AGENDA

La Vergne Planning Commission

December 26, 2023 at 6:00 PM

- Call meeting to order.
- Determine quorum.

ORDER OF BUSINESS

1. Approve Minutes: November 28, 2023 Regular Meeting.

2. Public Comment Period.

OLD BUSINESS

3. Final Plat - Guevara Subdivision - Three Lots on 3.89 Acres. Requested by Doyle Elkins. Property located at 396 Stones River Road (Tax Map 14, Parcel 54). R-1 (Low Density Residential) Zoning District. Property owned by Burgos J. Guevara. **(WITHDRAWN)**

4. Concept Plan – Marlowe La Vergne – 352 Apartments on 27.49 Acres. Requested by Kimley Horn. Property located at 243 Blair Road (Tax Map 32, Parcel 6). R-3 (High Density Residential) Zoning District. Property owned by Martin Shofner. **(DEFERRED)**

5. Preliminary Plat – Marlowe La Vergne – Two (2) Lots on 27.49 Acres. Requested by Kimley Horn. Property located at 243 Blair Road (Tax Map 32, Parcel 6). R-3 (High Density Residential) Zoning District. Property owned by Martin Shofner. **(DEFERRED)**

6. Update Bond Amount for Portico Place, Section 2, Phase 2 (Tax Map 14, Parcel 24). Requested by SEC, Inc. PDR (Planned Density Residential) Zoning District.

7. Site Plan – Aldi – New Grocery Store of 19,432 Square Feet on 2.4 Acres. Requested by ISG. Property located at Murfreesboro Road & Veterans Memorial Parkway (Tax Map 14, Parcel 72.04). C-2 (Highway Service) Zoning District. Property owned by Richland South, LLC. **(DEFERRED)**

8. Site Plan – Osama Dous Retail Center – Building Addition of 1,173 Square Feet. Requested by Chet Rhodes. Property located at 5130 Murfreesboro Road (Tax Map 15M, Group A, Parcel 1). C-2 (Highway Service) Zoning District. Property owned by TN Group Properties, LLC.

NEW BUSINESS

9. Final Plat - Co-Op Business Park - Three Lots on 114.8 Acres. Requested by

Barge Design Solutions. Property located on Old Waldron Road (Tax Map 15, Parcels 24 & 28). I-2 (Heavy Industrial) Zoning District. Property owned by Tennessee Farmers Cooperative, Inc.

10. Site Plan - Co-Op Business Park, Lot 1 - Four (4) Buildings Totaling 474,000 Square Feet on 38.92 Acres. Requested by Kimley-Horn. Property located on Old Waldron Road (Tax Map 15, Parcels 24 & 28). I-2 (Heavy Industrial) Zoning District. Property owned by Tennessee Farmers Cooperative, Inc.

11. Site Plan - Co-Op Business Park, Lot 2 - Three (3) Buildings Totaling 442,000 Square Feet on 32.1 Acres. Requested by Kimley-Horn. Property located on Old Waldron Road (Tax Map 15, Parcels 24 & 28). I-2 (Heavy Industrial) Zoning District. Property owned by Tennessee Farmers Cooperative, Inc.

12. Site Plan - Co-Op Business Park, Lot 3 - Two (2) Buildings Totaling 171,244 Square Feet on 43.88 Acres. Requested by Kimley-Horn. Property located on Old Waldron Road (Tax Map 15, Parcels 24 & 28). I-2 (Heavy Industrial) Zoning District. Property owned by Tennessee Farmers Cooperative, Inc.

13. Concept Plan - La Vergne Business Center - Two (2) Buildings Totaling 346,800 Square Feet on 29 Acres. Requested by Kimley-Horn. Property located at 1701 Mars Street (Tax Map 14, Parcels 46.01 & 25). I-1 (Light Industrial) Zoning District. Property owned by Big Acquisitions, LLC.

14. Preliminary Plat - La Vergne Business Center - Two (2) Lots Totaling 29 Acres. Requested by Kimley-Horn. Property located at 1701 Mars Street (Tax Map 14, Parcels 46.01 & 25). I-1 (Light Industrial) Zoning District. Property owned by Big Acquisitions, LLC.

15. Final Plat - Portico Place, Section 2, Phase 2 and Resubdivision of Common Areas A & B of Section 2, Phase 1 - Fifty Two (52) Lots on 15.69 Acres. Requested by SEC, Inc. Property located on Blair Road (Tax Map 29, Parcel 20.04). PDR (Planned Density Residential) Zoning District. Property owned by Blair Road, LLC.

16. Concept Plan – Burntwood – Creation of 8 Lots and Common Areas on 3.9 Acres. Requested by Huddleston Steele. Property located at Burntwood Drive and Vineyard Lane (Tax Map 32, Parcel 6.03). R-1 (Low Density Residential) Zoning District. Property owned by Gati Homes.

17. Recommendation to the Board of Mayor and Aldermen - New Zoning Ordinance and Zoning Map.

18. Bonds/Letters of Credit Update.

ADJOURN

MINUTES OF THE REGULAR MEETING OF THE CITY OF LA VERGNE PLANNING COMMISSION HELD ON NOVEMBER 28, 2023 AT LA VERGNE CITY HALL, LA VERGNE, TENNESSEE.

The City of La Vergne Planning Commission met in a regular meeting on November 28, 2023 in La Vergne City Hall, starting at 6:00 p.m. with Chairman Earl Garvin, Jr., present and presiding.

Members Present

The members present were: Chairman Earl Garvin, Jr., Vice-Chairman / Mayor Jason Cole, Secretary Graeme Coates, Alderman Carol Haas, Terry Coleman, Jim Hesemann, and Mark Molnar.

ORDER OF BUSINESS

1. Approve Minutes: October 30, 2023 Regular Meeting.

A motion, made by Mayor Jason Cole, seconded by Mark Molnar, to approve the minutes of the October 30, 2023 Regular Meeting, was adopted with all voting AYE.

2. Public Comment Period.

No one spoke.

OLD BUSINESS

3. Final Plat - 119 Chaney Boulevard - Five Lots on Approximately 0.66 Acres. Requested by JTA Land Surveying, Inc. Property located at 119 Chaney Boulevard (Tax Map 18P, Group C, Parcel 3). R-3 (High Density Residential) Zoning District. Property owned by Amer Angley.

This item was deferred. No action was taken.

4. Final Plat - Guevara Subdivision - Three Lots on 3.89 Acres. Requested by Doyle Elkins. Property located at 396 Stones River Road (Tax Map 14, Parcel 54). R-1 (Low Density Residential) Zoning District. Property owned by Burgos J. Guevara.

This item was deferred. No action was taken.

5. Preliminary Plat – Marlowe La Vergne – Two Lots on 27.49 Acres. Requested by Kimley Horn. Property located at 243 Blair Road (Tax Map 32, Parcel 6). R3

(High Density Residential) Zoning District. Property owned by Martin Shofner.

This item was deferred. No action was taken.

6. Concept Plan – Marlowe La Vergne – 352 Apartments on 27.49 Acres. Requested by Kimley Horn. Property located at 243 Blair Road (Tax Map 32, Parcel 6). R-3 (High Density Residential) Zoning District. Property owned by Martin Shofner.

This item was deferred. No action was taken.

7. Site Plan – 84 Lumber, Phase 2 – New Building Plus New Maintenance Shed of Page 2 of 2 Approximately 8400 Square Feet on 42.45 Acres. Requested by SEC, Inc. Property located on Wheeler St. (Tax Map 18K, Parcel 13). I-2 (Heavy Industrial) Zoning District. Property owned by 84 Lumber Company.

This item was deferred. No action was taken.

8. Site Plan – SitePro Rentals, LLC – New Building of 11,717 Square Feet on 4.14 Acres. Requested by Bohler, Inc. Property located at 425 Industrial Blvd. (Tax Map 14, P/O Parcel 5). I-2 (Heavy Industrial) Zoning District. Property owned by SitePro Rentals, LLC.

Mr. Logan gave his report.

City Engineer Gary Lide stated that all comments had been addressed. He stated that the sidewalk fee in lieu amount totaled to be $40,800.00. He made comments about the site plan. He stated that SitePro is responsible for the easement.

Mr. Kevin Eakes, 209 10th Ave South, 534 Nashville, approached the podium. Chairman Earl Garvin asked about the fence. Mr. Eakes explained that they would have black wrought iron in the front and that part of the side and the rear would have a black vinyl-coated chain-linked fence. A discussion ensued. Mayor Cole asked if the short side that would be visible to the street could be wrought iron. Mr. Eakes stated they could make that possible.

Secretary Graeme Coates asked if Mr. Eakes was okay with the fee-in-lieu amount. Mr. Eakes stated yes. Mayor Cole asked why they wanted to have a sidewalk fee-in-lieu. Mr. Eakes explained the existing utilities would cause the problem.

A motion, made by Mark Molnar, seconded by Mayor Jason Cole, to approve the site-plan and the fee-in-lieu amount of $40,800.00, was adopted with all voting AYE.

9. Recommendation to the Board of Mayor and Aldermen for Subdivision Acceptance – Carothers Crossing Phase 1. Property located off Carothers Rd. Requested by SEC Inc. R-1 (Low Density Residential) Zoning District.

Mr. Logan gave his report.

Mr. Lide stated that all comments had been addressed.

A motion, made by Mayor Jason Cole, seconded by Secretary Graeme Coates, to send a favorable recommendation to the Board of Mayor and Aldermen, was adopted with all voting AYE.

10. Recommendation to the Board of Mayor and Aldermen - Amendment to Zoning Ordinance - Amend Article IV, Section 4.010. Off-Street Parking Requirements - Kyle Brown & Bo Logan.

Mr. Logan gave his report.

Mr. Lide stated that all comments were addressed.

Assistant City Administrator Kyle Brown explained the ordinance wording of the parking. He made comments about the gated apartments exceptions. He explained the 1.75 parking spaces were sufficient for the apartment complex with a minimum of 50 units. A discussion ensued.

Mr. Mark Molnar stated that 1.75 spaces was good, especially with the gated community.

A motion, made by Secretary Graeme Coates, seconded by Mayor Jason Cole, to send a favorable recommendation to the Board of Mayor and Aldermen to amend the Zoning Ordinance Off-Street Parking Requirements, was adopted with all voting AYE.

11. Update Bond Amount for Portico Place, Section 2, Phase 2 (Tax Map 14, Parcel 24). Requested by SEC, Inc. PDR (Planned Density Residential) Zoning District.

Mr. Lide made stated that the bond amount meets subdivision regulation requirements.

Secretary Coates made comments about the missing signature.

A motion, made by Mayor Jason Cole, seconded by Secretary Graeme Coates, to defer the updated bond amount for Portico Place, Section 2, Phase 2 to get signed copies, was adopted with all voting AYE.

NEW BUSINESS

12. Site Plan – Aldi – New Grocery Store of 19,432 Square Feet on 2.4 Acres. Requested by ISG. Property located at Murfreesboro Road & Veterans Memorial Parkway (Tax Map 14, Parcel 72.04). C-2 (Highway Service) Zoning District. Property owned by Richland South, LLC.

This item was deferred. No action was taken.

13. Preliminary Plat – Arbor Ridge, Sections 9B, 11 & 12 – 121 Lots on Approximately 36 Acres. Requested by SEC, Inc. Property located off Waldron Road (Tax Map 32, Parcel 4.04). PDR (Planned Density Residential) Zoning District. Property owned by Starlight Homes of Tennessee, LLC.

Mr. Logan gave his report.

A motion, made by Mayor Jason Cole, seconded by Secretary Graeme Coates, to approve the preliminary plat, was adopted with all voting AYE.

14. Final Plat – Osama Dous Retail Center – Two (2) New Commercial Lots. Requested by Chet Rhodes. Property located at 5130 Murfreesboro Road (Tax Map 15M, Group A, Parcel 1). C-2 (Highway Service) Zoning District. Property owned by TN Group Properties, LLC.

This item was withdrawn. No action was taken.

15. Site Plan – Osama Dous Retail Center – Building Addition of 1,173 Square Feet. Requested by Chet Rhodes. Property located at 5130 Murfreesboro Road (Tax Map 15M, Group A, Parcel 1). C-2 (Highway Service) Zoning District. Property owned by TN Group Properties, LLC.

Mr. Logan gave his report.

Mr. Lide made comments about all the unfinished and outstanding items on the checklist. A discussion ensued.

A motion, made by Mayor Jason Cole, seconded by Mark Molnar, to defer the site plan, was approved with all voting AYE.

16. Recommendation to the Board of Mayor and Aldermen: Rezoning of Property, Requested by Cristen Rafik. 0.83 acres. Property located at 512 and 516 Old Nashville Highway (Tax Map 18P, Group C, Parcels 5 & 5.01). Current Zoning District: R-3 (High Density Residential) Zoning District; Proposed Zoning District: C-3 (Neighborhood Service) Zoning District. Property owned by Aleshaa Rafik.

Mr. Logan gave his report.

Mayor Cole asked if there were any phone calls. Mr. Logan stated no.

A motion, made by Mayor Jason Cole, seconded by Secretary Graeme Coates, to send a favorable recommendation to the Board of Mayor and Aldermen for the rezoning of the property located at 512 and 516 Old Nashville Highway, was adopted with all voting AYE.

17. Bonds/Letters of Credit Update.

Ms. Juliet Williams updated the status of bonds and letters of credit.

No action was taken.

ADJOURNMENT

There being no further business to come before this meeting, Chairman Garvin declared the meeting adjourned at 6:35 p.m.

_____
Chairman

_____
City Recorder

_____
Approved

Planning Commission Report Meeting: December 26, 2023	City of La Vergne

Item #: 4.

Item Title: Concept Plan – Marlowe La Vergne – 352 Apartments on 27.49 Acres. Requested by Kimley Horn. Property located at 243 Blair Road (Tax Map 32, Parcel 6). R-3 (High Density Residential) Zoning District. Property owned by Martin Shofner. **(DEFERRED)**

Reviewed By:
Bo Logan, City Planner
Gary Lide, City Engineer
Curtis Brinkley, Fire Marshal
Scott Tatalovich, Utility Engineer
Michael Dietz, Public Works Director

Summary: On behalf of their client, Kimley-Horn is requesting approval of the concept plan for Marlowe located on 27.5 ± acres. The purpose of the plan is to create new multifamily residential development. The property is currently zoned R-3 which allows high density.

The property is located on Blair Road. The proposed layout shows 16 buildings and 352 units. Also shown are the layout of driveways and parking areas.

The project will have separate phases as well. The applicant may submit at least two separate site plans in the future - most likely one site plan for each phase.

The clubhouse (or amenity center) is indicated on Lot 2. 1,056 parking spaces are required for this development. The parking table on the cover indicates either 1,056 or 1,067 spaces are being provided. The applicant needs to clarify.

The site data table indicates 16 buildings total, but labels on the following pages are only numbered 1 through 9 meaning 9 buildings total. This will need to be explained.

Staff Recommendation:

Staff Comments / Technical Items:
Planning

Bo Logan
blogan@lavergnetn.gov

Jake Blair
jblair@lavergnetn.gov

1. The site data table indicates 16 buildings total, but labels on the following pages are only numbered 1 through 9 meaning 9 buildings total. This will need to be explained.
2. The parking table on the Title Sheet appears to have errors. Please clarify is 1056 or 1067 parking spaces are being provided.

Engineering

Gary Lide
glide@lavergnetn.gov

1. Please note that separate site plans will be required for the apartment complex and the clubhouse prior to issuance of any building permits. These site plans will have to meet the Zoning Ordinance requirements for Site Plans.
2. Provide confirmation of the means by which sanitary sewer will be handled.
3. Provide a single table of results from the hydraulic calculations which shows every outfall and the discharges for the pre-development and post-development conditions for the 2-, 5-, 10-, 25-, 50-, and 100-year storms. This table should show pre- versus post- for each outfall from the site and the outfalls should be labeled in such a manner that it equates the drawings to the calculations. For example, the drawings show the outfalls as C1, E1, F1, and G1. These labels do not appear in the stormwater calculations.
4. If phasing of the construction is planned, provide a phasing plan.

Utilities

Scott Tatalovich
statalovich@lavergnetn.gov

1. At this time sewer capacity is not available in the existing 8" offsite sewer pipe from La Vergne to Smyrna. Developer's engineer is now working directly with Smyrna to figure out availability of sewer.

2. At this time, Water Availability has not been provided by the City's Water Consuting Engineer who is preparing the City's Water Master Plan.

Codes

1. (For developer's information) Please note that any retaining wall taller than 4 feet will require a permit from the Codes Department.

Fire

Curtis Brinkley
cbrinkley@lavergnetn.gov

1. Please verify that the access roads to each building are at least 26 feet wide (can not tell on the scale).

2. Access road setback from the building can not be any further than 30 feet due to aerial access requirements with building heights. Verify distance.

Police

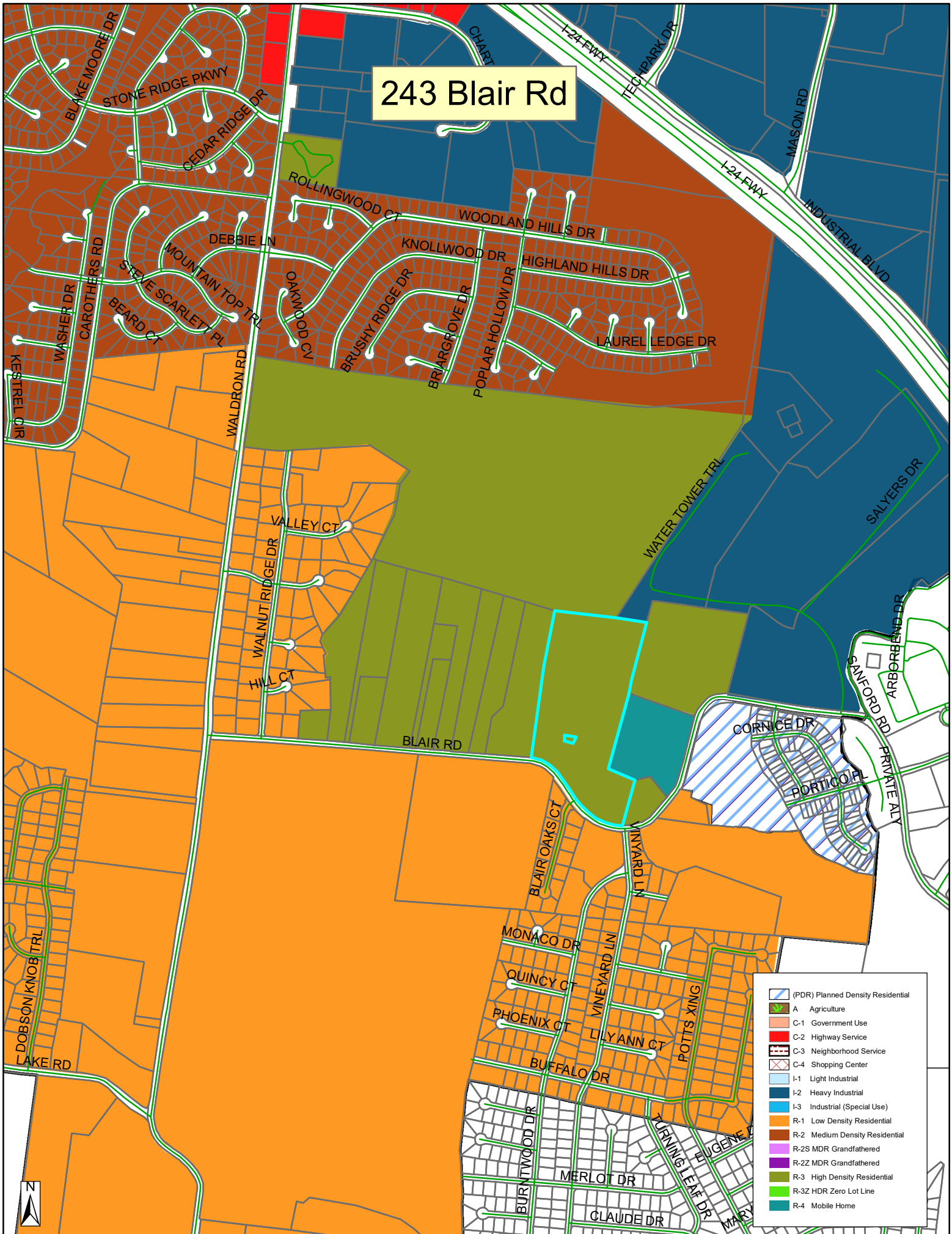
John Eubank
jeubank@lavergnetn.gov

***Note:** The above technical items may not be the only corrections and/or issues needing to be resolved to get approval from the planning commission. New items can be brought up at the workshop and staff can add items at any time that might have been overlooked. It is the applicant's responsibility to make sure that all technical items are addressed and that no new issues exist before the planning commission meeting. Addressing all technical items does not constitute approval. It is the planning commission's decision whether an item passes

or fails. Revised plans are due to staff by the following Monday at close of business unless other arrangements are made and documented.


243 Blair Rd
WATER TOWER TRL
BLAIR RD
BLAIR OAKS CT
VINYARD LN
N


243 Blair Rd
WOODLAND HILLS DR
DEBBIE LN
KNOLLWOOD DR
OAKWOOD CV
BRUSHYRIDGE DR
BRIARGROVE DR
POPLAR HOLLOW DR
LAUREL LEDGE DR
BRIARHILL CT
WALDRON RD
INDUSTRIAL BLVD
I-24 FWY
I-24 FWY
WATER TOWER TRL
SALYERS DR
SANFORD RD
ARBORBEND DR
MINT JULIP MNR
COLONNADE DR
VALLEY CT
WALNUT RIDGE DR
HILL CT
BLAIR RD
CORNICE DR
PORTICO PL
PRIVATE ALY
BLAIR OAKS CT
VINYARD LN
LMAC CT
BURNTWOOD DR
VINEYARD LN
JOHN SAMS DR
PHOENIX CT
LILY ANN CT
POTTS XING
BUFFALO DR
SLIGO CT
LANGFORD CT
MERLOT DR
MOET CT
TURNING LEAF DR
EUGENE DR
MARY ELLEN CIR
OMAHA CT
CLAUDE DR
CLAUDE DR
N


243 Blair Rd
BLAKE MOORE DR
STONE RIDGE PKWY
CEDAR RIDGE DR
CHART
I-24 FWY
TECHPARK DR
MASON RD
INDUSTRIAL BLVD
ROLLINGWOOD CT
WOODLAND HILLS DR
DEBBIE LN
KNOLLWOOD DR
HIGHLAND HILLS DR
MOUNTAIN TOP TRL
STEVE SCARLETT PL
BEARD CT
CAROTHERS RD
WASHER DR
KESTREL CIR
OAKWOOD CV
BRUSHY RIDGE DR
BRIARGROVE DR
POPLAR HOLLOW DR
LAUREL LEDGE DR
WALDRON RD
WATER TOWER TRL
SALYERS DR
VALLEY CT
WALNUT RIDGE DR
HILL CT
ARBORBEND DR
SANFORD RD
CORNICE DR
PRIVATE ALY
PORTICO PL
BLAIR RD
BLAIR OAKS CT
VINEYARD LN
MONACO DR
QUINCY CT
PHOENIX CT
LILY ANN CT
POTTS XING
BUFFALO DR
DOBSON KNOB TRL
LAKE RD
BURNTWOOD DR
MERLOT DR
TURNING LEAF DR
CLAUDE DR
(PDR) Planned Density Residential
A Agriculture
C-1 Government Use
C-2 Highway Service
C-3 Neighborhood Service
C-4 Shopping Center
I-1 Light Industrial
I-2 Heavy Industrial
I-3 Industrial (Special Use)
R-1 Low Density Residential
R-2 Medium Density Residential
R-2S MDR Grandfathered
R-2Z MDR Grandfathered
R-3 High Density Residential
R-3Z HDR Zero Lot Line
R-4 Mobile Home
N


VINEYARD LANE
BLAIR ROAD
STOP



April 18, 2023

Robert Arts, P.E.
Kimley-Horn
10 Lea Ave, Ste 400
Nashville, TN 37210

Re: 243 Blair Road
Smyrna, TN 37167

Mr. Arts,

Please be advised that natural gas and sanitary sewer are currently available at or near the above-mentioned location.

Natural Gas - existing 4" PE on south side of Blair Road

Sewer – Existing 8" gravity available approx 900 FT offsite at Portico Place. Must have approval from LaVergne before sewer service can be provided.

Water- LaVergne is the provider

Should you have any questions, please call me at (615) 355-5711.

Sincerely,

Mark Parker, P.E.
Assistant Director of Utilities
Smyrna Utilities
315 S. Lowry St.
Smyrna, TN 37167

CONCEPT PLAN SUBMITTAL

MARLOWE LA VERGNE

243 BLAIR ROAD
LA VERGNE, TENNESSEE

CONCEPT PLAN SUBMITTAL: 10/02/2023

SITE DATA TABLE		
SITE ADDRESS	243 BLAIR ROAD LA VERGNE, TENNESSEE	
TAX MAP	MAP 32 PARCEL 6.00	
OVERALL AREA	EXISTING	PROPOSED
SITE AREA	27.49 AC	27.49 AC
DISTURBED AREA	N/A	27.49 AC
DEDICATED R.O.W. AREA	N/A	+/- 0.83 AC
IMPERVIOUS AREA	0.39 AC	12.07 AC
PERVIOUS AREA	27.49 AC	15.42 AC
BUILDING SETBACKS	REQUIRED	PROVIDED
FRONT: SOUTH	35 FT	35 FT
REAR: NORTH	20 FT	20 FT
SIDE: EAST	15 FT	15 FT
SIDE: WEST	15 FT	15 FT

BUILDING DATA	REQUIRED	PROVIDED
NUMBER OF BUILDINGS	N/A	9
DIMENSIONS	N/A	71 FT X 205 FT
STORIES	N/A	±3 STORIES
AREA PER BUILDING	N/A	±14,350
TOTAL AREA	±387,450 GSF	
TOTAL UNITS	352 UNITS	

PARKING	MINIMUM	PROVIDED
STANDARD SPACES (3 SPACES / UNIT)	1,035	1,097
ACCESSIBLE (INCL. VAN ACCESSIBLE)	21	21
TOTAL VEHICULAR PARKING	1,056	1,118

EXISTING PROPERTY SUMMARY

PROPERTY ADDRESS:	243 BLAIR ROAD LA VERGNE, TENNESSEE
MAP AND PARCEL ID:	MAP 32, PARCEL 6.00
U.S. FEMA FIRM PANEL:	47149C0105H DATED 01/05/2007
EXISTING ZONING: EXISTING LAND USE:	R-3 SINGLE FAMILY RESIDENTIAL

GENERAL DEVELOPMENT NOTES

1. ALL DEVELOPMENT WITHIN THE BOUNDARIES OF THIS PLAN MEETS THE REQUIREMENTS OF ANSI 117.1, 2009 EDITION AND THE FAIR HOUSING ACT.

   U.S. Justice Department:
   http://www.justice.gov/crt/housinig/fairhousing/about_fairhousingact.htm

2. NO PART OF THE SUBJECT PROPERTY IS LOCATED IN AREAS DESIGNATED AS "ZONE AE" (AREAS DETERMINED TO BE OUTSIDE THE 0.2 % ANNUAL CHANCE FLOODPLAIN) AS NOTED ON THE CURRENT FEMA FIRM COMMUNITY PANEL 47149C0105H.

3. NO PART OF THE SUBJECT PROPERTY IS LOCATED IN AREAS DESIGNATED AS "ZONE X" (AREAS DETERMINED TO BE OF MINIMAL FLOOD HAZARD) AS NOTED ON THE CURRENT FEMA FIRM COMMUNITY PANEL 47149C0105H

4. ANY EXCAVATION, FILL, OR DISTURBANCE OF THE EXISTING GROUND ELEVATION MUST BE DONE IN ACCORDANCE WITH REGULATIONS SET FORTH BY THE CITY OF LA VERGNE.

5. CITY OF LA VERGNE SHALL BE PROVIDED SUFFICIENT AND UNENCUMBERED ACCESS IN ORDER TO MAINTAIN AND REPAIR UTILITIES IN THIS SITE.



VICINITY MAP
1" = 1,000'

CITY OF LA VERGNE
RUTHERFORD COUNTY, TENNESSEE

Sheet List Table

Sheet Number	Sheet Title
C0-00	COVER
C0-01	GENERAL NOTES
C0-02	VICINITY MAP
C1-00	EXISTING CONDITIONS
C2-00	CONCEPT PLAN
C4-00	CONCEPT DRAINAGE PLAN
C6-00	CONCEPT UTILITY PLAN
T1-00	CONCEPTUAL TRAFFIC CONTROL

PROJECT DESIGN TEAM

CIVIL ENGINEER
KIMLEY-HORN AND ASSOCIATES, INC.
10 LEA AVENUE, SUITE 400
NASHVILLE, TN 37210
CONTACT: ROBERT ARTS, PE
PHONE: (615) 564-2701

SURVEY
CROW LAND SURVEYING
210 OLD HICKORY BLVD, UNIT #7
NASHVILLE, TN 37221
CONTACT: THOMAS CROW, RLS
PHONE: (615) 948-9021

PERMITTING / UTILITY CONTACTS

BUILDING DEPT.
CITY OF LA VERGNE CODES
5175 MURFREESBORO RD
LA VERGNE, TN 37086
RANDOLPH SALYERS
PHONE: (615) 213-2624

STORMWATER
CITY OF LA VERGNE
STORMWATER DEPARTMENT
5175 MURFREESBORO ROAD
LA VERGNE, TN 37086
PHONE: (615) 287-8703

SANITARY SEWER
TOWN OF SMYRNA
PUBLIC WORKS DEPARTMENT
315 SOUTH LOWRY ST
SMYRNA, TN 37167
PHONE: (615) 459-9766

ZONING
CITY OF LA VERGNE PLANNING
5175 MURFREESBORO ROAD
LA VERGNE, TN 37086
BO LOGAN
PHONE: (615) 862-6608

ELECTRIC
MIDDLE TN ELECTRIC
MEMBERSHIP CORPORATION
555 NEW SALEM HIGHWAY
MURFREESBORO, TN 37066
JOSH HOWLAND
PHONE: (615) 453-3074

NATURAL GAS
SMYRNA GAS DEPARTMENT
315 SOUTH LOWRY ST
SMYRNA, TN 37167
PHONE: (615) 355-5740

WATER
LA VERGNE PUBLIC WORKS
148 INTERNATIONAL BLVD
LA VERGNE, TN 37086
PHONE: (615) 793-9891

FIRE
CITY OF LA VERGNE FIRE MARSHAL
283 OLD NASHVILLE HWY
LA VERGNE, TN 37086
CURTIS BRINKLEY
PHONE: (615) 287-5832

TELEPHONE
TDS TELECOM
5265 MURFREESBORO ROAD
LA VERGNE, TN 37086
PHONE: (615) 350-9375

CABLE
TDS TELECOM
5265 MURFREESBORO ROAD
LA VERGNE, TN 37086
PHONE: (615) 350-9375

OWNER / DEVELOPER

MARTIN SHOFNER, ET AL.
6109 JOCELYN HOLLOW ROAD
NASHVILLE, TENNESSEE 37205
PHONE: (615) 477-5155
EMAIL: MARTINSHOFNER@ARCHITECTSURE.COM

PLANS PREPARED BY

Kimley»Horn
10 Lea Avenue, Suite 400, Nashville, TN 37210
Main: (615) 564-2701 | www.kimley-horn.com

© 2023 Kimley-Horn and Associates, Inc.

Know what's below. Call before you dig.

PERMIT REVIEW ONLY

ENGINEER'S SEAL

ROBERT JAMES ARTS
REGISTERED ENGINEER
STATE OF TENNESSEE
No. 121045
11/27/2023

PLAN REVISIONS

REVISION NO.	DATE	REMARKS

FILE NUMBER	SHEET NUMBER	TOTAL SHEETS
118702000	C0-00	9

MARLOWE LA VERGNE - CONCEPT PLAN

Drawing name: K:\NSH_LDEV\118702000 – Shofner-Greystar La Vergne\4-CADD\PlanSheets\C0-00 COVER.dwg C0-00 COVER Nov 27, 2023 10:06am by: robert.arts

This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

CONTRACTOR RESPONSIBILITIES:

1. PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL BE RESPONSIBLE FOR:
   - A. THE CONTRACTOR SHALL VERIFY ALL PROPOSED AND EXISTING CONDITIONS INCLUDING UTILITIES (INVERTS, CONNECTIONS, MATERIALS, ETC.) AND DIMENSIONS WITHIN THE LIMITS OF WORK PRIOR TO THE START OF CONSTRUCTION.
   - B. REFER TO ARCHITECTURAL DRAWINGS FOR DETAILED BUILDING INFORMATION.
   - C. THE CONTRACTOR IS RESPONSIBLE FOR ALL NOTIFICATIONS AND LIAISONS WITH UTILITY COMPANIES DURING THE PROCESS OF LOCATING, RELOCATING, AND TYING INTO PUBLIC UTILITIES.
   - D. PRIOR TO COMMENCING LAND DISTURBANCE ACTIVITY, THE LIMITS OF LAND DISTURBANCE SHALL BE CLEARLY AND ACCURATELY DEMARCATED WITH STAKES, RIBBONS, OR OTHER APPROPRIATE MEANS. THE LOCATION AND EXTENT OF ALL AUTHORIZED LAND DISTURBANCE SHALL OCCUR INSIDE THE APPROVED LIMITS INDICATED ON THE APPROVED PLANS.
2. DURING CONSTRUCTION:
   - A. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DEVIATIONS FROM THESE PLANS AND SPECIFICATIONS WITHOUT PRIOR WRITTEN CONSENT OF THE ENGINEER MAY CAUSE THE WORK TO BE UNACCEPTABLE.
   - B. THE CONTRACTOR SHALL USE MATERIALS AND EMPLOY CONSTRUCTION METHODS IN ORDER TO COMPLY WITH THE DRAWINGS AND SPECIFICATIONS. WHERE A CONFLICT OCCURS, THE STRICTEST DESIGN SHALL GOVERN. THE ENGINEER'S REVIEW OF SHOP DRAWINGS, PRODUCT DATA, ETC., DOES NOT RELIEVE THE CONTRACTOR FROM COMPLYING WITH THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL INFORM THE ENGINEER IN WRITING OF ANY SPECIFIC DEVIATIONS AND OBTAIN ENGINEER'S WRITTEN APPROVAL OF THE SPECIFIC DEVIATION.
   - C. IT IS SOLELY THE CONTRACTOR'S RESPONSIBILITY TO FOLLOW ALL APPLICABLE SAFETY CODES AND REGULATIONS DURING ALL PHASES OF CONSTRUCTION.
   - D. ALL CONSTRUCTION MUST CONFORM TO THE STANDARDS, SPECIFICATIONS, AND CODES OF THE GOVERNING MUNICIPALITIES.
   - E. CONSTRUCTION SHALL MEET ALL CURRENT STANDARDS SET FORTH IN THE AMERICANS WITH DISABILITIES ACT.
   - F. IF THE CONTRACTOR DAMAGES ANY EXISTING UTILITIES DURING CONSTRUCTION, HE SHALL, AT HIS OWN EXPENSE, REPLACE OR REPAIR THE UTILITIES TO ORIGINAL CONDITION AND QUALITY AS APPROVED BY THE OWNER AND REPRESENTATIVE OF THE APPROPRIATE UTILITY COMPANY.
   - G. SUFFICIENT BARRICADES, LIGHTS, SIGNS, AND OTHER TRAFFIC CONTROL METHODS IN ACCORDANCE WITH GOVERNING ORDINANCES MAY BE NECESSARY FOR THE PROTECTION AND SAFETY OF THE PUBLIC. SAID CONTROL DEVICES SHALL BE PER THE MANUAL OF TRAFFIC CONTROL DEVICES, M.U.T.C.D., CURRENT EDITION, AND SHALL BE PROVIDED AND MAINTAINED THROUGHOUT CONSTRUCTION.
   - H. TRAFFIC CONTROLS AND OTHER WARNING DEVICES SHALL BE INSTALLED PRIOR TO THE COMMENCEMENT OF ANY WORK ON CITY, COUNTY, OR TENNESSEE DEPARTMENT OF TRANSPORTATION ROADS. THEY SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION AND SHALL REMAIN IN PLACE UNTIL THE CONCLUSION OF ALL WORK.
   - I. ALL WARNING DEVICES SHALL BE EITHER TYPE I BARRICADES OR DRUMS WITH WARNING LIGHTS ON EVERY OTHER DEVICE. THEY SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), CURRENT EDITION, AND CITY OF LA VERGNE STANDARDS FOR COLOR, SIZE, REFLECTIVITY, HEIGHT, AND PLACEMENT.
   - J. FIRE DEPARTMENT ACCESS SHALL BE MAINTAINED AT ALL TIMES.
   - K. CONTRACTOR SHALL SHORE AND BRACE ALL EARTH, FORMS, CONCRETE, STEEL, WOOD, AND MASONRY TO RESIST GRAVITY, EARTH, WIND, THERMAL, CONSTRUCTION, AND MISCELLANEOUS LOADS DURING CONSTRUCTION.
   - L. ON-SITE BURIAL OF DEBRIS IS PROHIBITED.
   - M. UNLESS OTHERWISE NOTED THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OF ALL FABRICATED MATERIALS TO THE ENGINEER. DESIGN DOCUMENTS SHALL NOT BE REPRODUCED AS SHOP DRAWINGS.
   - N. IN CASE OF UNFORESEEN CONSTRUCTION COMPLICATIONS OR DISCREPANCIES, THE CONTRACTOR IS TO IMMEDIATELY NOTIFY THE ENGINEER IN WRITING.
   - O. ALL REQUIRED TESTING REPORTS SHALL BE AVAILABLE AT THE JOB SITE.
   - P. AS-BUILT DRAWINGS OF ROADWAYS, STORM DRAINS, SANITARY SEWER AND WATER LINES, FIELD APPROVAL BY THE ENGINEER, AND ALL APPLICABLE BONDS ARE REQUIRED PRIOR TO FINAL ACCEPTANCE BY THE OWNER.
   - Q. CONTRACTOR SHALL MAINTAIN CONTINUOUS UTILITY SERVICE TO ALL EXISTING BUILDINGS THROUGHOUT CONSTRUCTION UNLESS APPROVAL FOR SERVICE INTERRUPTION IS OBTAINED FROM THE OWNERS IN ADVANCE.
   - R. THE CONTRACTOR SHALL VERIFY EXISTING CONDITIONS TO ENSURE THAT THE NEW WORK SHALL FIT INTO THE EXISTING SITE IN THE MANNER INTENDED AND AS SHOWN ON THE DRAWINGS. SHOULD ANY CONDITIONS EXIST THAT ARE CONTRARY TO THOSE SHOWN ON THE DRAWINGS, THE CONTRACTOR SHALL NOTIFY THE OWNER'S REPRESENTATIVE PRIOR TO PERFORMING ANY WORK IN THE AREA INVOLVING DIFFERENCES. NOTIFICATION SHALL BE IN THE FORM OF A DRAWING OR SKETCH INDICATING FIELD MEASUREMENTS AND NOTES RELATING TO THE AREA.
   - S. ANY FOREIGN ITEM FOUND DURING CONSTRUCTION IS THE PROPERTY OF THE OWNER. THIS INCLUDES, BUT IS NOT LIMITED TO, PRECIOUS METALS, COINS, PAPER CURRENCY, ARTIFACTS AND ANTIQUITIES.
   - T. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE DONE TO THE PREMISES OR ADJACENT PREMISES, OR INJURIES TO THE PUBLIC DURING THE CONSTRUCTION OF THE WORK, WHETHER CAUSED BY HIMSELF, HIS SUBCONTRACTORS, OR THE CARELESSNESS OF ANY OF HIS EMPLOYEES.
   - U. THE CONTRACTOR SHALL FURNISH, INSTALL AND MAINTAIN ALL NECESSARY TEMPORARY WORKS FOR THE PROTECTION OF THE WORK AND THE PUBLIC, INCLUDING BARRICADES, WARNING SIGNS, LIGHTS, ETC.
   - V. THE CONTRACTOR ACKNOWLEDGES & AGREES THAT THE WORK IS ENTIRELY AT HIS RISK UNTIL SITE IS ACCEPTED, AND HE WILL BE HELD RESPONSIBLE FOR ITS SAFETY BY THE OWNER. THE CONTRACTOR WILL INDEMNIFY THE OWNER & OWNER'S REPRESENTATIVE FROM LIABILITY AT THE SITE THROUGHOUT THE CONSTRUCTION PROCESS.
   - W. THE CONTRACTOR SHALL GIVE ALL NECESSARY NOTICES AND OBTAIN ALL PERMITS AND PAY ALL LEGAL FEES. HE SHALL ALSO COMPLY WITH ALL CITY, COUNTY AND STATE BUILDING LAWS, ORDINANCES OR REGULATIONS RELATING TO BUILDING SIDEWALKS, STREETS, BLASTING, PUBLIC INFRASTRUCTURE, STORMWATER REGULATIONS, ETC.
   - X. THE CONTRACTOR IS TO CHECK AND VERIFY ALL MEASUREMENTS, LEVELS, ETC. BEFORE ORDERING MATERIALS AND PROCEEDING WITH THE WORK, AND IS TO BE RESPONSIBLE FOR THE SAME.
   - Y. REFERENCE POINTS AND HUBS DURING THE CONSTRUCTION OF HIS WORK, AND SHALL BEAR THE COST OF REPLACING SAME.
   - Z. CARE SHALL BE TAKEN TO PROTECT ANY UTILITIES, TREES, ETC. WHICH ARE TO REMAIN AND NOT TO BE DISTURBED BY THE CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGES TO SUCH PROPERTY.

DEMOLITION INFORMATION:

1. NOTIFICATIONS:

   THE CONTRACTOR SHALL NOTIFY THE OWNER AND CITY INSPECTOR(S) 24 HOURS PRIOR TO ANY DEMOLITION OR CONSTRUCTION.
2. DISPOSAL GUIDELINES:
   - A. ONLY ITEMS SPECIFICALLY NOTED TO BE DEMOLISHED SHALL BE REMOVED FROM THE SITE.
   - B. REMOVE EXISTING PAVED AREAS AS SHOWN INCLUDING DRIVEWAYS, SIDEWALKS, PARKING AREAS, SERVICE AREAS, EQUIPMENT PADS, AND ALL MISCELLANEOUS PAVING.
   - C. ALL DEBRIS RESULTING FROM DEMOLITION SHALL BE REMOVED FROM THE SITE AND DISPOSED OF LEGALLY BY THE CONTRACTOR IN ACCORDANCE WITH LOCAL STATE AND FEDERAL REGULATIONS. BACKFILL ALL TRENCHES AND EXCAVATIONS RESULTING FROM DEMOLITION.
   - D. ALL DEMOLISHED MATERIAL BECOMES THE PROPERTY OF THE CONTRACTOR UNLESS OTHERWISE NOTED.
3. TREE PROTECTION GUIDELINES:

   PROTECT ALL EXISTING TREES NOTED "TO REMAIN" AND ALL ITEMS TO BE TURNED OVER TO THE OWNER DURING DEMOLITION. TAKE ALL NECESSARY PRECAUTIONS AND PROTECTIVE MEASURES. ANY EXISTING ITEMS TO BE TURNED OVER TO THE OWNER WHICH ARE DAMAGED DURING DEMOLITION SHALL BE REPAIRED AT NO ADDITIONAL COST TO THE OWNER. TREES WHICH ARE DAMAGED WILL BE REPLACED OR REIMBURSED AT A RATE TO BE DETERMINED BY THE OWNER.
4. UTILITIES:
   - A. PRIOR TO REMOVING OR ABANDONING ANY UTILITY THE CONTRACTOR SHALL VERIFY THAT NO UPSTREAM SERVICE WILL BE TERMINATED. THE CONTRACTOR SHALL INFORM THE ENGINEER IN WRITING OF ANY TERMINATION NOT SHOWN ON THE PLANS.
   - B. ALL ABANDONED WATER LINES, STORM SEWER PIPE, SANITARY SEWER PIPES, GAS LINES, OR ANY OTHER ABANDONED UNDERGROUND UTILITY SHALL BE ABANDONED IN PLACE UNLESS NOTED OTHERWISE.

SITE INFORMATION:

1. THE FOLLOWING ARE APPLICABLE TO ALL CIVIL DOCUMENTS:
   - A. WHERE A DETAIL SECTION, TYPICAL SECTION, OR A NOTE IS SHOWN FOR ONE CONDITION, IT SHALL APPLY FOR ALL LIKE OR SIMILAR CONDITIONS, UNLESS OTHERWISE NOTED ON THE PLANS.
   - B. EXISTING AND PROPOSED CONTOURS ARE AT FIVE (5) FOOT INTERVALS.
   - C. ALL DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.
   - D. ALL PIPE LENGTHS SPECIFIED IN THESE PLANS ARE THE HORIZONTAL DISTANCE AND ARE SHOWN FOR REFERENCE ONLY. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE ACTUAL LENGTHS BASED ON PROPOSED PIPE SLOPE.
   - E. PIPE LENGTHS IN PLANS ARE MEASURED FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE UNLESS OTHERWISE NOTED.

EROSION AND SEDIMENT CONTROL INFORMATION:

1. COMPREHENSIVE:
   - A. THE ESCAPE OF SEDIMENT FROM THE SITE SHALL BE PREVENTED BY THE INSTALLATION OF EROSION AND SEDIMENT CONTROL MEASURES AND PRACTICES PRIOR TO OR CONCURRENT WITH LAND-DISTURBING ACTIVITIES.
   - B. PROVISIONS TO PREVENT EROSION OF SOIL FROM THE SITE SHALL BE AT A MINIMUM IN CONFORMANCE WITH THE REQUIREMENTS OF THE TENNESSEE EROSION AND SEDIMENT CONTROL HANDBOOKS. IF FULL IMPLEMENTATION OF THE APPROVED PLAN DOES NOT PROVIDE FOR EFFECTIVE EROSION CONTROL, ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IMPLEMENTED TO CONTROL OR TREAT THE SEDIMENT SOURCE.
   - C. FAILURE TO INSTALL, OPERATE, OR MAINTAIN ALL EROSION CONTROL MEASURES WILL RESULT IN ALL CONSTRUCTION BEING STOPPED ON THE JOB SITE UNTIL SUCH MEASURES ARE CORRECTED BACK TO THE STANDARDS SPECIFIED IN THE TENNESSEE EROSION AND SEDIMENT CONTROL HANDBOOKS, CURRENT EDITION.
   - D. EROSION CONTROL MEASURES WILL BE MAINTAINED AT ALL TIMES. IF FULL IMPLEMENTATION OF THE APPROVED PLAN DOES NOT PROVIDE FOR EFFECTIVE EROSION CONTROL, ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IMPLEMENTED TO CONTROL OR TREAT THE SEDIMENT SOURCE.
   - E. EROSION CONTROL DEVICES SHALL BE INSTALLED PRIOR TO LAND DISTURBANCE. THE LOCATION OF SOME OF THE EROSION CONTROL DEVICES MAY HAVE TO BE ALTERED FROM THAT SHOWN ON THE APPROVED PLANS IF DRAINAGE PATTERNS DURING CONSTRUCTION ARE DIFFERENT FROM THE FINAL PROPOSED DRAINAGE PATTERNS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ACCOMPLISH EROSION CONTROL FOR ALL DRAINAGE PATTERNS CREATED AT VARIOUS STAGES DURING CONSTRUCTION. ANY DIFFICULTY IN CONTROLLING EROSION DURING ANY PHASE OF CONSTRUCTION SHALL BE REPORTED TO THE ENGINEER IMMEDIATELY.
   - F. THE CONSTRUCTION OF THE SITE WILL COMMENCE WITH THE INSTALLATION OF EROSION CONTROL MEASURES SUFFICIENT TO CONTROL SEDIMENT DEPOSITS AND EROSION. ALL SEDIMENT CONTROL WILL BE MAINTAINED UNTIL ALL UPSTREAM GROUND WITHIN THE CONSTRUCTION AREA HAS BEEN COMPLETELY STABILIZED WITH PERMANENT VEGETATION AND ALL ROADS/DRIVEWAYS HAVE BEEN PAVED.
   - G. CONSTRUCTION EXITS SHALL BE CONSTRUCTED AT EACH POINT OF ENTRY OR EXIT FROM THE SITE AND SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOW OF MUD ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH STONE AS CONDITIONS DEMAND, REPAIR, AND/OR CLEANOUT OF ANY STRUCTURES USED TO TRAP SEDIMENT. ALL MATERIALS SPILLED, DROPPED, WASHED, OR TRACKED FROM VEHICLES OFF SITE ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY. ACCESS POINTS PROTECTED WITH A CONSTRUCTION EXIT SHALL BE OTHERWISE BARRICADED UNTIL THE SITE IS STABILIZED.

ADA COMPLIANCE:

- A. CURB RAMPS ALONG PUBLIC STREETS AND IN THE PUBLIC RIGHT-OF-WAY SHALL BE CONSTRUCTED BASED ON THE CITY STANDARD CONSTRUCTION DETAILS AND SPECIFICATIONS.
- B. PRIVATE CURB RAMPS ON THE SITE (I.E. OUTSIDE PUBLIC STREET RIGHT-OF-WAY) SHALL CONFORM TO ADA STANDARDS AND SHALL HAVE A DETECTABLE WARNING SURFACE THAT IS FULL WIDTH AND FULL DEPTH OF THE CURB RAMP, NOT INCLUDING FLARES.
- C. ALL ACCESSIBLE ROUTES, GENERAL SITE AND BUILDING ELEMENTS, RAMPS, CURB RAMPS, STRIPING, AND PAVEMENT MARKINGS SHALL CONFORM TO ADA STANDARDS FOR ACCESSIBLE DESIGN, LATEST EDITION.
- D. ANY COMPONENTS OF THE PROJECT SERVING MULTIFAMILY DWELLINGS IN BUILDINGS THAT HAVE 4 OR MORE UNITS PER DWELLING SHALL ALSO CONFORM TO THE FAIR HOUSING ACT (FHA), AND COMPLY WITH THE FAIR HOUSING ACT DESIGN MANUAL BY THE US DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT.
- E. BEFORE PLACING PAVEMENT, CONTRACTOR SHALL VERIFY THAT SUITABLE ACCESSIBLE PEDESTRIAN ROUTES (PER ADA AND FHA) EXIST TO AND FROM EVERY DOOR AND ALONG SIDEWALKS, ACCESSIBLE PARKING SPACES, ACCESS AISLES, AND ACCESSIBLE ROUTES. IN NO CASE SHALL AN ACCESSIBLE RAMP SLOPE EXCEED 1 VERTICAL TO 12 HORIZONTAL. IN NO CASE SHALL SIDEWALK CROSS SLOPE EXCEED 2.0 PERCENT. IN NO CASE SHALL LONGITUDINAL SIDEWALK SLOPE EXCEED 5.0 PERCENT. ACCESSIBLE PARKING SPACES AND ACCESS AISLES SHALL NOT EXCEED 2.0 PERCENT SLOPE IN ANY DIRECTION.
- F. CONTRACTOR SHALL TAKE FIELD SLOPE MEASUREMENTS ON FINISHED SUBGRADE AND FORM BOARDS PRIOR TO PLACING PAVEMENT TO VERIFY THAT ADA SLOPE REQUIREMENTS ARE PROVIDED. CONTRACTOR SHALL CONTACT ENGINEER PRIOR TO PAVING IF ANY EXCESSIVE SLOPES ARE ENCOUNTERED. NO CONTRACTOR CHANGE ORDERS WILL BE ACCEPTED FOR ADA SLOPE COMPLIANCE ISSUES.

CONCRETE INFORMATION (SITE WORK ONLY):

1. PRODUCT CRITERIA:
   - A. UNLESS OTHERWISE NOTED CEMENT SHALL BE TYPE I OR III CONFORMING TO ASTM C150. AGGREGATES SHALL BE NORMAL WEIGHT CONFORMING TO ASTM C33.
   - B. CONCRETE SHALL CONFORM TO ACI BUILDING CODE (318-89). UNLESS NOTED CONCRETE SHALL BE NORMAL WEIGHT AND HAVE A 28 DAY COMPRESSIVE STRENGTH OF 3,500 P.S.I.
   - C. SLUMP SHALL BE 3" TO 5" FOR REGULAR MIX. LARGER SLUMP SHALL BE PERMITTED WITH WATER REDUCING ADMIXTURES AND WRITTEN CONSENT OF THE ENGINEER.
   - D. THE RELATIONSHIP BETWEEN MAXIMUM AGGREGATE SIZE TO MINIMUM AMOUNT OF CEMENT IN CONCRETE PAVEMENT (LB. PER C.Y. OR MIX) SHALL BE AS FOLLOWS: 1" - 520, 3/4" - 540, 1/2" - 590, 3/8" - 610.
2. CURING CRITERIA:
   - A. CONCRETE CURING SHALL COMPLY WITH ACI 308. CURING PROCESS SHALL START IMMEDIATELY FOLLOWING INITIAL SET. CURING SHALL BE BY CURING COMPOUND.
   - B. CONCRETE EXPOSED TO THE WEATHER SHALL BE AIR-ENTRAINED IN ACCORDANCE WITH ACI 318-89 TABLE 4.1.1. NORMAL WEIGHT CONCRETE SLABS SHALL HAVE AIR CONTENT IN ACCORDANCE WITH ACI 302.IR-89 TABLE 5.2.7A.
   - C. HOT WEATHER CONCRETING SHALL COMPLY WITH ACI 305. NO CONCRETE ABOVE 90 DEGREES FAHRENHEIT SHALL BE POURED. LOWER CONCRETE TEMPERATURE BY COOLING WATER AND AGGREGATE. FORMS, STEEL, AND SUBGRADE SHALL BE SPRINKLED WITH COLD WATER. AFTER FINISHING CONCRETE USE LIGHT FOG SPRAY UNTIL CURING COMPOUND IS USED.
   - D. COLD WEATHER CONCRETING SHALL COMPLY WITH ACI 306. SPECIAL MATERIAL PROCEDURES SHALL BE PROVIDED DURING PLACING AND CURING OF CONCRETE BELOW 40 DEGREES FAHRENHEIT.
   - E. E. CURING, HOT, AND COLD WEATHER CONCRETING PROCEDURES ARE ONLY GIVEN AS A GUIDE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PREVENT CONCRETE DAMAGE AND CRACKS. DAMAGED OR CRACKED CONCRETE WILL NOT BE ACCEPTED.

REINFORCING STEEL INFORMATION (SITE WORK ONLY):

1. PRODUCT CRITERIA:
   - A. REINFORCING STEEL SHALL CONFORM TO ASTM A-615, GRADE 60 AND GRADE 40 FOR #3 AND SMALLER BARS. MINIMUM LAP 48" DIAMETER.
   - B. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A-185, MINIMUM LAP SHALL BE 8".
   - C. REINFORCING THAT IS WELDED SHALL BE WELDABLE TYPE AND CONFORM TO ASTM A-706.

PAVEMENT INFORMATION:

1. PAVEMENT:
   - A. ALL MATERIALS, EQUIPMENT, METHODS OF CONSTRUCTION, AND WORKMANSHIP SHALL CONFORM TO THE TENNESSEE DEPARTMENT OF TRANSPORTATION, TDOT, STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, CURRENT EDITION.
   - B. SEE PAVEMENT DETAILS ON CONSTRUCTION DOCUMENTS FOR SPECIFIC DESIGN INFORMATION AND REQUIREMENTS.
   - C. ALL CURB AND GUTTER TO BE 24" AND CONSTRUCTED OF 3000 P.S.I. CONCRETE UNLESS OTHERWISE NOTED.
2. SIGNING AND STRIPING:
   - A. SIGNING AND STRIPING TO BE PROVIDED BY THE CONTRACTOR ACCORDING TO THE DRAWINGS AND SPECIFICATIONS.
   - B. ALL PAVEMENT MARKINGS SHALL CONFORM TO CURRENT MUTCD STANDARDS. ALL PAVEMENT MARKINGS ON PRIVATE PROPERTY SHALL BE PAINT, UNLESS NOTED OTHERWISE. ALL PAVEMENT MARKINGS ON PUBLIC RIGHT-OF-WAY SHALL BE THERMOPLASTIC, UNLESS NOTED OTHERWISE.

STORM SEWER NOTES:

1. REINFORCED CONCRETE PIPE SHALL BE RCP CLASS III UNLESS OTHERWISE NOTED WITH BELL-AND-SPIGOT AND GASKETED JOINTS WITH ASTM C 443 RUBBER GASKETS.
2. FILL HEIGHTS OVER 13' REQUIRE CLASS IV RCP STORM PIPE.
3. STORM INLETS SHALL BE PRECAST IN ACCORDANCE WITH LA VERGNE PUBLIC WORKS SPECIFICATIONS WHICH MEET OR EXCEED ASTM C 478.
4. ALL MANHOLE FRAMES AND COVERS ARE TO BE PER LA VERGNE PUBLIC WORKS STANDARD DETAIL FOR DIMENSIONS AND MATERIALS AND AS BELOW IF NOT OTHERWISE INDICATED. FERROUS; 24-INCH (610-MM) ID BY 7- TO 9-INCH (175- TO 225-MM) RISER WITH 4-INCH- (102-MM-) MINIMUM WIDTH FLANGE AND 26-INCH- (660-MM-) DIAMETER COVER. INCLUDE INDENTED TOP DESIGN WITH LETTERING CAST INTO COVER, USING WORDING EQUIVALENT TO "STORM SEWER."
5. MATERIAL: GRAY IRON ASTM A48 CLASS 30 UNLESS OTHERWISE INDICATED.
6. ALL HDPE PIPE SHALL BE CORRUGATED HIGH DENSITY POLYETHYLENE SMOOTH INTERIOR PIPE. HDPE PIPE SHALL CONFORM TO ASTM D3350 WITH SOIL TIGHT JOINTS.
7. ALL HDPE SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS AND AASHTO SECTION 30.
8. CONTRACTOR TO PROVIDE AND INSTALL MANUFACTURER RECOMMENDED FITTINGS ON RCP CONNECTIONS TO HDPE STRUCTURES.
9. REFER TO PIPE CHART FOR CASTING TYPES. INSTALL REDUCERS AS NECESSARY PER MANUFACTURER'S SPECIFICATIONS TO ACCOMMODATE LARGER INLET SIZES.
10. FOLLOW CONSTRUCTION PLANS AND MANUFACTURER DETAILS, SPECIFICATIONS, AND INSTALLATION INSTRUCTION AS INCLUDED WITHIN THE PLANS AND PROVIDED BY MANUFACTURER FOR THE INSTALLATION OF WATER QUALITY AND DETENTION SYSTEMS.
11. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR ALL STORM SEWER PIPE, STRUCTURES, WATER QUALITY STRUCTURES, AND DETENTION STRUCTURES FOR ENGINEER AND OWNER APPROVAL PRIOR TO ORDERING MATERIALS.

CLEARING AND GRUBBING:

- A. DO NOT EXCEED CLEARING AND GRUBBING LIMITS OF CONSTRUCTION LINES INDICATED ON THE PLANS.
- B. ALL AREAS OUTSIDE THE LIMITS OF CONSTRUCTION LINE SHALL NOT BE CROSSED BY HEAVY EQUIPMENT OR USED FOR STORING HEAVY EQUIPMENT OR MATERIALS.
- C. NO EQUIPMENT SHALL BE STORED UNDER THE DRIP LINE OF TREES TO REMAIN.
- D. DO NOT FALL ANY TREES OR PUSH PILES OF DEBRIS AGAINST ANY TREES TO REMAIN.
- E. REMOVE ALL STUMPS, ROCKS, ASPHALT & CONCRETE DEBRIS, ETC. AND DISPOSE OFF SITE IN ACCORDANCE WITH LOCAL, STATE & FEDERAL REGULATIONS.
- F. CONTACT ALL UTILITY AUTHORITIES WHO HAVE LINES WITHIN THE CLEARING AND GRUBBING LIMITS BEFORE STARTING WORK
- E. ALL EROSION CONTROL SEDIMENT BARRIERS, SILT FENCES, AND TREE PROTECTION DEVICES SHALL BE INSTALLED PRIOR TO STARTING CLEARING AND GRUBBING.
- F. AFTER STAKING IS COMPLETED, TREES WITHIN GRADING LIMITS TO BE SAVED WILL BE IDENTIFIED BY THE OWNER'S REPRESENTATIVE. FIELD CHANGES TO GRADING PLANS SHALL BE MADE FOR SMOOTH TRANSITION OF GRADES AROUND ALL TREES WHICH REQUITE TREE WELLS WITHIN THE GRADING LIMITS.
- G. ALL CLEARING SHALL BE LIMITED TO AREAS TO BE GRADED WITHIN 15 CALENDAR DAYS.

GRADING NOTES:

- A. TOPSOIL SHALL BE STORED ON SITE IN LOCATIONS APPROVED BY THE OWNER'S REPRESENTATIVE. DRAINAGE SHALL ROUT AROUND THESE TOPSOIL STOCKPILES FOR THE DURATION OF THE GRADING OPERATIONS. EROSION CONTROL MEASURES SHALL PREVENT THE LOSS OF TOPSOIL MATERIAL.
- B. UNSUITABLE SOILS SHALL BE UNIFORMLY SPREAD ACROSS NON-STRUCTURAL FILL AREAS AND COVERED WITH TOPSOIL AND SEEDED.
- C. FILL AREA SHALL BE PROOF-ROLLED WITH RUBBER-TIRED EQUIPMENT WITH A MINIMUM WEIGHT OF FIFTEEN TONS PRIOR TO BEGINNING FILL OPERATION. AREAS WHICH ARE SOFT OR UNSTABLE SHALL BE UNDERCUT UNTIL STABLE SOILS ARE FOUND. RE-COMPACTION OF THESE SOILS SHALL BE TO 98% MAXIMUM DRY DENSITY AS PER ASTM D698 (STANDARD PROCTOR).
- D. CUT AREA SHALL BE PROOF-ROLLED AFTER FINAL SUBGRADE IS ACHIEVED IN THE SAME MANNER AS FILLED AREAS. SOFT OR UNSTABLE SOILS SHALL BE SCARIFIED TO A DEPTH OF 12" AND RE-COMPACTED TO 98% MAXIMUM DRY DENSITY AS PER ASTM D698 (STANDARD PROCTOR).
- E. ALL GRADING SHALL BE COMPLETED TO THE LEVEL INDICATED BY THE SCOPE OF WORK LISTED IN THE BID DOCUMENTS.
- F. ELEVATIONS SHOWN ON THE PLANS IS THE FINISH GRADE ELEVATION.
- G. GRADING SHALL BE SEQUENCED SO THAT BASE STONE IS PLACED WITHIN 10 CALENDAR DAYS OF ACHIEVING OPTIMUM SUBGRADE COMPACTION.
- H. SOILS TESTING LABORATORY/ SOILS ENGINEER. CONTRACTOR WILL EMPLOY A QUALIFIED SOILS TESTING LABORATORY/ ENGINEER TO OBSERVE THIS WORK AND MAKE TESTS AS REQUIRED.
- I. HAVE EARTH BORROW FILL, AGGREGATE, AND TOPSOIL, AND STRUCTURAL FILL TESTED AND APPROVED BY DESIGNATED TESTING LABORATORY BEFORE MOVING IT TO THE JOB SITE.
- J. CONTRACTOR SHALL OBSERVE PROOF-ROLLING OF AREAS WHERE BUILDING AND PAVING WILL BE LOCATED TO DETERMINE ADEQUACY OF SOIL COMPACTION AND IN-PLACE SOILS. OTHER AREAS WILL BE INSPECTED BY SOILS ENGINEER TO DETERMINE ADEQUACY IN THOSE AREAS. IF SOILS ARE NOT ADEQUATE TO BEAR WEIGHTS THAT WILL BE IMPOSED, TESTING LABORATORY WILL OBSERVE AND REPORT CORRECTIVE ACTION TAKEN.
- K. TEST IN-PLACE SOIL AND FILLED AND COMPACTED AREAS. IF THESE ARE NOT ADEQUATE TO BEAR WEIGHTS IMPOSED, TESTING LABORATORY WILL ADVISE THE OWNER'S REPRESENTATIVE OF THEIR RECOMMENDATIONS. HE WILL DIRECT ANY CORRECTIVE MEASURES THAT ARE NECESSARY.
- L. SOILS COMPACTION TESTING OF IN-PLACE AND FILLED AND COMPACTED AREAS WILL BE PERFORMED BY TESTING LABORATORY IN ACCORDANCE WITH THEIR REQUIREMENTS.
- M. THE SOILS ENGINEER'S AND TESTING LABORATORY'S FEES WILL BE PAID BY THE CONTRACTOR.
- N. APPLICABLE SPECIFICATIONS FOR COMPACTED FILL: THE FOLLOWING CURRENT AMERICAN SOCIETY OF TESTING MATERIALS (ASTM) STANDARDS ARE HEREBY MADE PART OF THIS SPECIFICATION:
  - D421-58, DRY PREPARATION OF SOIL SAMPLES FOR GRAIN-SIZE ANALYSIS AND DETERMINATION OF SOIL CONSTANTS.
  - D422-63, STANDARD METHOD OF PARTICLE SIZE ANALYSIS OF SOILS.
  - D1140-54, METHOD OF TEST FOR AMOUNT OF MATERIAL IN SOILS FINER THAN NO.200 SIEVE.
  - D698, METHOD FOR LABORATORY COMPACTION CHARACTERISTICS OF SOIL USING STANDARD EFFORT
  - D1557-78, STANDARD TEST METHODS FOR MOISTURE-DENSITY RELATIONS OF SOILS AND SOIL-AGGREGATE MIXTURES USING 10 LB. (4.54-KG) RAMMER AND 18-INCH (457 MM) DROP.
- O. PROVIDE POSITIVE DRAINAGE AWAY FROM BUILDINGS AT ALL LOCATIONS UNLESS OTHERWISE NOTED.
- P. CONTRACTOR SHALL REVIEW THE SITE SPECIFIC GEOTECHNICAL REPORT PRIOR TO COMMENCING WITH GRADING OPERATIONS. WHERE CONFLICTS BETWEEN THE GRADING NOTES AND GEOTECHNICAL REPORT EXIST, THE MORE STRINGENT REQUIREMENT SHALL APPLY.
- Q. CONTRACTOR IS RESPONSIBLE FOR DOCUMENTING WITH LOAD TICKETS, PHOTOGRAPHS, LOG BOOK, VIDEO RECORDING AND OTHER MEANS AS NECESSARY TO VERIFY THE INSTALLATION OF STORMWATER BEST MANAGEMENT PRACTICES REQUIRED BY THE LOCAL MUNICIPALITY AND JURISDICTION. AS-BUILT TOPOGRAPHY AND UTILITY PLANS HAVING BEEN PREPARED BY A QUALIFIED LAND SURVEYOR ARE REQUIRED TO BE SUBMITTED TO KIMLEY-HORN AT THE CONCLUSION OF THE PROJECT FOR VERIFICATION OF DESIGN INTENT. ANY MODIFICATIONS TO THE GRADING AND UTILITY SYSTEMS REQUIRED, NOT PREVIOUSLY APPROVED BY THE OWNER AND ENGINEER ARE THE RESPONSIBILITY OF THE CONTRACTOR.

811 Know what's below. Call before you dig.

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MARLOWE LA VERGNE
243 BLAIR ROAD
LA VERGNE, TENNESSEE

ROBERT JAMES ARTS — REGISTERED ENGINEER — AGENCY NUMBER — 11/27/2023 — CERTIFICATE No. 121064 — STATE OF TENNESSEE

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DATE: 10/02/2023
KIMLEY-HORN PROJECT NO. 118702000

GENERAL NOTES

SHEET NUMBER
C0-01

Drawing name: K:\NS

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Drawing name: K:\NSH_LDEV\118970300 - Shofner-Greystar La Vergne\4-CAD\PlanSheets\C0-02 VICINITY MAP.dwg VICINITY MAP Nov 27, 2023 10:06am by robert.arts



Know what's below.
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VICINITY MAP

SHEET NUMBER
C0-02

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DATE	10/02/2023
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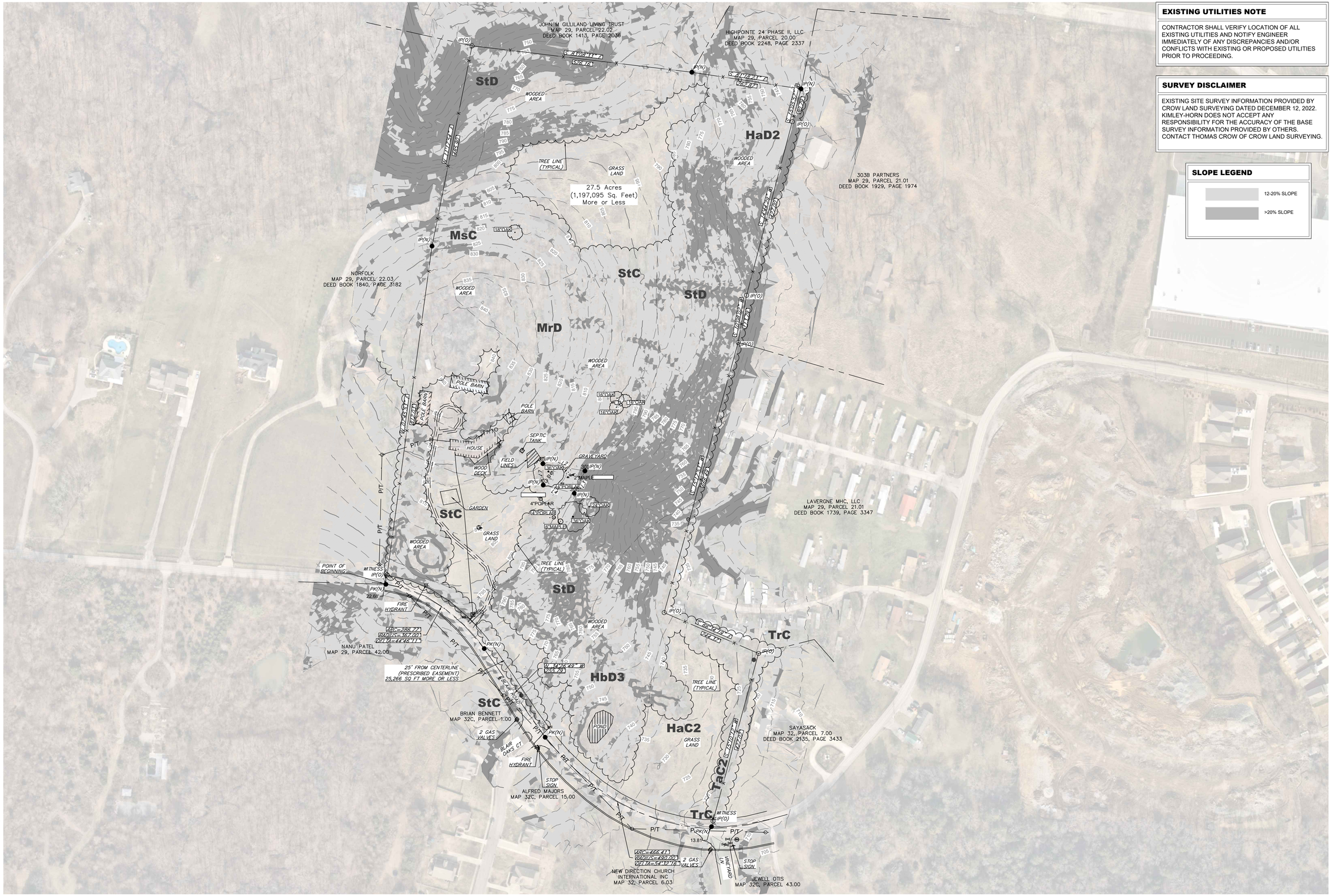
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ROBERT JAMES ANTS
REGISTERED
LICENSED
STATE OF TENNESSEE
LANDSCAPE ARCHITECT

MARLOWE LA VERGNE
243 BLAIR ROAD
LA VERGNE, TENNESSEE

Kimley»Horn
10 Lea Avenue Suite 400, Nashville, TN 37210
Main: 615.564.2701 | www.kimley-horn.com
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EXISTING UTILITIES NOTE

CONTRACTOR SHALL VERIFY LOCATION OF ALL EXISTING UTILITIES AND NOTIFY ENGINEER IMMEDIATELY OF ANY DISCREPANCIES AND/OR CONFLICTS WITH EXISTING OR PROPOSED UTILITIES PRIOR TO PROCEEDING.

SURVEY DISCLAIMER

EXISTING SITE SURVEY INFORMATION PROVIDED BY CROW LAND SURVEYING DATED DECEMBER 12, 2022. KIMLEY-HORN DOES NOT ACCEPT ANY RESPONSIBILITY FOR THE ACCURACY OF THE BASE SURVEY INFORMATION PROVIDED BY OTHERS. CONTACT THOMAS CROW OF CROW LAND SURVEYING.

SLOPE LEGEND

- 12-20% SLOPE
- >20% SLOPE

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243 BLAIR ROAD
LA VERGNE, TENNESSEE

ROBERT JAMES ARTS
REGISTERED ENGINEER
AGENT
ENGINEER
No. 121045
STATE OF TENNESSEE
11/27/2023

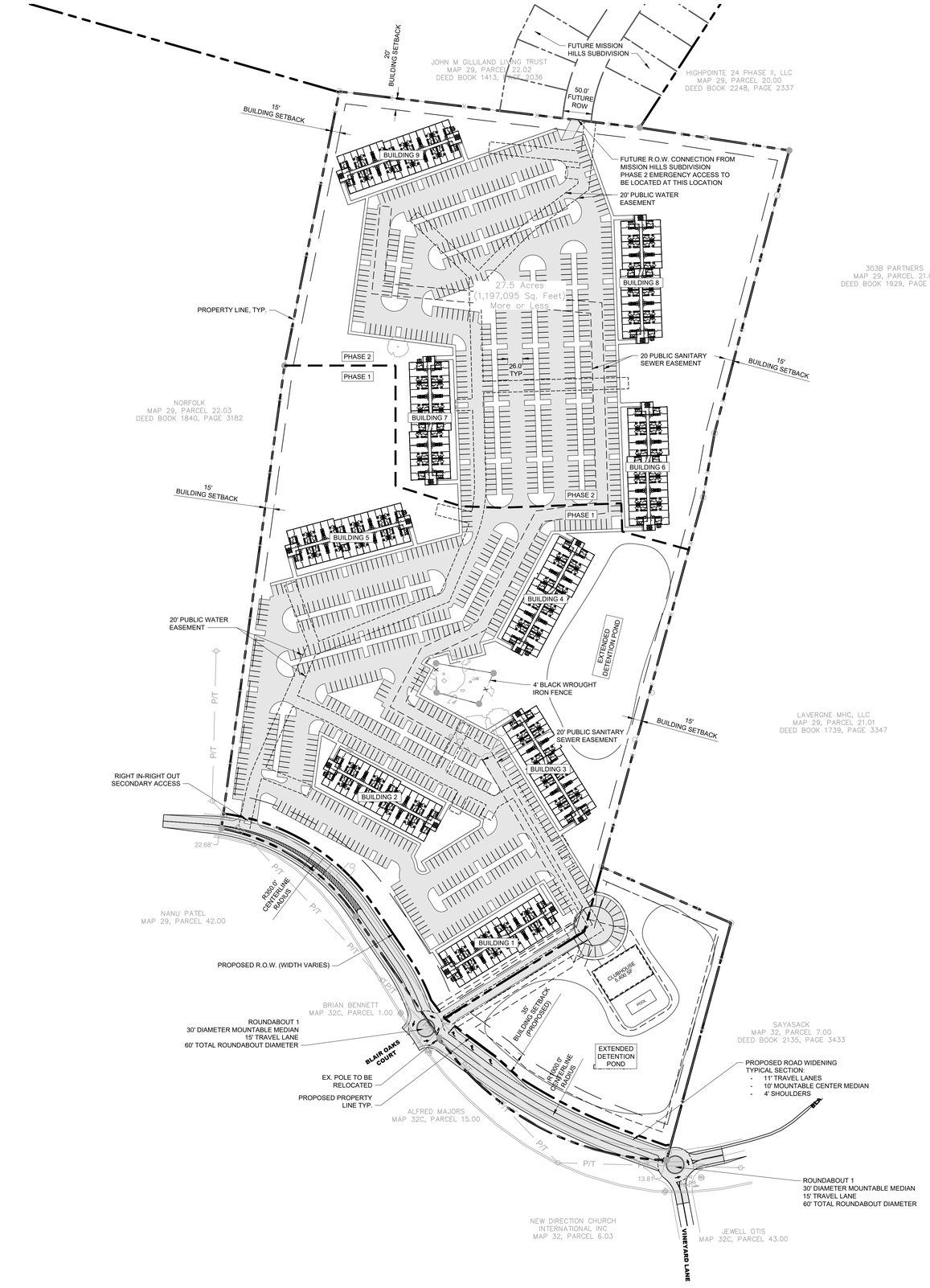
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KIMLEY-HORN PROJECT NO. 118702000

EXISTING CONDITIONS

SHEET NUMBER
C1-00



LAYOUT NOTES

1. ALL WORK AND MATERIALS SHALL COMPLY WITH ALL CITY/COUNTY/STATE REGULATIONS AND CODES AND O.S.H.A. STANDARDS.
2. ALL DIMENSIONS AND RADII ARE TO THE FACE OF CURB UNLESS OTHERWISE NOTED.
3. ALL RADII ARE 3' UNLESS NOTED OTHERWISE.
4. LAYOUT ALL CURVES SMOOTHLY WITH NO ABRUPT CHANGES AT TANGENT POINTS.
5. INSTALL CONCRETE JOINTS WHERE SHOWN ON PLANS AND DETAILS. ALIGN ON WALLS, BUILDING, RADII, ETC. EVENLY SPACE BETWEEN ELEMENTS AS SHOWN. PROVIDE EXPANSION JOINTS BETWEEN CONCRETE PAVEMENT AND ALL VERTICAL ELEMENTS (WALLS, CURBS, ETC.)
6. EXISTING STRUCTURES WITHIN CONSTRUCTION LIMITS ARE TO BE ABANDONED, REMOVED OR RELOCATED AS NECESSARY. ALL COST SHALL BE INCLUDED IN BASE BID.
7. ANY DAMAGED SECTIONS OF EXISTING INFRASTRUCTURE TO BE REPLACED.
8. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL RELOCATIONS, (UNLESS OTHERWISE NOTED ON PLANS) INCLUDING BUT NOT LIMITED TO, ALL UTILITIES, STORM DRAINAGE, SIGNS, TRAFFIC SIGNALS & POLES, ETC. AS REQUIRED. ALL WORK SHALL BE IN ACCORDANCE WITH GOVERNING AUTHORITIES REQUIREMENTS AND SHALL BE APPROVED BY SUCH. ALL COST SHALL BE INCLUDED IN BASE BID.
9. SITE BOUNDARY, TOPOGRAPHY, UTILITY AND ROAD INFORMATION TAKEN FROM A SURVEY PROVIDED AS ALTA SURVEY SHEET.
10. ALL PROPOSED UTILITY CONNECTIONS SHALL BE FIELD VERIFIED AND SUBJECT TO CHANGE PER UTILITY DISTRICT REQUEST.
11. CONTRACTOR SHALL TAKE ALL PRECAUTIONS TO FIND AND AVOID DISTURBING SITE UTILITIES. ALL UTILITIES ARE NOT SHOWN ON DRAWINGS. VERIFY LOCATION AND CONSIDER SUCH WHEN ESTIMATING.
12. ALL PAVEMENT MARKING ON PRIVATE PROPERTY SHALL BE PAINT, UNLESS NOTED OTHERWISE. ALL PAVEMENT MARKINGS ON PUBLIC RIGHT-OF-WAY SHALL BE THERMOPLASTIC, UNLESS NOTED OTHERWISE. ALL PAVEMENT MARKINGS AT DRIVEWAY CONNECTIONS WITHIN 25' OF THE INTERSECTING ROADWAY SHALL BE THERMOPLASTIC
13. ALL TRAFFIC CONTROL SIGNS AND PAVEMENT MARKING WILL COMPLY WITH THE MOST RECENT MUTCD STANDARDS.
14. ALL DEVELOPMENT WITHIN THE BOUNDARIES OF THIS PLAN MEETS THE REQUIREMENTS OF THE AMERICANS WITH DISABILITIES ACT AND THE FAIR HOUSING ACT.
    ADA: http://www.ada.gov/
    U.S. Justice Dept: http://www.justice.gov/crt/housing/fairhousing/about_fairhousingact.htm
14. CONTRACTOR SHALL REFER TO THE ARCHITECTURAL PLANS FOR BUILDING DIMENSIONS AND EXACT BUILDING UTILITY ENTRANCE LOCATIONS.
15. ALL LANDSCAPE ISLANDS SHALL BE MOUNDED WITH TOPSOIL 4" ABOVE THE CURB LINE TO PROMOTE POSITIVE DRAINAGE.
16. NO PEDESTRIAN PATHWAY SHALL EXCEED 2.0% CROSS SLOPE OR 5.0% LONGITUDINAL SLOPE.
17. NO ADA PARKING SPACES SHALL EXCEED 2.0% CROSS SLOPE IN ANY DIRECTION
18. ALL ADA ACCESSIBLE ROUTES INCLUDING CROSS WALKS, RAMPS, AND SIDEWALKS TO MEET ADA SLOPE REQUIREMENTS
19. THERE ARE TO BE NO VERTICAL OBSTRUCTIONS (POLES, SIGNS, GUY WIRES, ETC.) WITHIN SIDEWALK.
20. CONTRACTOR TO PLACE ASPHALT COURSE ONLY AFTER ALL CONSTRUCTION IS COMPLETED AND NO OTHER CONSTRUCTION TRAFFIC IS ANTICIPATED.
21. ROUNDABOUT AT VINEYARD LANE IS CONCEPTUAL AND NOT PART OF PRELIMINARY DEVELOPMENT PLANS.
22. APPLICANT TO COMPLETE ROUNDABOUT AT VINEYARD LANE IF CITY ACQUIRES NECESSARY RIGHT-OF-WAY FROM PRIVATE PROPERTY OWNER(S) AT OR BEFORE COMMENCEMENT OF CONSTRUCTION, OR AS THE CITY AND APPLICANT MAY LATER AGREE.

PHASING NOTE

DEVELOPMENT IS TO BE SPLIT INTO TWO PHASES. AT MOST 200 UNITS WILL BE ALLOWED IN PHASE 1 UNTIL A SECONDARY ACCESS CAN BE PROVIDED IN ACCORDANCE WITH INTERNATIONAL FIRE CODE APPENDIX D, SECTION D106.3 OR AS PERMITTED BY THE CITY OF LA VERGNE FIRE MARSHALL.

GRAPHIC SCALE IN FEET
0 50 100 200

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MARLOWE LA VERGNE
243 BLAIR ROAD
LA VERGNE, TENNESSEE

ROBERT JAMES ARTS
REGISTERED ENGINEER
STATE OF TENNESSEE
No. 121045
11/27/2023

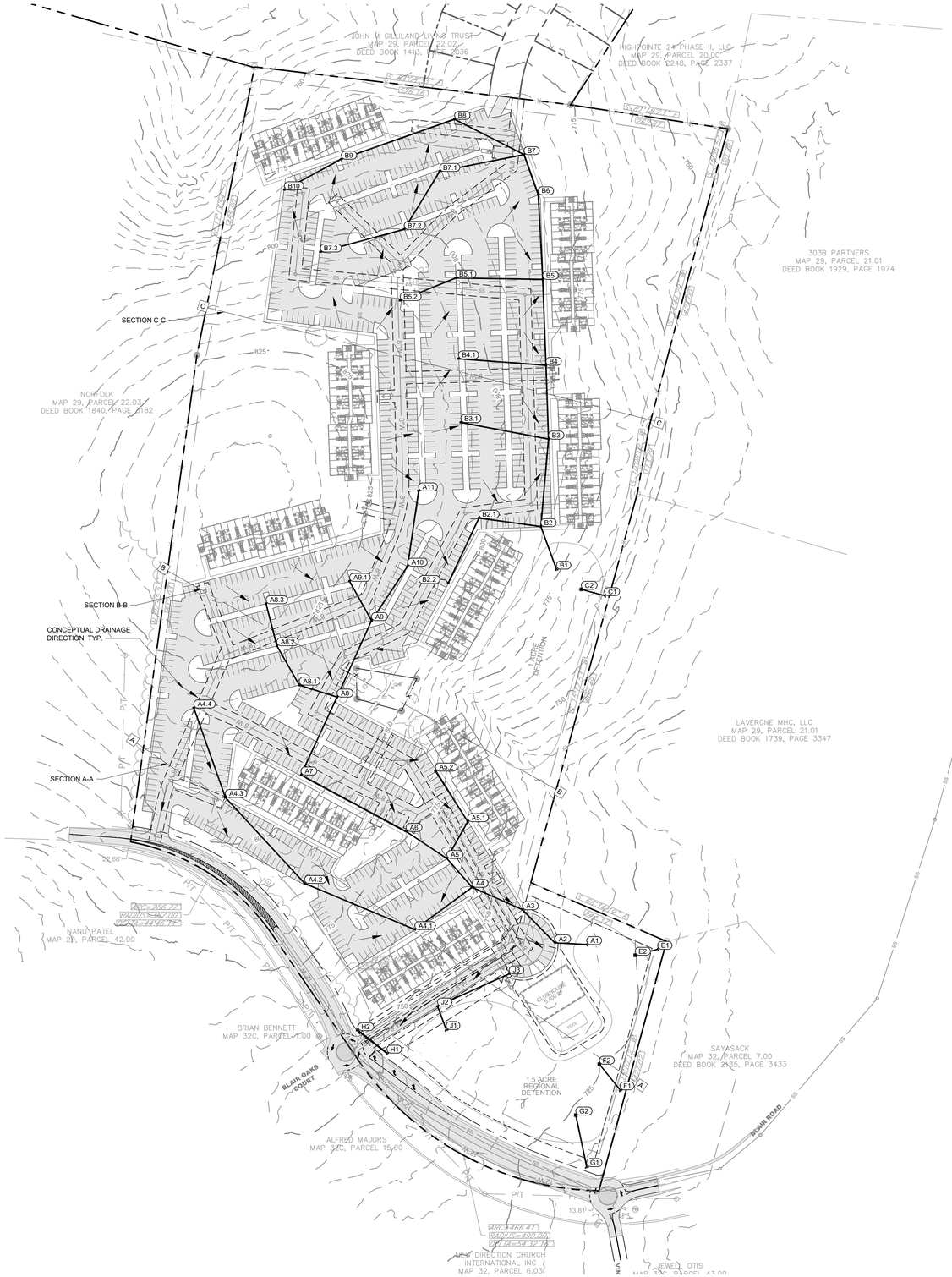
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KIMLEY-HORN PROJECT NO. 118702000

CONCEPT PLAN

SHEET NUMBER
C2-00

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GRADING NOTES

1. CONTRACTOR RESPONSIBLE FOR VERIFYING LOCATION, SIZE, AND ELEVATIONS OF EXISTING UTILITIES AT CONNECTION POINTS PRIOR TO GRADING OR INSTALLATION OF ANY PROPOSED UTILITIES. CONTRACTOR TO IMMEDIATELY NOTIFY OWNER'S REPRESENTATIVE IF DISCREPANCIES ARE FOUND.
2. AREAS FOR CONSTRUCTION THAT REQUIRE DE-WATERING FOR EXCAVATION WILL BE DONE AT NO ADDITIONAL COST TO THE OWNER AND IN ACCORDANCE WITH SECTION 4.1.4 OF THE TENNESSEE GENERAL NPDES PERMIT FOR DISCHARGES OF STORMWATER ASSOCIATED WITH CONSTRUCTION ACTIVITIES.
3. ADDITIONAL EROSION CONTROL DEVICES TO BE USED AS REQUIRED BY LOCAL INSPECTOR.
4. DISTURBED AREAS LEFT IDLE FOR FIVE DAYS, AND NOT TO FINAL GRADE, WILL BE ESTABLISHED TO TEMPORARY VEGETATION. MULCH, TEMPORARY VEGETATION OR PERMANENT VEGETATION SHALL BE COMPLETED ON ALL EXPOSED AREAS WITHIN 14 DAYS AFTER DISTURBANCE. ALL AREAS TO FINAL GRADE WILL BE ESTABLISHED TO PERMANENT VEGETATION UPON COMPLETION.
5. WHEN HAND PLANTING, MULCH (HAY OR STRAW) SHOULD BE UNIFORMLY SPREAD OVER SEEDED AREA WITHIN 24 HOURS OF SEEDING. IF UNABLE TO ACCOMPLISH, MULCH SHALL BE USED AS A TEMPORARY COVER. CONCENTRATED FLOW AREAS AND ALL SLOPES STEEPER THAN 2.5:1 AND WITH A HEIGHT OF TEN FEET OR GREATER (DOES NOT APPLY TO RETAINING WALLS), AND CUTS AND FILLS WITHIN BUFFERS, SHALL BE STABILIZED WITH THE APPROPRIATE EROSION CONTROL MATTING OR BLANKETS.
6. THE GRADING PERMIT MUST BE DISPLAYED ON SITE AT ALL TIMES DURING CONSTRUCTION AND IN PLAIN VIEW FROM A PUBLIC ROAD OR STREET.
7. EROSION AND SEDIMENT CONTROL DEVICES MUST BE DISPLAYED AND INSPECTED PRIOR TO ANY GRADING ON SITE. THE CONTRACTOR MUST CALL FOR AN INSPECTION TO OBTAIN A PERMIT TO GRADE. PLEASE CALL WITH ENOUGH LEAD-TIME FOR AN INSPECTION TO MEET YOUR SCHEDULE.
8. SEDIMENT/EROSION CONTROL DEVICES MUST BE INSPECTED ACCORDING TO LOCAL AND STATE REQUIREMENTS AND AS STIPULATED IN THE STORMWATER POLLUTION PREVENTION PLAN. EACH DEVICE IS TO BE MAINTAINED OR REPLACED IF SEDIMENT ACCUMULATION HAS REACHED ONE HALF THE CAPACITY OF THE DEVICE. ADDITIONAL DEVICES MAY BE NECESSARY AS THE PROJECT PROGRESSES AND NEW CHANNELS HAVE DEVELOPED.
9. THE ESCAPE OF SEDIMENT FROM THE SITE SHALL BE PREVENTED BY THE INSTALLATION OF EROSION AND SEDIMENT CONTROL MEASURES AND PRACTICES PRIOR TO, OR CONCURRENT WITH, LAND-DISTURBING ACTIVITIES.
10. EROSION CONTROL MEASURES WILL BE MAINTAINED AT ALL TIMES. IF FULL IMPLEMENTATION OF THE PLAN DOES NOT PROVIDE FOR EFFECTIVE EROSION CONTROL, ADDITIONAL EROSION CONTROL AND SEDIMENT CONTROL MEASURES SHALL BE IMPLEMENTED TO CONTROL OR TREAT THE SEDIMENT SOURCE.
11. CONTRACTOR SHALL REVIEW SITE GEOTECHNICAL REPORT BEFORE COMMENCING GRADING OPERATIONS.
12. SEED ALL DISTURBED AREAS UNLESS OTHERWISE NOTED AS PART OF THIS CONTRACT. REFER TO LANDSCAPING PLANS FOR AREAS TO RECEIVE SOD.
13. INSTALL SOD OR RIPRAP IN SWALES AS INDICATED ON GRADING PLANS AND EROSION CONTROL PLANS
14. TOPSOIL ON SITE TO BE STRIPPED AND STOCKPILED FOR REUSE IN LAWN AREAS.
15. ADEQUATE DRAINAGE, EROSION AND SEDIMENT CONTROL MEASURES, BEST MANAGEMENT PRACTICES, AND/OR OTHER WATER QUALITY MANAGEMENT FACILITIES SHALL BE PROVIDED AND MAINTAINED AT ALL TIMES DURING CONSTRUCTION. DAMAGES TO ADJACENT PROPERTY AND/OR THE CONSTRUCTION SITE CAUSED BY THE CONTRACTOR'S OR PROPERTY OWNER'S FAILURE TO PROVIDE AND MAINTAIN ADEQUATE DRAINAGE AND EROSION/SEDIMENT CONTROL FOR THE CONSTRUCTION AREA SHALL BE THE RESPONSIBILITY OF THE PROPERTY OWNER AND/OR CONTRACTOR.
16. UNDERGROUND UTILITIES HAVE NOT BEEN VERIFIED BY THE OWNER, DESIGNER, OR THEIR REPRESENTATIVES. BEFORE YOU DIG CALL ONE CALL–811 OR 1-800-752-6007
17. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK AND AGREES TO BE RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT RESULT FROM THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY UNDERGROUND UTILITIES TO REMAIN.

GRADING PLAN LEGEND

476.17	SPOT ELEVATION			
	HP	HIGH POINT	LP	LOW POINT
	TC	TOP OF CURB	BC	BOTTOM OF CURB / GUTTER LINE
	TW	TOP OF WALL	BW	BOTTOM OF EXPOSED WALL
	INV	INVERT	RIM	TOP OF GRATE / COVER
FFE 472.50	FINISH FLOOR ELEVATION			
500	EXISTING CONTOUR			
500	PROPOSED CONTOUR			

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MARLOWE LA VERGNE
243 BLAIR ROAD
LA VERGNE, TENNESSEE

ROBERT JAMES ARTS
REGISTERED ENGINEER
AGENT OF RECORD
CERTIFICATE NO. 121145
STATE OF TENNESSEE
11/27/2023

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DATE: 10/02/2023
KIMLEY-HORN PROJECT NO. 118702000

CONCEPT DRAINAGE PLAN

SHEET NUMBER
C4-00

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CAUTION!

EXISTING OVERHEAD AND UNDERGROUND UTILITIES

SITE UTILITY NOTES

1. EXISTING UTILITIES SHALL BE VERIFIED IN FIELD PRIOR TO INSTALLATION OF ANY NEW PIPE LINES.
2. THE CONTRACTOR SHALL NOTIFY THE INSPECTOR AT LEAST 7 DAYS PRIOR TO THE START OF SEWER CONSTRUCTION.
3. THE LOCATIONS OF EXISTING UNDERGROUND AND OVERHEAD UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR KIMLEY-HORN AND ASSOCIATES, INC. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UNDERGROUND AND OVERHEAD UTILITIES BEFORE COMMENCING WORK AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTORS FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND AND OVERHEAD UTILITIES.
4. CONTRACTOR TO COORDINATE ALL WORK WITH OTHER UTILITY INSTALLATIONS NOT PROVIDED IN THESE CONSTRUCTION DOCUMENTS (ELECTRIC, TELEPHONE, GAS, CABLE, ETC.) AND ALLOW FOR THEIR OPERATIONS AND CONSTRUCTION TO BE PERFORMED.
5. ALL WORK AND MATERIALS SHALL COMPLY WITH THE CITY OF LA VERGNE, TOWN OF SMYRNA AND O.H.S.A. STANDARDS.
6. ALL SEWER CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH TOWN OF SMYRNA AND THE DEPARTMENT OF ENVIRONMENT AND CONSERVATION CURRENT SPECIFICATIONS.
7. ALL FILL IS TO BE PLACED AND COMPACTED PRIOR TO INSTALLATION OF PUBLIC UTILITIES
8. ALL PIPES UNDER STREETS OR PAVED AREAS IN R.O.W. SHALL BE BACKFILLED WITH CRUSHED STONE.
9. ALL AREAS BACKFILLED SHALL BE COMPACTED TO 95% STANDARD PROCTOR IN R.O.W.
10. EXISTING UTILITIES SHALL BE VERIFIED IN FIELD PRIOR TO INSTALLATION OF ANY NEW PIPE LINES.
11. THE CONTRACTOR'S AUTHORIZED FIELD REPRESENTATIVE SHALL NOTIFY THE APPROPRIATE UTILITY DEPARTMENT 48 HOURS PRIOR TO COMMENCING ANY WORK ON THE PROPOSED SANITARY SEWER LINE EXTENSIONS.
12. ALL FIRE HYDRANTS INSTALLED FOR THIS DEVELOPMENT SHALL BE OF A TYPE ACCEPTABLE TO LA VERGNE UTILITY DISTRICT STANDARDS.
13. LA VERGNE UTILITY DISTRICT AND/OR CONTRACTOR SHALL SET INDIVIDUAL WATER METERS IN FIELD AS REQUIRED.
14. CONTRACTOR SHALL REPLACE IN LIKE KIND ALL PAVEMENT AREAS REMOVED OR DISTURBED AS A RESULT OF THE WATER MAIN INSTALLATION AND ASSOCIATED WORK.
15. PUBLIC WATER MAIN TO HAVE MINIMUM OF 36" COVER.
16. ALL WATER LATERALS TO HAVE A MINIMUM OF 18" COVER.
17. CONTRACTOR SHALL BE A STATE OF TENNESSEE LICENSED CONTRACTOR APPROVED TO INSTALL PUBLIC WATER MAINS.
18. CONTRACTOR SHALL OBTAIN AND PAY FOR ALL FEES, PERMITS AND LICENSES AS PART OF THE CONTRACT.
19. NON-METALLIC DETECTION TAPE SHALL BE INSTALLED 18" ABOVE THE WATERLINE, ALONG WITH NUMBER 12 OR 14 GAUGE CAP WIRE TAPED TO THE WATERLINE.
20. LUBRICANTS SHALL BE NON-TOXIC AND SHALL NOT PROMOTE BIOLOGICAL GROWTH. SOLVENT-CEMENTED JOINTS ARE NOT PERMITTED.
21. PROCEDURES FOR DISINFECTING POTABLE WATERLINES SHALL CONFORM TO THE REQUIREMENTS OF A.W.W.A. C651. ALL WATERLINES SHALL BE DISINFECTED, BACTERIOLOGICAL TESTED, AND PRESSURE TREATED ACCORDING TO LA VERGNE UTILITY DISTRICT SPECIFICATIONS PRIOR TO LINE ACCEPTANCE AND THE WATERLINE BEING PLACED INTO SERVICE.
22. PRESSURE AND LEAKAGE TESTS SHALL BE PREFORMED IN STRICT ACCORDANCE WITH CURRENT A.W.W.A STANDARD C600 AND/OR MANUFACTURER'S PROCEDURES.
23. ALL VALVES AND FITTINGS ARE TO CONFORM TO THE LATEST A.W.W.A STANDARDS.
24. THE CONTRACTOR SHALL MAKE ARRANGEMENTS WITH THE UTILITY ENTITY FOR CONNECTION TO THE EXISTING UTILITY LINES. THE CONTRACTOR SHALL ADJUST THE LOCATION OF THE PROPOSED WATERLINE TO AVOID CONFLICTS WITH OTHER UTILITIES.
25. ALL CONCRETE USED FOR THRUST BLOCKS TO HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 3000 psi.
26. THE CONTRACTOR IS RESPONSIBLE FOR THE COMPLETE INSTALLATION OF THE WATER SERVICE LINE AND FIRE LINE AS REQUIRED. THE CONTRACTOR SHALL PROVIDE A TAPPING VALVE AND SLEEVE AND OTHER MATERIAL AND EQUIPMENT AS REQUIRED FOR TAPPING THE EXISTING GROWTH. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE FEE TO LA VERGNE UTILITY DISTRICT AS REQUIRED FOR TAPPING THE EXISTING MAIN AND COORDINATE WITH LA VERGNE UTILITY DISTRICT AS REQUIRED.
27. NO CONNECTION TO THE EXISTING SANITARY SEWER SYSTEM WILL BE PERMITTED UNTIL THE NEW SANITARY SEWER WORK HAS BEEN INSPECTED AND IS APPROVED BY THE APPROPRIATE UTILITY DEPARTMENT/DISTRICT.
28. TEN-FOOT MINIMUM HORIZONTAL SEPARATION AND 18" VERTICAL SEPARATION TO BE MAINTAINED BETWEEN WATER AND SANITARY SEWER LINES WHEREVER POSSIBLE.
29. ALL SANITARY SEWER SERVICES WILL BE TEE OR WYE-CONNECTED TO MAIN LINE.
30. ALL MANHOLES TO HAVE TRAFFIC BEARING FRAMES AND COVERS UNLESS NOTED OTHERWISE ON THE PLAN/PROFILE SHEETS

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LA VERGNE, TENNESSEE

ROBERT JAMES ARTS
REGISTERED ENGINEER
AGENCY NUMBER
COMMISSION No. 121045
STATE OF TENNESSEE
11/27/2023

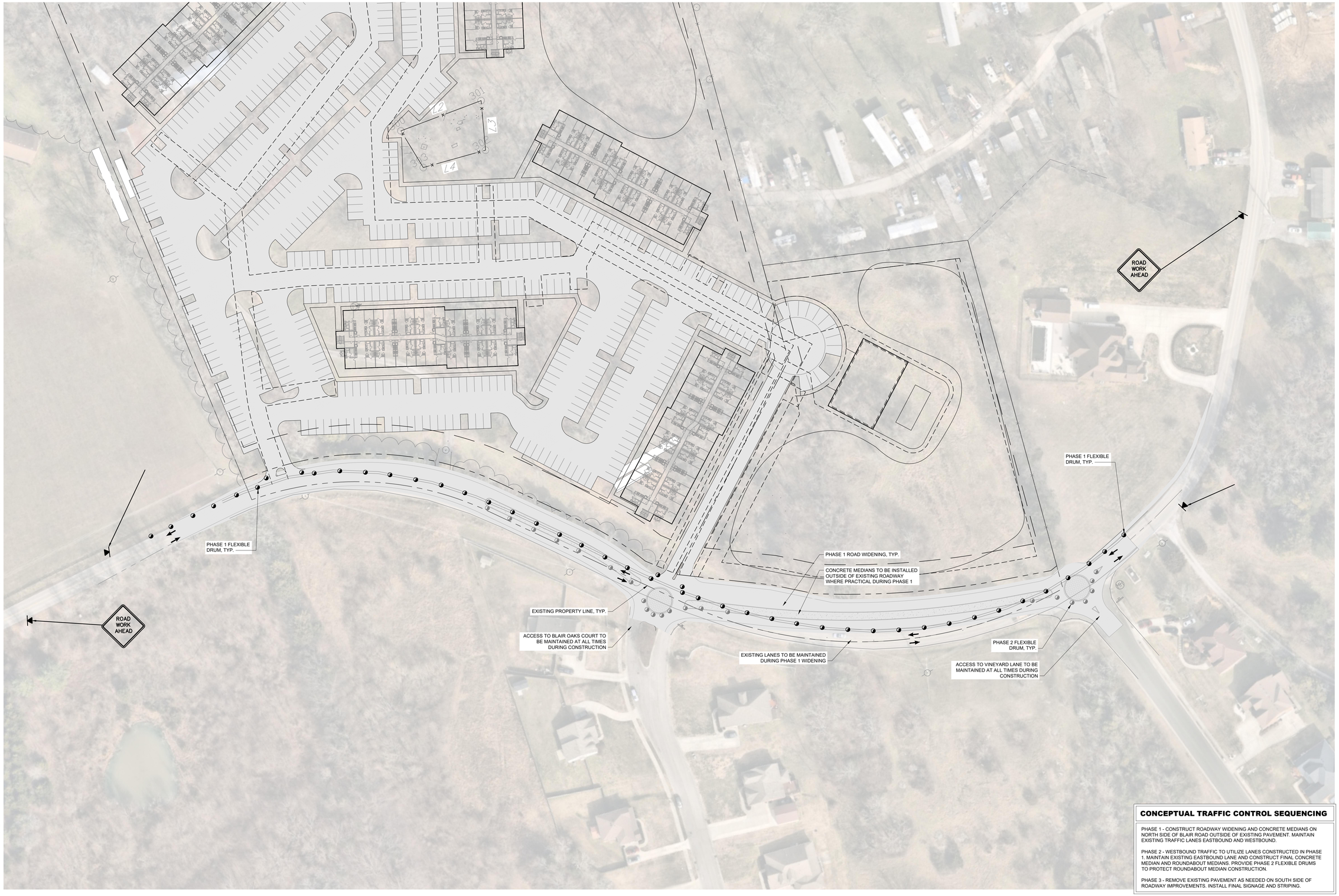
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CONCEPT UTILITY PLAN

SHEET NUMBER
C6-00

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CONCEPTUAL TRAFFIC CONTROL SEQUENCING

PHASE 1 - CONSTRUCT ROADWAY WIDENING AND CONCRETE MEDIANS ON NORTH SIDE OF BLAIR ROAD OUTSIDE OF EXISTING PAVEMENT. MAINTAIN EXISTING TRAFFIC LANES EASTBOUND AND WESTBOUND.

PHASE 2 - WESTBOUND TRAFFIC TO UTILIZE LANES CONSTRUCTED IN PHASE 1. MAINTAIN EXISTING EASTBOUND LANE AND CONSTRUCT FINAL CONCRETE MEDIAN AND ROUNDABOUT MEDIANS. PROVIDE PHASE 2 FLEXIBLE DRUMS TO PROTECT ROUNDABOUT MEDIAN CONSTRUCTION.

PHASE 3 - REMOVE EXISTING PAVEMENT AS NEEDED ON SOUTH SIDE OF ROADWAY IMPROVEMENTS. INSTALL FINAL SIGNAGE AND STRIPING.

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MARLOWE LA VERGNE
243 BLAIR ROAD
LA VERGNE, TENNESSEE

ROBERT JAMES ARTS
REGISTERED ENGINEER
AGENCY
No. 121043
STATE OF TENNESSEE
11/27/2023

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KIMLEY-HORN PROJECT NO.
118702000

CONCEPTUAL TRAFFIC CONTROL

SHEET NUMBER
T1-00

Planning Commission Report
Meeting: December 26, 2023

City of La Vergne

Item #: 5.

Item Title: Preliminary Plat – Marlowe La Vergne – Two (2) Lots on 27.49 Acres. Requested by Kimley Horn. Property located at 243 Blair Road (Tax Map 32, Parcel 6). R-3 (High Density Residential) Zoning District. Property owned by Martin Shofner. (DEFERRED)

Reviewed By:
Bo Logan, City Planner
Gary Lide, City Engineer

Summary: On behalf of their client, Kimley-Horn is requesting approval of the preliminary plat for Marlowe located on 27.5 ± acres. The purpose of the plat is to create two (2) new lots and show right-of-way dedication.

The property is currently zoned R-3 which allows high density.

The property is located on Blair Road. The concept plan shows 16 buildings and 352 units.

Staff Recommendation:

Staff Comments / Technical Items:

Planning

Bo Logan
blogan@lavergnetn.gov

Jake Blair
jblair@lavergnetn.gov

Engineering

Gary Lide
glide@lavergnetn.gov

No Engineering Comments. See Concept Plan review comments.

Utilities

Scott Tatalovich
statalovich@lavergnetn.gov

No comments.

Codes

No comments.

Fire

Curtis Brinkley
cbrinkley@lavergnetn.gov

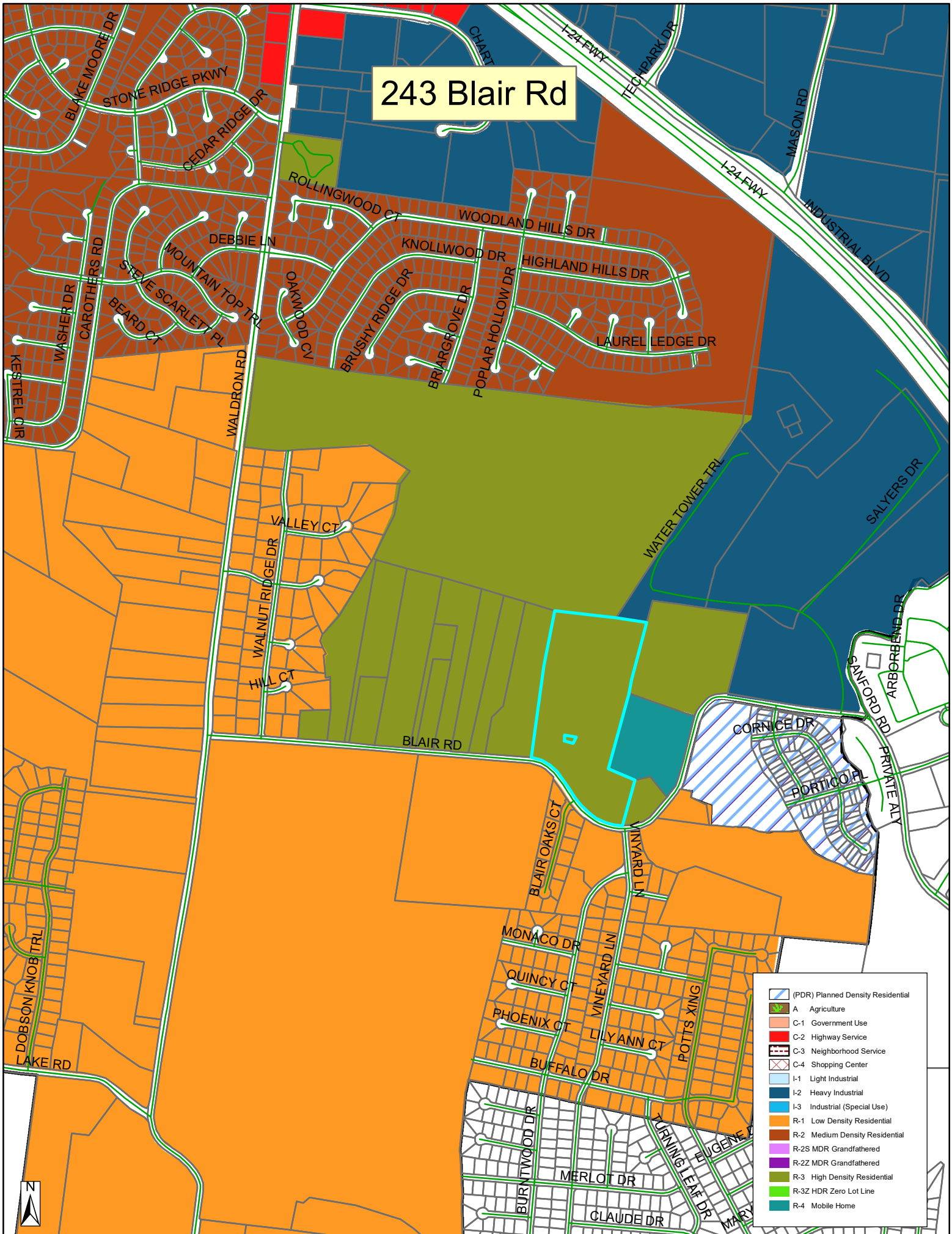
Police

John Eubank
jeubank@lavergnetn.gov

***Note:** The above technical items may not be the only corrections and/or issues needing to be resolved to get approval from the planning commission. New items can be brought up at the workshop and staff can add items at any time that might have been overlooked. It is the applicant's responsibility to make sure that all technical items are addressed and that no new issues exist before the planning commission meeting. Addressing all technical items does not constitute approval. It is the planning commission's decision whether an item passes or fails. Revised plans are due to staff by the following Monday at close of business unless other arrangements are made and documented.


243 Blair Rd
WATER TOWER TRL
BLAIR RD
BLAIR OAKS CT
VINYARD LN
N


243 Blair Rd
WOODLAND HILLS DR
DEBBIE LN
KNOLLWOOD DR
OAKWOOD CV
BRUSHYRIDGE DR
BRIARGROVE DR
POPLAR HOLLOW DR
LAUREL LEDGE DR
BRIARHILL CT
INDUSTRIAL BLVD
I-24 FWY
WALDRON RD
VALLEY CT
WALNUT RIDGE DR
HILL CT
WATER TOWER TRL
SALYERS DR
SANFORD RD
ARBORBEND DR
MINT JULIP MNR
COLONNADE DR
CORNICE DR
PRIVATE ALY
PORTICO PL
BLAIR RD
BLAIR OAKS CT
VINMARK LN
VINEYARD LN
BURNTWOOD DR
JOHN SAMS DR
POTTS XING
PHOENIX CT
LILY ANN CT
BUFFALO DR
SLIGO CT
LANGFORD CT
MERLOT DR
MOET CT
TURNING LEAF DR
EUGENE DR
MARY ELLEN CIR
OMAHA CT
CLAUDE DR
CLAUDE DR
N


243 Blair Rd
BLAKE MOORE DR
STONE RIDGE PKWY
CEDAR RIDGE DR
CHART
I-24 FWY
TECHPARK DR
MASON RD
INDUSTRIAL BLVD
ROLLINGWOOD CT
WOODLAND HILLS DR
DEBBIE LN
KNOLLWOOD DR
HIGHLAND HILLS DR
MOUNTAIN TOP TRL
STEVE SCARLETT PL
BEARD CT
CAROTHERS RD
WASHER DR
KESTREL CIR
OAKWOOD CV
BRUSHY RIDGE DR
BRIARGROVE DR
POPLAR HOLLOW DR
LAUREL LEDGE DR
WALDRON RD
WATER TOWER TRL
SALYERS DR
VALLEY CT
WALNUT RIDGE DR
HILL CT
ARBORBEND DR
SANFORD RD
CORNICE DR
PORTICO PL
PRIVATE ALY
BLAIR RD
BLAIR OAKS CT
VINYARD LN
MONACO DR
QUINCY CT
PHOENIX CT
LILY ANN CT
POTTS XING
BUFFALO DR
DOBSON KNOB TRL
LAKE RD
BURNTWOOD DR
MERLOT DR
CLAUDE DR
(PDR) Planned Density Residential
A Agriculture
C-1 Government Use
C-2 Highway Service
C-3 Neighborhood Service
C-4 Shopping Center
I-1 Light Industrial
I-2 Heavy Industrial
I-3 Industrial (Special Use)
R-1 Low Density Residential
R-2 Medium Density Residential
R-2S MDR Grandfathered
R-2Z MDR Grandfathered
R-3 High Density Residential
R-3Z HDR Zero Lot Line
R-4 Mobile Home
N


VINEYARD LANE
BLAIR ROAD
STOP



April 18, 2023

Robert Arts, P.E.
Kimley-Horn
10 Lea Ave, Ste 400
Nashville, TN 37210

Re: 243 Blair Road
Smyrna, TN 37167

Mr. Arts,

Please be advised that natural gas and sanitary sewer are currently available at or near the above-mentioned location.

Natural Gas - existing 4" PE on south side of Blair Road

Sewer – Existing 8" gravity available approx 900 FT offsite at Portico Place. Must have approval from LaVergne before sewer service can be provided.

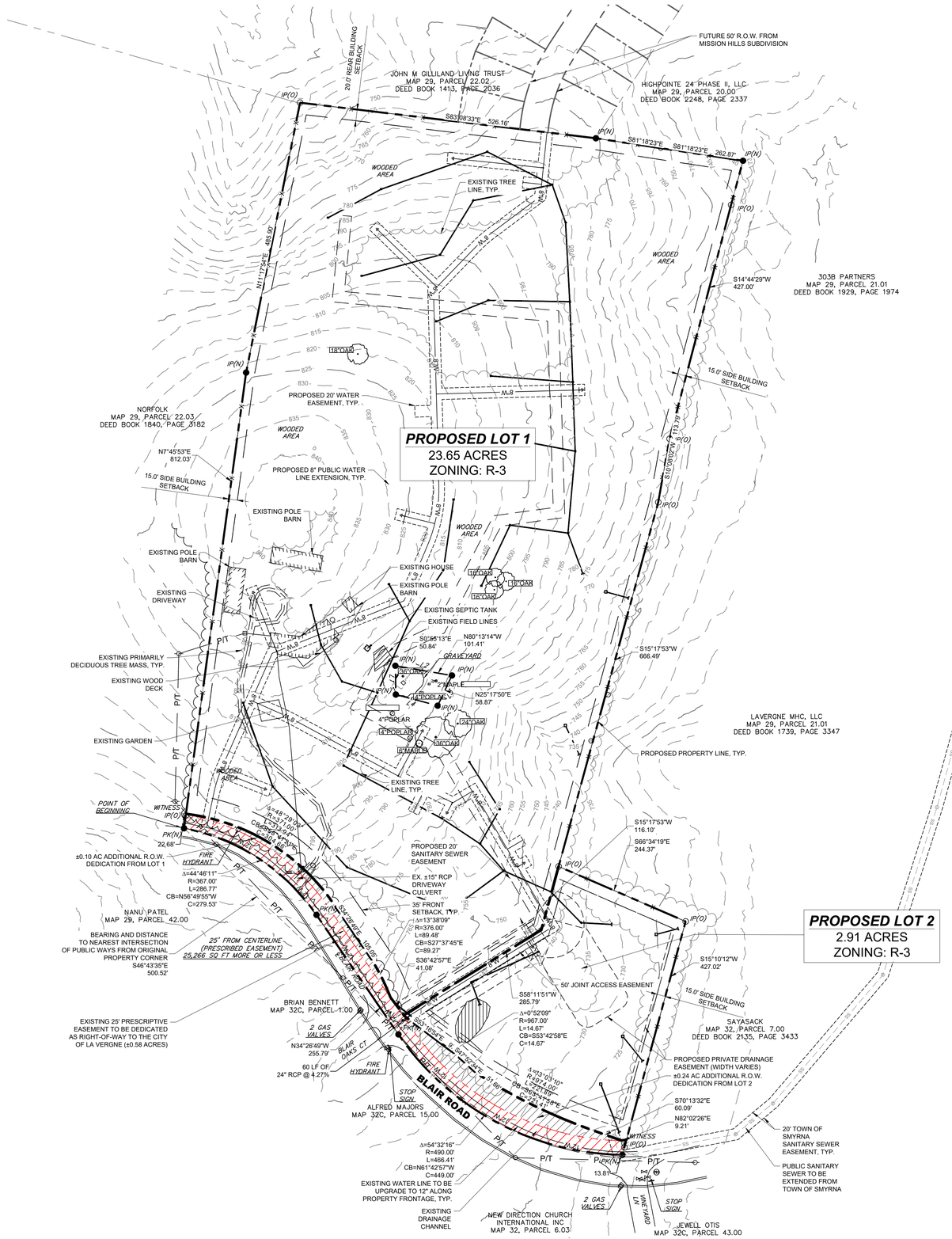
Water- LaVergne is the provider

Should you have any questions, please call me at (615) 355-5711.

Sincerely,

Mark Parker, P.E.
Assistant Director of Utilities
Smyrna Utilities
315 S. Lowry St.
Smyrna, TN 37167

This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



LOT SUMMARY

TOTAL NUMBER OF NEW LOTS = 2
TOTAL ACREAGE = 27.47 AC
R.O.W. DEDICATED = 0.89 AC
LOT 1 = 23.65 AC, LOT 2 = 2.93 AC
CURRENT ZONING: R-3
(HIGH-DENSITY REISDENTIAL)

OWNERS

PARCEL 6:
MARTIN SHOFNER ET AL
6109 JOCELYN HOLLOW ROAD
NASHVILLE, TN 37205

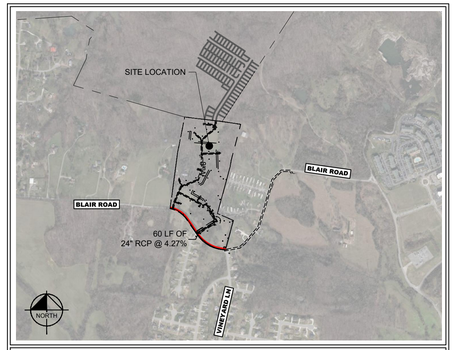
DEVELOPER / AUTHORIZED REPRESENTATIVE

MARTIN SHOFNER ET AL
6109 JOCELYN HOLLOW ROAD
NASHVILLE, TN 37205
CONTACT: MARTIN SHOFNER
(615) 477-5155

LEGEND

M(O)	MONUMENT (OLD)
IR(O)	IRON ROD (OLD)
IR(N)	IRON ROD (NEW) (1/2" x 18" W/CAP STAMPED
CO	SEWER CLEAN-OUT
	UTILITY POLE
	UTILITY POLE W/ ANCHOR
	UTILITY POLE W/ LIGHT
-P&T-	OVERHEAD POWER AND TELEPHONE LINES
E	ELECTRIC BOX
T	TELEPHONE RISER
CATV	CABLE TV BOX
CMP	CORRUGATED METAL PIPE
-X-X-	FENCE
R.O.R.C.T.	REGISTER'S OFFICE FOR RUTHERFORD COUNTY, TN





VICINITY MAP
NOT TO SCALE

DEED REFERENCES

RUTHERFORD COUNTY TAX MAP 32, PARCEL 6.00
WILL BOOK 54, PAGE 163
RUTHERFORD COUNTY CLERK'S OFFICE
DEED BOOK 596, PAGE 3639, R.O.R.C.T.

EXISTING UTILITIES NOTE

CONTRACTOR SHALL VERIFY LOCATION OF ALL EXISTING UTILITIES AND NOTIFY ENGINEER IMMEDIATELY OF ANY DISCREPANCIES AND/OR CONFLICTS WITH EXISTING OR PROPOSED UTILITIES PRIOR TO PROCEEDING.

PROPERTY MAP REFERENCES

BEING PARCEL 6.00 AS SHOWN ON RUTHERFORD COUNTY PROPERTY MAP 32.

PLAT REFERENCE

RUTHERFORD COUNTY TAX MAP 32, PARCEL 6.00
WILL BOOK 54, PAGE 163
RUTHERFORD COUNTY CLERK'S OFFICE
DEED BOOK 596, PAGE 3639, R.O.R.C.T.

GENERAL NOTES

1. BEARINGS SHOWN HEREON ARE BASED ON THE TENNESSEE COORDINATE SYSTEM OF 1983.
2. THIS PRELIMINARY PLAT WAS PREPARED AND IS BEING SUBMITTED UNDER THE CITY'S DEVELOPMENT STANDARDS FOR R-3 ZONING FOR THE PURPOSE OF DEVELOPING MULTIFAMILY APARTMENTS.
3. THIS PRELIMINARY WILL BE FOLLOWED WITH A SITE PLAN AND FINAL PLAT IN ACCORDANCE WITH CITY OF LA VERGNE REQUIREMENTS WITHIN THE APPLICABLE TIME PERIOD ESTABLISHED BY STATE LAW.

FLOOD HAZARD NOTE: ACCORDING TO THE FEDERAL EMERGENCY MANAGEMENT AGENCY'S FLOOD INSURANCE RATE MAP - EFFECTIVE DATE MAY 9, 2023, THE PROPERTY SHOWN DOES NOT LIE WITHIN A FLOOD ZONE.
MAP #47149C0105J

SURVEY DISCLAIMER

1. THE PLAT SHOWN HEREON BASED ON BOUNDARY SURVEY BY CROW LAND SURVEYING DATED 12/28/2022 SEALED BY R.L.S. #2758 THOMAS W. CROW

   1a. THE FOLLOWING INFORMATION WAS USED TO PERFORM THE SURVEY:
   (A) TYPE OF SURVEY: BASE/ROVER RTK
   (B) POSITIONAL ACCURACY: 0.05 FEET
   (C) DATE OF SURVEY: 12/13/2022
   (D) DATUM/EPOCH: NAD83(2011) EPOCH 2010.00
   (E) PUBLISHED/FIXED CONTROL: OPUS
   (F) GEOID MODEL: NGS2018
   (G) COMBINED GRID FACTOR: N/A - 1.000000

   1b. TOPOGRAPHY SHOWN HERON ACQUIRED BY QL-2 LIDAR IN TN STATE PLANE COORDINATES & WAS PROVIDED BY BARJOW LAND CONSULTING AT THE REQUEST OF THE CLIENT. A FIELD RUN TOPOGRAPHIC SURVEY WAS NOT DONE BY THIS SURVEYOR.

   1c. UTILITIES SHOWN ON THIS SURVEY HAVE BEEN TAKEN FROM VISIBLE APPURTENANCES ON-SITE AND MAPS AVAILABLE TO THIS SURVEYOR AT THIS TIME. ALL CARE HAS BEEN TAKEN TO ACCURATELY SHOW THE UTILITIES HEREON; HOWEVER, IN TENNESSEE, IT IS A REQUIREMENT OF THE LAW TO LOCATE THE EXISTING UTILITIES BY CONTACTING TENNESSEE ONE-CALL (811) AT LEAST THREE WORKING DAYS BEFORE BEGINNING ANY EXCAVATING OR DIGGING.

2. SURVEYOR'S LIABILITY FOR THIS DOCUMENT SHALL BE LIMITED TO THE ORIGINAL CLIENT(S) AND DOES NOT EXTEND TO ANY UNNAMED PERSON OR ENTITIES WITHOUT AN EXPRESSED RE-CERTIFICATION BY THIS SURVEYOR.

3. PROPERTY IS SUBJECT TO ALL EASEMENTS OR RIGHT OF WAYS RECORDED OR BY PRESCRIPTION THAT A TITLE SEARCH MAY REVEAL. A TITLE SEARCH REPORT WAS NOT PROVIDED TO THIS SURVEYOR.

4. NO PORTION OF THIS PROPERTY LIES WITHIN THE DESIGNATED SPECIAL FLOOD ZONE AREAS ACCORDING TO FEMA FLOOD INSURANCE RATE MAP 47149C0105H, DATED 1/5/2007.

CERTIFICATE OF APPROVAL OF WATER SYSTEMS

I HEREBY CERTIFY THAT THE WATER SYSTEMS OUTLINED OR INDICATED ON THE FINAL SUBDIVISION PLAT ENTITLED "MARLOWE LA VERGNE" HAS/HAVE BEEN INSTALLED IN ACCORDANCE WITH CURRENT LOCAL AND STATE GOVERNMENT REQUIREMENTS, OR A SUFFICIENT BOND OR OTHER SURETY HAS BEEN FILED TO GUARANTEE SAID INSTALLATION

_____, _____ _____
DATE NAME, TITLE AND AGENCY OR AUTHORIZED APPROVING AGENT

CERTIFICATE OF APPROVAL OF SEWER SYSTEMS

I HEREBY CERTIFY THAT THE SEWER SYSTEMS OUTLINED OR INDICATED ON THE FINAL SUBDIVISION PLAT ENTITLED "MARLOWE LA VERGNE" HAS/HAVE BEEN INSTALLED IN ACCORDANCE WITH CURRENT LOCAL AND STATE GOVERNMENT REQUIREMENTS, OR A SUFFICIENT BOND OR OTHER SURETY HAS BEEN FILED TO GUARANTEE SAID INSTALLATION

_____, _____ _____
DATE NAME, TITLE AND AGENCY OR AUTHORIZED APPROVING AGENT

APPROVED BY THE LA VERGNE PLANNING COMMISSION WITH SUCH EXCEPTIONS OR CONDITIONS AS ARE INDICATED IN THE MINUTES OF THE COMMISSION ON

_____
(DATE)

PRELIMINARY PLAT APPROVAL SHALL NOT CONSTITUTE FINAL APPROVAL FOR RECORDING PURPOSES

811 Know what's below. Call before you dig.

GRAPHIC SCALE IN FEET
0 50 100 200

NORTH

Kimley»Horn
10 Lea Avenue Suite 400, Nashville, TN 37210
Main: 615.564.2701 | www.kimley-horn.com
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MARLOWE LA VERGNE
243 BLAIR ROAD
PRELIMINARY PLAT
LA VERGNE, TENNESSEE

ROBERT JAMES ARMS
REGISTERED ENGINEER
AGENCY NUMBER
Robert James Arms
11/27/2023
Date
No. 121045
STATE OF TENNESSEE

No.	REVISIONS	DATE	BY
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			

DESIGNED BY: ___
DRAWN BY: ___
CHECKED BY: ___
DATE: 10/1/2023
KIMLEY-HORN PROJECT NO. 118702000

PRELIMINARY PLAT

SHEET NUMBER
C1-20

Drawing name: K:\NSH_LDEV\118702000 - Shofner-Greystar La Vergne\4-CADD\PlanSheets\C1-20 PRELIMINARY PLAT.dwg C1-20 PRELIMINARY PLAT Nov 27, 2023 9:48am by: robert.arts

Planning Commission Report
Meeting: December 26, 2023

City of La Vergne

Item #: 6.

Item Title: Update Bond Amount for Portico Place, Section 2, Phase 2 (Tax Map 14, Parcel 24). Requested by SEC, Inc. PDR (Planned Density Residential) Zoning District.

Reviewed By:

Summary: The previous bond amount for Portico Place Section 2, Phase 2, is now 6 months old, and an updated amount has been requested by the city.

Staff Recommendation:

Staff Comments / Technical Items:

Planning

Bo Logan
blogan@lavergnetn.gov

Jake Blair
jblair@lavergnetn.gov

Engineering

Gary Lide
glide@lavergnetn.gov

Revised document with proper signatures has been received. There are no Engineering comments.

Utilities

Scott Tatalovich
statalovich@lavergnetn.gov

Codes

Fire

Curtis Brinkley
cbrinkley@lavergnetn.gov

Police

John Eubank
jeubank@lavergnetn.gov

***Note:** The above technical items may not be the only corrections and/or issues needing to be resolved to get approval from the planning commission. New items can be brought up at the workshop and staff can add items at any time that might have been overlooked. It is the applicant's responsibility to make sure that all technical items are addressed and that no new issues exist before the planning commission meeting. Addressing all technical items does not constitute approval. It is the planning commission's decision whether an item passes or fails. Revised plans are due to staff by the following Monday at close of business unless other arrangements are made and documented.

SEC, Inc.

SITE ENGINEERING CONSULTANTS

ENGINEERING · SURVEYING · LAND PLANNING
LANDSCAPE ARCHITECTURE

850 Middle Tennessee Blvd · Murfreesboro, TN 37129 · 615-890-7901 · www.sec-civil.com · Fax 615-895-2567

November 13, 2023

Gary Lide
City of La Vergne Planning Department
5175 Murfreesboro Road
La Vergne, Tennessee 37086

RE: Portico Place Section 2 Phase 2
Opinion of Probable Cost for City Bonding
SEC No. 17024

Dear Gary,

Below is the Opinion of Cost for Items left to be completed:

1.	3-quotes for pavement average (on site)	$58,472
2.	Mail Kiosk	$25,000
3.	SEC, Inc. Cost for As-Builts	$5,000
4.	General Erosion Control Maintenance	$10,000
5.	General Water and Sewer Maintenance	$10,000
6.	Contingency	$21,695

Total opinion of probable cost = $130,167

If you have any questions or if I may be of further assistance, I can be contacted by phone at 615-890-7901. My email address is **jminer@sec-civil.com**.

Sincerely,



John Miner, P.E.
SEC, Inc.

Wiregrass Construction Company, Inc.

827 Needham Drive
Smyrna, TN 37167
Contact: **Andy Burton**
Phone: **615-793-2600**
Email: **aburton@wiregrassconstruction.com**

Quote To: Bidders
Contact:

Phone:
Email:

Job Name: Portico Place Section 2 Budgetary

Proposal Date: 11/9/2023

Date of Plans: SEC, Inc. 1/10/2019

Quote is good for 30 days.

ITEM	DESCRIPTION	QUANTITY	UNIT		
5	Tack Coat - Section 2 Phase 1	8,600.00	SY		
10	64-22 E Mix 1.5" - Section 2 Phase 1	800.00	TN		
15	Mobilization - Section 2 Phase 1	1.00	LS		
	Section 2 Phase 1				**96,946.26**
20	Tack Coat - Section 2 Phase 2	4,675.00	SY		
25	64-22 E Mix 1.5" - Section 2 Phase 2	450.00	TN		
30	Mobilization - Section 2 Phase 2	1.00	LS		
	Section 2 Phase 2				**54,052.28**
GRAND TOTAL					**$150,998.54**

NOTES:

This is just a budget paving number.

Exclusions:
-Permits, fees, aid to construction, allowances and bond
-Engineering or layout
-Traffic control materials
-Subgrade prep
-Sawcutting
-Testing
-Rock Excavation (Trench or Mass)
-Utility Risers
-Concrete Flatwork including Stone
-Striping/Pavement Markings
-Site Signage
-Concrete Curb
-Base Stone
-Binder/Repair

NOTES:

-This proposal shall be made part of the contract and given precedence over the plans, specs and other contract clauses.
-No Safety orientation, safety meetings, safety paperwork, or Drug Testing is included outside what is required by Wiregrass Construction Company, Inc. safety program and employment policy.
-Control is to be provided by Client.
-Drainage of paved areas will not be guaranteed where design slope is less than 1%.
-Not responsible for re-grading of site due to construction operations of other contractors after WCC has graded site.
-Not responsible for repairing base, pavement, curbs, sidewalk, handicap ramps, subgrade, or erosion control measures due to damage caused by other contractors
-Aggregates are quoted as meeting TDOT Specifications unless otherwise noted.
-Price includes one paving mobilization per phase. Additional mobilizations will be $3000 per move-in.
-Proposal is based on +/- 0.5 inch tolerance for aggregate base course and +/- 0.25 inch tolerance per asphalt layer.
-Pricing is firm through December 2023 provided that award is made within 30 days.
-Proposal is Lump Sum. If items are taken out of the scope, Wiregrass reserves the right to re price.
-Proposal is contingent upon acceptance of the terms of the contract.

-Due to the volatility in the petroleum industry this project has been priced utilizing an asphalt cement (Bituminous Material) escalator/de-escalator. Contract billings will be adjusted when work is performed in a month that the Tennessee Department of Transportation Monthly Bituminous Material Index increases or decreases from the Basic Bituminous Material Index by five (5) percent or more.The Basic Bituminous Material Index for this project is: $632.73 (11/1/2023)

-The construction and construction materials industries have experienced uncertainty in the global supply of petroleum products and associated unprecedented increases in fuel and energy costs. In an effort to equitably cover these fuel cost fluctuations that independent contract haulers are incurring, it has become necessary to adjust freight rates. Depending on the current monthly fuel index there will be a per ton fuel charge in addition to our lump sum, SY, or per ton price for base stone.

Proposal submitted by:

Andy Burton - Estimator/Project Manager

All material is guaranteed to be as specified. All work to be completed in a workmanlike manner according to standard practices. Any alteration or deviation from above specifications involving extra costs will be executed only upon written orders, and will become an extra charge over and above the estimate. All agreements contingent upon strikes, accidents or delays beyond our control. Owner to carry necessary insurance. Our workers are fully covered by Workman's Comp. insurance. All jobs must be started in a timely manner. Any delays will constitute a re-pricing and agreement of new price before commencement.

ACCEPTANCE OF PROPOSAL

The above prices, specifications and conditions are satisfactory and are hereby accepted. You are authorized to do the work as specified. Payment will be made as outlined above. Should the undersigned fail to pay this indebtedness, or any part thereof, when due, the entire unpaid balance shall become due and payable; in which the undersigned agrees to pay all costs of collecting, including a reasonable attorney's fee, plus a finance charge of 1.5% per month (18% per year from the due date).

ACCEPTED BY:

Print _____

Signature _____

Date _____

Humerick Environmental Construction, Inc.
8401 Covington Rd
College Grove, TN 37046

Date: 11/8/2023

RE: Portico Place Section 2

Humerick Environmental Construction, Inc. is pleased to quote the paving at Portico Place. Our price includes: all labor, equipment, materials, state fees, general liability insurance, and workman's compensation insurance to perform this work in a safe professional manner. We have listed for your review the key elements of our scope of work.

Portico Place Section 2 Paving

Humerick Environmental Construction, Inc. is providing the following pricing for:

	Quantity	Unit	Per Unit Price	Total
Section 2 Phase 1 (Includes Tack Coat and 1.5" E Mix)	8,642.00	SY	$ 12.39	$ 107,074.38
Section 2 Phase 2 (Includes Tack Coat and 1.5" E Mix)	4,684.00	SY	$ 12.39	$ 58,034.76
			Total Amount	**$ 165,109.14**

Respectfully Submitted,

Will Wheeler

Accepted by: _____

Date: _____

Phone: (615) 368-2600
Fax: (615) 368-2601

P.O. Box 682423, Franklin, Tennessee 37068 P 931 364 6900 F 931 364 4115 volunteerpaving.com

11/3/2023

Levi Grantham Land Group
Craig Yerian
101 Forrest crossing, suite 107
Franklin, TN 37064

Project: 856 - PORTICO PLACE SECTION 2 PHASE 2 TOPPING BUDGET UPDATED 3 NOV 23

We are pleased to submit the following scope of work for the Development located in LAVERGNE (RUTHERFORD COUNTY), Tennessee. After you have reviewed our proposal, should you have any questions or need any clarifications, please contact me at your convenience.

Description of Work
This quote includes all labor, materials and equipment required for the performance of the following described work.

Description	Quantity	Unit	Price	Extension
TACK COAT	5,010.000	S.Y.	0.44	2,204.40
1.5" ASPHALT MIX (PG64-22) GRADING E	5,010.000	S.Y.	12.20	61,122.00
		QUOTE TOTAL:		63,326.40

EXCLUSIONS:
EXCLUSIONS:
1. No permits, bonds, or fees
2. No striping or signage
3. No curb or binder repair
4. No testing of subgrade or asphalt materials
5. No utility adjustments
6. Not responsible for any damages to existing curbs or pavement gaining access to project.

NOTES:
7. This proposal is good for 30 days.
8. This proposal includes 1 mobilization. Each additional mobilization will be $1500.00.
9. This proposal does not include elevation adjustments to manholes, inlets, valve boxes or any utility unless specified.
10. Any change in the scope of work listed above shall be acknowledged in writing by both parties prior to work being performed. Any increase or decrease to the price will be included in the writing.
11. No paving will be performed between December 15th and March 15th without approval / waiver.
12. Price above is a mutually agreeable contract between Volunteer Paving, LLC and General Contractor or Developer
13. Payment is due 30 days from invoice date. A 1.5% late fee will be charged monthly on all unpaid balances until

P.O. Box 682423, Franklin, Tennessee 37068 P 931 364 6900 F 931 364 4115 volunteerpaving.com

full payment has been received.

14. This proposal is based on the TDOT Bituminous Index. The proposal price may be adjusted in accordance with this index based on the change from the month the job was quoted to the month the work was performed. Current Index: $632.73 per ton of liquid AC - November 2023

Submitted by:

Ricky Sanford

Ricky Sanford
Project Manager
Volunteer Paving, LLC

Accepted by: _____
Title: _____
Date: _____

Planning Commission Report Meeting: December 26, 2023	City of La Vergne

Item #: 7.

Item Title: Site Plan – Aldi – New Grocery Store of 19,432 Square Feet on 2.4 Acres. Requested by ISG. Property located at Murfreesboro Road & Veterans Memorial Parkway (Tax Map 14, Parcel 72.04). C-2 (Highway Service) Zoning District. Property owned by Richland South, LLC. (DEFERRED)

Reviewed By:
Bo Logan, City Planner
Gary Lide, City Engineer

Summary: The applicant is requesting site plan approval for a new grocery store totaling 19,432 SF at a site located on Murfreesboro Road and Veterans Memorial Parkway. Structures will consist of the grocery store, associated parking areas and driveways.

The grocery store will be built primarily of brick and masonry material. In addition, the developer is proposing ample landscaping along with sod to be installed in areas with highest visibility.

The property is currently vacant.

The driveways on the plan are indicated as 30 feet and 40 feet wide. Approximately 96 parking spaces are being provided where only 77 are required.

This store will offer curbside pickup and areas for this service are marked.

Staff Recommendation:

Staff Comments / Technical Items:

Planning

Bo Logan
blogan@lavergnetn.gov

Jake Blair
jblair@lavergnetn.gov

1. A final plat must be submitted and approved by the planning commission before the site plan is considered.

Engineering

Gary Lide
glide@lavergnetn.gov

No follow-up submittal has been received. Previous comments are as follows:

1. (C-126) Construction site entrance must be minimum 100' long and 20' wide.
2. (C-127) Please provide three erosion control plans:
a. Initial – Pre-Construction
b. Intermediate – After installation of detention pond and storm drains
c. Final – Post-Construction
3. (C-310) If the drive along the west property line is to be a shared access, a joint access easement must be recorded on the subdivision plat.
4. (C-310) Insufficient dimensions or coordinates are shown to locate the building relative to the property lines.
5. (C-410 and calculations) Stormwater calculations call out and the plan shows an "Existing Storm Sewer" running along the north boundary. No such storm sewer is existing. Nor has any such storm sewer been submitted to and approved by the city. This storm sewer must be approved by the city before it can be shown as receiving run-off from this project.
6. (C-410 and calculations) Provide calculations which show speed, depth, and spread of flow in Veteran's Memorial Parkway with surface flows from this parking lot included.
7. (C-310) Show lane striping in access drives.
8. (C-310) Provide distance between driveways.
9. A traffic study is required and must be approved before staff can recommend approval of this site plan.
10. (C-310) The screen gate in front of the dumpster is 7' tall. The retaining wall next to the dumpster is 3.5 feet tall. Provide an additional 3.5 feet of screen on top of the wall to the north of the dumpster.
11. (C-410 and Calculations) Detention basin must be shown and detention basin calculations provided meeting Stormwater Management Ordinance standards. Staff cannot recommend approval of the site plan until the detention basin serving the site has been approved.
12. (C-320) "Existing Sanitary Sewer" shown at north property line does not exist. Staff cannot recommend approval of this site plan until plans for that line have been approved.
13. (C-320) Domestic and Fire utility layout does not match city Water Standard Specifications (which can be found at www.lavergnetn.gov). Coordinate site utility design with Scott Tatalovich

(statalovich@lavergnetn.gov).
14. (C-320) Show clean-outs in sewer service line meeting IPC standards.
15. (C-320) Show fire department connection (FDC) within 100 feet oif a fire hydrant and more than 50 feet from the building.
16. (C-010) Provide a note regarding the Flood Zones based on the May 2023 FIRM Mapping.
17. Plans must be stamped and signed by a professional registered in Tennessee for Planning Commission approval.

Utilities

Scott Tatalovich
statalovich@lavergnetn.gov

Utility Engineer received site utility plans from ISGInc on Dec 6 2023, requesting comments.
The following was provided:
1. FDC shall be single 5" Storz at least 50 feet from building and less than 100 feet from fire hydrant.
2. Reference Water Meter Assembly per City Std Dtl 023.
3. City Std Dtl 023 has an unpublished change - no buried flanges valves. Use only MJ fittings and minimum 2 foot pipe spool between buried tee fitting and buried valves outside the vault. This increases the lay length of the buried tees and will affect onsite pipe layout.
4. Label sewer by others as "8-inch Public."
5. Indicate 20-foot public utility easement for public sewer by others.
6. Move private combined fire and domestic water service line, so the trench is will not be within the City's public utility easement.
7. If desired an irrigation meter may be applied for and no sewer charges will be applied to irrigation meters read by the City.

Codes

No comments

Fire

Curtis Brinkley
cbrinkley@lavergnetn.gov

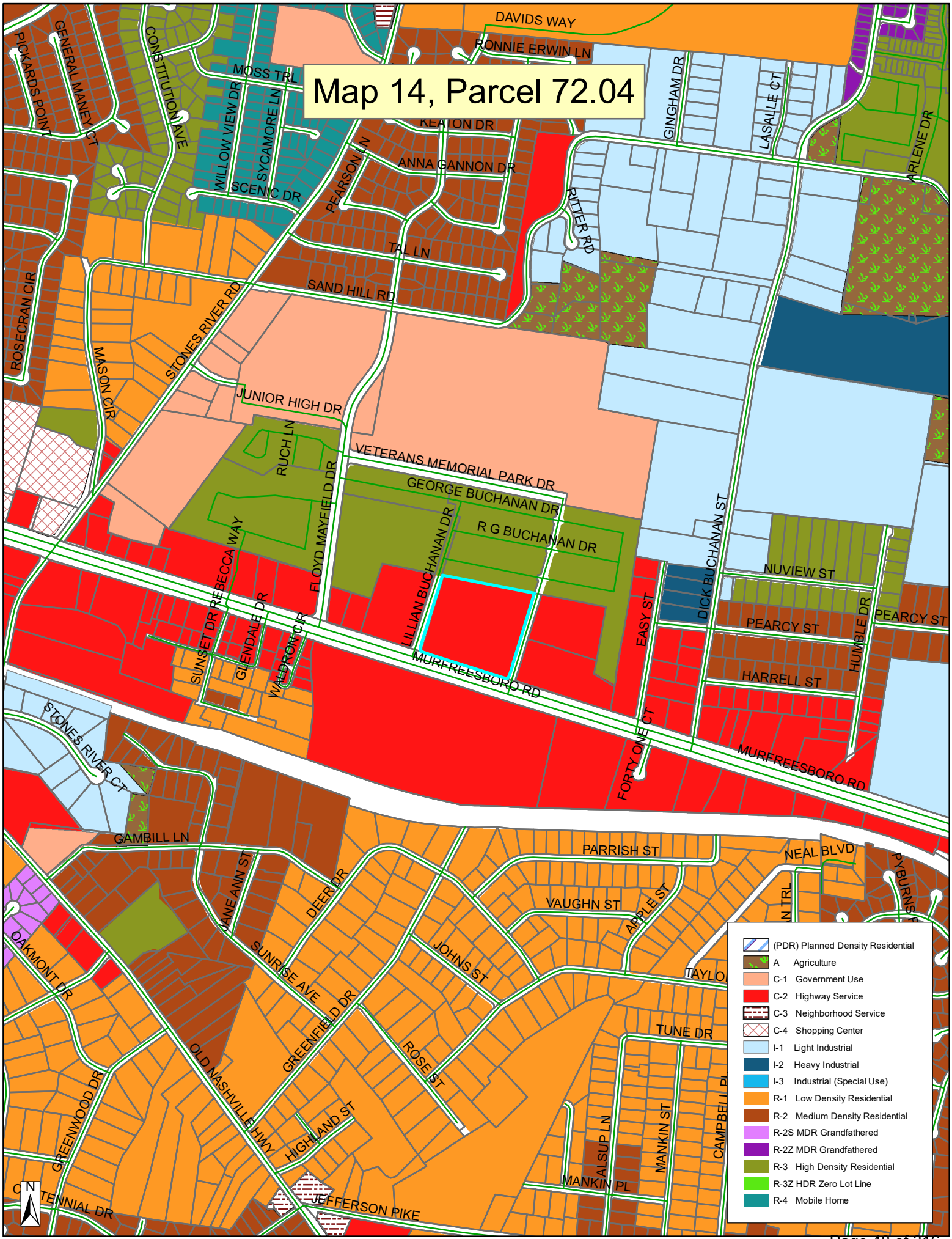
Police

John Eubank
jeubank@lavergnetn.gov

***Note:** The above technical items may not be the only corrections and/or issues needing to be resolved to get approval from the planning commission. New items can be brought up at the workshop and staff can add items at any time that might have been overlooked. It is the applicant's responsibility to make sure that all technical items are addressed and that no new issues exist before the planning commission meeting. Addressing all technical items does not constitute approval. It is the planning commission's decision whether an item passes or fails. Revised plans are due to staff by the following Monday at close of business unless other arrangements are made and documented.


Map 14, Parcel 72.04
GEORGE BUCHANAN DR
R G BUCHANAN DR
GEORGE BUCHANAN DR
LILLIAN BUCHANAN DR
VETERANS MEMORIAL PKWY
MURFREESBORO RD
MURFREESBORO RD
N


Map 14, Parcel 72.04
JUNIOR HIGH DR
PATTYS CV
RUCH LN
EVIE ANN LN
VETERANS MEMORIAL PARK DR
GEORGE BUCHANAN DR
R G BUCHANAN DR
RUTHERFORD POINT CIR
FLOYD MAYFIELD DR
LILLIAN BUCHANAN DR
VETERANS MEMORIAL PKWY
GLENDALE DR
MALDRON CIR
MURFREESBORO RD
EASY ST
PEARCY ST
DICK BUCHANAN ST
FORTY ONE CT
GAMBILL LN
DEER DR
GREENFIELD DR
PARRISH ST
VAUGHN ST
APPLE ST
N


Map 14, Parcel 72.04
DAVIDS WAY
RONNIE ERWIN LN
MOSS TRL
KEATON DR
ANNA GANNON DR
SCENIC DR
PEARSON LN
TAL LN
SAND HILL RD
RITTER RD
GINGHAM DR
LASALLE CT
ARLENE DR
PICKARDS POINT
GENERAL MANEY CT
CONSTITUTION AVE
WILLOW VIEW DR
SYCAMORE LN
ROSECRAN CIR
MASON CIR
STONES RIVER RD
JUNIOR HIGH DR
RUCH LN
VETERANS MEMORIAL PARK DR
GEORGE BUCHANAN DR
R G BUCHANAN DR
FLOYD MAYFIELD DR
LILLIAN BUCHANAN DR
DICK BUCHANAN ST
NUVIEW ST
PEARCY ST
HUMBLE DR
HARRELL ST
EASY ST
FORTY ONE CT
MURFREESBORO RD
REBECCA WAY
SUNSET DR
GLENDALE DR
WALDRON CIR
STONES RIVER CT
GAMBILL LN
PARRISH ST
NEAL BLVD
VAUGHN ST
APPLE ST
JANE ANN ST
DEER DR
SUNRISE AVE
JOHNS ST
OAKMONT DR
GREENFIELD DR
ROSE ST
TUNE DR
OLD NASHVILLE HWY
HIGHLAND ST
GREENWOOD DR
ALSUP LN
MANKIN ST
MANKIN PL
CAMPBELL PL
CENTENNIAL DR
JEFFERSON PIKE
N
(PDR) Planned Density Residential
A Agriculture
C-1 Government Use
C-2 Highway Service
C-3 Neighborhood Service
C-4 Shopping Center
I-1 Light Industrial
I-2 Heavy Industrial
I-3 Industrial (Special Use)
R-1 Low Density Residential
R-2 Medium Density Residential
R-2S MDR Grandfathered
R-2Z MDR Grandfathered
R-3 High Density Residential
R-3Z HDR Zero Lot Line
R-4 Mobile Home




STOP

ADD THIS REFERENCE BLOCK TO SIGNATURE XREF AND DELETE THIS TEXT AND REFERENCE BLOCK



LOCATION MAP

SCALE IN FEET

0 500 1000

SITE SUMMARY

PROJECT ADDRESS/LOCATION:	5309 MUFREESBORO RD LA VERGNE, TENNESSEE 37086	
ZONING:	C-2, HIGHWAY SERVICE DISTRICT	
EXISTING LAND USE:	OPEN LOT	
PROPOSED LAND USE:	CEMMERCIAL / RETAIL USES	
SITE/LOT AREA:	105,590 SF	(2.4 **AC)**
PROPOSED GREENSPACE:	25,175 SF	(0.6 **AC)23%**
PROPOSED IMPERVIOUS:	85,896 SF	(2.0 **AC)76%**
DISTURBED AREA:	114,773 SF	(2.6 **AC)**

REQUIRED SETBACKS

	PARKING	BUILDING
FRONT YARD	20'	35'
SIDE YARD	10'	35'
REAR YARD	20'	35'

PARKING DATA

LAND USE CLASSIFICATION	XXX
PARKING SPACES REQUIRED (CODE)	(4 / 1000 SQ. FT OF RETAIL SPACE) - 77
GOVERNING INFORMATION	ALDI MINIMUM
PARKING SPACES REQUIRED	95
PARKING STALLS PROVIDED	
STANDARD	92
ACCESSIBLE	4
TOTAL	96

PROJECT GENERAL NOTES

1. ALL WORK SHALL CONFORM TO THE CONTRACT DOCUMENTS, WHICH INCLUDE, BUT ARE NOT LIMITED TO, THE OWNER - CONTRACTOR AGREEMENT, THE PROJECT MANUAL (WHICH INCLUDES GENERAL SUPPLEMENTARY CONDITIONS AND SPECIFICATIONS), DRAWINGS OF ALL DISCIPLINES AND ALL ADDENDA, MODIFICATIONS AND CLARIFICATIONS ISSUED BY THE ARCHITECT/ENGINEER.
2. CONTRACT DOCUMENTS SHALL BE ISSUED TO ALL SUBCONTRACTORS BY THE GENERAL CONTRACTOR IN COMPLETE SETS IN ORDER TO ACHIEVE THE FULL EXTENT AND COMPLETE COORDINATION OF ALL WORK.
3. WRITTEN DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. NOTIFY ARCHITECT/ENGINEER OF ANY DISCREPANCIES OR CONDITIONS REQUIRING INFORMATION OR CLARIFICATION BEFORE PROCEEDING WITH THE WORK.
4. FIELD VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS. NOTIFY ARCHITECT/ENGINEER OF ANY DISCREPANCIES OR CONDITIONS REQUIRING INFORMATION OR CLARIFICATION BEFORE PROCEEDING WITH THE WORK.
5. DETAILS SHOWN ARE INTENDED TO BE INDICATIVE OF THE PROFILES AND TYPE OF DETAILING REQUIRED THROUGHOUT THE WORK. DETAILS NOT SHOWN ARE SIMILAR IN CHARACTER TO DETAILS SHOWN. WHERE SPECIFIC DIMENSIONS, DETAILS OR DESIGN INTENT CANNOT BE DETERMINED, NOTIFY ARCHITECT/ENGINEER BEFORE PROCEEDING WITH THE WORK.
6. ALL MANUFACTURED ARTICLES, MATERIALS AND EQUIPMENT SHALL BE APPLIED, INSTALLED, CONNECTED, ERECTED, CLEANED AND CONDITIONED ACCORDING TO MANUFACTURERS' INSTRUCTIONS. IN CASE OF DISCREPANCIES BETWEEN MANUFACTURERS' INSTRUCTIONS AND THE CONTRACT DOCUMENTS, NOTIFY ARCHITECT/ENGINEER BEFORE PROCEEDING WITH THE WORK.
7. ALL DISSIMILAR METALS SHALL BE EFFECTIVELY ISOLATED FROM EACH OTHER TO AVOID GALVANIC CORROSION.
8. THE LOCATION AND TYPE OF ALL INPLACE UTILITIES SHOWN ON THE PLANS ARE FOR GENERAL INFORMATION ONLY AND ARE ACCURATE AND COMPLETE TO THE BEST OF THE KNOWLEDGE OF I & S GROUP, INC. (ISG). NO WARRANTY OR GUARANTEE IS IMPLIED. THE CONTRACTOR SHALL VERIFY THE SIZES, LOCATIONS AND ELEVATIONS OF ALL INPLACE UTILITIES PRIOR TO CONSTRUCTION. CONTRACTOR SHALL IMMEDIATELY NOTIFY ENGINEER OF ANY DISCREPANCIES OR VARIATIONS FROM PLAN.
9. THE CONTRACTOR IS TO CONTACT "TENNESSEE 811" FOR UTILITY LOCATIONS, MINIMUM 2 BUSINESS DAYS PRIOR TO ANY EXCAVATION / CONSTRUCTION (1-800-351-1111).

SPECIFICATIONS REFERENCE

ALL CONSTRUCTION SHALL COMPLY WITH THE CITY OF LA VERGNE REQUIREMENTS AND TDOT STANDARD SPECIFICATIONS FOR CONSTRUCTION, 2023 EDITION, THE STANDARD SPECIFICATIONS FOR SANITARY SEWER, STORM DRAIN AND WATERMAIN AS PROPOSED BY THE GOVERNING LOCAL AGENCY, AND CURRENT VERSION OF THE TENNESSEE STATE PLUMBING CODE UNLESS DIRECTED OTHERWISE.

PROJECT DATUM

HORIZONTAL COORDINATES HAVE BEEN REFERENCED TO TENNESSEE STATE PLANE COORDINATE SYSTEM NAD83 TN STATE PLANE, IN U.S. SURVEY FEET. POSITIONAL ACCURACY HORIZ: 0.06' VERT: 0.08' FIXED CONTROL TDOT CORS TN 26, TN 29 & TN23 GEOID MODEL GEOID 18 COMBINED FACTOR 0.99998002

RTK GPS METHODS WERE USED TO ESTABLISH HORIZONTAL AND VERTICAL COORDINATES FOR THIS PROJECT.

TOPOGRAPHIC SURVEY

THIS PROJECT'S TOPOGRAPHIC SURVEY CONSISTS OF DATA COLLECTED IN JUNE / 2023 BY TTL INC.

B.M. ELEVATION=608.07

OPEN ARROW BOLT ON HYDRANT
AT INTERSECTION OF LILLIAN BUCHANNON DR AND MURREESBORO RD
WEST SIDE OF ROAD

LEGEND

EXISTING

CITY LIMITS
SECTION LINE
QUARTER SECTION LINE
RIGHT OF WAY LINE
PROPERTY / LOTLINE
EASEMENT LINE
ACCESS CONTROL
WATER EDGE
WETLAND BOUNDARY
WETLAND / MARSH
FENCE LINE
CULVERT
STORM SEWER
SANITARY SEWER
SANITARY SEWER FORCEMAIN
WATER
GAS
OVERHEAD ELECTRIC
UNDERGROUND ELECTRIC
UNDERGROUND TELEPHONE
UNDERGROUND TV
OVERHEAD UTILITY
UNDERGROUND UTILITY
UNDERGROUND FIBER OPTIC
CONTOUR (MAJOR)
CONTOUR (MINOR)
DECIDUOUS TREE
CONIFEROUS TREE
TREE LINE
MANHOLE/STRUCTURE
CATCH BASIN
HYDRANT
VALVE
CURB STOP
POWER POLE
UTILITY PEDESTAL / CABINET

PROPOSED

LOT LINE
RIGHT OF WAY
EASEMENT
CULVERT
STORM SEWER
STORM SEWER (PIPE WIDTH)
SANITARY SEWER
SANITARY SEWER (PIPE WIDTH)
WATER
GAS
OVERHEAD ELECTRIC
UNDERGROUND ELECTRIC
UNDERGROUND TV
CONTOUR
MANHOLE
CATCH BASIN
HYDRANT
VALVE

CIVIL SHEET INDEX

C-010 SITE DATA
C-020 SITE DETAILS
C-021 SITE DETAILS
C-022 SITE DETAILS
C-023 SITE DETAILS
C-024 SITE DETAILS
C-025 SITE DETAILS
C-120 EROSION CONTROL NOTES
C-121 EROSION CONTROL NOTES
C-122 EROSION CONTROL NOTES
C-123 EROSION CONTROL NOTES
C-124 EROSION CONTROL NOTES
C-125 EROSION CONTROL NOTES
C-126 EROSION CONTROL DETAILS
C-127 SITE EROSION CONTROL PLAN
C-200 EXISTING SITE AND REMOVALS PLAN
C-310 SITE PLAN
C-320 SITE UTILITY PLAN
C-410 DETAILED GRADING PLAN
C-510 PLANTING AND RESTORATION PLAN
C-520 PLANTING NOTES AND DETAILS
C-610 SITE LIGHTING PLAN
C-620 SITE LIGHTING CATALOGUE PAGES

Issued:	Date:
A	
B	
C	
D	
E	

Revisions:	Date:
1	
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MANAGING LOCATION:
BLOOMINGTON OFFICE
7900 INTERNATIONAL DRIVE
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MINNEAPOLIS, MN 55425
PHONE: 952.426.0699

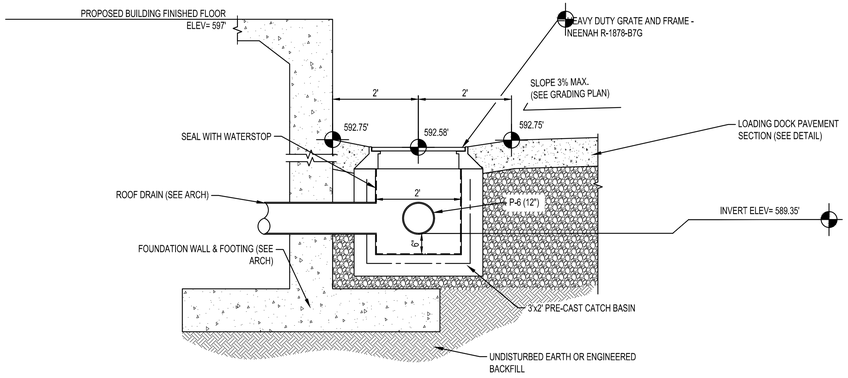
ALDI Inc.
2080 ALDI Blvd
Mt. Juliet, TN 37122
(615) 443-8842
(615) 443-8993 fax

ALDI Inc. Store #: __
LA VERGNE, TN
5309 MURFREESBORO RD
LA VERGNE, TN 37086
RUTHERFORD
Project Name & Location:

SITE DATA

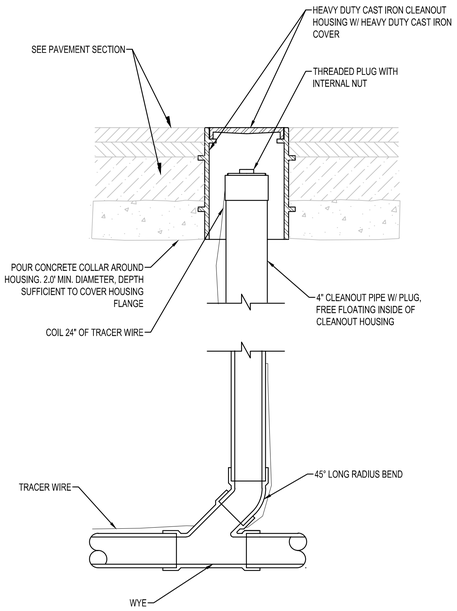
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Type: V7.0	ISG Project No. 23-27665
Drawn By: SK	
Designed By: SK	C-010
Reviewed By: EG	Drawing No.



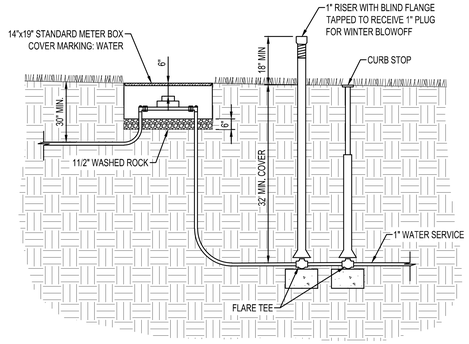
LOADING DOCK CATCH BASIN ST-X DETAIL

N.T.S.



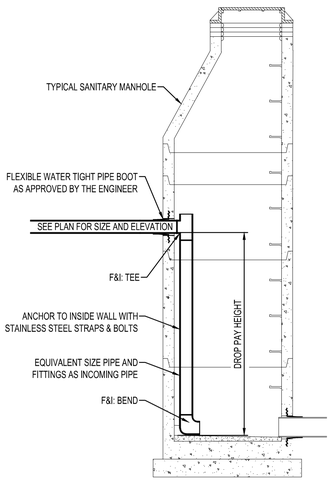
HEAVY-DUTY SANITARY CLEANOUT

NTS SA201



WATER SERVICE METERED BLOWOFF

NTS WM910



INSIDE DROP SANITARY MANHOLE

NTS SA150

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C	
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Revisions:	Date:
1	
2	
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ISG

MANAGING LOCATION:
BLOOMINGTON OFFICE
7900 INTERNATIONAL DRIVE
SUITE 550
MINNEAPOLIS, MN 55425
PHONE: 952.426.0699

ALDI Inc.
Division Address
Division City, Division State, Zip
(XXX) XXX-XXXX
(XXX) XXX-XXXX fax

ALDI Inc. Store #: __
LA VERGNE, TN
5309 MURFREESBORO RD
LA VERGNE, TN 37086
RUTHERFORD

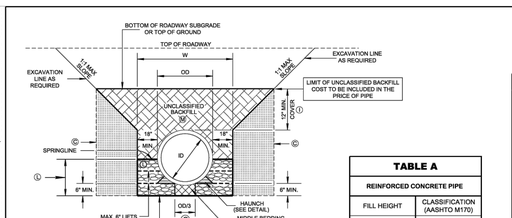
Project Name & Location:

SITE DETAILS

Drawing Name:

Type: V7.0	ISG Project No. 23-27665
Drawn By: SK	
Designed By: SK	C-020
Reviewed By: EG	Drawing No.

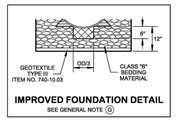
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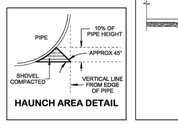
STANDARD TRENCH INSTALLATION
(PIPE CULVERT INSTALLATION DETAIL)
NOTE: CENTER PIPE IN TRENCH
SEE GENERAL NOTE Ⓑ

TABLE A

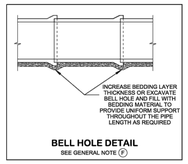
REINFORCED CONCRETE PIPE	
FILL HEIGHT	CLASSIFICATION (AASHTO M170)
≤ 16	III
> 16 TO ≤ 24	IV
> 24 TO ≤ 38	V
> 38	SPECIAL DESIGN



IMPROVED FOUNDATION DETAIL
SEE GENERAL NOTE Ⓖ



HAUNCH AREA DETAIL



BELL HOLE DETAIL
SEE GENERAL NOTE Ⓕ

TABLE B

CONCRETE PIPE CULVERT				CLASS "B" BEDDING MATERIAL (CY/LF)	UNCLASSIFIED BACKFILL MATERIAL (CY/LF)
PIPE DIA	PAYMENT ITEM NO (PER L.F.)	CLASS**	MIN.* W		
18"	607-03.02 THRU 607-03.04	III THRU V	59"	0.216	0.336
24"	607-05.02 THRU 607-05.04	III THRU V	66"	0.266	0.479
30"	607-06.02 THRU 607-06.04	III THRU V	73"	0.283	0.581
36"	607-07.02 THRU 607-07.04	III THRU V	80"	0.302	0.683
42"	607-08.02 THRU 607-08.04	III THRU V	87"	0.323	0.787
48"	607-09.02 THRU 607-09.04	III THRU V	94"	0.344	0.891
54"	607-10.02 THRU 607-10.04	III THRU V	101"	0.363	0.989
60"	607-11.03 THRU 607-11.05	III THRU V	108"	0.386	1.105

* FOR " WALL B" WALL THICKNESS.

** NOTE: CONCRETE PIPE CLASSES FOR REQUIRED D-LOAD CAPACITY. MINIMUM CLASS III SHALL BE USED UNDER ROADWAYS.

LEGEND

ID = INSIDE DIAMETER
OD = OUTSIDE DIAMETER

CLASS "B" BEDDING COMPACTED TO 90% STANDARD PROCTOR DENSITY

CLASS "B" BEDDING UNCOMPACTED

FIRM IN/SITU SOIL OR CLASS "B" BEDDING COMPACTED TO 90% STANDARD PROCTOR DENSITY

HAUNCH AREA, SHOVEL COMPACTED

UNCLASSIFIED BACKFILL (FINE COMPACTABLE SOIL)

NOT TO SCALE

GENERAL NOTES

PIPE MATERIALS:

Ⓐ REINFORCED CONCRETE PIPE SHALL MEET THE REQUIREMENTS OF AASHTO M-170. THE WALL THICKNESS SHALL BE "WALL B" (EXPECT: FOR STRUCTURES DEEPER THAN THE MINIMUM DEPTH, "WALL C" MAY BE USED) AND THE RCP CLASS SHALL BE AS LISTED IN "TABLE A". ALL PIPE MANUFACTURING PLANTS SHALL BE CERTIFIED BY EITHER ACPA OR NPCA. REFER SOP 5-3 FOR MORE INFORMATION.

INSTALLATIONS REQUIREMENTS:

Ⓑ FOR EMBANKMENT AREAS OR WHERE TRENCH CONDITIONS DO NOT EXIST, AN INDUCED TRENCH SOIL EMBANKMENT SHALL BE CONSTRUCTED SEE D-PB-3.

Ⓒ FOR TRENCHES WITH IN SITU SOIL WALLS, THE SOIL SHALL BE AT LEAST AS FIRM AS THE MAJORITY OF THE SUBGRADE AS DETERMINED BY THE ENGINEER. SOIL NOT MEETING THIS REQUIREMENT SHALL BE REMOVED AND REPLACED.

Ⓓ FOR ADDITIONAL INSTALLATION INFO SEE SECTION 27 "CONCRETE CULVERTS" OF THE AASHTO STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES AND ASTM C-1479-10.

Ⓔ ONLY AS MUCH TRENCH AS CAN BE SAFELY MAINTAINED SHALL BE OPENED. ALL TRENCHES SHALL BE BACKFILLED AND COMPACTED TO THE MINIMUM COVER DEPTH 12" ABOVE THE PIPE AS SOON AS PRACTICABLE, BUT NOT LATER THAN THE END OF EACH WORKING DAY IN ACCORDANCE WITH THE COMPACTED REQUIREMENTS.

Ⓕ JOINTS BETWEEN PIPES REQUIRE A RUBBER GASKET MEETING ASTM C443. AT CONNECTIONS TO STRUCTURES USE NON-SHRINK GROUT OR RUBBER GASKET PER CSD3 OR C1478. WHERE PIPE WITH BELLS ARE INSTALLED, BELL HOLES SHALL BE EXCAVATED IN BEDDING TO SUCH DIMENSIONS THAT THE ENTIRE LENGTH OF THE BARREL OF THE PIPE WILL BE SUPPORTED BY THE BEDDING WHEN PROPERLY INSTALLED AS SHOWN IN BELL-HOLE DETAIL.

Ⓖ WHERE THE TRENCH FOUNDATION IS FOUND UNACCEPTABLE OR LOCATION WHERE THE WATER TABLE IS FOUND HIGH:

(1) IMPROVED FOUNDATION OR EXCAVATABLE FLOWABLE FILL (EFF) MAY BE USED AT ENGINEER'S INSTRUCTION AS SHOWN ON THIS SHEET AND THE COST WILL BE INCLUDED IN THE UNIT PRICE OF THE PIPE.

(2) FIELD ENGINEER SHALL REVIEW SITE CONDITIONS TO CONFIRM TYPICAL BEDDING AS SHOWN IS ADEQUATE TO PROVIDE STRUCTURAL SUPPORT OR FOUNDATION IMPROVEMENT IS REQUIRED.

Ⓗ FOR MULTIPLE PIPES MINIMUM SPACING BETWEEN PIPES IS:

36" PIPES AND SMALLER: EQUAL TO THE OUTSIDE DIAMETER OF THE LARGEST PIPE.

PIPES LARGER THAN 36": EQUAL TO HALF THE OUTSIDE DIAMETER OF THE LARGEST PIPE.

Ⓘ FOR MINIMUM COVER DEPTHS FOR CONSTRUCTION LOADS SEE D-PB-3.

Ⓙ CLASS "B" BEDDING MAY NOT BE REQUIRED UNDER SIDE DRAINS FOR PRIVATE DRIVES, FILED ENTRANCES, PIPES OUTSIDE THE SHOULDER LIMITS OF INTERCHANGE RAMPS, OR PIPES OUTSIDE NORMAL SLOPE LINES BEDDING TYPE PER PIPES STANDARD SPECIFICATION 204-10.B.

Ⓚ ARCH AND OVAL SHAPED PIPE CULVERTS SHALL BE INSTALLED THE SAME AS CIRCULAR WITH O.D. EQUAL TO THE WIDEST HORIZONTAL DIMENSION ON THE PIPE. TO ESTIMATE BEDDING MATERIAL FOR THESE PIPES WITH INTERNAL WIDTH THE SAME AS DIAMETER IN THE TABLE, MULTIPLY BEDDING QUANTITY BY 0.5 FOR THE SHOWN MINIMUM TRENCH DIMENSIONS.

BEDDING AND BACKFILL REQUIREMENTS:

Ⓛ CLASS "B" BEDDING MATERIAL MEETING THE REQUIREMENTS OF CONSTRUCTION SPECIFICATION SUBSECTION 204.04 SHALL BE PLACED IN LIFTS, NOT TO EXCEED 8 INCHES, TO THE PIPE SPRINGLINE. A MINIMUM COMPACTION LEVEL OF 90% OF THE STANDARD PROCTOR DENSITY PER AASHTO T99 SHALL BE ACHIEVED BY USE OF VIBRATORY PLATE.

Ⓜ UNCLASSIFIED BACKFILL SHALL BE PLACED AND COMPACTED IN LAYERS NOT EXCEEDING A 8 INCH LOOSE LIFT THICKNESS AND BROUGHT UP EVENLY AND SIMULTANEOUSLY ON BOTH SIDES OF THE PIPE TO AN ELEVATION NOT LESS THAN ONE FOOT ABOVE THE TOP OF THE PIPE.

UNCLASSIFIED BACKFILL TO THE LIMIT OF PIPE BACKFILL LINE SHALL BE COMPACTED IN ACCORDANCE TO STANDARD SPECIFICATION 204.11. HYDRO-HAMMER TYPE OF COMPACTORS MAY BE USED AROUND THE PIPE HOWEVER THEY SHALL NOT BE USED DIRECTLY OVER THE PIPE TO PREVENT ANY DAMAGE. ALL COMPACTION EQUIPMENT USED SHALL BE APPROVED BY THE ENGINEER.

Ⓝ PLACE 6 INCHES MINIMUM OF CLASS "B" BEDDING MATERIAL, ALONG WITH SUFFICIENT ADDITIONAL CLASS "B" BEDDING MATERIAL ACCURATELY SHAPED AS SHOWN IN HAUNCH AREA DETAIL.

Ⓞ **END TREATMENTS:**

(1) ALL CROSS DRAINS (PERPENDICULAR) PLACED UNDER A MAINLINE ROADWAY, REQUIRE TYPE U ENDWALLS CONFORMING TO THE ROADWAY FILL SLOPE AS SHOWN ON STANDARD DRAWINGS D-PE-15A THROUGH D-PE-48A FOR END WALL GEOMETRY AND D-PE-99 FOR GRATE DETAILS. ALL CULVERT ENDWALLS LOCATED WITHIN THE CLEAR ZONE (S-CZ-1) REQUIRE A SAFETY GRATE (18" OR 24" PIPE ENDWALLS MAY OMIT THE STEEL GRATE). ALL CROSS DRAIN CULVERTS LARGER THAN 48" MUST BE PROTECTED BY A GUARDRAIL OR ENDWALL OR MUST BE PLACED OUTSIDE THE CLEAR ZONE. CROSS DRAIN ENDWALLS PLACED OUTSIDE THE CLEAR ZONE MAY USE TYPE A (D-PE-1), TYPE B (D-PE-2 THRU 9F), OR STRAIGHT HEADWALL (D-PE-4) IN LIEU OF TYPE U OR IF THE PIPE END WALL IS PROTECTED BY A GUARDRAIL.

(2) ALL SIDE DRAINS (PARALLEL) PLACED UNDER A SIDE ROAD, DRIVEWAY, OR FIELD ENTRANCE, ETC. THAT INTERSECT A MAINLINE ROADWAY, REQUIRE SAFETY ENDWALLS AS SHOWN ON THE D-SEW- SERIES STANDARD DRAWINGS WITH SAFETY GRATE (D-SEW-1A) WITH A MAXIMUM 6:1 TAPER IF THE CULVERT ENDWALLS ARE LOCATED INSIDE THE CLEAR ZONE (S-CZ-1).

(3) ALL MEDIAN CROSSOVER SIDE DRAINS (LONGITUDINAL) PLACED UNDER MEDIAN OPENINGS REQUIRE SAFETY ENDWALLS AS SHOWN ON D-SEW-120 STANDARD DRAWING WITH SAFETY GRATE (D-SEW-1A) WITH MAXIMUM 12:1 TAPER IF THE CULVERT ENDWALLS ARE LOCATED INSIDE THE CLEAR ZONE (S-CZ-1).

Ⓟ **INSPECTION REQUIREMENTS:**

ALL PIPES SHALL UNDERGO INSPECTION ACCORDING TO SECTION 607.09 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION OR PER SECTION 27 OF AASHTO STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES OR PER ASTM C1840.

Ⓠ **PAYMENT:**

EXCAVATION FOR PIPE WILL NOT BE MEASURED AND PAID FOR DIRECTLY AND ANY SOIL NOT MEETING REQUIREMENT FOR TRENCHES SHALL BE REMOVED AND REPLACED. ALL COST OF THIS WORK WILL BE INCLUDED IN THE COST OF THE PROPOSED PIPE CULVERT. SEE TABLE B FOR PIPE CULVERT ITEM NUMBERS.

PAYMENT FOR CLASS "B" BEDDING MATERIAL, UNCLASSIFIED BACKFILL TO THE LIMIT LINE, AND/OR IF REQUIRED EXCAVATABLE FLOWABLE FILL AND BEDDING MATERIAL WILL BE INCLUDED IN THE UNIT PRICE OF THE PIPE.

GEOTEXTILE TYPE III TO BE USED ONLY IF IMPROVED FOUNDATION IS REQUIRED, AND WILL BE PAID UNDER ITEM NO.

740-10.03 GEOTEXTILE (TYPE III)(EROSION CONTROL) PER S.Y.

REV. 7-12-07: REVISED GENERAL NOTE Ⓠ

REV. 6-1-09: REVISED GENERAL NOTE Ⓘ AND TITLE NAME. ADDED GENERAL NOTE Ⓠ

REV.2-1-12: REVISED DRAWING NAME ADDED EFF DETAIL. REVISED GENERAL NOTES AND TABLE. ADDED MINIMUM COVER TABLE.

REV. 8-21-12: REVISED GENERAL NOTES. CHANGED BACKFILL MATERIAL.

REV. 1-2-13: REVISED TRENCH DETAILS REVISED BEDDING TABLE.

REV. 3-18-13: CLARIFIED PAYMENT ITEM NO. IN TABLE B.

REV. 08-28-19: REVISED DETAIL FOR IMPROVED FOUNDATION INSTALLATION, TABLE A. AND GENERAL NOTES. REDREW SHEET.

REV. 11-30-20: REVISED DETAIL FOR STANDARD TRENCH INSTALLATION, TABLE B. AND GENERAL NOTES. ADDED BELL HOLE DETAIL.

REV. 03-04-21: REVISED TABLE B.

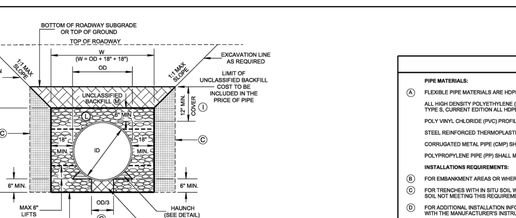
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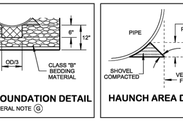
STANDARD DETAILS FOR CONCRETE PIPE INSTALLATION

D-PB-1

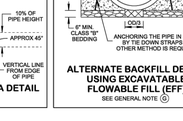
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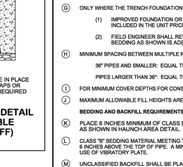
STANDARD TRENCH INSTALLATION
(PIPE CULVERT INSTALLATION DETAIL)
NOTE: CENTER PIPE IN TRENCH
SEE GENERAL NOTE Ⓑ



IMPROVED FOUNDATION DETAIL
SEE GENERAL NOTE Ⓖ



HAUNCH AREA DETAIL



ALTERNATE BACKFILL DETAIL USING EXCAVATABLE FLOWABLE FILL (EFF)
SEE GENERAL NOTE Ⓖ

TABLE A

PIPE CULVERT		CLASS "B" BEDDING MATERIAL (CY/LF)	UNCLASSIFIED BACKFILL MATERIAL (CY/LF)
PIPE DIA	PAYMENT ITEM NO		
18"	607-03.30	0.371	0.095
24"	607-05.30	0.463	0.104
30"	607-06.30	0.595	0.117
36"	607-07.30	0.703	0.127
42"	607-08.30	0.814	0.137
48"	607-09.30	0.932	0.148
54"	607-10.30	1.055	0.158
60"	607-11.30	1.183	0.168
66"	607-12.30	1.315	0.178
72"	607-13.30	1.453	0.188

NOTE: SEE TDOT DESIGN DIVISION DRAINAGE MANUAL SECTION 6, APPENDIX, TABLE 6A-1 FOR PIPE SELECTION CRITERIA BASED ON SYSTEM AND FILL HEIGHT.

LEGEND

ID = INSIDE DIAMETER
OD = OUTSIDE DIAMETER

CLASS "B" BEDDING COMPACTED TO 90% STANDARD PROCTOR DENSITY

CLASS "B" BEDDING UNCOMPACTED

FIRM IN/SITU SOIL OR CLASS "B" BEDDING COMPACTED TO 90% STANDARD PROCTOR DENSITY

HAUNCH AREA, SHOVEL COMPACTED

UNCLASSIFIED BACKFILL (FINE COMPACTABLE SOIL)

EXCAVATABLE FLOWABLE FILL (EFF)

NOT TO SCALE

GENERAL NOTES

PIPE MATERIALS:

Ⓐ FLEXIBLE PIPE MATERIALS ARE HDPE, PVC, CMP, SRTRP, AND PP.

ALL HIGH DENSITY POLYETHYLENE (HDPE) PIPE USED FOR CULVERT AND STORM DRAIN APPLICATIONS SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M294, TYPE S, CURRENT EDITION ALL HDPE PIPE DELIVERED AND USED SHALL BE A PARTICIPANT IN NTPEP. MAX. PIPE DIA. FOR HDPE PIPE IS 60".

POLY VINYL CHLORIDE (PVC) PROFILE WALL DRAINAGE PIPE SHALL MEET AASHTO DESIGNATION M-304. THE MAXIMUM PIPE DIAMETER FOR PVC PIPE IS 36".

STEEL REINFORCED THERMOPLASTIC RIBBED PIPE (SRTRP) SHALL MEET AASHTO DESIGNATION M335, THE MAXIMUM PIPE DIAMETER FOR THE PIPE IS 60",

CORRUGATED METAL PIPE (CMP) SHALL BE ALUMINIZED COATED CORRUGATED METAL PIPE AND SHALL MEET AASHTO M274, MAXIMUM DIA IS 72".

POLYPROPYLENE PIPE (PP) SHALL MEET AASHTO DESIGNATION M-330, THE MAXIMUM PIPE DIAMETER IS 60".

INSTALLATIONS REQUIREMENTS:

Ⓑ FOR EMBANKMENT AREAS OR WHERE TRENCH CONDITIONS DO NOT EXIST, AN INDUCED TRENCH SHALL BE CONSTRUCTED. SEE STD. DWG. NO. D-PB-3.

Ⓒ FOR TRENCHES WITH IN SITU SOIL WALLS, ANY PORTION OF THE WALL SHALL BE AT LEAST AS FIRM AS THE MAJORITY OF THE SUBGRADE. SOIL NOT MEETING THIS REQUIREMENT SHALL BE REMOVED AND REPLACED.

Ⓓ FOR ADDITIONAL INSTALLATION INFORMATION SEE AASHTO SECTION 30 OR ASTM D2321. ALL PIPES SHALL BE ASSEMBLED AND INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS. PIPE SHALL BE PLACED IN THE BED STARTING AT THE DOWNSTREAM END.

Ⓔ ONLY AS MUCH TRENCH AS CAN BE SAFELY MAINTAINED SHALL BE OPENED. ALL TRENCHES SHALL BE BACKFILLED AND COMPACTED TO THE MINIMUM COVER DEPTH OF 12" ABOVE THE PIPE AS SOON AS PRACTICABLE, BUT NOT LATER THAN THE END OF EACH WORKING DAY IN ACCORDANCE WITH THE COMPACTION REQUIREMENTS.

Ⓕ **JOINT REQUIREMENTS:**

CMP JOINING SYSTEM SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M36.
HDPE, PP, SRTRP, AND PVC PIPE SHALL BE JOINED IN ACCORDANCE WITH ASTM D3212 AND MEET THE PERFORMANCE REQUIREMENT FOR SOIL TIGHT JOINTS. USE A GASKET MEETING ASTM F477.
FOR A CONTINUOUS LINE OF PIPE, THE CONNECTIONS BETWEEN PIPE SECTIONS WILL BE FREE FROM IRREGULARITIES ALONG THE FLOW LINE. JOINTS BETWEEN PLASTIC FLEXIBLE PIPE AND STRUCTURE SHALL HAVE A GASKET MEETING ATM F2510. FOR CMP PIPE TO STRUCTURE CONNECTIONS OR PLASTIC PIPE AT A SKEW GREATER THAN 15°, WHERE A GASKET WILL NOT WORK, NON-SHRINK GROUT APPLIED IN TWO STAGES SHALL BE USED.

Ⓖ ONLY WHERE THE TRENCH FOUNDATION IS FOUND UNACCEPTABLE OR LOCATION WHERE THE WATER TABLE IS FOUND HIGH:

(1) IMPROVED FOUNDATION OR EXCAVATABLE FLOWABLE FILL (EFF) MAY BE USED AT ENGINEER'S INSTRUCTION AND THE COST WILL BE INCLUDED IN THE UNIT PRICE OF THE PIPE.

(2) FIELD ENGINEER SHALL REVIEW SITE CONDITIONS INCLUDING THE POSSIBLE EFFECTS OF WATER TABLE TO CONFIRM TYPICAL BEDDING AS SHOWN IS ADEQUATE TO PROVIDE STRUCTURAL SUPPORT OR FOUNDATION IMPROVEMENT IS REQUIRED.

Ⓗ MINIMUM SPACING BETWEEN MULTIPLE PIPES ARE:

36" PIPES AND SMALLER: EQUAL TO THE OUTSIDE DIAMETER OF THE LARGEST PIPE.

PIPES LARGER THAN 36": EQUAL TO HALF THE OUTSIDE DIAMETER OF THE LARGEST PIPE.

Ⓘ FOR MINIMUM COVER DEPTHS FOR CONSTRUCTION LOADS SEE D-PB-3.

Ⓙ MAXIMUM ALLOWABLE FILL HEIGHTS ARE AS DEFINED IN THE DRAINAGE MANUAL SECTION 6, APPENDIX, TABLE 6A-1.

BEDDING AND BACKFILL REQUIREMENTS:

Ⓚ PLACE 6 INCHES MINIMUM OF CLASS B BEDDING MATERIAL, ALONG WITH SUFFICIENT ADDITIONAL CLASS "B" BEDDING MATERIAL ACCURATELY SHAPED AS SHOWN IN HAUNCH AREA DETAIL.

Ⓛ CLASS "B" BEDDING MATERIAL MEETING THE REQUIREMENTS OF CONSTRUCTION SPECIFICATION SUBSECTION 204.04 SHALL BE PLACED IN LIFTS AND UP TO 8 INCHES ABOVE THE TOP OF PIPE. A MINIMUM COMPACTION LEVEL OF 90% OF THE STANDARD PROCTOR DENSITY PER AASHTO T99 SHALL BE ACHIEVED BY USE OF VIBRATORY PLATE.

Ⓜ UNCLASSIFIED BACKFILL SHALL BE PLACED AND COMPACTED IN LAYERS NOT EXCEEDING A 8 INCH LOOSE LIFT THICKNESS STARTING FROM THE CLASS B BEDDING, 6 INCHES ABOVE THE TOP OF PIPE, TO AN ELEVATION NOT LESS THAN ONE FOOT ABOVE THE TOP OF THE PIPE.

Ⓝ **END TREATMENTS:**

(1) ALL CROSS DRAINS (PERPENDICULAR) PLACED UNDER A MAINLINE ROADWAY, REQUIRE TYPE U ENDWALLS CONFORMING TO THE ROADWAY FILL SLOPE AS SHOWN ON STANDARD DRAWINGS D-PE-15A THROUGH D-PE-48A FOR END WALL GEOMETRY AND D-PE-99 FOR GRATE DETAILS. ALL CULVERT ENDWALLS LOCATED WITHIN THE CLEAR ZONE (S-CZ-1) REQUIRE A SAFETY GRATE (18" OR 24" PIPE ENDWALLS MAY OMIT THE STEEL GRATE). ALL CROSS DRAIN CULVERTS LARGER THAN 48" MUST BE PROTECTED BY A GUARDRAIL OR ENDWALL OR MUST BE PLACED OUTSIDE THE CLEAR ZONE. CROSS DRAIN ENDWALLS PLACED OUTSIDE THE CLEAR ZONE MAY USE TYPE A (D-PE-1), TYPE B (D-PE-2 THRU 9F), OR STRAIGHT HEADWALL (D-PE-4) IN LIEU OF TYPE U OR IF THE PIPE END WALL IS PROTECTED BY A GUARDRAIL.

(2) ALL SIDE DRAINS (PARALLEL) PLACED UNDER A SIDE ROAD, DRIVEWAY, OR FIELD ENTRANCE, ETC. THAT INTERSECT A MAINLINE ROADWAY, REQUIRE SAFETY ENDWALLS AS SHOWN ON THE D-SEW- SERIES STANDARD DRAWINGS WITH SAFETY GRATE (D-SEW-1A) WITH A MAXIMUM 6:1 TAPER IF THE CULVERT ENDWALLS ARE LOCATED INSIDE THE CLEAR ZONE (S-CZ-1).

(3) ALL MEDIAN CROSSOVER SIDE DRAINS (LONGITUDINAL) PLACED UNDER MEDIAN OPENINGS REQUIRE SAFETY ENDWALLS AS SHOWN ON D-SEW-120 STANDARD DRAWING WITH SAFETY GRATE (D-SEW-1A) WITH MAXIMUM 12:1 TAPER IF THE CULVERT ENDWALLS ARE LOCATED INSIDE THE CLEAR ZONE (S-CZ-1).

Ⓞ **INSPECTION REQUIREMENTS:**

ALL PIPES SHALL UNDERGO INSPECTION ACCORDING TO SECTION 607.09 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION OR PER SECTION 30 OF AASHTO STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES CURRENT EDITION.

Ⓟ **PAYMENT:**

EXCAVATION FOR PIPE WILL NOT BE MEASURED AND PAID FOR DIRECTLY AND ANY SOIL NOT MEETING REQUIREMENT FOR TRENCHES SHALL BE REMOVED AND REPLACED. ALL COST OF THIS WORK WILL BE INCLUDED IN THE COST OF THE PROPOSED PIPE CULVERT. SEE TABLE A FOR PIPE CULVERT ITEM NUMBERS.

PAYMENT FOR CLASS "B" BEDDING MATERIAL, UNCLASSIFIED BACKFILL TO THE LIMIT LINE, AND/OR IF REQUIRED EXCAVATABLE FLOWABLE FILL, TIE DOWN STRAPS AND BEDDING MATERIAL WILL BE INCLUDED IN THE UNIT PRICE OF THE PIPE.

GEOTEXTILE TYPE III TO BE USED ONLY IF IMPROVED FOUNDATION IS REQUIRED, AND WILL BE PAID UNDER ITEM NO.

740-10.03 GEOTEXTILE (TYPE III)(EROSION CONTROL) PER S.Y.

REV. 7-12-07: REVISED GENERAL NOTE Ⓠ

REV. 6-1-09: REVISED GENERAL NOTE Ⓘ AND TITLE NAME. ADDED GENERAL NOTE Ⓠ

REV.2-1-12: REVISED DRAWING NAME ADDED EFF DETAIL. REVISED GENERAL NOTES AND TABLE. ADDED MINIMUM COVER TABLE.

REV. 8-21-12: REVISED GENERAL NOTES. CHANGED BACKFILL MATERIAL.

REV. 1-2-13: REVISED TRENCH AND ADDED FILL DETAIL.

REV. 1-28-14: ADDED PP, RE LETTERED AND REVISED NOTES.

REV. 06-28-19: REVISED DETAIL FOR IMPROVED FOUNDATION INSTALLATION, AND GENERAL NOTES. REDREW TABLE A AND RENAMED TABLE B TO A. REVISED TABLE A CONTENT AND LEGEND. REDREW SHEET.

REV. 11-30-20: REVISED DETAIL FOR STANDARD TRENCH INSTALLATION, TABLE A. AND GENERAL NOTES.

REV. 03-04-21: REVISED TABLE A.

REV. 01-28-2022: REVISED GENERAL NOTE Ⓠ

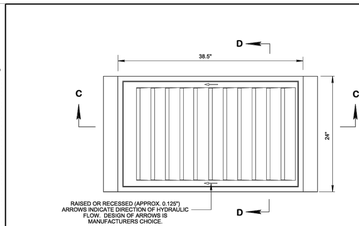
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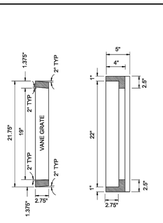
STANDARD DETAILS FOR FLEXIBLE PIPE INSTALLATION

3-15-07 D-PB-2

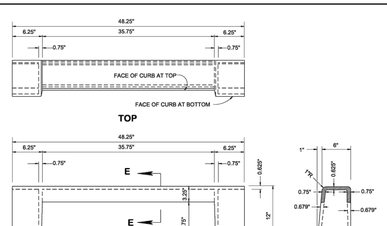
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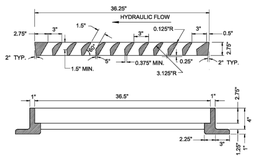


PLAN VIEW

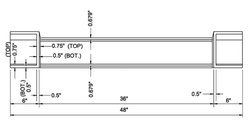


SECTION D-D





SECTION C-C



GRATE AND FRAME DETAILS

CURB INLET CASTING

WEIGHTS FOR SINGLE GRATE CATCH BASIN

FRAME ——— 265 LBS.
GRATE ——— 250 LBS.
CURB INLET ——— 155 LBS.
TOTAL ——— 670 LBS. ★

NOTE:
★ FOR NO. 10 CATCH BASIN, DEDUCT 155 LBS. PER " GRATE ", SINCE NO CURB INLET IS REQUIRED.

FRACTION TABLE

1/8"	-	0.125"
1/4"	-	0.250"
3/8"	-	0.375"
1/2"	-	0.500"
5/8"	-	0.625"
11/16"	-	0.688"
3/4"	-	0.750"

GENERAL NOTES

Ⓐ WHEN A SIX (6) INCH VERTICAL CURB IS REQUIRED USE THIS DRAWING ON ALL VARIATIONS OF NUMBER 10, 12, 14, 16, AND 17 CATCH BASINS CONTAINED IN THIS SECTION OF THE STANDARD DRAWINGS.

Ⓑ FOR CLEARNESS, ALL CORNERS ARE SHOWN ON THIS DRAWING BY STRAIGHT LINES WITH THE EXCEPTION OF THE 1" RADIUS AT THE TOP OF FACE OF CURB. ALL INSIDE CORNERS SHOULD BE MADE WITH ½" x ½" FILLETS OR ½" RADIUS FILLETS FOR EASE IN MOLDING.

Ⓒ IF PAID FOR SEPARATELY CAST IRON USED IN CASTINGS IS TO BE PAID FOR UNDER ITEM NO. 611-03.04, GRAY IRON CASTINGS (CATCH BASIN), LB.

Ⓓ IF CATCH BASIN IS PAID FOR UNDER EACH, THEN COST OF CAST IRON USED IN CASTINGS IS TO BE PAID FOR UNDER THE SPECIFIC ITEM BID FOR THAT CATCH BASIN. SEE STANDARD DRAWINGS FOR TYPE 10, 12, 14, 16, AND 17 CATCH BASINS FOR APPLICABLE PAY ITEMS FOR EACH TYPE OF CATCH BASIN.

REV. 10-26-93: REDREW SHEET, ADDED GENERAL NOTES AND UPDATED TO 1993 HOLIDT.

REV. 9-25-94: MODIFIED CURB INLET CASTING DETAIL.

REV. 1-19-96: CHANGED WEIGHT OF CURB INLET CASING FROM 150 TO 155 POUNDS.

REV. 5-27-97: CHANGED GENERAL NOTE Ⓐ.

REV. 5-27-97: CHANGED GENERAL NOTE Ⓓ. DELETED OLD GENERAL NOTE Ⓔ. CHANGED DIMENSIONS IN RIGHT LOWER CORNER BLOCK.

REV. 1-19-98: CHANGED GENERAL NOTE Ⓐ.

REV. 12-18-99: CHANGED LOWER RIGHT HAND CORNER BLOCK DESCRIPTION.

REV.9-27-01: CHANGED GENERAL NOTE Ⓓ.

REV. 08-28-19: REVISED DRAWING NAME AND GENERAL NOTE Ⓓ BY CHANGING NONMOUNTABLE TO VERTICAL. REDREW SHEET.

MINOR REVISION -- FHWA APPROVAL NOT REQUIRED

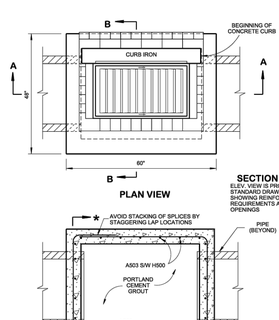
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TYPE 'S' CAST IRON FRAME, GRATE &

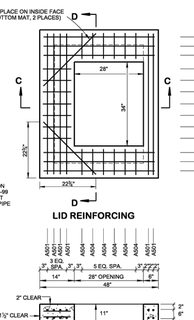
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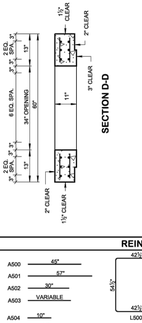
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PLAN VIEW



LID REINFORCING



SECTION D-D

SECTION "-"
ELEV. VIEW IS PROVIDED ON STANDARD DRAWING D-CB-99 SHOWING REINFORCEMENT REQUIREMENTS AROUND PIPE OPENINGS

SECTION E-E

SECTION C-C

CATCH BASIN MAXIMUM DEPTH NOTE

MAXIMUM DEPTH FOR THIS STRUCTURE IS 12.00'.

CATCH BASIN DIMENSIONS

INSIDE DIAMETER (D) OF PIPE (INCHES)	PIPE WALL THICKNESS (INCHES)	DIAMETER OF CUT-OUT HOLES (INCHES)	BOX SECTION MINIMUM HEIGHTS (INCHES)	FOR DESIGN USE ONLY ▲ CATCH BASIN MINIMUM DESIGN DEPTH (FEET)
18	2½	25	51	3.90
24	3	32	58	4.44
④ 30	3½	39	65	4.98
④ 36	4	46	72	5.52

① CUT-OUT HOLES BASED ON REINFORCED CONCRETE PIPE WITH WALL TYPE "B".

② ALL FLEXIBLE PIPE MATERIALS REQUIRE GASKET. SEE STANDARD DRAWING D-PS-2.

③ CUT-OUT HOLES FOR PRECAST STRUCTURES TO BE FORMED IN ORDER TO OBTAIN A SMOOTH EDGED HOLE. SCORED OR ETCHED HOLES WITH REINFORCING STEEL LEFT UNCUT WILL NOT BE PERMITTED.

④ TO BE USED IN 48 INCH INTERIOR WALLS ONLY.

REINFORCING STEEL LEGEND

A500	45°	425⅞"	12"	
A501	67"	545⅞" L500	30" 41⅛" H500	30" 533⅛" H501
A502	30"	425⅞"		30" 45" MAX. 42" MIN. 545⅞" H505
A503	VARIABLE			
A504	60"			
A505	11"			

DIMENSIONS SHOWN ON THIS LEGEND ARE OUTSIDE TO OUTSIDE OF BAR. STANDARD C.R.S.I. HOOK AND TIE DETAILS SHALL APPLY, EXCEPT AS NOTED.

GENERAL NOTES

(A) DRAWING TO BE USED FOR ALL PRECAST NO. 12 CONCRETE CATCH BASINS THAT ARE BETWEEN MINIMUM DEPTH AND TWELVE FEET. SEE STANDARD DRAWING D-CB-12S FOR DETAILS OF CAST-IN-PLACE NO. 12 CONCRETE CATCH BASINS AND PRECAST NO. 12 CONCRETE CATCH BASINS THAT ARE GREATER TWELVE FEET IN DEPTH. SEE STANDARD DRAWING D-CB-99 FOR ADDITIONAL CONSTRUCTION NOTES & DETAILS.

(B) THIS DIMENSION MAY VARY FROM A MINIMUM OF 0 INCHES TO A MAXIMUM OF 24 INCHES AS LONG AS 23 INCHES IS SATISFIED. THE CONTRACTOR HAS THE OPTION OF USING BRICK OR STANDARD PRECAST CONCRETE RISER FRAMES. THE USE OF BRICK SHALL BE LIMITED TO 8 INCHES. IF THIS DIMENSION EXCEEDS 8 INCHES, PRECAST CONCRETE RISER FRAMES SHALL BE USED AS SHOWN ON STANDARD DRAWING D-RF-1.

(C) THIS DRAWING DEPICTS THE MINIMUM HORIZONTAL REINFORCING AT THE TOP OF CATCH BASIN WALLS. SEE ADDITIONAL DETAILS ON STANDARD DRAWING D-CB-99 FOR TALLER SECTIONS AND STEEL PLACEMENT ABOVE PIPE OPENINGS.

(D) ALL PRECAST ELEMENTS SHALL MEET ASTM C913 (CURRENT EDITION) UNLESS SUPERSEDED BY THIS DRAWING.

CONCRETE: $f_{c'}$ = 4,000 POUNDS PER SQUARE INCH AT 28 DAYS
REINFORCING STEEL: ASTM A615, F_y = 60,000 POUNDS PER SQUARE INCH
ALL REINFORCING IS TO BE INSTALLED AS DETAILED ON THIS DRAWING.

(E) PRECAST CATCH BASIN UNITS WHICH ARE DAMAGED DURING SHIPMENT OR INSTALLATION WILL BE REJECTED. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO REPLACE DAMAGED CATCH BASIN UNITS AT THEIR OWN EXPENSE.

(F) THE FABRICATOR MAY ELIMINATE THE A503 BARS BY LENGTHENING THE VERTICAL LEG OF THE H500/H501 BARS SO THAT 1½ INCHES OF CLEAR COVER IS PROVIDED AT THE TOP OF THE STRUCTURE.

(G) APPROPRIATE SIZING AND LOCATION OF LIFTING DEVICES SHALL BE THE RESPONSIBILITY OF THE FABRICATOR.

(H) THE CONTRACTOR IS TO PATCH ALL LIFTING DEVICE HOLES WITH GROUT AND PLACE A MINIMUM OF ONE (1) INCH OF COVER OVER THE HARDWARE OF THESE DEVICES ON BOTH TOP AND BOTTOM SURFACES.

(I) ALTERNATIVE JOINT DETAILS MAY BE ACCEPTABLE. SEE STANDARD DRAWING D-CB-99 FOR ADDITIONAL DETAILS.

(J) SEE ROADWAY PLANS DRAINAGE TABULATION FOR PIPE INLET AND OUTLET ELEVATIONS. IF NEEDED, INVERT ELEVATIONS MAY BE ADJUSTED AS DIRECTED BY THE ENGINEER IN ORDER TO ACCOMMODATE INLET AND OUTLET PIPES.

(K) FOR CASES WHERE THE OUTLET PIPE DIAMETER IS LARGER THAN THE INLET PIPE DIAMETER, A MINIMUM 23 INCH DEPTH SHALL BE MAINTAINED ABOVE THE OUTLET PIPE.

(L) SEE STANDARD DRAWING D-CBB-12A FOR DETAILS REGARDING CAST IRON GRATES, FRAMES AND CURB INLETS.

(M) PAY DEPTH MEASUREMENT MADE FROM TOP OF GRATE TO OUTLET FLOW ELEVATION. PAYMENT INCLUDES RISER SECTION AND GRATE. PAYMENT FOR CATCH BASIN WILL BE MADE UNDER ITEM NUMBERS:

611-12.01, CATCH BASINS, TYPE 12, 0'-4' DEPTH, EACH, (THROUGH)
611-12.03, CATCH BASINS, TYPE 12, > 8'-12' DEPTH, EACH.

REV. 10-26-97. CHANGED MINIMUM DEPTH TABLE AND MODIFIED STEEL IN BASE SECTION.

REV. 1-19-99. MODIFIED CATCH BASIN MINIMUM DEPTH TABLE.

REV. 5-27-01. CHANGED PAY ITEMS IN GENERAL NOTE Ⓜ.

REV. 7-29-02. CHANGED ASTM SPECIFICATION IN GENERAL NOTE Ⓑ.

☐ REV. 8-01-12. REVISED CATCH BASIN FOR COMPLIANCE WITH AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, SECTION 5 WITH INTERIM. REVISED REINFORCING, GENERAL NOTES, LEGEND AND ADDITIONAL MISC. DRAFTING EDITS.

REV. 9-24-12. MODIFIED TOP SLAB AND MINIMUM DEPTH.

REV. 3-11-14. ELIMINATED STIRRUPS.

REV. 05-15-18. REVISED CATCH BASIN MINIMUM DESIGN DEPTH VALUES. CORRECTED STANDARD SPECIFICATIONS SECTION NUMBER TO 501 FOR NON -SHRINK GROUT. ADDED DIMENSION IN SECTION VIEW A-A FOR MINIMUM REBAR PLACEMENT IN LEG. ADDED DIMENSION IN SECTION VIEW A-A FOR MINIMUM DESIGN DEPTH. ADJUSTED BOX SECTION MINIMUM HEIGHTS

REV. 02-20-2020. REDREW SHEET.

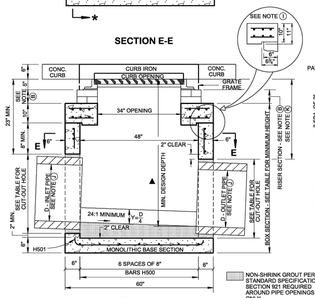
☐ APPROVED BY FHWA (ALL OTHERS APPROVED BY TDOT)

STATE OF TENNESSEE — STANDARD DRAWING — DEPARTMENT OF TRANSPORTATION

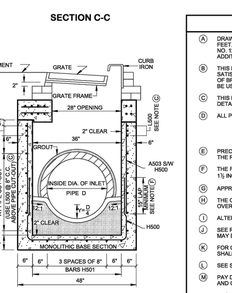
STANDARD PRECAST RECTANGULAR CONCRETE NO. 12 CATCH BASIN

12-18-1995 | D-CB-12P

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LP
NOT TO SCALE



SECTION A-A



SECTION B-B

REINFORCING STEEL LEGEND

VARIES	VARIES	L (1" MIN.)
BAR A	BAR H	

DIMENSIONS SHOWN ON THIS LEGEND ARE OUTSIDE TO OUTSIDE OF BAR. STANDARD C.R.S.I. HOOK AND TIE DETAILS SHALL APPLY, EXCEPT AS NOTED.

GENERAL NOTES

(A) DRAWING TO BE USED FOR ALL NON CIRCULAR CAST-IN-PLACE AND ALL NON CIRCULAR PRECAST CATCH BASINS, MANHOLES, JUNCTION BOXES AND SPRING DRAINS.

(B) PLACE ALL REINFORCING STEEL AS DETAILED ON APPLICABLE STANDARD DRAWINGS. TO ACCOMMODATE A PIPE OPENING, THE REQUIRED REINFORCING SCHEMES SHALL BE MODIFIED BY CUTTING OR TRIMMING THE AFFECTED REINFORCING STEEL AS DETAILED ON THIS STANDARD DRAWING.

(C) HORIZONTAL H-BARS AS DETAILED ON THE STANDARD DRAWINGS ASSUME PIPE OPENINGS AS SHOWN ON THE APPLICABLE STANDARD DRAWING. IN THESE CASES, THE LEGS OF THE H-BARS SHALL BE TERMINATED TO ACCOMMODATE PIPE OPENINGS AND THERE WILL BE NO LAPPING OF H-BARS. IN THE CASE SHOWN ON THIS SHEET, WITH PIPE OPENINGS IN ADJACENT CATCH BASIN WALLS, A FULL-LENGTH LAP SHALL BE REQUIRED IN THE SOLID WALL. IF PIPE OPENINGS ARE IN OPPOSITE WALLS BUT ROTATED 90° FROM WHAT IS DEPICTED ON THE STANDARD DRAWING (I.E. FOR A CROSS-DRAIN) THE CONTRACTOR HAS THE OPTION TO MODIFY THE H-BARS IN A SIMILAR FASHION SO ELIMINATE LAPS.

(D) A SINGLE L-BAR OF THE SAME DIAMETER MAY BE SUBSTITUTED FOR TWO OVERLAPPING H-BARS, WITH 15" OVERLAP.

(E) IF MODIFICATION TO STEEL REINFORCEMENT FOR A PIPE OPENING RESULTS IN ONE LEG OF AN H-BAR LESS THAN 6 INCHES LONG, THE LEG MAY BE OMITTED. IF MODIFICATION TO STEEL REINFORCEMENT FOR A PIPE OPENING RESULTS IN AN A-BAR LESS THAN 6 INCHES LONG, THEN THE A-BAR MAY BE OMITTED ENTIRELY.

(F) ADDITIONAL REINFORCING STEEL SHALL BE PROVIDED AROUND PIPE OPENINGS AS DETAILED ON THIS SHEET. PROVIDE DIAGONAL BARS WHEN PIPE OPENING IS FOR A 30 INCH OR LARGER PIPE.

(G) TIE ADDITIONAL REINFORCEMENT TO THE EXISTING INSIDE FACE REINFORCEMENT.

(H) THE PREFERRED LOCATION OF UNDERDRAIN CONNECTIONS, WHEN REQUIRED, IS IN A WALL WITH NO PIPE OPENING. UNDERDRAIN CONNECTIONS SHALL BE LOCATED AT LEAST 8 INCHES FROM THE TOP OF THE CATCH BASIN WALL. IF PLACEMENT IN A WALL WITH A PIPE OPENING IS NECESSARY, THE OUTSIDE EDGE OF THE UNDERDRAIN SHALL BE LOCATED A MINIMUM OF 4 INCHES FROM THE OUTSIDE EDGE OF THE PIPE OPENING.

(I) UNDERDRAIN HOLE SHOULD BE PLACED BETWEEN THE REINFORCING BARS. DURING THE PLACEMENT OF THE UNDERDRAIN HOLE, EVERY EFFORT SHALL BE MADE TO AVOID CUTTING REINFORCEMENT.

(J) VARIATIONS OF BAR LOCATION DUE TO REQUIRED SPLICES IS ACCEPTABLE UP TO A DISTANCE EQUAL TO THE BAR DIAMETER.

(K) MANUFACTURING TOLERANCES WILL BE AS SHOWN ON STANDARD OPERATING PROCEDURE (SOP) 5-3.

REV. 6-7-13. ADDED NOTES Ⓒ,Ⓓ, & Ⓔ.

REV. 3-11-14. ELIMINATED STIRRUPS.

REV. 5-20-14. COMBINED NOTE Ⓑ AND Ⓒ.

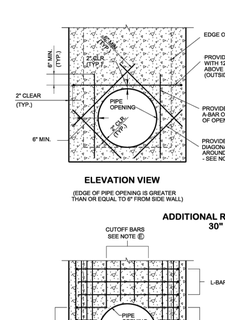
REV. 02-20-2020. REDREW SHEET.

REV. 01-28-2022. GENERAL NOTE Ⓗ WAS ADDED. THE TERM WWF WAS REPLACED WITH THE TERM WWR ON THE TABLE AND GENERAL NOTE Ⓑ.

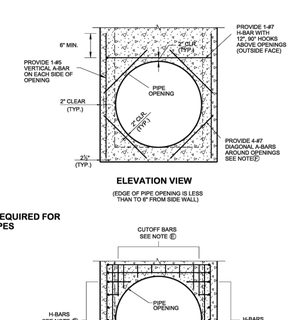
STATE OF TENNESSEE — STANDARD DRAWING — DEPARTMENT OF TRANSPORTATION

MISCELLANEOUS DETAILS FOR RECTANGULAR STRUCTURES

08-01-2012 | D-CB-99

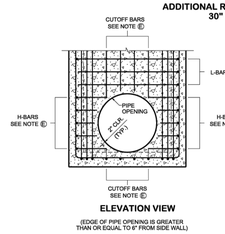


ELEVATION VIEW
(EDGE OF PIPE OPENING IS GREATER THAN OR EQUAL TO 6" FROM SIDE WALL)

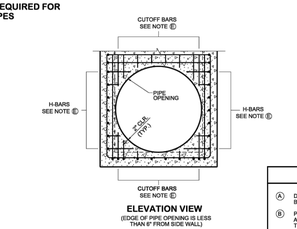


ELEVATION VIEW
(EDGE OF PIPE OPENING IS LESS THAN 6" FROM SIDE WALL)

ADDITIONAL REINFORCING REQUIRED FOR 30" OR LARGER PIPES

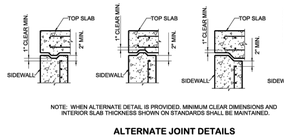


ELEVATION VIEW
(EDGE OF PIPE OPENING IS GREATER THAN OR EQUAL TO 6" FROM SIDE WALL)



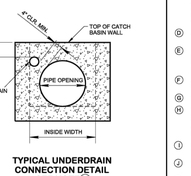
ELEVATION VIEW
(EDGE OF PIPE OPENING IS LESS THAN 6" FROM SIDE WALL)

BAR TERMINATION TO ACCOMMODATE PIPE OPENINGS

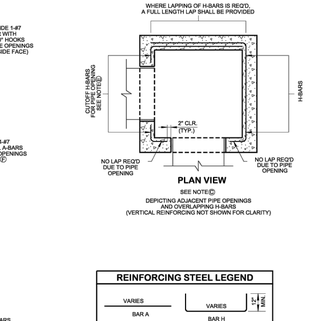


NOTE: WHEN ALTERNATE DETAIL IS PROVIDED, MINIMUM CLEAR DIMENSIONS AND INTERIOR SLAB THICKNESS SHOWN ON STANDARDS SHALL BE MAINTAINED.

ALTERNATE JOINT DETAILS



TYPICAL UNDERDRAIN CONNECTION DETAIL SEE NOTE Ⓗ



PLAN VIEW
SEE NOTE Ⓒ
DEPICTING ADJACENT PIPE OPENINGS AND OVERLAPPING H-BARS (VERTICAL REINFORCING NOT SHOWN FOR CLARITY)

GENERAL NOTES

(A) DRAWING TO BE USED FOR ALL CIRCULAR PRECAST CATCH BASINS AND MANHOLES.

(B) WELDED WIRE REINFORCEMENT (WWR) SHALL BE PLACED AS DESCRIBED IN ASTM C478 LATEST EDITION. WWR TABLE IS PROVIDED FOR REFERENCE ONLY. OTHER WWR SIZES AND/OR GRID SPACING MAY BE UTILIZED TO OBTAIN THE REQUIRED AREA OF STEEL REINFORCEMENT. A MAXIMUM OF TWO LAYERS MAY BE UTILIZED. WWR SHALL NOT BE UTILIZED IN TOP SLABS.

(C) SEE D-CB-99RA FOR BILL OF STEEL FOR LID REINFORCEMENT.

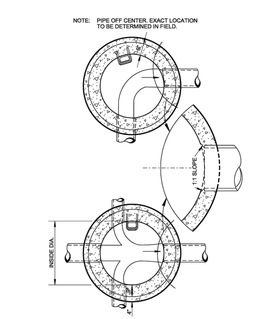
(D) CUT-OUT HOLES MAY BE PREFORMED OR CORE DRILLED.

STATE OF TENNESSEE — STANDARD DRAWING — DEPARTMENT OF TRANSPORTATION

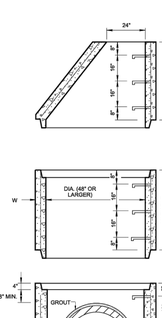
MISCELLANEOUS DETAILS FOR ROUND STRUCTURES

08-01-2012 | D-CB-99R

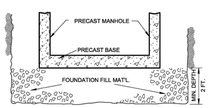
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NOT TO SCALE



TYPICAL PLANS

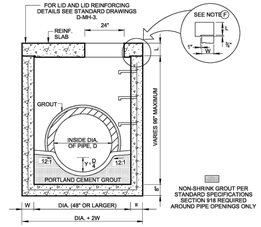


STANDARD ECCENTRIC CONCRETE RISER SECTION AND BASE SECTION



FOUNDATION DETAIL FOR PRECAST BASE

NOTE:
COST OF FURNISHING AND PLACING FOUNDATION FILL MATERIAL TO BE INCLUDED IN UNIT PRICE BID FOR 611-01.XX, MANHOLES. FOUNDATION FILL MATERIAL SHALL BE IN CONFORMANCE WITH SECTION 204 OF THE T.D.O.T. STANDARD SPECIFICATIONS.



STANDARD FLAT TOP MANHOLE

NON-SHRINK GROUT PER STANDARD SPECIFICATIONS SECTION 918 REQUIRED AROUND PIPE OPENINGS ONLY

MANHOLE DIMENSIONS

INSIDE DIA. OF MANHOLE DIA. (INCHES)	WALL THICKNESS W (INCHES)	LID THICKNESS L (INCHES)	OUTSIDE DIA. OF MANHOLE DIA. + 2W (INCHES)	MAX. INLET OR OUTLET CONC. PIPE SIZE - STR. (INCHES)	MAX. INLET OR OUTLET CONC. PIPE SIZE - 90° (INCHES)
48	5	8	58	24	15
60	6	8	72	36	24
72	7	9	86	48	30
84	8	9	100	60	36
96	9	10	114	66	42
108	10	10	128	72	48
120	11	10	142	78	54

MANHOLE MAXIMUM DEPTH NOTES

MAXIMUM DEPTH FOR PRECAST CONCRETE CIRCULAR MANHOLES IS 40.00'.

GENERAL NOTES

(A) THIS MANHOLE WILL CONFORM TO THE STANDARD DRAWING UNLESS OTHERWISE SHOWN OR DIRECTED BY THE ENGINEER TO MEET SPECIAL CONDITIONS. THERE WILL BE NO VARIATION FROM THE CONTRACT PRICE DUE TO SUCH CHANGES. IN ALL CASES IT MUST BE BUILT LARGE ENOUGH TO ACCOMMODATE INLET AND OUTLET PIPES.

(B) THE PRECAST CONCRETE MANHOLE SHALL MEET THE REQUIREMENTS AND SPECIFICATIONS SET OUT IN ASTM-C478 LATEST REVISION.

(C) THE FOLLOWING MATERIAL PROPERTIES ARE REQUIRED FOR MANHOLES:

CONCRETE: $f_{c'}$ = 4,000 POUNDS PER SQUARE INCH AT 28 DAYS
REINFORCING STEEL: ASTM A615, F_y = 60,000 POUNDS PER SQUARE INCH
ALL REINFORCING IS TO BE INSTALLED AS DETAILED ON THIS DRAWING.

(D) THE COST OF CASTINGS FOR COVERS AND RIMS AND OF MANHOLE STEPS SHALL BE INCLUDED IN THE UNIT PRICE BID FOR MANHOLES.

(E) ALTERNATIVE JOINT DETAILS MAY BE ACCEPTABLE. SEE STANDARD DRAWING D-CB-99R FOR ADDITIONAL DETAILS.

(F) PAYMENT FOR PRECAST CONCRETE CIRCULAR MANHOLES WILL BE MADE UNDER ITEM NUMBERS:

611-01.02, MANHOLES, > 4'-8' DEPTH, EACH (THROUGH)
611-01.07, MANHOLES, > 24'-28' DEPTH, EACH.

(G) PAYMENT FOR MANHOLES DEEPER THAN 28' WILL BE MADE UNDER ITEMS NUMBERS:

611-01.10 MANHOLE , "TO ... ", EACH (THROUGH)
611-01.19, MANHOLE , "TO ... ", EACH.

☐ APPROVED BY FHWA (ALL OTHERS APPROVED BY TDOT)

STATE OF TENNESSEE — STANDARD DRAWING — DEPARTMENT OF TRANSPORTATION

STANDARD PRECAST NO. 3 MANHOLE

AUG 1972 | D-MH-2

☐ REV. 11-20-72. WALL THICKNESS DELETED ON PRECAST SECTIONS.

☐ REV. 1-10-73. ENTRANCE TO OUTLET PIPE BEVELED.

☐ REV. 2-1-73. SKETCH ADDED SHOWING BEVELED ENTRY.

☐ REV. 1-1-76. CHANGED DWG. NO. FROM S-M-3 TO D-MH-3 (MASONRY DETAILS ADAPTED FROM OLD DWG. NO. S-M-3A).

☐ REV. 7-2-84. ADDED NOTE TO FOUNDATION DETAIL.

REV.7-29-96. REDREW SHEET ON CADD AND MADE MINOR CHANGES.

REV. 1-19-97. ADDED GENERAL NOTE Ⓖ ADDED CUT-OUT HOLE TABLE. ADDED MANHOLE DIMENSION TABLE.

REV. 4-16-97. CHANGED MANHOLE DIMENSION TABLE.

REV. 5-1-97. CHANGED DRAWING NO. FROM D-MH-5 TO D-MH-2. CHANGED BASE SECTION TO MONOLITHIC BASE SECTION.

REV. 5-27-97. ADDED 108 AND 120 INCH DIAMETER MANHOLES.

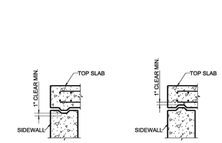
REV. 5-27-01. CHANGED GENERAL NOTE Ⓜ AND ADDED GENERAL NOTE Ⓝ. ADDED MANHOLE MAXIMUM DEPTH NOTES.

☐ REV. 8-01-12. REVISED CUT-OUT HOLES TABLE. SHALLOW BRICK MANHOLE TOP SLAB DETAIL AND ADDITIONAL MISC. DRAFTING EDITS. ADDED 48" MANHOLE.

REV. 2-2-16. CORRECTED SHALLOW BRICK MANHOLE TOP SLAB DETAIL NOTE.

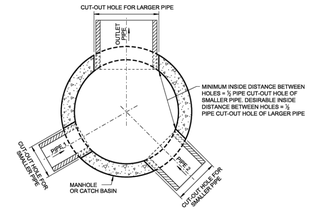
REV. 02-20-2020. REMOVED BRICK MANHOLE ALONG WITH ITS DETAILS AND NOTES. REDREW SHEET.

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ALTERNATE JOINT DETAILS

NOTE: WHEN ALTERNATE JOINT DETAIL IS PROVIDED, MINIMUM CLEAR DIMENSIONS AND INTERIOR SLAB THICKNESS SHOWN ON STANDARDS SHALL BE MAINTAINED.



MULTIPLE PIPE CONNECTIONS TO A ROUND STRUCTURE

NOTE: WHEN ALTERNATE JOINT DETAIL IS PROVIDED, MINIMUM CLEAR DIMENSIONS AND INTERIOR SLAB THICKNESS SHOWN ON STANDARDS SHALL BE MAINTAINED.

SUGGESTED SIZE OF WELDED WIRE REINFORCEMENT (WWR) FOR USE IN WALLS

INSIDE DIA. OF CATCH BASIN DIA. (INCHES)	WALL THICKNESS W (INCHES)	AREA STEEL REQ'D. (SQ. IN./FT.)	WWR OPTION A	WWR OPTION B
48	5	0.12	WWR 3x8-W3xW1.8	WWR 3x12-W3xW2.1
60	6	0.15	WWR 2x8-W2.5xW2.5	WWR 3x12-W3xW2.1 (2 LAYERS)
72	7	0.18	WWR 3x8-W4.5xW2.1	WWR 3x12-W3xW2.1 (2 LAYERS)
84	8	0.21	WWR 2x8-W3.5xW2.1	WWR 3x12-W3xW2.1 (2 LAYERS)
96	9	0.24	WWR 2x8-W4xW2.1	WWR 3x12-W3xW2.1 (2 LAYERS)
108	10	0.30	WWR 2x8-W5xW2.5	
120	11	0.36	WWR 2x8-W6xW3	

WWR AxB-WCxWD
A = SPACING OF HORIZONTAL WIRES, IN.
B = SPACING OF VERTICAL WIRES, IN.
C = HORIZONTAL WIRE SIZE
D = VERTICAL WIRE SIZE

GENERAL NOTES

(A) DRAWING TO BE USED FOR ALL CIRCULAR PRECAST CATCH BASINS AND MANHOLES.

(B) WELDED WIRE REINFORCEMENT (WWR) SHALL BE PLACED AS DESCRIBED IN ASTM C478 LATEST EDITION. WWR TABLE IS PROVIDED FOR REFERENCE ONLY. OTHER WWR SIZES AND/OR GRID SPACING MAY BE UTILIZED TO OBTAIN THE REQUIRED AREA OF STEEL REINFORCEMENT. A MAXIMUM OF TWO LAYERS MAY BE UTILIZED. WWR SHALL NOT BE UTILIZED IN TOP SLABS.

(C) SEE D-CB-99RA FOR BILL OF STEEL FOR LID REINFORCEMENT.

(D) CUT-OUT HOLES MAY BE PREFORMED OR CORE DRILLED.

REV. 9-24-12. ADDED GENERAL NOTE Ⓒ.

REV. 3-11-14. ELIMINATED STIRRUPS ON DETAILS VIEW.

REV. 02-20-2020. REDREW SHEET.

REV. 01-28-2022. GENERAL NOTE Ⓑ WAS ADDED. THE TERM WWF WAS REPLACED WITH THE TERM WWR ON THE TABLE AND GENERAL NOTE Ⓑ.

STATE OF TENNESSEE — STANDARD DRAWING — DEPARTMENT OF TRANSPORTATION

MISCELLANEOUS DETAILS FOR RECTANGULAR STRUCTURES

08-01-2012 | D-CB-99R

NOT TO SCALE

MANAGING LOCATION:
BLOOMINGTON OFFICE
7900 INTERNATIONAL DRIVE
SUITE 550
MINNEAPOLIS, MN 55425
PHONE: 952.426.0699

ALDI Inc.
Division Address
Division City, Division State, Zip
(XXX) XXX-XXXX
(XXX) XXX-XXXX fax

ALDI Inc. Store #: __
LA VERGNE, TN
5309 MURFREESBORO RD
LA VERGNE, TN 37086
RUTHERFORD

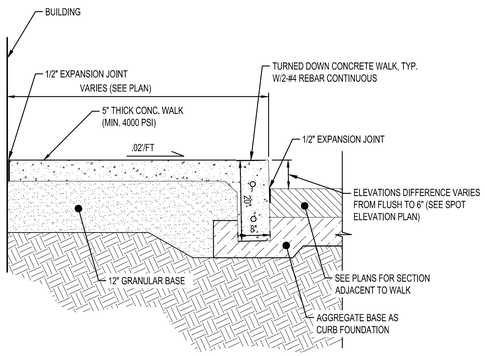
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SITE DETAILS

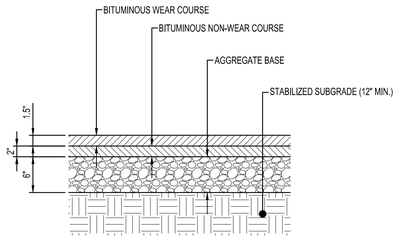
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Drawn By:	SK		
Designed By:	SK		C-022
Reviewed By:	EG		Drawing No.

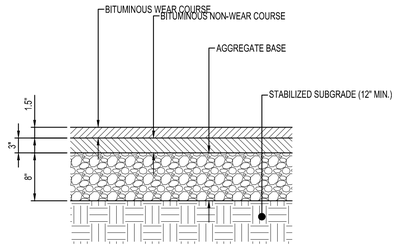
NOTE:
CONCRETE SHALL HAVE A NON-SLIP
BROOM FINISH



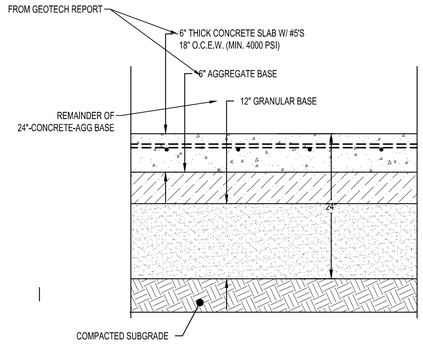
TURN DOWN CONCRETE WALK SECTION
NTS



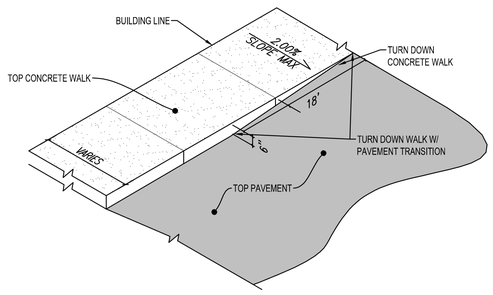
STANDARD BITUMINOUS PAVEMENT
NTS



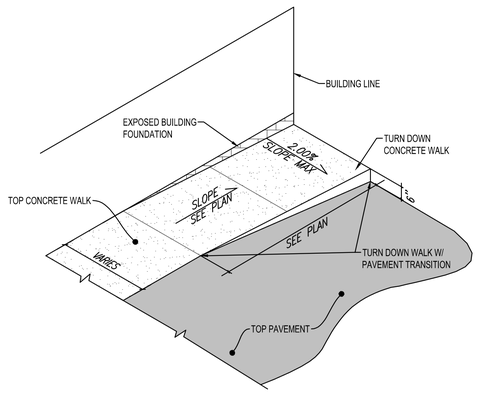
HEAVY DUTY BITUMINOUS PAVEMENT
NTS



LOADING DOCK PAVEMENT SECTION
NTS



TURN DOWN WALK TRANSITION 'X'
N.T.S.



TURN DOWN WALK TRANSITION 'X'
N.T.S.

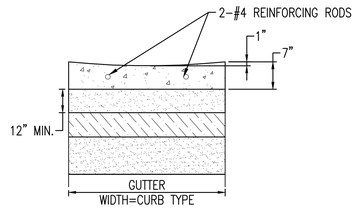
NOTES:

1. FLOW LINE THROUGH CURB RADIUS AND VALLEY GUTTER IS TO MATCH CURB AND GUTTER FLOW LINE

2. THE CONCRETE VALLEY GUTTER SHALL BE CONSTRUCTED ON A MINIMUM OF 12" AGGREGATE BASE (INCIDENTAL TO CONCRETE DRIVEWAY PAVEMENT)

3. NO SEPARATE PAYMENT SHALL BE MADE FOR INTEGRANT CURB

4. INSTALL (2) #4 REINFORCING RODS CENTERED IN VALLEY GUTTER (AS SHOWN) FOR THE FULL WIDTH OF OF THE VALLEY GUTTER



SECTION A-A

COMMERCIAL DRIVEWAY ENTRANCE
N.T.S.

Issued:	Date:
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C	
D	
E	

Revisions:	Date:
1	
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8	
9	

MANAGING LOCATION:
BLOOMINGTON OFFICE
7900 INTERNATIONAL DRIVE
SUITE 550
MINNEAPOLIS, MN 55425
PHONE: 952.426.0699

ALDI Inc.
Division Address
Division City, Division State, Zip
(XXX) XXX-XXXX
(XXX) XXX-XXXX fax

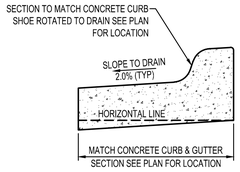
ALDI Inc. Store #: __
LA VERGNE, TN
5309 MURFREESBORO RD
LA VERGNE, TN 37086
RUTHERFORD

Project Name & Location:

SITE DETAILS

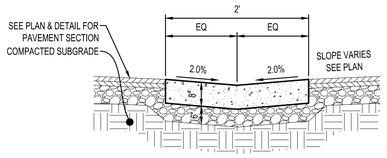
Drawing Name:

Type: V7.0	ISG Project No. 23-27665
Drawn By: SK	
Designed By: SK	C-023
Reviewed By: EG	Drawing No.



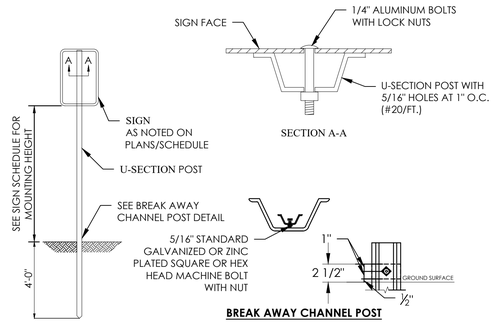
REVERSE PITCH CONCRETE CURB & GUTTER

NTS



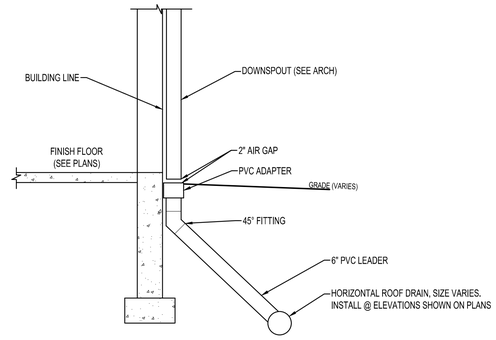
CONCRETE VALLEY GUTTER

NTS



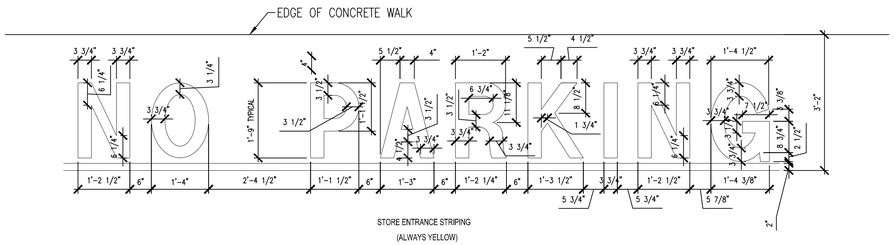
POST MOUNTED SIGN IN GRASS AREA

N.T.S.



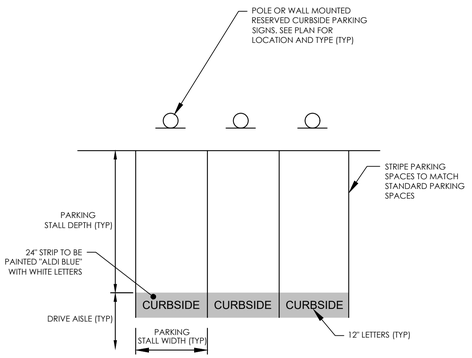
VERTICAL RAIN LEADER

NTS SD400



STORE ENTRANCE NO PARKING STRIPING DETAIL

N.T.S.



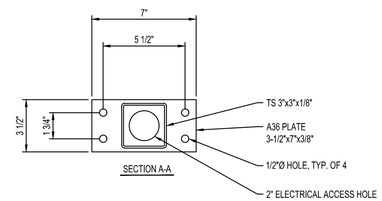
ALDI BLUE CUSTOM COLOR:

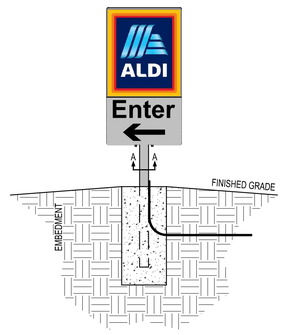
CCE COLORANT	OZ	32	64	128
L1-BLUE	-	63	1	1
R3-MAGENTA	-	5	-	1
Y3-DEEP GOLD	-	1	1	-

-ARIAL BOLD FONT SHALL BE USED FOR NUMBERS AND LETTERS.
-PAINT SHALL BE SEALMASTERS 'COLOR PAVE' OR 'LIQUID THERMOPLASTIC' TRAFFIC MARKING PAINT OR AS APPROVED BY ALDI CM. CONTACT ROCHESTER JET-BLACK, GARY ROSBROOK, 585-441-4125 FOR ORDERING.
-a. COLOR PAVE SHALL BE USED FOR NEW PAVEMENT
-b. LIQUID THERMOPLASTIC SHALL BE USED FOR OLDER PAVEMENT THAT HAS BEEN SEALED WITH A COAL TAR SEALER.
-SURFACE PREPARATION SHALL COMPLY WITH MANUFACTURERS REQUIREMENTS.
-SIGNS, NUMBERS AND WORDING TO BE PLACED CENTERED

CURBSIDE PARKING DETAIL

N.T.S.





ALDI DIRECTIONAL SIGN

N.T.S.

Issued:		Date:
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BLOOMINGTON OFFICE
7900 INTERNATIONAL DRIVE
SUITE 550
MINNEAPOLIS, MN 55425
PHONE: 952.426.0699

ALDI Inc.
Division Address
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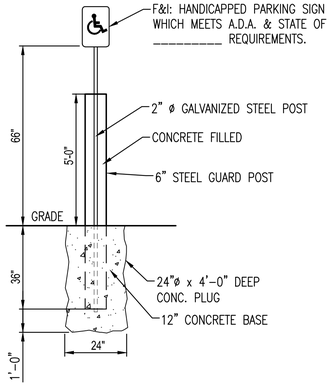
ALDI Inc. Store #: __
LA VERGNE, TN
5309 MURFREESBORO RD
LA VERGNE, TN 37086
RUTHERFORD

Project Name & Location:

SITE DETAILS

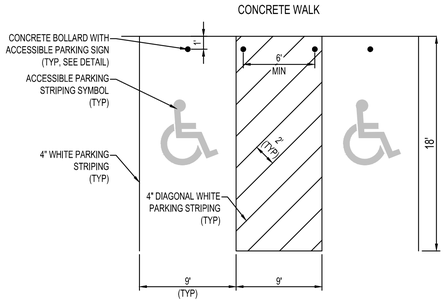
Drawing Name:

Type:	V7.0	ISG Project No. 23-27665
Drawn By:	SK	
Designed By:	SK	C-024
Reviewed By:	EG	Drawing No.



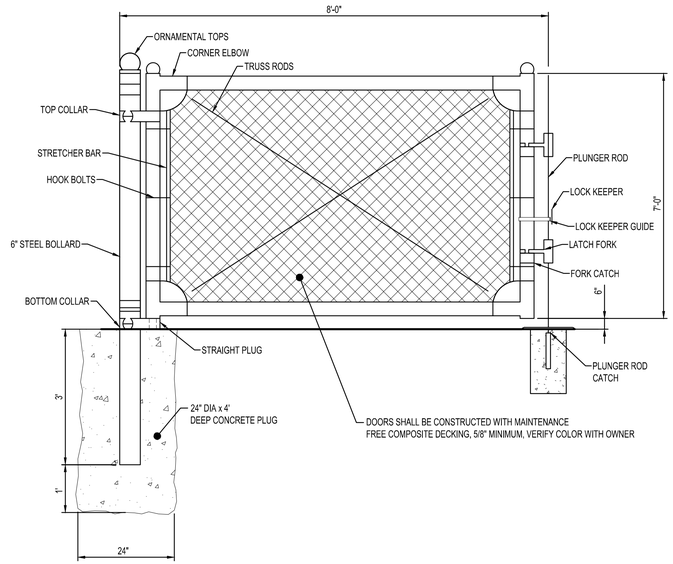
HANDICAPPED SIGN POST W/BOLLARD

N.T.S.



ACCESSIBLE PARKING AREA

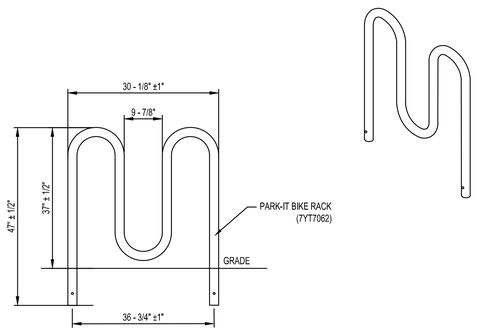
NTS PM303

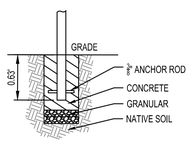


SCREENING GATE DETAIL

N.T.S.

*COORDINATE FINAL LOCATION WITH ALDI CONSTRUCTION MANAGER





PARK-IT BIKE RACK (5 BIKES)

N.T.S.

Issued:	Date:
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Revisions:	Date:
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ISG

MANAGING LOCATION:
BLOOMINGTON OFFICE
7900 INTERNATIONAL DRIVE
SUITE 550
MINNEAPOLIS, MN 55425
PHONE: 952.426.0699

ALDI Inc.
Division Address
Division City, Division State, Zip
(XXX) XXX-XXXX
(XXX) XXX-XXXX fax

ALDI Inc. Store #: __
LA VERGNE, TN
5309 MURFREESBORO RD
LA VERGNE, TN 37086
RUTHERFORD

Project Name & Location:

SITE DETAILS

Drawing Name:

Type:	V7.0	ISG Project No. 23-27665
Drawn By:	SK	
Designed By:	SK	C-025
Reviewed By:	EG	Drawing No.

SWPPP INDEX OF SHEETS

DESCRIPTION	SHT.
1. SWPPP REQUIREMENTS (5.0.)	1
2. SITE DESCRIPTION (5.5.1.)	1
3. ORDER OF CONSTRUCTION ACTIVITIES (5.5.1.a)	1
4. STREAM, OUTFALL, WETLAND, TMDL AND ECOLOGY INFORMATION	1
5. EROSION PREVENTION AND SEDIMENT CONTROL (EPSC) MEASURES (5.5.3.)	2
6. MAINTENANCE AND INSPECTION	3
7. SITE ASSESSMENTS (5.5.3.8.)	3
8. STORMWATER MANAGEMENT (5.5.3.11.h)	4
9. NON-STORMWATER DISCHARGES (5.5.3.12.)	4
10. SPILL PREVENTION, MANAGEMENT AND NOTIFICATION (5.5.3.7.c, 6.1)	4
11. RECORD-KEEPING	5
12. SITE WIDE/PRIMARY PERMITTEE CERTIFICATION (8.7.5.)	6
13. SECONDARY PERMITTEE (OPERATOR) CERTIFICATION (8.7.6.)	6

NOTE: CITATIONS IN PARENTHESIS INDICATE SECTIONS OF THE CURRENT CGP.

1. SWPPP REQUIREMENTS (5.0.)

1.1. HAS THE SWPPP TEMPLATE BEEN PREPARED BY AN INDIVIDUAL THAT HAS THE FOLLOWING LICENSING AND/OR CERTIFICATIONS (5.2)?

☒ YES (CHECK ALL THAT APPLY BELOW) OR ☐ NO

- ☒ CERTIFIED PROFESSIONAL IN EROSION AND SEDIMENT CONTROL (CPESC)
- ☒ A TN LICENSED PROFESSIONAL ENGINEER OR LANDSCAPE ARCHITECT
- ☐ HAS SUCCESSFULLY COMPLETED TDEC LEVEL II COURSE

1.2. DO THE EPSC PLANS INVOLVE STRUCTURAL DESIGN, HYDRAULIC, HYDROLOGIC OR OTHER ENGINEERING CALCULATIONS FOR EPSC STRUCTURAL MEASURES (E.G. SEDIMENT BASINS) (5.2.)? YES ☐ NO ☒

IF YES, HAVE THE EPSC PLANS BEEN PREPARED, STAMPED AND CERTIFIED BY A TN LICENSED PROFESSIONAL ENGINEER OR LANDSCAPE ARCHITECT? ☐ YES ☐ NO

1.3. DO THE PROJECT STORMWATER OUTFALLS DISCHARGE INTO THE FOLLOWING (6.4.1.)? ☐ YES (CHECK ALL THAT APPLY BELOW) ☒ NO

- ☐ WATERS WITH UNAVAILABLE PARAMETERS (303d FOR SILTATION)
- ☐ EXCEPTIONAL TENNESSEE WATERS (ETW)

2. SITE DESCRIPTION (5.5.1.)

2.1. PROJECT LIMITS (5.5.1.f): REFER TO C-122 SITE EROSION CONTROL PLAN (POST)

2.2. TOTAL PROJECT AREA (5.5.1.b): 2.42 ACRES

2.3. TOTAL AREA TO BE DISTURBED (5.5.1.b): 2.6 ACRES

2.4. PROJECT DESCRIPTION (5.5.1.a):

TITLE: ALDI LA VERGNE
COUNTY: RUTHERFORD COUNTY

2.5. SITE MAP(S) (3.2.2.): REFER TO C-122 SITE EROSION CONTROL PLAN (POST)

2.6. DESCRIPTION OF EXISTING SITE TOPOGRAPHY (5.5.1.c): REFER TO C-210 EXISTING SITE AND REMOVAL PLAN, SITE LOCATION MAP, AND THE OUTFALL TABLE IN SECTION 4.2.

2.7. IF THE PROJECT WILL EXCEED 50 ACRES OF DISTURBANCE AT ANY POINT DURING THE LIFESPAN OF THE PROJECT THE FOLLOWING CONDITIONS MUST BE MET (5.5.3.3)

2.7.1. TDEC SHALL BE NOTIFIED. (5.5.3.3.a)

2.7.2. A GEOSPATIAL FILE IDENTIFYING THE PROJECT AREAS BOUNDARIES SHALL BE SUBMITTED TO TDEC. (5.5.3.3.e)

2.7.3. A MONITORING PLAN SHALL BE PREPARED FOR OUTFALLS DRAINING 10 OR MORE ACRES, OR 5 ACRES IF DRAINING TO WATERS WITH UNAVAILABLE PARAMETERS (303d SILTATION) OR AN ETW. (5.5.3.3.f)

2.7.4. SITE ASSESSMENTS SHALL BE CONDUCTED ON A QUARTERLY BASIS (5.5.3.3.b AND 5.5.3.8).

2.7.5. INSPECTIONS SHALL BE CONDUCTED TWICE PER WEEK AND FOLLOWING ANY RAINFALL EVENT OF MORE THAN 0.5 INCHES IN 24 HOURS (5.5.3.3.c AND 5.5.3.9).

2.8. MAJOR SOIL DISTURBING ACTIVITIES (5.5.1.a) (CHECK ALL THAT APPLY):

- ☐ CLEARING AND GRUBBING
- ☒ EXCAVATION
- ☒ CUTTING AND FILLING
- ☒ FINAL GRADING AND SHAPING
- ☒ UTILITIES
- ☐ OTHER (DESCRIBE): _____

2.9. ARE THERE ANY SEASONAL LIMITATIONS ON WORK? ☐ YES ☒ NO

IF YES, LIST THE CORRESPONDING PLAN SHEET: _____

2.10. SOIL PROPERTIES (5.5.1.d, 5.5.3.3.d, 5.5.3.6.b).

SOIL PROPERTIES FOR THE PRIMARY SOILS ARE LISTED IN THE TABLE BELOW.

SOIL PROPERTIES			
PRIMARY SOIL NAME	HSG	% OF SITE	ERODIBILITY (k value)

2.11. PROJECT RUNOFF COEFFICIENTS AND AREA PERCENTAGES (5.5.3.6.a).

RUNOFF COEFFICIENTS FOR EXISTING CONDITIONS				
AREA TYPE	AREA(AC)	PERCENTAGE OF TOTAL AREA (%)	RUNOFF CN	C FACTOR
IMPERVIOUS	0.00	0		
PERVIOUS	2.42	100	0	0.30
WEIGHTED CURVE NUMBER OR C-FACTOR =			0	0.30

RUNOFF COEFFICIENTS FOR POST-CONSTRUCTION CONDITIONS				
AREA TYPE	AREA(AC)	PERCENTAGE OF TOTAL AREA (%)	RUNOFF CN	C FACTOR
IMPERVIOUS	2.00	76	00	0.95
PERVIOUS	0.60	23	00	0.30
WEIGHTED CURVE NUMBER OR C-FACTOR =			00	0.80

3. ORDER OF CONSTRUCTION ACTIVITIES (5.5.1.a)

CONSTRUCTION SHALL BE SEQUENCED AND STAGED TO: MINIMIZE THE EXPOSURE TIME OF GRADED OR DENUDED SOIL AREAS, PRESERVE TOPSOIL, AND MINIMIZE SOIL COMPACTION. NO WORK SHALL BE STARTED UNTIL THE CONTRACTOR'S PLAN FOR THE STAGING OF THEIR OPERATIONS, INCLUDING THE PLAN FOR STAGING OF TEMPORARY AND PERMANENT EPSC MEASURES, HAS BEEN ACCEPTED BY THE ENGINEER. THE CONTRACTOR'S EPSC PLAN SHALL INCORPORATE AND SUPPLEMENT, AS ACCEPTABLE, THE ORDER OF CONSTRUCTION ACTIVITIES AND THE BASIC EPSC DEVICES DEPICTED ON THE EPSC PLAN CONTAINED WITHIN THE APPROVED SWPPP.

3.1. SPECIAL SEQUENCING REQUIREMENTS

3.2. INSTALL STABILIZED CONSTRUCTION EXITS.

3.3. INSTALL PERIMETER PROTECTION WHERE RUNOFF SHEET FLOWS FROM THE SITE.

3.4. INSTALL INITIAL EPSC MEASURES BEFORE CLEARING, GRUBBING, EXCAVATION, GRADING, CULVERT OR BRIDGE CONSTRUCTION, CUTTING, FILLING, OR ANY OTHER EARTHWORK OCCURS, EXCEPT AS SUCH WORK MAY BE NECESSARY TO INSTALL EPSC MEASURES.

3.5. PERFORM CLEARING AND GRUBBING (NOT MORE THAN TWO WEEKS PRIOR TO GRADING OR EARTH-MOVING. REFER TO THE STABILIZATION PRACTICES BELOW.).

3.6. REMOVE AND STORE TOPSOIL.

3.7. STABILIZE DISTURBED AREAS WITHIN 2 WEEKS OF COMPLETING ANY STAGE AND/OR PHASE OF ACTIVITY (STEEP SLOPES SHALL BE STABILIZED WITHIN 1 WEEK AFTER CONSTRUCTION ACTIVITY HAS TEMPORARY OR PERMANENTLY CEASED).

3.8. INSTALL UTILITIES, STORM SEWERS, CULVERTS AND BRIDGE STRUCTURES.

3.9. INSTALL INLET AND CULVERT PROTECTION ONCE STRUCTURES ARE IN PLACE AND CAPABLE OF INTERCEPTING FLOW.

3.10. PERFORM FINAL GRADING AND INSTALL BASE STONE.

3.11. COMPLETE FINAL PAVING AND SEALING OF CONCRETE.

3.12. INSTALL TRAFFIC CONTROL AND PROTECTION DEVICES.

3.13. COMPLETE FINAL STABILIZATION (TOPSOIL, SEEDING, MULCH, EROSION CONTROL BLANKET, SOD, ETC.)

3.14. REMOVE TEMPORARY EROSION CONTROLS AND ACCUMULATED SEDIMENT FROM AREAS THAT HAVE ESTABLISHED AT LEAST 70 PERCENT UNIFORM PERMANENT VEGETATIVE COVER.

3.15. RE-STABILIZE AREAS DISTURBED BY REMOVAL ACTIVITIES.

4. STREAM, OUTFALL, WETLAND, TMDL AND ECOLOGY INFORMATION

4.1. STREAM INFORMATION (5.5.1.h, 5.5.1.i)

4.1.1. WILL CONSTRUCTION AND/OR EROSION PREVENTION AND SEDIMENT CONTROLS IMPACT ANY STREAMS WITHIN THE PROJECT LIMITS? ☐ YES ☒ NO

IF YES, THE IMPACT(S) HAVE BEEN INCLUDED IN THE TOTAL PROJECT IMPACTS AND HAVE BEEN INCLUDED IN THE WATER QUALITY PERMITS.

4.1.2. HAVE ANY OF THE RECEIVING STATE WATERS LESS THAN OR EQUAL TO 1 FLOW MILE DOWN GRADIENT OF THE PROJECT LIMITS BEEN CLASSIFIED BY TDEC AS FOLLOWS (CHECK ALL THAT APPLY):

- ☐ 303d WITH UNAVAILABLE PARAMETERS FOR SILTATION
- ☐ EXCEPTIONAL TENNESSEE WATERS (ETW)

4.1.3. RECEIVING WATERS OF THE STATE (5.5.1.h, 5.5.1.j, 5.5.1.k).

RECEIVING WATERS OF THE STATE INFORMATION					
STATE WATER LABEL	NAME OF RECEIVING STATE WATER	303d WITH UNAVAILABLE PARAMETERS FOR SILTATION (YES OR NO)	ETW (YES OR NO)	LOCATED WITHIN PROJECT LIMITS (YES OR NO)	LOCATED WITHIN ≤ 1 FLOW MILE DOWN GRADIENT OF PROJECT LIMITS (YES OR NO)
UNNAMED TRIB TO FINCH BRANCH	N/A	NO	NO	NO	YES

TNEPSC

PROJECT NAME
PROJECT ADDRESS
COUNTY, TENNESSEE

STORM WATER POLLUTION PREVENTION PLAN

SHEET NO.: 1

Issued:		Date:
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Revisions:		Date:
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ISG

MANAGING LOCATION:
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SUITE 550
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PHONE: 952.426.0699

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(XXX) XXX-XXXX fax

ALDI Inc. Store #: __
LA VERGNE, TN
5309 MURFREESBORO RD
LA VERGNE, TN 37086
RUTHERFORD

Project Name & Location:

EROSION CONTROL NOTES

Drawing Name:

Type:	V7.0	ISG Project No.	23-27665
Drawn By:	SK		
Designed By:	SK		C-120
Reviewed By:	EG		Drawing No.

4.1.4. RECEIVING WATERS OF THE US (NON STATE WATERS) (4.1.2). LIST ANY FEATURE THAT IS IDENTIFIED AS A WET WEATHER CONVEYANCE (TDEC) AND IDENTIFIED AS WATERS OF THE US BY THE ARMY CORPS OF ENGINEERS.

WET WEATHER CONVEYANCES THAT ARE WATERS OF THE US			
WOTUS LABEL	NAME OF RECEIVING STATE WATER	LOCATED WITHIN PROJECT LIMITS (YES OR NO)	LOCATED WITHIN 15-FT OF THE PROJECT LIMITS (YES OR NO)

4.1.5. ARE THERE ANY WATER QUALITY RIPARIAN BUFFER ZONES REQUIRED FOR WATERS OF THE STATE? (5.5.1.l, 6.4.2.)

☐ YES ☒ NO

IF YES, THEY HAVE BEEN INCLUDED ON PLAN SHEET(S) _____.

IF YES, CHECK THE APPROPRIATE BOX BELOW FOR SIZE OF BUFFER.

☐ 60-FEET FOR WATERS WITH UNAVAILABLE PARAMETERS AND EXCEPTIONAL TENNESSEE WATERS (ETW) (AVERAGE WIDTH PER SIDE WITH A MINIMUM OF 30-FEET).

A 60 FOOT NATURAL WATER QUALITY RIPARIAN BUFFER ZONE ADJACENT TO AND ON BOTH SIDES OF THE RECEIVING STATE STREAM WITH THIS DESIGNATION SHALL BE PRESERVED TO THE MAXIMUM EXTENT PRACTICABLE DURING CONSTRUCTION ACTIVITIES AT THE SITE. THE 60 FOOT CRITERION FOR THE WIDTH OF THE BUFFER ZONE CAN BE ESTABLISHED ON AN AVERAGE WIDTH BASIS AT A PROJECT, AS LONG AS THE MINIMUM WIDTH OF THE BUFFER ZONE IS MORE THAN 30 FEET AT ANY MEASURED LOCATION. IF THE CONSTRUCTION SITE ENCOMPASSES BOTH SIDES OF A STREAM, BUFFER AVERAGING CAN BE APPLIED TO BOTH SIDES, BUT MUST BE APPLIED INDEPENDENTLY.

☐ 30-FEET FOR ALL OTHER STREAMS (AVERAGE WIDTH PER SIDE WITH A MINIMUM OF 15-FEET).

A 30 FOOT NATURAL WATER QUALITY RIPARIAN BUFFER ZONE ADJACENT TO AND ON BOTH SIDES OF THE RECEIVING STATE STREAM SHALL BE PRESERVED TO THE MAXIMUM EXTENT PRACTICABLE DURING CONSTRUCTION ACTIVITIES AT THE SITE. THE 30 FOOT CRITERION FOR THE WIDTH OF THE BUFFER ZONE CAN BE ESTABLISHED ON AN AVERAGE WIDTH BASIS AT A PROJECT, AS LONG AS THE MINIMUM WIDTH OF THE BUFFER ZONE IS MORE THAN 15 FEET AT ANY MEASURED LOCATION. IF THE CONSTRUCTION SITE ENCOMPASSES BOTH SIDES OF A STREAM, BUFFER AVERAGING CAN BE APPLIED TO BOTH SIDES, BUT MUST BE APPLIED INDEPENDENTLY.

☐ 15-FEET FOR ANY WET WEATHER CONVEYANCES IDENTIFIED AS WATERS OF THE US BY THE US ARMY CORPS OF ENGINEERS.

4.1.6. ARE THERE ANY WATER QUALITY RIPARIAN BUFFER ZONES NOT REQUIRED FOR STATE WATERS DUE TO A TDEC ARAP? (1.5.2.)

☐ YES ☒ NO

4.1.7. ARE THERE WATER QUALITY RIPARIAN BUFFER ZONE EXEMPTIONS? (4.1.2.1.) ☐ YES ☒ NO

IF YES, EXISTING CONDITIONS DESCRIPTION:_____

4.1.8. EVERY ATTEMPT SHOULD BE MADE FOR CONSTRUCTION ACTIVITIES TO NOT TAKE PLACE WITHIN THE WATER QUALITY RIPARIAN BUFFER ZONE AND FOR EXISTING FORESTED AREAS TO BE PRESERVED. (4.1.2., 6.4.2.)

4.1.9. BECAUSE OF HEAVY SEDIMENT LOAD ASSOCIATED WITH CONSTRUCTION SITE RUNOFF, WATER QUALITY RIPARIAN BUFFER ZONES ARE NOT SEDIMENT CONTROL MEASURES AND SHOULD NOT BE RELIED UPON AS PRIMARY SEDIMENT CONTROL MEASURES. THE WATER QUALITY RIPARIAN BUFFER ZONE SHALL BE ESTABLISHED BETWEEN THE TOP OF THE STREAM BANK AND THE DISTURBED CONSTRUCTION AREA.

4.1.10. WHERE IT IS NOT PRACTICABLE TO MAINTAIN A FULL WATER QUALITY RIPARIAN BUFFER, BEST MANAGEMENT PRACTICES (BMPS) PROVIDING EQUIVALENT PROTECTION AS THE NATURAL RIPARIAN ZONE MUST BE USED. A JUSTIFICATION FOR USE AND DESIGN EQUIVALENCY SHALL BE DOCUMENTED WITHIN THE SWPPP. THE ENVIRONMENTAL AND ROADWAY DESIGN DIVISIONS SHALL REVIEW AND APPROVE THIS REVISION OF THE SWPPP BEFORE DISTURBANCE OF THE SITE PROCEEDS, UNLESS PREVIOUSLY EXEMPT IN THE NPDES CGP. WHERE ISSUED, ARAP/401 REQUIREMENTS WILL PREVAIL IF IN CONFLICT WITH THESE BUFFER ZONE REQUIREMENTS.

4.2. OUTFALL INFORMATION

4.2.1. OUTFALL TABLE (5.5.1.c).SEE SWPPP SHEETS C-120, C-121, C-122 FOR OUTFALL INFORMATION.

4.2.2. HAVE ALL OUTFALLS BEEN LABELED ON THE EPSC PLAN SHEETS (5.5.1.f)? ☒ YES ☐ NO

4.2.3. HAVE ALL OUTFALLS BEEN LABELED ON A USGS TOPOGRAPHIC MAP INCLUDED IN THE "DOCUMENTATION AND PERMITS" BINDER (3.2.2.)? ☐YES ☒ NO

4.2.4. WHERE POSSIBLE, HAS NON-PROJECT RUN-ON BEEN DIVERTED AROUND OR THROUGH THE PROJECT TO ELIMINATE CONTACT WITH DISTURBED AREAS OF THE PROJECT AND SEPARATE IT FROM PROJECT RUN-OFF THEREBY REDUCING THE DRAINAGE AREA OF TO THE OUTFALLS IN THIS AREA?

☒ YES ☐ NO ☐ N/A

4.2.5. ARE EQUIVALENT MEASURES BEING SUBSTITUTED FOR A SEDIMENT BASIN(S) OR SEDIMENT TRAP(S)? (5.5.3.5.) ☐ YES ☐ NO ☒ N/A

4.2.6. A SEDIMENT BASIN, OR EQUIVALENT MEASURE(S) WILL BE PROVIDED FOR ANY OUTFALL IN A DRAINAGE AREA:

OF TEN ACRES OR MORE FOR AN OUTFALL(S) THAT DOES NOT DISCHARGE TO A STATE STREAM WITH UNAVAILABLE PARAMETERS OR EXCEPTIONAL TENNESSEE WATERS. A TEMPORARY (OR PERMANENT) SEDIMENT BASIN OR EQUIVALENT CONTROL MEASURES THAT PROVIDES STORAGE FOR A CALCULATED VOLUME OF RUNOFF FROM A MINIMUM 2-YEAR/ 24-HOUR STORM EVENT, SHALL BE PROVIDED UNTIL FINAL STABILIZATION OF THE SITE. (5.5.3.5)

OR

OF FIVE ACRES OR MORE FOR AN OUTFALL(S) THAT DISCHARGES TO A STATE STREAM WITH UNAVAILABLE PARAMETERS DUE TO SILTATION OR EXCEPTIONAL TENNESSEE WATERS (ETW). A TEMPORARY (OR PERMANENT) SEDIMENT BASIN THAT PROVIDES STORAGE FOR A CALCULATED VOLUME OF RUNOFF FROM A 5-YEAR/ 24-HOUR STORM EVENT AND RUNOFF FROM EACH ACRE DRAINED, OR EQUIVALENT CONTROL MEASURES, SHALL BE PROVIDED UNTIL FINAL STABILIZATION OF THE SITE. (6.4.1.e).

4.2.7. A SEDIMENT TRAP, OR EQUIVALENT MEASURE(S) WILL BE PROVIDED FOR ANY OUTFALL IN A DRAINAGE AREA:

OF 3.5 - 4.9 ACRES FOR AN OUTFALL(S) THAT DISCHARGES TO A STATE STREAM WITH UNAVAILABLE PARAMETERS (303d SILTATION) OR EXCEPTIONAL TENNESSEE WATERS (ETW). A SEDIMENT TRAP THAT PROVIDES STORAGE FOR A CALCULATED VOLUME OF RUNOFF FROM A 5-YEAR/24-HOUR STORM EVENT AND RUNOFF FROM EACH ACRE DRAINED, OR EQUIVALENT CONTROL MEASURES, SHALL BE PROVIDED UNTIL FINAL STABILIZATION OF THE SITE. (6.4.1.f).

IN BOTH INSTANCES, THE ENVIRONMENTAL AND ROADWAY DESIGN DIVISIONS MAY BE CONTACTED TO REVIEW AND CONCUR WITH ANY REVISION OF THE SWPPP BEFORE DISTURBANCE OF THE OUTFALL PROCEEDS.

4.2.8. SEDIMENT STRUCTURES TREATING DRAINAGE AREAS IN EXCESS OF 25 ACRES REQUIRE A SITE-SPECIFIC DESIGN THAT ACCURATELY DEFINES THE SITE HYDROLOGY, SITE-SPECIFIC SEDIMENT LOADING, HYDRAULICS OF THE SITE, AND ADHERES TO ALL TENNESSEE EROSION AND SEDIMENT CONTROL HANDBOOK DESIGN RECOMMENDATIONS FOR SEDIMENT BASINS. (5.5.3.5.)

4.3. WETLAND INFORMATION

WILL CONSTRUCTION AND/OR EROSION AND SEDIMENT CONTROLS IMPACT ANY WETLANDS? ☐ YES ☒ NO

IF YES, THE STRUCTURAL EPSC MEASURES HAVE BEEN INCLUDED IN THE TOTAL PROJECT IMPACTS AND IN THE WATER QUALITY PERMITS.

WETLAND INFORMATION		
WETLAND LABEL	TEMPORARY IMPACTS (AC)	PERMANENT IMPACTS (AC)

4.4. TOTAL MAXIMUM DAILY LOADS (TMDL) INFORMATION (1.3.j)

4.4.1. IS THIS PROJECT LOCATED IN A HUC-8 WATERSHED THAT MAINTAINS AN EPA APPROVED TMDL FOR SILTATION AND HABITAT ALTERATION?

☐YES ☒ NO

4.4.2. IF YES, IS THIS PROJECT LOCATED WITHIN A HUC-12 SUBWATERSHED WITH A WASTE LOAD ALLOCATION (WLA)?

☐ YES ☒ NO

4.4.3. IF YES, DOES THE PROJECT HAVE A DIRECT DISCHARGE TO A 303(d) LISTED STREAM FOR SILTATION?

☐ YES ☒ NO

IF YES, SWPPP INCORPORATES MEASURES OR CONTROLS CONSISTENT WITH THE ASSUMPTIONS AND REQUIREMENTS OF THE TMDL.

5. <u>EROSION PREVENTION AND SEDIMENT CONTROL (EPSC) MEASURES</u> (<u>5.5.3.</u>)

5.1. EPSC MEASURES MUST BE DESIGNED, INSTALLED AND MAINTAINED TO CONTROL STORMWATER VOLUME AND VELOCITY WITHIN THE SITE TO MINIMIZE EROSION (4.1.1).

5.2. EPSC MEASURES MUST CONTROL STORMWATER DISCHARGES, INCLUDING BOTH PEAK FLOWS AND TOTAL STORMWATER VOLUME, TO MINIMIZE EROSION AT OUTLETS, STREAM CHANNELS, AND STREAM BANKS. (4.1.1)

5.3. HAVE THE CONTROL MEASURES BEEN DESIGNED PER THE SIZE AND SLOPE OF THE DISTURBED DRAINAGE AREA (5.5.3.5.)?

☒YES ☐ NO

5.4. THE CONTROL MEASURES HAVE, AT A MINIMUM, BEEN DESIGNED FOR THE FIVE-YEAR, 24 HOUR STORM EVENT (5.5.3.5., 6.4.1.b).

5.5. ARE THE LIMITS OF DISTURBANCE CLEARLY MARKED ON THE EPSC PLANS (5.5.1.f)? ☒ YES ☐ NO

5.6. AREAS TO BE UNDISTURBED SHALL BE CLEARLY MARKED IN THE FIELD BEFORE CONSTRUCTION ACTIVITIES BEGIN.

5.7. CLEARING, GRUBBING, AND OTHER DISTURBANCE TO RIPARIAN VEGETATION SHALL BE LIMITED TO THE MINIMUM NECESSARY FOR SLOPE CONSTRUCTION AND EQUIPMENT OPERATIONS. EXISTING VEGETATION, INCLUDING STREAM AND WETLAND BUFFERS (UNLESS PERMITTED), SHOULD BE PRESERVED TO THE MAXIMUM EXTENT POSSIBLE. UNNECESSARY VEGETATION REMOVAL IS PROHIBITED.

5.8. HAS A THREE STAGED EPSC PLAN BEEN PREPARED FOR THE PROJECT (5.5.2.)?

YES ☒ A THREE STAGED EPSC PLAN HAS BEEN PREPARED.

NO ☐ A SINGLE STAGED EPSC PLAN HAS BEEN PREPARED SINCE THE PROJECT DISTURBANCE IS LESS THAN 5 ACRES AND THE PROJECT CONSISTS OF A SINGLE-LOT HOME, COMMERCIAL LOT OR LINEAR INFRASTRUCTURE PROJECT.

TNEPSC

PROJECT NAME
PROJECT ADDRESS
COUNTY, TENNESSEE

STORM WATER POLLUTION PREVENTION PLAN

SHEET NO.: 2

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ISG

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Project Name & Location:

EROSION CONTROL NOTES

Drawing Name:

Type:	V7.0	ISG Project No.	23-27665
Drawn By:	SK		
Designed By:	SK		C-121
Reviewed By:	EG		Drawing No.

5.9. STEEP SLOPES ARE DEFINED AS A NATURAL OR CREATED SLOPE OF 35% GRADE OR GREATER REGARDLESS OF HEIGHT. HAVE STEEP SLOPES BEEN MINIMALLY DISTURBED AND/OR PROTECTED BY CONVEYING RUNOFF NON-EROSIVELY AROUND OR OVER THE SLOPE (5.5.3.4.) (10. "STEEP SLOPE")? ☐ YES ☐ NO ☒ N/A

5.10. THE STRUCTURAL EPSC MEASURES HAVE BEEN INCLUDED IN THE TOTAL PROJECT IMPACTS AND HAVE BEEN INCLUDED IN THE AQUATIC RESOURCE ALTERATION (ARAP) PERMIT OR SECTION 401 CERTIFICATION (5.5.1.h). ALL PERMITS WILL BE MAINTAINED ON SITE WITHIN THE "DOCUMENTATION AND PERMITS" BINDER.

5.11. TEMPORARY EPSC MEASURES MAY BE REMOVED AT THE BEGINNING OF THE WORKDAY, BUT MUST BE REINSTALLED AT THE END OF THE WORKDAY OR BEFORE A PRECIPITATION EVENT.

5.12. EPSC MEASURES LOCATED IN WOTUS (EPHEMERAL STREAMS) MUST BE CONSIDERED TEMPORARY AND SHALL BE REMOVED AT THE END OF CONSTRUCTION.

5.13. THE CONTRACTOR SHALL ESTABLISH AND MAINTAIN A PROACTIVE METHOD TO PREVENT THE OFF-SITE MIGRATION OR DEPOSIT OF SEDIMENT OFF THE PROJECT LIMITS (E.G. R.O.W., EASEMENTS, ETC.), INTO WATERS OF THE STATE/U.S., OR ONTO ROADWAYS USED BY THE PUBLIC. IF SEDIMENT ESCAPES THE CONSTRUCTION SITE, OFF-SITE ACCUMULATIONS OF SEDIMENT THAT HAVE NOT REACHED A STREAM MUST BE REMOVED TO A LEVEL SUFFICIENT TO MINIMIZE OFF-SITE IMPACTS (E.G., FUGITIVE SEDIMENT THAT HAS ESCAPED THE CONSTRUCTION SITE AND HAS COLLECTED IN A STREET MUST BE REMOVED SO THAT IT IS NOT SUBSEQUENTLY WASHED INTO STORM SEWERS AND STREAMS BY THE NEXT RAIN AND/OR SO THAT IT DOES NOT POSE A SAFETY HAZARD TO USERS OF PUBLIC STREETS). ARRANGEMENTS CONCERNING REMOVAL OF SEDIMENT ON ADJOINING PROPERTY MUST BE SETTLED WITH THE ADJOINING PROPERTY OWNER BEFORE REMOVAL OF SEDIMENT. SEDIMENT THAT MIGRATES INTO WATERS OF THE STATE/US SHALL NOT BE REMOVED WITHOUT GUIDANCE AND APPROVAL FROM TDEC.

5.14. OFFSITE VEHICLE TRACKING OF SEDIMENTS AND THE GENERATION OF DUST SHALL BE MINIMIZED. A STABILIZED CONSTRUCTION EXIT (A POINT OF ENTRANCE/EXIT TO THE CONSTRUCTION PROJECT) SHALL BE PROVIDED TO REDUCE THE TRACKING OF MUD AND DIRT ONTO PUBLIC ROADS BY CONSTRUCTION VEHICLES.

5.15. DISCHARGES FROM DEWATERING ACTIVITIES ARE PROHIBITED UNLESS MANAGED BY APPROPRIATE CONTROLS THAT PROVIDE THE LEVEL OF TREATMENT (FILTRATION) NECESSARY TO COMPLY WITH PERMIT REQUIREMENTS. (4.1.3.).

5.16. SETTLING BASINS AND SEDIMENT TRAPS SHALL BE PROPERLY DESIGNED PER THE SIZE OF THE DRAINAGE AREAS OR VOLUME OF WATER TO BE TREATED. TREATED WATER MUST BE DISCHARGED THROUGH A PIPE OR WELL VEGETATED OR LINED CHANNEL, SO THAT THE DISCHARGE DOES NOT CAUSE EROSION OR SEDIMENT TRANSPORT.

5.17. DISCHARGES FROM SEDIMENT BASINS AND IMPOUNDMENTS SHALL UTILIZE OUTLET STRUCTURES THAT ONLY WITHDRAW WATER FROM NEAR THE SURFACE OF THE BASIN OR IMPOUNDMENT. TREATED WATER MUST BE DISCHARGED THROUGH A PIPE, WELL- VEGETATED AND/OR LINED CHANNEL, SO THAT THE DISCHARGE DOES NOT CAUSE EROSION OR SEDIMENT TRANSPORT. (5.5.3.5.).

5.18. THE DEWATERING OF WORK AREAS, TRENCHES, FOUNDATIONS, EXCAVATIONS, ETC. THAT HAVE COLLECTED STORMWATER, WATER FROM VEHICLE WASH AREAS, OR GROUNDWATER SHALL BE EITHER HELD IN SETTLING BASINS OR TREATED BY FILTRATION AND/OR CHEMICAL TREATMENT PRIOR TO ITS DISCHARGE. ALL CHEMICAL TREATMENTS MUST BE APPLIED PER SECTION 6 FLOCCULANTS.

5.19. WATER DISCHARGED FROM DEWATERING ACTIVITIES SHALL NOT CAUSE AN OBJECTIONABLE COLOR CONTRAST WITHIN THE RECEIVING NATURAL RESOURCE. WATER MUST BE HELD WITHIN SETTLING BASINS UNTIL IT IS AT LEAST AS CLEAR AS THE RECEIVING WATERS.

5.20. DEWATERING STRUCTURES, SEDIMENT FILTER BAGS, SEDIMENT BASINS AND TRAPS SHALL NOT BE LOCATED CLOSER THAN 30 FEET (60 FEET DESIRABLE VEGETATIVE BUFFER) FOR WATERS WITH UNAVAILABLE PARAMETERS DUE TO SILTATION AND EXCEPTIONAL TENNESSEE WATERS (ETW) AND 15 FEET (30 FEET DESIRABLE VEGETATIVE BUFFER) FOR ALL OTHER FEATURES FROM THE TOP BANK OF A STREAM, WOTUS (EPHEMERAL), WETLAND OR OTHER NATURAL RESOURCE AND SHALL BE PROPERLY DESIGNED PER THE SIZE OF THE DRAINAGE AREAS OR VOLUME OF WATER TO BE TREATED.

5.21. STABILIZATION PRACTICES: PRE-CONSTRUCTION VEGETATIVE COVER WILL NOT BE DESTROYED, REMOVED OR DISTURBED MORE THAN 2 WEEKS PRIOR TO GRADING OR EARTH MOVING UNLESS THE AREA WILL BE SEEDED AND/OR MULCHED OR OTHER TEMPORARY COVER IS INSTALLED (5.5.3.5.f).

5.22. STABILIZATION MEASURES WILL BE INITIATED AS SOON AS POSSIBLE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED. TEMPORARY OR PERMANENT STABILIZATION WILL BE COMPLETED WITHIN 2 WEEKS AFTER ACTIVITY HAS TEMPORARILY OR PERMANENTLY CEASED IN THAT AREA. PERMANENT STABILIZATION WILL REPLACE TEMPORARY MEASURES AS SOON AS PRACTICABLE (5.5.3.4.).

5.23. PRIORITY SHALL BE GIVEN TO FINISHING OPERATIONS AND PERMANENT EPSC MEASURES OVER TEMPORARY EPSC MEASURES ON ALL PROJECTS. UNPACKED GRAVEL CONTAINING FINES (SILT AND CLAY SIZED PARTICLES) OR CRUSHER-RUN WILL NOT BE CONSIDERED A NON-ERODIBLE SURFACE

5.24. DELAYING THE PLANTING OF COVER VEGETATION UNTIL WINTER MONTHS OR DRY MONTHS SHOULD BE AVOIDED, IF POSSIBLE.

5.25. STEEP SLOPES SHALL BE TEMPORARILY STABILIZED NOT LATER THAN 1 WEEK AFTER CONSTRUCTION ACTIVITY ON THE SLOPE HAS TEMPORARILY OR PERMANENTLY CEASED. (5.5.3.4.).

6. MAINTENANCE AND INSPECTION

6.1. INSPECTION PRACTICES (5.5.3.9.)

6.1.1. PROJECT EPSC INSPECTORS RESPONSIBLE FOR THE INSPECTION, IMPLEMENTATION, MAINTENANCE. AND/OR REPAIR OF EPSC MEASURES SHALL MEET ONE OF THE FOLLOWING REQUIREMENTS (5.5.3.10.):

6.1.1.1. SUCCESSFULLY COMPLETED THE TDEC "LEVEL I - FUNDAMENTALS OF EROSION PREVENTION AND SEDIMENT CONTROL." COURSE AND ANY RECERTIFICATION COURSES AS REQUIRED.

6.1.1.2. BE A CURRENT TN LICENSED PROFESSIONAL ENGINEER OR LANDSCAPE ARCHITECT.

6.1.1.3. BE A CURRENT CERTIFIED PROFESSIONAL IN EROSION AND SEDIMENT CONTROL (CPESC).

6.1.1.4. SUCCESSFULLY COMPLETED TDEC "LEVEL II – DESIGN PRINCIPLES FOR EROSION PREVENTION AND SEDIMENT CONTROL FOR CONSTRUCTION SITES" COURSE AND ANY RECERTIFICATION COURSE AS REQUIRED.

6.1.2. EPSC CONTROLS SHALL BE INSPECTED TO VERIFY MEASURES HAVE BEEN INSTALLED AND MAINTAINED IN ACCORDANCE WITH CONSTRUCTION DRAWINGS, SPECIFICATIONS, AND GOOD ENGINEERING PRACTICES. EPSC INSPECTIONS SHALL BE DOCUMENTED ON THE TDEC CONSTRUCTION STORMWATER INSPECTION CERTIFICATION (TWICE-WEEKLY INSPECTIONS) FORM.

6.1.3. OUTFALL POINTS SHALL BE INSPECTED TO ASCERTAIN WHETHER EPSC MEASURES ARE EFFECTIVE IN PREVENTING EROSION AND CONTROLLING SEDIMENT INCLUDING SIGNIFICANT IMPACTS TO SURROUNDING STATE WATERS, WOTUS (EPHEMERAL), WETLANDS, OTHER NATURAL RESOURCES AND ADJACENT PROPERTY OWNERS. WHERE DISCHARGE LOCATIONS ARE INACCESSIBLE, NEARBY DOWN GRADIENT LOCATIONS SHALL BE INSPECTED. LOCATIONS WHERE VEHICLES ENTER AND EXIT THE SITE SHALL BE INSPECTED FOR EVIDENCE OF OFF-SITE ROADWAY SEDIMENT TRACKING.

6.1.4. INSPECTIONS WILL BE CONDUCTED AT LEAST TWICE EVERY CALENDAR WEEK AND AT LEAST 72 HOURS APART (5.5.3.11.a).

6.1.5. ON PROJECTS WHERE THE PERMITTEE CHOOSES TO DISTURB MORE THAN 50 ACRES AT ONE TIME, INSPECTIONS WILL BE CONDUCTED TWICE PER WEEK AND FOLLOWING ANY RAINFALL EVENT OF MORE THAN 0.5 INCHES IN 24 HOURS. (5.5.3.3.c)

6.1.6. THE FREQUENCY OF ESPC INSPECTIONS MAY BE REDUCED TO ONCE A MONTH WHERE SITES OR PORTIONS OF SITES HAVE BEEN TEMPORARILY STABILIZED UNTIL CONSTRUCTION ACTIVITIES RESUME WITH WRITTEN NOTIFICATION THE CITY OF CLEVELAND STORMWATER DIVISION AND SUBSEQUENT APPROVAL. WRITTEN NOTIFICATION MUST INCLUDE THE INTENT TO CHANGE FREQUENCY AND JUSTIFICATION (5.5.3.11.a).

6.1.7. ALL DISTURBED AREAS OF THE SITE THAT HAVE NOT BEEN FINALLY STABILIZED, AREAS USED FOR MATERIAL STORAGE THAT ARE EXPOSED TO PRECIPITATION, STRUCTURAL CONTROL MEASURES, AND LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE, AND EACH OUTFALL WILL BE INSPECTED (5.5.3.11.b).

6.1.8. THE INSPECTOR WILL OVERSEE THE REQUIREMENTS OF OTHER CONSTRUCTION-RELATED WATER QUALITY PERMITS (I.E. TDEC ARAP, USACE SECTION 404, AND TVA SECTION 26a PERMITS) FOR CONSTRUCTION ACTIVITIES AROUND WATERS OF THE STATE (10 "INSPECTOR").

6.1.9. THE SWPPP WILL BE REVISED AS NECESSARY BASED ON THE RESULTS OF THE INSPECTION. REVISION(S) WILL BE RECORDED WITHIN 1 WEEK OF THE INSPECTION. REVISION(S) WILL BE IMPLEMENTED WITHIN 2 WEEKS OF THE INSPECTION (5.5.3.11.e AND 5.5.3.11.f).

6.1.10. DOCUMENTATION OF INSPECTIONS WILL BE MAINTAINED ON SITE IN THE "DOCUMENTATION AND PERMITS" BINDER.

6.1.11. THESE INSPECTION REQUIREMENTS DO NOT APPLY TO DEFINABLE AREAS OF THE SITE THAT HAVE MET FINAL STABILIZATION REQUIREMENTS AND HAVE BEEN NOTED IN THE SWPPP.

6.1.12. TRAINED CERTIFIED INSPECTORS SHALL COMPLETE INSPECTION TO THE BEST OF THEIR ABILITY. FALSIFYING INSPECTION RECORDS OR OTHER DOCUMENTATION OR FAILURE TO COMPLETE INSPECTION DOCUMENTATION SHALL RESULT IN A VIOLATION OF THIS PERMIT AND ANY OTHER APPLICABLE ACTS OR RULES (5.5.3.11.h).

6.2. MAINTENANCE PRACTICES (5.1 AND 8.13.)

6.2.1. ALL CONTROLS WILL BE MAINTAINED IN GOOD AND EFFECTIVE OPERATING ORDER AND IN ACCORDANCE WITH CONSTRUCTION DRAWINGS AND GOOD ENGINEERING PRACTICES. (5.1. AND 5.5.3.1.b)

6.2.2. MAINTENANCE AND REPAIR ACTIVITIES ARE THE RESPONSIBILITY OF THE CONTRACTOR.

6.2.3. UPON CONCLUSION OF THE INSPECTIONS, EPSC MEASURES FOUND TO BE INEFFECTIVE SHALL BE REPAIRED, REPLACED, OR MODIFIED BEFORE THE NEXT RAIN EVENT OR WITHIN 7 DAYS (WHICHEVER IS SOONER) AFTER THE INSPECTION OR WHEN THE CONDITION IS IDENTIFIED. (5.5.3.11.e).

6.2.4. SEDIMENT SHALL BE REMOVED FROM SEDIMENT CONTROL STRUCTURES (SEDIMENT TRAPS, SILT FENCE, SEDIMENT BASINS, OTHER CONTROLS, ETC.) WHEN THE DESIGN CAPACITY HAS BEEN REDUCED BY FIFTY PERCENT (50%). (5.5.3.1.d).

6.2.5. DURING SEDIMENT REMOVAL, THE CONTRACTOR SHALL TAKE STEPS TO ENSURE THAT STRUCTURAL COMPONENTS OF EPSC MEASURES ARE NOT DAMAGED AND THUS MADE INEFFECTIVE. IF DAMAGE DOES OCCUR, THE CONTRACTOR SHALL REPAIR THE EPSC MEASURES AT THE CONTRACTOR'S OWN EXPENSE.

6.2.6. CHECK DAMS WILL BE INSPECTED FOR STABILITY. SEDIMENT WILL BE REMOVED WHEN DEPTH REACHES ONE-HALF (½) THE HEIGHT OF THE DAM.

6.2.7. SEDIMENT REMOVED FROM SEDIMENT CONTROL STRUCTURES SHALL BE PLACED AND TREATED IN A MANNER SO THAT THE SEDIMENT IS CONTAINED WITHIN THE PROJECT LIMITS, DOES NOT MIGRATE INTO FEATURES REMOVED FROM, AND DOES NOT MIGRATE ONTO ADJACENT PROPERTIES AND/OR INTO WATERS OF THE STATE/U.S.

6.2.8. LITTER, CONSTRUCTION DEBRIS, AND CONSTRUCTION CHEMICALS EXPOSED TO STORMWATER WILL BE PICKED UP AND REMOVED FROM STORMWATER EXPOSURE PRIOR TO ANTICIPATED STORM EVENTS OR BEFORE BEING CARRIED OFF THE SITE BY WIND, OR OTHERWISE PREVENTED FROM BECOMING A POLLUTANT SOURCE FOR STORMWATER DISCHARGES. AFTER USE, MATERIALS USED FOR EROSION CONTROL WILL BE REMOVED (5.5.3.7.a).

6.2.9. ALL SEEDED AREAS WILL BE CHECKED FOR BARE SPOTS, EROSION WASHOUTS, AND VIGOROUS GROWTH FREE OF SIGNIFICANT WEED INFESTATIONS.

7. SITE ASSESSMENTS (5.5.3.8.)

ARE SITE ASSESSMENTS REQUIRED? ☐YES ☒ NO

TNEPSC

PROJECT NAME
PROJECT ADDRESS
COUNTY, TENNESSEE

STORM WATER POLLUTION PREVENTION PLAN

SHEET NO.: 3

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Revisions:		Date:
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Project Name & Location:

EROSION CONTROL NOTES

Drawing Name:

Type:	V7.0	ISG Project No. 23-27665
Drawn By:	SK	
Designed By:	SK	C-122
Reviewed By:	EG	Drawing No.

8. STORMWATER MANAGEMENT (5.5.3.11.h)

8.1. STORMWATER MANAGEMENT WILL BE HANDLED BY TEMPORARY CONTROLS OUTLINED IN THIS SWPPP AND ANY PERMANENT CONTROLS NEEDED TO MEET PERMANENT STORMWATER MANAGEMENT NEEDS IN THE POST CONSTRUCTION PERIOD. PERMANENT CONTROLS WILL BE DEPICTED ON THE PLANS AND NOTED AS PERMANENT.

8.2. DESCRIBE ANY SPECIFIC POST-CONSTRUCTION MEASURES THAT WILL CONTROL VELOCITY, POLLUTANTS, AND/OR EROSION (5.5.3.6.c): _____
SEE SHEETS C-121 & C-321 FOR POST CONSTRUCTION MEASURES.

8.3. OTHER ITEMS NEEDING CONTROL (5.5.3.7.)

CONSTRUCTION MATERIALS: THE FOLLOWING MATERIALS OR SUBSTANCES ARE EXPECTED TO BE PRESENT ON THE SITE DURING THE CONSTRUCTION PERIOD. (CHECK ALL THAT APPLY).

- ☒ LUMBER, GUARDRAIL, TRAFFIC CONTROL DEVICES
- ☒ CONCRETE WASHOUT
- ☒ PIPE CULVERTS (I.E. CONCRETE, CORRUGATED METAL, HDPE, ETC.)
- ☒ MINERAL AGGREGATES, ASPHALT
- ☒ EARTH
- ☒ LIQUID TRAFFIC STRIPING MATERIALS, PAINT
- ☒ ROCK
- ☐ CURING COMPOUND
- ☐ EXPLOSIVES
- ☐ OTHER _____

THESE MATERIALS WILL BE HANDLED AS NOTED IN THIS SWPPP.

8.4. WASTE MATERIALS (5.5.3.7.c)

WASTE MATERIAL (EARTH, ROCK, ASPHALT, CONCRETE, ETC.) NOT REQUIRED FOR THE CONSTRUCTION OF THE PROJECT WILL BE DISPOSED OF BY THE CONTRACTOR IN ACCORDANCE WITH FEDERAL AND STATE REGULATIONS. IMPACTS TO WATERS OF THE STATE/U.S. SHALL BE AVOIDED IF POSSIBLE. IF UNAVOIDABLE, THE CONTRACTOR WILL OBTAIN ALL NECESSARY PERMITS INCLUDING, BUT NOT LIMITED TO NPDES, AQUATIC RESOURCES ALTERATION PERMIT(S) CORPS OF ENGINEERS SECTION 404 PERMITS, AND TVA SECTION 26A PERMITS TO DISPOSE OF WASTE MATERIALS.

8.5. HAZARDOUS WASTE (5.5.3.7.c) (8.8)

ALL HAZARDOUS WASTE MATERIALS WILL BE DISPOSED OF IN A MANNER WHICH IS COMPLIANT WITH LOCAL OR STATE REGULATIONS. SITE PERSONNEL WILL BE INSTRUCTED IN THESE PRACTICES, AND THE INDIVIDUAL DESIGNATED AS THE CONTRACTOR'S ON-SITE REPRESENTATIVE WILL BE RESPONSIBLE FOR SEEING THAT THESE PRACTICES ARE FOLLOWED. THE CONTRACTOR WILL OBTAIN ALL NECESSARY PERMITS TO DISPOSE OF HAZARDOUS MATERIAL.

8.6. SANITARY WASTE (5.5.3.7.b)

PORTABLE SANITARY FACILITIES WILL BE PROVIDED ON ALL CONSTRUCTION SITES. SANITARY WASTE WILL BE COLLECTED FROM THE PORTABLE UNITS IN A TIMELY MANNER BY A LICENSED WASTE MANAGEMENT CONTRACTOR OR AS REQUIRED BY ANY LOCAL REGULATIONS. THE CONTRACTOR WILL OBTAIN ALL NECESSARY PERMITS TO DISPOSE OF SANITARY WASTE.

8.7. OTHER MATERIALS

THE FOLLOWING MATERIALS OR SUBSTANCES ARE EXPECTED TO BE PRESENT ON THE SITE DURING THE CONSTRUCTION PERIOD. (CHECK ALL THAT APPLY).

- ☒ FERTILIZERS AND LIME
- ☐ PESTICIDES AND/OR HERBICIDES
- ☒ DIESEL AND GASOLINE
- ☒ MACHINERY LUBRICANTS (OIL AND GREASE)

THESE MATERIALS WILL BE HANDLED AS NOTED IN THIS SWPPP.

9. NON-STORMWATER DISCHARGES (5.5.3.12.)

9.1. THE FOLLOWING NON-STORMWATER DISCHARGES ARE ANTICIPATED DURING THE CONSTRUCTION OF THIS PROJECT (CHECK ALL THAT APPLY):

- ☒ DEWATERING OF WORK AREAS OF COLLECTED STORMWATER AND GROUND WATER.
- ☒ WATERS USED TO WASH VEHICLES (OF DUST AND SOIL) WHERE DETERGENTS ARE NOT USED AND DETENTION AND/OR FILTERING IS PROVIDED BEFORE THE WATER LEAVES THE SITE.
- ☒ WATER USED TO CONTROL DUST. (3.5.3.1.n)
- ☒ POTABLE WATER SOURCES INCLUDING WATERLINE FLUSHING FROM WHICH CHLORINE HAS BEEN REMOVED TO THE MAXIMUM EXTENT PRACTICABLE.
- ☒ UNCONTAMINATED GROUNDWATER OR SPRING WATER.
- ☐ FOUNDATION OR FOOTING DRAINS WHERE FLOWS ARE NOT CONTAMINATED WITH POLLUTANTS.
- ☐ OTHER: _____

9.2. ALL ALLOWABLE NON-STORMWATER DISCHARGES WILL BE DIRECTED TO STABLE DISCHARGE STRUCTURES PRIOR TO LEAVING THE SITE.

9.3. THE DESIGN OF ALL IMPACTED EPSC MEASURES RECEIVING FLOW FROM ALLOWABLE NON-STORMWATER DISCHARGES MUST BE DESIGNED TO HANDLE THE VOLUME OF THE NON-STORMWATER COMPONENT.

9.4. WASH DOWN OR WASTE DISCHARGE OF CONCRETE TRUCKS WILL NOT BE PERMITTED ON-SITE UNLESS PROPER SETTLEMENT AREAS HAVE BEEN PROVIDED IN ACCORDANCE WITH BOTH STATE AND FEDERAL REGULATIONS.

9.5. ARE ANY DISCHARGES ASSOCIATED WITH INDUSTRIAL (NON-CONSTRUCTION STORMWATER) ACTIVITY EXPECTED (5.5.1.g)?

☐ YES ☒ NO

IF YES, SPECIFY THE LOCATION OF THE ACTIVITY AND ITS PERMIT NUMBER: _____

10. SPILL PREVENTION, MANAGEMENT AND NOTIFICATION (5.5.3.7.c, 6.1)

10.1. SPILL PREVENTION (5.5.3.7.c)

10.1.1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PREPARING A SPILL PREVENTION CONTROL AND COUNTERMEASURE (SPCC) PLAN WHEN REQUIRED BY FEDERAL CODE.

10.2. MATERIAL MANAGEMENT

10.2.1. HOUSEKEEPING

ONLY CONSTRUCTION PRODUCTS NEEDED SHALL BE STORED ON-SITE BY THE CONTRACTOR. EXCEPT FOR BULK MATERIALS THE CONTRACTOR WILL STORE ALL MATERIALS UNDER COVER AND IN APPROPRIATE CONTAINERS. PRODUCTS MUST BE STORED IN ORIGINAL CONTAINERS AND LABELED. MATERIAL MIXING WILL BE CONDUCTED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. WHEN POSSIBLE, ALL PRODUCTS WILL BE USED COMPLETELY BEFORE PROPERLY DISPOSING OF THE CONTAINER OFF SITE. THE MANUFACTURER'S DIRECTIONS FOR DISPOSAL OF MATERIALS AND CONTAINERS WILL BE FOLLOWED. (9-410.06) THE CONTRACTOR'S SITE SUPERINTENDENT WILL INSPECT MATERIALS STORAGE AREAS REGULARLY TO ENSURE PROPER USE AND DISPOSAL. DUST GENERATED WILL BE CONTROLLED IN AN ENVIRONMENTALLY SAFE MANNER. VEGETATION AREAS NOT ESSENTIAL TO THE CONSTRUCTION PROJECT WILL BE PRESERVED AND MAINTAINED AS NOTED ON THE PLANS.

10.2.2. HAZARDOUS MATERIALS

PRODUCTS MUST BE STORED IN ORIGINAL CONTAINERS UNLESS THE CONTAINER IS NOT RE-SEALABLE. ORIGINAL LABELS AND MATERIAL SAFETY DATA SHEETS WILL BE RETAINED IN A SAFE PLACE TO RELAY IMPORTANT PRODUCT INFORMATION. IF SURPLUS PRODUCT MUST BE DISPOSED OF, MANUFACTURER'S LABEL DIRECTIONS FOR DISPOSAL WILL BE FOLLOWED. MAINTENANCE AND REPAIR OF ALL EQUIPMENT AND VEHICLES INVOLVING OIL CHANGES, HYDRAULIC SYSTEM DRAIN DOWN, DE-GREASING OPERATIONS, FUEL TANK DRAIN DOWN AND REMOVAL, AND OTHER ACTIVITIES WHICH MAY RESULT IN THE ACCIDENTAL RELEASE OF CONTAMINANTS WILL BE CONDUCTED ON AN IMPERVIOUS SURFACE AND UNDER COVER DURING WET WEATHER TO PREVENT THE RELEASE OF CONTAMINANTS ONTO THE GROUND. WHEEL WASH WATER WILL BE COLLECTED AND ALLOWED TO SETTLE OUT SUSPENDED SOLIDS PRIOR TO DISCHARGE. WHEEL WASH WATER WILL NOT BE DISCHARGED DIRECTLY INTO ANY STORMWATER SYSTEM OR STORMWATER TREATMENT SYSTEM. POTENTIAL pH-MODIFYING MATERIALS SUCH AS: BULK CEMENT, CEMENT KILN DUST, FLY ASH, NEW CONCRETE WASHINGS AND CURING WATERS, CONCRETE PUMPING, AND MIXER WASHOUT WATERS WILL BE COLLECTED ON SITE AND MANAGED TO PREVENT CONTAMINATION OF STORMWATER RUNOFF.

10.3. PRODUCT SPECIFIC PRACTICES

10.3.1. PETROLEUM PRODUCTS: ALL ON-SITE VEHICLES WILL BE MONITORED FOR LEAKS AND RECEIVE REGULAR PREVENTIVE MAINTENANCE TO REDUCE THE CHANCE OF LEAKAGE. PETROLEUM PRODUCTS WILL BE STORED IN TIGHTLY SEALED CONTAINERS WHICH ARE CLEARLY LABELED.

10.3.2. FERTILIZERS: FERTILIZERS WILL BE APPLIED ONLY IN THE AMOUNTS SPECIFIED BY THE SOIL ANALYSIS. ONCE APPLIED, FERTILIZERS WILL BE WORKED INTO THE SOIL TO LIMIT THE EXPOSURE TO STORMWATER. FERTILIZERS WILL BE STORED IN AN ENCLOSED AREA UNDER COVER. THE CONTENTS OF PARTIALLY USED FERTILIZER BAGS WILL BE TRANSFERRED TO SEALABLE CONTAINERS TO AVOID SPILLS.

10.3.3. PAINTS: ALL CONTAINERS WILL BE TIGHTLY SEALED AND STORED WHEN NOT REQUIRED FOR USE. THE EXCESS WILL BE DISPOSED OF PER THE MANUFACTURER'S INSTRUCTIONS AND APPLICABLE STATE AND LOCAL REGULATIONS.

10.3.4. CONCRETE TRUCKS: CONTRACTORS WILL PROVIDE DESIGNATED TRUCK WASHOUT AREAS ON THE SITE. THESE AREAS MUST BE SELF CONTAINED AND NOT CONNECTED TO ANY STORMWATER OUTLET OF THE SITE, AND PROPERLY SIGNED. UPON COMPLETION OF CONSTRUCTION WASHOUT AREAS WILL BE PROPERLY STABILIZED.

10.4. SPILL MANAGEMENT

IN ADDITION TO THE PREVIOUS HOUSEKEEPING AND MANAGEMENT PRACTICES, THE FOLLOWING PRACTICES WILL BE FOLLOWED FOR SPILL PREVENTION AND CLEANUP IF NECESSARY:

10.4.1. ALL ONSITE VEHICLES SHALL BE MONITORED FOR LEAKS AND RECEIVE REGULAR PREVENTATIVE MAINTENANCE TO REDUCE THE CHANGE OF LEAKAGE AND SPILLS.

10.4.2. FOR ALL HAZARDOUS MATERIALS STORED ON SITE, THE MANUFACTURER'S RECOMMENDED METHODS FOR SPILL CLEAN UP WILL BE CLEARLY POSTED. SITE PERSONNEL WILL BE MADE AWARE OF THE PROCEDURES AND THE LOCATIONS OF THE INFORMATION AND CLEANUP SUPPLIES.

10.4.3. APPROPRIATE CLEANUP MATERIALS AND EQUIPMENT WILL BE MAINTAINED BY THE CONTRACTOR IN THE MATERIALS STORAGE AREA ON-SITE AND UNDER COVER. SPILL RESPONSE EQUIPMENT SHALL BE INSPECTED AND MAINTAINED BY THE CONTRACTOR AS NECESSARY TO REPLACE ANY MATERIALS USED IN SPILL RESPONSE ACTIVITIES.

10.4.4. ALL SPILLS SHALL BE CLEANED IMMEDIATELY AFTER DISCOVERY AND THE MATERIALS DISPOSED OF PROPERLY. THE SPILL AREA WILL BE KEPT WELL VENTILATED AND PERSONNEL WILL WEAR APPROPRIATE PROTECTIVE CLOTHING TO PREVENT INJURY FROM CONTACT WITH A HAZARDOUS SUBSTANCE.

10.4.5. THE CONTRACTOR'S RESPONSIBLE PARTY WILL BE THE SPILL PREVENTION AND CLEANUP COORDINATOR. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT THE SITE SUPERINTENDENT HAS HAD APPROPRIATE TRAINING FOR HAZARDOUS MATERIALS HANDLING, SPILL MANAGEMENT, AND CLEANUP.

10.4.6. IF SPILLS REPRESENT AN IMMINENT THREAT OF ESCAPING THE SITE AND ENTERING RECEIVING WATERS, PERSONNEL WILL RESPOND IMMEDIATELY TO CONTAIN THE RELEASE AND NOTIFY THE PRIMARY PERMITTEE AFTER THE SITUATION HAS BEEN STABILIZED.

10.4.7. IF AN OIL SHEEN IS OBSERVED ON SURFACE WATER (E.G. SETTLING PONDS, DETENTION PONDS, SWALES), ACTION WILL BE TAKEN IMMEDIATELY TO REMOVE THE MATERIAL CAUSING THE SHEEN. THE CONTRACTOR WILL USE APPROPRIATE MATERIALS TO CONTAIN AND ABSORB THE SPILL. THE SOURCE OF THE OIL SHEEN WILL ALSO BE IDENTIFIED AND REMOVED OR REPAIRED AS NECESSARY TO PREVENT FURTHER RELEASES.

10.4.8. IF A SPILL OCCURS THE CONTRACTOR'S RESPONSIBLE PARTY SHALL BE RESPONSIBLE FOR COMPLETING THE SPILL REPORTING FORM. ALL SPILLS MUST BE REPORTED TO THE APPROPRIATE AGENCY, AND MEASURES SHALL BE TAKEN

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PROJECT NAME
PROJECT ADDRESS
COUNTY, TENNESSEE

STORM WATER POLLUTION PREVENTION PLAN

SHEET NO.: 4

Issued:		Date:
A		
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ISG

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RUTHERFORD

Project Name & Location:

EROSION CONTROL NOTES

Drawing Name:

Type:	V7.0	ISG Project No. 23-27665
Drawn By:	SK	
Designed By:	SK	C-123
Reviewed By:	EG	Drawing No.

IMMEDIATELY TO PREVENT THE POLLUTION OF WATERS OF THE STATE/U.S., INCLUDING GROUNDWATER, SHOULD A SPILL OCCUR.

10.5. SPILL NOTIFICATION (6.1)

WHERE A RELEASE CONTAINING A HAZARDOUS SUBSTANCE IN AN AMOUNT EQUAL TO, OR MORE THAN A REPORTABLE QUANTITY ESTABLISHED UNDER EITHER 40 CFR 117 OR 40 CFR 302 OCCURS DURING A 24 HOUR PERIOD:

10.5.1. THE PRIMARY PERMITTEE OFFICE WILL NOTIFY THE LOCAL TDEC ENVIRONMENTAL FIELD OFFICE AND ANY OTHER APPLICABLE REGULATORY AGENCIES WITHIN 24 HOURS OF THE SPILL.

10.5.2. IN ADDITION TO ANY FOLLOW UP NOTIFICATIONS REQUIRED BY FEDERAL LAW, A WRITTEN DESCRIPTION OF THE RELEASE, DATE OF RELEASE AND CIRCUMSTANCES LEADING TO THE RELEASE, WHAT ACTIONS WERE TAKEN TO MITIGATE EFFECTS OF THE RELEASE, AND STEPS TAKEN TO MINIMIZE THE CHANCE OF FUTURE OCCURRENCES WILL BE SUBMITTED TO THE APPROPRIATE TDEC ENVIRONMENTAL FIELD OFFICE WITHIN 2 WEEKS OF KNOWLEDGE OF THE RELEASE.

10.5.3. THE SWPPP MUST BE MODIFIED WITHIN 2 WEEKS OF KNOWLEDGE OF THE RELEASE PROVIDING A DESCRIPTION OF THE RELEASE, CIRCUMSTANCES LEADING TO THE RELEASE, AND THE DATE OF RELEASE. THE SWPPP WILL BE REVIEWED AND MODIFIED AS NECESSARY TO IDENTIFY MEASURES TO PREVENT THE REOCCURRENCE OF SUCH RELEASES AND TO RESPOND TO SUCH RELEASES.

11. RECORD-KEEPING

11.1. REQUIRED RECORDS

THE PRIMARY PERMITTEE OR THEIR DULY AUTHORIZED REPRESENTATIVE WILL MAINTAIN AT THE SITE THE FOLLOWING RECORDS OF CONSTRUCTION ACTIVITIES (7.2.1.):

11.1.1. THE DATES WHEN MAJOR GRADING ACTIVITIES OCCUR.

11.1.2. THE DATES WHEN CONSTRUCTION ACTIVITIES TEMPORARILY OR PERMANENTLY CEASE ON A PORTION OF THE SITE.

11.1.3. THE DATES WHEN STABILIZATION MEASURES ARE INITIATED.

11.1.4. RECORDS EPSC INSPECTION REPORTS AND CORRECTIVE MEASURES.

11.1.5. RECORDS OF QUALITY ASSURANCE SITE ASSESSMENTS, IF APPLICABLE.

11.1.6. COPY OF SITE EPSC INSPECTOR'S CERTIFICATION AND/OR LICENSING

11.1.7. A COPY OF ANY REGULATORY CORRESPONDENCE REGARDING THE EFFECTIVENESS OF THE SWPPP OR EPSC CONTROLS.

11.2. RAINFALL MONITORING PLAN (7.2.1.):

11.2.1. EQUIPMENT

AT A MINIMUM, THE CONTRACTOR WILL INSTALL A FENCE POST TYPE RAIN GAUGE TO MEASURE RAINFALL. THE STANDARD FENCE POST RAIN GAUGE WILL BE A WEDGE-SHAPED GAUGE THAT MEASURES UP TO 6 INCHES OF RAINFALL. AN ENGLISH SCALE WILL BE PROVIDED ON ONE FACE, WITH A METRIC SCALE ON THE OTHER FACE. GRADUATION WILL BE PERMANENTLY MOLDED IN DURABLE WEATHER-RESISTANT PLASTIC. THE MINIMUM GRADUATION WILL BE 0.01 INCH (OR 0.1MM). AN ALUMINUM BRACKET WITH SCREWS MAY BE USED TO MOUNT THE GAUGE ON A WOODEN SUPPORT. IF A RAIN GAUGE CANNOT BE MAINTAINED ON-SITE A REFERENCE SITE MAY BE USED FOR A RECORD OF DAILY RAINFALL.

11.2.2. LOCATION

THE RAIN GAUGE WILL BE LOCATED AT OR ALONG THE PROJECT SITE, AS DEFINED IN THE NOI OF THE NPDES PERMIT, IN AN OPEN AREA SUCH THAT THE MEASUREMENT WILL NOT BE INFLUENCED BY OUTSIDE FACTORS (I.E. OVERHANGS, GUTTER, TREES, ETC.). AT LEAST ONE RAIN GAUGE PER LINEAR MILE IS REQUIRED ALONG (AS MEASURED ALONG THE CENTERLINE OF THE PRIMARY ALIGNMENT) THE PROJECT WHERE CLEARING, GRUBBING, EXCAVATION, GRADING, CUTTING OR FILLING IS ACTIVELY PERFORMED, OR EXPOSED SOIL HAS NOT YET BEEN PERMANENTLY STABILIZED.

11.2.3. METHODS

RAINFALL MONITORING WILL BE INITIATED PRIOR TO CLEARING, GRUBBING, EXCAVATION, GRADING, CUTTING, OR FILLING, EXCEPT AS SUCH MINIMAL CLEARING MAY BE NECESSARY TO INSTALL A RAIN GAUGE IN AN OPEN AREA. THE RAIN GAUGE WILL BE CHECKED FOR OPERATIONAL SOUNDNESS DAILY (DURING NORMAL BUSINESS HOURS) IN WET TIMES AND WEEKLY IN DRY TIMES. GAUGES WILL BE REPAIRED OR REPLACED ON THE SAME DAY IF FOUND TO BE NON-OPERATIONAL OR MISSING.

11.2.4. EACH RAIN GAUGE WILL BE READ (FOR DETAILED RECORDS OF RAINFALL) AND EMPTIED AFTER EVERY RAINFALL EVENT OCCURRING ON THE PROJECT SITE AT APPROXIMATELY THE SAME TIME OF THE DAY (DURING NORMAL BUSINESS HOURS). DURING PERIODS OF DRY CONDITIONS, IT WILL NOT BE NECESSARY TO READ THE RAIN GAUGE EVERY DAY. IN LIEU OF THIS REQUIREMENT ON WEEKENDS AND ON STATE HOLIDAYS, THE RAIN GAUGES CAN BE EMPTIED THE NEXT BUSINESS DAY AND A REFERENCE SITE USED FOR A RECORD OF DAILY AMOUNT OF PRECIPITATION FOR THOSE DAYS. A REFERENCE SITE IS THE DOCUMENTATION FROM THE CLOSEST GAUGE WITHIN PROXIMITY OF THE PROJECT FROM A RECOGNIZED SOURCE SUCH AS THE NOAA NATIONAL WEATHER SERVICE.

11.2.5. DETAILED RECORDS WILL BE RECORDED OF RAINFALL EVENTS INCLUDE DATES, AMOUNTS OF RAINFALL, AND THE APPROXIMATE DURATION (OR THE STARTING AND ENDING TIMES). THE RAINFALL RECORDS SHALL BE RECORDED ON THE RAINFALL RECORD SHEET AND SHALL BE MAINTAINED IN THE "DOCUMENTATION AND PERMITS" BINDER.

11.2.6. IF THE RAINFALL EVENT IS STILL IN PROGRESS AT THE DAILY RECORDING TIME, THE GAUGE WILL BE EMPTIED AND THE RECORD WILL INDICATE THAT THE STORM EVENT WAS STILL IN PROGRESS.

11.2.7. RAIN GAUGE INFORMATION (DETAILED RECORDS), INCLUDING THE LOCATION OF THE NEAREST OUTFALL, WILL BE RECORDED ON THE EPSC INSPECTION REPORT FORMS AT THE TIME OF MEASUREMENT.

11.3. KEEPING PLANS CURRENT (5.4.)

11.3.1. THE EPSC PLAN IS TO SERVE AS AN INITIAL GUIDE FOR SITE PERSONNEL AS THE CONSTRUCTION PROCESS DEVELOPS. IT MUST BE AMENDED, MODIFIED, AND UPDATED WHENEVER EPSC INSPECTIONS INDICATE, OR WHERE STATE OR FEDERAL REGULATORY OFFICIALS DETERMINE EPSC MEASURES ARE PROVING INEFFECTIVE IN ELIMINATING OR SIGNIFICANTLY MINIMIZING POLLUTANT SOURCES OR ARE OTHERWISE NOT ACHIEVING THE GENERAL OBJECTIVES OF CONTROLLING POLLUTANTS IN STORMWATER DISCHARGES ASSOCIATED WITH THE CONSTRUCTION ACTIVITY.

11.3.2. THE STAGES DEPICTED WITHIN THE EPSC PLANS MAY NOT COINCIDE WITH THE ACTUAL STAGES OF CONSTRUCTION ESTABLISHED BY THE CONTRACTOR DURING CONSTRUCTION, THUS MODIFICATIONS WILL BE REQUIRED TO ENSURE THE EPSC PLAN IS MAINTAINED TO DEPICT CURRENT SITE CONDITIONS. IT SHOULD BE MAINTAINED SUCH THAT IT WILL ALWAYS REFLECT THE MEASURES THAT ARE INSTALLED DURING THE VARIOUS STAGES OF CONSTRUCTION. IT IS IMPRACTICAL TO DETERMINE ALL THE INTERMEDIATE STAGES OF CONSTRUCTION THAT WILL OCCUR, THUS THESE DOCUMENTS MUST BE UPDATED THROUGHOUT THE LIFE OF THE CONSTRUCTION PROJECT.

11.3.3. THE PRIMARY PERMITTEE'S EPSC INSPECTOR OR THEIR DULY AUTHORIZED REPRESENTATIVE WILL MODIFY AND UPDATE THE SWPPP WHEN ANY OF THE FOLLOWING CONDITIONS APPLY:

11.3.3.1. WHENEVER THERE IS A CHANGE IN THE SCOPE OF THE PROJECT THAT WOULD BE EXPECTED TO HAVE A SIGNIFICANT EFFECT ON THE DISCHARGE OF POLLUTANTS TO THE WATERS OF THE STATE AND WHICH HAS NOT OTHERWISE BEEN ADDRESSED IN THE SWPPP;

11.3.3.2. WHENEVER INSPECTIONS OR INVESTIGATIONS BY SITE OPERATORS, LOCAL, STATE, OR FEDERAL OFFICIALS INDICATE THE SWPPP IS PROVING INEFFECTIVE IN ELIMINATING OR SIGNIFICANTLY MINIMIZING POLLUTANTS FROM CONSTRUCTION ACTIVITY SOURCES, OR IS OTHERWISE NOT ACHIEVING THE GENERAL OBJECTIVES OF CONTROLLING POLLUTANTS IN STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY; WHERE LOCAL, STATE, OR FEDERAL OFFICIALS DETERMINE THAT THE SWPPP IS INEFFECTIVE IN ELIMINATING OR SIGNIFICANTLY MINIMIZING POLLUTANT SOURCES, A COPY OF ANY CORRESPONDENCE TO THAT EFFECT MUST BE RETAINED IN THE SWPPP;

11.3.3.3. WHEN ANY NEW OPERATOR AND/OR SUB-OPERATOR IS ASSIGNED OR RELIEVED OF THEIR RESPONSIBILITY TO IMPLEMENT A PORTION OF THE SWPPP;

11.3.3.4. TO PREVENT A NEGATIVE IMPACT TO LEGALLY PROTECTED STATE OR FEDERALLY LISTED OR PROPOSED THREATENED OR ENDANGERED AQUATIC FAUNA;

11.3.3.5. WHEN THERE IS A CHANGE IN CHEMICAL TREATMENT METHODS INCLUDING: USE OF DIFFERENT TREATMENT CHEMICALS, DIFFERENT DOSAGE OR APPLICATION RATES OR A DIFFERENT AREA OF APPLICATION NOT SPECIFIED ON THE EPSC PLANS.

11.3.3.6. ALL SWPPP REVISION(S) SHALL BE RECORDED WITHIN 1 WEEK BY THE PROJECT EPSC INSPECTOR.

11.3.3.7. WHEN A TMDL IS DEVELOPED FOR THE RECEIVING WATERS FOR A POLLUTANT OF CONCERN (SILTATION), CONSTRUCTION SHALL NOTIFY THE PERMITS SECTION FOR PROPER COORDINATION.

11.4. MAKING PLANS ACCESSIBLE

11.4.1. THE PRIMARY PERMITTEE WILL RETAIN A COPY OF THIS SWPPP (INCLUDING A COPY OF THE "DOCUMENTATION AND PERMITS" BINDER AT THE CONSTRUCTION SITE (OR OTHER LOCATION ACCESSIBLE TO THE CITY OF CLEVELAND STORMWATER DIVISION AND THE PUBLIC)) FROM THE DATE CONSTRUCTION COMMENCES TO THE DATE OF FINAL STABILIZATION. THE PRIMARY PERMITTEE WILL HAVE A COPY OF THE SWPPP AVAILABLE AT THE LOCATION WHERE WORK IS OCCURRING ON-SITE FOR THE USE OF OPERATORS AND THOSE IDENTIFIED AS HAVING RESPONSIBILITIES UNDER THE SWPPP WHENEVER THEY ARE ON THE CONSTRUCTION SITE (7.2).

11.4.2. PRIOR TO THE INITIATION OF LAND DISTURBING ACTIVITIES AND UNTIL THE SITE HAS MET THE FINAL STABILIZATION CRITERIA, THE PRIMARY PERMITTEE OR THEIR DULY AUTHORIZED REPRESENTATIVE WILL POST A NOTICE NEAR THE MAIN ENTRANCE OF THE CONSTRUCTION SITE WITH THE FOLLOWING INFORMATION (5.3.4.) (7.2.1.):

11.4.2.1. A COPY OF THE NOTICE OF COVERAGE (NOC) WITH THE NPDES PERMIT NUMBER FOR THE PROJECT;

11.4.2.2. THE INDIVIDUAL NAME, COMPANY NAME, E-MAIL ADDRESS (IF APPLICABLE) AND TELEPHONE NUMBER OF THE LOCAL PROJECT SITE OWNER AND OPERATOR CONTACT;

11.4.2.3. A BRIEF DESCRIPTION OF THE PROJECT; AND

11.4.2.4. THE LOCATION OF THE SWPPP.

11.4.3. ALL INFORMATION DESCRIBED IN SECTION 13.4.2 MUST BE MAINTAINED IN LEGIBLE CONDITION. IF POSTING THIS INFORMATION NEAR A MAIN ENTRANCE IS INFEASIBLE DUE TO SAFETY CONCERNS, THE NOTICE SHALL BE POSTED IN A LOCAL BUILDING. THE NOTICE MUST BE PLACED IN A PUBLICLY ACCESSIBLE LOCATION WHERE CONSTRUCTION IS ACTIVELY UNDERWAY AND MOVED AS NECESSARY.

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PROJECT NAME
PROJECT ADDRESS
COUNTY, TENNESSEE

STORM WATER POLLUTION PREVENTION PLAN

SHEET NO.: 5

Issued:	Date:
A	
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LA VERGNE, TN 37086
RUTHERFORD

Project Name & Location:

EROSION CONTROL NOTES

Drawing Name:

Type: V7.0	ISG Project No. 23-27665
Drawn By: SK	
Designed By: SK	C-124
Reviewed By: EG	Drawing No.

11.5. NOTICE OF TERMINATION (9.0.)

11.5.1. WHEN ALL STORMWATER DISCHARGES FROM CONSTRUCTION ACTIVITIES THAT ARE AUTHORIZED BY THE PERMIT ARE ELIMINATED BY FINAL STABILIZATION, THE PRIMARY PERMITTEE WILL SUBMIT A NOTICE OF TERMINATION (NOT) THAT IS SIGNED IN ACCORDANCE WITH THE PERMIT TO THE CITY OF LA VERGNE STORMWATER DIVISION.

11.5.2. FOR THE PURPOSES OF THE CERTIFICATION REQUIRED BY THE NOT, THE ELIMINATION OF STORMWATER DISCHARGES ASSOCIATED WITH THE CONSTRUCTION ACTIVITY MEANS THE

11.5.2.1. ALL EARTH-DISTURBING ACTIVITIES ON THE SITE ARE COMPLETED AND ALL DISTURBED SOILS AT THE PORTION OF THE CONSTRUCTION SITE WHERE THE OPERATOR HAD CONTROL HAVE BEEN FINALLY STABILIZED; AND

11.5.2.2. ALL CONSTRUCTION MATERIALS, WASTE AND WASTE HANDLING DEVICES, AND ALL EQUIPMENT, AND VEHICLES THAT WERE USED DURING CONSTRUCTION HAVE BEEN REMOVED AND PROPERLY DISPOSED; AND

11.5.2.3. ALL STORMWATER CONTROLS THAT WERE INSTALLED AND MAINTAINED DURING CONSTRUCTION, EXCEPT THOSE THAT ARE INTENDED FOR LONG-TERM USE FOLLOWING TERMINATION OF PERMIT COVERAGE, HAVE BEEN REMOVED; AND

11.5.2.4. ALL POTENTIAL POLLUTANTS AND POLLUTANT GENERATING ACTIVITIES ASSOCIATED WITH CONSTRUCTION HAVE BEEN REMOVED; AND

11.5.2.5. THE PERMITTEE HAS IDENTIFIED WHO IS RESPONSIBLE FOR ONGOING MAINTENANCE OF ANY STORMWATER CONTROLS LEFT ON THE SITE FOR LONG-TERM USE FOLLOWING TERMINATION OF PERMIT COVERAGE; AND

11.5.2.6. TEMPORARY EPSC MEASURES HAVE BEEN OR WILL BE REMOVED AT AN APPROPRIATE TIME TO ENSURE FINAL STABILIZATION IS MAINTAINED; AND

11.5.2.7. ALL STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITIES FROM THE IDENTIFIED SITE THAT ARE AUTHORIZED BY A NPDES GENERAL PERMIT HAVE OTHERWISE BEEN ELIMINATED FROM THE PORTION OF THE CONSTRUCTION SITE WHERE THE OPERATOR HAD CONTROL.

11.6. RETENTION OF RECORDS (7.1.)

THE PRIMARY PERMITTEE WILL RETAIN COPIES OF THE SWPPP, ALL REPORTS REQUIRED BY THE PERMIT, AND RECORDS OF ALL DATA USED TO COMPLETE THE NOTICE OF INTENT FOR THE PROJECT FOR A PERIOD OF AT LEAST THREE (3) YEARS FROM THE DATE THE NOT WAS FILED.

12. SITE WIDE/PRIMARY PERMITTEE CERTIFICATION (8.7.5.)

I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED BY ME, OR UNDER MY DIRECTION OR SUPERVISION. THE SUBMITTED INFORMATION IS TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT. AS SPECIFIED IN TENNESSEE CODE ANNOTATED SECTION 39-16-702(a)(4), THIS DECLARATION IS MADE UNDER PENALTY OF PERJURY.

AUTHORIZED PERSONNEL SIGNATURE (5.3.3.)

PRINTED NAME

TITLE

DATE

13. SECONDARY PERMITTEE (OPERATOR) CERTIFICATION (8.7.6.)

I CERTIFY UNDER PENALTY OF LAW THAT I HAVE REVIEWED THIS DOCUMENT, ANY ATTACHMENTS, AND THE SWPPP REFERENCED ABOVE. BASED ON MY INQUIRY OF THE CONSTRUCTION SITE OWNER/DEVELOPER IDENTIFIED ABOVE AND/OR MY INQUIRY OF THE PERSON DIRECTLY RESPONSIBLE FOR ASSEMBLING THIS NOI AND SWPPP, I BELIEVE THE INFORMATION SUBMITTED IS ACCURATE. I AM AWARE THAT THIS NOI, IF APPROVED, MAKES THE ABOVE-DESCRIBED CONSTRUCTION ACTIVITY SUBJECT TO NPDES PERMIT NUMBER TNR100000, AND THAT CERTAIN OF MY ACTIVITIES ONSITE ARE THEREBY REGULATED. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS, AND FOR FAILURE TO COMPLY WITH THESE PERMIT REQUIREMENTS. AS SPECIFIED IN TENNESSEE CODE ANNOTATED SECTION 39-16-702(a)(4), THIS DECLARATION IS MADE UNDER PENALTY OF PERJURY.

AUTHORIZED CONTRACTOR PERSONNEL SIGNATURE (5.3.3.)

PRINTED NAME

TITLE

DATE

TNEPSC

PROJECT NAME
PROJECT ADDRESS
COUNTY, TENNESSEE

STORM WATER POLLUTION PREVENTION PLAN

SHEET NO.: 6

Issued:		Date:
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ALDI Inc.
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Division City, Division State, Zip
(XXX) XXX-XXXX
(XXX) XXX-XXXX fax

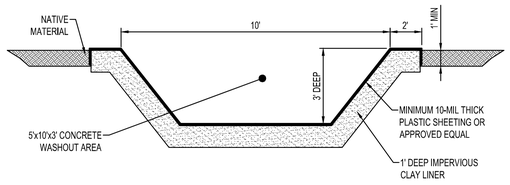
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LA VERGNE, TN
5309 MURFREESBORO RD
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Project Name & Location:

EROSION CONTROL NOTES

Drawing Name:

Type:	V7.0	ISG Project No.	23-27665
Drawn By:	SK		
Designed By:	SK		C-125
Reviewed By:	EG		Drawing No.



NOTES:

CONCRETE WASHOUT LOCATION WILL BE APPROVED BY ENGINEER.

CONTRACTOR SHALL INSTALL A SIGN INDICATING THE CONCRETE WASHOUT AREA.

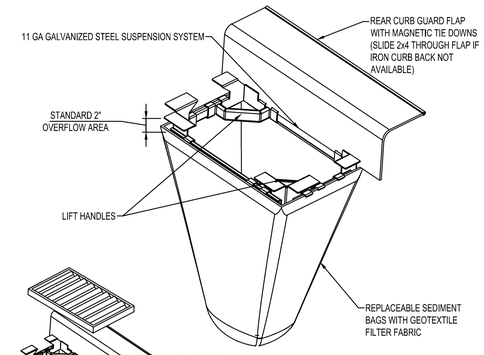
CONTRACTOR SHALL MAINTAIN WASHOUT AREA TO REMOVE MATERIALS BEYOND 75% CAPACITY.

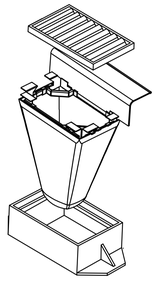
WASHOUT AREA SHALL NOT BE PLACED WITHIN 50' OF STORM DRAINS, OPEN DITCHES OR BODIES OF WATER.

CONTRACTOR SHALL INSPECT WASHOUT AREA AS NECESSARY TO PREVENT LEAKS AND OVER TOPPING.

WASHOUT AREA SHALL BE REMOVED AFTER CONSTRUCTION IS COMPLETE.

CONCRETE WASHOUT
NTS





NOTES:

FOR SPECIFICATIONS AND MAINTENANCE GUIDELINES VISIT WWW.INLETFILTERS.COM

INSTALLATION:

REMOVE GRATE

DROP FLEXSTORM INLET FILTER ONTO LOAD BEARING LIP OF CASTING OR CONCRETE STRUCTURE

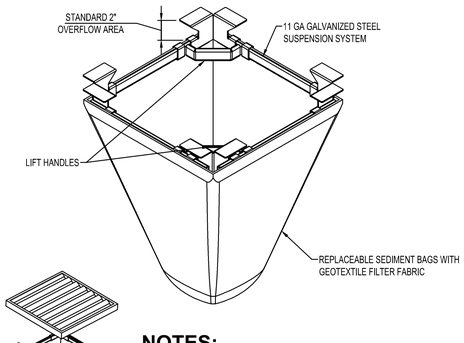
REPLACE GRATE

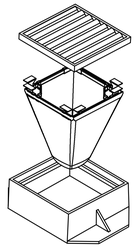
MATERIALS:

FRAMING - 11 GAUGE STEEL; CORROSION RESISTANT

SEDIMENT BAG - WOVEN GEOTEXTILE FABRIC; 2 CUBIC FOOT TYP VOLUME; STAINLESS STEEL LOCKING BAND SECURING BAG TO FRAME

CURB BOX FILTER INLET PROTECTION
NTS





NOTES:

FOR SPECIFICATIONS AND MAINTENANCE GUIDELINES VISIT WWW.INLETFILTERS.COM

INSTALLATION:

REMOVE GRATE

DROP FLEXSTORM INLET FILTER ONTO LOAD BEARING LIP OF CASTING OR CONCRETE STRUCTURE

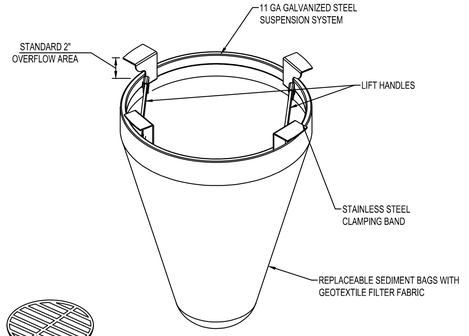
REPLACE GRATE

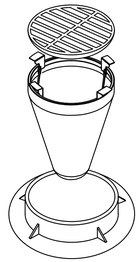
MATERIALS:

FRAMING - 11 GAUGE STEEL; CORROSION RESISTANT

SEDIMENT BAG - WOVEN GEOTEXTILE FABRIC; 2 CUBIC FOOT TYP VOLUME; STAINLESS STEEL LOCKING BAND SECURING BAG TO FRAME

RECTANGULAR FILTER INLET PROTECTION
NTS





NOTES:

FOR SPECIFICATIONS AND MAINTENANCE GUIDELINES VISIT WWW.INLETFILTERS.COM

INSTALLATION:

REMOVE GRATE

DROP FLEXSTORM INLET FILTER ONTO LOAD BEARING LIP OF CASTING OR CONCRETE STRUCTURE

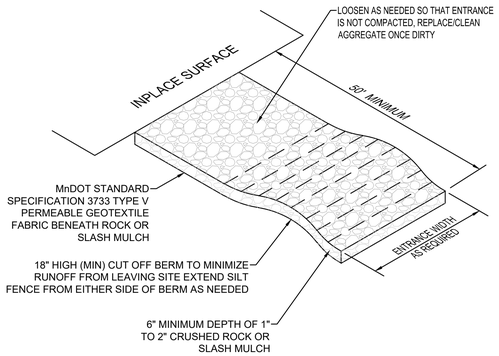
REPLACE GRATE

MATERIALS:

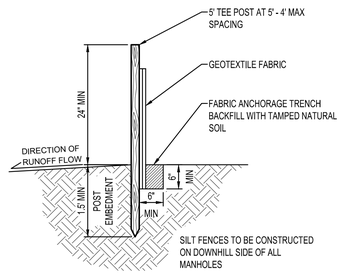
FRAMING - 11 GAUGE STEEL; CORROSION RESISTANT

SEDIMENT BAG - WOVEN GEOTEXTILE FABRIC; 2 CUBIC FOOT TYP VOLUME; STAINLESS STEEL LOCKING BAND SECURING BAG TO FRAME

ROUND FILTER INLET PROTECTION
NTS



STABILIZED CONSTRUCTION EXIT
NTS



SILT FENCE
NTS

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Revisions:	Date:
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MANAGING LOCATION:
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ALDI Inc.
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(XXX) XXX-XXXX fax

ALDI Inc. Store #: __
LA VERGNE, TN
5309 MURFREESBORO RD
LA VERGNE, TN 37086
RUTHERFORD

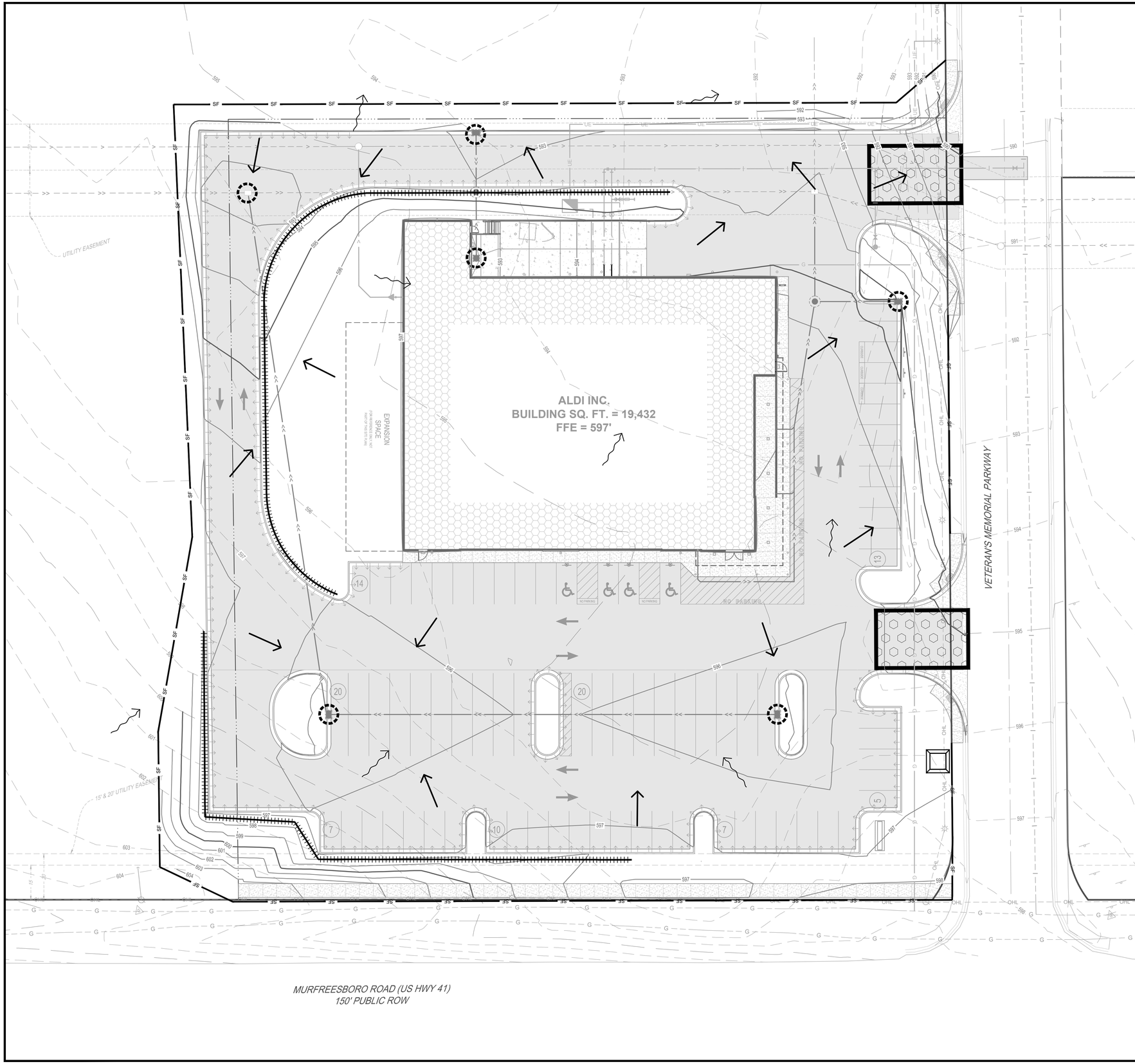
Project Name & Location:

EROSION CONTROL DETAILS

Drawing Name:

Type: V7.0	ISG Project No. 23-27665
Drawn By: SK	
Designed By: SK	C-126
Reviewed By: EG	Drawing No.

ADD THIS REFERENCE BLOCK TO SIGNATURE XREF AND DELETE THIS TEXT AND REFERENCE BLOCK



EROSION CONTROL LEGEND

SYMBOL	DESCRIPTION
SF	SILT FENCE, PREASSEMBLED
	STORM DRAIN INLET PROTECTION
	SEDIMENT CONTROL LOG
	ROCK CONSTRUCTION EXIT
	CONCRETE WASHOUT AREA
	EXISTING DRAINAGE ARROW
	PROPOSED DRAINAGE ARROW
101	EXISTING CONTOUR (MINOR INTERVAL)
100	EXISTING CONTOUR (MAJOR INTERVAL)
101	PROPOSED CONTOUR (MINOR INTERVAL)
100	PROPOSED CONTOUR (MAJOR INTERVAL)

PERIMETER CONTROL CAN BE SILT FENCE OR SEDIMENT CONTROL LOG.

SEE SITE RESTORATION PLAN FOR FINAL TURF ESTABLISHMENT.

NOTE: EROSION CONTROL PLAN COVERAGE INCLUDES ELECTRIC, GAS, TELEPHONE, AND CABLE INSTALLATION. EACH COMPANY OR THEIR SUBCONTRACTOR IS RESPONSIBLE TO FOLLOW THE REQUIREMENTS OF THIS PLAN, INCLUDING PROVIDING THEIR OWN RESTORATION IF INSTALLATION OCCURS AFTER PRIMARY INSTALLATION OF SEEDING/SODDING/MULCHING DURING CONSTRUCTION OF EACH UTILITY.

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RUTHERFORD

Project Name & Location:

SITE EROSION CONTROL PLAN

Drawing Name:

Type:	V7.0	ISG Project No. 23-27665
Drawn By:	SK	
Designed By:	SK	C-127
Reviewed By:	EG	Drawing No.

ADD THIS REFERENCE BLOCK TO SIGNATURE XREF AND DELETE THIS TEXT AND REFERENCE BLOCK

PROTECT EXISTING SANITARY SEWER

PROTECT EXISTING STORM SEWER

UTILITY EASEMENT

SAWCUT AND REMOVE 111 LF OF CONCRETE SIDEWALK AND CURB AND GUTTER

SAWCUT AND REMOVE ASPHALT PAVEMENT

VETERAN'S MEMORIAL PARKWAY

REMOVE UTILITY PEDESTAL

EX SAN MH R=595.93

EX CO

REMOVE SANITARY STRUCTURES

SAWCUT AND REMOVE 91 LF OF CONCRETE SIDEWALK AND CURB AND GUTTER

15' & 20' UTILITY EASEMENT

PROTECT EXISTING SANITARY FORCEMAIN

PROTECT EXISTING GAS LINE

PROTECT EXISTING POWER POLE

ITEM 10 & ITEM 13: 15' UTILITY EASEMENT PER PB 43, PG 261 REFERENCES DB

MURFREESBORO ROAD (US HWY 41)
150' PUBLIC ROW

REMOVAL LEGEND

SYMBOL	DESCRIPTION
	REMOVE BITUMINOUS PAVEMENT
	REMOVE CONCRETE PAVEMENT
	REMOVE CONCRETE WALK
	REMOVE AGGREGATE SURFACING
	REMOVE RIPRAP

CONTRACTOR SHALL VERIFY EXISTING PAVEMENT SECTION AND NOTIFY ENGINEER OF ANY DISCREPANCIES.

PAVEMENT REMOVALS SHALL INCLUDE FULL DEPTH SAWCUT AND SECTION REMOVAL.

STORM AND SANITARY SEWER SHOWN AS EXISTING (BY OTHERS)

N

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Issued:	Date:
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Revisions:	Date:
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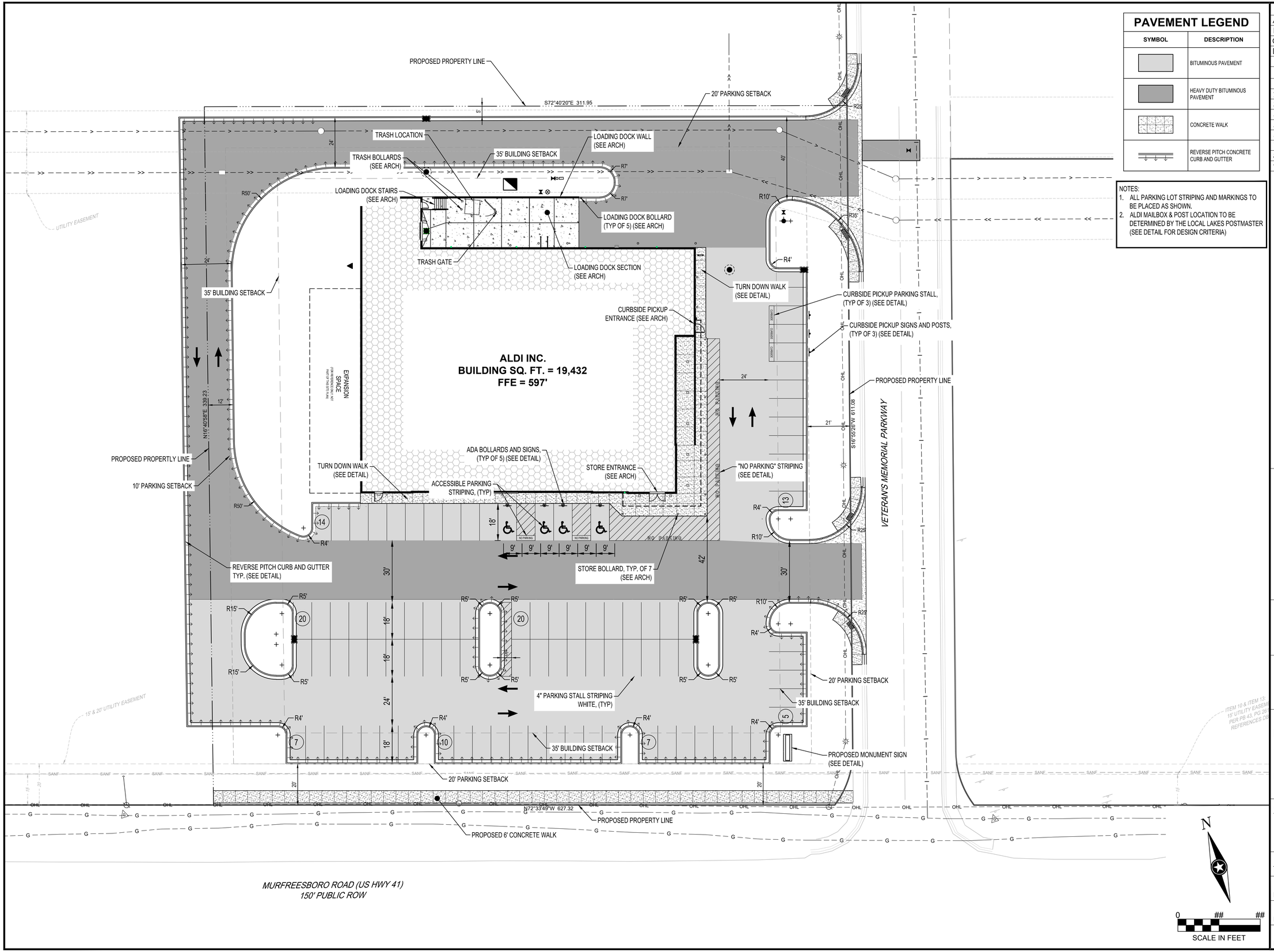
ALDI Inc. Store #: __
LA VERGNE, TN
5309 MURFREESBORO RD
LA VERGNE, TN 37086
RUTHERFORD

Project Name & Location:

EXISTING SITE AND REMOVALS PLAN

Drawing Name:

		ISG Project No.
Type:	V7.0	23-27665
Drawn By:	SK	
Designed By:	SK	C-200
Reviewed By:	EG	Drawing No.



PAVEMENT LEGEND

SYMBOL	DESCRIPTION
	BITUMINOUS PAVEMENT
	HEAVY DUTY BITUMINOUS PAVEMENT
	CONCRETE WALK
	REVERSE PITCH CONCRETE CURB AND GUTTER

NOTES:
1. ALL PARKING LOT STRIPING AND MARKINGS TO BE PLACED AS SHOWN.
2. ALDI MAILBOX & POST LOCATION TO BE DETERMINED BY THE LOCAL LAKES POSTMASTER (SEE DETAIL FOR DESIGN CRITERIA)

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MANAGING LOCATION:
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PHONE: 515.243.9143

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Division City, Division State, Zip
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(XXX) XXX-XXXX fax

ALDI Inc. Store #: __
LA VERGNE, TN
5309 MURFREESBORO RD
LA VERGNE, TN 37086
RUTHERFORD

Project Name & Location:

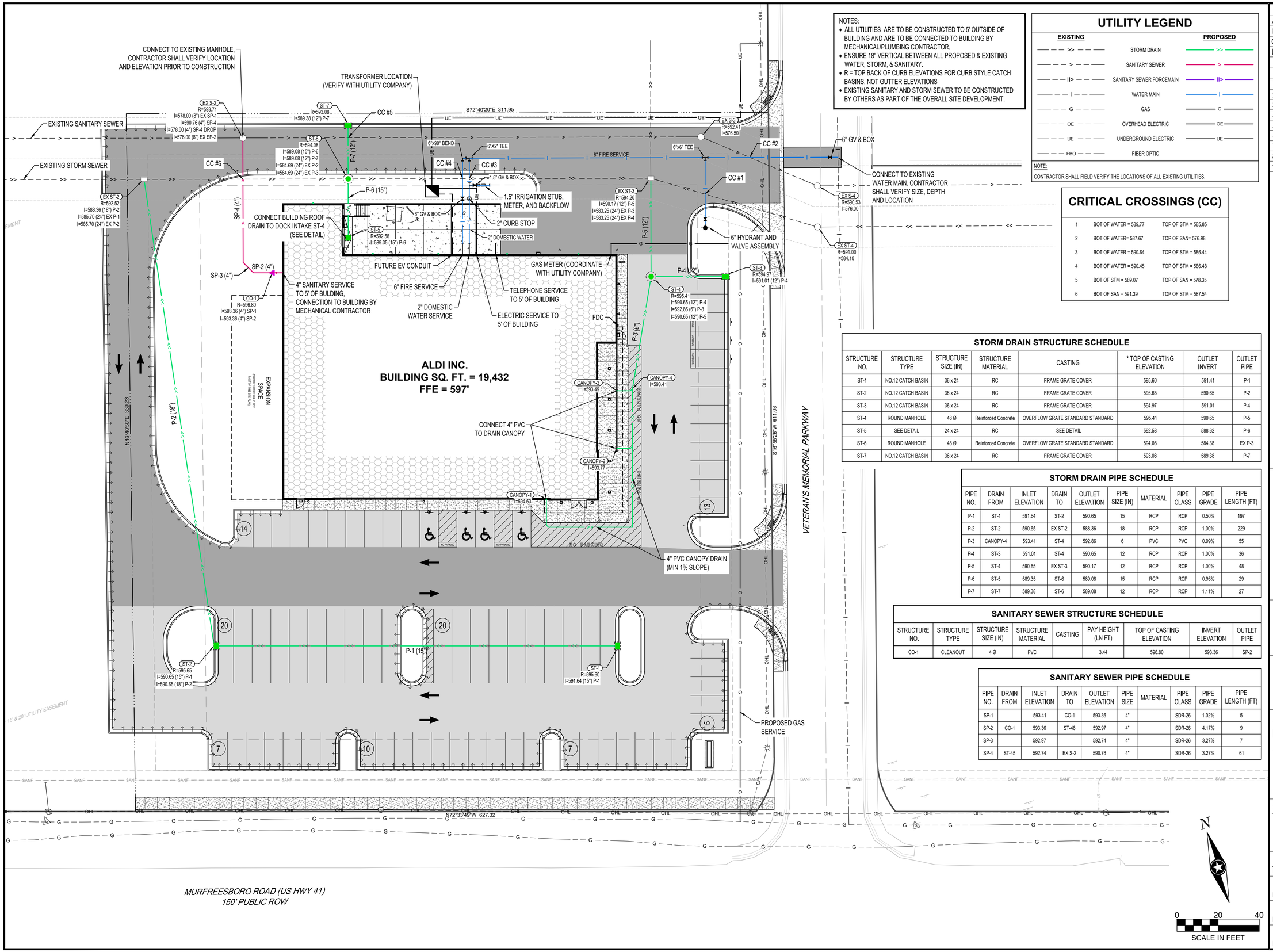
SITE PLAN

Drawing Name:

Type:	V7.0	ISG Project No. 23-27665
Drawn By:	SAK	
Designed By:	SAK	C-310
Reviewed By:	EJG	Drawing No.

SCALE IN FEET

ADD THIS REFERENCE BLOCK TO SIGNATURE XREF AND DELETE THIS TEXT AND REFERENCE BLOCK



NOTES:
- ALL UTILITIES ARE TO BE CONSTRUCTED TO 5' OUTSIDE OF BUILDING AND ARE TO BE CONNECTED TO BUILDING BY MECHANICAL/PLUMBING CONTRACTOR.
- ENSURE 18" VERTICAL BETWEEN ALL PROPOSED & EXISTING WATER, STORM, & SANITARY.
- R = TOP BACK OF CURB ELEVATIONS FOR CURB STYLE CATCH BASINS, NOT GUTTER ELEVATIONS
- EXISTING SANITARY AND STORM SEWER TO BE CONSTRUCTED BY OTHERS AS PART OF THE OVERALL SITE DEVELOPMENT.

UTILITY LEGEND

EXISTING		PROPOSED
>>	STORM DRAIN	>>
>	SANITARY SEWER	>
II>	SANITARY SEWER FORCEMAIN	II>
W	WATER MAIN	W
G	GAS	G
OE	OVERHEAD ELECTRIC	OE
UE	UNDERGROUND ELECTRIC	UE
FBO	FIBER OPTIC	

NOTE:
CONTRACTOR SHALL FIELD VERIFY THE LOCATIONS OF ALL EXISTING UTILITIES.

CRITICAL CROSSINGS (CC)

1	BOT OF WATER = 589.77	TOP OF STM = 585.85
2	BOT OF WATER= 587.67	TOP OF SAN= 576.98
3	BOT OF WATER = 590.64	TOP OF STM = 586.44
4	BOT OF WATER = 590.45	TOP OF STM = 586.48
5	BOT OF STM = 589.07	TOP OF SAN = 578.35
6	BOT OF SAN = 591.39	TOP OF STM = 587.54

STORM DRAIN STRUCTURE SCHEDULE

STRUCTURE NO.	STRUCTURE TYPE	STRUCTURE SIZE (IN)	STRUCTURE MATERIAL	CASTING	* TOP OF CASTING ELEVATION	OUTLET INVERT	OUTLET PIPE
ST-1	NO.12 CATCH BASIN	36 x 24	RC	FRAME GRATE COVER	595.60	591.41	P-1
ST-2	NO.12 CATCH BASIN	36 x 24	RC	FRAME GRATE COVER	595.65	590.65	P-2
ST-3	NO.12 CATCH BASIN	36 x 24	RC	FRAME GRATE COVER	594.97	591.01	P-4
ST-4	ROUND MANHOLE	48 Ø	Reinforced Concrete	OVERFLOW GRATE STANDARD STANDARD	595.41	590.65	P-5
ST-5	SEE DETAIL	24 x 24	RC	SEE DETAIL	592.58	588.62	P-6
ST-6	ROUND MANHOLE	48 Ø	Reinforced Concrete	OVERFLOW GRATE STANDARD STANDARD	594.08	584.38	EX P-3
ST-7	NO.12 CATCH BASIN	36 x 24	RC	FRAME GRATE COVER	593.08	589.38	P-7

STORM DRAIN PIPE SCHEDULE

PIPE NO.	DRAIN FROM	INLET ELEVATION	DRAIN TO	OUTLET ELEVATION	PIPE SIZE (IN)	MATERIAL	PIPE CLASS	PIPE GRADE	PIPE LENGTH (FT)
P-1	ST-1	591.64	ST-2	590.65	15	RCP	RCP	0.50%	197
P-2	ST-2	590.65	EX ST-2	588.36	18	RCP	RCP	1.00%	229
P-3	CANOPY-4	593.41	ST-4	592.86	6	PVC	PVC	0.99%	55
P-4	ST-3	591.01	ST-4	590.65	12	RCP	RCP	1.00%	36
P-5	ST-4	590.65	EX ST-3	590.17	12	RCP	RCP	1.00%	48
P-6	ST-5	589.35	ST-6	589.08	15	RCP	RCP	0.95%	29
P-7	ST-7	589.38	ST-6	589.08	12	RCP	RCP	1.11%	27

SANITARY SEWER STRUCTURE SCHEDULE

STRUCTURE NO.	STRUCTURE TYPE	STRUCTURE SIZE (IN)	STRUCTURE MATERIAL	CASTING	PAY HEIGHT (LN FT)	TOP OF CASTING ELEVATION	INVERT ELEVATION	OUTLET PIPE
CO-1	CLEANOUT	4 Ø	PVC		3.44	596.80	593.36	SP-2

SANITARY SEWER PIPE SCHEDULE

PIPE NO.	DRAIN FROM	INLET ELEVATION	DRAIN TO	OUTLET ELEVATION	PIPE SIZE	MATERIAL	PIPE CLASS	PIPE GRADE	PIPE LENGTH (FT)
SP-1		593.41	CO-1	593.36	4"		SDR-26	1.02%	5
SP-2	CO-1	593.36	ST-46	592.97	4"		SDR-26	4.17%	9
SP-3		592.97		592.74	4"		SDR-26	3.27%	7
SP-4	ST-45	592.74	EX S-2	590.76	4"		SDR-26	3.27%	61

Issued:	Date:
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Revisions:	Date:
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RUTHERFORD

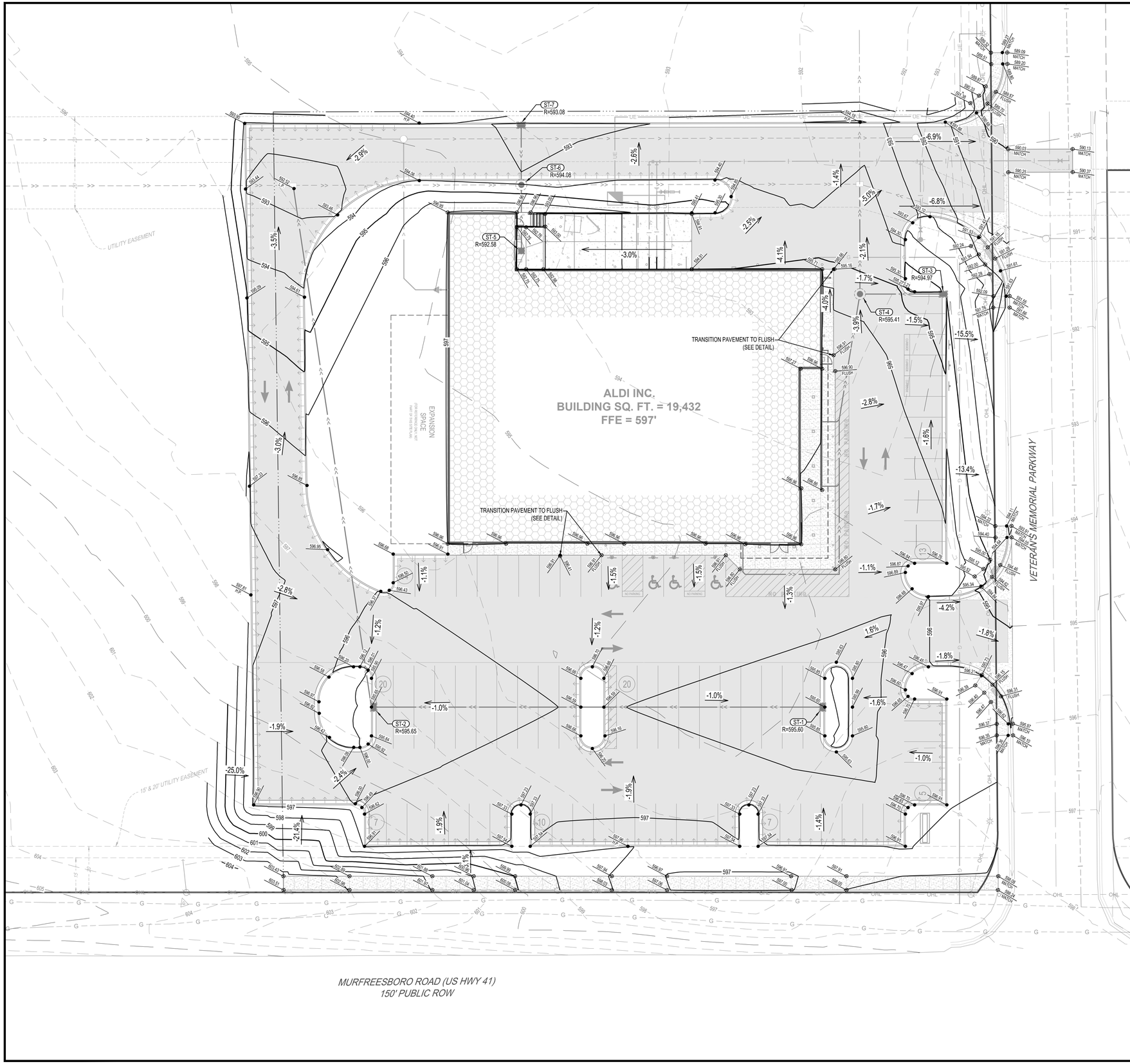
Project Name & Location:

SITE UTILITY PLAN

Drawing Name:

Type:	V7.0	ISG Project No. 23-27665
Drawn By:	SK	
Designed By:	SK	C-320
Reviewed By:	EG	Drawing No.

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GRADING LEGEND

101	EXISTING CONTOUR (MINOR INTERVAL)
100	EXISTING CONTOUR (MAJOR INTERVAL)
101	PROPOSED CONTOUR (MINOR INTERVAL)
100	PROPOSED CONTOUR (MAJOR INTERVAL)
XX.XX	PROPOSED SPOT ELEVATION
XX.XX	PROPOSED TOP BACK OF CURB / TOP OF TURNDOWN WALK SPOT ELEVATION
-X.X%	SURFACE GRADE / DIRECTION

GENERAL GRADING NOTES

PROPOSED CONTOURS SHOW FINISHED GRADE ELEVATIONS. BUILDING PAD AND PAVEMENT HOLD DOWNS ARE NOT INCLUDED. WHEN CONSTRUCTING BUILDING PADS WITH A HOLD DOWN, GRADE AREAS TO ENSURE POSITIVE BUILDING PAD DRAINAGE.

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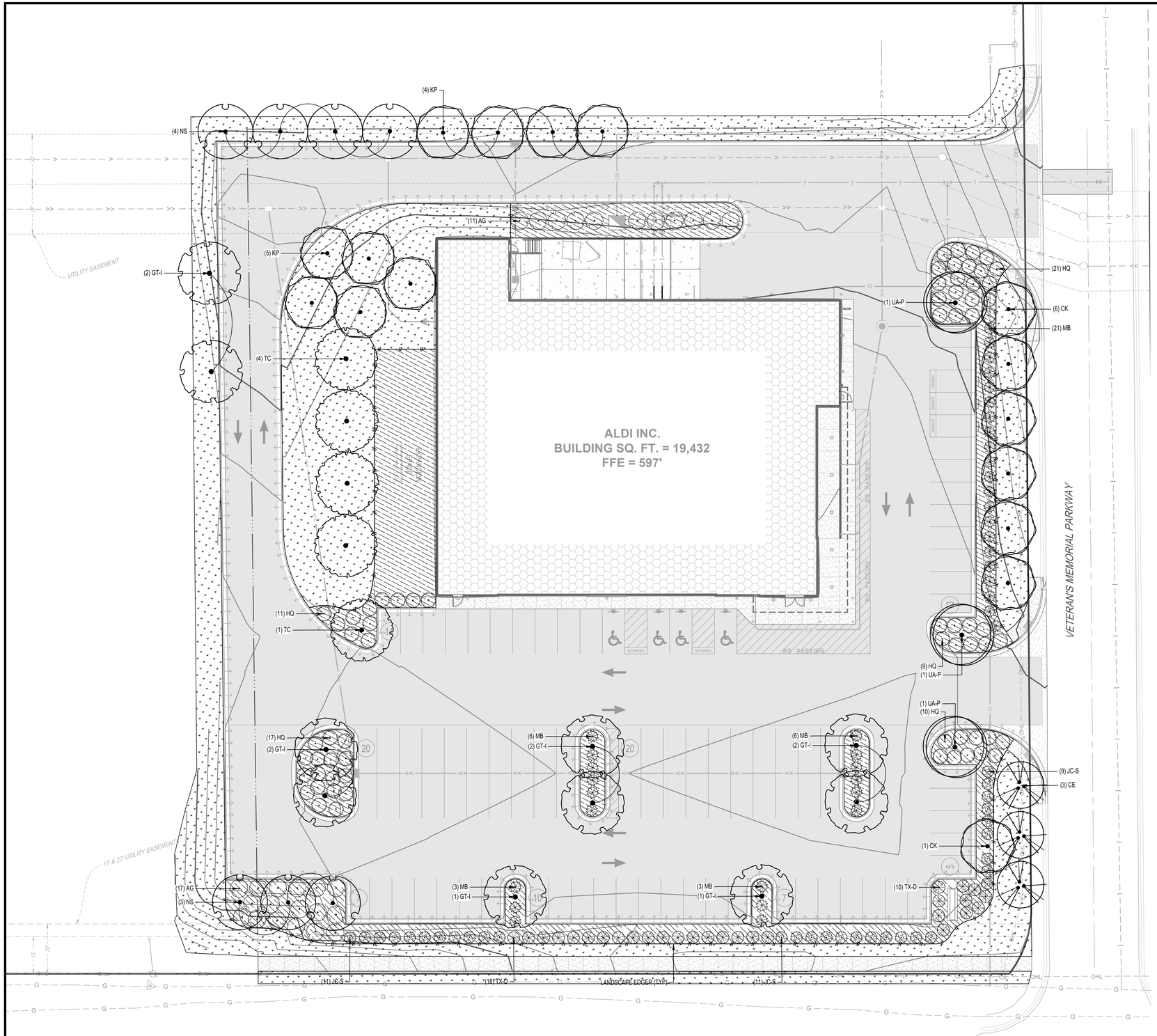
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5309 MURFREESBORO RD
LA VERGNE, TN 37086
RUTHERFORD

Project Name & Location:

DETAILED GRADING PLAN

Drawing Name:

Type:	V7.0	ISG Project No.	23-27665
Drawn By:	SK		
Designed By:	SK	Drawing No.	C-410
Reviewed By:	EG		



ZONING LANDSCAPE REQUIREMENTS

ZONING: DOWNTOWN DISTRICT

MINIMUM LANDSCAPE SURFACE AREA REQUIRED: 20% / 23% PROPOSED (SEE SHEET C-010)

OVERALL REQUIRED PLANTING: ALL NON-RESIDENTIAL DEVELOPMENTS SHALL BE REQUIRED TO MEET THE FOLLOWING REQUIREMENTS:

STREET YARD:

THE MINIMUM LANDSCAPE AREA MUST INCLUDE (1) CANOPY TREE (2.5" CALIPER) OR (2) UNDERSTORY TREES (1.5" CALIPER) PER EACH (25) FEET OF ROAD FRONTAGE OF THE LOT.

- *747 LF OF LOT FRONTAGE / 25 LF = 29 OVERSTORY TREES REQUIRED / 25 OVERSTORY TREES AND 8 UNDERSTORY TREES PROVIDED*

TREES MAY BE CLUSTERED TO PROVIDE VISIBILITY WITHIN THE FRONT SET BACK OF AREA OF EACH DISTRICT

ALL COMMERCIAL DEVELOPMENTS SHALL HAVE A MINIMUM OF (15) SHRUBS (MINIMUM 18" HEIGHT)

PARKING AREAS:

SURFACE PARKING AREAS OF 20 SPACES OR MORE SHALL PROVIDE LANDSCAPE ISLANDS THAT:

- MUST CONTAIN ONE CANOPY TREE PER ISLAND THAT SPANS ONE PARKING SPACE LENGTH OR TWO CANOPY TREES WITHIN A LANDSCAPE ISLAND THAT SPANS TWO PARKING SPACES.
- *PARKING ISLANDS PROVIDED: 10 (2 PARKING ISLANDS SPAN TWO PARKING SPACES) = 12 TREES REQUIRED / 12 TREES PROVIDED*

PERIMETER LANDSCAPING:

A PERIMETER PLANTING STRIP SHALL BE LOCATED ALONG PERIMETER OF A SURFACE PARKING AREA AND MAINTAIN A MINIMUM OF AVERAGE WIDTH OF (6) FEET. CONTAIN A CONTINUOUS HEDGE COMPOSED OF DOUBLE STAGGERED ROW OF EVERGREEN SHRUBS AND DECIDUOUS SHRUBS WITH A MINIMUM PLANTING HEIGHT OF (30) INCHES, PLANTED (3) FEET ON CENTER. THE STRIP SHALL ALSO INCLUDE (3) TREES PER (100) LINEAR FEET OF PERIMETER OF THE TOTAL PARKING AREA.

- 1342 LF OF PERIMETER / 100 = 13.42 TREES REQUIRED / 14 TREES PROVIDED

PLANT SCHEDULE

OVERSTORY TREES	CODE	QTY	BOTANICAL / COMMON NAME	SIZE	ROOT
	GT-I	10	GLEDITSIA TRIACANTHOS INERMIS THORNLESS HONEY LOCUST	2.5" CAL	B & B
	KP	9	KOELREUTERIA PANICULATA GOLDEN RAIN TREE	2.5" CAL	B & B
	NS	7	NYSSA SYLVATICA TUPELO	2.5" CAL	B & B
	TC	5	TILIA CORDATA LITTLELEAF LINDEN	2.5" CAL	B & B
	UA-P	3	ULMUS AMERICANA 'PRINCETON' PRINCETON AMERICAN ELM	2.5" CAL	B & B
UNDERSTORY TREES	CODE	QTY	BOTANICAL / COMMON NAME	SIZE	ROOT
	CE	3	CERCIS CANADENSIS EASTERN REDBUD MULTI-TRUNK	1.5" CAL	
	CK	7	CORNUS KOUSA KOUSA DOGWOOD	2" CAL	B & B
DECIDUOUS SHRUBS	CODE	QTY	BOTANICAL / COMMON NAME	SIZE	ROOT
	AG	28	ABELIA X GRANDIFLORA GLOSSY ABELIA	3 GAL	CONT
	HQ	68	HYDRANGEA QUERCIFOLIA OAKLEAF HYDRANGEA	3 GAL	CONT
EVERGREEN SHRUBS	CODE	QTY	BOTANICAL / COMMON NAME	SIZE	ROOT
	JC-S	31	JUNIPERUS CHINENSIS 'SEA GREEN' SEA GREEN JUNIPER	3 GAL	CONT
	MB	39	MAHONIA BEALEI LEATHERLEAF MAHONIA	3 GAL	CONT
	TX-D	28	TAXUS X MEDIA 'DENSIFORMIS' DENSE ANGLO-JAPANESE YEW	3 GAL	CONT
ROCK MULCH	QTY	DESCRIPTION			
	11,981 SF	1.5" DIA RIVER ROCK MULCH AT 3" DEPTH			
SOD	QTY	DESCRIPTION			
	20,955 SF	LAWN SOD			
EDGER	QTY	DESCRIPTION			
	480 LF	STEEL LANDSCAPE EDGER (BLACK COLOR)			

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217 EAST 2nd STREET
SUITE 110
DES MOINES, IA 50309
PHONE: 515.243.9143

ALDI Inc.
Division Address
Division City, Division State, Zip
(XXX) XXX-XXXX
(XXX) XXX-XXXX fax

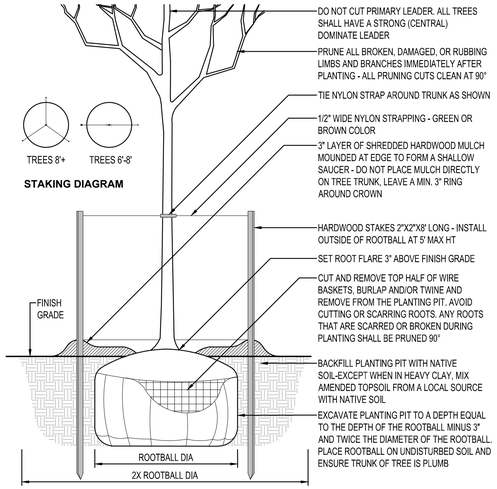
ALDI Inc. Store #: __
LA VERGNE, TN
5309 MURFREESBORO RD
LA VERGNE, TN 37086
RUTHERFORD

Project Name & Location:

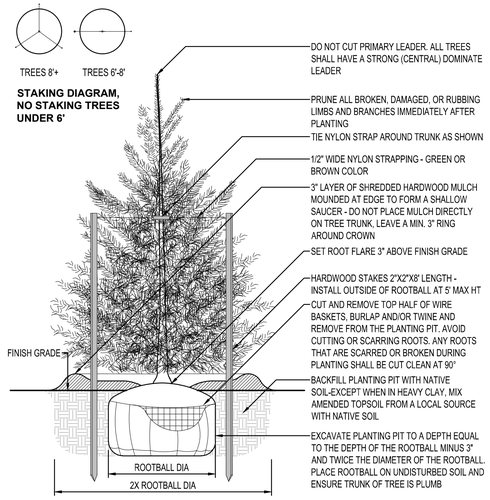
PLANTING AND RESTORATION PLAN

Drawing Name:

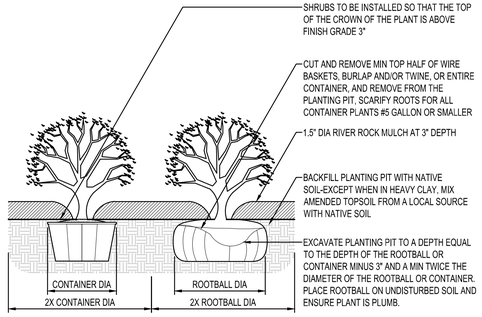
Type:	V7.0	ISG Project No.	23-27665
Drawn By:	AAE		
Designed By:	AAE		C-510
Reviewed By:	BAH		Drawing No.



DECIDUOUS TREE PLANTING
NTS



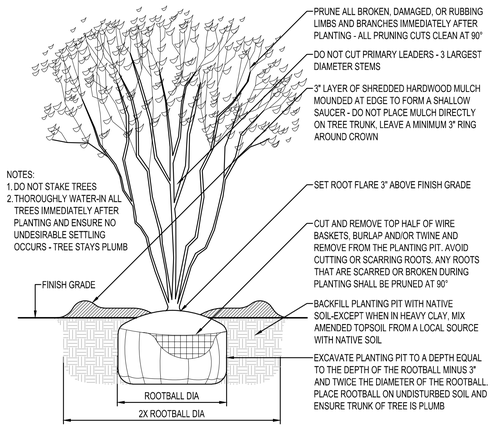
EVERGREEN TREE PLANTING
NTS



SHRUB PLANTING
NTS

PLANTING NOTES

1. COORDINATE LOCATION OF ALL UTILITIES (LINES, DUCTS, CONDUITS, SLEEVES, FOOTINGS, ETC.) WITH LOCATIONS OF PROPOSED LANDSCAPE ELEMENTS (FENCE, FOOTINGS, TREE ROOTBALLS, ETC.). CONTRACTOR SHALL REPORT ANY DISCREPANCIES TO OWNER'S REPRESENTATIVE PRIOR TO CONTINUING WORK.
2. SAVE AND PROTECT ALL EXISTING TREES NOT NOTED TO BE REMOVED.
3. REMOVE ALL CONSTRUCTION DEBRIS AND MATERIALS INJURIOUS TO PLANT GROWTH FROM PLANTING PITS AND BEDS PRIOR TO BACKFILLING WITH PLANTING MIX.
4. REFER TO PLANTING DETAILS FOR AMENDED SOIL DEPTH IN PLANTING BEDS AND SURROUNDING TREES.
5. FIELD STAKE PLANTINGS ACCORDING TO PLAN. OWNER'S REPRESENTATIVE SHALL APPROVE ALL PLANT LOCATIONS PRIOR TO INSTALLATION. OWNER'S REPRESENTATIVE RESERVES THE RIGHT TO REVISE PLANTING LAYOUT AT TIME OF INSTALLATION.
6. ALL PLANT MATERIALS SHALL BE TRUE TO THEIR SCIENTIFIC NAME AND SIZE AS INDICATED IN THE PLANT SCHEDULE.
7. IF DISCREPANCIES EXIST BETWEEN THE NUMBER OF PLANTS DRAWN ON THE PLANTING PLAN AND THE NUMBER OF PLANTS IN THE SCHEDULE, THE PLANTING PLAN SHALL GOVERN.
8. ANY PROPOSED SUBSTITUTIONS OF PLANT SPECIES SHALL BE MADE WITH PLANTS OF EQUIVALENT OVERALL FORM, HEIGHT, BRANCHING HABIT, FLOWER, LEAF, COLOR, FRUIT AND CULTURE, AND ONLY AFTER WRITTEN APPROVAL OF THE OWNER'S REPRESENTATIVE.
9. ALL PLANT MATERIALS MUST CONFORM TO AMERICAN STANDARDS FOR NURSERY STOCK (ANSI Z60.1), LATEST EDITION PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMEN, WASHINGTON D.C. LARGER SIZED PLANT MATERIALS OF THE SPECIES LISTED MAY BE USED IF THE STOCK CONFORMS TO ANSI Z60.1.
10. ALL PLANT MATERIAL SHALL BE GUARANTEED BY THE CONTRACTOR TO BE IN A LIVE AND HEALTHY GROWING CONDITION FOR ONE FULL GROWING SEASON (ONE YEAR) AFTER FINAL PROJECT ACCEPTANCE OR SHALL BE REPLACED BY THE CONTRACTOR FREE OF CHARGE WITH THE SAME GRADE AND SPECIES.
11. ALL TREES SHALL HAVE A STRONG CENTRAL LEADER. ANY TREES DEEMED NOT TO HAVE A STRONG CENTRAL LEADER SHALL BE REJECTED.
12. CONTRACTOR IS RESPONSIBLE FOR ALL DAMAGE DUE TO CONSTRUCTION OPERATIONS. ANY AREAS THAT ARE DISTURBED SHALL BE RESTORED TO ITS ORIGINAL CONDITION AT NO ADDITIONAL COST TO THE OWNER.
13. PROVIDE SHREDDED HARDWOOD MULCH SURROUNDING ALL PROPOSED TREES (5' Ø) AND WITHIN PLANTING BEDS TO A 3" MINIMUM DEPTH AS SHOWN IN TREE PLANTING DETAIL. DO NOT USE AN UNDERLAYMENT SUCH AS PLASTIC SHEET OR LANDSCAPE FABRIC. APPLY PRE-EMERGENT TO ALL PLANTING BEDS PRIOR TO MULCHING. REFER TO PLANS FOR ADDITIONAL DETAILS. REFER TO STORMWATER DETAILS FOR BASIN CONSTRUCTION AND MULCH APPLICATION.
14. MULCHING MATERIAL SHALL BE 1.5" DIA RIVER ROCK AT 3" DEPTH, WITH NO INDIVIDUAL PIECES LARGER THAN 3". FREE OF GROWTH OR GERMINATION INHIBITING INGREDIENTS, 3" MINIMUM DEPTH. MINIMUM DEPTHS AT LOCATIONS INDICATED ON DRAWINGS.
15. CONTRACTOR SHALL PROVIDE SAMPLE OF MULCH TO BE APPROVED BY THE LANDSCAPE ARCHITECT.
16. INDICATED QUANTITIES ARE ESTIMATES AND SHALL BE CONFIRMED BY THE CONTRACTOR.
17. ADJUST SPACING OF PLANT MATERIALS AROUND ADJACENT UTILITY STRUCTURES.



MULTI-STEM TREE PLANTING
NTS

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Revisions:	Date:
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MANAGING LOCATION:
DES MOINES OFFICE
217 EAST 2nd STREET
SUITE 110
DES MOINES, IA 50309
PHONE: 515.243.9143

ALDI Inc.
Division Address
Division City, Division State, Zip
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(XXX) XXX-XXXX fax

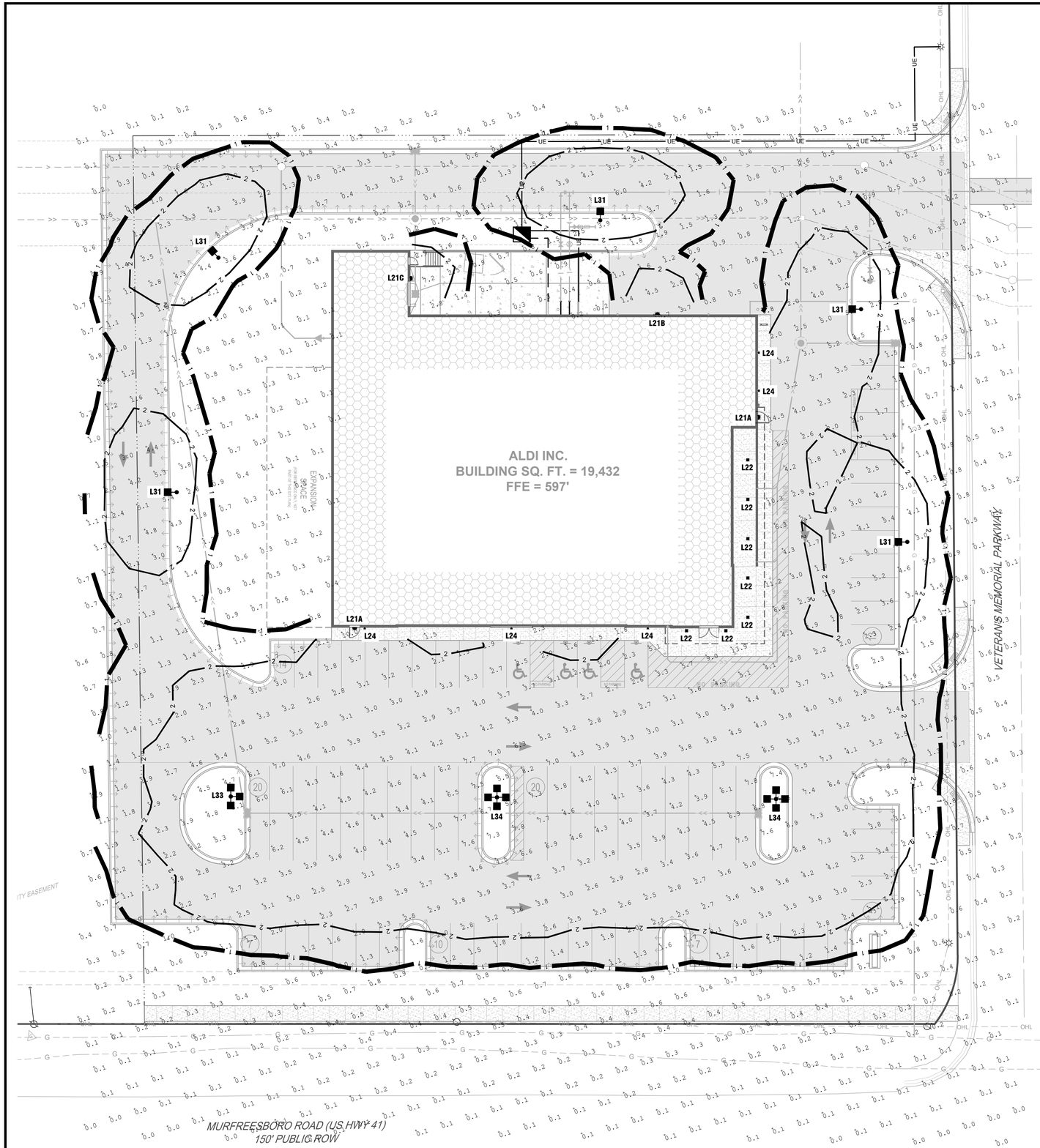
ALDI Inc. Store #: __
LA VERGNE, TN
5309 MURFREESBORO RD
LA VERGNE, TN 37086
RUTHERFORD

Project Name & Location:

PLANTING NOTES AND DETAILS

Drawing Name:

Type: V7.0	ISG Project No. 23-27665
Drawn By: SK	
Designed By: SK	C-520
Reviewed By: EG	Drawing No.

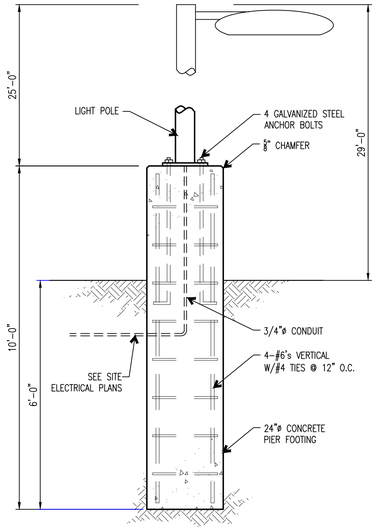


Provide light fixtures as shown on Fixture Schedule. Substitutions shall have prior approval by the Project Engineer before bid date. Being listed as an acceptable Manufacturer in no way relieves the Contractors obligation to provide all equipment and features in accordance with these specifications.

LIGHT FIXTURE SCHEDULE

TYPE	STYLE	MANUFACTURER/MODEL NUMBER	LAMPS	REMARKS
L21A	BUILDING MOUNTED WALL PACK	GE CURRENT #LWPC-26-S3-N-U-S-M1	26W LED - 3,900 LUMENS	MOUNT FIXTURE AT 9'-0" ABOVE FINISHED FLOOR
L21B	BUILDING MOUNTED WALL PACK	GE CURRENT #LWPC-26-S3-N-U-S-M1	26W LED - 3,900 LUMENS	MOUNT FIXTURE AT 10'-0" ABOVE FINISHED FLOOR
L21C	BUILDING MOUNTED WALL PACK	GE CURRENT #LWPC-26-S3-N-U-S-M1	26W LED - 3,900 LUMENS	MOUNT FIXTURE AT 12'-0" ABOVE FINISHED FLOOR
L22	CANOPY	GE CURRENT #ECLS010ASSM73011RMWHTE	39W LED - 5,200 LUMENS	MOUNT FIXTURE ON UNDERSIDE OF CANOPY
L24	ACCENT CYLINDER	GE CURRENT #44248A-17-3K	17W LED - 1,105 LUMENS	MOUNT FIXTURE AT 14'-6" ABOVE FINISHED FLOOR PROVIDE FIXTURE WITH DOWN LIGHT ONLY
L31	SITE POLE SINGLE HEAD	GE CURRENT #EACL010F2AF750NDD1	122W LED - 15,100 LUMENS	1@90 FIXED ARM MOUNT
	POLE	GE CURRENT #SSS-H-25-40-B-1-PSS-S2		25'-0" POLE
L33	SITE POLE TRIPLE HEAD @ 90	GE CURRENT #EACL010F4AF750NDD1	(3) 122W LED - 14,700 LUMENS	3@90 FIXED ARM MOUNT
	POLE	GE CURRENT #SSS-H-25-40-B-3-PSS-S2		25'-0" POLE
L34	SITE POLE QUAD HEAD @ 90	GE CURRENT #EACL010F4AF750NDD1	(4) 122W LED - 14,700 LUMENS	4@90 FIXED ARM MOUNT
	POLE	GE CURRENT #SSS-H-25-40-B-4-PSS-S2		25'-0" POLE

Note: All light fixtures shall be full-cutoff fixtures, which do not allow light to be emitted above 90 degrees.



1 LIGHT POLE DETAIL
N.T.S.



"L21" LIGHT STYLE



"L22" LIGHT STYLE

NOTE: SEE ELECTRICAL PLAN FOR SITE ELECTRICAL LAYOUT

FOOTCANDLE LEGEND

1.00 FOOTCANDLE LINE	1
2.00 FOOTCANDLE LINE	2



"L24" LIGHT STYLE

"L31", "L33", AND "L34" LIGHT STYLE

N

0 20 40
SCALE IN FEET

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Revisions:	Date:
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ISG

MANAGING LOCATION:
BLOOMINGTON OFFICE
7900 INTERNATIONAL DRIVE
SUITE 550
MINNEAPOLIS, MN 55425
PHONE: 952.426.0699

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Division City, Division State, Zip
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(XXX) XXX-XXXX fax

ALDI Inc. Store #: __
LA VERGNE, TN
5309 MURFREESBORO RD
LA VERGNE, TN 37086
RUTHERFORD
Project Name & Location:

SITE LIGHTING PLAN

Drawing Name:

		ISG Project No.
Type:	V7.0	23-27665
Drawn By:	SK	
Designed By:	SK	C-610
Reviewed By:	EG	Drawing No.

ARCHIPELAGO LIGHTING

luxoARCH

LWPC | Nightwatch

Quicksheet

26W — 135W

LIGHTING | REINVENTED

Project Details Type L21E

Project Name: ALDI Stores

Fixture Schedule:

Project Number:

Notes: LWPC26-S3N-UD-M1



Physical Features

1. Easily mounted over a standard 4" or 5" J-Box
2. Optional photocell allows for extra security and savings
3. 1/2in conduit holes allow for surface conduit wiring
4. Emergency driver option allows for 90min of operation
5. Optional CCTselect controller allows for flexibility
6. Strong die-cast aluminum extends fixture's lifespan
7. Zero uplight and anti-UV material reduces glare

Certifications

UL RoHS

Applications

Perimeter Pathways Entryways Security

Product Warranty *

7-Year 75,000 Hrs

* Standard warranty. Extended warranty available.

Model Specifications

Model	Watt (W)	Lumens (LM)	Voltage (V)	CCTselect	Replaces
LWPC26	26W	3,900LM	120-277Vac	3500K 4000K 5000K	100W MH
LWPC38	38W	5,700LM	120-277Vac		175W MH
LWPC65	65W	9,700LM	120-277Vac 347-480Vac		250W MH
LWPC100	100W	15,000LM	120-277Vac 347-480Vac		320W MH
LWPC135	135W	20,000LM	120-277Vac		400W MH

Ordering Guide

Model Series	Watt (W)	CCT (K)	Series	Voltage (V)	Finish	Photocell	EM Driver
LWPC LED Full-Cutoff Wallpack	**26** | 26W **38** | 38W **65** | 65W **100** | 100W **135** | 135W	**-S3** | CCTselect: — 3000K — 4000K — 5000K	**N** | Nightwatch	**-U** | 120-277V **-H** | 347-480V	**D** | Dark Bronze **B** | Black **S** | Silver **W** | White	**Blank** | None **-M1** | Button Photocell	**Blank** | None **-EM08** | 8W

Ordering number example: LWPC26-S3N-UD-PS-EM

Please place dashes (-) in correct order.

Choose your model specifications:

LWPC	26	-S3	N	-U	D	-PS	-EM
Model Series	Watt	CCT	Series	Voltage	Finish	Photocell	EM

Archipelago Lighting, Inc.
Headquarter: 4615 State Street, Montclair, CA 91763
USA Production: 9345 Sycamore Canyon Blvd, Riverside, CA 92508

EVOLVE



CUSTOMER NAME
PROJECT NAME **ALDI Stores**
DATE TYPE **L22**
CATALOG NUMBER **ECLS010A5SM73011RMGRAY**

ECLS Soffit

LED Canopy Light

The Evolve® Canopy LED Soffit (ECLS) offers energy efficiency and quality of light in a sleek low-profile look and style. The ECLS features a diffused aperture which spreads the source lumens for even light distribution and low glare. To be used for sealed deck applications only (enclosed canopy or soffit).

Construction

Housing:	Aluminum die cast enclosure. Integral heat sink for maximum heat transfer
Lens:	Impact resistant tempered glass
Paint:	Corrosion resistant polyester powder paint, minimum 2.0 mil thickness. Standard = Black, Dark Bronze Gray, White (RAL & custom colors available)
Weight:	10 lbs (4.5 kg) - 12.5 lbs (5.7 kg)

Optical System

Lumens:	3,600 - 7,100
Distribution:	Symmetric Medium
Efficacy:	119 - 138 LPW
CCT:	3000K, 4000K, 5000K
CRI:	≥70

Electrical

Input Voltage:	120-277V & 347V
Input Frequency:	50/60Hz
Power Factor:	>90% at rated watts
Total Harmonic Distortion:	<20% at rated watts
Surge Protection:	Standard Surge 6kV/3kA

*Per ANSI C136.2-

Warranty

☐ 5 Year (Standard)

Lumen Maintenance

Projected Lxx per IES TM-21-11 at

LUMEN CODES	LXX/10Ki @ HOURS 25,000 HR	50,000 HR	60,000 HR
T5	L96	L92	L91
A5	L95	L93	L92
B5	L95	L93	L92

Note: Projected Lxx based on LM80 (± 10,000 hour testing). Accepted industry tolerances apply to initial luminous flux and lumen maintenance measurements.

Luminaire Ambient Temperature Factor

AMBIENT TEMP (°C)	INITIAL FLUX FACTOR	AMBIENT TEMP (°C)	INITIAL FLUX FACTOR
10	1.02	30	0.99
20	1.01	40	0.98
25	1.00	50	0.97

Ratings

Operating Temperature:	-40°C to 50°C
Vibration:	1.5G per Per ANSI C136.31-2010.
LM-79:	Testing in accordance with IESNA Standards

Controls

Dimming:	Standard - 0-10V
Sensors:	Motion with Integrated Photoelectric control, Daintree Compatible

Not all product variations listed on this page are DLC qualified. Visit www.designlights.org/search to confirm qualifications.

Current

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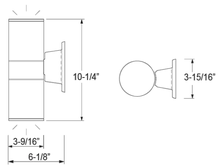
4424

120V

Catalog #:	4424BA-17-3K	Type L24
Project:	ALDI Stores	Date
Prepared by:		

3" LED Architectural Cylinder Up & Downlight





3" LED Cylinder Up & Downlight

DESCRIPTION

The Outdoor LED Cylinder Family features wet location rated wall mount style cylinders with down light and up & down light options. Choose from energy efficient 13W or 17W AC modules, with finishes available in white, black, brushed nickel, or oil-rubbed bronze. Features Triac dimming down to 5%, using most standard dimmers. Utilizes AC circuit on board technology for cooler operating temperature and extended lifetime.

DESIGN FEATURES

Construction
- Aluminum die-cast with powder coat finish

Electrical
- 120V Direct AC operation with DOB
- Triac dimming down to 5%
- Various wattages of modules available
- Cooler operating temperature without driver
- Stable driving current prevents inrush damage to circuit switches and modules
- Operating temperature: -31ºF (-35ºC) to 122ºF (50ºC)
- Available in 80CRI, 3000K & 4000K

Installation
- Easy surface mounting for simple installation using anchors and screws
- J-box mountable

Lens
- Clear acrylic lens protects LEDs while allowing for optimum lumen output
- 37° Beam angle

Finish
- Available in black, brushed aluminum and oil-rubbed bronze

Certifications
- cCSAus for wet location
- 5 year limited warranty
- Wet location rated

TEL: 800.937.6925 | Fax: 800.207.9509 | www.rplighting.com

RP | LIGHTING · FANS

Specifications and dimensions subject to change without notice.

EVOLVE



CUSTOMER NAME
PROJECT NAME **ALDI Stores**
DATE TYPE **L31-L34**
CATALOG NUMBER **EACL010F4AF750NDD1ALUM**

EACL® Series

LED Area Light/Compact Low Wattage

Current's EAL Series of Area Light Luminaires offer a wide range of optical patterns, color temperatures, lumen packages, and mounting configurations to optimize area light applications, as well as provide versatility in lighting design within the same form factor.

Construction

Housing:	Die-cast aluminum housing with integral heat sink for maximum heat transfer
Paint:	Corrosion resistant polyester powder paint, minimum 2.0 mil thickness. Standard = Black, Dark Bronze Gray, White (RAL & custom colors available). Optional coastal finish available.
Weight:	18 lbs (8.16 kg) Max depending on configuration

Optical System

Lumens:	2,900 - 20,400
Distribution:	Asymmetric Forward Type IV. Asymmetric Wide Type III. Asymmetric Narrow/Auto Type II
Efficacy:	123 - 143 LPW
CCT:	3000K, 4000K, 5000K
CRI:	≥70

Electrical

Input Voltage:	120-277V & 347-480V
Input Frequency:	50/60Hz
Power Factor:	> 90% at rated watts
Total Harmonic Distortion:	< 20% at rated watts

Surge Protection*

TYPICAL (120 STRIKES)	ENHANCED (40 STRIKES)
☐ 6kV/3kA*	☐ 10kV/5kA*

*Per ANSI C136.2-2015

Warranty

☐ 5 Year (Standard)

Lumen Maintenance

Projected Lxx per IES TM-21-11 at 25°C

LUMEN CODES	LXX/(10K) @ HOURS 25,000 HR	50,000 HR	60,000 HR
A2, A3, A4, B2, B3, B4, C2, C3, C4D2, D3, D4, E2, E3, E4, F2, F3, F4	L94	L90	L88
H2,H3, H4	L97	L96	L96

Note: Projected Lxx based on LM80 (± 10,000 hour testing). Accepted industry tolerances apply to initial luminous flux and lumen maintenance measurements.

Luminaire Ambient Temperature Factor

AMBIENT TEMP (°C)	INITIAL FLUX FACTOR	AMBIENT TEMP (°C)	INITIAL FLUX FACTOR
10	1.02	30	0.99
20	1.01	40	0.98
25	1.00	50	0.97

Ratings

Operating Temperature:	-40°C to 50°C
Vibration:	3G vibration per ANSI C136.31-2018
LM-79:	Testing in accordance with IESNA Standards

Controls

Dimming:	Standard - 0-10V ☐ Optional - DALI (Option U) ☐
Sensors:	Photo Electric Sensors (PE) available LightGrid and Daintree Compatible

Not all product variations listed on this page are DLC qualified. Visit www.designlights.org/search to confirm qualifications.

Current

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Revisions:	**Date:**
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ISG

MANAGING LOCATION:
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7900 INTERNATIONAL DRIVE
SUITE 550
MINNEAPOLIS, MN 55425
PHONE: 952.426.0699

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(XXX) XXX-XXXX fax

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5309 MURFREESBORO RD
LA VERGNE, TN 37086
RUTHERFORD

Project Name & Location:

SITE LIGHTING CATALOGUE PAGES

Drawing Name:

Type: V7.0	ISG Project No. 23-27665
Drawn By: SK	
Designed By: SK	C-620
Reviewed By: EG	Drawing No.

EXTERIOR FINISH SCHEDULE

KEY	MATERIAL / MFG.	COLOR / NO.	NOTES
A1	PREFINISHED METAL COPING	A1- SILVER - AT HIGH ROOF & CANOPY A1a - PETERSEN ALUM - MUSKET GREY-AT BRICK A1b - PETERSEN ALUM - #"CEDAR 397C0290 SPRAY CODE - AT NICHIHA TOWERS	SEE SPEC FOR ADDITIONAL INFO
A2	**BASE BID (BRICK 'A')** SPEC-BRIK CONCRETE MASONRY VENEER	4WxBRK16L, 8WxBRK16L (CART WALL ONLY) CHESAPEAKE BLEND w/ HOLCIM "SMITH GRAY" MORTAR MORTAR ALT: SOLOMON "85X DARK CHOCOLATE"	CONTACT THE CONCRETE PRODUCTS GROUP AT 800-789-0872 FOR ORDERING SEE SPEC FOR ADDITIONAL INFO
A3	PREFINISHED ALUM. SILL	A3 - BRIGHT SILVER A3a - PETERSEN ALUM # "CEDAR 397C0290 SPRAY CODE"	SEE SPEC FOR ADDITIONAL INFO
A4	ALUMINUM STOREFRONT SYSTEM	ANODIZED ALUM.	RE: DWG. A602
A5	MEMBRANE ROOFING	GRAY	TOP OF SLOPED ROOF, CANOPY ROOF, AND BACK OF RAISED ROOF PROJECTIONS - SEE SPECIFICATIONS APPENDIX 'B'
A6	METAL SOFFIT PANELS	SOLID PANELS - SILVER METALLIC	RE: DWG. A301-A304
A7	EXTERIOR PAINT		RE: DWG. A603
A9	ALUMINUM COMPOSITE PANEL	BRIGHT SILVER	PROVIDE PANEL JOINTS AS SHOWN - PROVIDE ONE PIECE TIGHT FIT EXTRUDED MOLDING INSTALLATION SYSTEM WITH CENTER REVEAL TRIM BETWEEN PANELS AND J TRIM AT PANEL EDGES.
A10	NICHIHA FIBER CEMENT EXTERIOR CLADDING	VINTAGEWOOD 'CEDAR'	CONTACT NICHIHA AT 770-805-9466 FOR ORDERING. SEE SPEC FOR TRIM REQUIREMENTS AND ADDITIONAL INFO. ALL INCLUDED TRIM ['H', 'J', 'L', CORNER, ETC] TO MATCH FCP
A11	BLRD-2	PT-19 / CL-4	RE: DWG A603
A12	BLRD-4		RE: DWG A603
A13	GUARD RAIL TYPE "A"	GALVANIZED STEEL	RE: DETAIL B2/A507
A14	GUARD RAIL TYPE "B"	GALVANIZED STEEL	RE: DETAIL B2/A507
A15	BLRD-3	GALVANIZED	RE: DWG A603
A16	DOCK LEVELER / SEAL AND BUMPERS	LEVELER - FACTORY FINISH / SEAL AND BUMPERS - FACTORY FINISH - BLACK	RE: DETAIL 9/A610 FOR CONDITION BEHIND SEAL
A17	MASONRY CONTROL JOINT		MAX 20' OC
A18	16" SCUPPER, OVERFLOW SCUPPER, COLLECTOR & DOWN SPOUT [SEE PLUMBING DWGS]	MATCH COPING ABOVE	RE: DWG A2/A507, A-121 FOR OVERFLOW SCUPPER SIZE
A19	ARCHITECTURAL CAST STONE	TANNERSTONE: AG-1 - STANDARD WHITE	SEE SPEC FOR ADDITIONAL INFORMATION - MORTAR COLOR TO MATCH CAST STONE RE: DETAIL D1/A503
A20	ALDI TOWER SIGN	BY SIGN VENDOR	7'-11 1/8" w. x 9'-5 1/2" h.; VERIFY SIGN SIZE PRIOR TO FRAMING OPENING SEE DETAIL C1/A504
A21	CRTB	NATURAL	RE: DWG A603 - SEE STRUCTURAL DWGS
A22	KNOX BOX	FACTORY FINISH	CONFIRM TYPE AND LOCATION WITH LOCAL FIRE MARSHAL
A23	AUTO DOOR SYSTEM & TRANSOM	ANODIZED ALUMINUM	RE. DWG A601 & A602

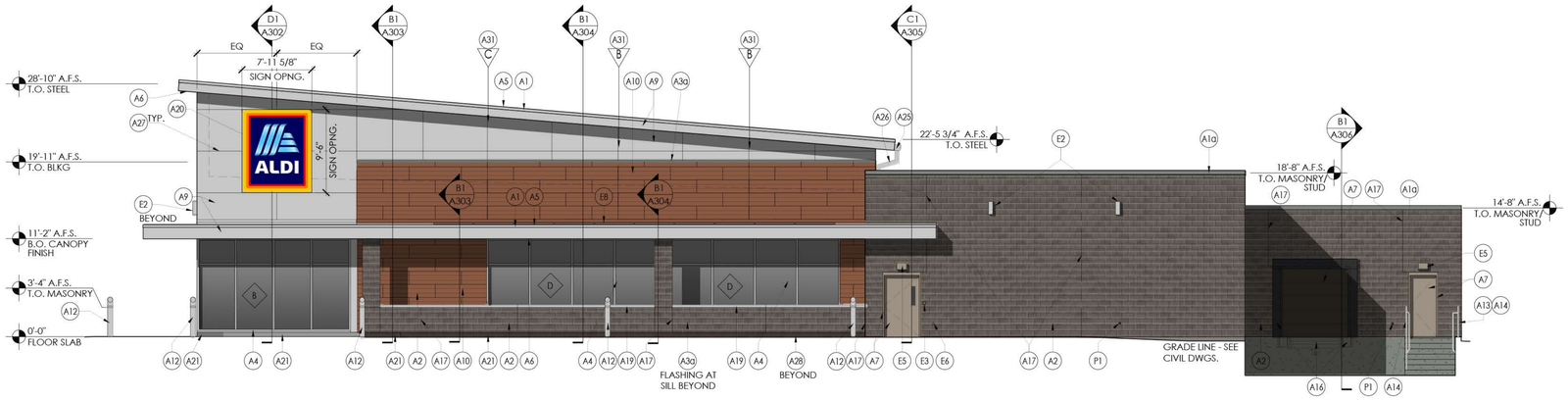
EXTERIOR FINISH SCHEDULE

KEY	MATERIAL / MFG.	COLOR / NO.	NOTES
A25	8" X 8" PRE-FINISHED ALUM GUTTER	MATCH PREFINISHED METAL COPING	RE: DETAIL C3/A501
A26	8" X 8" PRE-FINISHED ALUM DOWNSPOUT	MATCH PREFINISHED METAL COPING	RE: DETAIL C3/A501 TERMINATE AT CONC. SPLASH BLOCK
A27	ACP H/J TRIM / JOINT COVER		TYPICAL AT EDGES AND BUTT JOINTS OF ACP
A28	NICHIHA FIBER CEMENT PANEL BASE FLASHING	PETERSEN ALUMINUM - #"CEDAR 397C0290 SPRAY CODE"	SEE SPEC FOR ADDITIONAL INFO
A30	DUMPSTER GATE	WINCHESTER GREY	RE. DWG A507
A31	NICHIHA CONTROL JOINT WITH "H" CLIP		
E2	WALL SCONCE	FACTORY FINISH	MOUNT @ 14'-8" A.F.S.; RE: DWG. A111 FOR DIMENSIONS
E3	JUNCTION BOX WITH COVER FOR FUTURE CARD READER		MOUNT CENTERED @ 46" A.F.S., SEE ELEC DWGS
E4	UTILITY METERING & C.T.	FACTORY FINISH	SEE ELECTRICAL DWGS
E5	EXTERIOR WALL PACK	FACTORY FINISH	MAN DOORS - MOUNT @ 8'-0" A.F.S.; BREAK ROOM WINDOW @ 10'-0" A.F.S. TRUCK WELL - MOUNT @ 12'-0" A.F.S. (SIDE DOCK ONLY)
E6	EXTERIOR DUPLEX RECEPTACLE	FACTORY FINISH	MOUNT @ 1'-6" A.F.S. IN 4" SQUARE J-BOX
E7	GENERATOR QUICK CONNNECT	FACTORY FINISH	SEE ELECT DWGS
E8	EXTERIOR UPLIGHTING FIXTURES	FACTORY FINISH	SEE ELEC DWGS
F1	FIRE DEPT. CONNECTION	FACTORY FINISH	SEE FIRE PROTECTION DWGS
P2	MOTOR GONG	FACTORY FINISH	SEE FIRE PROTECTION DWGS
P1	HOSE BIB	FACTORY FINISH	SEE PLUMBING DWGS
P2	RPZ DISCHARGE	FACTORY FINISH	SEE PLUMBING DWGS
P3	GAS METER	FACTORY FINISH	SEE PLUMBING DWGS
XX	GLAZING KEY		RE: DWG A602
XX	ALIGN KEY		A: ALIGN NICHIHA PANEL JOINTS AND WINDOW MULLIONS B: ALIGN ALUMINUM COMPOSITE PANEL JOINTS AND NICHIHA PANEL JOINTS C: ALIGN NICHIHA PANEL JOINTS, ALUMINUM COMPOSITE PANEL JOINTS, AND WINDOW MULLIONS



2 Front Elevation

SCALE: 1/8" = 1'-0"



1 Side Elevation

SCALE: 1/8" = 1'-0"

SIGNAGE			
DESCRIPTION	QUANTITY	SQ. FT. PER SIGN	TOTALS
TOWER SIGN	2	74.9	149.8
TOTAL SIGNAGE			149.8
SIGNAGE IS SHOWN FOR REFERENCE ONLY AND SHALL BE UNDER SEPARATE PERMIT SUBMITTAL			

PLOTTED: 10/24/2023 10:17 AM

Issued:		Date:
A	Concept Elevations	08/16/23
B		
C		
D		
E		

Revisions:		Date:
1	Proto updates	10/24/23
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DRAWN BY:

REVIEWED BY:

Seal

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La Vergne, TN
5309 Murfreesboro Rd.
La Vergne, TN 37086
Rutherford County
Project Name & Location:

Concept Exterior Elevations
Drawing Name:

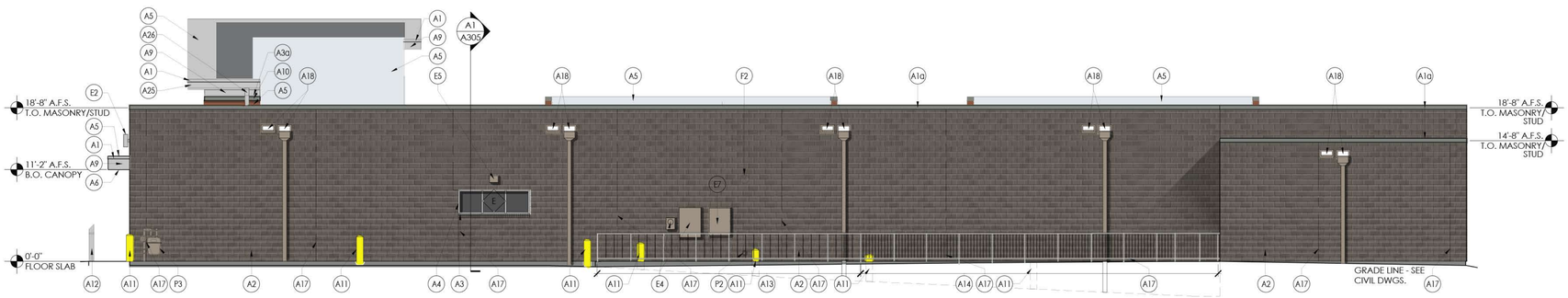
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Type: RHRD GROUND UP	
Drawn By:	CEE-1
Scale: As Noted	Drawing No.

EXTERIOR FINISH SCHEDULE

KEY	MATERIAL / MFG.	COLOR / NO.	NOTES
A1	PREFINISHED METAL COPING	A1- SILVER - AT HIGH ROOF & CANOPY A1a - PETERSEN ALUM - MUSKET GREY-AT BRICK A1b - PETERSEN ALUM - #'CEDAR 397C0290 SPRAY CODE' - AT NICHIHA TOWERS	SEE SPEC FOR ADDITIONAL INFO
A2	**BASE BID (BRICK 'A')** SPEC-BRIK CONCRETE MASONRY VENEER	4Wx8Hx16L, 8Wx8Hx16L (CART WALL ONLY) CHESAPEAKE BLEND w/ HOLCIM "SMITH GRAY" MORTAR MORTAR ALT: SOLOMON "85X DARK CHOCOLATE"	CONTACT THE CONCRETE PRODUCTS GROUP AT 800-789-0872 FOR ORDERING SEE SPEC FOR ADDITIONAL INFO
A3	PREFINISHED ALUM. SILL	A3 - BRIGHT SILVER A3a - PETERSEN ALUM # "CEDAR 397C0290 SPRAY CODE"	SEE SPEC FOR ADDITIONAL INFO
A4	ALUMINUM STOREFRONT SYSTEM	ANODIZED ALUM.	RE: DWG. A602
A5	MEMBRANE ROOFING	GRAY	TOP OF SLOPED ROOF, CANOPY ROOF, AND BACK OF RAISED ROOF PROJECTIONS - SEE SPECIFICATIONS APPENDIX 'B'
A6	METAL SOFFIT PANELS	SOLID PANELS - SILVER METALLIC	RE: DWG. A301-A304
A7	EXTERIOR PAINT		RE: DWG. A603
A9	ALUMINUM COMPOSITE PANEL	BRIGHT SILVER	PROVIDE PANEL JOINTS AS SHOWN - PROVIDE ONE PIECE TIGHT FIT EXTRUDED MOLDING INSTALLATION SYSTEM WITH CENTER REVEAL TRIM BETWEEN PANELS AND J TRIM AT PANEL EDGES.
A10	NICHIHA FIBER CEMENT EXTERIOR CLADDING	VINTAGEWOOD 'CEDAR'	CONTACT NICHIHA AT 770-805-9466 FOR ORDERING, SEE SPEC FOR TRIM REQUIREMENTS AND ADDITIONAL INFO. ALL INCLUDED TRIM ('H', 'J', 'L', CORNER, ETC) TO MATCH FCP
A11	BLRD-2	PT-19 / CL-4	RE: DWG A603
A12	BLRD-4		RE: DWG A603
A13	GUARD RAIL TYPE "A"	GALVANIZED STEEL	RE: DETAIL B2/A507
A14	GUARD RAIL TYPE "B"	GALVANIZED STEEL	RE: DETAIL B2/A507
A15	BLRD-3	GALVANIZED	RE: DWG A603
A16	DOCK LEVELER / SEAL AND BUMPERS	LEVELER - FACTORY FINISH / SEAL AND BUMPERS - FACTORY FINISH - BLACK	RE: DETAIL 9/A610 FOR CONDITION BEHIND SEAL
A17	MASONRY CONTROL JOINT		MAX 20' OC
A18	16" SCUPPER, OVERFLOW SCUPPER, COLLECTOR & DOWN SPOUT (SEE PLUMBING DWGS)	MATCH COPING ABOVE	RE: DWG A2/A507, A-121 FOR OVERFLOW SCUPPER SIZE
A19	ARCHITECTURAL CAST STONE	TANNERSTONE: AG-1 - STANDARD WHITE	SEE SPEC FOR ADDITIONAL INFORMATION - MORTAR COLOR TO MATCH CAST STONE RE: DETAIL D1/A503
A20	ALDI TOWER SIGN	BY SIGN VENDOR	7'-11 1/8" w. x 9'-5 1/2" h.; VERIFY SIGN SIZE PRIOR TO FRAMING OPENING SEE DETAIL C1/A504
A21	CRTB	NATURAL	RE: DWG A603 - SEE STRUCTURAL DWGS
A22	KNOX BOX	FACTORY FINISH	CONFIRM TYPE AND LOCATION WITH LOCAL FIRE MARSHAL
A23	AUTO DOOR SYSTEM & TRANSOM	ANODIZED ALUMINUM	RE. DWG A601 & A602

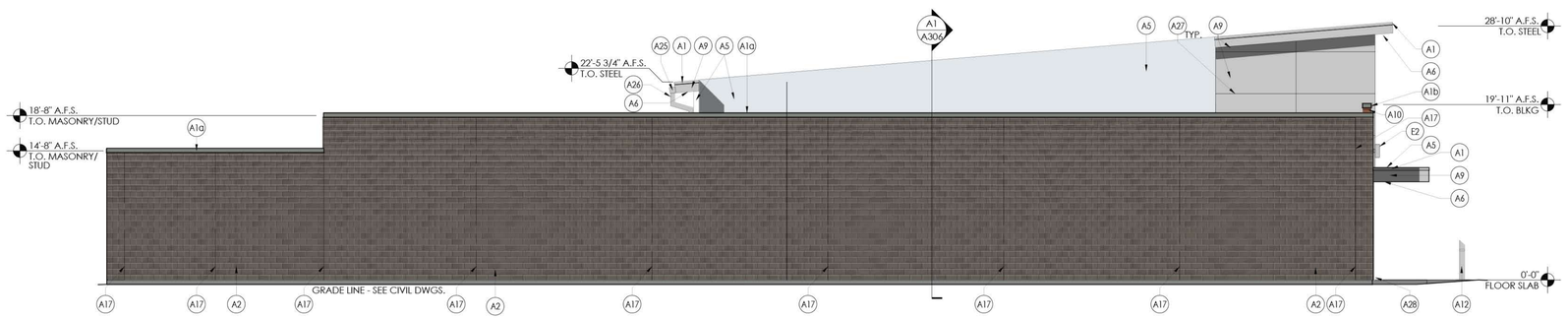
EXTERIOR FINISH SCHEDULE

KEY	MATERIAL / MFG.	COLOR / NO.	NOTES
A25	8" X 8" PRE-FINISHED ALUM GUTTER	MATCH PREFINISHED METAL COPING	RE: DETAIL C3/A501
A26	8" X 8" PRE-FINISHED ALUM DOWNSPOUT	MATCH PREFINISHED METAL COPING	RE: DETAIL C3/A501 TERMINATE AT CONC. SPLASH BLOCK
A27	ACP H/J TRIM / JOINT COVER		TYPICAL AT EDGES AND BUTT JOINTS OF ACP
A28	NICHIHA FIBER CEMENT PANEL BASE FLASHING	PETERSEN ALUMINUM - #'CEDAR 397C0290 SPRAY CODE'	SEE SPEC FOR ADDITIONAL INFO
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2 Rear Elevation

SCALE: 1/8" = 1'-0"



1 Side Elevation

SCALE: 1/8" = 1'-0"

SIGNAGE			
DESCRIPTION	**QUANTITY**	**SQ. FT. PER SIGN**	**TOTALS**
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DRAWN BY:

REVIEWED BY:

Seal

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Project Name & Location:

Concept Exterior Elevations
Drawing Name:

Prototype: V7.0	Project No. 23133244
Type: RHRD GROUND UP	
Drawn By:	CEE-2
Scale: As Noted	Drawing No.

Planning Commission Report
Meeting: December 26, 2023

City of La Vergne

Item #: 8.

Item Title: Site Plan – Osama Dous Retail Center – Building Addition of 1,173 Square Feet. Requested by Chet Rhodes. Property located at 5130 Murfreesboro Road (Tax Map 15M, Group A, Parcel 1). C-2 (Highway Service) Zoning District. Property owned by TN Group Properties, LLC.

Reviewed By:
Bo Logan, City Planner
Gary Lide, City Engineer

Summary: On behalf of their client, CRE and Dale & Associates are requesting site plan approval for a proposed retail facility on Murfreesboro Road. The applicant has proposed to use the existing building that is comprised of 4,200 square feet with this plan. Also proposed is an addition of 1173 sq. ft. The existing building is 1-story and was formerly a car wash.

This particular site is contained in an overlay district. The building currently contains five (5) bays and two (2) pedestrian doors that face the front of the building. The building itself is already comprised of brick with a metal roof.

This parcel is contained within the Murfreesboro Road Overlay Streetscape District and must adhere to the applicable overlay provisions. Color elevations need to be provided, as well as a materials board.

Staff Recommendation:

Staff Comments / Technical Items:

Planning

Bo Logan
blogan@lavergnetn.gov

Jake Blair
jblair@lavergnetn.gov

NO RESUBMITTAL WAS RECEIVED AFTER THE ITEM DEFERRED ON NOVEMBER 28.

1) This parcel is contained within the Murfreesboro Road Overlay Streetscape District and must adhere to the applicable overlay provisions;
2) A materials board is required with actual samples;
3) Landscape Plan is required;
4) Photometric Plan is missing;
5) A 5' wide Landscaped Buffer Area must be installed around all parking lots with 3' minimum tall screening (shrubs, etc.);
6) Show all utilities;
7) Building setback lines must be indicated for all sides of all buildings;

Engineering

Gary Lide
glide@lavergnetn.gov

No follow-up submittal has been provided. Previous comments are as follows:

1. Provide a grading and drainage plan shown how site run-off will be handled for the modified structure. Staff does not concur with engineer's response to this comment. The existing asphalt will have to be removed for the expansion of the building. This will expose and disturb soil which requires an erosion and sediment control.In addition, the architectural plans show doorways exiting from the proposed portion of the building which will require existing and proposed elevations to confirm IBC and ADA access requirements are met.

2. Provide stormwater calculations meeting the Stormwater Management Ordinance along with the means for complying with the stormwater quality requirements for the ordinance. These calculations must demonstrate that all existing culverts leaving the property are able to pass the 25-year storm. Staff does not fully concur with engineer's response as follows:
a. Staff concurs that stormwater detenhtion calculations are not required for the reasons provided.
b. The city's stormwater management ordinance, however, does not tie stormwater QUALITY calculations to a pre- versus post- comparison (Section 14-603) and specifically requires that the stormwater quality requirements be met for redevelopment projects. The city is presently interpreting this as requiring that the requirements be met for all disturbed or changed areas of a redevelopment site for plans which disturb less than 50% of the total area of the site and for the entire site for redevelopment sites that disturb 50% or more. Therefore, calculations must be provided and means designed to comply with meeting the requirements of that section for those areas which are being disturbed regardless of whether those areas were previously pervious or impervious.The Stormwater Management Ordinance which was recently approved by the Board of Mayor and Aldermen will be provided to the engineer and training is scheduled on 05 December 2023 at the city library on the ordinance.
c. The city's stormwater management ordinance requires that culverts be able to handle the 25-year storm. The previous ordinance required the 10-year. The engineer must provide calculations demonstrating the capacity of the existing and any proposed stormwater pipes or culverts. In the event that existing pipes are undersized for the new ordinance but meet the requirements of the previous ordinance, the staff will not recommend that the developer replace those culverts but will enter the information into a database for future city use. Any new culverts must pass the 25-year storm and existing culverts must pass the 10-year storm.

3. (Sheet C-2.1) Provide total driveway widths at the northern drive onto Brewer Street and the drive onto George Chaney Road.
4. (Sheet C-2.1)The dumpster screen is proposed to be exposed CMU with a wooden gate. The Planning Commission will review that proposal against requirements of the Murfreesboro Road Overlay District.
5. (Sheets C-2.0 and C-2.1) Please clarify which parking spaces are 19'-0" long and which are 19'-1" long. The spaces fronting on Murfreesboro Road are labeled at 19'-1" long and the ones in front of the building are labeled as 19'-0" long. The spaces along Brewer Street are unlabeled. Staff's previous assumption that the intent was for all spaces to be 19'-0" long was dispelled by the engineer's response to the previous comment. If different dimensions are provided, then all spaces must be labeled.
6. No landscaping plan has been provided. Engineer's response to this comment was that the landscaping plan is forthcoming. Therefore, the submittal is incomplete.
7. Provide erosion prevention and sediment control (EPSC) plans meeting the requirements of the Stormwater Management Ordinance. See Item 4 above.
8. (C-4.0) Show utilities serving proposed building even if they are existing. Engineer's response is that utilities are shown based on the survey which they were given. Staff considers the submittal incomplete.

Utilities

Scott Tatalovich
statalovich@lavergnetn.gov

No follow-up submittal has been provided. The previous comments are as follows:

1. Show and label existing water meter assemblies including water meter sizes.

Codes

No follow-up submittal has been provided. The previous comments are as follows:

1. Architectural sheet A1.1 shows an existing restroom in a proposed section of the building. Please correct.
2. Architectural sheet A1.1 shows the only access to the existing restroom in the proposed condition being from the exterior. Please confirm if this is the intent.
3. Architectural sheet A-2.0 shows an apparently unnecessary door in the front of the building. Please confirm that it is the intent for this door to remain.

Fire

Curtis Brinkley
cbrinkley@lavergnetn.gov

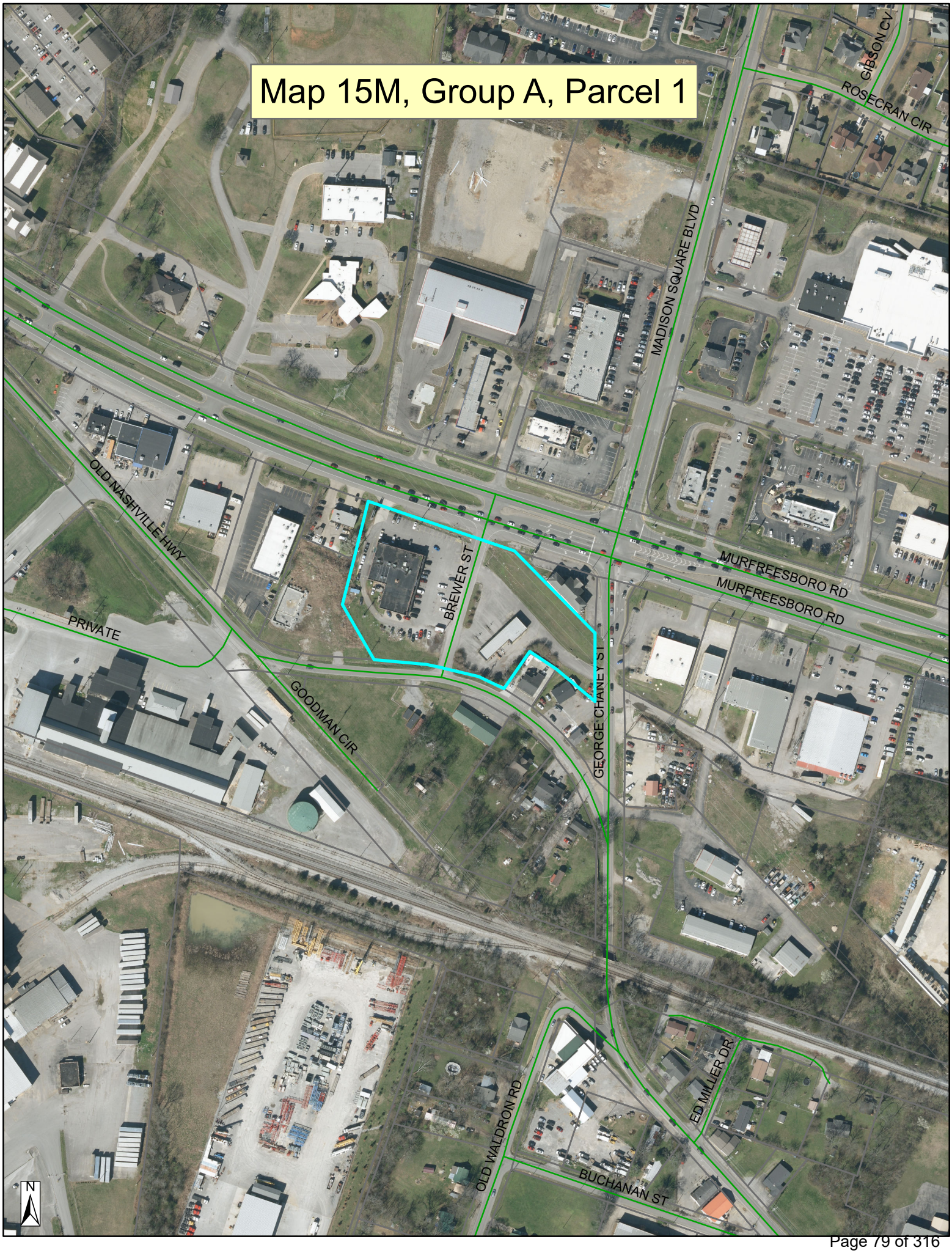
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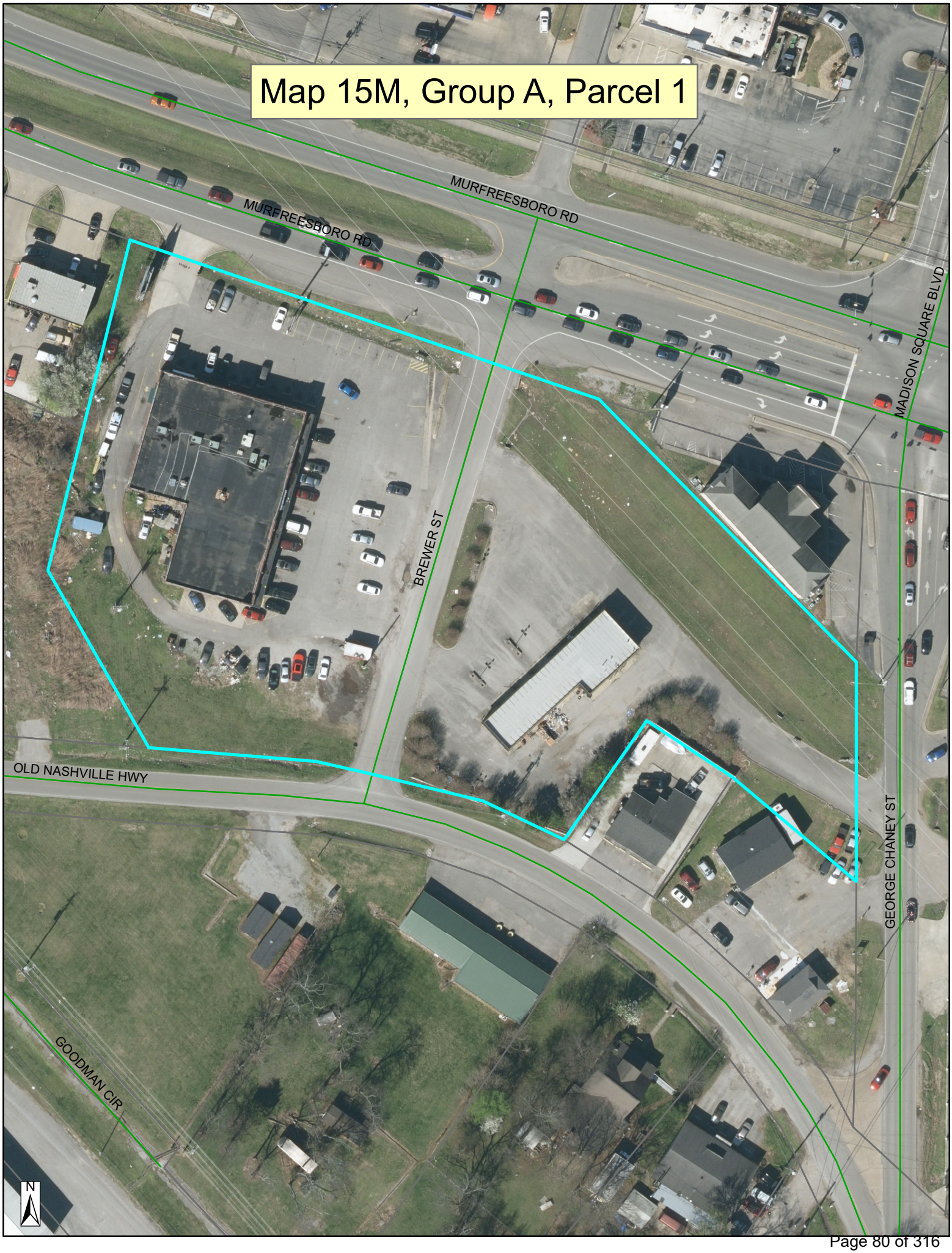
Police

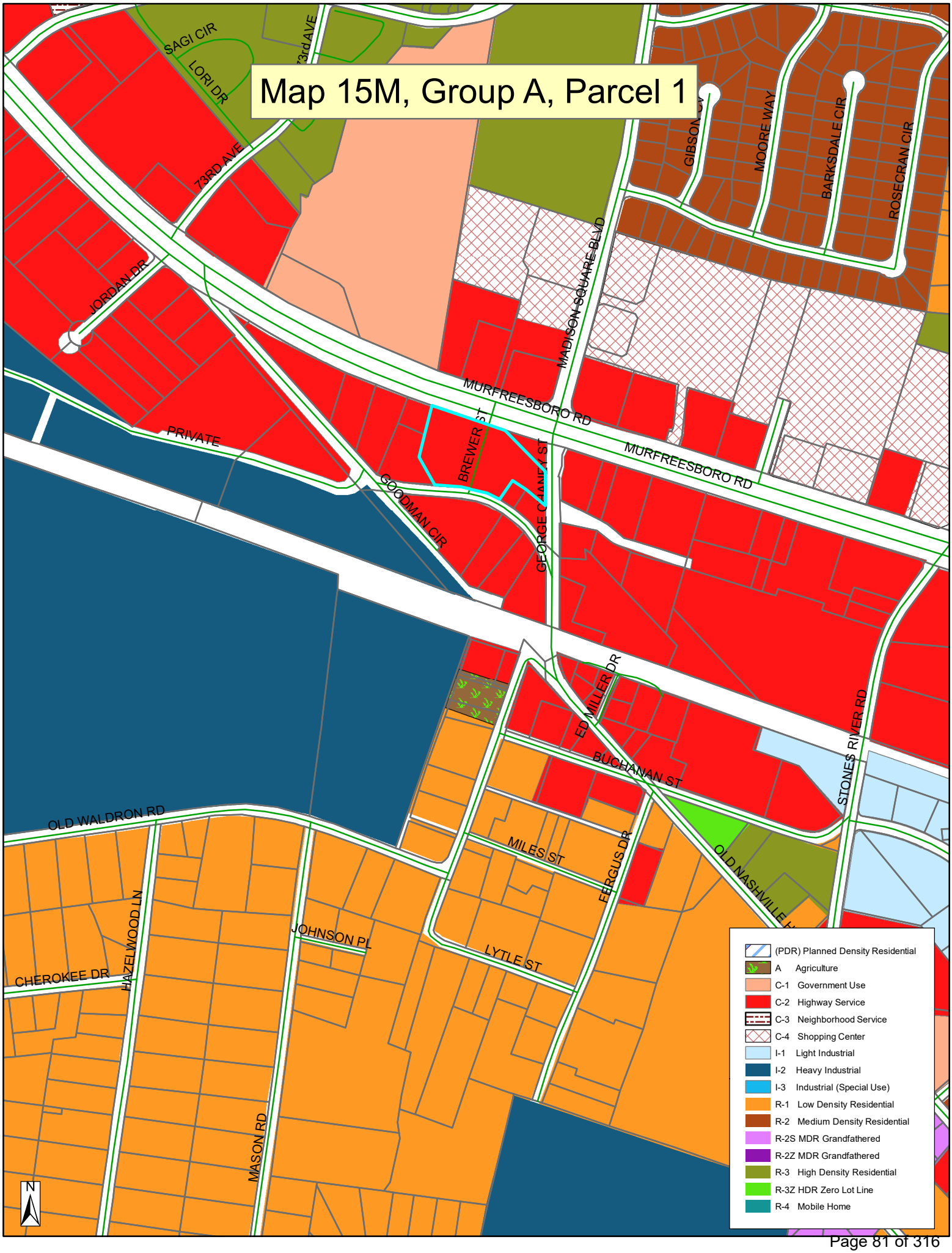
John Eubank
jeubank@lavergnetn.gov

No comments.

***Note:** The above technical items may not be the only corrections and/or issues needing to be resolved to get approval from the planning commission. New items can be brought up at the workshop and staff can add items at any time that might have been overlooked. It is the applicant's responsibility to make sure that all technical items are addressed and that no new issues exist before the planning commission meeting. Addressing all technical items does not constitute approval. It is the planning commission's decision whether an item passes or fails. Revised plans are due to staff by the following Monday at close of business unless other arrangements are made and documented.

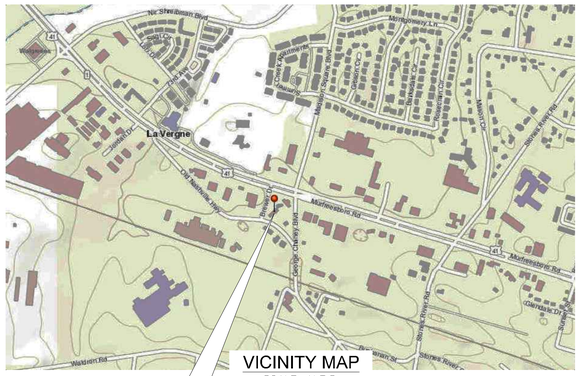

Map 15M, Group A, Parcel 1
GIBSON CV
ROSECRAN CIR
MADISON SQUARE BLVD
OLD NASHVILLE HWY
MURFREESBORO RD
MURFREESBORO RD
BREWER ST
PRIVATE
GOODMAN CIR
GEORGE CHANEY ST
ED MILLER DR
OLD WALDRON RD
BUCHANAN ST
N


Map 15M, Group A, Parcel 1
MURFREESBORO RD
MURFREESBORO RD
MADISON SQUARE BLVD
BREWER ST
OLD NASHVILLE HWY
GEORGE CHANEY ST
GOODMAN CIR
N


Map 15M, Group A, Parcel 1
SAGI CIR
LORI DR
73RD AVE
JORDAN DR
MADISON SQUARE BLVD
GIBSON CV
MOORE WAY
BARKSDALE CIR
ROSECRAN CIR
MURFREESBORO RD
PRIVATE
BREWER
GOODMAN CIR
GEORGE CANNON ST
ED MILLER DR
BUCHANAN ST
STONES RIVER RD
OLD WALDRON RD
MILES ST
FERGUS DR
OLD NASHVILLE H
JOHNSON PL
LYTLE ST
CHEROKEE DR
HAZELWOOD LN
MASON RD
N
(PDR) Planned Density Residential
A Agriculture
C-1 Government Use
C-2 Highway Service
C-3 Neighborhood Service
C-4 Shopping Center
I-1 Light Industrial
I-2 Heavy Industrial
I-3 Industrial (Special Use)
R-1 Low Density Residential
R-2 Medium Density Residential
R-2S MDR Grandfathered
R-2Z MDR Grandfathered
R-3 High Density Residential
R-3Z HDR Zero Lot Line
R-4 Mobile Home


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There IS Evidence for GOD!
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Itasca



VICINITY MAP
SCALE: N.T.S.

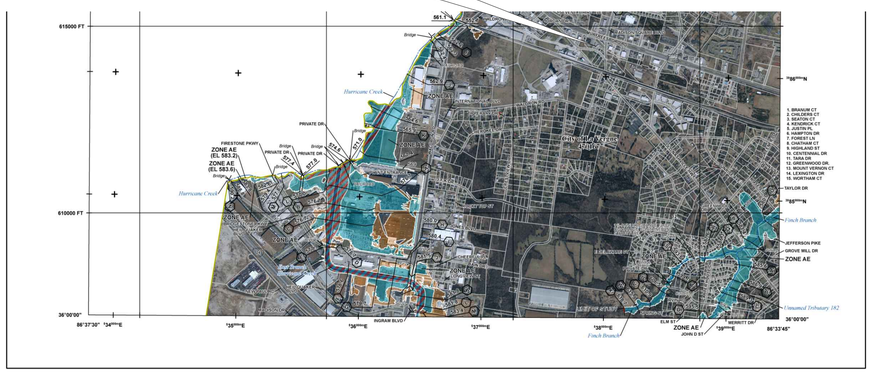
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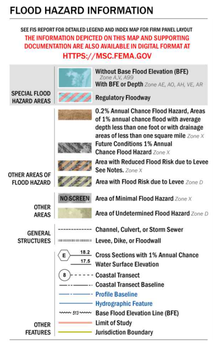


AERIAL VIEW
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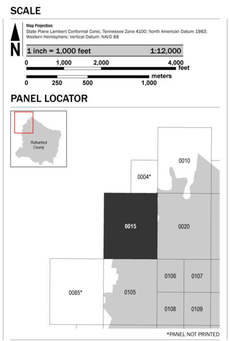
SITE LOCATION

SITE LOCATION













OSAMA DOUS
RETAIL CENTER
5116 MURFREESBORO ROAD
LA VERGNE, TN 37086
ACRES = 1.43
PARCEL ID: 00100 015M
ZONED C-2

SITE DATA CHART		
ZONING DISTRICT	=	C-2
EXISTING USE	=	CAR WASH
PROPOSED USE	=	RETAIL
DENSITY	=	1
SQ. FT. OF EACH BUILDING (EXISTING & PROPOSED)	=	4,210 sq. ft.
TOTAL SQ. FOOTAGE	=	4,210 sq. ft.
SQ. FOOTAGE OF EACH USE	=	4,210 SQ. FT.
FLOOR AREA RATIO		HEIGHT: 15'-7.3/4"
		STORIES: 1
		FAR = .06
ACREAGE/SQ. FOOTAGE OF LOT	=	62,737.8 sq. ft. / 1.43 acres
SIGN HEIGHT & AREA	=	
PARKING		
PARKING REQUIREMENTS (MIN.) FOR EACH USE	=	3 SPACES PER 1,000 SQUARE FEET GROSS FLOOR AREA.
TOTAL PARKING PROVIDED	=	4,210 SQ. FT. OF RETAIL = 3 X 5,000 SQ. FT. = **15 SPACES REQ'D**
LANDSCAPING & BUFFERING		
IMPERVIOUS SURFACE AREA	=	35,886.6 SQ. FT. = 0.82 ACRES
ILA EXISTING (LANDSCAPING ISLANDS)	=	
ILA REQUIRED	=	
ILA PROPOSED	=	
OPEN SPACE PROVIDED	=	
IMPERVIOUS AREA	=	35,886.6 SQ. FT. = 0.82 ACRES
PERVIOUS AREA	=	26,847.3 SQ. FT. = 0.61 ACRES
		1.43 ACRE

TENNESSEE CONSTRUCTION GENERAL PERMIT NOTICE OF COVERAGE NOC CERTIFICATION:

1. THE PROJECT ASSOCIATE WITH THESE SUBMITTED PLANS IS COVERED UNDER TENNESSEE CONSTRUCTION GENERAL PERMIT TN _____ .

CHECK ALL THAT APPLY: THIS SITE DISCHARGES INTO WATERS IDENTIFIED BY TDEC AS:
☒ IMPAIRED FOR SILTATION ☐ IMPAIRED FOR HABITAT ALTERATION ☐ EXCEPTIONAL

Charles A. Rhodes _____
SIGNATURE DATE

CIRCLE ONE: DEVELOPER (PROJECT ENGINEER) OTHER _____

NOTE: A PROJECT WILL NOT BE SCHEDULED FOR A PRE-CONSTRUCTION MEETING UNTIL THE STATE CONSTRUCTION GENERAL PERMIT NOC LETTER IS SUBMITTED.

2. I HEREBY CERTIFY THAT THIS PROJECT DOES NOT REQUIRE COVERAGE UNDER A TENNESSEE CONSTRUCTION GENERAL PERMIT.
THE TOTAL DISTURBED AREA IS: APPLIED FOR ACRES.

CHECK ALL THAT APPLY: THIS SITE DISCHARGES INTO WATERS IDENTIFIED BY TDEC AS:
☒ IMPAIRED FOR SILTATION ☐ IMPAIRED FOR HABITAT ALTERATION ☐ EXCEPTIONAL

_____ _____
SIGNATURE DATE

CIRCLE ONE: DEVELOPER PROJECT ENGINEER OTHER _____

NOTE:
PROJECTS OF ONE (1) OR MORE ACRES REQUIRE STATE PERMIT COVERAGE, WHILE PROJECTS OF LESS THAN ONE (1) ACRE DO NOT REQUIRE STATE PERMIT COVERAGE. ALSO, PROJECTS OF LESS THAN ONE (1) ACRE THAT ARE PART OF A TOTAL DEVELOPMENT PROJECT OF ONE (1) OR MORE ACRES REQUIRE STATE PERMIT COVERAGE.

SHEET INDEX

C-0.0	COVER SHEET
C-1.0	EXISTING CONDITIONS
C-2.0	PROPOSED ENCROACHMENT
C-2.1	PROPOSED NEW LAYOUT
C-3.0	GRADING PLAN
C-4.0	UTILITY PLAN
C-5.0	PERVIOUS & IMPERVIOUS
C-6.0	SITE DETAILS
C-6.1	SITE DETAILS
A-1.0	EXISTING FLOOR PLAN
A-1.1	PROPOSED NEW BUILDING LAYOUT
A-2.0	FRONT & REAR ELEVATIONS
A-2.1	LEFT & RIGHT SIDE ELEVATIONS

811
CALL BEFORE YOU DIG!

GENERAL NOTE(S):

1. THE LIST OF "APPLICABLE CODES" IS PROVIDED AS A CONVENIENCE AND IS NOT TO BE CONSIDERED ALL INCLUSIVE OF CODES AND REGULATIONS THAT MAY APPLY. THE CONTRACTOR SHALL COMPLY WITH ALL PERTINENT CODES, STANDARDS, REGULATIONS AND LAWS.

GENERAL CODE ANALYSIS AND NOTES

APPLICABLE CODE(S): (NASHVILLE, TN)

BUILDING CODE:	2018 INTERNATIONAL BUILDING CODE WITH LOCAL AMENDMENTS*
PLUMBING CODE:	2018 INTERNATIONAL PLUMBING CODE WITH LOCAL AMENDMENTS*
MECHANICAL CODE:	2018 INTERNATIONAL MECHANICAL CODE WITH LOCAL AMENDMENTS*
ELECTRICAL CODE:	2017 NATIONAL ELECTRIC CODE WITH LOCAL AMENDMENTS*
ACCESSIBILITY CODE:	2017 ICC/ANSI A-117.1 ACCESSIBLE AND USABLE BUILDINGS AND FACILITIES
LIFE SAFETY CODE:	2018 LIFE SAFETY CODE NFPA 1 AND NFPA 101 WITH LOCAL AMENDMENTS*

COVER SHEET

NOTED

OSAMA DOUS
902 OLACID COURT
BRENTWOOD, TN 37027
Ph # 615-423-4519
EMAIL: erlan.g@yahoo.com

TN GROUP PROPERTIES LLC
9402 PLACID CT.
BRENTWOOD TN 37027

CHESTER A. RHODES — REGISTERED — 102553 — STATE OF TENNESSEE — REGISTERED ENGINEER
Charles A. Rhodes
11/17/2023

ENGINEER:
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EMAIL: RhodesEngineering@gmail.com
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CIVIL ENVIRONMENTAL
SITE DEVELOPMENT WATER/WASTEWATER

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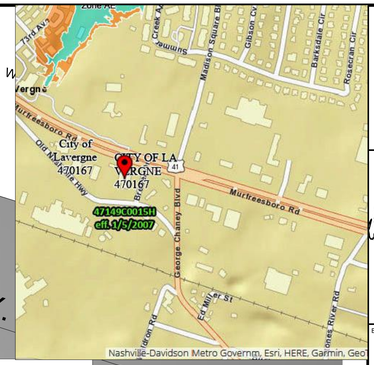
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DESIGN	ATD	00/00/00
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APPROVED	CAR	00/00/00
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OSAMA DOUS
RETAIL CENTER
5130 MURFREESBORO ROAD, LA VERGNE , TN 37086
COVER SHEET

DWG. No.
C-0.0
SCALE NOTED
CADFILE:
JOB No.
REV.

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902 OLACID COURT
BRENTWOOD, TN 37027
Ph # 615-423-4519
EMAIL: erian.g@yahoo.com

TN GROUP PROPERTIES LLC
9402 PLACID CT.
BRENTWOOD TN 37027

CHESTER A. RHODES — REGISTERED ENGINEER — AGRICULTURE — DATE OF LICENSE 02/19/1974 — STATE OF TENNESSEE

11/17/2023

ENGINEER:
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5130 MURFREESBORO ROAD, LA VERGNE, TN 37086

EXISING CONDITIONS

DWG. No.
C-1.0

SCALE: NOTED

CADFILE: I:\1-Murfreesboro Road 11 - 17 - 2023

JOB No.

REV.

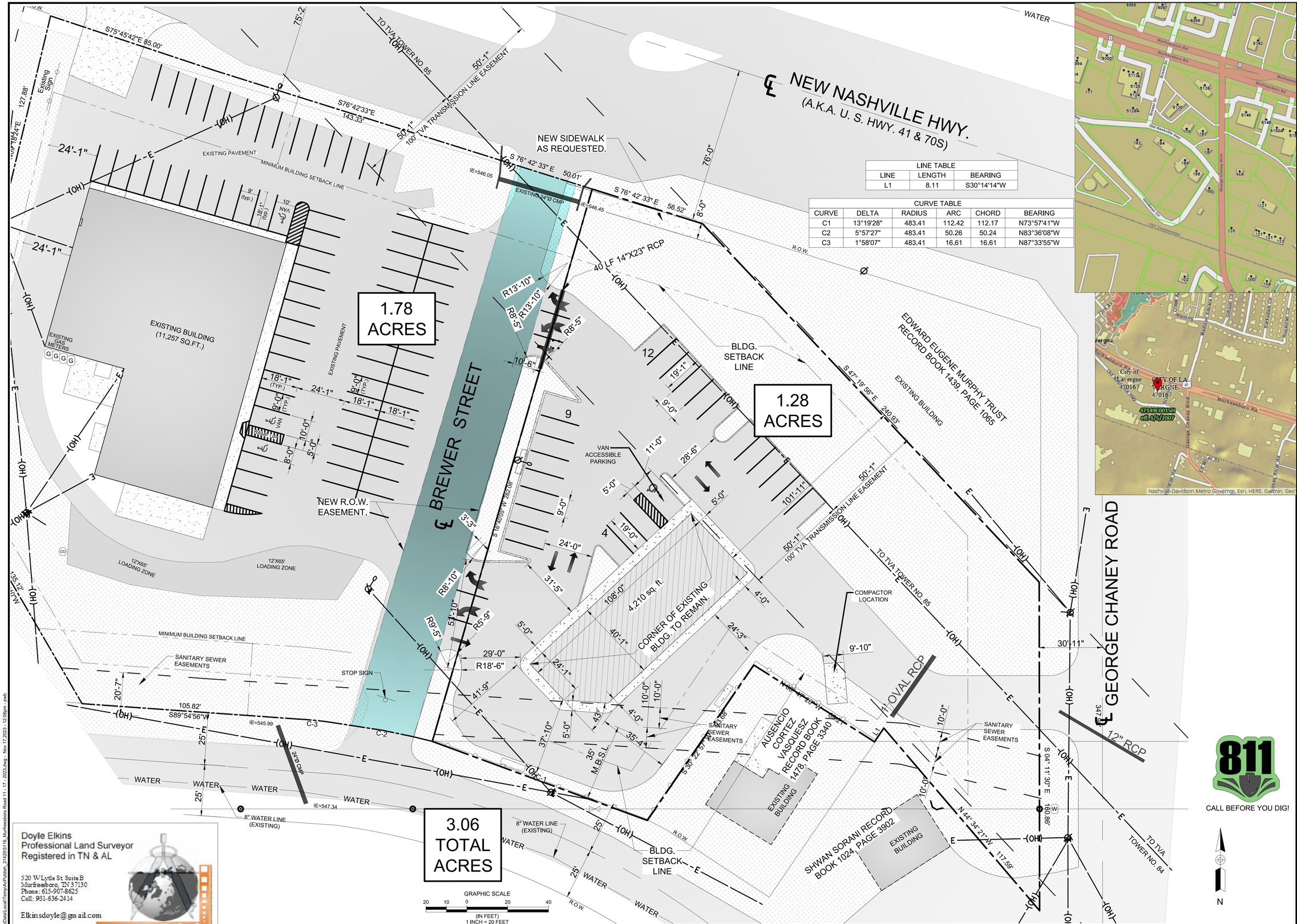
LINE TABLE		
LINE	LENGTH	BEARING
L1	8.11	S30°14'14"W

CURVE TABLE					
CURVE	DELTA	RADIUS	ARC	CHORD	BEARING
C1	13°19'28"	483.41	112.42	112.17	N73°57'41"W
C2	5°57'27"	483.41	50.26	50.24	N83°36'08"W
C3	1°58'07"	483.41	16.61	16.61	N87°33'55"W

Doyle Elkins
Professional Land Surveyor
Registered in TN & AL
520 W Lytle St, Suite B
Murfreesboro, TN 37130
Phone: 615-907-8625
Cell: 931-636-2414
Elkinsdoyle@gmail.com

EXISTING CONDITIONS

NOTED



LINE TABLE		
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TN GROUP PROPERTIES LLC
9402 PLACID CT.
BRENTWOOD TN 37027

CHESTER A. RHODES — REGISTERED ENGINEER — AGRICULTURE — DATE OF LICENSE — STATE OF TENNESSEE

11/17/2023

ENGINEER:
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OSAMA DOUS
RETAIL CENTER
5130 MURFREESBORO ROAD, LA VERGNE , TN 37086

PROPOSED NEW LAYOUT

DWG. No.
C-2.0

SCALE: NOTED

CADFILE: [illegible]

JOB No.

REV.

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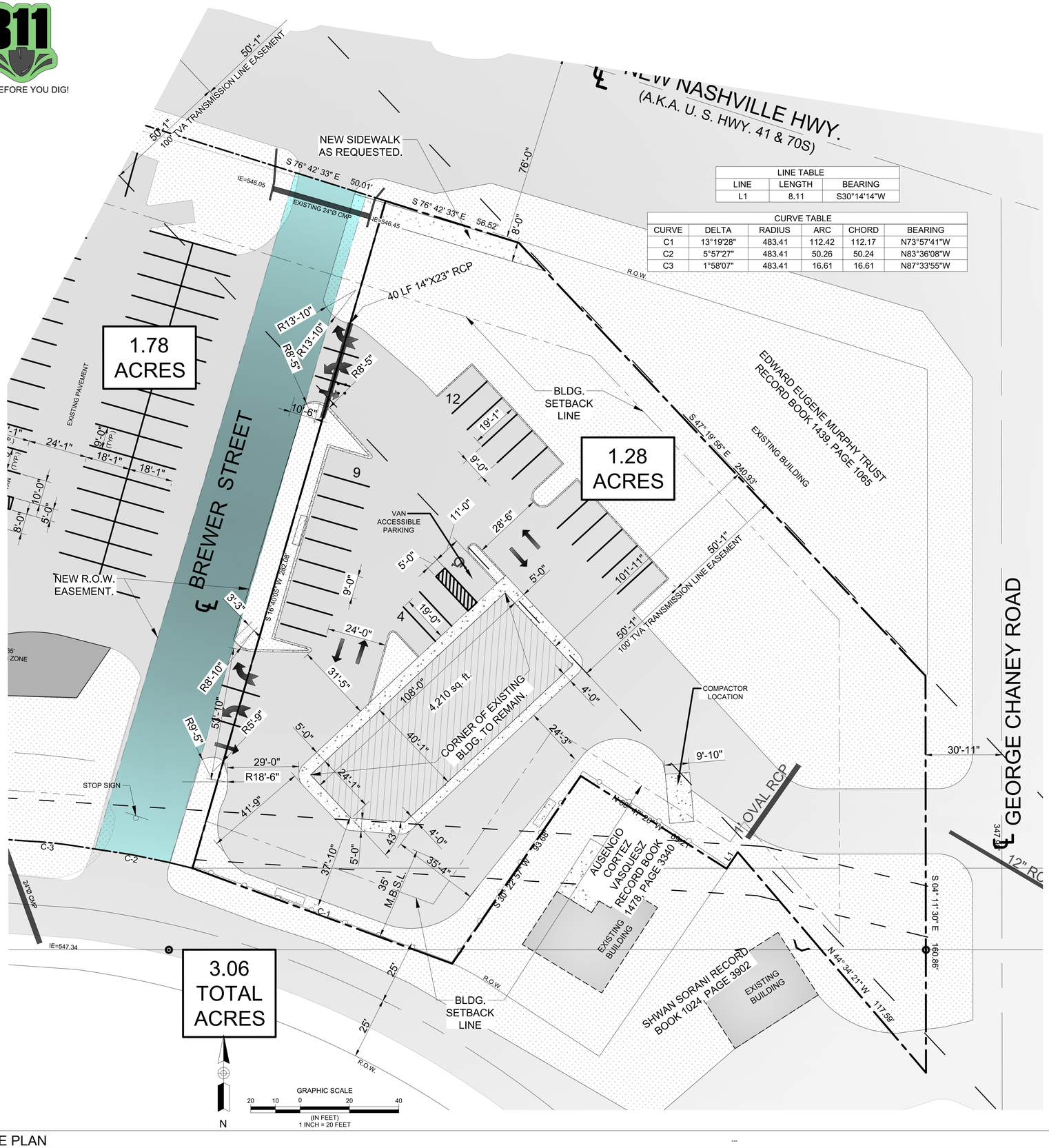
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PROPOSED NEW LAYOUT

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LINE TABLE		
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C3	1°58'07"	483.41	16.61	16.61	N87°33'55"W





RETAIL GOODS ESTABLISHMENT:

3 SPACES PER 1,000 SQUARE FEET GROSS FLOOR AREA.

4,210 sq. fT. OF RETAIL = 3 x 5,000 sq. ft. = **15 SPACES REQ'D**

THE ADA PARKING SPACE REQUIREMENTS IN TENNESSEE ALSO SPECIFY HOW MANY SPACES ARE NEEDED BASED ON THE SIZE OF THE LOT OR FACILITY. LOTS MUST HAVE AT LEAST ONE ACCESSIBLE SPOT FOR EVERY 25 COMMON SPACES (1:25). FOR ACCOMMODATIONS WITH MORE THAN 25 SPOTS, AN EXTRA ONE ADA PARKING SPACE MUST BE ADDED FOR EVERY 50 REGULAR STALLS OVER 25 (1:50).

IMPERVIOUS AREA	=	35,886.6 sq. ft.	= 0.82 acres
PERVIOUS AREA	=	26,847.3 sq. ft.	= 0.61 acres
			1.43 acres

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Registered in TN & AL

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BRENTWOOD TN 37027

CHESTER A. RHODES
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AGRICULTURE
DEPT. OF ENVIRONMENT & CONSERVATION
STATE OF TENNESSEE

11/17/2023

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RETAIL CENTER
5130 MURFREESBORO ROAD, LA VERGNE , TN 37086
SITE PLAN

DWG. No.
C-2.1

SCALE: NOTED

CADFILE: [illegible]

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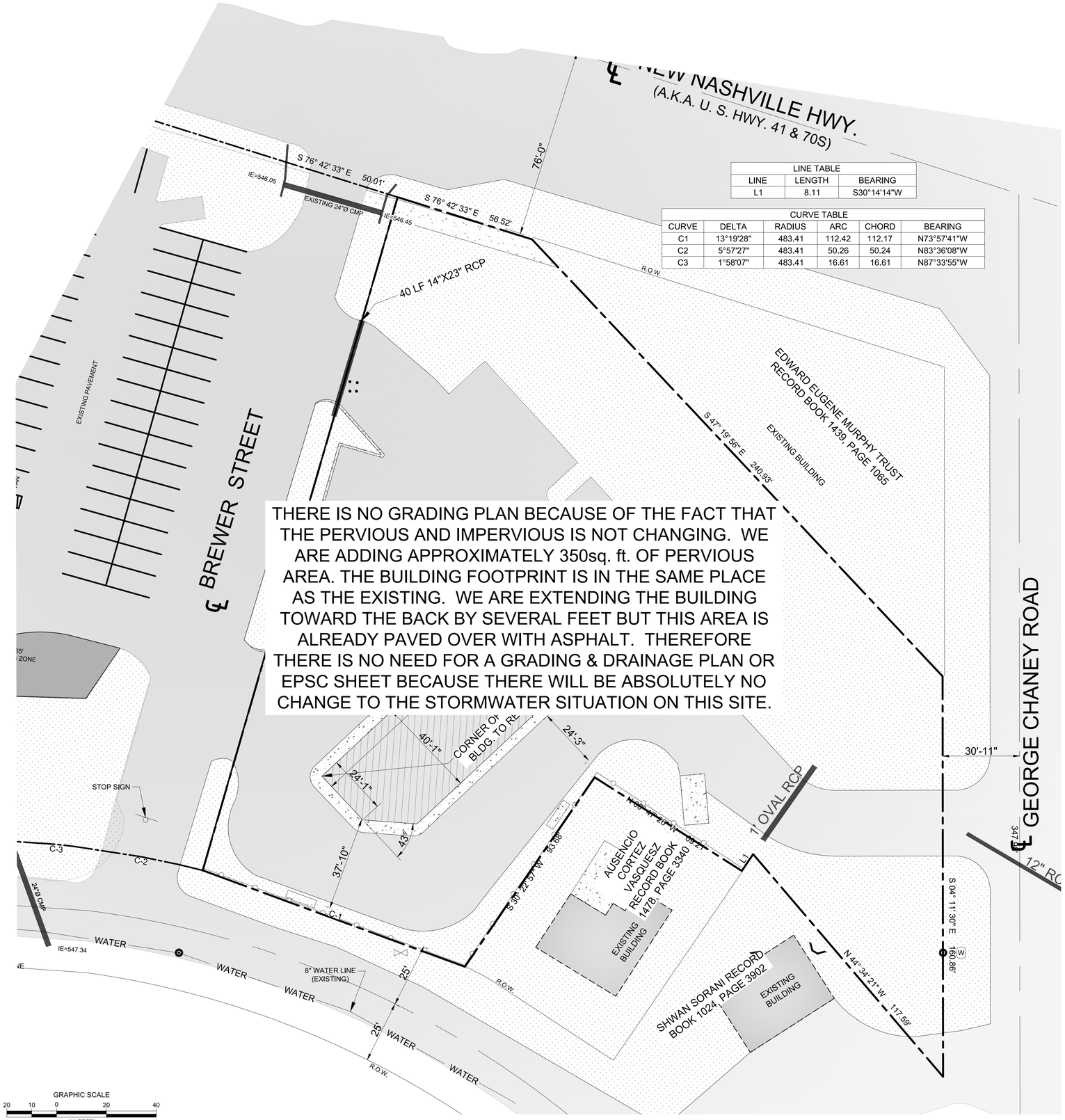
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SITE PLAN

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SITE PLAN

NOTED

OSAMA DOUS
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EMAIL: erian.g@yahoo.com

TN GROUP PROPERTIES LLC
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CHESTER A. RHODES
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AGRICULTURE
DATE
STATE OF TENNESSEE

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RETAIL CENTER
5130 MURFREESBORO ROAD, LA VERGNE, TN 37086
SITE PLAN

DWG. No.
C-2.1

SCALE: NOTED

CADFILE: I:\1-Murfreesboro Road 11 - 17 - 2023

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BRENTWOOD TN 37027

CHESTER A. RHODES — REGISTERED ENGINEER — AGRICULTURE — DATE — No. 023 — STATE OF TENNESSEE

11/17/2023

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RETAIL CENTER
5130 MURFREESBORO ROAD, LA VERGNE , TN 37086

UTILITY PLAN

DWG. No.
C-4.0

SCALE: NOTED

CADFILE: C:\ProjArchitecture Road 11 - 17 - 2023

JOB No.

REV.

PHASE I
1.46± ACRES

PHASE II
1.61± ACRES

1.74 ACRES

1.28 ACRES

0.66 TOTAL ACRES

EXISTING BUILDING (11,257 SQ.FT.)

EXISTING CONCRETE PAD

EXISTING DRIVE THRU WINDOW

EXISTING GAS METERS

EXISTING BUILDING (1,476 SQ.FT.)

EXISTING BUILDING

EXISTING 24"Ø CMP

IE=546.05

IE=546.45

40 LF 14"X23" RCP

24"Ø CMP

IE=545.99

IE=547.34

11" OVAL RCP

12" RCP

8" WATER LINE (EXISTING)

8" WATER LINE (EXISTING)

SANITARY SEWER EASEMENTS

SANITARY SEWER EASEMENTS

SANITARY SEWER EASEMENTS

TO TVA TOWER NO. 85

TO TVA TOWER NO. 84

TVA TOWER NO. 85

50'-1" 100' TVA TRANSMISSION LINE EASEMENT

50'-1" 100' TVA TRANSMISSION LINE EASEMENT

NEW NASHVILLE HWY. (A.K.A. U. S. HWY. 41 & 70S)

OLD NASHVILLE HIGHWAY

GEORGE CHANEY ROAD

BREWER STREET

NEW SIDEWALK REQUESTED.

S 75°18'50" E 49.98'

S 16°40'05" W 282.06'

A50.33' R57.28' TOTAL ARC

CONNECTION TO EXISTING BOX CULVERT

ASPHALT PAVEMENT

EDGE OF EXISTING PAVEMENT

MINIMUM BUILDING SETBACK LINE

12'X65' LOADING ZONE

20'-7"

10'-0"

10'-0"

10'-0"

10'-0"

C.O.

M.H.

M.H.

WATER

WATER

WATER

WATER

WATER

WATER

WATER

WATER

WATER

WATER

N

GRAPHIC SCALE
20 10 0 20 40
(IN FEET)
1 INCH = 20 FEET

UTILITY PLAN

NOTED

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APPROVED	CAR	00/00/00
SAVED DATE:	11/17/2023 12:03:06 PM Pwbrh	

IMPERVIOUS AREA	=	30,871.0 sq. ft.	= 0.72 acres
PERVIOUS AREA	=	25,107.1 sq. ft.	= 0.57 acres
			1.28 acres

℄ NEW NASHVILLE HWY. (A.K.A. U. S. HWY. 41 & 70S)

℄ BREWER STREET

℄ GEORGE CHANEY ROAD

R.O.W.

NEW SIDEWALK AS REQUESTED.

Existing Sign

EXISTING GAS METERS

1.78 ACRES

25,107.1 SQ. FT. = 0.57 ACRES

1.28 ACRES

31,196.1 SQ. FT. = 0.72 ACRES

EDWARD EUGENE MURPHY TRUST RECORD BOOK 1439, PAGE 1065

S 16°40'05" W 232.08'

108.0'

4,210 sq. ft.

40'-1"

CORNER OF EXISTING BLDG. TO REMAIN,

24'-3"

24'-1"

43°

37'-10"

AUSENCIO CORTEZ VASQUESZ RECORD BOOK 1478, PAGE 3340

SHIWAN SORANI RECORD BOOK 1024, PAGE 3902

VAN

RAMP UP

12'X65' LOADING ZONE

12'X65' LOADING ZONE

STOP SIGN

3.06 TOTAL

N

GRAPHIC SCALE
20 10 0 20 40
(IN FEET)
1 INCH = 20 FEET

OSAMA DOUS
RETAIL CENTER
5130 MURFREESBORO ROAD, LA VERGNE , TN 37086
PERVIOUS & IMPERVIOUS

DWG. No.
C-5.0

SCALE: NOTED

CADFILE: C:\My Architecture Dwg\11-17-...dwg

JOB No.

REV.

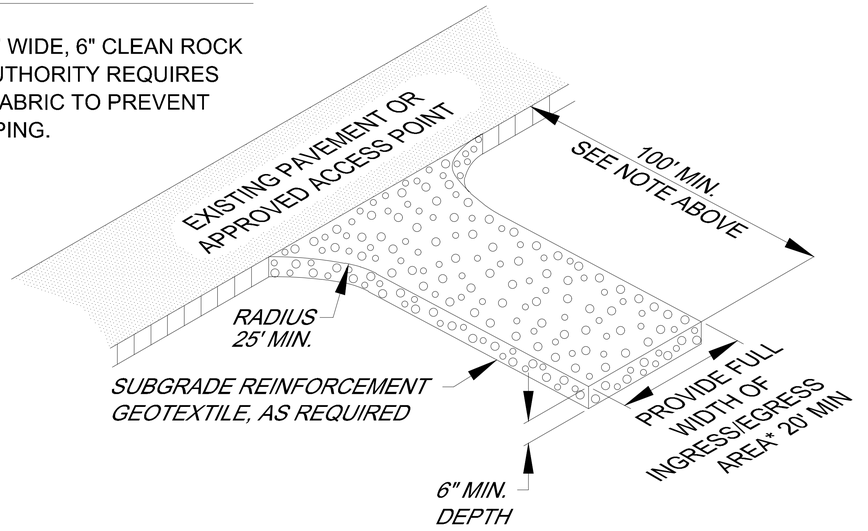
PERVIOUS & IMPERVIOUS

NOTED

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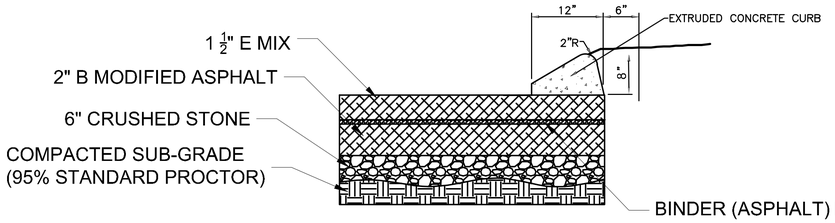
NOTE:

75' LONG BY 20' WIDE, 6" CLEAN ROCK GOVERNING AUTHORITY REQUIRES GEO-TEXTILE FABRIC TO PREVENT SUB-SOIL PUMPING.



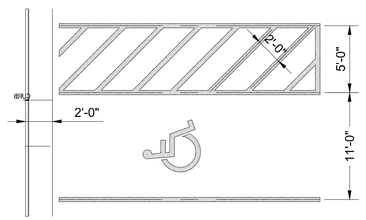
CONSTRUCTION ENTRANCE

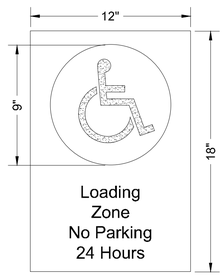
Parking Lot Paving Detail



ASPHALT CROSS SECTION

ASPHALT DETIAL & CURB

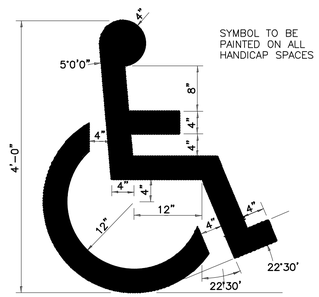




13

Scale: N.T.S. AS DIMENSIONED

ADA PARKING SPACE & SIGN



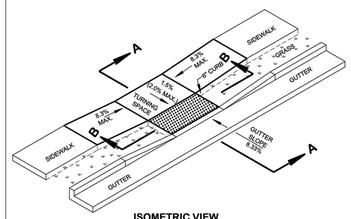
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Scale: N.T.S. AS DIMENSIONED

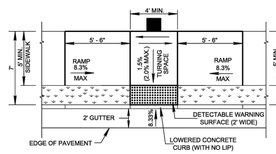
PAINTED ACCESSIBLE SYMBOL

COMBINATION CURB RAMP

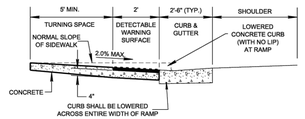
COMBINATION CURB RAMP COMBINE PARALLEL AND PERPENDICULAR CURB RAMPS INTO ONE.



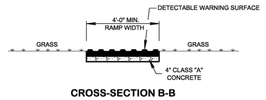
ISOMETRIC VIEW



PLAN VIEW



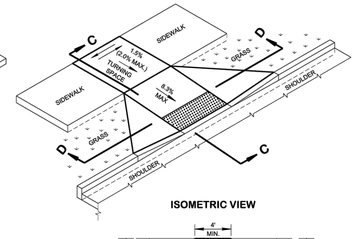
CROSS SECTION A-A



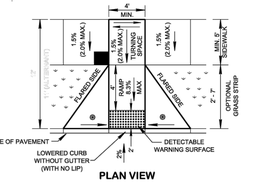
CROSS-SECTION B-B

NOT TO SCALE

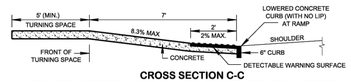
PERPENDICULAR CURB RAMP WITHOUT GUTTER PAN



ISOMETRIC VIEW

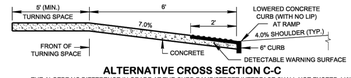


PLAN VIEW



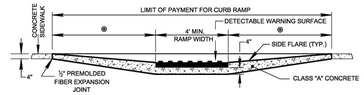
CROSS SECTION C-C

THE ALGEBRAIC DIFFERENCE IN GRADE AT THE CURB RAMP/STREET INTERFACE SHALL NOT EXCEED 11%.



ALTERNATIVE CROSS SECTION C-C

THE ALGEBRAIC DIFFERENCE IN GRADE AT THE CURB RAMP/STREET INTERFACE SHALL NOT EXCEED 11%.



CROSS-SECTION D-D

LEGEND

- ◉ DIMENSION VARIES RELATIVE TO LONGITUDINAL ROADWAY GRADE, 8.3% DESIRABLE (10.0% MAX.)
- ■ DENOTES: APPROXIMATE PEDESTRIAN POLE/PUSHBUTTON LOCATION FOR SIGNALIZED INTERSECTIONS

(A) FOR DETECTABLE WARNING SURFACE DETAILS SEE STD. DWG. RP-H-5. FOR ADDITIONAL DETAILS AND OTHER INFORMATION FOR PERPENDICULAR CURB RAMPS NOT SHOWN ON THIS DRAWING SEE STD. DWG. RP-H-4 AND FOR PARALLEL CURB RAMPS SEE STD. DWG. RP-H-5. FOR CROSSWALK MARKING DETAILS SEE STD. DWG. T-M-4.

(B) IF PERPENDICULAR CURB RAMPS AND TURNING SPACE CANNOT BE CONSTRUCTED DUE TO LIMITED RIGHT-OF-WAY, USE PARALLEL OR COMBINATION CURB RAMP INSTEAD.

(C) CARE SHALL BE TAKEN ON ALL ROADWAY CURB RAMPS AT INTERSECTIONS WITH SIDEWALK AND CURB RAMPS TO ENSURE A UNIFORM GRADE AROUND THEM. THE ROADWAY CURB RAMP GRADE SHALL BE FREE OF SAGS AND SHORT GRADE CHANGES.

(D) SIDEWALK WIDTH SHALL NOT INCLUDE 6" CONCRETE CURB. THE DESIRABLE SIDEWALK CROSS SLOPE IS 1.5 %, ABSOLUTE MAXIMUM IS 2.0%.

(E) DRAINAGE STRUCTURES SHALL NOT BE PLACED IN THE CROSSWALK OR IN FRONT OF THE CURB RAMP.

(F) TURNING SPACE \ CLEAR SPACE:

CLEAR SPACE BEYOND THE BOTTOM GRADE BREAK, A CLEAR SPACE 4' (MIN.) BY 4' (MIN.) SHALL BE PROVIDED WITHIN THE WIDTH OF THE PEDESTRIAN STREET CROSSING AND WHOLLY OUTSIDE THE PARALLEL VEHICLE TRAVEL LANE.

TURNING SPACE MUST BE PROVIDED AT THE TOP OF PERPENDICULAR CURB RAMPS. THE TURNING SPACE MUST BE 4' (MIN.) BY 4' (MIN.), AND IS PERMITTED TO OVERLAP OTHER TURNING SPACES AND CLEAR SPACES. WHERE THE TURNING SPACE IS CONSTRAINED AT THE BACK OF THE SIDEWALK, THE TURNING SPACE MUST BE 4' (MIN.) BY 5' (MIN.), WITH THE 5' DIMENSION PROVIDED IN THE DIRECTION OF THE RAMP RUN.

FOR PARALLEL CURB RAMPS, A TURNING SPACE 4' (MIN.) BY 4' (MIN.) SHALL BE PROVIDED AT THE BOTTOM OF THE CURB RAMP AND SHALL BE PERMITTED TO OVERLAP OTHER TURNING SPACES AND CLEAR SPACES. IF THE TURNING SPACE IS CONSTRAINED ON 2 OR MORE SIDES, THE TURNING SPACE SHALL BE 4' (MIN.) BY 5' (MIN.). THE 5' DIMENSION SHALL BE PROVIDED IN THE DIRECTION OF THE PEDESTRIAN STREET CROSSING.

(G) GRADE BREAKS:

GRADE BREAKS AT THE TOP AND BOTTOM OF CURB RAMP RUNS SHALL BE PERPENDICULAR TO THE DIRECTION OF THE CURB RAMP RUN. GRADE BREAKS SHALL NOT BE PERMITTED ON THE SURFACE OF CURB RAMP RUNS AND TURNING SPACES. SURFACE SLOPES THAT MEET AT GRADE BREAKS SHALL BE FLUSH.

WHERE THE END OF BOTTOM GRADE BREAK ARE BEHIND THE BACK OF CURB AND THE DISTANCE FROM EITHER END OF THE BOTTOM GRADE BREAK TO THE BACK OF CURB IS 5' OR LESS, DETECTABLE WARNING SURFACES SHALL BE PLACED ON THE CURB RAMP RUN WITHIN ONE DOME SPACING OF THE BOTTOM GRADE BREAK.

(H) PEDESTRIAN SIGNAL PUSHBUTTON:

WHERE PEDESTRIAN SIGNALS ARE PROVIDED AT PEDESTRIAN STREET CROSSINGS, THEY SHALL INCLUDE ACCESSIBLE PEDESTRIAN SIGNALS AND POLE/PEDESTRIAN PUSHBUTTONS COMPLYING WITH SECTIONS 4E.08 THROUGH 4E.13 OF THE MUTCD. FOR DETAILS OF THE PLACING OF PEDESTRIAN SIGNAL PUSHBUTTONS SEE TDOT TRAFFIC DESIGN MANUAL.

WHEN TWO PEDESTRIAN PUSHBUTTONS ARE ON ONE CORNER THEY WILL BE SEPARATED BY 10 FEET.

(I) PAYMENT:

COST OF CURB AND GUTTER TO BE INCLUDED IN THE PRICE OF ITEM NO. 702-01, CONCRETE CURB, PER C. Y. OR ITEM NO. 702-03, CONCRETE COMBINED CURB & GUTTER, PER C. Y.

NEW CURB RAMPS:
ALL COSTS OF INSTALLING CURB RAMP(S), INCLUDING DETECTABLE WARNING SURFACE(S) IN NEWLY CONSTRUCTED SIDEWALK AREAS, SHALL BE PAID BY ITEM NO. 701-02.03, CONCRETE CURB RAMP, PER SQUARE FOOT.

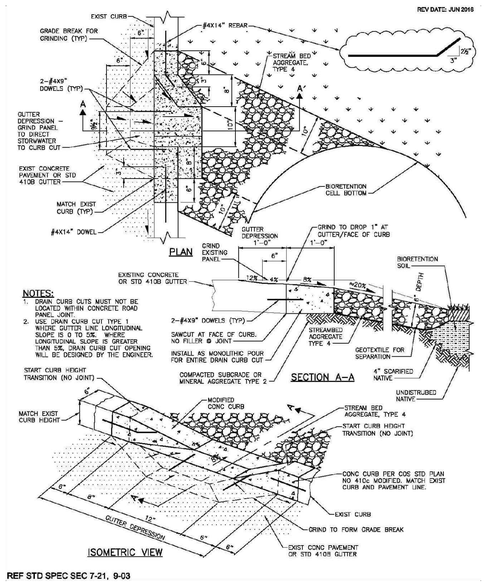
PAYMENT SHALL INCLUDE ALL MATERIALS, EQUIPMENT, AND LABOR NECESSARY FOR CONSTRUCTION OF THE CURB RAMP(S), INCLUDING INSTALLATION OF DETECTABLE WARNING SURFACE(S).

CURB RAMPS (RETROFIT):
ALL COSTS OF INSTALLING CURB RAMP(S), INCLUDING DETECTABLE WARNING SURFACE(S) IN EXISTING SIDEWALK AREAS, REMOVAL OF THE EXISTING SIDEWALK, AND ADJUSTMENT OF GUTTER PAN SLOPE, SHALL BE PAID BY ITEM NO. 701-02.01, CONCRETE CURB RAMP (RETROFIT), PER SQUARE FOOT.

PAYMENT SHALL INCLUDE ALL MATERIALS, EQUIPMENT, AND LABOR INSTALLATION OF CURB RAMP(S), INCLUDING INSTALLATION OF DETECTABLE WARNING SURFACE(S).

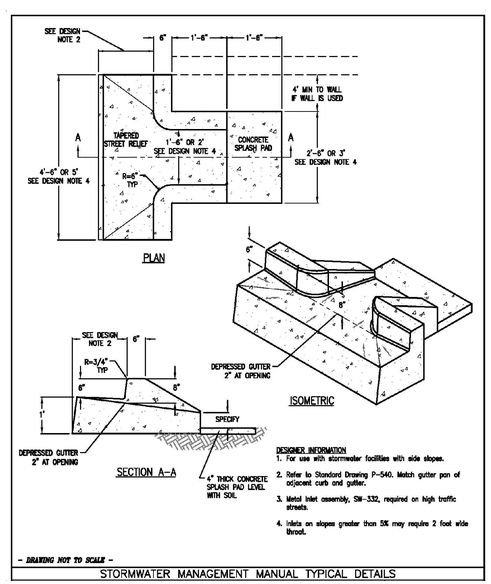
(J) TRANSITION GUTTER CROSS SLOPE FROM NORMAL SLOPE TO 5% SIMILAR TO SUPERELEVATION TRANSITION AREAS. MATCH GUTTER TRANSITION TO RAMP FLARES FOR PERPENDICULAR CURB RAMP (TYPICAL 8') OR RAMP AREA FOR COMBINATION CURB RAMP (TYPICAL 5'-8").

STANDARD CONCRETE SIDEWALK



REF STD SPEC SEC 7-21, 9-03

DRAIN CURB CUT TYPE 1



STORMWATER MANAGEMENT MANUAL TYPICAL DETAILS

DRAIN CURB CUT TYPE 2

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SITE DETAILS

DWG. No.
C-6.0

SCALE: NOTED

CADFILE: [illegible]

JOB No.

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TYPICAL ADA PARKING SPACE SIGNAGE

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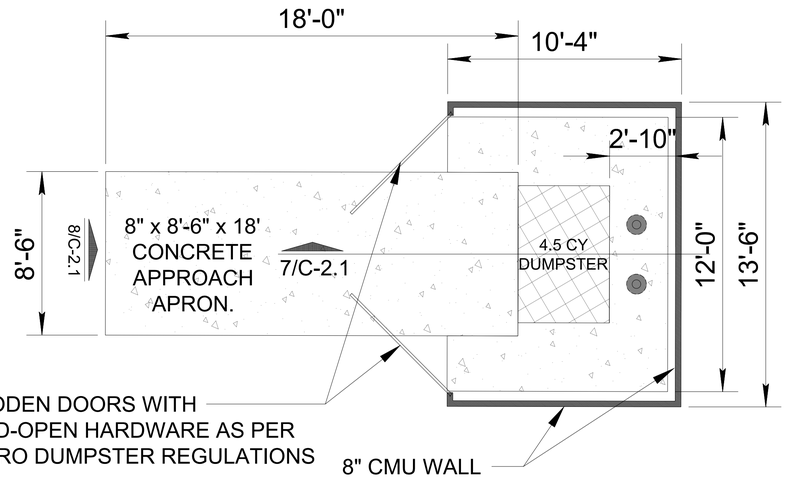
ADA PARKING SPACE SIGNAGE

SCALE: N.T.S.



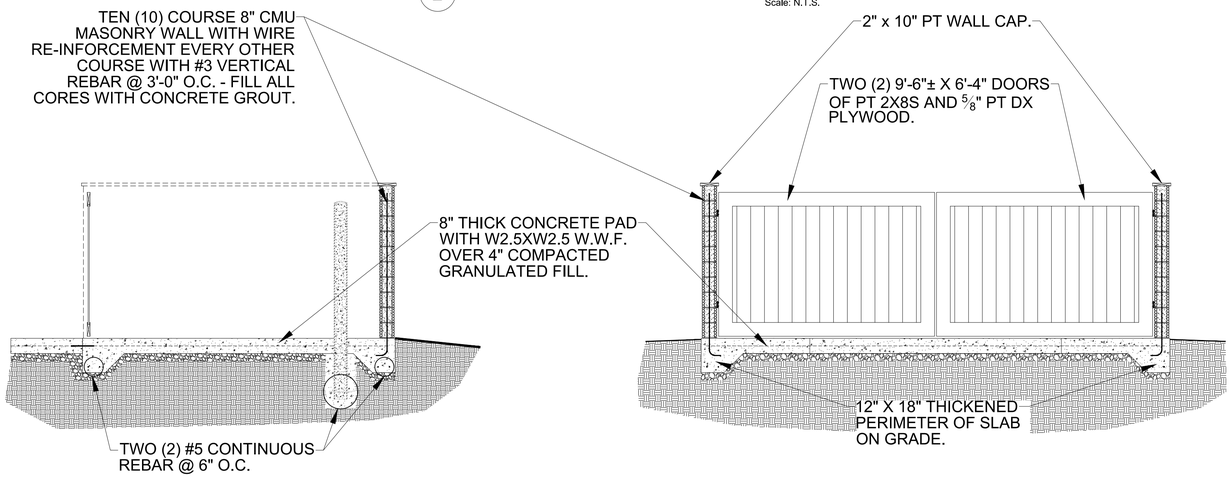
ADA PARKING SPACE SIGNAGE

SCALE: N.T.S.



2 DUMPSTER & DUMPSTER APPROACH

Scale: N.T.S.



3 DUMPSTER ENCLOSURE SECTION

Scale: N.T.S.

4 DUMPSTER FRONT ELEVATION / SECTION

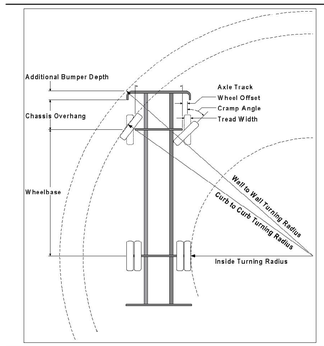
Scale: N.T.S.

Pierce

Turning Performance Analysis 5/3/2011

Bid Number: 253
Department:

Chassis: Velocity Chassis, Aerials, Tandem 48K, PUC (Big Block), 2010
Body: Aerial, HD Ladder 105', PUC, Alum Body



Parameters:

Inside Cramp Angle:	45°
Axle Track:	82.92 in.
Wheel Offset:	5.3 in.
Tread Width:	17.4 in.
Chassis Overhang:	78 in.
Additional Bumper Depth:	7 in.
Front Overhang:	85 in.
Wheelbase:	256.5 in.

Calculated Turning Radii:

Inside Turn:	20 ft, 2 in.
Curb to curb:	36 ft, 7 in.
Wall to wall:	40 ft, 11 in.

Comments:

Note: Truck Length is 42'

CategoryID	Category Description	OptionCode	OptionDescription
6	Axle, Front, Custom	0508849	Axle, Front, Oshkosh TAK-4, Non Drive, 22,800 lb, Imp/Vel/Dash CF
30	Wheels, Front	0019618	Wheels, Front, Alcoa, 22.50" x 13.00", Aluminum, Hub Pilot
31	Tires, Front	0594821	Tires, Front, Goodyear, G296 MSA, 425/65R22.50, 20 ply
38	Bumpers	0123628	Bumper, Non-extended, Imp/Vel
437	Aerial Devices	0592925	Aerial, 105' Heavy Duty Ladder

Notes:

Actual Inside Cramp Angle may be less due to highly specialized options.

Curb to Curb turning radius calculated for a 9.00 inch curb.

1 AUTOTURN DETAIL

Scale: N.T.S.

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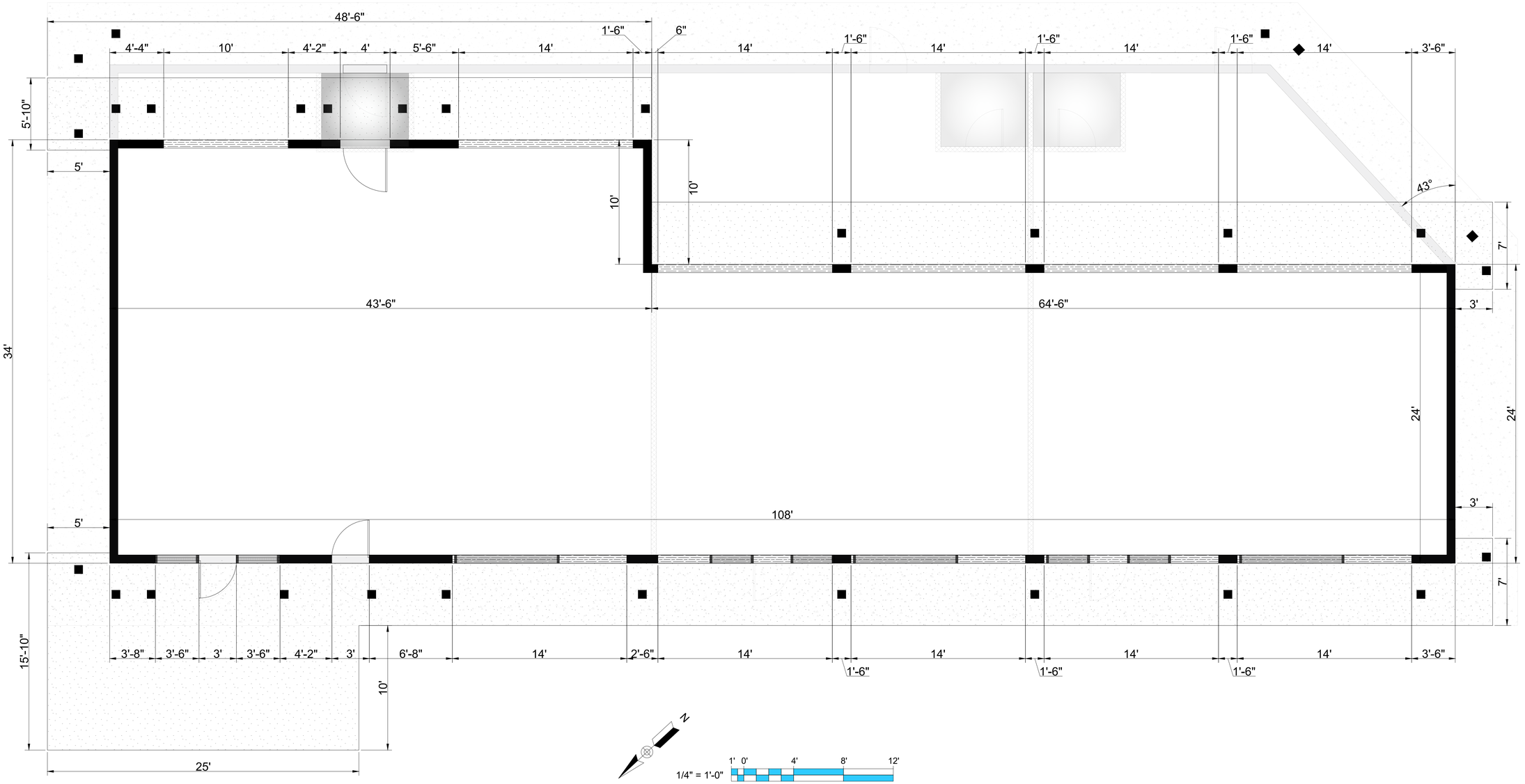
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EXISTING FLOOR PLAN

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EXISING FLOOR PLAN

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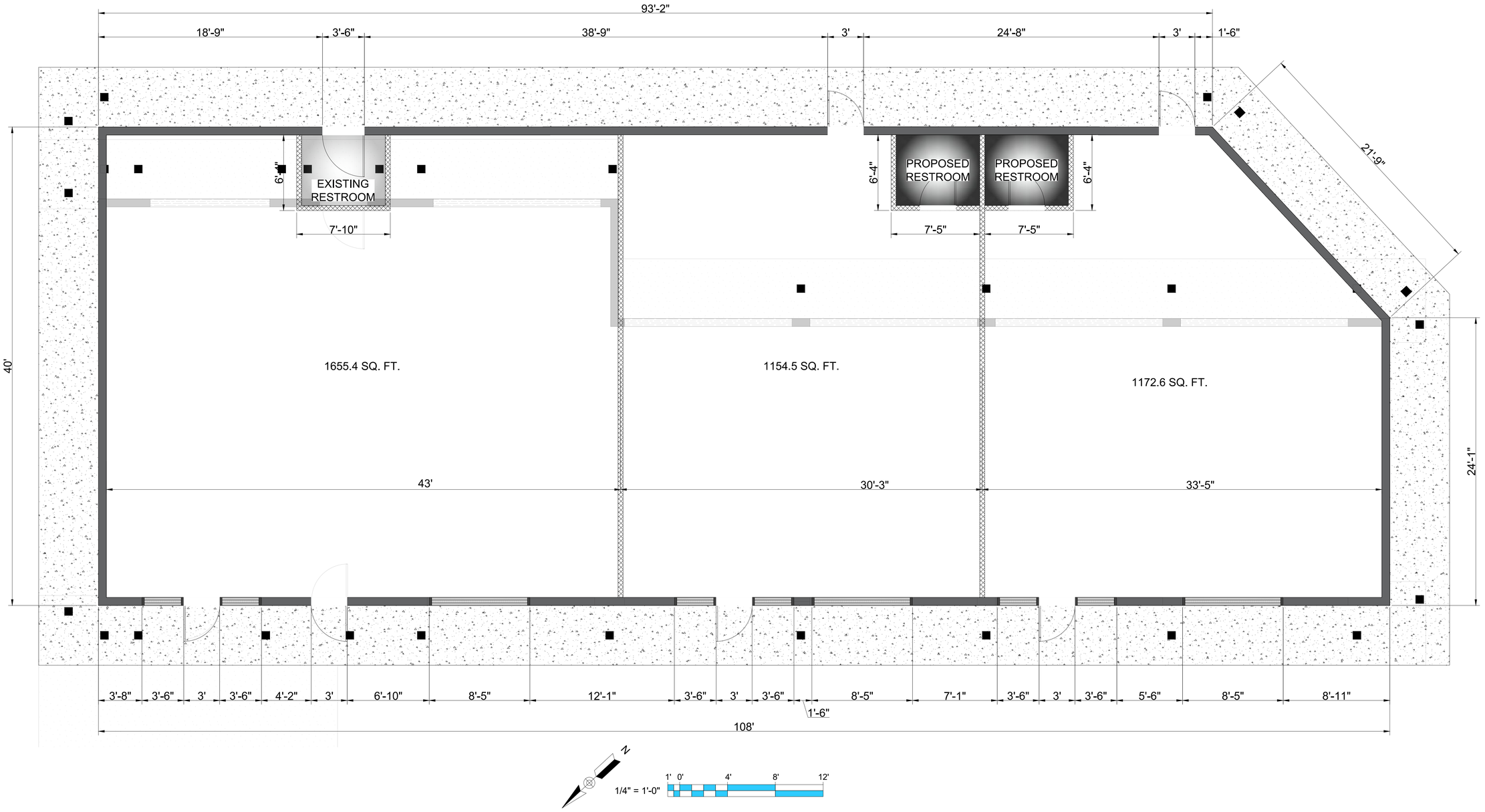
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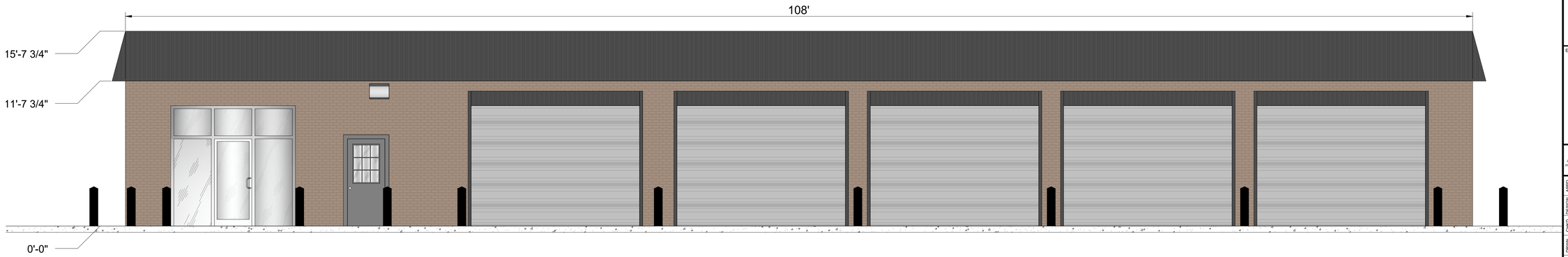
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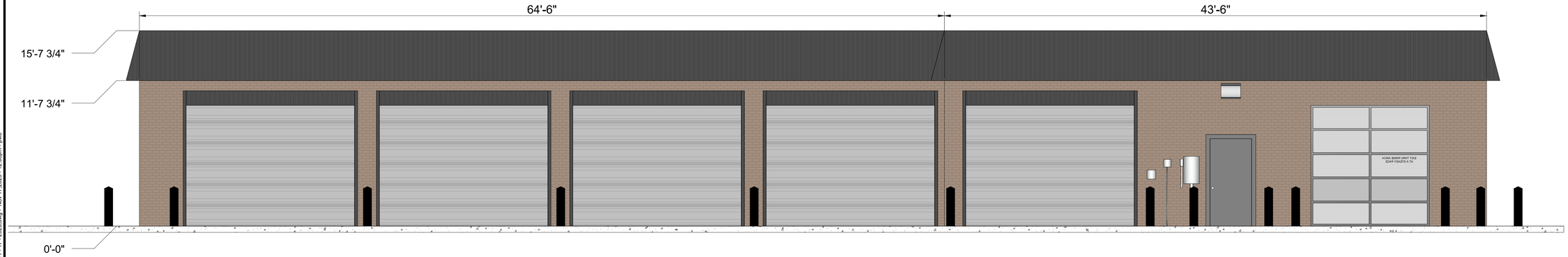
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1 FRONT ELEVATION
SCALE: 1/4" = 1'-0"

1/4" = 1'-0"





2 REAR ELEVATION
SCALE: 1/4" = 1'-0"

1/4" = 1'-0"



EXISTING FRONT & REAR ELEVATION

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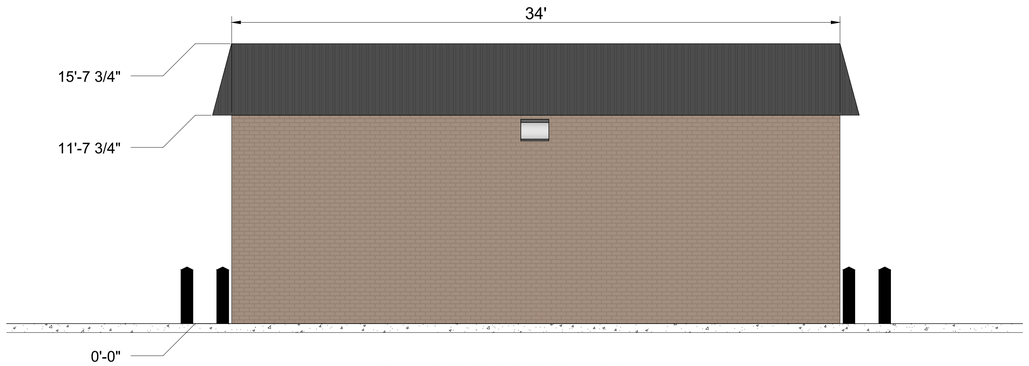
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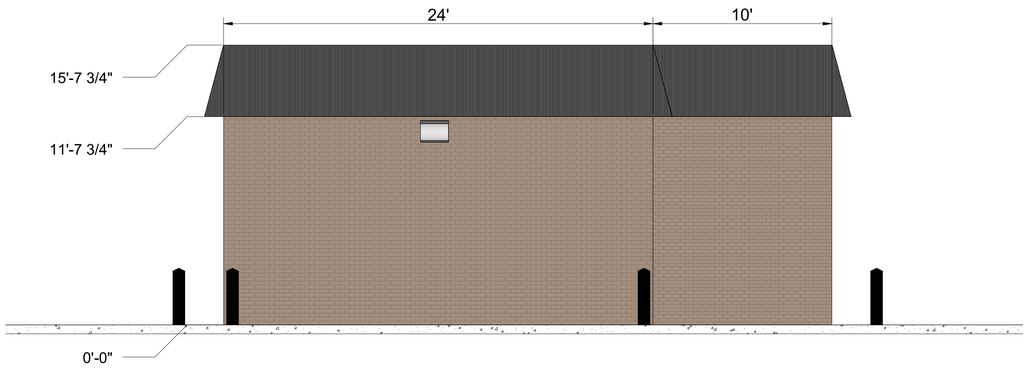
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1 LEFT SIDE ELEVATION
SCALE: 1/4" = 1'-0"

1/4" = 1'-0" 1' 0' 4' 8' 12'



2 RIGHT SIDE ELEVATION
SCALE: 1/4" = 1'-0"

1/4" = 1'-0" 1' 0' 4' 8' 12'

EXISTING LEFT SIDE & RIGHT SIDE ELEVATIONS

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TN GROUP PROPERTIES LLC
9402 PLACID CT.
BRENTWOOD TN 37027

CHESTER A. RHODES — REGISTERED PROFESSIONAL ENGINEER — AGRICULTURE — No. 102511 — STATE OF TENNESSEE

11/17/2023

ENGINEER:
RHODES ENGINEERING AND ENVIRONMENTAL SERVICES, LLC
PHONE: 615.480.7535
EMAIL: RhodesEngineering@gmail.com
1117 WHITNEY DRIVE
COLUMBIA, TN 38401
CIVIL ENVIRONMENTAL
SITE DEVELOPMENT WATER/WASTEWATER

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No.	REVISIONS	DATE	DRWN	CHKD	DESIGN	APPD

APPROVAL		
DRAWN	PWB	00/00/0000
DESIGN	ATD	00/00/00
CHECKED	CAR	00/00/00
APPROVED	CAR	00/00/00
SAVED DATE:	11/17/2023 12:03:06 PM Pwbrh	

OSAMA DOUS
RETAIL CENTER
5130 MURFREESBORO ROAD, LA VERGNE, TN 37086

EXISTING LEFT SIDE & RIGHT SIDE ELEVATIONS

DWG. No.
A-2.1

SCALE: NOTED

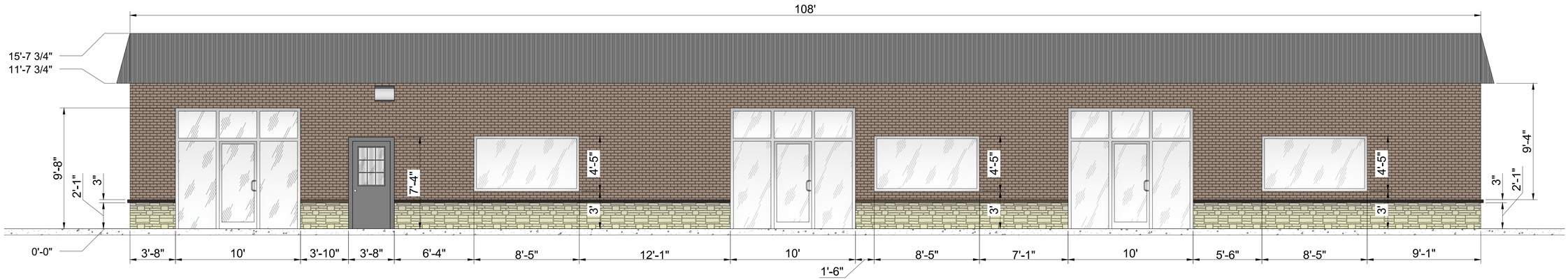
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JOB No.

REV.

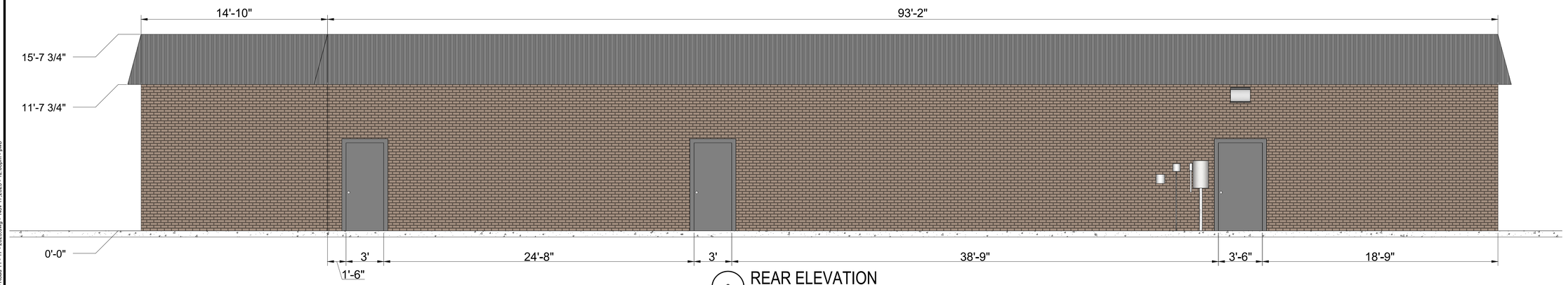
C:\Users\pwbrh\AppData\Local\Temp\AcPublish_31420\5130_Murfreesboro Road 11 - 17 - 2023.dwg - Nov 17 2023 - 12:08pm - pwb

CALL BEFORE YOU DIG!



1 FRONT ELEVATION
SCALE: 1/4" = 1'-0"

1/4" = 1'-0" (1' 0' 4' 8' 12')



2 REAR ELEVATION
SCALE: 1/4" = 1'-0"

1/4" = 1'-0" (1' 0' 4' 8' 12')

PROPOSED FRONT & REAR ELEVATION

NOTED

OSAMA DOUS
902 OLACID COURT
BRENTWOOD, TN 37027
Ph # 615-423-4519
EMAIL: erian.g@yahoo.com

TN GROUP PROPERTIES LLC
9402 PLACID CT.
BRENTWOOD TN 37027

CHESTER A. RHODES — REGISTERED PROFESSIONAL ENGINEER — AGRICULTURE — CIVIL — ENVIRONMENTAL — STATE OF TENNESSEE

11/17/2023

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OSAMA DOUS
RETAIL CENTER
5130 MURFREESBORO ROAD, LA VERGNE, TN 37086
PROPOSED FRONT & REAR ELEVATIONS

DWG. No.
A-3.0

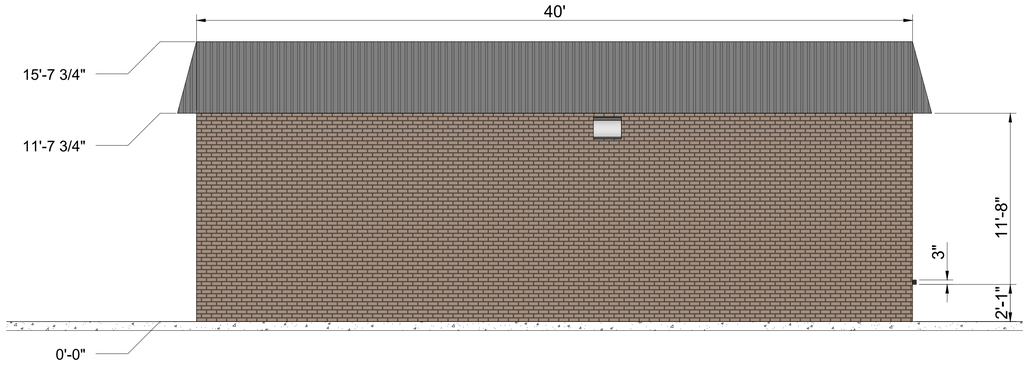
SCALE: NOTED

CADFILE: 5130_Murfreesboro Road 11 - 17 - 2023

JOB No.

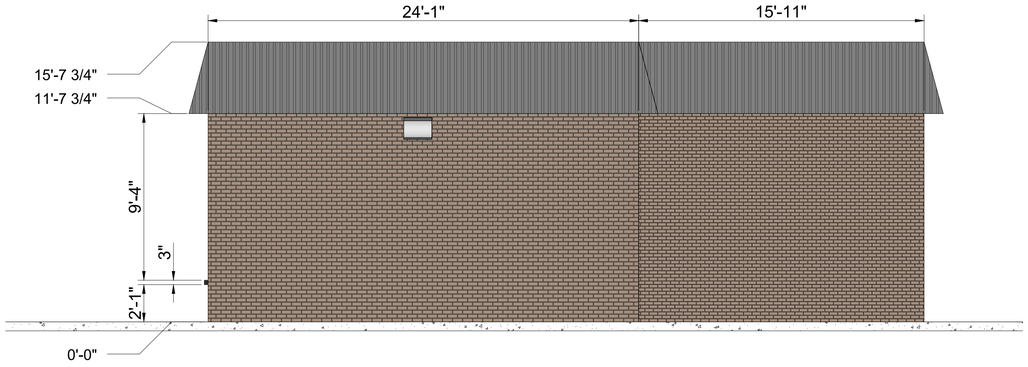
REV.

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1 LEFT SIDE ELEVATION
SCALE: 1/4" = 1'-0"

1/4" = 1'-0" 1' 0' 4' 8' 12'



2 RIGHT SIDE ELEVATION
SCALE: 1/4" = 1'-0"

1/4" = 1'-0" 1' 0' 4' 8' 12'

PROPOSED LEFT SIDE & RIGHT SIDE ELEVATIONS

NOTED

CALL BEFORE YOU DIG!

OSAMA DOUS
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BRENTWOOD, TN 37027
Ph # 615-423-4519
EMAIL: erian.g@yahoo.com

TN GROUP PROPERTIES LLC
9402 PLACID CT.
BRENTWOOD TN 37027

CHESTER A. RHODES — REGISTERED PROFESSIONAL ENGINEER — AGRICULTURAL — STATE OF TENNESSEE

11/17/2023

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SAVED DATE:	11/17/2023 12:03:06 PM Pwbrh	

OSAMA DOUS
RETAIL CENTER
5130 MURFREESBORO ROAD, LA VERGNE , TN 37086

PROPOSED LEFT SIDE & RIGHT SIDE ELEVATIONS

DWG. No.
A-3.1

SCALE: NOTED

CADFILE: 5130_Murfreesboro Road 11 - 17 - 2023

JOB No.

REV.

U:\pwb\pwbrh\AppData\Local\Temp\AcPublish_31420\5130_Murfreesboro Road 11 - 17 - 2023.dwg - Nov 17 2023 - 12:08pm - pwb

Planning Commission Report
Meeting: December 26, 2023

City of La Vergne

Item #: 9.

Item Title: Final Plat - Co-Op Business Park - Three Lots on 114.8 Acres. Requested by Barge Design Solutions. Property located on Old Waldron Road (Tax Map 15, Parcels 24 & 28). I-2 (Heavy Industrial) Zoning District. Property owned by Tennessee Farmers Cooperative, Inc.

Reviewed By:
Gary Lide, City Engineer
Bo Logan, City Planner

Summary: On behalf of their client, Kimley-Horn is requesting approval of the final plat for the Co-Op Business Park located on 114 ± acres. The purpose of the preliminary plat is to create three new lots to make way for new industrial development.

The property is located off Waldron and Old Waldron Roads. The proposed layout on the concept plan shows nine (9) new buildings are indicated for the new parcels that will be created. Together, these nine (9) proposed buildings total over 1,081,000 square feet (1.08 million square feet) of new industrial space.

The project will have nine phases as well. The applicant will be submitting nine separate site plans as time goes on - one site plan for each phase.

The new parcels will be served via a new internal road to be installed by the developer. This road will be a private road.

Staff Recommendation:

Staff Comments / Technical Items:

Planning
Bo Logan
blogan@lavergnetn.gov

Jake Blair
jblair@lavergnetn.gov

Engineering

Gary Lide
glide@lavergnetn.gov

All Engineering comments addressed.

Utilities

Scott Tatalovich
statalovich@lavergnetn.gov

Items addressed

Codes

No comments

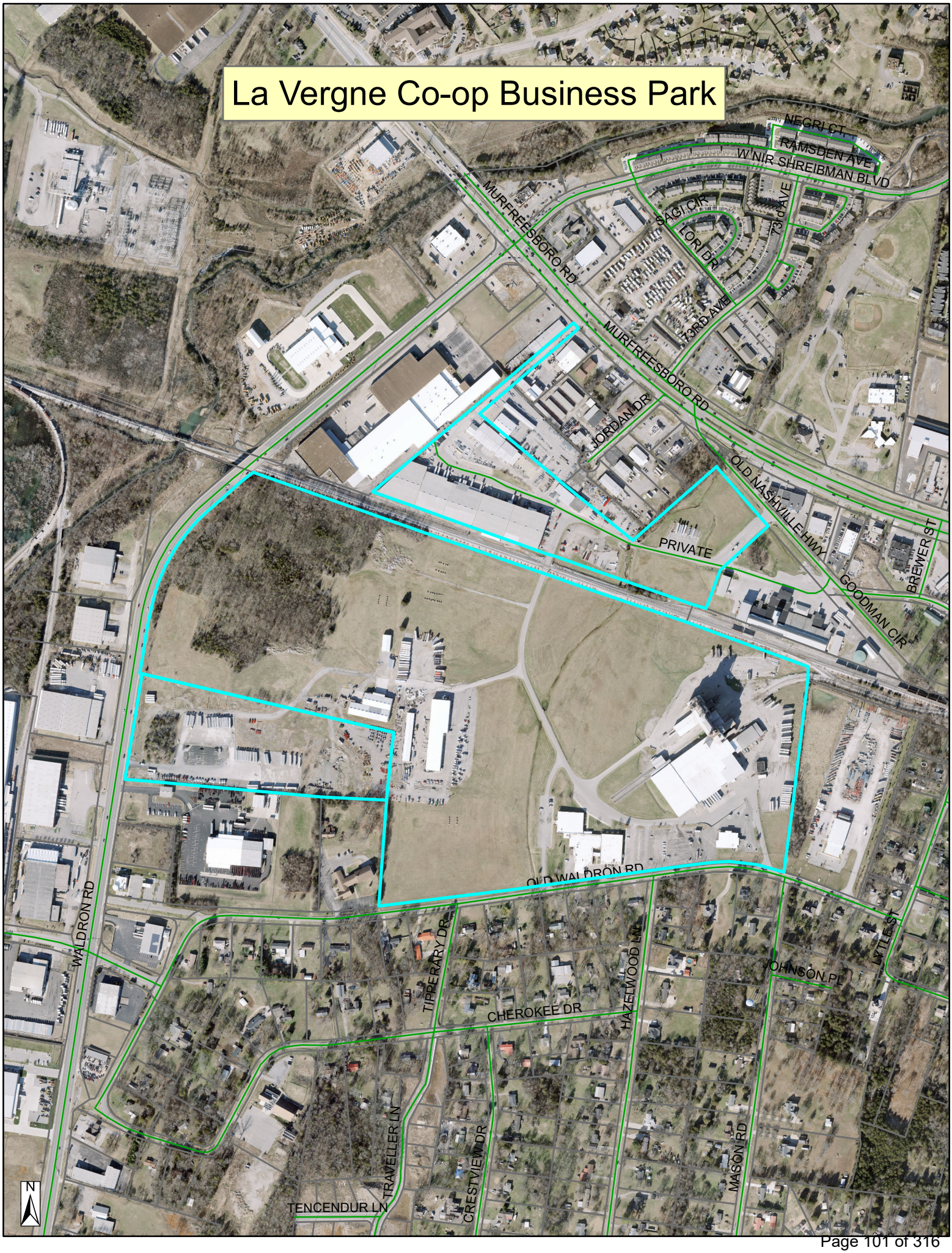
Fire

Curtis Brinkley
cbrinkley@lavergnetn.gov

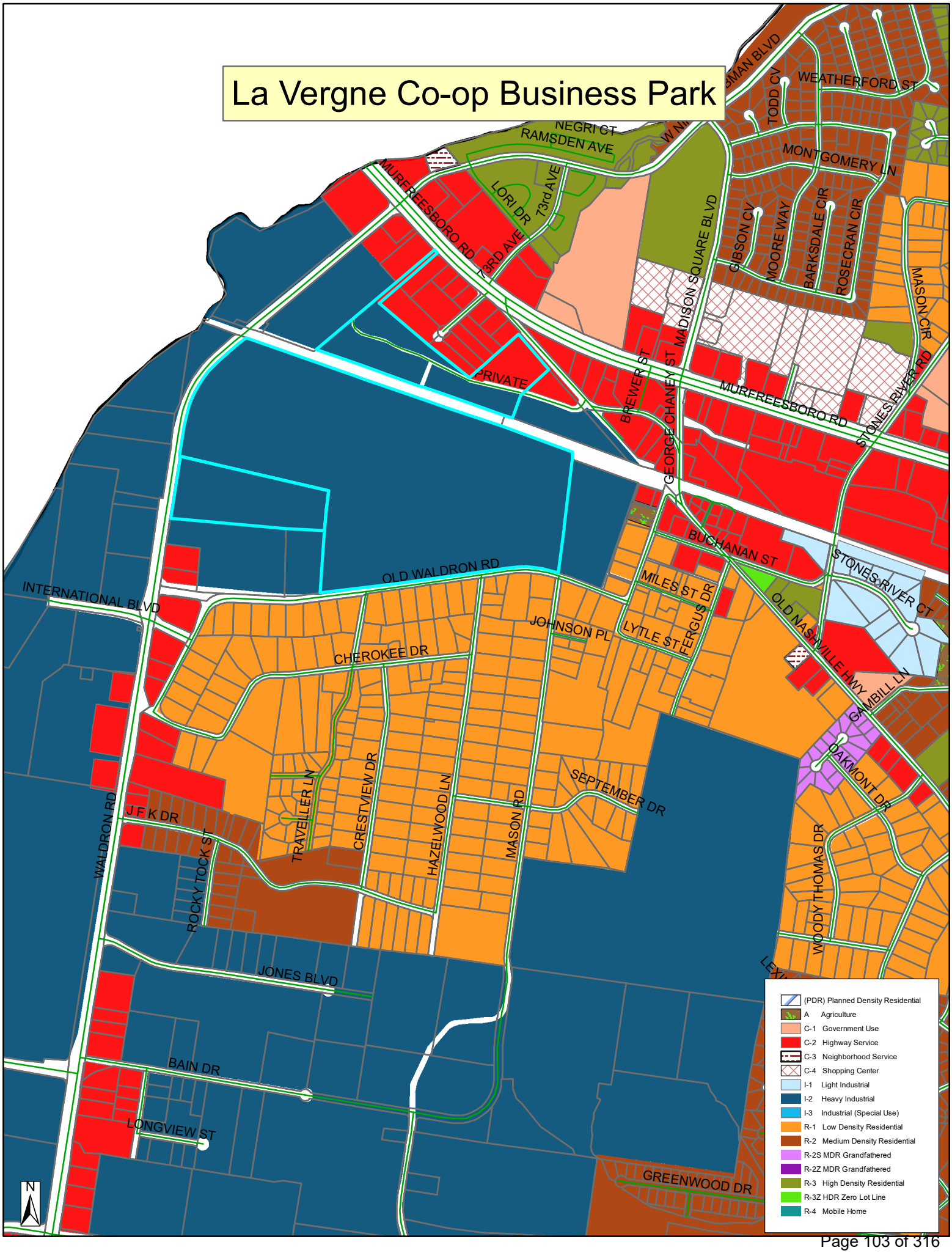
Police

John Eubank
jeubank@lavergnetn.gov

***Note:** The above technical items may not be the only corrections and/or issues needing to be resolved to get approval from the planning commission. New items can be brought up at the workshop and staff can add items at any time that might have been overlooked. It is the applicant's responsibility to make sure that all technical items are addressed and that no new issues exist before the planning commission meeting. Addressing all technical items does not constitute approval. It is the planning commission's decision whether an item passes or fails. Revised plans are due to staff by the following Monday at close of business unless other arrangements are made and documented.


La Vergne Co-op Business Park
NEGRI CT
RAMSDEN AVE
W NIR SHREIBMAN BLVD
MURFREESBORO RD
SAGI CIR
LORI DR
73RD AVE
JORDAN DR
PRIVATE
OLD NASHVILLE HWY
BREWER ST
GOODMAN CIR
OLD WALDRON RD
WALDRON RD
TIPPERARY DR
CHEROKEE DR
HAZELWOOD LN
JOHNSON PL
LYTLE ST
TRAVELLER LN
CRESTVIEW DR
TENCENDUR LN
MASON RD
N


La Vergne Co-op Business Park
W NIR SHREIBMAN BLVD
ROSECRAN CIR
NEGRI CT
RAMSDEN AVE
LORI DR
73rd AVE
JORDAN DR
73RD AVE
GIBSON CV
MOORE WAY
MADISON SQUARE BLVD
MURFREESBORO RD
MURFREESBORO RD
BREWER ST
PRIVATE
ED MILLER DR
OLD NASHVILLE HWY
OLD WALDRON RD
MILES ST
FERGUS DR
JOHNSON PL
LYTLE ST
INTERNATIONAL BLVD
CHEROKEE DR
WALDRON RD
J F K DR
TRAVELLER LN
CRESTVIEW DR
HAZELWOOD LN
MASON RD
SEPTEMBER DR
ROCKY TOOK ST
JONES BLVD
BRIDGESTONE PKWY
BAIN DR
CENTENNIAL DR
N


La Vergne Co-op Business Park
NEGRI CT
RAMSDEN AVE
MURFREESBORO RD
LORI DR
73rd AVE
TODD CV
WEATHERFORD ST
MONTGOMERY LN
GIBSON CV
MOORE WAY
BARKSDALE CIR
ROSECRAN CIR
MASON CIR
MADISON SQUARE BLVD
PRIVATE
BREWER ST
GEORGE CHANEY ST
STONES RIVER RD
BUCHANAN ST
STONES RIVER CT
OLD WALDRON RD
INTERNATIONAL BLVD
MILES ST
FERGUS DR
LYTLE ST
JOHNSON PL
OLD NASHVILLE HWY
CAMBILL LN
CHEROKEE DR
OAKMONT DR
SEPTEMBER DR
WALDRON RD
J F K DR
ROCKY TOCK ST
TRAVELLER LN
CRESTVIEW DR
HAZELWOOD LN
MASON RD
WOODY THOMAS DR
JONES BLVD
BAIN DR
LONGVIEW ST
GREENWOOD DR
N
(PDR) Planned Density Residential
A Agriculture
C-1 Government Use
C-2 Highway Service
C-3 Neighborhood Service
C-4 Shopping Center
I-1 Light Industrial
I-2 Heavy Industrial
I-3 Industrial (Special Use)
R-1 Low Density Residential
R-2 Medium Density Residential
R-2S MDR Grandfathered
R-2Z MDR Grandfathered
R-3 High Density Residential
R-3Z HDR Zero Lot Line
R-4 Mobile Home









CURVE TABLE

CURVE	DELTA	RADIUS	TANGENT	ARC	CHORD BEARING	CHORD
C-1	20° 55' 11"	756.00'	139.57'	276.03'	N 87° 31' 50" W	274.50'
C-2	40° 49' 10"	916.00'	340.83'	652.59'	N 29° 24' 08" E	638.88'
C-3	14° 10' 53"	90.43'	11.25'	22.38'	N 12° 59' 54" E	22.33'
C-4	56° 42' 37"	43.50'	23.48'	43.06'	N 33° 05' 21" E	41.32'
C-5	49° 16' 39"	63.50'	29.12'	54.61'	N 33° 35' 40" E	52.95'

LINE TABLE

LINE	BEARING	CHORD
L-1	N 78° 29' 20" W	87.09'
L-2	N 77° 04' 15" W	40.88'
L-3	S 20° 05' 21" W	136.83'
L-4	S 76° 38' 31" E	9.52'
L-5	N 09° 17' 41" E	163.90'
L-6	N 15° 47' 55" E	16.37'
L-7	N 08° 57' 21" E	92.45'
L-8	N 05° 29' 00" E	79.43'

LAND AREA TABLE

LOT 1 AREA= 1,693,895 SQ. FT., OR 38.89 ACRES +/-
LOT 2 AREA= 1,392,116 SQ. FT., OR 31.96 ACRES +/-
LOT 3 AREA= 1,911,591 SQ. FT. OR 43.88 ACRES +/-
DEDICATED R.O.W. AREA= 3,139 SQ. FT., OR 0.07 ACRE +/-
GRAND TOTAL AREA= 5,000,741 SQ. FT., OR 114.80 ACRES +/-

CERTIFICATE OF APPROVAL FOR RECORDING

I HEREBY CERTIFY THAT THE SUBDIVISION PLAT SHOWN HEREON HAS BEEN FOUND TO COMPLY WITH THE LA VERGNE SUBDIVISION REGULATIONS WITH THE EXCEPTION OF SUCH VARIANCES, IF ANY, AS ARE NOTED IN THE MINUTES OF THE PLANNING COMMISSION, AND THAT IT HAS BEEN APPROVED FOR RECORDING IN THE OFFICE OF THE COUNTY REGISTER.

DATE: _____ _____
SECRETARY, PLANNING COMMISSION

CERTIFICATE OF SURVEY ACCURACY

I (WE) HEREBY CERTIFY THAT TO THE BEST OF MY (OUR) KNOWLEDGE AND BELIEF THIS IS A TRUE AND ACCURATE SURVEY OF THE PROPERTY SHOWN HEREON; THAT THIS IS A CATEGORY "I" LAND SURVEY AS DEFINED IN TITLE 62, CHAPTER 18, TENNESSEE CODE ANNOTATED, AND THAT THE RATIO OF PRECISION IS GREATER THAN OR EQUAL TO 1:10,000.

BARGE DESIGN SOLUTIONS, INC.
NASHVILLE, TENNESSEE

BY: _____ DATE: DECEMBER 18, 2023

TN. LIC. NO. 1634

JAMES M. OVEREEM — REGISTERED — AGRICULTURE — CERTIFICATE NUMBER — 12/18/2023 — TENNESSEE NO. 1634

CERTIFICATE OF OWNERSHIP AND DEDICATION

I (WE) HEREBY CERTIFY THAT I AM (WE ARE) THE OWNER(S) OF THE PROPERTY SHOWN AND DESCRIBED HEREON AS EVIDENCED IN BOOK NUMBER 117, PAGE 369, COUNTY REGISTERS OFFICE, AND THAT I (WE) HEREBY ADOPT THIS PLAN OF SUBDIVISION WITH MY (OUR) FREE CONSENT, ESTABLISH THE MINIMUM BUILDING RESTRICTION LINES, AND THAT OFFERS OR IRREVOCABLE DEDICATION FOR ALL PUBLIC WAYS, UTILITIES, AND OTHER FACILITIES HAVE BEEN FILED.

_____ _____ _____
DATE OWNER

_____
TITLE (IF ACTING FOR PARTNERSHIP OR CORPORATION)

CERTIFICATE OF APPROVAL OF SEWER SYSTEM

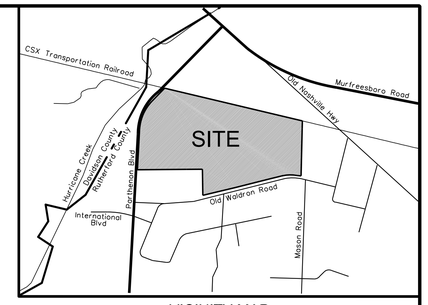
I HEREBY CERTIFY THAT THE SEWER SYSTEMS OUTLINED OR INDICATED ON THE FINAL SUBDIVISION PLAT ENTITLED CO-OP BUSINESS PARK HAVE BEEN INSTALLED IN ACCORDANCE WITH CURRENT LOCAL AND STATE GOVERNMENT REQUIREMENTS OR A SUFFICIENT BOND OR CASH HAS BEEN FILED WHICH WILL GUARANTEE SAID INSTALLATION.

DATE: _____ _____
NAME, TITLE AND AGENCY OR AUTHORIZED APPROVING AGENT

CERTIFICATE OF APPROVAL OF WATER SYSTEMS

I HEREB CERTIFY THAT THE WATER SYSTEM(S) OUTLINED OR INDICATED ON THE FINAL SUBDIVISION PLAT ENTITLED CO-OP BUSINESS PARK HAS/HAVE BEEN INSTALLED IN ACCORDANCE WITH CURRENT LOCAL AND STATE GOVERNMENT REQUIREMENTS, OR A SUFFICIENT BOND OR OTHER SURETY HAS BEEN FILED TO GUARANTEE SAID INSTALLATION.

DATE: _____ _____
NAME, TITLE AND AGENCY OR AUTHORIZED APPROVING AGENT



VICINITY MAP
NOT TO SCALE

NOTES

1. THE PURPOSE OF THIS PLAT IS TO CREATE 3 LOTS AND TO DEDICATE EASEMENTS.
2. THIS SURVEY MEETS THE REQUIREMENTS OF AN URBAN LAND SURVEY (CATEGORY 1), WITH A RATIO OF PRECISION OF THE UNADJUSTED SURVEY GREATER THAN 1:10,000 AS PER STANDARDS OF PRACTICE ADOPTED BY THE BOARD OF EXAMINERS FOR LAND SURVEYORS, STATE OF TENNESSEE.
3. BEARINGS SHOWN ARE BASED ON THE TENNESSEE COORDINATE SYSTEM OF 1983 (NAD-1983). ELEVATIONS ARE BASED ON NAVD-1988, USING GEOID 2003 FOR ORTHOMETRIC HEIGHT DETERMINATION.
4. PROPERTY IS ZONED I-2 (HEAVY INDUSTRIAL). SURROUNDING PROPERTIES ARE ZONED I-2 (HEAVY INDUSTRIAL). SETBACK REQUIREMENTS: FRONT BUILDING SETBACK = 40 FEET; SIDE BUILDING SETBACK = 20 FEET, REAR BUILDING SETBACK = 15 FEET.
5. A PORTION OF THIS PROPERTY IS LOCATED IN A FLOOD HAZARD AREA ACCORDING TO FEDERAL EMERGENCY MANAGEMENT AGENCY FLOOD INSURANCE RATE MAP COMMUNITY NO. 470167, PANEL NO. 0015 J, MAP REVISED MAY 9, 2023, ZONE "SHADED X".
6. UNDERGROUND UTILITY LOCATIONS SHOWN HEREON WERE TAKEN FROM FIELD LOCATIONS OF VISIBLE ABOVE-GROUND STRUCTURES (AND PERTINENT UTILITY MAPS) AND ARE APPROXIMATE ONLY. UTILITIES SHOULD BE FIELD VERIFIED BY THE PROPER UTILITY AUTHORITY HAVING JURISDICTION PRIOR TO ANY DIGGING.

LEGEND
- Property ownership boundary
- Building set-back line
- Easement
- Lot line
- New Monument
- Existing monuments
- Iron Pin (O)
- Iron Pin (N)
- Lot number
- Property map parcel number
- Pertains to property map

(24.00, 28.00)
15

BARGE DESIGN SOLUTIONS
615 Third Avenue South, Suite 700, Nashville, Tennessee 37210
PHONE (615)254-1500 FAX (615) 255-6572

OWNER:
TENNESSEE FARMERS COOPERATIVE, INC.
200 OLD WALDRON ROAD
LAVERGNE, TN 37086

DEVELOPER:
PANATTONI DEVELOPMENT COMPANY
35 MUSIC SQUARE EAST, SUITE 301
NASHVILLE, TN 37203

FINAL PLAT OF CO-OP BUSINESS PARK

THIRD CIVIL DISTRICT
LA VERGNE, RUTHERFORD COUNTY, TENNESSEE

FILE NO: 3814600
REVISED: DECEMBER 18, 2023
DATE: NOVEMBER 21, 2023
SHEET 1 OF 2

12/18/2023 9:53:57 AM JMudson
Workspace: LandRes
LandRes.pen

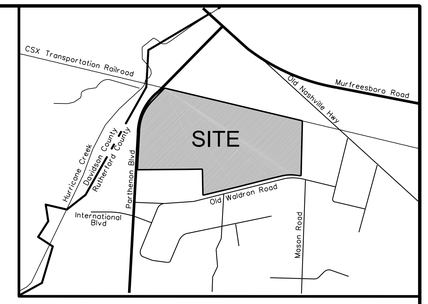
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L-8	N 05° 29' 00" E	79.43'



VICINITY MAP
NOT TO SCALE

100 50 0 50 100
SCALE: 1" = 100'

LEGEND

Property ownership boundary	
Building set-back line	
Easement	
Lot line	
New Monument	
Existing monuments	
Iron Pin (O)	
Iron Pin (N)	
Lot number	1
Property map parcel number	(24.00, 28.00)
Pertains to property map	15

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JAMES M. OVERFELT
AGRICULTURE
CAMPBELL
12/18/2023
TENNESSEE NO. 1634

BARGE
DESIGN SOLUTIONS
615 Third Avenue South, Suite 700, Nashville, Tennessee 37210
PHONE (615)254-1500 FAX (615) 255-6572

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200 OLD WALDRON ROAD
LAVERGNE, TN 37086

DEVELOPER:
PANATTONI DEVELOPMENT COMPANY
35 MUSIC SQUARE EAST, SUITE 301
NASHVILLE, TN 37203

PROPOSED EASEMENT EXHIBIT
OF
FINAL PLAT
OF
CO-OP BUSINESS PARK
THIRD CIVIL DISTRICT
LA VERGNE, RUTHERFORD COUNTY, TENNESSEE

FILE NO: 3814600 DATE: DECEMBER 18, 2023 SHEET 2 OF 2

12/18/2023
10:15:55 AM
JMOverfelt
LandRes.pen Workspace: LandRes

F:\38\38146\3814600\04_CAD\SURV\FINAL PLAT\3814600FINAL_PLAT_SHEET2.dgn

Planning Commission Report
Meeting: December 26, 2023

City of La Vergne

Item #: 10.

Item Title: Site Plan - Co-Op Business Park, Lot 1 - Four (4) Buildings Totaling 474,000 Square Feet on 38.92 Acres. Requested by Kimley-Horn. Property located on Old Waldron Road (Tax Map 15, Parcels 24 & 28). I-2 (Heavy Industrial) Zoning District. Property owned by Tennessee Farmers Cooperative, Inc.

Reviewed By:
Gary Lide, City Engineer
Bo Logan, City Planner

Summary: On behalf of their client, Kimley-Horn is requesting approval of the preliminary plat for the Co-Op Business Park located on 114 ± acres. The purpose of the preliminary plat is to create three new lots to make way for new industrial development.

The property is located off Waldron and Old Waldron Roads. The proposed layout on the concept plan shows nine (9) new buildings are indicated for the new parcels that will be created. Together, these nine (9) proposed buildings total over 1,081,000 square feet (1.08 million square feet) of new industrial space.

This submittal contains four buildings, labeled #1 through #4. Overall, Buildings #1 and #5 have special architectural designs to meet the Overlay District provisions. Building #5 is not part of Lot 1.

The City's parking requirements have been met or exceeded in every phase of the Co-Op project.

The new parcels will be served via a new internal road to be installed by the developer. This road will be a private road.

Staff Recommendation:

Staff Comments / Technical Items:

Planning

Bo Logan
blogan@lavergnetn.gov

1. The entire site must go to BOZA with a comprehensive sign

package to include directional signs, etc.
2. First United Methodist is zoned industrial so no buffer issue.

Jake Blair
jblair@lavergnetn.gov

Engineering

Gary Lide
glide@lavergnetn.gov

Engineering comments addressed.

Utilities

Scott Tatalovich
statalovich@lavergnetn.gov

1.Sht C6-11 - Label fire water meter vault and remove the letters DDCVA from the meter vault shown. (See City Standard Detail 024)
2.Sht C6-11 - Add Backflow Assembly to scale. It may be a Double Detector Check Assembly (DDCA), and fix callout location. (See City Standard Detail 024)

Codes

No comments

Fire

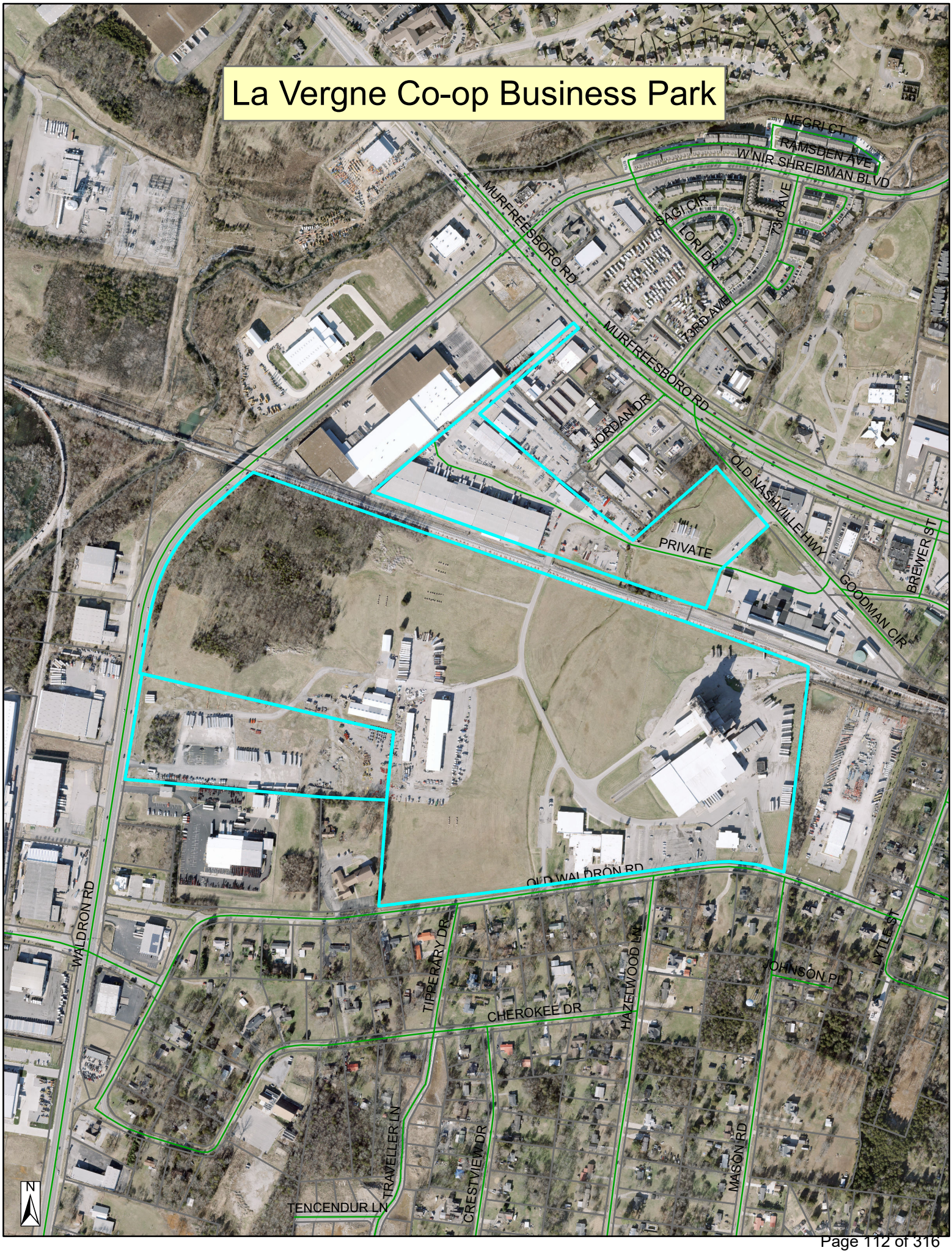
Curtis Brinkley
cbrinkley@lavergnetn.gov

Fire comment addressed.

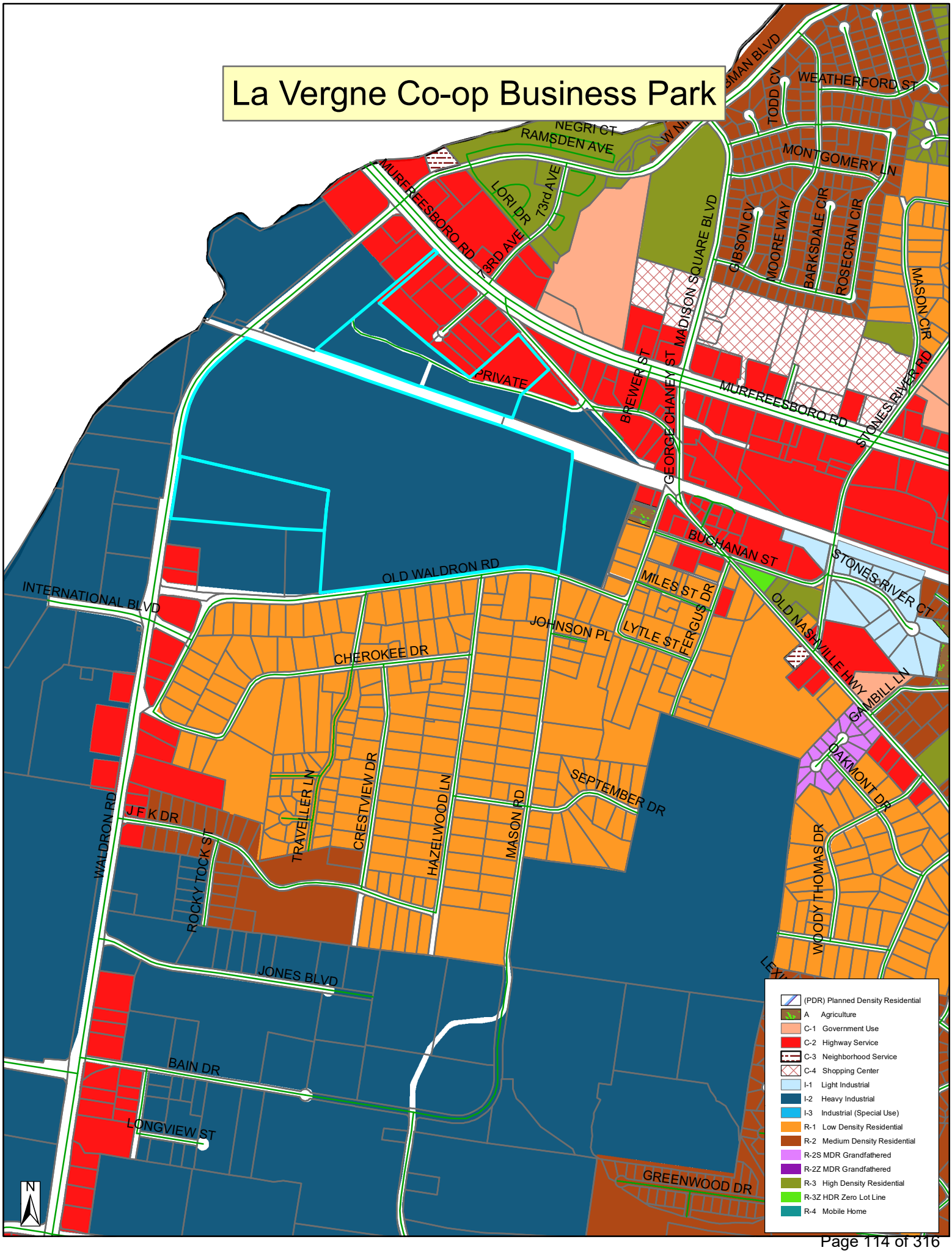
Police

John Eubank
jeubank@lavergnetn.gov

***Note:** The above technical items may not be the only corrections and/or issues needing to be resolved to get approval from the planning commission. New items can be brought up at the workshop and staff can add items at any time that might have been overlooked. It is the applicant's responsibility to make sure that all technical items are addressed and that no new issues exist before the planning commission meeting. Addressing all technical items does not constitute approval. It is the planning commission's decision whether an item passes or fails. Revised plans are due to staff by the following Monday at close of business unless other arrangements are made and documented.


La Vergne Co-op Business Park
NEGRI CT
RAMSDEN AVE
W NIR SHREIBMAN BLVD
MURFREESBORO RD
SAGI CIR
LORI DR
73RD AVE
JORDAN DR
PRIVATE
OLD NASHVILLE HWY
BREWER ST
GOODMAN CIR
OLD WALDRON RD
WALDRON RD
TIPPERARY DR
CHEROKEE DR
HAZELWOOD LN
JOHNSON PL
LYTLE ST
TRAVELLER LN
CRESTVIEW DR
TENCENDUR LN
MASON RD
N


La Vergne Co-op Business Park
W NIR SHREIBMAN BLVD
ROSECRAN CIR
NEGRI CT
RAMSDEN AVE
LORI DR
73rd AVE
JORDAN DR
73RD AVE
GIBSON CV
MOORE WAY
MADISON SQUARE BLVD
MURFREESBORO RD
PRIVATE
BREWER ST
MURFREESBORO RD
ED MILLER DR
OLD NASHVILLE HWY
OLD WALDRON RD
MILES ST
FERGUS DR
INTERNATIONAL BLVD
JOHNSON PL
LYTLE ST
CHEROKEE DR
WALDRON RD
J F K DR
TRAVELLER LN
CRESTVIEW DR
HAZELWOOD LN
MASON RD
SEPTEMBER DR
ROCKY TOOK ST
JONES BLVD
BRIDGESTONE PKWY
BAIN DR
CENTENNIAL DR
N


La Vergne Co-op Business Park
NEGRI CT
RAMSDEN AVE
MURFREESBORO RD
LORI DR
73rd AVE
TODD CV
WEATHERFORD ST
MONTGOMERY LN
GIBSON CV
MOORE WAY
BARKSDALE CIR
ROSECRAN CIR
MASON CIR
MADISON SQUARE BLVD
PRIVATE
BREWER ST
GEORGE CHANEY ST
STONES RIVER RD
BUCHANAN ST
STONES RIVER CT
OLD WALDRON RD
INTERNATIONAL BLVD
MILES ST
FERGUS DR
LYTLE ST
JOHNSON PL
OLD NASHVILLE HWY
CAMBILL LN
CHEROKEE DR
OAKMONT DR
SEPTEMBER DR
WALDRON RD
J F K DR
ROCKY TOCK ST
TRAVELLER LN
CRESTVIEW DR
HAZELWOOD LN
MASON RD
WOODY THOMAS DR
JONES BLVD
BAIN DR
LONGVIEW ST
GREENWOOD DR
N
(PDR) Planned Density Residential
A Agriculture
C-1 Government Use
C-2 Highway Service
C-3 Neighborhood Service
C-4 Shopping Center
I-1 Light Industrial
I-2 Heavy Industrial
I-3 Industrial (Special Use)
R-1 Low Density Residential
R-2 Medium Density Residential
R-2S MDR Grandfathered
R-2Z MDR Grandfathered
R-3 High Density Residential
R-3Z HDR Zero Lot Line
R-4 Mobile Home









CO-OP BUSINESS PARK

BUILDING 01- OPTION 1 - LA VERGNE, TENNESSEE

PANATTONI

alston CONSTRUCTION

Pickering
Engineering & Architectural Design Professionals



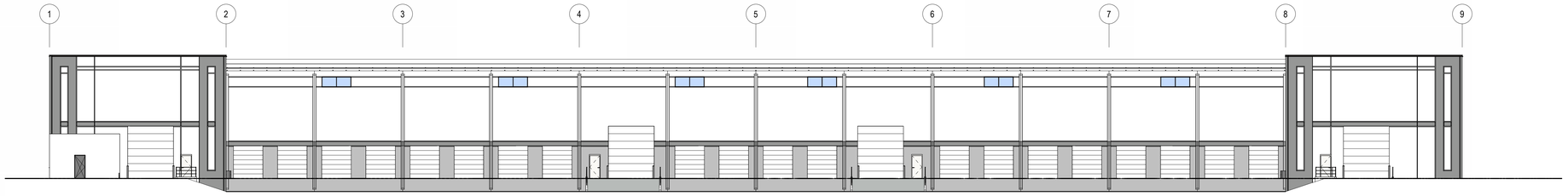
CO-OP BUSINESS PARK

BUILDING 01- OPTION 1 - LA VERGNE, TENNESSEE

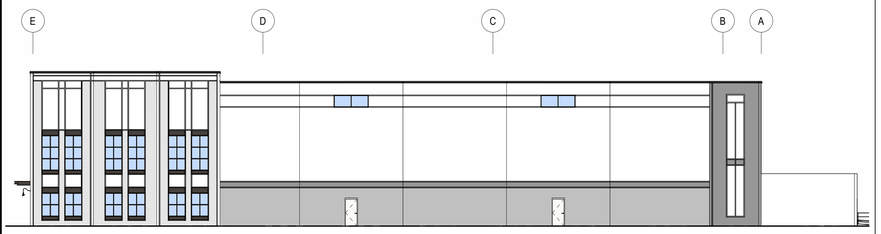
PANATTONI

alston CONSTRUCTION

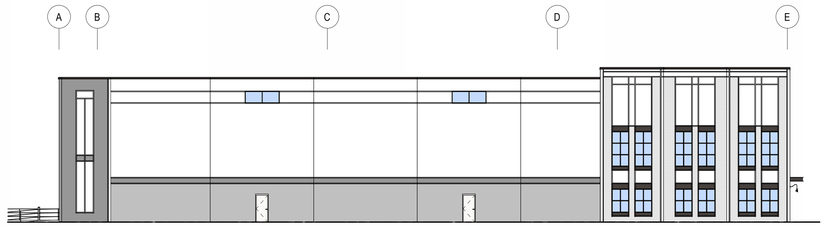
Pickering
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1E EAST ELEVATION
1/16" = 1'-0"



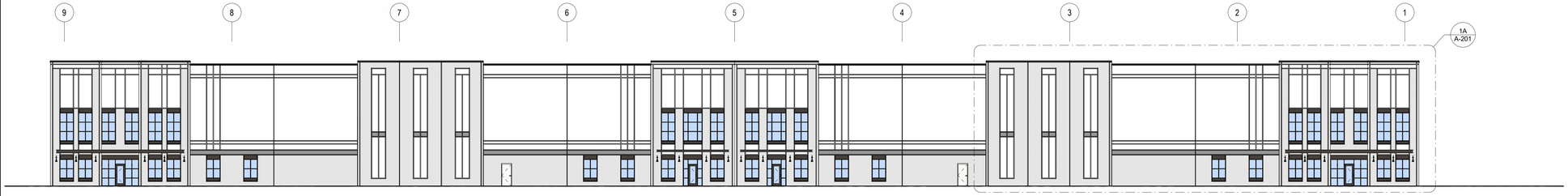
1D SOUTH ELEVATION
1/16" = 1'-0"



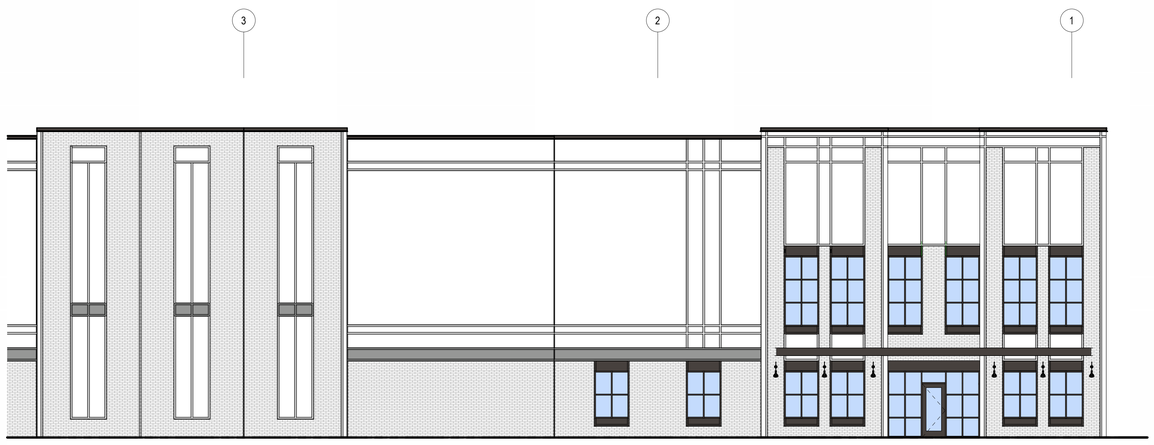
3D NORTH ELEVATION
1/16" = 1'-0"

MATERIALS LEGEND

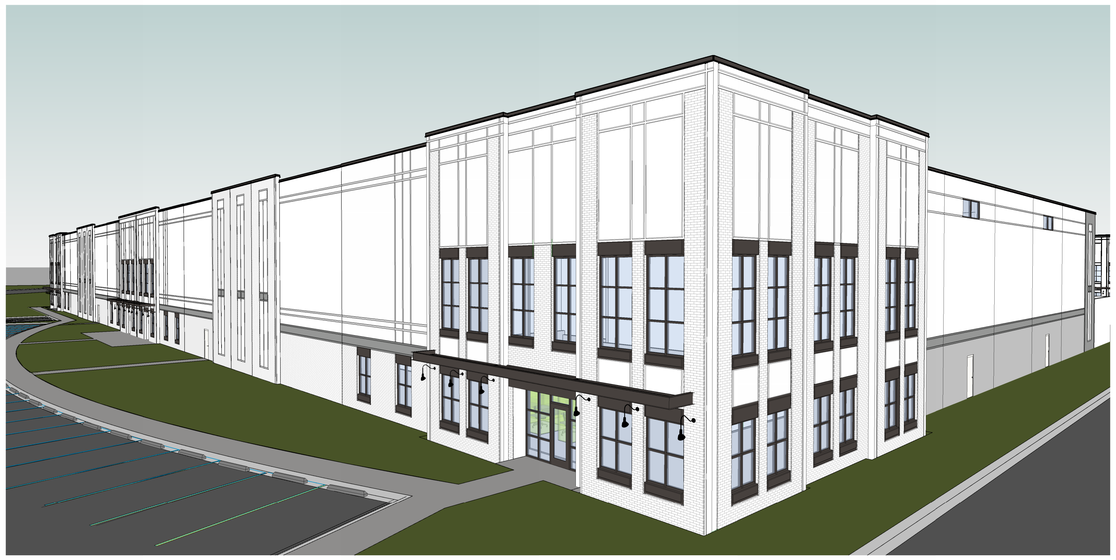
LEGEND	DESCRIPTION	MANUFACTURER	TYPE	COLOR
AS-01	ALUMINUM STOREFRONT	OLD CASTLE	FG 3000T	BLACK
CP-01	ALUMINUM CANOPY	MAPES	CANTILEVER	BLACK
GL-01	INSULATED GLASS	VITRO	SOLARBAN 60	OPTIGRAY
LT-01	DECORATIVE LIGHT FIXUTRE	-	-	-
MC-01	METAL COPING	ELEVATE	-	BLACK
MG-04	METAL GUTTER	ELEVATE	-	WHITE
PT-01	PAINTED CONCRETE	SHERWIN WILLIAMS		BLACK
PT-02	PAINTED CONCRETE	SHERWIN WILLIAMS	-	SW 7074 SOFTWARE
PT-03	PAINTED CONCRETE	SHERWIN WILLIAMS	-	SW 7071 GRAY SCREEN
PT-04	PAINTED CONCRETE	SHERWIN WILLIAMS	-	SW 7005 PURE WHITE
PT-04M	PAINTED CONCRETE WITH MASONRY FORM LINER	SHERWIN WILLIAMS SPEC FORM LINERS INC.	SMOOTH BRICK 1303	SW 7005 PURE WHITE -



1C WEST ELEVATION
1/16" = 1'-0"



1A ENL. WEST ELEVATION
1/8" = 1'-0"



REVISIONS

PROJECT #:	26552.10
DATE:	DECEMBER 18, 2023
DRAWN BY:	KL/KG
DESIGNER:	KL/KG
CHECKED BY:	--

Pickering
Pickering Firm, Inc.
Facility Design • Civil Engineering • Surveying • Transportation • Natural / Water Resources
6363 Poplar Avenue, Suite 300, Memphis, TN 38119
901.726.0810

CO-OP BUSINESS PARK
BUILDING 1
LA VERGNE, TN 37086

SEAL:

SHEET NUMBER:
A-201

DESCRIPTION:
EXTERIOR ELEVATIONS - BUILDING 1

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MATERIALS LEGEND

LEGEND	DESCRIPTION	MANUFACTURER	TYPE	COLOR
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CP-01	ALUMINUM CANOPY	MAPES	CANTILEVER	BLACK
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		SPEC FORM LINERS INC.	SMOOTH BRICK 1303	-

CO-OP BUSINESS PARK

BUILDING 01 - OPTION 1- LA VERGNE, TENNESSEE

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CO-OP BUSINESS PARK

BUILDING 01- OPTION 2 - LA VERGNE, TENNESSEE

PANATTONI

alston CONSTRUCTION

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Engineering & Architectural Design Professionals

CO-OP BUSINESS PARK

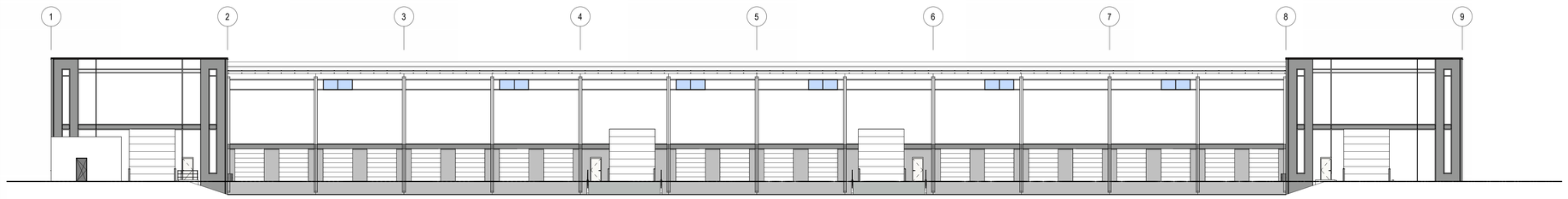
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PANATTONI

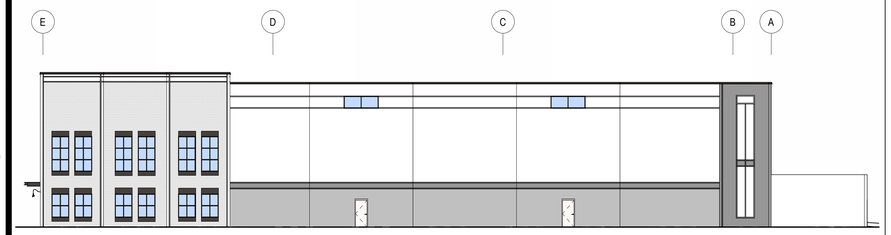
alston CONSTRUCTION

Pickering

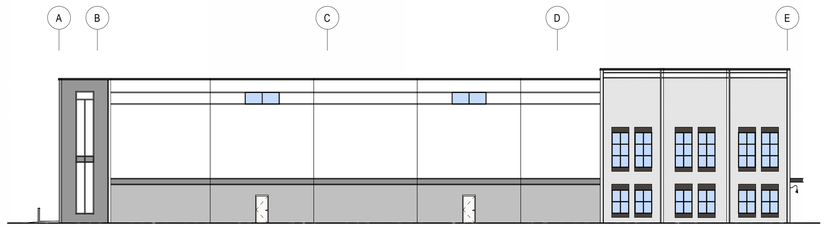
Engineering & Architectural Design Professionals



1E EAST ELEVATION
1/16" = 1'-0"



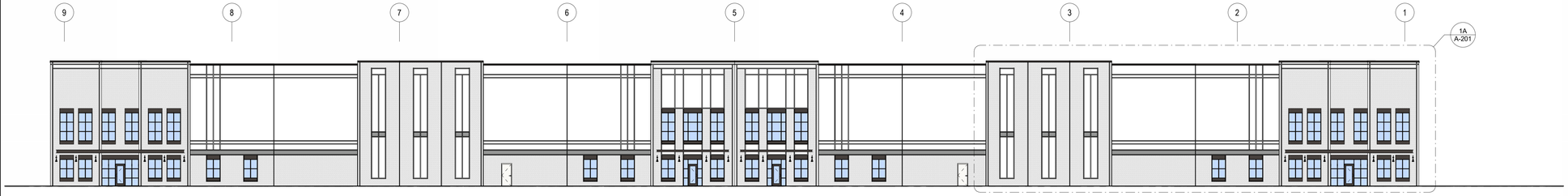
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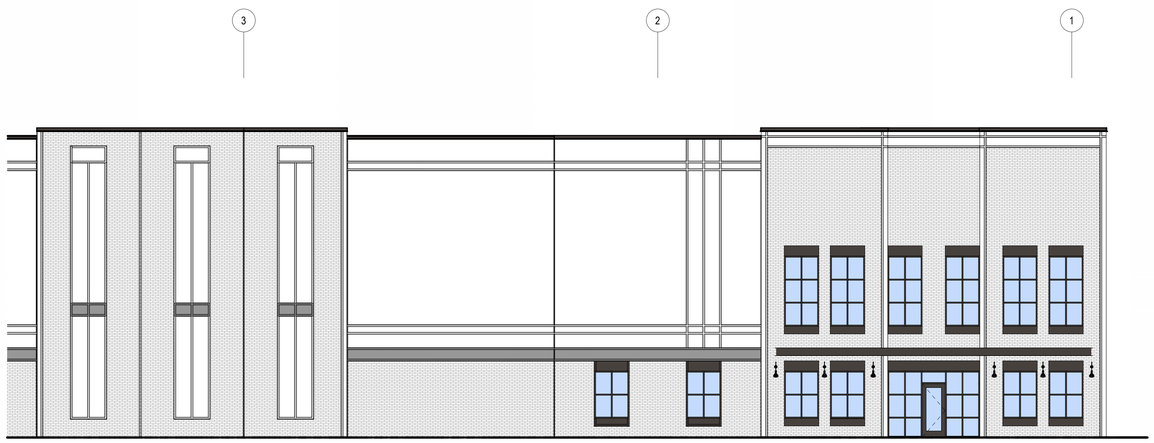
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1C WEST ELEVATION
1/16" = 1'-0"



1A ENL. WEST ELEVATION
1/8" = 1'-0"



REVISIONS

PROJECT #:	26552.10
DATE:	DECEMBER 18, 2023
DRAWN BY:	KL/KG
DESIGNER:	KL/KG
CHECKED BY:	--

Pickering
Pickering Firm, Inc.
Facility Design • Civil Engineering • Surveying • Transportation • Natural / Water Resources
6363 Poplar Avenue, Suite 330, Memphis, TN 38119
901.726.0810

CO-OP BUSINESS PARK
BUILDING 1 - OPTION 2
LA VERGNE, TN 37086

SEAL:

SHEET NUMBER:

A-201

DESCRIPTION:
EXTERIOR ELEVATIONS - BUILDING 1

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MATERIALS LEGEND

LEGEND	DESCRIPTION	MANUFACTURER	TYPE	COLOR
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		SPEC FORM LINERS INC.	SMOOTH BRICK 1303	-

CO-OP BUSINESS PARK

BUILDING 01- OPTION 2 - LA VERGNE, TENNESSEE

PANATTONI

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Pickering
Engineering & Architectural Design Professionals

SITE PLAN RESUBMITTAL

CO-OP BUSINESS PARK - LOT 1

BUILDINGS 1 - 4

WALDRON ROAD

LA VERGNE, TENNESSEE

CONCEPT PLAN SUBMITTAL: 10/02/2023
CONCEPT PLAN RESUBMITTAL: 10/23/2023
SITE PLAN SUBMITTAL: 11/27/2023
SITE PLAN RESUBMITTAL: 12/18/2023

SITE DATA TABLE		
SITE ADDRESS	WALDRON ROAD LA VERGNE, TENNESSEE	
TAX MAP	MAP 015 PARCEL 02400, 02800	
OVERALL AREA	EXISTING	PROPOSED
SITE AREA	±114.9 AC	±114.9 AC
DISTURBED AREA	N/A	±84.14 AC
DEDICATED R.O.W. AREA	N/A	TBD
IMPERVIOUS AREA	±37.94 AC	±75.83 AC
PERVIOUS AREA	±76.96 AC	±39.07 AC
GENERAL BUILDING DATA & REQUIREMENTS[1]	REQUIRED	PROVIDED
HEIGHT	50 FT (MAX.)	50 FT (MAX.)
STORIES	N/A	1
YARD / SETBACK REQUIREMENTS	REQUIRED (MIN.)	PROVIDED
FRONT YARD	10 FT	10 FT
FRONT BUILDING SETBACK	40 FT	40 FT
SIDE BUILDING SETBACK	20 FT	20 FT
REAR BUILDING SETBACK	15 FT	15 FT
1. THIS PROJECT ADHERES TO THE REQUIREMENTS SET BY THE CITY OF LA VERGNE ZONING ORDINANCE ADOPTED FEBRUARY 6, 1990, LAST AMENDED JANUARY 3, 2023.		

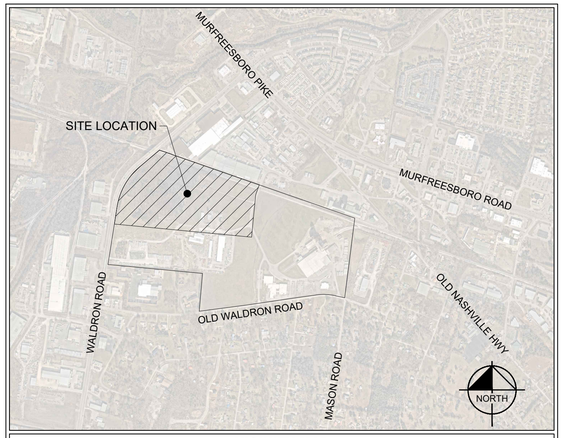
LOT DATA TABLE		
OVERALL AREA	PROPOSED	
SITE AREA	±38.92 AC	
DISTURBED AREA	±33.15 AC	
IMPERVIOUS	±25.33 AC	
PERVIOUS	±13.58 AC	
LOT DATA & REQUIREMENTS[1]	REQUIRED	PROVIDED
FLOOR AREA RATIO		±0.28
LOT COVERAGE	50% (MAX.)	±27.9%
BUILDING DATA	AREA	APPROXIMATE DIMENSIONS
BUILDING 1	±79,380 SF	432' x 180'
BUILDING 2	±157,464 SF	702' x 222'
BUILDING 3	±110,484 SF	648' x 168'
BUILDING 4	±126,360 SF	594' x 210'
TOTAL BUILDING AREA	±473,688 SF	
PARKING	REQUIRED	PROVIDED
STANDARD CAR PARKING (1 SPACE PER 400 GSF OFFICE + 1 SPACE PER 4,000 GSF WAREHOUSE)	±227	±482
ACCESSIBLE (INCL. VAN ACCESSIBLE)	7 (2 VAN)	21 (16 VAN)
TRUCK PARKS	N/A	±93

PROJECT DESCRIPTION

THE PROPOSED DEVELOPMENT WILL CONSIST OF A FOUR BUILDING WAREHOUSE DISTRIBUTION PARK TO BE CONSTRUCTED ON ±38.92 ACRES ALONG WALDRON ROAD IN LA VERGNE, TENNESSEE. IN TOTAL, THE COMBINED AREA FOR ALL FOUR BUILDINGS IS ±473,688 SQUARE FEET. THE DEVELOPMENT WILL CONSOLIDATE TWO EXISTING PARCELS (015 02400 AND 015 02800) AND SUBDIVIDE INTO THREE FEATURE LOTS. THE PROPOSED DEVELOPMENT AREA HAS PORTIONS OF THE 500-YEAR FLOODPLAIN PER THE US FEMA FIRM PANEL, BUT IS NOT SHOWN TO HAVE 100-YR FLOODPLAIN ON THE PANEL.

EXISTING PROPERTY SUMMARY

PROPERTY ADDRESS:	WALDRON ROAD LA VERGNE, TENNESSEE 37086
MAP AND PARCEL ID:	MAP 015, PARCELS 02400, 02800
U.S. FEMA FIRM PANEL:	47149C0015J DATED 05/09/2023
EXISTING ZONING:	I-2
EXISTING LAND USE:	HEAVY INDUSTRIAL/MANUFACTURING



VICINITY MAP
1" = 1,000'

CITY OF LA VERGNE
RUTHERFORD COUNTY, TENNESSEE

Sheet List Table	
SHEET NUMBER	SHEET TITLE
C0-00	COVER - LOT 1
C0-01	GENERAL NOTES
C0-10	SITE VICINITY MAP
C0-20	BUILDING PHASING PLAN
C1-00	EXISTING CONDITIONS
C1-10	DEMOLITION PLAN
C2-10	SITE LAYOUT - OVERALL
C2-11	SITE LAYOUT - ENLARGEMENT
C2-12	SITE LAYOUT - ENLARGEMENT
C3-00	EROSION CONTROL PLAN - PHASING PLAN
C3-10	EROSION CONTROL PLAN - PHASE 1 ENLARGEMENT
C3-11	EROSION CONTROL PLAN - PHASE 1 ENLARGEMENT
C3-20	EROSION CONTROL PLAN - PHASE 2 ENLARGEMENT
C3-21	EROSION CONTROL PLAN - PHASE 2 ENLARGEMENT
C3-30	EROSION CONTROL PLAN - PHASE 3 ENLARGEMENT
C3-31	EROSION CONTROL PLAN - PHASE 3 ENLARGEMENT
C3-50	EROSION CONTROL DETAILS
C3-51	EROSION CONTROL DETAILS
C4-10	GRADING AND DRAINAGE PLAN - OVERALL
C4-11	SITE GRADING PLAN - ENLARGEMENT
C4-12	SITE GRADING PLAN - ENLARGEMENT
C4-40	SITE GRADING PLAN - ENLARGEMENT
C4-41	SITE GRADING PLAN - ENLARGEMENT
C4-50	STORMWATER TABLES
C6-10	UTILITY PLAN - OVERALL
C6-11	UTILITY PLAN - ENLARGEMENT
C6-12	UTILITY PLAN - ENLARGEMENT
C7-00	PUBLIC SANITARY SEWER - OVERALL
C7-01	PUBLIC SANITARY SEWER - PLAN & PROFILE
C7-02	PUBLIC SANITARY SEWER - PLAN & PROFILE
C7-03	PUBLIC SANITARY SEWER - PLAN & PROFILE
C7-50	PUBLIC WATER MAIN - OVERALL PLAN
C7-51	PUBLIC WATER MAIN - PLAN & PROFILE
C7-52	PUBLIC WATER MAIN - PLAN & PROFILE
C7-53	PUBLIC WATER MAIN - PLAN & PROFILE
C7-54	PUBLIC WATER MAIN - PLAN & PROFILE
C7-55	PUBLIC WATER MAIN - PLAN & PROFILE
C8-10	SITE DETAILS
C8-11	SITE DETAILS
C8-20	UTILITY DETAILS
C8-21	UTILITY DETAILS
C8-22	UTILITY DETAILS
L1-10	LANDSCAPE PLAN - OVERALL
L1-11	LANDSCAPE PLAN - ENLARGEMENT
L1-12	LANDSCAPE PLAN - ENLARGEMENT
L1-50	LANDSCAPE NOTES
L1-51	LANDSCAPE DETAILS

PROJECT DESIGN TEAM

ARCHITECT
PICKERING FIRM, INC.
6363 POPLAR AVENUE, SUITE 300
MEMPHIS, TN 38119
CONTACT: KEVIN GETMAN
PHONE: (901) 726-0810

CIVIL ENGINEER
KIMLEY-HORN AND ASSOCIATES, INC.
10 LEA AVENUE, SUITE 400
NASHVILLE, TN 37210
CONTACT: ROBERT ARTS, PE
PHONE: (615) 564-2701

SURVEY
BARGE DESIGN SOLUTIONS, INC.
211 COMMERCE STREET, SUITE 600
NASHVILLE, TN 37210
CONTACT: JIM OVERFELT
PHONE: (615) 252-4421

GEOTECH / ENVIRONMENTAL
GEOSERVICES, LLC.
163 BUSINESS PARK DRIVE, SUITE 15
LEBANON, TN 37087
CONTACT: WAYNE HARNACK, PE
PHONE: (615) 547-9314

PERMITTING / UTILITY CONTACTS

BUILDING DEPT.
CITY OF LA VERGNE CODES
5175 MURFREESBORO RD
LA VERGNE, TN 37086
CONTACT: RANDOLPH SALYERS
PHONE: (615) 213-2624

STORMWATER
CITY OF LA VERGNE
STORMWATER DEPARTMENT
5175 MURFREESBORO ROAD
LA VERGNE, TN 37086
PHONE: (615) 287-8703

SANITARY SEWER
LA VERGNE PUBLIC WORKS
148 INTERNATIONAL BLVD
LA VERGNE, TN 37086
CONTACT: SCOTT TATALOVICH
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PLAN REVISIONS

REVISION NO.	DATE	REMARKS

ENGINEER'S SEAL

ROBERT JAMES ARTS — REGISTERED ENGINEER — 121045 — STATE OF TENNESSEE
12/18/2023

FILE NUMBER	SHEET NUMBER	TOTAL SHEETS
118163044	C0-00	47

Drawing name: K:\NSH_LDEV\118163044 - co-op la vergne\4-CADD\plansheets\C0-00 COVER.dwg C0-00 COVER - LOT 1 Dec 18, 2023 10:57am by: Garrett.Froula

CONTRACTOR RESPONSIBILITIES:

1. PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL BE RESPONSIBLE FOR:

   A. THE CONTRACTOR SHALL VERIFY ALL PROPOSED AND EXISTING CONDITIONS INCLUDING UTILITIES (INVERTS, CONNECTIONS, MATERIALS, ETC.) AND DIMENSIONS WITHIN THE LIMITS OF WORK PRIOR TO THE START OF CONSTRUCTION.

   B. REFER TO ARCHITECTURAL DRAWINGS FOR DETAILED BUILDING INFORMATION.

   C. THE CONTRACTOR IS RESPONSIBLE FOR ALL NOTIFICATIONS AND LIAISONS WITH UTILITY COMPANIES DURING THE PROCESS OF LOCATING, RELOCATING, AND TYING INTO PUBLIC UTILITIES.

   D. PRIOR TO COMMENCING LAND DISTURBANCE ACTIVITY, THE LIMITS OF LAND DISTURBANCE SHALL BE CLEARLY AND ACCURATELY DEMARCATED WITH STAKES, RIBBONS, OR OTHER APPROPRIATE MEANS. THE LOCATION AND EXTENT OF ALL AUTHORIZED LAND DISTURBANCE SHALL OCCUR INSIDE THE APPROVED LIMITS INDICATED ON THE APPROVED PLANS.

2. DURING CONSTRUCTION:

   A. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DEVIATIONS FROM THESE PLANS AND SPECIFICATIONS WITHOUT PRIOR WRITTEN CONSENT OF THE ENGINEER MAY CAUSE THE WORK TO BE UNACCEPTABLE.

   B. THE CONTRACTOR SHALL USE MATERIALS AND EMPLOY CONSTRUCTION METHODS IN ORDER TO COMPLY WITH THE DRAWINGS AND SPECIFICATIONS. WHERE A CONFLICT OCCURS, THE STRICTEST DESIGN SHALL GOVERN. THE ENGINEER'S REVIEW OF SHOP DRAWINGS, PRODUCT DATA, ETC., DOES NOT RELIEVE THE CONTRACTOR FROM COMPLYING WITH THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL INFORM THE ENGINEER IN WRITING OF ANY SPECIFIC DEVIATIONS AND OBTAIN ENGINEER'S WRITTEN APPROVAL OF THE SPECIFIC DEVIATION.

   C. IT IS SOLELY THE CONTRACTOR'S RESPONSIBILITY TO FOLLOW ALL APPLICABLE SAFETY CODES AND REGULATIONS DURING ALL PHASES OF CONSTRUCTION.

   D. ALL CONSTRUCTION MUST CONFORM TO THE STANDARDS, SPECIFICATIONS, AND CODES OF THE GOVERNING MUNICIPALITIES.

   E. CONSTRUCTION SHALL MEET ALL CURRENT STANDARDS SET FORTH IN THE AMERICANS WITH DISABILITIES ACT.

   F. IF THE CONTRACTOR DAMAGES ANY EXISTING UTILITIES DURING CONSTRUCTION, HE SHALL, AT HIS OWN EXPENSE, REPLACE OR REPAIR THE UTILITIES TO ORIGINAL CONDITION AND QUALITY AS APPROVED BY THE OWNER AND REPRESENTATIVE OF THE APPROPRIATE UTILITY COMPANY.

   G. SUFFICIENT BARRICADES, LIGHTS, SIGNS, AND OTHER TRAFFIC CONTROL METHODS IN ACCORDANCE WITH GOVERNING ORDINANCES MAY BE NECESSARY FOR THE PROTECTION AND SAFETY OF THE PUBLIC. SAID CONTROL DEVICES SHALL BE PER THE MANUAL OF TRAFFIC CONTROL DEVICES, M.U.T.C.D., CURRENT EDITION, AND SHALL BE PROVIDED AND MAINTAINED THROUGHOUT CONSTRUCTION.

   H. TRAFFIC CONTROLS AND OTHER WARNING DEVICES SHALL BE INSTALLED PRIOR TO THE COMMENCEMENT OF ANY WORK ON CITY, COUNTY, OR TENNESSEE DEPARTMENT OF TRANSPORTATION ROADS. THEY SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION AND SHALL REMAIN IN PLACE UNTIL THE CONCLUSION OF ALL WORK.

   I. ALL WARNING DEVICES SHALL BE EITHER TYPE I BARRICADES OR DRUMS WITH WARNING LIGHTS ON EVERY OTHER DEVICE. THEY SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), CURRENT EDITION, AND CITY OF LA VERGNE STANDARDS FOR COLOR, SIZE, REFLECTIVITY, HEIGHT, AND PLACEMENT.

   J. FIRE DEPARTMENT ACCESS SHALL BE MAINTAINED AT ALL TIMES.

   K. CONTRACTOR SHALL SHORE AND BRACE ALL EARTH, FORMS, CONCRETE, STEEL, WOOD, AND MASONRY TO RESIST GRAVITY, EARTH, WIND, THERMAL, CONSTRUCTION, AND MISCELLANEOUS LOADS DURING CONSTRUCTION.

   L. ON-SITE BURIAL OF DEBRIS IS PROHIBITED.

   M. UNLESS OTHERWISE NOTED THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OF ALL FABRICATED MATERIALS TO THE ENGINEER. DESIGN DOCUMENTS SHALL NOT BE REPRODUCED AS SHOP DRAWINGS.

   N. IN CASE OF UNFORESEEN CONSTRUCTION COMPLICATIONS OR DISCREPANCIES, THE CONTRACTOR IS TO IMMEDIATELY NOTIFY THE ENGINEER IN WRITING.

   O. ALL REQUIRED TESTING REPORTS SHALL BE AVAILABLE AT THE JOB SITE.

   P. AS-BUILT DRAWINGS OF ROADWAYS, STORM DRAINS, SANITARY SEWER AND WATER LINES, FIELD APPROVAL BY THE ENGINEER, AND ALL APPLICABLE BONDS ARE REQUIRED PRIOR TO FINAL ACCEPTANCE BY THE OWNER.

   Q. CONTRACTOR SHALL MAINTAIN CONTINUOUS UTILITY SERVICE TO ALL EXISTING BUILDINGS THROUGHOUT CONSTRUCTION UNLESS APPROVAL FOR SERVICE INTERRUPTION IS OBTAINED FROM THE OWNERS IN ADVANCE.

   R. THE CONTRACTOR SHALL VERIFY EXISTING CONDITIONS TO ENSURE THAT THE NEW WORK SHALL FIT INTO THE EXISTING SITE IN THE MANNER INTENDED AND AS SHOWN ON THE DRAWINGS. SHOULD ANY CONDITIONS EXIST THAT ARE CONTRARY TO THOSE SHOWN ON THE DRAWINGS, THE CONTRACTOR SHALL NOTIFY THE OWNER'S REPRESENTATIVE PRIOR TO PERFORMING ANY WORK IN THE AREA INVOLVING DIFFERENCES. NOTIFICATION SHALL BE IN THE FORM OF A DRAWING OR SKETCH INDICATING FIELD MEASUREMENTS AND NOTES RELATING TO THE AREA.

   S. ANY FOREIGN ITEM FOUND DURING CONSTRUCTION IS THE PROPERTY OF THE OWNER. THIS INCLUDES, BUT IS NOT LIMITED TO, PRECIOUS METALS, COINS, PAPER CURRENCY, ARTIFACTS AND ANTIQUITIES.

   T. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE DONE TO THE PREMISES OR ADJACENT PREMISES, OR INJURIES TO THE PUBLIC DURING THE CONSTRUCTION OF THE WORK, WHETHER CAUSED BY HIMSELF, HIS SUBCONTRACTORS, OR THE CARELESSNESS OF ANY OF HIS EMPLOYEES.

   U. THE CONTRACTOR SHALL FURNISH, INSTALL AND MAINTAIN ALL NECESSARY TEMPORARY WORKS FOR THE PROTECTION OF THE WORK AND THE PUBLIC, INCLUDING BARRICADES, WARNING SIGNS, LIGHTS, ETC.

   V. THE CONTRACTOR ACKNOWLEDGES & AGREES THAT THE WORK IS ENTIRELY AT HIS RISK UNTIL SITE IS ACCEPTED, AND HE WILL BE HELD RESPONSIBLE FOR ITS SAFETY BY THE OWNER. THE CONTRACTOR WILL INDEMNIFY THE OWNER & OWNER'S REPRESENTATIVE FROM LIABILITY AT THE SITE THROUGHOUT THE CONSTRUCTION PROCESS.

   W. THE CONTRACTOR SHALL GIVE ALL NECESSARY NOTICES AND OBTAIN ALL PERMITS AND PAY ALL LEGAL FEES. HE SHALL ALSO COMPLY WITH ALL CITY, COUNTY AND STATE BUILDING LAWS, ORDINANCES OR REGULATIONS RELATING TO BUILDING SIDEWALKS, STREETS, BLASTING, PUBLIC INFRASTRUCTURE, STORMWATER REGULATIONS, ETC.

   X. THE CONTRACTOR IS TO CHECK AND VERIFY ALL MEASUREMENTS, LEVELS, ETC. BEFORE ORDERING MATERIALS AND PROCEEDING WITH THE WORK, AND IS TO BE RESPONSIBLE FOR THE SAME.

   Y. REFERENCE POINTS AND HUBS DURING THE CONSTRUCTION OF HIS WORK, AND SHALL BEAR THE COST OF REPLACING SAME.

   Z. CARE SHALL BE TAKEN TO PROTECT ANY UTILITIES, TREES, ETC. WHICH ARE TO REMAIN AND NOT TO BE DISTURBED BY THE CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGES TO SUCH PROPERTY.

DEMOLITION INFORMATION:

1. NOTIFICATIONS:

   THE CONTRACTOR SHALL NOTIFY THE OWNER AND CITY INSPECTOR(S) 24 HOURS PRIOR TO ANY DEMOLITION OR CONSTRUCTION.

2. DISPOSAL GUIDELINES:

   A. ONLY ITEMS SPECIFICALLY NOTED TO BE DEMOLISHED SHALL BE REMOVED FROM THE SITE.

   B. REMOVE EXISTING PAVED AREAS AS SHOWN INCLUDING DRIVEWAYS, SIDEWALKS, PARKING AREAS, SERVICE AREAS, EQUIPMENT PADS, AND ALL MISCELLANEOUS PAVING.

   C. ALL DEBRIS RESULTING FROM DEMOLITION SHALL BE REMOVED FROM THE SITE AND DISPOSED OF LEGALLY BY THE CONTRACTOR IN ACCORDANCE WITH LOCAL STATE AND FEDERAL REGULATIONS. BACKFILL ALL TRENCHES AND EXCAVATIONS RESULTING FROM DEMOLITION.

   D. ALL DEMOLISHED MATERIAL BECOMES THE PROPERTY OF THE CONTRACTOR UNLESS OTHERWISE NOTED.

3. TREE PROTECTION GUIDELINES:

   PROTECT ALL EXISTING TREES NOTED "TO REMAIN" AND ALL ITEMS TO BE TURNED OVER TO THE OWNER DURING DEMOLITION. TAKE ALL NECESSARY PRECAUTIONS AND PROTECTIVE MEASURES. ANY EXISTING ITEMS TO BE TURNED OVER TO THE OWNER WHICH ARE DAMAGED DURING DEMOLITION SHALL BE REPAIRED AT NO ADDITIONAL COST TO THE OWNER. TREES WHICH ARE DAMAGED WILL BE REPLACED OR REIMBURSED AT A RATE TO BE DETERMINED BY THE OWNER.

4. UTILITIES:

   A. PRIOR TO REMOVING OR ABANDONING ANY UTILITY THE CONTRACTOR SHALL VERIFY THAT NO UPSTREAM SERVICE WILL BE TERMINATED. THE CONTRACTOR SHALL INFORM THE ENGINEER IN WRITING OF ANY TERMINATION NOT SHOWN ON THE PLANS.

   B. ALL ABANDONED WATER LINES, STORM SEWER PIPE, SANITARY SEWER PIPES, GAS LINES, OR ANY OTHER ABANDONED UNDERGROUND UTILITY SHALL BE ABANDONED IN PLACE UNLESS NOTED OTHERWISE.

SITE INFORMATION:

1. THE FOLLOWING ARE APPLICABLE TO ALL CIVIL DOCUMENTS:

   A. WHERE A DETAIL SECTION, TYPICAL SECTION, OR A NOTE IS SHOWN FOR ONE CONDITION, IT SHALL APPLY FOR ALL LIKE OR SIMILAR CONDITIONS, UNLESS OTHERWISE NOTED ON THE PLANS.

   B. EXISTING AND PROPOSED CONTOURS ARE AT ONE (1) FOOT INTERVALS.

   C. ALL DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.

   D. ALL PIPE LENGTHS SPECIFIED IN THESE PLANS ARE THE HORIZONTAL DISTANCE AND ARE SHOWN FOR REFERENE ONLY. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE ACTUAL LENGTHS BASED ON PROPOSED PIPE SLOPE.

   E. PIPE LENGTHS IN PLANS ARE MEASURED FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE UNLESS OTHERWISE NOTED.

EROSION AND SEDIMENT CONTROL INFORMATION:

1. COMPREHENSIVE:

   A. THE ESCAPE OF SEDIMENT FROM THE SITE SHALL BE PREVENTED BY THE INSTALLATION OF EROSION AND SEDIMENT CONTROL MEASURES AND PRACTICES PRIOR TO OR CONCURRENT WITH LAND-DISTURBING ACTIVITIES.

   B. PROVISIONS TO PREVENT EROSION OF SOIL FROM THE SITE SHALL BE AT A MINIMUM IN CONFORMANCE WITH THE REQUIREMENTS OF THE TENNESSEE EROSION AND SEDIMENT CONTROL HANDBOOKS. IF FULL IMPLEMENTATION OF THE APPROVED PLAN DOES NOT PROVIDE FOR EFFECTIVE EROSION CONTROL, ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IMPLEMENTED TO CONTROL OR TREAT THE SEDIMENT SOURCE.

   C. FAILURE TO INSTALL, OPERATE, OR MAINTAIN ALL EROSION CONTROL MEASURES WILL RESULT IN ALL CONSTRUCTION BEING STOPPED ON THE JOB SITE UNTIL SUCH MEASURES ARE CORRECTED BACK TO THE STANDARDS SPECIFIED IN THE TENNESSEE EROSION AND SEDIMENT CONTROL HANDBOOKS, CURRENT EDITION.

   D. EROSION CONTROL MEASURES WILL BE MAINTAINED AT ALL TIMES. IF FULL IMPLEMENTATION OF THE APPROVED PLAN DOES NOT PROVIDE FOR EFFECTIVE EROSION CONTROL, ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IMPLEMENTED TO CONTROL OR TREAT THE SEDIMENT SOURCE.

   E. EROSION CONTROL DEVICES SHALL BE INSTALLED PRIOR TO LAND DISTURBANCE. THE LOCATION OF SOME OF THE EROSION CONTROL DEVICES MAY HAVE TO BE ALTERED FROM THAT SHOWN ON THE APPROVED PLANS IF DRAINAGE PATTERNS DURING CONSTRUCTION ARE DIFFERENT FROM THE FINAL PROPOSED DRAINAGE PATTERNS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ACCOMPLISH EROSION CONTROL FOR ALL DRAINAGE PATTERNS CREATED AT VARIOUS STAGES DURING CONSTRUCTION. ANY DIFFICULTY IN CONTROLLING EROSION DURING ANY PHASE OF CONSTRUCTION SHALL BE REPORTED TO THE ENGINEER IMMEDIATELY.

   F. THE CONSTRUCTION OF THE SITE WILL COMMENCE WITH THE INSTALLATION OF EROSION CONTROL MEASURES SUFFICIENT TO CONTROL SEDIMENT DEPOSITS AND EROSION. ALL SEDIMENT CONTROL WILL BE MAINTAINED UNTIL ALL UPSTREAM GROUND WITHIN THE CONSTRUCTION AREA HAS BEEN COMPLETELY STABILIZED WITH PERMANENT VEGETATION AND ALL ROADS/DRIVEWAYS HAVE BEEN PAVED.

   G. CONSTRUCTION EXITS SHALL BE CONSTRUCTED AT EACH POINT OF ENTRY OR EXIT FROM THE SITE AND SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOW OF MUD ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH STONE AS CONDITIONS DEMAND, REPAIR, AND/OR CLEANOUT OF ANY STRUCTURES USED TO TRAP SEDIMENT. ALL MATERIALS SPILLED, DROPPED, WASHED, OR TRACKED FROM VEHICLES OFF SITE ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY. ACCESS POINTS PROTECTED WITH A CONSTRUCTION EXIT SHALL BE OTHERWISE BARRICADED UNTIL THE SITE IS STABILIZED.

ADA COMPLIANCE:

A. CURB RAMPS ALONG PUBLIC STREETS AND IN THE PUBLIC RIGHT-OF-WAY SHALL BE CONSTRUCTED BASED ON THE CITY STANDARD CONSTRUCTION DETAILS AND SPECIFICATIONS.

B. PRIVATE CURB RAMPS ON THE SITE (I.E. OUTSIDE PUBLIC STREET RIGHT-OF-WAY) SHALL CONFORM TO ADA STANDARDS AND SHALL HAVE A DETECTABLE WARNING SURFACE THAT IS FULL WIDTH AND FULL DEPTH OF THE CURB RAMP, NOT INCLUDING FLARES.

C. ALL ACCESSIBLE ROUTES, GENERAL SITE AND BUILDING ELEMENTS, RAMPS, CURB RAMPS, STRIPING, AND PAVEMENT MARKINGS SHALL CONFORM TO ADA STANDARDS FOR ACCESSIBLE DESIGN, LATEST EDITION.

D. ANY COMPONENTS OF THE PROJECT SERVING MULTIFAMILY DWELLINGS IN BUILDINGS THAT HAVE 4 OR MORE UNITS PER DWELLING SHALL ALSO CONFORM TO THE FAIR HOUSING ACT (FHA), AND COMPLY WITH THE FAIR HOUSING ACT DESIGN MANUAL BY THE US DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT.

E. BEFORE PLACING PAVEMENT, CONTRACTOR SHALL VERIFY THAT SUITABLE ACCESSIBLE PEDESTRIAN ROUTES (PER ADA AND FHA) EXIST TO AND FROM EVERY DOOR AND ALONG SIDEWALKS, ACCESSIBLE PARKING SPACES, ACCESS AISLES, AND ACCESSIBLE ROUTES. IN NO CASE SHALL AN ACCESSIBLE RAMP SLOPE EXCEED 1 VERTICAL TO 12 HORIZONTAL. IN NO CASE SHALL SIDEWALK CROSS SLOPE EXCEED 2.0 PERCENT. IN NO CASE SHALL LONGITUDINAL SIDEWALK SLOPE EXCEED 5.0 PERCENT. ACCESSIBLE PARKING SPACES AND ACCESS AISLES SHALL NOT EXCEED 2.0 PERCENT SLOPE IN ANY DIRECTION.

F. CONTRACTOR SHALL TAKE FIELD SLOPE MEASUREMENTS ON FINISHED SUBGRADE AND FORM BOARDS PRIOR TO PLACING PAVEMENT TO VERIFY THAT ADA SLOPE REQUIREMENTS ARE PROVIDED. CONTRACTOR SHALL CONTACT ENGINEER PRIOR TO PAVING IF ANY EXCESSIVE SLOPES ARE ENCOUNTERED. NO CONTRACTOR CHANGE ORDERS WILL BE ACCEPTED FOR ADA SLOPE COMPLIANCE ISSUES.

CONCRETE INFORMATION (SITE WORK ONLY):

1. PRODUCT CRITERIA:

   A. UNLESS OTHERWISE NOTED CEMENT SHALL BE TYPE I OR III CONFORMING TO ASTM C150. AGGREGATES SHALL BE NORMAL WEIGHT CONFORMING TO ASTM C33.

   B. CONCRETE SHALL CONFORM TO ACI BUILDING CODE (318-89). UNLESS NOTED CONCRETE SHALL BE NORMAL WEIGHT AND HAVE A 28 DAY COMPRESSIVE STRENGTH OF 3,500 P.S.I.

   C. SLUMP SHALL BE 3" TO 5" FOR REGULAR MIX. LARGER SLUMP SHALL BE PERMITTED WITH WATER REDUCING ADMIXTURES AND WRITTEN CONSENT OF THE ENGINEER.

   D. THE RELATIONSHIP BETWEEN MAXIMUM AGGREGATE SIZE TO MINIMUM AMOUNT OF CEMENT IN CONCRETE PAVEMENT (LB. PER C.Y. OR MIX) SHALL BE AS FOLLOWS: 1" - 520, 3/4" - 540, 1/2" - 590, 3/8" - 610.

2. CURING CRITERIA:

   A. CONCRETE CURING SHALL COMPLY WITH ACI 308. CURING PROCESS SHALL START IMMEDIATELY FOLLOWING INITIAL SET. CURING SHALL BE BY CURING COMPOUND.

   B. CONCRETE EXPOSED TO THE WEATHER SHALL BE AIR-ENTRAINED IN ACCORDANCE WITH ACI 318-89 TABLE 4.1.1. NORMAL WEIGHT CONCRETE SLABS SHALL HAVE AIR CONTENT IN ACCORDANCE WITH ACI 302.IR-89 TABLE 5.2.7A.

   C. HOT WEATHER CONCRETING SHALL COMPLY WITH ACI 305. NO CONCRETE ABOVE 90 DEGREES FAHRENHEIT SHALL BE POURED. LOWER CONCRETE TEMPERATURE BY COOLING WATER AND AGGREGATE. FORMS, STEEL, AND SUBGRADE SHALL BE SPRINKLED WITH COLD WATER. AFTER FINISHING CONCRETE USE LIGHT FOG SPRAY UNTIL CURING COMPOUND IS USED.

   D. COLD WEATHER CONCRETING SHALL COMPLY WITH ACI 306. SPECIAL MATERIAL PROCEDURES SHALL BE PROVIDED DURING PLACING AND CURING OF CONCRETE BELOW 40 DEGREES FAHRENHEIT.

   E. E. CURING, HOT, AND COLD WEATHER CONCRETING PROCEDURES ARE ONLY GIVEN AS A GUIDE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PREVENT CONCRETE DAMAGE AND CRACKS. DAMAGED OR CRACKED CONCRETE WILL NOT BE ACCEPTED.

REINFORCING STEEL INFORMATION (SITE WORK ONLY):

1. PRODUCT CRITERIA:

   A. REINFORCING STEEL SHALL CONFORM TO ASTM A-615, GRADE 60 AND GRADE 40 FOR #3 AND SMALLER BARS. MINIMUM LAP 48" DIAMETER.

   B. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A-185, MINIMUM LAP SHALL BE 8".

   C. REINFORCING THAT IS WELDED SHALL BE WELDABLE TYPE AND CONFORM TO ASTM A-706.

PAVEMENT INFORMATION:

1. PAVEMENT:

   A. ALL MATERIALS, EQUIPMENT, METHODS OF CONSTRUCTION, AND WORKMANSHIP SHALL CONFORM TO THE TENNESSEE DEPARTMENT OF TRANSPORTATION, TDOT, STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, CURRENT EDITION.

   B. SEE PAVEMENT DETAILS ON CONSTRUCTION DOCUMENTS FOR SPECIFIC DESIGN INFORMATION AND REQUIREMENTS.

   C. ALL CURB AND GUTTER TO BE 24" AND CONSTRUCTED OF 3000 P.S.I. CONCRETE UNLESS OTHERWISE NOTED.

2. SIGNING AND STRIPING:

   A. SIGNING AND STRIPING TO BE PROVIDED BY THE CONTRACTOR ACCORDING TO THE DRAWINGS AND SPECIFICATIONS.

   B. ALL PAVEMENT MARKINGS SHALL CONFORM TO CURRENT MUTCD STANDARDS. ALL PAVEMENT MARKINGS ON PRIVATE PROPERTY SHALL BE PAINT, UNLESS NOTED OTHERWISE. ALL PAVEMENT MARKINGS ON PUBLIC RIGHT-OF-WAY SHALL BE THERMOPLASTIC, UNLESS NOTED OTHERWISE.

STORM SEWER NOTES:

1. REINFORCED CONCRETE PIPE SHALL BE RCP CLASS III UNLESS OTHERWISE NOTED WITH BELL-AND-SPIGOT AND GASKETED JOINTS WITH ASTM C 443 RUBBER GASKETS.
2. FILL HEIGHTS OVER 13' REQUIRE CLASS IV RCP STORM PIPE.
3. STORM INLETS SHALL BE PRECAST IN ACCORDANCE WITH CITY OF LA VERGNE PUBLIC WORKS SPECIFICATIONS WHICH MEET OR EXCEED ASTM C 478.
4. ALL MANHOLE FRAMES AND COVERS ARE TO BE PER CITY OF LA VERGNE PUBLIC WORKS STANDARD DETAIL FOR DIMENSIONS AND MATERIALS AND AS BELOW IF NOT OTHERWISE INDICATED. FERROUS; 24-INCH (610-MM) ID BY 7- TO 9-INCH (175- TO 225-MM) RISER WITH 4-INCH-(102-MM-) MINIMUM WIDTH FLANGE AND 26-INCH- (660-MM-) DIAMETER COVER. INCLUDE INDENTED TOP DESIGN WITH LETTERING CAST INTO COVER, USING WORDING EQUIVALENT TO "STORM SEWER."
5. MATERIAL: GRAY IRON ASTM A48 CLASS 30 UNLESS OTHERWISE INDICATED.
6. ALL HDPE PIPE SHALL BE CORRUGATED HIGH DENSITY POLYETHYLENE SMOOTH INTERIOR PIPE. HDPE PIPE SHALL CONFORM TO ASTM D3350 WITH SOIL TIGHT JOINTS.
7. ALL HDPE SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS AND AASHTO SECTION 30.
8. CONTRACTOR TO PROVIDE AND INSTALL MANUFACTURER RECOMMENDED FITTINGS ON RCP CONNECTIONS TO HDPE STRUCTURES.
9. REFER TO PIPE CHART FOR CASTING TYPES. INSTALL REDUCERS AS NECESSARY PER MANUFACTURER'S SPECIFICATIONS TO ACCOMMODATE LARGER INLET SIZES.
10. FOLLOW CONSTRUCTION PLANS AND MANUFACTURER DETAILS, SPECIFICATIONS, AND INSTALLATION INSTRUCTION AS INCLUDED WITHIN THE PLANS AND PROVIDED BY MANUFACTURER FOR THE INSTALLATION OF WATER QUALITY AND DETENTION SYSTEMS.
11. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR ALL STORM SEWER PIPE, STRUCTURES, WATER QUALITY STRUCTURES, AND DETENTION STRUCTURES FOR ENGINEER AND OWNER APPROVAL PRIOR TO ORDERING MATERIALS.

CLEARING AND GRUBBING:

A. DO NOT EXCEED CLEARING AND GRUBBING LIMITS OF CONSTRUCTION LINES INDICATED ON THE PLANS.

B. ALL AREAS OUTSIDE THE LIMITS OF CONSTRUCTION LINE SHALL NOT BE CROSSED BY HEAVY EQUIPMENT OR USED FOR STORING HEAVY EQUIPMENT OR MATERIALS.

C. NO EQUIPMENT SHALL BE STORED UNDER THE DRIP LINE OF TREES TO REMAIN.

D. DO NOT FALL ANY TREES OR PUSH PILES OF DEBRIS AGAINST ANY TREES TO REMAIN.

E. REMOVE ALL STUMPS, ROCKS, ASPHALT & CONCRETE DEBRIS, ETC. AND DISPOSE OFF SITE IN ACCORDANCE WITH LOCAL, STATE & FEDERAL REGULATIONS.

F. CONTACT ALL UTILITY AUTHORITIES WHO HAVE LINES WITHIN THE CLEARING AND GRUBBING LIMITS BEFORE STARTING WORK

E. ALL EROSION CONTROL SEDIMENT BARRIERS, SILT FENCES, AND TREE PROTECTION DEVICES SHALL BE INSTALLED PRIOR TO STARTING CLEARING AND GRUBBING.

F. AFTER STAKING IS COMPLETED, TREES WITHIN GRADING LIMITS TO BE SAVED WILL BE IDENTIFIED BY THE OWNER'S REPRESENTATIVE. FIELD CHANGES TO GRADING PLANS SHALL BE MADE FOR SMOOTH TRANSITION OF GRADES AROUND ALL TREES WHICH REQUITE TREE WELLS WITHIN THE GRADING LIMITS.

G. ALL CLEARING SHALL BE LIMITED TO AREAS TO BE GRADED WITHIN 15 CALENDAR DAYS.

GRADING NOTES:

A. TOPSOIL SHALL BE STORED ON SITE IN LOCATIONS APPROVED BY THE OWNER'S REPRESENTATIVE. DRAINAGE SHALL ROUT AROUND THESE TOPSOIL STOCKPILES FOR THE DURATION OF THE GRADING OPERATIONS. EROSION CONTROL MEASURES SHALL PREVENT THE LOSS OF TOPSOIL MATERIAL.

B. UNSUITABLE SOILS SHALL BE UNIFORMLY SPREAD ACROSS NON-STRUCTURAL FILL AREAS AND COVERED WITH TOPSOIL AND SEEDED.

C. FILL AREA SHALL BE PROOF-ROLLED WITH RUBBER-TIRED EQUIPMENT WITH A MINIMUM WEIGHT OF FIFTEEN TONS PRIOR TO BEGINNING FILL OPERATION. AREAS WHICH ARE SOFT OR UNSTABLE SHALL BE UNDERCUT UNTIL STABLE SOILS ARE FOUND. RE-COMPACTION OF THESE SOILS SHALL BE TO 98% MAXIMUM DRY DENSITY AS PER ASTM D698 (STANDARD PROCTOR).

D. CUT AREA SHALL BE PROOF-ROLLED AFTER FINAL SUBGRADE IS ACHIEVED IN THE SAME MANNER AS FILLED AREAS. SOFT OR UNSTABLE SOILS SHALL BE SCARIFIED TO A DEPTH OF 12" AND RE-COMPACTED TO 98% MAXIMUM DRY DENSITY AS PER ASTM D698 (STANDARD PROCTOR).

E. ALL GRADING SHALL BE COMPLETED TO THE LEVEL INDICATED BY THE SCOPE OF WORK LISTED IN THE BID DOCUMENTS.

F. ELEVATIONS SHOWN ON THE PLANS IS THE FINISH GRADE ELEVATION.

G. GRADING SHALL BE SEQUENCED SO THAT BASE STONE IS PLACED WITHIN 10 CALENDAR DAYS PF ACHIEVING OPTIMUM SUBGRADE COMPACTION.

H. SOILS TESTING LABORATORY/ SOILS ENGINEER. CONTRACTOR WILL EMPLOY A QUALIFIED SOILS TESTING LABORATORY/ ENGINEER TO OBSERVE THIS WORK AND MAKE TESTS AS REQUIRED.

I. HAVE EARTH BORROW FILL, AGGREGATE, AND TOPSOIL, AND STRUCTURAL FILL TESTED AND APPROVED BY DESIGNATED TESTING LABORATORY BEFORE MOVING IT TO THE JOB SITE.

J. CONTRACTOR SHALL OBSERVE PROOF-ROLLING OF AREAS WHERE BUILDING AND PAVING WILL BE LOCATED TO DETERMINE ADEQUACY OF SOIL COMPACTION AND IN-PLACE SOILS. OTHER AREAS WILL BE INSPECTED BY SOILS ENGINEER TO DETERMINE ADEQUACY IN THOSE AREAS. IF SOILS ARE NOT ADEQUATE TO BEAR WEIGHTS THAT WILL BE IMPOSED, TESTING LABORATORY WILL OBSERVE AND REPORT CORRECTIVE ACTION TAKEN.

K. TEST IN-PLACE SOIL AND FILLED AND COMPACTED AREAS. IF THESE ARE NOT ADEQUATE TO BEAR WEIGHTS IMPOSED, TESTING LABORATORY WILL ADVICE THE OWNER'S REPRESENTATIVE OF THEIR RECOMMENDATIONS. HE WILL DIRECT ANY CORRECTIVE MEASURES THAT ARE NECESSARY.

L. SOILS COMPACTION TESTING OF IN-PLACE AND FILLED AND COMPACTED AREAS WILL BE PERFORMED BY TESTING LABORATORY IN ACCORDANCE WITH THEIR REQUIREMENTS.

M. THE SOILS ENGINEER'S AND TESTING LABORATORY'S FEES WILL BE PAID BY THE CONTRACTOR.

N. APPLICABLE SPECIFICATIONS FOR COMPACTED FILL: THE FOLLOWING CURRENT AMERICAN SOCIETY OF TESTING MATERIALS (ASTM) STANDARDS ARE HEREBY MADE PART OF THIS SPECIFICATION:

- D421-58, DRY PREPARATION OF SOIL SAMPLES FOR GRAIN-SIZE ANALYSIS AND DETERMINATION OF SOIL CONSTANTS.
- D422-63, STANDARD METHOD OF PARTICLE SIZE ANALYSIS OF SOILS.
- D1140-54, METHOD OF TEST FOR AMOUNT OF MATERIAL IN SOILS FINER THAN NO.200 SIEVE.
- D698, METHOD FOR LABORATORY COMPACTION CHARACTERISTICS OF SOIL USING STANDARD EFFORT
- D1557-78, STANDARD TEST METHODS FOR MOISTURE-DENSITY RELATIONS OF SOILS AND SOIL-AGGREGATE MIXTURES USING 10 LB. (4.54-KG) RAMMER AND 18-INCH (457 MM) DROP.

O. PROVIDE POSITIVE DRAINAGE AWAY FROM BUILDINGS AT ALL LOCATIONS UNLESS OTHERWISE NOTED.

P. CONTRACTOR SHALL REVIEW THE SITE SPECIFIC GEOTECHNICAL REPORT PRIOR TO COMMENCING WITH GRADING OPERATIONS. WHERE CONFLICTS BETWEEN THE GRADING NOTES AND GEOTECHNICAL REPORT EXIST, THE MORE STRINGENT REQUIREMENT SHALL APPLY.

Q. CONTRACTOR IS RESPONSIBLE FOR DOCUMENTING WITH LOAD TICKETS, PHOTOGRAPHS, LOG BOOK, VIDEO RECORDING AND OTHER MEANS AS NECESSARY TO VERIFY THE INSTALLATION OF STORMWATER BEST MANAGEMENT PRACTICES REQUIRED BY THE LOCAL MUNICIPALITY AND JURISDICTION. AS-BUILT TOPOGRAPHY AND UTILITY PLANS HAVING BEEN PREPARED BY A QUALIFIED LAND SURVEYOR ARE REQUIRED TO BE SUBMITTED TO KIMLEY-HORN AT THE CONCLUSION OF THE PROJECT FOR VERIFICATION OF DESIGN INTENT. ANY MODIFICATIONS TO THE GRADING AND UTILITY SYSTEMS REQUIRED, NOT PREVIOUSLY APPROVED BY THE OWNER AND ENGINEER ARE THE RESPONSIBILITY OF THE CONTRACTOR.

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CO-OP BUSINESS PARK
LOT 1
PANATTONI DEVELOPMENT COMPANY
LA VERGNE, TENNESSEE

PANATTONI®

ROBERT JAMES ARMS
REGISTERED ENGINEER
No. 121065
STATE OF TENNESSEE
12/18/2023

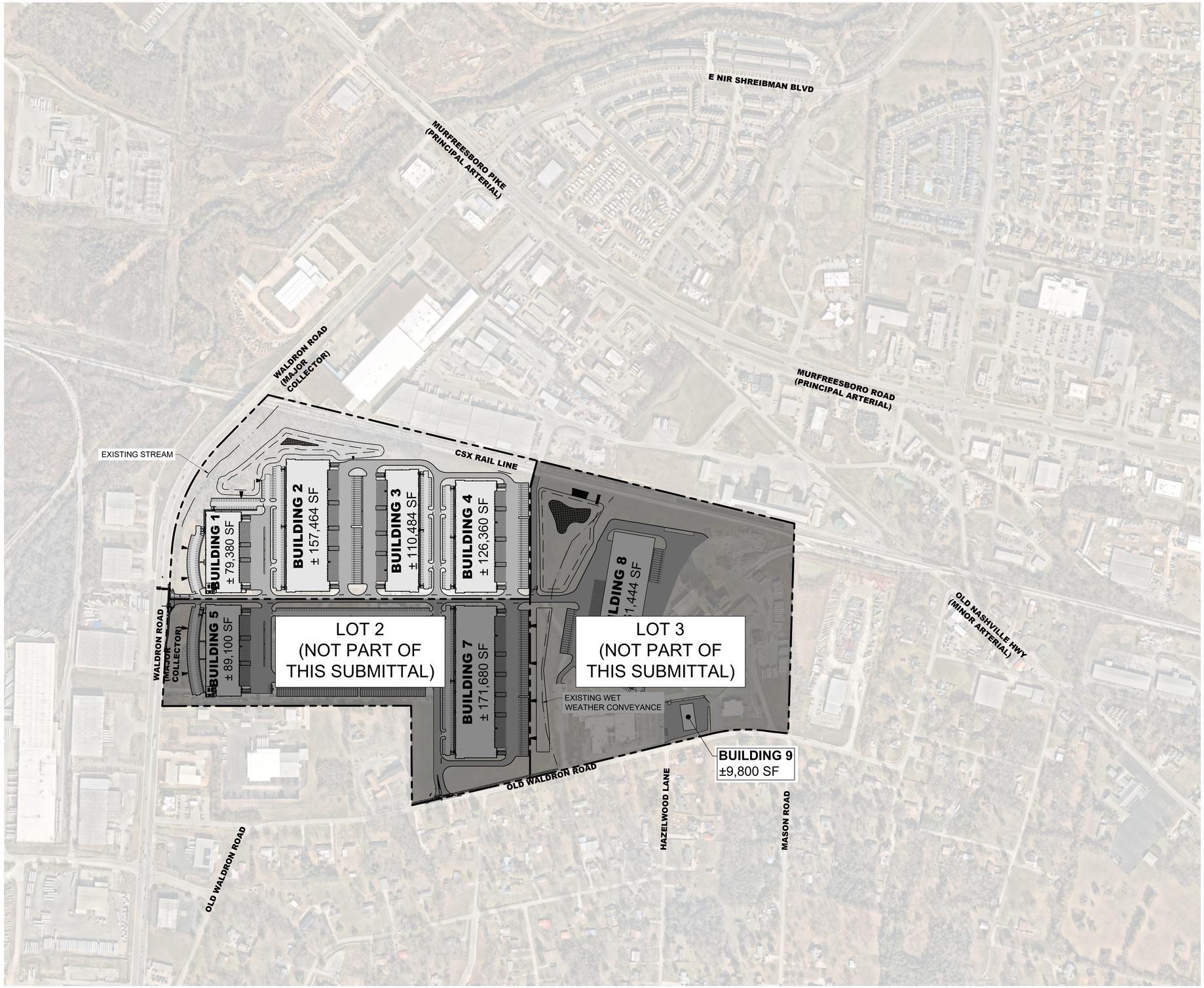
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KIMLEY-HORN PROJECT NO. 118163044

GENERAL NOTES

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C0-01

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LA VERGNE, TENNESSEE

PANATTONI®

ROBERT JAMES ARTS
REGISTERED ENGINEER
STATE OF TENNESSEE
120145
12/18/2023

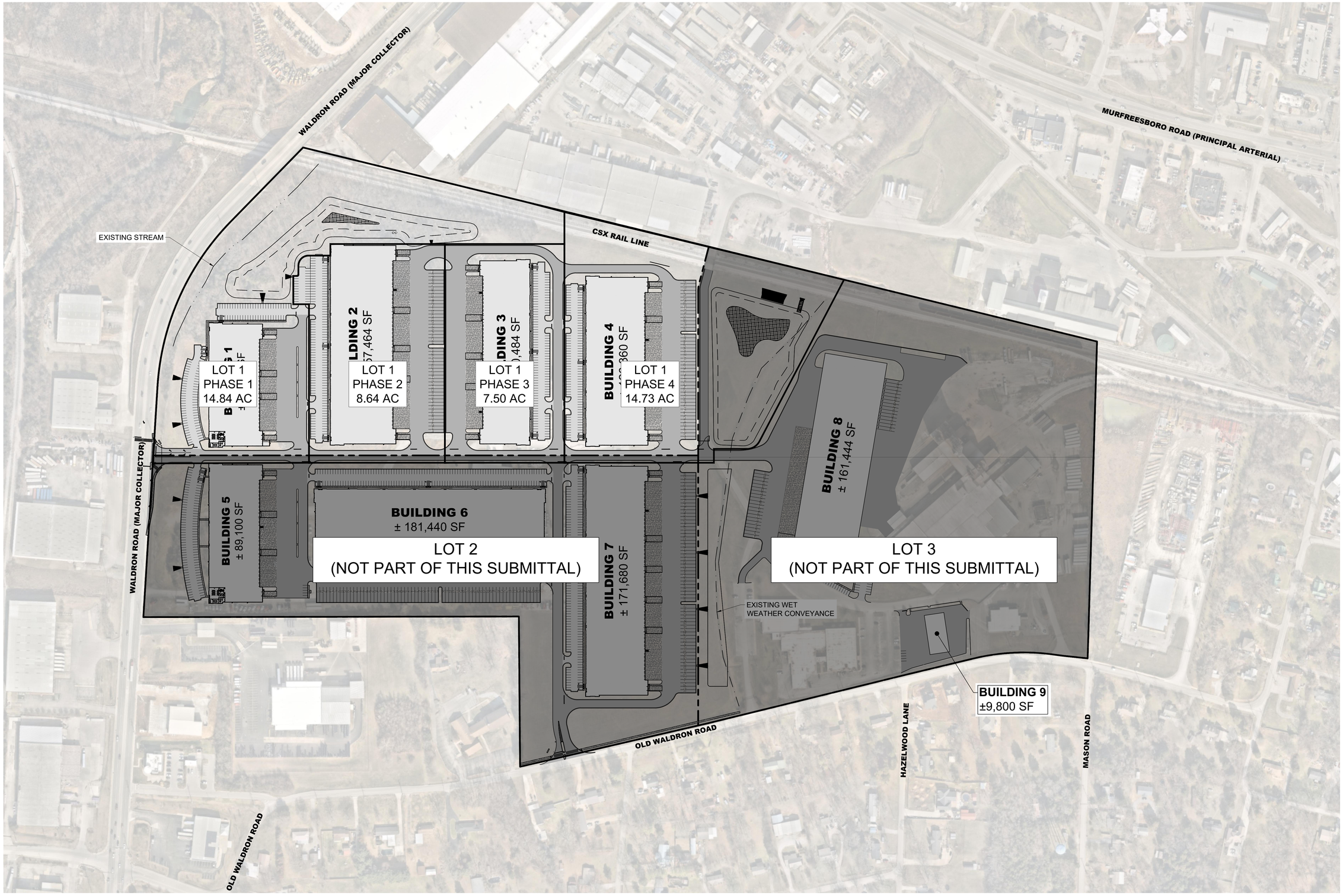
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SITE VICINITY MAP

SHEET NUMBER
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LA VERGNE, TENNESSEE

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ROBERT JAMES ARTS
REGISTERED ENGINEER
STATE OF TENNESSEE
12/18/2023

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KIMLEY-HORN PROJECT NO. 118163044

BUILDING PHASING PLAN

SHEET NUMBER
C0-20


WALDRON ROAD
MURFREESBORO ROAD
OLD WALDRON ROAD
HAZELWOOD LANE
MASON ROAD
TRACT "B"
15 (24.03)
TENNESSEE FARMERS COOPERATIVE
BOOK 117, PAGE 369, R.O.R.C.
ZONING: I-2
15 (017.03)
THE SCOTT CORPORATION LLC
RECORD BOOK 1608, PAGE 1025, R.O.R.C.
ZONING: I-2
15 (24.00)
TENNESSEE FARMERS COOPERATIVE INC.
DEED BOOK 107, PAGE 225,
DEED BOOK 111, PAGE 129,
R.O.R.C.
ZONING: I-2
DECLARE BOOK 117, PAGE 369, R.O.R.C.
15 (024.01)
GREENPOINT AG HOLDINGS LLC
RECORD BOOK 2190, PAGE 3057,
R.O.R.C.
ZONING: I-2
60' STREAM BUFFER
30' STREAM BUFFER
EX. 500-YR FLOODPLAIN
EXISTING STREAM
WOODS AND GROUND COVER AREAS OF THE CONTOURS WITHIN WOODED AREA
EXISTING WET WEATHER CONVEYANCE
EXISTING 48" CMP TO REMAIN
EXISTING BUILDING
LOT 1B
RESUBDIVISION OF LOT 1
IRON CITY SASH & DOOR
PLAT CABINET 30, PAGE 276, R.O.R.C.
15 (26.02)
MITSUCHI CORPORATION OF AMERICA
DEED BOOK 699, PAGE 382, R.O.R.C.
ZONING: I-2
POINT OF BEGINNING TRACT "B"
LOT 1A
RESUBDIVISION OF LOT 1
IRON CITY SASH & DOOR
PLAT CABINET 30, PAGE 276, R.O.R.C.
15 (26.01)
MITSUCHI CORPORATION OF AMERICA
RECORD BOOK 1261, PAGE 1312, R.O.R.C.
ZONING: I-2
POINT OF BEGINNING TRACTS "A" & "C"
LOT 2
IRON CITY SASH & DOOR
PLAT CABINET 14, PAGE 47, R.O.R.C.
15 (26.00)
DERBY FABRICATING ACQUISITION CO
RECORD BOOK 1052, PAGE 3748, R.O.R.C.
ZONING: I-2
SURVEY BENCHMARK:
TAG BOLT ON FIRE HYDRANT
EL. 575.60
(NAVD88) (GEOID03)
TAG BOLT ON FIRE HYDRANT
ELEV. 575.60
(NAVD88) (GEOID03)
15 (27.00)
JUDE N. LAPORTE AND WIFE,
SABINE LAPORTE
RECORD BOOK 1349, PAGE 3178, R.O.R.C.
ZONING: I-2
LOT 1
ASCEND FEDERAL CREDIT UNION
PLAT CABINET 41, PAGE 199, R.O.R.C.
17 (2.04)
RDM3 LLC
RECORD BOOK 2204, PAGE 1977, R.O.R.C.,
ZONING: C-2
LOT 1
ASCEND FEDERAL CREDIT UNION
PLAT CABINET 41, PAGE 199, R.O.R.C.
17 (213.00)
ASCEND FEDERAL CREDIT UNION
RECORD BOOK 1345, PAGE 1142,
R.O.R.C., ZONING: C-2
17 (1.00)
COCA COLA BOTTLING COMPANY OF NASHVILLE, INC.
DEED BOOK 403, PAGE 107, R.O.R.C.
ZONING: I-2
17 (1.01)
LAVERGNE FIRST UNITED METHODIST CHURCH
RECORD BOOK 1417, PAGE 3589, R.O.R.C.
ZONING: I-2
TRACT "C"
15 (28.00)
TENNESSEE FARMERS COOPERATIVE
DEED BOOK 117, PAGE 369 AND
DEED BOOK 630, PAGE 858, R.O.R.C.,
ZONING: I-2
TRACT "A"
15 (PART OF 24.00)
TENNESSEE FARMERS COOPERATIVE
DEED BOOK 117, PAGE 369,
R.O.R.C.
ZONING: I-2
SECTION I
TIPPERARY HEIGHTS
PLAT BOOK 1, PAGE 89, R.O.R.C.
ZONING: R-1
SECTION III
TIPPERARY HEIGHTS
PLAT BOOK 1, PAGE 113, R.O.R.C.
ZONING: R-1
SECTION IV
TIPPERARY HEIGHTS
PLAT BOOK 1, PAGE 126, R.O.R.C.
ZONING: R-1
SECTION IV
TIPPERARY HEIGHTS
PLAT BOOK 1, PAGE 99, R.O.R.C.
ZONING: R-1
15 (012.00)
150 OLD WALDRON ROAD LP
RECORD BOOK 2161, PAGE 2282, R.O.R.C.;
ZONING: I-2
17C-B (002.00)
DONNIE G. FERGUS, ET UX
RECORD BOOK 1327, PAGE 2564, R.O.R.C.
ZONING: R-1
17C-B (002.05)
PHENGVONH KHAMTANH AND ONERED PHI
DEED BOOK 430, PAGE 297, R.O.R.C.
ZONING: R-1
RESUBDIVISION OF LOT 38, SECTION III
TIPPERARY HEIGHTS
PLAT BOOK 16 PAGE 373, R.O.R.C.
ZONING: R-1
FINAL PLAT
EVELYN MITCHELL
PLAT BOOK 16, PAGE 212, R.O.R.C.
ZONING: R-1
BrB
Bu
Pd
LoB
HcA
TaB2
TrC
Eg
Ea
GRC
TbC3
TaC3
TaC2
BrB
TaB2
HcA
Bu
TaB2
TaC2
GRC
TbC3
TaB2
TaB2
TaC2
WOODS
GRAVEL
GRAVEL DRIVE
ASPHALT DRIVE
CRACKED ASPHALT DRIVE
CONCRETE
ASPHALT
6' CHAIN-LINK FENCE
STOP SIGN
CRAWFORD DRIVE
DOLLY PAD
TIPPERARY DRIVE
HAZELWOOD LANE
MASON ROAD
S 70° 47' 03" E 457.87'
N 19° 49' 58" E 360.68'
N 08° 09' 13" E 527.92'
CH=S 14° 30' 38" W 273.75'
R=998.00'
L=274.16'
CH=S 2° 08' E
N 84° 28' 00" E 1,000.00'
S 70° 47' 03" E 1,000.00'
S 19° 12' 57" W 360.00'
N 70° 47' 03" W 1,000.00'
N 19° 12' 57" E 360.00'
S 19° 12' 57" W 1,000.00'
N 70° 47' 03" W 1,000.00'
N 19° 12' 57" E 360.00'
S 70° 47' 03" E 1,000.00'
N 19° 12' 57" E 360.00'
S 70° 47' 03" E 1,000.00'
S 19° 12' 57" W 360.00'
N 70° 47' 03" W

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DEMOLITION LEGEND

	REMOVE GRAVEL
	DEMOLISH AND REMOVE STRUCTURE
	REMOVE CONCRETE / RIGID PAVEMENT
	SAW CUT LINE
	REMOVE LINEAR OBJECT (FENCE/UTILITIES)
X	REMOVE OBJECT

EXISTING UTILITIES NOTE

CONTRACTOR SHALL VERIFY LOCATION OF ALL EXISTING UTILITIES AND NOTIFY ENGINEER IMMEDIATELY OF ANY DISCREPANCIES AND/OR CONFLICTS WITH EXISTING OR PROPOSED UTILITIES PRIOR TO PROCEEDING.

SEE DEMOLITION NOTES, SHEET C0-01.

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PANATTONI DEVELOPMENT COMPANY
LA VERGNE, TENNESSEE

PANATTONI®

ROBERT JAMES ARTS
REGISTERED ENGINEER
No. 121045
STATE OF TENNESSEE
12/18/2023

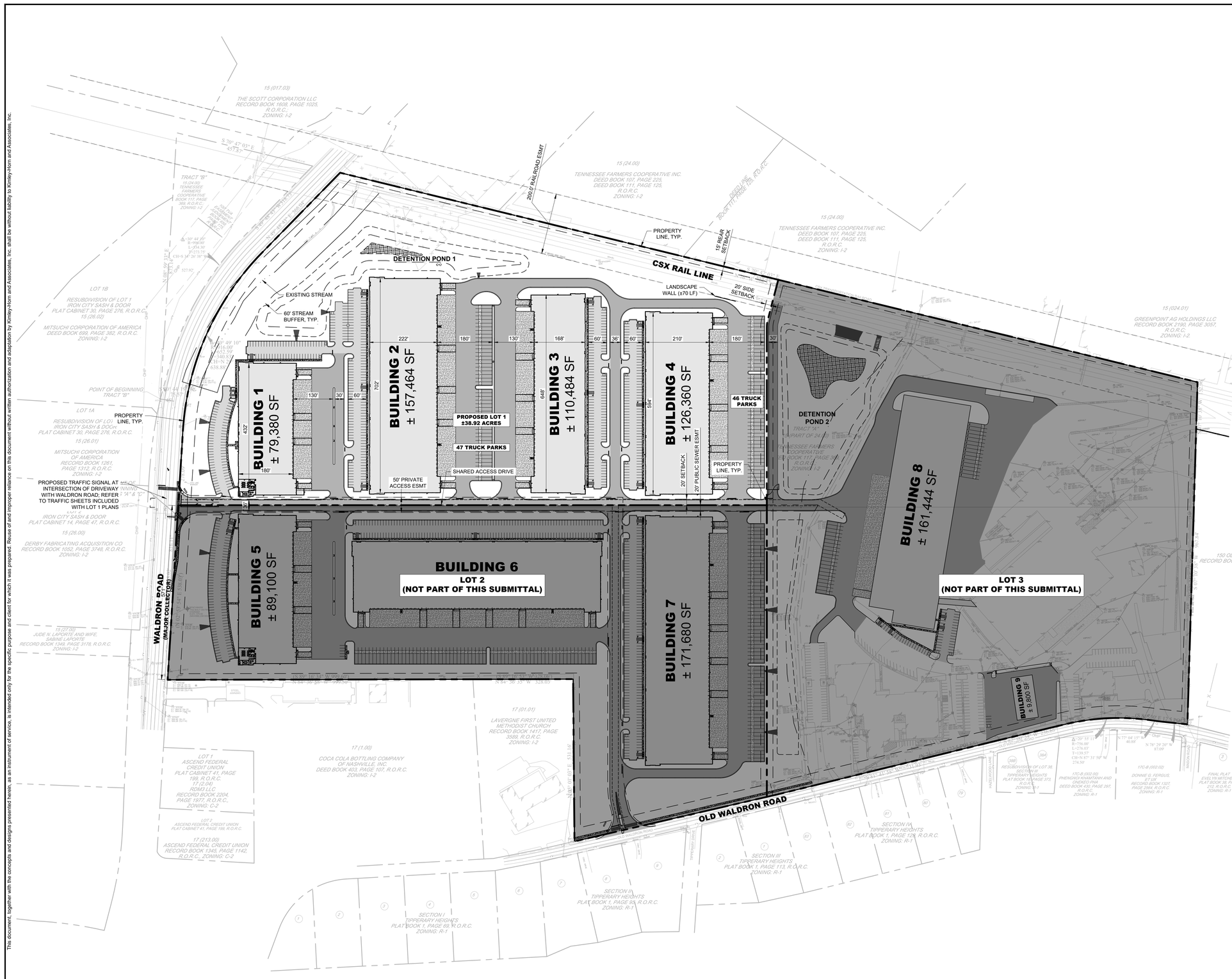
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KIMLEY-HORN PROJECT NO.
118163044

DEMOLITION PLAN

SHEET NUMBER
C1-10



SITE LAYOUT NOTES

1. INSTALL CONCRETE JOINTS WHERE SHOWN ON PLANS AND DETAILS. ALIGN ON WALLS, BUILDINGS, RADII, ETC. EVENLY SPACE BETWEEN ELEMENTS AS SHOWN. PROVIDE EXPANSION JOINTS BETWEEN CONCRETE PAVEMENT AND ALL VERTICAL ELEMENTS (WALLS, CURBS, ETC.).
2. LAYOUT ALL CURVES SMOOTHLY WITH NO ABRUPT CHANGES AT TANGENT POINTS.
3. ALL DIMENSIONS ARE TO THE FACE OF CURB UNLESS OTHERWISE NOTED.
4. GENERAL CONTRACTOR RESPONSIBLE FOR INSTALLATION OF IRRIGATION SLEEVES AND SHALL COORDINATE INSTALLATION WITH IRRIGATION PLANS. SEE SHEET CU101 FOR LOCATION OF IRRIGATION METER
5. LAYOUT ALL ELEMENTS IN FIELD AND CONTACT OWNER'S REPRESENTATIVE FOR APPROVAL BEFORE BEGINNING ANY CONSTRUCTION.
6. CONTRACTOR TO TAKE ALL PRECAUTIONS TO FIND AND AVOID SITE UTILITIES. ALL UTILITIES ARE NOT SHOWN ON DRAWING. VERIFY LOCATIONS AND CONSIDER SUCH WHEN ESTIMATING.
7. ALL LANDSCAPE ISLANDS SHALL BE MOUNDED WITH TOPSOIL 4" ABOVE THE CURB LINE TO PROMOTE POSITIVE DRAINAGE.
8. ALL PAVEMENT MARKINGS AND SIGNAGE SHALL BE INSTALLED PER THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION.
9. SEE ARCHITECTURAL PLANS FOR EXACT BUILDING DIMENSIONS.
10. THE SITE PLAN DRAWINGS ARE INTENDED TO SHOW THE HORIZONTAL CONTROL OF THE SITE. THE CONTRACTOR WILL BE FURNISHED WITH THE SITE PLAN IN AUTOCAD FORMAT. KEY DIMENSIONS HAVE BEEN PROVIDED ON THE PLAN AND MUST BE VERIFIED PRIOR TO ACTUAL CONSTRUCTION.
11. REFER TO GENERAL NOTE SHEETS C0-01.
12. REFER TO ARCHITECTURAL SITE PLAN FOR ADDITIONAL INFORMATION.

RETAINING WALL NOTES

1. ALL SITE RETAINING WALLS INDICATED ON THESE PLANS ARE SHOWN FOR GENERAL LOCATION AND MINIMUM HEIGHT REQUIRED.
2. ALL SITE WALLS SHALL BE DESIGN / BUILD UNDER THE RESPONSIBILITY OF THE CONTRACTOR.
3. CONTRACTOR SHALL SUBMIT DESIGN DRAWINGS AND CALCULATIONS SEALED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF TENNESSEE TO THE CIVIL ENGINEER OF RECORD AND THE CODES AND ENGINEERING DEPARTMENT FOR REVIEW AND APPROVAL PRIOR TO ORDERING MATERIALS OR CONSTRUCTION.
4. ALL WALLS OF HEIGHTS EQUAL TO OR GREATER THAN 30 INCHES (MEASURED FROM TOP OF WALL TO FINISHED GRADE AT BOTTOM OF WALL) SHALL INCLUDE PEDESTRIAN GUARDRAIL OR FENCE. GUARDRAIL SHALL BE IN COMPLIANCE WITH LOCAL CODES AND IBC REQUIREMENTS.

PAVEMENT LEGEND

- STANDARD DUTY ASPHALT PAVEMENT; SEE SHEET C8-10, DETAIL 1
- HEAVY DUTY ASPHALT PAVEMENT; SEE SHEET C8-10, DETAIL 2
- STANDARD DUTY CONCRETE PAVEMENT; SEE SHEET C8-10, DETAIL 3
- HEAVY DUTY CONCRETE PAVEMENT; SEE SHEET C8-10, DETAIL 4

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PANATTONI DEVELOPMENT COMPANY
LA VERGNE, TENNESSEE

PANATTONI®

ROBERT JAMES ARTS
REGISTERED ENGINEER
AGRICULTURE
COURAGE
No. 121045
STATE OF TENNESSEE
12/18/2023

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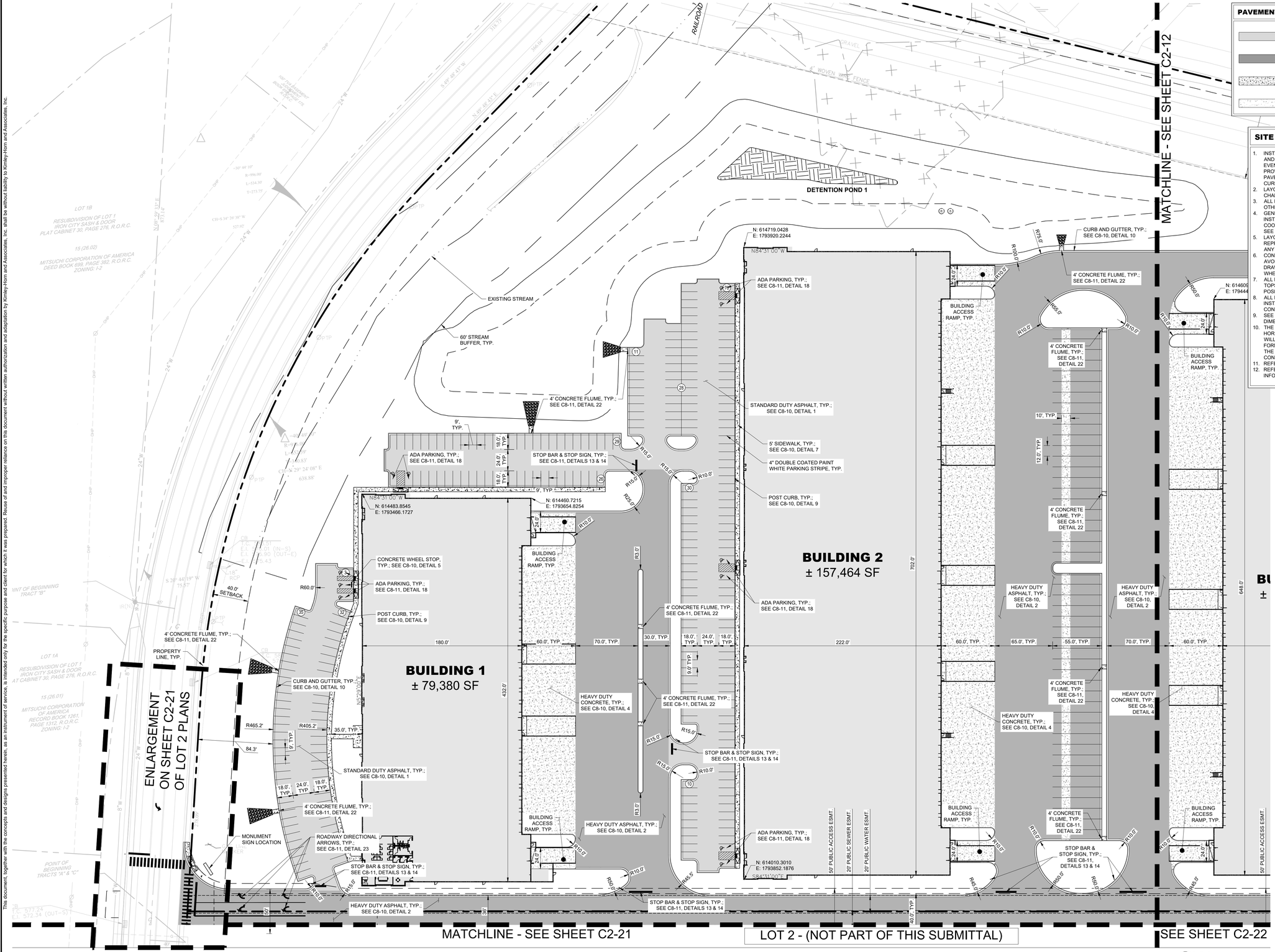
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SITE LAYOUT - OVERALL

SHEET NUMBER
C2-10

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PAVEMENT LEGEND

- STANDARD DUTY ASPHALT PAVEMENT; SEE SHEET C8-10, DETAIL 1
- HEAVY DUTY ASPHALT PAVEMENT; SEE SHEET C8-10, DETAIL 2
- STANDARD DUTY CONCRETE PAVEMENT; SEE SHEET C8-10, DETAIL 3
- HEAVY DUTY CONCRETE PAVEMENT; SEE SHEET C8-10, DETAIL 4

SITE LAYOUT NOTES

1. INSTALL CONCRETE JOINTS WHERE SHOWN ON PLANS AND DETAILS. ALIGN ON WALLS, BUILDINGS, RADII, ETC. EVENLY SPACE BETWEEN ELEMENTS AS SHOWN. PROVIDE EXPANSION JOINTS BETWEEN CONCRETE PAVEMENT AND ALL VERTICAL ELEMENTS (WALLS, CURBS, ETC.).
2. LAYOUT ALL CURVES SMOOTHLY WITH NO ABRUPT CHANGES AT TANGENT POINTS.
3. ALL DIMENSIONS ARE TO THE FACE OF CURB UNLESS OTHERWISE NOTED.
4. GENERAL CONTRACTOR RESPONSIBLE FOR INSTALLATION OF IRRIGATION SLEEVES AND SHALL COORDINATE INSTALLATION WITH IRRIGATION PLANS. SEE SHEET CU101 FOR LOCATION OF IRRIGATION METER
5. LAYOUT ALL ELEMENTS IN FIELD AND CONTACT OWNER'S REPRESENTATIVE FOR APPROVAL BEFORE BEGINNING ANY CONSTRUCTION.
6. CONTRACTOR TO TAKE ALL PRECAUTIONS TO FIND AND AVOID SITE UTILITIES. ALL UTILITIES ARE NOT SHOWN ON DRAWING. VERIFY LOCATIONS AND CONSIDER SUCH WHEN ESTIMATING.
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9. SEE ARCHITECTURAL PLANS FOR EXACT BUILDING DIMENSIONS.
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12. REFER TO ARCHITECTURAL SITE PLAN FOR ADDITIONAL INFORMATION.

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STATE OF TENNESSEE
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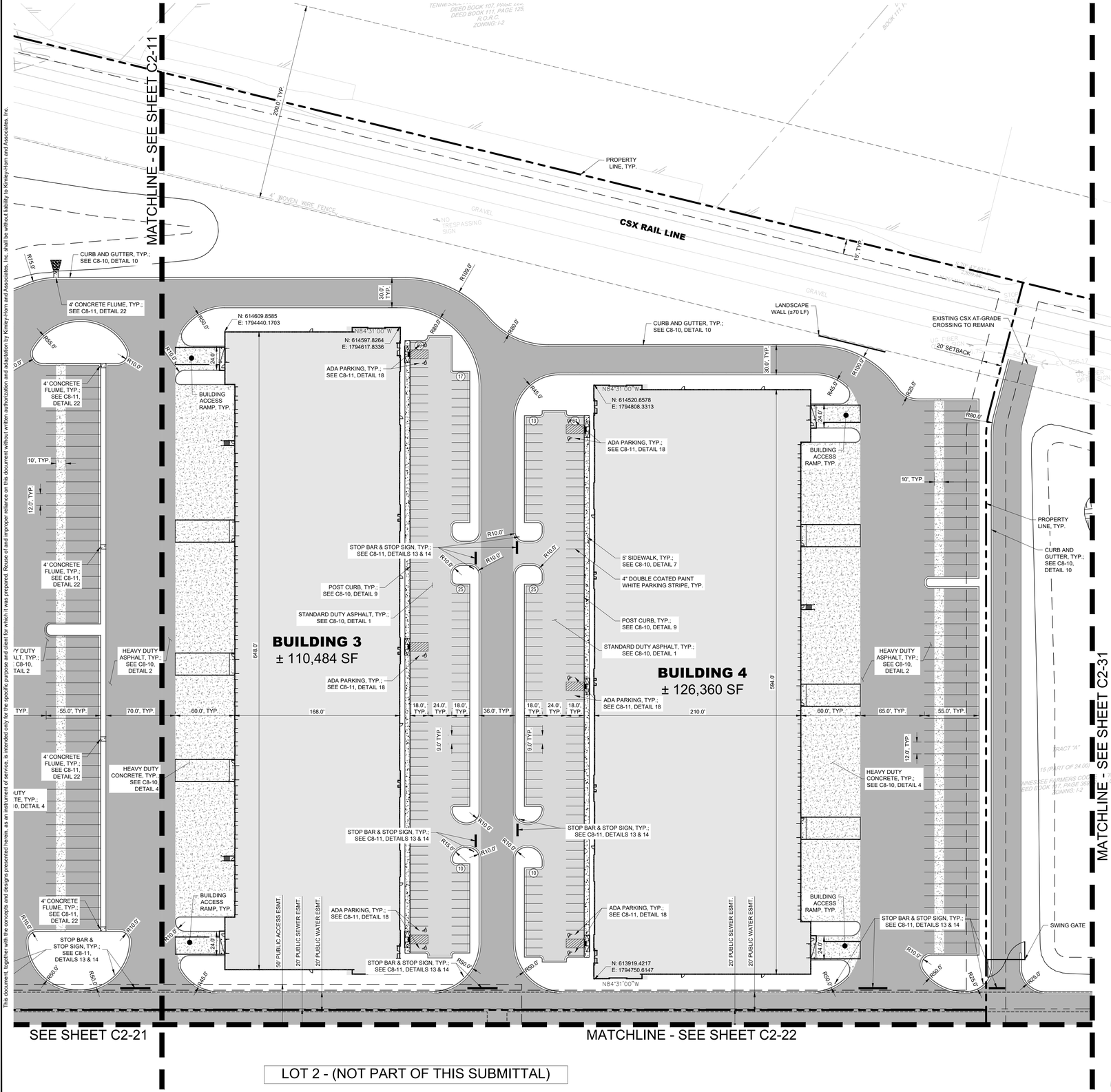
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KIMLEY-HORN PROJECT NO. 118163044

SITE LAYOUT - ENLARGEMENT

SHEET NUMBER
C2-11

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SITE LAYOUT NOTES

1. INSTALL CONCRETE JOINTS WHERE SHOWN ON PLANS AND DETAILS. ALIGN ON WALLS, BUILDINGS, RADII, ETC. EVENLY SPACE BETWEEN ELEMENTS AS SHOWN. PROVIDE EXPANSION JOINTS BETWEEN CONCRETE PAVEMENT AND ALL VERTICAL ELEMENTS (WALLS, CURBS, ETC.).
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9. SEE ARCHITECTURAL PLANS FOR EXACT BUILDING DIMENSIONS.
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11. REFER TO GENERAL NOTE SHEETS C0-01.
12. REFER TO ARCHITECTURAL SITE PLAN FOR ADDITIONAL INFORMATION.

RETAINING WALL NOTES

1. ALL SITE RETAINING WALLS INDICATED ON THESE PLANS ARE SHOWN FOR GENERAL LOCATION AND MINIMUM HEIGHT REQUIRED.
2. ALL SITE WALLS SHALL BE DESIGN / BUILD UNDER THE RESPONSIBILITY OF THE CONTRACTOR.
3. CONTRACTOR SHALL SUBMIT DESIGN DRAWINGS AND CALCULATIONS SEALED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF TENNESSEE TO THE CIVIL ENGINEER OF RECORD AND THE CODES AND ENGINEERING DEPARTMENT FOR REVIEW AND APPROVAL PRIOR TO ORDERING MATERIALS OR CONSTRUCTION.
4. ALL WALLS OF HEIGHTS EQUAL TO OR GREATER THAN 30 INCHES (MEASURED FROM TOP OF WALL TO FINISHED GRADE AT BOTTOM OF WALL) SHALL INCLUDE PEDESTRIAN GUARDRAIL OR FENCE. GUARDRAIL SHALL BE IN COMPLIANCE WITH LOCAL CODES AND IBC REQUIREMENTS.

PAVEMENT LEGEND

- STANDARD DUTY ASPHALT PAVEMENT; SEE SHEET C8-10, DETAIL 1
- HEAVY DUTY ASPHALT PAVEMENT; SEE SHEET C8-10, DETAIL 2
- STANDARD DUTY CONCRETE PAVEMENT; SEE SHEET C8-10, DETAIL 3
- HEAVY DUTY CONCRETE PAVEMENT; SEE SHEET C8-10, DETAIL 4

GRAPHIC SCALE IN FEET
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CO-OP BUSINESS PARK
LOT 1
PANATTONI DEVELOPMENT COMPANY
LA VERGNE, TENNESSEE

PANATTONI®

ROBERT JAMES ARMS — REGISTERED ENGINEER — AGENCY NO. 102 — CHARTERED — No. 121043 — STATE OF TENNESSEE
12/18/2023

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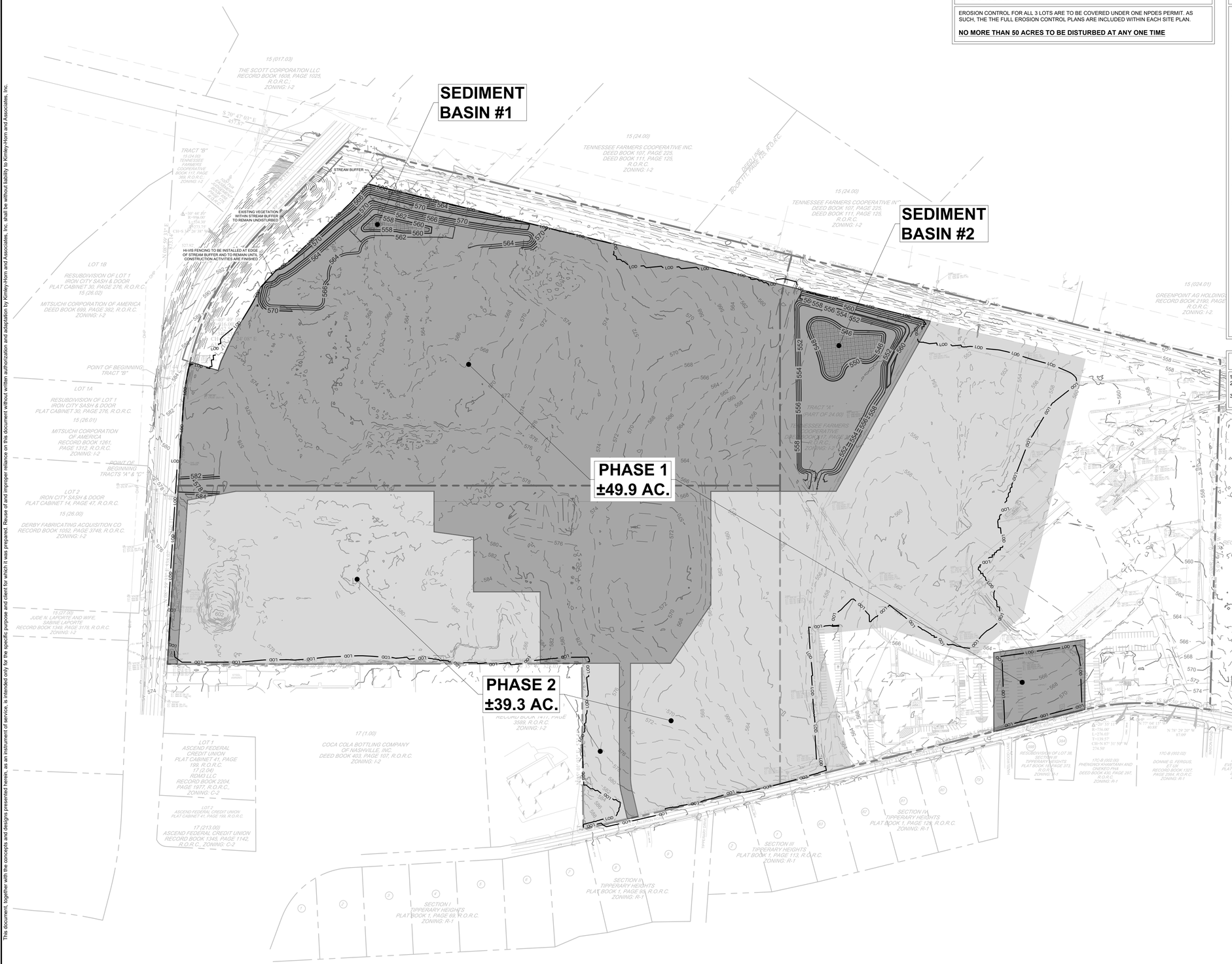
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CHECKED BY:	RJA
DATE:	12/18/2023
KIMLEY-HORN PROJECT NO.	118163044

SITE LAYOUT - ENLARGEMENT

SHEET NUMBER
C2-12

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EPSC NOTE

EROSION CONTROL FOR ALL 3 LOTS ARE TO BE COVERED UNDER ONE NPDES PERMIT. AS SUCH, THE THE FULL EROSION CONTROL PLANS ARE INCLUDED WITHIN EACH SITE PLAN.

NO MORE THAN 50 ACRES TO BE DISTURBED AT ANY ONE TIME

EROSION CONTROL NOTES

1. STOCKPILED TOPSOIL OR FILL MATERIAL IS TO BE TREATED SO THE SEDIMENT RUN-OFF WILL NOT CONTAMINATE SURROUNDING AREAS OR ENTER NEARBY STREAMS. STOCK PILE LOCATIONS SHALL BE COORDINATED WITH THE ENGINEER PRIOR TO GRADING ACTIVITIES. EROSION & SEDIMENT CONTROL PRACTICE SHALL BE INSTALLED PRIOR TO STOCKPILE OPERATIONS.
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12. SEE ADDITIONAL EROSION CONTROL NOTES ON SHEET C0-01.

EPSC PHASING NOTES

1. NO MORE THAN 50 ACRES IS TO BE DISTURBED AT ANY TIME.
2. SEDIMENT BASINS AND ALL OTHER PHASE 1 MEASURES WITHIN EACH DISTURBANCE PHASE TO BE IMPLEMENTED/CONSTRUCTED PRIOR TO FURTHER DISTURBANCE ACTIVITIES.
3. CONTRACTOR TO NOTIFY THE ENGINEER IN ADVANCE OF ANY DEVIATION FROM THE PHASING PLAN.

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0 75 150 300

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CO-OP BUSINESS PARK LOT 1

PANATTONI DEVELOPMENT COMPANY
LA VERGNE, TENNESSEE

PANATTONI®

ROBERT JAMES ARIS
REGISTERED ENGINEER
AGENT OF RECORD
STATE OF TENNESSEE
No. 121045
12/18/2023

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DESIGNED BY:	GTF
DRAWN BY:	GTF
CHECKED BY:	RJA
DATE:	12/18/2023

KIMLEY-HORN PROJECT NO. 118163044

EROSION CONTROL PLAN - PHASING PLAN

SHEET NUMBER
C3-00

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EPSC PHASE 1 CONSTRUCTION SEQUENCE

1. INSTALL CONSTRUCTION ENTRANCE/EXIT AND CONCRETE WASHOUT.
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3. CONTRACTOR TO CONTACT STORMWATER DEPARTMENT TO OBTAIN LAND DISTURBANCE PERMIT. THE CONTRACTOR SHALL CONTACT APPROPRIATE PARTY FOR INSPECTION OF EROSION CONTROL DEVICES AND TO OBTAIN FULL GRADING PERMIT.
4. ADD HIGH VISIBILITY FENCE TO BE INSTALLED AROUND ALL PROTECTED CHANNELS TO PREVENT DISTURBANCE.

TREE PROTECTION FENCING NOTE

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EROSION CONTROL LEGEND

	FR	STONE FILTER RING - CLASS A RIP-RAP, 2' THICK
	OP	OUTLET PROTECTION - REFER TO DETAIL SHEET C3-50
DD	DD	DIVERSION DITCH - REFER TO DETAIL SHEET C3-50
	IP	INLET PROTECTION - REFER TO DETAIL SHEET C3-50
SF	SF	SILT FENCE - REFER TO DETAIL SHEET C3-50
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	TS	TEMPORARY STABILIZATION - REFER TO DETAIL SHEET C3-50
	PS	PERMANENT STABILIZATION - REFER TO DETAIL SHEET C3-50
TP	TP	TREE PROTECTION FENCE / HIGH VISIBILITY FENCE - REFER TO DETAIL SHEET C3-50
LOD		LIMITS OF DISTURBANCE
		CONSTRUCTION SIGN

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CO-OP BUSINESS PARK LOT 1

PANATTONI DEVELOPMENT COMPANY
LA VERGNE, TENNESSEE

PANATTONI®

ROBERT JAMES ARIS
REGISTERED ENGINEER
AGENCY NUMBER
COURAGE
No. 121945
STATE OF TENNESSEE
12/18/2023

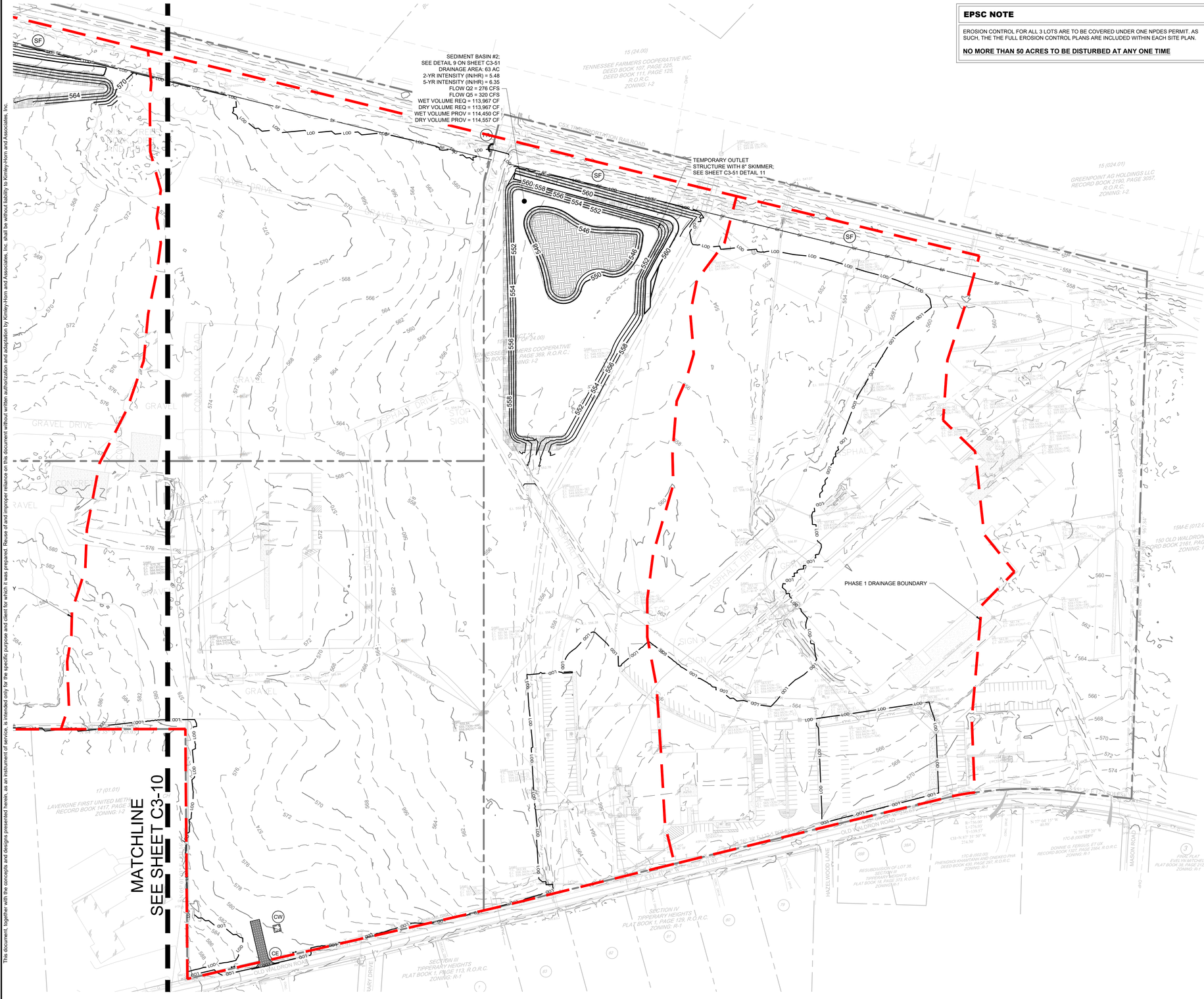
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DRAWN BY:	GTF
CHECKED BY:	RJA
DATE:	12/18/2023

KIMLEY-HORN PROJECT NO. 118163044

EROSION CONTROL PLAN - PHASE 1 ENLARGEMENT

SHEET NUMBER
C3-10



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LOD	LIMITS OF DISTURBANCE
	CONSTRUCTION SIGN

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CO-OP BUSINESS PARK
LOT 1

PANATTONI DEVELOPMENT COMPANY
LA VERGNE, TENNESSEE

PANATTONI®

ROBERT JAMES ARS
REGISTERED ENGINEER
AGENT FOR
KIMLEY-HORN AND ASSOCIATES, INC.
CERTIFICATE No. 121045
STATE OF TENNESSEE
12/18/2023

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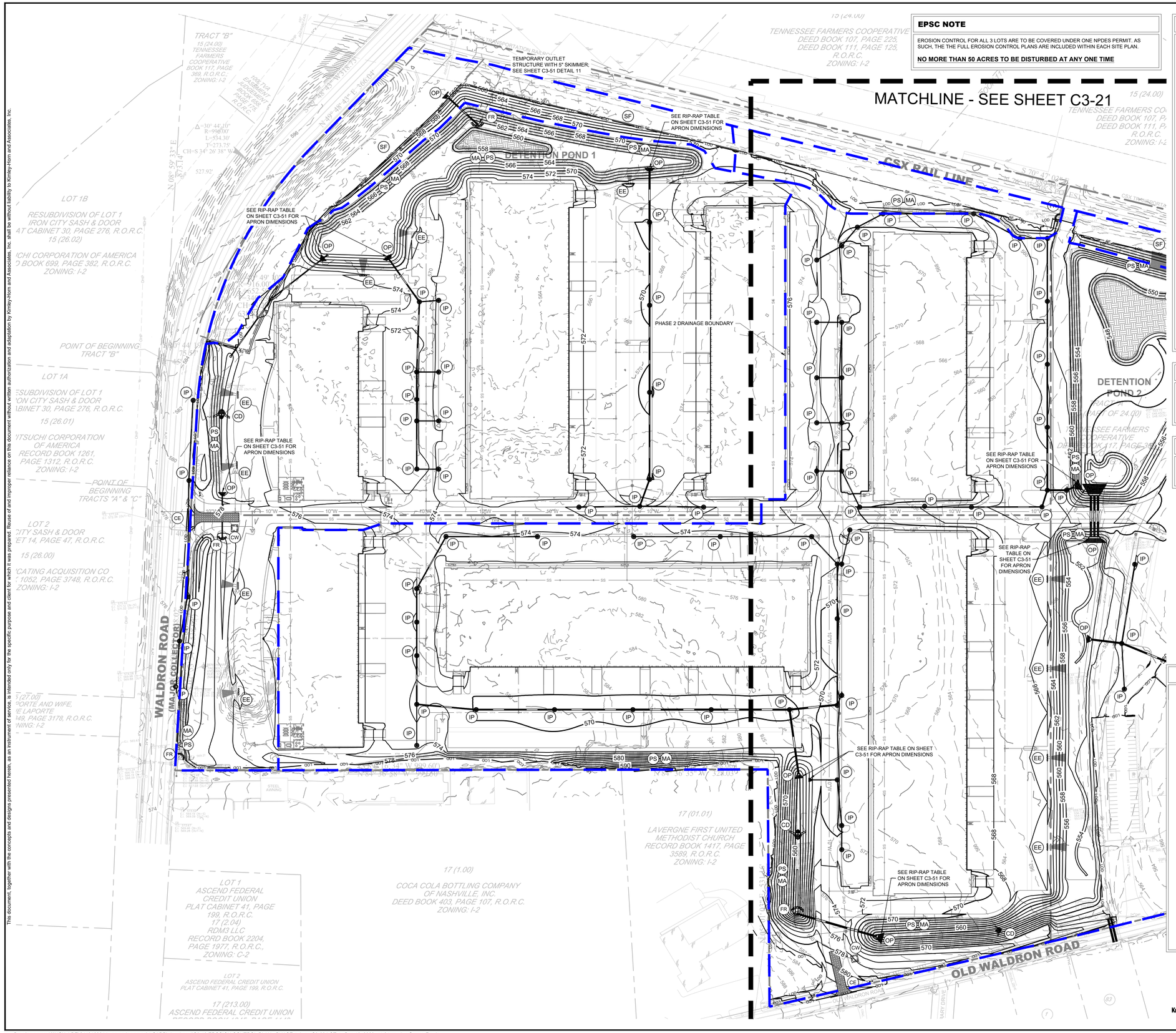
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CHECKED BY:	RJA
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KIMLEY-HORN PROJECT NO.
118163044

EROSION CONTROL PLAN - PHASE 1 ENLARGEMENT

SHEET NUMBER
C3-11

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8. PROVIDE TEMPORARY CONSTRUCTION ACCESS(ES) AT THE POINT(S) WHERE CONSTRUCTION VEHICLES EXIT THE CONSTRUCTION AREA. MAINTAIN PUBLIC ROADWAYS FREE OF TRACKED MUD AND DIRT.
9. DO NOT DISTURB VEGETATION OR REMOVE TREES EXCEPT WHEN NECESSARY FOR GRADING PURPOSES.
10. STABILIZATION MEASURES (SEED & MULCH, TRIM WHERE INDICATED) SHALL BE INITIATED AS SOON AS PRACTICABLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, EXCEPT IN THE FOLLOWING TWO CASES.
    - 10.a. WHERE THERE IS SNOW COVER OR FROZEN GROUND CONDITIONS, STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE OR WHERE CONSTRUCTION ACTIVITY ON A PORTION OF THE SITE IS TEMPORARILY CEASED, AND EARTH DISTURBING ACTIVITIES WILL BE RESUMED WITHIN 15 DAYS. TEMPORARY STABILIZATION MEASURES DO NOT HAVE TO BE INITIATED ON THAT PORTION OF SITE.
    - 10.b. ALL EROSION CONTROL MEASURES SHALL BE CHECKED TWICE WEEKLY DURING PROLONGED RAINFALL DAILY CHECKING IS NECESSARY. DOCUMENTATION OF ALL CHECKS AND CORRECTIVE MEASURES SHALL BE KEPT AT THE PROJECT. A MONITORING REPORT CAN BE FOUND IN THE TENNESSEE EROSION AND SEDIMENT CONTROL HANDBOOK.
11. CONTRACTOR TO PROVIDE AN AREA FOR CONCRETE WASH DOWN AND EQUIPMENT REFUELING IN ACCORDANCE WITH TDEC'S STANDARDS. CONTRACTOR TO COORDINATE EXACT LOCATION WITH NPDES DEPARTMENT DURING PRECONSTRUCTION MEETING. CONTROL OF OTHER SITE WASTES SUCH AS MAY CAUSE ADVERSE IMPACTS TO WATER QUALITY IS ALSO REQUIRED BY THE GRADING PERMITEE.
12. SEE ADDITIONAL EROSION CONTROL NOTES ON SHEET C0-01.

EPSC PHASE 2 CONSTRUCTION SEQUENCE

1. CONTRACTOR TO BEGIN CLEARING, GRUBBING, AND EXCAVATING.
2. CLEAR, GRUB, AND GRADE REMAINING SITE.
3. INSTALL PROPOSED UTILITIES INCLUDING PROPOSED INLETS WITH PROTECTION.
4. CONSTRUCT REMAINING SITE ACCORDING TO THE APPROVED PLANS, OR AS INSTRUCTED BY THE EROSION CONTROL INSPECTOR.

TREE PROTECTION FENCING NOTE

TREE PROTECTION FENCING IS TO REMAIN IN PLACE UNTIL FINAL INSPECTION AND SIGN-OFF ON THE MASTER BUILDING PERMIT AND CERTIFICATE OF OCCUPANCY BY THE CODES DEPARTMENT. STORMWATER SIGN-OFF AND REMOVAL OF EROSION CONTROL MEASURES IS NOT JUSTIFICATION TO REMOVE TREE PROTECTION FENCING.

EROSION CONTROL LEGEND

FR	FR	STONE FILTER RING - CLASS A RIP-RAP, 2' THICK
OP	OP	OUTLET PROTECTION - REFER TO DETAIL SHEET C3-50
DD	DD	DIVERSION DITCH - REFER TO DETAIL SHEET C3-50
IP	IP	INLET PROTECTION - REFER TO DETAIL SHEET C3-50
SF	SF	SILT FENCE - REFER TO DETAIL SHEET C3-50
EE	EE	EROSION EELS - REFER TO DETAIL SHEET C3-50
CD	CD	ROCK CHECK DAM - REFER TO DETAIL SHEET C3-50
CW	CW	CONCRETE WASHOUT AREA - REFER TO DETAIL SHEET C3-50
MA	MA	EROSION CONTROL MATTING - CONTECH LANDLOK S2 OR APPROVED EQUAL. CONTRACTOR TO INSTALL ON ALL SLOPES 3(H):1(V) OR STEEPER - REFER TO DETAIL SHEET C3-50
CE	CE	CONSTRUCTION EXIT - REFER TO DETAIL SHEET C3-50
TS	TS	TEMPORARY STABILIZATION - REFER TO DETAIL SHEET C3-50
PS	PS	PERMANENT STABILIZATION - REFER TO DETAIL SHEET C3-50
TP	TP	TREE PROTECTION FENCE / HIGH VISIBILITY FENCE - REFER TO DETAIL SHEET C3-50
LOD		LIMITS OF DISTURBANCE
		CONSTRUCTION SIGN

811 Know what's below. Call before you dig.

GRAPHIC SCALE IN FEET 0 50 100 200

NORTH

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CO-OP BUSINESS PARK LOT 1

PANATTONI DEVELOPMENT COMPANY
LA VERGNE, TENNESSEE

PANATTONI®

ROBERT JAMES ARS REGISTERED ENGINEER AGENCY TYPE CORPORATE No. 121045 STATE OF TENNESSEE
12/18/2023

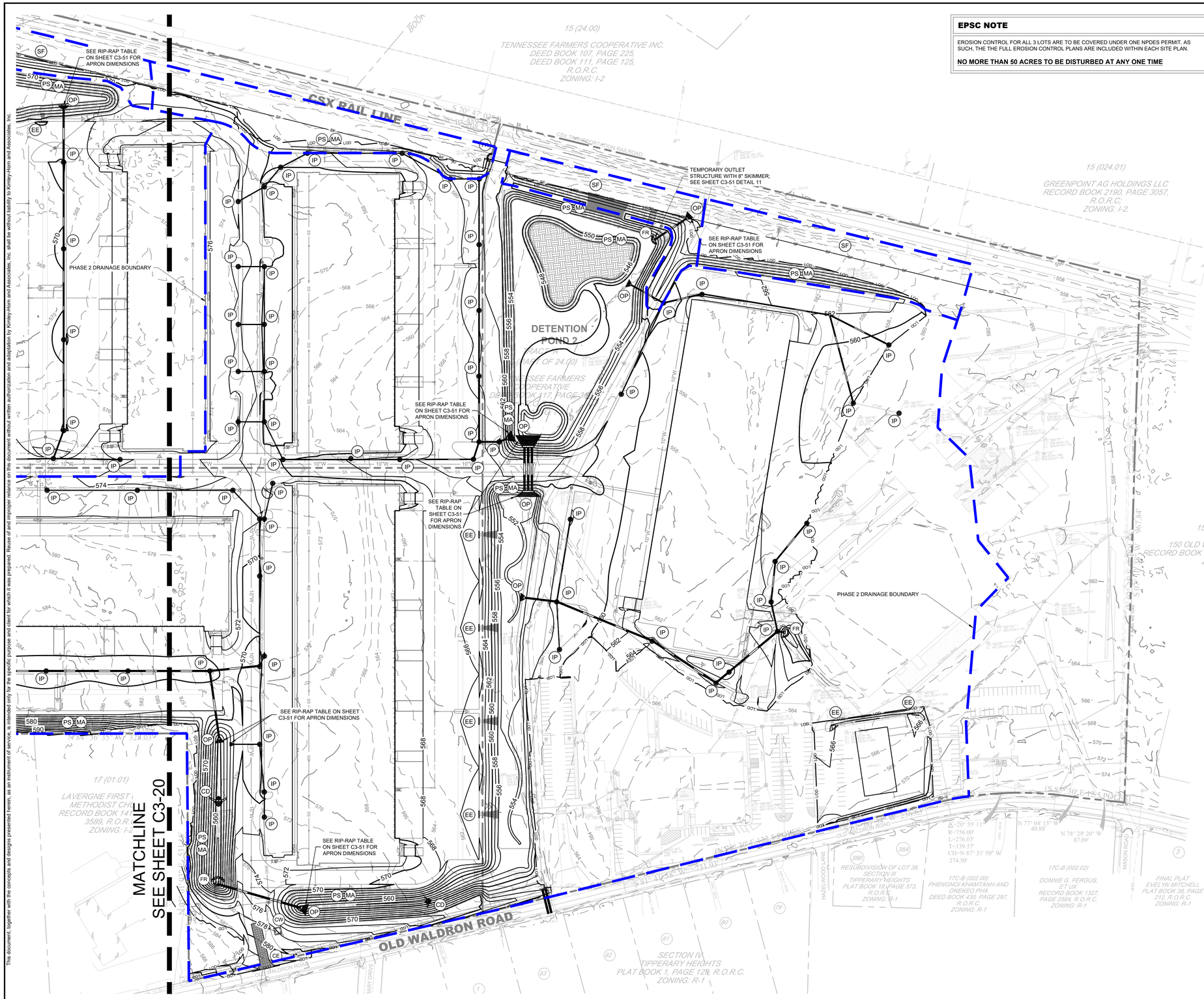
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DESIGNED BY:	GTF
DRAWN BY:	GTF
CHECKED BY:	RJA
DATE:	12/18/2023
KIMLEY-HORN PROJECT NO.	118163044

EROSION CONTROL PLAN - PHASE 2 ENLARGEMENT

SHEET NUMBER
C3-20

Drawing name: K:\NSH_LDEV\118163044 - co-op la vergne\4-CADD\plansheets\C3-10 EROSION CONTROL PLAN - PHASE 1.dwg C3-20 LOT 1 Dec 18, 2023 11:01am by: Garrett.Froula



EPSC NOTE

EROSION CONTROL FOR ALL 3 LOTS ARE TO BE COVERED UNDER ONE NPDES PERMIT. AS SUCH, THE THE FULL EROSION CONTROL PLANS ARE INCLUDED WITHIN EACH SITE PLAN.

NO MORE THAN 50 ACRES TO BE DISTURBED AT ANY ONE TIME

EROSION CONTROL NOTES

1. STOCKPILED TOPSOIL OR FILL MATERIAL IS TO BE TREATED SO THE SEDIMENT RUN-OFF WILL NOT CONTAMINATE SURROUNDING AREAS OR ENTER NEARBY STREAMS. STOCK PILE LOCATIONS SHALL BE COORDINATED WITH THE ENGINEER PRIOR TO GRADING ACTIVITIES. EROSION & SEDIMENT CONTROL PRACTICE SHALL BE INSTALLED PRIOR TO STOCKPILE OPERATIONS.
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3. CONSTRUCT SILT BARRIERS BEFORE BEGINNING GRADING OPERATIONS.
4. MULCH AND SEED ALL DISTURBED AREAS AS SOON AS POSSIBLE AFTER FINAL GRADING IS COMPLETED (WITHIN 15 DAYS OF ACHIEVED FINAL GRADES) UNLESS OTHERWISE INDICATED. CONTRACTOR SHALL TAKE WHATEVER MEANS NECESSARY TO ESTABLISH PERMANENT SOIL STABILIZATION. STEEP SLOPES (GREATER THAN 3:1) SHALL BE STABILIZED WITHIN 7 DAYS OF FINAL GRADING.
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TP	TREE PROTECTION FENCE / HIGH VISIBILITY FENCE - REFER TO DETAIL SHEET C3-50
LOD	LIMITS OF DISTURBANCE
	CONSTRUCTION SIGN

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CO-OP BUSINESS PARK LOT 1

PANATTONI DEVELOPMENT COMPANY
LA VERGNE, TENNESSEE

PANATTONI®

ROBERT JAMES ARS — REGISTERED ENGINEER — 12/18/2023 — STATE OF TENNESSEE

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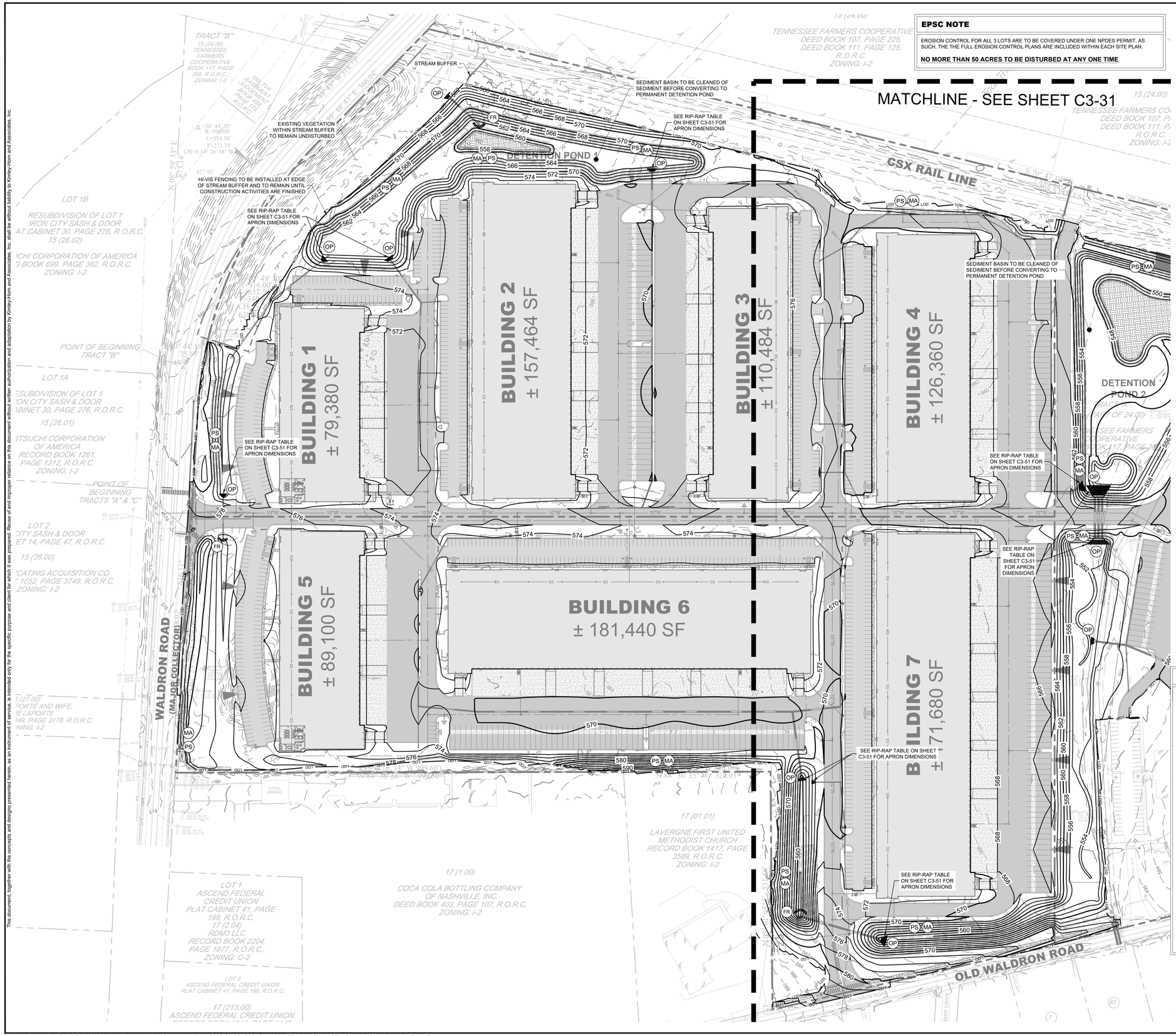
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CHECKED BY:	RJA
DATE:	12/18/2023

KIMLEY-HORN PROJECT NO. 118163044

EROSION CONTROL PLAN - PHASE 2 ENLARGEMENT

SHEET NUMBER
C3-21

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EROSION CONTROL NOTES

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    - 10.a. WHERE THERE IS SNOW COVER OR FROZEN GROUND CONDITIONS, STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE OR WHERE CONSTRUCTION ACTIVITY ON A PORTION OF THE SITE IS TEMPORARILY CEASED, AND EARTH DISTURBING ACTIVITIES WILL BE RESUMED WITHIN 15 DAYS. TEMPORARY STABILIZATION MEASURES DO NOT HAVE TO BE INITIATED ON THAT PORTION OF SITE.
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12. SEE ADDITIONAL EROSION CONTROL NOTES ON SHEET C0-01.

EPSC PHASE 3 CONSTRUCTION SEQUENCE

1. PERMANENTLY STABILIZE SITE.
2. UPON PERMANENT SITE STABILIZATION, REMOVE SILT FENCE, TREE PROTECTION, AND ALL OTHER TEMPORARY EROSION CONTROL DEVICES.
3. REMOVE SEDIMENT FROM SEDIMENT BASIN, CONVERT TO DETENTION POND AND INSTALL PROPOSED OUTLET STRUCTURES.
4. FINISH INSTALLING PERMANENT STORMWATER BMP'S SHOWN ON PHASE 3 EROSION CONTROL PLANS.

TREE PROTECTION FENCING NOTE

TREE PROTECTION FENCING IS TO REMAIN IN PLACE UNTIL FINAL INSPECTION AND SIGN-OFF ON THE MASTER BUILDING PERMIT AND CERTIFICATE OF OCCUPANCY BY THE CODES DEPARTMENT. STORMWATER SIGN-OFF AND REMOVAL OF EROSION CONTROL MEASURES IS NOT JUSTIFICATION TO REMOVE TREE PROTECTION FENCING.

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LOD	LIMITS OF DISTURBANCE	
	CONSTRUCTION SIGN	

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CO-OP BUSINESS PARK LOT 1

PANATTONI DEVELOPMENT COMPANY
LA VERGNE, TENNESSEE

PANATTONI®

ROBERT JAMES ARTS
REGISTERED ENGINEER
AGRICULTURE
CERTIFICATE
No. 121045
STATE OF TENNESSEE
12/18/2023

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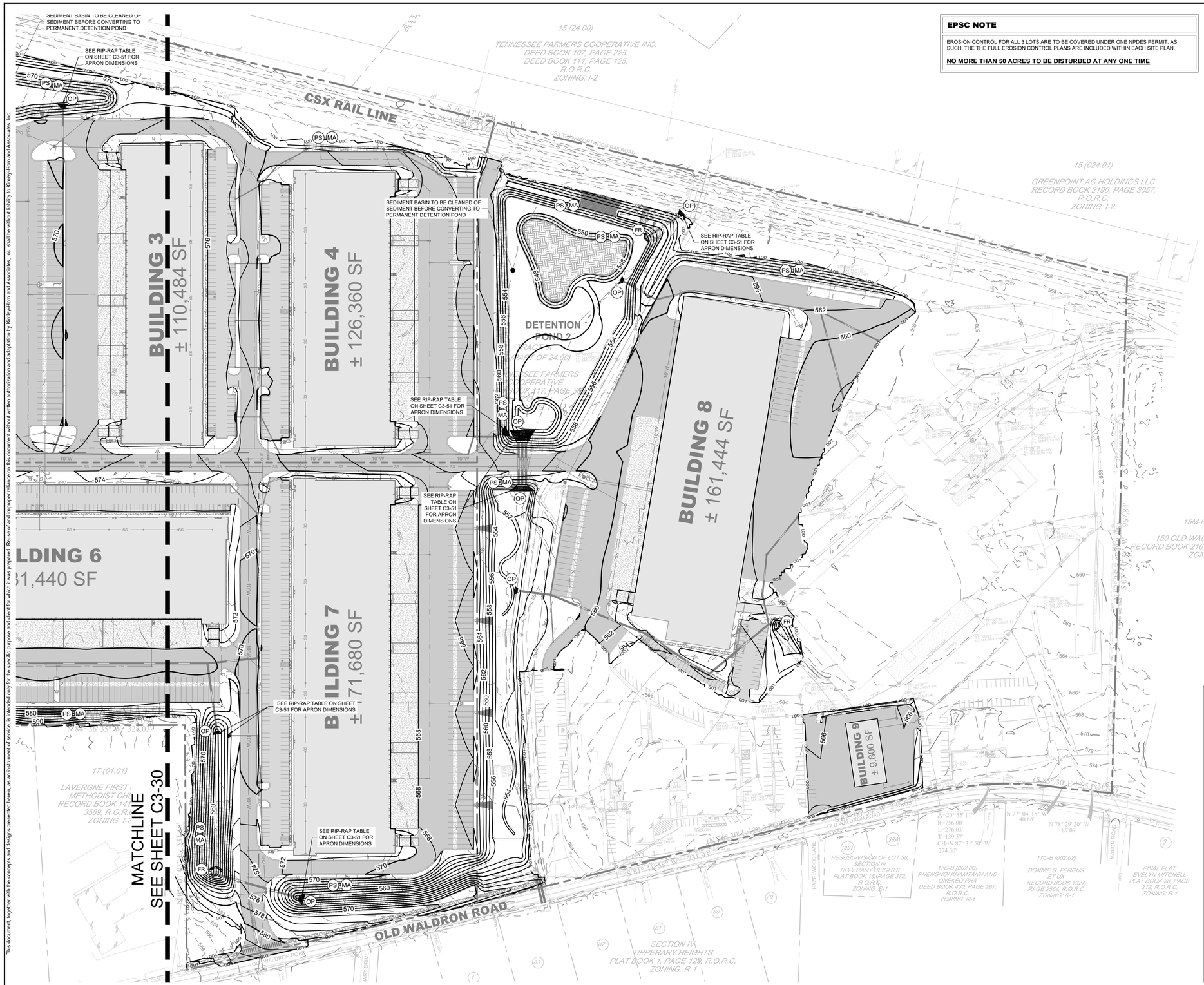
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DATE:	12/18/2023
KIMLEY-HORN PROJECT NO.	118163044

EROSION CONTROL PLAN - PHASE 3 ENLARGEMENT

SHEET NUMBER
C3-30

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Drawing name: K:\NSH_LDEV\118163044 - co-op la vergne\4-CADD\plansheets\C3-10 EROSION CONTROL PLAN - PHASE 1.dwg C3-30 LOT 1 Dec 18, 2023 11:01am by: Garrett.Froula



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TREE PROTECTION FENCING IS TO REMAIN IN PLACE UNTIL FINAL INSPECTION AND SIGN-OFF ON THE MASTER BUILDING PERMIT AND CERTIFICATE OF OCCUPANCY BY THE CODES DEPARTMENT. STORMWATER SIGN-OFF AND REMOVAL OF EROSION CONTROL MEASURES IS NOT JUSTIFICATION TO REMOVE TREE PROTECTION FENCING.

EROSION CONTROL LEGEND

FR	STONE FILTER RING - CLASS A RIP-RAP, 2' THICK	
OP	OUTLET PROTECTION - REFER TO DETAIL SHEET C3-50	
DD	DIVERSION DITCH - REFER TO DETAIL SHEET C3-50	
IP	INLET PROTECTION - REFER TO DETAIL SHEET C3-50	
SF	SILT FENCE - REFER TO DETAIL SHEET C3-50	SF
EE	EROSION EELS - REFER TO DETAIL SHEET C3-50	
CD	ROCK CHECK DAM - REFER TO DETAIL SHEET C3-50	
CW	CONCRETE WASHOUT AREA - REFER TO DETAIL SHEET C3-50	
MA	EROSION CONTROL MATTING - CONTECH LANDLOK S2 OR APPROVED EQUAL. CONTRACTOR TO INSTALL ON ALL SLOPES 3(H):1(V) OR STEEPER - REFER TO DETAIL SHEET C3-50	
CE	CONSTRUCTION EXIT - REFER TO DETAIL SHEET C3-50	
TS	TEMPORARY STABILIZATION - REFER TO DETAIL SHEET C3-50	
PS	PERMANENT STABILIZATION - REFER TO DETAIL SHEET C3-50	
TP	TREE PROTECTION FENCE / HIGH VISIBILITY FENCE - REFER TO DETAIL SHEET C3-50	TP
LOD	LIMITS OF DISTURBANCE	LOD
	CONSTRUCTION SIGN	

811 Know what's below. Call before you dig.

GRAPHIC SCALE IN FEET
0 50 100 200

NORTH

Kimley»Horn
10 Lea Avenue, Suite 400, Nashville, TN 37210
Main: 615.564.2701 | www.kimley-horn.com
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CO-OP BUSINESS PARK LOT 1

PANATTONI DEVELOPMENT COMPANY
LA VERGNE, TENNESSEE

PANATTONI®

ROBERT JAMES ARTS
REGISTERED ENGINEER
AGENCY NUMBER
LICENSE
No. 121045
STATE OF TENNESSEE
12/18/2023

No	REVISIONS	DATE	BY
1			
2			
3			
4			
5			
6			
7			

DESIGNED BY:	GTF
DRAWN BY:	GTF
CHECKED BY:	RJA
DATE:	12/18/2023
KIMLEY-HORN PROJECT NO.	118163044

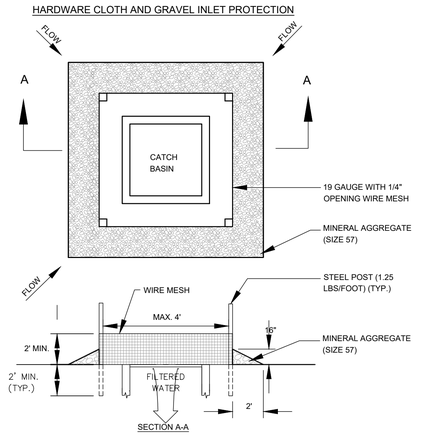
EROSION CONTROL PLAN - PHASE 3 ENLARGEMENT

SHEET NUMBER
C3-31

This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

Drawing name: K:\NSH_LDEV\118163044 - co-op la vergne\4-CADD\plansheets\C3-10 EROSION CONTROL PLAN - PHASE 1.dwg C3-31 LOT 1 Dec 18, 2023 11:02am by: Garrett.Froula

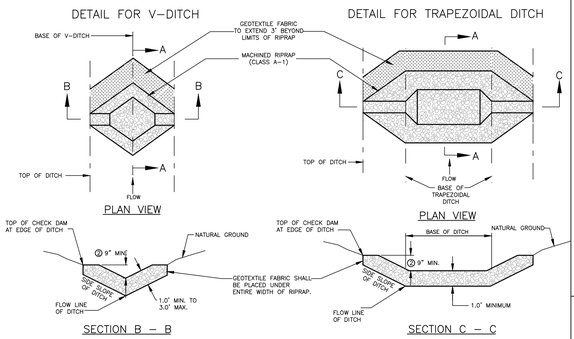
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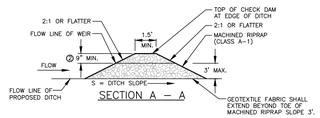


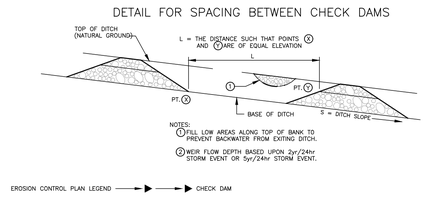
1 INLET PROTECTION - OPEN AREA
NOT TO SCALE

NOTE: CONTRACTOR TO PROVIDE ALTERNATE MEANS FOR INLET PROTECTION IN PAVED AREAS. SUBMIT SUBSTITUTION TO ENGINEER FOR APPROVAL.

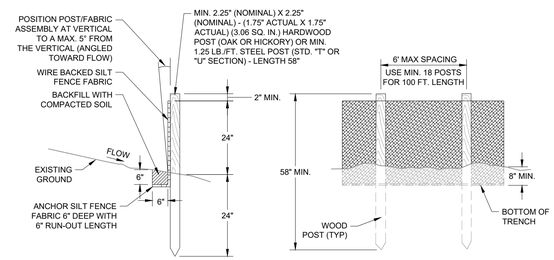
5 INLET PROTECTION - PAVED AREA
NOT TO SCALE





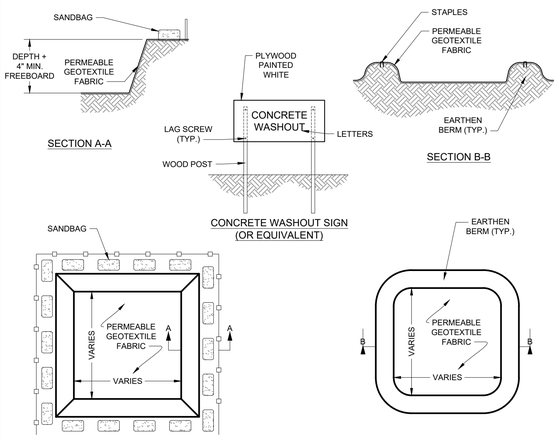


2 CHECK DAM
NOT TO SCALE

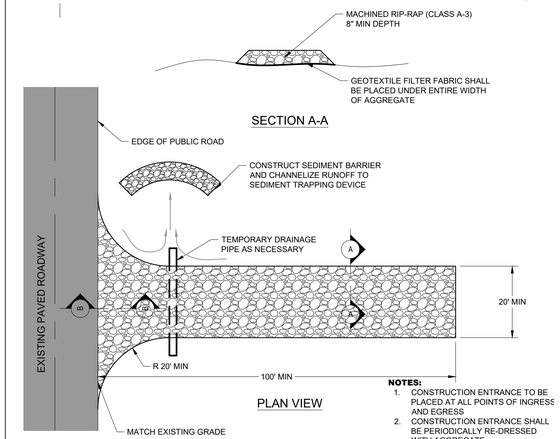


NOTES:
1. GEOTEXTILE TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION.
2. WHEN TWO SECTIONS OF GEOTEXTILE ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY SIX INCHES AND FOLDED.
3. MAINTENANCE SHALL BE PERFORMED AS NOTED IN THE EROSION CONTROL PLAN. COLLECTED MATERIAL SHALL BE REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE OR WHEN CAPACITY NEARS 50%.

3 SILT FENCE TYPE C
NOT TO SCALE



6 CONCRETE WASHOUT
NOT TO SCALE



NOTES:
1. CONSTRUCTION ENTRANCE TO BE PLACED AT ALL POINTS OF INGRESS AND EGRESS
2. CONSTRUCTION ENTRANCE SHALL BE PERIODICALLY RE-DRESSED WITH AGGREGATE

4 CONSTRUCTION ENTRANCE
NOT TO SCALE

LATE WINTER/EARLY SPRING PLANTING

SPECIES	RATE (LB/ACRE)
RYE	120

SEEDING DATES
EAST ABOVE 2500 FEET: FEB. 15 - MAY 15
BELOW 2500 FEET: FEB. 1- MAY 1
MIDDLE JAN. 1 - MAY 1
WEST DEC. 1 - APR. 15

MAINTENANCE
REFERTILIZE IF GROWTH IS NOT FULLY ADEQUATE. RESEED, REFERTILIZE AND MULCH IMMEDIATELY FOLLOWING EROSION OR OTHER DAMAGE.

SUMMER PLANTING

SPECIES	RATE (LB/ACRE)
OATS	60
BROWN TOP MILLET	30

SEEDING DATES
EAST MAY 15 - AUG. 15
MIDDLE MAY 1 - AUG. 15
WEST APR. 15 - AUG. 15

MAINTENANCE
REFERTILIZE IF GROWTH IS NOT FULLY ADEQUATE. RESEED, REFERTILIZE AND MULCH IMMEDIATELY FOLLOWING EROSION OR OTHER DAMAGE.

FALL PLANTING

SPECIES	RATE (LB/ACRE)
OATS	30
WINTER WHEAT	30

SEEDING DATES
EAST AUG. 15 - DEC. 15
MIDDLE AUG. 15 - DEC. 30
WEST AUG. 15 - DEC. 30

MAINTENANCE
REFERTILIZE IF GROWTH IS NOT FULLY ADEQUATE. RESEED, REFERTILIZE AND MULCH IMMEDIATELY FOLLOWING EROSION OR OTHER DAMAGE. IF NECESSARY TO EXTEND TEMPORARY COVER BEYOND JUNE 15, OVERSEED WITH 50 LB/AC CRIMSON CLOVER IN LATE FEBRUARY OR EARLY MARCH.

ALL SEASON NOTES

SOIL AMENDMENTS
FOLLOW RECOMMENDATIONS OF SOIL TESTS OR APPLY 2,000 LB/ACRE GROUND AGRICULTURAL LIMESTONE AND 750 LB/ACRE 10-10-10 FERTILIZER.

MULCH
APPLY 4,000 LB/ACRE STRAW. ANCHOR STRAW BY TACKING WITH ASPHALT, NETTING, OR A MULCH ANCHORING TOOL. A DISK WITH BLADES SET NEARLY STRAIGHT CAN BE USED AS A MULCH ANCHORING TOOL.

NOTES:
1. TEMPORARY STABILIZATION MEASURES SHALL BE DONE IN ACCORDANCE WITH TDEC EROSION AND SEDIMENT CONTROL HANDBOOK, FOURTH EDITION OR NEWER.

7 TEMPORARY STABILIZATION
NOT TO SCALE

LOW MAINTENANCE AREAS - SLOPES, POOR AND SHALLOW SOILS

PREFERRED RATE/MIX (LB/AC PLS)	SEEDING DATES	
	BEST	*MARGINAL*
15 BROWNTOP MILLET (NURSE CROP)	AUG. 25 - SEP. 15	SEP. 15 - OCT. 25
5 LITTLE BLUESTEM	FEB. 15 - MAY 30	MAR. 21 - MAY 30
2 SWITCH GRASS		
2 TALL DROPSEED		
5 SIDEOATS GRAMMA		
2 BLACK-EYED SUSAN		
2 PARTRIDGE PEA		
1 GREYHEADED CONEFLOWER		

LOW MAINTENANCE AREAS - SLOPES, SOILS > 6" DEEP

PREFERRED RATE/MIX (LB/AC PLS)	SEEDING DATES	
	BEST	*MARGINAL*
15 BROWNTOP MILLET (NURSE CROP)	AUG. 25 - SEP. 15	SEP. 15 - OCT. 25
5 PURPLETOP	FEB. 15 - MAY 30	MAR. 21 - APR. 15
5 LITTLE BLUESTEM		
5 VIRGINIA WILD RYE		
2 BLACK-EYED SUSAN		
2 PARTRIDGE PEA		
1 GREYHEADED CONEFLOWER		

HIGH MAINTENANCE AREAS - LAWNS, ETC.

PREFERRED RATE/MIX (LB/AC PLS)	SEEDING DATES	
	BEST	*MARGINAL*
15 BROWNTOP MILLET (NURSE CROP)	AUG. 30 - OCT. 15	FEB. 15 - APR. 15
2 PARTRIDGE PEA		
45 RED FESCUE		
45 HARD FESCUE		
25 CHEWING FESCUE		

NOTES:
1. MIXES INDICATED ABOVE ARE FOR THE REGION II PLANTING AREA (MIDDLE TENNESSEE).
2. PERMANENT STABILIZATION MEASURES SHALL BE DONE IN ACCORDANCE WITH TDEC EROSION AND SEDIMENT CONTROL HANDBOOK, FOURTH EDITION OR NEWER.
3. REFER TO LANDSCAPE PLANS FOR PERMANENT STABILIZATION PRACTICES AND AREAS TO RECEIVE SOD.

8 PERMANENT STABILIZATION
NOT TO SCALE

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CO-OP BUSINESS PARK
LOT 1
PANATTONI DEVELOPMENT COMPANY
LA VERGNE, TENNESSEE

PANATTONI®

ROBERT JAMES ARS — REGISTERED ENGINEER — AGRICULTURAL COMMERCE — No. 121045 — STATE OF TENNESSEE
12/18/2023

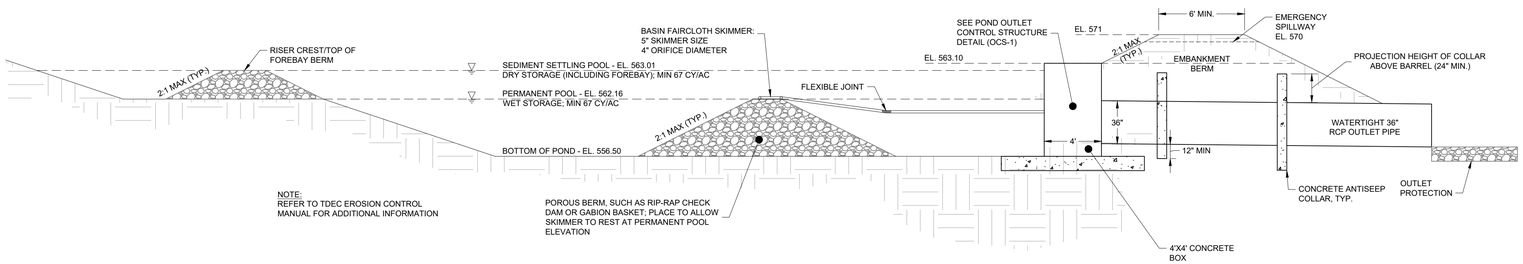
No.	REVISIONS	DATE	BY
1			
2			
3			
4			
5			
6			
7			

DESIGNED BY: GTF
DRAWN BY: GTF
CHECKED BY: RJA
DATE: 12/18/2023
KIMLEY-HORN PROJECT NO. 118163044

EROSION CONTROL DETAILS

SHEET NUMBER
C3-50

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9 SEDIMENT BASIN #1
SCALE:

Kimley»Horn

SEDIMENT BASIN #1 DESIGN CALCULATIONS

Project Information

Project Name: CO-OP BUSINESS PARK
KHA Project #: 118163044
Designed by: GTF — Date: 11/13/2023
Checked by: — Date:
Revised by: — Date:

Sediment Basin #1

Basin Drainage Area (A) (ac) =	36.00
Runoff Coefficient (C) =	0.80
SCS Curve Number (CN) =	87.00
Time of Concentration (min) =	5.00
Rainfall Intensity (2-yr Storm) "I" (in/hr) =	5.48
Rainfall Intensity (5-yr Storm) "I" (in/hr) =	6.35
Rainfall Intensity (25-yr Storm) "I" (in/hr) =	7.93
Flow (Q_2) (cfs) =	157.8 (Q=CYA)
Flow (Q_5) (cfs) =	182.9 (Q=CYA)
Flow (Q_{25}) (cfs) =	228.4 (Q=CYA)
WET Storage Volume (cf) =	65,124
DRY Storage Volume (cf) =	65,124
Required Total Volume (cf) =	130,248 (WET + DRY Volumes)
Forebay Volume (cf) =	16,281
Required Surface Area (sf) =	79,663
Storage Depth "R" (ft) =	14.50
Embankment Downstream Side Slope =	3:1
Embankment Upstream Side Slope =	3:1
Embankment Total Height =	15.00
Minimum Embankment Width =	12.00

Bottom Elevation	Elev (ft)	Area (SF)	Cumulative Volume (CF)
	556.50	3,446	0
	561.50	11,757	36,008
	563.00	45,927	53,179
	571.00	105,549	748,321

Total Basin Volume 748,321 CF
27,716 CY
17.18 Ac-Ft

Designed WET Storage Elev = 562.16
Designed WET Storage Volume (cf) = 65,537
Designed DRY Storage Elev = 563.01
Designed DRY Storage Volume (cf) = 65,652
Designed Total Volume (cf)= 748,321 **O.K. > Minimum Required Volume**

Kimley»Horn

SEDIMENT BASIN #1 DESIGN CALCULATIONS

Project Information

Project Name: CO-OP BUSINESS PARK
KHA Project #: 118163044
Designed by: GTF — Date: 11/13/2023
Checked by: — Date:
Revised by: — Date:

Skimmer Design

Dewatering Volume = Dry Storage Volume	65,124	CF	Dewatering Time	48	hrs
Skimmer Flow Rate	0.377	CFS		2.00	days
	32,562	ft³/Day	Head (H)	0.333	ft
			Orifice Area	19.85	in²
Skimmer Size	**5.0**	**in**	**Orifice Diameter**	**5.0**	**in**

Principal Spillway Design

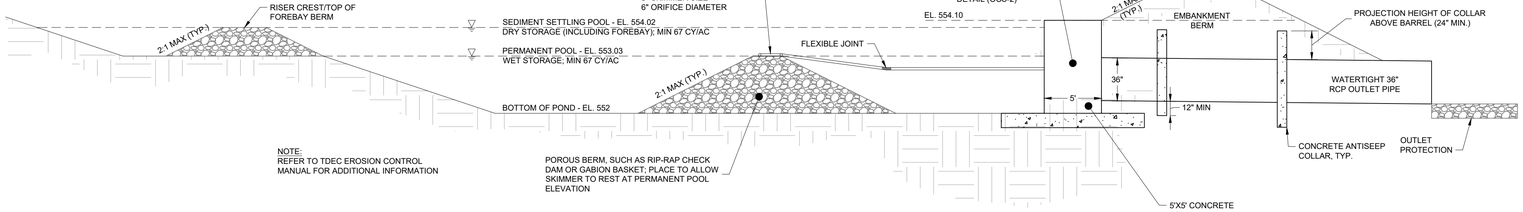
Spillway Type	Inlet Box		Spillway Foundation Type	N/A	
Opening Length	4.0	ft	Base Thickness	N/A	
Opening Width	4.0	ft	Base Length/Width	N/A	ft
Orifice Area	16.00	ft²	Top of Foundation Elevation	N/A	
Spillway Elevation	563.10				
5-yr H	5.81	ft	**5-yr Q**	182.50	CFS
25-yr H	7.80	ft	**25-yr Q**	212.33	CFS

Emergency Spillway Design

Weir Width	10.0	ft			
Weir Elevation	570.00				
Weir C-Value	2.70				
5-yr H	0.29	ft	**5-yr Q**	0.00	CFS
25-yr H	0.70	ft	**25-yr Q**	15.68	CFS

Water Surface Elevations

5-yr Elevation	568.71
5-yr Freeboard	2.29
25-yr Elevation	570.70
25-yr Freeboard	0.30



10 SEDIMENT BASIN #2
SCALE:

Kimley»Horn

SEDIMENT BASIN #2 DESIGN CALCULATIONS

Project Information

Project Name: CO-OP BUSINESS PARK
KHA Project #: 118163044
Designed by: GTF — Date: 11/13/2023
Checked by: — Date:
Revised by: — Date:

Sediment Basin #2

Basin Drainage Area (A) (ac) =	63.00
Runoff Coefficient (C) =	0.80
SCS Curve Number (CN) =	88.00
Time of Concentration (min) =	5.00
Rainfall Intensity (2-yr Storm) "I" (in/hr) =	5.48
Rainfall Intensity (5-yr Storm) "I" (in/hr) =	6.35
Rainfall Intensity (25-yr Storm) "I" (in/hr) =	7.93
Flow (Q_2) (cfs) =	276.2 (Q=CYA)
Flow (Q_5) (cfs) =	320.0 (Q=CYA)
Flow (Q_{25}) (cfs) =	399.7 (Q=CYA)
WET Storage Volume (cf) =	113,967
DRY Storage Volume (cf) =	113,967
Required Total Volume (cf) =	227,934 (WET + DRY Volumes)
Forebay Volume (cf) =	28,492
Required Surface Area (sf) =	139,409
Storage Depth "R" (ft) =	7.50
Embankment Downstream Side Slope =	3:1
Embankment Upstream Side Slope =	3:1
Embankment Total Height =	7.00
Minimum Embankment Width =	12.00

Bottom Elevation	Elev (ft)	Area (SF)	Cumulative Volume (CF)
	552.00	108,000	0
	553.00	113,000	111,000
	554.00	117,000	226,000
	556.00	183,666	526,666
	558.00	218,517	928,849
	559.00	262,000	1,169,108

Total Basin Volume 1,169,108 CF
43,300 CY
26.84 Ac-Ft

Designed WET Storage Elev = 553.03
Designed WET Storage Volume (cf) = 114,450
Designed DRY Storage Elev = 554.02
Designed DRY Storage Volume (cf) = 114,557
Designed Total Volume (cf)= 1,169,108 **O.K. > Minimum Required Volume**

Kimley»Horn

SEDIMENT BASIN #2 DESIGN CALCULATIONS

Project Information

Project Name: CO-OP BUSINESS PARK
KHA Project #: 118163044
Designed by: GTF — Date: 11/13/2023
Checked by: — Date:
Revised by: — Date:

Skimmer Design

Dewatering Volume = Dry Storage Volume	113,967	CF	Dewatering Time	48	hrs
Skimmer Flow Rate	0.660	CFS		2.00	days
	56,984	ft³/Day	Head (H)	0.500	ft
			Orifice Area	28.37	in²
Skimmer Size	**8.0**	**in**	**Orifice Diameter**	**6.0**	**in**

Principal Spillway Design

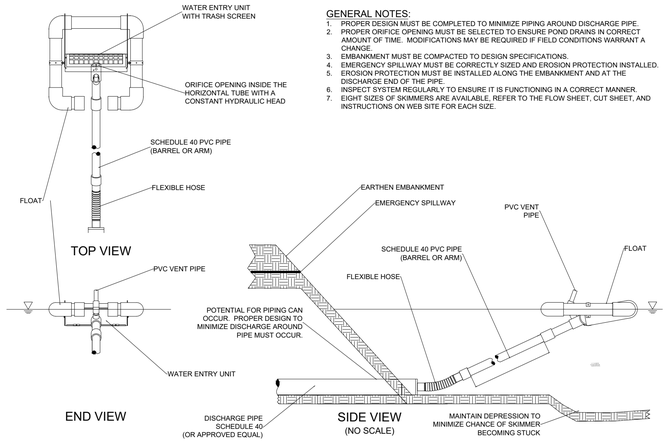
Spillway Type	Inlet Box		Spillway Foundation Type	N/A	
Opening Length	5.0	ft	Base Thickness	N/A	
Opening Width	5.0	ft	Base Length/Width	N/A	ft
Orifice Area	25.00	ft²	Top of Foundation Elevation	N/A	
Spillway Elevation	554.10				
5-yr H	4.51	ft	**5-yr Q**	255.55	CFS
25-yr H	4.89	ft	**25-yr Q**	268.17	CFS

Emergency Spillway Design

Weir Width	50.0	ft			
Weir Elevation	558.00				
Weir C-Value	2.70				
5-yr H	0.61	ft	**5-yr Q**	63.83	CFS
25-yr H	0.99	ft	**25-yr Q**	132.84	CFS

Water Surface Elevations

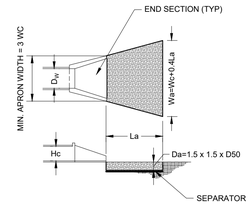
5-yr Elevation	558.61
5-yr Freeboard	0.39
25-yr Elevation	558.99
25-yr Freeboard	0.01



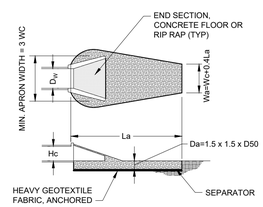
GENERAL NOTES:

1. PROPER DESIGN MUST BE COMPLETED TO MINIMIZE PIPING AROUND DISCHARGE PIPE.
2. PROPER ORIFICE OPENING MUST BE SELECTED TO ENSURE POND DRAINS IN CORRECT AMOUNT OF TIME. MODIFICATIONS MAY BE REQUIRED IF FIELD CONDITIONS WARRANT A CHANGE.
3. EMBANKMENT MUST BE COMPACTED TO DESIGN SPECIFICATIONS.
4. EMERGENCY SPILLWAY MUST BE CORRECTLY SIZED AND EROSION PROTECTION INSTALLED.
5. EROSION PROTECTION MUST BE INSTALLED ALONG THE EMBANKMENT AND AT THE DISCHARGE END OF THE PIPE.
6. INSPECT SYSTEM REGULARLY TO ENSURE IT IS FUNCTIONING IN A CORRECT MANNER.
7. EIGHT SIZES OF SKIMMERS ARE AVAILABLE, REFER TO THE FLOW SHEET, CUT SHEET, AND INSTRUCTIONS ON WEB SITE FOR EACH SIZE.

11 EMBANKMENT DISCHARGE - FAIRCLOTH SKIMMER
NOT TO SCALE



TAILWATER < 0.5 Hc AND ASSUMING FULL CULVERT FLOW (LOW TAILWATER CONDITIONS)



TAILWATER > 0.5 Hc AND ASSUMING FULL CULVERT FLOW (HIGH TAILWATER CONDITIONS)

H_W = HEIGHT OF CULVERT
D_W = WIDTH OF CULVERT
W_C = WIDTH OF RIP-RAP AT START
L_A = LENGTH OF RIP-RAP APRON
W_A = WIDTH OF RIP-RAP APRON AT END
D_{50} = MEDIAN SIZE OF RIP-RAP (6" MIN)
D_{MAX} = MAXIMUM SIZE OF RIP-RAP = 1.5 D_{50}
D_A = DEPTH OF RIP-RAP APRON = 1.5 D_{MAX}
SEPARATOR = GEOTEXTILE UNDERLAYMENT OR GRAVEL FILTER BLANKET

RIP-RAP APRON SUMMARY TABLE

RIP-RAP APRON CHARACTARISTICS	SYMBOL	A0	B0	C0	D0	D3	E0	F0	G0	J0	K0	L0	L2	M0	N0	N1	HW-1	HW-2
NOMINAL RIP-RAP SIZE (INCHES)	D_{50}	15.0	12.0	15.0	12.0	15.0	20.0	20.0	20.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	20.0	20.0
10-YEAR DISCHARGE (CFS)	Q	24.34	51.14	44.17	17.37	16.40	134.13	109.02	124.84	31.78	70.87	101.81	71.37	13.09	169.44	169.44	83.00	83.00
CONDUIT DIAMETER (FT)	D_W	2.50	3.50	3.00	2.00	2.00	4.00	4.00	4.00	2.50	3.50	4.00	3.50	1.50	4.00	4.00	3.00	3.00
START APRON WIDTH (FT)	W_C	7.5	10.5	9.0	6.0	6.0	12.0	12.0	12.0	7.5	10.5	12.0	10.5	4.5	12.0	12.0	9.0	9.0
LENGTH (FT)	L_A	10.0	14.0	12.0	8.0	8.0	20.0	20.0	20.0	10.0	14.0	16.0	14.0	6.0	16.0	16.0	15.0	15.0
APRON DEPTH (INCHES)	D_A	50.0	50.0	50.0	50.0	50.0	48.0	48.0	48.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	48.0	48.0
END APRON WIDTH (FT)	W_A	15.0	20.00	17.00	12.00	12.00	26.00	26.00	26.00	15.00	20.00	23.00	20.00	9.00	23.00	23.00	19.00	19.00
RIP-RAP CLASS PER TDOT	-	B	B	B	B	B	C	C	C	B	B	B	B	B	B	B	C	C

12 OUTLET PROTECTION
NOT TO SCALE

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CO-OP BUSINESS PARK
LOT 1
PANATTONI DEVELOPMENT COMPANY
LA VERGNE, TENNESSEE

PANATTONI®

ROBERT JAMES ARS — REGISTERED ENGINEER — AGENCY No. 121043 — STATE OF TENNESSEE — 12/18/2023

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DESIGNED BY: GTF
DRAWN BY: GTF
CHECKED BY: RJA
DATE: 12/18/2023
KIMLEY-HORN PROJECT NO. 118163044

EROSION CONTROL DETAILS

SHEET NUMBER
C3-51

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GRADING PLAN LEGEND

- SPOT ELEVATION (476.17)
  - HP HIGH POINT
  - TC TOP OF CURB
  - TW TOP OF WALL
  - INV INVERT
  - LP LOW POINT
  - BC BOTTOM OF CURB / GUTTER LINE
  - BW BOTTOM OF EXPOSED WALL
  - RIM TOP OF GRATE / COVER
- FFE 472.00 — FINISH FLOOR ELEVATION
- 500 — EXISTING CONTOUR
- 500 — PROPOSED CONTOUR

GRADING NOTES

1. CONTRACTOR RESPONSIBLE FOR VERIFYING LOCATION, SIZE, AND ELEVATIONS OF EXISTING UTILITIES AT CONNECTION POINTS PRIOR TO GRADING OR INSTALLATION OF ANY PROPOSED UTILITIES. CONTRACTOR TO IMMEDIATELY NOTIFY OWNER'S REPRESENTATIVE IF DISCREPANCIES ARE FOUND.
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6. THE GRADING PERMIT MUST BE DISPLAYED ON SITE AT ALL TIMES DURING CONSTRUCTION AND IN PLAIN VIEW FROM A PUBLIC ROAD OR STREET.
7. EROSION AND SEDIMENT CONTROL DEVICES MUST BE DISPLAYED AND INSPECTED PRIOR TO ANY GRADING ON SITE. THE CONTRACTOR MUST CALL FOR AN INSPECTION TO OBTAIN A PERMIT TO GRADE. PLEASE CALL WITH ENOUGH LEAD-TIME FOR AN INSPECTION TO MEET YOUR SCHEDULE.
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Drawing name: K:\NSH_LDEV\118163044 - co-op la vergne\4-CADD\plansheets\C4-00 GRADING AND DRAINAGE PLAN - OVERALL.dwg C4-10 GRADING AND DRAINAGE PLAN - LOT 1 Dec 18, 2023 11:03am by: Garrett.Froula

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CO-OP BUSINESS PARK LOT 1

PANATTONI DEVELOPMENT COMPANY
LA VERGNE, TENNESSEE

PANATTONI®

ROBERT JAMES ARTS — REGISTERED ENGINEER — AGENCY NUMBER — COURAGE — No. 121065 — STATE OF TENNESSEE
12/18/2023

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DESIGNED BY:
DRAWN BY:
CHECKED BY:
DATE: 12/18/2023
KIMLEY-HORN PROJECT NO. 118163044

GRADING AND DRAINAGE PLAN - OVERALL

SHEET NUMBER
C4-10

GRADING NOTES

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GRADING PLAN LEGEND

476.17 SPOT ELEVATION

HP	HIGH POINT	LP	LOW POINT
TC	TOP OF CURB	BC	BOTTOM OF CURB / GUTTER LINE
TW	TOP OF WALL	BW	BOTTOM OF EXPOSED WALL
INV	INVERT	RIM	TOP OF GRATE / COVER

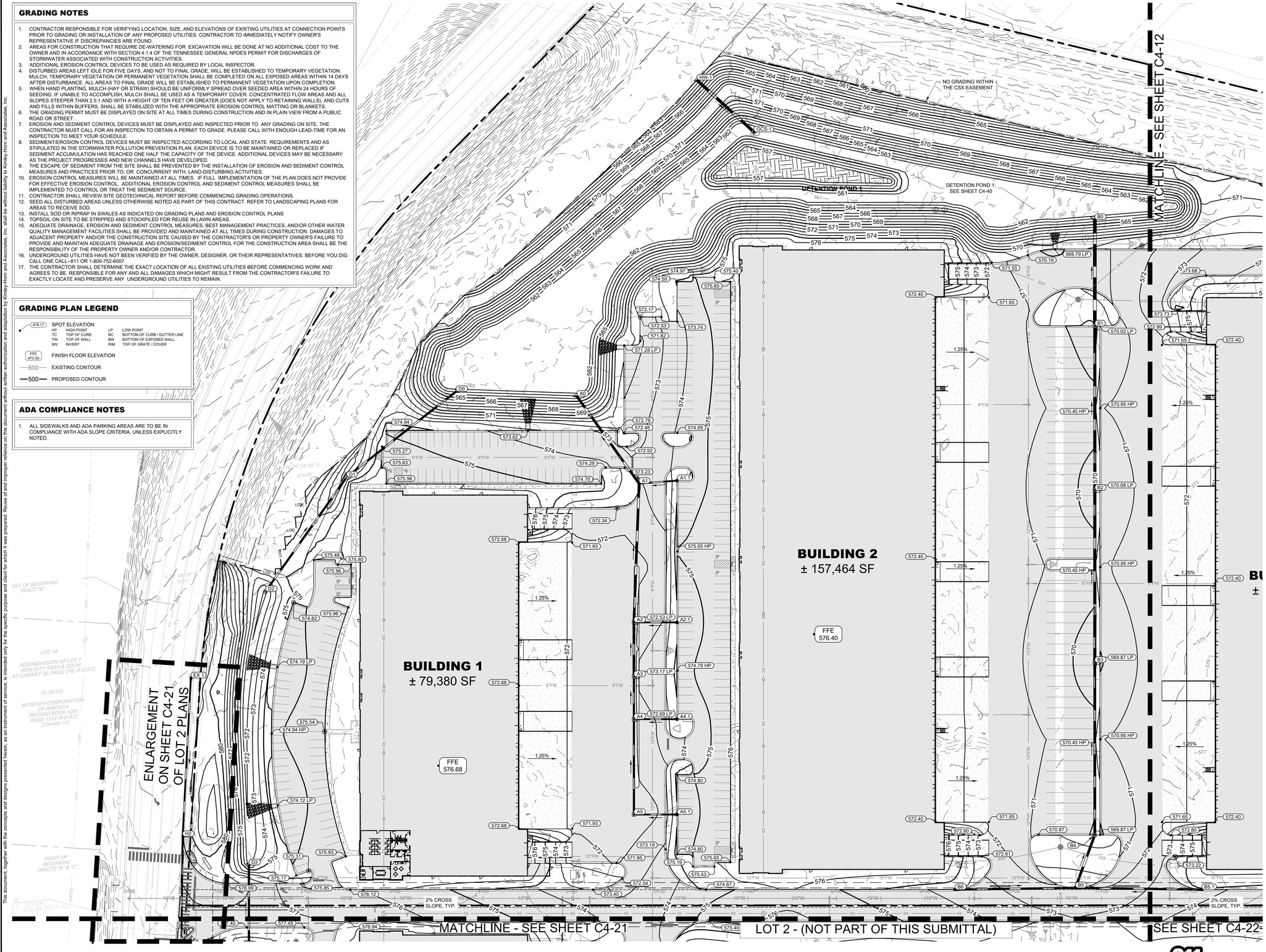
FFE 472.50 FINISH FLOOR ELEVATION

500 EXISTING CONTOUR

500 PROPOSED CONTOUR

ADA COMPLIANCE NOTES

1. ALL SIDEWALKS AND ADA PARKING AREAS ARE TO BE IN COMPLIANCE WITH ADA SLOPE CRITERIA, UNLESS EXPLICITLY NOTED.



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CO-OP BUSINESS PARK LOT 1

PANATTONI DEVELOPMENT COMPANY
LA VERGNE, TENNESSEE

PANATTONI®

ROBERT JAMES ARTS — REGISTERED ENGINEER — AGENCY NUMBER — COMMISSION No. 121065 — STATE OF TENNESSEE
12/18/2023

No.	REVISIONS	DATE	BY
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DESIGNED BY: ___
DRAWN BY: ___
CHECKED BY: ___
DATE: 12/18/2023
KIMLEY-HORN PROJECT NO. 118163044

SITE GRADING PLAN - ENLARGEMENT

SHEET NUMBER
C4-11

ADA COMPLIANCE NOTES

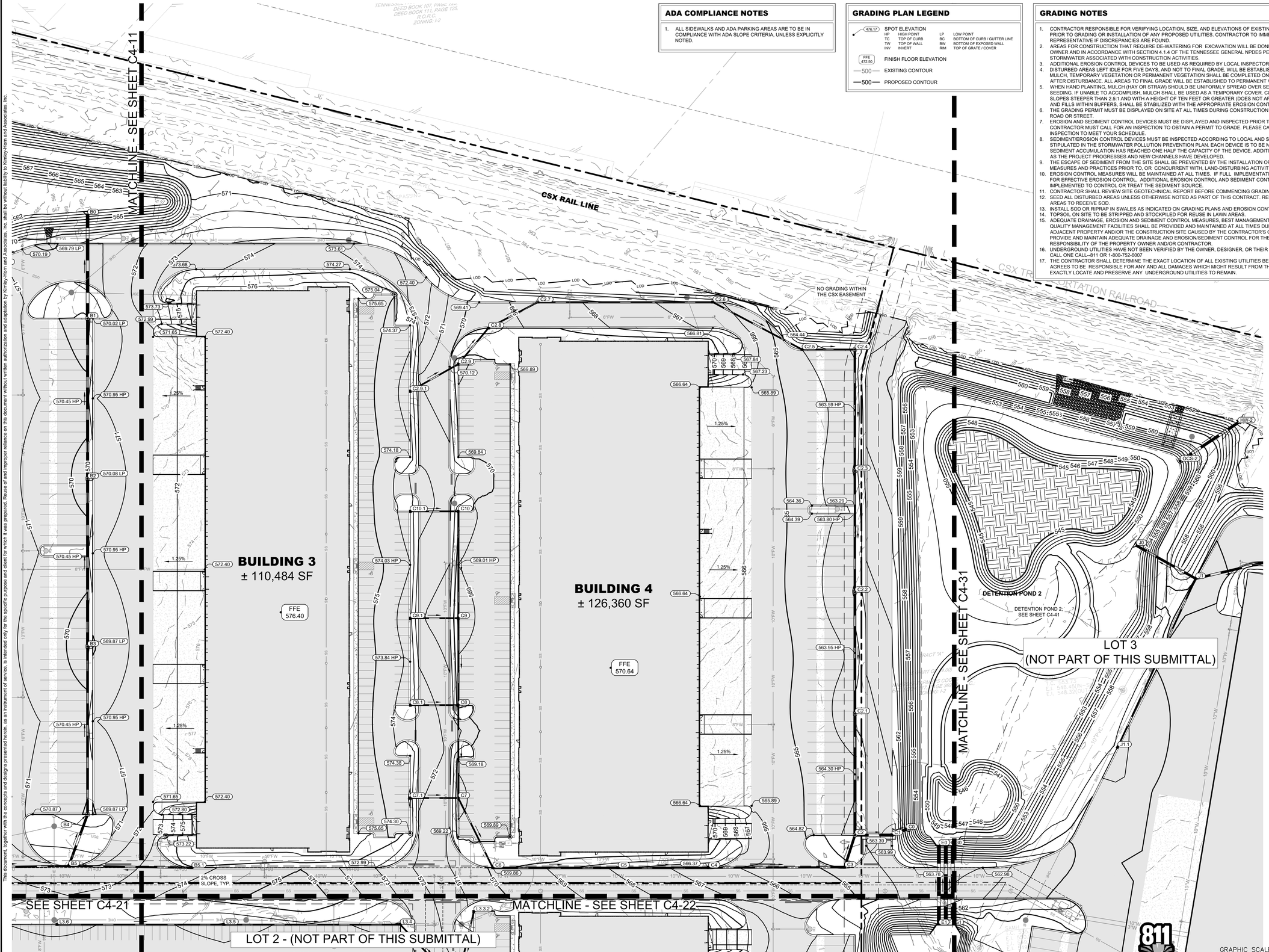
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GRADING PLAN LEGEND

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  - TC TOP OF CURB
  - TW TOP OF WALL
  - INV INVERT
  - LP LOW POINT
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GRAPHIC SCALE IN FEET
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CO-OP BUSINESS PARK LOT 1

PANATTONI DEVELOPMENT COMPANY
LA VERGNE, TENNESSEE

PANATTONI®

ROBERT JAMES ARS — REGISTERED ENGINEER — AGENT OF RECORD — CERTIFICATE No. 121045 — STATE OF TENNESSEE
12/18/2023

No.	REVISIONS	DATE	BY
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DESIGNED BY:	GTF
DRAWN BY:	GTF
CHECKED BY:	RJA
DATE:	12/18/2023

KIMLEY-HORN PROJECT NO. 118163044

SITE GRADING PLAN - ENLARGEMENT

SHEET NUMBER
C4-12

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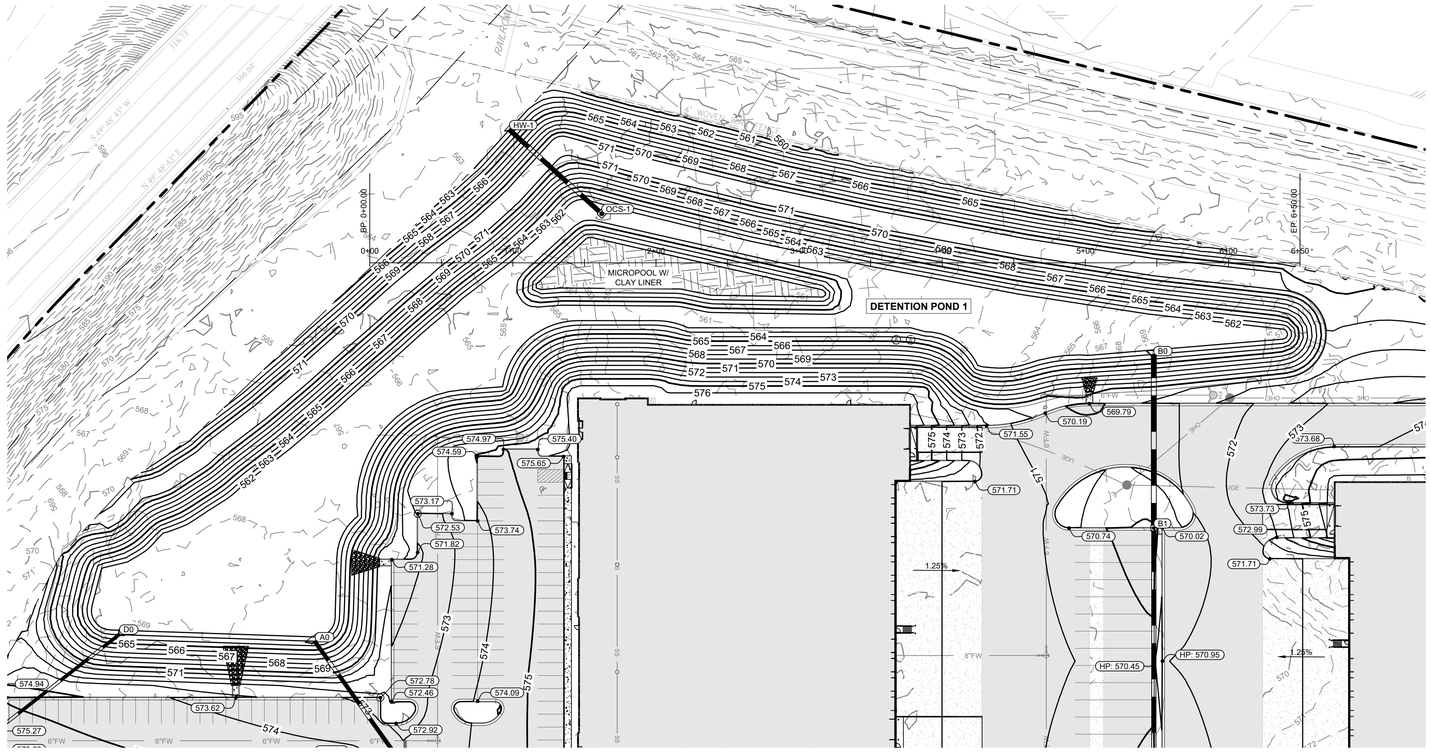
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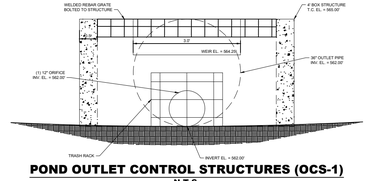
GRADING PLAN LEGEND

476.17	SPOT ELEVATION	HP	HIGH POINT	LP	LOW POINT
		TC	TOP OF CURB	BC	BOTTOM OF CURB / GUTTER LINE
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FFE 472.50	FINISH FLOOR ELEVATION				
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500	PROPOSED CONTOUR				

GRADING NOTES

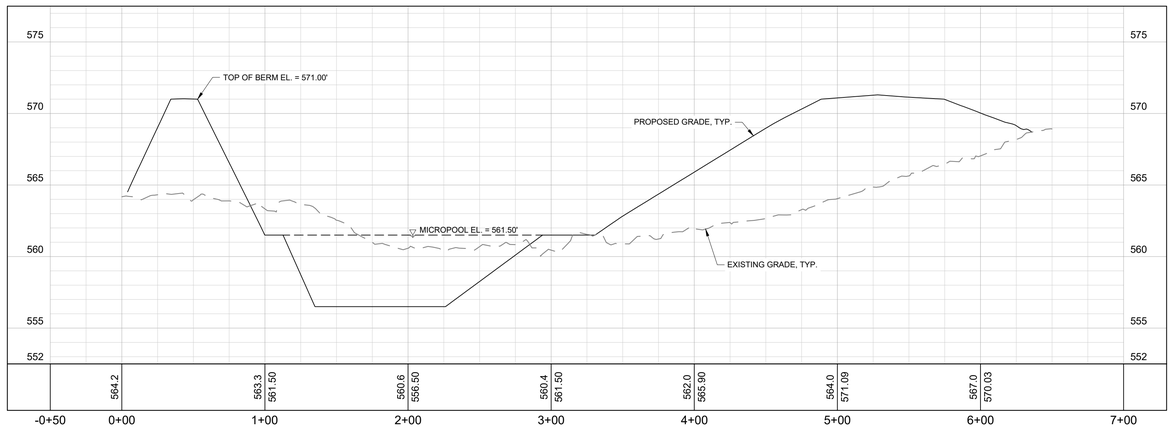
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15. ADEQUATE DRAINAGE, EROSION AND SEDIMENT CONTROL MEASURES, BEST MANAGEMENT PRACTICES, AND/OR OTHER WATER QUALITY MANAGEMENT FACILITIES SHALL BE PROVIDED AND MAINTAINED AT ALL TIMES DURING CONSTRUCTION. DAMAGES TO ADJACENT PROPERTY AND/OR THE CONSTRUCTION SITE CAUSED BY THE CONTRACTOR'S OR PROPERTY OWNER'S FAILURE TO PROVIDE AND MAINTAIN ADEQUATE DRAINAGE AND EROSION/SEDIMENT CONTROL FOR THE CONSTRUCTION AREA SHALL BE THE RESPONSIBILITY OF THE PROPERTY OWNER AND/OR CONTRACTOR.
16. UNDERGROUND UTILITIES HAVE NOT BEEN VERIFIED BY THE OWNER, DESIGNER, OR THEIR REPRESENTATIVES. BEFORE YOU DIG CALL ONE CALL–811 OR 1-800-752-6007
17. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK AND AGREES TO BE RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT RESULT FROM THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY UNDERGROUND UTILITIES TO REMAIN.





POND OUTLET CONTROL STRUCTURES (OCS-1)
N.T.S.

SECTION B-B



Kimley»Horn
10 Lea Avenue, Suite 400, Nashville, TN 37210
Main: 615.564.2701 | www.kimley-horn.com
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CO-OP BUSINESS PARK LOT 1

PANATTONI DEVELOPMENT COMPANY
LA VERGNE, TENNESSEE

PANATTONI®

ROBERT JAMES ARTS — REGISTERED ENGINEER — AGENCY NUMBER 120145 — GARRETT — STATE OF TENNESSEE
12/18/2023

REVISIONS									
No.	-	-	0	1	2	3	4	5	6	7
DATE										
BY										

DESIGNED BY:	GTF
DRAWN BY:	GTF
CHECKED BY:	RJA
DATE:	12/18/2023
KIMLEY-HORN PROJECT NO.	118163044

SITE GRADING PLAN - ENLARGEMENT

SHEET NUMBER
C4-40

Know what's below. Call before you dig.

VERTICAL 10 5 2.5 0

GRAPHIC SCALE IN FEET
0 25 50 100
HORIZONTAL

NORTH

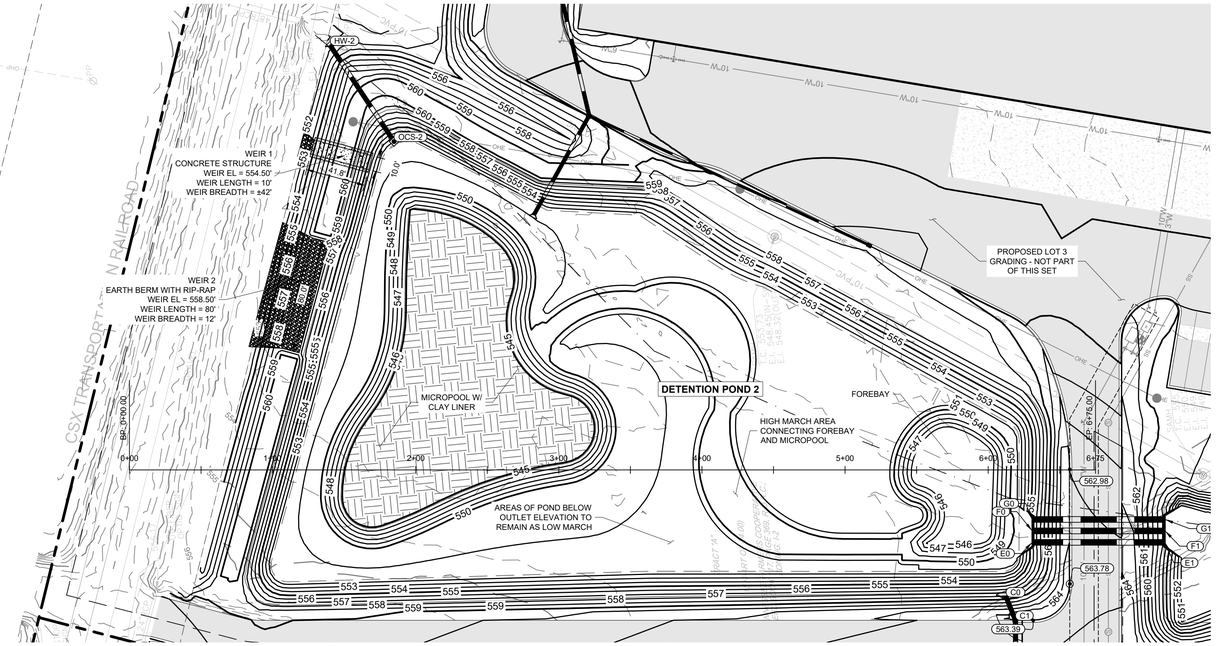
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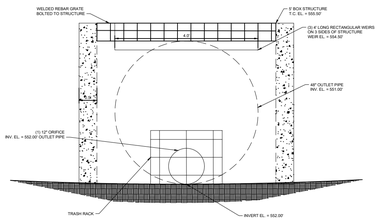
GRADING PLAN LEGEND

476.17	SPOT ELEVATION	HP	HIGH POINT	LP	LOW POINT
		TC	TOP OF CURB	BC	BOTTOM OF CURB / GUTTER LINE
		TW	TOP OF WALL	BW	BOTTOM OF EXPOSED WALL
		INV	INVERT	RIM	TOP OF GRATE / COVER
FFE 472.50	FINISH FLOOR ELEVATION				
500	EXISTING CONTOUR				
500	PROPOSED CONTOUR				

GRADING NOTES

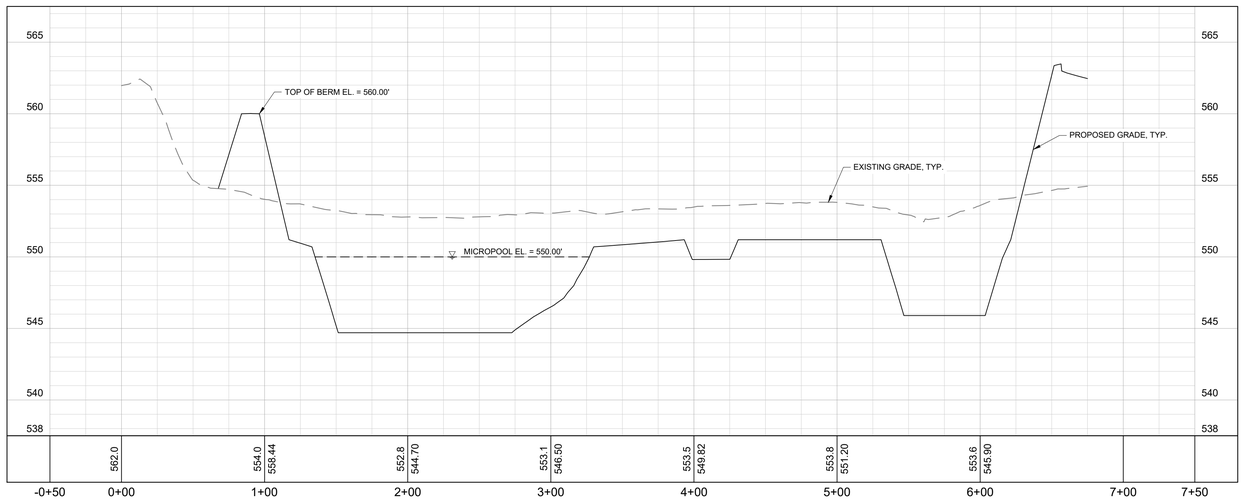
1. CONTRACTOR RESPONSIBLE FOR VERIFYING LOCATION, SIZE, AND ELEVATIONS OF EXISTING UTILITIES AT CONNECTION POINTS PRIOR TO GRADING OR INSTALLATION OF ANY PROPOSED UTILITIES. CONTRACTOR TO IMMEDIATELY NOTIFY OWNER'S REPRESENTATIVE IF DISCREPANCIES ARE FOUND.
2. AREAS FOR CONSTRUCTION THAT REQUIRE DE-WATERING FOR EXCAVATION WILL BE DONE AT NO ADDITIONAL COST TO THE OWNER AND IN ACCORDANCE WITH SECTION 4.1.4 OF THE TENNESSEE GENERAL NPDES PERMIT FOR DISCHARGES OF STORMWATER ASSOCIATED WITH CONSTRUCTION ACTIVITIES.
3. ADDITIONAL EROSION CONTROL DEVICES TO BE USED AS REQUIRED BY LOCAL INSPECTOR.
4. DISTURBED AREAS LEFT IDLE FOR FIVE DAYS, AND NOT TO FINAL GRADE, WILL BE ESTABLISHED TO TEMPORARY VEGETATION. MULCH, TEMPORARY VEGETATION OR PERMANENT VEGETATION SHALL BE COMPLETED ON ALL EXPOSED AREAS WITHIN 14 DAYS AFTER DISTURBANCE. ALL AREAS TO FINAL GRADE WILL BE ESTABLISHED TO PERMANENT VEGETATION UPON COMPLETION.
5. WHEN HAND PLANTING, MULCH (HAY OR STRAW) SHOULD BE UNIFORMLY SPREAD OVER SEEDED AREA WITHIN 24 HOURS OF SEEDING. IF UNABLE TO ACCOMPLISH, MULCH SHALL BE USED AS A TEMPORARY COVER. CONCENTRATED FLOW AREAS AND ALL SLOPES STEEPER THAN 2.5:1 AND WITH A HEIGHT OF TEN FEET OR GREATER (DOES NOT APPLY TO RETAINING WALLS), AND CUTS AND FILLS WITHIN BUFFERS, SHALL BE STABILIZED WITH THE APPROPRIATE EROSION CONTROL MATTING OR BLANKETS.
6. THE GRADING PERMIT MUST BE DISPLAYED ON SITE AT ALL TIMES DURING CONSTRUCTION AND IN PLAIN VIEW FROM A PUBLIC ROAD OR STREET.
7. EROSION AND SEDIMENT CONTROL DEVICES MUST BE DISPLAYED AND INSPECTED PRIOR TO ANY GRADING ON SITE. THE CONTRACTOR MUST CALL FOR AN INSPECTION TO OBTAIN A PERMIT TO GRADE. PLEASE CALL WITH ENOUGH LEAD-TIME FOR AN INSPECTION TO MEET YOUR SCHEDULE.
8. SEDIMENT/EROSION CONTROL DEVICES MUST BE INSPECTED ACCORDING TO LOCAL AND STATE REQUIREMENTS AND AS STIPULATED IN THE STORMWATER POLLUTION PREVENTION PLAN. EACH DEVICE IS TO BE MAINTAINED OR REPLACED IF SEDIMENT ACCUMULATION HAS REACHED ONE HALF THE CAPACITY OF THE DEVICE. ADDITIONAL DEVICES MAY BE NECESSARY AS THE PROJECT PROGRESSES AND NEW CHANNELS HAVE DEVELOPED.
9. THE ESCAPE OF SEDIMENT FROM THE SITE SHALL BE PREVENTED BY THE INSTALLATION OF EROSION AND SEDIMENT CONTROL MEASURES AND PRACTICES PRIOR TO, OR CONCURRENT WITH, LAND-DISTURBING ACTIVITIES.
10. EROSION CONTROL MEASURES WILL BE MAINTAINED AT ALL TIMES. IF FULL IMPLEMENTATION OF THE PLAN DOES NOT PROVIDE FOR EFFECTIVE EROSION CONTROL, ADDITIONAL EROSION CONTROL AND SEDIMENT CONTROL MEASURES SHALL BE IMPLEMENTED TO CONTROL OR TREAT THE SEDIMENT SOURCE.
11. CONTRACTOR SHALL REVIEW SITE GEOTECHNICAL REPORT BEFORE COMMENCING GRADING OPERATIONS.
12. SEED ALL DISTURBED AREAS UNLESS OTHERWISE NOTED AS PART OF THIS CONTRACT. REFER TO LANDSCAPING PLANS FOR AREAS TO RECEIVE SOD.
13. INSTALL SOD OR RIPRAP IN SWALES AS INDICATED ON GRADING PLANS AND EROSION CONTROL PLANS
14. TOPSOIL ON SITE TO BE STRIPPED AND STOCKPILED FOR REUSE IN LAWN AREAS.
15. ADEQUATE DRAINAGE, EROSION AND SEDIMENT CONTROL MEASURES, BEST MANAGEMENT PRACTICES, AND/OR OTHER WATER QUALITY MANAGEMENT FACILITIES SHALL BE PROVIDED AND MAINTAINED AT ALL TIMES DURING CONSTRUCTION. DAMAGES TO ADJACENT PROPERTY AND/OR THE CONSTRUCTION SITE CAUSED BY THE CONTRACTOR'S OR PROPERTY OWNER'S FAILURE TO PROVIDE AND MAINTAIN ADEQUATE DRAINAGE AND EROSION/SEDIMENT CONTROL FOR THE CONSTRUCTION AREA SHALL BE THE RESPONSIBILITY OF THE PROPERTY OWNER AND/OR CONTRACTOR.
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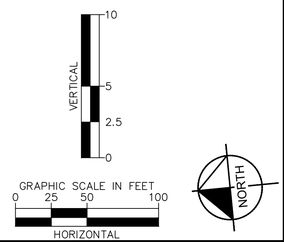


POND 2 OUTLET CONTROL STRUCTURE (OCS-2)
N.T.S.

SECTION A-A



Know what's below. Call before you dig.



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CO-OP BUSINESS PARK LOT 1

PANATTONI DEVELOPMENT COMPANY
LA VERGNE, TENNESSEE

PANATTONI®

ROBERT JAMES ARMS — REGISTERED ENGINEER — AGENT OF RECORD — COURAGE — No. 121045 — STATE OF TENNESSEE
12/18/2023

No.	REVISIONS	DATE	BY
-	-		
0			
1			
2			
3			
4			
5			
6			
7			

DESIGNED BY:	GTF
DRAWN BY:	GTF
CHECKED BY:	RJA
DATE:	12/18/2023
KIMLEY-HORN PROJECT NO.	118163044

SITE GRADING PLAN - ENLARGEMENT

SHEET NUMBER
C4-41

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STRUCTURE TABLE		
NAME	DESCRIPTION	TOP GRATE
A0	HEADWALL	N/A
A1	JBS 3101	572.89
A1.1	JBS 3101	574.25
A2	JBS 4310	570.97
A2.1	JBS 3101	574.25
A3	JBS 4310	571.05
A4	JBS 4310	571.05
A4.1	JBS 3101	574.25
A5	JBS 4310	571.23
A5.1	JBS 3101	574.35
B0	HEADWALL	N/A
B1	DOUBLE JBS 4310	569.05
B2	DOUBLE JBS 4310	569.52
B3	DOUBLE JBS 4310	569.37
B4	DOUBLE JBS 4310	569.91
B5	JBS 3101	572.29
B5.1	JBS 3101	573.71
B6	JBS 3101	573.70
C0	HEADWALL	N/A
C1	JBS 3101	563.34
C2	JBS 4310	563.59
C2.1	JBS 4310	563.24
C2.2	JBS 4310	562.89
C2.3	JBS 4310	562.89
C2.4	JBS 4310	562.89
C2.5	JBS 3101	564.00
C2.6	JBS 3101	566.21
C2.7	JBS 3101	568.61
C2.8	JBS 3101	569.41
C2.9	JBS 3101	568.76
C2.9.1	JBS 3101	573.41
C3	JBS 3101	564.68
C4	JBS 3101	566.37
C5	JBS 3101	567.84
C6	JBS 3101	569.86
C7	JBS 3101	568.73
C7.1	JBS 3101	573.89
C8	JBS 3101	569.19
C8.1	JBS 3101	574.01
C9	JBS 3101	568.39

STRUCTURE TABLE		
NAME	DESCRIPTION	TOP GRATE
C9.1	JBS 3101	573.72
C10	JBS 3101	568.39
C10.1	JBS 3101	573.94
D0	HEADWALL	N/A
D1	MANHOLE	573.81
D2	JBS 2272	570.92
D3	HEADWALL	N/A
D4	HEADWALL	N/A
E0	HEADWALL	N/A
E1	HEADWALL	N/A
EX 0	EXISTING CB TO REMAIN	N/A
EX 1	EXISTING CB TO REMAIN	N/A
F0	HEADWALL	N/A
F1	HEADWALL	N/A
G0	HEADWALL	N/A
G1	HEADWALL	N/A
H0	JBS 3101	574.64
H1	JBS 3101	575.40
H2	JBS 3101	578.72
HW-1	HEADWALL	N/A
HW-2	HEADWALL	N/A
J0	HEADWALL	N/A
J1	JBS 3101	559.50
J1.1	JBS 3101	558.60
J2	JBS 3101	560.49
J3	MANHOLE	561.89
J3.1	JBS 4310	558.23
J4	JBS 4310	557.81
K0	HEADWALL	N/A
K1	JBS 4310	558.48
K1.1	JBS 3101	559.87
K1.2	JBS 4310	557.80
K2	JBS 3101	563.27
K3	JBS 3101	563.56
K4	JBS 2272	562.40
K5	JBS 3101	563.22
K5.1	HEADWALL	N/A
K6	JBS 4310	560.47
K7	JBS 4310	560.59
K8	JBS 4310	560.59

STRUCTURE TABLE		
NAME	DESCRIPTION	TOP GRATE
L0	HEADWALL	N/A
L1	HEADWALL	N/A
L2	HEADWALL	N/A
L3	JBS 4310	569.04
L3.1	JBS 3101	568.92
L3.1.1	JBS 3101	569.94
L3.2	JBS 3101	568.78
L3.3	JBS 3101	572.14
L3.3.1	JBS 3101	569.94
L3.3.2	JBS 3101	571.06
L3.4	JBS 3101	572.43
L3.5	JBS 3101	572.43
L3.6	JBS 3101	572.54
L4	JBS 4310	569.04
L5	JBS 4310	569.04
L6	JBS 4310	568.82
L7	JBS 4310	569.70
L8	JBS 4310	571.45
L8.1	JBS 2272	572.80
L9	JBS 4310	571.67
L10	JBS 4310	571.67
L11	JBS 4310	571.67
L12	JBS 3101	572.43
L13	JBS 3101	572.43
M0	HEADWALL	N/A
M1	JBS 3101	569.35
M2	JBS 3101	570.31
M3	JBS 3101	570.58
N0	HEADWALL	N/A
N0.1	Null Structure	N/A
N1	HEADWALL	N/A
N1.1	Null Structure	N/A
OCS-1	OUTLET CONTROL STRUCTURE	N/A
OCS-2	OUTLET CONTROL STRUCTURE	N/A

PIPE TABLE							
NAME	UPSTREAM	DOWNSTREAM	SIZE	LENGTH	SLOPE	MATERIAL	MIN. COVER
A1 - A0	563.73 (A1)	562.50 (A0)	30"	122'	1.01%	RCP	-2.114 FT.
A1.1 - A1	570.57 (A1.1)	566.33 (A1)	18"	44'	9.82%	RCP	1.918 FT.
A2 - A1	564.61 (A2)	563.83 (A1)	30"	158'	0.50%	RCP	3.569 FT.
A2.1 - A2	570.57 (A2.1)	567.21 (A2)	18"	50'	6.86%	RCP	1.688 FT.
A3 - A2	565.02 (A3)	564.71 (A2)	30"	62'	0.50%	RCP	3.238 FT.
A4 - A3	565.36 (A4)	565.12 (A3)	24"	48'	0.50%	RCP	3.440 FT.
A4.1 - A4	568.75 (A4.1)	567.96 (A4)	18"	50'	1.61%	RCP	1.382 FT.
A5 - A4	566.00 (A5)	565.46 (A4)	24"	108'	0.50%	RCP	2.981 FT.
A5.1 - A5	570.42 (A5.1)	567.00 (A5)	18"	50'	6.97%	RCP	1.884 FT.
B1 - B0	562.12 (B1)	561.50 (B0)	42"	121'	0.51%	RCP	-2.057 FT.
B2 - B1	563.15 (B2)	562.22 (B1)	36"	186'	0.50%	RCP	3.503 FT.
B3 - B2	564.22 (B3)	563.25 (B2)	36"	196'	0.50%	RCP	1.813 FT.
B4 - B3	565.10 (B4)	564.32 (B3)	30"	196'	0.40%	RCP	2.014 FT.
B5 - B4	565.52 (B5)	565.20 (B4)	30"	64'	0.50%	RCP	1.914 FT.
B5.1 - B5	569.50 (B5.1)	567.02 (B5)	24"	144'	1.73%	RCP	1.956 FT.
B6 - B5	568.00 (B6)	566.02 (B5)	24"	137'	1.45%	RCP	3.400 FT.
C1 - C0	551.21 (C1)	551.02 (C0)	36"	18'	1.04%	RCP	4.975 FT.
C2 - C1	554.32 (C2)	554.10 (C1)	36"	43'	0.50%	RCP	5.904 FT.
C2.1 - C2	556.28 (C2.1)	555.58 (C2)	36"	141'	0.50%	RCP	3.624 FT.
C2.2 - C2.1	557.09 (C2.2)	556.38 (C2.1)	30"	141'	0.50%	RCP	3.008 FT.
C2.3 - C2.2	557.89 (C2.3)	557.19 (C2.2)	24"	142'	0.50%	RCP	2.744 FT.
C2.4 - C2.3	558.70 (C2.4)	557.99 (C2.3)	24"	141'	0.50%	RCP	1.939 FT.
C2.5 - C2.4	559.93 (C2.5)	558.80 (C2.4)	18"	62'	1.83%	RCP	2.365 FT.

PIPE TABLE							
NAME	UPSTREAM	DOWNSTREAM	SIZE	LENGTH	SLOPE	MATERIAL	MIN. COVER
C2.6 - C2.5	562.18 (C2.6)	560.03 (C2.5)	18"	118'	1.83%	RCP	2.265 FT.
C2.7 - C2.6	563.29 (C2.7)	562.28 (C2.6)	18"	204'	0.50%	RCP	2.221 FT.
C2.8 - C2.7	563.72 (C2.8)	563.39 (C2.7)	18"	65'	0.50%	RCP	3.506 FT.
C2.9 - C2.8	564.09 (C2.9)	563.82 (C2.8)	18"	55'	0.50%	RCP	2.959 FT.
C2.9.1 - C2.9	568.72 (C2.9.1)	564.22 (C2.9)	18"	65'	7.00%	RCP	1.445 FT.
C3 - C2	556.49 (C3)	555.48 (C2)	30"	40'	2.59%	RCP	5.323 FT.
C4 - C3	560.69 (C4)	556.59 (C3)	24"	159'	2.59%	RCP	3.436 FT.
C5 - C4	561.31 (C5)	560.79 (C4)	24"	105'	0.50%	RCP	3.336 FT.
C6 - C5	562.04 (C6)	561.31 (C5)	24"	146'	0.50%	RCP	4.275 FT.
C7 - C6	562.99 (C7)	562.54 (C6)	18"	91'	0.50%	RCP	4.028 FT.
C7.1 - C7	567.59 (C7.1)	564.00 (C7)	18"	56'	6.40%	RCP	3.017 FT.
C8 - C7	563.53 (C8)	562.99 (C7)	18"	108'	0.50%	RCP	3.957 FT.
C8.1 - C8	570.80 (C8.1)	564.00 (C8)	18"	56'	12.14%	RCP	0.823 FT.
C9 - C8	564.03 (C9)	563.53 (C8)	18"	101'	0.50%	RCP	2.649 FT.
C9.1 - C9	570.51 (C9.1)	565.00 (C9)	18"	56'	9.83%	RCP	-0.145 FT.
C10 - C9	564.65 (C10)	564.03 (C9)	18"	125'	0.50%	RCP	2.028 FT.
C10.1 - C10	570.73 (C10.1)	566.25 (C10)	18"	56'	8.00%	RCP	0.430 FT.
D1 - D0	565.99 (D1)	564.00 (D0)	24"	158'	1.26%	RCP	-3.333 FT.
D2 - D1	566.88 (D2)	566.09 (D1)	24"	159'	0.50%	RCP	1.790 FT.
D4 - D3	572.25 (D4)	571.82 (D3)	24"	98'	0.45%	RCP	-1.204 FT.
E1 - E0	550.85 (E1)	550.39 (E0)	48"	93'	0.50%	RCP	-4.504 FT.
EX 1 - H2	576.66 (EX 1)	574.72 (H2)	18"	180'	1.08%	RCP	0.000 FT.
F1 - F0	550.85 (F1)	550.39 (F0)	48"	93'	0.50%	RCP	-4.504 FT.

PIPE TABLE							
NAME	UPSTREAM	DOWNSTREAM	SIZE	LENGTH	SLOPE	MATERIAL	MIN. COVER
G1 - G0	550.85 (G1)	550.39 (G0)	48"	93'	0.50%	RCP	-4.504 FT.
H0 - EX 0	571.19 (H0)	570.75 (EX 0)	18"	103'	0.43%	RCP	1.550 FT.
H1 - H0	571.73 (H1)	571.29 (H0)	18"	101'	0.43%	RCP	-0.050 FT.
H2 - H1	574.62 (H2)	571.83 (H1)	18"	261'	1.07%	RCP	-0.167 FT.
J1 - J0	551.56 (J1)	551.20 (J0)	30"	80'	0.46%	RCP	-2.942 FT.
J1.1 - J1	555.14 (J1.1)	551.81 (J1)	18"	216'	1.55%	RCP	1.748 FT.
J2 - J1	552.05 (J2)	551.66 (J1)	30"	86'	0.46%	RCP	5.043 FT.
J3 - J2	553.41 (J3)	552.15 (J2)	24"	278'	0.46%	RCP	6.091 FT.
J3 - J3.1	554.15 (J3)	554.53 (J3.1)	30"	143'	0.26%	*	1.792 FT.
J4 - J3	554.39 (J4)	553.41 (J3)	30"	196'	0.50%	*	1.105 FT.
K1 - K0	553.10 (K1)	552.76 (K0)	42"	69'	0.50%	RCP	-3.605 FT.
K1 - K1.2	553.15 (K1)	554.05 (K1.2)	24"	180'	0.50%	RCP	1.505 FT.
K1.1 - K1	556.93 (K1.1)	554.54 (K1)	15"	103'	2.33%	RCP	0.079 FT.
K2 - K1	554.21 (K2)	553.10 (K1)	42"	222'	0.50%	RCP	1.317 FT.
K3 - K2	555.03 (K3)	554.21 (K2)	42"	164'	0.50%	RCP	4.657 FT.
K4 - K3	555.21 (K4)	555.03 (K3)	42"	38'	0.50%	RCP	3.307 FT.
K5 - K4	555.89 (K5)	555.21 (K4)	42"	135'	0.50%	RCP	3.307 FT.
K5 - K5.1	555.89 (K5)	556.00 (K5.1)	36"	14'	0.83%	RCP	-1.841 FT.
K6 - K5	556.20 (K6)	555.89 (K5)	30"	65'	0.49%	RCP	1.451 FT.
K7 - K6	556.64 (K7)	556.20 (K6)	30"	89'	0.50%	*	2.028 FT.
K8 - K7	557.17 (K8)	556.64 (K7)	30"	107'	0.50%	*	1.436 FT.
L1 - L0	557.75 (L1)	556.83 (L0)	48"	186'	0.50%	RCP	-4.910 FT.
L3 - L2	560.33 (L3)	559.61 (L2)	42"	146'	0.50%	RCP	-3.875 FT.

STORMWATER PIPE NOTE

PIPES DENOTED WITH AN ASTERISK ON THE PIPE TABLES ARE TO BE 30" x 19" CONCRETE HORIZONTAL ELLIPTICAL CULVERTS.

THE PIPE AND STRUCTURE TABLES SHOWN ARE FOR THE ENTIRETY OF LOTS 1, 2, AND 3 OF THE CO-OP BUSINESS PARK, AS THEY ARE PART OF A SHARED REGIONAL STORMWATER MANAGEMENT PLAN.

811 Know what's below. Call before you dig.

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PANATTONI DEVELOPMENT COMPANY
LA VERGNE, TENNESSEE

PANATTONI®

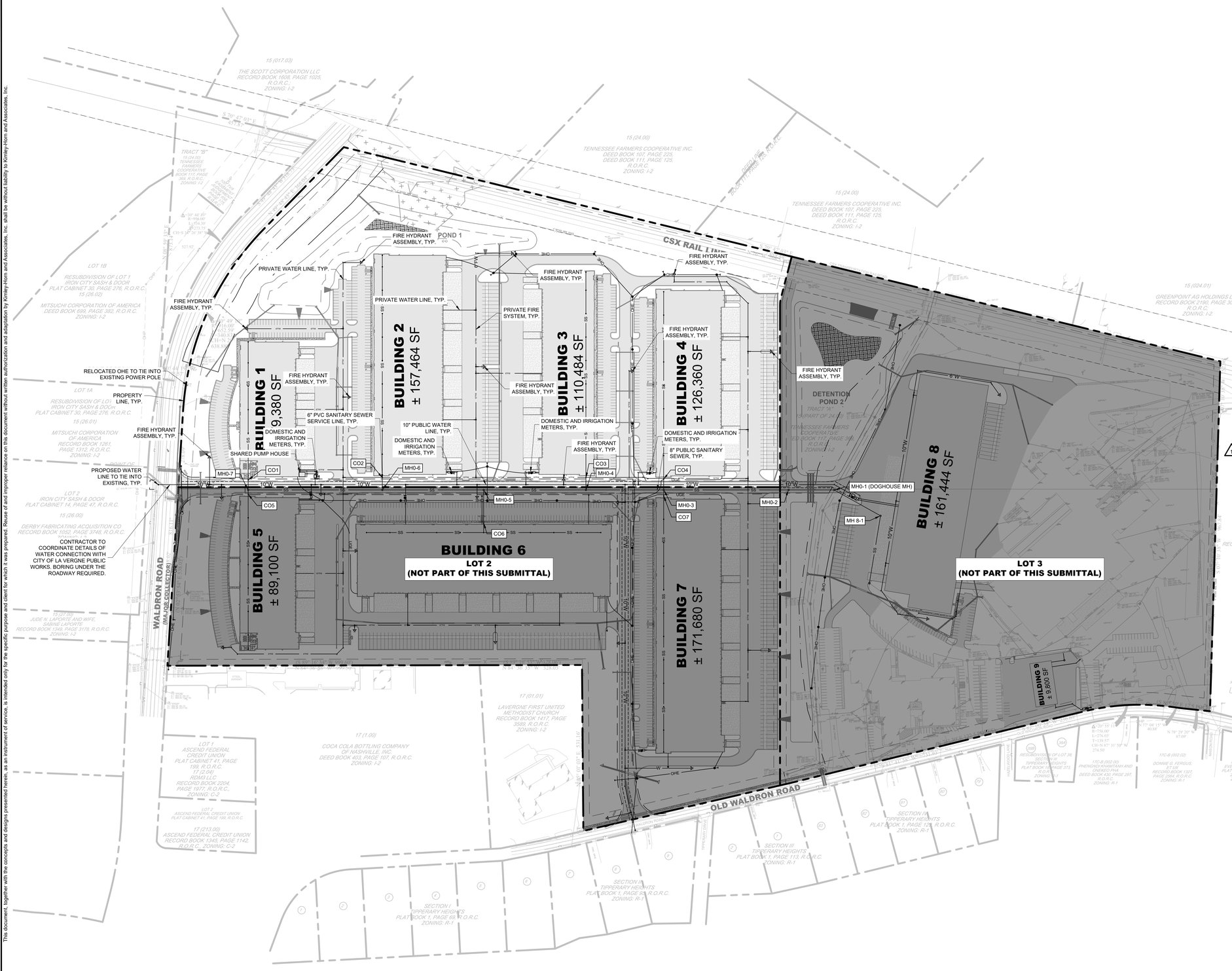
ROBERT JAMES ARIS
REGISTERED ENGINEER
AGENT NUMBER
100182
COMMERCE
TENNESSEE
STATE OF TENNESSEE
12/18/2023

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DESIGNED BY: GTF
DRAWN BY: GTF
CHECKED BY: RJA
DATE: 12/18/2023
KIMLEY-HORN PROJECT NO. 118163044

STORMWATER TABLES

SHEET NUMBER
C4-50



SITE UTILITY NOTES

1. EXISTING UTILITIES SHALL BE VERIFIED IN FIELD PRIOR TO INSTALLATION OF ANY NEW PIPE LINES.
2. WHERE WATER PIPING CROSSES THE SANITARY SEWER LINE, THE WATER SERVICE WITHIN 10 FEET OF THE POINT OF CROSSING SHALL BE AT LEAST 18 INCHES ABOVE THE TOP OF THE SEWER LINE.
3. THE CONTRACTOR SHALL NOTIFY THE INSPECTOR AT LEAST 7 DAYS PRIOR TO THE START OF SEWER CONSTRUCTION.
4. THE LOCATIONS OF EXISTING UNDERGROUND AND OVERHEAD UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR KIMLEY-HORN AND ASSOCIATES, INC. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UNDERGROUND AND OVERHEAD UTILITIES BEFORE COMMENCING WORK AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTORS FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND AND OVERHEAD UTILITIES.
5. CONTRACTOR TO COORDINATE ALL WORK WITH OTHER UTILITY INSTALLATIONS NOT PROVIDED IN THESE CONSTRUCTION DOCUMENTS (ELECTRIC, TELEPHONE, GAS, CABLE, ETC.) AND ALLOW FOR THEIR OPERATIONS AND CONSTRUCTION TO BE PERFORMED.
6. ALL WORK AND MATERIALS SHALL COMPLY WITH THE CITY OF LA VERGNE AND O.H.S.A. STANDARDS.
7. ALL PIPES UNDER STREETS OR PAVED AREAS IN R.O.W. SHALL BE BACKFILLED WITH CRUSHED STONE.
8. ALL AREAS BACKFILLED SHALL BE COMPACTED TO 95% STANDARD PROCTOR IN R.O.W.
9. EXISTING UTILITIES SHALL BE VERIFIED IN FIELD PRIOR TO INSTALLATION OF ANY NEW PIPE LINES.
10. LINES UNDERGROUND SHALL BE INSTALLED, TESTED AND APPROVED BEFORE BACKFILLING.
11. CONTRACTOR TO CONTACT THE CITY OF LA VERGNE TO COORDINATE INSTALLATION AS REQUIRED.
12. ALL FIRE HYDRANTS INSTALLED FOR THIS DEVELOPMENT SHALL BE OF A TYPE ACCEPTABLE TO THE CITY OF LA VERGNE STANDARDS.
13. THE CITY OF LA VERGNE AND/OR CONTRACTOR SHALL SET INDIVIDUAL WATER METERS IN FIELD AS REQUIRED.
14. CONTRACTOR SHALL REPLACE IN LIKE KIND ALL PAVEMENT AREAS REMOVED OR DISTURBED AS A RESULT OF THE WATER MAIN INSTALLATION AND ASSOCIATED WORK.
15. PRIVATE WATER MAIN AND LINES TO HAVE MINIMUM OF 30" COVER.
16. CONTRACTOR SHALL BE A STATE OF TENNESSEE LICENSED CONTRACTOR APPROVED TO INSTALL PUBLIC WATER MAINS.
17. CONTRACTOR SHALL OBTAIN AND PAY FOR ALL FEES, PERMITS AND LICENSES AS PART OF THE CONTRACT.
18. NON-METALLIC DETECTION TAPE SHALL BE INSTALLED 18" ABOVE THE WATERLINE, ALONG WITH NUMBER 12 OR 14 GAUGE CAP WIRE TAPED TO THE WATERLINE.
19. LUBRICANTS SHALL BE NON-TOXIC AND SHALL NOT PROMOTE BIOLOGICAL GROWTH. SOLVENT-CEMENTED JOINTS ARE NOT PERMITTED.
20. PROCEDURES FOR DISINFECTING POTABLE WATERLINES SHALL CONFORM TO THE REQUIREMENTS OF A.W.W.A. C651. ALL WATERLINES SHALL BE DISINFECTED, BACTERIOLOGICAL TESTED, AND PRESSURE TREATED ACCORDING TO THE CITY OF LA VERGNE'S SPECIFICATIONS PRIOR TO LINE ACCEPTANCE AND THE WATERLINE BEING PLACED INTO SERVICE.
21. PRESSURE AND LEAKAGE TESTS SHALL BE PREFORMED IN STRICT ACCORDANCE WITH CURRENT A.W.W.A STANDARD C600 AND/OR MANUFACTURER'S PROCEDURES.
22. ALL VALVES AND FITTINGS ARE TO CONFORM TO THE LATEST A.W.W.A STANDARDS.
23. THE CONTRACTOR SHALL MAKE ARRANGEMENTS WITH THE UTILITY ENTITY FOR CONNECTION TO THE EXISTING UTILITY LINES. THE CONTRACTOR SHALL ADJUST THE LOCATION OF THE PROPOSED WATERLINE TO AVOID CONFLICTS WITH OTHER UTILITIES.
24. ALL CONCRETE USED FOR THRUST BLOCKS TO HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 3000 psi.
25. THE CONTRACTOR IS RESPONSIBLE FOR THE COMPLETE INSTALLATION OF THE WATER SERVICE LINE AND FIRE LINE AS REQUIRED. THE CONTRACTOR SHALL PROVIDE A TAPPING VALVE AND SLEEVE AND OTHER MATERIAL AND EQUIPMENT AS REQUIRED FOR TAPPING THE EXISTING MAIN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE FEE TO THE CITY OF LA VERGNE AS REQUIRED FOR TAPPING THE EXISTING MAIN AND COORDINATE WITH THE CITY OF LA VERGNE AS REQUIRED.
26. ALL METERS ARE REQUIRED TO BE BADGER AUTOMATIC READ METERS.
27. ALL MATERIALS AND CONSTRUCTION SHALL BE PER LA VERGNE PUBLIC WORKS STANDARD SPECIFICATIONS FOR WATER AD SEWER CONSTRUCTION, LATEST VERSION.
28. NO MORE THAN 500 FT. OF OPEN TRENCH WILL BE ALLOWED AT ONE TIME.

LEGEND

- SANITARY SEWER MANHOLE
- SANITARY SEWER LINE
- FIRE HYDRANT
- WATER LINE
- WATER METER
- BACKFLOW PREVENTER
- FIRE DEPARTMENT CONNECTION

FIRE FLOW TEST

COMPLETED BY: SCOTT TATALOVICH, CITY OF LA VERGNE

DATE COMPLETED: SEPTEMBER 9, 2022

STATIC/RESIDUAL HYDRANT
FH #: FH248
LOCATION: HAZELWOOD LANE & OLD WALDRON ROAD
STATIC PRESSURE: 80 PSI
RESIDUAL PRESSURE: 66 PSI
FLOW: 6,768 GPM

FLOW HYDRANT 1
FH #: FH1603
LOCATION: MASON ROAD & OLD WALDRON ROAD
STATIC PRESSURE: 80 PSI
RESIDUAL PRESSURE: 32 PSI
FLOW: 1,898 GPM

FLOW HYDRANT 2
FH #: FH605
LOCATION: TIPPERARY DRIVE & OLD WALDRON ROAD
STATIC PRESSURE: 80 PSI
RESIDUAL PRESSURE: 50 PSI
FLOW: 1,186 GPM

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GRAPHIC SCALE IN FEET
0 75 150 300

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PANATTONI DEVELOPMENT COMPANY
LA VERGNE, TENNESSEE

PANATTONI®

ROBERT JAMES ARTS — REGISTERED ENGINEER — AGREEMENT No. 12104 — STATE OF TENNESSEE — 12/18/2023

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DESIGNED BY:
DRAWN BY:
CHECKED BY:
DATE: 12/18/2023
KIMLEY-HORN PROJECT NO. 118163044

UTILITY PLAN - OVERALL

SHEET NUMBER
C6-10

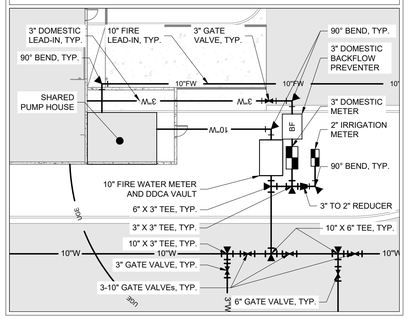
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SITE UTILITY NOTES

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2. WHERE WATER PIPING CROSSES THE SANITARY SEWER LINE, THE WATER SERVICE WITHIN 10 FEET OF THE POINT OF CROSSING SHALL BE AT LEAST 18 INCHES ABOVE THE TOP OF THE SEWER LINE.
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4. THE LOCATIONS OF EXISTING UNDERGROUND AND OVERHEAD UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR KIMLEY-HORN AND ASSOCIATES, INC. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UNDERGROUND AND OVERHEAD UTILITIES BEFORE COMMENCING WORK AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTORS FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND AND OVERHEAD UTILITIES.
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13. THE CITY OF LA VERGNE AND/OR CONTRACTOR SHALL SET INDIVIDUAL WATER METERS IN FIELD AS REQUIRED.
14. CONTRACTOR SHALL REPLACE IN LIKE KIND ALL PAVEMENT AREAS REMOVED OR DISTURBED AS A RESULT OF THE WATER MAIN INSTALLATION AND ASSOCIATED WORK.
15. WATER LINES 8" OR SMALLER TO HAVE MINIMUM OF 36" COVER AND NOT LESS THAN 42" OF COVER FOR PIPE LARGER THAN 8".
16. CONTRACTOR SHALL BE A STATE OF TENNESSEE LICENSED CONTRACTOR APPROVED TO INSTALL PUBLIC WATER MAINS.
17. CONTRACTOR SHALL OBTAIN AND PAY FOR ALL FEES, PERMITS AND LICENSES AS PART OF THE CONTRACT.
18. NON-METALLIC DETECTION TAPE SHALL BE INSTALLED 18" ABOVE THE WATERLINE, ALONG WITH NUMBER 12 OR 14 GAUGE CAP WIRE TAPED TO THE WATERLINE.
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27. ALL MATERIALS AND CONSTRUCTION SHALL BE PER LA VERGNE PUBLIC WORKS STANDARD SPECIFICATIONS FOR WATER AD SEWER CONSTRUCTION, LATEST EDITION.
28. NO MORE THAN 500 FT OF OPEN UTILITY TRENCH WILL BE ALLOWED AT ONE TIME.

PUMP HOUSE ENLARGEMENT

SCALE 1"=20'



LEGEND

- SANITARY SEWER MANHOLE
- SS — SANITARY SEWER LINE
- FIRE HYDRANT
- W — WATER LINE
- WATER METER
- BF — BACKFLOW PREVENTER
- FIRE DEPARTMENT CONNECTION

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ROBERT JAMES ARTS — REGISTERED ENGINEER — AGENCY TYPE — No. 121045 — STATE OF TENNESSEE — 12/18/2023

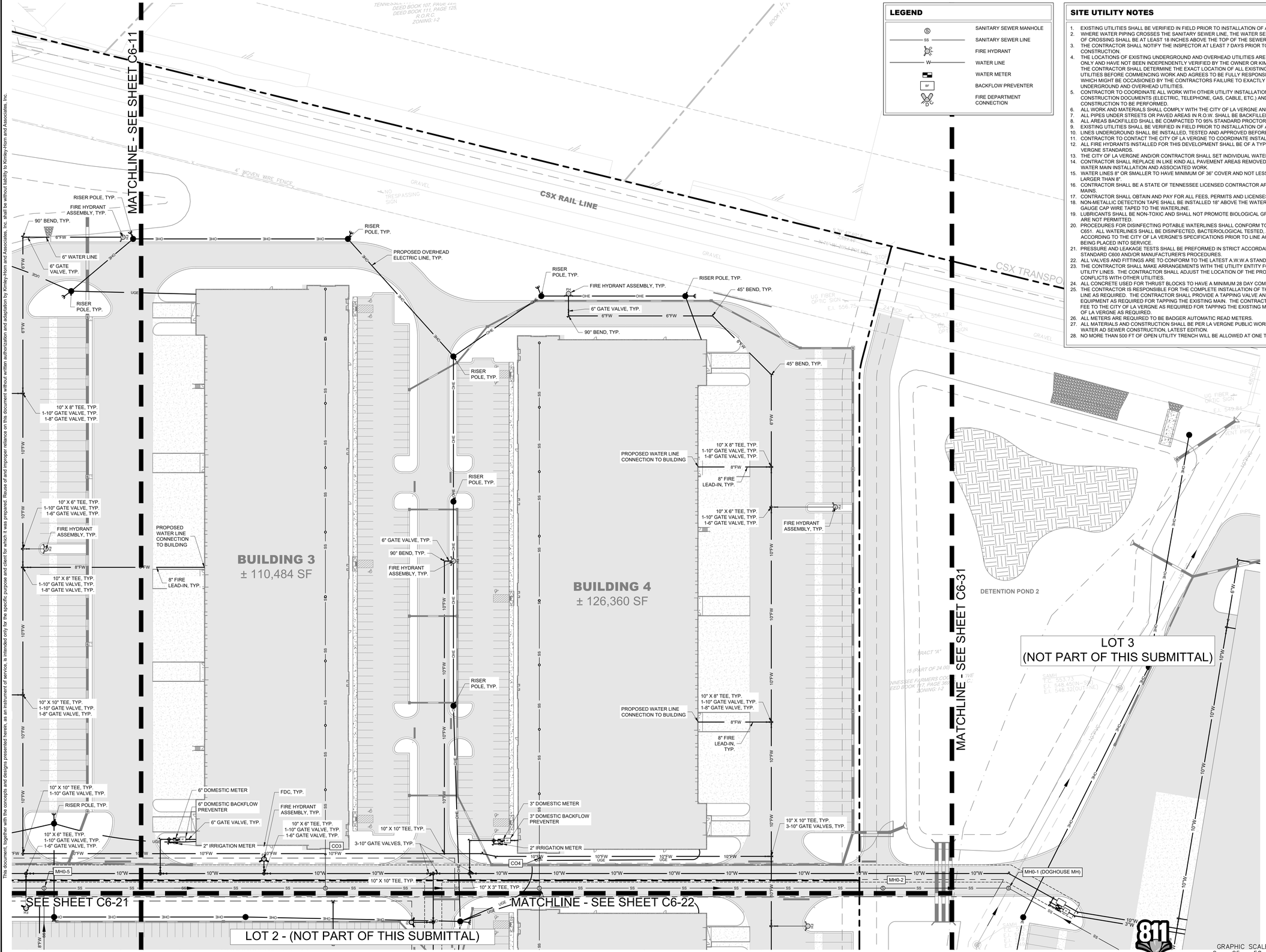
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DRAWN BY: ___
CHECKED BY: ___
DATE: 12/18/2023
KIMLEY-HORN PROJECT NO. 118163044

UTILITY PLAN - ENLARGEMENT

SHEET NUMBER
C6-11

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LA VERGNE, TENNESSEE

PANATTONI®

ROBERT JAMES ARTS
REGISTERED ENGINEER
AGGREGATE
ENGINEER
No. 121045
STATE OF TENNESSEE
12/18/2023

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CHECKED BY:	RJA
DATE:	12/18/2023
KIMLEY-HORN PROJECT NO.	118163044

UTILITY PLAN - ENLARGEMENT

SHEET NUMBER
C6-12

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ROBERT JAMES ARTS
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AGRICULTURE
ENGINEER
No. 121043
STATE OF TENNESSEE
12/18/2023

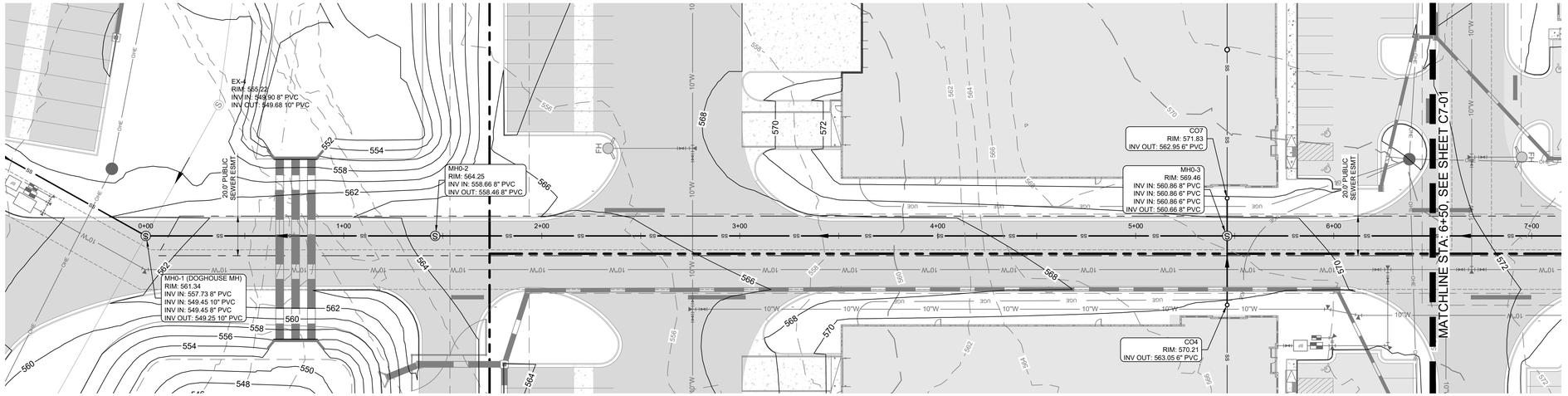
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DESIGNED BY:	GTF
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DATE:	12/18/2023
KIMLEY-HORN PROJECT NO.	118163044

PUBLIC SANITARY SEWER - OVERALL

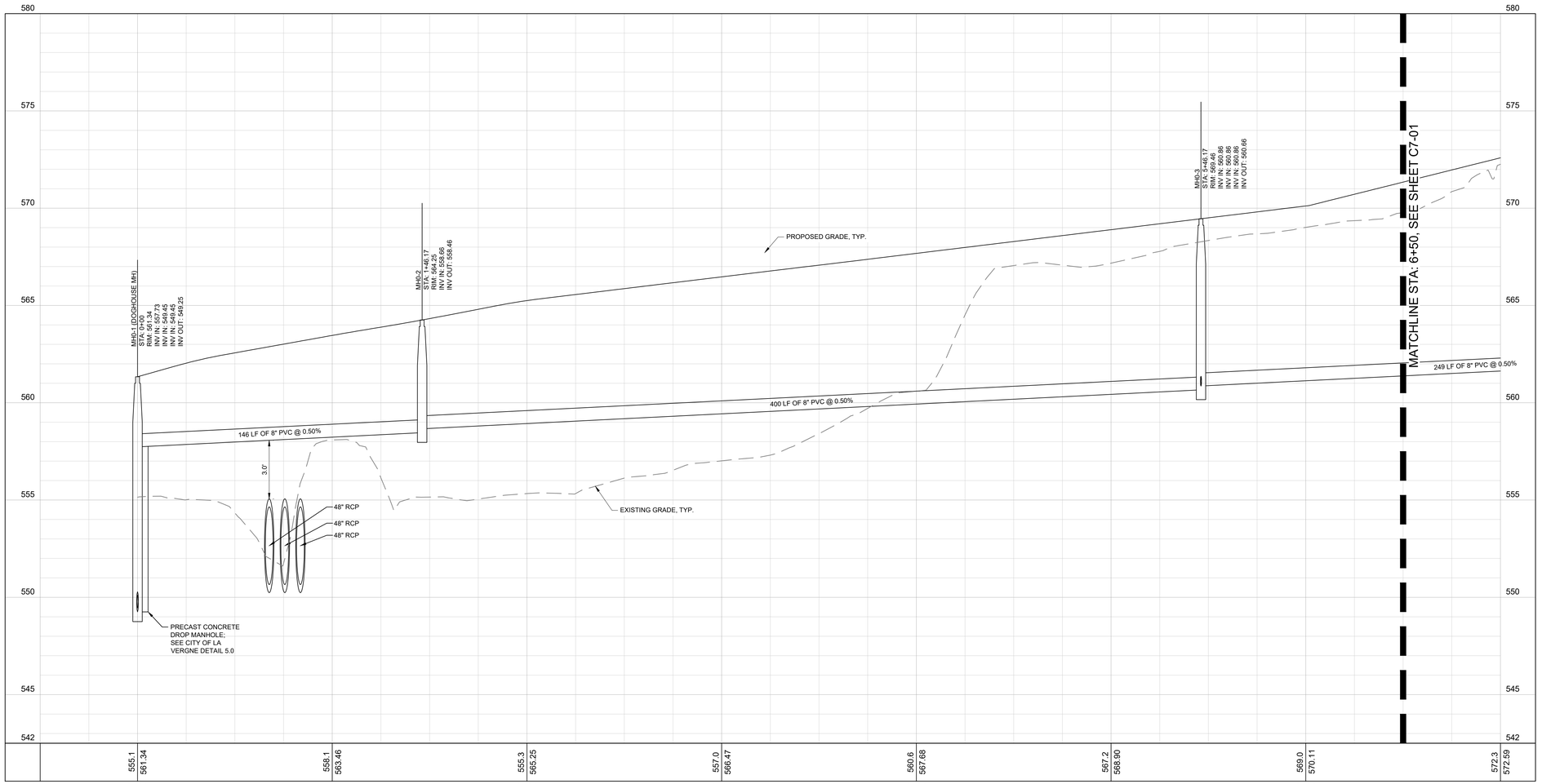
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Drawing name: K:\NSH_LDEV\118163044 - co-op la vergne\4-CADD\plansheets\C7-00 SANITARY SEWER PLAN - OVERALL.dwg C7-00 Dec 18, 2023 11:07am by: Garrett.Froula



PUBLIC SANITARY SEWER PLAN

STA. 0+00 TO STA. 6+50



PUBLIC SANITARY SEWER PROFILE

STA. 0+00 TO STA. 6+50

SITE UTILITY NOTES

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4. CONTRACTOR TO COORDINATE ALL WORK WITH OTHER UTILITY INSTALLATIONS NOT PROVIDED IN THESE CONSTRUCTION DOCUMENTS (ELECTRIC, TELEPHONE, GAS, CABLE, ETC.) AND ALLOW FOR THEIR OPERATIONS AND CONSTRUCTION TO BE PERFORMED.
5. ALL WORK AND MATERIALS SHALL COMPLY WITH THE CITY OF LA VERGNE AND O.H.S.A. STANDARDS.
6. ALL SEWER CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH TOWN OF LA VERGNE AND THE DEPARTMENT OF ENVIRONMENT AND CONSERVATION CURRENT SPECIFICATIONS.
7. ALL FILL IS TO BE PLACED AND COMPACTED PRIOR TO INSTALLATION OF PUBLIC UTILITIES
8. ALL PIPES UNDER STREETS OR PAVED AREAS IN R.O.W. SHALL BE BACKFILLED WITH CRUSHED STONE.
9. ALL AREAS BACKFILLED SHALL BE COMPACTED TO 95% STANDARD PROCTOR IN R.O.W.
10. EXISTING UTILITIES SHALL BE VERIFIED IN FIELD PRIOR TO INSTALLATION OF ANY NEW PIPE LINES.
11. THE CONTRACTORS AUTHORIZED FIELD REPRESENTATIVE SHALL NOTIFY THE APPROPRIATE UTILITY DEPARTMENT 48 HOURS PRIOR TO COMMENCING ANY WORK ON THE PROPOSED SANITARY SEWER LINE EXTENSIONS.
12. ALL FIRE HYDRANTS INSTALLED FOR THIS DEVELOPMENT SHALL BE OF A TYPE ACCEPTABLE TO LA VERGNE UTILITY DISTRICT STANDARDS.
13. LA VERGNE UTILITY DISTRICT AND/OR CONTRACTOR SHALL SET INDIVIDUAL WATER METERS IN FIELD AS REQUIRED.
14. CONTRACTOR SHALL REPLACE IN LIKE KIND ALL PAVEMENT AREAS REMOVED OR DISTURBED AS A RESULT OF THE WATER MAIN INSTALLATION AND ASSOCIATED WORK.
15. PUBLIC WATER MAIN TO HAVE MINIMUM OF 36" COVER.
16. ALL WATER LATERALS TO HAVE A MINIMUM OF 18" COVER.
17. CONTRACTOR SHALL BE A STATE OF TENNESSEE LICENSED CONTRACTOR APPROVED TO INSTALL PUBLIC WATER MAINS.
18. CONTRACTOR SHALL OBTAIN AND PAY FOR ALL FEES, PERMITS AND LICENSES AS PART OF THE CONTRACT.
19. NON-METALLIC DETECTION TAPE SHALL BE INSTALLED 18" ABOVE THE WATERLINE, ALONG WITH NUMBER 12 OR 14 GAUGE CAP WIRE TAPED TO THE WATERLINE.
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27. NO CONNECTION TO THE EXISTING SANITARY SEWER SYSTEM WILL BE PERMITTED UNTIL THE NEW SANITARY SEWER WORK HAS BEEN INSPECTED AND IS APPROVED BY THE APPROPRIATE UTILITY DEPARTMENT/DISTRICT.
28. TEN-FOOT MINIMUM HORIZONTAL SEPARATION AND 18" VERTICAL SEPARATION TO BE MAINTAINED BETWEEN WATER AND SANITARY SEWER LINES WHEREVER POSSIBLE.
29. ALL SANITARY SEWER SERVICES WILL BE TEE OR WYE-CONNECTED TO MAIN LINE.
30. ALL MANHOLES TO HAVE TRAFFIC BEARING FRAMES AND COVERS UNLESS NOTED OTHERWISE ON THE PLAN/PROFILE SHEETS

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LA VERGNE, TENNESSEE

PANATTONI®

ROBERT JAMES ARTS
REGISTERED ENGINEER
AGRICULTURE
ENGINEER
No. 121043
STATE OF TENNESSEE
12/18/2023

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REVISIONS										
DATE										
BY										

DESIGNED BY:	GTF
DRAWN BY:	GTF
CHECKED BY:	RJA
DATE:	12/18/2023

KIMLEY-HORN PROJECT NO. 118163044

PUBLIC SANITARY SEWER - PLAN & PROFILE

SHEET NUMBER
C7-01

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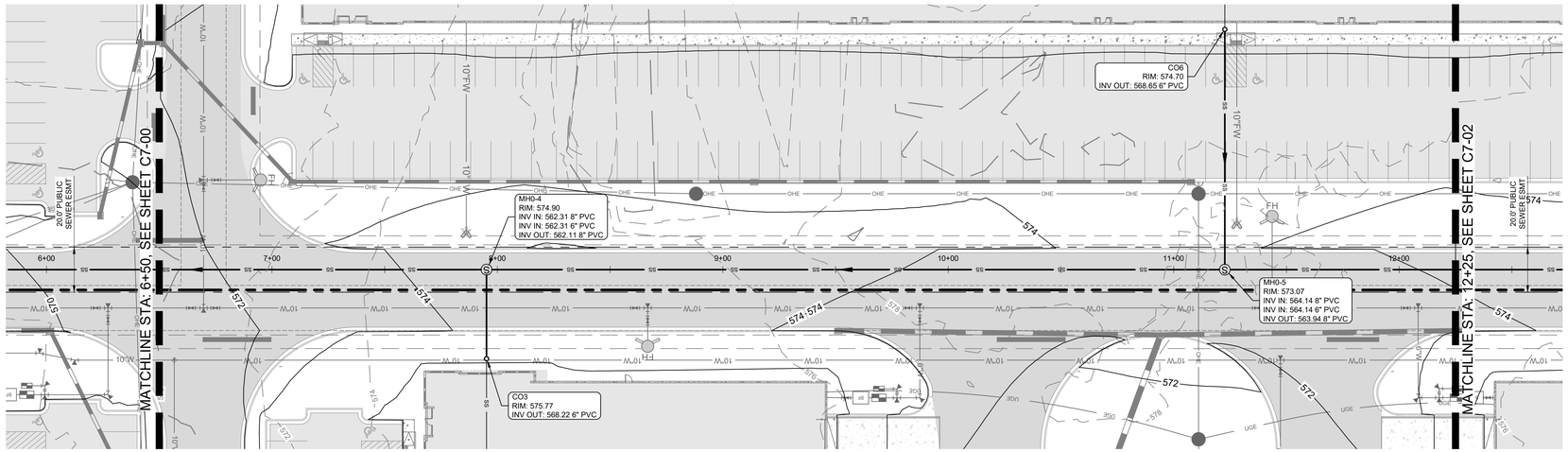
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VERTICAL

GRAPHIC SCALE IN FEET
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HORIZONTAL

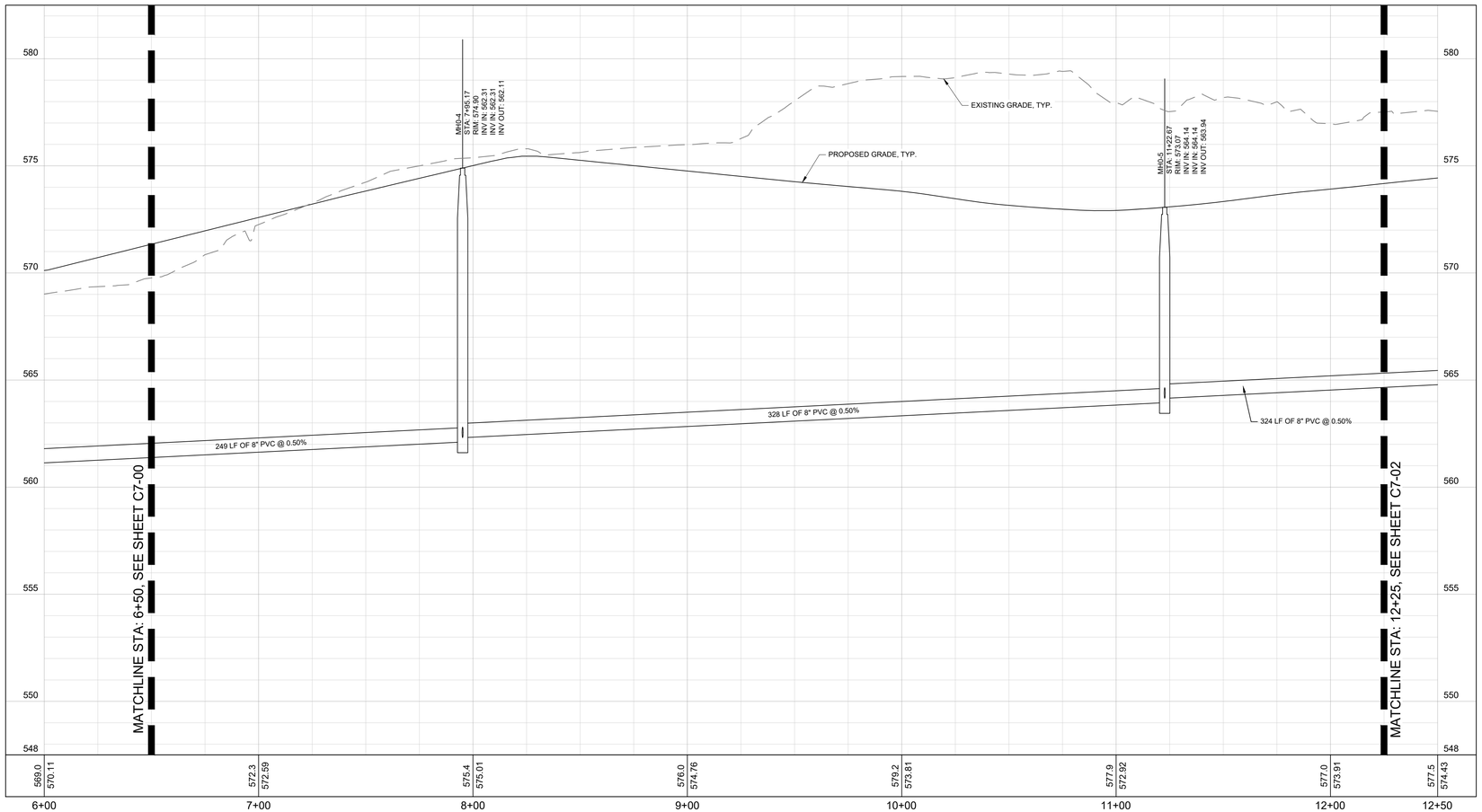
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PUBLIC SANITARY SEWER PLAN
STA. 6+50 TO STA. 12+25



PUBLIC SANITARY SEWER PROFILE
STA. 6+50 TO STA. 12+25

SITE UTILITY NOTES

1. EXISTING UTILITIES SHALL BE VERIFIED IN FIELD PRIOR TO INSTALLATION OF ANY NEW PIPE LINES.
2. THE CONTRACTOR SHALL NOTIFY THE INSPECTOR AT LEAST 7 DAYS PRIOR TO THE START OF SEWER CONSTRUCTION.
3. THE LOCATIONS OF EXISTING UNDERGROUND AND OVERHEAD UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR KIMLEY-HORN AND ASSOCIATES, INC. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UNDERGROUND AND OVERHEAD UTILITIES BEFORE COMMENCING WORK AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTORS FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND AND OVERHEAD UTILITIES.
4. CONTRACTOR TO COORDINATE ALL WORK WITH OTHER UTILITY INSTALLATIONS NOT PROVIDED IN THESE CONSTRUCTION DOCUMENTS (ELECTRIC, TELEPHONE, GAS, CABLE, ETC.) AND ALLOW FOR THEIR OPERATIONS AND CONSTRUCTION TO BE PERFORMED.
5. ALL WORK AND MATERIALS SHALL COMPLY WITH THE CITY OF LA VERGNE AND O.H.S.A. STANDARDS.
6. ALL SEWER CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH TOWN OF LA VERGNE AND THE DEPARTMENT OF ENVIRONMENT AND CONSERVATION CURRENT SPECIFICATIONS.
7. ALL FILL IS TO BE PLACED AND COMPACTED PRIOR TO INSTALLATION OF PUBLIC UTILITIES
8. ALL PIPES UNDER STREETS OR PAVED AREAS IN R.O.W. SHALL BE BACKFILLED WITH CRUSHED STONE.
9. ALL AREAS BACKFILLED SHALL BE COMPACTED TO 95% STANDARD PROCTOR IN R.O.W.
10. EXISTING UTILITIES SHALL BE VERIFIED IN FIELD PRIOR TO INSTALLATION OF ANY NEW PIPE LINES.
11. THE CONTRACTORS AUTHORIZED FIELD REPRESENTATIVE SHALL NOTIFY THE APPROPRIATE UTILITY DEPARTMENT 48 HOURS PRIOR TO COMMENCING ANY WORK ON THE PROPOSED SANITARY SEWER LINE EXTENSIONS.
12. ALL FIRE HYDRANTS INSTALLED FOR THIS DEVELOPMENT SHALL BE OF A TYPE ACCEPTABLE TO LA VERGNE UTILITY DISTRICT STANDARDS.
13. LA VERGNE UTILITY DISTRICT AND/OR CONTRACTOR SHALL SET INDIVIDUAL WATER METERS IN FIELD AS REQUIRED.
14. CONTRACTOR SHALL REPLACE IN LIKE KIND ALL PAVEMENT AREAS REMOVED OR DISTURBED AS A RESULT OF THE WATER MAIN INSTALLATION AND ASSOCIATED WORK.
15. PUBLIC WATER MAIN TO HAVE MINIMUM OF 36" COVER.
16. ALL WATER LATERALS TO HAVE A MINIMUM OF 18" COVER.
17. CONTRACTOR SHALL BE A STATE OF TENNESSEE LICENSED CONTRACTOR APPROVED TO INSTALL PUBLIC WATER MAINS.
18. CONTRACTOR SHALL OBTAIN AND PAY FOR ALL FEES, PERMITS AND LICENSES AS PART OF THE CONTRACT.
19. NON-METALLIC DETECTION TAPE SHALL BE INSTALLED 18" ABOVE THE WATERLINE, ALONG WITH NUMBER 12 OR 14 GAUGE CAP WIRE TAPED TO THE WATERLINE.
20. LUBRICANTS SHALL BE NON-TOXIC AND SHALL NOT PROMOTE BIOLOGICAL GROWTH. SOLVENT-CEMENTED JOINTS ARE NOT PERMITTED.
21. PROCEDURES FOR DISINFECTING POTABLE WATERLINES SHALL CONFORM TO THE REQUIREMENTS OF A.W.W.A. C651. ALL WATERLINES SHALL BE DISINFECTED, BACTERIOLOGICAL TESTED, AND PRESSURE TREATED ACCORDING TO LA VERGNE UTILITY DISTRICT SPECIFICATIONS PRIOR TO LINE ACCEPTANCE AND THE WATERLINE BEING PLACED INTO SERVICE.
22. PRESSURE AND LEAKAGE TESTS SHALL BE PREFORMED IN STRICT ACCORDANCE WITH CURRENT A.W.W.A STANDARD C600 AND/OR MANUFACTURER'S PROCEDURES.
23. ALL VALVES AND FITTINGS ARE TO CONFORM TO THE LATEST A.W.W.A STANDARDS.
24. THE CONTRACTOR SHALL MAKE ARRANGEMENTS WITH THE UTILITY ENTITY FOR CONNECTION TO THE EXISTING UTILITY LINES. THE CONTRACTOR SHALL ADJUST THE LOCATION OF THE PROPOSED WATERLINE TO AVOID CONFLICTS WITH OTHER UTILITIES.
25. ALL CONCRETE USED FOR THRUST BLOCKS TO HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 3000 psi.
26. THE CONTRACTOR IS RESPONSIBLE FOR THE COMPLETE INSTALLATION OF THE WATER SERVICE LINE AND FIRE LINE AS REQUIRED. THE CONTRACTOR SHALL PROVIDE A TAPPING VALVE AND SLEEVE AND OTHER MATERIAL AND EQUIPMENT AS REQUIRED FOR TAPPING THE EXISTING GROWTH. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE FEE TO LA VERGNE UTILITY DISTRICT AS REQUIRED FOR TAPPING THE EXISTING MAIN AND COORDINATE WITH LA VERGNE UTILITY DISTRICT AS REQUIRED.
27. NO CONNECTION TO THE EXISTING SANITARY SEWER SYSTEM WILL BE PERMITTED UNTIL THE NEW SANITARY SEWER WORK HAS BEEN INSPECTED AND IS APPROVED BY THE APPROPRIATE UTILITY DEPARTMENT/DISTRICT.
28. TEN-FOOT MINIMUM HORIZONTAL SEPARATION AND 18" VERTICAL SEPARATION TO BE MAINTAINED BETWEEN WATER AND SANITARY SEWER LINES WHEREVER POSSIBLE.
29. ALL SANITARY SEWER SERVICES WILL BE TEE OR WYE-CONNECTED TO MAIN LINE.
30. ALL MANHOLES TO HAVE TRAFFIC BEARING FRAMES AND COVERS UNLESS NOTED OTHERWISE ON THE PLAN/PROFILE SHEETS

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LA VERGNE, TENNESSEE

PANATTONI®

ROBERT JAMES ARIS
REGISTERED ENGINEER
AGENT OF RECORD
COA/PEC
No. 121945
STATE OF TENNESSEE
12/18/2023

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DESIGNED BY:	GTF
DRAWN BY:	GTF
CHECKED BY:	RJA
DATE:	12/18/2023

KIMLEY-HORN PROJECT NO. 118163044

PUBLIC SANITARY SEWER - PLAN & PROFILE

SHEET NUMBER
C7-02

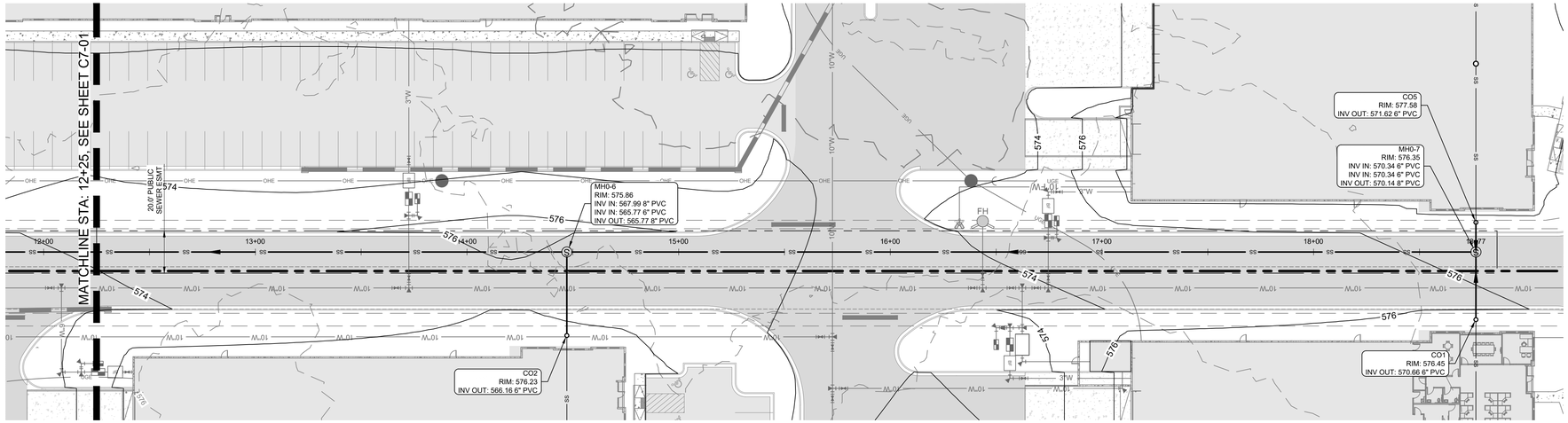
811 Know what's below. Call before you dig.

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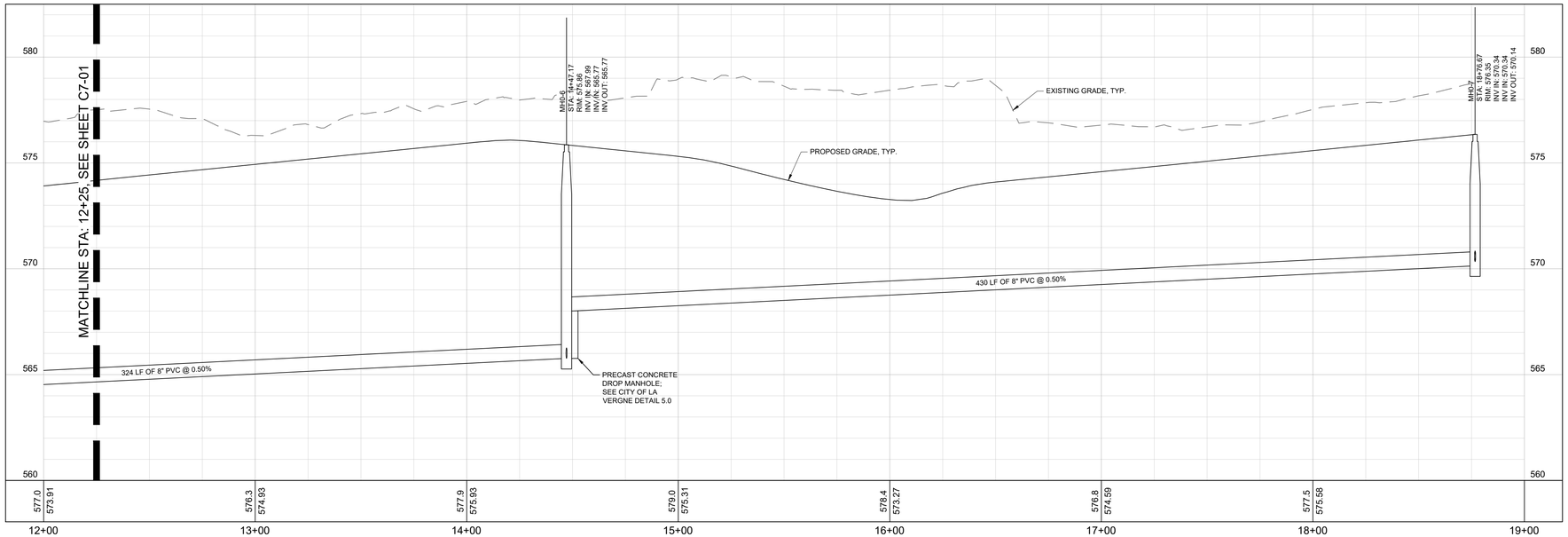
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NORTH

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PUBLIC SANITARY SEWER PLAN
STA. 12+25 TO STA. 19+00



PUBLIC SANITARY SEWER PROFILE
STA. 12+25 TO STA. 19+00

SITE UTILITY NOTES

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VERTICAL

GRAPHIC SCALE IN FEET
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LA VERGNE, TENNESSEE

PANATTONI®

ROBERT JAMES ARTS
REGISTERED ENGINEER
AGENCY USE
12/18/2023
CRUMBACK
No. 121045
STATE OF TENNESSEE

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DESIGNED BY:	GTF
DRAWN BY:	GTF
CHECKED BY:	RJA
DATE:	12/18/2023
KIMLEY-HORN PROJECT NO.	118163044

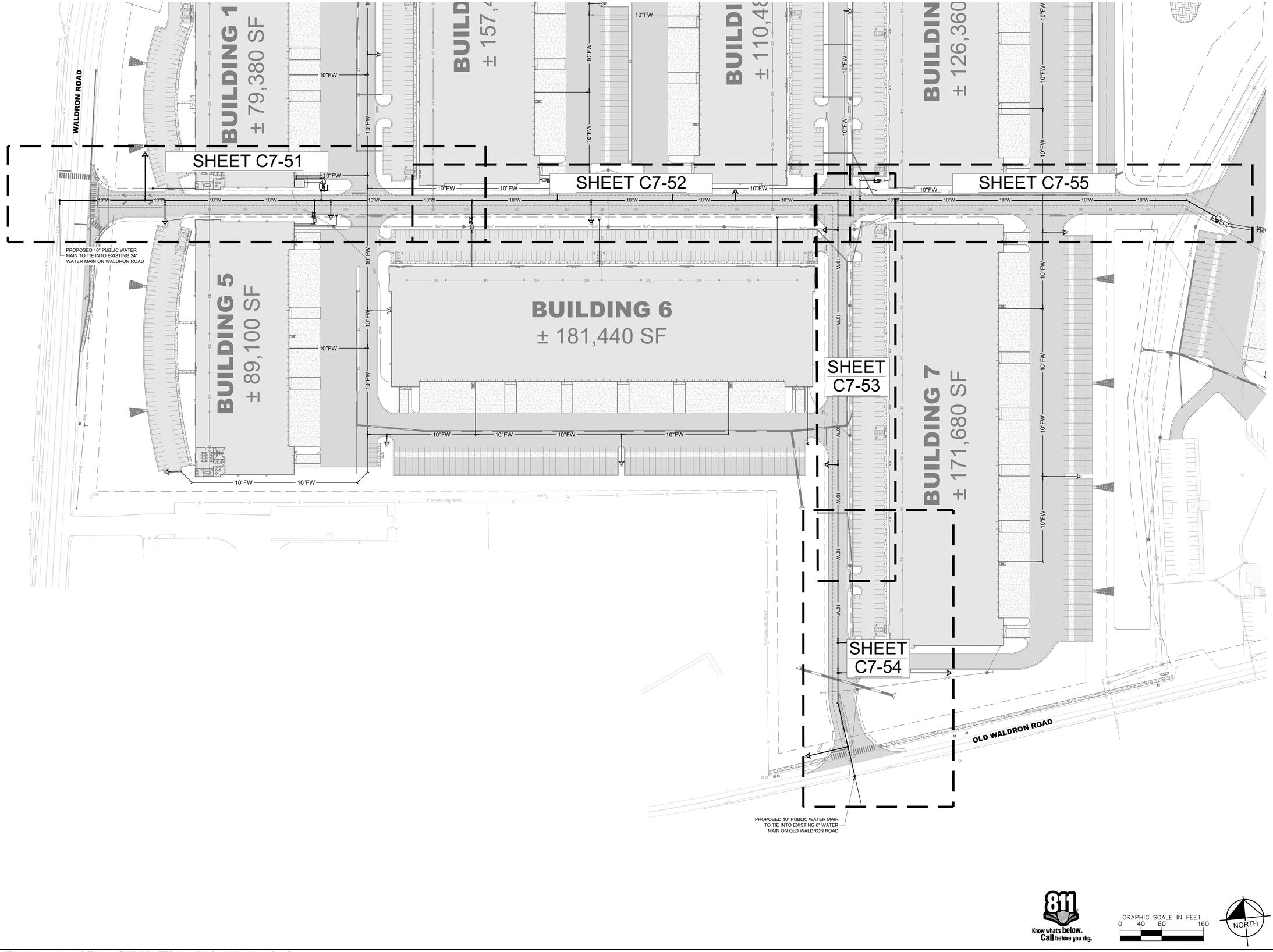
PUBLIC SANITARY SEWER - PLAN & PROFILE

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LA VERGNE, TENNESSEE

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STATE OF TENNESSEE
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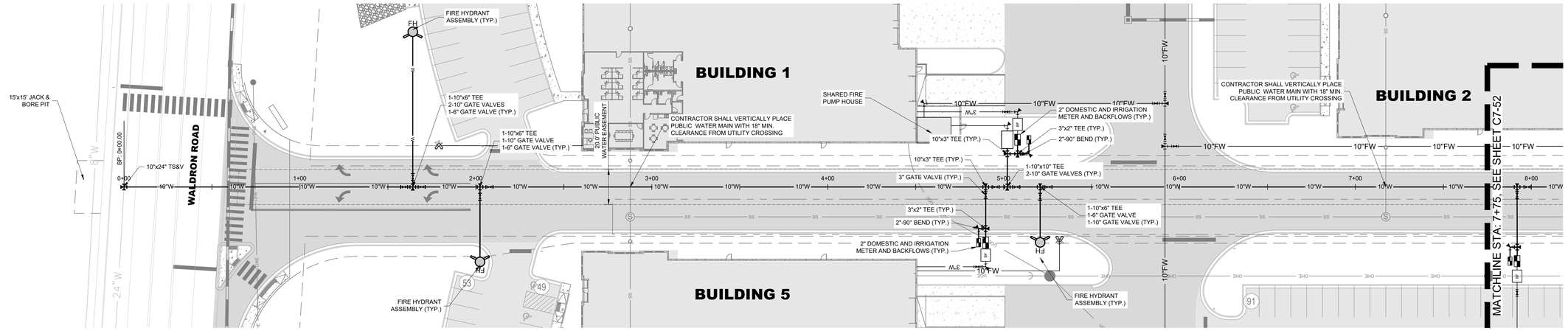
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DESIGNED BY:	GTF
DRAWN BY:	GTF
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DATE:	12/18/2023
KIMLEY-HORN PROJECT NO.	118163044

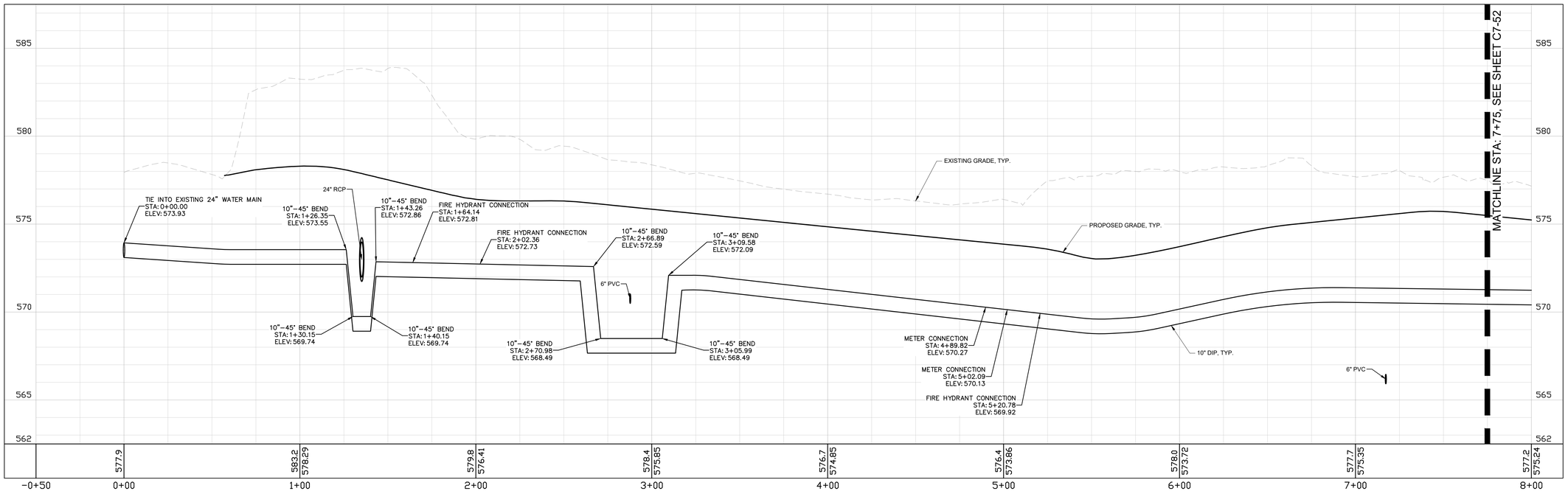
PUBLIC WATER MAIN - OVERALL PLAN

SHEET NUMBER
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PUBLIC WATER MAIN - PLAN
STA. 0+00 TO STA. 7+75



PUBLIC WATER MAIN - PROFILE
STA. 0+00 TO STA. 7+75

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VERTICAL

GRAPHIC SCALE IN FEET
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ROBERT JAMES ARIS
REGISTERED ENGINEER
AGENCY NO. 3720
COURAGE
No. 121945
STATE OF TENNESSEE
12/18/2023

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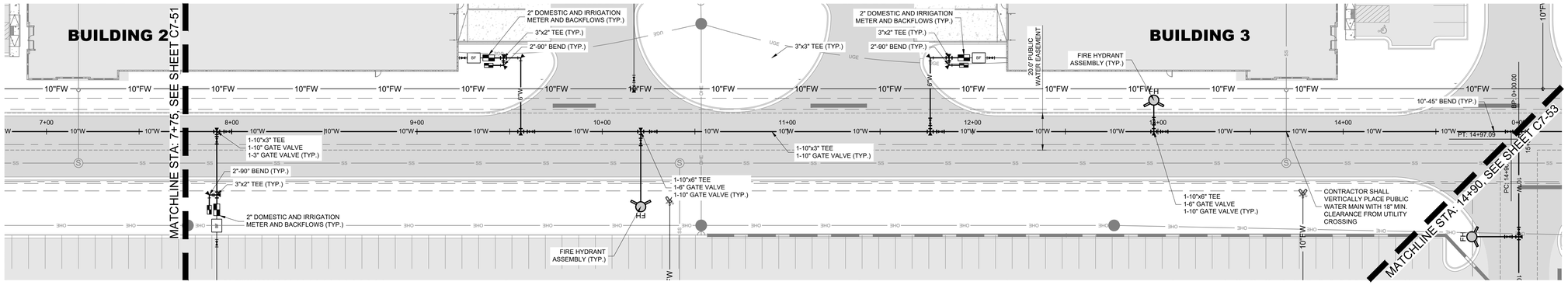
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PUBLIC WATER MAIN - PLAN & PROFILE

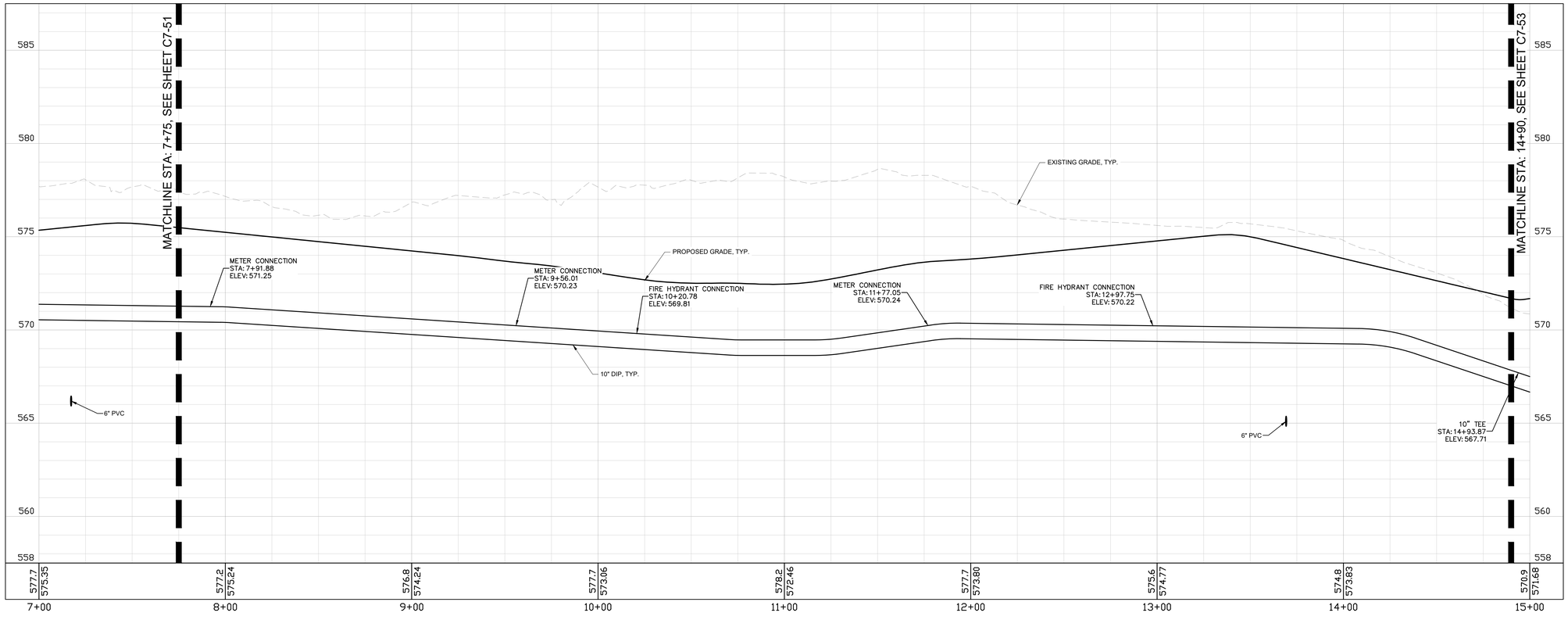
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PUBLIC WATER MAIN - PLAN
STA. 7+75 TO STA. 14+90



PUBLIC WATER MAIN - PROFILE
STA. 7+75 TO STA. 14+90

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VERTICAL: 0 1.5 3 6

GRAPHIC SCALE IN FEET
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ROBERT JAMES ARMS
REGISTERED ENGINEER
AGENCY NUMBER
COMMERCE
No. 121065
STATE OF TENNESSEE
12/18/2023

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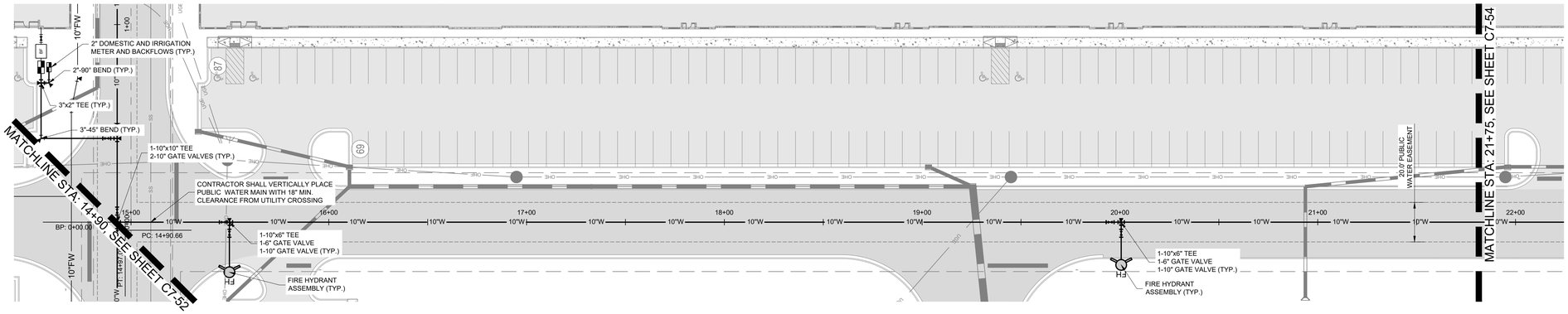
DESIGNED BY:	GTF
DRAWN BY:	GTF
CHECKED BY:	RJA
DATE:	12/18/2023
KIMLEY-HORN PROJECT NO.	118163044

PUBLIC WATER MAIN - PLAN & PROFILE

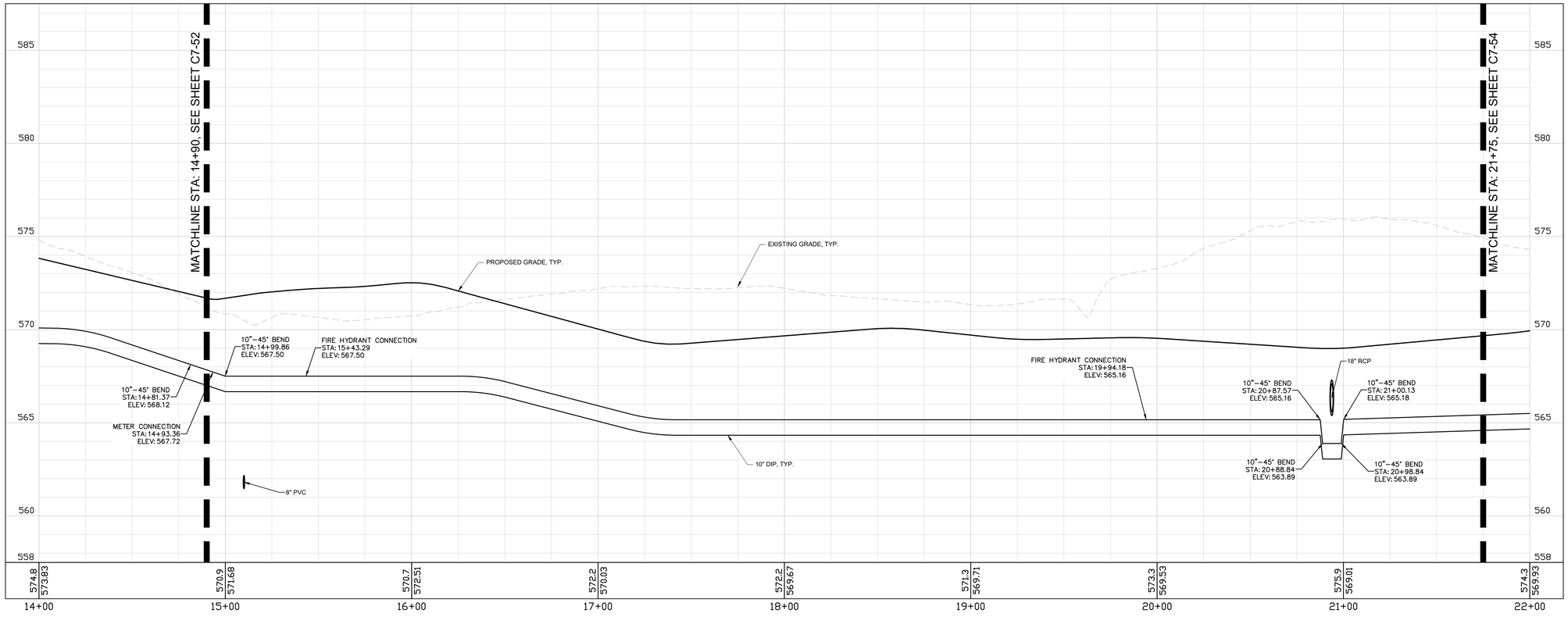
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PUBLIC WATER MAIN - PLAN
STA. 14+90 TO STA. 21+75



PUBLIC WATER MAIN - PROFILE
STA. 14+90 TO STA. 21+75

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LA VERGNE, TENNESSEE

PANATTONI®

ROBERT JAMES ARTS REGISTERED ENGINEER 121045 STATE OF TENNESSEE
12/18/2023

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DESIGNED BY:	GTF
DRAWN BY:	GTF
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DATE:	12/18/2023
KIMLEY-HORN PROJECT NO.	118163044

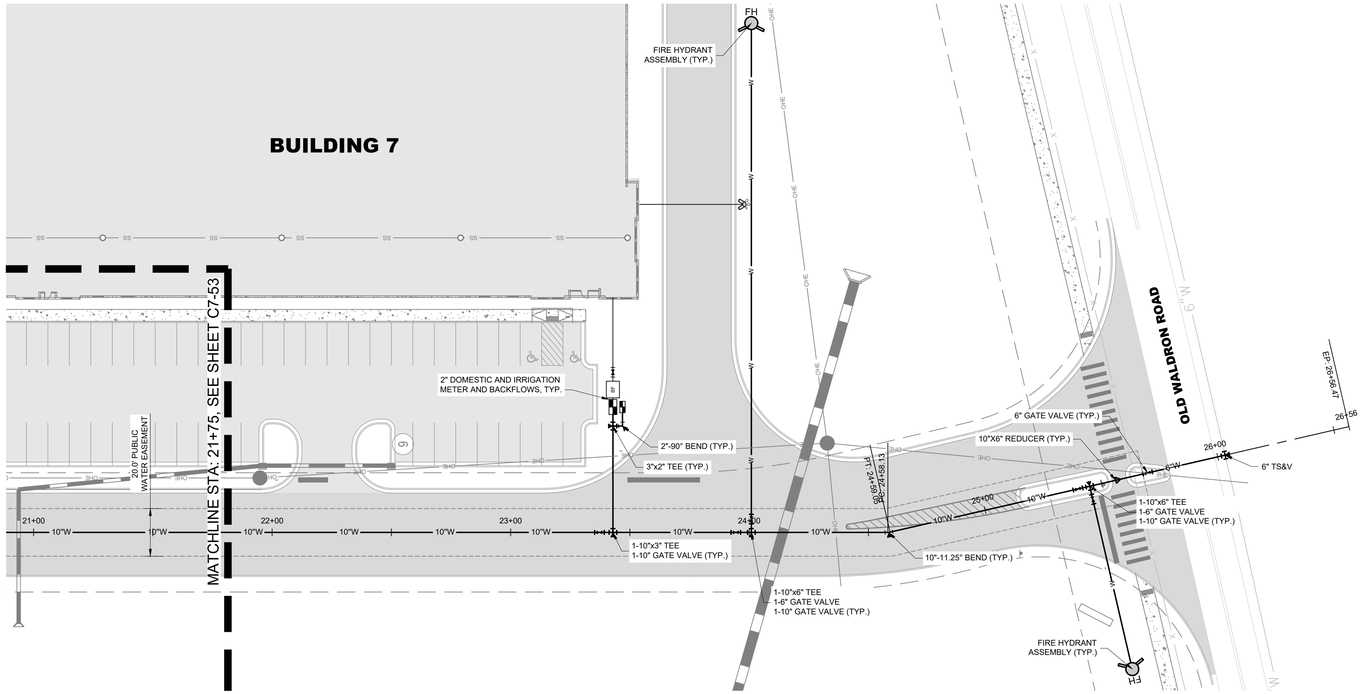
PUBLIC WATER MAIN - PLAN & PROFILE

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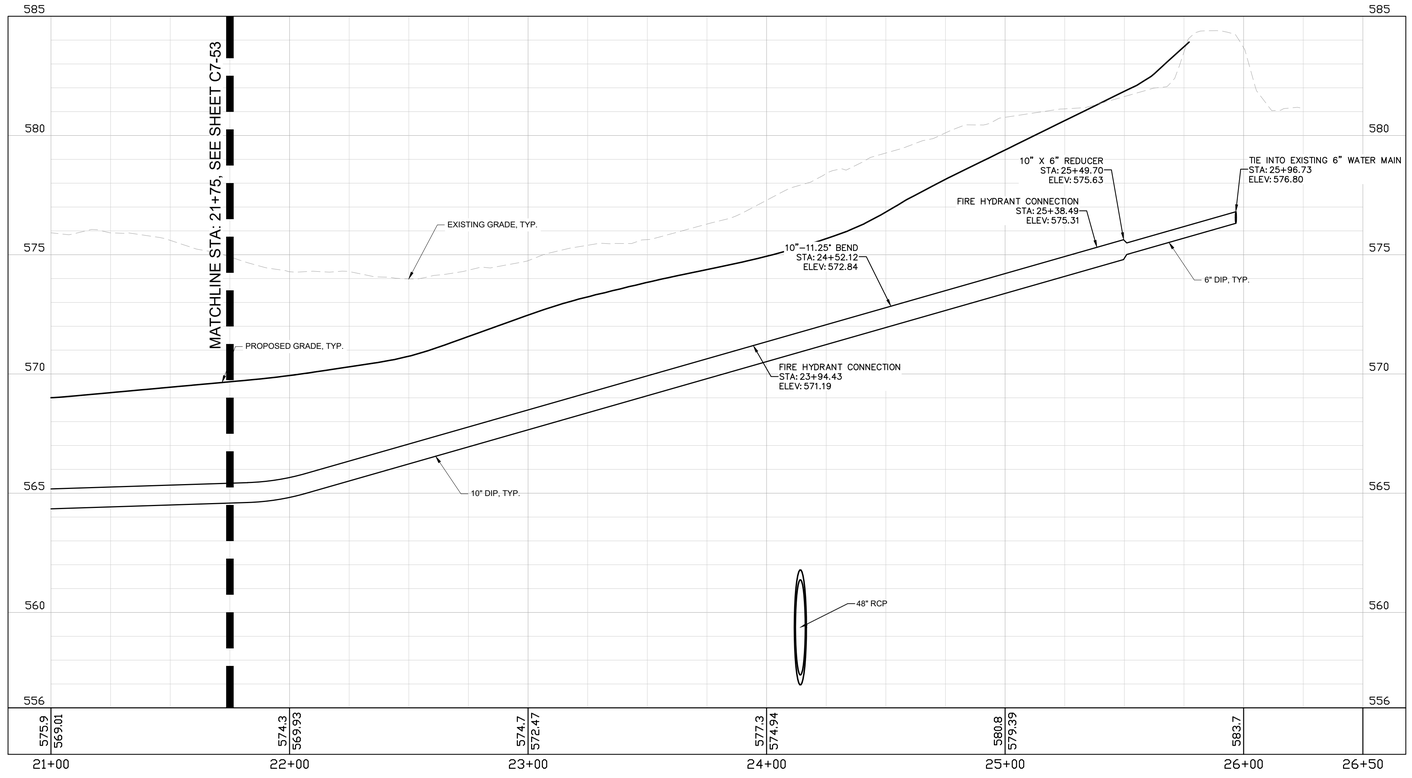
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PUBLIC WATER MAIN - PLAN
STA. 21+75 TO STA. 26+50



PUBLIC WATER MAIN - PROFILE
STA. 21+75 TO STA. 26+50

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LA VERGNE, TENNESSEE

PANATTONI®

ROBERT JAMES ARIS
REGISTERED ENGINEER
AGENCY NUMBER
CERTIFICATE
No. 121065
STATE OF TENNESSEE
12/18/2023

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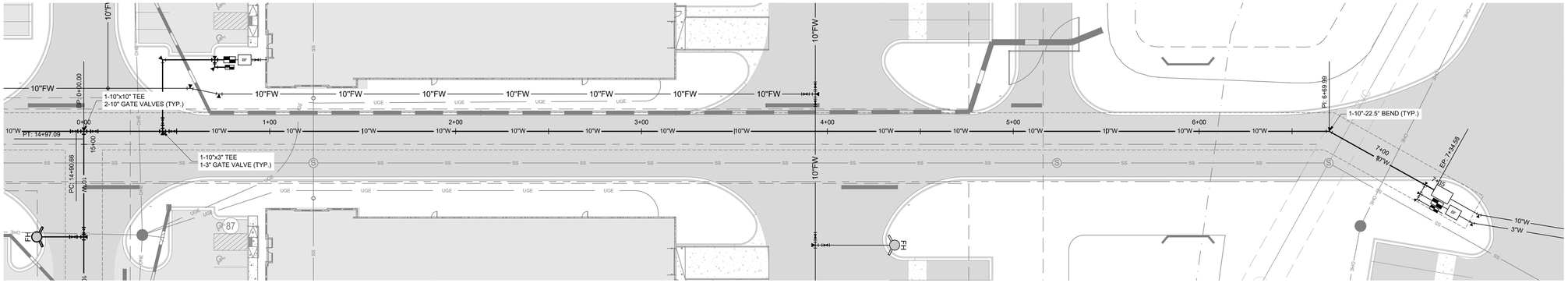
DESIGNED BY:	GTF
DRAWN BY:	GTF
CHECKED BY:	RJA
DATE:	12/18/2023

KIMLEY-HORN PROJECT NO. 118163044

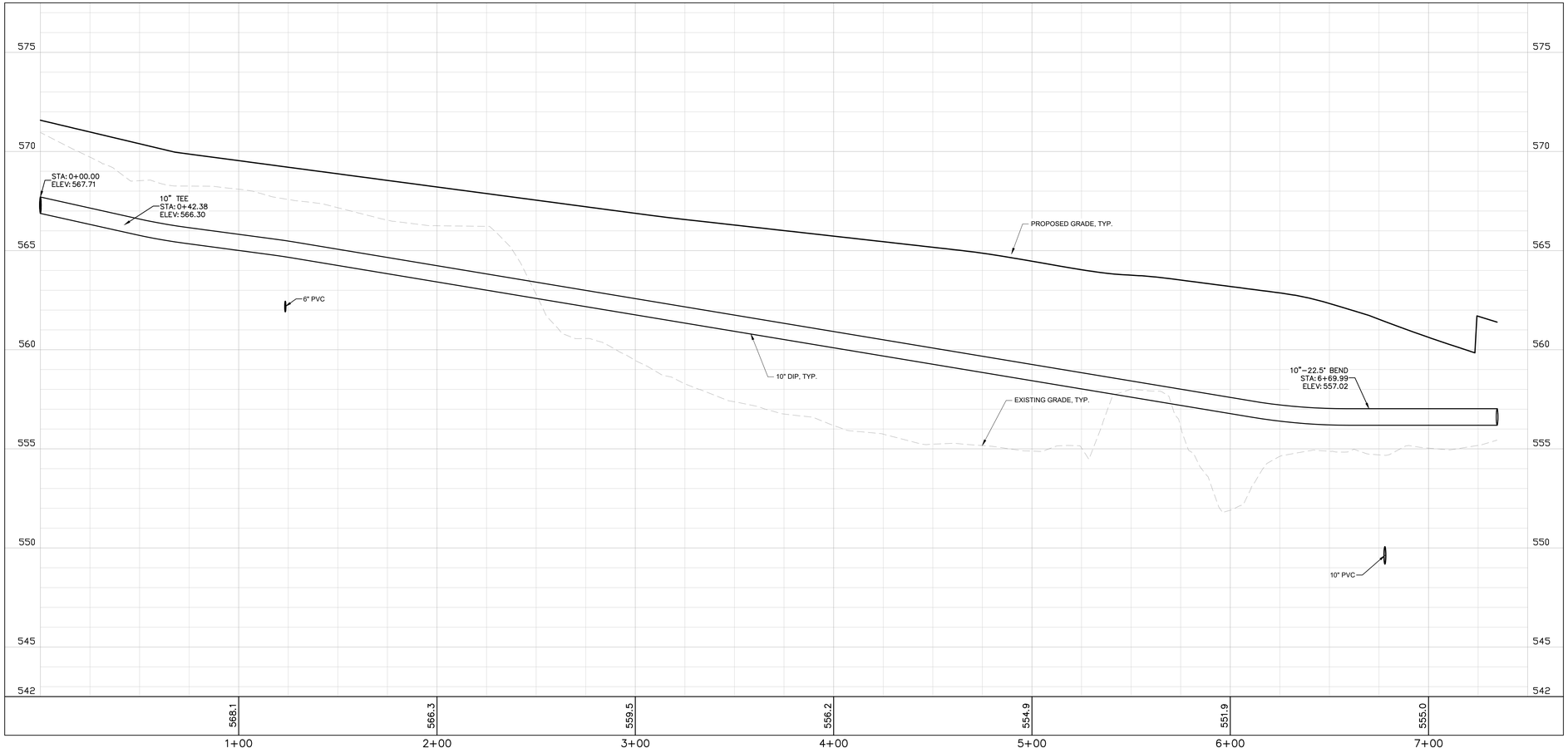
PUBLIC WATER MAIN - PLAN & PROFILE

SHEET NUMBER
C7-54

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PUBLIC WATER MAIN - PLAN
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PUBLIC WATER MAIN - PROFILE
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LOT 1
PANATTONI DEVELOPMENT COMPANY
LA VERGNE, TENNESSEE

PANATTONI®

ROBERT JAMES ARTS
REGISTERED ENGINEER
No. 121045
STATE OF TENNESSEE
12/18/2023

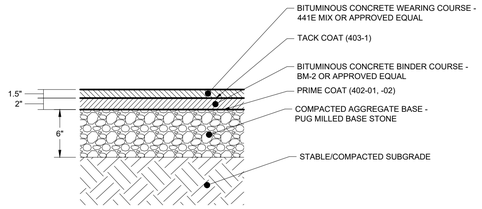
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DESIGNED BY:	GTF
DRAWN BY:	GTF
CHECKED BY:	RJA
DATE:	12/18/2023

KIMLEY-HORN PROJECT NO.
118163044

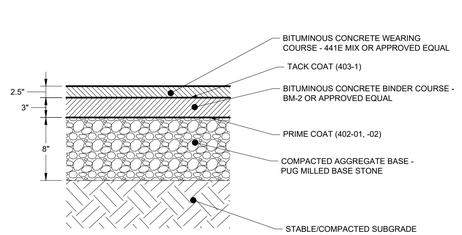
PUBLIC WATER MAIN - PLAN & PROFILE

SHEET NUMBER
C7-55



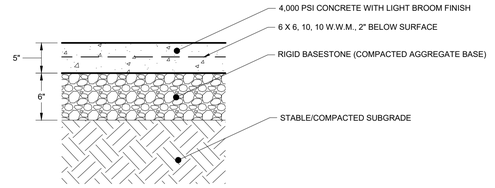
NOTES:
1. SEE GEOTECHNICAL SPECIFICATIONS FOR SUBGRADE REQUIREMENTS.
2. ALL MATERIALS AND CONSTRUCTION SHALL COMPLY WITH TDOT STANDARD SPECIFICATIONS FOR ROADWAY AND BRIDGE CONSTRUCTION, LATEST EDITION.
3. PROPOSED PAVEMENT SECTIONS SHOWN HEREIN ARE PRELIMINARY. FINAL PAVEMENT DESIGN SHALL BE PROVIDED BY A LICENSED GEOTECHNICAL ENGINEER, BASED ON SITE CONDITIONS AND SOIL PROPERTIES FOUND DURING CONSTRUCTION.

1 TYPICAL PAVEMENT SECTION - STANDARD DUTY
SCALE:



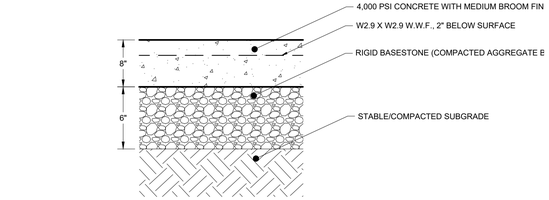
NOTES:
1. SEE GEOTECHNICAL SPECIFICATIONS FOR SUBGRADE REQUIREMENTS.
2. ALL MATERIALS AND CONSTRUCTION SHALL COMPLY WITH TDOT STANDARD SPECIFICATIONS FOR ROADWAY AND BRIDGE CONSTRUCTION, LATEST EDITION.
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2 TYPICAL PAVEMENT SECTION - HEAVY DUTY
SCALE:



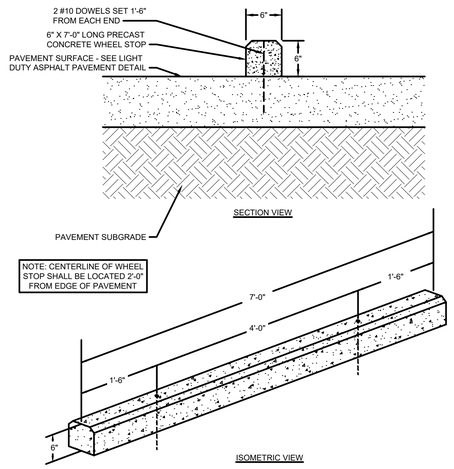
NOTES:
1. SEE GEOTECHNICAL SPECIFICATIONS FOR SUBGRADE REQUIREMENTS.
2. FIBER MESH REINFORCING CAN BE SUBSTITUTED FOR WWM. APPLICATION RATES SHALL BE IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.
3. ALL MATERIALS AND CONSTRUCTION SHALL COMPLY WITH TDOT STANDARD SPECIFICATIONS FOR ROADWAY AND BRIDGE CONSTRUCTION, LATEST EDITION.
4. BROOM FINISH SHALL BE PERPENDICULAR TO THE DIRECTION OF TRAVEL.
5. PROPOSED PAVEMENT SECTIONS SHOWN HEREIN ARE PRELIMINARY. FINAL PAVEMENT DESIGN SHALL BE PROVIDED BY A LICENSED GEOTECHNICAL ENGINEER, BASED ON SITE CONDITIONS AND SOIL PROPERTIES FOUND DURING CONSTRUCTION.
3. PLACE EXPANSION JOINTS AT A MAXIMUM OF 75' O.C.
4. PLACE CONTROL JOINTS AT A MAXIMUM OF 15' O.C.

3 TYPICAL CONCRETE PAVEMENT SECTION - STANDARD DUTY
SCALE:

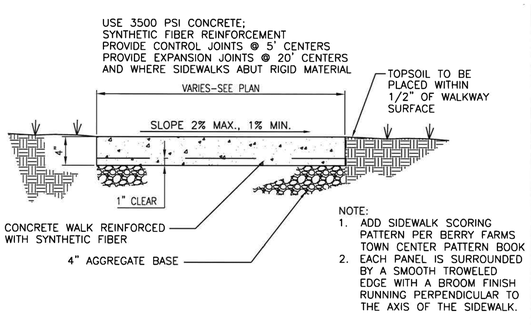


NOTES:
1. SEE GEOTECHNICAL SPECIFICATIONS FOR SUBGRADE REQUIREMENTS.
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4. BROOM FINISH SHALL BE PERPENDICULAR TO THE DIRECTION OF TRAVEL.
5. PROPOSED PAVEMENT SECTIONS SHOWN HEREIN ARE PRELIMINARY. FINAL PAVEMENT DESIGN SHALL BE PROVIDED BY A LICENSED GEOTECHNICAL ENGINEER, BASED ON SITE CONDITIONS AND SOIL PROPERTIES FOUND DURING CONSTRUCTION.
3. PLACE EXPANSION JOINTS AT A MAXIMUM OF 75' O.C.
4. PLACE CONTROL JOINTS AT A MAXIMUM OF 15' O.C.

4 TYPICAL CONCRETE PAVEMENT SECTION - HEAVY DUTY
SCALE:

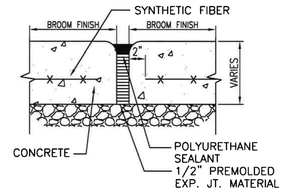


5 CONCRETE WHEEL STOP
NOT TO SCALE

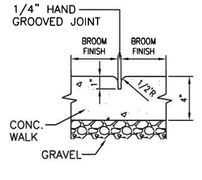


NOTE:
1. ADD SIDEWALK SCORING PATTERN PER BERRY FARMS TOWN CENTER PATTERN BOOK
2. EACH PANEL IS SURROUNDED BY A SMOOTH TROWELED EDGE WITH A BROOM FINISH RUNNING PERPENDICULAR TO THE AXIS OF THE SIDEWALK.

6 CONCRETE SIDEWALK DETAIL
NOT TO SCALE

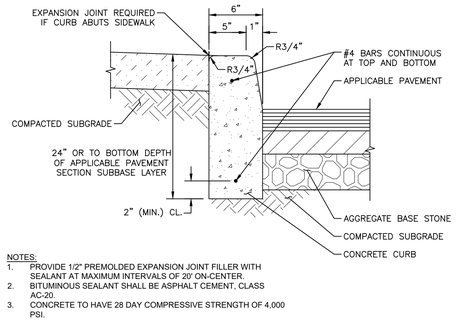


EXPANSION JOINT



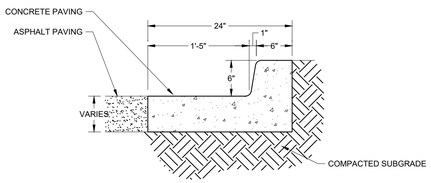
CONTROL JOINT

7 SIDEWALK JOINT DETAIL
SCALE:



NOTES:
1. PROVIDE 1/2" PREMOLDED EXPANSION JOINT FILLER WITH SEALANT AT MAXIMUM INTERVALS OF 20' ON-CENTER.
2. BITUMINOUS SEALANT SHALL BE ASPHALT CEMENT, CLASS AC-20.
3. CONCRETE TO HAVE 28 DAY COMPRESSIVE STRENGTH OF 4,000 PSI.

8 6" POST CURB
NOT TO SCALE



9 6" TALL 24" CURB AND GUTTER
NOT TO SCALE

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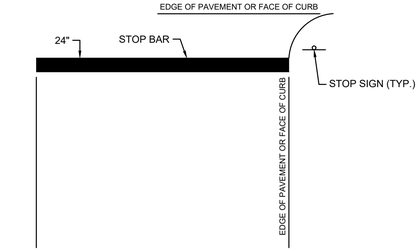
ROBERT JAMES ARTS
REGISTERED ENGINEER
AGENT OF ACE
ENGINEERING
No. 121043
STATE OF TENNESSEE
12/18/2023

No.	REVISIONS	DATE	BY
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0	1		
2	3		
4	5		
6	7		

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DRAWN BY: ___
CHECKED BY: ___
DATE: 12/18/2023
KIMLEY-HORN PROJECT NO. 118163044

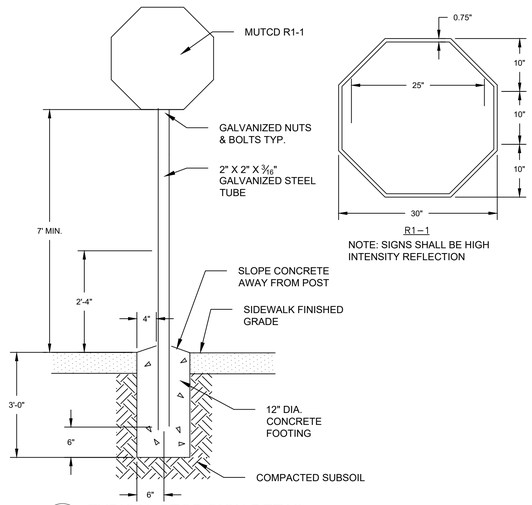
SITE DETAILS

SHEET NUMBER
C8-10



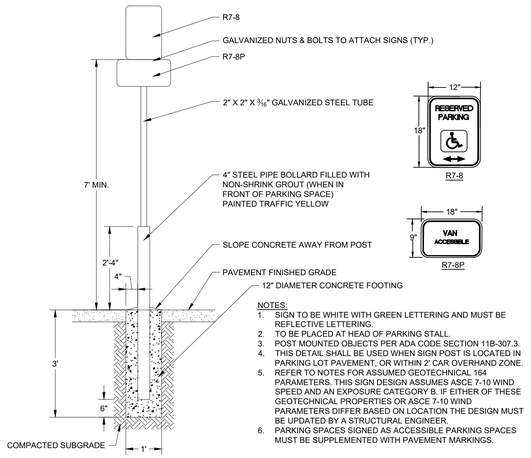
NOTES:
1. WORDS AND ARROWS FOR DRIVEWAYS SHALL BE APPLIED ACCORDING TO REQUIREMENTS AS OUTLINED IN SECTION 3B OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS.
2. THESE WORDS AND BAR ARE TO BE PAINTED REFLECTIVE WHITE.

13 TYPICAL STOP BAR DETAIL
NOT TO SCALE



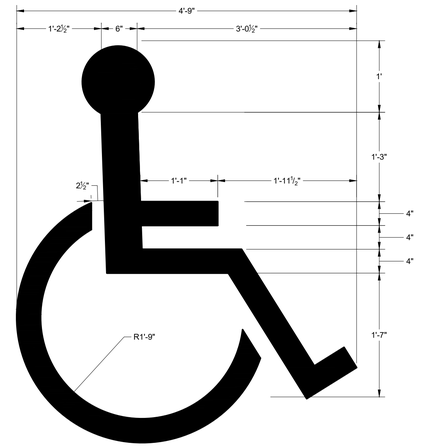
NOTE: SIGNS SHALL BE HIGH INTENSITY REFLECTION

14 TYPICAL STOP SIGN DETAIL
NOT TO SCALE



NOTES:
1. SIGN TO BE WHITE WITH GREEN LETTERING AND MUST BE REFLECTIVE LETTERING.
2. TO BE PLACED AT HEAD OF PARKING STALL.
3. POST MOUNTED OBJECTS PER ADA CODE SECTION 11B-307.3.
4. THIS DETAIL SHALL BE USED WHEN SIGN POST IS LOCATED IN PARKING LOT PAVEMENT, OR WITHIN 2' CAR OVERHAND ZONE.
5. REFER TO NOTES FOR ASSUMED GEOTECHNICAL 164 PARAMETERS. THIS SIGN DESIGN ASSUMES ASCE 7-10 WIND SPEED AND AN EXPOSURE CATEGORY B. IF EITHER OF THESE GEOTECHNICAL PROPERTIES OR ASCE 7-10 WIND PARAMETERS DIFFER BASED ON LOCATION THE DESIGN MUST BE UPDATED BY A STRUCTURAL ENGINEER.
6. PARKING SPACES SIGNED AS ACCESSIBLE PARKING SPACES MUST BE SUPPLEMENTED WITH PAVEMENT MARKINGS.

15 ADA PARKING SIGN DETAIL
NOT TO SCALE



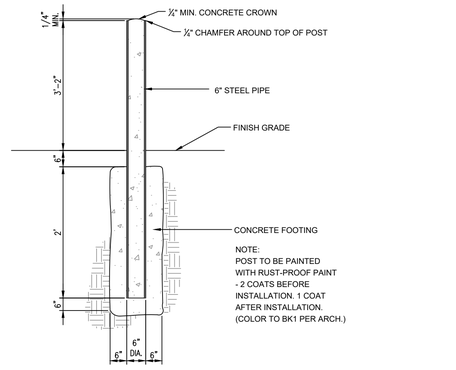
16 ADA PARKING SPACE SYMOL
NOT TO SCALE

17 TYPICAL ADA RAMP
NOT TO SCALE

PLAN VIEW

18 ADA PARKING STALL LAYOUT
NOT TO SCALE

19 ADA CURB RAMP
NOT TO SCALE



20 6" STEEL BOLLARD
NOT TO SCALE

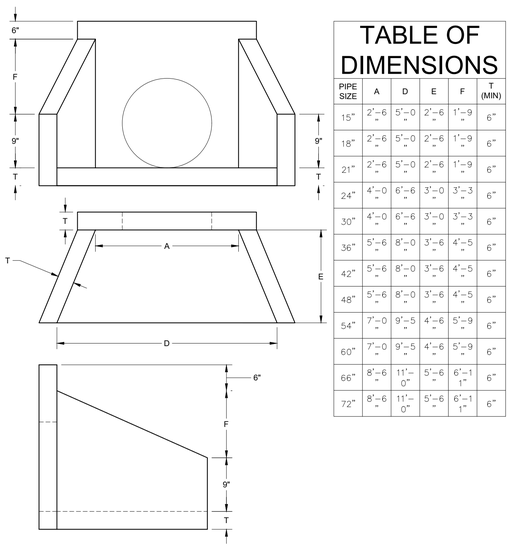
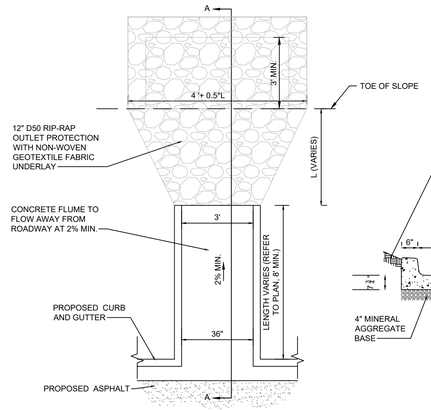
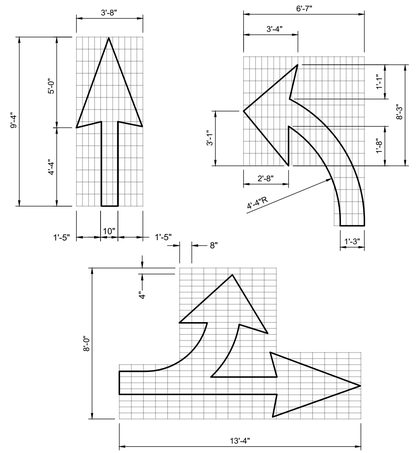


TABLE OF DIMENSIONS					
PIPE SIZE	A	D	E	F	T (MIN)
15"	2'-6"	5'-0"	2'-6"	1'-9"	6"
18"	2'-6"	5'-0"	2'-6"	1'-9"	6"
21"	2'-6"	5'-0"	2'-6"	1'-9"	6"
24"	4'-0"	6'-6"	3'-0"	3'-3"	6"
30"	4'-0"	6'-6"	3'-0"	3'-3"	6"
36"	5'-6"	8'-0"	3'-6"	4'-5"	6"
42"	5'-6"	8'-0"	3'-6"	4'-5"	6"
48"	5'-6"	8'-0"	3'-6"	4'-5"	6"
54"	7'-0"	9'-5"	4'-6"	5'-9"	6"
60"	7'-0"	9'-5"	4'-6"	5'-9"	6"
66"	8'-6"	11'-0"	5'-6"	6'-1"	6"
72"	8'-6"	11'-0"	5'-6"	6'-1"	6"

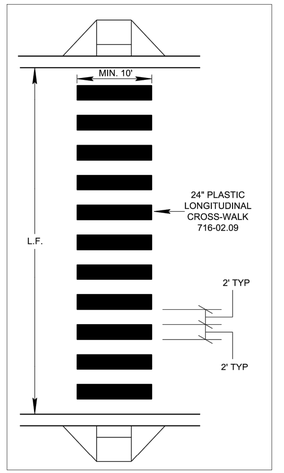
21 PRECAST CONCRETE HEADWALL
NOT TO SCALE



22 CONCRETE FLUME
NOT TO SCALE



23 ROADWAY DIRECTIONAL ARROWS
NOT TO SCALE



24 CROSS-WALK (TDOT T-M-4)
NOT TO SCALE

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LOT 1
PANATTONI DEVELOPMENT COMPANY
LA VERGNE, TENNESSEE

PANATTONI®

ROBERT JAMES ARIS
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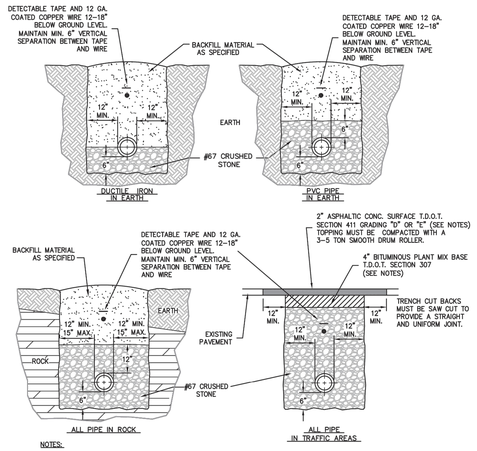
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DESIGNED BY: ___
DRAWN BY: ___
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DATE: 12/18/2023
KIMLEY-HORN PROJECT NO. 118163044

SITE DETAILS

SHEET NUMBER
C8-11

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NOTES:

1. FOR ROADWAYS 30' OR GREATER IN WIDTH OR DIVIDED HIGHWAYS WITH 2 OR MORE LANES USE 8" OF BINDER (2 LIFTS) AND 3" OF TOPPING.
2. BINDER SHALL BE INITIALLY INSTALLED FLUSH WITH EXISTING ASPHALT SURFACE AND SHALL BE IN PLACE FOR 2 WEEKS TO ALLOW FOR SETTLING AND COMPACTION. AFTER 2 WEEKS, MILL UP 2" OF THE NEW BINDER AND EXISTING ASPHALT TO THE DIMENSIONS SHOWN IN EACH DIRECTION AND INSTALL 2" OF NEW SURFACE MIX OVER MILLED AREA. REPAINT OR REPLACE, IF THERMOPLASTIC, ALL DELINEATION LINES AND PAVEMENT MARKINGS.
3. WHERE EXISTING SURFACE IS CONCRETE SUBSTITUTE 6" T.D.O.T. ITEM NO. 701-02.
4. FOR RESTORATION OF GRAVEL SURFACES, BACKFILL ENTIRE TRENCH WITH STONE.

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Engineering & Environmental Consulting

P.O. BOX 2968, MURFREESBORO, TN 37133-2968
(615) 895-8221 * FAX (615) 895-0632

FILE NAME: L: \Engineering\442-56\2015 Updates\Drawings\010 Water Line Bedding and Backfilling Detail.dwg

STANDARD WATERLINE BEDDING & BACKFILLING

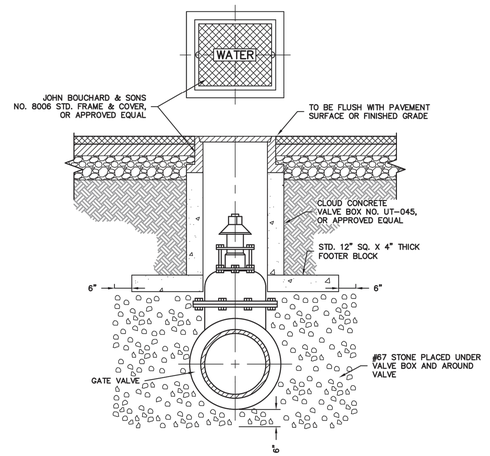
N.T.S.

Revised September, 2015

STANDARD DETAIL 010

CITY OF LAVERGNE, TENNESSEE

G & M File No. 442-56



TYPICAL VALVE BOX SETTING INSIDE & OUTSIDE OF PAVEMENT

N.T.S.

Revised September, 2015

STANDARD DETAIL 030

CITY OF LAVERGNE, TENNESSEE

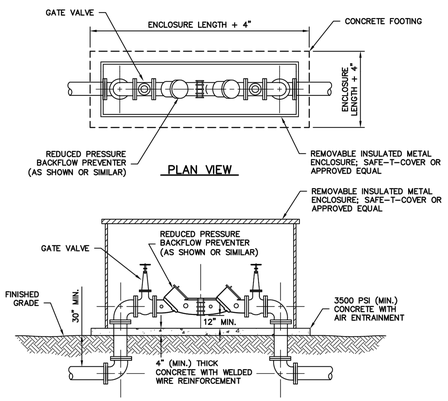
G & M File No. 442-56

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FILE NAME: L: \Engineering\442-56\2015 Updates\Drawings\030 Typical Valve Box Setting.dwg



ELEVATION

REDUCED PRESSURE BACKFLOW PREVENTER (ABOVEGROUND)

N.T.S.

Revised August 2017

STANDARD DETAIL 070

CITY OF LAVERGNE, TENNESSEE

G & M File No. 442-56

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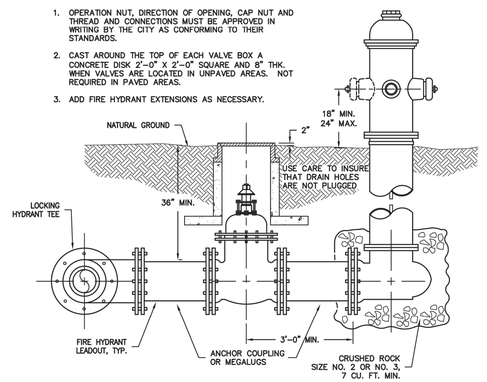
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FILE NAME: L: \Engineering\442-56\2015 Updates\Drawings\070 Reduced Pressure Backflow Preventer.dwg

NOTES:

1. OPERATION NUT, DIRECTION OF OPENING, CAP NUT AND THREAD AND CONNECTIONS MUST BE APPROVED IN WRITING BY THE CITY AS CONFORMING TO THEIR STANDARDS.
2. CAST AROUND THE TOP OF EACH VALVE BOX A CONCRETE DISK 2'-0" X 2'-0" SQUARE AND 8" THK. WHEN VALVES ARE LOCATED IN UNPAVED AREAS. NOT REQUIRED IN PAVED AREAS.
3. ADD FIRE HYDRANT EXTENSIONS AS NECESSARY.



TYPICAL FIRE HYDRANT SETTING

N.T.S.

Revised September, 2015

STANDARD DETAIL 040

CITY OF LAVERGNE, TENNESSEE

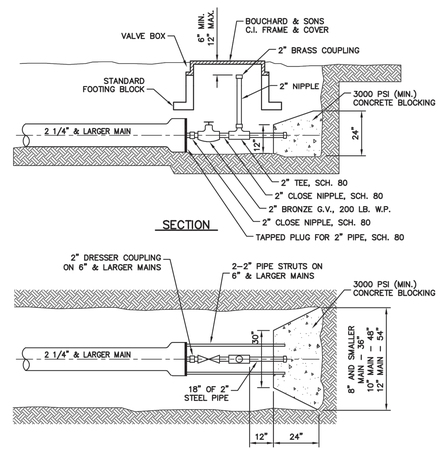
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TYPICAL 2" BLOW-OFF ASSEMBLY

N.T.S.

Revised September, 2015

STANDARD DETAIL 050

CITY OF LAVERGNE, TENNESSEE

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FILE NAME: L: \Engineering\442-56\2015 Updates\Drawings\050 Typical 2 In Blow-off.dwg

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LOT 1

PANATTONI DEVELOPMENT COMPANY
LA VERGNE, TENNESSEE

PANATTONI®

ROBERT JAMES ARTS
REGISTERED ENGINEER
AGREEMENT NUMBER
No. 121045
STATE OF TENNESSEE
12/18/2023

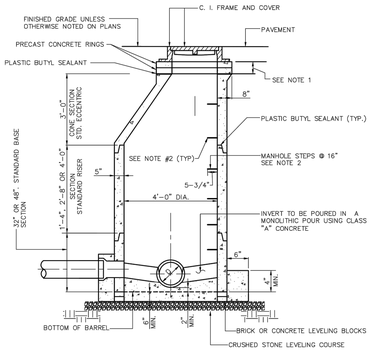
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DESIGNED BY: ___
DRAWN BY: ___
CHECKED BY: ___
DATE: 12/18/2023
KIMLEY-HORN PROJECT NO. 118163044

UTILITY DETAILS

SHEET NUMBER
C8-20

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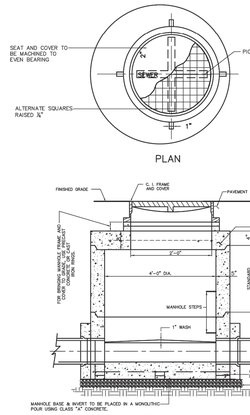
NOTE:
1. FOR BRINGING MANHOLE FRAME AND COVER TO GRADE, USE PRECAST CONCRETE OR CAST IRON RINGS.
2. 3/8 STEEL REINFORCED ROD ENCAPSULATED IN POLYPROPYLENE PLASTIC OR ALUMINUM ALLOY SEE SPECIFICATIONS.
3. RESILIENT CONNECTORS REQUIRED FOR ALL PIPES, REFER TO DETAIL AND SPECIFICATIONS.

CTI ENGINEERS, INC.
3354 PERIMETER HILL DRIVE, SUITE 140
NASHVILLE, TN 37211
615-834-8300

3.0
PRECAST CONCRETE MANHOLE
NOT TO SCALE

CITY OF LA VERGNE, TENNESSEE
STANDARD SEWER DETAILS

PUBLIC WORKS DEPARTMENT
148 INTERNATIONAL BLVD.
LA VERGNE, TN 37086
615-793-9891

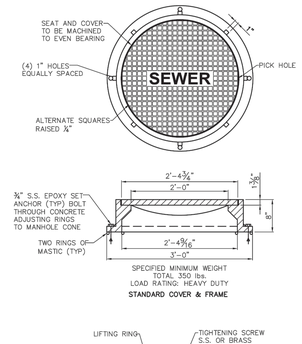


CTI ENGINEERS, INC.
3354 PERIMETER HILL DRIVE, SUITE 140
NASHVILLE, TN 37211
615-834-8300

4.0
STANDARD PRECAST MANHOLE FOR DEPTH OF LESS THAN 5'-0"
NOT TO SCALE

CITY OF LA VERGNE, TENNESSEE
STANDARD SEWER DETAILS

PUBLIC WORKS DEPARTMENT
148 INTERNATIONAL BLVD.
LA VERGNE, TN 37086
615-793-9891



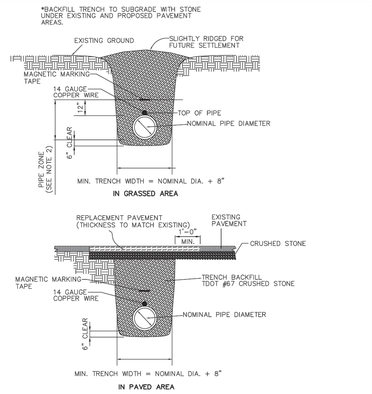
STANDARD FRAME AND COVER TO BE ACHESON FOUNDRY #A-2024-BIS, OR EQUAL WATER TIGHT MANHOLE FRAME AND COVER TO BE ACHESON FOUNDRY #A-2624-71S OR EQUAL

CTI ENGINEERS, INC.
3354 PERIMETER HILL DRIVE, SUITE 140
NASHVILLE, TN 37211
615-834-8300

10.0
MANHOLE FRAME AND COVER
NOT TO SCALE

CITY OF LA VERGNE, TENNESSEE
STANDARD SEWER DETAILS

PUBLIC WORKS DEPARTMENT
148 INTERNATIONAL BLVD.
LA VERGNE, TN 37086
615-793-9891



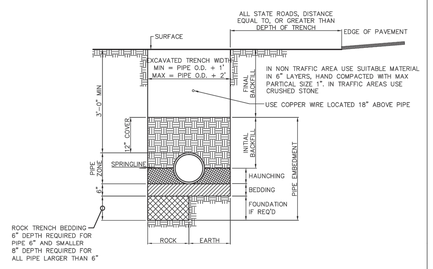
NOTES:
1. SEE STANDARD SPECIFICATIONS FOR FULL BACKFILL REQUIREMENTS.
2. "PIPE ZONE" EXTENDS TO 12" ABOVE TOP OF PIPE AND IS AREA IN WHICH SPECIAL CARE IS TO BE GIVEN TO PLACEMENT AND COMPACTON TO PROTECT PIPE DURING AND AFTER LAYING.
3. LIMIT TRENCH WIDTH AT TOP OF PIPE TO NOMINAL PIPE DIAMETER PLUS 16" UNLESS PERMITTED OTHERWISE BY ENGINEER.
4. TRENCH SHALL BE DUG TO GIVE PIPE FULL AND CONTINUOUS SUPPORT. ALL ROCK TO BE REMOVED WITHIN 6" OF PIPE – BED TO PIPE GRADE WITH CRUSHED STONE BEDDING.
5. PIPE TO BE CONTINUOUSLY SUPPORTED ALONG LENGTH OF PIPE BARREL EXCEPT AT BELL. BELL HOLES ARE REQUIRED SUCH THAT NO BEARING LOAD IS TAKEN BY THE BELL.
6. MAGNETIC MARKING TAPE AND 14 GAUGE COPPER WIRE REQUIRED FOR ALL SEWER.

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15.0
TYPICAL TRENCH BACKFILL
NOT TO SCALE

CITY OF LA VERGNE, TENNESSEE
STANDARD SEWER DETAILS

PUBLIC WORKS DEPARTMENT
148 INTERNATIONAL BLVD.
LA VERGNE, TN 37086
615-793-9891

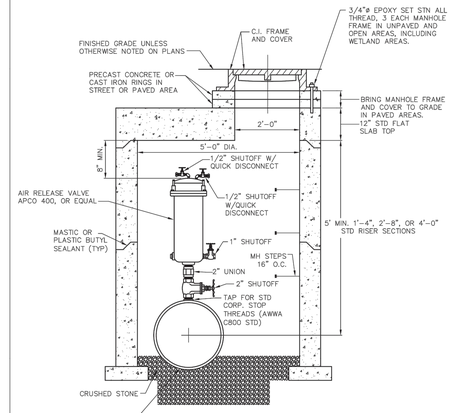


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3354 PERIMETER HILL DRIVE, SUITE 140
NASHVILLE, TN 37211
615-834-8300

16.0
PVC PIPE INSTALLATION DETAIL
NOT TO SCALE

CITY OF LA VERGNE, TENNESSEE
STANDARD SEWER DETAILS

PUBLIC WORKS DEPARTMENT
148 INTERNATIONAL BLVD.
LA VERGNE, TN 37086
615-793-9891



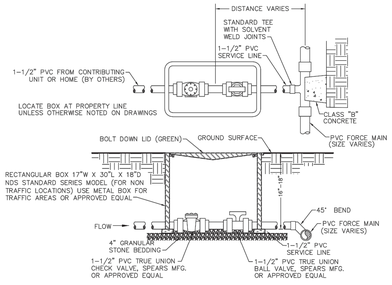
NOTE: IN WETLAND AREAS, EXTEND TOP OF MH COVER A MIN. OF 1 FT. AND A MAX. OF 2 FT. ABOVE ORIGINAL GRADE.

CTI ENGINEERS, INC.
3354 PERIMETER HILL DRIVE, SUITE 140
NASHVILLE, TN 37211
615-834-8300

18.0
SEWAGE AIR RELEASE VALVE
NOT TO SCALE

CITY OF LA VERGNE, TENNESSEE
STANDARD SEWER DETAILS

PUBLIC WORKS DEPARTMENT
148 INTERNATIONAL BLVD.
LA VERGNE, TN 37086
615-793-9891

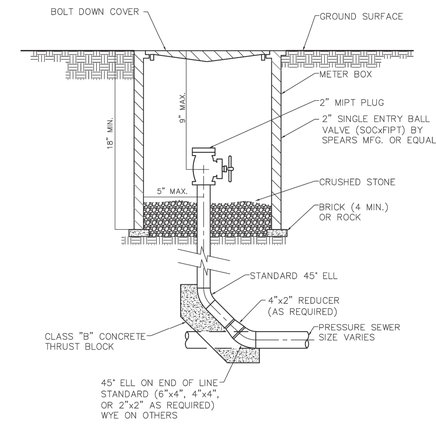


CTI ENGINEERS, INC.
3354 PERIMETER HILL DRIVE, SUITE 140
NASHVILLE, TN 37211
615-834-8300

19.0
TYPICAL PRESSURE SEWER SERVICE LINE CONNECTION
NOT TO SCALE

CITY OF LA VERGNE, TENNESSEE
STANDARD SEWER DETAILS

PUBLIC WORKS DEPARTMENT
148 INTERNATIONAL BLVD.
LA VERGNE, TN 37086
615-793-9891



CTI ENGINEERS, INC.
3354 PERIMETER HILL DRIVE, SUITE 140
NASHVILLE, TN 37211
615-834-8300

21.0
PRESSURE SEWER CLEAN OUT NON-TRAFFIC BOX
NOT TO SCALE

CITY OF LA VERGNE, TENNESSEE
STANDARD SEWER DETAILS

PUBLIC WORKS DEPARTMENT
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LA VERGNE, TN 37086
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CO-OP BUSINESS PARK
LOT 1
PANATTONI DEVELOPMENT COMPANY
LA VERGNE, TENNESSEE

PANATTONI®

ROBERT JAMES ARMS
REGISTERED ENGINEER
AGENCY NUMBER
COURAGE
No. 121945
STATE OF TENNESSEE
12/18/2023

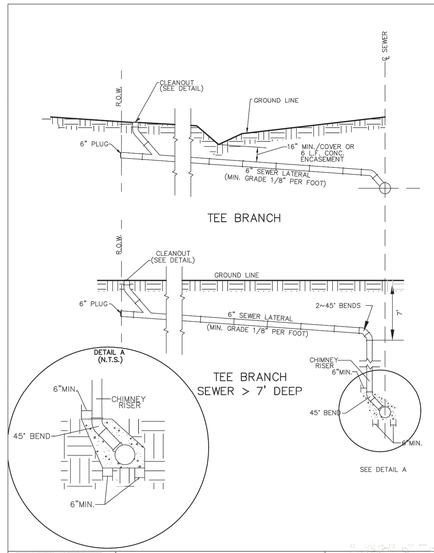
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DESIGNED BY: ___
DRAWN BY: ___
CHECKED BY: ___
DATE: 12/18/2023
KIMLEY-HORN PROJECT NO. 118163044

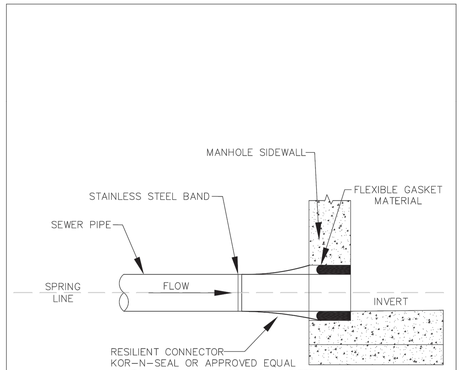
UTILITY DETAILS

SHEET NUMBER
C8-21

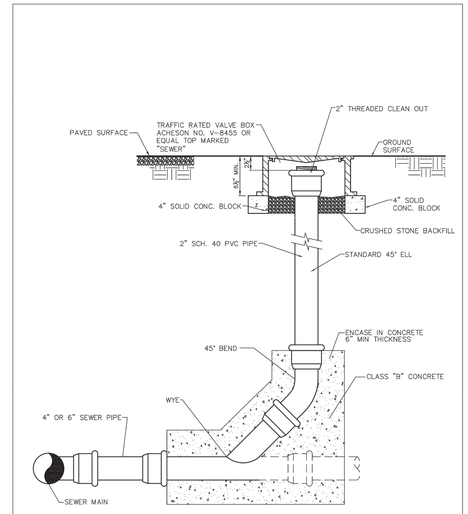
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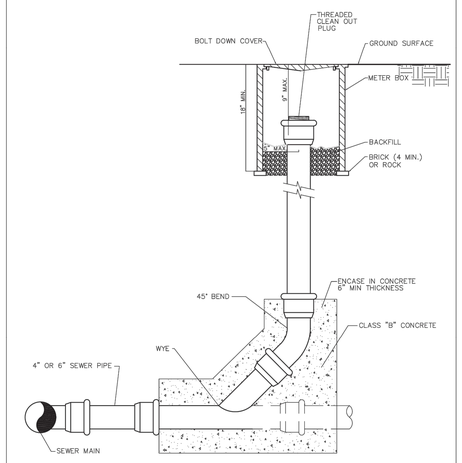
ENGINEERS, INC. 3354 PERIMETER HILL DRIVE, SUITE 140 NASHVILLE, TN 37211 615-834-8300	2.0 SANITARY SEWER LATERALS NOT TO SCALE CITY OF LA VERGNE, TENNESSEE STANDARD SEWER DETAILS	PUBLIC WORKS DEPARTMENT 148 INTERNATIONAL BLVD. LA VERGNE, TN 37086 615-793-9891



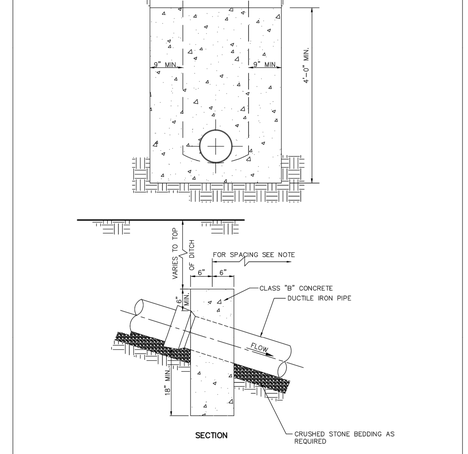
ENGINEERS, INC. 3354 PERIMETER HILL DRIVE, SUITE 140 NASHVILLE, TN 37211 615-834-8300	6.0 RESILIENT BOOT CONNECTION FOR SEWER PIPE TO MANHOLE DETAIL NOT TO SCALE CITY OF LA VERGNE, TENNESSEE STANDARD SEWER DETAILS	PUBLIC WORKS DEPARTMENT 148 INTERNATIONAL BLVD. LA VERGNE, TN 37086 615-793-9891



ENGINEERS, INC. 3354 PERIMETER HILL DRIVE, SUITE 140 NASHVILLE, TN 37211 615-834-8300	12.0 CLEAN OUT WITH TRAFFIC BOX NOT TO SCALE CITY OF LA VERGNE, TENNESSEE STANDARD SEWER DETAILS	PUBLIC WORKS DEPARTMENT 148 INTERNATIONAL BLVD. LA VERGNE, TN 37086 615-793-9891



ENGINEERS, INC. 3354 PERIMETER HILL DRIVE, SUITE 140 NASHVILLE, TN 37211 615-834-8300	13.0 CLEAN OUT WITH NON-TRAFFIC BOX NOT TO SCALE CITY OF LA VERGNE, TENNESSEE STANDARD SEWER DETAILS	PUBLIC WORKS DEPARTMENT 148 INTERNATIONAL BLVD. LA VERGNE, TN 37086 615-793-9891



NOTES:
1. SEWERS ON 18.8% SLOPE OR GREATER SHALL BE ANCHORED SECURELY WITH CONCRETE ANCHORS EQUAL SPACED. REFER TO SPECIFICATIONS.

ENGINEERS, INC. 3354 PERIMETER HILL DRIVE, SUITE 140 NASHVILLE, TN 37211 615-834-8300	14.0 CONCRETE ANCHOR NOT TO SCALE CITY OF LA VERGNE, TENNESSEE STANDARD SEWER DETAILS	PUBLIC WORKS DEPARTMENT 148 INTERNATIONAL BLVD. LA VERGNE, TN 37086 615-793-9891

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CO-OP BUSINESS PARK LOT 1

PANATTONI DEVELOPMENT COMPANY
LA VERGNE, TENNESSEE

PANATTONI®

ROBERT JAMES ARIS — REGISTERED ENGINEER — AGENT OF RECORD — CERTIFICATE No. 121045 — STATE OF TENNESSEE
12/18/2023

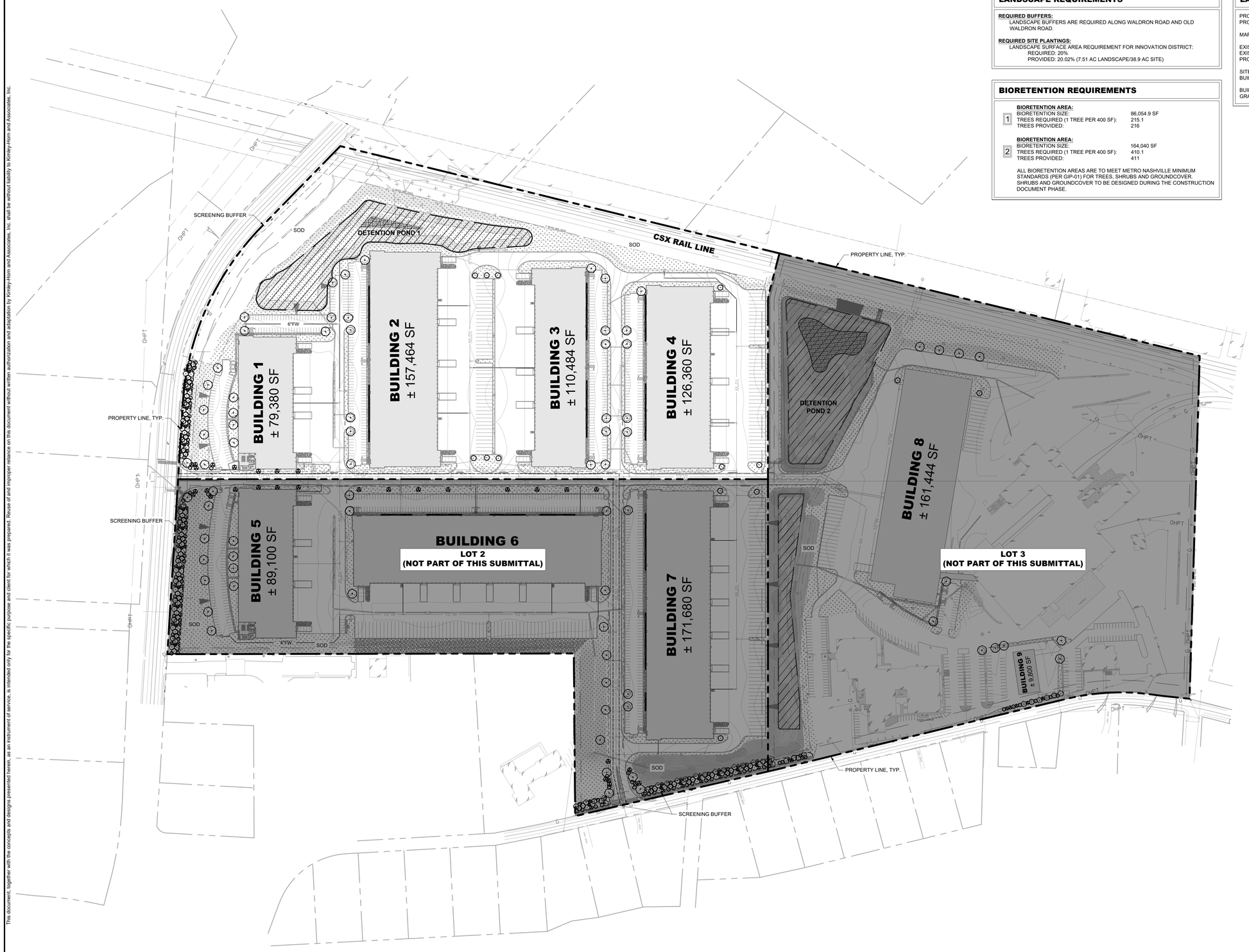
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DESIGNED BY:	GTF
DRAWN BY:	GTF
CHECKED BY:	RJA
DATE:	12/18/2023
KIMLEY-HORN PROJECT NO.	118163044

UTILITY DETAILS

SHEET NUMBER
C8-22

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LANDSCAPE REQUIREMENTS

REQUIRED BUFFERS:
LANDSCAPE BUFFERS ARE REQUIRED ALONG WALDRON ROAD AND OLD WALDRON ROAD.

REQUIRED SITE PLANTINGS:
LANDSCAPE SURFACE AREA REQUIREMENT FOR INNOVATION DISTRICT:
REQUIRED: 20%
PROVIDED: 20.02% (7.51 AC LANDSCAPE/38.9 AC SITE)

BIORETENTION REQUIREMENTS

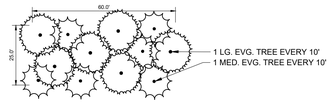
1
BIORETENTION AREA:
BIORETENTION SIZE: 86,054.9 SF
TREES REQUIRED (1 TREE PER 400 SF): 215.1
TREES PROVIDED: 216

2
BIORETENTION AREA:
BIORETENTION SIZE: 164,040 SF
TREES REQUIRED (1 TREE PER 400 SF): 410.1
TREES PROVIDED: 411

ALL BIORETENTION AREAS ARE TO MEET METRO NASHVILLE MINIMUM STANDARDS (PER GIP-01) FOR TREES, SHRUBS AND GROUNDCOVER. SHRUBS AND GROUNDCOVER TO BE DESIGNED DURING THE CONSTRUCTION DOCUMENT PHASE.

LANDSCAPE DATA TABLE

PROJECT NAME:	CO-OP BUSINESS PARK
PROPERTY ADDRESS:	MURFREESBORO ROAD LA VERGNE, TENNESSEE 37086
MAP AND PARCEL ID:	MAP 015 PARCEL 02400, 02800
EXISTING ZONING:	I-2
EXISTING LAND USE:	HEAVY INDUSTRIAL/MANUFACTURING
PROPOSED LAND USE:	HEAVY INDUSTRIAL/MANUFACTURING
SITE AREA:	±114.9 AC
BUILDING AREA:	±915,768 SF
BUILDING PERMIT:	TBD
GRADING PERMIT:	TBD



1 SCREENING BUFFER
1" = 30'-0"

PLANT SCHEDULE

SYMBOL	COMMON NAME
DECIDUOUS TREES	
	AUTUMN FLAME RED MAPLE
	BALD CYPRESS
EVERGREEN TREES	
	GREENLEAF AMERICAN HOLLY
	NELLIE STEVENS HOLLY
	TREE FORM BURFORD HOLLY
UNDERSTORY TREES	
	AUTUMN BRILLIANCE SERVICEBERRY
DECIDUOUS SHRUBS	
	ARROWOOD VIBURNUM
	LIMELIGHT HYDRANGEA
EVERGREEN SHRUBS	
	CARISSA HOLLY
GROUND COVERS	
	SHOT ROCK
	TENNESSEE RIVER ROCK
SOD/SEED	
	TIFWAY 419 BERMUDA SOD

LANDSCAPE NOTES

SEE SHEET L1-50 FOR COMPLETE PLANTING SCHEDULE.

811 Know what's below. Call before you dig.

GRAPHIC SCALE IN FEET
0 75 150 300

NORTH

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CO-OP BUSINESS PARK
LOT 1

PANATTONI DEVELOPMENT COMPANY
LA VERGNE, TENNESSEE

PANATTONI®

JENNIFER JAMES SANDERS
REG. 2201 STATE OF TENNESSEE
LANDSCAPE ARCHITECT
12/18/2023

No.	REVISIONS	DATE	BY
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DESIGNED BY:	OAS
DRAWN BY:	OAS
CHECKED BY:	JLR
DATE:	12/18/2023
KIMLEY-HORN PROJECT NO.	118163044

LANDSCAPE PLAN - OVERALL

SHEET NUMBER
L1-10

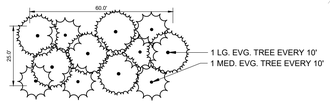
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LANDSCAPE DATA TABLE

PROJECT NAME:	CO-OP BUSINESS PARK
PROPERTY ADDRESS:	MURFREESBORO ROAD LA VERGNE, TENNESSEE 37086
MAP AND PARCEL ID:	MAP 015 PARCEL 02400, 02800
EXISTING ZONING:	I-2
EXISTING LAND USE:	HEAVY INDUSTRIAL/MANUFACTURING
PROPOSED LAND USE:	HEAVY INDUSTRIAL/MANUFACTURING
SITE AREA:	±114.9 AC
BUILDING AREA:	±915,768 SF
BUILDING PERMIT:	TBD
GRADING PERMIT:	TBD

LANDSCAPE NOTES

SEE SHEET L1-50 FOR COMPLETE PLANTING SCHEDULE.



SCREENING BUFFER
1" = 30'-0"

PLANT SCHEDULE

SYMBOL	COMMON NAME
DECIDUOUS TREES	
	AUTUMN FLAME RED MAPLE
	BALD CYPRESS
EVERGREEN TREES	
	GREENLEAF AMERICAN HOLLY
	NELLIE STEVENS HOLLY
	TREE FORM BURFORD HOLLY
UNDERSTORY TREES	
	AUTUMN BRILLIANCE SERVICEBERRY
DECIDUOUS SHRUBS	
	ARROWOOD VIBURNUM
	LIMELIGHT HYDRANGEA
EVERGREEN SHRUBS	
	CARISSA HOLLY
GROUND COVERS	
	SHOT ROCK
	TENNESSEE RIVER ROCK
SOD/SEED	
	TIFWAY 419 BERMUDA SOD

811 Know what's below. Call before you dig.

GRAPHIC SCALE IN FEET
0 25 50 100

NORTH

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CO-OP BUSINESS PARK
LOT 1

PANATTONI DEVELOPMENT COMPANY
LA VERGNE, TENNESSEE

PANATTONI®

SPENCER JAMES SANDBERG
REGISTERED
LANDSCAPE ARCHITECT
12/18/2023

No.	REVISIONS	DATE	BY
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DESIGNED BY:	OAS
DRAWN BY:	OAS
CHECKED BY:	JLR
DATE:	12/18/2023
KIMLEY-HORN PROJECT NO.	118163044

LANDSCAPE PLAN - ENLARGEMENT

SHEET NUMBER
L1-11

Drawing name: K:\NSH_LDEV\118163044 - co-op la vergne\4-CADD\plansheets\L1-10 LANDSCAPE PLAN - ENLARGEMENT.dwg L1-11 Dec 18, 2023 9:42am by: Garrett.Froula

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MATCHLINE - SEE SHEET L1-11

CSX RAIL LINE

CSX TRANSPORTATION RAILROAD

PROPERTY LINE, TYP.

4' WOVEN WIRE FENCE

GRAVEL

NO TRESPASSING SIGN

UG FIBER OPTIC SIGN

ATT TCP

BUILDING 3
± 110,484 SF

BUILDING 4
± 126,360 SF

10"FW

10"W

DETENTION POND 2

LOT 3
(NOT PART OF THIS SUBMITTAL)

MATCHLINE - SEE SHEET L1-31

SEE SHEET L1-21

MATCHLINE - SEE SHEET L1-22

LOT 2 - (NOT PART OF THIS SUBMITTAL)

60.0'
25.0'
SCREENING BUFFER
1" = 30'-0"
1 LG. EVG. TREE EVERY 10'
1 MED. EVG. TREE EVERY 10'

WETLAND PLANTING SCHEDULE

WETLAND ZONE LIVE STAKING		72,193 SF	
ALNUS SERRULATA / HAZEL ALDER		469	10% @ 48" oc
ARONIA ARBUTIFOLIA / RED CHOKEBERRY		833	10% @ 36" oc
CORNUS AMOMUM / SILKY DOGWOOD		302	10% @ 60" oc
HAMAMELIS VIRGINIANA / COMMON WITCH HAZEL		832	10% @ 36" oc
HYDRANGEA ARBORESCENS / WILD HYDRANGEA		2,402	20% @ 30" oc
ILEX VERTICILLATA / WINTERBERRY		1,227	20% @ 42" oc
SALIX ALBA 'SERICEA' / WHITE WILLOW		302	10% @ 60" oc
SAMBUCUS CANADENSIS / AMERICAN ELDERBERRY		302	10% @ 60" oc
WETLAND ZONE SEED		233,990 SF	
ROUNDSTONE SEED - MIX 131 / SOUTHERN WETLAND POND EDGE MIX			

LANDSCAPE DATA TABLE

PROJECT NAME:	CO-OP BUSINESS PARK
PROPERTY ADDRESS:	MURFREESBORO ROAD LA VERGNE, TENNESSEE 37086
MAP AND PARCEL ID:	MAP 015 PARCEL 02400, 02800
EXISTING ZONING:	I-2
EXISTING LAND USE:	HEAVY INDUSTRIAL/MANUFACTURING
PROPOSED LAND USE:	HEAVY INDUSTRIAL/MANUFACTURING
SITE AREA:	±114.9 AC
BUILDING AREA:	±915,768 SF
BUILDING PERMIT:	TBD
GRADING PERMIT:	TBD

PLANT SCHEDULE

SYMBOL	COMMON NAME
DECIDUOUS TREES	
	AUTUMN FLAME RED MAPLE
	BALD CYPRESS
EVERGREEN TREES	
	GREENLEAF AMERICAN HOLLY
	NELLIE STEVENS HOLLY
	TREE FORM BURFORD HOLLY
UNDERSTORY TREES	
	AUTUMN BRILLIANCE SERVICEBERRY
DECIDUOUS SHRUBS	
	ARROWOOD VIBURNUM
	LIMELIGHT HYDRANGEA
EVERGREEN SHRUBS	
	CARISSA HOLLY
GROUND COVERS	
	SHOT ROCK
	TENNESSEE RIVER ROCK
SOD/SEED	
	TIFWAY 419 BERMUDA SOD

LANDSCAPE NOTES

SEE SHEET L1-50 FOR COMPLETE PLANTING SCHEDULE.

Know what's below. Call before you dig.

GRAPHIC SCALE IN FEET
0 25 50 100

NORTH

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CO-OP BUSINESS PARK
LOT 1
PANATTONI DEVELOPMENT COMPANY
LA VERGNE, TENNESSEE

PANATTONI

SPENCER JAMES SANDERS
TENNESSEE
REGISTERED
LANDSCAPE ARCHITECT
12/18/2023

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DESIGNED BY:	OAS
DRAWN BY:	OAS
CHECKED BY:	JLR
DATE:	12/18/2023
KIMLEY-HORN PROJECT NO.	118163044

LANDSCAPE PLAN - ENLARGEMENT

SHEET NUMBER
L1-12

Drawing name: K:\NSH_LDEV\118163044 - co-op la vergne\4-CADD\plansheets\L1-10 LANDSCAPE PLAN - ENLARGEMENT.dwg L1-12 Dec 18, 2023 9:42am by: Garrett.Froula

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GENERAL LANDSCAPE SPECIFICATIONS AND NOTES

1.01 SCOPE OF WORK

A. THE WORK CONSISTS OF: FURNISHING ALL LABOR, MATERIALS, EQUIPMENT, TOOLS, TRANSPORTATION, AND ANY OTHER APPURTENANCES NECESSARY FOR THE COMPLETION OF THIS PROJECT AS SHOWN ON THE DRAWINGS, AS INCLUDED IN THE PLANT LIST, AND AS HEREIN SPECIFIED.

B. WORK SHALL INCLUDE MAINTENANCE AND WATERING OF ALL CONTRACT PLANTING AREAS UNTIL CERTIFICATION OF ACCEPTABILITY BY THE OWNER.

C. THE CONTRACTOR SHALL CONTACT THE OWNER AND TENNESSEE ONE CALL AT (615) 351-1111, TWO (2) FULL BUSINESS DAYS PRIOR TO THE BEGINNING OF WORK.

D. THE CITY MUST APPROVE ALL WORK HOURS AND LANE CLOSURE REQUESTS AT LEAST TWO (2) FULL WORKING DAYS IN ADVANCE OF THE START OF ANY SUCH WORK ON A LOCATION BY LOCATION BASIS. THE INDIVIDUAL(S) INSTALLING THE MAINTENANCE OF TRAFFIC SETUP SHALL HAVE COMPLETED A TDOT APPROVED WORK ZONE TRAFFIC CONTROL TRAINING COURSE. DOCUMENTATION SHALL BE FURNISHED TO THE CITY AT THE PRE-CONSTRUCTION MEETING OR PRIOR TO START OF WORK.

E. ALL LANDSCAPE MATERIAL SHALL BE INSTALLED AND MAINTAINED IN A MANNER WHEREBY TRAFFIC CONTROL SIGNAGE AND DEVICES ARE VISIBLE TO MOTORISTS AND PEDESTRIANS.

1.02 PROTECTION OF EXISTING STRUCTURES

A. ALL EXISTING BUILDINGS, WALKS, WALLS, PAVING, PIPING, OTHER SITE CONSTRUCTION ITEMS, AND PLANTING ALREADY COMPLETED OR ESTABLISHED SHALL BE PROTECTED FROM DAMAGE BY THE CONTRACTOR UNLESS OTHERWISE SPECIFIED. ALL DAMAGE RESULTING FROM NEGLIGENCE SHALL BE REPAIRED OR REPLACED TO THE SATISFACTION OF THE OWNER AND AT NO COST TO THE OWNER.

B. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL NECESSARY BMP DEVICES ACCORDING TO TDOT, COUNTY, OR CITY STANDARDS THROUGH THE DURATION OF ALL CONSTRUCTION ACTIVITIES.

C. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL UTILITIES, WHETHER PUBLIC OR PRIVATE, PRIOR TO EXCAVATION. THE OWNER AND DESIGN PROFESSIONAL SHALL NOT BE RESPONSIBLE FOR THE ACCURACY AND COMPLETENESS OF ANY SUCH INFORMATION OR DATA, AND THE CONTRACTOR SHALL HAVE FULL RESPONSIBILITY FOR REVIEWING AND CHECKING ALL SUCH INFORMATION AND DATA, FOR LOCATING ALL UNDERGROUND FACILITIES DURING CONSTRUCTION, FOR THE SAFETY AND PROTECTION THEREOF, AND REPAIRING ANY DAMAGE THERETO RESULTING FROM THE WORK. THE COST OF COMPLIANCE WITH THIS SECTION WILL BE CONSIDERED AS HAVING BEEN INCLUDED IN THE CONTRACT PRICE. THE CONTRACTOR SHALL NOTIFY ANY AFFECTED UTILITY COMPANIES OR AGENCIES IN WRITING AT LEAST 48 HOURS PRIOR TO BEGINNING CONSTRUCTION.

1.03 PROTECTION OF EXISTING PLANT MATERIALS OUTSIDE LIMIT OF WORK

A. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL UNAUTHORIZED CUTTING OR DAMAGE TO TREES AND SHRUBS EXISTING OR OTHERWISE, CAUSED BY CARELESS EQUIPMENT OPERATION, MATERIAL STOCKPILING, ETC. THIS SHALL INCLUDE COMPACTION BY DRIVING OR PARKING INSIDE THE DRIP-LINE AND SPILLING OIL, GASOLINE, OR OTHER DELETERIOUS MATERIALS WITHIN THE DRIP-LINE. NO MATERIALS SHALL BE BURNED ON SITE. EXISTING TREES KILLED OR DAMAGED SO THAT THEY ARE MISSHAPEN AND/OR UNSIGHTLY SHALL BE REPLACED AT THE COST TO THE CONTRACTOR OF ONE HUNDRED DOLLARS ($100) PER CALIPER INCH ON AN ESCALATING SCALE WHICH ADDS AN ADDITIONAL TWENTY (20) PERCENT PER INCH OVER FOUR (4) INCHES CALIPER AS FIXED AND AGREED LIQUIDATED DAMAGES. CALIPER SHALL BE MEASURED SIX (6) INCHES ABOVE GROUND LEVEL FOR TREES UP TO AND INCLUDING FOUR (4) INCHES IN CALIPER AND TWELVE (12) INCHES ABOVE GROUND LEVEL FOR TREES OVER FOUR (4) INCHES IN CALIPER.

1.04 MATERIALS

A. GENERAL

MATERIAL SAMPLES LISTED BELOW SHALL BE SUBMITTED FOR APPROVAL, ON SITE OR AS DETERMINED BY THE LANDSCAPE ARCHITECT. UPON APPROVAL, DELIVERY OF MATERIALS MAY COMMENCE.

MATERIAL	SAMPLE SIZE
MULCH	ONE (1) CUBIC FOOT
TOPSOIL MIX	ONE (1) CUBIC FOOT
PLANTS	ONE (1) OF EACH VARIETY (OR TAGGED IN NURSERY)

B. PLANT MATERIALS

1. PLANT SPECIES AND SIZE SHALL CONFORM TO THOSE INDICATED ON THE DRAWINGS. ALL NURSERY STOCK SHALL BE IN ACCORDANCE WITH GRADES AND STANDARDS AS SET FORTH IN ANSI Z60.1-2014-AMERICAN STANDARD FOR NURSERY STOCK. ALL PLANTS SHALL BE HEALTHY, VIGOROUS, SOUND, WELL-BRANCHED, AND FREE OF DISEASE AND INSECTS, INSECT EGGS AND LARVAE AND SHALL HAVE ADEQUATE ROOT SYSTEMS. TREES FOR PLANTING IN ROWS SHALL BE UNIFORM IN SIZE AND SHAPE. ALL MATERIALS SHALL BE SUBJECT TO APPROVAL BY THE OWNER. WHERE ANY REQUIREMENTS ARE OMITTED FROM THE PLANT LIST, THE PLANTS FURNISHED SHALL BE NORMAL FOR THE VARIETY. PLANTS SHALL BE PRUNED PRIOR TO DELIVERY ONLY WITH APPROVAL FROM OWNER OR LANDSCAPE ARCHITECT. NO SUBSTITUTIONS SHALL BE MADE WITHOUT WRITTEN PERMISSION FROM THE LANDSCAPE ARCHITECT.
2. MEASUREMENTS: THE HEIGHT AND/OR WIDTH OF TREES SHALL BE MEASURED FROM THE GROUND OR ACROSS THE NORMAL SPREAD OF BRANCHES WITH THE PLANTS IN THEIR NORMAL POSITION. THIS MEASUREMENT SHALL NOT INCLUDE THE IMMEDIATE TERMINAL GROWTH. PLANTS LARGER IN SIZE THAN THOSE SPECIFIED IN THE PLANT LIST MAY BE USED IF APPROVED BY THE OWNER. IF THE USE OF LARGER PLANTS IS APPROVED, THE ROOTBALL OR SPREAD OF ROOTS SHALL BE INCREASED IN PROPORTION TO THE SIZE OF THE PLANT.
3. INSPECTION: PLANTS SHALL BE SUBJECT TO INSPECTION AND APPROVAL AT THE PLACE OF GROWTH, OR UPON DELIVERY TO THE SITE, AS DETERMINED BY THE OWNER, FOR QUALITY, SIZE, AND VARIETY; SUCH APPROVAL SHALL NOT IMPAIR THE RIGHT OF INSPECTION AND REJECTION AT THE SITE DURING PROGRESS OF THE WORK OR AFTER COMPLETION FOR SIZE AND CONDITION OF ROOT BALLS OR ROOTS, LATENT DEFECTS OR INJURIES. REJECTED PLANTS SHALL BE REMOVED IMMEDIATELY FROM THE SITE. NOTICE REQUESTING INSPECTION SHALL BE SUBMITTED IN WRITING BY THE CONTRACTOR AT LEAST ONE (1) WEEK PRIOR TO ANTICIPATED DATE.

1.05 SOIL MIXTURE (PLANTING MEDIUM, PLANTING MIX, TOPSOIL MIX)

A. SOIL MIXTURE (PLANTING MEDIUM FOR PLANT PITS) SHALL CONSIST OF ⅓ LOOSE COMPOST (NO GREATER THAN 1" SIV), ⅓ PEAT AND ⅓ SAND, AS DESCRIBED BELOW.

B. TOPSOIL FOR USE IN PREPARING SOIL MIXTURE FOR BACKFILLING PLANT PITS SHALL BE FERTILE, FRIABLE, AND OF A LOAMY CHARACTER; REASONABLY FREE OF SUBSOIL, CLAY LUMPS, BRUSH WEEDS AND OTHER LITTER; FREE OF ROOTS, STUMPS, STONES LARGER THAN 2" IN ANY DIRECTION, AND OTHER EXTRANEOUS OR TOXIC MATTER HARMFUL TO PLANT GROWTH. IT SHALL CONTAIN THREE (3) TO FIVE (5) PERCENT DECOMPOSED ORGANIC MATTER AND A PH BETWEEN 5.5 AND 7.0 - SUBMIT SAMPLE AND PH TESTING RESULTS FOR APPROVAL.

C. SAND SHALL BE COARSE, CLEAN, WELL-DRAINING, NATIVE SAND. CONTRACTOR SHALL SUBMIT RESULTS OF SOIL TESTS FOR TOPSOIL AND SAND PROPOSED FOR APPROVAL BY THE OWNER.

D. TREES SHALL BE PLANTED IN THE EXISTING NATIVE SOIL ON SITE, UNLESS DETERMINED TO BE UNSUITABLE, AT WHICH POINT THE CONTRACTOR SHALL CONTACT OWNER'S REPRESENTATIVE TO DISCUSS ALTERNATE RECOMMENDATION PRIOR TO PLANTING.

E. CONTRACTOR TO SUBMIT SAMPLES OF SOIL MIXTURE FOR OWNER'S REPRESENTATIVE APPROVAL PRIOR TO PLANT INSTALLATION OPERATIONS COMMENCE.

1.06 WATER

A. WATER NECESSARY FOR PLANTING AND MAINTENANCE SHALL BE OF SATISFACTORY QUALITY TO SUSTAIN ADEQUATE PLANT GROWTH AND SHALL NOT CONTAIN HARMFUL, NATURAL OR MAN-MADE ELEMENTS DETRIMENTAL TO PLANTS. WATER MEETING THE ABOVE STANDARD SHALL BE OBTAINED ON THE SITE FROM THE OWNER, IF AVAILABLE, AND THE CONTRACTOR SHALL BE RESPONSIBLE TO MAKE ARRANGEMENTS FOR ITS USE BY HIS TANKS, HOSES, SPRINKLERS, ETC. IF SUCH WATER IS NOT AVAILABLE AT THE SITE, THE CONTRACTOR SHALL PROVIDE SATISFACTORY WATER FROM SOURCES OFF THE SITE AT NO ADDITIONAL COST TO THE OWNER.

* *WATERING/IRRIGATION RESTRICTIONS MAY APPLY - REFER TO PROPERTY'S JURISDICTIONAL AUTHORITY.*

1.07 FERTILIZER

A. CONTRACTOR SHALL PROVIDE FERTILIZER APPLICATION SCHEDULE TO OWNER, AS APPLICABLE TO SOIL TYPE, PLANT INSTALLATION TYPE, AND SITE'S PROPOSED USE. SUGGESTED FERTILIZER TYPES SHALL BE ORGANIC OR OTHERWISE NATURALLY-DERIVED.

* *FERTILIZER RESTRICTIONS MAY APPLY - REFER TO PROPERTY'S JURISDICTIONAL AUTHORITY.*

1.08 MULCH

A. MULCH MATERIAL SHALL BE MOISTENED AT THE TIME OF APPLICATION TO PREVENT WIND DISPLACEMENT, AND APPLIED AT A DEPTH OF THREE (3) INCHES FOR ALL PLANTINGS UNLESS OTHERWISE NOTED. MULCH AT ALL PLANTING BEDS SHALL BE TRIPLE SHREDDED HARDWOOD.

1.09 DIGGING AND HANDLING

A. PROTECT ROOTS OR ROOT BALLS OF PLANTS AT ALL TIMES FROM SUN, DRYING WINDS, WATER AND FREEZING AS NECESSARY UNTIL PLANTING. PLANT MATERIALS SHALL BE ADEQUATELY PACKED TO PREVENT DAMAGE DURING TRANSIT.

B. BALLED AND BURLAPPED PLANTS (B&B) SHALL BE DUG WITH FIRM, NATURAL BALLS OF SOIL OF SUFFICIENT SIZE TO ENCOMPASS THE FIBROUS AND FEEDING ROOTS OF THE PLANTS. NO PLANTS MOVED WITH A ROOT BALL SHALL BE PLANTED IF THE BALL IS CRACKED OR BROKEN. PLANTS SHALL NOT BE HANDLED BY STEMS.

C. EXCAVATION OF TREE PITS SHALL BE PERFORMED USING EXTREME CARE TO AVOID DAMAGE TO SURFACE AND SUBSURFACE ELEMENTS SUCH AS UTILITIES OR HARDSCAPE ELEMENTS, FOOTERS AND PREPARED SUB-BASES. ALL TREES SHALL BE PLANTED AS INDICATED ON DRAWINGS. COORDINATE WITH PLANTING DETAILS FOR EXACT DEPTH OF PLANTING SOIL.

1.10 CONTAINER GROWN STOCK

A. ALL TREES SPECIFIED SHALL BE BALL AND BURLAP, UNLESS OTHERWISE APPROVED BY LANDSCAPE ARCHITECT.

B. ALL SHRUB SPECIES SHALL BE CONTAINER GROWN.

C. ALL CONTAINER GROWN MATERIAL SHALL BE HEALTHY, VIGOROUS, WELL-ROOTED PLANTS ESTABLISHED IN THE CONTAINER IN WHICH THEY ARE SOLD. THE PLANTS SHALL HAVE TOPS WHICH ARE OF GOOD QUALITY AND ARE IN A HEALTHY GROWING CONDITION.

D. AN ESTABLISHED CONTAINER GROWN PLANT SHALL BE TRANSPLANTED INTO A CONTAINER AND GROWN IN THAT CONTAINER SUFFICIENTLY LONG ENOUGH FOR THE NEW FIBROUS ROOTS TO HAVE DEVELOPED SO THAT THE ROOT MASS WILL RETAIN ITS SHAPE AND HOLD TOGETHER WHEN REMOVED FROM THE CONTAINER. CONTAINER GROWN STOCK SHALL NOT BE HANDLED BY THEIR STEMS.

E. PLANT ROOTS BOUND IN CONTAINERS ARE NOT ACCEPTABLE.

1.11 MATERIALS LIST

A. QUANTITIES NECESSARY TO COMPLETE THE WORK ON THE DRAWINGS SHALL BE FURNISHED BY THE CONTRACTOR. QUANTITY ESTIMATES HAVE BEEN MADE CAREFULLY, BUT THE LANDSCAPE ARCHITECT OR OWNER ASSUMES NO LIABILITY FOR OMISSIONS OR ERRORS. SHOULD A DISCREPANCY OCCUR BETWEEN THE PLANS AND THE PLANT LIST QUANTITY, THE OWNER'S REPRESENTATIVE SHALL BE NOTIFIED FOR CLARIFICATION PRIOR TO BIDDING OR INSTALLATION. ALL DIMENSIONS AND/OR SIZES SPECIFIED SHALL BE THE MINIMUM ACCEPTABLE SIZE.

1.12 FINE GRADING

A. FINE GRADING UNDER THIS CONTRACT SHALL CONSIST OF FINAL FINISHED GRADING OF LAWN AND PLANTING AREAS THAT HAVE BEEN DISTURBED DURING CONSTRUCTION.

B. THE CONTRACTOR SHALL FINE GRADE THE LAWN AND PLANTING AREAS TO BRING THE ROUGH GRADE UP TO FINAL FINISHED GRADE ALLOWING FOR THICKNESS OF SOD AND/OR MULCH DEPTH. CONTRACTOR SHALL FINE GRADE BY HAND AND/OR WITH ALL EQUIPMENT NECESSARY INCLUDING A GRADING TRACTOR WITH FRONT-END LOADER FOR TRANSPORTING SOIL WITHIN THE SITE.

C. ALL PLANTING AREAS SHALL BE GRADED AND MAINTAINED FOR POSITIVE DRAINAGE TO SURFACE/SUBSURFACE STORM DRAIN SYSTEMS. AREAS ADJACENT TO BUILDINGS SHALL SLOPE AWAY FROM THE BUILDINGS. REFER TO CIVIL ENGINEER'S PLANS FOR FINAL GRADES, IF APPLICABLE.

1.13 PLANTING PROCEDURES

A. CLEANING UP BEFORE COMMENCING WORK: THE CONTRACTOR SHALL CLEAN WORK AND SURROUNDING AREAS OF ALL RUBBISH OR OBJECTIONABLE MATTER DAILY. ALL MORTAR, CEMENT, AND TOXIC MATERIAL SHALL BE REMOVED FROM THE SURFACE OF ALL PLANT BEDS. THESE MATERIALS SHALL NOT BE MIXED WITH THE SOIL. SHOULD THE CONTRACTOR FIND SUCH SOIL CONDITIONS BENEATH THE SOIL WHICH WILL IN ANY WAY ADVERSELY AFFECT THE PLANT GROWTH, CONTRACTOR SHALL IMMEDIATELY CALL IT TO THE ATTENTION OF THE OWNER'S REPRESENTATIVE. FAILURE TO DO SO BEFORE PLANTING SHALL MAKE THE CORRECTIVE MEASURES THE RESPONSIBILITY OF THE CONTRACTOR.

B. SUBGRADE EXCAVATION: THE CONTRACTOR IS RESPONSIBLE TO REMOVE ALL EXISTING AND IMPORTED LIMEROCK AND LIMEROCK SUB-BASE FROM ALL LANDSCAPE PLANTING AREAS TO A MINIMUM DEPTH OF 36" AT TREES AND 18" AT SHRUBS AND PERENNIALS. CONTRACTOR IS RESPONSIBLE TO BACKFILL THESE PLANTING AREAS TO ROUGH FINISH GRADE WITH CLEAN TOPSOIL FROM AN ON-SITE SOURCE OR AN IMPORTED SOURCE. IF LIMEROCK OR OTHER ADVERSE CONDITIONS OCCUR IN PLANTED AREAS AFTER 36", AND DEEP EXCAVATION BY THE CONTRACTOR AND POSITIVE DRAINAGE CANNOT BE ACHIEVED, THE CONTRACTOR SHALL UTILIZE PLANTING DETAIL THAT ADDRESSES POOR DRAINAGE.

C. VERIFY LOCATIONS OF ALL UTILITIES, CONDUITS, SUPPLY LINES AND CABLES, INCLUDING BUT NOT LIMITED TO: ELECTRIC, GAS (LINES AND TANKS), WATER, SANITARY SEWER, STORMWATER SYSTEMS, CABLE, AND TELEPHONE. PROPERLY MAINTAIN AND PROTECT EXISTING UTILITIES. CONTACT TENNESSEE ONE CALL AT (615) 351-1111 TO LOCATE ALL UTILITIES.

D. FURNISH NURSERY'S CERTIFICATE OF COMPLIANCE WITH ALL REQUIREMENTS AS HEREIN SPECIFIED AND REQUIRED. INSPECT AND SELECT PLANT MATERIALS BEFORE PLANTS ARE DUG AT NURSERY OR GROWING SITE.

E. GENERAL: COMPLY WITH APPLICABLE FEDERAL, STATE, COUNTY, AND LOCAL REGULATIONS GOVERNING LANDSCAPE MATERIALS AND WORK. CONFORM TO ACCEPTED HORTICULTURAL PRACTICES AS USED IN THE TRADE. UPON ARRIVAL AT THE SITE, PLANTS SHALL BE THOROUGHLY WATERED AND PROPERLY MAINTAINED UNTIL PLANTED. PLANTS STORED ON-SITE SHALL NOT REMAIN UNPLANTED OR APPROPRIATELY HEALED IN FOR A PERIOD EXCEEDING TWENTY-FOUR (24) HOURS. AT ALL TIMES WORKMANLIKE METHODS CUSTOMARY IN GOOD HORTICULTURAL PRACTICES SHALL BE EXERCISED.

F. THE WORK SHALL BE COORDINATED WITH OTHER TRADES TO PREVENT CONFLICTS. COORDINATE PLANTING WITH IRRIGATION WORK TO ASSURE AVAILABILITY OF WATER AND PROPER LOCATION OF IRRIGATION APPURTENANCES AND PLANTS.

G. ALL PLANTING PITS SHALL BE EXCAVATED TO SIZE AND DEPTH IN ACCORDANCE WITH ANSI Z60.1-2014 - AMERICAN STANDARD FOR NURSERY STOCK, UNLESS SHOWN OTHERWISE ON THE DRAWINGS, AND BACK FILLED WITH THE PREPARED PLANTING SOIL MIXTURE AS SPECIFIED IN SECTION 1.05. TEST ALL TREE PITS WITH WATER BEFORE PLANTING TO ASSURE PROPER DRAINAGE PERCOLATION IS AVAILABLE. NO ALLOWANCE WILL BE MADE FOR LOST PLANTS DUE TO IMPROPER DRAINAGE. TREES SHALL BE SET PLUMB AND HELD IN POSITION UNTIL THE PLANTING MIXTURE HAS BEEN FLUSHED INTO PLACE WITH A SLOW, FULL HOSE STREAM. ALL PLANTING SHALL BE PERFORMED BY PERSONNEL FAMILIAR WITH PLANTING PROCEDURES AND UNDER THE SUPERVISION OF A QUALIFIED LANDSCAPE FOREMAN.

H. TAKE ALL NECESSARY PRECAUTIONS TO AVOID DAMAGE TO BUILDINGS AND BUILDING STRUCTURES WHILE INSTALLING TREES.

I. SOIL MIXTURE SHALL BE AS SPECIFIED IN SECTION 1.05 OF THESE SPECIFICATIONS.

J. TREES AND SHRUBS SHALL BE SET STRAIGHT AT AN ELEVATION THAT, AFTER SETTLEMENT, THE PLANT CROWN WILL STAND ONE (1) TO TWO (2) INCHES ABOVE GRADE. EACH PLANT SHALL BE SET IN THE CENTER OF THE PIT. PLANTING SOIL MIXTURE SHALL BE BACK FILLED, THOROUGHLY TAMPED AROUND THE BALL, AND SETTLED BY WATER (AFTER TAMPING).

K. SHRUBS AND GROUND COVER PLANTS SHALL BE EVENLY SPACED IN ACCORDANCE WITH THE DRAWINGS AND AS INDICATED ON THE PLANT LIST. MATERIALS INSTALLED SHALL MEET MINIMUM SPECIMEN REQUIREMENTS OR QUANTITIES SHOW ON PLANS, WHICHEVER IS GREATER. CULTIVATE ALL PLANTING AREAS TO A MINIMUM DEPTH OF 12", REMOVE AND DISPOSE ALL DEBRIS. COORDINATE WITH PLANTING DETAILS FOR EXACT DEPTH. MIX TOP 4" OF THE PLANTING SOIL MIXTURE AS SPECIFIED IN SECTION 1.05. THOROUGHLY WATER ALL PLANTS AFTER INSTALLATION.

L. TREE GUYING AND BRACING SHALL BE INSTALLED BY THE CONTRACTOR IN ACCORDANCE WITH THE PLANS TO INSURE STABILITY AND MAINTAIN TREES IN AN UPRIGHT POSITION. IF THE CONTRACTOR AND OWNER DECIDE TO WAIVE THE TREE GUYING AND BRACING, THE OWNER SHALL NOTIFY THE PROJECT LANDSCAPE ARCHITECT IN WRITING AND AGREE TO INDEMNIFY AND HOLD HARMLESS THE PROJECT LANDSCAPE ARCHITECT IN THE EVENT UNSUPPORTED TREES PLANTED UNDER THIS CONTRACT FALL AND DAMAGE PERSON OR PROPERTY.

M. HERBICIDE WEED CONTROL: ALL PLANT BEDS SHALL BE KEPT FREE OF NOXIOUS WEEDS UNTIL FINAL ACCEPTANCE OF WORK. IF DIRECTED BY THE OWNER, "ROUND-UP" SHALL BE APPLIED FOR WEED CONTROL BY QUALIFIED PERSONNEL TO ALL PLANTING AREAS IN SPOT APPLICATIONS PER MANUFACTURER'S PRECAUTIONS AND SPECIFICATIONS. PRIOR TO FINAL INSPECTION, TREAT ALL PLANTING BEDS WITH AN APPROVED PRE-EMERGENT HERBICIDE AT AN APPLICATION RATE RECOMMENDED BY THE MANUFACTURER (AS ALLOWED BY JURISDICTIONAL AUTHORITY).

1.14 LAWN SODDING

A. THE WORK CONSISTS OF LAWN BED PREPARATION, SOIL PREPARATION, AND SODDING COMPLETE, IN STRICT ACCORDANCE WITH THE SPECIFICATIONS AND THE APPLICABLE DRAWINGS TO PRODUCE A TURF GRASS LAWN ACCEPTABLE TO THE OWNER.

B. LAWN BED PREPARATION: ALL AREAS THAT ARE TO BE SODDED SHALL BE CLEARED OF ANY ROUGH GRASS, WEEDS, AND DEBRIS BY MEANS OF A SOD CUTTER TO A DEPTH OF THREE (3) INCHES, AND THE GROUND BROUGHT TO AN EVEN GRADE. THE ENTIRE SURFACE SHALL BE ROLLED WITH A ROLLER WEIGHING NOT MORE THAN ONE-HUNDRED (100) POUNDS PER FOOT OF WIDTH. DURING THE ROLLING, ALL DEPRESSIONS CAUSED BY SETTLEMENT SHALL BE FILLED WITH ADDITIONAL SOIL, AND THE SURFACE SHALL BE REGRADED AND ROLLED UNTIL PRESENTING A SMOOTH AND EVEN FINISH TO THE REQUIRED GRADE.

C. SOIL PREPARATION: PREPARE LOOSE BED FOUR (4) INCHES DEEP. HAND RAKE UNTIL ALL BUMPS AND DEPRESSIONS ARE REMOVED. WET PREPARED AREA THOROUGHLY.

D. SODDING

1. THE CONTRACTOR SHALL SOD ALL DISTURBED AREAS WITHIN THE CONTRACT LIMITS NOT COVERED BY HARDSCAPE OR VEGETATIVE MATERIAL, UNLESS SPECIFICALLY NOTED OTHERWISE.
2. SOD PANELS SHALL BE LAID TIGHTLY TOGETHER SO AS TO MAKE A SOLID SODDED LAWN AREA. SOD SHALL BE LAID UNIFORMLY AGAINST THE EDGES OF ALL CURBS AND OTHER HARDSCAPE ELEMENTS, PAVED AND PLANTED AREAS. IMMEDIATELY FOLLOWING SOD LAYING, THE LAWN AREAS SHALL BE ROLLED WITH A LAWN ROLLER CUSTOMARILY USED FOR SUCH PURPOSES, AND THEN THOROUGHLY IRRIGATED. IF, IN THE OPINION OF THE OWNER, TOP-DRESSING IS NECESSARY AFTER ROLLING TO FILL THE VOIDS BETWEEN THE SOD PANELS AND TO EVEN OUT INCONSISTENCIES IN THE SOD, CLEAN SAND, AS APPROVED BY THE OWNER'S REPRESENTATIVE, SHALL BE UNIFORMLY SPREAD OVER THE ENTIRE SURFACE OF THE SOD AND THOROUGHLY WATERED IN. FERTILIZE INSTALLED SOD AS ALLOWED BY PROPERTY'S JURISDICTIONAL AUTHORITY.
3. DURING DELIVERY, PRIOR TO, AND DURING THE PLANTING OF THE LAWN AREAS, THE SOD PANELS SHALL AT ALL TIMES BE PROTECTED FROM EXCESSIVE DRYING AND UNNECESSARY EXPOSURE OF THE ROOTS TO THE SUN. ALL SOD SHALL BE STACKED SO AS NOT TO BE DAMAGED BY SWEATING OR EXCESSIVE HEAT AND MOISTURE.

E. LAWN MAINTENANCE

1. WITHIN THE CONTRACT LIMITS, THE CONTRACTOR SHALL PRODUCE A DENSE, WELL ESTABLISHED LAWN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR AND RE-SODDING OF ALL ERODED, SUNKEN OR BARE SPOTS (LARGER THAN 12"X12") UNTIL CERTIFICATION OF ACCEPTABILITY BY THE OWNER'S REPRESENTATIVE. REPAIRED SODDING SHALL BE ACCOMPLISHED AS IN THE ORIGINAL WORK (INCLUDING RE-GRADING IF NECESSARY).
2. CONTRACTOR SHALL BE RESPONSIBLE FOR ESTABLISHING AND MAINTAINING SOD/LAWN UNTIL ACCEPTANCE BY THE OWNER'S REPRESENTATIVE. PRIOR TO AND UPON ACCEPTANCE, CONTRACTOR TO PROVIDE WATERING/IRRIGATION SCHEDULE TO OWNER. OBSERVE ALL APPLICABLE WATERING RESTRICTIONS AS SET FORTH BY THE PROPERTY'S JURISDICTIONAL AUTHORITY.

1.15 CLEANUP

A. UPON COMPLETION OF ALL PLANTING WORK AND BEFORE FINAL ACCEPTANCE, THE CONTRACTOR SHALL REMOVE ALL MATERIAL, EQUIPMENT, AND DEBRIS RESULTING FROM HIS WORK. ALL PAVED AREAS SHALL BE BROOM-CLEANED AND THE SITE LEFT IN A NEAT AND ACCEPTABLE CONDITION AS APPROVED BY THE OWNER'S REPRESENTATIVE.

1.16 PLANT MATERIAL MAINTENANCE

A. ALL PLANTS AND PLANTING INCLUDED UNDER THIS CONTRACT SHALL BE MAINTAINED BY WATERING, CULTIVATING, SPRAYING, AND ALL OTHER OPERATIONS (SUCH AS RE-STAKING OR REPAIRING GUY SUPPORTS) NECESSARY TO INSURE A HEALTHY PLANT CONDITION BY THE CONTRACTOR UNTIL CERTIFICATION OF ACCEPTABILITY BY THE OWNER'S REPRESENTATIVE.

1.17 FINAL INSPECTION AND ACCEPTANCE OF WORK

A. FINAL INSPECTION AT THE END OF THE WARRANTY PERIOD SHALL BE ON PLANTING, CONSTRUCTION AND ALL OTHER INCIDENTAL WORK PERTAINING TO THIS CONTRACT. ANY REPLACEMENT AT THIS TIME SHALL BE SUBJECT TO THE SAME ONE (1) YEAR WARRANTY (OR AS SPECIFIED BY THE LANDSCAPE ARCHITECT OR OWNER IN WRITING) BEGINNING WITH THE TIME OF REPLACEMENT AND ENDING WITH THE SAME INSPECTION AND ACCEPTANCE HEREIN DESCRIBED.

1.18 WARRANTY

A. THE LIFE AND SATISFACTORY CONDITION OF ALL PLANT MATERIAL INSTALLED (INCLUDING SOD) BY THE LANDSCAPE CONTRACTOR SHALL BE WARRANTIED BY THE CONTRACTOR FOR A MINIMUM OF ONE (1) CALENDAR YEAR COMMENCING AT THE TIME OF CERTIFICATION OF ACCEPTABILITY BY THE OWNER'S REPRESENTATIVE.

B. REPLACEMENT: ANY PLANT NOT FOUND IN A HEALTHY GROWING CONDITION DURING THE WARRANTY PERIOD SHALL BE REMOVED FROM THE SITE AND REPLACED WITHIN TEN (10) DAYS OF NOTICE, OR BETWEEN SEPTEMBER-NOVEMBER, MARCH-MAY. ALL REPLACEMENTS SHALL BE PLANTS OF THE SAME KIND AND SIZE AS SPECIFIED IN THE PLANT LIST. THEY SHALL BE FURNISHED, PLANTED AND MULCHED AS SPECIFIED AT NO ADDITIONAL COST TO THE OWNER.

C. IN THE EVENT THE OWNER DOES NOT CONTRACT WITH THE CONTRACTOR FOR LANDSCAPE MAINTENANCE, THE CONTRACTOR IS ENCOURAGED TO VISIT THE PROJECT SITE PERIODICALLY DURING THE ONE (1) YEAR WARRANTY PERIOD TO EVALUATE MAINTENANCE PROCEDURES BEING PERFORMED BY THE OWNER, AND SHALL NOTIFY THE OWNER IN WRITING OF MAINTENANCE PROCEDURES OR CONDITIONS WHICH THREATEN VIGOROUS AND HEALTHY PLANT GROWTH. IT IS SUGGESTED SUCH SITE VISITS SHALL BE CONDUCTED A MINIMUM OF ONCE PER MONTH FOR A PERIOD OF TWELVE (12) MONTHS FROM THE DATE OF ACCEPTANCE.

811 Know what's below. Call before you dig.

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LA VERGNE, TENNESSEE

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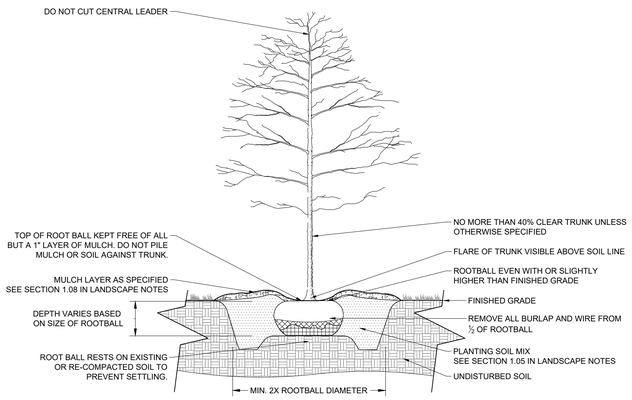
SPENCER JAMES SANDBERG
REGISTERED
LANDSCAPE ARCHITECT
12/18/2023

No	REVISIONS	DATE	BY
-	-		
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1			
2			
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7			

DESIGNED BY: OAS
DRAWN BY: OAS
CHECKED BY: JLR
DATE: 12/18/2023
KIMLEY-HORN PROJECT NO. 118163044

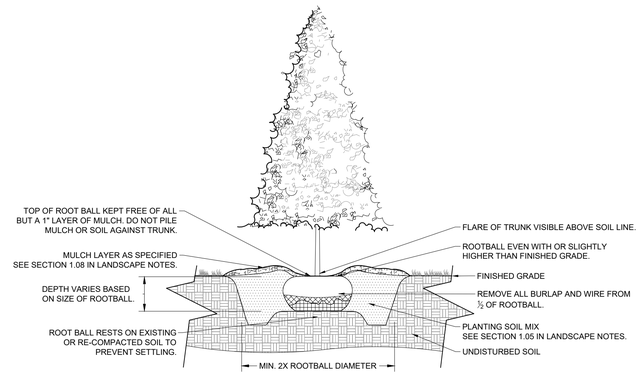
LANDSCAPE NOTES

SHEET NUMBER
L1-50



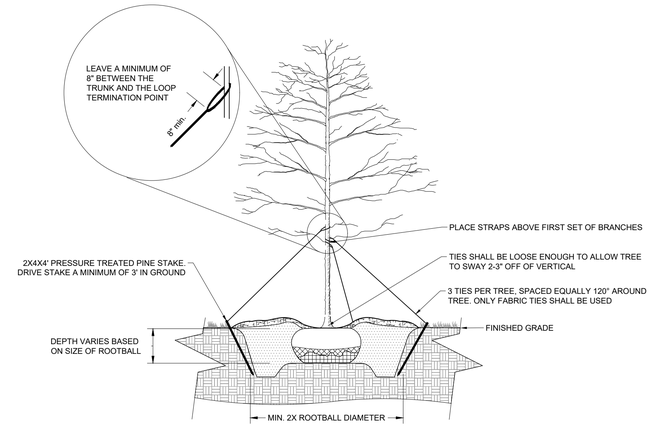
1 B&B TREE PLANTING

NOT TO SCALE



2 EVERGREEN TREE PLANTING

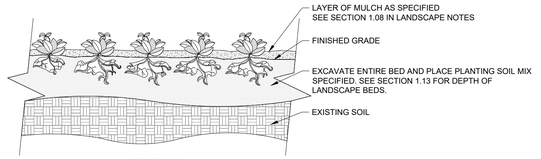
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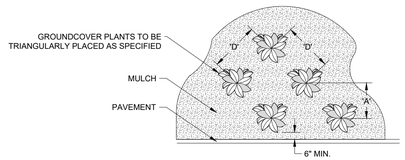
NOTE: TREE STAKING MAY BE USED ONLY ON TREES LARGER THAN 2" CAL., UNLESS OTHERWISE APPROVED BY THE CITY LANDSCAPE ARCHITECT.

3 TREE STAKING

NOT TO SCALE



SECTION VIEW



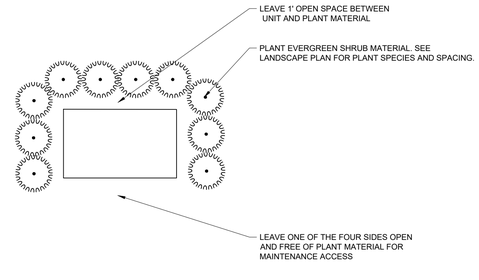
PLAN VIEW

PLANT SPACING ' D '	ROW ' A '
8" O.C.	6.93" O.C.
10" O.C.	8.66" O.C.
12" O.C.	10.4" O.C.
18" O.C.	15.6" O.C.
24" O.C.	20.8" O.C.
36" O.C.	30.0" O.C.
48" O.C.	31.5" O.C.

NOTES:
1 SEE PLANTING LEGEND FOR GROUNDCOVER SPECIES, SIZE, AND SPACING DIMENSION.
2 SETTLE SOIL AROUND ROOT BALL OF EACH GROUNDCOVER PRIOR TO MULCHING.

4 GROUNDCOVER PLANTING

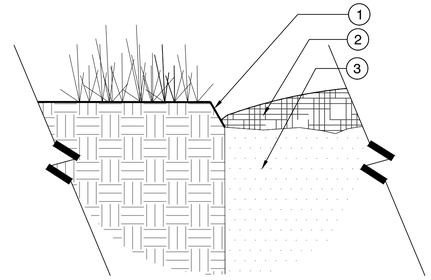
NOT TO SCALE



5 TYPICAL SERVICE SCREENING DETAIL

NOT TO SCALE

1. SPADED LANDSCAPE BED EDGE
2. 3" HIGH MULCH SAUCER SHALL BE CONSTRUCTED AROUND THE BASE OF SHRUB/TREE
3. PLANTING SOIL MIX SEE SECTION 1.05 IN LANDSCAPE NOTES



6 SPADED EDGE

1 1/2" = 1'-0"

KHA-SI-PAV-CO-28

PLANT SCHEDULE LOT 1

SYMBOL	CODE		BOTANICAL NAME	COMMON NAME	SPACING	SIZE	ROOT	CONDITION
DECIDUOUS TREES								
	ARA	35	ACER RUBRUM `AUTUMN FLAME`	AUTUMN FLAME RED MAPLE	AS SHOWN	3" CAL; 10`-12` HT.	B&B	FULL; MATCHED
	TD	26	TAXODIUM DISTICHUM	BALD CYPRESS	AS SHOWN	3" CAL; 10`-12` HT.	B&B	FULL; MATCHED
EVERGREEN TREES								
	ICB	15	ILEX CORNUTA `BURFORDII` (TREE FORM)	TREE FORM BURFORD HOLLY	AS SHOWN	2" CAL; 8-10` HT.	B&B	FULL; MATCHED
	IG	15	ILEX OPACA `GREENLEAF`	GREENLEAF AMERICAN HOLLY	AS SHOWN	3" CAL; 10`-12` HT.	B&B	FULL; MATCHED
	IN	20	ILEX X `NELLIE R STEVENS`	NELLIE STEVENS HOLLY	AS SHOWN	2" CAL.; 8-10` HT.	B&B	FULL; MATCHED
UNDERSTORY TREES								
	ACA	8	AMELANCHIER CANADENSIS `AUTUMN BRILLIANCE`	AUTUMN BRILLIANCE SERVICEBERRY	AS SHOWN	2" CAL. MIN; 8`-10` HT.	B&B	FULL CANOPY, MATCHED
DECIDUOUS SHRUBS								
	HPL	90	HYDRANGEA PANICULATA `LIMELIGHT` TM	LIMELIGHT HYDRANGEA	5` O.C.	24" MIN. HT.	3 GAL.	MATCHED; FULL
	VD	55	VIBURNUM DENTATUM `ARROWWOOD`	ARROWWOOD VIBURNUM	5` O.C.	30" MIN. HT.	5 GAL.	MATCHED; FULL

811 Know what's below. Call before you dig.

This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

Kimley»Horn
10 Lea Avenue, Suite 400, Nashville, TN 37210
Main: 615.564.2701 | www.kimley-horn.com
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CO-OP BUSINESS PARK
LOT 1
PANATTONI DEVELOPMENT COMPANY
LA VERGNE, TENNESSEE

PANATTONI®

SPENCER JAMES SANDBERG — REGISTERED — LANDSCAPE ARCHITECT — 12/18/2023

No.	REVISIONS	DATE	BY
-	-		
0	-		
1	-		
2	-		
3	-		
4	-		
5	-		
6	-		
7	-		

DESIGNED BY:	OAS
DRAWN BY:	OAS
CHECKED BY:	JLR
DATE:	12/18/2023
KIMLEY-HORN PROJECT NO.	118163044

LANDSCAPE DETAILS

SHEET NUMBER
L1-51

Drawing name: K:\NSH_LDEV\118163044 - co-op la vergne\4-CADD\plansheets\L1-50 LANDSCAPE DETAILS.dwg DETAILS - LOT 1 Dec 18, 2023 9:43am by: Garrett.Froula

Planning Commission Report
Meeting: December 26, 2023

City of La Vergne

Item #: 11.

Item Title: Site Plan - Co-Op Business Park, Lot 2 - Three (3) Buildings Totaling 442,000 Square Feet on 32.1 Acres. Requested by Kimley-Horn. Property located on Old Waldron Road (Tax Map 15, Parcels 24 & 28). I-2 (Heavy Industrial) Zoning District. Property owned by Tennessee Farmers Cooperative, Inc.

Reviewed By:
Gary Lide, City Engineer
Bo Logan, City Planner

Summary: On behalf of their client, Kimley-Horn is requesting approval of the site plan for the Co-Op Business Park, Lot 2, located on 32 ± acres.

The property is located off Waldron and Old Waldron Roads. The proposed layout on the plan shows three (3) new buildings are indicated for the new parcel that will be created. In total, the project calls for nine new buildings, and these nine (9) proposed buildings total over 1,081,000 square feet (1.08 million square feet) of new industrial space.

This site plan for Lot 2 contains three buildings numbered Building #5 through Building #7. Of these, Building 5 has special architectural considerations to meet the overlay, and extra color plans have been submitted for this. But the detail sheets for Building 5 are missing from the color architectural set as noted below in staff comments.

The new lots being created for this project will be served via a new internal road to be installed by the developer. This road will be a private road.

Staff Recommendation:

Staff Comments / Technical Items:

Planning
Bo Logan
blogan@lavergnetn.gov

1. Staff is satisfied with locations of signs at this time because this entire site must go to BOZA with a comprehensive sign

Jake Blair
jblair@lavergnetn.gov

package to include directional signs, etc.
2. First United Methodist is zoned industrial so no buffer issue;

Engineering

Gary Lide
glide@lavergnetn.gov

1. (New comment) On Sheet C2-21, some layers on the Waldron Road Enlargement have been left off so that the detail does not show proposed improvements. It is the Engineering Department's opinion that the information missing here is shown at other locations between the Site Plans for Lots 1 and 2 and therefore the overall plan sets are complete for the purpose of permitting.

Utilities

Scott Tatalovich
statalovich@lavergnetn.gov

Comments addressed.

Codes

No comments

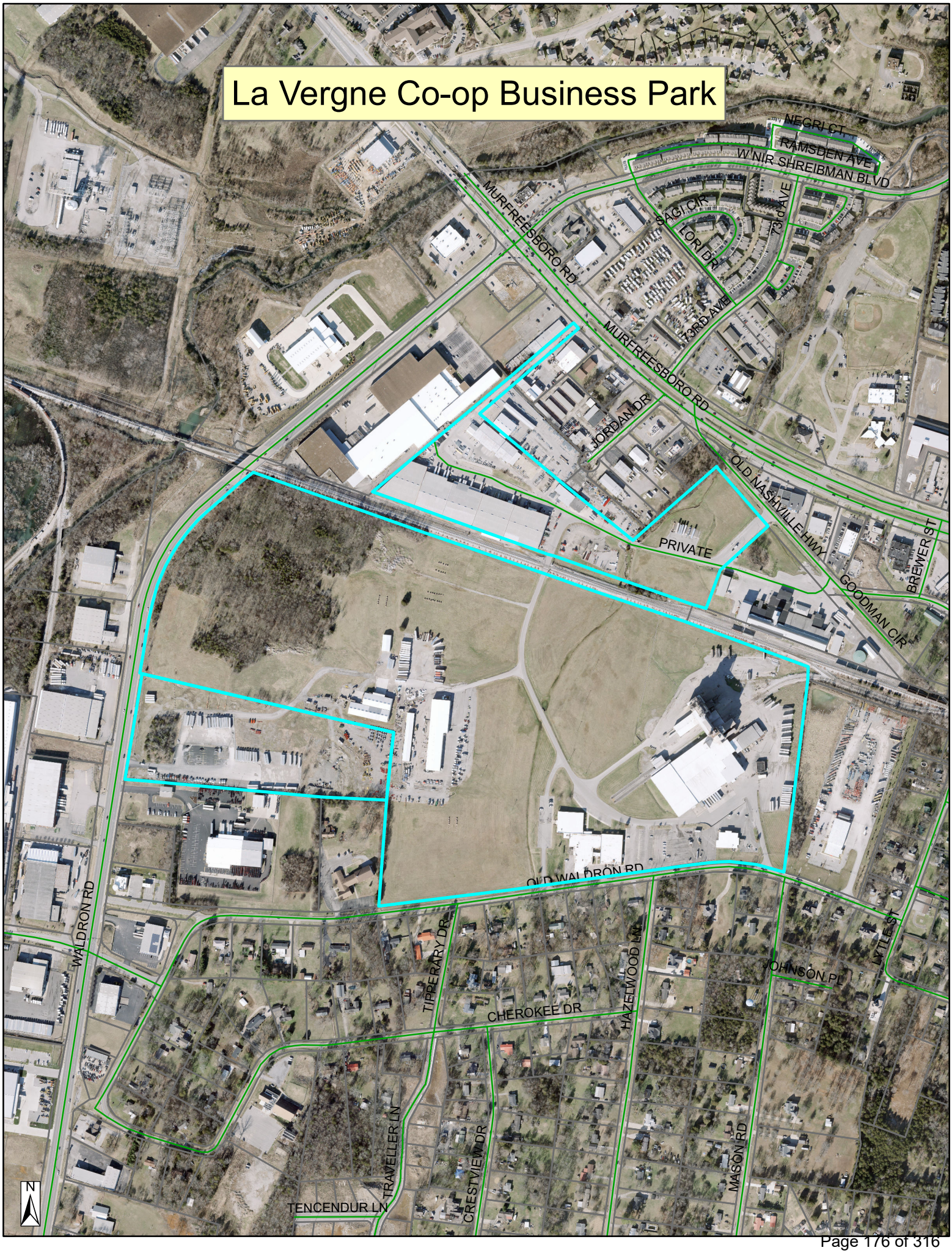
Fire

Curtis Brinkley
cbrinkley@lavergnetn.gov

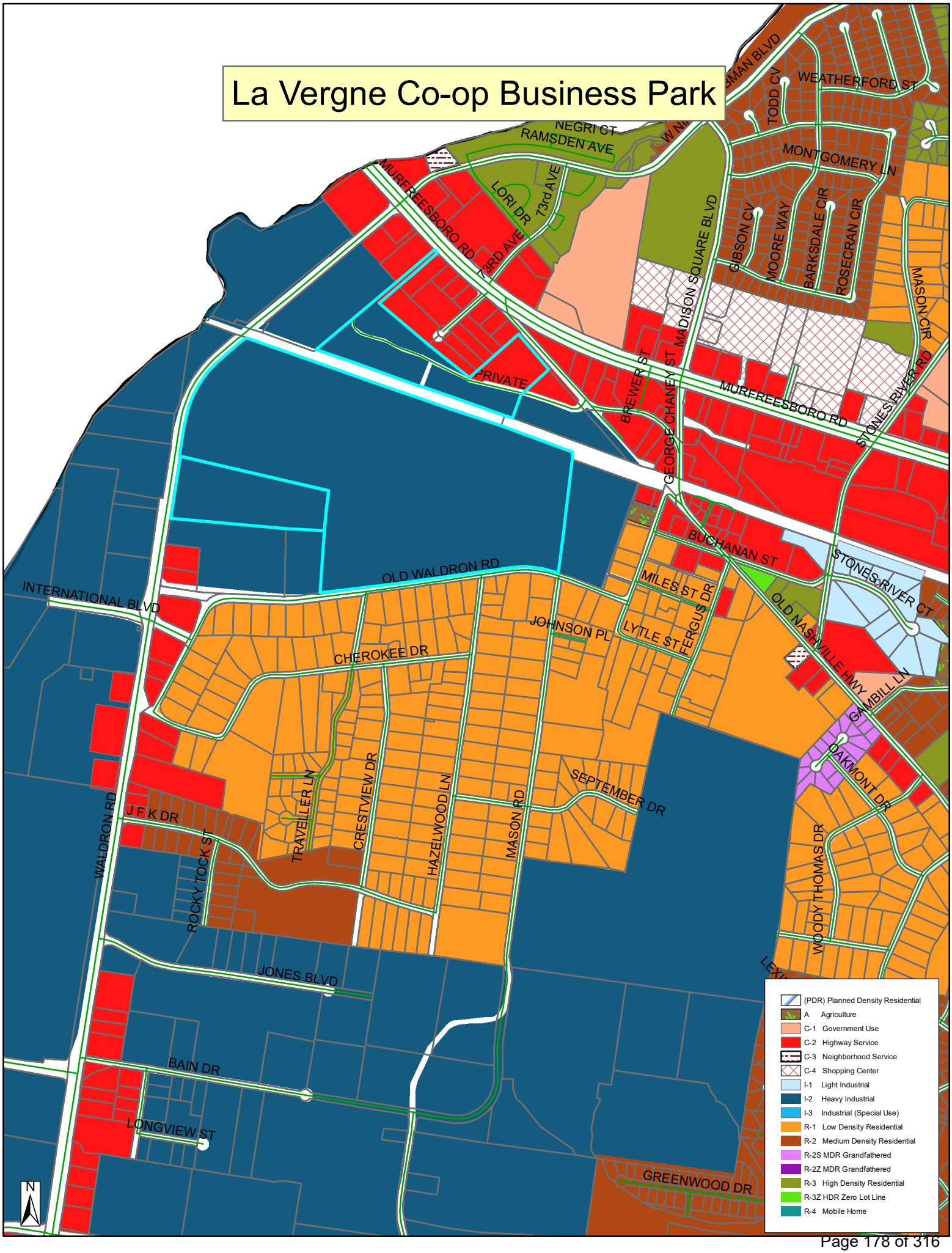
Police

John Eubank
jeubank@lavergnetn.gov

***Note:** The above technical items may not be the only corrections and/or issues needing to be resolved to get approval from the planning commission. New items can be brought up at the workshop and staff can add items at any time that might have been overlooked. It is the applicant's responsibility to make sure that all technical items are addressed and that no new issues exist before the planning commission meeting. Addressing all technical items does not constitute approval. It is the planning commission's decision whether an item passes or fails. Revised plans are due to staff by the following Monday at close of business unless other arrangements are made and documented.


La Vergne Co-op Business Park
NEGRI CT
RAMSDEN AVE
W NIR SHREIBMAN BLVD
MURFREESBORO RD
SAGI CIR
LORI DR
73RD AVE
JORDAN DR
PRIVATE
OLD NASHVILLE HWY
BREWER ST
GOODMAN CIR
OLD WALDRON RD
WALDRON RD
TIPPERARY DR
CHEROKEE DR
HAZELWOOD LN
JOHNSON PL
LYTLE ST
TRAVELLER LN
CRESTVIEW DR
TENCENDUR LN
MASON RD
N


La Vergne Co-op Business Park
W NIR SHREIBMAN BLVD
ROSECRAN CIR
NEGRI CT
RAMSDEN AVE
LORI DR
73rd AVE
73RD AVE
JORDAN DR
GIBSON CV
MOORE WAY
MADISON SQUARE BLVD
MURFREESBORO RD
PRIVATE
BREWER ST
MURFREESBORO RD
ED MILLER DR
OLD NASHVILLE HWY
OLD WALDRON RD
MILES ST
FERGUS DR
INTERNATIONAL BLVD
JOHNSON PL
LYTLE ST
CHEROKEE DR
WALDRON RD
SEPTEMBER DR
J F K DR
TRAVELLER LN
CRESTVIEW DR
HAZELWOOD LN
MASON RD
ROCKY TOOK ST
JONES BLVD
BRIDGESTONE PKWY
BAIN DR
CENTENNIAL DR
N


La Vergne Co-op Business Park
NEGRI CT
RAMSDEN AVE
MURFREESBORO RD
LORI DR
73rd AVE
TODD CV
WEATHERFORD ST
MONTGOMERY LN
GIBSON CV
MOORE WAY
BARKSDALE CIR
ROSECRAN CIR
MASON CIR
MADISON SQUARE BLVD
PRIVATE
BREWER ST
GEORGE CHANEY ST
STONES RIVER RD
BUCHANAN ST
STONES RIVER CT
OLD WALDRON RD
INTERNATIONAL BLVD
MILES ST
FERGUS DR
LYTLE ST
JOHNSON PL
OLD NASHVILLE HWY
AMBILL LN
CHEROKEE DR
OAKMONT DR
SEPTEMBER DR
WALDRON RD
J F K DR
TRAVELLER LN
CRESTVIEW DR
HAZELWOOD LN
MASON RD
ROCKY TOCK ST
WOODY THOMAS DR
JONES BLVD
BAIN DR
LONGVIEW ST
GREENWOOD DR
N
(PDR) Planned Density Residential
A Agriculture
C-1 Government Use
C-2 Highway Service
C-3 Neighborhood Service
C-4 Shopping Center
I-1 Light Industrial
I-2 Heavy Industrial
I-3 Industrial (Special Use)
R-1 Low Density Residential
R-2 Medium Density Residential
R-2S MDR Grandfathered
R-2Z MDR Grandfathered
R-3 High Density Residential
R-3Z HDR Zero Lot Line
R-4 Mobile Home









CO-OP BUSINESS PARK

BUILDING 05- OPTION 1 - LA VERGNE, TENNESSEE

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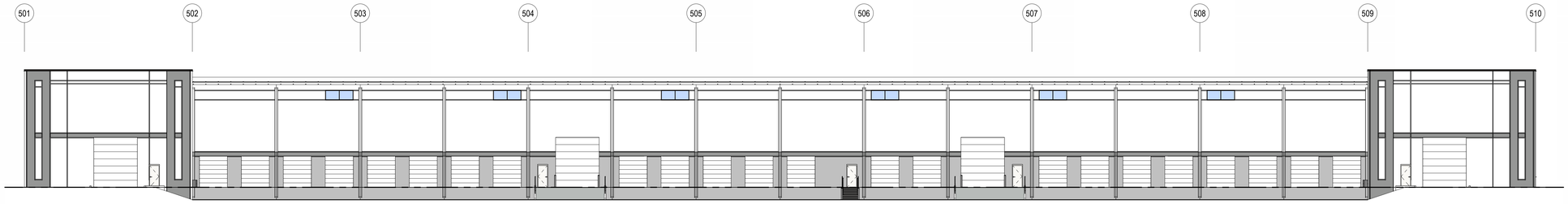
CO-OP BUSINESS PARK

BUILDING 05 - OPTION 1 - LA VERGNE, TENNESSEE

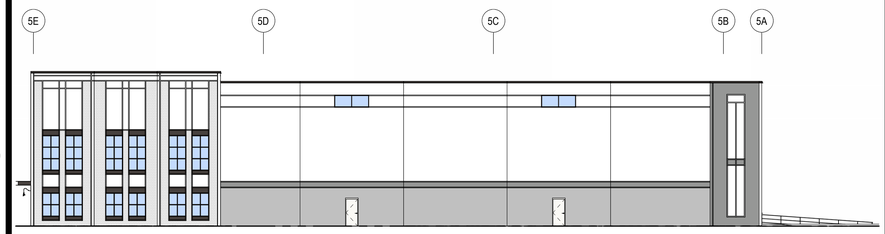
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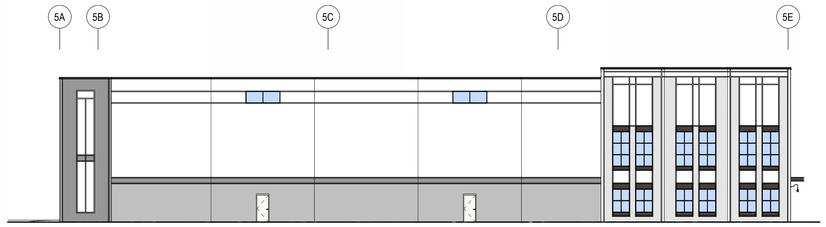
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1E EAST ELEVATION
1/16" = 1'-0"



1D SOUTH ELEVATION
1/16" = 1'-0"



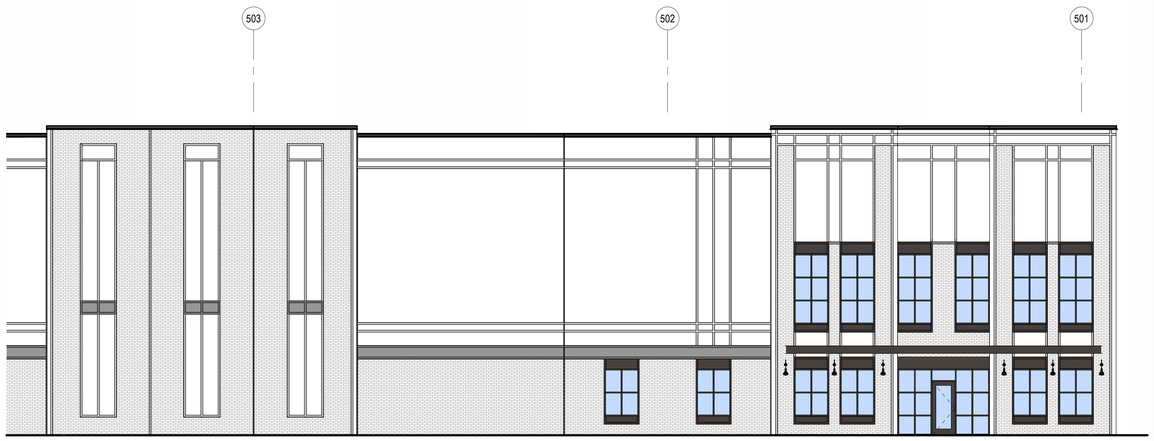
3D NORTH ELEVATION
1/16" = 1'-0"

MATERIALS LEGEND

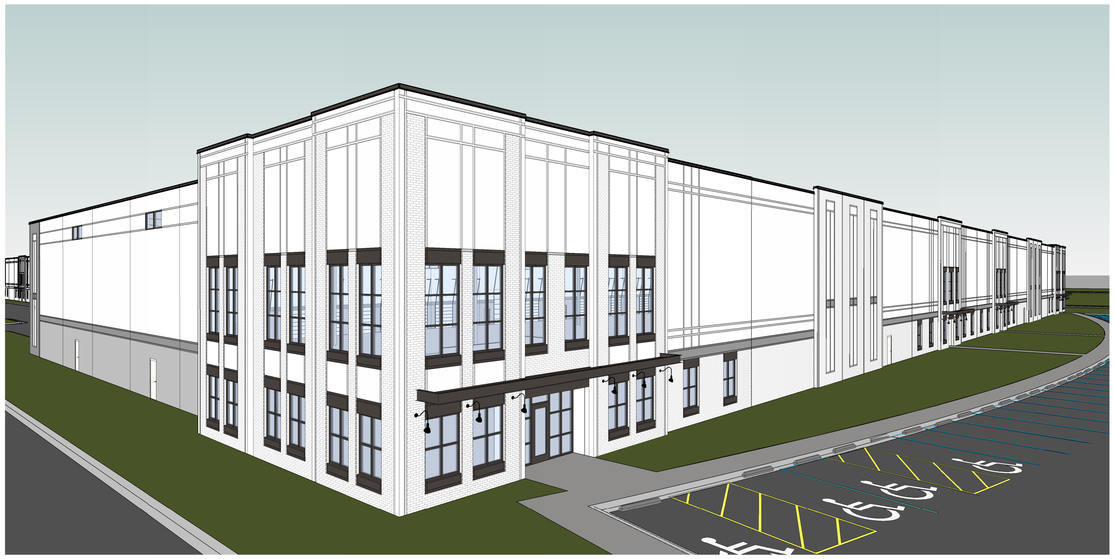
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CP-01	ALUMINUM CANOPY	MAPES	CANTILEVER	BLACK
GL-01	INSULATED GLASS	VITRO	SOLARBAN 60	OPTIGRAY
LT-01	DECORATIVE LIGHT FIXUTRE	-	-	-
MC-01	METAL COPING	ELEVATE	-	BLACK
MG-04	METAL GUTTER	ELEVATE	-	WHITE
PT-01	PAINTED CONCRETE	SHERWIN WILLIAMS		BLACK
PT-02	PAINTED CONCRETE	SHERWIN WILLIAMS	-	SW 7074 SOFTWARE
PT-03	PAINTED CONCRETE	SHERWIN WILLIAMS	-	SW 7071 GRAY SCREEN
PT-04	PAINTED CONCRETE	SHERWIN WILLIAMS	-	SW 7005 PURE WHITE
PT-04M	PAINTED CONCRETE WITH MASONRY FORM LINER	SHERWIN WILLIAMS SPEC FORM LINERS INC.	- SMOOTH BRICK 1303	SW 7005 PURE WHITE -



1C WEST ELEVATION
1/16" = 1'-0"



1A ENLARGED WEST ELEVATION
1/8" = 1'-0"



REVISIONS

PROJECT #:	26552.10
DATE:	DECEMBER 18, 2023
DRAWN BY:	KL/KG
DESIGNER:	KL/KG
CHECKED BY:	--

Pickering
Pickering Firm, Inc.
Facility Design • Civil Engineering • Surveying • Transportation • Natural / Water Resources
6363 Poplar Avenue, Suite 242, Memphis, TN 38119
901.726.0810

CO-OP BUSINESS PARK
BUILDING 5
LA VERGNE, TN 37086

SEAL:

SHEET NUMBER:

A-205

DESCRIPTION:
EXTERIOR ELEVATIONS - BUILDING 5

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MATERIALS LEGEND

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CP-01	ALUMINUM CANOPY	MAPES	CANTILEVER	BLACK
GL-01	INSULATED GLASS	VITRO	SOLARBAN 60	OPTIGRAY
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		SPEC FORM LINERS INC.	SMOOTH BRICK 1303	-

CO-OP BUSINESS PARK

BUILDING 05 - OPTION 1- LA VERGNE, TENNESSEE

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CO-OP BUSINESS PARK

BUILDING 05- OPTION 2 - LA VERGNE, TENNESSEE

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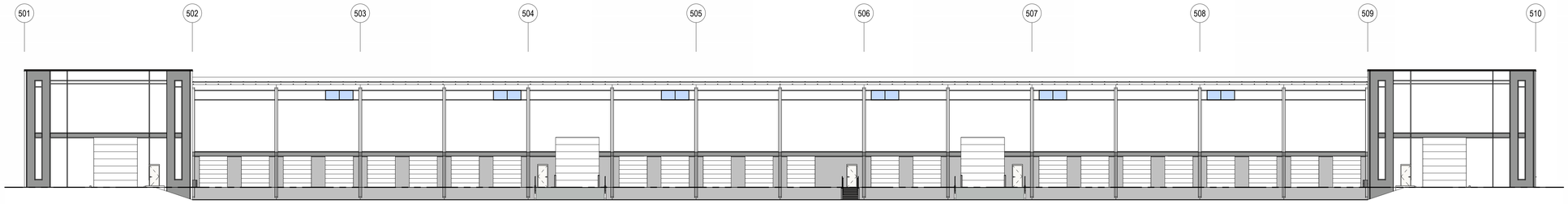
CO-OP BUSINESS PARK

BUILDING 05- OPTION 2 - LA VERGNE, TENNESSEE

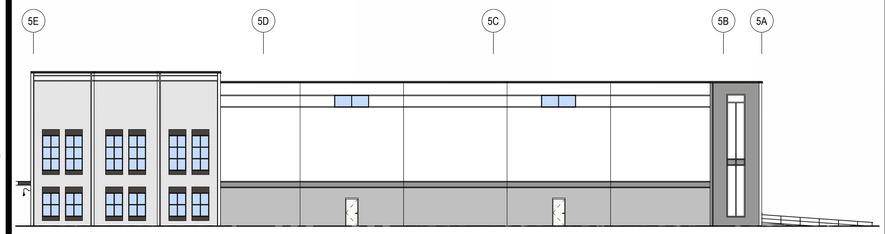
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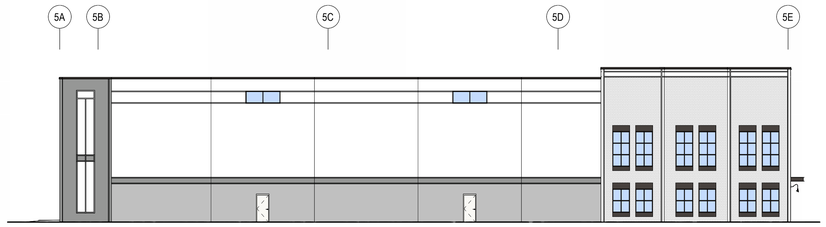
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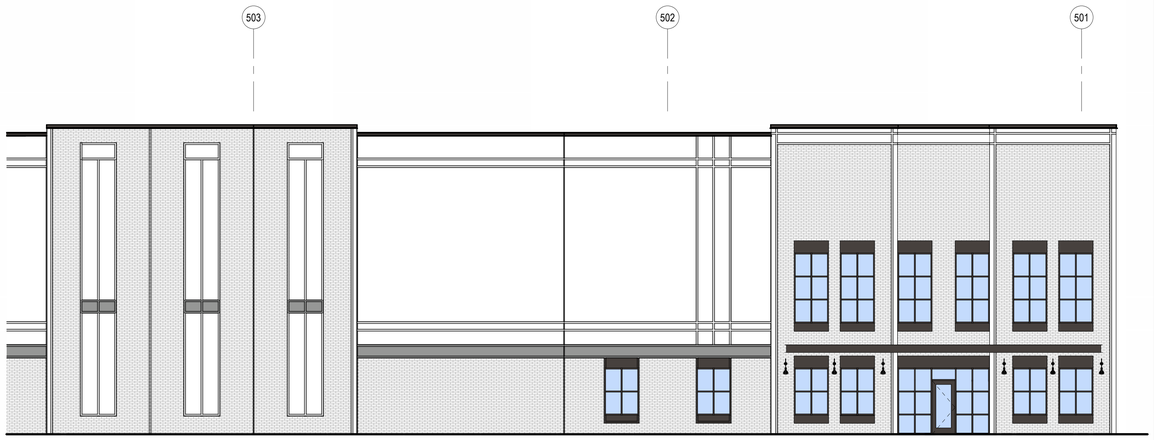
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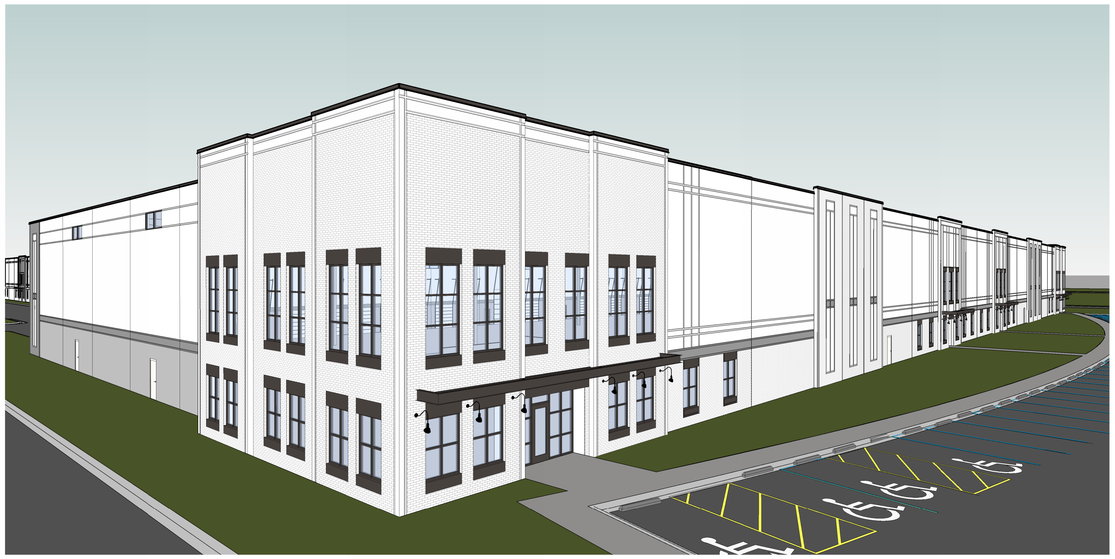
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PROJECT #:	26552.10
DATE:	DECEMBER 18, 2023
DRAWN BY:	KL/KG
DESIGNER:	KL/KG
CHECKED BY:	--

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Facility Design • Civil Engineering • Surveying • Transportation • Natural / Water Resources
6363 Poplar Avenue, Suite 242, Memphis, TN 38119
901.726.0810

CO-OP BUSINESS PARK
BUILDING 5 -NOPTION 2
LA VERGNE, TN 37086

SEAL:

SHEET NUMBER:
A-205

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EXTERIOR ELEVATIONS - BUILDING 5

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MATERIALS LEGEND

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		SPEC FORM LINERS INC.	SMOOTH BRICK 1303	-

CO-OP BUSINESS PARK

BUILDING 05- OPTION 2 - LA VERGNE, TENNESSEE

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alston CONSTRUCTION

Pickering
Engineering & Architectural Design Professionals

SITE PLAN RESUBMITTAL

CO-OP BUSINESS PARK - LOT 2

BUILDINGS 5 - 7
WALDRON ROAD
LA VERGNE, TENNESSEE

CONCEPT PLAN SUBMITTAL: 10/02/2023
CONCEPT PLAN RESUBMITTAL: 10/23/2023
SITE PLAN SUBMITTAL: 11/27/2023
SITE PLAN RESUBMITTAL: 12/18/2023

SITE DATA TABLE		
SITE ADDRESS	WALDRON ROAD LA VERGNE, TENNESSEE	
TAX MAP	MAP 015 PARCEL 02400, 02800	
OVERALL AREA	EXISTING	PROPOSED
SITE AREA	±114.9 AC	±114.9 AC
DISTURBED AREA	N/A	±84.14 AC
DEDICATED R.O.W. AREA	N/A	TBD
IMPERVIOUS AREA	±37.94 AC	±75.83 AC
PERVIOUS AREA	±76.96 AC	±39.07 AC
GENERAL BUILDING DATA & REQUIREMENTS[1]	REQUIRED	PROVIDED
HEIGHT	50 FT (MAX.)	50 FT (MAX.)
STORIES	N/A	1
YARD / SETBACK REQUIREMENTS	REQUIRED (MIN.)	PROVIDED
FRONT YARD	10 FT	10 FT
FRONT BUILDING SETBACK	40 FT	40 FT
SIDE BUILDING SETBACK	20 FT	20 FT
REAR BUILDING SETBACK	15 FT	15 FT
1. THIS PROJECT ADHERES TO THE REQUIREMENTS SET BY THE CITY OF LA VERGNE ZONING ORDINANCE ADOPTED FEBRUARY 6, 1990, LAST AMENDED JANUARY 3, 2023.		

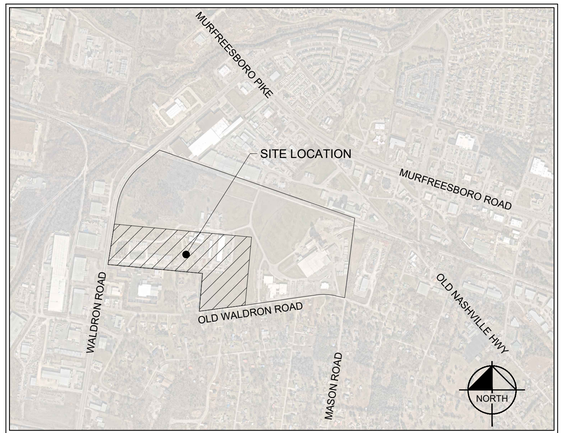
LOT DATA TABLE		
OVERALL AREA	PROPOSED	
SITE AREA	±32.10 AC	
DISTURBED AREA	±31.49 AC	
IMPERVIOUS	±23.92 AC	
PERVIOUS	±8.18 AC	
LOT DATA & REQUIREMENTS[1]	REQUIRED	PROVIDED
FLOOR AREA RATIO		±0.32
LOT COVERAGE	50% (MAX.)	±31.6%
BUILDING DATA	AREA	APPROXIMATE DIMENSIONS
BUILDING 5	±89,100 SF	486' x 180'
BUILDING 6	±181,440 SF	810' x 222'
BUILDING 7	±171,680 SF	810' x 210'
TOTAL BUILDING AREA	±442,220 SF	
PARKING	REQUIRED	PROVIDED
STANDARD CAR PARKING (1 SPACE PER 400 GSF OFFICE + 1 SPACE PER 4,000 GSF WAREHOUSE)	±212	±428
ACCESSIBLE (INCL. VAN ACCESSIBLE)	7 (2 VAN)	16 (16 VAN)
TRUCK PARKS	N/A	±129

PROJECT DESCRIPTION

THE PROPOSED DEVELOPMENT WILL CONSIST OF A THREE BUILDING WAREHOUSE DISTRIBUTION PARK TO BE CONSTRUCTED ON ±32.10 ACRES ALONG WALDRON ROAD IN LA VERGNE, TENNESSEE. IN TOTAL, THE COMBINED AREA FOR ALL THREE BUILDINGS IS ±442,220 SQUARE FEET. THE DEVELOPMENT WILL CONSOLIDATE TWO EXISTING PARCELS (015 02400 AND 015 02800) AND SUBDIVIDE INTO THREE FEATURE LOTS. THE PROPOSED DEVELOPMENT AREA HAS PORTIONS OF THE 500-YEAR FLOODPLAIN PER THE US FEMA FIRM PANEL, BUT IS NOT SHOWN TO HAVE 100-YR FLOODPLAIN ON THE PANEL.

EXISTING PROPERTY SUMMARY

PROPERTY ADDRESS:	WALDRON ROAD LA VERGNE, TENNESSEE 37086
MAP AND PARCEL ID:	MAP 015, PARCELS 02400, 02800
U.S. FEMA FIRM PANEL:	47149C0015J DATED 05/09/2023
EXISTING ZONING:	I-2
EXISTING LAND USE:	HEAVY INDUSTRIAL/MANUFACTURING



VICINITY MAP
1" = 1,000'

CITY OF LA VERGNE
RUTHERFORD COUNTY, TENNESSEE

PROJECT DESIGN TEAM

ARCHITECT
PICKERING FIRM, INC.
6363 POPLAR AVENUE, SUITE 300
MEMPHIS, TN 38119
CONTACT: KEVIN GETMAN
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CIVIL ENGINEER
KIMLEY-HORN AND ASSOCIATES, INC.
10 LEA AVENUE, SUITE 400
NASHVILLE, TN 37210
CONTACT: ROBERT ARTS, PE
PHONE: (615) 564-2701

SURVEY
BARGE DESIGN SOLUTIONS, INC.
211 COMMERCE STREET, SUITE 600
NASHVILLE, TN 37210
CONTACT: JIM OVERFELT
PHONE: (615) 252-4421

GEOTECH / ENVIRONMENTAL
GEOSERVICES, LLC.
163 BUSINESS PARK DRIVE, SUITE 15
LEBANON, TN 37087
CONTACT: WAYNE HARNACK, PE
PHONE: (615) 547-9314

PERMITTING / UTILITY CONTACTS

BUILDING DEPT.
CITY OF LA VERGNE CODES
5175 MURFEESBORO RD
LA VERGNE, TN 37086
CONTACT: RANDOLPH SALYERS
PHONE: (615) 213-2624

STORMWATER
CITY OF LA VERGNE
STORMWATER DEPARTMENT
5175 MURFREESBORO ROAD
LA VERGNE, TN 37086
PHONE: (615) 287-8703

SANITARY SEWER
LA VERGNE PUBLIC WORKS
148 INTERNATIONAL BLVD
LA VERGNE, TN 37086
CONTACT: SCOTT TATALOVICH
PHONE: (615) 287-8739

ZONING
CITY OF LA VERGNE PLANNING
5175 MURFREESBORO ROAD
LA VERGNE, TN 37086
CONTACT: BO LOGAN
PHONE: (615) 862-6608

ELECTRIC
NASHVILLE ELECTRIC SERVICE
1214 CHURCH STREET
NASHVILLE, TN 37246
CONTACT: JOSH MCGILL
PHONE: (615) 747-3662

NATURAL GAS
SMYRNA GAS DEPARTMENT
315 SOUTH LOWRY ST
SMYRNA, TN 37167
PHONE: (615) 355-5740

WATER
LA VERGNE PUBLIC WORKS
148 INTERNATIONAL BLVD
LA VERGNE, TN 37086
CONTACT: SCOTT TATALOVICH
PHONE: (615) 287-8739

FIRE
CITY OF LA VERGNE FIRE MARSHAL
283 OLD NASHVILLE HWY
LA VERGNE, TN 37086
CONTACT: CURTIS BRINKLEY
PHONE: (615) 287-5832

TELEPHONE
TDS TELECOM
5265 MURFREESBORO ROAD
LA VERGNE, TN 37086
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CABLE
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LA VERGNE, TN 37086
PHONE: (615) 350-9375

Sheet List Table

SHEET NUMBER	SHEET TITLE
C0-00	COVER - LOT 2
C0-01	GENERAL NOTES
C0-10	SITE VICINITY MAP
C0-20	BUILDING PHASING PLAN
C1-00	EXISTING CONDITIONS
C1-10	DEMOLITION PLAN
C2-20	SITE LAYOUT - OVERALL
C2-21	SITE LAYOUT - ENLARGEMENT
C2-22	SITE LAYOUT - ENLARGEMENT
C3-00	EPSC PHASING PLAN
C3-10	EROSION CONTROL PLAN - PHASE 1 ENLARGEMENT
C3-11	EROSION CONTROL PLAN - PHASE 1 ENLARGEMENT
C3-20	EROSION CONTROL PLAN - PHASE 2 ENLARGEMENT
C3-21	EROSION CONTROL PLAN - PHASE 2 ENLARGEMENT
C3-30	EROSION CONTROL PLAN - PHASE 3 ENLARGEMENT
C3-31	EROSION CONTROL PLAN - PHASE 3 ENLARGEMENT
C3-50	EROSION CONTROL DETAILS
C3-51	EROSION CONTROL DETAILS
C4-20	GRADING AND DRAINAGE PLAN - OVERALL
C4-21	SITE GRADING PLAN - ENLARGEMENT
C4-22	SITE GRADING PLAN - ENLARGEMENT
C4-50	STORMWATER TABLES
C6-20	UTILITY PLAN - OVERALL
C6-21	UTILITY PLAN - ENLARGEMENT
C6-22	UTILITY PLAN - ENLARGEMENT
C8-10	SITE DETAILS
C8-11	SITE DETAILS
C8-20	UTILITY DETAILS
C8-21	UTILITY DETAILS
C8-22	UTILITY DETAILS
L1-20	LANDSCAPE PLAN - OVERALL
L1-21	LANDSCAPE PLAN - ENLARGEMENT
L1-22	LANDSCAPE PLAN - ENLARGEMENT
L1-50	LANDSCAPE NOTES
L1-51	LANDSCAPE DETAILS

OWNER / DEVELOPER

PANATTONI®
PANATTONI DEVELOPMENT COMPANY
ONE MUSIC CIRCLE SOUTH, SUITE 110
NASHVILLE, TENNESSEE 37203
PHONE: (303) 408-7817
CONTACT: JEFF KONIECZNY

PLANS PREPARED BY

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PLAN REVISIONS

REVISION NO.	DATE	REMARKS

FILE NUMBER	SHEET NUMBER	TOTAL SHEETS
118163044	C0-00	35

ENGINEER'S SEAL

ROBERT JAMES ARTS
REGISTERED ENGINEER
12/18/2023
COMMERCE
No. 121043
STATE OF TENNESSEE

811 Know what's below. Call before you dig.

Drawing name: K:\NSH_LDEV\118163044 - co-op la vergne\4-CADD\plansheets\C0-00 COVER.dwg CO-00 COVER LOT 2 Dec 18, 2023 10:25am by: Garrett.Froula

CONTRACTOR RESPONSIBILITIES:

1. PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL BE RESPONSIBLE FOR:

   A. THE CONTRACTOR SHALL VERIFY ALL PROPOSED AND EXISTING CONDITIONS INCLUDING UTILITIES (INVERTS, CONNECTIONS, MATERIALS, ETC.) AND DIMENSIONS WITHIN THE LIMITS OF WORK PRIOR TO THE START OF CONSTRUCTION.

   B. REFER TO ARCHITECTURAL DRAWINGS FOR DETAILED BUILDING INFORMATION.

   C. THE CONTRACTOR IS RESPONSIBLE FOR ALL NOTIFICATIONS AND LIAISONS WITH UTILITY COMPANIES DURING THE PROCESS OF LOCATING, RELOCATING, AND TYING INTO PUBLIC UTILITIES.

   D. PRIOR TO COMMENCING LAND DISTURBANCE ACTIVITY, THE LIMITS OF LAND DISTURBANCE SHALL BE CLEARLY AND ACCURATELY DEMARCATED WITH STAKES, RIBBONS, OR OTHER APPROPRIATE MEANS. THE LOCATION AND EXTENT OF ALL AUTHORIZED LAND DISTURBANCE SHALL OCCUR INSIDE THE APPROVED LIMITS INDICATED ON THE APPROVED PLANS.

2. DURING CONSTRUCTION:

   A. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DEVIATIONS FROM THESE PLANS AND SPECIFICATIONS WITHOUT PRIOR WRITTEN CONSENT OF THE ENGINEER MAY CAUSE THE WORK TO BE UNACCEPTABLE.

   B. THE CONTRACTOR SHALL USE MATERIALS AND EMPLOY CONSTRUCTION METHODS IN ORDER TO COMPLY WITH THE DRAWINGS AND SPECIFICATIONS. WHERE A CONFLICT OCCURS, THE STRICTEST DESIGN SHALL GOVERN. THE ENGINEER'S REVIEW OF SHOP DRAWINGS, PRODUCT DATA, ETC., DOES NOT RELIEVE THE CONTRACTOR FROM COMPLYING WITH THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL INFORM THE ENGINEER IN WRITING OF ANY SPECIFIC DEVIATIONS AND OBTAIN ENGINEER'S WRITTEN APPROVAL OF THE SPECIFIC DEVIATION.

   C. IT IS SOLELY THE CONTRACTOR'S RESPONSIBILITY TO FOLLOW ALL APPLICABLE SAFETY CODES AND REGULATIONS DURING ALL PHASES OF CONSTRUCTION.

   D. ALL CONSTRUCTION MUST CONFORM TO THE STANDARDS, SPECIFICATIONS, AND CODES OF THE GOVERNING MUNICIPALITIES.

   E. CONSTRUCTION SHALL MEET ALL CURRENT STANDARDS SET FORTH IN THE AMERICANS WITH DISABILITIES ACT.

   F. IF THE CONTRACTOR DAMAGES ANY EXISTING UTILITIES DURING CONSTRUCTION, HE SHALL, AT HIS OWN EXPENSE, REPLACE OR REPAIR THE UTILITIES TO ORIGINAL CONDITION AND QUALITY AS APPROVED BY THE OWNER AND REPRESENTATIVE OF THE APPROPRIATE UTILITY COMPANY.

   G. SUFFICIENT BARRICADES, LIGHTS, SIGNS, AND OTHER TRAFFIC CONTROL METHODS IN ACCORDANCE WITH GOVERNING ORDINANCES MAY BE NECESSARY FOR THE PROTECTION AND SAFETY OF THE PUBLIC. SAID CONTROL DEVICES SHALL BE PER THE MANUAL OF TRAFFIC CONTROL DEVICES, M.U.T.C.D., CURRENT EDITION, AND SHALL BE PROVIDED AND MAINTAINED THROUGHOUT CONSTRUCTION.

   H. TRAFFIC CONTROLS AND OTHER WARNING DEVICES SHALL BE INSTALLED PRIOR TO THE COMMENCEMENT OF ANY WORK ON CITY, COUNTY, OR TENNESSEE DEPARTMENT OF TRANSPORTATION ROADS. THEY SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION AND SHALL REMAIN IN PLACE UNTIL THE CONCLUSION OF ALL WORK.

   I. ALL WARNING DEVICES SHALL BE EITHER TYPE I BARRICADES OR DRUMS WITH WARNING LIGHTS ON EVERY OTHER DEVICE. THEY SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), CURRENT EDITION, AND CITY OF LA VERGNE STANDARDS FOR COLOR, SIZE, REFLECTIVITY, HEIGHT, AND PLACEMENT.

   J. FIRE DEPARTMENT ACCESS SHALL BE MAINTAINED AT ALL TIMES.

   K. CONTRACTOR SHALL SHORE AND BRACE ALL EARTH, FORMS, CONCRETE, STEEL, WOOD, AND MASONRY TO RESIST GRAVITY, EARTH, WIND, THERMAL, CONSTRUCTION, AND MISCELLANEOUS LOADS DURING CONSTRUCTION.

   L. ON-SITE BURIAL OF DEBRIS IS PROHIBITED.

   M. UNLESS OTHERWISE NOTED THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OF ALL FABRICATED MATERIALS TO THE ENGINEER. DESIGN DOCUMENTS SHALL NOT BE REPRODUCED AS SHOP DRAWINGS.

   N. IN CASE OF UNFORESEEN CONSTRUCTION COMPLICATIONS OR DISCREPANCIES, THE CONTRACTOR IS TO IMMEDIATELY NOTIFY THE ENGINEER IN WRITING.

   O. ALL REQUIRED TESTING REPORTS SHALL BE AVAILABLE AT THE JOB SITE.

   P. AS-BUILT DRAWINGS OF ROADWAYS, STORM DRAINS, SANITARY SEWER AND WATER LINES, FIELD APPROVAL BY THE ENGINEER, AND ALL APPLICABLE BONDS ARE REQUIRED PRIOR TO FINAL ACCEPTANCE BY THE OWNER.

   Q. CONTRACTOR SHALL MAINTAIN CONTINUOUS UTILITY SERVICE TO ALL EXISTING BUILDINGS THROUGHOUT CONSTRUCTION UNLESS APPROVAL FOR SERVICE INTERRUPTION IS OBTAINED FROM THE OWNERS IN ADVANCE.

   R. THE CONTRACTOR SHALL VERIFY EXISTING CONDITIONS TO ENSURE THAT THE NEW WORK SHALL FIT INTO THE EXISTING SITE IN THE MANNER INTENDED AND AS SHOWN ON THE DRAWINGS. SHOULD ANY CONDITIONS EXIST THAT ARE CONTRARY TO THOSE SHOWN ON THE DRAWINGS, THE CONTRACTOR SHALL NOTIFY THE OWNER'S REPRESENTATIVE PRIOR TO PERFORMING ANY WORK IN THE AREA INVOLVING DIFFERENCES. NOTIFICATION SHALL BE IN THE FORM OF A DRAWING OR SKETCH INDICATING FIELD MEASUREMENTS AND NOTES RELATING TO THE AREA.

   S. ANY FOREIGN ITEM FOUND DURING CONSTRUCTION IS THE PROPERTY OF THE OWNER. THIS INCLUDES, BUT IS NOT LIMITED TO, PRECIOUS METALS, COINS, PAPER CURRENCY, ARTIFACTS AND ANTIQUITIES.

   T. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE DONE TO THE PREMISES OR ADJACENT PREMISES, OR INJURIES TO THE PUBLIC DURING THE CONSTRUCTION OF THE WORK, WHETHER CAUSED BY HIMSELF, HIS SUBCONTRACTORS, OR THE CARELESSNESS OF ANY OF HIS EMPLOYEES.

   U. THE CONTRACTOR SHALL FURNISH, INSTALL AND MAINTAIN ALL NECESSARY TEMPORARY WORKS FOR THE PROTECTION OF THE WORK AND THE PUBLIC, INCLUDING BARRICADES, WARNING SIGNS, LIGHTS, ETC.

   V. THE CONTRACTOR ACKNOWLEDGES & AGREES THAT THE WORK IS ENTIRELY AT HIS RISK UNTIL SITE IS ACCEPTED, AND HE WILL BE HELD RESPONSIBLE FOR ITS SAFETY BY THE OWNER. THE CONTRACTOR WILL INDEMNIFY THE OWNER & OWNER'S REPRESENTATIVE FROM LIABILITY AT THE SITE THROUGHOUT THE CONSTRUCTION PROCESS.

   W. THE CONTRACTOR SHALL GIVE ALL NECESSARY NOTICES AND OBTAIN ALL PERMITS AND PAY ALL LEGAL FEES. HE SHALL ALSO COMPLY WITH ALL CITY, COUNTY AND STATE BUILDING LAWS, ORDINANCES OR REGULATIONS RELATING TO BUILDING SIDEWALKS, STREETS, BLASTING, PUBLIC INFRASTRUCTURE, STORMWATER REGULATIONS, ETC.

   X. THE CONTRACTOR IS TO CHECK AND VERIFY ALL MEASUREMENTS, LEVELS, ETC. BEFORE ORDERING MATERIALS AND PROCEEDING WITH THE WORK, AND IS TO BE RESPONSIBLE FOR THE SAME.

   Y. REFERENCE POINTS AND HUBS DURING THE CONSTRUCTION OF HIS WORK, AND SHALL BEAR THE COST OF REPLACING SAME.

   Z. CARE SHALL BE TAKEN TO PROTECT ANY UTILITIES, TREES, ETC. WHICH ARE TO REMAIN AND NOT TO BE DISTURBED BY THE CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGES TO SUCH PROPERTY.

DEMOLITION INFORMATION:

1. NOTIFICATIONS:

   THE CONTRACTOR SHALL NOTIFY THE OWNER AND CITY INSPECTOR(S) 24 HOURS PRIOR TO ANY DEMOLITION OR CONSTRUCTION.

2. DISPOSAL GUIDELINES:

   A. ONLY ITEMS SPECIFICALLY NOTED TO BE DEMOLISHED SHALL BE REMOVED FROM THE SITE.

   B. REMOVE EXISTING PAVED AREAS AS SHOWN INCLUDING DRIVEWAYS, SIDEWALKS, PARKING AREAS, SERVICE AREAS, EQUIPMENT PADS, AND ALL MISCELLANEOUS PAVING.

   C. ALL DEBRIS RESULTING FROM DEMOLITION SHALL BE REMOVED FROM THE SITE AND DISPOSED OF LEGALLY BY THE CONTRACTOR IN ACCORDANCE WITH LOCAL STATE AND FEDERAL REGULATIONS. BACKFILL ALL TRENCHES AND EXCAVATIONS RESULTING FROM DEMOLITION.

   D. ALL DEMOLISHED MATERIAL BECOMES THE PROPERTY OF THE CONTRACTOR UNLESS OTHERWISE NOTED.

3. TREE PROTECTION GUIDELINES:

   PROTECT ALL EXISTING TREES NOTED "TO REMAIN" AND ALL ITEMS TO BE TURNED OVER TO THE OWNER DURING DEMOLITION. TAKE ALL NECESSARY PRECAUTIONS AND PROTECTIVE MEASURES. ANY EXISTING ITEMS TO BE TURNED OVER TO THE OWNER WHICH ARE DAMAGED DURING DEMOLITION SHALL BE REPAIRED AT NO ADDITIONAL COST TO THE OWNER. TREES WHICH ARE DAMAGED WILL BE REPLACED OR REIMBURSED AT A RATE TO BE DETERMINED BY THE OWNER.

4. UTILITIES:

   A. PRIOR TO REMOVING OR ABANDONING ANY UTILITY THE CONTRACTOR SHALL VERIFY THAT NO UPSTREAM SERVICE WILL BE TERMINATED. THE CONTRACTOR SHALL INFORM THE ENGINEER IN WRITING OF ANY TERMINATION NOT SHOWN ON THE PLANS.

   B. ALL ABANDONED WATER LINES, STORM SEWER PIPE, SANITARY SEWER PIPES, GAS LINES, OR ANY OTHER ABANDONED UNDERGROUND UTILITY SHALL BE ABANDONED IN PLACE UNLESS NOTED OTHERWISE.

SITE INFORMATION:

1. THE FOLLOWING ARE APPLICABLE TO ALL CIVIL DOCUMENTS:

   A. WHERE A DETAIL SECTION, TYPICAL SECTION, OR A NOTE IS SHOWN FOR ONE CONDITION, IT SHALL APPLY FOR ALL LIKE OR SIMILAR CONDITIONS, UNLESS OTHERWISE NOTED ON THE PLANS.

   B. EXISTING AND PROPOSED CONTOURS ARE AT ONE (1) FOOT INTERVALS.

   C. ALL DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.

   D. ALL PIPE LENGTHS SPECIFIED IN THESE PLANS ARE THE HORIZONTAL DISTANCE AND ARE SHOWN FOR REFERENE ONLY. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE ACTUAL LENGTHS BASED ON PROPOSED PIPE SLOPE.

   E. PIPE LENGTHS IN PLANS ARE MEASURED FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE UNLESS OTHERWISE NOTED.

EROSION AND SEDIMENT CONTROL INFORMATION:

1. COMPREHENSIVE:

   A. THE ESCAPE OF SEDIMENT FROM THE SITE SHALL BE PREVENTED BY THE INSTALLATION OF EROSION AND SEDIMENT CONTROL MEASURES AND PRACTICES PRIOR TO OR CONCURRENT WITH LAND-DISTURBING ACTIVITIES.

   B. PROVISIONS TO PREVENT EROSION OF SOIL FROM THE SITE SHALL BE AT A MINIMUM IN CONFORMANCE WITH THE REQUIREMENTS OF THE TENNESSEE EROSION AND SEDIMENT CONTROL HANDBOOKS. IF FULL IMPLEMENTATION OF THE APPROVED PLAN DOES NOT PROVIDE FOR EFFECTIVE EROSION CONTROL, ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IMPLEMENTED TO CONTROL OR TREAT THE SEDIMENT SOURCE.

   C. FAILURE TO INSTALL, OPERATE, OR MAINTAIN ALL EROSION CONTROL MEASURES WILL RESULT IN ALL CONSTRUCTION BEING STOPPED ON THE JOB SITE UNTIL SUCH MEASURES ARE CORRECTED BACK TO THE STANDARDS SPECIFIED IN THE TENNESSEE EROSION AND SEDIMENT CONTROL HANDBOOKS, CURRENT EDITION.

   D. EROSION CONTROL MEASURES WILL BE MAINTAINED AT ALL TIMES. IF FULL IMPLEMENTATION OF THE APPROVED PLAN DOES NOT PROVIDE FOR EFFECTIVE EROSION CONTROL, ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IMPLEMENTED TO CONTROL OR TREAT THE SEDIMENT SOURCE.

   E. EROSION CONTROL DEVICES SHALL BE INSTALLED PRIOR TO LAND DISTURBANCE. THE LOCATION OF SOME OF THE EROSION CONTROL DEVICES MAY HAVE TO BE ALTERED FROM THAT SHOWN ON THE APPROVED PLANS IF DRAINAGE PATTERNS DURING CONSTRUCTION ARE DIFFERENT FROM THE FINAL PROPOSED DRAINAGE PATTERNS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ACCOMPLISH EROSION CONTROL FOR ALL DRAINAGE PATTERNS CREATED AT VARIOUS STAGES DURING CONSTRUCTION. ANY DIFFICULTY IN CONTROLLING EROSION DURING ANY PHASE OF CONSTRUCTION SHALL BE REPORTED TO THE ENGINEER IMMEDIATELY.

   F. THE CONSTRUCTION OF THE SITE WILL COMMENCE WITH THE INSTALLATION OF EROSION CONTROL MEASURES SUFFICIENT TO CONTROL SEDIMENT DEPOSITS AND EROSION. ALL SEDIMENT CONTROL WILL BE MAINTAINED UNTIL ALL UPSTREAM GROUND WITHIN THE CONSTRUCTION AREA HAS BEEN COMPLETELY STABILIZED WITH PERMANENT VEGETATION AND ALL ROADS/DRIVEWAYS HAVE BEEN PAVED.

   G. CONSTRUCTION EXITS SHALL BE CONSTRUCTED AT EACH POINT OF ENTRY OR EXIT FROM THE SITE AND SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOW OF MUD ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH STONE AS CONDITIONS DEMAND, REPAIR, AND/OR CLEANOUT OF ANY STRUCTURES USED TO TRAP SEDIMENT. ALL MATERIALS SPILLED, DROPPED, WASHED, OR TRACKED FROM VEHICLES OFF SITE ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY. ACCESS POINTS PROTECTED WITH A CONSTRUCTION EXIT SHALL BE OTHERWISE BARRICADED UNTIL THE SITE IS STABILIZED.

ADA COMPLIANCE:

A. CURB RAMPS ALONG PUBLIC STREETS AND IN THE PUBLIC RIGHT-OF-WAY SHALL BE CONSTRUCTED BASED ON THE CITY STANDARD CONSTRUCTION DETAILS AND SPECIFICATIONS.

B. PRIVATE CURB RAMPS ON THE SITE (I.E. OUTSIDE PUBLIC STREET RIGHT-OF-WAY) SHALL CONFORM TO ADA STANDARDS AND SHALL HAVE A DETECTABLE WARNING SURFACE THAT IS FULL WIDTH AND FULL DEPTH OF THE CURB RAMP, NOT INCLUDING FLARES.

C. ALL ACCESSIBLE ROUTES, GENERAL SITE AND BUILDING ELEMENTS, RAMPS, CURB RAMPS, STRIPING, AND PAVEMENT MARKINGS SHALL CONFORM TO ADA STANDARDS FOR ACCESSIBLE DESIGN, LATEST EDITION.

D. ANY COMPONENTS OF THE PROJECT SERVING MULTIFAMILY DWELLINGS IN BUILDINGS THAT HAVE 4 OR MORE UNITS PER DWELLING SHALL ALSO CONFORM TO THE FAIR HOUSING ACT (FHA), AND COMPLY WITH THE FAIR HOUSING ACT DESIGN MANUAL BY THE US DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT.

E. BEFORE PLACING PAVEMENT, CONTRACTOR SHALL VERIFY THAT SUITABLE ACCESSIBLE PEDESTRIAN ROUTES (PER ADA AND FHA) EXIST TO AND FROM EVERY DOOR AND ALONG SIDEWALKS, ACCESSIBLE PARKING SPACES, ACCESS AISLES, AND ACCESSIBLE ROUTES. IN NO CASE SHALL AN ACCESSIBLE RAMP SLOPE EXCEED 1 VERTICAL TO 12 HORIZONTAL. IN NO CASE SHALL SIDEWALK CROSS SLOPE EXCEED 2.0 PERCENT. IN NO CASE SHALL LONGITUDINAL SIDEWALK SLOPE EXCEED 5.0 PERCENT. ACCESSIBLE PARKING SPACES AND ACCESS AISLES SHALL NOT EXCEED 2.0 PERCENT SLOPE IN ANY DIRECTION.

F. CONTRACTOR SHALL TAKE FIELD SLOPE MEASUREMENTS ON FINISHED SUBGRADE AND FORM BOARDS PRIOR TO PLACING PAVEMENT TO VERIFY THAT ADA SLOPE REQUIREMENTS ARE PROVIDED. CONTRACTOR SHALL CONTACT ENGINEER PRIOR TO PAVING IF ANY EXCESSIVE SLOPES ARE ENCOUNTERED. NO CONTRACTOR CHANGE ORDERS WILL BE ACCEPTED FOR ADA SLOPE COMPLIANCE ISSUES.

CONCRETE INFORMATION (SITE WORK ONLY):

1. PRODUCT CRITERIA:

   A. UNLESS OTHERWISE NOTED CEMENT SHALL BE TYPE I OR III CONFORMING TO ASTM C150. AGGREGATES SHALL BE NORMAL WEIGHT CONFORMING TO ASTM C33.

   B. CONCRETE SHALL CONFORM TO ACI BUILDING CODE (318-89). UNLESS NOTED CONCRETE SHALL BE NORMAL WEIGHT AND HAVE A 28 DAY COMPRESSIVE STRENGTH OF 3,500 P.S.I.

   C. SLUMP SHALL BE 3" TO 5" FOR REGULAR MIX. LARGER SLUMP SHALL BE PERMITTED WITH WATER REDUCING ADMIXTURES AND WRITTEN CONSENT OF THE ENGINEER.

   D. THE RELATIONSHIP BETWEEN MAXIMUM AGGREGATE SIZE TO MINIMUM AMOUNT OF CEMENT IN CONCRETE PAVEMENT (LB. PER C.Y. OR MIX) SHALL BE AS FOLLOWS: 1" - 520, 3/4" - 540, 1/2" - 590, 3/8" - 610.

2. CURING CRITERIA:

   A. CONCRETE CURING SHALL COMPLY WITH ACI 308. CURING PROCESS SHALL START IMMEDIATELY FOLLOWING INITIAL SET. CURING SHALL BE BY CURING COMPOUND.

   B. CONCRETE EXPOSED TO THE WEATHER SHALL BE AIR-ENTRAINED IN ACCORDANCE WITH ACI 318-89 TABLE 4.1.1. NORMAL WEIGHT CONCRETE SLABS SHALL HAVE AIR CONTENT IN ACCORDANCE WITH ACI 302.IR-89 TABLE 5.2.7A.

   C. HOT WEATHER CONCRETING SHALL COMPLY WITH ACI 305. NO CONCRETE ABOVE 90 DEGREES FAHRENHEIT SHALL BE POURED. LOWER CONCRETE TEMPERATURE BY COOLING WATER AND AGGREGATE. FORMS, STEEL, AND SUBGRADE SHALL BE SPRINKLED WITH COLD WATER. AFTER FINISHING CONCRETE USE LIGHT FOG SPRAY UNTIL CURING COMPOUND IS USED.

   D. COLD WEATHER CONCRETING SHALL COMPLY WITH ACI 306. SPECIAL MATERIAL PROCEDURES SHALL BE PROVIDED DURING PLACING AND CURING OF CONCRETE BELOW 40 DEGREES FAHRENHEIT.

   E. E. CURING, HOT, AND COLD WEATHER CONCRETING PROCEDURES ARE ONLY GIVEN AS A GUIDE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PREVENT CONCRETE DAMAGE AND CRACKS. DAMAGED OR CRACKED CONCRETE WILL NOT BE ACCEPTED.

REINFORCING STEEL INFORMATION (SITE WORK ONLY):

1. PRODUCT CRITERIA:

   A. REINFORCING STEEL SHALL CONFORM TO ASTM A-615, GRADE 60 AND GRADE 40 FOR #3 AND SMALLER BARS. MINIMUM LAP 48" DIAMETER.

   B. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A-185, MINIMUM LAP SHALL BE 8".

   C. REINFORCING THAT IS WELDED SHALL BE WELDABLE TYPE AND CONFORM TO ASTM A-706.

PAVEMENT INFORMATION:

1. PAVEMENT:

   A. ALL MATERIALS, EQUIPMENT, METHODS OF CONSTRUCTION, AND WORKMANSHIP SHALL CONFORM TO THE TENNESSEE DEPARTMENT OF TRANSPORTATION, TDOT, STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, CURRENT EDITION.

   B. SEE PAVEMENT DETAILS ON CONSTRUCTION DOCUMENTS FOR SPECIFIC DESIGN INFORMATION AND REQUIREMENTS.

   C. ALL CURB AND GUTTER TO BE 24" AND CONSTRUCTED OF 3000 P.S.I. CONCRETE UNLESS OTHERWISE NOTED.

2. SIGNING AND STRIPING:

   A. SIGNING AND STRIPING TO BE PROVIDED BY THE CONTRACTOR ACCORDING TO THE DRAWINGS AND SPECIFICATIONS.

   B. ALL PAVEMENT MARKINGS SHALL CONFORM TO CURRENT MUTCD STANDARDS. ALL PAVEMENT MARKINGS ON PRIVATE PROPERTY SHALL BE PAINT, UNLESS NOTED OTHERWISE. ALL PAVEMENT MARKINGS ON PUBLIC RIGHT-OF-WAY SHALL BE THERMOPLASTIC, UNLESS NOTED OTHERWISE.

STORM SEWER NOTES:

1. REINFORCED CONCRETE PIPE SHALL BE RCP CLASS III UNLESS OTHERWISE NOTED WITH BELL-AND-SPIGOT AND GASKETED JOINTS WITH ASTM C 443 RUBBER GASKETS.
2. FILL HEIGHTS OVER 13' REQUIRE CLASS IV RCP STORM PIPE.
3. STORM INLETS SHALL BE PRECAST IN ACCORDANCE WITH CITY OF LA VERGNE PUBLIC WORKS SPECIFICATIONS WHICH MEET OR EXCEED ASTM C 478.
4. ALL MANHOLE FRAMES AND COVERS ARE TO BE PER CITY OF LA VERGNE PUBLIC WORKS STANDARD DETAIL FOR DIMENSIONS AND MATERIALS AND AS BELOW IF NOT OTHERWISE INDICATED. FERROUS; 24-INCH (610-MM) ID BY 7- TO 9-INCH (175- TO 225-MM) RISER WITH 4-INCH-(102-MM-) MINIMUM WIDTH FLANGE AND 26-INCH- (660-MM-) DIAMETER COVER. INCLUDE INDENTED TOP DESIGN WITH LETTERING CAST INTO COVER, USING WORDING EQUIVALENT TO "STORM SEWER."
5. MATERIAL: GRAY IRON ASTM A48 CLASS 30 UNLESS OTHERWISE INDICATED.
6. ALL HDPE PIPE SHALL BE CORRUGATED HIGH DENSITY POLYETHYLENE SMOOTH INTERIOR PIPE. HDPE PIPE SHALL CONFORM TO ASTM D3350 WITH SOIL TIGHT JOINTS.
7. ALL HDPE SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS AND AASHTO SECTION 30.
8. CONTRACTOR TO PROVIDE AND INSTALL MANUFACTURER RECOMMENDED FITTINGS ON RCP CONNECTIONS TO HDPE STRUCTURES.
9. REFER TO PIPE CHART FOR CASTING TYPES. INSTALL REDUCERS AS NECESSARY PER MANUFACTURER'S SPECIFICATIONS TO ACCOMMODATE LARGER INLET SIZES.
10. FOLLOW CONSTRUCTION PLANS AND MANUFACTURER DETAILS, SPECIFICATIONS, AND INSTALLATION INSTRUCTION AS INCLUDED WITHIN THE PLANS AND PROVIDED BY MANUFACTURER FOR THE INSTALLATION OF WATER QUALITY AND DETENTION SYSTEMS.
11. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR ALL STORM SEWER PIPE, STRUCTURES, WATER QUALITY STRUCTURES, AND DETENTION STRUCTURES FOR ENGINEER AND OWNER APPROVAL PRIOR TO ORDERING MATERIALS.

CLEARING AND GRUBBING:

A. DO NOT EXCEED CLEARING AND GRUBBING LIMITS OF CONSTRUCTION LINES INDICATED ON THE PLANS.

B. ALL AREAS OUTSIDE THE LIMITS OF CONSTRUCTION LINE SHALL NOT BE CROSSED BY HEAVY EQUIPMENT OR USED FOR STORING HEAVY EQUIPMENT OR MATERIALS.

C. NO EQUIPMENT SHALL BE STORED UNDER THE DRIP LINE OF TREES TO REMAIN.

D. DO NOT FALL ANY TREES OR PUSH PILES OF DEBRIS AGAINST ANY TREES TO REMAIN.

E. REMOVE ALL STUMPS, ROCKS, ASPHALT & CONCRETE DEBRIS, ETC. AND DISPOSE OFF SITE IN ACCORDANCE WITH LOCAL, STATE & FEDERAL REGULATIONS.

F. CONTACT ALL UTILITY AUTHORITIES WHO HAVE LINES WITHIN THE CLEARING AND GRUBBING LIMITS BEFORE STARTING WORK

E. ALL EROSION CONTROL SEDIMENT BARRIERS, SILT FENCES, AND TREE PROTECTION DEVICES SHALL BE INSTALLED PRIOR TO STARTING CLEARING AND GRUBBING.

F. AFTER STAKING IS COMPLETED, TREES WITHIN GRADING LIMITS TO BE SAVED WILL BE IDENTIFIED BY THE OWNER'S REPRESENTATIVE. FIELD CHANGES TO GRADING PLANS SHALL BE MADE FOR SMOOTH TRANSITION OF GRADES AROUND ALL TREES WHICH REQUITE TREE WELLS WITHIN THE GRADING LIMITS.

G. ALL CLEARING SHALL BE LIMITED TO AREAS TO BE GRADED WITHIN 15 CALENDAR DAYS.

GRADING NOTES:

A. TOPSOIL SHALL BE STORED ON SITE IN LOCATIONS APPROVED BY THE OWNER'S REPRESENTATIVE. DRAINAGE SHALL ROUT AROUND THESE TOPSOIL STOCKPILES FOR THE DURATION OF THE GRADING OPERATIONS. EROSION CONTROL MEASURES SHALL PREVENT THE LOSS OF TOPSOIL MATERIAL.

B. UNSUITABLE SOILS SHALL BE UNIFORMLY SPREAD ACROSS NON-STRUCTURAL FILL AREAS AND COVERED WITH TOPSOIL AND SEEDED.

C. FILL AREA SHALL BE PROOF-ROLLED WITH RUBBER-TIRED EQUIPMENT WITH A MINIMUM WEIGHT OF FIFTEEN TONS PRIOR TO BEGINNING FILL OPERATION. AREAS WHICH ARE SOFT OR UNSTABLE SHALL BE UNDERCUT UNTIL STABLE SOILS ARE FOUND. RE-COMPACTION OF THESE SOILS SHALL BE TO 98% MAXIMUM DRY DENSITY AS PER ASTM D698 (STANDARD PROCTOR).

D. CUT AREA SHALL BE PROOF-ROLLED AFTER FINAL SUBGRADE IS ACHIEVED IN THE SAME MANNER AS FILLED AREAS. SOFT OR UNSTABLE SOILS SHALL BE SCARIFIED TO A DEPTH OF 12" AND RE-COMPACTED TO 98% MAXIMUM DRY DENSITY AS PER ASTM D698 (STANDARD PROCTOR).

E. ALL GRADING SHALL BE COMPLETED TO THE LEVEL INDICATED BY THE SCOPE OF WORK LISTED IN THE BID DOCUMENTS.

F. ELEVATIONS SHOWN ON THE PLANS IS THE FINISH GRADE ELEVATION.

G. GRADING SHALL BE SEQUENCED SO THAT BASE STONE IS PLACED WITHIN 10 CALENDAR DAYS PF ACHIEVING OPTIMUM SUBGRADE COMPACTION.

H. SOILS TESTING LABORATORY/ SOILS ENGINEER. CONTRACTOR WILL EMPLOY A QUALIFIED SOILS TESTING LABORATORY/ ENGINEER TO OBSERVE THIS WORK AND MAKE TESTS AS REQUIRED.

I. HAVE EARTH BORROW FILL, AGGREGATE, AND TOPSOIL, AND STRUCTURAL FILL TESTED AND APPROVED BY DESIGNATED TESTING LABORATORY BEFORE MOVING IT TO THE JOB SITE.

J. CONTRACTOR SHALL OBSERVE PROOF-ROLLING OF AREAS WHERE BUILDING AND PAVING WILL BE LOCATED TO DETERMINE ADEQUACY OF SOIL COMPACTION AND IN-PLACE SOILS. OTHER AREAS WILL BE INSPECTED BY SOILS ENGINEER TO DETERMINE ADEQUACY IN THOSE AREAS. IF SOILS ARE NOT ADEQUATE TO BEAR WEIGHTS THAT WILL BE IMPOSED, TESTING LABORATORY WILL OBSERVE AND REPORT CORRECTIVE ACTION TAKEN.

K. TEST IN-PLACE SOIL AND FILLED AND COMPACTED AREAS. IF THESE ARE NOT ADEQUATE TO BEAR WEIGHTS IMPOSED, TESTING LABORATORY WILL ADVICE THE OWNER'S REPRESENTATIVE OF THEIR RECOMMENDATIONS. HE WILL DIRECT ANY CORRECTIVE MEASURES THAT ARE NECESSARY.

L. SOILS COMPACTION TESTING OF IN-PLACE AND FILLED AND COMPACTED AREAS WILL BE PERFORMED BY TESTING LABORATORY IN ACCORDANCE WITH THEIR REQUIREMENTS.

M. THE SOILS ENGINEER'S AND TESTING LABORATORY'S FEES WILL BE PAID BY THE CONTRACTOR.

N. APPLICABLE SPECIFICATIONS FOR COMPACTED FILL: THE FOLLOWING CURRENT AMERICAN SOCIETY OF TESTING MATERIALS (ASTM) STANDARDS ARE HEREBY MADE PART OF THIS SPECIFICATION:

- D421-58, DRY PREPARATION OF SOIL SAMPLES FOR GRAIN-SIZE ANALYSIS AND DETERMINATION OF SOIL CONSTANTS.
- D422-63, STANDARD METHOD OF PARTICLE SIZE ANALYSIS OF SOILS.
- D1140-54, METHOD OF TEST FOR AMOUNT OF MATERIAL IN SOILS FINER THAN NO.200 SIEVE.
- D698, METHOD FOR LABORATORY COMPACTION CHARACTERISTICS OF SOIL USING STANDARD EFFORT
- D1557-78, STANDARD TEST METHODS FOR MOISTURE-DENSITY RELATIONS OF SOILS AND SOIL-AGGREGATE MIXTURES USING 10 LB. (4.54-KG) RAMMER AND 18-INCH (457 MM) DROP.

O. PROVIDE POSITIVE DRAINAGE AWAY FROM BUILDINGS AT ALL LOCATIONS UNLESS OTHERWISE NOTED.

P. CONTRACTOR SHALL REVIEW THE SITE SPECIFIC GEOTECHNICAL REPORT PRIOR TO COMMENCING WITH GRADING OPERATIONS. WHERE CONFLICTS BETWEEN THE GRADING NOTES AND GEOTECHNICAL REPORT EXIST, THE MORE STRINGENT REQUIREMENT SHALL APPLY.

Q. CONTRACTOR IS RESPONSIBLE FOR DOCUMENTING WITH LOAD TICKETS, PHOTOGRAPHS, LOG BOOK, VIDEO RECORDING AND OTHER MEANS AS NECESSARY TO VERIFY THE INSTALLATION OF STORMWATER BEST MANAGEMENT PRACTICES REQUIRED BY THE LOCAL MUNICIPALITY AND JURISDICTION. AS-BUILT TOPOGRAPHY AND UTILITY PLANS HAVING BEEN PREPARED BY A QUALIFIED LAND SURVEYOR ARE REQUIRED TO BE SUBMITTED TO KIMLEY-HORN AT THE CONCLUSION OF THE PROJECT FOR VERIFICATION OF DESIGN INTENT. ANY MODIFICATIONS TO THE GRADING AND UTILITY SYSTEMS REQUIRED, NOT PREVIOUSLY APPROVED BY THE OWNER AND ENGINEER ARE THE RESPONSIBILITY OF THE CONTRACTOR.

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CO-OP BUSINESS PARK
LOT 2
PANATTONI DEVELOPMENT COMPANY
LA VERGNE, TENNESSEE

PANATTONI®

ROBERT JAMES ARMS
REGISTERED ENGINEER
AGENCY NUMBER
COMMISSION NO. 121065
STATE OF TENNESSEE
12/18/2023

No.	REVISIONS	DATE	BY
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7			

DESIGNED BY:	GTF
DRAWN BY:	GTF
CHECKED BY:	RJA
DATE:	12/18/2023

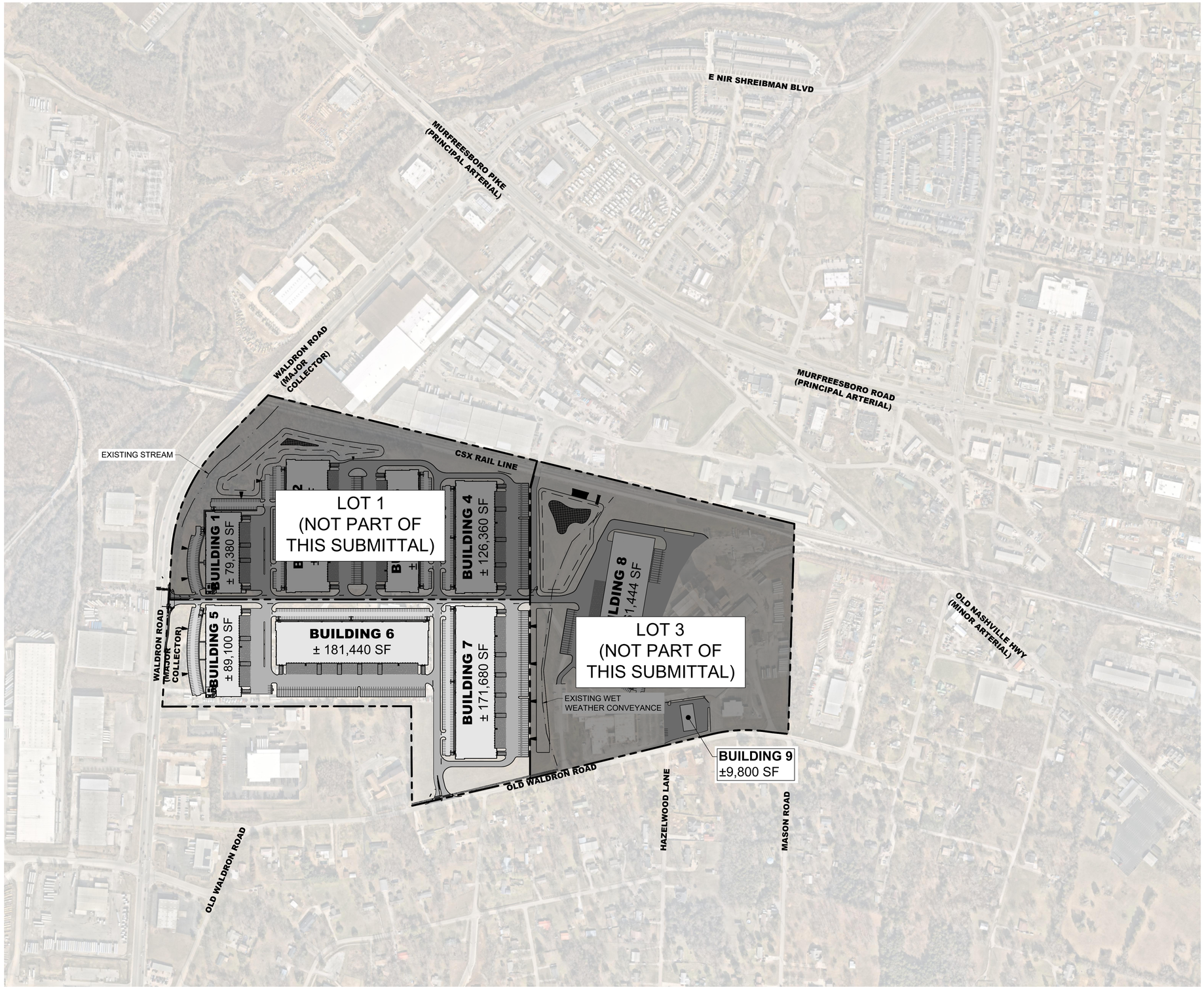
KIMLEY-HORN PROJECT NO. 118163044

GENERAL NOTES

SHEET NUMBER
C0-01

Drawing name: K:\NSH_LDEV\118163044 - co-op la vergne\4-CADD\plansheets\C0-01 GENERAL NOTES.dwg C0-01 GENERAL NOTES - LOT 2 Dec

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GRAPHIC SCALE IN FEET
0 125 250 500

NORTH

Drawing name: K:\NSH_LDEV\118163044 - co-op la vergne\4-CADD\plansheets\C0-10 SITE CONTEXT MAP.dwg SITE VICINITY MAP - LOT 2 Dec 18, 2023 10:25am by: Garrett.Froula

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CO-OP BUSINESS PARK LOT 2

PANATTONI DEVELOPMENT COMPANY
LA VERGNE, TENNESSEE

PANATTONI®

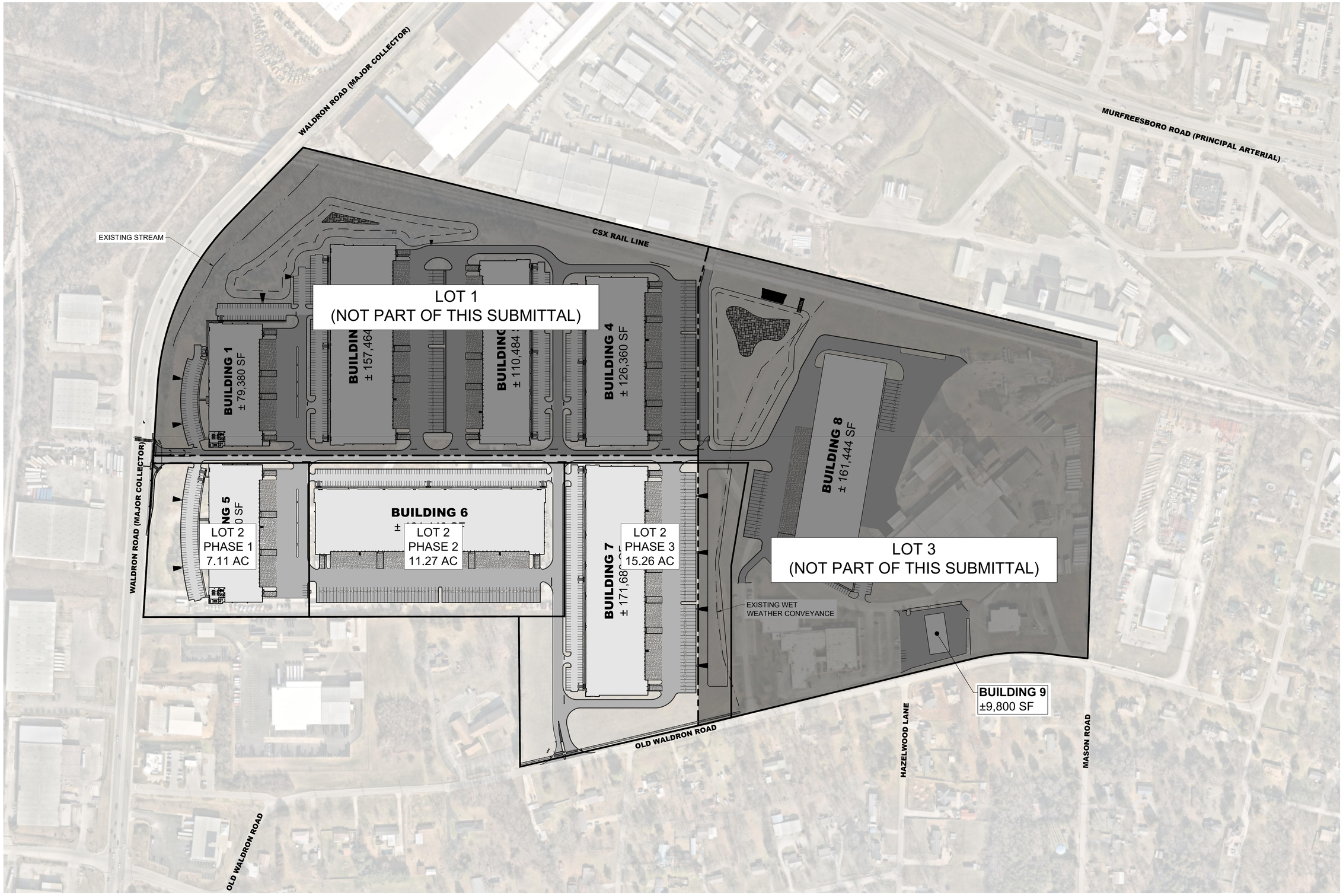
ROBERT JAMES ARTS — REGISTERED ENGINEER — AGENT No. 120184 — STATE OF TENNESSEE
12/18/2023

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DRAWN BY:	GTF
CHECKED BY:	RJA
DATE:	12/18/2023
KIMLEY-HORN PROJECT NO.	118163044

SITE VICINITY MAP

SHEET NUMBER
C0-10



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CO-OP BUSINESS PARK
LOT 2

PANATTONI DEVELOPMENT COMPANY
LA VERGNE, TENNESSEE

PANATTONI®

ROBERT JAMES ARIS
REGISTERED ENGINEER
AGENCY NUMBER
COMMERCE
No. 121065
STATE OF TENNESSEE
12/18/2023

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DATE:	12/18/2023
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BUILDING PHASING PLAN

SHEET NUMBER
C0-20

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GRAPHIC SCALE IN FEET
0 75 150 300

NORTH

EXISTING UTILITIES NOTE

CONTRACTOR SHALL VERIFY LOCATION OF ALL EXISTING UTILITIES AND NOTIFY ENGINEER IMMEDIATELY OF ANY DISCREPANCIES AND/OR CONFLICTS WITH EXISTING OR PROPOSED UTILITIES PRIOR TO PROCEEDING.

SURVEY DISCLAIMER

EXISTING SITE SURVEY INFORMATION PROVIDED BY BARGE DESIGN SOLUTIONS, INC. DATED JANUARY 18, 2023. KIMLEY-HORN DOES NOT ACCEPT ANY RESPONSIBILITY FOR THE ACCURACY OF THE BASE SURVEY INFORMATION PROVIDED BY OTHERS. CONTACT JAMES OVERFELT OF BARGE DESIGN AT (615) 254-1500.

SLOPE LEGEND

- 12-20% SLOPE
- >20% SLOPE

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CO-OP BUSINESS PARK LOT 2

PANATTONI DEVELOPMENT COMPANY
LA VERGNE, TENNESSEE

PANATTONI®

ROBERT JAMES ARS — REGISTERED ENGINEER — 12/18/2023 — LICENSE No. 121045 — STATE OF TENNESSEE

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KIMLEY-HORN PROJECT NO. 118163044

EXISTING CONDITIONS

SHEET NUMBER
C1-00

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GRAPHIC SCALE IN FEET
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Drawing name: K:\NSH_LDEV\118163044 - co-op la vergne\4-CADD\plansheets\C1-00 EXISTING CONDITIONS.dwg LOT 2 Dec 18, 2023 10:26am by: Garrett.Froula

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DEMOLITION LEGEND

	REMOVE GRAVEL
	DEMOLISH AND REMOVE STRUCTURE
	REMOVE CONCRETE / RIGID PAVEMENT
	SAW CUT LINE
	REMOVE LINEAR OBJECT (FENCE/UTILITIES)
X	REMOVE OBJECT

EXISTING UTILITIES NOTE

CONTRACTOR SHALL VERIFY LOCATION OF ALL EXISTING UTILITIES AND NOTIFY ENGINEER IMMEDIATELY OF ANY DISCREPANCIES AND/OR CONFLICTS WITH EXISTING OR PROPOSED UTILITIES PRIOR TO PROCEEDING.

SEE DEMOLITION NOTES, SHEET C0-01.

Know what's below. Call before you dig.

GRAPHIC SCALE IN FEET
0 75 150 300

NORTH

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CO-OP BUSINESS PARK LOT 2

PANATTONI DEVELOPMENT COMPANY
LA VERGNE, TENNESSEE

PANATTONI®

ROBERT JAMES HAYS
REGISTERED ENGINEER
AGENT
COMMITTED
120165
STATE OF TENNESSEE
12/18/2023

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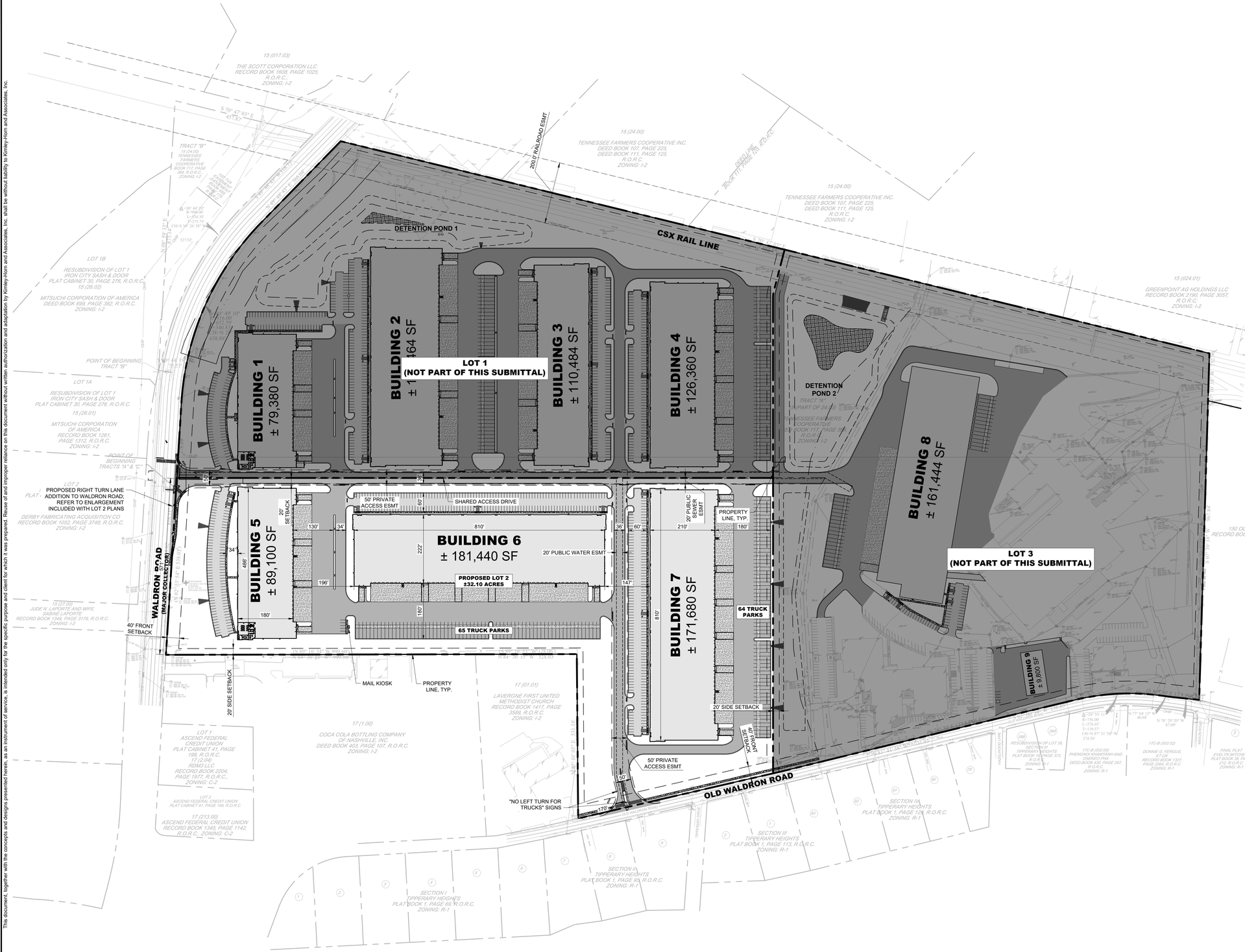
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DRAWN BY:	GTF
CHECKED BY:	RJA
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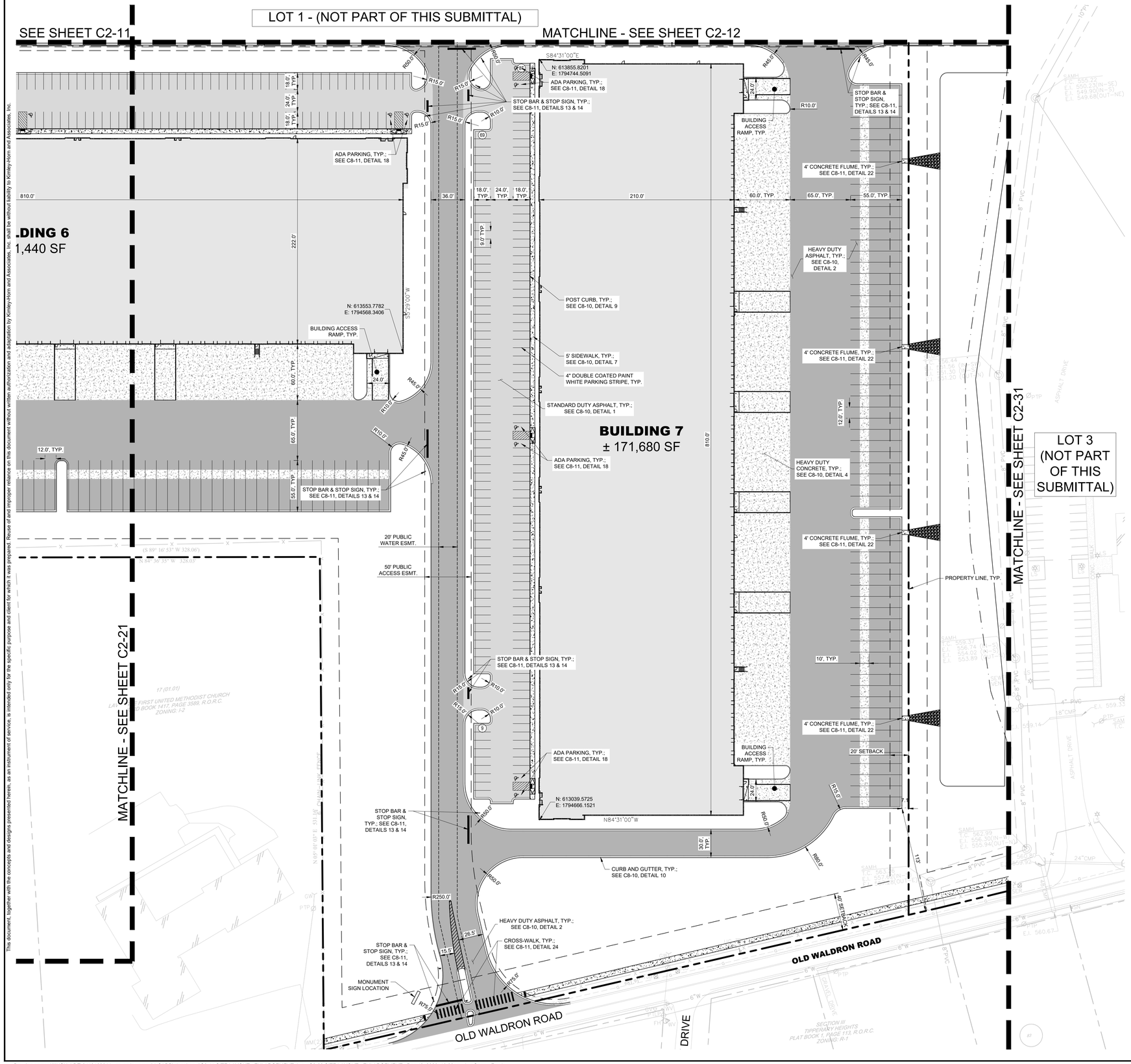
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DEMOLITION PLAN

SHEET NUMBER
C1-10

Drawing name: K:\NSH_LDEV\118163044 - co-op la vergne\4-CADD\plansheets\C1-10 DEMOLITION PLAN.dwg LOT 2 Dec 18, 2023 10:27am by: Garrett.Froula


BUILDING 1
± 79,380 SF
BUILDING 2
± 1 64 SF
BUILDING 3
± 110,484 SF
BUILDING 4
± 126,360 SF
BUILDING 5
± 89,100 SF
BUILDING 6
± 181,440 SF
BUILDING 7
± 171,680 SF
BUILDING 8
± 161,444 SF
BUILDING 9
± 9,800 SF
LOT 1
(NOT PART OF THIS SUBMITTAL)
LOT 3
(NOT PART OF THIS SUBMITTAL)
PROPOSED LOT 2
±32.10 ACRES
DETENTION POND 1
DETENTION POND 2
CSX RAIL LINE
OLD WALDRON ROAD
WALDRON ROAD
(MAJOR COLLECTOR)
SHARED ACCESS DRIVE
50' PRIVATE ACCESS ESMT
20' PUBLIC WATER ESMT
20' PUBLIC SEWER ESMT
PROPERTY LINE, TYP.
65 TRUCK PARKS
64 TRUCK PARKS
PROPOSED RIGHT TURN LANE ADDITION TO WALDRON ROAD; REFER TO ENLARGEMENT INCLUDED WITH LOT 2 PLANS
"NO LEFT TURN FOR TRUCKS" SIGNS
MAIL KIOSK
40' FRONT SETBACK
20' SIDE SETBACK
15 (017.03) THE SCOTT CORPORATION LLC RECORD BOOK 1608, PAGE 1025, R.O.R.C., ZONING: I-2
15 (24.00) TENNESSEE FARMERS COOPERATIVE INC. DEED BOOK 107, PAGE 225, DEED BOOK 111, PAGE 125, R.O.R.C. ZONING: I-2
15 (024.01) GREENPOINT AG HOLDINGS LLC RECORD BOOK 2190, PAGE 3057, R.O.R.C. ZONING: I-2
LOT 1B RESUBDIVISION OF LOT 1 IRON CITY SASH & DOOR PLAT CABINET 30, PAGE 276, R.O.R.C. 15 (26.02) MITSUCHI CORPORATION OF AMERICA DEED BOOK 699, PAGE 382, R.O.R.C. ZONING: I-2
LOT 1A RESUBDIVISION OF LOT 1 IRON CITY SASH & DOOR PLAT CABINET 30, PAGE 276, R.O.R.C. 15 (26.01) MITSUCHI CORPORATION OF AMERICA RECORD BOOK 1261, PAGE 1312, R.O.R.C. ZONING: I-2
LOT 2 PLAT CABINET 30, PAGE 276, R.O.R.C. DERBY FABRICATING ACQUISITION CO RECORD BOOK 1052, PAGE 3748, R.O.R.C. ZONING: I-2
15 (27.00) JUDE N. LAPORTE AND WIFE, SABINE LAPORTE RECORD BOOK 1349, PAGE 3178, R.O.R.C. ZONING: I-2
17 (1.00) COCA COLA BOTTLING COMPANY OF NASHVILLE, INC. DEED BOOK 403, PAGE 107, R.O.R.C. ZONING: I-2
17 (01.01) LAVERGNE FIRST UNITED METHODIST CHURCH RECORD BOOK 1417, PAGE 3589, R.O.R.C. ZONING: I-2
LOT 1 ASCEND FEDERAL CREDIT UNION PLAT CABINET 41, PAGE 199, R.O.R.C. 17 (2.04) RDM3 LLC RECORD BOOK 2204, PAGE 1977, R.O.R.C., ZONING: C-2
LOT 2 ASCEND FEDERAL CREDIT UNION PLAT CABINET 41, PAGE 199, R.O.R.C.
17 (213.00) ASCEND FEDERAL CREDIT UNION RECORD BOOK 1349, PAGE 1142, R.O.R.C., ZONING: C-2
15M-E (012.00) 150 OLD WALDRON ROAD LP RECORD BOOK 2161, PAGE 2282, R.O.R.C., ZONING: I-2
SECTION I TIPPERARY HEIGHTS PLAT BOOK 1, PAGE 69, R.O.R.C. ZONING: R-1
SECTION II TIPPERARY HEIGHTS PLAT BOOK 1, PAGE 99, R.O.R.C. ZONING: R-1
SECTION III TIPPERARY HEIGHTS PLAT BOOK 1, PAGE 113, R.O.R.C. ZONING: R-1
SECTION IV TIPPERARY HEIGHTS PLAT BOOK 1, PAGE 129, R.O.R.C. ZONING: R-1
POINT OF BEGINNING TRACT "B"
POINT OF BEGINNING TRACTS "A" & "C"
TRACT "B" 15 (24.00) TENNESSEE FARMERS COOPERATIVE BOOK 111, PAGE 369, R.O.R.C., ZONING: I-2
S 70° 47' 03" E 457.87'
N 70° 47' 03" W 457.87'
200.0' RAILROAD ESMT
S 70° 49' 10" E 1,000.00'
N 70° 49' 10" W 1,000.00'
S 19° 44' 35" E 534.12'
N 19° 44' 35" W 534.12'
N 19° 44' 35" W 528.05'
N 84° 46' 35" W 328.05'
N 01° 01' 05" E 531.06'
S 70° 47' 03" E 1,000.00'
N 70° 47' 03" W 1,000.00'
S 19° 49' 10" E 534.12'
N 19° 49' 10" W 534.12'
S 70° 47' 03" E 457.87'
N 70° 47' 03" W 457.87'
S 19° 44' 35" E 534.12'
N 19° 44' 35" W 534.12'
S 70° 47' 03" E 457.87'
N 70° 47' 03" W 457.87



SITE LAYOUT NOTES

1. INSTALL CONCRETE JOINTS WHERE SHOWN ON PLANS AND DETAILS. ALIGN ON WALLS, BUILDINGS, RADII, ETC. EVENLY SPACE BETWEEN ELEMENTS AS SHOWN. PROVIDE EXPANSION JOINTS BETWEEN CONCRETE PAVEMENT AND ALL VERTICAL ELEMENTS (WALLS, CURBS, ETC.).
2. LAYOUT ALL CURVES SMOOTHLY WITH NO ABRUPT CHANGES AT TANGENT POINTS.
3. ALL DIMENSIONS ARE TO THE FACE OF CURB UNLESS OTHERWISE NOTED.
4. GENERAL CONTRACTOR RESPONSIBLE FOR INSTALLATION OF IRRIGATION SLEEVES AND SHALL COORDINATE INSTALLATION WITH IRRIGATION PLANS. SEE SHEET CU101 FOR LOCATION OF IRRIGATION METER
5. LAYOUT ALL ELEMENTS IN FIELD AND CONTACT OWNER'S REPRESENTATIVE FOR APPROVAL BEFORE BEGINNING ANY CONSTRUCTION.
6. CONTRACTOR TO TAKE ALL PRECAUTIONS TO FIND AND AVOID SITE UTILITIES. ALL UTILITIES ARE NOT SHOWN ON DRAWING. VERIFY LOCATIONS AND CONSIDER SUCH WHEN ESTIMATING.
7. ALL LANDSCAPE ISLANDS SHALL BE MOUNDED WITH TOPSOIL 4" ABOVE THE CURB LINE TO PROMOTE POSITIVE DRAINAGE.
8. ALL PAVEMENT MARKINGS AND SIGNAGE SHALL BE INSTALLED PER THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION.
9. SEE ARCHITECTURAL PLANS FOR EXACT BUILDING DIMENSIONS.
10. THE SITE PLAN DRAWINGS ARE INTENDED TO SHOW THE HORIZONTAL CONTROL OF THE SITE. THE CONTRACTOR WILL BE FURNISHED WITH THE SITE PLAN IN AUTOCAD FORMAT. KEY DIMENSIONS HAVE BEEN PROVIDED ON THE PLAN AND MUST BE VERIFIED PRIOR TO ACTUAL CONSTRUCTION.
11. REFER TO GENERAL NOTE SHEETS C0-01.
12. REFER TO ARCHITECTURAL SITE PLAN FOR ADDITIONAL INFORMATION.

RETAINING WALL NOTES

1. ALL SITE RETAINING WALLS INDICATED ON THESE PLANS ARE SHOWN FOR GENERAL LOCATION AND MINIMUM HEIGHT REQUIRED.
2. ALL SITE WALLS SHALL BE DESIGN / BUILD UNDER THE RESPONSIBILITY OF THE CONTRACTOR.
3. CONTRACTOR SHALL SUBMIT DESIGN DRAWINGS AND CALCULATIONS SEALED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF TENNESSEE TO THE CIVIL ENGINEER OF RECORD AND THE CODES AND ENGINEERING DEPARTMENT FOR REVIEW AND APPROVAL PRIOR TO ORDERING MATERIALS OR CONSTRUCTION.
4. ALL WALLS OF HEIGHTS EQUAL TO OR GREATER THAN 30 INCHES (MEASURED FROM TOP OF WALL TO FINISHED GRADE AT BOTTOM OF WALL) SHALL INCLUDE PEDESTRIAN GUARDRAIL OR FENCE. GUARDRAIL SHALL BE IN COMPLIANCE WITH LOCAL CODES AND IBC REQUIREMENTS.

PAVEMENT LEGEND

- STANDARD DUTY ASPHALT PAVEMENT; SEE SHEET C8-10, DETAIL 1
- HEAVY DUTY ASPHALT PAVEMENT; SEE SHEET C8-10, DETAIL 2
- STANDARD DUTY CONCRETE PAVEMENT; SEE SHEET C8-10, DETAIL 3
- HEAVY DUTY CONCRETE PAVEMENT; SEE SHEET C8-10, DETAIL 4

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CO-OP BUSINESS PARK LOT 2

PANATTONI DEVELOPMENT COMPANY
LA VERGNE, TENNESSEE

PANATTONI®

ROBERT JAMES ARTS — REGISTERED ENGINEER — AGENT — No. 121045 — STATE OF TENNESSEE
12/18/2023

No.	REVISIONS	DATE	BY
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DESIGNED BY:	GTF
DRAWN BY:	GTF
CHECKED BY:	RJA
DATE:	12/18/2023
KIMLEY-HORN PROJECT NO.	118163044

SITE LAYOUT - ENLARGEMENT

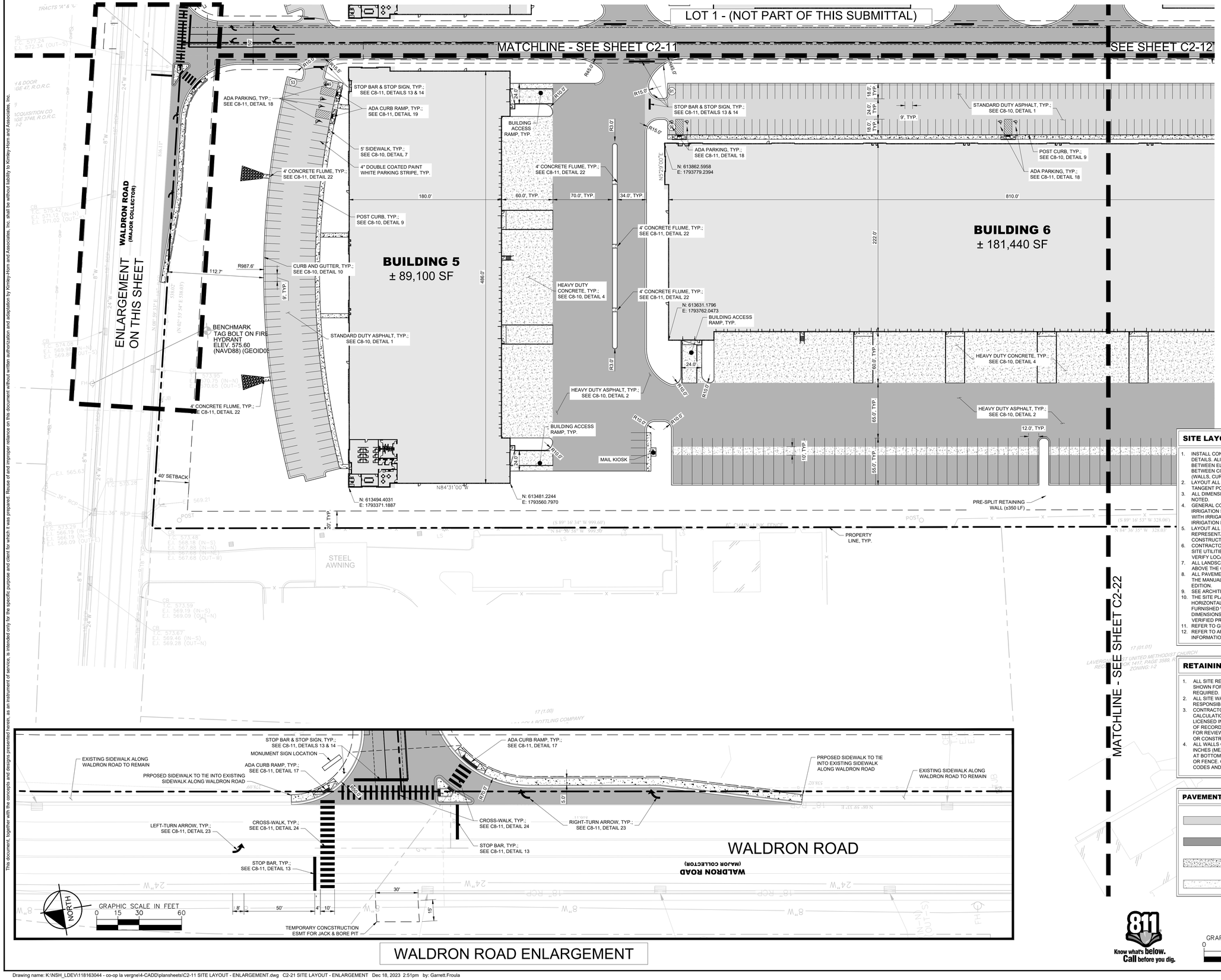
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C2-22

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Drawing name: K:\NSH_LDEV\118163044 - co-op la vergne\4-CADD\plansheets\C2-11 SITE LAYOUT - ENLARGEMENT.dwg C2-22 SITE LAYOUT - ENLARGEMENT Dec 18, 2023 10:28am by: Garrett.Froula



SITE LAYOUT NOTES

1. INSTALL CONCRETE JOINTS WHERE SHOWN ON PLANS AND DETAILS. ALIGN ON WALLS, BUILDINGS, RADII, ETC. EVENLY SPACE BETWEEN ELEMENTS AS SHOWN. PROVIDE EXPANSION JOINTS BETWEEN CONCRETE PAVEMENT AND ALL VERTICAL ELEMENTS (WALLS, CURBS, ETC.).
2. LAYOUT ALL CURVES SMOOTHLY WITH NO ABRUPT CHANGES AT TANGENT POINTS.
3. ALL DIMENSIONS ARE TO THE FACE OF CURB UNLESS OTHERWISE NOTED.
4. GENERAL CONTRACTOR RESPONSIBLE FOR INSTALLATION OF IRRIGATION SLEEVES AND SHALL COORDINATE INSTALLATION WITH IRRIGATION PLANS. SEE SHEET CU101 FOR LOCATION OF IRRIGATION METER
5. LAYOUT ALL ELEMENTS IN FIELD AND CONTACT OWNER'S REPRESENTATIVE FOR APPROVAL BEFORE BEGINNING ANY CONSTRUCTION.
6. CONTRACTOR TO TAKE ALL PRECAUTIONS TO FIND AND AVOID SITE UTILITIES. ALL UTILITIES ARE NOT SHOWN ON DRAWING. VERIFY LOCATIONS AND CONSIDER SUCH WHEN ESTIMATING.
7. ALL LANDSCAPE ISLANDS SHALL BE MOUNDED WITH TOPSOIL 4" ABOVE THE CURB LINE TO PROMOTE POSITIVE DRAINAGE.
8. ALL PAVEMENT MARKINGS AND SIGNAGE SHALL BE INSTALLED PER THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION.
9. SEE ARCHITECTURAL PLANS FOR EXACT BUILDING DIMENSIONS.
10. THE SITE PLAN DRAWINGS ARE INTENDED TO SHOW THE HORIZONTAL CONTROL OF THE SITE. THE CONTRACTOR WILL BE FURNISHED WITH THE SITE PLAN IN AUTOCAD FORMAT. KEY DIMENSIONS HAVE BEEN PROVIDED ON THE PLAN AND MUST BE VERIFIED PRIOR TO ACTUAL CONSTRUCTION.
11. REFER TO GENERAL NOTE SHEETS C0-01.
12. REFER TO ARCHITECTURAL SITE PLAN FOR ADDITIONAL INFORMATION.

RETAINING WALL NOTES

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- HEAVY DUTY ASPHALT PAVEMENT; SEE SHEET C8-10, DETAIL 2
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- HEAVY DUTY CONCRETE PAVEMENT; SEE SHEET C8-10, DETAIL 4

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CO-OP BUSINESS PARK LOT 2

PANATTONI DEVELOPMENT COMPANY
LA VERGNE, TENNESSEE

PANATTONI®

ROBERT JAMES ARTS — REGISTERED ENGINEER — AGENCY NUMBER 121043 — LICENSE No. 121043 — STATE OF TENNESSEE — 12/18/2023

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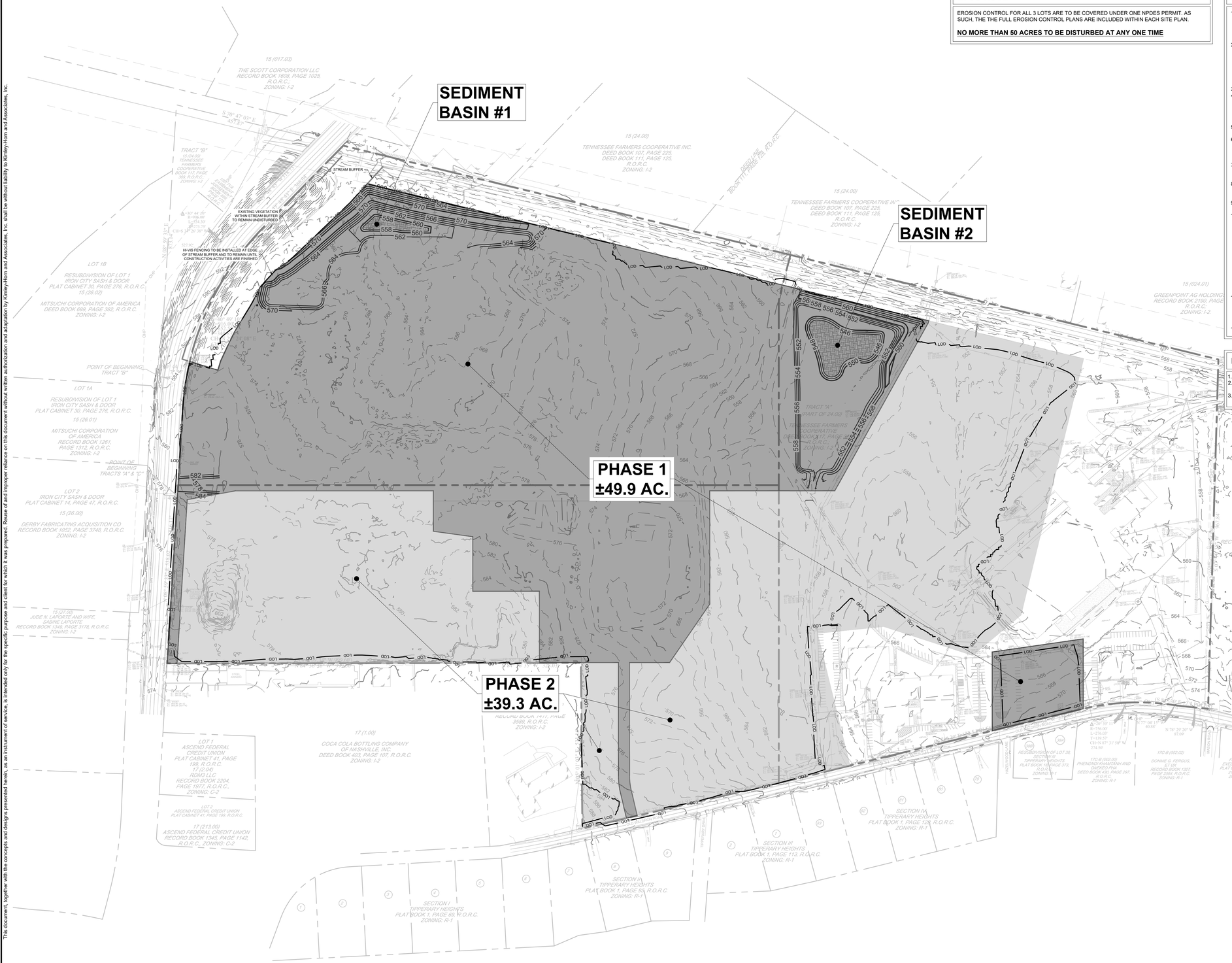
DESIGNED BY:	GTF
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CHECKED BY:	RJA
DATE:	12/18/2023
KIMLEY-HORN PROJECT NO.	118163044

SITE LAYOUT - ENLARGEMENT

SHEET NUMBER
C2-21

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EPSC NOTE

EROSION CONTROL FOR ALL 3 LOTS ARE TO BE COVERED UNDER ONE NPDES PERMIT. AS SUCH, THE THE FULL EROSION CONTROL PLANS ARE INCLUDED WITHIN EACH SITE PLAN.

NO MORE THAN 50 ACRES TO BE DISTURBED AT ANY ONE TIME

EROSION CONTROL NOTES

1. STOCKPILED TOPSOIL OR FILL MATERIAL IS TO BE TREATED SO THE SEDIMENT RUN-OFF WILL NOT CONTAMINATE SURROUNDING AREAS OR ENTER NEARBY STREAMS. STOCK PILE LOCATIONS SHALL BE COORDINATED WITH THE ENGINEER PRIOR TO GRADING ACTIVITIES. EROSION & SEDIMENT CONTROL PRACTICE SHALL BE INSTALLED PRIOR TO STOCKPILE OPERATIONS.
2. ANY SITE USED FOR DISPOSAL AND/OR STOCKPILE OF ANY MATERIAL SHALL BE PROPERLY PERMITTED FOR SUCH ACTIVITY. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO SEE THAT ALL REQUIRED PERMITS ARE SECURED FOR EACH PROPERTY UTILIZED. A COPY OF THE APPROVED PERMIT MUST BE PROVIDED TO THE INSPECTOR PRIOR TO COMMENCEMENT OF WORK ON ANY PROPERTY. FAILURE TO DO SO MAY RESULT IN THE CONTRACTOR REMOVING ANY ILLEGALLY PLACED MATERIAL AT HIS OWN EXPENSE.
3. CONSTRUCT SILT BARRIERS BEFORE BEGINNING GRADING OPERATIONS.
4. MULCH AND SEED ALL DISTURBED AREAS AS SOON AS POSSIBLE AFTER FINAL GRADING IS COMPLETED (WITHIN 15 DAYS OF ACHIEVED FINAL GRADES) UNLESS OTHERWISE INDICATED. CONTRACTOR SHALL TAKE WHATEVER MEANS NECESSARY TO ESTABLISH PERMANENT SOIL STABILIZATION. STEEP SLOPES (GREATER THAN 3:1) SHALL BE STABILIZED WITHIN 7 DAYS OF FINAL GRADING.
5. REMOVE SEDIMENT FROM ALL DRAINAGE STRUCTURES BEFORE ACCEPTANCE BY LOCAL GOVERNING AGENCY OR AS DIRECTED BY THE OWNER'S REPRESENTATIVE.
6. CLEAN SILT BARRIERS WHEN THEY ARE APPROXIMATELY 50% FILLED WITH SEDIMENT OR AS DIRECTED BY THE OWNER'S REPRESENTATIVE. SILT BARRIERS SHALL BE REPLACED AS EFFECTIVENESS IS SIGNIFICANTLY REDUCED OR AS DIRECTED BY THE OWNER'S REPRESENTATIVE.
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8. PROVIDE TEMPORARY CONSTRUCTION ACCESS(ES) AT THE POINT(S) WHERE CONSTRUCTION VEHICLES EXIT THE CONSTRUCTION AREA. MAINTAIN PUBLIC ROADWAYS FREE OF TRACKED MUD AND DIRT.
9. DO NOT DISTURB VEGETATION OR REMOVE TREES EXCEPT WHEN NECESSARY FOR GRADING PURPOSES.
10. STABILIZATION MEASURES (SEED & MULCH, TRIM WHERE INDICATED) SHALL BE INITIATED AS SOON AS PRACTICABLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, EXCEPT IN THE FOLLOWING TWO CASES.
    - 10.a. WHERE THERE IS SNOW COVER OR FROZEN GROUND CONDITIONS, STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE OR WHERE CONSTRUCTION ACTIVITY ON A PORTION OF THE SITE IS TEMPORARILY CEASED, AND EARTH DISTURBING ACTIVITIES WILL BE RESUMED WITHIN 15 DAYS. TEMPORARY STABILIZATION MEASURES DO NOT HAVE TO BE INITIATED ON THAT PORTION OF SITE.
    - 10.b. ALL EROSION CONTROL MEASURES SHALL BE CHECKED TWICE WEEKLY DURING PROLONGED RAINFALL. DAILY CHECKING IS NECESSARY. DOCUMENTATION OF ALL CHECKS AND CORRECTIVE MEASURES SHALL BE KEPT AT THE PROJECT. A MONITORING REPORT CAN BE FOUND IN THE TENNESSEE EROSION AND SEDIMENT CONTROL HANDBOOK.
11. CONTRACTOR TO PROVIDE AN AREA FOR CONCRETE WASH DOWN AND EQUIPMENT REFUELING IN ACCORDANCE WITH TDEC'S STANDARDS. CONTRACTOR TO COORDINATE EXACT LOCATION WITH NPDES DEPARTMENT DURING PRECONSTRUCTION MEETING. CONTROL OF OTHER SITE WASTES SUCH AS MAY CAUSE ADVERSE IMPACTS TO WATER QUALITY IS ALSO REQUIRED BY THE GRADING PERMITEE.
12. SEE ADDITIONAL EROSION CONTROL NOTES ON SHEET C0-01.

EPSC PHASING NOTES

1. NO MORE THAN 50 ACRES IS TO BE DISTURBED AT ANY TIME.
2. SEDIMENT BASINS AND ALL OTHER PHASE 1 MEASURES WITHIN EACH DISTURBANCE PHASE TO BE IMPLEMENTED/CONSTRUCTED PRIOR TO FURTHER DISTURBANCE ACTIVITIES.
3. CONTRACTOR TO NOTIFY THE ENGINEER IN ADVANCE OF ANY DEVIATION FROM THE PHASING PLAN.

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CO-OP BUSINESS PARK LOT 2

PANATTONI DEVELOPMENT COMPANY
LA VERGNE, TENNESSEE

PANATTONI®

ROBERT JAMES HARRIS
REGISTERED ENGINEER
No. 121045
STATE OF TENNESSEE
12/18/2023

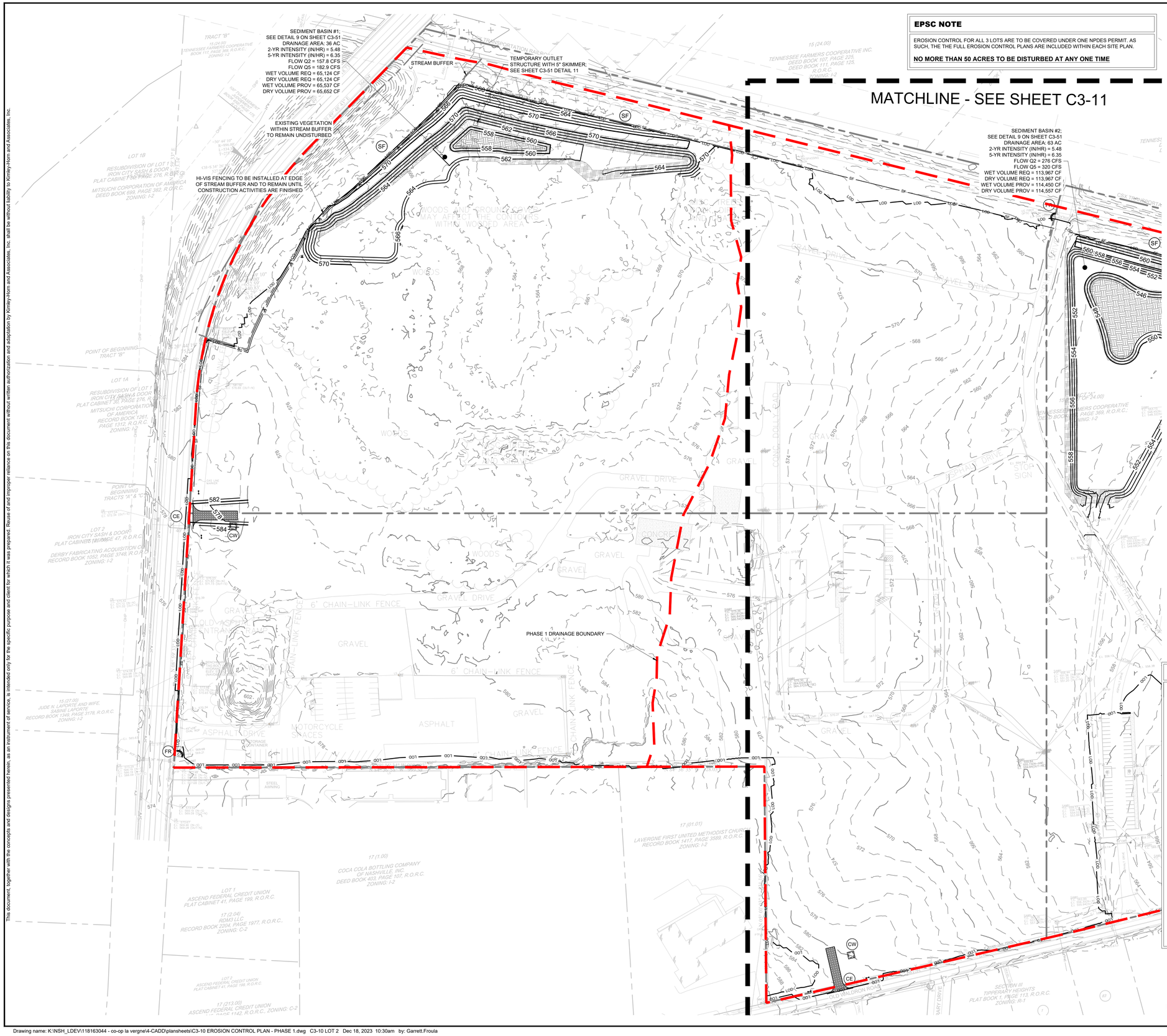
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DESIGNED BY:	GTF
DRAWN BY:	GTF
CHECKED BY:	RJA
DATE:	12/18/2023
KIMLEY-HORN PROJECT NO.	118163044

EROSION CONTROL PLAN - PHASING PLAN

SHEET NUMBER
C3-00

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NO MORE THAN 50 ACRES TO BE DISTURBED AT ANY ONE TIME

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8. PROVIDE TEMPORARY CONSTRUCTION ACCESS(ES) AT THE POINT(S) WHERE CONSTRUCTION VEHICLES EXIT THE CONSTRUCTION AREA. MAINTAIN PUBLIC ROADWAYS FREE OF TRACKED MUD AND DIRT.
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12. SEE ADDITIONAL EROSION CONTROL NOTES ON SHEET C0-01.

EPSC PHASE 1 CONSTRUCTION SEQUENCE

1. INSTALL CONSTRUCTION ENTRANCE/EXIT AND CONCRETE WASHOUT.
2. INSTALL SILT FENCE WITH WIRE BACKING AND TREE PROTECTION.
3. CONTRACTOR TO CONTACT STORMWATER DEPARTMENT TO OBTAIN LAND DISTURBANCE PERMIT. THE CONTRACTOR SHALL CONTACT APPROPRIATE PARTY FOR INSPECTION OF EROSION CONTROL DEVICES AND TO OBTAIN FULL GRADING PERMIT.
4. ADD HIGH VISIBILITY FENCE TO BE INSTALLED AROUND ALL PROTECTED CHANNELS TO PREVENT DISTURBANCE.

TREE PROTECTION FENCING NOTE

TREE PROTECTION FENCING IS TO REMAIN IN PLACE UNTIL FINAL INSPECTION AND SIGN-OFF ON THE MASTER BUILDING PERMIT AND CERTIFICATE OF OCCUPANCY BY THE CODES DEPARTMENT. STORMWATER SIGN-OFF AND REMOVAL OF EROSION CONTROL MEASURES IS NOT JUSTIFICATION TO REMOVE TREE PROTECTION FENCING.

EROSION CONTROL LEGEND

	FR	STONE FILTER RING - CLASS A RIP-RAP, 2' THICK
	OP	OUTLET PROTECTION - REFER TO DETAIL SHEET C3-50
DD	DD	DIVERSION DITCH - REFER TO DETAIL SHEET C3-50
	IP	INLET PROTECTION - REFER TO DETAIL SHEET C3-50
SF	SF	SILT FENCE - REFER TO DETAIL SHEET C3-50
	EE	EROSION EELS - REFER TO DETAIL SHEET C3-50
	CD	ROCK CHECK DAM - REFER TO DETAIL SHEET C3-50
	CW	CONCRETE WASHOUT AREA - REFER TO DETAIL SHEET C3-50
	MA	EROSION CONTROL MATTING - CONTECH LANDLOK S2 OR APPROVED EQUAL. CONTRACTOR TO INSTALL ON ALL SLOPES 3(H):1(V) OR STEEPER - REFER TO DETAIL SHEET C3-50
	CE	CONSTRUCTION EXIT - REFER TO DETAIL SHEET C3-50
	TS	TEMPORARY STABILIZATION - REFER TO DETAIL SHEET C3-50
	PS	PERMANENT STABILIZATION - REFER TO DETAIL SHEET C3-50
TP	TP	TREE PROTECTION FENCE / HIGH VISIBILITY FENCE - REFER TO DETAIL SHEET C3-50
LOD		LIMITS OF DISTURBANCE
		CONSTRUCTION SIGN

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CO-OP BUSINESS PARK LOT 2

PANATTONI DEVELOPMENT COMPANY
LA VERGNE, TENNESSEE

PANATTONI®

ROBERT JAMES ARMS
REGISTERED ENGINEER
AGENCY PLAN
COMMERCE
No. 121045
STATE OF TENNESSEE
12/18/2023

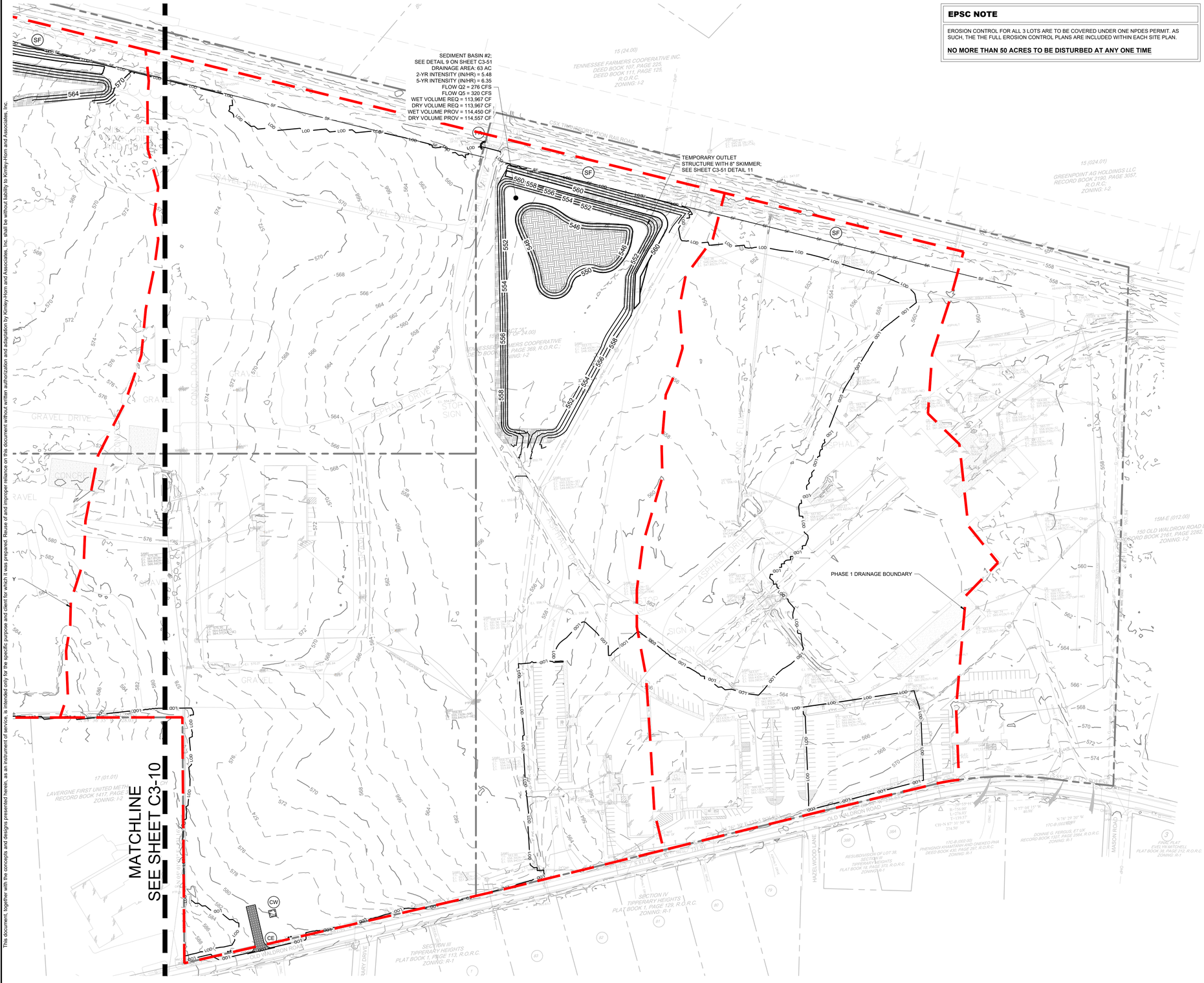
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DRAWN BY:	GTF
CHECKED BY:	RJA
DATE:	12/18/2023

KIMLEY-HORN PROJECT NO. 118163044

EROSION CONTROL PLAN - PHASE 1 ENLARGEMENT

SHEET NUMBER
C3-10



EPSC NOTE

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12. SEE ADDITIONAL EROSION CONTROL NOTES ON SHEET C0-01.

EPSC PHASE 1 CONSTRUCTION SEQUENCE

1. INSTALL CONSTRUCTION ENTRANCE/EXIT AND CONCRETE WASHOUT.
2. INSTALL SILT FENCE WITH WIRE BACKING AND TREE PROTECTION.
3. CONTRACTOR TO CONTACT STORMWATER DEPARTMENT TO OBTAIN LAND DISTURBANCE PERMIT. THE CONTRACTOR SHALL CONTACT APPROPRIATE PARTY FOR INSPECTION OF EROSION CONTROL DEVICES AND TO OBTAIN FULL GRADING PERMIT.
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EROSION CONTROL LEGEND

FR	STONE FILTER RING - CLASS A RIP-RAP, 2' THICK
OP	OUTLET PROTECTION - REFER TO DETAIL SHEET C3-50
DD	DIVERSION DITCH - REFER TO DETAIL SHEET C3-50
IP	INLET PROTECTION - REFER TO DETAIL SHEET C3-50
SF	SILT FENCE - REFER TO DETAIL SHEET C3-50
EE	EROSION EELS - REFER TO DETAIL SHEET C3-50
CD	ROCK CHECK DAM - REFER TO DETAIL SHEET C3-50
CW	CONCRETE WASHOUT AREA - REFER TO DETAIL SHEET C3-50
MA	EROSION CONTROL MATTING - CONTECH LANDLOK S2 OR APPROVED EQUAL. CONTRACTOR TO INSTALL ON ALL SLOPES 3(H):1(V) OR STEEPER - REFER TO DETAIL SHEET C3-50
CE	CONSTRUCTION EXIT - REFER TO DETAIL SHEET C3-50
TS	TEMPORARY STABILIZATION - REFER TO DETAIL SHEET C3-50
PS	PERMANENT STABILIZATION - REFER TO DETAIL SHEET C3-50
TP	TREE PROTECTION FENCE / HIGH VISIBILITY FENCE - REFER TO DETAIL SHEET C3-50
LOD	LIMITS OF DISTURBANCE
	CONSTRUCTION SIGN

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CO-OP BUSINESS PARK
LOT 2

PANATTONI DEVELOPMENT COMPANY
LA VERGNE, TENNESSEE

PANATTONI®

ROBERT JAMES ARS
REGISTERED ENGINEER
ARS
ENGINEER
No. 121045
STATE OF TENNESSEE
12/18/2023

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DRAWN BY:	GTF
CHECKED BY:	RJA
DATE:	12/18/2023

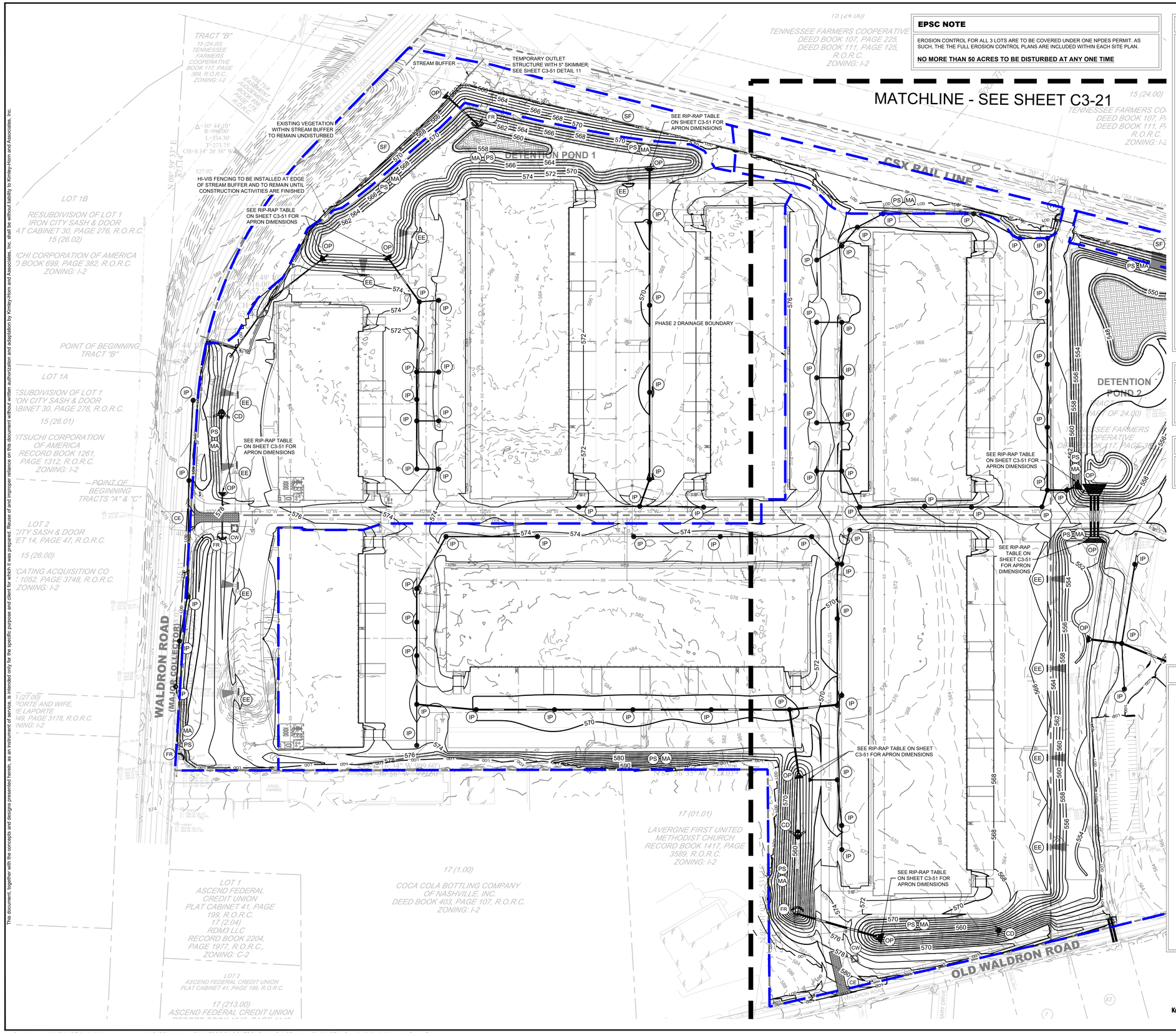
KIMLEY-HORN PROJECT NO.
118163044

EROSION CONTROL PLAN - PHASE 1 ENLARGEMENT

SHEET NUMBER
C3-11

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Drawing name: K:\NSH_LDEV\118163044 - co-op la vergne\4-CADD\plansheets\C3-10 EROSION CONTROL PLAN - PHASE 1.dwg C3-11 LOT 2 Dec 18, 2023 10:30am by: Garrett.Froula



EPSC NOTE

EROSION CONTROL FOR ALL 3 LOTS ARE TO BE COVERED UNDER ONE NPDES PERMIT. AS SUCH, THE THE FULL EROSION CONTROL PLANS ARE INCLUDED WITHIN EACH SITE PLAN.

NO MORE THAN 50 ACRES TO BE DISTURBED AT ANY ONE TIME

EROSION CONTROL NOTES

1. STOCKPILED TOPSOIL OR FILL MATERIAL IS TO BE TREATED SO THE SEDIMENT RUN-OFF WILL NOT CONTAMINATE SURROUNDING AREAS OR ENTER NEARBY STREAMS. STOCK PILE LOCATIONS SHALL BE COORDINATED WITH THE ENGINEER PRIOR TO GRADING ACTIVITIES. EROSION & SEDIMENT CONTROL PRACTICE SHALL BE INSTALLED PRIOR TO STOCKPILE OPERATIONS.
2. ANY SITE USED FOR DISPOSAL AND/OR STOCKPILE OF ANY MATERIAL SHALL BE PROPERLY PERMITTED FOR SUCH ACTIVITY. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO SEE THAT ALL REQUIRED PERMITS ARE SECURED FOR EACH PROPERTY UTILIZED. A COPY OF THE APPROVED PERMIT MUST BE PROVIDED TO THE INSPECTOR PRIOR TO COMMENCEMENT OF WORK ON ANY PROPERTY. FAILURE TO DO SO MAY RESULT IN THE CONTRACTOR REMOVING ANY ILLEGALLY PLACED MATERIAL AT HIS OWN EXPENSE.
3. CONSTRUCT SILT BARRIERS BEFORE BEGINNING GRADING OPERATIONS.
4. MULCH AND SEED ALL DISTURBED AREAS AS SOON AS POSSIBLE AFTER FINAL GRADING IS COMPLETED (WITHIN 15 DAYS OF ACHIEVED FINAL GRADES) UNLESS OTHERWISE INDICATED. CONTRACTOR SHALL TAKE WHATEVER MEANS NECESSARY TO ESTABLISH PERMANENT SOIL STABILIZATION. STEEP SLOPES (GREATER THAN 3:1) SHALL BE STABILIZED WITHIN 7 DAYS OF FINAL GRADING.
5. REMOVE SEDIMENT FROM ALL DRAINAGE STRUCTURES BEFORE ACCEPTANCE BY LOCAL GOVERNING AGENCY OR AS DIRECTED BY THE OWNER'S REPRESENTATIVE.
6. CLEAN SILT BARRIERS WHEN THEY ARE APPROXIMATELY 50% FILLED WITH SEDIMENT OR AS DIRECTED BY THE OWNER'S REPRESENTATIVE. SILT BARRIERS SHALL BE REPLACED AS EFFECTIVENESS IS SIGNIFICANTLY REDUCED OR AS DIRECTED BY THE OWNER'S REPRESENTATIVE.
7. REMOVE THE TEMPORARY EROSION AND WATER POLLUTION CONTROL DEVICES ONLY AFTER A SOLID STAND OF GRASS HAS BEEN ESTABLISHED ON GRADED AREAS AND, WHEN IN THE OPINION OF THE OWNER'S REPRESENTATIVE, THEY ARE NO LONGER NEEDED.
8. PROVIDE TEMPORARY CONSTRUCTION ACCESS(ES) AT THE POINT(S) WHERE CONSTRUCTION VEHICLES EXIT THE CONSTRUCTION AREA. MAINTAIN PUBLIC ROADWAYS FREE OF TRACKED MUD AND DIRT.
9. DO NOT DISTURB VEGETATION OR REMOVE TREES EXCEPT WHEN NECESSARY FOR GRADING PURPOSES.
10. STABILIZATION MEASURES (SEED & MULCH, TRIM WHERE INDICATED) SHALL BE INITIATED AS SOON AS PRACTICABLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, EXCEPT IN THE FOLLOWING TWO CASES.
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12. SEE ADDITIONAL EROSION CONTROL NOTES ON SHEET C0-01.

EPSC PHASE 2 CONSTRUCTION SEQUENCE

1. CONTRACTOR TO BEGIN CLEARING, GRUBBING, AND EXCAVATING.
2. CLEAR, GRUB, AND GRADE REMAINING SITE.
3. INSTALL PROPOSED UTILITIES INCLUDING PROPOSED INLETS WITH PROTECTION.
4. CONSTRUCT REMAINING SITE ACCORDING TO THE APPROVED PLANS, OR AS INSTRUCTED BY THE EROSION CONTROL INSPECTOR.

TREE PROTECTION FENCING NOTE

TREE PROTECTION FENCING IS TO REMAIN IN PLACE UNTIL FINAL INSPECTION AND SIGN-OFF ON THE MASTER BUILDING PERMIT AND CERTIFICATE OF OCCUPANCY BY THE CODES DEPARTMENT. STORMWATER SIGN-OFF AND REMOVAL OF EROSION CONTROL MEASURES IS NOT JUSTIFICATION TO REMOVE TREE PROTECTION FENCING.

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CO-OP BUSINESS PARK LOT 2

PANATTONI DEVELOPMENT COMPANY
LA VERGNE, TENNESSEE

PANATTONI®

ROBERT JAMES ARS — REGISTERED ENGINEER — AGENT OF RECORD — CERTIFICATE No. 121045 — STATE OF TENNESSEE
12/18/2023

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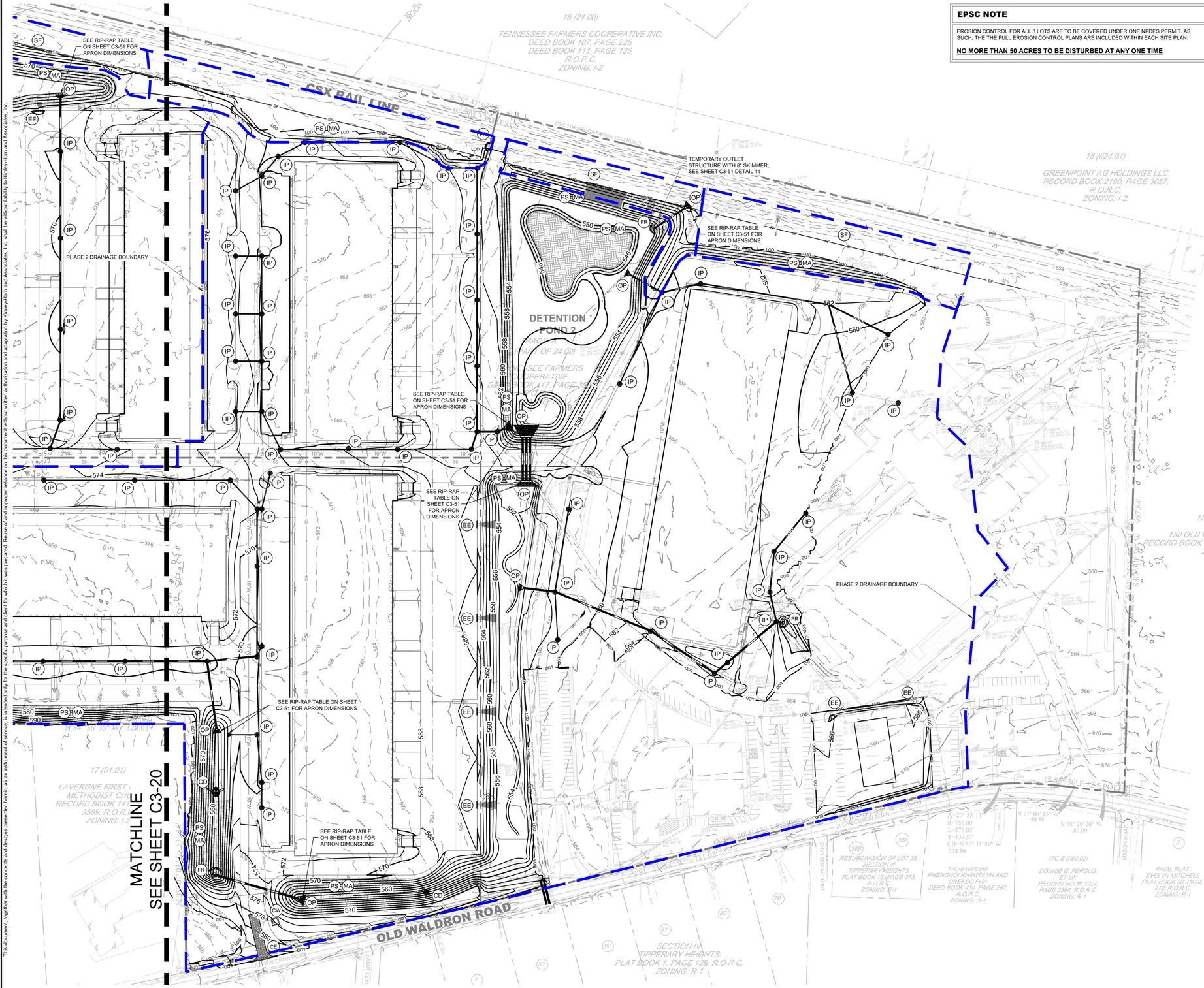
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KIMLEY-HORN PROJECT NO.	118163044

EROSION CONTROL PLAN - PHASE 2 ENLARGEMENT

SHEET NUMBER
C3-20

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Drawing name: K:\NSH_LDEV\118163044 - co-op la vergne\4-CADD\plansheets\C3-10 EROSION CONTROL PLAN - PHASE 1.dwg C3-20 LOT 2 Dec 18, 2023 10:30am by: Garrett.Froula



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12. SEE ADDITIONAL EROSION CONTROL NOTES ON SHEET C0-01.

EPSC PHASE 2 CONSTRUCTION SEQUENCE

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CO-OP BUSINESS PARK LOT 2

PANATTONI DEVELOPMENT COMPANY
LA VERGNE, TENNESSEE

PANATTONI®

ROBERT JAMES ARMS
REGISTERED ENGINEER
AGENT NAME
CERTIFICATE NO. 121045
STATE OF TENNESSEE
12/18/2023

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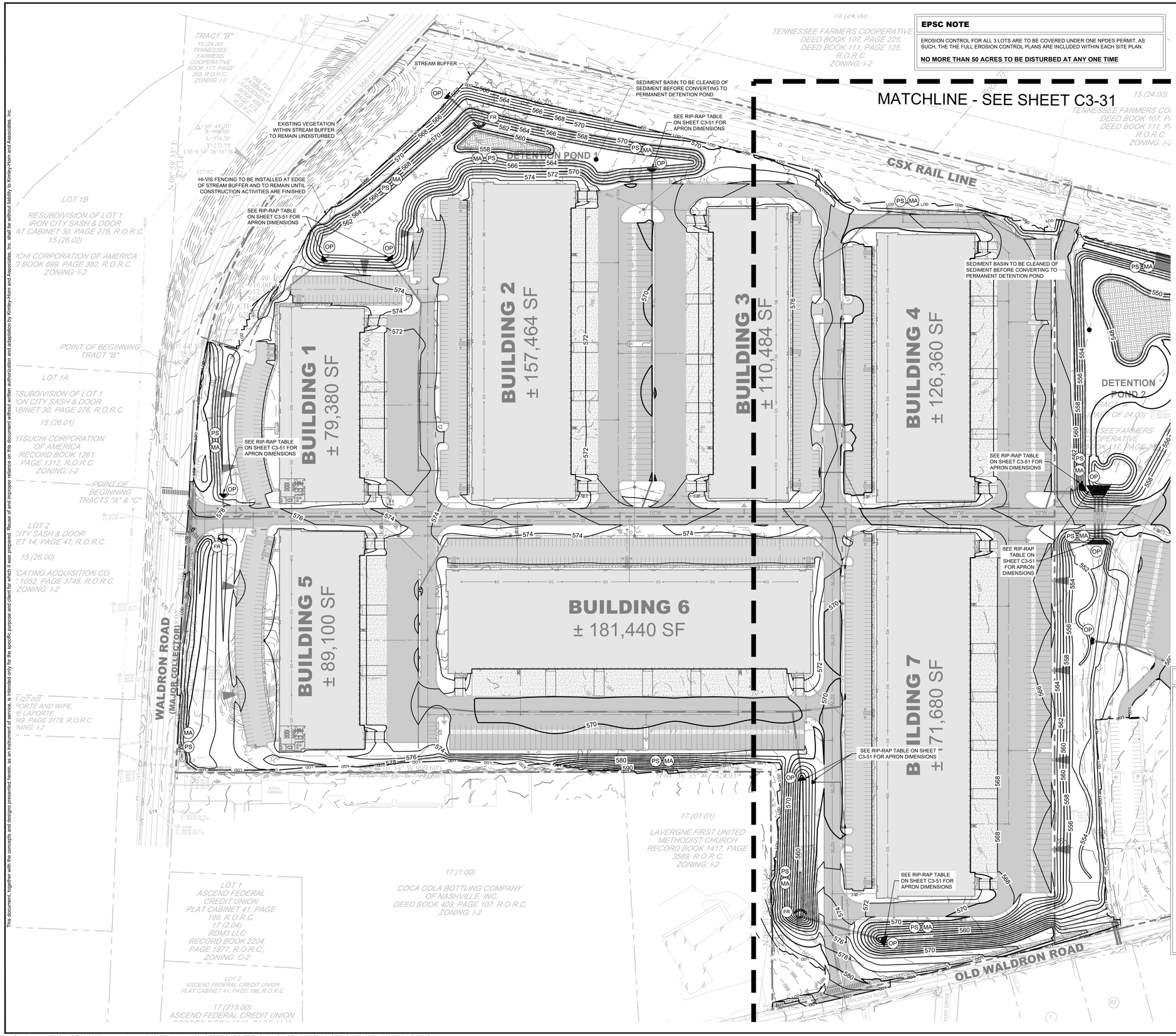
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CHECKED BY:	RJA
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KIMLEY-HORN PROJECT NO. 118163044

EROSION CONTROL PLAN - PHASE 2 ENLARGEMENT

SHEET NUMBER
C3-21

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12. SEE ADDITIONAL EROSION CONTROL NOTES ON SHEET C0-01.

EPSC PHASE 3 CONSTRUCTION SEQUENCE

1. PERMANENTLY STABILIZE SITE.
2. UPON PERMANENT SITE STABILIZATION, REMOVE SILT FENCE, TREE PROTECTION, AND ALL OTHER TEMPORARY EROSION CONTROL DEVICES.
3. REMOVE SEDIMENT FROM SEDIMENT BASIN, CONVERT TO DETENTION POND AND INSTALL PROPOSED OUTLET STRUCTURES.
4. FINISH INSTALLING PERMANENT STORMWATER BMP'S SHOWN ON PHASE 3 EROSION CONTROL PLANS.

TREE PROTECTION FENCING NOTE

TREE PROTECTION FENCING IS TO REMAIN IN PLACE UNTIL FINAL INSPECTION AND SIGN-OFF ON THE MASTER BUILDING PERMIT AND CERTIFICATE OF OCCUPANCY BY THE CODES DEPARTMENT. STORMWATER SIGN-OFF AND REMOVAL OF EROSION CONTROL MEASURES IS NOT JUSTIFICATION TO REMOVE TREE PROTECTION FENCING.

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CO-OP BUSINESS PARK LOT 2

PANATTONI DEVELOPMENT COMPANY
LA VERGNE, TENNESSEE

PANATTONI®

ROBERT JAMES ARTS — REGISTERED ENGINEER — AGENCY TYPE — REGISTRATION No. 121043 — STATE OF TENNESSEE
12/18/2023

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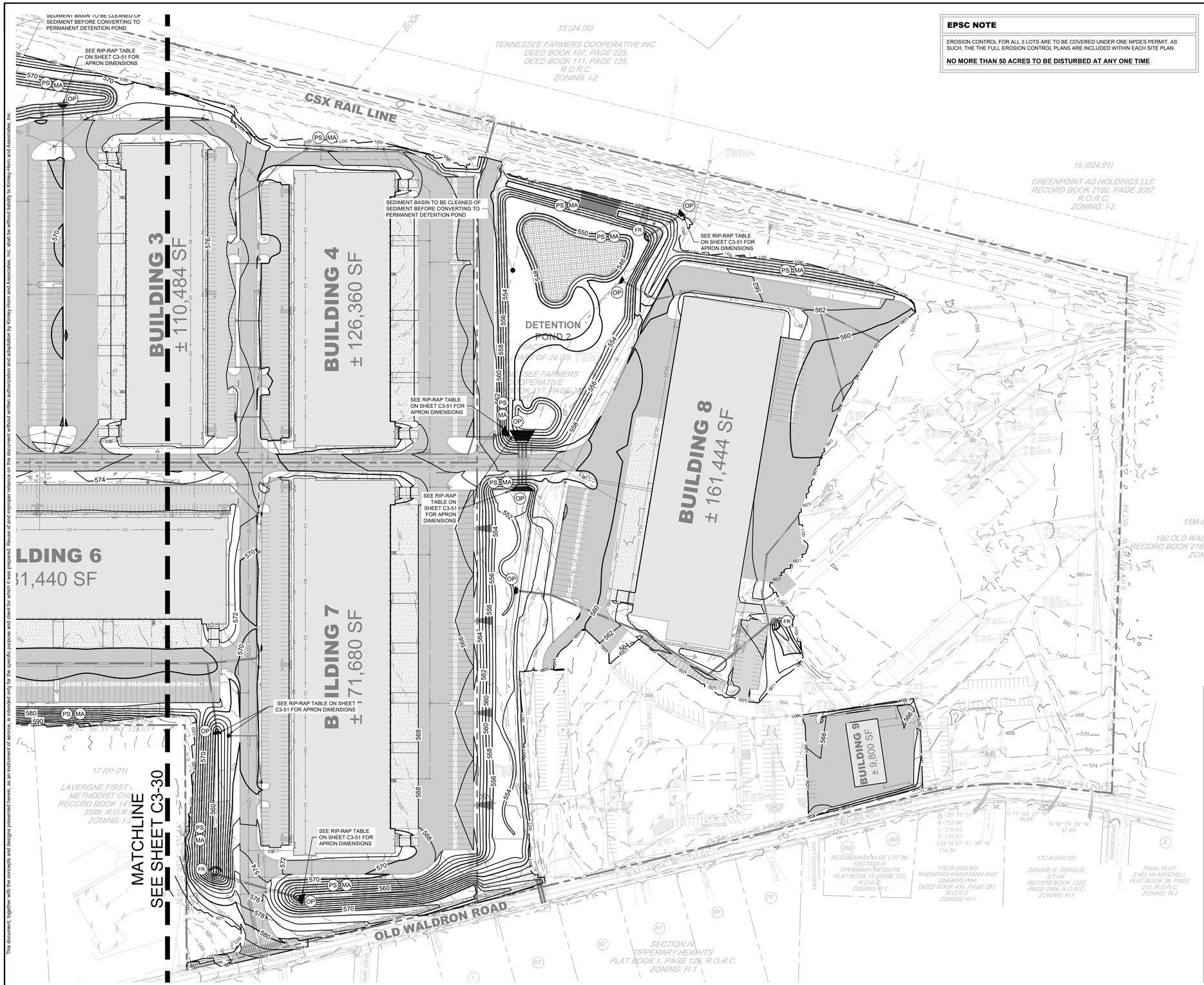
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DRAWN BY:	GTF
CHECKED BY:	RJA
DATE:	12/18/2023
KIMLEY-HORN PROJECT NO.	118163044

EROSION CONTROL PLAN - PHASE 3 ENLARGEMENT

SHEET NUMBER
C3-30

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Drawing name: K:\NSH_LDEV\118163044 - co-op la vergne\4-CADD\plansheets\C3-10 EROSION CONTROL PLAN - PHASE 1.dwg C3-30 LOT 2 Dec 18, 2023 10:30am by: Garrett.Froula



EPSC NOTE

EROSION CONTROL FOR ALL 3 LOTS ARE TO BE COVERED UNDER ONE NPDES PERMIT. AS SUCH, THE THE FULL EROSION CONTROL PLANS ARE INCLUDED WITHIN EACH SITE PLAN.

NO MORE THAN 50 ACRES TO BE DISTURBED AT ANY ONE TIME

EROSION CONTROL NOTES

1. STOCKPILED TOPSOIL OR FILL MATERIAL IS TO BE TREATED SO THE SEDIMENT RUN-OFF WILL NOT CONTAMINATE SURROUNDING AREAS OR ENTER NEARBY STREAMS. STOCK PILE LOCATIONS SHALL BE COORDINATED WITH THE ENGINEER PRIOR TO GRADING ACTIVITIES. EROSION & SEDIMENT CONTROL PRACTICE SHALL BE INSTALLED PRIOR TO STOCKPILE OPERATIONS.
2. ANY SITE USED FOR DISPOSAL AND/OR STOCKPILE OF ANY MATERIAL SHALL BE PROPERLY PERMITTED FOR SUCH ACTIVITY. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO SEE THAT ALL REQUIRED PERMITS ARE SECURED FOR EACH PROPERTY UTILIZED. A COPY OF THE APPROVED PERMIT MUST BE PROVIDED TO THE INSPECTOR PRIOR TO COMMENCEMENT OF WORK ON ANY PROPERTY. FAILURE TO DO SO MAY RESULT IN THE CONTRACTOR REMOVING ANY ILLEGALLY PLACED MATERIAL AT HIS OWN EXPENSE.
3. CONSTRUCT SILT BARRIERS BEFORE BEGINNING GRADING OPERATIONS.
4. MULCH AND SEED ALL DISTURBED AREAS AS SOON AS POSSIBLE AFTER FINAL GRADING IS COMPLETED (WITHIN 15 DAYS OF ACHIEVED FINAL GRADES) UNLESS OTHERWISE INDICATED. CONTRACTOR SHALL TAKE WHATEVER MEANS NECESSARY TO ESTABLISH PERMANENT SOIL STABILIZATION. STEEP SLOPES (GREATER THAN 3:1) SHALL BE STABILIZED WITHIN 7 DAYS OF FINAL GRADING.
5. REMOVE SEDIMENT FROM ALL DRAINAGE STRUCTURES BEFORE ACCEPTANCE BY LOCAL GOVERNING AGENCY OR AS DIRECTED BY THE OWNER'S REPRESENTATIVE.
6. CLEAN SILT BARRIERS WHEN THEY ARE APPROXIMATELY 50% FILLED WITH SEDIMENT OR AS DIRECTED BY THE OWNER'S REPRESENTATIVE. SILT BARRIERS SHALL BE REPLACED AS EFFECTIVENESS IS SIGNIFICANTLY REDUCED OR AS DIRECTED BY THE OWNER'S REPRESENTATIVE.
7. REMOVE THE TEMPORARY EROSION AND WATER POLLUTION CONTROL DEVICES ONLY AFTER A SOLID STAND OF GRASS HAS BEEN ESTABLISHED ON GRADED AREAS AND, WHEN IN THE OPINION OF THE OWNER'S REPRESENTATIVE, THEY ARE NO LONGER NEEDED.
8. PROVIDE TEMPORARY CONSTRUCTION ACCESS(ES) AT THE POINT(S) WHERE CONSTRUCTION VEHICLES EXIT THE CONSTRUCTION AREA. MAINTAIN PUBLIC ROADWAYS FREE OF TRACKED MUD AND DIRT.
9. DO NOT DISTURB VEGETATION OR REMOVE TREES EXCEPT WHEN NECESSARY FOR GRADING PURPOSES.
10. STABILIZATION MEASURES (SEED & MULCH, TRIM WHERE INDICATED) SHALL BE INITIATED AS SOON AS PRACTICABLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, EXCEPT IN THE FOLLOWING TWO CASES.
    - 10.a. WHERE THERE IS SNOW COVER OR FROZEN GROUND CONDITIONS, STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE OR WHERE CONSTRUCTION ACTIVITY ON A PORTION OF THE SITE IS TEMPORARILY CEASED, AND EARTH DISTURBING ACTIVITIES WILL BE RESUMED WITHIN 15 DAYS. TEMPORARY STABILIZATION MEASURES DO NOT HAVE TO BE INITIATED ON THAT PORTION OF SITE.
    - 10.b. ALL EROSION CONTROL MEASURES SHALL BE CHECKED TWICE WEEKLY DURING PROLONGED RAINFALL. DAILY CHECKING IS NECESSARY. DOCUMENTATION OF ALL CHECKS AND CORRECTIVE MEASURES SHALL BE KEPT AT THE PROJECT. A MONITORING REPORT CAN BE FOUND IN THE TENNESSEE EROSION AND SEDIMENT CONTROL HANDBOOK.
11. CONTRACTOR TO PROVIDE AN AREA FOR CONCRETE WASH DOWN AND EQUIPMENT REFUELING IN ACCORDANCE WITH TDEC'S STANDARDS. CONTRACTOR TO COORDINATE EXACT LOCATION WITH NPDES DEPARTMENT DURING PRECONSTRUCTION MEETING. CONTROL OF OTHER SITE WASTES SUCH AS MAY CAUSE ADVERSE IMPACTS TO WATER QUALITY IS ALSO REQUIRED BY THE GRADING PERMITEE.
12. SEE ADDITIONAL EROSION CONTROL NOTES ON SHEET C0-01.

EPSC PHASE 3 CONSTRUCTION SEQUENCE

1. PERMANENTLY STABILIZE SITE.
2. UPON PERMANENT SITE STABILIZATION, REMOVE SILT FENCE, TREE PROTECTION, AND ALL OTHER TEMPORARY EROSION CONTROL DEVICES.
3. REMOVE SEDIMENT FROM SEDIMENT BASIN, CONVERT TO DETENTION POND AND INSTALL PROPOSED OUTLET STRUCTURES.
4. FINISH INSTALLING PERMANENT STORMWATER BMP'S SHOWN ON PHASE 3 EROSION CONTROL PLANS.

TREE PROTECTION FENCING NOTE

TREE PROTECTION FENCING IS TO REMAIN IN PLACE UNTIL FINAL INSPECTION AND SIGN-OFF ON THE MASTER BUILDING PERMIT AND CERTIFICATE OF OCCUPANCY BY THE CODES DEPARTMENT. STORMWATER SIGN-OFF AND REMOVAL OF EROSION CONTROL MEASURES IS NOT JUSTIFICATION TO REMOVE TREE PROTECTION FENCING.

EROSION CONTROL LEGEND

	FR	STONE FILTER RING - CLASS A RIP-RAP, 2' THICK
	OP	OUTLET PROTECTION - REFER TO DETAIL SHEET C3-50
	DD	DIVERSION DITCH - REFER TO DETAIL SHEET C3-50
	IP	INLET PROTECTION - REFER TO DETAIL SHEET C3-50
SF	SF	SILT FENCE - REFER TO DETAIL SHEET C3-50
	EE	EROSION EELS - REFER TO DETAIL SHEET C3-50
	CD	ROCK CHECK DAM - REFER TO DETAIL SHEET C3-50
	CW	CONCRETE WASHOUT AREA - REFER TO DETAIL SHEET C3-50
	MA	EROSION CONTROL MATTING - CONTECH LANDLOK S2 OR APPROVED EQUAL. CONTRACTOR TO INSTALL ON ALL SLOPES 3(H):1(V) OR STEEPER - REFER TO DETAIL SHEET C3-50
	CE	CONSTRUCTION EXIT - REFER TO DETAIL SHEET C3-50
	TS	TEMPORARY STABILIZATION - REFER TO DETAIL SHEET C3-50
	PS	PERMANENT STABILIZATION - REFER TO DETAIL SHEET C3-50
TP	TP	TREE PROTECTION FENCE / HIGH VISIBILITY FENCE - REFER TO DETAIL SHEET C3-50
LOD		LIMITS OF DISTURBANCE
		CONSTRUCTION SIGN

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GRAPHIC SCALE IN FEET
0 50 100 200

NORTH

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CO-OP BUSINESS PARK
LOT 2

PANATTONI DEVELOPMENT COMPANY
LA VERGNE, TENNESSEE

PANATTONI®

ROBERT JAMES ARTS
REGISTERED ENGINEER
AGENCY FILING
No. 121043
STATE OF TENNESSEE
12/18/2023

No	REVISIONS	DATE	BY
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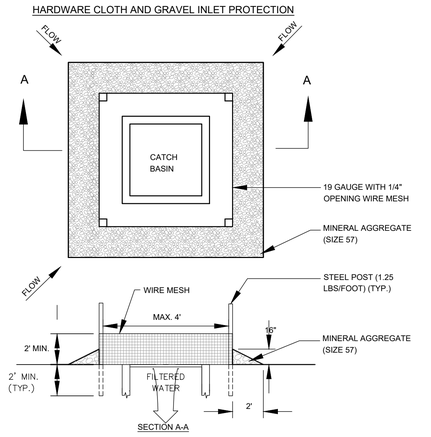
DESIGNED BY:	GTF
DRAWN BY:	GTF
CHECKED BY:	RJA
DATE:	12/18/2023
KIMLEY-HORN PROJECT NO.	118163044

EROSION CONTROL PLAN - PHASE 3 ENLARGEMENT

SHEET NUMBER
C3-31

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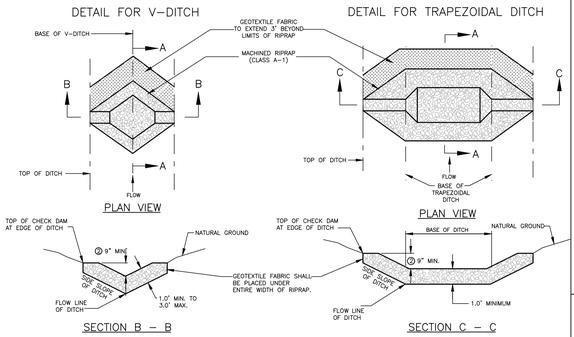
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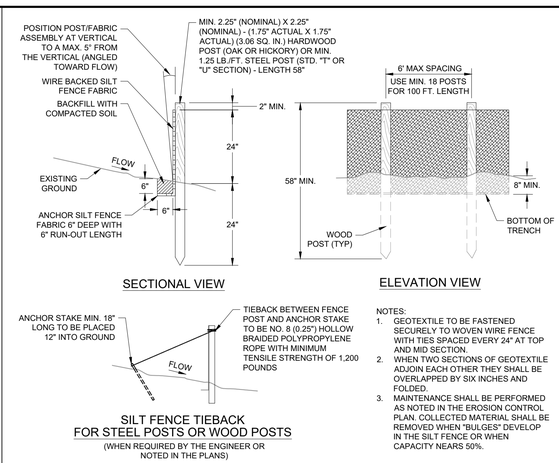
1 INLET PROTECTION - OPEN AREA
NOT TO SCALE

NOTE: CONTRACTOR TO PROVIDE ALTERNATE MEANS FOR INLET PROTECTION IN PAVED AREAS. SUBMIT SUBSTITUTION TO ENGINEER FOR APPROVAL.

5 INLET PROTECTION - PAVED AREA
NOT TO SCALE

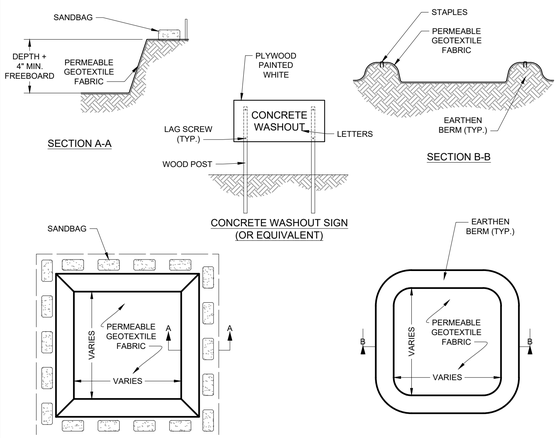


2 CHECK DAM
NOT TO SCALE

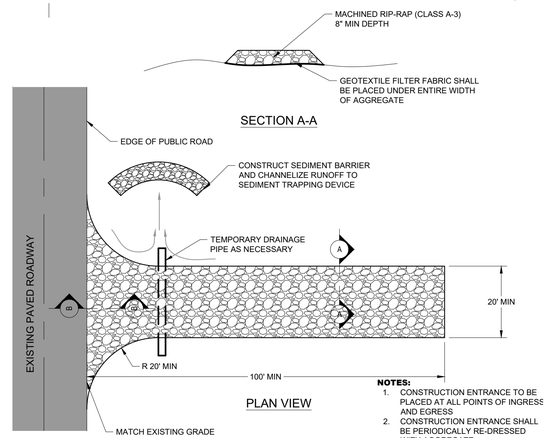


NOTES:
1. GEOTEXTILE TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION.
2. WHEN TWO SECTIONS OF GEOTEXTILE ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY SIX INCHES AND FOLDED.
3. MAINTENANCE SHALL BE PERFORMED AS NOTED IN THE EROSION CONTROL PLAN. COLLECTED MATERIAL SHALL BE REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE OR WHEN CAPACITY NEARS 50%.

3 SILT FENCE TYPE C
NOT TO SCALE



6 CONCRETE WASHOUT
NOT TO SCALE



NOTES:
1. CONSTRUCTION ENTRANCE TO BE PLACED AT ALL POINTS OF INGRESS AND EGRESS
2. CONSTRUCTION ENTRANCE SHALL BE PERIODICALLY RE-DRESSED WITH AGGREGATE

4 CONSTRUCTION ENTRANCE
NOT TO SCALE

LATE WINTER/EARLY SPRING PLANTING	
SPECIES	**RATE (LB/ACRE)**
RYE	120
SEEDING DATES	
EAST	ABOVE 2500 FEET: FEB. 15 - MAY 15
	BELOW 2500 FEET: FEB. 1- MAY 1
MIDDLE	JAN. 1 - MAY 1
WEST	DEC. 1 - APR. 15
MAINTENANCE	
REFERTILIZE IF GROWTH IS NOT FULLY ADEQUATE. RESEED, REFERTILIZE AND MULCH IMMEDIATELY FOLLOWING EROSION OR OTHER DAMAGE.	

SUMMER PLANTING	
SPECIES	**RATE (LB/ACRE)**
OATS	60
BROWN TOP MILLET	30
SEEDING DATES	
EAST	MAY 15 - AUG. 15
MIDDLE	MAY 1 - AUG. 15
WEST	APR. 15 - AUG. 15
MAINTENANCE	
REFERTILIZE IF GROWTH IS NOT FULLY ADEQUATE. RESEED, REFERTILIZE AND MULCH IMMEDIATELY FOLLOWING EROSION OR OTHER DAMAGE.	

FALL PLANTING	
SPECIES	**RATE (LB/ACRE)**
OATS	30
WINTER WHEAT	30
SEEDING DATES	
EAST	AUG. 15 - DEC. 15
MIDDLE	AUG. 15 - DEC. 30
WEST	AUG. 15 - DEC. 30
MAINTENANCE	
REFERTILIZE IF GROWTH IS NOT FULLY ADEQUATE. RESEED, REFERTILIZE AND MULCH IMMEDIATELY FOLLOWING EROSION OR OTHER DAMAGE. IF NECESSARY TO EXTEND TEMPORARY COVER BEYOND JUNE 15, OVERSEED WITH 50 LB/AC CRIMSON CLOVER IN LATE FEBRUARY OR EARLY MARCH.	

ALL SEASON NOTES
SOIL AMENDMENTS
FOLLOW RECOMMENDATIONS OF SOIL TESTS OR APPLY 2,000 LB/ACRE GROUND AGRICULTURAL LIMESTONE AND 750 LB/ACRE 10-10-10 FERTILIZER.
MULCH
APPLY 4,000 LB/ACRE STRAW. ANCHOR STRAW BY TACKING WITH ASPHALT, NETTING, OR A MULCH ANCHORING TOOL. A DISK WITH BLADES SET NEARLY STRAIGHT CAN BE USED AS A MULCH ANCHORING TOOL.

NOTES:
1. TEMPORARY STABILIZATION MEASURES SHALL BE DONE IN ACCORDANCE WITH TDEC EROSION AND SEDIMENT CONTROL HANDBOOK, FOURTH EDITION OR NEWER.

7 TEMPORARY STABILIZATION
NOT TO SCALE

LOW MAINTENANCE AREAS - SLOPES, POOR AND SHALLOW SOILS		
PREFERRED RATE/MIX (LB/AC PLS)	**SEEDING DATES**	
	BEST	*MARGINAL*
15 BROWNTOP MILLET (NURSE CROP)	AUG. 25 - SEP. 15	SEP. 15 - OCT. 25
5 LITTLE BLUESTEM	FEB. 15 - MAY 30	MAR. 21 - MAY 30
2 SWITCH GRASS		
2 TALL DROPSEED		
5 SIDEOATS GRAMMA		
2 BLACK-EYED SUSAN		
2 PARTRIDGE PEA		
1 GREYHEADED CONEFLOWER		

LOW MAINTENANCE AREAS - SLOPES, SOILS > 6" DEEP		
PREFERRED RATE/MIX (LB/AC PLS)	**SEEDING DATES**	
	BEST	*MARGINAL*
15 BROWNTOP MILLET (NURSE CROP)	AUG. 25 - SEP. 15	SEP. 15 - OCT. 25
5 PURPLETOP	FEB. 15 - MAY 30	MAR. 21 - APR. 15
5 LITTLE BLUESTEM		
5 VIRGINIA WILD RYE		
2 BLACK-EYED SUSAN		
2 PARTRIDGE PEA		
1 GREYHEADED CONEFLOWER		

HIGH MAINTENANCE AREAS - LAWNS, ETC.		
PREFERRED RATE/MIX (LB/AC PLS)	**SEEDING DATES**	
	BEST	*MARGINAL*
15 BROWNTOP MILLET (NURSE CROP)	AUG. 30 - OCT. 15	FEB. 15 - APR. 15
2 PARTRIDGE PEA		
45 RED FESCUE		
45 HARD FESCUE		
25 CHEWING FESCUE		

NOTES:
1. MIXES INDICATED ABOVE ARE FOR THE REGION II PLANTING AREA (MIDDLE TENNESSEE).
2. PERMANENT STABILIZATION MEASURES SHALL BE DONE IN ACCORDANCE WITH TDEC EROSION AND SEDIMENT CONTROL HANDBOOK, FOURTH EDITION OR NEWER.
3. REFER TO LANDSCAPE PLANS FOR PERMANENT STABILIZATION PRACTICES AND AREAS TO RECEIVE SOD.

8 PERMANENT STABILIZATION
NOT TO SCALE

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CO-OP BUSINESS PARK LOT 2
PANATTONI DEVELOPMENT COMPANY
LA VERGNE, TENNESSEE

PANATTONI®

ROBERT JAMES ARMS REGISTERED ENGINEER STATE OF TENNESSEE 121045 — 12/18/2023

No.	REVISIONS	DATE	BY
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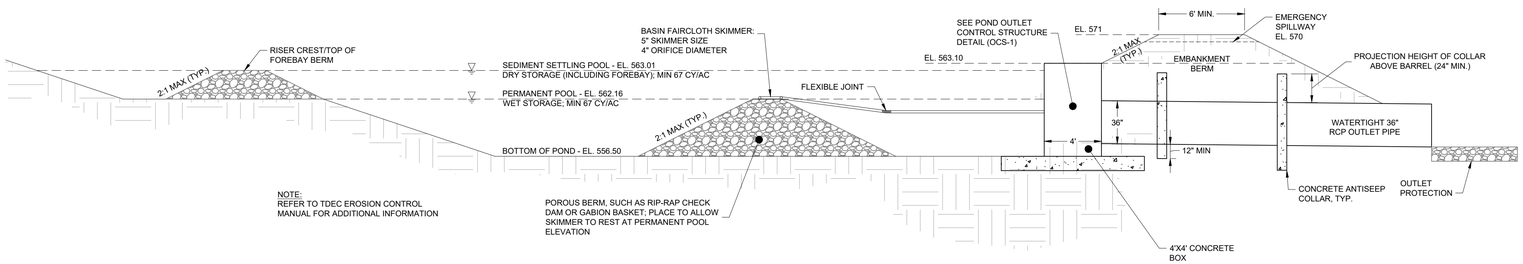
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CHECKED BY:	RJA
DATE:	12/18/2023
KIMLEY-HORN PROJECT NO.	118163044

EROSION CONTROL DETAILS

SHEET NUMBER
C3-50

Drawing name: K:\NSH_LDEV\118163044 - co-op la vergne\4-CADD\plansheets\C3-50 EROSION CONTROL DETAILS.dwg C3-50 LOT 2 Dec 18, 2023 10:31am by: Garrett.Froula

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9 SEDIMENT BASIN #1
SCALE:

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SEDIMENT BASIN #1 DESIGN CALCULATIONS

Project Information

Project Name: CO-OP BUSINESS PARK
KHA Project #: 118163044
Designed by: GTF — Date: 11/13/2023
Checked by: — Date:
Revised by: — Date:

Sediment Basin #1

Basin Drainage Area (A) (ac) =	36.00	
Runoff Coefficient (C) =	0.80	
SCS Curve Number (CN) =	87.00	
Time of Concentration (min) =	5.00	
Rainfall Intensity (2-yr Storm) "I" (in/hr) =	5.48	
Rainfall Intensity (5-yr Storm) "I" (in/hr) =	6.35	
Rainfall Intensity (25-yr Storm) "I" (in/hr) =	7.93	
Flow (Q_2) (cfs) =	157.8	(Q=CYA)
Flow (Q_5) (cfs) =	182.9	(Q=CYA)
Flow (Q_{25}) (cfs) =	228.4	(Q=CYA)
WET Storage Volume (cf) =	65,124	
DRY Storage Volume (cf) =	65,124	
Required Total Volume (cf) =	130,248	(WET + DRY Volumes)
Forebay Volume (cf) =	16,281	
Required Surface Area (sf) =	79,663	
Storage Depth "R" (ft) =	14.50	
Embankment Downstream Side Slope =	3:1	
Embankment Upstream Side Slope =	3:1	
Embankment Total Height =	15.00	
Minimum Embankment Width =	12.00	

Bottom Elevation	Elev (ft)	Area (SF)	Cumulative Volume (CF)
	556.50	3,446	0
	561.50	11,757	36,008
	563.00	45,927	53,179
	571.00	105,549	748,321

Total Basin Volume 748,321 CF
27,716 CY
17.18 Ac-Ft

Designed WET Storage Elev = 562.16
Designed WET Storage Volume (cf) = 65,537
Designed DRY Storage Elev = 563.01
Designed DRY Storage Volume (cf) = 65,652
Designed Total Volume (cf)= 748,321 **O.K. > Minimum Required Volume**

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SEDIMENT BASIN #1 DESIGN CALCULATIONS

Project Information

Project Name: CO-OP BUSINESS PARK
KHA Project #: 118163044
Designed by: GTF — Date: 11/13/2023
Checked by: — Date:
Revised by: — Date:

Skimmer Design

Dewatering Volume = Dry Storage Volume	65,124	CF	Dewatering Time	48	hrs
Skimmer Flow Rate	0.377	CFS		2.00	days
	32,562	ft³/Day	Head (H)	0.333	ft
			Orifice Area	19.85	in²
Skimmer Size	**5.0**	**in**	**Orifice Diameter**	**5.0**	**in**

Principal Spillway Design

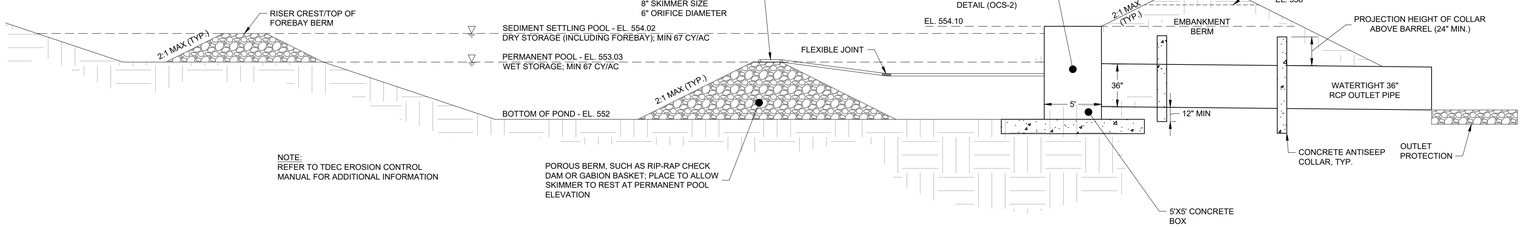
Spillway Type	Inlet Box		Spillway Foundation Type	N/A	
Opening Length	4.0	ft	Base Thickness	N/A	
Opening Width	4.0	ft	Base Length/Width	N/A	ft
Orifice Area	16.00	ft²	Top of Foundation Elevation	N/A	
Spillway Elevation	563.10				
5-yr H	5.81	ft	**5-yr Q**	182.50	CFS
25-yr H	7.80	ft	**25-yr Q**	212.33	CFS

Emergency Spillway Design

Weir Width	10.0	ft			
Weir Elevation	570.00				
Weir C-Value	2.70				
5-yr H	0.29	ft	**5-yr Q**	0.00	CFS
25-yr H	0.70	ft	**25-yr Q**	15.68	CFS

Water Surface Elevations

5-yr Elevation	568.71
5-yr Freeboard	2.29
25-yr Elevation	570.70
25-yr Freeboard	0.30



10 SEDIMENT BASIN #2
SCALE:

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SEDIMENT BASIN #2 DESIGN CALCULATIONS

Project Information

Project Name: CO-OP BUSINESS PARK
KHA Project #: 118163044
Designed by: GTF — Date: 11/13/2023
Checked by: — Date:
Revised by: — Date:

Sediment Basin #2

Basin Drainage Area (A) (ac) =	63.00	
Runoff Coefficient (C) =	0.80	
SCS Curve Number (CN) =	88.00	
Time of Concentration (min) =	5.00	
Rainfall Intensity (2-yr Storm) "I" (in/hr) =	5.48	
Rainfall Intensity (5-yr Storm) "I" (in/hr) =	6.35	
Rainfall Intensity (25-yr Storm) "I" (in/hr) =	7.93	
Flow (Q_2) (cfs) =	276.2	(Q=CYA)
Flow (Q_5) (cfs) =	320.0	(Q=CYA)
Flow (Q_{25}) (cfs) =	399.7	(Q=CYA)
WET Storage Volume (cf) =	113,967	
DRY Storage Volume (cf) =	113,967	
Required Total Volume (cf) =	227,934	(WET + DRY Volumes)
Forebay Volume (cf) =	28,492	
Required Surface Area (sf) =	139,409	
Storage Depth "R" (ft) =	7.50	
Embankment Downstream Side Slope =	3:1	
Embankment Upstream Side Slope =	3:1	
Embankment Total Height =	7.00	
Minimum Embankment Width =	12.00	

Bottom Elevation	Elev (ft)	Area (SF)	Cumulative Volume (CF)
	552.00	108,000	0
	553.00	113,000	111,000
	554.00	117,000	226,000
	556.00	193,666	526,666
	558.00	216,517	926,849
	559.00	262,000	1,169,108

Total Basin Volume 1,169,108 CF
43,300 CY
26.84 Ac-Ft

Designed WET Storage Elev = 553.03
Designed WET Storage Volume (cf) = 114,450
Designed DRY Storage Elev = 554.02
Designed DRY Storage Volume (cf) = 114,557
Designed Total Volume (cf)= 1,169,108 **O.K. > Minimum Required Volume**

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SEDIMENT BASIN #2 DESIGN CALCULATIONS

Project Information

Project Name: CO-OP BUSINESS PARK
KHA Project #: 118163044
Designed by: GTF — Date: 11/13/2023
Checked by: — Date:
Revised by: — Date:

Skimmer Design

Dewatering Volume = Dry Storage Volume	113,967	CF	Dewatering Time	48	hrs
Skimmer Flow Rate	0.660	CFS		2.00	days
	56,984	ft³/Day	Head (H)	0.500	ft
			Orifice Area	28.37	in²
Skimmer Size	**8.0**	**in**	**Orifice Diameter**	**6.0**	**in**

Principal Spillway Design

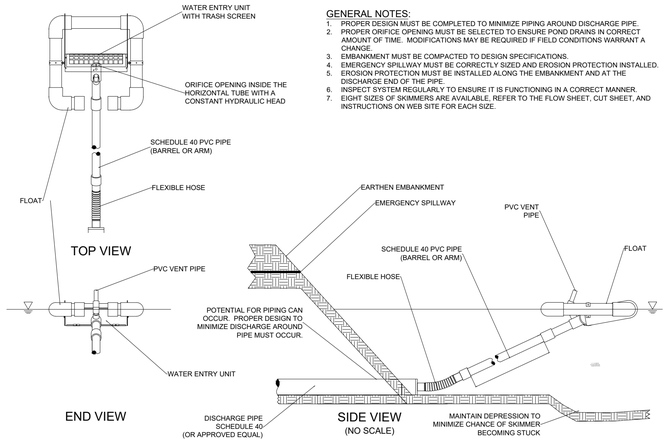
Spillway Type	Inlet Box		Spillway Foundation Type	N/A	
Opening Length	5.0	ft	Base Thickness	N/A	
Opening Width	5.0	ft	Base Length/Width	N/A	ft
Orifice Area	25.00	ft²	Top of Foundation Elevation	N/A	
Spillway Elevation	554.10				
5-yr H	4.51	ft	**5-yr Q**	255.55	CFS
25-yr H	4.89	ft	**25-yr Q**	268.17	CFS

Emergency Spillway Design

Weir Width	50.0	ft			
Weir Elevation	558.00				
Weir C-Value	2.70				
5-yr H	0.61	ft	**5-yr Q**	63.83	CFS
25-yr H	0.99	ft	**25-yr Q**	132.84	CFS

Water Surface Elevations

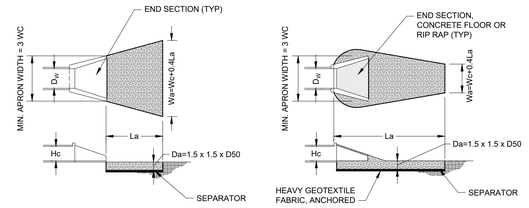
5-yr Elevation	558.61
5-yr Freeboard	0.39
25-yr Elevation	558.99
25-yr Freeboard	0.01



GENERAL NOTES:

1. PROPER DESIGN MUST BE COMPLETED TO MINIMIZE PIPING AROUND DISCHARGE PIPE.
2. PROPER ORIFICE OPENING MUST BE SELECTED TO ENSURE POND DRAINS IN CORRECT AMOUNT OF TIME. MODIFICATIONS MAY BE REQUIRED IF FIELD CONDITIONS WARRANT A CHANGE.
3. EMBANKMENT MUST BE COMPACTED TO DESIGN SPECIFICATIONS.
4. EMERGENCY SPILLWAY MUST BE CORRECTLY SIZED AND EROSION PROTECTION INSTALLED.
5. EROSION PROTECTION MUST BE INSTALLED ALONG THE EMBANKMENT AND AT THE DISCHARGE END OF THE PIPE.
6. INSPECT SYSTEM REGULARLY TO ENSURE IT IS FUNCTIONING IN A CORRECT MANNER.
7. EIGHT SIZES OF SKIMMERS ARE AVAILABLE; REFER TO THE FLOW SHEET, CUT SHEET, AND INSTRUCTIONS ON WEB SITE FOR EACH SIZE.

11 EMBANKMENT DISCHARGE - FAIRCLOTH SKIMMER
NOT TO SCALE



TAILWATER < 0.5 Hc AND ASSUMING FULL CULVERT FLOW (LOW TAILWATER CONDITIONS)

TAILWATER > 0.5 Hc AND ASSUMING FULL CULVERT FLOW (HIGH TAILWATER CONDITIONS)

H_W = HEIGHT OF CULVERT
D_W = WIDTH OF CULVERT
W_C = WIDTH OF RIP-RAP AT START
L_A = LENGTH OF RIP-RAP APRON
W_A = WIDTH OF RIP-RAP APRON AT END
D_{50} = MEDIAN SIZE OF RIP-RAP (6" MIN)
D_{MAX} = MAXIMUM SIZE OF RIP-RAP = 1.5 D_{50}
D_A = DEPTH OF RIP-RAP APRON = 1.5 D_{MAX}
SEPARATOR = GEOTEXTILE UNDERLAYMENT OR GRAVEL FILTER BLANKET

RIP-RAP APRON SUMMARY TABLE

RIP-RAP APRON CHARACTARISTICS	SYMBOL	A0	B0	C0	D0	D3	E0	F0	G0	J0	K0	L0	L2	M0	N0	N1	HW-1	HW-2
NOMINAL RIP-RAP SIZE (INCHES)	D_{50}	15.0	12.0	15.0	12.0	15.0	20.0	20.0	20.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	20.0	20.0
10-YEAR DISCHARGE (CFS)	Q	24.34	51.14	44.17	17.37	16.40	134.13	109.02	124.84	31.78	70.87	101.81	71.37	13.09	169.44	169.44	83.00	83.00
CONDUIT DIAMETER (FT)	D_W	2.50	3.50	3.00	2.00	2.00	4.00	4.00	4.00	2.50	3.50	4.00	3.50	1.50	4.00	4.00	3.00	3.00
START APRON WIDTH (FT)	W_C	7.5	10.5	9.0	6.0	6.0	12.0	12.0	12.0	7.5	10.5	12.0	10.5	4.5	12.0	12.0	9.0	9.0
LENGTH (FT)	L_A	10.0	14.0	12.0	8.0	8.0	20.0	20.0	20.0	10.0	14.0	16.0	14.0	6.0	16.0	16.0	15.0	15.0
APRON DEPTH (INCHES)	D_A	50.0	50.0	50.0	50.0	50.0	48.0	48.0	48.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	48.0	48.0
END APRON WIDTH (FT)	W_A	15.0	20.00	17.00	12.00	12.00	26.00	26.00	26.00	15.00	20.00	23.00	20.00	9.00	23.00	23.00	19.00	19.00
RIP-RAP CLASS PER TDOT	-	B	B	B	B	B	C	C	C	B	B	B	B	B	B	B	C	C

12 OUTLET PROTECTION
NOT TO SCALE

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CO-OP BUSINESS PARK
LOT 2
PANATTONI DEVELOPMENT COMPANY
LA VERGNE, TENNESSEE

PANATTONI®

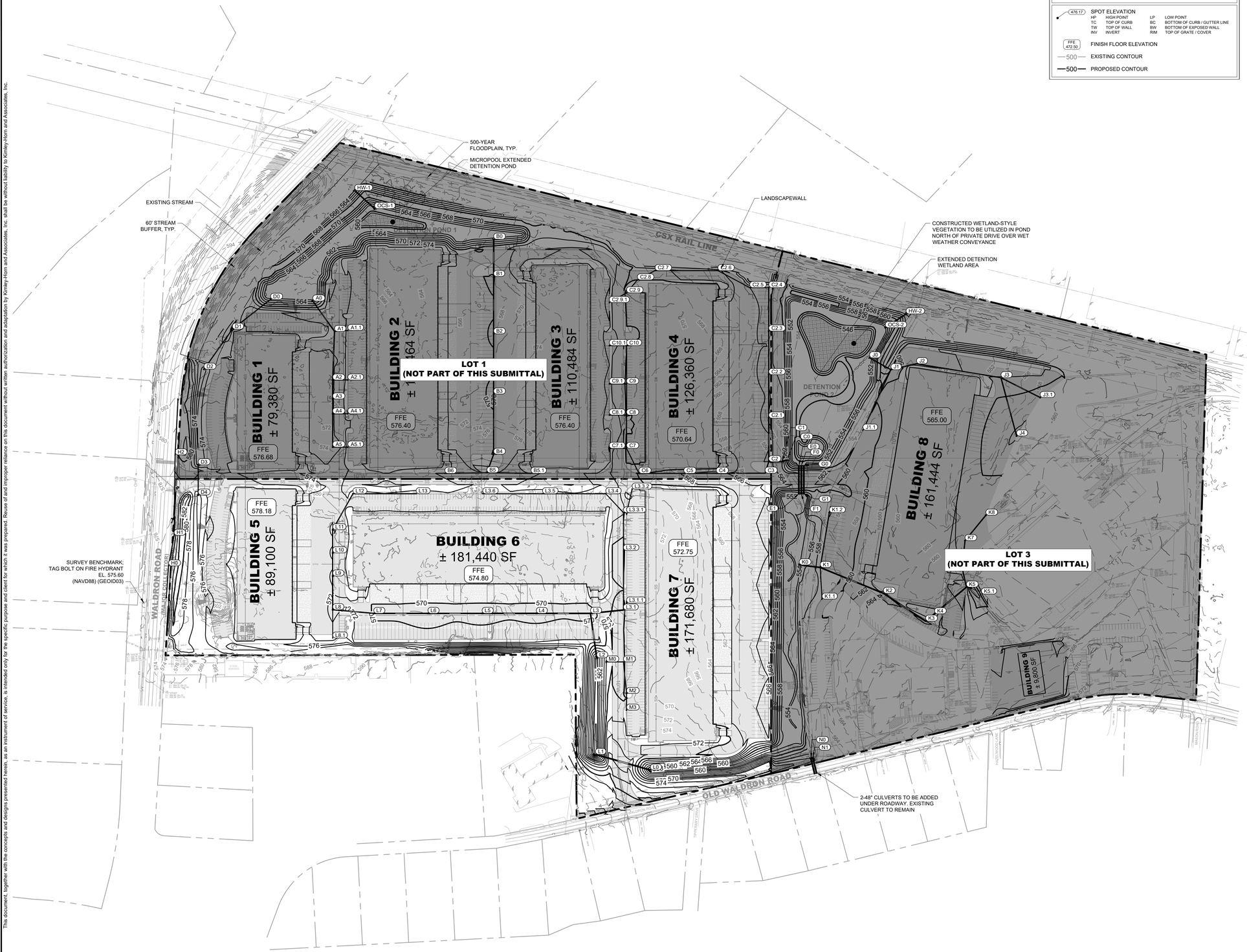
ROBERT JAMES ARS
REGISTERED ENGINEER
AGENCY NUMBER
No. 121045
STATE OF TENNESSEE
12/18/2023

No	REVISIONS	DATE	BY
-			
1			
2			
3			
4			
5			
6			
7			

DESIGNED BY: GTF
DRAWN BY: GTF
CHECKED BY: RJA
DATE: 12/18/2023
KIMLEY-HORN PROJECT NO. 118163044

EROSION CONTROL DETAILS

SHEET NUMBER
C3-51



GRADING PLAN LEGEND

- SPOT ELEVATION (476.17)
  - HP HIGH POINT
  - TC TOP OF CURB
  - TW TOP OF WALL
  - INV INVERT
  - LP LOW POINT
  - BC BOTTOM OF CURB / GUTTER LINE
  - BW BOTTOM OF EXPOSED WALL
  - RIM TOP OF GRATE / COVER
- FFE 472.00 — FINISH FLOOR ELEVATION
- 500 — EXISTING CONTOUR
- 500 — PROPOSED CONTOUR

GRADING NOTES

1. CONTRACTOR RESPONSIBLE FOR VERIFYING LOCATION, SIZE, AND ELEVATIONS OF EXISTING UTILITIES AT CONNECTION POINTS PRIOR TO GRADING OR INSTALLATION OF ANY PROPOSED UTILITIES. CONTRACTOR TO IMMEDIATELY NOTIFY OWNER'S REPRESENTATIVE IF DISCREPANCIES ARE FOUND.
2. AREAS FOR CONSTRUCTION THAT REQUIRE DE-WATERING FOR EXCAVATION WILL BE DONE AT NO ADDITIONAL COST TO THE OWNER AND IN ACCORDANCE WITH SECTION 4.1.4 OF THE TENNESSEE GENERAL NPDES PERMIT FOR DISCHARGES OF STORMWATER ASSOCIATED WITH CONSTRUCTION ACTIVITIES.
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6. THE GRADING PERMIT MUST BE DISPLAYED ON SITE AT ALL TIMES DURING CONSTRUCTION AND IN PLAIN VIEW FROM A PUBLIC ROAD OR STREET.
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CO-OP BUSINESS PARK LOT 2

PANATTONI DEVELOPMENT COMPANY
LA VERGNE, TENNESSEE

PANATTONI®

ROBERT JAMES ARMS — REGISTERED ENGINEER — AGENCY NUMBER — COMMISSION No. 121065 — STATE OF TENNESSEE
12/18/2023

No.	REVISIONS	DATE	BY
-	-		
0	1		
1	2		
2	3		
3	4		
4	5		
5	6		
6	7		

DESIGNED BY:	GTF
DRAWN BY:	GTF
CHECKED BY:	RJA
DATE:	12/18/2023
KIMLEY-HORN PROJECT NO.	118163044

GRADING AND DRAINAGE PLAN - OVERALL

SHEET NUMBER
C4-20

811 Know what's below. Call before you dig.

GRAPHIC SCALE IN FEET
0 75 150 300

NORTH

Drawing name: K:\NSH_LDEV\118163044 - co-op la vergne\4-CADD\plansheets\C4-00 GRADING AND DRAINAGE PLAN - OVERALL.dwg C4-20 GRADING AND DRAINAGE PLAN - LOT 2 Dec 18, 2023 10:32am by: Garrett.Froula

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LOT 1 - (NOT PART OF THIS SUBMITTAL)

MATCHLINE - SEE SHEET C4-11

SEE SHEET C4-12

2% CROSS SLOPE, TYP.

BUILDING 5
± 89,100 SF

FFE 578.18

BUILDING 6
± 181,440 SF

FFE 574.80

ENLARGEMENT ON THIS SHEET

WALDRON ROAD
(MAJOR COLLECTOR)

MATCHLINE - SEE SHEET C4-22

MONUMENT SIGN LOCATION

ME: 578.84

ME: 574.64

WALDRON ROAD

GRAPHIC SCALE IN FEET
0 15 30 60

NORTH

WALDRON ROAD ENLARGEMENT

ADA COMPLIANCE NOTES

1. ALL SIDEWALKS AND ADA PARKING AREAS ARE TO BE IN COMPLIANCE WITH ADA SLOPE CRITERIA, UNLESS EXPLICITLY NOTED.

GRADING PLAN LEGEND

476.17	SPOT ELEVATION			
	HP	HIGH POINT	LP	LOW POINT
	TC	TOP OF CURB	BC	BOTTOM OF CURB / GUTTER LINE
	TW	TOP OF WALL	BW	BOTTOM OF EXPOSED WALL
	INV	INVERT	RIM	TOP OF GRATE / COVER
FFE 472.50	FINISH FLOOR ELEVATION			
500	EXISTING CONTOUR			
500	PROPOSED CONTOUR			

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GRAPHIC SCALE IN FEET
0 25 50 100

NORTH

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CO-OP BUSINESS PARK LOT 2

PANATTONI DEVELOPMENT COMPANY
LA VERGNE, TENNESSEE

PANATTONI®

ROBERT JAMES ARMS — REGISTERED ENGINEER — AGENCY NUMBER 120106 — COMMERCE — STATE OF TENNESSEE
12/18/2023

No.	REVISIONS	DATE	BY
1			
2			
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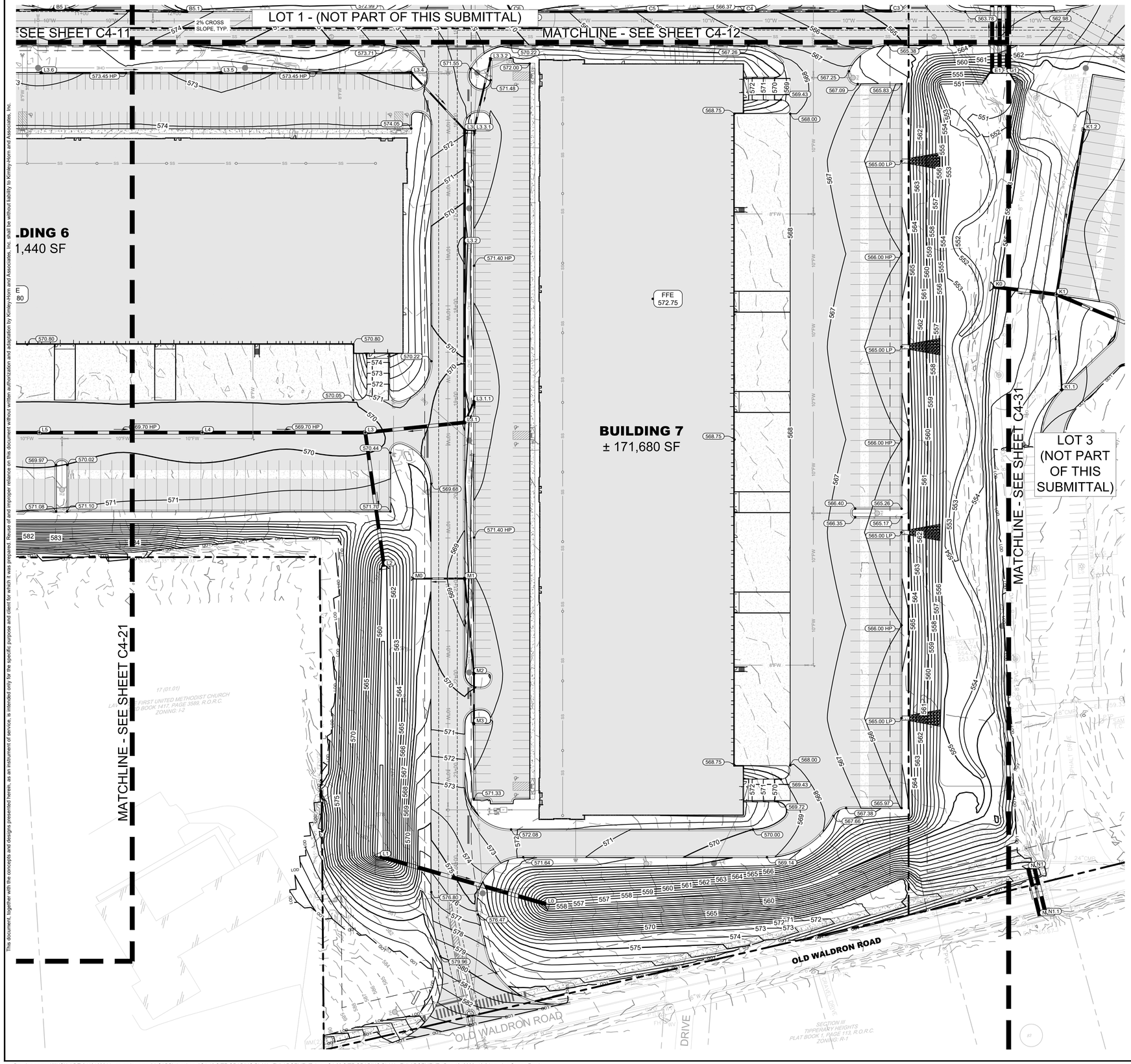
DESIGNED BY:	GTF
DRAWN BY:	GTF
CHECKED BY:	RJA
DATE:	12/18/2023

KIMLEY-HORN PROJECT NO. 118163044

SITE GRADING PLAN - ENLARGEMENT

SHEET NUMBER
C4-21

Drawing name: K:\NSH_LDEV\118163044 - co-op la vergne\4-CADD\plansheets\C4-10 SITE GRADING PLAN - ENLARGEMENT.dwg C4-21 SITE GRADING PLAN - ENLARGEMENT Dec 18, 2023 10:34am by: Garrett.Froula



GRADING NOTES

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GRADING PLAN LEGEND

476.17	SPOT ELEVATION		
HP	HIGH POINT	LP	LOW POINT
TC	TOP OF CURB	BC	BOTTOM OF CURB / GUTTER LINE
TW	TOP OF WALL	BW	BOTTOM OF EXPOSED WALL
INV	INVERT	RIM	TOP OF GRATE / COVER
FFE 472.50	FINISH FLOOR ELEVATION		
500	EXISTING CONTOUR		
500	PROPOSED CONTOUR		

ADA COMPLIANCE NOTES

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811 Know what's below. Call before you dig.

GRAPHIC SCALE IN FEET
0 25 50 100

NORTH

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CO-OP BUSINESS PARK LOT 2

PANATTONI DEVELOPMENT COMPANY
LA VERGNE, TENNESSEE

PANATTONI®

ROBERT JAMES ARTS
REGISTERED ENGINEER
AGENT OF RECORD
LICENSE
No. 121043
STATE OF TENNESSEE
12/18/2023

No.	REVISIONS	DATE	BY
-	-		
1			
2			
3			
4			
5			
6			
7			

DESIGNED BY:	GTF
DRAWN BY:	GTF
CHECKED BY:	RJA
DATE:	12/18/2023
KIMLEY-HORN PROJECT NO.	118163044

SITE GRADING PLAN - ENLARGEMENT

SHEET NUMBER
C4-22

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STRUCTURE TABLE		
NAME	DESCRIPTION	TOP GRATE
A0	HEADWALL	N/A
A1	JBS 3101	572.89
A1.1	JBS 3101	574.25
A2	JBS 4310	570.97
A2.1	JBS 3101	574.25
A3	JBS 4310	571.05
A4	JBS 4310	571.05
A4.1	JBS 3101	574.25
A5	JBS 4310	571.23
A5.1	JBS 3101	574.35
B0	HEADWALL	N/A
B1	DOUBLE JBS 4310	569.05
B2	DOUBLE JBS 4310	569.52
B3	DOUBLE JBS 4310	569.37
B4	DOUBLE JBS 4310	569.91
B5	JBS 3101	572.29
B5.1	JBS 3101	573.71
B6	JBS 3101	573.70
C0	HEADWALL	N/A
C1	JBS 3101	563.34
C2	JBS 4310	563.59
C2.1	JBS 4310	563.24
C2.2	JBS 4310	562.89
C2.3	JBS 4310	562.89
C2.4	JBS 4310	562.89
C2.5	JBS 3101	564.00
C2.6	JBS 3101	566.21
C2.7	JBS 3101	568.61
C2.8	JBS 3101	569.41
C2.9	JBS 3101	568.76
C2.9.1	JBS 3101	573.41
C3	JBS 3101	564.68
C4	JBS 3101	566.37
C5	JBS 3101	567.84
C6	JBS 3101	569.86
C7	JBS 3101	568.73
C7.1	JBS 3101	573.89
C8	JBS 3101	569.19
C8.1	JBS 3101	574.01
C9	JBS 3101	568.39

STRUCTURE TABLE		
NAME	DESCRIPTION	TOP GRATE
C9.1	JBS 3101	573.72
C10	JBS 3101	568.39
C10.1	JBS 3101	573.94
D0	HEADWALL	N/A
D1	MANHOLE	573.81
D2	JBS 2272	570.92
D3	HEADWALL	N/A
D4	HEADWALL	N/A
E0	HEADWALL	N/A
E1	HEADWALL	N/A
EX 0	EXISTING CB TO REMAIN	N/A
EX 1	EXISTING CB TO REMAIN	N/A
F0	HEADWALL	N/A
F1	HEADWALL	N/A
G0	HEADWALL	N/A
G1	HEADWALL	N/A
H0	JBS 3101	574.64
H1	JBS 3101	575.40
H2	JBS 3101	578.72
HW-1	HEADWALL	N/A
HW-2	HEADWALL	N/A
J0	HEADWALL	N/A
J1	JBS 3101	559.50
J1.1	JBS 3101	558.60
J2	JBS 3101	560.49
J3	MANHOLE	561.89
J3.1	JBS 4310	558.23
J4	JBS 4310	557.81
K0	HEADWALL	N/A
K1	JBS 4310	558.48
K1.1	JBS 3101	559.87
K1.2	JBS 4310	557.80
K2	JBS 3101	563.27
K3	JBS 3101	563.56
K4	JBS 2272	562.40
K5	JBS 3101	563.22
K5.1	HEADWALL	N/A
K6	JBS 4310	560.47
K7	JBS 4310	560.59
K8	JBS 4310	560.59

STRUCTURE TABLE		
NAME	DESCRIPTION	TOP GRATE
L0	HEADWALL	N/A
L1	HEADWALL	N/A
L2	HEADWALL	N/A
L3	JBS 4310	569.04
L3.1	JBS 3101	568.92
L3.1.1	JBS 3101	569.94
L3.2	JBS 3101	568.78
L3.3	JBS 3101	572.14
L3.3.1	JBS 3101	569.94
L3.3.2	JBS 3101	571.06
L3.4	JBS 3101	572.43
L3.5	JBS 3101	572.43
L3.6	JBS 3101	572.54
L4	JBS 4310	569.04
L5	JBS 4310	569.04
L6	JBS 4310	568.82
L7	JBS 4310	569.70
L8	JBS 4310	571.45
L8.1	JBS 2272	572.80
L9	JBS 4310	571.67
L10	JBS 4310	571.67
L11	JBS 4310	571.67
L12	JBS 3101	572.43
L13	JBS 3101	572.43
M0	HEADWALL	N/A
M1	JBS 3101	569.35
M2	JBS 3101	570.31
M3	JBS 3101	570.58
N0	HEADWALL	N/A
N0.1	Null Structure	N/A
N1	HEADWALL	N/A
N1.1	Null Structure	N/A
OCS-1	OUTLET CONTROL STRUCTURE	N/A
OCS-2	OUTLET CONTROL STRUCTURE	N/A

PIPE TABLE							
NAME	UPSTREAM	DOWNSTREAM	SIZE	LENGTH	SLOPE	MATERIAL	MIN. COVER
A1 - A0	563.73 (A1)	562.50 (A0)	30"	122'	1.01%	RCP	-2.114 FT.
A1.1 - A1	570.57 (A1.1)	566.33 (A1)	18"	44'	9.82%	RCP	1.918 FT.
A2 - A1	564.61 (A2)	563.83 (A1)	30"	158'	0.50%	RCP	3.569 FT.
A2.1 - A2	570.57 (A2.1)	567.21 (A2)	18"	50'	6.86%	RCP	1.688 FT.
A3 - A2	565.02 (A3)	564.71 (A2)	30"	62'	0.50%	RCP	3.238 FT.
A4 - A3	565.36 (A4)	565.12 (A3)	24"	48'	0.50%	RCP	3.440 FT.
A4.1 - A4	568.75 (A4.1)	567.96 (A4)	18"	50'	1.61%	RCP	1.382 FT.
A5 - A4	566.00 (A5)	565.46 (A4)	24"	108'	0.50%	RCP	2.981 FT.
A5.1 - A5	570.42 (A5.1)	567.00 (A5)	18"	50'	6.97%	RCP	1.884 FT.
B1 - B0	562.12 (B1)	561.50 (B0)	42"	121'	0.51%	RCP	-2.057 FT.
B2 - B1	563.15 (B2)	562.22 (B1)	36"	186'	0.50%	RCP	3.503 FT.
B3 - B2	564.22 (B3)	563.25 (B2)	36"	196'	0.50%	RCP	1.813 FT.
B4 - B3	565.10 (B4)	564.32 (B3)	30"	196'	0.40%	RCP	2.014 FT.
B5 - B4	565.52 (B5)	565.20 (B4)	30"	64'	0.50%	RCP	1.914 FT.
B5.1 - B5	569.50 (B5.1)	567.02 (B5)	24"	144'	1.73%	RCP	1.956 FT.
B6 - B5	568.00 (B6)	566.02 (B5)	24"	137'	1.45%	RCP	3.400 FT.
C1 - C0	551.21 (C1)	551.02 (C0)	36"	18'	1.04%	RCP	4.975 FT.
C2 - C1	554.32 (C2)	554.10 (C1)	36"	43'	0.50%	RCP	5.904 FT.
C2.1 - C2	556.28 (C2.1)	555.58 (C2)	36"	141'	0.50%	RCP	3.624 FT.
C2.2 - C2.1	557.09 (C2.2)	556.38 (C2.1)	30"	141'	0.50%	RCP	3.008 FT.
C2.3 - C2.2	557.89 (C2.3)	557.19 (C2.2)	24"	142'	0.50%	RCP	2.744 FT.
C2.4 - C2.3	558.70 (C2.4)	557.99 (C2.3)	24"	141'	0.50%	RCP	1.939 FT.
C2.5 - C2.4	559.93 (C2.5)	558.80 (C2.4)	18"	62'	1.83%	RCP	2.365 FT.

PIPE TABLE							
NAME	UPSTREAM	DOWNSTREAM	SIZE	LENGTH	SLOPE	MATERIAL	MIN. COVER
C2.6 - C2.5	562.18 (C2.6)	560.03 (C2.5)	18"	118'	1.83%	RCP	2.265 FT.
C2.7 - C2.6	563.29 (C2.7)	562.28 (C2.6)	18"	204'	0.50%	RCP	2.221 FT.
C2.8 - C2.7	563.72 (C2.8)	563.39 (C2.7)	18"	65'	0.50%	RCP	3.506 FT.
C2.9 - C2.8	564.09 (C2.9)	563.82 (C2.8)	18"	55'	0.50%	RCP	2.959 FT.
C2.9.1 - C2.9	568.72 (C2.9.1)	564.22 (C2.9)	18"	65'	7.00%	RCP	1.445 FT.
C3 - C2	556.49 (C3)	555.48 (C2)	30"	40'	2.59%	RCP	5.323 FT.
C4 - C3	560.69 (C4)	556.59 (C3)	24"	159'	2.59%	RCP	3.436 FT.
C5 - C4	561.31 (C5)	560.79 (C4)	24"	105'	0.50%	RCP	3.336 FT.
C6 - C5	562.04 (C6)	561.31 (C5)	24"	146'	0.50%	RCP	4.275 FT.
C7 - C6	562.99 (C7)	562.54 (C6)	18"	91'	0.50%	RCP	4.028 FT.
C7.1 - C7	567.59 (C7.1)	564.00 (C7)	18"	56'	6.40%	RCP	3.017 FT.
C8 - C7	563.53 (C8)	562.99 (C7)	18"	108'	0.50%	RCP	3.957 FT.
C8.1 - C8	570.80 (C8.1)	564.00 (C8)	18"	56'	12.14%	RCP	0.823 FT.
C9 - C8	564.03 (C9)	563.53 (C8)	18"	101'	0.50%	RCP	2.649 FT.
C9.1 - C9	570.51 (C9.1)	565.00 (C9)	18"	56'	9.83%	RCP	-0.145 FT.
C10 - C9	564.65 (C10)	564.03 (C9)	18"	125'	0.50%	RCP	2.028 FT.
C10.1 - C10	570.73 (C10.1)	566.25 (C10)	18"	56'	8.00%	RCP	0.430 FT.
D1 - D0	565.99 (D1)	564.00 (D0)	24"	158'	1.26%	RCP	-3.333 FT.
D2 - D1	566.88 (D2)	566.09 (D1)	24"	159'	0.50%	RCP	1.790 FT.
D4 - D3	572.25 (D4)	571.82 (D3)	24"	98'	0.45%	RCP	-1.204 FT.
E1 - E0	550.85 (E1)	550.39 (E0)	48"	93'	0.50%	RCP	-4.504 FT.
EX 1 - H2	576.66 (EX 1)	574.72 (H2)	18"	180'	1.08%	RCP	0.000 FT.
F1 - F0	550.85 (F1)	550.39 (F0)	48"	93'	0.50%	RCP	-4.504 FT.

PIPE TABLE							
NAME	UPSTREAM	DOWNSTREAM	SIZE	LENGTH	SLOPE	MATERIAL	MIN. COVER
G1 - G0	550.85 (G1)	550.39 (G0)	48"	93'	0.50%	RCP	-4.504 FT.
H0 - EX 0	571.19 (H0)	570.75 (EX 0)	18"	103'	0.43%	RCP	1.550 FT.
H1 - H0	571.73 (H1)	571.29 (H0)	18"	101'	0.43%	RCP	-0.050 FT.
H2 - H1	574.62 (H2)	571.83 (H1)	18"	261'	1.07%	RCP	-0.167 FT.
J1 - J0	551.56 (J1)	551.20 (J0)	30"	80'	0.46%	RCP	-2.942 FT.
J1.1 - J1	555.14 (J1.1)	551.81 (J1)	18"	216'	1.55%	RCP	1.748 FT.
J2 - J1	552.05 (J2)	551.66 (J1)	30"	86'	0.46%	RCP	5.043 FT.
J3 - J2	553.41 (J3)	552.15 (J2)	24"	278'	0.46%	RCP	6.091 FT.
J3 - J3.1	554.15 (J3)	554.53 (J3.1)	30"	143'	0.26%	*	1.792 FT.
J4 - J3	554.39 (J4)	553.41 (J3)	30"	196'	0.50%	*	1.105 FT.
K1 - K0	553.10 (K1)	552.76 (K0)	42"	69'	0.50%	RCP	-3.605 FT.
K1 - K1.2	553.15 (K1)	554.05 (K1.2)	24"	180'	0.50%	RCP	1.505 FT.
K1.1 - K1	556.93 (K1.1)	554.54 (K1)	15"	103'	2.33%	RCP	0.079 FT.
K2 - K1	554.21 (K2)	553.10 (K1)	42"	222'	0.50%	RCP	1.317 FT.
K3 - K2	555.03 (K3)	554.21 (K2)	42"	164'	0.50%	RCP	4.657 FT.
K4 - K3	555.21 (K4)	555.03 (K3)	42"	38'	0.50%	RCP	3.307 FT.
K5 - K4	555.89 (K5)	555.21 (K4)	42"	135'	0.50%	RCP	3.307 FT.
K5 - K5.1	555.89 (K5)	556.00 (K5.1)	36"	14'	0.83%	RCP	-1.841 FT.
K6 - K5	556.20 (K6)	555.89 (K5)	30"	65'	0.49%	RCP	1.451 FT.
K7 - K6	556.64 (K7)	556.20 (K6)	30"	89'	0.50%	*	2.028 FT.
K8 - K7	557.17 (K8)	556.64 (K7)	30"	107'	0.50%	*	1.436 FT.
L1 - L0	557.75 (L1)	556.83 (L0)	48"	186'	0.50%	RCP	-4.910 FT.
L3 - L2	560.33 (L3)	559.61 (L2)	42"	146'	0.50%	RCP	-3.875 FT.

STORMWATER PIPE NOTE

PIPES DENOTED WITH AN ASTERISK ON THE PIPE TABLES ARE TO BE 30" x 19" CONCRETE HORIZONTAL ELLIPTICAL CULVERTS.

THE PIPE AND STRUCTURE TABLES SHOWN ARE FOR THE ENTIRETY OF LOTS 1, 2, AND 3 OF THE CO-OP BUSINESS PARK, AS THEY ARE PART OF A SHARED REGIONAL STORMWATER MANAGEMENT PLAN.

811 Know what's below. Call before you dig.

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CO-OP BUSINESS PARK LOT 2

PANATTONI DEVELOPMENT COMPANY
LA VERGNE, TENNESSEE

PANATTONI®

ROBERT JAMES ARMS — REGISTERED ENGINEER — AGENCY NAME — COMMISSION NO. 121045 — STATE OF TENNESSEE — 12/18/2023

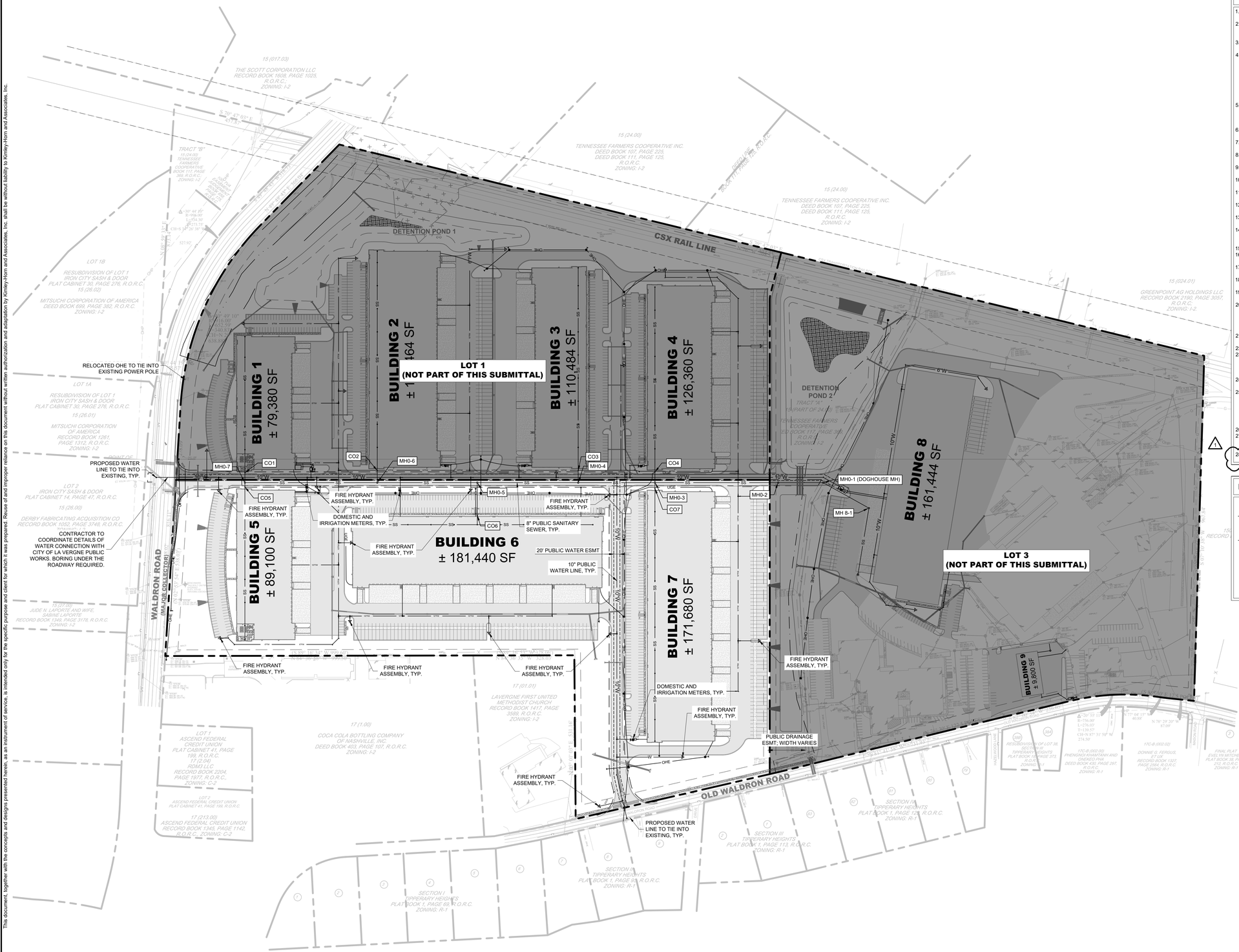
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6	7		

DESIGNED BY:	GTF
DRAWN BY:	GTF
CHECKED BY:	RJA
DATE:	12/18/2023

KIMLEY-HORN PROJECT NO. 118163044

STORMWATER TABLES

SHEET NUMBER
C4-50



SITE UTILITY NOTES

1. EXISTING UTILITIES SHALL BE VERIFIED IN FIELD PRIOR TO INSTALLATION OF ANY NEW PIPE LINES.
2. WHERE WATER PIPING CROSSES THE SANITARY SEWER LINE, THE WATER SERVICE WITHIN 10 FEET OF THE POINT OF CROSSING SHALL BE AT LEAST 18 INCHES ABOVE THE TOP OF THE SEWER LINE.
3. THE CONTRACTOR SHALL NOTIFY THE INSPECTOR AT LEAST 7 DAYS PRIOR TO THE START OF SEWER CONSTRUCTION.
4. THE LOCATIONS OF EXISTING UNDERGROUND AND OVERHEAD UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR KIMLEY-HORN AND ASSOCIATES, INC. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UNDERGROUND AND OVERHEAD UTILITIES BEFORE COMMENCING WORK AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTORS FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND AND OVERHEAD UTILITIES.
5. CONTRACTOR TO COORDINATE ALL WORK WITH OTHER UTILITY INSTALLATIONS NOT PROVIDED IN THESE CONSTRUCTION DOCUMENTS (ELECTRIC, TELEPHONE, GAS, CABLE, ETC.) AND ALLOW FOR THEIR OPERATIONS AND CONSTRUCTION TO BE PERFORMED.
6. ALL WORK AND MATERIALS SHALL COMPLY WITH THE CITY OF LA VERGNE AND O.H.S.A. STANDARDS.
7. ALL PIPES UNDER STREETS OR PAVED AREAS IN R.O.W. SHALL BE BACKFILLED WITH CRUSHED STONE.
8. ALL AREAS BACKFILLED SHALL BE COMPACTED TO 95% STANDARD PROCTOR IN R.O.W.
9. EXISTING UTILITIES SHALL BE VERIFIED IN FIELD PRIOR TO INSTALLATION OF ANY NEW PIPE LINES.
10. LINES UNDERGROUND SHALL BE INSTALLED, TESTED AND APPROVED BEFORE BACKFILLING.
11. CONTRACTOR TO CONTACT THE CITY OF LA VERGNE TO COORDINATE INSTALLATION AS REQUIRED.
12. ALL FIRE HYDRANTS INSTALLED FOR THIS DEVELOPMENT SHALL BE OF A TYPE ACCEPTABLE TO THE CITY OF LA VERGNE STANDARDS.
13. THE CITY OF LA VERGNE AND/OR CONTRACTOR SHALL SET INDIVIDUAL WATER METERS IN FIELD AS REQUIRED.
14. CONTRACTOR SHALL REPLACE IN LIKE KIND ALL PAVEMENT AREAS REMOVED OR DISTURBED AS A RESULT OF THE WATER MAIN INSTALLATION AND ASSOCIATED WORK.
15. PRIVATE WATER MAIN AND LINES TO HAVE MINIMUM OF 30" COVER.
16. CONTRACTOR SHALL BE A STATE OF TENNESSEE LICENSED CONTRACTOR APPROVED TO INSTALL PUBLIC WATER MAINS.
17. CONTRACTOR SHALL OBTAIN AND PAY FOR ALL FEES, PERMITS AND LICENSES AS PART OF THE CONTRACT.
18. NON-METALLIC DETECTION TAPE SHALL BE INSTALLED 18" ABOVE THE WATERLINE, ALONG WITH NUMBER 12 OR 14 GAUGE CAP WIRE TAPED TO THE WATERLINE.
19. LUBRICANTS SHALL BE NON-TOXIC AND SHALL NOT PROMOTE BIOLOGICAL GROWTH. SOLVENT-CEMENTED JOINTS ARE NOT PERMITTED.
20. PROCEDURES FOR DISINFECTING POTABLE WATERLINES SHALL CONFORM TO THE REQUIREMENTS OF A.W.W.A. C651. ALL WATERLINES SHALL BE DISINFECTED, BACTERIOLOGICAL TESTED, AND PRESSURE TREATED ACCORDING TO THE CITY OF LA VERGNE'S SPECIFICATIONS PRIOR TO LINE ACCEPTANCE AND THE WATERLINE BEING PLACED INTO SERVICE.
21. PRESSURE AND LEAKAGE TESTS SHALL BE PREFORMED IN STRICT ACCORDANCE WITH CURRENT A.W.W.A STANDARD C600 AND/OR MANUFACTURER'S PROCEDURES.
22. ALL VALVES AND FITTINGS ARE TO CONFORM TO THE LATEST A.W.W.A STANDARDS.
23. THE CONTRACTOR SHALL MAKE ARRANGEMENTS WITH THE UTILITY ENTITY FOR CONNECTION TO THE EXISTING UTILITY LINES. THE CONTRACTOR SHALL ADJUST THE LOCATION OF THE PROPOSED WATERLINE TO AVOID CONFLICTS WITH OTHER UTILITIES.
24. ALL CONCRETE USED FOR THRUST BLOCKS TO HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 3000 psi.
25. THE CONTRACTOR IS RESPONSIBLE FOR THE COMPLETE INSTALLATION OF THE WATER SERVICE LINE AND FIRE LINE AS REQUIRED. THE CONTRACTOR SHALL PROVIDE A TAPPING VALVE AND SLEEVE AND OTHER MATERIAL AND EQUIPMENT AS REQUIRED FOR TAPPING THE EXISTING MAIN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE FEE TO THE CITY OF LA VERGNE AS REQUIRED FOR TAPPING THE EXISTING MAIN AND COORDINATE WITH THE CITY OF LA VERGNE AS REQUIRED.
26. ALL METERS ARE REQUIRED TO BE BADGER AUTOMATIC READ METERS.
27. ALL MATERIALS AND CONSTRUCTION SHALL BE PER LA VERGNE PUBLIC WORKS STANDARD SPECIFICATIONS FOR WATER AD SEWER CONSTRUCTION, LATEST VERSION.
28. NO MORE THAN 500 FT. OF OPEN TRENCH WILL BE ALLOWED AT ONE TIME.

LEGEND

- SANITARY SEWER MANHOLE
- SS — SANITARY SEWER LINE
- FIRE HYDRANT
- W — WATER LINE
- WATER METER
- BF — BACKFLOW PREVENTER
- FIRE DEPARTMENT CONNECTION

FIRE FLOW TEST

COMPLETED BY: SCOTT TATALOVICH, CITY OF LA VERGNE

DATE COMPLETED: SEPTEMBER 9, 2022

STATIC/RESIDUAL HYDRANT
FH #: FH248
LOCATION: HAZELWOOD LANE & OLD WALDRON ROAD
STATIC PRESSURE: 80 PSI
RESIDUAL PRESSURE: 66 PSI
FLOW: 6,768 GPM

FLOW HYDRANT 1
FH #: FH1603
LOCATION: MASON ROAD & OLD WALDRON ROAD
STATIC PRESSURE: 80 PSI
RESIDUAL PRESSURE: 32 PSI
FLOW: 1,898 GPM

FLOW HYDRANT 2
FH #: FH605
LOCATION: TIPPERARY DRIVE & OLD WALDRON ROAD
STATIC PRESSURE: 80 PSI
RESIDUAL PRESSURE: 50 PSI
FLOW: 1,186 GPM

Know what's below. Call before you dig.

GRAPHIC SCALE IN FEET
0 75 150 300

NORTH

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CO-OP BUSINESS PARK LOT 2

PANATTONI DEVELOPMENT COMPANY
LA VERGNE, TENNESSEE

PANATTONI®

ROBERT JAMES ARMS — REGISTERED ENGINEER — AGENCY NUMBER — 12/18/2023 — LICENSED PROFESSIONAL ENGINEER — No. 121045 — STATE OF TENNESSEE

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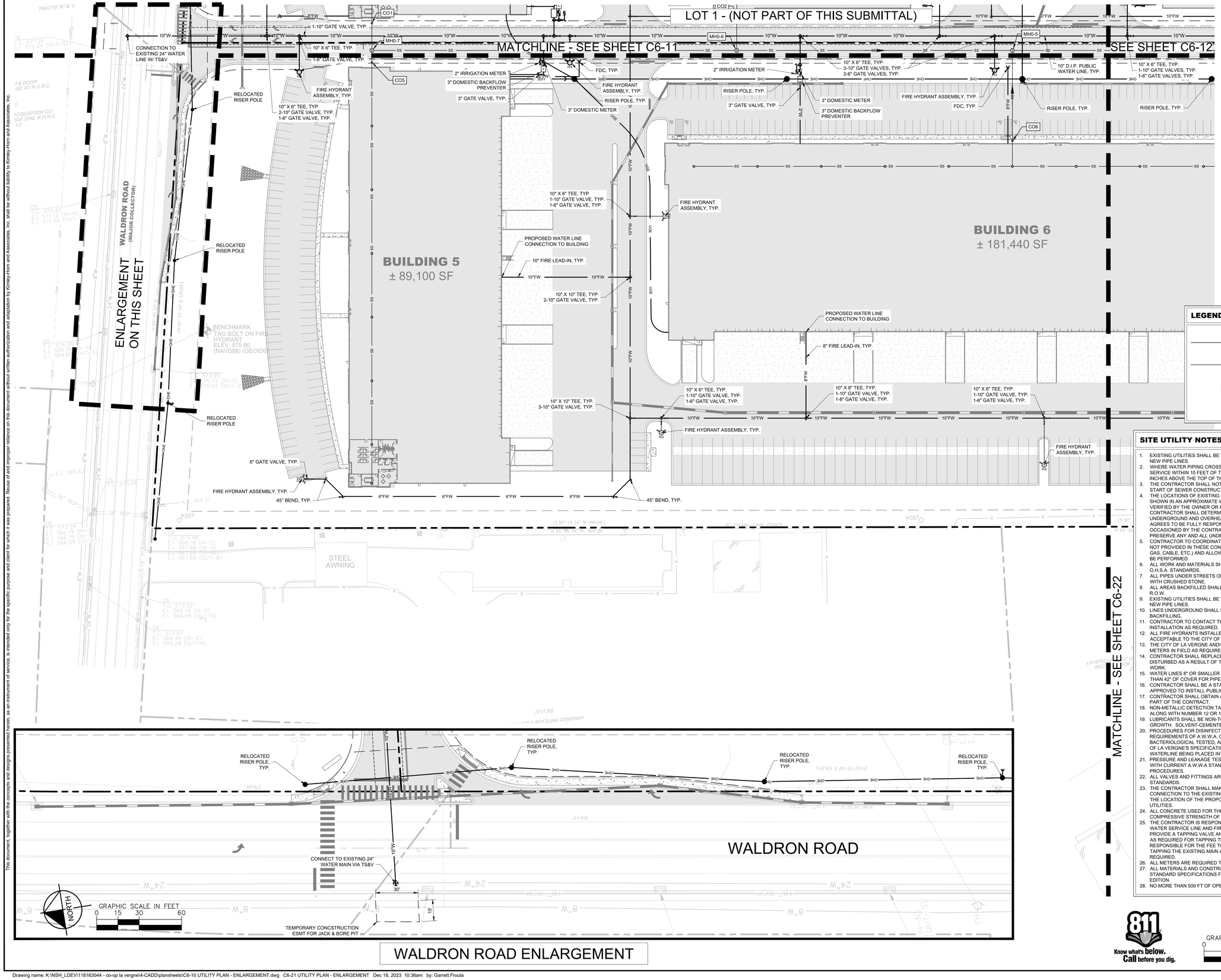
DESIGNED BY:	GTF
DRAWN BY:	GTF
CHECKED BY:	RJA
DATE:	12/18/2023
KIMLEY-HORN PROJECT NO.	118163044

UTILITY PLAN - OVERALL

SHEET NUMBER
C6-20

This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

Drawing name: K:\NSH_LDEV\118163044 - co-op la vergne\4-CADD\plansheets\C6-00 UTILITY PLAN - OVERALL.dwg C6-20 UTILITY PLAN - OVERALL - LOT 2 Dec 18, 2023 10:35am by: Garrett.Froula



LEGEND

- SANITARY SEWER MANHOLE
- SANITARY SEWER LINE
- FIRE HYDRANT
- WATER LINE
- WATER METER
- BACKFLOW PREVENTER
- FIRE DEPARTMENT CONNECTION

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14. CONTRACTOR SHALL REPLACE IN LIKE KIND ALL PAVEMENT AREAS REMOVED OR DISTURBED AS A RESULT OF THE WATER MAIN INSTALLATION AND ASSOCIATED WORK.
15. WATER LINES 8" OR SMALLER TO HAVE MINIMUM OF 36" COVER AND NOT LESS THAN 42" OF COVER FOR PIPE LARGER THAN 8".
16. CONTRACTOR SHALL BE A STATE OF TENNESSEE LICENSED CONTRACTOR APPROVED TO INSTALL PUBLIC WATER MAINS.
17. CONTRACTOR SHALL OBTAIN AND PAY FOR ALL FEES, PERMITS AND LICENSES AS PART OF THE CONTRACT.
18. NON-METALLIC DETECTION TAPE SHALL BE INSTALLED 18" ABOVE THE WATERLINE, ALONG WITH NUMBER 12 OR 14 GAUGE CAP WIRE TAPED TO THE WATERLINE.
19. LUBRICANTS SHALL BE NON-TOXIC AND SHALL NOT PROMOTE BIOLOGICAL GROWTH. SOLVENT-CEMENTED JOINTS ARE NOT PERMITTED.
20. PROCEDURES FOR DISINFECTING POTABLE WATERLINES SHALL CONFORM TO THE REQUIREMENTS OF A.W.W.A. C651. ALL WATERLINES SHALL BE DISINFECTED, BACTERIOLOGICAL TESTED, AND PRESSURE TREATED ACCORDING TO THE CITY OF LA VERGNE'S SPECIFICATIONS PRIOR TO LINE ACCEPTANCE AND THE WATERLINE BEING PLACED INTO SERVICE.
21. PRESSURE AND LEAKAGE TESTS SHALL BE PREFORMED IN STRICT ACCORDANCE WITH CURRENT A.W.W.A STANDARD C600 AND/OR MANUFACTURER'S PROCEDURES.
22. ALL VALVES AND FITTINGS ARE TO CONFORM TO THE LATEST A.W.W.A STANDARDS.
23. THE CONTRACTOR SHALL MAKE ARRANGEMENTS WITH THE UTILITY ENTITY FOR CONNECTION TO THE EXISTING UTILITY LINES. THE CONTRACTOR SHALL ADJUST THE LOCATION OF THE PROPOSED WATERLINE TO AVOID CONFLICTS WITH OTHER UTILITIES.
24. ALL CONCRETE USED FOR THRUST BLOCKS TO HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 3000 psi.
25. THE CONTRACTOR IS RESPONSIBLE FOR THE COMPLETE INSTALLATION OF THE WATER SERVICE LINE AND FIRE LINE AS REQUIRED. THE CONTRACTOR SHALL PROVIDE A TAPPING VALVE AND SLEEVE AND OTHER MATERIAL AND EQUIPMENT AS REQUIRED FOR TAPPING THE EXISTING MAIN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE FEE TO THE CITY OF LA VERGNE AS REQUIRED FOR TAPPING THE EXISTING MAIN AND COORDINATE WITH THE CITY OF LA VERGNE AS REQUIRED.
26. ALL METERS ARE REQUIRED TO BE BADGER AUTOMATIC READ METERS.
27. ALL MATERIALS AND CONSTRUCTION SHALL BE PER LA VERGNE PUBLIC WORKS STANDARD SPECIFICATIONS FOR WATER AD SEWER CONSTRUCTION, LATEST EDITION.
28. NO MORE THAN 500 FT OF OPEN UTILITY TRENCH WILL BE ALLOWED AT ONE TIME.

WALDRON ROAD ENLARGEMENT

811 Know what's below. Call before you dig.

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CO-OP BUSINESS PARK LOT 2

PANATTONI DEVELOPMENT COMPANY
LA VERGNE, TENNESSEE

PANATTONI®

ROBERT JAMES ARMS
REGISTERED ENGINEER
AGENCY NUMBER
COMMERCE
No. 121045
STATE OF TENNESSEE
12/18/2023

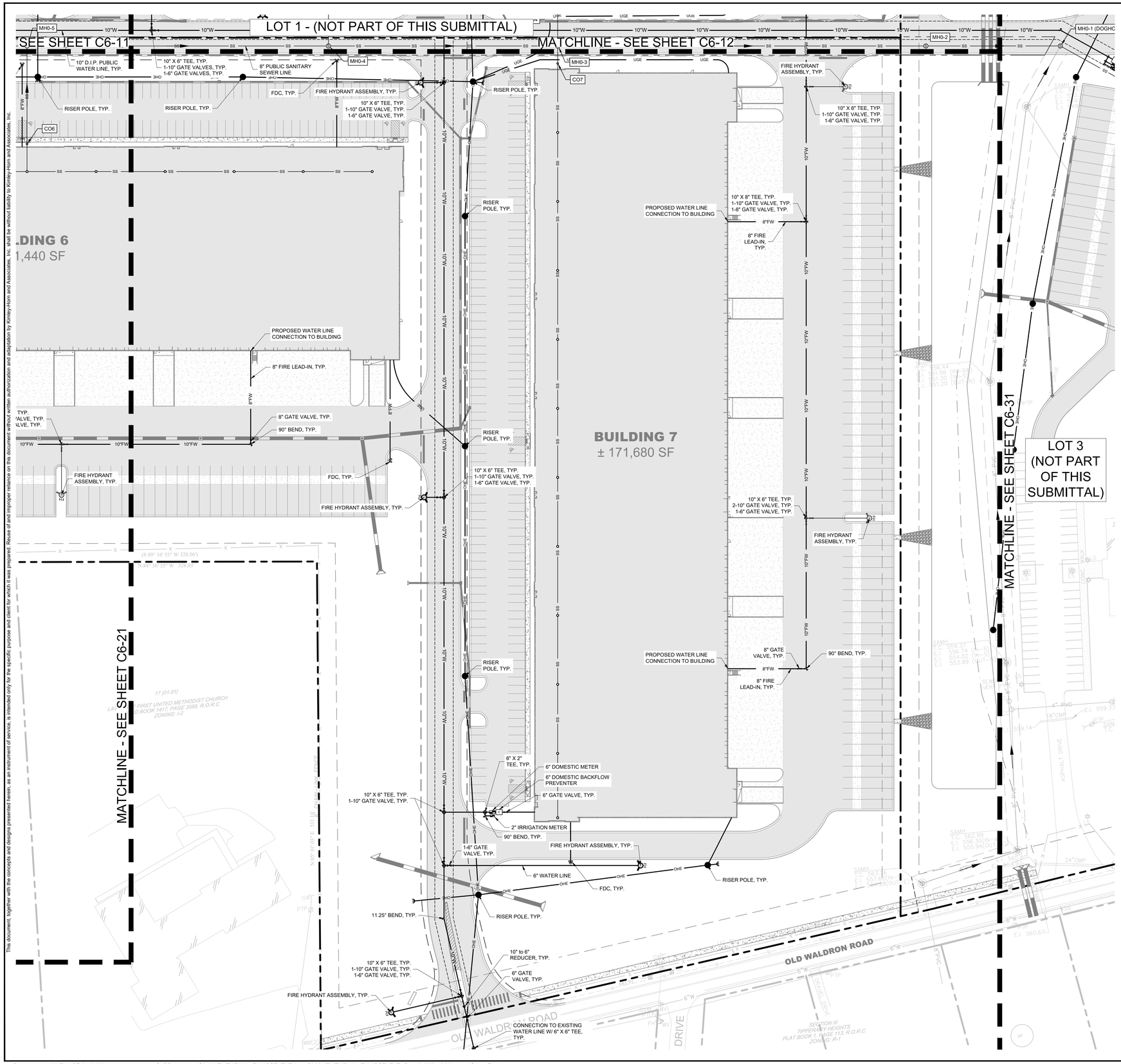
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DESIGNED BY:	GTF
DRAWN BY:	GTF
CHECKED BY:	RJA
DATE:	12/18/2023
KIMLEY-HORN PROJECT NO.	118163044

UTILITY PLAN - ENLARGEMENT

SHEET NUMBER
C6-21

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SITE UTILITY NOTES

1. EXISTING UTILITIES SHALL BE VERIFIED IN FIELD PRIOR TO INSTALLATION OF ANY NEW PIPE LINES.
2. WHERE WATER PIPING CROSSES THE SANITARY SEWER LINE, THE WATER SERVICE WITHIN 10 FEET OF THE POINT OF CROSSING SHALL BE AT LEAST 18 INCHES ABOVE THE TOP OF THE SEWER LINE.
3. THE CONTRACTOR SHALL NOTIFY THE INSPECTOR AT LEAST 7 DAYS PRIOR TO THE START OF SEWER CONSTRUCTION.
4. THE LOCATIONS OF EXISTING UNDERGROUND AND OVERHEAD UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR KIMLEY-HORN AND ASSOCIATES, INC. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UNDERGROUND AND OVERHEAD UTILITIES BEFORE COMMENCING WORK AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTORS FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND AND OVERHEAD UTILITIES.
5. CONTRACTOR TO COORDINATE ALL WORK WITH OTHER UTILITY INSTALLATIONS NOT PROVIDED IN THESE CONSTRUCTION DOCUMENTS (ELECTRIC, TELEPHONE, GAS, CABLE, ETC.) AND ALLOW FOR THEIR OPERATIONS AND CONSTRUCTION TO BE PERFORMED.
6. ALL WORK AND MATERIALS SHALL COMPLY WITH THE CITY OF LA VERGNE AND O.H.S.A. STANDARDS.
7. ALL PIPES UNDER STREETS OR PAVED AREAS IN R.O.W. SHALL BE BACKFILLED WITH CRUSHED STONE.
8. ALL AREAS BACKFILLED SHALL BE COMPACTED TO 95% STANDARD PROCTOR IN R.O.W.
9. EXISTING UTILITIES SHALL BE VERIFIED IN FIELD PRIOR TO INSTALLATION OF ANY NEW PIPE LINES.
10. LINES UNDERGROUND SHALL BE INSTALLED, TESTED AND APPROVED BEFORE BACKFILLING.
11. CONTRACTOR TO CONTACT THE CITY OF LA VERGNE TO COORDINATE INSTALLATION AS REQUIRED.
12. ALL FIRE HYDRANTS INSTALLED FOR THIS DEVELOPMENT SHALL BE OF A TYPE ACCEPTABLE TO THE CITY OF LA VERGNE STANDARDS.
13. THE CITY OF LA VERGNE AND/OR CONTRACTOR SHALL SET INDIVIDUAL WATER METERS IN FIELD AS REQUIRED.
14. CONTRACTOR SHALL REPLACE IN LIKE KIND ALL PAVEMENT AREAS REMOVED OR DISTURBED AS A RESULT OF THE WATER MAIN INSTALLATION AND ASSOCIATED WORK.
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LEGEND

- SANITARY SEWER MANHOLE
- SANITARY SEWER LINE
- FIRE HYDRANT
- WATER LINE
- WATER METER
- BACKFLOW PREVENTER
- FIRE DEPARTMENT CONNECTION

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CO-OP BUSINESS PARK LOT 2

PANATTONI DEVELOPMENT COMPANY
LA VERGNE, TENNESSEE

PANATTONI®

ROBERT JAMES ARS
REGISTERED ENGINEER
AGENCY NUMBER
ENGINEER
No. 121043
STATE OF TENNESSEE
12/18/2023

No	REVISIONS	DATE	BY
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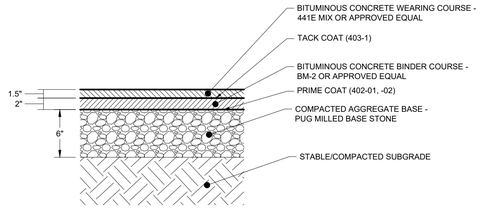
DESIGNED BY:	GTF
DRAWN BY:	GTF
CHECKED BY:	RJA
DATE:	12/18/2023

KIMLEY-HORN PROJECT NO. 118163044

UTILITY PLAN - ENLARGEMENT

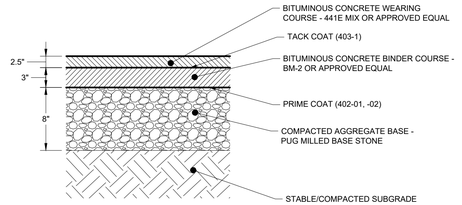
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C6-22

Drawing name: K:\NSH_LDEV\118163044 - co-op la vergne\4-CADD\plansheets\C6-10 UTILITY PLAN - ENLARGEMENT.dwg C6-22 UTILITY PLAN - ENLARGEMENT Dec 18, 2023 10:36am by: Garrett.Froula



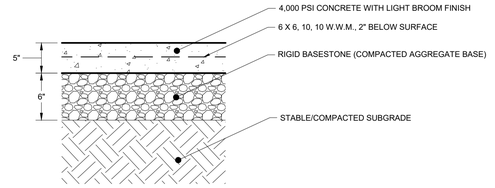
NOTES:
1. SEE GEOTECHNICAL SPECIFICATIONS FOR SUBGRADE REQUIREMENTS.
2. ALL MATERIALS AND CONSTRUCTION SHALL COMPLY WITH TDOT STANDARD SPECIFICATIONS FOR ROADWAY AND BRIDGE CONSTRUCTION, LATEST EDITION.
3. PROPOSED PAVEMENT SECTIONS SHOWN HEREIN ARE PRELIMINARY. FINAL PAVEMENT DESIGN SHALL BE PROVIDED BY A LICENSED GEOTECHNICAL ENGINEER, BASED ON SITE CONDITIONS AND SOIL PROPERTIES FOUND DURING CONSTRUCTION.

1 TYPICAL PAVEMENT SECTION - STANDARD DUTY
SCALE:



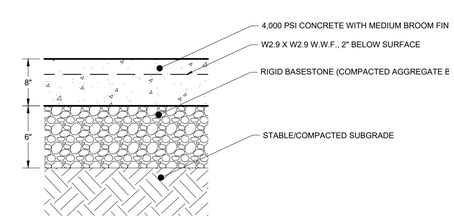
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2 TYPICAL PAVEMENT SECTION - HEAVY DUTY
SCALE:



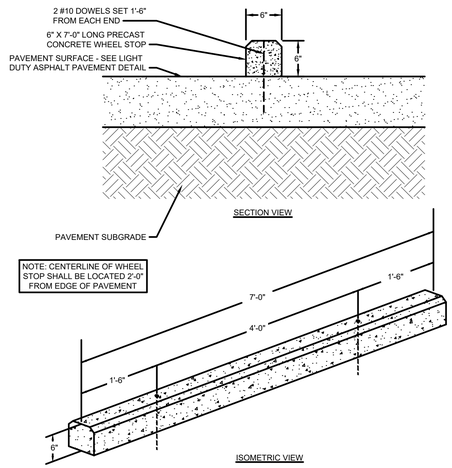
NOTES:
1. SEE GEOTECHNICAL SPECIFICATIONS FOR SUBGRADE REQUIREMENTS.
2. FIBER MESH REINFORCING CAN BE SUBSTITUTED FOR WWM. APPLICATION RATES SHALL BE IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.
3. ALL MATERIALS AND CONSTRUCTION SHALL COMPLY WITH TDOT STANDARD SPECIFICATIONS FOR ROADWAY AND BRIDGE CONSTRUCTION, LATEST EDITION.
4. BROOM FINISH SHALL BE PERPENDICULAR TO THE DIRECTION OF TRAVEL.
5. PROPOSED PAVEMENT SECTIONS SHOWN HEREIN ARE PRELIMINARY. FINAL PAVEMENT DESIGN SHALL BE PROVIDED BY A LICENSED GEOTECHNICAL ENGINEER, BASED ON SITE CONDITIONS AND SOIL PROPERTIES FOUND DURING CONSTRUCTION.
3. PLACE EXPANSION JOINTS AT A MAXIMUM OF 75' O.C.
4. PLACE CONTROL JOINTS AT A MAXIMUM OF 15' O.C.

3 TYPICAL CONCRETE PAVEMENT SECTION - STANDARD DUTY
SCALE:

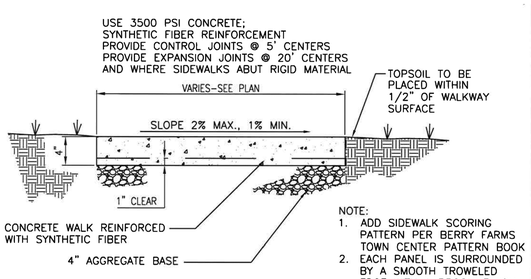


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4. PLACE CONTROL JOINTS AT A MAXIMUM OF 15' O.C.

4 TYPICAL CONCRETE PAVEMENT SECTION - HEAVY DUTY
SCALE:

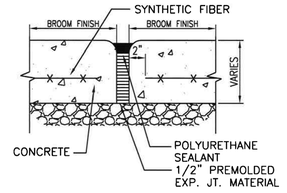


5 CONCRETE WHEEL STOP
NOT TO SCALE

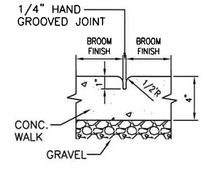


NOTE:
1. ADD SIDEWALK SCORING PATTERN PER BERRY FARMS TOWN CENTER PATTERN BOOK
2. EACH PANEL IS SURROUNDED BY A SMOOTH TROWELED EDGE WITH A BROOM FINISH RUNNING PERPENDICULAR TO THE AXIS OF THE SIDEWALK.

6 CONCRETE SIDEWALK DETAIL
NOT TO SCALE

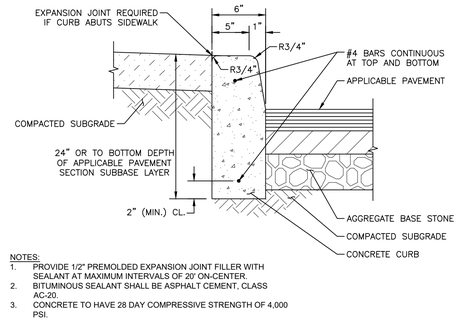


EXPANSION JOINT



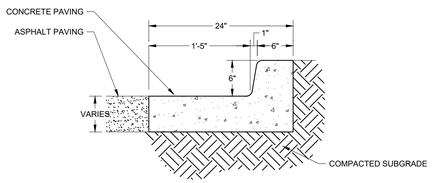
CONTROL JOINT

7 SIDEWALK JOINT DETAIL
SCALE:



NOTES:
1. PROVIDE 1/2" PREMOLDED EXPANSION JOINT FILLER WITH SEALANT AT MAXIMUM INTERVALS OF 20' ON-CENTER.
2. BITUMINOUS SEALANT SHALL BE ASPHALT CEMENT, CLASS AC-20.
3. CONCRETE TO HAVE 28 DAY COMPRESSIVE STRENGTH OF 4,000 PSI.

8 6" POST CURB
NOT TO SCALE



9 6" TALL 24" CURB AND GUTTER
NOT TO SCALE

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CO-OP BUSINESS PARK
LOT 2
PANATTONI DEVELOPMENT COMPANY
LA VERGNE, TENNESSEE

PANATTONI®

ROBERT JAMES ARTS
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No. 121045
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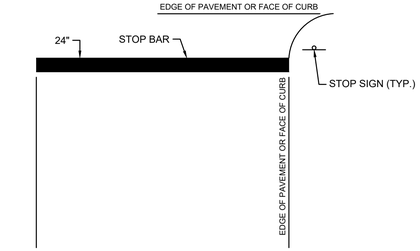
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DESIGNED BY:	GTF
DRAWN BY:	GTF
CHECKED BY:	RJA
DATE:	12/18/2023

KIMLEY-HORN PROJECT NO.
118163044

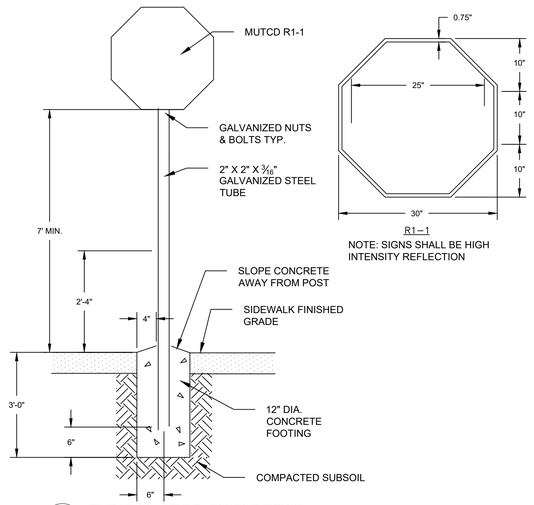
SITE DETAILS

SHEET NUMBER
C8-10



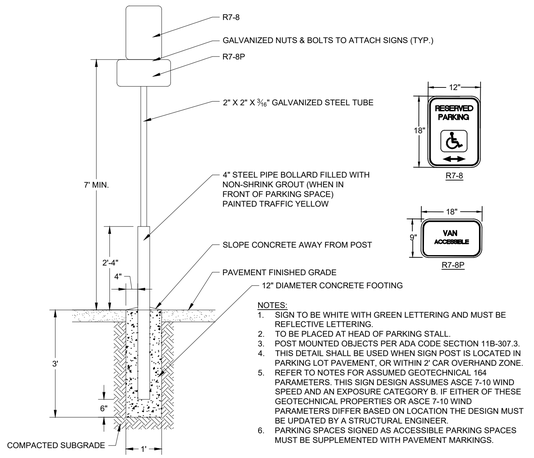
NOTES:
1. WORDS AND ARROWS FOR DRIVEWAYS SHALL BE APPLIED ACCORDING TO REQUIREMENTS AS OUTLINED IN SECTION 3B OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS.
2. THESE WORDS AND BAR ARE TO BE PAINTED REFLECTIVE WHITE.

13 TYPICAL STOP BAR DETAIL
NOT TO SCALE



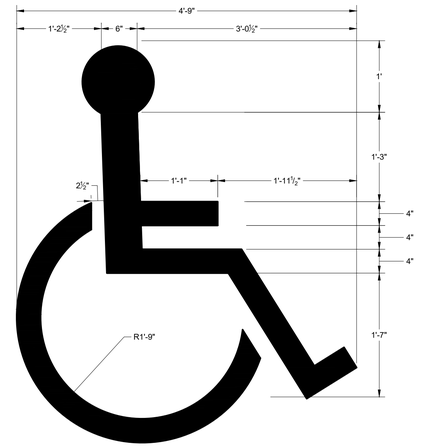
NOTE: SIGNS SHALL BE HIGH INTENSITY REFLECTION

14 TYPICAL STOP SIGN DETAIL
NOT TO SCALE



NOTES:
1. SIGN TO BE WHITE WITH GREEN LETTERING AND MUST BE REFLECTIVE LETTERING.
2. TO BE PLACED AT HEAD OF PARKING STALL.
3. POST MOUNTED OBJECTS PER ADA CODE SECTION 11B-307.3.
4. THIS DETAIL SHALL BE USED WHEN SIGN POST IS LOCATED IN PARKING LOT PAVEMENT, OR WITHIN 2' CAR OVERHAND ZONE.
5. REFER TO NOTES FOR ASSUMED GEOTECHNICAL 164 PARAMETERS. THIS SIGN DESIGN ASSUMES ASCE 7-10 WIND SPEED AND AN EXPOSURE CATEGORY B. IF EITHER OF THESE GEOTECHNICAL PROPERTIES OR ASCE 7-10 WIND PARAMETERS DIFFER BASED ON LOCATION THE DESIGN MUST BE UPDATED BY A STRUCTURAL ENGINEER.
6. PARKING SPACES SIGNED AS ACCESSIBLE PARKING SPACES MUST BE SUPPLEMENTED WITH PAVEMENT MARKINGS.

15 ADA PARKING SIGN DETAIL
NOT TO SCALE

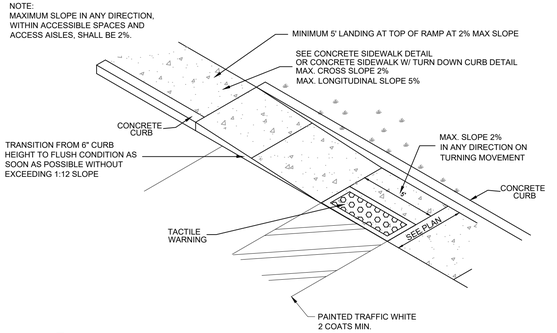


16 ADA PARKING SPACE SYMOL
NOT TO SCALE

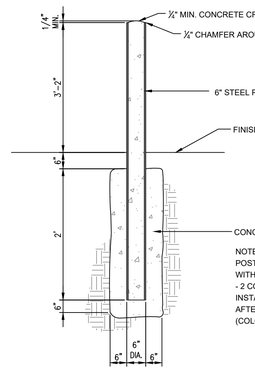
17 TYPICAL ADA RAMP
NOT TO SCALE

PLAN VIEW

18 ADA PARKING STALL LAYOUT
NOT TO SCALE



19 ADA CURB RAMP
NOT TO SCALE



20 6" STEEL BOLLARD
NOT TO SCALE

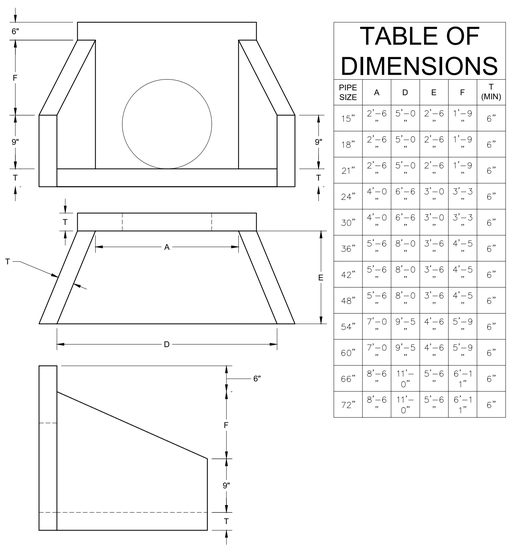
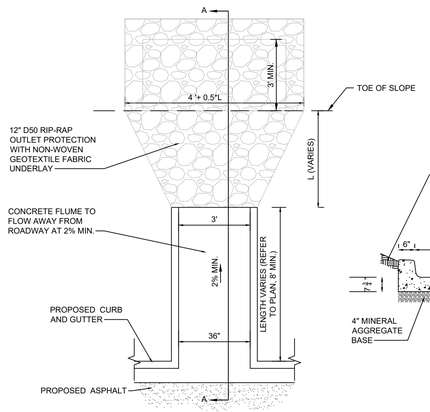
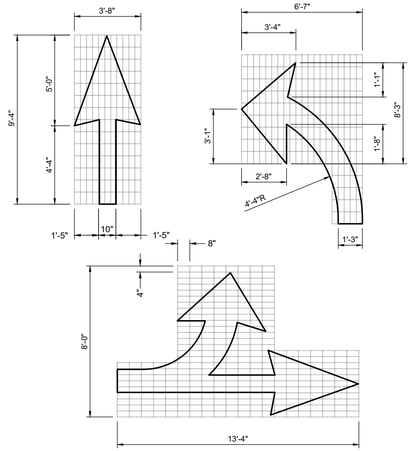


TABLE OF DIMENSIONS					
PIPE SIZE	A	D	E	F	T (MIN)
15"	2'-6"	5'-0"	2'-6"	1'-9"	6"
18"	2'-6"	5'-0"	2'-6"	1'-9"	6"
21"	2'-6"	5'-0"	2'-6"	1'-9"	6"
24"	4'-0"	6'-6"	3'-0"	3'-3"	6"
30"	4'-0"	6'-6"	3'-0"	3'-3"	6"
36"	5'-6"	8'-0"	3'-6"	4'-5"	6"
42"	5'-6"	8'-0"	3'-6"	4'-5"	6"
48"	5'-6"	8'-0"	3'-6"	4'-5"	6"
54"	7'-0"	9'-5"	4'-6"	5'-9"	6"
60"	7'-0"	9'-5"	4'-6"	5'-9"	6"
66"	8'-6"	11'-0"	5'-6"	6'-1"	6"
72"	8'-6"	11'-0"	5'-6"	6'-1"	6"

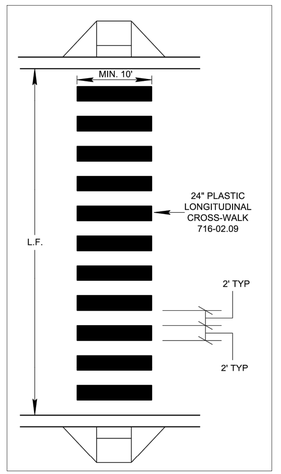
21 PRECAST CONCRETE HEADWALL
NOT TO SCALE



22 CONCRETE FLUME
NOT TO SCALE



23 ROADWAY DIRECTIONAL ARROWS
NOT TO SCALE



24 CROSS-WALK (TDOT T-M-4)
NOT TO SCALE

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CO-OP BUSINESS PARK
LOT 2
PANATTONI DEVELOPMENT COMPANY
LA VERGNE, TENNESSEE

PANATTONI®

ROBERT JAMES ARTS — REGISTERED ENGINEER — AGENCY PLANS — 12/18/2023 — COMMERCE — No. 121045 — STATE OF TENNESSEE

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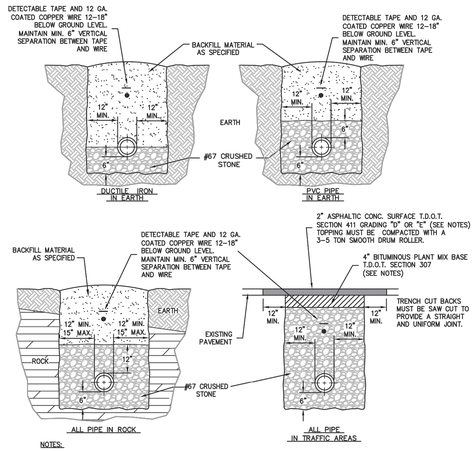
DESIGNED BY:	GTF
DRAWN BY:	GTF
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DATE:	12/18/2023

KIMLEY-HORN PROJECT NO. 118163044

SITE DETAILS

SHEET NUMBER
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NOTES:

1. FOR ROADWAYS 30' OR GREATER IN WIDTH OR DIVIDED HIGHWAYS WITH 2 OR MORE LANES USE 8" OF BINDER (2 LIFTS) AND 3" OF TOPPING.
2. BINDER SHALL BE INITIALLY INSTALLED FLUSH WITH EXISTING ASPHALT SURFACE AND SHALL BE IN PLACE FOR 2 WEEKS TO ALLOW FOR SETTLING AND COMPACTION. AFTER 2 WEEKS, MILL UP 2" OF THE NEW BINDER AND EXISTING ASPHALT TO THE DIMENSIONS SHOWN IN EACH DIRECTION AND INSTALL 2" OF NEW SURFACE MIX OVER MILLED AREA. REPAINT OR REPLACE, IF THERMOPLASTIC, ALL DELINEATION LINES AND PAVEMENT MARKINGS.
3. WHERE EXISTING SURFACE IS CONCRETE SUBSTITUTE 6" T.D.O.T. ITEM NO. 701-02.
4. FOR RESTORATION OF GRAVEL SURFACES, BACKFILL ENTIRE TRENCH WITH STONE.

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GRIGGS & MALONEY INCORPORATED
Engineering & Environmental Consulting

P.O. BOX 2968, MURFREESBORO, TN 37133-2968
(615) 895-8221 * FAX (615) 895-0632

FILE NAME: L: \Engineering\442-56\2015 Updates\Drawings\010 Water Line Bedding and Backfilling Detail.dwg

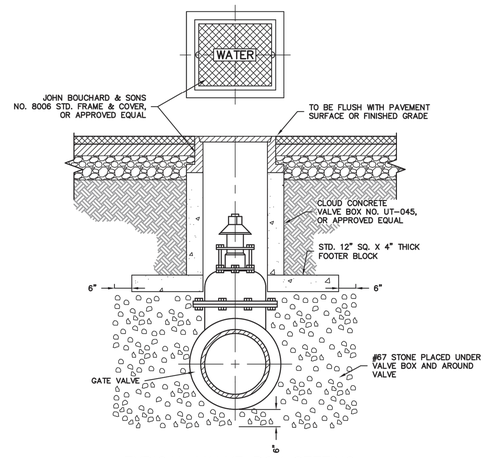
STANDARD WATERLINE BEDDING & BACKFILLING

N.T.S.

Revised September, 2015

STANDARD DETAIL 010

CITY OF LAVERGNE, TENNESSEE
G & M File No. 442-56



TYPICAL VALVE BOX SETTING INSIDE & OUTSIDE OF PAVEMENT

N.T.S.

Revised September, 2015

STANDARD DETAIL 030

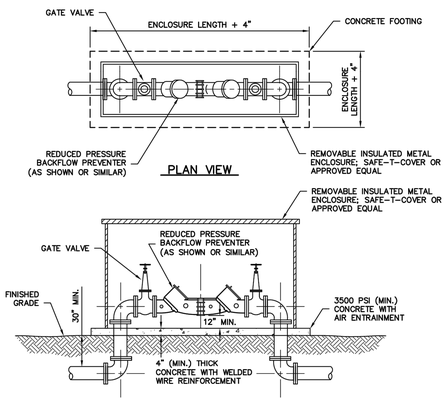
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G & M File No. 442-56

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FILE NAME: L: \Engineering\442-56\2015 Updates\Drawings\030 Typical Valve Box Setting.dwg



REDUCED PRESSURE BACKFLOW PREVENTER (ABOVEGROUND)

N.T.S.

Revised August 2017

STANDARD DETAIL 070

CITY OF LAVERGNE, TENNESSEE
G & M File No. 442-56

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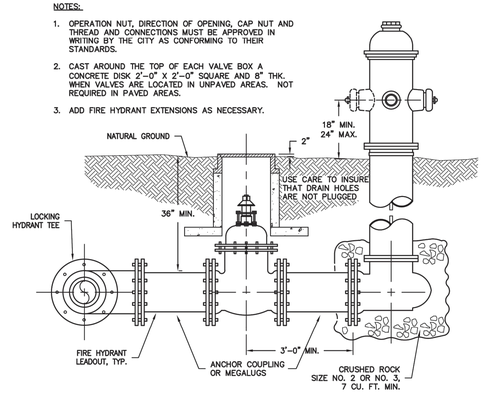
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FILE NAME: L: \Engineering\442-56\2015 Updates\Drawings\070 Reduced Pressure Backflow Preventer.dwg

NOTES:

1. OPERATION NUT, DIRECTION OF OPENING, CAP NUT AND THREAD AND CONNECTIONS MUST BE APPROVED IN WRITING BY THE CITY AS CONFORMING TO THEIR STANDARDS.
2. CAST AROUND THE TOP OF EACH VALVE BOX A CONCRETE DISK 2'-0" X 2'-0" SQUARE AND 8" THK. WHEN VALVES ARE LOCATED IN UNPAVED AREAS. NOT REQUIRED IN PAVED AREAS.
3. ADD FIRE HYDRANT EXTENSIONS AS NECESSARY.



TYPICAL FIRE HYDRANT SETTING

N.T.S.

Revised September, 2015

STANDARD DETAIL 040

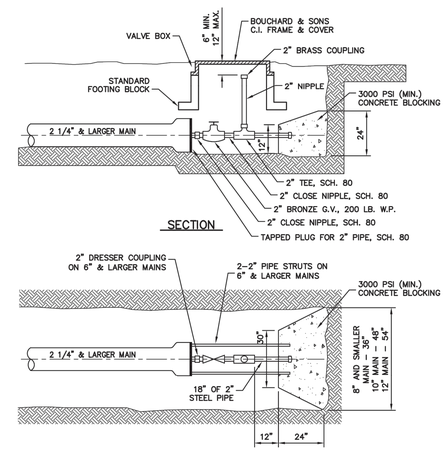
CITY OF LAVERGNE, TENNESSEE
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FILE NAME: L: \Engineering\442-56\2015 Updates\Drawings\040 Drawings\Fire Hydrant Setting.dwg



TYPICAL 2" BLOW-OFF ASSEMBLY

N.T.S.

Revised September, 2015

STANDARD DETAIL 050

CITY OF LAVERGNE, TENNESSEE
G & M File No. 442-56

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FILE NAME: L: \Engineering\442-56\2015 Updates\Drawings\050 Typical 2 In Blow-off.dwg

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LA VERGNE, TENNESSEE

PANATTONI®

ROBERT JAMES ARTS
REGISTERED ENGINEER
AGRICULTURE
12/18/2023
LICENSE No. 121043
STATE OF TENNESSEE

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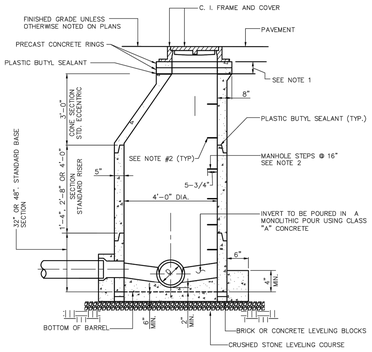
DESIGNED BY:	GTF
DRAWN BY:	GTF
CHECKED BY:	RJA
DATE:	12/18/2023

KIMLEY-HORN PROJECT NO. 118163044

UTILITY DETAILS

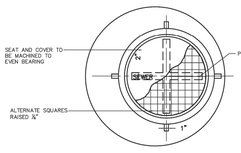
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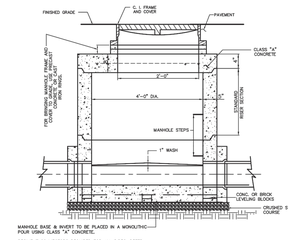


NOTE:
1. FOR BRINGING MANHOLE FRAME AND COVER TO GRADE, USE PRECAST CONCRETE OR CAST IRON RINGS.
2. 3/8 STEEL REINFORCED ROD ENCAPSULATED IN POLYPROPYLENE PLASTIC OR ALUMINUM ALLOY SEE SPECIFICATIONS.
3. RESILIENT CONNECTORS REQUIRED FOR ALL PIPES, REFER TO DETAIL AND SPECIFICATIONS.

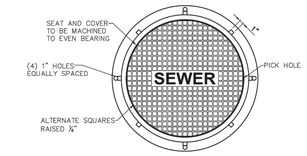
CTI ENGINEERS, INC. 3354 PERIMETER HILL DRIVE, SUITE 140 NASHVILLE, TN 37211 615-834-8300	3.0 PRECAST CONCRETE MANHOLE NOT TO SCALE CITY OF LA VERGNE, TENNESSEE STANDARD SEWER DETAILS	PUBLIC WORKS DEPARTMENT 148 INTERNATIONAL BLVD. LA VERGNE, TN 37086 615-793-9891



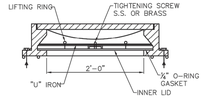
PLAN



CTI ENGINEERS, INC. 3354 PERIMETER HILL DRIVE, SUITE 140 NASHVILLE, TN 37211 615-834-8300	4.0 STANDARD PRECAST MANHOLE FOR DEPTH OF LESS THAN 5'-0" NOT TO SCALE CITY OF LA VERGNE, TENNESSEE STANDARD SEWER DETAILS	PUBLIC WORKS DEPARTMENT 148 INTERNATIONAL BLVD. LA VERGNE, TN 37086 615-793-9891



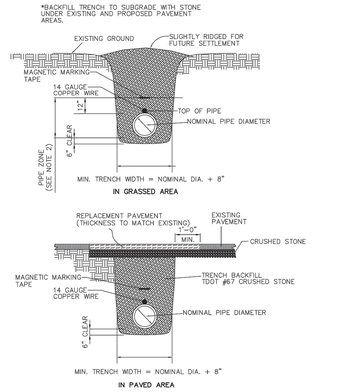
SPECIFIED MINIMUM WEIGHT
TOTAL 350 lbs.
LOAD RATING: HEAVY DUTY
STANDARD COVER & FRAME



SPECIFIED MINIMUM WEIGHT
TOTAL 590 lbs.
LOAD RATING: HEAVY DUTY
WATERTIGHT COVER & FRAME

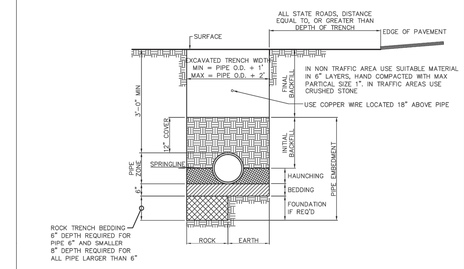
STANDARD FRAME AND COVER TO BE ACHESON FOUNDRY #A-2024-BIS, OR EQUAL WATER TIGHT MANHOLE FRAME AND COVER TO BE ACHESON FOUNDRY #A-2624-71S OR EQUAL

CTI ENGINEERS, INC. 3354 PERIMETER HILL DRIVE, SUITE 140 NASHVILLE, TN 37211 615-834-8300	10.0 MANHOLE FRAME AND COVER NOT TO SCALE CITY OF LA VERGNE, TENNESSEE STANDARD SEWER DETAILS	PUBLIC WORKS DEPARTMENT 148 INTERNATIONAL BLVD. LA VERGNE, TN 37086 615-793-9891

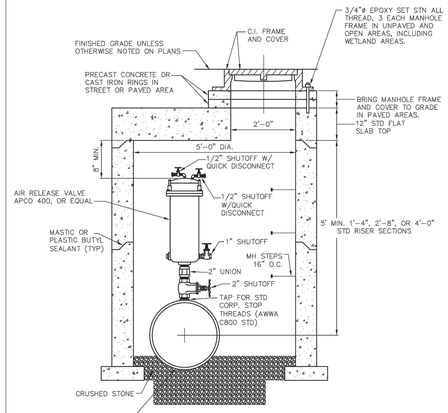


NOTES:
1. SEE STANDARD SPECIFICATIONS FOR FULL BACKFILL REQUIREMENTS.
2. "PIPE ZONE" EXTENDS TO 12" ABOVE TOP OF PIPE AND IS AREA IN WHICH SPECIAL CARE IS TO BE GIVEN TO PLACEMENT AND COMPACTON TO PROTECT PIPE DURING AND AFTER LAYING.
3. LIMIT TRENCH WIDTH AT TOP OF PIPE TO NOMINAL PIPE DIAMETER PLUS 16" UNLESS PERMITTED OTHERWISE BY ENGINEER.
4. TRENCH SHALL BE DUG TO GIVE PIPE FULL AND CONTINUOUS SUPPORT. ALL ROCK TO BE REMOVED WITHIN 6" OF PIPE – BED TO PIPE GRADE WITH CRUSHED STONE BEDDING.
5. PIPE TO BE CONTINUOUSLY SUPPORTED ALONG LENGTH OF PIPE BARREL EXCEPT AT BELL. BELL HOLES ARE REQUIRED SUCH THAT NO BEARING LOAD IS TAKEN BY THE BELL.
6. MAGNETIC MARKING TAPE AND 14 GAUGE COPPER WIRE REQUIRED FOR ALL SEWER.

CTI ENGINEERS, INC. 3354 PERIMETER HILL DRIVE, SUITE 140 NASHVILLE, TN 37211 615-834-8300	15.0 TYPICAL TRENCH BACKFILL NOT TO SCALE CITY OF LA VERGNE, TENNESSEE STANDARD SEWER DETAILS	PUBLIC WORKS DEPARTMENT 148 INTERNATIONAL BLVD. LA VERGNE, TN 37086 615-793-9891

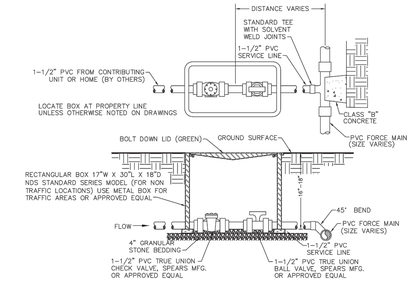


CTI ENGINEERS, INC. 3354 PERIMETER HILL DRIVE, SUITE 140 NASHVILLE, TN 37211 615-834-8300	16.0 PVC PIPE INSTALLATION DETAIL NOT TO SCALE CITY OF LA VERGNE, TENNESSEE STANDARD SEWER DETAILS	PUBLIC WORKS DEPARTMENT 148 INTERNATIONAL BLVD. LA VERGNE, TN 37086 615-793-9891

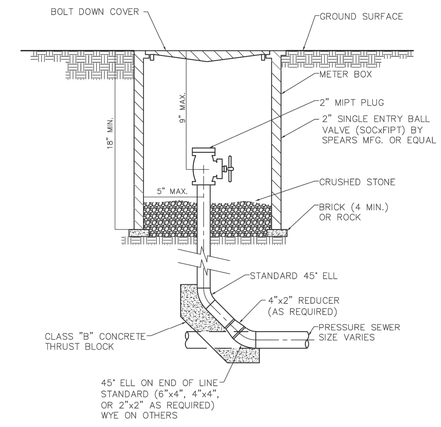


NOTE: IN WETLAND AREAS, EXTEND TOP OF MH COVER A MIN. OF 1 FT. AND A MAX. OF 2 FT. ABOVE ORIGINAL GRADE.

CTI ENGINEERS, INC. 3354 PERIMETER HILL DRIVE, SUITE 140 NASHVILLE, TN 37211 615-834-8300	18.0 SEWAGE AIR RELEASE VALVE NOT TO SCALE CITY OF LA VERGNE, TENNESSEE STANDARD SEWER DETAILS	PUBLIC WORKS DEPARTMENT 148 INTERNATIONAL BLVD. LA VERGNE, TN 37086 615-793-9891



CTI ENGINEERS, INC. 3354 PERIMETER HILL DRIVE, SUITE 140 NASHVILLE, TN 37211 615-834-8300	19.0 TYPICAL PRESSURE SEWER SERVICE LINE CONNECTION NOT TO SCALE CITY OF LA VERGNE, TENNESSEE STANDARD SEWER DETAILS	PUBLIC WORKS DEPARTMENT 148 INTERNATIONAL BLVD. LA VERGNE, TN 37086 615-793-9891



CTI ENGINEERS, INC. 3354 PERIMETER HILL DRIVE, SUITE 140 NASHVILLE, TN 37211 615-834-8300	21.0 PRESSURE SEWER CLEAN OUT NON-TRAFFIC BOX NOT TO SCALE CITY OF LA VERGNE, TENNESSEE STANDARD SEWER DETAILS	PUBLIC WORKS DEPARTMENT 148 INTERNATIONAL BLVD. LA VERGNE, TN 37086 615-793-9891

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CO-OP BUSINESS PARK LOT 2

PANATTONI DEVELOPMENT COMPANY
LA VERGNE, TENNESSEE

PANATTONI®

ROBERT JAMES ARTS — REGISTERED ENGINEER — AGENCY PLAN — No. 121045 — STATE OF TENNESSEE
12/18/2023

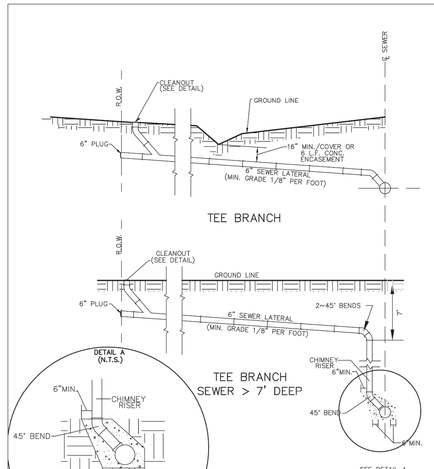
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KIMLEY-HORN PROJECT NO. 118163044

UTILITY DETAILS

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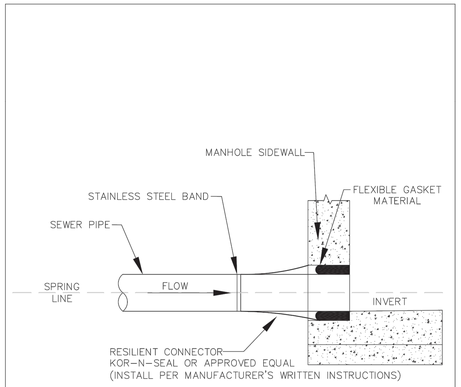
ENGINEERS, INC.
3354 PERIMETER HILL DRIVE, SUITE 140
NASHVILLE, TN 37211
615-834-8300

2.0
SANITARY SEWER LATERALS
NOT TO SCALE

CITY OF LA VERGNE, TENNESSEE

STANDARD SEWER DETAILS

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LA VERGNE, TN 37086
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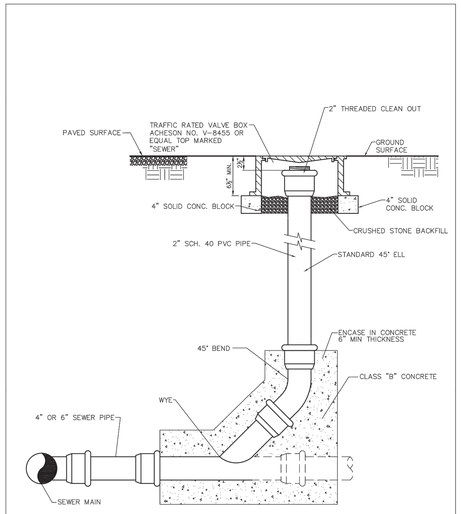
ENGINEERS, INC.
3354 PERIMETER HILL DRIVE, SUITE 140
NASHVILLE, TN 37211
615-834-8300

6.0
RESILIENT BOOT CONNECTION FOR SEWER PIPE TO MANHOLE DETAIL
NOT TO SCALE

CITY OF LA VERGNE, TENNESSEE

STANDARD SEWER DETAILS

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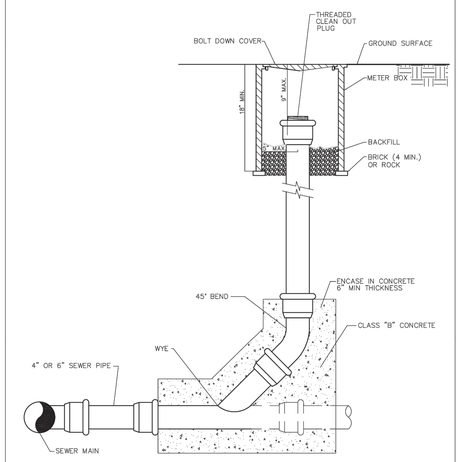
ENGINEERS, INC.
3354 PERIMETER HILL DRIVE, SUITE 140
NASHVILLE, TN 37211
615-834-8300

12.0
CLEAN OUT WITH TRAFFIC BOX
NOT TO SCALE

CITY OF LA VERGNE, TENNESSEE

STANDARD SEWER DETAILS

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LA VERGNE, TN 37086
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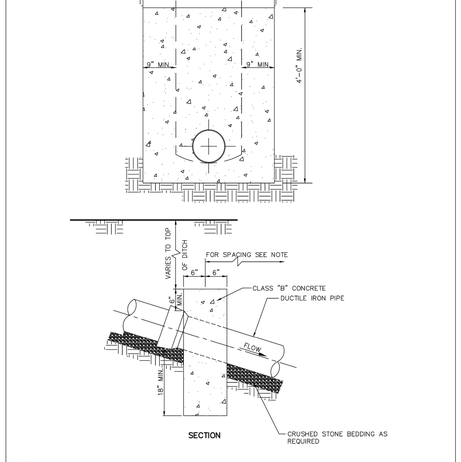
ENGINEERS, INC.
3354 PERIMETER HILL DRIVE, SUITE 140
NASHVILLE, TN 37211
615-834-8300

13.0
CLEAN OUT WITH NON-TRAFFIC BOX
NOT TO SCALE

CITY OF LA VERGNE, TENNESSEE

STANDARD SEWER DETAILS

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NOTES:
1. SEWERS ON 18.8% SLOPE OR GREATER SHALL BE ANCHORED SECURELY WITH CONCRETE ANCHORS EQUAL SPACED. REFER TO SPECIFICATIONS.

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3354 PERIMETER HILL DRIVE, SUITE 140
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615-834-8300

14.0
CONCRETE ANCHOR
NOT TO SCALE

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STANDARD SEWER DETAILS

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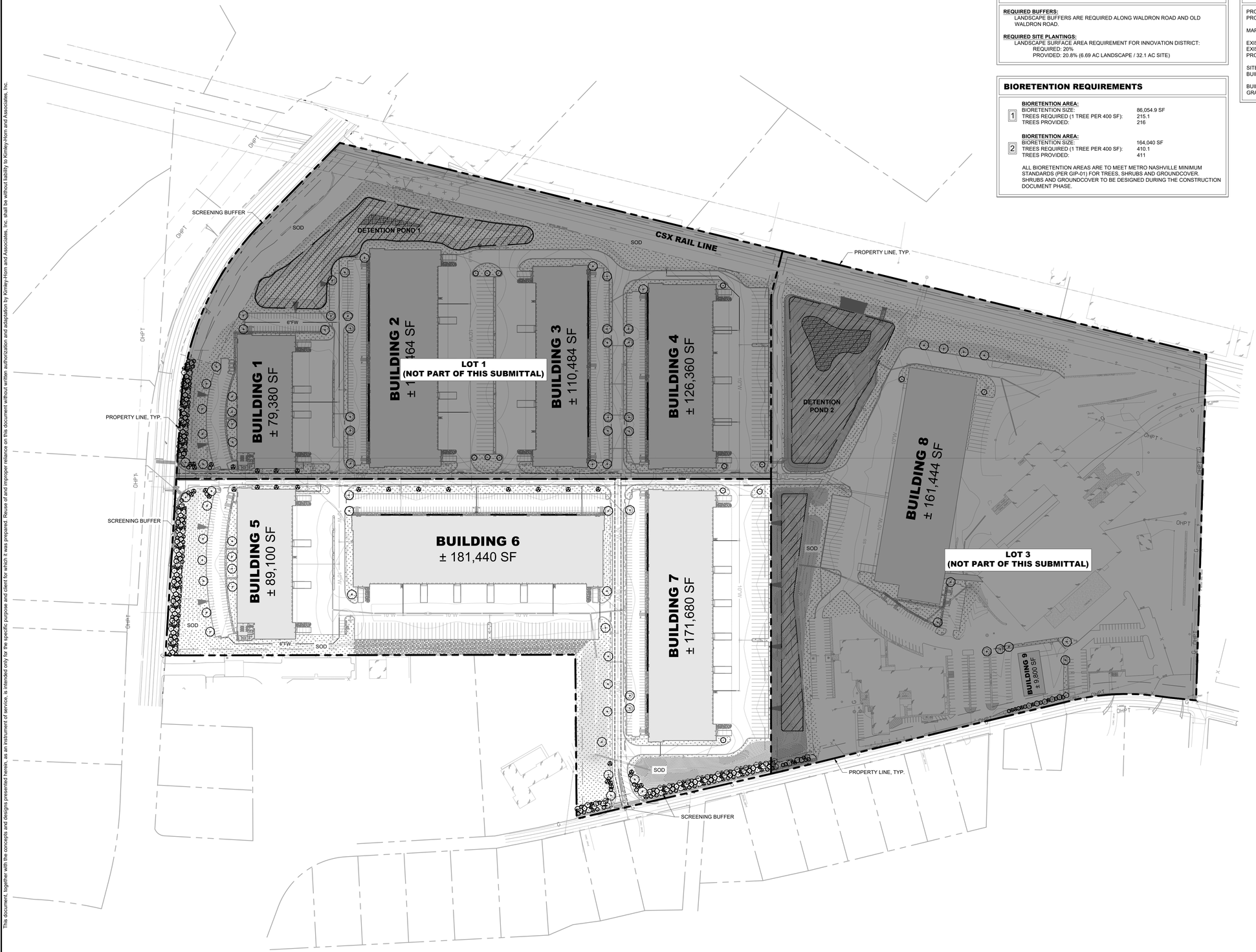
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CHECKED BY:	RJA
DATE:	12/18/2023

KIMLEY-HORN PROJECT NO. 118163044

UTILITY DETAILS

SHEET NUMBER
C8-22



LANDSCAPE REQUIREMENTS

REQUIRED BUFFERS:
LANDSCAPE BUFFERS ARE REQUIRED ALONG WALDRON ROAD AND OLD WALDRON ROAD.

REQUIRED SITE PLANTINGS:
LANDSCAPE SURFACE AREA REQUIREMENT FOR INNOVATION DISTRICT:
REQUIRED: 20%
PROVIDED: 20.8% (6.69 AC LANDSCAPE / 32.1 AC SITE)

BIORETENTION REQUIREMENTS

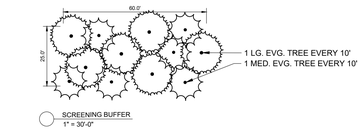
1
BIORETENTION AREA:
BIORETENTION SIZE: 86,054.9 SF
TREES REQUIRED (1 TREE PER 400 SF): 215.1
TREES PROVIDED: 216

2
BIORETENTION AREA:
BIORETENTION SIZE: 164,040 SF
TREES REQUIRED (1 TREE PER 400 SF): 410.1
TREES PROVIDED: 411

ALL BIORETENTION AREAS ARE TO MEET METRO NASHVILLE MINIMUM STANDARDS (PER GIP-01) FOR TREES, SHRUBS AND GROUNDCOVER. SHRUBS AND GROUNDCOVER TO BE DESIGNED DURING THE CONSTRUCTION DOCUMENT PHASE.

LANDSCAPE DATA TABLE

PROJECT NAME:	CO-OP BUSINESS PARK
PROPERTY ADDRESS:	MURFREESBORO ROAD LA VERGNE, TENNESSEE 37086
MAP AND PARCEL ID:	MAP 015 PARCEL 02400, 02800
EXISTING ZONING:	I-2
EXISTING LAND USE:	HEAVY INDUSTRIAL/MANUFACTURING
PROPOSED LAND USE:	HEAVY INDUSTRIAL/MANUFACTURING
SITE AREA:	±114.9 AC
BUILDING AREA:	±915,768 SF
BUILDING PERMIT:	TBD
GRADING PERMIT:	TBD



SCREENING BUFFER
1" = 30'-0"

PLANT SCHEDULE

SYMBOL	COMMON NAME
DECIDUOUS TREES	
	AUTUMN FLAME RED MAPLE
	BALD CYPRESS
EVERGREEN TREES	
	GREENLEAF AMERICAN HOLLY
	NELLIE STEVENS HOLLY
	TREE FORM BURFORD HOLLY
UNDERSTORY TREES	
	AUTUMN BRILLIANCE SERVICEBERRY
DECIDUOUS SHRUBS	
	ARROWOOD VIBURNUM
	LIMELIGHT HYDRANGEA
EVERGREEN SHRUBS	
	CARISSA HOLLY
GROUND COVERS	
	SHOT ROCK
	TENNESSEE RIVER ROCK
SOD/SEED	
	TIFWAY 419 BERMUDA SOD

LANDSCAPE NOTES

SEE SHEET L1-50 FOR COMPLETE PLANTING SCHEDULE.

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GRAPHIC SCALE IN FEET
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NORTH

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CO-OP BUSINESS PARK LOT 2

PANATTONI DEVELOPMENT COMPANY
LA VERGNE, TENNESSEE

PANATTONI®

SPENCER JAMES SANDERS
REGISTERED
AGRICULTURE AND COMMERCE
LANDSCAPE ARCHITECT
12/18/2023

No	REVISIONS	DATE	BY
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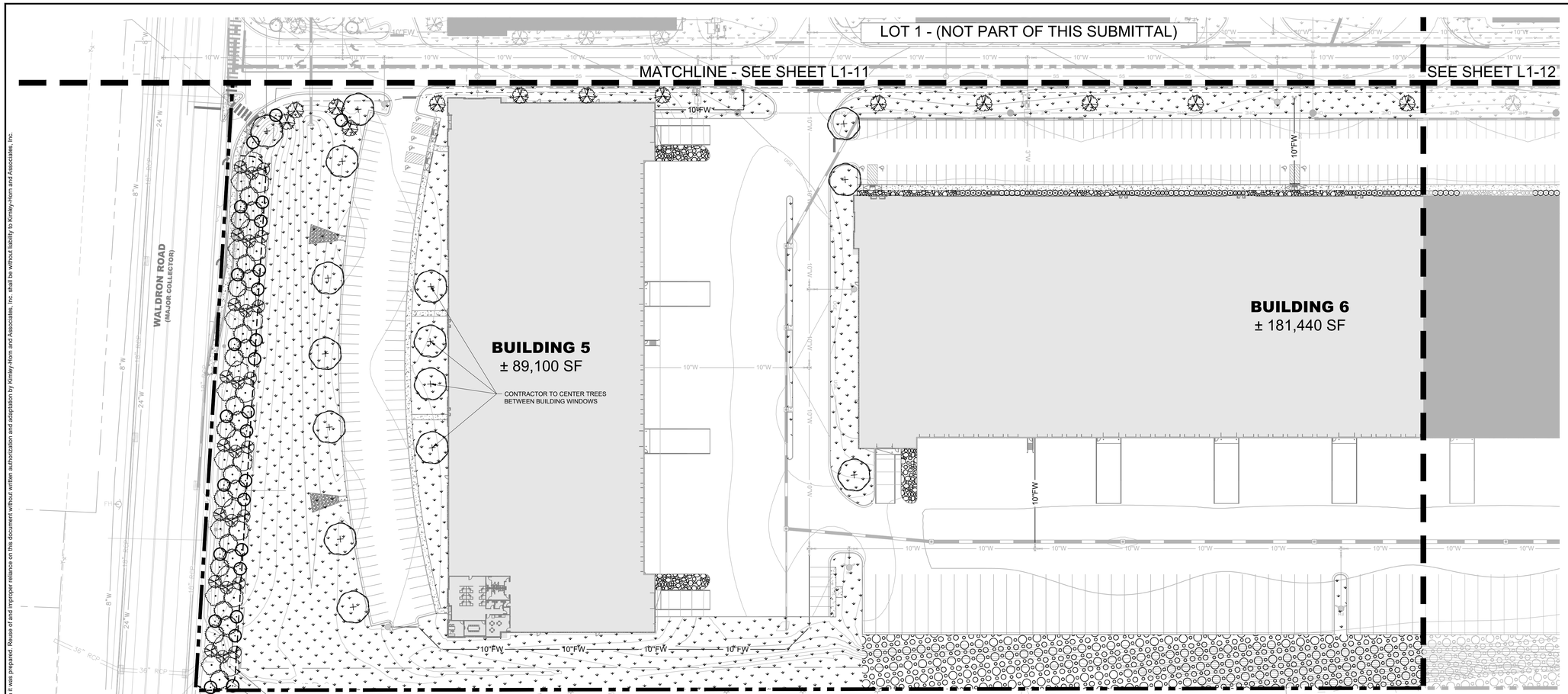
DESIGNED BY:	OAS
DRAWN BY:	OAS
CHECKED BY:	JLR
DATE:	12/18/2023
KIMLEY-HORN PROJECT NO.	118163044

LANDSCAPE PLAN - OVERALL

SHEET NUMBER
L1-20

Drawing name: K:\NSH_LDEV\118163044 - co-op la vergne\4-CADD\plansheets\L1-00 LANDSCAPE PLAN - OVERALL.dwg L1-20 Dec 18, 2023 9:35am by: Garrett.Froula

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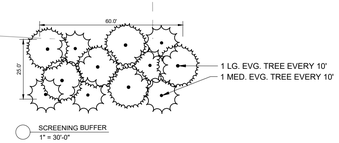


PLANT SCHEDULE

SYMBOL	COMMON NAME
DECIDUOUS TREES	
	AUTUMN FLAME RED MAPLE
	BALD CYPRESS
EVERGREEN TREES	
	GREENLEAF AMERICAN HOLLY
	NELLIE STEVENS HOLLY
	TREE FORM BURFORD HOLLY
UNDERSTORY TREES	
	AUTUMN BRILLIANCE SERVICEBERRY
DECIDUOUS SHRUBS	
	ARROWOOD VIBURNUM
	LIMELIGHT HYDRANGEA
EVERGREEN SHRUBS	
	CARISSA HOLLY
GROUND COVERS	
	SHOT ROCK
	TENNESSEE RIVER ROCK
SOD/SEED	
	TIFWAY 419 BERMUDA SOD

LANDSCAPE DATA TABLE

PROJECT NAME:	CO-OP BUSINESS PARK
PROPERTY ADDRESS:	MURFREESBORO ROAD LA VERGNE, TENNESSEE 37086
MAP AND PARCEL ID:	MAP 015 PARCEL 02400, 02800
EXISTING ZONING:	I-2
EXISTING LAND USE:	HEAVY INDUSTRIAL/MANUFACTURING
PROPOSED LAND USE:	HEAVY INDUSTRIAL/MANUFACTURING
SITE AREA:	±114.9 AC
BUILDING AREA:	±915,768 SF
BUILDING PERMIT:	TBD
GRADING PERMIT:	TBD



1 LG. EVG. TREE EVERY 10'
1 MED. EVG. TREE EVERY 10'

SCREENING BUFFER
1" = 30'-0"

LANDSCAPE NOTES

SEE SHEET L1-50 FOR COMPLETE PLANTING SCHEDULE.

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GRAPHIC SCALE IN FEET
0 25 50 100

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CO-OP BUSINESS PARK LOT 2

PANATTONI DEVELOPMENT COMPANY
LA VERGNE, TENNESSEE

PANATTONI®

SPENCER JAMES SANDERS
991015332
TENNESSEE
LANDSCAPE ARCHITECT
12/18/2023

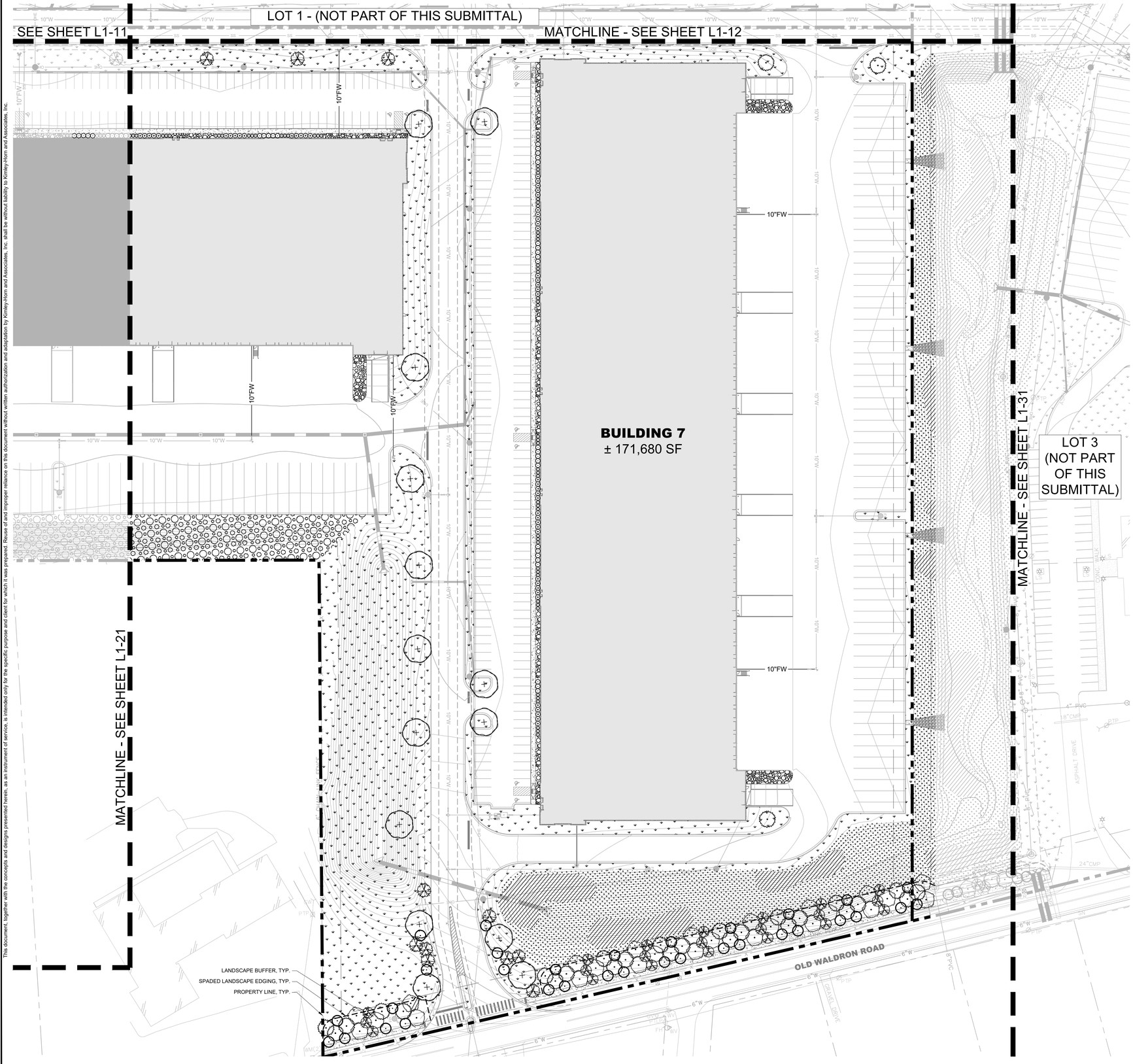
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DESIGNED BY:	OAS
DRAWN BY:	OAS
CHECKED BY:	JLR
DATE:	12/18/2023
KIMLEY-HORN PROJECT NO.	118163044

LANDSCAPE PLAN - ENLARGEMENT

SHEET NUMBER
L1-21

Drawing name: K:\NSH_LDEV\118163044 - co-op la vergne\4-CADD\plansheets\L1-10 LANDSCAPE PLAN - ENLARGEMENT.dwg L1-21 Dec 18, 2023 9:37am by: Garrett.Froula



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LANDSCAPE DATA TABLE

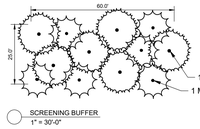
PROJECT NAME:	CO-OP BUSINESS PARK
PROPERTY ADDRESS:	MURFREESBORO ROAD LA VERGNE, TENNESSEE 37086
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EXISTING LAND USE:	HEAVY INDUSTRIAL/MANUFACTURING
PROPOSED LAND USE:	HEAVY INDUSTRIAL/MANUFACTURING
SITE AREA:	±114.9 AC
BUILDING AREA:	±915,768 SF
BUILDING PERMIT:	TBD
GRADING PERMIT:	TBD

PLANT SCHEDULE

SYMBOL	COMMON NAME
DECIDUOUS TREES	
	AUTUMN FLAME RED MAPLE
	BALD CYPRESS
EVERGREEN TREES	
	GREENLEAF AMERICAN HOLLY
	NELLIE STEVENS HOLLY
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UNDERSTORY TREES	
	AUTUMN BRILLIANCE SERVICEBERRY
DECIDUOUS SHRUBS	
	ARROWOOD VIBURNUM
	LIMELIGHT HYDRANGEA
EVERGREEN SHRUBS	
	CARISSA HOLLY
GROUND COVERS	
	SHOT ROCK
	TENNESSEE RIVER ROCK
SOD/SEED	
	TIFWAY 419 BERMUDA SOD

LANDSCAPE NOTES

SEE SHEET L1-50 FOR COMPLETE PLANTING SCHEDULE.



WETLAND PLANTING SCHEDULE

	WETLAND ZONE LIVE STAKING	72,193 SF	
	ALNUS SERRULATA / HAZEL ALDER	469	10% @ 48" oc
	ARONIA ARBUTIFOLIA / RED CHOKEBERRY	833	10% @ 36" oc
	CORNUS AMOMUM / SILKY DOGWOOD	302	10% @ 60" oc
	HAMAMELIS VIRGINIANA / COMMON WITCH HAZEL	832	10% @ 36" oc
	HYDRANGEA ARBORESCENS / WILD HYDRANGEA	2,402	20% @ 30" oc
	ILEX VERTICILLATA / WINTERBERRY	1,227	20% @ 42" oc
	SALIX ALBA 'SERICEA' / WHITE WILLOW	302	10% @ 60" oc
	SAMBUCUS CANADENSIS / AMERICAN ELDERBERRY	302	10% @ 60" oc
	WETLAND ZONE SEED	233,990 SF	
	ROUNDSTONE SEED - MIX 131 / SOUTHERN WETLAND AND POND EDGE MIX		

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0 25 50 100

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CO-OP BUSINESS PARK LOT 2

PANATTONI DEVELOPMENT COMPANY
LA VERGNE, TENNESSEE

PANATTONI®

SPENCER JAMES SANDBORN
203019
LANDSCAPE ARCHITECT
12/5/2023

No.	DATE	BY
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REVISIONS

DESIGNED BY:	OAS
DRAWN BY:	OAS
CHECKED BY:	JLR
DATE:	12/18/2023
KIMLEY-HORN PROJECT NO.	118163044

LANDSCAPE PLAN - ENLARGEMENT

SHEET NUMBER
L1-22

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GENERAL LANDSCAPE SPECIFICATIONS AND NOTES

1.01 SCOPE OF WORK

A. THE WORK CONSISTS OF: FURNISHING ALL LABOR, MATERIALS, EQUIPMENT, TOOLS, TRANSPORTATION, AND ANY OTHER APPURTENANCES NECESSARY FOR THE COMPLETION OF THIS PROJECT AS SHOWN ON THE DRAWINGS, AS INCLUDED IN THE PLANT LIST, AND AS HEREIN SPECIFIED.

B. WORK SHALL INCLUDE MAINTENANCE AND WATERING OF ALL CONTRACT PLANTING AREAS UNTIL CERTIFICATION OF ACCEPTABILITY BY THE OWNER.

C. THE CONTRACTOR SHALL CONTACT THE OWNER AND TENNESSEE ONE CALL AT (615) 351-1111, TWO (2) FULL BUSINESS DAYS PRIOR TO THE BEGINNING OF WORK.

D. THE CITY MUST APPROVE ALL WORK HOURS AND LANE CLOSURE REQUESTS AT LEAST TWO (2) FULL WORKING DAYS IN ADVANCE OF THE START OF ANY SUCH WORK ON A LOCATION BY LOCATION BASIS. THE INDIVIDUAL(S) INSTALLING THE MAINTENANCE OF TRAFFIC SETUP SHALL HAVE COMPLETED A TDOT APPROVED WORK ZONE TRAFFIC CONTROL TRAINING COURSE. DOCUMENTATION SHALL BE FURNISHED TO THE CITY AT THE PRE-CONSTRUCTION MEETING OR PRIOR TO START OF WORK.

E. ALL LANDSCAPE MATERIAL SHALL BE INSTALLED AND MAINTAINED IN A MANNER WHEREBY TRAFFIC CONTROL SIGNAGE AND DEVICES ARE VISIBLE TO MOTORISTS AND PEDESTRIANS.

1.02 PROTECTION OF EXISTING STRUCTURES

A. ALL EXISTING BUILDINGS, WALKS, WALLS, PAVING, PIPING, OTHER SITE CONSTRUCTION ITEMS, AND PLANTING ALREADY COMPLETED OR ESTABLISHED SHALL BE PROTECTED FROM DAMAGE BY THE CONTRACTOR UNLESS OTHERWISE SPECIFIED. ALL DAMAGE RESULTING FROM NEGLIGENCE SHALL BE REPAIRED OR REPLACED TO THE SATISFACTION OF THE OWNER AND AT NO COST TO THE OWNER.

B. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL NECESSARY BMP DEVICES ACCORDING TO TDOT, COUNTY, OR CITY STANDARDS THROUGH THE DURATION OF ALL CONSTRUCTION ACTIVITIES.

C. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL UTILITIES, WHETHER PUBLIC OR PRIVATE, PRIOR TO EXCAVATION. THE OWNER AND DESIGN PROFESSIONAL SHALL NOT BE RESPONSIBLE FOR THE ACCURACY AND COMPLETENESS OF ANY SUCH INFORMATION OR DATA, AND THE CONTRACTOR SHALL HAVE FULL RESPONSIBILITY FOR REVIEWING AND CHECKING ALL SUCH INFORMATION AND DATA, FOR LOCATING ALL UNDERGROUND FACILITIES DURING CONSTRUCTION, FOR THE SAFETY AND PROTECTION THEREOF, AND REPAIRING ANY DAMAGE THERETO RESULTING FROM THE WORK. THE COST OF COMPLIANCE WITH THIS SECTION WILL BE CONSIDERED AS HAVING BEEN INCLUDED IN THE CONTRACT PRICE. THE CONTRACTOR SHALL NOTIFY ANY AFFECTED UTILITY COMPANIES OR AGENCIES IN WRITING AT LEAST 48 HOURS PRIOR TO BEGINNING CONSTRUCTION.

1.03 PROTECTION OF EXISTING PLANT MATERIALS OUTSIDE LIMIT OF WORK

A. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL UNAUTHORIZED CUTTING OR DAMAGE TO TREES AND SHRUBS EXISTING OR OTHERWISE, CAUSED BY CARELESS EQUIPMENT OPERATION, MATERIAL STOCKPILING, ETC. THIS SHALL INCLUDE COMPACTION BY DRIVING OR PARKING INSIDE THE DRIP-LINE AND SPILLING OIL, GASOLINE, OR OTHER DELETERIOUS MATERIALS WITHIN THE DRIP-LINE. NO MATERIALS SHALL BE BURNED ON SITE. EXISTING TREES KILLED OR DAMAGED SO THAT THEY ARE MISSHAPEN AND/OR UNSIGHTLY SHALL BE REPLACED AT THE COST TO THE CONTRACTOR OF ONE HUNDRED DOLLARS ($100) PER CALIPER INCH ON AN ESCALATING SCALE WHICH ADDS AN ADDITIONAL TWENTY (20) PERCENT PER INCH OVER FOUR (4) INCHES CALIPER AS FIXED AND AGREED LIQUIDATED DAMAGES. CALIPER SHALL BE MEASURED SIX (6) INCHES ABOVE GROUND LEVEL FOR TREES UP TO AND INCLUDING FOUR (4) INCHES IN CALIPER AND TWELVE (12) INCHES ABOVE GROUND LEVEL FOR TREES OVER FOUR (4) INCHES IN CALIPER.

1.04 MATERIALS

A. GENERAL

MATERIAL SAMPLES LISTED BELOW SHALL BE SUBMITTED FOR APPROVAL, ON SITE OR AS DETERMINED BY THE LANDSCAPE ARCHITECT. UPON APPROVAL, DELIVERY OF MATERIALS MAY COMMENCE.

MATERIAL	SAMPLE SIZE
MULCH	ONE (1) CUBIC FOOT
TOPSOIL MIX	ONE (1) CUBIC FOOT
PLANTS	ONE (1) OF EACH VARIETY (OR TAGGED IN NURSERY)

B. PLANT MATERIALS

1. PLANT SPECIES AND SIZE SHALL CONFORM TO THOSE INDICATED ON THE DRAWINGS. ALL NURSERY STOCK SHALL BE IN ACCORDANCE WITH GRADES AND STANDARDS AS SET FORTH IN ANSI Z60.1-2014-AMERICAN STANDARD FOR NURSERY STOCK. ALL PLANTS SHALL BE HEALTHY, VIGOROUS, SOUND, WELL-BRANCHED, AND FREE OF DISEASE AND INSECTS, INSECT EGGS AND LARVAE AND SHALL HAVE ADEQUATE ROOT SYSTEMS. TREES FOR PLANTING IN ROWS SHALL BE UNIFORM IN SIZE AND SHAPE. ALL MATERIALS SHALL BE SUBJECT TO APPROVAL BY THE OWNER. WHERE ANY REQUIREMENTS ARE OMITTED FROM THE PLANT LIST, THE PLANTS FURNISHED SHALL BE NORMAL FOR THE VARIETY. PLANTS SHALL BE PRUNED PRIOR TO DELIVERY ONLY WITH APPROVAL FROM OWNER OR LANDSCAPE ARCHITECT. NO SUBSTITUTIONS SHALL BE MADE WITHOUT WRITTEN PERMISSION FROM THE LANDSCAPE ARCHITECT.
2. MEASUREMENTS: THE HEIGHT AND/OR WIDTH OF TREES SHALL BE MEASURED FROM THE GROUND OR ACROSS THE NORMAL SPREAD OF BRANCHES WITH THE PLANTS IN THEIR NORMAL POSITION. THIS MEASUREMENT SHALL NOT INCLUDE THE IMMEDIATE TERMINAL GROWTH. PLANTS LARGER IN SIZE THAN THOSE SPECIFIED IN THE PLANT LIST MAY BE USED IF APPROVED BY THE OWNER. IF THE USE OF LARGER PLANTS IS APPROVED, THE ROOTBALL OR SPREAD OF ROOTS SHALL BE INCREASED IN PROPORTION TO THE SIZE OF THE PLANT.
3. INSPECTION: PLANTS SHALL BE SUBJECT TO INSPECTION AND APPROVAL AT THE PLACE OF GROWTH, OR UPON DELIVERY TO THE SITE, AS DETERMINED BY THE OWNER, FOR QUALITY, SIZE, AND VARIETY; SUCH APPROVAL SHALL NOT IMPAIR THE RIGHT OF INSPECTION AND REJECTION AT THE SITE DURING PROGRESS OF THE WORK OR AFTER COMPLETION FOR SIZE AND CONDITION OF ROOT BALLS OR ROOTS, LATENT DEFECTS OR INJURIES. REJECTED PLANTS SHALL BE REMOVED IMMEDIATELY FROM THE SITE. NOTICE REQUESTING INSPECTION SHALL BE SUBMITTED IN WRITING BY THE CONTRACTOR AT LEAST ONE (1) WEEK PRIOR TO ANTICIPATED DATE.

1.05 SOIL MIXTURE (PLANTING MEDIUM, PLANTING MIX, TOPSOIL MIX)

A. SOIL MIXTURE (PLANTING MEDIUM FOR PLANT PITS) SHALL CONSIST OF ⅓ LOOSE COMPOST (NO GREATER THAN 1" SIV), ⅓ PEAT AND ⅓ SAND, AS DESCRIBED BELOW.

B. TOPSOIL FOR USE IN PREPARING SOIL MIXTURE FOR BACKFILLING PLANT PITS SHALL BE FERTILE, FRIABLE, AND OF A LOAMY CHARACTER; REASONABLY FREE OF SUBSOIL, CLAY LUMPS, BRUSH WEEDS AND OTHER LITTER; FREE OF ROOTS, STUMPS, STONES LARGER THAN 2" IN ANY DIRECTION, AND OTHER EXTRANEOUS OR TOXIC MATTER HARMFUL TO PLANT GROWTH. IT SHALL CONTAIN THREE (3) TO FIVE (5) PERCENT DECOMPOSED ORGANIC MATTER AND A PH BETWEEN 5.5 AND 7.0 - SUBMIT SAMPLE AND PH TESTING RESULTS FOR APPROVAL.

C. SAND SHALL BE COARSE, CLEAN, WELL-DRAINING, NATIVE SAND. CONTRACTOR SHALL SUBMIT RESULTS OF SOIL TESTS FOR TOPSOIL AND SAND PROPOSED FOR APPROVAL BY THE OWNER.

D. TREES SHALL BE PLANTED IN THE EXISTING NATIVE SOIL ON SITE, UNLESS DETERMINED TO BE UNSUITABLE, AT WHICH POINT THE CONTRACTOR SHALL CONTACT OWNER'S REPRESENTATIVE TO DISCUSS ALTERNATE RECOMMENDATION PRIOR TO PLANTING.

E. CONTRACTOR TO SUBMIT SAMPLES OF SOIL MIXTURE FOR OWNER'S REPRESENTATIVE APPROVAL PRIOR TO PLANT INSTALLATION OPERATIONS COMMENCE.

1.06 WATER

A. WATER NECESSARY FOR PLANTING AND MAINTENANCE SHALL BE OF SATISFACTORY QUALITY TO SUSTAIN ADEQUATE PLANT GROWTH AND SHALL NOT CONTAIN HARMFUL, NATURAL OR MAN-MADE ELEMENTS DETRIMENTAL TO PLANTS. WATER MEETING THE ABOVE STANDARD SHALL BE OBTAINED ON THE SITE FROM THE OWNER, IF AVAILABLE, AND THE CONTRACTOR SHALL BE RESPONSIBLE TO MAKE ARRANGEMENTS FOR ITS USE BY HIS TANKS, HOSES, SPRINKLERS, ETC. IF SUCH WATER IS NOT AVAILABLE AT THE SITE, THE CONTRACTOR SHALL PROVIDE SATISFACTORY WATER FROM SOURCES OFF THE SITE AT NO ADDITIONAL COST TO THE OWNER.

* *WATERING/IRRIGATION RESTRICTIONS MAY APPLY - REFER TO PROPERTY'S JURISDICTIONAL AUTHORITY.*

1.07 FERTILIZER

A. CONTRACTOR SHALL PROVIDE FERTILIZER APPLICATION SCHEDULE TO OWNER, AS APPLICABLE TO SOIL TYPE, PLANT INSTALLATION TYPE, AND SITE'S PROPOSED USE. SUGGESTED FERTILIZER TYPES SHALL BE ORGANIC OR OTHERWISE NATURALLY-DERIVED.

* *FERTILIZER RESTRICTIONS MAY APPLY - REFER TO PROPERTY'S JURISDICTIONAL AUTHORITY.*

1.08 MULCH

A. MULCH MATERIAL SHALL BE MOISTENED AT THE TIME OF APPLICATION TO PREVENT WIND DISPLACEMENT, AND APPLIED AT A DEPTH OF THREE (3) INCHES FOR ALL PLANTINGS UNLESS OTHERWISE NOTED. MULCH AT ALL PLANTING BEDS SHALL BE TRIPLE SHREDDED HARDWOOD.

1.09 DIGGING AND HANDLING

A. PROTECT ROOTS OR ROOT BALLS OF PLANTS AT ALL TIMES FROM SUN, DRYING WINDS, WATER AND FREEZING AS NECESSARY UNTIL PLANTING. PLANT MATERIALS SHALL BE ADEQUATELY PACKED TO PREVENT DAMAGE DURING TRANSIT.

B. BALLED AND BURLAPPED PLANTS (B&B) SHALL BE DUG WITH FIRM, NATURAL BALLS OF SOIL OF SUFFICIENT SIZE TO ENCOMPASS THE FIBROUS AND FEEDING ROOTS OF THE PLANTS. NO PLANTS MOVED WITH A ROOT BALL SHALL BE PLANTED IF THE BALL IS CRACKED OR BROKEN. PLANTS SHALL NOT BE HANDLED BY STEMS.

C. EXCAVATION OF TREE PITS SHALL BE PERFORMED USING EXTREME CARE TO AVOID DAMAGE TO SURFACE AND SUBSURFACE ELEMENTS SUCH AS UTILITIES OR HARDSCAPE ELEMENTS, FOOTERS AND PREPARED SUB-BASES. ALL TREES SHALL BE PLANTED AS INDICATED ON DRAWINGS. COORDINATE WITH PLANTING DETAILS FOR EXACT DEPTH OF PLANTING SOIL.

1.10 CONTAINER GROWN STOCK

A. ALL TREES SPECIFIED SHALL BE BALL AND BURLAP, UNLESS OTHERWISE APPROVED BY LANDSCAPE ARCHITECT.

B. ALL SHRUB SPECIES SHALL BE CONTAINER GROWN.

C. ALL CONTAINER GROWN MATERIAL SHALL BE HEALTHY, VIGOROUS, WELL-ROOTED PLANTS ESTABLISHED IN THE CONTAINER IN WHICH THEY ARE SOLD. THE PLANTS SHALL HAVE TOPS WHICH ARE OF GOOD QUALITY AND ARE IN A HEALTHY GROWING CONDITION.

D. AN ESTABLISHED CONTAINER GROWN PLANT SHALL BE TRANSPLANTED INTO A CONTAINER AND GROWN IN THAT CONTAINER SUFFICIENTLY LONG ENOUGH FOR THE NEW FIBROUS ROOTS TO HAVE DEVELOPED SO THAT THE ROOT MASS WILL RETAIN ITS SHAPE AND HOLD TOGETHER WHEN REMOVED FROM THE CONTAINER. CONTAINER GROWN STOCK SHALL NOT BE HANDLED BY THEIR STEMS.

E. PLANT ROOTS BOUND IN CONTAINERS ARE NOT ACCEPTABLE.

1.11 MATERIALS LIST

A. QUANTITIES NECESSARY TO COMPLETE THE WORK ON THE DRAWINGS SHALL BE FURNISHED BY THE CONTRACTOR. QUANTITY ESTIMATES HAVE BEEN MADE CAREFULLY, BUT THE LANDSCAPE ARCHITECT OR OWNER ASSUMES NO LIABILITY FOR OMISSIONS OR ERRORS. SHOULD A DISCREPANCY OCCUR BETWEEN THE PLANS AND THE PLANT LIST QUANTITY, THE OWNER'S REPRESENTATIVE SHALL BE NOTIFIED FOR CLARIFICATION PRIOR TO BIDDING OR INSTALLATION. ALL DIMENSIONS AND/OR SIZES SPECIFIED SHALL BE THE MINIMUM ACCEPTABLE SIZE.

1.12 FINE GRADING

A. FINE GRADING UNDER THIS CONTRACT SHALL CONSIST OF FINAL FINISHED GRADING OF LAWN AND PLANTING AREAS THAT HAVE BEEN DISTURBED DURING CONSTRUCTION.

B. THE CONTRACTOR SHALL FINE GRADE THE LAWN AND PLANTING AREAS TO BRING THE ROUGH GRADE UP TO FINAL FINISHED GRADE ALLOWING FOR THICKNESS OF SOD AND/OR MULCH DEPTH. CONTRACTOR SHALL FINE GRADE BY HAND AND/OR WITH ALL EQUIPMENT NECESSARY INCLUDING A GRADING TRACTOR WITH FRONT-END LOADER FOR TRANSPORTING SOIL WITHIN THE SITE.

C. ALL PLANTING AREAS SHALL BE GRADED AND MAINTAINED FOR POSITIVE DRAINAGE TO SURFACE/SUBSURFACE STORM DRAIN SYSTEMS. AREAS ADJACENT TO BUILDINGS SHALL SLOPE AWAY FROM THE BUILDINGS. REFER TO CIVIL ENGINEER'S PLANS FOR FINAL GRADES, IF APPLICABLE.

1.13 PLANTING PROCEDURES

A. CLEANING UP BEFORE COMMENCING WORK: THE CONTRACTOR SHALL CLEAN WORK AND SURROUNDING AREAS OF ALL RUBBISH OR OBJECTIONABLE MATTER DAILY. ALL MORTAR, CEMENT, AND TOXIC MATERIAL SHALL BE REMOVED FROM THE SURFACE OF ALL PLANT BEDS. THESE MATERIALS SHALL NOT BE MIXED WITH THE SOIL. SHOULD THE CONTRACTOR FIND SUCH SOIL CONDITIONS BENEATH THE SOIL WHICH WILL IN ANY WAY ADVERSELY AFFECT THE PLANT GROWTH, CONTRACTOR SHALL IMMEDIATELY CALL IT TO THE ATTENTION OF THE OWNER'S REPRESENTATIVE. FAILURE TO DO SO BEFORE PLANTING SHALL MAKE THE CORRECTIVE MEASURES THE RESPONSIBILITY OF THE CONTRACTOR.

B. SUBGRADE EXCAVATION: THE CONTRACTOR IS RESPONSIBLE TO REMOVE ALL EXISTING AND IMPORTED LIMEROCK AND LIMEROCK SUB-BASE FROM ALL LANDSCAPE PLANTING AREAS TO A MINIMUM DEPTH OF 36" AT TREES AND 18" AT SHRUBS AND PERENNIALS. CONTRACTOR IS RESPONSIBLE TO BACKFILL THESE PLANTING AREAS TO ROUGH FINISH GRADE WITH CLEAN TOPSOIL FROM AN ON-SITE SOURCE OR AN IMPORTED SOURCE. IF LIMEROCK OR OTHER ADVERSE CONDITIONS OCCUR IN PLANTED AREAS AFTER 36", AND DEEP EXCAVATION BY THE CONTRACTOR AND POSITIVE DRAINAGE CANNOT BE ACHIEVED, THE CONTRACTOR SHALL UTILIZE PLANTING DETAIL THAT ADDRESSES POOR DRAINAGE.

C. VERIFY LOCATIONS OF ALL UTILITIES, CONDUITS, SUPPLY LINES AND CABLES, INCLUDING BUT NOT LIMITED TO: ELECTRIC, GAS (LINES AND TANKS), WATER, SANITARY SEWER, STORMWATER SYSTEMS, CABLE, AND TELEPHONE. PROPERLY MAINTAIN AND PROTECT EXISTING UTILITIES. CONTACT TENNESSEE ONE CALL AT (615) 351-1111 TO LOCATE ALL UTILITIES.

D. FURNISH NURSERY'S CERTIFICATE OF COMPLIANCE WITH ALL REQUIREMENTS AS HEREIN SPECIFIED AND REQUIRED. INSPECT AND SELECT PLANT MATERIALS BEFORE PLANTS ARE DUG AT NURSERY OR GROWING SITE.

E. GENERAL: COMPLY WITH APPLICABLE FEDERAL, STATE, COUNTY, AND LOCAL REGULATIONS GOVERNING LANDSCAPE MATERIALS AND WORK. CONFORM TO ACCEPTED HORTICULTURAL PRACTICES AS USED IN THE TRADE. UPON ARRIVAL AT THE SITE, PLANTS SHALL BE THOROUGHLY WATERED AND PROPERLY MAINTAINED UNTIL PLANTED. PLANTS STORED ON-SITE SHALL NOT REMAIN UNPLANTED OR APPROPRIATELY HEALED IN FOR A PERIOD EXCEEDING TWENTY-FOUR (24) HOURS. AT ALL TIMES WORKMANLIKE METHODS CUSTOMARY IN GOOD HORTICULTURAL PRACTICES SHALL BE EXERCISED.

F. THE WORK SHALL BE COORDINATED WITH OTHER TRADES TO PREVENT CONFLICTS. COORDINATE PLANTING WITH IRRIGATION WORK TO ASSURE AVAILABILITY OF WATER AND PROPER LOCATION OF IRRIGATION APPURTENANCES AND PLANTS.

G. ALL PLANTING PITS SHALL BE EXCAVATED TO SIZE AND DEPTH IN ACCORDANCE WITH ANSI Z60.1-2014 - AMERICAN STANDARD FOR NURSERY STOCK, UNLESS SHOWN OTHERWISE ON THE DRAWINGS, AND BACK FILLED WITH THE PREPARED PLANTING SOIL MIXTURE AS SPECIFIED IN SECTION 1.05. TEST ALL TREE PITS WITH WATER BEFORE PLANTING TO ASSURE PROPER DRAINAGE PERCOLATION IS AVAILABLE. NO ALLOWANCE WILL BE MADE FOR LOST PLANTS DUE TO IMPROPER DRAINAGE. TREES SHALL BE SET PLUMB AND HELD IN POSITION UNTIL THE PLANTING MIXTURE HAS BEEN FLUSHED INTO PLACE WITH A SLOW, FULL HOSE STREAM. ALL PLANTING SHALL BE PERFORMED BY PERSONNEL FAMILIAR WITH PLANTING PROCEDURES AND UNDER THE SUPERVISION OF A QUALIFIED LANDSCAPE FOREMAN.

H. TAKE ALL NECESSARY PRECAUTIONS TO AVOID DAMAGE TO BUILDINGS AND BUILDING STRUCTURES WHILE INSTALLING TREES.

I. SOIL MIXTURE SHALL BE AS SPECIFIED IN SECTION 1.05 OF THESE SPECIFICATIONS.

J. TREES AND SHRUBS SHALL BE SET STRAIGHT AT AN ELEVATION THAT, AFTER SETTLEMENT, THE PLANT CROWN WILL STAND ONE (1) TO TWO (2) INCHES ABOVE GRADE. EACH PLANT SHALL BE SET IN THE CENTER OF THE PIT. PLANTING SOIL MIXTURE SHALL BE BACK FILLED, THOROUGHLY TAMPED AROUND THE BALL, AND SETTLED BY WATER (AFTER TAMPING).

K. SHRUBS AND GROUND COVER PLANTS SHALL BE EVENLY SPACED IN ACCORDANCE WITH THE DRAWINGS AND AS INDICATED ON THE PLANT LIST. MATERIALS INSTALLED SHALL MEET MINIMUM SPECIMEN REQUIREMENTS OR QUANTITIES SHOW ON PLANS, WHICHEVER IS GREATER. CULTIVATE ALL PLANTING AREAS TO A MINIMUM DEPTH OF 12", REMOVE AND DISPOSE ALL DEBRIS. COORDINATE WITH PLANTING DETAILS FOR EXACT DEPTH. MIX TOP 4" OF THE PLANTING SOIL MIXTURE AS SPECIFIED IN SECTION 1.05. THOROUGHLY WATER ALL PLANTS AFTER INSTALLATION.

L. TREE GUYING AND BRACING SHALL BE INSTALLED BY THE CONTRACTOR IN ACCORDANCE WITH THE PLANS TO INSURE STABILITY AND MAINTAIN TREES IN AN UPRIGHT POSITION. IF THE CONTRACTOR AND OWNER DECIDE TO WAIVE THE TREE GUYING AND BRACING, THE OWNER SHALL NOTIFY THE PROJECT LANDSCAPE ARCHITECT IN WRITING AND AGREE TO INDEMNIFY AND HOLD HARMLESS THE PROJECT LANDSCAPE ARCHITECT IN THE EVENT UNSUPPORTED TREES PLANTED UNDER THIS CONTRACT FALL AND DAMAGE PERSON OR PROPERTY.

M. HERBICIDE WEED CONTROL: ALL PLANT BEDS SHALL BE KEPT FREE OF NOXIOUS WEEDS UNTIL FINAL ACCEPTANCE OF WORK. IF DIRECTED BY THE OWNER, "ROUND-UP" SHALL BE APPLIED FOR WEED CONTROL BY QUALIFIED PERSONNEL TO ALL PLANTING AREAS IN SPOT APPLICATIONS PER MANUFACTURER'S PRECAUTIONS AND SPECIFICATIONS. PRIOR TO FINAL INSPECTION, TREAT ALL PLANTING BEDS WITH AN APPROVED PRE-EMERGENT HERBICIDE AT AN APPLICATION RATE RECOMMENDED BY THE MANUFACTURER (AS ALLOWED BY JURISDICTIONAL AUTHORITY).

1.14 LAWN SODDING

A. THE WORK CONSISTS OF LAWN BED PREPARATION, SOIL PREPARATION, AND SODDING COMPLETE, IN STRICT ACCORDANCE WITH THE SPECIFICATIONS AND THE APPLICABLE DRAWINGS TO PRODUCE A TURF GRASS LAWN ACCEPTABLE TO THE OWNER.

B. LAWN BED PREPARATION: ALL AREAS THAT ARE TO BE SODDED SHALL BE CLEARED OF ANY ROUGH GRASS, WEEDS, AND DEBRIS BY MEANS OF A SOD CUTTER TO A DEPTH OF THREE (3) INCHES, AND THE GROUND BROUGHT TO AN EVEN GRADE. THE ENTIRE SURFACE SHALL BE ROLLED WITH A ROLLER WEIGHING NOT MORE THAN ONE-HUNDRED (100) POUNDS PER FOOT OF WIDTH. DURING THE ROLLING, ALL DEPRESSIONS CAUSED BY SETTLEMENT SHALL BE FILLED WITH ADDITIONAL SOIL, AND THE SURFACE SHALL BE REGRADED AND ROLLED UNTIL PRESENTING A SMOOTH AND EVEN FINISH TO THE REQUIRED GRADE.

C. SOIL PREPARATION: PREPARE LOOSE BED FOUR (4) INCHES DEEP. HAND RAKE UNTIL ALL BUMPS AND DEPRESSIONS ARE REMOVED. WET PREPARED AREA THOROUGHLY.

D. SODDING

1. THE CONTRACTOR SHALL SOD ALL DISTURBED AREAS WITHIN THE CONTRACT LIMITS NOT COVERED BY HARDSCAPE OR VEGETATIVE MATERIAL, UNLESS SPECIFICALLY NOTED OTHERWISE.
2. SOD PANELS SHALL BE LAID TIGHTLY TOGETHER SO AS TO MAKE A SOLID SODDED LAWN AREA. SOD SHALL BE LAID UNIFORMLY AGAINST THE EDGES OF ALL CURBS AND OTHER HARDSCAPE ELEMENTS, PAVED AND PLANTED AREAS. IMMEDIATELY FOLLOWING SOD LAYING, THE LAWN AREAS SHALL BE ROLLED WITH A LAWN ROLLER CUSTOMARILY USED FOR SUCH PURPOSES, AND THEN THOROUGHLY IRRIGATED. IF, IN THE OPINION OF THE OWNER, TOP-DRESSING IS NECESSARY AFTER ROLLING TO FILL THE VOIDS BETWEEN THE SOD PANELS AND TO EVEN OUT INCONSISTENCIES IN THE SOD, CLEAN SAND, AS APPROVED BY THE OWNER'S REPRESENTATIVE, SHALL BE UNIFORMLY SPREAD OVER THE ENTIRE SURFACE OF THE SOD AND THOROUGHLY WATERED IN. FERTILIZE INSTALLED SOD AS ALLOWED BY PROPERTY'S JURISDICTIONAL AUTHORITY.
3. DURING DELIVERY, PRIOR TO, AND DURING THE PLANTING OF THE LAWN AREAS, THE SOD PANELS SHALL AT ALL TIMES BE PROTECTED FROM EXCESSIVE DRYING AND UNNECESSARY EXPOSURE OF THE ROOTS TO THE SUN. ALL SOD SHALL BE STACKED SO AS NOT TO BE DAMAGED BY SWEATING OR EXCESSIVE HEAT AND MOISTURE.

E. LAWN MAINTENANCE

1. WITHIN THE CONTRACT LIMITS, THE CONTRACTOR SHALL PRODUCE A DENSE, WELL ESTABLISHED LAWN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR AND RE-SODDING OF ALL ERODED, SUNKEN OR BARE SPOTS (LARGER THAN 12"X12") UNTIL CERTIFICATION OF ACCEPTABILITY BY THE OWNER'S REPRESENTATIVE. REPAIRED SODDING SHALL BE ACCOMPLISHED AS IN THE ORIGINAL WORK (INCLUDING RE-GRADING IF NECESSARY).
2. CONTRACTOR SHALL BE RESPONSIBLE FOR ESTABLISHING AND MAINTAINING SOD/LAWN UNTIL ACCEPTANCE BY THE OWNER'S REPRESENTATIVE. PRIOR TO AND UPON ACCEPTANCE, CONTRACTOR TO PROVIDE WATERING/IRRIGATION SCHEDULE TO OWNER. OBSERVE ALL APPLICABLE WATERING RESTRICTIONS AS SET FORTH BY THE PROPERTY'S JURISDICTIONAL AUTHORITY.

1.15 CLEANUP

A. UPON COMPLETION OF ALL PLANTING WORK AND BEFORE FINAL ACCEPTANCE, THE CONTRACTOR SHALL REMOVE ALL MATERIAL, EQUIPMENT, AND DEBRIS RESULTING FROM HIS WORK. ALL PAVED AREAS SHALL BE BROOM-CLEANED AND THE SITE LEFT IN A NEAT AND ACCEPTABLE CONDITION AS APPROVED BY THE OWNER'S REPRESENTATIVE.

1.16 PLANT MATERIAL MAINTENANCE

A. ALL PLANTS AND PLANTING INCLUDED UNDER THIS CONTRACT SHALL BE MAINTAINED BY WATERING, CULTIVATING, SPRAYING, AND ALL OTHER OPERATIONS (SUCH AS RE-STAKING OR REPAIRING GUY SUPPORTS) NECESSARY TO INSURE A HEALTHY PLANT CONDITION BY THE CONTRACTOR UNTIL CERTIFICATION OF ACCEPTABILITY BY THE OWNER'S REPRESENTATIVE.

1.17 FINAL INSPECTION AND ACCEPTANCE OF WORK

A. FINAL INSPECTION AT THE END OF THE WARRANTY PERIOD SHALL BE ON PLANTING, CONSTRUCTION AND ALL OTHER INCIDENTAL WORK PERTAINING TO THIS CONTRACT. ANY REPLACEMENT AT THIS TIME SHALL BE SUBJECT TO THE SAME ONE (1) YEAR WARRANTY (OR AS SPECIFIED BY THE LANDSCAPE ARCHITECT OR OWNER IN WRITING) BEGINNING WITH THE TIME OF REPLACEMENT AND ENDING WITH THE SAME INSPECTION AND ACCEPTANCE HEREIN DESCRIBED.

1.18 WARRANTY

A. THE LIFE AND SATISFACTORY CONDITION OF ALL PLANT MATERIAL INSTALLED (INCLUDING SOD) BY THE LANDSCAPE CONTRACTOR SHALL BE WARRANTIED BY THE CONTRACTOR FOR A MINIMUM OF ONE (1) CALENDAR YEAR COMMENCING AT THE TIME OF CERTIFICATION OF ACCEPTABILITY BY THE OWNER'S REPRESENTATIVE.

B. REPLACEMENT: ANY PLANT NOT FOUND IN A HEALTHY GROWING CONDITION DURING THE WARRANTY PERIOD SHALL BE REMOVED FROM THE SITE AND REPLACED WITHIN TEN (10) DAYS OF NOTICE, OR BETWEEN SEPTEMBER-NOVEMBER, MARCH-MAY. ALL REPLACEMENTS SHALL BE PLANTS OF THE SAME KIND AND SIZE AS SPECIFIED IN THE PLANT LIST. THEY SHALL BE FURNISHED, PLANTED AND MULCHED AS SPECIFIED AT NO ADDITIONAL COST TO THE OWNER.

C. IN THE EVENT THE OWNER DOES NOT CONTRACT WITH THE CONTRACTOR FOR LANDSCAPE MAINTENANCE, THE CONTRACTOR IS ENCOURAGED TO VISIT THE PROJECT SITE PERIODICALLY DURING THE ONE (1) YEAR WARRANTY PERIOD TO EVALUATE MAINTENANCE PROCEDURES BEING PERFORMED BY THE OWNER, AND SHALL NOTIFY THE OWNER IN WRITING OF MAINTENANCE PROCEDURES OR CONDITIONS WHICH THREATEN VIGOROUS AND HEALTHY PLANT GROWTH. IT IS SUGGESTED SUCH SITE VISITS SHALL BE CONDUCTED A MINIMUM OF ONCE PER MONTH FOR A PERIOD OF TWELVE (12) MONTHS FROM THE DATE OF ACCEPTANCE.

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CO-OP BUSINESS PARK
LOT 2
PANATTONI DEVELOPMENT COMPANY
LA VERGNE, TENNESSEE

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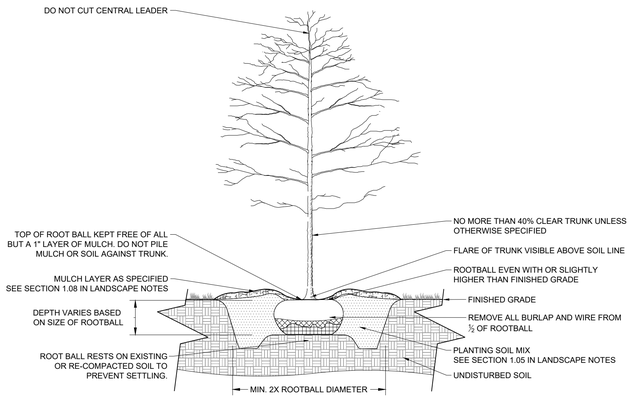
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DESIGNED BY:	OAS
DRAWN BY:	OAS
CHECKED BY:	JLR
DATE:	12/18/2023

KIMLEY-HORN PROJECT NO. 118163044

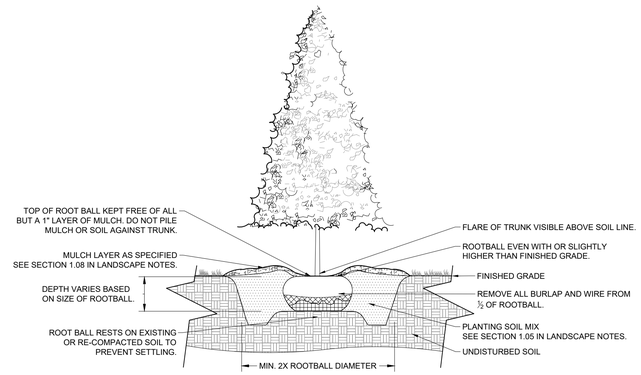
LANDSCAPE NOTES

SHEET NUMBER
L1-50



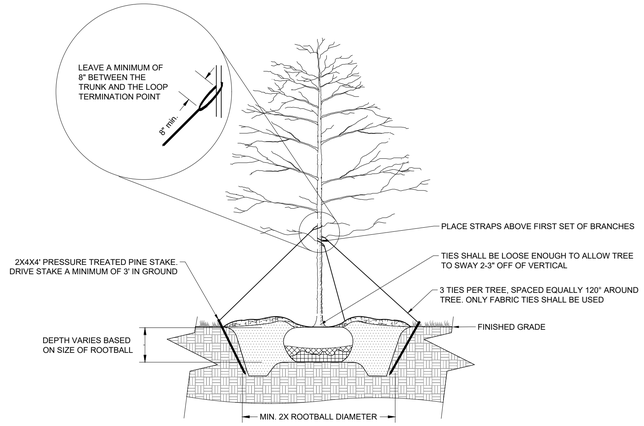
1 B&B TREE PLANTING

NOT TO SCALE



2 EVERGREEN TREE PLANTING

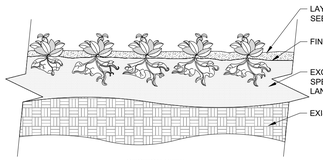
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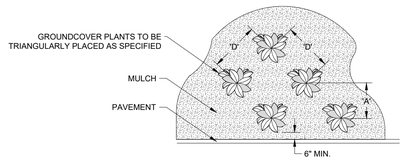
NOTE: TREE STAKING MAY BE USED ONLY ON TREES LARGER THAN 2" CAL., UNLESS OTHERWISE APPROVED BY THE CITY LANDSCAPE ARCHITECT.

3 TREE STAKING

NOT TO SCALE



SECTION VIEW



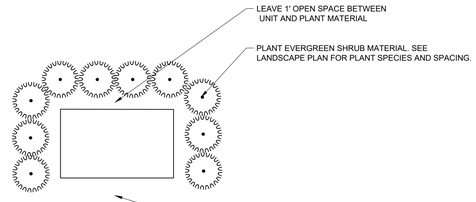
PLAN VIEW

PLANT SPACING ' D '	ROW ' A '
8" O.C.	6.93" O.C.
10" O.C.	8.66" O.C.
12" O.C.	10.4" O.C.
18" O.C.	15.6" O.C.
24" O.C.	20.8" O.C.
36" O.C.	30.0" O.C.
48" O.C.	31.5" O.C.

NOTES:
1 SEE PLANTING LEGEND FOR GROUNDCOVER SPECIES, SIZE, AND SPACING DIMENSION.
2 SETTLE SOIL AROUND ROOT BALL OF EACH GROUNDCOVER PRIOR TO MULCHING.

4 GROUNDCOVER PLANTING

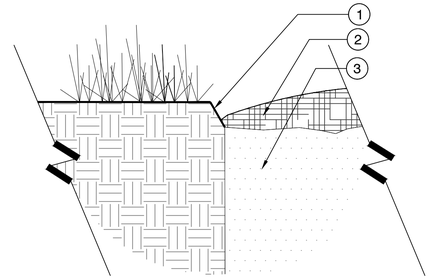
NOT TO SCALE



5 TYPICAL SERVICE SCREENING DETAIL

NOT TO SCALE

1. SPADED LANDSCAPE BED EDGE
2. 3" HIGH MULCH SAUCER SHALL BE CONSTRUCTED AROUND THE BASE OF SHRUB/TREE
3. PLANTING SOIL MIX SEE SECTION 1.05 IN LANDSCAPE NOTES



6 SPADED EDGE

1 1/2" = 1'-0"

KHA-SI-PAV-CO-28

PLANT SCHEDULE LOT 2

SYMBOL	CODE		BOTANICAL NAME	COMMON NAME	SPACING	SIZE	ROOT	CONDITION
GROUND COVERS								
	RR	4,024 SF	TENNESSEE RIVER ROCK - -	TENNESSEE RIVER ROCK	AS SHOWN			
SOD/SEED								
	SOD	329,803 SF	-	TIFWAY 419 BERMUDA SOD	SOD	-	SOD	TIGHT, SAND ROLLED JOINTS, FREE OF WEEDS & DEBRIS
DECIDUOUS TREES								
	ARA	29	ACER RUBRUM `AUTUMN FLAME`	AUTUMN FLAME RED MAPLE	AS SHOWN	3" CAL; 10`-12` HT.	B&B	FULL; MATCHED
	TD	50	TAXODIUM DISTICHUM	BALD CYPRESS	AS SHOWN	3" CAL; 10`-12` HT.	B&B	FULL; MATCHED
EVERGREEN TREES								
	ICB	45	ILEX CORNUTA `BURFORDII` (TREE FORM)	TREE FORM BURFORD HOLLY	AS SHOWN	2" CAL; 8-10` HT.	B&B	FULL; MATCHED
	IG	47	ILEX OPACA `GREENLEAF`	GREENLEAF AMERICAN HOLLY	AS SHOWN	3" CAL; 10`-12` HT.	B&B	FULL; MATCHED
	IN	57	ILEX X `NELLIE R STEVENS`	NELLIE STEVENS HOLLY	AS SHOWN	2" CAL.; 8-10` HT.	B&B	FULL; MATCHED
UNDERSTORY TREES								
	ACA	24	AMELANCHIER CANADENSIS `AUTUMN BRILLIANCE`	AUTUMN BRILLIANCE SERVICEBERRY	AS SHOWN	2" CAL. MIN; 8`-10` HT.	B&B	FULL CANOPY, MATCHED
DECIDUOUS SHRUBS								
	HPL	75	HYDRANGEA PANICULATA `LIMELIGHT` TM	LIMELIGHT HYDRANGEA	5` O.C.	24" MIN. HT.	3 GAL.	MATCHED; FULL
	VD	43	VIBURNUM DENTATUM `ARROWWOOD`	ARROWOOD VIBURNUM	5` O.C.	30" MIN. HT.	5 GAL.	MATCHED; FULL

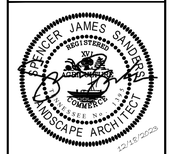
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CO-OP BUSINESS PARK
LOT 2
PANATTONI DEVELOPMENT COMPANY
LA VERGNE, TENNESSEE

PANATTONI®



No.	REVISIONS	DATE	BY
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7			

DESIGNED BY:	OAS
DRAWN BY:	OAS
CHECKED BY:	JLR
DATE:	12/18/2023
KIMLEY-HORN PROJECT NO.	118163044

LANDSCAPE DETAILS

SHEET NUMBER
L1-51

Drawing name: K:\NSH_LDEV\118163044 - co-op la vergne\4-CADD\plansheets\L1-50 LANDSCAPE DETAILS.dwg DETAILS - LOT 2 Dec 18, 2023 9:38am by: Garrett.Froula

Planning Commission Report
Meeting: December 26, 2023

City of La Vergne

Item #: 12.

Item Title: Site Plan - Co-Op Business Park, Lot 3 - Two (2) Buildings Totaling 171,244 Square Feet on 43.88 Acres. Requested by Kimley-Horn. Property located on Old Waldron Road (Tax Map 15, Parcels 24 & 28). I-2 (Heavy Industrial) Zoning District. Property owned by Tennessee Farmers Cooperative, Inc.

Reviewed By:
Gary Lide, City Engineer
Bo Logan, City Planner

Summary: Lot 3 will contain Buildings 8 and 9. Lot 3 is comprised of 44 ± acres.

The property is located off Waldron and Old Waldron Roads. The proposed layout on the plan shows two (2) new buildings are indicated for the new parcel that will be created.

In total, the project calls for nine new buildings, and these nine (9) proposed buildings total over 1,081,000 square feet (1.08 million square feet) of new industrial and warehouse space.

The City's parking requirements have been met or exceeded in every phase of the Co-Op project.

Staff Recommendation:

Staff Comments / Technical Items:

Planning

Bo Logan
blogan@lavergnetn.gov

Jake Blair
jblair@lavergnetn.gov

1. Sidewalks along Old Waldron need to be addressed.

Engineering

Gary Lide
glide@lavergnetn.gov

1. (previous comment 9) FDCs are not shown on sheets C6-31 or C6-32.

Utilities

Scott Tatalovich
statalovich@lavergnetn.gov

1. (Sheet C6-31) Fire meter and DDCA sharing the same vault does not comply with City Standard Water Detail 024. This is shown correctly on Sheet C6-32 for Building 9.

Codes

No comments

Fire

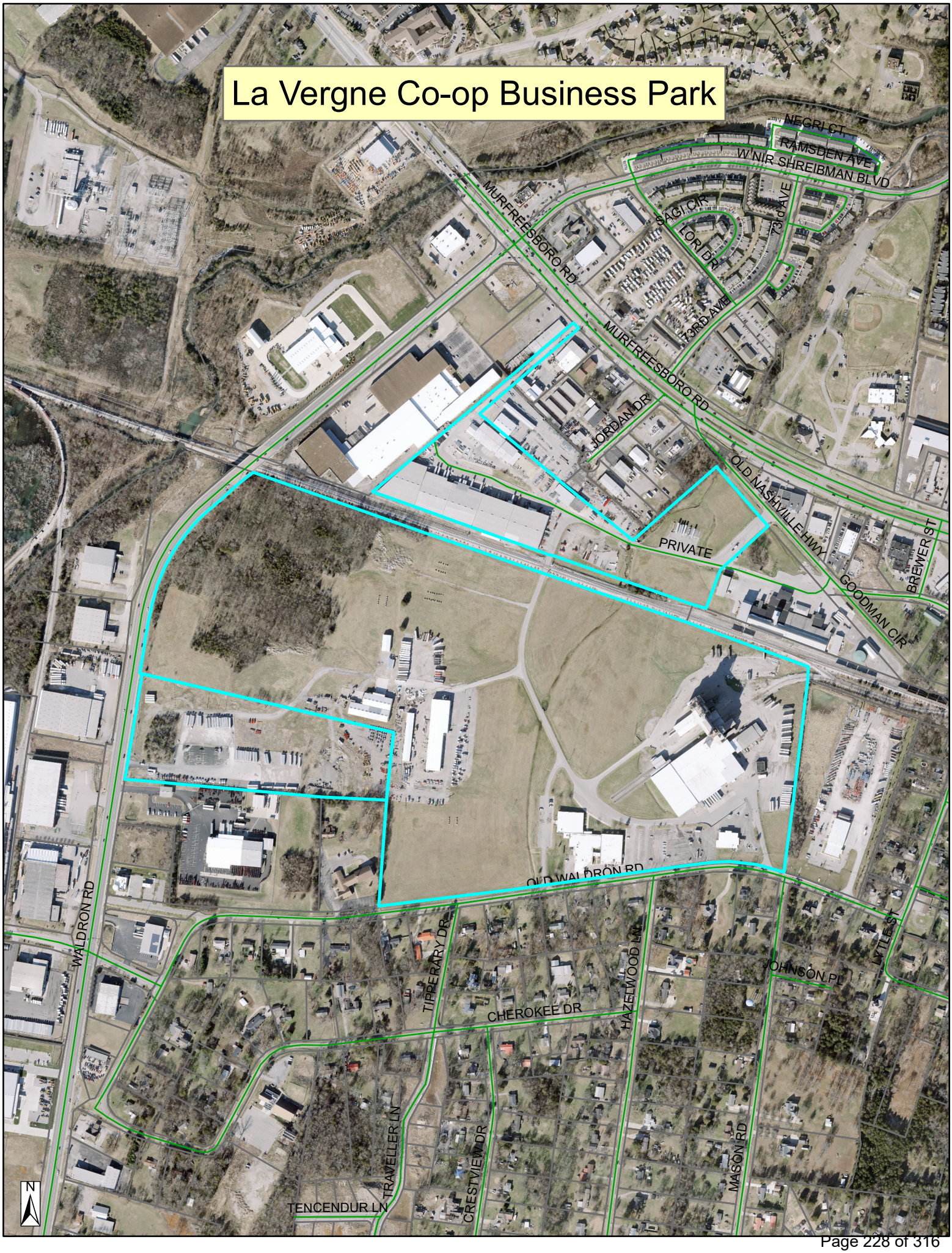
Curtis Brinkley
cbrinkley@lavergnetn.gov

No FDCs notated.

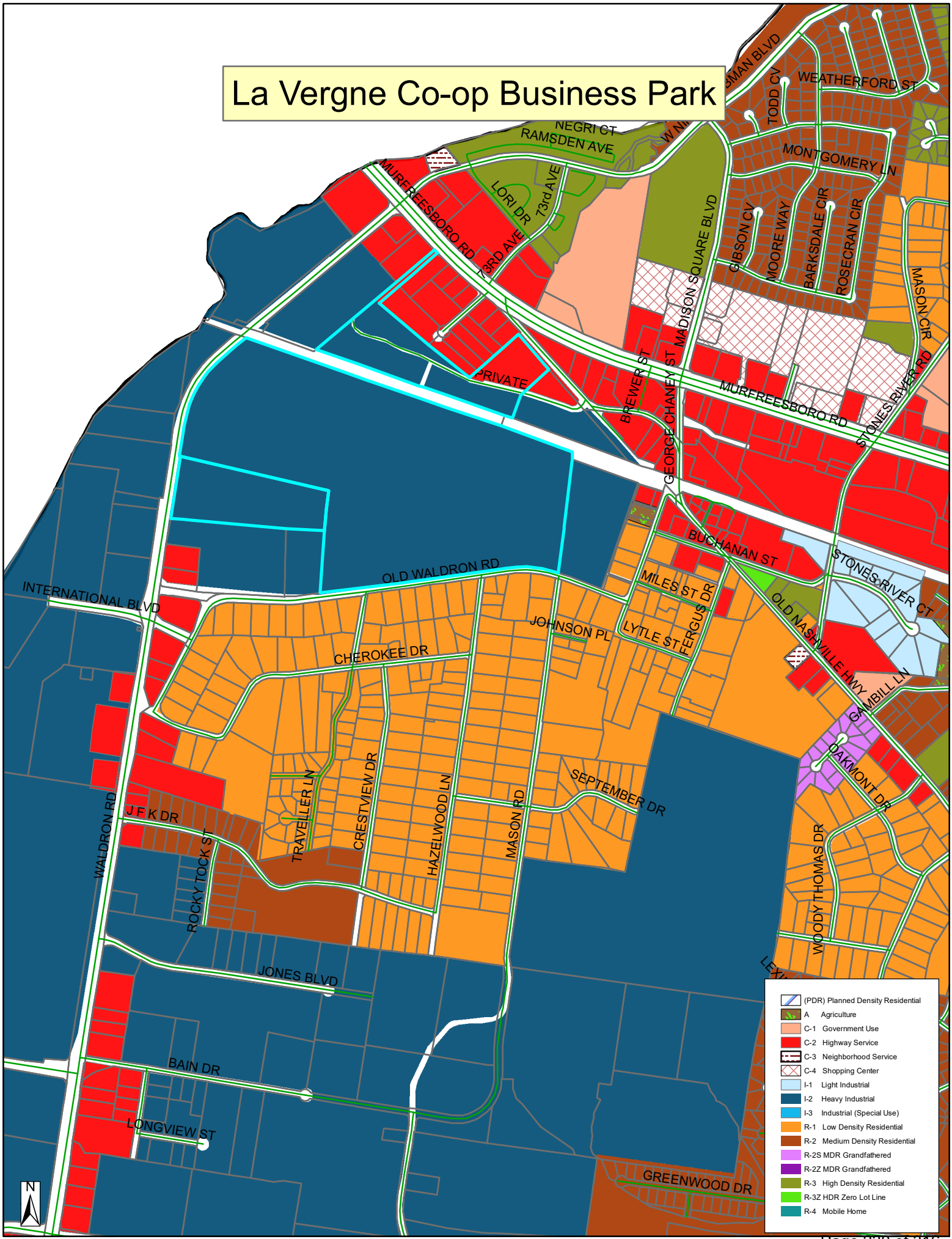
Police

John Eubank
jeubank@lavergnetn.gov

***Note:** The above technical items may not be the only corrections and/or issues needing to be resolved to get approval from the planning commission. New items can be brought up at the workshop and staff can add items at any time that might have been overlooked. It is the applicant's responsibility to make sure that all technical items are addressed and that no new issues exist before the planning commission meeting. Addressing all technical items does not constitute approval. It is the planning commission's decision whether an item passes or fails. Revised plans are due to staff by the following Monday at close of business unless other arrangements are made and documented.


La Vergne Co-op Business Park
NEGRI CT
RAMSDEN AVE
W NIR SHREIBMAN BLVD
MURFREESBORO RD
SAGI CIR
LORI DR
73RD AVE
JORDAN DR
OLD NASHVILLE HWY
PRIVATE
BREWER ST
GOODMAN CIR
OLD WALDRON RD
WALDRON RD
TIPPERARY DR
CHEROKEE DR
HAZELWOOD LN
JOHNSON PL
LYTLE ST
TRAVELLER LN
CRESTVIEW DR
MASON RD
TENCENDUR LN
N


La Vergne Co-op Business Park
NEGRI CT
RAMSDEN AVE
W NIR SHREIBMAN BLVD
ROSECRAN CIR
LORI DR
73rd AVE
JORDAN DR
73RD AVE
GIBSON CV
MOORE WAY
MADISON SQUARE BLVD
MURFREESBORO RD
PRIVATE
BREWER ST
MURFREESBORO RD
ED MILLER DR
OLD NASHVILLE HWY
OLD WALDRON RD
INTERNATIONAL BLVD
MILES ST
FERGUS DR
JOHNSON PL
LYTLE ST
CHEROKEE DR
WALDRON RD
J F K DR
TRAVELLER LN
CRESTVIEW DR
HAZELWOOD LN
MASON RD
SEPTEMBER DR
ROCKY TOOK ST
JONES BLVD
BRIDGESTONE PKWY
BAIN DR
CENTENNIAL DR
N


La Vergne Co-op Business Park
NEGRI CT
RAMSDEN AVE
MURFREESBORO RD
LORI DR
73rd AVE
TODD CV
WEATHERFORD ST
MONTGOMERY LN
GIBSON CV
MOORE WAY
BARKSDALE CIR
ROSECRAN CIR
MASON CIR
MADISON SQUARE BLVD
PRIVATE
BREWER ST
GEORGE CHANEY ST
STONES RIVER RD
BUCHANAN ST
STONES RIVER CT
OLD WALDRON RD
INTERNATIONAL BLVD
MILES ST
FERGUS DR
LYTLE ST
JOHNSON PL
OLD NASHVILLE HWY
AMBILL LN
CHEROKEE DR
OAKMONT DR
SEPTEMBER DR
WALDRON RD
J F K DR
TRAVELLER LN
CRESTVIEW DR
HAZELWOOD LN
MASON RD
ROCKY TOCK ST
WOODY THOMAS DR
JONES BLVD
BAIN DR
LONGVIEW ST
GREENWOOD DR
N
(PDR) Planned Density Residential
A Agriculture
C-1 Government Use
C-2 Highway Service
C-3 Neighborhood Service
C-4 Shopping Center
I-1 Light Industrial
I-2 Heavy Industrial
I-3 Industrial (Special Use)
R-1 Low Density Residential
R-2 Medium Density Residential
R-2S MDR Grandfathered
R-2Z MDR Grandfathered
R-3 High Density Residential
R-3Z HDR Zero Lot Line
R-4 Mobile Home









SITE PLAN RESUBMITTAL

CO-OP BUSINESS PARK - LOT 3

BUILDINGS 8-9
WALDRON ROAD
LA VERGNE, TENNESSEE

CONCEPT PLAN SUBMITTAL: 10/02/2023
CONCEPT PLAN RESUBMITTAL: 10/23/2023
SITE PLAN SUBMITTAL: 11/27/2023
SITE PLAN RESUBMITTAL: 12/18/2023

SITE DATA TABLE		
SITE ADDRESS	WALDRON ROAD LA VERGNE, TENNESSEE	
TAX MAP	MAP 015 PARCEL 02400, 02800	
OVERALL AREA	EXISTING	PROPOSED
SITE AREA	±114.9 AC	±114.9 AC
DISTURBED AREA	N/A	±84.14 AC
DEDICATED R.O.W. AREA	N/A	TBD
IMPERVIOUS AREA	±37.94 AC	±75.83 AC
PERVIOUS AREA	±76.96 AC	±39.07 AC
GENERAL BUILDING DATA & REQUIREMENTS[1]	REQUIRED	PROVIDED
HEIGHT	50 FT (MAX.)	50 FT (MAX.)
STORIES	N/A	1
YARD / SETBACK REQUIREMENTS	REQUIRED (MIN.)	PROVIDED
FRONT YARD	10 FT	10 FT
FRONT BUILDING SETBACK	40 FT	40 FT
SIDE BUILDING SETBACK	20 FT	20 FT
REAR BUILDING SETBACK	15 FT	15 FT
1. THIS PROJECT ADHERES TO THE REQUIREMENTS SET BY THE CITY OF LA VERGNE ZONING ORDINANCE ADOPTED FEBRUARY 6, 1990, LAST AMENDED JANUARY 3, 2023.		

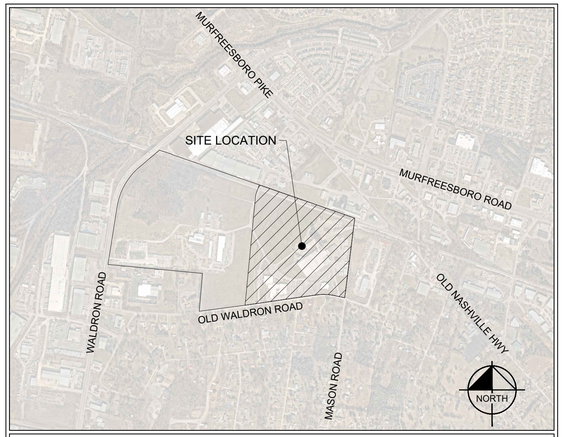
LOT DATA TABLE		
OVERALL AREA	PROPOSED	
SITE AREA	±43.88 AC	
DISTURBED AREA	±19.51 AC	
IMPERVIOUS	±26.57 AC	
PERVIOUS	±17.31 AC	
LOT DATA & REQUIREMENTS[1]	REQUIRED	PROVIDED
FLOOR AREA RATIO		±0.09
LOT COVERAGE	50% (MAX.)	±8.67%
BUILDING DATA	AREA	APPROXIMATE DIMENSIONS
BUILDING 8	±161,444 SF	742' x 222'
BUILDING 9	±9,800 SF	140' X 70'
TOTAL BUILDING AREA	±171,244 SF	
PARKING	REQUIRED	PROVIDED
STANDARD CAR PARKING (1 SPACE PER 400 GSF OFFICE + 1 SPACE PER 4,000 GSF WAREHOUSE)	±267	±267
ACCESSIBLE (INCL. VAN ACCESSIBLE)	7 (2 VAN)	7 (7 VAN)
TRUCK PARKS	N/A	±35

PROJECT DESCRIPTION

THE PROPOSED DEVELOPMENT WILL CONSIST OF A TWO BUILDING WAREHOUSE DISTRIBUTION PARK TO BE CONSTRUCTED ON ±43.88 ACRES ALONG WALDRON ROAD IN LA VERGNE, TENNESSEE. IN TOTAL, THE COMBINED AREA FOR ALL THREE BUILDINGS IS ±171,244 SQUARE FEET. THE DEVELOPMENT WILL CONSOLIDATE TWO EXISTING PARCELS (015 02400 AND 015 02800) AND SUBDIVIDE INTO THREE FEATURE LOTS. THE PROPOSED DEVELOPMENT AREA HAS PORTIONS OF THE 500-YEAR FLOODPLAIN PER THE US FEMA FIRM PANEL, BUT IS NOT SHOWN TO HAVE 100-YR FLOODPLAIN ON THE PANEL.

EXISTING PROPERTY SUMMARY

PROPERTY ADDRESS:	WALDRON ROAD LA VERGNE, TENNESSEE 37086
MAP AND PARCEL ID:	MAP 015, PARCELS 02400, 02800
U.S. FEMA FIRM PANEL:	47149C0015J DATED 05/09/2023
EXISTING ZONING:	I-2
EXISTING LAND USE:	HEAVY INDUSTRIAL/MANUFACTURING



VICINITY MAP
1" = 1,000'

CITY OF LA VERGNE
RUTHERFORD COUNTY, TENNESSEE

PROJECT DESIGN TEAM

ARCHITECT
PICKERING FIRM, INC.
6363 POPLAR AVENUE, SUITE 300
MEMPHIS, TN 38119
CONTACT: KEVIN GETMAN
PHONE: (901) 726-0810

CIVIL ENGINEER
KIMLEY-HORN AND ASSOCIATES, INC.
10 LEA AVENUE, SUITE 400
NASHVILLE, TN 37210
CONTACT: ROBERT ARTS, PE
PHONE: (615) 564-2701

SURVEY
BARGE DESIGN SOLUTIONS, INC.
211 COMMERCE STREET, SUITE 600
NASHVILLE, TN 37210
CONTACT: JIM OVERFELT
PHONE: (615) 252-4421

GEOTECH / ENVIRONMENTAL
GEOSERVICES, LLC.
163 BUSINESS PARK DRIVE, SUITE 15
LEBANON, TN 37087
CONTACT: WAYNE HARNACK, PE
PHONE: (615) 547-9314

PERMITTING / UTILITY CONTACTS

BUILDING DEPT.
CITY OF LA VERGNE CODES
5175 MURFEESBORO RD
LA VERGNE, TN 37086
CONTACT: RANDOLPH SALYERS
PHONE: (615) 213-2624

STORMWATER
CITY OF LA VERGNE
STORMWATER DEPARTMENT
5175 MURFREESBORO ROAD
LA VERGNE, TN 37086
PHONE: (615) 287-8703

SANITARY SEWER
LA VERGNE PUBLIC WORKS
148 INTERNATIONAL BLVD
LA VERGNE, TN 37086
CONTACT: SCOTT TATALOVICH
PHONE: (615) 287-8739

ZONING
CITY OF LA VERGNE PLANNING
5175 MURFREESBORO ROAD
LA VERGNE, TN 37086
CONTACT: BO LOGAN
PHONE: (615) 862-6608

ELECTRIC
NASHVILLE ELECTRIC SERVICE
1214 CHURCH STREET
NASHVILLE, TN 37246
CONTACT: JOSH MCGILL
PHONE: (615) 747-3662

NATURAL GAS
SMYRNA GAS DEPARTMENT
315 SOUTH LOWRY ST
SMYRNA, TN 37167
PHONE: (615) 355-5740

WATER
LA VERGNE PUBLIC WORKS
148 INTERNATIONAL BLVD
LA VERGNE, TN 37086
CONTACT: SCOTT TATALOVICH
PHONE: (615) 287-8739

FIRE
CITY OF LA VERGNE FIRE MARSHAL
283 OLD NASHVILLE HWY
LA VERGNE, TN 37086
CONTACT: CURTIS BRINKLEY
PHONE: (615) 287-5832

TELEPHONE
TDS TELECOM
5265 MURFREESBORO ROAD
LA VERGNE, TN 37086
PHONE: (615) 350-9375

CABLE
TDS TELECOM
5265 MURFREESBORO ROAD
LA VERGNE, TN 37086
PHONE: (615) 350-9375

Sheet List Table

SHEET NUMBER	SHEET TITLE
C0-00	COVER - LOT 3
C0-01	GENERAL NOTES
C0-10	SITE VICINITY MAP
C0-20	BUILDING PHASING PLAN
C1-00	EXISTING CONDITIONS
C1-10	DEMOLITION PLAN
C2-30	SITE LAYOUT - OVERALL
C2-31	SITE LAYOUT - ENLARGEMENT
C2-32	SITE LAYOUT - ENLARGEMENT
C3-00	EROSION CONTROL PLAN - PHASING PLAN
C3-10	EROSION CONTROL PLAN - PHASE 1 ENLARGEMENT
C3-11	EROSION CONTROL PLAN - PHASE 1 ENLARGEMENT
C3-20	EROSION CONTROL PLAN - PHASE 2 ENLARGEMENT
C3-21	EROSION CONTROL PLAN - PHASE 2 ENLARGEMENT
C3-30	EROSION CONTROL PLAN - PHASE 3 ENLARGEMENT
C3-31	EROSION CONTROL PLAN - PHASE 3 ENLARGEMENT
C3-50	EROSION CONTROL DETAILS
C3-51	EROSION CONTROL DETAILS
C4-30	GRADING AND DRAINAGE PLAN - OVERALL
C4-31	SITE GRADING PLAN - ENLARGEMENT
C4-32	SITE GRADING PLAN - ENLARGEMENT
C4-41	SITE GRADING PLAN - ENLARGEMENT
C4-50	STORMWATER TABLES
C6-30	UTILITY PLAN - OVERALL
C6-31	UTILITY PLAN - ENLARGEMENT
C6-32	UTILITY PLAN - ENLARGEMENT
C8-10	SITE DETAILS
C8-11	SITE DETAILS
C8-20	UTILITY DETAILS
C8-21	UTILITY DETAILS
C8-22	UTILITY DETAILS
L1-30	LANDSCAPE PLAN - OVERALL
L1-31	LANDSCAPE PLAN - ENLARGEMENT
L1-32	LANDSCAPE PLAN - ENLARGEMENT
L1-50	LANDSCAPE NOTES
L1-51	LANDSCAPE DETAILS

OWNER / DEVELOPER

PANATTONI®
PANATTONI DEVELOPMENT COMPANY
ONE MUSIC CIRCLE SOUTH, SUITE 110
NASHVILLE, TENNESSEE 37203
PHONE: (303) 408-7817
CONTACT: JEFF KONIECZNY

PLANS PREPARED BY

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PLAN REVISIONS

REVISION NO.	DATE	REMARKS

ENGINEER'S SEAL

ROBERT JAMES ARTS
REGISTERED ENGINEER
AGENT OF ARCHITECTURE
ENGINEERING
No. 121043
STATE OF TENNESSEE
12/18/2023

FILE NUMBER	SHEET NUMBER	TOTAL SHEETS
118163044	C0-00	36

811 Know what's below. Call before you dig.

Drawing name: K:\NSH_LDEV\118163044 - co-op la vergne\4-CADD\plansheets\C0-00 COVER.dwg C0-00 COVER - LOT 3 Dec 18, 2023 9:49am by: Garrett.Froula

CONTRACTOR RESPONSIBILITIES:

1. PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL BE RESPONSIBLE FOR:

   A. THE CONTRACTOR SHALL VERIFY ALL PROPOSED AND EXISTING CONDITIONS INCLUDING UTILITIES (INVERTS, CONNECTIONS, MATERIALS, ETC.) AND DIMENSIONS WITHIN THE LIMITS OF WORK PRIOR TO THE START OF CONSTRUCTION.

   B. REFER TO ARCHITECTURAL DRAWINGS FOR DETAILED BUILDING INFORMATION.

   C. THE CONTRACTOR IS RESPONSIBLE FOR ALL NOTIFICATIONS AND LIAISONS WITH UTILITY COMPANIES DURING THE PROCESS OF LOCATING, RELOCATING, AND TYING INTO PUBLIC UTILITIES.

   D. PRIOR TO COMMENCING LAND DISTURBANCE ACTIVITY, THE LIMITS OF LAND DISTURBANCE SHALL BE CLEARLY AND ACCURATELY DEMARCATED WITH STAKES, RIBBONS, OR OTHER APPROPRIATE MEANS. THE LOCATION AND EXTENT OF ALL AUTHORIZED LAND DISTURBANCE SHALL OCCUR INSIDE THE APPROVED LIMITS INDICATED ON THE APPROVED PLANS.

2. DURING CONSTRUCTION:

   A. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DEVIATIONS FROM THESE PLANS AND SPECIFICATIONS WITHOUT PRIOR WRITTEN CONSENT OF THE ENGINEER MAY CAUSE THE WORK TO BE UNACCEPTABLE.

   B. THE CONTRACTOR SHALL USE MATERIALS AND EMPLOY CONSTRUCTION METHODS IN ORDER TO COMPLY WITH THE DRAWINGS AND SPECIFICATIONS. WHERE A CONFLICT OCCURS, THE STRICTEST DESIGN SHALL GOVERN. THE ENGINEER'S REVIEW OF SHOP DRAWINGS, PRODUCT DATA, ETC., DOES NOT RELIEVE THE CONTRACTOR FROM COMPLYING WITH THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL INFORM THE ENGINEER IN WRITING OF ANY SPECIFIC DEVIATIONS AND OBTAIN ENGINEER'S WRITTEN APPROVAL OF THE SPECIFIC DEVIATION.

   C. IT IS SOLELY THE CONTRACTOR'S RESPONSIBILITY TO FOLLOW ALL APPLICABLE SAFETY CODES AND REGULATIONS DURING ALL PHASES OF CONSTRUCTION.

   D. ALL CONSTRUCTION MUST CONFORM TO THE STANDARDS, SPECIFICATIONS, AND CODES OF THE GOVERNING MUNICIPALITIES.

   E. CONSTRUCTION SHALL MEET ALL CURRENT STANDARDS SET FORTH IN THE AMERICANS WITH DISABILITIES ACT.

   F. IF THE CONTRACTOR DAMAGES ANY EXISTING UTILITIES DURING CONSTRUCTION, HE SHALL, AT HIS OWN EXPENSE, REPLACE OR REPAIR THE UTILITIES TO ORIGINAL CONDITION AND QUALITY AS APPROVED BY THE OWNER AND REPRESENTATIVE OF THE APPROPRIATE UTILITY COMPANY.

   G. SUFFICIENT BARRICADES, LIGHTS, SIGNS, AND OTHER TRAFFIC CONTROL METHODS IN ACCORDANCE WITH GOVERNING ORDINANCES MAY BE NECESSARY FOR THE PROTECTION AND SAFETY OF THE PUBLIC. SAID CONTROL DEVICES SHALL BE PER THE MANUAL OF TRAFFIC CONTROL DEVICES, M.U.T.C.D., CURRENT EDITION, AND SHALL BE PROVIDED AND MAINTAINED THROUGHOUT CONSTRUCTION.

   H. TRAFFIC CONTROLS AND OTHER WARNING DEVICES SHALL BE INSTALLED PRIOR TO THE COMMENCEMENT OF ANY WORK ON CITY, COUNTY, OR TENNESSEE DEPARTMENT OF TRANSPORTATION ROADS. THEY SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION AND SHALL REMAIN IN PLACE UNTIL THE CONCLUSION OF ALL WORK.

   I. ALL WARNING DEVICES SHALL BE EITHER TYPE I BARRICADES OR DRUMS WITH WARNING LIGHTS ON EVERY OTHER DEVICE. THEY SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), CURRENT EDITION, AND CITY OF LA VERGNE STANDARDS FOR COLOR, SIZE, REFLECTIVITY, HEIGHT, AND PLACEMENT.

   J. FIRE DEPARTMENT ACCESS SHALL BE MAINTAINED AT ALL TIMES.

   K. CONTRACTOR SHALL SHORE AND BRACE ALL EARTH, FORMS, CONCRETE, STEEL, WOOD, AND MASONRY TO RESIST GRAVITY, EARTH, WIND, THERMAL, CONSTRUCTION, AND MISCELLANEOUS LOADS DURING CONSTRUCTION.

   L. ON-SITE BURIAL OF DEBRIS IS PROHIBITED.

   M. UNLESS OTHERWISE NOTED THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OF ALL FABRICATED MATERIALS TO THE ENGINEER. DESIGN DOCUMENTS SHALL NOT BE REPRODUCED AS SHOP DRAWINGS.

   N. IN CASE OF UNFORESEEN CONSTRUCTION COMPLICATIONS OR DISCREPANCIES, THE CONTRACTOR IS TO IMMEDIATELY NOTIFY THE ENGINEER IN WRITING.

   O. ALL REQUIRED TESTING REPORTS SHALL BE AVAILABLE AT THE JOB SITE.

   P. AS-BUILT DRAWINGS OF ROADWAYS, STORM DRAINS, SANITARY SEWER AND WATER LINES, FIELD APPROVAL BY THE ENGINEER, AND ALL APPLICABLE BONDS ARE REQUIRED PRIOR TO FINAL ACCEPTANCE BY THE OWNER.

   Q. CONTRACTOR SHALL MAINTAIN CONTINUOUS UTILITY SERVICE TO ALL EXISTING BUILDINGS THROUGHOUT CONSTRUCTION UNLESS APPROVAL FOR SERVICE INTERRUPTION IS OBTAINED FROM THE OWNERS IN ADVANCE.

   R. THE CONTRACTOR SHALL VERIFY EXISTING CONDITIONS TO ENSURE THAT THE NEW WORK SHALL FIT INTO THE EXISTING SITE IN THE MANNER INTENDED AND AS SHOWN ON THE DRAWINGS. SHOULD ANY CONDITIONS EXIST THAT ARE CONTRARY TO THOSE SHOWN ON THE DRAWINGS, THE CONTRACTOR SHALL NOTIFY THE OWNER'S REPRESENTATIVE PRIOR TO PERFORMING ANY WORK IN THE AREA INVOLVING DIFFERENCES. NOTIFICATION SHALL BE IN THE FORM OF A DRAWING OR SKETCH INDICATING FIELD MEASUREMENTS AND NOTES RELATING TO THE AREA.

   S. ANY FOREIGN ITEM FOUND DURING CONSTRUCTION IS THE PROPERTY OF THE OWNER. THIS INCLUDES, BUT IS NOT LIMITED TO, PRECIOUS METALS, COINS, PAPER CURRENCY, ARTIFACTS AND ANTIQUITIES.

   T. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE DONE TO THE PREMISES OR ADJACENT PREMISES, OR INJURIES TO THE PUBLIC DURING THE CONSTRUCTION OF THE WORK, WHETHER CAUSED BY HIMSELF, HIS SUBCONTRACTORS, OR THE CARELESSNESS OF ANY OF HIS EMPLOYEES.

   U. THE CONTRACTOR SHALL FURNISH, INSTALL AND MAINTAIN ALL NECESSARY TEMPORARY WORKS FOR THE PROTECTION OF THE WORK AND THE PUBLIC, INCLUDING BARRICADES, WARNING SIGNS, LIGHTS, ETC.

   V. THE CONTRACTOR ACKNOWLEDGES & AGREES THAT THE WORK IS ENTIRELY AT HIS RISK UNTIL SITE IS ACCEPTED, AND HE WILL BE HELD RESPONSIBLE FOR ITS SAFETY BY THE OWNER. THE CONTRACTOR WILL INDEMNIFY THE OWNER & OWNER'S REPRESENTATIVE FROM LIABILITY AT THE SITE THROUGHOUT THE CONSTRUCTION PROCESS.

   W. THE CONTRACTOR SHALL GIVE ALL NECESSARY NOTICES AND OBTAIN ALL PERMITS AND PAY ALL LEGAL FEES. HE SHALL ALSO COMPLY WITH ALL CITY, COUNTY AND STATE BUILDING LAWS, ORDINANCES OR REGULATIONS RELATING TO BUILDING SIDEWALKS, STREETS, BLASTING, PUBLIC INFRASTRUCTURE, STORMWATER REGULATIONS, ETC.

   X. THE CONTRACTOR IS TO CHECK AND VERIFY ALL MEASUREMENTS, LEVELS, ETC. BEFORE ORDERING MATERIALS AND PROCEEDING WITH THE WORK, AND IS TO BE RESPONSIBLE FOR THE SAME.

   Y. REFERENCE POINTS AND HUBS DURING THE CONSTRUCTION OF HIS WORK, AND SHALL BEAR THE COST OF REPLACING SAME.

   Z. CARE SHALL BE TAKEN TO PROTECT ANY UTILITIES, TREES, ETC. WHICH ARE TO REMAIN AND NOT TO BE DISTURBED BY THE CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGES TO SUCH PROPERTY.

DEMOLITION INFORMATION:

1. NOTIFICATIONS:

   THE CONTRACTOR SHALL NOTIFY THE OWNER AND CITY INSPECTOR(S) 24 HOURS PRIOR TO ANY DEMOLITION OR CONSTRUCTION.

2. DISPOSAL GUIDELINES:

   A. ONLY ITEMS SPECIFICALLY NOTED TO BE DEMOLISHED SHALL BE REMOVED FROM THE SITE.

   B. REMOVE EXISTING PAVED AREAS AS SHOWN INCLUDING DRIVEWAYS, SIDEWALKS, PARKING AREAS, SERVICE AREAS, EQUIPMENT PADS, AND ALL MISCELLANEOUS PAVING.

   C. ALL DEBRIS RESULTING FROM DEMOLITION SHALL BE REMOVED FROM THE SITE AND DISPOSED OF LEGALLY BY THE CONTRACTOR IN ACCORDANCE WITH LOCAL STATE AND FEDERAL REGULATIONS. BACKFILL ALL TRENCHES AND EXCAVATIONS RESULTING FROM DEMOLITION.

   D. ALL DEMOLISHED MATERIAL BECOMES THE PROPERTY OF THE CONTRACTOR UNLESS OTHERWISE NOTED.

3. TREE PROTECTION GUIDELINES:

   PROTECT ALL EXISTING TREES NOTED "TO REMAIN" AND ALL ITEMS TO BE TURNED OVER TO THE OWNER DURING DEMOLITION. TAKE ALL NECESSARY PRECAUTIONS AND PROTECTIVE MEASURES. ANY EXISTING ITEMS TO BE TURNED OVER TO THE OWNER WHICH ARE DAMAGED DURING DEMOLITION SHALL BE REPAIRED AT NO ADDITIONAL COST TO THE OWNER. TREES WHICH ARE DAMAGED WILL BE REPLACED OR REIMBURSED AT A RATE TO BE DETERMINED BY THE OWNER.

4. UTILITIES:

   A. PRIOR TO REMOVING OR ABANDONING ANY UTILITY THE CONTRACTOR SHALL VERIFY THAT NO UPSTREAM SERVICE WILL BE TERMINATED. THE CONTRACTOR SHALL INFORM THE ENGINEER IN WRITING OF ANY TERMINATION NOT SHOWN ON THE PLANS.

   B. ALL ABANDONED WATER LINES, STORM SEWER PIPE, SANITARY SEWER PIPES, GAS LINES, OR ANY OTHER ABANDONED UNDERGROUND UTILITY SHALL BE ABANDONED IN PLACE UNLESS NOTED OTHERWISE.

SITE INFORMATION:

1. THE FOLLOWING ARE APPLICABLE TO ALL CIVIL DOCUMENTS:

   A. WHERE A DETAIL SECTION, TYPICAL SECTION, OR A NOTE IS SHOWN FOR ONE CONDITION, IT SHALL APPLY FOR ALL LIKE OR SIMILAR CONDITIONS, UNLESS OTHERWISE NOTED ON THE PLANS.

   B. EXISTING AND PROPOSED CONTOURS ARE AT ONE (1) FOOT INTERVALS.

   C. ALL DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.

   D. ALL PIPE LENGTHS SPECIFIED IN THESE PLANS ARE THE HORIZONTAL DISTANCE AND ARE SHOWN FOR REFERENE ONLY. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE ACTUAL LENGTHS BASED ON PROPOSED PIPE SLOPE.

   E. PIPE LENGTHS IN PLANS ARE MEASURED FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE UNLESS OTHERWISE NOTED.

EROSION AND SEDIMENT CONTROL INFORMATION:

1. COMPREHENSIVE:

   A. THE ESCAPE OF SEDIMENT FROM THE SITE SHALL BE PREVENTED BY THE INSTALLATION OF EROSION AND SEDIMENT CONTROL MEASURES AND PRACTICES PRIOR TO OR CONCURRENT WITH LAND-DISTURBING ACTIVITIES.

   B. PROVISIONS TO PREVENT EROSION OF SOIL FROM THE SITE SHALL BE AT A MINIMUM IN CONFORMANCE WITH THE REQUIREMENTS OF THE TENNESSEE EROSION AND SEDIMENT CONTROL HANDBOOKS. IF FULL IMPLEMENTATION OF THE APPROVED PLAN DOES NOT PROVIDE FOR EFFECTIVE EROSION CONTROL, ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IMPLEMENTED TO CONTROL OR TREAT THE SEDIMENT SOURCE.

   C. FAILURE TO INSTALL, OPERATE, OR MAINTAIN ALL EROSION CONTROL MEASURES WILL RESULT IN ALL CONSTRUCTION BEING STOPPED ON THE JOB SITE UNTIL SUCH MEASURES ARE CORRECTED BACK TO THE STANDARDS SPECIFIED IN THE TENNESSEE EROSION AND SEDIMENT CONTROL HANDBOOKS, CURRENT EDITION.

   D. EROSION CONTROL MEASURES WILL BE MAINTAINED AT ALL TIMES. IF FULL IMPLEMENTATION OF THE APPROVED PLAN DOES NOT PROVIDE FOR EFFECTIVE EROSION CONTROL, ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IMPLEMENTED TO CONTROL OR TREAT THE SEDIMENT SOURCE.

   E. EROSION CONTROL DEVICES SHALL BE INSTALLED PRIOR TO LAND DISTURBANCE. THE LOCATION OF SOME OF THE EROSION CONTROL DEVICES MAY HAVE TO BE ALTERED FROM THAT SHOWN ON THE APPROVED PLANS IF DRAINAGE PATTERNS DURING CONSTRUCTION ARE DIFFERENT FROM THE FINAL PROPOSED DRAINAGE PATTERNS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ACCOMPLISH EROSION CONTROL FOR ALL DRAINAGE PATTERNS CREATED AT VARIOUS STAGES DURING CONSTRUCTION. ANY DIFFICULTY IN CONTROLLING EROSION DURING ANY PHASE OF CONSTRUCTION SHALL BE REPORTED TO THE ENGINEER IMMEDIATELY.

   F. THE CONSTRUCTION OF THE SITE WILL COMMENCE WITH THE INSTALLATION OF EROSION CONTROL MEASURES SUFFICIENT TO CONTROL SEDIMENT DEPOSITS AND EROSION. ALL SEDIMENT CONTROL WILL BE MAINTAINED UNTIL ALL UPSTREAM GROUND WITHIN THE CONSTRUCTION AREA HAS BEEN COMPLETELY STABILIZED WITH PERMANENT VEGETATION AND ALL ROADS/DRIVEWAYS HAVE BEEN PAVED.

   G. CONSTRUCTION EXITS SHALL BE CONSTRUCTED AT EACH POINT OF ENTRY OR EXIT FROM THE SITE AND SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOW OF MUD ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH STONE AS CONDITIONS DEMAND, REPAIR, AND/OR CLEANOUT OF ANY STRUCTURES USED TO TRAP SEDIMENT. ALL MATERIALS SPILLED, DROPPED, WASHED, OR TRACKED FROM VEHICLES OFF SITE ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY. ACCESS POINTS PROTECTED WITH A CONSTRUCTION EXIT SHALL BE OTHERWISE BARRICADED UNTIL THE SITE IS STABILIZED.

ADA COMPLIANCE:

A. CURB RAMPS ALONG PUBLIC STREETS AND IN THE PUBLIC RIGHT-OF-WAY SHALL BE CONSTRUCTED BASED ON THE CITY STANDARD CONSTRUCTION DETAILS AND SPECIFICATIONS.

B. PRIVATE CURB RAMPS ON THE SITE (I.E. OUTSIDE PUBLIC STREET RIGHT-OF-WAY) SHALL CONFORM TO ADA STANDARDS AND SHALL HAVE A DETECTABLE WARNING SURFACE THAT IS FULL WIDTH AND FULL DEPTH OF THE CURB RAMP, NOT INCLUDING FLARES.

C. ALL ACCESSIBLE ROUTES, GENERAL SITE AND BUILDING ELEMENTS, RAMPS, CURB RAMPS, STRIPING, AND PAVEMENT MARKINGS SHALL CONFORM TO ADA STANDARDS FOR ACCESSIBLE DESIGN, LATEST EDITION.

D. ANY COMPONENTS OF THE PROJECT SERVING MULTIFAMILY DWELLINGS IN BUILDINGS THAT HAVE 4 OR MORE UNITS PER DWELLING SHALL ALSO CONFORM TO THE FAIR HOUSING ACT (FHA), AND COMPLY WITH THE FAIR HOUSING ACT DESIGN MANUAL BY THE US DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT.

E. BEFORE PLACING PAVEMENT, CONTRACTOR SHALL VERIFY THAT SUITABLE ACCESSIBLE PEDESTRIAN ROUTES (PER ADA AND FHA) EXIST TO AND FROM EVERY DOOR AND ALONG SIDEWALKS, ACCESSIBLE PARKING SPACES, ACCESS AISLES, AND ACCESSIBLE ROUTES. IN NO CASE SHALL AN ACCESSIBLE RAMP SLOPE EXCEED 1 VERTICAL TO 12 HORIZONTAL. IN NO CASE SHALL SIDEWALK CROSS SLOPE EXCEED 2.0 PERCENT. IN NO CASE SHALL LONGITUDINAL SIDEWALK SLOPE EXCEED 5.0 PERCENT. ACCESSIBLE PARKING SPACES AND ACCESS AISLES SHALL NOT EXCEED 2.0 PERCENT SLOPE IN ANY DIRECTION.

F. CONTRACTOR SHALL TAKE FIELD SLOPE MEASUREMENTS ON FINISHED SUBGRADE AND FORM BOARDS PRIOR TO PLACING PAVEMENT TO VERIFY THAT ADA SLOPE REQUIREMENTS ARE PROVIDED. CONTRACTOR SHALL CONTACT ENGINEER PRIOR TO PAVING IF ANY EXCESSIVE SLOPES ARE ENCOUNTERED. NO CONTRACTOR CHANGE ORDERS WILL BE ACCEPTED FOR ADA SLOPE COMPLIANCE ISSUES.

CONCRETE INFORMATION (SITE WORK ONLY):

1. PRODUCT CRITERIA:

   A. UNLESS OTHERWISE NOTED CEMENT SHALL BE TYPE I OR III CONFORMING TO ASTM C150. AGGREGATES SHALL BE NORMAL WEIGHT CONFORMING TO ASTM C33.

   B. CONCRETE SHALL CONFORM TO ACI BUILDING CODE (318-89). UNLESS NOTED CONCRETE SHALL BE NORMAL WEIGHT AND HAVE A 28 DAY COMPRESSIVE STRENGTH OF 3,500 P.S.I.

   C. SLUMP SHALL BE 3" TO 5" FOR REGULAR MIX. LARGER SLUMP SHALL BE PERMITTED WITH WATER REDUCING ADMIXTURES AND WRITTEN CONSENT OF THE ENGINEER.

   D. THE RELATIONSHIP BETWEEN MAXIMUM AGGREGATE SIZE TO MINIMUM AMOUNT OF CEMENT IN CONCRETE PAVEMENT (LB. PER C.Y. OR MIX) SHALL BE AS FOLLOWS: 1" - 520, 3/4" - 540, 1/2" - 590, 3/8" - 610.

2. CURING CRITERIA:

   A. CONCRETE CURING SHALL COMPLY WITH ACI 308. CURING PROCESS SHALL START IMMEDIATELY FOLLOWING INITIAL SET. CURING SHALL BE BY CURING COMPOUND.

   B. CONCRETE EXPOSED TO THE WEATHER SHALL BE AIR-ENTRAINED IN ACCORDANCE WITH ACI 318-89 TABLE 4.1.1. NORMAL WEIGHT CONCRETE SLABS SHALL HAVE AIR CONTENT IN ACCORDANCE WITH ACI 302.IR-89 TABLE 5.2.7A.

   C. HOT WEATHER CONCRETING SHALL COMPLY WITH ACI 305. NO CONCRETE ABOVE 90 DEGREES FAHRENHEIT SHALL BE POURED. LOWER CONCRETE TEMPERATURE BY COOLING WATER AND AGGREGATE. FORMS, STEEL, AND SUBGRADE SHALL BE SPRINKLED WITH COLD WATER. AFTER FINISHING CONCRETE USE LIGHT FOG SPRAY UNTIL CURING COMPOUND IS USED.

   D. COLD WEATHER CONCRETING SHALL COMPLY WITH ACI 306. SPECIAL MATERIAL PROCEDURES SHALL BE PROVIDED DURING PLACING AND CURING OF CONCRETE BELOW 40 DEGREES FAHRENHEIT.

   E. E. CURING, HOT, AND COLD WEATHER CONCRETING PROCEDURES ARE ONLY GIVEN AS A GUIDE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PREVENT CONCRETE DAMAGE AND CRACKS. DAMAGED OR CRACKED CONCRETE WILL NOT BE ACCEPTED.

REINFORCING STEEL INFORMATION (SITE WORK ONLY):

1. PRODUCT CRITERIA:

   A. REINFORCING STEEL SHALL CONFORM TO ASTM A-615, GRADE 60 AND GRADE 40 FOR #3 AND SMALLER BARS. MINIMUM LAP 48" DIAMETER.

   B. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A-185, MINIMUM LAP SHALL BE 8".

   C. REINFORCING THAT IS WELDED SHALL BE WELDABLE TYPE AND CONFORM TO ASTM A-706.

PAVEMENT INFORMATION:

1. PAVEMENT:

   A. ALL MATERIALS, EQUIPMENT, METHODS OF CONSTRUCTION, AND WORKMANSHIP SHALL CONFORM TO THE TENNESSEE DEPARTMENT OF TRANSPORTATION, TDOT, STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, CURRENT EDITION.

   B. SEE PAVEMENT DETAILS ON CONSTRUCTION DOCUMENTS FOR SPECIFIC DESIGN INFORMATION AND REQUIREMENTS.

   C. ALL CURB AND GUTTER TO BE 24" AND CONSTRUCTED OF 3000 P.S.I. CONCRETE UNLESS OTHERWISE NOTED.

2. SIGNING AND STRIPING:

   A. SIGNING AND STRIPING TO BE PROVIDED BY THE CONTRACTOR ACCORDING TO THE DRAWINGS AND SPECIFICATIONS.

   B. ALL PAVEMENT MARKINGS SHALL CONFORM TO CURRENT MUTCD STANDARDS. ALL PAVEMENT MARKINGS ON PRIVATE PROPERTY SHALL BE PAINT, UNLESS NOTED OTHERWISE. ALL PAVEMENT MARKINGS ON PUBLIC RIGHT-OF-WAY SHALL BE THERMOPLASTIC, UNLESS NOTED OTHERWISE.

STORM SEWER NOTES:

1. REINFORCED CONCRETE PIPE SHALL BE RCP CLASS III UNLESS OTHERWISE NOTED WITH BELL-AND-SPIGOT AND GASKETED JOINTS WITH ASTM C 443 RUBBER GASKETS.
2. FILL HEIGHTS OVER 13' REQUIRE CLASS IV RCP STORM PIPE.
3. STORM INLETS SHALL BE PRECAST IN ACCORDANCE WITH CITY OF LA VERGNE PUBLIC WORKS SPECIFICATIONS WHICH MEET OR EXCEED ASTM C 478.
4. ALL MANHOLE FRAMES AND COVERS ARE TO BE PER CITY OF LA VERGNE PUBLIC WORKS STANDARD DETAIL FOR DIMENSIONS AND MATERIALS AND AS BELOW IF NOT OTHERWISE INDICATED. FERROUS; 24-INCH (610-MM) ID BY 7- TO 9-INCH (175- TO 225-MM) RISER WITH 4-INCH-(102-MM-) MINIMUM WIDTH FLANGE AND 26-INCH- (660-MM-) DIAMETER COVER. INCLUDE INDENTED TOP DESIGN WITH LETTERING CAST INTO COVER, USING WORDING EQUIVALENT TO "STORM SEWER."
5. MATERIAL: GRAY IRON ASTM A48 CLASS 30 UNLESS OTHERWISE INDICATED.
6. ALL HDPE PIPE SHALL BE CORRUGATED HIGH DENSITY POLYETHYLENE SMOOTH INTERIOR PIPE. HDPE PIPE SHALL CONFORM TO ASTM D3350 WITH SOIL TIGHT JOINTS.
7. ALL HDPE SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS AND AASHTO SECTION 30.
8. CONTRACTOR TO PROVIDE AND INSTALL MANUFACTURER RECOMMENDED FITTINGS ON RCP CONNECTIONS TO HDPE STRUCTURES.
9. REFER TO PIPE CHART FOR CASTING TYPES. INSTALL REDUCERS AS NECESSARY PER MANUFACTURER'S SPECIFICATIONS TO ACCOMMODATE LARGER INLET SIZES.
10. FOLLOW CONSTRUCTION PLANS AND MANUFACTURER DETAILS, SPECIFICATIONS, AND INSTALLATION INSTRUCTION AS INCLUDED WITHIN THE PLANS AND PROVIDED BY MANUFACTURER FOR THE INSTALLATION OF WATER QUALITY AND DETENTION SYSTEMS.
11. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR ALL STORM SEWER PIPE, STRUCTURES, WATER QUALITY STRUCTURES, AND DETENTION STRUCTURES FOR ENGINEER AND OWNER APPROVAL PRIOR TO ORDERING MATERIALS.

CLEARING AND GRUBBING:

A. DO NOT EXCEED CLEARING AND GRUBBING LIMITS OF CONSTRUCTION LINES INDICATED ON THE PLANS.

B. ALL AREAS OUTSIDE THE LIMITS OF CONSTRUCTION LINE SHALL NOT BE CROSSED BY HEAVY EQUIPMENT OR USED FOR STORING HEAVY EQUIPMENT OR MATERIALS.

C. NO EQUIPMENT SHALL BE STORED UNDER THE DRIP LINE OF TREES TO REMAIN.

D. DO NOT FALL ANY TREES OR PUSH PILES OF DEBRIS AGAINST ANY TREES TO REMAIN.

E. REMOVE ALL STUMPS, ROCKS, ASPHALT & CONCRETE DEBRIS, ETC. AND DISPOSE OFF SITE IN ACCORDANCE WITH LOCAL, STATE & FEDERAL REGULATIONS.

F. CONTACT ALL UTILITY AUTHORITIES WHO HAVE LINES WITHIN THE CLEARING AND GRUBBING LIMITS BEFORE STARTING WORK

E. ALL EROSION CONTROL SEDIMENT BARRIERS, SILT FENCES, AND TREE PROTECTION DEVICES SHALL BE INSTALLED PRIOR TO STARTING CLEARING AND GRUBBING.

F. AFTER STAKING IS COMPLETED, TREES WITHIN GRADING LIMITS TO BE SAVED WILL BE IDENTIFIED BY THE OWNER'S REPRESENTATIVE. FIELD CHANGES TO GRADING PLANS SHALL BE MADE FOR SMOOTH TRANSITION OF GRADES AROUND ALL TREES WHICH REQUITE TREE WELLS WITHIN THE GRADING LIMITS.

G. ALL CLEARING SHALL BE LIMITED TO AREAS TO BE GRADED WITHIN 15 CALENDAR DAYS.

GRADING NOTES:

A. TOPSOIL SHALL BE STORED ON SITE IN LOCATIONS APPROVED BY THE OWNER'S REPRESENTATIVE. DRAINAGE SHALL ROUT AROUND THESE TOPSOIL STOCKPILES FOR THE DURATION OF THE GRADING OPERATIONS. EROSION CONTROL MEASURES SHALL PREVENT THE LOSS OF TOPSOIL MATERIAL.

B. UNSUITABLE SOILS SHALL BE UNIFORMLY SPREAD ACROSS NON-STRUCTURAL FILL AREAS AND COVERED WITH TOPSOIL AND SEEDED.

C. FILL AREA SHALL BE PROOF-ROLLED WITH RUBBER-TIRED EQUIPMENT WITH A MINIMUM WEIGHT OF FIFTEEN TONS PRIOR TO BEGINNING FILL OPERATION. AREAS WHICH ARE SOFT OR UNSTABLE SHALL BE UNDERCUT UNTIL STABLE SOILS ARE FOUND. RE-COMPACTION OF THESE SOILS SHALL BE TO 98% MAXIMUM DRY DENSITY AS PER ASTM D698 (STANDARD PROCTOR).

D. CUT AREA SHALL BE PROOF-ROLLED AFTER FINAL SUBGRADE IS ACHIEVED IN THE SAME MANNER AS FILLED AREAS. SOFT OR UNSTABLE SOILS SHALL BE SCARIFIED TO A DEPTH OF 12" AND RE-COMPACTED TO 98% MAXIMUM DRY DENSITY AS PER ASTM D698 (STANDARD PROCTOR).

E. ALL GRADING SHALL BE COMPLETED TO THE LEVEL INDICATED BY THE SCOPE OF WORK LISTED IN THE BID DOCUMENTS.

F. ELEVATIONS SHOWN ON THE PLANS IS THE FINISH GRADE ELEVATION.

G. GRADING SHALL BE SEQUENCED SO THAT BASE STONE IS PLACED WITHIN 10 CALENDAR DAYS PF ACHIEVING OPTIMUM SUBGRADE COMPACTION.

H. SOILS TESTING LABORATORY/ SOILS ENGINEER. CONTRACTOR WILL EMPLOY A QUALIFIED SOILS TESTING LABORATORY/ ENGINEER TO OBSERVE THIS WORK AND MAKE TESTS AS REQUIRED.

I. HAVE EARTH BORROW FILL, AGGREGATE, AND TOPSOIL, AND STRUCTURAL FILL TESTED AND APPROVED BY DESIGNATED TESTING LABORATORY BEFORE MOVING IT TO THE JOB SITE.

J. CONTRACTOR SHALL OBSERVE PROOF-ROLLING OF AREAS WHERE BUILDING AND PAVING WILL BE LOCATED TO DETERMINE ADEQUACY OF SOIL COMPACTION AND IN-PLACE SOILS. OTHER AREAS WILL BE INSPECTED BY SOILS ENGINEER TO DETERMINE ADEQUACY IN THOSE AREAS. IF SOILS ARE NOT ADEQUATE TO BEAR WEIGHTS THAT WILL BE IMPOSED, TESTING LABORATORY WILL OBSERVE AND REPORT CORRECTIVE ACTION TAKEN.

K. TEST IN-PLACE SOIL AND FILLED AND COMPACTED AREAS. IF THESE ARE NOT ADEQUATE TO BEAR WEIGHTS IMPOSED, TESTING LABORATORY WILL ADVICE THE OWNER'S REPRESENTATIVE OF THEIR RECOMMENDATIONS. HE WILL DIRECT ANY CORRECTIVE MEASURES THAT ARE NECESSARY.

L. SOILS COMPACTION TESTING OF IN-PLACE AND FILLED AND COMPACTED AREAS WILL BE PERFORMED BY TESTING LABORATORY IN ACCORDANCE WITH THEIR REQUIREMENTS.

M. THE SOILS ENGINEER'S AND TESTING LABORATORY'S FEES WILL BE PAID BY THE CONTRACTOR.

N. APPLICABLE SPECIFICATIONS FOR COMPACTED FILL: THE FOLLOWING CURRENT AMERICAN SOCIETY OF TESTING MATERIALS (ASTM) STANDARDS ARE HEREBY MADE PART OF THIS SPECIFICATION:

- D421-58, DRY PREPARATION OF SOIL SAMPLES FOR GRAIN-SIZE ANALYSIS AND DETERMINATION OF SOIL CONSTANTS.
- D422-63, STANDARD METHOD OF PARTICLE SIZE ANALYSIS OF SOILS.
- D1140-54, METHOD OF TEST FOR AMOUNT OF MATERIAL IN SOILS FINER THAN NO.200 SIEVE.
- D698, METHOD FOR LABORATORY COMPACTION CHARACTERISTICS OF SOIL USING STANDARD EFFORT
- D1557-78, STANDARD TEST METHODS FOR MOISTURE-DENSITY RELATIONS OF SOILS AND SOIL-AGGREGATE MIXTURES USING 10 LB. (4.54-KG) RAMMER AND 18-INCH (457 MM) DROP.

O. PROVIDE POSITIVE DRAINAGE AWAY FROM BUILDINGS AT ALL LOCATIONS UNLESS OTHERWISE NOTED.

P. CONTRACTOR SHALL REVIEW THE SITE SPECIFIC GEOTECHNICAL REPORT PRIOR TO COMMENCING WITH GRADING OPERATIONS. WHERE CONFLICTS BETWEEN THE GRADING NOTES AND GEOTECHNICAL REPORT EXIST, THE MORE STRINGENT REQUIREMENT SHALL APPLY.

Q. CONTRACTOR IS RESPONSIBLE FOR DOCUMENTING WITH LOAD TICKETS, PHOTOGRAPHS, LOG BOOK, VIDEO RECORDING AND OTHER MEANS AS NECESSARY TO VERIFY THE INSTALLATION OF STORMWATER BEST MANAGEMENT PRACTICES REQUIRED BY THE LOCAL MUNICIPALITY AND JURISDICTION. AS-BUILT TOPOGRAPHY AND UTILITY PLANS HAVING BEEN PREPARED BY A QUALIFIED LAND SURVEYOR ARE REQUIRED TO BE SUBMITTED TO KIMLEY-HORN AT THE CONCLUSION OF THE PROJECT FOR VERIFICATION OF DESIGN INTENT. ANY MODIFICATIONS TO THE GRADING AND UTILITY SYSTEMS REQUIRED, NOT PREVIOUSLY APPROVED BY THE OWNER AND ENGINEER ARE THE RESPONSIBILITY OF THE CONTRACTOR.

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CO-OP BUSINESS PARK
LOT 3
PANATTONI DEVELOPMENT COMPANY
LA VERGNE, TENNESSEE

PANATTONI®

ROBERT JAMES ARMS — REGISTERED ENGINEER — AGENCY NUMBER — CERTIFICATE No. 121065 — STATE OF TENNESSEE
12/18/2023

No.	REVISIONS	DATE	BY
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DESIGNED BY:	GTF
DRAWN BY:	GTF
CHECKED BY:	RJA
DATE:	12/18/2023

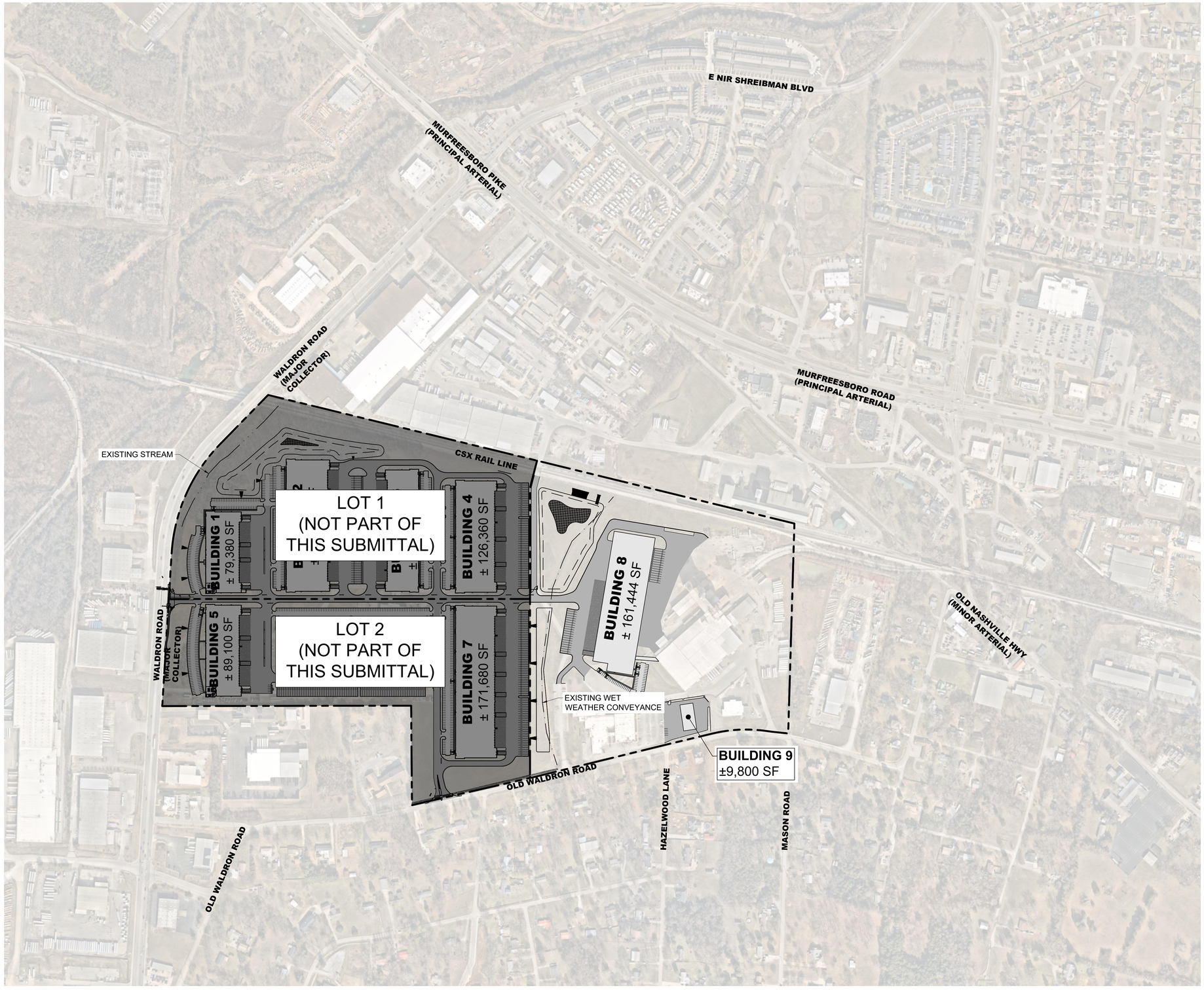
KIMLEY-HORN PROJECT NO. 118163044

GENERAL NOTES

SHEET NUMBER
C0-01

Drawing name: K:\NSH_LDEV\118163044 - co-op la vergne\4-CADD\plansheets\C0-01 GENERAL NOTES.dwg C0-01 GENERAL NOTES - LOT 3 D

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PANATTONI DEVELOPMENT COMPANY
LA VERGNE, TENNESSEE

PANATTONI®

ROBERT JAMES ARTS
REGISTERED ENGINEER
AGENCY TYPE
ENGINEER
No. 121043
STATE OF TENNESSEE
12/18/2023

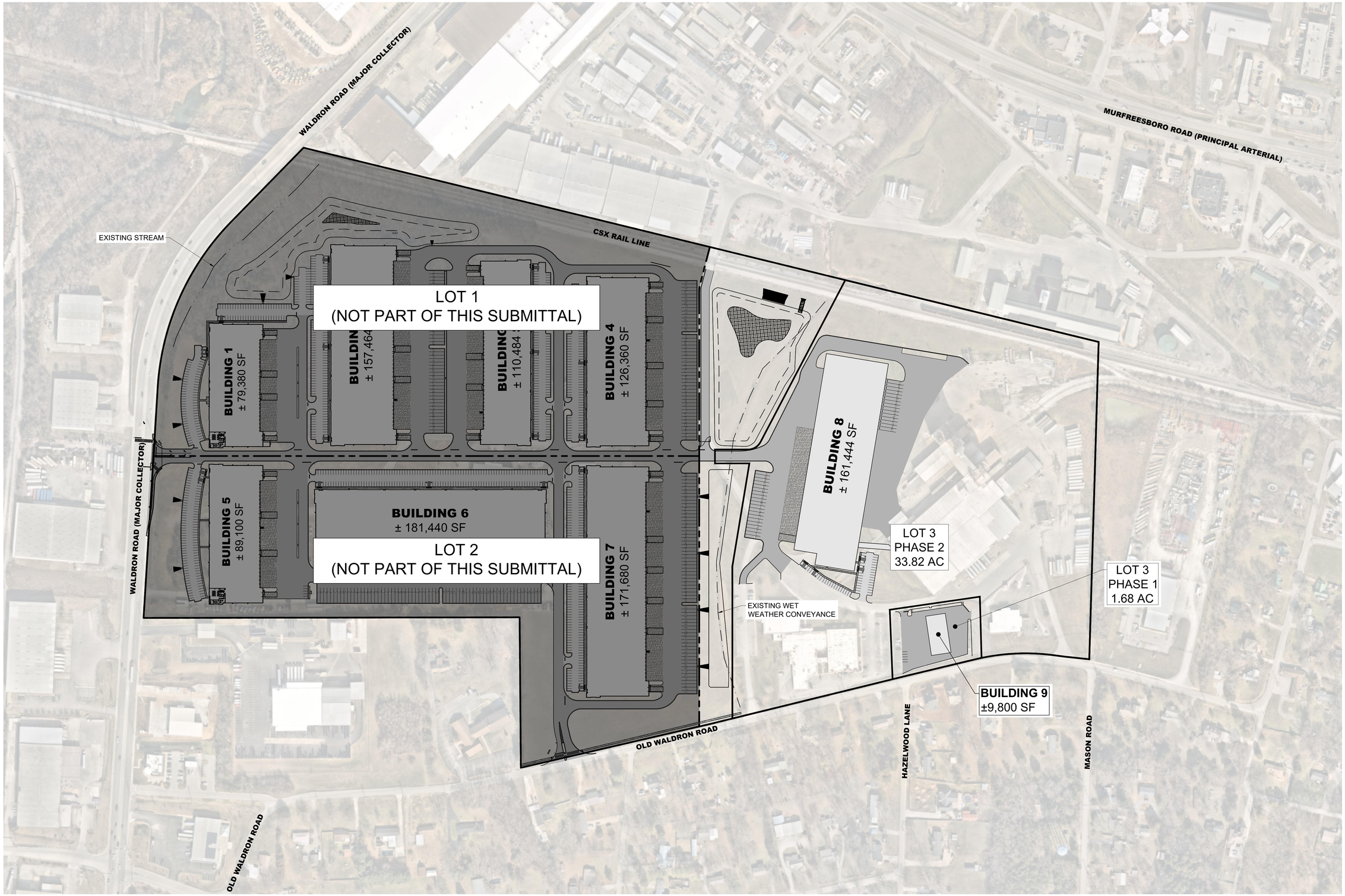
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DESIGNED BY:	GTF
DRAWN BY:	GTF
CHECKED BY:	RJA
DATE:	12/18/2023
KIMLEY-HORN PROJECT NO.	118163044

SITE VICINITY MAP

SHEET NUMBER
C0-10

Drawing name: K:\NSH_LDEV\118163044 - co-op la vergne\4-CADD\plansheets\C0-10 SITE CONTEXT MAP.dwg SITE VICINITY MAP - LOT 3 Dec 18, 2023 9:50am by: Garrett.Froula



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CO-OP BUSINESS PARK
LOT 3

PANATTONI DEVELOPMENT COMPANY
LA VERGNE, TENNESSEE

PANATTONI®

ROBERT JAMES ARIS
REGISTERED ENGINEER
AGENCY PLUS
CORPORATE
No. 121045
STATE OF TENNESSEE
12/18/2023

No.	REVISIONS	DATE	BY
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CHECKED BY:	RJA
DATE:	12/18/2023
KIMLEY-HORN PROJECT NO.	118163044

BUILDING PHASING PLAN

SHEET NUMBER
C0-20

Drawing name: K:\NSH_LDEV\118163044 - co-op la vergne\4-CADD\plansheets\C0-10 SITE CONTEXT MAP.dwg SITE PHASING PLAN - LOT 3 Dec 18, 2023 9:50am by: Garrett.Froula

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EXISTING UTILITIES NOTE

CONTRACTOR SHALL VERIFY LOCATION OF ALL EXISTING UTILITIES AND NOTIFY ENGINEER IMMEDIATELY OF ANY DISCREPANCIES AND/OR CONFLICTS WITH EXISTING OR PROPOSED UTILITIES PRIOR TO PROCEEDING.

SURVEY DISCLAIMER

EXISTING SITE SURVEY INFORMATION PROVIDED BY BARGE DESIGN SOLUTIONS, INC. DATED JANUARY 18, 2023. KIMLEY-HORN DOES NOT ACCEPT ANY RESPONSIBILITY FOR THE ACCURACY OF THE BASE SURVEY INFORMATION PROVIDED BY OTHERS. CONTACT JAMES OVERFELT OF BARGE DESIGN AT (615) 254-1500.

SLOPE LEGEND

- 12-20% SLOPE
- >20% SLOPE

WALDRON ROAD
MURFREESBORO ROAD
OLD WALDRON ROAD
HAZELWOOD LANE
MASON ROAD
LOT 1B
RESUBDIVISION OF LOT 1 IRON CITY SASH & DOOR PLAT CABINET 30, PAGE 276, R.O.R.C. 15 (26.02)
LOT 1A
RESUBDIVISION OF LOT 1 IRON CITY SASH & DOOR PLAT CABINET 30, PAGE 276, R.O.R.C. 15 (26.01)
LOT 2 IRON CITY SASH & DOOR PLAT CABINET 14, PAGE 47, R.O.R.C. 15 (26.00)
TRACT "B" 15 (24.00) TENNESSEE FARMERS COOPERATIVE BOOK 117, PAGE 369, R.O.R.C. ZONING: I-2
TRACT "A" 15 (PART OF 24.00) TENNESSEE FARMERS COOPERATIVE DEED BOOK 117, PAGE 369, R.O.R.C. ZONING: I-2
TRACT "C" 15 (28.00) TENNESSEE FARMERS COOPERATIVE DEED BOOK 117, PAGE 369 AND DEED BOOK 630, PAGE 858, R.O.R.C. ZONING: I-2
15 (017.03) THE SCOTT CORPORATION LLC RECORD BOOK 1608, PAGE 1025, R.O.R.C. ZONING: I-2
15 (24.00) TENNESSEE FARMERS COOPERATIVE INC. DEED BOOK 107, PAGE 225, DEED BOOK 111, PAGE 129, R.O.R.C. ZONING: I-2
15 (024.01) GREENPOINT AG HOLDINGS LLC RECORD BOOK 2190, PAGE 3057, R.O.R.C. ZONING: I-2
15M-E (012.00) 150 OLD WALDRON ROAD LP RECORD BOOK 2161, PAGE 2282, R.O.R.C. ZONING: I-2
15 (27.00) JUDE N. LAPORTE AND WIFE, SABINE LAPORTE RECORD BOOK 1349, PAGE 3178, R.O.R.C. ZONING: I-2
DERBY-FABRICATING ACQUISITION CO RECORD BOOK 1052, PAGE 3748, R.O.R.C. ZONING: I-2
MITSUCHI CORPORATION OF AMERICA DEED BOOK 699, PAGE 382, R.O.R.C. ZONING: I-2
MITSUCHI CORPORATION OF AMERICA RECORD BOOK 1261, PAGE 1312, R.O.R.C. ZONING: I-2
17 (1.00) COCA COLA BOTTLING COMPANY OF NASHVILLE, INC. DEED BOOK 403, PAGE 107, R.O.R.C. ZONING: I-2
17 (2.04) RDM3 LLC RECORD BOOK 2204, PAGE 1977, R.O.R.C., ZONING: C-2
17 (213.00) ASCEND FEDERAL CREDIT UNION RECORD BOOK 1345, PAGE 1142, R.O.R.C., ZONING: C-2
LOT 1 ASCEND FEDERAL CREDIT UNION PLAT CABINET 41, PAGE 199, R.O.R.C.
LOT 1 ASCEND FEDERAL CREDIT UNION PLAT CABINET 41, PAGE 199, R.O.R.C.
17 (1.01) LAVERGNE FIRST UNITED METHODIST CHURCH RECORD BOOK 1417, PAGE 3589, R.O.R.C. ZONING: I-2
17-B (002.00) DONNIE G. FERGUS, ET UX RECORD BOOK 1327, PAGE 2564, R.O.R.C. ZONING: R-1
17C-B (002.00) PHENGVONH KHAMTANH AND ONERED PHA DEED BOOK 430, PAGE 297, R.O.R.C. ZONING: R-1
RESUBDIVISION OF LOT 38, SECTION III TIPPERARY HEIGHTS PLAT BOOK 16 PAGE 373, R.O.R.C. ZONING: R-1
FINAL PLAT EVELYN MITCHELL PLAT BOOK 16, PAGE 212, R.O.R.C. ZONING: R-1
SECTION I TIPPERARY HEIGHTS PLAT BOOK 1, PAGE 69, R.O.R.C. ZONING: R-1
SECTION II TIPPERARY HEIGHTS PLAT BOOK 1, PAGE 98, R.O.R.C. ZONING: R-1
SECTION III TIPPERARY HEIGHTS PLAT BOOK 1, PAGE 113, R.O.R.C. ZONING: R-1
SECTION IV TIPPERARY HEIGHTS PLAT BOOK 1, PAGE 126, R.O.R.C. ZONING: R-1
POINT OF BEGINNING TRACT "B"
POINT OF BEGINNING TRACTS "A" & "C"
SURVEY BENCHMARK: TAG BOLT ON FIRE HYDRANT EL. 575.60 (NAVD88) (GEOID03)
TAG BOLT ON FIRE HYDRANT ELEV. 575.60 (NAVD88) (GEOID03)
EXISTING STREAM
60' STREAM BUFFER
30' STREAM BUFFER
EX. 500-YR FLOODPLAIN
EXISTING WET WEATHER CONVEYANCE
EXISTING 48" CMP TO REMAIN
EXISTING BUILDING
BrB
Bu
Pd
LoB
HcA
TaB2
TrC
Eg
Ea
GRC
TbC3
TaC3
TaC2
WOODS
GRAVEL
ASPHALT
CONCRETE
GRAVEL DRIVE
ASPHALT DRIVE
6' CHAIN-LINK FENCE
S 70° 47' 03" E 457.87'
N 19° 49' 58" E 360.68'
N 08° 09' 13" E 317.14'
S 21° 02' 08" E
N 84° 28' 00" W 1,000.00'
CH=S 14° 30' 38" W 527.92'
R=998.00' L=374.16' CH=S 14° 30' 38" W 371.93'
R=756.00' L=276.03' T=139.57' CH=N 87° 31' 50" W 274.59'
N 77° 04' 15" W 40.85'
N 78° 29' 20" W 97.09'
S 70° 47' 03" E 457.87'
S 19° 49' 58" W 360.68'
N 84° 28' 00" W 1,000.00

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DEMOLITION LEGEND

	REMOVE GRAVEL
	DEMOLISH AND REMOVE STRUCTURE
	REMOVE CONCRETE / RIGID PAVEMENT
	SAW CUT LINE
	REMOVE LINEAR OBJECT (FENCE/UTILITIES)
X	REMOVE OBJECT

EXISTING UTILITIES NOTE

CONTRACTOR SHALL VERIFY LOCATION OF ALL EXISTING UTILITIES AND NOTIFY ENGINEER IMMEDIATELY OF ANY DISCREPANCIES AND/OR CONFLICTS WITH EXISTING OR PROPOSED UTILITIES PRIOR TO PROCEEDING.

SEE DEMOLITION NOTES, SHEET C0-01.

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CO-OP BUSINESS PARK LOT 3

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LA VERGNE, TENNESSEE

PANATTONI®

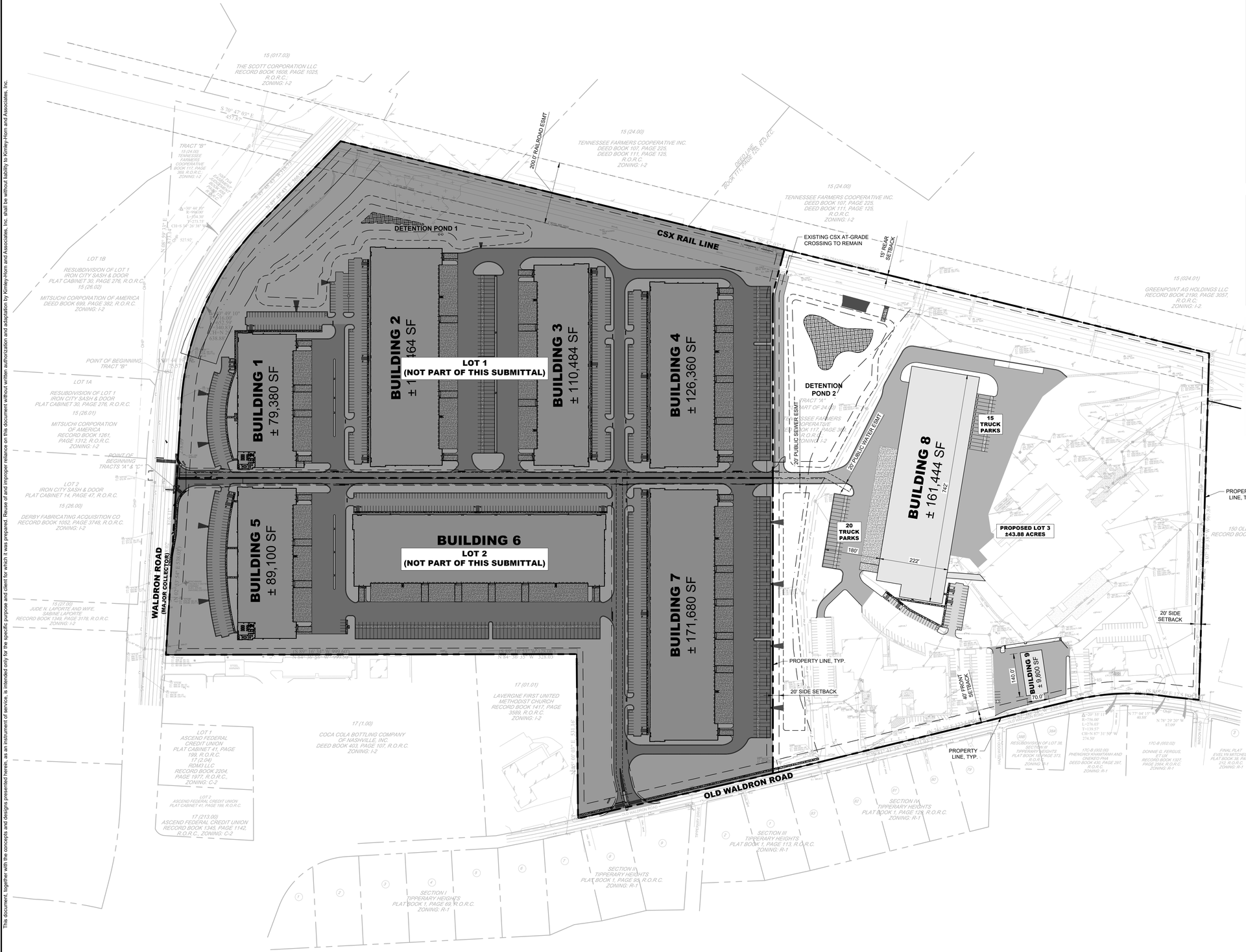
ROBERT JAMES HARRIS
REGISTERED ENGINEER
STATE OF TENNESSEE
120165
AGENT OF RECORD
COMMITTED
12/18/2023

No.	REVISIONS	DATE	BY
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DESIGNED BY:	GTF
DRAWN BY:	GTF
CHECKED BY:	RJA
DATE:	12/18/2023
KIMLEY-HORN PROJECT NO.	118163044

DEMOLITION PLAN

SHEET NUMBER
C1-10



SITE LAYOUT NOTES

1. INSTALL CONCRETE JOINTS WHERE SHOWN ON PLANS AND DETAILS. ALIGN ON WALLS, BUILDINGS, RADII, ETC. EVENLY SPACE BETWEEN ELEMENTS AS SHOWN. PROVIDE EXPANSION JOINTS BETWEEN CONCRETE PAVEMENT AND ALL VERTICAL ELEMENTS (WALLS, CURBS, ETC.).
2. LAYOUT ALL CURVES SMOOTHLY WITH NO ABRUPT CHANGES AT TANGENT POINTS.
3. ALL DIMENSIONS ARE TO THE FACE OF CURB UNLESS OTHERWISE NOTED.
4. GENERAL CONTRACTOR RESPONSIBLE FOR INSTALLATION OF IRRIGATION SLEEVES AND SHALL COORDINATE INSTALLATION WITH IRRIGATION PLANS. SEE SHEET CU101 FOR LOCATION OF IRRIGATION METER
5. LAYOUT ALL ELEMENTS IN FIELD AND CONTACT OWNER'S REPRESENTATIVE FOR APPROVAL BEFORE BEGINNING ANY CONSTRUCTION.
6. CONTRACTOR TO TAKE ALL PRECAUTIONS TO FIND AND AVOID SITE UTILITIES. ALL UTILITIES ARE NOT SHOWN ON DRAWING. VERIFY LOCATIONS AND CONSIDER SUCH WHEN ESTIMATING.
7. ALL LANDSCAPE ISLANDS SHALL BE MOUNDED WITH TOPSOIL 4" ABOVE THE CURB LINE TO PROMOTE POSITIVE DRAINAGE.
8. ALL PAVEMENT MARKINGS AND SIGNAGE SHALL BE INSTALLED PER THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION.
9. SEE ARCHITECTURAL PLANS FOR EXACT BUILDING DIMENSIONS.
10. THE SITE PLAN DRAWINGS ARE INTENDED TO SHOW THE HORIZONTAL CONTROL OF THE SITE. THE CONTRACTOR WILL BE FURNISHED WITH THE SITE PLAN IN AUTOCAD FORMAT. KEY DIMENSIONS HAVE BEEN PROVIDED ON THE PLAN AND MUST BE VERIFIED PRIOR TO ACTUAL CONSTRUCTION.
11. REFER TO GENERAL NOTE SHEETS C0-01.
12. REFER TO ARCHITECTURAL SITE PLAN FOR ADDITIONAL INFORMATION.

RETAINING WALL NOTES

1. ALL SITE RETAINING WALLS INDICATED ON THESE PLANS ARE SHOWN FOR GENERAL LOCATION AND MINIMUM HEIGHT REQUIRED.
2. ALL SITE WALLS SHALL BE DESIGN / BUILD UNDER THE RESPONSIBILITY OF THE CONTRACTOR.
3. CONTRACTOR SHALL SUBMIT DESIGN DRAWINGS AND CALCULATIONS SEALED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF TENNESSEE TO THE CIVIL ENGINEER OF RECORD AND THE CODES AND ENGINEERING DEPARTMENT FOR REVIEW AND APPROVAL PRIOR TO ORDERING MATERIALS OR CONSTRUCTION.
4. ALL WALLS OF HEIGHTS EQUAL TO OR GREATER THAN 30 INCHES (MEASURED FROM TOP OF WALL TO FINISHED GRADE AT BOTTOM OF WALL) SHALL INCLUDE PEDESTRIAN GUARDRAIL OR FENCE. GUARDRAIL SHALL BE IN COMPLIANCE WITH LOCAL CODES AND IBC REQUIREMENTS.

PAVEMENT LEGEND

- STANDARD DUTY ASPHALT PAVEMENT; SEE SHEET C8-10, DETAIL 1
- HEAVY DUTY ASPHALT PAVEMENT; SEE SHEET C8-10, DETAIL 2
- STANDARD DUTY CONCRETE PAVEMENT; SEE SHEET C8-10, DETAIL 3
- HEAVY DUTY CONCRETE PAVEMENT; SEE SHEET C8-10, DETAIL 4

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CO-OP BUSINESS PARK LOT 3

PANATTONI DEVELOPMENT COMPANY
LA VERGNE, TENNESSEE

PANATTONI®

ROBERT JAMES ARMS REGISTERED ENGINEER 121084 AGRICULTURE COMMERCE STATE OF TENNESSEE
12/18/2023

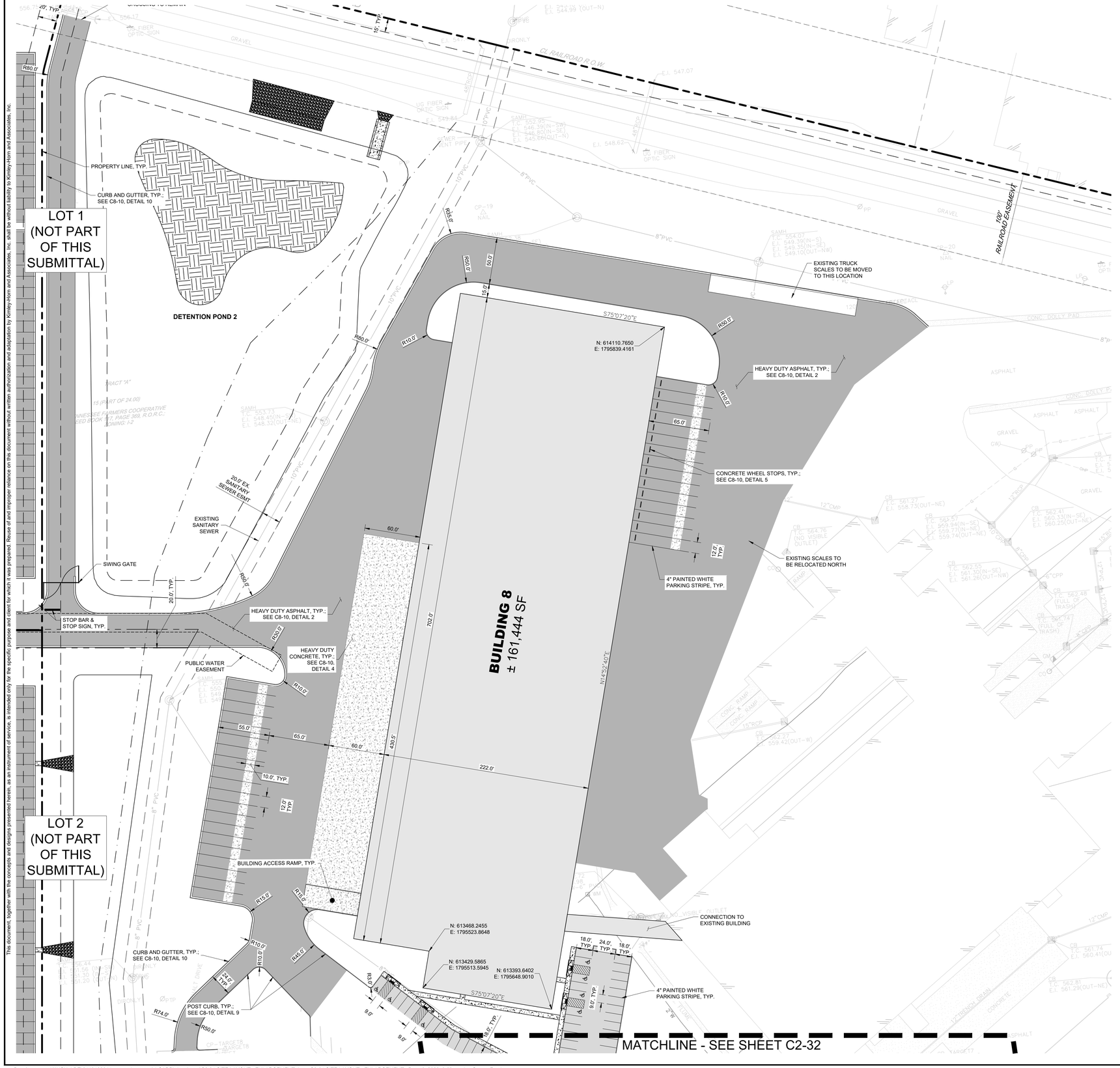
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DESIGNED BY:	GTF
DRAWN BY:	GTF
CHECKED BY:	RJA
DATE:	12/18/2023
KIMLEY-HORN PROJECT NO.	118163044

SITE LAYOUT - OVERALL

SHEET NUMBER
C2-30

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SITE LAYOUT NOTES

1. INSTALL CONCRETE JOINTS WHERE SHOWN ON PLANS AND DETAILS. ALIGN ON WALLS, BUILDINGS, RADII, ETC. EVENLY SPACE BETWEEN ELEMENTS AS SHOWN. PROVIDE EXPANSION JOINTS BETWEEN CONCRETE PAVEMENT AND ALL VERTICAL ELEMENTS (WALLS, CURBS, ETC.).
2. LAYOUT ALL CURVES SMOOTHLY WITH NO ABRUPT CHANGES AT TANGENT POINTS.
3. ALL DIMENSIONS ARE TO THE FACE OF CURB UNLESS OTHERWISE NOTED.
4. GENERAL CONTRACTOR RESPONSIBLE FOR INSTALLATION OF IRRIGATION SLEEVES AND SHALL COORDINATE INSTALLATION WITH IRRIGATION PLANS. SEE SHEET CU101 FOR LOCATION OF IRRIGATION METER
5. LAYOUT ALL ELEMENTS IN FIELD AND CONTACT OWNER'S REPRESENTATIVE FOR APPROVAL BEFORE BEGINNING ANY CONSTRUCTION.
6. CONTRACTOR TO TAKE ALL PRECAUTIONS TO FIND AND AVOID SITE UTILITIES. ALL UTILITIES ARE NOT SHOWN ON DRAWING. VERIFY LOCATIONS AND CONSIDER SUCH WHEN ESTIMATING.
7. ALL LANDSCAPE ISLANDS SHALL BE MOUNDED WITH TOPSOIL 4" ABOVE THE CURB LINE TO PROMOTE POSITIVE DRAINAGE.
8. ALL PAVEMENT MARKINGS AND SIGNAGE SHALL BE INSTALLED PER THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION.
9. SEE ARCHITECTURAL PLANS FOR EXACT BUILDING DIMENSIONS.
10. THE SITE PLAN DRAWINGS ARE INTENDED TO SHOW THE HORIZONTAL CONTROL OF THE SITE. THE CONTRACTOR WILL BE FURNISHED WITH THE SITE PLAN IN AUTOCAD FORMAT. KEY DIMENSIONS HAVE BEEN PROVIDED ON THE PLAN AND MUST BE VERIFIED PRIOR TO ACTUAL CONSTRUCTION.
11. REFER TO GENERAL NOTE SHEETS C0-01.
12. REFER TO ARCHITECTURAL SITE PLAN FOR ADDITIONAL INFORMATION.

RETAINING WALL NOTES

1. ALL SITE RETAINING WALLS INDICATED ON THESE PLANS ARE SHOWN FOR GENERAL LOCATION AND MINIMUM HEIGHT REQUIRED.
2. ALL SITE WALLS SHALL BE DESIGN / BUILD UNDER THE RESPONSIBILITY OF THE CONTRACTOR.
3. CONTRACTOR SHALL SUBMIT DESIGN DRAWINGS AND CALCULATIONS SEALED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF TENNESSEE TO THE CIVIL ENGINEER OF RECORD AND THE CODES AND ENGINEERING DEPARTMENT FOR REVIEW AND APPROVAL PRIOR TO ORDERING MATERIALS OR CONSTRUCTION.
4. ALL WALLS OF HEIGHTS EQUAL TO OR GREATER THAN 30 INCHES (MEASURED FROM TOP OF WALL TO FINISHED GRADE AT BOTTOM OF WALL) SHALL INCLUDE PEDESTRIAN GUARDRAIL OR FENCE. GUARDRAIL SHALL BE IN COMPLIANCE WITH LOCAL CODES AND IBC REQUIREMENTS.

PAVEMENT LEGEND

- STANDARD DUTY ASPHALT PAVEMENT; SEE SHEET C8-10, DETAIL 1
- HEAVY DUTY ASPHALT PAVEMENT; SEE SHEET C8-10, DETAIL 2
- STANDARD DUTY CONCRETE PAVEMENT; SEE SHEET C8-10, DETAIL 3
- HEAVY DUTY CONCRETE PAVEMENT; SEE SHEET C8-10, DETAIL 4

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CO-OP BUSINESS PARK
LOT 3

PANATTONI DEVELOPMENT COMPANY
LA VERGNE, TENNESSEE

PANATTONI®

ROBERT JAMES ARS — REGISTERED ENGINEER — AGENT OF RECORD — LICENSED PROFESSIONAL ENGINEER — CERTIFICATE NO. 121043 — STATE OF TENNESSEE
12/18/2023

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DESIGNED BY:	GTF
DRAWN BY:	GTF
CHECKED BY:	RJA
DATE:	12/18/2023

KIMLEY-HORN PROJECT NO. 118163044

SITE LAYOUT - ENLARGEMENT

SHEET NUMBER
C2-31

811 Know what's below. Call before you dig.

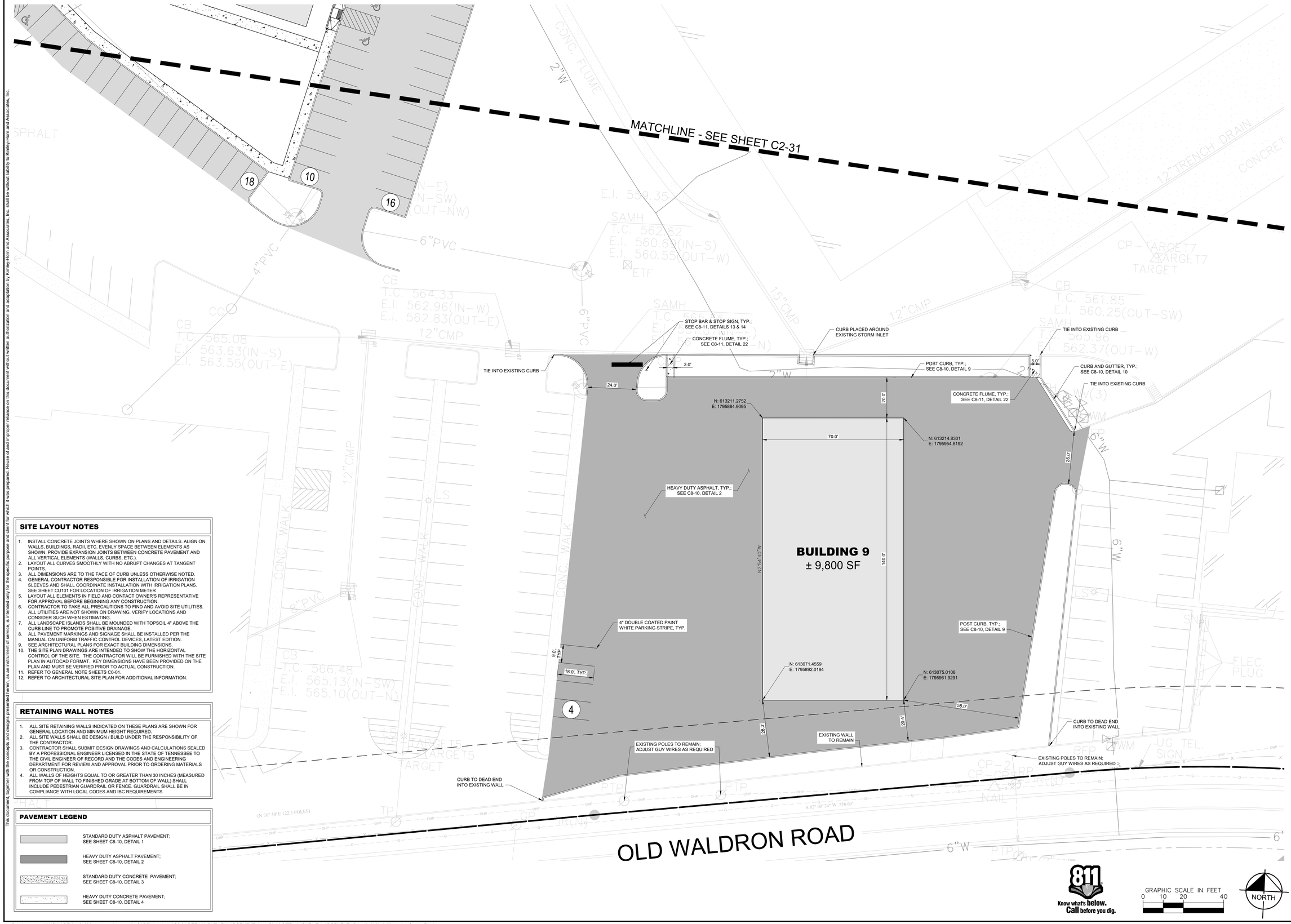
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Drawing name: K:\NSH_LDEV\118163044 - co-op la vergne\4-CADD\plansheets\C2-31 SITE LAYOUT - ENLARGEMENT.dwg C2-31 SITE LAYOUT - ENLARGEMENT Dec 18, 2023 9:52am by: Garrett.Froula

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- STANDARD DUTY CONCRETE PAVEMENT; SEE SHEET C8-10, DETAIL 3
- HEAVY DUTY CONCRETE PAVEMENT; SEE SHEET C8-10, DETAIL 4

811 Know what's below. Call before you dig.

GRAPHIC SCALE IN FEET
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CO-OP BUSINESS PARK LOT 3

PANATTONI DEVELOPMENT COMPANY
LA VERGNE, TENNESSEE

PANATTONI®

ROBERT JAMES ARMS
REGISTERED ENGINEER
AGENCY PLAN
COMMERCE
No. 121045
STATE OF TENNESSEE
12/18/2023

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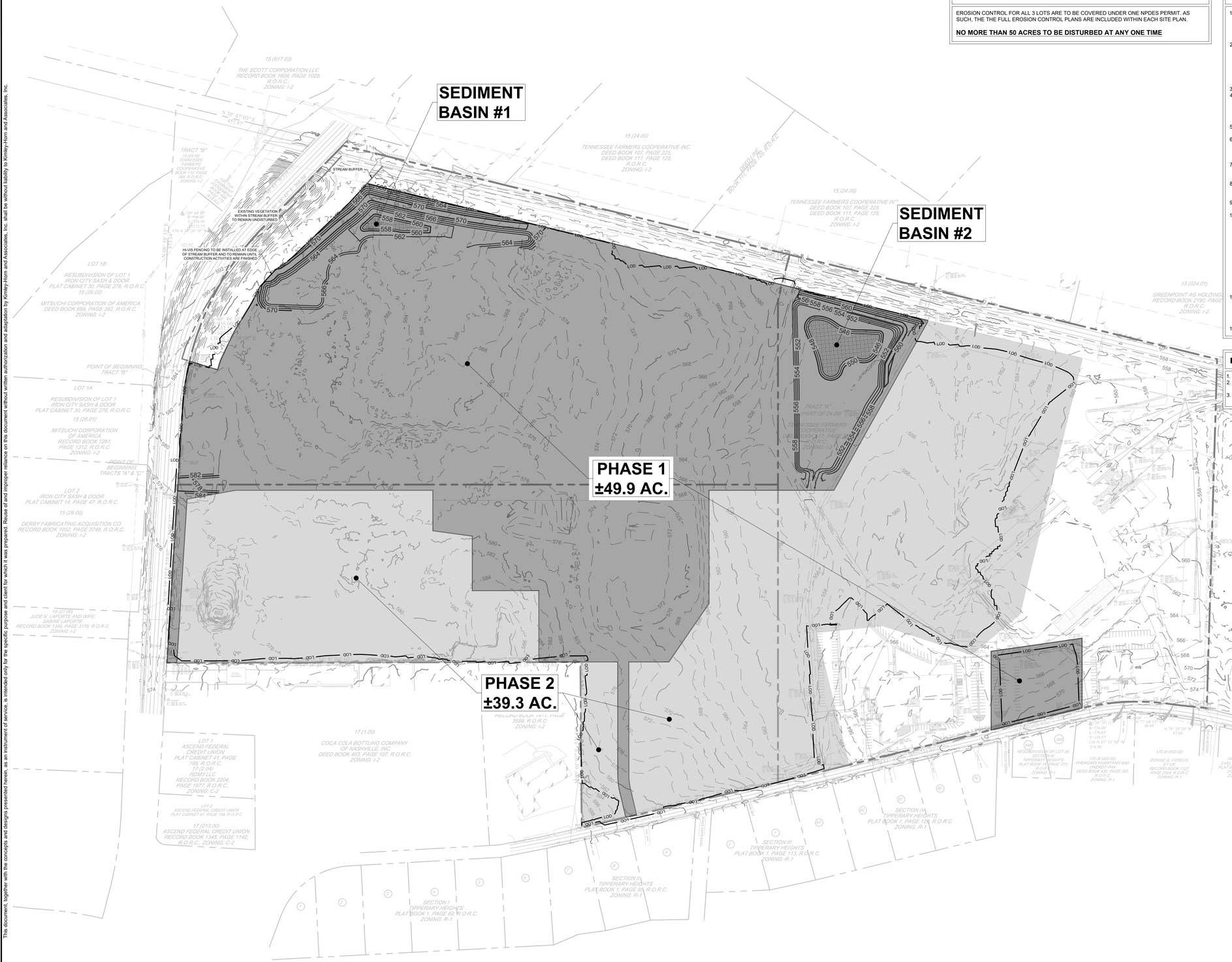
DESIGNED BY:	GTF
DRAWN BY:	GTF
CHECKED BY:	RJA
DATE:	12/18/2023
KIMLEY-HORN PROJECT NO.	118163044

SITE LAYOUT - ENLARGEMENT

SHEET NUMBER
C2-32

Drawing name: K:\NSH_LDEV\118163044 - co-op la vergne\4-CADD\plansheets\C2-31 SITE LAYOUT - ENLARGEMENT.dwg C2-32 SITE LAYOUT - ENLARGEMENT Dec 18, 2023 9:52am by: Garrett.Froula

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EPSC NOTE

EROSION CONTROL FOR ALL 3 LOTS ARE TO BE COVERED UNDER ONE NPDES PERMIT. AS SUCH, THE THE FULL EROSION CONTROL PLANS ARE INCLUDED WITHIN EACH SITE PLAN.

NO MORE THAN 50 ACRES TO BE DISTURBED AT ANY ONE TIME

EROSION CONTROL NOTES

1. STOCKPILED TOPSOIL OR FILL MATERIAL IS TO BE TREATED SO THE SEDIMENT RUN-OFF WILL NOT CONTAMINATE SURROUNDING AREAS OR ENTER NEARBY STREAMS. STOCK PILE LOCATIONS SHALL BE COORDINATED WITH THE ENGINEER PRIOR TO GRADING ACTIVITIES. EROSION & SEDIMENT CONTROL PRACTICE SHALL BE INSTALLED PRIOR TO STOCKPILE OPERATIONS.
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3. CONSTRUCT SILT BARRIERS BEFORE BEGINNING GRADING OPERATIONS.
4. MULCH AND SEED ALL DISTURBED AREAS AS SOON AS POSSIBLE AFTER FINAL GRADING IS COMPLETED (WITHIN 15 DAYS OF ACHIEVED FINAL GRADES) UNLESS OTHERWISE INDICATED. CONTRACTOR SHALL TAKE WHATEVER MEANS NECESSARY TO ESTABLISH PERMANENT SOIL STABILIZATION. STEEP SLOPES (GREATER THAN 3:1) SHALL BE STABILIZED WITHIN 7 DAYS OF FINAL GRADING.
5. REMOVE SEDIMENT FROM ALL DRAINAGE STRUCTURES BEFORE ACCEPTANCE BY LOCAL GOVERNING AGENCY OR AS DIRECTED BY THE OWNER'S REPRESENTATIVE.
6. CLEAN SILT BARRIERS WHEN THEY ARE APPROXIMATELY 50% FILLED WITH SEDIMENT OR AS DIRECTED BY THE OWNER'S REPRESENTATIVE. SILT BARRIERS SHALL BE REPLACED AS EFFECTIVENESS IS SIGNIFICANTLY REDUCED OR AS DIRECTED BY THE OWNER'S REPRESENTATIVE.
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8. PROVIDE TEMPORARY CONSTRUCTION ACCESS(ES) AT THE POINT(S) WHERE CONSTRUCTION VEHICLES EXIT THE CONSTRUCTION AREA. MAINTAIN PUBLIC ROADWAYS FREE OF TRACKED MUD AND DIRT.
9. DO NOT DISTURB VEGETATION OR REMOVE TREES EXCEPT WHEN NECESSARY FOR GRADING PURPOSES.
10. STABILIZATION MEASURES (SEED & MULCH, TRIM WHERE INDICATED) SHALL BE INITIATED AS SOON AS PRACTICABLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, EXCEPT IN THE FOLLOWING TWO CASES.
    - 10.a. WHERE THERE IS SNOW COVER OR FROZEN GROUND CONDITIONS, STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE OR WHERE CONSTRUCTION ACTIVITY ON A PORTION OF THE SITE IS TEMPORARILY CEASED, AND EARTH DISTURBING ACTIVITIES WILL BE RESUMED WITHIN 15 DAYS. TEMPORARY STABILIZATION MEASURES DO NOT HAVE TO BE INITIATED ON THAT PORTION OF SITE.
    - 10.b. ALL EROSION CONTROL MEASURES SHALL BE CHECKED TWICE WEEKLY DURING PROLONGED RAINFALL DAILY CHECKING IS NECESSARY. DOCUMENTATION OF ALL CHECKS AND CORRECTIVE MEASURES SHALL BE KEPT AT THE PROJECT. A MONITORING REPORT CAN BE FOUND IN THE TENNESSEE EROSION AND SEDIMENT CONTROL HANDBOOK.
11. CONTRACTOR TO PROVIDE AN AREA FOR CONCRETE WASH DOWN AND EQUIPMENT REFUELING IN ACCORDANCE WITH TDEC'S STANDARDS. CONTRACTOR TO COORDINATE EXACT LOCATION WITH NPDES DEPARTMENT DURING PRECONSTRUCTION MEETING. CONTROL OF OTHER SITE WASTES SUCH AS MAY CAUSE ADVERSE IMPACTS TO WATER QUALITY IS ALSO REQUIRED BY THE GRADING PERMITEE.
12. SEE ADDITIONAL EROSION CONTROL NOTES ON SHEET C0-01.

EPSC PHASING NOTES

1. NO MORE THAN 50 ACRES IS TO BE DISTURBED AT ANY TIME.
2. SEDIMENT BASINS AND ALL OTHER PHASE 1 MEASURES WITHIN EACH DISTURBANCE PHASE TO BE IMPLEMENTED/CONSTRUCTED PRIOR TO FURTHER DISTURBANCE ACTIVITIES.
3. CONTRACTOR TO NOTIFY THE ENGINEER IN ADVANCE OF ANY DEVIATION FROM THE PHASING PLAN.

Know what's below. Call before you dig.

GRAPHIC SCALE IN FEET
0 75 150 300

NORTH

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CO-OP BUSINESS PARK LOT 3

PANATTONI DEVELOPMENT COMPANY
LA VERGNE, TENNESSEE

PANATTONI®

ROBERT JAMES HARRIS REGISTERED ENGINEER No. 121045 STATE OF TENNESSEE
12/18/2023

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DRAWN BY:	GTF
CHECKED BY:	RJA
DATE:	12/18/2023
KIMLEY-HORN PROJECT NO.	118163044

EROSION CONTROL PLAN - PHASING PLAN

SHEET NUMBER
C3-00

Drawing name: K:\NSH_LDEV\118163044 - co-op la vergne\4-CADD\plansheets\C3-10 EROSION CONTROL PLAN - PHASE 1.dwg C3-00 LOT 3 Dec 18, 2023 9:54am by: Garrett.Froula

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SEDIMENT BASIN #1;
SEE DETAIL 9 ON SHEET C3-51
DRAINAGE AREA: 36 AC
2-YR INTENSITY (IN/HR) = 5.48
5-YR INTENSITY (IN/HR) = 6.35
FLOW Q2 = 157.8 CFS
FLOW Q5 = 182.9 CFS
WET VOLUME REQ = 65,124 CF
DRY VOLUME REQ = 65,124 CF
WET VOLUME PROV = 65,537 CF
DRY VOLUME PROV = 65,652 CF

STREAM BUFFER

TEMPORARY OUTLET
STRUCTURE WITH 5" SKIMMER;
SEE SHEET C3-51 DETAIL 11

EXISTING VEGETATION
WITHIN STREAM BUFFER
TO REMAIN UNDISTURBED

HI-VIS FENCING TO BE INSTALLED AT EDGE
OF STREAM BUFFER AND TO REMAIN UNTIL
CONSTRUCTION ACTIVITIES ARE FINISHED

MATCHLINE - SEE SHEET C3-11

SEDIMENT BASIN #2;
SEE DETAIL 9 ON SHEET C3-51
DRAINAGE AREA: 63 AC
2-YR INTENSITY (IN/HR) = 5.48
5-YR INTENSITY (IN/HR) = 6.35
FLOW Q2 = 276 CFS
FLOW Q5 = 320 CFS
WET VOLUME REQ = 113,967 CF
DRY VOLUME REQ = 113,967 CF
WET VOLUME PROV = 114,450 CF
DRY VOLUME PROV = 114,557 CF

PHASE 1 DRAINAGE BOUNDARY

EPSC NOTE

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NO MORE THAN 50 ACRES TO BE DISTURBED AT ANY ONE TIME

EROSION CONTROL NOTES

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12. SEE ADDITIONAL EROSION CONTROL NOTES ON SHEET C0-01.

EPSC PHASE 1 CONSTRUCTION SEQUENCE

1. INSTALL CONSTRUCTION ENTRANCE/EXIT AND CONCRETE WASHOUT.
2. INSTALL SILT FENCE WITH WIRE BACKING AND TREE PROTECTION.
3. CONTRACTOR TO CONTACT STORMWATER DEPARTMENT TO OBTAIN LAND DISTURBANCE PERMIT. THE CONTRACTOR SHALL CONTACT APPROPRIATE PARTY FOR INSPECTION OF EROSION CONTROL DEVICES AND TO OBTAIN FULL GRADING PERMIT.
4. ADD HIGH VISIBILITY FENCE TO BE INSTALLED AROUND ALL PROTECTED CHANNELS TO PREVENT DISTURBANCE.

TREE PROTECTION FENCING NOTE

TREE PROTECTION FENCING IS TO REMAIN IN PLACE UNTIL FINAL INSPECTION AND SIGN-OFF ON THE MASTER BUILDING PERMIT AND CERTIFICATE OF OCCUPANCY BY THE CODES DEPARTMENT. STORMWATER SIGN-OFF AND REMOVAL OF EROSION CONTROL MEASURES IS NOT JUSTIFICATION TO REMOVE TREE PROTECTION FENCING.

EROSION CONTROL LEGEND

	FR	STONE FILTER RING - CLASS A RIP-RAP, 2' THICK
OP	OP	OUTLET PROTECTION - REFER TO DETAIL SHEET C3-50
DD	DD	DIVERSION DITCH - REFER TO DETAIL SHEET C3-50
IP	IP	INLET PROTECTION - REFER TO DETAIL SHEET C3-50
SF	SF	SILT FENCE - REFER TO DETAIL SHEET C3-50
EE	EE	EROSION EELS - REFER TO DETAIL SHEET C3-50
CD	CD	ROCK CHECK DAM - REFER TO DETAIL SHEET C3-50
CW	CW	CONCRETE WASHOUT AREA - REFER TO DETAIL SHEET C3-50
MA	MA	EROSION CONTROL MATTING - CONTECH LANDLOK S2 OR APPROVED EQUAL. CONTRACTOR TO INSTALL ON ALL SLOPES 3(H):1(V) OR STEEPER - REFER TO DETAIL SHEET C3-50
CE	CE	CONSTRUCTION EXIT - REFER TO DETAIL SHEET C3-50
TS	TS	TEMPORARY STABILIZATION - REFER TO DETAIL SHEET C3-50
PS	PS	PERMANENT STABILIZATION - REFER TO DETAIL SHEET C3-50
TP	TP	TREE PROTECTION FENCE / HIGH VISIBILITY FENCE - REFER TO DETAIL SHEET C3-50
LOD		LIMITS OF DISTURBANCE
		CONSTRUCTION SIGN

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CO-OP BUSINESS PARK LOT 3

PANATTONI DEVELOPMENT COMPANY
LA VERGNE, TENNESSEE

PANATTONI®

ROBERT JAMES ARTS
REGISTERED ENGINEER
AGENCY PLAN
12/18/2023
LICENSE No. 121045
STATE OF TENNESSEE

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DESIGNED BY:	GTF
DRAWN BY:	GTF
CHECKED BY:	RJA
DATE:	12/18/2023

KIMLEY-HORN PROJECT NO.
118163044

EROSION CONTROL PLAN - PHASE 1 ENLARGEMENT

SHEET NUMBER
C3-10

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SEE DETAIL 9 ON SHEET C3-51
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FLOW Q2 = 276 CFS
FLOW Q5 = 320 CFS
WET VOLUME REQ = 113,967 CF
DRY VOLUME REQ = 113,967 CF
WET VOLUME PROV = 114,450 CF
DRY VOLUME PROV = 114,557 CF

TEMPORARY OUTLET
STRUCTURE WITH 8" SKIMMER;
SEE SHEET C3-51 DETAIL 11

PHASE 1 DRAINAGE BOUNDARY

MATCHLINE
SEE SHEET C3-10

EPSC NOTE

EROSION CONTROL FOR ALL 3 LOTS ARE TO BE COVERED UNDER ONE NPDES PERMIT. AS SUCH, THE THE FULL EROSION CONTROL PLANS ARE INCLUDED WITHIN EACH SITE PLAN.

NO MORE THAN 50 ACRES TO BE DISTURBED AT ANY ONE TIME

EROSION CONTROL NOTES

1. STOCKPILED TOPSOIL OR FILL MATERIAL IS TO BE TREATED SO THE SEDIMENT RUN-OFF WILL NOT CONTAMINATE SURROUNDING AREAS OR ENTER NEARBY STREAMS. STOCK PILE LOCATIONS SHALL BE COORDINATED WITH THE ENGINEER PRIOR TO GRADING ACTIVITIES. EROSION & SEDIMENT CONTROL PRACTICE SHALL BE INSTALLED PRIOR TO STOCKPILE OPERATIONS.
2. ANY SITE USED FOR DISPOSAL AND/OR STOCKPILE OF ANY MATERIAL SHALL BE PROPERLY PERMITTED FOR SUCH ACTIVITY. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO SEE THAT ALL REQUIRED PERMITS ARE SECURED FOR EACH PROPERTY UTILIZED. A COPY OF THE APPROVED PERMIT MUST BE PROVIDED TO THE INSPECTOR PRIOR TO COMMENCEMENT OF WORK ON ANY PROPERTY. FAILURE TO DO SO MAY RESULT IN THE CONTRACTOR REMOVING ANY ILLEGALLY PLACED MATERIAL AT HIS OWN EXPENSE.
3. CONSTRUCT SILT BARRIERS BEFORE BEGINNING GRADING OPERATIONS.
4. MULCH AND SEED ALL DISTURBED AREAS AS SOON AS POSSIBLE AFTER FINAL GRADING IS COMPLETED (WITHIN 15 DAYS OF ACHIEVED FINAL GRADES) UNLESS OTHERWISE INDICATED. CONTRACTOR SHALL TAKE WHATEVER MEANS NECESSARY TO ESTABLISH PERMANENT SOIL STABILIZATION. STEEP SLOPES (GREATER THAN 3:1) SHALL BE STABILIZED WITHIN 7 DAYS OF FINAL GRADING.
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7. REMOVE THE TEMPORARY EROSION AND WATER POLLUTION CONTROL DEVICES ONLY AFTER A SOLID STAND OF GRASS HAS BEEN ESTABLISHED ON GRADED AREAS AND, WHEN IN THE OPINION OF THE OWNER'S REPRESENTATIVE, THEY ARE NO LONGER NEEDED.
8. PROVIDE TEMPORARY CONSTRUCTION ACCESS(ES) AT THE POINT(S) WHERE CONSTRUCTION VEHICLES EXIT THE CONSTRUCTION AREA. MAINTAIN PUBLIC ROADWAYS FREE OF TRACKED MUD AND DIRT.
9. DO NOT DISTURB VEGETATION OR REMOVE TREES EXCEPT WHEN NECESSARY FOR GRADING PURPOSES.
10. STABILIZATION MEASURES (SEED & MULCH, TRIM WHERE INDICATED) SHALL BE INITIATED AS SOON AS PRACTICABLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, EXCEPT IN THE FOLLOWING TWO CASES.
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12. SEE ADDITIONAL EROSION CONTROL NOTES ON SHEET C0-01.

EPSC PHASE 1 CONSTRUCTION SEQUENCE

1. INSTALL CONSTRUCTION ENTRANCE/EXIT AND CONCRETE WASHOUT.
2. INSTALL SILT FENCE WITH WIRE BACKING AND TREE PROTECTION.
3. CONTRACTOR TO CONTACT STORMWATER DEPARTMENT TO OBTAIN LAND DISTURBANCE PERMIT. THE CONTRACTOR SHALL CONTACT APPROPRIATE PARTY FOR INSPECTION OF EROSION CONTROL DEVICES AND TO OBTAIN FULL GRADING PERMIT.
4. ADD HIGH VISIBILITY FENCE TO BE INSTALLED AROUND ALL PROTECTED CHANNELS TO PREVENT DISTURBANCE.

TREE PROTECTION FENCING NOTE

TREE PROTECTION FENCING IS TO REMAIN IN PLACE UNTIL FINAL INSPECTION AND SIGN-OFF ON THE MASTER BUILDING PERMIT AND CERTIFICATE OF OCCUPANCY BY THE CODES DEPARTMENT. STORMWATER SIGN-OFF AND REMOVAL OF EROSION CONTROL MEASURES IS NOT JUSTIFICATION TO REMOVE TREE PROTECTION FENCING.

EROSION CONTROL LEGEND

FR	STONE FILTER RING - CLASS A RIP-RAP, 2' THICK
OP	OUTLET PROTECTION - REFER TO DETAIL SHEET C3-50
DD	DIVERSION DITCH - REFER TO DETAIL SHEET C3-50
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TP	TREE PROTECTION FENCE / HIGH VISIBILITY FENCE - REFER TO DETAIL SHEET C3-50
LOD	LIMITS OF DISTURBANCE
	CONSTRUCTION SIGN

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CO-OP BUSINESS PARK LOT 3

PANATTONI DEVELOPMENT COMPANY
LA VERGNE, TENNESSEE

PANATTONI®

ROBERT JAMES ARS
REGISTERED ENGINEER
No. 121045
STATE OF TENNESSEE
12/18/2023

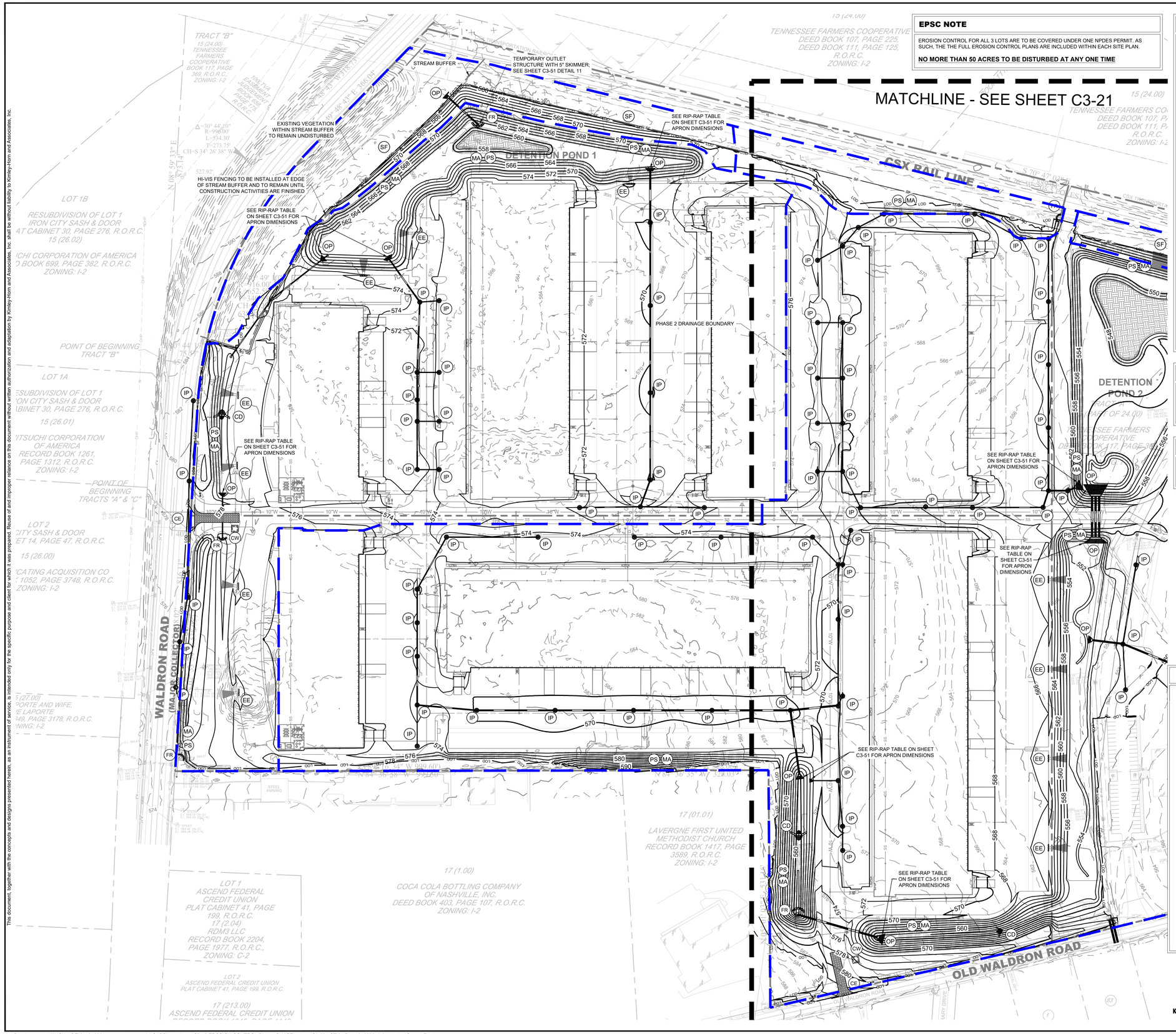
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DESIGNED BY:	GTF
DRAWN BY:	GTF
CHECKED BY:	RJA
DATE:	12/18/2023

KIMLEY-HORN PROJECT NO.
118163044

EROSION CONTROL PLAN - PHASE 1 ENLARGEMENT

SHEET NUMBER
C3-11



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EPSC PHASE 2 CONSTRUCTION SEQUENCE

1. CONTRACTOR TO BEGIN CLEARING, GRUBBING, AND EXCAVATING.
2. CLEAR, GRUB, AND GRADE REMAINING SITE.
3. INSTALL PROPOSED UTILITIES INCLUDING PROPOSED INLETS WITH PROTECTION.
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TP	TREE PROTECTION FENCE / HIGH VISIBILITY FENCE - REFER TO DETAIL SHEET C3-50
LOD	LIMITS OF DISTURBANCE
	CONSTRUCTION SIGN

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CO-OP BUSINESS PARK LOT 3

PANATTONI DEVELOPMENT COMPANY
LA VERGNE, TENNESSEE

PANATTONI®

ROBERT JAMES ARS — REGISTERED ENGINEER — AGENT OF RECORD — No. 121045 — STATE OF TENNESSEE
12/18/2023

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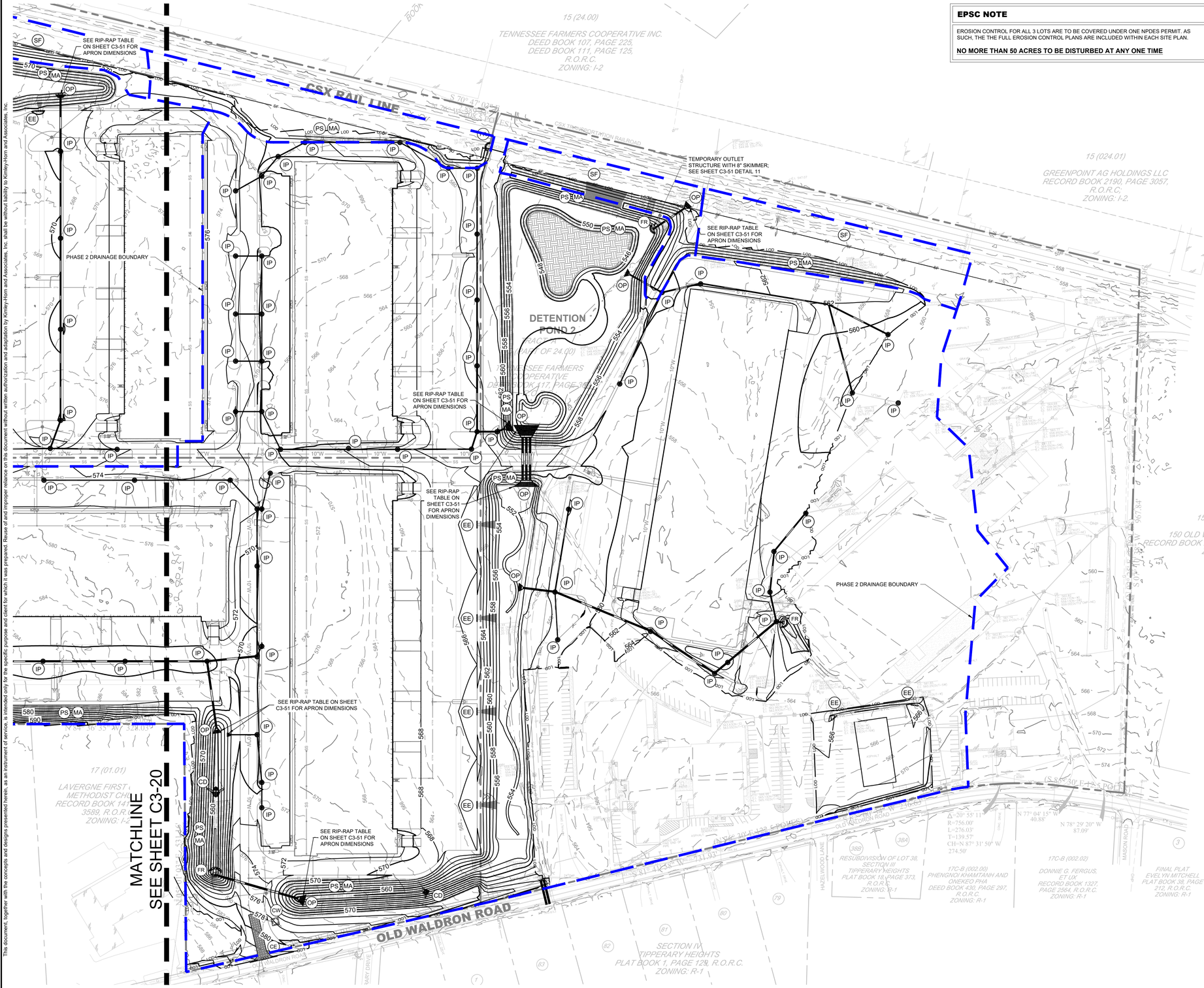
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CHECKED BY:	RJA
DATE:	12/18/2023
KIMLEY-HORN PROJECT NO.	118163044

EROSION CONTROL PLAN - PHASE 2 ENLARGEMENT

SHEET NUMBER
C3-20

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Drawing name: K:\NSH_LDEV\118163044 - co-op la vergne\4-CADD\plansheets\C3-10 EROSION CONTROL PLAN - PHASE 1.dwg C3-20 LOT 3 Dec 18, 2023 9:54am by: Garrett.Froula



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LOD	LIMITS OF DISTURBANCE
	CONSTRUCTION SIGN

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CO-OP BUSINESS PARK LOT 3

PANATTONI DEVELOPMENT COMPANY
LA VERGNE, TENNESSEE

PANATTONI®

ROBERT JAMES ARMS — REGISTERED ENGINEER — AGENT NO. 2 — 12/18/2023 — CERTIFICATE NO. 121043 — STATE OF TENNESSEE

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DRAWN BY:	GTF
CHECKED BY:	RJA
DATE:	12/18/2023

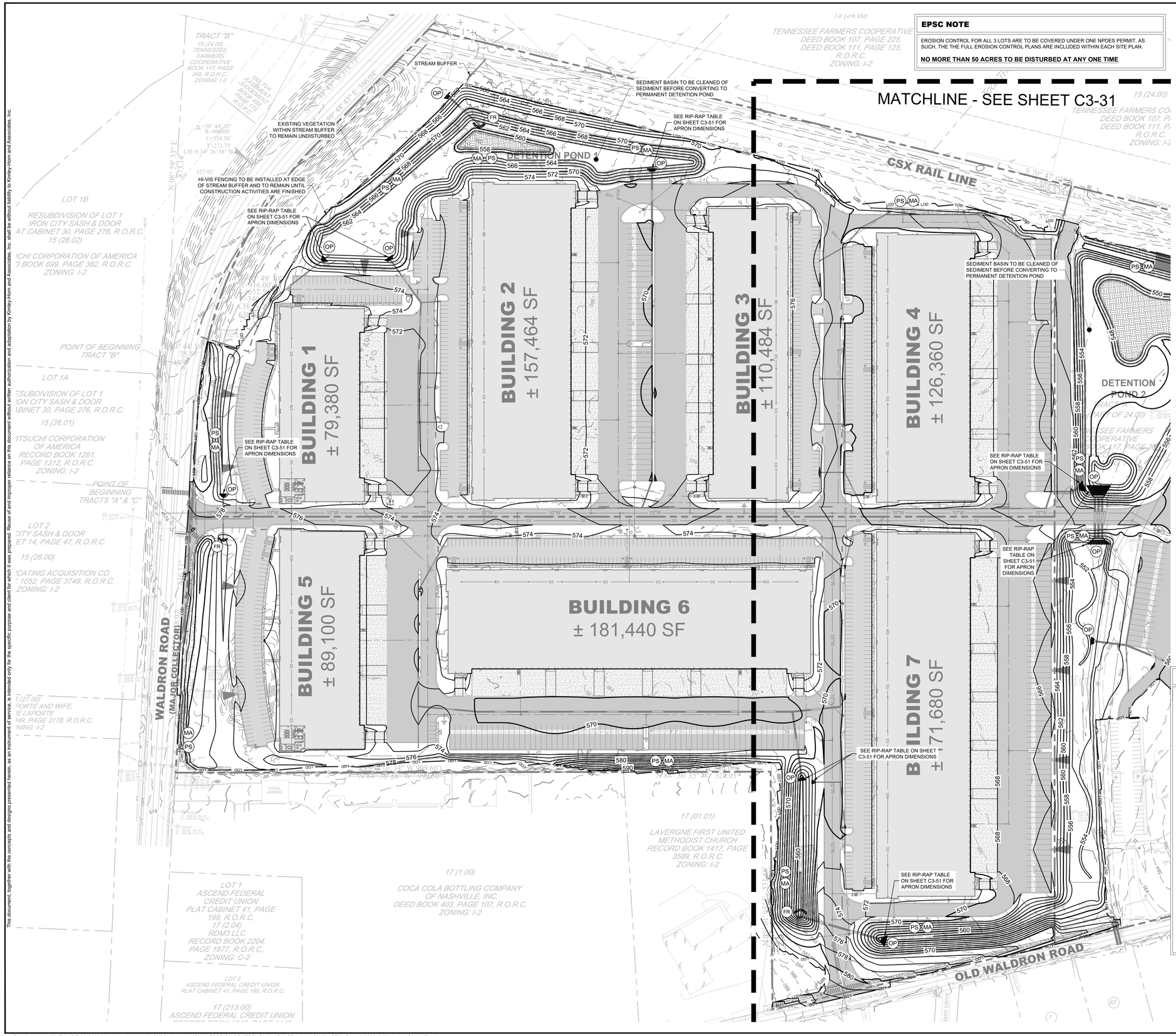
KIMLEY-HORN PROJECT NO. 118163044

EROSION CONTROL PLAN - PHASE 2 ENLARGEMENT

SHEET NUMBER
C3-21

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Drawing name: K:\NSH_LDEV\118163044 - co-op la vergne\4-CADD\plansheets\C3-10 EROSION CONTROL PLAN - PHASE 1.dwg C3-21 LOT 3 Dec 18, 2023 9:54am by: Garrett.Froula



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    - 10.a. WHERE THERE IS SNOW COVER OR FROZEN GROUND CONDITIONS, STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE OR WHERE CONSTRUCTION ACTIVITY ON A PORTION OF THE SITE IS TEMPORARILY CEASED, AND EARTH DISTURBING ACTIVITIES WILL BE RESUMED WITHIN 15 DAYS. TEMPORARY STABILIZATION MEASURES DO NOT HAVE TO BE INITIATED ON THAT PORTION OF SITE.
    - 10.b. ALL EROSION CONTROL MEASURES SHALL BE CHECKED TWICE WEEKLY DURING PROLONGED RAINFALL DAILY CHECKING IS NECESSARY. DOCUMENTATION OF ALL CHECKS AND CORRECTIVE MEASURES SHALL BE KEPT AT THE PROJECT. A MONITORING REPORT CAN BE FOUND IN THE TENNESSEE EROSION AND SEDIMENT CONTROL HANDBOOK.
11. CONTRACTOR TO PROVIDE AN AREA FOR CONCRETE WASH DOWN AND EQUIPMENT REFUELING IN ACCORDANCE WITH TDEC'S STANDARDS. CONTRACTOR TO COORDINATE EXACT LOCATION WITH NPDES DEPARTMENT DURING PRECONSTRUCTION MEETING. CONTROL OF OTHER SITE WASTES SUCH AS MAY CAUSE ADVERSE IMPACTS TO WATER QUALITY IS ALSO REQUIRED BY THE GRADING PERMITEE.
12. SEE ADDITIONAL EROSION CONTROL NOTES ON SHEET C0-01.

EPSC PHASE 3 CONSTRUCTION SEQUENCE

1. PERMANENTLY STABILIZE SITE.
2. UPON PERMANENT SITE STABILIZATION, REMOVE SILT FENCE, TREE PROTECTION, AND ALL OTHER TEMPORARY EROSION CONTROL DEVICES.
3. REMOVE SEDIMENT FROM SEDIMENT BASIN, CONVERT TO DETENTION POND AND INSTALL PROPOSED OUTLET STRUCTURES.
4. FINISH INSTALLING PERMANENT STORMWATER BMP'S SHOWN ON PHASE 3 EROSION CONTROL PLANS.

TREE PROTECTION FENCING NOTE

TREE PROTECTION FENCING IS TO REMAIN IN PLACE UNTIL FINAL INSPECTION AND SIGN-OFF ON THE MASTER BUILDING PERMIT AND CERTIFICATE OF OCCUPANCY BY THE CODES DEPARTMENT. STORMWATER SIGN-OFF AND REMOVAL OF EROSION CONTROL MEASURES IS NOT JUSTIFICATION TO REMOVE TREE PROTECTION FENCING.

EROSION CONTROL LEGEND

FR	STONE FILTER RING - CLASS A RIP-RAP, 2' THICK
OP	OUTLET PROTECTION - REFER TO DETAIL SHEET C3-50
DD	DIVERSION DITCH - REFER TO DETAIL SHEET C3-50
IP	INLET PROTECTION - REFER TO DETAIL SHEET C3-50
SF	SILT FENCE - REFER TO DETAIL SHEET C3-50
EE	EROSION EELS - REFER TO DETAIL SHEET C3-50
CD	ROCK CHECK DAM - REFER TO DETAIL SHEET C3-50
CW	CONCRETE WASHOUT AREA - REFER TO DETAIL SHEET C3-50
MA	EROSION CONTROL MATTING - CONTECH LANDLOK S2 OR APPROVED EQUAL. CONTRACTOR TO INSTALL ON ALL SLOPES 3(H):1(V) OR STEEPER - REFER TO DETAIL SHEET C3-50
CE	CONSTRUCTION EXIT - REFER TO DETAIL SHEET C3-50
TS	TEMPORARY STABILIZATION - REFER TO DETAIL SHEET C3-50
PS	PERMANENT STABILIZATION - REFER TO DETAIL SHEET C3-50
TP	TREE PROTECTION FENCE / HIGH VISIBILITY FENCE - REFER TO DETAIL SHEET C3-50
LOD	LIMITS OF DISTURBANCE
	CONSTRUCTION SIGN

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CO-OP BUSINESS PARK LOT 3

PANATTONI DEVELOPMENT COMPANY
LA VERGNE, TENNESSEE

PANATTONI®

ROBERT JAMES ARTS — REGISTERED ENGINEER — AGENCY NUMBER 121043 — ENGINEER — STATE OF TENNESSEE
12/18/2023

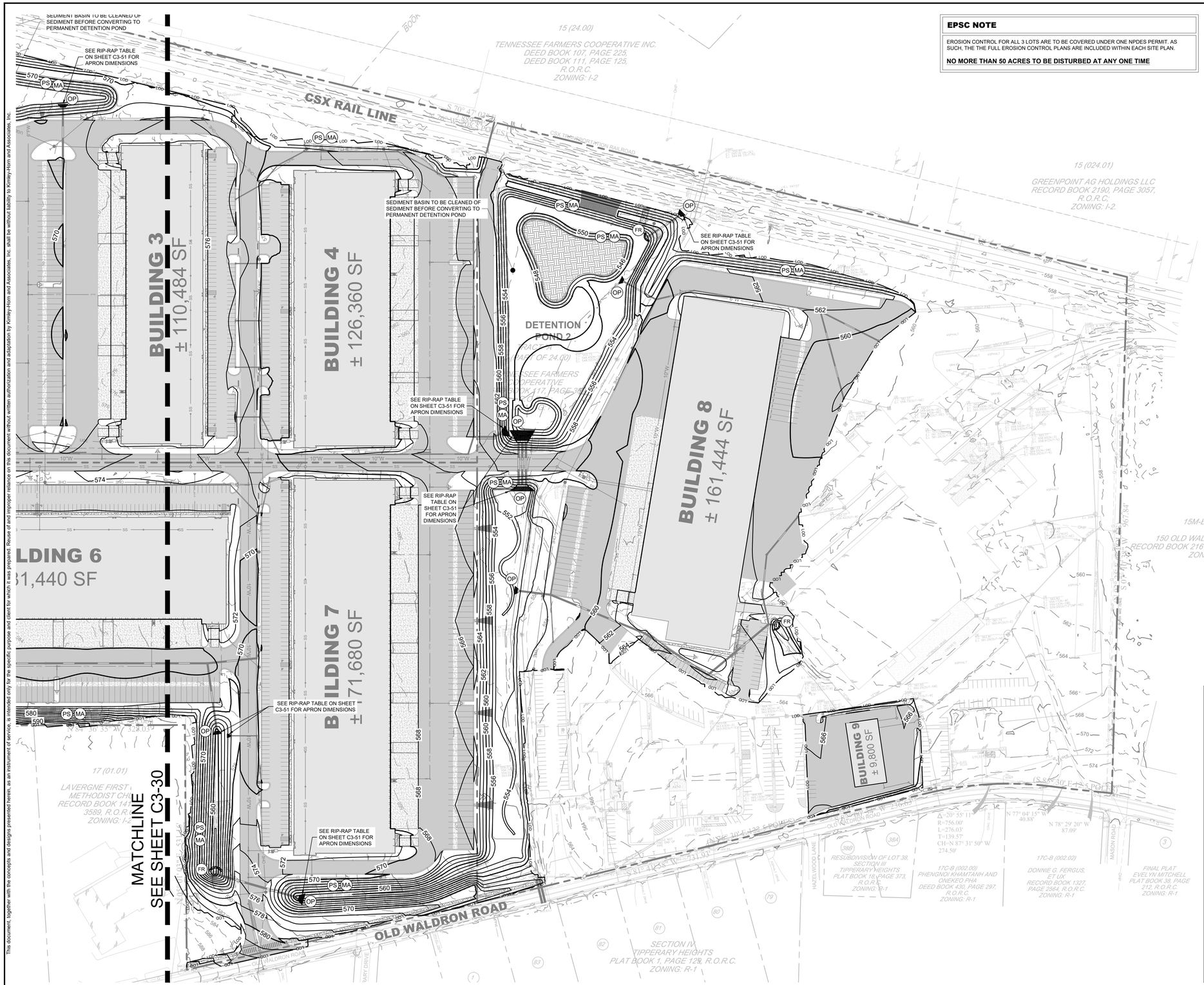
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DESIGNED BY:	GTF
DRAWN BY:	GTF
CHECKED BY:	RJA
DATE:	12/18/2023
KIMLEY-HORN PROJECT NO.	118163044

EROSION CONTROL PLAN - PHASE 3 ENLARGEMENT

SHEET NUMBER
C3-30

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EPSC NOTE

EROSION CONTROL FOR ALL 3 LOTS ARE TO BE COVERED UNDER ONE NPDES PERMIT. AS SUCH, THE THE FULL EROSION CONTROL PLANS ARE INCLUDED WITHIN EACH SITE PLAN.

NO MORE THAN 50 ACRES TO BE DISTURBED AT ANY ONE TIME

EROSION CONTROL NOTES

1. STOCKPILED TOPSOIL OR FILL MATERIAL IS TO BE TREATED SO THE SEDIMENT RUN-OFF WILL NOT CONTAMINATE SURROUNDING AREAS OR ENTER NEARBY STREAMS. STOCK PILE LOCATIONS SHALL BE COORDINATED WITH THE ENGINEER PRIOR TO GRADING ACTIVITIES. EROSION & SEDIMENT CONTROL PRACTICE SHALL BE INSTALLED PRIOR TO STOCKPILE OPERATIONS.
2. ANY SITE USED FOR DISPOSAL AND/OR STOCKPILE OF ANY MATERIAL SHALL BE PROPERLY PERMITTED FOR SUCH ACTIVITY. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO SEE THAT ALL REQUIRED PERMITS ARE SECURED FOR EACH PROPERTY UTILIZED. A COPY OF THE APPROVED PERMIT MUST BE PROVIDED TO THE INSPECTOR PRIOR TO COMMENCEMENT OF WORK ON ANY PROPERTY. FAILURE TO DO SO MAY RESULT IN THE CONTRACTOR REMOVING ANY ILLEGALLY PLACED MATERIAL AT HIS OWN EXPENSE.
3. CONSTRUCT SILT BARRIERS BEFORE BEGINNING GRADING OPERATIONS.
4. MULCH AND SEED ALL DISTURBED AREAS AS SOON AS POSSIBLE AFTER FINAL GRADING IS COMPLETED (WITHIN 15 DAYS OF ACHIEVED FINAL GRADES) UNLESS OTHERWISE INDICATED. CONTRACTOR SHALL TAKE WHATEVER MEANS NECESSARY TO ESTABLISH PERMANENT SOIL STABILIZATION. STEEP SLOPES (GREATER THAN 3:1) SHALL BE STABILIZED WITHIN 7 DAYS OF FINAL GRADING.
5. REMOVE SEDIMENT FROM ALL DRAINAGE STRUCTURES BEFORE ACCEPTANCE BY LOCAL GOVERNING AGENCY OR AS DIRECTED BY THE OWNER'S REPRESENTATIVE.
6. CLEAN SILT BARRIERS WHEN THEY ARE APPROXIMATELY 50% FILLED WITH SEDIMENT OR AS DIRECTED BY THE OWNER'S REPRESENTATIVE. SILT BARRIERS SHALL BE REPLACED AS EFFECTIVENESS IS SIGNIFICANTLY REDUCED OR AS DIRECTED BY THE OWNER'S REPRESENTATIVE.
7. REMOVE THE TEMPORARY EROSION AND WATER POLLUTION CONTROL DEVICES ONLY AFTER A SOLID STAND OF GRASS HAS BEEN ESTABLISHED ON GRADED AREAS AND, WHEN IN THE OPINION OF THE OWNER'S REPRESENTATIVE, THEY ARE NO LONGER NEEDED.
8. PROVIDE TEMPORARY CONSTRUCTION ACCESS(ES) AT THE POINT(S) WHERE CONSTRUCTION VEHICLES EXIT THE CONSTRUCTION AREA. MAINTAIN PUBLIC ROADWAYS FREE OF TRACKED MUD AND DIRT.
9. DO NOT DISTURB VEGETATION OR REMOVE TREES EXCEPT WHEN NECESSARY FOR GRADING PURPOSES.
10. STABILIZATION MEASURES (SEED & MULCH, TRIM WHERE INDICATED) SHALL BE INITIATED AS SOON AS PRACTICABLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, EXCEPT IN THE FOLLOWING TWO CASES.
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TREE PROTECTION FENCING NOTE

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TP	TREE PROTECTION FENCE / HIGH VISIBILITY FENCE - REFER TO DETAIL SHEET C3-50	TP
LOD	LIMITS OF DISTURBANCE	LOD
	CONSTRUCTION SIGN	

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CO-OP BUSINESS PARK
LOT 3

PANATTONI DEVELOPMENT COMPANY
LA VERGNE, TENNESSEE

PANATTONI®

ROBERT JAMES ARTS
REGISTERED ENGINEER
AGENCY FILING
No. 121043
STATE OF TENNESSEE
12/18/2023

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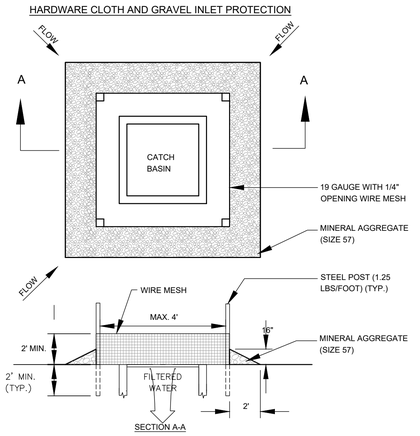
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DRAWN BY:	GTF
CHECKED BY:	RJA
DATE:	12/18/2023
KIMLEY-HORN PROJECT NO.	118163044

EROSION CONTROL PLAN - PHASE 3 ENLARGEMENT

SHEET NUMBER
C3-31

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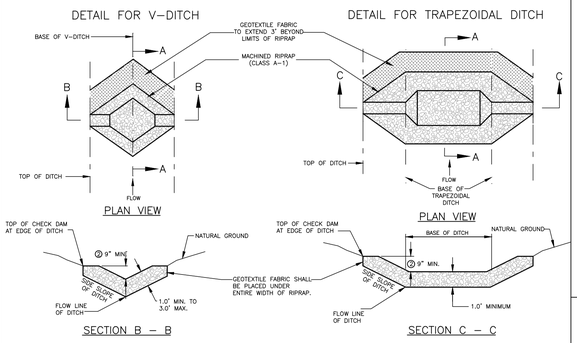
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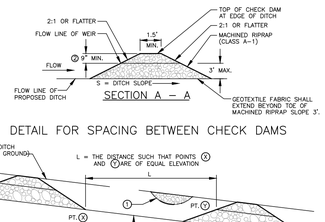


1 INLET PROTECTION - OPEN AREA
NOT TO SCALE

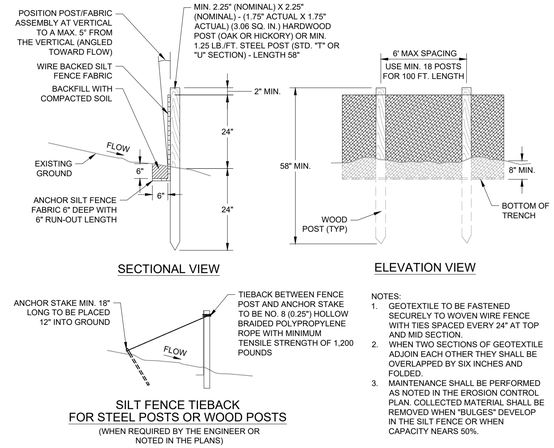
NOTE: CONTRACTOR TO PROVIDE ALTERNATE MEANS FOR INLET PROTECTION IN PAVED AREAS. SUBMIT SUBSTITUTION TO ENGINEER FOR APPROVAL.

5 INLET PROTECTION - PAVED AREA
NOT TO SCALE



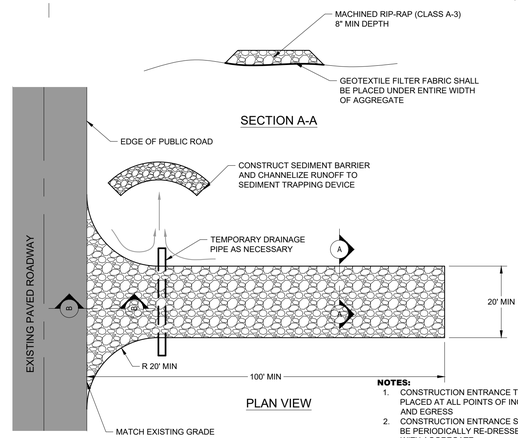


2 CHECK DAM
NOT TO SCALE



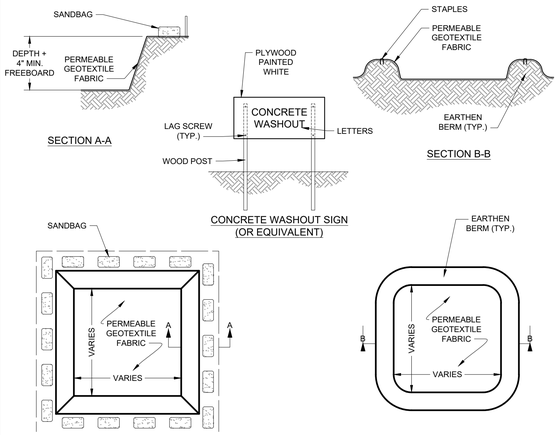
NOTES:
1. GEOTEXTILE TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION.
2. WHEN TWO SECTIONS OF GEOTEXTILE ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY SIX INCHES AND FOLDED.
3. MAINTENANCE SHALL BE PERFORMED AS NOTED IN THE EROSION CONTROL PLAN. COLLECTED MATERIAL SHALL BE REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE OR WHEN CAPACITY NEARS 50%.

3 SILT FENCE TYPE C
NOT TO SCALE



NOTES:
1. CONSTRUCTION ENTRANCE TO BE PLACED AT ALL POINTS OF INGRESS AND EGRESS
2. CONSTRUCTION ENTRANCE SHALL BE PERIODICALLY RE-DRESSED WITH AGGREGATE

4 CONSTRUCTION ENTRANCE
NOT TO SCALE



6 CONCRETE WASHOUT
NOT TO SCALE

LATE WINTER/EARLY SPRING PLANTING	
SPECIES	**RATE (LB/ACRE)**
RYE	120
SEEDING DATES	
EAST	ABOVE 2500 FEET: FEB. 15 - MAY 15
	BELOW 2500 FEET: FEB. 1- MAY 1
MIDDLE	JAN. 1 - MAY 1
WEST	DEC. 1 - APR. 15
MAINTENANCE	
REFERTILIZE IF GROWTH IS NOT FULLY ADEQUATE. RESEED, REFERTILIZE AND MULCH IMMEDIATELY FOLLOWING EROSION OR OTHER DAMAGE.	

SUMMER PLANTING	
SPECIES	**RATE (LB/ACRE)**
OATS	60
BROWN TOP MILLET	30
SEEDING DATES	
EAST	MAY 15 - AUG. 15
MIDDLE	MAY 1 - AUG. 15
WEST	APR. 15 - AUG. 15
MAINTENANCE	
REFERTILIZE IF GROWTH IS NOT FULLY ADEQUATE. RESEED, REFERTILIZE AND MULCH IMMEDIATELY FOLLOWING EROSION OR OTHER DAMAGE.	

FALL PLANTING	
SPECIES	**RATE (LB/ACRE)**
OATS	30
WINTER WHEAT	30
SEEDING DATES	
EAST	AUG. 15 - DEC. 15
MIDDLE	AUG. 15 - DEC. 30
WEST	AUG. 15 - DEC. 30
MAINTENANCE	
REFERTILIZE IF GROWTH IS NOT FULLY ADEQUATE. RESEED, REFERTILIZE AND MULCH IMMEDIATELY FOLLOWING EROSION OR OTHER DAMAGE. IF NECESSARY TO EXTEND TEMPORARY COVER BEYOND JUNE 15, OVERSEED WITH 50 LB/AC CRIMSON CLOVER IN LATE FEBRUARY OR EARLY MARCH.	

ALL SEASON NOTES
SOIL AMENDMENTS
FOLLOW RECOMMENDATIONS OF SOIL TESTS OR APPLY 2,000 LB/ACRE GROUND AGRICULTURAL LIMESTONE AND 750 LB/ACRE 10-10-10 FERTILIZER.
MULCH
APPLY 4,000 LB/ACRE STRAW. ANCHOR STRAW BY TACKING WITH ASPHALT, NETTING, OR A MULCH ANCHORING TOOL. A DISK WITH BLADES SET NEARLY STRAIGHT CAN BE USED AS A MULCH ANCHORING TOOL.

NOTES:
1. TEMPORARY STABILIZATION MEASURES SHALL BE DONE IN ACCORDANCE WITH TDEC EROSION AND SEDIMENT CONTROL HANDBOOK, FOURTH EDITION OR NEWER.

7 TEMPORARY STABILIZATION
NOT TO SCALE

LOW MAINTENANCE AREAS - SLOPES, POOR AND SHALLOW SOILS		
PREFERRED RATE/MIX (LB/AC PLS)	**SEEDING DATES**	
	BEST	*MARGINAL*
15 BROWNTOP MILLET (NURSE CROP)	AUG. 25 - SEP. 15	SEP. 15 - OCT. 25
5 LITTLE BLUESTEM	FEB. 15 - MAY 30	MAR. 21 - MAY 30
2 SWITCH GRASS		
2 TALL DROPSEED		
5 SIDEOATS GRAMMA		
2 BLACK-EYED SUSAN		
2 PARTRIDGE PEA		
1 GREYHEADED CONEFLOWER		

LOW MAINTENANCE AREAS - SLOPES, SOILS > 6" DEEP		
PREFERRED RATE/MIX (LB/AC PLS)	**SEEDING DATES**	
	BEST	*MARGINAL*
15 BROWNTOP MILLET (NURSE CROP)	AUG. 25 - SEP. 15	SEP. 15 - OCT. 25
5 PURPLETOP	FEB. 15 - MAY 30	MAR. 21 - APR. 15
5 LITTLE BLUESTEM		
5 VIRGINIA WILD RYE		
2 BLACK-EYED SUSAN		
2 PARTRIDGE PEA		
1 GREYHEADED CONEFLOWER		

HIGH MAINTENANCE AREAS - LAWNS, ETC.		
PREFERRED RATE/MIX (LB/AC PLS)	**SEEDING DATES**	
	BEST	*MARGINAL*
15 BROWNTOP MILLET (NURSE CROP)	AUG. 30 - OCT. 15	FEB. 15 - APR. 15
2 PARTRIDGE PEA		
45 RED FESCUE		
45 HARD FESCUE		
25 CHEWING FESCUE		

NOTES:
1. MIXES INDICATED ABOVE ARE FOR THE REGION II PLANTING AREA (MIDDLE TENNESSEE).
2. PERMANENT STABILIZATION MEASURES SHALL BE DONE IN ACCORDANCE WITH TDEC EROSION AND SEDIMENT CONTROL HANDBOOK, FOURTH EDITION OR NEWER.
3. REFER TO LANDSCAPE PLANS FOR PERMANENT STABILIZATION PRACTICES AND AREAS TO RECEIVE SOD.

8 PERMANENT STABILIZATION
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CO-OP BUSINESS PARK
LOT 3
PANATTONI DEVELOPMENT COMPANY
LA VERGNE, TENNESSEE

PANATTONI®

ROBERT JAMES ARS REGISTERED ENGINEER AGENCY NUMBER 3719 COMMERCE No. 121065 STATE OF TENNESSEE
12/18/2023

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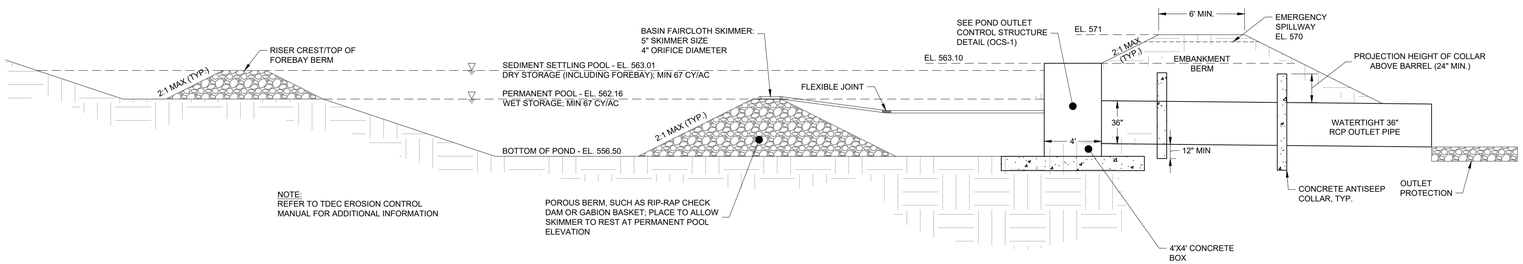
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DATE:	12/18/2023

KIMLEY-HORN PROJECT NO. 118163044

EROSION CONTROL DETAILS

SHEET NUMBER
C3-50

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9 SEDIMENT BASIN #1
SCALE:

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SEDIMENT BASIN #1 DESIGN CALCULATIONS

Project Information

Project Name: CO-OP BUSINESS PARK
KHA Project #: 118163044
Designed by: GTF — Date: 11/13/2023
Checked by: — Date:
Revised by: — Date:

Sediment Basin #1

Basin Drainage Area (A) (ac) =	36.00		
Runoff Coefficient (C) =	0.80		
SCS Curve Number (CN) =	87.00		
Time of Concentration (min) =	5.00		
Rainfall Intensity (2-yr Storm) "I" (in/hr) =	5.48		
Rainfall Intensity (5-yr Storm) "I" (in/hr) =	6.35		
Rainfall Intensity (25-yr Storm) "I" (in/hr) =	7.93		
Flow (Q_2) (cfs) =	157.8		(Q=CYA)
Flow (Q_5) (cfs) =	182.9		(Q=CYA)
Flow (Q_{25}) (cfs) =	228.4		(Q=CYA)
WET Storage Volume (cf) =	65,124		
DRY Storage Volume (cf) =	65,124		
Required Total Volume (cf) =	130,248		(WET + DRY Volumes)
Forebay Volume (cf) =	16,281		
Required Surface Area (sf) =	79,663		
Storage Depth "R" (ft) =	14.50		
Embankment Downstream Side Slope =	3:1		
Embankment Upstream Side Slope =	3:1		
Embankment Total Height =	15.00		
Minimum Embankment Width =	12.00		

Bottom Elevation	Elev (ft)	Area (SF)	Cumulative Volume (CF)
	558.50	3,446	0
	561.50	11,757	36,008
	563.00	45,927	53,179
	571.00	105,549	748,321

Total Basin Volume 748,321 CF
27,716 CY
17.18 Ac-Ft

Designed WET Storage Elev = 562.16
Designed WET Storage Volume (cf) = 65,537
Designed DRY Storage Elev = 563.01
Designed DRY Storage Volume (cf) = 65,652
Designed Total Volume (cf)= 748,321 **O.K. > Minimum Required Volume**

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SEDIMENT BASIN #1 DESIGN CALCULATIONS

Project Information

Project Name: CO-OP BUSINESS PARK
KHA Project #: 118163044
Designed by: GTF — Date: 11/13/2023
Checked by: — Date:
Revised by: — Date:

Skimmer Design

Dewatering Volume = Dry Storage Volume	65,124	CF	Dewatering Time	48	hrs
Skimmer Flow Rate	0.377	CFS		2.00	days
	32,562	ft³/Day	Head (H)	0.333	ft
			Orifice Area	19.85	in²
Skimmer Size	**5.0**	**in**	**Orifice Diameter**	**5.0**	**in**

Principal Spillway Design

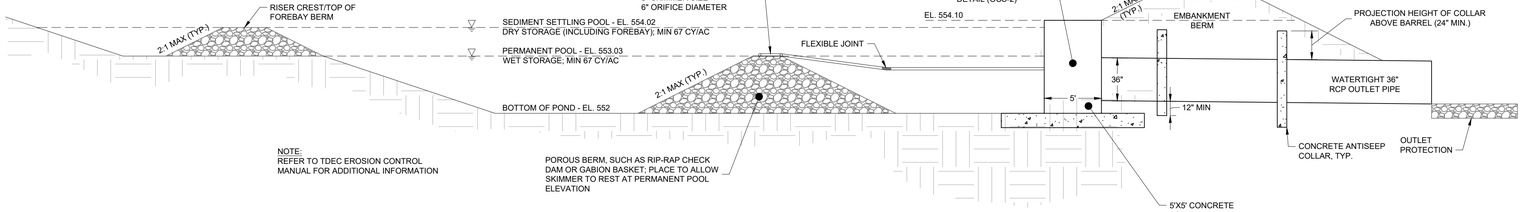
Spillway Type	Inlet Box		Spillway Foundation Type	N/A	
Opening Length	4.0	ft	Base Thickness	N/A	
Opening Width	4.0	ft	Base Length/Width	N/A	ft
Orifice Area	16.00	ft²	Top of Foundation Elevation	N/A	
Spillway Elevation	563.10				
5-yr H	5.81	ft	**5-yr Q**	182.50	CFS
25-yr H	7.80	ft	**25-yr Q**	212.33	CFS

Emergency Spillway Design

Weir Width	10.0	ft			
Weir Elevation	570.00				
Weir C-Value	2.70				
5-yr H	0.29	ft	**5-yr Q**	0.00	CFS
25-yr H	0.70	ft	**25-yr Q**	15.68	CFS

Water Surface Elevations

5-yr Elevation	568.71
5-yr Freeboard	2.29
25-yr Elevation	570.70
25-yr Freeboard	0.30



10 SEDIMENT BASIN #2
SCALE:

Kimley»Horn

SEDIMENT BASIN #2 DESIGN CALCULATIONS

Project Information

Project Name: CO-OP BUSINESS PARK
KHA Project #: 118163044
Designed by: GTF — Date: 11/13/2023
Checked by: — Date:
Revised by: — Date:

Sediment Basin #2

Basin Drainage Area (A) (ac) =	63.00		
Runoff Coefficient (C) =	0.80		
SCS Curve Number (CN) =	88.00		
Time of Concentration (min) =	5.00		
Rainfall Intensity (2-yr Storm) "I" (in/hr) =	5.48		
Rainfall Intensity (5-yr Storm) "I" (in/hr) =	6.35		
Rainfall Intensity (25-yr Storm) "I" (in/hr) =	7.93		
Flow (Q_2) (cfs) =	276.2		(Q=CYA)
Flow (Q_5) (cfs) =	320.0		(Q=CYA)
Flow (Q_{25}) (cfs) =	399.7		(Q=CYA)
WET Storage Volume (cf) =	113,967		
DRY Storage Volume (cf) =	113,967		
Required Total Volume (cf) =	227,934		(WET + DRY Volumes)
Forebay Volume (cf) =	28,492		
Required Surface Area (sf) =	139,409		
Storage Depth "R" (ft) =	7.50		
Embankment Downstream Side Slope =	3:1		
Embankment Upstream Side Slope =	3:1		
Embankment Total Height =	7.00		
Minimum Embankment Width =	12.00		

Bottom Elevation	Elev (ft)	Area (SF)	Cumulative Volume (CF)
	552.00	108,000	0
	553.00	113,000	111,000
	554.00	117,000	226,000
	556.00	193,666	526,666
	558.00	216,517	926,849
	559.00	262,000	1,169,108

Total Basin Volume 1,169,108 CF
43,300 CY
26.84 Ac-Ft

Designed WET Storage Elev = 553.03
Designed WET Storage Volume (cf) = 114,450
Designed DRY Storage Elev = 554.02
Designed DRY Storage Volume (cf) = 114,557
Designed Total Volume (cf)= 1,169,108 **O.K. > Minimum Required Volume**

Kimley»Horn

SEDIMENT BASIN #2 DESIGN CALCULATIONS

Project Information

Project Name: CO-OP BUSINESS PARK
KHA Project #: 118163044
Designed by: GTF — Date: 11/13/2023
Checked by: — Date:
Revised by: — Date:

Skimmer Design

Dewatering Volume = Dry Storage Volume	113,967	CF	Dewatering Time	48	hrs
Skimmer Flow Rate	0.660	CFS		2.00	days
	56,984	ft³/Day	Head (H)	0.500	ft
			Orifice Area	28.37	in²
Skimmer Size	**8.0**	**in**	**Orifice Diameter**	**6.0**	**in**

Principal Spillway Design

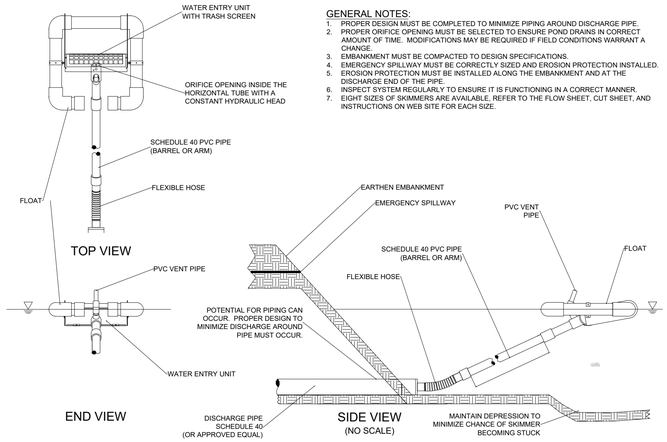
Spillway Type	Inlet Box		Spillway Foundation Type	N/A	
Opening Length	5.0	ft	Base Thickness	N/A	
Opening Width	5.0	ft	Base Length/Width	N/A	ft
Orifice Area	25.00	ft²	Top of Foundation Elevation	N/A	
Spillway Elevation	554.10				
5-yr H	4.51	ft	**5-yr Q**	255.55	CFS
25-yr H	4.89	ft	**25-yr Q**	268.17	CFS

Emergency Spillway Design

Weir Width	50.0	ft			
Weir Elevation	558.00				
Weir C-Value	2.70				
5-yr H	0.61	ft	**5-yr Q**	63.83	CFS
25-yr H	0.99	ft	**25-yr Q**	132.84	CFS

Water Surface Elevations

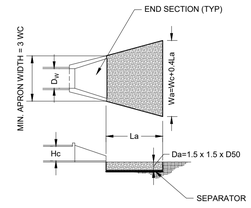
5-yr Elevation	558.61
5-yr Freeboard	0.39
25-yr Elevation	558.99
25-yr Freeboard	0.01



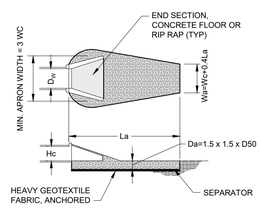
GENERAL NOTES:

1. PROPER DESIGN MUST BE COMPLETED TO MINIMIZE PIPING AROUND DISCHARGE PIPE.
2. PROPER ORIFICE OPENING MUST BE SELECTED TO ENSURE POND DRAINS IN CORRECT AMOUNT OF TIME. MODIFICATIONS MAY BE REQUIRED IF FIELD CONDITIONS WARRANT A CHANGE.
3. EMBANKMENT MUST BE COMPACTED TO DESIGN SPECIFICATIONS.
4. EMERGENCY SPILLWAY MUST BE CORRECTLY SIZED AND EROSION PROTECTION INSTALLED.
5. EROSION PROTECTION MUST BE INSTALLED ALONG THE EMBANKMENT AND AT THE DISCHARGE END OF THE PIPE.
6. INSPECT SYSTEM REGULARLY TO ENSURE IT IS FUNCTIONING IN A CORRECT MANNER.
7. EIGHT SIZES OF SKIMMERS ARE AVAILABLE, REFER TO THE FLOW SHEET, CUT SHEET, AND INSTRUCTIONS ON WEB SITE FOR EACH SIZE.

11 EMBANKMENT DISCHARGE - FAIRCLOTH SKIMMER
NOT TO SCALE



TAILWATER < 0.5 Hc AND ASSUMING FULL CULVERT FLOW (LOW TAILWATER CONDITIONS)



TAILWATER > 0.5 Hc AND ASSUMING FULL CULVERT FLOW (HIGH TAILWATER CONDITIONS)

H_W = HEIGHT OF CULVERT
D_W = WIDTH OF CULVERT
W_C = WIDTH OF RIP-RAP AT START
L_A = LENGTH OF RIP-RAP APRON
W_A = WIDTH OF RIP-RAP APRON AT END
D_{50} = MEDIAN SIZE OF RIP-RAP (6" MIN)
D_{MAX} = MAXIMUM SIZE OF RIP-RAP = 1.5 D_{50}
D_A = DEPTH OF RIP-RAP APRON = 1.5 D_{MAX}
SEPARATOR = GEOTEXTILE UNDERLAYMENT OR GRAVEL FILTER BLANKET

RIP-RAP APRON SUMMARY TABLE

RIP-RAP APRON CHARACTARISTICS	SYMBOL	A0	B0	C0	D0	D3	E0	F0	G0	J0	K0	L0	L2	M0	N0	N1	HW-1	HW-2
NOMINAL RIP-RAP SIZE (INCHES)	D_{50}	15.0	12.0	15.0	12.0	15.0	20.0	20.0	20.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	20.0	20.0
10-YEAR DISCHARGE (CFS)	Q	24.34	51.14	44.17	17.37	16.40	134.13	109.02	124.84	31.78	70.87	101.81	71.37	13.09	169.44	169.44	83.00	83.00
CONDUIT DIAMETER (FT)	D_W	2.50	3.50	3.00	2.00	2.00	4.00	4.00	4.00	2.50	3.50	4.00	3.50	1.50	4.00	4.00	3.00	3.00
START APRON WIDTH (FT)	W_C	7.5	10.5	9.0	6.0	6.0	12.0	12.0	12.0	7.5	10.5	12.0	10.5	4.5	12.0	12.0	9.0	9.0
LENGTH (FT)	L_A	10.0	14.0	12.0	8.0	8.0	20.0	20.0	20.0	10.0	14.0	16.0	14.0	6.0	16.0	16.0	15.0	15.0
APRON DEPTH (INCHES)	D_A	50.0	50.0	50.0	50.0	50.0	48.0	48.0	48.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	48.0	48.0
END APRON WIDTH (FT)	W_A	15.0	20.00	17.00	12.00	12.00	26.00	26.00	26.00	15.00	20.00	23.00	20.00	9.00	23.00	23.00	19.00	19.00
RIP-RAP CLASS PER TDOT	-	B	B	B	B	B	C	C	C	B	B	B	B	B	B	B	C	C

12 OUTLET PROTECTION
NOT TO SCALE

811 Know what's below. Call before you dig.

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CO-OP BUSINESS PARK
LOT 3
PANATTONI DEVELOPMENT COMPANY
LA VERGNE, TENNESSEE

PANATTONI®

ROBERT JAMES ARS — REGISTERED ENGINEER — AGRICULTURE — No. 121045 — STATE OF TENNESSEE
12/18/2023

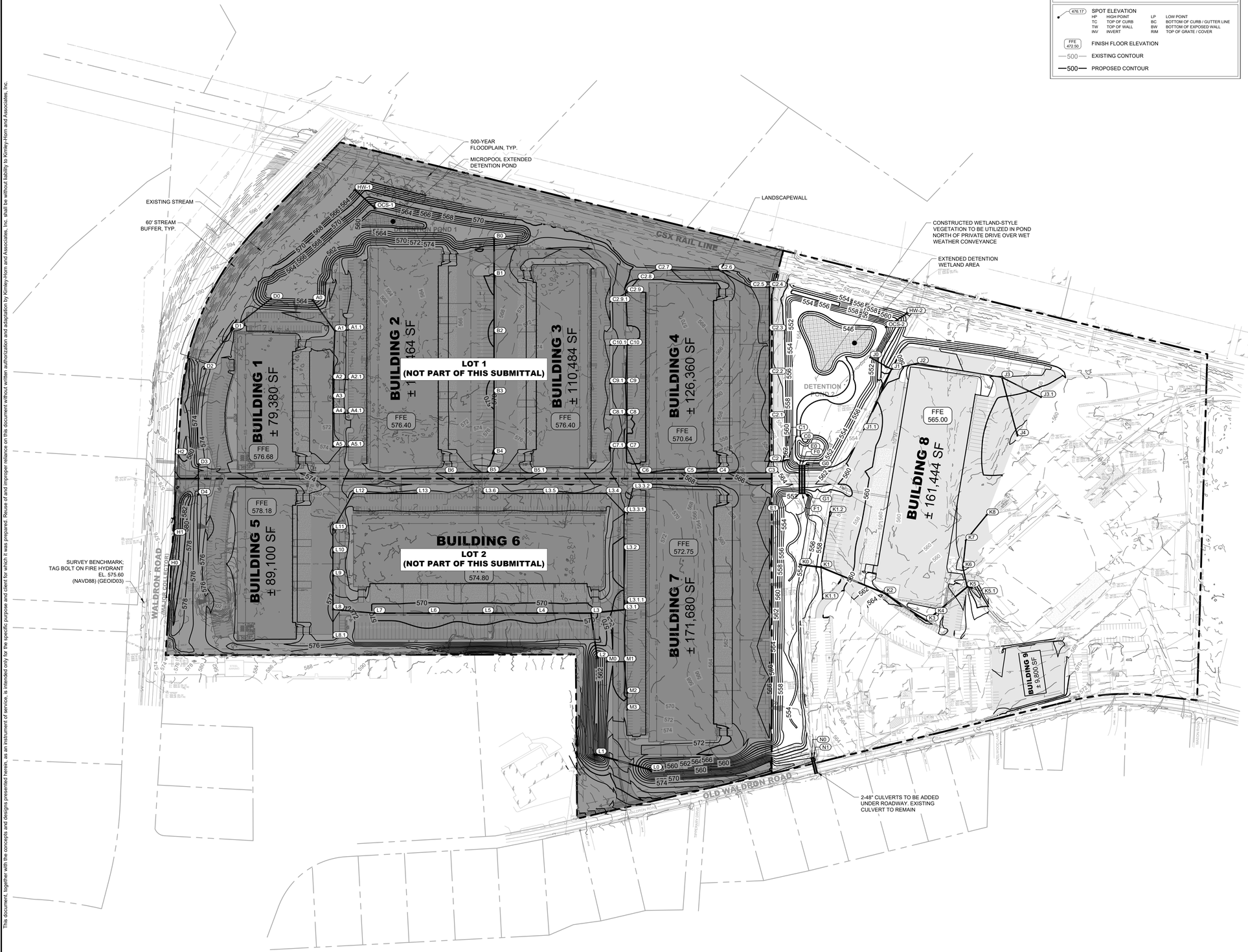
No	REVISIONS	DATE	BY
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DESIGNED BY: GTF
DRAWN BY: GTF
CHECKED BY: RJA
DATE: 12/18/2023
KIMLEY-HORN PROJECT NO. 118163044

EROSION CONTROL DETAILS

SHEET NUMBER
C3-51

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GRADING PLAN LEGEND

- SPOT ELEVATION (476.17)
  - HP HIGH POINT
  - TC TOP OF CURB
  - TW TOP OF WALL
  - INV INVERT
  - LP LOW POINT
  - BC BOTTOM OF CURB / GUTTER LINE
  - BW BOTTOM OF EXPOSED WALL
  - RIM TOP OF GRATE / COVER
- FFE 472.00 — FINISH FLOOR ELEVATION
- 500 — EXISTING CONTOUR
- 500 — PROPOSED CONTOUR

GRADING NOTES

1. CONTRACTOR RESPONSIBLE FOR VERIFYING LOCATION, SIZE, AND ELEVATIONS OF EXISTING UTILITIES AT CONNECTION POINTS PRIOR TO GRADING OR INSTALLATION OF ANY PROPOSED UTILITIES. CONTRACTOR TO IMMEDIATELY NOTIFY OWNER'S REPRESENTATIVE IF DISCREPANCIES ARE FOUND.
2. AREAS FOR CONSTRUCTION THAT REQUIRE DE-WATERING FOR EXCAVATION WILL BE DONE AT NO ADDITIONAL COST TO THE OWNER AND IN ACCORDANCE WITH SECTION 4.1.4 OF THE TENNESSEE GENERAL NPDES PERMIT FOR DISCHARGES OF STORMWATER ASSOCIATED WITH CONSTRUCTION ACTIVITIES.
3. ADDITIONAL EROSION CONTROL DEVICES TO BE USED AS REQUIRED BY LOCAL INSPECTOR.
4. DISTURBED AREAS LEFT IDLE FOR FIVE DAYS, AND NOT TO FINAL GRADE, WILL BE ESTABLISHED TO TEMPORARY VEGETATION. MULCH, TEMPORARY VEGETATION OR PERMANENT VEGETATION SHALL BE COMPLETED ON ALL EXPOSED AREAS WITHIN 14 DAYS AFTER DISTURBANCE. ALL AREAS TO FINAL GRADE WILL BE ESTABLISHED TO PERMANENT VEGETATION UPON COMPLETION.
5. WHEN HAND PLANTING, MULCH (HAY OR STRAW) SHOULD BE UNIFORMLY SPREAD OVER SEEDED AREA WITHIN 24 HOURS OF SEEDING. IF UNABLE TO ACCOMPLISH, MULCH SHALL BE USED AS A TEMPORARY COVER. CONCENTRATED FLOW AREAS AND ALL SLOPES STEEPER THAN 2.5:1 AND WITH A HEIGHT OF TEN FEET OR GREATER (DOES NOT APPLY TO RETAINING WALLS), AND CUTS AND FILLS WITHIN BUFFERS, SHALL BE STABILIZED WITH THE APPROPRIATE EROSION CONTROL MATTING OR BLANKETS.
6. THE GRADING PERMIT MUST BE DISPLAYED ON SITE AT ALL TIMES DURING CONSTRUCTION AND IN PLAIN VIEW FROM A PUBLIC ROAD OR STREET.
7. EROSION AND SEDIMENT CONTROL DEVICES MUST BE DISPLAYED AND INSPECTED PRIOR TO ANY GRADING ON SITE. THE CONTRACTOR MUST CALL FOR AN INSPECTION TO OBTAIN A PERMIT TO GRADE. PLEASE CALL WITH ENOUGH LEAD-TIME FOR AN INSPECTION TO MEET YOUR SCHEDULE.
8. SEDIMENT/EROSION CONTROL DEVICES MUST BE INSPECTED ACCORDING TO LOCAL AND STATE REQUIREMENTS AND AS STIPULATED IN THE STORMWATER POLLUTION PREVENTION PLAN. EACH DEVICE IS TO BE MAINTAINED OR REPLACED IF SEDIMENT ACCUMULATION HAS REACHED ONE HALF THE CAPACITY OF THE DEVICE. ADDITIONAL DEVICES MAY BE NECESSARY AS THE PROJECT PROGRESSES AND NEW CHANNELS HAVE DEVELOPED.
9. THE ESCAPE OF SEDIMENT FROM THE SITE SHALL BE PREVENTED BY THE INSTALLATION OF EROSION AND SEDIMENT CONTROL MEASURES AND PRACTICES PRIOR TO, OR CONCURRENT WITH, LAND-DISTURBING ACTIVITIES.
10. EROSION CONTROL MEASURES WILL BE MAINTAINED AT ALL TIMES. IF FULL IMPLEMENTATION OF THE PLAN DOES NOT PROVIDE FOR EFFECTIVE EROSION CONTROL, ADDITIONAL EROSION CONTROL AND SEDIMENT CONTROL MEASURES SHALL BE IMPLEMENTED TO CONTROL OR TREAT THE SEDIMENT SOURCE.
11. CONTRACTOR SHALL REVIEW SITE GEOTECHNICAL REPORT BEFORE COMMENCING GRADING OPERATIONS.
12. SEED ALL DISTURBED AREAS UNLESS OTHERWISE NOTED AS PART OF THIS CONTRACT. REFER TO LANDSCAPING PLANS FOR AREAS TO RECEIVE SOD.
13. INSTALL SOD OR RIPRAP IN SWALES AS INDICATED ON GRADING PLANS AND EROSION CONTROL PLANS
14. TOPSOIL ON SITE TO BE STRIPPED AND STOCKPILED FOR REUSE IN LAWN AREAS.
15. ADEQUATE DRAINAGE, EROSION AND SEDIMENT CONTROL MEASURES, BEST MANAGEMENT PRACTICES, AND/OR OTHER WATER QUALITY MANAGEMENT FACILITIES SHALL BE PROVIDED AND MAINTAINED AT ALL TIMES DURING CONSTRUCTION. DAMAGES TO ADJACENT PROPERTY AND/OR THE CONSTRUCTION SITE CAUSED BY THE CONTRACTOR'S OR PROPERTY OWNER'S FAILURE TO PROVIDE AND MAINTAIN ADEQUATE DRAINAGE AND EROSION/SEDIMENT CONTROL FOR THE CONSTRUCTION AREA SHALL BE THE RESPONSIBILITY OF THE PROPERTY OWNER AND/OR CONTRACTOR.
16. UNDERGROUND UTILITIES HAVE NOT BEEN VERIFIED BY THE OWNER, DESIGNER, OR THEIR REPRESENTATIVES. BEFORE YOU DIG CALL ONE CALL--811 OR 1-800-752-6007
17. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK AND AGREES TO BE RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT RESULT FROM THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY UNDERGROUND UTILITIES TO REMAIN.

Know what's below. Call before you dig.

GRAPHIC SCALE IN FEET
0 75 150 300

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CO-OP BUSINESS PARK LOT 3

PANATTONI DEVELOPMENT COMPANY
LA VERGNE, TENNESSEE

PANATTONI®

ROBERT JAMES ARMS REGISTERED ENGINEER AGENCY NUMBER COMMERCE No. 121084 STATE OF TENNESSEE
12/18/2023

No.	REVISIONS	DATE	BY
-	-		
0	1		
1	2		
2	3		
3	4		
4	5		
5	6		
6	7		

DESIGNED BY:	GTF
DRAWN BY:	GTF
CHECKED BY:	RJA
DATE:	12/18/2023
KIMLEY-HORN PROJECT NO.	118163044

GRADING AND DRAINAGE PLAN - OVERALL

SHEET NUMBER
C4-30



GRADING NOTES

1. CONTRACTOR RESPONSIBLE FOR VERIFYING LOCATION, SIZE, AND ELEVATIONS OF EXISTING UTILITIES AT CONNECTION POINTS PRIOR TO GRADING OR INSTALLATION OF ANY PROPOSED UTILITIES. CONTRACTOR TO IMMEDIATELY NOTIFY OWNER'S REPRESENTATIVE IF DISCREPANCIES ARE FOUND.
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GRADING PLAN LEGEND

476.17 SPOT ELEVATION

HP	HIGH POINT	LP	LOW POINT
TC	TOP OF CURB	BC	BOTTOM OF CURB / GUTTER LINE
TW	TOP OF WALL	BW	BOTTOM OF EXPOSED WALL
INV	INVERT	RIM	TOP OF GRATE / COVER

FFE 472.50 FINISH FLOOR ELEVATION

500 EXISTING CONTOUR

500 PROPOSED CONTOUR

ADA COMPLIANCE NOTES

1. ALL SIDEWALKS AND ADA PARKING AREAS ARE TO BE IN COMPLIANCE WITH ADA SLOPE CRITERIA, UNLESS EXPLICITLY NOTED.

Know what's below. Call before you dig.

GRAPHIC SCALE IN FEET
0 25 50 100

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CO-OP BUSINESS PARK LOT 3

PANATTONI DEVELOPMENT COMPANY
LA VERGNE, TENNESSEE

PANATTONI®

ROBERT JAMES ARTS
REGISTERED ENGINEER
AGENCY RUNE
PROJECT
No. 121043
STATE OF TENNESSEE
12/18/2023

No	REVISIONS	DATE	BY
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7			

DESIGNED BY:	GTF
DRAWN BY:	GTF
CHECKED BY:	RJA
DATE:	12/18/2023
KIMLEY-HORN PROJECT NO.	118163044

SITE GRADING PLAN - ENLARGEMENT

SHEET NUMBER
C4-31

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Drawing name: K:\NSH_LDEV\118163044 - co-op la vergne\4-CADD\plansheets\C4-31 SITE GRADING PLAN - ENLARGEMENT.dwg C4-31 SITE GRADING PLAN - ENLARGEMENT Dec 18, 2023 9:58am by: Garrett.Froula

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MATCHLINE - SEE SHEET C4-31

GRADING PLAN LEGEND

476.17 SPOT ELEVATION

HP	HIGH POINT	LP	LOW POINT
TC	TOP OF CURB	BC	BOTTOM OF CURB / GUTTER LINE
TW	TOP OF WALL	BW	BOTTOM OF EXPOSED WALL
INV	INVERT	RIM	TOP OF GRATE / COVER

FFE 472.50 FINISH FLOOR ELEVATION

500 EXISTING CONTOUR

500 PROPOSED CONTOUR

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11. CONTRACTOR SHALL REVIEW SITE GEOTECHNICAL REPORT BEFORE COMMENCING GRADING OPERATIONS.
12. SEED ALL DISTURBED AREAS UNLESS OTHERWISE NOTED AS PART OF THIS CONTRACT. REFER TO LANDSCAPING PLANS FOR AREAS TO RECEIVE SOD.
13. INSTALL SOD OR RIPRAP IN SWALES AS INDICATED ON GRADING PLANS AND EROSION CONTROL PLANS
14. TOPSOIL ON SITE TO BE STRIPPED AND STOCKPILED FOR REUSE IN LAWN AREAS.
15. ADEQUATE DRAINAGE, EROSION AND SEDIMENT CONTROL MEASURES, BEST MANAGEMENT PRACTICES, AND/OR OTHER WATER QUALITY MANAGEMENT FACILITIES SHALL BE PROVIDED AND MAINTAINED AT ALL TIMES DURING CONSTRUCTION. DAMAGES TO ADJACENT PROPERTY AND/OR THE CONSTRUCTION SITE CAUSED BY THE CONTRACTOR'S OR PROPERTY OWNER'S FAILURE TO PROVIDE AND MAINTAIN ADEQUATE DRAINAGE AND EROSION/SEDIMENT CONTROL FOR THE CONSTRUCTION AREA SHALL BE THE RESPONSIBILITY OF THE PROPERTY OWNER AND/OR CONTRACTOR.
16. UNDERGROUND UTILITIES HAVE NOT BEEN VERIFIED BY THE OWNER, DESIGNER, OR THEIR REPRESENTATIVES. BEFORE YOU DIG CALL ONE CALL--811 OR 1-800-752-6007
17. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK AND AGREES TO BE RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT RESULT FROM THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY UNDERGROUND UTILITIES TO REMAIN.

ADA COMPLIANCE NOTES

1. ALL SIDEWALKS AND ADA PARKING AREAS ARE TO BE IN COMPLIANCE WITH ADA SLOPE CRITERIA, UNLESS EXPLICITLY NOTED.

BUILDING 9
± 9,800 SF
FFE 568.00

EXISTING STORM INLET TO REMAIN IN USE
WRAP CURB AROUND INLET AS NEEDED TO MAINTAIN FUNCTIONALITY

MATCH EXISTING CONCRETE ELEVATION

MATCH EXISTING CONCRETE ELEVATION

TIE PROPOSED CURB INTO EXISTING WALL

EXISTING WALL TO REMAIN

OLD WALDRON ROAD

Know what's below. Call before you dig. 811

GRAPHIC SCALE IN FEET
0 10 20 40

NORTH

Drawing name: K:\NSH_LDEV\118163044 - co-op la vergne\4-CADD\plansheets\C4-31 SITE GRADING PLAN - ENLARGEMENT.dwg C4-32 SITE GRADING PLAN - ENLARGEMENT Dec 18, 2023 9:58am by: Garrett.Froula

Kimley»Horn
10 Lea Avenue, Suite 400, Nashville, TN 37210
Main: 615.564.2701 | www.kimley-horn.com
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CO-OP BUSINESS PARK LOT 3

PANATTONI DEVELOPMENT COMPANY
LA VERGNE, TENNESSEE

PANATTONI®

ROBERT JAMES ARS
REGISTERED ENGINEER
AGENCY NUMBER
No. 121043
ENGINEER
STATE OF TENNESSEE
12/18/2023

No	REVISIONS	DATE	BY
1			
2			
3			
4			
5			
6			
7			

DESIGNED BY:	GTF
DRAWN BY:	GTF
CHECKED BY:	RJA
DATE:	12/18/2023

KIMLEY-HORN PROJECT NO. 118163044

SITE GRADING PLAN - ENLARGEMENT

SHEET NUMBER
C4-32

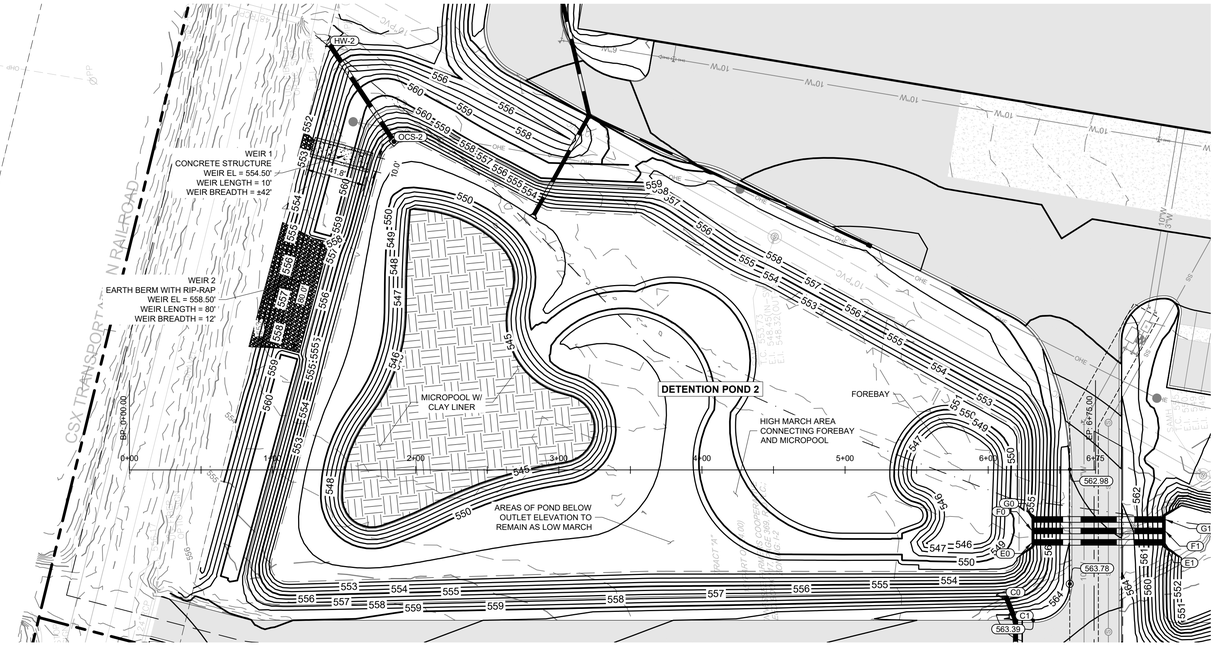
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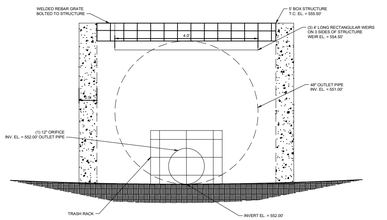
GRADING PLAN LEGEND

476.17	SPOT ELEVATION			
	HP	HIGH POINT	LP	LOW POINT
	TC	TOP OF CURB	BC	BOTTOM OF CURB / GUTTER LINE
	TW	TOP OF WALL	BW	BOTTOM OF EXPOSED WALL
	INV	INVERT	RIM	TOP OF GRATE / COVER
FFE 472.50	FINISH FLOOR ELEVATION			
500	EXISTING CONTOUR			
500	PROPOSED CONTOUR			

GRADING NOTES

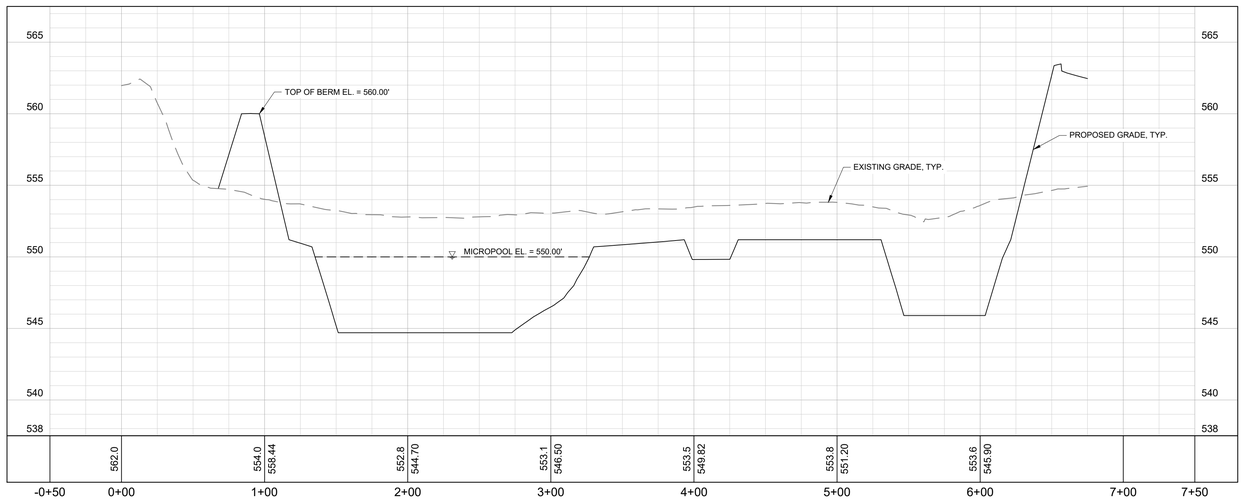
1. CONTRACTOR RESPONSIBLE FOR VERIFYING LOCATION, SIZE, AND ELEVATIONS OF EXISTING UTILITIES AT CONNECTION POINTS PRIOR TO GRADING OR INSTALLATION OF ANY PROPOSED UTILITIES. CONTRACTOR TO IMMEDIATELY NOTIFY OWNER'S REPRESENTATIVE IF DISCREPANCIES ARE FOUND.
2. AREAS FOR CONSTRUCTION THAT REQUIRE DE-WATERING FOR EXCAVATION WILL BE DONE AT NO ADDITIONAL COST TO THE OWNER AND IN ACCORDANCE WITH SECTION 4.1.4 OF THE TENNESSEE GENERAL NPDES PERMIT FOR DISCHARGES OF STORMWATER ASSOCIATED WITH CONSTRUCTION ACTIVITIES.
3. ADDITIONAL EROSION CONTROL DEVICES TO BE USED AS REQUIRED BY LOCAL INSPECTOR.
4. DISTURBED AREAS LEFT IDLE FOR FIVE DAYS, AND NOT TO FINAL GRADE, WILL BE ESTABLISHED TO TEMPORARY VEGETATION. MULCH, TEMPORARY VEGETATION OR PERMANENT VEGETATION SHALL BE COMPLETED ON ALL EXPOSED AREAS WITHIN 14 DAYS AFTER DISTURBANCE. ALL AREAS TO FINAL GRADE WILL BE ESTABLISHED TO PERMANENT VEGETATION UPON COMPLETION. WHEN HAND PLANTING, MULCH (HAY OR STRAW) SHOULD BE UNIFORMLY SPREAD OVER SEEDED AREA WITHIN 24 HOURS OF SEEDING. IF UNABLE TO ACCOMPLISH, MULCH SHALL BE USED AS A TEMPORARY COVER. CONCENTRATED FLOW AREAS AND ALL SLOPES STEEPER THAN 2.5:1 AND WITH A HEIGHT OF TEN FEET OR GREATER (DOES NOT APPLY TO RETAINING WALLS), AND CUTS AND FILLS WITHIN BUFFERS, SHALL BE STABILIZED WITH THE APPROPRIATE EROSION CONTROL MATTING OR BLANKETS.
5. THE GRADING PERMIT MUST BE DISPLAYED ON SITE AT ALL TIMES DURING CONSTRUCTION AND IN PLAIN VIEW FROM A PUBLIC ROAD OR STREET.
6. EROSION AND SEDIMENT CONTROL DEVICES MUST BE DISPLAYED AND INSPECTED PRIOR TO ANY GRADING ON SITE. THE CONTRACTOR MUST CALL FOR AN INSPECTION TO OBTAIN A PERMIT TO GRADE. PLEASE CALL WITH ENOUGH LEAD-TIME FOR AN INSPECTION TO MEET YOUR SCHEDULE.
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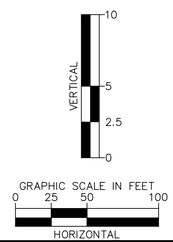


POND 2 OUTLET CONTROL STRUCTURE (OCS-2)
N.T.S.

SECTION A-A



Know what's below. Call before you dig.



Kimley»Horn
10 Lea Avenue, Suite 400, Nashville, TN 37210
Main: 615.564.2701 | www.kimley-horn.com
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CO-OP BUSINESS PARK LOT 3

PANATTONI DEVELOPMENT COMPANY
LA VERGNE, TENNESSEE

PANATTONI®

ROBERT JAMES ARTS — REGISTERED ENGINEER — AGRICULTURE — COMMERCE — No. 121045 — STATE OF TENNESSEE
12/18/2023

No.	REVISIONS	DATE	BY
-	-		
0			
1			
2			
3			
4			
5			
6			
7			

DESIGNED BY:	GTF
DRAWN BY:	GTF
CHECKED BY:	RJA
DATE:	12/18/2023
KIMLEY-HORN PROJECT NO.	118163044

SITE GRADING PLAN - ENLARGEMENT

SHEET NUMBER
C4-41

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STRUCTURE TABLE		
NAME	DESCRIPTION	TOP GRATE
A0	HEADWALL	N/A
A1	JBS 3101	572.89
A1.1	JBS 3101	574.25
A2	JBS 4310	570.97
A2.1	JBS 3101	574.25
A3	JBS 4310	571.05
A4	JBS 4310	571.05
A4.1	JBS 3101	574.25
A5	JBS 4310	571.23
A5.1	JBS 3101	574.35
B0	HEADWALL	N/A
B1	DOUBLE JBS 4310	569.05
B2	DOUBLE JBS 4310	569.52
B3	DOUBLE JBS 4310	569.37
B4	DOUBLE JBS 4310	569.91
B5	JBS 3101	572.29
B5.1	JBS 3101	573.71
B6	JBS 3101	573.70
C0	HEADWALL	N/A
C1	JBS 3101	563.34
C2	JBS 4310	563.59
C2.1	JBS 4310	563.24
C2.2	JBS 4310	562.89
C2.3	JBS 4310	562.89
C2.4	JBS 4310	562.89
C2.5	JBS 3101	564.00
C2.6	JBS 3101	566.21
C2.7	JBS 3101	568.61
C2.8	JBS 3101	569.41
C2.9	JBS 3101	568.76
C2.9.1	JBS 3101	573.41
C3	JBS 3101	564.68
C4	JBS 3101	566.37
C5	JBS 3101	567.84
C6	JBS 3101	569.86
C7	JBS 3101	568.73
C7.1	JBS 3101	573.89
C8	JBS 3101	569.19
C8.1	JBS 3101	574.01
C9	JBS 3101	568.39

STRUCTURE TABLE		
NAME	DESCRIPTION	TOP GRATE
C9.1	JBS 3101	573.72
C10	JBS 3101	568.39
C10.1	JBS 3101	573.94
D0	HEADWALL	N/A
D1	MANHOLE	573.81
D2	JBS 2272	570.92
D3	HEADWALL	N/A
D4	HEADWALL	N/A
E0	HEADWALL	N/A
E1	HEADWALL	N/A
EX 0	EXISTING CB TO REMAIN	N/A
EX 1	EXISTING CB TO REMAIN	N/A
F0	HEADWALL	N/A
F1	HEADWALL	N/A
G0	HEADWALL	N/A
G1	HEADWALL	N/A
H0	JBS 3101	574.64
H1	JBS 3101	575.40
H2	JBS 3101	578.72
HW-1	HEADWALL	N/A
HW-2	HEADWALL	N/A
J0	HEADWALL	N/A
J1	JBS 3101	559.50
J1.1	JBS 3101	558.60
J2	JBS 3101	560.49
J3	MANHOLE	561.89
J3.1	JBS 4310	558.23
J4	JBS 4310	557.81
K0	HEADWALL	N/A
K1	JBS 4310	558.48
K1.1	JBS 3101	559.87
K1.2	JBS 4310	557.80
K2	JBS 3101	563.27
K3	JBS 3101	563.56
K4	JBS 2272	562.40
K5	JBS 3101	563.22
K5.1	HEADWALL	N/A
K6	JBS 4310	560.47
K7	JBS 4310	560.59
K8	JBS 4310	560.59

STRUCTURE TABLE		
NAME	DESCRIPTION	TOP GRATE
L0	HEADWALL	N/A
L1	HEADWALL	N/A
L2	HEADWALL	N/A
L3	JBS 4310	569.04
L3.1	JBS 3101	568.92
L3.1.1	JBS 3101	569.94
L3.2	JBS 3101	568.78
L3.3	JBS 3101	572.14
L3.3.1	JBS 3101	569.94
L3.3.2	JBS 3101	571.06
L3.4	JBS 3101	572.43
L3.5	JBS 3101	572.43
L3.6	JBS 3101	572.54
L4	JBS 4310	569.04
L5	JBS 4310	569.04
L6	JBS 4310	568.82
L7	JBS 4310	569.70
L8	JBS 4310	571.45
L8.1	JBS 2272	572.80
L9	JBS 4310	571.67
L10	JBS 4310	571.67
L11	JBS 4310	571.67
L12	JBS 3101	572.43
L13	JBS 3101	572.43
M0	HEADWALL	N/A
M1	JBS 3101	569.35
M2	JBS 3101	570.31
M3	JBS 3101	570.58
N0	HEADWALL	N/A
N0.1	Null Structure	N/A
N1	HEADWALL	N/A
N1.1	Null Structure	N/A
OCS-1	OUTLET CONTROL STRUCTURE	N/A
OCS-2	OUTLET CONTROL STRUCTURE	N/A

PIPE TABLE							
NAME	UPSTREAM	DOWNSTREAM	SIZE	LENGTH	SLOPE	MATERIAL	MIN. COVER
A1 - A0	563.73 (A1)	562.50 (A0)	30"	122'	1.01%	RCP	-2.114 FT.
A1.1 - A1	570.57 (A1.1)	566.33 (A1)	18"	44'	9.82%	RCP	1.918 FT.
A2 - A1	564.61 (A2)	563.83 (A1)	30"	158'	0.50%	RCP	3.569 FT.
A2.1 - A2	570.57 (A2.1)	567.21 (A2)	18"	50'	6.86%	RCP	1.688 FT.
A3 - A2	565.02 (A3)	564.71 (A2)	30"	62'	0.50%	RCP	3.238 FT.
A4 - A3	565.36 (A4)	565.12 (A3)	24"	48'	0.50%	RCP	3.440 FT.
A4.1 - A4	568.75 (A4.1)	567.96 (A4)	18"	50'	1.61%	RCP	1.382 FT.
A5 - A4	566.00 (A5)	565.46 (A4)	24"	108'	0.50%	RCP	2.981 FT.
A5.1 - A5	570.42 (A5.1)	567.00 (A5)	18"	50'	6.97%	RCP	1.884 FT.
B1 - B0	562.12 (B1)	561.50 (B0)	42"	121'	0.51%	RCP	-2.057 FT.
B2 - B1	563.15 (B2)	562.22 (B1)	36"	186'	0.50%	RCP	3.503 FT.
B3 - B2	564.22 (B3)	563.25 (B2)	36"	196'	0.50%	RCP	1.813 FT.
B4 - B3	565.10 (B4)	564.32 (B3)	30"	196'	0.40%	RCP	2.014 FT.
B5 - B4	565.52 (B5)	565.20 (B4)	30"	64'	0.50%	RCP	1.914 FT.
B5.1 - B5	569.50 (B5.1)	567.02 (B5)	24"	144'	1.73%	RCP	1.956 FT.
B6 - B5	568.00 (B6)	566.02 (B5)	24"	137'	1.45%	RCP	3.400 FT.
C1 - C0	551.21 (C1)	551.02 (C0)	36"	18'	1.04%	RCP	4.975 FT.
C2 - C1	554.32 (C2)	554.10 (C1)	36"	43'	0.50%	RCP	5.904 FT.
C2.1 - C2	556.28 (C2.1)	555.58 (C2)	36"	141'	0.50%	RCP	3.624 FT.
C2.2 - C2.1	557.09 (C2.2)	556.38 (C2.1)	30"	141'	0.50%	RCP	3.008 FT.
C2.3 - C2.2	557.89 (C2.3)	557.19 (C2.2)	24"	142'	0.50%	RCP	2.744 FT.
C2.4 - C2.3	558.70 (C2.4)	557.99 (C2.3)	24"	141'	0.50%	RCP	1.939 FT.
C2.5 - C2.4	559.93 (C2.5)	558.80 (C2.4)	18"	62'	1.83%	RCP	2.365 FT.

PIPE TABLE							
NAME	UPSTREAM	DOWNSTREAM	SIZE	LENGTH	SLOPE	MATERIAL	MIN. COVER
C2.6 - C2.5	562.18 (C2.6)	560.03 (C2.5)	18"	118'	1.83%	RCP	2.265 FT.
C2.7 - C2.6	563.29 (C2.7)	562.28 (C2.6)	18"	204'	0.50%	RCP	2.221 FT.
C2.8 - C2.7	563.72 (C2.8)	563.39 (C2.7)	18"	65'	0.50%	RCP	3.506 FT.
C2.9 - C2.8	564.09 (C2.9)	563.82 (C2.8)	18"	55'	0.50%	RCP	2.959 FT.
C2.9.1 - C2.9	568.72 (C2.9.1)	564.22 (C2.9)	18"	65'	7.00%	RCP	1.445 FT.
C3 - C2	556.49 (C3)	555.48 (C2)	30"	40'	2.59%	RCP	5.323 FT.
C4 - C3	560.69 (C4)	556.59 (C3)	24"	159'	2.59%	RCP	3.436 FT.
C5 - C4	561.31 (C5)	560.79 (C4)	24"	105'	0.50%	RCP	3.336 FT.
C6 - C5	562.04 (C6)	561.31 (C5)	24"	146'	0.50%	RCP	4.275 FT.
C7 - C6	562.99 (C7)	562.54 (C6)	18"	91'	0.50%	RCP	4.028 FT.
C7.1 - C7	567.59 (C7.1)	564.00 (C7)	18"	56'	6.40%	RCP	3.017 FT.
C8 - C7	563.53 (C8)	562.99 (C7)	18"	108'	0.50%	RCP	3.957 FT.
C8.1 - C8	570.80 (C8.1)	564.00 (C8)	18"	56'	12.14%	RCP	0.823 FT.
C9 - C8	564.03 (C9)	563.53 (C8)	18"	101'	0.50%	RCP	2.649 FT.
C9.1 - C9	570.51 (C9.1)	565.00 (C9)	18"	56'	9.83%	RCP	-0.145 FT.
C10 - C9	564.65 (C10)	564.03 (C9)	18"	125'	0.50%	RCP	2.028 FT.
C10.1 - C10	570.73 (C10.1)	566.25 (C10)	18"	56'	8.00%	RCP	0.430 FT.
D1 - D0	565.99 (D1)	564.00 (D0)	24"	158'	1.26%	RCP	-3.333 FT.
D2 - D1	566.88 (D2)	566.09 (D1)	24"	159'	0.50%	RCP	1.790 FT.
D4 - D3	572.25 (D4)	571.82 (D3)	24"	98'	0.45%	RCP	-1.204 FT.
E1 - E0	550.85 (E1)	550.39 (E0)	48"	93'	0.50%	RCP	-4.504 FT.
EX 1 - H2	576.66 (EX 1)	574.72 (H2)	18"	180'	1.08%	RCP	0.000 FT.
F1 - F0	550.85 (F1)	550.39 (F0)	48"	93'	0.50%	RCP	-4.504 FT.

PIPE TABLE							
NAME	UPSTREAM	DOWNSTREAM	SIZE	LENGTH	SLOPE	MATERIAL	MIN. COVER
G1 - G0	550.85 (G1)	550.39 (G0)	48"	93'	0.50%	RCP	-4.504 FT.
H0 - EX 0	571.19 (H0)	570.75 (EX 0)	18"	103'	0.43%	RCP	1.550 FT.
H1 - H0	571.73 (H1)	571.29 (H0)	18"	101'	0.43%	RCP	-0.050 FT.
H2 - H1	574.62 (H2)	571.83 (H1)	18"	261'	1.07%	RCP	-0.167 FT.
J1 - J0	551.56 (J1)	551.20 (J0)	30"	80'	0.46%	RCP	-2.942 FT.
J1.1 - J1	555.14 (J1.1)	551.81 (J1)	18"	216'	1.55%	RCP	1.748 FT.
J2 - J1	552.05 (J2)	551.66 (J1)	30"	86'	0.46%	RCP	5.043 FT.
J3 - J2	553.41 (J3)	552.15 (J2)	24"	278'	0.46%	RCP	6.091 FT.
J3 - J3.1	554.15 (J3)	554.53 (J3.1)	30"	143'	0.26%	*	1.792 FT.
J4 - J3	554.39 (J4)	553.41 (J3)	30"	196'	0.50%	*	1.105 FT.
K1 - K0	553.10 (K1)	552.76 (K0)	42"	69'	0.50%	RCP	-3.605 FT.
K1 - K1.2	553.15 (K1)	554.05 (K1.2)	24"	180'	0.50%	RCP	1.505 FT.
K1.1 - K1	556.93 (K1.1)	554.54 (K1)	15"	103'	2.33%	RCP	0.079 FT.
K2 - K1	554.21 (K2)	553.10 (K1)	42"	222'	0.50%	RCP	1.317 FT.
K3 - K2	555.03 (K3)	554.21 (K2)	42"	164'	0.50%	RCP	4.657 FT.
K4 - K3	555.21 (K4)	555.03 (K3)	42"	38'	0.50%	RCP	3.307 FT.
K5 - K4	555.89 (K5)	555.21 (K4)	42"	135'	0.50%	RCP	3.307 FT.
K5 - K5.1	555.89 (K5)	556.00 (K5.1)	36"	14'	0.83%	RCP	-1.841 FT.
K6 - K5	556.20 (K6)	555.89 (K5)	30"	65'	0.49%	RCP	1.451 FT.
K7 - K6	556.64 (K7)	556.20 (K6)	30"	89'	0.50%	*	2.028 FT.
K8 - K7	557.17 (K8)	556.64 (K7)	30"	107'	0.50%	*	1.436 FT.
L1 - L0	557.75 (L1)	556.83 (L0)	48"	186'	0.50%	RCP	-4.910 FT.
L3 - L2	560.33 (L3)	559.61 (L2)	42"	146'	0.50%	RCP	-3.875 FT.

STORMWATER PIPE NOTE

PIPES DENOTED WITH AN ASTERISK ON THE PIPE TABLES ARE TO BE 30" x 19" CONCRETE HORIZONTAL ELLIPTICAL CULVERTS.

THE PIPE AND STRUCTURE TABLES SHOWN ARE FOR THE ENTIRETY OF LOTS 1, 2, AND 3 OF THE CO-OP BUSINESS PARK, AS THEY ARE PART OF A SHARED REGIONAL STORMWATER MANAGEMENT PLAN.

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CO-OP BUSINESS PARK LOT 3

PANATTONI DEVELOPMENT COMPANY
LA VERGNE, TENNESSEE

PANATTONI®

ROBERT JAMES ARMS — REGISTERED ENGINEER — AGENCY NAME — COMMENT — 12/18/2023 — No. 121045 — STATE OF TENNESSEE

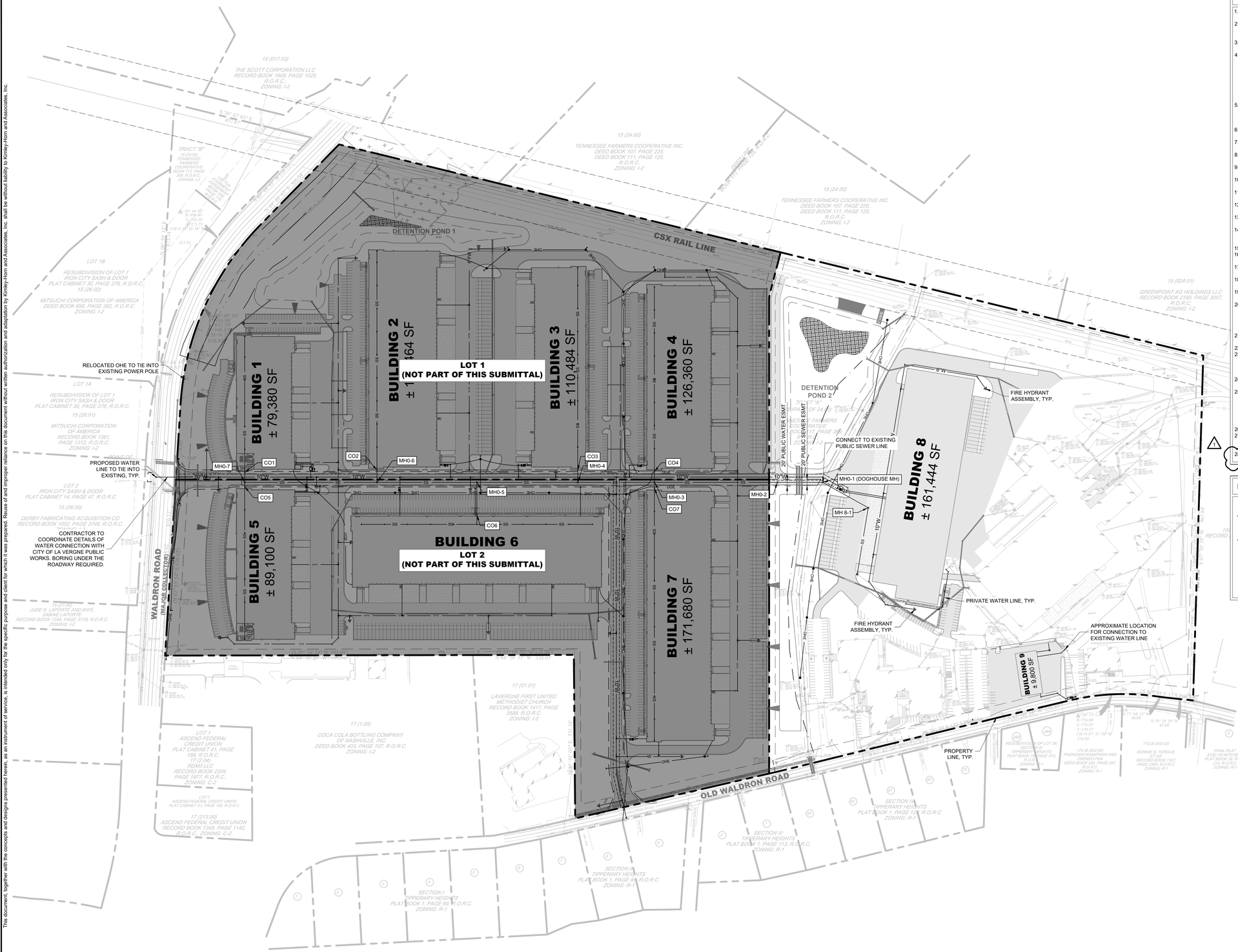
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DESIGNED BY:	GTF
DRAWN BY:	GTF
CHECKED BY:	RJA
DATE:	12/18/2023

KIMLEY-HORN PROJECT NO. 118163044

STORMWATER TABLES

SHEET NUMBER
C4-50



SITE UTILITY NOTES

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13. THE CITY OF LA VERGNE AND/OR CONTRACTOR SHALL SET INDIVIDUAL WATER METERS IN FIELD AS REQUIRED.
14. CONTRACTOR SHALL REPLACE IN LIKE KIND ALL PAVEMENT AREAS REMOVED OR DISTURBED AS A RESULT OF THE WATER MAIN INSTALLATION AND ASSOCIATED WORK.
15. PRIVATE WATER MAIN AND LINES TO HAVE MINIMUM OF 30" COVER.
16. CONTRACTOR SHALL BE A STATE OF TENNESSEE LICENSED CONTRACTOR APPROVED TO INSTALL PUBLIC WATER MAINS.
17. CONTRACTOR SHALL OBTAIN AND PAY FOR ALL FEES, PERMITS AND LICENSES AS PART OF THE CONTRACT.
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19. LUBRICANTS SHALL BE NON-TOXIC AND SHALL NOT PROMOTE BIOLOGICAL GROWTH. SOLVENT-CEMENTED JOINTS ARE NOT PERMITTED.
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21. PRESSURE AND LEAKAGE TESTS SHALL BE PREFORMED IN STRICT ACCORDANCE WITH CURRENT A.W.W.A STANDARD C600 AND/OR MANUFACTURER'S PROCEDURES.
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26. ALL METERS ARE REQUIRED TO BE BADGER AUTOMATIC READ METERS.
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28. NO MORE THAN 500 FT. OF OPEN TRENCH WILL BE ALLOWED AT ONE TIME.

LEGEND

- SANITARY SEWER MANHOLE
- SS — SANITARY SEWER LINE
- FIRE HYDRANT
- W — WATER LINE
- WATER METER
- BF — BACKFLOW PREVENTER
- FDC — FIRE DEPARTMENT CONNECTION

FIRE FLOW TEST

COMPLETED BY:	SCOTT TATALOVICH CITY OF LA VERGNE
DATE COMPLETED:	SEPTEMBER 9, 2022
STATIC/RESIDUAL HYDRANT	
FH #:	FH246
LOCATION:	HAZELWOOD LANE & OLD WALDRON ROAD
STATIC PRESSURE:	80 PSI
RESIDUAL PRESSURE:	66 PSI
FLOW:	6,768 GPM
FLOW HYDRANT 1	
FH #:	FH1603
LOCATION:	MASON ROAD & OLD WALDRON ROAD
STATIC PRESSURE:	80 PSI
RESIDUAL PRESSURE:	32 PSI
FLOW:	1,898 GPM
FLOW HYDRANT 2	
FH #:	FH605
LOCATION:	TIPPERARY DRIVE & OLD WALDRON ROAD
STATIC PRESSURE:	80 PSI
RESIDUAL PRESSURE:	50 PSI
FLOW:	1,186 GPM

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CO-OP BUSINESS PARK LOT 3

PANATTONI DEVELOPMENT COMPANY
LA VERGNE, TENNESSEE

PANATTONI®

ROBERT JAMES ARMS — REGISTERED ENGINEER — STATE OF TENNESSEE — 121045 — 12/18/2023

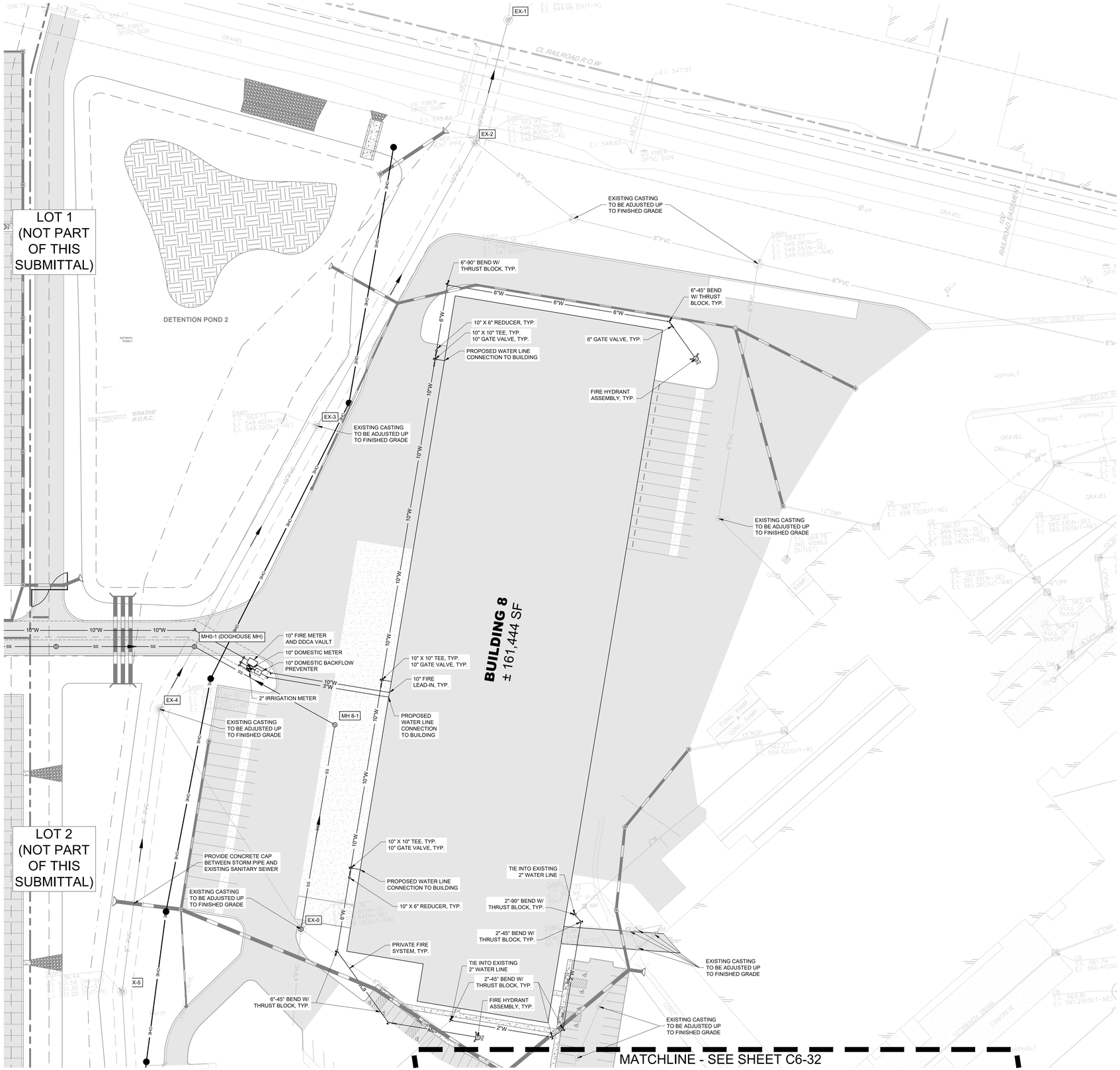
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DESIGNED BY: GTF
DRAWN BY: GTF
CHECKED BY: RJA
DATE: 12/18/2023
KIMLEY-HORN PROJECT NO. 118163044

UTILITY PLAN - OVERALL

SHEET NUMBER
C6-30

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LEGEND

- SANITARY SEWER MANHOLE
- SANITARY SEWER LINE
- FIRE HYDRANT
- WATER LINE
- WATER METER
- BACKFLOW PREVENTER
- FIRE DEPARTMENT CONNECTION

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CO-OP BUSINESS PARK LOT 3

PANATTONI DEVELOPMENT COMPANY
LA VERGNE, TENNESSEE

PANATTONI®

ROBERT JAMES ARTS
REGISTERED ENGINEER
AGENCY #1195
No. 121045
STATE OF TENNESSEE
12/18/2023

No	REVISIONS	DATE	BY
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DESIGNED BY:	GTF
DRAWN BY:	GTF
CHECKED BY:	RJA
DATE:	12/18/2023
KIMLEY-HORN PROJECT NO.	118163044

UTILITY PLAN - ENLARGEMENT

SHEET NUMBER
C6-31

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MATCHLINE - SEE SHEET C6-31

EXISTING CASTING TO BE ADJUSTED UP TO FINISHED GRADE

PROPOSED SANITARY LINE TO TIE INTO EXISTING MANHOLE. CONTRACTOR TO MODIFY EXISTING CLEAN OUT STRUCTURE TO PROPOSED ELEVATION AND VEHICLE TRAFFIC RATING.

EXISTING CASTING TO BE ADJUSTED UP TO FINISHED GRADE

ADJUST WATER APPURTENANCES TO FINISHED GRADE

23 LF OF 6" PVC @ 2.69%

A1
RIM: 566.32
INV IN: 563.38 6" PVC
INV OUT: 563.18 6" PVC

42 LF OF 6" PVC @ 2.69%

A-2

WATER TO CONNECT TO EXISTING 6" WATER ON SITE

2"X6" TS&V, TYP.

2" GATE VALVE, TYP.

2"-45° BEND WITH THRUST BLOCK, TYP.

6" SANITARY SEWER SERVICE

2" DOMESTIC WATER SERVICE LEAD-IN

±100 LF OF 2" DOMESTIC WATER SERVICE

BUILDING 9
± 9,800 SF
FFE: 568.00

6" FIRE LINE LEAD-IN

6"-90° BEND WITH THRUST BLOCK, TYP.

EXISTING WATER METER TO REMAIN

1-6" GATE VALVE, TYP.

6"X6" TEE, TYP.

6"-45° BEND WITH THRUST BLOCK, TYP.

6" WATER METER, TYP.

DOUBLE DETECTOR CHECK VALVE, TYP.

OLD WALDRON ROAD

LEGEND

- SANITARY SEWER MANHOLE
- SANITARY SEWER LINE
- FIRE HYDRANT
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CO-OP BUSINESS PARK LOT 3

PANATTONI DEVELOPMENT COMPANY
LA VERGNE, TENNESSEE

PANATTONI®

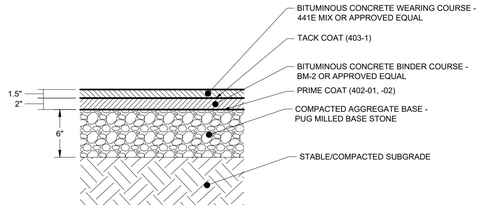
ROBERT JAMES ARTS — REGISTERED ENGINEER — AGENCY PARK — COURAGE — No. 121045 — STATE OF TENNESSEE
12/18/2023

No.	REVISIONS	DATE	BY
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DESIGNED BY:	GTF
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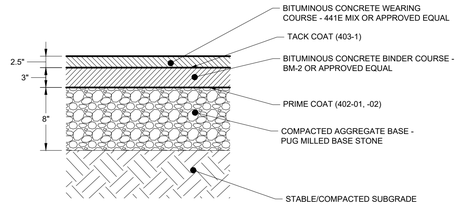
UTILITY PLAN - ENLARGEMENT

SHEET NUMBER
C6-32



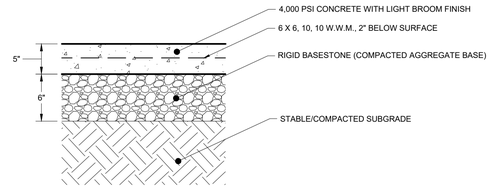
NOTES:
1. SEE GEOTECHNICAL SPECIFICATIONS FOR SUBGRADE REQUIREMENTS.
2. ALL MATERIALS AND CONSTRUCTION SHALL COMPLY WITH TDOT STANDARD SPECIFICATIONS FOR ROADWAY AND BRIDGE CONSTRUCTION, LATEST EDITION.
3. PROPOSED PAVEMENT SECTIONS SHOWN HEREIN ARE PRELIMINARY. FINAL PAVEMENT DESIGN SHALL BE PROVIDED BY A LICENSED GEOTECHNICAL ENGINEER, BASED ON SITE CONDITIONS AND SOIL PROPERTIES FOUND DURING CONSTRUCTION.

1 TYPICAL PAVEMENT SECTION - STANDARD DUTY
SCALE:



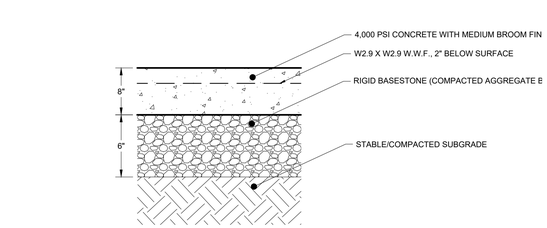
NOTES:
1. SEE GEOTECHNICAL SPECIFICATIONS FOR SUBGRADE REQUIREMENTS.
2. ALL MATERIALS AND CONSTRUCTION SHALL COMPLY WITH TDOT STANDARD SPECIFICATIONS FOR ROADWAY AND BRIDGE CONSTRUCTION, LATEST EDITION.
3. PROPOSED PAVEMENT SECTIONS SHOWN HEREIN ARE PRELIMINARY. FINAL PAVEMENT DESIGN SHALL BE PROVIDED BY A LICENSED GEOTECHNICAL ENGINEER, BASED ON SITE CONDITIONS AND SOIL PROPERTIES FOUND DURING CONSTRUCTION.

2 TYPICAL PAVEMENT SECTION - HEAVY DUTY
SCALE:



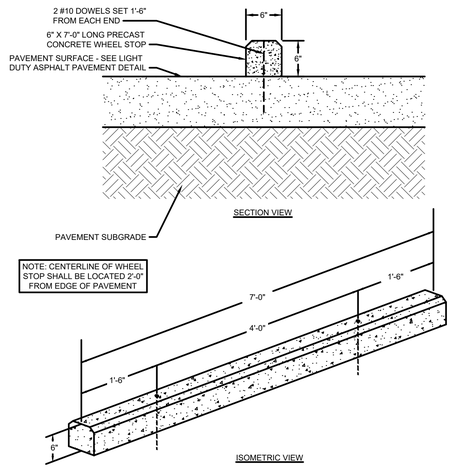
NOTES:
1. SEE GEOTECHNICAL SPECIFICATIONS FOR SUBGRADE REQUIREMENTS.
2. FIBER MESH REINFORCING CAN BE SUBSTITUTED FOR WWM. APPLICATION RATES SHALL BE IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.
3. ALL MATERIALS AND CONSTRUCTION SHALL COMPLY WITH TDOT STANDARD SPECIFICATIONS FOR ROADWAY AND BRIDGE CONSTRUCTION, LATEST EDITION.
4. BROOM FINISH SHALL BE PERPENDICULAR TO THE DIRECTION OF TRAVEL.
5. PROPOSED PAVEMENT SECTIONS SHOWN HEREIN ARE PRELIMINARY. FINAL PAVEMENT DESIGN SHALL BE PROVIDED BY A LICENSED GEOTECHNICAL ENGINEER, BASED ON SITE CONDITIONS AND SOIL PROPERTIES FOUND DURING CONSTRUCTION.
3. PLACE EXPANSION JOINTS AT A MAXIMUM OF 75' O.C.
4. PLACE CONTROL JOINTS AT A MAXIMUM OF 15' O.C.

3 TYPICAL CONCRETE PAVEMENT SECTION - STANDARD DUTY
SCALE:

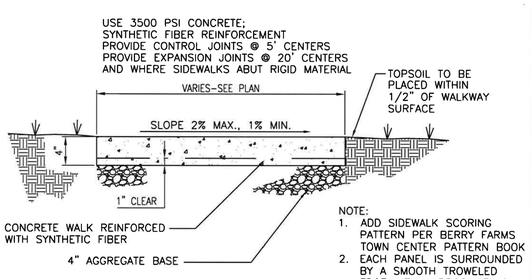


NOTES:
1. SEE GEOTECHNICAL SPECIFICATIONS FOR SUBGRADE REQUIREMENTS.
2. FIBER MESH REINFORCING CAN BE SUBSTITUTED FOR WWM. APPLICATION RATES SHALL BE IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.
3. ALL MATERIALS AND CONSTRUCTION SHALL COMPLY WITH TDOT STANDARD SPECIFICATIONS FOR ROADWAY AND BRIDGE CONSTRUCTION, LATEST EDITION.
4. BROOM FINISH SHALL BE PERPENDICULAR TO THE DIRECTION OF TRAVEL.
5. PROPOSED PAVEMENT SECTIONS SHOWN HEREIN ARE PRELIMINARY. FINAL PAVEMENT DESIGN SHALL BE PROVIDED BY A LICENSED GEOTECHNICAL ENGINEER, BASED ON SITE CONDITIONS AND SOIL PROPERTIES FOUND DURING CONSTRUCTION.
3. PLACE EXPANSION JOINTS AT A MAXIMUM OF 75' O.C.
4. PLACE CONTROL JOINTS AT A MAXIMUM OF 15' O.C.

4 TYPICAL CONCRETE PAVEMENT SECTION - HEAVY DUTY
SCALE:

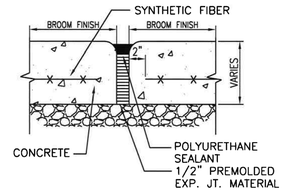


5 CONCRETE WHEEL STOP
NOT TO SCALE

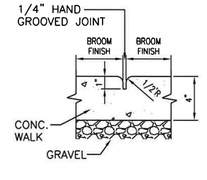


NOTE:
1. ADD SIDEWALK SCORING PATTERN PER BERRY FARMS TOWN CENTER PATTERN BOOK
2. EACH PANEL IS SURROUNDED BY A SMOOTH TROWELED EDGE WITH A BROOM FINISH RUNNING PERPENDICULAR TO THE AXIS OF THE SIDEWALK.

6 CONCRETE SIDEWALK DETAIL
NOT TO SCALE

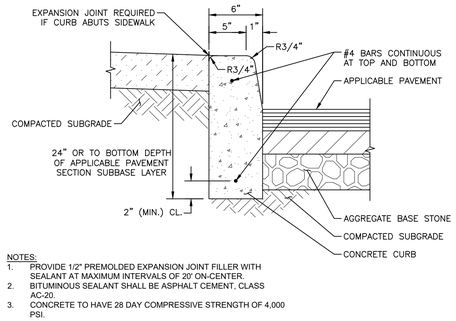


EXPANSION JOINT



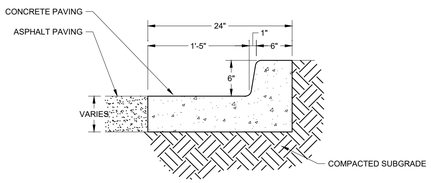
CONTROL JOINT

7 SIDEWALK JOINT DETAIL
SCALE:



NOTES:
1. PROVIDE 1/2" PREMOLDED EXPANSION JOINT FILLER WITH SEALANT AT MAXIMUM INTERVALS OF 20' ON-CENTER.
2. BITUMINOUS SEALANT SHALL BE ASPHALT CEMENT, CLASS AC-20.
3. CONCRETE TO HAVE 28 DAY COMPRESSIVE STRENGTH OF 4,000 PSI.

8 6" POST CURB
NOT TO SCALE



9 6" TALL 24" CURB AND GUTTER
NOT TO SCALE

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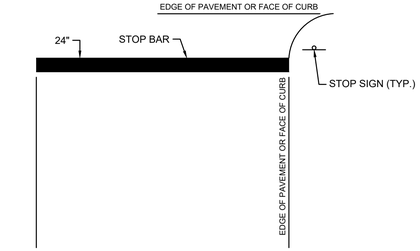
ROBERT JAMES ARTS
REGISTERED ENGINEER
No. 120145
AGENT OF RECORD
CONNECTICUT
STATE OF TENNESSEE
12/18/2023

No.	REVISIONS	DATE	BY
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0	1		
1	2		
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DESIGNED BY:	GTF
DRAWN BY:	GTF
CHECKED BY:	RJA
DATE:	12/18/2023
KIMLEY-HORN PROJECT NO.	118163044

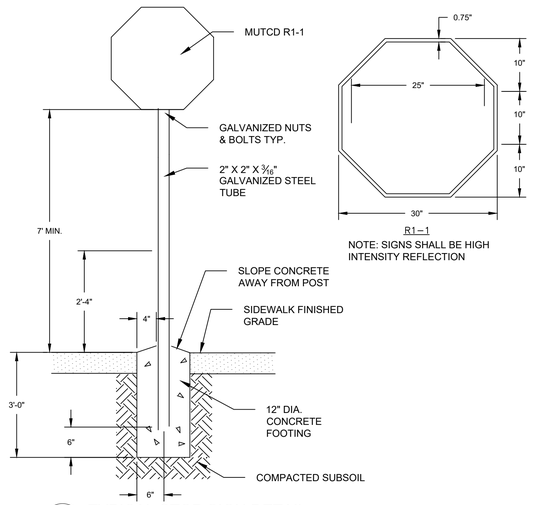
SITE DETAILS

SHEET NUMBER
C8-10



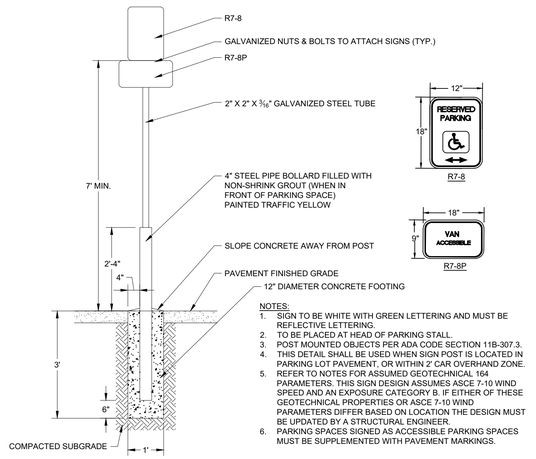
NOTES:
1. WORDS AND ARROWS FOR DRIVEWAYS SHALL BE APPLIED ACCORDING TO REQUIREMENTS AS OUTLINED IN SECTION 3B OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS.
2. THESE WORDS AND BAR ARE TO BE PAINTED REFLECTIVE WHITE.

13 TYPICAL STOP BAR DETAIL
NOT TO SCALE



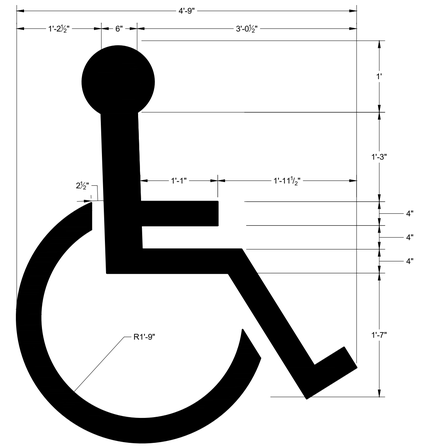
NOTE: SIGNS SHALL BE HIGH INTENSITY REFLECTION

14 TYPICAL STOP SIGN DETAIL
NOT TO SCALE

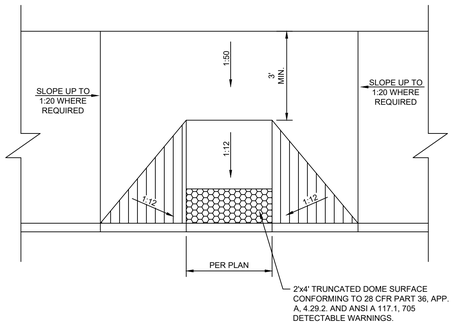


NOTES:
1. SIGN TO BE WHITE WITH GREEN LETTERING AND MUST BE REFLECTIVE LETTERING.
2. TO BE PLACED AT HEAD OF PARKING STALL.
3. POST MOUNTED OBJECTS PER ADA CODE SECTION 11B-307.3.
4. THIS DETAIL SHALL BE USED WHEN SIGN POST IS LOCATED IN PARKING LOT PAVEMENT, OR WITHIN 2' CAR OVERHAND ZONE.
5. REFER TO NOTES FOR ASSUMED GEOTECHNICAL 164 PARAMETERS. THIS SIGN DESIGN ASSUMES ASCE 7-10 WIND SPEED AND AN EXPOSURE CATEGORY B. IF EITHER OF THESE GEOTECHNICAL PROPERTIES OR ASCE 7-10 WIND PARAMETERS DIFFER BASED ON LOCATION THE DESIGN MUST BE UPDATED BY A STRUCTURAL ENGINEER.
6. PARKING SPACES SIGNED AS ACCESSIBLE PARKING SPACES MUST BE SUPPLEMENTED WITH PAVEMENT MARKINGS.

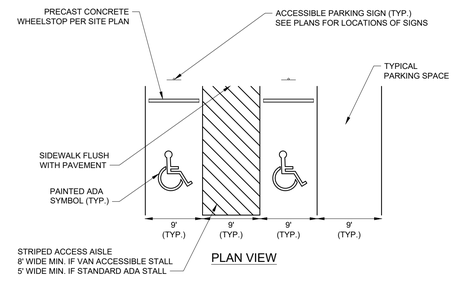
15 ADA PARKING SIGN DETAIL
NOT TO SCALE



16 ADA PARKING SPACE SYMOL
NOT TO SCALE

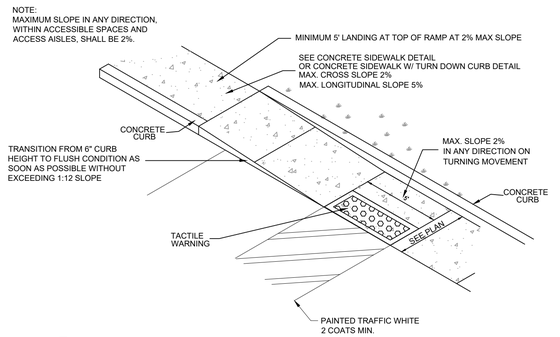


17 TYPICAL ADA RAMP
NOT TO SCALE

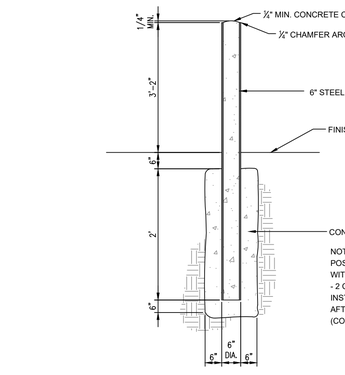


PLAN VIEW

18 ADA PARKING STALL LAYOUT
NOT TO SCALE



19 ADA CURB RAMP
NOT TO SCALE



20 6" STEEL BOLLARD
NOT TO SCALE

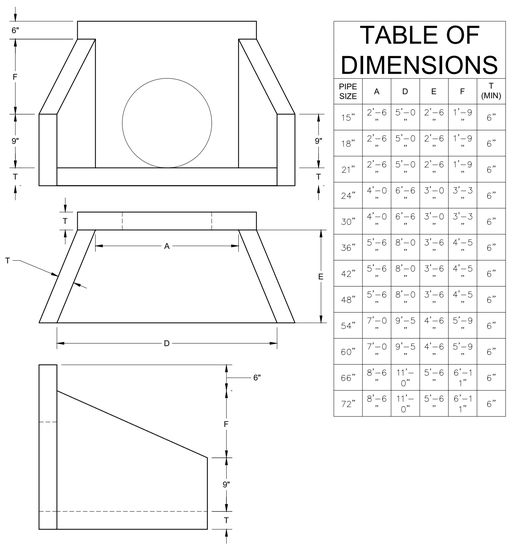
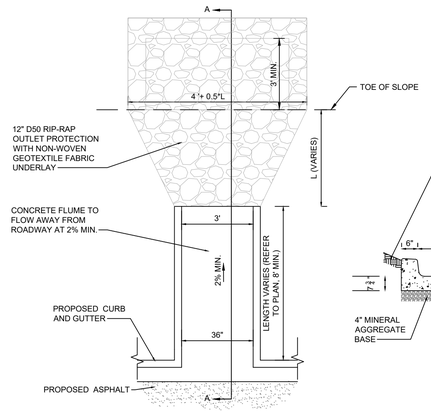
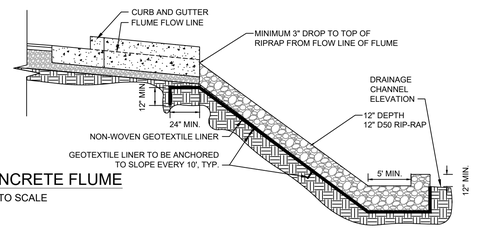


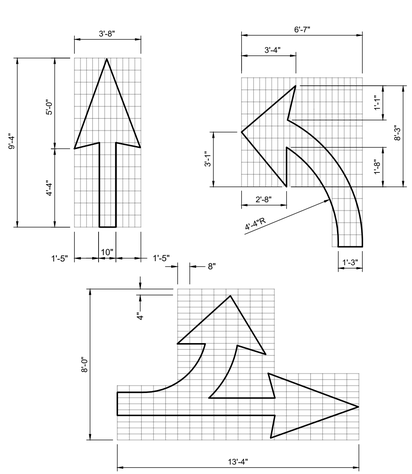
TABLE OF DIMENSIONS					
PIPE SIZE	A	D	E	F	T (MIN)
15"	2'-6"	5'-0"	2'-6"	1'-9"	6"
18"	2'-6"	5'-0"	2'-6"	1'-9"	6"
21"	2'-6"	5'-0"	2'-6"	1'-9"	6"
24"	4'-0"	6'-6"	3'-0"	3'-3"	6"
30"	4'-0"	6'-6"	3'-0"	3'-3"	6"
36"	5'-6"	8'-0"	3'-6"	4'-5"	6"
42"	5'-6"	8'-0"	3'-6"	4'-5"	6"
48"	5'-6"	8'-0"	3'-6"	4'-5"	6"
54"	7'-0"	9'-5"	4'-6"	5'-9"	6"
60"	7'-0"	9'-5"	4'-6"	5'-9"	6"
66"	8'-6"	11'-0"	5'-6"	6'-1"	6"
72"	8'-6"	11'-0"	5'-6"	6'-1"	6"

21 PRECAST CONCRETE HEADWALL
NOT TO SCALE

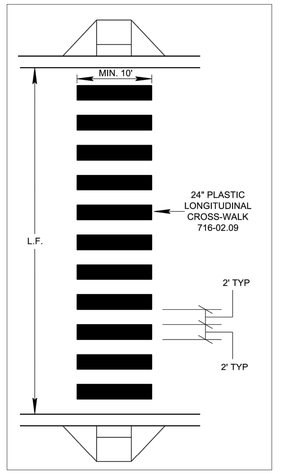




22 CONCRETE FLUME
NOT TO SCALE



23 ROADWAY DIRECTIONAL ARROWS
NOT TO SCALE



24 CROSS-WALK (TDOT T-M-4)
NOT TO SCALE

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ROBERT JAMES ARTS
REGISTERED ENGINEER
AGENCY NO. 121045
STATE OF TENNESSEE
12/18/2023

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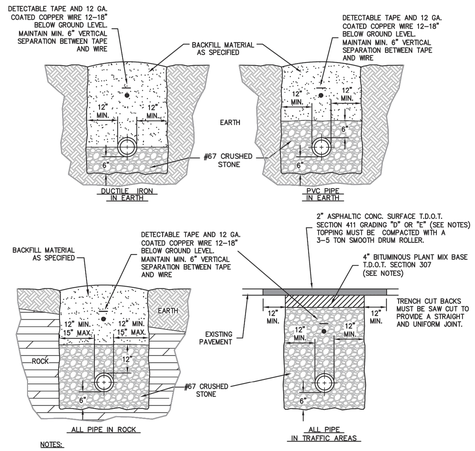
DESIGNED BY:	GTF
DRAWN BY:	GTF
CHECKED BY:	RJA
DATE:	12/18/2023

KIMLEY-HORN PROJECT NO. 118163044

SITE DETAILS

SHEET NUMBER
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NOTES:

1. FOR ROADWAYS 30' OR GREATER IN WIDTH OR DIVIDED HIGHWAYS WITH 2 OR MORE LANES USE 8" OF BINDER (2 LIFTS) AND 3" OF TOPPING.
2. BINDER SHALL BE INITIALLY INSTALLED FLUSH WITH EXISTING ASPHALT SURFACE AND SHALL BE IN PLACE FOR 2 WEEKS TO ALLOW FOR SETTLING AND COMPACTION. AFTER 2 WEEKS, MILL UP 2" OF THE NEW BINDER AND EXISTING ASPHALT TO THE DIMENSIONS SHOWN IN EACH DIRECTION AND INSTALL 2" OF NEW SURFACE MIX OVER MILLED AREA. REPAINT OR REPLACE, IF THERMOPLASTIC, ALL DELINEATION LINES AND PAVEMENT MARKINGS.
3. WHERE EXISTING SURFACE IS CONCRETE SUBSTITUTE 6" T.D.O.T. ITEM NO. 701-02.
4. FOR RESTORATION OF GRAVEL SURFACES, BACKFILL ENTIRE TRENCH WITH STONE.

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Engineering & Environmental Consulting

P.O. BOX 2968, MURFREESBORO, TN 37133-2968
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FILE NAME: L: \Engineering\442-56\2015 Updates\Drawings\010 Water Line Bedding and Backfilling Detail.dwg

STANDARD WATERLINE BEDDING & BACKFILLING

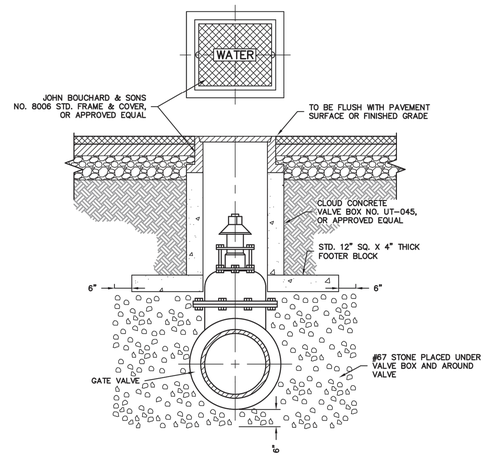
N.T.S.

Revised September, 2015

STANDARD DETAIL 010

CITY OF LAVERGNE, TENNESSEE

G & M File No. 442-56



TYPICAL VALVE BOX SETTING INSIDE & OUTSIDE OF PAVEMENT

N.T.S.

Revised September, 2015

STANDARD DETAIL 030

CITY OF LAVERGNE, TENNESSEE

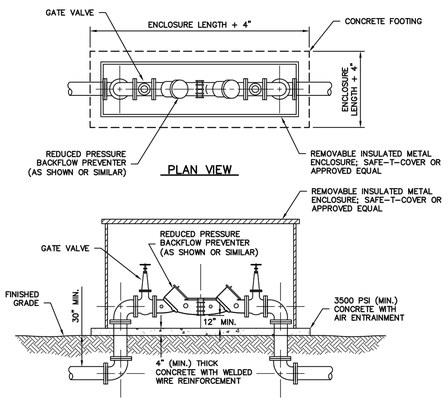
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FILE NAME: L: \Engineering\442-56\2015 Updates\Drawings\030 Typical Valve Box Setting.dwg



ELEVATION

REDUCED PRESSURE BACKFLOW PREVENTER (ABOVEGROUND)

N.T.S.

Revised August 2017

STANDARD DETAIL 070

CITY OF LAVERGNE, TENNESSEE

G & M File No. 442-56

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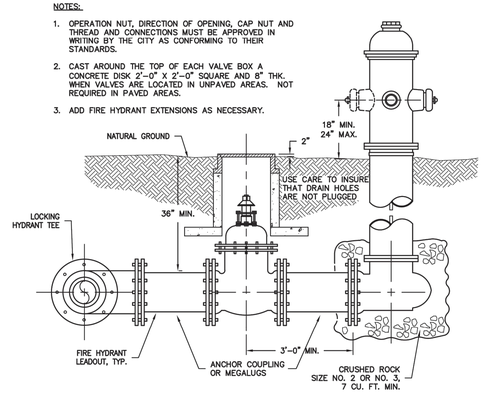
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FILE NAME: L: \Engineering\442-56\2015 Updates\Drawings\070 Reduced Pressure Backflow Preventer.dwg

NOTES:

1. OPERATION NUT, DIRECTION OF OPENING, CAP NUT AND THREAD AND CONNECTIONS MUST BE APPROVED IN WRITING BY THE CITY AS CONFORMING TO THEIR STANDARDS.
2. CAST AROUND THE TOP OF EACH VALVE BOX A CONCRETE DISK 2'-0" X 2'-0" SQUARE AND 8" THK. WHEN VALVES ARE LOCATED IN UNPAVED AREAS. NOT REQUIRED IN PAVED AREAS.
3. ADD FIRE HYDRANT EXTENSIONS AS NECESSARY.



TYPICAL FIRE HYDRANT SETTING

N.T.S.

Revised September, 2015

STANDARD DETAIL 040

CITY OF LAVERGNE, TENNESSEE

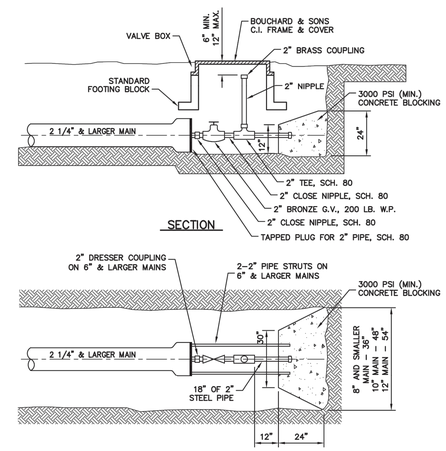
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TYPICAL 2" BLOW-OFF ASSEMBLY

N.T.S.

Revised September, 2015

STANDARD DETAIL 050

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G & M File No. 442-56

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FILE NAME: L: \Engineering\442-56\2015 Updates\Drawings\050 Typical 2 In Blow-off.dwg

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ROBERT JAMES ARTS
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
No. 121043
STATE OF TENNESSEE
12/18/2023

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DESIGNED BY:	GTF
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DATE:	12/18/2023

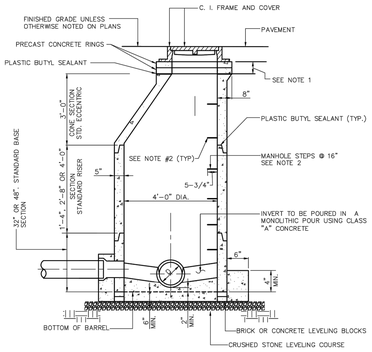
KIMLEY-HORN PROJECT NO. 118163044

UTILITY DETAILS

SHEET NUMBER

C8-20

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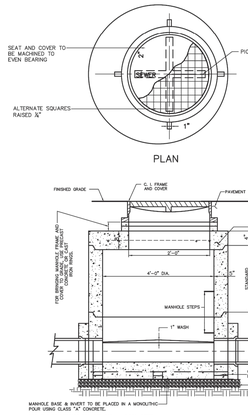
NOTE:
1. FOR BRINGING MANHOLE FRAME AND COVER TO GRADE, USE PRECAST CONCRETE OR CAST IRON RINGS.
2. 3/8 STEEL REINFORCED ROD ENCAPSULATED IN POLYPROPYLENE PLASTIC OR ALUMINUM ALLOY SEE SPECIFICATIONS.
3. RESILIENT CONNECTORS REQUIRED FOR ALL PIPES, REFER TO DETAIL AND SPECIFICATIONS.

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615-834-8300

3.0
PRECAST CONCRETE MANHOLE
NOT TO SCALE

CITY OF LA VERGNE, TENNESSEE
STANDARD SEWER DETAILS

PUBLIC WORKS DEPARTMENT
148 INTERNATIONAL BLVD.
LA VERGNE, TN 37086
615-793-9891

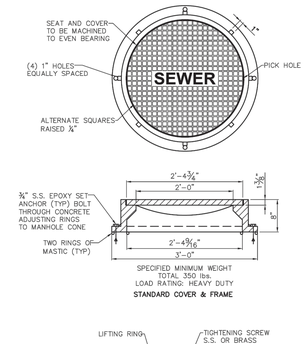


CTI ENGINEERS, INC.
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615-834-8300

4.0
STANDARD PRECAST MANHOLE FOR DEPTH OF LESS THAN 5'-0"
NOT TO SCALE

CITY OF LA VERGNE, TENNESSEE
STANDARD SEWER DETAILS

PUBLIC WORKS DEPARTMENT
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615-793-9891



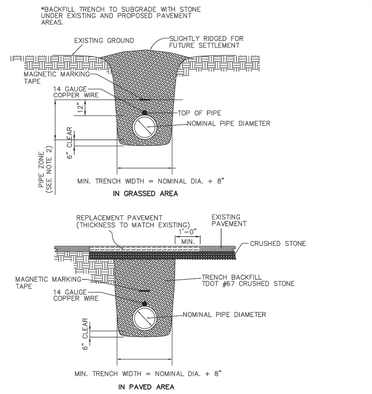
STANDARD FRAME AND COVER TO BE ACHESON FOUNDRY #A-2024-BIS, OR EQUAL WATER TIGHT MANHOLE FRAME AND COVER TO BE ACHESON FOUNDRY #A-2624-71S OR EQUAL

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10.0
MANHOLE FRAME AND COVER
NOT TO SCALE

CITY OF LA VERGNE, TENNESSEE
STANDARD SEWER DETAILS

PUBLIC WORKS DEPARTMENT
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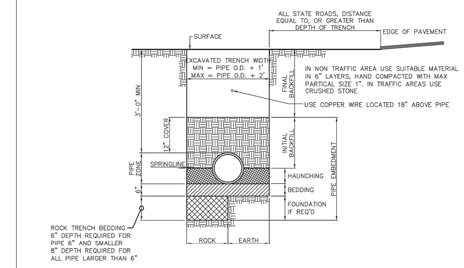
NOTES:
1. SEE STANDARD SPECIFICATIONS FOR FULL BACKFILL REQUIREMENTS.
2. "PIPE ZONE" EXTENDS TO 12" ABOVE TOP OF PIPE AND IS AREA IN WHICH SPECIAL CARE IS TO BE GIVEN TO PLACEMENT AND COMPACTION TO PROTECT PIPE DURING AND AFTER LAYING.
3. LIMIT TRENCH WIDTH AT TOP OF PIPE TO NOMINAL PIPE DIAMETER PLUS 16" UNLESS PERMITTED OTHERWISE BY ENGINEER.
4. TRENCH SHALL BE DUG TO GIVE PIPE FULL AND CONTINUOUS SUPPORT. ALL ROCK TO BE REMOVED WITHIN 6" OF PIPE – BED TO PIPE GRADE WITH CRUSHED STONE BEDDING.
5. PIPE TO BE CONTINUOUSLY SUPPORTED ALONG LENGTH OF PIPE BARREL EXCEPT AT BELL. BELL HOLES ARE REQUIRED SUCH THAT NO BEARING LOAD IS TAKEN BY THE BELL.
6. MAGNETIC MARKING TAPE AND 14 GAUGE COPPER WIRE REQUIRED FOR ALL SEWER.

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15.0
TYPICAL TRENCH BACKFILL
NOT TO SCALE

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STANDARD SEWER DETAILS

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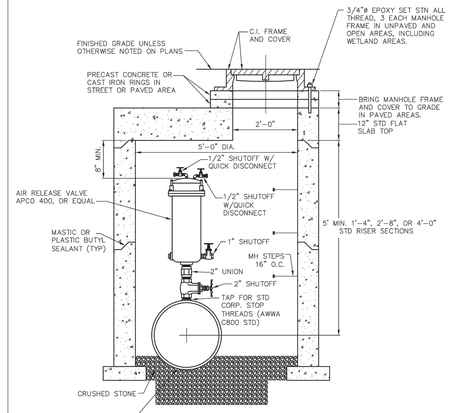


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NASHVILLE, TN 37211
615-834-8300

16.0
PVC PIPE INSTALLATION DETAIL
NOT TO SCALE

CITY OF LA VERGNE, TENNESSEE
STANDARD SEWER DETAILS

PUBLIC WORKS DEPARTMENT
148 INTERNATIONAL BLVD.
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615-793-9891



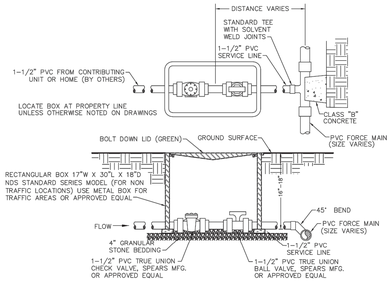
NOTE: IN WETLAND AREAS, EXTEND TOP OF MH COVER A MIN. OF 1 FT. AND A MAX. OF 2 FT. ABOVE ORIGINAL GRADE.

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18.0
SEWAGE AIR RELEASE VALVE
NOT TO SCALE

CITY OF LA VERGNE, TENNESSEE
STANDARD SEWER DETAILS

PUBLIC WORKS DEPARTMENT
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LA VERGNE, TN 37086
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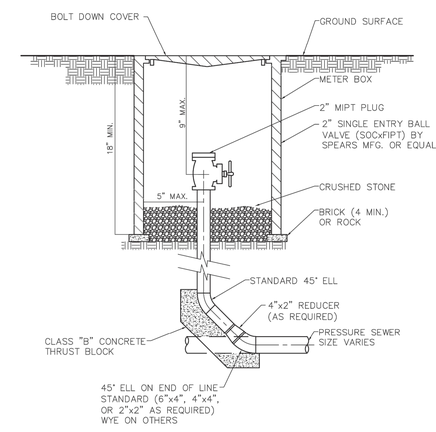


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615-834-8300

19.0
TYPICAL PRESSURE SEWER SERVICE LINE CONNECTION
NOT TO SCALE

CITY OF LA VERGNE, TENNESSEE
STANDARD SEWER DETAILS

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CTI ENGINEERS, INC.
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21.0
PRESSURE SEWER CLEAN OUT NON-TRAFFIC BOX
NOT TO SCALE

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CO-OP BUSINESS PARK LOT 3
PANATTONI DEVELOPMENT COMPANY
LA VERGNE, TENNESSEE

PANATTONI®

ROBERT JAMES ARMS
REGISTERED ENGINEER
AGENCY FILING
12/18/2023
COMMISSION No. 121065
STATE OF TENNESSEE

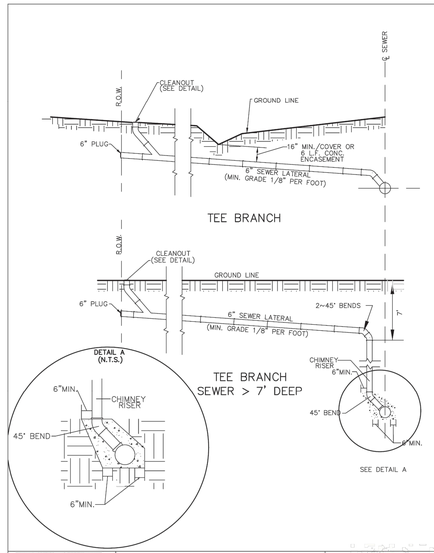
No.	REVISIONS	DATE	BY
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DESIGNED BY: GTF
DRAWN BY: GTF
CHECKED BY: RJA
DATE: 12/18/2023
KIMLEY-HORN PROJECT NO. 118163044

UTILITY DETAILS

SHEET NUMBER
C8-21

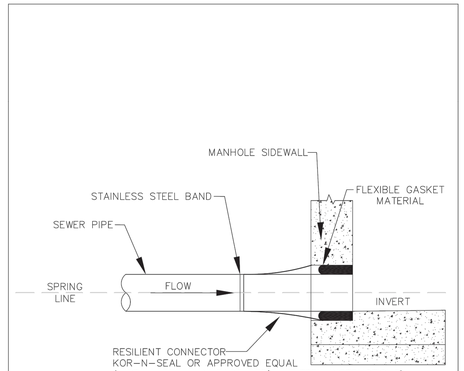
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2.0
SANITARY SEWER LATERALS
NOT TO SCALE
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STANDARD SEWER DETAILS

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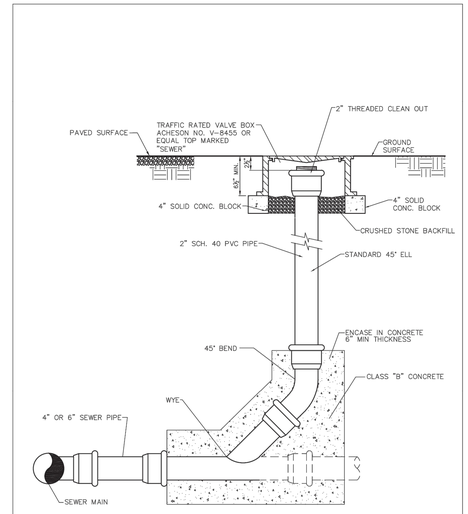
PUBLIC WORKS DEPARTMENT
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6.0
RESILIENT BOOT CONNECTION FOR SEWER PIPE TO MANHOLE DETAIL
NOT TO SCALE
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STANDARD SEWER DETAILS

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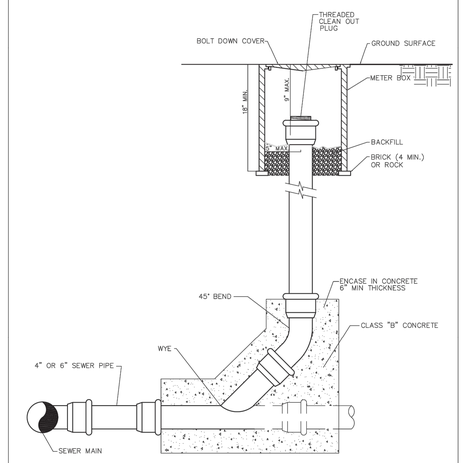
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12.0
CLEAN OUT WITH TRAFFIC BOX
NOT TO SCALE
CITY OF LA VERGNE, TENNESSEE
STANDARD SEWER DETAILS

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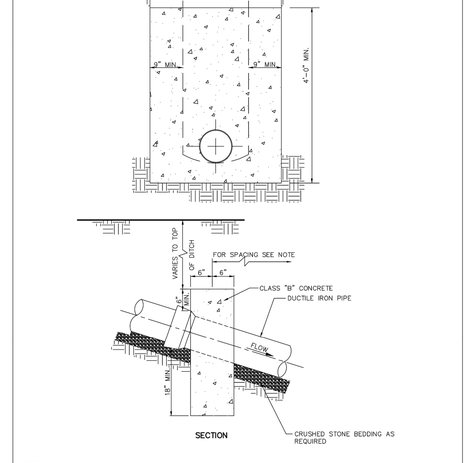
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13.0
CLEAN OUT WITH NON-TRAFFIC BOX
NOT TO SCALE
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STANDARD SEWER DETAILS

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NOTES:
1. SEWERS ON 18.8% SLOPE OR GREATER SHALL BE ANCHORED SECURELY WITH CONCRETE ANCHORS EQUAL SPACED. REFER TO SPECIFICATIONS.

14.0
CONCRETE ANCHOR
NOT TO SCALE
CITY OF LA VERGNE, TENNESSEE
STANDARD SEWER DETAILS

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CO-OP BUSINESS PARK
LOT 3
PANATTONI DEVELOPMENT COMPANY
LA VERGNE, TENNESSEE

PANATTONI®

ROBERT JAMES ARMS
REGISTERED ENGINEER
AGENCY PUBLIC
Robert James Arms 12/18/2023
LICENSE No. 121045
STATE OF TENNESSEE

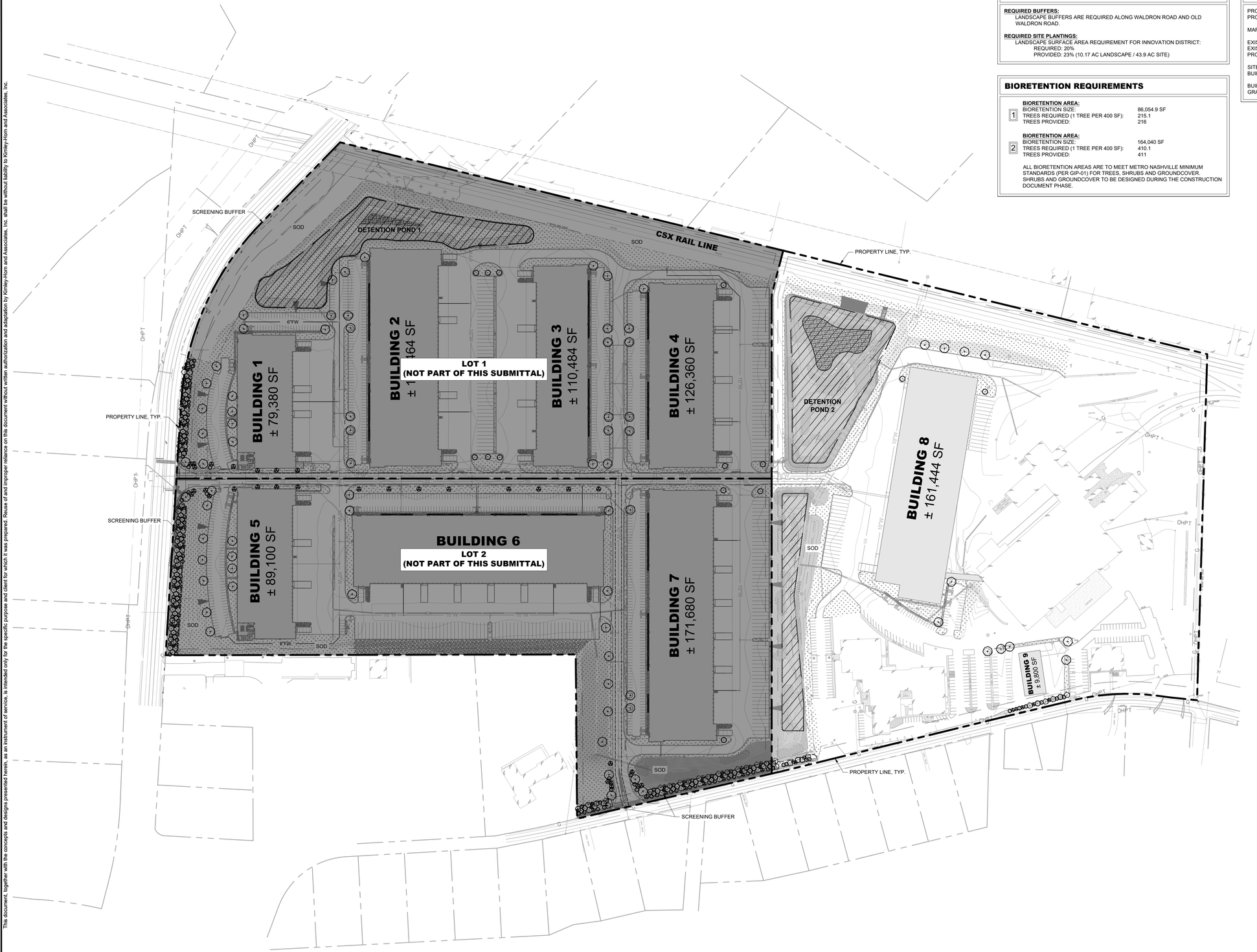
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DESIGNED BY:	GTF
DRAWN BY:	GTF
CHECKED BY:	RJA
DATE:	12/18/2023

KIMLEY-HORN PROJECT NO. 118163044

UTILITY DETAILS

SHEET NUMBER
C8-22



LANDSCAPE REQUIREMENTS

REQUIRED BUFFERS:
LANDSCAPE BUFFERS ARE REQUIRED ALONG WALDRON ROAD AND OLD WALDRON ROAD.

REQUIRED SITE PLANTINGS:
LANDSCAPE SURFACE AREA REQUIREMENT FOR INNOVATION DISTRICT:
REQUIRED: 20%
PROVIDED: 23% (10.17 AC LANDSCAPE / 43.9 AC SITE)

BIORETENTION REQUIREMENTS

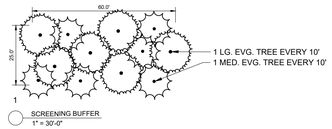
1
BIORETENTION AREA:
BIORETENTION SIZE: 86,054.9 SF
TREES REQUIRED (1 TREE PER 400 SF): 215.1
TREES PROVIDED: 216

2
BIORETENTION AREA:
BIORETENTION SIZE: 164,040 SF
TREES REQUIRED (1 TREE PER 400 SF): 410.1
TREES PROVIDED: 411

ALL BIORETENTION AREAS ARE TO MEET METRO NASHVILLE MINIMUM STANDARDS (PER GIP-01) FOR TREES, SHRUBS AND GROUNDCOVER. SHRUBS AND GROUNDCOVER TO BE DESIGNED DURING THE CONSTRUCTION DOCUMENT PHASE.

LANDSCAPE DATA TABLE

PROJECT NAME:	CO-OP BUSINESS PARK
PROPERTY ADDRESS:	MURFREESBORO ROAD LA VERGNE, TENNESSEE 37086
MAP AND PARCEL ID:	MAP 015 PARCEL 02400, 02800
EXISTING ZONING:	I-2
EXISTING LAND USE:	HEAVY INDUSTRIAL/MANUFACTURING
PROPOSED LAND USE:	HEAVY INDUSTRIAL/MANUFACTURING
SITE AREA:	±114.9 AC
BUILDING AREA:	±915,768 SF
BUILDING PERMIT:	TBD
GRADING PERMIT:	TBD



1
SCREENING BUFFER
1" = 30'-0"

PLANT SCHEDULE

SYMBOL	COMMON NAME
DECIDUOUS TREES	
	AUTUMN FLAME RED MAPLE
	BALD CYPRESS
EVERGREEN TREES	
	GREENLEAF AMERICAN HOLLY
	NELLIE STEVENS HOLLY
	TREE FORM BURFORD HOLLY
UNDERSTORY TREES	
	AUTUMN BRILLIANCE SERVICEBERRY
DECIDUOUS SHRUBS	
	ARROWOOD VIBURNUM
	LIMELIGHT HYDRANGEA
EVERGREEN SHRUBS	
	CARISSA HOLLY
GROUND COVERS	
	SHOT ROCK
	TENNESSEE RIVER ROCK
SOD/SEED	
	TIFWAY 419 BERMUDA SOD

LANDSCAPE NOTES

SEE SHEET L1-50 FOR COMPLETE PLANTING SCHEDULE.

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GRAPHIC SCALE IN FEET
0 75 150 300

NORTH

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CO-OP BUSINESS PARK LOT 3

PANATTONI DEVELOPMENT COMPANY
LA VERGNE, TENNESSEE

PANATTONI®

SPENCER JAMES SANDERS
REGISTERED
LANDSCAPE ARCHITECT
12-15-2023

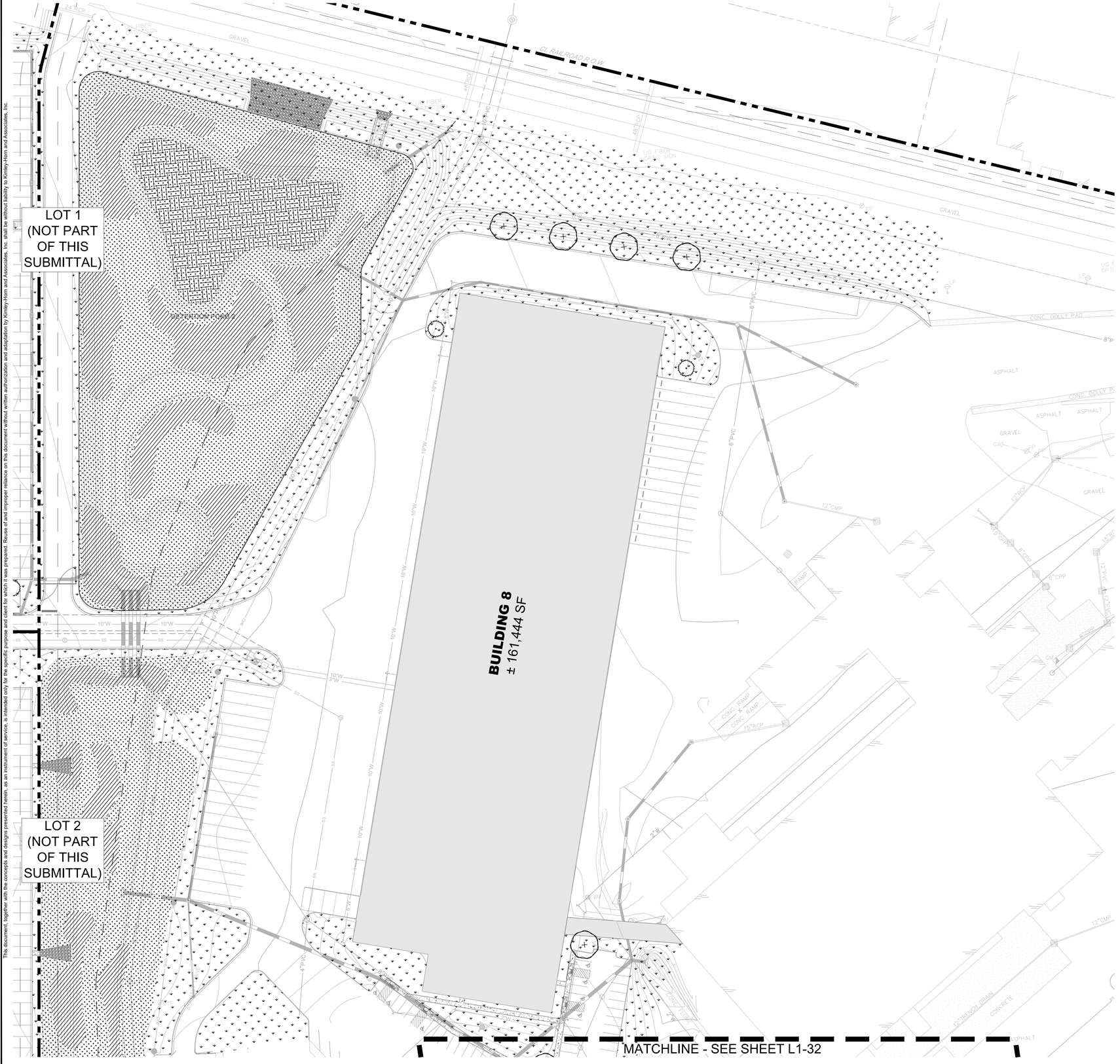
No.	REVISIONS	DATE	BY
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2	3		
4	5		
6	7		

DESIGNED BY:	OAS
DRAWN BY:	OAS
CHECKED BY:	JLR
DATE:	12/18/2023
KIMLEY-HORN PROJECT NO.	118163044

LANDSCAPE PLAN - OVERALL

SHEET NUMBER
L1-30

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LANDSCAPE DATA TABLE

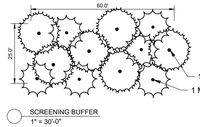
PROJECT NAME:	CO-OP BUSINESS PARK
PROPERTY ADDRESS:	MURFREESBORO ROAD LA VERGNE, TENNESSEE 37086
MAP AND PARCEL ID:	MAP 015 PARCEL 02400, 02800
EXISTING ZONING:	I-2
EXISTING LAND USE:	HEAVY INDUSTRIAL/MANUFACTURING
PROPOSED LAND USE:	HEAVY INDUSTRIAL/MANUFACTURING
SITE AREA:	±114.9 AC
BUILDING AREA:	±915,768 SF
BUILDING PERMIT:	TBD
GRADING PERMIT:	TBD

PLANT SCHEDULE

SYMBOL	COMMON NAME
DECIDUOUS TREES	
	AUTUMN FLAME RED MAPLE
	BALD CYPRESS
EVERGREEN TREES	
	GREENLEAF AMERICAN HOLLY
	NELLIE STEVENS HOLLY
	TREE FORM BURFORD HOLLY
UNDERSTORY TREES	
	AUTUMN BRILLIANCE SERVICEBERRY
DECIDUOUS SHRUBS	
	ARROWOOD VIBURNUM
	LIMELIGHT HYDRANGEA
EVERGREEN SHRUBS	
	CARISSA HOLLY
GROUND COVERS	
	SHOT ROCK
	TENNESSEE RIVER ROCK
SOD/SEED	
	TIFWAY 419 BERMUDA SOD

LANDSCAPE NOTES

SEE SHEET L1-50 FOR COMPLETE PLANTING SCHEDULE.



SCREENING BUFFER
1" = 30'-0"

WETLAND PLANTING SCHEDULE

WETLAND ZONE LIVE STAKING	72,193 SF	
ALNUS SERRULATA / HAZEL ALDER	469	10% @ 48" oc
ARONIA ARBUTIFOLIA / RED CHOKEBERRY	833	10% @ 36" oc
CORNUS AMOMUM / SILKY DOGWOOD	302	10% @ 60" oc
HAMAMELIS VIRGINIANA / COMMON WITCH HAZEL	832	10% @ 36" oc
HYDRANGEA ARBORESCENS / WILD HYDRANGEA	2,402	20% @ 30" oc
ILEX VERTICILLATA / WINTERBERRY	1,227	20% @ 42" oc
SALIX ALBA 'SERICEA' / WHITE WILLOW	302	10% @ 60" oc
SAMBUCUS CANADENSIS / AMERICAN ELDERBERRY	302	10% @ 60" oc
WETLAND ZONE SEED	233,990 SF	
ROUNDSTONE SEED - MIX 131 / SOUTHERN WETLAND AND POND EDGE MIX		

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GRAPHIC SCALE IN FEET
0 25 50 100

NORTH

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CO-OP BUSINESS PARK
LOT 3

PANATTONI DEVELOPMENT COMPANY
LA VERGNE, TENNESSEE

PANATTONI®

SPENCER JAMES SANDERS
REGISTERED
LANDSCAPE ARCHITECT
12/18/2023

No.	REVISIONS	DATE	BY
1	-		
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3	-		
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7	-		

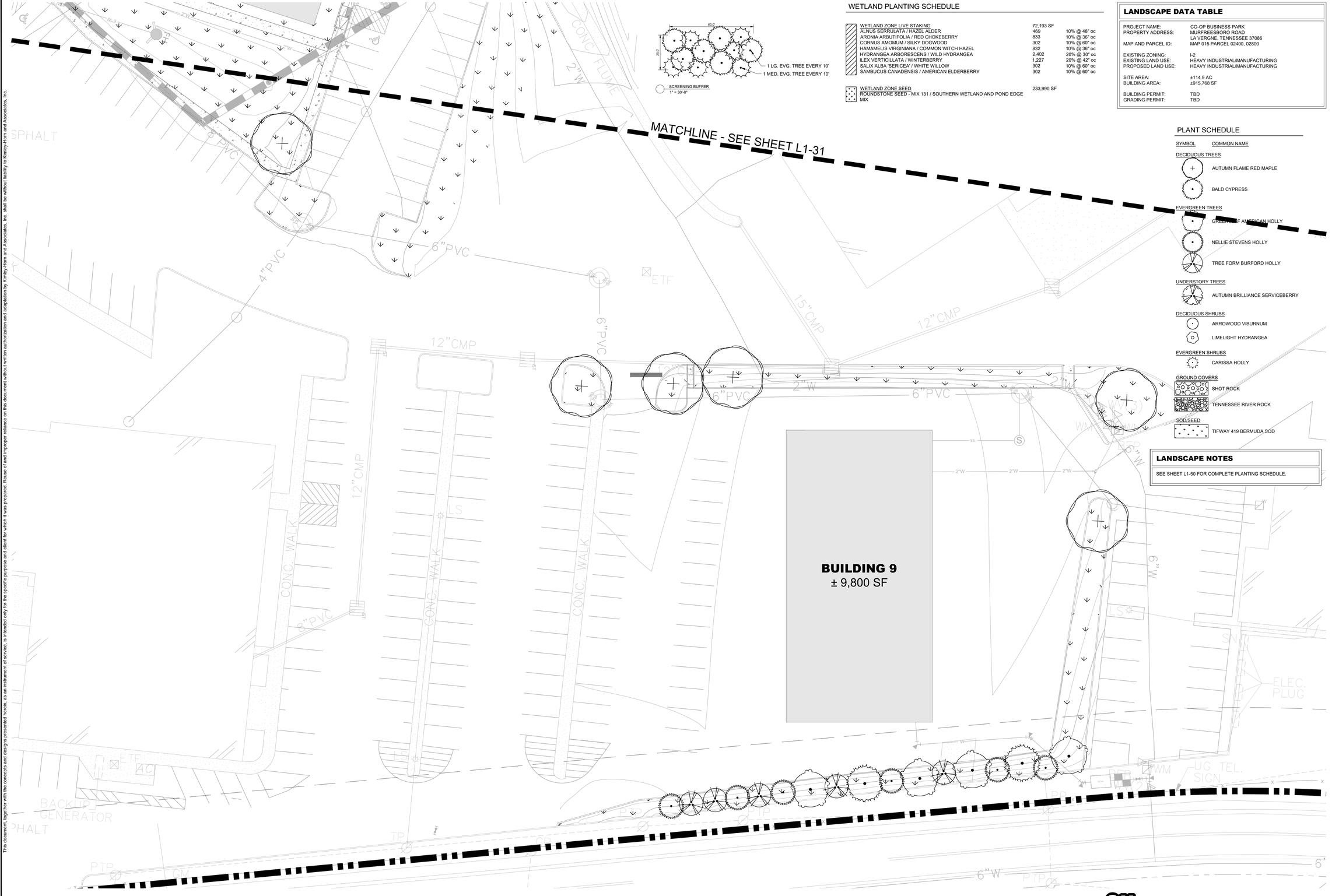
DESIGNED BY:	OAS
DRAWN BY:	OAS
CHECKED BY:	JLR
DATE:	12/18/2023
KIMLEY-HORN PROJECT NO.	118163044

LANDSCAPE PLAN - ENLARGEMENT

SHEET NUMBER
L1-31

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SCREENING BUFFER
1" = 30'-0"

WETLAND PLANTING SCHEDULE

WETLAND ZONE LIVE STAKING		72,193 SF	
ALNUS SERRULATA / HAZEL ALDER		469	10% @ 48" oc
ARONIA ARBUTIFOLIA / RED CHOKEBERRY		833	10% @ 36" oc
CORNUS AMOMUM / SILKY DOGWOOD		302	10% @ 60" oc
HAMAMELIS VIRGINIANA / COMMON WITCH HAZEL		832	10% @ 36" oc
HYDRANGEA ARBORESCENS / WILD HYDRANGEA		2,402	20% @ 30" oc
ILEX VERTICILLATA / WINTERBERRY		1,227	20% @ 42" oc
SALIX ALBA 'SERICEA' / WHITE WILLOW		302	10% @ 60" oc
SAMBUCUS CANADENSIS / AMERICAN ELDERBERRY		302	10% @ 60" oc
WETLAND ZONE SEED		233,990 SF	
ROUNDSTONE SEED - MIX 131 / SOUTHERN WETLAND AND POND EDGE MIX			

LANDSCAPE DATA TABLE

PROJECT NAME:	CO-OP BUSINESS PARK
PROPERTY ADDRESS:	MURFREESBORO ROAD LA VERGNE, TENNESSEE 37086
MAP AND PARCEL ID:	MAP 015 PARCEL 02400, 02800
EXISTING ZONING:	I-2
EXISTING LAND USE:	HEAVY INDUSTRIAL/MANUFACTURING
PROPOSED LAND USE:	HEAVY INDUSTRIAL/MANUFACTURING
SITE AREA:	±114.9 AC
BUILDING AREA:	±915,768 SF
BUILDING PERMIT:	TBD
GRADING PERMIT:	TBD

PLANT SCHEDULE

SYMBOL	COMMON NAME
DECIDUOUS TREES	
	AUTUMN FLAME RED MAPLE
	BALD CYPRESS
EVERGREEN TREES	
	GREEN LEAF AMERICAN HOLLY
	NELLIE STEVENS HOLLY
	TREE FORM BURFORD HOLLY
UNDERSTORY TREES	
	AUTUMN BRILLIANCE SERVICEBERRY
DECIDUOUS SHRUBS	
	ARROWOOD VIBURNUM
	LIMELIGHT HYDRANGEA
EVERGREEN SHRUBS	
	CARISSA HOLLY
GROUND COVERS	
	SHOT ROCK
	TENNESSEE RIVER ROCK
SOD/SEED	
	TIFWAY 419 BERMUDA SOD

LANDSCAPE NOTES

SEE SHEET L1-50 FOR COMPLETE PLANTING SCHEDULE.

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PANATTONI DEVELOPMENT COMPANY
LA VERGNE, TENNESSEE

PANATTONI®

SPENCER JAMES SAUNDERS
REGISTERED
LANDSCAPE ARCHITECT
12/18/2023

No.	REVISIONS	DATE	BY
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DESIGNED BY:	OAS
DRAWN BY:	OAS
CHECKED BY:	JLR
DATE:	12/18/2023
KIMLEY-HORN PROJECT NO.	118163044

LANDSCAPE PLAN - ENLARGEMENT

SHEET NUMBER
L1-32

Drawing name: K:\NSH_LDEV\118163044 - co-op la vergne\4-CADD\plansheets\L1-10 LANDSCAPE PLAN - ENLARGEMENT.dwg L1-32 Dec 18, 2023 9:26am by: Garrett.Froula

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GENERAL LANDSCAPE SPECIFICATIONS AND NOTES

1.01 SCOPE OF WORK

A. THE WORK CONSISTS OF: FURNISHING ALL LABOR, MATERIALS, EQUIPMENT, TOOLS, TRANSPORTATION, AND ANY OTHER APPURTENANCES NECESSARY FOR THE COMPLETION OF THIS PROJECT AS SHOWN ON THE DRAWINGS, AS INCLUDED IN THE PLANT LIST, AND AS HEREIN SPECIFIED.

B. WORK SHALL INCLUDE MAINTENANCE AND WATERING OF ALL CONTRACT PLANTING AREAS UNTIL CERTIFICATION OF ACCEPTABILITY BY THE OWNER.

C. THE CONTRACTOR SHALL CONTACT THE OWNER AND TENNESSEE ONE CALL AT (615) 351-1111, TWO (2) FULL BUSINESS DAYS PRIOR TO THE BEGINNING OF WORK.

D. THE CITY MUST APPROVE ALL WORK HOURS AND LANE CLOSURE REQUESTS AT LEAST TWO (2) FULL WORKING DAYS IN ADVANCE OF THE START OF ANY SUCH WORK ON A LOCATION BY LOCATION BASIS. THE INDIVIDUAL(S) INSTALLING THE MAINTENANCE OF TRAFFIC SETUP SHALL HAVE COMPLETED A TDOT APPROVED WORK ZONE TRAFFIC CONTROL TRAINING COURSE. DOCUMENTATION SHALL BE FURNISHED TO THE CITY AT THE PRE-CONSTRUCTION MEETING OR PRIOR TO START OF WORK.

E. ALL LANDSCAPE MATERIAL SHALL BE INSTALLED AND MAINTAINED IN A MANNER WHEREBY TRAFFIC CONTROL SIGNAGE AND DEVICES ARE VISIBLE TO MOTORISTS AND PEDESTRIANS.

1.02 PROTECTION OF EXISTING STRUCTURES

A. ALL EXISTING BUILDINGS, WALKS, WALLS, PAVING, PIPING, OTHER SITE CONSTRUCTION ITEMS, AND PLANTING ALREADY COMPLETED OR ESTABLISHED SHALL BE PROTECTED FROM DAMAGE BY THE CONTRACTOR UNLESS OTHERWISE SPECIFIED. ALL DAMAGE RESULTING FROM NEGLIGENCE SHALL BE REPAIRED OR REPLACED TO THE SATISFACTION OF THE OWNER AND AT NO COST TO THE OWNER.

B. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL NECESSARY BMP DEVICES ACCORDING TO TDOT, COUNTY, OR CITY STANDARDS THROUGH THE DURATION OF ALL CONSTRUCTION ACTIVITIES.

C. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL UTILITIES, WHETHER PUBLIC OR PRIVATE, PRIOR TO EXCAVATION. THE OWNER AND DESIGN PROFESSIONAL SHALL NOT BE RESPONSIBLE FOR THE ACCURACY AND COMPLETENESS OF ANY SUCH INFORMATION OR DATA, AND THE CONTRACTOR SHALL HAVE FULL RESPONSIBILITY FOR REVIEWING AND CHECKING ALL SUCH INFORMATION AND DATA, FOR LOCATING ALL UNDERGROUND FACILITIES DURING CONSTRUCTION, FOR THE SAFETY AND PROTECTION THEREOF, AND REPAIRING ANY DAMAGE THERETO RESULTING FROM THE WORK. THE COST OF COMPLIANCE WITH THIS SECTION WILL BE CONSIDERED AS HAVING BEEN INCLUDED IN THE CONTRACT PRICE. THE CONTRACTOR SHALL NOTIFY ANY AFFECTED UTILITY COMPANIES OR AGENCIES IN WRITING AT LEAST 48 HOURS PRIOR TO BEGINNING CONSTRUCTION.

1.03 PROTECTION OF EXISTING PLANT MATERIALS OUTSIDE LIMIT OF WORK

A. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL UNAUTHORIZED CUTTING OR DAMAGE TO TREES AND SHRUBS EXISTING OR OTHERWISE, CAUSED BY CARELESS EQUIPMENT OPERATION, MATERIAL STOCKPILING, ETC. THIS SHALL INCLUDE COMPACTION BY DRIVING OR PARKING INSIDE THE DRIP-LINE AND SPILLING OIL, GASOLINE, OR OTHER DELETERIOUS MATERIALS WITHIN THE DRIP-LINE. NO MATERIALS SHALL BE BURNED ON SITE. EXISTING TREES KILLED OR DAMAGED SO THAT THEY ARE MISSHAPEN AND/OR UNSIGHTLY SHALL BE REPLACED AT THE COST TO THE CONTRACTOR OF ONE HUNDRED DOLLARS ($100) PER CALIPER INCH ON AN ESCALATING SCALE WHICH ADDS AN ADDITIONAL TWENTY (20) PERCENT PER INCH OVER FOUR (4) INCHES CALIPER AS FIXED AND AGREED LIQUIDATED DAMAGES. CALIPER SHALL BE MEASURED SIX (6) INCHES ABOVE GROUND LEVEL FOR TREES UP TO AND INCLUDING FOUR (4) INCHES IN CALIPER AND TWELVE (12) INCHES ABOVE GROUND LEVEL FOR TREES OVER FOUR (4) INCHES IN CALIPER.

1.04 MATERIALS

A. GENERAL

MATERIAL SAMPLES LISTED BELOW SHALL BE SUBMITTED FOR APPROVAL, ON SITE OR AS DETERMINED BY THE LANDSCAPE ARCHITECT. UPON APPROVAL, DELIVERY OF MATERIALS MAY COMMENCE.

MATERIAL	SAMPLE SIZE
MULCH	ONE (1) CUBIC FOOT
TOPSOIL MIX	ONE (1) CUBIC FOOT
PLANTS	ONE (1) OF EACH VARIETY (OR TAGGED IN NURSERY)

B. PLANT MATERIALS

1. PLANT SPECIES AND SIZE SHALL CONFORM TO THOSE INDICATED ON THE DRAWINGS. ALL NURSERY STOCK SHALL BE IN ACCORDANCE WITH GRADES AND STANDARDS AS SET FORTH IN ANSI Z60.1-2014-AMERICAN STANDARD FOR NURSERY STOCK. ALL PLANTS SHALL BE HEALTHY, VIGOROUS, SOUND, WELL-BRANCHED, AND FREE OF DISEASE AND INSECTS, INSECT EGGS AND LARVAE AND SHALL HAVE ADEQUATE ROOT SYSTEMS. TREES FOR PLANTING IN ROWS SHALL BE UNIFORM IN SIZE AND SHAPE. ALL MATERIALS SHALL BE SUBJECT TO APPROVAL BY THE OWNER. WHERE ANY REQUIREMENTS ARE OMITTED FROM THE PLANT LIST, THE PLANTS FURNISHED SHALL BE NORMAL FOR THE VARIETY. PLANTS SHALL BE PRUNED PRIOR TO DELIVERY ONLY WITH APPROVAL FROM OWNER OR LANDSCAPE ARCHITECT. NO SUBSTITUTIONS SHALL BE MADE WITHOUT WRITTEN PERMISSION FROM THE LANDSCAPE ARCHITECT.
2. MEASUREMENTS: THE HEIGHT AND/OR WIDTH OF TREES SHALL BE MEASURED FROM THE GROUND OR ACROSS THE NORMAL SPREAD OF BRANCHES WITH THE PLANTS IN THEIR NORMAL POSITION. THIS MEASUREMENT SHALL NOT INCLUDE THE IMMEDIATE TERMINAL GROWTH. PLANTS LARGER IN SIZE THAN THOSE SPECIFIED IN THE PLANT LIST MAY BE USED IF APPROVED BY THE OWNER. IF THE USE OF LARGER PLANTS IS APPROVED, THE ROOTBALL OR SPREAD OF ROOTS SHALL BE INCREASED IN PROPORTION TO THE SIZE OF THE PLANT.
3. INSPECTION: PLANTS SHALL BE SUBJECT TO INSPECTION AND APPROVAL AT THE PLACE OF GROWTH, OR UPON DELIVERY TO THE SITE, AS DETERMINED BY THE OWNER, FOR QUALITY, SIZE, AND VARIETY; SUCH APPROVAL SHALL NOT IMPAIR THE RIGHT OF INSPECTION AND REJECTION AT THE SITE DURING PROGRESS OF THE WORK OR AFTER COMPLETION FOR SIZE AND CONDITION OF ROOT BALLS OR ROOTS, LATENT DEFECTS OR INJURIES. REJECTED PLANTS SHALL BE REMOVED IMMEDIATELY FROM THE SITE. NOTICE REQUESTING INSPECTION SHALL BE SUBMITTED IN WRITING BY THE CONTRACTOR AT LEAST ONE (1) WEEK PRIOR TO ANTICIPATED DATE.

1.05 SOIL MIXTURE (PLANTING MEDIUM, PLANTING MIX, TOPSOIL MIX)

A. SOIL MIXTURE (PLANTING MEDIUM FOR PLANT PITS) SHALL CONSIST OF ⅓ LOOSE COMPOST (NO GREATER THAN 1" SIV), ⅓ PEAT AND ⅓ SAND, AS DESCRIBED BELOW.

B. TOPSOIL FOR USE IN PREPARING SOIL MIXTURE FOR BACKFILLING PLANT PITS SHALL BE FERTILE, FRIABLE, AND OF A LOAMY CHARACTER; REASONABLY FREE OF SUBSOIL, CLAY LUMPS, BRUSH WEEDS AND OTHER LITTER; FREE OF ROOTS, STUMPS, STONES LARGER THAN 2" IN ANY DIRECTION, AND OTHER EXTRANEOUS OR TOXIC MATTER HARMFUL TO PLANT GROWTH. IT SHALL CONTAIN THREE (3) TO FIVE (5) PERCENT DECOMPOSED ORGANIC MATTER AND A PH BETWEEN 5.5 AND 7.0 - SUBMIT SAMPLE AND PH TESTING RESULTS FOR APPROVAL.

C. SAND SHALL BE COARSE, CLEAN, WELL-DRAINING, NATIVE SAND. CONTRACTOR SHALL SUBMIT RESULTS OF SOIL TESTS FOR TOPSOIL AND SAND PROPOSED FOR APPROVAL BY THE OWNER.

D. TREES SHALL BE PLANTED IN THE EXISTING NATIVE SOIL ON SITE, UNLESS DETERMINED TO BE UNSUITABLE, AT WHICH POINT THE CONTRACTOR SHALL CONTACT OWNER'S REPRESENTATIVE TO DISCUSS ALTERNATE RECOMMENDATION PRIOR TO PLANTING.

E. CONTRACTOR TO SUBMIT SAMPLES OF SOIL MIXTURE FOR OWNER'S REPRESENTATIVE APPROVAL PRIOR TO PLANT INSTALLATION OPERATIONS COMMENCE.

1.06 WATER

A. WATER NECESSARY FOR PLANTING AND MAINTENANCE SHALL BE OF SATISFACTORY QUALITY TO SUSTAIN ADEQUATE PLANT GROWTH AND SHALL NOT CONTAIN HARMFUL, NATURAL OR MAN-MADE ELEMENTS DETRIMENTAL TO PLANTS. WATER MEETING THE ABOVE STANDARD SHALL BE OBTAINED ON THE SITE FROM THE OWNER, IF AVAILABLE, AND THE CONTRACTOR SHALL BE RESPONSIBLE TO MAKE ARRANGEMENTS FOR ITS USE BY HIS TANKS, HOSES, SPRINKLERS, ETC. IF SUCH WATER IS NOT AVAILABLE AT THE SITE, THE CONTRACTOR SHALL PROVIDE SATISFACTORY WATER FROM SOURCES OFF THE SITE AT NO ADDITIONAL COST TO THE OWNER.

* *WATERING/IRRIGATION RESTRICTIONS MAY APPLY - REFER TO PROPERTY'S JURISDICTIONAL AUTHORITY.*

1.07 FERTILIZER

A. CONTRACTOR SHALL PROVIDE FERTILIZER APPLICATION SCHEDULE TO OWNER, AS APPLICABLE TO SOIL TYPE, PLANT INSTALLATION TYPE, AND SITE'S PROPOSED USE. SUGGESTED FERTILIZER TYPES SHALL BE ORGANIC OR OTHERWISE NATURALLY-DERIVED.

* *FERTILIZER RESTRICTIONS MAY APPLY - REFER TO PROPERTY'S JURISDICTIONAL AUTHORITY.*

1.08 MULCH

A. MULCH MATERIAL SHALL BE MOISTENED AT THE TIME OF APPLICATION TO PREVENT WIND DISPLACEMENT, AND APPLIED AT A DEPTH OF THREE (3) INCHES FOR ALL PLANTINGS UNLESS OTHERWISE NOTED. MULCH AT ALL PLANTING BEDS SHALL BE TRIPLE SHREDDED HARDWOOD.

1.09 DIGGING AND HANDLING

A. PROTECT ROOTS OR ROOT BALLS OF PLANTS AT ALL TIMES FROM SUN, DRYING WINDS, WATER AND FREEZING AS NECESSARY UNTIL PLANTING. PLANT MATERIALS SHALL BE ADEQUATELY PACKED TO PREVENT DAMAGE DURING TRANSIT.

B. BALLED AND BURLAPPED PLANTS (B&B) SHALL BE DUG WITH FIRM, NATURAL BALLS OF SOIL OF SUFFICIENT SIZE TO ENCOMPASS THE FIBROUS AND FEEDING ROOTS OF THE PLANTS. NO PLANTS MOVED WITH A ROOT BALL SHALL BE PLANTED IF THE BALL IS CRACKED OR BROKEN. PLANTS SHALL NOT BE HANDLED BY STEMS.

C. EXCAVATION OF TREE PITS SHALL BE PERFORMED USING EXTREME CARE TO AVOID DAMAGE TO SURFACE AND SUBSURFACE ELEMENTS SUCH AS UTILITIES OR HARDSCAPE ELEMENTS, FOOTERS AND PREPARED SUB-BASES. ALL TREES SHALL BE PLANTED AS INDICATED ON DRAWINGS. COORDINATE WITH PLANTING DETAILS FOR EXACT DEPTH OF PLANTING SOIL.

1.10 CONTAINER GROWN STOCK

A. ALL TREES SPECIFIED SHALL BE BALL AND BURLAP, UNLESS OTHERWISE APPROVED BY LANDSCAPE ARCHITECT.

B. ALL SHRUB SPECIES SHALL BE CONTAINER GROWN.

C. ALL CONTAINER GROWN MATERIAL SHALL BE HEALTHY, VIGOROUS, WELL-ROOTED PLANTS ESTABLISHED IN THE CONTAINER IN WHICH THEY ARE SOLD. THE PLANTS SHALL HAVE TOPS WHICH ARE OF GOOD QUALITY AND ARE IN A HEALTHY GROWING CONDITION.

D. AN ESTABLISHED CONTAINER GROWN PLANT SHALL BE TRANSPLANTED INTO A CONTAINER AND GROWN IN THAT CONTAINER SUFFICIENTLY LONG ENOUGH FOR THE NEW FIBROUS ROOTS TO HAVE DEVELOPED SO THAT THE ROOT MASS WILL RETAIN ITS SHAPE AND HOLD TOGETHER WHEN REMOVED FROM THE CONTAINER. CONTAINER GROWN STOCK SHALL NOT BE HANDLED BY THEIR STEMS.

E. PLANT ROOTS BOUND IN CONTAINERS ARE NOT ACCEPTABLE.

1.11 MATERIALS LIST

A. QUANTITIES NECESSARY TO COMPLETE THE WORK ON THE DRAWINGS SHALL BE FURNISHED BY THE CONTRACTOR. QUANTITY ESTIMATES HAVE BEEN MADE CAREFULLY, BUT THE LANDSCAPE ARCHITECT OR OWNER ASSUMES NO LIABILITY FOR OMISSIONS OR ERRORS. SHOULD A DISCREPANCY OCCUR BETWEEN THE PLANS AND THE PLANT LIST QUANTITY, THE OWNER'S REPRESENTATIVE SHALL BE NOTIFIED FOR CLARIFICATION PRIOR TO BIDDING OR INSTALLATION. ALL DIMENSIONS AND/OR SIZES SPECIFIED SHALL BE THE MINIMUM ACCEPTABLE SIZE.

1.12 FINE GRADING

A. FINE GRADING UNDER THIS CONTRACT SHALL CONSIST OF FINAL FINISHED GRADING OF LAWN AND PLANTING AREAS THAT HAVE BEEN DISTURBED DURING CONSTRUCTION.

B. THE CONTRACTOR SHALL FINE GRADE THE LAWN AND PLANTING AREAS TO BRING THE ROUGH GRADE UP TO FINAL FINISHED GRADE ALLOWING FOR THICKNESS OF SOD AND/OR MULCH DEPTH. CONTRACTOR SHALL FINE GRADE BY HAND AND/OR WITH ALL EQUIPMENT NECESSARY INCLUDING A GRADING TRACTOR WITH FRONT-END LOADER FOR TRANSPORTING SOIL WITHIN THE SITE.

C. ALL PLANTING AREAS SHALL BE GRADED AND MAINTAINED FOR POSITIVE DRAINAGE TO SURFACE/SUBSURFACE STORM DRAIN SYSTEMS. AREAS ADJACENT TO BUILDINGS SHALL SLOPE AWAY FROM THE BUILDINGS. REFER TO CIVIL ENGINEER'S PLANS FOR FINAL GRADES, IF APPLICABLE.

1.13 PLANTING PROCEDURES

A. CLEANING UP BEFORE COMMENCING WORK: THE CONTRACTOR SHALL CLEAN WORK AND SURROUNDING AREAS OF ALL RUBBISH OR OBJECTIONABLE MATTER DAILY. ALL MORTAR, CEMENT, AND TOXIC MATERIAL SHALL BE REMOVED FROM THE SURFACE OF ALL PLANT BEDS. THESE MATERIALS SHALL NOT BE MIXED WITH THE SOIL. SHOULD THE CONTRACTOR FIND SUCH SOIL CONDITIONS BENEATH THE SOIL WHICH WILL IN ANY WAY ADVERSELY AFFECT THE PLANT GROWTH, CONTRACTOR SHALL IMMEDIATELY CALL IT TO THE ATTENTION OF THE OWNER'S REPRESENTATIVE. FAILURE TO DO SO BEFORE PLANTING SHALL MAKE THE CORRECTIVE MEASURES THE RESPONSIBILITY OF THE CONTRACTOR.

B. SUBGRADE EXCAVATION: THE CONTRACTOR IS RESPONSIBLE TO REMOVE ALL EXISTING AND IMPORTED LIMEROCK AND LIMEROCK SUB-BASE FROM ALL LANDSCAPE PLANTING AREAS TO A MINIMUM DEPTH OF 36" AT TREES AND 18" AT SHRUBS AND PERENNIALS. CONTRACTOR IS RESPONSIBLE TO BACKFILL THESE PLANTING AREAS TO ROUGH FINISH GRADE WITH CLEAN TOPSOIL FROM AN ON-SITE SOURCE OR AN IMPORTED SOURCE. IF LIMEROCK OR OTHER ADVERSE CONDITIONS OCCUR IN PLANTED AREAS AFTER 36", AND DEEP EXCAVATION BY THE CONTRACTOR AND POSITIVE DRAINAGE CANNOT BE ACHIEVED, THE CONTRACTOR SHALL UTILIZE PLANTING DETAIL THAT ADDRESSES POOR DRAINAGE.

C. VERIFY LOCATIONS OF ALL UTILITIES, CONDUITS, SUPPLY LINES AND CABLES, INCLUDING BUT NOT LIMITED TO: ELECTRIC, GAS (LINES AND TANKS), WATER, SANITARY SEWER, STORMWATER SYSTEMS, CABLE, AND TELEPHONE. PROPERLY MAINTAIN AND PROTECT EXISTING UTILITIES. CONTACT TENNESSEE ONE CALL AT (615) 351-1111 TO LOCATE ALL UTILITIES.

D. FURNISH NURSERY'S CERTIFICATE OF COMPLIANCE WITH ALL REQUIREMENTS AS HEREIN SPECIFIED AND REQUIRED. INSPECT AND SELECT PLANT MATERIALS BEFORE PLANTS ARE DUG AT NURSERY OR GROWING SITE.

E. GENERAL: COMPLY WITH APPLICABLE FEDERAL, STATE, COUNTY, AND LOCAL REGULATIONS GOVERNING LANDSCAPE MATERIALS AND WORK. CONFORM TO ACCEPTED HORTICULTURAL PRACTICES AS USED IN THE TRADE. UPON ARRIVAL AT THE SITE, PLANTS SHALL BE THOROUGHLY WATERED AND PROPERLY MAINTAINED UNTIL PLANTED. PLANTS STORED ON-SITE SHALL NOT REMAIN UNPLANTED OR APPROPRIATELY HEALED IN FOR A PERIOD EXCEEDING TWENTY-FOUR (24) HOURS. AT ALL TIMES WORKMANLIKE METHODS CUSTOMARY IN GOOD HORTICULTURAL PRACTICES SHALL BE EXERCISED.

F. THE WORK SHALL BE COORDINATED WITH OTHER TRADES TO PREVENT CONFLICTS. COORDINATE PLANTING WITH IRRIGATION WORK TO ASSURE AVAILABILITY OF WATER AND PROPER LOCATION OF IRRIGATION APPURTENANCES AND PLANTS.

G. ALL PLANTING PITS SHALL BE EXCAVATED TO SIZE AND DEPTH IN ACCORDANCE WITH ANSI Z60.1-2014 - AMERICAN STANDARD FOR NURSERY STOCK, UNLESS SHOWN OTHERWISE ON THE DRAWINGS, AND BACK FILLED WITH THE PREPARED PLANTING SOIL MIXTURE AS SPECIFIED IN SECTION 1.05. TEST ALL TREE PITS WITH WATER BEFORE PLANTING TO ASSURE PROPER DRAINAGE PERCOLATION IS AVAILABLE. NO ALLOWANCE WILL BE MADE FOR LOST PLANTS DUE TO IMPROPER DRAINAGE. TREES SHALL BE SET PLUMB AND HELD IN POSITION UNTIL THE PLANTING MIXTURE HAS BEEN FLUSHED INTO PLACE WITH A SLOW, FULL HOSE STREAM. ALL PLANTING SHALL BE PERFORMED BY PERSONNEL FAMILIAR WITH PLANTING PROCEDURES AND UNDER THE SUPERVISION OF A QUALIFIED LANDSCAPE FOREMAN.

H. TAKE ALL NECESSARY PRECAUTIONS TO AVOID DAMAGE TO BUILDINGS AND BUILDING STRUCTURES WHILE INSTALLING TREES.

I. SOIL MIXTURE SHALL BE AS SPECIFIED IN SECTION 1.05 OF THESE SPECIFICATIONS.

J. TREES AND SHRUBS SHALL BE SET STRAIGHT AT AN ELEVATION THAT, AFTER SETTLEMENT, THE PLANT CROWN WILL STAND ONE (1) TO TWO (2) INCHES ABOVE GRADE. EACH PLANT SHALL BE SET IN THE CENTER OF THE PIT. PLANTING SOIL MIXTURE SHALL BE BACK FILLED, THOROUGHLY TAMPED AROUND THE BALL, AND SETTLED BY WATER (AFTER TAMPING).

K. SHRUBS AND GROUND COVER PLANTS SHALL BE EVENLY SPACED IN ACCORDANCE WITH THE DRAWINGS AND AS INDICATED ON THE PLANT LIST. MATERIALS INSTALLED SHALL MEET MINIMUM SPECIMEN REQUIREMENTS OR QUANTITIES SHOW ON PLANS, WHICHEVER IS GREATER. CULTIVATE ALL PLANTING AREAS TO A MINIMUM DEPTH OF 12", REMOVE AND DISPOSE ALL DEBRIS. COORDINATE WITH PLANTING DETAILS FOR EXACT DEPTH. MIX TOP 4" OF THE PLANTING SOIL MIXTURE AS SPECIFIED IN SECTION 1.05. THOROUGHLY WATER ALL PLANTS AFTER INSTALLATION.

L. TREE GUYING AND BRACING SHALL BE INSTALLED BY THE CONTRACTOR IN ACCORDANCE WITH THE PLANS TO INSURE STABILITY AND MAINTAIN TREES IN AN UPRIGHT POSITION. IF THE CONTRACTOR AND OWNER DECIDE TO WAIVE THE TREE GUYING AND BRACING, THE OWNER SHALL NOTIFY THE PROJECT LANDSCAPE ARCHITECT IN WRITING AND AGREE TO INDEMNIFY AND HOLD HARMLESS THE PROJECT LANDSCAPE ARCHITECT IN THE EVENT UNSUPPORTED TREES PLANTED UNDER THIS CONTRACT FALL AND DAMAGE PERSON OR PROPERTY.

M. HERBICIDE WEED CONTROL: ALL PLANT BEDS SHALL BE KEPT FREE OF NOXIOUS WEEDS UNTIL FINAL ACCEPTANCE OF WORK. IF DIRECTED BY THE OWNER, "ROUND-UP" SHALL BE APPLIED FOR WEED CONTROL BY QUALIFIED PERSONNEL TO ALL PLANTING AREAS IN SPOT APPLICATIONS PER MANUFACTURER'S PRECAUTIONS AND SPECIFICATIONS. PRIOR TO FINAL INSPECTION, TREAT ALL PLANTING BEDS WITH AN APPROVED PRE-EMERGENT HERBICIDE AT AN APPLICATION RATE RECOMMENDED BY THE MANUFACTURER (AS ALLOWED BY JURISDICTIONAL AUTHORITY).

1.14 LAWN SODDING

A. THE WORK CONSISTS OF LAWN BED PREPARATION, SOIL PREPARATION, AND SODDING COMPLETE, IN STRICT ACCORDANCE WITH THE SPECIFICATIONS AND THE APPLICABLE DRAWINGS TO PRODUCE A TURF GRASS LAWN ACCEPTABLE TO THE OWNER.

B. LAWN BED PREPARATION: ALL AREAS THAT ARE TO BE SODDED SHALL BE CLEARED OF ANY ROUGH GRASS, WEEDS, AND DEBRIS BY MEANS OF A SOD CUTTER TO A DEPTH OF THREE (3) INCHES, AND THE GROUND BROUGHT TO AN EVEN GRADE. THE ENTIRE SURFACE SHALL BE ROLLED WITH A ROLLER WEIGHING NOT MORE THAN ONE-HUNDRED (100) POUNDS PER FOOT OF WIDTH. DURING THE ROLLING, ALL DEPRESSIONS CAUSED BY SETTLEMENT SHALL BE FILLED WITH ADDITIONAL SOIL, AND THE SURFACE SHALL BE REGRADED AND ROLLED UNTIL PRESENTING A SMOOTH AND EVEN FINISH TO THE REQUIRED GRADE.

C. SOIL PREPARATION: PREPARE LOOSE BED FOUR (4) INCHES DEEP. HAND RAKE UNTIL ALL BUMPS AND DEPRESSIONS ARE REMOVED. WET PREPARED AREA THOROUGHLY.

D. SODDING

1. THE CONTRACTOR SHALL SOD ALL DISTURBED AREAS WITHIN THE CONTRACT LIMITS NOT COVERED BY HARDSCAPE OR VEGETATIVE MATERIAL, UNLESS SPECIFICALLY NOTED OTHERWISE.
2. SOD PANELS SHALL BE LAID TIGHTLY TOGETHER SO AS TO MAKE A SOLID SODDED LAWN AREA. SOD SHALL BE LAID UNIFORMLY AGAINST THE EDGES OF ALL CURBS AND OTHER HARDSCAPE ELEMENTS, PAVED AND PLANTED AREAS. IMMEDIATELY FOLLOWING SOD LAYING, THE LAWN AREAS SHALL BE ROLLED WITH A LAWN ROLLER CUSTOMARILY USED FOR SUCH PURPOSES, AND THEN THOROUGHLY IRRIGATED. IF, IN THE OPINION OF THE OWNER, TOP-DRESSING IS NECESSARY AFTER ROLLING TO FILL THE VOIDS BETWEEN THE SOD PANELS AND TO EVEN OUT INCONSISTENCIES IN THE SOD, CLEAN SAND, AS APPROVED BY THE OWNER'S REPRESENTATIVE, SHALL BE UNIFORMLY SPREAD OVER THE ENTIRE SURFACE OF THE SOD AND THOROUGHLY WATERED IN. FERTILIZE INSTALLED SOD AS ALLOWED BY PROPERTY'S JURISDICTIONAL AUTHORITY.
3. DURING DELIVERY, PRIOR TO, AND DURING THE PLANTING OF THE LAWN AREAS, THE SOD PANELS SHALL AT ALL TIMES BE PROTECTED FROM EXCESSIVE DRYING AND UNNECESSARY EXPOSURE OF THE ROOTS TO THE SUN. ALL SOD SHALL BE STACKED SO AS NOT TO BE DAMAGED BY SWEATING OR EXCESSIVE HEAT AND MOISTURE.

E. LAWN MAINTENANCE

1. WITHIN THE CONTRACT LIMITS, THE CONTRACTOR SHALL PRODUCE A DENSE, WELL ESTABLISHED LAWN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR AND RE-SODDING OF ALL ERODED, SUNKEN OR BARE SPOTS (LARGER THAN 12"X12") UNTIL CERTIFICATION OF ACCEPTABILITY BY THE OWNER'S REPRESENTATIVE. REPAIRED SODDING SHALL BE ACCOMPLISHED AS IN THE ORIGINAL WORK (INCLUDING RE-GRADING IF NECESSARY).
2. CONTRACTOR SHALL BE RESPONSIBLE FOR ESTABLISHING AND MAINTAINING SOD/LAWN UNTIL ACCEPTANCE BY THE OWNER'S REPRESENTATIVE. PRIOR TO AND UPON ACCEPTANCE, CONTRACTOR TO PROVIDE WATERING/IRRIGATION SCHEDULE TO OWNER. OBSERVE ALL APPLICABLE WATERING RESTRICTIONS AS SET FORTH BY THE PROPERTY'S JURISDICTIONAL AUTHORITY.

1.15 CLEANUP

A. UPON COMPLETION OF ALL PLANTING WORK AND BEFORE FINAL ACCEPTANCE, THE CONTRACTOR SHALL REMOVE ALL MATERIAL, EQUIPMENT, AND DEBRIS RESULTING FROM HIS WORK. ALL PAVED AREAS SHALL BE BROOM-CLEANED AND THE SITE LEFT IN A NEAT AND ACCEPTABLE CONDITION AS APPROVED BY THE OWNER'S REPRESENTATIVE.

1.16 PLANT MATERIAL MAINTENANCE

A. ALL PLANTS AND PLANTING INCLUDED UNDER THIS CONTRACT SHALL BE MAINTAINED BY WATERING, CULTIVATING, SPRAYING, AND ALL OTHER OPERATIONS (SUCH AS RE-STAKING OR REPAIRING GUY SUPPORTS) NECESSARY TO INSURE A HEALTHY PLANT CONDITION BY THE CONTRACTOR UNTIL CERTIFICATION OF ACCEPTABILITY BY THE OWNER'S REPRESENTATIVE.

1.17 FINAL INSPECTION AND ACCEPTANCE OF WORK

A. FINAL INSPECTION AT THE END OF THE WARRANTY PERIOD SHALL BE ON PLANTING, CONSTRUCTION AND ALL OTHER INCIDENTAL WORK PERTAINING TO THIS CONTRACT. ANY REPLACEMENT AT THIS TIME SHALL BE SUBJECT TO THE SAME ONE (1) YEAR WARRANTY (OR AS SPECIFIED BY THE LANDSCAPE ARCHITECT OR OWNER IN WRITING) BEGINNING WITH THE TIME OF REPLACEMENT AND ENDING WITH THE SAME INSPECTION AND ACCEPTANCE HEREIN DESCRIBED.

1.18 WARRANTY

A. THE LIFE AND SATISFACTORY CONDITION OF ALL PLANT MATERIAL INSTALLED (INCLUDING SOD) BY THE LANDSCAPE CONTRACTOR SHALL BE WARRANTIED BY THE CONTRACTOR FOR A MINIMUM OF ONE (1) CALENDAR YEAR COMMENCING AT THE TIME OF CERTIFICATION OF ACCEPTABILITY BY THE OWNER'S REPRESENTATIVE.

B. REPLACEMENT: ANY PLANT NOT FOUND IN A HEALTHY GROWING CONDITION DURING THE WARRANTY PERIOD SHALL BE REMOVED FROM THE SITE AND REPLACED WITHIN TEN (10) DAYS OF NOTICE, OR BETWEEN SEPTEMBER-NOVEMBER, MARCH-MAY. ALL REPLACEMENTS SHALL BE PLANTS OF THE SAME KIND AND SIZE AS SPECIFIED IN THE PLANT LIST. THEY SHALL BE FURNISHED, PLANTED AND MULCHED AS SPECIFIED AT NO ADDITIONAL COST TO THE OWNER.

C. IN THE EVENT THE OWNER DOES NOT CONTRACT WITH THE CONTRACTOR FOR LANDSCAPE MAINTENANCE, THE CONTRACTOR IS ENCOURAGED TO VISIT THE PROJECT SITE PERIODICALLY DURING THE ONE (1) YEAR WARRANTY PERIOD TO EVALUATE MAINTENANCE PROCEDURES BEING PERFORMED BY THE OWNER, AND SHALL NOTIFY THE OWNER IN WRITING OF MAINTENANCE PROCEDURES OR CONDITIONS WHICH THREATEN VIGOROUS AND HEALTHY PLANT GROWTH. IT IS SUGGESTED SUCH SITE VISITS SHALL BE CONDUCTED A MINIMUM OF ONCE PER MONTH FOR A PERIOD OF TWELVE (12) MONTHS FROM THE DATE OF ACCEPTANCE.

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LOT 3
PANATTONI DEVELOPMENT COMPANY
LA VERGNE, TENNESSEE

PANATTONI®

SPENCER JAMES SANDBERG — REGISTERED — LANDSCAPE ARCHITECT — 12/18/2023

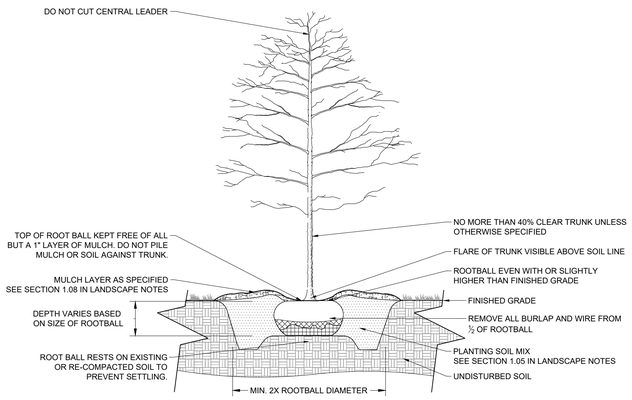
No	REVISIONS	DATE	BY
-	-		
0			
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4			
5			
6			
7			

DESIGNED BY:	OAS
DRAWN BY:	OAS
CHECKED BY:	JLR
DATE:	12/18/2023

KIMLEY-HORN PROJECT NO. 118163044

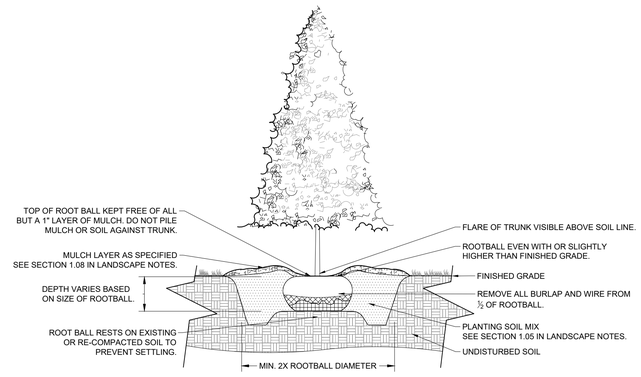
LANDSCAPE NOTES

SHEET NUMBER
L1-50



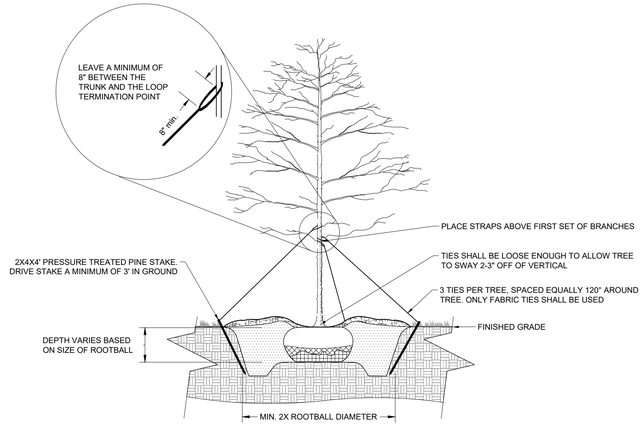
1 B&B TREE PLANTING

NOT TO SCALE



2 EVERGREEN TREE PLANTING

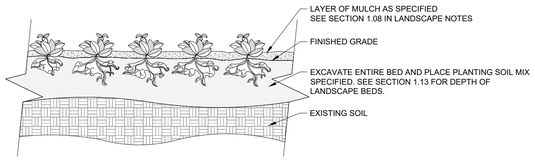
NOT TO SCALE



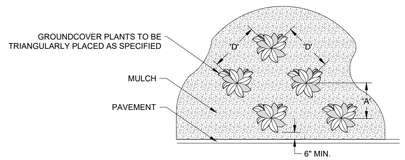
NOTE: TREE STAKING MAY BE USED ONLY ON TREES LARGER THAN 2" CAL., UNLESS OTHERWISE APPROVED BY THE CITY LANDSCAPE ARCHITECT.

3 TREE STAKING

NOT TO SCALE



SECTION VIEW



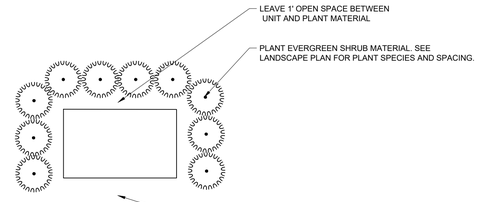
PLAN VIEW

PLANT SPACING ' D '	ROW ' A '
8" O.C.	6.93" O.C.
10" O.C.	8.66" O.C.
12" O.C.	10.4" O.C.
18" O.C.	15.6" O.C.
24" O.C.	20.8" O.C.
36" O.C.	30.0" O.C.
48" O.C.	31.5" O.C.

NOTES:
1 SEE PLANTING LEGEND FOR GROUNDCOVER SPECIES, SIZE, AND SPACING DIMENSION.
2 SETTLE SOIL AROUND ROOT BALL OF EACH GROUNDCOVER PRIOR TO MULCHING.

4 GROUNDCOVER PLANTING

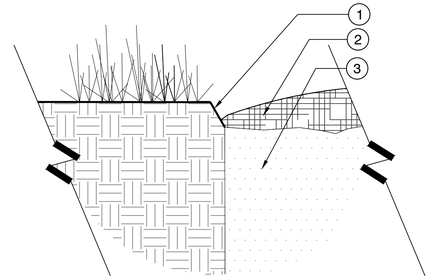
NOT TO SCALE



5 TYPICAL SERVICE SCREENING DETAIL

NOT TO SCALE

1. SPADED LANDSCAPE BED EDGE
2. 3" HIGH MULCH SAUCER SHALL BE CONSTRUCTED AROUND THE BASE OF SHRUB/TREE
3. PLANTING SOIL MIX SEE SECTION 1.05 IN LANDSCAPE NOTES



6 SPADED EDGE

1 1/2" = 1'-0"

KHA-SI-PAV-CO-28

PLANT SCHEDULE LOT 3

SYMBOL	CODE		BOTANICAL NAME	COMMON NAME	SPACING	SIZE	ROOT	CONDITION	
SOD/SEED									
DECIDUOUS TREES									
	SOD	240,130 SF	-	TIFWAY 419 BERMUDA SOD		SOD	-	SOD	TIGHT, SAND ROLLED JOINTS, FREE OF WEEDS & DEBRIS
	ARA	11	ACER RUBRUM `AUTUMN FLAME`	AUTUMN FLAME RED MAPLE	AS SHOWN	3" CAL; 10`-12` HT.	B&B	FULL; MATCHED	
	TD	8	TAXODIUM DISTICHUM	BALD CYPRESS	AS SHOWN	3" CAL; 10`-12` HT.	B&B	FULL; MATCHED	
EVERGREEN TREES									
	ICB	7	ILEX CORNUTA `BURFORDII` (TREE FORM)	TREE FORM BURFORD HOLLY	AS SHOWN	2" CAL; 8-10` HT.	B&B	FULL; MATCHED	
	IG	8	ILEX OPACA `GREENLEAF`	GREENLEAF AMERICAN HOLLY	AS SHOWN	3" CAL; 10`-12` HT.	B&B	FULL; MATCHED	
	IN	13	ILEX X `NELLIE R STEVENS`	NELLIE STEVENS HOLLY	AS SHOWN	2" CAL.; 8-10` HT.	B&B	FULL; MATCHED	
SOD/SEED									
	SOD	42,411 SF	-	TIFWAY 419 BERMUDA SOD	SOD	-	SOD	TIGHT, SAND ROLLED JOINTS, FREE OF WEEDS & DEBRIS	
GROUND COVERS									
	SR	36,364 SF	SHOT ROCK	SHOT ROCK		AS SHOWN			
	TR	7,587 SF	TENNESSEE RIVER ROCK - -	TENNESSEE RIVER ROCK		AS SHOWN			

811 Know what's below. Call before you dig.

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Kimley»Horn
10 Lea Avenue, Suite 400, Nashville, TN 37210
Main: 615.564.2701 | www.kimley-horn.com
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CO-OP BUSINESS PARK
LOT 3
PANATTONI DEVELOPMENT COMPANY
LA VERGNE, TENNESSEE

PANATTONI®

SPENCER JAMES SANDERS — REGISTERED — LANDSCAPE ARCHITECT — 12/18/2023

No.	REVISIONS	DATE	BY
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4	-	-	-
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6	-	-	-
7	-	-	-

DESIGNED BY:	OAS
DRAWN BY:	OAS
CHECKED BY:	JLR
DATE:	12/18/2023
KIMLEY-HORN PROJECT NO.	118163044

LANDSCAPE DETAILS

SHEET NUMBER
L1-51

Planning Commission Report Meeting: December 26, 2023	City of La Vergne

Item #: 13.

Item Title: Concept Plan - La Vergne Business Center - Two (2) Buildings Totaling 346,800 Square Feet on 29 Acres. Requested by Kimley-Horn. Property located at 1701 Mars Street (Tax Map 14, Parcels 46.01 & 25). I-1 (Light Industrial) Zoning District. Property owned by Big Acquisitions, LLC.

Reviewed By:
Bo Logan, City Planner
Gary Lide, City Engineer

Summary: On behalf of their client, Kimley-Horn is requesting approval of the concept plan for the La Vergne Business Center located on 29 ± acres. The purpose of the plan is to show the layout for a new industrial development.

The property is located off Mars Street and Minerva Drive. The proposed layout on the concept plan shows two (2) new buildings are indicated for the new parcels that will be created. Together, these two (2) proposed buildings total over 346,000 square feet of new industrial space.

The project will have two phases as well. The applicant will be submitting two separate site plans as time goes on - one site plan for each phase.

The project will be served via a new internal road to be installed by the developer. This road will be a private road.

The existing lot at 1701 Mars is zoned residential and must be rezoned to industrial in order to be used as part of this industrial park.

Staff recommends that this applicant should abandon this plan with access from Mars and Minerva, and instead all warehouse and distribution should access from Dick Buchanan Street, either directly or indirectly;

Staff Recommendation:

Staff Comments / Technical Items:

Planning

Bo Logan
blogan@lavergnetn.gov

Jake Blair
jblair@lavergnetn.gov

1. Staff recommends that this applicant abandon this plan with access from Mars and Minerva & instead all warehouse and distribution should access from Dick Buchanan Street, either directly or indirectly;
2. The existing lot at 1701 Mars is zoned residential and must be rezoned to industrial in order to be used as part of this industrial park.
3. A private easement was considered back on December 16th after the workshop, but the easement creates even more issues including access for emergency services such as Fire; Emergency cannot access through a private easement for various reasons;
4. Owner should dedicate ROW all the way to the property line at a minimum to create public right-of-way and extend Minerva Drive;
5. A 50' buffer will be required between all industrial and residential land.
6. A cul-de-sac will most likely be required to be installed by developer at end of Minerva.

Engineering

Gary Lide
glide@lavergnetn.gov

1. (Previous comments 4, 5, 6, and 7)(For discussion with the Planning Commission) Applicant's response to comments regarding traffic impacts of this development is as follows:

These intersections in existing conditions are on the border between two level of services. With the increase in traffic generated by the site, the LOS is reduced a service level. Significant improvements are proposed as part of this development on Minerva and Murfreesboro. The results of the traffic study do not warrant signalization of Minerva and Murfreesboro Pike.

The concept plan shows the intent to widen Minerva Drive to 14' wide lanes and add a 160-foot-long left turn lane from Minerva onto Murfreesboro Road. Please explain to the Planning Commission how these improvements offset the negative impacts shown by the traffic study at the intersections of Murfreesboro Road with Minerva, Mercury, and Fergus.

Utilities

Scott Tatalovich
statalovich@lavergnetn.gov

1. Fire water meter and backflow assembly layout does not match City Standard Water Detail 024.

Codes

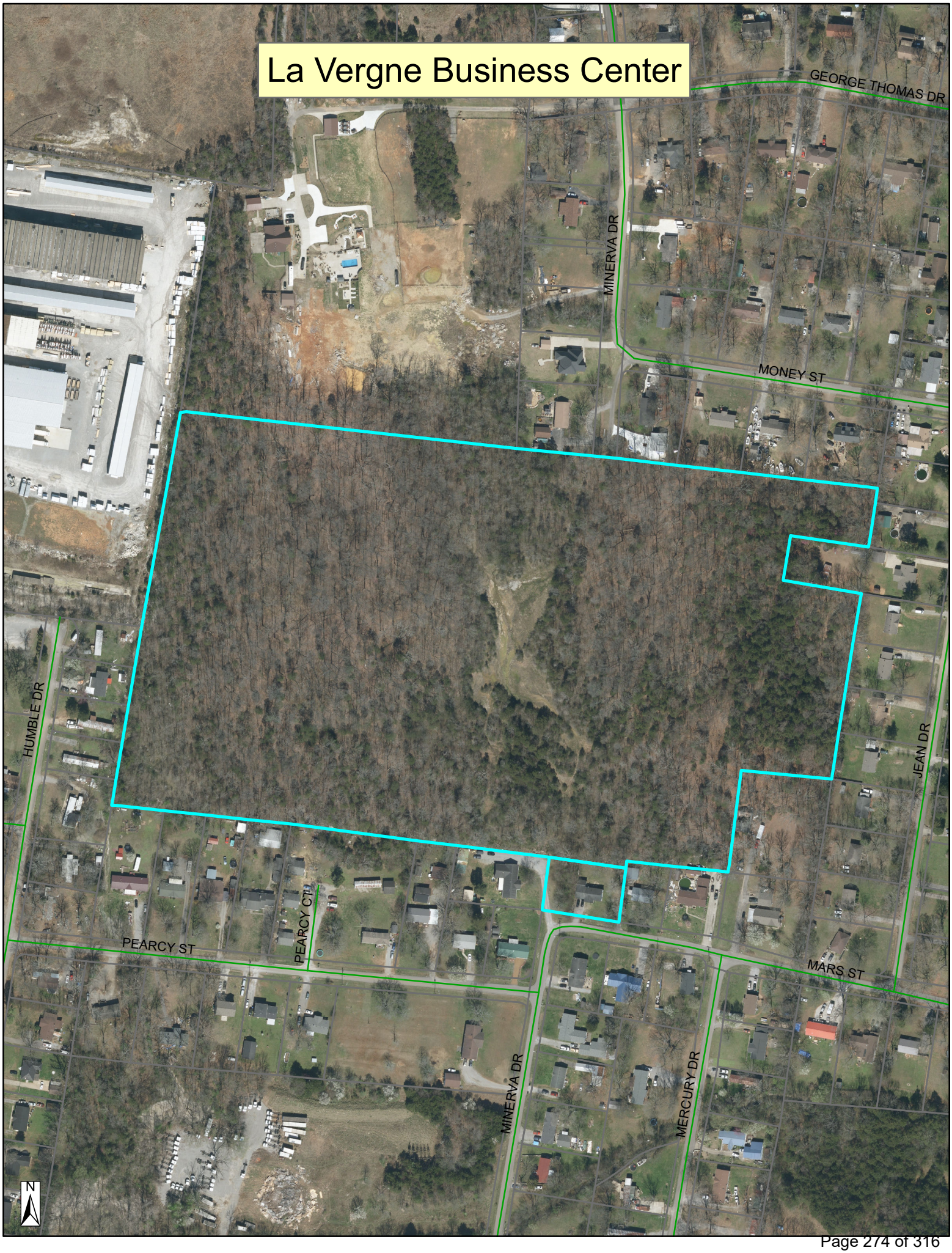
Fire

Curtis Brinkley
cbrinkley@lavergnetn.gov

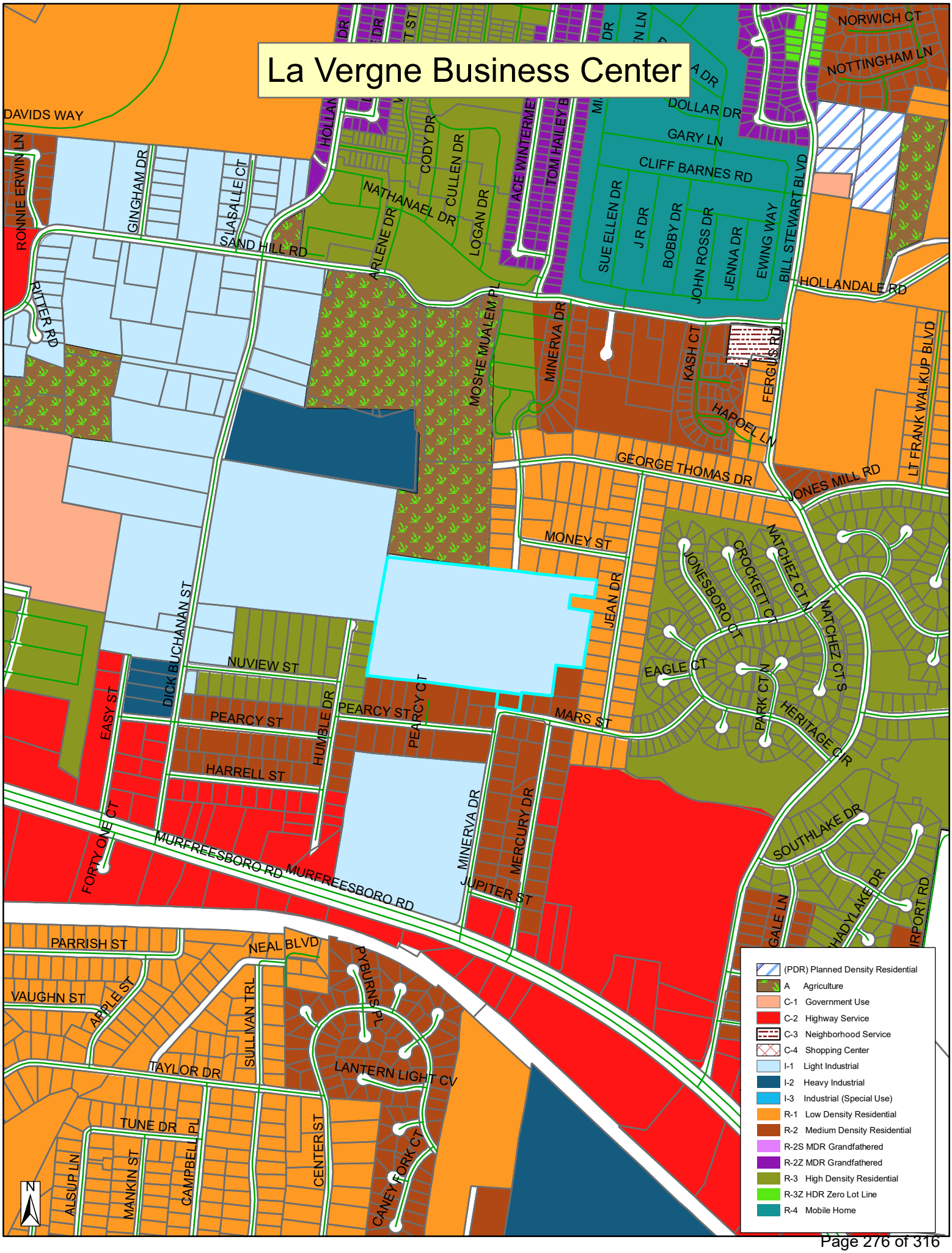
Police

John Eubank
jeubank@lavergnetn.gov

***Note:** The above technical items may not be the only corrections and/or issues needing to be resolved to get approval from the planning commission. New items can be brought up at the workshop and staff can add items at any time that might have been overlooked. It is the applicant's responsibility to make sure that all technical items are addressed and that no new issues exist before the planning commission meeting. Addressing all technical items does not constitute approval. It is the planning commission's decision whether an item passes or fails. Revised plans are due to staff by the following Monday at close of business unless other arrangements are made and documented.


La Vergne Business Center
GEORGE THOMAS DR
MINERVA DR
MONEY ST
HUMBLE DR
JEAN DR
PEARCY ST
PEARCY CT
MARS ST
MINERVA DR
MERCURY DR
N


La Vergne Business Center
JERRY BUTLER DR
SAND HILL RD
CHRISTOPHER RD
BILL STEWART BLVD
JOHN ROSS DR
JENNA DR
BOBBY DR
J R DR
EWING WAY
MOSHE MUALEM PL
MINERVA DR
KASH CT
FERGUS RD
HAPOEL LN
GEORGE THOMAS DR
MONEY ST
DICK BUCHANAN ST
JEAN DR
JONESBORO CT
CROCKETT CT
NATCHEZ CT N
FREEDOM CT
PARK CT N
EAGLE CT
HERITAGE CIR
NUVIEW ST
HUMBLE DR
PEARCY ST
PEARCY CT
MARS ST
HARRELL ST
MERCURY DR
MURFREESBORO RD
JUPITER ST
GALE LN
PARRISH ST
NEAL BLVD
SULLIVAN TRL
CENTER ST
FISK DR
N


La Vergne Business Center
DAVIDS WAY
RONNIE ERWIN LN
GINGHAM DR
LASALLE CT
SAND HILL RD
RITTER RD
HOLLAN
CODY DR
CULLEN DR
NATHANAEL DR
ARLENE DR
LOGAN DR
ACE WINTERME
TOM HAILEY B
DOLLAR DR
GARY LN
CLIFF BARNES RD
SUE ELLEN DR
JR DR
BOBBY DR
JOHN ROSS DR
JENNA DR
EWING WAY
BILL STEWART BLVD
NORWICH CT
NOTTINGHAM LN
HOLLANDALE RD
MOSHE MUALEM PL
MINERVA DR
KASH CT
FERGUS RD
HAPOEL LN
LT FRANK WALKUP BLVD
GEORGE THOMAS DR
JONES MILL RD
MONEY ST
JEAN DR
JONESBORO CT
CROCKETT CT
NATCHEZ CT N
NATCHEZ CT S
EAGLE CT
PARK CT N
HERITAGE CIR
DICK BUCHANAN ST
NUVIEW ST
EASY ST
PEARCY ST
HUMBLE DR
PEARCY CT
MARS ST
HARRELL ST
FORTY ONE CT
MURFREESBORO RD
MINERVA DR
MERCURY DR
JUPITER ST
SOUTHLAKE DR
GALE LN
PARRISH ST
NEAL BLVD
VAUGHN ST
APPLE ST
SULLIVAN TRL
AYBURN PL
LANTERN LIGHT CV
TAYLOR DR
TUNE DR
CAMPBELL PL
CENTER ST
CANEY FORK CT
ALSUP LN
MANKIN ST
N
(PDR) Planned Density Residential
A Agriculture
C-1 Government Use
C-2 Highway Service
C-3 Neighborhood Service
C-4 Shopping Center
I-1 Light Industrial
I-2 Heavy Industrial
I-3 Industrial (Special Use)
R-1 Low Density Residential
R-2 Medium Density Residential
R-2S MDR Grandfathered
R-2Z MDR Grandfathered
R-3 High Density Residential
R-3Z HDR Zero Lot Line
R-4 Mobile Home


303


GRAY'S
1255-6921



CONCEPT PLAN SUBMITTAL

LA VERGNE BUSINESS CENTER

1701 MARS STREET
LA VERGNE, TN

CONCEPT PLAN SUBMITTAL: 11/27/2023
CONCEPT PLAN RESUBMITTAL: 12/18/2023

SITE DATA TABLE		
SITE ADDRESS	1701 MARS STREET LA VERGNE, TN 37086	
TAX MAP	MAP 014 PARCEL 046.01, 025.00	
OVERALL AREA	EXISTING	PROPOSED
SITE AREA	29.0 AC	29.0 AC
DISTURBED AREA	N/A	29.0 AC
DEDICATED R.O.W. AREA	N/A	N/A
IMPERVIOUS AREA	0 AC	16.68 AC
PERVIOUS AREA	29 AC	12.32 AC
YARD / BUILDING SETBACKS	REQUIRED	PROVIDED
FRONT YARD	20 FT	20 FT
FRONT BUILDING SETBACK	40 FT	40 FT
SIDE YARD	10 FT	10 FT
SIDE BUILDING SETBACK	20 FT	20 FT
REAR YARD	15 FT	15 FT
REAR BUILDING SETBACK	20 FT	20 FT

BUILDING DATA	AREA	APPROXIMATE DIMENSIONS
BUILDING 1	±181,800 SF	260' x 680'
BUILDING 2	±165,000 SF	250' x 640'
TOTAL BUILDING AREA	±346,800 SF	

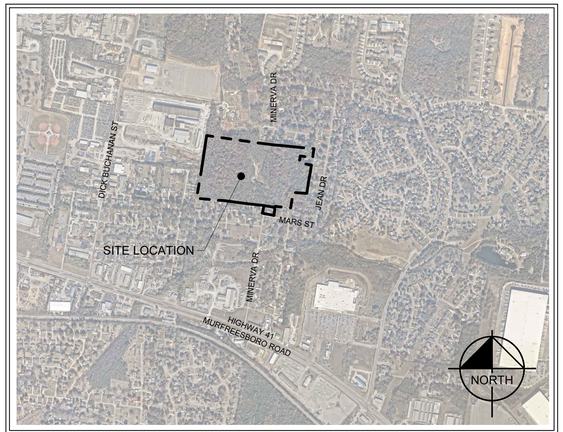
PARKING	REQUIRED	PROVIDED
STANDARD CAR PARKING (1 SPACE PER 400 GSF OFFICE + 1 SPACE PER 4,000 GSF WAREHOUSE)	±87	±286
ACCESSIBLE (INCL. VAN ACCESSIBLE)	4 (1 VAN)	4
TRUCK PARKS	N/A	±257

EXISTING PROPERTY SUMMARY

THE PROPOSED DEVELOPMENT WILL CONSIST OF A TWO-BUILDING WAREHOUSE DISTRIBUTION PARK TO BE CONSTRUCTED ON ±29 ACRES OFF OF MINERVA DRIVE IN LA VERGNE, TN. IN TOTAL, THE COMBINED AREA FOR THE TWO BUILDINGS IS ±346,800 SQUARE FEET.

EXISTING PROPERTY SUMMARY

PROPERTY ADDRESS:	1701 MARS STREET LA VERGNE, TN
MAP AND PARCEL ID:	MAP 014, PARCELS 046.01, 025.00
U.S. FEMA FIRM PANEL:	47149C0020K DATED MAY 9, 2023, ZONE X
EXISTING ZONING: EXISTING LAND USE:	I-1, LIGHT INDUSTRIAL VACANT



VICINITY MAP
NOT TO SCALE

Sheet List Table	
Sheet Number	Sheet Title
C0-00	COVER
C0-01	GENERAL NOTES
C0-10	SITE VICINITY MAP
C1-00	EXISTING CONDITIONS
C1-20	ROAD CLOSURE PLAN
C2-00	SITE LAYOUT - OVERALL
C2-10	MINERVA DR ENLARGEMENT
C2-11	MINERVA DR ENLARGEMENT
C4-00	GRADING AND DRAINAGE PLAN - OVERALL
C4-01	GRADING AND DRAINAGE PLAN - CROSS SECTION
C6-00	UTILITY PLAN - OVERALL
L1-00	LANDSCAPE PLAN

CITY OF LA VERGNE
RUTHERFORD COUNTY, TN

PROJECT DESIGN TEAM

CIVIL ENGINEER
KIMLEY-HORN AND ASSOCIATES, INC.
10 LEA AVENUE, SUITE 400
NASHVILLE, TENNESSEE 37210
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PHONE: (615) 564-2701

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BARGE DESIGN SOLUTIONS, INC.
211 COMMERCE STREET, SUITE 600
NASHVILLE, TN 37210
CONTACT: JIM OVERFELT
PHONE: (615) 252-4421

TRAFFIC
KCI TECHNOLOGIES, INC.
500 11TH AVENUE N, SUITE 290
NASHVILLE, TN 37203
CONTACT: TYLER FOSNES
PHONE: (615) 370-8410

PERMITTING / UTILITY CONTACTS

BUILDING DEPT.
CITE OF LA VERGNE CODES
5175 MURFREESBORO RD
LA VERGNE, TN 37086
CONTACT: RANDPOLPH SALYERS
PHONE: (615) 213-2624

STORMWATER
CITY OF LA VERGNE
STORMWATER DEPARTMENT
5175 MURFREESBORO RD
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PHONE: (615) 287-8703

SANITARY SEWER
LA VERGNE PUBLIC WORKS
148 INTERNATIONAL BLVD
LA VERGNE, TN 37086
PHONE: (615) 793-9891

ZONING
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LA VERGNE, TN 37086
CONTACT: BO LOGAN
PHONE: (615) 862-6608

TELEPHONE
TDS TELECOM
5265 MURFREESBORO ROAD
LA VERGNE, TN 37086
PHONE: (615) 350-9375

NATURAL GAS
SMYRNA GAS DEPARTMENT
315 SOUTH LOWRY ST
SMYRNA, TN 37167
PHONE: (615) 355-5740

WATER
LA VERGNE PUBLIC WORKS
148 INTERNATIONAL BLVD
LA VERGNE, TN 37086
PHONE: (615) 793-9891

FIRE
CITY OF LA VERGNE FIRE MARSHAL
283 OLD NASHVILLE HWY
LA VERGNE, TN 37086
CONTACT: CURTIS BRINKLEY
PHONE: (615) 287-5832

ELECTRIC
MIDDLE TN ELECTRIC
MEMBERSHIP CORPORATION
555 NEW SALEM HIGHWAY
MURFREESBORO, TN 37066
CONTACT: JOSH HOWLAND
PHONE: (615) 453-3074

CABLE
TDS TELECOM
5265 MURFREESBORO ROAD
LA VERGNE, TN 37086
PHONE: (615) 350-9375

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OWNER / DEVELOPER

BIG ACQUISITIONS LLC
10275 W HIGGINS RD, SUITE 810
ROSEMONT, IL 60018
PHONE: 615-630-8591
CONTACT: ANDREW MAZEY

PLANS PREPARED BY

Kimley»Horn

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Main: (615) 564-2701 | www.kimley-horn.com
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ENGINEER'S SEAL

BRETT BEELER
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
No. 126611
STATE OF TENNESSEE

PLAN REVISIONS

REVISION NO.	DATE	REMARKS

FILE NUMBER	SHEET NUMBER	TOTAL SHEETS
118574000	C0-00	12

Drawing name: K:\NSH_LDEV\118574000 - 1701 Mars Street\4-CADD\PlanSheets\C0-00 COVER.dwg C0-00 COVER Dec 18, 2023 12:36pm by: brett.beeler

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CONTRACTOR RESPONSIBILITIES:

1. PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL BE RESPONSIBLE FOR:
   - A. THE CONTRACTOR SHALL VERIFY ALL PROPOSED AND EXISTING CONDITIONS INCLUDING UTILITIES (INVERTS, CONNECTIONS, MATERIALS, ETC.) AND DIMENSIONS WITHIN THE LIMITS OF WORK PRIOR TO THE START OF CONSTRUCTION.
   - B. REFER TO ARCHITECTURAL DRAWINGS FOR DETAILED BUILDING INFORMATION.
   - C. THE CONTRACTOR IS RESPONSIBLE FOR ALL NOTIFICATIONS AND LIAISONS WITH UTILITY COMPANIES DURING THE PROCESS OF LOCATING, RELOCATING, AND TYING INTO PUBLIC UTILITIES.
   - D. PRIOR TO COMMENCING LAND DISTURBANCE ACTIVITY, THE LIMITS OF LAND DISTURBANCE SHALL BE CLEARLY AND ACCURATELY DEMARCATED WITH STAKES, RIBBONS, OR OTHER APPROPRIATE MEANS. THE LOCATION AND EXTENT OF ALL AUTHORIZED LAND DISTURBANCE SHALL OCCUR INSIDE THE APPROVED LIMITS INDICATED ON THE APPROVED PLANS.
2. DURING CONSTRUCTION:
   - A. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DEVIATIONS FROM THESE PLANS AND SPECIFICATIONS WITHOUT PRIOR WRITTEN CONSENT OF THE ENGINEER MAY CAUSE THE WORK TO BE UNACCEPTABLE.
   - B. THE CONTRACTOR SHALL USE MATERIALS AND EMPLOY CONSTRUCTION METHODS IN ORDER TO COMPLY WITH THE DRAWINGS AND SPECIFICATIONS. WHERE A CONFLICT OCCURS, THE STRICTEST DESIGN SHALL GOVERN. THE ENGINEER'S REVIEW OF SHOP DRAWINGS, PRODUCT DATA, ETC., DOES NOT RELIEVE THE CONTRACTOR FROM COMPLYING WITH THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL INFORM THE ENGINEER IN WRITING OF ANY SPECIFIC DEVIATIONS AND OBTAIN ENGINEER'S WRITTEN APPROVAL OF THE SPECIFIC DEVIATION.
   - C. IT IS SOLELY THE CONTRACTOR'S RESPONSIBILITY TO FOLLOW ALL APPLICABLE SAFETY CODES AND REGULATIONS DURING ALL PHASES OF CONSTRUCTION.
   - D. ALL CONSTRUCTION MUST CONFORM TO THE STANDARDS, SPECIFICATIONS, AND CODES OF THE GOVERNING MUNICIPALITIES.
   - E. CONSTRUCTION SHALL MEET ALL CURRENT STANDARDS SET FORTH IN THE AMERICANS WITH DISABILITIES ACT.
   - F. IF THE CONTRACTOR DAMAGES ANY EXISTING UTILITIES DURING CONSTRUCTION, HE SHALL, AT HIS OWN EXPENSE, REPLACE OR REPAIR THE UTILITIES TO ORIGINAL CONDITION AND QUALITY AS APPROVED BY THE OWNER AND REPRESENTATIVE OF THE APPROPRIATE UTILITY COMPANY.
   - G. SUFFICIENT BARRICADES, LIGHTS, SIGNS, AND OTHER TRAFFIC CONTROL METHODS IN ACCORDANCE WITH GOVERNING ORDINANCES MAY BE NECESSARY FOR THE PROTECTION AND SAFETY OF THE PUBLIC. SAID CONTROL DEVICES SHALL BE PER THE MANUAL OF TRAFFIC CONTROL DEVICES, M.U.T.C.D., CURRENT EDITION, AND SHALL BE PROVIDED AND MAINTAINED THROUGHOUT CONSTRUCTION.
   - H. TRAFFIC CONTROLS AND OTHER WARNING DEVICES SHALL BE INSTALLED PRIOR TO THE COMMENCEMENT OF ANY WORK ON CITY, COUNTY, OR TENNESSEE DEPARTMENT OF TRANSPORTATION ROADS. THEY SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION AND SHALL REMAIN IN PLACE UNTIL THE CONCLUSION OF ALL WORK.
   - I. ALL WARNING DEVICES SHALL BE EITHER TYPE I BARRICADES OR DRUMS WITH WARNING LIGHTS ON EVERY OTHER DEVICE. THEY SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), CURRENT EDITION, AND CITY OF LA VERGNE STANDARDS FOR COLOR, SIZE, REFLECTIVITY, HEIGHT, AND PLACEMENT.
   - J. FIRE DEPARTMENT ACCESS SHALL BE MAINTAINED AT ALL TIMES.
   - K. CONTRACTOR SHALL SHORE AND BRACE ALL EARTH, FORMS, CONCRETE, STEEL, WOOD, AND MASONRY TO RESIST GRAVITY, EARTH, WIND, THERMAL, CONSTRUCTION, AND MISCELLANEOUS LOADS DURING CONSTRUCTION.
   - L. ON-SITE BURIAL OF DEBRIS IS PROHIBITED.
   - M. UNLESS OTHERWISE NOTED THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OF ALL FABRICATED MATERIALS TO THE ENGINEER. DESIGN DOCUMENTS SHALL NOT BE REPRODUCED AS SHOP DRAWINGS.
   - N. IN CASE OF UNFORESEEN CONSTRUCTION COMPLICATIONS OR DISCREPANCIES, THE CONTRACTOR IS TO IMMEDIATELY NOTIFY THE ENGINEER IN WRITING.
   - O. ALL REQUIRED TESTING REPORTS SHALL BE AVAILABLE AT THE JOB SITE.
   - P. AS-BUILT DRAWINGS OF ROADWAYS, STORM DRAINS, SANITARY SEWER AND WATER LINES, FIELD APPROVAL BY THE ENGINEER, AND ALL APPLICABLE BONDS ARE REQUIRED PRIOR TO FINAL ACCEPTANCE BY THE OWNER.
   - Q. CONTRACTOR SHALL MAINTAIN CONTINUOUS UTILITY SERVICE TO ALL EXISTING BUILDINGS THROUGHOUT CONSTRUCTION UNLESS APPROVAL FOR SERVICE INTERRUPTION IS OBTAINED FROM THE OWNERS IN ADVANCE.
   - R. THE CONTRACTOR SHALL VERIFY EXISTING CONDITIONS TO ENSURE THAT THE NEW WORK SHALL FIT INTO THE EXISTING SITE IN THE MANNER INTENDED AND AS SHOWN ON THE DRAWINGS. SHOULD ANY CONDITIONS EXIST THAT ARE CONTRARY TO THOSE SHOWN ON THE DRAWINGS, THE CONTRACTOR SHALL NOTIFY THE OWNER'S REPRESENTATIVE PRIOR TO PERFORMING ANY WORK IN THE AREA INVOLVING DIFFERENCES. NOTIFICATION SHALL BE IN THE FORM OF A DRAWING OR SKETCH INDICATING FIELD MEASUREMENTS AND NOTES RELATING TO THE AREA.
   - S. ANY FOREIGN ITEM FOUND DURING CONSTRUCTION IS THE PROPERTY OF THE OWNER. THIS INCLUDES, BUT IS NOT LIMITED TO, PRECIOUS METALS, COINS, PAPER CURRENCY, ARTIFACTS AND ANTIQUITIES.
   - T. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE DONE TO THE PREMISES OR ADJACENT PREMISES, OR INJURIES TO THE PUBLIC DURING THE CONSTRUCTION OF THE WORK, WHETHER CAUSED BY HIMSELF, HIS SUBCONTRACTORS, OR THE CARELESSNESS OF ANY OF HIS EMPLOYEES.
   - U. THE CONTRACTOR SHALL FURNISH, INSTALL AND MAINTAIN ALL NECESSARY TEMPORARY WORKS FOR THE PROTECTION OF THE WORK AND THE PUBLIC, INCLUDING BARRICADES, WARNING SIGNS, LIGHTS, ETC.
   - V. THE CONTRACTOR ACKNOWLEDGES & AGREES THAT THE WORK IS ENTIRELY AT HIS RISK UNTIL SITE IS ACCEPTED, AND HE WILL BE HELD RESPONSIBLE FOR ITS SAFETY BY THE OWNER. THE CONTRACTOR WILL INDEMNIFY THE OWNER & OWNER'S REPRESENTATIVE FROM LIABILITY AT THE SITE THROUGHOUT THE CONSTRUCTION PROCESS.
   - W. THE CONTRACTOR SHALL GIVE ALL NECESSARY NOTICES AND OBTAIN ALL PERMITS AND PAY ALL LEGAL FEES. HE SHALL ALSO COMPLY WITH ALL CITY, COUNTY AND STATE BUILDING LAWS, ORDINANCES OR REGULATIONS RELATING TO BUILDING SIDEWALKS, STREETS, BLASTING, PUBLIC INFRASTRUCTURE, STORMWATER REGULATIONS, ETC.
   - X. THE CONTRACTOR IS TO CHECK AND VERIFY ALL MEASUREMENTS, LEVELS, ETC. BEFORE ORDERING MATERIALS AND PROCEEDING WITH THE WORK, AND IS TO BE RESPONSIBLE FOR THE SAME.
   - Y. REFERENCE POINTS AND HUBS DURING THE CONSTRUCTION OF HIS WORK, AND SHALL BEAR THE COST OF REPLACING SAME.
   - Z. CARE SHALL BE TAKEN TO PROTECT ANY UTILITIES, TREES, ETC. WHICH ARE TO REMAIN AND NOT TO BE DISTURBED BY THE CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGES TO SUCH PROPERTY.

DEMOLITION INFORMATION:

1. NOTIFICATIONS:

   THE CONTRACTOR SHALL NOTIFY THE OWNER AND CITY INSPECTOR(S) 24 HOURS PRIOR TO ANY DEMOLITION OR CONSTRUCTION.
2. DISPOSAL GUIDELINES:
   - A. ONLY ITEMS SPECIFICALLY NOTED TO BE DEMOLISHED SHALL BE REMOVED FROM THE SITE.
   - B. REMOVE EXISTING PAVED AREAS AS SHOWN INCLUDING DRIVEWAYS, SIDEWALKS, PARKING AREAS, SERVICE AREAS, EQUIPMENT PADS, AND ALL MISCELLANEOUS PAVING.
   - C. ALL DEBRIS RESULTING FROM DEMOLITION SHALL BE REMOVED FROM THE SITE AND DISPOSED OF LEGALLY BY THE CONTRACTOR IN ACCORDANCE WITH LOCAL STATE AND FEDERAL REGULATIONS. BACKFILL ALL TRENCHES AND EXCAVATIONS RESULTING FROM DEMOLITION.
   - D. ALL DEMOLISHED MATERIAL BECOMES THE PROPERTY OF THE CONTRACTOR UNLESS OTHERWISE NOTED.
3. TREE PROTECTION GUIDELINES:

   PROTECT ALL EXISTING TREES NOTED "TO REMAIN" AND ALL ITEMS TO BE TURNED OVER TO THE OWNER DURING DEMOLITION. TAKE ALL NECESSARY PRECAUTIONS AND PROTECTIVE MEASURES. ANY EXISTING ITEMS TO BE TURNED OVER TO THE OWNER WHICH ARE DAMAGED DURING DEMOLITION SHALL BE REPAIRED AT NO ADDITIONAL COST TO THE OWNER. TREES WHICH ARE DAMAGED WILL BE REPLACED OR REIMBURSED AT A RATE TO BE DETERMINED BY THE OWNER.
4. UTILITIES:
   - A. PRIOR TO REMOVING OR ABANDONING ANY UTILITY THE CONTRACTOR SHALL VERIFY THAT NO UPSTREAM SERVICE WILL BE TERMINATED. THE CONTRACTOR SHALL INFORM THE ENGINEER IN WRITING OF ANY TERMINATION NOT SHOWN ON THE PLANS.
   - B. ALL ABANDONED WATER LINES, STORM SEWER PIPE, SANITARY SEWER PIPES, GAS LINES, OR ANY OTHER ABANDONED UNDERGROUND UTILITY SHALL BE ABANDONED IN PLACE UNLESS NOTED OTHERWISE.

SITE INFORMATION:

1. THE FOLLOWING ARE APPLICABLE TO ALL CIVIL DOCUMENTS:
   - A. WHERE A DETAIL SECTION, TYPICAL SECTION, OR A NOTE IS SHOWN FOR ONE CONDITION, IT SHALL APPLY FOR ALL LIKE OR SIMILAR CONDITIONS, UNLESS OTHERWISE NOTED ON THE PLANS.
   - B. EXISTING AND PROPOSED CONTOURS ARE AT ONE (1) FOOT INTERVALS.
   - C. ALL DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.
   - D. ALL PIPE LENGTHS SPECIFIED IN THESE PLANS ARE THE HORIZONTAL DISTANCE AND ARE SHOWN FOR REFERENE ONLY. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE ACTUAL LENGTHS BASED ON PROPOSED PIPE SLOPE.
   - E. PIPE LENGTHS IN PLANS ARE MEASURED FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE UNLESS OTHERWISE NOTED.

EROSION AND SEDIMENT CONTROL INFORMATION:

1. COMPREHENSIVE:
   - A. THE ESCAPE OF SEDIMENT FROM THE SITE SHALL BE PREVENTED BY THE INSTALLATION OF EROSION AND SEDIMENT CONTROL MEASURES AND PRACTICES PRIOR TO OR CONCURRENT WITH LAND-DISTURBING ACTIVITIES.
   - B. PROVISIONS TO PREVENT EROSION OF SOIL FROM THE SITE SHALL BE AT A MINIMUM IN CONFORMANCE WITH THE REQUIREMENTS OF THE TENNESSEE EROSION AND SEDIMENT CONTROL HANDBOOKS. IF FULL IMPLEMENTATION OF THE APPROVED PLAN DOES NOT PROVIDE FOR EFFECTIVE EROSION CONTROL, ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IMPLEMENTED TO CONTROL OR TREAT THE SEDIMENT SOURCE.
   - C. FAILURE TO INSTALL, OPERATE, OR MAINTAIN ALL EROSION CONTROL MEASURES WILL RESULT IN ALL CONSTRUCTION BEING STOPPED ON THE JOB SITE UNTIL SUCH MEASURES ARE CORRECTED BACK TO THE STANDARDS SPECIFIED IN THE TENNESSEE EROSION AND SEDIMENT CONTROL HANDBOOKS, CURRENT EDITION.
   - D. EROSION CONTROL MEASURES WILL BE MAINTAINED AT ALL TIMES. IF FULL IMPLEMENTATION OF THE APPROVED PLAN DOES NOT PROVIDE FOR EFFECTIVE EROSION CONTROL, ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IMPLEMENTED TO CONTROL OR TREAT THE SEDIMENT SOURCE.
   - E. EROSION CONTROL DEVICES SHALL BE INSTALLED PRIOR TO LAND DISTURBANCE. THE LOCATION OF SOME OF THE EROSION CONTROL DEVICES MAY HAVE TO BE ALTERED FROM THAT SHOWN ON THE APPROVED PLANS IF DRAINAGE PATTERNS DURING CONSTRUCTION ARE DIFFERENT FROM THE FINAL PROPOSED DRAINAGE PATTERNS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ACCOMPLISH EROSION CONTROL FOR ALL DRAINAGE PATTERNS CREATED AT VARIOUS STAGES DURING CONSTRUCTION. ANY DIFFICULTY IN CONTROLLING EROSION DURING ANY PHASE OF CONSTRUCTION SHALL BE REPORTED TO THE ENGINEER IMMEDIATELY.
   - F. THE CONSTRUCTION OF THE SITE WILL COMMENCE WITH THE INSTALLATION OF EROSION CONTROL MEASURES SUFFICIENT TO CONTROL SEDIMENT DEPOSITS AND EROSION. ALL SEDIMENT CONTROL WILL BE MAINTAINED UNTIL ALL UPSTREAM GROUND WITHIN THE CONSTRUCTION AREA HAS BEEN COMPLETELY STABILIZED WITH PERMANENT VEGETATION AND ALL ROADS/DRIVEWAYS HAVE BEEN PAVED.
   - G. CONSTRUCTION EXITS SHALL BE CONSTRUCTED AT EACH POINT OF ENTRY OR EXIT FROM THE SITE AND SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOW OF MUD ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH STONE AS CONDITIONS DEMAND, REPAIR, AND/OR CLEANOUT OF ANY STRUCTURES USED TO TRAP SEDIMENT. ALL MATERIALS SPILLED, DROPPED, WASHED, OR TRACKED FROM VEHICLES OFF SITE ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY. ACCESS POINTS PROTECTED WITH A CONSTRUCTION EXIT SHALL BE OTHERWISE BARRICADED UNTIL THE SITE IS STABILIZED.

ADA COMPLIANCE:

- A. CURB RAMPS ALONG PUBLIC STREETS AND IN THE PUBLIC RIGHT-OF-WAY SHALL BE CONSTRUCTED BASED ON THE CITY STANDARD CONSTRUCTION DETAILS AND SPECIFICATIONS.
- B. PRIVATE CURB RAMPS ON THE SITE (I.E. OUTSIDE PUBLIC STREET RIGHT-OF-WAY) SHALL CONFORM TO ADA STANDARDS AND SHALL HAVE A DETECTABLE WARNING SURFACE THAT IS FULL WIDTH AND FULL DEPTH OF THE CURB RAMP, NOT INCLUDING FLARES.
- C. ALL ACCESSIBLE ROUTES, GENERAL SITE AND BUILDING ELEMENTS, RAMPS, CURB RAMPS, STRIPING, AND PAVEMENT MARKINGS SHALL CONFORM TO ADA STANDARDS FOR ACCESSIBLE DESIGN, LATEST EDITION.
- D. ANY COMPONENTS OF THE PROJECT SERVING MULTIFAMILY DWELLINGS IN BUILDINGS THAT HAVE 4 OR MORE UNITS PER DWELLING SHALL ALSO CONFORM TO THE FAIR HOUSING ACT (FHA), AND COMPLY WITH THE FAIR HOUSING ACT DESIGN MANUAL BY THE US DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT.
- E. BEFORE PLACING PAVEMENT, CONTRACTOR SHALL VERIFY THAT SUITABLE ACCESSIBLE PEDESTRIAN ROUTES (PER ADA AND FHA) EXIST TO AND FROM EVERY DOOR AND ALONG SIDEWALKS, ACCESSIBLE PARKING SPACES, ACCESS AISLES, AND ACCESSIBLE ROUTES. IN NO CASE SHALL AN ACCESSIBLE RAMP SLOPE EXCEED 1 VERTICAL TO 12 HORIZONTAL. IN NO CASE SHALL SIDEWALK CROSS SLOPE EXCEED 2.0 PERCENT. IN NO CASE SHALL LONGITUDINAL SIDEWALK SLOPE EXCEED 5.0 PERCENT. ACCESSIBLE PARKING SPACES AND ACCESS AISLES SHALL NOT EXCEED 2.0 PERCENT SLOPE IN ANY DIRECTION.
- F. CONTRACTOR SHALL TAKE FIELD SLOPE MEASUREMENTS ON FINISHED SUBGRADE AND FORM BOARDS PRIOR TO PLACING PAVEMENT TO VERIFY THAT ADA SLOPE REQUIREMENTS ARE PROVIDED. CONTRACTOR SHALL CONTACT ENGINEER PRIOR TO PAVING IF ANY EXCESSIVE SLOPES ARE ENCOUNTERED. NO CONTRACTOR CHANGE ORDERS WILL BE ACCEPTED FOR ADA SLOPE COMPLIANCE ISSUES.

CONCRETE INFORMATION (SITE WORK ONLY):

1. PRODUCT CRITERIA:
   - A. UNLESS OTHERWISE NOTED CEMENT SHALL BE TYPE I OR III CONFORMING TO ASTM C150. AGGREGATES SHALL BE NORMAL WEIGHT CONFORMING TO ASTM C33.
   - B. CONCRETE SHALL CONFORM TO ACI BUILDING CODE (318-89). UNLESS NOTED CONCRETE SHALL BE NORMAL WEIGHT AND HAVE A 28 DAY COMPRESSIVE STRENGTH OF 3,500 P.S.I.
   - C. SLUMP SHALL BE 3" TO 5" FOR REGULAR MIX. LARGER SLUMP SHALL BE PERMITTED WITH WATER REDUCING ADMIXTURES AND WRITTEN CONSENT OF THE ENGINEER.
   - D. THE RELATIONSHIP BETWEEN MAXIMUM AGGREGATE SIZE TO MINIMUM AMOUNT OF CEMENT IN CONCRETE PAVEMENT (LB. PER C.Y. OR MIX) SHALL BE AS FOLLOWS: 1" - 520, 3/4" - 540, 1/2" - 590, 3/8" - 610.
2. CURING CRITERIA:
   - A. CONCRETE CURING SHALL COMPLY WITH ACI 308. CURING PROCESS SHALL START IMMEDIATELY FOLLOWING INITIAL SET. CURING SHALL BE BY CURING COMPOUND.
   - B. CONCRETE EXPOSED TO THE WEATHER SHALL BE AIR-ENTRAINED IN ACCORDANCE WITH ACI 318-89 TABLE 4.1.1. NORMAL WEIGHT CONCRETE SLABS SHALL HAVE AIR CONTENT IN ACCORDANCE WITH ACI 302.IR-89 TABLE 5.2.7A.
   - C. HOT WEATHER CONCRETING SHALL COMPLY WITH ACI 305. NO CONCRETE ABOVE 90 DEGREES FAHRENHEIT SHALL BE POURED. LOWER CONCRETE TEMPERATURE BY COOLING WATER AND AGGREGATE. FORMS, STEEL, AND SUBGRADE SHALL BE SPRINKLED WITH COLD WATER. AFTER FINISHING CONCRETE USE LIGHT FOG SPRAY UNTIL CURING COMPOUND IS USED.
   - D. COLD WEATHER CONCRETING SHALL COMPLY WITH ACI 306. SPECIAL MATERIAL PROCEDURES SHALL BE PROVIDED DURING PLACING AND CURING OF CONCRETE BELOW 40 DEGREES FAHRENHEIT.
   - E. E. CURING, HOT, AND COLD WEATHER CONCRETING PROCEDURES ARE ONLY GIVEN AS A GUIDE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PREVENT CONCRETE DAMAGE AND CRACKS. DAMAGED OR CRACKED CONCRETE WILL NOT BE ACCEPTED.

REINFORCING STEEL INFORMATION (SITE WORK ONLY):

1. PRODUCT CRITERIA:
   - A. REINFORCING STEEL SHALL CONFORM TO ASTM A-615, GRADE 60 AND GRADE 40 FOR #3 AND SMALLER BARS. MINIMUM LAP 48" DIAMETER.
   - B. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A-185, MINIMUM LAP SHALL BE 8".
   - C. REINFORCING THAT IS WELDED SHALL BE WELDABLE TYPE AND CONFORM TO ASTM A-706.

PAVEMENT INFORMATION:

1. PAVEMENT:
   - A. ALL MATERIALS, EQUIPMENT, METHODS OF CONSTRUCTION, AND WORKMANSHIP SHALL CONFORM TO THE TENNESSEE DEPARTMENT OF TRANSPORTATION, TDOT, STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, CURRENT EDITION.
   - B. SEE PAVEMENT DETAILS ON CONSTRUCTION DOCUMENTS FOR SPECIFIC DESIGN INFORMATION AND REQUIREMENTS.
   - C. ALL CURB AND GUTTER TO BE 24" AND CONSTRUCTED OF 3000 P.S.I. CONCRETE UNLESS OTHERWISE NOTED.
2. SIGNING AND STRIPING:
   - A. SIGNING AND STRIPING TO BE PROVIDED BY THE CONTRACTOR ACCORDING TO THE DRAWINGS AND SPECIFICATIONS.
   - B. ALL PAVEMENT MARKINGS SHALL CONFORM TO CURRENT MUTCD STANDARDS. ALL PAVEMENT MARKINGS ON PRIVATE PROPERTY SHALL BE PAINT, UNLESS NOTED OTHERWISE. ALL PAVEMENT MARKINGS ON PUBLIC RIGHT-OF-WAY SHALL BE THERMOPLASTIC, UNLESS NOTED OTHERWISE.

STORM SEWER NOTES:

1. REINFORCED CONCRETE PIPE SHALL BE RCP CLASS III UNLESS OTHERWISE NOTED WITH BELL-AND-SPIGOT AND GASKETED JOINTS WITH ASTM C 443 RUBBER GASKETS.
2. FILL HEIGHTS OVER 13' REQUIRE CLASS IV RCP STORM PIPE.
3. STORM INLETS SHALL BE PRECAST IN ACCORDANCE WITH CITY OF LA VERGNE PUBLIC WORKS SPECIFICATIONS WHICH MEET OR EXCEED ASTM C 478.
4. ALL MANHOLE FRAMES AND COVERS ARE TO BE PER CITY OF LA VERGNE PUBLIC WORKS STANDARD DETAIL FOR DIMENSIONS AND MATERIALS AND AS BELOW IF NOT OTHERWISE INDICATED. FERROUS; 24-INCH (610-MM) ID BY 7- TO 9-INCH (175- TO 225-MM) RISER WITH 4-INCH-(102-MM-) MINIMUM WIDTH FLANGE AND 26-INCH- (660-MM-) DIAMETER COVER. INCLUDE INDENTED TOP DESIGN WITH LETTERING CAST INTO COVER, USING WORDING EQUIVALENT TO "STORM SEWER."
5. MATERIAL: GRAY IRON ASTM A48 CLASS 30 UNLESS OTHERWISE INDICATED.
6. ALL HDPE PIPE SHALL BE CORRUGATED HIGH DENSITY POLYETHYLENE SMOOTH INTERIOR PIPE. HDPE PIPE SHALL CONFORM TO ASTM D3350 WITH SOIL TIGHT JOINTS.
7. ALL HDPE SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS AND AASHTO SECTION 30.
8. CONTRACTOR TO PROVIDE AND INSTALL MANUFACTURER RECOMMENDED FITTINGS ON RCP CONNECTIONS TO HDPE STRUCTURES.
9. REFER TO PIPE CHART FOR CASTING TYPES. INSTALL REDUCERS AS NECESSARY PER MANUFACTURER'S SPECIFICATIONS TO ACCOMMODATE LARGER INLET SIZES.
10. FOLLOW CONSTRUCTION PLANS AND MANUFACTURER DETAILS, SPECIFICATIONS, AND INSTALLATION INSTRUCTION AS INCLUDED WITHIN THE PLANS AND PROVIDED BY MANUFACTURER FOR THE INSTALLATION OF WATER QUALITY AND DETENTION SYSTEMS.
11. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR ALL STORM SEWER PIPE, STRUCTURES, WATER QUALITY STRUCTURES, AND DETENTION STRUCTURES FOR ENGINEER AND OWNER APPROVAL PRIOR TO ORDERING MATERIALS.

CLEARING AND GRUBBING:

- A. DO NOT EXCEED CLEARING AND GRUBBING LIMITS OF CONSTRUCTION LINES INDICATED ON THE PLANS.
- B. ALL AREAS OUTSIDE THE LIMITS OF CONSTRUCTION LINE SHALL NOT BE CROSSED BY HEAVY EQUIPMENT OR USED FOR STORING HEAVY EQUIPMENT OR MATERIALS.
- C. NO EQUIPMENT SHALL BE STORED UNDER THE DRIP LINE OF TREES TO REMAIN.
- D. DO NOT FALL ANY TREES OR PUSH PILES OF DEBRIS AGAINST ANY TREES TO REMAIN.
- E. REMOVE ALL STUMPS, ROCKS, ASPHALT & CONCRETE DEBRIS, ETC. AND DISPOSE OFF SITE IN ACCORDANCE WITH LOCAL, STATE & FEDERAL REGULATIONS.
- F. CONTACT ALL UTILITY AUTHORITIES WHO HAVE LINES WITHIN THE CLEARING AND GRUBBING LIMITS BEFORE STARTING WORK
- E. ALL EROSION CONTROL SEDIMENT BARRIERS, SILT FENCES, AND TREE PROTECTION DEVICES SHALL BE INSTALLED PRIOR TO STARTING CLEARING AND GRUBBING.
- F. AFTER STAKING IS COMPLETED, TREES WITHIN GRADING LIMITS TO BE SAVED WILL BE IDENTIFIED BY THE OWNER'S REPRESENTATIVE. FIELD CHANGES TO GRADING PLANS SHALL BE MADE FOR SMOOTH TRANSITION OF GRADES AROUND ALL TREES WHICH REQUITE TREE WELLS WITHIN THE GRADING LIMITS.
- G. ALL CLEARING SHALL BE LIMITED TO AREAS TO BE GRADED WITHIN 15 CALENDAR DAYS.

GRADING NOTES:

- A. TOPSOIL SHALL BE STORED ON SITE IN LOCATIONS APPROVED BY THE OWNER'S REPRESENTATIVE. DRAINAGE SHALL ROUT AROUND THESE TOPSOIL STOCKPILES FOR THE DURATION OF THE GRADING OPERATIONS. EROSION CONTROL MEASURES SHALL PREVENT THE LOSS OF TOPSOIL MATERIAL.
- B. UNSUITABLE SOILS SHALL BE UNIFORMLY SPREAD ACROSS NON-STRUCTURAL FILL AREAS AND COVERED WITH TOPSOIL AND SEEDED.
- C. FILL AREA SHALL BE PROOF-ROLLED WITH RUBBER-TIRED EQUIPMENT WITH A MINIMUM WEIGHT OF FIFTEEN TONS PRIOR TO BEGINNING FILL OPERATION. AREAS WHICH ARE SOFT OR UNSTABLE SHALL BE UNDERCUT UNTIL STABLE SOILS ARE FOUND. RE-COMPACTION OF THESE SOILS SHALL BE TO 98% MAXIMUM DRY DENSITY AS PER ASTM D698 (STANDARD PROCTOR).
- D. CUT AREA SHALL BE PROOF-ROLLED AFTER FINAL SUBGRADE IS ACHIEVED IN THE SAME MANNER AS FILLED AREAS. SOFT OR UNSTABLE SOILS SHALL BE SCARIFIED TO A DEPTH OF 12" AND RE-COMPACTED TO 98% MAXIMUM DRY DENSITY AS PER ASTM D698 (STANDARD PROCTOR).
- E. ALL GRADING SHALL BE COMPLETED TO THE LEVEL INDICATED BY THE SCOPE OF WORK LISTED IN THE BID DOCUMENTS.
- F. ELEVATIONS SHOWN ON THE PLANS IS THE FINISH GRADE ELEVATION.
- G. GRADING SHALL BE SEQUENCED SO THAT BASE STONE IS PLACED WITHIN 10 CALENDAR DAYS PF ACHIEVING OPTIMUM SUBGRADE COMPACTION.
- H. SOILS TESTING LABORATORY/ SOILS ENGINEER. CONTRACTOR WILL EMPLOY A QUALIFIED SOILS TESTING LABORATORY/ ENGINEER TO OBSERVE THIS WORK AND MAKE TESTS AS REQUIRED.
- I. HAVE EARTH BORROW FILL, AGGREGATE, AND TOPSOIL, AND STRUCTURAL FILL TESTED AND APPROVED BY DESIGNATED TESTING LABORATORY BEFORE MOVING IT TO THE JOB SITE.
- J. CONTRACTOR SHALL OBSERVE PROOF-ROLLING OF AREAS WHERE BUILDING AND PAVING WILL BE LOCATED TO DETERMINE ADEQUACY OF SOIL COMPACTION AND IN-PLACE SOILS. OTHER AREAS WILL BE INSPECTED BY SOILS ENGINEER TO DETERMINE ADEQUACY IN THOSE AREAS. IF SOILS ARE NOT ADEQUATE TO BEAR WEIGHTS THAT WILL BE IMPOSED, TESTING LABORATORY WILL OBSERVE AND REPORT CORRECTIVE ACTION TAKEN.
- K. TEST IN-PLACE SOIL AND FILLED AND COMPACTED AREAS. IF THESE ARE NOT ADEQUATE TO BEAR WEIGHTS IMPOSED, TESTING LABORATORY WILL ADVICE THE OWNER'S REPRESENTATIVE OF THEIR RECOMMENDATIONS. HE WILL DIRECT ANY CORRECTIVE MEASURES THAT ARE NECESSARY.
- L. SOILS COMPACTION TESTING OF IN-PLACE AND FILLED AND COMPACTED AREAS WILL BE PERFORMED BY TESTING LABORATORY IN ACCORDANCE WITH THEIR REQUIREMENTS.
- M. THE SOILS ENGINEER'S AND TESTING LABORATORY'S FEES WILL BE PAID BY THE CONTRACTOR.
- N. APPLICABLE SPECIFICATIONS FOR COMPACTED FILL: THE FOLLOWING CURRENT AMERICAN SOCIETY OF TESTING MATERIALS (ASTM) STANDARDS ARE HEREBY MADE PART OF THIS SPECIFICATION:
  - D421-58, DRY PREPARATION OF SOIL SAMPLES FOR GRAIN-SIZE ANALYSIS AND DETERMINATION OF SOIL CONSTANTS.
  - D422-63, STANDARD METHOD OF PARTICLE SIZE ANALYSIS OF SOILS.
  - D1140-54, METHOD OF TEST FOR AMOUNT OF MATERIAL IN SOILS FINER THAN NO.200 SIEVE.
  - D698, METHOD FOR LABORATORY COMPACTION CHARACTERISTICS OF SOIL USING STANDARD EFFORT
  - D1557-78, STANDARD TEST METHODS FOR MOISTURE-DENSITY RELATIONS OF SOILS AND SOIL-AGGREGATE MIXTURES USING 10 LB. (4.54-KG) RAMMER AND 18-INCH (457 MM) DROP.
- O. PROVIDE POSITIVE DRAINAGE AWAY FROM BUILDINGS AT ALL LOCATIONS UNLESS OTHERWISE NOTED.
- P. CONTRACTOR SHALL REVIEW THE SITE SPECIFIC GEOTECHNICAL REPORT PRIOR TO COMMENCING WITH GRADING OPERATIONS. WHERE CONFLICTS BETWEEN THE GRADING NOTES AND GEOTECHNICAL REPORT EXIST, THE MORE STRINGENT REQUIREMENT SHALL APPLY.
- Q. CONTRACTOR IS RESPONSIBLE FOR DOCUMENTING WITH LOAD TICKETS, PHOTOGRAPHS, LOG BOOK, VIDEO RECORDING AND OTHER MEANS AS NECESSARY TO VERIFY THE INSTALLATION OF STORMWATER BEST MANAGEMENT PRACTICES REQUIRED BY THE LOCAL MUNICIPALITY AND JURISDICTION. AS-BUILT TOPOGRAPHY AND UTILITY PLANS HAVING BEEN PREPARED BY A QUALIFIED LAND SURVEYOR ARE REQUIRED TO BE SUBMITTED TO KIMLEY-HORN AT THE CONCLUSION OF HE PROJECT FOR VERIFICATION OF DESIGN INTENT. ANY MODIFICATIONS TO THE GRADING AND UTILITY SYSTEMS REQUIRED, NOT PREVIOUSLY APPROVED BY THE OWNER AND ENGINEER ARE THE RESPONSIBILITY OF THE CONTRACTOR.

COORDINATES ARE NAD83.
ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.

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LA VERGNE
BUSINESS CENTER
BIG ACQUISITIONS, LLC
LA VERGNE, TENNESSEE

BRETT BEELER
REGISTERED ENGINEER
No. 120611
COMMERCE
STATE OF TENNESSEE

No.	REVISIONS	DATE	BY
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DESIGNED BY: —
DRAWN BY: —
CHECKED BY: —
DATE: 12/14/2023
KIMLEY-HORN PROJECT NO. 118574000

GENERAL NOTES

SHEET NUMBER
C0-01

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Drawing name: K:\NSH_LDEV\11857\4000 - 1701 Mars Street\4-CAD\SPlan\Sheets\C0-01 GENERAL NOTES.dwg C0-10 SITE VICINITY MAP Dec 18, 2023 12:39pm by brett.beeler



GRAPHIC SCALE IN FEET
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NORTH

COORDINATES ARE NAD83.
ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.

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DATE: 12/14/2023
KIMLEY-HORN PROJECT NO. 11857.4000

SITE VICINITY MAP

SHEET NUMBER
C0-10

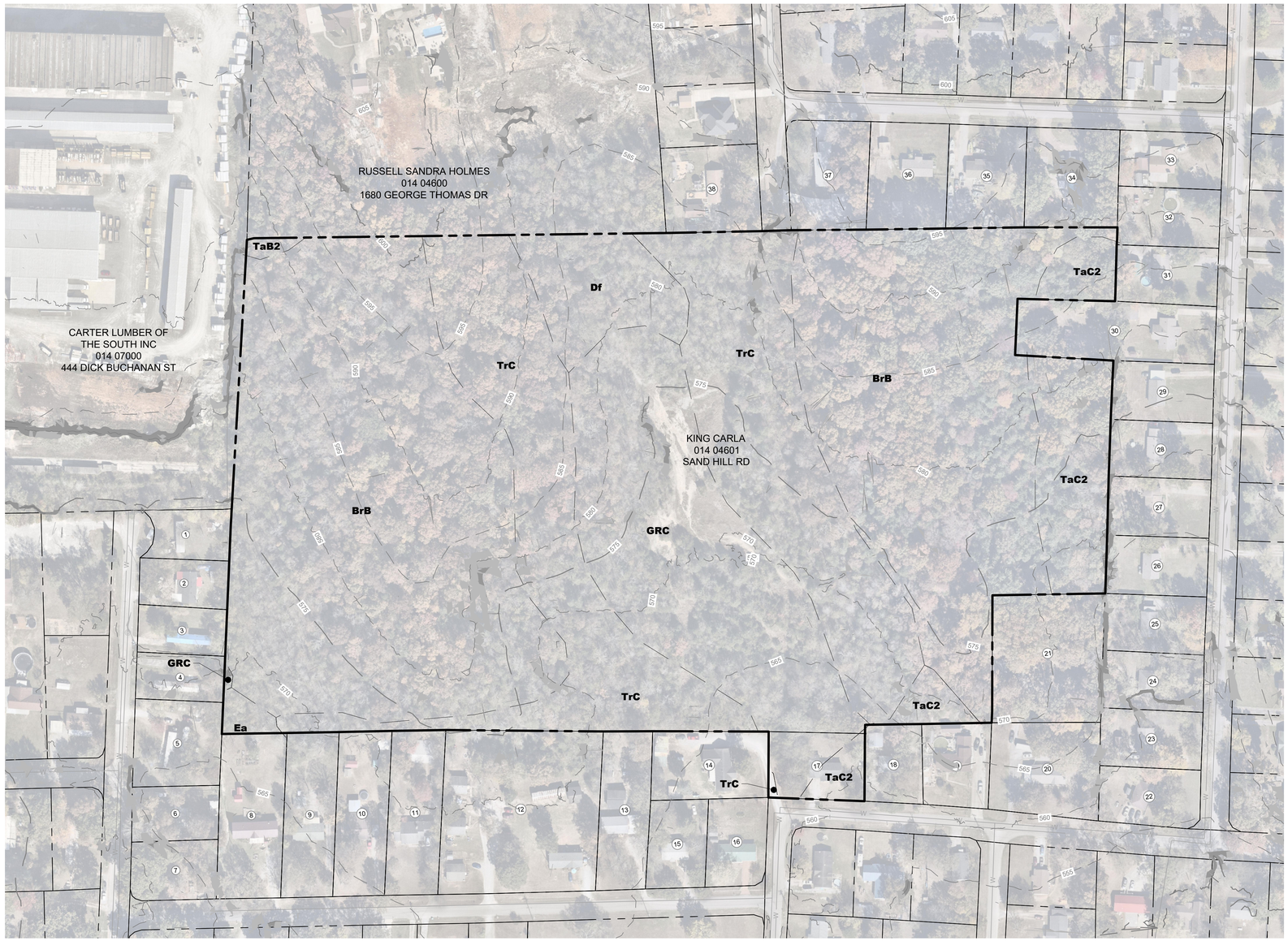
BRETT BEELER
STATE OF TENNESSEE
REGISTERED ENGINEER

LA VERGNE BUSINESS CENTER

BIG ACQUISITIONS, LLC
LA VERGNE, TENNESSEE

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EXISTING UTILITIES NOTE

CONTRACTOR SHALL VERIFY LOCATION OF ALL EXISTING UTILITIES AND NOTIFY ENGINEER IMMEDIATELY OF ANY DISCREPANCIES AND/OR CONFLICTS WITH EXISTING OR PROPOSED UTILITIES PRIOR TO PROCEEDING.

SLOPE LEGEND

- 12-20% SLOPE
- >20% SLOPE

ADJACENT PROPERTIES TABLE

LOT NO.	OWNER	ADDRESS	PARCEL
1	WALDRON S WAYNE	312 HUMBLE DRIVE	014O A 00403
2	WALDRON S WAYNE	310 HUMBLE DRIVE	014O A 00402
3	WALDRON S WAYNE	308 HUMBLE DRIVE	014O A 00401
4	WALDRON STEVEN W	306 HUMBLE DRIVE	014O A 00400
5	QUINTER EDA K	304 HUMBLE DRIVE	014O A 00300
6	QUINTER EDA K	302 HUMBLE DRIVE	014O A 00200
7	QUINTER EDA K	300 HUMBLE DRIVE	014O A 00100
8	CAUDILL TERESA L	1603 PEARCY ST	014O B 03200
9	SNOW JOANN N	1605 PEARCY ST	014O B 03101
10	KING RONALD D	1607 PEARCY ST	014O B 03100
11	CHAMBERS SYLVESTER, ANN T	1609 PEARCY ST	014O B 03000
12	SMITH FOY D, BARBARA	301-305 PEARCY ST	014O B 02900
13	RUSSELL RONALD DALE	1617 PEARCY ST	014O B 02800
14	YOUNGBLOOD TONY, LILLIAN	303 MINERVA DR	014O B 02700
15	TEKOPPEL NICOLA	1619 PEARCY DR	014O B 02701
16	CARTER LESLIE L	1621 PEARCY ST	014O B 02600
17	COTHRAN JUDY ANN	1701 MARS ST	014O B 02500
18	COIA RACHEL	1703 MARS ST	014O B 02400
19	OAKLEY RAYMOND	1705 MARS ST	014O B 02300
20	BANNISTER JAMES L, DONNA	1707 MARS ST	014O B 02200
21	BANNISTER ELIZABETH, RENA L MONTGOMERY	MARS ST	014O B 02201
22	MULLINS ROBERT F SR	301 JEAN DR	014O B 02100
23	MEY JOHN P	303 JEAN DR	014O B 02000
24	ELLENBURG THOMAS JR, TRACY	305 JEAN DR	014O B 01900
25	HOME SFR BORROWER LLC	307 JEAN DR	014O B 01800
26	CERVANTES ANTONIO J	309 JEAN DR	014O B 01700
27	DURANI KHALIDA	311 JEAN DR	014O B 01600
28	GOODWIN STEVE LARRY E MORRIS	401 JEAN DR	014O B 01500
29	GOODWIN STEVE ANOTHONY MR JEAN	403 JEAN DR	014O B 01400
30	BOHANAN JEAN	405 JEAN DR	014O B 01300
31	COOK RICHARD, TONYA	409 JEAN DR	014O B 01200
32	DIAZ JOSE DEJESUS	JEAN DR	014O B 01100
33	DIAZ JOSE DEJESUS	411 JEAN DR	014O B 01000
34	LINDSEY DAVID K	1706 MONEY ST	014O B 00900
35	WAGGONER GARY C	1704 MONEY ST	014O B 00800
36	TENPENNY ALLEN M ROBIN LEE	1702 MONEY ST	014O B 00700
37	KNOWLES ROBERT J	1700 MONEY ST	014O B 00600
38	LEE ALAN JR	411 MINERVA DR	014O B 00500

COORDINATES ARE NAD83.
ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.

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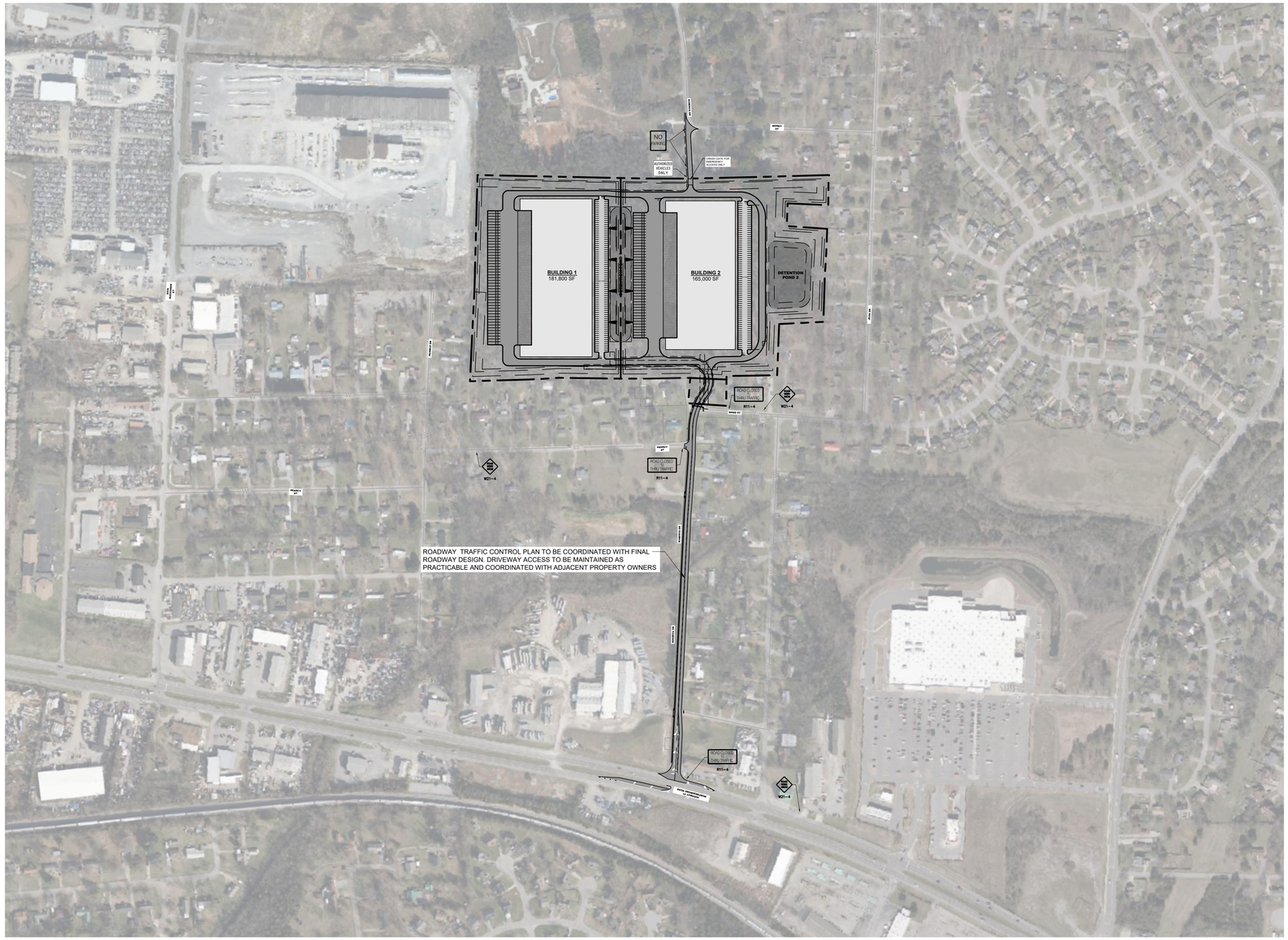
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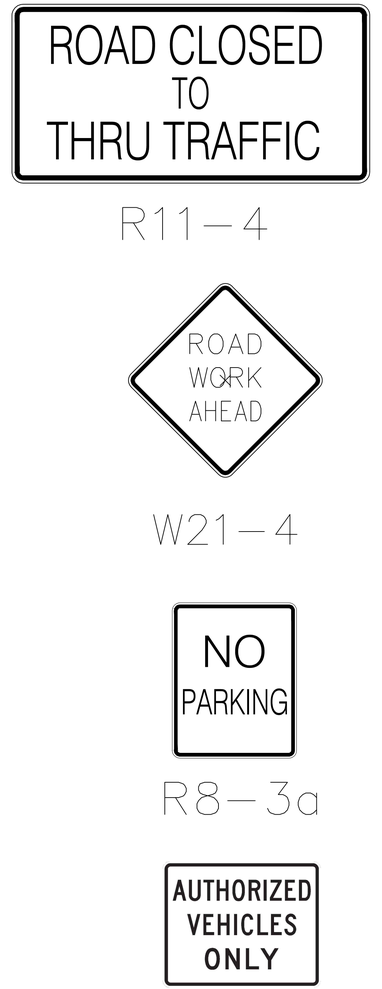
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EXISTING CONDITIONS

SHEET NUMBER
C1-00

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GRAPHIC SCALE IN FEET
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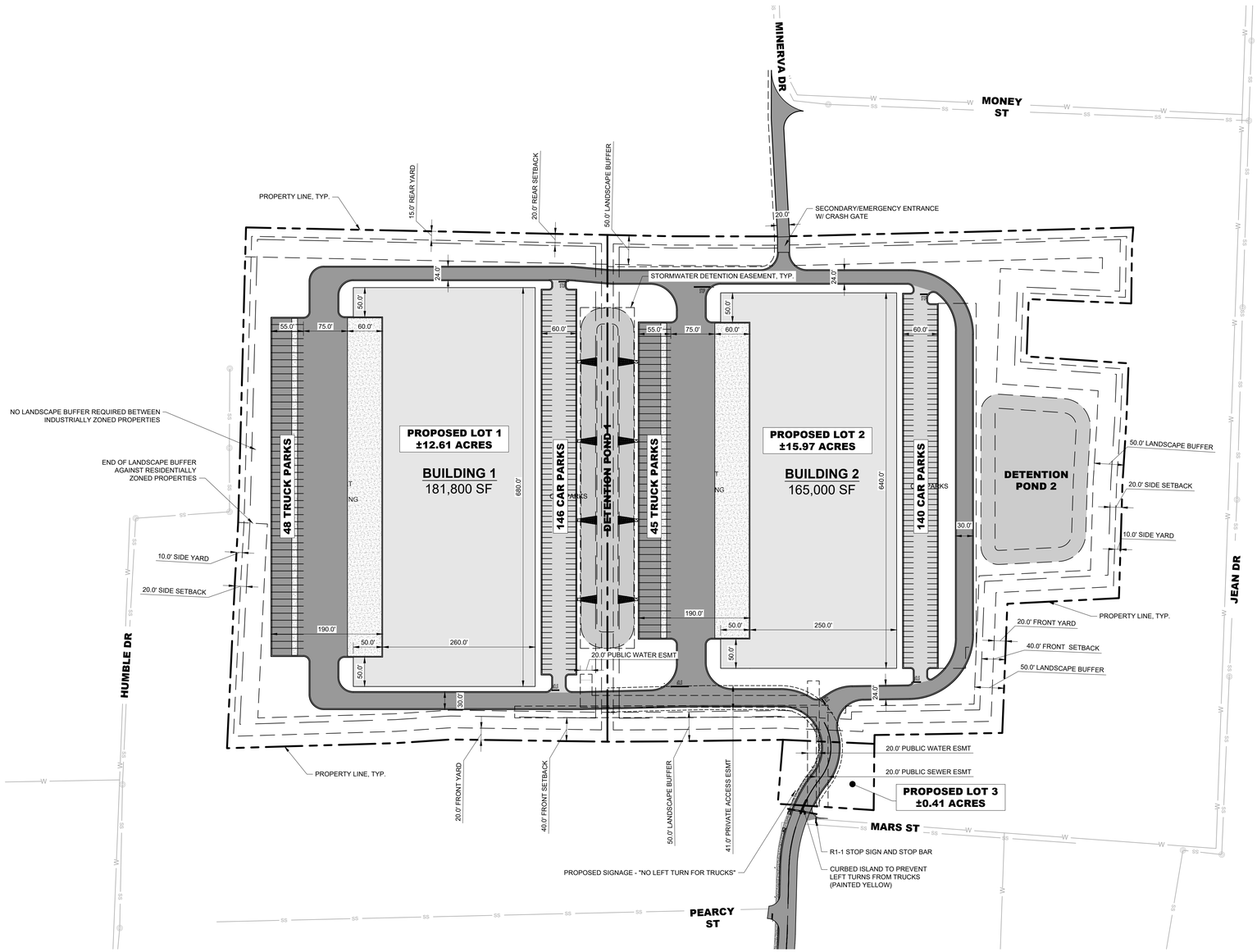
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ROAD CLOSURE PLAN

SHEET NUMBER
C1-20

Drawing name: K:\NSH_LDEV\118574000 - 1701 Mars Street\4-CADD\PlanSheets\C1-20 ROAD CLOSURE PLAN.dwg C1-20 ROAD CLOSURE PLAN Dec 18, 2023 12:37pm by: brett.beeler

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SITE LAYOUT NOTES

1. INSTALL CONCRETE JOINTS WHERE SHOWN ON PLANS AND DETAILS. ALIGN ON WALLS, BUILDINGS, RADII, ETC. EVENLY SPACE BETWEEN ELEMENTS AS SHOWN. PROVIDE EXPANSION JOINTS BETWEEN CONCRETE PAVEMENT AND ALL VERTICAL ELEMENTS (WALLS, CURBS, ETC.).
2. LAYOUT ALL CURVES SMOOTHLY WITH NO ABRUPT CHANGES AT TANGENT POINTS.
3. ALL DIMENSIONS ARE TO THE FACE OF CURB UNLESS OTHERWISE NOTED.
4. GENERAL CONTRACTOR RESPONSIBLE FOR INSTALLATION OF IRRIGATION SLEEVES AND SHALL COORDINATE INSTALLATION WITH IRRIGATION PLANS. SEE SHEET CU101 FOR LOCATION OF IRRIGATION METER
5. LAYOUT ALL ELEMENTS IN FIELD AND CONTACT OWNER'S REPRESENTATIVE FOR APPROVAL BEFORE BEGINNING ANY CONSTRUCTION.
6. CONTRACTOR TO TAKE ALL PRECAUTIONS TO FIND AND AVOID SITE UTILITIES. ALL UTILITIES ARE NOT SHOWN ON DRAWING. VERIFY LOCATIONS AND CONSIDER SUCH WHEN ESTIMATING.
7. ALL LANDSCAPE ISLANDS SHALL BE MOUNDED WITH TOPSOIL 4" ABOVE THE CURB LINE TO PROMOTE POSITIVE DRAINAGE.
8. ALL PAVEMENT MARKINGS AND SIGNAGE SHALL BE INSTALLED PER THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION.
9. SEE ARCHITECTURAL PLANS FOR EXACT BUILDING DIMENSIONS.
10. THE SITE PLAN DRAWINGS ARE INTENDED TO SHOW THE HORIZONTAL CONTROL OF THE SITE. THE CONTRACTOR WILL BE FURNISHED WITH THE SITE PLAN IN AUTOCAD FORMAT. KEY DIMENSIONS HAVE BEEN PROVIDED ON THE PLAN AND MUST BE VERIFIED PRIOR TO ACTUAL CONSTRUCTION.
11. REFER TO GENERAL NOTE SHEETS C0-01.
12. REFER TO ARCHITECTURAL SITE PLAN FOR ADDITIONAL INFORMATION.

RETAINING WALL NOTES

1. ALL SITE RETAINING WALLS INDICATED ON THESE PLANS ARE SHOWN FOR GENERAL LOCATION AND MINIMUM HEIGHT REQUIRED.
2. ALL SITE WALLS SHALL BE DESIGN / BUILD UNDER THE RESPONSIBILITY OF THE CONTRACTOR.
3. CONTRACTOR SHALL SUBMIT DESIGN DRAWINGS AND CALCULATIONS SEALED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF TENNESSEE TO THE CIVIL ENGINEER OF RECORD AND THE CODES AND ENGINEERING DEPARTMENT FOR REVIEW AND APPROVAL PRIOR TO ORDERING MATERIALS OR CONSTRUCTION.
4. ALL WALLS OF HEIGHTS EQUAL TO OR GREATER THAN 30 INCHES (MEASURED FROM TOP OF WALL TO FINISHED GRADE AT BOTTOM OF WALL) SHALL INCLUDE PEDESTRIAN GUARDRAIL OR FENCE. GUARDRAIL SHALL BE IN COMPLIANCE WITH LOCAL CODES AND IBC REQUIREMENTS.

PAVEMENT LEGEND

	STANDARD DUTY ASPHALT PAVEMENT; SEE SHEET C8-10, DETAIL 1
	HEAVY DUTY ASPHALT PAVEMENT; SEE SHEET C8-10, DETAIL 2
	STANDARD DUTY CONCRETE PAVEMENT; SEE SHEET C8-10, DETAIL 3
	HEAVY DUTY CONCRETE PAVEMENT; SEE SHEET C8-10, DETAIL 4

COORDINATES ARE NAD83.
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GRAPHIC SCALE IN FEET
0 50 100 200

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SITE LAYOUT - OVERALL

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C2-00



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0 15 30 60

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MINERVA DR ENLARGEMENT

SHEET NUMBER
C2-10

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MATCHLINE - SEE SHEET C2-10

POWER3 LLC
PARCEL 018B B 02800
5457 MURFREESBORO ROAD

NOTE: TRAFFIC IMPROVEMENTS TO BE CONSTRUCTED ONLY IF FEASIBLE WITHIN THE EXISTING ROW

PEARCY FRANCES M
PARCEL 018B B 02700
207 MINERVA DRIVE

PEARCY STREET

CARTER LESLIE L
PARCEL 014O B 02600
1621 PEARCY STREET

YOUNGBLOOD TONY ETUX LILLIAN
PARCEL 014O B 02700
303 MINERVA DRIVE

MINERVA DRIVE

PROPOSED DRIVEWAY ENTRY

PROPOSED 5.0' SIDEWALK, TYP.

PROPOSED 6" CURB AND 1.5' GUTTER, TYP.

FENCE TO BE REPLACED IN KIND

EXISTING FENCE, TYP.

PROPOSED DRIVEWAY ENTRY

PROPOSED CULVERT

50' RIGHT OF WAY

14.0'

14.0'

14.0'

25.3'

PROPOSED SIGNAGE - "NO LEFT TURN FOR TRUCKS"

PROPOSED UTILITY EASEMENT, TYP.

EXISTING FENCE, TYP.

EXISTING FENCE, TYP.

PROPOSED STOP BAR & SIGN

ECCLES CHRISTOPHER RAY
PARCEL 018B C 00500
122 MINERVA DRIVE

BOONE JAMES O VIVIAN
PARCEL 018B C 00600
202 MINERVA DRIVE

KING CARLA
PARCEL 018B C 00700
204 MINERVA DRIVE

ROGERS JOSEPH NEIL
PARCEL 018B C 00701
206 MINERVA DRIVE

ROGERS ANTHONY WAIN
PARCEL 018B C 00800
208 MINERVA DRIVE

MULLINS ROBERT F SR
PARCEL 018B C 00900
210 MINERVA DRIVE

MARS STREET

COTHRAN JUDY ANN
PARCEL 014O B 02500
1701 MARS STREET

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MINERVA DR ENLARGEMENT

SHEET NUMBER
C2-11

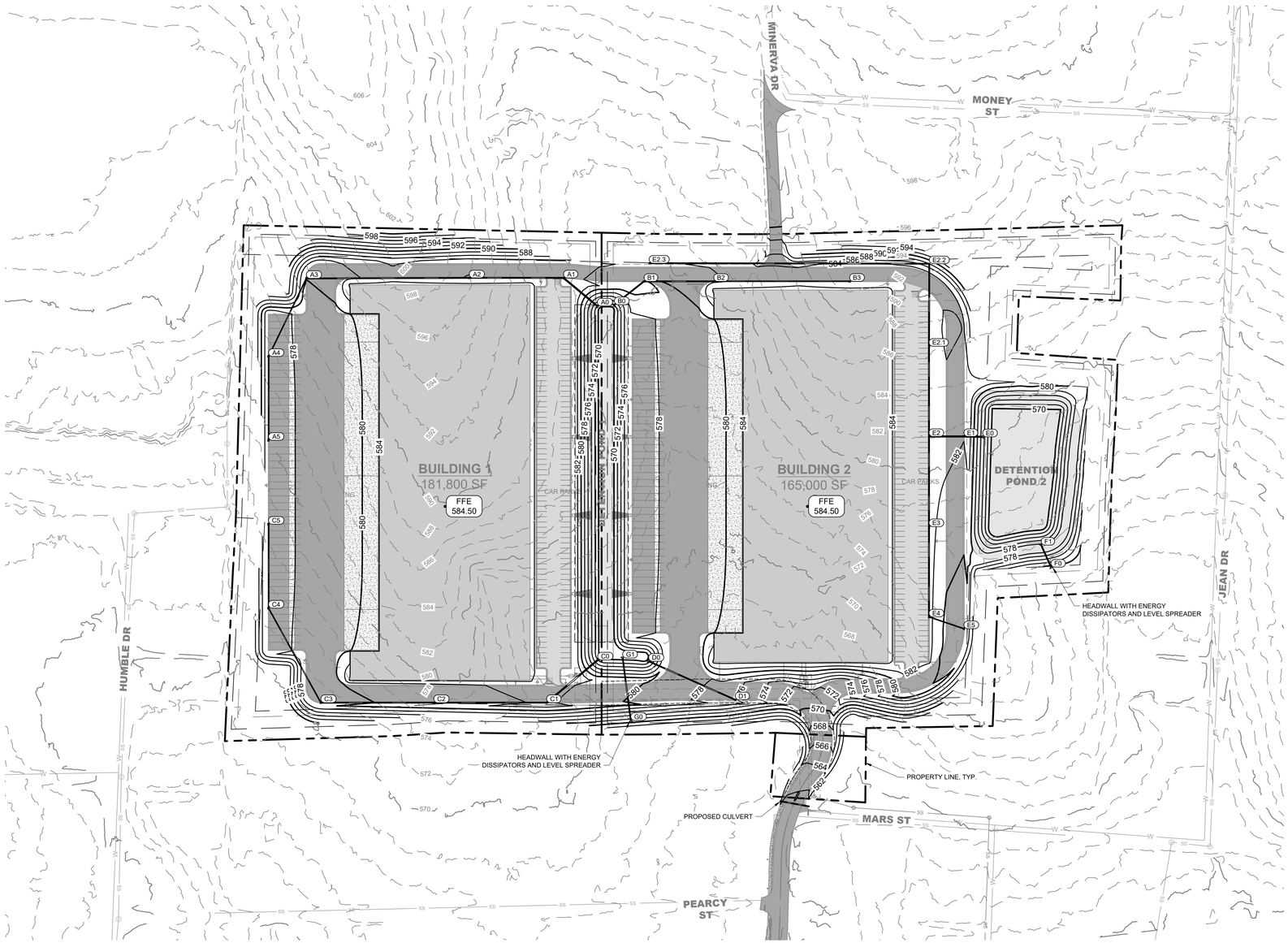
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GRADING PLAN LEGEND

- 476.17 — SPOT ELEVATION
  - HP HIGH POINT
  - TC TOP OF CURB
  - TW TOP OF WALL
  - INV INVERT
  - LP LOW POINT
  - BC BOTTOM OF CURB / GUTTER LINE
  - BW BOTTOM OF EXPOSED WALL
  - RIM TOP OF GRATE / COVER
- FFE 472.50 — FINISH FLOOR ELEVATION
- 500 — EXISTING CONTOUR
- 500 — PROPOSED CONTOUR

GRADING NOTES

1. CONTRACTOR RESPONSIBLE FOR VERIFYING LOCATION, SIZE, AND ELEVATIONS OF EXISTING UTILITIES AT CONNECTION POINTS PRIOR TO GRADING OR INSTALLATION OF ANY PROPOSED UTILITIES. CONTRACTOR TO IMMEDIATELY NOTIFY OWNER'S REPRESENTATIVE IF DISCREPANCIES ARE FOUND.
2. AREAS FOR CONSTRUCTION THAT REQUIRE DE-WATERING FOR EXCAVATION WILL BE DONE AT NO ADDITIONAL COST TO THE OWNER AND IN ACCORDANCE WITH SECTION 4.1.4 OF THE TENNESSEE GENERAL NPDES PERMIT FOR DISCHARGES OF STORMWATER ASSOCIATED WITH CONSTRUCTION ACTIVITIES.
3. ADDITIONAL EROSION CONTROL DEVICES TO BE USED AS REQUIRED BY LOCAL INSPECTOR.
4. DISTURBED AREAS LEFT IDLE FOR FIVE DAYS, AND NOT TO FINAL GRADE, WILL BE ESTABLISHED TO TEMPORARY VEGETATION. MULCH, TEMPORARY VEGETATION OR PERMANENT VEGETATION SHALL BE COMPLETED ON ALL EXPOSED AREAS WITHIN 14 DAYS AFTER DISTURBANCE. ALL AREAS TO FINAL GRADE WILL BE ESTABLISHED TO PERMANENT VEGETATION UPON COMPLETION.
5. WHEN HAND PLANTING, MULCH (HAY OR STRAW) SHOULD BE UNIFORMLY SPREAD OVER SEEDED AREA WITHIN 24 HOURS OF SEEDING. IF UNABLE TO ACCOMPLISH, MULCH SHALL BE USED AS A TEMPORARY COVER. CONCENTRATED FLOW AREAS AND ALL SLOPES STEEPER THAN 2.5:1 AND WITH A HEIGHT OF TEN FEET OR GREATER (DOES NOT APPLY TO RETAINING WALLS), AND CUTS AND FILLS WITHIN BUFFERS, SHALL BE STABILIZED WITH THE APPROPRIATE EROSION CONTROL MATTING OR BLANKETS.
6. THE GRADING PERMIT MUST BE DISPLAYED ON SITE AT ALL TIMES DURING CONSTRUCTION AND IN PLAIN VIEW FROM A PUBLIC ROAD OR STREET.
7. EROSION AND SEDIMENT CONTROL DEVICES MUST BE DISPLAYED AND INSPECTED PRIOR TO ANY GRADING ON SITE. THE CONTRACTOR MUST CALL FOR AN INSPECTION TO OBTAIN A PERMIT TO GRADE. PLEASE CALL WITH ENOUGH LEAD-TIME FOR AN INSPECTION TO MEET YOUR SCHEDULE.
8. SEDIMENT/EROSION CONTROL DEVICES MUST BE INSPECTED ACCORDING TO LOCAL AND STATE REQUIREMENTS AND AS STIPULATED IN THE STORMWATER POLLUTION PREVENTION PLAN. EACH DEVICE IS TO BE MAINTAINED OR REPLACED IF SEDIMENT ACCUMULATION HAS REACHED ONE HALF THE CAPACITY OF THE DEVICE. ADDITIONAL DEVICES MAY BE NECESSARY AS THE PROJECT PROGRESSES AND NEW CHANNELS HAVE DEVELOPED.
9. THE ESCAPE OF SEDIMENT FROM THE SITE SHALL BE PREVENTED BY THE INSTALLATION OF EROSION AND SEDIMENT CONTROL MEASURES AND PRACTICES PRIOR TO, OR CONCURRENT WITH, LAND-DISTURBING ACTIVITIES.
10. EROSION CONTROL MEASURES WILL BE MAINTAINED AT ALL TIMES. IF FULL IMPLEMENTATION OF THE PLAN DOES NOT PROVIDE FOR EFFECTIVE EROSION CONTROL, ADDITIONAL EROSION CONTROL AND SEDIMENT CONTROL MEASURES SHALL BE IMPLEMENTED TO CONTROL OR TREAT THE SEDIMENT SOURCE.
11. CONTRACTOR SHALL REVIEW SITE GEOTECHNICAL REPORT BEFORE COMMENCING GRADING OPERATIONS.
12. SEED ALL DISTURBED AREAS UNLESS OTHERWISE NOTED AS PART OF THIS CONTRACT. REFER TO LANDSCAPING PLANS FOR AREAS TO RECEIVE SOD.
13. INSTALL SOD OR RIPRAP IN SWALES AS INDICATED ON GRADING PLANS AND EROSION CONTROL PLANS
14. TOPSOIL ON SITE TO BE STRIPPED AND STOCKPILED FOR REUSE IN LAWN AREAS.
15. ADEQUATE DRAINAGE, EROSION AND SEDIMENT CONTROL MEASURES, BEST MANAGEMENT PRACTICES, AND/OR OTHER WATER QUALITY MANAGEMENT FACILITIES SHALL BE PROVIDED AND MAINTAINED AT ALL TIMES DURING CONSTRUCTION. DAMAGES TO ADJACENT PROPERTY AND/OR THE CONSTRUCTION SITE CAUSED BY THE CONTRACTOR'S OR PROPERTY OWNER'S FAILURE TO PROVIDE AND MAINTAIN ADEQUATE DRAINAGE AND EROSION/SEDIMENT CONTROL FOR THE CONSTRUCTION AREA SHALL BE THE RESPONSIBILITY OF THE PROPERTY OWNER AND/OR CONTRACTOR.
16. UNDERGROUND UTILITIES HAVE NOT BEEN VERIFIED BY THE OWNER, DESIGNER, OR THEIR REPRESENTATIVES. BEFORE YOU DIG CALL ONE CALL--811 OR 1-800-752-6007
17. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK AND AGREES TO BE RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT RESULT FROM THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY UNDERGROUND UTILITIES TO REMAIN.



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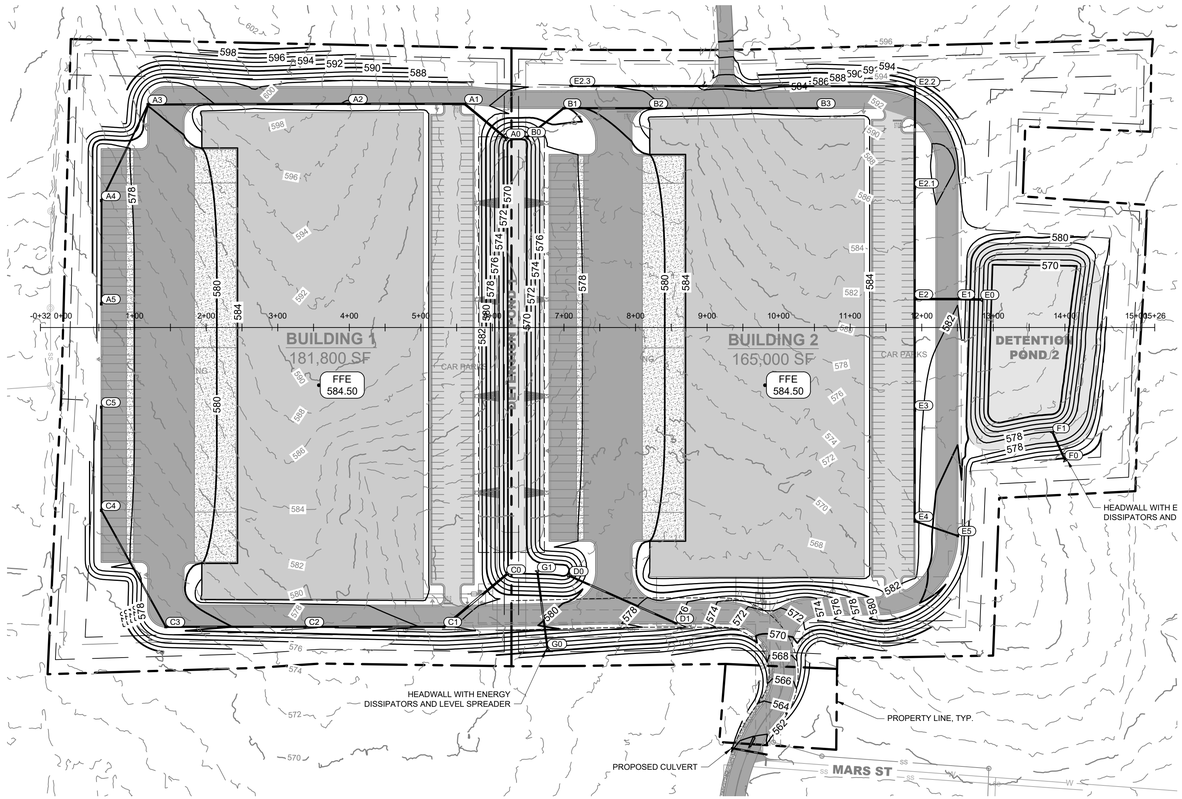
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GRADING AND DRAINAGE PLAN - OVERALL

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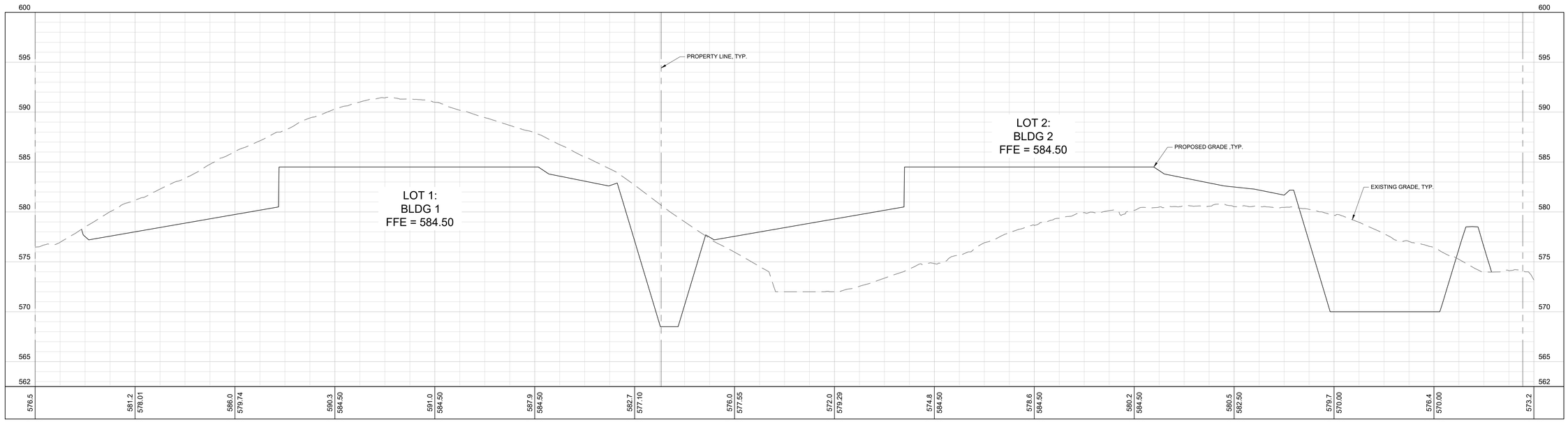
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13. INSTALL SOD OR RIPRAP IN SWALES AS INDICATED ON GRADING PLANS AND EROSION CONTROL PLANS
14. TOPSOIL ON SITE TO BE STRIPPED AND STOCKPILED FOR REUSE IN LAWN AREAS.
15. ADEQUATE DRAINAGE, EROSION AND SEDIMENT CONTROL MEASURES, BEST MANAGEMENT PRACTICES, AND/OR OTHER WATER QUALITY MANAGEMENT FACILITIES SHALL BE PROVIDED AND MAINTAINED AT ALL TIMES DURING CONSTRUCTION. DAMAGES TO ADJACENT PROPERTY AND/OR THE CONSTRUCTION SITE CAUSED BY THE CONTRACTOR'S OR PROPERTY OWNER'S FAILURE TO PROVIDE AND MAINTAIN ADEQUATE DRAINAGE AND EROSION/SEDIMENT CONTROL FOR THE CONSTRUCTION AREA SHALL BE THE RESPONSIBILITY OF THE PROPERTY OWNER AND/OR CONTRACTOR.
16. UNDERGROUND UTILITIES HAVE NOT BEEN VERIFIED BY THE OWNER, DESIGNER, OR THEIR REPRESENTATIVES. BEFORE YOU DIG CALL ONE CALL--811 OR 1-800-752-6007
17. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK AND AGREES TO BE RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT RESULT FROM THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY UNDERGROUND UTILITIES TO REMAIN.

SECTION A-A



0 2.5 5 10
VERTICAL

GRAPHIC SCALE IN FEET
0 25 50 100
HORIZONTAL

Kimley»Horn
10 Lea Avenue, Suite 400 Nashville, TN 37210
Main: 615.564.2701 | www.kimley-horn.com
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LA VERGNE
BUSINESS CENTER

BIG ACQUISITIONS, LLC
LA VERGNE, TENNESSEE

BRETT BEELER
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
No. 136611
STATE OF TENNESSEE

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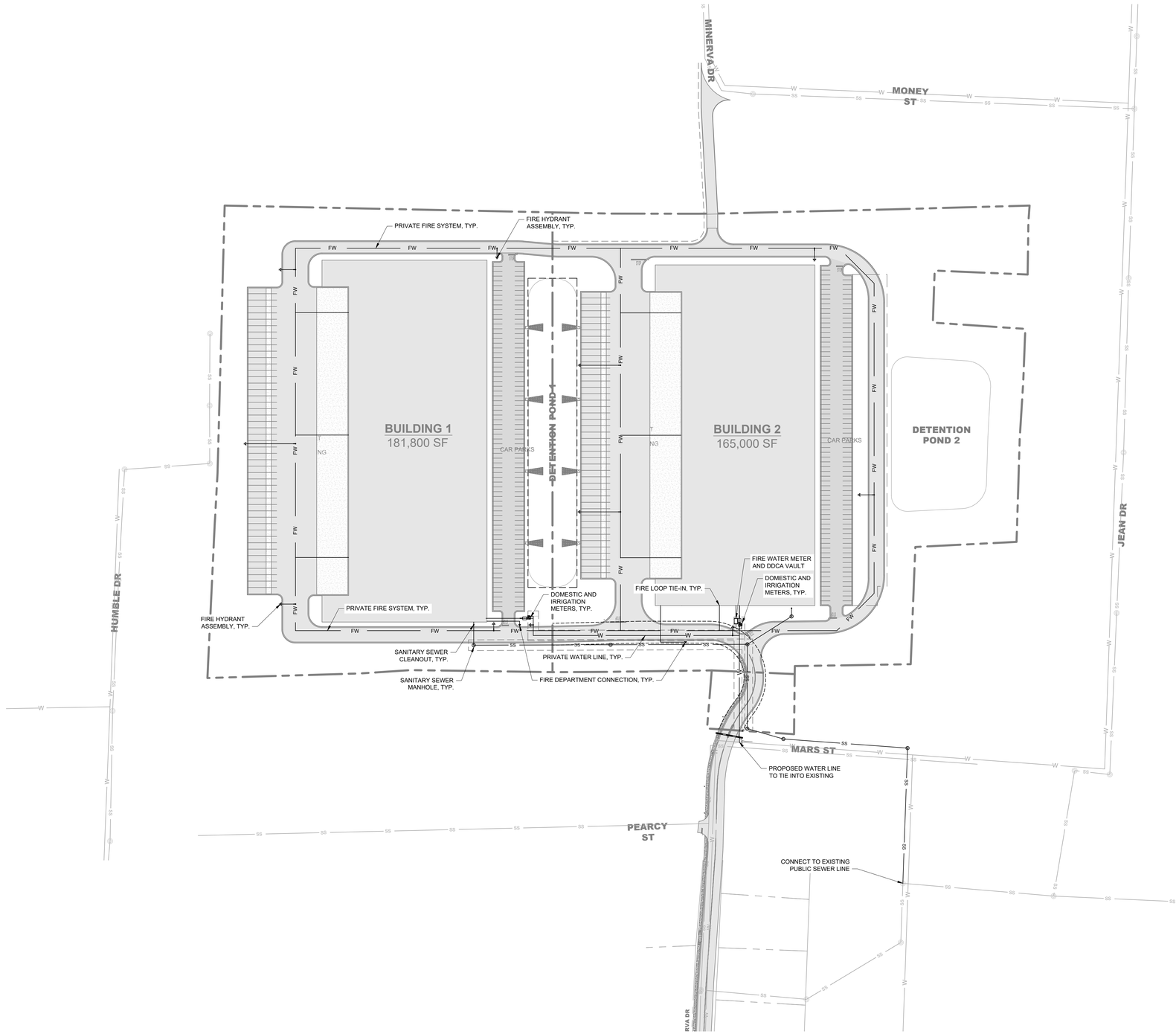
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DATE: 12/14/2023
KIMLEY-HORN PROJECT NO. 118574000

GRADING AND DRAINAGE PLAN - CROSS SECTION

SHEET NUMBER
C4-01

Drawing name: K:\NSH_LDEV\118574000 - 1701 Mars Street\4-CADD\PlanSheets\C4-00 GRADING AND DRAINAGE PLAN - OVERALL.dwg C4-01 GRADING AND DRAINAGE PLAN - CROSS SECTION Dec 18, 2023 12:38pm by: brett.beeler

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SITE UTILITY NOTES

1. EXISTING UTILITIES SHALL BE VERIFIED IN FIELD PRIOR TO INSTALLATION OF ANY NEW PIPE LINES.
2. WHERE WATER PIPING CROSSES THE SANITARY SEWER LINE, THE WATER SERVICE WITHIN 10 FEET OF THE POINT OF CROSSING SHALL BE AT LEAST 18 INCHES ABOVE THE TOP OF THE SEWER LINE.
3. THE CONTRACTOR SHALL NOTIFY THE INSPECTOR AT LEAST 7 DAYS PRIOR TO THE START OF SEWER CONSTRUCTION.
4. THE LOCATIONS OF EXISTING UNDERGROUND AND OVERHEAD UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR KIMLEY-HORN AND ASSOCIATES, INC. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UNDERGROUND AND OVERHEAD UTILITIES BEFORE COMMENCING WORK AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTORS FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND AND OVERHEAD UTILITIES.
5. CONTRACTOR TO COORDINATE ALL WORK WITH OTHER UTILITY INSTALLATIONS NOT PROVIDED IN THESE CONSTRUCTION DOCUMENTS (ELECTRIC, TELEPHONE, GAS, CABLE, ETC.) AND ALLOW FOR THEIR OPERATIONS AND CONSTRUCTION TO BE PERFORMED.
6. ALL WORK AND MATERIALS SHALL COMPLY WITH THE CITY OF LA VERGNE AND O.H.S.A. STANDARDS.
7. ALL PIPES UNDER STREETS OR PAVED AREAS IN R.O.W. SHALL BE BACKFILLED WITH CRUSHED STONE.
8. ALL AREAS BACKFILLED SHALL BE COMPACTED TO 95% STANDARD PROCTOR IN R.O.W.
9. EXISTING UTILITIES SHALL BE VERIFIED IN FIELD PRIOR TO INSTALLATION OF ANY NEW PIPE LINES.
10. LINES UNDERGROUND SHALL BE INSTALLED, TESTED AND APPROVED BEFORE BACKFILLING.
11. CONTRACTOR TO CONTACT THE CITY OF LA VERGNE TO COORDINATE INSTALLATION AS REQUIRED.
12. ALL FIRE HYDRANTS INSTALLED FOR THIS DEVELOPMENT SHALL BE OF A TYPE ACCEPTABLE TO THE CITY OF LA VERGNE STANDARDS.
13. THE CITY OF LA VERGNE AND/OR CONTRACTOR SHALL SET INDIVIDUAL WATER METERS IN FIELD AS REQUIRED.
14. CONTRACTOR SHALL REPLACE IN LIKE KIND ALL PAVEMENT AREAS REMOVED OR DISTURBED AS A RESULT OF THE WATER MAIN INSTALLATION AND ASSOCIATED WORK.
15. PRIVATE WATER MAIN AND LINES TO HAVE MINIMUM OF 30" COVER.
16. CONTRACTOR SHALL BE A STATE OF TENNESSEE LICENSED CONTRACTOR APPROVED TO INSTALL PUBLIC WATER MAINS.
17. CONTRACTOR SHALL OBTAIN AND PAY FOR ALL FEES, PERMITS AND LICENSES AS PART OF THE CONTRACT.
18. NON-METALLIC DETECTION TAPE SHALL BE INSTALLED 18" ABOVE THE WATERLINE, ALONG WITH NUMBER 12 OR 14 GAUGE CAP WIRE TAPED TO THE WATERLINE.
19. LUBRICANTS SHALL BE NON-TOXIC AND SHALL NOT PROMOTE BIOLOGICAL GROWTH. SOLVENT-CEMENTED JOINTS ARE NOT PERMITTED.
20. PROCEDURES FOR DISINFECTING POTABLE WATERLINES SHALL CONFORM TO THE REQUIREMENTS OF A.W.W.A. C651. ALL WATERLINES SHALL BE DISINFECTED, BACTERIOLOGICAL TESTED, AND PRESSURE TREATED ACCORDING TO THE CITY OF LA VERGNE'S SPECIFICATIONS PRIOR TO LINE ACCEPTANCE AND THE WATERLINE BEING PLACED INTO SERVICE.
21. PRESSURE AND LEAKAGE TESTS SHALL BE PREFORMED IN STRICT ACCORDANCE WITH CURRENT A.W.W.A STANDARD C600 AND/OR MANUFACTURER'S PROCEDURES.
22. ALL VALVES AND FITTINGS ARE TO CONFORM TO THE LATEST A.W.W.A STANDARDS.
23. THE CONTRACTOR SHALL MAKE ARRANGEMENTS WITH THE UTILITY ENTITY FOR CONNECTION TO THE EXISTING UTILITY LINES. THE CONTRACTOR SHALL ADJUST THE LOCATION OF THE PROPOSED WATERLINE TO AVOID CONFLICTS WITH OTHER UTILITIES.
24. ALL CONCRETE USED FOR THRUST BLOCKS TO HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 3000 psi.
25. THE CONTRACTOR IS RESPONSIBLE FOR THE COMPLETE INSTALLATION OF THE WATER SERVICE LINE AND FIRE LINE AS REQUIRED. THE CONTRACTOR SHALL PROVIDE A TAPPING VALVE AND SLEEVE AND OTHER MATERIAL AND EQUIPMENT AS REQUIRED FOR TAPPING THE EXISTING MAIN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE FEE TO THE CITY OF LA VERGNE AS REQUIRED FOR TAPPING THE EXISTING MAIN AND COORDINATE WITH THE CITY OF LA VERGNE AS REQUIRED.
26. ALL METERS ARE REQUIRED TO BE BADGER AUTOMATIC READ METERS.
27. ALL MATERIALS AND CONSTRUCTION SHALL BE PER LA VERGNE PUBLIC WORKS STANDARD SPECIFICATIONS FOR WATER AD SEWER CONSTRUCTION, LATEST EDITION.

LEGEND

- SANITARY SEWER MANHOLE
- SS — SANITARY SEWER LINE
- W — WATER LINE
- FW — FIRE WATER LINE
- WATER METER
- BF — BACKFLOW PREVENTER
- FH — FIRE HYDRANT ASSEMBLY
- FDC — FIRE DEPARTMENT CONNECTION

COORDINATES ARE NAD83.
ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.

GRAPHIC SCALE IN FEET
0 50 100 200

NORTH

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LA VERGNE BUSINESS CENTER

BIG ACQUISITIONS, LLC
LA VERGNE, TENNESSEE

BRETT BEELER
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
No. 136819
STATE OF TENNESSEE

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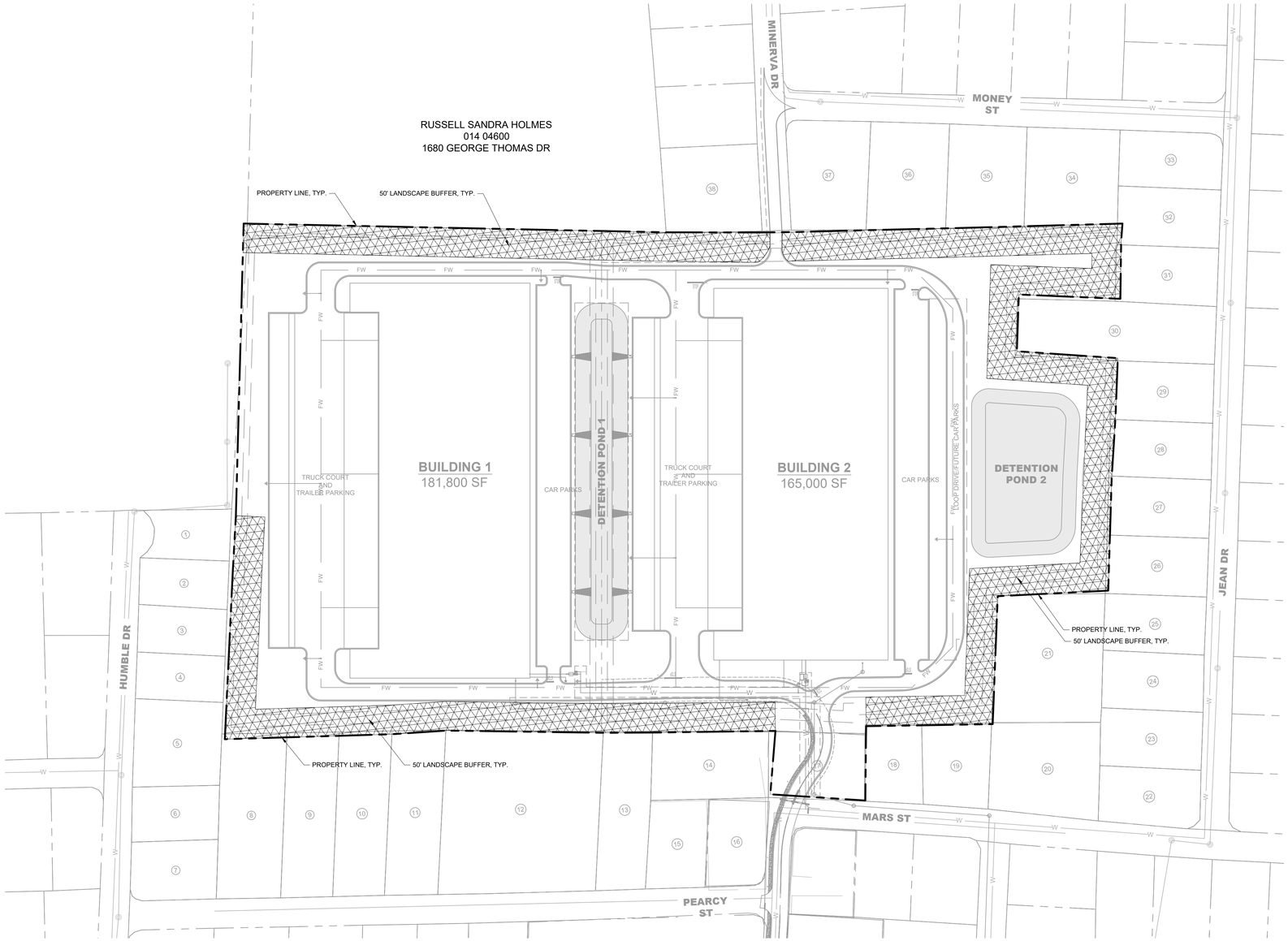
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KIMLEY-HORN PROJECT NO. 118574000

UTILITY PLAN - OVERALL

SHEET NUMBER
C6-00

Drawing name: K:\NSH_LDEV\118574000 - 1701 Mars Street\4-CADD\PlanSheets\C6-00 UTILITY PLAN - OVERALL.dwg C6-00 UTILITY PLAN - OVERALL Dec 18, 2023 12:38pm by: brett.beeler

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LANDSCAPE DATA TABLE

PROJECT NAME:	LA VERGNE BUSINESS CENTER
PROPERTY ADDRESS:	1701 MARS STREET LA VERGNE, TN 37086
MAP AND PARCEL ID:	MAP 014 PARCEL 046.01, 025.00
EXISTING ZONING:	I-1, LIGHT INDUSTRIAL
EXISTING LAND USE:	VACANT
PROPOSED LAND USE:	INDUSTRIAL
SITE AREA (AC):	29.0
BUILDING AREA (SF):	346,800 SF
BUILDING PERMIT:	TBD
GRADING PERMIT:	TBD

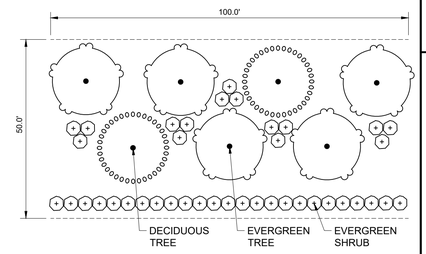
LANDSCAPE REQUIREMENTS

REQUIRED BUFFERS:
LANDSCAPE BUFFERS ARE REQUIRED ALONG MARS ST.

REQUIRED SITE PLANTINGS:
LANDSCAPE SURFACE AREA REQUIREMENT FOR RESIDENTIAL (R-1) DISTRICT:
REQUIRED: 50%
PROVIDED: 57.52% (16.68 AC LANDSCAPE/29 AC SITE)

LANDSCAPE LEGEND

SCREENING BUFFER



50' BUFFER YARD

1. A MINIMUM OF SIX LARGE MATURING TREES AND 40 SHRUBS SHALL BE PLANTED FOR EACH 100 LINEAR FEET OF LANDSCAPE SCREEN AREA TO PROVIDE CONTINUOUS COVERAGE.
2. TREES SHALL BE A MINIMUM 50 PERCENT EVERGREEN
3. SHRUBS SHALL BE A MINIMUM 75 PERCENT EVERGREEN

NOTE: EXISTING VEGETATION LOCATED IN THE REQUIRED LANDSCAPE SCREEN AREA MAY BE COUNTED TOWARDS THE MINIMUM REQUIRED LANDSCAPING FOR LANDSCAPE SCREENS PROVIDED IT IS APPROVED BY THE PLANNING DIRECTOR.

COORDINATES ARE NAD83.
ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.

GRAPHIC SCALE IN FEET
0 50 100 200

NORTH

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LA VERGNE BUSINESS CENTER

BIG ACQUISITIONS, LLC
LA VERGNE, TENNESSEE

SPENCER JAMES SANDERS
REGISTERED
LANDSCAPE ARCHITECT
12/15/2023

No.	REVISIONS	DATE	BY
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DRAWN BY:	GR
CHECKED BY:	SJS
DATE:	12/14/2023
KIMLEY-HORN PROJECT NO.	118574000

LANDSCAPE PLAN

SHEET NUMBER
L1-00

Drawing name: K:\NSH_LDEV\118574000 - 1701 Mars Street\4-CADD\PlanSheets\L1-00 LANDSCAPE PLAN.dwg L1-00 LANDSCAPE PLAN Dec 18, 2023 12:38pm by: brett.beeler

Planning Commission Report
Meeting: December 26, 2023

City of La Vergne

Item #: 14.

Item Title: Preliminary Plat - La Vergne Business Center - Two (2) Lots Totaling 29 Acres. Requested by Kimley-Horn. Property located at 1701 Mars Street (Tax Map 14, Parcels 46.01 & 25). I-1 (Light Industrial) Zoning District. Property owned by Big Acquisitions, LLC.

Reviewed By:
Bo Logan, City Planner
Gary Lide, City Engineer

Summary: On behalf of their client, Kimley-Horn is requesting approval of the preliminary plat for the La Vergne Business Center located on 29 ± acres. The purpose of the plat is to show the layout for a new industrial development.

The property is located off Mars Street and Minerva Drive. The plat shows two (2) new lots will be created.

The project will be served via a new internal road to be installed by the developer. This road will be a private road.

Staff Recommendation:

Staff Comments / Technical Items:

Planning

Bo Logan
blogan@lavergnetn.gov

Jake Blair
jblair@lavergnetn.gov

1. Staff recommends that this applicant abandon this plan with access from Mars and Minerva & instead all warehouse and distribution should access from Dick Buchanan Street, either directly or indirectly;
2. The existing lot at 1701 Mars is zoned residential and must be rezoned to industrial in order to be used as part of this industrial park.
3. A private easement was considered back on December 16th after the workshop, but the easement creates even more issues including access for emergency services such as Fire; Emergency cannot access through a private easement for various reasons;
4. Owner should dedicate ROW all the way to the property line at a

minimum to create public right-of-way and extend Minerva Drive;
5. A 50' buffer will be required between all industrial and residential land.
6. A cul-de-sac will most likely be required to be installed by developer.

Engineering

Gary Lide
glide@lavergnetn.gov

Engineering comments addressed.

Utilities

Scott Tatalovich
statalovich@lavergnetn.gov

Comments addressed on Concept Plan.

Codes

No comments.

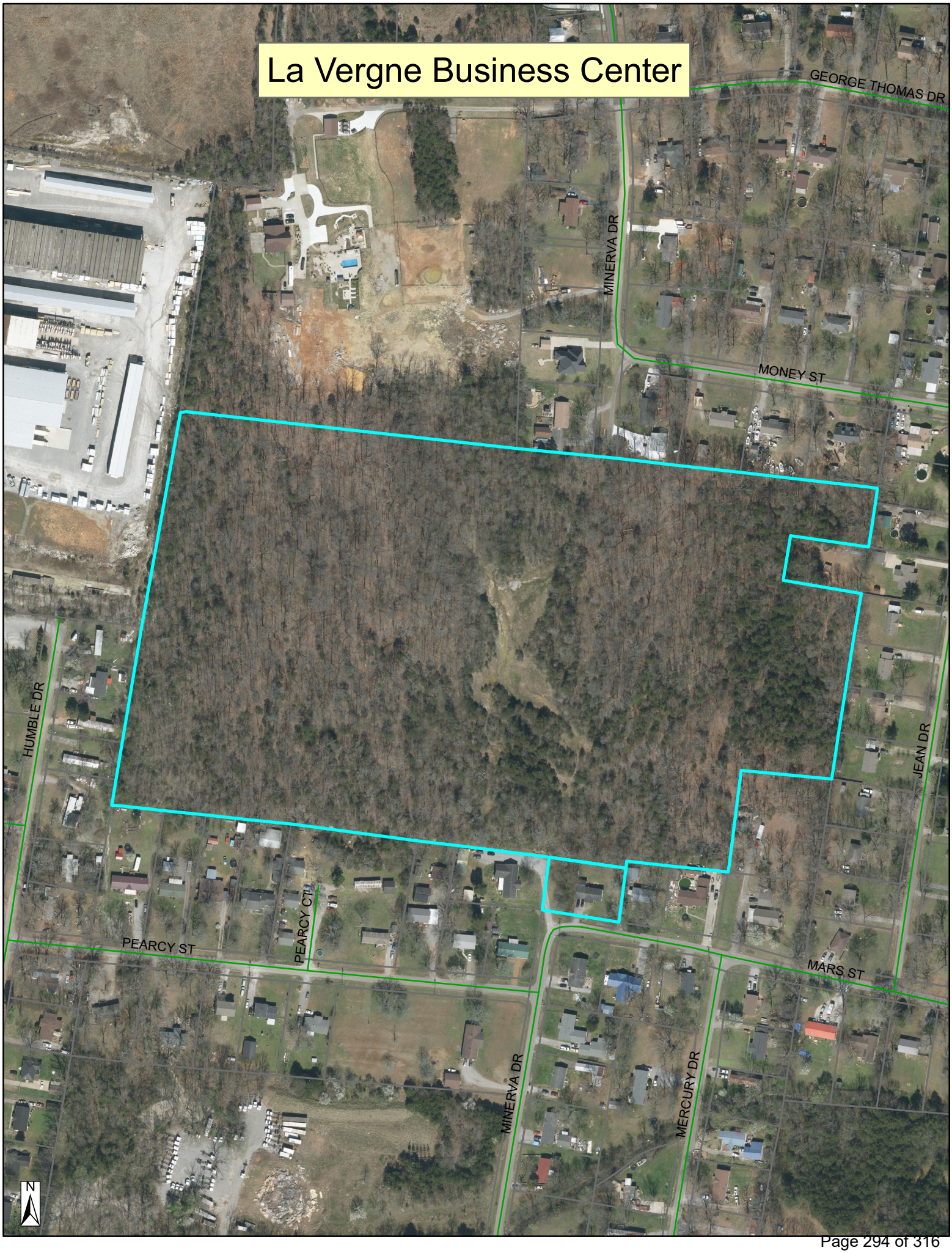
Fire

Curtis Brinkley
cbrinkley@lavergnetn.gov

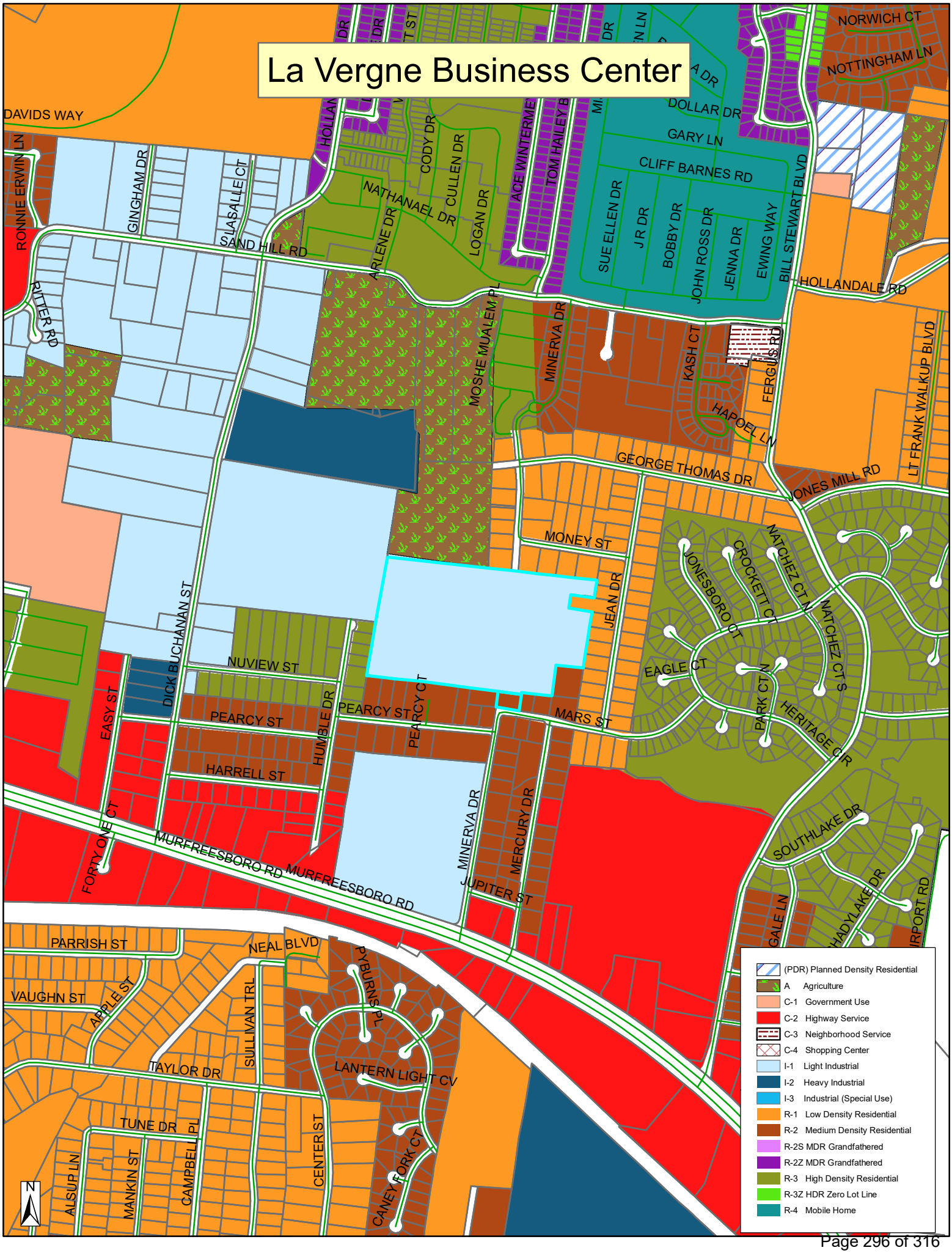
Police

John Eubank
jeubank@lavergnetn.gov

***Note:** The above technical items may not be the only corrections and/or issues needing to be resolved to get approval from the planning commission. New items can be brought up at the workshop and staff can add items at any time that might have been overlooked. It is the applicant's responsibility to make sure that all technical items are addressed and that no new issues exist before the planning commission meeting. Addressing all technical items does not constitute approval. It is the planning commission's decision whether an item passes or fails. Revised plans are due to staff by the following Monday at close of business unless other arrangements are made and documented.


La Vergne Business Center
GEORGE THOMAS DR
MINERVA DR
MONEY ST
HUMBLE DR
JEAN DR
PEARCY ST
PEARCY CT
MARS ST
MINERVA DR
MERCURY DR
N

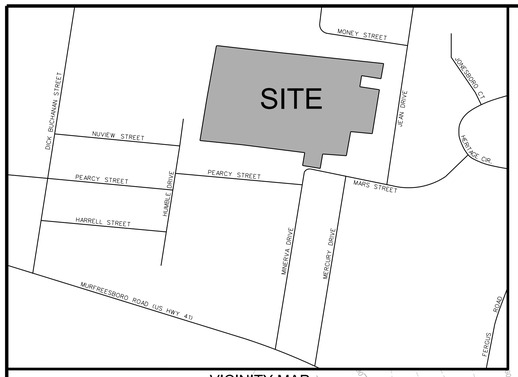

La Vergne Business Center
JERRY BUTLER DR
SAND HILL RD
CHRISTOPHER RD
BILL STEWART BLVD
JOHN ROSS DR
JENNA DR
BOBBY DR
J R DR
EWING WAY
MOSHE MUALEM PL
MINERVA DR
KASH CT
FERGUS RD
HAPOEL LN
GEORGE THOMAS DR
MONEY ST
DICK BUCHANAN ST
JEAN DR
JONESBORO CT
CROCKETT CT
NATCHEZ CT N
FREEDOM CT
PARK CT N
EAGLE CT
HERITAGE CIR
NUVIEW ST
HUMBLE DR
PEARCY ST
PEARCY CT
MARS ST
HARRELL ST
MERCURY DR
MURFREESBORO RD
JUPITER ST
GALE LN
PARRISH ST
NEAL BLVD
SULLIVAN TRL
CENTER ST
FISK DR
N


La Vergne Business Center
DAVIDS WAY
RONNIE ERWIN LN
GINGHAM DR
LASALLE CT
SAND HILL RD
RITTER RD
HOLLAN
CODY DR
CULLEN DR
NATHANAEL DR
ARLENE DR
LOGAN DR
ACE WINTERME
TOM HAILEY B
DOLLAR DR
GARY LN
CLIFF BARNES RD
SUE ELLEN DR
JR DR
BOBBY DR
JOHN ROSS DR
JENNA DR
EWING WAY
BILL STEWART BLVD
NORWICH CT
NOTTINGHAM LN
HOLLANDALE RD
MOSHE MUALEM PL
MINERVA DR
KASH CT
FERGUS RD
HAPOEL LN
LT FRANK WALKUP BLVD
GEORGE THOMAS DR
JONES MILL RD
MONEY ST
JEAN DR
JONESBORO CT
CROCKETT CT
NATCHEZ CT N
NATCHEZ CT S
EAGLE CT
PARK CT N
HERITAGE CT R
DICK BUCHANAN ST
NUVIEW ST
EASY ST
PEARCY ST
HUMBLE DR
PEARCY CT
MARS ST
HARRELL ST
FORTY ONE CT
MURFREESBORO RD
MINERVA DR
MERCURY DR
JUPITER ST
SOUTHLAKE DR
GALE LN
PARRISH ST
NEAL BLVD
VAUGHN ST
APPLE ST
SULLIVAN TRL
PYBURN PL
LANTERN LIGHT CV
TAYLOR DR
TUNE DR
CAMPBELL PL
CENTER ST
CANEY FORK CT
ALSUP LN
MANKIN ST
N
(PDR) Planned Density Residential
A Agriculture
C-1 Government Use
C-2 Highway Service
C-3 Neighborhood Service
C-4 Shopping Center
I-1 Light Industrial
I-2 Heavy Industrial
I-3 Industrial (Special Use)
R-1 Low Density Residential
R-2 Medium Density Residential
R-2S MDR Grandfathered
R-2Z MDR Grandfathered
R-3 High Density Residential
R-3Z HDR Zero Lot Line
R-4 Mobile Home


303


GRAY'S
1255-6921





VICINITY MAP
NOT TO SCALE

LEGEND

MAPPING SYMBOLS AND CODES		LINE STYLES	
AIR CONDITIONER (AC)	POST INDICATOR VALVE (PIV)	CENTERLINE	
BACKFLOW PREVENTER (BFP)	MANHOLE (MH)	CONCRETE AREA	
CLEANOUT	CONCRETE MONUMENT OLD (MONI(O))	ASPHALT AREA	
CATCH BASIN (CB)	CONCRETE MONUMENT NEW (MONI(N))	EDGE OF WOODS LINE	
DOUBLE CATCH BASIN (DCB)	P.K. NAIL OLD (PKO)	EASEMENT LINE	
TRIPLE CATCH BASIN (TCB)	P.K. NAIL NEW (PKN)	FENCE LINE	
AREA DRAIN (ADS/ADR)	POWER LIGHT POLE (PLP)	GAS LINE	
ELECTRIC JUNCTION BOX (EJB)	POWER MANHOLE (PMH)	OVERHEAD POWER LINE	
ELECTRIC METER (EM)	POWER POLE (PP)	OVERHEAD TELEPHONE LINE	
ELECTRIC TRANSFORMER (ETF)	POWER TELEPHONE LIGHT POLE (PTLP)	OVERHEAD POWER AND TELEPHONE LINE	
FINISHED FLOOR ELEVATION (F.F.E.)	POWER TELEPHONE POLE (PTP)	PROPERTY LINE	
FIRE HYDRANT (FH)	RIGHT-OF-WAY MONUMENT (RWM)	SANITARY SEWER LINE	
GAS METER (GM)	SPRINKLER VALVE (SV)	STORM LINE (RCP,CMP,PVC, CPP, HDPE)	
GUY POLE (GP)	SANITARY SEWER MANHOLE (SAMH)	UNDERGROUND POWER LINE	
GAS VALVE (GV)	SIGN (SN)	UNDERGROUND TELEPHONE LINE	
GUY WIRE (GW)	STEAM MANHOLE (STMH)	WATER LINE	
IRON ROD NEW (IRN)	STORMWATER MANHOLE (SWMH)	GUARDRAIL	
IRON ROD OLD (IRO)	TELEPHONE JUNCTION BOX (TJB)	EDGE OF WATER	
IRON PIPE OLD (IPO)	TELEPHONE LIGHT POLE (TLP)		
IRON SPIKE OLD (ISO)	TELEPHONE POLE (TP)		
LIGHT STANDARD METAL/WOOD (LS/LP)	TREE EVERGREEN		
MAIL BOX (MB)	WATER METER (WM)		
POST	WATER VALVE (WV)		

SETBACK REQUIREMENTS

YARD / BUILDING SETBACKS	REQUIRED	PROVIDED
FRONT YARD	20 FEET	20 FEET
FRONT BUILDING SETBACK	40 FEET	40 FEET
SIDE YARD	10 FEET	10 FEET
SIDE BUILDING SETBACK	20 FEET	20 FEET
REAR YARD	15 FEET	15 FEET
REAR BUILDING SETBACK	20 FEET	20 FEET

60 30 0 30 60
SCALE 1"=60'

JAMES M. OVERFELT
REGISTERED PROFESSIONAL LAND SURVEYOR
AGRICULTURE
COMMERCE
TENNESSEE NO. 1634

NOTES

1. THE PURPOSE OF THIS PLAT IS TO CREATE 2 LOTS AND DEDICATE EASEMENTS.
2. THIS SURVEY MEETS THE REQUIREMENTS OF AN URBAN LAND SURVEY (CATEGORY 1), WITH A RATIO OF PRECISION OF THE UNADJUSTED SURVEY GREATER THAN 1:10,000 AS PER STANDARDS OF PRACTICE ADOPTED BY THE BOARD OF EXAMINERS FOR LAND SURVEYORS, STATE OF TENNESSEE.
3. BEARINGS SHOWN ARE BASED ON THE TENNESSEE COORDINATE SYSTEM OF 1983 (NAD-1983). ELEVATIONS ARE BASED ON NAVD-1988, USING GEOID 2003 FOR ORTHOMETRIC HEIGHT DETERMINATION.
4. LOT 3 - PROPERTY IS ZONED R-2 (MEDIUM DENSITY RESIDENTIAL). LOTS 1 & 2 - PROPERTY IS ZONED I-1 (LIGHT INDUSTRIAL). ZONING INFORMATION SHOWN HEREON WAS TAKEN FROM THE CITY OF LA VERGNE PLANNING DEPARTMENT-ONLINE MAPPING. NO PARCEL REPORT, NO ZONING LETTER, OR ZONING REPORT WAS PROVIDED TO THIS SURVEYOR.
5. THIS PROPERTY IS NOT LOCATED IN A FLOOD HAZARD AREA ACCORDING TO FEDERAL EMERGENCY MANAGEMENT AGENCY FLOOD INSURANCE RATE MAP COMMUNITY NO. 47167, PANEL NO. 0020 K, DATED 5/08/2023. ZONE "X".
6. UNDERGROUND UTILITY LOCATIONS SHOWN HEREON WERE TAKEN FROM FIELD LOCATIONS OF VISIBLE ABOVE-GROUND STRUCTURES (AND PERTINENT UTILITY MAPS) AND ARE APPROXIMATE ONLY. UTILITIES SHOULD BE FIELD VERIFIED BY THE PROPER UTILITY AUTHORITY HAVING JURISDICTION PRIOR TO ANY DIGGING.
7. CONTOURS SHOWN HEREON WERE FURNISHED BY KIMLEY HORN AND WERE DERIVED FROM GIS DATA. CONTOUR INTERVAL TWO-FOOT.

DEED REFERENCE

PARCEL NO. 25.00 - BEING PROPERTY CONVEYED TO JUDY ANN COTHRAN BY DEED OF RECORD IN BOOK 1272, PAGE 2278, R.O.R.C.

PARCEL NO. 46.01 - BEING PROPERTY CONVEYED TO CARLA KING BY DEED OF RECORD IN BOOK 1377, PAGE 2174, AND RECORD BOOK 1418, PAGE 1572, R.O.R.C.

PROPERTY MAP REFERENCE

BEING PARCEL 25.00 AS SHOWN ON RUTHERFORD COUNTY PROPERTY MAP NO. 14O GROUP B.

BEING PARCEL 46.01 AS SHOWN ON RUTHERFORD COUNTY PROPERTY MAP NO. 14.

CERTIFICATE OF PLANNING COMMISSION APPROVAL

APPROVED BY THE LA VERGNE PLANNING COMMISSION, WITH SUCH EXCEPTIONS OR CONDITIONS AS ARE INDICATED IN THE MINUTES OF THE COMMISSION ON _____.

PRELIMINARY PLAT APPROVAL SHALL NOT CONSTITUTE FINAL APPROVAL FOR RECORDING PURPOSES.

CERTIFICATE OF SURVEY ACCURACY

I (WE) HEREBY CERTIFY THAT TO THE BEST OF MY (OUR) KNOWLEDGE AND BELIEF THE HEREON SHOWN SUBDIVISION PLAT REPRESENTS A CATEGORY I SURVEY HAVING AN UNADJUSTED RATIO OF PRECISION GREATER THAN 1:10,000 AND IS TRUE AND CORRECT. APPROVED MONUMENTS HAVE BEEN PLACED AS INDICATED. ALL SIDE LOT LINES ARE AT RIGHT ANGLES OR RADIAL TO A STREET UNLESS OTHERWISE NOTED.

BARGE DESIGN SOLUTIONS, INC.
NASHVILLE, TENNESSEE

BY:_____ DATE: DECEMBER 15, 2023

TN. LIC. NO. 1634

BARGE
DESIGN SOLUTIONS
615 Third Avenue South, Suite 700, Nashville, Tennessee 37210
PHONE (615)254-1500 FAX (615) 255-6572

LOT AREA TABLE

LOT 1 AREA = 540,615 SQ. FT. OR 12.41 ACRES +/-
LOT 2 AREA = 690,002 SQ. FT. OR 15.84 ACRES +/-
LOT 3 AREA = 19,692 SQ. FT. OR 0.45 ACRE +/-
TOTAL AREA= 1,250,309 SQ. FT., OR 28.70 ACRES +/-

OWNERS:
JUDY ANN COTHRAN
2515 GILBERT STREET
MURFREESBORO, TN 37129

CARLA KING
7182 LEE ROAD
SMYRNA, TENNESSEE 37167

DEVELOPER:
BIG ACQUISITIONS LLC
10275 W HIGGING ROAD
SUITE 810
ROSEMONT, IL 60018

PRELIMINARY PLAT OF LA VERGNE BUSINESS CENTER

SECOND CIVIL DISTRICT
LA VERGNE, RUTHERFORD COUNTY, TENNESSEE

FILE NO: 3838000 | REVISED: DECEMBER 15, 2023 | DATE: NOVEMBER 21, 2023 | SHEET 1 OF 1

12/18/2023
12:20:06 PM
JMJudson
LandRes.pen Workspace: LandRes

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Planning Commission Report Meeting: December 26, 2023	City of La Vergne

Item #: 15.

Item Title: Final Plat - Portico Place, Section 2, Phase 2 and Resubdivision of Common Areas A & B of Section 2, Phase 1 - Fifty Two (52) Lots on 15.69 Acres. Requested by SEC, Inc. Property located on Blair Road (Tax Map 29, Parcel 20.04). PDR (Planned Density Residential) Zoning District. Property owned by Blair Road, LLC.

Reviewed By:
Bo Logan, City Planner
Gary Lide, City Engineer

Summary: On behalf of their client, SEC is requesting approval of the final plat for Portico Place located on 16 ± acres. The purpose of the plat is to show the layout for new residential development.

The property is located off Blair Road near I-24. The proposed layout of the plan shows fifty two (52) new lots are indicated after the recording of a subdivision plat. Sidewalks are shown on all streets.

The community will be served via two new internal roads to be installed by the developer. These streets will be named Cornice Drive and Portico Place.

Staff Recommendation:

Staff Comments / Technical Items:

Planning

Bo Logan
blogan@lavergnetn.gov

Jake Blair
jblair@lavergnetn.gov

Engineering

Gary Lide
glide@lavergnetn.gov

No comments

Utilities

Scott Tatalovich
statalovich@lavergnetn.gov

No comments

Codes

No comments.

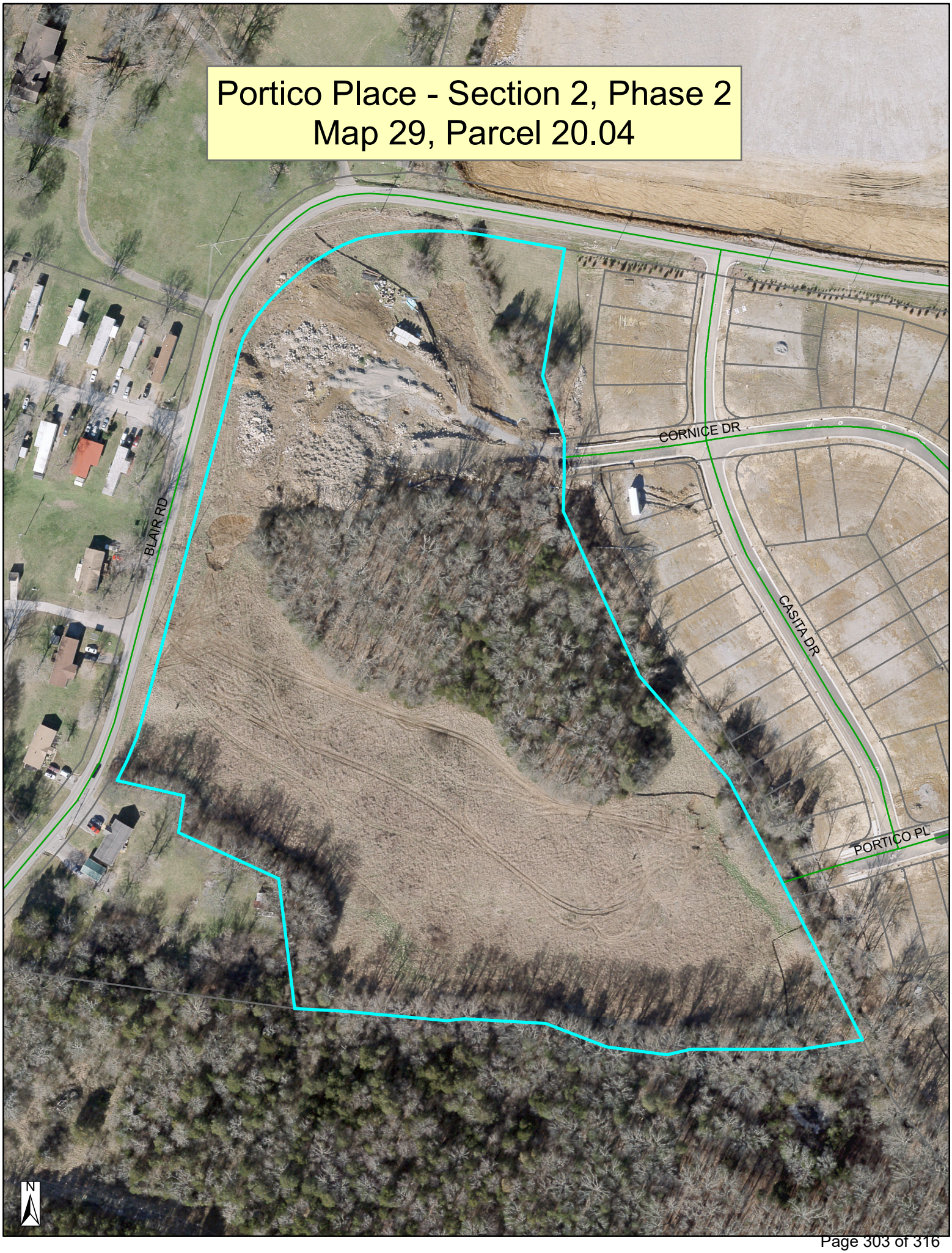
Fire

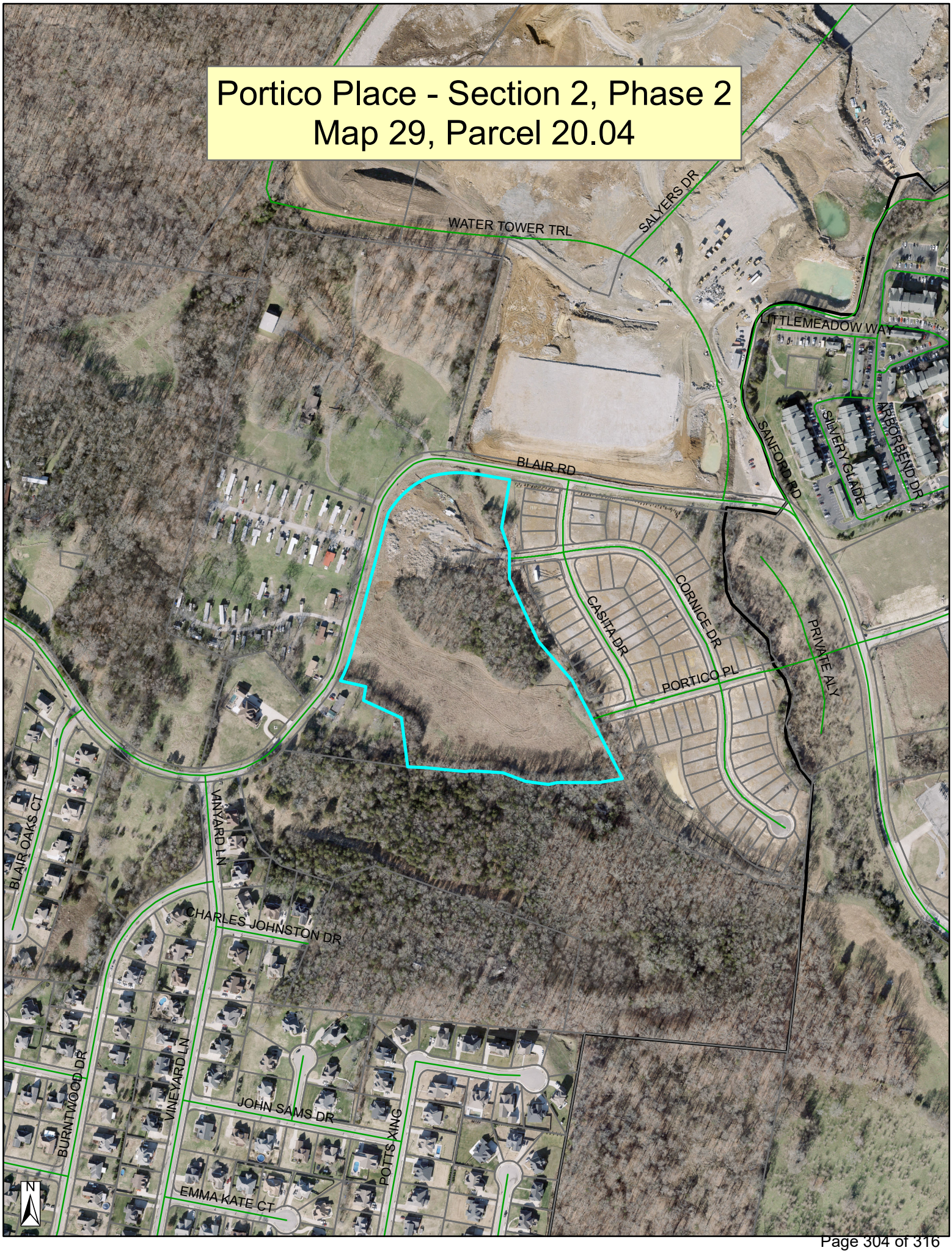
Curtis Brinkley
cbrinkley@lavergnetn.gov

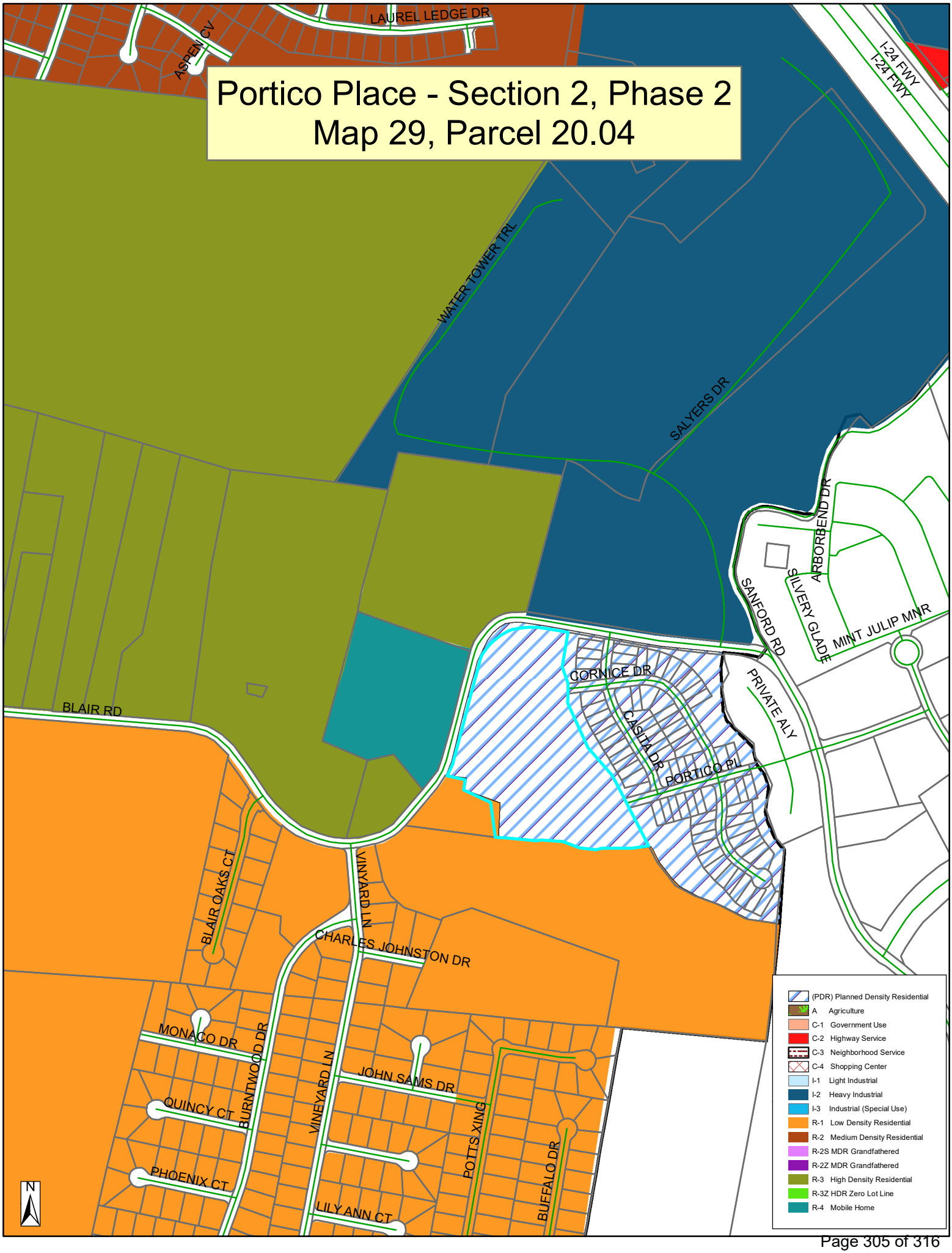
Police

John Eubank
jeubank@lavergnetn.gov

***Note:** The above technical items may not be the only corrections and/or issues needing to be resolved to get approval from the planning commission. New items can be brought up at the workshop and staff can add items at any time that might have been overlooked. It is the applicant's responsibility to make sure that all technical items are addressed and that no new issues exist before the planning commission meeting. Addressing all technical items does not constitute approval. It is the planning commission's decision whether an item passes or fails. Revised plans are due to staff by the following Monday at close of business unless other arrangements are made and documented.


Portico Place - Section 2, Phase 2
Map 29, Parcel 20.04
CORNICE DR
BLAIR RD
CASITA DR
PORTICO PL
N

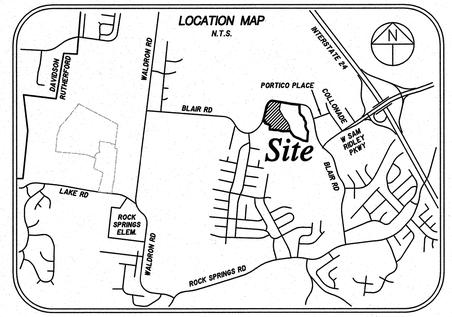

Portico Place - Section 2, Phase 2
Map 29, Parcel 20.04
WATER TOWER TRL
SALYERS DR
LITTLEMEADOW WAY
SILVERY GLADE
ARBOR BEND DR
SANFORD RD
BLAIR RD
CASITA DR
CORNICE DR
PRIVATE ALY
PORTICO PL
BLAIR OAKS CT
VANYARD LN
CHARLES JOHNSTON DR
BURNTWOOD DR
VINEYARD LN
JOHN SAMS DR
POTTS XING
EMMA KATE CT
N

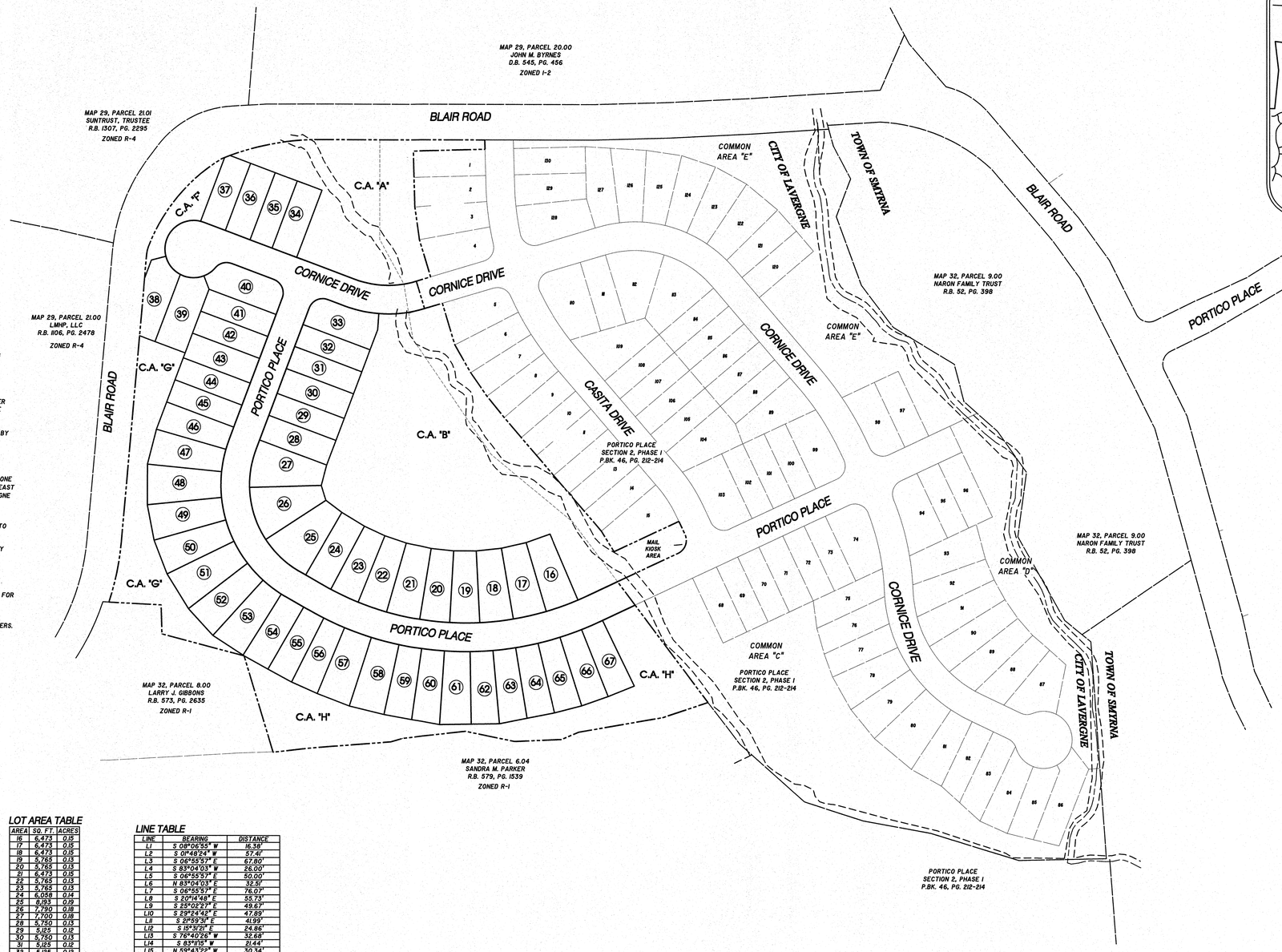

Portico Place - Section 2, Phase 2
Map 29, Parcel 20.04
LAUREL LEDGE DR
ASPEN CV
I-24 FWY
I-24 FWY
WATER TOWER TRL
SALYERS DR
ARBORBEND DR
SILVERY GLADE
MINT JULIP MNR
SANFORD RD
CORNICE DR
CASITA DR
PORTICO PL
PRIVATE ALY
BLAIR RD
BLAIR OAKS CT
VINYARD LN
CHARLES JOHNSTON DR
MONACO DR
BURNTWOOD DR
QUINCY CT
VINEYARD LN
JOHN SAMS DR
POTTS XING
BUFFALO DR
PHOENIX CT
LILY ANN CT
N
(PDR) Planned Density Residential
A Agriculture
C-1 Government Use
C-2 Highway Service
C-3 Neighborhood Service
C-4 Shopping Center
I-1 Light Industrial
I-2 Heavy Industrial
I-3 Industrial (Special Use)
R-1 Low Density Residential
R-2 Medium Density Residential
R-2S MDR Grandfathered
R-2Z MDR Grandfathered
R-3 High Density Residential
R-3Z HDR Zero Lot Line
R-4 Mobile Home




Cozy Bears
CONSTRUCTION
"EXPERIENCE THE DIFFERENCE"
269
PRIVATE
RESIDENCE







GENERAL NOTES

1. THE PURPOSE OF THIS FINAL PLAT IS TO CREATE 52 SINGLE FAMILY LOTS BEING SUPPORTED WITH ROAD RIGHT-OF-WAY AND EASEMENTS.
2. BEARING SYSTEM IS BASED ON TENNESSEE STATE PLANE COORDINATES TIED TO RUTHERFORD COUNTY CONTROL POINT RCC-01 (NAD 83-96).
3. THIS PROPERTY LIES WITHIN ZONE X, NOT IN A SPECIAL FLOOD HAZARD AREA, PER FEMA FIRM MAPS FOR RUTHERFORD COUNTY, MAP NO. 47149C0105 J, EFFECTIVE DATE: MAY 9, 2023.
4. PARCELS MAY BE SUBJECT TO ADDITIONAL EASEMENT'S AND/OR RESTRICTIONS, BY RECORD OR PRESCRIPTION, THAT A COMPLETE TITLE SEARCH MAY REVEAL.
5. PROPERTY IS ZONED PDR. MINIMUM SETBACK REQUIREMENTS ARE: FRONT = 15 FT., / (35 FT. TO GARAGE) - SIDE = 5 FT. - REAR = 15 FT.
6. FOR EACH LOT SHOWN ON THIS PLAT, THERE SHALL BE PLANTED A MINIMUM OF ONE CANOPY TREE OF AT LEAST 2.5" CALIPER AND ONE UNDERSTORY TREE OF AT LEAST 1.5" CALIPER. THE TYPE OF TREE IS TO BE DETERMINED BY THE CITY OF LA VERGNE WITH THE DEVELOPER.
7. ALL CRITICAL LOTS (WITH 15% SLOPES OR GREATER), ARE DENOTED WITH AN ASTERISK (*). ENGINEERED PLOT PLANS ARE REQUIRED FOR THESE LOTS PRIOR TO OBTAINING A BUILDING PERMIT.
8. ALL COMMON AREAS AND DRAINAGE AREAS SHALL BE OWNED AND MAINTAINED BY THE HOMEOWNERS ASSOCIATION.
9. DEVELOPER IS RESPONSIBLE FOR THE INSTALLATION OF STREET LIGHTS. STREET LIGHTS SHALL BE LOCATED NO MORE THAN 300 FEET APART.
10. LOTS 34-39 AND 43-53 SHALL HAVE NO ACCESS TO BLAIR ROAD. ALL ACCESS FOR THESE LOTS SHALL BE FROM AND TO CORNICE DRIVE FOR LOTS 34-39 AND PORTICO PLACE FOR LOTS 43-53.
11. CONSTRUCTION OR MOVING OF SOILS IS NOT ALLOWED WITHIN THE STREAM BUFFERS. NO VARIANCE WILL BE GRANTED FOR LOT 34.

CURVE DATA

CURVE	DELTA	RADIUS	ARC LENGTH	CRD BEARING	CRD LENGTH
C1	6°45'45"	500.00'	59.01'	S 79°52'49" W	58.97'
C2	6°45'43"	500.00'	59.01'	S 86°38'31" W	58.97'
C3	6°45'43"	500.00'	59.01'	N 86°53'46" W	58.97'
C4	6°01'34"	500.00'	52.59'	N 80°12'07" W	52.56'
C5	6°01'34"	500.00'	52.59'	N 74°10'33" W	52.56'
C6	6°45'43"	500.00'	59.01'	N 67°46'55" W	58.97'
C7	6°01'34"	500.00'	52.59'	N 68°25'16" W	52.56'
C8	6°01'34"	500.00'	52.59'	N 55°19'42" W	52.56'
C9	2°00'09"	500.00'	17.47'	N 51°20'50" W	17.47'
C10	26°58'52"	175.00'	82.41'	N 36°51'20" W	81.65'
C11	31°36'01"	175.00'	96.52'	N 07°33'54" W	95.30'
C12	22°02'31"	175.00'	67.32'	N 19°15'27" E	66.91'
C13	90°00'00"	25.00'	39.27'	N 75°16'38" E	35.36'
C14	16°17'36"	220.00'	62.56'	S 67°52'10" E	62.35'
C15	6°26'58"	50.00'	5.62'	N 62°56'41" W	5.62'
C16	1°14'24"	445.37'	9.64'	N 78°37'29" E	9.64'
C17	47°39'58"	50.00'	41.60'	S 28°49'13" E	40.41'
C18	48°44'32"	50.00'	42.54'	S 77°07'27" E	41.26'
C19	90°00'00"	25.00'	39.27'	S 14°43'22" E	35.36'
C20	28°51'22"	50.00'	25.18'	N 64°10'35" E	24.92'
C21	70°53'44"	25.00'	30.77'	N 85°00'46" E	28.87'
C22	4°35'06"	225.00'	18.00'	S 27°59'05" W	18.00'
C23	10°11'56"	225.00'	40.05'	S 20°35'33" W	40.00'
C24	11°28'42"	225.00'	45.08'	S 09°45'34" W	45.00'
C25	10°11'56"	225.00'	40.05'	S 01°05'06" E	40.00'
C26	10°11'56"	225.00'	40.05'	S 11°11'04" E	40.00'
C27	11°28'42"	225.00'	45.08'	S 22°07'34" E	45.00'
C28	10°11'56"	225.00'	40.05'	S 32°57'44" E	40.00'
C29	10°11'56"	225.00'	40.05'	S 43°09'42" E	40.00'
C30	2°05'06"	8.19'	8.19'	S 49°18'31" E	8.19'
C31	3°20'03"	550.00'	32.00'	S 52°00'47" E	32.00'
C32	4°09'31"	550.00'	39.92'	S 55°45'34" E	39.91'
C33	5°11'3"	550.00'	49.78'	S 60°29'54" E	49.77'
C34	5°11'2"	550.00'	49.79'	S 65°37'09" E	49.77'
C35	4°09'31"	550.00'	39.92'	S 70°11'50" E	39.91'
C36	4°09'31"	550.00'	39.92'	S 74°13'20" E	39.91'
C37	4°39'58"	550.00'	44.79'	S 78°51'46" E	44.78'
C38	4°09'31"	550.00'	39.92'	S 83°16'50" E	39.91'
C39	4°09'31"	550.00'	39.92'	S 87°26'02" E	39.91'
C40	4°09'31"	550.00'	39.92'	N 88°24'27" E	39.91'
C41	4°09'31"	550.00'	39.92'	N 84°14'56" E	39.91'
C42	4°09'31"	550.00'	39.92'	N 80°05'24" E	39.91'
C43	3°32'00"	550.00'	33.92'	N 76°14'39" E	33.91'
C44	29°49'39"	170.00'	88.50'	S 74°38'11" E	87.50'
C45	13°32'02"	220.00'	51.97'	N 82°47'00" W	51.85'
C46	2°01'18"	500.00'	17.64'	N 75°29'18" E	17.64'
C47	118°49'14"	50.00'	103.69'	N 54°25'23" E	86.08'
C48	19°25'58"	445.37'	151.01'	N 88°53'30" E	150.29'
C49	15°56'33"	50.00'	13.91'	N 22°41'49" E	13.87'
C50	37°32'58"	310.00'	203.16'	N 49°26'34" E	199.55'
C51	0°44'16"	445.37'	5.74'	N 77°38'09" E	5.74'
C52	13°14'09"	459.84'	106.23'	N 21°20'57" E	105.99'

LOT AREA TABLE

AREA	SQ. FT.	ACRES
16	6,473	0.15
17	6,473	0.15
18	6,473	0.15
19	5,765	0.13
20	5,765	0.13
21	6,473	0.15
22	5,765	0.13
23	5,765	0.13
24	6,058	0.14
25	8,093	0.19
26	7,790	0.18
27	7,700	0.18
28	5,750	0.13
29	5,125	0.12
30	5,750	0.13
31	5,125	0.12
32	5,125	0.12
33	7,008	0.16
34	5,750	0.13
35	5,125	0.12
36	5,750	0.13
37	5,728	0.13
38	6,247	0.14
39	7,188	0.17
40	7,153	0.16
41	5,125	0.12
42	5,125	0.12
43	5,750	0.13
44	5,125	0.12
45	5,125	0.12
46	5,757	0.13
47	6,530	0.15
48	7,468	0.17
49	6,652	0.15
50	6,652	0.15
51	7,468	0.17
52	6,652	0.15
53	6,518	0.15
54	5,950	0.14
55	5,429	0.12
56	5,543	0.13
57	6,873	0.16
58	7,013	0.16
59	5,550	0.13
60	5,652	0.13
61	6,382	0.15
62	5,680	0.13
63	5,633	0.13
64	5,543	0.13
65	5,560	0.13
66	5,580	0.13
67	5,616	0.13

LINE TABLE

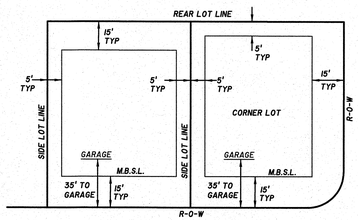
LINE	BEARING	DISTANCE
L1	S 08°06'55" W	16.38'
L2	S 01°48'24" W	57.41'
L3	S 06°55'57" E	67.80'
L4	S 83°04'03" W	26.00'
L5	S 06°55'57" E	50.00'
L6	N 83°04'03" E	32.51'
L7	S 06°55'57" E	76.07'
L8	S 20°14'48" E	55.73'
L9	S 25°02'27" E	49.67'
L10	S 29°24'42" E	47.89'
L11	S 21°59'31" E	41.99'
L12	S 15°37'21" E	24.86'
L13	S 76°40'26" W	32.68'
L14	S 83°11'15" W	21.44'
L15	N 59°43'22" W	30.34'
L16	S 13°59'02" W	28.31'
L17	N 1°23'44" W	24.97'
L18	S 85°00'46" W	26.12'
L19	N 30°16'38" E	34.39'

OPEN SPACE AREA TABLE

AREA	SQ. FEET	ACRES
OPEN SPACE A	54,042	1.24
OPEN SPACE B	132,609	3.04
OPEN SPACE F	7,157	0.16
OPEN SPACE G	32,537	0.75
OPEN SPACE H	53,963	1.24

RIGHT-OF-WAY AREA TABLE

AREA	SQ. FEET	ACRES
RIGHT-OF-WAY	84,541	1.94



TYPICAL MINIMUM BUILDING SETBACKS
N.T.S.

OWNER/DEVELOPER:
BLAIR ROAD, LLC
CORPORATE OFFICE:
572 SAVANNAH HWY.
CHARLESTON, SC 29407
&
LOCAL OFFICE:
101 FORREST CROSSING, SUITE 107,
FRANKLIN, TN 37064

LAND DATA:
ZONING: PDR
52 LOTS ON 15.69± ACRES

BUILDING SETBACKS:
FRONT: 15'
SIDE:5'
REAR: 15'

DEED REFERENCE:

TAX MAP 29, PARCEL 20.04
RECORD BOOK 1655, PAGE 1199

REVISED COMMON AREA:
TAX MAP 29N, GROUP "A", PARCEL 1.01
&
TAX MAP 29N, GROUP "A", PARCEL 15.01

PLAT BOOK _____ , PAGE _____

TIME OF RECORDING: _____

DATE OF RECORDING: _____

CERTIFICATE OF OWNERSHIP AND DEDICATION

I (WE) HEREBY CERTIFY THAT I AM (WE ARE) THE OWNER(S) OF THE PROPERTY SHOWN AND DESCRIBED HEREON AS EVIDENCED IN BOOK NUMBER 1655, PAGE 1199, RUTHERFORD COUNTY REGISTERS OFFICE, AND THAT I (WE) HEREBY ADOPT THIS PLAN OF SUBDIVISION WITH MY (OUR) FREE CONSENT ESTABLISH THE MINIMUM BUILDING RESTRICTION LINES AND THAT OFFERS OR IRREVOCABLE DEDICATION FOR ALL PUBLIC WAYS, UTILITIES, AND OTHER FACILITIES HAVE BEEN FILED.

DATE _____ NAME _____

DEED REFERENCE:
TAX MAP 29, PARCEL 20.04
TAX MAP 29N, GROUP "A", PARCEL 1.01
TAX MAP 29N, GROUP "A", PARCEL 15.01
RECORD BOOK 1655, PAGE 1199

CRAIG YERIAN, DIRECTOR OF LAND DEVELOPMENT
BLAIR ROAD, LLC
A TENNESSEE LIMITED LIABILITY COMPANY

CERTIFICATE OF ACCURACY

I HEREBY CERTIFY THAT TO THE BEST OF MY KNOWLEDGE AND BELIEF THAT THIS IS A TRUE AND ACCURATE SURVEY OF THE PROPERTY SHOWN HEREON; THAT THIS SURVEY MEETS OR EXCEEDS THE MINIMUM REQUIREMENTS OF AN URBAN LAND SURVEY, CATEGORY "1", AS PER STANDARDS OF PRACTICE ADOPTED BY THE BOARD OF EXAMINERS FOR LAND SURVEYORS FOR THE STATE OF TENNESSEE, AND THAT THE RATIO OF PRECISION IS GREATER THAN 1:10,000.

DATE 12-18-23 David A. Parker
REGISTERED LAND SURVEYOR

TENN. R.L.S. NO. 2381

DAVID A. PARKER
REGISTERED LAND SURVEYOR
STATE OF TENNESSEE
2381
12-18-23
TENNESSEE NO. 2381

CERTIFICATE OF APPROVAL OF WATER SYSTEM

I HEREBY CERTIFY THAT THE WATER SYSTEM(S) OUTLINED OR INDICATED ON THE FINAL SUBDIVISION PLAT ENTITLED "PORTICO PLACE SECTION 2, PHASE 2" HAS/HAVE BEEN INSTALLED IN ACCORDANCE WITH CURRENT LOCAL AND STATE GOVERNMENT REQUIREMENTS, OR A SUFFICIENT BOND OR OTHER SURETY HAS BEEN FILED TO GUARANTEE SAID INSTALLATION.

DATE _____ NAME _____
AUTHORIZED APPROVING AGENT

CERTIFICATE OF APPROVAL OF SEWER SYSTEM

I HEREBY CERTIFY THAT THE SEWER SYSTEMS OUTLINED OR INDICATED ON THE SUBDIVISION FINAL PLAT ENTITLED "PORTICO PLACE SECTION 2, PHASE 2" HAVE BEEN INSTALLED IN ACCORDANCE WITH CURRENT LOCAL AND STATE GOVERNMENT REQUIREMENTS, OR A SUFFICIENT BOND OR OTHER SURETY HAS BEEN FILED TO GUARANTEE SAID INSTALLATION.

DATE _____ NAME _____
AUTHORIZED APPROVING AGENT

CERTIFICATE OF APPROVAL OF PUBLIC WAYS FOR BOND POSTING

I HEREBY CERTIFY (I) THAT ALL DESIGNATED PUBLIC WAYS ON THIS FINAL SUBDIVISION PLAT HAVE BEEN INSTALLED IN AN ACCEPTABLE MANNER AND ACCORDING TO THE SPECIFICATIONS OF THE LAVERGNE SUBDIVISION REGULATIONS, OR (2) THAT A PERFORMANCE BOND OR OTHER SURETY HAS BEEN POSTED WITH THE PLANNING COMMISSION TO GUARANTEE COMPLETION OF ALL REQUIRED IMPROVEMENTS IN CASE OF DEFAULT.

DATE _____ NAME _____
AUTHORIZED APPROVING AGENT

CERTIFICATE OF APPROVAL FOR RECORDING

I HEREBY CERTIFY THAT THE SUBDIVISION PLAT SHOWN HEREON HAS BEEN FOUND TO COMPLY WITH THE LAVERGNE SUBDIVISION REGULATIONS, WITH THE EXCEPTION OF SUCH VARIANCES, IF ANY, AS ARE NOTED IN THE MINUTES OF THE PLANNING COMMISSION, AND THAT IT HAS BEEN APPROVED FOR RECORDING IN THE OFFICE OF THE COUNTY REGISTER.

DATE _____ NAME _____
SECRETARY, PLANNING COMMISSION

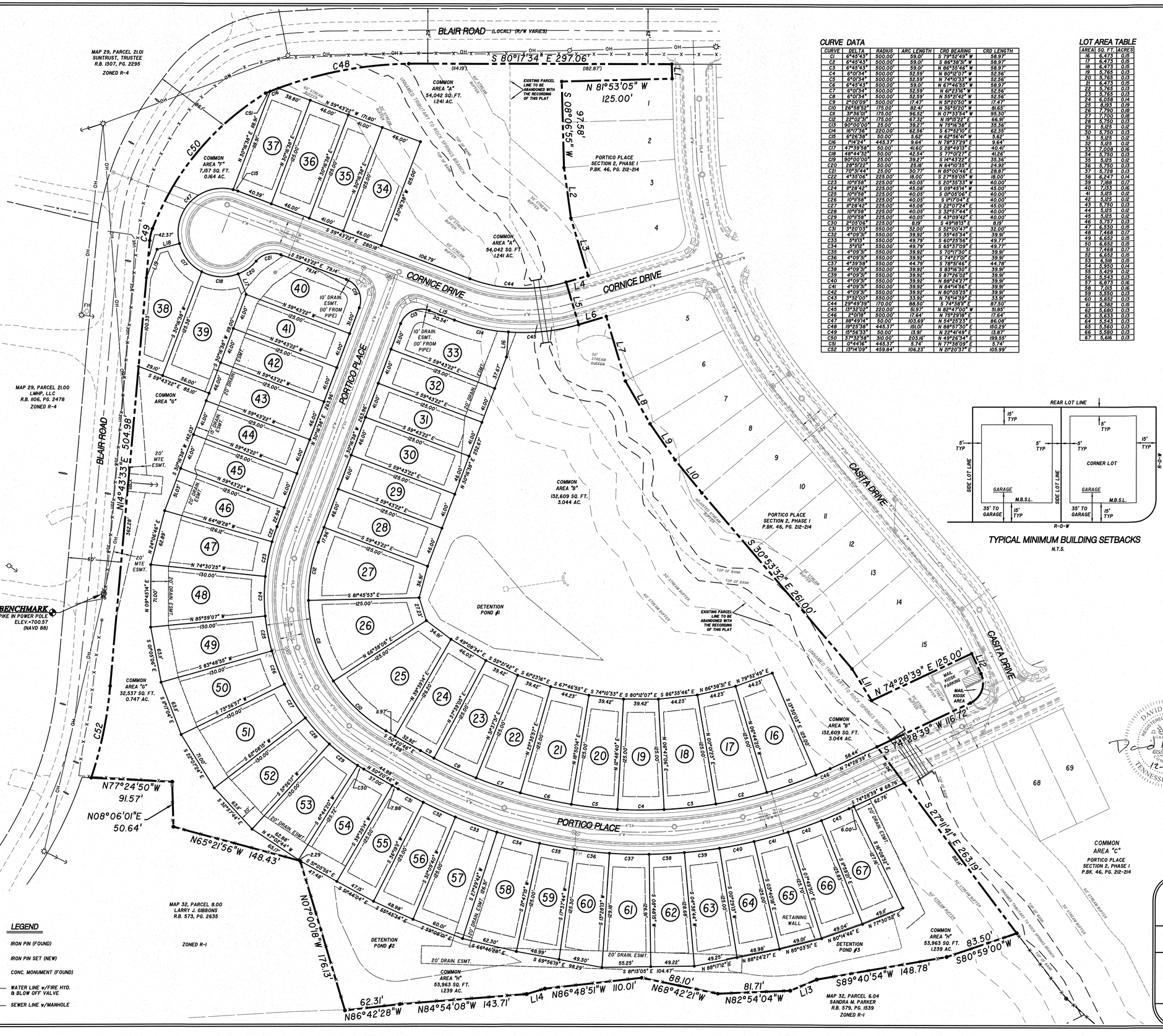
FINAL PLAT - COVER SHEET

SECTION 2, PHASE 2 AND RESUBDIVISION OF COMMON AREAS A & B OF SECTION 2, PHASE 1 PORTICO PLACE SUBDIVISION

CITY OF LAVERGNE, TENNESSEE
3rd CIVIL DISTRICT, RUTHERFORD COUNTY

SEC, Inc.
SITE ENGINEERING CONSULTANTS
ENGINEERING • SURVEYING • LAND PLANNING
850 MIDDLE TENNESSEE BLVD • MURFREESBORO, TENNESSEE 37129
PHONE (615) 890-7901 • FAX (615) 895-2567

PROJ. #	DATE: 4-26-23 REV: 12-18-23	FILE:	DRAWN BY:	SCALE:	SHEET
17024		17024 - PPSEC2PH2 FINALPLAT	ATS	1" = 100'	1 OF 2



CURVE DATA

CURVE	DELTA	RADIUS	ARC LENGTH	CRD BEARING	CRD LENGTH
C1	6°45'43"	500.00'	59.01'	S 79°52'49" W	58.97'
C2	6°45'43"	500.00'	59.01'	S 86°38'31" W	58.97'
C3	6°45'43"	500.00'	59.01'	N 86°35'46" W	58.97'
C4	6°01'34"	500.00'	52.59'	N 80°12'07" W	52.56'
C5	6°01'34"	500.00'	52.59'	N 74°10'33" W	52.56'
C6	6°45'43"	500.00'	59.01'	N 67°46'55" W	58.97'
C7	6°01'34"	500.00'	52.59'	N 6°23'16" W	52.56'
C8	6°01'34"	500.00'	52.59'	N 55°21'49" W	52.56'
C9	2°00'09"	500.00'	17.47'	N 50°20'50" W	17.47'
C10	26°58'52"	175.00'	82.41'	N 36°59'20" W	81.65'
C11	31°36'01"	175.00'	96.52'	N 07°33'54" W	95.30'
C12	22°02'51"	175.00'	67.32'	N 19°19'23" E	66.91'
C13	90°00'00"	25.00'	39.27'	N 75°16'59" E	35.36'
C14	16°17'36"	220.00'	62.56'	S 67°52'10" E	62.35'
C15	6°25'59"	50.00'	5.62'	N 62°56'41" W	5.62'
C16	1°14'24"	445.37'	9.64'	N 78°37'29" E	9.64'
C17	47°39'59"	50.00'	41.60'	S 28°49'13" E	40.41'
C18	48°44'52"	50.00'	42.54'	S 77°10'23" E	41.26'
C19	90°00'00"	25.00'	39.27'	S 14°43'22" E	35.36'
C20	28°51'22"	50.00'	25.18'	N 64°10'55" E	24.92'
C21	70°51'44"	25.00'	30.77'	N 85°00'46" E	28.87'
C22	4°35'06"	225.00'	18.00'	S 27°59'05" W	18.00'
C23	10°11'58"	225.00'	40.05'	S 20°35'33" W	40.00'
C24	10°11'58"	225.00'	40.05'	S 09°45'34" W	40.00'
C25	10°11'58"	225.00'	40.05'	S 01°05'06" E	40.00'
C26	10°11'58"	225.00'	40.05'	S 11°17'04" E	40.00'
C27	12°31'42"	225.00'	49.18'	S 22°27'54" E	49.07'
C28	10°11'58"	225.00'	40.05'	S 32°57'44" E	40.00'
C29	10°11'58"	225.00'	40.05'	S 43°09'42" E	40.00'
C30	2°03'06"	225.00'	8.09'	S 49°18'13" E	8.09'
C31	3°20'03"	550.00'	32.00'	S 52°00'47" E	32.00'
C32	4°09'31"	550.00'	39.92'	S 55°43'34" E	39.91'
C33	5°19'13"	550.00'	49.79'	S 60°25'56" E	49.77'
C34	5°19'12"	550.00'	49.79'	S 65°37'09" E	49.77'
C35	4°09'31"	550.00'	39.92'	S 70°17'30" E	39.91'
C36	4°09'31"	550.00'	39.92'	S 74°27'00" E	39.91'
C37	4°39'58"	550.00'	44.79'	S 78°51'46" E	44.78'
C38	4°09'31"	550.00'	39.92'	S 83°16'30" E	39.91'
C39	4°09'31"	550.00'	39.92'	S 87°26'02" E	39.91'
C40	4°09'31"	550.00'	39.92'	N 88°24'27" E	39.91'
C41	4°09'31"	550.00'	39.92'	N 84°14'56" E	39.91'
C42	4°09'31"	550.00'	39.92'	N 80°05'25" E	39.91'
C43	3°32'00"	550.00'	33.92'	N 76°14'39" E	33.91'
C44	29°43'39"	170.00'	88.50'	S 74°38'11" E	87.50'
C45	13°33'02"	220.00'	51.97'	N 82°47'00" E	51.85'
C46	2°01'18"	500.00'	17.64'	N 75°29'18" E	17.64'
C47	118°49'14"	50.00'	103.69'	N 54°26'23" E	86.08'
C48	19°23'59"	445.37'	151.01'	N 68°57'30" E	150.29'
C49	15°56'53"	50.00'	13.91'	N 22°41'49" E	13.87'
C50	37°32'56"	310.00'	203.16'	N 49°26'54" E	199.55'
C51	0°44'16"	445.37'	5.74'	N 77°39'09" E	5.74'
C52	13°14'09"	459.84'	106.23'	N 2°20'57" E	105.99'

LOT AREA TABLE

AREA	SQ. FT.	ACRES
16	6,473	0.15
17	6,473	0.15
18	6,473	0.15
19	5,765	0.13
20	5,765	0.13
21	6,473	0.15
22	5,765	0.13
23	5,765	0.13
24	6,098	0.14
25	8,183	0.19
26	7,790	0.18
27	7,700	0.18
28	5,750	0.13
29	5,125	0.12
30	5,750	0.13
31	5,125	0.12
32	5,125	0.12
33	7,008	0.16
34	5,750	0.13
35	5,125	0.12
36	5,750	0.13
37	5,728	0.13
38	6,247	0.14
39	7,188	0.17
40	7,153	0.16
41	5,125	0.12
42	5,125	0.12
43	5,750	0.13
44	5,125	0.12
45	5,125	0.12
46	5,727	0.13
47	6,530	0.15
48	7,468	0.17
49	6,652	0.15
50	6,652	0.15
51	7,468	0.17
52	6,652	0.15
53	6,518	0.15
54	6,350	0.14
55	5,429	0.12
56	5,343	0.13
57	6,873	0.16
58	7,013	0.16
59	5,350	0.13
60	5,652	0.13
61	6,382	0.15
62	5,580	0.13
63	5,633	0.13
64	5,543	0.13
65	5,560	0.13
66	5,580	0.13
67	5,616	0.13

LINE TABLE

LINE	BEARING	DISTANCE
L1	S 08°06'55" W	16.38'
L2	S 0°48'24" W	57.41'
L3	S 0°48'24" W	67.80'
L4	S 83°04'03" W	26.00'
L5	S 06°55'57" E	50.00'
L6	N 83°04'03" E	32.59'
L7	S 06°55'57" E	76.07'
L8	S 20°14'48" E	55.73'
L9	S 25°02'27" E	49.67'
L10	S 29°24'42" E	47.89'
L11	S 2°59'31" E	41.99'
L12	S 18°37'20" E	24.86'
L13	S 76°40'26" W	32.68'
L14	S 83°11'55" W	21.44'
L15	N 59°43'22" W	30.34'
L16	S 13°59'02" W	28.31'
L17	N 1°23'44" W	24.97'
L18	S 89°06'46" W	26.19'
L19	N 30°16'38" E	34.39'

OPEN SPACE AREA TABLE

	SQ. FT. (minimum)	ACRES (minimum)
EN SPACE A	54,042	1.24
EN SPACE B	132,609	3.04
EN SPACE F	7,157	0.16
EN SPACE G	32,537	0.75
EN SPACE H	53,963	1.24

RIGHT-OF-WAY AREA TABLE

AREA	SQ. FEET	ACRES
RIGHT-OF-WAY	84,541	1.94

TYPICAL MINIMUM BUILDING SETBACKS

N.T.S.

OWNER/DEVELOPER:
BLAIR ROAD, LLC
CORPORATE OFFICE:
572 SAVANNAH HWY.
CHARLESTON, SC 29407
&
LOCAL OFFICE:
101 FORREST CROSSING, SUITE 107,
FRANKLIN, TN 37064

LAND DATA:
ZONING: PDR
52 LOTS ON 15.69± ACRES

BUILDING SETBACKS:
FRONT: 15'
SIDE:5'
REAR: 15'

DEED REFERENCE:

TAX MAP 29, PARCEL 20.04
RECORD BOOK 1655, PAGE 1199

REVISED COMMON AREA:
TAX MAP 29N, GROUP "A", PARCEL 1.01
&
TAX MAP 29N, GROUP "A", PARCEL 15.01

PLAT BOOK _____, PAGE _____
TIME OF RECORDING: _____
DATE OF RECORDING: _____

LEGEND

- IRON PIN (FOUND)
- IRON PIN SET (NEW)
- CONC. MONUMENT (FOUND)
- WATER LINE w/FIRE HYD. & BLOW OFF VALVE
- SEWER LINE w/MANHOLE

FINAL PLAT

SECTION 2, PHASE 2 AND RESUBDIVISION OF COMMON AREAS A & B OF SECTION 2, PHASE 1 PORTICO PLACE SUBDIVISION

CITY OF LAVERGNE, TENNESSEE
3rd CIVIL DISTRICT, RUTHERFORD COUNTY

SEC, Inc. SITE ENGINEERING CONSULTANTS
ENGINEERING • SURVEYING • LAND PLANNING
850 MIDDLE TENNESSEE BLVD • MURFREESBORO, TENNESSEE 37129
PHONE (615) 890-7901 • FAX (615) 895-2567

PROJ. #	DATE: 4-26-23 REV: 12-18-23	FILE:	DRAWN BY:	SCALE:	SHEET
17024		17024 - PPSEC2PHI FINALPLAT	ATS	1" = 50'	2 OF 2

Planning Commission Report
Meeting: December 26, 2023

City of La Vergne

Item #: 16.

Item Title: Concept Plan – Burntwood – Creation of 8 Lots and Common Areas on 3.9 Acres. Requested by Huddleston Steele. Property located at Burntwood Drive and Vineyard Lane (Tax Map 32, Parcel 6.03). R-1 (Low Density Residential) Zoning District. Property owned by Gati Homes.

Reviewed By:
Bo Logan, City Planner
Gary Lide, City Engineer
Curtis Brinkley, Fire Marshal
Scott Tatalovich, Utility Engineer
Michael Dietz, Public Works Director

Summary: On behalf of their client, Huddleston Steele is requesting approval of the concept plan for Burntwood located on 4 ± acres. The purpose of the plan is to create new single-family residential development. The property is currently zoned R-1 which allows low density.

The property is located at Vineyard and Burntwood Drives. The proposed layout shows 8 new lots with common areas. Also shown is the layout of a new street.

Sidewalks are missing from the plat. All streets must have sidewalks a minimum of 5 feet wide.

Staff Recommendation:

Staff Comments / Technical Items:

Planning

Bo Logan
blogan@lavergnetn.gov

No remaining comments.

Jake Blair
jblair@lavergnetn.gov

Engineering

Gary Lide
glide@lavergnetn.gov

1. Engineering comments addressed.

Utilities

Scott Tatalovich
statalovich@lavergnetn.gov

1. (Previous comment #2) Label existing water in Vineyard and Burntwood as 8-inch water.

Codes

No comments

Fire

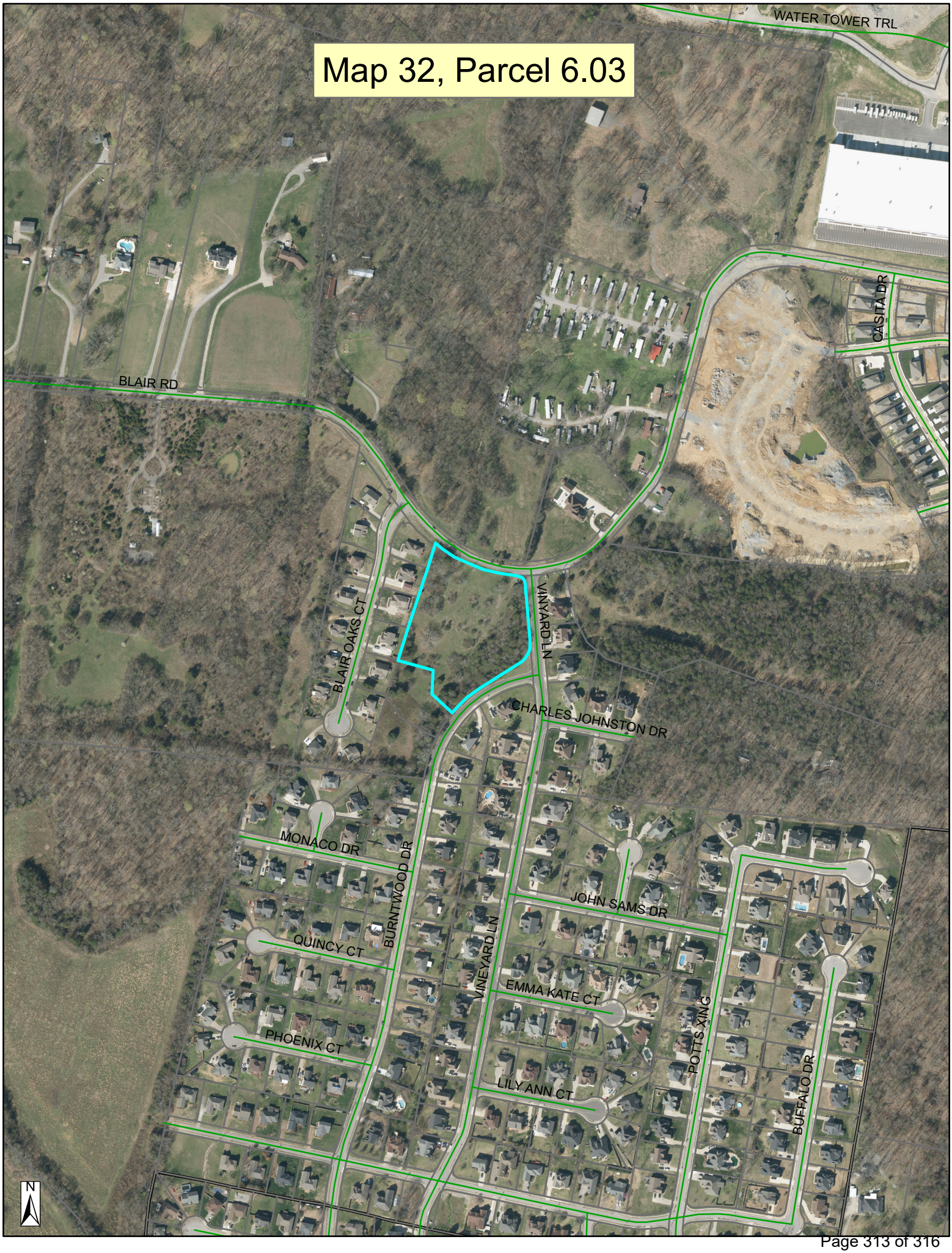
Curtis Brinkley
cbrinkley@lavergnetn.gov

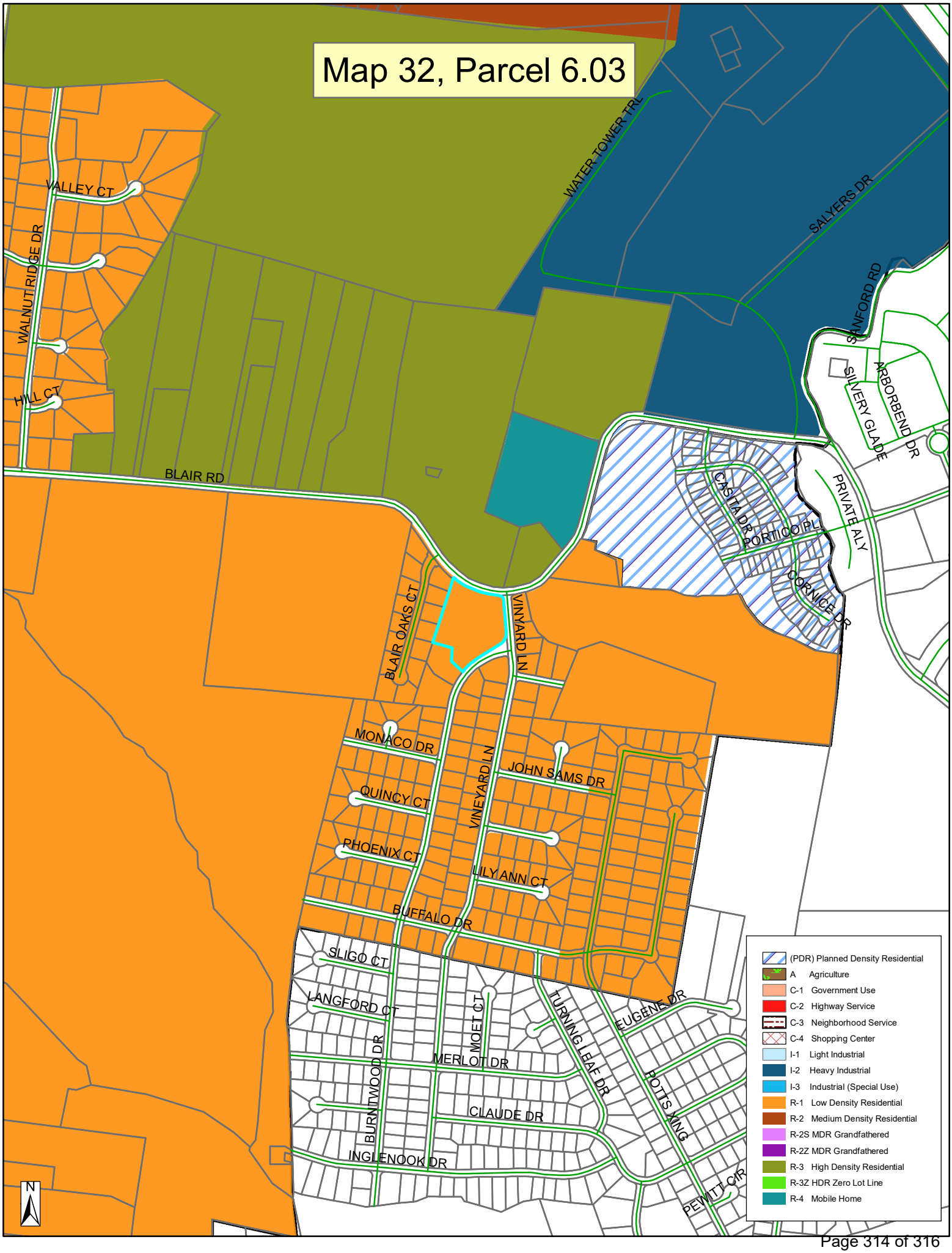
Police

John Eubank
jeubank@lavergnetn.gov

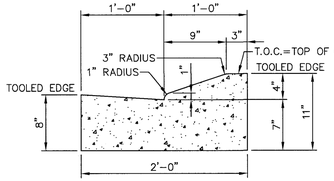
***Note:** The above technical items may not be the only corrections and/or issues needing to be resolved to get approval from the planning commission. New items can be brought up at the workshop and staff can add items at any time that might have been overlooked. It is the applicant's responsibility to make sure that all technical items are addressed and that no new issues exist before the planning commission meeting. Addressing all technical items does not constitute approval. It is the planning commission's decision whether an item passes or fails. Revised plans are due to staff by the following Monday at close of business unless other arrangements are made and documented.


Map 32, Parcel 6.03
BLAIR RD
BLAIR OAKS CT
VINYARD LN
BURNTWOOD DR
CHARLES JOHNSTON DR
VINEYARD LN
N


Map 32, Parcel 6.03
WATER TOWER TRL
BLAIR RD
CASITA DR
BLAIR OAKS CT
VINYARD LN
CHARLES JOHNSTON DR
MONACO DR
BURNTWOOD DR
JOHN SAMS DR
QUINCY CT
VINEYARD LN
EMMA KATE CT
POTTS XING
PHOENIX CT
LILY ANN CT
BUFFALO DR
N

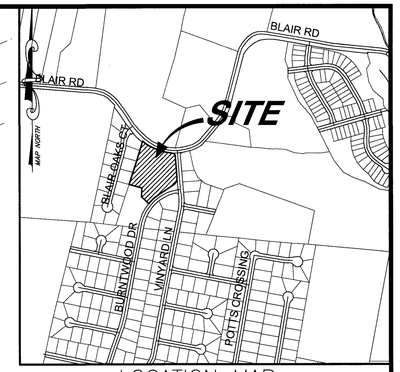

Map 32, Parcel 6.03
WATER TOWER TRL
SALYERS DR
SANFORD RD
SILVERY GLADE
ARBORBEND DR
VALLEY CT
WALNUT RIDGE DR
HILL CT
BLAIR RD
CASTLE DR
PORTICO PL
PRIVATE ALY
CORNICE DR
BLAIR OAKS CT
VINYARD LN
MONACO DR
JOHN SAMS DR
QUINCY CT
VINEYARD LN
PHOENIX CT
LILY ANN CT
BUFFALO DR
SLIGO CT
LANGFORD CT
MOET CT
TURNING LEAF DR
EUGENE DR
MERLOT DR
BURNTWOOD DR
CLAUDE DR
POTTS XING
INGLENOOK DR
PEWITT CIR
N
(PDR) Planned Density Residential
A Agriculture
C-1 Government Use
C-2 Highway Service
C-3 Neighborhood Service
C-4 Shopping Center
I-1 Light Industrial
I-2 Heavy Industrial
I-3 Industrial (Special Use)
R-1 Low Density Residential
R-2 Medium Density Residential
R-2S MDR Grandfathered
R-2Z MDR Grandfathered
R-3 High Density Residential
R-3Z HDR Zero Lot Line
R-4 Mobile Home





ROLLOVER CURB WITH GUTTER

N.T.S.



LOCATION MAP

N.T.S.

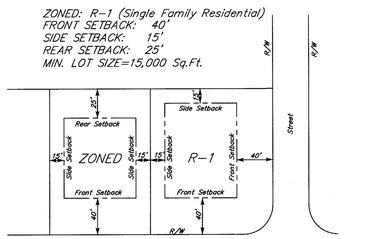
PLAT NOTES:

1. In Tennessee, it is a requirement per "The Underground Utility Damage Prevention Act" that anyone who engages in Excavation must notify all known underground utility owners, no less than three nor more than ten working days of their intent to excavate. A list of these utilities may be obtained from the County Register of Deeds. Those utilities that participate in the Tennessee One Call system can be notified by calling toll free 1-800-351-1111.
2. Underground utilities shown were located using available aboveground evidence, and also from information obtained from the respective utility companies. The existence or nonexistence of the utilities shown and any other utilities which may be Present on this site or adjacent sites should be confirmed with the utility owner prior to commencing any work.
3. It is the responsibility of each builder to design and construct a suitable grading and drainage scheme which will convey surface water, without ponding in the lot or under the structure, from his structure to the drainage system constructed by the subdivision developer.
4. Parcels may be subject to additional easements, and/or restrictions, by record or prescription, that a complete title search may reveal.
5. Permanent or temporary soil stabilization shall be applied to denuded areas within 15 days after final grade is reached on any portion of the site. Soil stabilization shall also be applied within 15 days to denuded areas which may not be at final grade, but will remain dormant (undisturbed) for longer than 60 days.
4. Properties adjacent to the site of land disturbance shall be protected from sediment deposition. This may be accomplished by preserving a well-vegetated buffer strip around the lower perimeter of the land disturbance; by installing perimeter controls such as sediment barriers, filters, or dikes, or sediment basins; or by a combination of such measures.
5. Public utility and drainage easements where shown hereon are intended to indicate an easement for construction, operation, and maintenance of public utilities and drainage ways; including, but not limited to, sanitary sewers, force mains, water lines, telephone signal conduits, electric conductors, drainage pipes, and natural gas lines. Easements may not have infrastructure constructed within them until some future time and there may be no notice or consultation with the individual Owners/Tenants of this construction.
6. Documentation of the Stormwater Notice of Intent (N.O.I.) for this site must be submitted to the City of LaVergne prior to any grading or land disturbance permits being issued by the city.
7. All work is to be performed in accordance with the Standards and Specifications of the latest version of the City of LaVergne Public Works Manual.
8. Per the City of LaVergne, fire hydrants must be installed in grass strip between the back of sidewalk and the right-of-way. Fire Hydrant valves are to be located in the grass strip between the back of curb & the front of sidewalk.
9. Per the City of LaVergne, water valves shall not be installed in the curb line.
10. Per the City of LaVergne, all pipe greater than 12' in depth shall be ductile iron construction.
11. Per the City of LaVergne, common areas are to be maintained by the homeowners association.
12. Per the City of LaVergne, sidewalks are to be constructed along Lemonwood Court, Burntwood Drive and Vineyard Lane within the right-of-way, behind the curb.
13. Per the City of LaVergne, sidewalks along Blair Road to be coordinated with the roadway widening with the Shofner property when developed.

LEGEND

- Power Pole
- Existing Fire Hydrant
- Proposed Fire Hydrant
- Reducer
- Proposed Gate Valve & Box
- Concrete Thrust Block
- —W— Existing Water Line
- —W— Proposed Water Line
- —S— Existing Sanitary Sewer Line
- —S— Proposed Sanitary Sewer Line
- Existing Manhole
- Proposed Manhole
- Sewer Line Check Dam
- —00— Existing Contours
- —00— Proposed Contours
- 00.0 Existing Spot Elevations
- 00.0 Proposed Spot Elevations

ZONED: R-1 (Single Family Residential)
FRONT SETBACK: 40'
SIDE SETBACK: 15'
REAR SETBACK: 25'
MIN. LOT SIZE=15,000 Sq.Ft.



TYPICAL BUILDING SETBACK DETAIL

N.T.S.

3.90± Acres

30' 0 30'

LEGEND FOR MONUMENTS
- IRON PIN SET (1/2" rebar with HSENGR cap)
- IPF IRON PIN FND.
- RAILROAD SPIKE
- FENCE
- SURVEY POINT
- NAIL
- CONC. MARKER FND.

OWNER/DEVELOPER: Gati Homes
Attn: Fernando Gallego
ADDRESS: 613 Blakemoore Drive
LaVergne, TN 37086

Tax Map 32 Parcel 6.03
Record Book 2389, Page 3683
Plat Book 35, Page 73

THIS PROPERTY IS NOT INCLUDED IN AN AREA DESIGNATED AS "SPECIAL FLOOD HAZARD" ON THE NATIONAL FLOOD INSURANCE PROGRAM COMMUNITY MAP PANEL NO. 47149C0105J, ZONE: X, DATED 05-09-2023.

NO.	DATE	DESCRIPTION
0	11-27-23	Original Issue - For Review
1	12-15-23	Revised per Staff comments

HUDDLESTON-STEELE ENGINEERING, INC.
2115 N.W. BROAD STREET, MURFREESBORO, TN 37129
SURVEYING : 893 - 4084, FAX: 893 - 0080

CONCEPT PLAN
BURNTWOOD
A Resubdivision of Lot 1 Rock Springs Church Subdivision
3rd Civil District of Rutherford County, Tennessee

Date: November, 2023 | Scale: 1"=30' | C 1.0

C:\Civil 3D Projects\Burntwood Blair Road\Sets\Layout 2.dwg, 4/24/2024