

CITY OF GOODLETTSVILLE PLANNING COMMISSION

MEETING AGENDA

Monday November 7, 2022 5:00 PM

Call Meeting to Order and Member Roll Call

ITEM#1 Approval of November 7, 2022 Agenda

ITEM#2 Approval of October 3, 2022 Meeting Minutes

ITEM#3 Public Forum on Planning Related Topics

ITEM#4 ITEM#5 Dry Creek Commons: Vastland, Eatherly. McClung Development LLC:
Requests performance bond reduction

ITEM#5 Dry Creek Townhomes Phase One / Ragan Smith Associates Inc: Request *revised* final subdivision plat approval for *fifty-five (55) town home* lots and public right of way dedication on 9.61 acres on Robert Cartwright Drive. Properties referenced as Davidson County Tax Map/Parcel# 03300029700 and a portion of 03300004200 and are zoned HDRPUD, High Density Residential Planned Unit Development. Property Owner: Dry Creek, LLC

ITEM#6 Al Neyer Louisville Highway Industrial Development/ CESO, Inc: Request site plan approval for two (2) industrial buildings totaling 225,200 square feet at 1016 Louisville Hwy 31W. Properties referenced as Sumner County Tax Map 141 Parcels# 58.00, 58.02, 59.00. Properties are zoned CG, Commercial General, and IC, Industrial Commercial. Property Owners: Felix, Nancy, and Sarah G Neely (#12-22)

ITEM#7 BJ'S Wholesale Club/Barge Design Solutions: Request site plan approval for a 103,004 square feet retail building at 1000 Rivergate Parkway. Properties referenced as Davidson County Tax Map/Parcel# 02614003900, 026140002700, 02614005300, 02600000700, 02600012700, and 02614004600 and are zoned CSL, Commercial Services Limited and GOPUD, General Office Planned Unit Development. Property Owners: BJ Rivergate, LLC and KDI Rivergate Mall, LLC (#13-22)

ITEM#8 R&C Enterprises: Request recommendation to the Goodlettsville City Commission to rezone a 0.32 property at 107 Harris Street from R-10, Medium Density to CSL, Commercial Services Limited/Commercial Core Overlay The property is referenced as Davidson County Tax Map/Parcel# 02508002100. Property Owner: Goodlettsville Church of Christ

ITEM#9 Zoning Ordinance Amendment/ Planning and Development Services Staff: Request recommendation to the City Commission to amend the Zoning Ordinance Sections 14-201 (3) (ii) and 14-213 (9)(e)(ii)(a) to define a Home Day Care Center as including three (3) to eight (8) kids. **(City resident submitted request)**

ITEM#10 Zoning Ordinance Amendment/Planning and Development Services Staff: Request recommendation to the City Commission to the amend the Zoning Ordinance Sections 14-205 (3)(b) and 14-213 (9)(h) to include a conditional use in residential zoning districts for an accessory residential unit in defined residential zoning districts. **(City resident/property owner submitted request)**

GOODLETTSVILLE CITY HALL MASSIE CHAMBERS

A government committed to operating with efficiency and integrity in all we do as we strive to enhance the quality of life for the community we serve.

105 S. Main Street – Goodlettsville, TN 37072 – 615-851-2202

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CITY OF GOODLETTSVILLE PLANNING COMMISSION

STAFF RECOMMENDATION REPORT

Monday November 7, 2022 5:00 PM

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STAFF NOTES: N/A

STAFF RECOMMENDATION: Approval

ITEM#2 Approval of October 3, 2022 Meeting Minutes

STAFF NOTES: N/A

STAFF RECOMMENDATION: Approval

ITEM#3 Public Forum on Planning Related Topics

STAFF NOTES: N/A

STAFF RECOMMENDATION: N/A

ITEM#4 ITEM#5 Dry Creek Commons: Vastland, Eatherly. McClung Development LLC:
Requests performance bond reduction

STAFF NOTES:

Project Status: Forty (40) of the forty (40) units in phase one are completed

Subdivision Plat Information: Phase One Horizontal Property Regime Master Deed–recorded
May 29, 2020

Subdivision Roadways: Dry Creek Commons private drive

Subdivision Bond Information: Performance Bond \$ 115,000 January 30, 2023 Expiration

Remaining Improvements:

Concrete curb and asphalt binder surface repairs due to construction

Asphalt surface and pavement striping

Replacement landscaping

Detention pond bank finish work

Remaining Improvement Cost Estimate: \$ 85,000

STAFF RECOMMENDATION:

Approval to reduce bond to \$ 40,000 after completion of asphalt surface final layer and pavement striping and concrete repairs. Bond extension for one additional year to ensure the remaining improvements are completed and additional construction in phase two (2) is completed before the phase one bond is released. The project improvements are private improvements.

Photo: Dry Creek Commons Phase One – November 1, 2022



ITEM#5 Dry Creek Townhomes Phase One / Ragan Smith Associates Inc: Request revised final subdivision plat approval for *fifty-five (55) town home* lots and public right of way dedication on 9.61 acres on Robert Cartwright Drive. Properties referenced as Davidson County Tax Map/Parcel# 03300029700 and a portion of 03300004200 and are zoned HDRPUD, High Density Residential Planned Unit Development. Property Owner: Dry Creek, LLC

STAFF NOTES: The final subdivision plat was approved at the October meeting based on the understanding the lots were being set up under the horizontal property regime property ownership recording format. The property owners have requested the revised final subdivision plat amendment to include individual lots instead of the horizontal property regime property format.

STAFF RECOMMENDATION: Approval

ITEM#6 Al Neyer Louisville Highway Industrial Development/ CESO, Inc: Request site plan approval for two (2) industrial buildings totaling 225,200 square feet at 1016 Louisville Hwy 31W. Properties referenced as Sumner County Tax Map 141 Parcels# 58.00, 58.02, 59.00. Properties are zoned CG, Commercial General, and IC, Industrial Commercial. Property Owners: Felix, Nancy, and Sarah G Neely (#12-22)

STAFF NOTES:

The project includes two (2) buildings totaling 225,200 square feet with the north side building at 123,200 square feet and the south side building at 102,000 square feet. The existing site includes multiple industrial buildings that will be demolished with the project.

The project traffic study and design are currently being reviewed by the TDOT, Tennessee Department of Transportation for any Louisville Hwy 31W turn lane and I-65 ramp improvements required with the project. Staff recently was involved in a meeting reviewing the I-65 widening project preliminary design plans. The preliminary plans include signalized intersections for both the north and south bound ramp intersections at exit 98. The TDOT I-65 project is currently projected to start in the spring of 2025.

The City's Engineer consultant is currently reviewing the revised plans. Staff will discuss any remaining items at the meeting. The items previously discussed being a concern with the project design was the detention pond outlets connections to existing off-site ditches leading to the drainage culverts under Louisville Hwy 31W which all drain to Slaters Creek. The project includes three (3) storm water pond facilities and a section of the stream running through the property being piped.

The developer is proposing to pay the City's sidewalk in-lieu of fee instead of installing sidewalks along the Louisville Hwy 31W frontage of the property.

The developer is requesting a design variance from the City's Design Guideline requirement from the industrial provisions regarding building walls facing public streets to include thirty-three (33%) percent brick or stone only on the street facing building wall section. The remaining wall areas are permitted to be tilt up panel concrete and metal walls. The project design includes with the north building a defined building entrance/office area with the tilt up panel concrete wall designs as shown on the attached plan. The design variance request is based on the location of the north building in relation to Louisville Hwy 31W since most of the north building is behind buildings along Louisville Hwy 31W and the separation of the front facing building wall to Louisville Hwy 31W is roughly 375 feet behind a landscaped feature. The south building would not be covered by the regulation due to the building location behind the building and lots along Louisville Hwy 31W.

The developer is requesting with transitional buffer yards along the north and east property lines between the IC, Industrial Commercial and Agricultural and CG, Commercial General zoning districts to install a solid decorative stamped vinyl fence with a line of landscaping to reduce the width of the buffer requirement. The buffer areas include sloped grades with limited areas for masonry wall or wood fence with masonry columns. The City's buffer requirements permit reductions to buffer widths and number of plantings with the installation of masonry walls. The City has permitted wood fences with masonry columns and bases as alternatives to solid masonry walls in buffer areas. The proposed fence design would be required to be reviewed as an alternative fence/wall material.

STAFF RECOMMENDATION: Approval with the following stipulations:

1. Approval of revised plans by City's Engineer Consultant prior to any City Land Disturbance permit issuance
2. City's Fire Department review and approval of revised layout plans regarding turn arounds shown with the fire truck turn study information included in the meeting packet
3. Landscaping or other screening method for grouped utility meter/connection area at the Louisville Hwy 31W drive entrance

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STAFF NOTES:

The project includes the removal of an existing movie theater and existing parking lots and alteration of multiple property lines in the development area. The project fuel station and the intersection of Rivergate Private Drive and Conference Drive are under the Metro Nashville planning and zoning jurisdiction and will require their review and approval. Metro Nashville recently approved an alteration of the original Rivergate Mall master plan zoning for this property to permit the fuel center use. Staff requested a limited traffic study due to the existing drive and signalized intersection improvement based on previous higher traffic conditions to determine the need for any traffic signal timing alteration at both ends of the private Rivergate Drive mall frontage road. Per the applicant, Metro Public Works has reviewed the traffic study presented with the project and any signal timing alterations would be as required by Metro.

The project includes a 103,004 square feet general retail building including an accessory vehicle service center similar to other large scale retail sales uses. The vehicle service center is an accessory to the primary general retail sales use. The project will require a final subdivision plat amendment to be reviewed by the Planning Commission to alter the existing property lines and combine the multiple properties/lots into one for the project. The final subdivision plat will also require alteration of existing easements due to the lot alterations.

The City's Consultant Engineer submitted additional comments with the main comment including additional storm water calculations revisions needed for the proposed project connection to the existing thirty (30") inch drainage culvert that drains the project area. The project design includes underground storm water quality and quantity facilities. Staff sent the remaining consultant engineer comments to the project design engineer and they agreed with the consultant comment items being approval stipulations.

The developer is requesting a variance from the City's Design Guidelines to permit concrete tilt-up panel construction as an alternative material for commercial developments. The City's standards permit the tilt up panel with industrial developments. The plans show a majority of the

building including the tilt-up panel construction with sections of brick materials at the building main entrance area and the brick columns/pilasters along the building elevations to break up the building wall areas. The concrete tilt-up panel construction would be reviewed as an alternative material with a commercial development. Staff discussed options with the developer due to the large scale of the building including reviewing brick installation along sections of the building front and along half of the building side walls with the back half of the side walls and rear wall remaining the concrete tilt-up panel construction with paint to match the other building areas.

The developer has requested the Planning Commission's discussion on the landscaping requirement for a building front wall foundation landscaping feature due to the location of the building fronting a private drive instead of a public street.

STAFF RECOMMENDATION: Approval with the following stipulations

1. Approval of revised plans by City's Engineer Consultant prior to the City's land disturbance permit issuance
2. Final subdivision plat reviewed and approved by the Planning Commission including revised property lines and easement locations prior to building permit issuance.
3. Building elevations and building foundation planting feature as determined by the Planning Commission based on meeting discussion. Staff to confirm any required building material alterations or foundation planting feature requirements prior to the building permit issuance.
4. Revised parking lot lighting plan to reduce parking lot pole light height to be consistent with building height.

Referenced Landscaping Foundation Requirement:

The landscape plan shall include foundation planting at the front of the building and along any side which parallels a public street. Such foundation planting shall include shrubs, flowering plants and ornamental trees.

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STAFF NOTES:

The property is requested to be rezoned to be consistent with the existing adjacent properties zoned CSL, Commercial Services Limited/Commercial Core Overlay. The adjacent three (3) properties fronting N. Main north of Harris Street and this referenced property are proposed for a commercial development. This referenced property being included in the development area would improve the commercial development opportunities to provide a more "square shaped" development area.

STAFF RECOMMENDATION: Approval based on the existing adjacent frontage commercial zoning and the rezoning would provide a consistent line of commercial zoning with adjacent

frontage properties along S. Main Street on both sides of Harris Street. The City's Comprehensive Land Use Plan includes commercial concentration frontage along this section of S. Main Street.

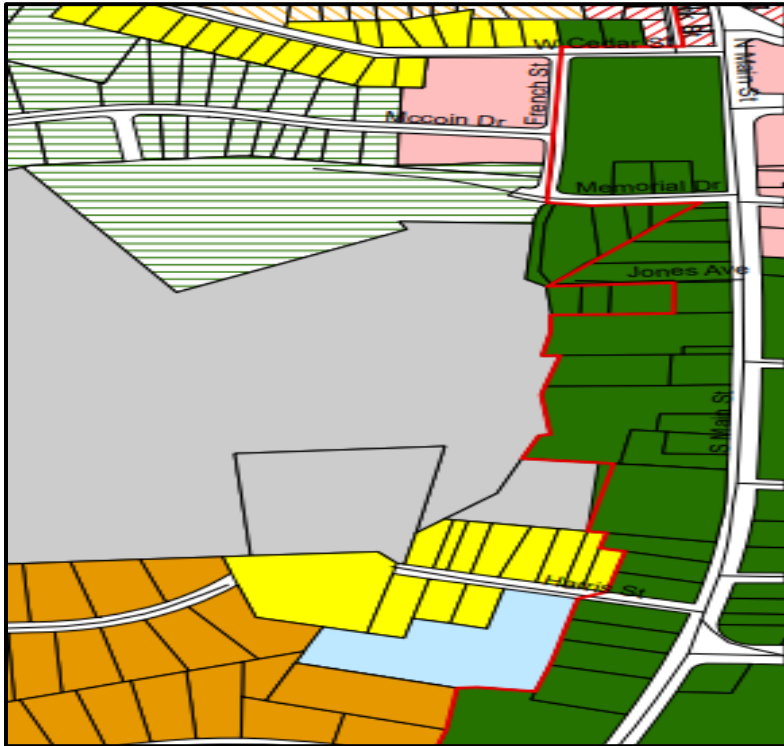


Zoning Map

Dark Green (Red Outline) CSL, Commercial Services Limited/CCO, Commercial Core Overlay

Yellow- R-10, Medium Density Residential

Light Blue- HDRPUD, High Density Residential Planned Unit Development

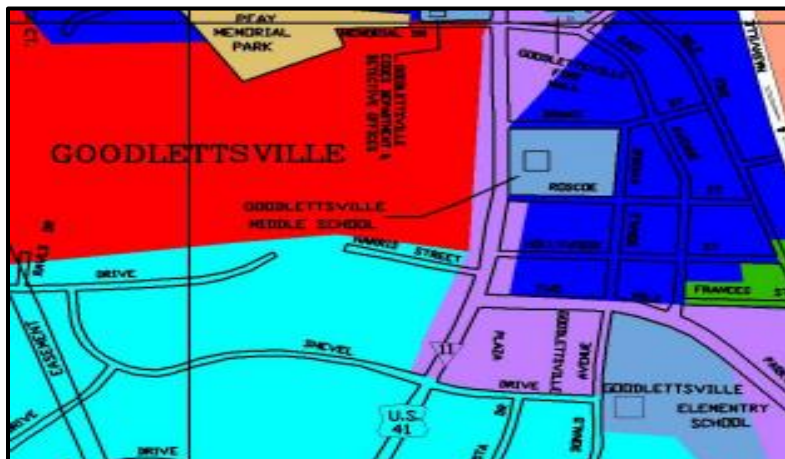


Comprehensive Land Use Plan

Purple- Commercial Concentration

Red- Residential Development Low Density

Light Blue- Residential Conservation Low Density



ITEM#9 Zoning Ordinance Amendment/ Planning and Development Services Staff:

Request recommendation to the City Commission to amend the Zoning Ordinance Sections 14-201 (3) (ii) and 14-213 (9)(e)(ii)(a) to define a Home Day Care Center as including three (3) to eight (8) kids. **(City resident submitted request)**

STAFF NOTES:

The City's Board of Zoning and Sign Appeals recently reviewed and denied a conditional use request for a home day care center due to concerns with the setting of the request and questions about the total number of kids that would be kept at the property. The Board of Zoning and Sign appeals questioned the City's Zoning Ordinance not including a defined minimum threshold for a home day care center. The City's Zoning Ordinance defines home day care centers up to eight (8) kids being kept in a home. The proposed amendment would define a home day care center as three (3) to eight (8) kids being kept in a home. Staff included examples from other Middle Tennessee cities and state law. Staff received a request from a resident for the home day care center to include four (4) to eight (8) kids. Staff's proposed amendment is for three (3) to eight (8) kids for better consistency with the City's Home Occupation Zoning Ordinance provisions. The proposed amendment would permit two (2) kids to be kept at a home and not be regulated as a home day care center.

STAFF RECOMMENDATION: Approval

Proposed Ordinance Amendments:

14-201 (3)(ii)

"Day Care Home" A childcare facility operated in a residential dwelling unit for the purpose of providing care, protection and guidance to three (3) but not more than eight (8) children who are unrelated by blood or adoption to the resident of the dwelling unit providing such care during only part of a twenty-four (24) hour day.

14-213 (9)(h)

(9) Conditional Use Permits

(e) Specific Standards for Community Facility Activities

ii) Special conditions for personal and group care

facilities (day care). For purposes of this ordinance, day care facilities are classified into two (2) types as defined below:

(A) Day care home - include day care in an

occupied residence of **three (3)** to not more than eight (8) children

not including children living in the home.

(B) Day care center - includes day care for more than eight (8) pre-teenage children in any kind of building.

(1) Day care home.

(i) The required lot size, yard, and bulk regulations of the district shall apply. No variances shall be permitted for lots on which such use is to be located.

(ii) All public utilities and sanitary sewers shall be available and connected to the site unless the site is over one (1) acre in size and sewer is not available. The fire department shall approve the facility for safety.

(iii) All requirements of the State of Tennessee that pertain to the use shall be met.

(iv) An outdoor play area of at least two hundred (200) square feet per child in size shall be available and shall be fenced.

(v) The facility shall be located so as to be compatible with the surrounding area and provide safety to those using the facility.

(vi) Fencing, screening, and landscaping shall be provided as appropriate to protect the surrounding area.

(vii) A site plan shall be submitted in conjunction with the application for a conditional use permit.

Ordinance Examples:

Example 1:

Day care" means the provision of care for individuals, who are not related to the primary caregiver, for less than twenty-four hours per day. These classes are referenced

Accessory to a single-family dwelling: Up to four individuals;

Day care home—Small: Five through seven individuals;

Day care home—Large: Eight through twelve individuals;

Class I: Thirteen through twenty-five individuals;

Class II: Twenty-six through fifty individuals;

Class III: Fifty-one through seventy-five individuals;

Class IV: More than seventy-five individuals;

Example 2:

DAY CARE HOME, ADULT AND CHILD 1. Day care homes shall meet all federal, state, and local requirements including, but not limited to, licensing, health, safety, and building code requirements. In addition, the following criteria shall be required: A. Adequate sidewalks and exterior lighting shall be provided. B. The amount of traffic or noise to be generated shall not be excessive. C. Adequate open space and recreational areas shall be provided. D. The day care home shall retain a residential character and the effect of the day care home shall not alter the residential character of the neighborhood. E. The operation of the day care home shall not adversely impact surrounding properties. **2. Services provided in a protective setting for more than four (4), up to a maximum of twelve (12), children or adults for less than twenty-four (24) hours per day**

Child Care - A facility operated for the purpose of providing care, protection and guidance to three (3) or more individuals during only part of a 24 hour day, excluding public or private primary schools, as further defined in Section 71-3-501, Tenn. Code Ann., as a "Child Care Center".

Example 3:

Family day care home: A place providing, or designed to provide, care for less than twenty-four hours a day for **more than four**, but less than eight, children who are unrelated, by blood or adoption, to the person providing such care, which may be licensed by the Tennessee Department of Human Services. See also "group day care home."

Example 4:

Home Day Care. Any place, home or institution which receives **between five (5) and twelve (12)** young children, conducted for cultivating the normal aptitude for exercise, play observation, initiation and construction

ITEM#10 Zoning Ordinance Amendment/Planning and Development Services Staff:

Request recommendation to the City Commission to amend the Zoning Ordinance Sections 14-205 (3)(b) and 14-213 (9)(h) to include a conditional use in residential zoning districts for an accessory residential unit in defined residential zoning districts. **(City resident/property owner submitted request)**

STAFF NOTES:

Staff received a request from a property owner for an accessory dwelling unit. Staff discussed the City's Zoning Ordinance does not permit accessory dwelling units or accessory buildings to be used for a dwelling unit. The owner has requested to discuss the request with the Planning Commission. The Planning Commission recently discussed a similar request and decided not to direct staff to provide a Zoning Ordinance amendment for review and recommendation to the City Commission. The proposed amendment includes an accessory dwelling unit being either attached or detached to the primary house building. The Planning Commission could determine if the accessory dwelling unit would only be permitted to be an attached unit. The proposed Zoning Ordinance requires accessory dwelling units to meet the same property minimum building setbacks as the primary building since the detached building would contain a dwelling unit.

STAFF RECOMMENDATION:

Deferral if the Planning Commission determines additional review is needed for accessory dwelling units to be included in the Zoning Ordinance. The recommendation is based on the Planning Commission previously discussing and deciding not to request staff to complete a Zoning Ordinance amendment for a similar request.

Proposed Ordinance Amendments:**14-205 (3)(b) Table 1**

(3) Use and Structure Provisions

(b) Conditional Uses. Conditional uses permitted for consideration of the Board of Zoning Appeals are listed in Table I.

P- PERMITTED USE																									
N- NOT A PERMITTED USE																									
C- PERMITTED ONLY BY CONDITIONAL USE																									
TABLE I																									
LAND USE ACTIVITY MATRIX																									
ZONING DISTRICTS																									
ACTIVITY																									
LDR MDR HDR																									
CP CPL GO RO																									
INT																									
PUD																									
MHP* OP CSL CS CG CC																									
IR IG																									
PERMANENT RESIDENTIAL																									
Dwelling, attached	N	N	N	N	N	N	N	P	P	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Dwelling, one-family detached	P	P	P	P	P	P	P	P	P	N	C	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Dwelling, two-family detached	N	N	N	P	P	P	P	P	P	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Dwelling, semi-detached	N	N	N	N	P	P	N	N	P	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Dwelling, multi-family	N	N	N	N	N	N	N	N	P	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Dwelling, mobile home	N	N	N	N	N	N	N	N	N	P	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Bed & Breakfast Homestay	C	C	C	C	C	C	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Mobile Home Park	N	N	N	N	N	N	N	N	N	P	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Accessory Dwelling Unit*	C	C	C	C	C	C	C	C	C	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
SEMI-PERMANENT RESIDENT																									
	N	N	N	N	C	C	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N

****Accessory Dwelling Units in Planned Unit Developments are to be reviewed as permitted uses with new project master plan proposals and as master plan amendments for existing developments***

14-213 (9)(h)

(9) Conditional Use Permits

(h) Specific Standards for Residential Activities

(iv) Accessory Dwelling Unit

An accessory residential family living dwelling unit either attached or detached to the primary single family residential dwelling unit, which provides complete living facilities for one or more persons on the same property as the primary single family dwelling unit. The following items are standards that shall apply to all accessory residential family dwelling units:

1. No more than one accessory residential dwelling unit shall be permitted on a single property in conjunction with the primary single-family dwelling unit.
2. The accessory unit shall be owned by the same property owner(s) and located on the same property as the primary dwelling unit.
3. Only family member(s) of residents of the primary dwelling unit may occupy the dwelling unit.
4. The maximum size of all accessory buildings permitted for a residential property shall be limited to the requirements of the Zoning Ordinance. The maximum size of an accessory dwelling unit is 750 square feet. The maximum square footage is subject to the size of the primary residential building and other accessory buildings per the requirements of the Zoning Ordinance. The minimum dimension of an accessory unit shall be determined by the adopted building code and the Board of Zoning and Sign Appeals.
5. The total area of primary and accessory residential dwelling units shall not exceed the maximum lot coverage requirements of the property zoning district.

6. Attached accessory residential dwelling units shall be under the same building setback requirements as the primary dwelling unit.
7. The property shall contain adequate off-street parking for both the primary and accessory residential family dwelling units.
8. Accessory residential dwelling unit shall be designed to be an accessory building to the primary residential unit structure including consistent building designs. The Board of Zoning Appeals review may include not allowing separate doors visible from street, separate street drive access, property address, utility meters, and any other items deemed necessary to ensure that the accessory residential dwelling unit shall be designed to be an accessory to the primary residential dwelling unit and that accessory unit shall not be a separate primary residential dwelling unit.

Applicants requesting a conditional use shall submit a written request and plans of the property and building to the Board of Zoning and Sign Appeals. The plans shall include enough detail to certify that requirements listed above will be met.

If the conditional use request is approved, the owner(s) shall submit, prior to building permit application, a copy of recorded restrictive covenants including above listed requirements and any additional requirements that may be stipulated by the Board of Zoning and Sign Appeals.

Planning Commissioner Training:

The Middle Tennessee section of the Tennessee American Planning Association is offering virtual training for Planning Commissioners & Board of Zoning Appeals members on Friday, November 18th from 8-11:30am. Registration is free & available through this link: <https://us06web.zoom.us/meeting/register/tZEld-6hpz4rG9b3olXQUh-gM6X3crEX5Y5T#/registration>.

OFFICIAL MINUTES OF THE MEETING

GOODLETTSVILLE PLANNING AND ZONING COMMISSION

October 3, 2022

Goodlettsville City Hall

5:00 p.m.

Massie Chambers-Auditorium

Present: Chairman Tony Espinosa, Jeff Duncan, Grady McNeal, Mayor Rusty Tinnin, Scott Trew, and Judy Wheeler

Absent: Jeff Parnell

Also Present: Addam McCormick (Staff), Tim Ellis- City Manager, Russell Freeman-City Attorney, Sharon Reed (Staff) and Alex West (Staff)

Tony Espinosa called the meeting to order, and Trew offered prayer.

Item #1 Approval of Agenda: Tinnin made a motion to approve the agenda, Duncan seconded the motion. The motion passed unanimously.

Item #2 Approval of September 12, 2022 Meeting Minutes: Trew made a motion to approve the minutes of the September 12, 2022, McNeal seconded the motion. Motion passed unanimously.

Item #3 Espinosa opened the Public Forum on Planning Related Topics.

No one requested to speak at the meeting. Duncan made a motion to close the public forum, seconded by Tinnin. The motion passed unanimously. The Public Forum was closed.

AGENDA

Item #4 Dry Creek Townhomes Phase One / Ragan Smith Associates Inc: Request final subdivision plat approval for two (2) lots and public right of way dedication on 9.61 acres on Robert Cartwright Drive. Properties referenced as Davidson County Tax Map/Parcel#03300029700 and a portion of 03300004200 and are zoned HDRPUD, High Density Residential Planned Unit Development. Property Owner: Dry Creek. LLC

Item Representative: Adam McCormick-Staff

Staff Discussion:

- The subdivision plat is to dedicate the public road right-of-way for the project and define the project boundary area for phase one.
- The town home lots will be recorded per a horizontal property regime recording process.
- Request to record the roads as a public right-of-way and split the project in two (2) different parts.
- Staff recommends approval.

Planning Commission Discussion: N/A

Motion: Motion by Duncan to approve the request, seconded by Trew. The motion passed unanimously.

DISCUSSION ITEM

-Ellen Drive Subdivision Conceptual Layout

- The lots/properties are zoned R-25, Low Density Residential.
- The existing two (2) building-four (4) unit town homes that were constructed in 1968 are legal non-conforming uses in the R-25 zoning district.
- Staff has received a request to remodel the town home units and review the possibility of subdividing additional lots for the construction of new one family dwelling homes.
- The four (4) lots/properties total 4.9 acres.
- The lots/properties include areas of 0.9, 1.2, 1.3, and 1.5 acres.
- Since the lots/properties are included in a developed subdivision and non-conforming uses and buildings are included on the lots/properties, the Planning Commission must review all requests to re-subdivide the lot/properties per the Subdivision Regulations.
- Staff has discussed with the applicant the possibility of re-subdivide the lots/properties to include the existing town homes buildings on one or two (2) lots and reviewing two (2) to three (3) lots for one family dwelling homes along the Ellen Drive frontage in front of the town homes to fit in with the appearance of the majority of other properties along Ellen Drive.
- Referenced Subdivision Regulations:

1-108.2 Limitation on Re-subdivision -- Within any existing subdivision which has been approved, recorded and at least partially developed, no re-subdivision or replating shall be permitted which reduces the average lot size in such recorded subdivision.

- Phase three (3) recorded in the mid 60's not including lot 131 (8 acres), the average lot size in the subdivision is thirty-five thousand (35,000) sq. ft.
- Duncan asked McCormick since they are aged non-confirming can they permit to remodel if they are not changing the unit count.
- McCormick responded yes, they can restore and repair.
- Duncan discussed the number of lots four (4) and number of units eight (8) on the site.
- McCormick responded four (4) in each unit that is correct.
- Trew asked what was the condition of the units?
- McCormick responded they are rough and did not think they are currently occupied.
- Duncan discussed his willingness to work with the property owner as much as the public would be accepting of it.
- Duncan discussed the elevation and options for the property
- McCormick responded the quads would have to be on a lot and meet the minimum zoning requirements.
- Duncan made note this is his opinion and not the opinion of the board.

-Rivergate Mixed Use Project

- The applicant is requesting discussion on a revised project design including the amount of dedicated commercial square footage required with the Zoning Ordinance Regional Center Planned Unit Development Section requirements and the parking design.

-The proposal includes a 10,000 sq. ft. retail center at the front of site and the proposed parking is based on 1.4 spaces per residential unit versus the City Zoning Ordinance requirement of 1.5 parking spaces for each one bedroom and two (2) parking spaces for all two (2) and three (3) bedroom units.

-Based on the project proposal, the City's Ordinance would require 643 spaces for residential units and forty (40) spaces for the commercial center.

-The applicant is requesting reduced parking 525 spaces based on the shared parking agreement in the Rivergate Mall area.

Referenced Zoning Ordinance Sections:

(5) RC1 to include minimum ground floor non-residential uses along Rivergate Parkway and within 500 feet of the center points of Rivergate Parkway and secondary street intersections with the primary ground square footage limited to non-residential uses. Residential uses include the residential units and offices and accessory uses of the residential use

(4) Minimum parking requirements can be met on-site or in a collective off-site shared private or public parking area except that all required residential use parking shall be met on-site only. A parking needs study may be submitted with the preliminary master plan for proposed reduced parking needs due to the intention of the Regional Center pedestrian oriented mixed-use design

Representative: Matthew Beck – RangeWater Real Estate

-Beck discussed RangeWater's fully integrated real estate firm they develop, manage and acquire multi-family communities.

-Beck presented the conceptual plan for the Macy's parcel at Rivergate mall.

-Beck discussed and presented renderings of current local projects Marathon Village and the Gossett.

-Beck discussed the proposal for 375 units, including 1-, 2- and 3-bedroom units, four story building serviced by elevators.

-Beck discussed eleven thousand square feet of amenities including green space, pool, and fitness center.

-Beck discussed the proposal of sub-dividing the lot to provide retail on the front parcel.

-Beck discussed the retail building and the proposed 10,000 sq. ft. based on feedback from retail brokers.

-Beck discussed the proposed parking and formula being one (1) space per bedroom.

-McCormick asked Beck if he thinks the Rivergate Mall shared parking agreement will remain in place?

-Beck responded he is not sure the conservations are ongoing.

-Espinosa asked the board for thoughts and comments.

-Duncan commented that the Marathon Village example listed in provided meeting information is what he thinks the board envisioned for the live, work, play scenario.

-Duncan expressed more flexibility if there was some office space or other commercial space and would not have to be all retail.

-Duncan discussed employment of people that could live, work, play and stay in the area use and flourish.

-Duncan commented in his opinion he would not have a problem, negotiating a deal with a separate building

-Ellis commented the shared parking agreement in Rivergate Mall area expires in 2023.

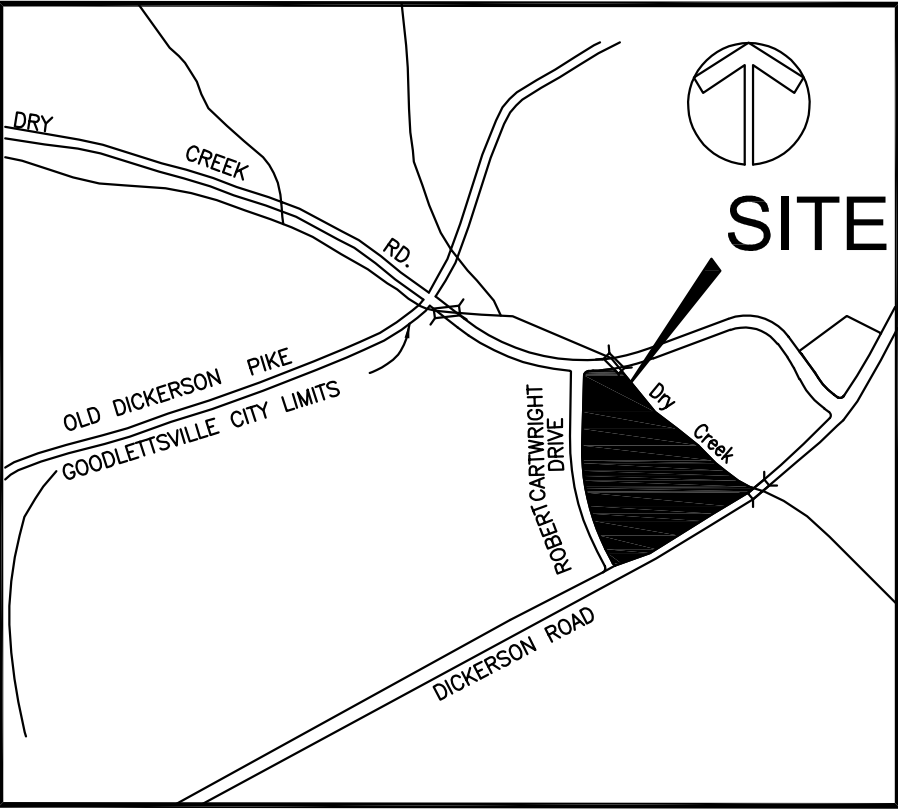
-Ellis discussed for the project to move forward they would have to have consent of all the current owners which is Hendon properties, Dillard's, JC Penny, and Sears building lease holder.

- Ellis mentioned a 100,000 sq. ft. retail project that will be before the board next month.
- Ellis discussed if the Macy's site was totally residential staff would have never recommended the change.
- Ellis commented in his opinion it is a good mixed-use product, but converting all to residential a poor decision for the City.
- Tinnin clarified the proposal for the board and anyone watching live.
- Beck discussed the proposed Rivergate site plan.
- Tinnin expressed his opinion of the plan was taking a parking lot and building all condominiums.
- McCormick asked Beck if they had a break down of the square footage?
- Beck responded the whole area is 400,000 sq. ft. and floors would be 75,000 sq. ft. the size of the Macy's
- Beck asked the board what they envision with the retail and type of usage in this area?
- Trew responded he would like something that would revitalize the Rivergate Mall experience.
- Duncan discussed the requirement of retail and commercial can be a bank, restaurant or office space does not have to be one continuous space
- McCormick responded it can be personal services, financial services anything allowed in that zoning district.
- Duncan commented he would assume the cliental would be the young professionals so he would be looking at things that would serve them, modern classy restaurants, bars, shopping, small business space and work long term in the area for the City.
- Espinosa commented his enthusiasm for a project like this is really high and discussed young professionals' attraction to the Bellevue area.
- Espinosa discussed being just 20 minutes from downtown and looking at the area there is hardly a coffee shop you can sit at in the area.
- Espinosa discussed the demographic opportunities available in the area
- Espinosa discussed the shared parking space agreement.
- Beck responded and shared their perspective for the parking space requirement.
- McCormick responded the City Zoning Ordinance requirement of 1.5 parking spaces for one bedroom and two (2) parking spaces for all two (2) and three (3) bedroom units.
- McCormick discussed dedicated parking for people living there and overflow parking availability.
- Tinnin commented one parking space per unit is pushing it and would be more comfortable with 1.4 parking space per unit.
- Beck responded to clarify one space per bedroom and averages 1.4 space per unit.
- Wheeler asked about the research that determines the design.
- Beck discussed the property management team at RangeWater.
- Espinosa thanked Mr. Beck for his time and hope the information was helpful.

With no further business, the meeting adjourned at 5:45 pm.

Tony Espinosa, Chairman

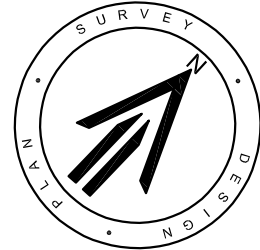
Sharon Reed, Planning Assistant



VICINITY MAP
(N.T.S.)

CURVE TABLE					
CURVE	RADIUS	LENGTH	DELTA	TANGENT	CHORD
C1	2825.00'	242.93'	4°55'37"	121.54	242.85'
C2	2785.00'	484.32'	9°57'50"	242.77	483.71'
C3	2825.00'	132.52'	2°41'16"	66.27	132.51'
C4	1268.00'	533.71'	24°06'58"	270.86	529.78'
C5	25.00'	38.11'	87°19'51"	23.86	34.52'
C6	1199.00'	244.50'	11°41'02"	122.68	244.08'
C7	241.00'	312.09'	74°11'47"	182.25	290.73'
C8	390.00'	73.46'	10°47'32"	36.84	73.35'
C9	447.00'	225.39'	28°53'23"	115.14	223.01'
C10	25.00'	40.25'	92°14'43"	26.00	36.04'

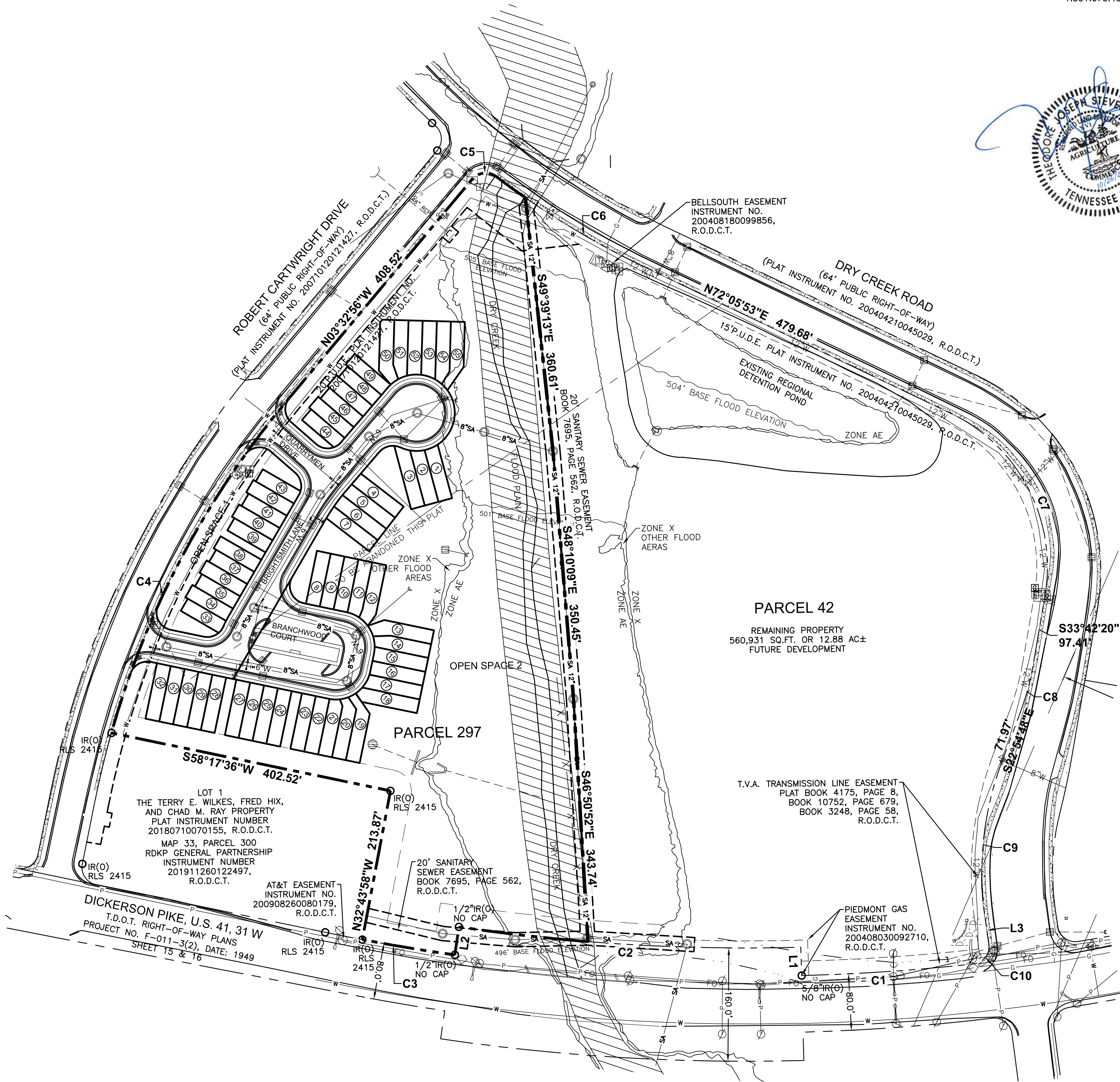
LINE TABLE		
LINE	BEARING	DISTANCE
L1	N45°23'31"W	40.00'
L2	S35°26'02"E	40.00'
L3	S51°48'11"E	36.10'



OWNER / DEVELOPER
NATELLI COMMUNITIES
506 MAIN STREET, SUITE 300,
GAITHERSBURG, MARYLAND 20878
MR. MICHAEL NATELLI
MNATELLI@NATELLI.COM
1.301.670.4020

GENERAL NOTES

1. THE PURPOSE OF THIS PLAT IS TO CREATE 55 RESIDENTIAL LOTS, TWO OPEN SPACE LOTS AND TO DEDICATE RIGHT-OF-WAY.
2. BEARINGS SHOWN HEREON ARE BASED ON TENNESSEE COORDINATE SYSTEM OF 1983.
3. THE SUBJECT PROPERTY IS CURRENTLY ZONED HDRPUD (HIGH RESIDENTIAL PLANNED UNIT DEVELOPMENT).
4. THIS SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES. ABOVE GRADE AND UNDERGROUND UTILITIES SHOWN WERE TAKEN FROM VISIBLE APPURTENANCES AT THE SITE, PUBLIC RECORDS AND/OR MAPS PREPARED BY OTHERS. THEREFORE, RELIANCE UPON THE TYPE, SIZE AND LOCATION OF UTILITIES SHOWN SHOULD BE DONE SO WITH THIS CIRCUMSTANCE CONSIDERED. DETAILED VERIFICATION OF EXISTENCE, LOCATION AND DEPTH SHOULD ALSO BE MADE PRIOR TO ANY DECISION RELATIVE THERETO IS MADE. AVAILABILITY AND COST OF SERVICE SHOULD BE CONFIRMED WITH THE APPROPRIATE UTILITY COMPANY. 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 (3) THREE NOR MORE THAN (10) TEN WORKING DAYS PRIOR TO THE DATE OF THEIR INTENT TO EXCAVATE AND ALSO TO AVOID ANY POSSIBLE HAZARD OR CONFLICT. TENNESSEE ONE CALL 811.
5. BY SCALED MAP LOCATION AND GRAPHIC PLOTTING ONLY, THIS PROPERTY LIES WITHIN FLOOD ZONES "AE", "X" (OTHER FLOOD AREAS) AND "X" (OTHER AREAS), AS DESIGNATED ON CURRENT FEDERAL EMERGENCY MANAGEMENT AGENCY MAP NO. 47037C0136H, WITH AN EFFECTIVE DATE OF APRIL 5, 2017, WHICH MAKES UP A PART OF THE NATIONAL FLOOD INSURANCE ADMINISTRATION REPORT; COMMUNITY NO. 470040, PANEL NO. 0136, SUFFIX H, WHICH IS THE CURRENT FLOOD INSURANCE RATE MAP FOR THE COMMUNITY IN WHICH SAID PREMISES IS SITUATED.
- SAID MAP DEFINES ZONE "AE" UNDER "SPECIAL FLOOD HAZARD AREAS SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD" AS BASE FLOOD ELEVATIONS DETERMINED.
- SAID MAP DEFINES ZONE "X" (OTHER FLOOD AREAS) UNDER "OTHER FLOOD AREAS" AS AREAS OF 0.2% ANNUAL CHANCE FLOOD; AREAS OF 1% ANNUAL CHANCE FLOOD WITH AVERAGE DEPTHS OF LESS THAN 1 FOOT OR WITH DRAINAGE AREAS LESS THAN 1 SQUARE MILE; AND AREAS PROTECTED BY LEVEES FROM 1% ANNUAL CHANCE FLOOD.
- SAID MAP DEFINES ZONE "X" (OTHER AREAS) UNDER "OTHER AREAS" AS AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN.
6. BEING PARCELS 42 & 297 AS SHOWN ON DAVIDSON COUNTY PROPERTY MAP NUMBER 33.
7. INDIVIDUAL WATER AND/OR SANITARY SEWER SERVICE LINES ARE REQUIRED FOR EACH PARCEL.
8. A PUBLIC UTILITY & DRAINAGE EASEMENT OF A MINIMUM OF TWENTY FEET (20') ADJACENT TO ALL STREET RIGHT-OF-WAY SHALL HEREBY BE MADE A PART OF THIS RECORDING.



LEGEND

- | | | | |
|---------|--|-------|--|
| ● IR(N) | IRON ROD (NEW) (5/8" X 18" W/CAP STAMPED "RAGAN SMITH & ASSOCIATES") | —RCP— | REINFORCED CONCRETE PIPE |
| ○ IR(O) | IRON ROD (OLD) | —SA— | SANITARY SEWER LINE |
| □ | ELECTRIC BOX | —G—G— | GUARDRAIL |
| ⊕ | FIRE HYDRANT | —P— | OVERHEAD ELECTRIC POWER LINE |
| ⊕ | WATER VALVE | ⊕—> | UTILITY POLE W/ANCHOR |
| ▢ | CATCH BASIN/CURB INLET | * | LIGHT STANDARD |
| ⊕ | STORM MANHOLE | ○ | GAS VALVE |
| ⊕ | SEWER VALVE | ○ | UTILITY POLE |
| ⊕ | TRANSFORMER PAD | ○ | REGISTER'S OFFICE FOR DAVIDSON COUNTY, TENNESSEE |

LOT AREA = 83,190 SQUARE FEET OR 1.91 ACRES±
OPEN SPACE AREA = 274,597 SQUARE FEET OR 6.30 ACRES±
PRIVATE ROAD/COMMON AREA = 20,038 SQUARE FEET OR 0.46 ACRES±
RIGHT-OF-WAY DEDICATION = 40,957 SQUARE FEET OR 0.94 ACRES±
PHASE 1 TOTAL = 418,782 SQUARE FEET OR 9.61 ACRES±

CERTIFICATE OF OWNERSHIP & DEDICATION

I(WE) HEREBY CERTIFY THAT I(WE) ARE THE OWNERS OF THE PROPERTY SHOWN AND DESCRIBED HEREON AS EVIDENCED IN DEED OF RECORD AS INSTRUMENT NO. 20210914-01223325, R.O.D.C.T. AND THAT I(WE), HEREBY ADOPT THIS PLAN OF SUBDIVISION WITH OUR(MY) FREE CONSENT, ESTABLISH THE MINIMUM BUILDING RESTRICTION LINES, AND THAT OFFERS OF IRREVOCABLE DEDICATION FOR ALL PUBLIC STREETS, UTILITIES, AND OTHER FACILITIES HAVE BEEN FILED.

DRY CREEK, LLC

MICHAEL NATELLI DATE

CERTIFICATION OF COMMON AREAS DEDICATION

(OWNER) IN RECORDING THIS PLAT HAS DESIGNATED CERTAIN AREAS OF LAND SHOWN HEREON AS COMMON AREAS INTENDED FOR USE BY THE HOMEOWNERS WITHIN NAME OF DRY CREEK TOW HOMES PHASE 1 FOR RECREATION AND RELATED ACTIVITIES. THE ABOVE DESCRIBED AREAS ARE NOT DEDICATED FOR USE BY THE GENERAL PUBLIC, BUT ARE DEDICATED TO THE COMMON USE OF THE HOMEOWNERS WITHIN THE NAMED SUBDIVISION. THE "DECLARATION OF COVENANTS AND RESTRICTIONS," APPLICABLE TO THE ABOVE NAMED SUBDIVISION, IS HEREBY INCORPORATED AND MADE A PART OF THIS PLAT.

MICHAEL NATELLI DATE

CERTIFICATE OF APPROVAL OF SEWER SYSTEMS

I HEREBY CERTIFY THAT THE SEWER SYSTEMS OUTLINED OR INDICATED ON THE FINAL SUBDIVISION PLAT ENTITLED "CEDARSIDE AT DRY CREEK, PHASE 1" HAVE BEEN INSTALLED IN ACCORDANCE WITH CURRENT LOCAL AND STATE GOVERNMENT REQUIREMENTS OR A LETTER OF CREDIT OR OTHER APPROVED SURETY HAS BEEN FILED WHICH WILL GUARANTEE SAID INSTALLATION.

SEWER SYSTEM: _____

DATE: _____ BY: _____

CERTIFICATE OF APPROVAL OF STREETS OR BOND POSTING

I HEREBY CERTIFY: (1) THAT ALL DESIGNATED PUBLIC STREETS ON THIS FINAL SUBDIVISION PLAT HAVE BEEN INSTALLED IN AN ACCEPTABLE MANNER AND ACCORDING TO THE SPECIFICATIONS OF THE GOODLETTSVILLE SUBDIVISION REGULATIONS OR (2) THAT A LETTER OF CREDIT OR OTHER APPROVED SURETY HAS BEEN POSTED WITH THE PLANNING COMMISSION TO GUARANTEE COMPLETION OF ALL REQUIRED IMPROVEMENTS IN CASE OF DEFAULT

NAME: _____

DATE: _____ BY: _____

CERTIFICATE OF APPROVAL OF WATER SYSTEM

I HEREBY CERTIFY THAT THE WATER SYSTEM(S) OUTLINED OR INDICATED ON THE FINAL SUBDIVISION PLAT ENTITLED "CEDARSIDE AT DRY CREEK, PHASE 1" HAVE BEEN INSTALLED IN ACCORDANCE WITH CURRENT LOCAL AND STATE GOVERNMENT REQUIREMENTS OR A LETTER OF CREDIT OR OTHER APPROVED SURETY HAS BEEN FILED TO GUARANTEE SAID INSTALLATION.

DATE: _____

NAME: _____ MADISON SUBURBAN UTILITY DISTRICT

CERTIFICATE OF APPROVAL FOR RECORDING

I HEREBY CERTIFY THAT THE SUBDIVISION PLAT SHOWN HEREON HAS BEEN FOUND TO COMPLY WITH THE GOODLETTSVILLE 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.

BY: _____ SECRETARY PLANNING COMMISSION

DATE: _____

CERTIFICATE OF ACCURACY

I HEREBY CERTIFY THAT THIS IS A TRUE AND ACCURATE SURVEY OF THE PROPERTY SHOWN HEREON TO THE ACCURACY REQUIRED BY THE GOODLETTSVILLE PLANNING COMMISSION AND THAT THE MONUMENTS HAVE BEEN PLACED AS REQUIRED BY THOSE REGULATIONS. I HEREBY CERTIFY THAT THIS IS A CATEGORY 1 SURVEY AND THE RATIO OF PRECISION OF THE UNADJUSTED SURVEY IS 1: 52,721.

BY: _____ DATE: 10/26/22
TED J. STEVENSON II PLS NO.: 2136

FINAL PLAT

CEDARSIDE AT DRY CREEK PHASE 1

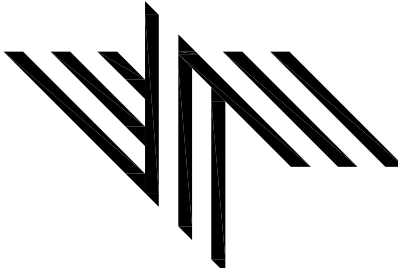
DICKERSON PIKE
10TH COUNCIL DISTRICT,
CITY OF GOODLETTSVILLE,
DAVIDSON COUNTY, TENNESSEE
DISTRICT COUNCIL MEMBER:
ZACH YOUNG

OCTOBER 26, 2022

SCALE: 1" = 100'

JOB NO. 84144-2096

SHEET 1 of 2



RaganSmith

Nashville - Murfreesboro - Chattanooga

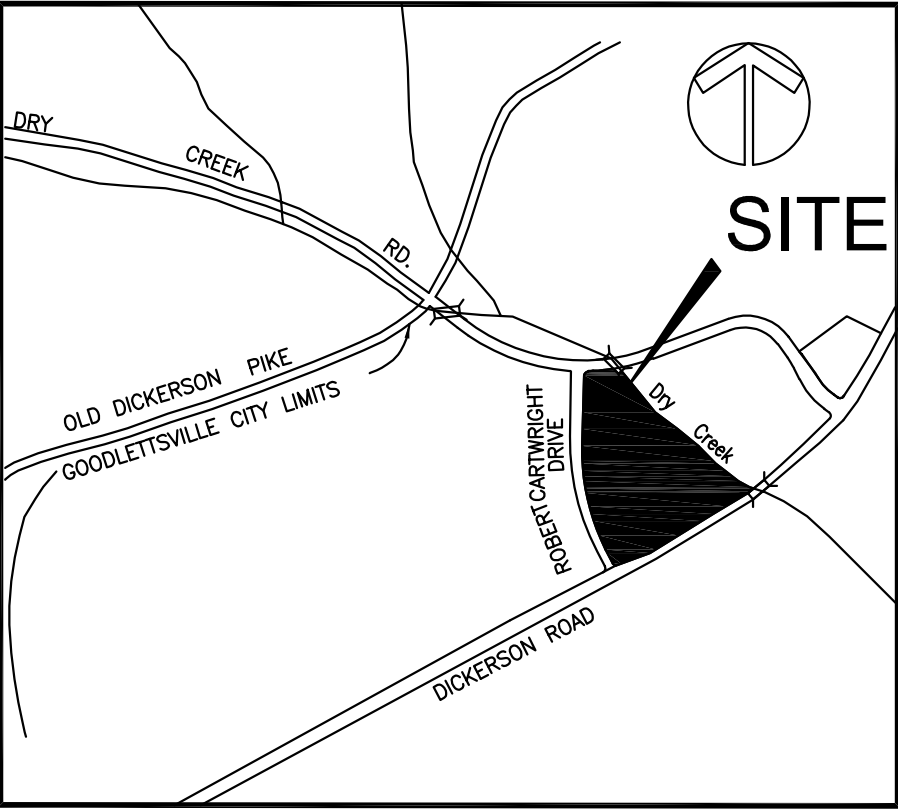
ragansmith.com

315 Woodland Street, Nashville,

Tennessee 37206

615.244.8591; tstevenson@ragansmith.com

Ted Stevenson



VICINITY MAP
(N.T.S.)

CURVE TABLE						
CURVE	RADIUS	LENGTH	DELTA	TANGENT	CHORD	CHD BRG
C11	25.00'	37.79'	86°36'15"	23.56'	34.29'	S47°28'00"E
C12	25.00'	39.56'	90°39'16"	25.29'	35.56'	N42°26'09"E
C13	54.00'	239.94'	254°35'03"	70.91'	85.92'	S55°35'58"E
C14	25.00'	32.54'	74°35'03"	19.04'	30.29'	S34°24'02"W
C15	275.00'	50.22'	10°27'47"	25.18'	50.15'	S08°07'22"E
C16	25.00'	47.28'	108°21'14"	34.63'	40.54'	S67°31'53"E
C17	50.00'	78.54'	90°00'00"	50.00'	70.71'	S76°42'30"E
C19	50.00'	1.64'	1°52'35"	0.82'	1.64'	N57°21'13"E
C20	25.00'	35.76'	81°57'15"	21.71'	32.79'	S17°18'53"W
C21	25.00'	44.83'	102°44'01"	31.28'	39.06'	S70°20'30"E
C22	25.00'	34.30'	78°36'55"	20.47'	31.67'	N18°59'02"E
C23	125.00'	15.20'	6°58'09"	7.61'	15.20'	N16°50'20"W
C24	25.00'	34.42'	78°52'58"	20.57'	31.76'	N52°47'44"W
C25	25.00'	41.73'	95°38'41"	27.59'	37.05'	S44°07'33"W
C26	25.00'	12.71'	29°07'30"	6.49'	12.57'	S11°40'16"W
C27	54.00'	6.56'	6°57'53"	3.29'	6.56'	S00°35'28"W
C28	54.00'	13.05'	13°50'39"	6.56'	13.02'	S10°59'44"W
C29	54.00'	13.35'	14°10'05"	6.71'	13.32'	S25°00'06"W
C30	54.00'	20.20'	21°26'11"	10.22'	20.09'	S42°48'14"W
C31	54.00'	20.99'	22°16'30"	10.63'	20.86'	S64°39'35"W

CURVE TABLE						
CURVE	RADIUS	LENGTH	DELTA	TANGENT	CHORD	CHD BRG
C32	54.00'	11.40'	12°05'38"	5.72'	11.38'	S81°50'40"W
C33	54.00'	11.84'	12°33'31"	5.94'	11.81'	N85°49'46"W
C34	54.00'	87.35'	92°40'36"	56.58'	78.13'	S33°12'42"E
C35	54.00'	20.17'	21°23'53"	10.20'	20.05'	N23°49'32"E
C36	54.00'	20.75'	22°00'55"	10.50'	20.62'	N45°31'56"E
C37	54.00'	14.28'	15°09'11"	7.18'	14.24'	N64°06'58"E
C38	25.00'	8.96'	20°32'05"	4.53'	8.91'	N61°25'32"E
C39	25.00'	23.58'	54°02'58"	12.75'	22.72'	S24°08'00"W
C40	275.00'	7.22'	1°30'15"	3.61'	7.22'	N03°38'37"W
C41	275.00'	20.00'	4°10'06"	10.01'	20.00'	N06°28'47"W
C42	275.00'	19.95'	4°09'22"	9.98'	19.94'	N10°38'30"W
C43	275.00'	3.05'	0°38'06"	1.52'	3.05'	S13°02'13"E
C44	50.00'	1.46'	1°40'17"	0.73'	1.46'	S59°07'39"W
C45	50.00'	18.15'	20°47'53"	9.18'	18.05'	S70°21'44"W
C46	50.00'	17.05'	19°31'59"	8.61'	16.96'	N89°28'20"W
C47	50.00'	16.63'	19°03'35"	8.39'	16.56'	N70°10'32"W
C48	50.00'	15.04'	17°14'00"	7.58'	14.98'	N52°01'45"W
C49	50.00'	10.21'	11°42'15"	5.12'	10.20'	N37°33'37"W
C50	50.00'	4.86'	5°34'22"	2.43'	4.86'	N28°55'19"W
C51	50.00'	21.01'	24°04'13"	10.66'	20.85'	N14°06'01"W

OWNER / DEVELOPER
NATELLI COMMUNITIES
506 MAIN STREET, SUITE 300,
GAITHERSBURG, MARYLAND 20878
MR. MICHAEL NATELLI
MNATELLI@NATELLI.COM
1.301.670.4020

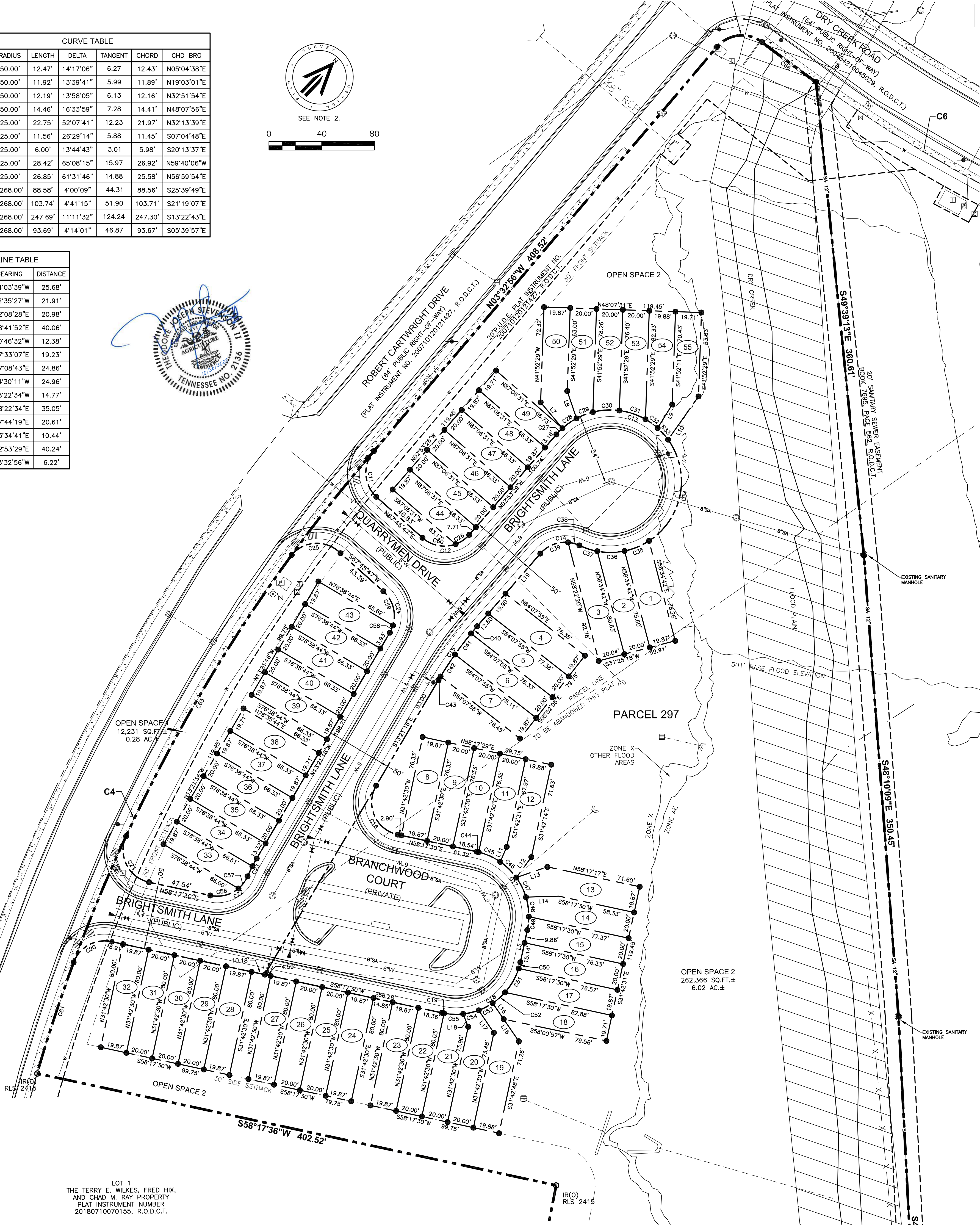
LEGEND		
● IR(N)	IRON ROD (NEW) (5/8" X 18" W/CAP STAMPED "RAGAN SMITH & ASSOCIATES")	— RCP — REINFORCED CONCRETE PIPE
○ IR(O)	IRON ROD (OLD)	— SA — SANITARY SEWER LINE
□	ELECTRIC BOX	— G — GUARDRAIL
⊕	FIRE HYDRANT	— P — OVERHEAD ELECTRIC POWER LINE
⊕	WATER VALVE	⊕ UTILITY POLE W/ANCHOR
⊕	CATCH BASIN/CURB INLET	* LIGHT STANDARD
⊕	STORM MANHOLE	○ GAS VALVE
⊕	SEWER VALVE	○ UTILITY POLE
⊕	TRANSFORMER PAD	○ REGISTER'S OFFICE FOR DAVIDSON COUNTY, TENNESSEE

G:\84144-2096\1-SURVEY\PLAT\PHASE 1\2096 PHASE 1 SHEET 2.DWG

CURVE TABLE						
CURVE	RADIUS	LENGTH	DELTA	TANGENT	CHORD	CHD BRG
C52	50.00'	12.47'	14°17'06"	6.27'	12.43'	N05°04'38"E
C53	50.00'	11.92'	13°39'41"	5.99'	11.89'	N19°03'01"E
C54	50.00'	12.19'	13°58'05"	6.13'	12.16'	N32°51'54"E
C55	50.00'	14.46'	16°33'59"	7.28'	14.41'	N48°07'56"E
C56	25.00'	22.75'	52°07'41"	12.23'	21.97'	N32°13'39"E
C57	25.00'	11.56'	26°29'14"	5.88'	11.45'	S07°04'48"E
C58	25.00'	6.00'	13°44'43"	3.01'	5.98'	S20°13'37"E
C59	25.00'	28.42'	65°08'15"	15.97'	26.92'	N59°40'06"W
C60	25.00'	26.85'	61°31'46"	14.88'	25.58'	N56°59'54"E
C61	1268.00'	88.58'	4°00'09"	44.31'	88.56'	S25°39'49"E
C62	1268.00'	103.74'	4°41'15"	51.90'	103.71'	S21°19'07"E
C63	1268.00'	247.69'	11°11'32"	124.24'	247.30'	S13°22'43"E
C64	1268.00'	93.69'	4°14'01"	46.87'	93.67'	S05°39'57"E

LINE TABLE		
LINE	BEARING	DISTANCE
L7	N84°03'39"W	25.68'
L8	N62°35'27"W	21.91'
L9	S12°08'28"E	20.98'
L10	S08°41'52"E	40.06'
L11	N20°46'32"W	12.38'
L12	S07°33'07"E	19.23'
L13	N27°08'43"E	24.86'
L14	S44°30'11"W	24.96'
L15	N78°22'34"W	14.77'
L16	S78°22'34"E	35.05'
L17	S77°44'19"E	20.61'
L18	S65°34'41"E	10.44'
L19	S02°53'29"E	40.24'
L20	N03°32'56"W	6.22'

LOT 1
THE TERRY E. WILKES, FRED HIX,
AND CHAD M. RAY PROPERTY
PLAT INSTRUMENT NUMBER
20180710070155, R.O.D.C.T.



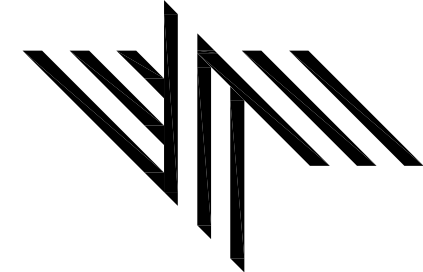
LOT AREA TABLE		
LOT	SQ. FT.±	ACRES±
1	1,516	0.03
2	1,549	0.04
3	1,725	0.04
4	1,528	0.04
5	1,558	0.04
6	1,567	0.04
7	1,538	0.04
8	1,517	0.03
9	1,527	0.04
10	1,527	0.04
11	1,545	0.04
12	1,665	0.04
13	1,768	0.04
14	1,537	0.04
15	1,530	0.04
16	1,527	0.04
17	1,569	0.04
18	1,705	0.04
19	1,768	0.04
20	1,673	0.04

LOT AREA TABLE		
LOT	SQ. FT.±	ACRES±
21	1,603	0.04
22	1,600	0.04
23	1,590	0.04
24	1,590	0.04
25	1,600	0.04
26	1,600	0.04
27	1,590	0.04
28	1,590	0.04
29	1,600	0.04
30	1,600	0.04
31	1,600	0.04
32	1,590	0.04
33	1,331	0.03
34	1,327	0.03
35	1,327	0.03
36	1,327	0.03
37	1,318	0.03
38	1,307	0.03
39	1,318	0.03
40	1,327	0.03

LOT AREA TABLE		
LOT	SQ. FT.±	ACRES±
41	1,327	0.03
42	1,327	0.03
43	1,317	0.03
44	1,306	0.03
45	1,327	0.03
46	1,327	0.03
47	1,327	0.03
48	1,318	0.03
49	1,308	0.03
50	1,747	0.04
51	1,555	0.04
52	1,534	0.04
53	1,573	0.04
54	1,635	0.04
55	1,693	0.04
57	262,366	6.02
60	12,231	0.28

FINAL PLAT
CEDARSIDE AT DRY CREEK
PHASE 1
DICKERSON PIKE
10TH COUNCIL DISTRICT,
CITY OF GOODLETTSVILLE,
DAVIDSON COUNTY, TENNESSEE
DISTRICT COUNCIL MEMBER:
ZACH YOUNG

OCTOBER 26, 2022
SCALE: 1" = 100'
JOB NO. 84-144 2096
SHEET 2 of 2



RaganSmith
Nashville - Murfreesboro - Chattanooga
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Ted Stevenson

**1016 LOUISVILLE HWY (31W)
CITY OF GOODLETTSVILLE, SUMNER COUNTY, TENNESSEE**

DEMOLITION NOTES

1. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL PERMITS REQUIRED FOR DEMOLITION AND DISPOSAL. THE DEMOLITION, REMOVAL, AND DISPOSAL IS TO BE APPROVED BY ALL GOVERNING AUTHORITIES OF ALL FACILITIES SUCH AS STRUCTURES, PADS, WALLS, TUMES, FOUNDATIONS, PAVING, DRAINS, DRAINAGE STRUCTURES, UTILITIES, WELLS, ETC., SUCH THAT THE IMPROVEMENTS SHOWN ON THE REMAINING PLANS CAN BE CONSTRUCTED. ALL FACILITIES TO BE REMOVED SHALL BE UNDERCUT TO SUITABLE MATERIAL AND BROUGHT TO GRADE WITH SUITABLE COMPACTED FILL MATERIAL AS SPECIFIED BY A QUALIFIED PROFESSIONAL GEOTECHNICAL ENGINEER. IF UNDOCUMENTED FACILITIES ARE FOUND ON SITE, CONTRACTOR SHALL CONTACT THE OWNER AND UTILITY COMPANY PRIOR TO REMOVAL. ALL FACILITIES SHALL BE PLUGGED, ABANDONED, OR REMOVED PER STATE AND LOCAL REQUIREMENTS.
2. FEDERAL, STATE AND LOCAL CODE REQUIREMENTS SHALL GOVERN THE DISPOSAL OF DEBRIS INCLUDING ANY POTENTIALLY HAZARDOUS AND TOXIC MATERIALS. ALL MATERIALS AND STRUCTURES DESIGNATED AS "TO BE REMOVED" SHALL BE DISPOSED OFF SITE AND AT THE COST OF THE CONTRACTOR.
3. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING JOB SITE SAFETY PER OSHA REQUIREMENTS AT ALL TIMES.
4. PRIOR TO DEMOLITION, IT IS THE CONTRACTOR'S RESPONSIBILITY TO CALL THE STATE 811 AND NOTIFY ALL UTILITY COMPANIES TO SCHEDULE UTILITY SERVICE REMOVAL AND/OR ABANDONMENT. ALL UTILITIES SHALL BE REMOVED/RELOCATED PER THE SPECIFICATIONS OF THE UTILITY COMPANIES. THE CONTRACTOR IS RESPONSIBLE TO PAY ALL FEES AND CHARGES ASSOCIATED WITH THIS WORK.
5. CONTRACTOR SHALL MAINTAIN ALL UTILITY SERVICES TO INHABITED BUILDINGS ON SITE AND ADJACENT PROPERTIES AT ALL TIMES. INTERRUPTIONS SHALL BE APPROVED BY THE OWNERS OF THE BUILDINGS/PROPERTIES.
6. THE LOCATIONS OF ALL EXISTING UTILITIES SHOWN ON THIS PLAN HAVE BEEN DETERMINED FROM THE BEST INFORMATION AVAILABLE AND ARE GIVEN FOR THE CONVENIENCE OF THE CONTRACTOR. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THEIR ACCURACY. PRIOR TO THE START OF ANY DEMOLITION ACTIVITY, THE CONTRACTOR SHALL NOTIFY THE UTILITY COMPANIES FOR ON-SITE LOCATIONS OF EXISTING UTILITIES. IF THE LOCATION OR ELEVATION OF THE EXISTING UTILITIES ARE FOUND TO BE DIFFERENT FROM THE PLANS, CONTRACTOR SHALL CONTACT THE ENGINEER IMMEDIATELY.
7. CONTRACTOR SHALL PROTECT EXISTING SITE FEATURES TO REMAIN INSIDE AND OUTSIDE CONSTRUCTION LIMITS. CONTRACTOR IS RESPONSIBLE TO DOCUMENT ALL EXISTING DAMAGES AND NOTIFY THE CITY/COUNTY PRIOR TO CONSTRUCTION START. ANY EXISTING SITE FEATURE TO REMAIN THAT IS DAMAGED DURING CONSTRUCTION, SUCH AS, BUT NOT LIMITED TO, DRAINAGE, UTILITIES, PAVEMENT, CURBS, ETC., SHALL BE REPAIRED TO A CONDITION THAT IS EQUAL TO, OR BETTER THAN, THE EXISTING CONDITIONS. PRIOR TO BEING NECESSARY, THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY DAMAGE TO THE SATISFACTION OF THE OWNER AT NO ADDITIONAL COST.
8. CONTINUOUS ACCESS SHALL BE MAINTAINED TO THE SURROUNDING PROPERTIES AT ALL TIMES DURING DEMOLITION OF THE EXISTING FACILITIES.
9. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING TRAFFIC CONTROL. ALL TRAFFIC CONTROL MEASURES SHALL BE IN ACCORDANCE WITH STATE DEPARTMENT OF TRANSPORTATION REGULATIONS AND LOCAL REGULATIONS.
10. THE CONTRACTOR IS RESPONSIBLE FOR PLACING AND MAINTAINING CONSTRUCTION FENCE, SIGNS, ETC., TO WARN AND KEEP UNAUTHORIZED PEOPLE OFF SITE FOR THE DURATION OF THE PROJECT.
11. PRIOR TO DEMOLITION, ALL EROSION CONTROL DEVICES ARE TO BE INSTALLED PER THE GOVERNING AGENCIES GUIDELINES AND STANDARDS. DUST CONTROL SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
12. SAWCUT LINE PROVIDED IS FOR REFERENCE ONLY. CONTRACTOR WILL BE RESPONSIBLE FOR DETERMINING THE EXTENT OF THE SAWCUT THAT WILL BE REQUIRED AS WELL AS PAVEMENT REPAIRS TO INSTALL UTILITY TRENCHING. IF ANY DAMAGE OCCURS ON ANY OF THE SURROUNDING PAVEMENT, ETC., THE CONTRACTOR SHALL BE RESPONSIBLE FOR ITS REMOVAL AND REPAIR. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING THAT WHICH IS NECESSARY TO COMPLETE THE INTENT OF THE PROPOSED IMPROVEMENTS. SAWCUT EXISTING PAVEMENT TO FULL DEPTH, USING CARE TO CUT NEAT, STRAIGHT LINES, OUT AT EXISTING JOINTS WHERE POSSIBLE.
13. THE CONTRACTOR SHALL MAINTAIN A WELL-DRAINED SITE, FREE OF STANDING WATER DURING CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TEMPORARY DRAINAGE MEASURES DURING CONSTRUCTION.
14. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO STUDY THE PLANS AND VISIT THE SITE TO DETERMINE THE ITEMS THAT MUST BE REMOVED TO COMPLY WITH THE SITE DEVELOPMENT PLANS. NO EXTRA FEE WILL BE PAID FOR THE REMOVAL OF ANY ITEM NOT LISTED THAT IS VISIBLE UPON A SITE VISIT. THE DEMOLITION PLAN IS INTENDED TO PRESENT THE SCOPE OF THE DEMOLITION AND DOES NOT GUARANTEE THAT ALL ITEMS ARE ADDRESSED.
15. THE CONTRACTOR SHALL OBTAIN ALL PERMITS FOR ALL SITE DEVELOPMENT WORK, PAY ALL FEES FOR PERMITS AND CHECK ALL GOVERNING AUTHORITIES' SPECIFICATIONS FOR BUT NOT LIMITED TO, GUTTERS, SIDEWALKS, POLES, AND OTHER STRUCTURES, INCLUDING THE REMOVAL OR RELOCATION OF EXISTING UTILITIES OR OTHER PHYSICAL OBJECTS SHOWN ON PLANS OR NOTED OTHERWISE.
16. THE CONTRACTOR SHALL CREATE AND IMPLEMENT AN EROSION AND SEDIMENTATION CONTROL PLAN FOR ALL SITE CONSTRUCTION ACTIVITIES ASSOCIATED WITH THE PROJECT. THE PLAN MUST CONFORM TO THE EROSION AND SEDIMENTATION REQUIREMENTS OF THE CONSTRUCTION GENERAL PERMIT OR LOCAL STANDARDS AND CODES, WHICHEVER IS MORE STRINGENT.
17. ALL COSTS FOR INSPECTIONS AND/OR TESTS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR UNLESS NOTED OTHERWISE.

SITE NOTES

1. ALL WORK AND MATERIALS SHALL COMPLY WITH ALL CITY/COUNTY REGULATIONS AND CODES AND O.S.H.A. STANDARDS.
2. ALL MATERIAL NOTED ON DRAWINGS WILL BE SUPPLIED BY THE CONTRACTOR UNLESS OTHERWISE NOTED.
3. CONTRACTOR SHALL REFER TO THE ARCHITECTURAL PLANS TO COORDINATE ACCESS POINTS AND ELEVATIONS. REFER TO ARCHITECTURAL PLANS FOR EXACT LOCATIONS AND DIMENSIONS OF DOORS, ENTRY RAMP, AND CANOPY.
4. THE CONTRACTOR SHALL OBTAIN ALL PERMITS FOR ALL SITE DEVELOPMENT WORK, PAY ALL FEES FOR PERMITS AND CHECK ALL GOVERNING AUTHORITIES' SPECIFICATIONS FOR BUT NOT LIMITED TO, GUTTERS, SIDEWALKS, POLES, AND OTHER STRUCTURES, INCLUDING THE REMOVAL OR RELOCATION OF EXISTING UTILITIES OR OTHER PHYSICAL OBJECTS SHOWN ON PLANS OR NOTED OTHERWISE.
5. THE CONTRACTOR SHALL CREATE AND IMPLEMENT AN EROSION AND SEDIMENTATION CONTROL PLAN FOR ALL SITE CONSTRUCTION ACTIVITIES ASSOCIATED WITH THE PROJECT. THE PLAN MUST CONFORM TO THE EROSION AND SEDIMENTATION REQUIREMENTS OF THE CONSTRUCTION GENERAL PERMIT OR LOCAL STANDARDS AND CODES, WHICHEVER IS MORE STRINGENT.
6. ALL COSTS FOR INSPECTIONS AND/OR TESTS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR UNLESS NOTED OTHERWISE.
7. ACCESSIBILITY STANDARDS SHALL BE IN ACCORDANCE WITH FEDERAL AND LOCAL REQUIREMENTS FOR HANDICAP ACCESSIBILITY, INCLUDING BUT NOT LIMITED TO THE AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES. ADA PARKING SPACES SHALL MEET ADA GRADE GUIDELINES. CONTRACTOR SHALL FIELD VERIFY EXISTING GRADES AT ACCESS POINTS, ACCESSIBLE ROUTES, AND EXISTING PARKING TO REMAIN TO DETERMINE COMPLIANCE WITH STANDARDS.
8. ALL DISTURBED AREAS ARE TO RECEIVE 6" OF TOPSOIL, SEED, MULCH AND WATER UNTIL A HEALTHY STAND OF GRASS IS ESTABLISHED.
9. ALL DIMENSIONS AND RADII ARE TO THE FACE OF THE CURB OR EDGE OF PAVEMENT, AS APPLICABLE, UNLESS OTHERWISE NOTED.
10. ALL CURB RADII ARE 5 FEET UNLESS OTHERWISE NOTED.
11. PROVIDE SIGNAGE AND STRIPING AS SHOWN. ALL SIGNAGE AND PAVEMENT MARKINGS SHALL COMPLY WITH THE GOVERNING MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (M.U.T.C.D.). PAVEMENT MARKINGS ON ASPHALT SHALL BE WHITE. PAVEMENT MARKINGS ON CONCRETE SHALL BE YELLOW.
12. REFER TO ARCHITECTURAL PLANS FOR PROPOSED BUILDING SIGNAGE.
13. REFER TO MECHANICAL PLANS FOR EQUIPMENT LAYOUT.
14. REFER TO ELECTRICAL PLANS FOR ELECTRICAL WORK.
15. REFER TO GEOTECHNICAL ENGINEERING REPORT FOR SITE WORK PREPARATION RECOMMENDATIONS AND PAVEMENT SECTIONS.
16. REFER TO ORIGINAL SURVEY PROVIDED BY CESO INC.
17. REFER TO GEOS RETAINING WALL PLANS FOR RETAINING WALL DESIGN.
18. ALL LIGHT POLES TO BE LOCATED 7' FROM THE BACK OF CURB, AS MEASURED FROM THE FACE OF POLE FOUNDATION, UNLESS OTHERWISE DENOTED ON PLANS.

GRADING NOTES

1. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES, AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANIES AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
2. THE TOPOGRAPHIC SURVEY WAS PERFORMED BY A REGISTERED LAND SURVEYOR. IF CONTRACTOR DOES NOT ACCEPT EXISTING TOPOGRAPHY AS SHOWN ON THE PLANS, WITHOUT EXCEPTION, HE SHALL HAVE MADE, AT HIS EXPENSE, A TOPOGRAPHIC SURVEY BY A REGISTERED LAND SURVEYOR AND SUBMIT IT TO THE OWNER FOR REVIEW.
3. CONSTRUCTION SHALL COMPLY WITH ALL APPLICABLE GOVERNING CODES AND BE CONSTRUCTED TO SAME.
4. THE CONTRACTOR SHALL ADHERE TO ALL TERMS & CONDITIONS AS OUTLINED IN THE EPA OR APPLICABLE STATE GENERAL N.P.D.E.S. PERMIT FOR STORM WATER DISCHARGE ASSOCIATED WITH CONSTRUCTION ACTIVITIES.
5. EXISTING AND PROPOSED GRADE/CONTOUR INTERVALS ARE SHOWN AT 1 FOOT INTERVALS.
6. ALL SPOT ELEVATIONS REFER TO FINISHED PAVEMENT ELEVATIONS UNLESS OTHERWISE NOTED.
7. ALL ADA ACCESSIBLE PARKING SPACES AND LOADING AREAS SHALL BE GRADED WITH A 2.0% MAXIMUM SLOPE IN ALL DIRECTIONS, ALL ADA ACCESSIBLE ROUTES SHALL BE GRADED WITH A 2.0% MAXIMUM CROSS SLOPE AND 5.0% MAXIMUM RUNNING SLOPE.
8. MAINTAIN EXISTING DRAINAGE PATTERN THROUGHOUT THE SITE, EXCEPT WITHIN THE LIMITS OF DISTURBANCE (LOC).
9. COORDINATE GRADES AT BUILDING ENTRIES WITH ARCHITECTURAL PLANS.
10. EXISTING DRAINAGE STRUCTURES SHALL BE INSPECTED AND REPAIRED AS NEEDED, AND EXISTING PIPES ARE TO BE CLEANED TO REMOVE ALL SILT AND DEBRIS AFTER CONSTRUCTION IS COMPLETE.
11. IF ANY EXISTING STRUCTURES TO REMAIN ARE DAMAGED DURING CONSTRUCTION IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO REPAIR AND/OR REPLACE THE EXISTING STRUCTURE AS NECESSARY TO RETURN IT TO A CONDITION EQUAL TO OR BETTER THAN ITS CONDITION PRIOR TO DAMAGE.
12. CONTRACTOR SHALL ASSURE POSITIVE DRAINAGE AWAY FROM BUILDING AND WITHIN PAVED AREAS.
13. ALL TOPSOIL MUST BE REMOVED BEFORE FILL MATERIAL IS PLACED.
14. ALL WET, OR OTHERWISE UNSUITABLE SOILS MUST BE STABILIZED. THIS MAY BE ACCOMPLISHED BY DRYING, REMOVAL & REPLACEMENT, REMOVAL & DRYING & RECOMPACTION, OR SOIL TREATMENT (LIME/CEMENT) UNDER THE SUPERVISION OF A QUALIFIED PROFESSIONAL GEOTECHNICAL ENGINEER.
15. ALL UNPAVED AREAS, DISTURBED BY GRADING, OPERATION SHALL RECEIVE 12" OF TOPSOIL. CONTRACTOR SHALL APPLY STABILIZATION FABRIC TO ALL SLOPES 15% OR STEEPER AND SEED WITH LOW MAINTENANCE GRASS SEED MIX. CONTRACTOR SHALL SEED DISTURBED AREAS IN ACCORDANCE WITH SPECIFICATIONS UNTIL A HEALTHY STAND OF GRASS IS OBTAINED. ALL EXPOSED SURFACE AREAS SHALL BE STABILIZED PER THE SWPPP AND LANDSCAPE REQUIREMENTS AS PART OF THIS PLAN SET.
16. ALL STORM PIPE ENTERING STRUCTURES SHALL BE GRADED TO ASSURE CONNECTION AT STRUCTURE IS SOIL TIGHT.
17. ALL STORM STRUCTURES SHALL HAVE A SMOOTH UNIFORM POURED MORTAR INVERT FROM INVERT IN TO INVERT OUT.
18. STORM PIPE SHALL BE AS FOLLOWS UNLESS OTHERWISE NOTED:

MATERIAL	TYPE	PIPE SPEC	JOINT SPEC	INSTALLATION	ACCEPTABLE AREAS OF USE
REINFORCED CONCRETE PIPE (RCP)	CLASS III N, V	ASTM C-78	ASTM C443	ASTM C1478	WITHIN R/W, COVER VARIES WITH PIPE CLASS
HIGH DENSITY POLY-ETHYLENE (HDPE)	SMOOTH WALLED CORRUGATED ADS-42 OR EQUAL	ASAP TO M24 (TYPE S)	ASTM F417	ASTM D2321	ON SITE, 12" TO 60" DIA.
POLY VINYL CHLORIDE (PVC)	SDR 35	ASTM D3034	ASTM D3212	ASTM D2321	ON SITE, 4" TO 10"

19. ALL STORM SEWER STRUCTURE WITHIN PAVEMENT SHALL HAVE A CONCRETE COLLAR AND THE FRAME GRATE SHALL BE HEAVY DUTY.
20. ALL STORM DRAINAGE SHALL BE PERFORMED IN ACCORDANCE WITH ALL LOCAL COUNTY AND TDD STANDARDS.
21. ALL DOWNSPOUT DRAIN LINES OR ROOF LEADERS SHALL HAVE A 1.0% MINIMUM SLOPE, UNLESS OTHERWISE NOTED. CONNECT ALL DOWNSPOUTS AND ROOF LEADERS TO THE STORM SEWER SYSTEM. REFER TO ARCHITECTURAL PLANS FOR DOWNSPOUT AND ROOF LEADER LOCATIONS. PROVIDE POSITIVE DRAINAGE AND PAVEMENT REPAIR AS NEEDED.
22. ROOF DRAINS, FOUNDATION DRAINS, AND OTHER CLEAN WATER CONNECTIONS TO THE SANITARY SEWER SYSTEM ARE PROHIBITED.
23. THE STORM SEWER GRADE WILL BE SUCH THAT A MINIMUM COVER IS MAINTAINED TO WITHSTAND ASHSTO HS-25 LOADING ON THE PIPE. PROVIDE MINIMUM 2.0 FEET OF COVER FOR ALL STORM SEWERS UNLESS OTHERWISE NOTED.
24. WHEN A SANITARY SEWER MAIN LIES ABOVE A STORM SEWER, OR WITHIN 18 INCHES BELOW, THE SANITARY SEWER WILL HAVE AN IMPERVIOUS ENCASEMENT OR BE CONSTRUCTED OF STRUCTURAL SEWER PIPE FOR A MINIMUM OF 10 FEET ON EACH SIDE OF WHERE THE STORM SEWER CROSSES.
25. IF EXISTING FIELD TILES ARE ENCOUNTERED DURING CONSTRUCTION THEY SHALL BE REPAIRED AND/OR TIED INTO A STORM SEWER SYSTEM AS NEEDED TO MAINTAIN POSITIVE DRAINAGE.

EPSC NOTES

1. THIS PLAN REPRESENTS THE MINIMUM EROSION CONTROL MEASURES. ADDITIONAL EROSION AND SEDIMENT CONTROLS MAY BE REQUIRED TO CONTROL STORMWATER RUNOFF AS IDENTIFIED WITH THE TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION (TDEC) AND/OR LOCAL STORMWATER INSPECTOR. CONTRACTOR IS RESPONSIBLE TO KEEP SEDIMENT ON SITE IN ACCORDANCE WITH THE SWPPP OR TDEC REQUIREMENTS.
2. CONTRACTOR SHALL REVIEW THE COMPLETE DRAWING SET AND NOTIFY THE DESIGN PROFESSIONAL IN WRITING PRIOR TO CONSTRUCTION, IF ANY DISCREPANCIES ARE FOUND WITHIN THE DRAWINGS OR WITH ACTUAL FIELD CONDITIONS.
3. ALL STORMWATER POLLUTION PREVENTION PLANS, NOTES AND DETAILS SHALL COMPLY WITH THE EROSION & SEDIMENT CONTROL HANDBOOK OF TDEC.
4. CONTRACTOR IS RESPONSIBLE TO MAINTAIN EROSION CONTROL MEASURES UNTIL ADEQUATE RE-VEGETATION AND STABILIZATION ARE ACHIEVED.
5. PROVIDE TEMPORARY CONSTRUCTION FENCE TO SECURE SITE DURING CONSTRUCTION.
6. IN THE EVENT THAT HIGH GROUND WATER IS ENCOUNTERED, CONTRACTOR IS RESPONSIBLE FOR DESIGNING AND IMPLEMENTING A PLAN TO CONTROL BOTH SURFACE AND GROUND WATER DURING THE COURSE OF CONSTRUCTION.
7. CONTRACTOR TO MAINTAIN ALL EROSION CONTROL MEASURES UNTIL SEED ON SOIL IS PLACED AND ESTABLISHED ON SITE FOR FINAL STABILIZATION IN ACCORDANCE WITH TDEC GUIDELINES AND REGULATIONS.

UTILITY NOTES

WHUD GENERAL WATER NOTES:

1. THE CONTRACTOR SHALL NOT PROCEED WITH ANY PIPE INSTALLATION WORK UNTIL A PRE-CONSTRUCTION MEETING HAS BEEN HELD AND THEY HAVE BEEN NOTIFIED BY THE WHITE HOUSE UTILITY DISTRICT TO PROCEED WITH THE WORK. THE CONTRACTOR WILL ALSO NEED TO PROVIDE A WHUD SUBGRADE LETTER FOR APPROVAL BEFORE PIPE INSTALLATION WILL TAKE PLACE.
2. THE LOCATIONS AND DEPTHS OF EXISTING UTILITIES, INCLUDING SERVICE LATERALS AND DRAINAGE STRUCTURES SHOWN ON THE PLANS ARE APPROXIMATE ONLY. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION AND DEPTHS OF UNDERGROUND UTILITIES AT LEAST 48 HOURS PRIOR TO CONSTRUCTION WHETHER SHOWN ON PLANS OR NOT, AND TO PROTECT THE SAME DURING CONSTRUCTION.
3. THE CONTRACTOR WILL BE RESPONSIBLE FOR RESTORING TO ITS ORIGINAL OR BETTER CONDITION FROM DAMAGE DONE TO EXISTING FENCES, CURBS, STREETS, DRIVEWAYS, LANDSCAPING AND STRUCTURES.
4. NO METER BOXES TO BE SET IN DRIVEWAYS. ANY METER BOXES SET IN DRIVEWAYS WILL BE RELOCATED AT THE CONTRACTOR'S AND/OR DEVELOPER'S EXPENSE.
5. THE CONTRACTOR SHALL MAINTAIN SERVICE TO EXISTING UTILITIES AT ALL TIMES DURING CONSTRUCTION.
6. ALL WATER MAINS GREATER THAN TWO (2) INCHES IN DIAMETER SHALL BE DUCTILE IRON CLASS 52 PIPE.
7. ALL WATER MAINS SHALL BE INSTALLED AT A MINIMUM DEPTH OF 36 INCHES UNLESS OTHERWISE NOTED ON THE CONSTRUCTION PLANS.
8. MECHANICAL JOINT RESTRAINTS ARE TO BE ADDED ON ALL TEES, VALVES, BENDS, AND HYDRANTS (MEGA LUG TYPE). A MINIMUM OF 40 FT LENGTH OF RESTRAINED JOINT PIPE SHALL BE ON EACH SIDE OF ALL VALVES AND FITTINGS.
9. RESTRAINED JOINT PIPE WILL BE DEVELOPED WITH FIELD INSTALLED LOCKING GASKETS.
10. ALL DEAD END LINES WILL RECEIVE A MINIMUM OF 80 FT OF RESTRAINED JOINT PIPE AT ENDS.
11. ALL BENDS 45 DEGREES AND UNDER WILL RECEIVE RESTRAINED JOINT PIPE 40 FT UP & DOWNSTREAM.
12. ALL 90 DEGREE BENDS WILL RECEIVE RESTRAINED JOINT PIPE 80 FT UP & DOWNSTREAM.
13. WATER LINES AND SEWER LINES MUST MAINTAIN A MINIMUM OF TEN (10) FOOT HORIZONTAL CLEARANCE AND/OR EIGHTEEN (18) INCHES VERTICAL CLEARANCE AT ALL TIMES.
14. THE CONTRACTOR WILL KEEP THE AREA ON TOP OF AND AROUND THE WATER METER BOX FREE OF ALL OBJECTS AND DEBRIS.
15. ALL TESTING WILL BE DONE IN ACCORDANCE WITH THE MOST RECENT WHITE HOUSE UTILITY DISTRICT STANDARDS.
16. IN NO CASE ARE VALVES TO BE LOCATED WITHIN PAVED AREAS.
17. ADEQUATE SPACE SHALL BE PROVIDED FOR THE INSTALLATION AND MAINTENANCE OF METER VAULTS, BACKFLOW PREVENTION ASSEMBLIES AND WATER MAINS.
18. CONTRACTOR IS RESPONSIBLE FOR REMOVAL OF ALL WASTE MATERIALS UPON PROJECT COMPLETION. THE CONTRACTOR SHALL NOT PERMANENTLY PLACE ANY WASTE MATERIALS IN THE FLOOD PLAIN WITHOUT FIRST OBTAINING REQUIRED PERMITS.
19. ALL TEMPORARY EROSION AND SEDIMENTATION CONTROLS SHALL BE REMOVED BY THE CONTRACTOR AT FINAL ACCEPTANCE OF THE PROJECT BY THE WHITE HOUSE UTILITY DISTRICT.

BLASTING

20. WHEN ALLOWABLE, BLASTING SHALL BE PERFORMED IN ACCORDANCE WITH THE APPROPRIATE CRITERIA ESTABLISHED BY THE NATIONAL FIRE PROTECTION ASSOCIATION OR APPLICABLE LOCAL CODES.
21. WHEN BLASTING IS ALLOWABLE, BLASTING FOR SEWER LINE EXCAVATION MUST BE DONE IN SUCH A MANNER AS TO MINIMIZE THE FRACTURING OF ROCK BEYOND THE REQUIRED EXCAVATION. THE CONTRACTOR SHALL CONSIDER THE ELEVATION OF THE EXISTING WATER MAIN IN RELATION TO THE BLASTING CHARGE AND THE RELATIVE DIRECTION OF EXISTING AND PROPOSED TRENCHES. BLASTING WITHIN SUCH AREAS SHALL BE ACCOMPLISHED ONLY BY QUALIFIED BLASTING CONTRACTORS WHO HOLD BLASTING LICENSES FROM A QUALIFIED AGENCY. ANY DAMAGE TO EXISTING WATER MAINS RESULTING FROM BLASTING SHALL BE REPAIRED AND RETESTED BY THE CONTRACTOR AT HIS OWN EXPENSE.
22. WORK COMPLETED BY THE CONTRACTOR WHICH HAS NOT RECEIVED A NOTICE TO PROCEED BY THE WHITE HOUSE UTILITY DISTRICT WILL BE SUBJECT TO REMOVAL AND REPLACEMENT BY AND AT THE EXPENSE OF THE CONTRACTOR.

WHUD GENERAL SEWER NOTES:

1. THE CONTRACTOR SHALL NOT PROCEED WITH ANY PIPE INSTALLATION WORK UNTIL A PRE-CONSTRUCTION MEETING HAS BEEN HELD AND THEY HAVE BEEN NOTIFIED BY THE WHITE HOUSE UTILITY DISTRICT TO PROCEED WITH THE WORK.
2. THE LOCATIONS AND DEPTHS OF EXISTING UTILITIES, INCLUDING SERVICE LATERALS AND DRAINAGE STRUCTURES SHOWN ON THE PLANS ARE APPROXIMATE ONLY. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION AND DEPTHS OF UNDERGROUND UTILITIES AT LEAST 48 HOURS PRIOR TO CONSTRUCTION WHETHER SHOWN ON PLANS OR NOT, AND TO PROTECT THE SAME DURING CONSTRUCTION.
3. THE CONTRACTOR WILL BE RESPONSIBLE FOR RESTORING TO ITS ORIGINAL OR BETTER CONDITION FROM DAMAGE DONE TO EXISTING FENCES, CURBS, STREETS, DRIVEWAYS, LANDSCAPING AND STRUCTURES.
4. THE CONTRACTOR SHALL MAINTAIN SERVICE TO EXISTING UTILITIES AT ALL TIMES DURING CONSTRUCTION.
5. ALL RESIDENTIAL GRAVITY FED SEWER SERVICE LATERALS SHALL BE EXTENDED TO THE PROPERTY LINE AND CAPPED AND DEADED.
6. WATER MAINS AND SEWER MAINS MUST MAINTAIN A MINIMUM OF TEN (10) FOOT HORIZONTAL CLEARANCE AND/OR EIGHTEEN (18) INCHES VERTICAL CLEARANCE AT ALL TIMES.
7. ON ALL MANHOLES TO BE ABANDONED, THE RINGS AND COVERS SHALL BE SALVAGED IN ACCORDANCE WITH THE MOST CURRENT WHITE HOUSE UTILITY DISTRICT STANDARDS. THE HOLE SHOULD BE BACKFILLED TO THE SATISFACTION OF THE INSPECTOR.
8. CONTRACTOR IS RESPONSIBLE FOR REMOVAL OF ALL WASTE MATERIALS UPON PROJECT COMPLETION. THE CONTRACTOR SHALL NOT PERMANENTLY PLACE ANY WASTE MATERIALS IN THE FLOOD PLAIN WITHOUT FIRST OBTAINING REQUIRED PERMITS.
9. ALL TEMPORARY EROSION AND SEDIMENTATION CONTROLS SHALL BE REMOVED BY THE CONTRACTOR AT FINAL ACCEPTANCE OF THE PROJECT BY THE WHITE HOUSE UTILITY DISTRICT.
10. AFTER CONSTRUCTION IS COMPLETE, TESTING WILL BE DONE BY TV CAMERA BY THE CONTRACTOR AND OBSERVED BY THE INSPECTOR, AS THE CAMERA IS RUN THROUGH ALL LINES. ANY ABNORMALITIES, SUCH AS BROKEN PIPE, MISALIGNED JOINTS OR NON-UNIFORM SLOPE, MUST BE REPLACED BY THE CONTRACTOR AT HIS EXPENSE. ALL TESTING WILL BE DONE IN ACCORDANCE WITH THE MOST RECENT WHITE HOUSE UTILITY DISTRICT STANDARDS.
11. UNLESS OTHERWISE NOTED ON THE PLANS, ALL SEWER PIPE SHALL CONFORM TO THE FOLLOWING CHART:

	DEPTH OF MAIN	PIPE MATERIAL
1	0 TO 18"	SDR 25
2	18" TO 24"	C900
3	>24"	DUCTILE IRON
12. WORK COMPLETED BY THE CONTRACTOR WHICH HAS NOT RECEIVED A NOTICE TO PROCEED BY THE WHITE HOUSE UTILITY DISTRICT WILL BE SUBJECT TO REMOVAL AND REPLACEMENT BY AND AT THE EXPENSE OF THE CONTRACTOR.



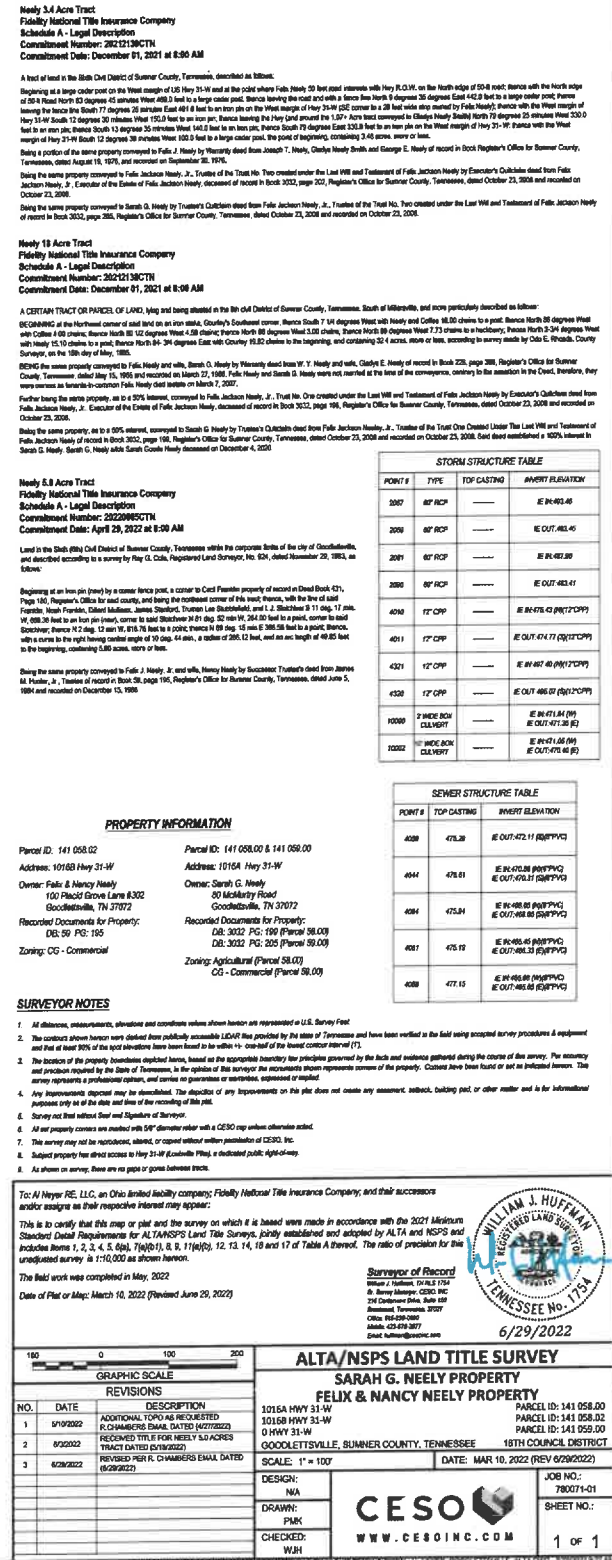
NO. DATE



AL NEYER
LOUISVILLE HWY
INDUSTRIAL DEVELOPMENT

GENERAL NOTES

ISSUE: PERMIT SET
DATE: 10.21.2022
JOB NO.: 750071
DESIGN: NAL
DRAWN: NAL
CHECKED: JTK
SHEET NO. C11





EXISTING FEATURES LEGEND

APPLIES TO ALL CIVIL SHEETS

	R/W		RIGHT OF WAY
			PARCEL LINE
			PROPERTY BOUNDARY
			EASEMENT
			CURB
			EDGE OF PAVEMENT
			PAVEMENT MARKINGS
	G		GAS LINE
			WATER LINE
	OHL		OVERHEAD LIGHTING
	STM		STORM SEWER
	SAN		SANITARY SEWER
	MJ		MAJOR CONTOURS
	MT		MINOR CONTOURS
	WMETER		STORM INLET BASIN
	WATER VALVE		SANITARY MANHOLE
	LIGHT POLE		SANITARY CLEANOUT
	POWER POLE		TRAFFIC MANHOLE
	GAS VALVE		GAS METER

DEMOLITION LEGEND

EXISTING

REFER TO THIS SHEET FOR EXISTING FEATURES LEGEND

PROPOSED

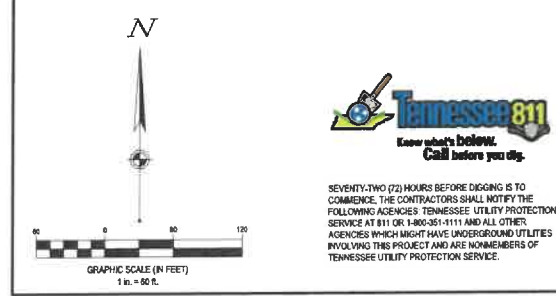
	SITE CLEARING LIMITS
	REMOVE EXISTING BUILDING
	REMOVE EXISTING GRAVEL
	REMOVE EXISTING ASPHALT PAVEMENT
	SAWCUT LINE
	UTILITY LINE TO BE REMOVED / RELOCATED
	STREAM BUFFER
	LIMITS OF DISTURBANCE
	REMOVE AND DISPOSE OF EXISTING TREE
	PROTECT EXISTING TREE TO REMAIN

[illegible]

AL NEYER
LOUISVILLE HWY
INDUSTRIAL DEVELOPMENT

DEMOLITION
PLAN

ISSUE:	
PERMIT SET	
DATE:	
10.21.2022	
JOB NO.:	750071
DESIGN:	NAL
DRAWN:	NAL
CHECKED:	JTK
SHEET NO.	
C2.1	



 BENCHMARKS		
	ELEVATION*	DESCRIPTION
BM - 1	502.96	IRON PIN WITH CAP
BM - 18	476.65	IRON PIN WITH CAP
BM - 19	477.29	IRON PIN WITH CAP

C4.0
C5.0
C6.0
C7.0
C7.3
C7.6

C4.1
C5.1
C6.1
C7.1
C7.4
C7.7

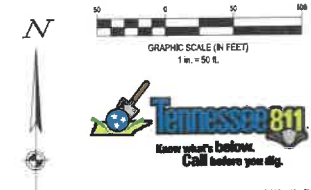
C4.2
C5.2
C6.2
C7.2
C7.5
C7.8

INTERSTATE 65
(VARYING PUBLIC ROW WIDTH)

HWY 31-WILLOUISVILLE PIKE
(100' PUBLIC ROW WIDTH)

BENCHMARKS		
	ELEVATION*	DESCRIPTION
BM - 1	502.99	IRON PIN WITH CAP
BM - 18	476.65	IRON PIN WITH CAP
BM - 19	477.29	IRON PIN WITH CAP

* VERTICAL DATUM: NAVD 83



SEVENTY-TWO (72) HOURS BEFORE DIGGING IS TO COMMENCE, THE CONTRACTOR SHALL NOTIFY THE FOLLOWING AGENCIES TENNESSEE UTILITY PROTECTION SERVICE AT 811 OR 1-800-351-1111 AND ALL OTHER AGENCIES WHICH MIGHT HAVE UNDERGROUND UTILITIES INVOLVING THIS PROJECT AND ARE NONMEMBERS OF TENNESSEE UTILITY PROTECTION SERVICE.



www.cesoinc.com



AL NEYER
LOUISVILLE HWY
INDUSTRIAL DEVELOPMENT

1016 LOUISVILLE HWY (11M) - GOODLETTSVILLE, TN 37072

SITE PLAN

ISSUE:
PERMIT SET
DATE:
10.21.2022
JOB NO.: 750071
DESIGN: NAL
DRAWN: NAL
CHECKED: JTK
SHEET NO.
C4.0

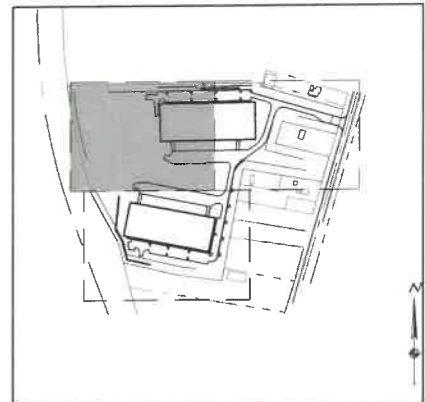
SITE LEGEND

EXISTING

REFER TO TOPOGRAPHIC SURVEY

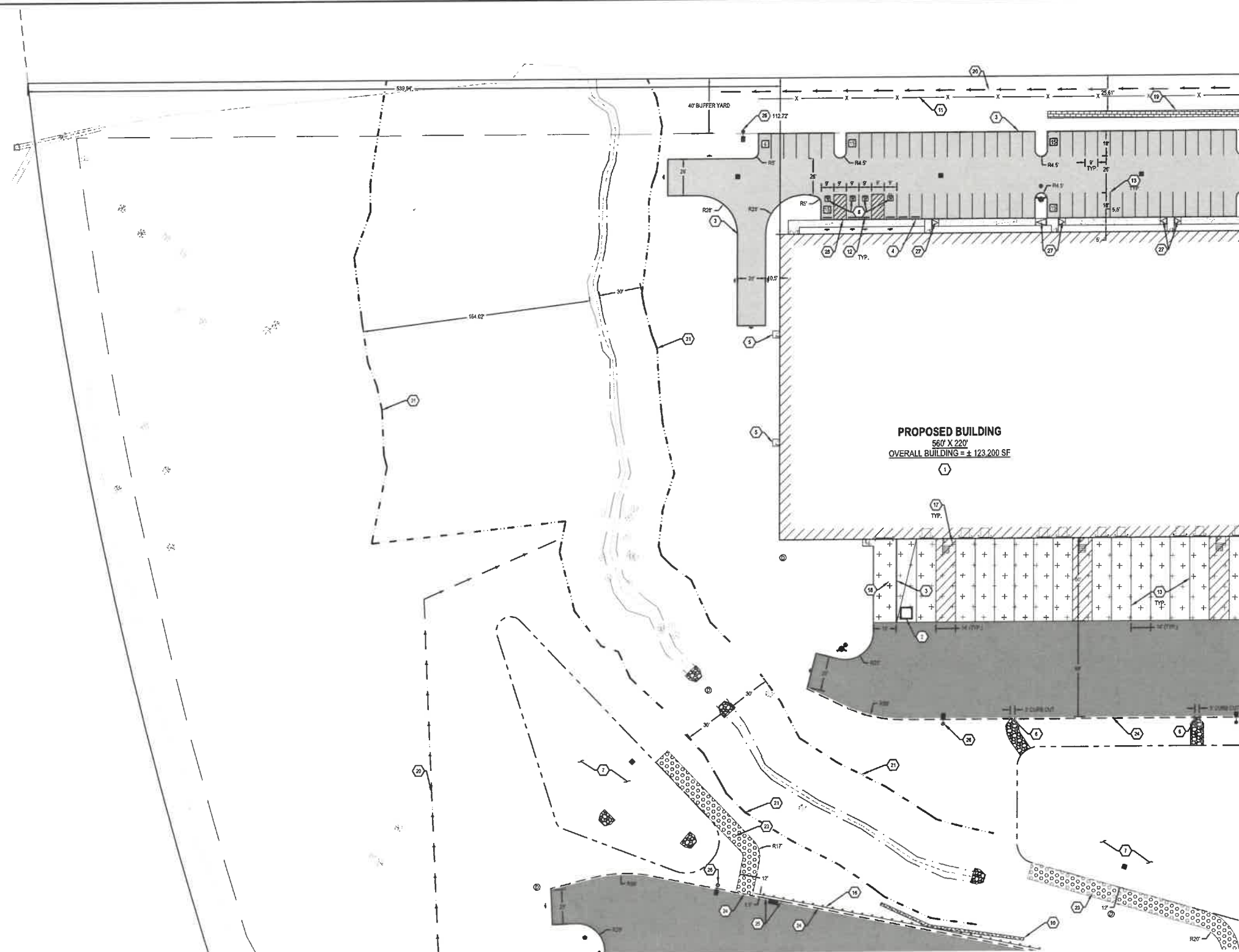
PROPOSED

- PROPOSED HEAVY DUTY ASPHALT PAVEMENT
- PROPOSED STANDARD DUTY ASPHALT PAVEMENT
- PROPOSED HEAVY DUTY CONCRETE PAVEMENT
- PROPOSED CONCRETE SIDEWALK
- PROPOSED PLASTIC TURF REINFORCING GRID
- REPLACE DRIVEWAY IN KIND
- SETBACK
- EASEMENT
- GUARD RAIL
- CENTERLINE
- BUILDING
- CONCRETE CURB
- MOUNTABLE CURB
- CURB AND GUTTER
- PAVEMENTWALK
- BUFFER WALL
- SHEER ROCK WALL
- RETAINING WALL
- PARKING SPACE COUNT
- SIGN
- LIGHT POLE
- CATCH BASIN
- STORM MANHOLE
- SANITARY MANHOLE
- RIP RAP
- HEADWALL
- CLEANOUT
- DOWN SPOUT
- AREA DRAIN
- FIRE HYDRANT
- FIRE DEPARTMENT CONNECTION
- CONCRETE BUMPER BLOCK
- 8" BOLLARD
- SWALE CENTERLINE
- TOTD EDGE CLEARANCE MEASUREMENT



KEY MAP
SCALE: 1"=400'

\\CESO\LOCAL\ROOT\DATA\PROJECTS\AL NEYER\750071 - GOODLETTSVILLE TN\3-CIVIL\PLANS\07C4.3 - SITE PLAN.DWG - 10/21/2022 10:01 AM



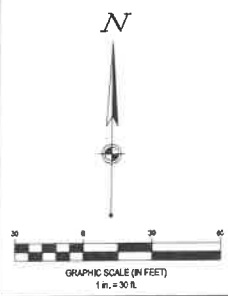
CODED NOTES:

- PROPOSED 123,200 SF BUILDING. REFER TO ARCHITECTURAL PLANS FOR DETAILS.
- PROPOSED TRASH DUMPSTER PROVIDED BY TENANT. SCREEN WALL TO BE SPLIT FACE BLOCK TO MATCH BUILDING.
- PROPOSED 8" STRAIGHT CURB. REFER TO CONSTRUCTION DETAILS.
- PROPOSED INTEGRAL CONCRETE CURB AND SIDEWALK.
- CONCRETE PAD. REFER TO ARCHITECTURAL PLANS FOR DETAILS.
- PROPOSED CURB CUT. REFER TO CONSTRUCTION DETAILS.
- STORMWATER MANAGEMENT AREA.
- ACCESSIBLE PARKING SPACES WITH SIGNAGE. REFER TO CONSTRUCTION DETAILS.
- PROPOSED 8" BOLLARD. REFER TO ARCHITECTURAL PLANS FOR DETAILS.
- RETAINING WALL BY OTHERS.
- PROPOSED BUFFER WALL. REFER TO CONSTRUCTION DETAILS.
- PROPOSED CONCRETE BUMPER BLOCK. REFER TO CONSTRUCTION DETAILS.
- PROPOSED PARKING LOT PAVEMENT MARKINGS. REFER TO PAVEMENT AND STRIPING PLAN FOR COLOR.
- PROPOSED 102,000 SF BUILDING. REFER TO ARCHITECTURAL PLANS FOR DETAILS.
- DRIVEWAY TO BE PERMITTED THROUGH TOTD. PROPOSED ASPHALT WITHIN ROW TO MEET TOTD DRIVEWAY PAVEMENT SECTIONS.
- PROPOSED GUARD RAIL. REFER TO CONSTRUCTION DETAILS.
- PROPOSED STAIRS. REFER TO ARCHITECTURAL PLANS FOR DETAILS.
- PROPOSED DRIVE-IN DOOR.
- SHEER ROCK WALL. REFER TO GEOS. SEQUENCE OF CONSTRUCTION AND SPECIFICATIONS.
- PROPOSED SWALE.
- PROPOSED STREAM BUFFER.
- PROPOSED WATER METERS. REFER TO UTILITY PLANS FOR DETAILS.
- 12' WIDE MAINTENANCE VEHICLE DRIVEWAY.
- PROPOSED MOUNTABLE CURB. REFER TO CONSTRUCTION DETAILS.
- PROPOSED 8" STRAIGHT CURB WITH 18" GUTTER. REFER TO CONSTRUCTION DETAILS.
- LIGHT POLES TO BE LOCATED 3' FROM THE BACK OF CURB, AS MEASURED FROM THE FACE OF POLE FOUNDATION, UNLESS OTHERWISE DENOTED ON THE PLANS.
- PROPOSED RAMP.
- PROPOSED FLUSH CURB.



SEVENTY-TWO (72) HOURS BEFORE DIGGING IS TO COMMENCE, THE CONTRACTORS SHALL NOTIFY THE FOLLOWING AGENCIES: TENNESSEE UTILITY PROTECTION SERVICE, AT 811 OR 1-800-351-1111 AND ALL OTHER AGENCIES WHICH MIGHT HAVE UNDERGROUND UTILITIES INVOLVING THIS PROJECT AND ARE NONMEMBERS OF TENNESSEE UTILITY PROTECTION SERVICE.

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AL NEYER
LOUISVILLE HWY
INDUSTRIAL DEVELOPMENT

1016 LOUISVILLE HWY (11W) - GOODLETTSVILLE, TN 37072

SITE PLAN

ISSUE:
PERMIT SET
DATE:
10/21/2022
JOB NO.: 769071
DESIGN: NAL
DRAWN: NAL
CHECKED: JTK

SHEET NO.
C4.1

SITE LEGEND

- EXISTING
REFER TO TOPOGRAPHIC SURVEY
- PROPOSED
- PROPOSED HEAVY DUTY ASPHALT PAVEMENT
 - PROPOSED STANDARD DUTY ASPHALT PAVEMENT
 - PROPOSED HEAVY DUTY CONCRETE PAVEMENT
 - PROPOSED CONCRETE SIDEWALK
 - PROPOSED PLASTIC TURF REINFORCING GRID
 - REPLACE DRIVEWAY IN KIND
 - SETBACK
 - EASEMENT
 - GUARD RAIL
 - CENTERLINE
 - BUILDING
 - CONCRETE CURB
 - MOUNTABLE CURB
 - CURB AND GUTTER
 - PAVEMENT WALK
 - BUFFER WALL
 - SHEER ROCK WALL
 - RETAINING WALL
 - PARKING SPACE COUNT
 - SIGN
 - LIGHT POLE
 - CATCH BASIN
 - STORM MANHOLE
 - SANITARY MANHOLE
 - RIP RAP
 - HEADWALL
 - CLEANOUT
 - DOWN SPOUT
 - AREA DRAIN
 - FIRE HYDRANT
 - FIRE DEPARTMENT CONNECTION
 - CONCRETE BUMPER BLOCK
 - 8" BOLLARD
 - SWALE CENTERLINE
 - TOOT EDGE CLEARANCE MEASUREMENT

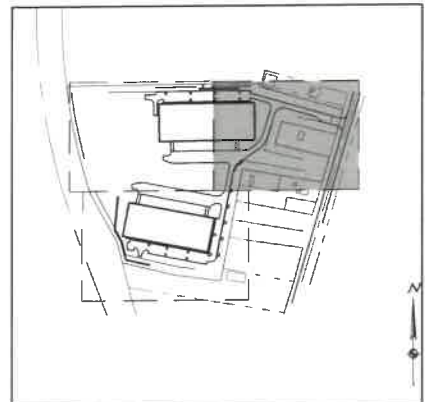
CODED NOTES:

- PROPOSED 123,200 SF BUILDING. REFER TO ARCHITECTURAL PLANS FOR DETAILS.
- PROPOSED TRASH DUMPSTER PROVIDED BY TENANT. SCREEN WALL TO BE SPLIT FACE BLOCK TO MATCH BUILDING.
- PROPOSED 8" STRAIGHT CURB. REFER TO CONSTRUCTION DETAILS.
- PROPOSED INTEGRAL CONCRETE CURB AND SIDEWALK.
- CONCRETE PAD. REFER TO ARCHITECTURAL PLANS FOR DETAILS.
- PROPOSED CURB CUT. REFER TO CONSTRUCTION DETAILS.
- STORMWATER MANAGEMENT AREA.
- ACCESSIBLE PARKING SPACES WITH SIGNAGE. REFER TO CONSTRUCTION DETAILS.
- PROPOSED 8" BOLLARD. REFER TO ARCHITECTURAL PLANS FOR DETAILS.
- RETAINING WALL BY OTHERS.
- PROPOSED BUFFER WALL. REFER TO CONSTRUCTION DETAILS.
- PROPOSED CONCRETE BUMPER BLOCK. REFER TO CONSTRUCTION DETAILS.
- PROPOSED PARKING LOT PAVEMENT MARKINGS. REFER TO PAVEMENT AND STRIPING PLAN FOR COLOR.
- PROPOSED 102,000 SF BUILDING. REFER TO ARCHITECTURAL PLANS FOR DETAILS.
- DRIVEWAY TO BE PERMITTED THROUGH TOOT. PROPOSED ASPHALT WITHIN ROW TO MEET TOOT DRIVEWAY PAVEMENT SECTIONS.
- PROPOSED GUARD RAIL. REFER TO CONSTRUCTION DETAILS.
- PROPOSED STAIRS. REFER TO ARCHITECTURAL PLANS FOR DETAILS.
- PROPOSED DRIVE-IN DOCK.
- SHEER ROCK WALL. REFER TO GEOS SEQUENCE OF CONSTRUCTION AND SPECIFICATIONS.
- PROPOSED SWALE.
- PROPOSED STREAM BUFFER.
- PROPOSED WATER METERS. REFER TO UTILITY PLANS FOR DETAILS.
- 12' WIDE MAINTENANCE VEHICLE DRIVEWAY.
- PROPOSED MOUNTABLE CURB. REFER TO CONSTRUCTION DETAILS.
- PROPOSED 8" STRAIGHT CURB WITH 18" GUTTER. REFER TO CONSTRUCTION DETAILS.
- LIGHT POLES TO BE LOCATED 2' FROM THE BACK OF CURB, AS MEASURED FROM THE FACE OF POLE FOUNDATION, UNLESS OTHERWISE DEVOTED ON THE PLANS.
- PROPOSED RAMP.
- PROPOSED FLUSH CURB.

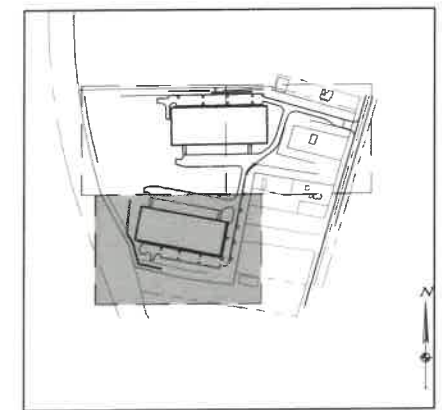
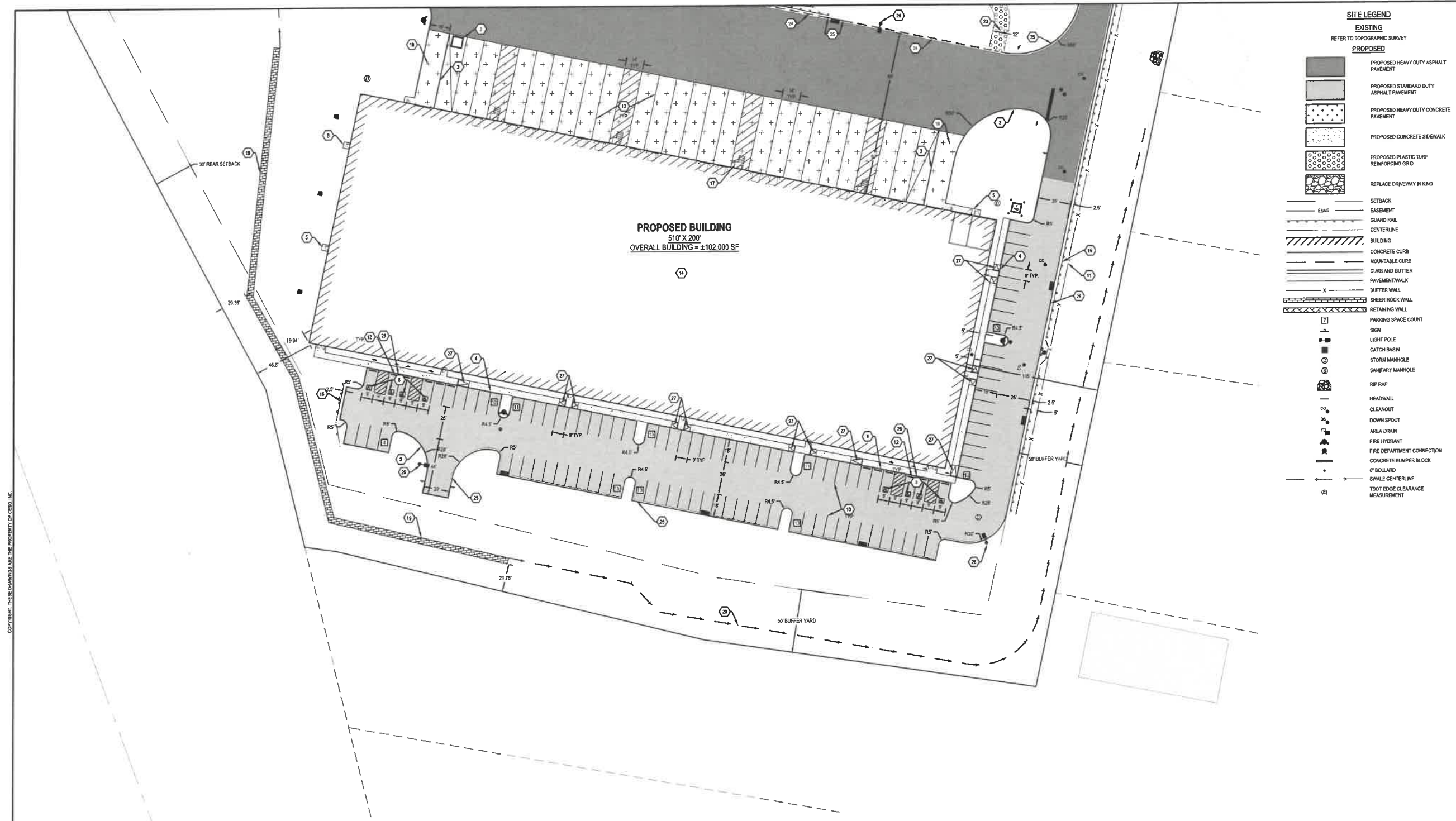
PROPOSED BUILDING
560' X 220'
OVERALL BUILDING = ± 123,200 SF



SEVENTY-TWO (72) HOURS BEFORE DIGGING IS TO COMMENCE, THE CONTRACTORS SHALL NOTIFY THE FOLLOWING AGENCIES: TENNESSEE UTILITY PROTECTION SERVICE: AT 811 OR 1-800-351-1111 AND ALL OTHER AGENCIES WHICH MIGHT HAVE UNDERGROUND UTILITIES INVOLVING THIS PROJECT AND ARE NONMEMBERS OF TENNESSEE UTILITY PROTECTION SERVICE.



KEY MAP
SCALE: 1"=400'

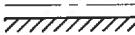
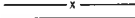
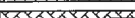


SITE LEGEND

EXISTING

REFER TO TOPOGRAPHIC SURVEY

PROPOSED

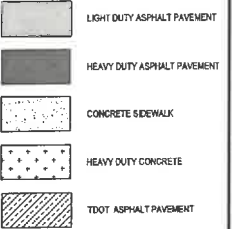
	PROPOSED HEAVY DUTY ASPHALT PAVEMENT
	PROPOSED STANDARD DUTY ASPHALT PAVEMENT
	PROPOSED HEAVY DUTY CONCRETE PAVEMENT
	PROPOSED CONCRETE SIDEWALK
	PROPOSED PLASTIC TUFF REINFORCING GRID
	REPLACE DRIVEWAY IN KIND
	SETBACK
	EASEMENT
	GUARD RAIL
	CENTERLINE
	BUILDING
	CONCRETE CURB
	MOUNTABLE CURB
	CURB AND GUTTER
	PAVEMENTWALK
	BUFFER WALL
	SHEER ROCK WALL
	RETAINING WALL
	PARKING SPACE COUNT
	SIGN
	LIGHT POLE
	CATCH BASIN
	STORM MANHOLE
	SANITARY MANHOLE
	RIP RAP
	HEADWALL
	CLEANOUT
	DOWN SPOUT
	AREA DRAIN
	FIRE HYDRANT
	FIRE DEPARTMENT CONNECTION
	CONCRETE BUMPER BLOCK
	8" BOLLARD
	SWALE CENTERLINE
	TOTD EDGE CLEARANCE MEASUREMENT



SITE PLAN

SHEET NO.
C4.2

PAVING LEGEND



ALL DRIVEWAYS SHALL MEET AASHTO INTERSECTION SIGHT DISTANCE.
ALL PAVEMENT MARKINGS ON TDOT ROW SHALL BE THERMOPLASTIC.

PROPOSED ASPHALT WITHIN ROW TO MEET TDOT DRIVEWAY PAVEMENT SECTIONS

N

GRAPHIC SCALE (IN FEET)
1" = 50'



FORTY-EIGHT (48) HOURS BEFORE DIGGING IS TO COMMENCE, THE CONTRACTORS SHALL NOTIFY THE FOLLOWING AGENCIES TENNESSEE UTILITY PROTECTION SERVICE AT 811 OR 1-800-351-4111 AND ALL OTHER AGENCIES WHOSE MIGHT HAVE UNDERGROUND UTILITIES INVOLVING THIS PROJECT AND ARE NONMEMBERS OF TENNESSEE UTILITY PROTECTION SERVICE.

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INTERSTATE 65
(VARYING PUBLIC ROW WIDTH)

PROPOSED BUILDING
507' X 220'
OVERALL BUILDING = 112,540 SF

PROPOSED BUILDING
310' X 300'
OVERALL BUILDING = 93,000 SF

HWY 31-LOUISVILLE PIKE
(100' PUBLIC ROW WIDTH)

SITE SIGN SCHEDULE

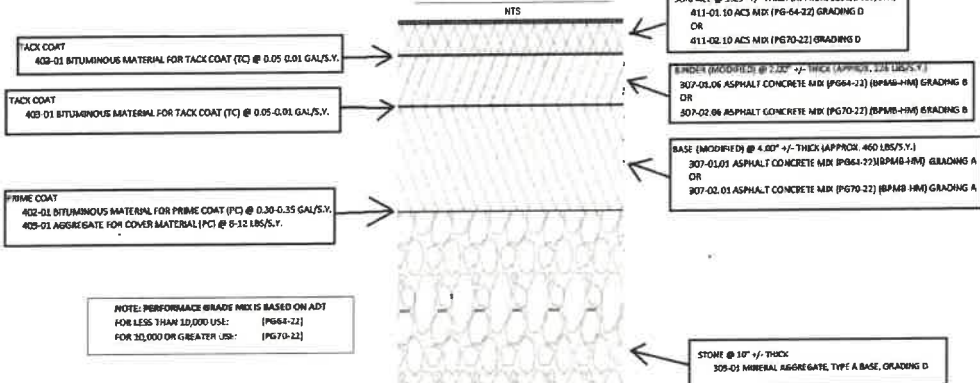
SIGN #	DESCRIPTION	QTY.
1	STOP SIGN - STANDARD 24" x 24" REFERENCE: MUTCD R1-1	5
2	ADA ACCESSIBILITY SIGN - 12" x 18" REFERENCE: MUTCD R7-4	12
3	VAN ACCESSIBILITY SIGN - 12" x 6" REFERENCE: MUTCD R7-4P	4
4	SPEED LIMIT 10 MPH - 24" x 18" REFERENCE: MUTCD R2-1	1
5	NO PARKING SIGN REFERENCE: MUTCD R5-3A	8
6	NO TRUCKS SIGN REFERENCE: MUTCD R5-3A	2
7	NO MOTOR VEHICLES SIGN REFERENCE: MUTCD R5-3	2
8	NO PARKING FIRE LANE SIGN REFERENCE: MUTCD R8-31	5

PAVEMENT MARKINGS

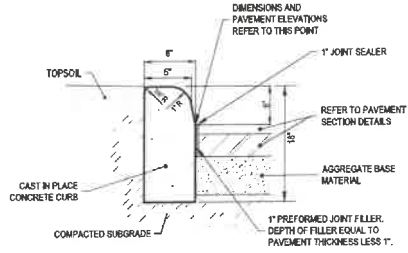
DESCRIPTION	QTY.
1 STOP BAR, PER DETAIL	4
2 LEFT TURN ARROW, PER DETAIL	1
3 RIGHT TURN ARROW, PER DETAIL	1
4 STANDARD PARKING, 4" WIDE X 18' LONG, WHITE	198
5 STANDARD ACCESSIBLE PARKING, PER DETAIL	12
6 VAN ACCESSIBLE PARKING, PER DETAIL	4
7 DOCK PARKING, 4" WIDE X 60' LONG YELLOW STRIPE	44
8 PAINTED ISLAND, 12" WIDE STRIPING AT 45 DEGREES, YELLOW	8
9 PAINTED ISLAND, 12" WIDE STRIPING AT 45 DEGREES, WHITE	9
10 CENTERLINE, 4" WIDE, DOUBLE SOLID, YELLOW	1
11 LOADING ZONE, PER DETAIL	8

NOTE: ALL PAINTED MARKINGS SHALL HAVE TWO COATS OF PAINT MIN.

TDOT PAVING SCHEDULE



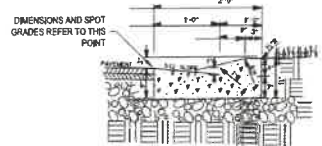
NOTE: PERFORMANCE GRADE MIX IS BASED ON APT FOR LESS THAN 10,000 USL: (PG64-22) FOR 10,000 OR GREATER USL: (PG70-22)



NOTES:

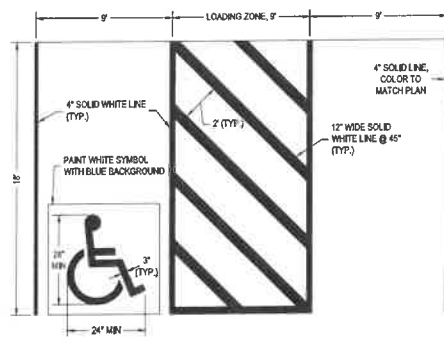
1. ALL CONCRETE CURBS TO BE 4,000 P.S.I. CONCRETE AT 28 DAYS.
2. TRANSVERSE EXPANSION JOINTS, 1/2" WIDE, SHALL BE INSTALLED IN THE CURB 20'-0" APART MAXIMUM.
3. EXPANSION JOINTS SHALL BE FILLED WITH 1/2" PREFORMED JOINT FILLER, RECESSED 1/4" FROM TOP AND FACE OF CURB.
4. MAXIMUM HEIGHT OF CURB TO PAVING IS 6".

CONCRETE CURB
NTS

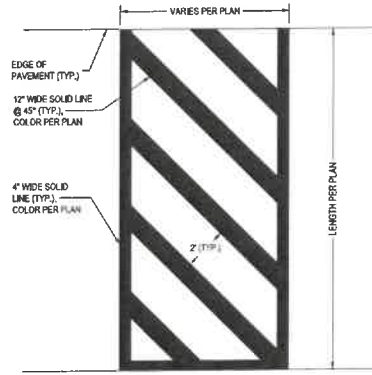


1. PROVIDE EXPANSION JOINTS AT END OF CURB INLETS THEN IN FROM INLET.
2. EXPANSION JOINTS SHALL BE RECESSED 1/4" FROM TOP AND FACE OF CURB.
3. EXPANSION JOINTS SHALL ALSO BE RECESSED AT TRANSVERSE JOINTS & DRAIPS.
4. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING THE JOINTS IN THE CURB.
5. JOINTS SHALL BE FILLED WITH 1/2" PREFORMED JOINT FILLER.
6. JOINTS SHALL BE RECESSED 1/4" FROM TOP AND FACE OF CURB.
7. JOINTS SHALL BE RECESSED 1/4" FROM TOP AND FACE OF CURB.
8. JOINTS SHALL BE RECESSED 1/4" FROM TOP AND FACE OF CURB.

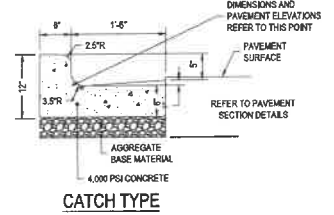
MOUNTABLE CURB
NTS



ACCESSIBLE PARKING SPACE STRIPING
NTS



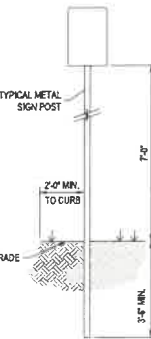
PAINTED ISLAND
NTS



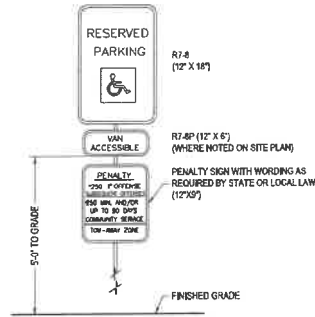
NOTES:

1. ALL CONCRETE CURBS AND SIDEWALKS TO BE 4,000 P.S.I. CONCRETE AT 28 DAYS.
2. TRANSVERSE EXPANSION JOINTS, 1/2" WIDE, SHALL BE INSTALLED IN THE CURB 20'-0" APART MAXIMUM.
3. EXPANSION JOINTS SHALL BE FILLED WITH 1/2" PREFORMED JOINT FILLER, RECESSED 1/4" FROM TOP AND FACE OF CURB.

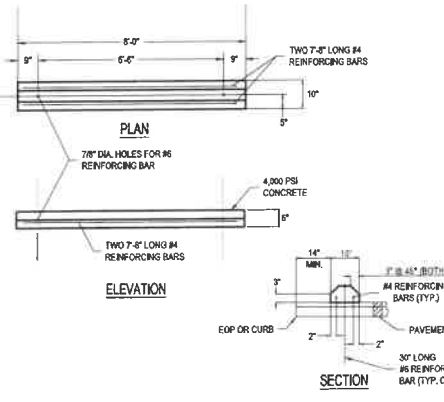
CONCRETE CURB AND GUTTER
NTS



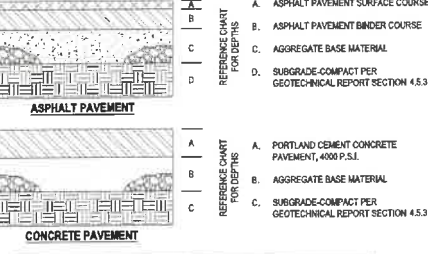
SIGN - LANDSCAPE
NTS



ACCESSIBLE PARKING SIGN
NTS

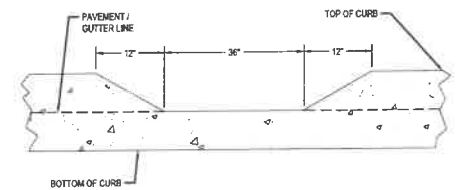


CONCRETE BUMPER BLOCK
NTS

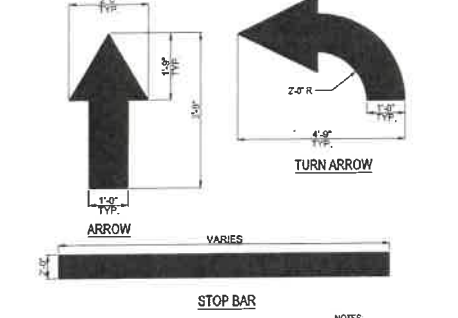


	PAVEMENT LAYER DEPTHS					
	ASPHALT			CONCRETE		
STANDARD DUTY	1.5	2	8	-	-	-
HEAVY DUTY	2.5	3	10	6	5	-

PAVEMENT SECTIONS
NTS

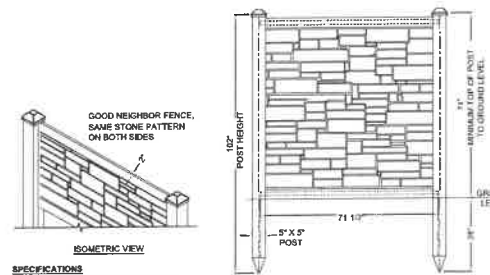


CURB CUT
NTS

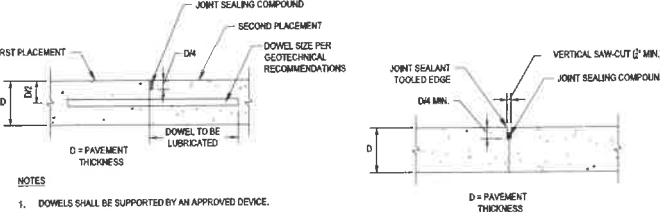


STOP BAR

PAVEMENT MARKINGS
NTS



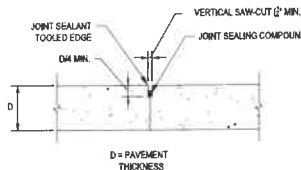
BUFFER WALL
NTS



NOTES:

1. DOWELS SHALL BE SUPPORTED BY AN APPROVED DEVICE.
2. ALL DOWELS AND BASKETS SHALL BE EPOXY COATED.
3. DOWELED CONTRACTION JOINTS ARE REQUIRED WHERE PAVEMENT DEPTH IS 7" OR GREATER.
4. DOWELS SHALL BE SMOOTH BARS AND SHALL BE PROVIDED A COATING OF GREASE, AS A BOND-BREAKING MATERIAL, IMMEDIATELY PRIOR TO PLACING THE CONCRETE.

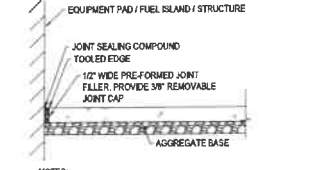
DOWELED CONTRACTION JOINT
NTS



NOTES:

1. MAXIMUM CONTRACTION JOINT SPACING IS DEPENDENT UPON THE PAVEMENT THICKNESS. REFER TO TABLE BELOW FOR SPACING REQUIREMENTS.
2. ENSURE CONTRACTION JOINT PATTERNS DIVIDE PAVEMENT INTO PANELS AS CLOSE TO SQUARE AS POSSIBLE.

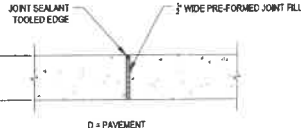
CONTRACTION JOINT
NTS



NOTES:

1. PLACE ISOLATION JOINTS WHERE CONCRETE PAVEMENT ABUTS SLABS, FUEL ISLANDS, CANOPY COLUMNS, BOLLARDS AND STRUCTURES OR FIXED OBJECTS.
2. PRE-FORMED JOINT FILLER - NON-IMPREGNATED TYPE, CLOSED CELL RESILIENT POLYETHYLENE FOAM, 1/2" THICK UNLESS OTHERWISE NOTED.
3. WHERE SLABS OF DIFFERENT THICKNESSES COME TOGETHER AT ISOLATION JOINTS, THE SURGRADE/SUBGRADE UNDER THE THINNER PAVEMENT SECTIONS SHOULD BE SHAPED TO PROVIDE GRADUAL THICKNESS TRANSITION OVER A DISTANCE OF 4 FT OR MORE.

ISOLATION JOINT
NTS

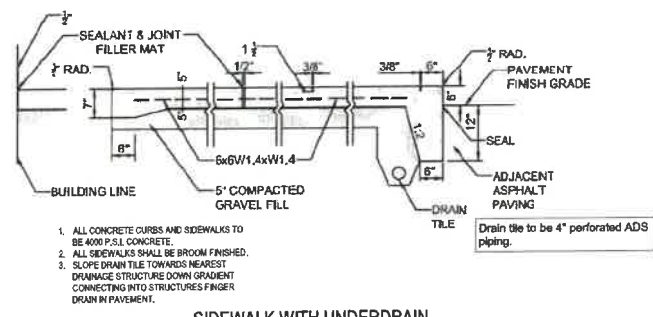


EXPANSION JOINT
NTS

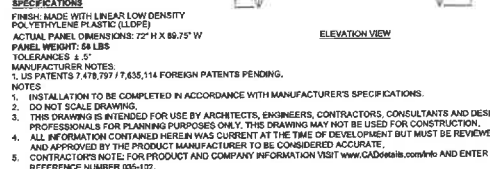
GENERAL JOINTING NOTES:

1. NOTES AND DETAILS BASED ON ACI 308.1R-17 AND 309.1R-17. ALL RECOMMENDATIONS SHOULD BE CONFIRMED ON A PROJECT BY PROJECT BASIS WITH THE CIVIL AND/OR GEOTECHNICAL ENGINEER. IF THE DETAILS AND RECOMMENDATIONS PROVIDED DO NOT COMPLY WITH THE LATEST INDUSTRY STANDARDS, OR THE STANDARDS ESTABLISHED BY THE AUTHORITY HAVING JURISDICTION, THIS SHOULD BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE OWNER'S REPRESENTATIVE.
2. CONSTRUCTION AND TRANSVERSE JOINTS SHALL BE RE-SAWN AND ALL SAW LANTAGE VACUUMED FROM THE JOINT ONCE BOTH SIDES ARE POURED.
3. PAVEMENT JOINTS OF ANY TYPE SHOULD EXTEND THROUGH ANY CURB AND GUTTER.
4. CONCRETE CONTRACTOR SHALL SUBMIT THE CONCRETE MIX TO THE OWNER'S REPRESENTATIVE FOR REVIEW AND APPROVAL.
5. A SCALED DRAWING OF THE JOINTING PLAN FOR THE PAVEMENTS AND CURBS SHOULD BE SUBMITTED BY THE CONTRACTOR FOR REVIEW BY THE CIVIL AND GEOTECHNICAL ENGINEERS.

JOINT SPACING FOR UNREINFORCED CONCRETE (FROM ACI 308.1R-17 TABLE 4.4.4 & ACI 309.1R-17 TABLE 3.5)		
PAVEMENT THICKNESS (IN)	MAXIMUM SPACING (FT)	
4 - 4.5	10	
5 - 5.5	12.50	
6 OR GREATER	15	



SIDEWALK WITH UNDERDRAIN
NTS



PAVEMENT MARKINGS
NTS



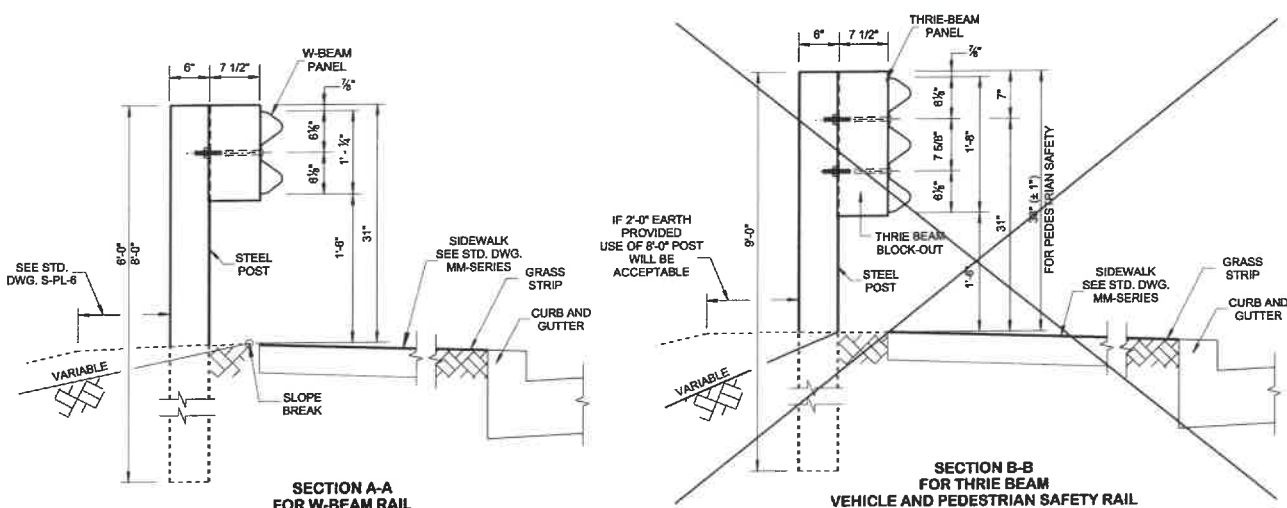
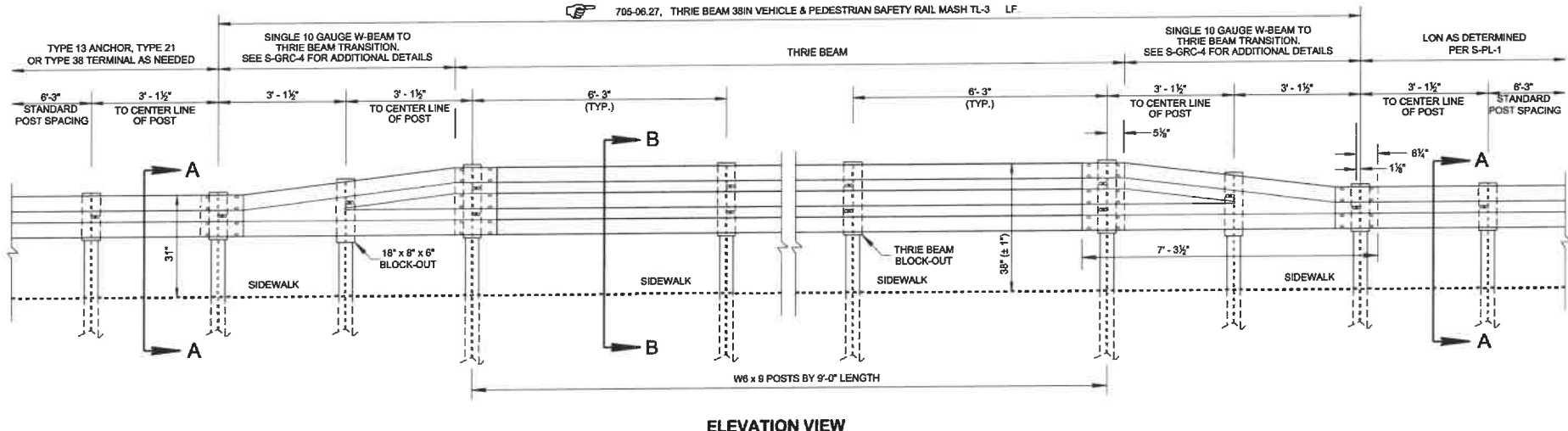
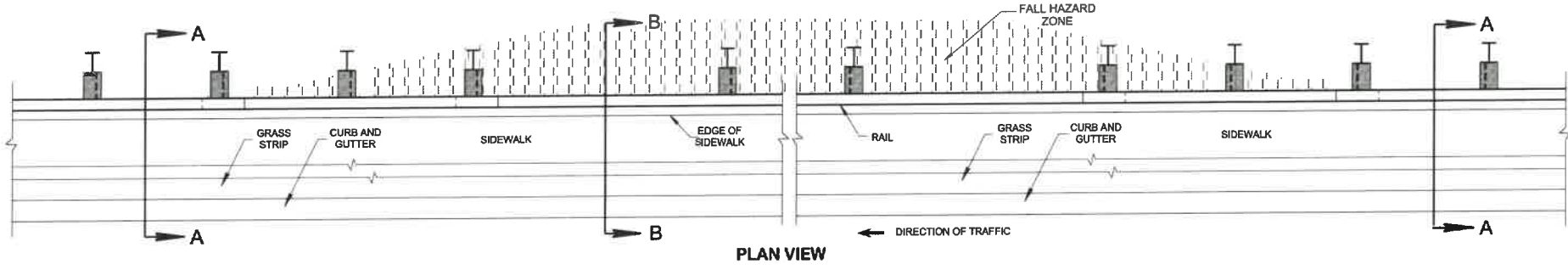
CONCRETE JOINTS
NTS



AL NEYER
LOUISVILLE HWY
INDUSTRIAL DEVELOPMENT

SITE
CONSTRUCTION
DETAILS

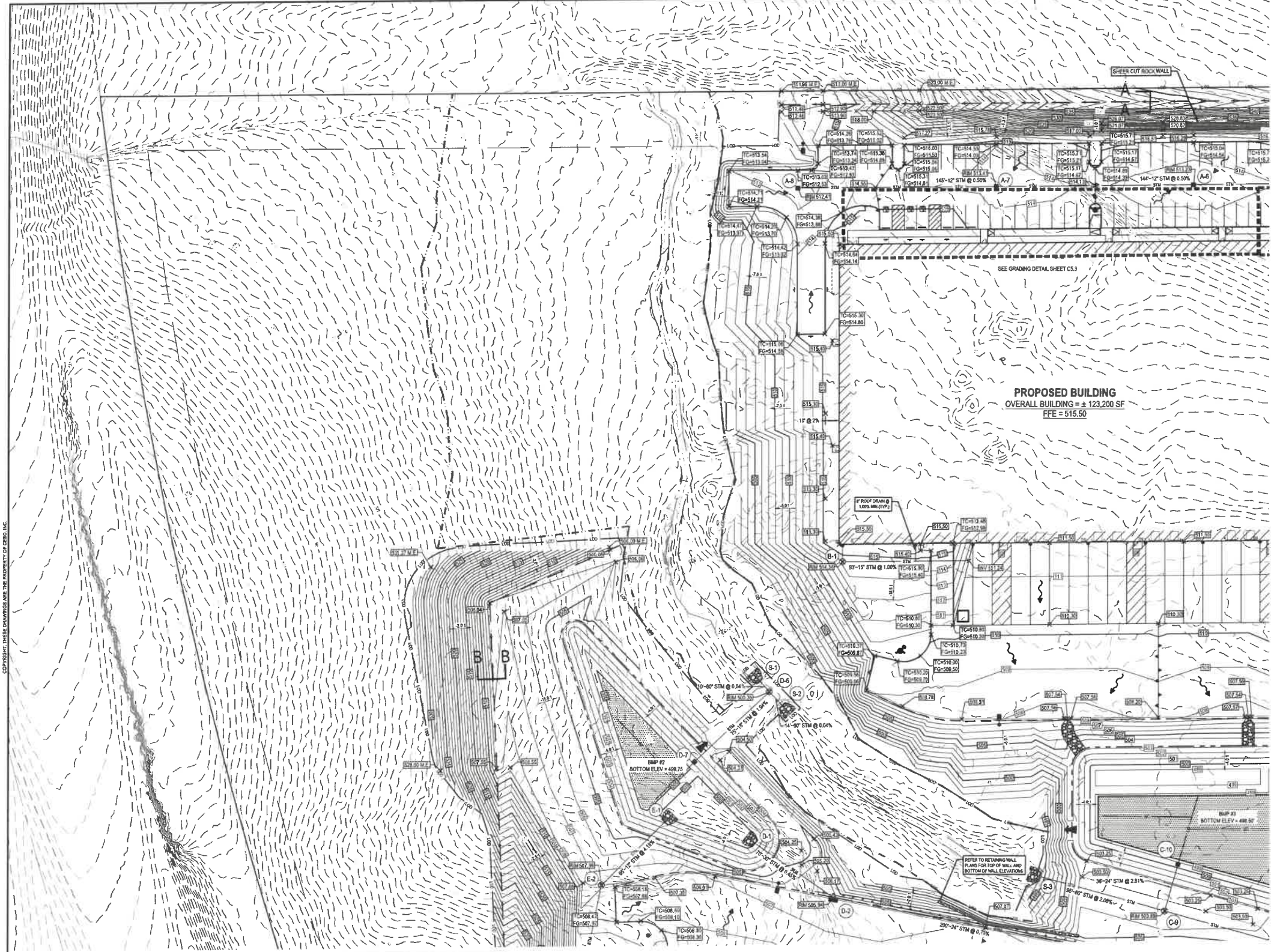
ISSUE:
PERMIT SET
DATE:
10.21.2022
JOB NO.: 760071
DESIGN: NAL
DRAWN: NAL
CHECKED: JTK
SHEET NO.
C4.5



- GENERAL NOTES**
- (A) THE 38" VEHICLE AND PEDESTRIAN SAFETY RAIL MAY BE USED AT LOCATIONS WHERE GUARDRAIL IS WARRANTED FOR VEHICLE SAFETY PER S-CZ-1 AND WHERE THE PEDESTRIAN SAFETY RAIL IS WARRANTED PER MM-BPR-1.
 - (B) THIS DETAIL SHOULD ONLY BE APPLIED FOR PEDESTRIAN FACILITIES. ON SHARED USE PATHS, IN ORDER TO PROVIDE BICYCLE SAFETY, A MINIMUM 42" RAIL HEIGHT SHOULD BE PROVIDED. REFER TO STANDARD DRAWING MM-BPR-2.
 - (C) SEE STANDARD DRAWINGS S-PL-6 AND S-GR-31 SERIES FOR ALL OTHER GUARDRAIL DETAILS AND MATERIAL PROPERTIES NOT SHOWN IN THIS SHEET.
 - (D) REFER TO STANDARD DRAWING RD11-TS SERIES FOR ROADWAY SECTIONS AND MM-TS-2 FOR PEDESTRIAN FACILITIES.
 - (E) PAYMENT:
ALL COMPONENTS AS SHOWN ON THIS DRAWING OR ANY COMPONENTS NEEDED TO INSTALL THIS GUARDRAIL SHALL BE INCLUDED UNDER PAY ITEM NUMBER:
705-06.27, THRIE BEAM 38IN VEHICLE & PEDESTRIAN SAFETY RAIL MASH TL-3 LF.

STATE OF TENNESSEE
STANDARD
DRAWING
DEPARTMENT OF TRANSPORTATION
VEHICLE AND
PEDESTRIAN
SAFETY RAIL
10-16-2020 MM-VPR-1

11/10/2020 8:26:19 AM
P:\StandDraw\DESIGN STANDARDS\Standards Library\Standard Roadway Drawings - CURRENT\In Progress\10-106.00 Multimodal IP160.03 Safety Rail IPMMVPR1-20201016.dgn
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GRADING LEGEND

EXISTING
REFER TO TOPOGRAPHIC SURVEY

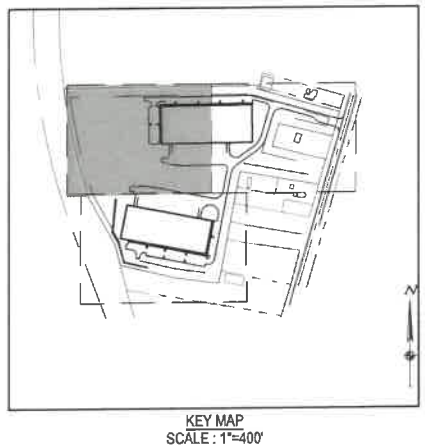
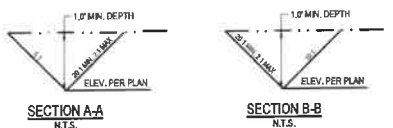
PROPOSED

LOC LIMIT OF DISTURBANCE
SETBACK
EASEMENT
BUILDING
MAJOR CONTOUR
MINOR CONTOUR
GRADE BREAK
STORM SEWER LINE
SWALE CENTER LINE
FLOW LINE
STRUCTURE NUMBER
CATCH BASIN
STORM MANHOLE
CURB INLET
CLEANOUT
DOWNSPOUT
AREA DRAIN
HEADWALL
FINISHED GRADE ELEVATION
RIM ELEVATION
BACK OF CURB ELEVATION
TOP OF CURB ELEVATION
FINISHED GRADE ELEVATION
M.E. MATCH EXISTING ELEVATION
H.P. HIGH POINT
SLOPE ARROW
FLOOD ROUTE
POND INFILTRATION FILTER MEDIA

STORM SEWER STRUCTURE SCHEDULE

NO.	STRUCTURE	RIM	INVERT
A-6	CATCH BASIN PER STORM SEWER DETAILS	513.23	507.86 (12") W 507.71 (12") E
A-7	CATCH BASIN PER STORM SEWER DETAILS	513.41	508.88 (12") W 508.88 (12") E
A-8	CATCH BASIN PER STORM SEWER DETAILS	512.41	509.41 (12") E
B-1	MANHOLE PER STORM SEWER DETAILS	514.24	512.47 (18") E 512.87 (8") N
C-9	MANHOLE PER STORM SEWER DETAILS	503.58	495.94 (8") W 493.75 (24") N 495.94 (8") E
C-10	OUTLET CONTROL STRUCTURE	502.25	494.75 (24") S
D-1	HALF HEIGHT HEADWALL PER STORM SEWERS DETAILS	500.00	(20") SE
D-2	DOUBLE CURB INLET PER TDOT D-CB-14P	505.94	500.82 (24") E 500.32 (20") NW
D-6	MANHOLE PER STORM SEWER DETAILS	500.02	493.45 (8") NW 495.85 (18") SW 493.45 (8") SE
D-7	OUTLET CONTROL STRUCTURE	504.00	497.40 (18") NE
E-1	HALF HEIGHT HEADWALL PER STORM SEWERS DETAILS	501.01	(12") SW
E-2	MANHOLE PER STORM SEWER DETAILS	507.96	503.74 (12") S 503.74 (12") NE
S-1	ENDWALL PER TDOT STD D-PEW-1"		493.45 (8") SE
S-2	ENDWALL PER TDOT STD D-PEW-1"		493.45 (8") NW
S-3	ENDWALL PER TDOT STD D-PEW-1"		487.80 (8") E

* OR APPROVED EQUAL



STORM SEWER PIPE TABLE

PIPE NAME	DIAMETER	LENGTH	SLOPE	MATERIAL
P-A6	15"	144'	0.40%	HDPE
P-A7	12"	144'	0.50%	HDPE
P-A8	12"	145'	0.50%	HDPE
P-B1	15"	83'	1.00%	RCP
P-C10	24"	36'	2.81%	HDPE
P-D2	30"	70'	0.45%	HDPE
P-D3	24"	200'	0.75%	HDPE
P-D7	18"	75'	1.94%	HDPE
P-E2	12"	85'	4.15%	HDPE
P-E3	12"	128'	4.15%	HDPE
P-S1	60"	10'	0.04%	RCP
P-S2	60"	14'	0.04%	RCP
P-S3	60"	95'	2.08%	RCP
P-S4	60"	211'	2.08%	RCP

North arrow pointing up.

GRAPHIC SCALE (H FEET)
1 in. = 30 ft.

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

SEVENTY-TWO (72) HOURS BEFORE DIGGING IS TO COMMENCE, THE CONTRACTORS SHALL NOTIFY THE FOLLOWING AGENCIES: TENNESSEE UTILITY PROTECTION SERVICE AT 811 OR 1-800-351-1111 AND ALL OTHER AGENCIES WHICH MIGHT HAVE UNDERGROUND UTILITIES INVOLVING THIS PROJECT AND ARE NONMEMBERS OF TENNESSEE UTILITY PROTECTION SERVICE.

CESO
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REVISION DESCRIPTION

NO.	DATE	REVISION DESCRIPTION

AL NEYER
LOUISVILLE HWY
INDUSTRIAL DEVELOPMENT

GRADING PLAN

ISSUE: PERMIT SET
DATE: 10.21.2022

JOB NO.: 760071
DESIGN: NAL
DRAWN: NAL
CHECKED: JTK

SHEET NO.
C5.0

1016 LOUISVILLE HWY (31W) GOODLETTSVILLE, TN 37072



REVISION DESCRIPTION

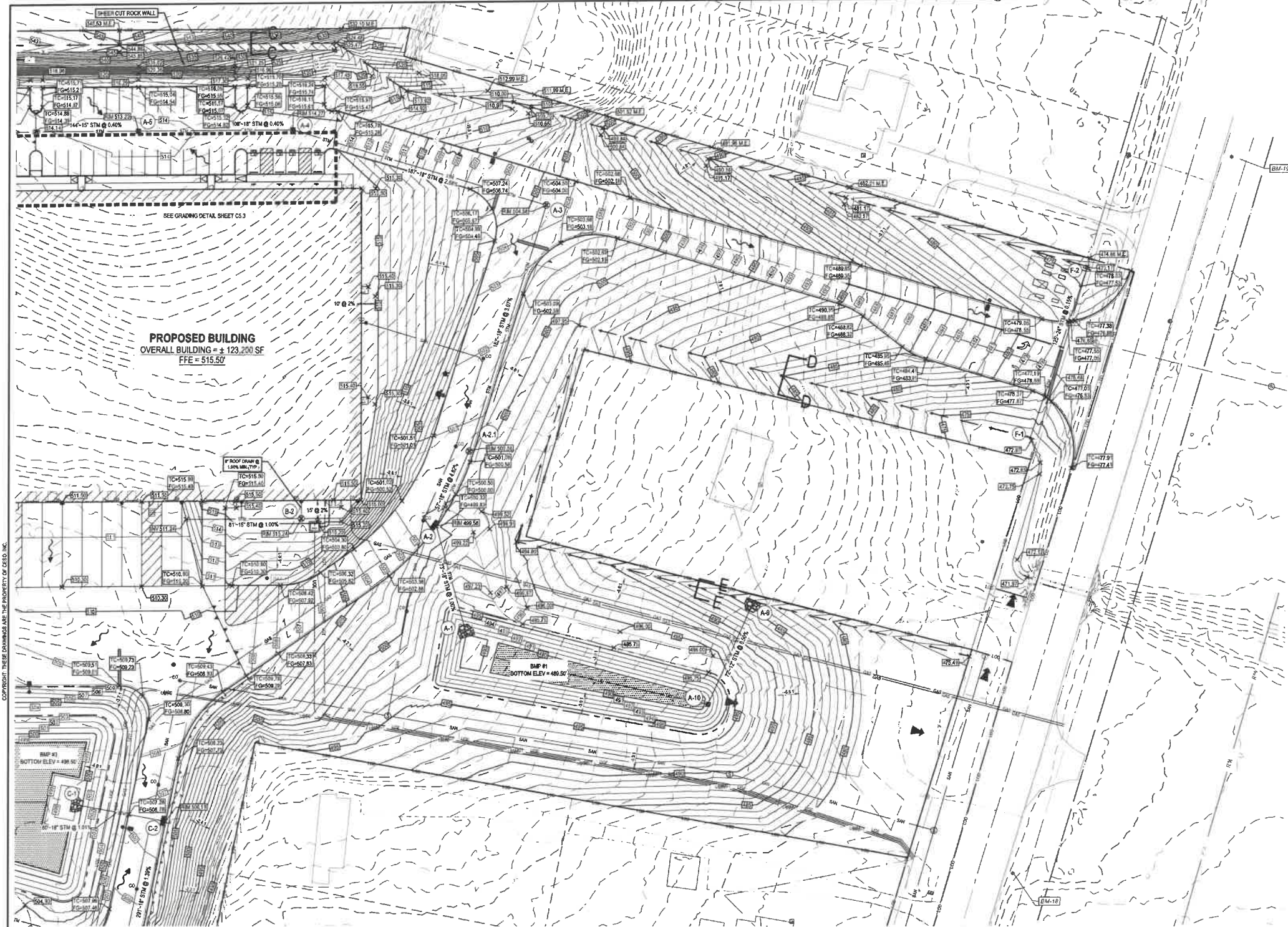
NO. DATE



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LOUISVILLE HWY
INDUSTRIAL DEVELOPMENT

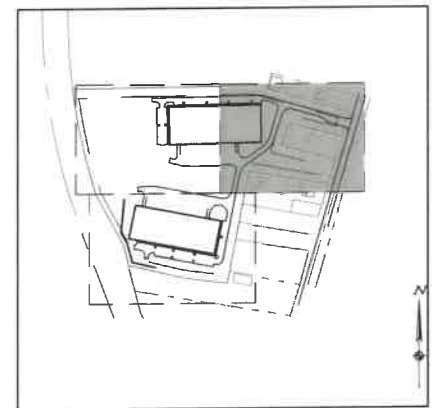
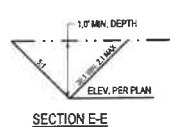
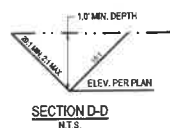
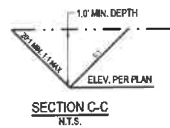
GRADING
PLAN

ISSUE: PERMIT SET
DATE: 10/21/2022
JOB NO.: 760071
DESIGN: NAL
DRAWN: NAL
CHECKED: JTK
SHEET NO. C5.1



GRADING LEGEND

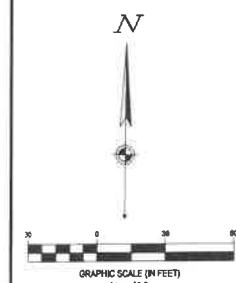
EXISTING	
REFER TO TOPOGRAPHIC SURVEY	
PROPOSED	
LOC	LIMIT OF DISTURBANCE
ESMT	SETBACK
ESMT	EASEMENT
BUILDING	BUILDING
MAJOR CONTOUR	MAJOR CONTOUR
MINOR CONTOUR	MINOR CONTOUR
GRADE BREAK	GRADE BREAK
STW	STORM SEWER LINE
SWALE CENTERLINE	SWALE CENTERLINE
FLOW LINE	FLOW LINE
STRUCTURE NUMBER	STRUCTURE NUMBER
CATCH BASIN	CATCH BASIN
STORM MANHOLE	STORM MANHOLE
CURB INLET	CURB INLET
CLEANOUT	CLEANOUT
DOWNSPOUT	DOWNSPOUT
AREA DRAIN	AREA DRAIN
HEADWALL	HEADWALL
FINISHED GRADE ELEVATION	FINISHED GRADE ELEVATION
RM ELEVATION	RM ELEVATION
BACK OF CURB ELEVATION	BACK OF CURB ELEVATION
TOP OF CURB ELEVATION	TOP OF CURB ELEVATION
FINISHED GRADE ELEVATION	FINISHED GRADE ELEVATION
M.E.	MATCH EXISTING ELEVATION
H.P.	HIGH POINT
SLOPE ARROW	SLOPE ARROW
FLOOD ROUTE	FLOOD ROUTE
POND INFILTRATION FILTER MEDIA	POND INFILTRATION FILTER MEDIA



THERE WILL BE NO INCREASE IN THE Q50 RUNOFF FROM THE DEVELOPMENT ONTO TDOT ROW.

STORM SEWER STRUCTURE SCHEDULE			
NO.	STRUCTURE	RM	INVERT
A-1	HALF HEIGHT HEADWALL PER STORM SEWER DETAILS	492.00 (18') N	
A-2	CURB INLET PER STORM SEWER DETAILS	492.58	482.73 (18') NE 492.73 (18') S
A-3	MANHOLE PER STORM SEWER DETAILS	504.58	502.28 (18') W 501.28 (18') S
A-4	CATCH BASIN PER STORM SEWER DETAILS	514.27	506.45 (18') W 508.45 (18') E
A-5	CATCH BASIN PER STORM SEWER DETAILS	513.23	507.13 (15') W 505.88 (18') E
A-6	HALF HEIGHT HEADWALL PER STORM SEWER DETAILS		485.84 (12') SW
A-10	OUTLET CONTROL STRUCTURE	485.00	485.00 (12') NE
B-2	MANHOLE PER STORM SEWER DETAILS	515.24	512.26 (15') W 512.26 (15') E 512.26 (15') N
C-1	HALF HEIGHT HEADWALL PER STORM SEWER DETAILS		500.00 (18') E
C-2	CURB INLET PER STORM SEWER DETAILS	508.19	500.86 (18') S 500.86 (18') W
F-1	HEADWALL PER TDOT D-SEW-1A		472.81 (24') N
F-2	HEADWALL PER TDOT D-SEW-1A		473.00 (24') S

STORM SEWER PIPE TABLE				
PIPE NAME	DIAMETER	LENGTH	SLOPE	MATERIAL
P-A2	18"	73'	1.00%	HDPE
P-A3	18"	182'	3.07%	HDPE
P-A4	18"	187'	2.88%	HDPE
P-A5	18"	108'	0.40%	HDPE
P-A6	15"	144'	0.40%	HDPE
P-A10	12"	72'	0.50%	HDPE
P-B2	15"	81'	1.00%	RCP
P-C2	18"	80'	1.01%	HDPE
P-C3	18"	291'	1.39%	HDPE
P-F2	24"	125'	0.15%	RCP



SEVENTY-TWO (72) HOURS BEFORE DIGGING IS TO COMMENCE, THE CONTRACTOR SHALL NOTIFY THE FOLLOWING AGENCIES: TENNESSEE UTILITY PROTECTION SERVICE AT 811 OR 1-800-351-1111 AND ALL OTHER AGENCIES WHICH MIGHT HAVE UNDERGROUND UTILITIES INVOLVING THIS PROJECT AND ARE MEMBERS OF TENNESSEE UTILITY PROTECTION SERVICE.



NO. DATE



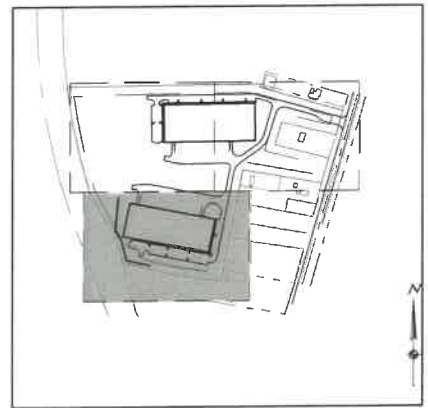
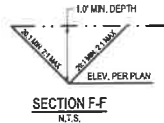
AL NEYER
LOUISVILLE HWY
INDUSTRIAL DEVELOPMENT

GRADING
PLAN

ISSUE:
PERMIT SET
DATE:
10.21.2022
JOB NO.: 780071
DESIGN: NAL
DRAWN: NAL
CHECKED: JTK
SHEET NO.
C5.2

GRADING LEGEND

- EXISTING
REFER TO TOPOGRAPHIC SURVEY
- PROPOSED
- 100' LIMIT OF DISTURBANCE
 - SETBACK
 - EASEMENT
 - BUILDING
 - MAJOR CONTOUR
 - MINOR CONTOUR
 - GRADE BREAK
 - STORM SEWER LINE
 - SWALE CENTERLINE
 - FLOW LINE
 - STRUCTURE NUMBER
 - CATCH BASIN
 - STORM MANHOLE
 - CURB INLET
 - CLEANOUT
 - DOWNSPOUT
 - AREA DRAIN
 - HEADWALL
 - FINISHED GRADE ELEVATION
 - RIM ELEVATION
 - BACK OF CURB ELEVATION
 - TOP OF CURB ELEVATION
 - FINISHED GRADE ELEVATION
 - MATCH EXISTING ELEVATION
 - HIGH POINT
 - SLOPE ARROW
 - FLOOD ROUTE
 - POND INFILTRATION FILTER MEDIA



KEY MAP
SCALE: 1"=400'

STORM SEWER STRUCTURE SCHEDULE			
NO.	STRUCTURE	RIM	INVERT
C-3	CURB INLET PER STORM SEWER DETAILS	511.00	504.04 (18") S 504.04 (18") N
C-4	CURB INLET PER STORM SEWER DETAILS	511.00	505.18 (18") SW 505.18 (18") N
C-6	MANHOLE PER STORM SEWER DETAILS	513.20	505.60 (18") W 505.60 (18") NE
C-8	CURB INLET PER STORM SEWER DETAILS	511.22	505.98 (18") W 505.98 (18") E
C-7	CURB INLET PER STORM SEWER DETAILS	510.71	506.46 (18") W 506.46 (18") E
C-8	CURB INLET PER STORM SEWER DETAILS	510.82	507.12 (18") E
D-3	DOUBLE CURB INLET PER TDOT D-CB-14P	506.12	502.32 (24") W
D-4	MANHOLE PER STORM SEWER DETAILS	513.29	510.75 (8") S 510.41 (12") E
D-6	MANHOLE PER STORM SEWER DETAILS	513.40	510.45 (12") W 510.78 (8") S
E-3	CATCH BASIN PER STORM SEWER DETAILS	512.29	509.94 (12") S 509.84 (12") N
E-4	CATCH BASIN PER STORM SEWER DETAILS	512.31	509.36 (12") S 509.26 (12") N
E-6	CATCH BASIN PER STORM SEWER DETAILS	512.78	509.75 (12") N
S-4	ENDWALL PER TDOT STD D-PW-1		481.57 (80") W

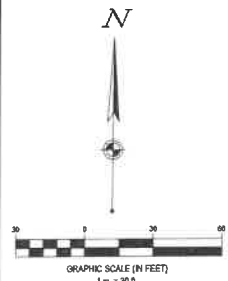
STORM SEWER PIPE TABLE				
PIPE NAME	DIAMETER	LENGTH	SLOPE	MATERIAL
P-C3	18"	291'	1.39%	HDPE
P-C4	18"	108'	0.50%	HDPE
P-C5	18"	84'	0.50%	HDPE
P-C6	18"	94'	0.40%	HDPE
P-C7	18"	126'	0.40%	HDPE
P-C8	18"	181'	0.40%	HDPE
P-D4	12"	67'	1.00%	RCP
P-D6	12"	68'	1.00%	RCP
P-E3	12"	128'	4.15%	HDPE
P-E4	12"	67'	0.50%	HDPE
P-E5	12"	79'	0.51%	HDPE
P-S4	80"	211'	2.08%	RCP

** OR APPROVED EQUAL



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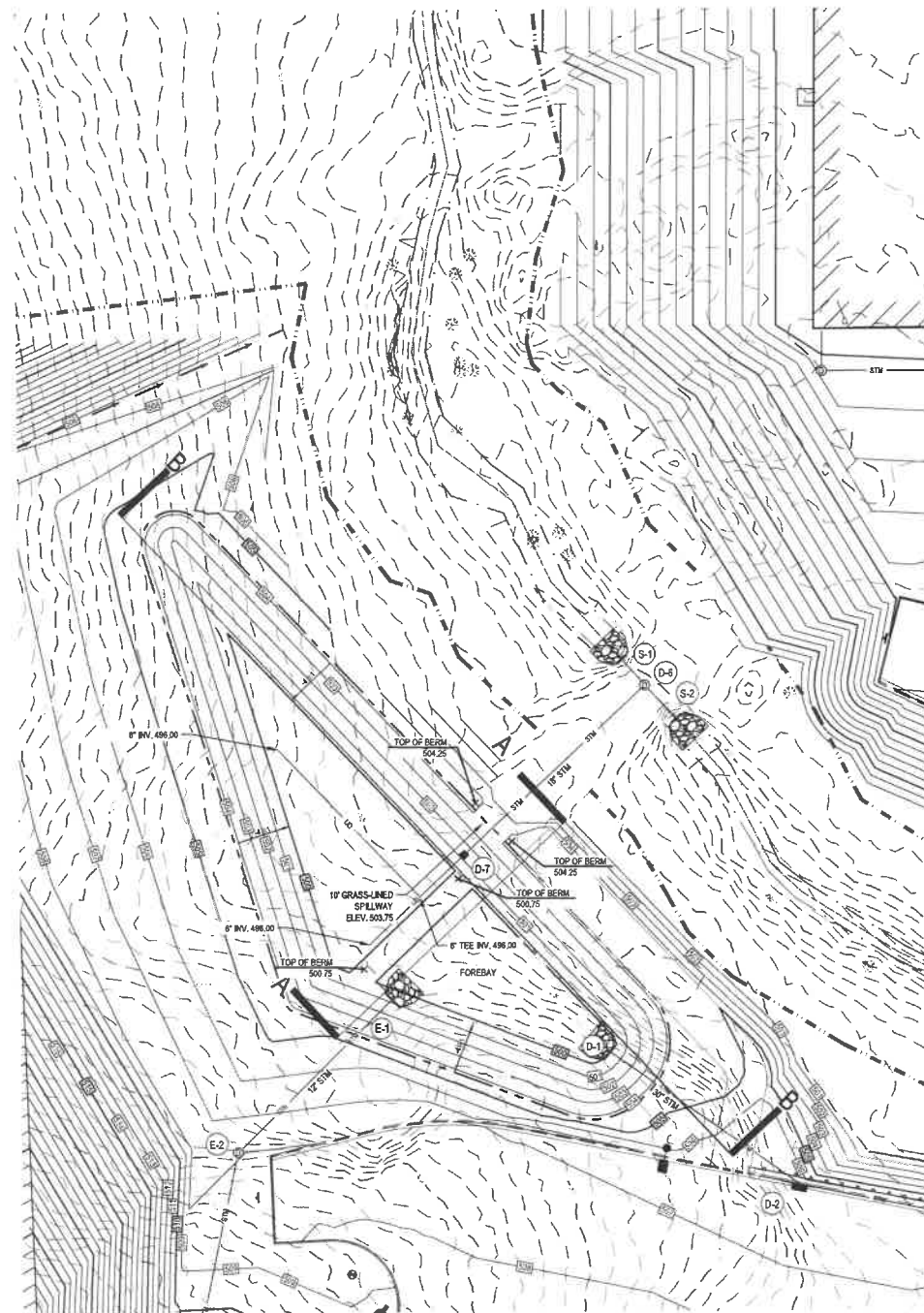


ISSUE:
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DATE:
10.21.2022

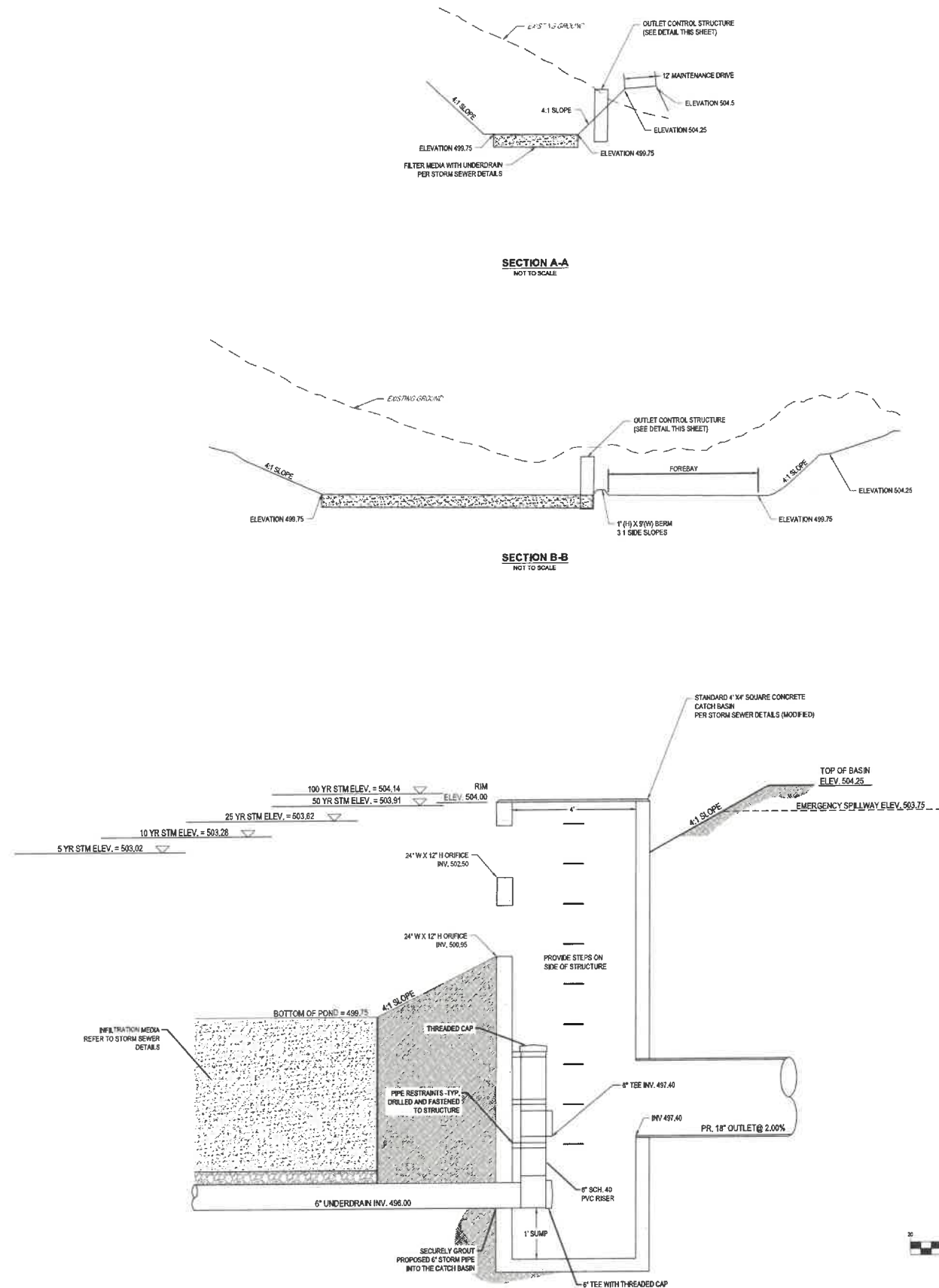
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CKED: JTK

SHEET NO.
C5.3

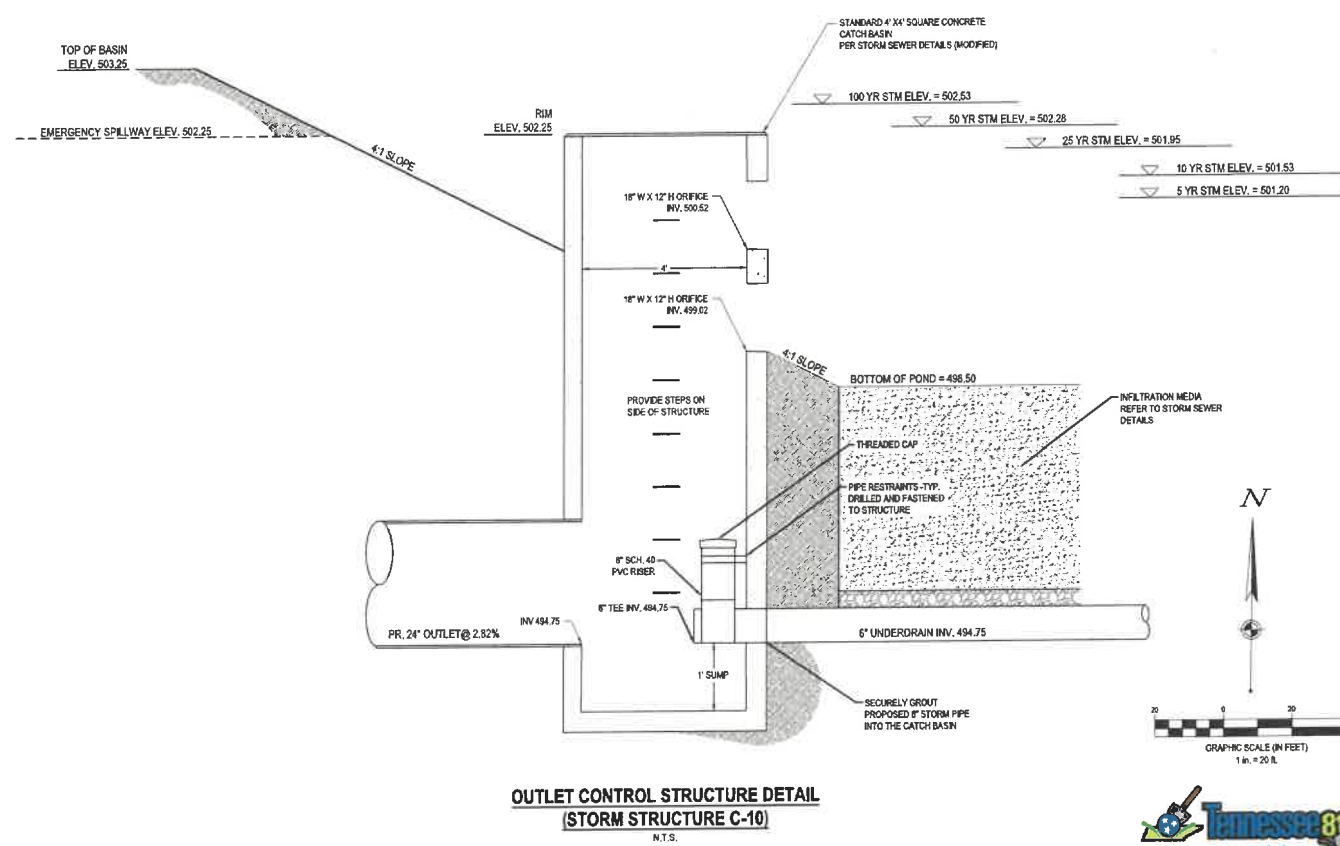
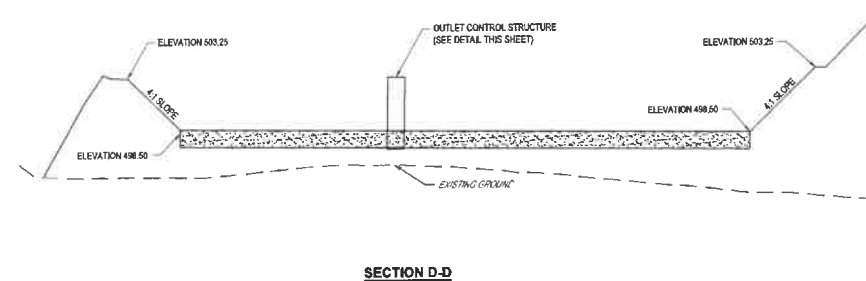
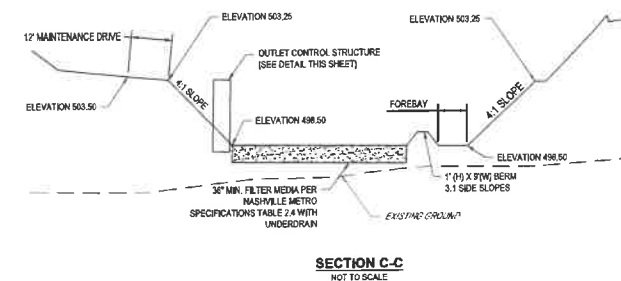
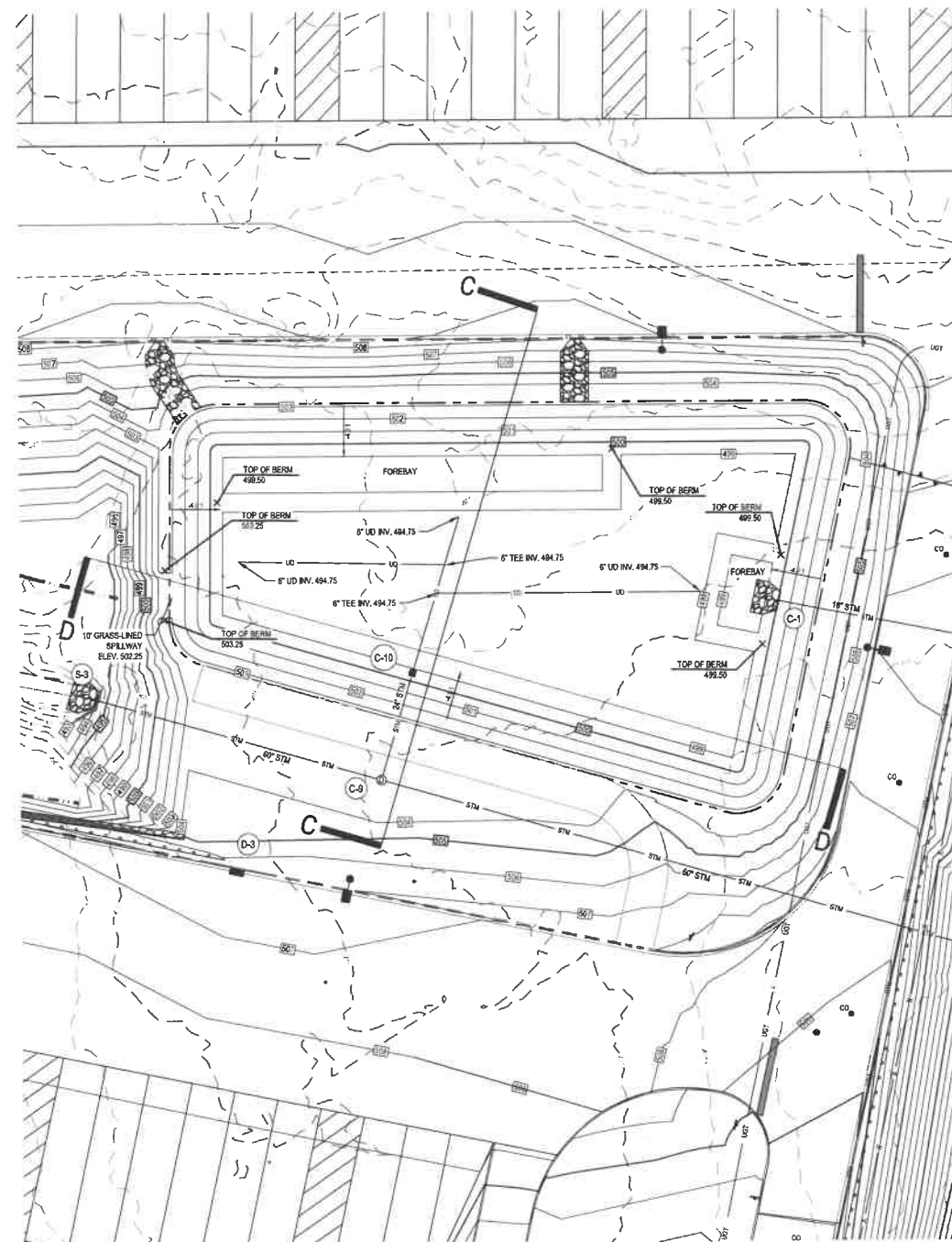




DETENTION BASIN DETAIL
SCALE: 1" = 20'

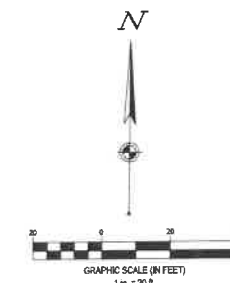
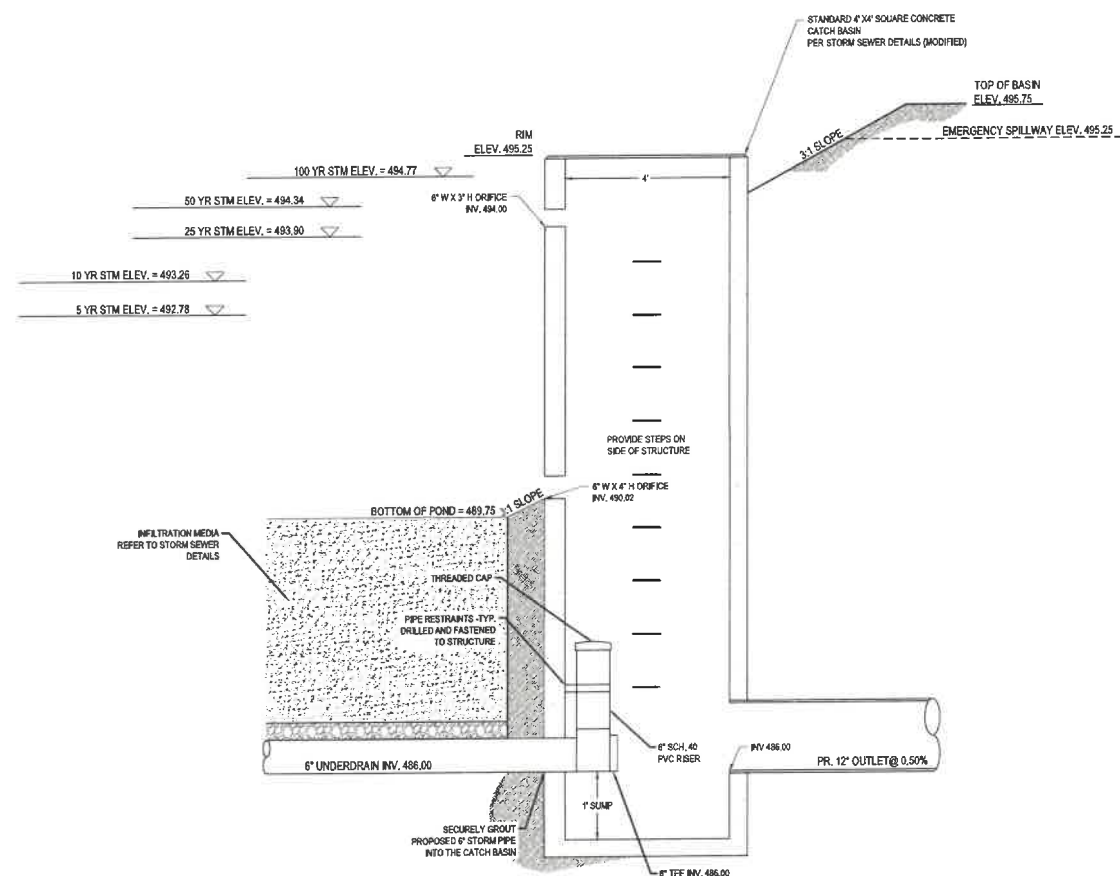
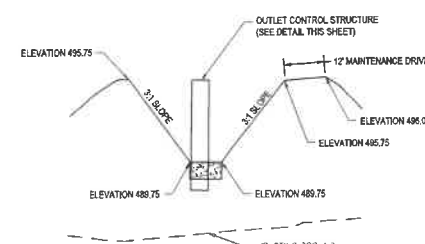
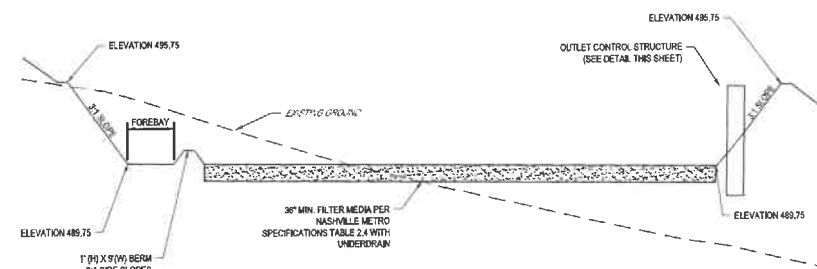
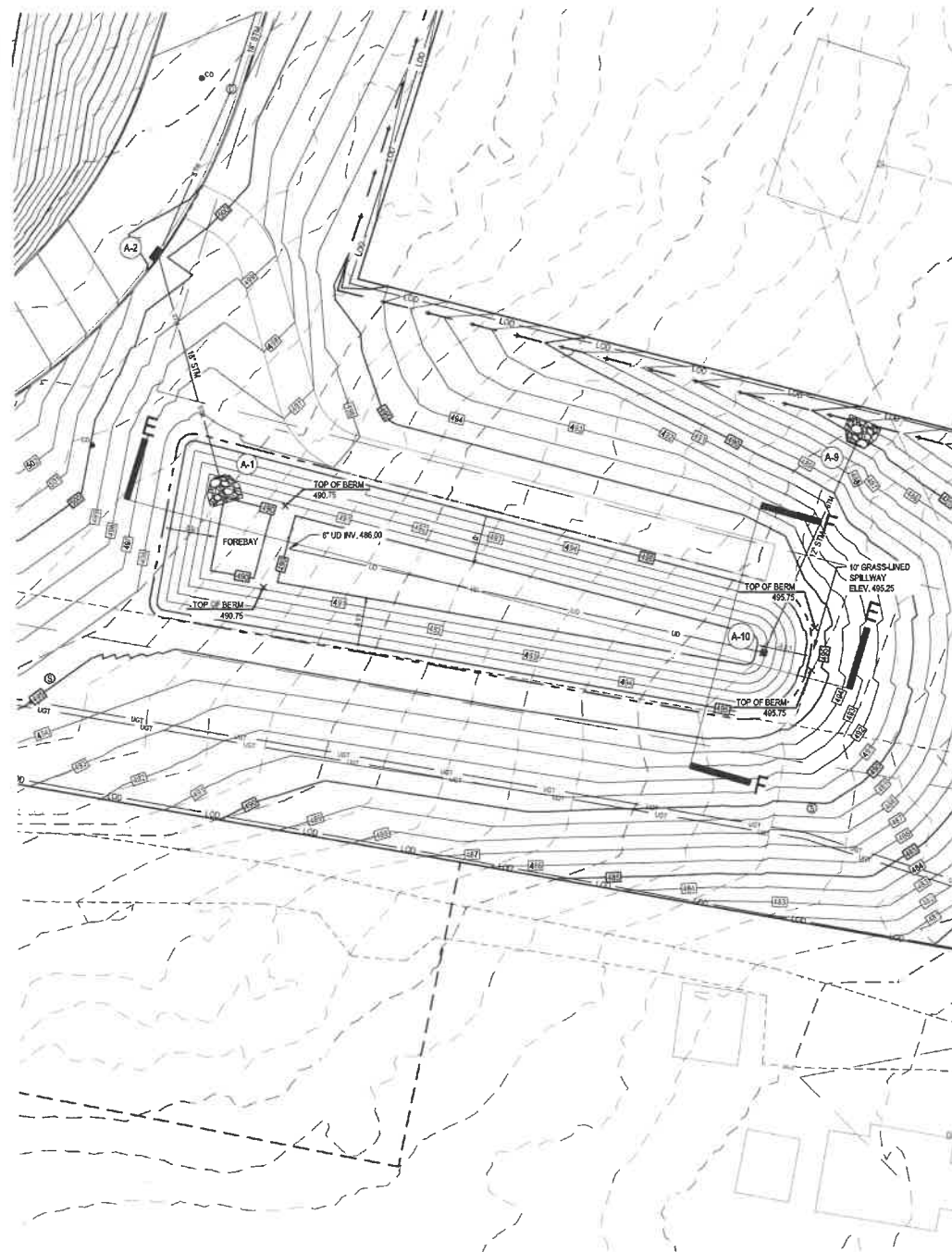


SEVENTY-TWO (72) HOURS BEFORE DIGGING IS TO COMMENCE, THE CONTRACTORS SHALL NOTIFY THE FOLLOWING AGENCIES: TENNESSEE UTILITY PROTECTION SERVICE AT 811 OR 1-800-351-1111 AND ALL OTHER AGENCIES WHICH MIGHT HAVE UNDERGROUND UTILITIES INVOLVING THIS PROJECT AND ARE NONMEMBERS OF TENNESSEE UTILITY PROTECTION SERVICE.

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AL NEYER
LOUISVILLE
INDUSTRIAL DEVELOPMENT

ISSUE:	
PERMIT SET	
DATE:	
10.21.2022	
JOB NO.:	760071
DESIGN:	NAL
DRAWN:	NAL
CHECKED:	JTK
SHEET NO.	
C5.5	



SEVENTY-TWO (72) HOURS BEFORE DIGGING IS TO COMMENCE, THE CONTRACTORS SHALL NOTIFY THE FOLLOWING AGENCIES: TENNESSEE UTILITY PROTECTION SERVICE AT 811 OR 1-800-351-1111 AND ALL OTHER AGENCIES WHICH MIGHT HAVE UNDERGROUND UTILITIES INVOLVING THIS PROJECT AND ARE NONMEMBERS OF TENNESSEE UTILITY PROTECTION SERVICE.



REVISION DESCRIPTION

NO. DATE



AL NEYER
LOUISVILLE HWY
INDUSTRIAL DEVELOPMENT

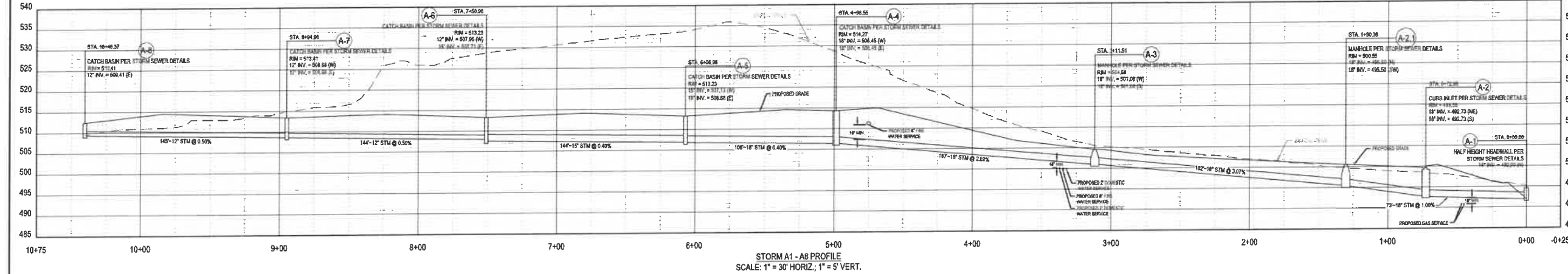
STORM
SEWER
PROFILES

ISSUE:
PERMIT SET
DATE:
10/21/2022
JOB NO.: 760071
DESIGN: NAL
DRAWN: NAL
CHECKED: JTK
SHEET NO.
C5.7

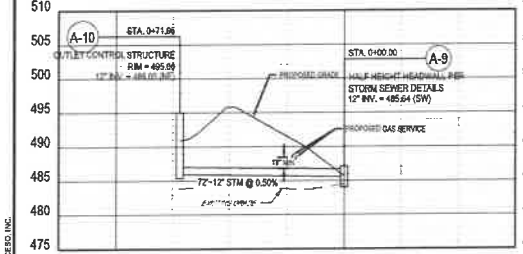


SEVENTY-TWO (72) HOURS BEFORE DIGGING IS TO
COMMENCE THE CONTRACTORS SHALL NOTIFY THE
FOLLOWING AGENCIES TENNESSEE UTILITY PROTECTION
SERVICE AT 811 OR 1-800-351-1111 AND ALL OTHER
AGENCIES WHICH MIGHT HAVE UNDERGROUND UTILITIES
INVOLVING THIS PROJECT AND ARE NONMEMBERS OF
TENNESSEE UTILITY PROTECTION SERVICE.

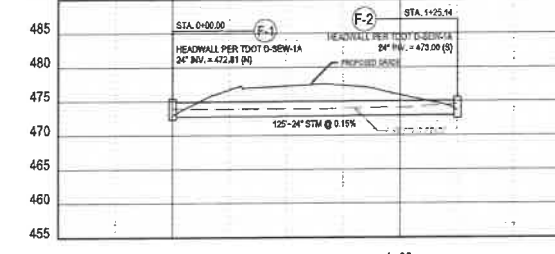
\\CESO\LOCAL\WOOD\DATA\PROJECTS\AL NEYER\80071 - GOODLETTSVILLE TMD-CMS PLUM\PLOTS-1 - STORM SEWER PROFILES.DWG - 10/21/2022 10:04 AM



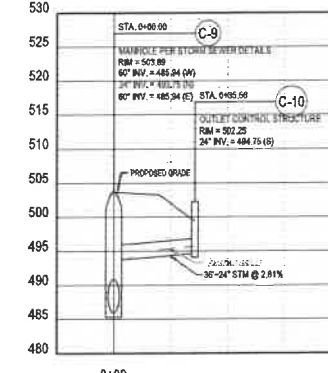
STORM A1 - A8 PROFILE
SCALE: 1" = 30' HORIZ.; 1" = 5' VERT.



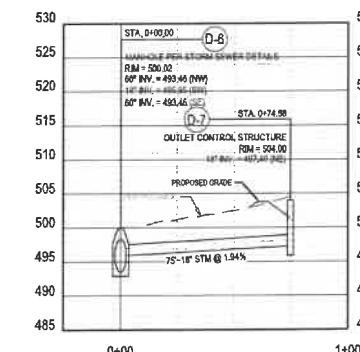
STORM A9 - A10 PROFILE
SCALE: 1" = 30' HORIZ.; 1" = 5' VERT.



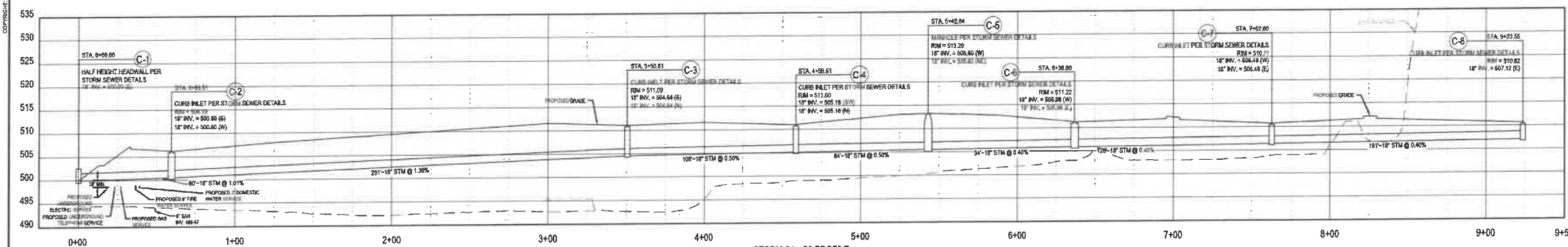
STORM F1 - F2 PROFILE
SCALE: 1" = 30' HORIZ.; 1" = 5' VERT.



STORM C9 - C10 PROFILE
SCALE: 1" = 30' HORIZ.; 1" = 5' VERT.



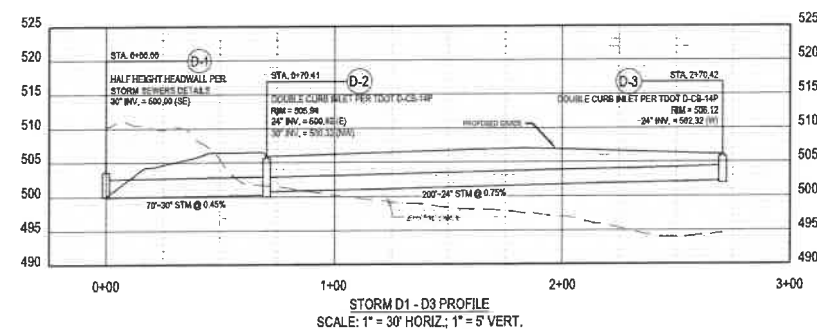
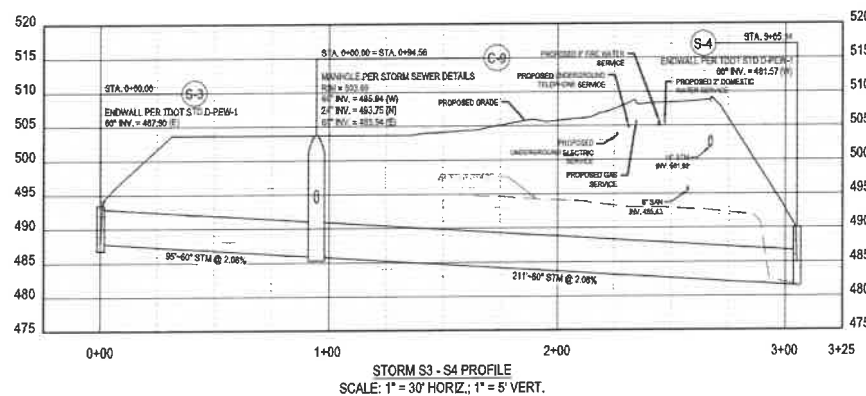
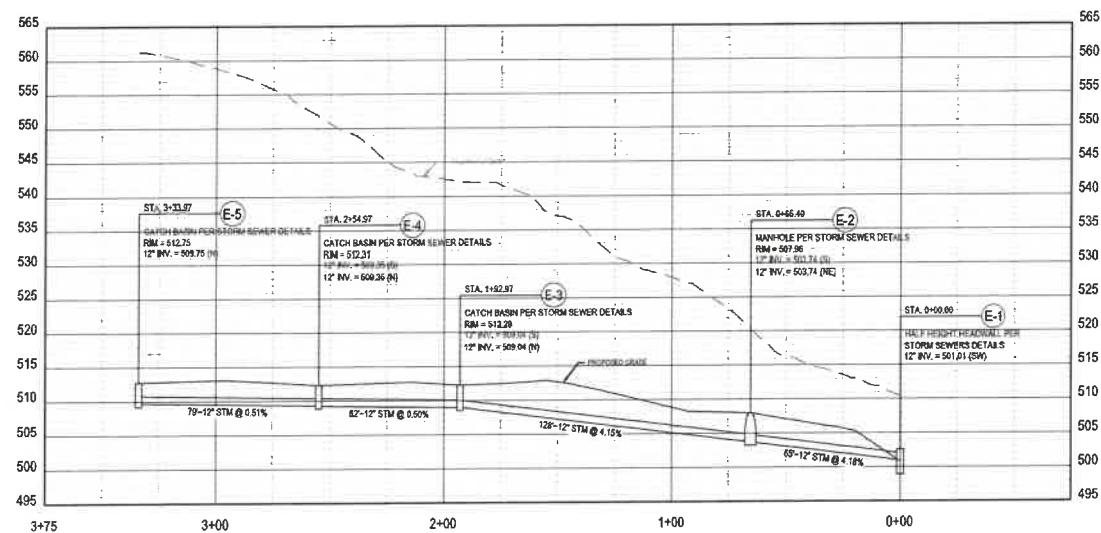
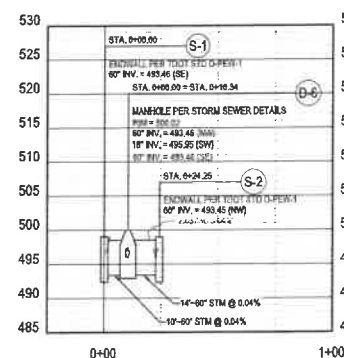
STORM D6 - D7 PROFILE
SCALE: 1" = 30' HORIZ.; 1" = 5' VERT.



STORM C1 - C8 PROFILE
SCALE: 1" = 30' HORIZ.; 1" = 5' VERT.

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1016 LOUISVILLE HWY (11W), GOODLETTSVILLE, TN 37072

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AL NEYER
LOUISVILLE HWY
INDUSTRIAL DEVELOPMENT

STORM SEWER PROFILES

ISSUE:
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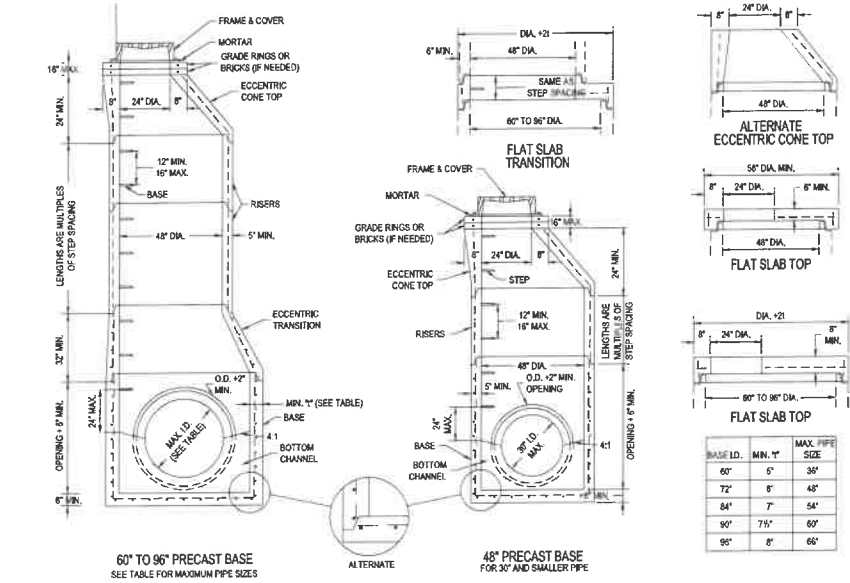
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SHEET NO.
C5.8



SEVENTY-TWO (72) HOURS BEFORE DIGGING IS TO COMMENCE. THE CONTRACTORS SHALL NOTIFY THE FOLLOWING AGENCIES TENNESSEE UTILITY PROTECTION SERVICE AT 811 OR 1-800-351-1111 AND ALL OTHER AGENCIES WHICH MIGHT HAVE UNDERGROUND UTILITIES INVOLVING THIS PROJECT AND ARE NONMEMBERS OF TENNESSEE UTILITY PROTECTION SERVICE.

- NOTES:**
- SECTIONS OF THE PRECAST MANHOLE SHALL BE CAST AND ASSEMBLED WITH EITHER ALL TONGUE OR ALL GROOVE ENDS UP, LIFT HOLES MAY BE PROVIDED IN EACH SECTION FOR HANDLING.
 - TOP AND TRANSITION (OR REDUCER) SECTIONS MAY BE EITHER ECCENTRIC CONE, CONCENTRIC CONE, OR FLAT SLAB.
 - BASES FOR MANHOLES ARE SHOWN WITH MONOLITHIC FLOOR AND RISER WHICH MAY BE CAST IN ONE OR TWO OPERATIONS. A PERMISSIBLE ALTERNATE IS TO CAST AND SHIP THE FLOOR AND BASE SEPARATELY, OPENINGS FOR INLET AND OUTLET PIPE SHALL BE PROVIDED EITHER WHEN THE UNIT IS CAST OR LATER, TO MEET PROJECT REQUIREMENTS. BOTTOM CHANNELS MAY BE FORMED OF CONCRETE PRECAST IN THE BASE OR BY FIELD CONSTRUCTION. BASES MAY ALSO BE POURED IN PLACE. ALL INLETS AND OUTLETS ARE TO BE IDENTIFIED.
 - OPENINGS IN RISE SECTION FOR 12" AND SMALLER INLET PIPES SHALL BE PREPARATED. FLEXIBLE CONNECTIONS SHALL BE PROVIDED FOR SANITARY AND COMBINED SEWERS.
 - JOINT SEAL BETWEEN PRECAST MANHOLE SECTIONS AND PIPES SHALL BE RESILIENT AND FLEXIBLE GASKET JOINTS PER ASTM C-923 OR LATEST EDITION.
 - DURING JOINT, BETWEEN MANHOLE SECTIONS SHALL BE FLEXIBLE BUTYL RUBBER SEAL PER ASTM C-995.
 - PRECAST MANHOLE SHALL CONFORM TO THE REQUIREMENTS OF ASTM C-478, CONCRETE SHALL BE 4000 PSI.
 - SEAL LIFT HOLES WITH NON-SHRINK GROUT.
 - FRAME AND COVER.
 1. FRAME WITH SOLID COVER USE EAST JORDAN 1710A, WITH APPROPRIATE LETTERING OR APPROVED OTHER.
 2. FRAME WITH GRATE USE EAST JORDAN 1710M OR APPROVED OTHER.



PRECAST CONCRETE MANHOLE
NTS

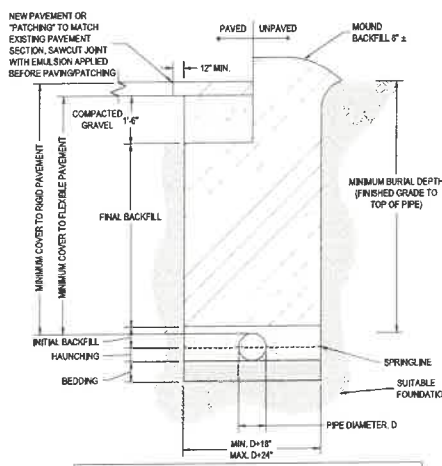


TABLE 1: BACKFILL AND EMBEDMENT MATERIALS

SOIL CLASSIFICATIONS (AS DEFINED IN ASTM D2487 AND D2321)

CLASS I	CRUSHED ROCK ANGULAR (CLEAN)
CLASS II	GRAVEL AND/OR SANDS, WITH LITTLE OR NO FINES
CLASS III	SAND/SILT AND SAND/CLAY MIXTURES
CLASS IV	INORGANIC CLAYS
CLASS V	ORGANIC SILTS, CLAYS, AND PEATS

SOIL CLASSIFICATIONS (AS DEFINED IN ASCE 15-86)

CATEGORY I	GRAVELLY SAND
CATEGORY II	SANDY SILT
CATEGORY III	SILTY CLAY

- NOTES:**
- IN THE CASE OF TRENCH BOTTOM BEING UNSTABLE, THE CONTRACTOR SHALL REPLACE FOUNDATION WITH SUITABLE MATERIAL AS SPECIFIED BY GEOTECHNICAL ENGINEER.
 - COMPACTION PERCENTAGES SPECIFIED REFER TO STANDARD PROCTOR PERCENT COMPACTION.
 - CONTRACTOR TO MAINTAIN DEWATERING IN TRENCHES DURING CONSTRUCTION.
 - TRENCHING OPERATIONS SHALL CONFORM TO ALL OSHA REQUIREMENTS.
 - FOR HDPE AND PVC WATER LINES AND LONG SEWER LATERALS, INSTALL METALLIC LOCATOR TAPE 12" (MIN) AND 18" (MAX) BELOW FINISHED SUBGRADE ELEVATION. INSTALL TRACER WIRE LOCATED AT THE TOP OF THE PIPE WITHIN THE INITIAL BACKFILL.

PVC PIPE

ZONE	DEPTH / SOIL MATERIAL
FINAL BACKFILL	CLASS 1A*
INITIAL BACKFILL	MINIMUM DEPTH = D/2 (12" COMMON)* CLASS I, II, AND III
HAUNCHING	DEPTH = D/2* CLASS I, II, AND III COMPACTED*
BEDDING	DEPTH = 4"*

NOTE: HAUNCHING ZONE MUST BE COMPACTED PRIOR TO PLACEMENT AND COMPACTION OF INITIAL AND FINAL BACKFILLS TO PREVENT PIPE DEFLECTION.

HDPE PIPE

ZONE	DEPTH / SOIL MATERIAL
FINAL BACKFILL	MINIMUM COVER UNPAVED AREAS = 12" MINIMUM COVER PAVED AREAS (D=48") = 12" MINIMUM COVER PAVED AREAS (D=48") = 24" CLASS I AND II (COMPACTED 90% SPD) AND CLASS III (COMPACTED 95% SPD)
INITIAL BACKFILL	MINIMUM DEPTH = D/2 (CAN EXTEND TO THE CROWN OF THE PIPE)* CLASS I, II, AND III (TYPE M CAN BE USED WITH THE APPROVAL OF GEOTECHNICAL ENGINEER)*
HAUNCHING	DEPTH = D/2* CLASS I, II, AND III (TYPE M CAN BE USED WITH THE APPROVAL OF GEOTECHNICAL ENGINEER)*
BEDDING	DEPTH (D ≤ 24") = 4" DEPTH (D > 24") = 6" CLASS I, II, AND III (TYPE M CAN BE USED WITH THE APPROVAL OF GEOTECHNICAL ENGINEER)*

NOTE: THE MIDDLE (BENEATH THE PIPE INVERT) IN THE BEDDING ZONE SHALL BE LOOSELY PLACED.

RC PIPE

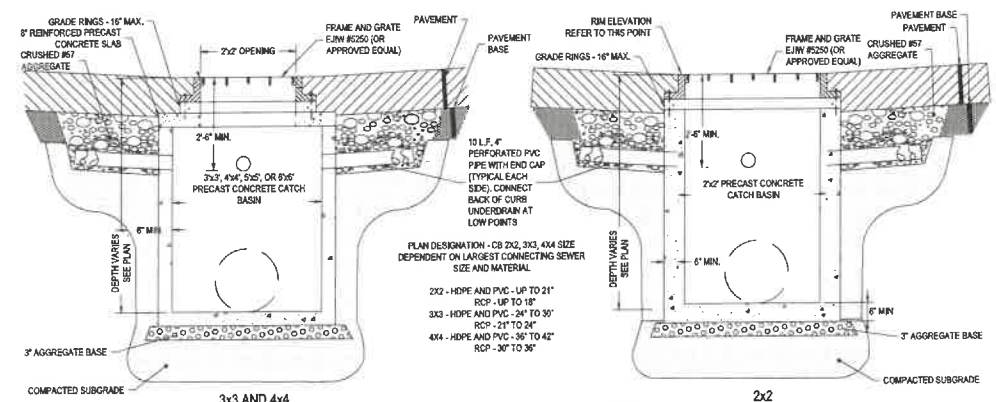
ZONE	DEPTH / SOIL MATERIAL
FINAL BACKFILL	CATEGORY I, II, III*
INITIAL BACKFILL	DEPTH = D/2* CATEGORY I (85-95% COMPACTION), CATEGORY II (90-95% COMPACTION), OR CATEGORY III (95-95% COMPACTION)*
HAUNCHING	DEPTH = D/2* CATEGORY I (85-95% COMPACTION), CATEGORY II (90-95% COMPACTION), OR CATEGORY III (95-95% COMPACTION)*
BEDDING	MINIMUM DEPTH = D/24 (NOT LESS THAN 3") IF ROCK FOUNDATION, MINIMUM DEPTH = D/12 (NOT LESS THAN 8") CATEGORY I (85-95% COMPACTION), CATEGORY II (90-95% COMPACTION), OR CATEGORY III (95-95% COMPACTION)*

NOTE: FOR ELLIPTICAL AND ARCH PIPE, D SHALL REPRESENT HORIZONTAL SPAN OF PIPE.

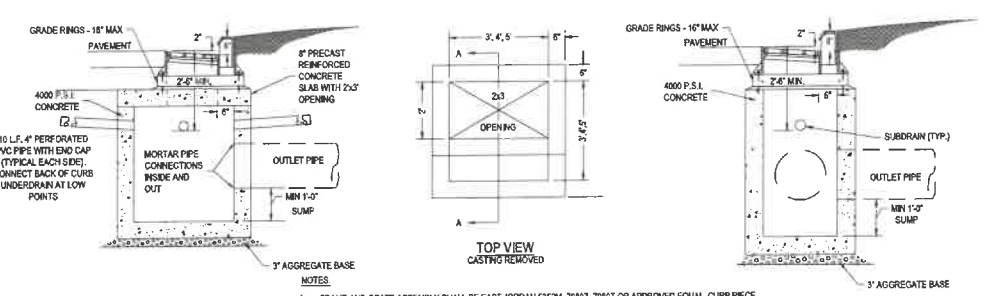
DI PIPE

ZONE	DEPTH / SOIL MATERIAL
FINAL BACKFILL	CLASS 1A*
INITIAL BACKFILL	DEPTH = D/2* CLASS I, II, AND III (APPROX. 90% STANDARD PROCTOR PER AASHTO T-99)*
HAUNCHING	DEPTH = D/2* CLASS I, II, AND III*
BEDDING	MINIMUM DEPTH = 4" CLASS I, II, AND III*

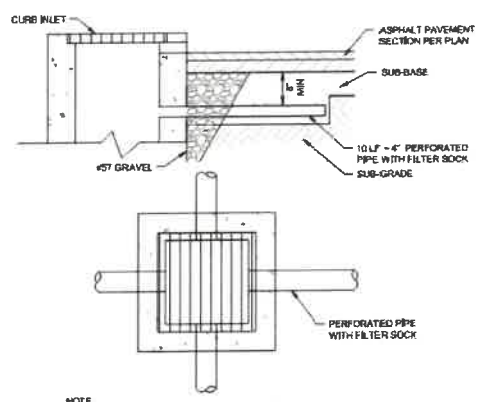
*SEE TABLE 1 FOR SPECIFICATIONS ON SOIL MATERIALS
** D = PIPE DIAMETER
*** MEASURED FROM TOP OF PIPE TO BOTTOM OF FLEXIBLE PAVEMENT OR TO TOP OF RIGID PAVEMENT.



PRECAST CATCH BASIN
NTS



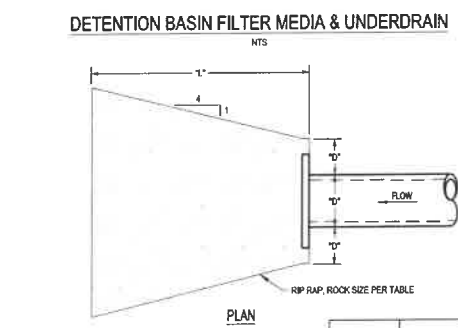
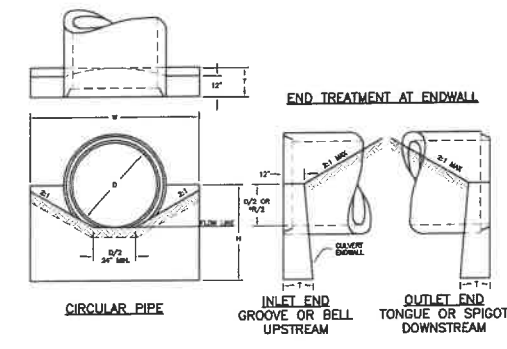
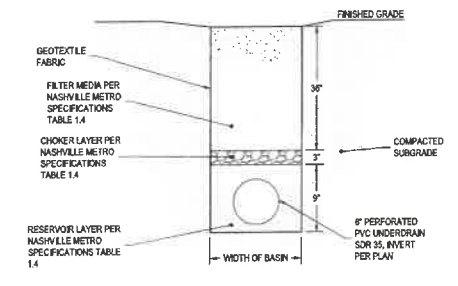
PRECAST CURB INLET
NTS



ENDWALL FOR CONCRETE PIPE

D	W	H	T	CONC. CU. YDS.
8"-12"	2'-0"	3'-0"	12"	.30
15"	2'-6"	3'-2"	12"	.35
18"	3'-0"	3'-5"	12"	.31
21"	3'-6"	3'-4"	12"	.37
24"	4'-0"	3'-8"	12"	.43
27"	4'-6"	3'-8"	12"	.48
30"	5'-0"	3'-8"	12"	.56
33"	5'-6"	3'-10"	12"	.62
36"	6'-0"	4'-0"	12"	.68

- NOTES:**
- CONCRETE SHALL BE CLASS "C".
 - SOIL MUST HAVE A BEARING CAPACITY OF 2500 PSF PRIOR TO PLACING HEADWALL.
 - DIMENSIONS AND QUANTITIES ARE SHOWN FOR CONCRETE SECTIONS ONLY. WHEN USED WITH OTHER PIPE MATERIALS IT WILL BE NECESSARY TO DETERMINE SUCH DIMENSIONS AND QUANTITIES.

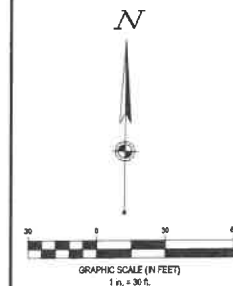
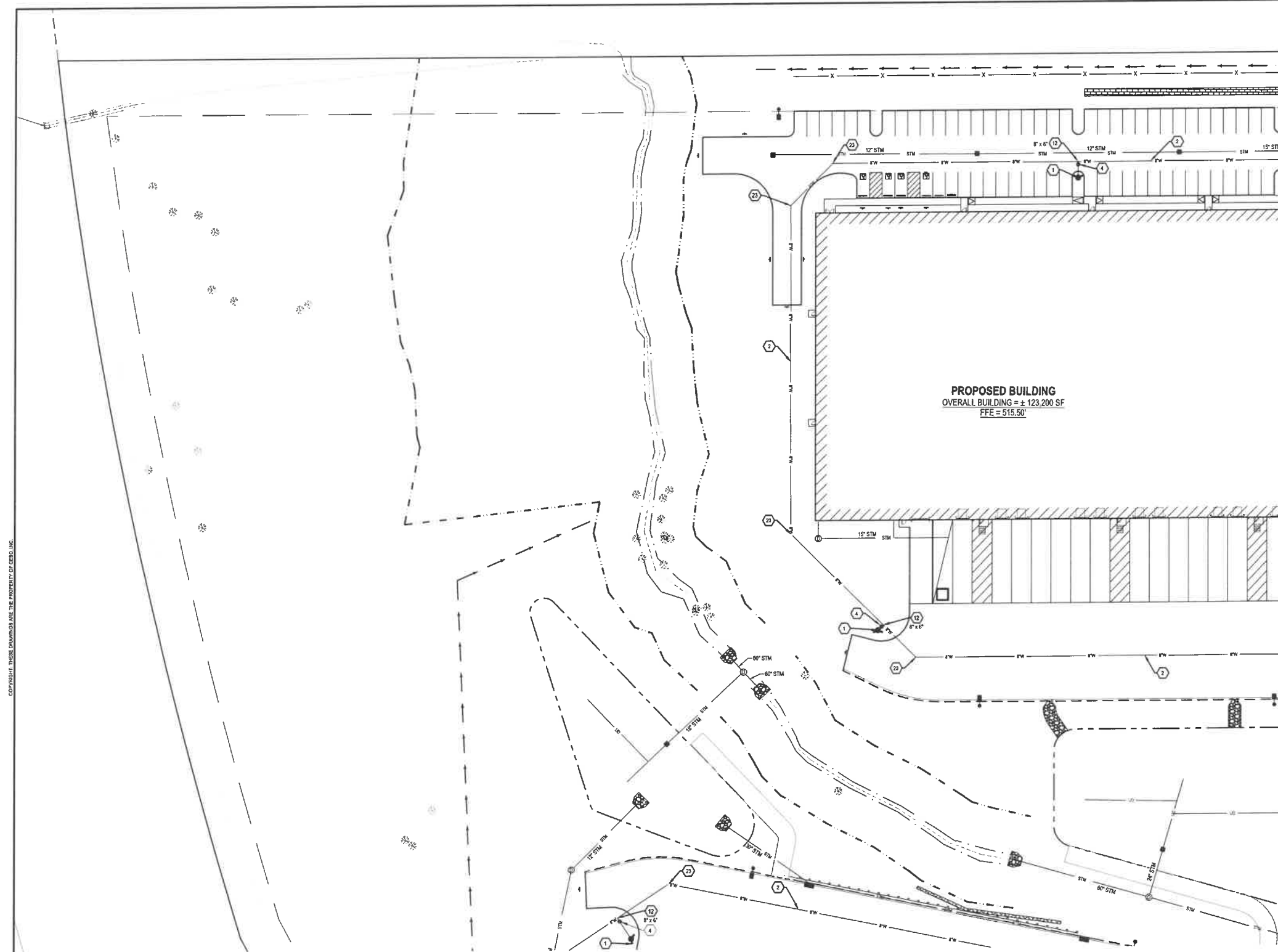


RIPRAP OUTLET DIMENSIONS

OUTFALL	L	D	ROCK SIZE	T
A-1	10'	18"	6"	18"
A-9	10'	12"	6"	18"
C-1	10'	18"	6"	18"
D-1	15'	30"	18"	36"
E-1	10'	12"	6"	18"
CURB CUT	PER PLAN	36"	12"	24"
S-1 - S-4	20'	60"	18"	48"



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SEVENTY-TWO (72) HOURS BEFORE DIGGING IS TO COMMENCE, THE CONTRACTORS SHALL NOTIFY THE FOLLOWING AGENCIES: TENNESSEE UTILITY PROTECTION SERVICE AT 811 OR 1-800-351-1111 AND ALL OTHER AGENCIES WHICH MIGHT HAVE UNDERGROUND UTILITIES INVOLVING THIS PROJECT AND ARE NONMEMBERS OF TENNESSEE UTILITY PROTECTION SERVICE.

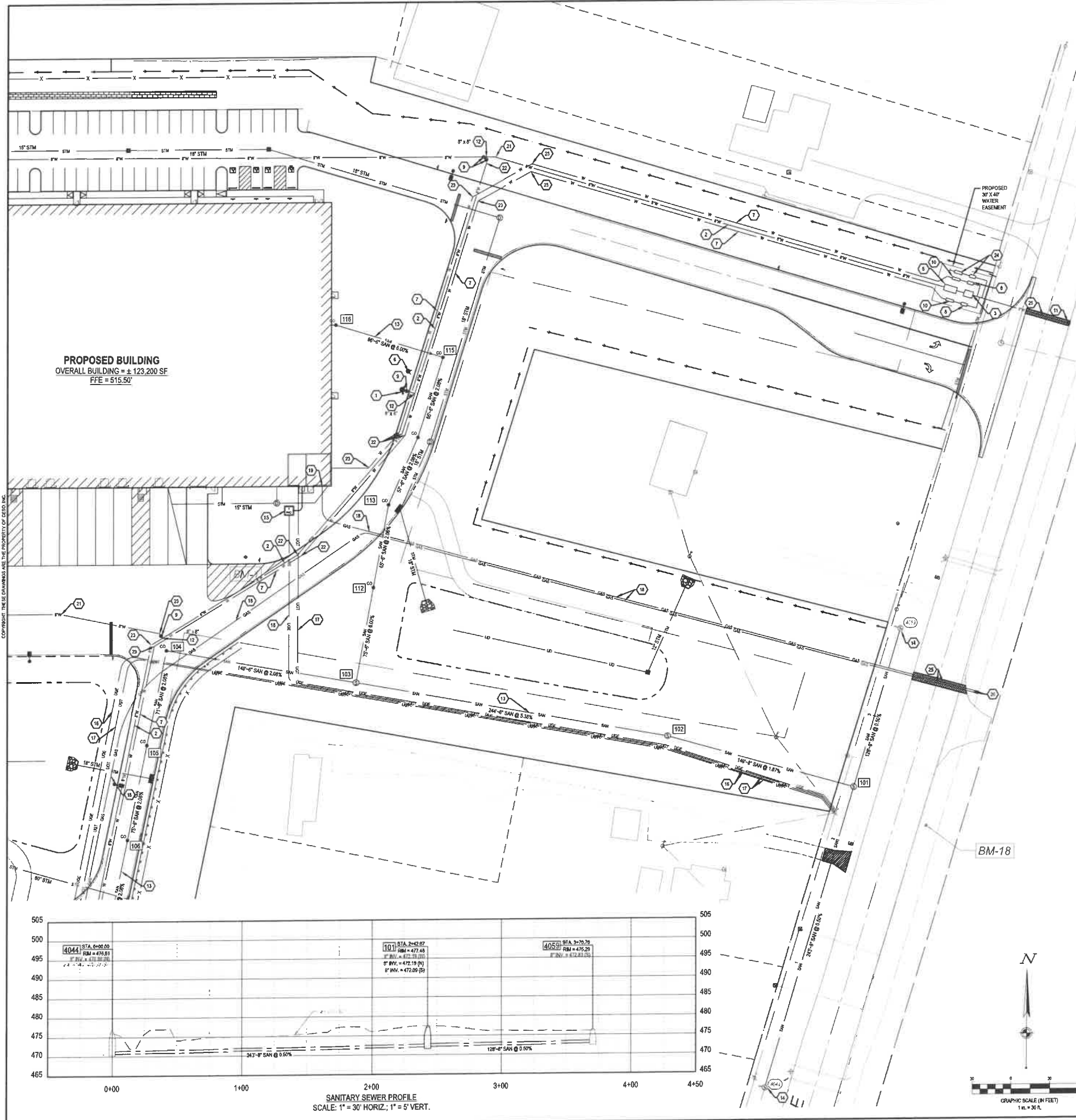
KEY MAP
SCALE: 1"=400'

<u>EXISTING</u>	
REFER TO C2.1 FOR EXISTING FEATURES LEGEND	
<u>PROPOSED</u>	
	BUILDING
	CONCRETE CURB
	PAVEMENT/PAV.
STM	STORM SEWER LINE
SAW	SANITARY SEWER LINE
W	DOMESTIC WATER SERVICE LINE
G	GAS SERVICE LINE
OE	OVERHEAD ELECTRIC LINE
USE	UNDERGROUND ELECTRIC LINE
UT	UNDERGROUND TELEPHONE LINE
OH	OVERHEAD TELEPHONE LINE
	CATCH BASIN
10	STORM SEWER
10	SANITARY SEWER
	CURB INLET
00	CLEANOUT
35	DOWNSPOUT
TD	AREA DRAIN
	HEADWALL
	ELECTRICAL TRANSFORMER PAD
	FIRE HYDRANT
	WATER VALVE
	WATER METER
	FIRE DEPARTMENT CORRECTION
	REPLACE PAVEMENT IN KIND



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INDUSTRIAL DEVELOPMENT

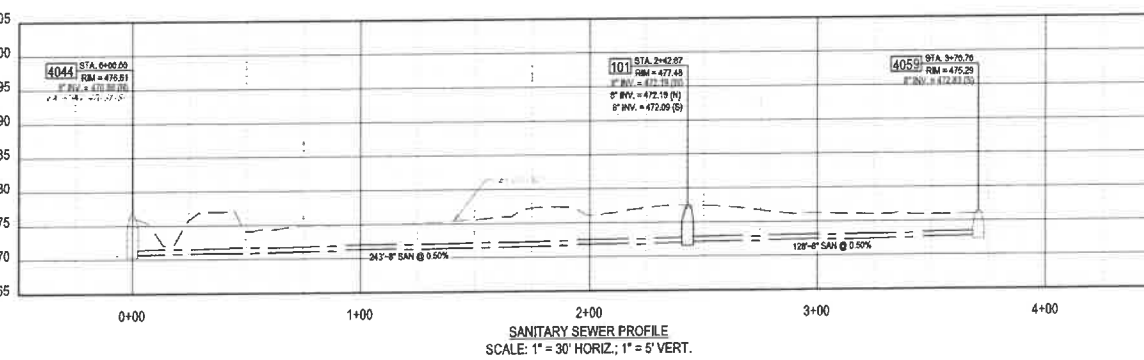
UTILITY PLAN



PROPOSED BUILDING
OVERALL BUILDING = ± 123,200 SF
FFE = 515.50'

SANITARY SEWER STRUCTURE SCHEDULE			
NO.	STRUCTURE	RIM	INVERT
101	48" MI PER GOODLETTSVILLE STANDARDS	477.48	472.19 (7' W) 472.19 (7' N) 472.09 (7' S)
102	48" MI PER GOODLETTSVILLE STANDARDS	488.82	475.09 (7' W) 474.98 (7' N) 474.98 (7' S)
103	48" MI PER GOODLETTSVILLE STANDARDS	495.29	486.40 (7' W) 486.06 (7' N) 486.24 (7' S)
104	6" CLEANOUT	509.33	481.49 (7' S)
106	6" CLEANOUT	507.25	492.06 (7' S) 492.06 (7' N)
106	6" CLEANOUT	507.73	494.52 (7' S) 494.52 (7' N)
112	6" CLEANOUT	499.89	483.16 (7' N) 483.16 (7' S)
113	6" CLEANOUT	500.10	494.51 (7' NE) 494.51 (7' S)
114	6" CLEANOUT	500.72	495.88 (7' N) 495.88 (7' SW)
115	6" CLEANOUT	501.88	487.04 (7' W) 487.04 (7' S)
116	6" CLEANOUT	515.43	502.23 (7' W) 502.23 (7' E)

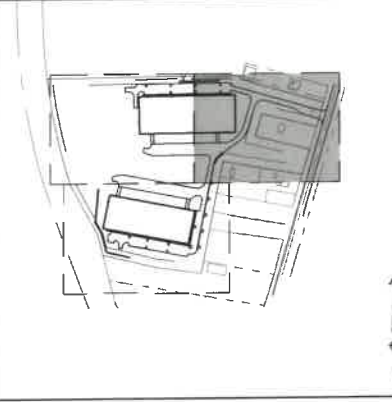
SANITARY SEWER PIPE TABLE				
PIPE NAME	DIAMETER	LENGTH	SLOPE	MATERIAL
P-101	8"	243'	0.50%	PVC
P-102	8"	149'	1.87%	PVC
P-103	8"	244'	5.38%	PVC
P-104	8"	149'	2.08%	PVC
P-105	8"	71'	2.08%	PVC
P-106	8"	75'	2.08%	PVC
P-107	8"	75'	2.08%	PVC
P-112	8"	75'	6.00%	PVC
P-113	8"	65'	2.08%	PVC
P-114	8"	57'	2.08%	PVC
P-115	8"	65'	2.08%	PVC
P-116	8"	86'	6.00%	PVC
P-4059	8"	128'	0.50%	PVC



SANITARY SEWER PROFILE
SCALE: 1" = 30' HORIZ.; 1" = 5' VERT.



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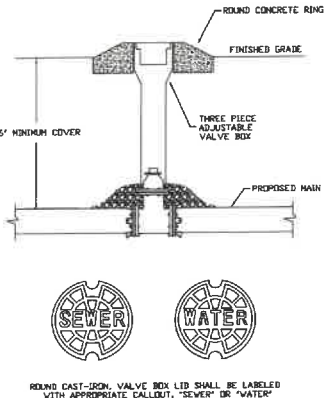


KEY MAP
SCALE: 1" = 400'

- UTILITY LEGEND
- EXISTING
REFER TO C2.1 FOR EXISTING FEATURES LEGEND
- PROPOSED
- BUILDING
 - CONCRETE CURB
 - PAYMENT WALK
 - STORM SEWER LINE
 - SANITARY SEWER LINE
 - DOMESTIC WATER SERVICE LINE
 - GAS SERVICE LINE
 - OVERHEAD ELECTRIC LINE
 - UNDERGROUND ELECTRIC LINE
 - UNDERGROUND TELEPHONE LINE
 - OVERHEAD TELEPHONE LINE
 - CATCH BASIN
 - STORM SEWER
 - SANITARY SEWER
 - CURB INLET
 - CLEANOUT
 - DOWNSPOUT
 - AREA DRAIN
 - HEADWALL
 - ELECTRICAL TRANSFORMER PAD
 - FIRE HYDRANT
 - WATER VALVE
 - WATER METER
 - FIRE DEPARTMENT CONNECTION
 - REPLACE PAVEMENT IN KIND

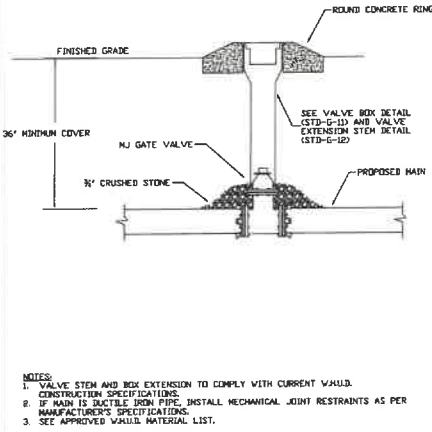
- CODED NOTES:
- PROPOSED FIRE HYDRANT, MATERIALS AND INSTALLATION PER WHITE HOUSE UTILITY DISTRICT (WHUD) REQUIREMENTS, REFER TO UTILITY DETAILS.
 - PROPOSED 12" FIRE WATER SERVICE, SERVICE TO BE DUCTILE IRON FROM THE MAIN TO THE METER AND 8" DUCTILE IRON FROM THE METER TO THE BUILDING. FIRE LINE SIZE TO BE COORDINATED WITH FIRE PREVENTION CONSULTANT, INSTALLATION PER WHUD REQUIREMENTS.
 - PROPOSED 12" FIRE WATER METER PROVIDED BY CONTRACTOR, REFER TO UTILITY DETAILS.
 - PROPOSED 8" GATE VALVE WITH VALVE BOX, REFER TO UTILITY DETAILS.
 - PROPOSED 12" BACKFLOW PREVENTER & ELECTRICAL SERVICE TO REDUCED PRESSURE BACKFLOW PREVENTER, PROVIDED BY CONTRACTOR, REFER TO UTILITY DETAILS.
 - PROPOSED FIRE DEPARTMENT CONNECTION, REFER TO PLUMBING PLANS, COORDINATE WITH FIRE PREVENTION CONSULTANT FOR SPECIFIC SITE LOCATION AND CONNECTION INTO BUILDING.
 - PROPOSED 2" DOMESTIC WATER SERVICE, SERVICE TO BE TYPE K COPPER FROM THE MAIN TO THE METER AND SCHEDULE 40 PVC FROM THE METER TO THE BUILDING. MATERIALS AND INSTALLATION PER WHUD REQUIREMENTS.
 - PROPOSED 2" DOMESTIC WATER METER, PROVIDED BY CONTRACTOR, REFER TO UTILITY DETAILS.
 - PROPOSED 8" GATE VALVE WITH VALVE BOX, REFER TO UTILITY DETAILS.
 - PROPOSED 12" BACKFLOW PREVENTER & ELECTRICAL SERVICE TO REDUCED PRESSURE BACKFLOW PREVENTER, PROVIDED BY CONTRACTOR, REFER TO UTILITY DETAILS.
 - CONTRACTOR TO INSTALL TAPPING SADDLE, THREADED GATE VALVE, WET TAP TO BE COMPLETED BY WHUD APPROVED CONTRACTOR.
 - PROPOSED TEE, SEE PLAN FOR SIDE.
 - PROPOSED SANITARY SERVICE PER CITY OF GOODLETTSVILLE STANDARDS, CONTRACTOR SHALL PROVIDE ALL NECESSARY FITTINGS FOR SERVICE CONNECTION.
 - PROPOSED TIE INTO EXISTING SANITARY SEWER STRUCTURE, MODIFY STRUCTURE AS NECESSARY FOR PROPOSED SEWER LINE, PER CITY OF GOODLETTSVILLE STANDARDS AND SPECIFICATIONS.
 - PROPOSED ELECTRICAL TRANSFORMER, CONTRACTOR SHALL COORDINATE WITH CUMBERLAND ELECTRIC MEMBERSHIP CORPORATION (CEMC).
 - PROPOSED ELECTRICAL SERVICE, CONTRACTOR SHALL COORDINATE WITH CEMC.
 - PROPOSED DATA SERVICE, CONTRACTOR SHALL COORDINATE WITH UTILITY PROVIDER.
 - PROPOSED GAS SERVICE.
 - PROPOSED GAS METER.
 - PROPOSED TIE INTO EXISTING GAS MAIN, CONTRACTOR TO COORDINATE WITH PREMMONT GAS COMPANY.
 - PROPOSED 11.25' BEND.
 - PROPOSED 22.5' BEND.
 - PROPOSED 45' BEND.
 - PROPOSED IRRIGATION METER AND BACKFLOW PREVENTER WITH ELECTRICAL SERVICE TO REDUCED PRESSURE BACKFLOW PREVENTER, REFER TO UTILITY DETAILS, SIZE TO BE DETERMINED BY CONTRACTOR.
 - OPEN OUT ROAD FOR UTILITY INSTALLATION, CONTRACTOR TO COORDINATE WITH TxDOT AND CITY FOR ROAD CLOSURES, REPLACE PAVEMENT IN KIND.





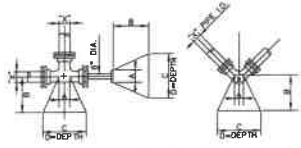
- NOTES:
1. EXTENSION STEMS ARE REQUIRED IF BURY DEPTH FROM VALVE OPERATING HUT TO FINISHED GRADE IS GREATER THAN 40" (SEE STD-G-12).
 2. SEE APPROVED VALUJL MATERIALS LIST.

White House Utility District	WHITE HOUSE UTILITY DISTRICT	DATE : AUG 2008 SCALE : N.T.S.
	VALVE BOX DETAIL	STD-G-11

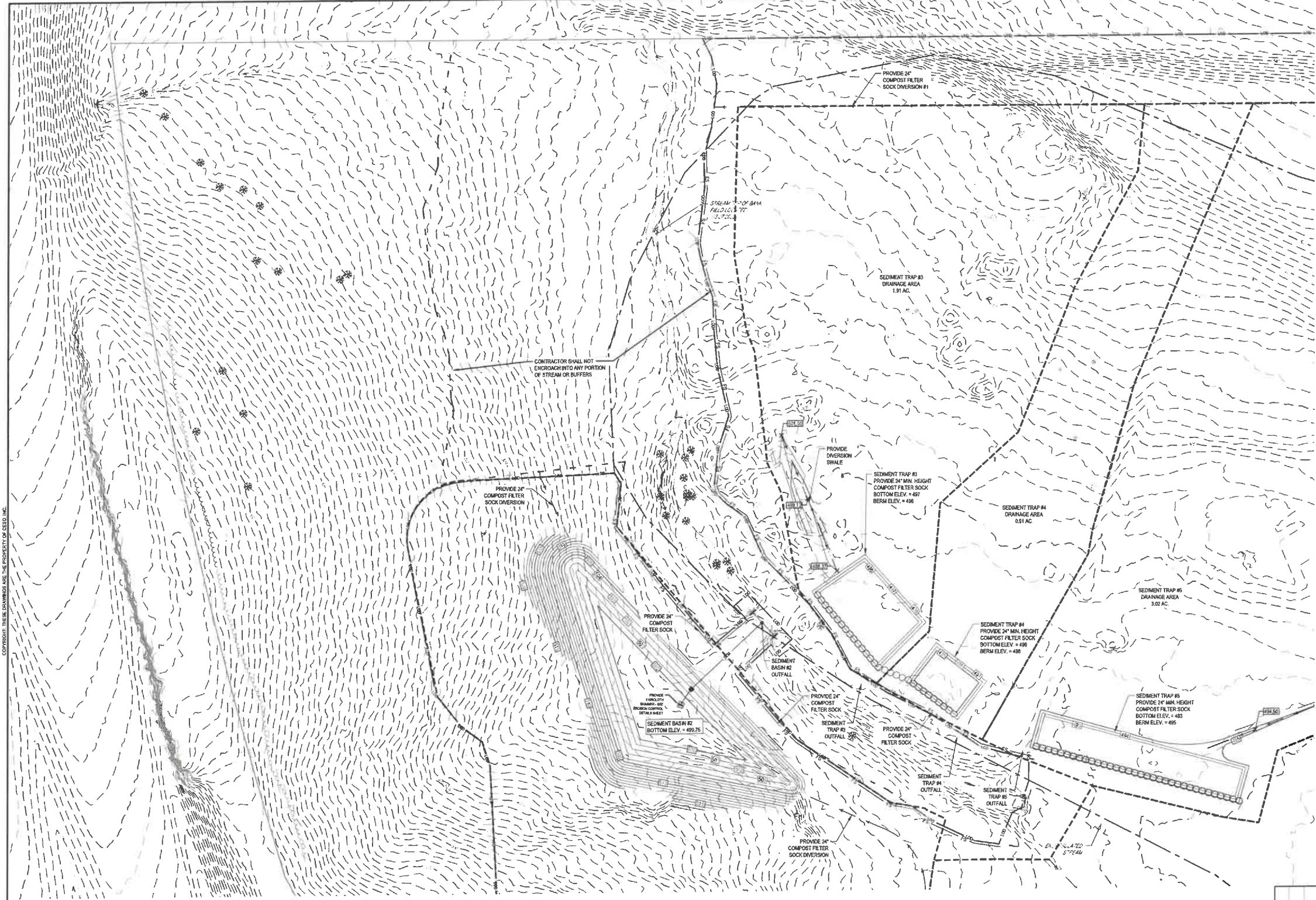


- NOTES:
1. VALVE STEM AND BOX EXTENSION TO COMPLY WITH CURRENT VALUJL CONSTRUCTION SPECIFICATIONS.
 2. IF MAIN IS DUCTILE IRON PIPE, INSTALL MECHANICAL JOINT RESTRAINTS AS PER MANUFACTURERS SPECIFICATIONS.
 3. SEE APPROVED VALUJL MATERIALS LIST.

White House Utility District	WHITE HOUSE UTILITY DISTRICT	DATE : AUG 2008 SCALE : N.T.S.
	GATE VALVE INSTALLATION DETAIL	STD-G-10

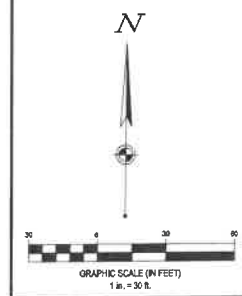


BLOCKING DIMENSIONS					
HEAD END & TEES	X IN	A	B	C	
		D			
1/2" 20# 4"	10"	1'-0"	2'-6"	4'-0"	2'-6"
	12"	1'-0"	2'-6"	3'-3"	2'-6"
	14"	1'-0"	3'-0"	3'-3"	2'-6"
	16"	1'-0"	3'-6"	2'-6"	1'-6"
	18"	1'-0"	3'-6"	2'-6"	1'-6"
	20"	1'-0"	3'-6"	2'-6"	1'-6"
	22"	1'-0"	3'-6"	2'-6"	1'-6"
	24"	1'-0"	3'-6"	2'-6"	1'-6"
	26"	1'-0"	3'-6"	2'-6"	1'-6"
	28"	1'-0"	3'-6"	2'-6"	1'-6"
	30"	1'-0"	3'-6"	2'-6"	1'-6"
	32"	1'-0"	3'-6"	2'-6"	1'-6"
1/2" 20# 4"	10"	1'-0"	1'-9"	3'-3"	2'-6"
	12"	1'-0"	1'-6"	2'-6"	1'-6"
	14"	1'-0"	1'-3"	2'-0"	1'-6"
	16"	1'-0"	1'-4"	2'-6"	1'-6"
	18"	1'-0"	1'-0"	2'-6"	1'-6"
	20"	1'-0"	0'-9"	1'-6"	1'-6"
	22"	1'-0"	0'-6"	1'-6"	1'-6"
	24"	1'-0"	0'-6"	1'-4"	1'-6"
	26"	1'-0"	0'-6"	1'-4"	1'-6"
	28"	1'-0"	0'-6"	1'-4"	1'-6"
	30"	1'-0"	0'-6"	1'-4"	1'-6"
	32"	1'-0"	0'-6"	1'-4"	1'-6"

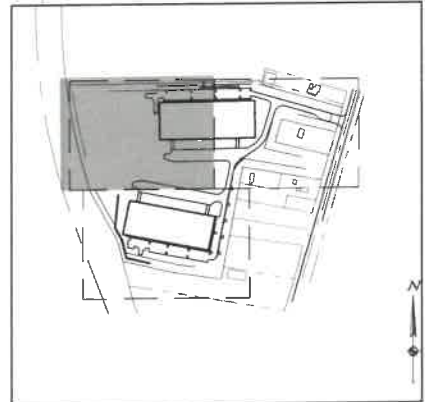


E&S LEGEND	
EXISTING	
REFER TO TOPOGRAPHIC SURVEY	
PROPOSED	
	MAJOR CONTOUR
	MINOR CONTOUR
	COMPOST FILTER SOCK
	SUPER SILT FENCE
	COMPOST SOCK SEDIMENT TRAP
	COMPOST FILTER SOCK DIVERSION
	LIMIT OF DISTURBANCE
	SOIL BOUNDARY
	DRAINAGE AREA BOUNDARY
	UNDERDRAIN
	SOIL IDENTIFIER
	PERMANENT EROSION CONTROL BLANKET ON ALL 3:1 SLOPES OR STEEPER
	STABILIZED CONSTRUCTION ENTRANCE
	RIPPRAP
	STORAGE AREA
	BASIN SEDIMENT FILTER
	STORM MANHOLE
	CATCH BASIN
	CURB INLET
	STABILIZED CONSTRUCTION ENTRANCE
	CONCRETE WASHOUT AREA
	INLET PROTECTION
	ROCK CHECK DAM

A QUALIFIED PROFESSIONAL MUST BE ON SITE FOR ALL CRITICAL STAGE DEVELOPMENT. CRITICAL STAGES INCLUDE ALL BMP INSTALLATIONS. REFER TO THE CONSTRUCTION SEQUENCE FOR ADDITIONAL DETAILS.



SEVENTY-TWO (72) HOURS BEFORE DIGGING IS TO COMMENCE, THE CONTRACTORS SHALL NOTIFY THE FOLLOWING AGENCIES: TENNESSEE UTILITY PROTECTION SERVICE AT 811 OR 1-800-961-1111 AND ALL OTHER AGENCIES WHICH MIGHT HAVE UNDERGROUND UTILITIES INVOLVING THIS PROJECT AND ARE MEMBERS OF TENNESSEE UTILITY PROTECTION SERVICE.



KEY MAP
SCALE: 1"=400'



REVISION DESCRIPTION	
NO.	DATE



AL NEYER
LOUISVILLE HWY
INDUSTRIAL DEVELOPMENT

EROSION & SEDIMENT CONTROL
PHASE 1

ISSUE:	PERMIT SET
DATE:	10.21.2022
JOB NO.:	780071
DESIGN:	NAL
DRAWN:	NAL
CHECKED:	JTK

SHEET NO.
C7.0

\\CESO\LOCAL\ROOT\DATA\PROJECTS\AL NEYER\780071 - GOODLETTSVILLE TNS\CD\11\PLANNING\CD-1\PHASE 1 E&S PLANDWG - 10/21/2022 10:06 AM



NO. DATE



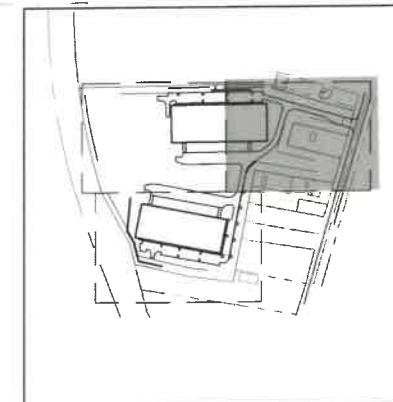
AL NEYER
LOUISVILLE HWY
INDUSTRIAL DEVELOPMENT

EROSION &
SEDIMENT
CONTROL
PHASE 1

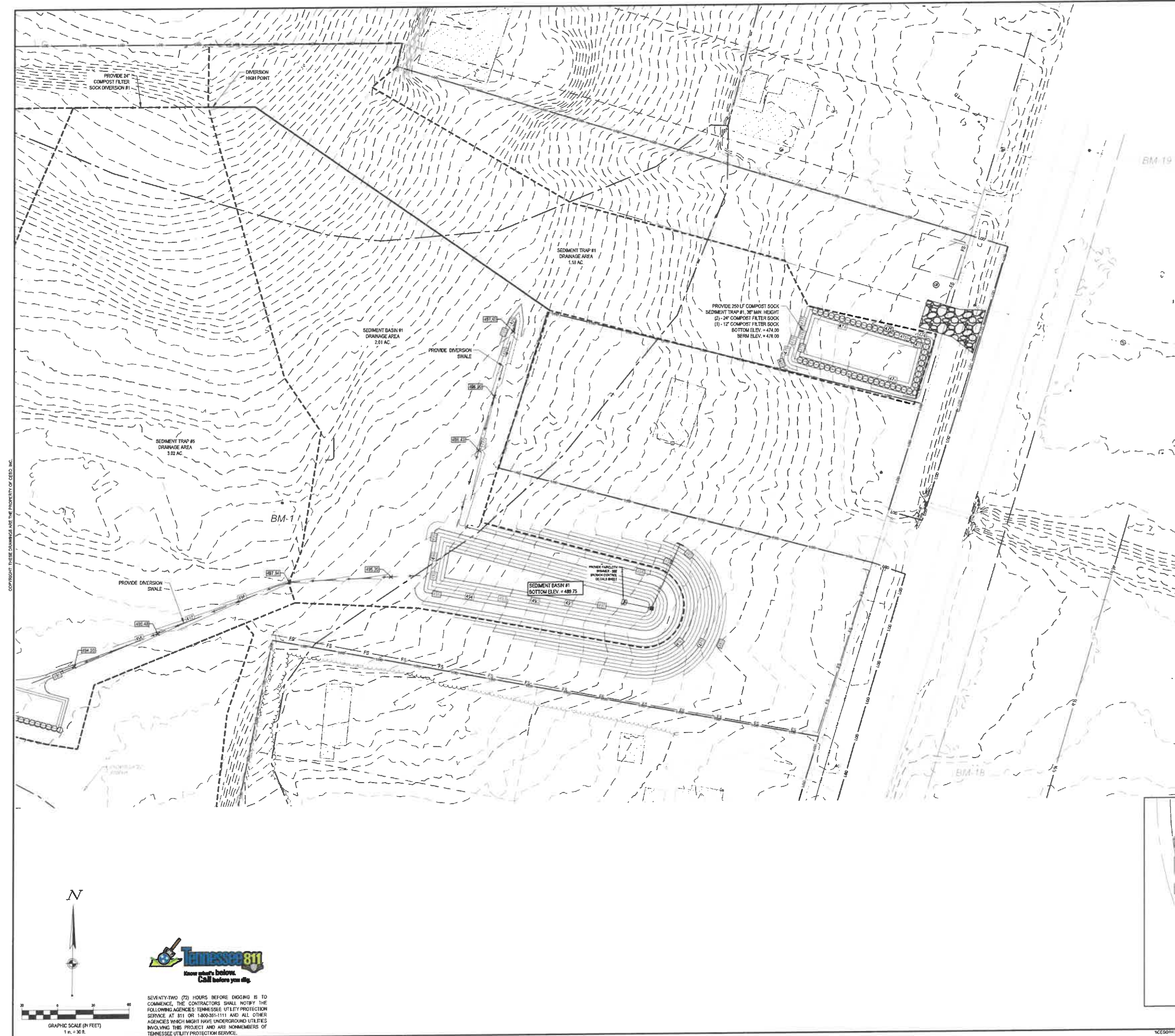
ISSUE:
PERMIT SET
DATE:
10.21.2022
JOB NO.: 750671
DESIGN: NAL
DRAWN: NAL
CHECKED: JTK
SHEET NO.
C7.1

- E&S LEGEND**
- EXISTING**
REFER TO TOPOGRAPHIC SURVEY
- PROPOSED**
- MAJOR CONTOUR
 - MINOR CONTOUR
 - COMPOST FILTER SOCK
 - SUPER SILT FENCE
 - COMPOST SOCK SEDIMENT TRAP
 - COMPOST FILTER SOCK DIVERSION
 - LIMIT OF DISTURBANCE
 - SOIL BOUNDARY
 - DRAINAGE AREA BOUNDARY
 - UNDERDRAIN
 - SOIL IDENTIFIER
 - PERMANENT EROSION CONTROL BLANKET ON ALL 3:1 SLOPES OR STEEPER
 - STABILIZED CONSTRUCTION ENTRANCE
 - RIPRAP
 - STORAGE AREA
 - BASED SEDIMENT FILTER
 - STORM MANHOLE
 - CATCH BASIN
 - CURB INLET
 - STABILIZED CONSTRUCTION ENTRANCE
 - CONCRETE WASHOUT AREA
 - INLET PROTECTION
 - ROCK CHECK DAM

A QUALIFIED PROFESSIONAL MUST BE ON SITE FOR ALL CRITICAL STAGE DEVELOPMENT. CRITICAL STAGES INCLUDE ALL BMP INSTALLATIONS. REFER TO THE CONSTRUCTION SEQUENCE FOR ADDITIONAL DETAILS.



KEY MAP
SCALE: 1"=400'

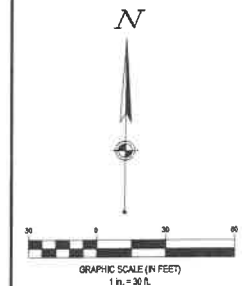
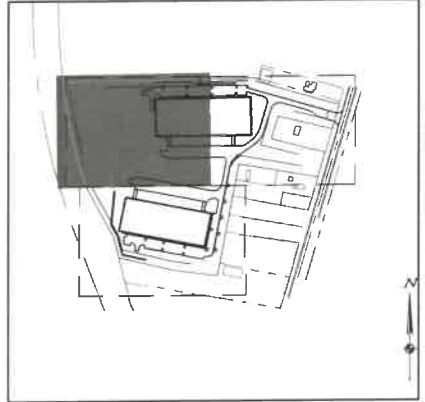


SEVENTY-TWO (72) HOURS BEFORE DIGGING IS TO COMMENCE, THE CONTRACTORS SHALL NOTIFY THE FOLLOWING AGENCIES: TENNESSEE UTILITY PROTECTION SERVICE AT 811 OR 1-800-351-1111 AND ALL OTHER AGENCIES WHICH MIGHT HAVE UNDERGROUND UTILITIES INVOLVING THIS PROJECT AND ARE MEMBERS OF TENNESSEE UTILITY PROTECTION SERVICE.

\\CESO\H:\LOCAL\DATA\PROJECTS\AL NEYER\750671 - GOODLETTSVILLE TNS-CIVIL\PLANS\FIG 7.5 - PHASE 1 E&S PLAN.DWG - 10/21/2022 10:08 AM



- E&S LEGEND**
- EXISTING**
REFER TO TOPOGRAPHIC SURVEY
- PROPOSED**
- MAJOR CONTOUR
 - MINOR CONTOUR
 - SILT FENCE
 - SUPER SILT FENCE
 - COMPOST SOCK SEDIMENT TRAP
 - COMPOST FILTER SOCK DIVERSION
 - LIMIT OF DISTURBANCE
 - SOIL BOUNDARY
 - TEMPORARY STOCKPILE LIMITS
 - UNDERDRAIN
 - SOIL IDENTIFIER
 - PERMANENT EROSION CONTROL BLANKET ON ALL 3:1 SLOPES OR STEEPER
 - STABILIZED CONSTRUCTION ENTRANCE
 - RSR/FRAP
 - CHANNEL MATTING (HA GREEN C125B)
 - STORAGE AREA
 - SEDIMENT FILTER
 - STORM MANHOLE
 - CATCH BASIN
 - CURB INLET
 - STABILIZED CONSTRUCTION ENTRANCE
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 - INLET PROTECTION
 - ROCK CHECK DAM



SEVENTY-TWO (72) HOURS BEFORE DIGGING IS TO COMMENCE, THE CONTRACTORS SHALL NOTIFY THE FOLLOWING AGENCIES: TENNESSEE UTILITY PROTECTION SERVICE AT 811 OR 1-800-361-1111 AND ALL OTHER AGENCIES WHICH MIGHT HAVE UNDERGROUND UTILITIES INVOLVING THIS PROJECT AND ARE NONMEMBERS OF TENNESSEE UTILITY PROTECTION SERVICE.



NO.	DATE	REVISION DESCRIPTION



AL NEYER
LOUISVILLE HWY
INDUSTRIAL DEVELOPMENT

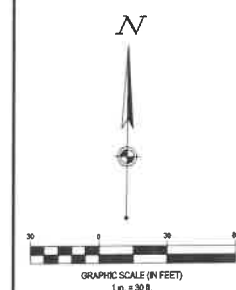
EROSION & SEDIMENT CONTROL PHASE 2

ISSUE: PERMIT SET
DATE: 10/21/2022

JOB NO.: 760071
DESIGN: NAL
DRAWN: NAL
CHECKED: JTK

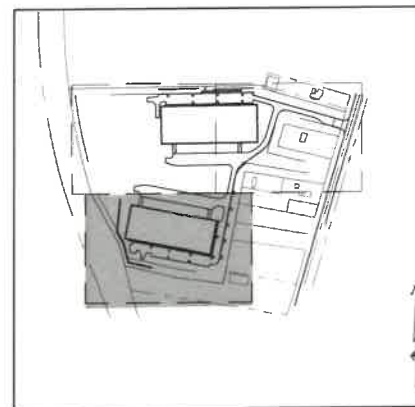
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\\CESO\LOCAL\PROJECTS\AL NEYER\760071 - GOODLETTSVILLE TNS-3-CIVIL\PLANS\07C7.3 - PHASE 2 E&S PLAN.DWG - 10/21/2022 10:07 AM



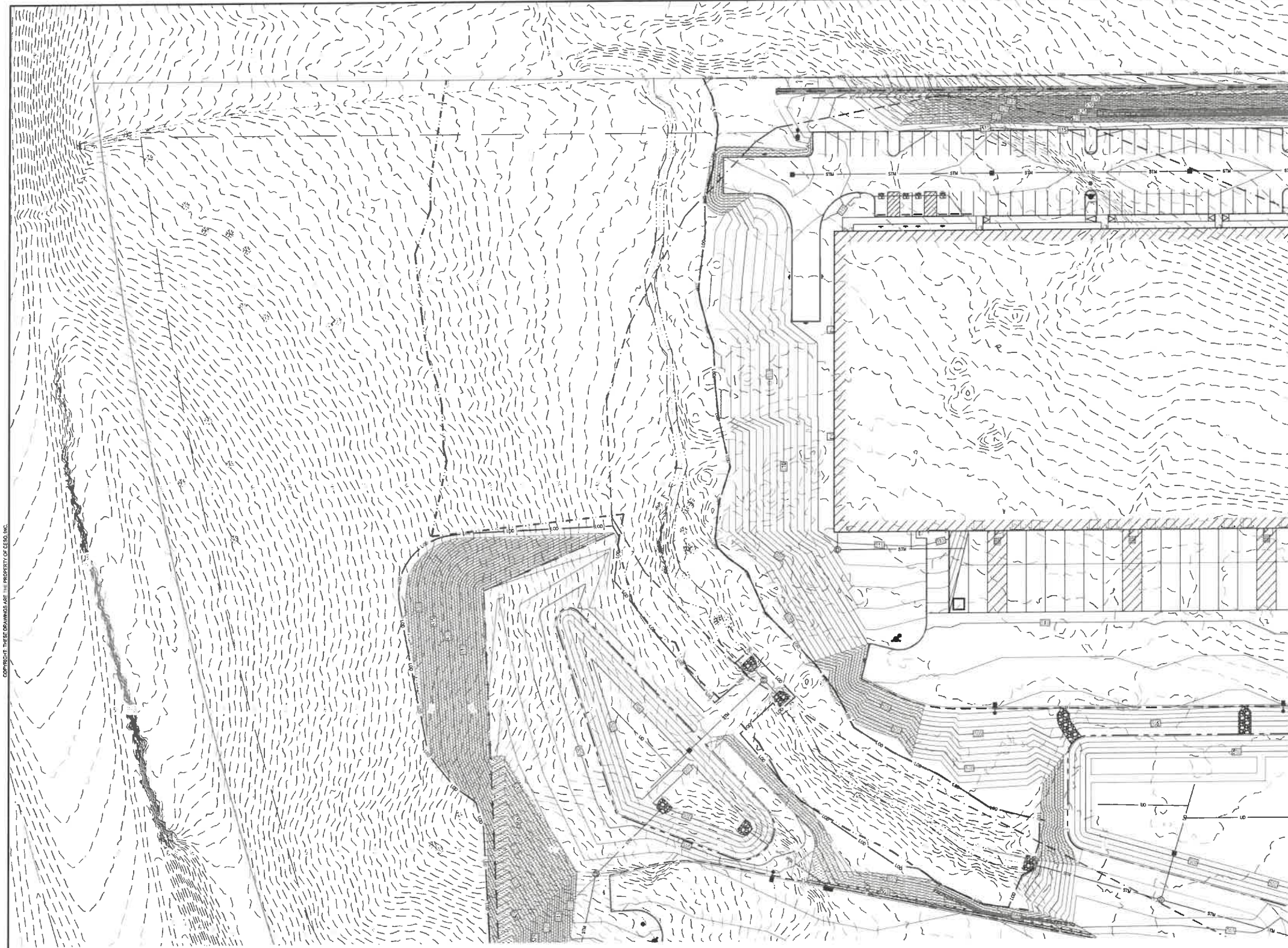
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REFER TO TOPOGRAPHIC SURVEY	
<u>PROPOSED</u>	
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	MINOR CONTOUR
	SILT FENCE
	SUPER SILT FENCE
	COMPOST SOCK SEDIMENT TRAP
	COMPOST FILTER SOCK DIMENSION
	LIMIT OF DISTURBANCE
	SOIL BOUNDARY
	TEMPORARY STOCKPILE LIMITS
	UNDERDRAIN
	SOIL IDENTIFIER
	PERMANENT EROSION CONTROL BLANKET ON ALL 3:1 SLOPES OR STEEPER
	STABILIZED CONSTRUCTION ENTRANCE
	PRPRAP
	CHANNEL MATTING (A GREEN C125B)
	STORAGE AREA
	BASIN SEDIMENT FILTER
	STORM MANHOLE
	CATCH BASIN
	CURB INLET
	STABILIZED CONSTRUCTION ENTRANCE
	CONCRETE WASHOUT AREA
	INLET PROTECTION
	ROCK CHECK DAM

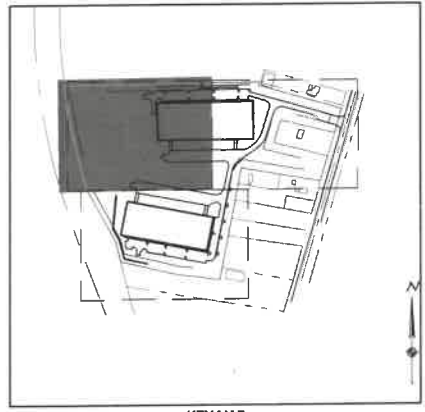
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AL NEYER
LOUISVILLE HWY
INDUSTRIAL DEVELOPMENT

EROSION &
SEDIMENT
CONTROL
PHASE 2



- E&S LEGEND**
- EXISTING**
REFER TO TOPOGRAPHIC SURVEY
- PROPOSED**
- MAJOR CONTOUR
 - MINOR CONTOUR
 - SILT FENCE
 - SUPER SALT FENCE
 - COMPOST SOCK SEDIMENT TRAP
 - COMPOST FILTER SOCK DIVERSION
 - LIMIT OF DISTURBANCE
 - SOIL BOUNDARY
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 - UNDERDRAIN
 - SOIL IDENTIFIER
 - PERMANENT EROSION CONTROL BLANKET ON ALL 3:1 SLOPES OR STEEPER
 - STABILIZED CONSTRUCTION ENTRANCE
 - RIPRAP
 - CHANNEL MATTING (NA GREEN C125BN)
 - STORAGE AREA
 - BASIN SEDIMENT FILTER
 - STORM MANHOLE
 - CATCH BASIN
 - CURB INLET
 - STABILIZED CONSTRUCTION ENTRANCE
 - CONCRETE WASHOUT AREA
 - INLET PROTECTION
 - ROCK CHECK DAM



KEY MAP
SCALE: 1"=400'



NO.	DATE	REVISION DESCRIPTION



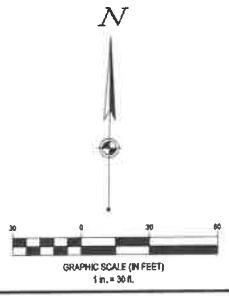
AL NEYER
LOUISVILLE HWY
INDUSTRIAL DEVELOPMENT

EROSION &
SEDIMENT
CONTROL
PHASE 3

ISSUE:	PERMIT SET
DATE:	10.21.2022
JOB NO.:	780071
DESIGN:	NAL
DRAWN:	NAL
CHECKED:	JTK
SHEET NO.:	C7.6



SEVENTY-TWO (72) HOURS BEFORE DIGGING IS TO COMMENCE, THE CONTRACTORS SHALL NOTIFY THE FOLLOWING AGENCIES: TENNESSEE UTILITY PROTECTION SERVICE AT 811 OR 1-800-351-1111 AND ALL OTHER AGENCIES WHICH MIGHT HAVE UNDERGROUND UTILITIES INVOLVING THIS PROJECT AND ARE NONMEMBERS OF TENNESSEE UTILITY PROTECTION SERVICE.



\\CESO\LOCAL\ROOT\DATA\PROJECTS\AL NEYER\780071 - GOODLETTSVILLE TMS-CIVIL\PLAN\LOT1-C7.6 - PHASE III E&S PLAN.DWG - 10/21/2022 10:08 AM

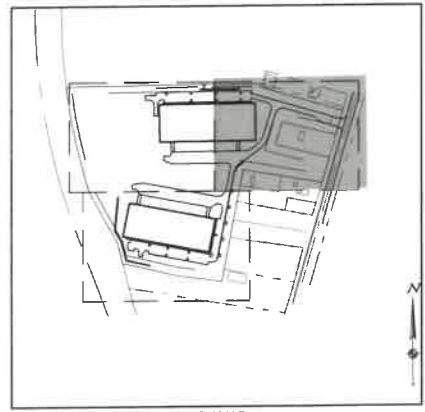


AL NEYER
LOUISVILLE HWY
INDUSTRIAL DEVELOPMENT

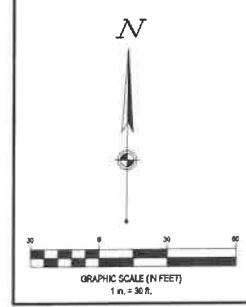
EROSION & SEDIMENT CONTROL PHASE 3	
ISSUE:	PERMIT SET
DATE:	10/21/2022
JOB NO.:	789071
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SHEET NO. C7.7	



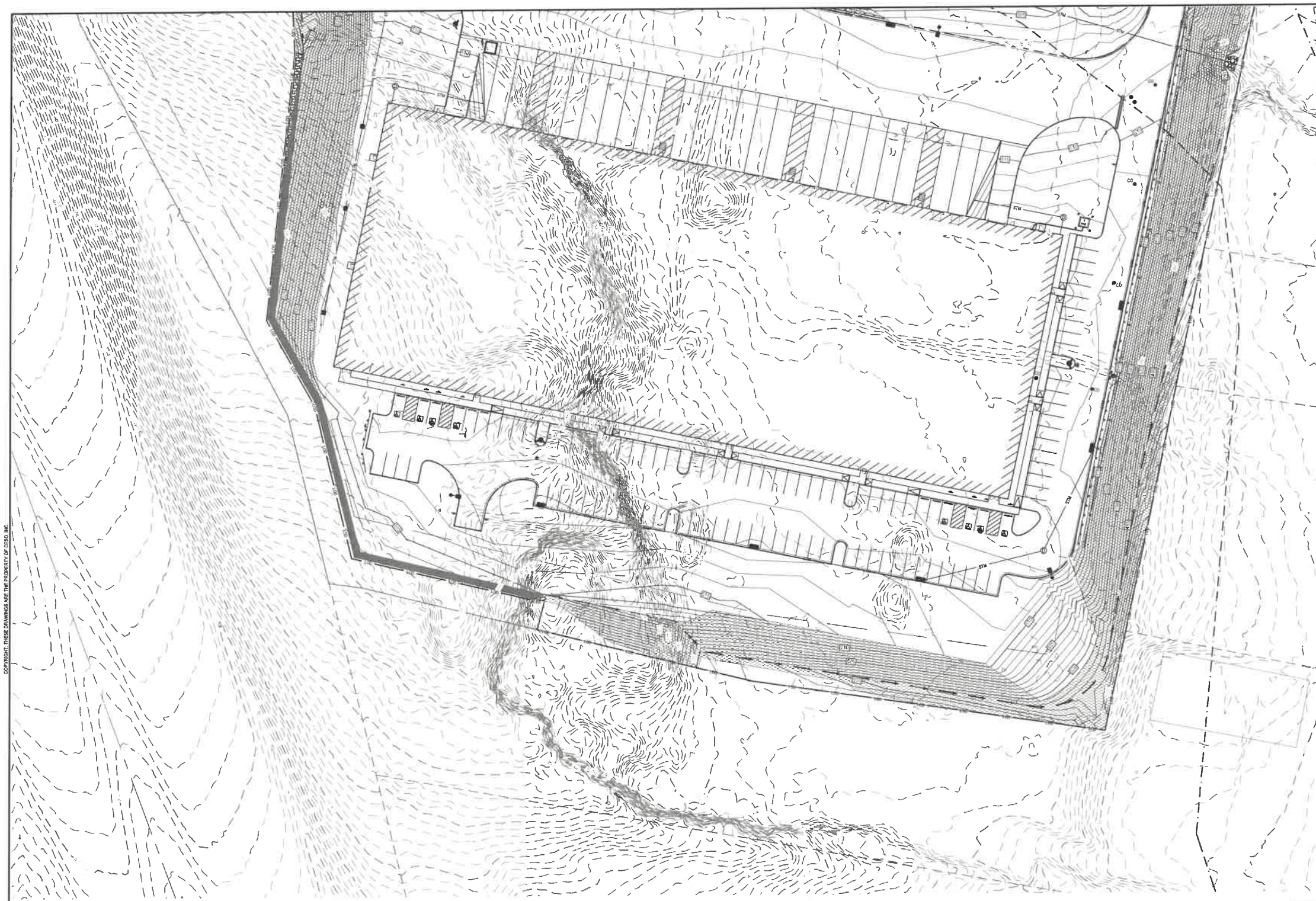
- E&S LEGEND**
- EXISTING**
REFER TO TOPOGRAPHIC SURVEY
- PROPOSED**
- MAJOR CONTOUR
 - MINOR CONTOUR
 - SILT FENCE
 - SUPER SILT FENCE
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 - LIMIT OF DISTURBANCE
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 - SOIL IDENTIFIER
 - PERMANENT EROSION CONTROL BLANKET ON ALL 3:1 SLOPES OR STEEPER
 - STABILIZED CONSTRUCTION ENTRANCE
 - RETRAP
 - CHANNEL MATTING (NA GREEN C125BN)
 - STORAGE AREA
 - BASIN SEDIMENT FILTER
 - STORM MANHOLE
 - CATCH BASIN
 - CURB INLET
 - STABILIZED CONSTRUCTION ENTRANCE
 - CONCRETE WASHOUT AREA
 - INLET PROTECTION
 - ROCK CHECK DAM



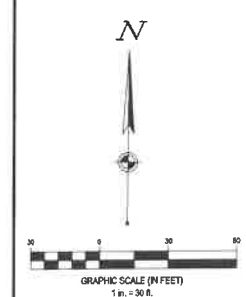
KEY MAP
SCALE: 1"=400'



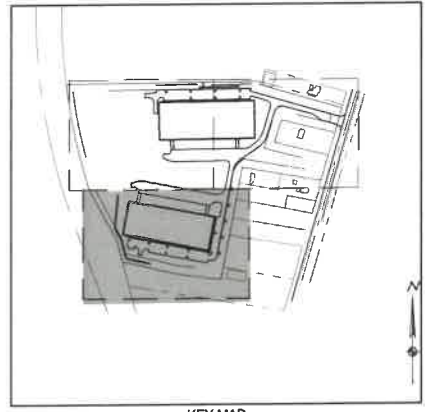
SEVENTY-TWO (72) HOURS BEFORE DIGGING IS TO COMMENCE, THE CONTRACTORS SHALL NOTIFY THE FOLLOWING AGENCIES: TENNESSEE UTILITY PROTECTION SERVICE AT 811 OR 1-800-381-1111 AND ALL OTHER AGENCIES WHICH MIGHT HAVE UNDERGROUND UTILITIES INVOLVING THIS PROJECT AND ARE MEMBERS OF TENNESSEE UTILITY PROTECTION SERVICE.



E&S LEGEND	
EXISTING	
REFER TO TOPOGRAPHIC SURVEY	
PROPOSED	
	MAJOR CONTOUR
	MINOR CONTOUR
	SILT FENCE
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	COMPOST SOCK SEDIMENT TRAP
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	PERMANENT EROSION CONTROL BLANKET ON ALL 3:1 SLOPES OR STEEPER
	STABILIZED CONSTRUCTION ENTRANCE
	RIPPRAP
	CHANNEL MATTING (NA GREEN C128H)
	STORAGE AREA
	BASIN SEDIMENT FILTER
	STORM MANHOLE
	CATCH BASIN
	CURB INLET
	STABILIZED CONSTRUCTION ENTRANCE
	CONCRETE WASHOUT AREA
	INLET PROTECTION
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SEVENTY-TWO (72) HOURS BEFORE DIGGING IS TO COMMENCE, THE CONTRACTORS SHALL NOTIFY THE FOLLOWING AGENCIES: TENNESSEE UTILITY PROTECTION SERVICE AT 811 OR 1-800-851-1111 AND ALL OTHER AGENCIES WHICH MIGHT HAVE UNDERGROUND UTILITIES INVOLVING THIS PROJECT AND ARE NONMEMBERS OF TENNESSEE UTILITY PROTECTION SERVICE.



KEY MAP
SCALE: 1"=400'



REVISION DESCRIPTION	
NO.	DATE



AL NEYER
LOUISVILLE HWY
INDUSTRIAL DEVELOPMENT

EROSION & SEDIMENT CONTROL PHASE 3	
ISSUE:	PERMIT SET
DATE:	10.21.2022
JOB NO.:	750071
DESIGN:	NAL
DRAWN:	NAL
CHECKED:	JTK
SHEET NO. C7.8	

\\CESO\PROJECTS\LOCAL\ROOT\DATA\PROJECTS\AL NEYER\750071 - GOODLETTSVILLE THRU-CITY\PLAN\LOT\7.8 - PHASE III E&S PLAN.DWG - 10/21/2022 10:08 AM



LOUISVILLE HWY
INDUSTRIAL DEVELOPMENT

EROSION & SEDIMENT CONTROL GENERAL NOTES

SHEET NO
C7.9



THE PROPOSED PROJECT IS THE CONSTRUCTION OF TWO WAREHOUSE BUILDINGS WITH ASSOCIATED TRUCK DOCKS, TRAILER PARKING, ASSOCIATE PARKING, A FULL COMPLEMENT OF UTILITIES, AND THREE DRY EXTENDED DETENTION BASINS. THE SUBJECT PARCEL IS 26.53 ACRES. THE TOTAL DISTURBED AREA IS 21.40 ACRES.

THE SITE DRAINS TO SLATERS CREEK.

ON-SITE SOILS:	Hr9	0.36%
	MmC2	32.59%
	MmD2	59.05%
HYDROLOGIC SOIL GROUP =	B (Hr9)	
	C (MmC2 & MmD2)	

THE EXISTING CONDITIONS ON-SITE IS COMMERCIAL BUSINESS WITH OPEN STORAGE AND BUILDINGS ON GRAVEL. SITE CONTAINS A STREAM, ROCK OUTCROPPINGS, AND SHORT GRASS.

SEQUENCE OF CONSTRUCTION

1. NOTIFY ALL APPROPRIATE PARTIES, INCLUDING THE CITY OF GOOULETTSVILLE ENGINEER, BEFORE WORK IS TO BEGIN.
2. INSTALL PHASE I TEMPORARY EROSION CONTROL MEASURES INCLUDING CONSTRUCTION ENTRANCE, FILTER SOCKS, SEDIMENT TRAPS, SEDIMENT BASINS, ETC. AS DEPICTED IN THE PHASE I EAS PLANS.
3. BEGIN SITE DEMOLITION AND CLEARING.
4. CONSTRUCT THE SHEER ROCK WALL AND BEGIN ROUGH GRADINGS. PROVIDE TEMPORARY SEEDING OF DISTURBED AREAS WHICH ARE INACTIVE.
5. INSTALL REMAINING EAS CONTROLS AS DEPICTED IN THE PHASE II EAS PLANS, INCLUDING INLET PROTECTION FOR PROPOSED STORM STRUCTURES.
6. STORM SEWER AND UNDERGROUND UTILITY CONSTRUCTION.
7. BUILDING PAD.
8. CURB CONSTRUCTION.
9. FINE GRADING AND PAVEMENT SUBGRADE PREPARATION
10. ASPHALT PAVING AND REMAINING CONCRETE FLATWORK.
11. CONVERT TEMPORARY SEDIMENT BASINS TO PERMANENT BMP FACILITIES AS DEPICTED IN THE GRADING PLANS.
12. FINAL SEEDING.

* CONTRACTOR SHALL MODIFY THE SEQUENCE OF CONSTRUCTION BASED ON SITE CONDITIONS. CONTRACTOR TO NOTIFY PROJECT MANAGER PRIOR TO CHANGING SEQUENCE OF CONSTRUCTION

INSTRUCTIONS TO CONVERT SEDIMENT BASIN INTO DETENTION BASIN

1. DEWATER BASIN, UTILIZING THE PUMPED WATER FILTER BAG.
2. REMOVE SKIMMER AND CLEAN OUT THE INLET PIPE AND RISER TO REMOVE ANY ACCUMULATED SEDIMENTS.
3. EXCAVATE MICROPOOL, AND ANY OTHER ACCUMULATED SEDIMENTS TO FINAL BASIN ELEVATION. SPREAD EXCAVATED MATERIAL THROUGHOUT THE SIFT.
4. INSTALL UNDERDRAIN.
5. STABILIZE BASIN.

E&S GENERAL NOTES

1. ALL EROSION AND SEDIMENTATION CONTROL SHALL BE PERFORMED ACCORDING TO EROSION & SEDIMENT CONTROL AND DETAIL PLANS; ACCORDING TO THE LATEST EPA AUTHORIZATION FOR CONSTRUCTION ACTIVITY UNDER THE CLEAN WATER ACT, THE LATEST EPCRA AUTHORIZATION FOR AIR POLLUTION ACTIVITY, AND ALL REQUIRED PERMITS, REPORTS, AND RELATED DOCUMENTS. ALL CONTRACTORS AND SUBCONTRACTORS MUST BECOME FAMILIAR WITH ALL OF THE ABOVE.
2. THE CONTRACTOR SHALL IMPLEMENT BEST MANAGEMENT PRACTICES (BMPs) AS REQUIRED BY THE EROSION AND SEDIMENTATION CONTROL PLAN. ADDITIONAL BEST MANAGEMENT PRACTICES SHALL BE IMPLEMENTED AS DICTATED BY CONDITIONS AND REQUIRED CHANGES TO THE SITE AT AN ADDITIONAL COST TO OWNER THROUGHOUT ALL PHASES OF CONSTRUCTION.
3. CONTRACTOR SHALL MINIMIZE CLEARING AND DISTURBANCE TO THE ENVIRONMENT TO THE MAXIMUM EXTENT POSSIBLE AND AS REQUIRED BY THE GENERAL PERMIT.
4. SEDIMENT CONTROL AND PERMEABLE SEGMENT BARRIERS SHALL BE IMPLEMENTED AS THE FIRST STEP OF GRADING PRIOR TO THE START OF CLEARING AND GRUBBING, AND SHALL CONTINUE TO FUNCTION UNTIL THE SLOPE DEVELOPMENT AREA IS REVEGETATED.
5. STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS POSSIBLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED. TEMPORARY OR PERMANENT SLOPE STABILIZATION AT THE CONSTRUCTION SITE (OR A PHASE OF THE PROJECT) MUST BE COMPLETED IMMEDIATELY AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED. IN THE FOLLOWING SITUATIONS, TEMPORARY STABILIZATION MEASURES ARE NOT REQUIRED:
 - A) WHERE THE INITIATION OF STABILIZATION MEASURES IS PRECLUDED BY SNOW COVER OR FROZEN GROUND CONDITIONS OR ADVERSE SOOQ OR CONSTRUCTION SITUATIONS. STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE. OR
 - B) WHERE CONSTRUCTION ACTIVITY ON A PORTION OF THE SITE IS TEMPORARILY CEASED, AND EARTH DISTURBING ACTIVITIES WILL BE RESUMED WITHIN 14 DAYS.
6. STEEP SLOPES SHALL BE TEMPORARILY STABILIZED NOT LATER THAN 21 DAYS AFTER CONSTRUCTION ACTIVITY ON THE SLOPE HAS TEMPORARILY OR PERMANENTLY CEASED.
7. PERMANENT STABILIZATION WITH PERENNIAL VEGETATION (USING NATIVE HERBACEOUS AND WOODY PLANTS WHERE PRACTICABLE) (OR OTHER PERMANENTLY STABLE, NONERODING SURFACE PLANT SPECIES) SHALL REPLACE ANY TEMPORARILY STABILIZED AREAS AS SOON AS PRACTICABLE. UNPAVED AREAS SHALL CONTAIN GRASS AND/OR MULCH AND/OR LAY SLIP-RESISTING SEEDINGS) OR CRUSHER RUNS WILL NOT BE CONSIDERED A NON-ERODING SURFACE.
8. TEMPORARY SEEDING, MULCHING, AND FERTILIZER SPECIFICATIONS:

SEEDING ANNUAL RYEGRASS AT 2.22 POUNDS PER 1,000 S.F.

MULCHING: STRAW MATERIAL SHALL BE UNFROTTED SMALL GRAIN STRAW APPLIED AT A RATE OF TWO (2) TONNAGE, OR 80-100 POUNDS PER 1,000 S.F. MULCH MATERIALS SHALL BE RELATIVELY FREE OF ALL KINDS OF WEEDS AND SHALL BE FREE OF ALL UNDESIRABLE AND PROPERLY DISPOSED OFF SITE WHEN THEY ARE APPLIED. MULCHING SHALL BE APPLIED AS SOON AS PRACTICABLE. FROM NOVEMBER 31 THRU MARCH 15 INCREASE THE RATE OF STRAW MULCH TO THREE (3) TONNAGE

FERTILIZER: APPLY FERTILIZER AT HALF THE RATE OF PERMANENT APPLICATION AND AS PER TPOD SPECIFICATIONS. IF PROJECT CONDITIONS PREVENT FERTILIZING THE SLOPE, THEN THIS ITEM MAY BE WAIVED.
9. SLOPES SHALL BE LEFT IN A ROUGHENED CONDITION DURING THE GRADING PHASE TO REDUCE RUNOFF VELOCITIES AND EROSION. ALL SLOPES 3:1 OR GREATER THAN 3:1 SHALL BE FERTILIZED, SEEDED, AND COVERED IMMEDIATELY WITH AMERICAN EXCELSIOR COMPANY, NORTH AMERICAN GROUND, INC. OR AN APPROVED EQUAL, AS SPECIFIED IN THE CONTRACT. MULCH OR SOIL SHOULD BE COVERED IMMEDIATELY AFTER FERTILIZING. WITHIN ONE WEEK AFTER CONSTRUCTION ACTIVITY ON THE SLOPE HAS TEMPORARILY OR PERMANENTLY CEASED.
10. NO SOLID (OTHER THAN NON-SEDIMENT) OR LIQUID WASTE, INCLUDING BUILDING MATERIALS, SHALL BE DISCHARGED IN STORM WATER RUNOFF. ALL SOLID OR LIQUID POLLUTANTS MUST BE DISPOSED OF IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL GUIDELINES. WASH OUT OF DIRT OR OTHER TRUCKS SHOULD OCCUR IN DESIGNATED PIT AREAS. WASHING AREAS SHALL BE MAINTAINED AND PROPERLY DISPOSED OFF SITE WHEN THEY ARE USED. HARDEN, STORAGE TANKS, SHOULDER, ARE ALSO WASHED OUT OF DIRT OR OTHER TRUCKS. IN ADDITION, SUFFICIENT OIL AND GREASE ABSORBING MATERIALS AND FLOTATION BOOMS TO CLEAN AND CATCH FUEL AND CHEMICAL SPILLS MUST BE KEPT ON SITE.
11. IF THE ACTION OF VEHICLES TRAVELING OVER THE STABILIZED CONSTRUCTION ERT DOES NOT SUFFICIENTLY REMOVE MOST OF THE DIRT AND MOIL, THEN THE TIMES MAY BE WAIVED IFOR VEHICLES ENTER A PUBLIC ROAD. PROVISIONS MUST BE MADE TO INTERCEPT THE WASH AND TRAP THE SEDIMENT BEFORE IT IS CARRIED OFF THE SITE.
12. RUBBISH TRASH, GARBAGE LITTER, OR OTHER SUCH MATERIALS SHALL BE DISPOSED INTO SEALED CONTAINERS. MATERIALS SHALL BE PREVENTED FROM LEAVING THE SITE THROUGH THE ACTION OF WIND OR STORM WATER DISCHARGE INTO DRAINAGE DITCHES OR WATERS OF THE STATE.
13. DUST CONTROL USING APPROVED MATERIALS MUST BE PERFORMED AT ALL TIMES. THE USE OF MOTOR OILS AND OTHER PETROLEUM BASED OR TOXIC LIQUIDS FOR DUST SUPPRESSION IS PROHIBITED.
14. ON-SITE AND OFF-SITE STOCKPILE OR BORROW AREAS SHALL BE PROTECTED FROM EROSION AND SEDIMENTATION BY THE USE OF BEST MANAGEMENT PRACTICES. THESE AREAS MUST BE SHOWN IN THE SITE PLAN AND PERMITTED IN ACCORDANCE WITH GENERAL PERMIT REQUIREMENTS. AT A MINIMUM, SLIP FENCE TO BE PLACED AT PERIMETER OF STOCKPILE AREA TO PREVENT SOIL FROM LEAVING THE STOCKPILE AREA.
15. ALL MATERIALS SPILLED, DROPPED, WASHED, OR TRACKED OFF THE ROADWAYS OR INTO THE STORM SEWERS MUST BE REMOVED IMMEDIATELY.
16. ALL CONSTRUCTION SHALL BE STABILIZED AT THE END OF EACH DAY; THIS INCLUDES BACKFILLING OF TRENCHES FOR UTILITY CONSTRUCTION AND PLACEMENT OF GRAVEL OR ASPHALT FOR ROAD CONSTRUCTION.
17. THE LAST LAYER OF SOIL, INCLUDING TOP SOIL, SHOULD BE COMPACTED TO 90% - 95% OF THE MAXIMUM STANDARD PROCTOR DENSITY. IF A LAYER IS OUTSIDE THE DESIGNATED PARKING LOT THAT WILL RECEIVE VEGETATION, THIS IS PARTICULARLY IMPORTANT IN CUT TO SOIL AND EMBANKMENT AREAS. IN PAVEMENT AND ISLAND AREAS, IT IS RECOMMENDED THAT THE SOIL BE COMPACTED TO 90% AND 90% OF THE MAXIMUM STANDARD PROCTOR DENSITY. THE TOP COMPACTED LAYER MUST BE SCARIFIED TO IMPROVE THE SOIL GROWTH CHARACTERISTICS.
18. ALL DETERIORATING ACTIVITIES SUCH AS PUMPING DOWN OF FLOODED FOUNDATION AND UTILITY TRENCHES MUST PASS THROUGH THE RETROFITTED DRAINAGE BASIN OR A SEDIMENT CONTROL PRACTICE PRIOR TO LEAVING THE SITE.
19. SILT FENCE AND OTHER PERMITTER EROSION CONTROL MEASURES SHOWS OFF LIMITS OF DISTURBANCE FOR CLARITY PURPOSES ONLY; CONTRACTOR TO ENSURE PERMITTER EROSION CONTROL MEASURES ARE PLACED AT THE LIMITS OF DISTURBANCE. THE LIMITS OF DISTURBANCE SHOULD BE BROUGHT TO THE ENGINEER PRIOR TO THE START OF EROSION CONTROL MEASURES.

MAINTENANCE NOTES

1. ALL CONTROL MEASURES STATED IN THE EAS PLANS SHALL BE MAINTAINED IN FULLY FUNCTIONAL CONDITION UNTIL TEMPORARY OR PERMANENT STABILIZATION OF THE SITE IS ACHIEVED. ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE INSPECTED BY A QUALIFIED PERSON IN ACCORDANCE TO THE CONTRACT DOCUMENTS OR THE APPLICABLE PERMIT, WHICHEVER IS MORE STRINGENT, AND REPAIRED ACCORDING TO THE FOLLOWING
2. INSET PROTECTION DEVICES AND CONTROLS SHALL BE REPAIRED OR REPLACED WHEN THEY SHOW SIGNS OF UNDERMINING AND/OR DETEIORATION. INSET PROTECTION DEVICES SHOULD BE ROUTINELY CLEANED AND MAINTAINED.
3. ALL SEEDED AREAS SHALL BE CHECKED REGULARLY TO ENSURE THAT A GOOD STANDING OF GRASS IS MAINTAINED. AREAS SHOULD BE FERTILIZED, WATERED, AND RESEEDED AS NEEDED.
4. MINIMIZE OFF-SITE SEDIMENT TRACKING OF VEHICLES BY THE USE OF STONE MATERIAL IN ALL CONSTRUCTION ENTRANCES, ALONG WITH REGULARLY SCHEDULED SWEEPING/GROOMING HOUSEKEEPING, STABILIZED CONSTRUCTION ENTRANCES TO PROPERLY MAINTAIN BY GENERAL CONTRACTOR AND IN GOOD WORKING ORDER AT ALL TIMES; THIS MAY REQUIRE PERIODIC TOP DRESSING OF THE STONE AS CONDITIONS DEMAND.
5. THE TEMPORARY PARKING AND STORAGE AREA SHALL BE KEPT IN GOOD CONDITION (SUITABLE FOR PARKING AND STORAGE) BY GENERAL CONTRACTOR. THIS MAY REQUIRE PERIODIC TOP DRESSING OF THE TEMPORARY PARKING AS CONDITIONS DEMAND.
6. CONTRACTORS AND SUBCONTRACTORS WILL BE RESPONSIBLE FOR REMOVING ALL SEDIMENT FROM THE SITE, AND STORM SEWER SYSTEMS. SEDIMENT DEPOSITION DURING SITE STABILIZATION MUST ALSO BE REMOVED.
7. STONE CONSTRUCTION EXITS TO BE MAINTAINED BY GENERAL CONTRACTOR UNTIL SITE HAS BEEN PAVED OR IS NO LONGER REQUIRED.
8. ALL CATCH BASIN GRATES ARE TO BE PROTECTED WITH METAL BAGS AFTER THEY ARE INSTALLED. THEY SHOULD BE ROUTINELY CLEANED AND MAINTAINED.
9. CONTAINERS SHALL BE AVAILABLE FOR DISPOSAL OF DEBRIS, TRASH, HAZARDOUS OR PETROLEUM WASTES. ALL CONTAINERS MUST BE COVERED AND LEAK-PROOF. ALL WASTE MATERIAL MUST BE DISPOSED OF AT FACILITIES APPROVED FOR THE PERTINENT MATERIAL.
10. BRICKS, HARDENING CONCRETE AND SOIL WASTE SHALL BE FREE FROM CONTAMINATION WHICH MAY LEACH CONSTITUENTS TO WATERS OF THE STATE.
11. CLEAN CONSTRUCTION WASTES THAT WILL BE DISPOSED INTO THE PROPERTY SHALL BE SUBJECT TO ANY LOCAL PROHIBITIONS FROM THIS TYPE OF DISPOSAL.
12. ALL CONSTRUCTION AND DEMOLITION DEBRIS (CDD) WASTE SHALL BE DISPOSED OF IN AN TENNESSEE DEC APPROVED CDD LANDFILL. CONSTRUCTION DEBRIS MAY BE DISPOSED OF ON-SITE, BUT DEMOLITION DEBRIS MUST BE DISPOSED IN AN TENNESSEE DEC APPROVED LANDFILL. ALSO, MATERIALS WHICH CONTAIN ASBESTOS MUST COMPLY WITH TENNESSEE DEC REGULATIONS.
13. AREA SHALL BE DESIGNATED BY CONTRACTOR AND SHOWN ON EAS MAP FOR MINOR OR STORAGE OF CONCRETE FUELING & MAINTENANCE SHALL BE IN DESIGNATED AREAS ONLY.
14. A SPILL PREVENTION CONTROL AND CONTAINMENT/USE (SPCC) PLAN MUST BE DEVELOPED FOR SITES WITH ONE ABOVE-GROUND STORAGE TANK OF 660 GALLONS OR MORE, TOTAL ABOVE-GROUND STORAGE OF 1,320 GALLONS OR BELOW-GROUND STORAGE OF 4,200 GALLONS OF FUEL.
15. ALL DESIGNATED CONCRETE WASHOUT AREAS SHALL BE LOCATED AWAY FROM WATERCOURSES, DRAINAGE DITCHES, FIELD DRAINS OR OTHER STORMWATER DRAINAGE AREAS.
16. ALL CONTAMINATED SOIL MUST BE TREATED AND/OR DISPOSED IN AN TENNESSEE DEC APPROVED SOLID WASTE MANAGEMENT FACILITY OR HAZARDOUS WASTE TREATMENT, STORAGE OR DISPOSAL FACILITY.
17. THE CONTRACTOR SHALL CONTACT THE TENNESSEE DEC (TDEC), THE LOCAL PERMITS DEPARTMENT AND THE LOCAL EMERGENCY PLANNING COMMITTEE IN THE EVENT OF A PETROLEUM SPILL (>25 GALLONS) OR THE PRESENCE OF CHEMICALS.
18. OPEN BURNING IS NOT PERMITTED ON THE SITE.
19. CONTRACTOR TO ENSURE SITE SHALL BE CLEANED OF DEBRIS FROM SITE AND SWEEP CLEAN ON AN AS NEEDED BASIS.
20. THE PROJECT IS SUBJECT TO INSPECTION BY THE CITY OF GOODLETTSVILLE AT ANY TIME AND ITEMS FOUND DEFICIENT SHALL BE IMMEDIATELY CORRECTED. THE CITY MAY STOP CONSTRUCTION ON PROPERTIES, OR ADMINISTER OTHER ENFORCEMENT ACTIONS AS DEFINED BY GOODLETTSVILLE'S STORMWATER MANAGEMENT ORDINANCE INCLUDING CIVIL PENALTIES OF \$50 TO \$5,000 PER DAY OF VIOLATION.
21. EROSION PREVENTION AND SEDIMENT CONTROLS MUST BE INSPECTED AT LEAST TWICE EVERY CALENDAR WEEK AT LEAST 72 HOURS APART. INSPECTIONS ARE TO BE DOCUMENTED AND KEPT WITH THE EROSION AND SEDIMENT CONTROL PLANS. INSPECTION REPORTS TO BE FURNISHED TO GOODLETTSVILLE PUBLIC WORKS DEPARTMENT WEEKLY.

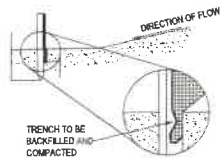
LONG TERM BMP OPERATION AND MAINTENANCE

- IN ORDER TO ENSURE THAT ALL SCQs ARE OPERATING CORRECTLY AND ARE PROPERLY MAINTAINED, OWNERS OR OPERATORS OF SCQs ARE REQUIRED, AT A MINIMUM, TO:
- PERFORM ROUTINE INSPECTIONS TO ENSURE THAT THE SCQs ARE PROPERLY FUNCTIONING. THESE INSPECTIONS SHALL BE CONDUCTED ON AN ANNUAL BASIS, AT A MINIMUM. THESE INSPECTIONS SHALL BE CONDUCTED BY A PERSON FAMILIAR WITH CONTROL MEASURES IMPLEMENTED AT A SITE. OWNERS OR OPERATORS SHALL MAINTAIN DOCUMENTATION OF THESE INSPECTIONS.
 - PERFORM COMPREHENSIVE INSPECTIONS OF ALL STORMWATER MANAGEMENT FACILITIES AND STRUCTURES. THESE INSPECTIONS SHALL BE CONDUCTED ONCE EVERY FIVE YEARS, AT A MINIMUM. SUCH INSPECTIONS SHALL BE CONDUCTED BY EITHER A PROFESSIONAL ENGINEER OR LANDSCAPE ARCHITECT. COMPLETE INSPECTION REPORTS FOR THESE FIVE YEAR INSPECTIONS SHALL INCLUDE:
 - A. FACILITY TYPE,
 - B. INSPECTION DATE,
 - C. LATITUDE AND LONGITUDE AND NEAREST STREET ADDRESS,
 - D. SCQ OWNER INFORMATION (E.G. NAME, ADDRESS, PHONE NUMBER, FAX, AND EMAIL),
 - E. A DESCRIPTION OF SCQ CONDITION INCLUDING VEGETATION AND SOILS, INLET AND OUTLET CHANNELS AND STRUCTURES, EMBANKMENTS, SLOPES, AND SPILL BENCHES, SPILLWAYS, WEIRS, AND OTHER CONTROL STRUCTURES, AND ANY SEDIMENT AND DEBRIS ACCUMULATION.
 - F. PHOTOGRAPHIC DOCUMENTATION OF SCQs AND
 - G. SPECIFIC MAINTENANCE ITEMS OR VIOLATIONS THAT NEED TO BE CORRECTED BY THE BAP OWNER, ALONG WITH DEADLINES AND RE-INSPECTION DATES.
2. QUARTERLY AND WITHIN 24 HOURS AFTER EVERY STORM EVENT GREATER THAN 1.0 INCH INSPECT AND EVALUATE THE CONDITION AND PERFORMANCE OF THE BASIN, INCLUDING THE FOLLOWING
- MEASURE SEDIMENT ACCUMULATION LEVELS IN FOREBAY,
 - MONITOR THE GROWTH OF WEEDS, TREES AND SHRUBS PLANTED, AND NOTE THE PRESENCE OF ANY INVASIVE PLANT SPECIES,
 - INSPECT THE CONDITION OF STORMWATER INLETS TO THE POND FOR MATERIAL DAMAGE, EROSION OR UNDERCUTTING,
 - INSPECT THE BANKS OF UPSTREAM AND DOWNSTREAM CHANNELS FOR EVIDENCE OF SLOUGHING, ANIMAL BURROWS, BOGGY AREAS, WOODY DEBRIS, OR GULLY EROSION THAT MAY UNDERMINE FOUNDATION INTEGRITY,
 - INSPECT POND OUTFALL CHANNEL, FOR EROSION, UNDERCUTTING, RIP-RAP DISPLACEMENT, WOODY DEBRIS, ETC.
 - INSPECT CONDITION OF PRINCIPAL SPILLWAY AND RISER FOR EVIDENCE OF SPALLING, JOINT FAILURE, LEAKAGE, CORROSION, ETC.
 - INSPECT CONDITION OF ALL TRASH RACKS, REVERSE SLOPED PIPES OR FLASHBOARD RISERS FOR EVIDENCE OF CLOGGING, LEAKAGE, DEBRIS ACCUMULATION, ETC.
 - INSPECT MAINTENANCE ACCESS TO ENSURE IT IS FREE OF WOODY VEGETATION, AND CHECK TO SEE WHETHER VALVES, MANHOLES AND LOGS CAN BE OPENED AND OPERATED.
 - INSPECT INTERNAL AND EXTERNAL SIDE SLOPES OF THE POND FOR EVIDENCE OF SPARSE VEGETATIVE COVER, EROSION, OR SLUMPING, AND MAKE NEEDED REPAIRS IMMEDIATELY
3. ANY SCQs OF EROSION, INTERNAL BERMS OR BAPFLES SHOULD BE ADDRESSED WITH GRADING, ADDING ARMORING, OR ESTABLISHING COVER.
4. CLEANUP SHOULD BE PERFORMED AT LEAST ONCE A YEAR TO REMOVE TRASH AND FLOATABLES THAT TEND TO ACCUMULATE IN THE FOREBAY, MIDCHANNEL, AND ON THE BOTTOM OF THE BASIN. PREVENT SEDIMENT REMOVAL FROM THE FOREBAY IS ESSENTIAL TO MAINTAIN THE FUNCTION AND PERFORMANCE OF A BASIN.
5. CLEANUPS SHOULD BE PERFORMED EVERY 5 TO 10 YEARS, OR WHEN INSPECTIONS INDICATE THAT 50% OF THE FOREBAY CAPACITY HAS BEEN FILLED. EXCAVATED SEDIMENTS ARE NOT USUALLY CONSIDERED TOXIC OR HAZARDOUS AND CAN BE SAFELY DISPOSED BY EITHER LAND APPLICATION OR LAND FILLING.
6. MORE INFORMATION ON SCQ MAINTENANCE CAN BE FOUND IN TENNESSEE PERMANENT STORMWATER MANUAL CHAPTER 7.

NOTES

1. ACTUAL LAYOUT DETERMINED IN THE FIELD.
2. THE CONCRETE WASHOUT SIGN SHALL BE INSTALLED WITHIN 30' OF THE TEMPORARY CONCRETE WASHOUT FACILITY.
3. THE WASHOUT MUST HAVE SUFFICIENT VOLUME TO CONTAIN ALL LIQUID AND CONCRETE WASTE GENERATED BY WASHOUT OPERATIONS INCLUDING BUT NOT LIMITED TO OPERATIONS ASSOCIATED WITH GROUT AND MORTAR.

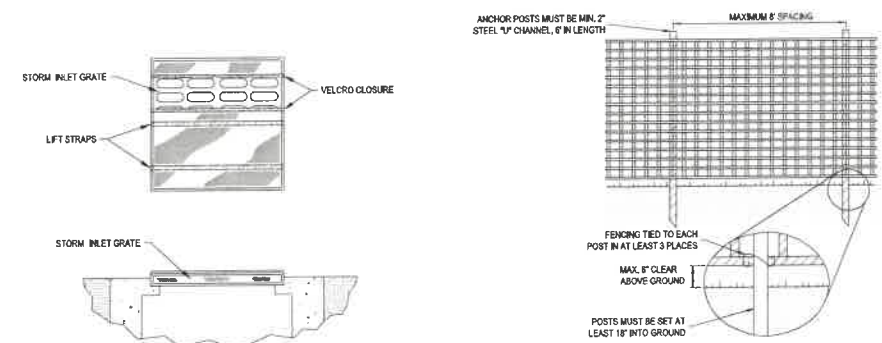
CONCRETE WASHOUT
NTS



NOTES

1. SILT FENCE SHALL BE CONSTRUCTED BEFORE UPSLOPE LAND DISTURBANCE BEGINS.
2. ALL SILT FENCE SHALL BE PLACED AS CLOSE TO THE CONTOUR AS POSSIBLE SO THAT WATER WILL NOT CONCENTRATE AT LOW POINTS IN THE FENCE AND SO THAT SMALL SWALES OR DEPRESSIONS WHICH MAY CARRY SMALL CONCENTRATED FLOWS TO THE SILT FENCE ARE DISSIPATED ALONG ITS LENGTH.
3. TO PREVENT WATER POUNDED BY THE SILT FENCE FROM FLOWING AROUND THE ENDS, EACH END SHALL BE CONSTRUCTED UPSLOPE SO THAT THE FENCE USES AT A HIGHER ELEVATION.
4. WHERE POSSIBLE, SILT FENCE SHALL BE PLACED ON THE FLATTEST AREA AVAILABLE.
5. WHERE POSSIBLE, VEGETATION SHALL BE PRESERVED FOR 5 FT. (OR AS MUCH AS POSSIBLE) UPSLOPE FROM THE SILT FENCE. IF VEGETATION IS REMOVED, IT SHALL BE ESTABLISHED WITHIN 7 DAYS FROM THE INSTALLATION OF THE SILT FENCE.
6. THE HEIGHT OF THE SILT FENCE SHALL BE A MINIMUM OF 18 IN. ABOVE THE ORIGINAL GROUND SURFACE.
7. THE SILT FENCE SHALL BE PLACED IN A TRENCH CUT A MINIMUM 6 IN. DEEP. THE TRENCH SHALL BE CUT WITH A TRENCHER, CABLE LAYING MACHINE, OR OTHER SUITABLE DEVICES WHICH WILL ENSURE ADEQUATE UNIFORM TRENCH DEPTH.
8. THE SILT FENCE SHALL BE PLACED WITH THE STAPLES ON THE DOWNSLOPE SIDE OF THE GEOTEXTILE AND SO THAT THE 6 INCHES OF GEOTEXTILE BELOW THE GROUND SURFACE, EXCESS MATERIAL SHALL LAY ON THE BOTTOM OF THE 6 IN. DEEP TRENCH. THE TRENCH SHALL BE BACKFILLED AND COMPACTED.
9. SEAMS BETWEEN SECTIONS OF SILT FENCE SHALL BE OVERLAPPED WITH THE END STAPLES OF EACH SECTION WRAPPED TOGETHER BEFORE DRIVING INTO THE GROUND.
10. MAINTENANCE - SILT FENCE SHALL ALLOW RUNOFF TO PASS ONLY AS DIFFUSE FLOW THROUGH THE GEOTEXTILE. IF RUNOFF OVERTOPS SILT FENCE, FLOWS UNDER OR AROUND THE ENDS, OR IN ANY OTHER WAY BECOMES A CONCENTRATED FLOW, ONLY OF THE FOLLOWING SHALL BE PERFORMED, AS APPROPRIATE:
 - 1) THE LAYOUT OF THE SILT FENCE SHALL BE CHANGED.
 - 2) ACCUMULATED SEDIMENT SHALL BE REMOVED.
 - 3) OTHER PRACTICES SHALL BE INSTALLED.

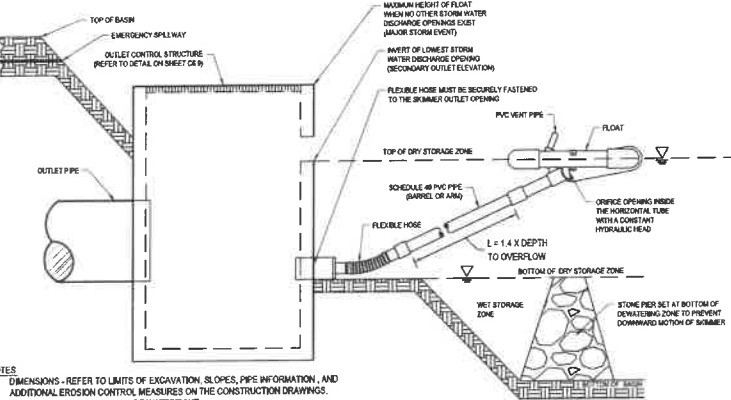
SILT FENCE
NTS



NOTE

INLET PROTECTION SHALL BE DANDY BAG OR APPROVED OTHER.

INLET PROTECTION
NTS



NOTES

1. DIMENSIONS - REFER TO LIMITS OF EXCAVATION, SLOPES, PIPE INFORMATION, AND ADDITIONAL EROSION CONTROL MEASURES ON THE CONSTRUCTION DRAWINGS.
2. ALL PIPE CONNECTIONS SHALL BE WATER TIGHT.
3. INSPECT SYSTEM REGULARLY TO ENSURE IT IS FUNCTIONING IN A CORRECT MANNER.
4. USE FARPCLOTH SKIMMER OR APPROVED EQUAL.
5. REMOVE SKIMMER UPON ACHIEVING FINAL STABILIZATION. INSTALL PERMANENT OUTLET PROTECTION / RIP RAP.
6. REFER TO OUTLET STRUCTURE DETAIL FOR PERMANENT WATER QUALITY OR RUNOFF CONTROL MEASURES.

SEDIMENT BASIN
SKIMMER-OUTLET STRUCTURE
NTS

SPECIFICATIONS FOR SILT FENCE
NTS

FABRIC PROPERTIES	VALUES	TEST METHODS
GRAB TENSILE STRENGTH	90 LB. MINIMUM	ASTM D-1682
MULCH BURST STRENGTH	190 PSI MINIMUM	ASTM D-3706
MULCH FLOW RATE	0.3 GAL/MIN/FT. MAX.	
EQUIVALENT OPENING SIZE	40-60	US STD. SIEVE OR 92215
ULTRAVIOLET RADIATION STABILITY	90% MINIMUM	ASTM - G 25

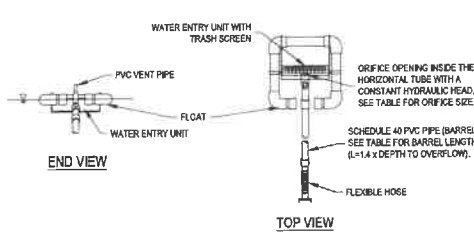
CRITERIA FOR SILT FENCE MATERIALS

1. FENCE POSTS - THE LENGTH SHALL BE A MINIMUM OF 32 INCHES LONG. WOOD - POSTS WILL BE 2 IN. X 2 IN. HARDWOOD OF SOUND QUALITY. THE MAXIMUM SPACING BETWEEN POSTS SHALL BE 10 FT.
2. SILT FENCE FABRIC (SEE CHART BELOW)

NOTES

1. ALL MATERIAL TO MEET SPECIFICATIONS.
2. COMPOST SOCKS FILL TO MEET APPLICATION REQUIREMENTS.
3. FILTER MEDIA TO BE DISPERSED ON SITE, AS DETERMINED BY ENGINEER.

COMPOST SOCK ON LAND
NTS

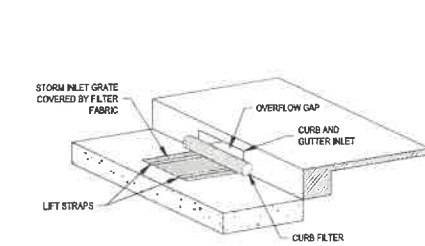


BASIN #	VOLUME (CF)	DAYS TO DRAIN	SKIMMER SIZE (IN.)	BARREL LENGTH (FT.)	ORIFICE RADIUS (IN.)
1	5,900	3	2	7.7	0.9
2	22,369	3	3	4.2	1.3
3	7,463	3	2	5.3	0.8

NOTES

1. INSPECT SYSTEM REGULARLY TO ENSURE IT IS FUNCTIONING IN A CORRECT MANNER.
2. USE FARPCLOTH SKIMMER OR APPROVED OTHER.

SEDIMENT BASIN SKIMMER
NTS

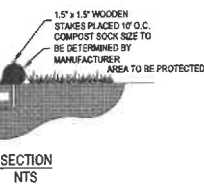


NOTE

INLET PROTECTION SHALL BE DANDY CURB BAG OR APPROVED OTHER.

CURB INLET PROTECTION
NTS

	BASIN #1	BASIN #2	BASIN #3
DRAINAGE AREA (AC)	3.15	4.06	7.11
ELEVATION			
TOP OF BASIN	496.75	504.25	503.25
EMERGENCY SPILLWAY	496.25	503.25	502.25
SECONDARY OUTLET	496.19	502.75	502.24
SKIMMER OUTLET	491.55	501.00	499.50
BOTTOM OF BASIN	480.75	499.75	498.50
VOLUME (CF)			
WET STORAGE REQUIRED	5,899	7,350	12,862
WET STORAGE PROVIDED	6,598	9,178	13,035
DRY STORAGE REQUIRED	5,899	7,350	12,862
DRY STORAGE PROVIDED	25,066	17,726	62,363
SKIMMER SIZING			
DAYS TO DRAIN - REQUIRED	3	3	3
DAYS TO DRAIN - PROVIDED	3	3	3
FARPCLOTH SKIMMER SIZE (IN)	2	2	3
FARPCLOTH SKIMMER ORIFICE DIAMETER (IN)	2.00	2.20	2.90

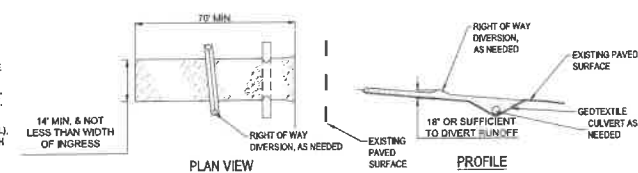


NOTES

1. ALL MATERIAL TO MEET SPECIFICATIONS.
2. COMPOST SOCKS FILL TO MEET APPLICATION REQUIREMENTS.
3. FILTER MEDIA TO BE DISPERSED ON SITE, AS DETERMINED BY ENGINEER.

COMPOST SOCK ON LAND
NTS

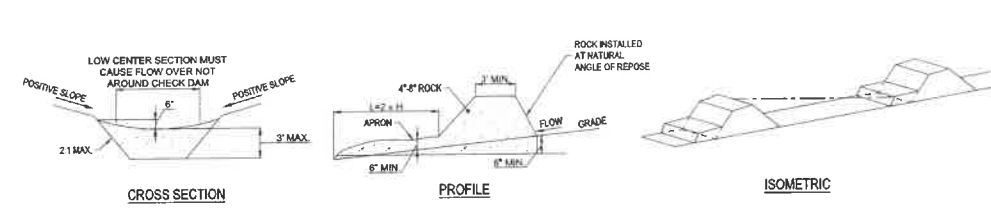
COMPOST SOCK STACK
NTS



NOTES

1. STONE SIZE - (1.5-2.5 INCH) STONE SHALL BE USED, OR RECYCLED CONCRETE EQUIVALENT.
2. LENGTH - THE CONSTRUCTION ENTRANCE SHALL BE AS LONG AS REQUIRED TO STABILIZE HIGH TRAFFIC AREAS BUT NOT LESS THAN 70 FT. (EXCEPTION: APPLY 30 FT. MINIMUM TO SINGLE RESIDENCE LOTS.
3. THICKNESS - THE STONE LAYER SHALL BE AT LEAST 6 INCHES THICK FOR LIGHT DUTY ENTRANCES OR AT LEAST 10 INCHES FOR HEAVY DUTY USE.
4. WIDTH - THE ENTRANCE SHALL BE AT LEAST 14 FEET WIDE, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INDENTERS OR EDGES OCCUR.
5. GEOTEXTILE - A GEOTEXTILE SHALL BE LAY OVER THE ENTIRE AREA PRIOR TO PLACING STONE. IT SHALL BE COMPOSED OF STRONG ROT-PROOF POLYMERIC FIBERS AND MEET THE FOLLOWING SPECIFICATIONS:
6. TIMING - THE CONSTRUCTION ENTRANCE SHALL BE INSTALLED AS SOON AS IS PRACTICAL, BEFORE MAJOR GRADING ACTIVITIES.
7. CULVERT - A PIPE OR CULVERT SHALL BE CONSTRUCTED UNDER THE ENTRANCE IF NEEDED TO PREVENT SURFACE WATER FROM FLOWING ACROSS THE ENTRANCE OR TO PREVENT RUNOFF FROM BEING DIRECTED OUT ONTO PAVED SURFACES.
8. WATER BAR - A WATER BAR SHALL BE CONSTRUCTED AS PART OF THE CONSTRUCTION ENTRANCE IF NEEDED TO PREVENT SURFACE RUNOFF FROM FLOWING THE LENGTH OF THE CONSTRUCTION ENTRANCE AND OUT ONTO PAVED SURFACES.
9. MAINTENANCE - TOP DRESSING OF ADDITIONAL STONE SHALL BE APPLIED AS CONDITIONS DEMAND. MUD SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC ROADS, OR A SURFACE WHERE RUNOFF IS NOT CHECKED BY SEGMENT CONTROLS, SHALL BE REMOVED IMMEDIATELY. REMOVAL SHALL BE ACCOMPANIED BY SCRAPING OR SWEEPING.
10. CONSTRUCTION ENTRANCES SHALL NOT BE RELIED UPON TO REMOVE MUD FROM VEHICLES AND PREVENT OFF-SITE TRACKING. VEHICLES THAT ENTER AND LEAVE THE CONSTRUCTION SITE SHALL BE RESTRICTED FROM MUDDY AREAS.
11. REMOVAL - THE ENTRANCE SHALL REMAIN IN PLACE UNTIL THE DISTURBED AREA IS STABILIZED OR REPLACED WITH A PERMANENT ROADWAY OR ENTRANCE.

STABILIZED CONSTRUCTION ENTRANCE
NTS



NOTES

1. THE CHECK DAM SHALL BE CONSTRUCTED OF 4-6 INCH DIAMETER STONE, PLACED SO THAT IT COMPLETELY COVERS THE WIDTH OF THE CHANNEL. FILTER FABRIC SHALL BE NONWOVEN MEETING AASHTO M-288-06 FOR CLASS 1 APPLICATIONS.
2. MAXIMUM HEIGHT OF CHECK DAM SHALL NOT EXCEED 3.0 FEET.
3. THE MIDPOINT OF THE ROCK CHECK DAM SHALL BE A MINIMUM OF 6 INCHES LOWER THAN THE SIDES IN ORDER TO DIRECT ACROSS THE CENTER AND AWAY FROM THE CHANNEL SIDES.
4. THE BASE OF THE CHECK DAM SHALL BE EXTENDED APPROXIMATELY 6 INCHES.
5. SPACING OF CHECK DAMS SHALL BE IN A MANNER SUCH THAT THE TOE OF THE UPSTREAM DAM IS AT THE SAME ELEVATION AS THE TOP OF THE DOWNSTREAM DAM.
6. A SPLASH APRON SHALL BE CONSTRUCTED WHERE CHECK DAMS ARE EXPECTED TO BE IN USE FOR AN EXTENDED PERIOD OF TIME. A STONE APRON SHALL BE CONSTRUCTED IMMEDIATELY DOWNSTREAM OF THE CHECK DAM TO PREVENT FLOWS FROM UNDERCUTTING THE STRUCTURE. THE APRON SHOULD BE 6 IN. THICK AND ITS LENGTH TWO TIMES THE HEIGHT OF THE DAM.
7. STONE PLACEMENT SHALL BE PERFORMED EITHER BY HAND OR MECHANICALLY AS LONG AS THE CENTER OF CHECK DAM IS LOWER THAN THE SIDES AND EXTENDS ACROSS ENTIRE CHANNEL.
8. SIDE SLOPES SHALL BE A MINIMUM OF 2:1.

ROCK CHECK DAM
NTS



NO. DATE



AL NEYER
LOUISVILLE HWY
INDUSTRIAL DEVELOPMENT

EROSION &
SEDIMENT
CONTROL
DETAILS

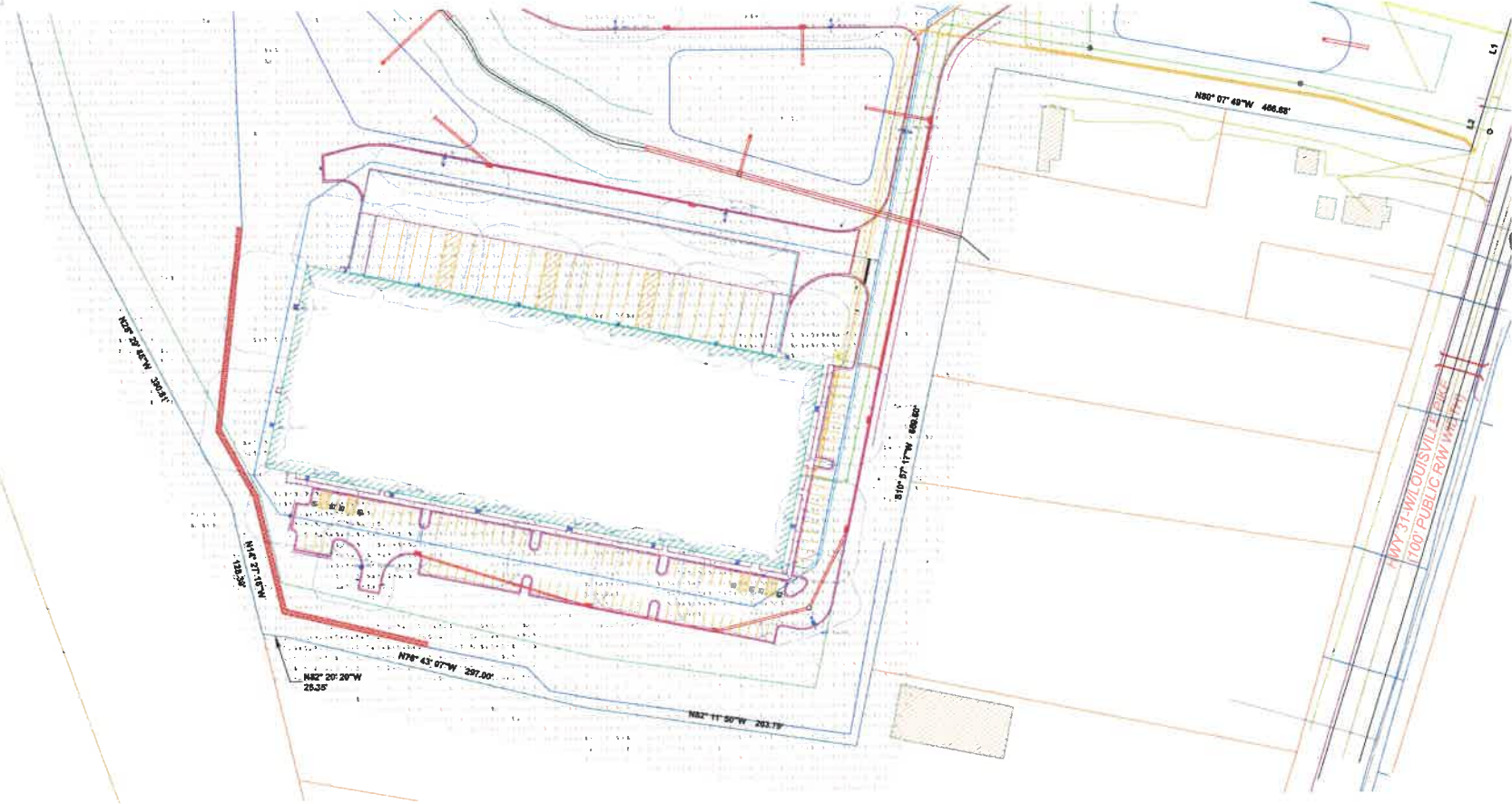
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REVISIONS			4	10/21/22	J.P.
REV #	DATE	BY:			
1	8/5/22	J.P.			
2	9/22/22	J.P.			
3	10/11/22	J.P.			

INTERSTATE 65 WIDTH
(VARYING PUBLIC ROW WIDTH)



Calculation Summary								
Label	Units	Avg	Max	Min	Avg/Min	Max/Min	PtSpcl	PtSpot
DRIVE	Fc	1.22	8.5	0.1	12.20	85.00	10	10
ENTRANCE	Fc	1.04	5.5	0.7	2.34	5.00		
NORTH DOCK + 100'	Fc	2.90	8.2	0.6	4.83	13.47		
NORTH DOCK DRIVE	Fc	1.71	4.3	0.4	4.28	10.75		
NORTH PARKING	Fc	2.17	3.7	1.2	1.81	3.08		
SOUTH DOCK + 100'	Fc	2.73	6.3	0.5	5.46	12.60		
SOUTH DOCK DRIVE	Fc	1.38	4.4	0.1	13.80	44.00		
SOUTH PARKING	Fc	2.47	4.2	1.1	2.25	3.82		

Luminaire Schedule						
WLS17106	INDUSTRIAL DEVELOPMENT	GOODLETTSVILLE, TN	PM: HOLLY	PLEASE EMAIL US FOR PRICING AT HOLLY@WLSLIGHTING.COM		
Symbol	Qty	Label	Lum. Lumens	LF	Description	Typ. Watts
•	3	B	22900	0.980	WLS-A-L-B-221-40K7-SQ-SLM 30' MOUNTING HEIGHT	132
•	3	C	17000	0.980	WLS-A-L-B-221-40K7-EN-SLSLF-SLM 30' MOUNTING HEIGHT	132
•	1	D	17800	0.980	WLS-A-L-B-221-40K7-3H-SLSLF-SLM 30' MOUNTING HEIGHT	132
•	5	E	17000	0.980	WLS-A-L-B-221-40K7-2H-SLSLF-SLM 30' MOUNTING HEIGHT	132
•	20	G	22100	0.980	WLS-A-L-B-221-40K7-4H-SLM VARIOUS HEIGHTS	132
•	13	I	30752	0.980	WLS-A-L-B-301-40K7-4H-SLM VARIOUS HEIGHTS	202

BASED ON THE INFORMATION PROVIDED, ALL DIMENSIONS AND LUMINAIRE LOCATIONS SHOWN REPRESENT RECOMMENDED POSITIONS. THE ENGINEER AND/OR ARCHITECT MUST DETERMINE APPLICABILITY OF THE LAYOUT TO EXISTING OR FUTURE FIELD CONDITIONS.
THIS LIGHTING PATTERN REPRESENTS ILLUMINATION LEVELS CALCULATED FROM LABORATORY DATA TAKEN UNDER CONTROLLED CONDITIONS UTILIZING CURRENT INDUSTRY STANDARD LAMP RATINGS IN ACCORDANCE WITH ILLUMINATING ENGINEERING SOCIETY APPROVED METHODS. ACTUAL PERFORMANCE OF ANY MANUFACTURER'S LUMINAIRE MAY VARY DUE TO VARIATION IN ELECTRICAL VOLTAGE, TOLERANCE IN LAMPS AND OTHER VARIABLE FIELD CONDITIONS.

INDUSTRIAL DEVELOPMENT
GOODLETTSVILLE, TN

WLS LIGHTING
a WLS company

6820 CORPORATION PKWY
FORT WORTH, TX 76126
WWW.WLSLIGHTING.COM

WLS-17106 DATE -7/25/22 SCALE: 1"=60' 800-633-8711 PM: HOLLY BY: J.P. SHEET 2 OF 2



NO.	DATE	REVISION DESCRIPTION



AL NEYER
LOUISVILLE HWY
INDUSTRIAL DEVELOPMENT

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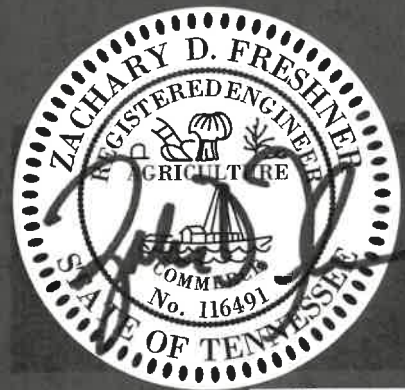
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TRAFFIC IMPACT STUDY

Louisville Highway Industrial Park
City of Goodlettsville
Sumner County, Tennessee
September 27th, 2022



10/06/2022

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1. Executive Summary

1.1. Summary

This report is submitted on behalf of Al Neyer in connection with its application to the City of Goodlettsville, TN for Site Plan approval. The Traffic Impact Study (TIS) conducted by CESO, Inc. addresses the traffic related impacts associated with the proposed Louisville Highway Industrial Park; referred to herein as “Louisville Highway Industrial Park Development.”

The proposed 25.6-acre Louisville Highway Industrial Park Development is to be located between Louisville Highway (31W) and I-65 within Goodlettsville, Sumner County, TN. The full buildout of the Louisville Highway Industrial Park Development is projected to contain 2 buildings. The first proposed building will have approximately 123,200 square feet of space and the second proposed building will have approximately 102,000 square feet of space.

The use of the Site as an Industrial Park will generate additional traffic on the I-65 NB and SB On/Off Ramps and Louisville Hwy. Al Neyer retained CESO, Inc. to prepare the Traffic Impact Study and present the details of a safe and efficient access system in connection with Al Neyer’s application for approval of the following access points:

- Full access driveway connection to Louisville Highway (referred to as Site Driveway) approximately 680’ west of the intersection of Louisville Highway and Long Drive.

In addition, the Al Neyer Site Plan application requests approval to conduct work within the right-of-way to construct the proposed access driveways along with the recommended improvements. Louisville Highway is under the jurisdiction of the City of Goodlettsville and the I-65 NB/SB Ramps are under the jurisdiction of the Tennessee Department of Transportation. Please note that although Louisville Highway generally travels in the north-south direction, due to the proximity to I-65 Louisville Highway is modeled as an east-west roadway throughout this report.

The purpose of the TIS was to identify the traffic related impacts, if any, during typical weekday AM and PM peak hours of the adjacent street traffic corresponding with the weekday hours of operation for the proposed Louisville Highway Industrial Park Development.

The study parameters of this report were generated based upon the project scope, recent concept plan, and Memorandum of Understanding (MOU) with the City of Goodlettsville and the Tennessee Department of Transportation (TDOT, Region 3).

The Traffic Impact Study focused on evaluating the Existing, 2023 No-Build, 2023 Build, 2033 No-Build, and 2033 Build traffic conditions near the site under five (5) distinct traffic scenarios. The term “Build” means the first day of the use of the Site as a Louisville Highway Industrial Park Development.

The five (5) traffic scenarios analyzed in the TIS were:

Existing Traffic Scenario – Represents current (year 2022) traffic conditions during the weekday AM and PM Peak Hours of the adjacent roadway network. The Existing Traffic Scenario served as a baseline for comparison of the traffic impacts in relation to the proposed Louisville Highway Industrial Park Development.

2023 No-Build Traffic Scenario – Represents traffic conditions during the weekday AM and PM Peak Hours of the adjacent roadway network that would exist during year 2023—including the planned QuikTrip Development to be built at the end of 2022—without the proposed Louisville Highway Industrial Park Development.

2023 Build Traffic Scenario – Represents traffic conditions during the weekday AM and PM Peak Hours of the adjacent roadway network that would exist during year 2023—including the planned QuikTrip Development to be built at the end of 2022— with the proposed Louisville Highway Industrial Park Development constructed and fully operational.

2033 No-Build Traffic Scenario – Represents traffic conditions during the weekday AM and PM Peak Hours of the adjacent roadway network that would exist during year 2033—including the planned QuikTrip Development to be built at the end of 2022—without the proposed Louisville Highway Industrial Park Development.

2033 Build Traffic Scenario – Represents traffic conditions during the weekday AM and PM Peak Hours of the adjacent roadway network that would exist during year 2033—including the planned QuikTrip Development to be built at the end of 2022— with the proposed Louisville Highway Industrial Park Development constructed and fully operational.

1.2. Conclusions

The following intersections were analyzed in the Traffic Impact Study:

- Louisville Highway (31W) and I-65 (SR 41) Southbound Ramps (Stop Controlled)
- Louisville Highway (31W) and I-65 (SR 41) Southbound Off-Ramp Left-Turn (Stop Controlled)
- Louisville Highway (31W) and I-65 (SR 41) Northbound Off-Ramp Left-Turn (Signalized)
- Louisville Highway (31W) and I-65 (SR 41) Northbound Ramps (Free Flow)

The full buildout of the Louisville Highway Industrial Park is estimated to generate 1,432 trips per day on a typical weekday (716 inbound and 716 outbound), of which 90 trips will be generated during Weekday AM Peak Hour (73 inbound and 17 outbound) and 90 trips will be generated during the Weekday PM Peak Hour (19 inbound and 71 outbound).

Trips for the proposed Louisville Highway Industrial Park Development are anticipated to approach and depart the Site following the distribution pattern illustrated on Figure 6 (see pg. 25).

Synchro Version 11 HCM 6th Signalized/TWSC methodology was used to analyze the current level of service at the key study intersections.

Under the Existing Traffic Scenario, all studied intersections operate at overall level of service “B” or better. In addition, all movements operate at LOS “C” or better with the exception of the SBL movement at the intersection of Louisville Highway and I-65 Southbound Off-Ramp Left-Turn.

Under the 2023 No-Build Traffic Scenario, all studied intersections continue to operate at overall level of service "B" or better. In addition, all movements operate at LOS "D" or better with the exception of the following. The SBL movement at the intersection of Louisville Highway and I-65 Southbound Off-Ramp Left-Turn operates at a LOS "F" during the AM and PM Peak Hours. CESO recommends the signalization of Louisville Highway and I-65 Southbound Off-Ramp Left-Turn. The SBL movement at the intersection of Louisville Highway and QuikTrip Drive A operates at a LOS "E" during the AM Peak Hour. CESO does not recommend any improvements as longer delays are expected at this intersection due to high through volumes.

Under the 2023 Build Traffic Scenario, all intersections operate at overall level of service "B" or better. In addition, all individual movements operate at overall level of service "D" or better with recommended improvements applied with the exception of the SBL movement at the intersection of Louisville Highway and QuikTrip Drive A operates at a LOS "E" during the AM Peak Hour. CESO does not recommend any improvements as longer delays are expected at this intersection due to high through volumes.

Under the 2033 No-Build Traffic Scenario, all studied intersections continue to operate at overall level of service "B" or better. In addition, all movements operate at LOS "D" or better with the exception of the SBL movements at the intersections Louisville Highway with all of the QuikTrip Drives. These intersections have a level of service "F" or "E" in both the AM and PM Peak hours. CESO does not recommend any improvements as longer delays are expected at this intersection due to high through volumes.

Under the 2033 Build Traffic Scenario, all intersections operate at overall level of service "B" or better. In addition, all individual movements operate at overall level of service "D" or better with the exception of the SBL movements at the intersections Louisville Highway with all of the QuikTrip Drives. These intersections have a level of service "F" or "E" in both the AM and PM Peak hours. CESO does not recommend any improvements as longer delays are expected at this intersection due to high through volumes.

CESO conducted turn lane analyses for the study network and reached the following conclusions:

- Based upon the capacity analyses results and queue length analysis results, CESO determined that a right-turn lane **is not required** at the intersection of Louisville Highway and the Site Driveway.
- Based on Table 1 (Harmelink Table for Two-Lane Highways), a left-turn lane **is warranted** at the intersection of Louisville Highway and the Site Driveway.

CESO conducted queue length analyses for the study network and reached the following conclusions:

Under the 2033 No-Build Traffic Scenario there will be significant queueing delays in the eastbound and westbound through lanes at the intersections of Louisville Highway (31W) and I-65 (SR 41) Southbound Ramps and Louisville Highway (31W) and I-65 (SR 41) Southbound Off-Ramp Left-Turn. These queueing delays will affect traffic entering and exiting the QuikTrip Drives. CESO recommends monitoring these intersections. If the growth rate of 2.8% remains consistent, the southbound left and right turn lanes should be realigned and signalized as a single intersection to decrease queue lengths and improve the function of the I-65 SB/Louisville Highway Interchange. In addition, the eastbound through movement should be restriped to allow two through lanes along the entire I-65/Louisville Highway Interchange.

1.3. Summary of Recommendations

All recommendations are illustrated on Figure 11.

2023 No-Build Traffic Scenario (Responsibility – TDOT/Others):

Louisville Highway (31W) and I-65 (SR 41) Southbound Ramps:

- Construct a 100-foot EB to SB right-turn lane with a 150-foot diverging taper.
- Install additional southbound through lane to accommodate traffic turning onto the I-65 Southbound On Ramp

Louisville Highway (31W) and I-65 (SR 41) Southbound Off-Ramp Left-Turn:

- Signalize intersection and coordinate signal with the signal at the intersection of Louisville Highway (31W) and I-65 (SR 41) Northbound Off-Ramp Left-Turn.
- Construct a 150-foot SB to EB left-turn lane with 150-foot diverging taper.

2023 Build Traffic Scenario (Responsibility – Louisville Highway Industrial Park):

Louisville Highway (31W) and Site Driveway:

- Construct Full Access Site Driveway to permit left-in, left-out, right-in, and right-out movements. Control Site Driveway with one stop sign. Provide one outbound left-turn lane and one outbound right-turn lane.

2033 No-Build Traffic Scenario (Responsibility – TDOT/Others):

Louisville Highway (31W) and I-65 (SR 41) Southbound Ramps and Louisville Highway (31W) and I-65 (SR 41) Southbound Off-Ramp Left-Turn

- CESO recommends monitoring these intersections as there are significant queueing delays in the eastbound and westbound through lanes under the 2033 No-Build Traffic Scenario. If the growth rate of 2.8% remains consistent, the southbound left and right turn lanes should be realigned and signalized as a single intersection to decrease queue lengths and improve the function of the I-65/Louisville Highway Interchange. In addition, the eastbound through movement should be restriped to allow two through lanes along the entire I-65/Louisville Highway Interchange.

2033 Build Traffic Scenario (Responsibility – Louisville Highway Industrial Park):

- No additional Improvements

2. Introduction

This report is submitted on behalf of Al Neyer in connection with its application to the City of Goodlettsville, TN for Site Plan approval. The Traffic Impact Study (TIS) conducted by CESO, Inc. addresses the traffic related impacts associated with the proposed Louisville Highway Industrial Park; referred to herein as “Louisville Highway Industrial Park Development.”

The proposed 25.6-acre Louisville Highway Industrial Park Development is to be located between Louisville Highway (31W) and I-65 within Goodlettsville, Sumner County, TN. The full buildout of the Louisville Highway Industrial Park Development is projected to contain 2 buildings. The first proposed building will have approximately 123,200 square feet of space and the second proposed building will have approximately 102,000 square feet of space.

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- Full access driveway connection to Louisville Highway (referred to as Site Driveway) approximately 680’ west of the intersection of Louisville Highway and Long Drive.

The Site Plan application also requests approval to conduct work within the right-of-way for the construction of the Site driveways along with the recommended roadway improvements.

The purpose of the TIS was to identify and mitigate the traffic related impacts, if any, during typical weekday AM and PM Peak Hours of the adjacent street traffic, corresponding with the weekday hours of operation for the proposed Louisville Highway Industrial Park Development. The Traffic Impact Study addresses the roadway capacity analysis, turn lane analyses, queue lengths, site access, and necessary mitigation based upon the findings. The study parameters of this report were generated based upon the project scope, recent concept plan, and Memorandum of Understanding (MOU) with the City of Goodlettsville and the Tennessee Department of Transportation (TDOT, Region 3).

The following intersections were analyzed in the Traffic Impact Study:

- Louisville Highway (31W) and I-65 (SR 41) Southbound Ramps (Stop Controlled)
- Louisville Highway (31W) and I-65 (SR 41) Southbound Off-Ramp Left-Turn (Stop Controlled)
- Louisville Highway (31W) and I-65 (SR 41) Northbound Off-Ramp Left-Turn (Signalized)
- Louisville Highway (31W) and I-65 (SR 41) Northbound Ramps (Free Flow)

Due to circumstances caused by COVID-19, accurate turning movement counts could not be collected at the study intersections. Through coordination with the City of Goodlettsville and TDOT, hourly volume counts from 2019 along Louisville Highway and the interchange ramps were obtained. Utilizing these volume counts, turning movement volumes were estimated at the study intersections for both the AM and PM peak hours. These turning movement volumes were utilized for the analyses under existing conditions.

Louisville Highway is under the jurisdiction of the City of Goodlettsville and the I-65 NB/SB Ramps are under the jurisdiction of the Tennessee Department of Transportation.

The Traffic Impact Study focused on evaluating the Existing, 2023 No-Build, 2023 Build, 2033 No-Build, and 2033 Build traffic conditions near the site under three distinct traffic scenarios.

The five (5) traffic scenarios analyzed in the TIS were:

Existing Traffic Scenario – Represents current (year 2022) traffic conditions during the weekday AM and PM Peak Hours of the adjacent roadway network. The Existing Traffic Scenario served as a baseline for comparison of the traffic impacts in relation to the proposed Louisville Highway Industrial Park Development.

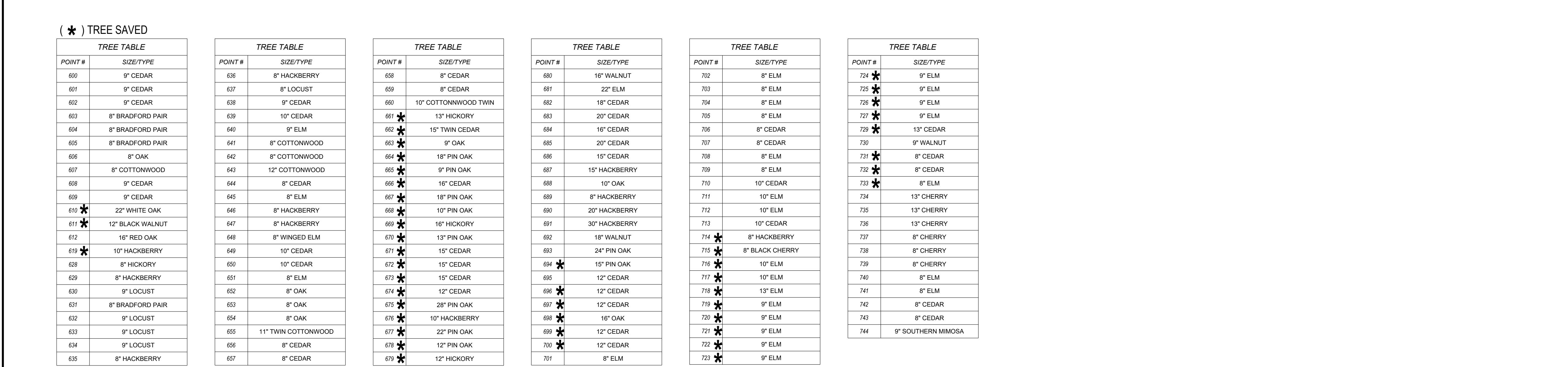
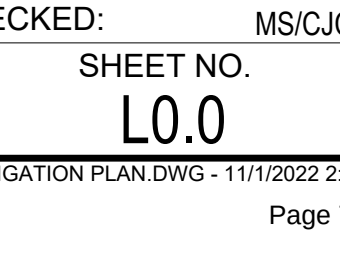
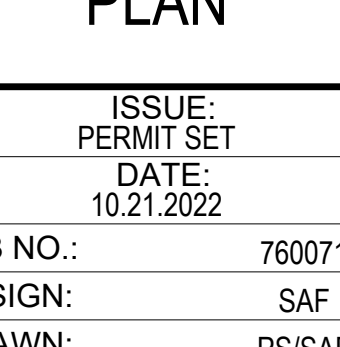
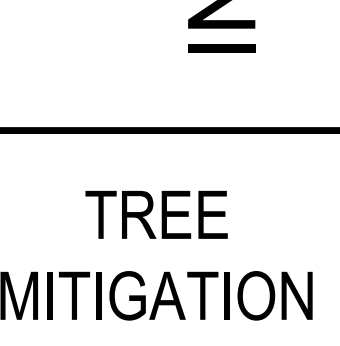
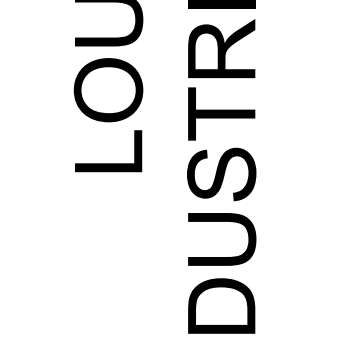
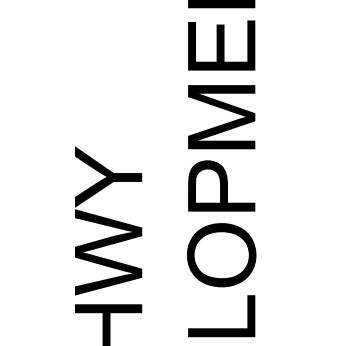
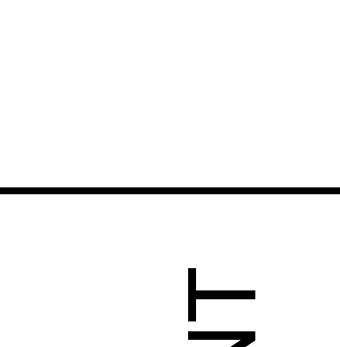
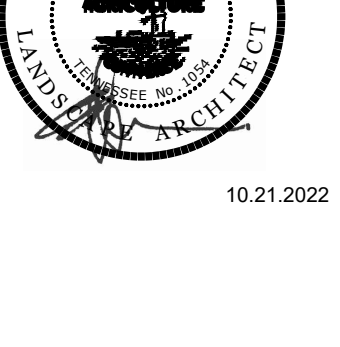
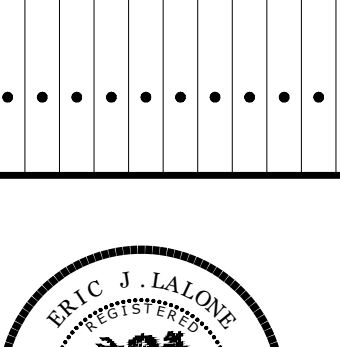
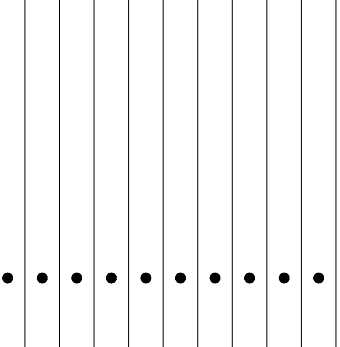
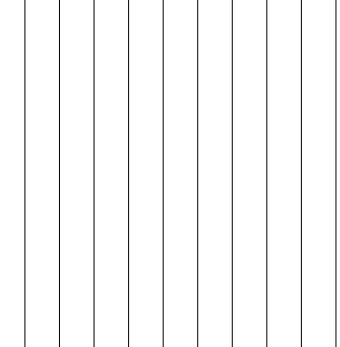
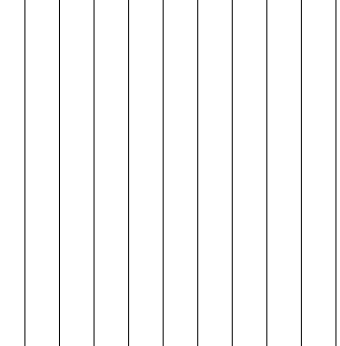
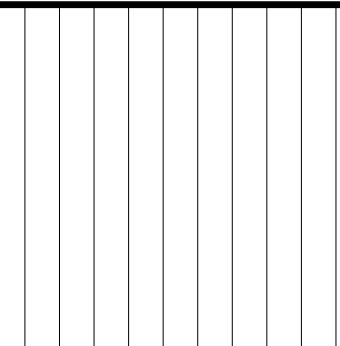
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The Site is to be located between Louisville Highway (31W) and I-65 within Goodlettsville, Sumner County, TN. Figure 1 illustrates the Site Location with respect to the study area and Figure 2 illustrates the Site Plan for the proposed Louisville Highway Industrial Park Development.



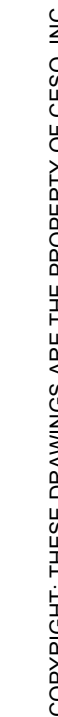
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733 ✱	8" ELM
734	13" CHERRY
735	13" CHERRY
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737	8" CHERRY
738	8" CHERRY
739	8" CHERRY
740	8" ELM
741	8" ELM
742	8" CEDAR
743	8" CEDAR
744	9" SOUTHERN MIMOSA



PRUNING SHALL BE DONE PER ANSI A300 AND INTERNATIONAL SOCIETY OF ARBORICULTURE (ISA) BEST MANAGEMENT PRACTICES GUIDELINES



FORTY- EIGHT (48) HOURS BEFORE DIGGING IS TO
 COMMENCE, THE CONTRACTORS SHALL NOTIFY THE
 FOLLOWING AGENCIES: TENNESSEE UTILITY PROTECTION
 SERVICE AT 811 OR 1-800-351-1111 AND ALL OTHER
 AGENCIES WHICH MIGHT HAVE UNDERGROUND UTILITIES
 INVOLVING THIS PROJECT AND ARE NONMEMBERS OF
 TENNESSEE UTILITY PROTECTION SERVICE.

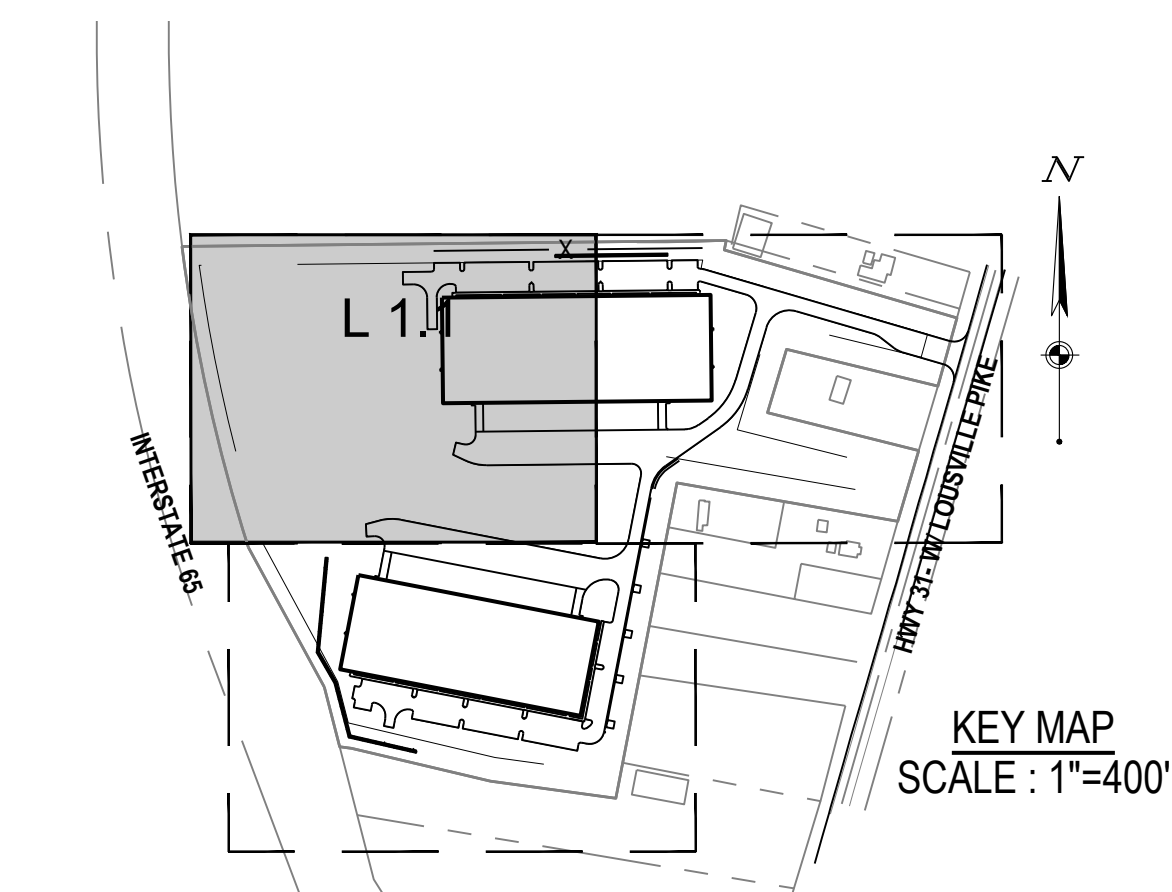
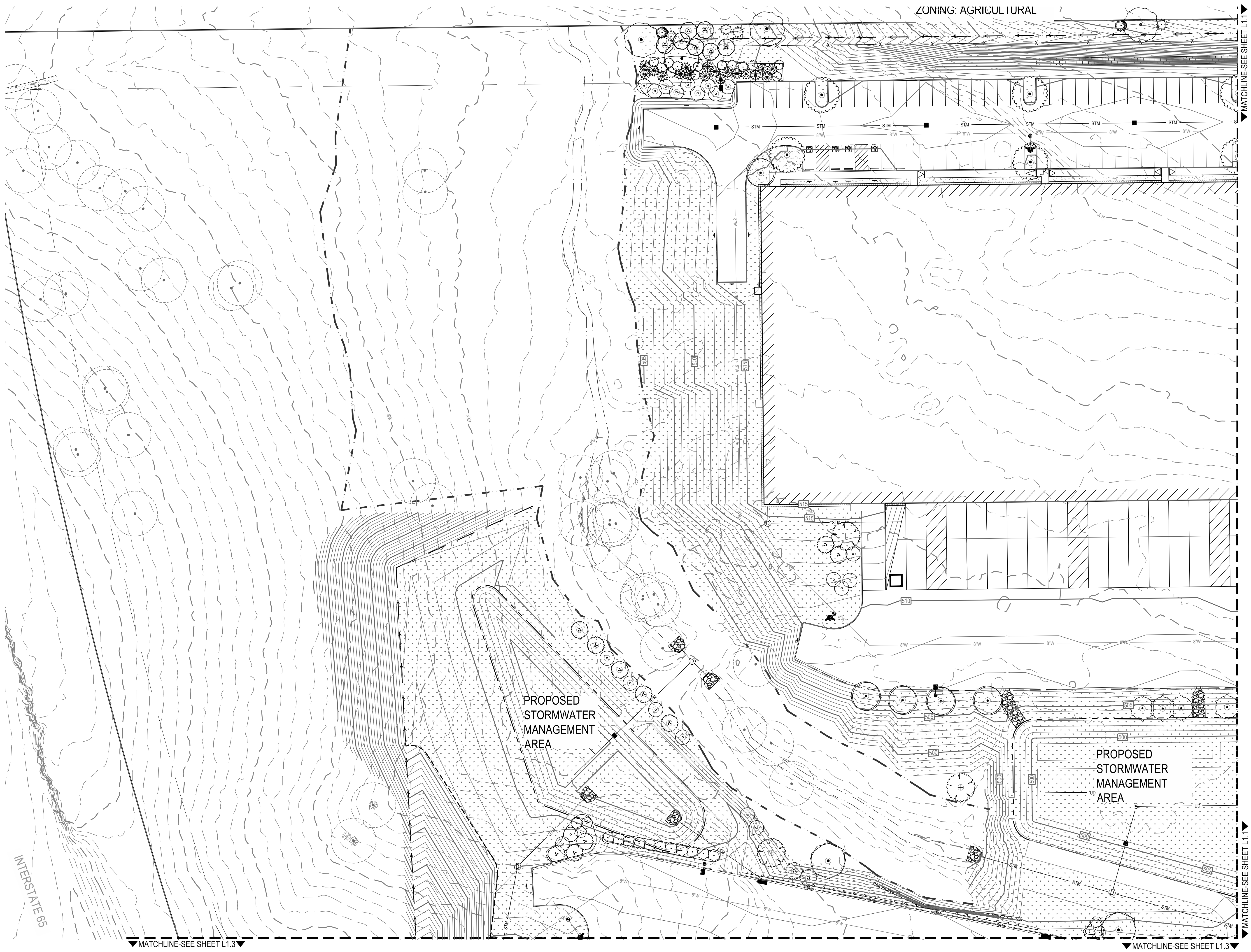


(**) SOME PROPOSED PLANTS HAVE BEEN LAID OUT BEYOND MIN. PERIMETER BUFFER ZONES, TO BEST ACCOMMODATE RESTRICTED PROTECTION AREAS AND/OR TO MAXIMIZE BUFFERING AT HEIGHT ADVANTAGE.

- ALL PLANT BEDS SHALL CONTAIN A 4" LAYER OF PINE NEEDLE MULCH, INCLUDING ALL INTERNAL PARKING ISLANDS
- CONTRACTOR TO PLACE 4" DIAMETER MULCH RING AROUND ALL TREES IN LAWN
- REFER TO CIVIL DRAWINGS FOR EROSION CONTROL BLANKET LAYOUT AND DETAILS
- EXTERIOR BUILDING FAÇADE SHALL BE TREATED WITH 18" WIDE LANDSCAPE MAINTENANCE GRAVEL STRIP. SEED BEYOND THE STRIP. SEE LANDSCAPE DETAILS.

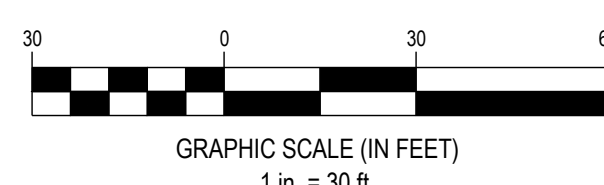


OVERALL PLANTING PLAN	
ISSUE: PERMIT SET	
DATE: 10.21.2022	
JOB NO.:	76007
DESIGN:	SAF
DRAWN:	PS/SAF
CHECKED:	MS/CJL
SHEET NO. L1.0	



LEGEND

---	PARCEL LINE
---	PROPERTY BOUNDARY LINE
---	EASEMENT LINE
---	OVERHEAD POWER LINE
STM	STORM DRAIN
SSW	SANITARY SEWER
W	WATER LINE
G	GAS LINE
UGT	UNDERGROUND TELEPHONE LINE
UGE	UNDERGROUND ELECTRIC LINE
UD	UNDERDRAIN
---	GAUDDRAIL
---	EXISTING TREE CANOPY
---	MAJOR EXISTING CONTOUR
---	MINOR EXISTING CONTOUR
---	MAJOR CONTOUR
---	MINOR CONTOUR
---	SWALE CENTERLINE
---	TURF LIMIT LINE



FORTY-EIGHT (48) HOURS BEFORE DIGGING IS TO COMMENCE, THE CONTRACTORS SHALL NOTIFY THE FOLLOWING AGENCIES: TENNESSEE UTILITY PROTECTION SERVICE AT 811 OR 1-800-351-1111 AND ALL OTHER AGENCIES WHICH MIGHT HAVE UNDERGROUND UTILITIES INVOLVING THIS PROJECT AND ARE NONMEMBERS OF TENNESSEE UTILITY PROTECTION SERVICE.

PLANT SCHEDULE

CANOPY TREE



BOTANICAL / COMMON NAME

ACER RUBRUM 'BRANDYWINE'
BRANDYWINE RED MAPLE

ACER X FREEMANII 'ARMSTRONG'
ARMSTRONG FREEMAN MAPLE

GINKGO BILOBA
MAIDENHAIR TREE (MALE ONLY)

GYMNOCLADUS DIOICA 'ESPRESSO'
KENTUCKY COFFEETREE

PLATANUS OCCIDENTALIS
AMERICAN SYCAMORE

PLATANUS X ACERIFOLIA 'BLOODGOOD'
BLOODGOOD LONDON PLANE TREE

QUERCUS PALUSTRIS
PIN OAK

TAXODIUM DISTICHUM
BALD CYPRESS

ULMUS AMERICANA 'VALLEY FORGE'
VALLEY FORGE AMERICAN ELM

EVERGREEN TREES



ILEX OPACA
AMERICAN HOLLY

ILEX X ATTENUATA 'FOSTERI'
FOSTER'S HOLLY

JUNIPERUS VIRGINIANA
EASTERN REDCEDAR

MAGNOLIA GRANDIFLORA
SOUTHERN MAGNOLIA

PINUS STROBUS
WHITE PINE

PINUS SYLVESTRIS
SCOTCH PINE

PINUS VIRGINIANA
VIRGINIA PINE

UNDERSTORY TREES



AMELANCHIER ARBOREA 'TIFT COUNTY' TM
PINK DAMSEL DOWNY SERVICEBERRY

CARPINUS CAROLINIANA
AMERICAN HORNBEAM

ILEX CORNUTA 'BURFORDII'
BURFORD HOLLY

LIQUIDAMBAR STYRACIFLUA 'SLENDER SILHOUETTE'
SLENDER SILHOUETTE SWEET GUM

MAGNOLIA VIRGINIANA
SWEETBAY MAGNOLIA (STANDARD)

SHRUBS



ARONIA ARBUTIFOLIA
RED CHOKEBERRY

ILEX GLABRA 'SHAMROCK'
SHAMROCK INKBERRY HOLLY

JUNIPERUS CHINENSIS 'SAYBROOK GOLD'
SAYBROOK GOLD JUNIPER

NANDINA DOMESTICA 'GULF STREAM' TM
GULF STREAM HEAVENLY BAMBOO

VIBURNUM X PRAGENSE
PRAGUE VIBURNUM

GROUND COVERS



CYNODON DACTYLON (SEED)
BERMUDAGRASS

CYNODON DACTYLON (SOD)
BERMUDAGRASS

18" WIDE LANDSCAPE MAINTENANCE STRIP



10.21.2022

PLANTING
PLAN

ISSUE:
PERMIT SET

DATE:
10.21.2022

JOB NO.: 760071

DESIGN: SAF

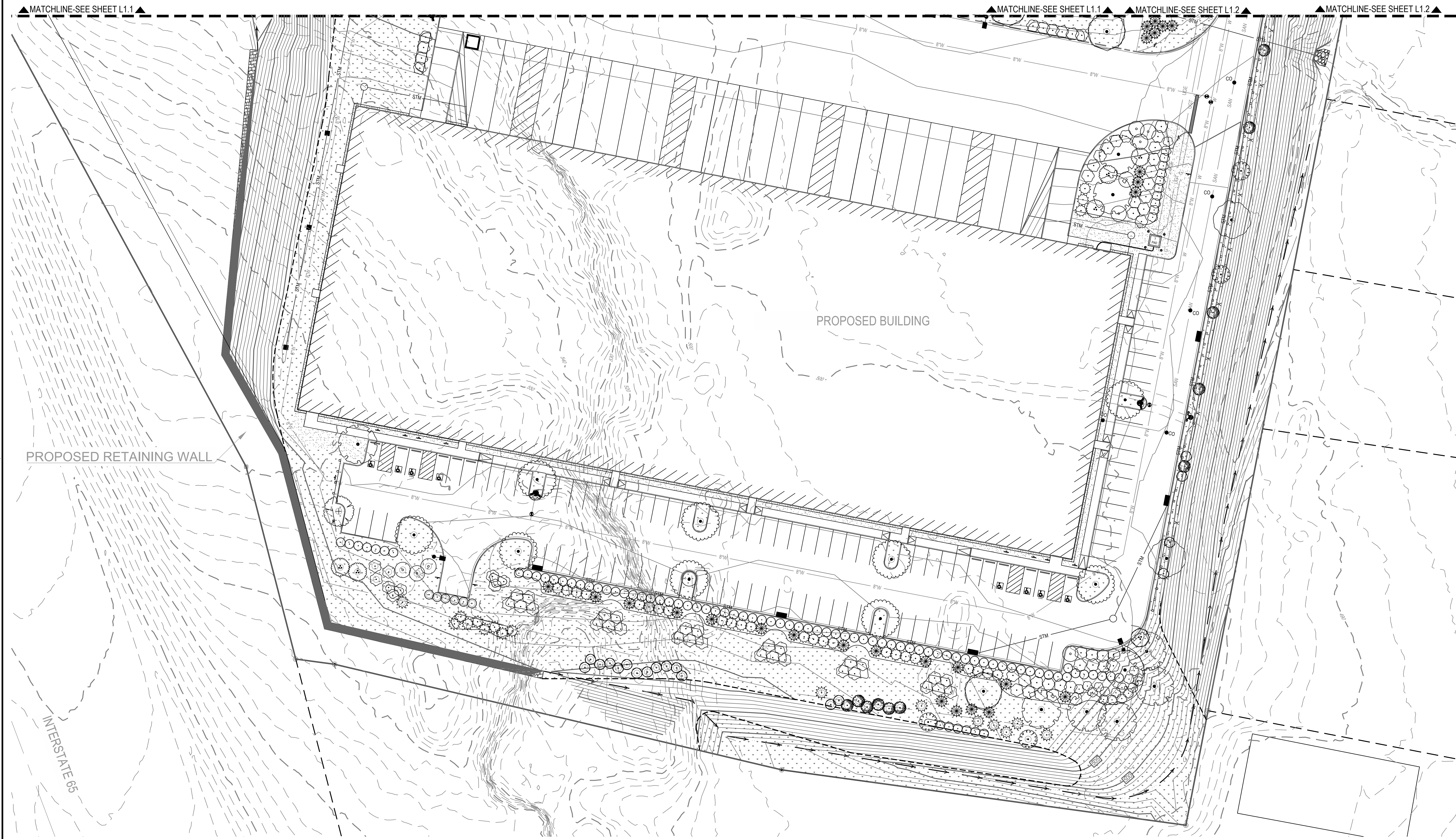
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SHEET NO.

L1.1

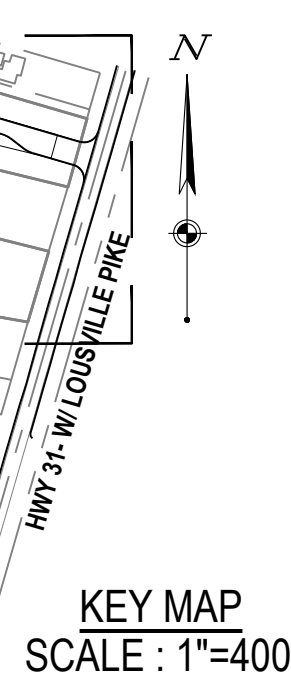
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PROPOSED RETAINING WALL

PROPOSED BUILDING

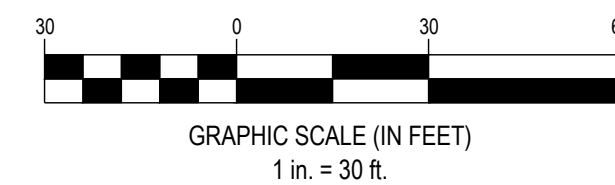
INTERSTATE 65



KEY MAP
SCALE : 1"=400'

LEGEND

- PARCEL LINE
- PROPERTY BOUNDARY LINE
- EASEMENT LINE
- OVERHEAD POWER LINE
- STM STORM DRAIN
- SAN SANITARY SEWER
- W WATER LINE
- G GAS LINE
- UGT UNDERGROUND TELEPHONE LINE
- UGE UNDERGROUND ELECTRIC LINE
- UD UNDERDRAIN
- GARDRAIL
- EXISTING TREE CANOPY
- MAJOR EXISTING CONTOUR
- MINOR EXISTING CONTOUR
- MAJOR CONTOUR
- MINOR CONTOUR
- SWALE CENTERLINE
- TURF LIMIT LINE



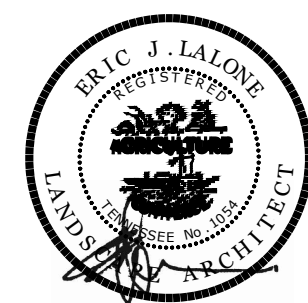
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PLANT SCHEDULE

CANOPY TREE	BOTANICAL / COMMON NAME
	ACER RUBRUM 'BRANDYWINE' BRANDYWINE RED MAPLE
	ACER X FREEMANII 'ARMSTRONG' ARMSTRONG FREEMAN MAPLE
	GINKGO BILOBA MAIDENHAIR TREE (MALE ONLY)
	GYMNOCLADUS DIOICA 'ESPRESSO' KENTUCKY COFFEETREE
	PLATANUS OCCIDENTALIS AMERICAN SYCAMORE
	PLATANUS X ACERIFOLIA 'BLOODGOOD' BLOODGOOD LONDON PLANE TREE
	QUERCUS PALUSTRIS PIN OAK
	TAXODIUM DISTICHUM BALD CYPRESS
	ULMUS AMERICANA 'VALLEY FORGE' VALLEY FORGE AMERICAN ELM
EVERGREEN TREES	BOTANICAL / COMMON NAME
	ILEX OPACA AMERICAN HOLLY
	ILEX X ATTENUATA 'FOSTERI' FOSTER'S HOLLY
	JUNIPERUS VIRGINIANA EASTERN REDCEDAR
	MAGNOLIA GRANDIFLORA SOUTHERN MAGNOLIA
	PINUS STROBUS WHITE PINE
	PINUS SYLVESTRIS SCOTCH PINE
	PINUS VIRGINIANA VIRGINIA PINE
UNDERSTORY TREES	BOTANICAL / COMMON NAME
	AMELANCHIER ARBOREA 'TIFT COUNTY' TM PINK DANSEL DOWNY SERVICEBERRY
	CARPINUS CAROLINIANA AMERICAN HORNBEAM
	ILEX CORNUTA 'BURFORDII' BURFORD HOLLY
	LIQUIDAMBAR STYRACIFLUA 'SLENDER SILHOUETTE' SLENDER SILHOUETTE SWEET GUM
	MAGNOLIA VIRGINIANA SWEETBAY MAGNOLIA (STANDARD)
SHRUBS	BOTANICAL / COMMON NAME
	ARONIA ARBUTIFOLIA RED CHOKEBERRY
	ILEX GLABRA 'SHAMROCK' SHAMROCK INKBERRY HOLLY
	JUNIPERUS CHINENSIS 'SAYBROOK GOLD' SAYBROOK GOLD JUNIPER
	NANDINA DOMESTICA 'GULF STREAM' TM GULF STREAM HEAVENLY BAMBOO
	VIBURNUM X PRAGENSE PRAGUE VIBURNUM
GROUND COVERS	BOTANICAL / COMMON NAME
	CYNODON DACTYLON (SEED) BERMUDAGRASS
	CYNODON DACTYLON (SOD) BERMUDAGRASS
	18" WIDE LANDSCAPE MAINTENANCE STRIP

REVISION DESCRIPTION

NO. DATE



10.21.2022

AL NEYER

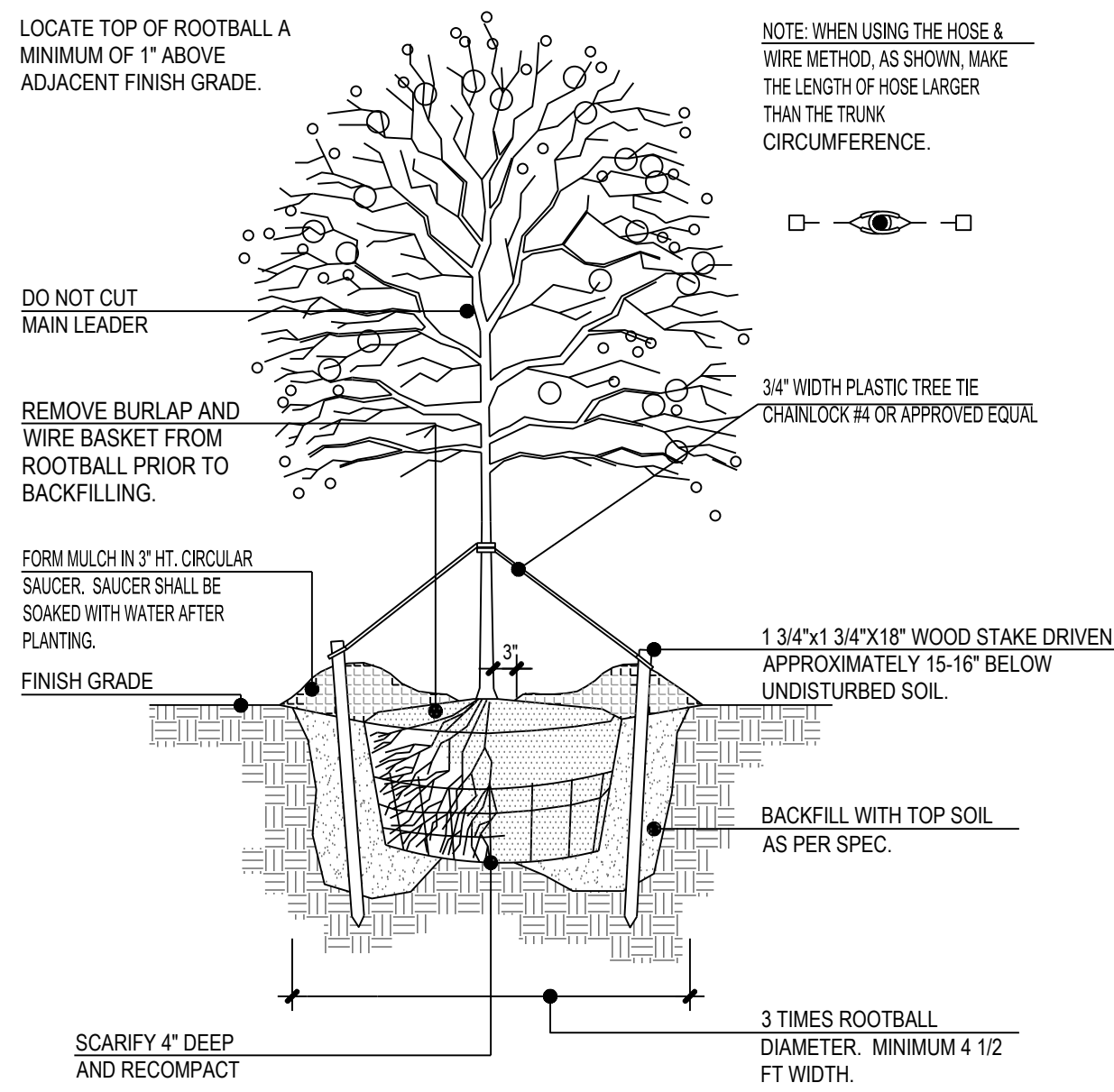
LOUISVILLE HWY
INDUSTRIAL DEVELOPMENT

1016 LOUISVILLE HWY (31W), GOODLETTSVILLE, TN 37072

PLANTING
PLAN

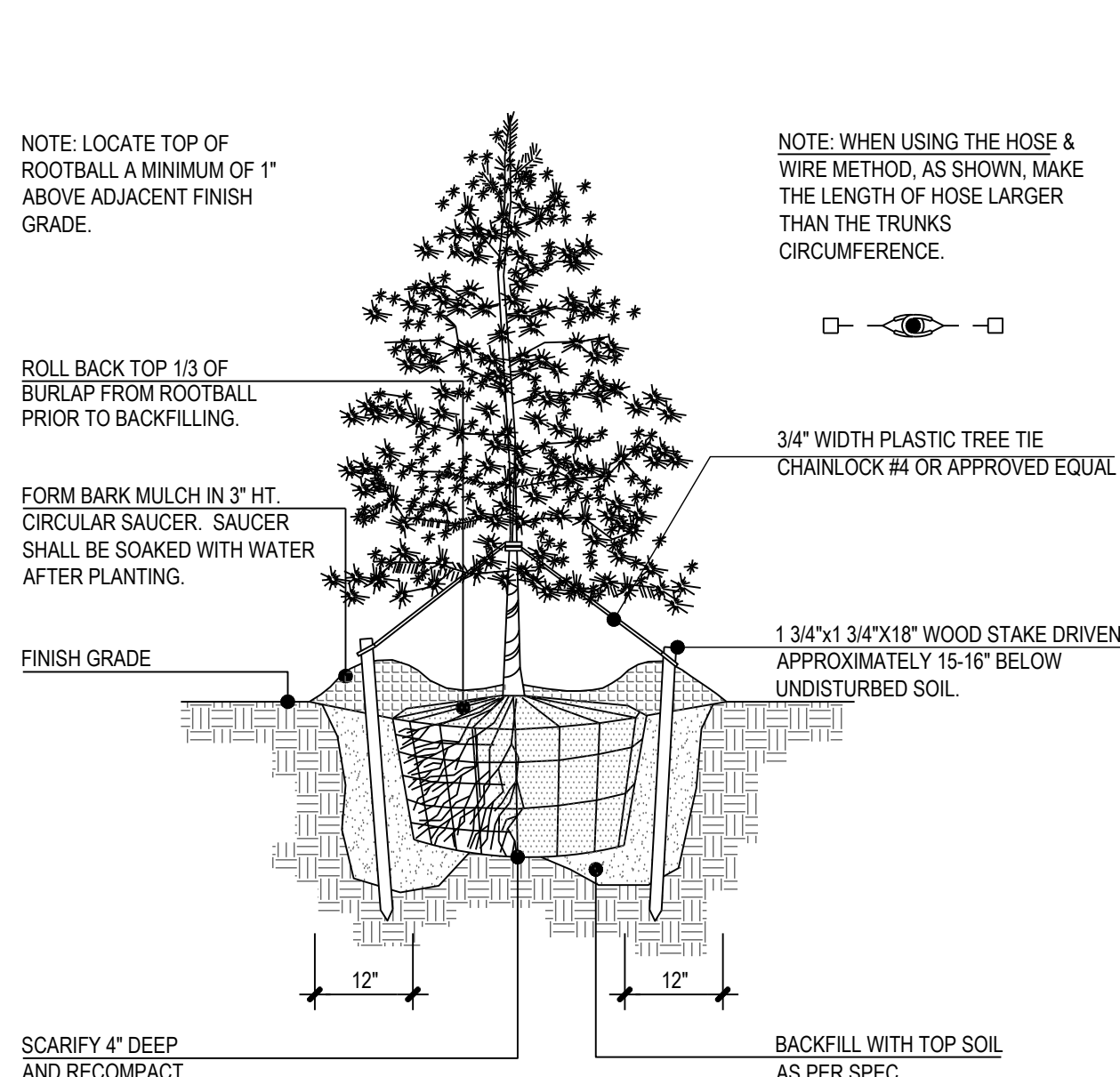
ISSUE:	PERMIT SET
DATE:	10.21.2022
JOB NO.:	760071
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CHECKED:	MS/CJC
SHEET NO.	L1.3

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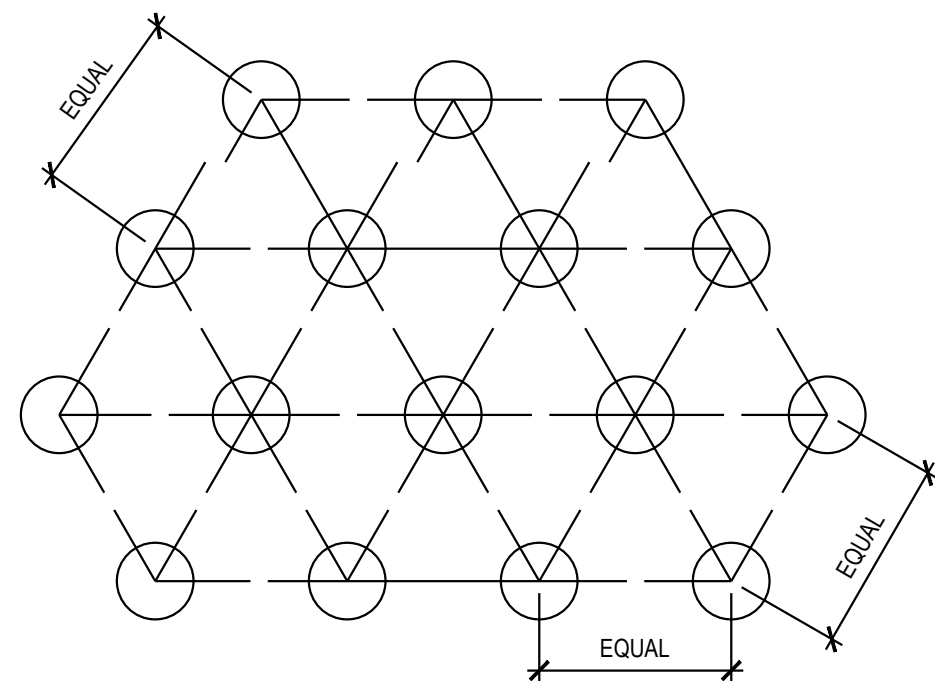
1 DECIDUOUS TREE STAKING

N.T.S.



2 EVERGREEN TREE STAKING

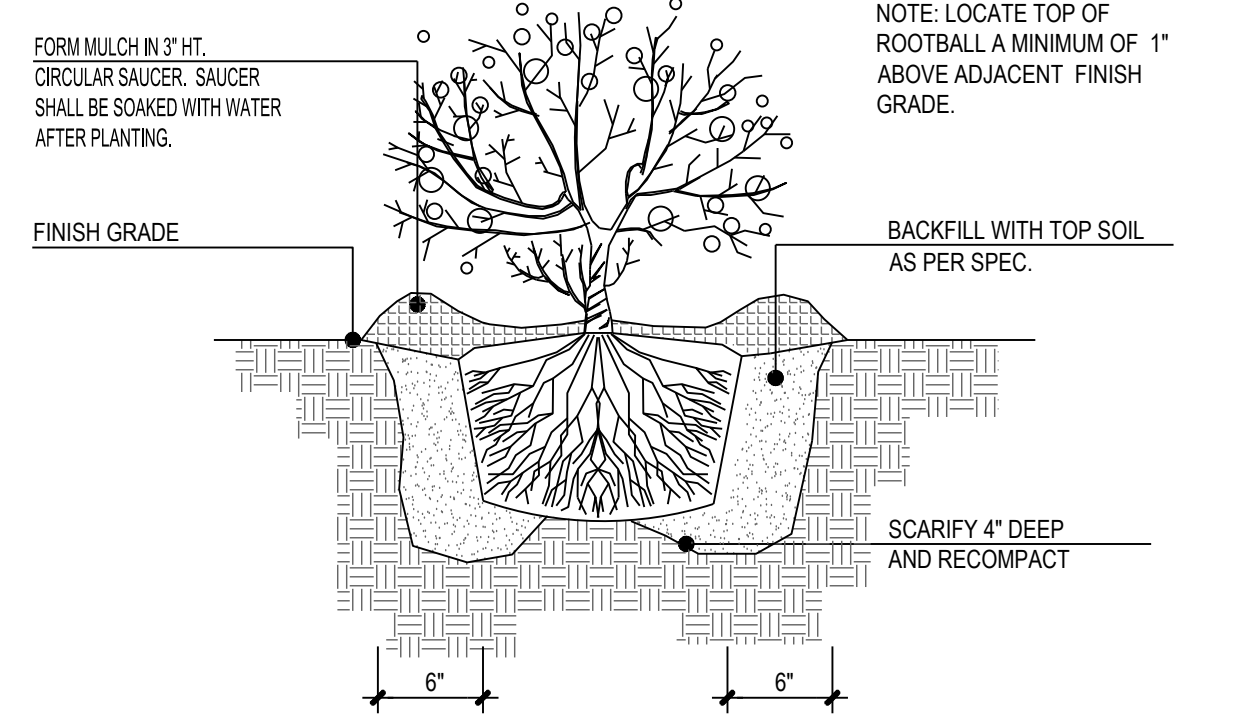
N.T.S.



ALL GROUND COVER SHALL BE PLANTED AT EQUAL TRIANGULAR SPACING PER ON CENTER SPACING AS SPECIFIED ON PLANTING PLAN.

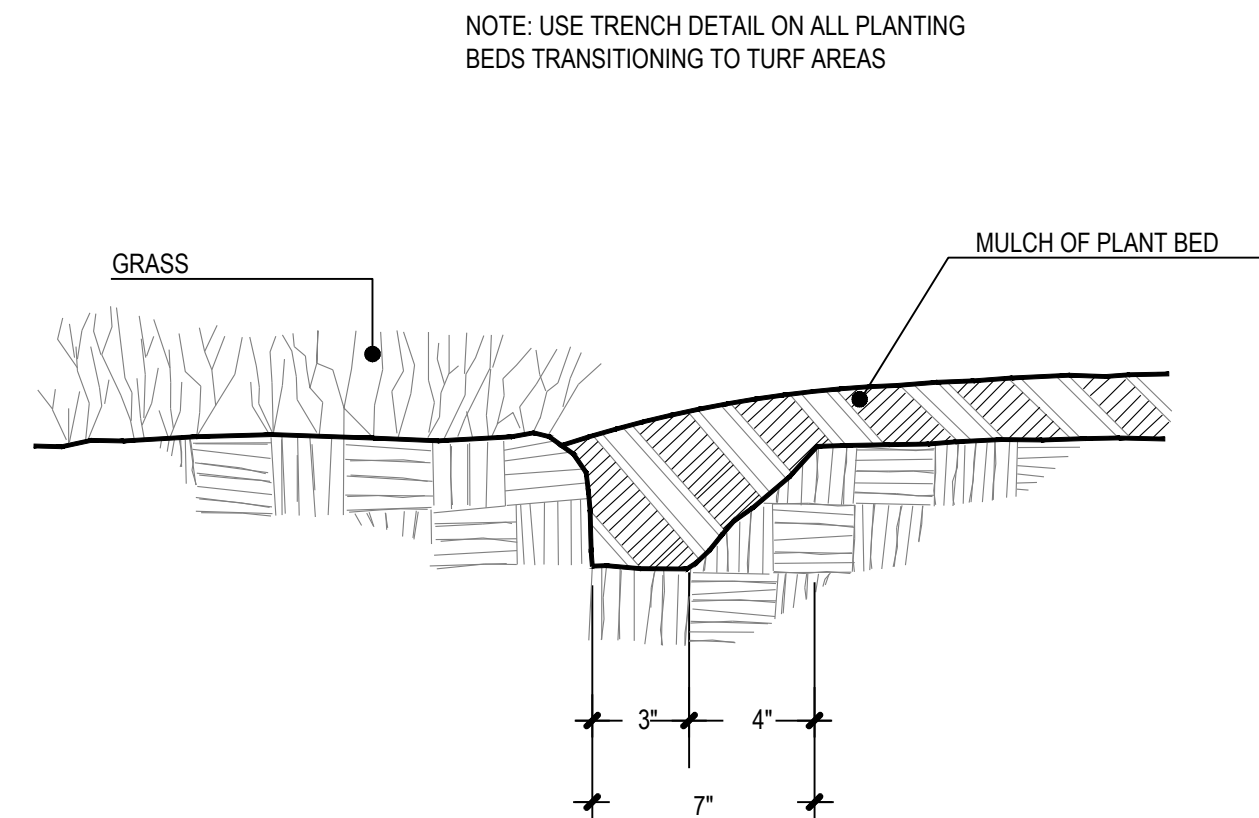
LOCATE GROUND COVER ONE HALF OF SPECIFIED SPACING DISTANCE FROM ANY CURB, SIDEWALK, OR OTHER HARD SURFACE, UNLESS OTHERWISE NOTED.

3 GROUND COVER SPACING



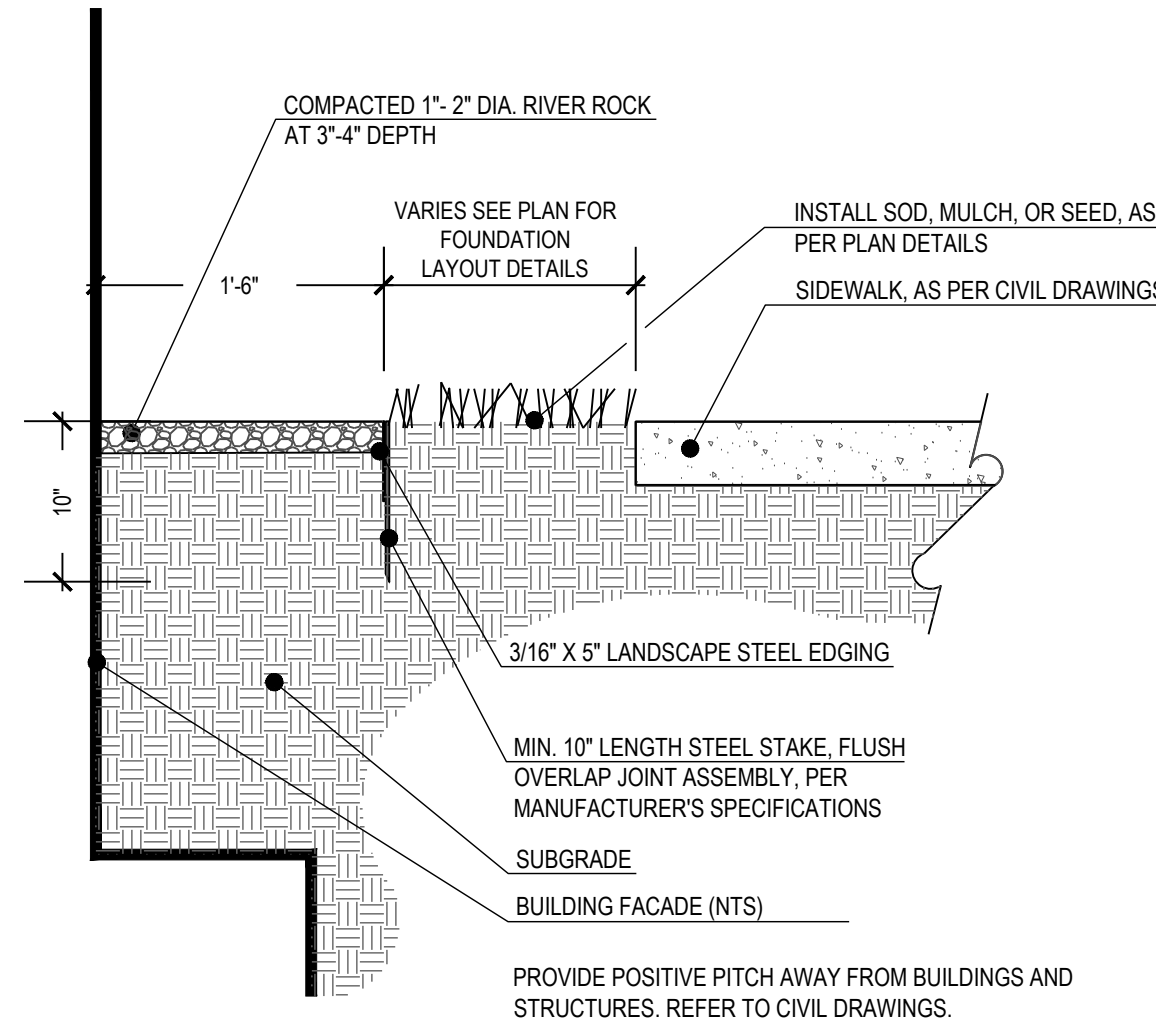
4 EVERGREEN / DECIDUOUS SHRUB

N.T.S.



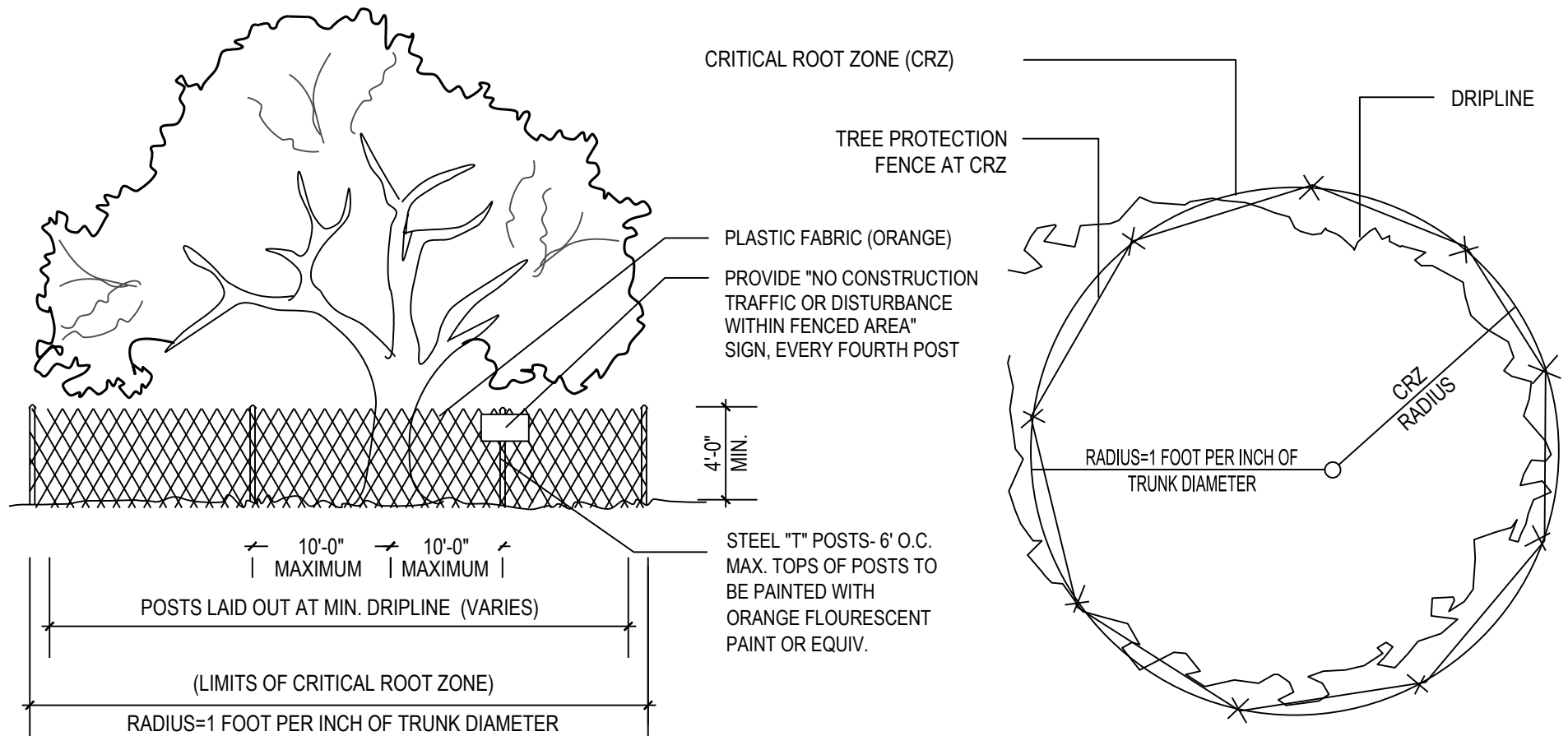
5 TRENCH EDGING

N.T.S.



6 BUILDING FOUNDATION MAINTENANCE EDGING

N.T.S.



- NOTES:
1. NO TRUCKS OR HEAVY EQUIPMENT ALLOWED WITHIN BARRIERS, ONLY HAND LABOR ALLOWED.
 2. NO CONSTRUCTION MATERIALS, SOILS DEPOSITS, OR SOLVENTS SHALL BE ALLOWED WITHIN BARRIERS.
 3. BARRIERS ARE TO IN PLACE PRIOR TO ANY CONSTRUCTION ACTIVITIES WITH-IN TREE AREA.
 4. BARRIERS ARE TO STAY IN PLACE UNTIL ALL PAVING, CONSTRUCTION, AND HEAVY EQUIPMENT IS REMOVED FROM THE AREA.
 5. CRITICAL ROOT ZONE: 1 INCH OF TREE AT DIAMETER BREAST HEIGHT (DBH) IS EQUAL TO 1 FOOT OF CRITICAL ROOT ZONE (CRZ). IE. 30 INCH DBH = 30 FOOT CRZ

7 TYP. TREE PROTECTION

N.T.S.

GENERAL NOTES: LANDSCAPE PLAN

1. CONTRACTOR TO VERIFY WITH OWNER AND UTILITY COMPANIES THE LOCATIONS OF ALL UTILITIES PRIOR TO CONSTRUCTION. TO DETERMINE IN THE FIELD THE ACTUAL LOCATIONS AND ELEVATIONS OF ALL EXISTING UTILITIES, WHETHER SHOWN ON THE PLANS OR NOT. THE CONTRACTOR SHALL CALL UTILITY LOCATE SERVICE 72 HOURS PRIOR TO CONSTRUCTION.
2. SITE CONDITIONS BASED UPON SURVEY PROVIDED BY OWNER. CONTRACTOR TO FIELD VERIFY EXISTING CONDITIONS BY DETAILED INSPECTION PRIOR TO SUBMITTING BID AND BEGINNING CONSTRUCTION.
3. REFER TO SITE CIVIL DRAWINGS FOR ADDITIONAL REQUIREMENTS AND COORDINATE WORK WITH OTHER SITE RELATED DEVELOPMENT DRAWING AS NEEDED.
4. REESTABLISH EXISTING TURF IN AREAS DISTURBED BY GRADING OR UTILITY TRENCHING, INCLUDING AREAS IN RIGHT-OF-WAY, TO MATCH EXISTING SPECIES.
5. CONTRACTOR SHALL EXAMINE FINISH SURFACE, GRADES, TOPSOIL QUALITY AND DEPTH. DO NOT START ANY WORK UNTIL UNSATISFACTORY CONDITIONS HAVE BEEN CORRECTED. VERIFY LIMITS OF WORK BEFORE STARTING.
6. CONTRACTOR TO REPORT ALL DAMAGES TO EXISTING CONDITIONS AND INCONSISTENCIES WITH PLANS TO LANDSCAPE ARCHITECT.
7. CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE IN ALL LANDSCAPE BEDS AND ALL LAWN AREAS.
8. CONTRACTOR TO FINE GRADE AND ROCK-HOUND ALL TURF AREAS PRIOR TO SEEDING, TO PROVIDE A SMOOTH AND CONTINUAL SURFACE, FREE OF IRREGULARITIES (BUMPS OR DEPRESSIONS) & EXTRANEIOUS MATERIAL OR DEBRIS.
9. REMOVE EXISTING WEEDS FROM PROJECT SITE PRIOR TO THE ADDITION OF ORGANIC AMENDMENTS AND FERTILIZER. APPLY AMENDMENTS AND FERTILIZER AS NEEDED.
10. QUANTITIES SHOWN ARE INTENDED TO ASSIST CONTRACTOR IN EVALUATING THEIR OWN TAKE OFFS AND ARE NOT GUARANTEED AS ACCURATE REPRESENTATIONS OF REQUIRED MATERIALS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR HIS BID QUANTITIES AS REQUIRED BY THE PLANS AND SPECIFICATIONS. IF THERE IS A DISCREPANCY BETWEEN THE NUMBER LABELED ON THE PLANT LEGEND AND THE QUANTITY OF GRAPHIC SYMBOLS SHOWN, THE GREATER QUANTITY SHALL GOVERN.
11. ONCE PROJECT IS AWARDED, THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE TO SECURE ALL PLANT MATERIAL IN THE SIZE SPECIFIED ON PLAN PRIOR TO INSTALLATION. IN THE EVENT THE PLANT MATERIAL IS NOT AVAILABLE IN THE SIZE SPECIFIED, THE CONTRACTOR SHALL INSTALL LARGER AT NO COST TO OWNER.
12. THE LANDSCAPE CONTRACTOR SHALL OBTAIN WRITTEN APPROVAL FOR ALL PLANT MATERIAL SUBSTITUTIONS FROM THE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION. PLANT SUBSTITUTIONS WITHOUT PRIOR WRITTEN APPROVAL THAT DO NOT COMPLY WITH THE DRAWINGS AND SPECIFICATIONS MAY BE REJECTED BY THE LANDSCAPE ARCHITECT AND REPLACED BY CONTRACTOR AT NO COST TO THE OWNER.
13. PRIOR TO MOBILIZATION THE CONTRACTOR SHALL NOTIFY THE LANDSCAPE ARCHITECT, IN WRITING, IF HE/SHE BELIEVES ANY OF THE PLANT MATERIAL IDENTIFIED ON THE PLAN MAY NOT BE SUITABLE FOR THE SITE OR MAY DIE. SUBSTITUTION REQUESTS WILL BE GRANTED BY THE LANDSCAPE ARCHITECT PRIOR TO THE START OF CONSTRUCTION ACTIVITIES. IF NOTIFICATION IS NOT GIVEN TO THE LANDSCAPE ARCHITECT ALL PLANTING WHICH FAILS TO GROW (EXCEPT FOR DEFECTS RESULTING FROM LACK OF ADEQUATE MAINTENANCE AS DETERMINED BY THE OWNER, NEGLIGENCE, OR VANDALISM) SHALL BE REPLACED BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE.
14. WHERE PROPOSED TREE LOCATIONS OCCUR UNDER EXISTING OVERHEAD UTILITIES OR CROWD EXISTING TREES, NOTIFY LANDSCAPE ARCHITECT TO ADJUST TREE LOCATIONS.
15. ALL PLANT MASSES TO BE TOP DRESSED WITH MULCH AS SPECIFIED IN PLANT SCHEDULE, SPREAD UNIFORMLY IN DEPTH OVER THE PLANTING BEDS AS DELINEATED ON THE PLANS UNLESS OTHERWISE NOTED.
16. BED EDGE TO BE NO LESS THAN 12" AND NO MORE THAN 18" FROM OUTER EDGE OF PLANT MATERIAL BRANCHING, WHERE GROUND-COVER OCCURS, PLANT TO LIMITS OF AREA AS SHOWN.
17. ALL PLANTS SHALL BE GUARANTEED FOR 1 YEAR AFTER SUBSTANTIAL COMPLETION OCCURS AND FINAL ACCEPTANCE BY OWNER.
18. LANDSCAPE MAINTENANCE PERIOD BEGINS IMMEDIATELY AFTER THE COMPLETION OF ALL PLANTING OPERATIONS AND WRITTEN ACCEPTANCE FROM THE OWNER AND LANDSCAPE ARCHITECT. MAINTAIN TREES, SHRUBS, LAWNS, AND OTHER PLANTS AS PER THE PROJECT MANUAL AND/OR WRITTEN SPECIFICATIONS, IF APPLICABLE. LANDSCAPE MAINTENANCE IS THE LANDSCAPING CONTRACTORS RESPONSIBILITY UNTIL FINAL ACCEPTANCE BY THE OWNER.
19. ALL LANDSCAPE MAINTENANCE SHALL BE IN ACCORDANCE WITH LOCAL GOVERNING STANDARDS.
20. REFER TO PROJECT MANUAL OR WRITTEN SPECIFICATIONS, IF AVAILABLE, FOR ADDITIONAL REQUIREMENTS.

SOIL PLANTING MIXTURE (MIX ON SITE)

1. THE LANDSCAPE CONTRACTOR SHALL FURNISH FROM THEIR SOURCE A GOOD CLEAN, NATIVE SOIL WHICH SHALL MEET THE APPROVAL OF THE OWNER'S REPRESENTATIVE. THIS SOIL SHALL BE USED FOR THE PLANTING MIXTURE AS FOLLOWS:
A. ONE PART COMPOST/MANURE PLANTING MIX, TOPSOIL OR APPROVED EQUAL.
B. ONE PART NATIVE SOIL.
2. SOILS WITHIN PLANTING AREAS MUST BE SUITABLE FOR PROPOSED PLANTED MATERIAL & SOD WITH REGARD TO: pH, SOIL TEXTURE, SOIL STRUCTURE, AND SEASONAL HIGH WATER TABLE. THE CONTRACTOR SHALL ANALYZE EXISTING SOILS LOCATED IN PROXIMITY TO PROPOSED PLANT MATERIAL AND BE RESPONSIBLE TO AMEND THE SOIL TO OBTAIN ESSENTIAL REQUIREMENTS NECESSARY FOR THE ESTABLISHMENT AND GROWTH OF PLANT LIFE. LANDSCAPE CONTRACTOR TO PROVIDE SOILS REPORT AND APPROPRIATE RECOMMENDATIONS PRIOR TO INSTALLATION TO OWNER'S REPRESENTATIVE FOR REVIEW. FAILURE TO PROVIDE REPORT MAY RESULT IN PLANT MATERIAL BEING REJECTED BY OWNER'S REPRESENTATIVE AND REPLACED AT NO COST TO OWNER.
3. THE LANDSCAPE CONTRACTOR SHALL NOTIFY THE OWNER'S REPRESENTATIVE IN WRITING PRIOR TO PLANTING, WHEN CONDITIONS DETRIMENTAL TO PLANT GROWTH ARE ENCOUNTERED, SUCH AS RUBBLE FILL, POOR PLANTING SOIL, ADVERSE DRAINAGE CONDITIONS, OR OBSTRUCTIONS.



REVISION DESCRIPTION

NO. DATE



10.21.2022

AL NEYER

LOUISVILLE HWY
INDUSTRIAL DEVELOPMENT

1016 LOUISVILLE HWY (31W), GOODLETTSVILLE, TN 37072

PLANTING
DETAILS

ISSUE:
PERMIT SET
DATE:
10.21.2022
JOB NO.: 760071
DESIGN: SAF
DRAWN: PS/SAF
CHECKED: MS/CJC
SHEET NO.
L1.4



CERTAINTEED FENCE
DECK AND RAIL DIVISION
231 SHIP CANAL PARKWAY
BUFFALO, NY 14218
TOLL FREE: 1-800-333-0569
PHONE: (716) 823-3023
FAX: (716) 823-2843
www.certainteed.com

☒ SELECT DESIRED SIZE:

☐ 6' HEIGHT X 6' WIDE

☒ SELECT DESIRED COLOR:

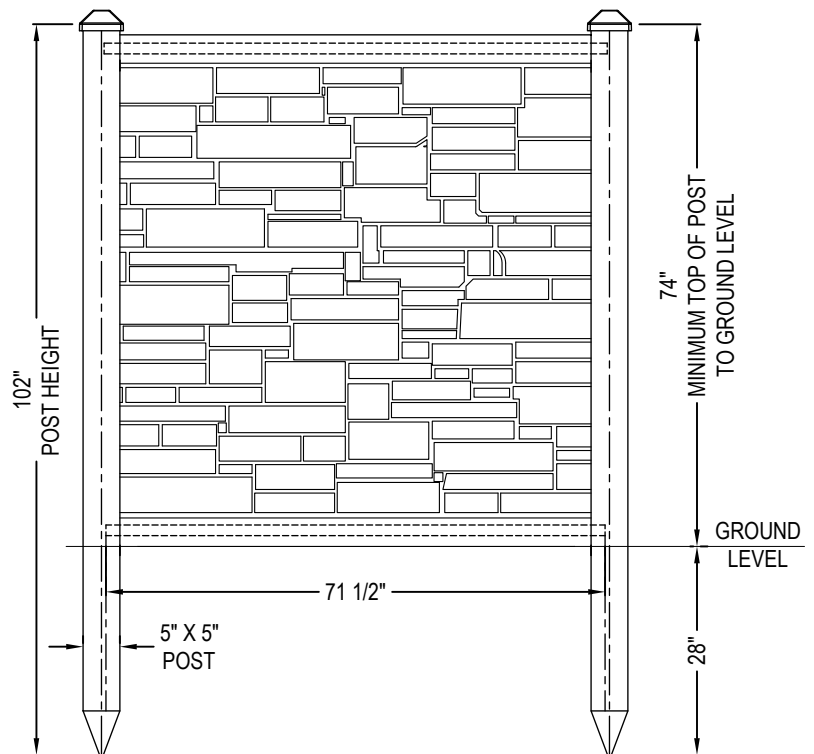
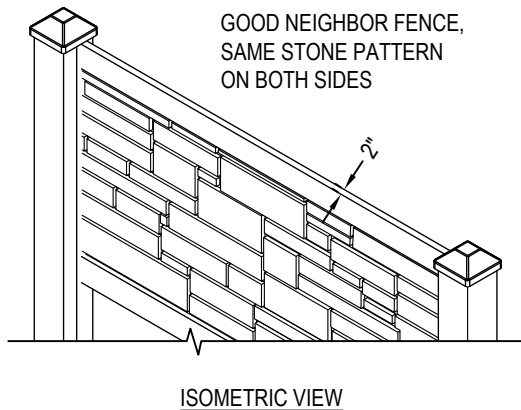
☐ BEIGE GRANITE

☐ BROWN GRANITE

☐ DARK BROWN GRANITE

☐ GRAY GRANITE

☐ BLACK GRANITE



SPECIFICATIONS

FINISH: MADE WITH LINEAR LOW DENSITY
POLYETHYLENE PLASTIC (LLDPE)

ACTUAL PANEL DIMENSIONS: 72" H X 69.75" W

PANEL WEIGHT: 56 LBS

TOLERANCES: ± .5"

MANUFACTURER NOTES:

1. US PATENTS 7,478,797 / 7,635,114 FOREIGN PATENTS PENDING.

NOTES:

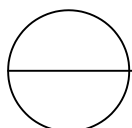
1. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.

2. DO NOT SCALE DRAWING.

3. THIS DRAWING IS INTENDED FOR USE BY ARCHITECTS, ENGINEERS, CONTRACTORS, CONSULTANTS AND DESIGN PROFESSIONALS FOR PLANNING PURPOSES ONLY. THIS DRAWING MAY NOT BE USED FOR CONSTRUCTION.

4. ALL INFORMATION CONTAINED HEREIN WAS CURRENT AT THE TIME OF DEVELOPMENT BUT MUST BE REVIEWED AND APPROVED BY THE PRODUCT MANUFACTURER TO BE CONSIDERED ACCURATE.

5. CONTRACTOR'S NOTE: FOR PRODUCT AND COMPANY INFORMATION VISIT www.CADdetails.com/info AND ENTER REFERENCE NUMBER 035-102.



PRIVACY FENCING

(BUFFTECH) ALLEGHENY FENCE PANEL - 6' H X 6' W



Allegheny

Bufftech's patented design of rotationally-molded fence allows realistic stone appearance and superior performance. Allegheny has excellent impact-resistance and creates an excellent sound barrier.

Panel Sizes: 6' x 6', 4' x 8'

Heights: 4' & 6'

Stackable: 8' & 12'

Steel Reinforced Panels





LOUISVILLE HIGHWAY INDUSTRIAL
PRELIMINARY DESIGN | GOODLETTSVILLE, TN | OCTOBER 20, 2022

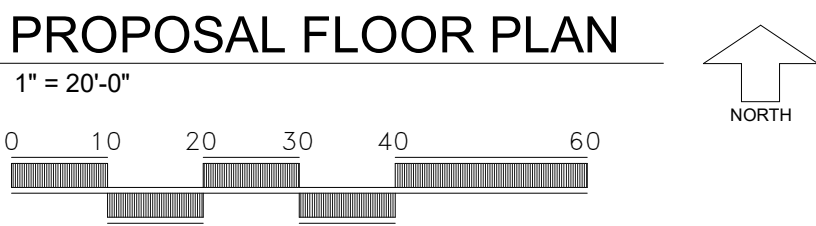
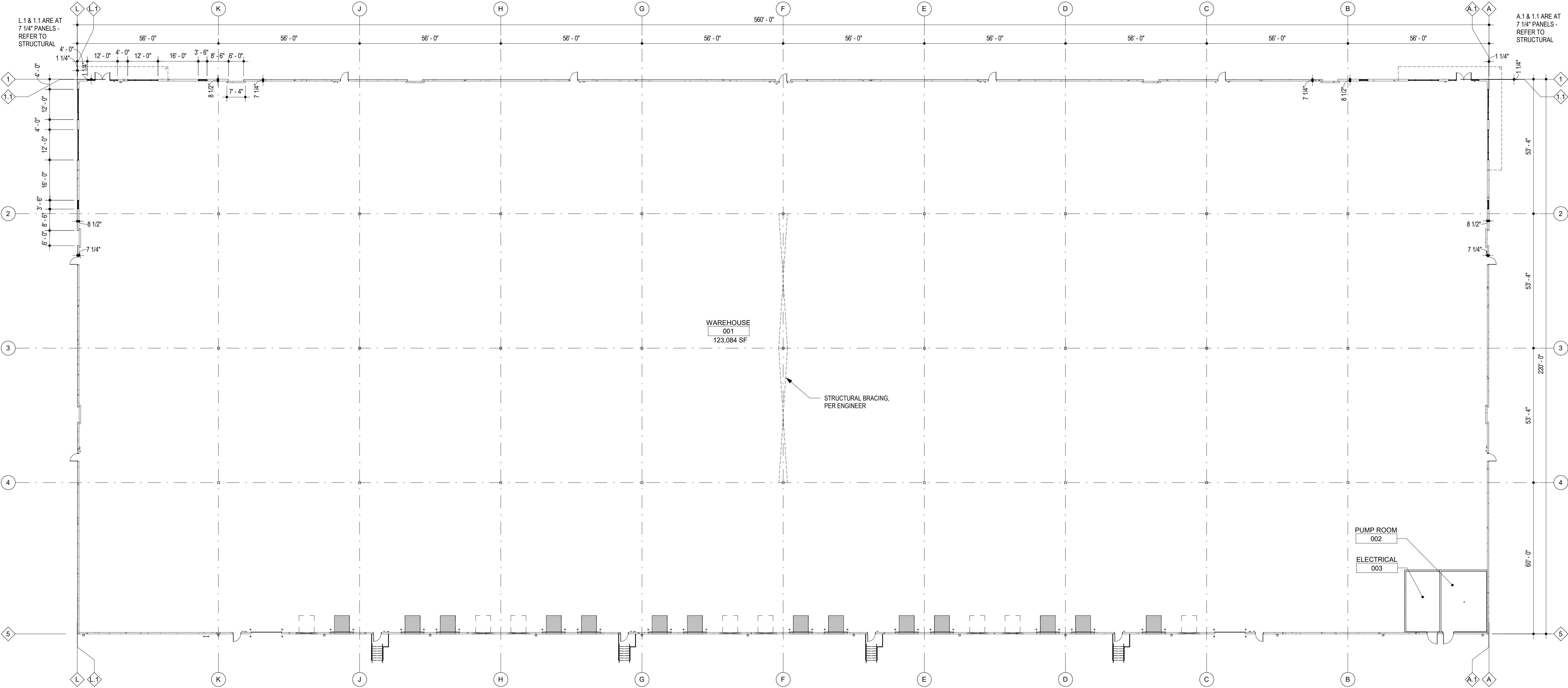
BIM 360//R20 Preliminary Projects/P3818_Louisville Hwy Goodlettsville_TN_BLDG 1_REDESIGN_R20.rvt



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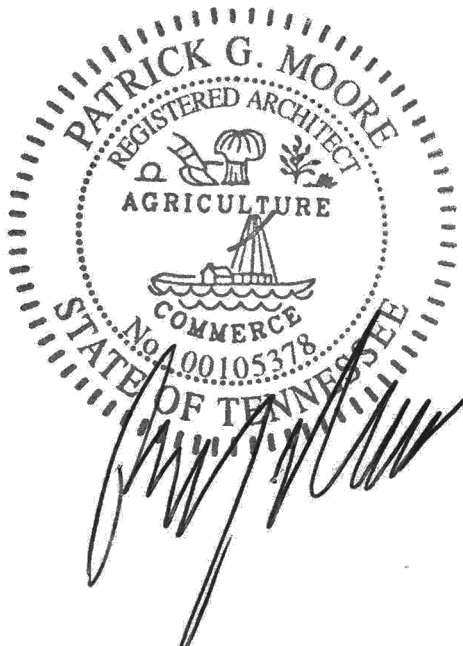
BUILDING 1



LOUISVILLE HIGHWAY INDUSTRIAL

PRELIMINARY DESIGN | GOODLETTSVILLE, TN | OCTOBER 20, 2022

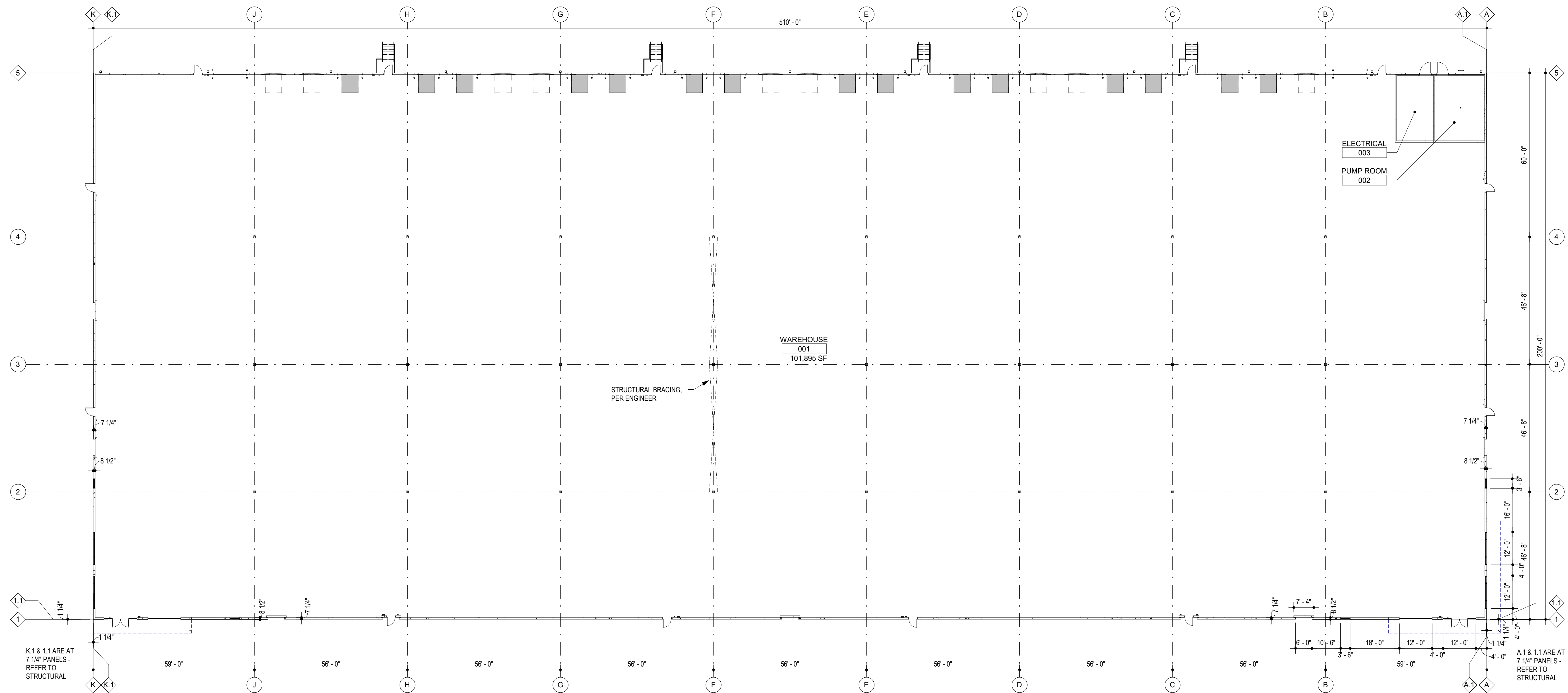
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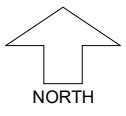
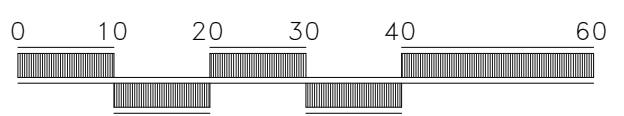
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BUILDING 2



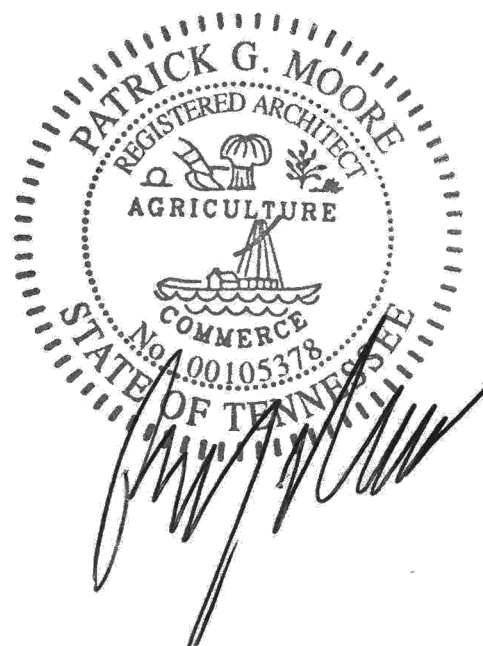
PROPOSAL FLOOR PLAN

1" = 20'-0"



LOUISVILLE HIGHWAY INDUSTRIAL
PRELIMINARY DESIGN | GOODLETTSVILLE, TN | OCTOBER 20, 2022

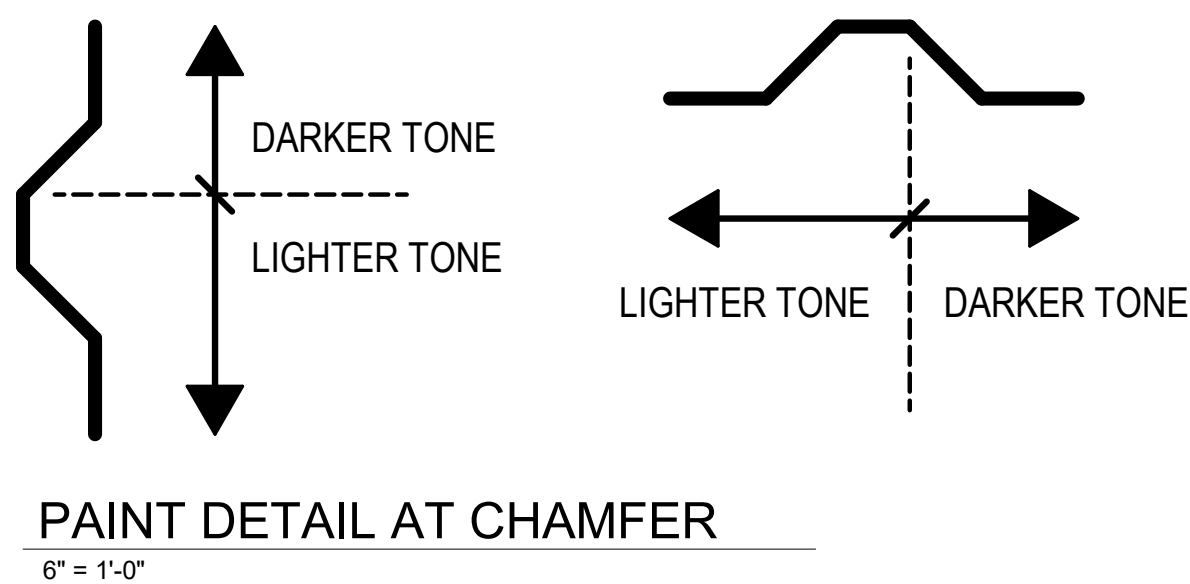
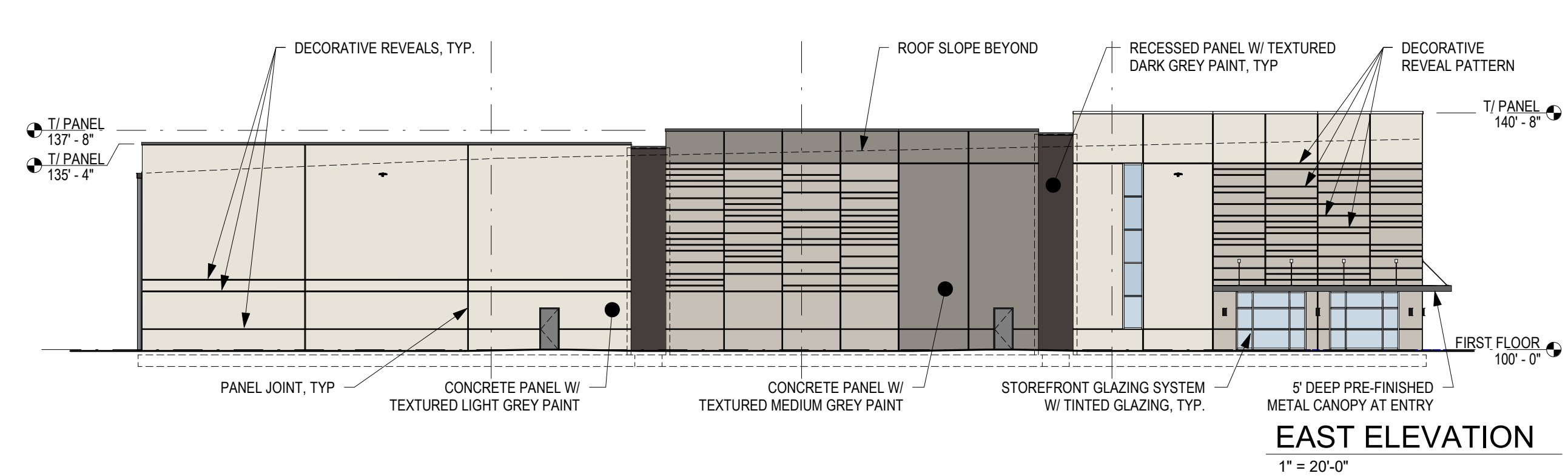
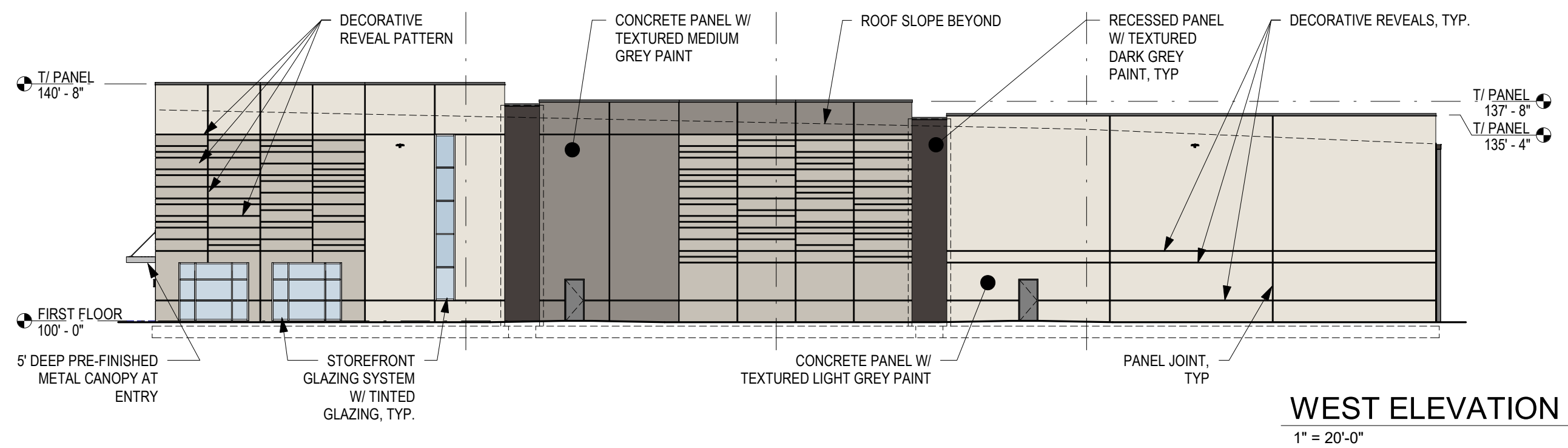
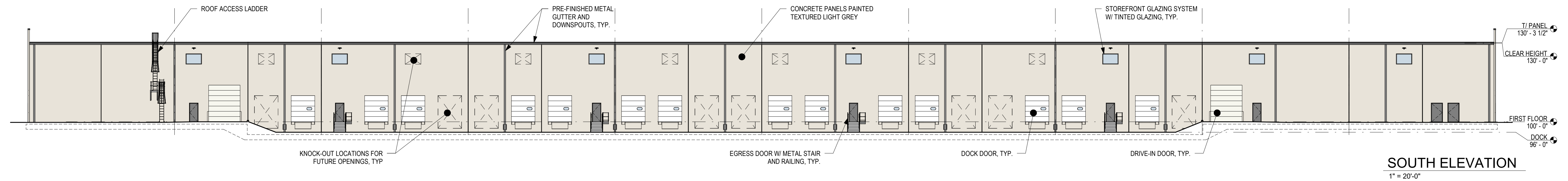
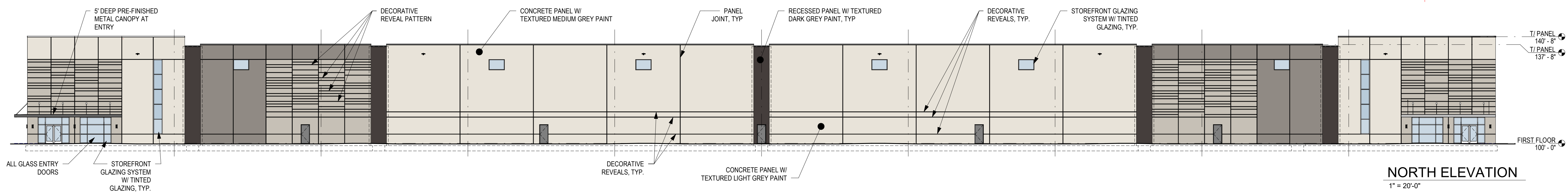
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A2.2

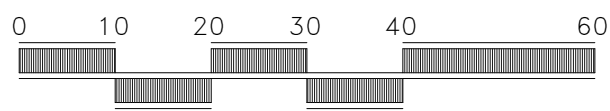
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BUILDING 1



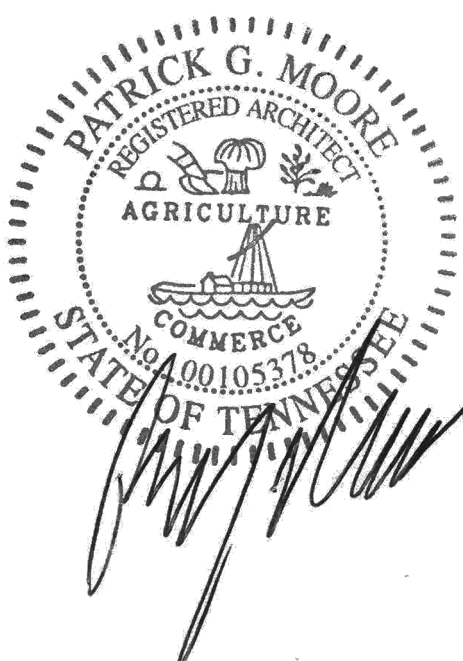
PAINT LEGEND

	EP-1 PEARLY WHITE SW 7009
	EP-2 COLONNADE GRAY SW 7641
	EP-3 DOVETAIL SW 7018
	EP-4 CLOVE SW 9605



LOUISVILLE HIGHWAY INDUSTRIAL
PRELIMINARY DESIGN | GOODLETTSVILLE, TN | OCTOBER 20, 2022

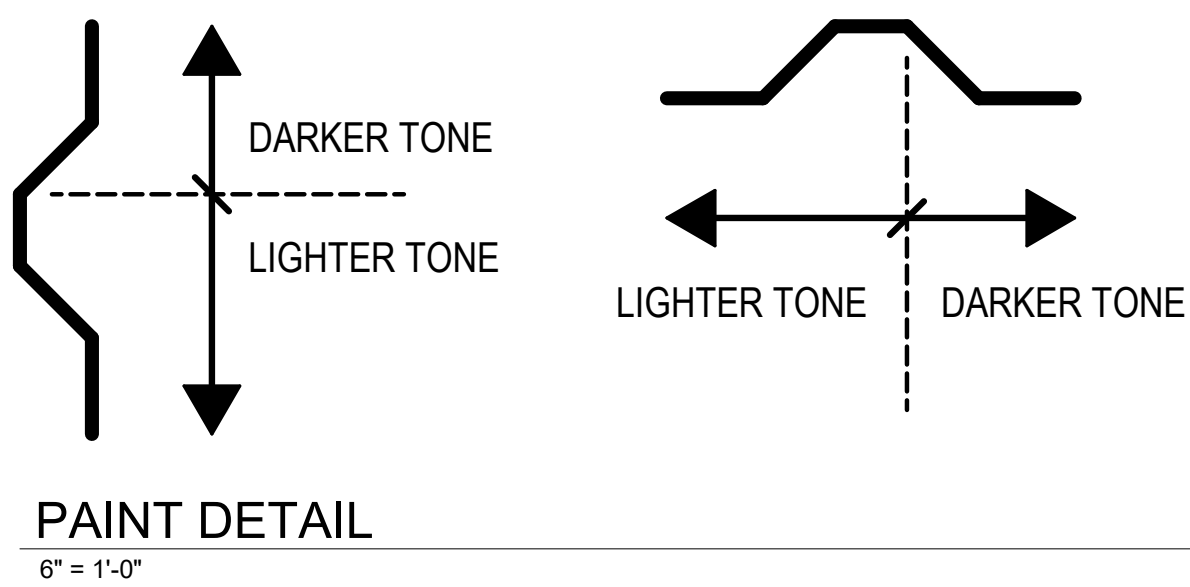
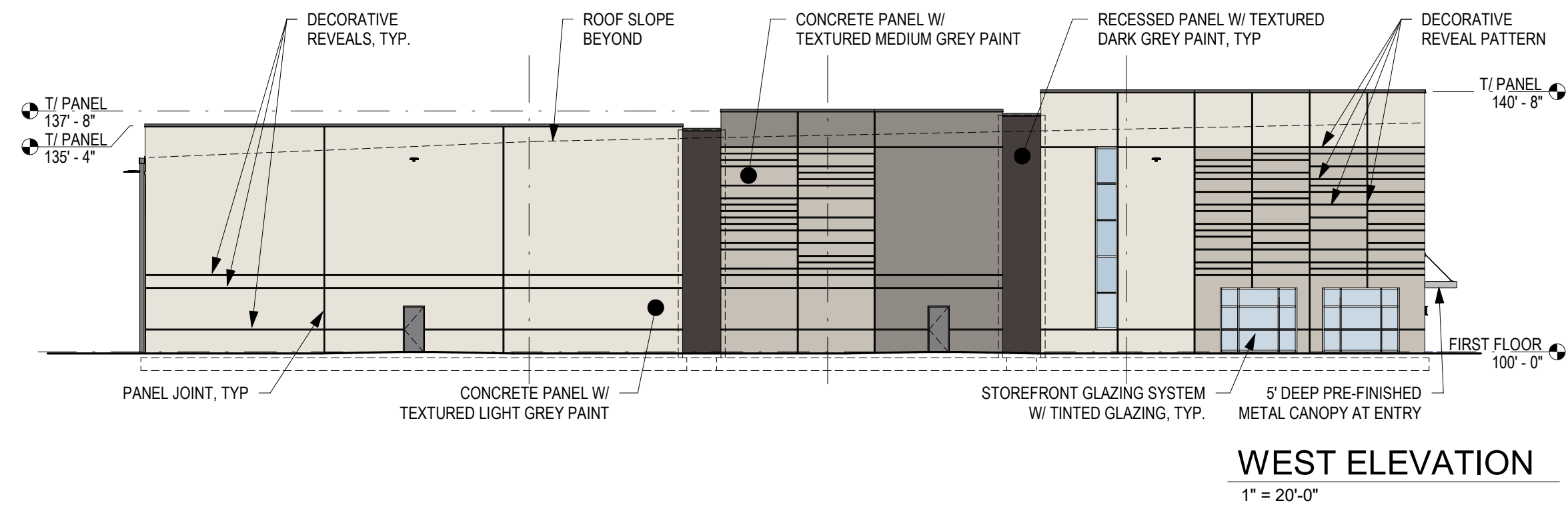
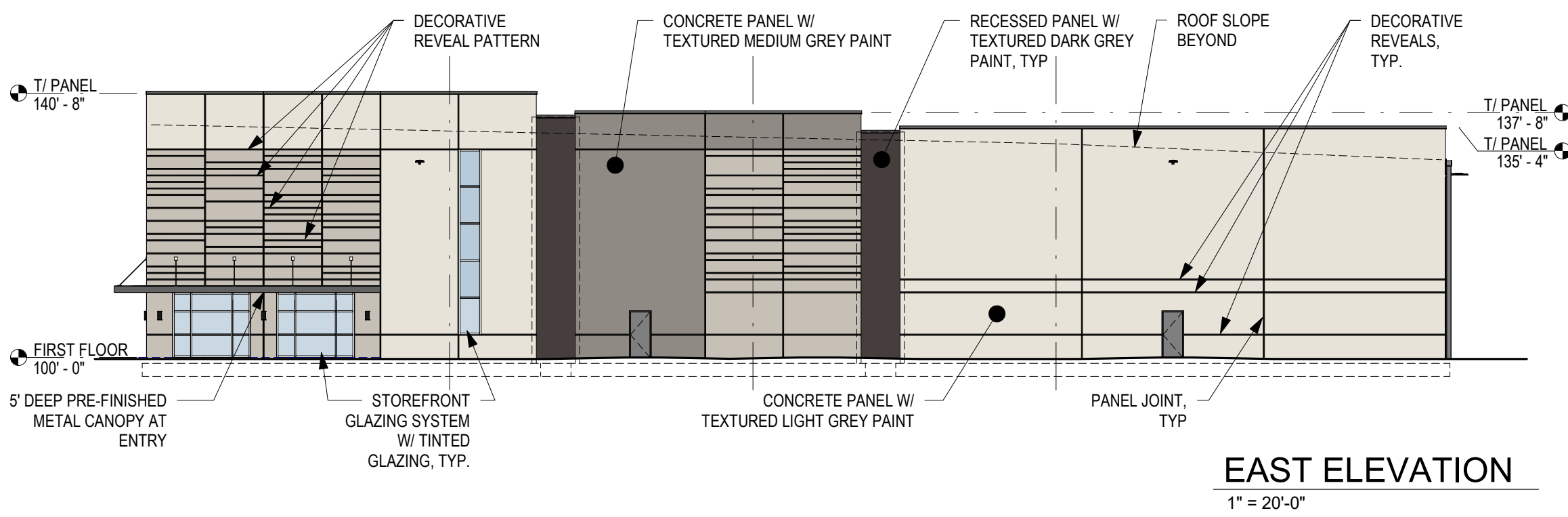
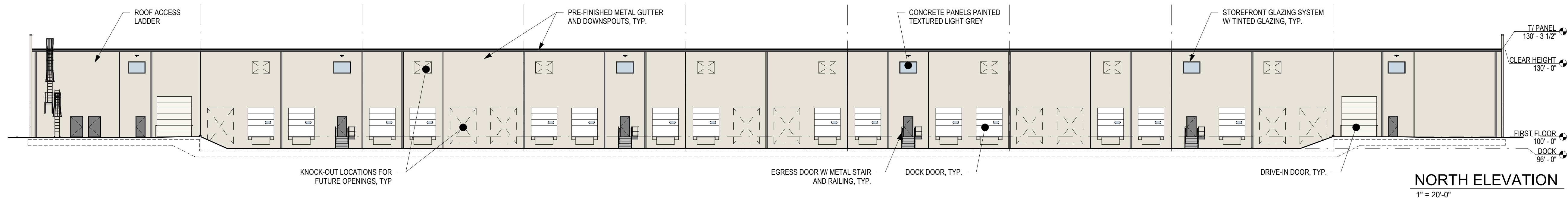
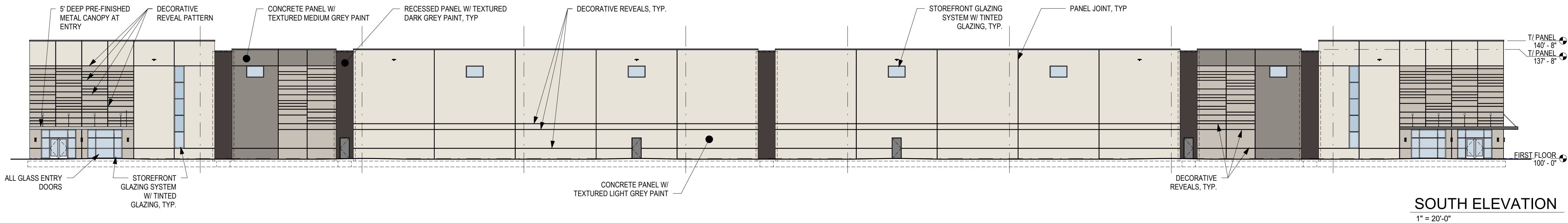
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A3.1

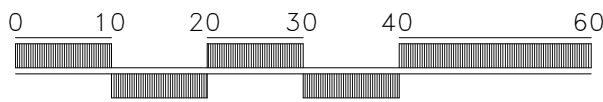
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BUILDING 2



PAINT LEGEND

- EP-1 PEARLY WHITE SW 7009
- EP-2 COLONNADE GRAY SW 7641
- EP-3 DOVETAIL SW 7018
- EP-4 CLOVE SW 9605



LOUISVILLE HIGHWAY INDUSTRIAL
PRELIMINARY DESIGN | GOODLETTSVILLE, TN | OCTOBER 20, 2022

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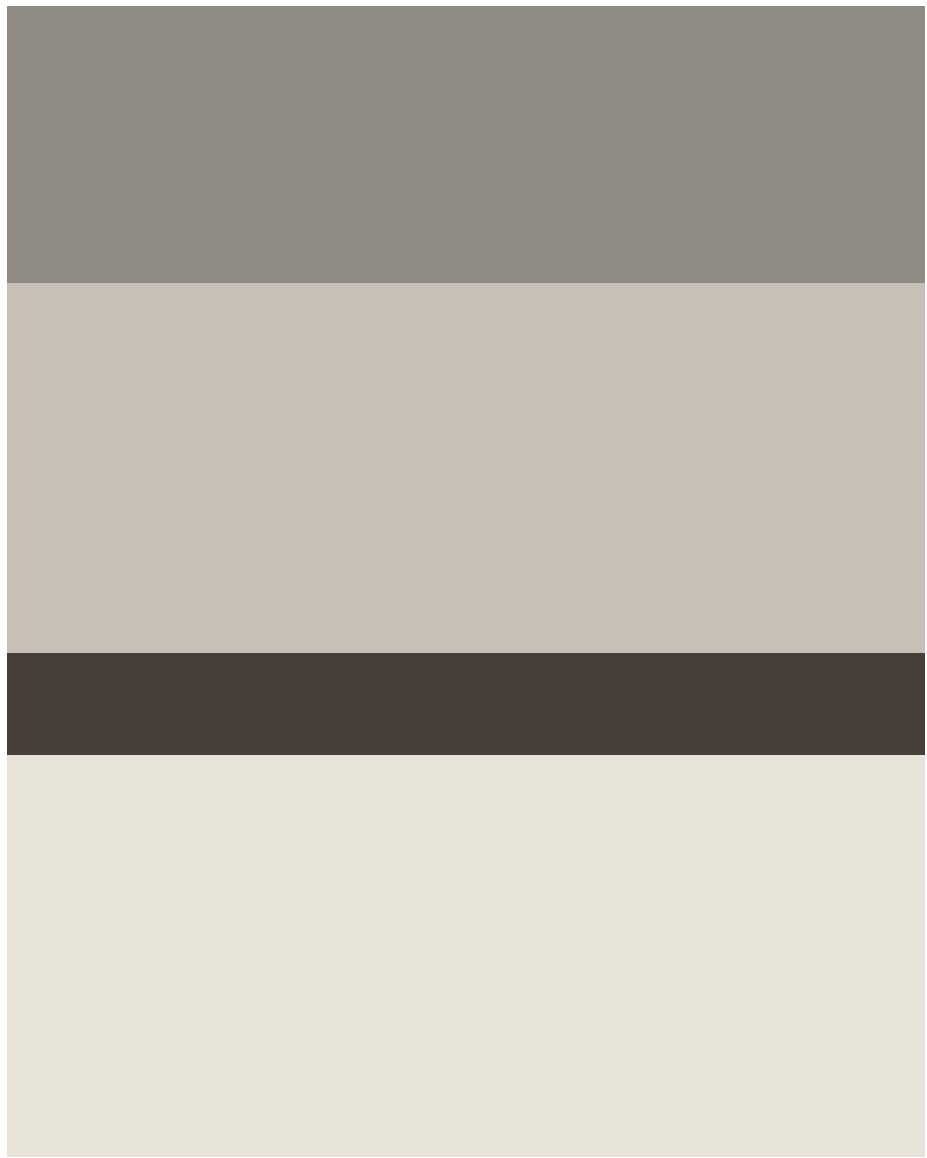


A3.2

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PROPOSED MATERIAL PALETTE

02 TEXTURED (STUCCO LIKE) EXTERIOR PAINT

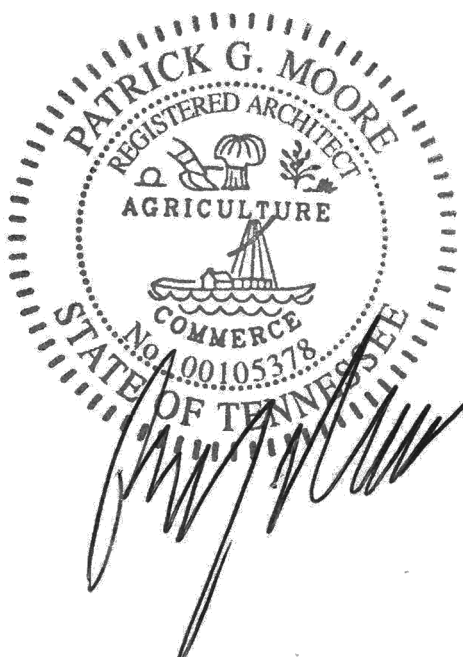


COLOR SCHEME

03 DECORATIVE REVEALS



04 ENHANCED LANDSCAPING



1000 RIVERGATE PARKWAY
BJ's WHOLESALE CLUB
GOODLETTSVILLE, TN 37072



SITE PLAN
SUBMITTAL
10.03.2022

SITE PLAN
RESUBMITTAL
10.27.2022

CONTACTS

DEVELOPER	BJ RIVERGATE LLC. 3445 PEACHTREE RD STE 465 ATLANTA, GA 30339 CONTACT: CAMERON ZURBRUEGG
DESIGN PROFESSIONAL (CIVIL ENGINEER, LANDSCAPE ARCHITECT, & ELECTRICAL ENGINEER)	BARGE DESIGN SOLUTIONS 615 3RD AVENUE SOUTH SUITE 700 NASHVILLE, TN 37210 615.252.4304 CONTACT: ROY HASLE, PE
ARCHITECT	CASCO 1090 KING GEORGES POST RD. SUITE 204 EDISON, NJ 08837 732.661.1400
GOODLETTSVILLE PLANNING & DEVELOPMENT SERVICES	117 MEMORIAL DRIVE GOODLETTSVILLE, TN 37072 615.851.3741
GOODLETTSVILLE PUBLIC WORKS	215 CARTWRIGHT STREET GOODLETTSVILLE, TN 37072 615.851.2200
MADISON SUBURBAN UTILITY DISTRICT (WATER)	108 W WEBSTER STREET MADISON, TN 37115 615.868.3201
NASHVILLE ELECTRIC SERVICE (NES)	1214 CHURCH STREET NASHVILLE, TN 37246 615.736.6900
NASHVILLE DEPARTMENT OF TRANSPORTATION (NDOT)	720 SOUTH FIFTH STREET NASHVILLE, TN 37206 615.862.8782
GOODLETTSVILLE PUBLIC WORKS (SANITARY SEWER)	215 CARTWRIGHT STREET GOODLETTSVILLE, TN 37072 615.859.2740 CONTACT: STEVEN DIVINEY EMAIL:SDIVINEY@GOODLETTSVILLE.GOV

PROPERTY DATA	
PARCEL ID	02614003900, 02614002700, 02614005300, 02600000700, 02600012700, 02614004600
ADDRESS	1000 RIVERGATE PARKWAY GOODLETTSVILLE, TN 37072
COUNTY	DAVIDSON
ZONING	CSL, CPUDL, GOPUD
LOT SIZE	15.3± ACRES (667,983± S.F.)
FAR MAX.	1.0
FAR PROVIDED	0.15
BUILDING SIZE ALLOWED	267,193 SF
BUILDING SIZE PROVIDED	103,004
BUILDING COVERAGE MAX. ALLOWED	40%
BUILDING COVERAGE PROVIDED	15%
IMPERVIOUS SURFACE AREA PROVIDED	9.4+/- ACRES
BUILDING HEIGHT ALLOWED	5 STORIES
BUILDING HEIGHT PROVIDED	41'-2"
PARKING MIN. REQUIRED (1 PER 1,000 SF)	103
PARKING PROVIDED	465 (CART CORRAL SPACES NOT INCLUDED)
FRONT SETBACK	40'
SIDE SETBACK	15'
REAR SETBACK	10'

FEMA NOTE
THIS PARCEL IS NOT LOCATED IN A FLOOD HAZARD AREA ACCORDING TO
FEDERAL EMERGENCY MANAGEMENT AGENCY FLOOD INSURANCE RATE MAP
COMMUNITY NO. 47037C, PANEL NO. 0137J, DATED FEBRUARY 25, 2022. ZONE "X."

INDEX OF DRAWINGS

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C1.02	ENLARGED SITE LAYOUT PLAN
C1.03	ENLARGED SITE LAYOUT PLAN
C2.01	OVERALL GRADING PLAN
C2.02	ENLARGED GRADING PLAN
C2.03	ENLARGED GRADING PLAN
C2.11	OVERALL DRAINAGE PLAN
C2.12	DRAINAGE TABLES
C3.01	EPSC PLAN - PHASE 1
C3.02	EPSC PLAN - PHASE 2
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C3.04	EPSC PLAN - PHASE 4
C4.00	OVERALL UTILITY PLAN
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C7.04	SITE DETAILS
C7.05	UTILITY DETAILS
C7.06	UTILITY DETAILS
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E1.02	ENLARGED SITE LIGHTING PLAN - PART B
E7.01	ELECTRICAL DETAILS



VICINITY MAP

1" = 1000'

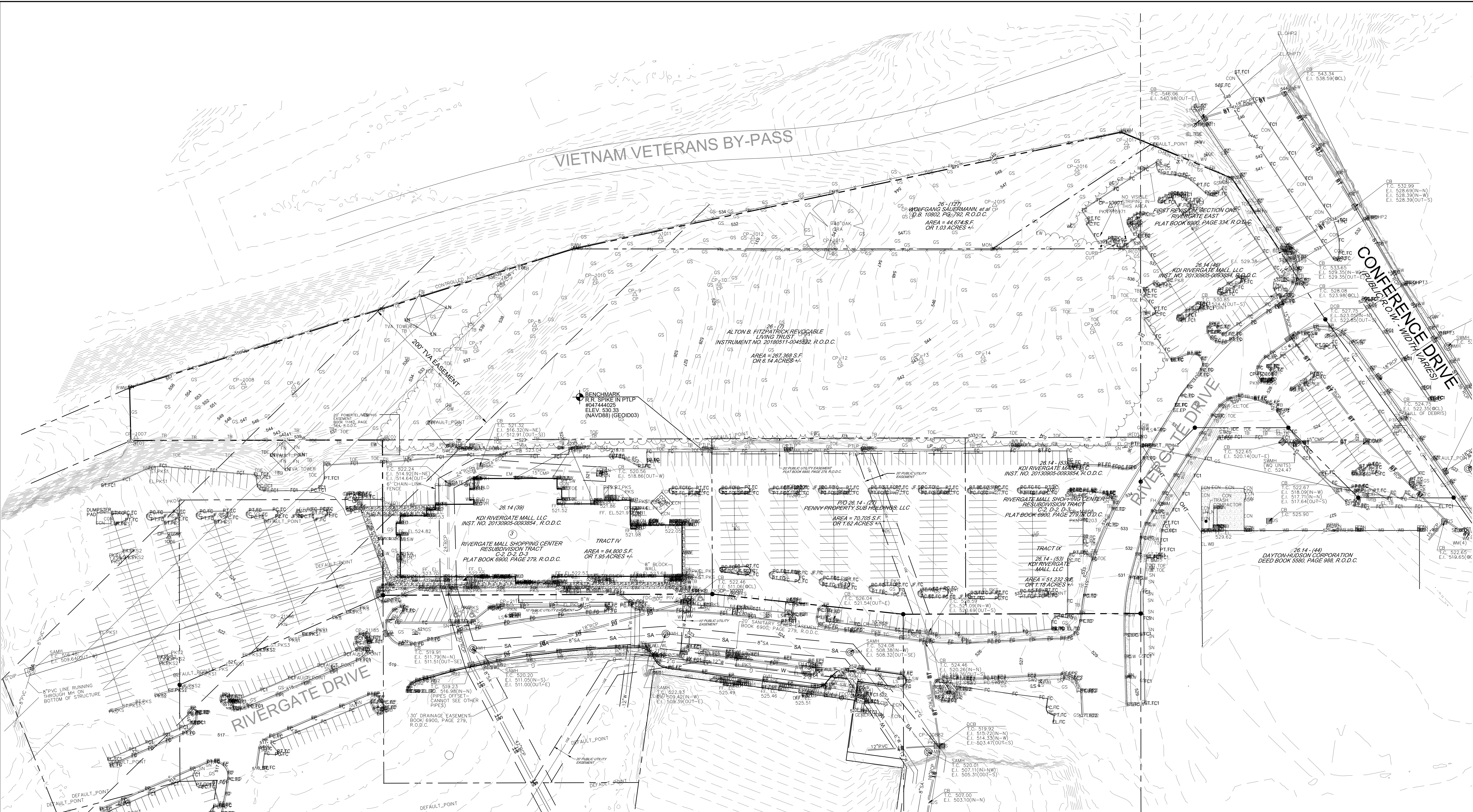


615 3rd Avenue South // Suite 700 // Nashville, Tennessee 37210
Phone (615) 254-1500 // Fax (615) 255-6572



1000 RIVERGATE PARKWAY
BJ's WHOLESALE CLUB
GOODLETTSVILLE, TENNESSEE

C0.00
PROJECT No.
32897-03



DEVELOPMENT SUMMARY

- GO SERVICES DISTRICT
10TH COUNCILMANIC DISTRICT
NASHVILLE, DAVIDSON COUNTY, TENNESSEE
COUNCIL MEMBER: ZACH YOUNG
- OWNER:
PENNEY PROPERTY SUB HOLDINGS LLC
6501 LEGACY DRIVE
PLANO, TEXAS 75024
- CAMERON S. ZURBRUEGG
DEVELOPMENT PARTNER
PHONE: (404) 213-8897
FAX: (765) 649-0804
EMAIL: CAMERON@HENDONPROPERTIES.COM
- SUBDIVISION NAME:
- ZONING: 6ZZ
- SUBDIVISION NUMBER:

- PLAT PREPARED ON OCTOBER 18, 2022
- SCALE: 1" = 30'
- SHEET 1 OF 1
- SURVEYOR:
JAMES M. OVERFELT, R.L.S.
BARGE DESIGN SOLUTIONS, INC.
615 3RD AVE. S., SUITE 700
NASHVILLE, TENNESSEE 37201
PH: (615) 252-4421
FAX: (615) 256-9851
EMAIL: JIM.OVERFELT@BARGEDESIGN.COM
- THIS PROPERTY IS NOT LOCATED IN A FLOOD HAZARD AREA ACCORDING TO FEDERAL EMERGENCY MANAGEMENT AGENCY FLOOD INSURANCE RATE COMMUNITY NO. 470287, PANEL NO 0137 J, DATED FEBRUARY 25, 2022.

NOTES:

1. OPERATING AGREEMENT PER RECORDED BOOK 4432, PAGE 137 AND 5TH AMENDMENT TO OPERATING AGREEMENT PER RECORDED DOCUMENT #20090723-0069160 ALLOWS FOR CROSS ACCESS BETWEEN PROPERTIES WITHIN THE MALL AND GRANT EASEMENTS FOR UTILITY INSTALLATION.

LEGEND			
(00)	PARCEL NO.	8"W	WATER LINE
○	LOT NO.	⊙ 2R	ELECTRIC RISER
○ R(O)	IRON ROD (OLD)	□ 80X	ELECTRIC METER / VAULT
● R(N)	IRON ROD (SET)	○	TRAFFIC SIGNAL POST
---	PROPERTY LINE	∅	UTILITY POLE
---520---	CONTOUR LINE (MAJOR)	↑	GUY WIRE
---519---	CONTOUR LINE (MINOR)	□ 780X	TRAFFIC SIGNAL BOX
---UG---	UNDERGROUND ELECTRIC LINE	⊙	SANITARY SEWER MANHOLE
---OH---	OVERHEAD POWER LINE	⊙	STORM SEWER MANHOLE
---12"SA---	SANITARY SEWER LINE	⊙	CURB INLET
---15"ST---	STORM SEWER LINE	⊙	CATCH BASIN

811 Know what's below
Call before you dig.
811
www.call811.com

PERMIT NUMBERS:
SWGR# XXXXXX CACF# XXXXXX
SUP# XXXXXX CACN# XXXXXX

PARCEL ID: FEMA PANEL:
ZONE "X", PANEL NO. 4037C0137J

BENCHMARK:
R.R. SPIKE IN PTLP
#047444025
ELEV. 530.33
(NAVD88) (GEOID03)

DATE: 10/03/2022
MP: 10/27/2022

DESCRIPTION: SITE PLAN SUBMITTAL
SITE PLAN RESUBMITTAL

DR: AV
REV: AV

60' 30' 0' 60' 120'

SCALE: 1 INCH = 60 FEET

BARGE
DESIGN SOLUTIONS

615 3rd Avenue South / Suite 700 / Nashville, Tennessee 37210
PHONE (615) 254-1500 / FAX (615) 256-6572

MICHAEL DOUGLASS
REGISTERED ENGINEER
#00189133
STATE OF TENNESSEE
10-22-20

EXISTING CONDITIONS

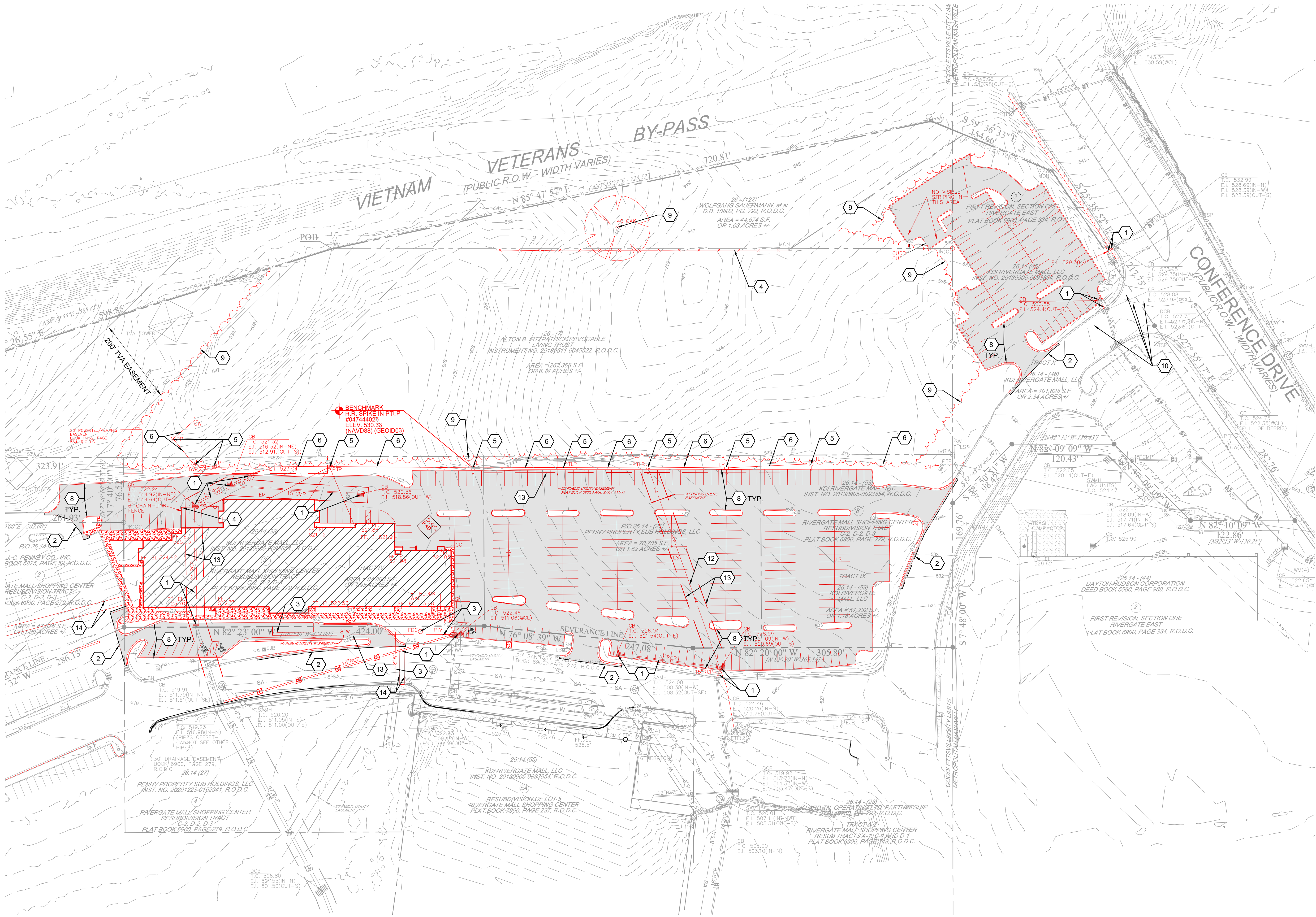
1000 RIVERGATE PARKWAY

BJ's WHOLESALE CLUB

GOODLETTSVILLE, TENNESSEE

C0.21

FILE NO. 32897-03



DEMOLITION NOTES

1. CONTRACTOR TO FIELD VERIFY LOCATIONS OF EXISTING UTILITIES PRIOR TO START OF CONSTRUCTION.
2. EXISTING UNDERGROUND UTILITY SERVICES INCLUDING BUT NOT LIMITED TO, GAS, WATER, SANITARY ARE TO BE CUT AND CAPPED AT THE MAIN AND REMOVED.
3. CONTRACTOR TO PROVIDE SMOOTH, STRAIGHT SAW-CUT LINES ALONG ALL AREAS OF CURB AND PAVEMENT REMOVAL.

LEGEND

- PAVEMENT REMOVAL
- BUILDING REMOVAL
- CONCRETE REMOVAL

DEMOLITION KEYNOTES	
1	REMOVE STORM STRUCTURE AND PIPE
2	SAWCUT AND REMOVE EXISTING ASPHALT, CURB, AND GUTTER
3	REMOVE WATER DEVICE AND PIPE
4	REMOVE FENCE AND POSTS
5	REMOVE UTILITY POLE AND GUY (IF APPLICABLE) AND ABANDON ASSOCIATED EASEMENT
6	REMOVE OVERHEAD UTILITY SERVICE
7	REMOVE SIGN
8	REMOVE CURB AND GUTTER
9	REMOVE TREE/WOODS/SHRUBS
10	REMOVE ROADWAY PAINT MARKINGS AND RESTRIPE AS SHOWN ON SHEET C1.01
11	REMOVE ELECTRIC CONDUIT AND ABANDON ASSOCIATED EASEMENT
12	ELECTRIC CONDUIT TO BE RELOCATED AND ABANDON ASSOCIATED EASEMENT
13	ABANDON EASEMENT
14	SAWCUT, REMOVE AND REPLACE PAVEMENT FOR UTILITY INSTALLATION
15	
16	
17	
18	
19	
20	

DEMOLITION PLAN

1000 RIVERGATE PARKWAY
BJ's WHOLESALE CLUB
GOODLETTSVILLE, TENNESSEE

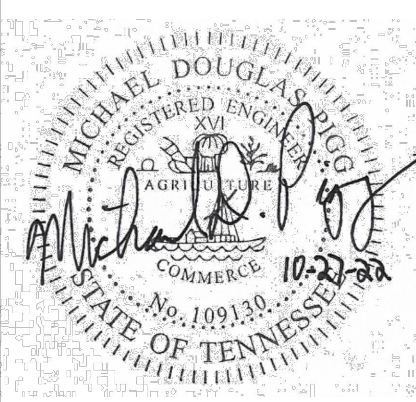


PERMIT NUMBERS:			
SWGR#	XXXXXX	CACF#	XXXXXX
SUP#	XXXXXX	CACN#	XXXXXX
PARCEL ID: -		FEMA PANEL: ZONE "X", PANEL NO. 4037C013	
BENCHMARK: R.R. SPIKE IN PTLP #047444025 ELEV. 530.33 (NAVD88) (GEOID03)			



C0.41

FILE NO. 32897-03



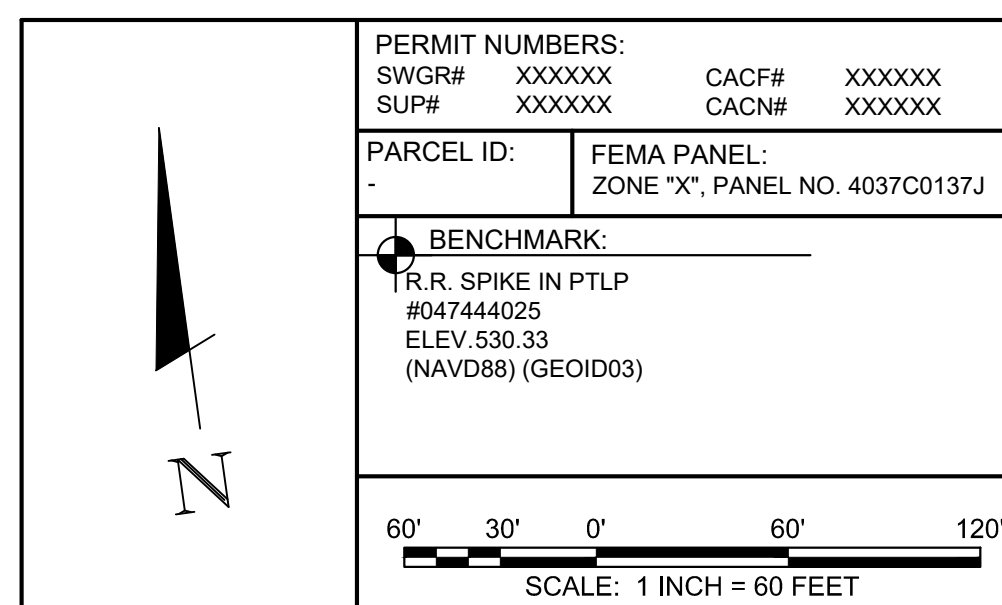
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DESIGN SOLUTIONS

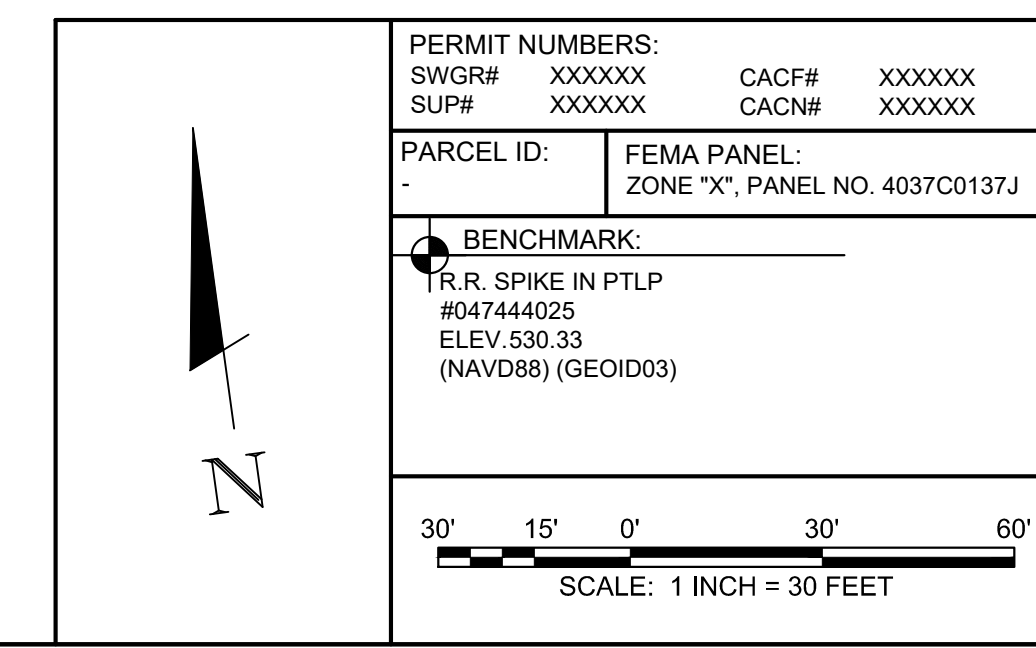
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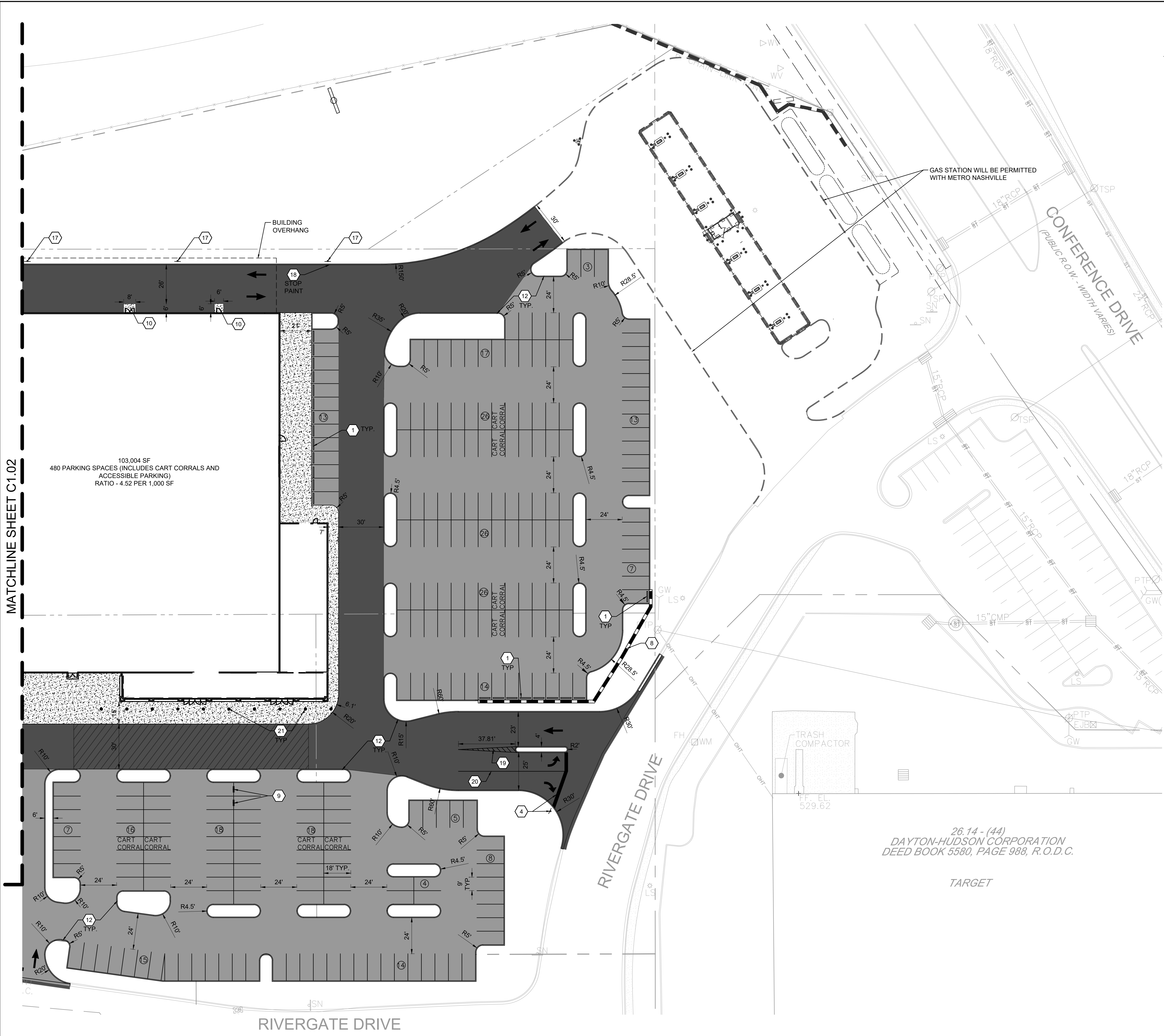
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C1.01

FILE NO. 32897-03







103,004 SF
480 PARKING SPACES (INCLUDES CART CORRALS AND ACCESSIBLE PARKING)
RATIO - 4.52 PER 1,000 SF

GAS STATION WILL BE PERMITTED WITH METRO NASHVILLE

NOTES:

- OPERATING AGREEMENT PER RECORDED BOOK 4432, PAGE 137 AND 5TH AMENDMENT TO OPERATING AGREEMENT PER RECORDED DOCUMENT #20090723-0069160 ALLOWS FOR CROSS ACCESS BETWEEN PROPERTIES WITHIN THE MALL AND GRANT EASEMENTS FOR UTILITY INSTALLATION.

LEGEND

- REINFORCED CONCRETE SIDEWALK (SEE DETAIL X ON SHEET C7.0X)
- 6" CONCRETE PAVEMENT (SEE DETAIL X ON SHEET C7.0X)
- 8" CONCRETE PAVEMENT (SEE DETAIL X ON SHEET C7.0X)
- LIGHT DUTY ASPHALT PAVEMENT (SEE DETAIL X ON SHEET C7.0X)
- HEAVY DUTY ASPHALT PAVEMENT (SEE DETAIL X ON SHEET C7.0X)

SITE KEYNOTES

- | | |
|----|--|
| 1 | CONCRETE WHEEL STOP (SEE DETAIL 8 ON SHEET C7.02) |
| 2 | CART CORRAL (BY OTHERS) |
| 3 | ACCESSIBLE PARKING, MARKINGS AND SIGNAGE (SEE DETAIL 1 ON SHEET C7.01) |
| 4 | STOP SIGN AND STOP BAR (SEE DETAIL 2 ON SHEET C7.01) |
| 5 | TRASH COMPACTOR (BY OTHERS) |
| 6 | SIGN POST AND PROPANE CUSTOMER SIGNAGE (SEE DETAIL 4 ON SHEET C7.01) |
| 7 | SIGN POST AND TIRE CENTER SIGNAGE (SEE DETAILS 4 & 6 ON SHEET C7.01) |
| 8 | RETAINING WALL WITH 60" FALL PROTECTION (DESIGN BUILD - BY OTHERS). MATERIAL OF THE RETAINING WALL AND RAILING MUST BE APPROVED BY THE CITY OF GOODLETTSVILLE. THE RETAINING WALL DESIGN BY A PROFESSIONAL ENGINEER MUST BE SUBMITTED TO THE CITY OF GOODLETTSVILLE PRIOR TO CONSTRUCTION. |
| 9 | SIGN POST AND MEMBER WITH INFANT SIGN (SEE DETAILS 4 & 7 ON SHEET C7.01) |
| 10 | CONCRETE STOOP (SEE DETAIL 3 ON SHEET C7.02) |
| 11 | CONCRETE TRUCK RAMP (SEE DETAILS 4 OR 5 ON SHEET C7.02) |
| 12 | CONCRETE CURB (SEE DETAIL 1 ON SHEET C7.02) |
| 13 | TRANSFORMER (BY OTHERS) |
| 14 | GENERATOR (BY OTHERS) |
| 15 | NOT USED |
| 16 | PROPANE FILLING STATION (BY OTHERS) |
| 17 | "NO PARKING FIRE LANE" SIGN SPACED AT 100' APART. SIGNAGE ALSO TO BE PLACED ON BUILDING. |
| 18 | CURBS TO BE PAINTED RED ON BOTH SIDES OF REAR ACCESS ROAD. START AND STOP PAINT INDICATED ON PLANS. |
| 19 | 4" YELLOW PAINT STRIPING AT 36" ON CENTER AND 45° ANGLE |
| 20 | 4" YELLOW PAINT STRIPING |
| 21 | BOLLARD (SEE BOLLARD SCHEDULE AND DETAIL 5 ON SHEET C7.01) |

CHK

DATE

MP

10/03/2022

MP

10/27/2022

DR

AV

REV

DESCRIPTION

SITE PLAN SUBMITTAL

SITE PLAN RESUBMITTAL

PERMIT NUMBERS:

SWGR# XXXXXX CACF# XXXXXX

SUP# XXXXXX CACN# XXXXXX

PARCEL ID:

FEMA PANEL:

ZONE "X", PANEL NO. 4037C0137J

BENCHMARK:

R.R. SPIKE IN PTLP

#047444025

ELEV 530.33

(NAVD88) (GEOID03)

30'

15'

0'

30'

60'

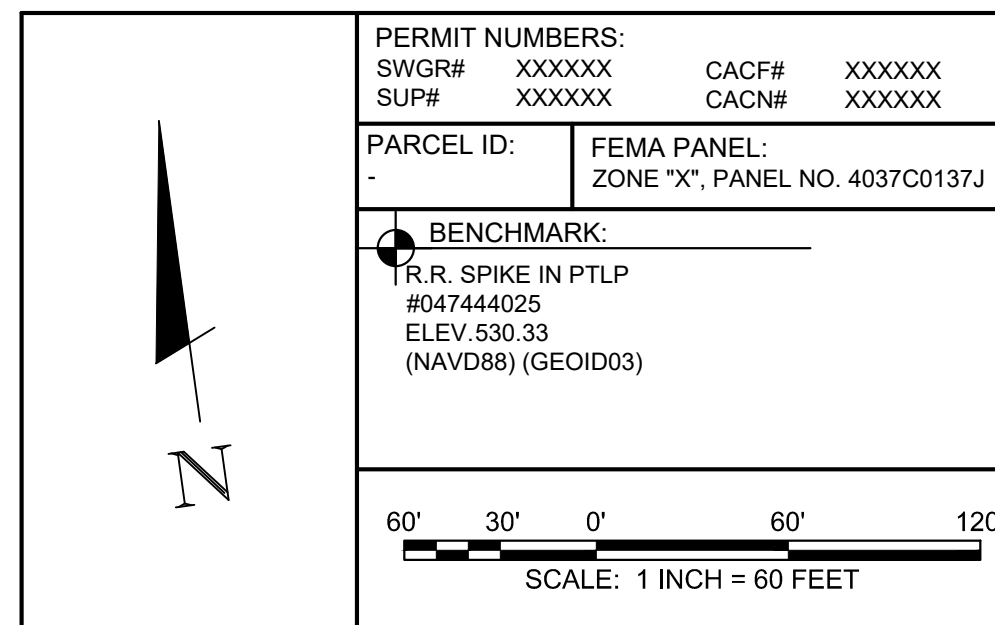
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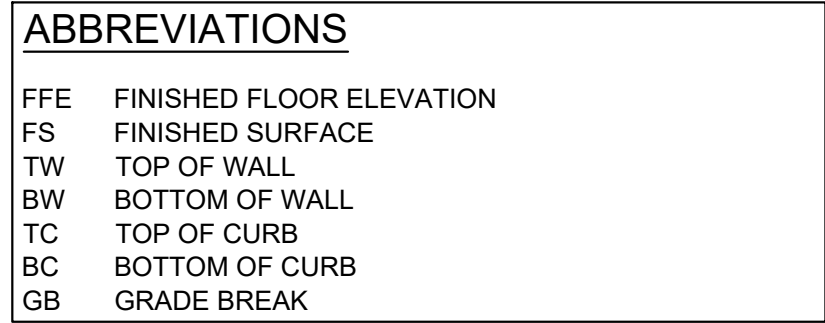
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FILE NO. 32897-03

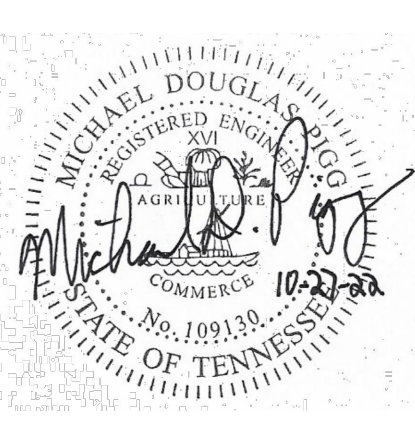
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C2.01
FILE NO. 32897-03





1000 RIVERGATE PARKWAY
BJ's WHOLESALE CLUB



BARGE
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PHONE (615) 254-1500 // FAX (615) 255-6572

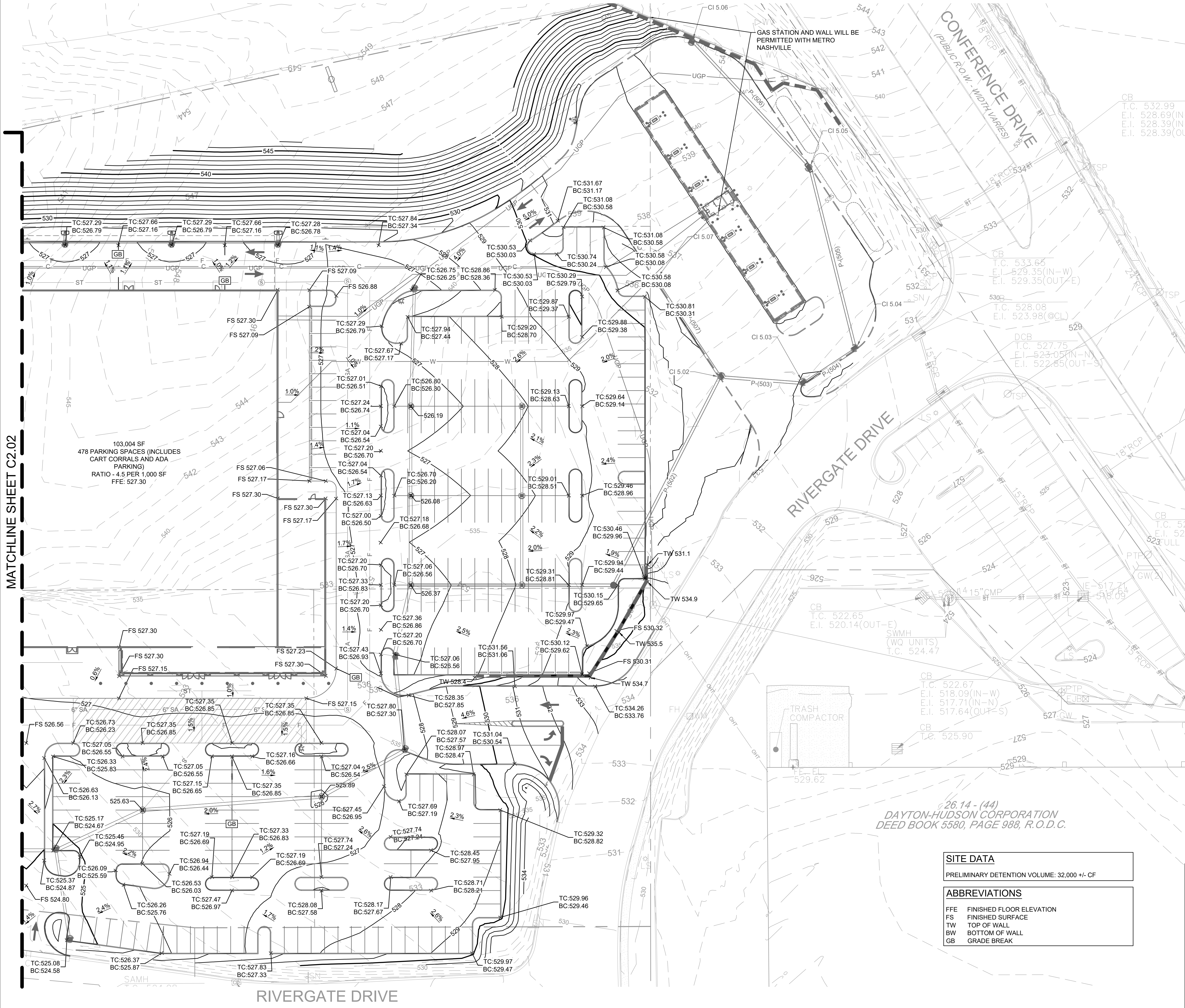
C2.02

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Page 94 of 100

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PLOTTED:10/27/2022

USER:APWIEBER
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SAVED:10/26/2022
PLOT:10/27/2022

MATCHLINE SHEET C2.02



SITE DATA	
PRELIMINARY DETENTION VOLUME: 32,000 +/- CF	
ABBREVIATIONS	
FFE	FINISHED FLOOR ELEVATION
FS	FINISHED SURFACE
TW	TOP OF WALL
BW	BOTTOM OF WALL
GB	GRADE BREAK

30'

15'

0'

30'

60'

SCALE: 1 INCH = 30 FEET

PERMIT NUMBERS:

SWGR# XXXXXX CACF# XXXXXX

SUP# XXXXXX CACN# XXXXXX

PARCEL ID:

FEMA PANEL:

BENCHMARK:

TR R SPIKE IN PTLP

#047444025

ELEV 530.33

(NAVD83) (GEOID03)

ENLARGED GRADING PLAN

1000 RIVERGATE PARKWAY

BJ's WHOLESALE CLUB

GOODLETTSVILLE, TENNESSEE

REVISIONS

REV.	DATE	DESCRIPTION
1	10/27/2022	SITE PLAN SUBMITTAL
2	10/27/2022	SITE PLAN RESUBMITTAL

C2.03

FILE NO. 32897-03

BARGE

DESIGN SOLUTIONS

615 3rd Avenue South / Suite 700 / Nashville, Tennessee 37210

PHONE (615) 254-1500 / FAX (615) 255-6572

STATE OF TENNESSEE

REGISTERED ENGINEER

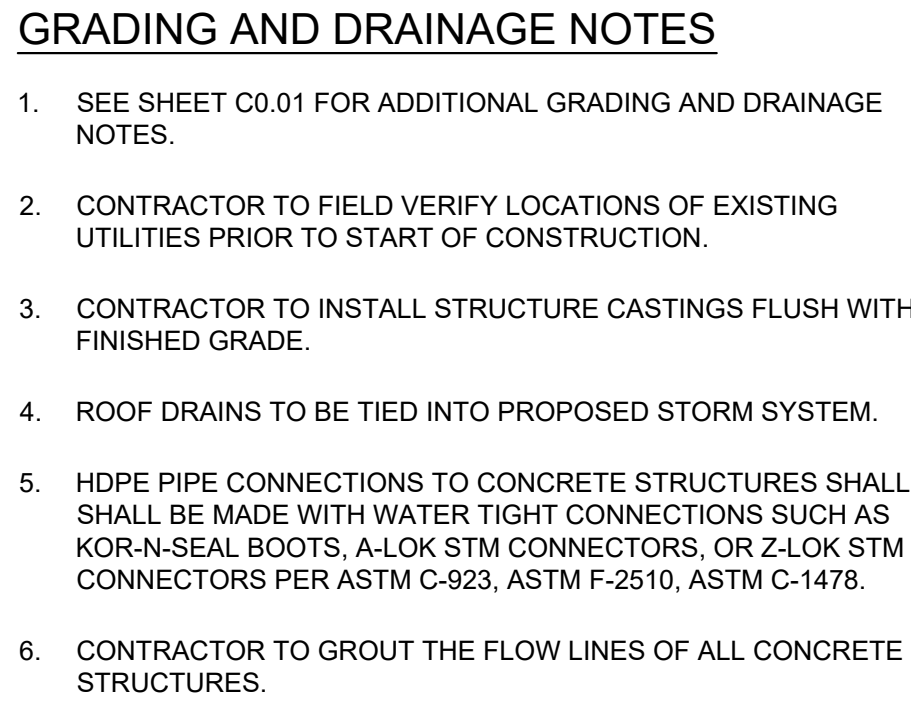
NO. 18913

EXPIRATION DATE 12-31-2024

Michael Douglas

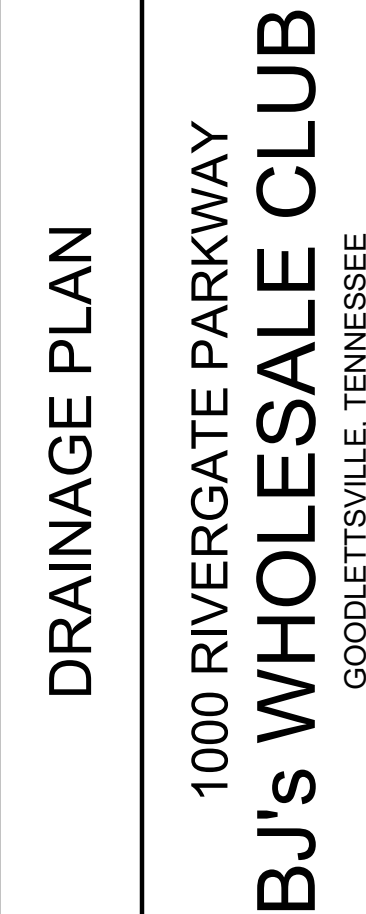
Professional Engineer

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Page 95 of 136



CI	CURB INLET
CB	CATCH BASIN
MH	MANHOLE
TD	TRENCH DRAIN
UD	UNDERGROUND DETENTION
WQU	WATER QUALITY UNIT

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PHONE (615) 254-1500 // FAX (615) 255-6572

[illegible]

C2.11

FILE NO. 32897-03

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PERMIT NUMBERS:			
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SUP#	XXXXXX	CACN#	XXXXXX

PARCEL ID: -	FEMA PANEL: ZONE "X", PANEL NO. 4037C01
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BENCHMARK:
R.R. SPIKE IN PTLP
#047444025
ELEV. 530.33
(NAVD88) (GEOID03)

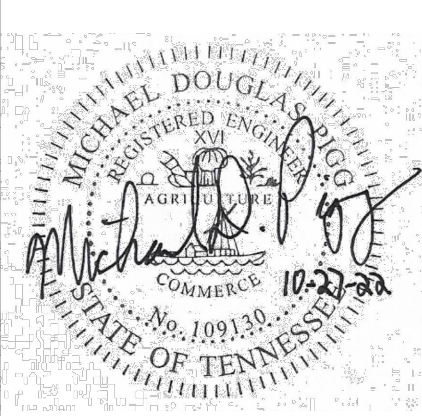


DRAINAGE STRUCTURE SCHEDULE						
LABEL	STRUCTURE TYPE	DEPTH	GRATE ELEVATION	INVERT IN	INVERT OUT	STANDARD DRAWINGS
CB 1.01	CATCH BASIN	4.09	526.19	522.10N	522.10	DETAIL 6 ON SHEET C7.03
CB 1.02	CATCH BASIN	4.79	526.09	521.80N	521.30	DETAIL 6 ON SHEET C7.03
CB 1.03	CATCH BASIN	5.37	526.37	521.00N 521.00E	521.00	DETAIL 6 ON SHEET C7.03
CB 1.06	CATCH BASIN	5.78	525.89	520.11E	520.11	DETAIL 6 ON SHEET C7.03
CB 1.07	CATCH BASIN	6.12	525.63	519.51E	519.51	DETAIL 6 ON SHEET C7.03
CB 1.10	CATCH BASIN	6.76	525.41	518.65SE	518.65	DETAIL 6 ON SHEET C7.03
CB 1.11	CATCH BASIN	7.69	525.24	518.05E	517.55	DETAIL 6 ON SHEET C7.03
CB 1.12	CATCH BASIN	7.89	525.13	517.24E	517.24	DETAIL 6 ON SHEET C7.03
CB 3.06	STORM MANHOLE	5.94	524.60	518.66E	518.66	DETAILS 2 AND 3 ON SHEET C7.03
CB 3.08	CATCH BASIN	8.24	526.04	517.80N	517.80	DETAIL 6 ON SHEET C7.03
CB 3.09	CATCH BASIN	7.11	524.16		517.05	DETAIL 6 ON SHEET C7.03
CB 5.00	CATCH BASIN	6.30	528.09	521.79E 521.79N	521.79	DETAIL 6 ON SHEET C7.03
CB 6.01	CATCH BASIN	5.39	527.79	522.40N	522.40	DETAIL 6 ON SHEET C7.03
CB 6.02	CATCH BASIN	4.90	527.90		523.00	DETAIL 6 ON SHEET C7.03
CI 1.00	CURB INLET	3.82	526.32		522.50	DETAIL 4 ON SHEET C7.03
CI 1.04	CURB INLET	5.82	526.57	520.75N	520.75	DETAIL 4 ON SHEET C7.03
CI 1.05	CURB INLET	6.87	527.30	520.43N	520.43	DETAIL 4 ON SHEET C7.03
CI 1.08	CURB INLET	5.51	524.70	519.19E 519.80S	519.19	DETAIL 4 ON SHEET C7.03
CI 1.09	CURB INLET	5.76	524.75	518.99E 519.60SW	518.99	DETAIL 4 ON SHEET C7.03
CI 1.13	CURB INLET	6.79	523.67	516.88NE	516.88	DETAIL 4 ON SHEET C7.03
CI 1.14	CURB INLET	5.25	521.81	516.56E	516.56	DETAIL 4 ON SHEET C7.03
CI 1.15	CURB INLET	5.36	521.67	516.31E	516.31	DETAIL 4 ON SHEET C7.03
CI 2.01	CURB INLET	4.02	524.62		520.60	DETAIL 4 ON SHEET C7.03
CI 2.02	CURB INLET	4.08	524.23		520.15	DETAIL 4 ON SHEET C7.03
CI 3.01	CURB INLET	4.02	526.72	522.70N	522.70	DETAIL 4 ON SHEET C7.03
CI 3.02	CURB INLET	4.53	526.72	522.19E 522.19N	522.19	DETAIL 4 ON SHEET C7.03
CI 3.03	CURB INLET	5.07	526.72	521.65E 521.65N	521.65	DETAIL 4 ON SHEET C7.03
CI 3.04	CURB INLET	5.60	526.70	521.10E 521.10N	521.10	DETAIL 4 ON SHEET C7.03
CI 3.05	CURB INLET	6.73	526.35	520.12E 520.12N	519.62	DETAIL 4 ON SHEET C7.03
CI 3.07	CURB INLET	4.87	523.14	518.27N 518.77E	518.27	DETAIL 4 ON SHEET C7.03
CI 5.02	CI 5.02	7.03	531.12	524.09E 524.09NW	524.09	DETAIL 4 ON SHEET C7.03
CI 5.03	CURB INLET	6.20	530.85	524.65NE	524.65	DETAIL 4 ON SHEET C7.03
CI 5.04	CURB INLET	6.20	531.27	525.07N	525.07	DETAIL 4 ON SHEET C7.03
CI 5.05	CURB INLET	4.63	530.96	526.33NW	526.33	DETAIL 4 ON SHEET C7.03
CI 5.06	CURB INLET	4.01	531.50		527.49	DETAIL 4 ON SHEET C7.03
CI 5.07	CURB INLET	6.38	531.25		524.87	DETAIL 4 ON SHEET C7.03
MH 5.01	STORM MANHOLE	7.17	529.62	522.45NE	522.45	DETAILS 2 AND 3 ON SHEET C7.03
MH 8.02	STORM MANHOLE	11.61	523.41	511.80N 511.80E	511.80	DETAILS 2 AND 3 ON SHEET C7.03
MH 8.04	STORM MANHOLE	10.86	522.36	511.50N	511.51	DETAILS 2 AND 3 ON SHEET C7.03
ND 6.01	24" NYOPLAST DRAIN	6.40	526.60		520.20	DETAIL 7 ON SHEET C7.03
ND 6.02	24" NYOPLAST DRAIN	5.75	526.95		521.20	DETAIL 7 ON SHEET C7.03
ND 6.03	24" NYOPLAST DRAIN	5.22	526.97		521.75	DETAIL 7 ON SHEET C7.03
ND 6.04	24" NYOPLAST DRAIN	4.67	526.97		522.30	DETAIL 7 ON SHEET C7.03
ND 6.05	24" NYOPLAST DRAIN	4.17	526.97		522.80	DETAIL 7 ON SHEET C7.03
TD 4.01	TRENCH DRAIN	4.34	523.34		519.00	DETAIL 8 ON SHEET C7.03
UD 1.16	UNDERGROUND DETENTION	7.08	523.08	516.00S		DETAIL 1 ON SHEET C7.04
UD 1.17	UNDERGROUND DETENTION	7.56	524.31	516.75E		DETAIL 1 ON SHEET C7.04
UD 1.18	UNDERGROUND DETENTION	9.74	526.79	517.05E		DETAIL 1 ON SHEET C7.04
UD 8.00	UNDERGROUND DETENTION	11.37	523.37		512.00	DETAIL 1 ON SHEET C7.04
UD 8.01	UNDERGROUND DETENTION	???	520.75		512.00	DETAIL 1 ON SHEET C7.04
WQU 8.02	80% TSS REMOVAL WQU	11.21	523.16	511.95N	511.95	DETAIL 2 ON SHEET C7.04

DRAINAGE PIPE TABLE							
PIPE LABEL	PIPE SIZE	UPSTREAM STRUCTURE	UPSTREAM ELEVATION	DOWNSTREAM STRUCTURE	DOWNSTREAM ELEVATION	LENGTH (FT)	SLOPE (%)
P-(0)	18" HDPE	CI 1.00	522.50	CB 1.01	522.10	78.0	0.51%
P-(1)	18" HDPE	CB 1.01	522.10	CB 1.02	521.80	60.0	0.50%
P-(2)	24" HDPE	CB 1.02	521.30	CB 1.03	521.00	60.0	0.50%
P-(3)	24" HDPE	CB 1.03	521.00	CI 1.04	520.75	48.8	0.51%
P-(4)	24" HDPE	CI 1.04	520.75	CI 1.05	520.43	63.8	0.50%
P-(5)	24" HDPE	CI 1.05	520.43	CB 1.06	520.11	63.7	0.50%
P-(6)	24" HDPE	CB 1.06	520.11	CB 1.07	519.51	120.3	0.50%
P-(7)	24" HDPE	CB 1.07	519.51	CI 1.08	519.19	64.1	0.50%
P-(8)	24" HDPE	CI 1.08	519.19	CI 1.09	518.99	39.9	0.50%
P-(9)	24" HDPE	CI 1.09	518.99	CB 1.10	518.65	68.3	0.50%
P-(10)	24" HDPE	CB 1.10	518.65	CB 1.11	518.05	120.1	0.50%
P-(11)	30" HDPE	CB 1.11	517.55	CB 1.12	517.24	61.5	0.50%
P-(12)	30" HDPE	CB 1.12	517.24	CI 1.13	516.88	71.6	0.50%
P-(13)	30" HDPE	CI 1.13	516.88	CI 1.14	516.56	62.7	0.51%
P-(14)	30" HDPE	CI 1.14	516.56	CI 1.15	516.31	50.0	0.50%
P-(15)	18" HDPE	CI 2.02	520.15	CI 1.09	519.60	57.0	0.96%
P-(16)	18" HDPE	CI 2.01	520.60	CI 1.08	519.80	61.2	1.31%
P-(17)	18" HDPE	CI 3.01	522.70	CI 3.02	522.19	71.4	0.71%
P-(18)	18" HDPE	CI 3.02	522.19	CI 3.03	521.65	71.4	0.76%
P-(19)	18" HDPE	CI 3.03	521.65	CI 3.04	521.10	74.2	0.74%
P-(20)	18" HDPE	CI 3.04	521.10	CI 3.05	520.12	97.8	1.00%
P-(21)	24" HDPE	CI 3.05	519.62	CB 3.06	518.66	191.3	0.50%
P-(22)	24" HDPE	CB 3.06	518.66	CI 3.07	518.27	74.6	0.52%
P-(23)	24" HDPE	CI 3.07	518.27	CB 3.08	517.80	94.1	0.50%
P-(24)	24" HDPE	CB 3.08	517.80	UD 1.18	517.05	49.1	1.53%
P-(25)	30" HDPE	CI 1.15	516.31	UD 1.16	516.00	60.9	0.51%
P-(27)	30" HDPE	CB 3.09	517.05	UD 1.17	516.75	10.6	2.84%
P-(28)	12" HDPE	TD 4.01	519.00	CI 3.07	518.77	21.9	1.05%
P-(36)	18" RCP	ND 6.05	522.80	CI 3.01	522.70	6.5	1.54%
P-(37)	18" RCP	ND 6.04	522.30	CI 3.02	522.19	6.5	1.69%
P-(38)	18" RCP	ND 6.03	521.75	CI 3.03	521.65	6.5	1.54%
P-(39)	18" RCP	ND 6.02	521.20	CI 3.04	521.10	6.5	1.54%
P-(40)	18" RCP	ND 6.01	520.20	CI 3.05	520.12	6.5	1.23%
P-(500)	18" RCP	CB 5.00	521.79	CB 1.03	521.00	74.5	1.07%
P-(501)	18" RCP	MH 5.01	522.45	CB 5.00	521.79	61.5	1.07%
P-(502)	18" RCP	CI 5.02	524.09	MH 5.01	522.45	157.0	1.04%
P-(503)	18" RCP	CI 5.03	524.65	CI 5.02	524.09	56.4	0.99%
P-(504)	18" RCP	CI 5.04	525.07	CI 5.03	524.65	41.4	1.01%
P-(505)	18" RCP	CI 5.05	526.33	CI 5.04	525.07	126.0	1.00%
P-(506)	18" RCP	CI 5.06	527.49	CI 5.05	526.33	115.9	1.00%
P-(507)	18" RCP	CI 5.07	524.87	CI 5.02	524.09	78.4	1.00%
P-(600)	18" HDPE	CB 6.01	522.40	CB 5.00	521.79	60.1	1.01%
P-(601)	18" HDPE	CB 6.02	523.00	CB 6.01	522.40	60.0	1.00%
P-(801)	30" HDPE	UD 8.01	512.00	MH 8.02	511.80	9.8	2.04%
P-(802)	18" HDPE	UD 8.00	512.00	WQU 8.02	511.95	9.8	0.51%
P-(803)	18" HDPE	WQU 8.02	511.95	MH 8.02	511.80	16.6	0.91%
P-(804)	30" HDPE	MH 8.02	511.80	MH 8.04	511.50	43.1	0.70%
P-(1000)	30" HDPE	MH 8.04	511.51		511.40	3.4	3.24%

ABBREVIATIONS

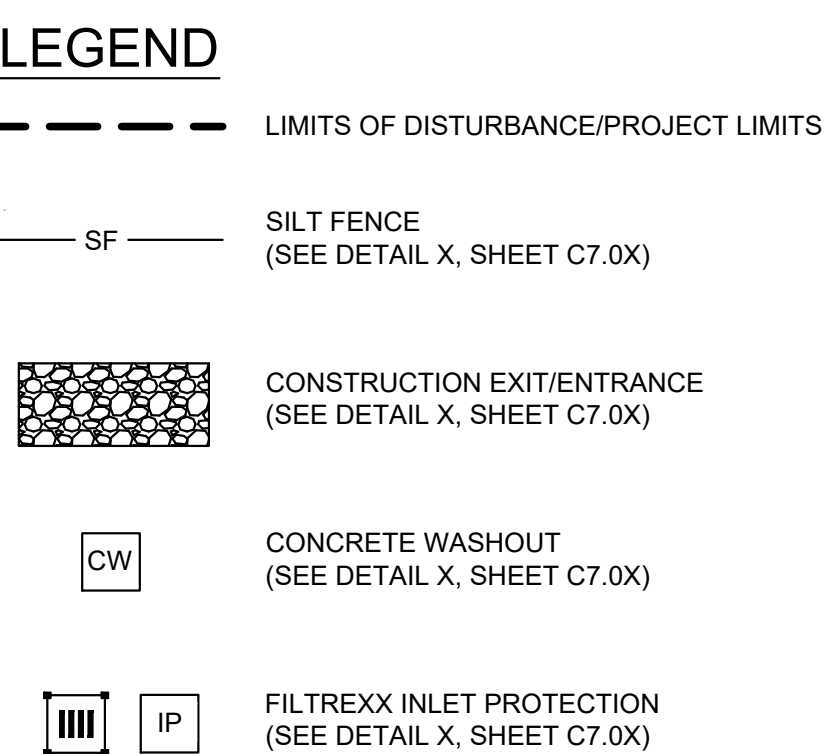
CI	CURB INLET
CB	CATCH BASIN
MH	MANHOLE
TD	TRENCH DRAIN
UD	UNDERGROUND DETENTION



DRAINAGE TABLES

1000 RIVERGATE PARKWAY
S WHOLESALE CL
GOODLETTSVILLE, TENNESSEE

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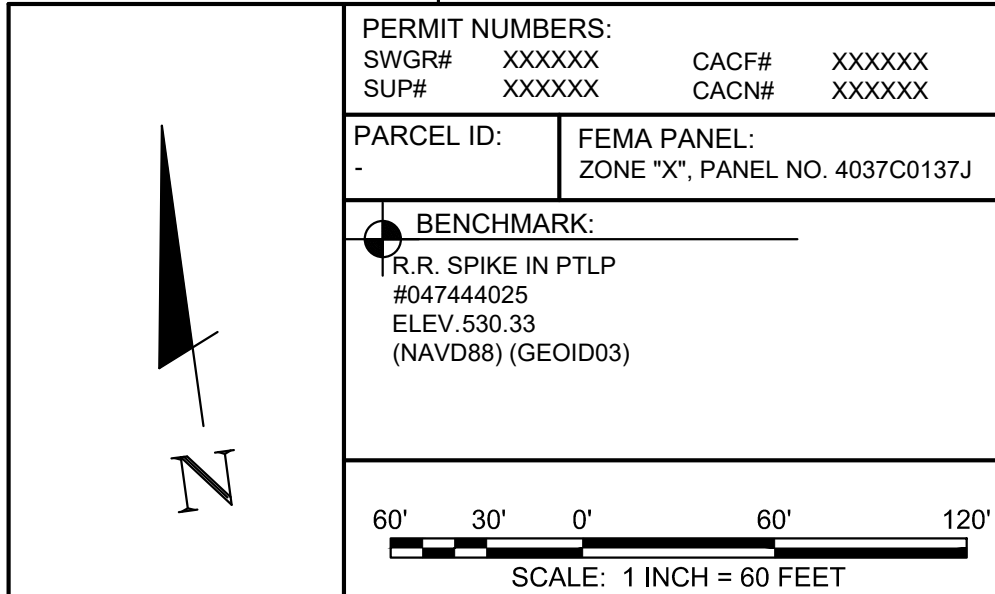


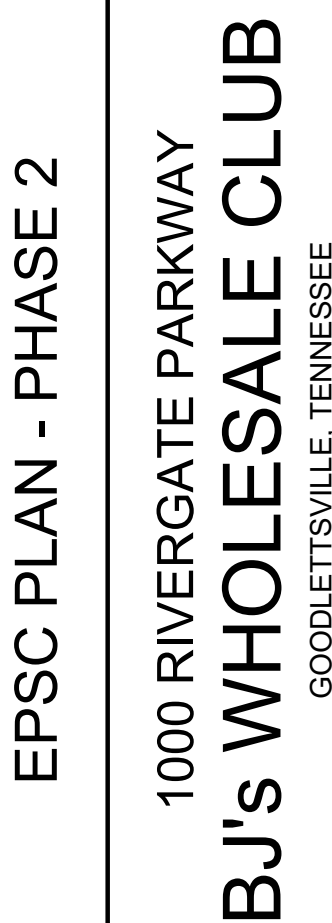
1. THE CONTRACTOR SHALL INSTALL THE CONSTRUCTION ENTRANCE, EXIT BEFORE ANY OTHER WORK CAN BEGIN ON SITE.
2. THE CONTRACTOR SHALL DESIGNATE A CONCRETE WASHOUT AND TIRE WASHING FACILITY ONSITE AS SHOWN.
3. THE CONTRACTOR SHALL INSTALL PERIMETER SILT FENCE AS SHOWN BEFORE GRADING OPERATIONS CAN BEGIN.
4. THE CONTRACTOR SHALL INSTALL INLET PROTECTION AS SHOWN BEFORE WORK CAN BEGIN.

1. CONTRACTOR IS REQUIRED TO SWEEP THE STREETS DAILY WHEN CONSTRUCTION IS ACTIVE WHERE THE CONSTRUCTION EXIT IS LOCATED.

2. DEWATERING PRACTICES COMPLY WITH TDEC BMP MANUALS DEWATERING CRITERIA.

3. SEE ADDITIONAL NOTES ON SHEET C0.01.





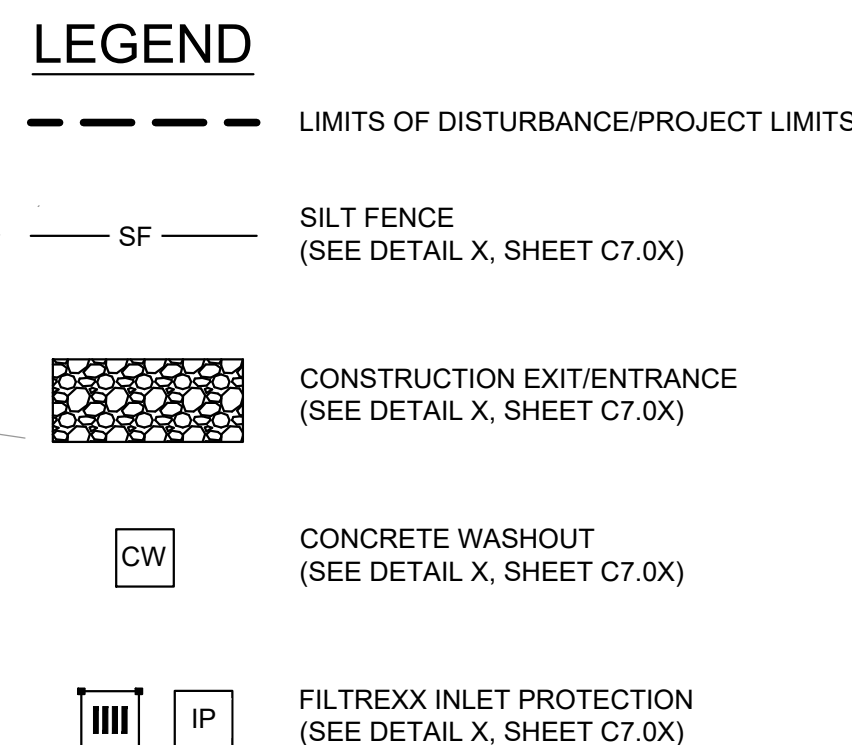
EPSC PLAN - PHASE 2

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BJ's WHOLESALE CLUB
GOODLETTSVILLE, TENNESSEE

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C3.02

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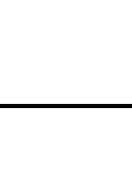
PHASE 2 SEQUENCING NOTES:

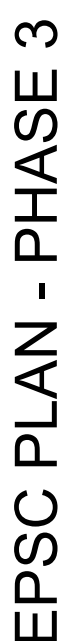
1. THE CONTRACTOR SHALL MAINTAIN ALL BMP'S INSTALLED IN THE EROSION CONTROL PLAN - PHASE 1.
2. THE CONTRACTOR SHALL BEGIN DEMOLITION AND GRADING IN THE SOUTHWEST PORTION OF THE SITE AND MOVE TOWARD THE NORTHEAST WHILE INSTALLING SEDIMENT POND AND DIVERSION DITCH AS THE CORRESPONDING AREAS ARE CLEARED.
3. THE CONTRACTOR SHALL STABILIZE THE SEDIMENT POND AND DIVERSION DITCH AS SHOWN.

LIMITS OF DISTURBANCE/PROJECT LIMITS = 12.5 AC

NOTES:

1. CONTRACTOR IS REQUIRED TO SWEEP THE STREETS DAILY WHEN CONSTRUCTION IS ACTIVE WHERE THE CONSTRUCTION EXIT IS LOCATED.
2. DEWATERING PRACTICES COMPLY WITH TDEC BMP MANUALS DEWATERING CRITERIA.
3. SEE ADDITIONAL NOTES ON SHEET C0.01.

	 Know what's below Call before you dig 811 www.call811.com										
	PERMIT NUMBERS: <table style="width: 100%; border: none;"> <tr> <td style="width: 25%;">SWGR#</td> <td style="width: 25%;">XXXXXX</td> <td style="width: 25%;">CACH#</td> <td style="width: 25%;">XXXXXX</td> </tr> <tr> <td>SUP#</td> <td>XXXXXX</td> <td>CACN#</td> <td>XXXXXX</td> </tr> </table>				SWGR#	XXXXXX	CACH#	XXXXXX	SUP#	XXXXXX	CACN#
SWGR#	XXXXXX	CACH#	XXXXXX								
SUP#	XXXXXX	CACN#	XXXXXX								
PARCEL ID: -	FEMA PANEL: ZONE "X", PANEL NO. 4037C0137J										
BENCHMARK:  T.R. SPIKE IN PLTP #047444025 ELEV. 530.33 (NAVD88) (GEOID03)											
60' 30' 0' 60' 120'  SCALE: 1 INCH = 60 FEET											



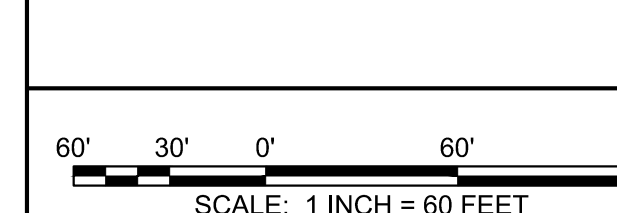
1000 RIVERGATE PARKWAY
BJ's WHOLESALE CLUB

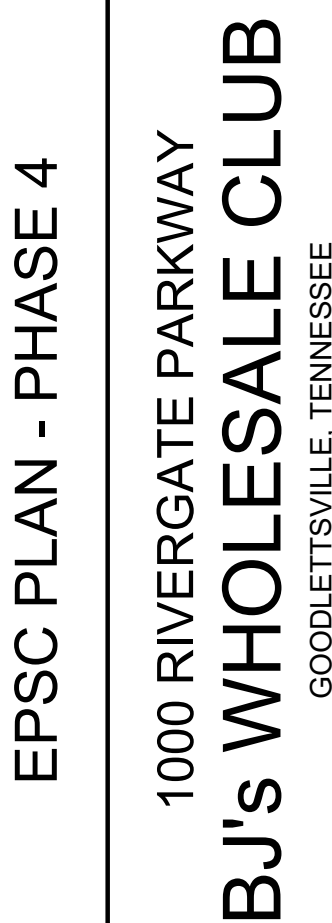
GOODLETTSVILLE, TENNESSEE

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C3.03

FILE NO. 32897-03





EPSC PLAN - PHASE 4

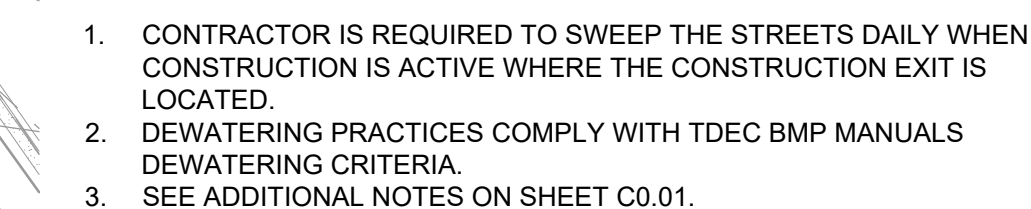
10000 RIVERGATE PARKWAY

GOODLETTSVILLE, TENNESSEE

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C3.04

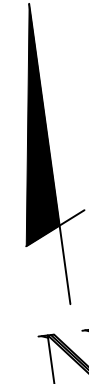
FILE NO. 32897-03



103,004 SF
480 PARKING SPACES (INCLUDES CART
CORRALS AND ACCESSIBLE PARKING)
RATIO - 4.52 PER 1,000 SF

30' DRAINAGE EASEMENT
BOOK 6900, PAGE 279,
R.O.D.C.

SAMH
T.C. 520.01
E.I. 507.11(IN-NW)
E.I. 505.31(OUT-S)



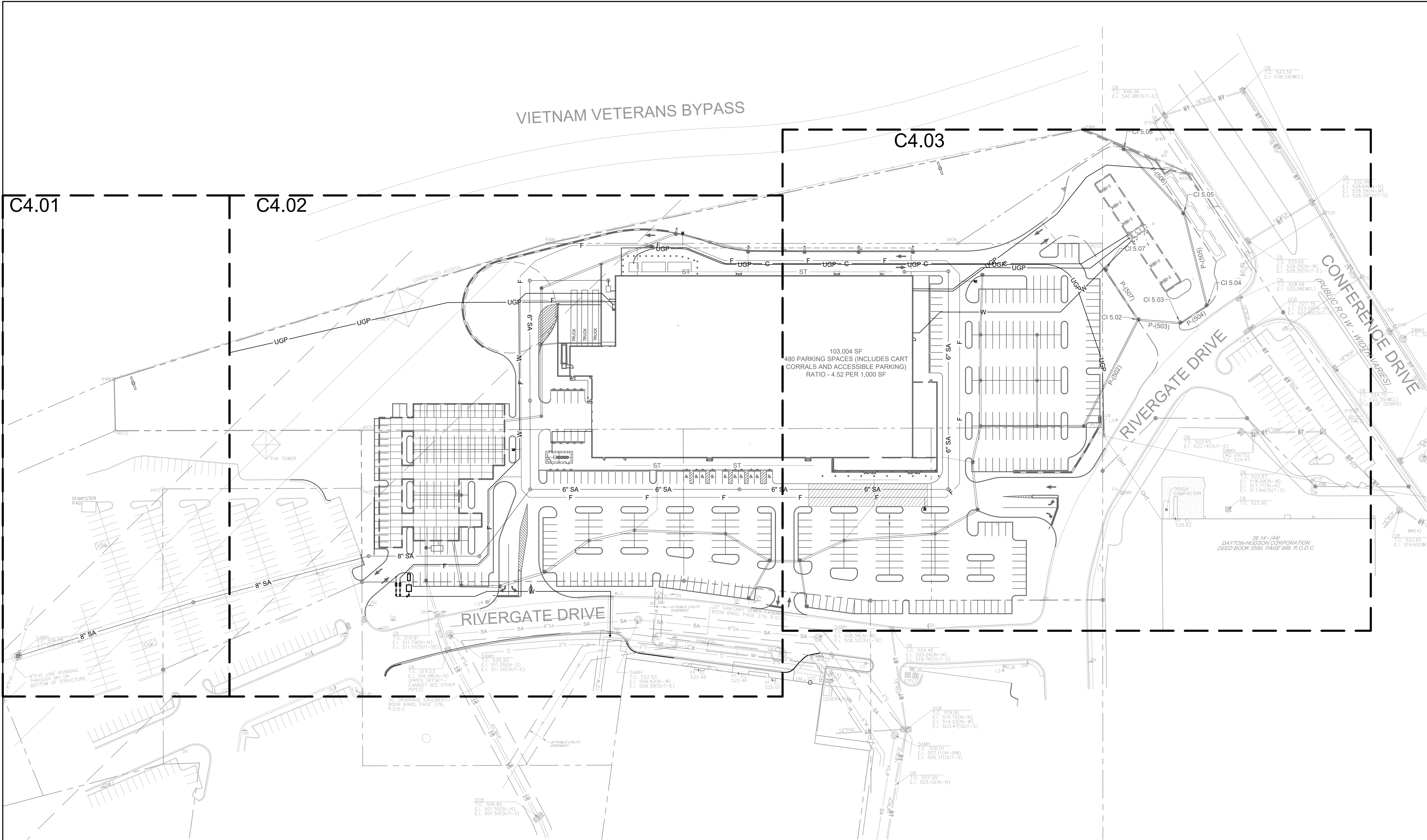
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SUP#	XXXXXX	CACN#	XXXXXX

PARCEL ID: -	FEMA PANEL: ZONE "X". PANEL NO. 4037C01
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BENCHMARK:
R.R. SPIKE IN PTLP
#047444025
ELEV.530.33
(NAVD88) (GEOID03)

USER:RCABELL
FILE:328289713289710304_C401.dwg
SAVED:10/27/2022
PLOTTED:10/27/2022



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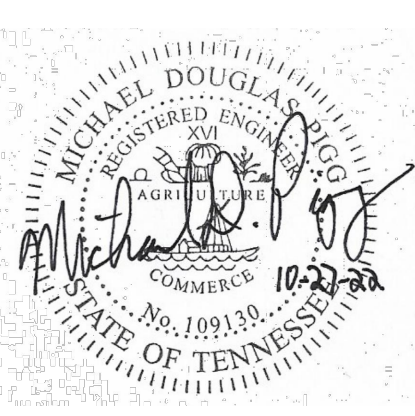
PARCEL ID: FEMA PANEL:
ZONE "X", PANEL NO. 4037C0137J

BENCHMARK:
R.R. SPIKE IN PTLP
#047444025
ELEV 530.33
(NAVD88) (GEOID03)

60' 30' 0' 60' 120'
SCALE: 1 INCH = 60 FEET

OVERALL UTILITY PLAN

1000 RIVERGATE PARKWAY
BJ's WHOLESALE CLUB
GOODLETTSVILLE, TENNESSEE

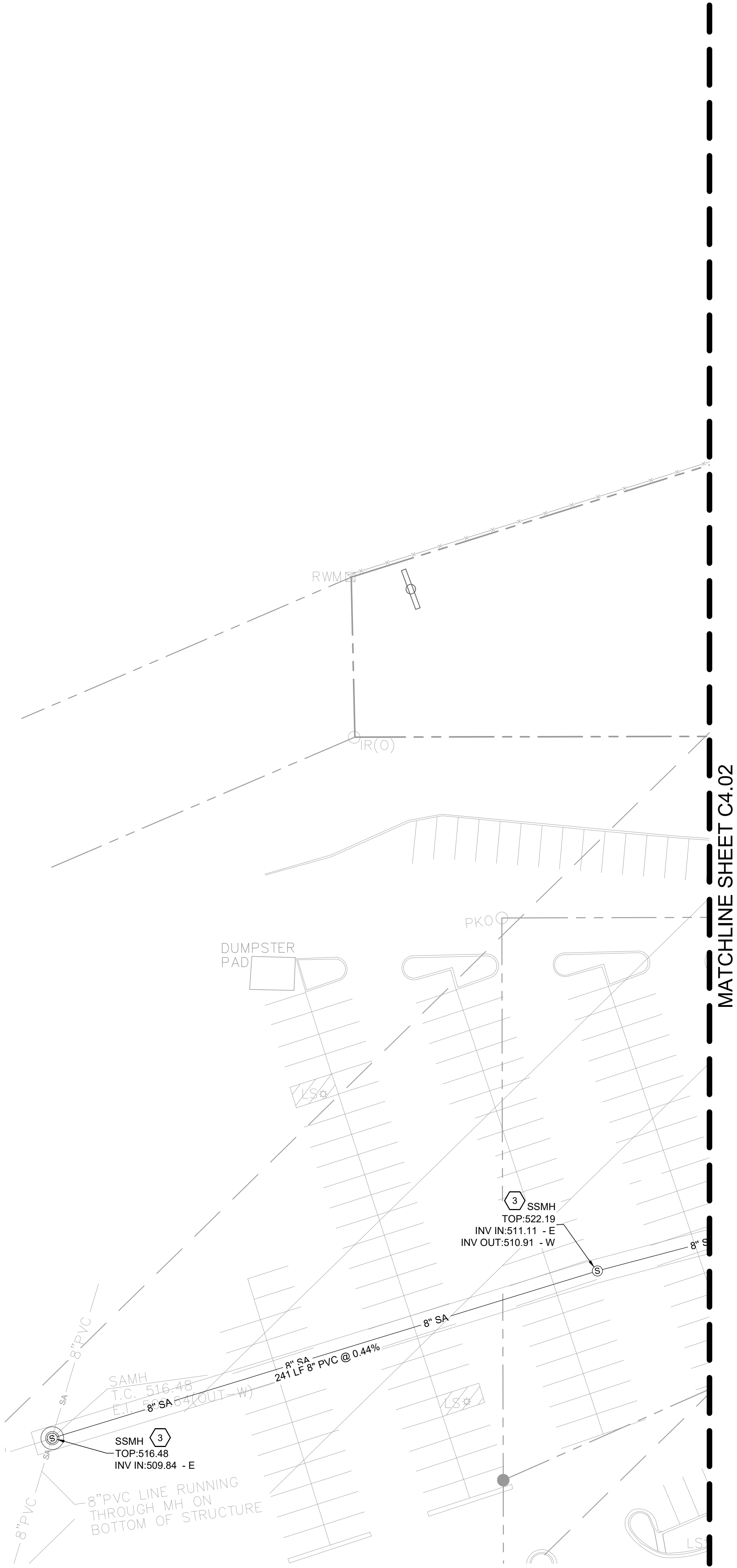


BARGE
DESIGN SOLUTIONS

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C4.00
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USER:RCABELL
FILE:3289713289710304_C401CIVILPkg32897103_C4.01.dwg
SAVED:10/27/2022
PLOTTED:10/27/2022



UTILITY NOTES

1. CONTRACTOR TO COORDINATE WITH LOCAL UTILITY FOR NATURAL GAS AND TELECOM SERVICE INSTALLATION.
2. OPERATING AGREEMENT PER RECORDED BOOK 4432, PAGE 137 AND 5TH AMENDMENT TO OPERATING AGREEMENT PER RECORDED DOCUMENT #20090723-0069160 ALLOWS FOR CROSS ACCESS BETWEEN PROPERTIES WITHIN THE MALL AND GRANT EASEMENTS FOR UTILITY INSTALLATION.

UTILITY KEYNOTES	
1	PVC SDR35 SANITARY SERVICE (SIZES AS SHOWN)
2	3" WATER SERVICE TO BUILDING
3	SANITARY SEWER MANHOLE (SEE DETAIL 1 ON SHEET C7.03)
4	10" DIP FIRE SERVICE
5	SANITARY SEWER CLEANOUT (SEE DETAIL 4 ON SHEET C7.03)
6	FIRE HYDRANT (SEE DETAIL 6 ON SHEET C7.05)
7	3" WATER METER (SEE DETAIL 2 ON SHEET C7.06)
8	3" BACKFLOW PREVENTION (SEE DETAIL 1 ON SHEET C7.06)
9	GREASE TRAP (SEE PLUMBING PLANS)
10	TRANSFORMER
11	GENERATOR
12	UNDERGROUND POWER
13	10" WATER METER (SEE DETAIL 3 ON SHEET C7.06)
14	10" BACKFLOW PREVENTION (SEE DETAIL 1 ON SHEET C7.06)
15	10" X 10" TEE
16	45° BEND
17	22.5° BEND
18	IRRIGATION SERVICE (SEE LANDSCAPE PLANS)
19	90° BEND
20	ELECTRIC CONDUIT TO LIGHTED SIGN (BY OTHERS)
21	COMMUNICATION CONDUIT (BY OTHERS)
22	ELECTRIC CONDUIT TO PROPANE CENTER (BY OTHERS)
23	ELECTRIC CONDUIT TO GAS STATION (BY OTHERS)
24	CONDUIT FOR SITE LIGHTING (BY OTHERS)
25	1 1/2" SLEEVED WATER SERVICE TO GAS STATION
26	UNDERGROUND ELECTRIC SERVICE CONDUIT (BY OTHERS)
27	10" X 12" TAPPING SLEEVE AND VALVE (SEE DETAIL 5 ON SHEET C7.05)
28	10" DIP WATER SERVICE
29	10" X 6" TEE

LEGEND

— G —	GAS
— W —	DOMESTIC WATER SERVICE LINE
— UGP —	UNDERGROUND POWER LINE
— SA —	SANITARY SEWER
— C —	CABLE/COMMUNICATION CONDUIT
— F —	FIRE SERVICE LINE
⊗	GATE VALVE

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SUP# XXXXXX CACN# XXXXXX

PARCEL ID:
-

FEMA PANEL:
ZONE "X", PANEL NO. 4037C0137J

BENCHMARK:
T.R. SPIKE IN PTLP
#047444025
ELEV 530.33
(NAVD88) (GEOID03)

DR. DATE
MP 10/03/2022
AV 10/27/2022

REV. DESCRIPTION
MP 10/27/2022
AV SITE PLAN RESUBMITTAL

30' 15' 0' 30' 60'

SCALE: 1 INCH = 30 FEET

ENLARGED UTILITY PLAN

1000 RIVERGATE PARKWAY

BJ's WHOLESALE CLUB

GOODLETTSVILLE, TENNESSEE

C4.01

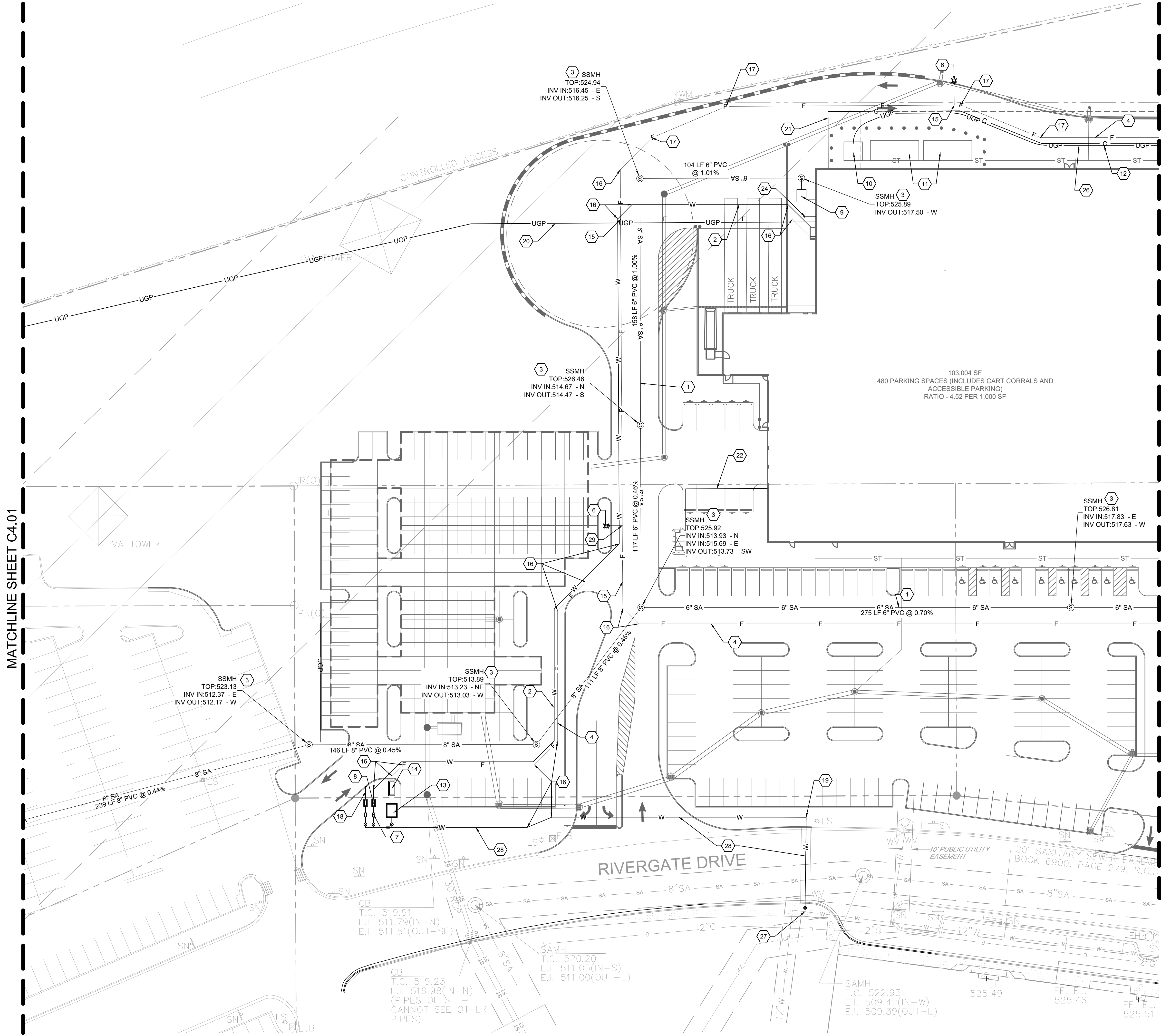
FILE NO. 32897-03

BARGE
DESIGN SOLUTIONS

615 3rd Avenue South / Suite 700 // Nashville, Tennessee 37210
PHONE (615) 254-1500 / FAX (615) 255-6572

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Page 103 of 136

MATCHLINE SHEET C4.01



MATCHLINE SHEET C4.03

UTILITY NOTES

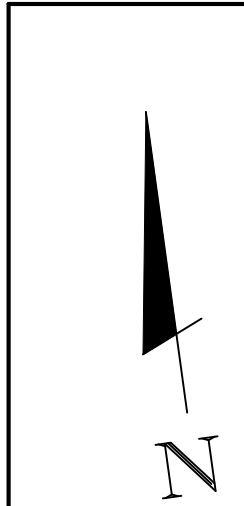
- CONTRACTOR TO COORDINATE WITH LOCAL UTILITY FOR NATURAL GAS AND TELECOM SERVICE INSTALLATION.
- OPERATING AGREEMENT PER RECORDED BOOK 4432, PAGE 137 AND 5TH AMENDMENT TO OPERATING AGREEMENT PER RECORDED DOCUMENT #20090723-0069160 ALLOWS FOR CROSS ACCESS BETWEEN PROPERTIES WITHIN THE MALL AND GRANT EASEMENTS FOR UTILITY INSTALLATION.

UTILITY KEYNOTES

1	PVC SDR35 SANITARY SERVICE (SIZES AS SHOWN)
2	3" WATER SERVICE TO BUILDING
3	SANITARY SEWER MANHOLE (SEE DETAIL 1 ON SHEET C7.03)
4	10" DIP FIRE SERVICE
5	SANITARY SEWER CLEANOUT (SEE DETAIL 4 ON SHEET C7.03)
6	FIRE HYDRANT (SEE DETAIL 6 ON SHEET C7.05)
7	3" WATER METER (SEE DETAIL 2 ON SHEET C7.06)
8	3" BACKFLOW PREVENTION (SEE DETAIL 1 ON SHEET C7.06)
9	GREASE TRAP (SEE PLUMBING PLANS)
10	TRANSFORMER
11	GENERATOR
12	UNDERGROUND POWER
13	10" WATER METER (SEE DETAIL 3 ON SHEET C7.06)
14	10" BACKFLOW PREVENTION (SEE DETAIL 1 ON SHEET C7.06)
15	10" X 10" TEE
16	45° BEND
17	22.5° BEND
18	IRRIGATION SERVICE (SEE LANDSCAPE PLANS)
19	90° BEND
20	ELECTRIC CONDUIT TO LIGHTED SIGN (BY OTHERS)
21	COMMUNICATION CONDUIT (BY OTHERS)
22	ELECTRIC CONDUIT TO PROPANE CENTER (BY OTHERS)
23	ELECTRIC CONDUIT TO GAS STATION (BY OTHERS)
24	CONDUIT FOR SITE LIGHTING (BY OTHERS)
25	1 1/2" SLEEVED WATER SERVICE TO GAS STATION
26	UNDERGROUND ELECTRIC SERVICE CONDUIT (BY OTHERS)
27	10" X 12" TAPPING SLEEVE AND VALVE (SEE DETAIL 5 ON SHEET C7.05)
28	10" DIP WATER SERVICE
29	10" X 6" TEE

LEGEND

G	GAS
W	DOMESTIC WATER SERVICE LINE
UGP	UNDERGROUND POWER LINE
SA	SANITARY SEWER
C	CABLE/COMMUNICATION CONDUIT
F	FIRE SERVICE LINE
⊗	GATE VALVE



PERMIT NUMBERS:			
SWGR#	XXXXXX	CACF#	XXXXXX
SUP#	XXXXXX	CACN#	XXXXXX
PARCEL ID:		FEMA PANEL:	
-		ZONE "X", PANEL NO. 4037C0	
BENCHMARK:			
R.R. SPIKE IN PTLP			
#047444025			
ELEV. 530.33			
(NAVD88) (GEOID03)			

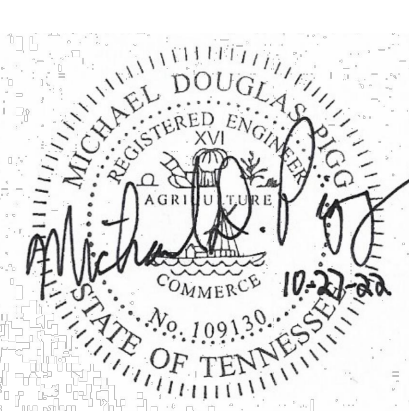
30' 15' 0' 30' 60'
SCALE: 1 INCH = 30 FEET

ENLARGED UTILITY PLAN

1000 RIVERGATE PARKWAY
BJ's WHOLESALE CLUB

GOODLETTSVILLE, TENNESSEE

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C4.02

FILE NO. 328289-03



ENLARGED UTILITY PLAN

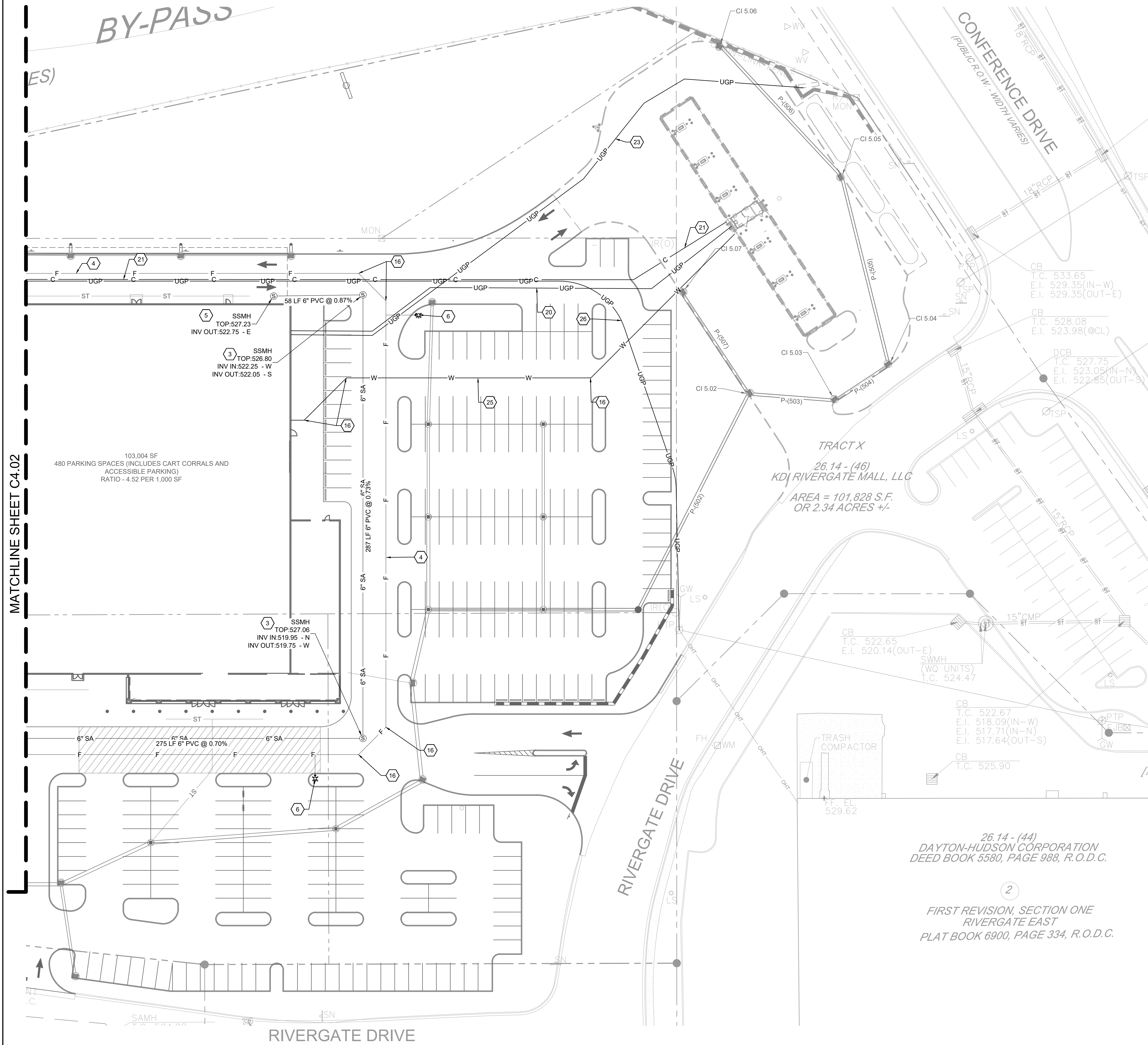
1000 RIVERGATE PARKWAY

GOODLETTSVILLE, TENNESSEE

[illegible]

C4.03

FILE NO. 32897-03



1. CONTRACTOR TO COORDINATE WITH LOCAL UTILITY FOR NATURAL GAS AND TELECOM SERVICE INSTALLATION.
2. OPERATING AGREEMENT PER RECORDED BOOK 4432, PAGE 137 AND 5TH AMENDMENT TO OPERATING AGREEMENT PER RECORDED DOCUMENT #20090723-0069160 ALLOWS FOR CROSS ACCESS BETWEEN PROPERTIES WITHIN THE MALL AND GRANT EASEMENTS FOR UTILITY INSTALLATION.

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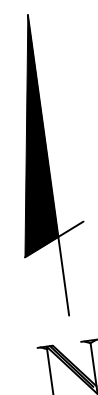
_____ G _____	GAS
_____ W _____	DOMESTIC WATER SERVICE LINE
_____ UGP _____	UNDERGROUND POWER LINE
_____ SA _____	SANITARY SEWER
_____ C _____	CABLE/COMMUNICATION CONDUIT
_____ F _____	FIRE SERVICE LINE
	GATE VALVE

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 811
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PERMIT NUMBERS:			
SWGR#	XXXXXX	CACF#	XXXXXX
SUP#	XXXXXX	CAGN#	XXXXXX

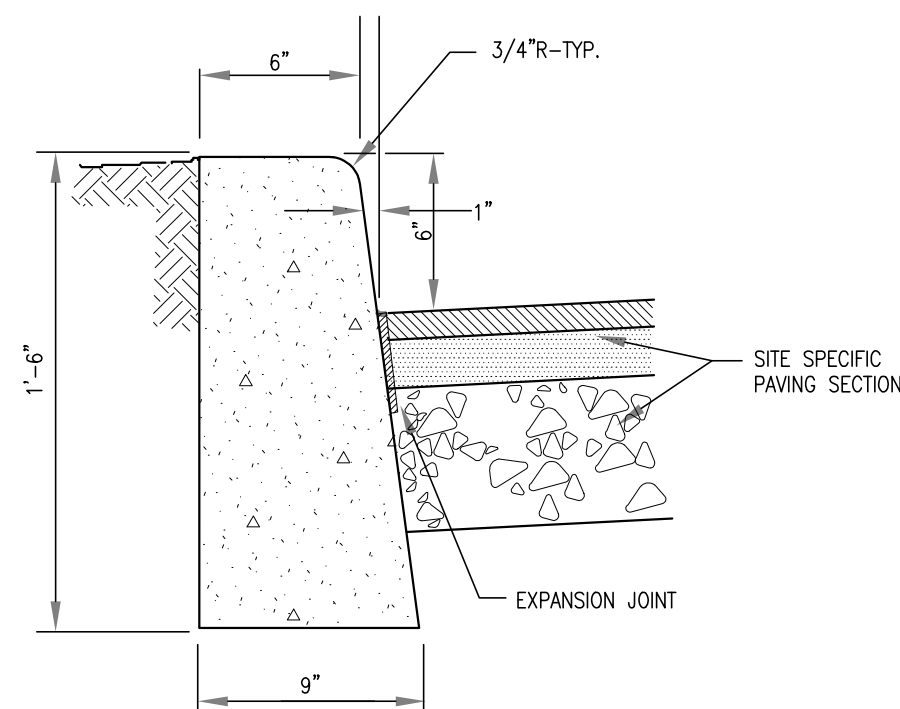
PARCEL ID: -	FEMA PANEL: ZONE "X". PANEL NO. 4037C0
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BENCHMARK:
R.R. SPIKE IN PTLP
#047444025
ELEV.530.33
(NAVD88) (GEOID03)



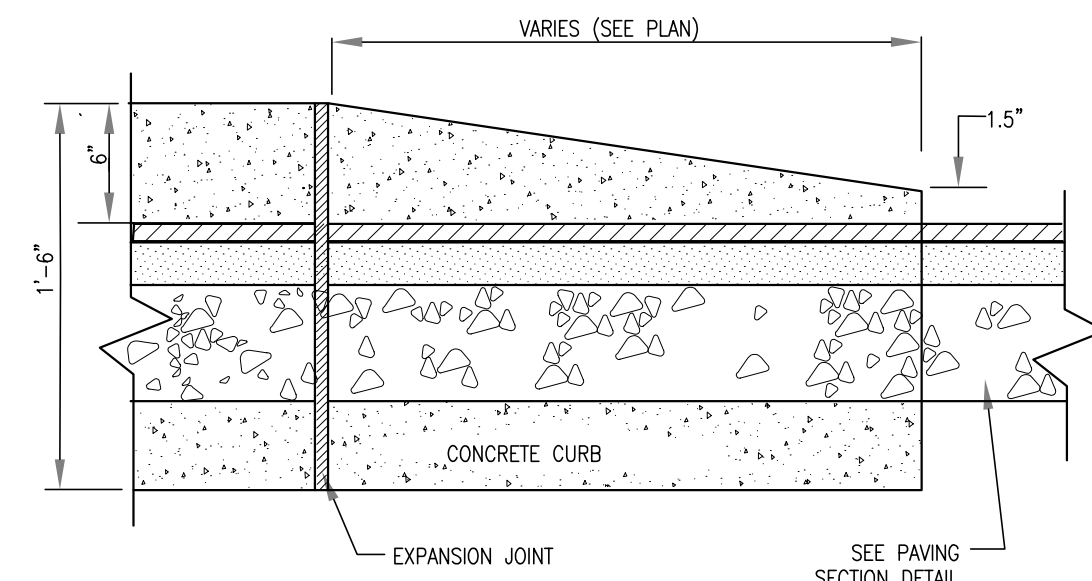
30' 15' 0' 30' 60'

SCALE: 1 INCH = 30 FEET

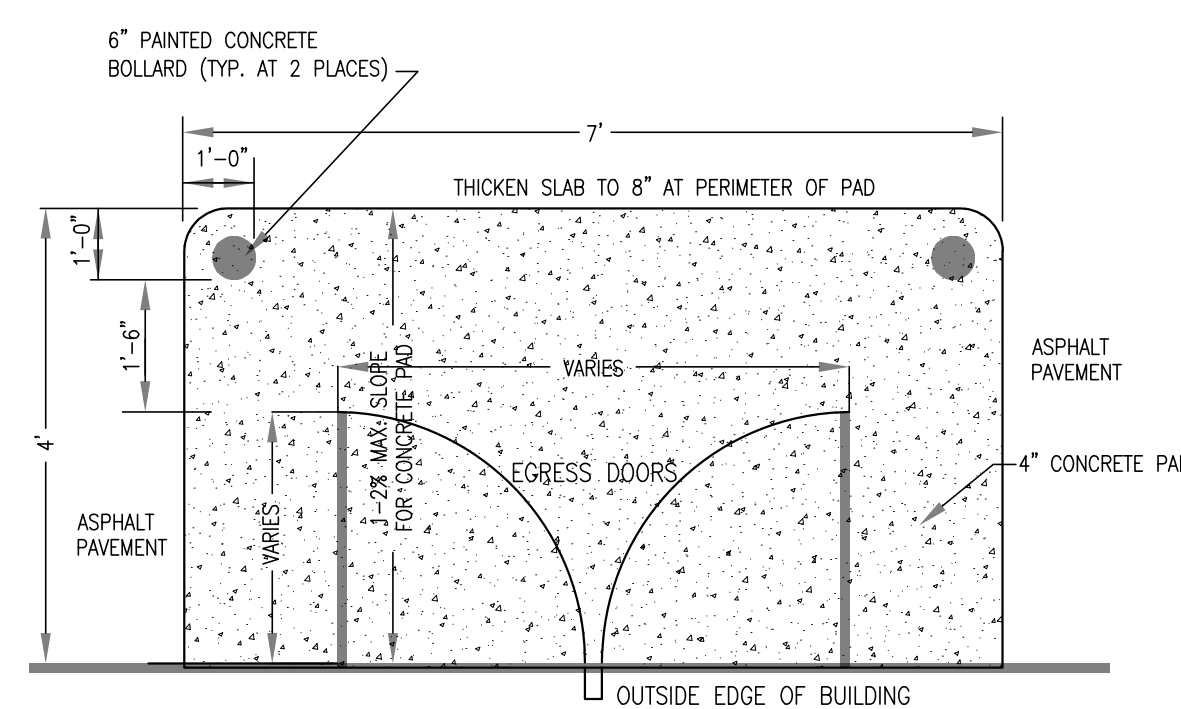


- NOTES:
1. CONCRETE SHALL BE 4,000 P.S.I - 2" SLUMP.
 2. SIX (6") INCH FACE TO BE PROVIDED ON CURB.
 3. PROVIDE PREFORMED BITUMINOUS FIBER EXPANSION JOINTS, 1/2" THICK AT 20'-0" (MAX.) INTERVALS. PROVIDE DUMMY JOINTS (FORMED) MIDWAY BETWEEN EXPANSION JOINTS.

1 CONCRETE CURB DETAIL

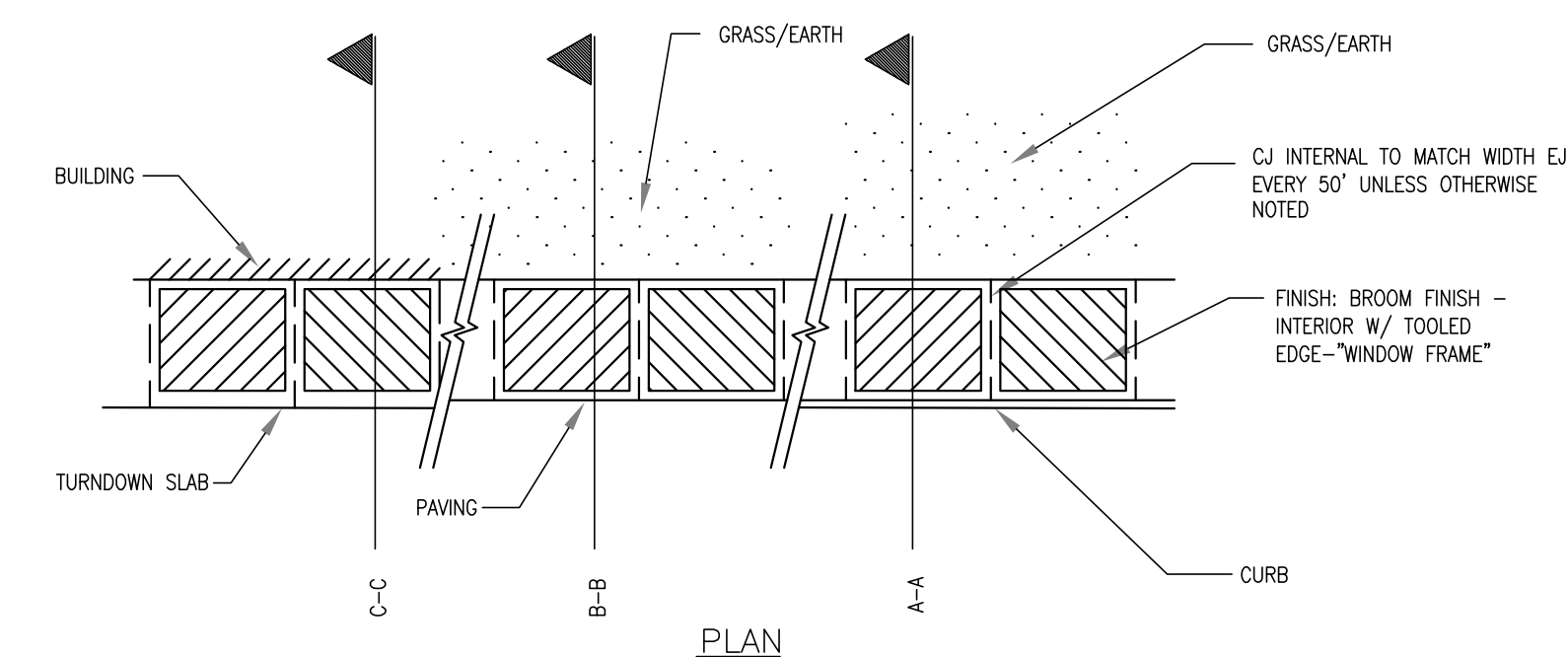
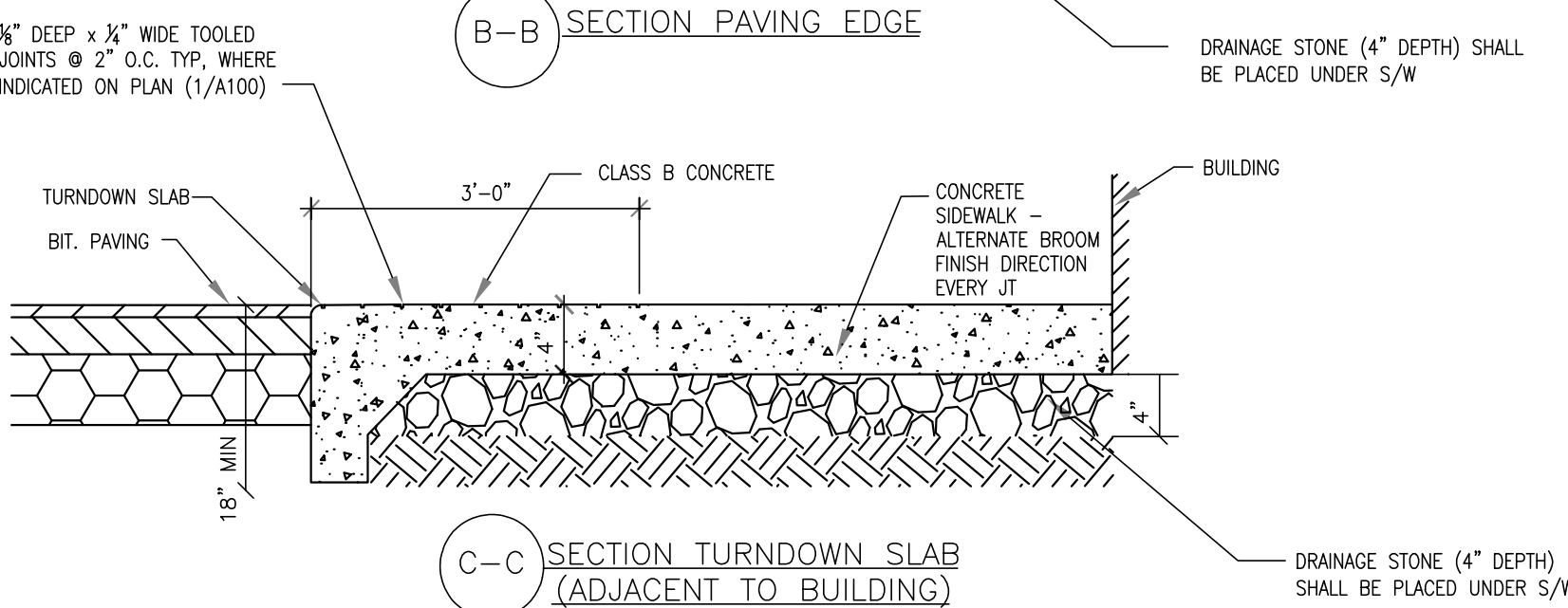
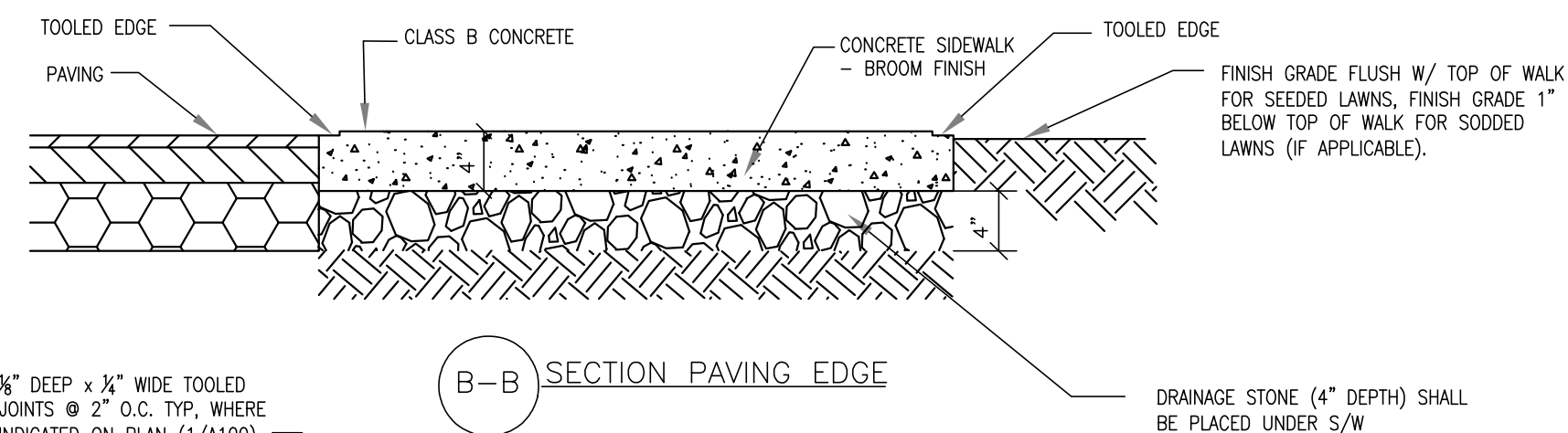
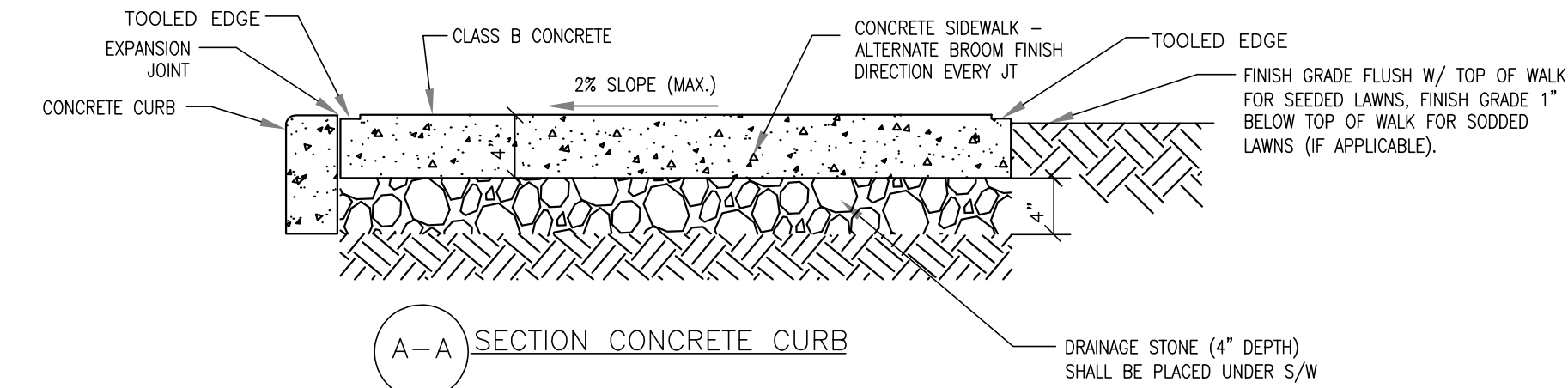


2 CURB TRANSITION DETAIL

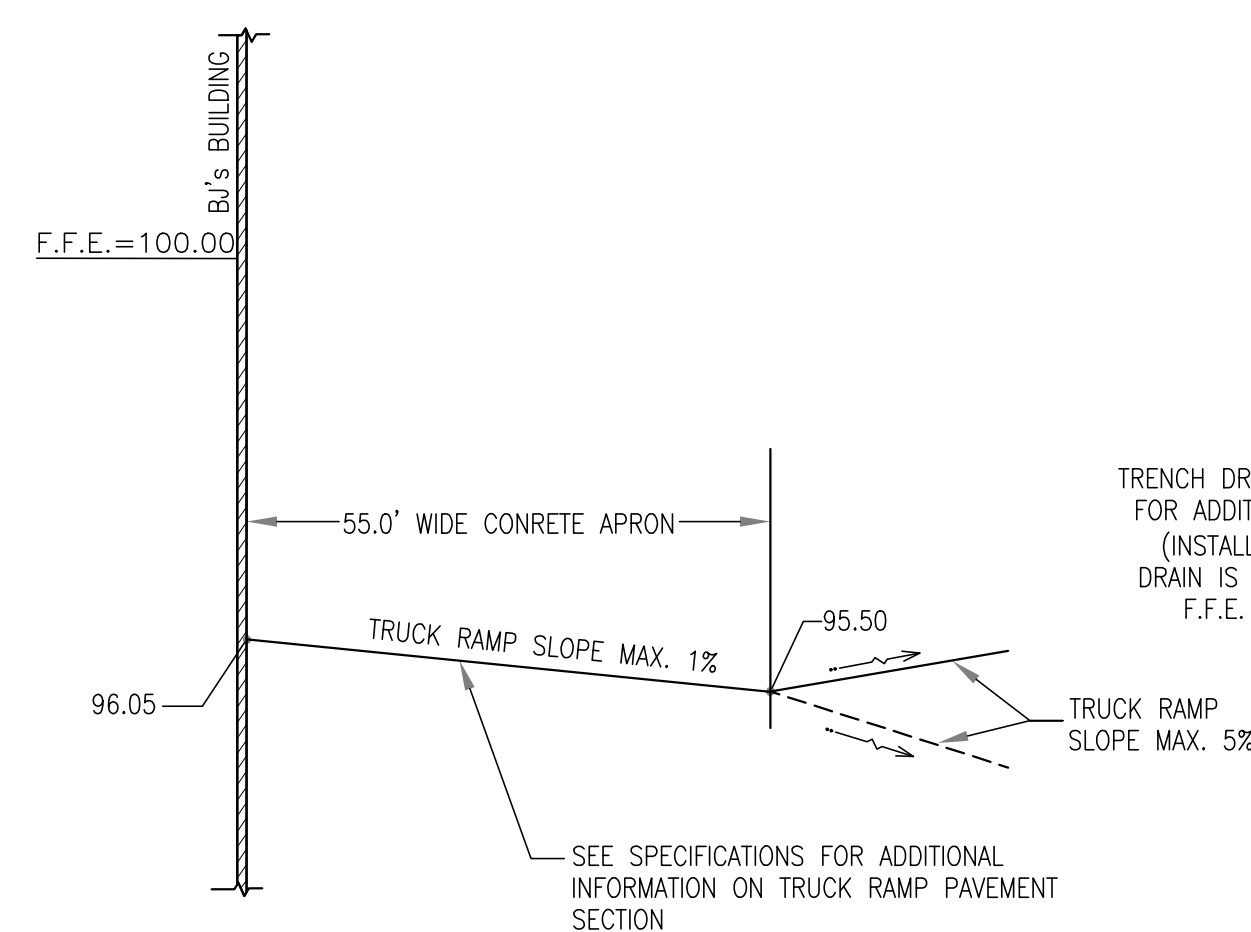


- NOTES:
1. IT IS RESPONSIBILITY OF THE ENGINEER TO CONFIRM THE DIMENSIONS AND OTHER APPURTENANCES OF THE CONCRETE STOOP.THE FINAL DESIGN SHALL COMPLY WITH ALL APPLICABLE BUILDING AND FIRE CODES.

3 CONCRETE STOOP DETAIL



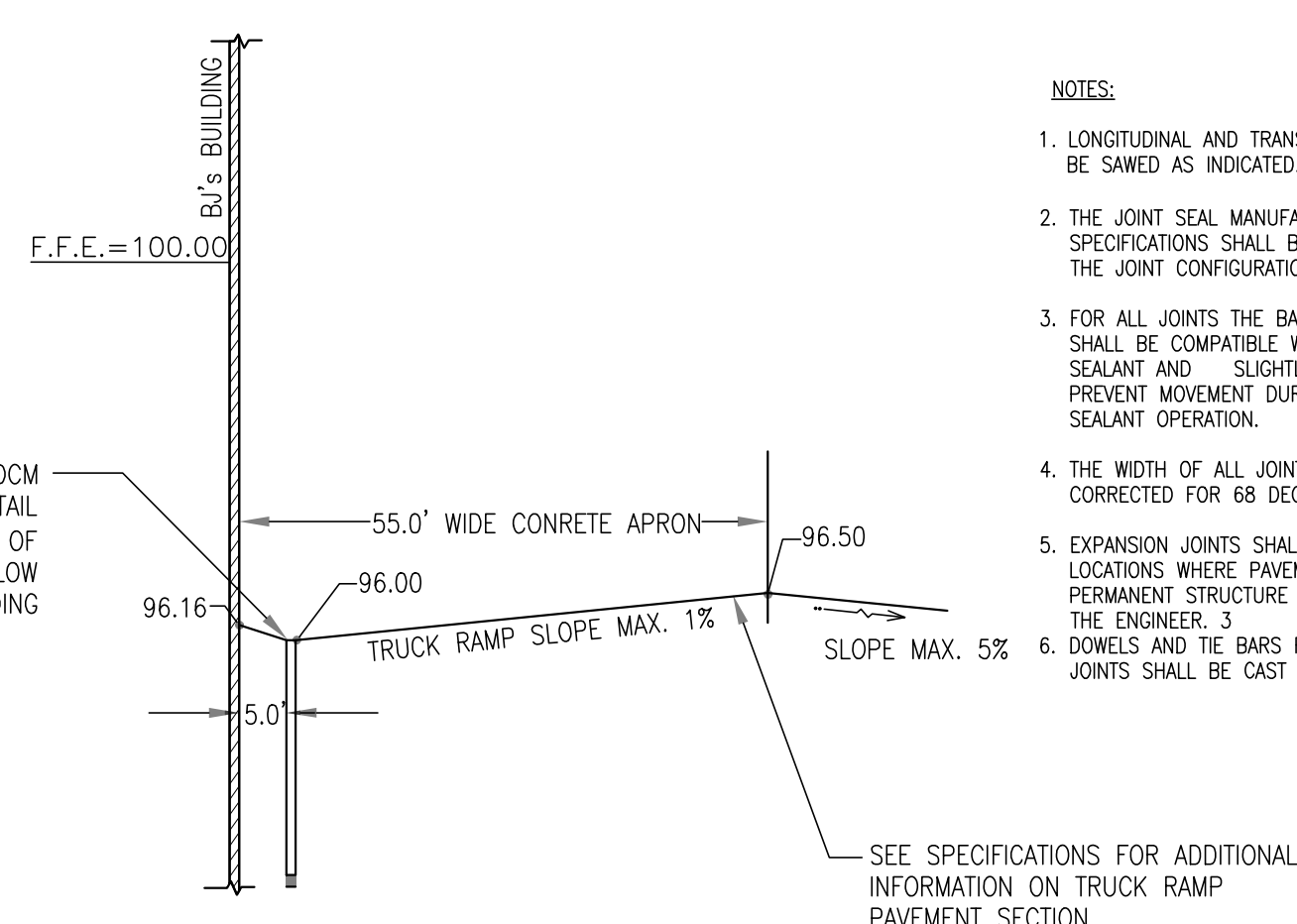
7 SIDEWALK DETAIL
SCALE: N.T.S.



- NOTES:
1. IF POSSIBLE, SITE ENGINEER TO GRADE LOADING DOCK PAD SO THAT 1% SLOPE CONTINUES BEYOND CONCRETE APRON TO EDGE OF WB-67 TRUCK CAB WOULD BE (TYPICALLY 74' FROM BUILDING FACE) PRIOR TO ADJUSTING SLOPE.
 2. THE MOST DESIRABLE GRADING CONFIGURATION IS TO GRADE AWAY FROM THE BUILDING AT 1.0% SLOPE, AVOIDING THE USE OF A "WELL" ALTOGETHER. TRUCK WELLS ARE THE LEAST DESIRABLE DESIGN AND SHOULD ONLY BE CONSIDERED WHERE SEVERE SITE GRADING PROBLEMS MITIGATE ITS USE.

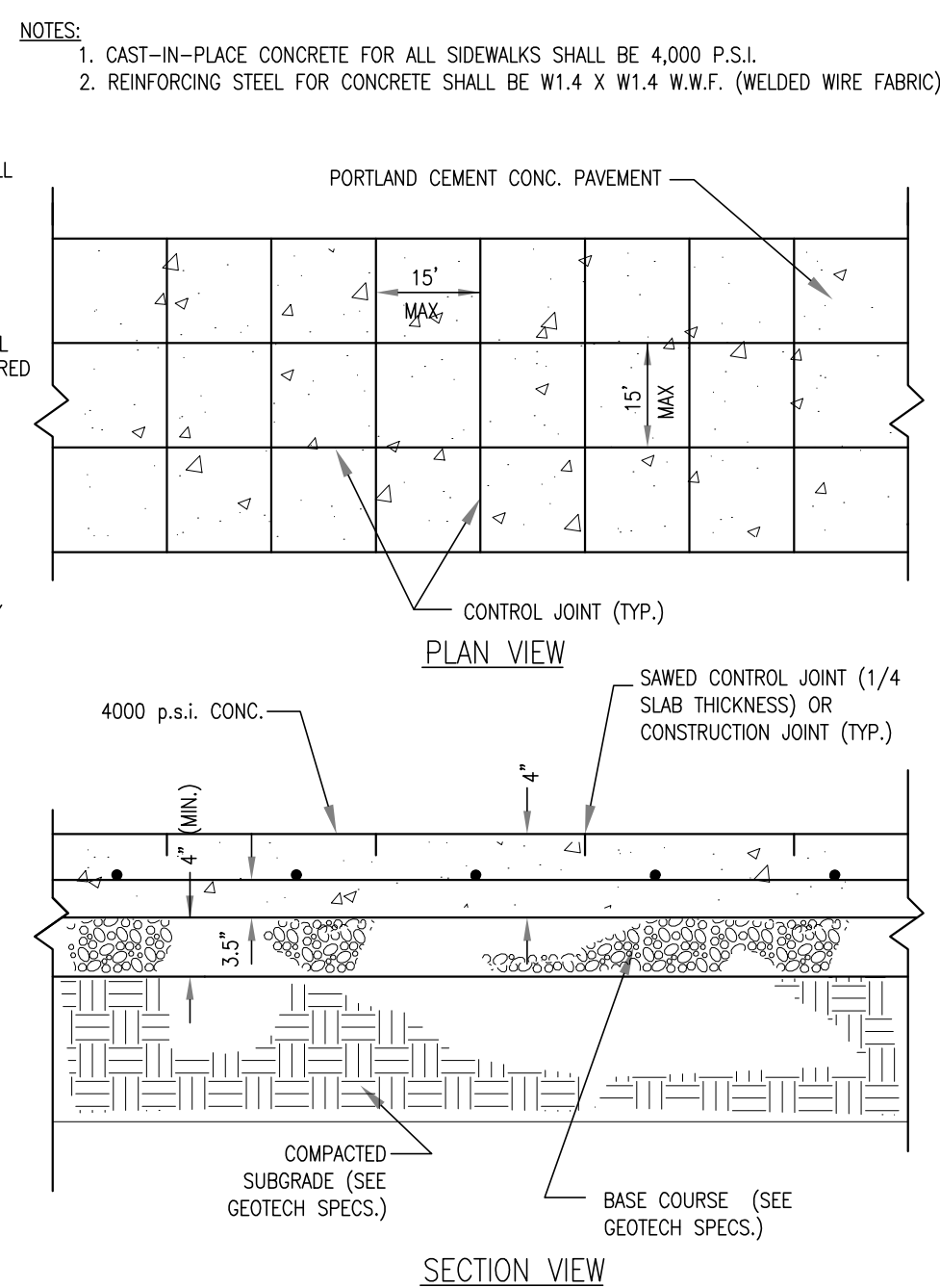
CONCRETE TRUCK RAMP PROTOTYPICAL LAYOUT

4 SCALE: N.T.S.

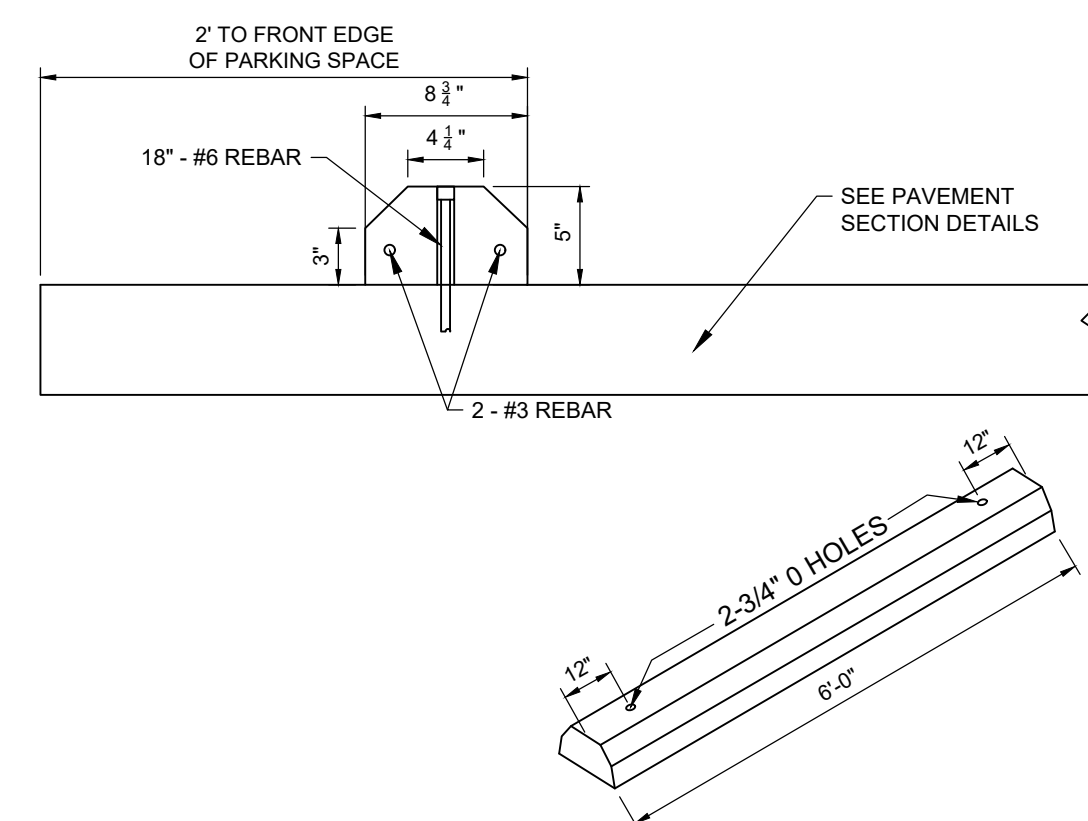


- NOTES:
1. TRENCH DRAIN MUST BE CONNECTED TO THE SITE STORMWATER MANAGEMENT SYSTEM AND THE SUBSURFACE DRAINAGE SYSTEM. GREASE TRAP MAY BE REQUIRED BY LOCAL CODES. DRY WELL DESIGN IS NOT ACCEPTABLE.
 2. THIS OPTION SHALL ONLY BE UTILIZED WITH APPROVAL FROM BJ's.

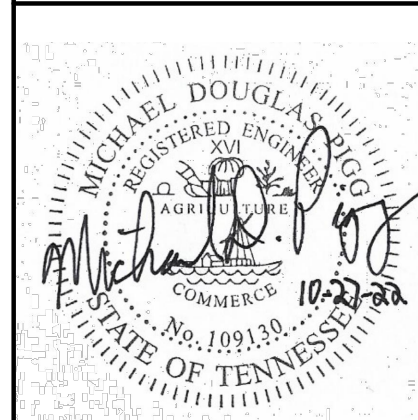
5 CONCRETE TRUCK RAMP
ALTERNATE LAYOUT
SCALE: N.T.S.



6 REINFORCED CONCRETE
SIDEWALK DETAIL
SCALE: N.T.S.



8 CONCRETE WHEELSTOP DETAIL
SCALE: N.T.S.



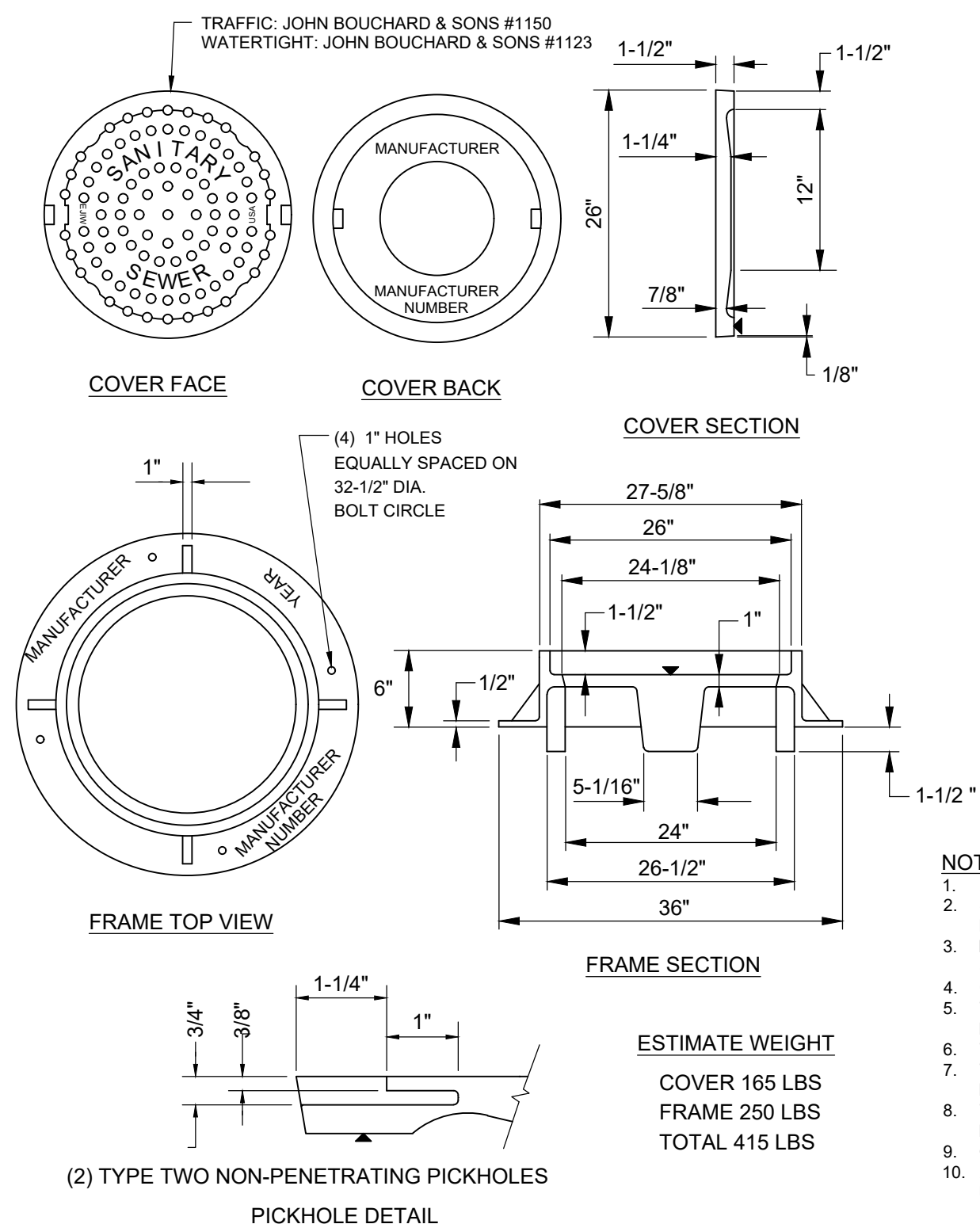
SITE DETAILS

1000 RIVERGATE PARKWAY
BJ's WHOLESALE CLUB
GOODLETTSVILLE, TENNESSEE

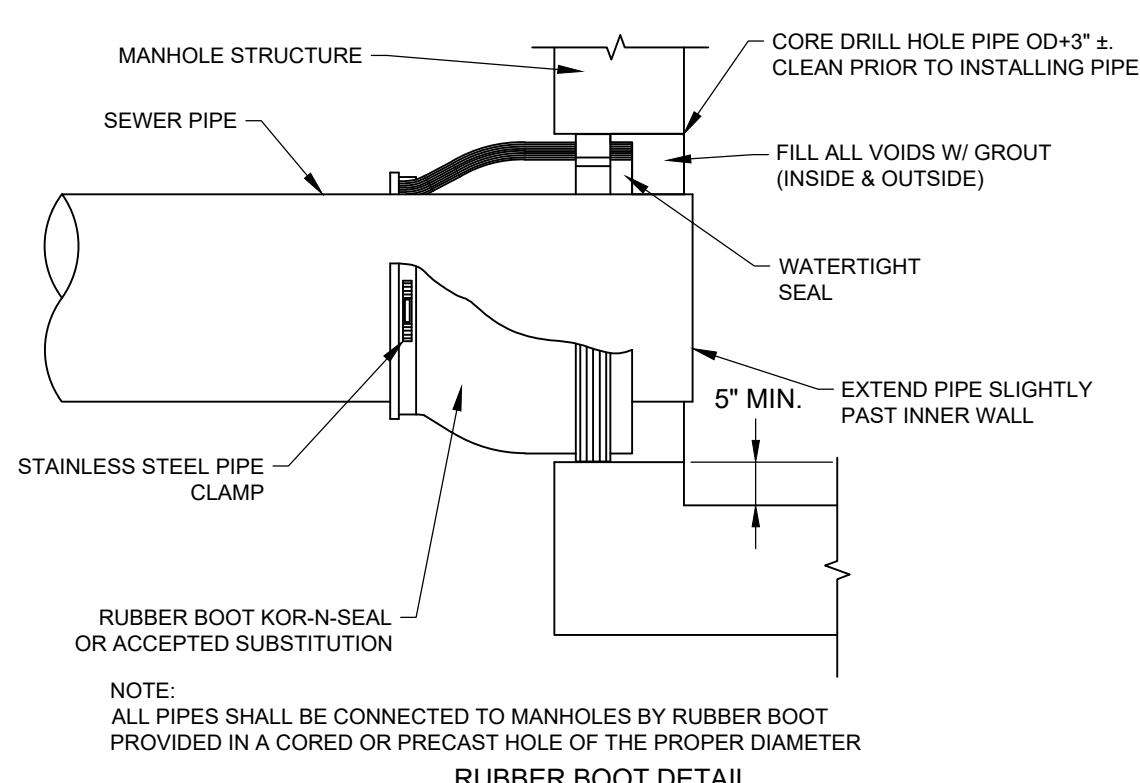
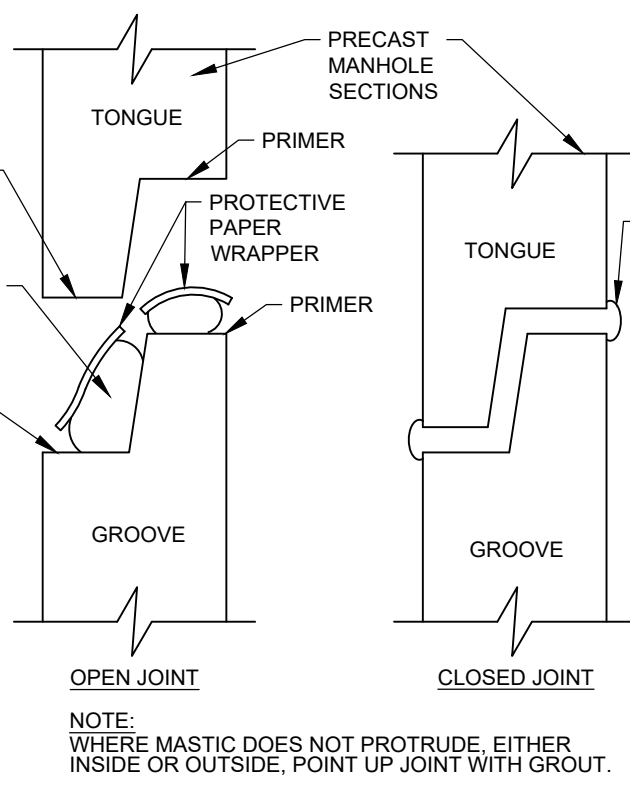
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C7.02

FILE NO. 32897-03

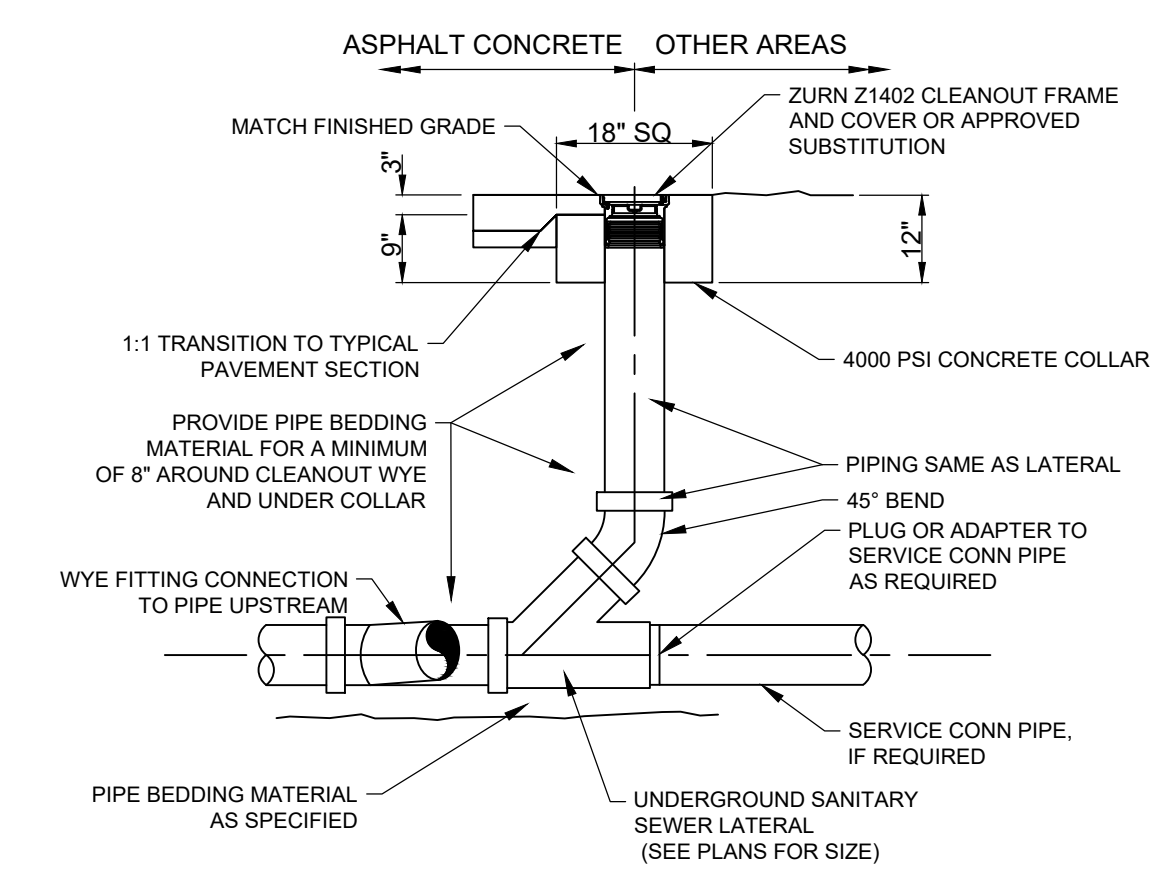


- NOTES:
1. ALL ELEMENTS PRECAST TO MEET SPECIFICATION ASTM C-478 LATEST REVISION
 2. STANDARD FRAME AND COVER SHALL BE INSTALLED ON STANDARD MANHOLE UNLESS NOTED OTHERWISE ON THE CONSTRUCTION DRAWINGS.
 3. FLEXIBLE JOINT SEALANTS SHALL BE PLACED BEFORE INSTALLATION OF PRECAST SECTIONS. SEE DETAIL OF FLEXIBLE JOINT SEALANT.
 4. OPENINGS FOR PIPE ARE CORED TO PROVIDE REQUIRED SIZE AND LOCATION
 5. THE HOLE IS TO BE MANUFACTURED AS TO ALLOW FOR LATERAL AND VERTICAL MOVEMENT, AS WELL AS ANGULAR ADJUSTMENTS THRU 20°.
 6. THE FLEXIBLE BOOT IS MOLDED FROM A NEOPRENE COMPOUND MEETING ASTM C-443.
 7. THE KORBRAND IS AN EXTERNAL EXPANDING BAND WHICH CLAMPS AND SEALS THE BOOT TO THE PORT.
 8. THE S.S. EXTERNAL BAND CONTRACTS AROUND THE BOOT TO CLAMP AND SEAL THE BOOT TO THE PIPE.
 9. GROUT FOR MANHOLES SHALL BE NON-SHRINK EMBECCO OR EQUAL.
 10. ALL MANHOLES SHALL PASS VACUUM TESTING AND PASS REQUIREMENTS OF LOCAL UTILITY AUTHORITY.



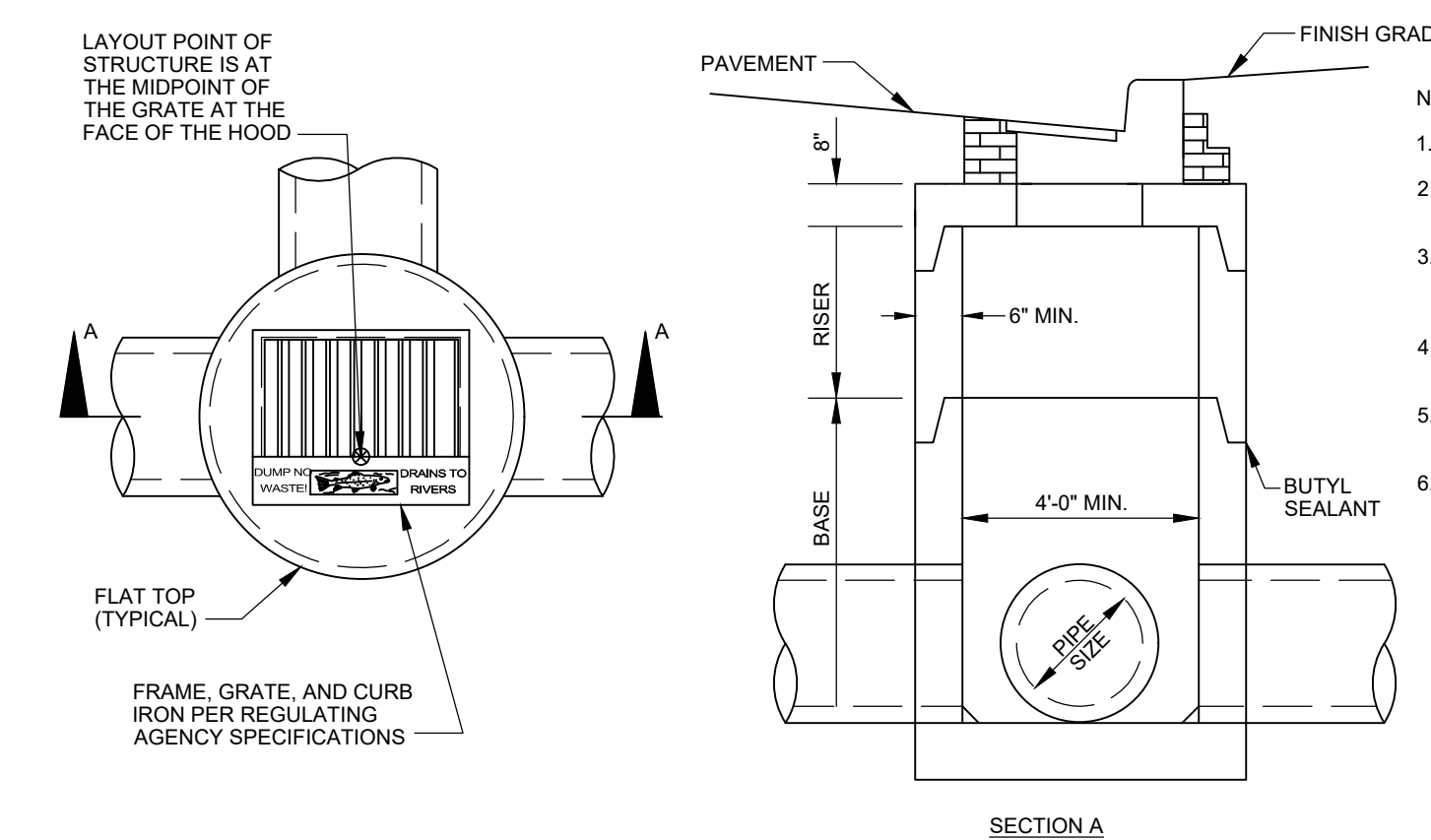
1 STANDARD PRECAST SEWER MANHOLE DETAILS

SCALE: N.T.S.



4 SEWER CLEANOUT

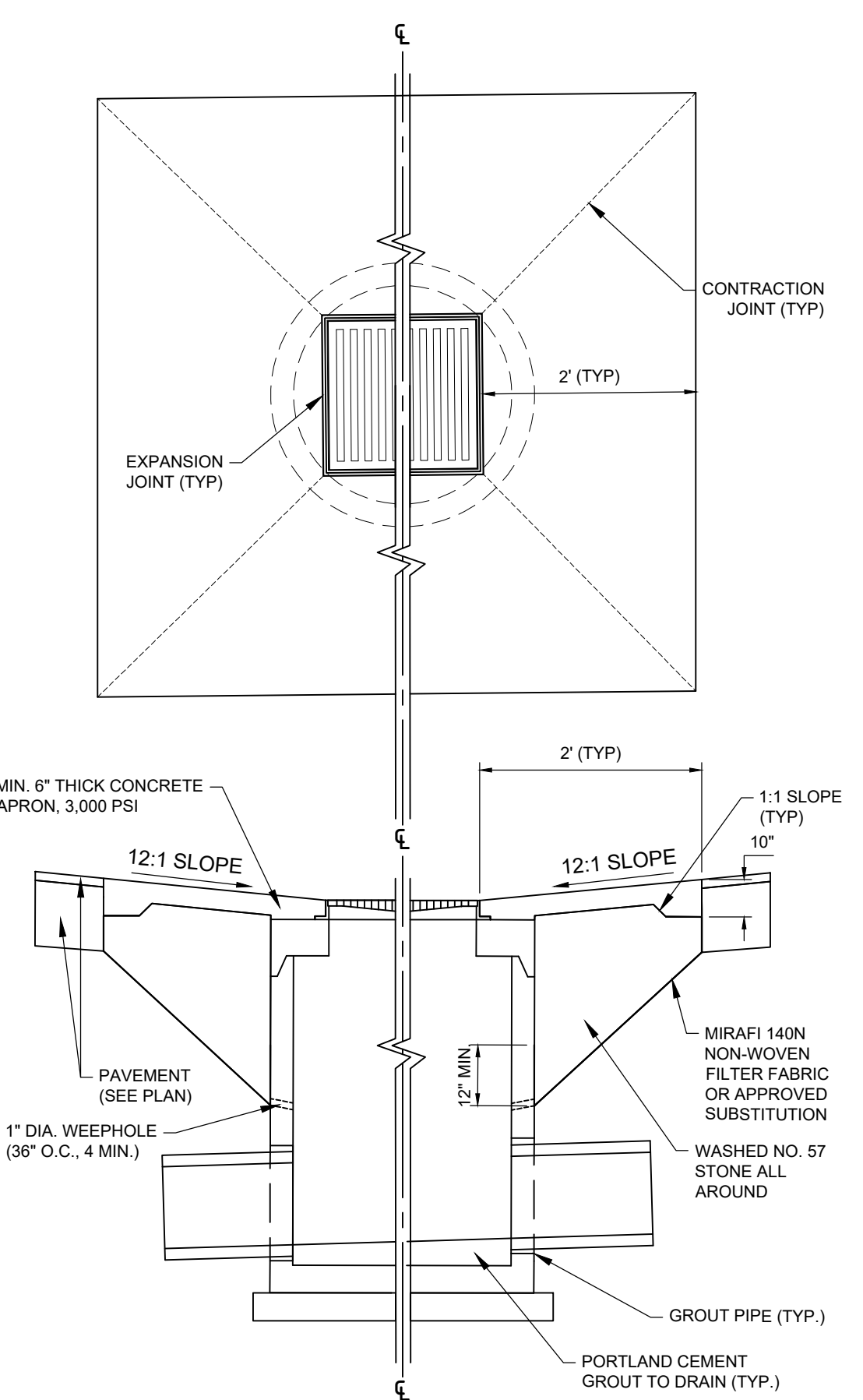
SCALE: N.T.S.



5 PRECAST ROUND CURB INLET

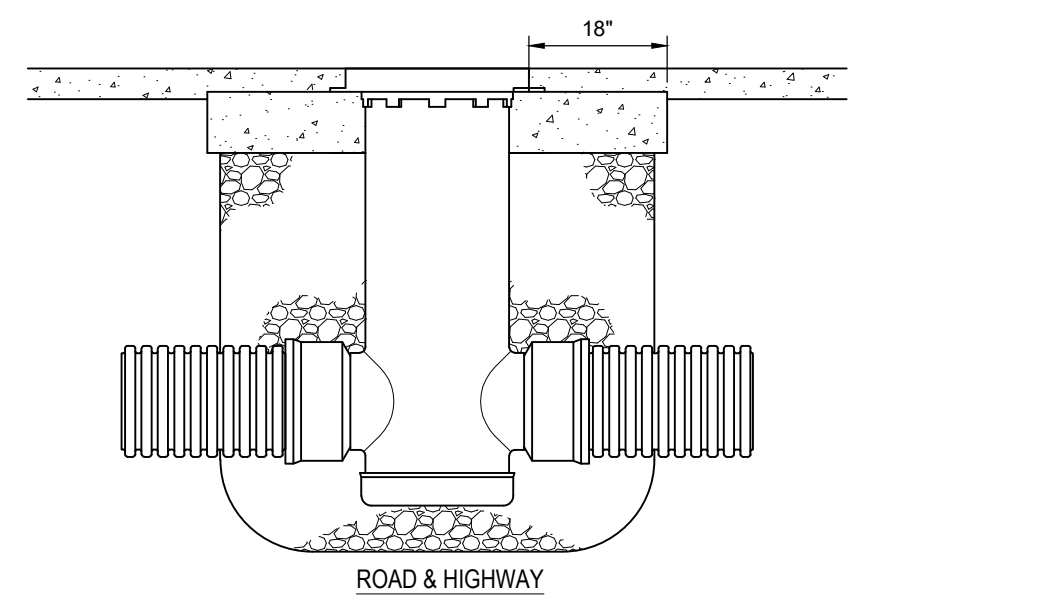
SCALE: N.T.S.

- NOTES:
1. MINIMUM CONCRETE STRENGTH - 4000 PSI.
 2. SEE GRADING AND DRAINAGE PLAN FOR PIPE SIZES, LOCATIONS, AND FLOW LINES.
 3. PRECAST CATCH BASIN STRUCTURES SHALL BE STANDARD SHERMAN DIXIE STRUCTURES OR APPROVED SUBSTITUTION.
 4. STRUCTURE SIZES VARY, SEE STORM SEWER PROFILE FOR STRUCTURE CALL OUT.
 5. PROVIDE LADDER BARS ON STRUCTURES OVER 4'-0" DEEP.
 6. GRATE SHALL HAVE ENVIRONMENTAL MESSAGE PER LOCAL REQUIREMENTS.



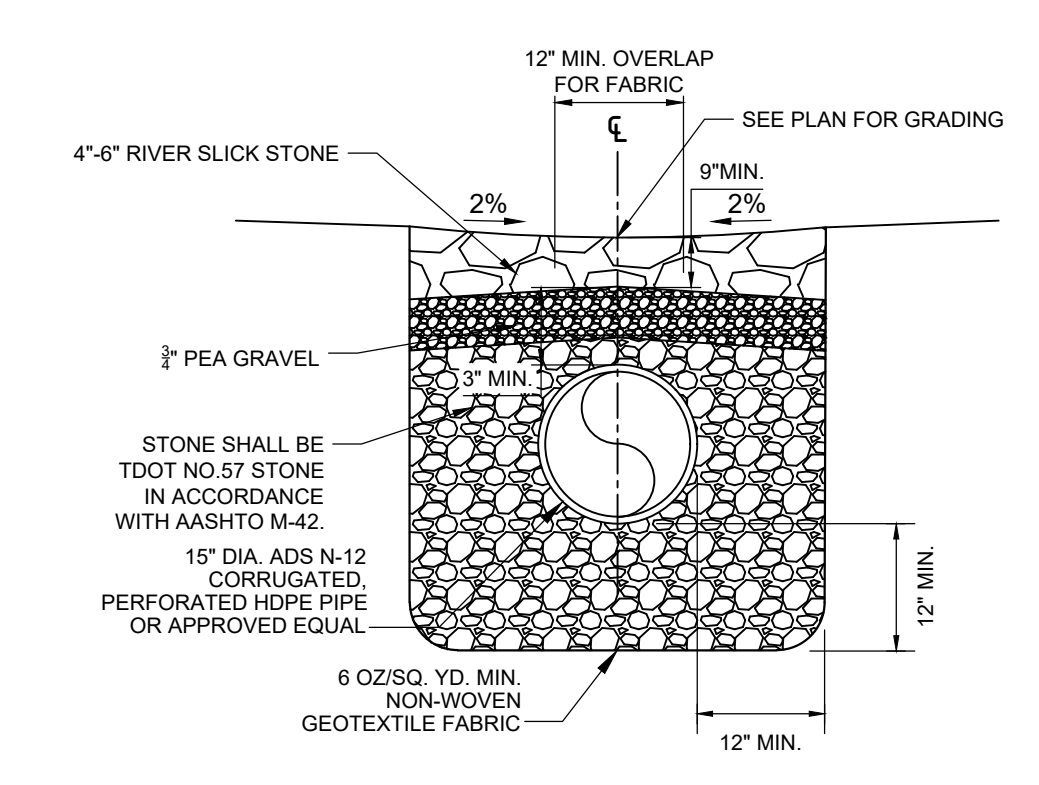
6 CATCH BASIN

SCALE: N.T.S.



7 ADS DRAIN BASIN

SCALE: N.T.S.

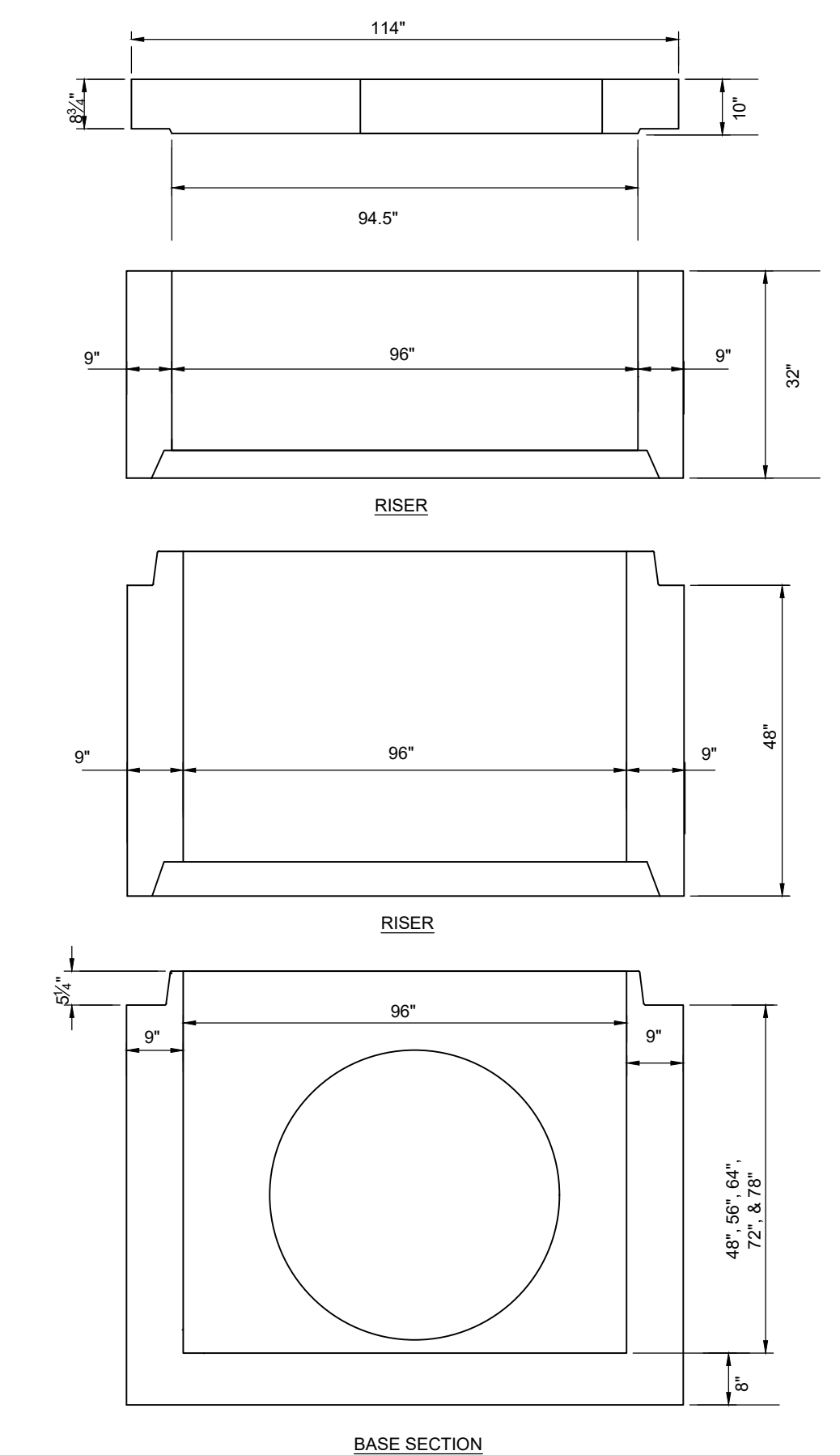


8 TRENCH DRAIN DETAIL

SCALE: N.T.S.

2 PRECAST STORMWATER CONCRETE JUNCTION BOX

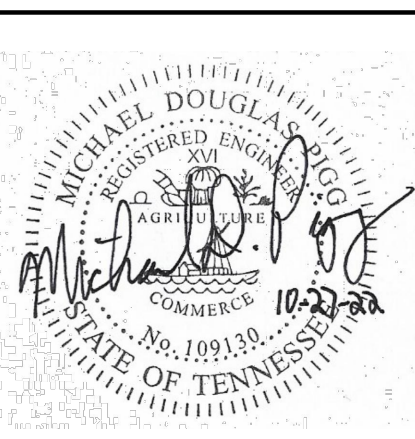
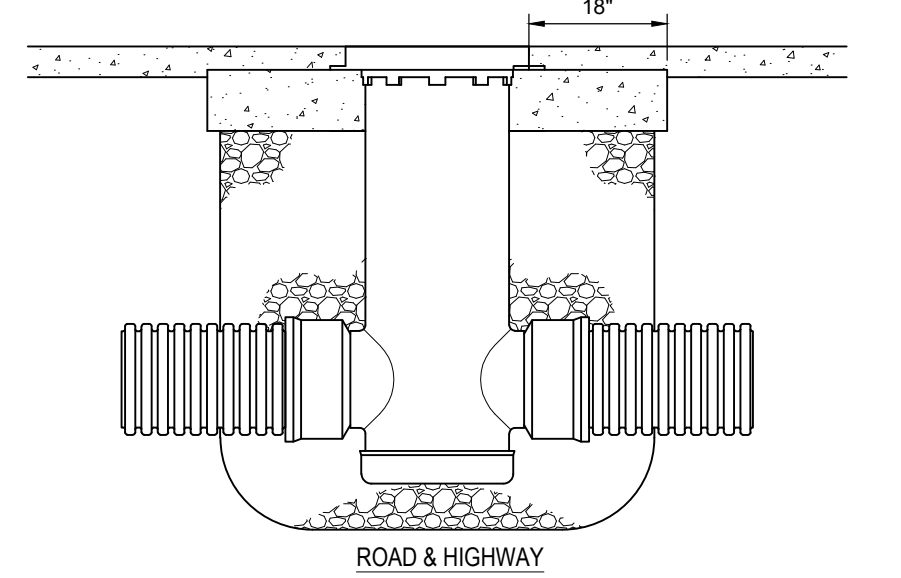
SCALE: N.T.S.



3 TYPICAL STORMWATER JUNCTION BOX CASTING

SCALE: N.T.S.

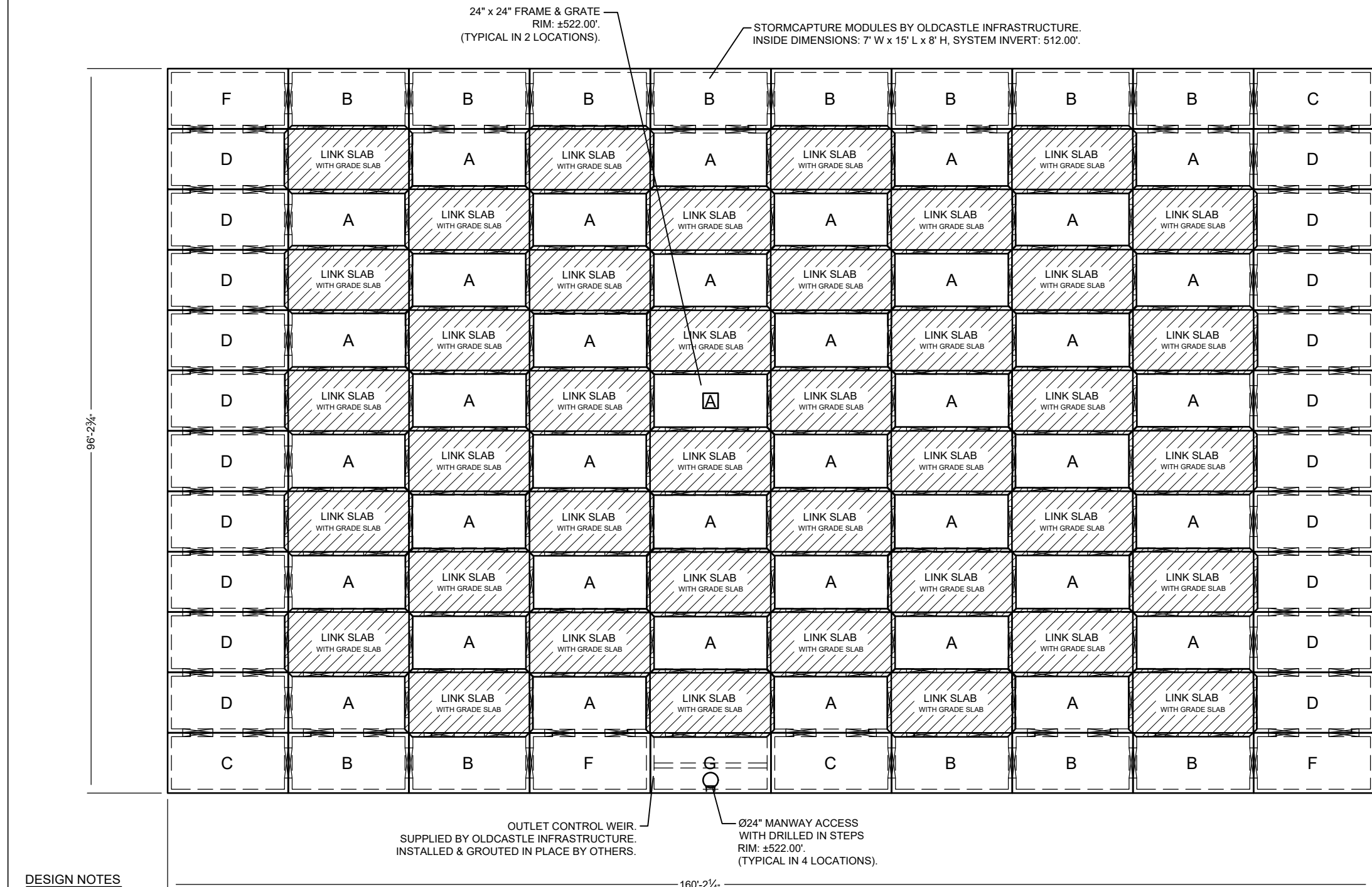
- NOTES:
1. ALL MATERIAL, DESIGN, MANUFACTURE, PHYSICAL TEST REQUIREMENTS, FINISH MARKING, INSPECTION, REJECTION, AND REPAIRS TO MEET SPECIFICATIONS FOR PRECAST-REINFORCED CONCRETE MANHOLE RISERS AND TOPS PER ASTM-C478 LATEST REVISION.
 2. PLASTIC STEPS, IF DESIRED, SHALL BE PLACED STRAIGHT IN LINE ON 12" OR 16" CENTERS FOR STORM MANHOLES.
 3. PRECAST SECTIONS BELOW FLAT TOP LID WILL HAVE SQUARE EDGE.



SITE DETAILS

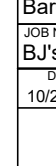
1000 RIVERGATE PARKWAY
BJ's WHOLESALE CLUB
GOODLETTSVILLE, TENNESSEE

REV.	DR.	CHK.	DATE	DESCRIPTION
	AV	MP	10.03.2022	SITE PLAN SUBMITTAL
	AV	MP	10.27.2022	SITE PLAN RESUBMITTAL



- DESIGN NOTES
- LIVE LOADING CRITERIA:
 - AASHTO HS-20-44 DESIGN TRUCK (WITH IMPACT AT 0.50FT MINIMUM COVER)
 - LATERAL LIVE LOAD SURCHARGE: 80 PSF (TO 8.00FT DEPTH)
 - NO LATERAL SURCHARGE(S) FROM ANY ADJACENT BUILDINGS, WALLS, FOUNDATIONS, OR ANY ADDITIONAL SITE ELEMENTS.
 - SOIL LOADING CRITERIA:
 - SOIL COVER DEPTH: 0.50FT (MIN.) - 5.00FT (MAX.)
 - SOIL UNIT WEIGHT: 120 PCF
 - ASSUMED WATER TABLE ELEVATION: BELOW BOTTOM OF PRECAST
 - REQUIRED ALLOWABLE BEARING PRESSURE: 3,000 PSF
 - EQUIVALENT LATERAL FLUID PRESSURE: ACTIVE: 45 PCF (DRAINED)
 - EQUIVALENT LATERAL FLUID PRESSURE: AT-REST: 60 PCF (DRAINED)
 - EQUIVALENT LATERAL FLUID PRESSURE: PASSIVE: 150 PCF (DRAINED)
 - ASSUMED COEFFICIENT OF FRICTION: 0.40
 - SEISMIC LATERAL EARTH PRESSURES: NOT APPLICABLE
 - STORMCAPTURE MODULE TYPE: DETENTION (SOILTIGHT).
 - CONCRETE (NORMALWEIGHT):
 - MIN. 28-DAY COMPRESSIVE STRENGTH: 6,000 PSI
 - CEMENT: ASTM C150
 - STEEL REINFORCEMENT: ASTM A615 / A706 (GRADE 60), ASTM A1064 (GRADE 80)
 - REFERENCE STANDARDS: ASTM C913 & C890, ACI 318-14

PLAN VIEW
SCALE: 1/16" = 1'



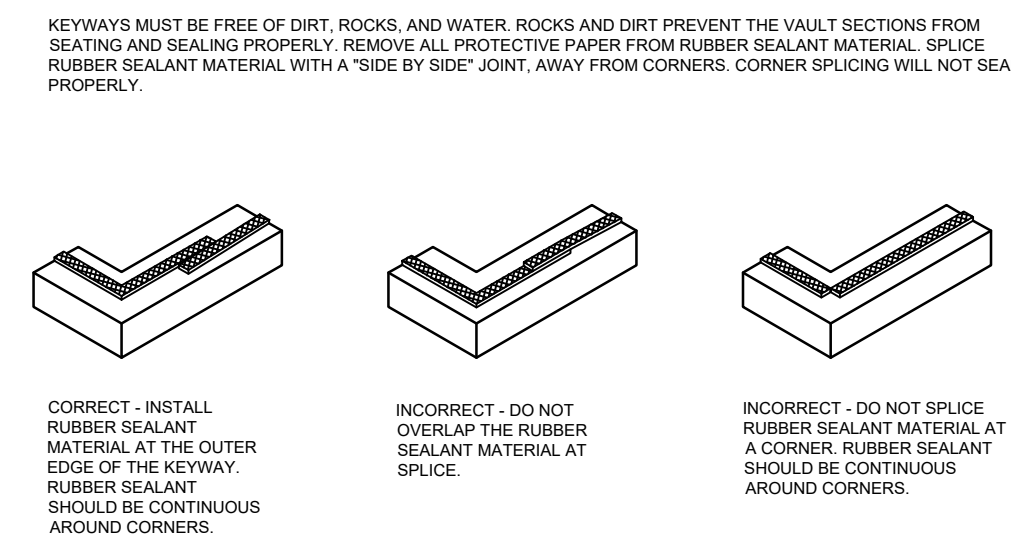
REV	DESCRIPTION	DATE
1	ISSUED FOR PERMIT	10/27/2022
2	REVISION	
3	REVISION	

Oldcastle Infrastructure
22-779925-SC2 4.4

STORMCAPTURE®
DETENTION SYSTEM

Customer: Barge Design Solutions
Job Name: B.J.'s Wholesale - Goodlettsville, TN
Job Number: 779925
Date: 10/20/22
SRS: LDIW LDIH
Drawing Name: 22-779925-SC2 4.4
Sheet: 1 OF 3

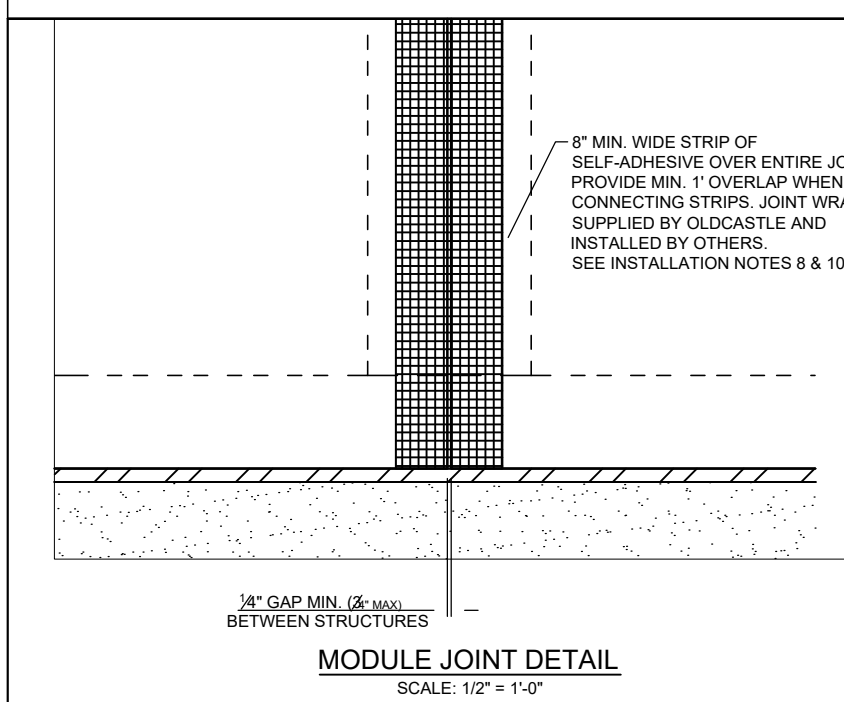
- MODULE NOTES
- | TYPE | QUANTITY | HEIGHT |
|-----------|----------|------------|
| A | 40 | 6" |
| B | 13 | 6" |
| C | 3 | 6" |
| D | 20 | 6" |
| E | 3 | 6" |
| F | 1 | 6" |
| LINK SLAB | 40 | |
| TOTAL | 120 | |
| VOLUME | 112.038 | CUBIC FEET |
- INSTALLATION NOTES
- UNDERGROUND PRECAST CONCRETE SYSTEM INSTALLATION SHALL BE PER ASTM C891 - STANDARD PRACTICE FOR INSTALLATION OF UNDERGROUND PRECAST CONCRETE UTILITY STRUCTURES AND PER OLDCASTLE.
 - MODULE SUBBASE OR SUBGRADE SHALL BE LEVEL/SUBGRADE AND COMPACTED ADEQUATELY FOR REQUIRED BEARING CAPACITY PER DESIGN NOTE 20. CONTRACTOR AND/OR INSTALLING SUB-CONTRACTOR SHALL VERIFY THAT SOIL BEARING CONDITIONS MEET OR EXCEED DESIGN REQUIRED MINIMUMS PRIOR TO PLACEMENT AND INSTALLATION OF MODULES.
 - ANY CONSTRUCTION EQUIPMENT EXCEEDING NOTED DESIGN LOADING IS NOT PERMITTED OVER OR ADJACENT TO ANY MODULE WITHOUT FORMAL REVIEW AND WRITTEN APPROVAL BY OLDCASTLE ENGINEERING. ELSE PRODUCT WARRANTY MAY BE VOIDED. ANY DESIGN CONSTRAINT EXCEEDING THE DESIGN PARAMETERS NOTED ABOVE MAY REQUIRE CUSTOM STRUCTURAL DESIGN, SUBGRADE REVISIONS, AND/OR PRICING ADJUSTMENTS.
 - HEAVY VIBRATORY COMPACTION EQUIPMENT SHALL NOT BE OPERATED WITHIN 10 FEET OF MODULE EXTERIOR.
 - MINIMUM OF 0.50FT OF SOIL COVER REQUIRED FOR CONSTRUCTION EQUIPMENT OPERATION ON TOP OF SYSTEM. IT IS THE RESPONSIBILITY OF THE CONTRACTOR AND INSTALLING SUB-CONTRACTOR TO ENSURE THAT THE MODULES ARE DAMAGED DURING CONSTRUCTION.
 - UNLESS NOTED OTHERWISE, ALL PIPE SUPPLIED AND INSTALLED BY OTHERS.
 - CONTRACTOR MAY MODIFY AT RISK ANY OLDCASTLE PRODUCT(S) IN THE FIELD OR AFTER DELIVERY WITHOUT FORMAL REVIEW AND WRITTEN APPROVAL BY OLDCASTLE ENGINEERING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THAT ANY PRODUCT MODIFICATIONS DO NOT INVALIDATE THE PRODUCT WARRANTY.
 - MODULE PLACEMENT FIELD TOLERANCES SHALL NOT EXCEED 3/4" BETWEEN ADJACENT MODULES. IF MODULE GAP EXCEEDS 3/4", CONTRACTOR SHALL MAKE NECESSARY ADJUSTMENTS AND RESET MODULE(S) TO BRING WITHIN NOTED TOLERANCES.
 - CONTRACTOR IS RESPONSIBLE FOR PRODUCTS ONCE DELIVERED TO THE SITE. OLDCASTLE IS NOT RESPONSIBLE FOR OFFLOADING PRODUCTS, MAINTENANCE, AND INSTALLATION OF PRODUCTS ONCE THEY ARRIVE TO THE SITE.
 - CONTRACTOR SHALL INSTALL SYSTEM PER PROJECT WATERPROOFING AND SOILTIGHTNESS REQUIREMENTS. WATERPROOFING AND SOILTIGHTNESS INSTALLATION IS NOT BY OLDCASTLE AND OLDCASTLE WILL PROVIDE NO GUARANTEE FOR THIS COMPONENT OF SYSTEM INSTALLATION.



BUTYL RUBBER SEALANT (CONSEAL CS-102 OR EQUAL)
PLACEMENT DETAIL
N.T.S.

TRACK WIDTH	12"	18"	24"	30"
MIN TRACK LENGTH	8'-0"	10'-0"	12'-0"	14'-0"
FILL DEPTH	OW (LBS)	OW (LBS)	OW (LBS)	OW (LBS)
0	35,000	45,000	52,500	54,500
1	35,000	45,000	56,000	60,500
2	35,000	45,000	56,000	64,000
3	75,000	78,500	83,500	88,000
4	94,000	100,000	106,000	113,000
5	100,000	116,000	132,000	149,000

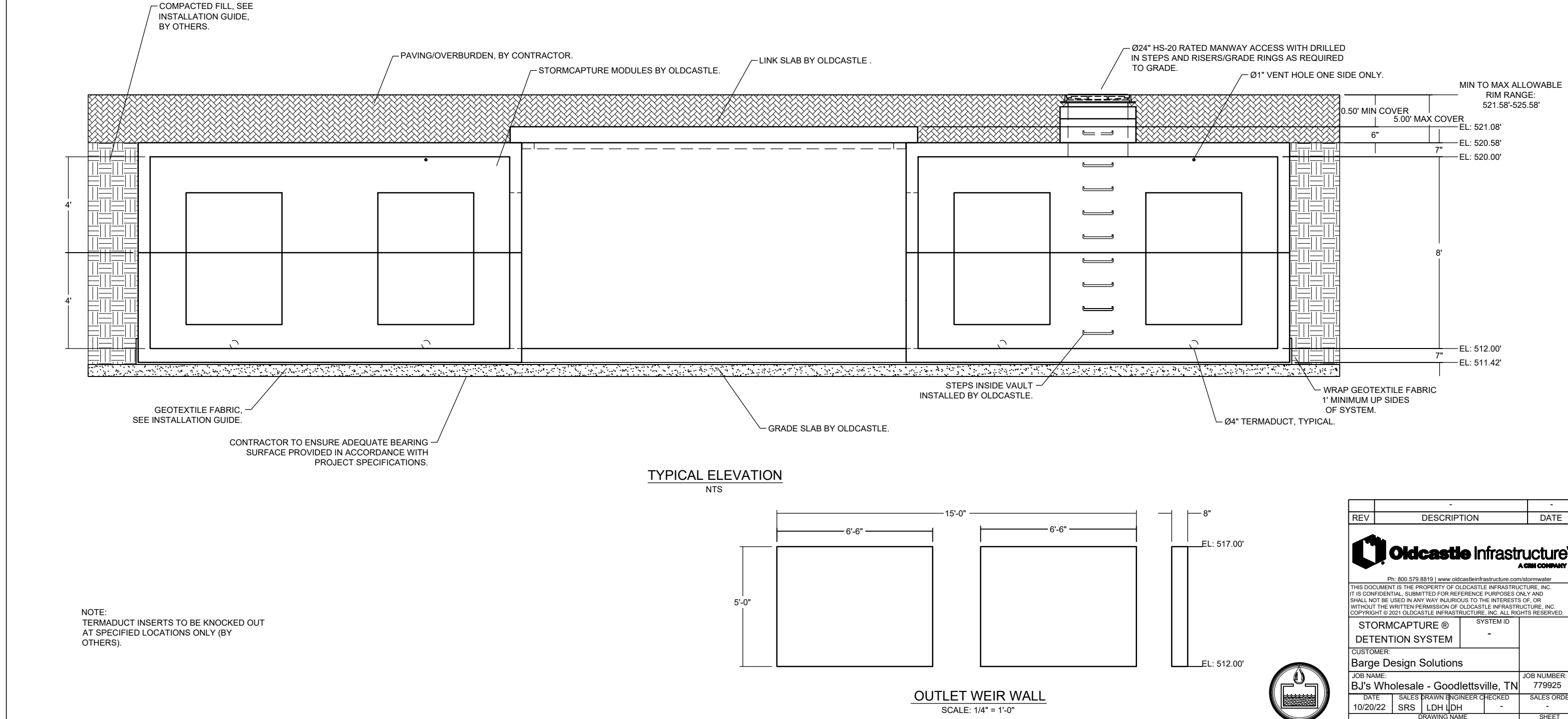
- NOTES:
- IF CONSTRUCTION EQUIPMENT EXCEEDS THE ABOVE OPERATING WEIGHT LIMITS REFER TO INSTALLATION NOTE 3.
 - FOR WHEELED CONSTRUCTION EQUIPMENT LIMITS REFER TO INSTALLATION NOTE 3.
 - MINIMUM AXLE SPACING FOR ALL TRACK WIDTHS IS 6'-0".



- REVIEWING NOTES
- THIS SYSTEM HAS BEEN DESIGNED PER THE DESIGN PARAMETERS SPECIFIED IN THE DESIGN NOTES. REVIEWING ENGINEER SHALL VERIFY THAT THESE PARAMETERS MEET OR EXCEED PROJECT SPECIFIC REQUIREMENTS. IF SITE CONDITIONS DIFFER FROM NOTED DESIGN PARAMETERS, REVIEWING ENGINEER SHALL NOTIFY OLDCASTLE FOR POTENTIAL REDESIGN AND/OR PRICING ADJUSTMENTS.
 - REVIEWING ENGINEER SHALL VERIFY ALL PIPE PENETRATION LOCATIONS, SIZES, AND INVERTS.
 - REVIEWING ENGINEER SHALL VERIFY ALL MANWAY ACCESS LOCATIONS AND RIM ELEVATIONS.
 - THIS SYSTEM IS DESIGNED FOR A GROUNDWATER TABLE ELEVATION PER DESIGN NOTE 2C. REVIEWING ENGINEER SHALL VERIFY THAT THE DESIGN GROUNDWATER ELEVATION MEETS OR EXCEEDS SITE CONDITION REQUIREMENTS. NOTIFY OLDCASTLE IF SITE CONDITIONS VARY FROM WHAT HAS BEEN SPECIFIED FOR POTENTIAL SYSTEM DESIGN CHANGES AND/OR PRICING ADJUSTMENTS.

- STORMCAPTURE MODULES ARE NOT WATERTIGHT. IF A WATERTIGHT SOLUTION IS REQUIRED, CONTACT OLDCASTLE FOR RECOMMENDATIONS. THE WATERTIGHT APPLICATION TO BE PROVIDED AND IMPLEMENTED BY THE CONTRACTOR. THE CONTRACTOR IS RESPONSIBLE TO ENSURE THAT THE SELECTED WATERTIGHT SOLUTION PERFORMS AS SPECIFIED BY THE MANUFACTURER.
- DESIGN OF THE STORMCAPTURE PRECAST MODULE SYSTEM ASSUMES NO ADJACENT BUILDING(S), WALL(S), OR STRUCTURAL FOUNDATION(S) WITHIN A 1' INFLUENCE LINE FROM THE BOTTOM EDGE OF ANY SYSTEM MODULE. ANY SITE ELEMENTS BEYOND THIS ZONE OF INFLUENCE ARE ASSUMED TO HAVE NO IMPACT ON THE SYSTEM AND EXERT ZERO LATERAL SURCHARGE ONTO THE MODULES. THE CONTRACTOR SHALL VERIFY THAT ANY ADJACENT BUILDING(S), WALL(S), OR STRUCTURAL FOUNDATION(S) DO NOT LIE WITHIN THIS INFLUENCE ZONE OR DO NOT SURCHARGE THE PRECAST MODULES.

- WRITTEN APPROVAL OF SUBMITTAL DRAWINGS ALONG WITH SIGNED PURCHASE ORDER REQUIRED FOR BEGINNING OF PRODUCT FABRICATION. ANY SYSTEM MODIFICATION POST-APPROVAL MAY RESULT IN CHANGE ORDER(S) AND/OR POTENTIAL DELIVERY DELAYS.
- ALL SAND FILTER MEDIA, DRAIN ROCK AGGREGATE, PIPE, AND FITTINGS PROVIDED BY CONTRACTOR.



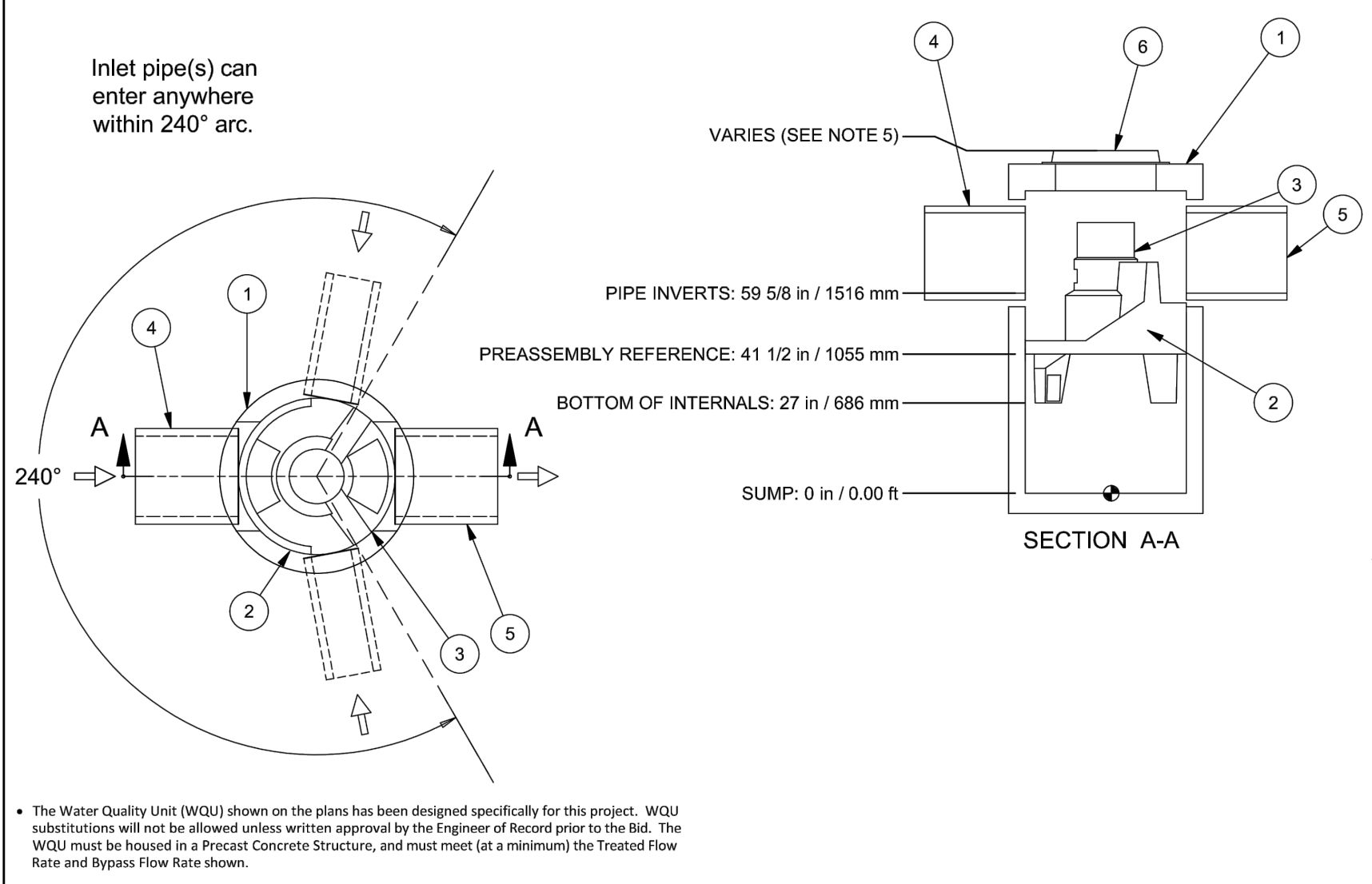
TYPICAL ELEVATION
N.T.S.

REV	DESCRIPTION	DATE
1	ISSUED FOR PERMIT	10/27/2022
2	REVISION	
3	REVISION	

Oldcastle Infrastructure
22-779925-SC2 4.4

STORMCAPTURE®
DETENTION SYSTEM

Customer: Barge Design Solutions
Job Name: B.J.'s Wholesale - Goodlettsville, TN
Job Number: 779925
Date: 10/20/22
SRS: LDIW LDIH
Drawing Name: 22-779925-SC2 4.4
Sheet: 2 OF 3

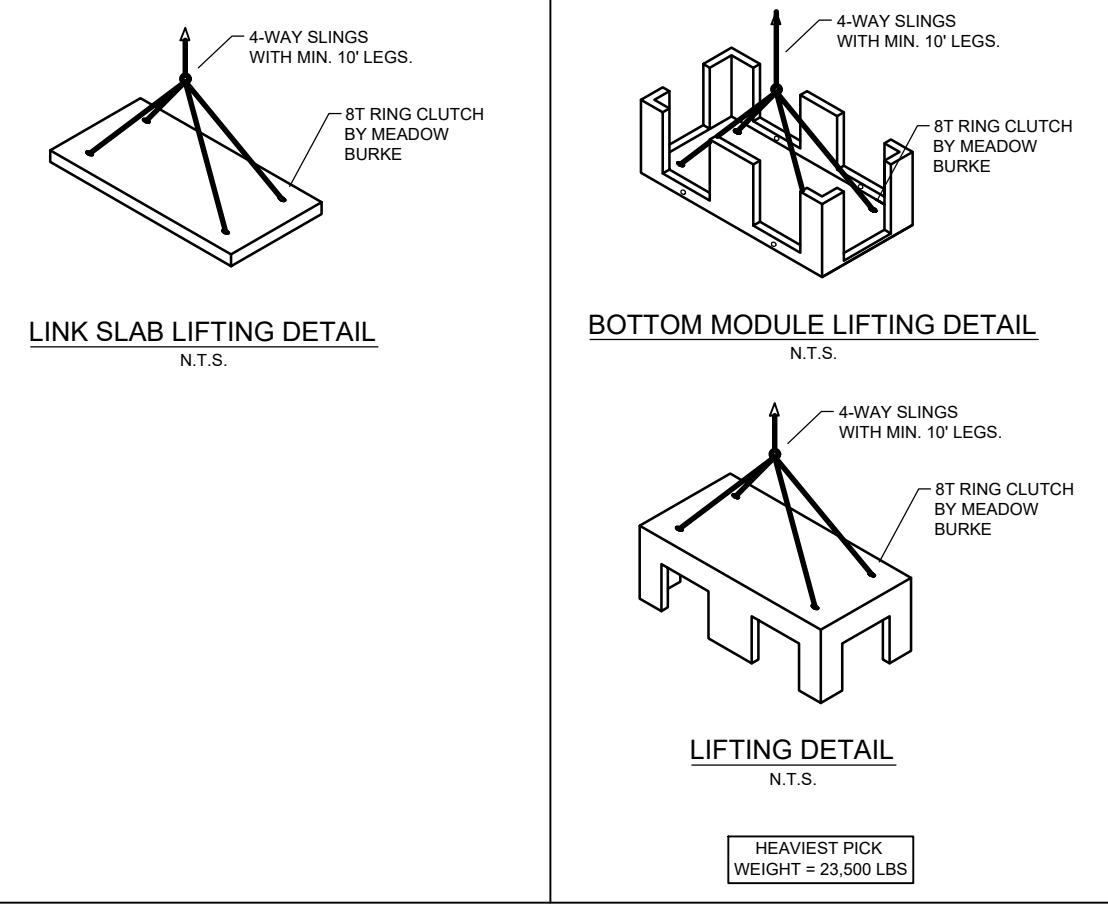


ITEM	SIZE (in)	DESCRIPTION
1	48	I.D. PRECAST MANHOLE
2		LEDGER SUPPORT
3		SEPARATION MODULE
4	24	INLET PIPE (BY OTHERS)
5	24	OUTLET PIPE (BY OTHERS)
6	30	FRAME AND COVER (OR GRATE) (ROUND)

- GENERAL NOTES:
- General Arrangement drawings only. Contact Hydro International for site specific fabrication drawings.
 - The diameter of the inlet & outlet pipes may be no more than 24".
 - Multiple inlet pipes possible (refer to project plans).
 - Interlocked pipe angle can vary to align with drainage network (refer to project plans).
 - Peak flow rate and minimum height limited by available cover and pipe diameter.
 - Larger sediment storage capacity may be provided with a deeper sump depth.
- PRODUCT SPECIFICATIONS:
- The treatment system shall use an induced vortex to separate pollutants from stormwater runoff.
 - The treatment system shall fit within the limits of excavation (area and depth) as shown in the project plans and will not exceed the dimensions for the design flow rates specified herein.
 - The treatment system shall convey the Peak On-line Flow Rates of up to 15 cfs without causing upstream surcharge conditions.
 - The treatment system shall be capable of capturing and retaining fine silt and sand size particles.

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2 WATER QUALITY UNIT DETAIL
SCALE: N.T.S.



LIFTING DETAIL
N.T.S.

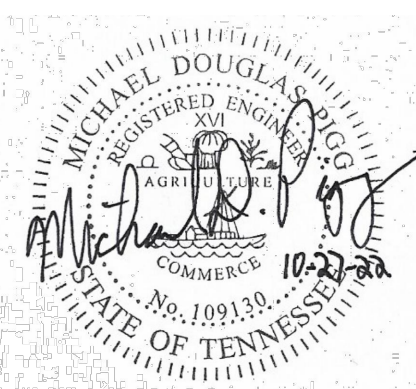
HEAVIEST PICK
WEIGHT = 23,500 LBS

REV	DESCRIPTION	DATE
1	ISSUED FOR PERMIT	10/27/2022
2	REVISION	
3	REVISION	

Oldcastle Infrastructure
22-779925-SC2 4.4

STORMCAPTURE®
DETENTION SYSTEM

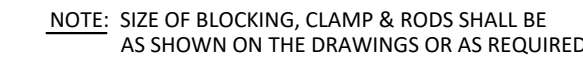
Customer: Barge Design Solutions
Job Name: B.J.'s Wholesale - Goodlettsville, TN
Job Number: 779925
Date: 10/20/22
SRS: LDIW LDIH
Drawing Name: 22-779925-SC2 4.4
Sheet: 3 OF 3



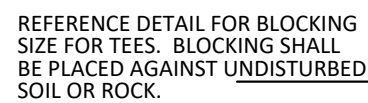
REV.	CHK.	DATE	DESCRIPTION
1	MP	10/03/2022	SITE PLAN SUBMITTAL
2	MP	10/27/2022	SITE PLAN REVISION



SCALE: N.T.S.



SCALE: N.T.S.



SCALE: N.T.S.

TABLE IS BASED ON 225 P.S.I. OR 150 P.S.I. WORKING PRESSURE PLUS 50% WATER HAMMER.

NOTE: CONCRETE USED FOR BLOCKING SHALL BE 3500#/sq. in.

EARTH PRESSURES ARE FIGURED AT 4000# PER SQ. FT.
BEARING AREA OF KICKERS SHALL BE INCREASED WHEN
POURED AGAINST SAND, LOOSE FILL, WET EARTH,
CINDERS, ETC.

SCALE: N.T.S



FLAT-BOTTOM TRENCH. *SELECT MATERIAL **
LIGHTLY CONSOLIDATED TO CENTERLINE OF PIPE.
LOOSE SELECT MATERIAL TO MINIMUM OF 8"
OVER TOP OF PIPE. BELL HOLES MUST BE CUT OUT
IN TRENCH BOTTOM SO AS TO ALLOW THE ENTIRE P
BARREL LENGTH TO REST ON THE TRENCH BOTTOM

*** "SELECT MATERIAL" IS DEFINED AS NATIVE SOIL EXCAVATED FROM TRENCH, FREE OF ROCKS, FOREIGN MATERIALS AND FROZEN EARTH.

NOTE:
TRENCH SIDE SLOPES SHALL BE IN ACCORDANCE
WITH OSHA REQUIREMENTS. BEGIN SIDE SLOPES, IF USED
APPROX. 18" ABOVE TOP OF PILE. (TYPICAL ALL
BEDDING TYPES)

FOR DUCTILE IRON PIPE INSTALLED IN TRAFFIC AREAS
(PAVEMENT, SHOULDERS, DRIVEWAYS, PARKING LOTS, ETC.)
THE SAME BACKFILL REQUIREMENTS APPLY TO TRAFFIC
AREAS PLACED OVER EXISTING WATER MAINS.

SCALE: N.T.S

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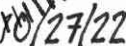
SEE NOTE 12, DWG MSUDET1

SCALE: N.T.S.



SCALE: N.T.S

1000 RIVERGATE PARKWAY
BJ's WHOLESALE CLUB



1000 RIVERGATE PARKWAY
BJ's WHOLESALE CLUB

[illegible]

L1.02

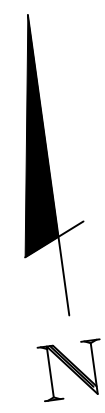
FILE NO. 32897-03

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Page 113



1. ALL PARKING AREAS TO BE INSPECTED BY THE CITY OF GOODLETTSVILLE PLANNING DEPARTMENT PRIOR TO THE INSTALLATION OF ANY PLANT MATERIAL OR SOIL.
2. ALL DISTURBED AREAS TO BE SEEDDED WITH TALL FESCUE BLEND UNLESS OTHERWISE NOTED.
3. SEE SHEET L7.01 FOR LANDSCAPE NOTES / SCHEDULE AND SHEET L7.02 FOR LANDSCAPE DETAILS.
4. SEE SHEET L1.01 FOR LANDSCAPE CALCULATIONS.

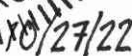
MATCHLINE SHEET L1.03



PERMIT NUMBERS:		
SWG#	XXXXXX	CACF# XXXXXX
SUP#	XXXXXX	CACN# XXXXXX
PARCEL ID:		FEMA PANEL:
-		ZONE "X", PANEL NO. 4037C013
BENCHMARK:		
R.R. SPIKE IN PTLP		
#047444025		
ELEV.530.33		
(NAVD88) (GEOID03)		

30' 15' 0' 30'

SCALE: 1 INCH = 30 FEET

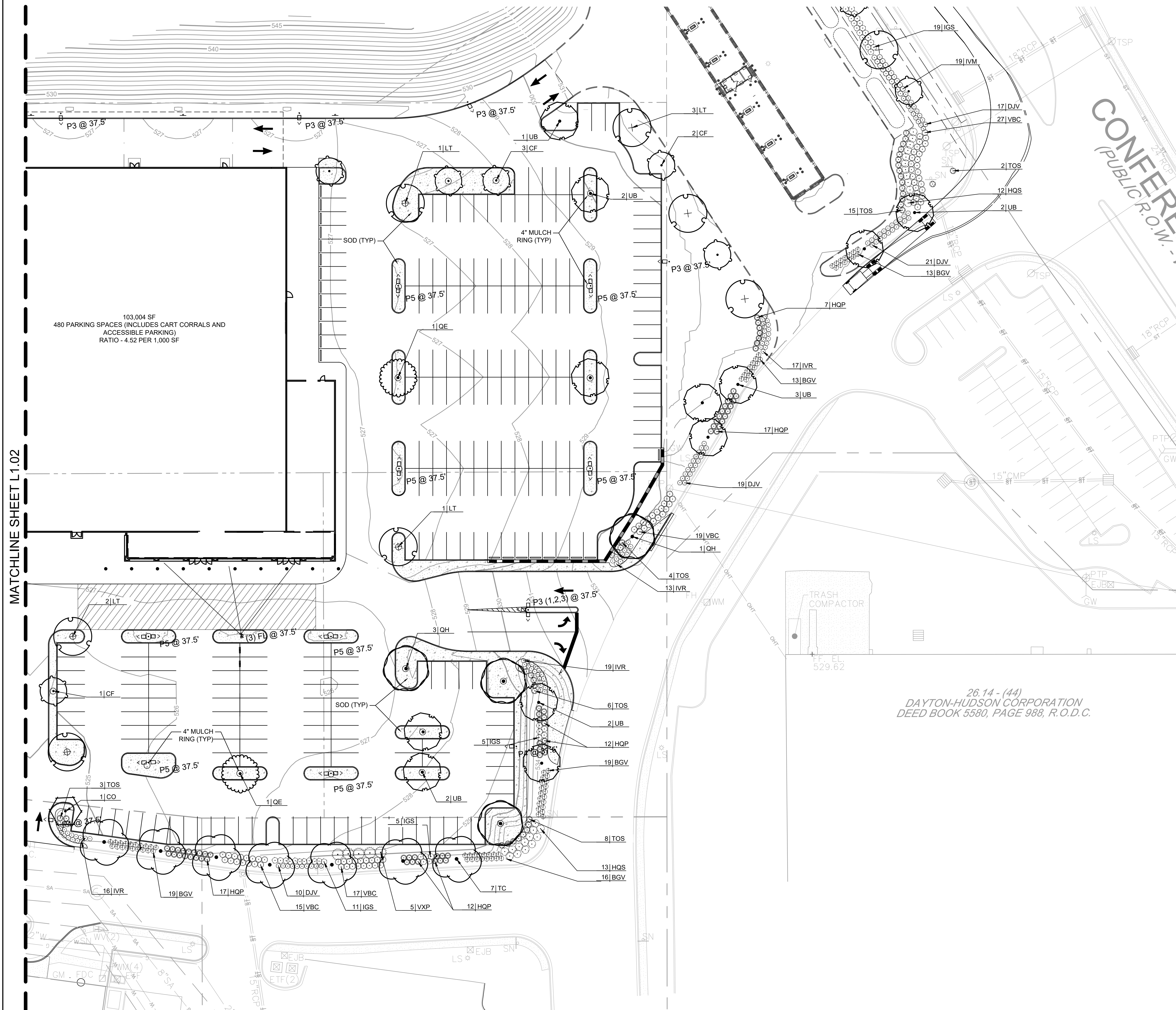


1000 RIVERGATE PARKWAY
BJ's WHOLESALE CLUB

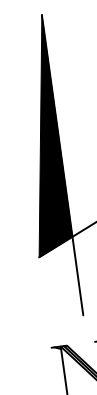
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L1.03

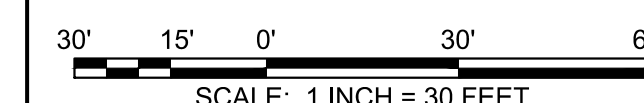
FILE NO. 32897-03



1. ALL PARKING ISLANDS TO BE INSPECTED BY THE CITY OF GOODLETTSVILLE PLANNING DEPARTMENT PRIOR TO THE INSTALLATION OF ANY PLANT MATERIAL OR SOIL.
2. ALL DISTURBED AREAS TO BE SEEDDED WITH TALL FESCUE BLEND UNLESS OTHERWISE NOTED.
3. SEE SHEET L7.01 FOR LANDSCAPE NOTES / SCHEDULE AND SHEET L7.02 FOR LANDSCAPE DETAILS.
4. SEE SHEET L1.01 FOR LANDSCAPE CALCULATIONS.



PERMIT NUMBERS:	
SWGR# XXXXXX	CACF# XXXXXX
SUP# XXXXXX	CACN# XXXXXX
PARCEL ID: -	FEMA PANEL: ZONE "X", PANEL NO. 4037C0
BENCHMARK: R.R. SPIKE IN PTLT #047444025 ELEV. 530.33 (NAVD88) (GEOID03)	



1. PRIOR TO THE START OF WORK, THE LANDSCAPE CONTRACTOR SHALL ASCERTAIN THE LOCATION OF ALL SURFACE AND UNDERGROUND UTILITIES, ETC., AND SHALL TAKE PROPER PRECAUTIONS TO PREVENT DAMAGE TO SUCH IMPROVEMENTS. IN THE EVENT ANY UTILITIES ARE UNCOVERED, THE LANDSCAPE CONTRACTOR SHALL PROMPTLY NOTIFY THE LANDSCAPE ARCHITECT. THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL UTILITIES FROM DAMAGE DURING CONSTRUCTION AND TO REPAIR ANY DAMAGE WHICH SHOULD OCCUR TO THE SATISFACTION OF THE OWNER.
2. EXAMINE SUBGRADE UPON WHICH WORK IS TO BE PERFORMED. VERIFY SUBGRADE ELEVATIONS, OBSERVE CONDITIONS UNDER WHICH WORK IS TO BE PERFORMED, AND PROVIDE PERCOLATION TESTS AND ALL OTHER TESTS NECESSARY TO ASCERTAIN THAT ADEQUATE GROWING CONDITIONS WILL BE PROVIDED FOR PLANTS. IF PERCOLATION TESTS OR SUBSOIL CONDITIONS INDICATE RETENTION OF WATER IN PLANTING AREAS, AS SHOWN BY SEEPAGE OR OTHER EVIDENCE INDICATING PRESENCE OF UNDERGROUND WATER, NOTIFY LANDSCAPE CONTRACTOR IN WRITING OF THIS FACT OR OTHER UNSATISFACTORY CONDITIONS BEFORE BACKFILLING. A CHANGE ORDER MAY BE ISSUED TO DIRECT INSTALLATION OF DRAIN TILE OR OTHER MEASURES BEYOND DRAINAGE REQUIREMENTS INDICATED. DO NOT PROCEED WITH THE WORK UNTIL UNSATISFACTORY CONDITIONS HAVE BEEN CORRECTED. COMMENCEMENT OF PLANTING WORK INDICATES THAT SITE CONDITIONS HAVE BEEN ACCEPTED "AS IS" BY THE CONTRACTOR.
3. THE QUANTITIES INDICATED ON THE MATERIAL SCHEDULE ARE PROVIDED FOR THE BENEFIT OF THE CONTRACTOR, BUT SHOULD NOT BE ASSUMED TO ALWAYS BE CORRECT. IN THE EVENT OF A DISCREPANCY, THE PLANTING PLAN WILL TAKE PRECEDENCE OVER THE MATERIAL SCHEDULE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR HIS OWN QUANTITY CALCULATIONS AND THE LIABILITY PERTAINING TO THOSE QUANTITIES AND ANY OTHER RELATED CONTRACT DOCUMENTS AND/OR PRICE QUOTATIONS.
4. PROTECT EXISTING GRASS AREAS, TREES, AND OTHER VEGETATION TO REMAIN.
5. DAMAGE BY CONTRACTOR TO UNDISTURBED AREAS OUTSIDE THE LIMITS OF CONSTRUCTION SHALL BE REPAIRED BY CONTRACTOR TO THE SATISFACTION OF THE OWNER.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL LANDSCAPE QUANTITY CALCULATIONS AND THE LIABILITY WHICH PERTAINS TO THOSE QUANTITIES AND ANY RELATED CONTRACT DOCUMENTS AND/OR PRICE QUOTATIONS. LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR PROVIDING PLANT QUANTITIES REQUIRED TO COVER SPECIFIED AREAS AT THE DESIGNATED SPACING.
7. CONTRACTOR IS RESPONSIBLE FOR CONDUCTING SITE INSPECTION PRIOR TO BIDDING WORK, TO DETERMINE SITE CONDITIONS AND AREAS TO BE PLANTED. SUBMISSION OF BID INDICATES CONTRACTOR HAS VERIFIED SITE CONDITIONS AND PLANT MATERIAL QUANTITIES.
8. PRIOR TO PLANTING, THE CONTRACTOR IS TO OBTAIN SOIL TESTS FOR ALL PLANTING AREAS TO DETERMINE IF THE PROPER SOIL PH IS PRESENT. RESULTS FROM THESE TESTS ARE TO BE SENT TO THE LANDSCAPE ARCHITECT. IF THE TEST INDICATES IMPROPER PH, THEN THE LANDSCAPE CONTRACTOR IS TO ADD LIME OR SULFUR TO PROVIDE THE PROPER SOIL PH.
9. SUBSTANTIAL COMPLETION: WILL BE PROVIDED AFTER THE CONTRACTOR HAS SATISFACTORILY COMPLETED WORK REQUIREMENTS AS SPECIFIED. THE LA WILL CONDUCT A SUBSTANTIAL COMPLETION INSPECTION AND PROVIDE A PUNCH LIST OF OBSERVED DEFICIENCIES.
10. FINAL ACCEPTANCE: THE LANDSCAPE ARCHITECT WILL PROVIDE THE FINAL INSPECTION AFTER THE CONTRACTOR HAS SATISFACTORILY CORRECTED THE DEFICIENCIES ON THE PUNCH LIST. IF THE FINAL INSPECTION FINDS WORK INCOMPLETE, THE CONTRACTOR SHALL REMEDY THE DEFICIENCIES.
11. AFTER FINAL ACCEPTANCE AND PRIOR TO END OF WARRANTY PERIOD, CONTRACTOR SHALL REPLACE ALL PLANT MATERIAL THAT HAS DIED OR HAS DEFECTS, INCLUDING UNSATISFACTORY GROWTH, IN THE OPINION OF THE LANDSCAPE ARCHITECT.
12. DURING LANDSCAPE INSTALLATION KEEP PAVEMENTS CLEAN AND WORK AREA IN ORDERLY CONDITION.
13. CONTRACTOR TO REPAIR ANY PAVEMENTS, CURBS, DRAINAGE AND OTHER IMPROVEMENTS DAMAGED AS A RESULT OF LANDSCAPE INSTALLATION ACTIVITIES.
14. NO PARKING, STORAGE, STOCKPILING, CONCRETE WASHOUT, OR DISTURBANCE TO BE DONE WITHIN TREE SAVE AREAS.
15. THE CONTRACTOR SHALL NOT CHANGE OR SUBSTITUTE PLANT VARIETIES OR SPECIES WITHOUT THE WRITTEN PERMISSION OF THE LANDSCAPE ARCHITECT.
16. THE CONTRACTOR IS RESPONSIBLE FOR THE LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION, AND THE REPAIR OF ANY DAMAGE INCURRED DURING THE EXECUTION OF THE WORK.
17. THE CONTRACTOR IS RESPONSIBLE FOR COMPLYING WITH ALL LOCAL, STATE, AND FEDERAL CONSTRUCTION CODES AND SECURING ALL NECESSARY PERMITS.
18. THE CONTRACTOR SHALL MAKE PERIODIC INSPECTIONS OF THE PROJECT DURING THE GUARANTEE PERIOD TO SATISFY HIMSELF THAT ESTABLISHMENT RATE OF GROWTH IS ADEQUATE, AND METHODS OF GROWTH DEFECTS DEEMED NOT NORMAL OR DETRIMENTAL TO GOOD PLANT GROWTH SHALL BE REPORTED TO THE LANDSCAPE ARCHITECT IN WRITING. FAILURE TO INSPECT AND REPORT WILL BE INTERPRETED AS APPROVAL, AND THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY AND ALL REPLACEMENTS.

1. ONLY "HEMP" BURLAP AND TWINE SHALL BE USED. NO TREATED OR PRESERVED BURLAP OR TWINE IS ALLOWED. ALL HEMP TWINE ATTACHED TO THE TREE TRUNK IS TO BE REMOVED AFTER PLANTING. AT A MINIMUM THE TOP ONE-THIRD OF THE ROOT BALL IS TO HAVE ALL BURLAP AND TWINE REMOVED.
2. DIMENSIONS FOR HEIGHTS, SPREAD, AND TRUNK SPECIFIED ON THE MATERIAL SCHEDULE IS A GENERAL GUIDE FOR THE MINIMUM REQUIRED SIZE OF EACH PLANT. AT A MINIMUM, ALL PLANT MATERIALS SHALL COMPLY WITH THE LATEST EDITION OF PUBLICATION ANSI Z60.1, AND AMERICAN STANDARDS FOR NURSERY STOCK BY THE AMERICAN ASSOCIATION OF NURSEYMEN.
3. THE LOCATION OF ALL TREES, SHRUBS, AND GROUND COVER AREAS SHOWN ON THE PLAN SHALL BE STAKED/FLAGGED BY THE CONTRACTOR AND APPROVED BY THE LANDSCAPE ARCHITECT BEFORE THE DIGGING OF PITS. PLANTING SHALL BE LOCATED WHERE SHOWN ON THE DRAWINGS OR WHERE FIELD LOCATED BY LANDSCAPE ARCHITECT.
4. PROVIDE ONLY PLANTS THAT ARE FREE FROM DISEASES AND PESTS, AND THAT COMPLY WITH THE LATEST EDITION OF PUBLICATION ANSI Z60.1, AMERICAN STANDARDS FOR NURSERY STOCK, BY THE AMERICAN ASSOCIATION OF NURSEYMEN.
5. DO NOT MAKE SUBSTITUTIONS REGARDING PLANT SIZES OR SPECIES WITHOUT WRITTEN PERMISSION FROM THE LANDSCAPE ARCHITECT.
6. REMOVE ALL STRINGS AND OTHER TIES FROM TREES.
7. PLANTS DESIGNATED "B&B" IN THE PLANT LIST SHALL BE BALED AND BURLAPPED. THEY SHALL BE DUG WITH FIRM, NATURAL BALLS OF EARTH OF SUFFICIENT DIAMETER AND THICKNESS TO ENCOMPASS THE FIBROUS AND FEEDING ROOT SYSTEM NECESSARY FOR FULL RECOVERY OF THE PLANT. BALLS SHALL BE FIRMLY WRAPPED WITH BURLAP OR SIMILAR MATERIAL AND BOUND WITH TWINE OR CORD.
8. MINIMIZE DAMAGE TO THE ROOT BALL WHEN INSTALLING ALL PLANT MATERIAL. IF ROOTS ARE GIRDLING OR CIRCLING THEY MUST BE CAREFULLY LOOSENED OR CUT.
9. THE BALLS OF "B&B" PLANTS WHICH CANNOT BE PLANTED IMMEDIATELY ON DELIVERY SHALL BE COVERED WITH MOIST SOIL OR MULCH, OR OTHER PROTECTION FROM DRYING WINDS AND SUN. ALL PLANTS INSTALLED OR STORED SHALL BE WATERED BY CONTRACTOR AS NECESSARY UNTIL FINAL ACCEPTANCE.
10. ALL PLANTS SHALL BE HANDLED SO THAT ROOTS ARE ADEQUATELY PROTECTED AT ALL TIMES. DURING SHIPMENT, THE ENTIRE PLANT SHALL BE PROTECTED BY TARPULINS OR OTHER SUITABLE COVERING. PLANT MATERIAL SUFFERING FROM WIND BURN OR OTHER DAMAGE IS NOT ACCEPTABLE.
11. NO PLANT SHALL BE BOUND WITH ROPE OR WIRE IN A MANNER THAT DAMAGES THE BARK, BREAKS BRANCHES, OR DESTROYS ITS NATURAL SHAPE.

5. ANY SERIES OF TREES OR SHRUBS TO BE PLACED IN A PARTICULAR ARRANGEMENT WILL BE FIELD CHECKED FOR ACCURACY BY THE LANDSCAPE ARCHITECT. ANY PLANTS INCORRECTLY ARRANGED SHALL BE RELOCATED WITH LANDSCAPE ARCHITECT APPROVAL.
16. ALL PLANT BEDS SHALL BE SPRAYED WITH PRE-EMERGENT HERBICIDE (SNAPSHOT 2.5 TP OR EQUIVALENT), APPLIED (ACCORDING TO MANUFACTURER'S INSTRUCTIONS) PRIOR TO PLANTING, FOR NOXIOUS WEED CONTROL. AVOID OVER APPLICATION INTO SEEDED GRASS AREAS.
17. ALL PLANTING BEDS AND TREE PLANTINGS SHALL RECEIVE A PINE STRAW MULCH LAYER WHICH SHOULD BE OF SUFFICIENT CHARACTER AS NOT TO BE EASILY DISPLACED BY WATER RUNOFF OR WIND. ALL TREE PLANTINGS TO HAVE MULCH RINGS AT 36" IN DIA.
18. THE VENDOR SHALL NOTIFY THE LANDSCAPE ARCHITECT BEFORE SHIPMENTS ARE MADE SO THAT ARRANGEMENTS CAN BE MADE FOR INSPECTION AND TESTING OF STOCK.
19. LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR GUYING, FERTILIZING, APPLICATION OF INSECTICIDES/HERBICIDES, AND FOR THE WATERING AND MAINTENANCE TO INCLUDE BUT NOT LIMITED TO WEEDING, MULCHING, AND STRAIGHTENING OF ALL INSTALLED PLANT MATERIAL, INCLUDING SOD AND SEED AREAS, UNTIL FINAL ACCEPTANCE OF LANDSCAPE ARCHITECT.
20. ALL PLANT MATERIAL IS TO BE GUARANTEED FOR ONE (1) YEAR. GUARANTEE PERIOD STARTS FROM DATE OF FINAL ACCEPTANCE OF LANDSCAPE ARCHITECT AND CITY OF FRANKLIN STAFF.
21. GROUND COVER SPACING PATTERN SHALL BE AS INDICATED ON TYPICAL SPACING PATTERN USING SPACING DIMENSION AS SHOWN ON PLANS AND SCHEDULE.
22. THE LANDSCAPE ARCHITECT MAY INSPECT TREES AND SHRUBS EITHER AT PLACE OF GROWTH OR AT SITE BEFORE PLANTING, FOR COMPLIANCE WITH REQUIREMENTS FOR GENUS, SPECIES, SIZE, AND QUALITY. LANDSCAPE ARCHITECT RETAINS THE RIGHT TO FURTHER INSPECT TREES AND SHRUBS FOR SIZE AND CONDITION OF ROOT BALL, INSECTS, INJURY, AND LATENT DEFECTS TO REJECT UNSATISFACTORY OR DEFECTIVE AT ANY TIME DURING PROGRESS OF WORK. REMOVE REJECTED MATERIAL IMMEDIATELY FROM THE PROJECT SITE.
23. REPLACEMENT PLANT MATERIAL SHALL CLOSELY MATCH ADJACENT SPECIMENS OF THE SAME SPECIES AND SHALL CONFORM TO THE STANDARDS FOR PLANT MATERIALS. SPECIFIED ALL REPLACED MATERIAL SHALL IMMEDIATELY BE REMOVED FROM THE SITE AND ALL NECESSARY REPAIRS TO GRADES, LAWN AREAS, PAVING, AND OTHER AREAS DAMAGED DURING REPLACEMENT SHALL BE MADE AT NO COST TO THE OWNER.
24. NO PLANT MATERIAL REQUIRED TO BE BALLED AND BURLAPPED SHALL BE ACCEPTED IF THE BALL IS CRACKED OR BROKEN EITHER BEFORE OR DURING THE PROCESS OF PLANTING OR WHEN REQUIRED BURLAP, STAVES, ROPES OR PLATFORM HAVE BEEN REMOVED.
25. PLANT BED PREPARATION: THOROUGHLY DISC, SCARIFY, & LOOSEN SUBGRADE OF PLANTING BEDS TO A MINIMUM DEPTH OF 4 INCHES. REMOVE STONES MEASURING OVER 1 INCH IN ANY DIMENSION. REMOVE ROCKS, STICKS, ROOTS, RUBBISH, AND OTHER EXTRANEOUS MATTER THAT WILL INTERFERE WITH VEGETATION ESTABLISHMENT OR MAINTENANCE OPERATIONS. ADD SPECIFIED SOIL AMENDMENTS AND MIX THOROUGHLY INTO UPPER 4 INCHES OF TOPSOIL.
26. REFER TO THE GRADING PLAN FOR ROUGH GRADES OF PLANTING BEDS. FINAL GRADES ARE SUBJECT TO APPROVAL BY LANDSCAPE ARCHITECT.
27. PLANT MATERIAL TO BE PLACED AS SHOWN ON THE PLANTING PLANS. ALL PLANT MATERIAL SHALL BE SUBJECT TO APPROVAL BY LANDSCAPE ARCHITECT PRIOR TO BACKFILLING AND MULCHING.
28. DO NOT SCALE FROM DRAWING.
29. NEW SHRUB PLANTING IS TO BE A MINIMUM OF 24" AWAY FROM EXISTING TREES.
30. PLANTING PLAN IS FOR THE LOCATION AND IDENTIFICATION OF VEGETATION ONLY. NO OTHER WORK IS TO BE PERFORMED BASED ON THIS PLAN.
31. CONTRACTOR SHALL ASSURE POSITIVE DRAINAGE OF ALL PLANTING PITS AND PLANT BEDS PRIOR TO INSTALLATION.
32. THE PLANTING SOIL MIX SHALL CONSIST OF THE FOLLOWING:

33. IF TOPSOIL FOR LANDSCAPE WORK IS NOT AVAILABLE ON-SITE THEN TOPSOIL MUST BE FURNISHED AS SPECIFIED.

34. PROVIDE NEW TOPSOIL THAT IS FERTILE, FRIABLE, NATURAL LOAM, SURFACE SOIL, REASONABLY FREE OF SUBSOIL, CLAY LUMPS, BRUSH, WEEDS AND OTHER LITTER, AND FREE OF ROOTS, STUMPS, STONES, LARGER THAN 2 INCHES IN ANY DIMENSION, AND OTHER EXTRANEOUS OR TOXIC MATTER HARMFUL TO PLANT GROWTH.

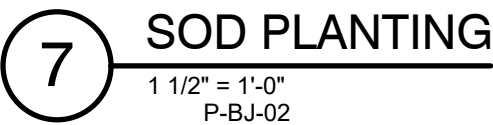
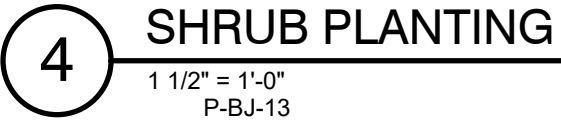
35. OBTAIN TOPSOIL FROM LOCAL SOURCES OR FROM AREAS HAVING SIMILAR SOIL CHARACTERISTICS TO THAT FOUND AT PROJECT SITE. OBTAIN TOPSOIL ONLY FROM NATURALLY WELL DRAINED SITES WHERE TOPSOIL OCCURS IN A DEPTH OF NOT LESS THAN 4 INCHES. DO NOT OBTAIN FROM BOGS OR MARSHES.

12. CONTRACTOR IS RESPONSIBLE FOR WATERING AND MAINTENANCE OF SODDED AREAS UNTIL AREAS EXHIBIT HEALTHY AND VIGOROUS GROWTH AS DETERMINED BY LANDSCAPE ARCHITECT.

4. OF TOPSOIL SHALL BE PROVIDED ON ALL AREAS TO BE SEEDING UNLESS NOTED OTHERWISE. INSTALL AND STABILIZE TOPSOIL PRIOR TO SEEDING.
2. FINE GRADE LAWN AREAS TO SMOOTH, EVEN SURFACE WITH LOOSE, UNIFORMLY FINE TEXTURE, ROLL, RAKE, AND DRAG LAWN AREAS, REMOVE RIDGES AND FILL DEPRESSIONS, AS REQUIRED TO MEET FINISH GRADES.
3. SEEDING IS TO BE DONE AS AREAS ARE READY. IF THE CONSTRUCTION SCHEDULE ALLOWS, SEEDING APPLICATION SHOULD BE DONE ACCORDING TO THE OPTIMUM SEEDING DATES DEPICTED IN THE SEEDING SCHEDULE. A TEMPORARY SEED AND APPLICATION IS TO BE ADDED TO THE SEED MIX DURING THE DATES LISTED IN THE SEED SCHEDULE. TIMING OF SEEDING IS TO BE AS NOTED ON DRAWINGS OR SPECIFICATIONS.
4. THE VENDOR SHALL NOTIFY THE LANDSCAPE ARCHITECT BEFORE SHIPMENTS ARE MADE SO THAT ARRANGEMENTS CAN BE MADE FOR INSPECTION AND TESTING OF STOCK.
5. AT THE DISCRETION OF THE LANDSCAPE ARCHITECT, SAMPLES OF THE SEED MAY BE TAKEN FOR CHECK AGAINST THE CERTIFIED LABORATORY REPORT. SAMPLING AND TESTING WILL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE TENNESSEE DEPARTMENT OF AGRICULTURE.
6. SEED BED PREPARATION: THOROUGHLY DISC, SCARIFY, & LOOSEN SUBGRADE FOR LAWN AREAS TO A MINIMUM DEPTH OF 4 INCHES. REMOVE STONES MEASURING OVER 1 INCH IN ANY DIMENSION. REMOVE ROCKS, STICKS, ROOTS, RUBBISH, AND OTHER EXTRANEOUS MATTER THAT WILL INTERFERE WITH VEGETATION ESTABLISHMENT OR MAINTENANCE OPERATIONS. ADD SPECIFIED SOIL AMENDMENTS AND MIX THOROUGHLY INTO UPPER 4 INCHES OF TOPSOIL.
7. GRASS SEED: PROVIDE FRESH, CLEAN, NEW-CROP SEED COMPLYING WITH TOLERANCE FOR PURITY AND GERMINATION ESTABLISHED BY OFFICIAL SEED ANALYSIS OF NORTH AMERICA. PROVIDE SEED MIXTURE COMPOSED OF GRASS SPECIES, PROPORTIONS, AND MINIMUM PERCENTAGES OF PURITY, GERMINATION AND MAXIMUM PERCENTAGE OF WEED SEED.
8. SEED ALL DISTURBED AREAS (THAT ARE NOT TO BE PAVED, PLANTED, OR SODDED). CONTRACTOR TO SUBMIT SEED VARIETY TO LANDSCAPE ARCHITECT FOR APPROVAL.
9. PROTECT ALL SLOPES 3:1 OR STEEPER AGAINST EROSION WITH EROSION CONTROL BLANKETS/MATERIALS OR ACCEPTED SUBSTITUTION. INSTALL BLANKETS/MATERIALS ACCORDING TO MANUFACTURER'S SPECIFICATIONS
10. UNLESS OTHERWISE APPROVED IN WRITING BY THE LANDSCAPE ARCHITECT, SEEDING OPERATIONS SHALL BE LIMITED TO THE FOLLOWING PLANTING PERIODS.
SPRING - APRIL 1 THROUGH JUNE 1
11. FERTILIZER: CONTRACTOR SHALL PERFORM A SOIL TEST PRIOR TO SEEDING AND APPLICATION OF ANY SOIL AMENDMENTS, AND SUBMIT RESULTS OF SOIL TESTS TO LANDSCAPE ARCHITECT FOR APPROVAL. APPLY ALL AMENDMENTS PER SOIL TEST RECOMMENDATIONS. SPREAD LIME AND FERTILIZER UNIFORMLY OVER ALL AREAS IMMEDIATELY BEFORE FINAL LAND PREPARATION AND MIX THOROUGHLY WITH THE SOIL.
12. PERMANENT VEGETATIVE COVER OF AT LEAST 95% IS REQUIRED FOR FINAL ACCEPTANCE
13. REPAIR AND RESEED ALL ERODED OR DISTURBED SEEDED AREAS WHERE VEGETATIVE COVER HAS NOT BEEN ESTABLISHED.
14. APPLY A 1/2" TO 3/4" LAYER OF THRASHED RYE, OAT, OR WHEAT STRAW, OR BERMUDA GRASS HAY FOR SEEDING APPLICATIONS. APPLY MULCH ON ALL SEEDED AREAS IMMEDIATELY FOLLOWING SEEDING OPERATIONS. MAINTAIN A COVER OF MULCH UNTIL SEEDS HAVE GERMINATED AND SEEDLINGS ARE A MINIMUM OF 2" HEIGHT AND MOWING OPERATIONS HAVE BEGUN. FIELD ADJUST FOR UNIFORM COVER.
15. AREAS WILL BE REPLANTED IF PERMANENT VEGETATION IS DISTURBED OR NOT ESTABLISHED. CONTRACTOR TO MECHANICALLY REMOVE GROWTH OF OVER 12" PRIOR TO OVERSEEDING AND RESEEDING MEADOW AREAS IN THE SPRING TO ALLOW GROWTH OF PERMANENT VEGETATION.
16. THE CONTRACTOR IS RESPONSIBLE FOR WATERING AND MAINTENANCE OF SEEDED AREAS UNTIL 95% PERMANENT GRASS COVER IS ESTABLISHED AND SEEDED AREAS EXHIBIT HEALTHY AND VIGOROUS GROWTH AS DETERMINED BY LANDSCAPE ARCHITECT.
17. WHEN REQUIRED TO SEED FESCUE SEED OUTSIDE OF SPECIFIED PLANTING PERIODS, ADD AN ADDITIONAL 3 POUNDS PER 1,000 SQUARE FEET OF ANNUAL RYE GRASS.

1000 RIVERGATE PARKWAY
BJ's WHOLESALE CLUB
GOODLETTSVILLE, TENNESSEE

FILE NO. 32897-03



LANDSCAPE DETAILS

1000 RIVERGATE PARKWAY

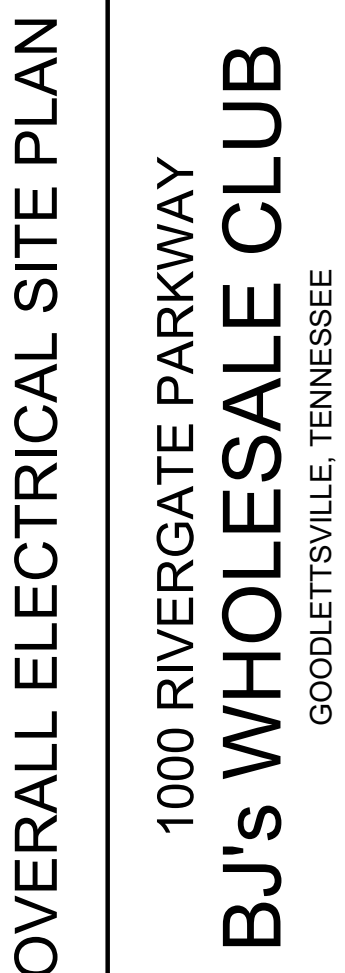
BJ's WHOLESALE CLUB

GOODLETTSVILLE, TENNESSEE

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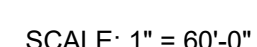
L7.02
FILE NO. 32897-03

PERMIT NUMBERS:			
SWGR#	XXXXXX	CACF#	XXXXXX
SUP#	XXXXXX	CACN#	XXXXXX
PARCEL ID:		FEMA PANEL:	
-		ZONE "X", PANEL NO. 4037C0137.	
 BENCHMARK:			
T.R.R. SPIKE IN PTLP			
#047444025			
ELEV. 530.33			
(NAVD88) (GEIOD03)			

[illegible]

FILE NO. 32897-03

1. CONTRACTOR TO REPLACE ANY PAVEMENT MARKINGS REMOVED DURING INSTALLATION OF SIDEWALK, CURB AND GUTTER, AND PAVEMENT. REFER TO DETAIL 03/C5.03 STANDARD BIKE LANE DETAIL.

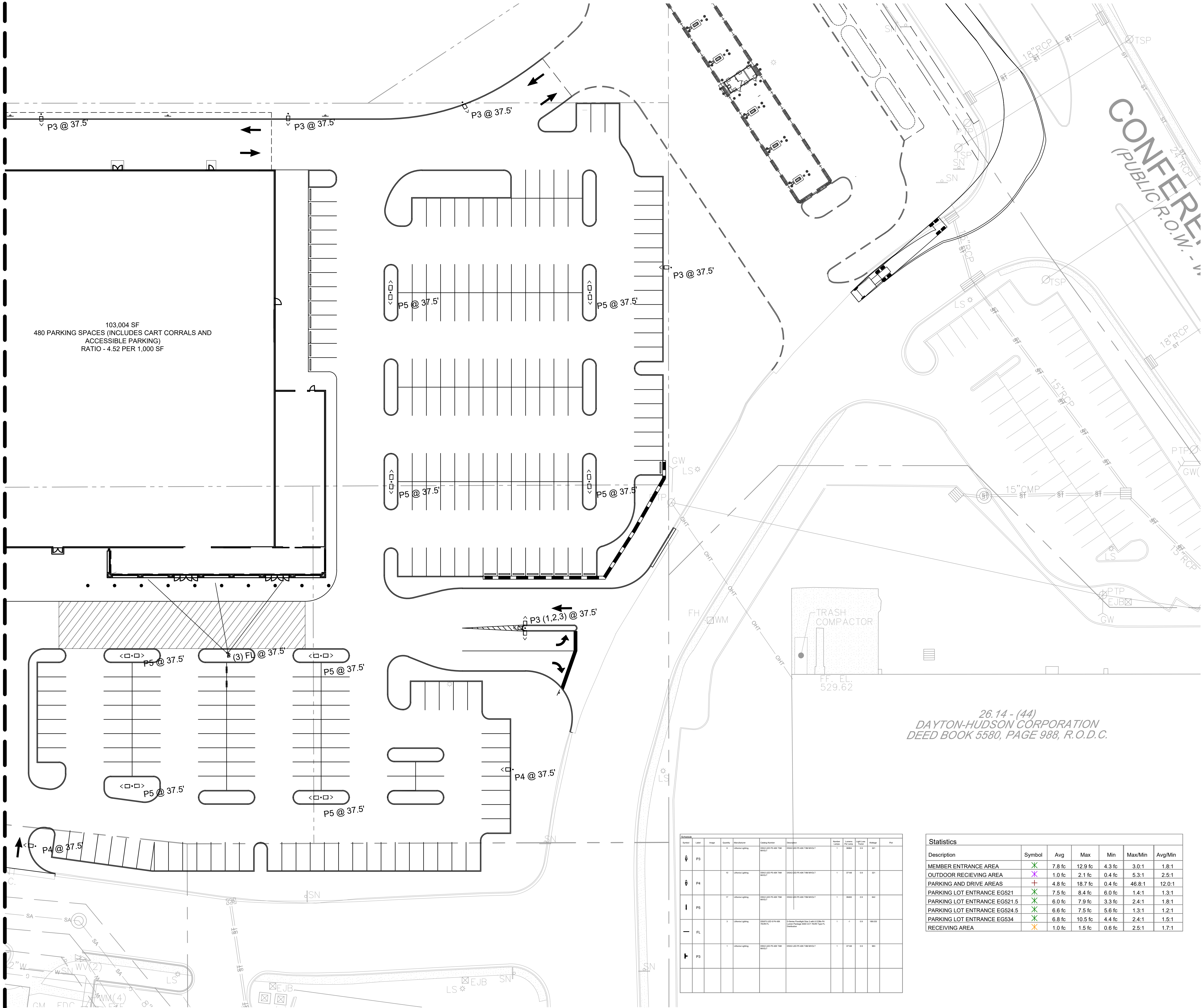


PERMIT NUMBERS:			
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SUP#	XXXXXX	CACN#	XXXXXX
PARCEL ID:		FEMA PANEL:	
-		ZONE "X", PANEL NO. 4037C01	
BENCHMARK:			
R.R. SPIKE IN PTLP			
#047444025			
ELEV. 530.33			
(NAVD88) (GEOID03)			



USER:APMEBER
FILE:3289713289710304_CAD/ELEC/3289703_E1.01.dwg
SAVED:10/27/2022
PLOTTED:10/27/2022

MATCHLINE SHEET E1.01



LEGEND

- POLE MOUNTED SINGLE AREA LUMINAIRE
- POLE MOUNTED DOUBLE AREA LUMINAIRES
- POLE MOUNTED FLOOD LUMINAIRE

SITE ELECTRICAL KEYED NOTES

- HOLD
-
-
-
-
-
-
-
-
-
-
-
-
-
-

26.14 - (44)
DAYTON-HUDSON CORPORATION
DEED BOOK 5580, PAGE 988, R.O.D.C.

Symbol	Label	Notes	Quantity	Unit	Notes	Quantity	Unit	Notes	Quantity	Unit
P3	Pole Mounted Single Area Luminaire	10	10	10	10	10	10	10	10	10
P4	Pole Mounted Double Area Luminaire	10	10	10	10	10	10	10	10	10
P5	Pole Mounted Flood Luminaire	10	10	10	10	10	10	10	10	10
FL	Fire Hydrant	10	10	10	10	10	10	10	10	10
WM	Water Meter	10	10	10	10	10	10	10	10	10
TH	Trash Compactor	10	10	10	10	10	10	10	10	10

Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
MEMBER ENTRANCE AREA	✕	7.8 fc	12.9 fc	4.3 fc	3.0:1	1.8:1
OUTDOOR RECEIVING AREA	✕	1.0 fc	2.1 fc	0.4 fc	5.3:1	2.5:1
PARKING AND DRIVE AREAS	✕	4.8 fc	18.7 fc	0.4 fc	46.8:1	12.0:1
PARKING LOT ENTRANCE EG521	✕	7.5 fc	8.4 fc	6.0 fc	1.4:1	1.3:1
PARKING LOT ENTRANCE EG521.5	✕	6.0 fc	7.9 fc	3.3 fc	2.4:1	1.8:1
PARKING LOT ENTRANCE EG524.5	✕	6.6 fc	7.5 fc	5.6 fc	1.3:1	1.2:1
PARKING LOT ENTRANCE EG534	✕	6.8 fc	10.5 fc	4.4 fc	2.4:1	1.5:1
RECEIVING AREA	✕	1.0 fc	1.5 fc	0.6 fc	2.5:1	1.7:1

PERMIT NUMBERS:
SWGR# XXXXXX CACF# XXXXXX
SUP# XXXXXX CACN# XXXXXX
PARCEL ID: FEMA PANEL:
ZONE "X", PANEL NO. 4037C0137J
BENCHMARK:
TR R SPIKE IN PTLP
#047444025
ELEV 530.33
(NAVD88) (GEOD03)

30' 15' 0' 30' 60'
SCALE: 1 INCH = 30 FEET

ENLARGED SITE LIGHTING PLAN - PART B

1000 RIVERGATE PARKWAY
BJ's WHOLESALE CLUB
GOODLETTSVILLE, TENNESSEE



BARGE
DESIGN SOLUTIONS

615 3rd Avenue South / Suite 700 // Nashville, Tennessee 37210
PHONE (615) 254-1500 // FAX (615) 255-6572

REV.	DATE	DESCRIPTION
1	10/27/2022	SITE PLAN SUBMITTAL
2	10/27/2022	SITE PLAN RESUBMITTAL

E1.02
FILE NO. 32897-03



NO SCALE

615 3rd Avenue South // Suite 700 // Nashville, Tennessee 37210
PHONE (615) 254-1500 // FAX (615) 255-8572

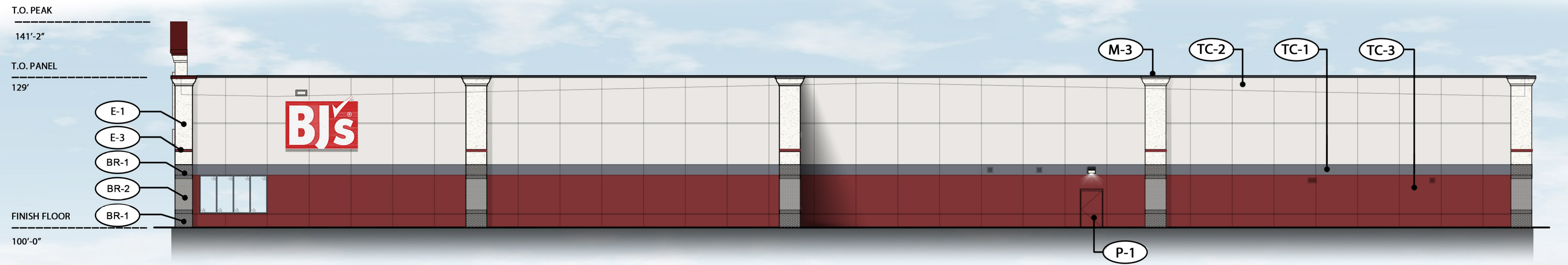


1000 RIVERGATE PARKWAY
BJ's WHOLESALE CLUB
GOODLETTSVILLE, TENNESSEE

E7.01

FILE NO. 32897-03

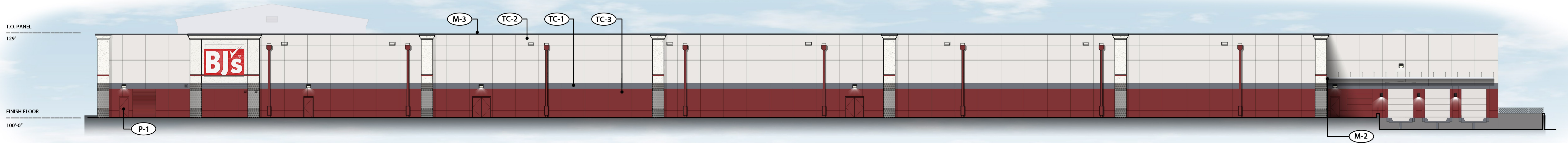
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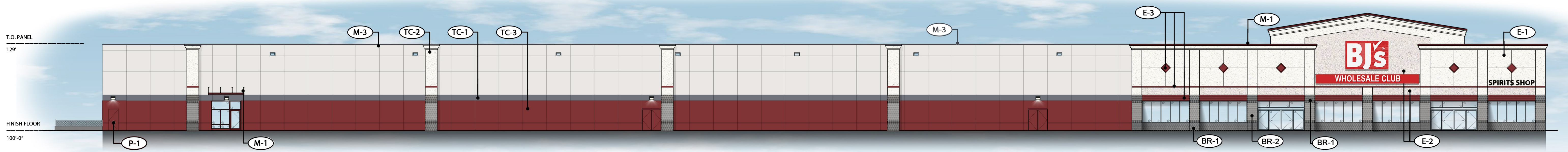
RIGHT SIDE ELEVATION



LEFT SIDE ELEVATION

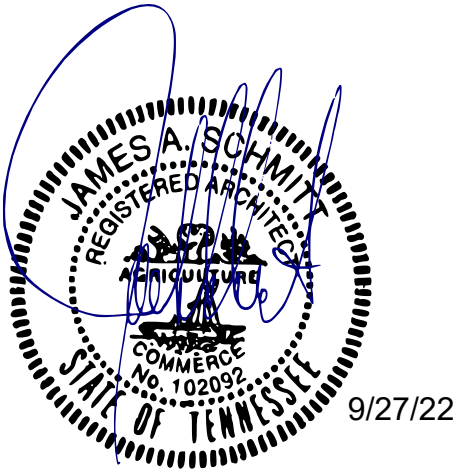


REAR ELEVATION



FRONT ELEVATION

MATERIAL SCHEDULE			
	TC-1: BENJAMIN MOORE "TROUT GRAY" #24124-20 ON CONCRETE WALL PANEL		E-3: DRYVIT TO MATCH "RED ROCK"
	TC-2: BENJAMIN MOORE "GRAY OWL" #2137-60 ON CONCRETE WALL PANEL		BR-1 BELDEN BRICK VELOUR "TITANIUM"
	TC-3: BENJAMIN MOORE "RED ROCK" #2005-10 ON CONCRETE WALL PANEL		BR-2 BELDEN BRICK VELOUR "SMOKY GRAY"
	E-1: DRYVIT #310 "WHITE CHINA"		P-1: BENJAMIN MOORE "RED ROCK"
			M-1: PAC-CLAD "COLONIAL RED"
	E-2: DRYVIT #104 "DOVER SKY"		M-2: PAC-CLAD "BONE WHITE"
			M-3: PAC-CLAD "CHARCOAL"



GOODDLETTSVILLE, TN





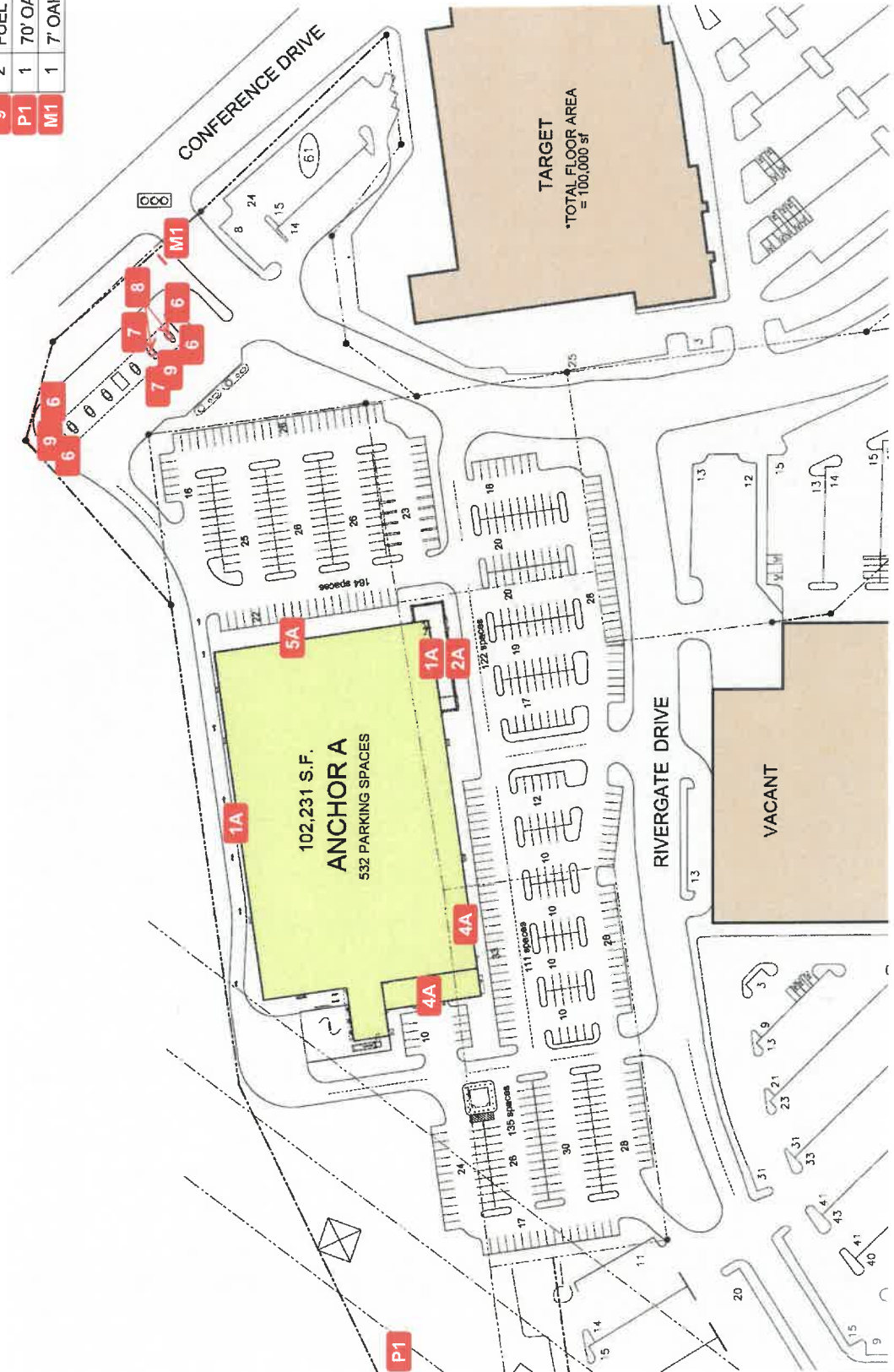
BJ's Project Signage

1000 RIVERGATE PKWY
Goodlettsville TN

809016791.02 03/15/2022

SITEPLAN

QTY.	DESCRIPTION	SQ. FT.
1A	2 BJ's MAIN ID	128
2A	1 WHOLESALE CLUB 32'-0"	91.3
4A	2 BJ's Tire Sales, Service & Propane	68.1
5A	1 BJ's Curbside Pickup	57.3
6	4 GAS CANOPY SIGN	22.1
7	2 CLEARANCE VINYL	1.8
8	2 4-SIDED DIESEL VINYL SIGN	3
9	2 FUEL CANOPY PRICE SIGN	28.1
P1	1 70' OAH PYLON	175
M1	1 7' OAH MONUMENT	44.31



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CUSTOMER APPROVAL:

DATE: _____

DATE: 03/11/22

Rev. #1: 03/11/22

Rev. #2: 03/11/22

Rev. #3: 03/11/22

DATE: _____

Rev. #4: _____

Rev. #5: _____

Rev. #6: _____

BJ's Wholesale Club

1000 RIVERGATE PKWY

Goodlettsville TN

DRAWING NO:

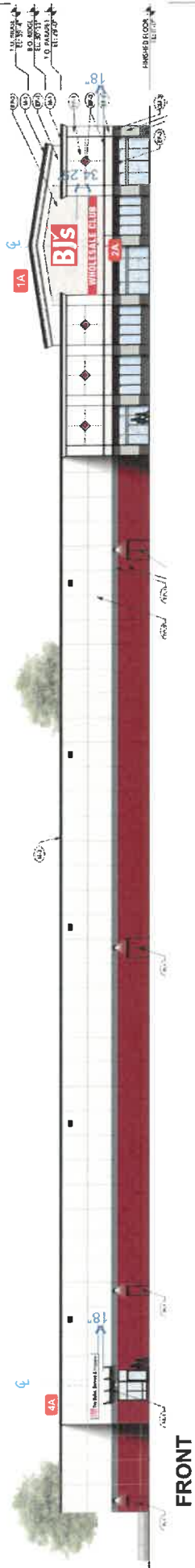
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ARTIST: AAAJ

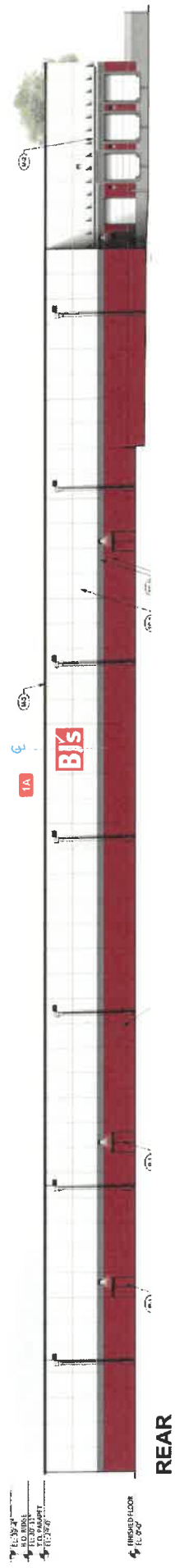
DATE: 03/11/22

SHEET: 2 OF 14

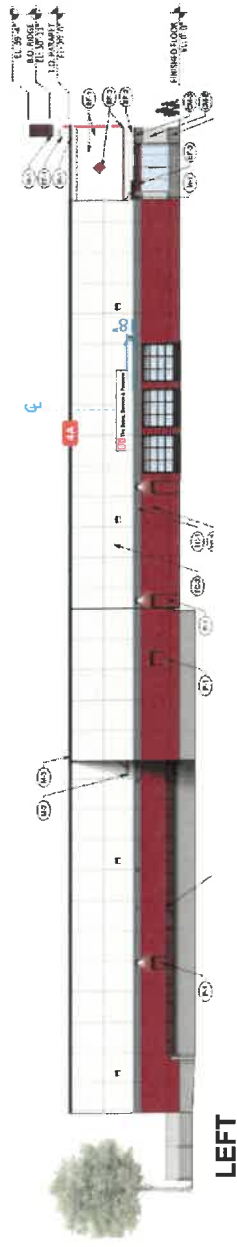
ELEVATIONS



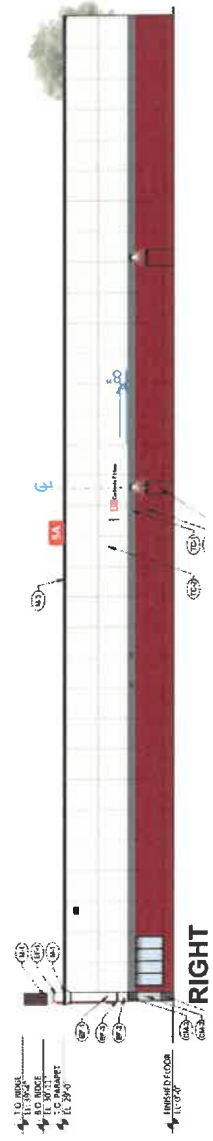
FRONT



REAR



LEFT



RIGHT



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CUSTOMER APPROVAL:

DATE _____

DRAWING NO:

809016791.03

ARTIST: AAAJ DATE: 03/11/22

SHEET: 3 OF 14

BJ's Wholesale Club

1000 RIVERGATE PKWY

Goodlettsville TN

DATE _____

BY _____

Rev. #4 _____

Rev. #5 _____

Rev. #6 _____

Rev. #1 _____

Rev. #2 _____

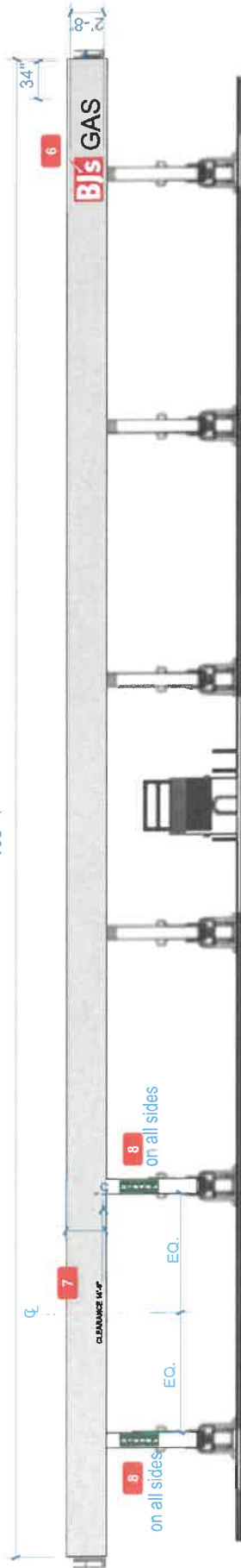
Rev. #3 _____

Note: canopy price signs are site specific (by request only)



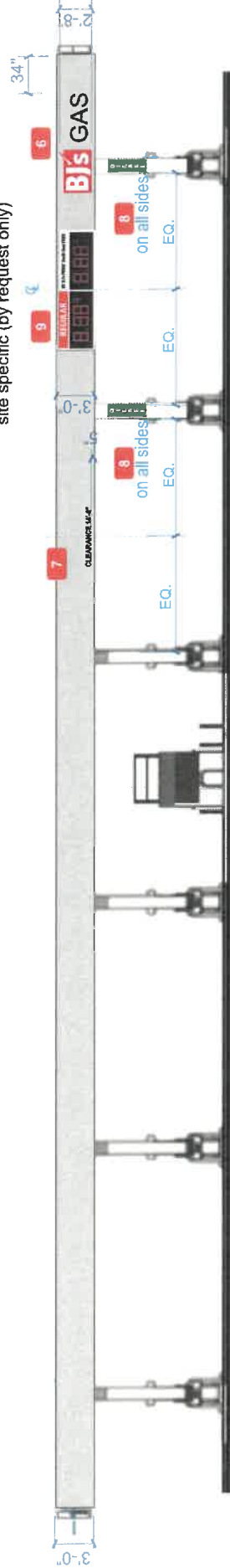
Veterans Blvd

169'-4"



Conference Drive

Note: canopy price signs are site specific (by request only)



Facing Store



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CUSTOMER APPROVAL:

DATE:

Rev. #1 DATE BY

Rev. #2 DATE BY

Rev. #3 DATE BY

Rev. #4 DATE BY

Rev. #5 DATE BY

Rev. #6 DATE BY

BJ's Wholesale Club
1000 RIVERGATE PKWY
Goodlettsville TN

DRAWING NO:
809016791.03

ARTIST: AAAJ DATE: 03/11/22

SHEET: 4 OF 14

GENERAL SPECIFICATIONS

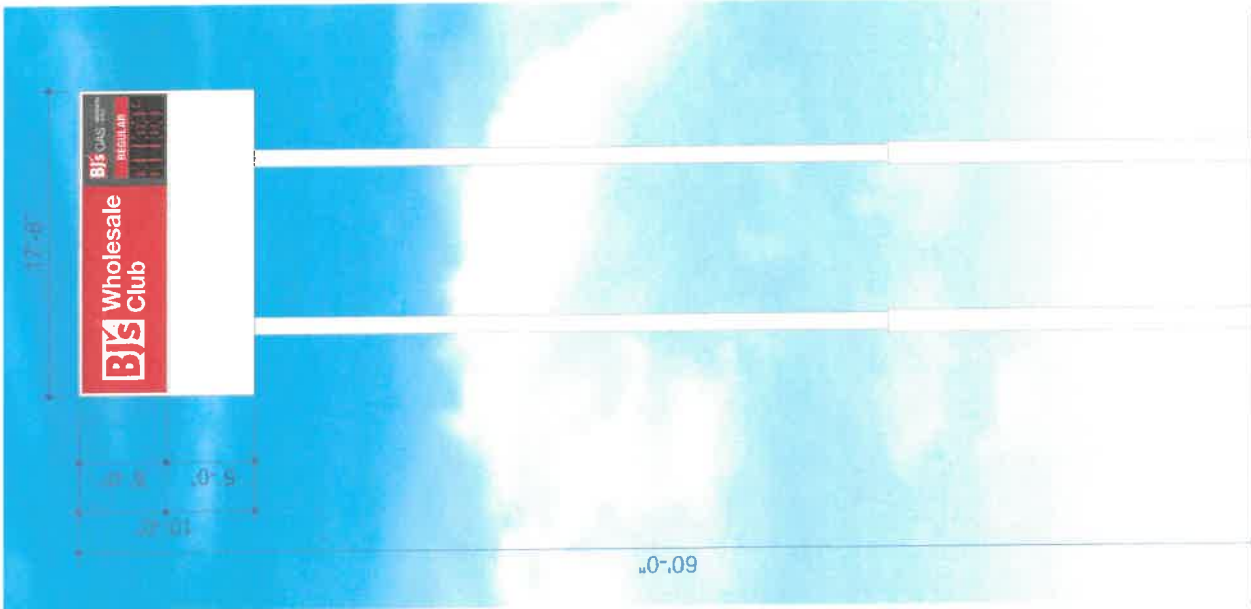
Pan formed polycarbonate faces decorated
 With flat, 1st surface graphics.
 Aluminum Cabinet & poles/cladding to match
 Benjamin Moore Super White
 (#PM-1 or OC-152)
 White LED illumination.
 LED Face Panel
 (2) Single Face
 Red Digital Color
 Provide 90-265V AC, 15 AMP Circuit for P
 24/7 dedicated circuits required

COLOR SPECIFICATIONS

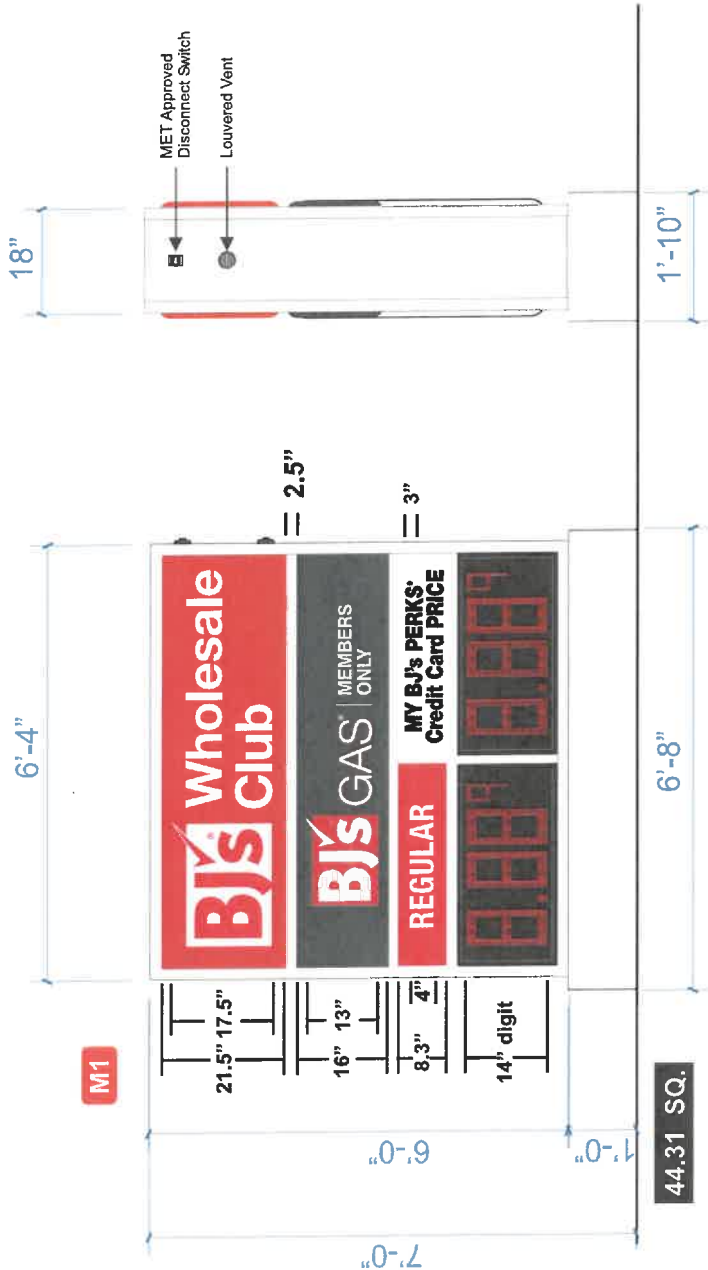
- 3M 3730-53L Red Vinyl / PMS 200
- 3M 3630-22 Black Vinyl
- White
- Benjamin Moore Super White
(#PM-1 or OC-152)
- City Scope SW 7067

UNDERGROUND DETAILS
 TO BE DETERMINED

NOTE: FOR FUEL PYLONS WITH PRICE SIGNS ON
 LEFT OR RIGHT PANEL ONLY - FUEL PRICER SHOULD
 ALWAYS BE LOCATED CLOSEST TO THE ROAD



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	Rvw. #1 _____ Rvw. #2 _____ Rvw. #3 _____	DATE _03/14/22_	BY _AAA_	DATE _03/15/22_	Rvw. #4 _____ Rvw. #5 _____ Rvw. #6 _____	ARTIST: AAAJ DATE: 03/11/22 SHEET: 13 OF 14
	BJ's Wholesale Club 1000 RIVERGATE PKWY Goodlettsville TN					



GENERA

Specifications

Pan formed polycarbonate faces decorated
With flat, 1st surface graphics.
Aluminum Cabinet & poles/cladding to match
Benjamin Moore Super White
(#PM-1 or OC-152)
White LED illumination.

14" GAS PRICE LED DISPLAY

P401140R
LED Face Panel
(2) Single Face
Red Digital Color
Board: 17.25"H x 35"W
Window: 15.75"H x 33.5"W
Digit: 14"H x 6.25"W
Provide 90-265V AC, 15 AMP Circuit for Power
24/7 dedicated circuits required

COLOR SPECIFICATIONS

- 3M 3730-53L Red Vinyl /PMS 200
- 3M 3630-22 Black Vinyl
- White
- Benjamin Moore Super White
(#PM-1 or OC-152)
- City Scope SW 7067



OPPOSITE SIDE FACE LAYOUT

UNDERGROUND DETAILS
TO BE DETERMINED

NOTE: FOR FUEL PYLONS WITH PRICE SIGNS ON
LEFT OR RIGHT PANEL ONLY - FUEL PRICER SHOULD
ALWAYS BE LOCATED CLOSEST TO THE ROAD

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	Rev. #1	DATE	BY	DATE	BJ's Wholesale Club 1000 RIVERGATE PKWY Goodlettsville TN	
	Rev. #2	03/14/22	AAAJ	Rev. #4		
					Rev. #5	
					Rev. #6	

38 SQ. FT.
FACE SQ. FT.



TRAFFIC IMPACT STUDY

BJ'S AT RIVERGATE MALL
GOODLETTSVILLE, TENNESSEE



PREPARED FOR:
BARGE DESIGN SOLUTIONS, INC.
JUNE 2022

TRAFFIC IMPACT STUDY
BJ'S AT RIVERGATE MALL
GOODLETTSVILLE, TENNESSEE

PREPARED FOR:
BARGE DESIGN SOLUTIONS, INC.



PREPARED BY:
KCI TECHNOLOGIES, INC
500 11th Avenue North, Suite 290
Nashville, TN 37203
615.370.8410 office 615.370.8455 fax
www.kci.com

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EXECUTIVE SUMMARY

Project Description

The proposed BJ's at Rivergate Mall development is located along Rivergate Drive in Goodlettsville, Tennessee. According to the developer, the proposed development includes approximately 103,004 square feet of discount club, including 12-fueling positions, and 4,000 square feet of fast-food restaurant space. It should be noted that the gas station and fast-food restaurant portions of this development are located within Nashville, Tennessee. Access to the development is planned to be provided by six driveways on Rivergate Drive. The purpose of this study is to analyze the access plan and the traffic impacts associated with this proposed development.

Data Collection

In order to provide data for the traffic impact analysis, manual traffic counts were conducted at the following intersections:

1. Conference Drive and Rivergate Drive (signalized)
2. Rivergate Parkway and Rivergate Drive (signalized)

Specifically, KCI Technologies, Inc. conducted the traffic counts from 7:00 – 9:00 AM and 4:00 – 6:00 PM on a typical weekday in May 2022 while local schools were in session. From the counts, it was determined that the peak hours of traffic flow for the majority of the study intersections occurred from 7:15 – 8:15 AM and 4:30 – 5:30 PM.

Projection of Future Traffic Volumes

In order to account for the traffic growth prior to the completion of the proposed project, background traffic volumes were established. Then, the estimated total project-generated traffic volumes for the proposed development were added to the background peak hour traffic volumes in order to obtain the total projected peak hour traffic volumes for the study area intersections.

Conclusions and Recommendations

The analyses presented in this study indicate that the impacts of the proposed project on the existing street network will be manageable by providing the recommendations below. These specific recommendations will provide safe and efficient traffic

operations within the study area following the completion of the proposed project. The recommendations are as follows:

Site Driveways

- As part of the construction of the project, all internal and external driveway connections should be designed such that the departure sight triangles, as specified by AASHTO, will be clear of all sight obstructions, including landscaping, existing vegetation, monument signs/walls, fences, etc.

Rivergate Drive and Driveway A/Driveway B

- The southbound approach of Driveway A should be stop-controlled, and a stop bar and R1-1 'Stop' sign should be installed on the egress approach.
- Driveway A should be designed to include sufficient width for one entering lane and a minimum of one exiting lane.
- The northbound approach of Driveway B should be stop-controlled, and a stop bar and R1-1 'Stop' sign should be installed on the egress approach.
- Driveway B should be designed to include sufficient width for one entering lane and a minimum of one exiting lane.

Rivergate Drive and Driveway C

- The eastbound approach of Driveway C should be stop-controlled, and a stop bar and R1-1 'Stop' sign should be installed on the egress approach.
- Driveway C should be designed to include sufficient width for one entering lane and a minimum of one exiting lane.

Rivergate Drive and Driveway D

- The southbound approach of Driveway D should be stop-controlled, and a stop bar and R1-1 'Stop' sign should be installed on the egress approach.
- Driveway D should be designed to include sufficient width for one entering lane and a minimum of one exiting lane.

Rivergate Drive and Driveway E

- The southbound approach of Driveway E should be stop-controlled, and a stop bar and R1-1 'Stop' sign should be installed on the egress approach.
- Driveway E should be designed to include sufficient width for one entering lane and a minimum of one exiting lane.

Rivergate Drive and Driveway F

- The southbound approach of Driveway F should be stop-controlled, and a stop bar and R1-1 'Stop' sign should be installed on the egress approach.

- Driveway F should be designed to include sufficient width for one entering lane and a minimum of one exiting lane.

Signal Timing Optimization and Coordination

- Signal timings at all the signalized study intersections should be optimized upon completion of the development.

Additional Recommendations

- Parking should be developed per code.
- Off-peak loading and deliveries for the discount club should be encouraged to minimize impacts to traffic operations.

In summary, based on the analyses conducted, no further recommendations are presented for the proposed BJ's at Rivergate Mall development.

Addam McCormick

From: Rose Morgan <rosesblacin1978@gmail.com>
Sent: Tuesday, September 13, 2022 11:04 AM
To: Addam McCormick

To Whom It May Concern:

My name is Cynthia "Rose" Morgan. I am writing to request that the definition of a home day care center be changed to read "four (4) to (8) children". The current definition of a home daycare center is "up to four (4) to eight (8) children" which excludes occasional babysitting of any nonrelated children. The state of Tennessee requires a license be obtained in order to provide childcare to five (5) or more. I am blessed to be a Gramma of six (6) and Godmother of two (2) who also enjoys helping others. Children have always brought great joy to my soul. On September 6, 2022, I was brought before the zoning board after the city received a complaint of an unlawful daycare at my residence. I normally babysit two (2) or less nonrelated children as needed, but have on occasions cared for up to four (4) nonrelated children. This sometimes includes sibling sets. I was under the understanding that there was no limitation on babysitting in my home for up to four (4) children that are not related to me at which five (5) or more would require a license from the state of Tennessee.

Sincery
Cynthia "Rose" Morgan