



# Administrative Approval Action

Case File / Name: ASR-0110-2022  
DSLCL - PROJECT OCEAN

City of Raleigh  
Development Services Department  
One Exchange Plaza  
Raleigh, NC 27602  
(919) 996-2492  
currentplanning@raleighnc.gov  
www.raleighnc.gov

**LOCATION:** This 63.25 acre site is located at 4320 Auburn Church Road and situated east of Interstate 40, south of Jones Sausage Road, north of E Garner Road, and west of Rock Quarry Road. The site is part of the Eagle Crest Industrial Park and is zoned IH-CU. The development will be on proposed lot 8 of SUB-0074-2022.

**REQUEST:** The plan proposes construction of a 646,310 SF light industrial building that includes 21,356 SF for second level office fit up, 288 SF for a guardshack and 8,208 SF vehicle service/wash building (total gross building area of 654,806 SF). Infrastructure, parking, outdoor storage, and site improvements are also part of the plan.

**DESIGN  
ADJUSTMENT(S)/  
ALTERNATES, ETC:** N/A

**FINDINGS:** City Administration finds that this request, with the below conditions of approval being met, conforms to the Unified Development Ordinance. This approval is based on a preliminary plan dated July 12, 2023 by Capital Civil Engineering.

## **CONDITIONS OF APPROVAL and NEXT STEPS:**

*This document must be applied to the second sheet of all future submittals except for final plats. This is a preliminary plan and as such no permits have been issued with this approval. To obtain permits and/or completion of the project, the following steps are required:*

☒ **SITE PERMITTING REVIEW** - For land disturbance of 12,000 square feet or greater, public or private infrastructure, shared stormwater devices, etc. Site Permitting Review may be submitted upon receipt of this signed approval document.

***The following items are required prior to approval of Site Permitting Review plans:***

### **Engineering**

1. Required NCDOT encroachment and/or driveway permits must be approved and copies provided to the City of Raleigh Transportation Department – Mobility Strategy and Infrastructure Division prior to Site Permit review approval.
2. A Traffic Control and Pedestrian (TCPED) Plan must be approved and a right-of-way occupancy permit must be obtained from Right-of-way Services for any construction activities within the right-of-way.

### **Stormwater**

3. A surety equal to of the cost of clearing, grubbing and reseeding a site, shall be paid to the City (UDO 9.4.4).
4. A nitrogen offset payment must be made to a qualifying mitigation bank (UDO 9.2.2.B).
5. A stormwater control plan with a stormwater operations and maintenance manual and budget shall be approved (UDO 9.2).



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## Urban Forestry

6. Submit a final tree conservation plan that includes metes and bounds descriptions of all tree conservation areas and tree protection fencing as required (UDO 9.1.5).
7. Tree protection fence must be inspected by Urban Forestry staff prior to the issuance of a grading permit.

☒ **LEGAL DOCUMENTS** - Email to [legaldocumentreview@raleighnc.gov](mailto:legaldocumentreview@raleighnc.gov). Legal documents must be approved, executed, and recorded prior to or in conjunction with the recorded plat on which the associated easements are shown. Copies of recorded documents must be returned to the City within one business day of recording to avoid withholding of further permit issuance.

<input checked="" type="checkbox"/>	Right of Way Deed of Easement Required
<input checked="" type="checkbox"/>	Utility Placement Deed of Easement Required

<input checked="" type="checkbox"/>	Slope Easement Deed of Easement Required
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☒ **RECORDED MAP(S)** - Submit plat to record new property lines, easements, tree conservation areas, etc.). Plats may be submitted for review when the Site Permitting Review plans, if required, have been deemed ready for mylar signature.

***The following items must be approved prior to recording the plat:***

## General

1. The greenway easement as shown on the preliminary plan shall be dedicated prior to, or in conjunction with the recording of a map in any phase affected by the greenway.

## Engineering

2. A fee-in-lieu for those portions of the stub road not built to the property line is paid to the City of Raleigh (UDO 8.1.10).
3. A 5' utility placement easement deed of easement, in addition to a plat showing the location of the easement, shall be submitted to the Planning and Development Services Department for review, and if acceptable, approved for recordation. Approved plats must be recorded at the Wake County Register of Deeds Office on or before the 14th day following approval by the City. The 14-day expiration date shall be clearly indicated on the plat. By the end of the next business day following recordation of the plat, all required legal instruments (including deeds of easement) shall be recorded, and recorded copies of the plat and all legal instruments required by the City in association with development approval shall be provided to the City. (Reference: UDO 8.1.7.A; 10.2.5.F.4.d)





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4. A slope easement deed of easement, in addition to a plat showing the location of the easement, shall be submitted to the Planning and Development Services Department for review, and if acceptable, approved for recordation. Approved plats must be recorded at the Wake County Register of Deeds Office on or before the 14th day following approval by the City. The 14-day expiration date shall be clearly indicated on the plat. By the end of the next business day following recordation of the plat, all required legal instruments (including deeds of easement) shall be recorded, and recorded copies of the plat and all legal instruments required by the City in association with development approval shall be provided to the City. (Reference: UDO 8.1.7.A; 10.2.5.F.4.d)
5. A public street right-of-way deed of easement, in addition to a plat showing the location of the easement, shall be submitted to the Planning and Development Services Department for review, and if acceptable, approved for recordation. Approved plats must be recorded at the Wake County Register of Deeds Office on or before the 14th day following approval by the City. The 14-day expiration date shall be clearly indicated on the plat. By the end of the next business day following recordation of the plat, all required legal instruments (including deeds of easement) shall be recorded, and recorded copies of the plat and all legal instruments required by the City in association with development approval shall be provided to the City. (Reference: UDO 8.1.7.A; 10.2.5.F.4.d)
6. A public infrastructure surety shall be provided to City of Raleigh Transportation – Development Engineering Division (UDO 8.1.3) in the amount of 100% of the improvement cost for the NCDOT portion and 125% of the improvement cost for the City of Raleigh infrastructure.

## **Public Utilities**

7. A Petition for Annexation into the City limits shall be submitted in accordance with City Council policy for extension of utility service to properties currently outside of the City limits. This voluntary annexation in no way obligates the City to extend utility services to the property.

## **Stormwater**

8. All stormwater control measures and means of transporting stormwater runoff to and from any nitrogen and stormwater runoff control measures shall be shown on all plats for recording as private drainage easements (UDO 9.2).

## **Urban Forestry**

9. A tree conservation plat shall be recorded with metes and bounds showing the designated tree conservation areas (UDO 9.1). This development proposes 17.81 total acres of tree conservation area. 12.02 acres of Tree Conservation Area will be newly dedicated.
10. A public infrastructure surety for 23 street trees along Conash Lane and 91 street trees along Eagle Crest Way shall be provided to City of Raleigh Transportation – Development Engineering Division (UDO 8.1.3) in the amount of 100% of the improvement cost for the NCDOT portion and 125% of the improvement cost for the City of Raleigh infrastructure.



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☒ **BUILDING PERMITS** - For buildings and structures shown on the approved plans. Commercial building permit plans must include the signed, approved Site Permitting Review plans attached, if applicable. Permit sets may be reviewed prior to the recordation of required plats, but cannot be approved.

*The following items must be approved prior to the issuance of building permits:*

## General

1. The subdivision phase of SUB-0074-2022 creating the parcel and street right-of-way for this development shall be recorded.

## Public Utilities

2. A plat must be recorded at the Wake County Register of Deeds office for all utility easement dedications.

## Stormwater

3. A surety equal to 125% of the cost of the construction of a stormwater device shall be paid to the Engineering Services Department (UDO 9.2.2.D.1.d).
4. All stormwater control measures and means of transporting stormwater runoff to and from any nitrogen and stormwater runoff control measures shall be shown on all plats for recording as private drainage easements (UDO 9.2).
5. A payment equal to twenty-four percent (24%) of the estimated cost of constructing all stormwater control facilities shown on the development plans shall be paid by the developer to the City stormwater facility replacement fund (UDO 9.2.2.G.3).

## Urban Forestry

6. A tree conservation plat shall be recorded with metes and bounds showing the designated tree conservation areas (UDO 9.1).
7. A tree impact permit must be obtained for the approved streetscape tree installation in the right of way. This development proposes 17 street trees along Eagle Crest Way.

*The following are required prior to issuance of building occupancy permit:*

## General

1. All Water, Sanitary Sewer and Reuse facilities shall be installed, inspected, tested and accepted by the City of Raleigh Public Utilities Department for operations and maintenance.
2. Final inspection of all tree conservation areas and right of way street trees by Urban Forestry Staff



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3. All street lights and street signs required as part of the development approval are installed.
4. Required public right-of-way infrastructure improvements shall be, at a minimum, sufficiently completed to provide the necessary, safe emergency and vehicular access.

**EXPIRATION DATES:** The expiration provisions of UDO Section 10.2.8 E, including the ability to request extensions in the expiration date, apply to this site plan. If significant construction has not taken place on a project after administrative site review approval, that approval may expire and be declared void, requiring re-approval before permits may be issued. To avoid allowing this plan approval to expire the following must take place by the following dates:

**3-Year Expiration Date:** August 16, 2026

Obtain a valid building permit for the total area of the project, or a phase of the project.

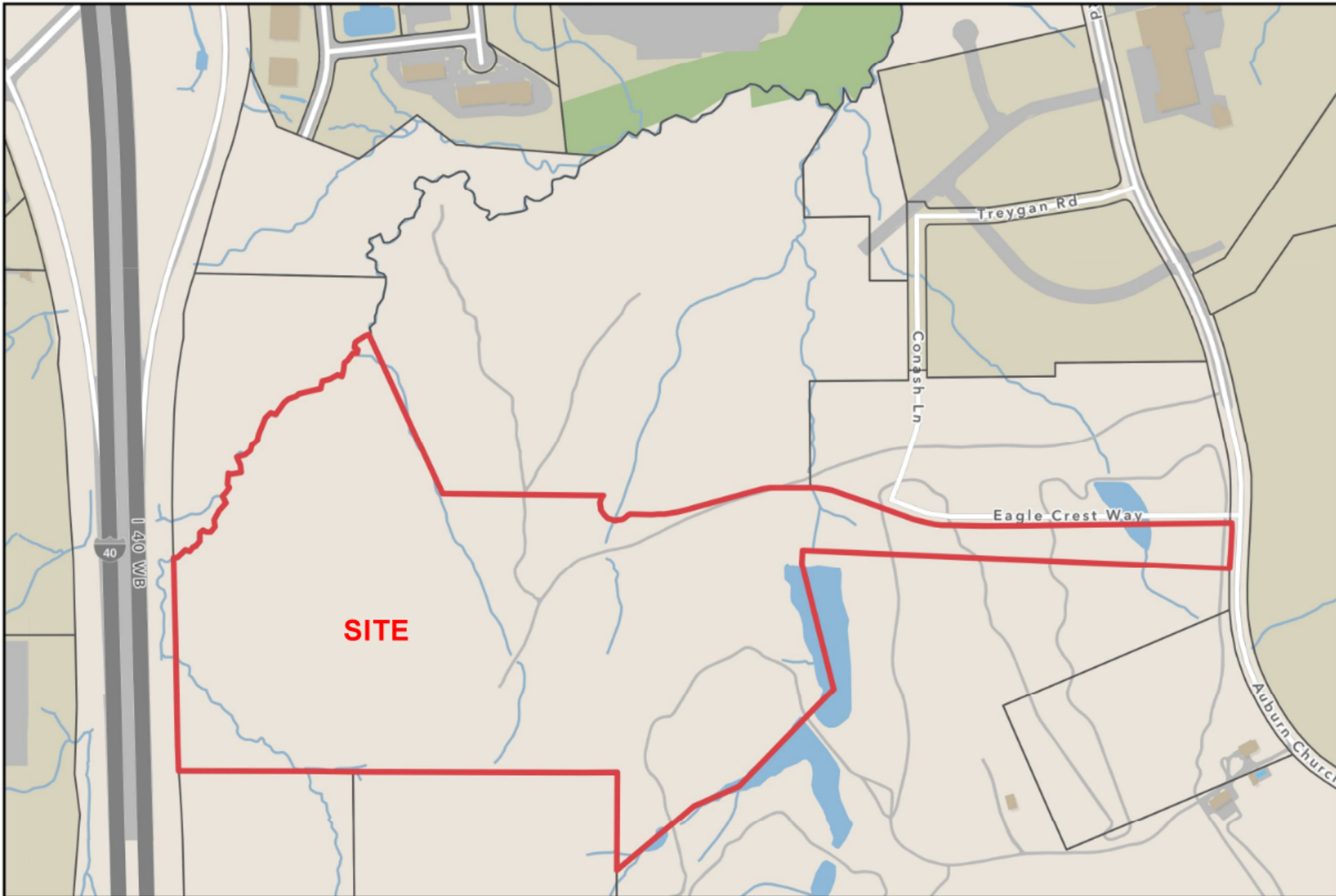
**4-Year Completion Date:**

Within four years after issuance of the first building permit for the site plan, the construction of the entire site plan must be completed unless an applicant has been granted vested rights. Failure to complete construction within this specified time frame shall automatically void the approved site plan for which no building permits have been issued.

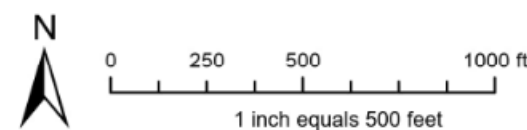
I hereby certify this administrative decision.

Signed: *Daniel L. Stegall* Date: 08/16/2023  
Development Services Dir/Designee  
Staff Coordinator: Jessica Gladwin





Vicinity Map



Disclaimer: Map makes every effort to produce and publish the most current and accurate information possible. However, the map is produced for information purposes and is NOT a survey. No warranties, expressed or implied, are provided for the data therein, its use, or its interpretation.

BLOCK PERIMETER NOTES

PER UDO SECTION 8.3.2.A.1.b.i AS PROVIDED IN TC-06-19, BLOCK PERIMETERS ARE NOT REQUIRED IN THE IH ZONING DISTRICT.

CROSS ACCESS NOTES

CROSS ACCESS REQUIREMENT ARE NOT APPLICABLE TO THIS SUBDIVISION. THE FOLLOWING EXEMPTIONS APPLY:

1. UDO SECTION 8.3.5.D.5.a. THIS APPLIES TO THE SOUTHERN BOUNDARY OF THE PROPERTY.
2. UDO SECTION 8.3.5.D.5.b.ii. THIS APPLIES TO THE WESTERN BOUNDARY OF THE PROPERTY.
3. UDO SECTION 8.3.5.D.5.b.iii. THIS APPLIES TO ALL BOUNDARIES THAT ARE DESIGNATED AS CREEKS.
4. UDO SECTION 8.3.5.D.5.c. THIS APPLIES TO THE SOUTHERN BOUNDARY OF THE PROPERTY.

STUB STREET NOTES

1. STREET STUBS ARE NOT REQUIRED FOR THIS SUBDIVISION. THE FOLLOWING EXEMPTIONS APPLY:

- A. UDO SECTION 8.3.2.A.1.b.v.(b). THIS APPLIES TO THE WESTERN BOUNDARY OF THE PROPERTY.
- B. UDO SECTION 8.3.2.A.1.b.v.(c). THIS APPLIES TO THE WESTERN BOUNDARY OF THE PROPERTY.
- C. UDO SECTION 8.3.2.A.1.b.ix. THIS APPLIES TO THE SOUTHERN BOUNDARY OF THE PROPERTY.

**OWNER**  
SOUND TIMBER MANAGEMENT, LLC  
333 SHERWEE DR  
RALEIGH, NC 27603

**PROJECT MANAGER**  
DEVELOPMENT AND CONSTRUCTION INSIGHT  
2054 KILDAIRE FARM ROAD, #167  
CARY, NORTH CAROLINA 27518  
DAVID PARKER  
David@CInightllc.com  
919-866-3099

**ENGINEER / APPLICANT**  
CAPITAL CIVIL ENGINEERING, PLLC  
209 N SALEM ST. STE 220  
APEX, NC 27502  
PH: 919 249-8587  
MICHAEL J. KANE, PE  
mkane@capitalcivil.com  
919-249-8587

ATTENTION CONTRACTORS

The Construction Contractor responsible for the extension of water, sewer, and/or reuse, as approved in these plans, is responsible for contacting the Public Works Department at (919) 996-4540, at least twenty-four hours prior to beginning any of their construction.

Failure to notify both City Departments in advance of beginning construction, will result in the issuance of monetary fines, and require reinstallation of any water or sewer facilities not inspected as a result of this notification failure.

Failure to call for inspection, install a Downstream Plug, have Permitted Plans on the jobsite, or any other Violation of City of Raleigh Standards will result in a Fine and Possible Exclusion from future work in the City of Raleigh.

SOLID WASTE SERVICES STATEMENT

- DEVELOPER/OWNER HAS REVIEWED THE CITY OF RALEIGH SOLID WASTE DESIGN MANUAL AND SHALL COMPLY WITH ITS REQUIREMENTS.
- ONSITE DUMPSTER AND COMPACTORS TO BE PLACED IN LOADING DOCK AREAS TO BE SERVICED BY PRIVATE SOLID WASTE SERVICES PICK UP. SEE SERVICE LETTER, SHEET C101

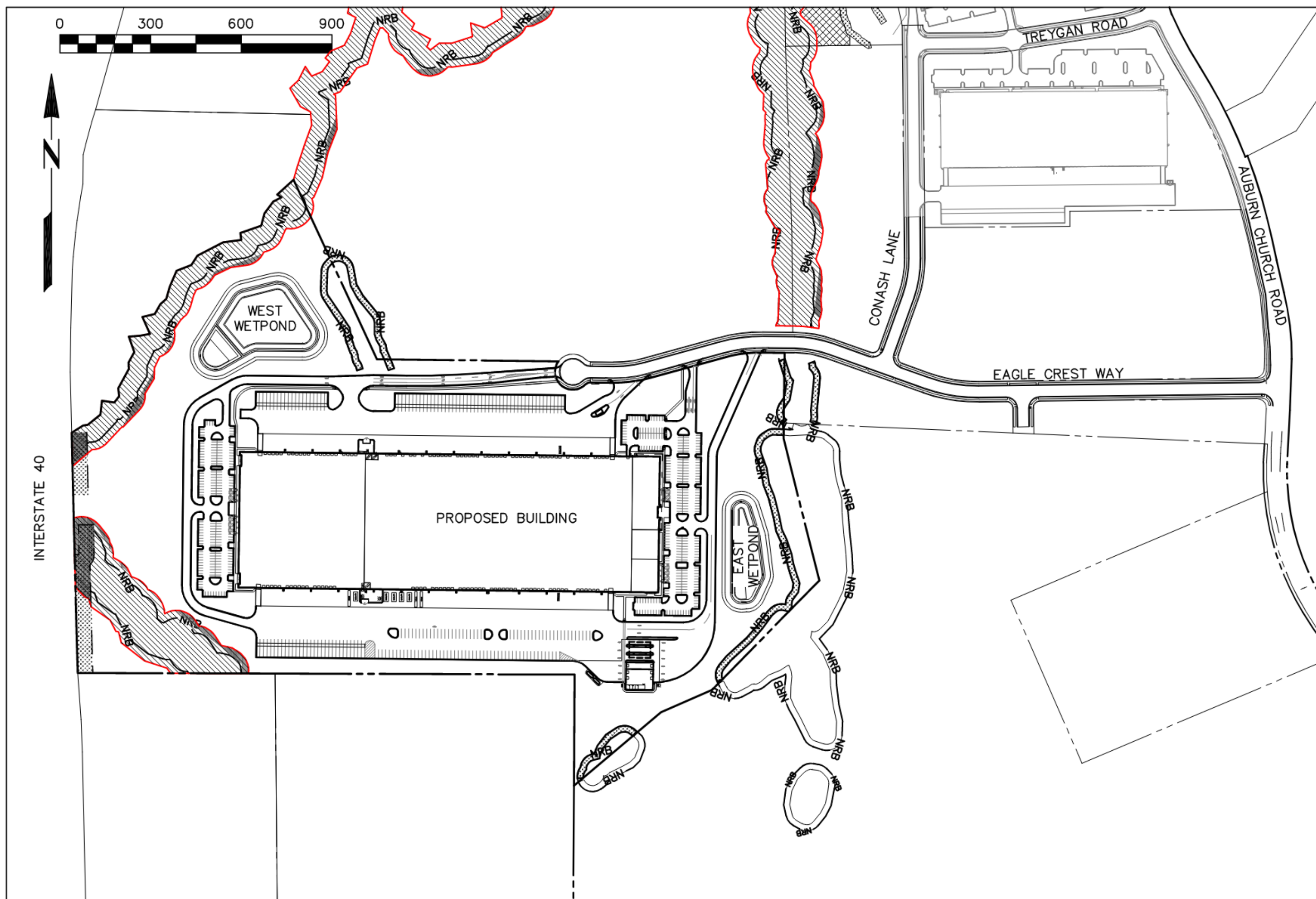
AFFILIATED PLANS

REZONING	Z-2-889
SKETCH PLAN	SCOPE-0141-2022
RECOMBINATION	RCMP-0299-2022, BM2023 PG274
SUBDIVISION	SUB-0074-2022

# PROJECT OCEAN

## ADMINISTRATIVE SITE PLAN

### ASR-0110-2022



OVERVIEW

SCALE: 1" = 300'

SHEET INDEX

COVER SHEET  
ZONING CONDITIONS  
EXISTING CONDITIONS  
RECOMBINATION PLAT (BY OTHERS)  
SITE PLAN  
OFFSITE IMPROVEMENTS  
GRADING PLAN  
SCM PLAN  
UTILITY PLAN  
TREE CONSERVATION PLAN  
LANDSCAPE PLAN  
LIGHTING PLAN  
DETAILS  
ELEVATIONS

C100  
C101  
C102-C103  
C104  
C200-C203  
C204-C205  
C300-C303  
C304-C306  
C400-C403  
C500  
C600-C604  
C700  
C800-C803  
A201 & A204

SITE DATA

PARCEL ID NO	1721-55-0804
ZONING	IH-CU
OVERLAY	SHOD-1
FRONTAGE TYPE	NONE
EXISTING USE	VACANT
PROPOSED USE	LIGHT INDUSTRIAL
EXISTING BUILDING	0 SF
PROPOSED BUILDINGS	654,806 SF
RESIDENTIAL DENSITY	NONE
PARKING REQUIRED	NO MAXIMUM
PARKING PROPOSED	445
PRIMARY STREET	EAGLE CREST WAY (PROPOSED)
AREA GROSS EXISTING	68.9 ACRES
AREA NET AFTER R/W	63.25 ACRES
EXISTING IMPERVIOUS	0 ACRES
PROPOSED IMPERVIOUS	34.5 ACRES
100YR FLOOD PLAIN	YES, PANEL 3720172100K, JULY 19, 2022
HEIGHT, STORIES ALLOWABLE	50' / 3 STORIES
HEIGHT, STORIES PROPOSED	49' / 1 STORY
LAND DISTURBANCE	49.23 ACRES

### Administrative Site Review Application

Planning and Development Customer Service Center • One Exchange Plaza, Suite 400 | Raleigh, NC 27601 | 919-999-2500



This form is required when submitting site plans as referenced in Unified Development Ordinance (UDO) Section 10.2.8. Please check the appropriate building types and include the plan checklist document when submitting.

Office Use Only: Case #: \_\_\_\_\_ Planner (print): \_\_\_\_\_

Please review UDO Section 10.2.8, to determine the site plan tier. If assistance determining a Site Plan Tier is needed a Site Plan Tier Verification request can be submitted online via the [Permit and Development Portal](#). (Note: There is a fee for this verification service.)

Site Plan Tier: Tier Two Site Plan <input type="checkbox"/> Tier Three Site Plan <input checked="" type="checkbox"/>	
<b>Building Type</b>	<b>Site Transaction History</b>
<input type="checkbox"/> Detached <input type="checkbox"/> Attached <input type="checkbox"/> Apartment <input type="checkbox"/> Townhouse <input type="checkbox"/> Tiny house	<input type="checkbox"/> Cottage Court <input checked="" type="checkbox"/> General <input type="checkbox"/> Mixed use <input type="checkbox"/> Open lot <input type="checkbox"/> Civic
Subdivision case #: SUB-0074-2022 Scoping/sketch plan case #: SCOPE-0141-2022 Certificate of Appropriateness #: Board of Adjustment #: Zoning Case #: Z-2-889 Design Alternate #:	
<b>GENERAL INFORMATION</b>	
Development name: Project Ocean Inside City limits? <input type="radio"/> Yes <input checked="" type="radio"/> No Property address(es): 2051 Eagle Crest Way, Garner, NC 27529 Site P.I.N.(s): 1721-55-0804 Please describe the scope of work. Include any additions, expansions, and uses (UDO 6.1.4). 646,310 sf Light Industrial Building, (624,954 footprint with 21,356 sf second level office fit-up) 288 sf guardshack 8,208 sf vehicle service / wash building.	
<b>Current Property Owner(s):</b>	
Company: Sound Timber Management, LLC Address: 333 Sherwee Drive, Raleigh, NC 27603 Phone #: _____ Email: hgbrj@ix.netcom.com	Title: _____
<b>Applicant Name (if different from owner. See "who can apply" in instructions):</b> Michael J. Kane, PE Relationship to owner: <input type="checkbox"/> Lessee or contract purchaser <input checked="" type="checkbox"/> Owner's authorized agent <input type="checkbox"/> Easement holder	
Company: Capital Civil Engineering, PLLC Address: 209 N Salem St, Ste 220 Apex, NC 27502	

Phone #: 919 249-8587	Email: mkane@capitalcivil.com
<b>NOTE: please attach purchase agreement or contract, lease or easement when submitting this form.</b>	
Developer Contact: David Parker, PE	
Company: Development and Construction Insight	Title: Vice President
Address: 2054 Kildaire Farm Rd, #167 Cary, NC 27518	
Phone #: 919 868-3099	Email: David@dcinsightllc.com
Applicant Name: Michael J. Kane, PE	
Company: Capital Civil Engineering, PLLC	Address: 209 N Salem St, Ste 220 Apex, NC 27502
Phone #: 919 249-8587	Email: mkane@capitalcivil.com

DEVELOPMENT TYPE + SITE DATE TABLE (Applicable to all developments)	
SITE DATA	BUILDING DATA
Zoning district(s) (please provide the acreage of each): IH-CU - 68.9 ac	Existing gross floor area (not to be demolished): 0
Gross site acreage: 63.25 ac	Existing gross floor area to be demolished: 0
# of parking spaces proposed: 445	New gross floor area: 654,806 sf
Max # parking permitted (7.1.2.C): no max	Total sf gross (to remain and new): 654,806 sf
Overlay District (if applicable): SHOD-1	Proposed # of buildings: 3
Existing use (UDO 6.1.4): Vacant	Proposed # of stories for each: Main building one story warehouse with internal 21,356 sf second story office fit-up.
Proposed use (UDO 6.1.4): Light Industrial	Proposed # of basement levels (UDO 1.5.7.A.6) 0

STORMWATER INFORMATION	
Impervious Area on Parcel(s):	Impervious Area for Compliance (includes ROW):
Existing (sf) 0 Proposed total (sf) 1,508,991	Existing (sf) 0 Proposed total (sf) 1515148

RESIDENTIAL & OVERNIGHT LODGING DEVELOPMENTS	
Total # of dwelling units: 0	Total # of hotel bedrooms: 0
# of bedroom units: 1br <input type="checkbox"/> 2br <input type="checkbox"/> 3br <input type="checkbox"/> 4br or more <input type="checkbox"/>	
# of lots:	Is your project a cottage court? <input type="radio"/> Yes <input checked="" type="radio"/> No
	A frequent transit development? <input type="radio"/> Yes <input checked="" type="radio"/> No

Continue to Applicant Signature Block on Page Three.

APPLICANT SIGNATURE BLOCK	
Pursuant to state law (N.C. Gen. Stat. § 160D-403(a)), applications for development approvals may be made by the landowner, a lessee or person holding an option or contract to purchase or lease land, or an authorized agent of the landowner. An easement holder may also apply for development approval for such development as is authorized by the easement.	
By submitting this application, the undersigned applicant acknowledges that they are either the property owner or one of the persons authorized by state law (N.C.G.S. 160D-403(a)) to make this application, as specified in the application. The undersigned also acknowledges that the information and statements made in the application are correct and the undersigned understands that developments approvals are subject to revocation for false statements or misrepresentations made in securing the development approval, pursuant to N.C. Gen. Stat. § 160D-403(f).	
The undersigned indicates that the property owner(s) is aware of this application and that the proposed project described in this application will be maintained in all respects in accordance with the plans and specifications submitted herewith, and in accordance with the provisions and regulations of the City of Raleigh Unified Development Ordinance.	
The undersigned hereby acknowledges that, pursuant to state law (N.C.G.S. 143-755(b1)), if this permit application is placed on hold at the request of the applicant for a period of six consecutive months or more, or if the applicant fails to respond to comments or provide additional information requested by the City for a period of six consecutive months or more, then the application review is discontinued and a new application is required to proceed and the development regulations in effect at the time permit processing is resumed shall apply to the new application.	
Signature:	Date: 5/9/2023
Printed Name: Michael J. Kane	



2054 KILDAIRE FARM RD, #167 CARY, NC 27518  
www.dcinightllc.com

PROJECT OCEAN - ASR-0110-2022

2051 EAGLE CREST WAY, GARNER, NC 27529

RALEIGH JURISDICTION, ZONING: IH-CU OVERLAY: SHOD-1

COVER SHEET

REVISIONS:  
11/17/2022 - ASR 1st REVIEW  
3/3/2023 - ASR 2nd REVIEW  
5/9/2023 - ASR 3rd REVIEW  
7/12/2023 - ASR 4th REVIEW



209 N SALEM ST, STE 220, APEX, NC 27502  
PH 919 249-8587 FX 919 590-6887  
COPYRIGHT 2023 CAPITAL CIVIL ENGINEERING, PLLC P-0809

DATE  
JULY 12, 2023

ISSUED FOR  
ASR APPROVAL

SHEET NO.

C100



SUB-0011-2021  
Response to Zoning Conditions

Z-2-89

Conditions:

1. Application will not be made to the Board of Adjustment pursuant to section 10-2046(b)(1) for storage yard for unlicensed, uninspected, wrecked, dismantled or partially dismantled automotive vehicles.  
RESPONSE: This is not a planned use of the property and application to the Board of Adjustment will not be made.
2. The reimbursement value of any additional right-of-way along Auburn Church Road shall remain at values in existence prior to rezoning (R-40)\*.  
RESPONSE: Noted.
3. Billboards shall not be erected on any portion of the property.  
RESPONSE: Noted. No billboards will be erected on the property.
4. No more than 10% of the gross land area of the subject property (31.9 acres) shall be devoted to any combination of retail uses, hotel or motel uses.  
RESPONSE: No retail uses, hotel or motel uses are planned for the property.
5. Any development of the property will comply with the provisions of Certified Recommendation 7107 of the City of Raleigh Planning Commission.  
RESPONSE: Per Matt Klem, this provision is not longer applicable, as the UDO stormwater standards surpass those established by this stormwater provision.
6. In the event of the condemnation of an area for Greenway along Big Branch Creek, the area condemned shall remain at values in existence prior to rezoning (R-40)\*.  
RESPONSE: Noted.

\* Residential-40 (Town of Garner zoning) is the equivalent of Rural Residential (City of Raleigh zoning).

Z-3-89

Conditions:

1. Application will not be made to the Board of Adjustment pursuant to section 10-2046(b)(1) for storage yard for unlicensed, uninspected, wrecked, dismantled or partially dismantled automotive vehicles.  
RESPONSE: This is not a planned use of the property and application to the Board of Adjustment will not be made.
2. The reimbursement value of any additional right-of-way along Auburn Church Road shall remain at values in existence prior to rezoning (Residential-4).  
RESPONSE: Noted.
3. Billboards shall not be erected on any portion of the property.  
RESPONSE: Noted. No billboards will be erected on the property.
4. No more than 10% of the gross land area of the subject property (22.5 acres) shall be devoted to any combination of retail uses, hotel or motel uses.  
RESPONSE: No retail uses, hotel or motel uses are planned for the property.
5. Any development of the property will comply with the provisions of Certified Recommendation 7107 of the City of Raleigh Planning Commission.  
RESPONSE: Per Matt Klem, this provision is not longer applicable, as the UDO stormwater standards surpass those established by this stormwater provision.
6. In the event of the condemnation of an area for Greenway along Big Branch Creek, the area condemned shall remain at values in existence prior to rezoning (Residential-4).  
RESPONSE: Noted.



**WASTE MANAGEMENT**  
10411 Globe Road  
Morrisville, NC 27560  
(919) 455-1440  
(919) 455-9337 Fax

To Whom It May Concern:

Project Ocean is a customer of WM at many locations. We will provide garbage service to them in any of the Wake County area.

Please contact me if you have any questions, Amber Abercrombie, 334-919-452-1057 or [aaabercro@wm.com](mailto:aaabercro@wm.com)

Sincerely,

Amber Abercrombie  
WM Senior Account Executive  
South Atlantic Region



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www.dcinightllc.com

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2051 EAGLE CREST WAY, GARNER, NC 27529

RALEIGH JURISDICTION, ZONING: IH-CU OVERLAY: SHOD-1

ZONING CONDITIONS

REVISIONS:  
11/17/2022 - ASR 1st REVIEW  
3/13/2023 - ASR 2nd REVIEW  
5/9/2023 - ASR 3rd REVIEW  
7/12/2023 - ASR 4th Review



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DATE  
JULY 12, 2023

ISSUED FOR  
ASR APPROVAL

SHEET NO.

C101









**LEGEND**

PROPERTY LINE  
ADJOINING PROPERTY LINE  
FEMA FLOODWAY  
1% ANNUAL FLOOD  
WETLANDS

EXISTING WATER LINE  
EXISTING SANITARY SERVICE  
EXISTING CONTOUR 1'  
EXISTING CONTOUR 5'



Development &  
Construction Insight, LLC

2054 KILDAKE FARM RD., #167 CARY, NC 27518  
www.dcinightllc.com

PROJECT OCEAN - ASR-0110-2022

2051 EAGLE CREST WAY, GARNER, NC 27529

RALEIGH JURISDICTION, ZONING: IH-CU OVERLAY: SHOD-1

EXISTING CONDITIONS

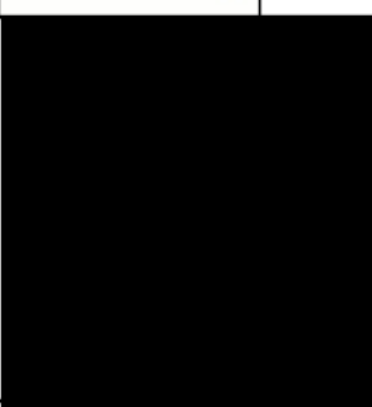
REVISIONS

11/17/2022	- ASR 1st REVIEW
3/13/2023	- ASR 2nd REVIEW
5/9/2023	- ASR 3rd REVIEW
7/12/2023	- ASR 4th Review



CAPITAL CIVIL ENGINEERING -

209 N SALEM ST, STE 220, APEX, NC 27502  
PH 919 249-8387 FX 919 590-6887  
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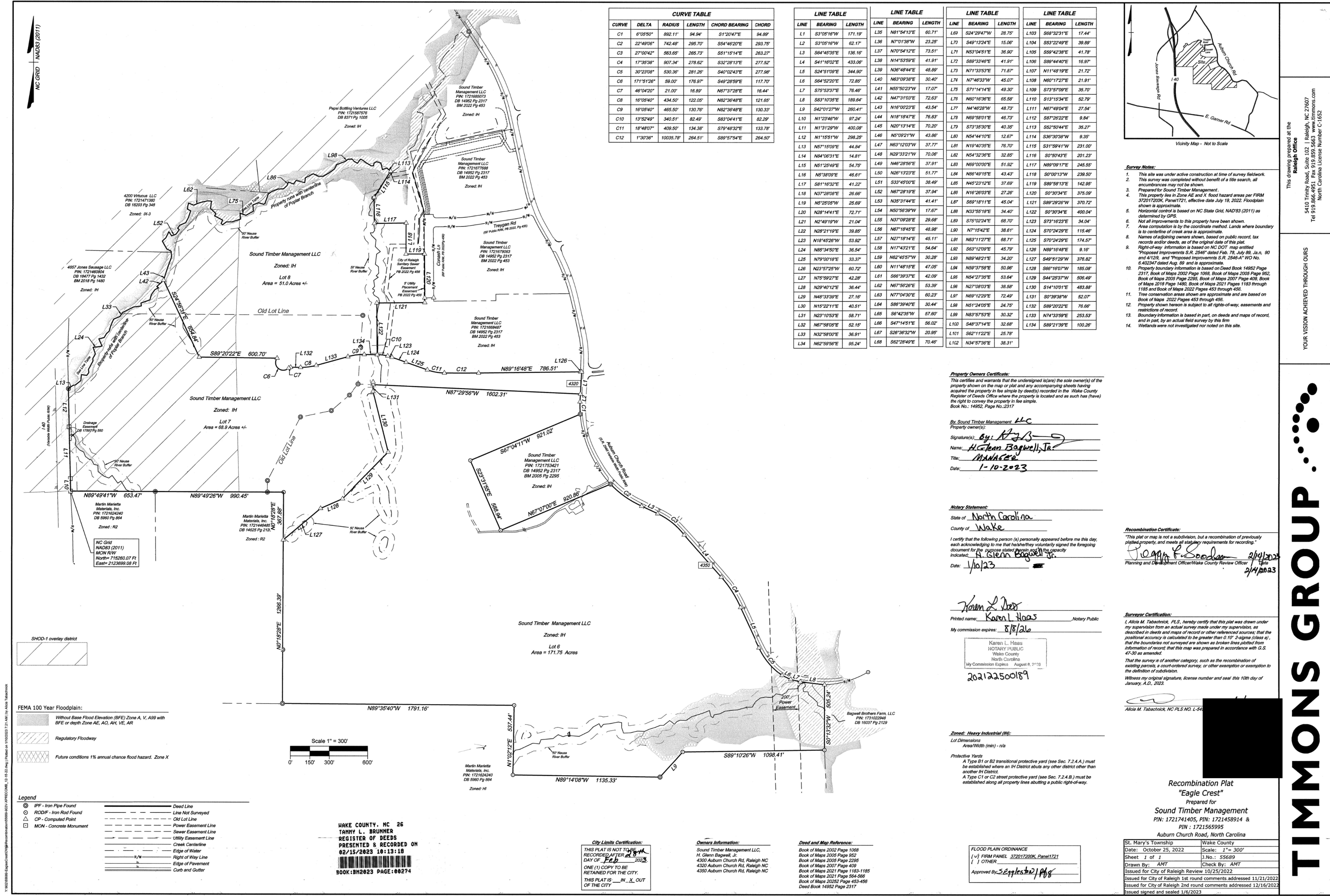
DATE  
JULY 12, 2023

ISSUED FOR  
ASR APPROVAL

SHEET NO.

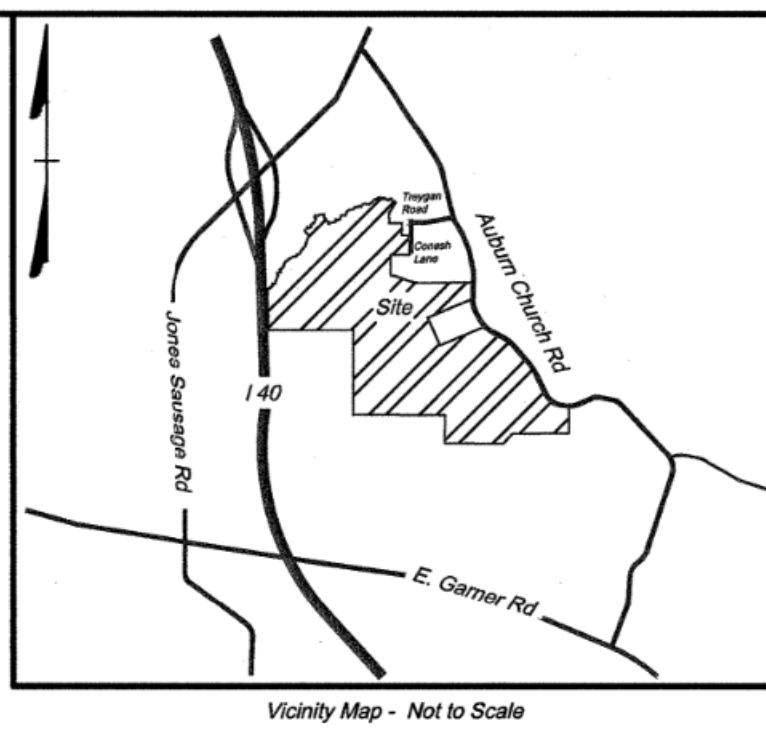
C103





CURVE TABLE					
CURVE	DELTA	RADIUS	LENGTH	CHORD BEARING	CHORD
C1	6°05'50"	892.11'	94.94'	S1°20'47"E	94.89'
C2	22°49'06"	742.48'	295.70'	S54°48'20"E	293.75'
C3	27°00'42"	563.65'	265.73'	S51°16'14"E	263.27'
C4	17°35'38"	907.34'	278.62'	S32°28'13"E	277.52'
C5	30°23'08"	530.36'	281.26'	S40°02'43"E	277.98'
C6	171°51'26"	59.00'	176.97'	S49°28'59"E	117.70'
C7	46°04'20"	21.00'	16.89'	N87°37'28"E	16.44'
C8	16°05'40"	434.50'	122.05'	N82°36'48"E	121.65'
C9	16°05'40"	465.50'	130.76'	N82°36'48"E	130.33'
C10	13°52'49"	340.51'	82.49'	S83°04'41"E	82.29'
C11	18°48'07"	409.50'	134.38'	S79°48'32"E	133.78'
C12	1°30'36"	10035.78'	264.51'	S89°57'54"E	264.50'

LINE TABLE			LINE TABLE			LINE TABLE			LINE TABLE		
LINE	BEARING	LENGTH	LINE	BEARING	LENGTH	LINE	BEARING	LENGTH	LINE	BEARING	LENGTH
L1	S3°05'16"W	171.19'	L35	N81°54'13"E	60.71'	L69	S24°29'47"W	28.75'	L103	S68°32'31"E	17.44'
L2	S3°05'16"W	62.17'	L36	N7°01'38"W	23.25'	L70	S49°13'24"E	15.06'	L104	S53°22'49"E	39.89'
L3	S64°45'35"E	136.16'	L37	N7°04'12"E	73.51'	L71	N53°04'51"E	36.90'	L105	S59°42'38"E	41.78'
L4	S41°16'02"E	433.06'	L38	N14°53'59"E	41.91'	L72	S89°33'46"E	41.91'	L106	S89°44'40"E	16.97'
L5	S24°51'09"E	344.90'	L39	N36°48'44"E	48.89'	L73	N71°33'53"E	71.87'	L107	N11°48'19"E	21.72'
L6	S64°52'20"E	72.85'	L40	N63°09'38"E	30.40'	L74	N7°46'33"W	45.07'	L108	N60°17'27"E	21.91'
L7	S75°53'37"E	76.46'	L41	N55°50'23"W	17.07'	L75	S71°14'14"E	49.30'	L109	S73°57'09"E	35.70'
L8	S83°10'35"E	189.64'	L42	N47°31'03"E	72.63'	L76	N60°16'36"E	65.58'	L110	S13°15'34"E	52.79'
L9	S42°01'12"W	260.41'	L43	N16°00'23"E	43.54'	L77	N4°46'28"W	48.73'	L111	N67°49'04"E	27.54'
L10	N1°23'46"W	97.24'	L44	N18°18'47"E	76.83'	L78	N69°58'01"E	46.73'	L112	S87°26'22"E	9.84'
L11	N1°31'29"W	400.08'	L45	N20°13'14"E	70.20'	L79	S73°35'30"E	40.35'	L113	S52°50'44"E	35.27'
L12	N1°15'51"W	298.25'	L46	N5°09'21"W	43.86'	L80	N54°44'10"E	12.67'	L114	S36°30'38"W	9.35'
L13	N57°15'09"E	44.84'	L47	N63°12'03"W	37.77'	L81	N19°40'35"E	76.70'	L115	S31°59'41"W	231.00'
L14	N64°06'31"E	14.81'	L48	N29°33'21"W	70.06'	L82	N54°32'36"E	32.85'	L116	S0°50'43"E	201.23'
L15	N61°25'49"E	54.75'	L49	N46°28'56"E	37.91'	L83	N69°00'00"E	51.92'	L117	N89°09'17"E	245.55'
L16	N5°38'09"E	46.61'	L50	N26°13'23"E	51.77'	L84	N86°48'15"E	43.43'	L118	S0°00'13"W	239.50'
L17	S81°16'32"E	41.22'	L51	S33°45'00"E	36.49'	L85	N45°23'12"E	37.69'	L119	S89°58'13"E	142.95'
L18	N37°28'08"E	26.66'	L52	N67°28'19"E	37.94'	L86	N16°26'03"E	27.26'	L120	S0°30'34"E	375.09'
L19	N5°25'05"W	25.69'	L53	N35°31'44"E	41.41'	L87	S69°18'11"E	45.04'	L121	S89°29'28"W	370.72'
L20	N28°14'41"E	72.71'	L54	N50°56'39"W	17.67'	L88	N33°55'18"E	34.40'	L122	S0°30'34"E	400.04'
L21	N2°49'19"W	21.04'	L55	N37°09'28"E	28.68'	L89	S78°02'24"E	68.70'	L123	S73°16'23"E	34.04'
L22	N28°21'19"E	38.85'	L56	N67°18'45"E	48.98'	L90	N7°15'42"E	38.61'	L124	S70°24'29"E	115.46'
L23	N18°45'26"W	53.92'	L57	N27°18'14"E	45.11'	L91	N63°11'27"E	68.71'	L125	S70°24'29"E	174.57'
L24	N85°34'50"E	36.54'	L58	N17°43'21"E	54.64'	L92	S63°12'09"E	45.79'	L126	N89°16'48"E	9.16'
L25	N79°00'18"E	33.37'	L59	N62°45'57"W	30.28'	L93	N89°48'21"E	34.20'	L127	S49°51'29"W	378.82'
L26	N23°57'25"W	60.72'	L60	N11°48'15"E	47.05'	L94	N59°37'58"E	50.96'	L128	S66°16'07"W	185.08'
L27	N75°59'27"E	42.28'	L61	S66°39'37"E	42.09'	L95	N54°27'35"E	53.64'	L129	S44°25'37"W	506.49'
L28	N29°40'12"E	36.44'	L62	N67°56'26"E	53.39'	L96	N27°08'03"E	38.58'	L130	S14°10'01"E	483.88'
L29	N48°33'39"E	27.16'	L63	N77°04'30"E	60.23'	L97	N69°12'29"E	72.49'	L131	S0°39'38"W	52.07'
L30	N15°22'11"E	40.51'	L64	S88°39'40"E	30.44'	L98	N51°24'05"E	24.75'	L132	S89°20'22"E	76.66'
L31	N23°10'53"E	58.71'	L65	S6°42'35"W	57.60'	L99	N83°57'53"E	30.32'	L133	N74°33'59"E	253.53'
L32	N67°58'05"E	52.15'	L66	S47°14'51"E	56.02'	L100	S48°37'14"E	32.68'	L134	S89°21'39"E	100.26'
L33	N32°58'00"E	36.91'	L67	S26°36'32"W	20.95'	L101	S62°11'22"E	25.78'			
L34	N62°59'56"E	95.24'	L68	S62°28'49"E	70.46'	L102	N34°57'36"E	38.31'			



- Survey Notes:**
- This site was under active construction at time of survey fieldwork.
  - This survey was completed without benefit of a title search, all encumbrances may not be shown.
  - Prepared for Sound Timber Management.
  - This property lies in Zone AE and X flood hazard areas per FIRM 372017200K, Panel 1721, effective date July 19, 2022. Floodplain shown is approximate.
  - Horizontal control is based on NC State Grid, NAD83 (2011) as determined by GPS.
  - Not all improvements to this property have been shown.
  - Area computation is by the coordinate method. Lands where boundary is to centerline of creek area is approximate.
  - Names of adjoining owners shown, based on public record, tax records and/or deeds, as of the original date of this plat.
  - Right-of-way information is based on NC DOT map entitled "Proposed Improvements S.R. 2546" dated Feb. 78, July 88, Jan. 90 and 4/129, and "Proposed Improvements S.R. 2546-A" W.O. No. 6402347 dated Aug. 89 and is approximate.
  - Property boundary information is based on Deed Book 14952 Page 2317, Book of Maps 2002 Page 1068, Book of Maps 2003 Page 952, Book of Maps 2005 Page 2295, Book of Maps 2007 Page 409, Book of Maps 2018 Page 1480, Book of Maps 2021 Page 1183 through 1185 and Book of Maps 2022 Pages 453 through 456.
  - Tree conservation areas shown are approximate and are based on Book of Maps 2022 Pages 453 through 456.
  - Property shown hereon is subject to all rights-of-way, easements and restrictions of record.
  - Boundary information is based in part, on deeds and maps of record, and in part, by an actual field survey by this firm.
  - Wetlands were not investigated nor noted on this site.

**Property Owners Certificate:**  
This certifies and warrants that the undersigned is/are the sole owner(s) of the property shown on the map or plat and any accompanying sheets having acquired the property in fee simple by deed(s) recorded in the Wake County Register of Deeds Office where the property is located and as such has/have the right to convey the property in fee simple.  
Book No.: 14952, Page No.: 2317

**By Sound Timber Management LLC**  
Property owner(s):  
Signature(s): *[Signature]*  
Name: *Alan Bagwell, Jr.*  
Title: *MANAGER*  
Date: *1-10-2023*

**Notary Statement:**  
State of *North Carolina*  
County of *Wake*  
I certify that the following person (s) personally appeared before me this day, each acknowledging to me that he/she/they voluntarily signed the foregoing document for the purpose stated and as such has/have the capacity indicated:  
*Alan Bagwell, Jr.*  
Date: *1/10/23*

**Recombination Certificate:**  
"This plat or map is not a subdivision, but a recombination of previously platted property, and meets all statutory requirements for recording."  
*[Signature]* *2/4/2023*  
Planning and Development Officer/Wake County Review Officer

*[Signature]*  
Printed name: *Karen L. Hoas*, Notary Public  
My commission expires: *8/8/26*  
Karen L. Hoas  
NOTARY PUBLIC  
Wake County  
North Carolina  
My Commission Expires August 8, 2026  
202122500189

**Surveyor Certification:**  
I, Alicia M. Tabachnick, PLS, hereby certify that this plat was drawn under my supervision from an actual survey made under my supervision, as described in deeds and maps of record or other referenced sources; that the positional accuracy is calculated to be greater than 1" 2" sigma (less or), that the boundaries not surveyed are shown as broken lines plotted from information of record; that this map was prepared in accordance with G.S. 47-30 as amended.  
That the survey is of another category, such as the recombination of existing parcels, a court-ordered survey, or other exemption or exception to the definition of subdivision.  
Witness my original signature, license number and seal this 10th day of January, A.D., 2023.  
*[Signature]*  
Alicia M. Tabachnick, NC PLS NO. L-54

**Zoned: Heavy Industrial (IH):**  
Lot Dimensions:  
Area/Width (min) - n/a  
Protective Yards:  
A Type B1 or B2 transitional protective yard (see Sec. 2.2.4.A) must be established where an IH District abuts any other district other than another IH District.  
A Type C1 or C2 street protective yard (see Sec. 2.2.4.B) must be established along all property lines abutting a public right-of-way.

**Recombination Plat**  
"Eagle Crest"  
Prepared for  
Sound Timber Management  
PIN: 1721741405, PIN: 1721458914 &  
PIN: 1721565995  
Auburn Church Road, North Carolina

St. Mary's Township Wake County  
Date: October 25, 2022 Scale: 1"= 300'  
Sheet 1 of 1 J.No.: 55689  
Drawn By: AMT Check By: AMT  
Issued for City of Raleigh Review 10/25/2022  
Issued for City of Raleigh 1st round comments addressed 11/21/2022  
Issued for City of Raleigh 2nd round comments addressed 12/16/2022  
Issued signed and sealed 1/6/2023

**Legend**

- IPF - Iron Pipe Found
- RODF - Iron Rod Found
- CP - Computed Point
- MON - Concrete Monument
- Dead Line
- Line Not Surveyed
- Old Lot Line
- Power Easement Line
- Sewer Easement Line
- Utility Easement Line
- Creek Centerline
- Edge of Water
- Right of Way Line
- Edge of Pavement
- Curb and Gutter

**FEMA 100 Year Floodplain:**

- Without Base Flood Elevation (BFE) Zone A, V, A99 with BFE or depth Zone AE, AO, AH, VE, AR
- Regulatory Floodway
- Future conditions 1% annual chance flood hazard, Zone X

**SHOD-1 overlay district**

**Scale 1" = 300'**

**WAKE COUNTY, NC 26**  
**TAMMY L. BRUNNER**  
**REGISTER OF DEEDS**  
**PRESENTED & RECORDED ON**  
**02/15/2023 10:13:18**  
**BOOK: BH2023 PAGE: 00274**

**City Limits Certification:**  
THIS PLAT IS NOT TO BE RECORDED AFTER 2023 DAY OF Feb 2023  
ONE (1) COPY TO BE RETAINED FOR THE CITY. THIS PLAT IS IN X OUT OF THE CITY

**Owners Information:**  
Sound Timber Management LLC,  
H. Glenn Bagwell, Jr.,  
4300 Auburn Church Rd, Raleigh NC  
4320 Auburn Church Rd, Raleigh NC  
4350 Auburn Church Rd, Raleigh NC

**Deed and Map References:**  
Book of Maps 2002 Page 1068  
Book of Maps 2003 Page 952  
Book of Maps 2005 Page 2295  
Book of Maps 2007 Page 409  
Book of Maps 2021 Page 1183-1185  
Book of Maps 2021 Page 564-566  
Book of Maps 2022 Page 453-456  
Deed Book 14952 Page 2317

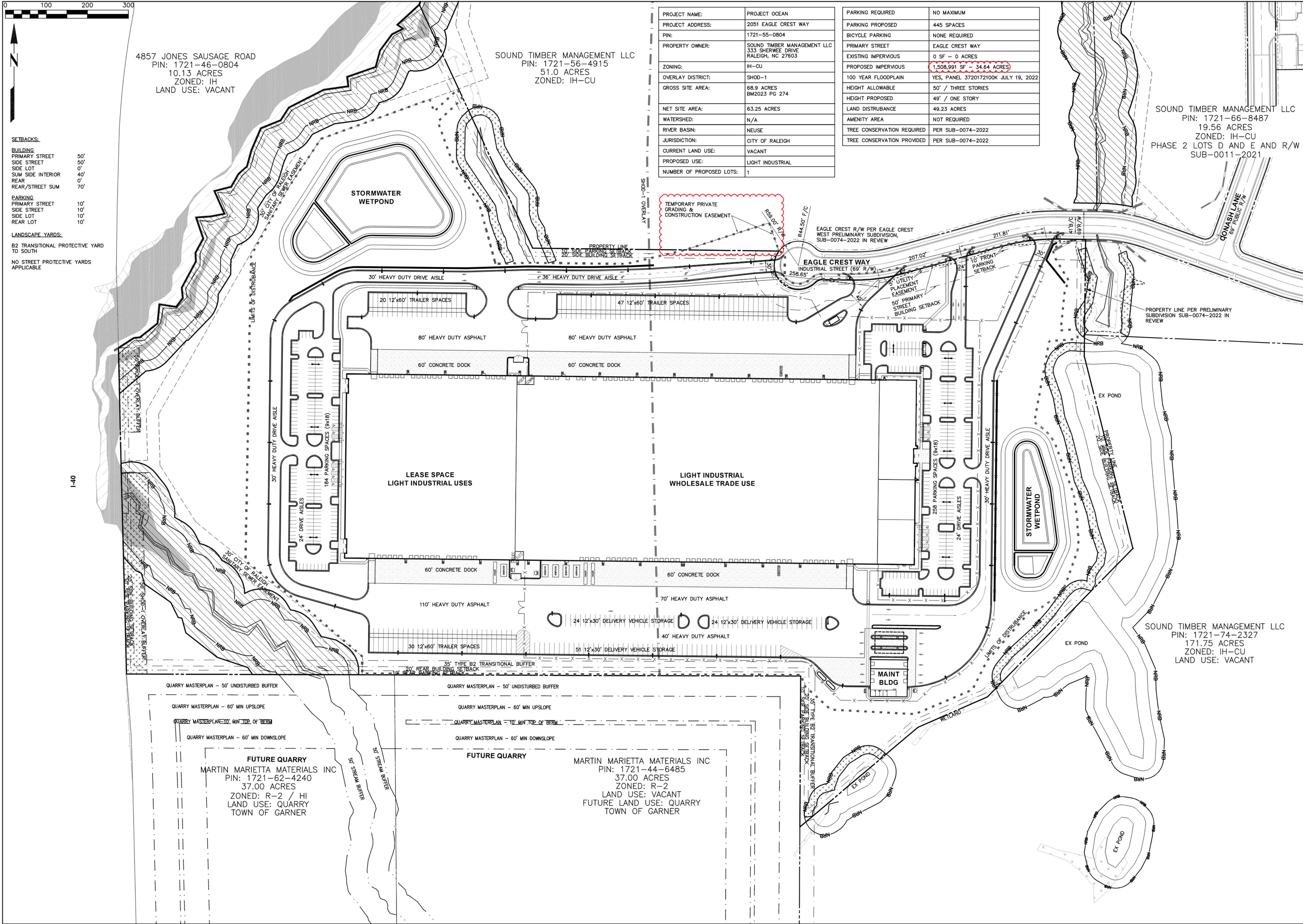
**FLOOD PLAIN ORDINANCE**  
[X] FIRM PANEL 372017200K, Panel 1721  
[ ] OTHER  
Approved By: *[Signature]*

This drawing prepared at the  
**Timmons Group**  
5410 Trinity Road, Suite 102 | Raleigh, NC 27607  
Tel 919 856 4951 Fax 919 859 5663 www.timmons.com  
North Carolina License Number C-1652

YOUR VISION ACHIEVED THROUGH OURS

**TIMMONS GROUP**





PROJECT NAME:	PROJECT OCEAN
PROJECT ADDRESS:	2051 EAGLE CREST WAY
PIN:	1721-55-0804
PROPERTY OWNER:	SOUND TIMBER MANAGEMENT LLC 333 SHERWEE DRIVE RALEIGH, NC 27603
ZONING:	IH-CU
OVERLAY DISTRICT:	SHOD-1
GROSS SITE AREA:	68.9 ACRES BM2023 PG 274
NET SITE AREA:	63.25 ACRES
WATERSHED:	N/A
RIVER BASIN:	NEUSE
JURISDICTION:	CITY OF RALEIGH
CURRENT LAND USE:	VACANT
PROPOSED USE:	LIGHT INDUSTRIAL
NUMBER OF PROPOSED LOTS:	1

PARKING REQUIRED	NO MAXIMUM
PARKING PROPOSED	445 SPACES
BICYCLE PARKING	NONE REQUIRED
PRIMARY STREET	EAGLE CREST WAY
EXISTING IMPERVIOUS	0 SF - 0 ACRES
PROPOSED IMPERVIOUS	1,508,991 SF - 34.64 ACRES
100 YEAR FLOODPLAIN	YES, PANEL 3720172100K JULY 19, 2022
HEIGHT ALLOWABLE	50' / THREE STORIES
HEIGHT PROPOSED	49' / ONE STORY
LAND DISTURBANCE	49.23 ACRES
AMENITY AREA	NOT REQUIRED
TREE CONSERVATION REQUIRED	PER SUB-0074-2022
TREE CONSERVATION PROVIDED	PER SUB-0074-2022

**SETBACKS:**

**BUILDING**

PRIMARY STREET 50'

SIDE STREET 0'

SIDE LOT 0'

SUM SIDE INTERIOR 40'

REAR 0'

REAR/STREET SUM 70'

**PARKING**

PRIMARY STREET 10'

SIDE STREET 10'

SIDE LOT 10'

REAR LOT 10'

**LANDSCAPE YARDS:**

B2 TRANSITIONAL PROTECTIVE YARD TO SOUTH

NO STREET PROTECTIVE YARDS APPLICABLE

SOUND TIMBER MANAGEMENT LLC  
PIN: 1721-66-8487  
19.56 ACRES  
ZONED: IH-CU  
PHASE 2 LOTS D AND E AND R/W  
SUB-0011-2021

SOUND TIMBER MANAGEMENT LLC  
PIN: 1721-74-2327  
171.75 ACRES  
ZONED: IH-CU  
LAND USE: VACANT

MARTIN MARIETTA MATERIALS INC  
PIN: 1721-44-6485  
37.00 ACRES  
ZONED: R-2  
LAND USE: VACANT  
FUTURE LAND USE: QUARRY  
TOWN OF GARNER

FUTURE QUARRY  
MARTIN MARIETTA MATERIALS INC  
PIN: 1721-62-4240  
37.00 ACRES  
ZONED: R-2 / HI  
LAND USE: QUARRY  
TOWN OF GARNER



2054 KILDARE FARM RD, #167 GARY, NC 27518  
www.dcinights.com

PROJECT OCEAN - ASR-0110-2022

2051 EAGLE CREST WAY, GARNER, NC 27529

RALEIGH JURISDICTION, ZONING: IH-CU OVERLAY: SHOD-1

SITE PLAN OVERVIEW

REVISIONS:  
11/17/2022 - ASR 1st REVIEW  
3/3/2023 - ASR 2nd REVIEW  
5/9/2023 - ASR 3rd REVIEW  
7/12/2023 - ASR 4th REVIEW



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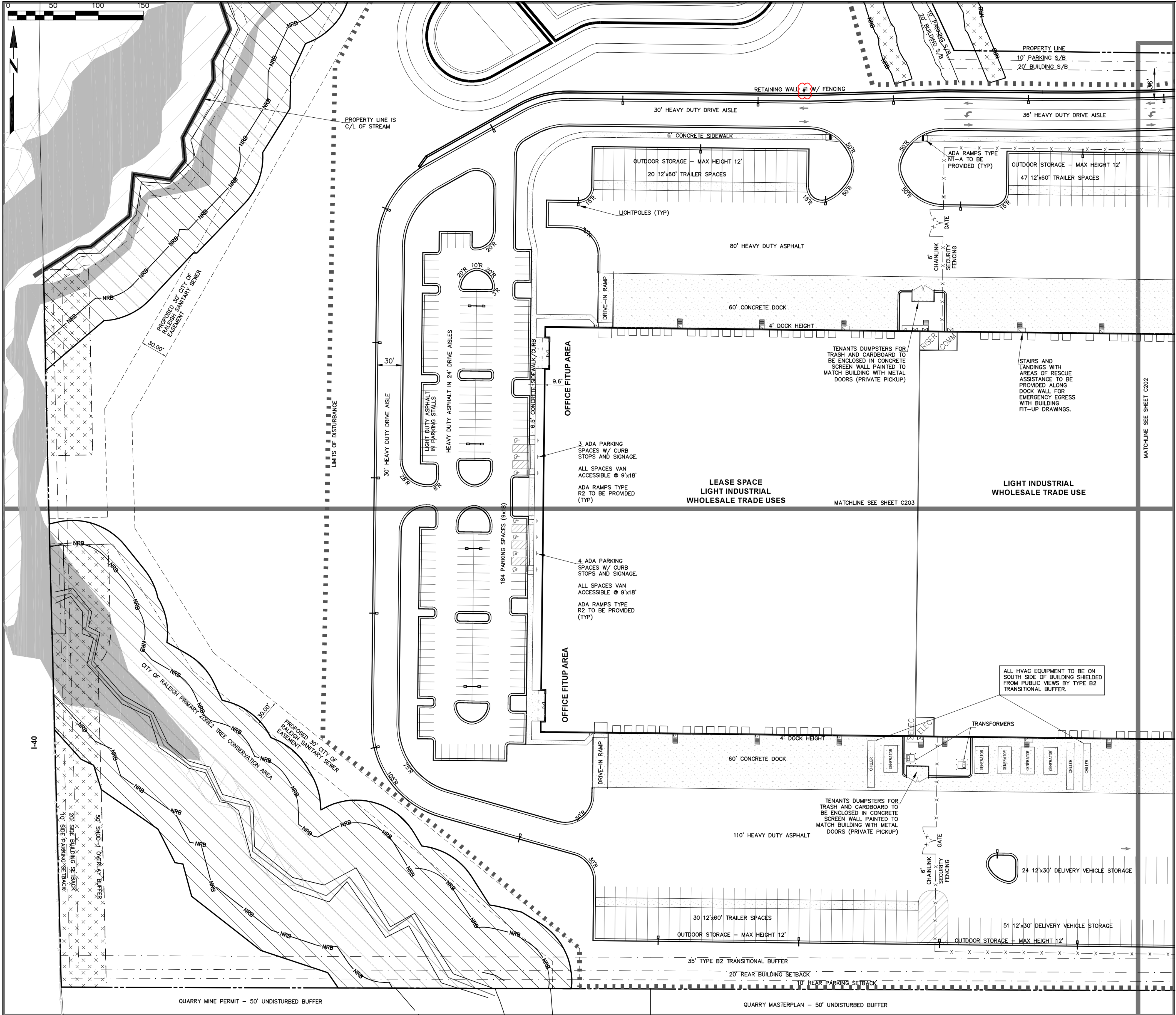
DATE  
JULY 12, 2023

ISSUED FOR  
ASR APPROVAL

SHEET NO.

C200





SITE PLAN NOTES:

1. BOUNDARY SURVEY PROVIDED BY TIMMONS GROUP AND TOPOGRAPHIC SURVEY PROVIDED BY GPI.
2. NO FREE STANDING SIGNS ARE PROPOSED AS PART OF THE DESIGN. IF NEW FREE STANDING SIGNS ARE REQUIRED IN THE FUTURE, IT WILL BE PERMITTED SEPARATELY.
3. ALL DENUDEED AREAS NOT COVERED WITH IMPERVIOUS SURFACE OR NOTED LANDSCAPING TO BE PERMANENTLY SEEDED.
4. CONTRACTOR SHALL SECURE ALL NECESSARY PERMITS FOR CONSTRUCTION SHOWN ON THESE PLANS.
5. ALL DIMENSIONS AND STAKING POINT LOCATIONS ARE TO FACE OF CURB/EDGE OF PAVEMENT UNLESS OTHERWISE NOTED.
6. LOCATIONS FOR EXISTING UTILITIES SHOWN ON THESE PLANS ARE APPROXIMATE, CONTRACTOR SHALL CALL UTILITY LOCATOR TO VERIFY THE LOCATION OF ALL EXISTING UTILITIES.
7. CONTRACTOR SHALL AT ALL TIMES MAINTAIN ADEQUATE SAFETY MEASURES, ACTIVITIES, AND BARRICADES FOR THE PROTECTION OF ALL PERSONS ON OR ABOUT THE LOCATION OF THE SITE.
8. CONTRACTOR SHALL INSTALL SIGNS, AND CONSTRUCT NECESSARY RAMPS, AS PER THE NORTH CAROLINA STATE BUILDING CODE, FOR ALL HANDICAP PARKING SPACES NOTED ON THE PLANS.
9. FOR ALL HANDICAPPED PARKING SPACES, AS PER ADA CODE: 1) REGARDLESS OF AGE, ALL ACCESSIBLE SPACES SHALL BE IDENTIFIED BY ABOVE GROUND SIGNS ONLY; 2) NEW SPACES SHALL NOT USE GROUND-PAINTED SYMBOLS; 3) ACCESSIBLE SPACES ARE REQUIRED TO BE STRIPED OFF ONLY. 4) STRIPING IS WHITE ON DARK PAVEMENT; BLACK ON LIGHT PAVEMENT.
10. INSTALL DIRECTIONAL ARROWS, LANE MARKINGS, "STOP" MESSAGES, ETC. AS SHOWN ON THE PLANS WITH TRAFFIC MARKING PAINT ACCORDING TO THE MANUFACTURER'S SPECIFICATIONS. USE WHITE PAINT.
11. HVAC UNITS THAT ARE ROOF MOUNTED AND SCREENED FROM OFFSITE VIEW
12. ALL CONSTRUCTION TO BE PERFORMED TO CITY OF RALEIGH STANDARDS, SPECIFICATIONS AND DETAILS.
13. RETAINING WALL SHALL BE CONSTRUCTED OF HIGH QUALITY MATERIALS INCLUDING ONE OR A COMBINATION OF THE FOLLOWING: DECORATIVE BLOCK, BRICK, STONE, CAST-STONE, ARCHITECTURAL BLOCK, SPLIT-FACED BLOCK, STUCCO OVER STANDARD CONCRETE MASONRY BLOCK, GLASS BLOCK, WOOD, WROUGHT IRON, COMPOSITE FENCING, WIRE, PVC VINYL, ALUMINUM OR METAL. UDO SECTION 7.2.8.B.1.

LEGEND

- PROPERTY LINE
- FEMA FLOODWAY
- 1% ANNUAL FLOOD
- WETLANDS
- GREENWAY EASEMENT / TREE CONSERVATION AREA - GREENWAY PER SUB-0074-2022
- PRIMARY TCA PER SUB-0074-2022

PROJECT OCEAN - ASR-0110-2022

2051 EAGLE CREST WAY, GARNER, NC 27529

RALEIGH JURISDICTION, ZONING: IH-CU OVERLAY: SHOD-1

SITE PLAN

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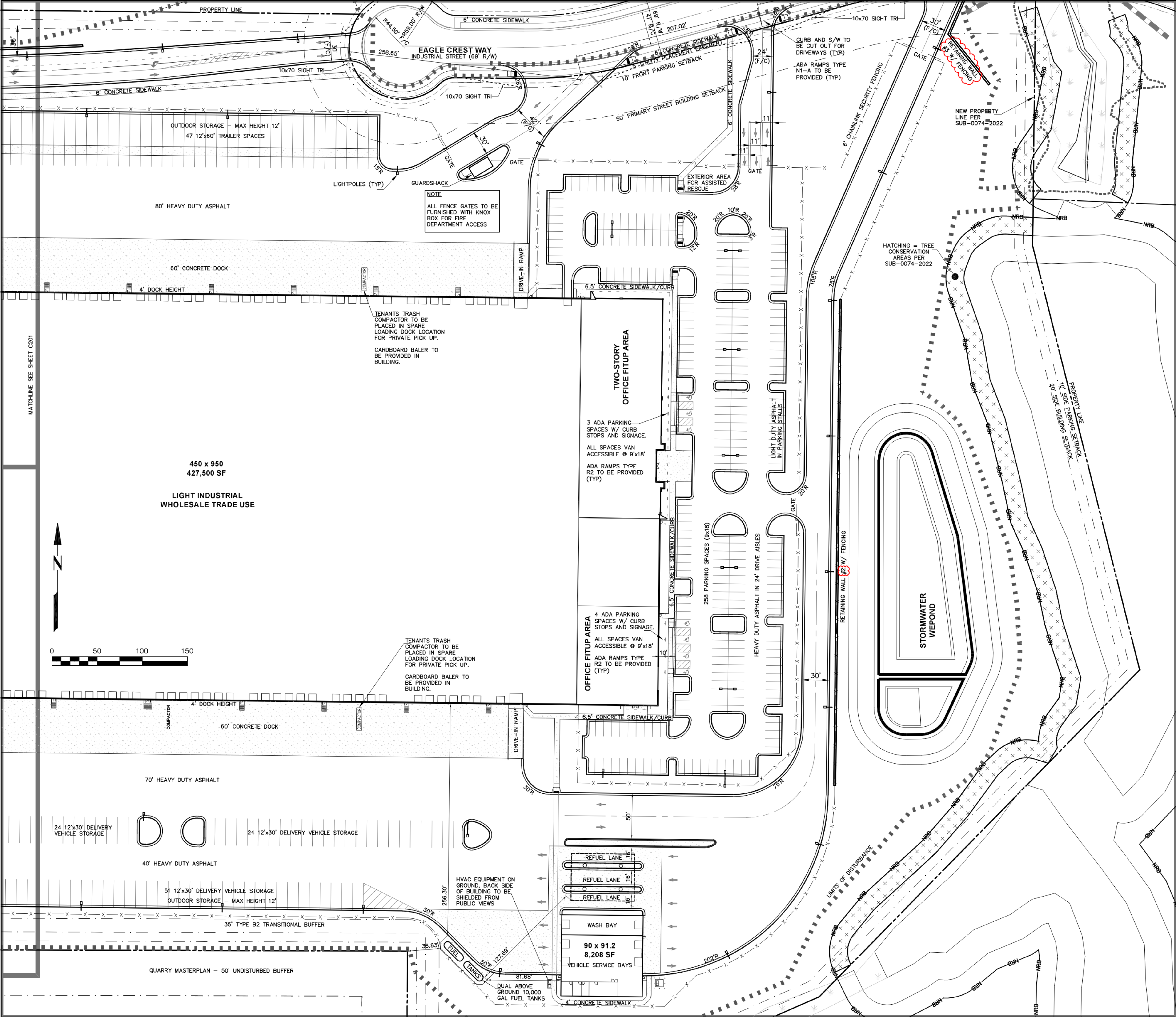
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ASR APPROVAL

SHEET NO.

C201





**LEGEND**

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FEMA FLOODWAY  
1% ANNUAL FLOOD  
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GREENWAY EASEMENT / TREE CONSERVATION AREA - GREENWAY PER SUB-0074-2022  
PRIMARY TCA PER SUB-0074-2022

**DCI**  
Development &  
Construction Insight, LLC  
2054 KILDAKE FARM RD., #167 CARY, NC 27518  
www.dcinightllc.com

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**SITE PLAN**

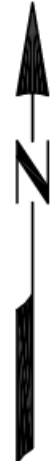
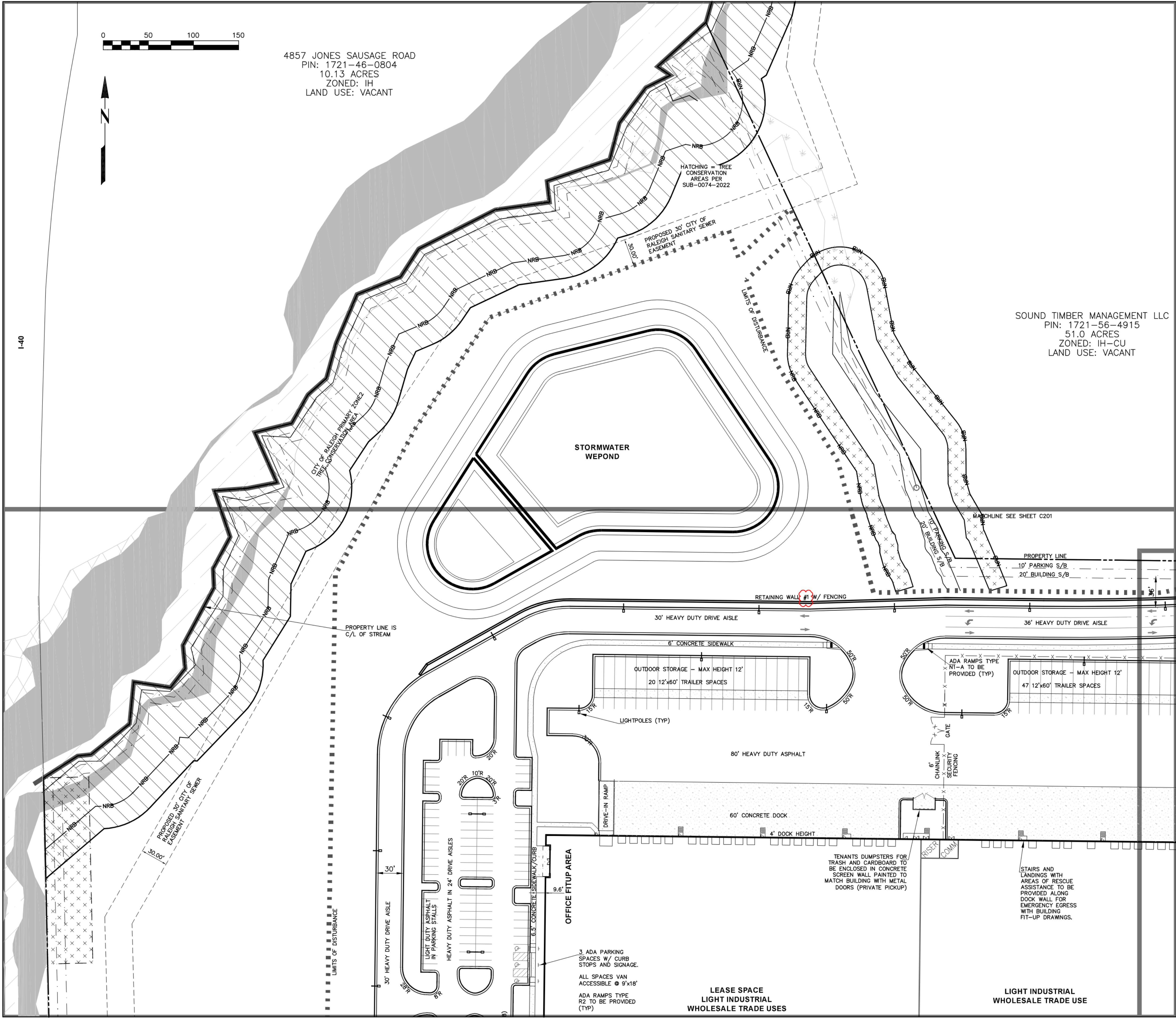
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7/12/2023 - ASR 4th REVIEW

**GCE**  
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JULY 12, 2023  
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SHEET NO.

**C202**





4857 JONES SAUSAGE ROAD  
PIN: 1721-46-0804  
10.13 ACRES  
ZONED: IH  
LAND USE: VACANT

HATCHING = TREE  
CONSERVATION  
AREAS PER  
SUB-0074-2022

PROPOSED 30' CITY OF  
RALEIGH SANITARY SEWER  
EASEMENT

SOUND TIMBER MANAGEMENT LLC  
PIN: 1721-56-4915  
51.0 ACRES  
ZONED: IH-CU  
LAND USE: VACANT

LEGEND

- PROPERTY LINE  
FEMA FLOODWAY  
1% ANNUAL FLOOD  
WETLANDS  
GREENWAY EASEMENT / TREE  
CONSERVATION AREA - GREENWAY  
PER SUB-0074-2022  
PRIMARY TCA  
PER SUB-0074-2022



PROJECT OCEAN - ASR-0110-2022

2051 EAGLE CREST WAY, GARNER, NC 27529

RALEIGH JURISDICTION, ZONING: IH-CU OVERLAY: SHOD-1

SITE PLAN

REVISIONS  
11/17/2022 - ASR 1st REVIEW  
3/3/2023 - ASR 2nd REVIEW  
5/9/2023 - ASR 3rd REVIEW  
7/12/2023 - ASR 4th REVIEW



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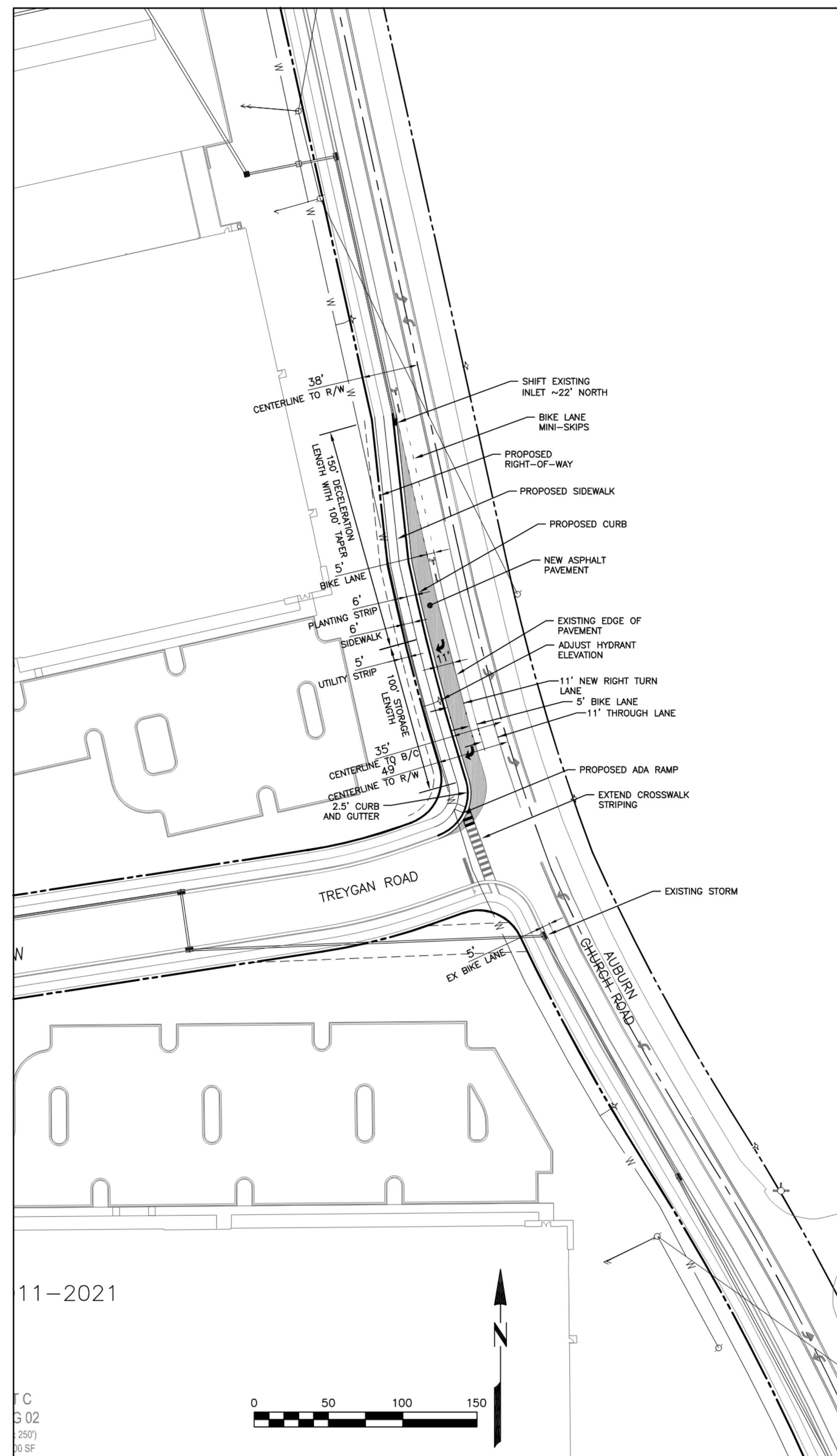
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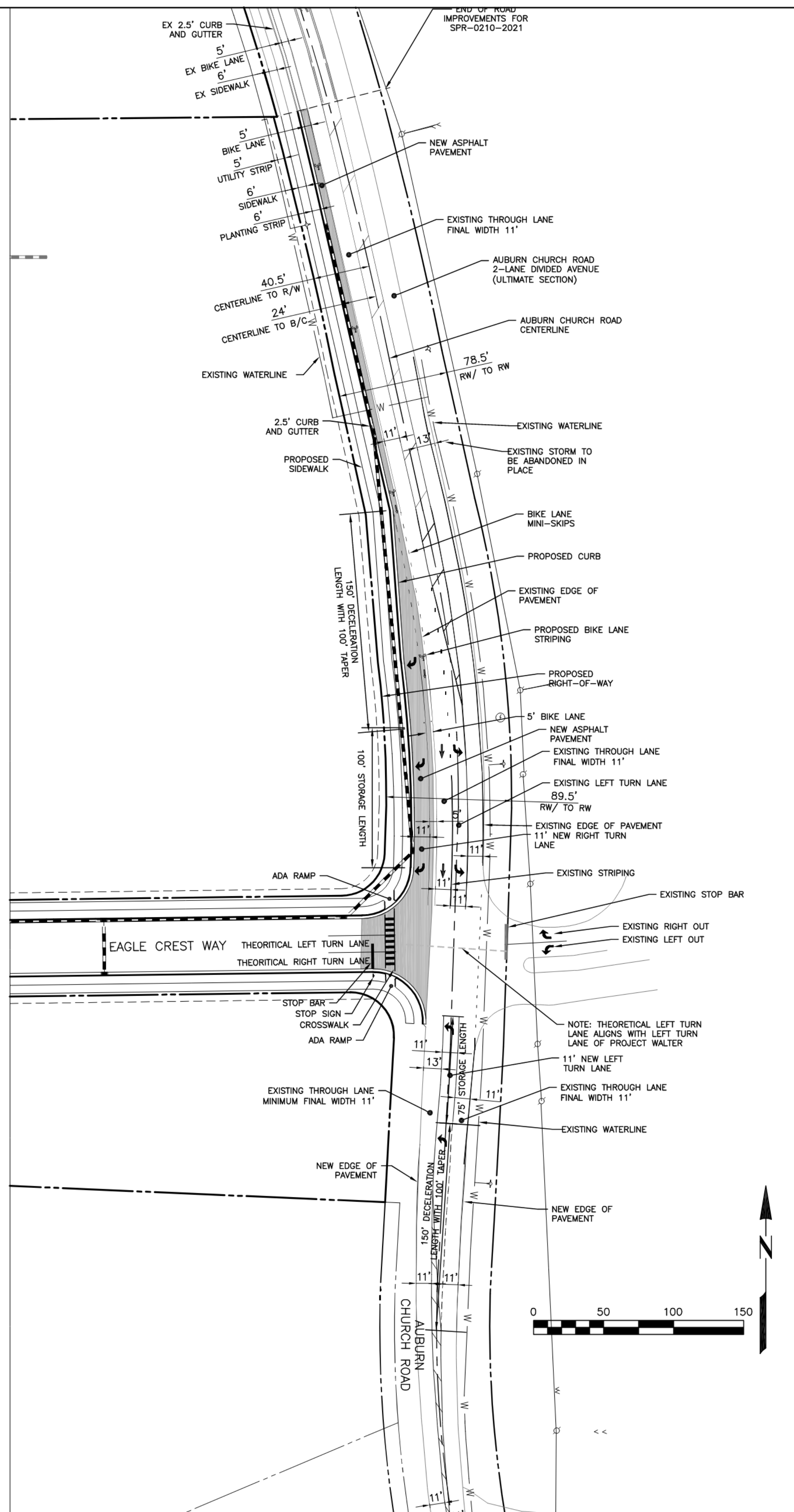
SHEET NO.

C203





## AUBURN CHURCH ROAD AND TREYGAN ROAD INTERSECTION IMPROVEMENTS



**AUBURN CHURCH ROAD AND EAGLE CREST WAY  
INTERSECTION IMPROVEMENTS**

## OFFSITE ROAD IMPROVEMENT SUMMARY

BASED ON A TRAFFIC IMPACT ANALYSIS FOR 'PROJECT OCEAN' FROM TIMMONS GROUP IN OCTOBER, 2022, THE FOLLOW OFFSITE ROAD IMPROVEMENTS ARE REQUIRED AS PART OF THIS PROJECT.

AUBURN CHURCH ROAD AND TREYGAN ROAD (IDENTIFIED AS SITE ACCESS 1 IN TIA.

- A. 100-FOOT SOUTHBOUND RIGHT TURN LANE WITH APPROPRIATE TAPER.
- B. 50-FOOT NORTHBOUND RIGHT TURN LANE WITH APPROPRIATE TAPER.
- C. IMPROVEMENTS ARE SHOWN ON THIS SHEET

AUBURN CHURCH ROAD AND EAGLE CREST WAY (IDENTIFIED AS SITE ACCESS 2 IN TIA.

- A. 50-FOOT SOUTHBOUND RIGHT TURN LANE WITH APPROPRIATE TAPER.  
B. IMPROVEMENTS ARE SHOWN ON THIS SHEET

AUBURN CHURCH ROAD AND EAST GARNER ROAD

- A. 100-FOOT SOUTHBOUND RIGHT TURN LANE WITH APPROPRIATE TAPER.
- B. IMPROVEMENTS ARE NOT SHOWN AND WILL BE PROVIDED IN THE SPR SUBMITTAL.







0 100 200 300



**SITE RETAINING WALLS**

ALL RETAINING WALLS (INCLUDING GEOGRID) SHALL NOT BE LOCATED WITHIN A RIGHT-OF-WAY, BUFFER OR EASEMENT. RETAINING WALL DESIGN DRAWINGS TO BE PERMITTED WITH SITE PERMIT PLANS (SPR) FOR ALL WALLS GREATER THAN 5' IN HEIGHT. 4" BLACK VINYL COATED CHAIN-LINK FENCING TO BE PROVIDED ALONG ALL WALLS THAT ARE GREATER THAN 2.5'. GUARDRAIL TO BE INSTALLED WHEREVER TOP OF WALL IS WITHIN 10' OF PRIVATE DRIVES.

	WALL #1	WALL #2	WALL #3
DISTANCE FROM PUBLIC R/W	295'	311'	8.5'
MAXIMUM WALL HEIGHT	33'	21'	10'
PERMIT REQUIRED	YES	YES	YES

**SITE NOTES:**

- THE SITE IS LOCATED IN THE NEUSE RIVER BASIN
- THE PLACEMENT OF ANY FILL MATERIAL MUST BE CONDUCTED UNDER THE OBSERVATION OF A QUALIFIED LICENSED GEOTECHNICAL TESTING FIRM

**STORMWATER QUANTITY AND QUALITY NOTES:**

SITE AREA: 63.25 ACRES  
IMPERVIOUS AREA: 34.64 ACRES - 54.8%

POST DEVELOPMENT STORMWATER QUANTITY SHALL BE MANAGED BY TWO WET POND THAT WILL DETAIN THE RUNOFF RATES FOR THE 1-YEAR, 2-YEAR AND 10-YEAR STORM EVENTS TO PRE-DEVELOPMENT RUNOFF RATES AS WELL AS PROVIDE POST DEVELOPMENT STORMWATER QUALITY.

**ADA ACCESS NOTES:**

ALL ADA ACCESSIBLE LOCATIONS ARE SHOWN ON THE PLAN. THEY INCLUDE, BUT ARE NOT LIMITED TO: ADA PARKING SPACES, SIDEWALK BETWEEN ADA PARKING SPACES AND MAIN BUILDING ENTRANCE, SIDEWALK BETWEEN MAIN BUILDING ENTRANCE AND PUBLIC RIGHT OF WAY.

ADA PARKING SPACE MAXIMUM SLOPE IN ANY DIRECTION IS 2%. THIS INCLUDES ALL ADA PARKING SPACES AND ACCESS AISLES.

ADA ROUTES MAXIMUM RUNNING SLOPE IS 5% AND MAXIMUM CROSS SLOPE IS 2%.

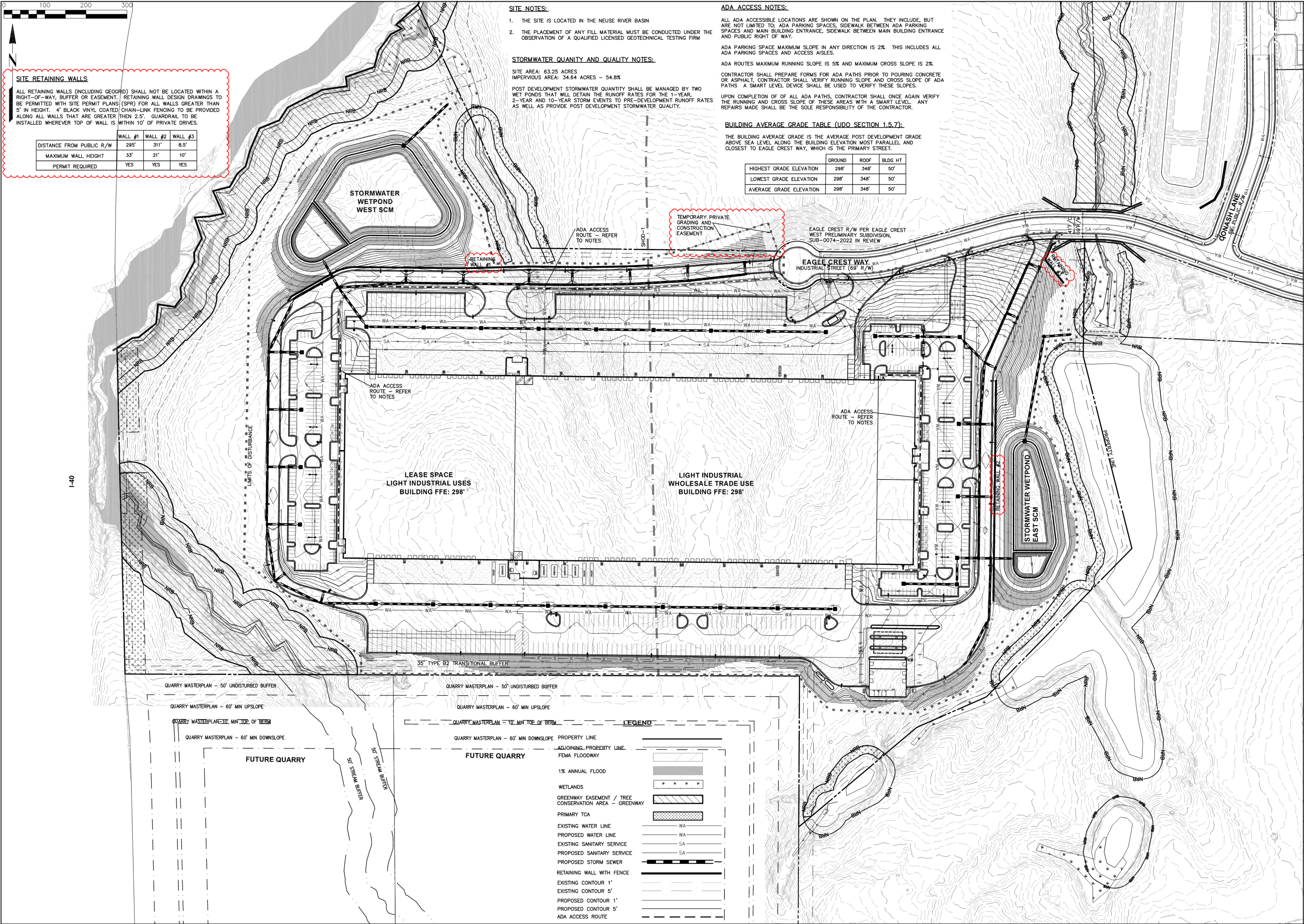
CONTRACTOR SHALL PREPARE FORMS FOR ADA PATHS PRIOR TO POURING CONCRETE OR ASPHALT. CONTRACTOR SHALL VERIFY RUNNING SLOPE AND CROSS SLOPE OF ADA PATHS. A SMART LEVEL DEVICE SHALL BE USED TO VERIFY THESE SLOPES.

UPON COMPLETION OF OF ALL ADA PATHS, CONTRACTOR SHALL ONCE AGAIN VERIFY THE RUNNING AND CROSS SLOPE OF THESE AREAS WITH A SMART LEVEL. ANY REPAIRS MADE SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

**BUILDING AVERAGE GRADE TABLE (UDO SECTION 1.5.7):**

THE BUILDING AVERAGE GRADE IS THE AVERAGE POST DEVELOPMENT GRADE ABOVE SEA LEVEL ALONG THE BUILDING ELEVATION MOST PARALLEL AND CLOSEST TO EAGLE CREST WAY, WHICH IS THE PRIMARY STREET.

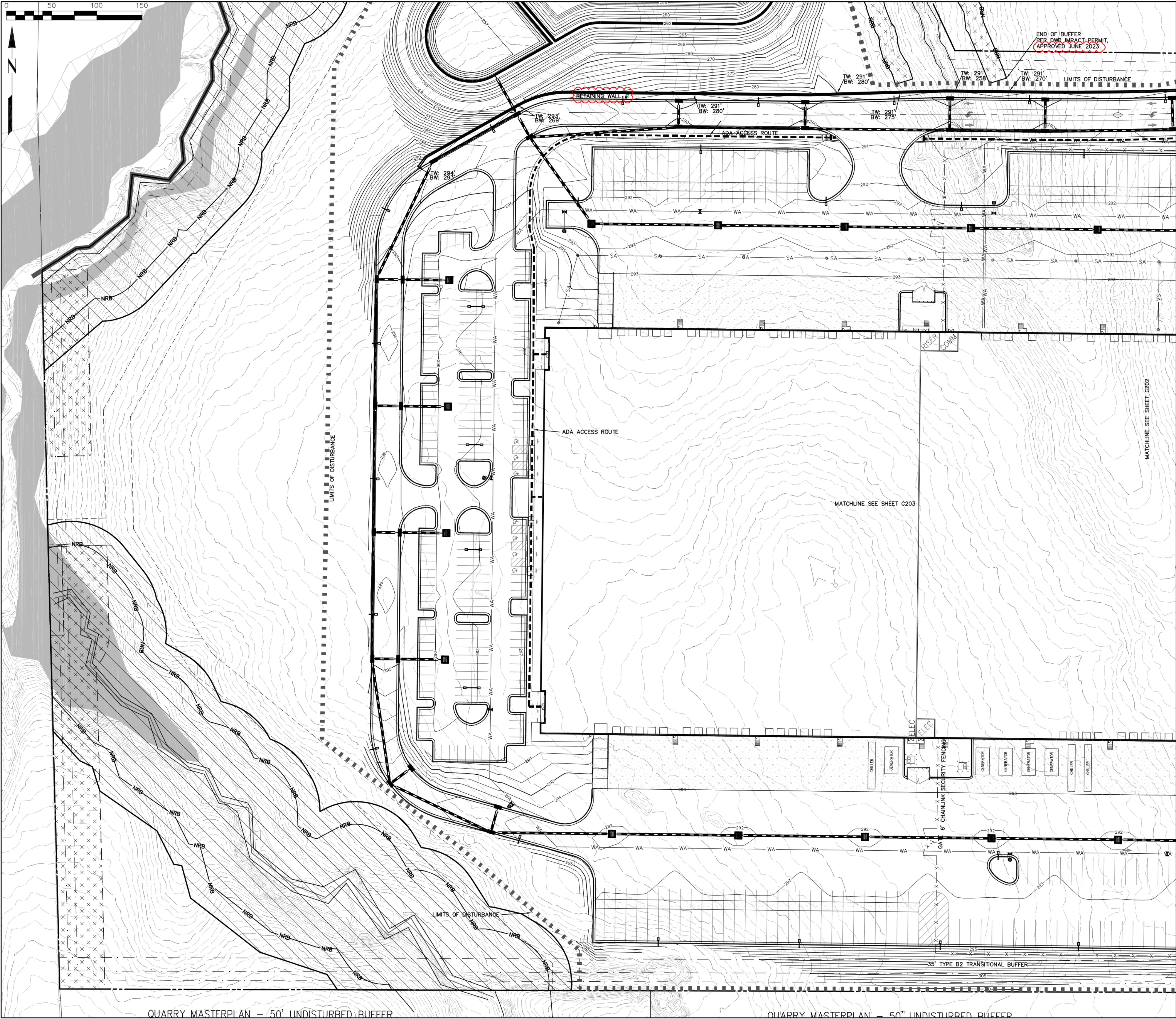
	GROUND	ROOF	BLDG HT
HIGHEST GRADE ELEVATION	298'	348'	50'
LOWEST GRADE ELEVATION	298'	348'	50'
AVERAGE GRADE ELEVATION	298'	348'	50'



**LEGEND**

PROPERTY LINE	---
ADJOINING PROPERTY LINE	---
FEMA FLOODWAY	---
1% ANNUAL FLOOD	---
WETLANDS	---
GREENWAY EASEMENT / TREE CONSERVATION AREA - GREENWAY	---
PRIMARY TCA	---
EXISTING WATER LINE	WA
PROPOSED WATER LINE	WA
EXISTING SANITARY SERVICE	SA
PROPOSED SANITARY SERVICE	SA
PROPOSED STORM SEWER	---
RETAINING WALL WITH FENCE	---
EXISTING CONTOUR 1'	---
EXISTING CONTOUR 5'	---
PROPOSED CONTOUR 1'	---
PROPOSED CONTOUR 5'	---
ADA ACCESS ROUTE	---





LEGEND	
PROPERTY LINE	---
ADJOINING PROPERTY LINE	---
FEMA FLOODWAY	---
1% ANNUAL FLOOD	---
WETLANDS	---
GREENWAY EASEMENT / TREE CONSERVATION AREA - GREENWAY	---
PRIMARY TCA	---
EXISTING WATER LINE	WA
PROPOSED WATER LINE	WA
EXISTING SANITARY SERVICE	SA
PROPOSED SANITARY SERVICE	SA
PROPOSED STORM SEWER	SS
RETAINING WALL WITH FENCE	---
EXISTING CONTOUR 1'	---
EXISTING CONTOUR 5'	---
PROPOSED CONTOUR 1'	---
PROPOSED CONTOUR 5'	---
ADA ACCESS ROUTE	---



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RALEIGH JURISDICTION, ZONING: IH-CU OVERLAY: SHOD-1

GRADING PLAN

REVISIONS

11/17/2022	- ASR 1st REVIEW
3/3/2023	- ASR 2nd REVIEW
5/9/2023	- ASR 3rd REVIEW
7/12/2023	- ASR 4th REVIEW

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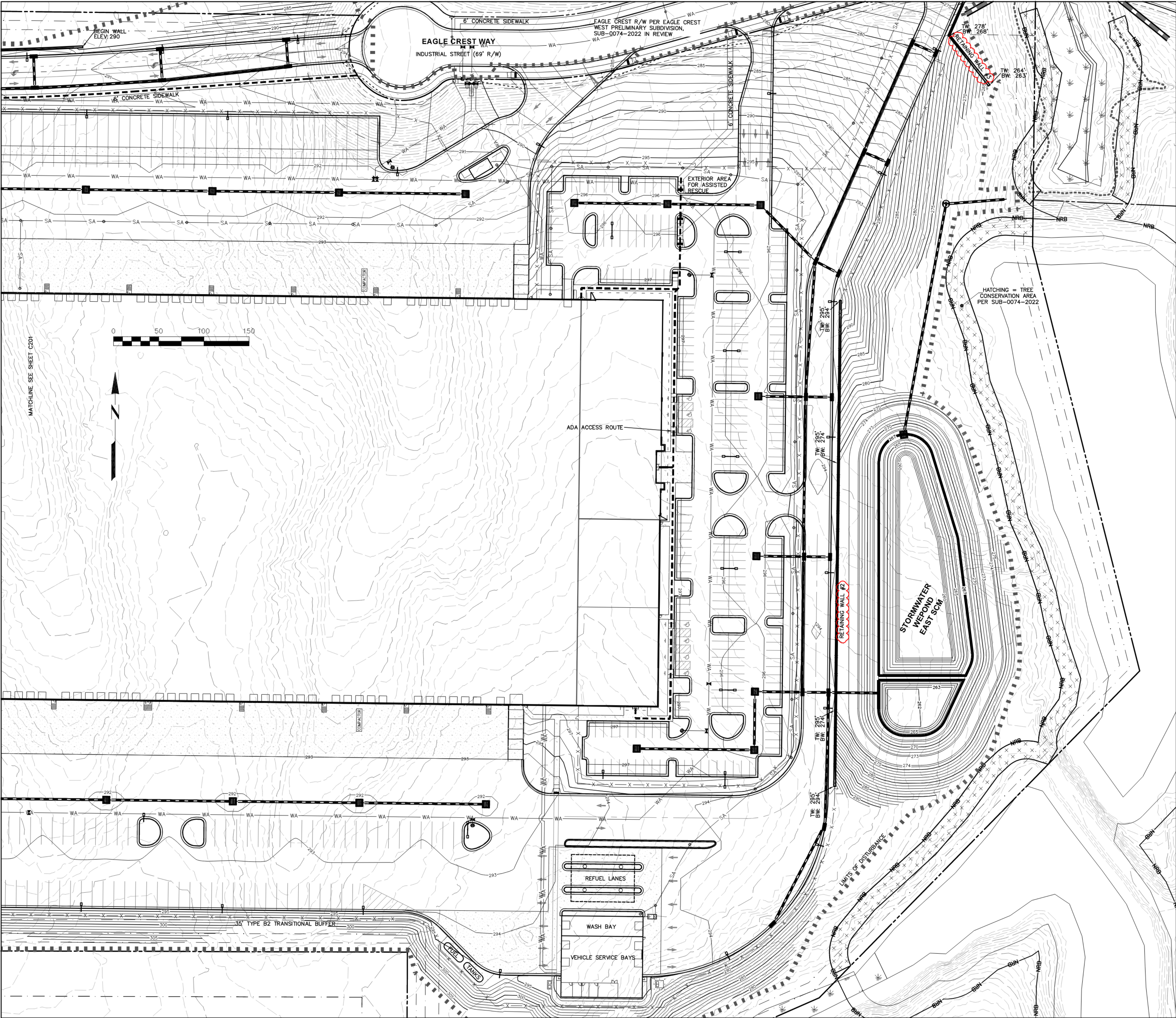
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C301





LEGEND	
PROPERTY LINE	---
ADJOINING PROPERTY LINE	---
FEMA FLOODWAY	---
1% ANNUAL FLOOD	---
WETLANDS	---
GREENWAY EASEMENT / TREE CONSERVATION AREA - GREENWAY	---
PRIMARY TCA	---
EXISTING WATER LINE	WA
PROPOSED WATER LINE	WA
EXISTING SANITARY SERVICE	SA
PROPOSED SANITARY SERVICE	SA
PROPOSED STORM SEWER	---
RETAINING WALL WITH FENCE	---
EXISTING CONTOUR 1'	---
EXISTING CONTOUR 5'	---
PROPOSED CONTOUR 1'	---
PROPOSED CONTOUR 5'	---
ADA ACCESS ROUTE	---



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www.dcinightllc.com

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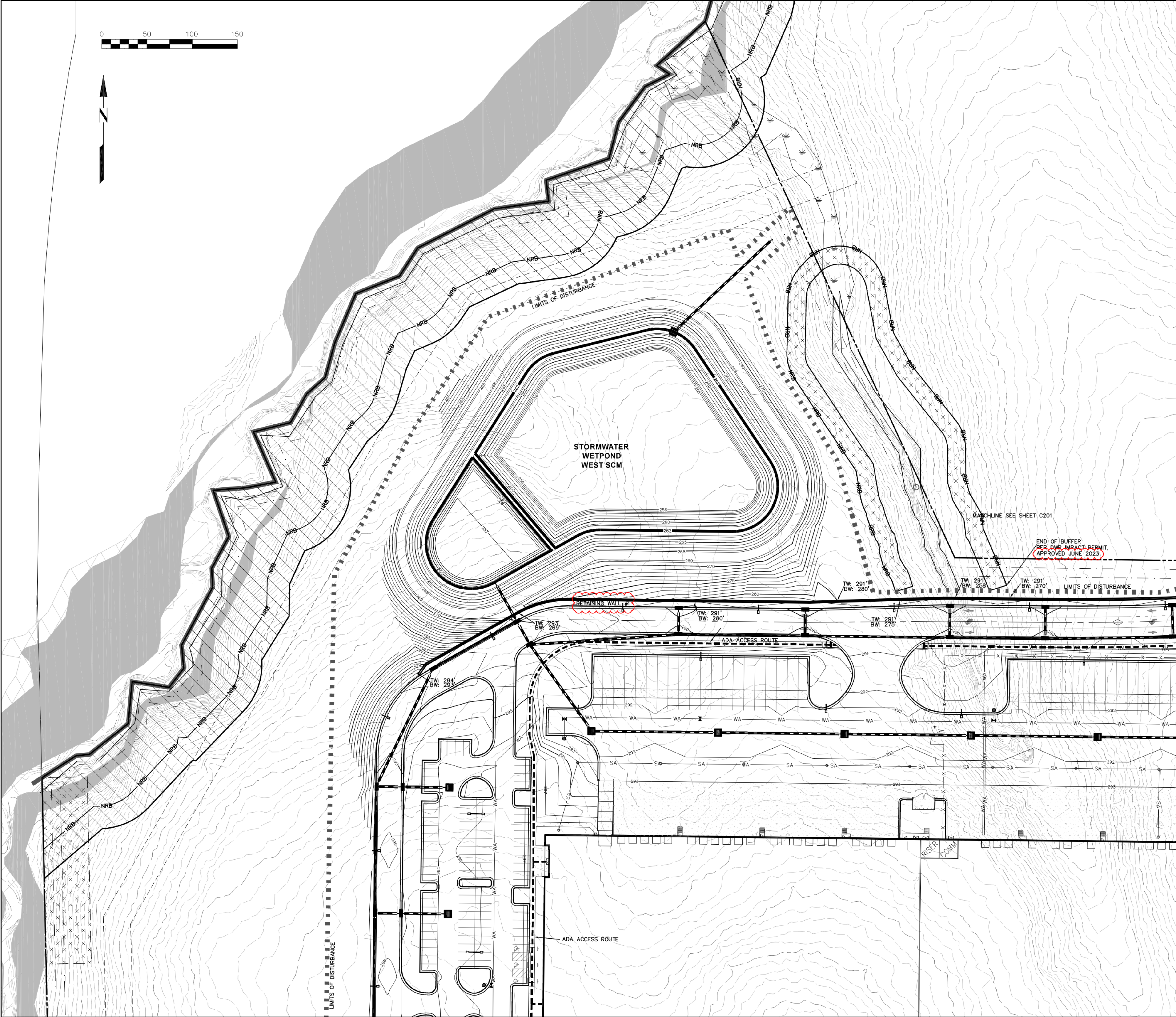
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C302





LEGEND	
PROPERTY LINE	---
ADJOINING PROPERTY LINE	---
FEMA FLOODWAY	---
1% ANNUAL FLOOD	---
WETLANDS	---
GREENWAY EASEMENT / TREE CONSERVATION AREA - GREENWAY	---
PRIMARY TCA	---
EXISTING WATER LINE	WA
PROPOSED WATER LINE	WA
EXISTING SANITARY SERVICE	SA
PROPOSED SANITARY SERVICE	SA
PROPOSED STORM SEWER	SS
RETAINING WALL WITH FENCE	---
EXISTING CONTOUR 1'	---
EXISTING CONTOUR 5'	---
PROPOSED CONTOUR 1'	---
PROPOSED CONTOUR 5'	---
ADA ACCESS ROUTE	---



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DATE

JULY 12, 2023

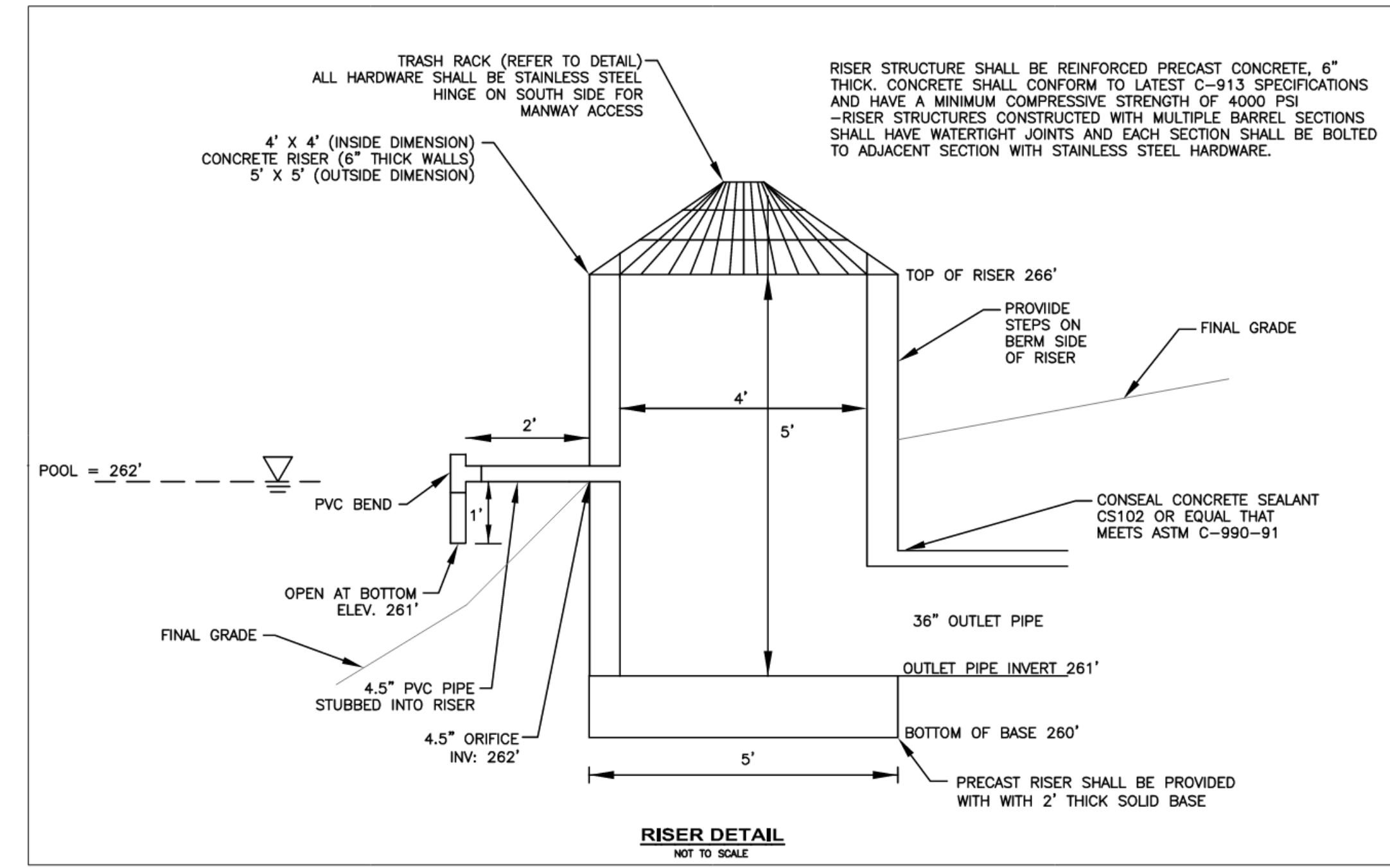
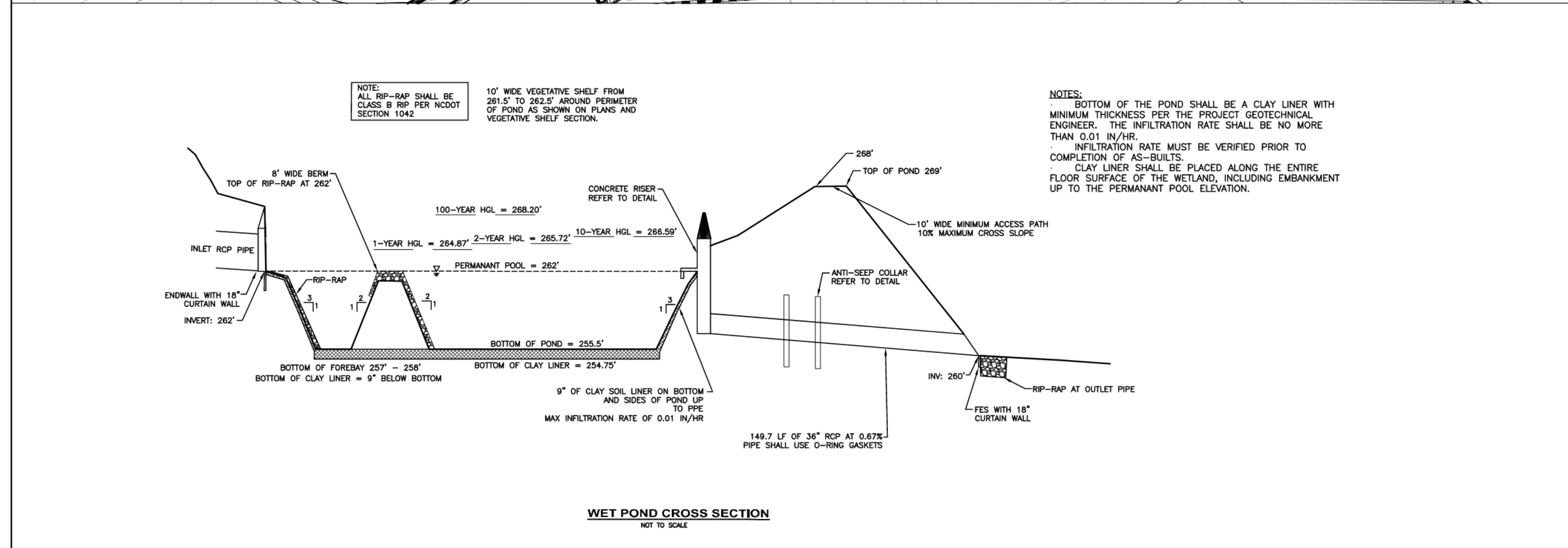
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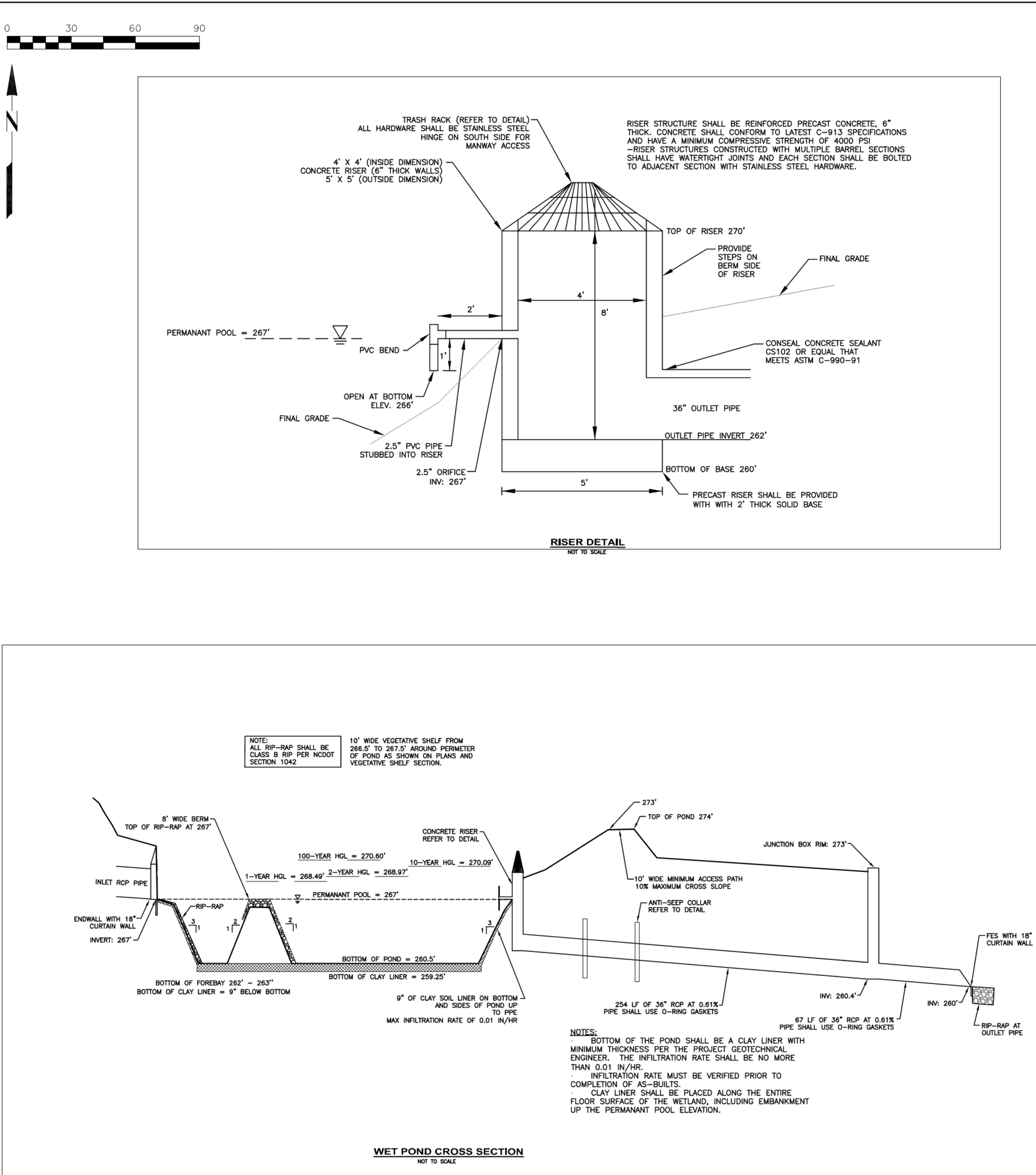
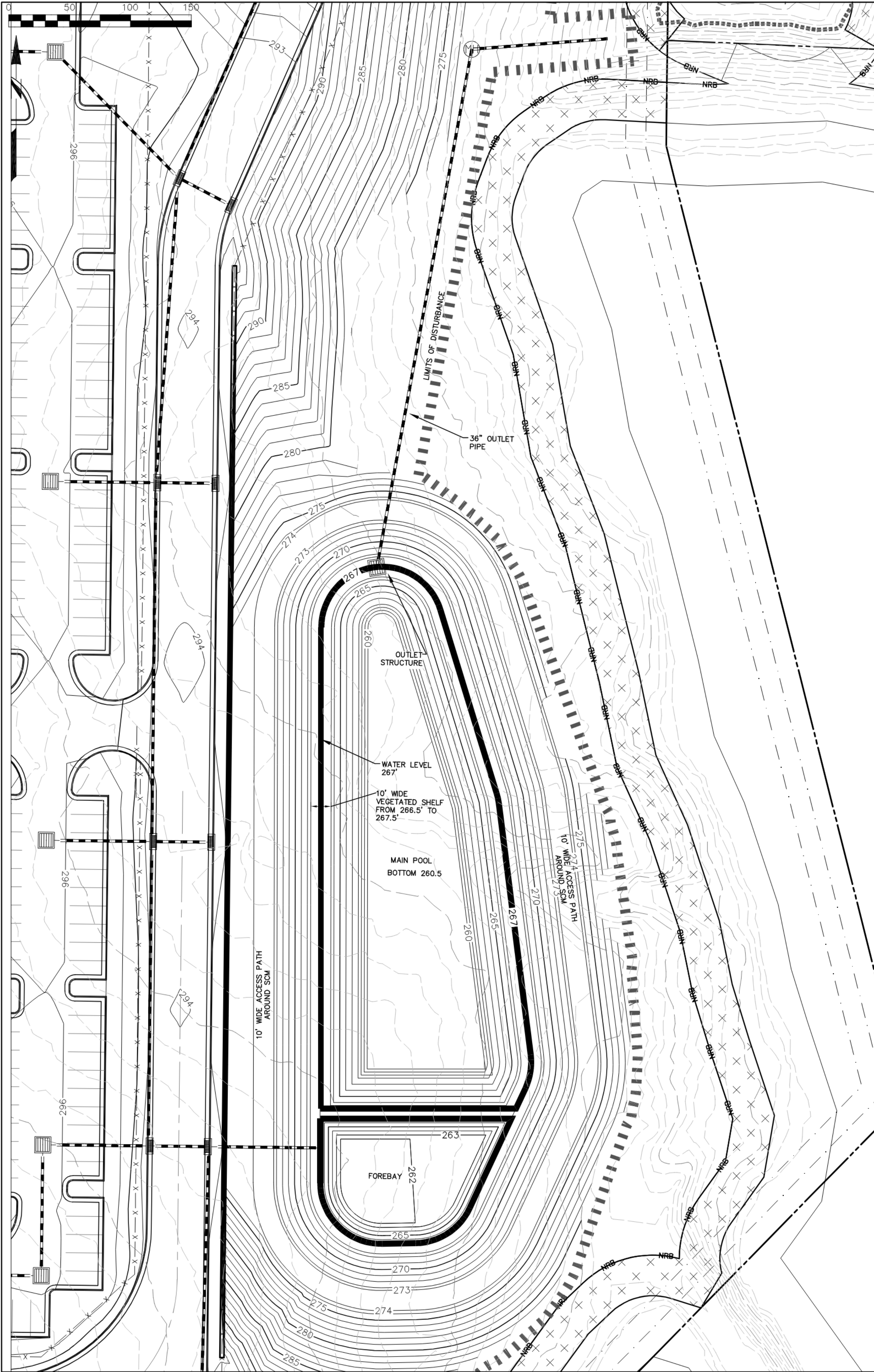
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C303

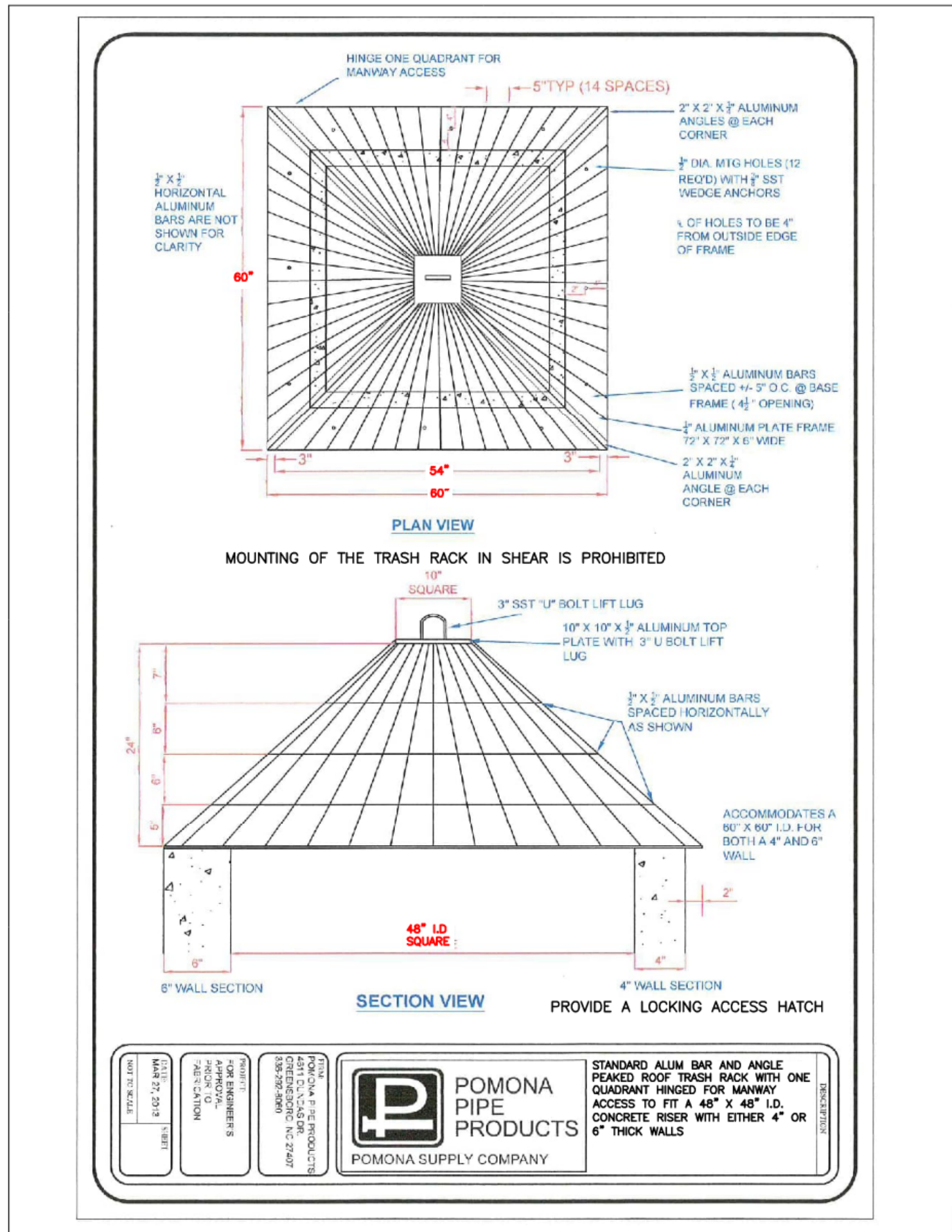
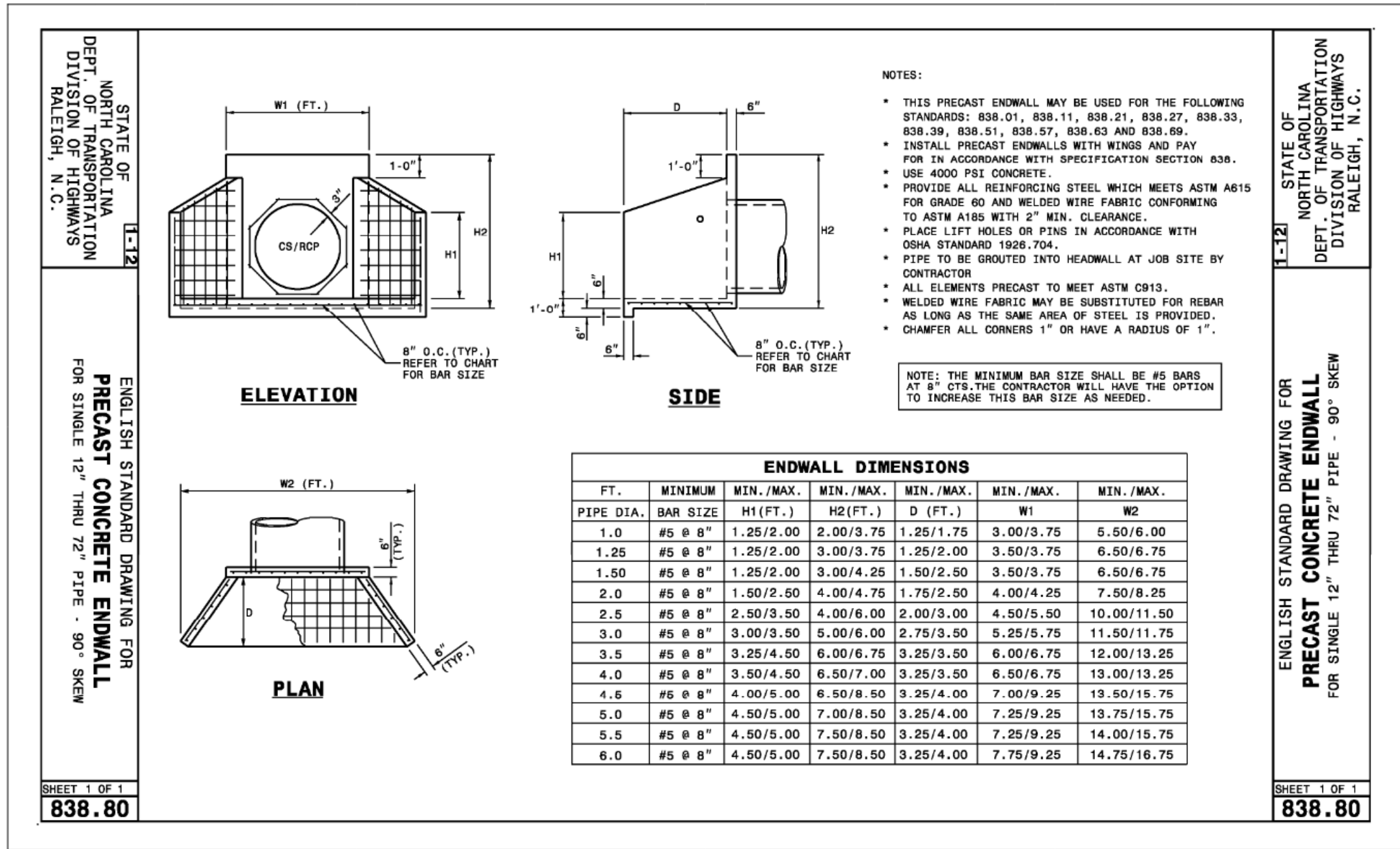












TRASH RACK DETAIL

GENERAL NOTES:

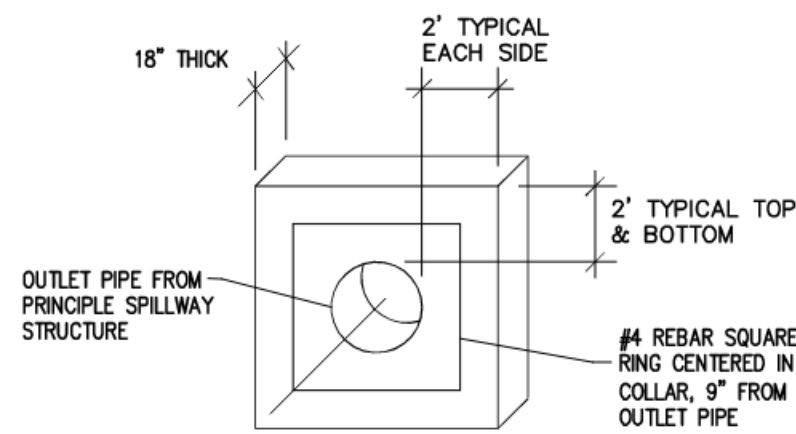
- PERMANENT BASINS AREA TO BE USED FOR TEMPORARY SEDIMENT BASIN DURING CONSTRUCTION. SEDIMENT BASIN IS REQUIRED TO BE CLEANED OUT AND THE SITE MUST BE 90% STABILIZED PRIOR TO USE AS WETLAND BASINS. SEE APPROVED EROSION CONTROL PLANS FOR ADDITIONAL INFORMATION.
- SCMS SHALL BE STABILIZED WITHIN 14 DAYS OF CONSTRUCTION.
- POND SHALL NOT BE PROVIDED WITH A DRAIN AND WILL BE REQUIRED TO BE PUMPED OUT FOR MAINTENANCE - REFER TO APPROVED OPERATIONS AND MAINTENANCE MANUAL THIS INCLUDES THE FOREBAY AND MAIN POOL.
- IF THE PERMANENT POOL AND / OR FOREBAY REQUIRE DEWATERING FOR MAINTENANCE PURPOSES, A PUMP WITH THE CAPACITY OF 10 GPM AT A 20-FOOT HEAD DEPTH SHOULD BE USED. FLOW SHALL BE PUMPED OUT AND DISCHARGED THROUGH A SEDIMENT BAG.
- THE AS-BUILT OF THIS FACILITY WILL NEED TO MEET CITY OF RALEIGH AS-BUILT CERTIFICATION REQUIREMENTS.

BERM AND SOIL COMPACTION SPECIFICATIONS:

- ALL EARTHEN FILL SHALL BE CLEARED, GRUBBED AND STRIPPED OF ALL VEGETATIVE MATERIAL, TOPSOIL AND ORGANIC MATTER PRIOR TO CONSTRUCTION.
- ALL FILL MATERIALS FOR THE EMBANKMENT SHALL BE APPROVED AND PERFORMED UNDER THE DIRECT SUPERVISION OF THE OWNERS ON-SITE GEOTECHNICAL ENGINEER. THE FILL MATERIAL SHALL BE FREE OF ROOTS, STUMPS, STONES GREATER THAN 6" OR OTHER QUESTIONABLE MATERIAL.
- PLACEMENT OF FILL FOR THE EMBANKMENT SHALL NOT EXCEED LIFTS OF MORE THAN 8" UNCOMPACTED AND SHALL BE PLACED CONTINUOUSLY ALONG THE LENGTH OF THE EMBANKMENT. PLACEMENT OF FILL ADJACENT TO THE SPILLWAY AND ANY DRAINAGE STRUCTURES SHALL NOT EXCEED LIFTS OF MORE THAN 4".
- EMBANKMENT FILL SHALL BE METHODICALLY BACK-FILLED WITH HIGHLY IMPERMEABLE MATERIAL AND COMPACTED TO AT LEAST 95% OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY (ASTM-698). COMPACTION SHALL BE PERFORMED SUCH THAT MOISTURE CONTENT SHALL BE WITH 1% TO 3% OF OPTIMUM M OISTURE CONTENT.
- COMPACTION TESTS SHALL BE PERFORMED BY THE ON-SITE GEOTECHNICAL ENGINEER DURING CONSTRUCTION TO ENSURE THAT PROPER COMPACTION LEVELS HAVE BEEN REACHED.
- COMPACTION REPORTS SHALL BE MAINTAINED BY THE CONTRACTOR TO BE AVAILABLE TO THE DESIGN ENGINEER AND LOCAL MUNICIPALITY.
- SOIL MATERIAL USE FOR EARTH FILL WHICH ARE CONSIDERED PERMEABLE OR WHICH EXHIBIT SIGNIFICANT SHRINK/SWELL SHALL NOT BE USED IN THE EMBANKMENT.
- THE MINIMUM TOP WIDTH OF THE DAM SHALL BE 10' SO UNIMPEDED ACCESS AROUND THE FACILITY CAN BE OBTAINED.
- REFER TO THIS SHEET FOR RIP-RAP DIMENSIONS INTO EACH POND. RIP-RAP FROM THE END OF THESE PIPES SHALL EXTEND TO THE BOTTOM OF THE FOREBAY.
- KEY TRENCH SHALL BE INSTALLED UNDER THE DIRECTION OF THE GEOTECHNICAL ENGINEER. THE KEY TRENCH SHALL EXTEND A MINIMUM OF THREE FEET DEEP, HOWEVER IT SHALL EXTEND INTO SUITABLE SOILD FOR EMBANKMENT FOUNDATIONS. KEY TRENCH MINIMUM WIDTH IS 6', REFER TO DETAIL.
- CONTRACTOR AND GEOTECHNICAL ENGINEER SHALL PROVIDE A REPORT INDICATING THE INFILTRATION RATE OF THE LINER OF THE POND TO THE ENGINEER.

CONCRETE RISER AND SPILLWAY PIPE SPECIFICATIONS:

- REINFORCED CONCRETE SPILLWAY PIPES SHALL HAVE A MINIMUM PIPE STRENGTH CONFORMING TO AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM) C-76, CLASS III STANDARDS.
- THE REINFORCED CONCRETE SPILLWAY PIPES FROM THE RISER SHALL HAVE GASKETTED JOINTS AND EACH SECTION SHALL BE BOLTED TO ADJACENT SECTIONS WITH STAINLESS STEEL STRAPS AND HARDWARE.
- ALL REINFORCED PIPE SECTIONS SHALL BE PROVIDED WITH GASKETTED JOINTS AND WRAPPED WITH A LAYER OF GEOTEXTILE FILTER FABRIC ON THE OUTSIDE OF THE PIPE. THE FABRIC SHALL MEET NCDDOT SPECIFICATIONS FOR TYPE II FILTER FABRIC. REFER TO SECTION 1056 IN THE NCDDOT 2012 EDITION OF THE EDITION OF THE STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES. THE FABRIC WRAP SHALL BE BETWEEN TWO AND THREE FEET WIDE, CENTERED OVER EACH PIPE JOINT AND COVER A MINIMUM ON ONE-FOOT LENGTH OF EACH PIPE SEGMENT.
- CONTRACTOR SHALL TAKE PHOTOGRAPHS OF ALL ITEMS DESCRIBED IN THIS SECTION PRIOR TO BACKFILLING. PHOTOGRAPHS SHALL BE PROVIDED TO THE CIVIL ENGINEER AND GEOTECHNICAL ENGINEER.



NOTES:

REFER TO PLANS FOR LOCATIONS OF COLLARS

USE 3000psi CONCRETE FOR COLLAR

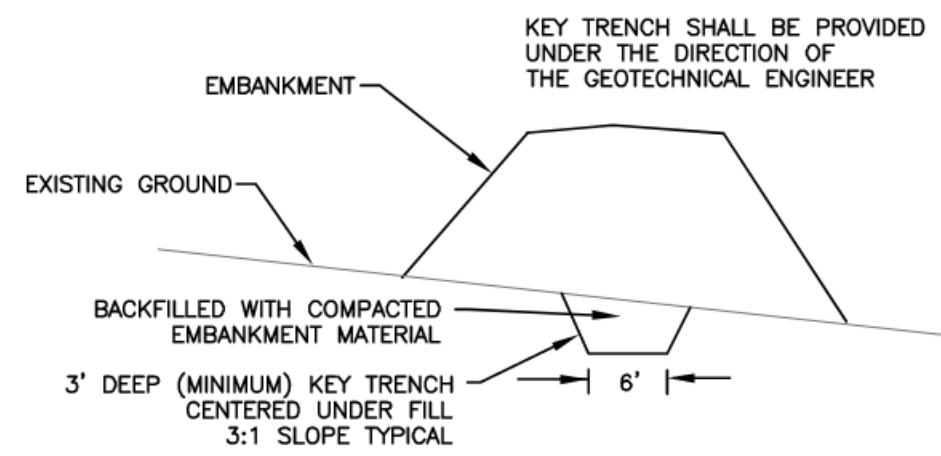
BOTTOM OF COLLAR TO BE IMBEDDED 6" INTO FIRM UNDISTURBED EARTH. EXTEND BEYOND 18" MIN SHOWN ON DETAIL IF REQUIRED

COLLARS SHALL FORM A WATERTIGHT CONNECTION WITH THE PRINCIPAL SPILLWAY BARREL

COLLAR SHALL NOT BE INSTALLED OVER A WRAPPED JOINT

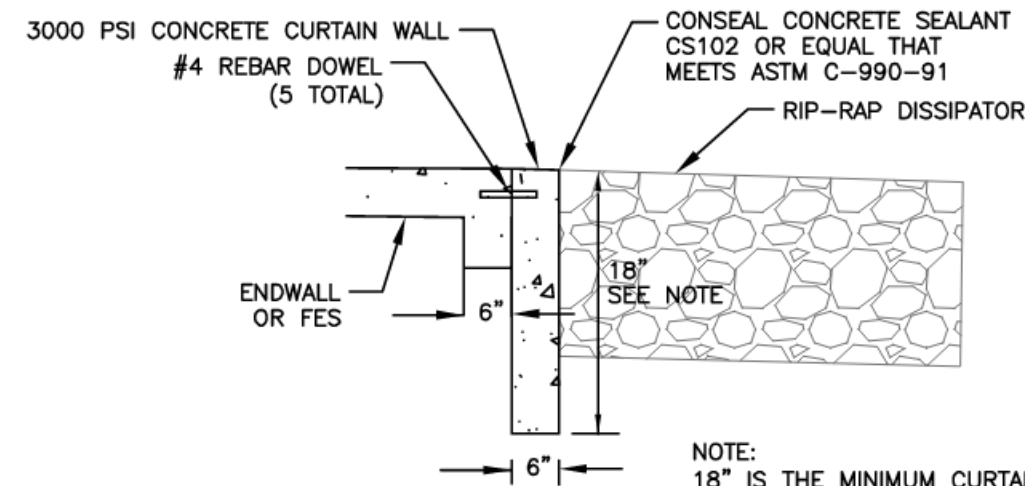
CONCRETE ANTISEEP COLLAR

NOT TO SCALE



KEY TRENCH DETAIL

NOT TO SCALE



CURTAIN WALL DETAIL

NOT TO SCALE

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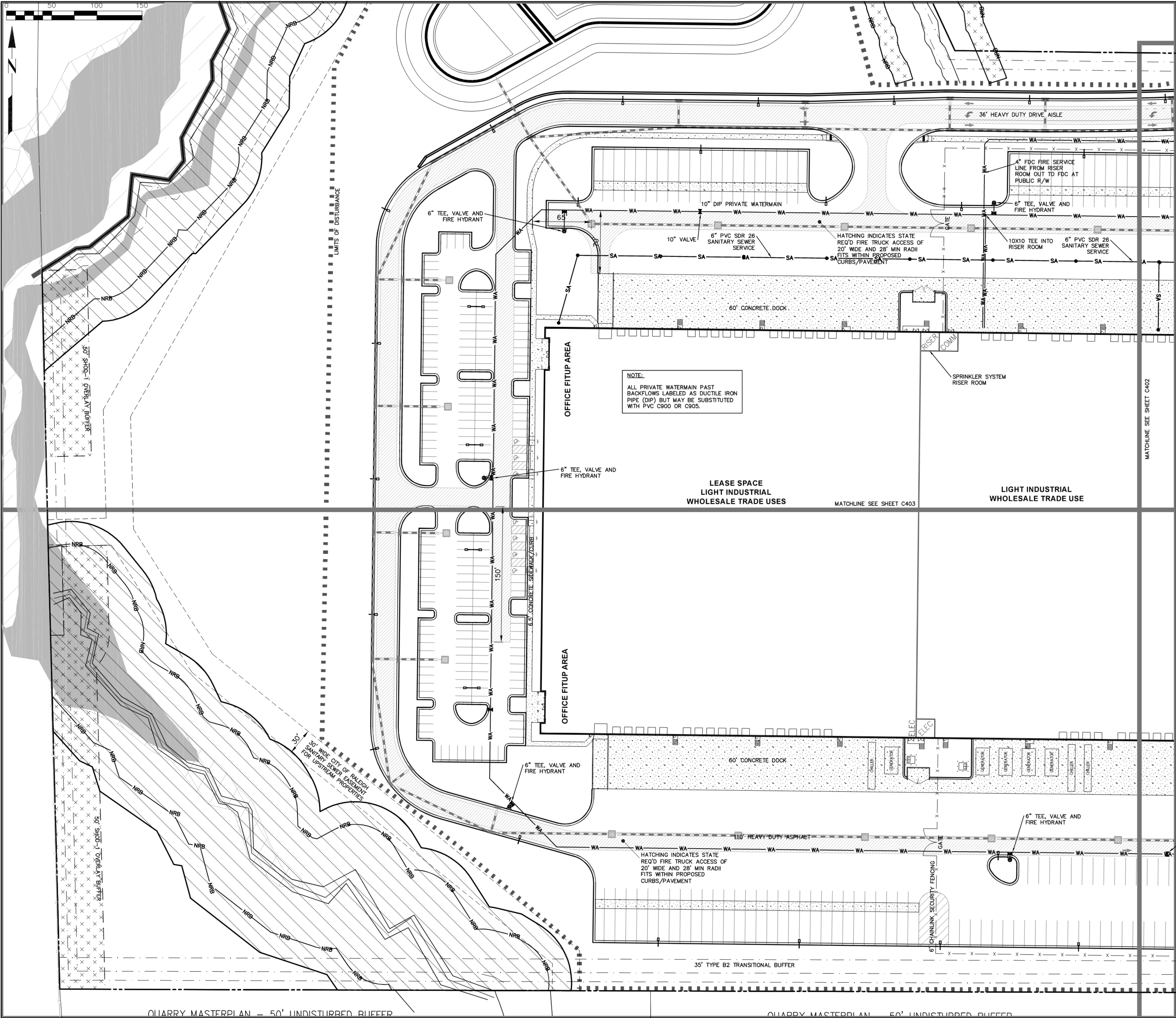
SHEET NO.

C306









**LEGEND**

PROPERTY LINE  
ADJOINING PROPERTY LINE  
FEMA FLOODWAY  
1% ANNUAL FLOOD  
WETLANDS  
GREENWAY EASEMENT / TREE CONSERVATION AREA-GREENWAY  
PRIMARY TCA  
EXISTING WATER LINE  
PROPOSED WATER LINE  
EXISTING SANITARY SERVICE  
PROPOSED SANITARY SERVICE  
PROPOSED STORM SEWER  
RETAINING WALL WITH FENCE  
LIGHT POLE  
FIRE TRUCK PATH

**ATTENTION CONTRACTORS**

The Construction Contractor responsible for the extension of water, sewer, and/or reuse, as approved in these plans, is responsible for contacting the Public Works Department at (919) 996-4540, at least twenty-four hours prior to beginning any of their construction.

Failure to notify both City Departments in advance of beginning construction, will result in the issuance of monetary fines, and require reinstatement of any water or sewer facilities not inspected as a result of this notification failure.

Failure to call for inspection, install a Downstream Plug, have Permitted Plans on the jobsite, or any other Violation of City of Raleigh Standards, will result in a Fine and Possible Exclusion from future work in the City of Raleigh.

- STANDARD UTILITY NOTES:**
- All materials & construction methods shall be in accordance with City of Raleigh design standards, details & specifications (reference: CORPUD Handbook, current edition).
  - Utility separation requirements:
    - A distance of 100' shall be maintained between sanitary sewer & any private or public water supply source such as an impounded reservoir used as a source of drinking water. If adequate lateral separation cannot be achieved, ferrous sanitary sewer pipe shall be specified & installed to wateline specifications. However, the minimum separation shall not be less than 25' from a private well or 50' from a public well.
    - When installing water and/or sewer mains, the horizontal separation between utilities shall be 10'. If this separation cannot be maintained due to existing conditions, the variation allowed is the water main in a separate trench with the elevation of the water main at least 18" above the top of the sewer & must be approved by the Public Utilities Director. All distances are measured from outside diameter to outside diameter.
    - Where it is impossible to obtain proper separation, or anytime a sanitary sewer passes over a watermain, DIP materials or steel encasement extended 10' on each side of crossing must be specified & installed to wateline specifications
    - 5.0' minimum horizontal separation is required between all sanitary sewer & storm sewer facilities, unless DIP material is specified for sanitary sewer
    - Maintain 18" min. vertical separation at all watermain & RCP storm drain crossings; maintain 24" min. vertical separation at all sanitary sewer & RCP storm drain crossings. Where adequate separations cannot be achieved, specify DIP materials & a concrete cradle having 6" min. clearance (per CORPUD details W-41 & S-49)
  - All other underground utilities shall cross water & sewer facilities with 18" min. vertical separation required
  - Any necessary field revisions are subject to review & approval of an amended plan and/or profile by the City of Raleigh Public Utilities Department prior to construction.
  - Contractor shall maintain continuous water & sewer service to existing residences & businesses throughout construction of project. Any necessary service interruptions shall be preceded by a 24 hour advance notice to the City of Raleigh Public Utilities Department
  - 3.0' minimum cover is required on all water mains & sewer forcemains. 4.0' minimum cover is required on all reuse mains
  - It is the developer's responsibility to abandon or remove existing water & sewer services not being used in redevelopment of a site unless otherwise directed by the City of Raleigh Public Utilities Department. This includes abandoning top at main & removal of service from ROW or easement per CORPUD Handbook procedure
  - Install 2" & 3/4" copper water services with meters located at ROW or within a 2x2' Wateline Easement immediately adjacent. NOTE: it is the applicant's responsibility to properly size the water service for each connection to provide adequate flow & pressure
  - Install 6" PVC sewer services @ 1.0% minimum grade with cleanouts located at ROW or easement line & spaced every 75 linear feet maximum.
  - Pressure reducing valves are required on all water services exceeding 80 psi; backwater valves are required on all sanitary sewer services having building drains lower than 1.0 above the next upstream manhole
  - All environmental permits applicable to the project must be obtained from NCDWQ, USACE &/or FEMA for any riparian buffer, wetland &/or floodplain impacts (respectively) prior to construction.
  - NCDOT / Railroad Encroachment Agreements are required for any utility work (including main extensions & service taps) within state or railroad ROW prior to construction
  - Grease Interceptor / Oil Water Separator sizing calculations & installation specifications shall be as approved by the CORPUD FOG Program Coordinator prior to issuance of a Building Permit. Contact Tim Beasley at (919) 996-2334 or timothy.beasley@raleighnc.gov for more information
  - Cross-connection control protection devices are required based on degree of health hazard involved as listed in Appendix-B of the Rules Governing Public Water Systems in North Carolina. These guidelines are the minimum requirements. The devices shall meet American Society of Sanitary Engineering (ASSE) standards or be on the University of Southern California approval list. The devices shall be installed and tested (both initial and periodic testing thereafter) in accordance with the manufacturer's recommendations or the local cross-connection control program, whichever is more stringent. Contact Joanie Hartley at (919) 996-5923 or joanie.hartley@raleighnc.gov for more information

**DCI**  
Development &  
Construction Insight, LLC

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www.dcinightllc.com

**PROJECT OCEAN - ASR-0110-2022**

2051 EAGLE CREST WAY, GARNER, NC 27529

RALEIGH JURISDICTION, ZONING: IH-CU OVERLAY: SHOD-1

**UTILITY PLAN**

**REVISIONS**

NO.	DATE	DESCRIPTION
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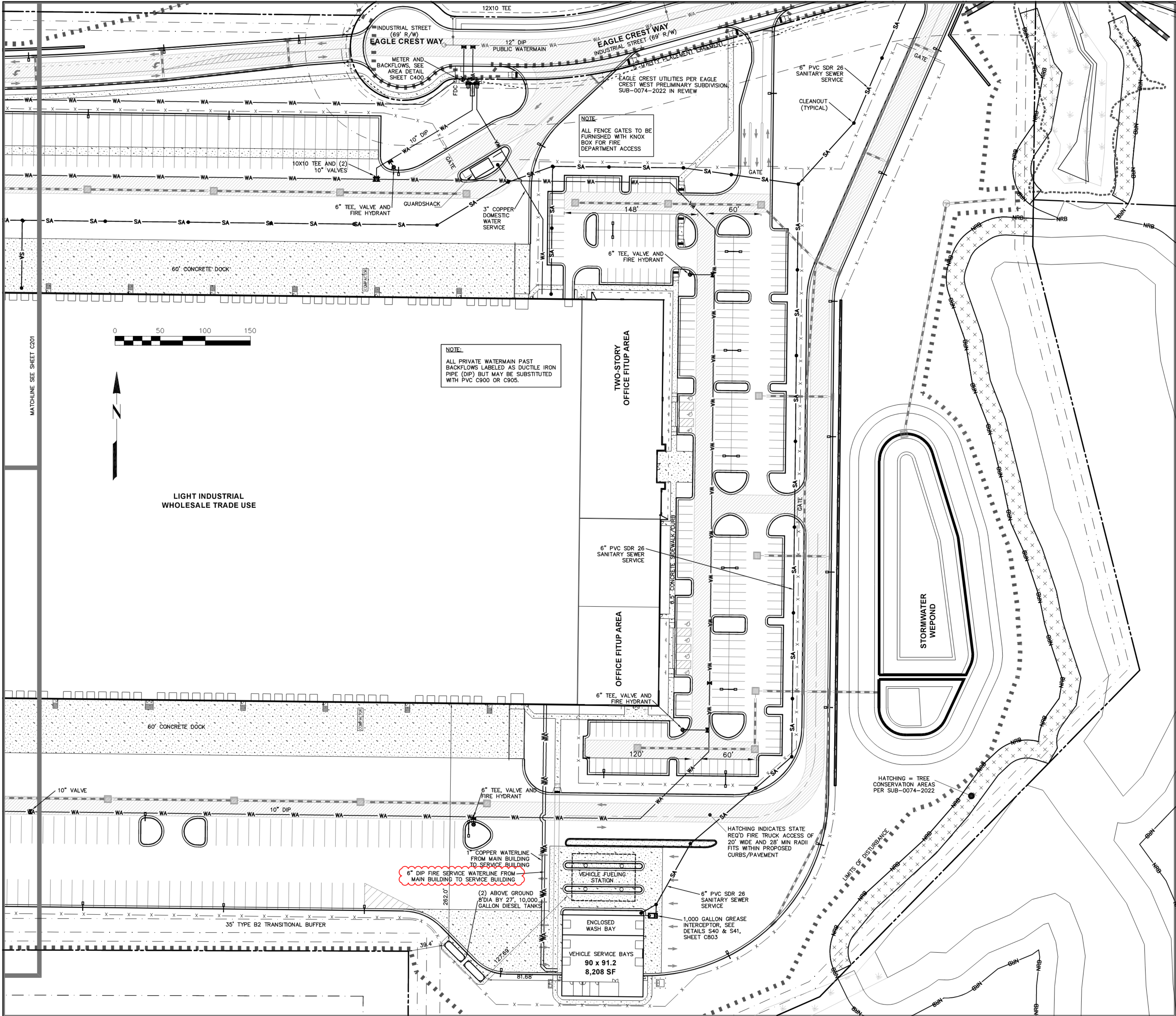
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PH 919 249-8587 FX 919 590-1687  
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DATE  
JULY 12, 2023

ISSUED FOR  
ASR APPROVAL

SHEET NO.  
**C401**





**LEGEND**

PROPERTY LINE  
ADJOINING PROPERTY LINE  
FEMA FLOODWAY  
1% ANNUAL FLOOD  
WETLANDS  
GREENWAY EASEMENT / TREE CONSERVATION AREA-GREENWAY  
PRIMARY TCA  
EXISTING WATER LINE  
PROPOSED WATER LINE  
EXISTING SANITARY SERVICE  
PROPOSED SANITARY SERVICE  
PROPOSED STORM SEWER  
RETAINING WALL WITH FENCE  
LIGHT POLE  
FIRE TRUCK PATH

**ATTENTION CONTRACTORS**

The Construction Contractor responsible for the extension of water, sewer, and/or reuse, as approved in these plans, is responsible for contacting the Public Works Department at (919) 996-4540, at least twenty-four hours prior to beginning any of their construction.

Failure to notify both City Departments in advance of beginning construction, will result in the issuance of monetary fines, and require reinstatement of any water or sewer facilities not inspected as a result of this notification failure.

Failure to call for inspection, install a Downstream Plug, have Permitted Plans on the jobsite, or any other violation of City of Raleigh Standards, will result in a Fine and Possible Exclusion from future work in the City of Raleigh.

- STANDARD UTILITY NOTES:**
- All materials & construction methods shall be in accordance with City of Raleigh design standards, details & specifications (reference: CORPUD Handbook, current edition).
  - Utility separation requirements:
    - A distance of 100' shall be maintained between sanitary sewer & any private or public water supply source such as an impounded reservoir used as a source of drinking water. If adequate lateral separation cannot be achieved, ferrous sanitary sewer pipe shall be specified & installed to wateline specifications. However, the minimum separation shall not be less than 25' from a private well or 50' from a public well.
    - When installing water and/or sewer mains, the horizontal separation between utilities shall be 10'. If this separation cannot be maintained due to existing conditions, the variation allowed is the water main in a separate trench with the elevation of the water main at least 18" above the top of the sewer & must be approved by the Public Utilities Director. All distances are measured from outside diameter to outside diameter.
    - Where it is impossible to obtain proper separation, or anytime a sanitary sewer passes over a watermain, DIP materials or steel encasement extended 10' on each side of crossing must be specified & installed to wateline specifications
    - 5.0' minimum horizontal separation is required between all sanitary sewer & storm sewer facilities, unless DIP material is specified for sanitary sewer
    - Maintain 18" min. vertical separation at all watermain & RCP storm drain crossings; maintain 24" min. vertical separation at all sanitary sewer & RCP storm drain crossings. Where adequate separations cannot be achieved, specify DIP materials & a concrete cradle having 6" min. clearance (per CORPUD details W-41 & S-49)
  - All other underground utilities shall cross water & sewer facilities with 18" min. vertical separation required.
  - Any necessary field revisions are subject to review & approval of an amended plan and/or profile by the City of Raleigh Public Utilities Department prior to construction.
  - Contractor shall maintain continuous water & sewer service to existing residences & businesses throughout construction of project. Any necessary service interruptions shall be preceded by a 24 hour advance notice to the City of Raleigh Public Utilities Department.
  - 3.0' minimum cover is required on all water mains & sewer forcemains. 4.0' minimum cover is required on all reuse mains.
  - It is the developer's responsibility to abandon or remove existing water & sewer services not being used in redevelopment of a site unless otherwise directed by the City of Raleigh Public Utilities Department. This includes abandoning top at main & removal of service from ROW or easement per CORPUD Handbook procedure.
  - Install 2" & 3/4" copper water services with meters located at ROW or within a 2x2' Wateline Easement immediately adjacent. NOTE: It is the applicant's responsibility to properly size the water service for each connection to provide adequate flow & pressure.
  - Install 6" PVC sewer services @ 1.0% minimum grade with cleanouts located at ROW or easement line & spaced every 75 linear feet maximum.
  - Pressure reducing valves are required on all water services exceeding 80 psi; backwater valves are required on all sanitary sewer services having building drains lower than 1.0 above the next upstream manhole.
  - All environmental permits applicable to the project must be obtained from NCDWQ, USACE &/or FEMA for any riparian buffer, wetland &/or floodplain impacts (respectively) prior to construction.
  - NCDOT / Railroad Encroachment Agreements are required for any utility work (including main extensions & service tops) within state or railroad ROW prior to construction.
  - Grease Interceptor / Oil Water Separator sizing calculations & installation specification by the CORPUD FOG Program Coordinator prior to issuance of a Building Permit. Contact Tim Beasley at (919) 996-2334 or timothy.beasley@raleighnc.gov for more information.
  - Cross-connection control protection devices are required based on degree of health hazard involved as listed in Appendix-B of the Rules Governing Public Water Systems in North Carolina. These guidelines are the minimum requirements. The devices shall meet American Society of Sanitary Engineering (ASSE) standards or be on the University of Southern California approval list. The devices shall be installed and tested (both initial and periodic testing thereafter) in accordance with the manufacturer's recommendations or the local cross-connection control program, whichever is more stringent. Contact Joanie Hartley at (919) 996-5923 or joanie.hartley@raleighnc.gov for more information.

2054 KILDAKE FARM RD, #167 CARY, NC 27518  
www.dcinightllc.com

**PROJECT OCEAN - ASR-0110-2022**

2051 EAGLE CREST WAY, GARNER, NC 27529

RALEIGH JURISDICTION, ZONING: IH-CU OVERLAY: SH00-1

**UTILITY PLAN**

REVISIONS:  
11/17/2022 - ASR 1st REVIEW  
3/13/2023 - ASR 2nd REVIEW  
5/9/2023 - ASR 3rd REVIEW  
7/12/2023 - ASR 4th REVIEW

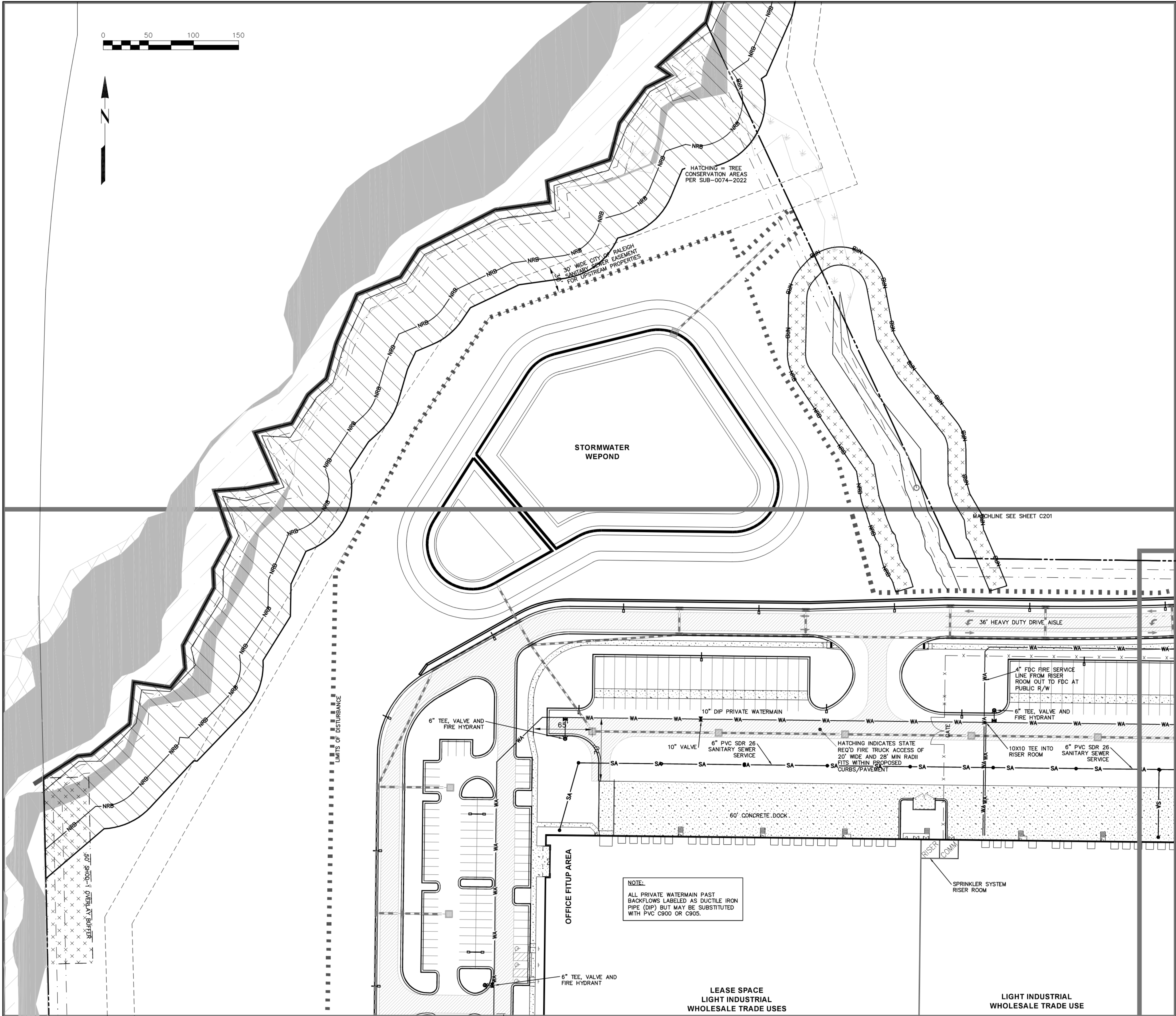
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DATE  
JULY 12, 2023

ISSUED FOR  
ASR APPROVAL

SHEET NO.  
**C402**





**LEGEND**

PROPERTY LINE

ADJOINING PROPERTY LINE

FEMA FLOODWAY

1% ANNUAL FLOOD

WETLANDS

GREENWAY EASEMENT / TREE CONSERVATION AREA—GREENWAY

PRIMARY TCA

EXISTING WATER LINE

PROPOSED WATER LINE

EXISTING SANITARY SERVICE

PROPOSED SANITARY SERVICE

PROPOSED STORM SEWER

RETAINING WALL WITH FENCE

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FIRE TRUCK PATH

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14. Cross-connection control protection devices are required based on degree of health hazard involved as listed in Appendix-B of the Rules Governing Public Water Systems in North Carolina. These guidelines are the minimum requirements. The devices shall meet American Society of Sanitary Engineering (ASSE) standards or be on the University of Southern California approval list. The devices shall be installed and tested (both initial and periodic testing thereafter) in accordance with the manufacturer's recommendations or the local cross-connection control program, whichever is more stringent. Contact Joanie Hartley at (919) 996-5923 or joanie.hartley@raleighnc.gov for more information
- DCI

Development & Construction Insight, LLC

2054 KILDAKE FARM RD., #167 CARY, NC 27518

www.dcinightllc.com

PROJECT OCEAN - ASR-0110-2022

2051 EAGLE CREST WAY, GARNER, NC 27529

RALEIGH JURISDICTION, ZONING: IH-CU OVERLAY: SHOD-1

UTILITY PLAN

REVISIONS:

11/17/2022 - ASR 1st REVIEW

3/3/2023 - ASR 2nd REVIEW

5/9/2023 - ASR 3rd REVIEW

7/12/2023 - ASR 4th REVIEW

CCE

- CAPITAL CIVIL ENGINEERING -

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DATE

JULY 12, 2023

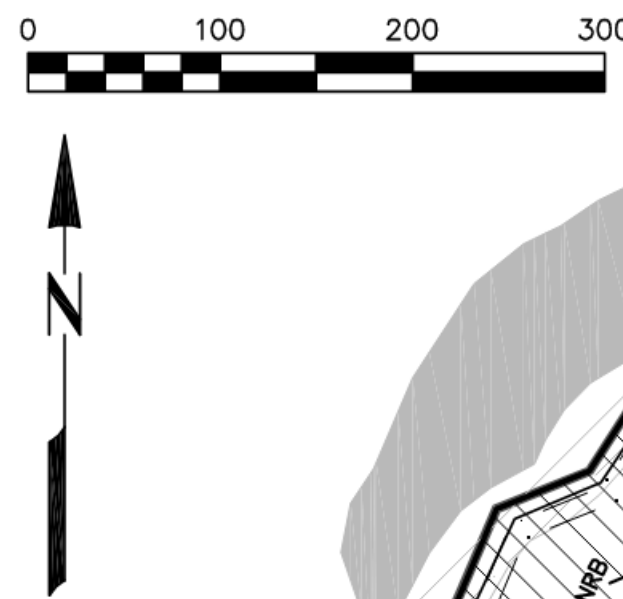
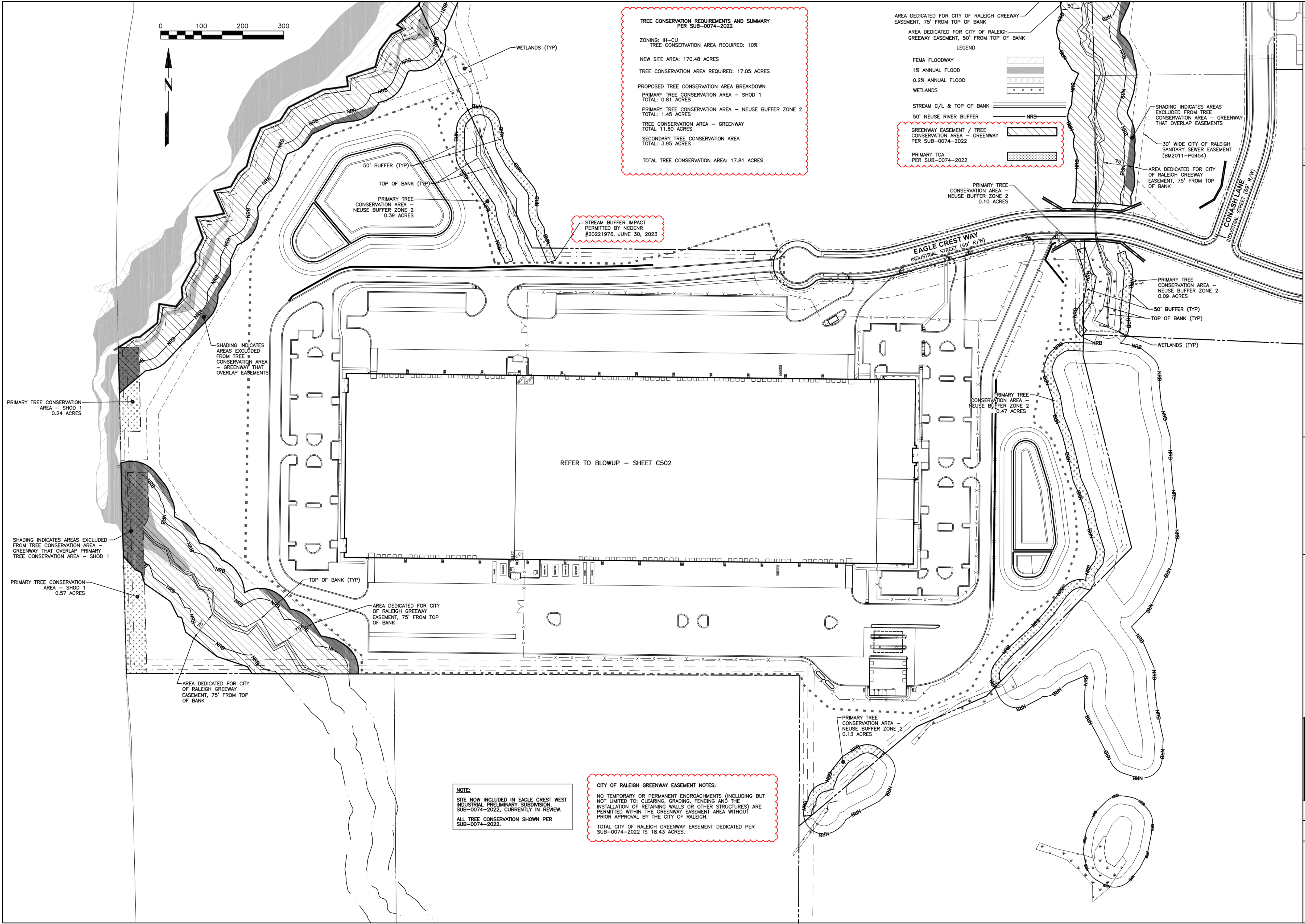
ISSUED FOR

ASR APPROVAL

SHEET NO.

C403





**TREE CONSERVATION REQUIREMENTS AND SUMMARY PER SUB-0074-2022**

ZONING: IH-CU  
TREE CONSERVATION AREA REQUIRED: 10%

NEW SITE AREA: 170.48 ACRES  
TREE CONSERVATION AREA REQUIRED: 17.05 ACRES

PROPOSED TREE CONSERVATION AREA BREAKDOWN  
PRIMARY TREE CONSERVATION AREA - SHOD 1  
TOTAL: 0.81 ACRES  
PRIMARY TREE CONSERVATION AREA - NEUSE BUFFER ZONE 2  
TOTAL: 1.45 ACRES  
TREE CONSERVATION AREA - GREENWAY  
TOTAL: 11.60 ACRES  
SECONDARY TREE CONSERVATION AREA  
TOTAL: 3.95 ACRES  
TOTAL TREE CONSERVATION AREA: 17.81 ACRES

AREA DEDICATED FOR CITY OF RALEIGH GREENWAY EASEMENT, 75' FROM TOP OF BANK  
AREA DEDICATED FOR CITY OF RALEIGH GREENWAY EASEMENT, 50' FROM TOP OF BANK

**LEGEND**

FEMA FLOODWAY  
1% ANNUAL FLOOD  
0.2% ANNUAL FLOOD  
WETLANDS

STREAM C/L & TOP OF BANK  
50' NEUSE RIVER BUFFER

GREENWAY EASEMENT / TREE CONSERVATION AREA - GREENWAY PER SUB-0074-2022  
PRIMARY TCA PER SUB-0074-2022

STREAM BUFFER IMPACT PERMITTED BY NCDENR #20221976, JUNE 30, 2023

PRIMARY TREE CONSERVATION AREA - SHOD 1  
0.24 ACRES

SHADING INDICATES AREAS EXCLUDED FROM TREE CONSERVATION AREA - GREENWAY THAT OVERLAP PRIMARY TREE CONSERVATION AREA - SHOD 1

PRIMARY TREE CONSERVATION AREA - SHOD 1  
0.57 ACRES

AREA DEDICATED FOR CITY OF RALEIGH GREENWAY EASEMENT, 75' FROM TOP OF BANK

TOP OF BANK (TYP)

AREA DEDICATED FOR CITY OF RALEIGH GREENWAY EASEMENT, 75' FROM TOP OF BANK

REFER TO BLOWUP - SHEET C502

PRIMARY TREE CONSERVATION AREA - NEUSE BUFFER ZONE 2  
0.10 ACRES

SHADING INDICATES AREAS EXCLUDED FROM TREE CONSERVATION AREA - GREENWAY THAT OVERLAP EASEMENTS

30' WIDE CITY OF RALEIGH SANITARY SEWER EASEMENT (BM2011-PG454)

AREA DEDICATED FOR CITY OF RALEIGH GREENWAY EASEMENT, 75' FROM TOP OF BANK

PRIMARY TREE CONSERVATION AREA - NEUSE BUFFER ZONE 2  
0.09 ACRES

50' BUFFER (TYP)  
TOP OF BANK (TYP)

WETLANDS (TYP)

PRIMARY TREE CONSERVATION AREA - NEUSE BUFFER ZONE 2  
0.47 ACRES

PRIMARY TREE CONSERVATION AREA - NEUSE BUFFER ZONE 2  
0.13 ACRES

**NOTE:**  
SITE NOW INCLUDED IN EAGLE CREST WEST INDUSTRIAL PRELIMINARY SUBDIVISION, SUB-0074-2022, CURRENTLY IN REVIEW.  
ALL TREE CONSERVATION SHOWN PER SUB-0074-2022.

**CITY OF RALEIGH GREENWAY EASEMENT NOTES:**  
NO TEMPORARY OR PERMANENT ENCROACHMENTS (INCLUDING BUT NOT LIMITED TO: CLEARING, GRADING, FENCING AND THE INSTALLATION OF RETAINING WALLS OR OTHER STRUCTURES) ARE PERMITTED WITHIN THE GREENWAY EASEMENT AREA WITHOUT PRIOR APPROVAL BY THE CITY OF RALEIGH.  
TOTAL CITY OF RALEIGH GREENWAY EASEMENT DEDICATED PER SUB-0074-2022 IS 18.43 ACRES.



LEGEND:

TRANSITIONAL PROTECTIVE YARD

CITY OF RALEIGH LANDSCAPE NOTES:

1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH CITY OF RALEIGH STANDARDS & SPECIFICATIONS.
2. NO PERMIT FOR THE CONSTRUCTION, RECONSTRUCTION, EXTENSION, REPAIR OR ALTERATION OF ANY BUILDING, STRUCTURE OR USE OF LAND AND NO BUILDING OR LAND OR ANY PART OF ANY BUILDING OR LAND, MAY BE OCCUPIED OR USED UNTIL LANDSCAPING HAS BEEN PROVIDED IN ACCORDANCE WITH THE REQUIREMENTS OF THE UDO.
3. THE DEVELOPMENT SERVICES DIRECTOR CANNOT ISSUE A CERTIFICATE OF COMPLIANCE UNTIL ALL LANDSCAPING HAS BEEN INSTALLED IN ACCORDANCE WITH THE REQUIREMENTS OF THE UDO.
4. A TEMPORARY CERTIFICATE OF COMPLIANCE MAY BE ISSUED WHEN THE DEVELOPMENT SERVICES DIRECTOR DETERMINES THAT DUE TO THE UNAVAILABILITY OF PLANT MATERIAL OR WEATHER CONCERNS, PLANTING LANDSCAPING WOULD JEOPARDIZE THE HEALTH OF PLANT MATERIALS FOR A PERIOD OF UP TO 1 YEAR FOLLOWING THE DATE OF APPLICATION FOR A CERTIFICATE OF COMPLIANCE.
5. STREET TREES ARE TO BE PLANTED IN ACCORDANCE WITH TPP-03 CITY DETAIL BETWEEN OCTOBER 1 AND APRIL 30. A LANDSCAPE AGREEMENT IS NEEDED IF CO IS REQUIRED OUTSIDE OF THE PLANTING WINDOW. CONTACT URBAN FORESTRY INSPECTOR WITH QUESTIONS.
6. TREE AND SHRUB PLANTINGS SHOULD NOT INTERFERE WITH THE SAFE VEHICULAR AND PEDESTRIAN CIRCULATION ON THE SITE.
7. LANDSCAPING SHALL NOT OBSTRUCT THE VIEWS OF MOTORISTS USING ANY STREET, DRIVEWAY, PARKING AISLES OR THE APPROACH TO ANY STREET INTERSECTION.
8. ALL LANDSCAPING INSTALLATIONS MUST COMPLY WITH THE SIGHT TRIANGLE REQUIREMENTS OF THE RALEIGH STREET DESIGN MANUAL.
9. TREES CANNOT BE PLANTED WITHIN A TREE CONSERVATION AREA OR THE CRITICAL ROOT ZONE OF AN EXISTING TREE.
10. NO REQUIRED LANDSCAPING OR SCREENING SHALL BE PLANTED INSIDE UTILITY AND DRAINAGE EASEMENTS, EXCLUDING OVERHEAD EASEMENTS, WITHOUT THE CONSENT OF THE CITY AND THE EASEMENT HOLDER.
11. THE OWNER OR TENANT IS RESPONSIBLE FOR MAINTAINING ALL REQUIRED LANDSCAPING IN GOOD HEALTH. ANY DEAD, UNHEALTHY OR MISSING LANDSCAPING MUST BE REPLACED WITH LANDSCAPING THAT CONFORMS TO THE UDO WITHIN 30 DAYS (OR WITHIN 180 DAYS WHERE WEATHER CONCERNS WOULD JEOPARDIZE THE HEALTH OF PLANT MATERIALS). IN THE EVENT THAT REQUIRED LANDSCAPE IS SEVERELY DAMAGED DUE TO AN UNUSUAL WEATHER OCCURRENCE OR OTHER ACT OF NATURE, THE OWNER OR TENANT MAY HAVE 2 YEARS TO REPLACE THE REQUIRED LANDSCAPING.
12. ALL PLANTING AREAS MUST BE STABILIZED FROM SOIL EROSION IMMEDIATELY UPON PLANTING AND MUST BE MAINTAINED FOR THE DURATION OF THE USE.
13. ALL REQUIRED LANDSCAPING SHALL BE ALLOWED TO REACH ITS REQUIRED SIZE AND SHALL BE MAINTAINED AT THAT REQUIRED SIZE.
14. STREET TREES ARE TO BE PROTECTED AND MAINTAINED PER REQUIREMENTS OUTLINED IN CHAPTER 2 OF THE CITY TREE MANUAL.

PROJECT OCEAN - ASR-0110-2022

4320 AUBURN CHURCH ROAD, GARNER, NC 27529

RALEIGH JURISDICTION, ZONING: IH-CU OVERLAY: SHOD-1

OVERALL LANDSCAPE PLAN

REVISIONS:  
1/17/2022 - ASR 1st REVIEW  
2/27/2023 - ASR 2nd REVIEW  
5/9/2023 - ASR 3rd REVIEW  
7/11/2023 - ASR 4th REVIEW

SOUTHWELL DESIGN LANDSCAPE ARCHITECTURE  
PO Box 37178 | Raleigh, North Carolina 27627  
919.272.6729 | info@southwelldesign.com | www.southwelldesign.com

DATE

JULY 11, 2023

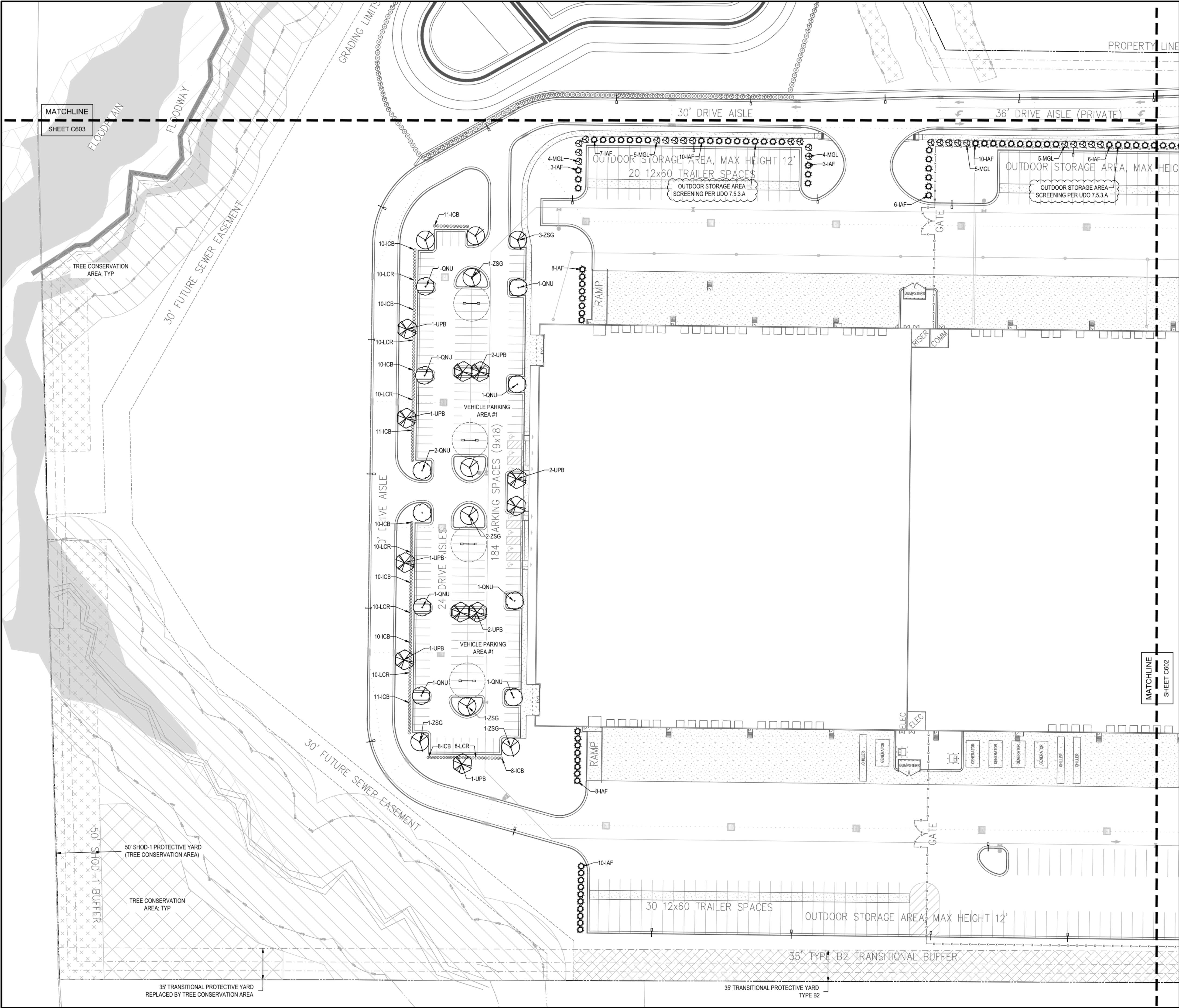
ISSUED FOR

ASR REVIEW

SHEET NO.

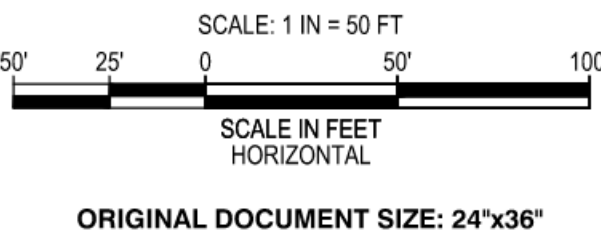
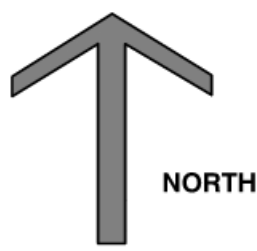
C600





LEGEND:

- TRANSITIONAL PROTECTIVE YARD
- LIGHT POLE & 20' SEPARATION RADIUS
- SHADE TREES
  - QNU - QUERCUS NUTTALLII
  - UPB - ULMUS PARVIFOLIA 'BOSQUE'
  - ZSG - ZELKOVA SERRATA 'GREEN VASE'
  - NSY - NYSSA SYLVATICA
- UNDERSTORY TREES
  - IAF - ILEX x ATTENUATA 'FOSTER'
  - MGL - MAGNOLIA GRANDIFLORA 'LITTLE GEM'
- SHRUBS
  - ICB - ILEX CORNUTA 'BURFORDII NANA'
  - LCR - LOROPETALUM CHINENSIS 'RUBY'
  - MCE - MYRICA CERIFERA
  - OFO - OSMANTHUS x FORTUNEI



PROJECT OCEAN - ASR-0110-2022

4320 AUBURN CHURCH ROAD, GARNER, NC 27529

RALEIGH JURISDICTION, ZONING: IH-CU OVERLAY: SHOD-1

LANDSCAPE PLAN

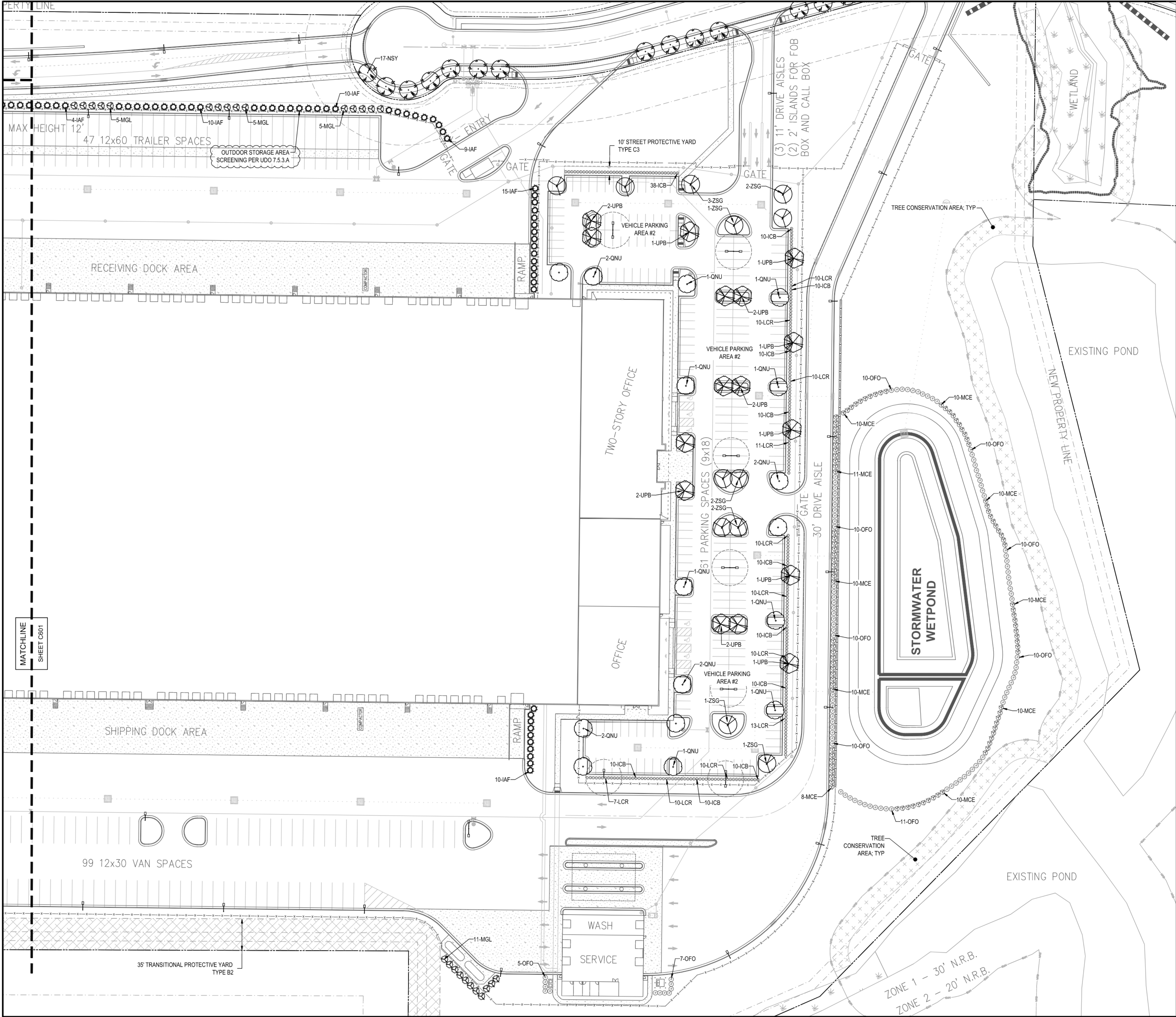
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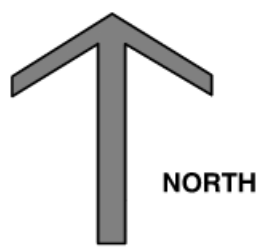
DATE: JULY 11, 2023  
ISSUED FOR: ASR REVIEW  
SHEET NO.

C601



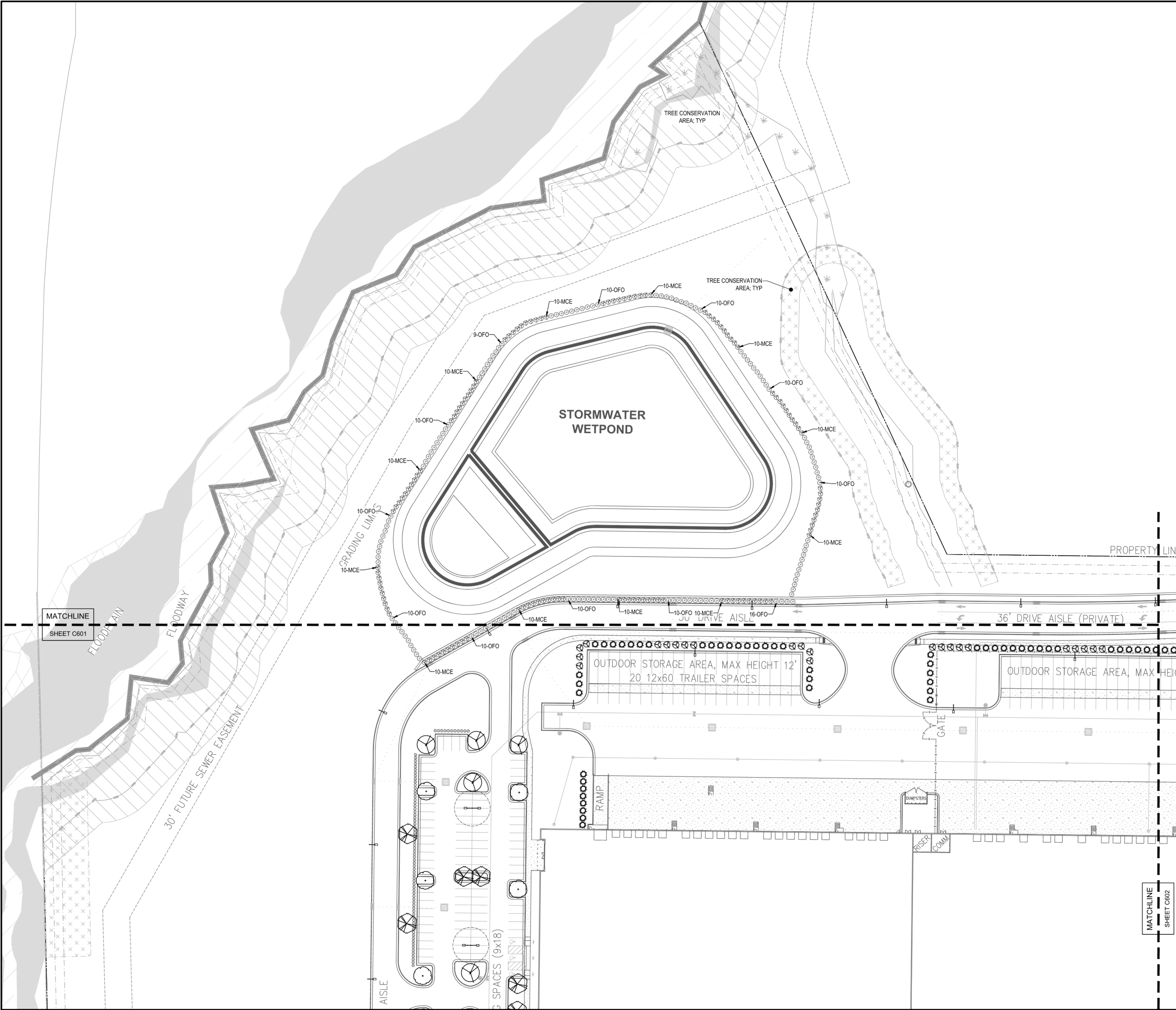


- LEGEND:**
- TRANSITIONAL PROTECTIVE YARD
  - LIGHT POLE & 20' SEPARATION RADIUS
  - SHADE TREES**
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SCALE: 1 IN = 50 FT  
SCALE IN FEET  
HORIZONTAL  
ORIGINAL DOCUMENT SIZE: 24"x36"





LEGEND:



TRANSITIONAL PROTECTIVE YARD



LIGHT POLE & 20' SEPARATION RADIUS

SHADE TREES



QNU - QUERCUS NUTTALLII



UPB - ULMUS PARVIFOLIA 'BOSQUE'



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UNDERSTORY TREES

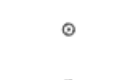


IAF - ILEX x ATTENUATA 'FOSTER'



MGL - MAGNOLIA GRANDIFLORA 'LITTLE GEM'

SHRUBS



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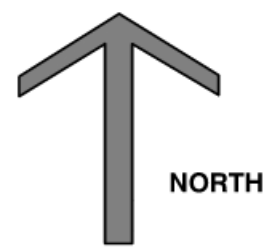
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HORIZONTAL  
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PROJECT OCEAN - ASR-0110-2022

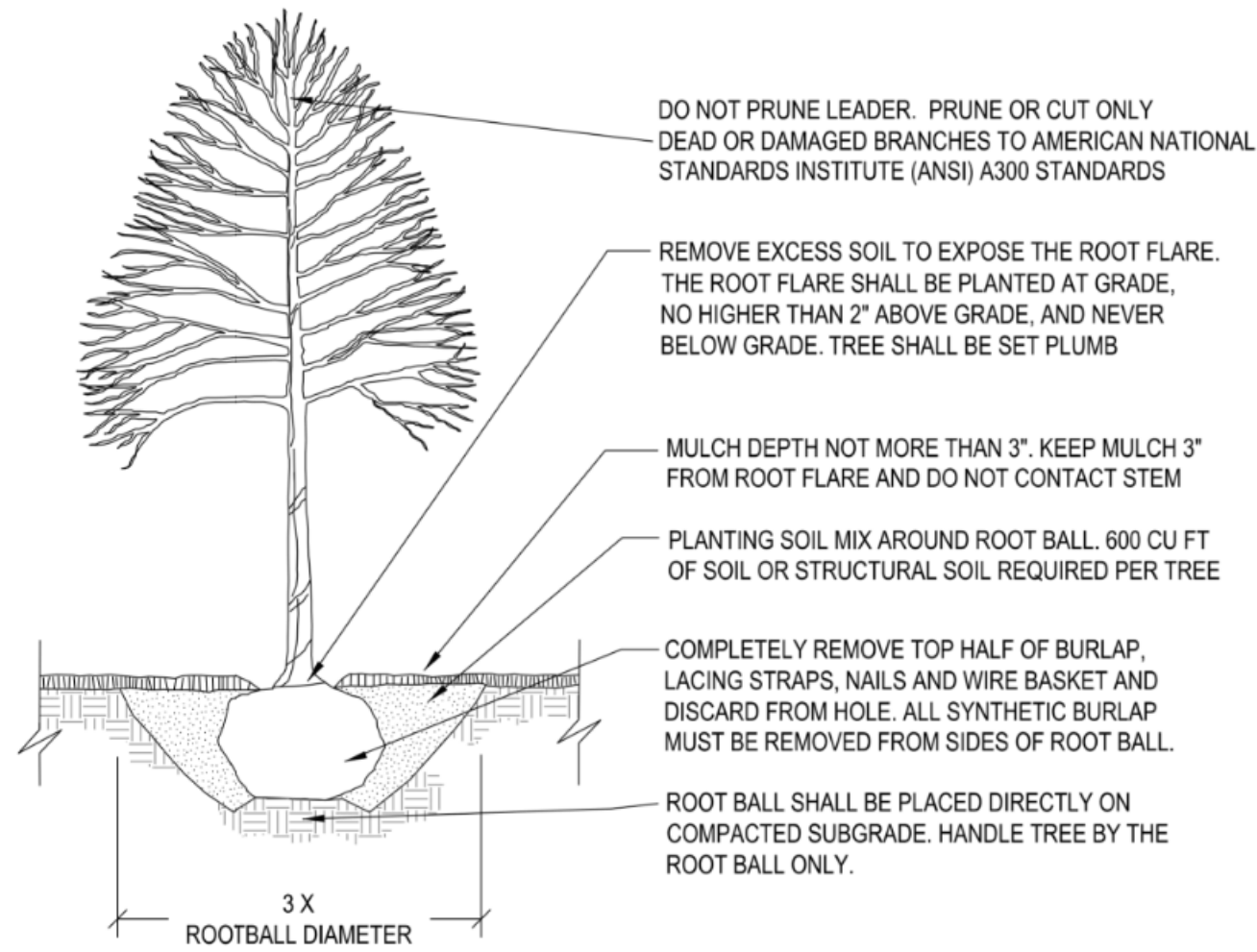
4320 AUBURN CHURCH ROAD, GARNER, NC 27529

RALEIGH JURISDICTION, ZONING: IH-CU OVERLAY: SHOD-1

LANDSCAPE PLAN

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DO NOT PRUNE LEADER. PRUNE OR CUT ONLY DEAD OR DAMAGED BRANCHES TO AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI) A300 STANDARDS

REMOVE EXCESS SOIL TO EXPOSE THE ROOT FLARE. THE ROOT FLARE SHALL BE PLANTED AT GRADE, NO HIGHER THAN 2" ABOVE GRADE, AND NEVER BELOW GRADE. TREE SHALL BE SET PLUMB

MULCH DEPTH NOT MORE THAN 3". KEEP MULCH 3" FROM ROOT FLARE AND DO NOT CONTACT STEM

PLANTING SOIL MIX AROUND ROOT BALL. 600 CU FT OF SOIL OR STRUCTURAL SOIL REQUIRED PER TREE

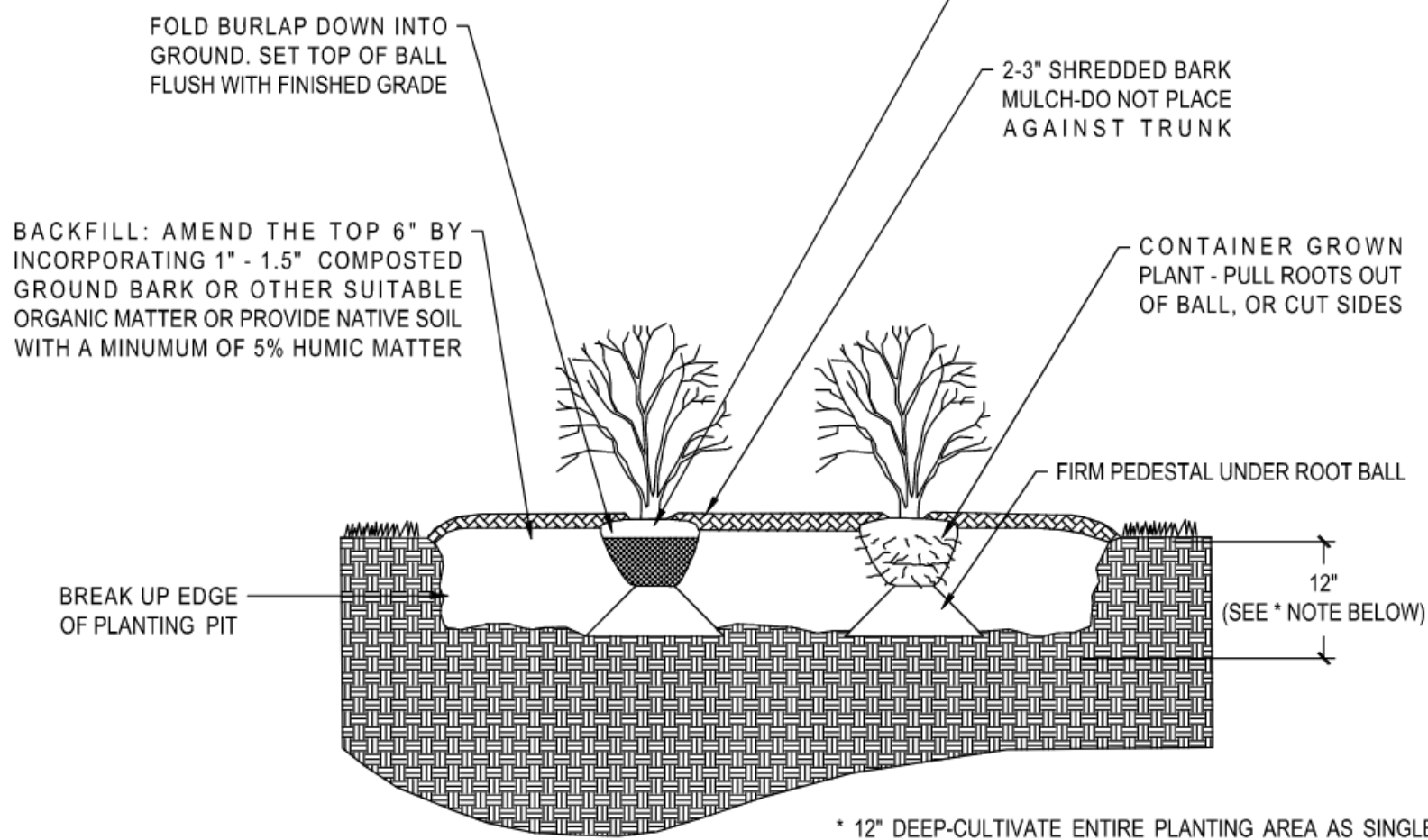
COMPLETELY REMOVE TOP HALF OF BURLAP, LACING STRAPS, NAILS AND WIRE BASKET AND DISCARD FROM HOLE. ALL SYNTHETIC BURLAP MUST BE REMOVED FROM SIDES OF ROOT BALL.

ROOT BALL SHALL BE PLACED DIRECTLY ON COMPACTED SUBGRADE. HANDLE TREE BY THE ROOT BALL ONLY.

CONTACT INFORMATION:  
CITY OF RALEIGH PARKS, RECREATION AND CULTURAL RESOURCES DEPARTMENT URBAN FORESTER:  
TREES@RALEIGHNC.GOV  
WWW.RALEIGHNC.GOV

- NOTES:
- TREES MUST MEET THE TREE QUALITY STANDARDS IN CH. 2 OF THE CITY TREE MANUAL.
  - CONTRACTOR IS RESPONSIBLE FOR ADEQUATE DRAINAGE OF ALL PLANTING PITS. (POSITIVE DRAINAGE AWAY FROM PIT)
  - TREES SHALL BE PLANTED BETWEEN OCTOBER 1ST AND APRIL 30TH.
  - A TREE IMPACT PERMIT IS REQUIRED.
  - ELECTRICAL OUTLETS AND OTHER UTILITIES ARE PROHIBITED IN THE PLANTING AREA IMMEDIATELY SURROUNDING THE TREE.
  - IF STAKING IN ACCORDANCE WITH THE CITY TREE MANUAL, THE STAKING MUST BE REMOVED WITHIN ONE YEAR.
  - TREES WILL HAVE A MINIMUM 1 YEAR WARRANTY AFTER THE INITIAL PLANTING IS APPROVED BY THE CITY.

CITY OF RALEIGH STANDARD DETAIL		
REVISIONS	DATE: 6/2020	NOT TO SCALE
10/2019		
TREE PLANTING DETAIL		
TPP-03		



#### NOTES

- ALL SHRUBS SHALL CONFORM TO THE STANDARDS SET FORTH IN THE MOST RECENT AMERICAN STANDARDS FOR NURSERY STOCK PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMEN (A.A.N.).
- SOIL ANALYSIS SHALL BE OBTAINED PRIOR TO PLANTING. SOIL SHALL BE AMENDED AS RECOMMENDED.
- SHEET PREPARATION OF BEDS IS HIGHLY PREFERRED TO INDIVIDUAL DUG HOLE.S.

#### SHRUB/GROUNDCOVER PLANTING DETAIL (LAN-38)

NTS

#### LANDSCAPE CALCULATIONS:

UDO 5.3.1 SPECIAL HIGHWAY OVERLAY DISTRICTS (SHOD)  
REQUIRED: 50' SHOD-1 PROTECTIVE YARD  
PROVIDED: TREE CONSERVATION AREA

UDO 7.1.7 VEHICLE PARKING LOT LANDSCAPING  
PERIMETER ISLANDS  
REQUIREMENT: 30 SHRUBS PER 100 LF

PERIMETER ISLANDS:  
REQUIRED: 1,294 LF  
388 SHRUBS  
PROVIDED: 388 SHRUBS

TREE COVERAGE  
REQUIREMENT: EACH INTERIOR ISLAND (AND TERMINAL INTERIOR ISLAND) MUST INCLUDE AT LEAST 1 SHADE TREE  
IN NO CASE SHALL THERE BE LESS THAN 1 SHADE TREE FOR EVERY 2,000 SF OF PARKING AREA  
LIGHTING FIXTURES MUST BE LOCATED AT LEAST 20 FEET FROM A TREE, MEASURED FROM THE POLE OF THE LIGHTING FIXTURE TO THE TRUNK OF THE TREE

PARKING AREA #1:  
REQUIRED: 60,350 SF  
30 SHADE TREES  
PROVIDED: 30 SHADE TREES

PARKING AREA #2:  
REQUIRED: 87,510 SF  
44 SHADE TREES  
PROVIDED: 44 SHADE TREES

UDO 7.2.4 PROTECTIVE YARDS  
TRANSITIONAL PROTECTIVE YARD (TPY)  
REQUIREMENT: 35' W TYPE B2  
6.5' HT FENCE  
6 SHADE TREES PER 100 LF (50% EVERGREEN)  
6 UNDERSTORY TREES PER 100 LF (50% EVERGREEN)  
60 SHRUBS (100% EVERGREEN)

35' W TYPE B2 TPY:  
REQUIRED: 1,437 LF  
6.5' HT SOLID WOOD FENCE  
87 SHADE TREES (44 EVERGREEN)  
87 UNDERSTORY TREES (44 EVERGREEN)  
863 EVERGREEN SHRUBS

PROVIDED: EXISTING VEGETATION TO REMAIN UNDISTURBED TO THE EXTENT POSSIBLE.  
SUPPLEMENT AS NECESSARY TO ACHIEVE THE MINIMUM PLANTING REQUIREMENTS

STREET PROTECTIVE YARD (SPY)  
REQUIREMENT: 10' W TYPE C3  
30 SHRUBS PER 100 LF (100% EVERGREEN)

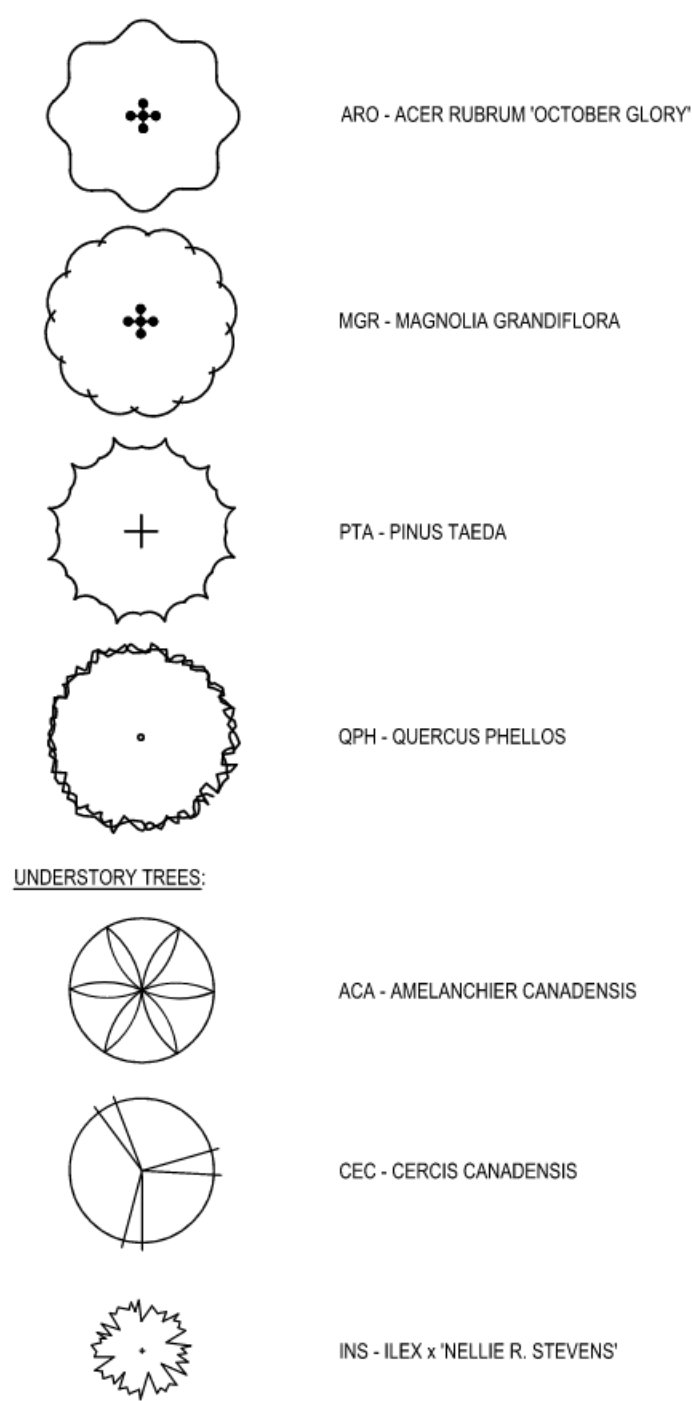
10' W TYPE C3 SPY:  
REQUIRED: 127 LF  
38 EVERGREEN SHRUBS  
PROVIDED: 38 EVERGREEN SHRUBS

UDO 8.4 NEW & EXISTING STREETS  
STREETSCAPE TREE PLANTING  
REQUIREMENT: 1 SHADE TREE PER 40 LF

EAGLE CREST WAY:  
REQUIRED: 719 LF  
17 SHADE TREES  
PROVIDED: 17 SHADE TREES

#### TRANSITIONAL PROTECTIVE YARD PLANT SYMBOL KEY:

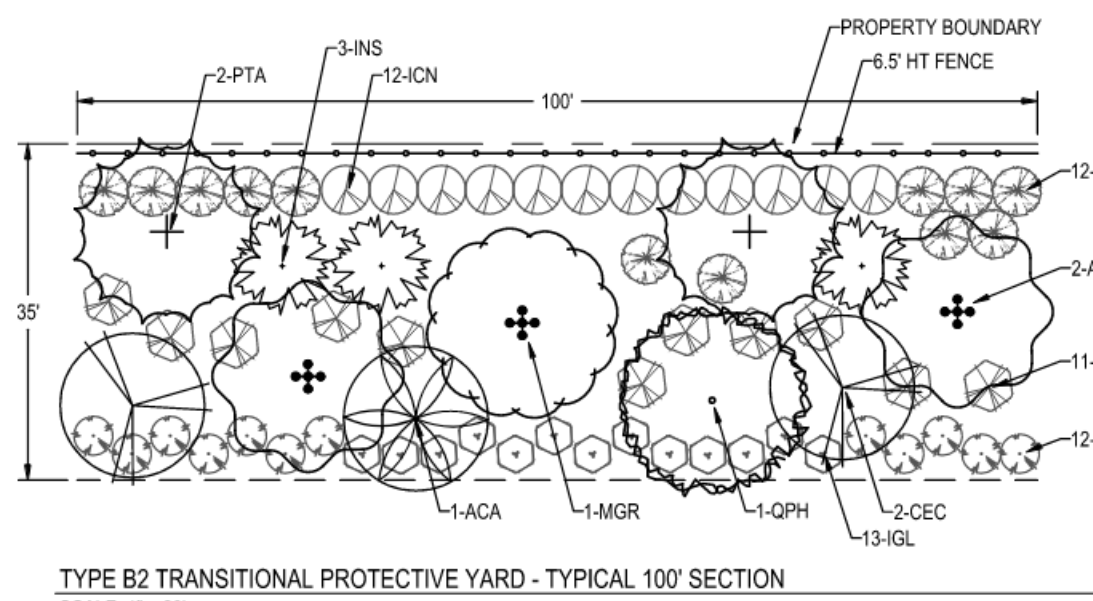
##### SHADE TREES:



##### UNDERSTORY TREES:

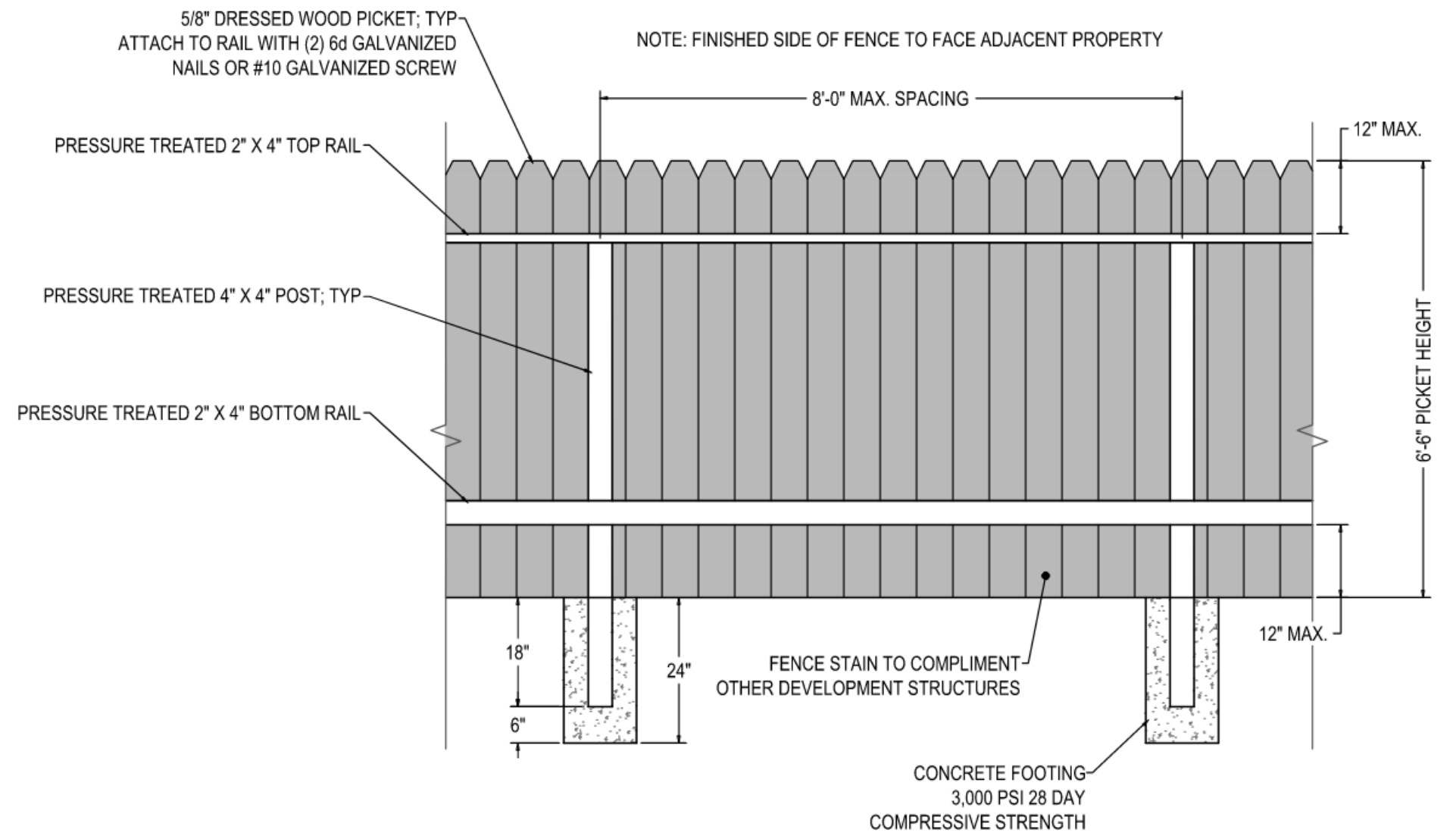
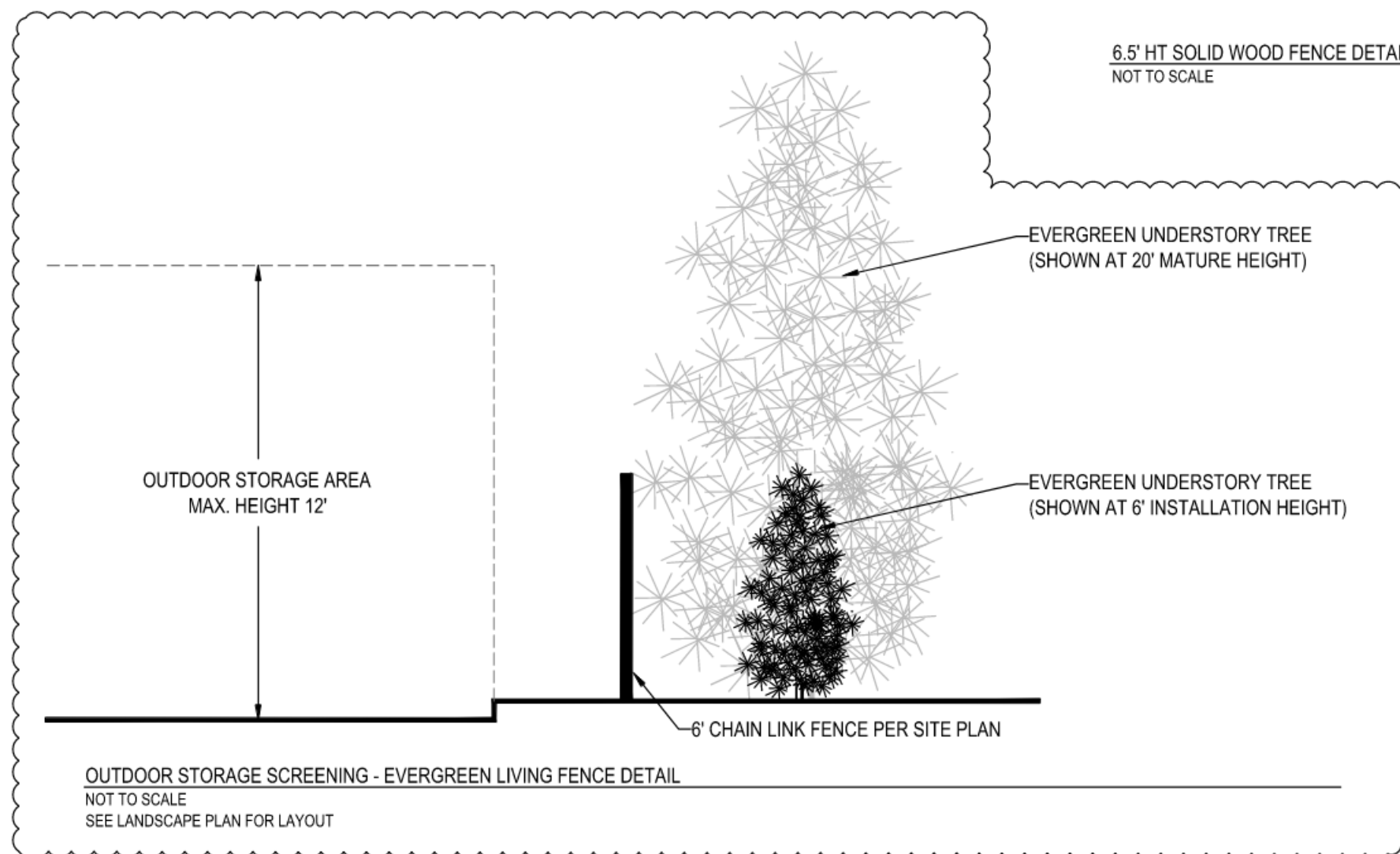


##### SHRUBS:



REQUIREMENTS: 35' AVERAGE WIDTH  
6.5' HT FENCE  
6 SHADE TREES (50% EVERGREEN) PER 100 LF  
6 UNDERSTORY TREES (50% EVERGREEN) PER 100 LF  
60 SHRUBS (100% EVERGREEN) PER 100 LF

NOTE: THIS DETAIL IS TO BE USED IF EXISTING VEGETATION REQUIRES SUPPLEMENTAL PLANTING IN ORDER TO ACHIEVE THE MINIMUM STANDARDS OF THE TRANSITIONAL PROTECTIVE YARD



REVISIONS: 1/17/2022 - ASR 1st REVIEW  
2/27/2023 - ASR 2nd REVIEW  
5/9/2023 - ASR 3rd REVIEW  
7/11/2023 - ASR 4th REVIEW

SOUTHWELL DESIGN  
LANDSCAPE ARCHITECTURE  
PO Box 31718 | Raleigh, North Carolina 27627  
919.272.5729 | info@southwelldesign.com | www.southwelldesign.com

DATE: JULY 11, 2023  
ISSUED FOR: ASR REVIEW  
SHEET NO.

C604



Statistics						
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Adj Res Zone	+	0.0 fc	0.1 fc	0.0 fc	N/A	N/A
Driveway East	+	2.5 fc	5.2 fc	0.4 fc	13.0:1	6.3:1
Driveway West	+	2.5 fc	5.3 fc	0.8 fc	6.6:1	3.1:1
Parking East	+	3.3 fc	7.9 fc	1.2 fc	6.6:1	2.8:1
Parking West	+	2.9 fc	6.2 fc	1.0 fc	6.2:1	2.9:1
Adj NonRes - R/W	+	0.0 fc	0.6 fc	0.0 fc	N/A	N/A

Schedule										
Symbol	Label	Image	QTY	Manufacturer	Catalog	Description	Number Lamps	Lamp Output	LLF	Input Power
	A		22	U.S. ARCHITECTURAL LIGHTING	VLL-PLD-IV-FT-80LED-1050mA-40K	CAST BLACK PAINTED FINNED METAL HOUSING.	80	357	0.85	256.4
	B		67	American Electric Lighting	ATB2 P603 R4 4K	Autobahn Large P603 Package Roadway Type IV 4000K/5000K CCT	1	31108	0.85	233

NOTE: ALL POLE FIXTURES AND WALL PACKS MOUNTED AT 25' ABOVE GRADE.

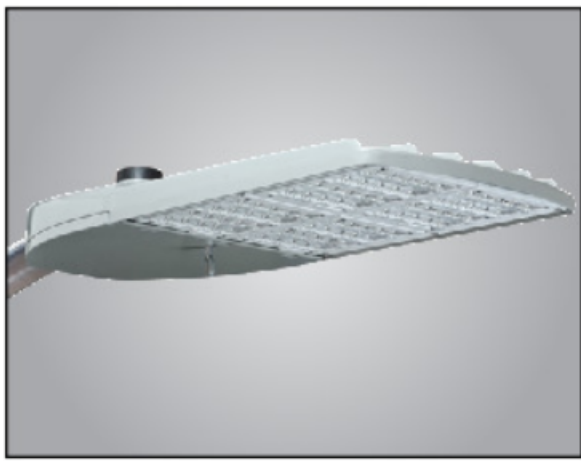


Consistent with LEED® goals  
& Green Glare™ for  
light pollution reduction

## Autobahn Series ATB2 Roadway Lighting



### PRODUCT OVERVIEW



#### Features:

##### OPTICAL

Same Light: Performance is comparable to 250-400W HPS roadway luminaires.

White Light: Correlated color temperature - 4000K, 70 CRI minimum, 3000K, 70CRI minimum or optional 5000K, 70 CRI minimum.

Unique IP66 rated LED light engines provided 0% uplight and restrict backlight to within sidewalk depth, providing optimal application coverage and optimal pole spacing.

Available in Type II, III, IV, & V roadway distributions.

##### ELECTRICAL

Expected Life: LED light engines are rated >100,000 hours at 25°C, L70. Electronic driver has an expected life of 100,000 hours at a 25°C ambient.

Lower Energy: Saves an average of 40-60% over comparable HPS platforms.

Robust Surge Protection: Three different surge protection options provide a minimum of IEEE/ANSI C82.41 Category C (10kV/5kA) protection. 20kV/10kA protection is also available.

##### MECHANICAL

Easy to Maintain: Includes standard AEL lineman-friendly features such as tool-less entry, 3 station terminal block and quick disconnects. Bubble level located inside the electrical compartment for easy leveling at installation.

Rugged die-cast aluminum housing is polyester powder-coated for durability and corrosion resistance. Rigorous five-stage pre-treating and painting process yields a finish that achieves a scribe creepage rating of 8 (per ASTM D 1654) after over 1000 hours exposure to salt fog chamber (operated per ASTM B117) Optional Enhanced Corrosion Resistant finish (CR) increases the salt spray exposure to 5000 hours.

Four-bolt mast arm mount is adjustable for arms from 1-1/4" to 2" (1-5/8" to 2-3/8" O.D.) diameter and provides a 36 vibration rating per ANSI C136. Wildlife shield is cast into the housing (not a separate piece).

##### CONTROLS

NEMA 3 Pin photocontrol receptacle is standard, with the Acuity designed ANSI 5 Pin and 7 Pin receptacles optionally available.

Premium solid state locking sale photocontrol - PCSS (10 year rated life). Extreme long life solid state locking style photocontrol - PCLL (20 year rated life).

Multi-level dimming available to provide scheduled dimming as specified by the customer.

Optional onboard Adjustable Output module allows the light output and input wattage to be modified to meet site specific requirements, and can also allow a single fixture to be flexibly applied in many different applications.

##### STANDARDS

DesignLights Consortium® (DLC) qualified product. Not all versions of this product may be DLC qualified. Please check the DLC Qualified Products List at [www.designlights.org/QPL](http://www.designlights.org/QPL) to confirm which versions are qualified.

Rated for -40°C to 40°C ambient.

CSA Certified to U.S. and Canadian standards

Complies with ANSI: C136.2, C136.10, C136.14, C136.31, C136.15, C136.37

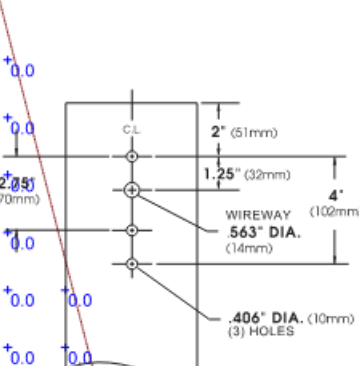
Note: Specifications subject to change without notice.  
Autobahn Series - AEL\_0109\_ATB2

AEL American  
Electric  
Lighting

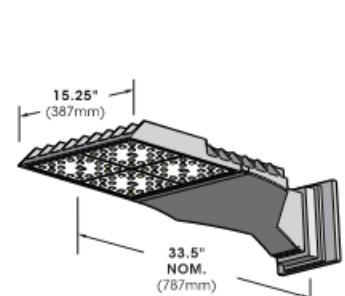
### VLL SERIES - LED

#### SPECIFICATIONS

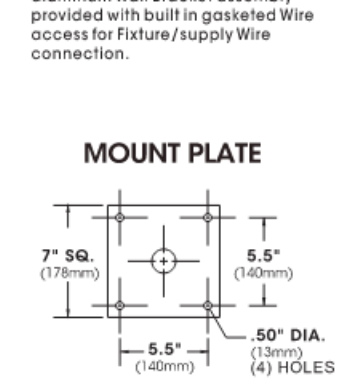
##### POLE DRILLING TEMPLATE



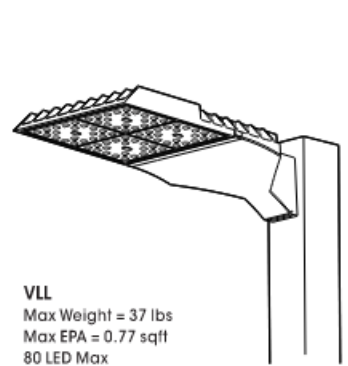
##### WALL MOUNT



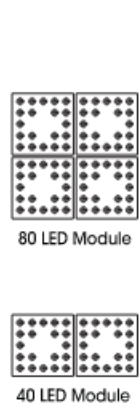
##### MOUNT PLATE



##### EPA & WEIGHT



##### PLED™ MODULES



#### ORDERING INFORMATION

Luminaire	Optics	LED Mode		Voltage	Mounting	Finish	Options
Luminaire	Optics	LED		Voltage	Mounting	Finish	Options
<input checked="" type="checkbox"/> VLL	<div><div><input type="checkbox"/> PLED-I Derivative Type</div><div><input type="checkbox"/> Type I PLED-II</div><div><input type="checkbox"/> Type II PLED-III</div><div><input type="checkbox"/> Type III PLED-IV</div><div><input type="checkbox"/> Type IV PLED-V</div><div><input type="checkbox"/> Type V PLED-VI</div><div><input type="checkbox"/> Type VI PLED-VII</div><div><input type="checkbox"/> Type VII PLED-VIII</div><div><input type="checkbox"/> Type VIII PLED-IX</div><div><input type="checkbox"/> Type IX PLED-X</div><div><input type="checkbox"/> Type X PLED-XI</div><div><input type="checkbox"/> Type XI PLED-XII</div><div><input type="checkbox"/> Type XII PLED-XIII</div><div><input type="checkbox"/> Type XIII PLED-XIV</div><div><input type="checkbox"/> Type XIV PLED-XV</div><div><input type="checkbox"/> Type XV PLED-XVI</div><div><input type="checkbox"/> Type XVI PLED-XVII</div><div><input type="checkbox"/> Type XVII 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TYPICAL STOP SIGN DETAIL

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NTS

### TYPICAL HANDICAP SIGN DETAIL

PARKING BLOCK DETAIL  
NTS

### SITE CONCRETE SIDEWALK

### RETAINING WALL RAILING DETAIL

## SITE PAVING SECTIONS

DUMPSTER PAD  
NTS

NTS

**CITY OF RALEIGH**  
**STANDARD DETAIL**

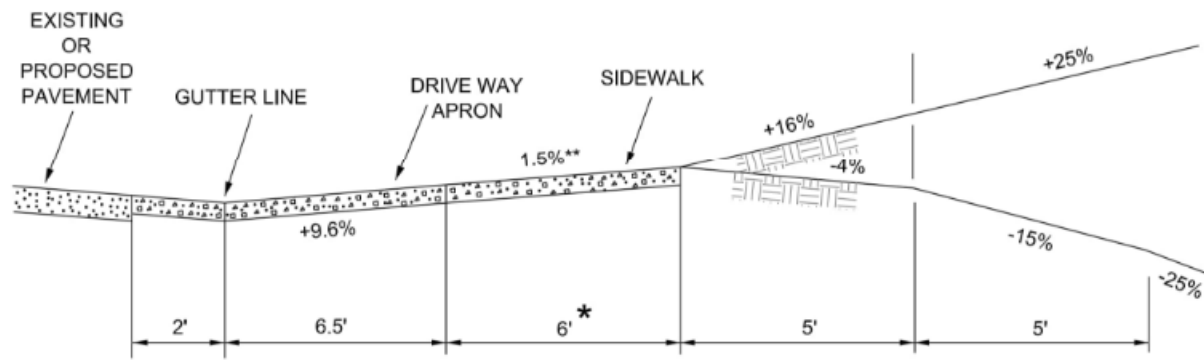
**CITY OF RALEIGH**  
**STANDARD DETAIL**

NOT TO SCALE

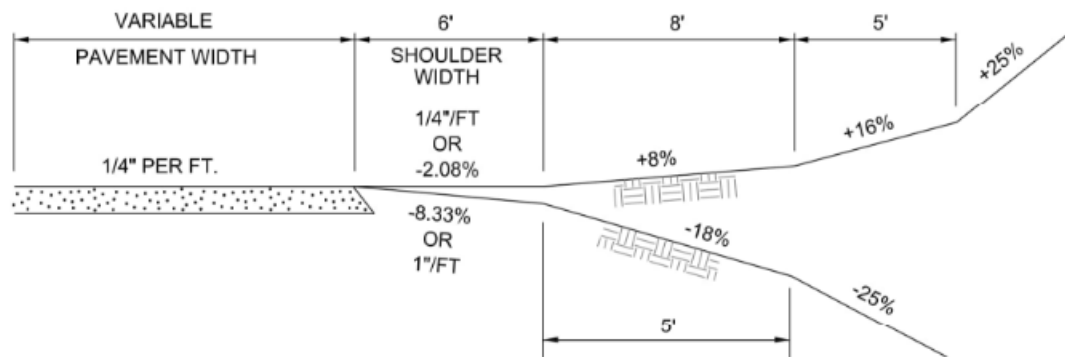
**CITY OF RALEIGH**  
**STANDARD DETAIL**



DRIVEWAY GRADES



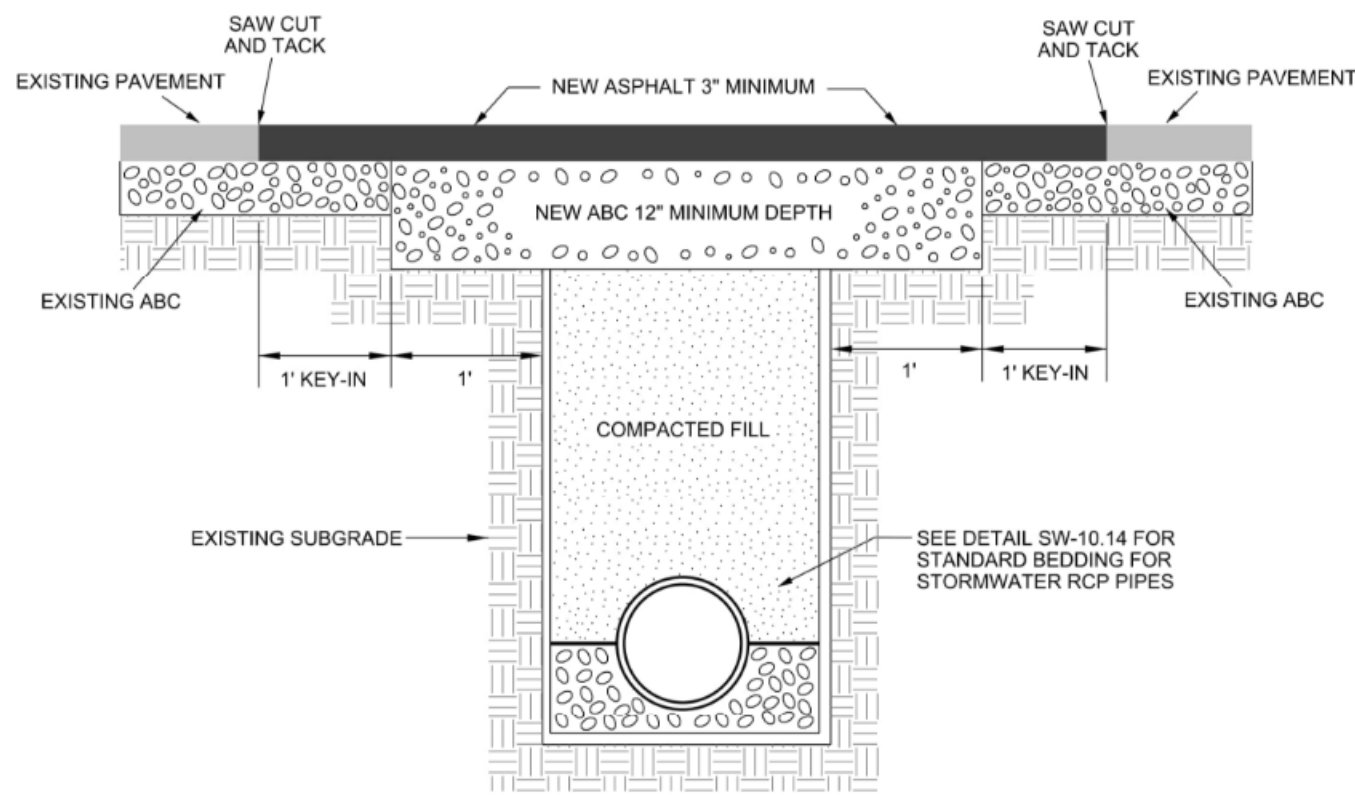
A. CURB & GUTTER, SIDEWALK SECTION



B. SHOULDER SECTION

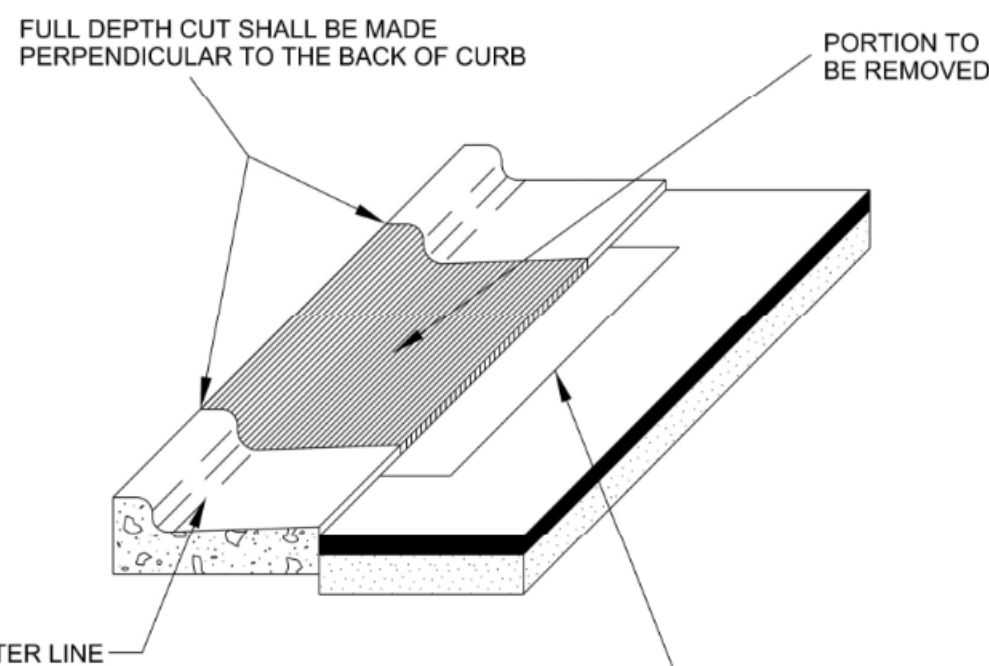
NOTES:  
IF THE SLOPE BETWEEN THE TOP OF CURB AND GUTTER AND A POINT 30 FEET FROM THE CURB AND GUTTER EXCEEDS 20%, THIS SLOPE SHALL BE ADJUSTED TO A MAXIMUM OF 8.33% (1\"/>

CITY OF RALEIGH STANDARD DETAIL		
REVISIONS	DATE: 8/2020	NOT TO SCALE
DATE: 12/2022		
DRIVEWAY GRADES		
T-10.04		



NOTES:  
1. THE PAVEMENT EDGE SHALL BE DEFINED BY A STRAIGHT EDGE FORMED BY A MACHINED SAW CUT.  
2. THE TRENCH SUBGRADE MATERIAL SHALL BE BACKFILLED WITH SUITABLE MATERIAL AND COMPACTED TO A DENSITY OF AT LEAST 95% OF THAT OBTAINED BY COMPACTING A SAMPLE OF THE MATERIAL IN ACCORDANCE WITH AASHTO T-99 AS MODIFIED BY NCDOT.  
3. THE FINAL 1\"/>

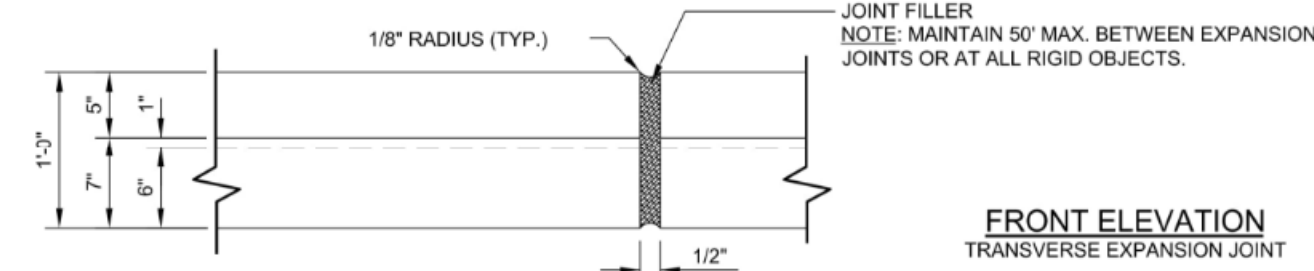
CITY OF RALEIGH STANDARD DETAIL		
REVISIONS	DATE: 8/2020	NOT TO SCALE
DATE: 12/2022		
ASPHALT PAVEMENT PATCH AND RCP PIPE BACKFILL		
T-10.05		



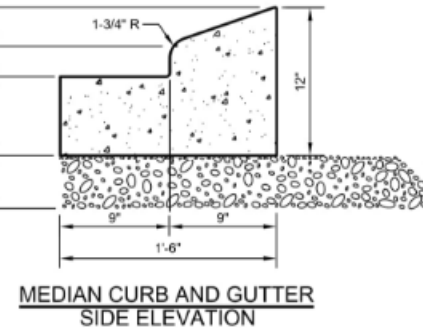
IF THE FINAL LIFT OF ASPHALT HAS BEEN INSTALLED AND IS DAMAGED DURING CURB REMOVAL, A ONE FOOT WIDE SECTION OF ASPHALT SHOULD BE SAWCUT AND REMOVED FOR FORMS TO BE USED TO KEEP A STRAIGHT EDGE ON THE DRIVEWAY APRON. REINSTALL HOT MIX SURFACE ASPHALT PATCH S9.5B.  
IF THE FINAL LIFT OF ASPHALT HAS NOT BEEN INSTALLED, THE ASPHALT IN FRONT OF THE APRON CAN REMAIN IN PLACE.

NOTES:  
1. CURB AND GUTTER SECTION SHALL BE REMOVED IN ACCORDANCE WITH DRIVEWAY WIDTH APPROVED BY THE CITY.  
2. IF PERPENDICULAR CUT IS LESS THAN 5\"/>

CITY OF RALEIGH STANDARD DETAIL		
REVISIONS	DATE: 8/2020	NOT TO SCALE
DATE: 12/2022		
STANDARD METHOD OF REMOVING EXISTING CURB (FOR A DRIVEWAY APRON INSTALLATION)		
T-10.24		

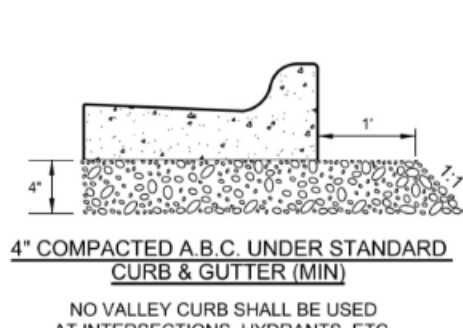
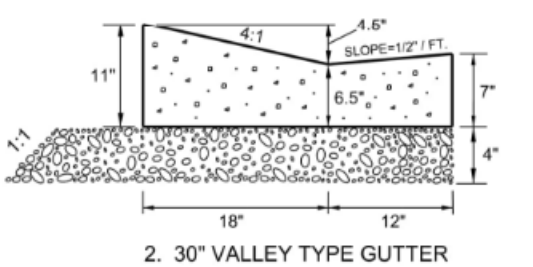


1. 30\"/>



MEDIAN CURB AND GUTTER  
(NON-MOUNTABLE)

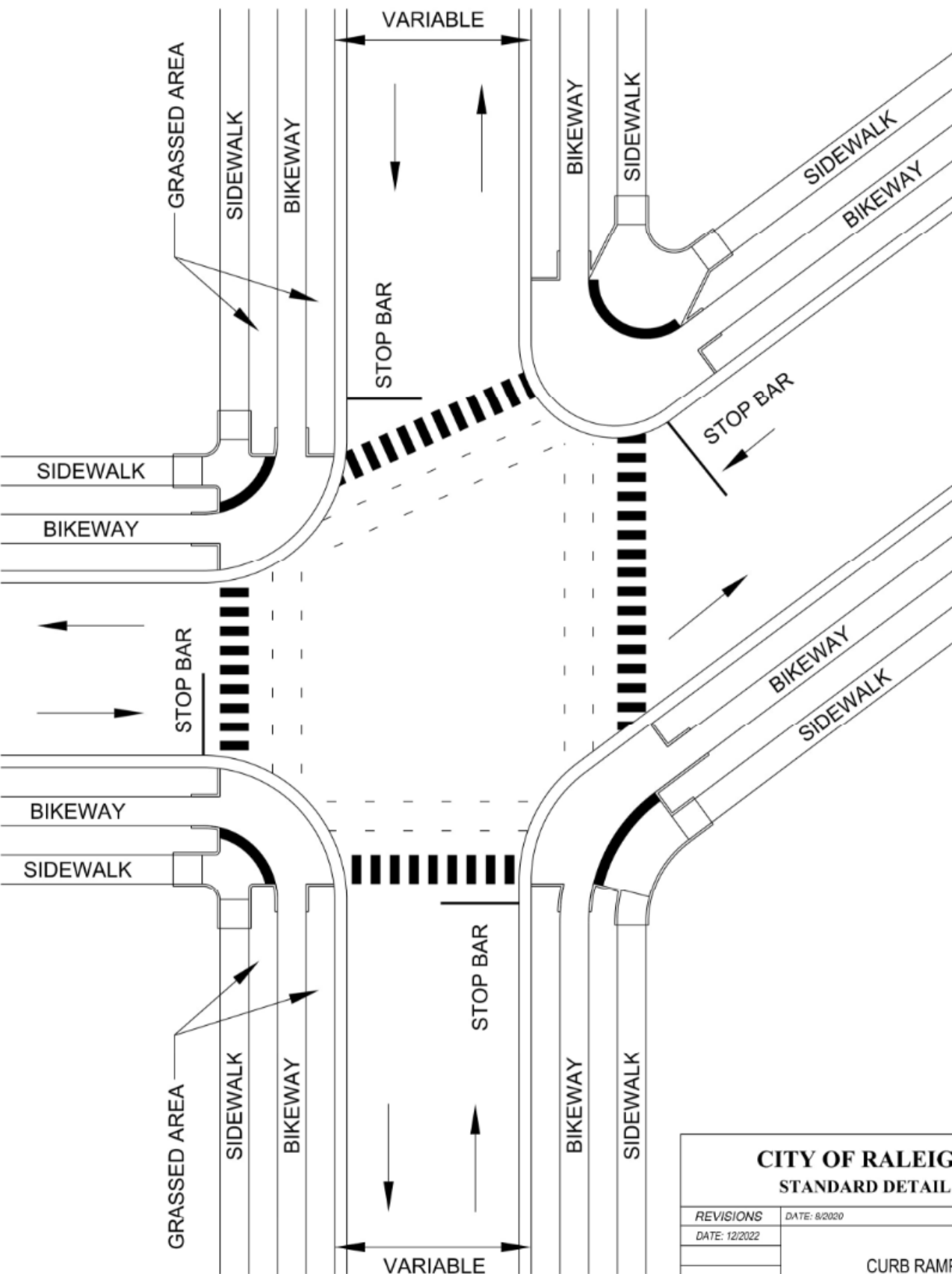
NOTES:  
1. 10\"/>



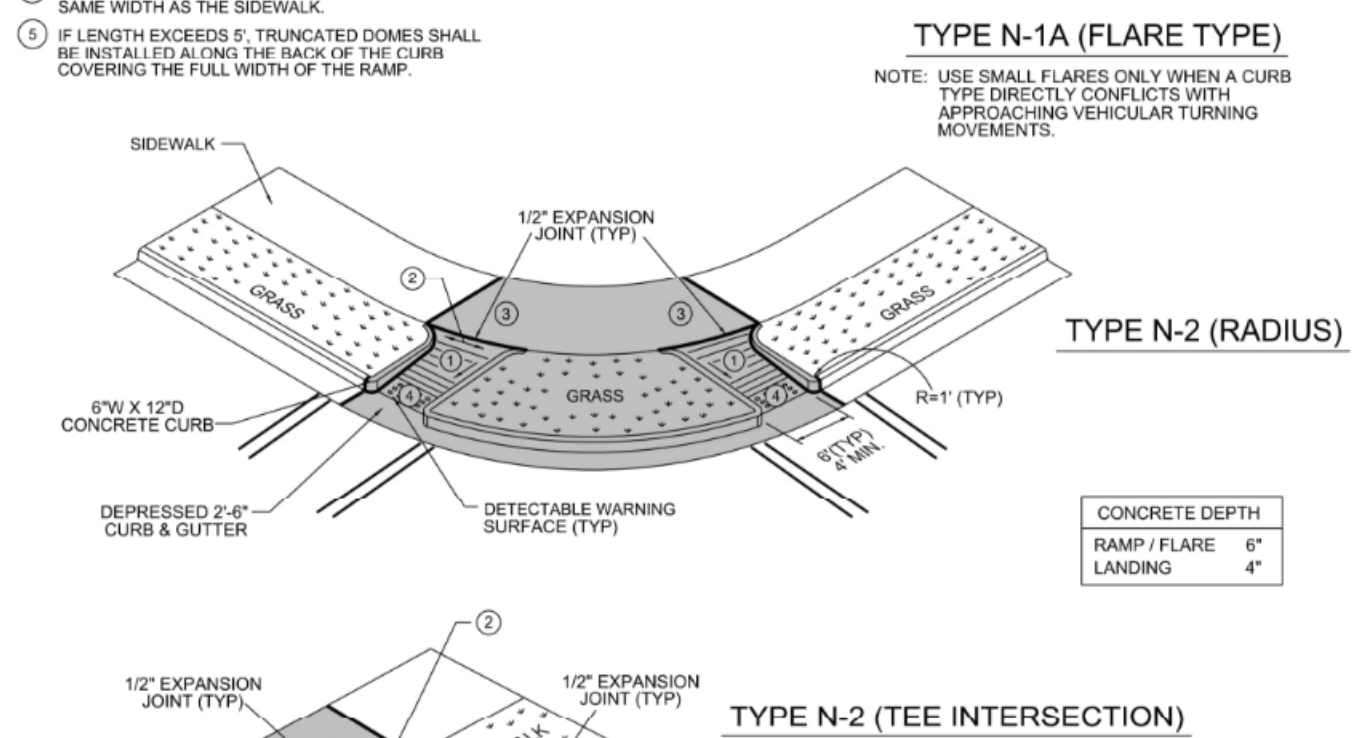
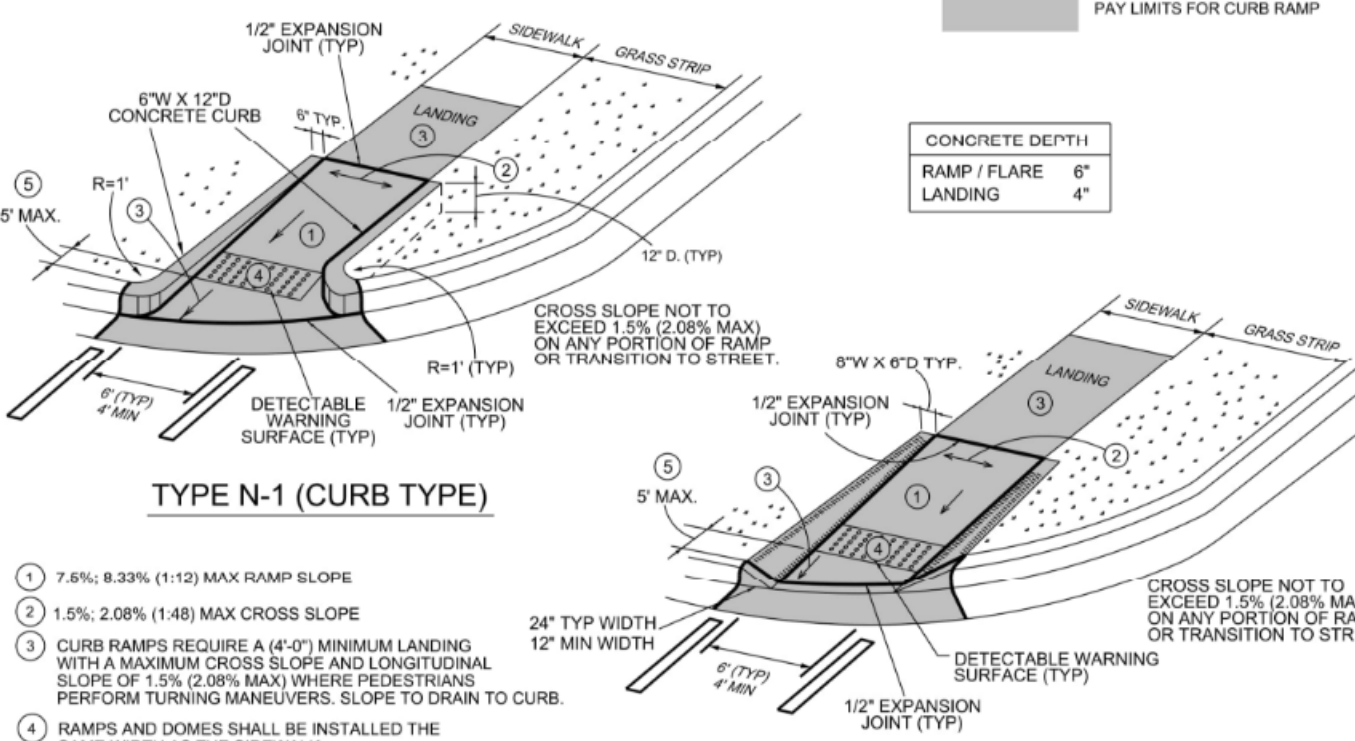
SPILL CURB DETAIL

NO VALLEY CURB SHALL BE USED AT INTERSECTIONS, HYDRANTS, ETC.

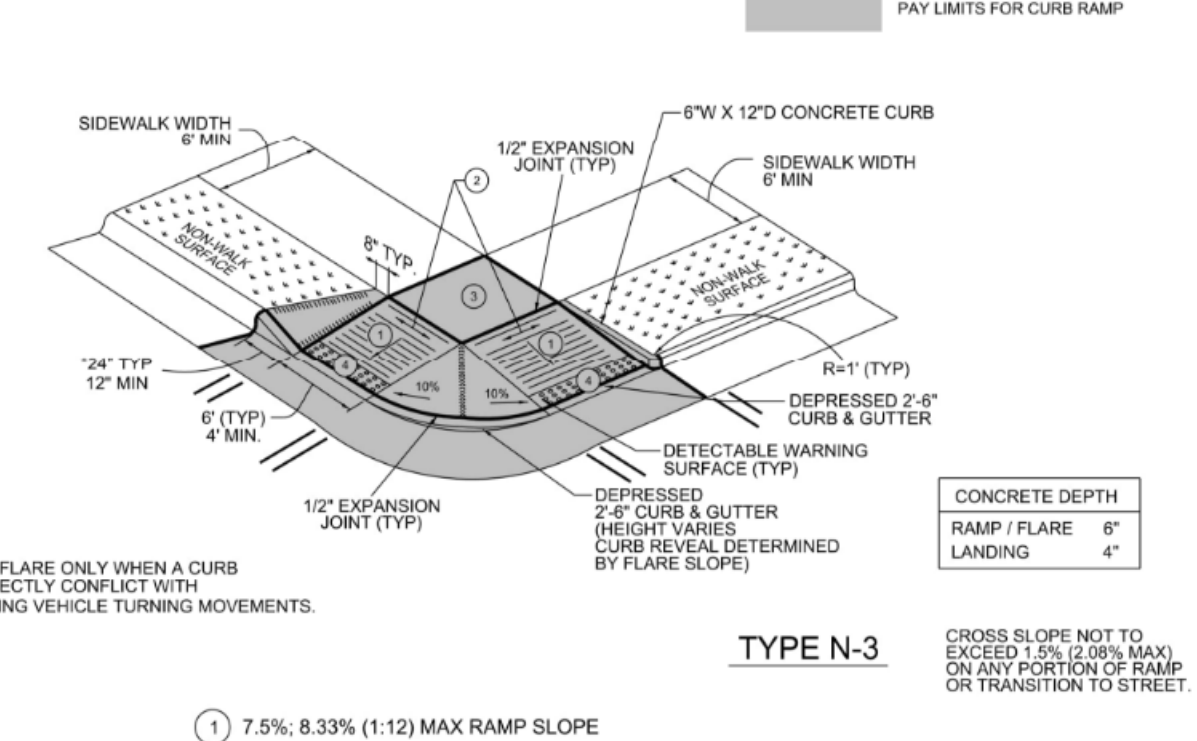
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REVISIONS	DATE: 8/2020	NOT TO SCALE
DATE: 12/2022		
CURB AND GUTTER		
T-10.26.1		



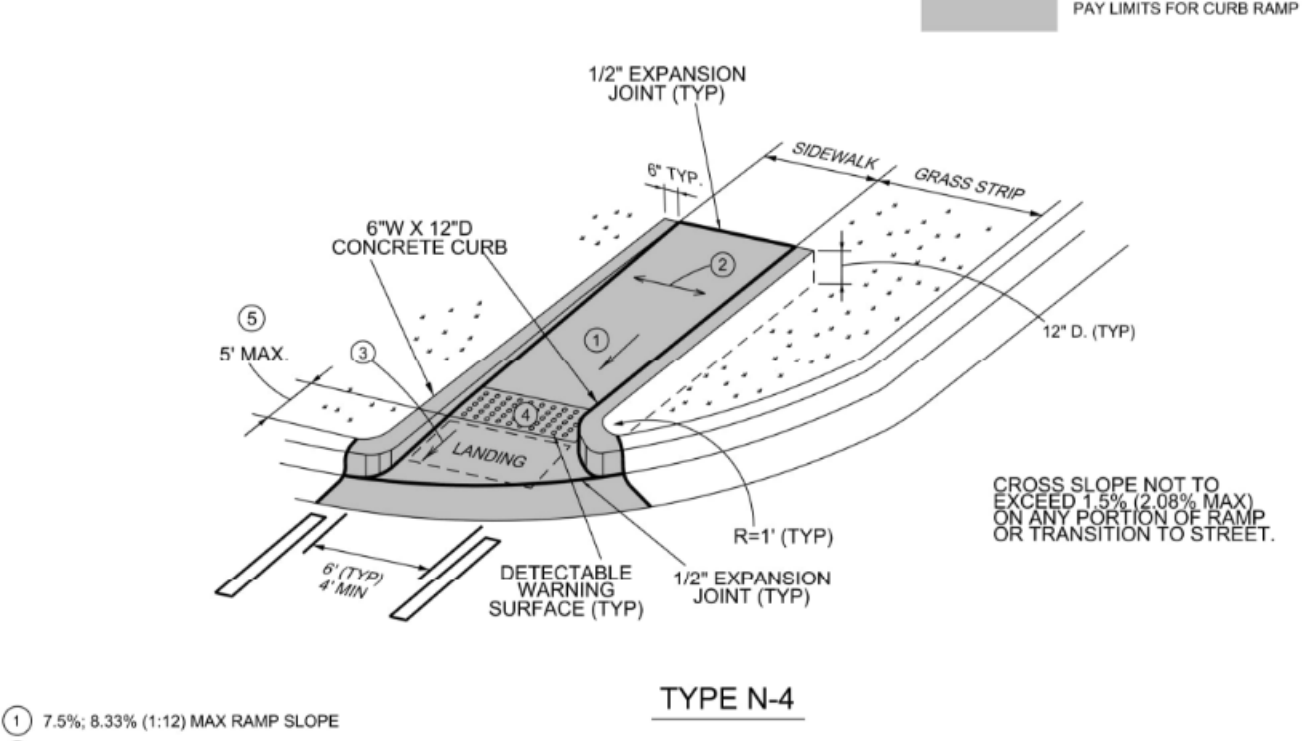
CITY OF RALEIGH STANDARD DETAIL		
REVISIONS	DATE: 8/2020	NOT TO SCALE
DATE: 12/2022		
CURB RAMPS		
T-20.01.1		



CITY OF RALEIGH STANDARD DETAIL		
REVISIONS	DATE: 8/2020	NOT TO SCALE
DATE: 12/2022		
CURB RAMPS (NEW DEVELOPMENT)		
T-20.01.2		



CITY OF RALEIGH STANDARD DETAIL		
REVISIONS	DATE: 8/2020	NOT TO SCALE
DATE: 12/2022		
CURB RAMPS (NEW DEVELOPMENT)		
T-20.01.3		



CITY OF RALEIGH STANDARD DETAIL		
REVISIONS	DATE: 8/2020	NOT TO SCALE
DATE: 12/2022		
CURB RAMPS (NEW DEVELOPMENT)		
T-20.01.4		

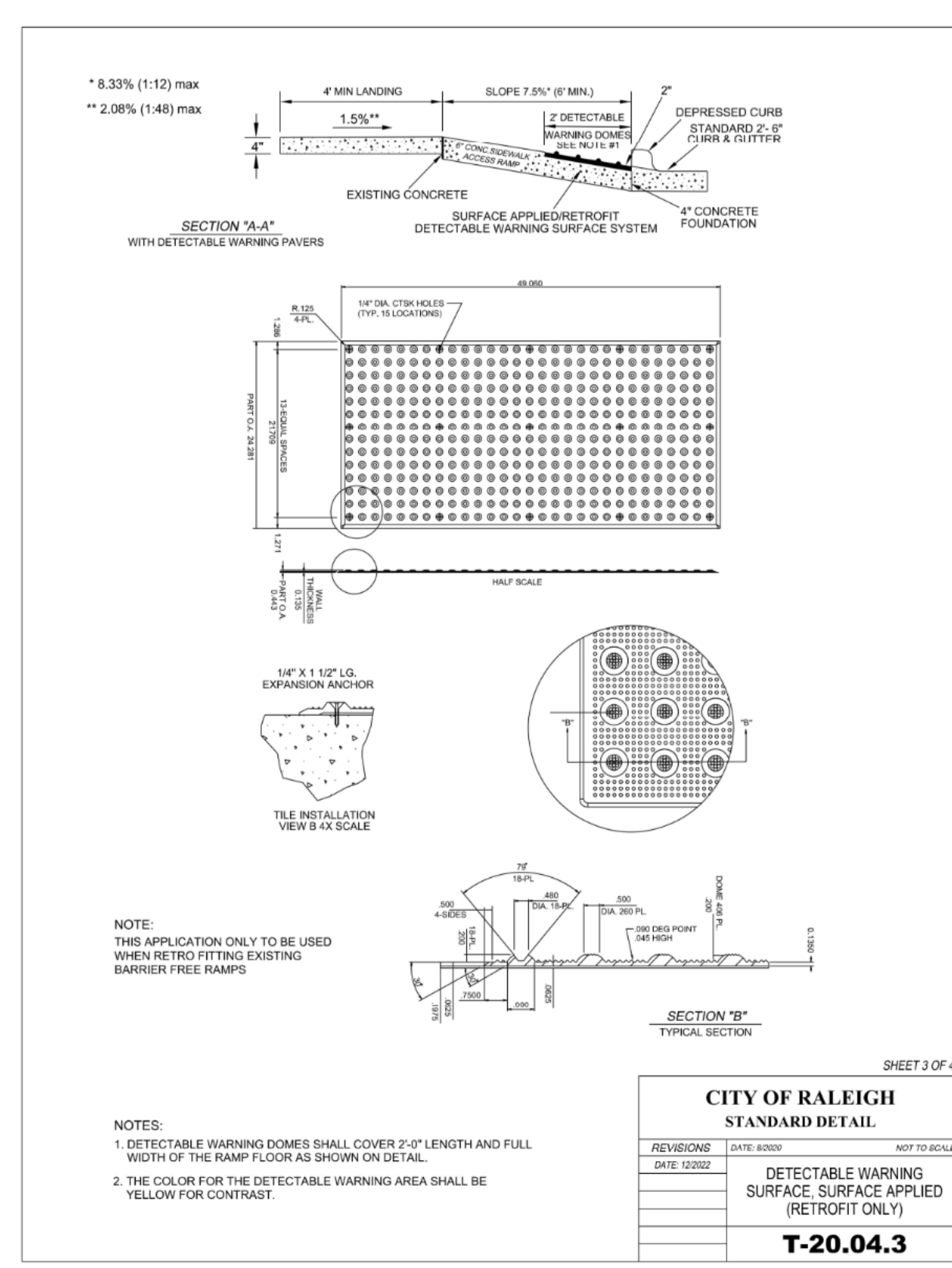
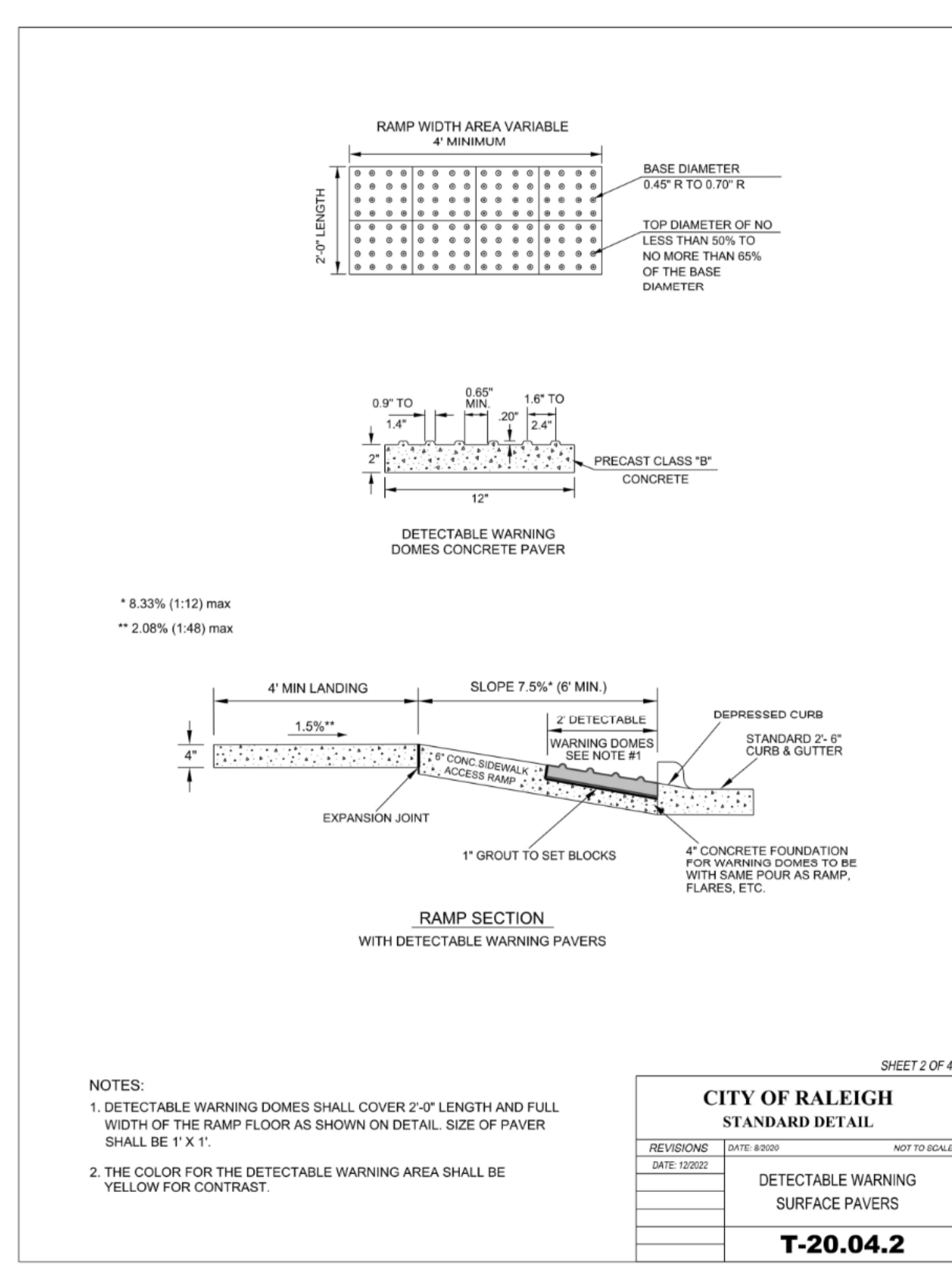
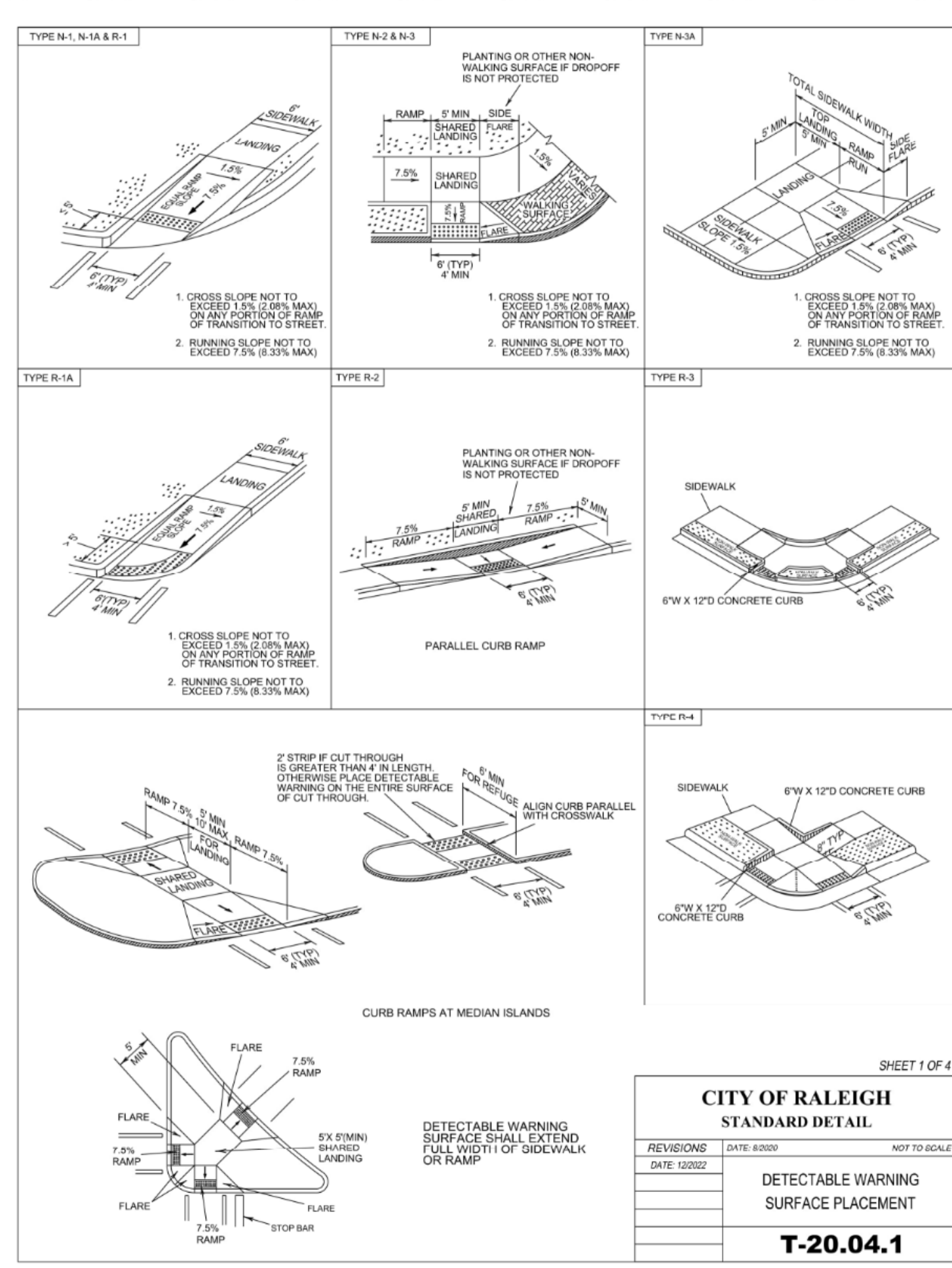
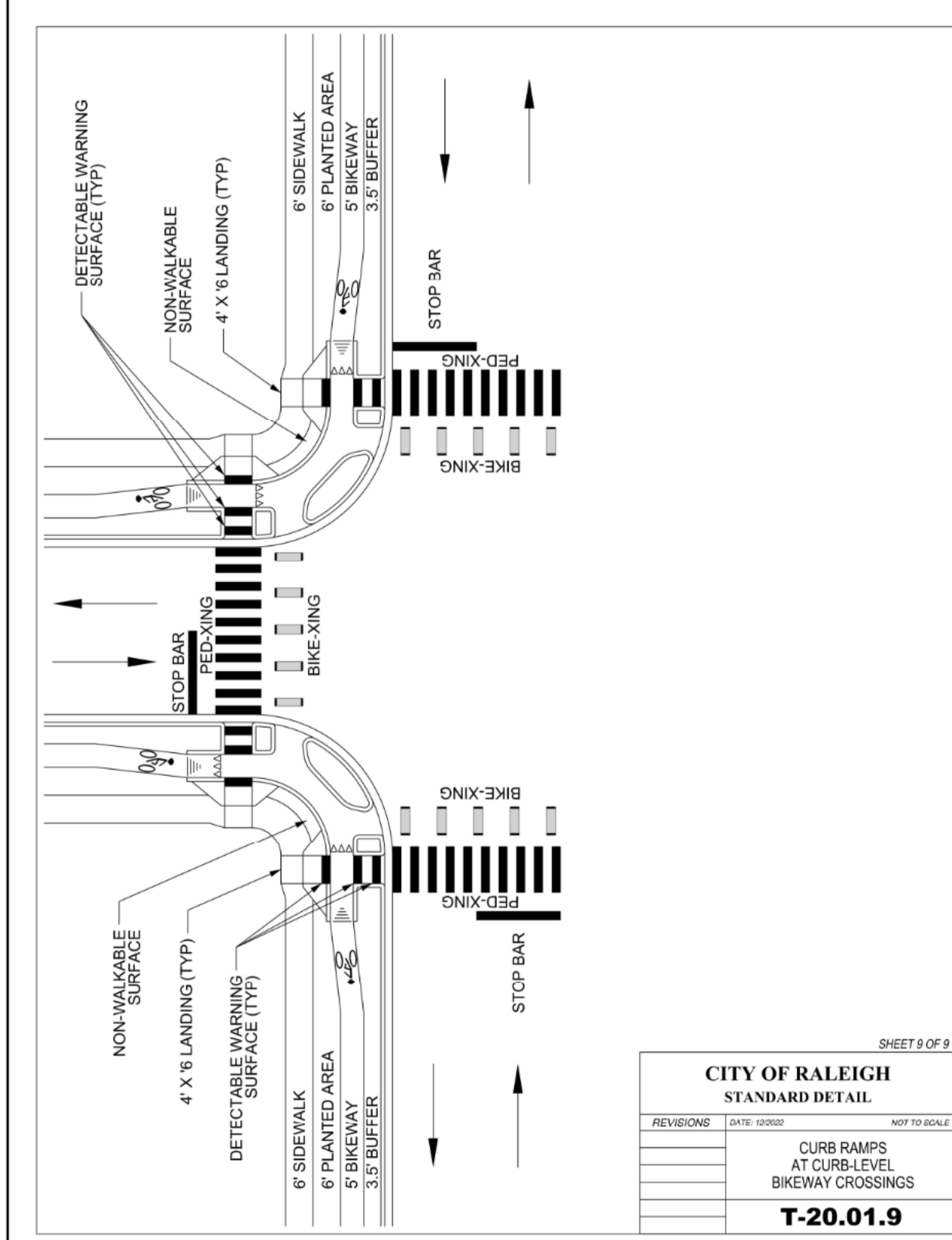
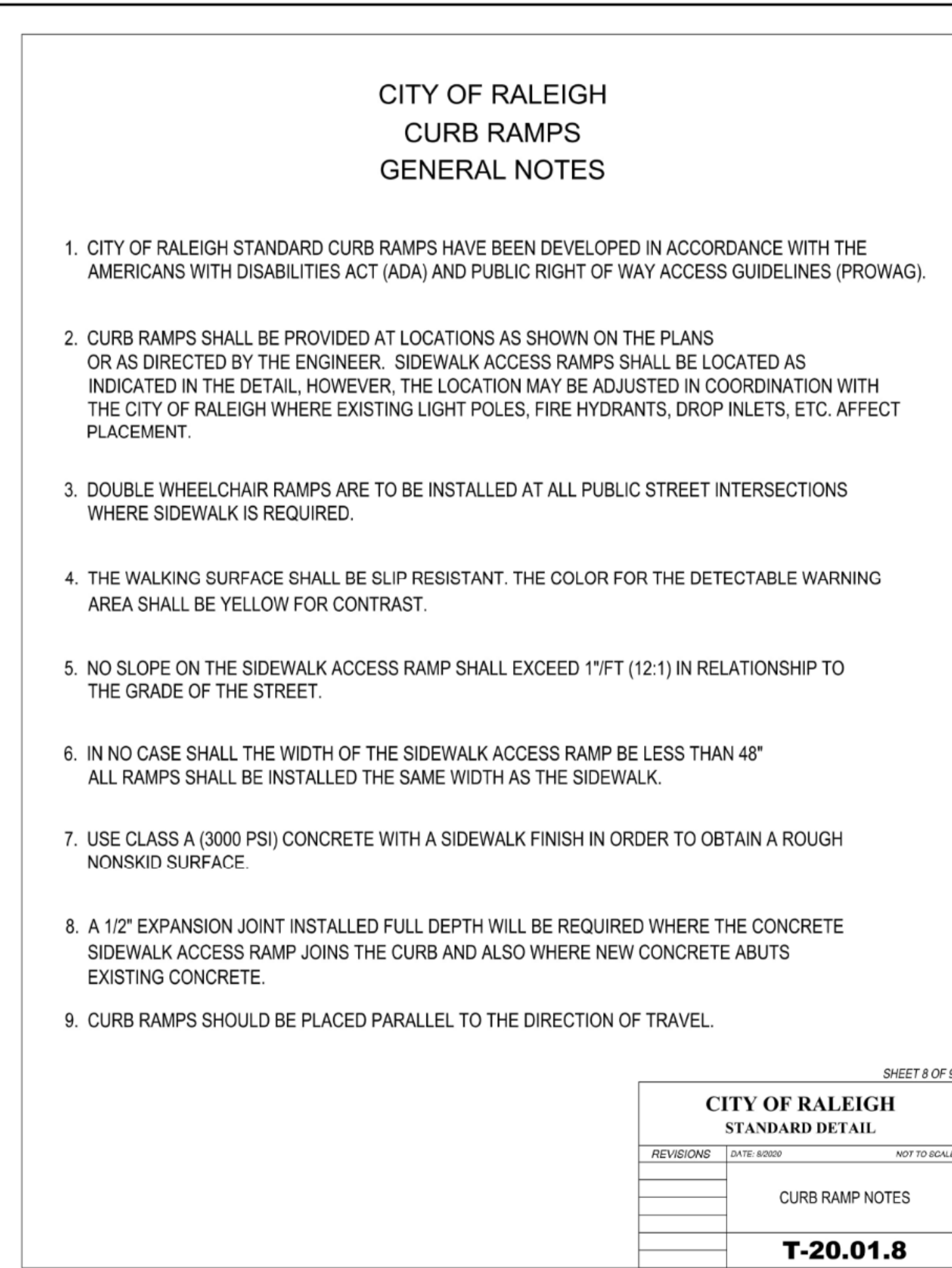
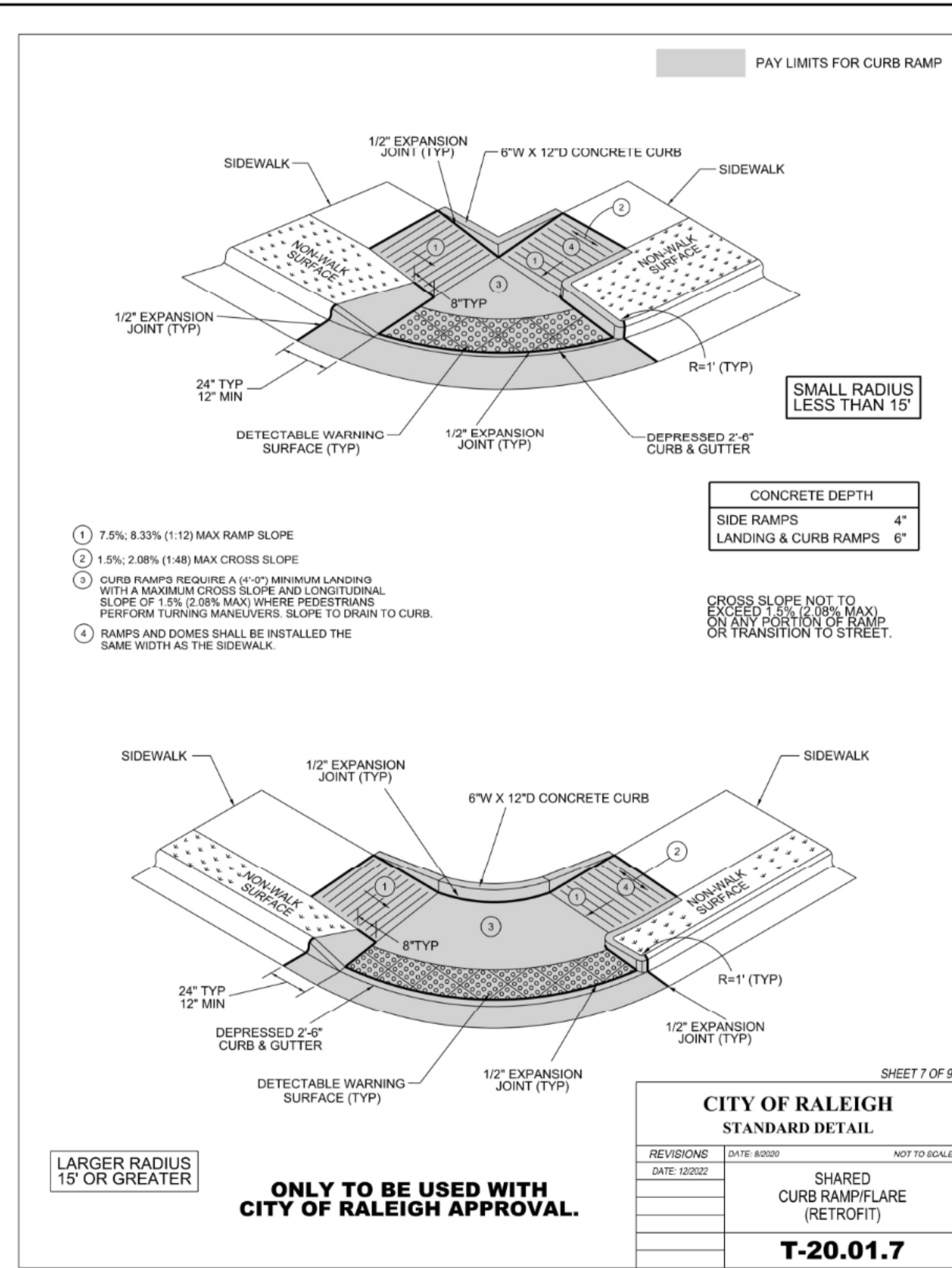
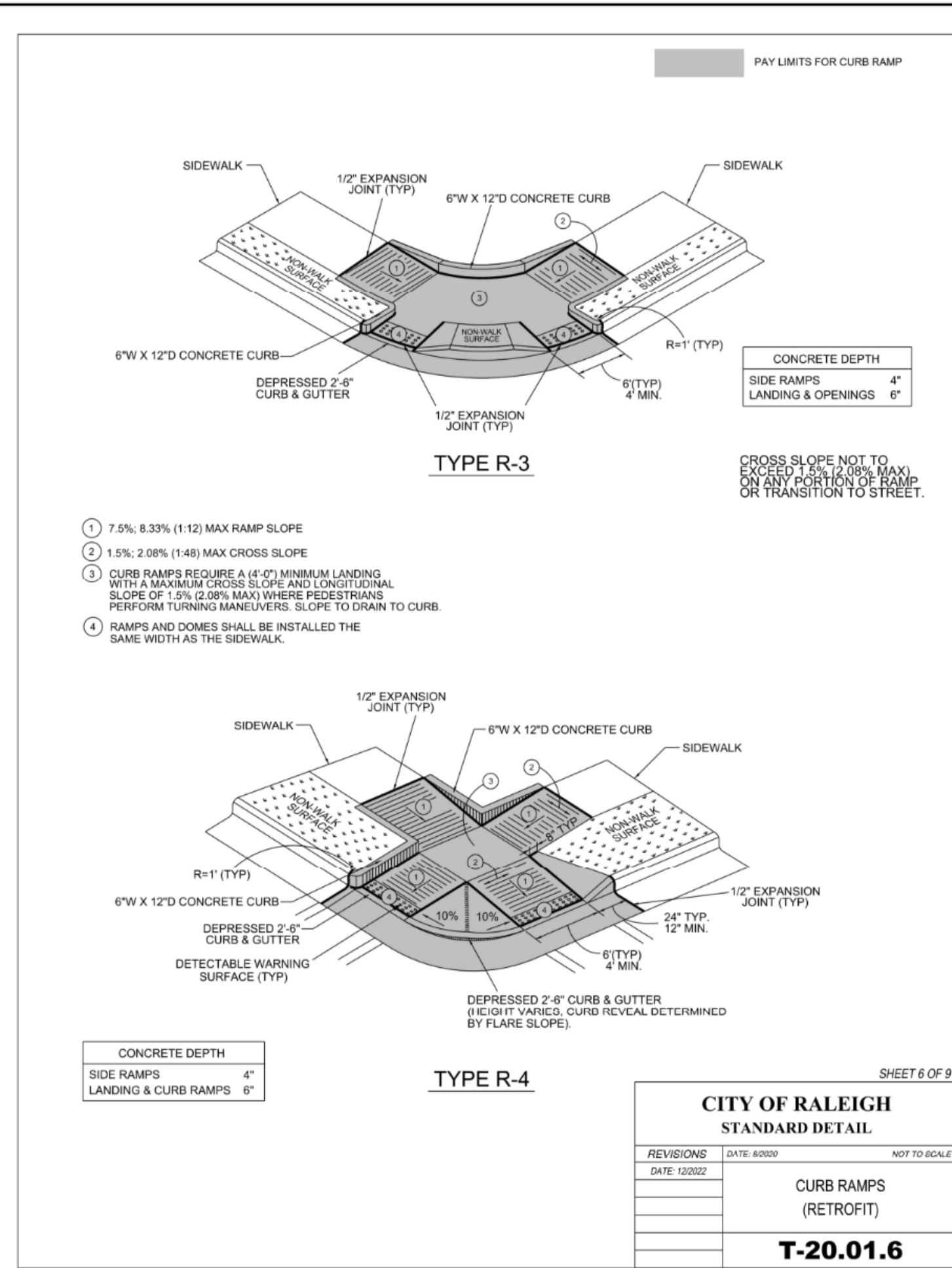
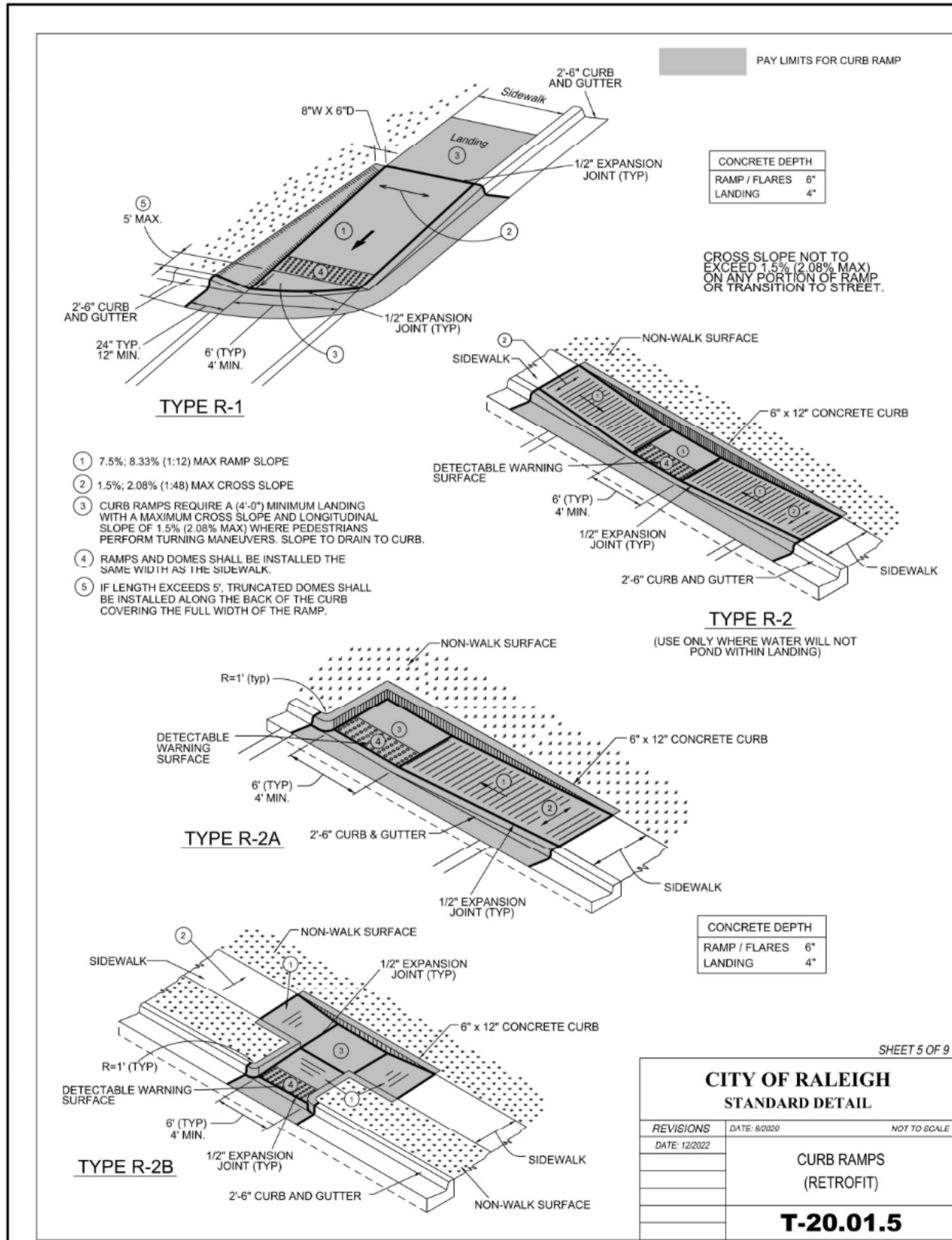
REVISIONS:  
11/17/2022 - ASR 1st REVIEW  
3/13/2023 - ASR 2nd REVIEW  
5/9/2023 - ASR 3rd REVIEW  
7/12/2023 - ASR 4th REVIEW

**CCE**  
CAPITAL CIVIL ENGINEERING -  
209 N SALEM ST, STE 220, APEX, NC 27502  
PH 919 249-8587 FX 919 590-1687  
COPYRIGHT 2023 CAPITAL CIVIL ENGINEERING, PLLC P-0809

DATE  
JULY 12, 2023  
ISSUED FOR  
ASR APPROVAL  
SHEET NO.

C801





DCI

Development & Construction Insight, LLC

2054 KILDARE FARM RD., #167 CARY, NC 27518

www.dcinightllc.com

PROJECT OCEAN - ASR-0110-2022

2051 EAGLE CREST WAY, GARNER, NC 27529

RALEIGH JURISDICTION, ZONING: IH-CU OVERLAY: SHOD-1

DETAILS

REVISIONS: 11/17/2023 - ASR 1st REVIEW  
3/13/2023 - ASR 2nd REVIEW  
5/9/2023 - ASR 3rd REVIEW  
7/12/2023 - ASR 4th REVIEW

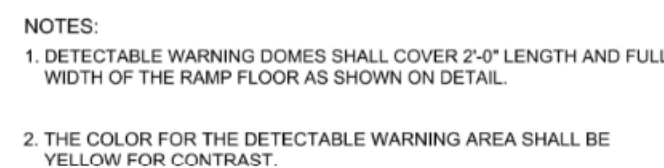
DATE: JULY 12, 2023

ISSUED FOR: ASR APPROVAL

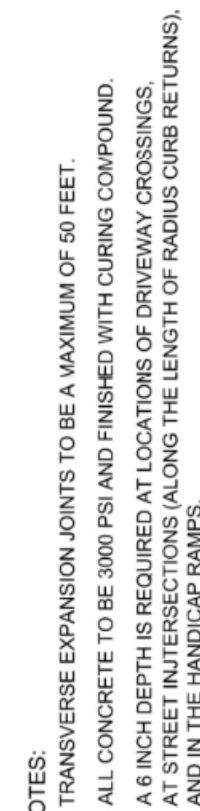
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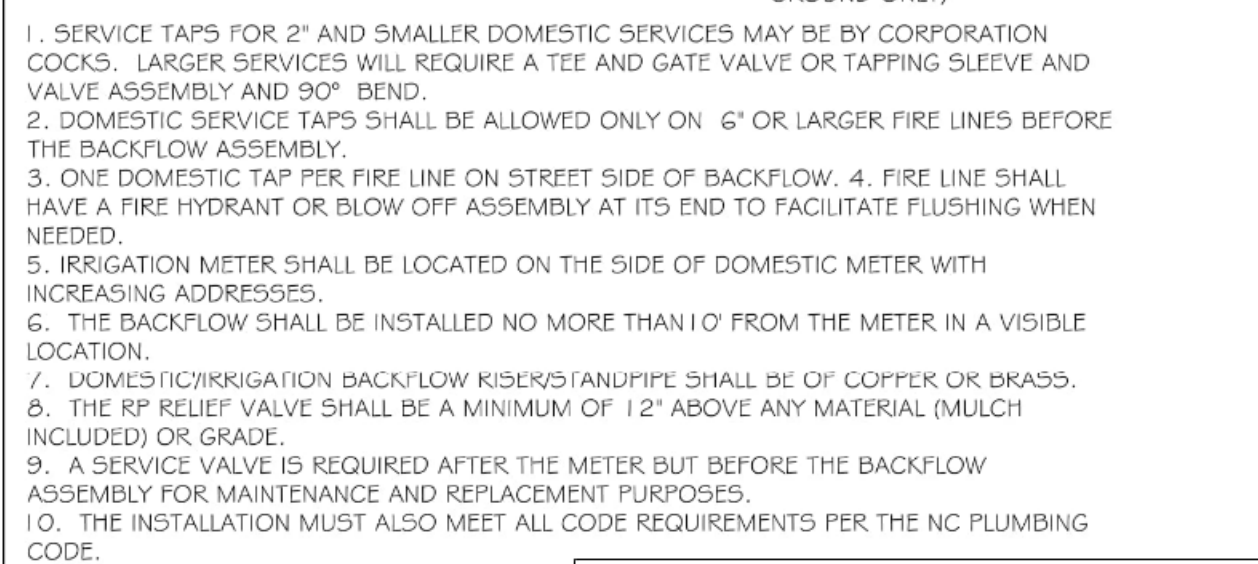




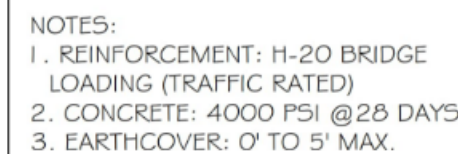
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<p>REVISIONS</p> <p>DATE: 12/20/22</p>	<p>DATE: 8/2020</p> <p>NOT TO SCALE</p>
<p align="center"><b>DETECTABLE WARNING</b> <b>CAST-IN-PLACE</b></p>	
<p align="center"><b>T-20.04.4</b></p>	



<p align="center"><b>CITY OF RALEIGH</b> <b>STANDARD DETAIL</b></p>		
<p><b>REVISIONS</b></p> <p>DATE: 12/20/22</p>	<p>DATE: 8/20/20</p>	<p>NOT TO SCALE</p>
<p align="center">CONCRETE SIDEWALK</p>		
<p align="center"><b>T-30.01.1</b></p>		



CITY OF RALEIGH				
DEPARTMENT OF PUBLIC UTILITIES				
FIRE, DOMESTIC & IRRIGATION OPTIONS SCHEMATIC				
DWG. NO.	REVISIONS	DATE	REVISIONS	DATE
W-34	D.W.C.	11-18-99	A.B.B.	7-10-04
	BBH	2-21-00	D.B.L.	6/18/04



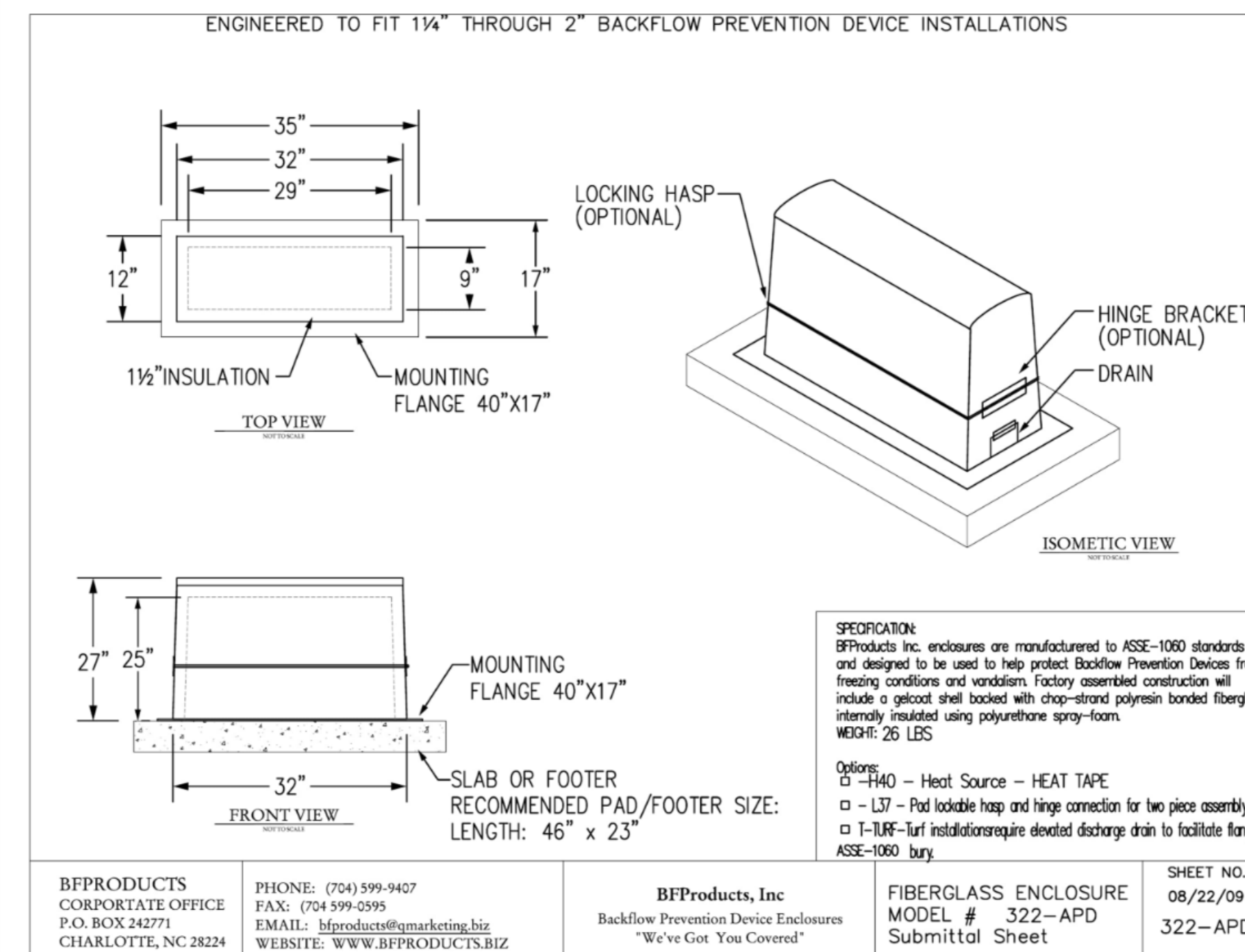
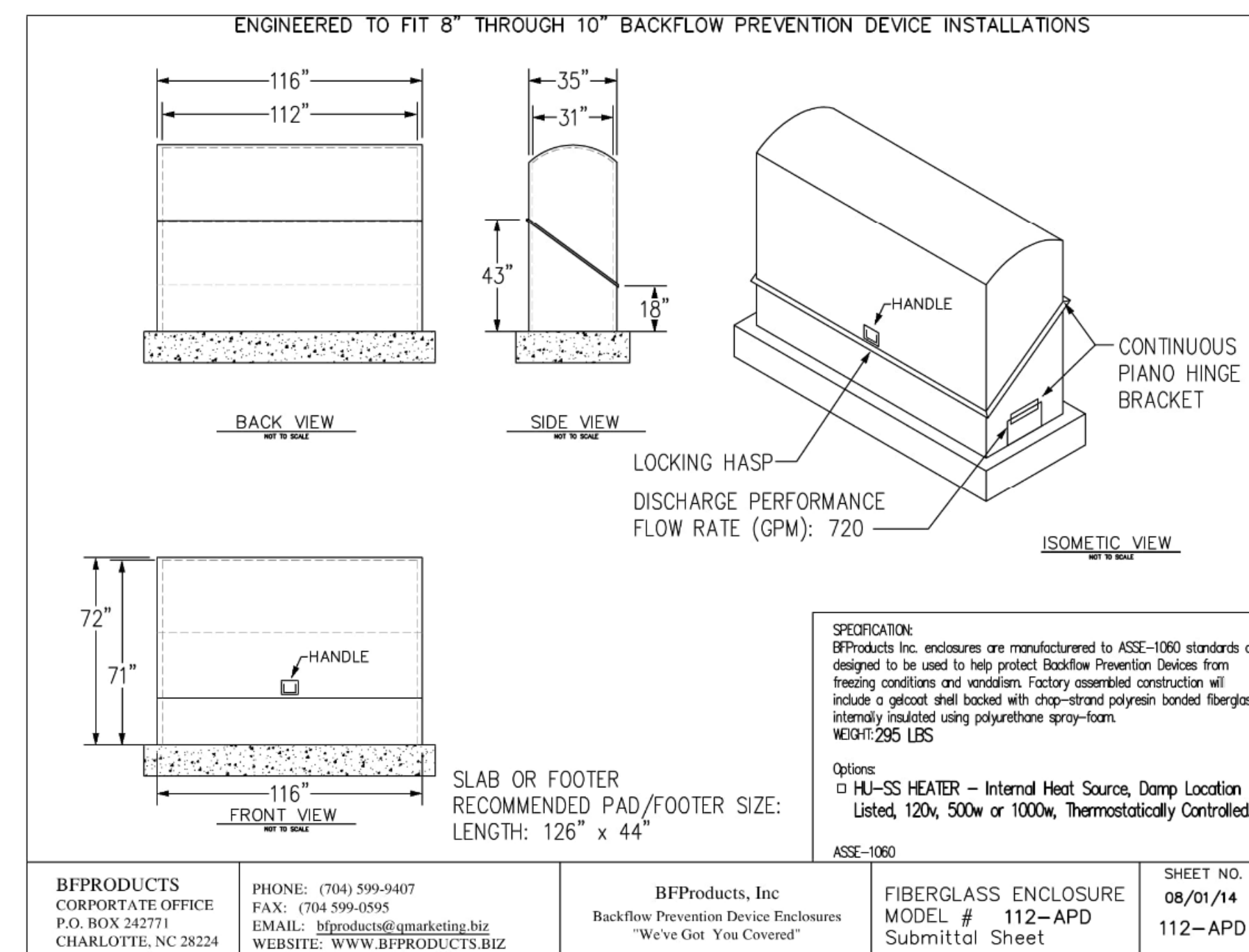
PAYS	CITY OF RALEIGH			
	DEPARTMENT OF PUBLIC UTILITIES			
	1 000 GALLON GREASE INTERCEPTOR			
DWG. NO.	REVISIONS	DATE	REVISIONS	DATE
S-40	RRH	3/9/00	D.H.L.	6/18/08
	ABP	3/19/04		

LOCALLY AVAILABLE SIZES	
INTERCEPTORS CAPACITY (GAL.)	SEPARATORS CAPACITY (GAL.)
300	1000
550	1200
750	1600
1000	
1200	
1500	
2000	
2500	
3000	
4000	
5000	
6000	
8000	

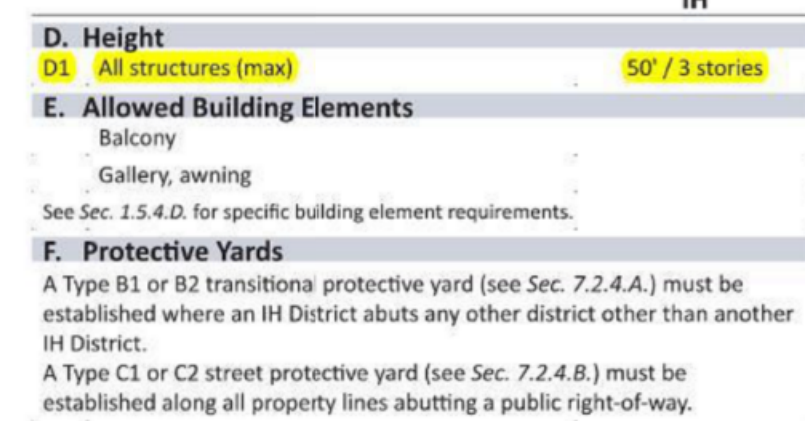
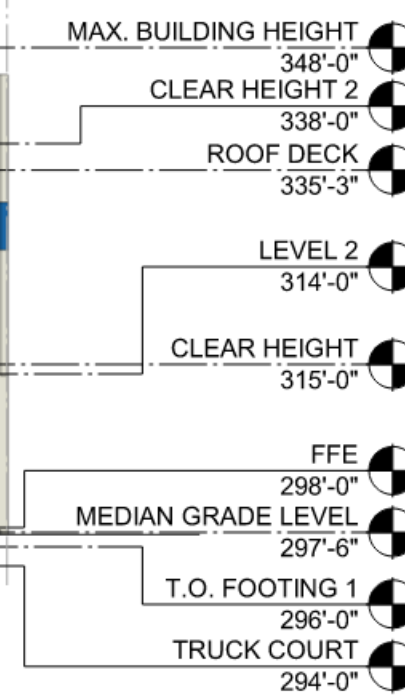
NOTES:

1. Baffle wall located at a distance from inlet wall  $\frac{2}{3}$  to  $\frac{3}{4}$  of the total length of the interceptor or separator AS SHOWN ON DETAIL 5-40.
2. Baffle walls located at a distance approximately of  $\frac{1}{3}$  of the total length of the separator AS SHOWN ON DETAIL 5-40.
3. EACH INTERCEPTOR OR SEPARATOR SHALL HAVE INLET AND OUTLET TEES. THE OUTLET TEES SHALL EXTEND 50% INTO THE LIQUID DEPTH. THE INLET TEES SHALL EXTEND 25% INTO THE LIQUID DEPTH. INLET AND OUTLET TEES MUST BE OPEN TO ALLOW THE COLLECTION OF F.O.G. SAMPLE.
3. ACCESS OPENINGS OVER EACH COMPARTMENT WITHIN THE INTERCEPTOR OR SEPARATOR SHALL BE 18" MINIMUM CLEARANCE FROM THE TOP OF THE COMPARTMENT. ALL COVERS SHALL BE CONSTRUCTED OF CAST IRON OR EQUIVALENT FRICTION BEARING MATERIAL. MANHOLE COVERS MUST EXTEND TO FINISH GRADE AND BE INSTALLED TO EXCLUDE THE ENTRANCE OF STORMWATER INTO THE INTERCEPTOR OR SEPARATOR.
4. FULL SIZE DUAL SLEEP CHANNELS SHALL BE INSTALLED ON THE INLET AND OUTLET SIDES OF THE INTERCEPTOR OR SEPARATOR.
5. INTERCEPTORS AND SEPARATORS MUST BE VENTED IN ACCORDANCE WITH THE NC STATE REQUIREMENTS.
6. CONCRETE: 4000 PSI @ 28 DAYS.
7. DESIGN: A31.3 BUILDING CODE  
ASTM C11.31 G OR FOR GRADE INTERCEPTORS  
ASTM C91.3 G FOR WATER AND WASTEWATER STRUCTURES  
ASTM C890-G FOR MINIMAL STRUCTURAL DESIGN LOADS
8. INTERCEPTORS AND SEPARATORS SHALL BE DESIGNED TO WITHSTAND AN H=20 WHEEL LOAD.
9. INTERCEPTORS OR SEPARATORS MADE OF POLYETHYLENE OR FIBERGLASS SHALL INCLUDE A MINIMUM 2,000 PSI TENSILE STRENGTH, 18,000 PSI FLEXURAL STRENGTH, AND 800,000 PSI FLEXURAL MODULUS.
10. INTERCEPTORS AND SEPARATORS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANHOLE INSTALLATION SPECIFICATIONS.

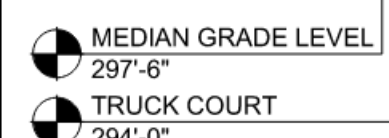
	CITY OF RALEIGH			
	DEPARTMENT OF PUBLIC UTILITIES			
	DIMENSIONS: GREASE INTERCEPTORS OIL-WATER-SAND SEPARATORS			
DWG. NO.	REVISIONS	DATE	REVISIONS	DATE
S-41	RRH APR	3/9/00 3/1/02	D.H.L.	6/1/08



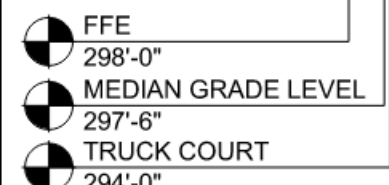



$$1^{\circ} = 20'-0''$$


48 - 001 05



41 = COL OF



**TABLE 1**

32 24 16 8 0 32

SCALE:  $\frac{1}{32}" = 1'-0"$

16 12 8 4 0 16

SCALE:  $\frac{1}{16}" = 1'-0"$

SD PACKAGE



5/3/2023 10:02:40 AM



**D. Height**  
**D1. All structures (max)** 50' or 3 stories

**E. Allowed Building Elements**  
 Balcony  
 Gallery, awning

See Sec. 5.4.0. for specific building element requirements.

**F. Protective Yards**  
 A Type I or B2 transitional protective yard (see Sec. 7.2.4.A.) must be established where an IH District abuts any other district other than another IH District.  
 A Type C1 or C2 street protective yard (see Sec. 7.2.4.B.) must be established along all property lines abutting a public right-of-way.

434 FAYETTEVILLE STREET SUITE 1700  
RALEIGH, NORTH CAROLINA 27601  
TEL. 919.829.2700 FAX. 919.829.2730  
WWW.LS3P.COM

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27529

LS3P PROJECT: 8109-226770

SD PACKAGE