

Administrative Approval Action

Case File / Name: ASR-0050-2022 DSLC - RALEIGH OAK CHARTER SCHOOL City of Raleigh
Development Services Department
One Exchange Plaza
Raleigh, NC 27602
(919) 996-2492
currentplanning@raleighnc.gov
www.raleighnc.gov

LOCATION: This 7.5 acre site zoned OX-3 CU (Z-17-04) is located on the south side of Sungate

Blvd on the southeastern corner of the intersection of Sungate Blvd and Stoney

Moss Drive at 3400 Sungate Blvd.

REQUEST: Construction of a multi-story charter school building of 44,000 square feet in size

with site work, parking and associated infrastructure.

DESIGN

ADJUSTMENT(S)/

ALTERNATES, ETC: FIL-0424-2023: DSENG - Fee-In-Lieu Estimator/Fee-In-Lieu Estimator

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 June 19, 2023 by Civil &

Environmental Consultants, Inc..

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:

☑ <u>SITE PERMITTING REVIEW</u> - 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:

General

- 1. For clarification (see sheets LP-1 and LP-3) please label the required A2 protective yard along the southern and western borders Show the required fence and label within the protective yard (between the required plant material and the adjacent property) AND provide a fence detail demonstrating compliance to 7.2.4 D 1 and D3, and 7.2.7 B.
- 2. Concurrent/SPR submittal must include both the Site Photometrics plan sheet and the Exterior Elevations plan sheet included in previous preliminary reviews (see Preliminary plan version 3) as well as ALL concurrent/SPR plan sheets submitted must be sealed.
- 3. Proposed and previously approved and SEALED elevations (see preliminary plan submittal v3) must be included in the concurrent submittal. As approved preliminary packet was missing elevations.

Stormwater

- 4. A surety equal to of the cost of clearing, grubbing and reseeding a site, shall be paid to the City (UDO 9.4.4).
- 5. A nitrogen offset payment must be made to a qualifying mitigation bank (UDO 9.2.2.B).
- 6. 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

- 7. Tree protection fence must be inspected by Urban Forestry staff prior to the issuance of a grading permit.
- 8. 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).

☑ <u>LEGAL DOCUMENTS</u> - Email to 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.

V	Right of Way Deed of Easement	V	Utility Placement Deed of Easement
	Required		Required

☑ <u>RECORDED MAP(S)</u> - 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 25' Bicycle & Pedestrian Access 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 multi-use path. Final alignment of the multi-use path is contingent upon approval by PRCR staff and the connection shall be built to COR Greenway Trail Standards.

Engineering

2. 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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3. 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)

Public Utilities

- 4. 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.
- 5. Infrastructure Construction Plans (concurrent submittal) must be approved by the City of Raleigh Public Utilities Department for all public water, public sewer and/or private sewer extensions.

Stormwater

- The riparian buffers, in accordance with the preliminary plan and the State of North Carolina regulations, shall be shown on plats for recording along with required buffer statement (Recorded Map Checklist).
- 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).

☑ <u>BUILDING PERMITS</u> - 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

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.

Engineering

2. A fee-in-lieu for 6' wide sidewalk along Sungate Blvd frontage shall be paid to the City of Raleigh (UDO 8.1.10).

Stormwater



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

- 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).
- 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

5. A tree conservation plat shall be recorded with metes and bounds showing the designated tree conservation areas (UDO 9.1). This development proposes 0.75 acres of tree conservation area.

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

General

1. Final inspection of all tree conservation areas by Urban Forestry Staff.

Stormwater

As-built drawings and associated forms for all Stormwater devices are accepted by the Engineering Services Department (UDO 9.2.2.D.3).

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 7, 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.

,	,		
Signed:	Daniel L. Stegall	Date:	08/07/2023
	Development Services Dir/Designee	_	

Staff Coordinator: Michael Walters

I hereby certify this administrative decision.

Administrative Site Review Application

his	form is	required	when	submitting	site plans	as refere	nced in	 Unified 	Develo	pment	Ordinance	(UDO)	Sec
		roquiro		oubg	orto piarro	40 101010			2010.0	pilioni	O I dillidilloo	(020)	

Office Use Only: Case #:	Planner (print):
10.2.6. Flease check the appropriate building types and inc	due the plan checklist document when submitting.

assistance determining a Site Plan Tier is needed a Site Plan Tier Verification request can be submitted online via the

Building Type		Site Transaction History						
Detached Attached Apartment Townhouse	General Mixed use Open lot Civic	Scoping/sketch plan case #: Certificate of Appropriateness #:						
GENERAL INFORMATION								
Development name: Raleigh Oak Charter School								
Inside City limits? Yes 🗸 No								
Property address(es): 3400 Sungate Blvd Raleigh, NC 27610								
Site P.I.N.(s): 1723477999								
Please describe the scope of work. Include any additions, expansions, and change of use. Construction of multi story school building associated access drives, pick up lanes and parking. Construction of a multi use path for Raleigh Park Center Recreation is also included. Existing site is undeveloped.								
Current Property Owner/Developer Contact Name: Jay Lemery (Developer) NOTE: please attach purchase agreement when submitting this form.								
Company: Parks Holdings, LLC		Title:						
Address: PO Box 2123								
Phone #: 865.742.1993	Email: shadle	y@leeassociates.com						
FIIOTIC #. 000.742.1995	Applicant Name: Jay Lemery							
	Address: 103	18 Lake Road, B102 Houston, Texas 77070						

DEVELOPMENT TYPE + SITE DATE TABLE (Applicable to all developments)						
SITE DATA BUILDING DATA						
Zoning district (if more than one, please provide the acreage of each):	Existing gross floor area (not to be demolished): 0 sf					
OX-3-CU	Existing gross floor area to be demolished: 0 sf					
Gross site acreage: 7.51	New gross floor area: 44,000 sf					
# of parking spaces required: No Maximum	Total sf gross (to remain and new): 44,000 sf					
# of parking spaces proposed: 69	Proposed # of buildings: 1					
Overlay District (if applicable): N/A	Proposed # of stories for each: 3					
Existing use (UDO 6.1.4): Undeveloped						

Proposed use (UDO 6.1.4): School	
STORMWA	ATER INFORMATION
Existing Impervious Surface:	Proposed Impervious Surface:
Acres: O Square Feet: O	Acres: 2.58 Square Feet: 112385
Is this a flood hazard area? Yes V No If yes, please provide: Alluvial soils:	
Flood study:	
Neusa Piver Buffer Vas V	Wetlands Yes V

	RESID	ENTIAL DE	VELOPMENTS		1000
Total # of dwelling units: N/A			Total # of hotel units: N/A		
# of bedroom units: 1br N/A	2br N/A	3br N/A	4br or more N/A		
# of lots: N/A			Is your project a cottage court?	Yes	No 🗸

SIGNATURE BLOCK

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.

will serve as the agent regarding this application, and will receive and respond to administrative comments, resubmit plans and applicable documentation, and will represent the property

I/we have read, acknowledge, and affirm that this project is conforming to all application requirements applicable with the proposed development use. I acknowledge that this application is subject to the filing calendar and submittal policy, which states applications will expire after 180 days of inactivity.

Printed Name	: Geo	rge Gene	ro	/	
	/				

f 2	REVISION 02.19.21
	raleighno go

REFERENCE

12-13-2021 AND PROVIDED BY CLIENT.

Page 1 of 2

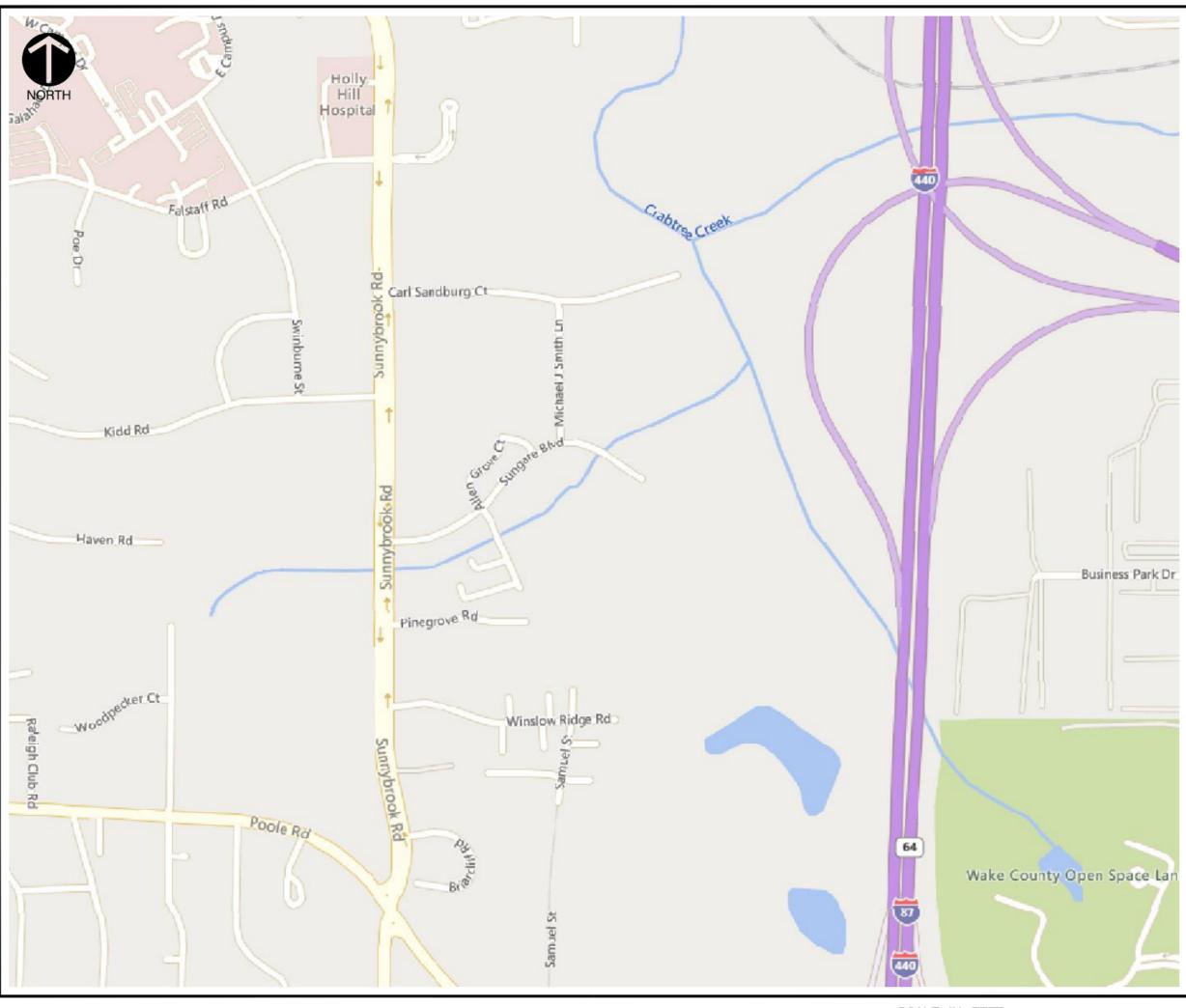
SURVEY PERFORMED BY FREELAND & ASSOCIATES, INC. ON

RALEIGH OAK CHARTER SCHOOL

3400 SUNGATE BOULEVARD RALEIGH, NC 27610

ASR-0050-2022

ZONE: OX-3-CU USE: EDUCATION K-8 PIN: 1723477999 **PROJECT AREA: 7.55 AC MAY 2023**



VICINITY MAP

ZONING USE STANDARDS

- 1. MEET THE CURRICULAR TEACHING CERTIFICATION OF INSTRUCTION APPROVED BY THE STATE BOARD OF EDUCATION THE SCHOOL HAS THE REQUIRED CERTIFICATIONS AND IS ALREADY IN OPERATION
- 2. BE LOCATED ON A LOT WITH TOTAL AREA OF 500 SF AREA PER ENROLLED PUPIL UNLESS WITHIN A DX-DISTRICT IN WHICH CASE NO MINIMUM AREA THE SCHOOL IS ANTICIPATED TO SERVE 647 STUDENTS, WHICH EQUATES TO 506 SF OF AREA PER STUDENT
- 3. BE LOCATED OUTSIDE ANY AIRPORT OVERLAY DISTRICT OR PRIMARY RESERVOIR WATERSHED PROTECTION AREA.
- THE SITE IS NOT LOCATED IN ANY OVERLAY DISTRICT OR WATERSHED PROTECTION AREA PER RALEIGH IMAP INFORMATION.
- 4. THE ADDITIONAL TRAFFIC GENERATED TO AND FROM THE SITE DURING PEAK TRAVEL PERIODS, COMBINED WITH THE BACKGROUND TRAFFIC VOLUME TRAVELING ON THE ROADWAY WOULD NOT REDUCE THE ROADWAY OR NEARBY INTERSECTIONS' CAPACITY BELOW LEVEL-OF-SERVICE "D" AS DEFINED IN

BASED ON THE TRAFFIC IMPACT ANALYSIS REPORT FOR THE DEVELOPMENT, THE ADJACENT INTERSECTIONS WOULD OPERATE AT LOS D OR BETTER BASED ON THE ASSUMPTIONS IN THE TIA REPORT (STAGGERED BELL SCHEDULES). THE INTERSECTION OF SUNNYBROOK ROAD AND SUNGATE BOULEVARD COULD WARRANT A TRAFFIC SIGNAL AT SOME POINT IN THE FUTURE BUT THIS WOULD TYPICALLY BE MONITORED BY THE CITY TO DETERMINE IF A SIGNAL IS WARRANTED. NCDOT HAS REVIEWED THE TIA AND ARE NOT REQUIRING ANY OFF-SITE IMPROVEMENTS.

- 5. IN A RESIDENTIAL DISTRICT, A TYPE A1 OR A2 TRANSITIONAL PROTECTIVE YARD (SEE SEC. 7.2.4.A) MUST BE ESTABLISHED ALONG ANY SIDE OF THE PROPERTY ABUTTING ANY RESIDENTIAL USE. A TYPE A2 YARD WITH PROPOSED FENCING, AVERAGING 12-FT WIDE IS PROPOSED ALONG THE SOUTH AND WEST PROPERTY BOUNDARIES, ADJACENT TO THE RESIDUAL PROPERTIES. THE A2 PROTECTIVE YARDS INCLUDE THE REQUIRED FENCING.
- 6. IN A RESIDENTIAL DISTRICT, A TYPE C2 STREET PROTECTIVE YARD (SEE SEC. 7.2.4.B) MUST BE ESTABLISHED ALONG ALL PROPERTY LINES ABUTTING A

A TYPE C2 STREET PROTECTIVE YARD IS PROPOSED ALONG THE RIGHT OF WAY

		DRAWING INDEX	
SHEET NUMBER	DRAWING NUMBER	SHEET TITLE	1
1	C000	COVER SHEET	1
~~	~610 0 ~	EXISTING CONDITIONS & DEMOLITION PLAN	LZ
3	C200	OVERALL SITE LAYOUT])_
\sim	~C300~	OVERALL GRADING PLAN	ĺ
5	C400	STORMWATER MANAGEMENT PLAN	1
6	C401	STORMWATER WETLAND PLAN]
7	C500	UTILITY PLAN)
8	C501	FIRE ACCESS PLAN)
9	TCA-1	TREE CONSERVATION AREAS	
10	TCA-2	TREE INVENTORY AND PROTECTION DETAILS)
11	TCA-3	TREE INVENTORY) /
12	LP-1	PLANTING PLAN	
13	LP-2	PLANTING PLAN)
14	LP-3	PLANTING PLAN)
15	LP-4	PLANTING DETAILS AND SPECIFICATIONS)
	<u>►102</u>	SÎTE PHÔTOMEÎRICS	1
17	A501	EXTERIOR ELEVATIONS	1

LEGEND	
	EXISTING ADJACENT PROPERTY LINE
	EXISTING PROPERTY PARCEL BOUNDAR
	EXISTING INDEX CONTOUR
	EXISTING INTERMEDIATE CONTOUR
=========	EXISTING STORM SEWER
SAN-	EXISTING SANITARY SEWER
	EXISTING WATER MAIN
UG-E	EXISTING UNDERGROUND POWER LINE
	EXISTING WETLAND
	EXISTING PAVEMENT TO BE REMOVED
4 4 4 4 4 A	PROPOSED CONCRETE SIDEWALK
	PROPOSED ASPHALT PAVEMENT
	PROPOSED INDEX CONTOUR
	PROPOSED INTERMEDIATE CONTOUR
	PROPOSED DRAINAGE AREA TO BMP
~	FLOW DIRECTION

OWNER/TEAM INFORMATION

CIVIL ENGINEER

CIVIL & ENVIRONMENTAL CONSULTANTS, INC. 530 HOWELL ROAD SUITE 203 GREENVILLE, SOUTH CAROLINA 29615 PH: (864) 626-3140 (OFFICE) CONTACT: CHRISTIAN ALONSO, P.E. EMAIL: CALONSO@CECINC.COM

ARCHITECT

MUSSMAN ARCHITECTS GREENVILLE, SC 29601 MOLLIE GREENE, NCARB DIRECTOR OF DESIGN OFFICE: (864) 626-6330 EXT 1009 CELL: (864) 609-7769

OMEGA CONSTRUCTION, INC. 1100 SOUTH STRATFORD ROAD, BUILDING C, SUITE 110 WINSTON-SALEM, NC 27103 CONTACT: LEE COOK, EXEC. VP

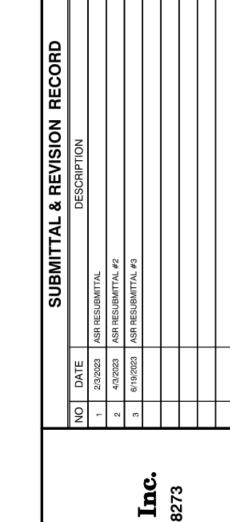
PERFORMANCE CHARTER SCHOOL DEVELOPMENT JAY LEMERY DIRECTOR OF FACILITY DEVELOPMENT MOBILE: (832) 823-8200 DIRECT: (281) 581-0706 JLEMERY@PERFORMANCECSD.COM

RALEIGH OAK CHARTER SCHOOL 9400 FORUM DR RALEIGH, NC 27615

- 1. REIMBURSEMENT FOR FUTURE RIGHT-OF-WAY SHALL REMAIN AT THE ORIGINAL R-6 ZONING VALUE FOR THE PROPERTY.
- 2. ALLOWED USES SHALL BE LIMITED TO GENERAL, PROFESSIONAL/SERVICE OFFICES, GOVERNMENTAL OFFICES, FINANCIAL OFFICES AND NON-RESIDENTIAL RELATED SERVICE. HOTEL/MOTEL USES ARE PROHIBITED.
- THE PROPOSED USE IS A SCHOOL FACILITY. NO RESIDENTIAL OR HOTEL/MOTEL USE IS PROPOSED

ZONING CONDITIONS (Z-17-04)

- 3. ON-SITE OPEN AIR STORM WATER MANAGEMENT FACILITIES SHALL BE DESIGNED AS SITE AMENTITIES AND SHALL BE LANDSCAPED WITH SITE-APPROPRIATE VEGETATION TO SHOD-4 STANDARDS. THE PROPOSED SCM IS A STORMWATER WETLAND AND WILL BE DESIGNED PER CURRENT STANDARDS AND AS A SITE AMENITY WITH APPROPRIATE VEGETATION. THE SHOD-4 DISTRICT IS NO LONGER APPLICABLE TO THE SITE.
- 4. THE FRONTAGE ALONG THE SOUTHERN RIGHT-OF-WAY OF THE EXISTING SUNGATE BLVD, PIN#1723-47-0878, APPROXIMATELY 0.27 ACRES SHALL BE A NATURAL PROTECTIVE YARD FULL DEPTH, FROM THE NORTHERN RIGHT-OF-WAY TO SOUTHERN PROPERTY LINE, AND ALONG THE NORTHERN RIGHT-OF-WAY FROM PARCEL PIN#1723-47-7999, MINIMUM 50' WIDE WHICH SHALL ALSO BE A NATURAL PROTECTIVE YARD, ABOUT 400' LONG. OWNER AGREES TO DEDICATE GREENWAY AT THE TIME OF DEVELOPMENT, PURSUANT TO COMPREHENSIVE PLAN, WITH REIMBURSEMENT AT R-6 VALUE. PIN#1723-47-0878 IS UNDER SEPARATE OWNERSHIP AND NOT PART OF THIS PROJECT, BUT REMAINS UNDEVELOPED IN ITS ENTIRETY. THIS
- PROJECT, WHICH IS LOCATED AT PIN#1723-47-7999 INCLUDES DEDICATION OF A 50' WIDE TRACT, APPROXIMATELY 800 FEET IN LENGTH AS A
- 5. FUTURE OFFICE BUILDINGS SHALL MEET UNITY OF DEVELOPMENT GUIDELINES ESTABLISHED FOR LOT 1 AND/OR 2 NO OFFICE BUILDINGS ARE PROPOSED WITH THIS PROJECT
- 6. ANY PROPOSED OFFICE BUILDING TO BE BUILT WITHIN THE 8.35 AC REZONING MAY NOT EXCEED 37' IN HEIGHT AND MUST HAVE, AS A MINIMUM, 70% FACE BRICK EXTERIOR WALLS, OF A SELECTION COMPATIBLE WITH ANY EXISTING MASONRY, ON-SITE OR ADJACENT



GENERAL NOTES

- 1. EXISTING CONDITIONS AS DEPICTED ON THESE PLANS ARE GENERAL AND ILLUSTRATIVE IN NATURE. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO EXAMINE THE SITE AND BE FAMILIAR WITH EXISTING CONDITIONS PRIOR TO BIDDING ON THIS PROJECT. IF CONDITIONS ENCOUNTERED DURING EXAMINATION ARE SIGNIFICANTLY DIFFERENT FROM THOSE SHOWN, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY.
- EXISTING SITE INFORMATION / TOPOGRAPHIC SURVEY WAS PREPARED BY <NAME OF SURVEYOR>, DATED <DATE>. CEC IS NOT RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF THE INFORMATION SHOWN
- 3. THE CONTRACTOR SHALL VERIFY LOCATION AND ELEVATION OF ALL EXISTING UTILITIES (INCLUDING THOSE LABELED PER RECORD DATA) PRIOR TO THE BEGINNING OF CONSTRUCTION OR EARTH MOVING OPERATIONS. INFORM ENGINEER OF ANY CONFLICTS DETRIMENTAL TO THE DESIGN INTENT.
- 4. <NUMBER> HOURS BEFORE DIGGING IS TO COMMENCE, THE CONTRACTOR SHALL NOTIFY THE FOLLOWING AGENCIES: THE <STATE> UTILITY PROTECTION SERVICES, AND ALL OTHER AGENCIES THAT MAY HAVE UNDERGROUND UTILITIES INVOLVING THIS PROJECT AND ARE NON-MEMBERS OF <STATE> UNDERGROUND PROTECTION, INC.
- 5. THE CONTRACTOR AND SUBCONTRACTORS SHALL BE RESPONSIBLE FOR COMPLYING WITH APPLICABLE FEDERAL, STATE AND LOCAL REQUIREMENTS, TOGETHER WITH EXERCISING PRECAUTIONS AT ALL TIMES FOR THE PROTECTION OF PERSONS (INCLUDING EMPLOYEES) AND PROPERTY. IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND SUBCONTRACTORS TO INITIATE, MAINTAIN AND SUPERVISE ALL SAFETY REQUIREMENTS, PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE
- 6. THE CONTRACTOR SHALL INDEMNIFY AND HOLD HARMLESS THE OWNER AND OWNER'S REPRESENTATIVE FOR ANY AND ALL INJURIES AND/OR DAMAGES TO PERSONNEL, EQUIPMENT AND/OR EXISTING FACILITIES OCCURRING IN THE COURSE OF THE DEMOLITION AND CONSTRUCTION DESCRIBED IN THE PLANS AND SPECIFICATIONS.
- CONTRACTOR SHALL OBTAIN A PERMIT FOR ALL CONSTRUCTION ACTIVITIES IN ACCORDANCE WITH LOCAL, STATE, & FEDERAL REGULATIONS.
- 8. THE CONTRACTOR SHALL COMPLY WITH ALL LOCAL CODES, OBTAIN ALL APPLICABLE PERMITS, AND PAY ALL REQUIRED FEES PRIOR TO BEGINNING WORK.
- 9. ANY WORK PERFORMED IN THE LOCAL OR STATE RIGHT OF WAYS SHALL BE IN ACCORDANCE WITH THE APPLICABLE LOCAL OR STATE REQUIREMENTS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN THE NECESSARY PERMITS FOR THE WORK, SCHEDULE NECESSARY INSPECTIONS, AND PROVIDE THE NECESSARY TRAFFIC CONTROL MEASURES AND DEVICES, ETC., FOR WORK PERFORMED IN THE RIGHT OF WAYS.
- 10. THE CONTRACTOR IS TO PERFORM ALL INSPECTIONS AS REQUIRED BY THE <STATE> EPA FOR THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT AND FURNISH OWNERS REPRESENTATIVE WITH WRITTEN REPORTS. <OWNER> WILL OBTAIN NPDES PERMIT.
- 11. CONTRACTOR SHALL IMPLEMENT ALL SOIL AND EROSION CONTROL, PRACTICES REQUIRED BY <CITY/COUNTY> AND THE <STATE> EPA.
- 12. ALL GROUND SURFACE AREAS THAT HAVE BEEN EXPOSED OR LEFT BARE AS A RESULT OF CONSTRUCTION AND ARE TO FINAL GRADE AND ARE TO REMAIN SO, SHALL BE SEEDED AND MULCHED AS SOON AS PRACTICAL IN ACCORDANCE WITH SPECIFICATIONS. IF NO SPECIFICATIONS ARE SUPPLIED, USE STATE OF <STATE> SPECIFICATIONS ITEM <NO.>.
- 13. ITEM NUMBERS REFER TO THE <STATE> DEPARTMENT OF TRANSPORTATION CONSTRUCTION AND MATERIAL SPECIFICATIONS, AND ALL CONSTRUCTION WORK SHALL BE DONE ACCORDING TO SAID SPECIFICATIONS AND IN ACCORDANCE WITH APPLICABLE STANDARDS OF <COUNTY/CITY>. WHEN IN CONFLICT, THE COUNTY REQUIREMENTS SHALL PREVAIL.
- 14. ALL WORK PERFORMED BY THE CONTRACTOR SHALL CONFORM TO THE LATEST REGULATIONS OF THE AMERICANS WITH DISABILITIES ACT.
- 15. THE CONTRACTOR SHALL REFER TO OTHER PLANS WITHIN THIS CONSTRUCTION SET FOR OTHER PERTINENT INFORMATION. IT IS NOT THE ENGINEER'S INTENT THAT ANY SINGLE PLAN SHEET IN THIS SET OF DOCUMENTS FULLY DEPICT ALL WORK ASSOCIATED WITH THE PROJECT.
- 16. BEFORE INSTALLATION OF STORM OR SANITARY SEWER, OR OTHER UTILITY, THE CONTRACTOR SHALL VERIFY ALL CROSSINGS, BY EXCAVATION WHERE NECESSARY, AND INFORM THE OWNER AND THE ENGINEER OF ANY CONFLICTS. THE ENGINEER WILL BE HELD HARMLESS IN THE EVENT HE IS NOT NOTIFIED OF DESIGN CONFLICTS PRIOR TO CONSTRUCTION.
- 17. ADJUST/RECONSTRUCT ALL EXISTING CASTINGS, CLEANOUTS, ETC. WITHIN PROJECT AREA TO GRADE AS REQUIRED.
- 18. CONTRACTOR TO REMOVE & REPLACE PAVEMENT AS SPECIFIED.
- 19. ALL STANDARD PARKING PLACES ARE DIMENSION' BY DIMENSION'
- 20. SITE SIGNAGE AND STRIPING SHALL BE IN ACCORDANCE WITH THE <STATE> MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.
- 21. CONCRETE WALKS SHALL BE <THICKNESS>" THICK OVER <THICKNESS>" COMPACTED GRAVEL WITH CONTROL JOINTS EQUALLY SPACED AT NO MORE THAN <WIDTH>' ON CENTER, EXPANSION JOINTS AT NO MORE THAN <SPACING>' ON CENTER. ALL SIDEWALKS ARE TO BE BROOM FINISHED.

DEMOLITION NOTES

- 1. ALL EXISTING ABOVE AND BELOW GROUND STRUCTURES WITHIN THE LIMITS OF CONSTRUCTION SHALL BE REMOVED UNLESS NOTED OTHERWISE WITHIN THIS CONSTRUCTION SET AND/OR PROJECT SPECIFICATIONS. THIS INCLUDES FOUNDATION SLABS, WALLS AND FOOTINGS. CAVITIES LEFT BY STRUCTURE REMOVAL SHALL BE BACKFILLED WITH SATISFACTORY MATERIALS AND COMPACTED TO THE GEOTECHNICAL ENGINEER'S RECOMMENDATION.
- 2. CLEARING LIMITS SHALL BE PHYSICALLY MARKED IN THE FIELD BY THE <CONTRACTOR/OWNER>.
- 3. NO TREES SHALL BE REMOVED, NOR VEGETATION DISTURBED BEYOND THE LIMITS OF CONSTRUCTION WITHOUT THE EXPRESS WRITTEN APPROVAL OF THE OWNER'S REPRESENTATIVE.
- 4. TREE PROTECTION FENCING SHALL BE IN ACCORDANCE WITH THE <CITY/COUNTY> STANDARDS OR IN ACCORDANCE WITH THE DETAILED DRAWINGS. DO NOT OPERATE OR STORE EQUIPMENT, NOR HANDLE OR STORE MATERIALS WITHIN THE DRIP LINES OF THE TREES SHOWN TO REMAIN.
- 5. PROTECTION OF EXISTING TREES AND VEGETATION: PROTECT EXISTING TREES AND OTHER VEGETATION INDICATED TO REMAIN IN PLACE AGAINST UNNECESSARY CUTTING, BREAKING OR SKINNING OF ROOTS, SKINNING OR BRUISING OF BARK, SMOTHERING OF TREES BY STOCKPILING CONSTRUCTION MATERIALS OR EXCAVATED MATERIALS WITHIN DRIP LINE, EXCESS FOOT OR VEHICULAR TRAFFIC, OR PARKING OF VEHICLES WITHIN DRIP LINE. PROVIDE TEMPORARY GUARDS TO PROTECT TREES AND VEGETATION TO BE LEFT STANDING.
- 6. ALL DEMOLITION WASTE AND CONSTRUCTION DEBRIS SHALL BECOME THE PROPERTY OF THE CONTRACTOR UNLESS OTHERWISE DESIGNATED AND SHALL BE REMOVED BY THE CONTRACTOR AND DISPOSED OF OFFSITE IN A STATE APPROVED WASTE SITE AND IN ACCORDANCE WITH ALL LOCAL AND STATE CODES AND PERMIT REQUIREMENTS. TAKE CARE TO PROTECT UTILITIES THAT ARE TO REMAIN. REPAIR DAMAGE ACCORDING TO THE APPROPRIATE UTILITY COMPANY STANDARDS AND AT THE CONTRACTOR'S EXPENSE.
- 7. ALL UTILITY DISCONNECTION, REMOVAL, RELOCATION, CUTTING, CAPPING AND/OR ABANDONMENT SHALL BE COORDINATED WITH THE APPROPRIATE UTILITY COMPANY / AGENCY. UTILITY CONTACTS ARE LISTED ON THE COVER SHEET.

OBTAINS PRIOR WRITTEN AUTHORIZATION FROM THE LOCAL AUTHORITIES.

- 8. THE BURNING OF CLEARED MATERIAL AND DEBRIS SHALL NOT BE ALLOWED UNLESS CONTRACTOR
- 9. EROSION & SEDIMENT CONTROL MEASURES AROUND AREAS OF DEMOLITION SHALL BE PROPERLY INSTALLED AND FUNCTION PROPERLY PRIOR TO INITIALIZATION OF DEMOLITION ACTIVITIES.
- 10. ASBESTOS OR HAZARDOUS MATERIALS ARE <NOT EXPECTED/ANTICIPATED>, IF FOUND ON SITE, SUCH MATERIALS SHALL BE REMOVED BY A LICENSED HAZARDOUS MATERIALS CONTRACTOR. CONTRACTOR SHALL NOTIFY OWNER IMMEDIATELY IF HAZARDOUS MATERIALS ARE ENCOUNTERED.
- 11. CONTRACTOR SHALL ADHERE TO ALL LOCAL, STATE, FEDERAL AND OSHA REGULATIONS DURING ALL
- 12. CONTRACTOR SHALL PROTECT ALL CORNER PINS, MONUMENTS, PROPERTY CORNERS AND BENCHMARKS DURING DEMOLITION ACTIVITIES. IF DISTURBED, CONTRACTOR SHALL HAVE DISTURBED ITEMS RESET BY A LICENSED SURVEYOR AT NO ADDITIONAL COST TO THE OWNER.
- 13. CONTRACTOR SHALL PROTECT ALL EXISTING UTILITIES, STRUCTURES, AND FEATURES TO REMAIN. ANY ITEMS TO REMAIN THAT HAVE BEEN DISTURBED OR DAMAGED AS A RESULT OF CONSTRUCTION SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR AT CONTRACTOR'S EXPENSE.
- 14. CONTRACTOR SHALL PROVIDE AND MAINTAIN TRAFFIC CONTROL MEASURES IN ACCORDANCE WITH STATE DEPARTMENT OF TRANSPORTATION REGULATIONS AND AS REQUIRED BY LOCAL AGENCIES WHEN WORKING IN AND/OR ALONG STREETS, ROADS, HIGHWAYS, ETC.. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN APPROVAL AND COORDINATE WITH LOCAL AND/OR STATE AGENCIES REGARDING THE NEED, EXTENT AND LIMITATIONS ASSOCIATED WITH INSTALLING AND MAINTAINING TRAFFIC CONTROL MEASURES.
- 15. PROVIDE NEAT, STRAIGHT, FULL DEPTH, SAW CUTS OF EXISTING PAVEMENT WHERE INDICATED ALONG LIMITS OF PAVEMENT DEMOLITION.
- 16. ALL UTILITY AND STRUCTURE REMOVAL, RELOCATION, CUTTING, CAPPING AND/OR ABANDONMENT SHALL BE COORDINATED AND PROPERLY DOCUMENTED BY A CERTIFIED PROFESSIONAL, WHEN APPLICABLE, WITH THE APPROPRIATE UTILITY COMPANY, MUNICIPALITY AND/OR AGENCY. DEMOLITION OF REGULATED ITEMS MAY INCLUDE, BUT ARE NOT LIMITED TO WELLS, ASBESTOS, UNDER GROUND STORAGE TANKS, SEPTIC TANKS AND ELECTRIC TRANSFORMERS. DEMOLITION CONTRACTOR SHALL REFER TO ANY ENVIRONMENTAL STUDIES FOR DEMOLITION RECOMMENDATIONS AND GUIDANCE. AVAILABLE ENVIRONMENTAL STUDIES MAY INCLUDE, BUT ARE NOT LIMITED TO PHASE I ESA, PHASE II, WETLAND AND STREAM DELINEATION AND ASBESTOS SURVEY. ALL APPLICABLE ENVIRONMENTAL STUDIES SHALL BE MADE AVAILABLE UPON REQUEST.
- 17. ALL PAVEMENT, BASE COURSES, SIDEWALKS, CURBS, BUILDINGS, FOUNDATIONS, ETC., WITHIN THE AREA TO BE DEMOLISHED SHALL BE REMOVED TO FULL DEPTH. EXISTING BASE COURSE MATERIALS MAY BE WORKED INTO THE NEW PAVEMENT OR BUILDING SUBGRADE IF THE GRADATION, CONSISTENCY, COMPACTION, SUBGRADE CONDITION, ETC., ARE IN ACCORDANCE WITH THE SPECIFICATIONS AND RECOMMENDATIONS OF THE REPORT OF GEOTECHNICAL INVESTIGATION. BASE COURSE MATERIALS SHALL NOT BE WORKED INTO THE SUBGRADE AREAS TO RECEIVE LANDSCAPING.
- 18. THE CONTRACTOR SHALL USE SUITABLE METHODS TO CONTROL DUST AND DIRT CAUSED BY THE DEMOLITION ACTIVITIES.

LAYOUT NOTES

- THE CONTRACTOR SHALL CHECK EXISTING GRADES, DIMENSIONS, AND INVERTS IN THE FIELD AND REPORT ANY DISCREPANCIES TO THE OWNER'S REPRESENTATIVE PRIOR TO BEGINNING WORK.
- THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF ALL EXISTING UTILITIES, INCLUDING IRRIGATION LINES. TAKE CARE TO PROTECT UTILITIES THAT ARE TO REMAIN. RELOCATE EXISTING UTILITIES AS INDICATED, OR AS NECESSARY FOR CONSTRUCTION.
- PROVIDE A SMOOTH TRANSITION BETWEEN EXISTING PAVEMENT AND NEW PAVEMENT. FIELD
 ADJUSTMENT OF FINAL GRADES MAY BE NECESSARY. INSTALL ALL UTILITIES, INCLUDING IRRIGATION
 SLEEVING, PRIOR TO INSTALLATION OF PAVED SURFACES.
- 4. THE CONTRACTOR SHALL PROTECT ALL TREES TO REMAIN IN ACCORDANCE WITH THE SPECIFICATIONS.
- 5. SITE WORK CONCRETE WALKS AND PADS SHALL HAVE A BROOM FINISH TO ALL SURFACES. SITE WORK CONCRETE SHALL BE CLASS "<CLASS>" (<STRENGTH> PSI @ 28 DAYS) UNLESS OTHERWISE NOTED.
- 6. ALL DAMAGE TO EXISTING PAVEMENT TO REMAIN, WHICH RESULTS FROM THE CONTRACTOR'S OPERATIONS SHALL BE REPLACED WITH LIKE MATERIALS AT THE CONTRACTOR'S EXPENSE.
- SITE DIMENSIONS SHOWN ARE TO THE <FACE/BACK> OF CURB, OR EDGE OF PAVEMENT UNLESS OTHERWISE NOTED.
- 8. COORDINATES ARE FOR BUILDING COLUMNS, EXTERIOR BUILDING WALL, CENTER OF DRIVEWAYS, CENTER OF SANITARY SEWER MANHOLES, AND CENTER OF STRUCTURE PLACED SIX INCHES INSIDE FACE OF CURB FOR DRAIN INLETS, UNLESS OTHERWISE NOTED.
- CONTRACTOR SHALL MAINTAIN ONE SET OF AS-BUILT / RECORD DRAWINGS ON-SITE DURING CONSTRUCTION FOR DISTRIBUTION TO THE OWNER AND/OR OWNER'S REPRESENTATIVE UPON COMPLETION
- 10. REFER TO THE ARCHITECTURAL, PLUMBING & ELECTRICAL DRAWINGS FOR EXACT DIMENSIONS AND LOCATIONS OF UTILITY SERVICE ENTRY LOCATIONS AND PRECISE BUILDING DIMENSIONS.
- 11. THIS SITE LAYOUT IS SPECIFIC TO THE APPROVALS NECESSARY FOR THE CONSTRUCTION IN ACCORDANCE WITH THE <CITY OF <NAME>. NO CHANGES TO THE SITE LAYOUT ARE ALLOWED WITHOUT THE WRITTEN APPROVAL OF THE ENGINEER. CHANGES MADE TO THE SITE LAYOUT WITHOUT APPROVAL IS SOLELY THE RESPONSIBILITY OF THE CONTRACTOR. CHANGES INCLUDE BUT ARE NOT LIMITED TO, INCREASED IMPERVIOUS PAVEMENT, ADDITION / DELETION OF PARKING SPACES, MOVEMENT OF CURB LINES, CHANGES TO DRAINAGE STRUCTURES AND PATTERNS, LANDSCAPING STO.

GRADING NOTES

- 1. ALL PROPOSED GRADES SHOWN ARE FINAL GRADES, TOP OF GROUND LEVEL, OR TOP OF PAVEMENT, OR GRATE ELEVATION AT THE DRAWDOWN POINT, UNLESS INDICATED OTHERWISE.
- 2. REFER TO AND FOLLOW THE RECOMMENDATIONS OF THE GEOTECHNICAL REPORT PREPARED FOR THIS PROJECT BY<NAME OF COMPANY> TITLED <NAME> AND DATED <DATE>.
- 3. SITE BUILDING PAD EXCAVATION AND CONSTRUCTION TO BE PER GEOTECHNICAL ENGINEER'S RECOMMENDATIONS (REPORT DATED: <DATE>). BUILDING PAD PREPARATION SHALL BEGIN BY CLEARING & STRIPPING UNSUITABLE MATERIAL FROM PAD SITE, THEN PLACEMENT & COMPACTION OF BACKFILL MATERIAL PER GEOTECHNICAL ENGINEER'S RECOMMENDATIONS. ALL BACKFILL MATERIAL MUST BE ACCEPTABLE TO THE GEOTECHNICAL ENGINEER.
- ALL FILL UNDER PAVEMENT SHALL BE COMPACTED TO THE GEOTECHNICAL ENGINEER'S RECOMMENDATIONS. (REPORT DATED: <DATE>).
- 5. ALL ELEVATIONS SHOWN ARE FINISHED GRADE ELEVATIONS.
- CONTRACTOR SHALL STRICTLY ADHERE TO THE EROSION & SEDIMENT CONTROL PLAN PREPARED FOR THIS PROJECT.
- EARTHWORK SHALL INCLUDE CLEARING AND GRUBBING, STRIPPING AND STOCKPILING TOPSOIL, MASS GRADING, EXCAVATION, FILLING, UNDER CUT AND REPLACEMENT, IF REQUIRED, AND COMPACTION.
- 8. CONTRACTOR TO REFILL UNDERCUT AREAS WITH SUITABLE MATERIAL AND COMPACT AS RECOMMENDED BY THE GEOTECHNICAL ENGINEER.
- 9. PLACE TOPSOIL OVER THE SUBGRADE OF UNPAVED, DISTURBED AREAS TO A DEPTH INDICATED ON THE LANDSCAPE PLANS (6" MINIMUM).
- 10. PAVEMENT SLOPES ACROSS ACCESSIBLE PARKING STALLS AND ADJOINING ACCESS AISLES SHALL BE MAXIMUM 2% AND SHALL CONFORM TO THE LATEST REGULATIONS OF THE AMERICANS WITH DISABILITIES ACT.
- 11. ALL SLOPES IN NON-PAVED AREAS SHALL BE <DIST>:<DIST> (HORIZONTAL:VERTICAL) MAXIMUM UNLESS NOTED OTHERWISE.
- 12. ALL AREAS NOT PAVED SHALL BE STABILIZED IN ACCORDANCE WITH THE EROSION & SEDIMENT CONTROL PLAN, UNLESS NOTED OTHERWISE.
- 13. COMPACTED FILLS ARE TO BE MADE TO A MINIMUM OF <THREE FEET> ABOVE THE CROWN OF ANY PROPOSED SEWER PRIOR TO CUTTING OF TRENCHES FOR PLACEMENT OF SAID SEWERS. ALL FILLS SHALL BE CONTROLLED, COMPACTED, AND INSPECTED BY AN APPROVED TESTING LABORATORY OR AN INSPECTOR FROM THE APPROPRIATE GOVERNMENTAL AGENCY.
- 14. ALL EXCESS SOIL MATERIALS SHALL BECOME THE PROPERTY OF THE CONTRACTOR UNLESS OTHERWISE DESIGNATED SHALL BE REMOVED BY THE CONTRACTOR AND DISPOSED OF OFFSITE AT NO ADDITIONAL COST TO THE OWNER IN ACCORDANCE WITH ALL LOCAL AND STATE CODES AND PERMIT REQUIREMENTS.
- 15. THE CONTRACTOR IS RESPONSIBLE FOR BALANCING THE SITE EARTHWORK BY IMPORTING OR EXPORTING AS NECESSARY TO ACHIEVE DESIGN GRADES AND SPECIFICATIONS.
- 16. TOPSOIL VOLUMES ESTIMATED AS PART OF THIS PROJECT ASSUME THAT A MINIMUM OF 12 INCHES OF SOIL AND TOPSOIL WILL BE STRIPPED FROM THE SITE. THE ACTUAL VOLUME WILL BE BASED ON EQUIPMENT USED AND THE CONTRACTOR'S MEANS AND METHODS. CEC AND THE OWNER ARE NOT RESPONSIBLE FOR THE CONTRACTOR'S INTERPRETATION OF TOPSOIL THICKNESS AND RESULTING INCREASED VOLUMES. NO ADDITIONAL COSTS WILL BE PAID TO THE CONTRACTOR FOR AN INCREASE IN THE VOLUME OF TOPSOIL STRIPPED AND STOCKPILED.

STORM DRAINAGE NOTES

- 11. DISTANCES SHOWN ON PIPING ARE HORIZONTAL DISTANCES FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE, UNLESS OTHERWISE NOTED.
- 12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH THE INSTALLATION, INSPECTION, TESTING AND FINAL ACCEPTANCE OF ALL NEW STORMWATER MANAGEMENT FACILITIES CONSTRUCTION. CONTRACTOR SHALL COORDINATE WITH ALL APPLICABLE REGULATING AGENCIES CONCERNING INSTALLATION, INSPECTION AND APPROVAL OF THE STORM DRAINAGE SYSTEM
- 13. ALL STORMWATER MANAGEMENT FACILITIES, INCLUDING COLLECTION AND CONVEYANCE STRUCTURES SHALL BE INSTALLED IN ACCORDANCE WITH ALL APPLICABLE LOCAL AND STATE CODES AND
- 14. ALL CATCH BASINS IN THE PAVEMENT OR CURB ARE TO HAVE A MINIMUM OF ONE, 4" PERFORATED UNDERDRAIN EXTENDING 10 LF FROM THE CATCH BASIN IN THE UPHILL DIRECTION. SEE DETAIL ON
- 15. ANY FIELD TILE CUT IN EXCAVATION, WHICH DRAINS AN OFFSITE AREA, MUST BE TIED INTO THE STORM DRAINAGE SYSTEM.
- 16. FOR EXACT LOCATION OF DOWN SPOUTS & ROOF DRAINS, CONTRACTOR IS TO COORDINATE WITH ARCHITECTURAL AND PLUMBING DRAWINGS.
- 17. ALL PROPOSED STORM SEWERS, SURFACE OR OTHER DRAINAGE FACILITIES ARE TO BE PRIVATE AND MAINTAINED BY THE OWNER.
- 18. THE CONTRACTOR IS TO CONSTRUCT CURBS, CATCH BASINS, DOWNSPOUTS, PIPING AND CONNECTION ETC. AS REQUIRED TO CONVEY THE ROOF AND PAVED SURFACE DRAINAGE TO THE DETENTION
- 19. ALL STORM STRUCTURES ARE <STATE> DOT TYPES UNLESS OTHERWISE INDICATED.
- 20. ALL CATCH BASINS AND MANHOLES WITH A DEPTH GREATER THAN <4'> SHALL BE PROVIDED WITH STEPS. STEPS SHALL MEET THE REQUIREMENTS OF <STATE OR CITY DOT> SPECIFICATION ITEM <NUMBER>.
- 21. STORM SEWER PIPE LABELED "<STM>" SHALL BE ONE OF THE FOLLOWING: PVC SDR-35, PVC PROFILE PIPE PER <STATE OR CITY DOT NO.>, HIGH DENSITY POLYETHYLENE PER <STATE OR CITY DOT NO.>, OR CONTECH ULTRA FLO ALUMINIZED CORRUGATED METAL, <STATE OR CITY DOT NO.>. STORM SEWER PIPE LABELED "RCP" SHALL BE REINFORCED CONCRETE PIPE, <STATE OR CITY DOT NO.>. ALL STORM IS TO BE INSTALLED PER <STATE OR CITY DOT NO.>.
- 22. STORM SEWER IS TO BE BEDDED WITH CLEAN GRANULAR MATERIAL—AGGREGATES <NOT TO BE LARGER THAN 3/4" AND NOT SMALLER THAN NO. 8 SIEVE, FREE OF SILT AND FINES, AASHTO M43 SIZE #67, 7 OR 8. BEDDING TO BE MINIMUM OF 6" BELOW & 12" / PER STATE OR CITY DOT NO.> ABOVE THE PIPE.

UTILITY NOTES

- 1. ALL PROPOSED UTILITY LINES AND EXTENSIONS ARE TO BE CONSTRUCTED IN ACCORDANCE WITH THE <NAME> UTILITY AGENCY / DISTRICT / MUNICIPALITY / COMPANY SPECIFICATIONS. CONTRACTOR SHALL COORDINATE UTILITY DISCONNECTIONS WITH THE APPROPRIATE AGENCY.
- 2. PROVIDE <SIZE> STORZ FIRE DEPARTMENT CONNECTION WITH 30 DEGREE TURN DOWN PER LOCAL FIRE DEPARTMENT REQUIREMENTS. UNDERGROUND PIPING SERVING REMOTE FIRE DEPARTMENT CONNECTION SHALL BE DUCTILE IRON PIPING WITH RUBBER—GASKET PUSH—ON JOINTS. ABOVE GROUND PIPING AT LOCATION OF FIRE DEPARTMENT CONNECTION SHALL BE GALVANIZED, PROVIDE FLANGE ABOVE GRADE AT TRANSITION. PROVIDE CONCRETE THRUST BLOCKING AT ALL CHANGES OF DIRECTION AND MOUNT FIRE DEPARTMENT CONNECTION PIPING IN A 12" X 12" CONCRETE PAD 4" THICK. PROVIDE BALL DRIP VALVE AT BASE OF VERTICAL PIPING SERVING FIRE DEPARTMENT CONNECTION AND SURROUND WITH PEA GRAVEL.
- 3. THE CONTRACTOR IS PARTICULARLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF THE EXISTING UTILITIES SHOWN HEREON IS BASED ON TOPOGRAPHIC SURVEYS AND RECORD DRAWINGS. THE CONTRACTOR SHALL NOT RELY UPON THIS INFORMATION AS BEING EXACT OR COMPLETE. SHOULD UNCHARTED UTILITIES BE ENCOUNTERED DURING EXCAVATION OPERATIONS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER AS SOON AS POSSIBLE FOR INSTRUCTIONS. THE CONTRACTOR SHALL CALL THE APPROPRIATE UTILITY COMPANY AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION AND REQUEST FIELD VERIFICATION OF UTILITY LOCATIONS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO RELOCATE EXISTING UTILITIES CONFLICTING WITH IMPROVEMENTS SHOWN HEREON IN ACCORDANCE WITH ALL LOCAL, STATE, AND FEDERAL REGULATIONS GOVERNING SUCH OPERATIONS.
- THE CONTRACTOR SHALL OBTAIN ALL REQUIRED PERMITS PRIOR TO COMMENCEMENT OF CONSTRUCTION.
- MAINTAIN MINIMUM 10-FOOT HORIZONTAL AND 18-INCH MINIMUM VERTICAL SEPARATION BETWEEN SANITARY SEWER, STORM SEWER AND WATER SUPPLY LINE, UNLESS OTHERWISE INDICATED.
- 6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE SEQUENCING OF CONSTRUCTION FOR ALL UTILITY LINES SO THAT WATER LINES, GAS LINES, AND UNDERGROUND ELECTRIC DO NOT CONFLICT WITH SANITARY SEWERS OR STORM SEWERS. INSTALL UTILITIES PRIOR TO PAVEMENT CONSTRUCTION
- 7. ALL TRENCH SPOILS SHALL BECOME THE PROPERTY OF THE CONTRACTOR UNLESS OTHERWISE DESIGNATED SHALL BE REMOVED BY THE CONTRACTOR AND DISPOSED OF OFFSITE AT NO ADDITIONAL COST TO THE OWNER IN ACCORDANCE WITH ALL LOCAL AND STATE CODES AND PERMIT REQUIREMENTS.
- 8. SANITARY SEWER SHALL BE <PVC-SDR 35 PER ASTM D-3034> OR APPROVED EQUAL (CONFORMING TO <NAME> CITY OR COUNTY WATER & SEWER DEPARTMENT RULES AND REGULATIONS) INSTALLED AT A MINIMUM SLOPE OF ONE PERCENT (1.00%) UNLESS OTHERWISE NOTED SANITARY SERVICE SHALL BE INSTALLED AT A MINIMUM DEPTH OF FOUR FEET (4') UNLESS OTHERWISE NOTED. A MINIMUM OF 18" CLEARANCE SHALL BE MAINTAINED AT ALL WATERLINE & STORM SEWER CROSSINGS. SANITARY SERVICE JOINTS ALL CONFORM TO ASTM D-3212.
- 9. SANITARY SEWER IS TO BE BEDDED WITH CLEAN GRANULAR MATERIAL—AGGREGATES <NOT TO BE LARGER THAN 3/4" AND NOT SMALLER THAN NO. 8 SIEVE, FREE OF SILT AND FINES, AASHTO M43 SIZE #67, 7 OR 8. BEDDING TO BE MINIMUM OF 6" BELOW & 12" / PER STATE OR CITY DOT NO.> ABOVE THE PIPE.
- 10. DISTANCES SHOWN FOR BOTH SANITARY AND STORM SEWER PIPES ARE MEASURED FROM CENTER OF STRUCTURE, CONTRACTOR RESPONSIBLE FOR ACTUAL FIELD CUT LENGTH. COORDINATES FOR STORM & SANITARY STRUCTURES ARE SHOWN TO THE CENTER STRUCTURE. UNLESS OTHERWISE
- 11. ROOF DRAINS, FOUNDATION DRAINS AND ALL OTHER CLEAR WATER CONNECTIONS TO THE SANITARY SEWER SYSTEMS ARE PROHIBITED.
- 12. ADJUST ALL EXISTING UTILITY SURFACE FEATURES INCLUDING BUT NOT LIMITED TO CASTINGS, VALVE BOXES, PEDESTALS, CLEANOUTS, ETC. TO MATCH PROPOSED FINISHED GRADES, UNLESS OTHERWISE INDICATED.
- 13. THE CONTRACTOR SHALL PROVIDE RECORD DRAWINGS OF ALL IMPROVEMENTS. INCLUDE AT LEAST TWO DIMENSIONS TO EACH VALVE AND MANHOLE FROM KNOWN SITE FEATURES. DRAWINGS SHALL INCLUDE HORIZONTAL AND VERTICAL INFORMATION ON ALL NEW UTILITIES AS WELL AS EXISTING UTILITIES ENCOUNTERED.
- 14. MECHANICAL/ELECTRICAL CONTRACTORS SHALL BRING ALL UTILITIES 5' OUTSIDE BUILDING WALL. COORDINATE WITH <CONSTRUCTION MANAGER/ARCHITECT/ENGINEER/OWNER>.
- 15. ALL WATERLINE CROSSINGS SHALL MAINTAIN A VERTICAL SEPARATION OF 18" MINIMUM. SANITARY SEWER SHALL BE LOCATED 18" BELOW WATERMAIN AT ALL CROSSINGS. WATERMAIN SHALL BE LOCATED A MINIMUM OF 10' HORIZONTALLY FROM ANY SANITARY SEWER OR STORM SEWER. ALL MEASUREMENTS SHALL BE TAKEN FROM OUTSIDE OF SEWER PIPE TO THE OUTSIDE OF WATERMAIN PIPE. ONE FULL LENGTH OF WATERMAIN PIPE SHALL BE LOCATED AT ALL CROSSINGS TO ENABLE BOTH JOINTS TO BE LOCATED AS FAR FROM SEWER AS POSSIBLE.
- 16. ALL WATER SERVICE PIPE SIZES 3" THRU 12" SHALL BE <DUCTILE IRON PIPE CLASS <51, 52, 53>, PVC <C-900> OR PVC <C909>> PIPE PER LOCAL JURISDICTION, FROM WATERMAIN THRU METER SETTING(S) INCLUDING THE METER BYPASS.
- 17. ALL WATER SERVICE PIPE, <2" AND SMALLER>, SHALL BE K SOFT COPPER FROM WATERMAIN THRU CURB STOP; K SOFT COPPER OR <UTILITY AGENCY / DISTRICT / MUNICIPALITY / COMPANY> APPROVED POLYTUBING FROM <CURB STOP THRU METER SETTING IN BUILDING>.
- 18. WATERLINE IS TO BE BEDDED WITH CLEAN GRANULAR MATERIAL—AGGREGATES <NOT TO BE LARGER THAN 3/4" AND NOT SMALLER THAN NO. 8 SIEVE, FREE OF SILT AND FINES, AASHTO M43 SIZE #67, 7 OR 8. BEDDING TO BE MINIMUM OF 6" BELOW & 12" / PER STATE OR CITY DOT NO.> ABOVE THE PIPE

Environmental Cons

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JUNE 2023 DRAWN BY:

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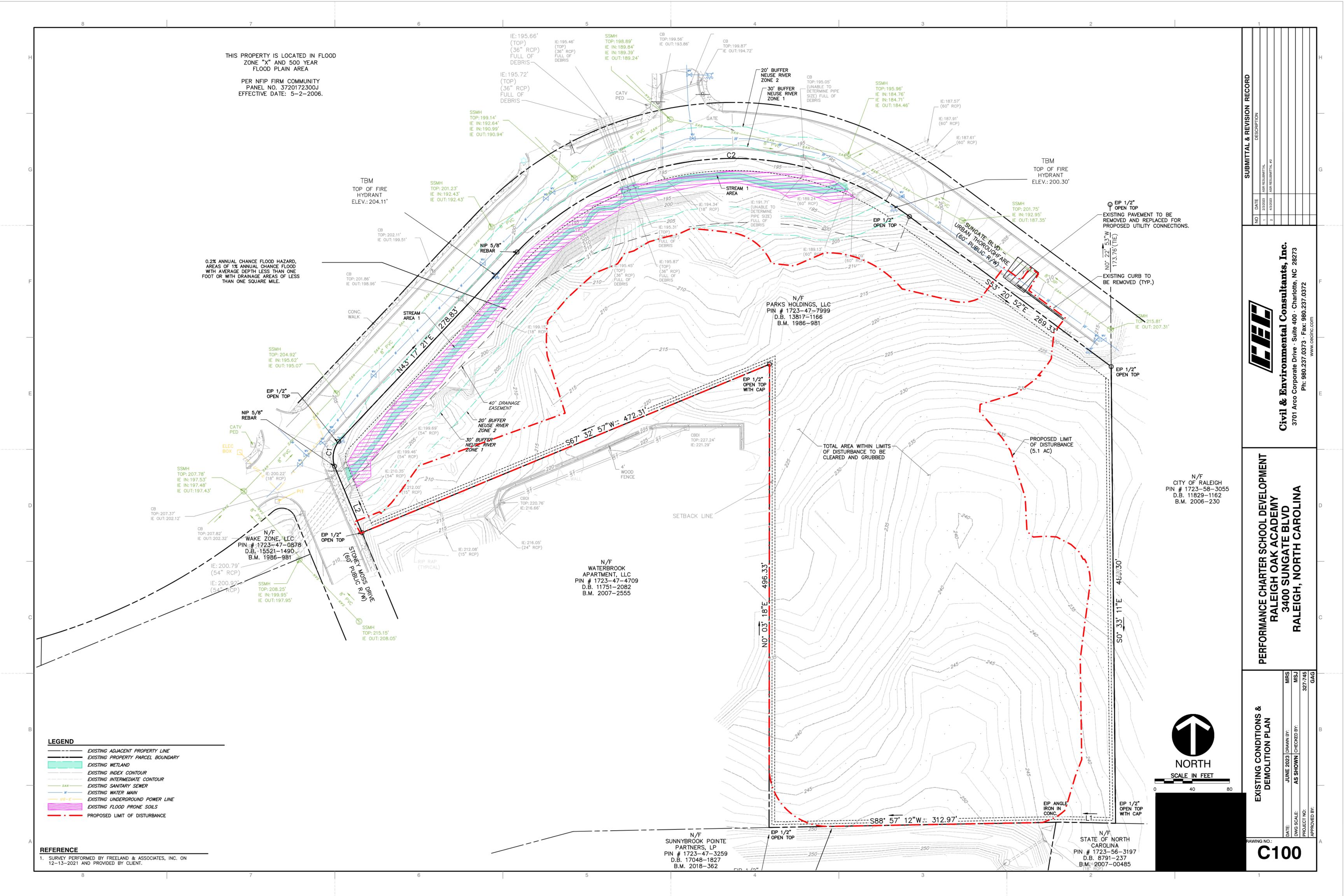
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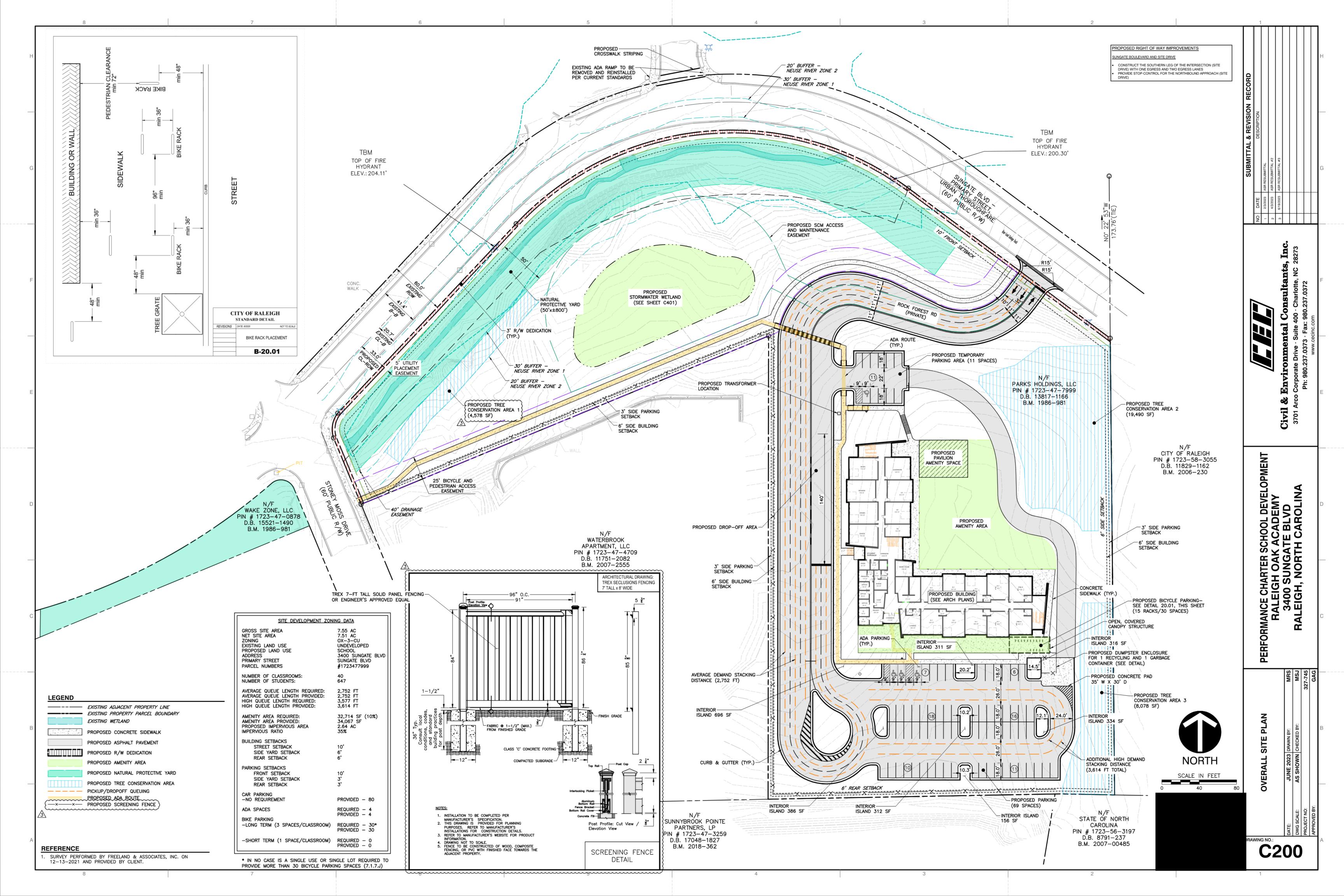
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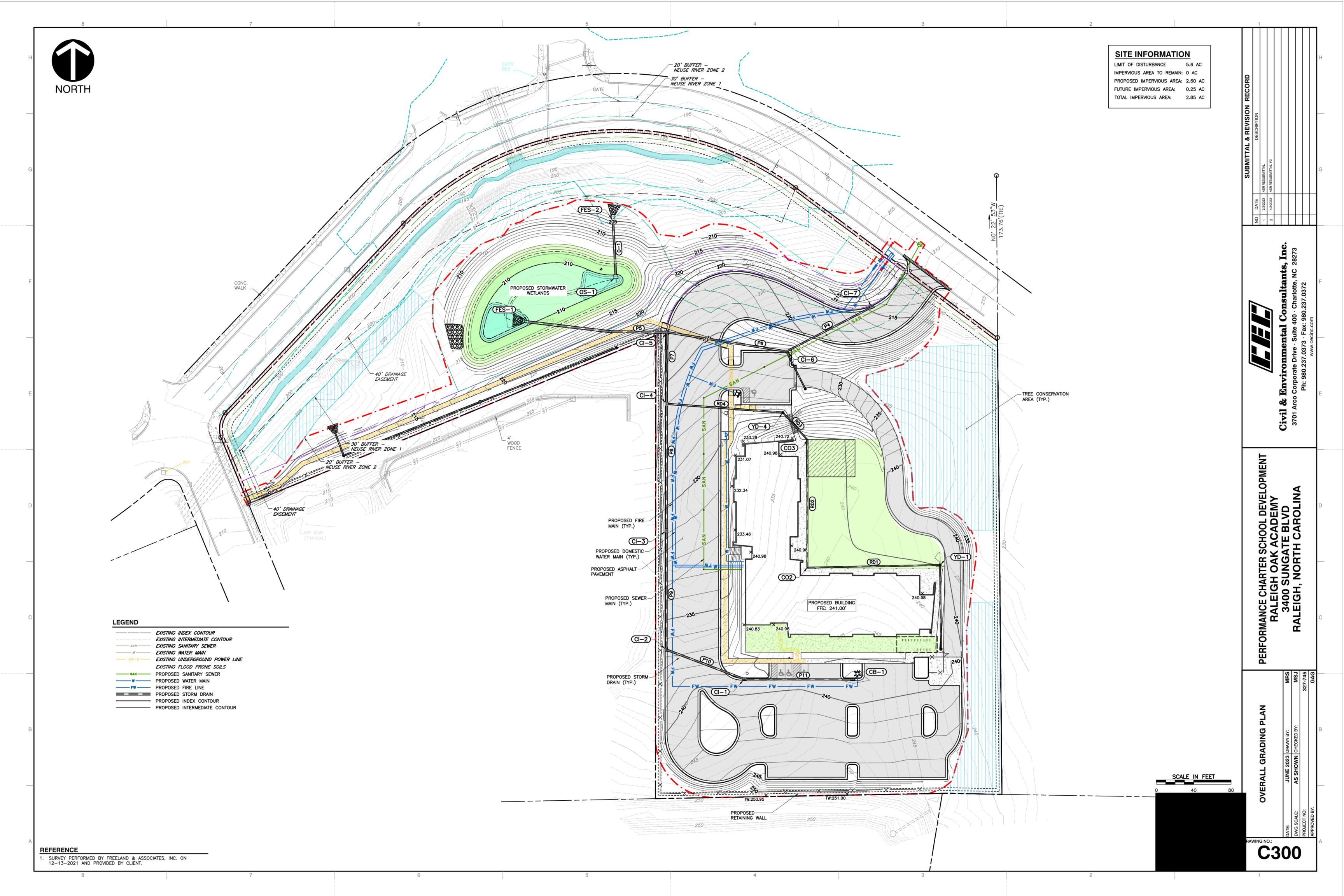
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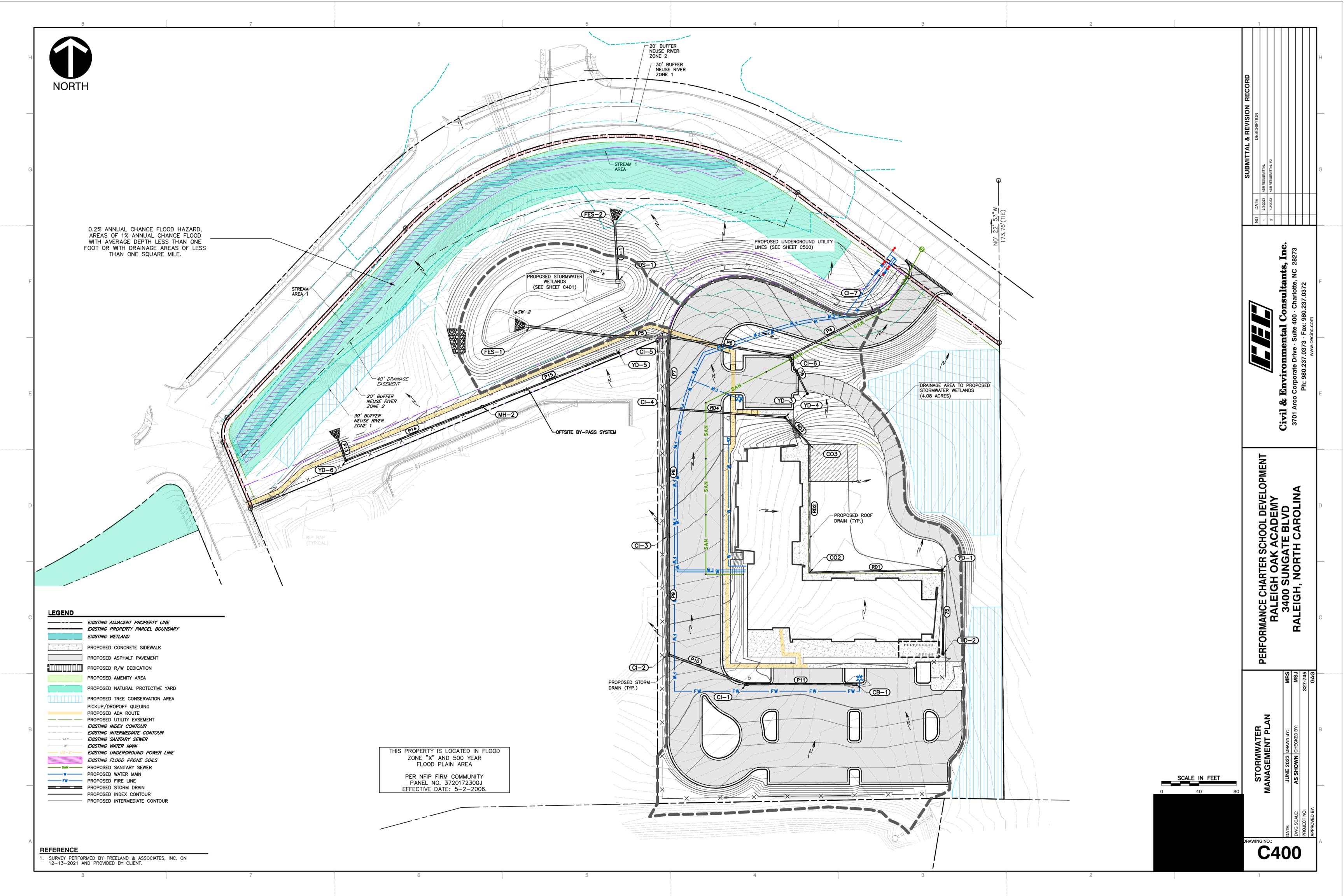
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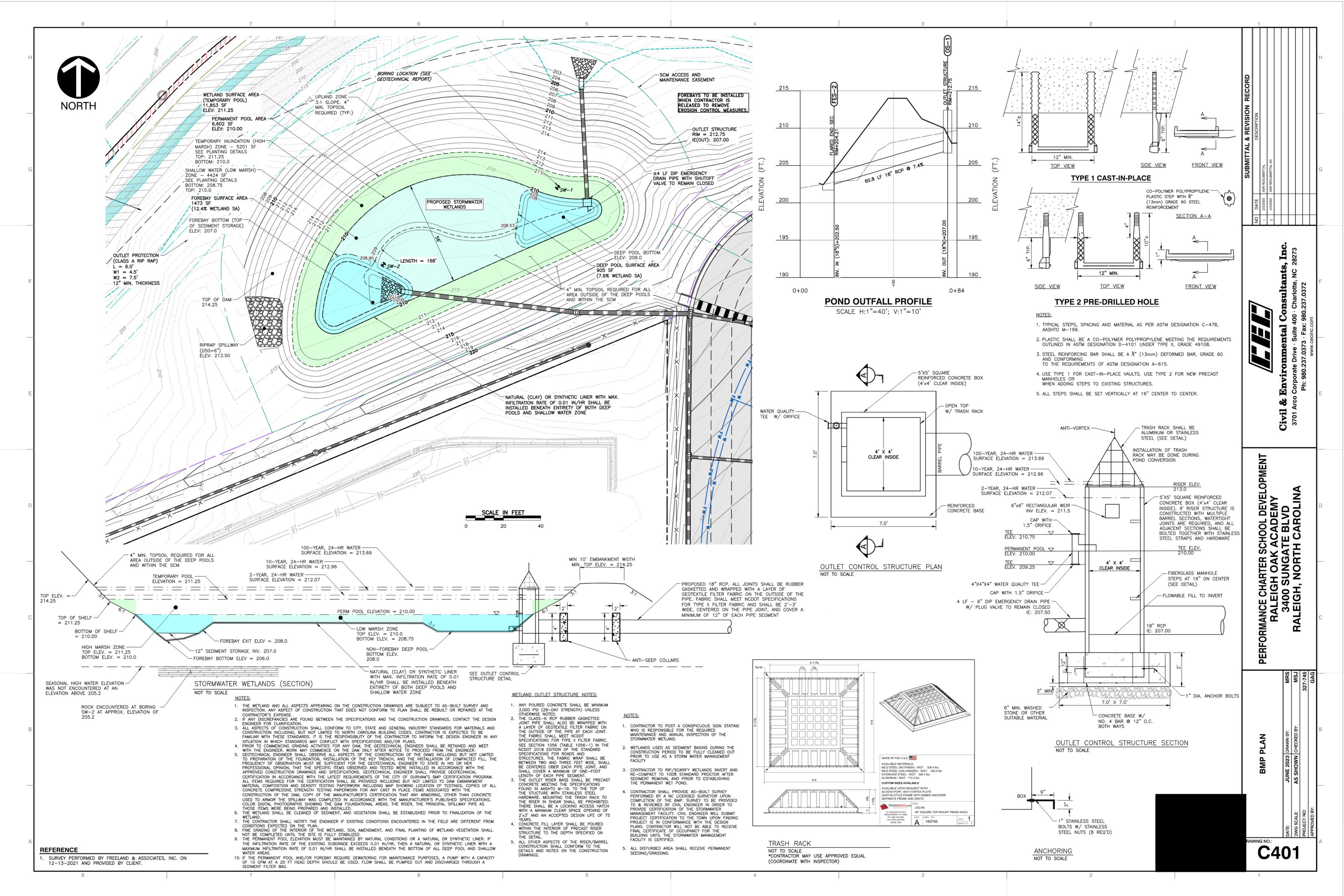
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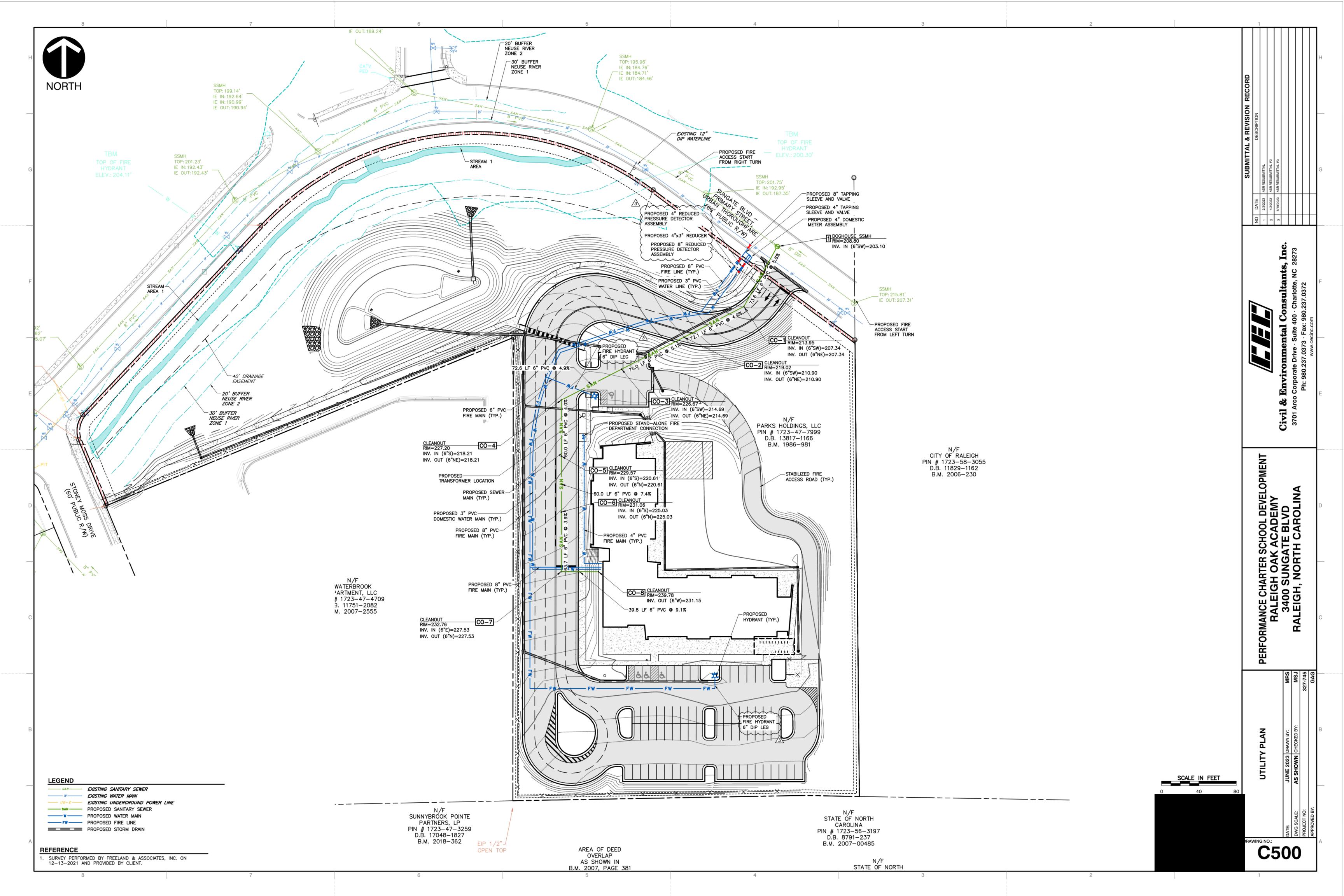


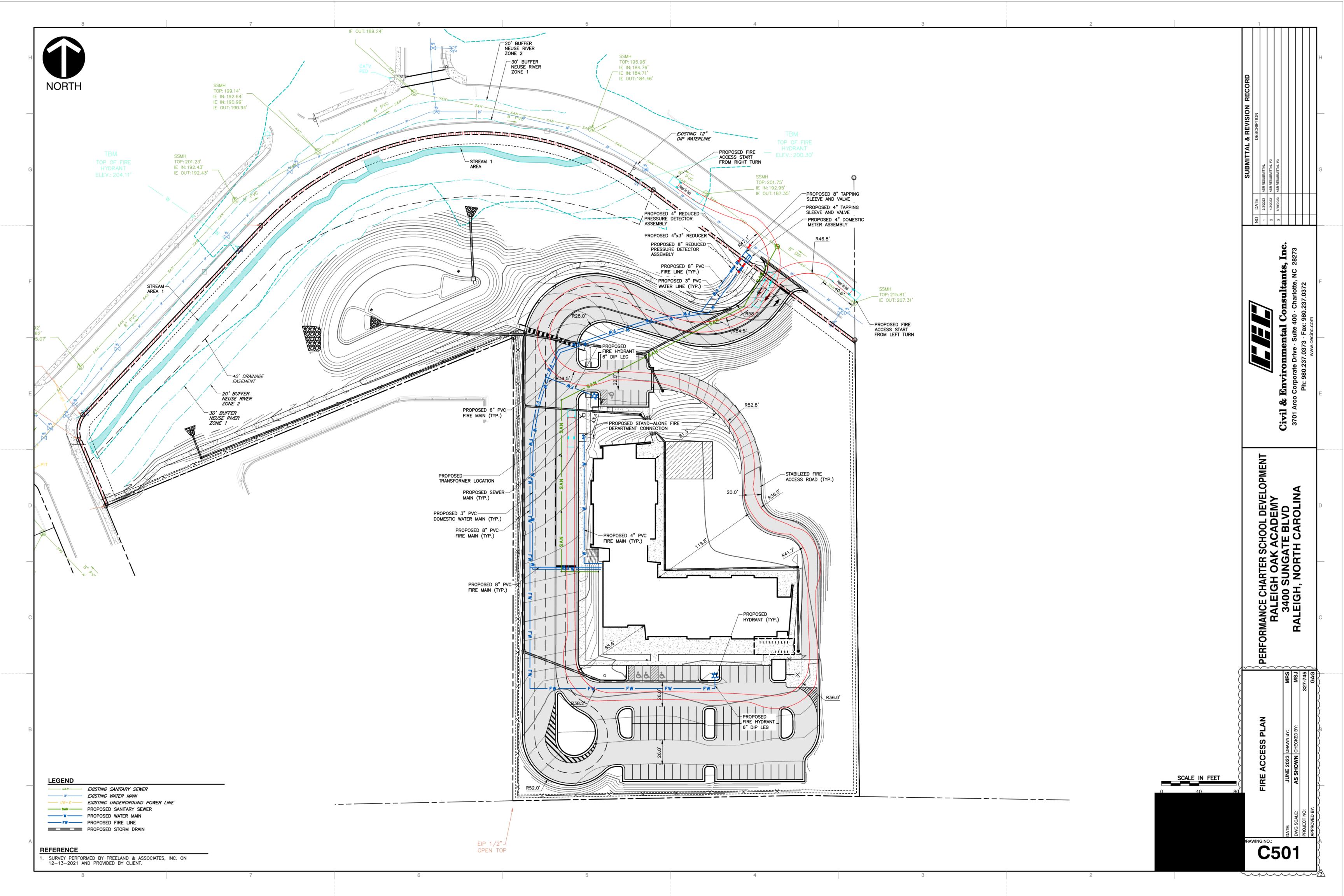


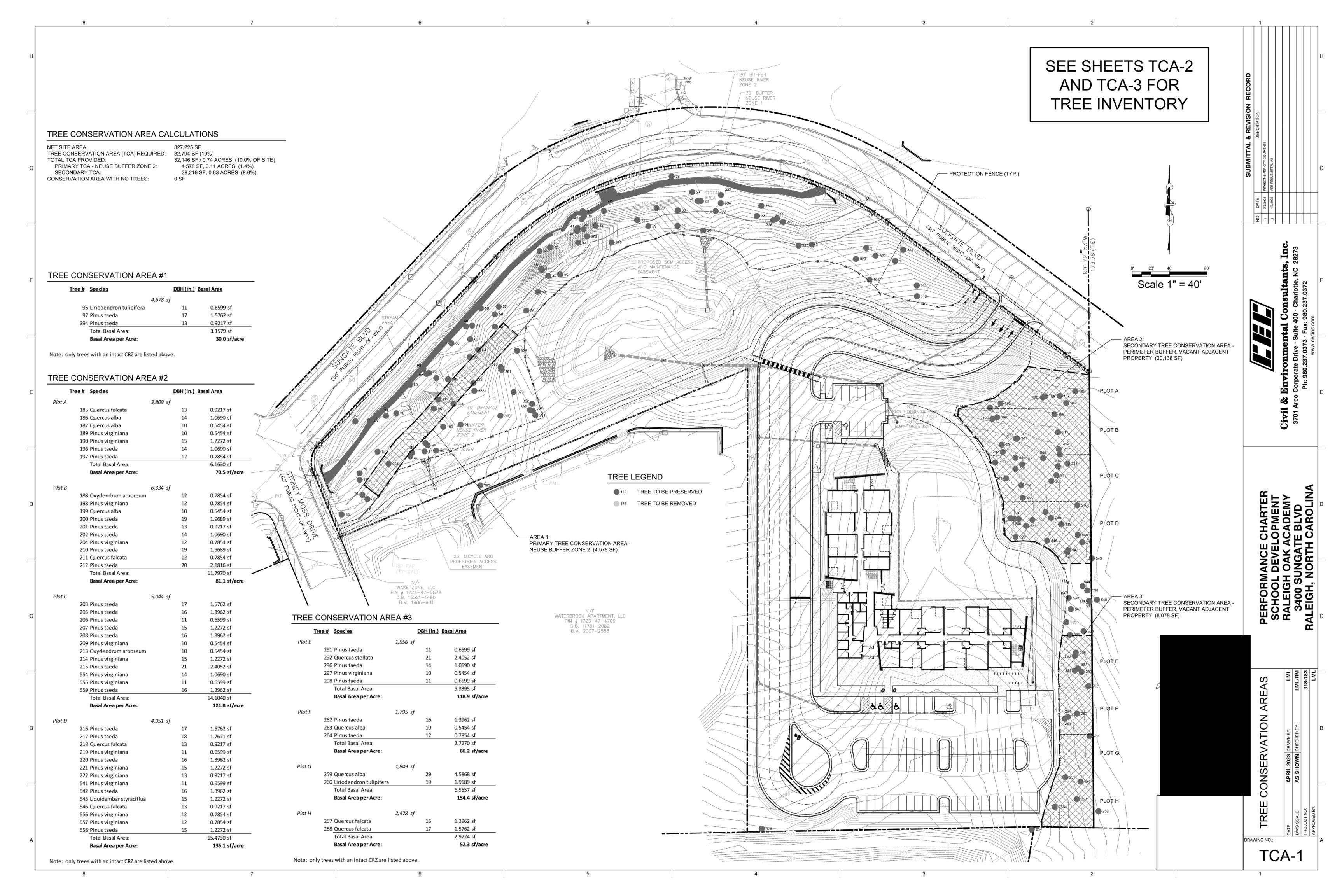








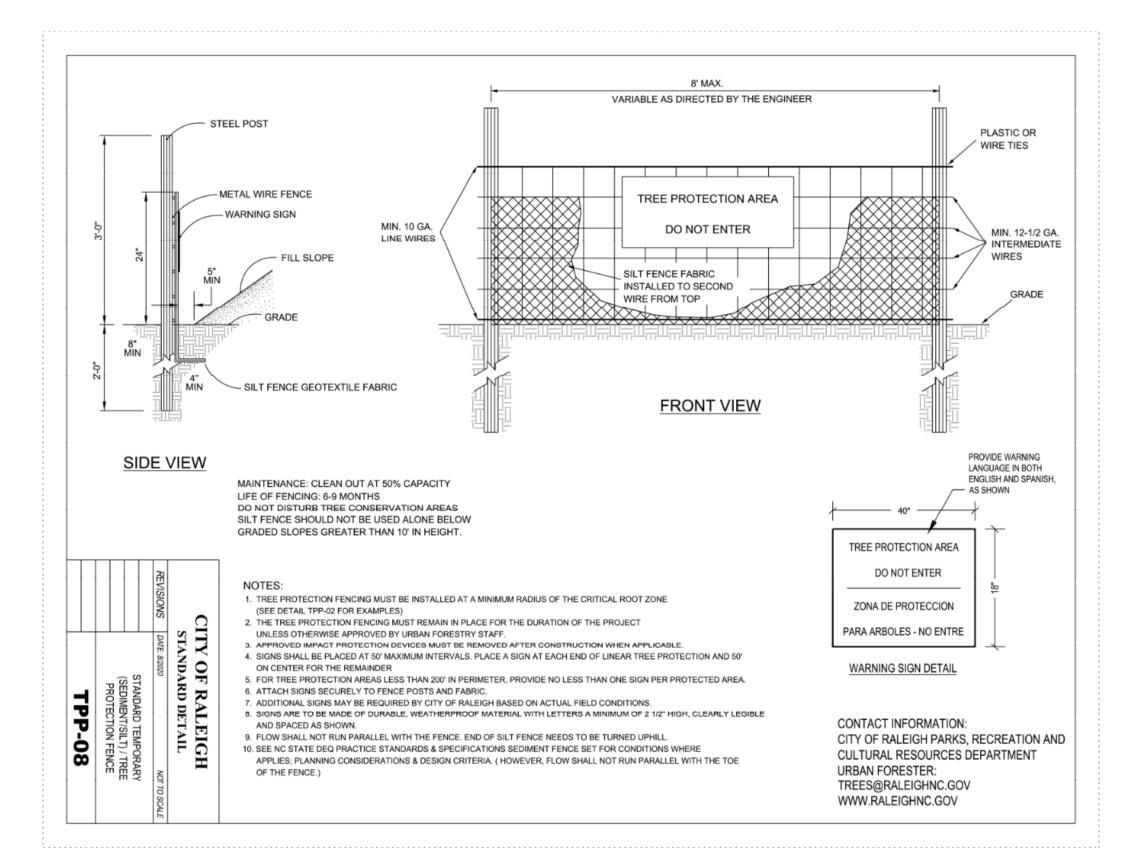




TREE PROTECTION SPECIFICATIONS

- FABRIC: 4 FOOT HIGH ORANGE PLASTIC FENCING AS SHOWN ON THE PLANS AND SHALL BE WOVEN WITH 2 INCH MESH OPENINGS SUCH THAT IN A VERTICAL DIMENSION OF 23 INCHES ALONG THE DIAGONALS OF THE OPENINGS THERE SHALL BE AT LEAST 7
- TIE WIRE: WIRE FOR ATTACHING THE FABRIC TO THE T-POSTS SHALL BE NOT LESS THAN NO. 12 GAUGE GALVANIZED WIRE. USED MATERIALS: PREVIOUSLY-USED MATERIALS, MEETING THE ABOVE REQUIREMENTS AND WHEN APPROVED BY THE OWNER,

- ALL TREES AND SHRUBS SHOWN TO REMAIN WITHIN THE PROXIMITY OF THE CONSTRUCTION SITE SHALL BE PROTECTED PRIOR TO
- 2. EMPLOY THE SERVICES OF AN ISA (INTERNATIONAL SOCIETY OF ARBORICULTURE) CERTIFIED ARBORIST AND OBTAIN ALL REQUIRED PERMITS TO PRUNE THE EXISTING TREES FOR CLEANING, RAISING AND THINNING, AS MAY BE REQUIRED.
- PROTECTIVE FENCING SHALL BE ERECTED OUTSIDE THE CRITICAL ROOT ZONE (CRZ, EQUAL TO 1.25' FROM THE TRUNK FOR EVERY 1" OF DBH) AT LOCATIONS SHOWN IN THE PLANS OR AS DIRECTED BY THE LANDSCAPE ARCHITECT AND/OR CITY ARBORIST, AND IN ACCORDANCE WITH THE DETAILS SHOWN ON THE PLANS. FENCING SHALL BE MAINTAINED AND REPAIRED BY THE CONTRACTOR DURING SITE CONSTRUCTION. TREES IN CLOSE PROXIMITY SHALL FENCED TOGETHER, RATHER THAN INDIVIDUALLY.
- 4. PROTECTIVE FENCE LOCATIONS IN CLOSE PROXIMITY TO STREET INTERSECTIONS OR DRIVES SHALL ADHERE TO THE APPLICABLE JURISDICTION'S SIGHT DISTANCE CRITERIA.
- THE PROTECTIVE FENCING SHALL BE ERECTED BEFORE SITE WORK COMMENCES AND SHALL REMAIN IN PLACE DURING THE ENTIRE CONSTRUCTION PHASE.
- WITHIN THE CRZ: DO NOT CLEAR, FILL OR GRADE IN THE CRZ OF ANY TREE.
 - DO NOT STORE, STOCKPILE OR DUMP ANY JOB MATERIAL, SOIL OR RUBBISH UNDER THE SPREAD OF THE TREE BRANCHES. DO NOT PARK OR STORE ANY EQUIPMENT OR SUPPLIES UNDER THE TREE CANOPY.
 - DO NOT SET UP ANY CONSTRUCTION OPERATIONS UNDER THE TREE CANOPY (SUCH AS PIPE CUTTING AND THREADING, MORTAR MIXING. PAINTING OR LUMBER CUTTING)
- DO NOT NAIL OR ATTACH TEMPORARY SIGNS METERS, SWITCHES, WIRES, BRACING OR ANY OTHER ITEM TO THE TREES. DO NOT PERMIT RUNOFF FROM WASTE MATERIALS INCLUDING SOLVENTS, CONCRETE WASHOUTS, ASPHALT TACK COATS (MC-30 OIL). ETC. TO ENTER THE CRZ. BARRIERS ARE TO BE PROVIDED TO PREVENT SUCH RUNOFF SUBSTANCES FROM ENTERING THE CRZ WHENEVER POSSIBLE, INCLUDING IN AN AREA WHERE RAIN OR SURFACE WATER COULD CARRY SUCH MATERIALS TO THE ROOT SYSTEM OF THE TREE.
- 7. ROUTE UNDERGROUND UTILITIES TO AVOID THE CRZ. IF DIGGING IS UNAVOIDABLE, BORE UNDER THE ROOTS, OR HAND DIG TO AVOID SEVERING THEM.
- WHERE EXCAVATION IN THE VICINITY OF TREES MUST OCCUR, SUCH AS FOR IRRIGATION INSTALLATION, PROCEED WITH CAUTION.
- THE CONTRACTOR SHALL NOT CUT ROOTS LARGER THAN ONE INCH IN DIAMETER WHEN EXCAVATION OCCURS NEAR EXISTING TREES. ALL ROOTS LARGER THAN ONE INCH IN DIAMETER ARE TO BE CUT CLEANLY. FOR OAKS ONLY, ALL WOUNDS SHALL BE PAINTED WITH WOUND SEALER WITHIN 30 MINUTES
- 10. REMOVE ALL TREES, SHRUBS OR BUSHES TO BE CLEARED FROM PROTECTED ROOT ZONE AREAS BY HAND.
- 11. TREES DAMAGED OR KILLED DUE TO CONTRACTOR'S NEGLIGENCE DURING CONSTRUCTION SHALL BE MITIGATED AT THE CONTRACTOR'S EXPENSE AND TO THE PROJECT OWNER'S AND LOCAL JURISDICTION'S SATISFACTION.
- 12. ANY TREE REMOVAL SHALL BE APPROVED BY THE OWNER AND LOCAL JURISDICTION PRIOR TO ITS REMOVAL, AND THE CONTRACTOR SHALL HAVE ALLREQUIRED PERMITS FOR SUCH ACTIVITIES.
- 13. COVER EXPOSED ROOTS AT THE END OF EACH DAY WITH SOIL, MULCH OR WET BURLAP.
- 14. IN CRITICAL ROOT ZONE AREAS THAT CANNOT BE PROTECTED DUING CONSTRUCTION AND WHERE HEAVY TRAFFIC IS ANTICIPATED, COVER THE SOIL WITH EIGHT INCHES OF ORGANIC MULCH TO MINIMIZE SOIL COMPACTION. THIS EIGHT INCH DEPTH OF MULCH SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION.
- 15. WATER ALL TREES IMPACTED BY CONSTRUCTION ACTIVITIES, DEEPLY ONCE A WEEK DURING PERIODS OF HOT DRY WEATHER. SPRAY TREE CROWNS WITH WATER PERIODICALLY TO REDUCE DUST ACCUMULATION ON THE LEAVES.
- 16. WHEN INSTALLING CONCRETE ADJACENT TO THE ROOT ZONE OF A TREE, USE A PLASTIC VAPOR BARRIER BEHIND THE CONCRETE TO PROHIBIT LEACHING OF LIME INTO THE SOIL.
- 17. CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL TREE PROTECTION FENCING JUST PRIOR TO FINAL ACCEPTANCE, OR WHEN ALL THREATS TO THE EXISTING TREES FROM CONSTRUCTION-RELATED ACTIVITIES HAVE BEEN REMOVED (WHICHEVER IS LATER).



Status → DB → Condition Class 100 Liriodendron tulipifera 16 Good Tree Preserve 200 Pinus taeda 19 Good Tree Preserve Tag * Species Tree 13 Good 101 Acer rubrum 22 Good Preserve 201 Pinus taeda Tree Preserve 1 Pinus virginiana 17 Good Tree Tree 17 Good Tree 102 Pinus taeda 22 Good 202 Pinus taeda 14 Good Tree 2 Quercus falcata Preserve Preserve 103 Pinus taeda 23 Good Tree 17 Good 203 Pinus taeda Tree 3 Fagus americana 25 Good Tree Preserve Tree Tree 19 Good Tree 104 Acer rubrum 11 Good 204 Pinus virginiana 12 Good 4 Pinus virginiana Preserve 22 Good 105 Pinus taeda Tree 205 Pinus taeda 16 Good Tree 5 Liquidambar styraciflua 11 Good Tree Preserve Tree 106 Pinus taeda 23 Good 206 Pinus taeda 11 Poor 6 Pinus virginiana 19 Good Preserve 24 Good 207 Pinus taeda 107 Pinus taeda Heritage 15 Good Tree 7 Pinus virginiana 21 Good Tree Preserve 108 Pinus taeda Tree 16 Fair Tree 15 Fair 208 Pinus taeda Tree 8 Pinus virginiana 15 Poor Preserve 10 Good Tree 109 Oxydendrum arboreum 12 Poor Tree 209 Pinus virginiana 10 Good Tree 9 Pinus taeda Preserve Tree 210 Pinus taeda 24 Good Heritage 110 Acer rubrum 21 Fair 19 Good 10 Pinus taeda Preserve 111 Oxydendrum arboreum 11 Fair Tree 12 Fair 211 Quercus falcata Tree 11 Pinus taeda 21 Good Tree Preserve Tree 112 Pinus virginiana 14 Good Preserve 212 Pinus taeda 20 Good Tree 12 Pinus taeda 25 Good Heritage Preserve 113 Quercus alba 15 Good Tree 213 Oxydendrum arboreum 10 Fair Tree 13 Pinus echinata 10 Good Tree Preserve Preserve Tree 12 Good 114 Pinus taeda 18 Poor 214 Pinus virginiana 15 Good 14 Quercus falcata Tree Preserve Tree 215 Pinus taeda 14 Good 115 Pinus virginiana 10 Good 21 Good Tree 15 Quercus falcata Tree Preserve Tree 17 Good 116 Pinus virginiana 16 Good 216 Pinus taeda Tree 16 Liriodendron tulipifera 21 Good Tree Preserve 217 Pinus taeda 13 Fair Tree 117 Pinus virginiana 18 Good 17 Carya illinoinensis 20 Fair Tree Preserve Tree 11 Good 118 Liriodendron tulipifera 12 Good 218 Quercus falcata 13 Good 18 Liriodendron 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Liriodendron tulipifera 16 Good Tree Preserve 166 Pinus taeda 13 Good 267 Pinus taeda Tree 13 Good Tree 67 Liquidambar styraciflua 17 Good Tree 167 Pinus virginiana Preserve 11 Good Tree 12 Good Tree 68 Pinus taeda 12 Good Tree 168 Pinus virginiana 268 Quercus alba Preserve 12 Good Tree 269 Pinus taeda 16 Good Tree 69 Liriodendron tulipifera 13 Good Tree 169 Quercus falcata Preserve Tree 270 Liriodendron tulipifera 13 Good Tree 70 Pinus taeda 16 Good Tree 170 Quercus alba 11 Good Preserve 13 Good Tree 11 Good 71 Pinus taeda 12 Fair Tree 171 Quercus falcata 271 Quercus alba Tree Preserve 16 Fair Tree 17 Good Tree 72 Liriodendron tulipifera 17 Good Tree 172 Quercus alba 272 Liriodendron tulipifera Preserve 273 Pinus taeda 12 Good Tree 14 Good Tree 73 Pinus taeda 10 Good Tree 173 Quercus falcata Preserve 174 Pinus taeda 274 Pinus taeda Tree 14 Good Tree 74 Liquidambar styraciflua 16 Good Tree 18 Good Preserve Heritage Tree Tree 75 Liriodendron tulipifera 25 Good 175 Pinus taeda 16 Good 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Good 294 Quercus falcata 16 Good 94 Betula nigra 11 Dead/Diseased Tree Preserve Tree 15 Good 195 Pinus virginiana 11 Good 295 Quercus falcata 95 Liriodendron tulipifera 11 Fair Tree Preserve

Tree

Tree

Tree

Tree

Preserve

Preserve

Preserve

Preserve

296 Pinus taeda

298 Pinus taeda

299 Pinus taeda

297 Pinus virginiana

14 Good

12 Good

12 Good

10 Good

14 Good

10 Good

15 Good

11 Fair

Tree

Tree

Tree

Preserve

Preserve

Preserve

Preserve

SILT FENCE/TREE & WATERCOURSE PROTECTION FENCE

Heritage Preserve

Preserve

Preserve

Tree

Tree

96 Liriodendron tulipifera

97 Pinus taeda

98 Pinus taeda

99 Betula nigra

27 Good

17 Good

28 Good

11 Dead/Diseased

196 Pinus taeda

197 Pinus taeda

199 Quercus alba

198 Pinus virginiana

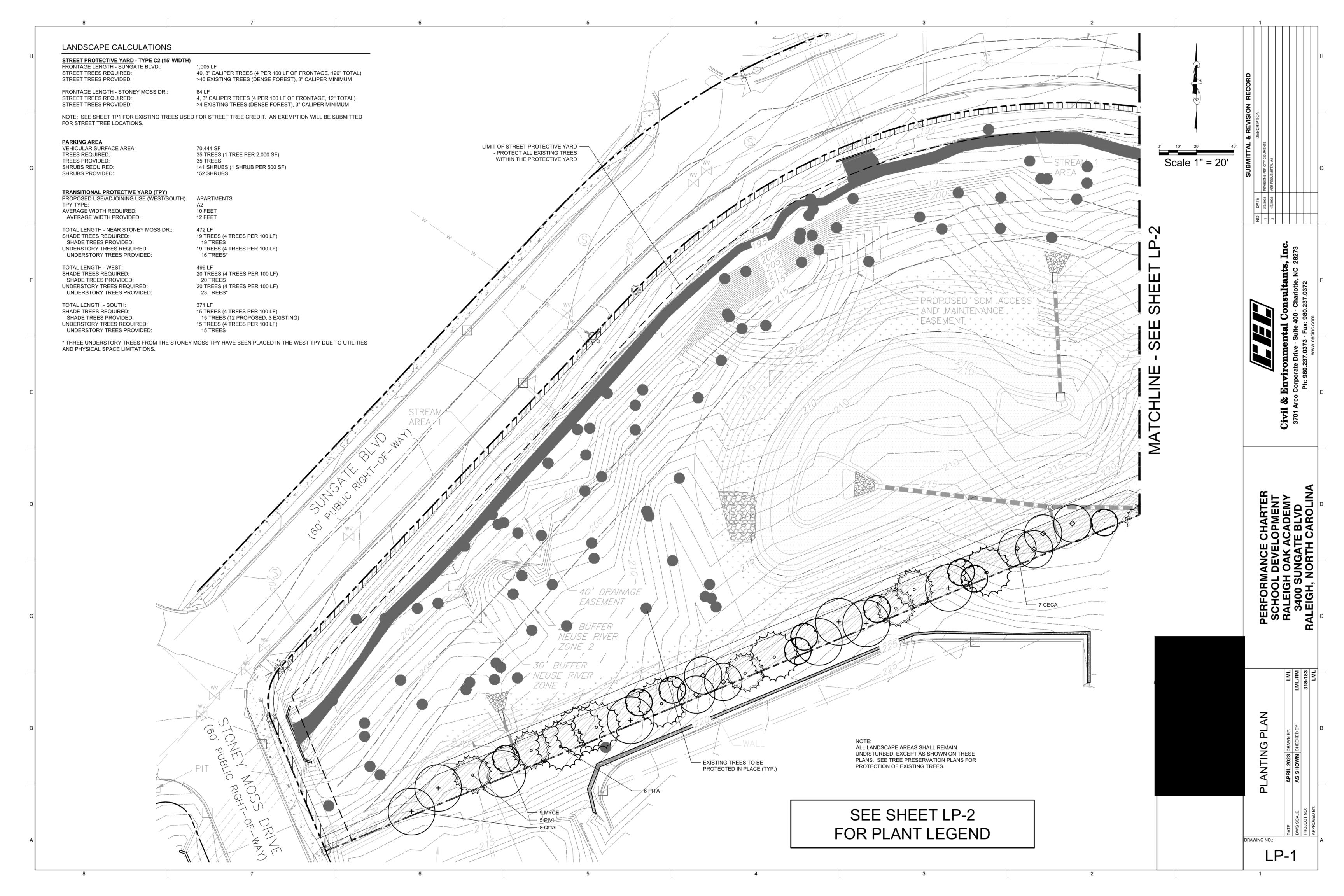
TREE INVENTORY

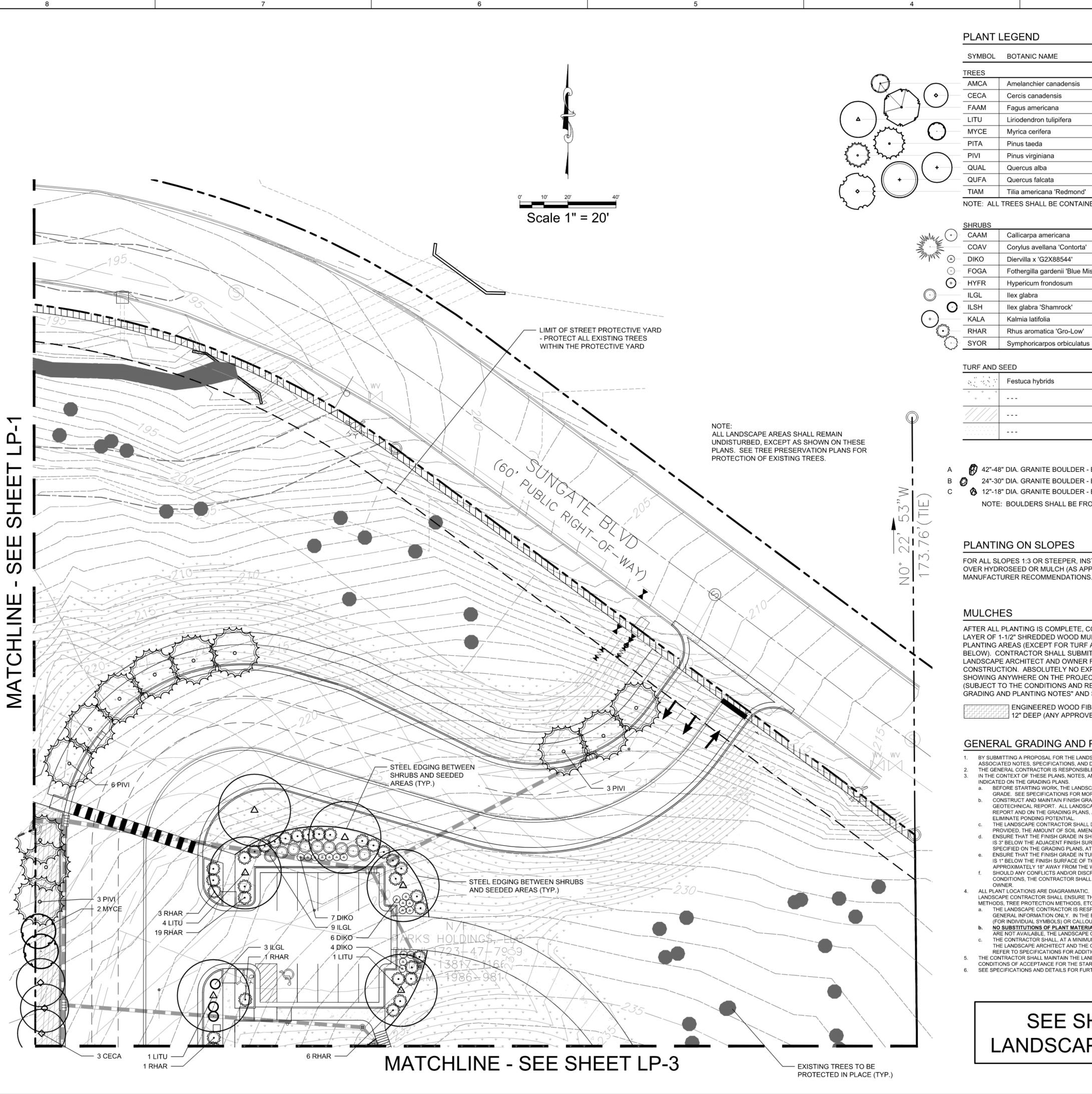
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			TREE INVENTORY (C	ON'T.)								
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			301 Pinus taeda 302 Pinus taeda	12 Good 23 Fair	Tree Tree	401 Pinus taeda 402 Pinus virginiana	13 Good 11 Good	Tree Tree	501 Quercus alba 502 Quercus falcata	11 Good	Tree Tree	유
			303 Liquidambar styraciflua	10 Good	Tree	403 Pinus virginiana	10 Fair 14 Fair	Tree	503 uercus velutina	10 Good	Tree	
			304 Liquidambar styraciflua 305 Pinus taeda	10 Good 20 Good	Tree Tree	404 Quercus alba 405 Pinus virginiana	12 Good	Tree Tree	504 Quercus falcata 505 Quercus alba	16 Good	Tree Tree	
			306 Quercus falcata 307 Quercus alba	13 Good 11 Good	Tree Tree	406 Quercus alba 407 Quercus alba	21 Good 12 Good	Tree Tree	506 Pinus taeda 507 Quercus velutina	16 Good	Tree Tree	NOIL
			308 Pinus taeda 309 Quercus alba	19 Fair 19 Good	Tree Tree	408 Quercus falcata 409 Quercus falcata	11 Good 11 Good	Tree Tree	508 Pinus taeda 509 Pinus taeda		Tree Tree	BESCRIP
			310 Liquidambar styraciflua 311 Pinus taeda	23 Good 23 Good	Tree Tree	410 Quercus falcata 411 Pinus taeda	12 Good 18 Good	Tree Tree	510 Quercus alba 511 Pinus taeda	10 Good	Tree Tree	AL & D D D D D D D D D D D D D D D D D D
			312 Liquidambar styraciflua	10 Good	Tree	412 Quercus falcata	12 Good	Tree	512 Pinus virginiana	14 Good	Tree	MITT HY COMM
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			315 Pinus taeda 316 Quercus alba	15 Good 10 Good	Tree Tree	415 Quercus falcata 416 Pinus taeda	12 Good 15 Good	Tree Tree	515 Pinus virginiana 516 Pinus taeda		Tree Tree	ASR RESI
			317 Pinus taeda 318 Pinus taeda	21 Good 19 Good	Tree Tree	417 Pinus virginiana 418 Pinus taeda	12 Good 15 Good	Tree Tree	517 Pinus taeda 518 Quercus alba		Tree Tree	ATE 3/2023 (
			319 Pinus taeda 320 Pinus taeda	13 Good 21 Fair	Tree Tree	419 Pinus taeda 420 Quercus falcata	19 Good 11 Fair	Tree Tree	519 Pinus virginiana 520 Quercus alba	11 Good	Tree Tree	1 2/3// 2 4/3//
1			321 Pinus taeda	13 Good	Tree Preserve	421 Pinus taeda	14 Good	Tree	521 Quercus alba	11 Good	Tree	
			322 Pinus taeda 323 Pinus virginiana	23 Good 15 Good	Tree Preserve Tree Preserve	422 Quercus falcata 423 Pinus taeda	12 Good 17 Good	Tree Tree	522 Pinus virginiana 523 Pinus virginiana		Tree Tree	.
			324 Fagus americana 325 Pinus virginiana	10 Good 14 Good	Tree Tree	424 Pinus taeda 425 Pinus taeda	10 Good 16 Good	Tree Tree	524 Pinus taeda 525 Quercus alba		Tree Tree	
			326 Pinus taeda 327 Liquidambar styraciflua	13 Good 16 Good	Tree Preserve Tree Preserve	426 Pinus taeda 427 Pinus virginiana	15 Good 12 Good	Tree Tree	526 Pinus virginiana 527 Pinus taeda		Tree Tree	NC 2
F			328 Acer rubrum	15 Good	Tree Preserve	428 Quercus falcata	13 Good	Tree	528 Pinus taeda	15 Good	Tree	
			329 Liriodendron tulipifera 330 Carya glabra	11 Good 20 Good	Tree Preserve Tree Preserve	429 Quercus falcata 430 Pinus taeda	13 Good 15 Good	Tree Tree	529 Quercus rubra 530 Quercus falcata	10 Good	Tree Tree	7 Isult
			331 Fagus americana 332 Liriodendron tulipifera	17 Good 11 Good	Tree Preserve Tree Preserve	431 Pinus virginiana 432 Pinus virginiana	14 Good 12 Fair	Tree Tree	531 Pinus taeda 532 Quercus falcata	10 Good	Tree Tree	Cons 100 · Ch 980.23
			333 Liquidambar styraciflua 334 Liriodendron tulipifera	10 Good 11 Good	Tree Preserve Tree Preserve	433 Quercus velutina 434 Pinus virginiana	23 Good 13 Good	Tree Tree	533 Pinus taeda 534 Quercus falcata	11 Fair 13 Good	Tree Tree	1
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			337 Pinus taeda 338 Pinus taeda	25 Good 10 Good	Heritage	437 Pinus virginiana 438 Pinus taeda	10 Good 20 Good	Tree	537 Pinus taeda	14 Good	Tree Preserve	ronme ate Drive
			339 Quercus falcata	10 Good	Tree Tree	439 Pinus taeda	11 Good	Tree Tree	538 Pinus taeda 539 Pinus taeda	12 Good 21 Good	Tree Preserve Tree Preserve	ror ate [30.23
			340 Quercus alba 341 Liriodendron tulipifera	17 Good 11 Good	Tree Tree	440 Pinus virginiana 441 Liquidambar styraciflua	17 Good 15 Good	Tree Tree	540 Fagus americana 541 Pinus virginiana	15 Good 11 Good	Tree Offsite Tree Preserve	Envii Corpora Ph: 98
			342 Pinus taeda 343 Pinus taeda	13 Good 14 Good	Tree Tree	442 Pinus taeda 443 Pinus taeda	14 Good 14 Good	Tree Tree	542 Pinus taeda 543 Quercus falcata	16 Good 13 Good	Tree Preserve Tree Offsite	
			344 Liquidambar styraciflua 345 Pinus taeda	12 Good 23 Good	Tree Tree	444 Pinus taeda 445 Pinus taeda	12 Good 12 Good	Tree Tree	544 Pinus taeda 545 Liquidambar styraciflua	18 Good 15 Good	Tree Preserve Tree Preserve	11 & C
			346 Liquidambar styraciflua	15 Good	Tree	446 Pinus taeda	13 Good	Tree	546 Quercus falcata	13 Good	Tree Preserve	Civil 3701 A
			347 Quercus rubra 348 Pinus virginiana	10 Good 10 Good	Tree Tree	447 Pinus taeda 448 Pinus taeda	10 Fair 14 Good	Tree Tree	547 Pinus taeda 548 Pinus taeda	16 Good	Tree Preserve Tree	
			349 Pinus taeda 350 Pinus taeda	14 Good 15 Good	Tree Tree	449 Pinus virginiana 450 Pinus virginiana	11 Good 11 Good	Tree Tree	549 Pinus virginiana 550 Pinus taeda		Tree Tree	
			351 Pinus virginiana 352 Liquidambar styraciflua	10 Good 10 Good	Tree Tree Preserve	451 Pinus virginiana 452 Pinus virginiana	13 Good 12 Good	Tree Tree	551 Liquidambar styraciflua 552 Pinus taeda	11 Good 13 Good	Tree Tree	
			353 Pinus taeda 354 Pinus taeda	19 Good 14 Good	Tree Preserve	453 Pinus taeda 454 Pinus taeda	13 Good 15 Good	Tree Tree	553 Liquidambar styraciflua 554 Pinus virginiana		Tree	
			355 Liriodendron tulipifera	11 Good	Tree	455 Pinus virginiana	11 Good	Tree	555 Pinus virginiana	11 Fair	Tree Preserve	~ ¥
			356 Pinus taeda 357 Pinus taeda	14 Good 23 Good	Tree Tree	456 Pinus taeda 457 Pinus taeda	10 Good 14 Good	Tree Tree	556 Pinus virginiana 557 Pinus virginiana	12 Good 12 Good	Tree Preserve Tree Preserve	
			358 Pinus taeda 359 Pinus taeda	14 Poor 15 Good	Tree Tree	459 Pinus taeda 460 Pinus virginiana	22 Good 15 Good	Tree Tree	558 Pinus taeda 559 Pinus taeda	15 Fair 16 Good	Tree Preserve Tree Preserve	A H H H H H H H H H H H H H H H H H H H
			360 Pinus taeda 361 Pinus taeda	14 Good 10 Good	Tree Tree	461 Quercus alba 462 Pinus virginiana	11 Good 12 Good	Tree Tree	560 Quercus alba 561 Quercus alba		Tree Tree	E CHARTER ELOPMENT ACADEMY TE BLVD H CAROLINA
			362 Quercus falcata 363 Pinus taeda	16 Good 13 Good	Tree Tree	463 Pinus virginiana 464 Quercus alba	13 Fair 11 Good	Tree Tree	562 Quercus falcata	12 Fair	Tree	₩ <u>₩</u> ₩₩₩
			364 Quercus alba	16 Good	Tree	465 Pinus taeda	12 Good	Tree	563 Pinus taeda 564 Quercus falcata	11 Good	Tree Tree	ERFORMANCE SCHOOL DEVEL SALEIGH OAK A 3400 SUNGAT LEIGH, NORTH
			365 Quercus stellata 366 Fagus americana	13 Good 13 Good	Tree Tree	466 Quercus rubra 467 Pinus virginiana	10 Good 14 Fair	Tree Tree	565 Pinus taeda 566 Pinus virginiana		Tree Tree	A D D S S S S S S S S S S S S S S S S S
			367 Liriodendron tulipifera 368 Quercus rubra	13 Good 10 Good	Tree Tree	468 Pinus virginiana 469 Pinus virginiana	14 Good 13 Good	Tree Tree	567 Pinus virginiana 568 Liquidambar styraciflua		Tree Tree	
			369 Quercus alba 370 Quercus falcata	12 Good 13 Good	Tree Tree	470 Quercus velutina 471 Pinus virginiana	14 Good 14 Good	Tree Tree	569 Quercus alba 570 Pinus virginiana	11 Fair	Tree Tree	だえ 188
			371 Pinus taeda	15 Good	Tree	472 Pinus virginiana	12 Good	Tree	571 Pinus taeda	16 Good	Tree	
			372 Liriodendron tulipifera 373 Pinus taeda	10 Good 15 Good	Tree Tree	473 Pinus taeda 474 Pinus virginiana	17 Good 13 Good	Tree Tree	572 Pinus virginiana 573 Liquidambar styraciflua	13 Good 11 Good	Tree	
			374 Liriodendron tulipifera 375 Pinus taeda	10 Fair 15 Good	Tree Tree	475 Pinus taeda 476 Quercus falcata	20 Good 19 Good	Tree Tree				
			376 Pinus taeda 377 Pinus taeda	11 Good 11 Good	Tree Tree	477 Pinus taeda 478 Ulmus alata	17 Good 10 Good	Tree Preserve				
-			378 Liquidambar styraciflua 379 Pinus taeda	11 Good 20 Good	Tree Preserve Tree Preserve	479 Pinus taeda 480 Quercus alba	11 Good 18 Good	Tree Tree				LML LML LML
			380 Liriodendron tulipifera	12 Fair	Tree Preserve	481 Quercus alba	18 Good	Tree				LML/
			381 Pinus taeda 382 Fagus americana	22 Good 12 Good	Tree Preserve Tree Preserve	482 Quercus alba 483 Quercus alba	20 Good 14 Good	Tree Tree				
			383 Liquidambar styraciflua 384 Pinus taeda	27 Fair 24 Good	Tree Preserve Heritage Preserve	484 Pinus virginiana 485 Quercus falcata	14 Good 11 Good	Tree Tree				
3			385 Liriodendron tulipifera 386 Pinus taeda	12 Good 13 Good	Tree Preserve Tree	486 Pinus taeda 487 Pinus virginiana	20 Good 13 Good	Tree Tree				<u>O</u> .:.
			387 Pinus taeda 388 Pinus taeda	11 Good 18 Good	Tree Tree	488 Liquidambar styraciflua 489 Pinus virginiana		Tree Tree				RAWN B
			389 Liquidambar styraciflua	12 Good	Tree	490 Quercus alba	13 Good	Tree				023 pr
			390 Pinus taeda 391 Pinus taeda	20 Good 12 Good	Tree Preserve Tree Preserve	491 Pinus taeda 492 Quercus alba	14 Good 33 Good	Tree Heritage				E IN SHOW
			392 Pinus taeda 393 Pinus taeda	17 Good 15 Good	Tree Preserve Tree Offsite	493 Carya glabra 494 Quercus falcata	20 Fair 23 Good	Tree Tree				
			394 Pinus taeda 395 Acer rubrum	13 Good 11 Good	Tree Tree	495 Quercus falcata 496 Quercus falcata	20 Good 14 Good	Tree Tree				
			396 Quercus alba	15 Good	Tree	497 Pinus virginiana	11 Good	Tree				N Ö:
			397 Pinus taeda 398 Pinus virginiana	20 Good 12 Good	Tree Tree	498 Pinus taeda 499 Quercus alba	16 Good 17 Good	Tree Tree				VESCA IOJECT
			399 Pinus virginiana	12 Dead/Diseased	Tree							DRAWING NO.:
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PLANT LEGEND

	SYMBOL	BOTANIC NAME	COMMON NAME	SIZE	SPACING	QUANTITY	REMARKS
	TREES						
)	AMCA	Amelanchier canadensis	Canadian Serviceberry	2" cal. min.	Per plan	15	8' high min.
	CECA	Cercis canadensis	Eastern Redbud	2" cal. min.	Per plan	17	8' high min.
	FAAM	Fagus americana	American Beech	2" cal. min.	Per plan	2	8' high min.
	LITU	Liriodendron tulipifera	Tuliptree	2" cal. min.	Per plan	6	8' high min.
	MYCE	Myrica cerifera	Wax Myrtle	2" cal. min.	Per plan	26	8' high min.
	PITA	Pinus taeda	Loblolly Pine	2" cal. min.	Per plan	16	8' high min.
	PIVI	Pinus virginiana	Virginia Pine	2" cal. min.	Per plan	28	8' high min.
	QUAL	Quercus alba	White Oak	2" cal. min.	Per plan	18	8' high min.
	QUFA	Quercus falcata	Southern Red Oak	2" cal. min.	Per plan	6	8' high min.
	TIAM	Tilia americana 'Redmond'	Redmond Linden	2" cal. min.	Per plan	6	8' high min.

NOTE: ALL TREES SHALL BE CONTAINER-GROWN, CONTAINER SIZE AS APPROPRIATE FOR THE CALIPER SPECIFIED. SEE SPECIFICATIONS FOR PROPER ROOT QUALITY.

_	SHRUBS						
	CAAM	Callicarpa americana	Beautyberry	#5 cont. min.	5' o.c.	9	18" high min.
	COAV	Corylus avellana 'Contorta'	Harry Lauder's Walking Stick	#15 cont.	Per plan	1	18" high min.
<i>∞</i>	DIKO	Diervilla x 'G2X88544'	Kodiak Orange Diervilla	#5 cont. min.	3' o.c.	67	18" high min.
\odot	FOGA	Fothergilla gardenii 'Blue Mist'	Blue Mist Fothergilla	#5 cont. min.	3' o.c.	71	Low growing
0	HYFR	Hypericum frondosum	St. Johnswort	#5 cont. min.	4' o.c.	41	18" high min.
	ILGL	llex glabra	Inkberry	#5 cont. min.	5' o.c.	31	18" high min.
0	ILSH	llex glabra 'Shamrock'	Shamrock Inkberry	#5 cont. min.	4' o.c.	83	18" high min.
)	KALA	Kalmia latifolia	Mountain Laurel	#5 cont. min.	6' o.c.	7	18" high min.; species only
0	RHAR	Rhus aromatica 'Gro-Low'	Dwarf Fragrant Sumac	#5 cont. min.	5' o.c.	84	Low growing
(·)	SYOR	Symphoricarpos orbiculatus	Coralberry	#5 cont. min.	5' o.c.	11	Low growing

TURF AND SEED

$A_{n,j}^{(i)}(A_{n,j}^{(i)})$	Festuca hybrids	Tall Fescue	Sod	 	
* * * * * .		Native seed mix - sun (TBD)	Hydroseed	 	
		Native seed mix - shade (TBD)	Hydroseed	 	
		Detention pond seed mix (TBD)	Hydroseed	 	

42"-48" DIA. GRANITE BOULDER - BURY 1/3 TO 1/2 OF HEIGHT (TYP.)

B 🙋 24"-30" DIA. GRANITE BOULDER - BURY 1/3 TO 1/2 OF HEIGHT (TYP.)

C 12"-18" DIA. GRANITE BOULDER - BURY 1/3 TO 1/2 OF HEIGHT (TYP.)

NOTE: BOULDERS SHALL BE FROM A LOCAL SOURCE. SEE DETAIL ON SHEET LP-4.

PLANTING ON SLOPES

FOR ALL SLOPES 1:3 OR STEEPER, INSTALL BIODEGRADABLE JUTE NETTING OVER HYDROSEED OR MULCH (AS APPROPRIATE), AND STAKE IN PLACE PER MANUFACTURER RECOMMENDATIONS.

MULCHES

AFTER ALL PLANTING IS COMPLETE, CONTRACTOR SHALL INSTALL 3" THICK LAYER OF 1-1/2" SHREDDED WOOD MULCH, NATURAL (UNDYED), IN ALL PLANTING AREAS (EXCEPT FOR TURF AND SEEDED AREAS, AND AS NOTED BELOW). CONTRACTOR SHALL SUBMIT SAMPLES OF ALL MULCHES TO LANDSCAPE ARCHITECT AND OWNER FOR APPROVAL PRIOR TO CONSTRUCTION. ABSOLUTELY NO EXPOSED GROUND SHALL BE LEFT (SUBJECT TO THE CONDITIONS AND REQUIREMENTS OF THE "GENERAL GRADING AND PLANTING NOTES" AND SPECIFICATIONS).

ENGINEERED WOOD FIBER FOR PLAYGROUND SURFACING, 12" DEEP (ANY APPROVED)

ROOT BARRIERS

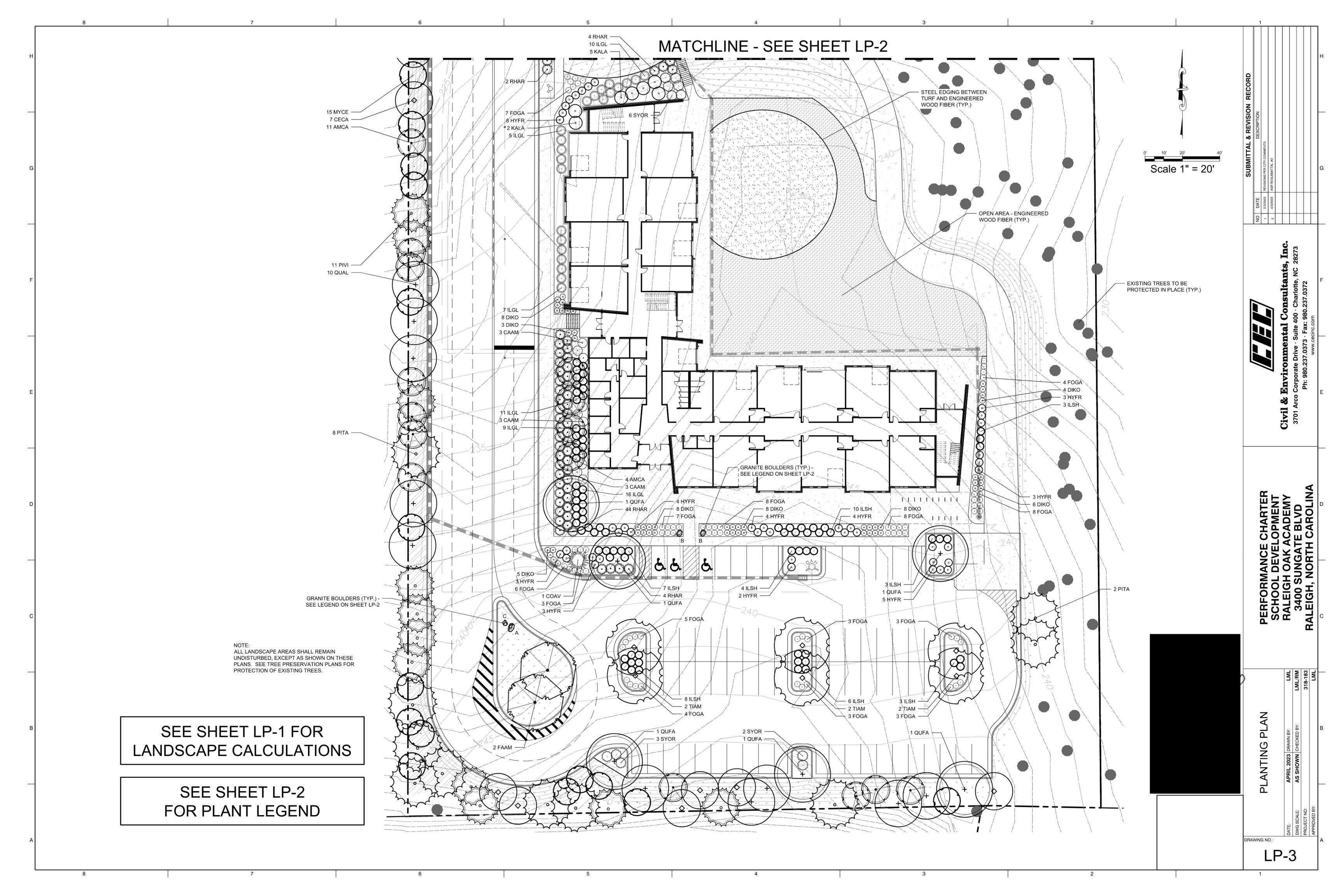
THE CONTRACTOR SHALL INSTALL ROOT BARRIERS NEAR ALL NEWLY-PLANTED TREES THAT ARE LOCATED WITHIN FIVE (5) FEET OF PAVING OR CURBS. ROOT BARRIERS SHALL BE "CENTURY" OR "DEEP-ROOT" 24" DEEP PANELS (OR EQUAL). BARRIERS SHALL BE LOCATED IMMEDIATELY ADJACENT TO HARDSCAPE. INSTALL PANELS PER MANUFACTURER'S RECOMMENDATIONS. UNDER NO CIRCUMSTANCES SHALL THE CONTRACTOR USE ROOT BARRIERS OF A TYPE THAT COMPLETELY ENCIRCLE THE ROOTBALL.

GENERAL GRADING AND PLANTING NOTES

- BY SUBMITTING A PROPOSAL FOR THE LANDSCAPE PLANTING SCOPE OF WORK, THE CONTRACTOR CONFIRMS THAT HE HAS READ, AND WILL COMPLY WITH, THE
- THE GENERAL CONTRACTOR IS RESPONSIBLE FOR REMOVING ALL EXISTING VEGETATION (EXCEPT WHERE NOTED TO REMAIN) IN THE CONTEXT OF THESE PLANS, NOTES, AND SPECIFICATIONS, "FINISH GRADE" REFERS TO THE FINAL ELEVATION OF THE SOIL SURFACE (NOT TOP OF MULCH) AS
- CONSTRUCT AND MAINTAIN FINISH GRADES AS SHOWN ON GRADING PLANS, AND CONSTRUCT AND MAINTAIN SLOPES AS RECOMMENDED BY THE
- GEOTECHNICAL REPORT. ALL LANDSCAPE AREAS SHALL HAVE POSITIVE DRAINAGE AWAY FROM STRUCTURES AT THE MINIMUM SLOPE SPECIFIED IN THE REPORT AND ON THE GRADING PLANS, AND AREAS OF POTENTIAL PONDING SHALL BE REGRADED TO BLEND IN WITH THE SURROUNDING GRADES AND
- PROVIDED, THE AMOUNT OF SOIL AMENDMENTS TO BE ADDED (BASED ON A SOIL TEST, PER SPECIFICATIONS), AND THE FINISH GRADES TO BE ESTABLISHED. ENSURE THAT THE FINISH GRADE IN SHRUB AREAS IMMEDIATELY ADJACENT TO WALKS AND OTHER WALKING SURFACES, AFTER INSTALLING SOIL AMENDMENTS
- SPECIFIED ON THE GRADING PLANS, AT APPROXIMATELY 18" AWAY FROM THE WALKS. ENSURE THAT THE FINISH GRADE IN TURF AREAS IMMEDIATELY ADJACENT TO WALKS AND OTHER WALKING SURFACES, AFTER INSTALLING SOIL AMENDMENTS
- IS 1" BELOW THE FINISH SURFACE OF THE WALKS. TAPER THE SOIL SURFACE TO MEET FINISH GRADE, AS SPECIFIED ON THE GRADING PLANS, AT APPROXIMATELY 18" AWAY FROM THE WALKS. SHOULD ANY CONFLICTS AND/OR DISCREPANCIES ARISE BETWEEN THE GRADING PLANS, GEOTECHNICAL REPORT, THESE NOTES AND PLANS, AND ACTUAL
- ALL PLANT LOCATIONS ARE DIAGRAMMATIC. ACTUAL LOCATIONS SHALL BE VERIFIED WITH THE LANDSCAPE ARCHITECT OR DESIGNER PRIOR TO PLANTING. THE LANDSCAPE CONTRACTOR SHALL ENSURE THAT ALL REQUIREMENTS OF THE PERMITTING AUTHORITY ARE MET (I.E., MINIMUM PLANT QUANTITIES, PLANTING
- GENERAL INFORMATION ONLY. IN THE EVENT OF A DISCREPANCY BETWEEN THE PLAN AND THE PLANT LEGEND, THE PLANT QUANTITY AS SHOWN ON THE PLAN (FOR INDIVIDUAL SYMBOLS) OR CALLOUT (FOR GROUNDCOVER PATTERNS) SHALL TAKE PRECEDENCE.
- c. THE CONTRACTOR SHALL, AT A MINIMUM, PROVIDE REPRESENTATIVE PHOTOS OF ALL PLANTS PROPOSED FOR THE PROJECT. THE CONTRACTOR SHALL ALLOW
- THE CONTRACTOR SHALL MAINTAIN THE LANDSCAPE IN A HEALTHY CONDITION FOR 90 DAYS AFTER ACCEPTANCE BY THE OWNER. REFER TO SPECIFICATIONS FOR CONDITIONS OF ACCEPTANCE FOR THE START OF THE MAINTENANCE PERIOD, AND FOR FINAL ACCEPTANCE AT THE END OF THE MAINTENANCE PERIOD.

SEE SHEET LP-1 FOR LANDSCAPE CALCULATIONS

LP-2



A. QUALIFICATIONS OF LANDSCAPE CONTRACTOR

ALL LANDSCAPE WORK SHOWN ON THESE PLANS SHALL BE PERFORMED BY A SINGLE FIRM SPECIALIZING IN LANDSCAPE PLANTING.

A LIST OF SUCCESSFULLY COMPLETED PROJECTS OF THIS TYPE, SIZE AND NATURE MAY BE REQUESTED BY THE OWNER FOR FURTHER QUALIFICATION MEASURES.

THE LANDSCAPE CONTRACTOR SHALL HOLD A VALID CONTRACTOR'S LICENSE ISSUED BY THE APPROPRIATE LOCAL JURISDICTION. B. SCOPE OF WORK

WORK COVERED BY THESE SECTIONS INCLUDES THE FURNISHING AND PAYMENT OF ALL MATERIALS LABOR, SERVICES, FOLIPMENT, LICENSES, TAXES AND ANY OTHER ITEMS THAT ARE NECESSARY FOR THE EXECUTION, INSTALLATION AND COMPLETION OF ALL WORK, SPECIFIED HEREIN AND / OR SHOWN ON THE LANDSCAPE PLANS, NOTES, AND DETAILS.

ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE LAWS. CODES AND REGULATIONS REQUIRED BY AUTHORITIES HAVING JURISDICTION OVER SUCH WORK, INCLUDING ALL INSPECTIONS AND PERMITS REQUIRED BY FEDERAL, STATE AND LOCAL AUTHORITIES IN SUPPLY. TRANSPORTATION AND INSTALLATION OF MATERIALS.

THE LANDSCAPE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL UNDERGROUND UTILITY LINES (WATER, SEWER, ELECTRICAL, TELEPHONE, GAS, CABLE, TELEVISION, ETC.) PRIOR TO THE START OF

ALL MANUFACTURED PRODUCTS SHALL BE NEW.

CONTAINER AND BALLED-AND-BURLAPPED PLANTS: FURNISH NURSERY-GROWN PLANTS COMPLYING WITH ANSI Z60.1-2014. PROVIDE WELL-SHAPED, FULLY BRANCHED, HEALTHY, VIGOROUS STOCK FREE OF DISEASE, INSECTS, EGGS, LARVAE, AND DEFECTS SUCH AS KNOTS, SUN SCALD, INJURIES, ABRASIONS, AND DISFIGUREMENT. ALL PLANTS WITHIN A SPECIES SHALL HAVE SIMILAR SIZE, AND SHALL BE OF A FORM TYPICAL FOR THE SPECIES. ALL TREES SHALL BE OBTAINED FROM SOURCES WITHIN 200 MILES OF THE PROJECT SITE, AND WITH SIMILAR

ROOT SYSTEMS SHALL BE HEALTHY, DENSELY BRANCHED ROOT SYSTEMS, NON-POT-BOUND, FREE FROM ENCIRCLING AND/OR GIRDLING ROOTS, AND FREE FROM ANY OTHER ROOT DEFECTS (SUCH AS

TREES MAY BE PLANTED FROM CONTAINERS OR BALLED-AND-BURLAPPED (B&B), UNLESS SPECIFIED ON THE PLANTING LEGEND. BARE-ROOT TREES ARE NOT ACCEPTABLE. ANY PLANT DEEMED UNACCEPTABLE BY THE LANDSCAPE ARCHITECT OR OWNER SHALL BE

IMMEDIATELY REMOVED FROM THE SITE AND SHALL BE REPLACED WITH AN ACCEPTBLE PLANT OF LIKE TYPE AND SIZE AT THE CONTRACTOR'S OWN EXPENSE. ANY PLANTS APPEARING TO BE UNHEALTHY, EVEN IF DETERMINED TO STILL BE ALIVE, SHALL NOT BE ACCEPTED. THE LANDSCAPE ARCHITECT AND OWNER SHALL BE THE SOLE JUDGES AS TO THE ACCEPTABILITY OF PLANT MATERIAL. ALL TREES SHALL BE STANDARD IN FORM, UNLESS OTHERWISE SPECIFIED. TREES WITH CENTRAL

LEADERS WILL NOT BE ACCEPTED IF LEADER IS DAMAGED OR REMOVED. PRUNE ALL DAMAGED TWIGS AFTER PLANTING. 6. CALIPER MEASUREMENTS FOR STANDARD (SINGLE TRUNK) TREES SHALL BE AS FOLLOWS: SIX INCHES

ABOVE THE ROOT FLARE FOR TREES UP TO AND INCLUDING FOUR INCHES IN CALIPER, AND TWELVE INCHES ABOVE THE ROOT FLARE FOR TREES EXCEEDING FOUR INCHES IN CALIPER. MULTI-TRUNK TREES SHALL BE MEASURED BY THEIR OVERALL HEIGHT. MEASURED FROM THE TOP OF THE ROOT BALL. WHERE CALIPER MEASUREMENTS ARE USED. THE CALIPER SHALL BE CALCULATED

AS ONE-HALF OF THE SUM OF THE CALIPER OF THE THREE LARGEST TRUNKS. ANY TREE OR SHRUB SHOWN TO HAVE EXCESS SOIL PLACED ON TOP OF THE ROOT BALL, SO THAT THE ROOT FLARE HAS BEEN COMPLETELY COVERED, SHALL BE REJECTED.

C. SOD: PROVIDE WELL-ROOTED SOD OF THE VARIETY NOTED ON THE PLANS. SOD SHALL BE CUT FROM HEALTHY, MATURE TURF WITH SOIL THICKNESS OF 3/4" TO 1". EACH PALLET OF SOD SHALL BE ACCOMPANIED BY A CERTIFICATE FROM SUPPLIER STATING THE COMPOSITION OF THE SOD.

). SEED: PROVIDE BLEND OF SPECIES AND VARIETIES AS NOTED ON THE PLANS, WITH MAXIMUM PERCENTAGES OF PURITY, GERMINATION, AND MINIMUM PERCENTAGE OF WEED SEED AS INDICATED ON PLANS. EACH BAG OF SEED SHALL BE ACCOMPANIED BY A TAG FROM THE SUPPLIER INDICATING THE COMPOSITION OF THE SEED.

TOPSOIL: SANDY TO CLAY LOAM TOPSOIL, FREE OF STONES LARGER THAN 1/2 INCH, FOREIGN MATTER, COMPOST: WELL-COMPOSTED, STABLE, AND WEED-FREE ORGANIC MATTER, pH RANGE OF 5.5 TO 8; MOISTURE CONTENT 35 TO 55 PERCENT BY WEIGHT; 100 PERCENT PASSING THROUGH 3/4-INCH SIEVE;

SOLUBLE SALT CONTENT OF 5 TO 10 DECISIEMENS/M; NOT EXCEEDING 0.5 PERCENT INERT CONTAMINANTS AND FREE OF SUBSTANCES TOXIC TO PLANTINGS. NO MANURE OR ANIMAL-BASED PRODUCTS SHALL BE G. FERTILIZER: GRANULAR FERTILIZER CONSISTING OF NITROGEN, PHOSPHORUS, POTASSIUM, AND OTHER

NUTRIENTS IN PROPORTIONS, AMOUNTS, AND RELEASE RATES RECOMMENDED IN A SOIL REPORT FROM A QUALIFIED SOIL-TESTING AGENCY (SEE BELOW). H. MULCH: SIZE AND TYPE AS INDICATED ON PLANS, FREE FROM DELETERIOUS MATERIALS AND SUITABLE AS A TOP DRESSING OF TREES AND SHRUBS. TREE STAKING AND GUYING

STAKES: 6' LONG GREEN METAL T-POSTS. GUY AND TIE WIRE: ASTM A 641, CLASS 1, GALVANIZED-STEEL WIRE, 2-STRAND, TWISTED, 0.106 INCH

STRAP CHAFING GUARD: REINFORCED NYLON OR CANVAS AT LEAST 1-1/2 INCH WIDE, WITH GROMMETS TO PROTECT TREE TRUNKS FROM DAMAGE.

STEEL EDGING: PROFESSIONAL STEEL EDGING, 14 GAUGE THICK X 4 INCHES WIDE, FACTORY PAINTED DARK GREEN. ACCEPTABLE MANUFACTURERS INCLUDE COL-MET OR APPROVED EQUAL. PRE-EMERGENT HERBICIDES: ANY GRANULAR NON-STAINING PRE-EMERGENT HERBICIDE THAT IS LABELED FOR THE SPECIFIC ORNAMENTALS OR TURF ON WHICH IT WILL BE UTILIZED. PRE-EMERGENT HERBICIDES SHALL BE APPLIED PER THE MANUFACTURER'S LABELED RATES.

METHODS 1

A. SOIL PREPARATION

BEFORE STARTING WORK, THE LANDSCAPE CONTRACTOR SHALL VERIFY THAT THE GRADE OF ALL LANDSCAPE AREAS ARE WITHIN +/-0.1' OF FINISH GRADE. THE CONTRACTOR SHALL NOTIFY THE OWNER IMMEDIATELY SHOULD ANY DISCREPANCIES EXIST.

SOIL TESTING: a. AFTER FINISH GRADES HAVE BEEN ESTABLISHED, CONTRACTOR SHALL HAVE SOIL SAMPLES FROM THE PROJECT'S LANDSCAPE AREAS TESTED BY AN ESTABLISHED SOIL TESTING LABORATORY. EACH SAMPLE SUBMITTED TO THE LAB SHALL CONTAIN NO LESS THAN ONE QUART OF SOIL, TAKEN FROM BETWEEN THE SOIL SURFACE AND 6" DEPTH. IF NO SAMPLE LOCATIONS ARE INDICATED ON THE PLANS, THE CONTRACTOR SHALL TAKE A MINIMUM OF THREE SAMPLES FROM VARIOUS REPRESENTATIVE LOCATIONS FOR TESTING.

b. THE CONTRACTOR SHALL HAVE THE SOIL TESTING LABORATORY PROVIDE RESULTS FOR THE FOLLOWING: SOIL TEXTURAL CLASS, GENERAL SOIL FERTILITY, pH, ORGANIC MATTER CONTENT, SALT (CEC), LIME, SODIUM ADSORPTION RATIO (SAR) AND BORON CONTENT. c. THE CONTRACTOR SHALL ALSO SUBMIT THE PROJECT'S PLANT LIST TO THE LABORATORY ALONG

d. THE SOIL REPORT PRODUCED BY THE LABORATORY SHALL CONTAIN RECOMMENDATIONS FOR THE FOLLOWING (AS APPROPRIATE): SEPARATE SOIL PREPARATION AND BACKFILL MIX RECOMMENDATIONS FOR GENERAL ORNAMENTAL PLANTS, XERIC PLANTS, TURF, AND NATIVE SEED, AS WELL AS PRE-PLANT FERTILIZER APPLICATIONS AND RECOMMENDATIONS FOR ANY OTHER SOIL RELATED ISSUES. THE REPORT SHALL ALSO PROVIDE A FERTILIZER PROGRAM FOR THE ESTABLISHMENT PERIOD AND FOR LONG-TERM MAINTENANCE

THE CONTRACTOR SHALL INSTALL SOIL AMENDMENTS AND FERTILIZERS PER THE SOILS REPORT RECOMMENDATIONS. ANY CHANGE IN COST DUE TO THE SOIL REPORT RECOMMENDATIONS, EITHER INCREASE OR DECREASE, SHALL BE SUBMITTED TO THE OWNER WITH THE REPORT.

FOR BIDDING PURPOSES ONLY, THE SOIL PREPARATION SHALL CONSIST OF THE FOLLOWING: TURF: INCORPORATE THE FOLLOWING AMENDMENTS INTO THE TOP 8" OF SOIL BY MEANS OF ROTOTILLING AFTER CROSS-RIPPING: NITROGEN STABILIZED ORGANIC AMENDMENT - 4 CU. YDS. PER 1.000 S.F.

PREPLANT TURF FERTILIZER (10-20-10 OR SIMILAR, SLOW RELEASE, ORGANIC) - 15 LBS PER 1,000

iii. "CLAY BUSTER" OR EQUAL - USE MANUFACTURER'S RECOMMENDED RATE TREES, SHRUBS, AND PERENNIALS: INCORPORATE THE FOLLOWING AMENDMENTS INTO THE TOP

8" OF SOIL BY MEANS OF ROTOTILLING AFTER CROSS-RIPPING: NITROGEN STABILIZED ORGANIC AMENDMENT - 4 CU. YDS. PER 1,000 S.F. 12-12-12 FERTILIZER (OR SIMILAR, ORGANIC, SLOW RELEASE) - 10 LBS. PER CU. YD.

"CLAY BUSTER" OR EQUAL - USE MANUFACTURER'S RECOMMENDED RATE

IRON SULPHATE - 2 LBS. PER CU. YD. 5. IN THE CONTEXT OF THESE PLANS, NOTES, AND SPECIFICATIONS, "FINISH GRADE" REFERS TO THE FINAL ELEVATION OF THE SOIL SURFACE (NOT TOP OF MULCH) AS INDICATED ON THE GRADING PLANS. a. BEFORE STARTING WORK, THE LANDSCAPE CONTRACTOR SHALL VERIFY THAT THE ROUGH GRADES OF ALL LANDSCAPE AREAS ARE WITHIN +/-0.1' OF FINISH GRADE. SEE SPECIFICATIONS

FOR MORE DETAILED INSTRUCTION ON TURF AREA AND PLANTING BED PREPARATION. b. CONSTRUCT AND MAINTAIN FINISH GRADES AS SHOWN ON GRADING PLANS, AND CONSTRUCT AND MAINTAIN SLOPES AS RECOMMENDED BY THE GEOTECHNICAL REPORT. ALL LANDSCAPE AREAS SHALL HAVE POSITIVE DRAINAGE AWAY FROM STRUCTURES AT THE MINIMUM SLOPE SPECIFIED IN THE REPORT AND ON THE GRADING PLANS, AND AREAS OF POTENTIAL PONDING SHALL BE REGRADED TO BLEND IN WITH THE SURROUNDING GRADES AND ELIMINATE PONDING

c. THE LANDSCAPE CONTRACTOR SHALL DETERMINE WHETHER OR NOT THE EXPORT OF ANY SOIL WILL BE NEEDED, TAKING INTO ACCOUNT THE ROUGH GRADE PROVIDED, THE AMOUNT OF SOIL AMENDMENTS TO BE ADDED (BASED ON A SOIL TEST, PER SPECIFICATIONS), AND THE FINISH GRADES TO BE ESTABLISHED

d. ENSURE THAT THE FINISH GRADE IN SHRUB AREAS IMMEDIATELY ADJACENT TO WALKS AND OTHER WALKING SURFACES, AFTER INSTALLING SOIL AMENDMENTS, IS 3" BELOW THE ADJACENT FINISH SURFACE, IN ORDER TO ALLOW FOR PROPER MULCH DEPTH. TAPER THE SOIL SURFACE TO MEET FINISH GRADE, AS SPECIFIED ON THE GRADING PLANS, AT APPROXIMATELY 18" AWAY FROM THE WALKS.

e. ENSURE THAT THE FINISH GRADE IN TURF AREAS IMMEDIATELY ADJACENT TO WALKS AND OTHER WALKING SURFACES, AFTER INSTALLING SOIL AMENDMENTS, IS 1" BELOW THE FINISH SURFACE OF THE WALKS. TAPER THE SOIL SURFACE TO MEET FINISH GRADE, AS SPECIFIED ON THE GRADING PLANS. AT APPROXIMATELY 18" AWAY FROM THE WALKS.

 SHOULD ANY CONFLICTS AND/OR DISCREPANCIES ARISE BETWEEN THE GRADING PLANS, GEOTECHNICAL REPORT, THESE NOTES AND PLANS, AND ACTUAL CONDITIONS, THE CONTRACTOR SHALL IMMEDIATELY BRING SUCH ITEMS TO THE ATTENTION OF THE LANDSCAPE

ARCHITECT, GENERAL CONTRACTOR, AND OWNER. 6. ONCE SOIL PREPARATION IS COMPLETE, THE LANDSCAPE CONTRACTOR SHALL ENSURE THAT THERE ARE NO DEBRIS, TRASH, OR STONES LARGER THAN 1" REMAINING IN THE TOP 6" OF SOIL.

THE CONTRACTOR SHALL PROVIDE SUBMITTALS AND SAMPLES, IF REQUIRED, TO THE LANDSCAPE ARCHITECT, AND RECEIVE APPROVAL IN WRITING FOR SUCH SUBMITTALS BEFORE WORK COMMENCES. SUBMITTALS SHALL INCLUDE PHOTOS OF PLANTS WITH A RULER OR MEASURING STICK FOR SCALE, PHOTOS OR SAMPLES OF ANY REQUIRED MULCHES, AND SOIL TEST RESULTS AND PREPARATION RECOMMENDATIONS FROM THE TESTING LAB (INCLUDING COMPOST AND FERTILIZER RATES AND TYPES, AND OTHER AMENDMENTS FOR TREE/SHRUB, TURF, AND SEED AREAS AS MAY BE

3. SUBMITTALS SHALL ALSO INCLUDE MANUFACTURER CUT SHEETS FOR PLANTING ACCESSORIES SUCH AS TREE STAKES AND TIES, EDGING, AND LANDSCAPE FABRICS (IF ANY). WHERE MULTIPLE ITEMS ARE SHOWN ON A PAGE, THE CONTRACTOR SHALL CLEARLY INDICATE THE ITEM BEING CONSIDERED.

C. GENERAL PLANTING REMOVE ALL NURSERY TAGS AND STAKES FROM PLANTS.

EXCEPT IN AREAS TO BE PLANTED WITH ORNAMENTAL GRASSES, APPLY PRE-EMERGENT HERBICIDES AT THE MANUFACTURER'S RECOMMENDED RATE.

TRENCHING NEAR EXISTING TREES:

CONTRACTOR SHALL NOT DISTURB ROOTS 1-1/2" AND LARGER IN DIAMETER WITHIN THE CRITICAL ROOT ZONE (CRZ) OF EXISTING TREES, AND SHALL EXERCISE ALL POSSIBLE CARE AND PRECAUTIONS TO AVOID INJURY TO TREE ROOTS, TRUNKS, AND BRANCHES. THE CRZ IS DEFINED AS A CIRCULAR AREA EXTENDING OUTWARD FROM THE TREE TRUNK, WITH A RADIUS EQUAL TO 1' FOR EVERY 1" OF TRUNK DIAMETER-AT-BREAST-HEIGHT (4.5' ABOVE THE AVERAGE GRADE AT THE TRUNK).

ALL EXCAVATION WITHIN THE CRZ SHALL BE PERFORMED USING HAND TOOLS. NO MACHINE EXCAVATION OR TRENCHING OF ANY KIND SHALL BE ALLOWED WITHIN THE CRZ. ALTER ALIGNMENT OF PIPE TO AVOID TREE ROOTS 1-1/2" AND LARGER IN DIAMETER. WHERE TREE ROOTS 1-1/2" AND LARGER IN DIAMETER ARE ENCOUNTERED IN THE FIELD, TUNNEL UNDER SUCH ROOTS. WRAP EXPOSED ROOTS WITH SEVERAL LAYERS OF BURLAP AND KEEP MOIST.

CLOSE ALL TRENCHES WITHIN THE CANOPY DRIP LINES WITHIN 24 HOURS. ALL SEVERED ROOTS SHALL BE HAND PRUNED WITH SHARP TOOLS AND ALLOWED TO AIR-DRY DO NOT USE ANY SORT OF SEALERS OR WOUND PAINTS. TREE PLANTING HOLES SHALL BE EXCAVATED TO MINIMUM WIDTH OF TWO TIMES THE WIDTH OF THE

ROOTBALL, AND TO A DEPTH EQUAL TO THE DEPTH OF THE ROOTBALL LESS TWO TO FOUR INCHES. SCARIFY THE SIDES AND BOTTOM OF THE PLANTING HOLE PRIOR TO THE PLACEMENT OF THE TREE. REMOVE ANY GLAZING THAT MAY HAVE BEEN CAUSED DURING THE EXCAVATION OF THE HOLE. FOR CONTAINER AND BOX TREES, TO REMOVE ANY POTENTIALLY GIRDLING ROOTS AND OTHER ROOT DEFECTS, THE CONTRACTOR SHALL SHAVE A 1" LAYER OFF OF THE SIDES AND BOTTOM OF THE ROOTBALL OF ALL TREES JUST BEFORE PLACING INTO THE PLANTING PIT. DO NOT "TEASE" ROOTS OUT FROM THE ROOTBALL.

4. INSTALL THE TREE ON UNDISTURBED SUBGRADE SO THAT THE TOP OF THE ROOTBALL IS TWO TO FOUR INCHES ABOVE THE SURROUNDING GRADE. BACKFILL THE TREE HOLE UTILIZING THE EXISTING TOPSOIL FROM ON-SITE. ROCKS LARGER THAN 1" DIA. AND ALL OTHER DEBRIS SHALL BE REMOVED FROM THE SOIL PRIOR TO THE BACKFILL. SHOULD ADDITIONAL SOIL BE REQUIRED TO ACCOMPLISH THIS TASK, USE STORED TOPSOIL FROM ON-SITE OR

IMPORT ADDITIONAL TOPSOIL FROM OFF-SITE AT NO ADDITIONAL COST TO THE OWNER. IMPORTED TOPSOIL SHALL BE OF SIMILAR TEXTURAL CLASS AND COMPOSITION IN THE ON-SITE SOIL. TREES SHALL NOT BE STAKED UNLESS LOCAL CONDITIONS (SUCH AS HEAVY WINDS OR SLOPES) REQUIRE STAKES TO KEEP TREES UPRIGHT. SHOULD STAKING BE REQUIRED. THE TOTAL NUMBER OF TREE STAKES (BEYOND THE MINIMUMS LISTED BELOW) WILL BE LEFT TO THE LANDSCAPE CONTRACTOR'S DISCRETION. SHOULD ANY TREES FALL OR LEAN, THE LANDSCAPE CONTRACTOR SHALL STRAIGHTEN THE TREE, OR REPLACE IT SHOULD IT BECOME DAMAGED. TREE STAKING SHALL

ADHERE TO THE FOLLOWING GUIDELINES: TWO STAKES PER TREE 2-1/2"-4" TREES THREE STAKES PER TREE

TREES OVER 4" CALIPER GUY AS NEEDED THREE STAKES PER TREE MINIMUM, QUANTITY AND POSITIONS AS

NEEDED TO STABILIZE THE TREE UPON COMPLETION OF PLANTING, CONSTRUCT AN EARTH WATERING BASIN AROUND THE TREE. COVER THE INTERIOR OF THE TREE RING WITH MULCH (TYPE AND DEPTH PER PLANS).

SHRUB, PERENNIAL, AND GROUNDCOVER PLANTING DIG THE PLANTING HOLES TWICE AS WIDE AND 2" LESS DEEP THAN EACH PLANT'S ROOTBALL. INSTALL THE PLANT IN THE HOLE. BACKFILL AROUND THE PLANT WITH SOIL AMENDED PER SOIL TEST

WHEN PLANTING IS COMPLETE, INSTALL MULCH (TYPE AND DEPTH PER PLANS) OVER ALL PLANTING BEDS, COVERING THE ENTIRE PLANTING AREA. F. SODDING

SOD VARIETY TO BE AS SPECIFIED ON THE LANDSCAPE PLAN.

LAY SOD WITHIN 24 HOURS FROM THE TIME OF STRIPPING. DO NOT LAY IF THE GROUND IS FROZEN. LAY THE SOD TO FORM A SOLID MASS WITH TIGHTLY FITTED JOINTS. BUTT ENDS AND SIDES OF SOD STRIPS - DO NOT OVERLAP. STAGGER STRIPS TO OFFSET JOINTS IN ADJACENT COURSES. ROLL THE SOD TO ENSURE GOOD CONTACT OF THE SOD'S ROOT SYSTEM WITH THE SOIL

UNDERNEATH. WATER THE SOD THOROUGHLY WITH A FINE SPRAY IMMEDIATELY AFTER PLANTING TO OBTAIN AT

LEAST SIX INCHES OF PENETRATION INTO THE SOIL BELOW THE SOD. G. HYDROMULCHING

1. TURF HYDROMULCH MIX (PER 1,000 SF) SHALL BE AS FOLLOWS: WINTER MIX (OCTOBER 1 - MARCH 31)

> 50# CELLULOSE FIBER MULCH 2# UNHULLED BERMUDA SEED 2# ANNUAL RYE SEED 15# 15-15-15 WATER SOLUBLE FERTILIZER

SUMMER MIX (APRIL 1 - SEPTEMBER 30) 50# CELLULOSE FIBER MULCH

2# HULLED BERMUDA SEED 15# 15-15-15 WATER SOLUBLE FERTILIZER SEED HYDROMULCH MIX (PER 1,000 SF) SHALL BE AS FOLLOWS:

GENERAL 50# CELLULOSE FIBER MULCH

15# 15-15-15 WATER SOLUBLE FERTILIZER SEED RATE PER LEGEND

NEATLY MOWED.

1. INSTALL MULCH TOPDRESSING, TYPE AND DEPTH PER MULCH NOTE, IN ALL PLANTING AREAS AND

DO NOT INSTALL MULCH WITHIN 6" OF TREE ROOT FLARE AND WITHIN 24" OF HABITABLE STRUCTURES, EXCEPT AS MAY BE NOTED ON THESE PLANS. MULCH COVER WITHIN 6" OF CONCRETE WALKS AND CURBS SHALL NOT PROTRUDE ABOVE THE FINISH SURFACE OF THE WALKS AND CURBS. MULCH COVER WITHIN 12" OF WALLS SHALL BE AT LEAST 3" LOWER THAN THE TOP OF WALL.

1. DURING LANDSCAPE PREPARATION AND PLANTING, KEEP ALL PAVEMENT CLEAN AND ALL WORK AREAS IN A NEAT, ORDERLY CONDITION. DISPOSED LEGALLY OF ALL EXCAVATED MATERIALS OFF THE PROJECT SITE.

J. INSPECTION AND ACCEPTANCE UPON COMPLETION OF THE WORK, THE LANDSCAPE CONTRACTOR SHALL PROVIDE THE SITE CLEAN, FREE OF DEBRIS AND TRASH, AND SUITABLE FOR USE AS INTENDED. THE LANDSCAPE CONTRACTOR SHALL THEN REQUEST AN INSPECTION BY THE OWNER TO DETERMINE FINAL ACCEPTABILITY. WHEN THE INSPECTED PLANTING WORK DOES NOT COMPLY WITH THE CONTRACT DOCUMENTS. THE LANDSCAPE CONTRACTOR SHALL REPLACE AND/OR REPAIR THE REJECTED WORK TO THE OWNER'S

SATISFACTION WITHIN 24 HOURS. THE LANDSCAPE MAINTENANCE PERIOD WILL NOT COMMENCE UNTIL THE LANDSCAPE WORK HAS BEEN RE-INSPECTED BY THE OWNER AND FOUND TO BE ACCEPTABLE. AT THAT TIME, A WRITTEN NOTICE OF FINAL ACCEPTANCE WILL BE ISSUED BY THE OWNER, AND THE MAINTENANCE AND GUARANTEE PERIODS WILL COMMENCE.

K. LANDSCAPE MAINTENANCE THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF ALL WORK SHOWN ON THESE PLANS FOR 90 DAYS BEYOND FINAL ACCEPTANCE OF ALL LANDSCAPE WORK BY THE OWNER. LANDSCAPE MAINTENANCE SHALL INCLUDE WEEKLY SITE VISITS FOR THE FOLLOWING ACTIONS (AS APPROPRIATE): PROPER PRUNING, RESTAKING OF TREES, RESETTING OF PLANTS THAT HAVE SETTLED, MOWING AND AERATION OF LAWNS, WEEDING, RESEEDING AREAS WHICH HAVE NOT GERMINATED WELL, TREATING FOR INSECTS AND DISEASES, REPLACEMENT OF MULCH, REMOVAL OF LITTER, REPAIRS TO THE IRRIGATION SYSTEM DUE TO FAULTY PARTS AND/OR WORKMANSHIP, AND THE APPROPRIATE WATERING OF ALL PLANTINGS. THE LANDSCAPE CONTRACTOR SHALL MAINTAIN THE IRRIGATION SYSTEM IN PROPER WORKING ORDER, WITH SCHEDULING ADJUSTMENTS BY SEASON TO MAXIMIZE WATER CONSERVATION.

SHOULD SEEDED AND/OR SODDED AREAS NOT BE COVERED BY AN AUTOMATIC IRRIGATION SYSTEM, THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR WATERING THESE AREAS AND OBTAINING A FULL, HEALTHY STAND OF PLANTS AT NO ADDITIONAL COST TO THE OWNER.

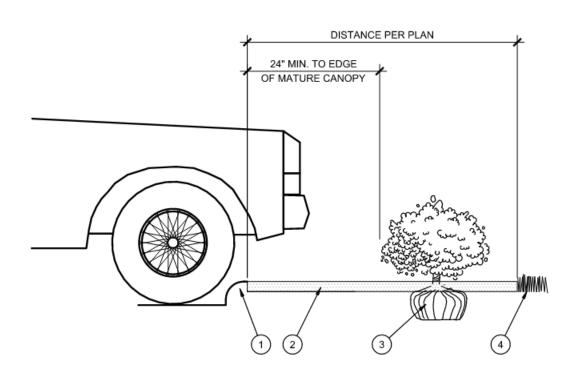
TO ACHIEVE FINAL ACCEPTANCE AT THE END OF THE MAINTENANCE PERIOD, ALL OF THE FOLLOWING THE LANDSCAPE SHALL SHOW ACTIVE, HEALTHY GROWTH (WITH EXCEPTIONS MADE FOR

SEASONAL DORMANCY). ALL PLANTS NOT MEETING THIS CONDITION SHALL BE REJECTED AND

REPLACED BY HEALTHY PLANT MATERIAL PRIOR TO FINAL ACCEPTANCE. ALL HARDSCAPE SHALL BE CLEANED PRIOR TO FINAL ACCEPTANCE. SODDED AREAS MUST BE ACTIVELY GROWING AND MUST REACH A MINIMUM HEIGHT OF 1 1/2 INCHES BEFORE FIRST MOWING. HYDROMULCHED AREAS SHALL SHOW ACTIVE, HEALTHY GROWTH. BARE AREAS LARGER THAN TWELVE SQUARE INCHES MUST BE RESODDED OR RESEEDED (AS APPROPRIATE) PRIOR TO FINAL ACCEPTANCE. ALL SODDED TURF SHALL BE

L. WARRANTY PERIOD, PLANT GUARANTEE AND REPLACEMENTS THE LANDSCAPE CONTRACTOR SHALL GUARANTEE ALL TREES, SHRUBS, PERENNIALS, SOD, SEEDED/HYDROMULCHED AREAS, AND IRRIGATION SYSTEMS FOR A PERIOD OF ONE YEAR FROM THE DATE OF THE OWNER'S FINAL ACCEPTANCE (90 DAYS FOR ANNUAL PLANTS). THE CONTRACTOR SHALL REPLACE, AT HIS OWN EXPENSE AND TO THE SATISFACTION OF THE OWNER, ANY PLANTS WHICH DIE IN THAT TIME, OR REPAIR ANY PORTIONS OF THE IRRIGATION SYSTEM WHICH OPERATE IMPROPERLY AFTER THE INITIAL MAINTENANCE PERIOD AND DURING THE GUARANTEE PERIOD, THE LANDSCAPE

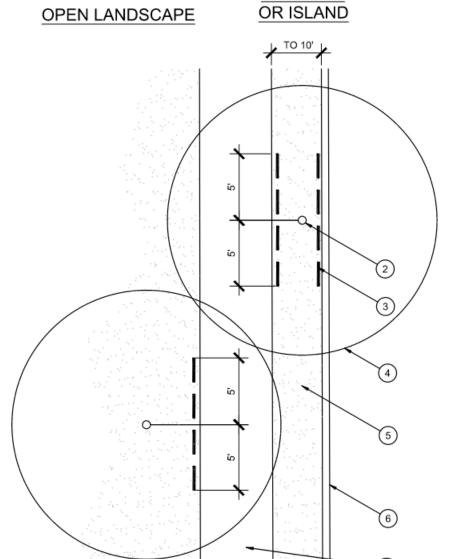
CONTRACTOR SHALL ONLY BE RESPONSIBLE FOR REPLACEMENT OF PLANTS WHEN PLANT DEATH CANNOT BE ATTRIBUTED DIRECTLY TO OVERWATERING OR OTHER DAMAGE BY HUMAN ACTIONS. M. PROVIDE A MINIMUM OF (2) COPIES OF RECORD DRAWINGS TO THE OWNER UPON COMPLETION OF WORK. A RECORD DRAWING IS A RECORD OF ALL CHANGES THAT OCCURRED IN THE FIELD AND THAT ARE DOCUMENTED THROUGH CHANGE ORDERS, ADDENDA, OR CONTRACTOR/CONSULTANT DRAWING MARKUPS.



PARKWAY

(1) CURB. (2) MULCH LAYER. (3) PLANT. (4) TURF (WHERE SHOWN ON PLAN).

PLANTING AT PARKING AREA



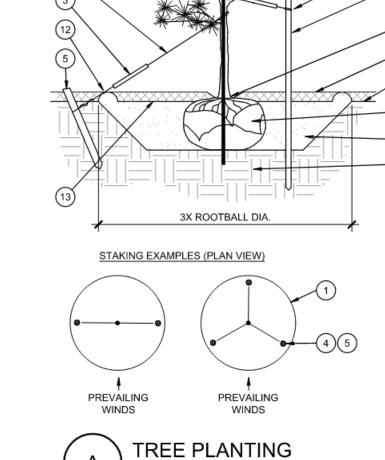
1 TYPICAL WALKWAY OR PAVING TREE TRUNK LINEAR ROOT BARRIER MATERIAL. SEE PLANTING NOTES FOR TYPE AND

MANUFACTURER. INSTALL PER MANUFACTURER'S SPECIFICATIONS. TYPICAL PLANTING AREA

(6) TYPICAL CURB AND GUTTER 1) INSTALL ROOT BARRIERS NEAR ALL NEWLY-PLANTED TREES THAT ARE LOCATED WITHIN FIVE (5) FEET OF PAVING OR CURBS

BARRIERS SHALL BE LOCATED IMMEDIATELY ADJACENT TO HARDSCAPE. UNDER NO CIRCUMSTANCES SHALL THE CONTRACTOR USE ROOT BARRIERS OF A TYPE THAT COMPLETELY ENCIRCLE THE ROOTBALL.

ROOT BARRIER - PLAN VIEW



NON-CONIFEROUS

CONIFEROUS

(13) FINISH GRADE. SCARIFY SIDES OF PLANTING PIT PRIOR TO SETTING TREE. 2. REMOVE EXCESS SOIL APPLIED ON TOP OF THE ROOTBALL THAT COVERS THE ROOT FLARE. THE PLANTING HOLE DEPTH SHALL BE SUCH THAT THE ROOTBALL RESTS ON UNDISTURBED SOIL, AND THE ROOT FLARE IS 2"-4" ABOVE FINISH GRADE. 3. FOR B&B TREES, CUT OFF BOTTOM 1/3 OF WIRE BASKET BEFORE PLACING TREE IN HOLE, CUT OFF AND REMOVE REMAINDER OF BASKET AFTER TREE IS SET IN HOLE. REMOVE ALL NYLON TIES TWINE, ROPE, AND OTHER PACKING MATERIAL. REMOVE AS MUCH BURLAP FROM AROUND ROOTBALL AS IS PRACTICAL.

11) UNDISTURBED NATIVE SOIL.

(12) 4" HIGH EARTHEN WATERING BASIN.

TREE CANOPY.

(6) TRUNK FLARE

(8) FINISH GRADE.

9) ROOT BALL.

2 CINCH-TIES (24" BOX/2" CAL. TREES AND SMALLER) OR

12 GAUGE GALVANIZED WIRE WITH NYLON TREE STRAPS AT TREE AND STAKE (36" BOX/2.5" CAL. TREES AND LARGER). SECURE TIES OR STRAPS TO TRUNK

(4) GREEN STEEL T-POSTS. EXTEND POSTS 12" MIN. INTO

TREE (MIN.). BURY OUTSIDE OF PLANTING PIT AND

5) PRESSURE-TREATED WOOD DEADMAN, TWO PER

(7) MULCH, TYPE AND DEPTH PER PLANS. DO NOT

BACKFILL. AMEND AND FERTILIZE ONLY AS

RECOMMENDED IN SOIL FERTILITY ANALYSIS.

JUST ABOVE LOWEST MAJOR BRANCHES.

(3) 24" X 3/4" P.V.C. MARKERS OVER WIRES.

18" MIN. INTO UNDISTURBED SOIL.

PLACE MULCH WITHIN 6" OF TRUNK.

REMOVE ALL NURSERY STAKES AFTER PLANTING. 5. FOR TREES 36" BOX/2.5" CAL. AND LARGER, USE THREE STAKES OR DEADMEN (AS APPROPRIATE), SPACED EVENLY AROUND TREE. 6. STAKING SHALL BE TIGHT ENOUGH TO PREVENT TRUNK FROM BENDING, BUT LOOSE ENOUGH TO ALLOW SOME TRUNK MOVEMENT

 SHRUB, PERENNIAL, OR ORNAMENTAL GRASS. 2) MULCH, TYPE AND DEPTH PER PLANS. PLACE NO MORE THAN 1" OF MULCH WITHIN 6" OF PLANT

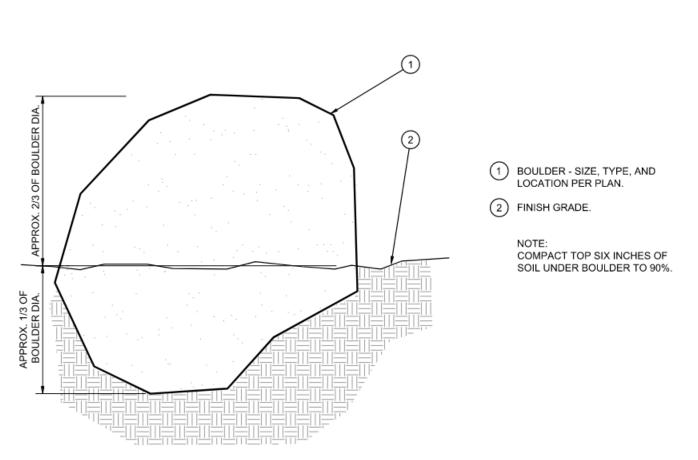
CENTER. FINISH GRADE.

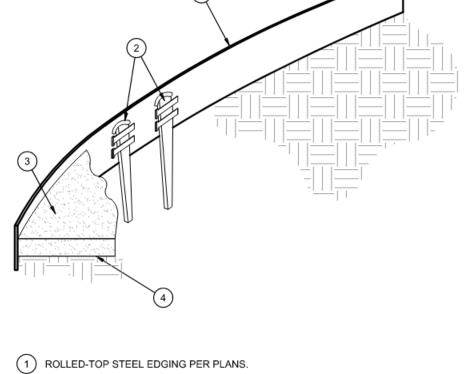
(4) ROOT BALL.

5 BACKFILL. AMEND AND FERTILIZE ONLY AS RECOMMENDED IN SOIL FERTILITY ANALYSIS.

(7) 3" HIGH EARTHEN WATERING BASIN.

SHRUB AND PERENNIAL PLANTING



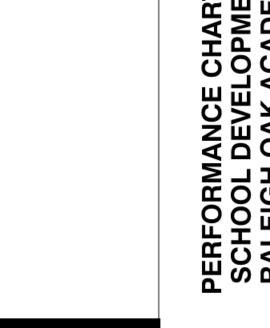


TAPERED STEEL STAKES.

(3) MULCH, TYPE AND DEPTH PER PLANS. (4) FINISH GRADE.

> 1) INSTALL EDGING SO THAT STAKES WILL BE ON INSIDE OF PLANTING BED. BOTTOM OF EDGING SHALL BE BURIED A MINIMUM OF 1" BELOW FINISH GRADE TOP OF MULCH SHALL BE 1" LOWER THAN TOP OF EDGING.





ANTING DETAILS AND SPECIFICATIONS

DRAWING NO .: