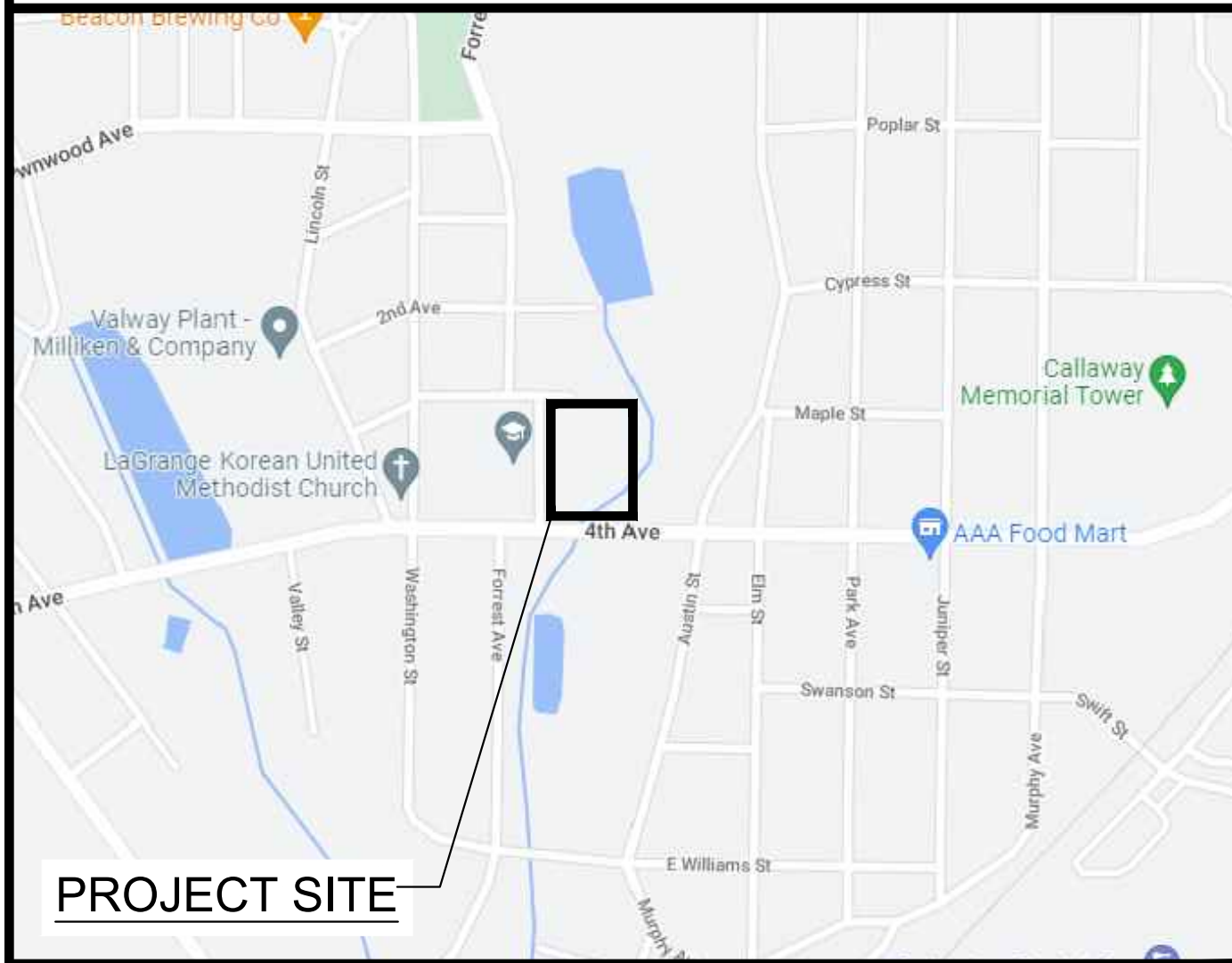


LAGRANGE - BICYCLE PARK

CITY OF LAGRANGE, GEORGIA



VICINITY MAP
N.T.S.

LAND LOTS: 142 - 6TH DISTRICT

ALL WORK TO BE DONE IN ACCORDANCE WITH:
 - 2023 STANDARD SPECIFICATIONS AND 2016 SUPPLEMENTAL SPECIFICATIONS OF THE GEORGIA DEPARTMENT OF TRANSPORTATION
 - 2010 AMERICANS WITH DISABILITIES ACT (ADA) STANDARDS FOR ACCESSIBLE DESIGN
 - ARCHITECTURAL BARRIERS ACT (ABA) ACCESSIBILITY STANDARDS

SURVEY AND COORDINATE DATA
 HORIZ. DATUM - GA. STATE PLANE COORDINATE SYSTEM
 VERT. DATUM - NAVD 1988
 COORDINATE ZONE - GEORGIA WEST
 PROJECT UNITS - ENGLISH

PROJECT DESCRIPTION

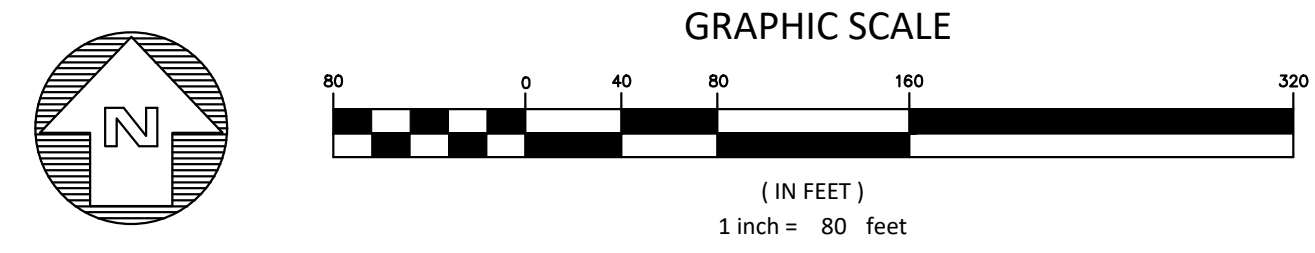
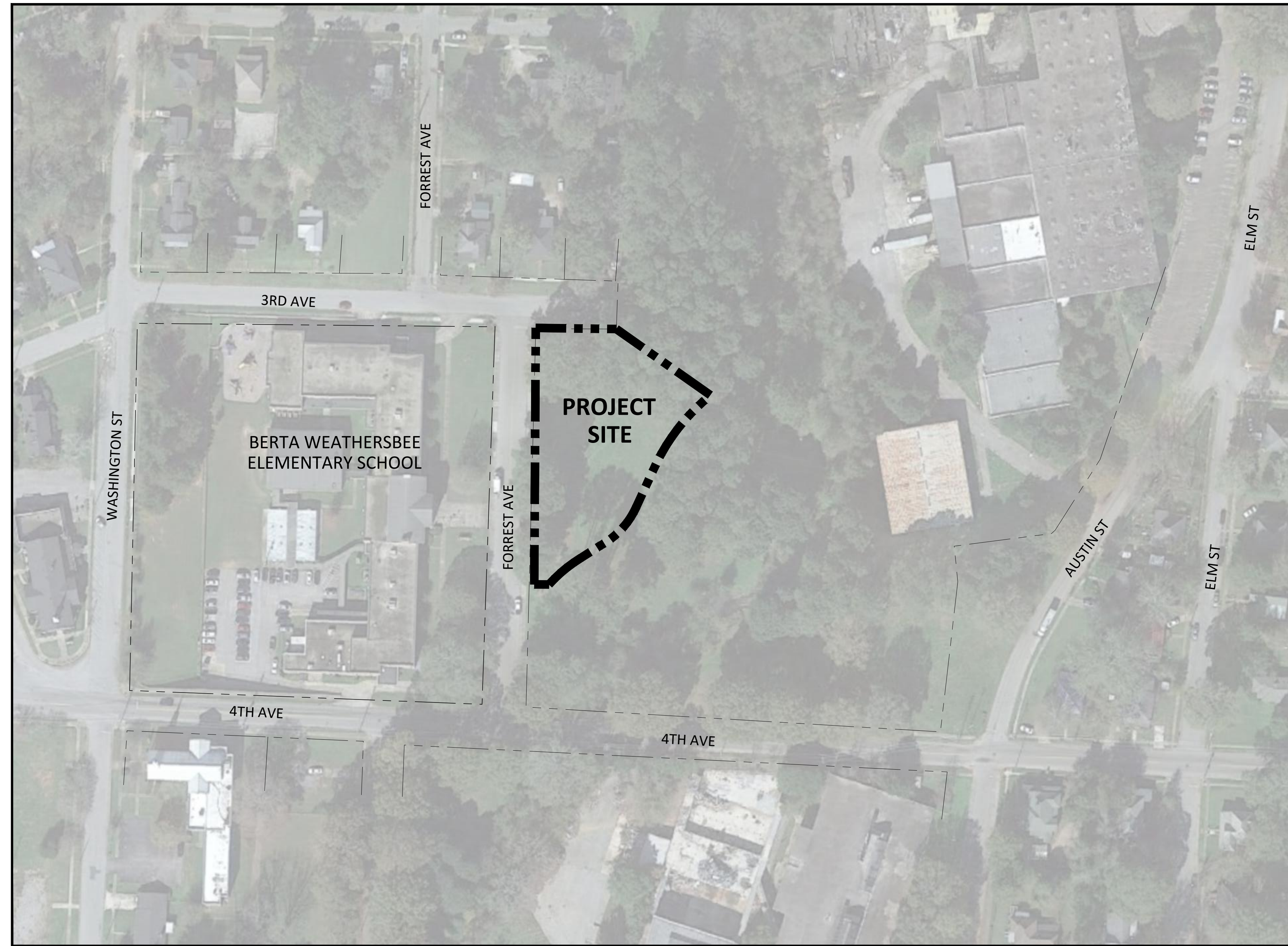
THE PROJECT FALLS WITHIN LAND LOT 142 IN DISTRICT 6. THIS PROJECT WILL NOT REQUIRE ANY ZONING BUFFERS. THIS IS A BICYCLE PARK BUILT ON CITY PROPERTY. NO DISTURBANCE IS PROPOSED WITHIN THE STATE 25' STREAM BUFFER SETBACK.

NARRATIVE

THIS PROJECT IS A CHILDREN'S BICYCLE PARK THAT CONNECTS TO THE EXISTING LAGRANGE THREAD PHASE 9 ACROSS FROM BERTA WEATHERSBEE ELEMENTARY SCHOOL. THE PARK TEACHES CHILDREN BICYCLE ETIQUETTE AND SAFETY ABOUT ROAD AND TRAIL RULES IN A CONTROLLED SETTING. THE PROJECT SCOPE INCLUDES APPROXIMATELY 1,239 LINEAR FEET OF CONCRETE TRAIL, TRAIL AMENITIES, AND SIGNING AND MARKING. ADDITIONAL WORK ASSOCIATED WITH THIS PROJECT INCLUDES MINOR DEMOLITION AND CLEARING, AND EROSION AND GRADING.

OWNER/DEVELOPER (PRIMARY PERMITTEE)
 CITY OF LAGRANGE
 MEG KELSEY, CITY MANAGER
 200 RIDLEY AVENUE
 LAGRANGE, GA 30240
 706-883-2010

PROJECT MANAGEMENT
 PATH Foundation, PO Box 14327, Atlanta, GA.
 PETE PELLEGRINI - 24 HOUR CONTACT
 GA GSWCC LEVEL 1 CERTIFICATION # 0000029813
 12/21/2023
 office 404-875-7284 x2 cell 404-277-5392



ENGINEER'S CERTIFICATION STATEMENT:

With my initials at the line above and my seal and signature below, I Charles M. Abbott, a professional Engineer, licensed in the State of Georgia, hereby certify that I have personally reviewed the attached submittal plans for a land disturbance permit. In my opinion these submittal plans meet all applicable regulations and ordinances of the City of LaGrange and other affected parties may rely on this certification.

Signed: *Charles M. Abbott* Georgia Registration # NO. 31674
 Date: JULY 21, 2023

LENGTH OF 10' WIDE TRAIL: 1,007 LF
 LENGTH OF 6' WIDE TRAIL: 218 LF
 GROSS LENGTH OF PROJECT: 1,239 LF

TOTAL SITE AREA = 0.9 ACRES
 DISTURBED AREA = 0.9 ACRES

PLANS PREPARED BY:

KAIZEN COLLABORATIVE
 2390 Main Street | Tucker, GA 30084 | 404.239.2521



INDEX OF SHEETS

GENERAL
 COVER SHEET (THIS SHEET)
 GN-01 GENERAL NOTES

TOPOGRAPHIC SURVEY
 SURVEY SHEET 1 OF 1
 CITY DEEDED PLAT AND LEGAL

TREE PROTECTION PLAN
 TP-01 TREE PROTECTION PLAN

LAYOUT & MATERIALS PLANS
 CP-01 LAYOUT & MATERIALS PLAN
 CP-02 LAYOUT & MATERIALS PLAN

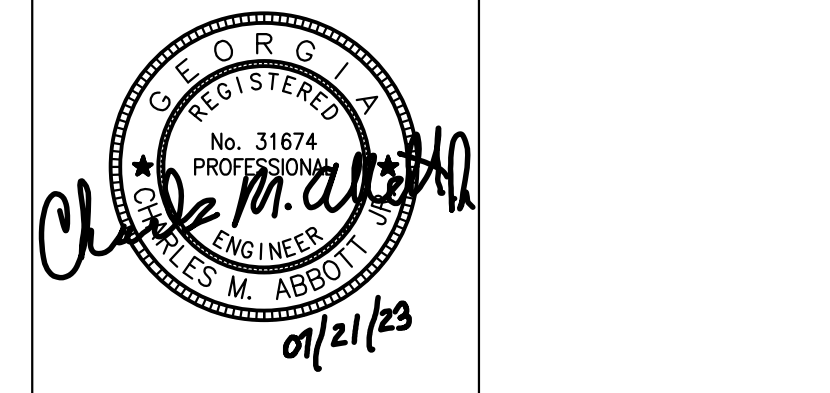
GRADING AND DRAINAGE PLANS
 GD-01 GRADING AND DRAINAGE PLAN

SIGNING & MARKING PLANS
 SM-00 SIGNING & MARKING DETAILS
 SM-01 SIGNING & MARKING PLAN
 SM-02 SIGNING & MARKING PLAN
 SM-03 SIGNING & MARKING PLAN

CONSTRUCTION DETAILS
 CD-01 CONSTRUCTION DETAILS
 CD-02 CONSTRUCTION DETAILS
 CD-03 CONSTRUCTION DETAILS
 CD-04 CONSTRUCTION DETAILS

EROSION CONTROL
 EC-01 INITIAL PHASE EROSION, SEDIMENTATION, & POLLUTION CONTROL PLAN
 EC-02 INTERMEDIATE PHASE EROSION, SEDIMENTATION, & POLLUTION CONTROL PLAN
 EC-03 FINAL PHASE EROSION, SEDIMENTATION, & POLLUTION CONTROL PLAN
 EC-04 EROSION, SEDIMENTATION, & POLLUTION CONTROL NOTES
 EC-05 EROSION, SEDIMENTATION, & POLLUTION CONTROL NOTES
 ECD-01 EROSION, SEDIMENTATION, & POLLUTION CONTROL DETAILS
 ECD-02 EROSION, SEDIMENTATION, & POLLUTION CONTROL DETAILS
 ECD-03 EROSION, SEDIMENTATION, & POLLUTION CONTROL DETAILS
 ECD-04 EROSION, SEDIMENTATION, & POLLUTION CONTROL DETAILS

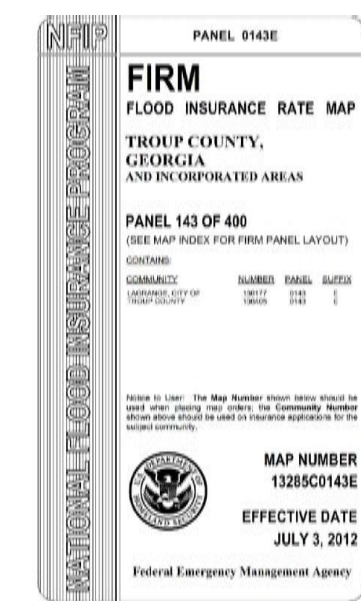
DATE	DESCRIPTION
02/17/2023	50% DESIGN REVIEW
07/21/2023	100% ISSUE FOR PERMIT
08/16/2023	100% ISSUE FOR BID



LAGRANGE BICYCLE PARK

KAIZEN PROJECT # 2022-256

08/16/2023 - 100% ISSUE FOR BID



NOTE: NONE OF THE DISTURBED AREA IS WITHIN THE FEMA 100 YEAR FLOOD HAZARD ZONE.

GENERAL NOTES

- THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING DIMENSIONS SHOWN HEREON WITH THE CONSTRUCTION DRAWINGS AND EXISTING BUILDINGS PRIOR TO ANY CONSTRUCTION AND SHALL PROMPTLY NOTIFY THE LANDSCAPE ARCHITECT OF ANY DISCREPANCIES.
- PROPOSED CONTOURS AND SPOT ELEVATIONS REPRESENT FINAL GRADE. PROPOSED GRADE ELEVATIONS SHOWN WITHIN PAVED AREA REPRESENT TOP OF PAVEMENT ELEVATIONS. CONTRACTOR SHALL ALLOW FOR PAVEMENT THICKNESS, TOPSOIL, BASE COURSE, SLABS, ETC. WHEN GRADING TO SUBGRADE ELEVATIONS.
- DIMENSIONS ARE TO BACK OF CURB, CENTER OF STRUCTURE AND CENTER LINE OF COLUMN LINE, UNLESS OTHERWISE NOTED. ANGLES SHOWN ON STORM AND SANITARY SEWER ARE TO CENTER OF PIPE, UNLESS OTHERWISE NOTED.
- CALL BEFORE YOU DIG 811.** THE LOCATIONS OF EXISTING UTILITIES ARE APPROXIMATE AND SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO BEGINNING CONSTRUCTION. BEWARE OF HIDDEN UTILITIES NOT SHOWN. CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING APPROPRIATE UTILITY COMPANIES PRIOR TO EXCAVATION. IF UNCHARTED UTILITIES ARE ENCOUNTERED DURING EXCAVATION OPERATIONS, THE CONTRACTOR SHALL NOTIFY THE PROJECT LANDSCAPE ARCHITECT IMMEDIATELY FOR INSTRUCTIONS. ANY DAMAGE OR INTERRUPTION OF EXISTING UTILITIES SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE REPAIRED PROMPTLY AT THE CONTRACTOR'S EXPENSE.
- PRIOR TO COMMENCING LAND DISTURBANCE ACTIVITY, THE LIMITS OF LAND DISTURBANCE SHALL BE CLEARLY AND ACCURATELY DEMARCATED WITH STAKES, RIBBONS, OR OTHER APPROPRIATE MEANS. THE LOCATION AND EXTENT OF ALL AUTHORIZED DISTURBANCE SHALL BE DEMARCATED FOR THE DURATION OF THE CONSTRUCTION ACTIVITY. NO DISTURBANCE SHALL OCCUR OUTSIDE THE LIMITS INDICATED ON THE DRAWINGS WITHOUT APPROVAL IN WRITING FROM THE PROJECT LANDSCAPE ARCHITECT.
- THROUGHOUT CONSTRUCTION, THE CONTRACTOR SHALL PROVIDE AND MAINTAIN SUFFICIENT BARRICADES, LIGHTS, WARNING SIGNS, AND OTHER TRAFFIC CONTROL METHODS ADJACENT TO EXISTING ROADWAYS AND PARKING AREAS AS MAY BE REQUIRED FOR THE PROTECTION AND SAFETY OF THE PUBLIC. ALL TRAFFIC CONTROL MEASURES UTILIZED WITHIN PUBLIC RIGHT-OF-WAY SHALL COMPLY WITH MANUAL FOR UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), CURRENT EDITION. THE CONTRACTOR SHALL COORDINATE WITH THE CITY OF LAGRANGE THE ANTICIPATED SCHEDULE FOR CLOSURE OF PANTHER WAY FOR ROADWAY RECONSTRUCTION. CITY OF LAGRANGE TO CREATE A DETOUR PLAN AND INSTALL SIGNAGE FOR DETOUR.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LAYOUT OF ALL CONSTRUCTION ELEMENTS, WITH SOME FIELD ADJUSTMENTS MADE AS NECESSARY TO MEET FIELD CONDITIONS AND PROVIDED THAT SUCH ADJUSTMENT HAVE BEEN GIVEN PRIOR APPROVAL BY THE PROJECT DESIGN TEAM. IN ADDITION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSURING THAT TRAIL AND AMENITY CONSTRUCTION COMPLIES WITH AASHTO REQUIREMENTS, PARTICULARLY WITH RESPECT TO TRAIL CROSS-SLOPES AND GRADIENTS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR TEMPORARY AND PERMANENT GROUNDWATER CONTROL DURING CONSTRUCTION, AS WELL AS PROVISIONS FOR CONTROLLING SURFACE WATER RUN-OFF, IN ORDER TO PREVENT PONDING IN OPEN EXCAVATIONS AND POTENTIAL UNDERMINING OF PERMANENT CONSTRUCTION FEATURES.
- EARTHWORK OPERATIONS AND SOIL COMPACTION SHALL BE PERFORMED IN STRICT ACCORDANCE WITH THE PROJECT SPECIFICATIONS AND DRAWINGS. PRIOR TO POURING CONCRETE, EARTHWORK SHALL BE CLEAR OF DEBRIS AND MACHINE COMPACTED. CONSTRUCTION ACTIVITIES SHALL BE MONITORED BY A GEOTECHNICAL CONSULTING FIRM APPROVED BY THE OWNER TO VERIFY THAT EARTHWORK, WALL CONSTRUCTION, AND OTHER OPERATIONS CONFORM WITH THE CONTRACT DOCUMENTS. GEOTECHNICAL SERVICES SHALL BE AT THE COST OF THE CONTRACTOR.
- THE TOPOGRAPHIC SURVEY INFORMATION HAS BEEN PROVIDED BY GEORGIA AND WEST INC., (770) 834-4694, AND IS REFERENCED TO THE GEORGIA STATE PLANE COORDINATE SYSTEM (WEST ZONE).
- DEMOLITION DEBRIS SHALL BECOME PROPERTY OF THE CONTRACTOR AND WASTE SOILS, VEGETATION, AND OTHER DELETERIOUS MATERIALS SHALL BE HAULED OFF-SITE AND BE DISPOSED OF AT AN APPROVED LOCATION IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL REGULATIONS. BURNING WILL NOT BE ALLOWED ON THIS PROJECT.
- EROSION CONTROL MEASURES AND OTHER SITE ISSUES SHALL BE INSPECTED AND MAINTAINED BY CONTRACTOR THROUGHOUT CONSTRUCTION.
- ON ALL AREAS WHERE ROADWAYS, CONCRETE TRAILS, RETAINING WALLS, OR OTHER STRUCTURES ARE TO BE CONSTRUCTED ON COMPACTED SUBGRADE, FOUNDATION SOILS SHALL BE REVIEWED AND APPROVED BY THE GEOTECHNICAL CONSULTING FIRM PRIOR TO THE PLACEMENT OF CONCRETE, AGGREGATE BASE, OR FILL MATERIALS.
- CONSTRUCTION ACCESS POINTS ARE APPROXIMATE LOCATIONS AND MUST BE FIELD VERIFIED AND APPROVED BY CITY OF LAGRANGE.
- ALL WORK TO BE DONE IN ACCORDANCE WITH THE GEORGIA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS AND SUPPLEMENTAL SPECIFICATIONS, CURRENT EDITION, THE 2010 AMERICANS WITH DISABILITY ACT (ADA) STANDARDS FOR ACCESSIBLE DESIGN, THE ARCHITECTURAL BARRIERS ACT (ABA) ACCESSIBILITY STANDARDS, THE PUBLIC RIGHT-OF-WAY ACCESSIBILITY GUIDELINES, AND AS MODIFIED BY CONTRACT DOCUMENTS.
- ALL CONCRETE TO BE USED FOR THE CONSTRUCTION OF TRAILS TO BE 3000 PSI CONCRETE, UNLESS NOTED OTHERWISE.
- CONTRACTOR SHALL SCHEDULE A PRE-CONSTRUCTION MEETING WITH CITY OF LAGRANGE, GEORGIA AND WEST INC., PATH FOUNDATION, AND KAIZEN COLLABORATIVE PRIOR TO BEGINNING CONSTRUCTION.
- NOTICE: IT IS THE OWNER'S RESPONSIBILITY TO COMPLY WITH ALL ENVIRONMENTAL IMPACT ISSUES AND TO OBTAIN ALL NECESSARY PERMITS FROM THE APPROPRIATE GOVERNING AUTHORITIES.
- CONTRACTOR TO CONTACT KAIZEN COLLABORATIVE FOR ALL CONSTRUCTION STAKING CAD DATA.

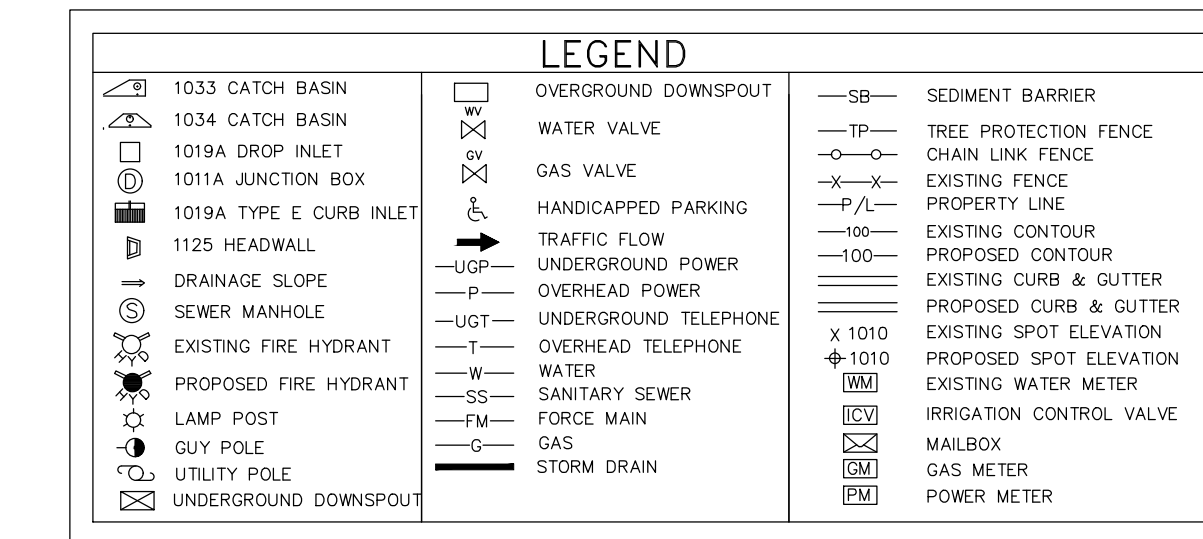
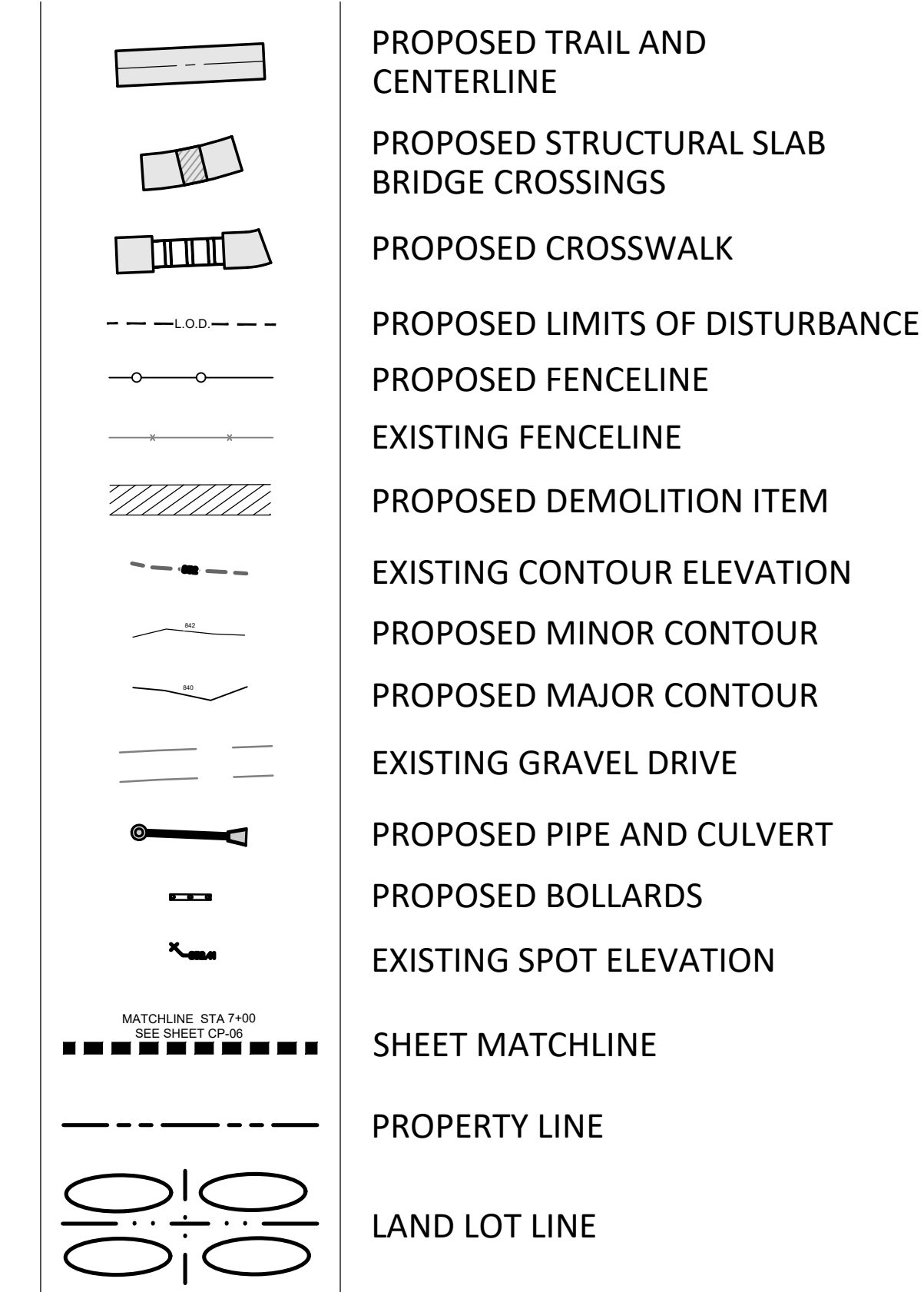
TRAIL NOTES

- THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING MINIMUM GRADES AND NOT EXCEEDING MAXIMUM GRADES ALONG THE TRAIL. TRAIL LONGITUDINAL GRADES NOT ADJACENT TO A ROADWAY THAT EXCEED 4.9% SHALL ADHERE TO TABLE 1017.7.1 OF THE U.S. ACCESS BOARD'S GUIDELINES FOR ACCESSIBILITY STANDARDS, 2016 EDITION. TRAILS ADJACENT TO A ROADWAY SHALL NOT EXCEED THE GENERAL GRADE ESTABLISHED FOR THE ADJACENT STREET OR HIGHWAY PER PROWAG R302.5.1. TRAIL CROSS SLOPE SHALL BE MINIMUM 1%, MAXIMUM 2%.
- THE LAYOUT OF THE TRAIL IS SHOWN IN RELATION TO THE BEST AVAILABLE INFORMATION. THE CONTRACTOR SHALL VERIFY THE LAYOUT WITH OWNER PRIOR TO CONSTRUCTION OF TRAIL.
- THE CONTRACTOR IS RESPONSIBLE FOR CLEARING OF ALL UNDERSTORY VEGETATION WITHIN 10' FROM CENTERLINE OF TRAIL. CLEARING AREA MAY INCREASE WHERE INVASIVE PLANTS ARE LOCATED. CONTRACTOR SHALL CONFIRM VEGETATION TO BE CLEARED WITH LANDSCAPE ARCHITECT AND PROJECT ENGINEER PRIOR TO CLEARING.
- ALL TREES WITHIN THE LIMITS OF DISTURBANCE AND/OR IDENTIFIED ON PLANS TO BE REMOVED SHALL BE MARKED IN THE FIELD & VERIFIED BY CITY OF LAGRANGE PRIOR TO REMOVAL. ALL DISEASED, DYING, OR DEAD TREES AND TREE LIMBS WITHIN 25' OF THE TRAIL EDGE SHALL BE REMOVED
- ALL SIGNING & MARKING SHALL BE IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), LATEST EDITION
- ALL ROADWAY PAVEMENT MARKINGS SHALL BE THERMOPLASTIC AND MEET GDOT SPECIFICATIONS UNLESS SPECIFIED OTHERWISE BY CITY. TRAIL PAVEMENT MARKINGS TO BE PAINT, UNLESS SPECIFIED OTHERWISE BY CITY.

CONSTRUCTION NOTES

- TRAIL BACKFILL DIRT SHALL BE CLEAN, COHESIVE CLAY OR SANDY CLAY FREE OF DEBRIS, ORGANICS, DELETERIOUS MATERIAL AND ROCKS GREATER THAN 3" DIAMETER.
- DESIRABLE GRADED SLOPES ARE TO BE 3:1 (H:V) OR FLATTER. MAX CUT OR FILL SLOPES SHALL BE 2:1 (H:V), UNLESS SPECIFICALLY NOTED.
- EQUIPMENT AND MATERIALS SHALL BE STORED IN AREAS DESIGNATED BY THE OWNER. CONSTRUCTION AND STORAGE AREAS SHALL BE KEPT NEAT AND CLEAN. TREE SAVE AREAS SHALL NOT BE USED FOR STORAGE OR PARKING. EQUIPMENT AND MATERIAL SHALL NOT BE STORED WITHIN THE DRIP LINE OF TREES.
- CONTRACTOR TO VERIFY THE ELEVATIONS OF ALL TIE-IN POINTS FOR INSTALLATION OF UTILITIES, CURB & GUTTER AND PAVING.
- TRENCH BACKFILL MATERIAL SHALL BE COMPACTED TO NOT LESS THAN 95% OF THE OPTIMUM COMPACTION FOR ANY SOIL CLASSIFICATION AS DETERMINED BY THE STANDARD PROCTOR TEST ASHTO T-99 METHOD "A". THE TOP 2 FEET OF ALL AREAS TO RECEIVE PAVEMENT SHALL BE COMPACTED TO 100% STANDARD PROCTOR DENSITY. BACKFILL MATERIAL SHALL BE CLEAN AND FREE OF ROOTS, ROCK OR DELETERIOUS MATTER. CONTRACTOR SHALL CORRECT ANY DAMAGE TO CURBING OR PAVING CAUSED BY TRENCH SETTLEMENT WHICH OCCURS WITHIN 12 MONTHS OF PROJECT ACCEPTANCE.
- THE CONTRACTOR SHALL NOTIFY THE PROJECT DESIGN TEAM OF ANY DISCREPANCIES BETWEEN PLAN AND FIELD CONDITIONS PROMPTLY UPON DISCOVERY.
- ALL EXISTING UTILITY BOXES AND/OR COVERS THAT ARE TO REMAIN SHALL BE SET FLUSH WITH THE TOP OF THE PROPOSED GRADE.
- AREAS INTENDED TO SUPPORT PAVEMENT OR NEW FILL SHALL BE PROOF ROLLED IN THE PRESENCE OF THE GEOTECHNICAL ENGINEER TO LOCATE WEAK, SOFT OR EXCESSIVELY WET MATERIALS. AREAS WHICH PUMP WHILE PROOF ROLLED SHALL BE UNDERCUT AND BACK-FILLED AS DIRECTED BY GEOTECHNICAL ENGINEER.
- CRUSHED STONE AGGREGATE IN PAVEMENT BASE SHALL CONFORM WITH SECTION 815 OF THE STATE OF GEORGIA, DEPARTMENT OF TRANSPORTATION, STANDARD SPECIFICATIONS. ALL ASPHALT MATERIAL AND PAVING OPERATIONS SHALL MEET APPLICABLE SPECIFICATIONS OF THE GEORGIA DEPARTMENT OF TRANSPORTATION.
- ALL FILL AREAS MUST BE COMPACTED TO A MINIMUM 95% STANDARD PROCTOR. THE TOP 2 FEET OF ALL AREAS TO RECEIVE PAVEMENT SHALL BE COMPACTED TO 100% STANDARD PROCTOR DENSITY. A REPORT FROM A GEOTECHNICAL ENGINEER WILL BE REQUIRED FOR ALL FILL AREAS WITHIN THE RIGHT-OF-WAY.
- CONTRACTOR SHALL ENSURE POSITIVE DRAINAGE ACROSS DISTURBED AREA AND INTO DRAINAGE FEATURES.

CONSTRUCTION LEGEND



TREE LEGEND			
BE = BOXELDER	CW = COTTONWOOD	MA = MAPLE	PO = POPLAR
BG = BLACK GUM	CY = CYPRESS	MG = MAGNOLIA	RB = REDBUD
BH = BEECH	DW = DOGWOOD	MI = MIMOSA	SG = SWEETGUM
BI = BIRCH	EM = ELM	O = OAK	SM = SYCAMORE
C = CEDAR	GI = GINKGO	PC = PECAN	SW = SOURWOOD
CH = CHERRY	HB = HACKBERRY	PE = PEAR	UK = UNKNOWN
CM = CREPE MYRTLE	HK = HICKORY	PI = PINE	WA = WALNUT

SITE DATA	
TOTAL SITE AREA = 0.9 ACRE	NPDES FEE = \$0 (N/A <1 AC. DISTURBANCE)
DISTURBED AREA = 0.9 ACRE	STATE AMOUNT = \$0 (N/A <1 AC. DISTURBANCE)
LAND LOT: 142 - DISTRICT 6	

PROJECT MANAGEMENT	
PATH Foundation, PO Box 14327, Atlanta, GA.	
PETE PELLEGRINI - 24 HOUR CONTACT	
GA GSWCC LEVEL 1 CERTIFICATION # 0000029813	
12/21/2023	
office 404-875-7284 x2	cell 404-277-5392

EROSION & SEDIMENT CONTROL	
1. THE ESCAPE OF SEDIMENT FROM THE SITE SHALL BE PREVENTED BY THE INSTALLATION OF EROSION AND SEDIMENT CONTROL MEASURES AND PRACTICES PRIOR TO, OR CONCURRENT WITH, LAND DISTURBANCE ACTIVITIES.	
2. EROSION CONTROL MEASURES WILL BE MAINTAINED AT ALL TIMES. IF FULL IMPLEMENTATION OF THE APPROVED PLAN DOES NOT PROVIDE FOR EFFECTIVE EROSION CONTROL, ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IMPLEMENTED TO CONTROL OR TREAT THE SEDIMENT SOURCE.	
3. ANY DISTURBED AREA LEFT EXPOSED FOR A PERIOD GREATER THAN 14 DAYS SHALL BE STABILIZED WITH MULCH OR TEMPORARY SEEDING.	
4. ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES AND PRACTICES WILL BE INSTALLED IF DEEMED NECESSARY BY THE ON-SITE INSPECTOR.	
5. EROSION AND SEDIMENT MEASURES AND PRACTICES TO BE INSPECTED DAILY.	
6. ALL INSPECTION, MONITORING, AND REPORTING SHALL BE PERFORMED AS REQUIRED BY NPDES PERMIT AND BY PROJECT EROSION, SEDIMENTATION, AND POLLUTION CONTROL NOTES.	

U.S. ACCESS BOARD'S GUIDELINES FOR ACCESSIBILITY STANDARDS, 2016 EDITION, TABLE 1017.7.1

Table 1017.7.1 Maximum Running Slope and Segment Length

Running Slope of Trail Segment		
Steeper than	But not Steeper than	Maximum Length of Segment
1:20 (5%)	1:12 (8.33%)	200 feet (61 m)
1:12 (8.33%)	1:10 (10%)	30 feet (9 m)
1:10 (10%)	1:8 (12%)	10 feet (3050 mm)

WHERE THE RUNNING SLOPE OF A SEGMENT OF A TRAIL IS STEEPER THAN 1:20 (5%), THE MAXIMUM LENGTH OF THE SEGMENT SHALL BE IN ACCORDANCE WITH TABLE 1017.7.1, AND A RESTING INTERVAL COMPLYING WITH 1017.8 SHALL BE PROVIDED.

KAIZEN COLLABORATIVE

2390 MAIN STREET | TUCKER, GEORGIA 30084 | 404.239.2521

CHARLES M. ABBOTT JR., P.E.
DESIGN ENGINEER LEVEL II CERTIFICATION
GSWCC # 00004168 EXPIRES: 04/28/2025
CHUCK.ABBOTT@KAIZENCOLLABORATIVE.COM
O: 404-239-2521



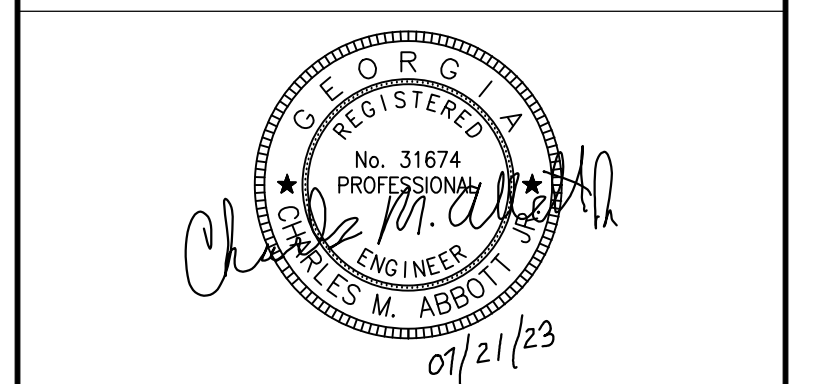
PATH FOUNDATION
PO BOX 1432, ATLANTA, GA 30305

24 HOUR CONTACT - PETE PELLEGRINI
E: PETEVP@PATHFOUNDATION.ORG
O: 404-875-7284 x2 C: 404-277-5392

DATE	DESCRIPTION
02/17/2023	50% DESIGN REVIEW
07/21/2023	100% ISSUE FOR PERMIT
08/16/2023	100% ISSUE FOR BID

PROJECT #	2022 - 256
PROJECT MANAGER	AC

LaGRANGE BICYCLE PARK
LaGRANGE, GA



GENERAL NOTES

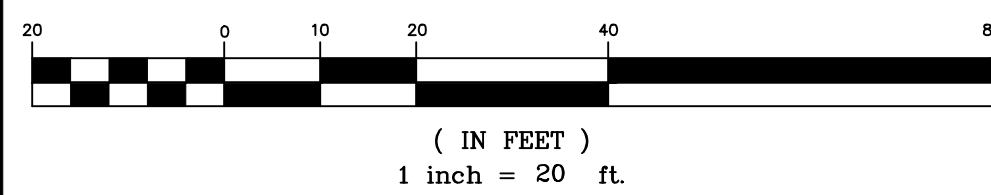
SCALE	
DATE	JULY 21, 2023
SHEET #	GN-01





Know what's below.
Call before you dig.

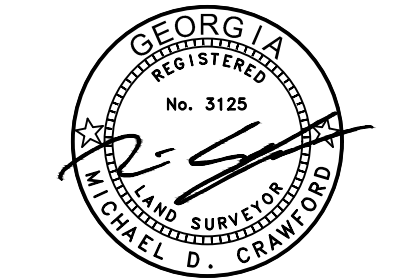
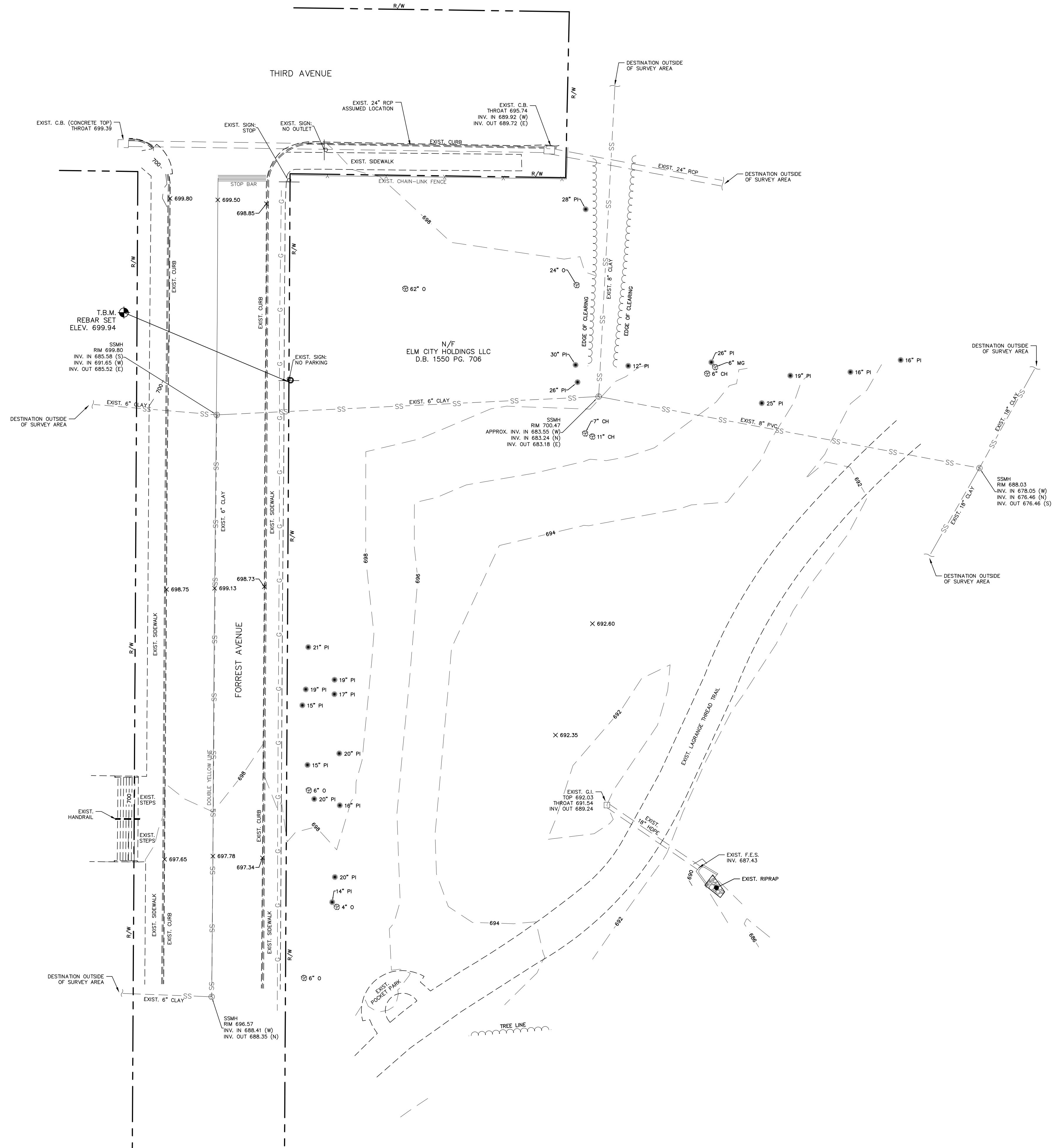
GRAPHIC SCALE



THE F.I.R.M. MAP NUMBER 1328C0143E EFFECTIVE DATE 07/03/2012 INDICATES THIS PROPERTY IS NOT LOCATED IN A DESIGNATED FLOOD HAZARD AREA.

TREE LEGEND			
BE = BOXELDER	CW = COTTONWOOD	MA = MAPLE	PO = POPLAR
BG = BLACK GUM	CY = CYPRESS	MG = MAGNOLIA	RB = REDBUD
BH = BEECH	DW = DOGWOOD	MI = MIMOSA	SG = SWEETGUM
BI = BIRCH	EM = ELM	O = OAK	SM = SYCAMORE
C = CEDAR	GI = GINKGO	PC = PECAN	SW = SOURWOOD
CH = CHERRY	HB = HACKBERRY	PE = PEAR	UK = UNKNOWN
CM = CREPE MYRTLE	HK = HICKORY	PI = PINE	WA = WALNUT

LEGEND		



GEORGIA & WEST, INC.
ENGINEERING • LAND SURVEYING • LAND PLANNING
105 CORPORATE DRIVE
CARROLLTON, GA. 30117
OFFICE (770) 834-4694
FAX (770) 834-1005
E-MAIL: mailbox@georgiandwest.com

WARNING: THIS PLAN SHEET IS NOT THE OFFICIAL CONTRACT DOCUMENT UNLESS APPROVED BY THE APPROPRIATE GOVERNMENTAL AGENCIES.
WARNING: UTILITIES LOCATIONS ARE APPROXIMATE. BEWARE OF HIDDEN UTILITIES NOT SHOWN. CONTACT APPROPRIATE UTILITY COMPANIES PRIOR TO EXCAVATION.
NOTICE: IT IS THE PROPERTY OWNER'S/ CONTRACTOR'S RESPONSIBILITY TO COMPLY WITH ALL ENVIRONMENTAL IMPACT ISSUES AND TO OBTAIN ALL NECESSARY PERMITS FROM THE APPROPRIATE GOVERNING AUTHORITIES.

TITLE: TOPOGRAPHIC SURVEY
LAGRANGE THREAD BIKE PARK
LOCATED IN LAND LOT 142 DISTRICT 6
TROOP COUNTY, GEORGIA
JOB NUMBER: 210702B
DESIGNED BY: [Blank]
DATE: 08-18-2022
SCALE: 1"=20'

eFiled & eRecorded
 DATE: 10/13/2022
 TIME: 8:55 AM
 PLAT BOOK: 00083
 PAGE: 00091
 RECORDING FEES: \$10.00
 PARTICIPANT ID: 8208115107
 CLERK: Jackie Taylor
 Troup County, GA

RESERVED FOR CLERK OF COURT

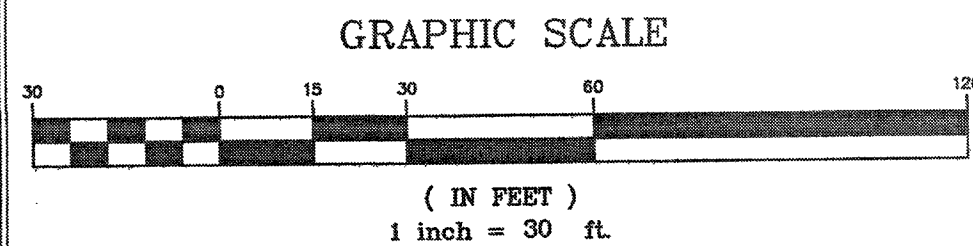
LEGEND	
101	HOUSE NUMBER
10	LOT NUMBER
○	PROPERTY CORNER
—	PROPERTY LINE
IPF	IRON PIN FOUND (1/2" REBAR UNLESS NOTED)
IPP	IRON PIN PLACED (1/2" REBAR)
OTP	OPEN TOP PIPE
CTP	CRIMPED TOP PIPE
R/W	RIGHT OF WAY
---	RIGHT OF WAY
□	R/W MONUMENT
223	LAND LOT NUMBER
L.L.L.	LAND LOT LINE
---	LAND LOT LINE
E.O.P.	EDGE OF PAVEMENT
-X-	FENCE LINE
☆	LAMP POLE
○	UTILITY POLE
PP	POWER POLE
LP	LAMP POLE
-P-	OVERHEAD POWER
P.I.	POINT OF INTERSECTION

NOTES:
 1. BEING A PORTION OF TAX PARCEL 0601B017021.
 2. PROPERTY LINE IS 12.5' OFF THE CENTERLINE OF THE AS-BUILT LAGRANGE THREAD TRAIL.

DIRECTOR OF COMMUNITY DEVELOPMENT

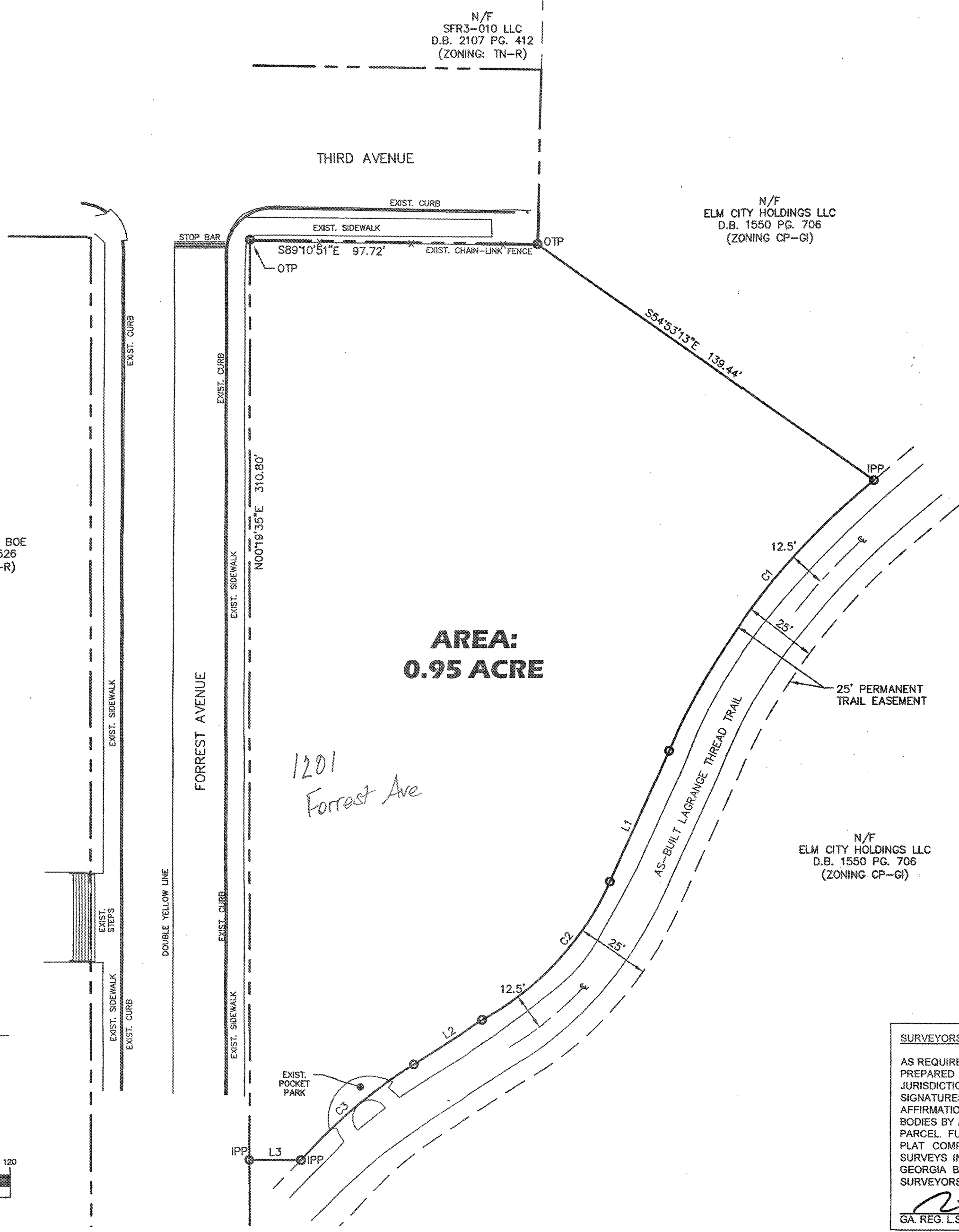
Alton S. West
 SIGNATURE

10/12/22
 DATE



Curve Table				
Curve #	Length	Radius	Chord Direction	Chord Length
C1	115.91'	244.86'	S37° 21' 41"W	114.83'
C2	65.06'	100.61'	S42° 58' 18"W	63.94'
C3	50.59'	175.16'	S50° 14' 08"W	50.41'

Parcel Line Table		
Line #	Length	Direction
L1	48.51'	S24° 35' 57"W
L2	27.85'	S57° 39' 36"W
L3	17.81'	N89° 40' 25"W



SURVEYORS CERTIFICATION
 AS REQUIRED BY SUBSECTION (D) OF O.C.G.A. SECTION 15-6-67, THIS PLAT HAS BEEN PREPARED BY A LAND SURVEYOR AND APPROVED BY ALL APPLICABLE LOCAL JURISDICTIONS FOR RECORDING AS EVIDENCED BY APPROVAL FOR CERTIFICATES, SIGNATURES, STAMPS, OR STATEMENTS HERON. SUCH APPROVALS OR AFFIRMATIONS SHOULD BE CONFIRMED WITH THE APPROPRIATE GOVERNMENTAL BODIES BY ANY PURCHASER OR USER OF THIS PLAT AS TO INTENDED USE OF ANY PARCEL. FURTHERMORE, THE UNDERSIGNED LAND SURVEYOR CERTIFIES THAT THIS PLAT COMPLIES WITH THE MINIMUM TECHNICAL STANDARDS FOR PROPERTY SURVEYS IN GEORGIA AS SET FORTH IN THE RULES AND REGULATIONS OF THE GEORGIA BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS AND LAND SURVEYORS AND AS SET FORTH IN O.C.G.A. SECTION 15-6-67.
 GA. REG. L.S. #125 MICHAEL D. CRAWFORD

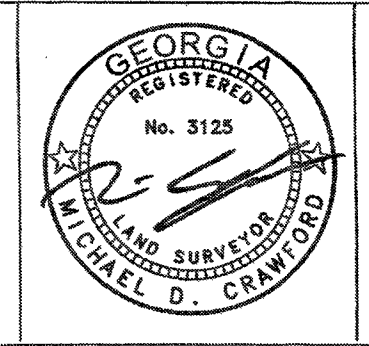
CLOSURE
 THE FIELD DATA UPON THIS MAP OR PLAT IS BASED HAS A CLOSURE PRECISION OF ONE FOOT IN 10,000 FEET AND AN ANGULAR ERROR OF 10" PER ANGLE POINT, AND WAS ADJUSTED USING CRANDALL RULE.
 TOPCON 233 WAS USED TO OBTAIN THE LINEAR AND ANGULAR MEASUREMENTS USED IN THE PREPARATION OF THIS PLAT.
 THIS MAP OR PLAT HAS BEEN CALCULATED FOR CLOSURE AND IS FOUND TO BE ACCURATE WITHIN ONE FOOT IN 300,000 FEET.

GENERAL NOTES
 1. NO TITLE OR ABSTRACT RESEARCH WAS PERFORMED BY THE UNDERSIGNED FOR THIS SURVEY.
 2. WARNING: THIS PLAT OF SURVEY MAKES NO WARRANTY OR GUARANTEE AS TO THE EXISTENCE OF ANY EASEMENTS OR RIGHTS OF WAY OF ANY TYPE NO ABSTRACT OR TITLE SEARCH WAS PERFORMED TO DISCOVER THE EXISTENCE OF ANY EASEMENTS OR RIGHTS OF WAY.
 3. NO WARRANTY OR GUARANTEE AS TO THE EXISTENCE OR LOCATION OF UNDERGROUND STRUCTURES IS IMPLIED, ONLY THOSE ITEMS SHOWN.

GENERAL NOTES
 4. NO WARRANTY OR GUARANTEE AS TO ENVIRONMENTAL ISSUES HAS BEEN IMPLIED, ONLY THOSE ITEMS SHOWN HEREON HAVE BEEN ADDRESSED.
 5. ONLY ACTS OF POSSESSION, IF ANY, THAT ARE VISIBLE FROM CASUAL INSPECTION OF THE PROPERTY ARE SHOWN HEREON. NO WARRANTY OR GUARANTEE IS IMPLIED AS TO THE EXISTENCE OF ACTS OF POSSESSION BY ADJOINERS TO THE LANDS SHOWN AND DESCRIBED HEREON.

GENERAL NOTES
 6. THE ACCEPTANCE OF THE PLAT HEREON AND MONUMENTS USED AND SET DURING THE PERFORMANCE OF THE FIELD SURVEY HEREBY LIMIT THE TORT OR CONTRACT HERETO TO AN AMOUNT NOT TO EXCEED THE FEE CHARGED. IF ADDITIONAL LIABILITY IS REQUIRED BY THE CLIENT, THEN AN AMOUNT OF 1% OF THE TOTAL LIABILITY REQUEST MUST BE PAID TO THE UNDERSIGNED PRIOR TO COMMENCEMENT OF WORK.
 7. NO WARRANTY OR GUARANTEE AS TO COUNTY OR CITY ORDINANCE ISSUES, TO INCLUDE SET BACKS, HAS BEEN IMPLIED. ONLY THOSE ITEMS SHOWN HAVE BEEN ADDRESSED.

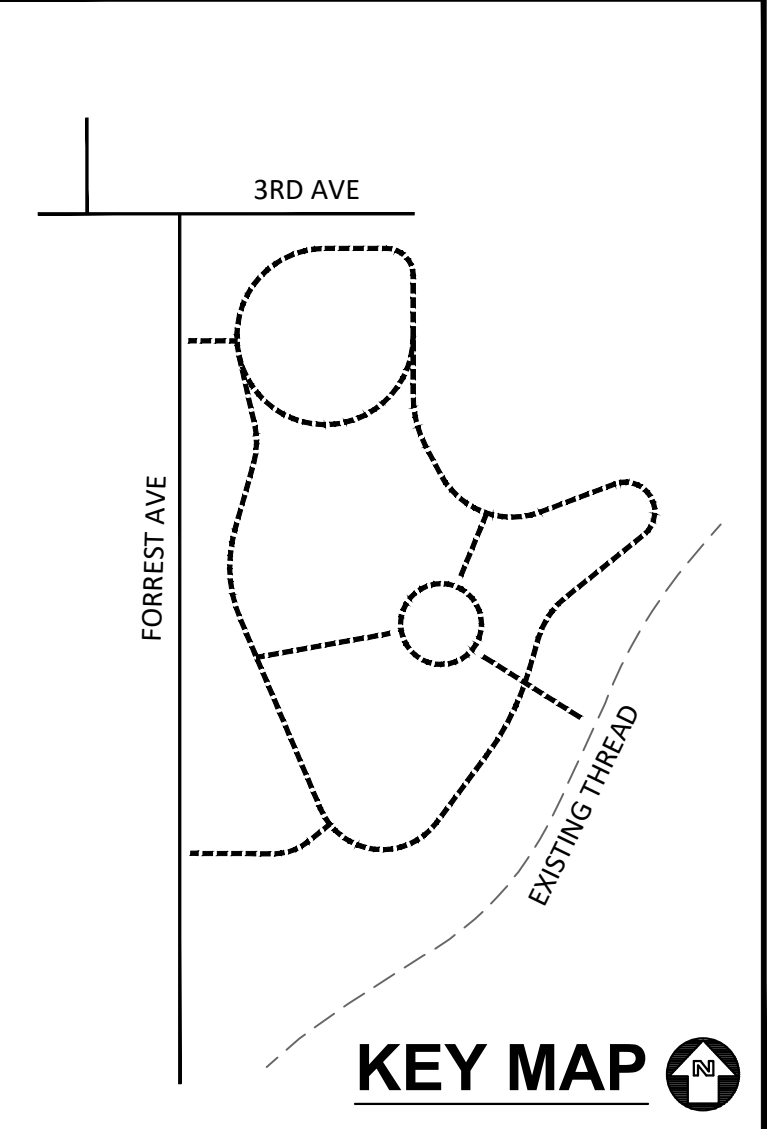
GW GEORGIA & WEST, INC.
 ENGINEERING • LAND SURVEYING • LAND PLANNING
 105 CORPORATE DRIVE OFFICE (770) 834-4694
 CARROLLTON, GA. 30117 FAX (770) 834-1005
 E-MAIL: mailbox@georgiaandwest.com



PARCEL SPLIT SURVEY FOR:
CITY OF LAGRANGE
 LOCATED IN LAND LOT 142 DISTRICT 06
 CITY OF LAGRANGE, TROUP COUNTY, GEORGIA
 SCALE: 1" = 30' DATE: 09/22/2022
 CHECKED BY: REVISED:
 JN210702B
 3-22-243



- SHEET NOTES:**
- TREE PROTECTION FENCING SHALL BE INSTALLED JUST OUTSIDE THE LIMITS OF DISTURBANCE AS INDICATED ON DRAWINGS.
 - SEDIMENT AND EROSION CONTROL DEVICES SHALL BE HAND DUG DURING INSTALLATION WITHIN THE CRZ OF ANY CONSERVED TREE. NO TREE ROOTS ARE TO BE CUT DURING THE INSTALLATION OF THESE DEVICES.
 - CITY ARBORIST TO ASSESS AND CLEARLY IDENTIFY ON-SITE LOCATIONS OF TREES TO REMAIN AND TREES TO BE REMOVED FROM THE SITE PRIOR TO ALL CONSTRUCTION ACTIVITY. NO TREE TO BE REMOVED BY CONTRACTOR WITHOUT FINAL CITY APPROVAL.
 - CONTRACTOR TO REMOVE ALL UNDERSTORY VEGETATION BY HAND IN AREAS WHERE HEAVY EQUIPMENT MAY DAMAGE NEARBY TREES THAT ARE TO REMAIN. NO MATERIAL STORAGE SHALL BE PERMITTED WITHIN 10 FT. OF TREE SAVE AREAS.
 - CONTRACTOR TO BRING ANY DISCREPANCIES TO THE ATTENTION OF THE CITY AND LANDSCAPE ARCHITECT AS SOON AS POSSIBLE.
 - ANY TREES DAMAGED, YET NOT SLATED TO BE REMOVED, WILL BE REPLACED PER CITY REQUIREMENTS AT THE CONTRACTOR'S EXPENSE.
 - TREES REMOVED SHALL BE RECYCLED THROUGH CHIPPING AND MULCHING. NO LANDFILLS.
 - REPLACEMENT TREES SHALL BE SPECIES APPROVED BY THE CITY OF LAGRANGE OR THE CITY'S DESIGNEE.
 - CITY ARBORIST TO PROVIDE ROOT PRUNING PLAN, TREE LIMBING PLAN, AND TREE SAVE DETAILS FOR ALL LAND DISTURBANCE ACTIVITY WITHIN THE CRZ OF TREES NOT SLATED FOR REMOVAL.
 - DUE TO GRADE CHANGE RESTRICTIONS, THE DEPTH AND/OR EXTENTS OF ROOT BRIDGING #57 STONE WITHIN THE CRZ OF PROTECTED TREES MAY NEED TO BE LESS THAN SPECIFIED PER REVIEW AND APPROVAL OF CITY ARBORIST.

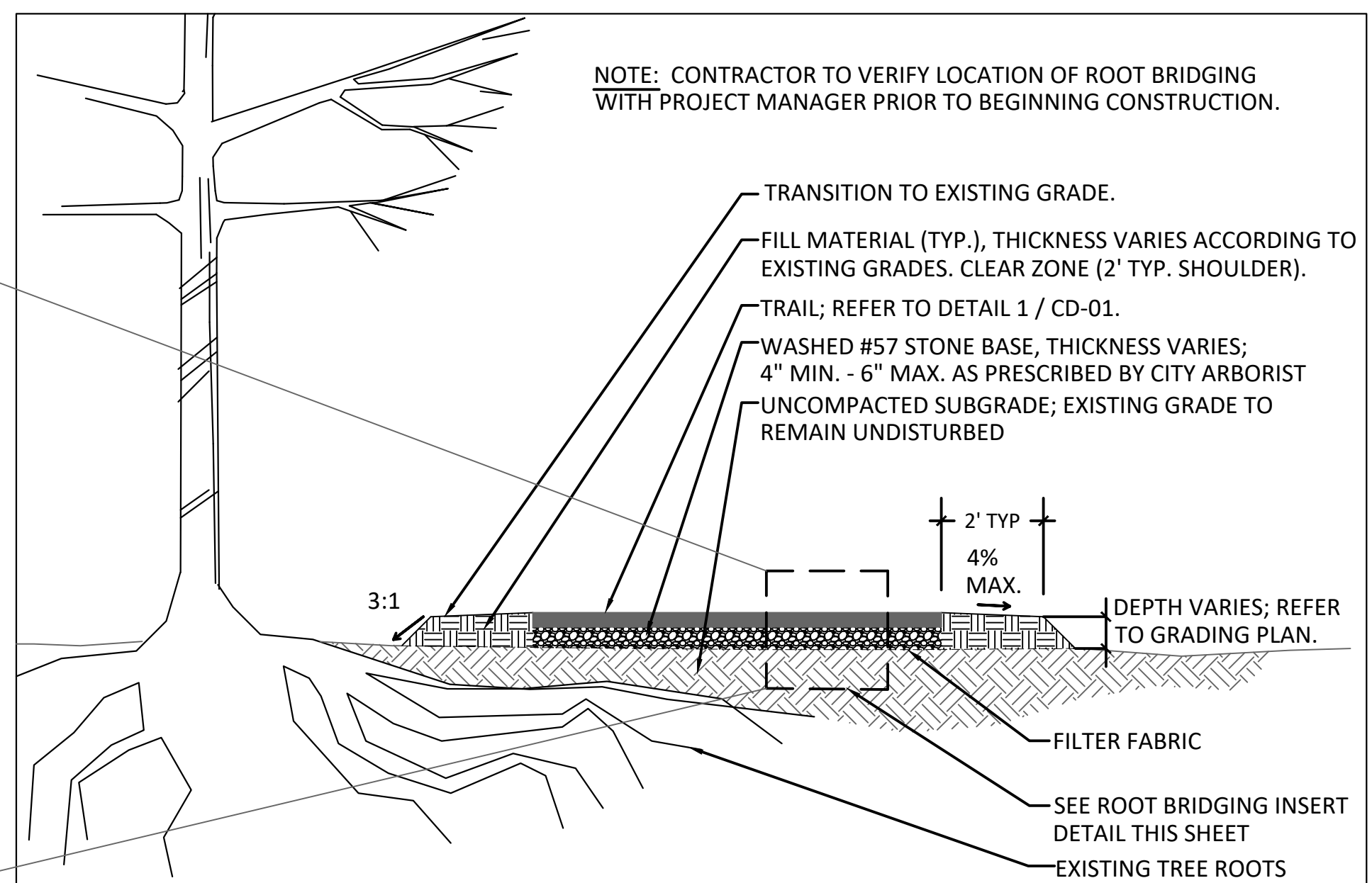
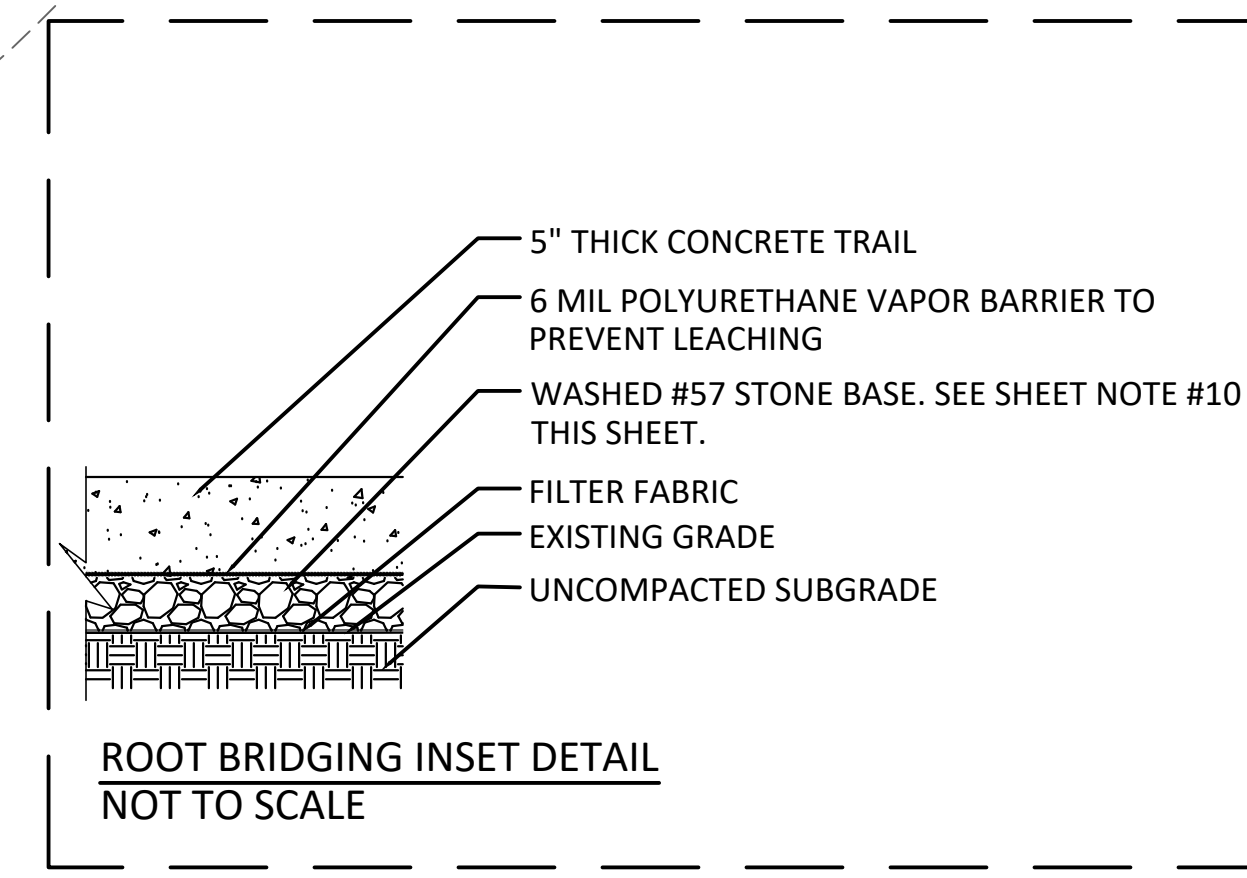
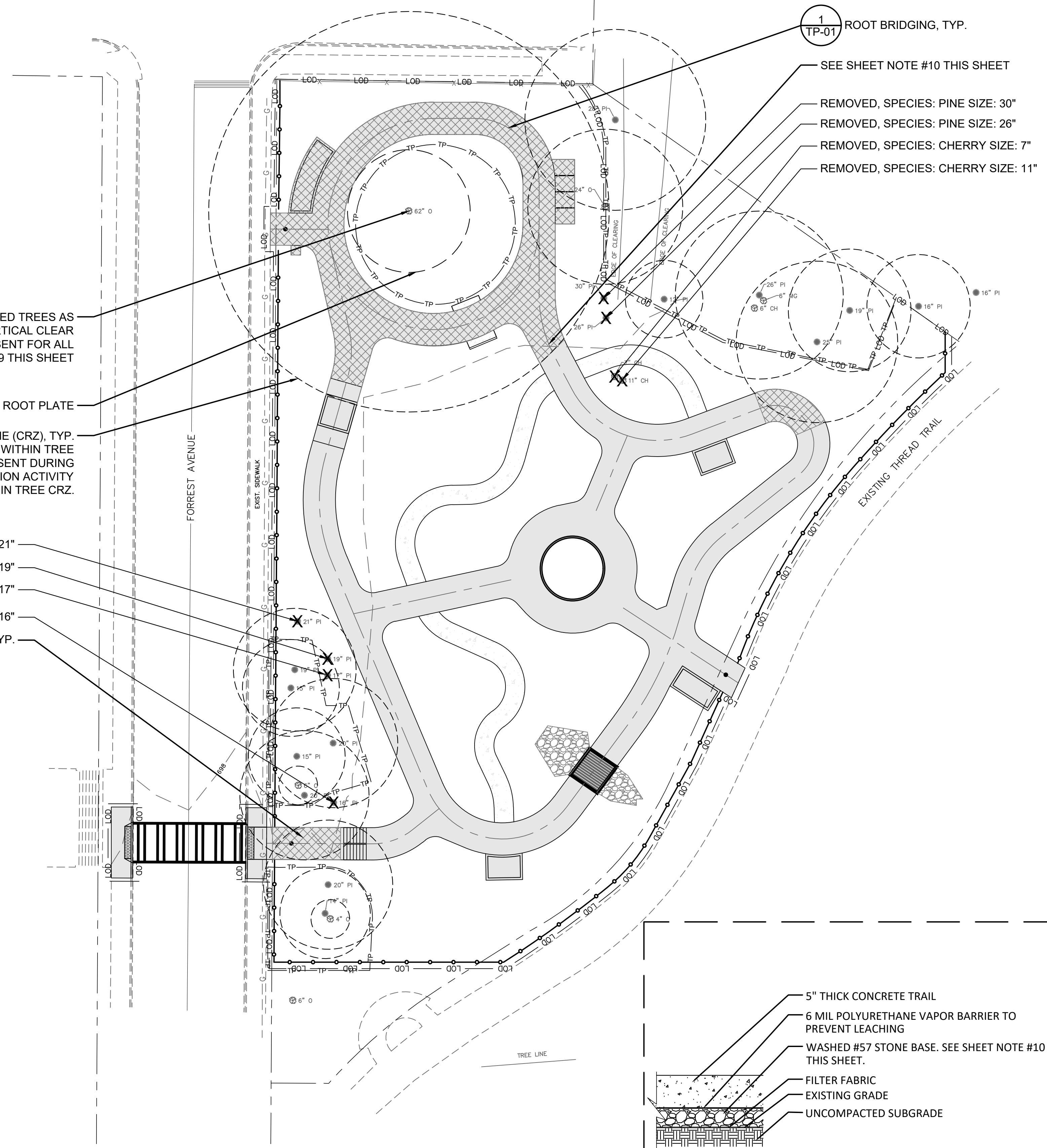


CONTRACTOR TO LIMB UP ALL SAVED TREES AS NEEDED TO MAINTAIN TRAIL VERTICAL CLEAR ZONE. CITY ARBORIST TO BE PRESENT FOR ALL TREE LIMBING. SEE SHEET NOTE #9 THIS SHEET

STRUCTURAL ROOT PLATE

CRITICAL ROOT ZONE (CRZ), TYP. NO HEAVY MACHINERY TO BE USED WITHIN TREE CRZ. CITY ARBORIST TO BE PRESENT DURING DEMOLITION AND CONSTRUCTION ACTIVITY OCCURRING WITHIN TREE CRZ.

- REMOVED, SPECIES: PINE SIZE: 21"
- REMOVED, SPECIES: PINE SIZE: 19"
- REMOVED, SPECIES: PINE SIZE: 17"
- REMOVED, SPECIES: PINE SIZE: 16"
- ROOT BRIDGING, TYP.



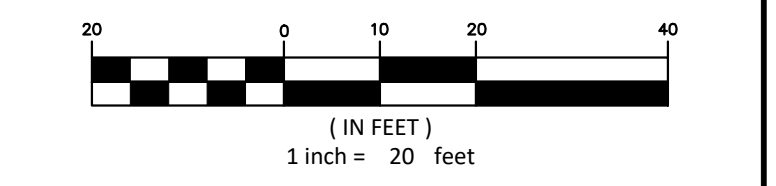
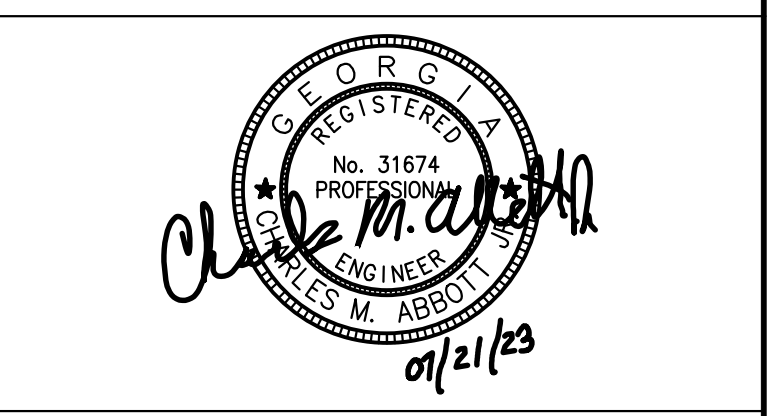
1 ROOT BRIDGING
 TP-01 SCALE: 1/4" = 1'-0"



DATE	DESCRIPTION
02/17/2023	50% DESIGN REVIEW
07/21/2023	100% ISSUE FOR PERMIT
08/16/2023	100% ISSUE FOR BID

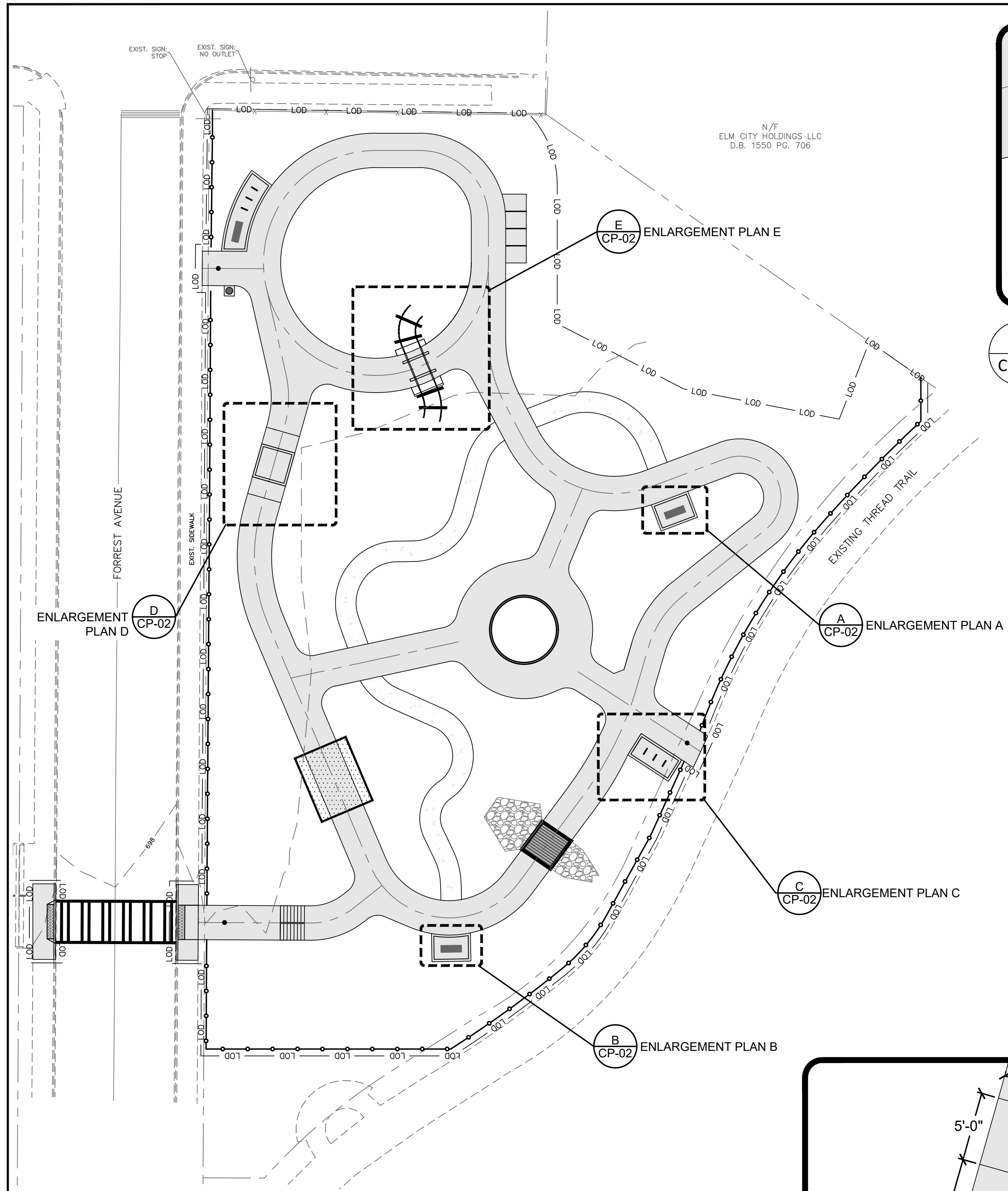
PROJECT #	2022 - 256
PROJECT MANAGER	AC

LaGRANGE BICYCLE PARK
 LaGRANGE, GA

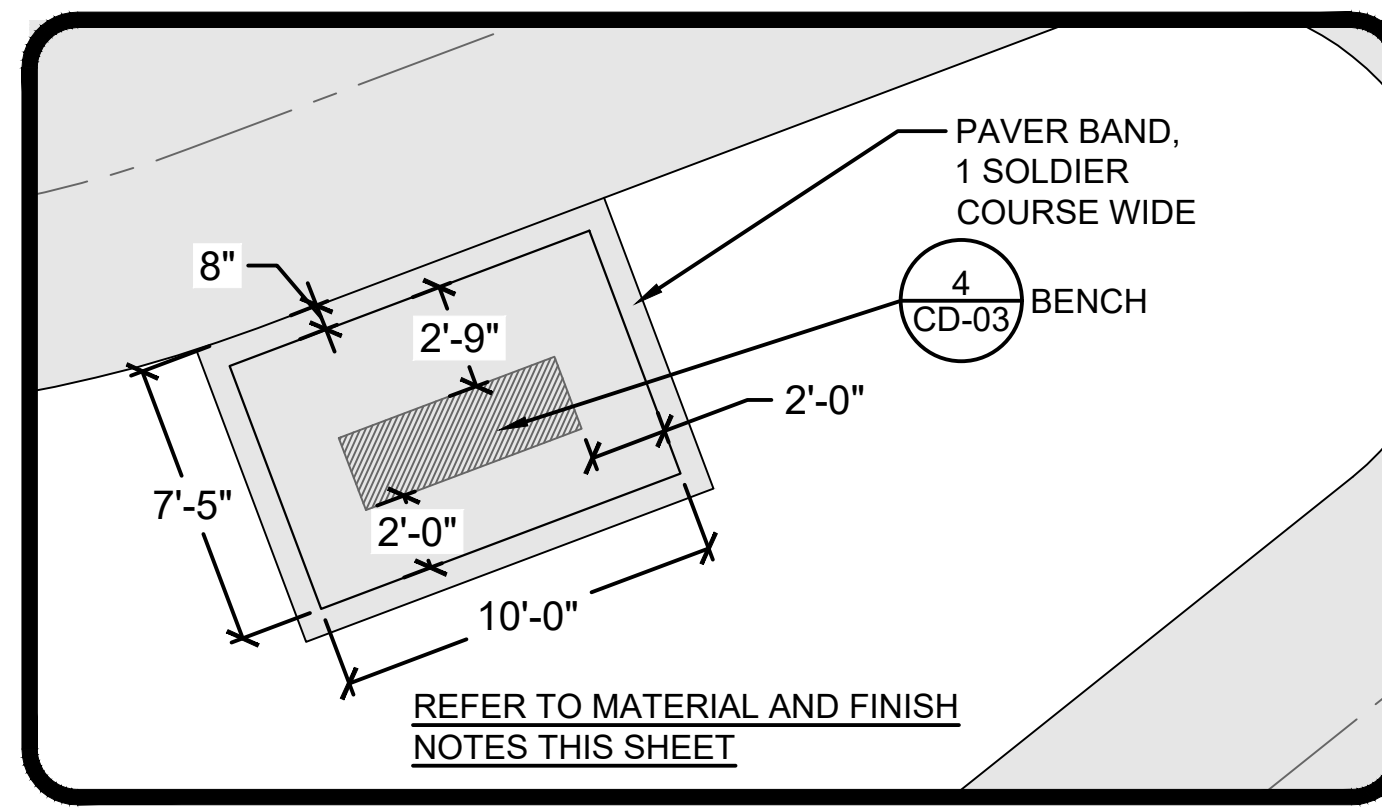


TREE PROTECTION PLAN

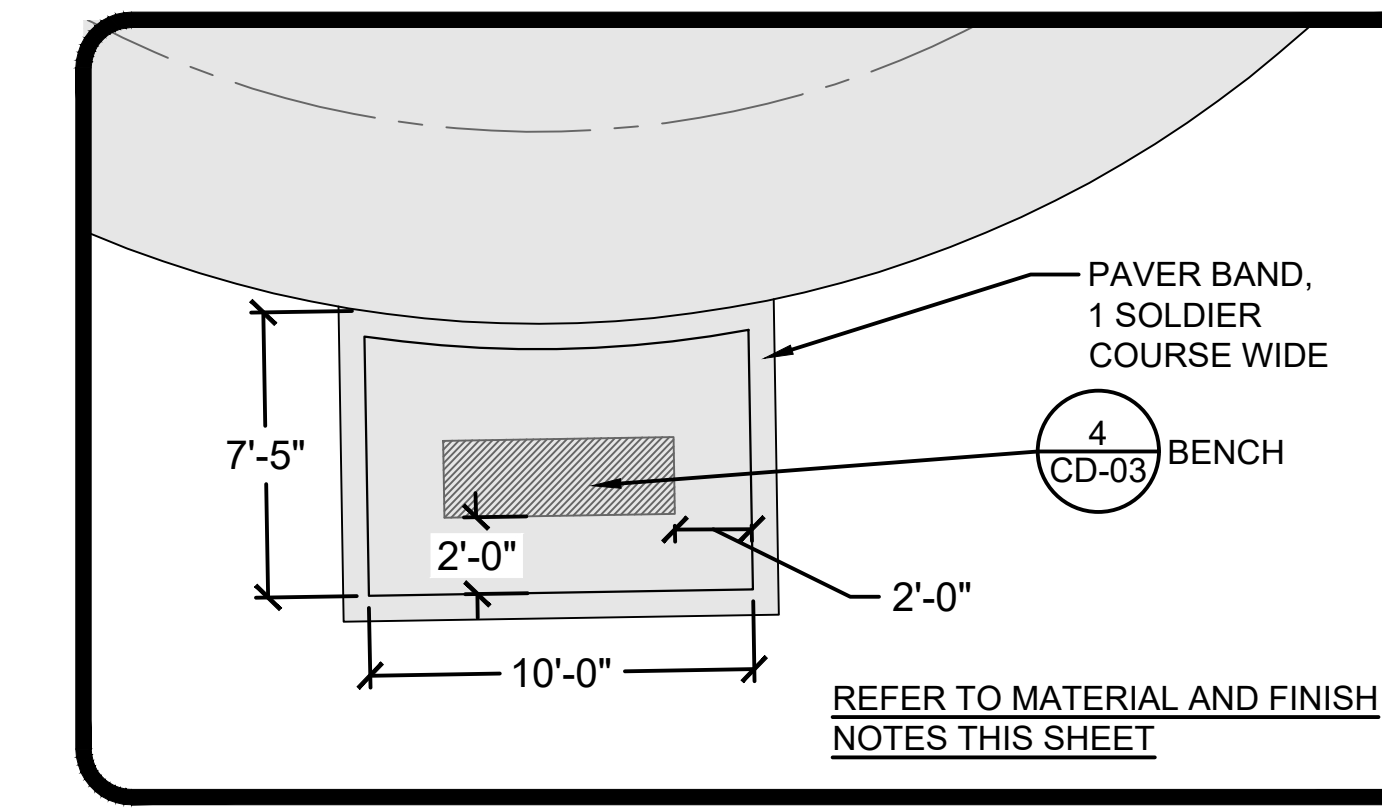
SCALE	1" = 20'-0"
DATE	JULY 21, 2023
SHEET #	TP-01



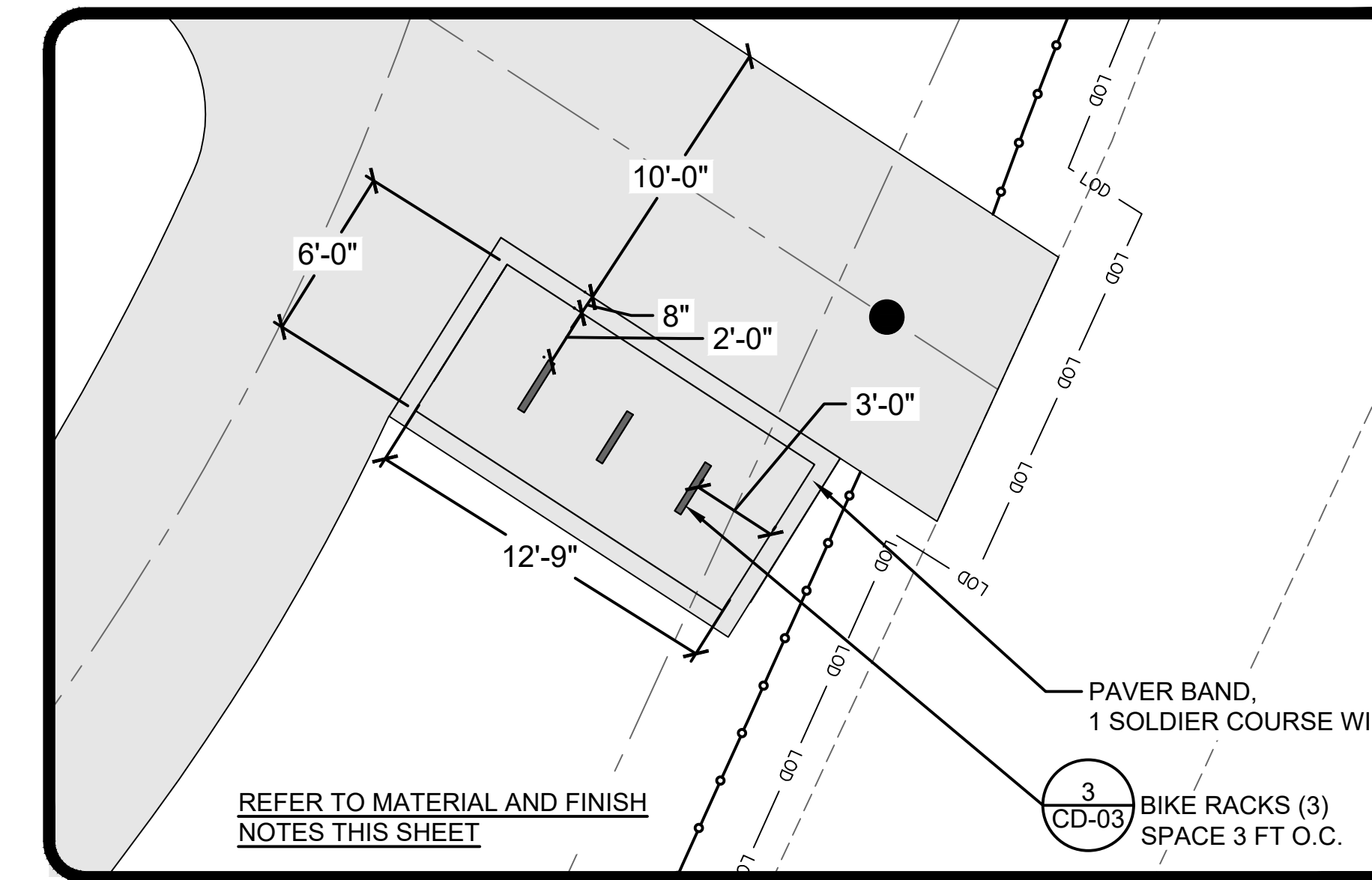
A BENCH PAD 'A' PLAN DETAIL
 CP-02 SCALE: 1" = 5'-0"



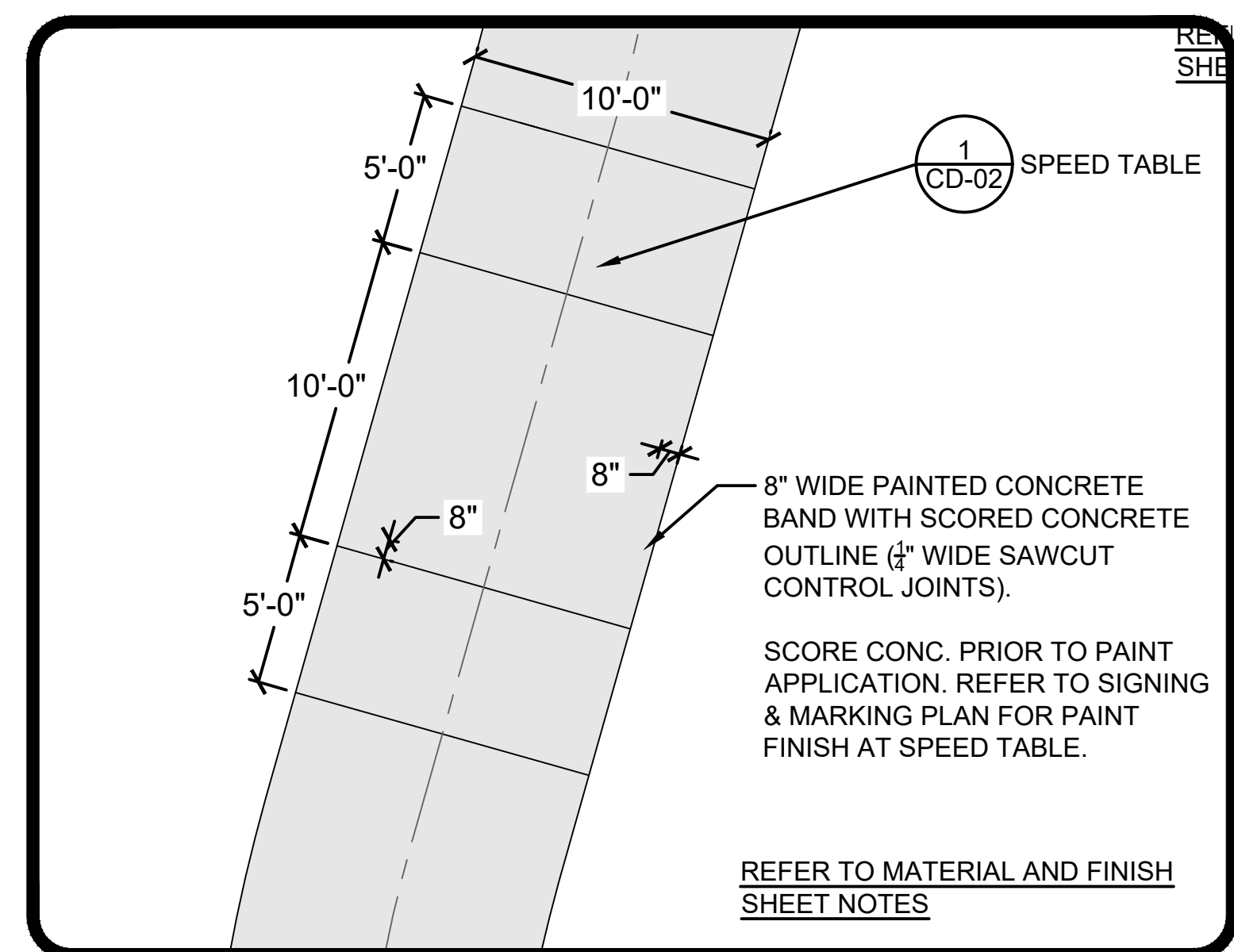
B BENCH PAD 'B' PLAN DETAIL
 CP-02 SCALE: 1" = 5'-0"



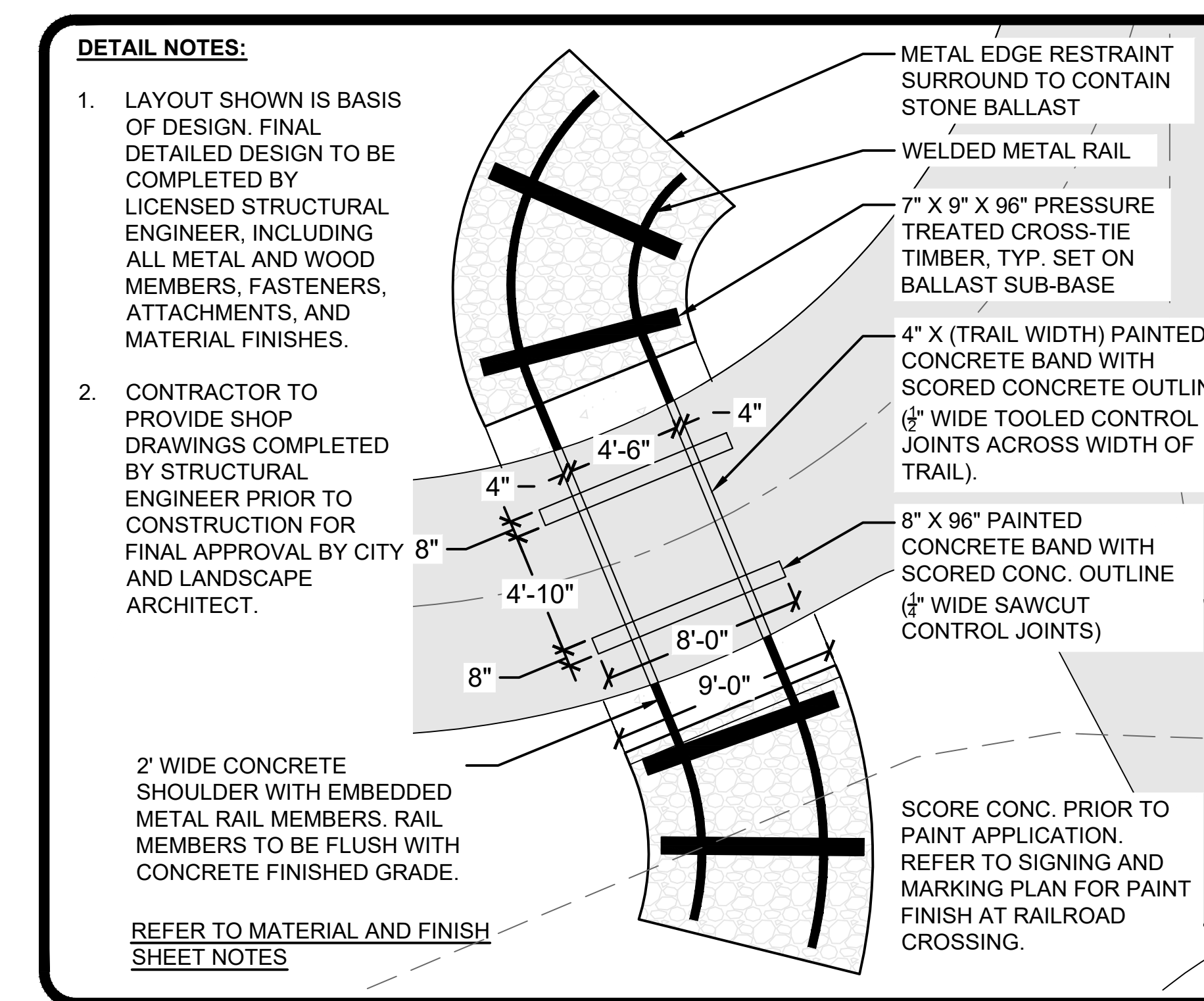
C BIKE RACK PAD 'C' PLAN DETAIL
 CP-02 SCALE: 1" = 5'-0"



D SPEED TABLE PLAN DETAIL
 CP-02 SCALE: 1" = 5'-0"



E RAILROAD X-ING PLAN DETAIL
 CP-02 SCALE: 1" = 5'-0"

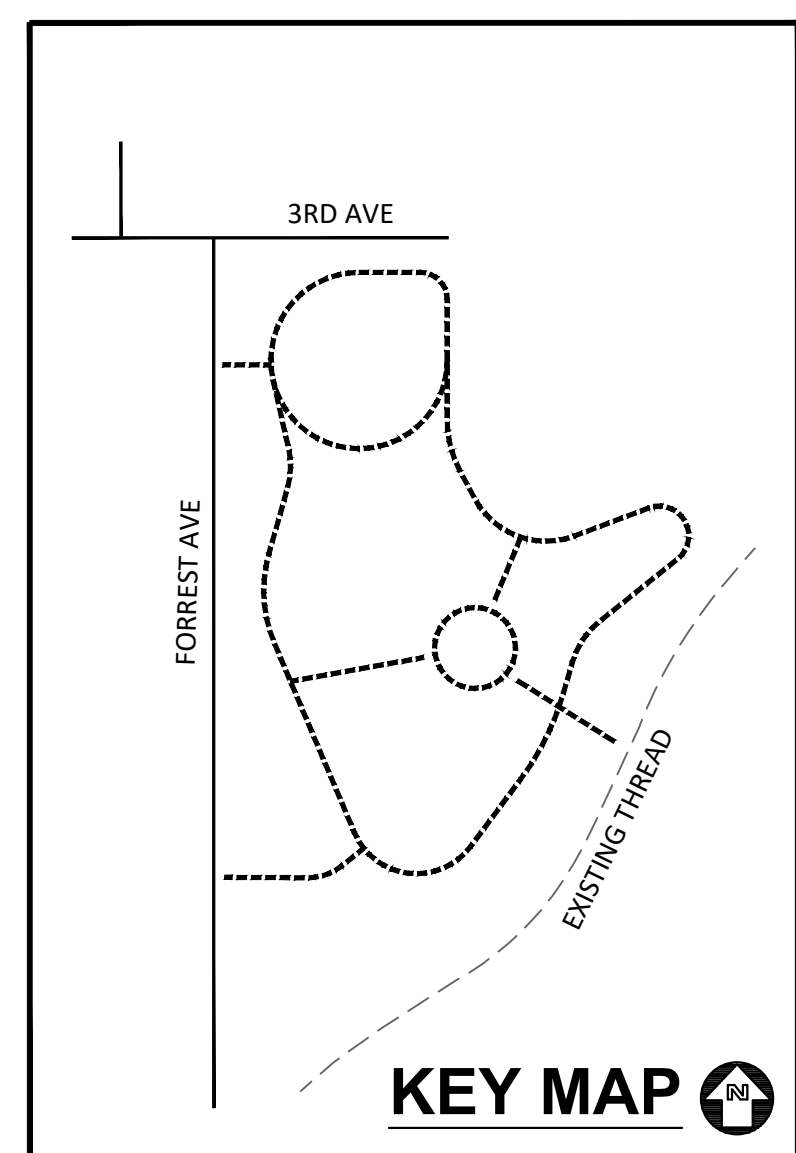


MATERIAL & FINISH NOTES:

- PAVER BASIS OF DESIGN: PINE HALL, COLOR: MIXED COLOR TO MATCH BRICK COLOR PATTERN ON BERTA WEATHERSBEE ELEM. SCHOOL, 2-1/4" THICK, 4" W X 8" L. CONTRACTOR TO PROVIDE PAVER SAMPLES TO CITY FOR FINAL COLOR APPROVAL PRIOR TO CONSTRUCTION.
- SCORED CONCRETE: 1/4-INCH CONTROL JOINT (UNLESS OTHERWISE NOTED), CUT DEPTH EQUAL TO 1/4 DEPTH OF SLAB.
- CONTRACTOR TO PERFORM A TEST PANEL TO CONFIRM SAW CUT DEPTH FOR FINAL CITY APPROVAL PRIOR TO CONSTRUCTION.

KAIZENCOLLABORATIVE
 2390 MAIN STREET | TUCKER, GEORGIA 30084 | 404.239.2521
CHARLES M. ABBOTT JR., P.E.
 DESIGN ENGINEER LEVEL II CERTIFICATION
 GSWCC # 000004168 EXPIRES: 04/28/2025
 CHUCK.ABBOTT@KAIZENCOLLABORATIVE.COM
 O: 404-239-2521

PATH FOUNDATION
 PO BOX 1432, ATLANTA, GA 30305
 24 HOUR CONTACT - PETE PELLEGRINI
 E: PETEVP@PATHFOUNDATION.ORG
 O: 404-875-7284 x 2 C: 404-277-5392

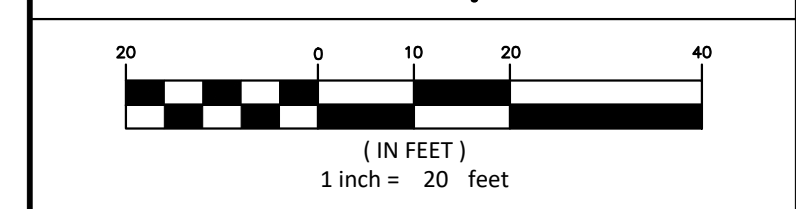


DATE	DESCRIPTION
02/17/2023	50% DESIGN REVIEW
07/21/2023	100% ISSUE FOR PERMIT
08/16/2023	100% ISSUE FOR BID

PROJECT # 2022 - 256
 PROJECT MANAGER AC

LaGRANGE BICYCLE PARK
LaGRANGE, GA

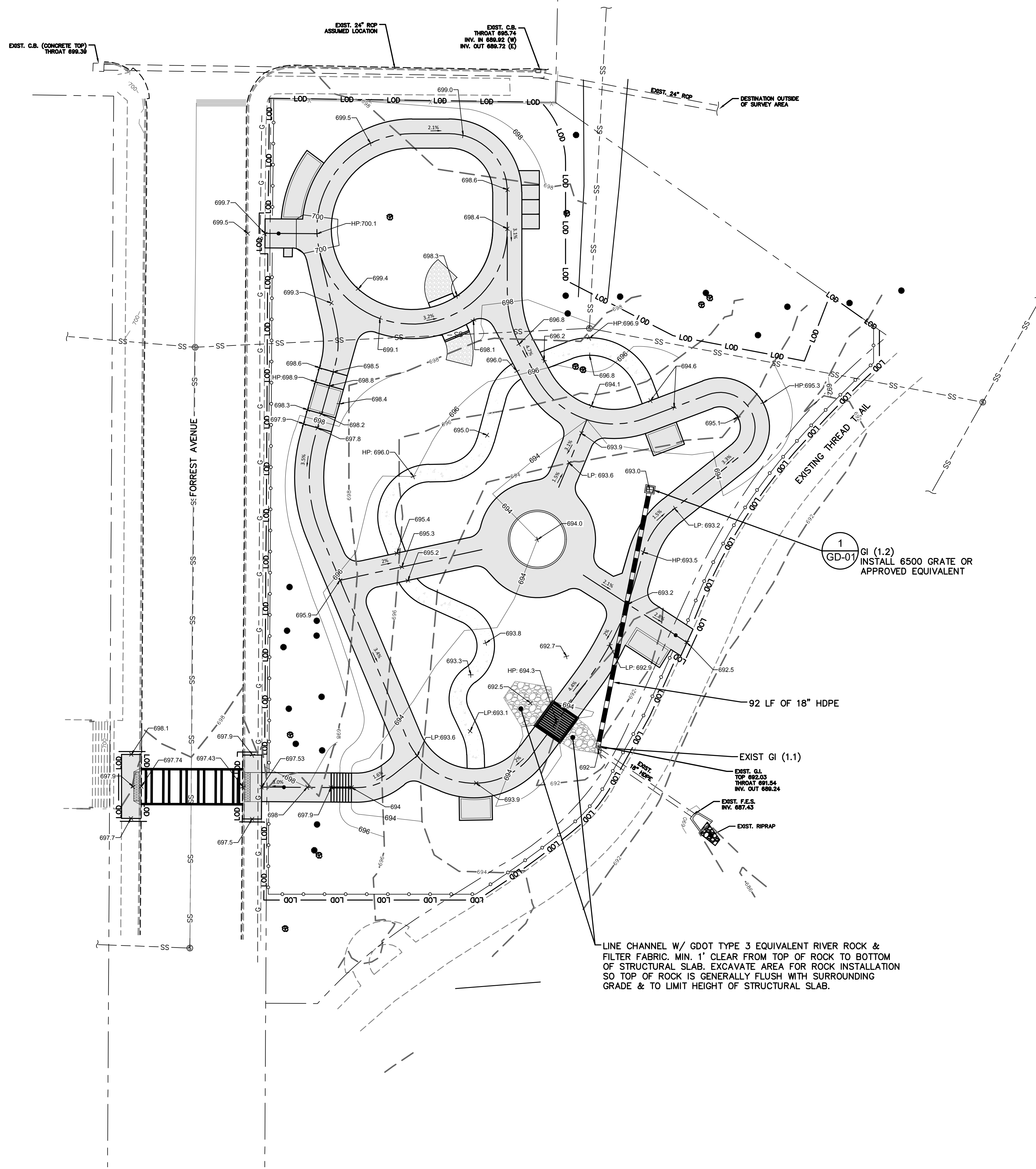
REGISTERED PROFESSIONAL ENGINEER
 No. 31674
 CHARLES M. ABBOTT JR.
 07/21/23



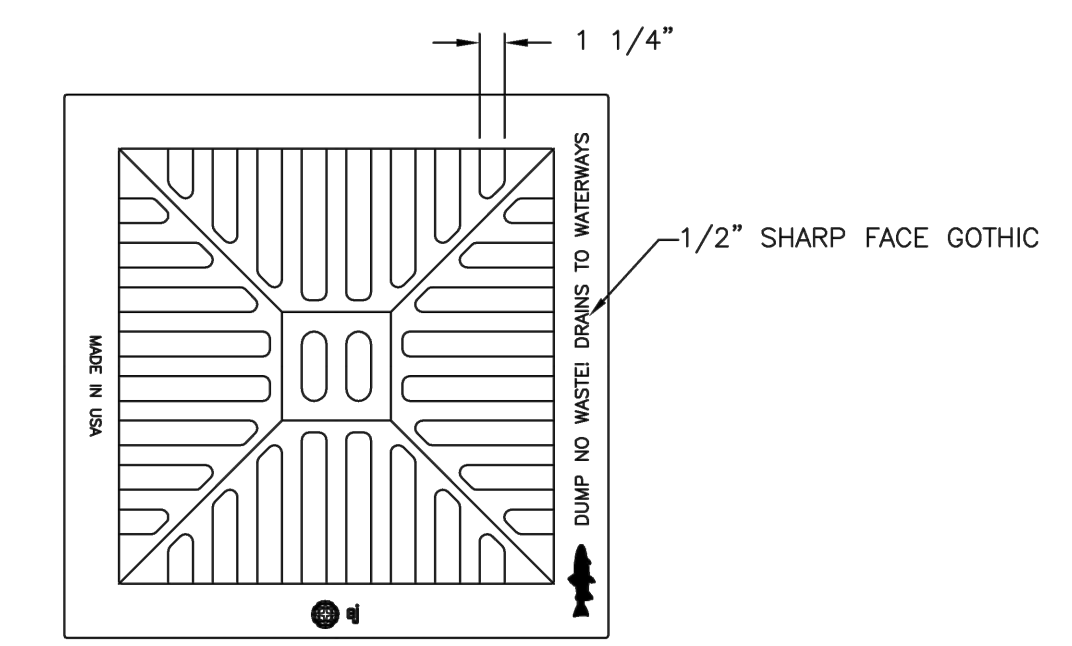
LAYOUT AND MATERIAL PLAN

SCALE 1" = 20'-0"
 DATE JULY 21, 2023
 SHEET # **CP-02**

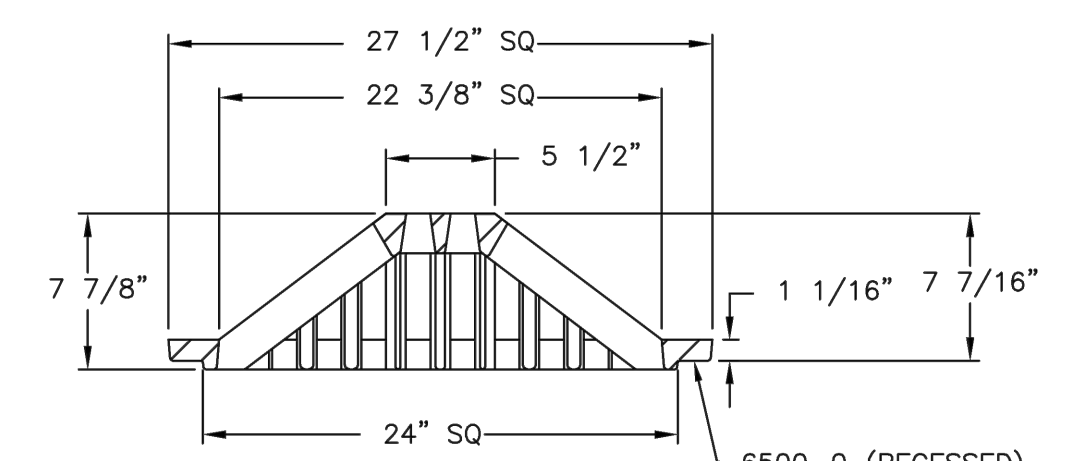
GEORGIA811
 www.Georgia811.com
 Know what's below. Call before you dig.



6500 Grate



PLAN VIEW



GRATE SECTION

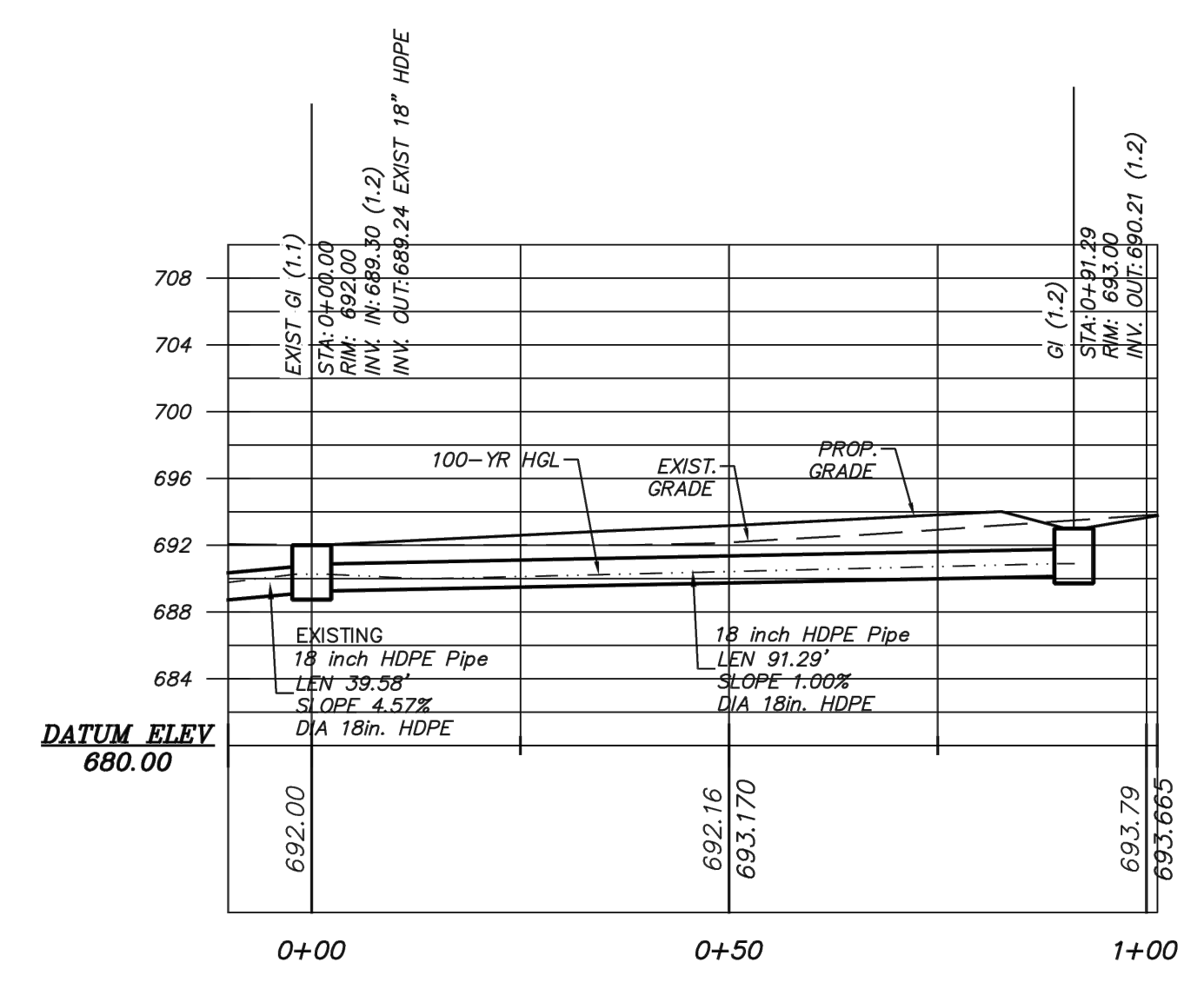
Product Number
00650044
Design Features
-Materials
Gray Iron (CL35B)
-Load Rating
Heavy Duty
-Open Area
279 Sq. Inches
-Coating
Dipped
-Designates Machined Surface

Certification
-ASTM A48
-Country of Origin: USA

Drawing Revision
10/24/2011 Designer: DEF
12/18/2019 Revised By: DAE

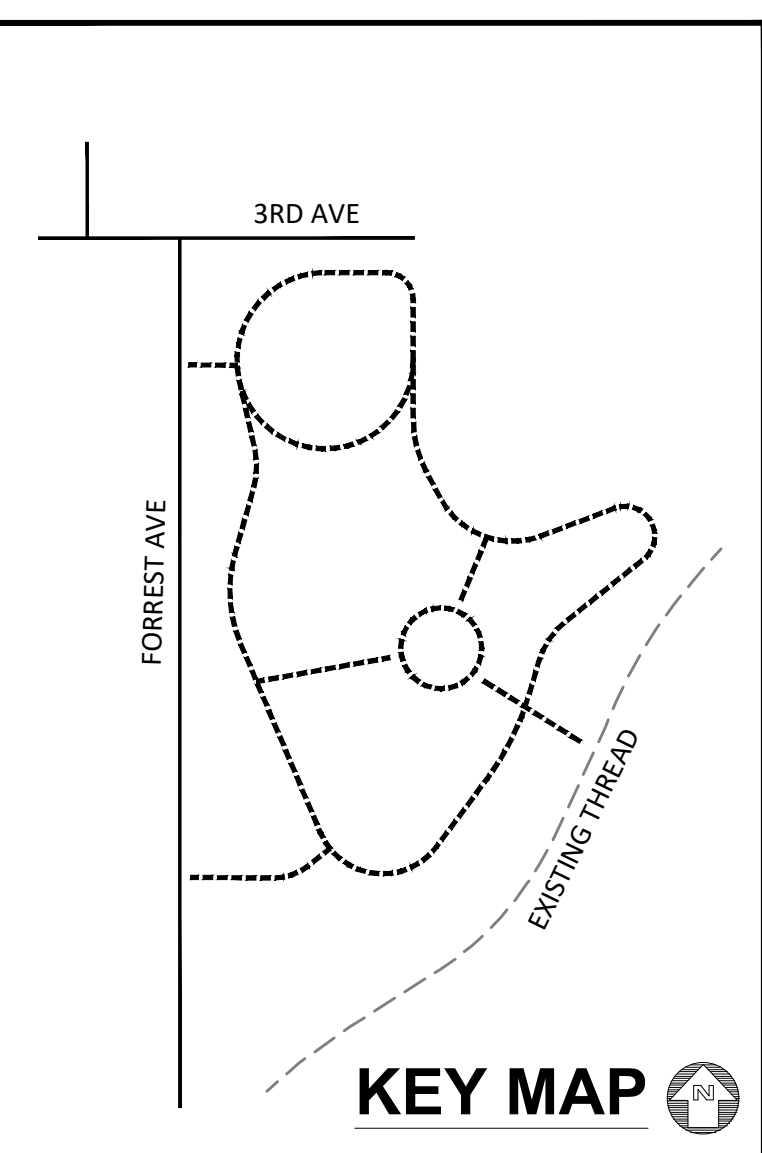
Disclaimer
Weights (lbs./sq) dimensions (inches/mm) and drawings provided for your guidance. We reserve the right to modify specifications without prior notice.
CONFIDENTIAL: This drawing is the property of E.J. GROUP, Inc. and embodies confidential information, registered marks, patents, trade secret information, and/or know-how that is the property of E.J. GROUP, Inc. All rights reserved.
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ejco.com

1 PYRAMID GRATE INLET DETAIL
GD-01 N.T.S.



STORM LINE 1
HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1" = 10'

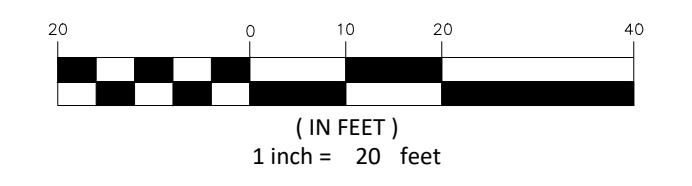
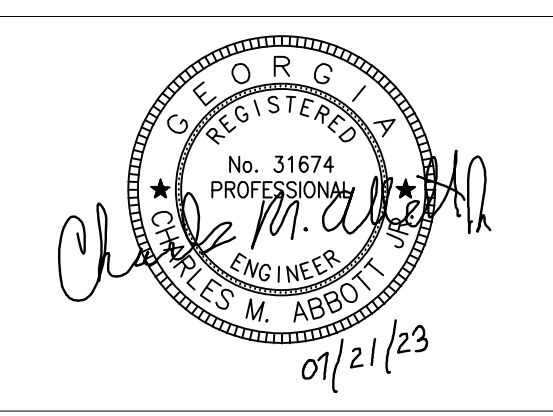
LINE CHANNEL W/ GDOT TYPE 3 EQUIVALENT RIVER ROCK & FILTER FABRIC. MIN. 1' CLEAR FROM TOP OF ROCK TO BOTTOM OF STRUCTURAL SLAB. EXCAVATE AREA FOR ROCK INSTALLATION SO TOP OF ROCK IS GENERALLY FLUSH WITH SURROUNDING GRADE & TO LIMIT HEIGHT OF STRUCTURAL SLAB.



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07/21/2023	100% ISSUE FOR PERMIT
08/16/2023	100% ISSUE FOR BID

PROJECT #	2022 - 256
PROJECT MANAGER	AC

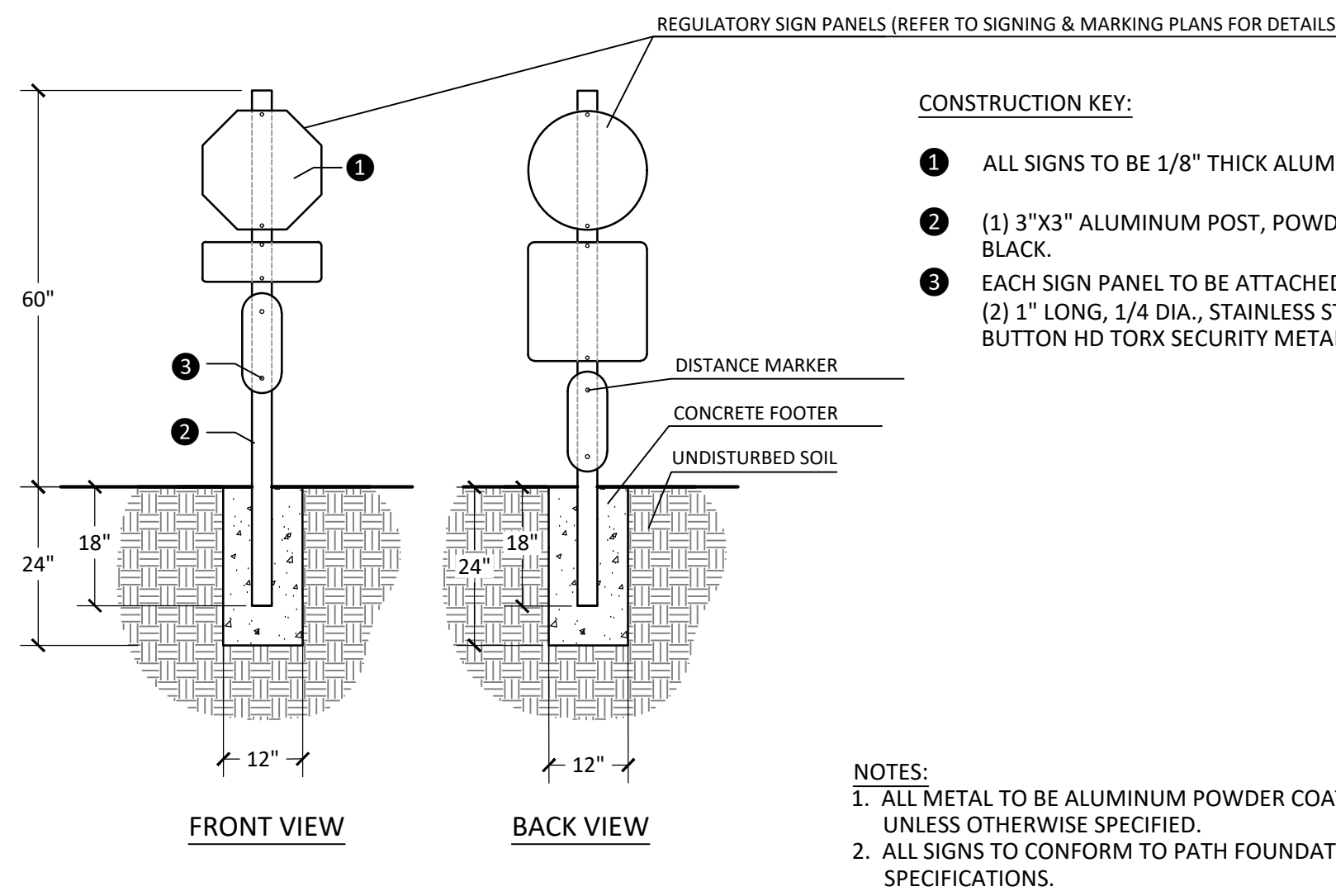
LaGRANGE BICYCLE PARK
LaGRANGE, GA



GRADING PLAN

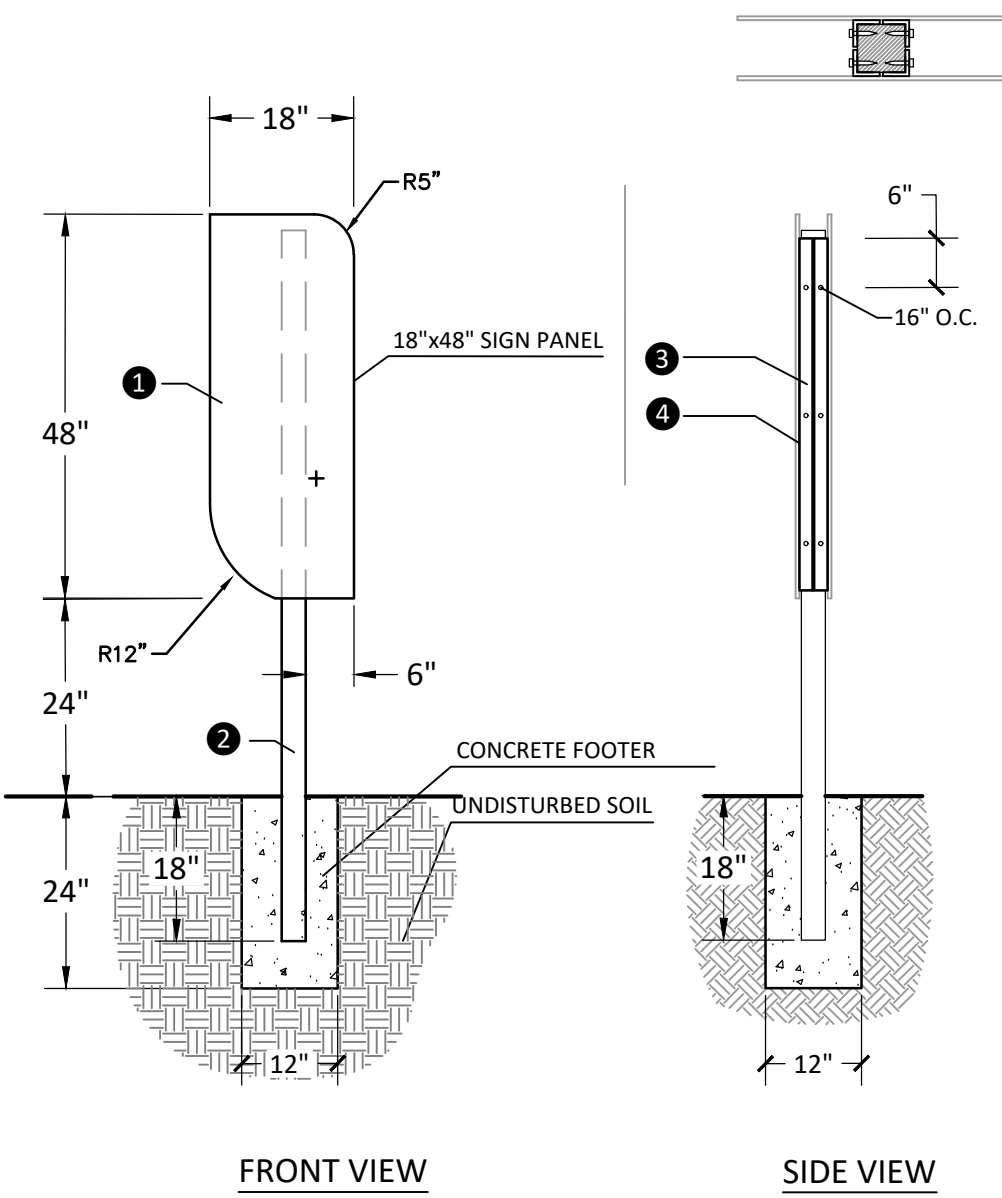
SCALE	1" = 20'-0"
DATE	JULY 21, 2023
SHEET #	GD-01





- CONSTRUCTION KEY:**
- 1 ALL SIGNS TO BE 1/8" THICK ALUMINUM PANEL.
 - 2 (1) 3"x3" ALUMINUM POST, POWDER COATED BLACK.
 - 3 EACH SIGN PANEL TO BE ATTACHED TO POST USING (2) 1" LONG, 1/4 DIA., STAINLESS STEEL #14A BUTTON HD TORX SECURITY METAL SCREW.

NOTES:
 1. ALL METAL TO BE ALUMINUM POWDER COATED BLACK UNLESS OTHERWISE SPECIFIED.
 2. ALL SIGNS TO CONFORM TO PATH FOUNDATION SPECIFICATIONS.

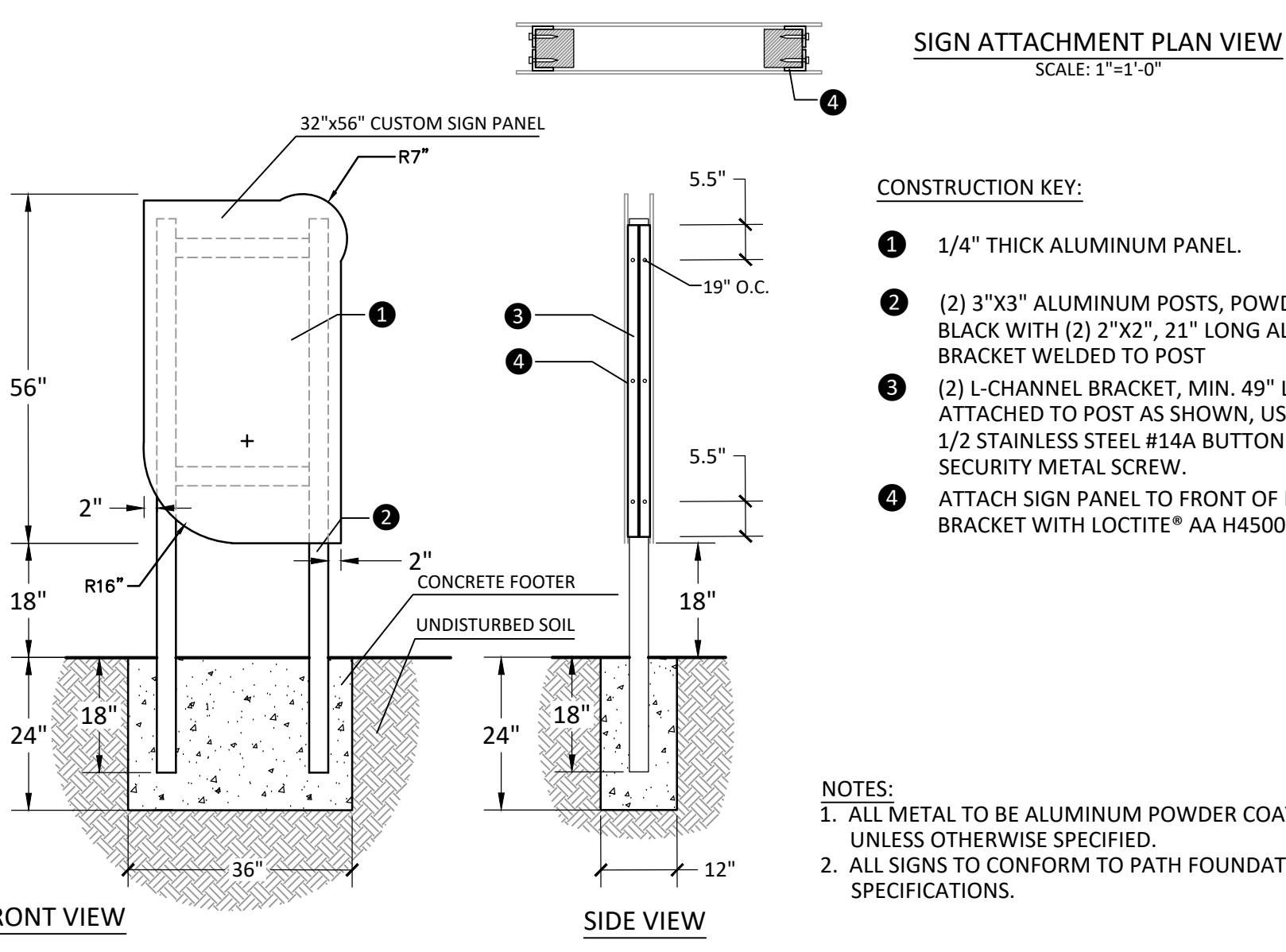


- SIGN ATTACHMENT PLAN VIEW**
SCALE: 1"=1'-0"
- CONSTRUCTION KEY:**
- 1 1/4" THICK ALUMINUM PANEL.
 - 2 (1) 3"x3" ALUMINUM POST, POWDER COATED BLACK.
 - 3 (2) L-CHANNEL BRACKET, MIN. 38" LONG, ATTACHED TO POST AS SHOWN, USING 1.5" LONG, 1/2 STAINLESS STEEL #14A BUTTON HD TORX SECURITY METAL SCREW.
 - 4 ATTACH SIGN PANEL TO FRONT OF L-CHANNEL BRACKET WITH LOCTITE® AA H4500 ADHESIVE.

NOTES:
 1. ALL METAL TO BE ALUMINUM POWDER COATED BLACK UNLESS OTHERWISE SPECIFIED.
 2. ALL SIGNS TO CONFORM TO PATH FOUNDATION SPECIFICATIONS.

1 REGULATORY SIGN
SM-00 SCALE: 1/2" = 1'-0"

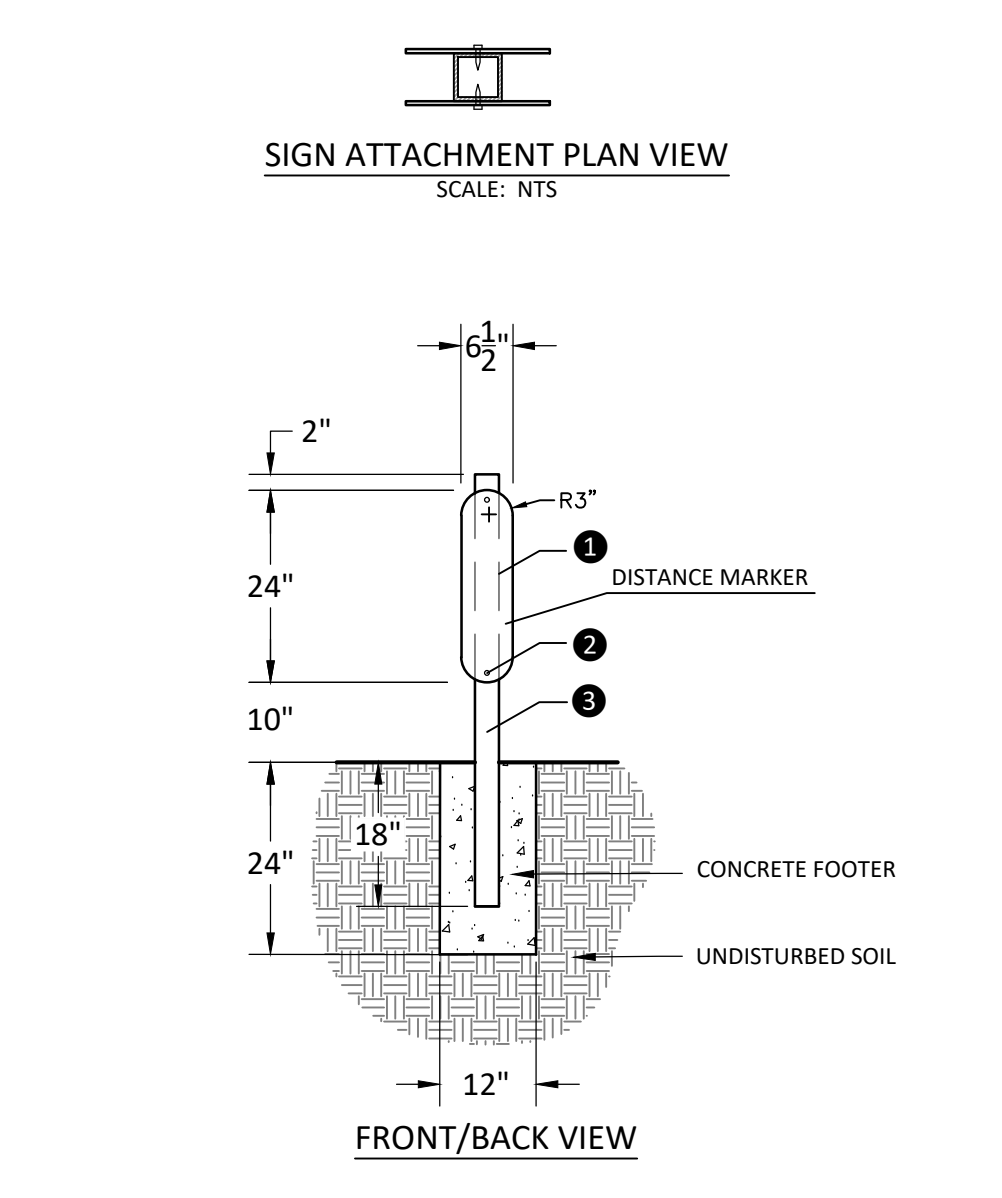
2 DIRECTIONAL SIGN
SM-00 SCALE: 1/2" = 1'-0"



- SIGN ATTACHMENT PLAN VIEW**
SCALE: 1"=1'-0"
- CONSTRUCTION KEY:**
- 1 1/4" THICK ALUMINUM PANEL.
 - 2 (2) 3"x3" ALUMINUM POSTS, POWDER COATED BLACK WITH (2) 2"x2", 21" LONG ALUMINUM BRACKET WELDED TO POST
 - 3 (2) L-CHANNEL BRACKET, MIN. 49" LONG, ATTACHED TO POST AS SHOWN, USING 2" LONG, 1/2 STAINLESS STEEL #14A BUTTON HD TORX SECURITY METAL SCREW.
 - 4 ATTACH SIGN PANEL TO FRONT OF L-CHANNEL BRACKET WITH LOCTITE® AA H4500 ADHESIVE.

NOTES:
 1. ALL METAL TO BE ALUMINUM POWDER COATED BLACK UNLESS OTHERWISE SPECIFIED.
 2. ALL SIGNS TO CONFORM TO PATH FOUNDATION SPECIFICATIONS.

3 KIOSK SIGN
SM-00 SCALE: 1/2" = 1'-0"



- SIGN ATTACHMENT PLAN VIEW**
SCALE: NTS
- CONSTRUCTION KEY:**
- 1 1/8" THICK ALUMINUM PANEL.
 - 2 (2) DISTANCE MARKER SIGN PANELS ATTACHED TO POST USING (2) 1" LONG, 1/4 DIA., STAINLESS STEEL #14A BUTTON HD TORX SECURITY METAL SCREW.
 - 3 (1) 3"x3" ALUMINUM POST, POWDER COATED BLACK.

NOTES:
 1. ALL METAL TO BE ALUMINUM POWDER COATED BLACK UNLESS OTHERWISE SPECIFIED.
 2. ALL SIGNS TO CONFORM TO PATH FOUNDATION SPECIFICATIONS.
 3. SIGN PANEL DIMENSIONS SHOWN FOR STAND-ALONE DISTANCE MARKER ONLY. REFER TO SIGNING AND MARKING PLANS FOR DETAILS

4 DISTANCE MARKER
SM-00 SCALE: 1/2" = 1'-0"

THIS SPACE INTENTIONALLY LEFT BLANK

PATH FOUNDATION SIGN SPECIFICATIONS

- ALUMINUM SIGN BLANKS SHOULD MEET REQUIREMENTS OF GEORGIA DOT SECTION 912--SIGN BLANKS AND PANELS. ALL SIGNS TO BE MADE WITH AT LEAST 0.125-INCH THICK ALUMINUM USING METAL THAT MEETS THE REQUIREMENTS OF ASTM B 209 (B 209M), ALLOY 6061-T-6 OR 5052-H38.
- SIGNS LOCATED WITHIN RIGHT-OF-WAY SHALL USE RETROREFLECTIVE VINYL WITH AT LEAST 10-YEAR LIFE EXPECTANCY AND FOLLOW THE FEDERAL HIGHWAY ADMINISTRATION (FHA) MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) SPECIFICATIONS. PLEASE SEE THE FOLLOWING TABLE FOR RECOMMENDED PRODUCTS FOR RETROREFLECTIVE VINYL SIGNS WITHIN THE RIGHT-OF-WAY:

RETRO REFLECTIVE VINYL PRODUCT NAME	LIFE EXPECTANCY
3M™ High Intensity Reflective Sheeting	10YR
ORALITE® 5800 High Intensity Grade Reflective Sheeting	10YR
OTHER PRODUCTS MUST BE APPROVED BY PATH PROJECT MANAGEMENT BEFORE USE	AT LEAST 10YR

ALL REFLECTIVE SIGNS MUST INCLUDE ANTI-GRAFFITI LAMINATE OF AT LEAST 10-YEAR LIFE EXPECTANCY. PLEASE SEE THE FOLLOWING TABLE FOR RECOMMENDED PRODUCTS FOR ANTI-GRAFFITI LAMINATE:

ANTI-GRAFFITI FILMS: PRODUCT NAME	LIFE EXPECTANCY
3M™ Protective Overlay Film Series 1160	10YR
OTHER PRODUCTS MUST BE APPROVED BY PATH PROJECT MANAGEMENT BEFORE USE	AT LEAST 10YR

- ALL SIGNS MUST HAVE AT LEAST 10-YEAR LIFE EXPECTANCY, INCLUDING ANY CUSTOM TEXT AND GRAPHICS ON SIGNS. IF SIGN INCLUDES CUSTOM TEXT AND GRAPHICS ON ONLY ONE FACE, THEN THE BACK PANEL MUST BE BLACK WITH AT LEAST 10-YEAR LIFE EXPECTANCY. PLEASE SEE THE FOLLOWING TABLE FOR RECOMMENDED PRODUCTS FOR CUSTOM TEXT AND GRAPHICS:

CUSTOM TEXT AND GRAPHICS: PRODUCT NAME	LIFE EXPECTANCY
Direct Print to Aluminum with Grip Gard BC System with satin, anti-graffiti clear-coat	10YR
OTHER PRODUCTS MUST BE APPROVED BY PATH PROJECT MANAGEMENT BEFORE USE	AT LEAST 10YR

- ALL SIGNS MUST BE PRINTED WITH NAME BRAND INKS FROM THE PRINTING EQUIPMENT MANUFACTURER FOR THE PRINTER USED TO CREATE THE SIGN.
- ON STANDARD SIGNS, THE BLACK BORDER IS INSET 3/8" FROM EACH EDGE. THE THICKNESS OF THE BLACK BORDER IS ALSO 1/4", OR 18 POINT. SIGNS AT OR LARGER THAN 24" X 36" MAY COME FROM THE ARCHITECTURAL FIRM WITH LARGER BORDERS. THESE BORDERS MUST BE CONSISTENT ON ALL FOUR EDGES AND MATCH STANDARD DIE CUT CURVES ON THE CORNERS.
- PATH GREEN IS 85 - 20 - 69 - 4 IN CMYK VALUES. YELLOW ON PATH SIGNS IS 0 - 15 - 100 - 0. OTHER COLORS WILL BE DETERMINED FROM THE VECTOR FILES IN THE SIGN MATRIX.

SIGN MANUFACTURERS:

- SIGN MANUFACTURER CONTACT TO BE APPROVED BY THE CITY.

KAIZENCOLLABORATIVE
 2390 MAIN STREET | TUCKER, GEORGIA 30084 | 404.239.2521
CHARLES M. ABBOTT JR., P.E.
 DESIGN ENGINEER LEVEL II CERTIFICATION
 GSWCC # 000004168 EXPIRES: 04/28/2025
 CHUCK.ABBOTT@KAIZENCOLLABORATIVE.COM
 O: 404-239-2521

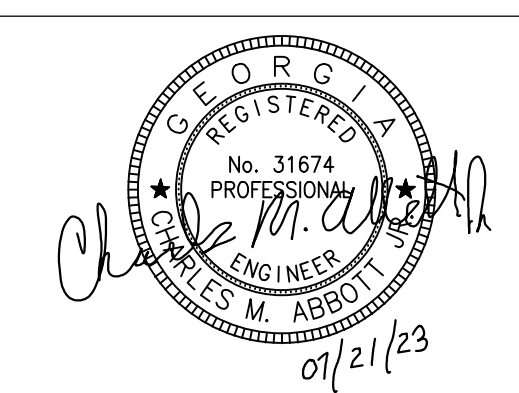
PATH FOUNDATION
 PO BOX 1432, ATLANTA, GA 30305
 24 HOUR CONTACT - PETE PELLEGRINI
 E: PETEVP@PATHFOUNDATION.ORG
 O: 404-875-7284 x 2 C: 404-277-5392

DATE	DESCRIPTION
02/17/2023	50% DESIGN REVIEW
07/21/2023	100% ISSUE FOR PERMIT
08/16/2023	100% ISSUE FOR BID

PROJECT #	2022 - 256
PROJECT MANAGER	AC

LaGRANGE BICYCLE PARK

LaGRANGE, GA

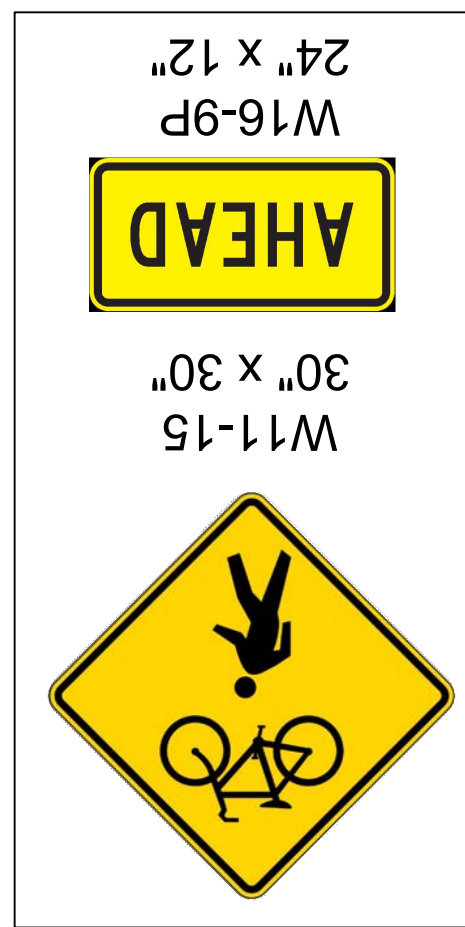


SIGNING AND MARKING DETAILS

SCALE	AS SHOWN
DATE	JULY 21, 2023
SHEET #	SM-00

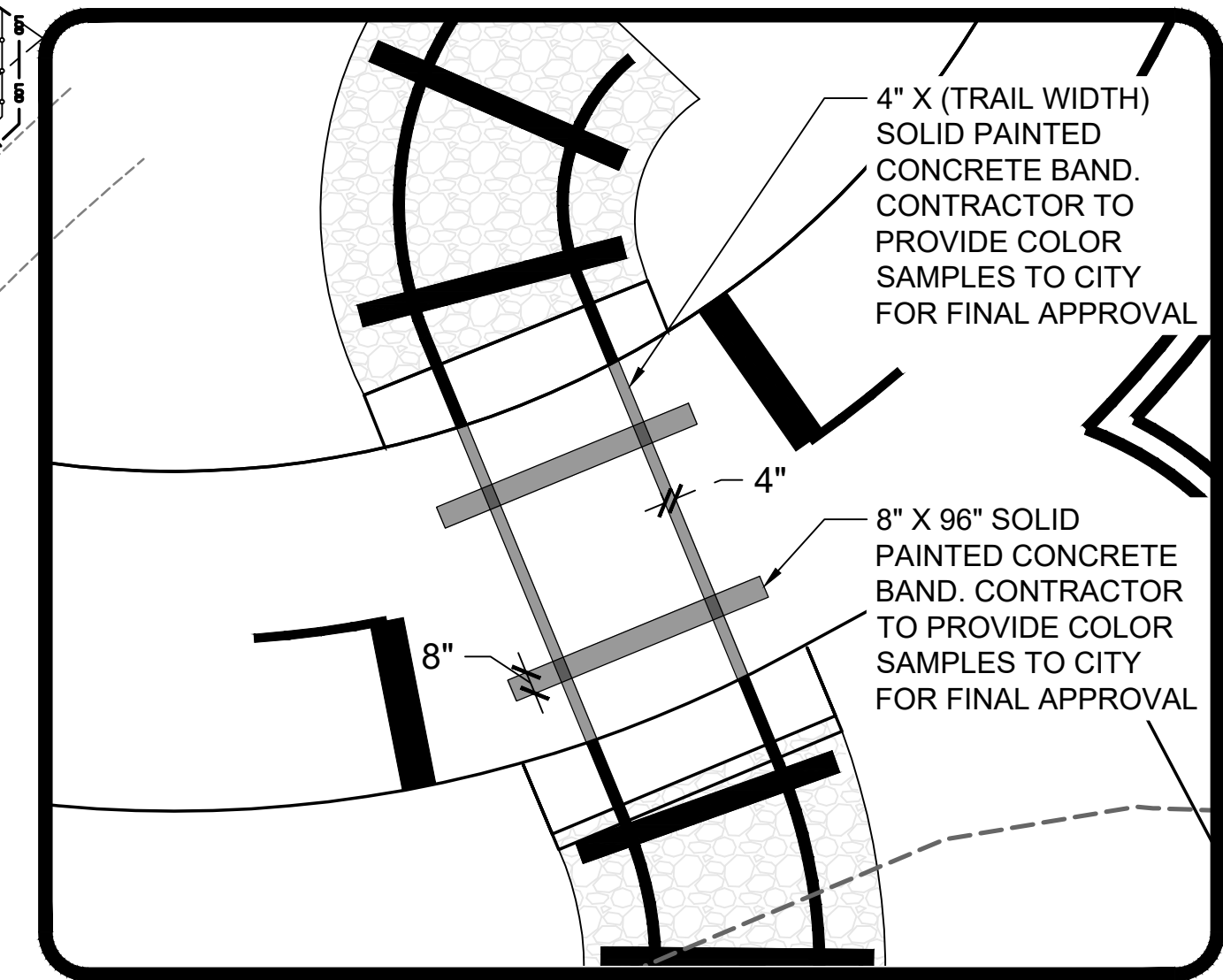
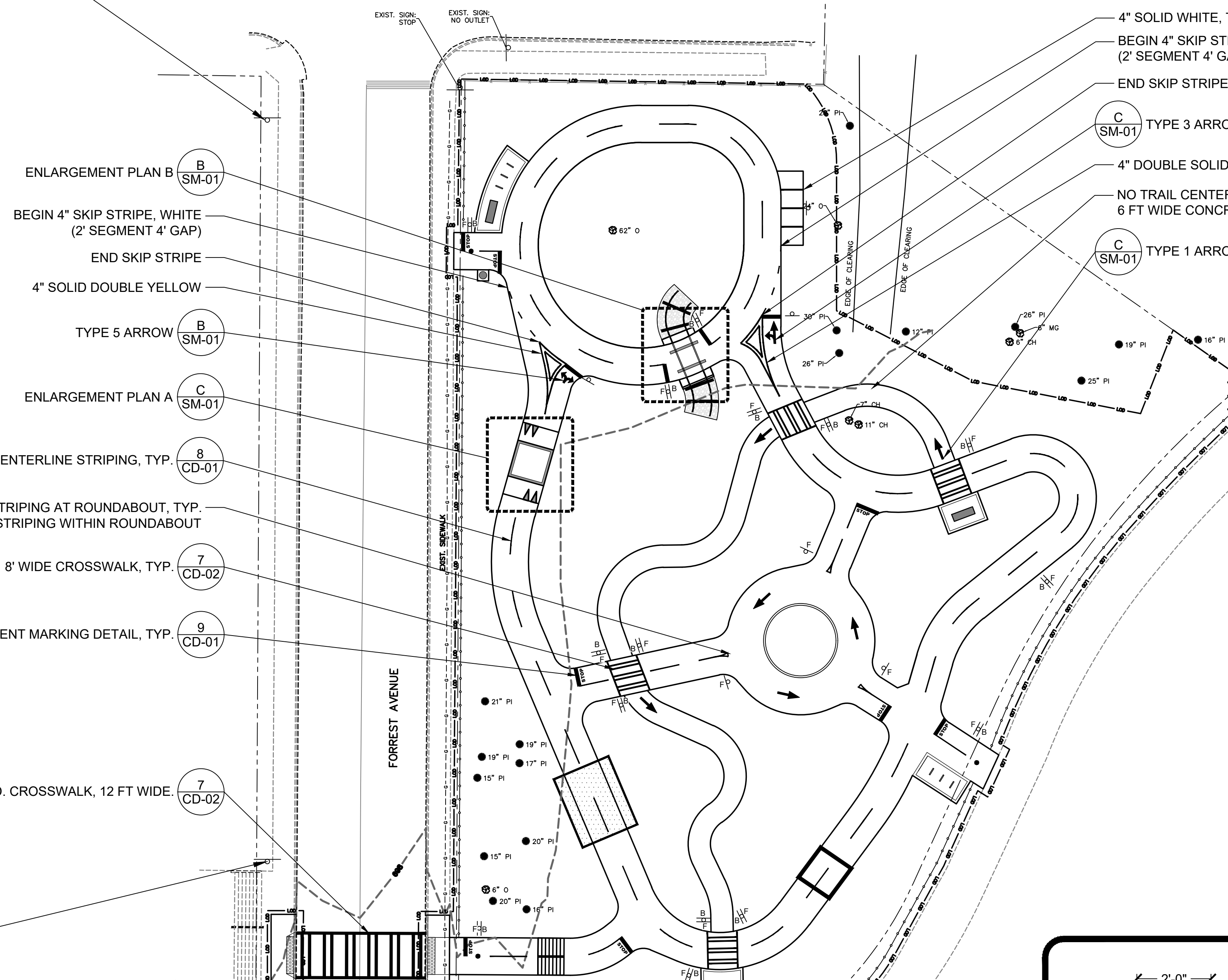


MUTCD SIGNS, PLACE 200 LF IN ADVANCE OF CROSSING

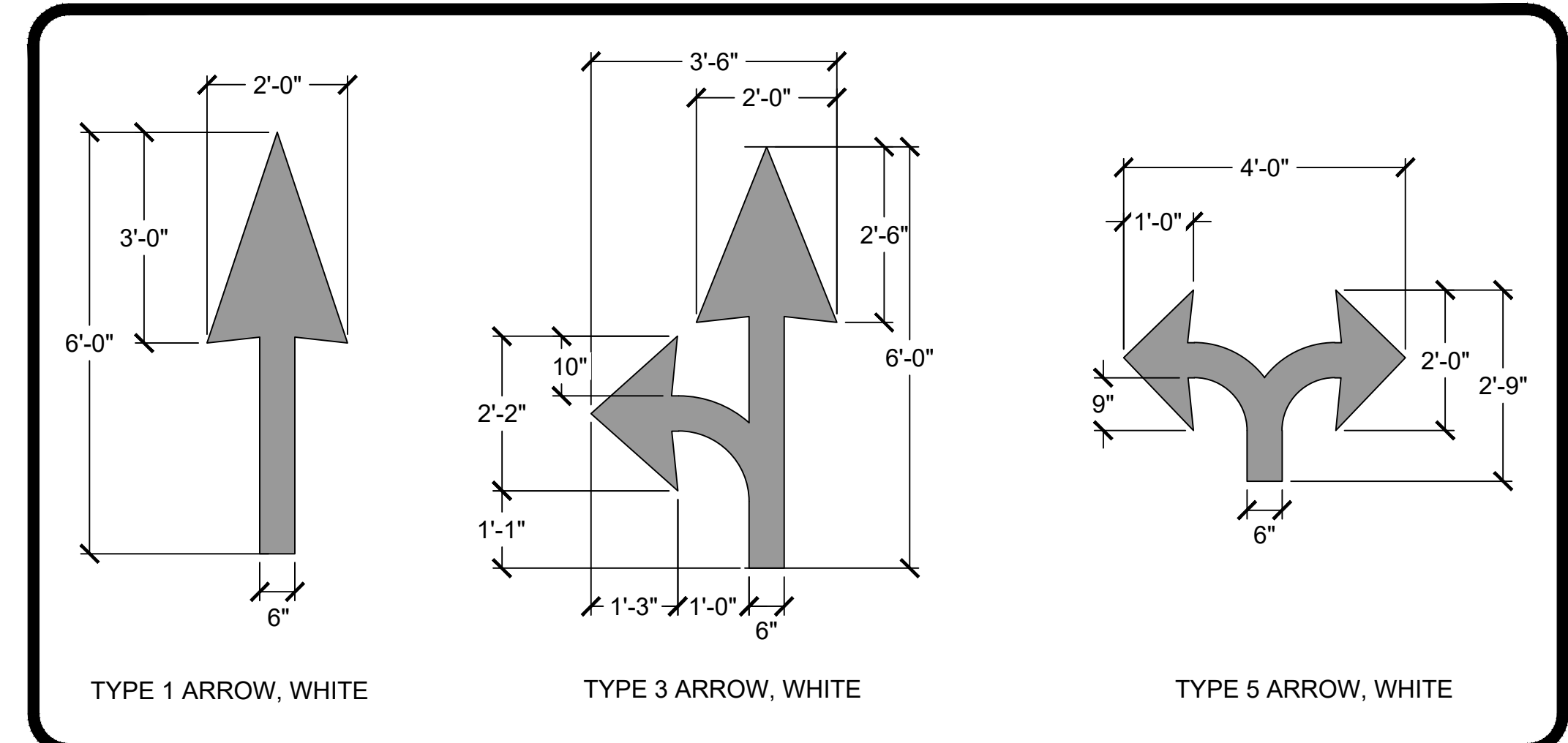


MUTCD SIGNS

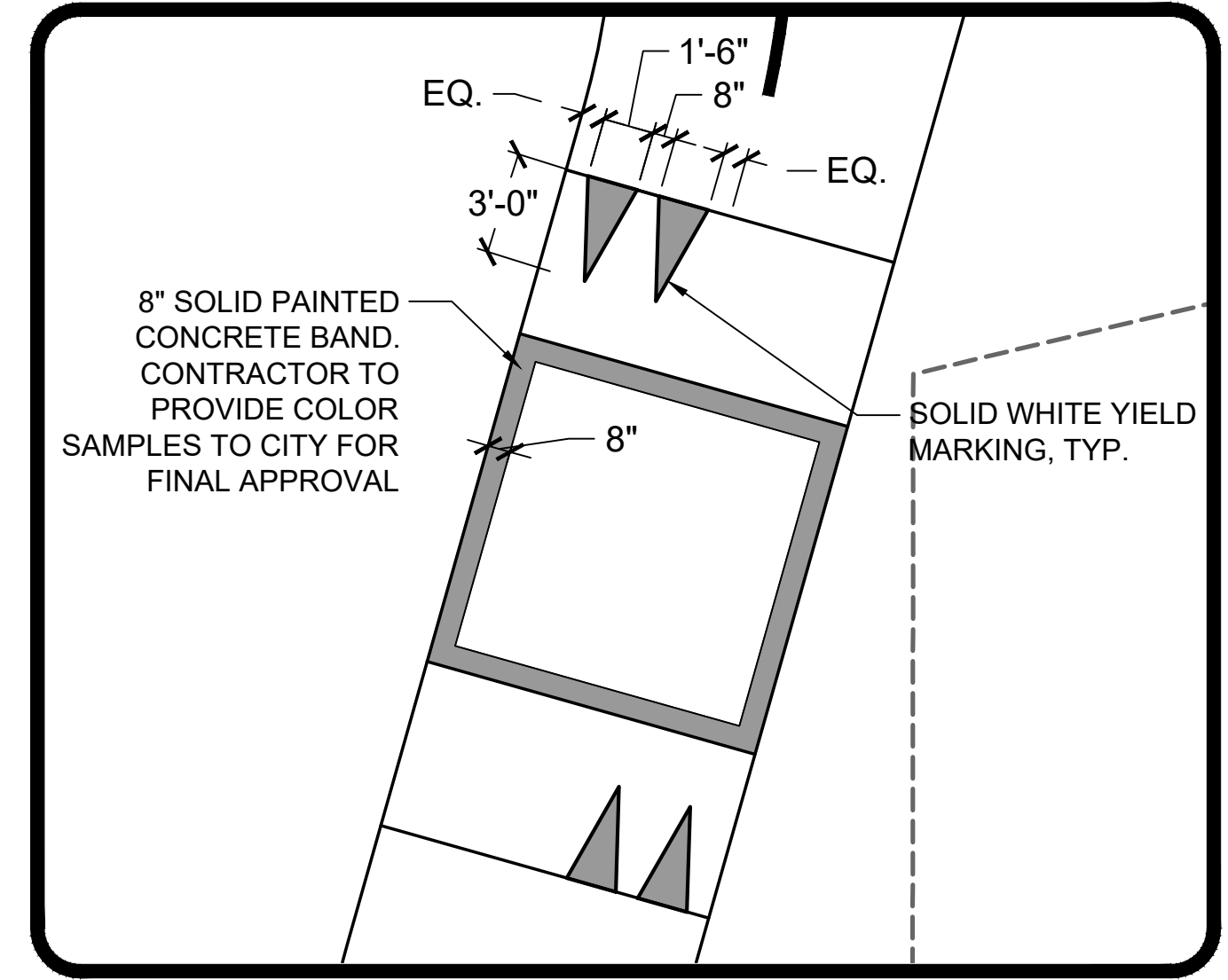
SHEET NOTES:
 1. MUTCD SIGN PLACEMENTS ARE APPROXIMATE AND MAY BE ADJUSTED TO MEET FIELD CONDITIONS WHERE NECESSARY, BUT SHALL BE WITHIN THE LIMITATIONS SET FORTH IN THE MUTCD CURRENT EDITION.
 2. ALL MUTCD SIGNS TO BE SET ON NEW POST PER GDOT STD. DETAIL T-3A
 3. ALL NEW ROAD STRIPING AND GDOT STD. CROSSWALK STRIPING TO BE THERMOPLASTIC ON ASPHALT



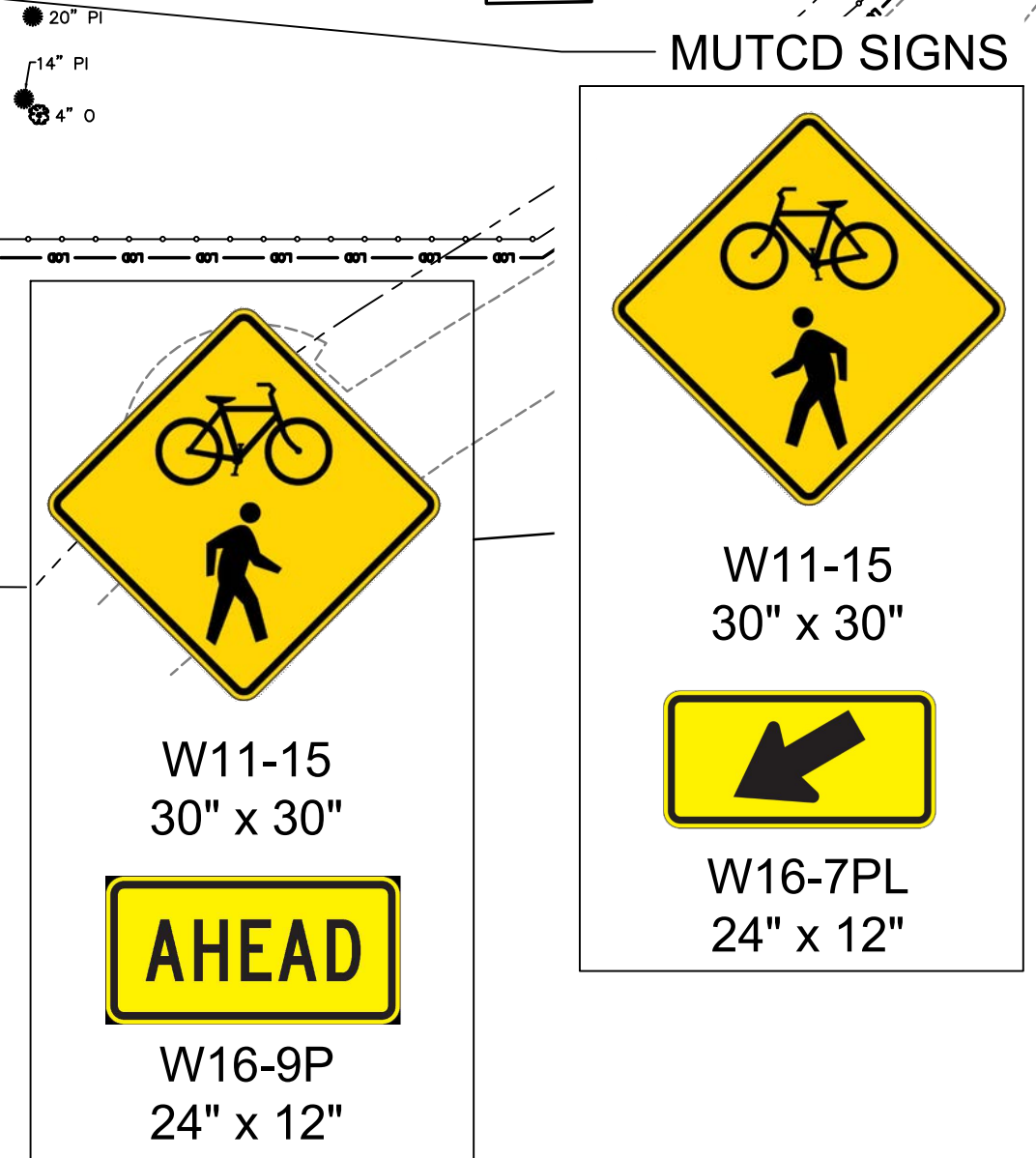
B RAILROAD X-ING ENLARGEMENT
 SM-01 SCALE: 1" = 5'-0"



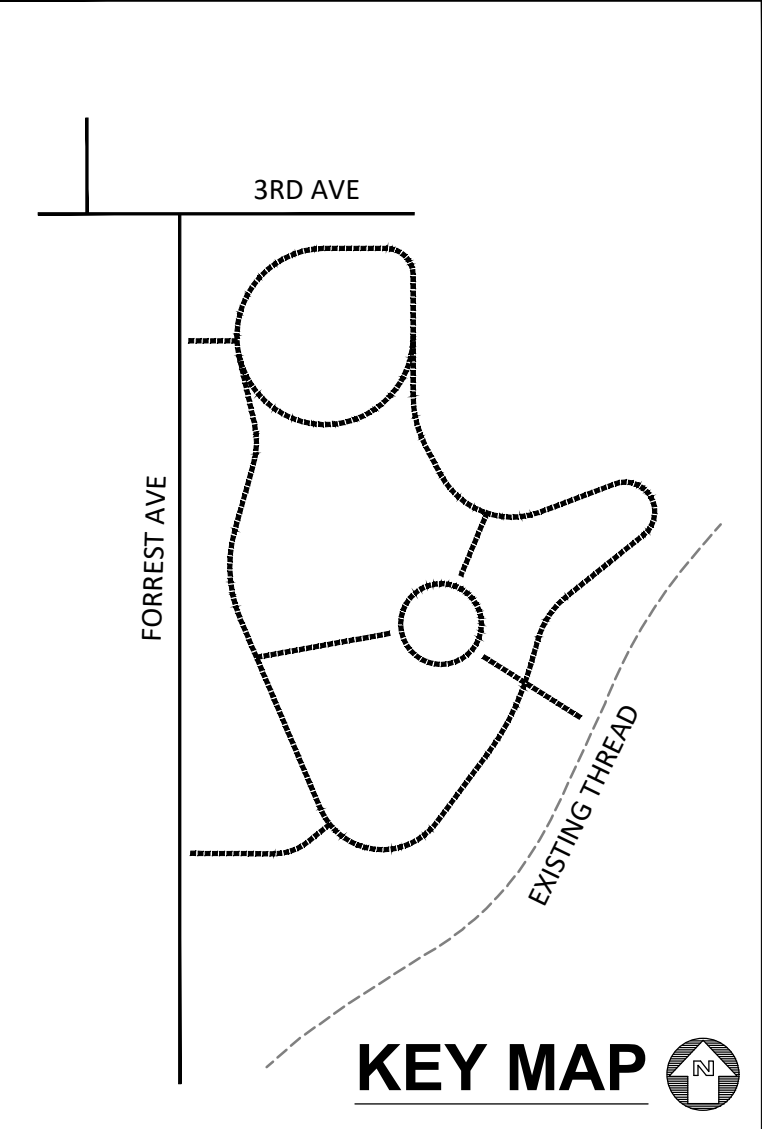
C PAVEMENT MARKING ARROW DETAIL
 SM-01 SCALE: 1/2" = 1'-0"



A SPEED TABLE ENLARGEMENT
 SM-01 SCALE: 1" = 5'-0"



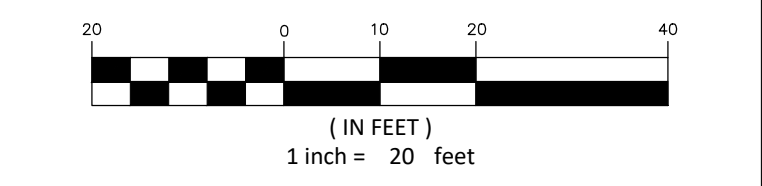
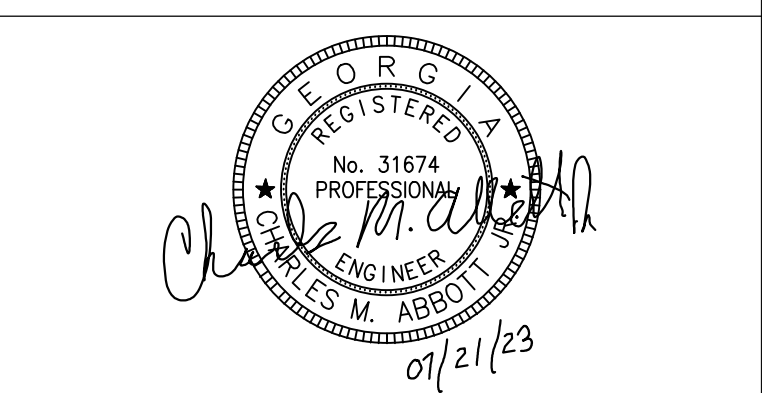
MUTCD SIGNS, PLACE 200 LF IN ADVANCE OF CROSSING



DATE	DESCRIPTION
02/17/2023	50% DESIGN REVIEW
07/21/2023	100% ISSUE FOR PERMIT
08/16/2023	100% ISSUE FOR BID

PROJECT #	2022 - 256
PROJECT MANAGER	AC

LaGRANGE BICYCLE PARK
LaGRANGE, GA



SIGNING AND MARKING PLAN

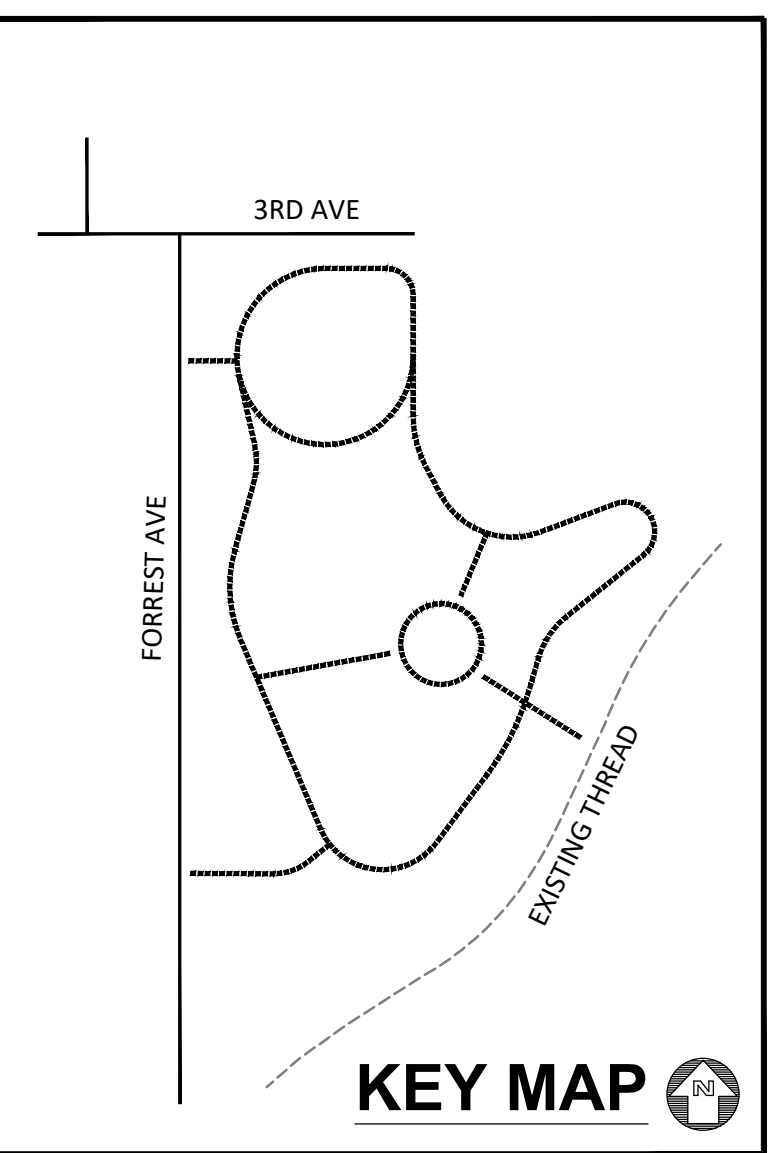
SCALE	1" = 20'-0"
DATE	JULY 21, 2023

SHEET #	SM-01
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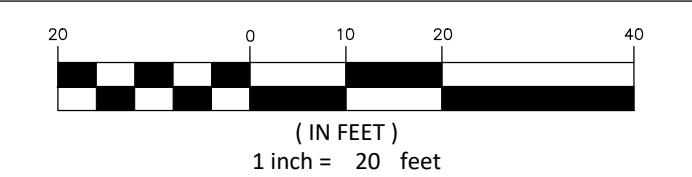
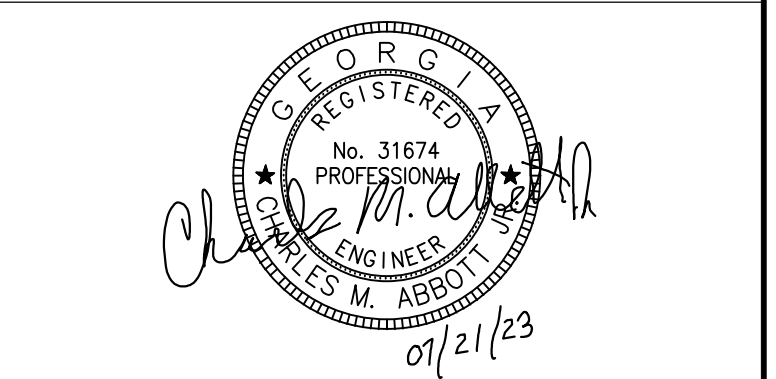
PATH FOUNDATION
 PO BOX 1432, ATLANTA, GA 30305
 24 HOUR CONTACT - PETE PELLEGRINI
 E: PETEVP@PATHFOUNDATION.ORG
 O: 404-875-7284 x 2 C: 404-277-5392



DATE	DESCRIPTION
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07/21/2023	100% ISSUE FOR PERMIT
08/16/2023	100% ISSUE FOR BID

PROJECT #	2022 - 256
PROJECT MANAGER	AC

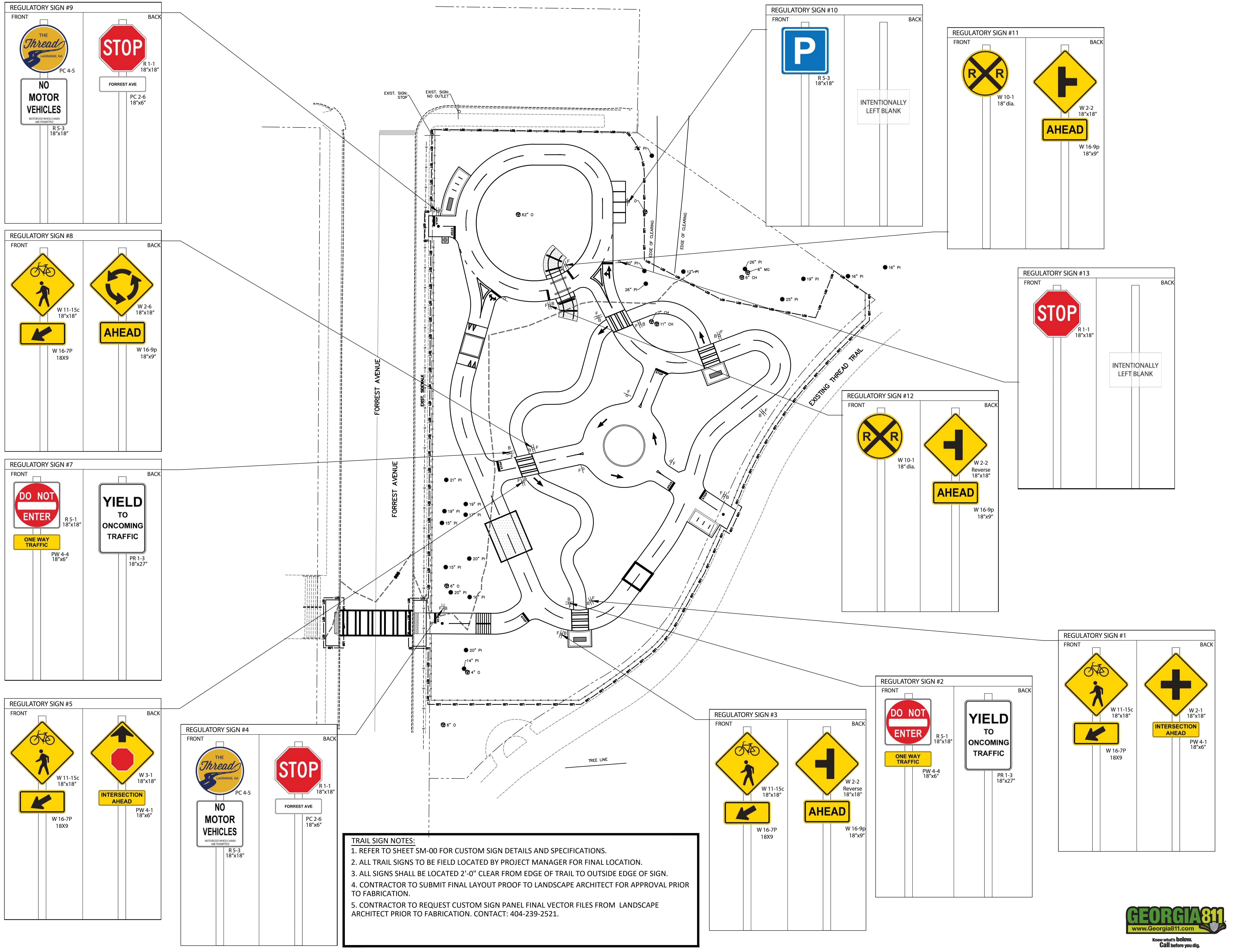
LaGRANGE BICYCLE PARK
LaGRANGE, GA



SIGNING AND MARKING PLAN

SCALE	1" = 20'-0"
DATE	JULY 21, 2023

SHEET #	SM-02
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TRAIL SIGN NOTES:

1. REFER TO SHEET SM-00 FOR CUSTOM SIGN DETAILS AND SPECIFICATIONS.
2. ALL TRAIL SIGNS TO BE FIELD LOCATED BY PROJECT MANAGER FOR FINAL LOCATION.
3. ALL SIGNS SHALL BE LOCATED 2'-0" CLEAR FROM EDGE OF TRAIL TO OUTSIDE EDGE OF SIGN.
4. CONTRACTOR TO SUBMIT FINAL LAYOUT PROOF TO LANDSCAPE ARCHITECT FOR APPROVAL PRIOR TO FABRICATION.
5. CONTRACTOR TO REQUEST CUSTOM SIGN PANEL FINAL VECTOR FILES FROM LANDSCAPE ARCHITECT PRIOR TO FABRICATION. CONTACT: 404-239-2521.

REGULATORY SIGN #9

FRONT: THE Thread LaGrange, GA PC 4-5
 NO MOTOR VEHICLES R 5-3 18"x18"
 BACK: STOP R 1-1 18"x18"
 FORREAST AVE PC 2-6 18"x6"

REGULATORY SIGN #8

FRONT: W 11-15c 18"x18"
 W 16-7P 18X9
 BACK: W 2-6 18"x18"
 W 16-9p 18"x9"
 AHEAD

REGULATORY SIGN #7

FRONT: DO NOT ENTER R 5-1 18"x18"
 ONE WAY TRAFFIC PW 4-4 18"x6"
 BACK: YIELD TO ONCOMING TRAFFIC PR 1-3 18"x27"

REGULATORY SIGN #5

FRONT: W 11-15c 18"x18"
 W 16-7P 18X9
 BACK: W 3-1 18"x18"
 PW 4-1 18"x6"
 INTERSECTION AHEAD

REGULATORY SIGN #4

FRONT: THE Thread LaGrange, GA PC 4-5
 NO MOTOR VEHICLES R 5-3 18"x18"
 BACK: STOP R 1-1 18"x18"
 FORREAST AVE PC 2-6 18"x6"

REGULATORY SIGN #10

FRONT: P R 5-3 18"x18"
 BACK: INTENTIONALLY LEFT BLANK

REGULATORY SIGN #11

FRONT: W 10-1 18" dia.
 BACK: W 2-2 18"x18"
 W 16-9p 18"x9"
 AHEAD

REGULATORY SIGN #13

FRONT: STOP R 1-1 18"x18"
 BACK: INTENTIONALLY LEFT BLANK

REGULATORY SIGN #12

FRONT: W 10-1 18" dia.
 BACK: W 2-2 Reverse 18"x18"
 W 16-9p 18"x9"
 AHEAD

REGULATORY SIGN #1

FRONT: W 11-15c 18"x18"
 W 16-7P 18X9
 BACK: W 2-1 18"x18"
 PW 4-1 18"x6"
 INTERSECTION AHEAD

REGULATORY SIGN #3

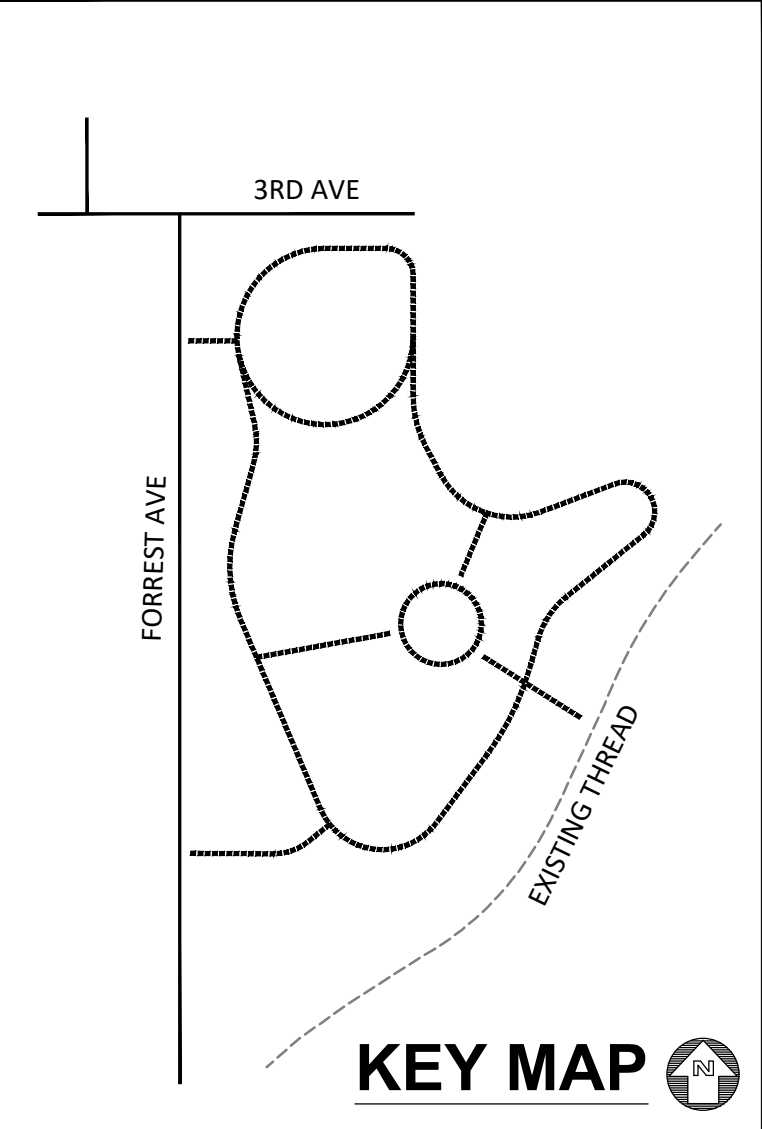
FRONT: W 11-15c 18"x18"
 W 16-7P 18X9
 BACK: W 2-2 Reverse 18"x18"
 W 16-9p 18"x9"
 AHEAD

REGULATORY SIGN #2

FRONT: DO NOT ENTER R 5-1 18"x18"
 ONE WAY TRAFFIC PW 4-4 18"x6"
 BACK: YIELD TO ONCOMING TRAFFIC PR 1-3 18"x27"



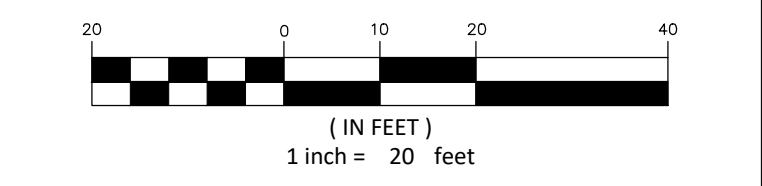
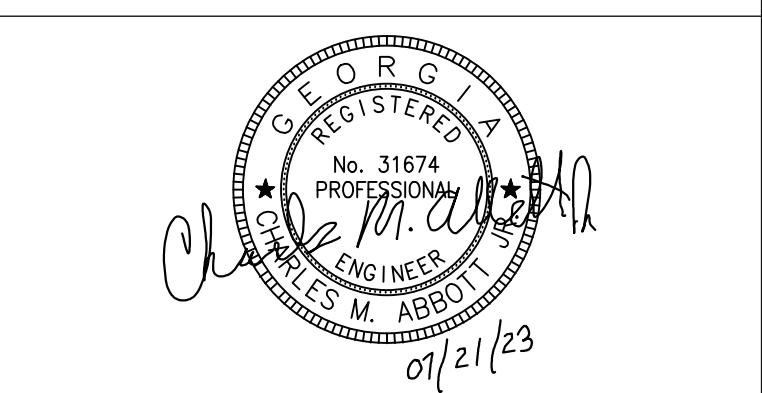
PATH FOUNDATION
 PO BOX 1432, ATLANTA, GA 30305
 24 HOUR CONTACT - PETE PELLEGRINI
 E: PETEVP@PATHFOUNDATION.ORG
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07/21/2023	100% ISSUE FOR PERMIT
08/16/2023	100% ISSUE FOR BID

PROJECT # 2022 - 256
 PROJECT MANAGER AC

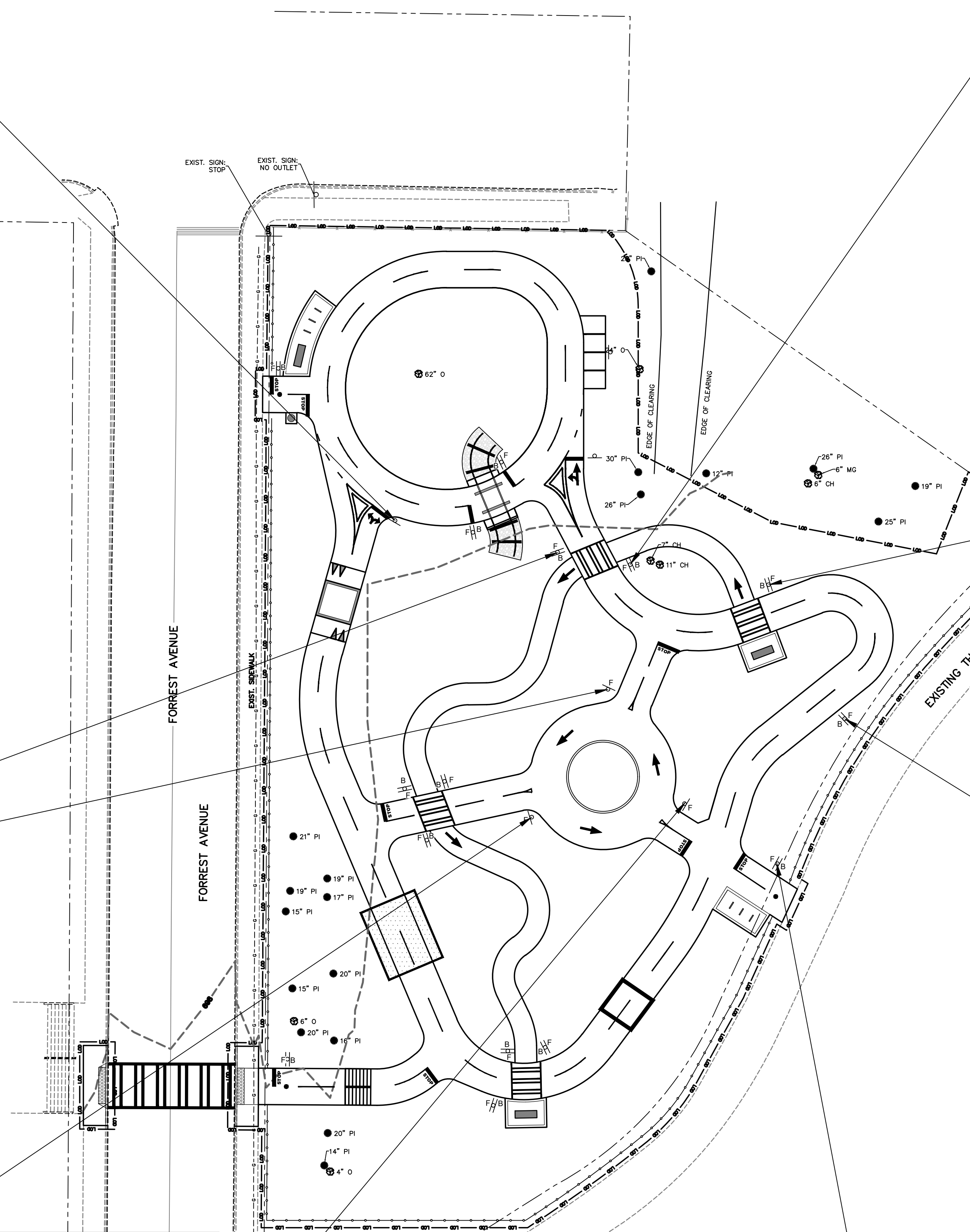
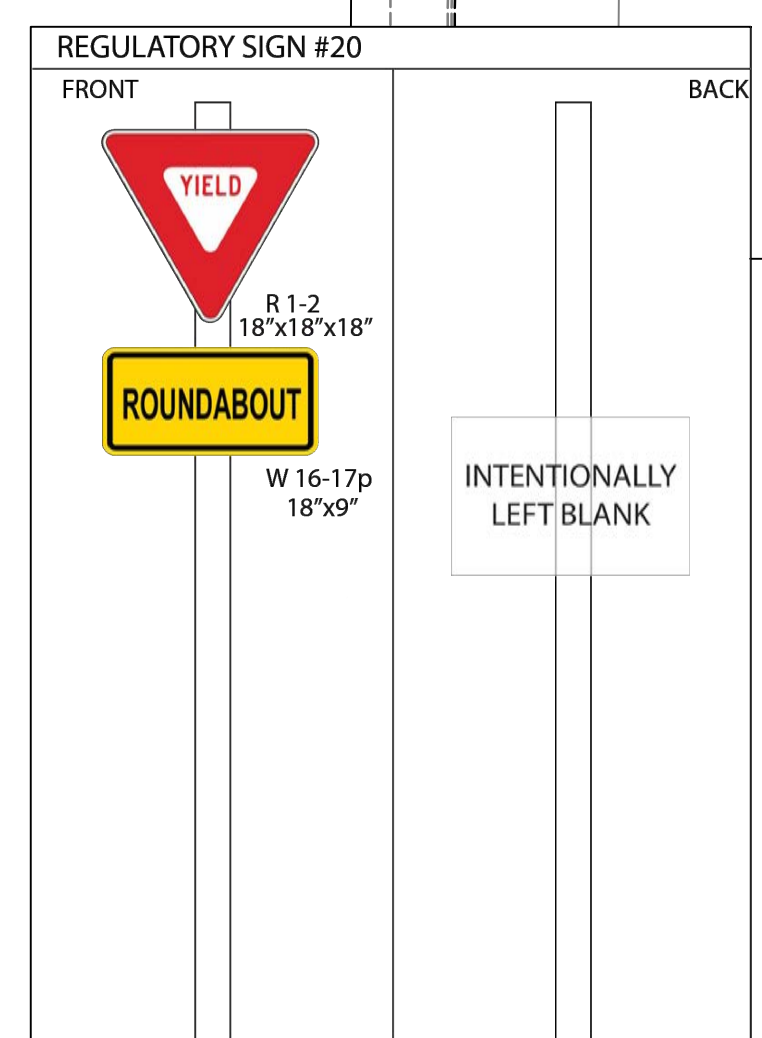
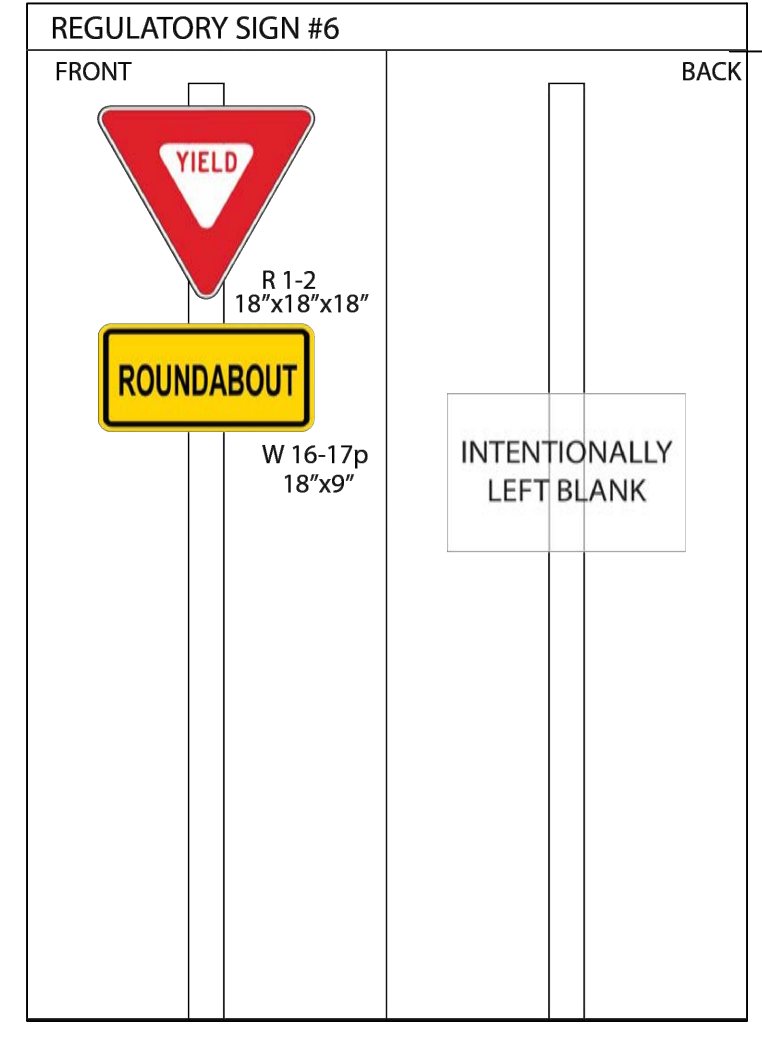
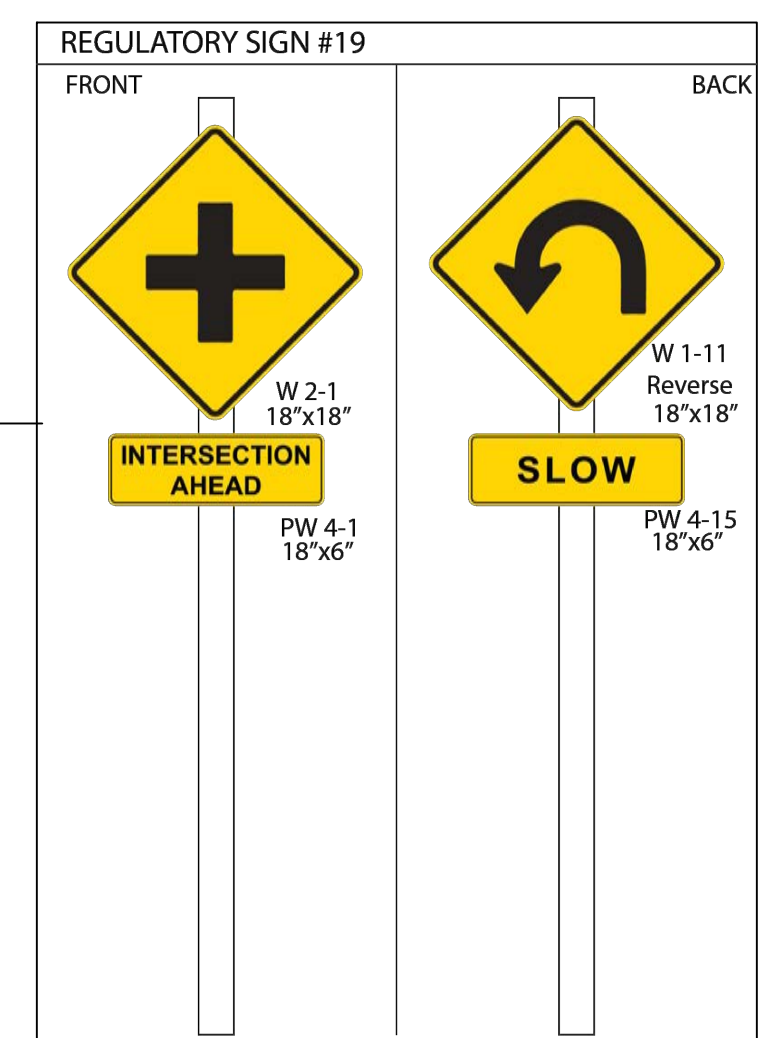
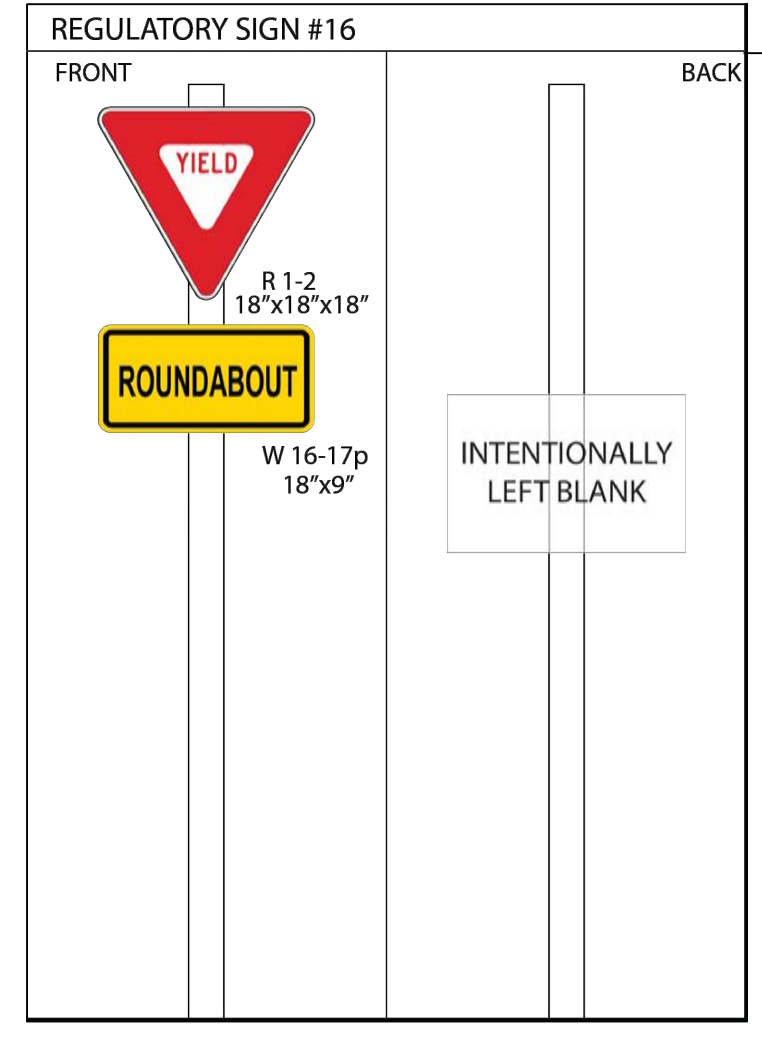
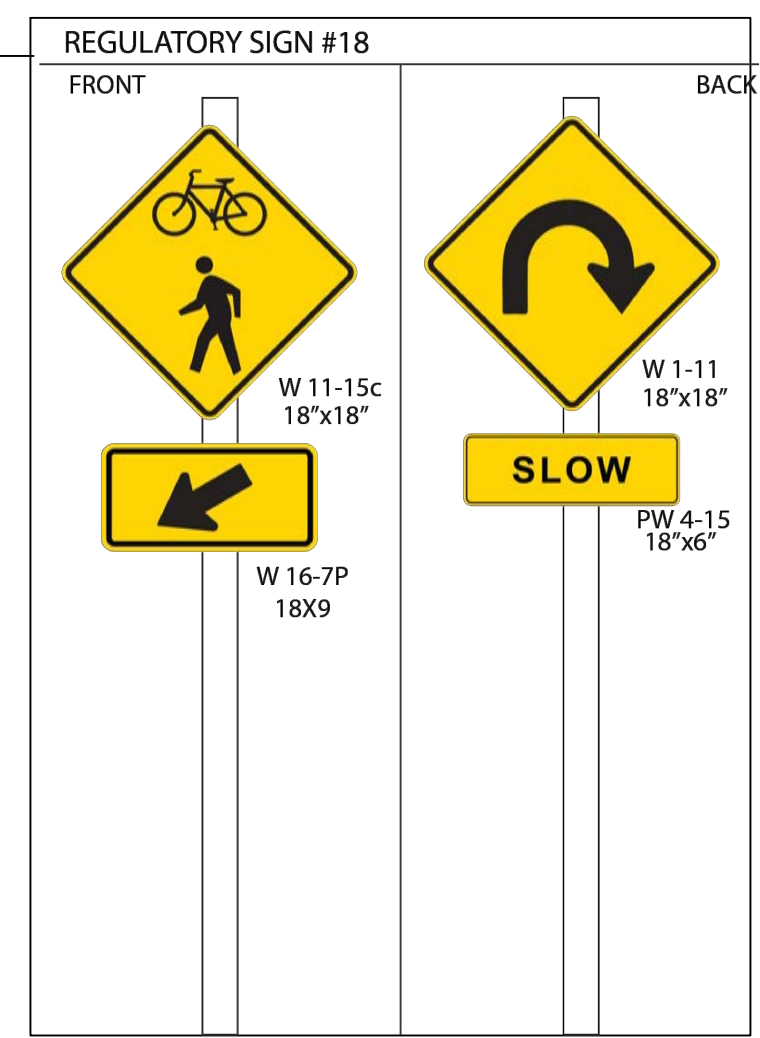
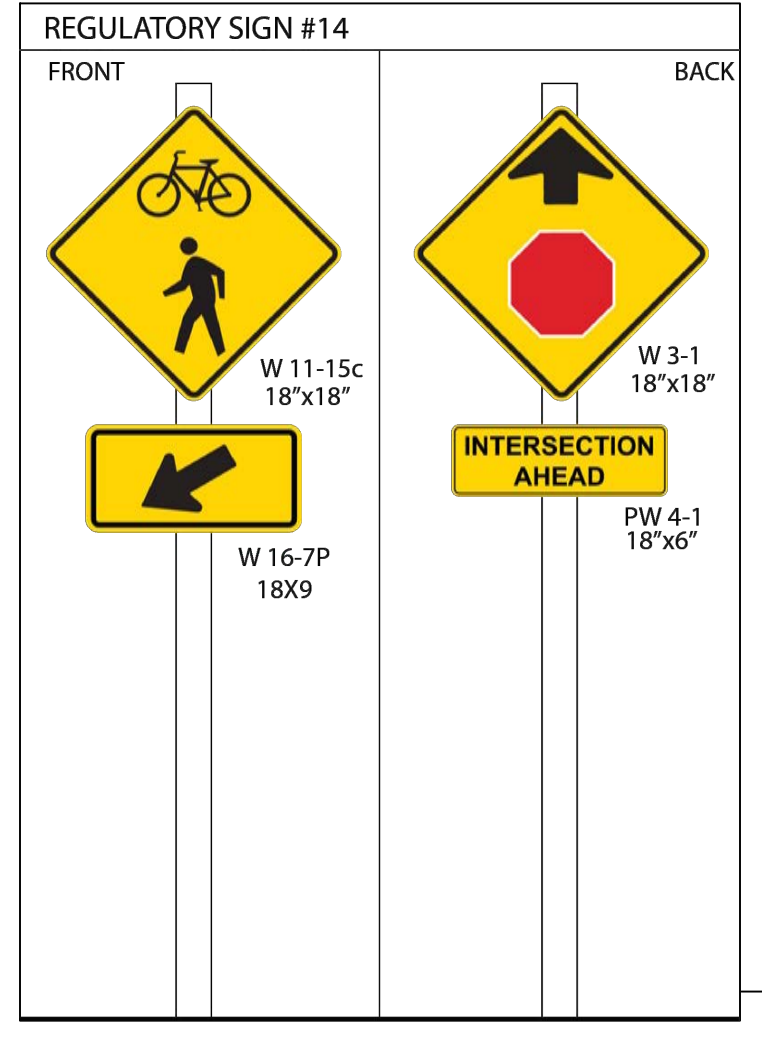
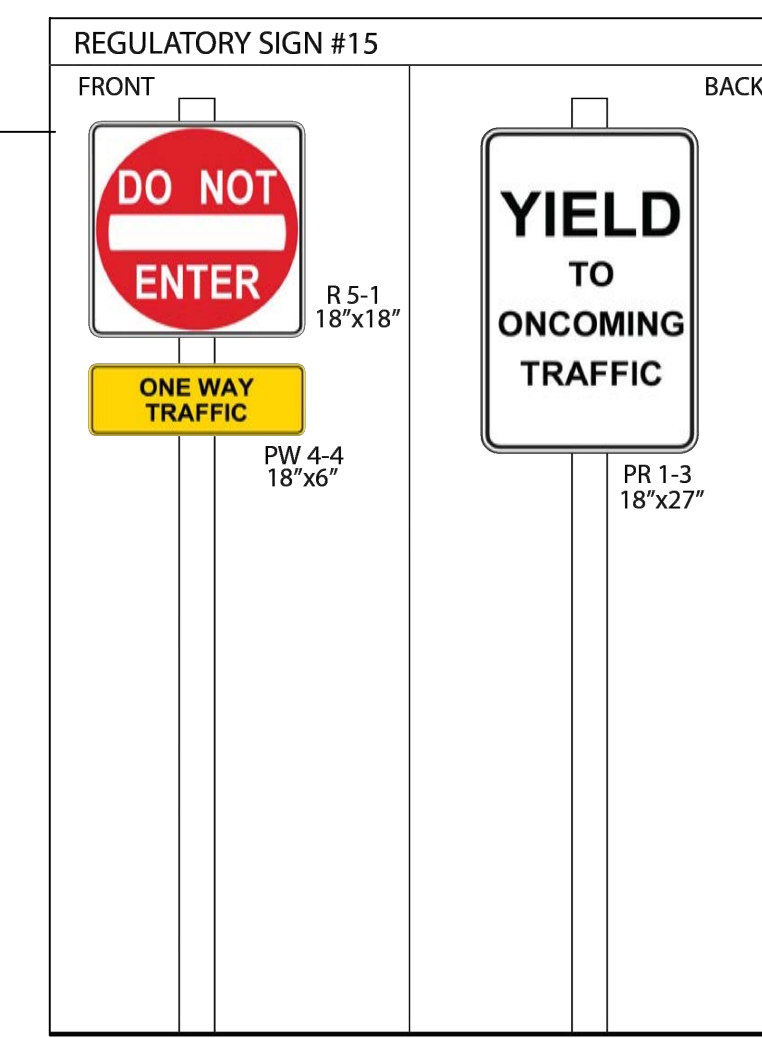
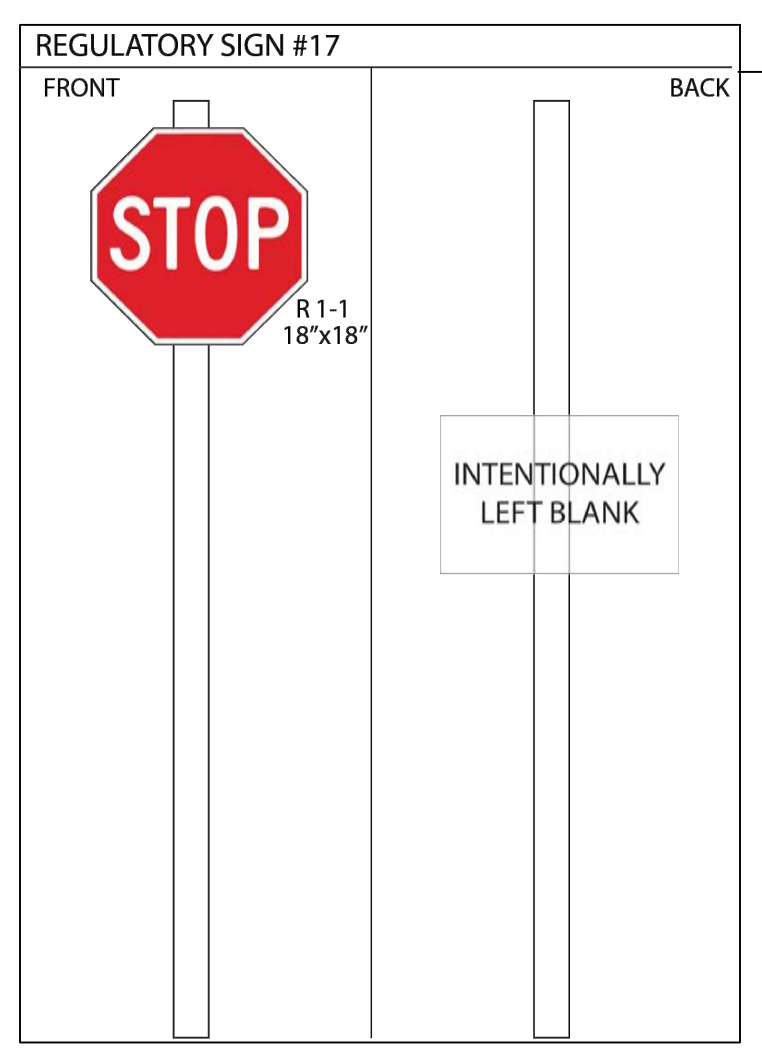
LaGRANGE BICYCLE PARK
LaGRANGE, GA



SIGNING AND MARKING PLAN

SCALE 1" = 20'-0"
 DATE JULY 21, 2023

SHEET # **SM-03**



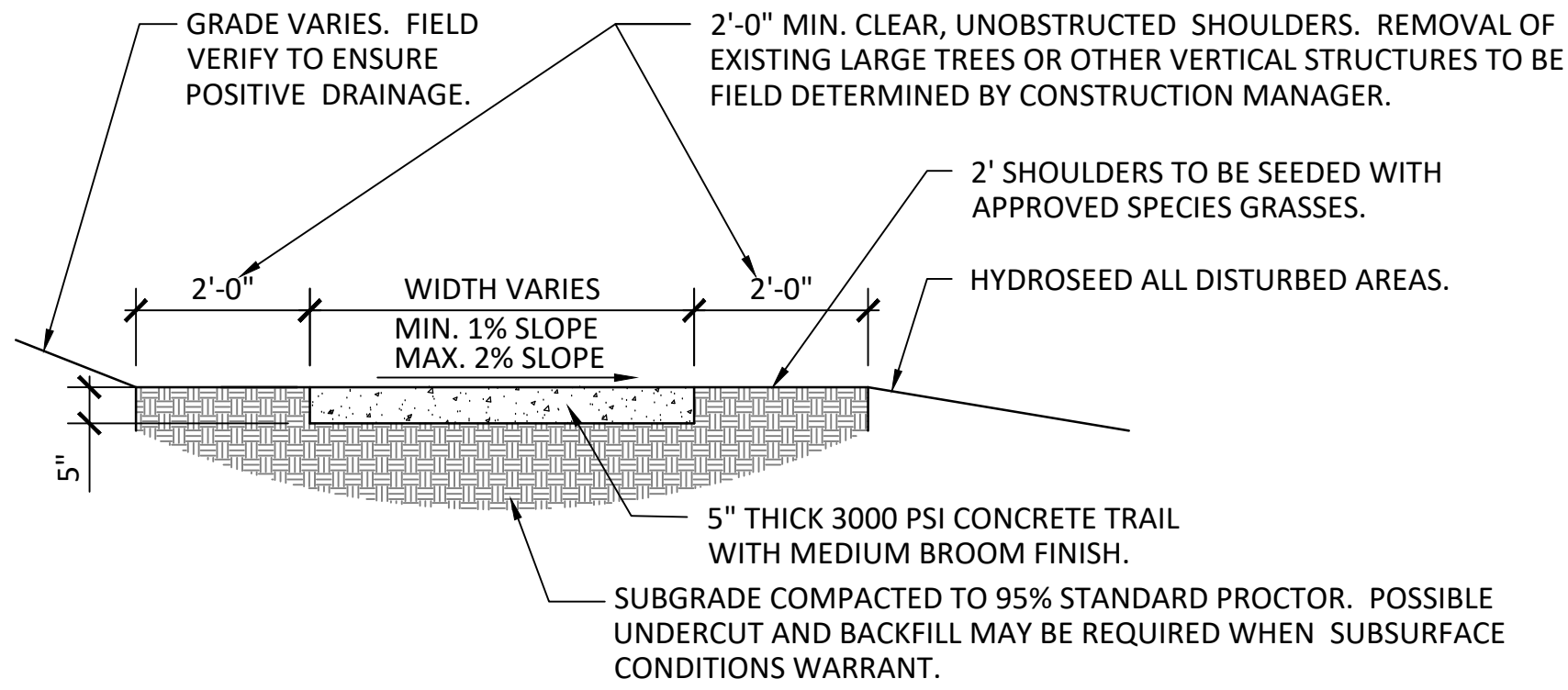
- TRAIL SIGN NOTES:**
1. REFER TO SHEET SM-00 FOR CUSTOM SIGN DETAILS AND SPECIFICATIONS.
 2. ALL TRAIL SIGNS TO BE FIELD LOCATED BY PROJECT MANAGER FOR FINAL LOCATION.
 3. ALL SIGNS SHALL BE LOCATED 2'-0" CLEAR FROM EDGE OF TRAIL TO OUTSIDE EDGE OF SIGN.
 4. CONTRACTOR TO SUBMIT FINAL LAYOUT PROOF TO LANDSCAPE ARCHITECT FOR APPROVAL PRIOR TO FABRICATION.
 5. CONTRACTOR TO REQUEST CUSTOM SIGN PANEL FINAL VECTOR FILES FROM LANDSCAPE ARCHITECT PRIOR TO FABRICATION. CONTACT: 404-239-2521.



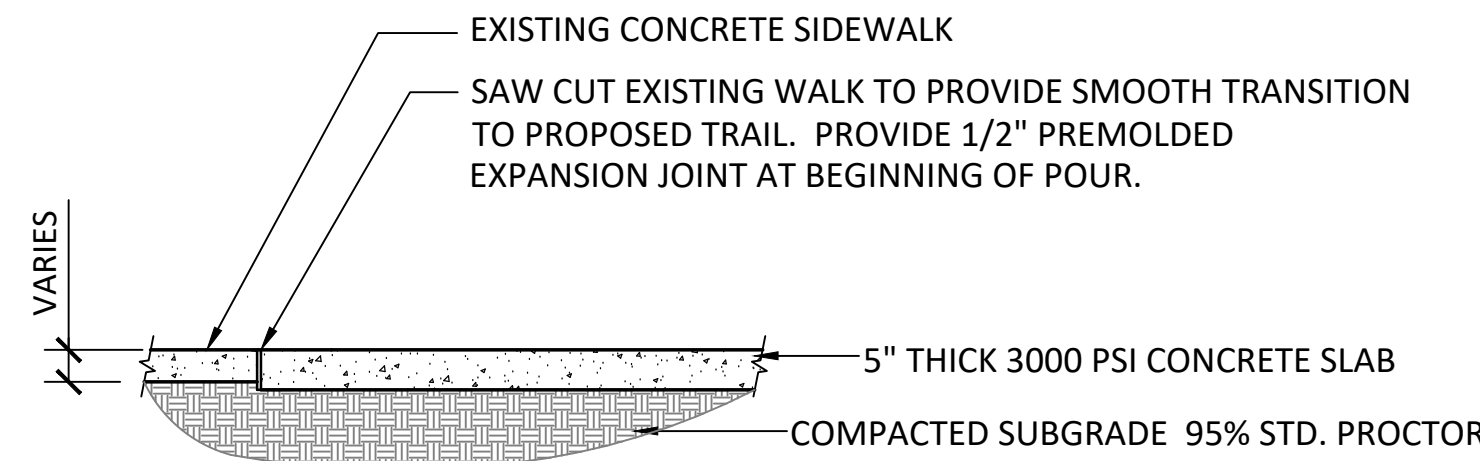
NOTES:
 1) 4"x (TRAIL WIDTH) ALTERNATING YELLOW CENTERLINE STRIPING TO BE INSTALLED ALONG ENTIRE LENGTH OF TRAIL CENTERLINE, UNLESS OTHERWISE NOTED ON PLANS.

2) CONTRACTOR TO SAW CUT CONTROL JOINT AT LEAST 1/4 DEPTH OF SLAB ACROSS ENTIRE WIDTH OF TRAIL. CONTROL JOINTS TO BE LOCATED THE SAME DISTANCE APART AS THE WIDTH OF TRAIL (I.E. 12" WIDE TRAIL TO HAVE CONTROL JOINTS EVERY 12" ALONG TRAIL). CONTRACTOR REQUIRED TO REMOVE SAW DUST AFTER CUTTING.

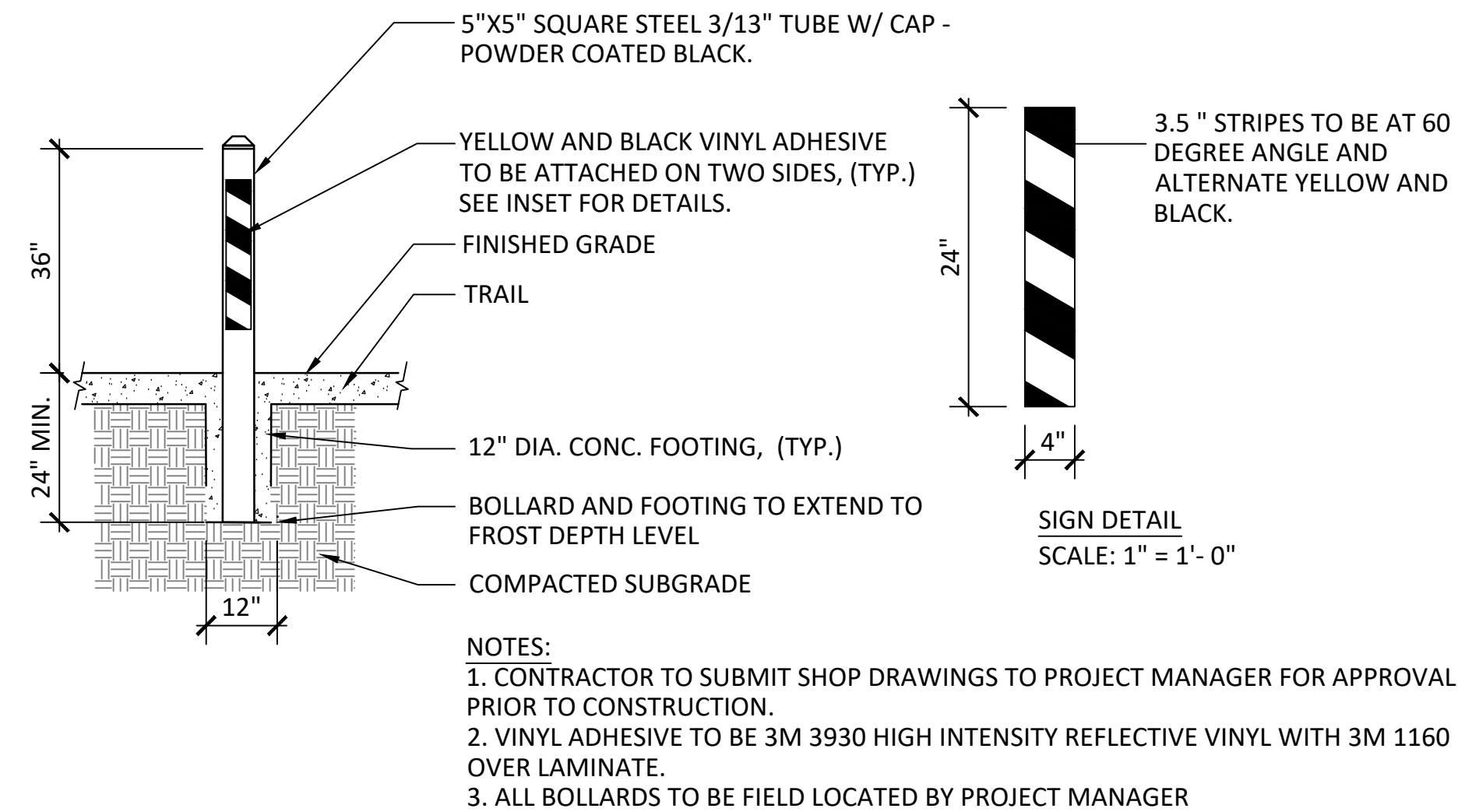
3) EXPANSION JOINTS TO BE LOCATED ALONG TRAIL MIN. EVERY 100' IN PLACE OF CONTROL JOINT.



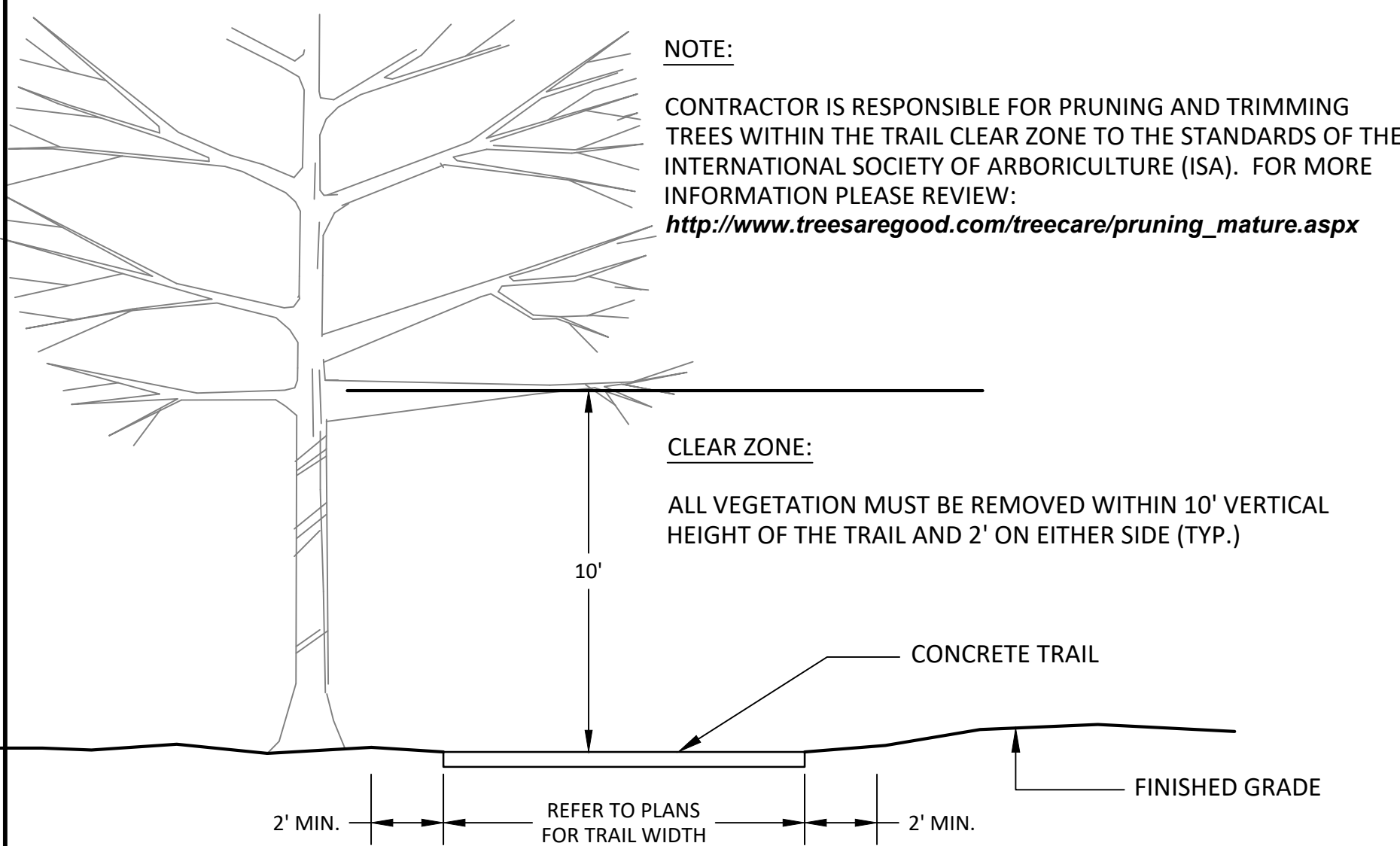
1 MULTI-USE TRAIL-CROSS SECTION
 CD-01 SCALE: 1/2" = 1'-0"



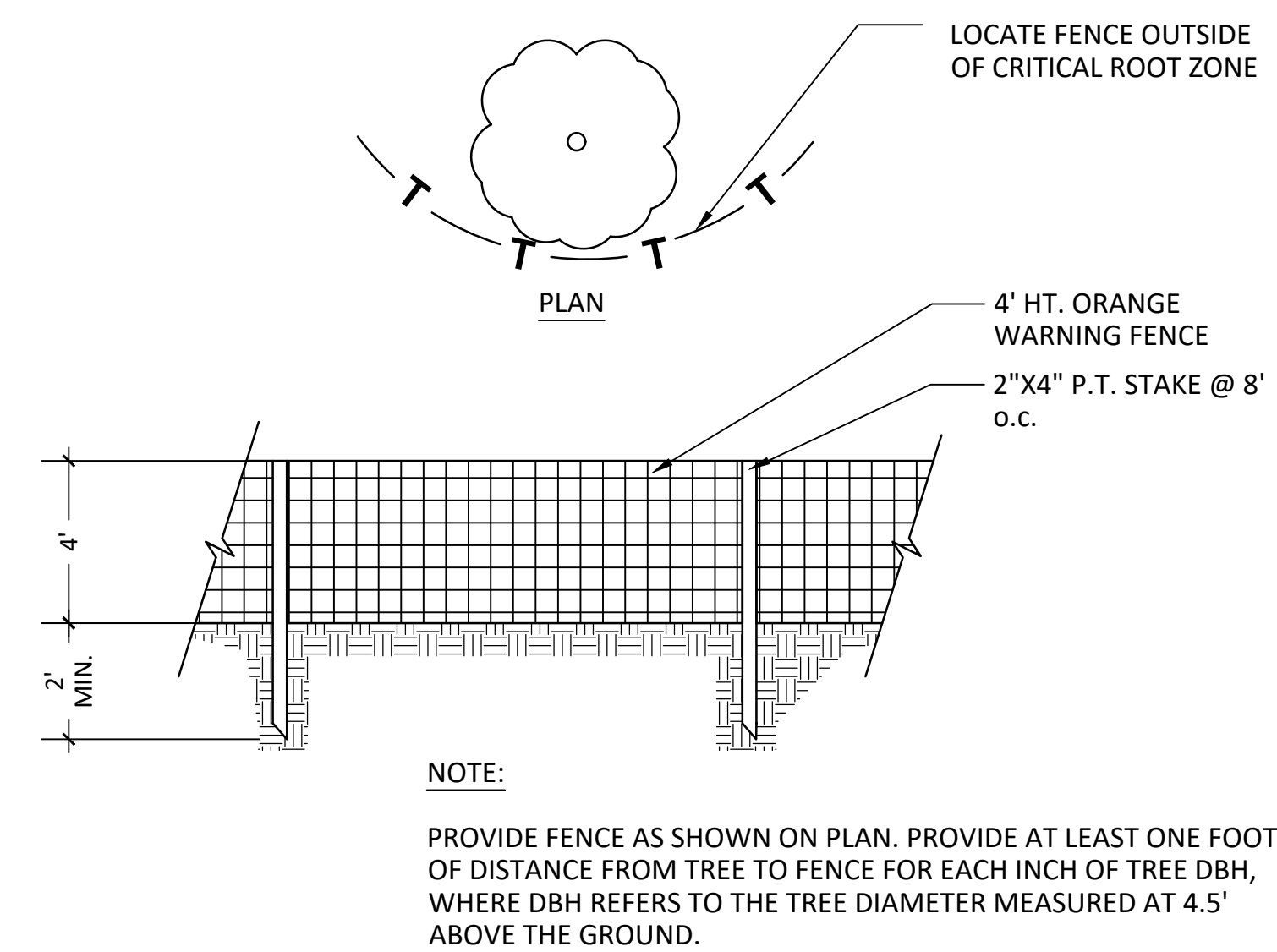
2 EXISTING WALK/TRAIL TRANSITION
 CD-01 SCALE: 1/2" = 1'-0"



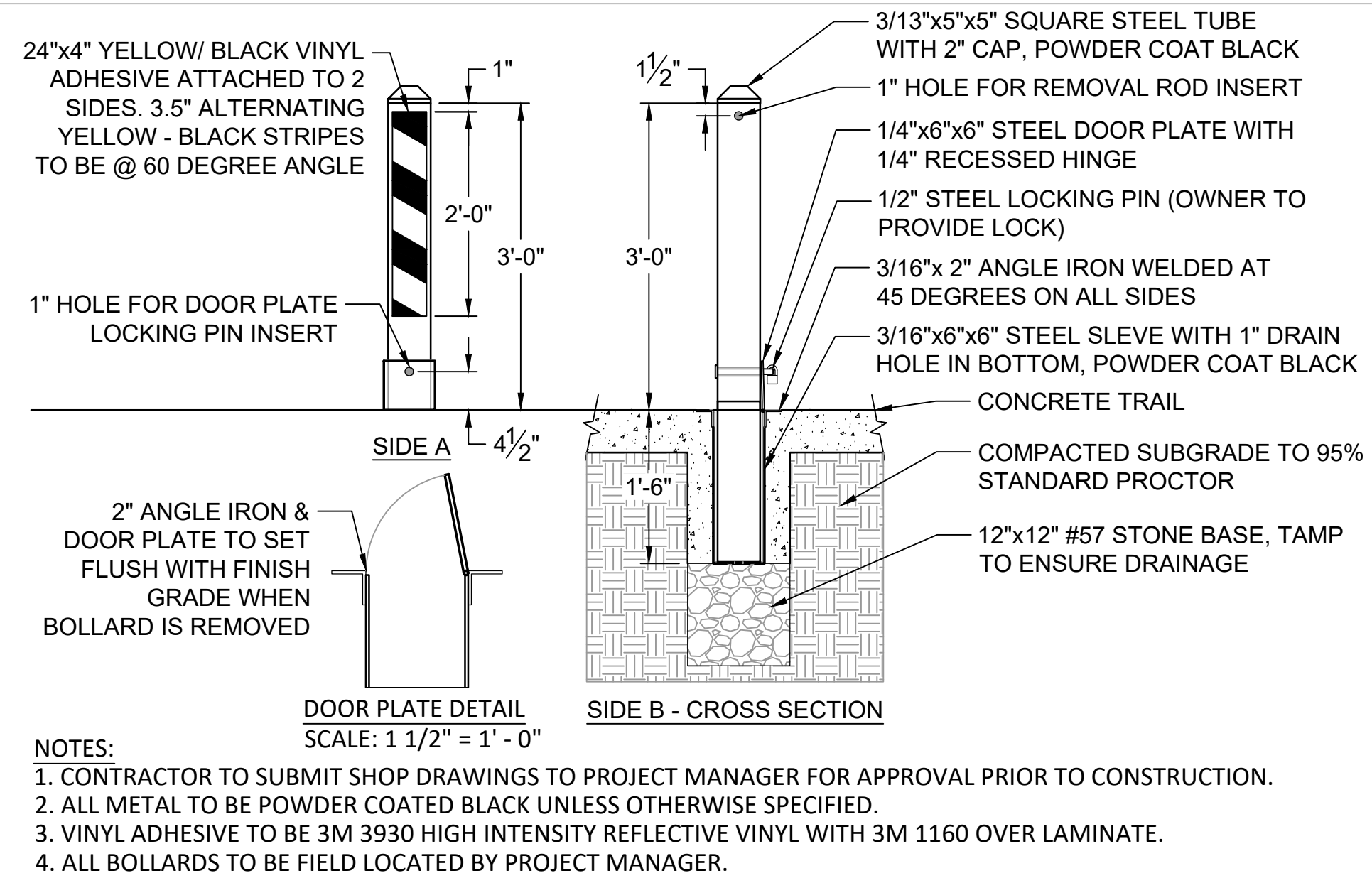
3 FIXED BOLLARD
 CD-01 SCALE: 1/2" = 1'-0"



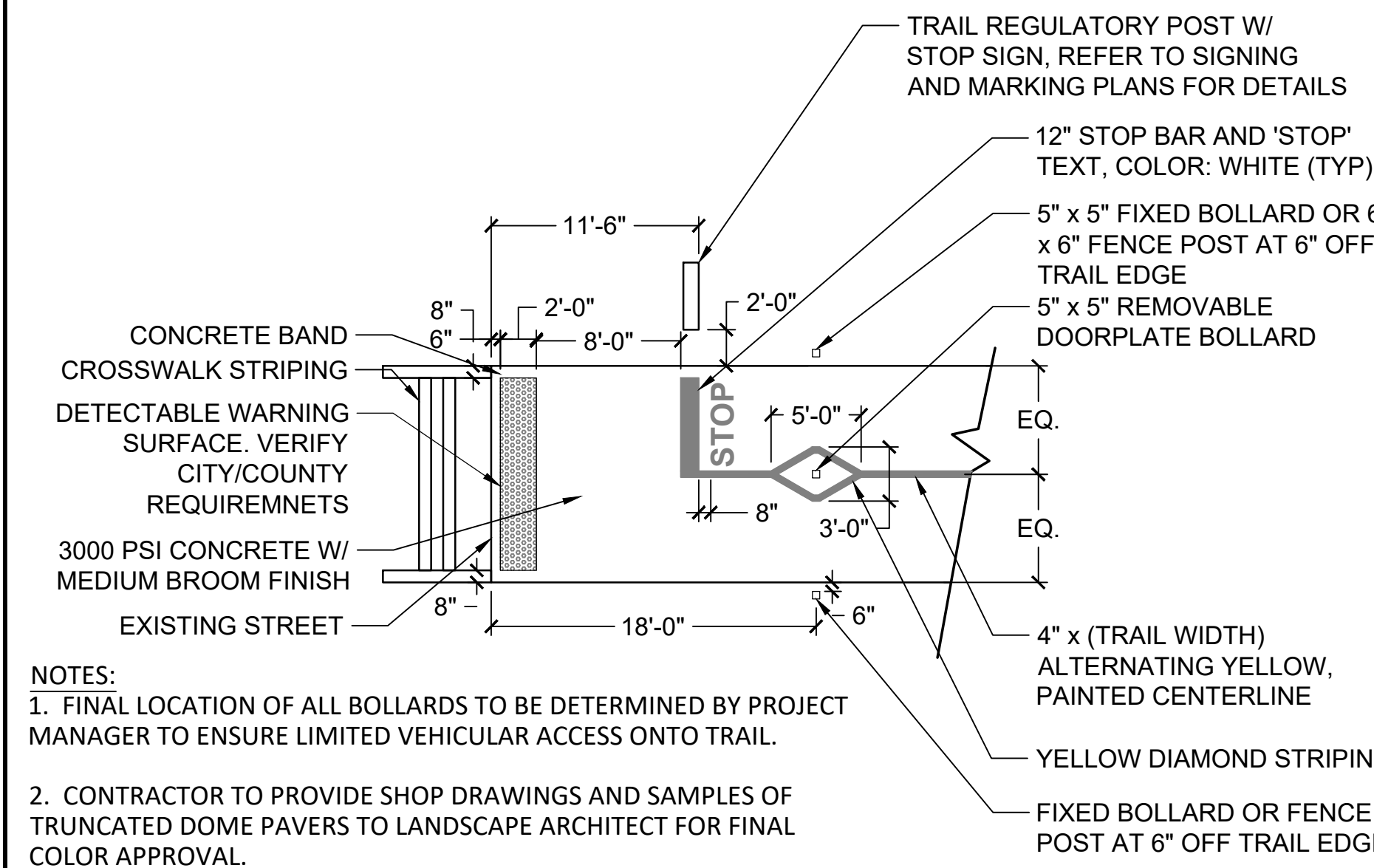
4 CLEAR ZONE
 CD-01 SCALE: 1/4" = 1'-0"



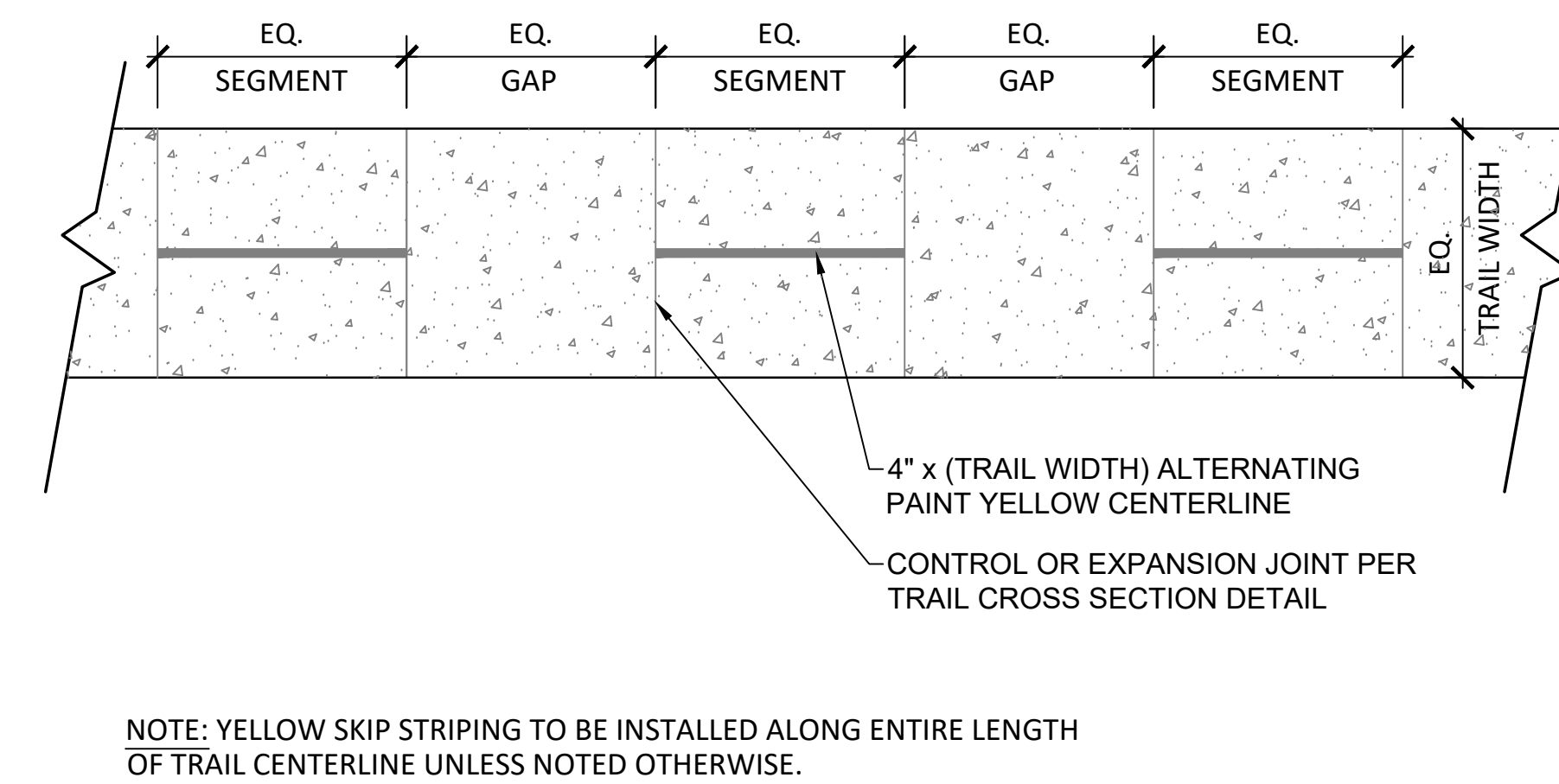
5 TREE PROTECTION FENCE
 CD-01 SCALE: 1/4" = 1'-0"



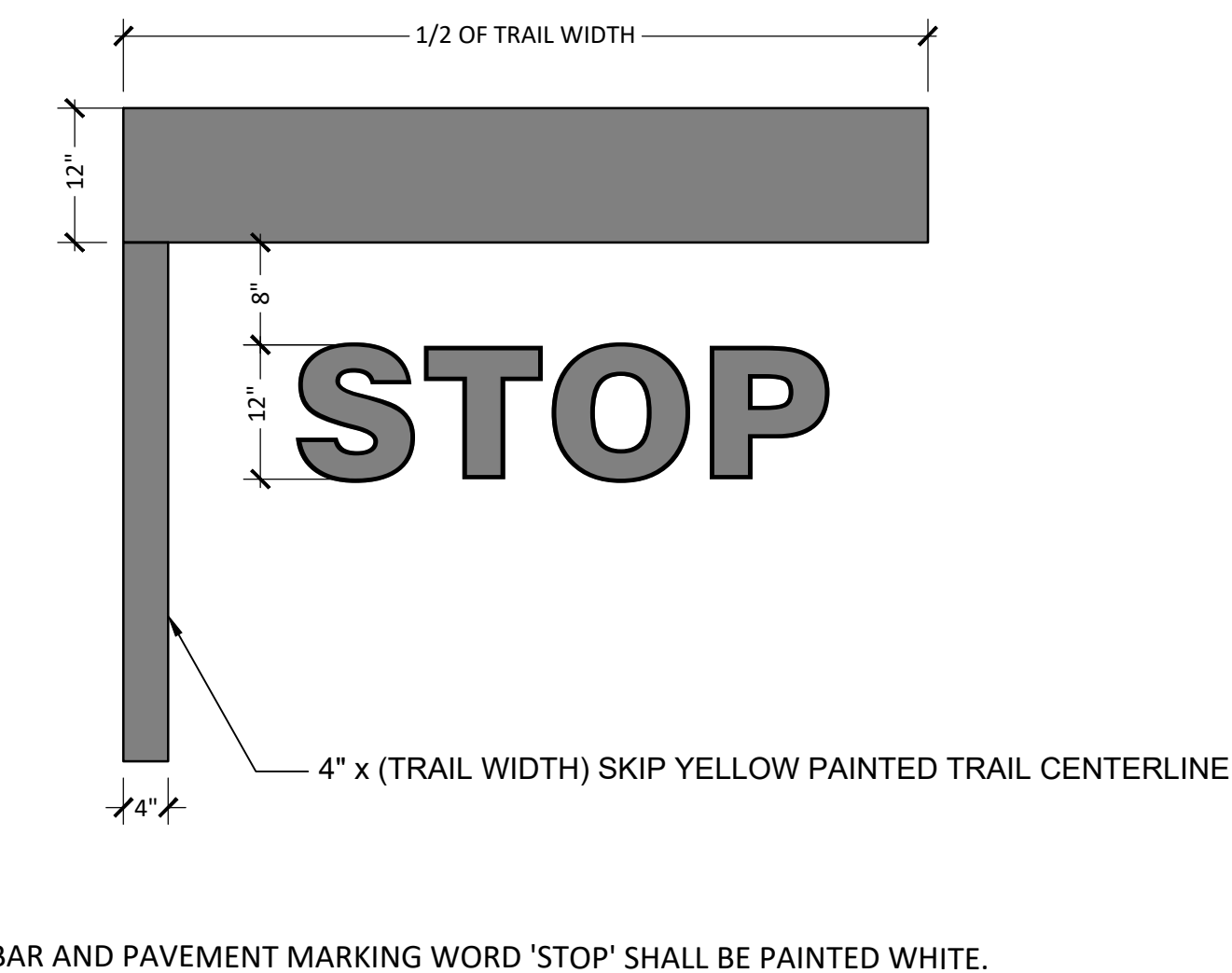
6 REMOVABLE DOOR PLATE BOLLARD
 CD-01 SCALE: 3/4" = 1'-0"



7 STANDARD INTERSECTION: PLAN VIEW
 CD-01 SCALE: 1/8" = 1'-0"



8 TRAIL CENTERLINE STRIPING: PLAN VIEW
 CD-01 SCALE: 1/8" = 1'-0"

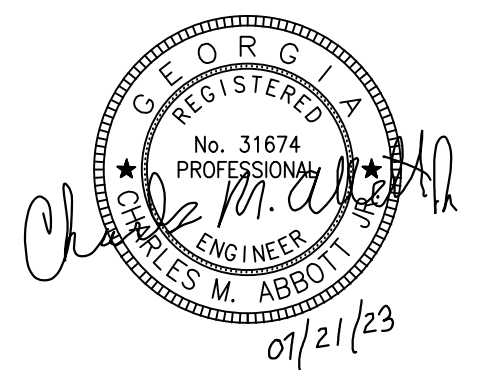


9 TRAIL STOP PAVEMENT MARKING DETAIL
 CD-01 N.T.S

DATE	DESCRIPTION
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PROJECT #	2022 - 256
PROJECT MANAGER	AC

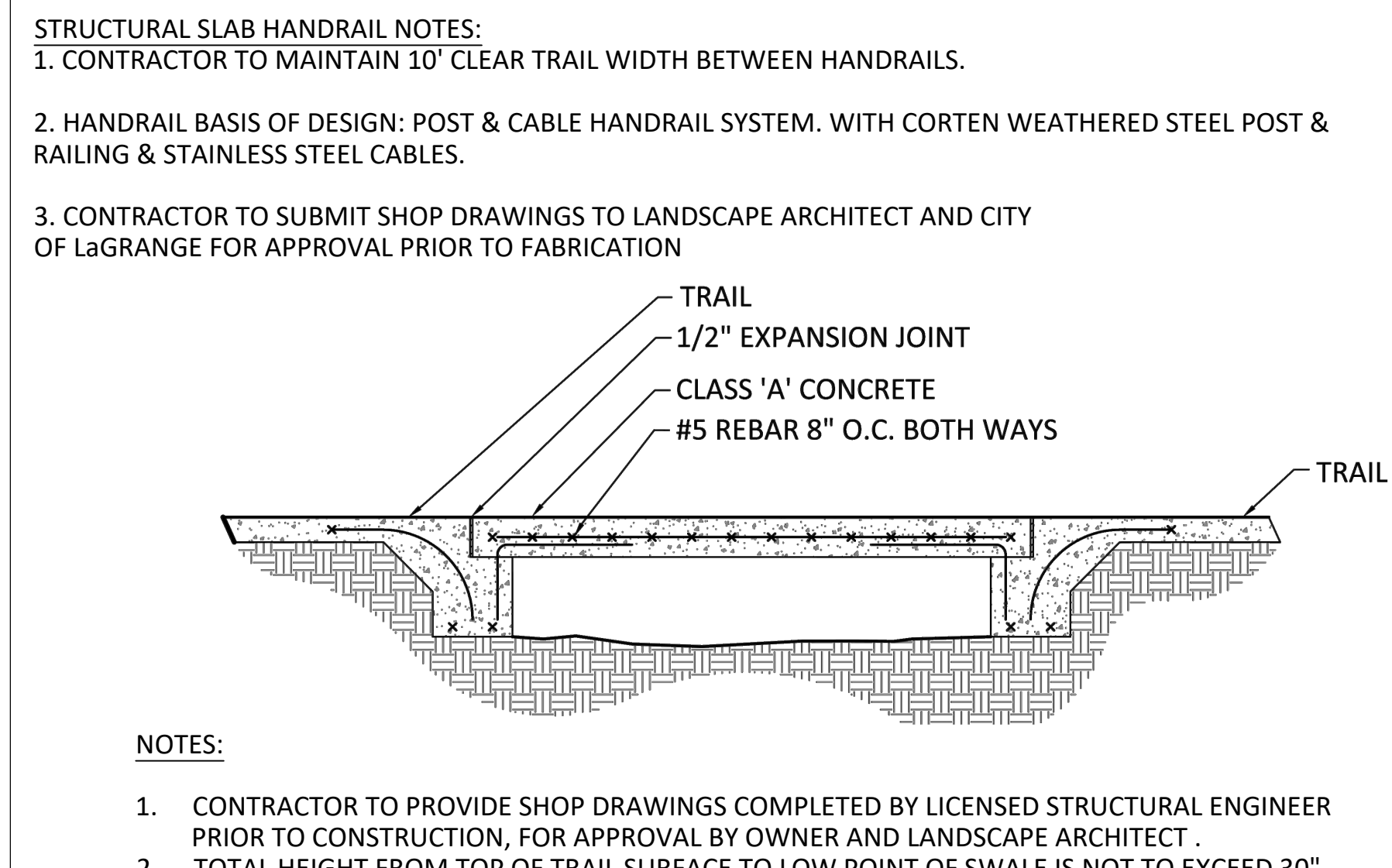
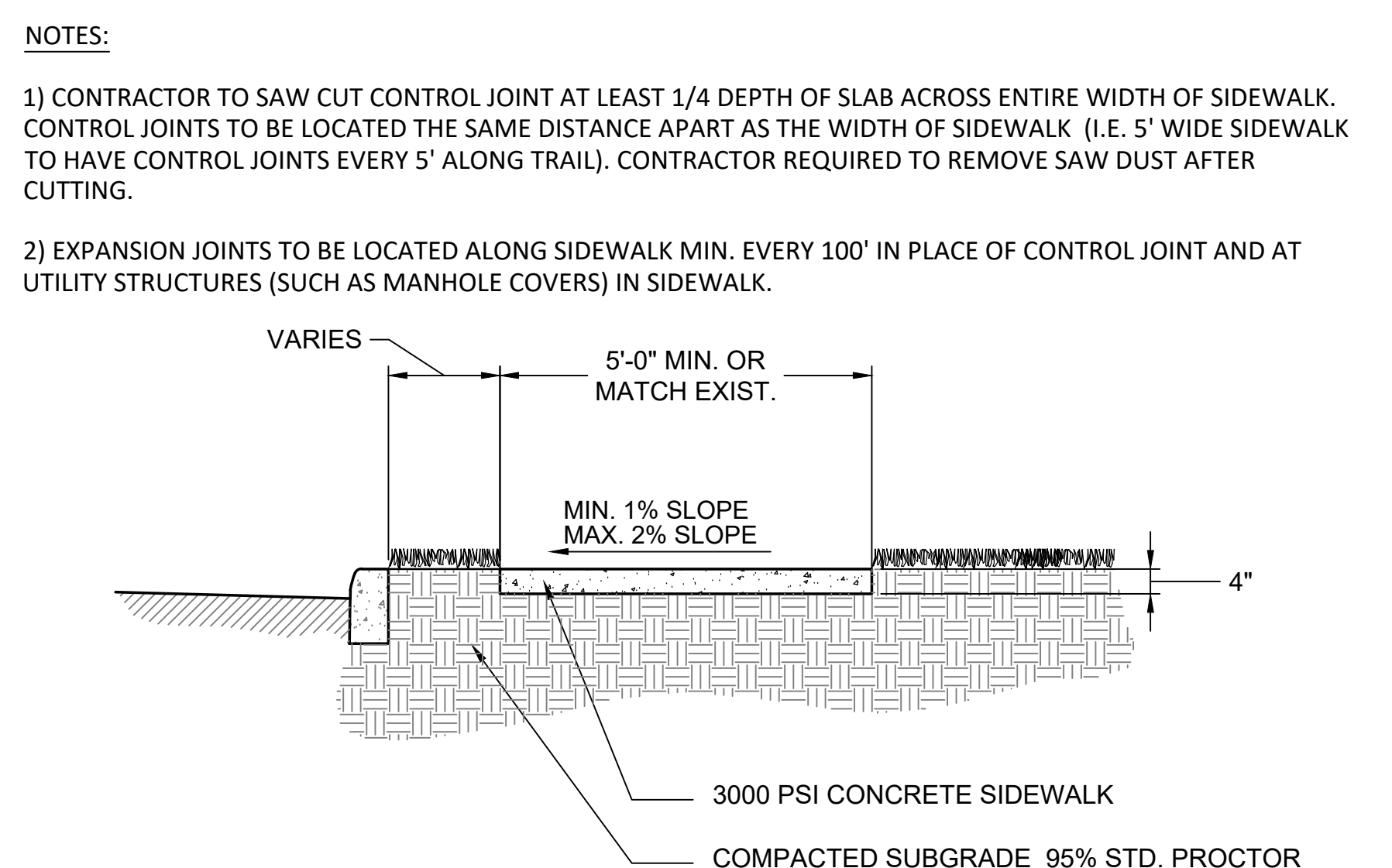
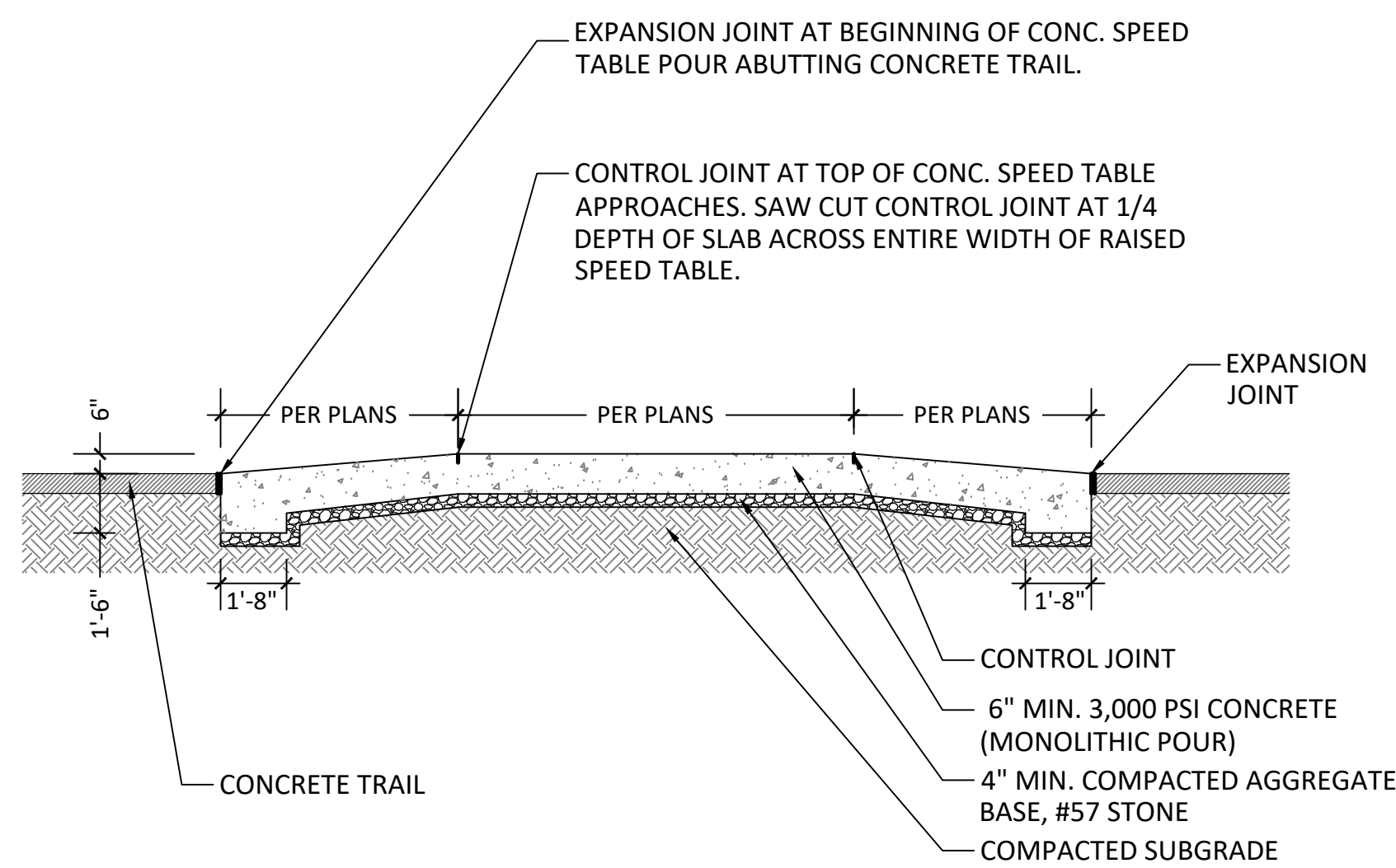
LaGRANGE BICYCLE PARK
 LaGRANGE, GA



CONSTRUCTION DETAILS

SCALE	AS SHOWN
DATE	JULY 21, 2023

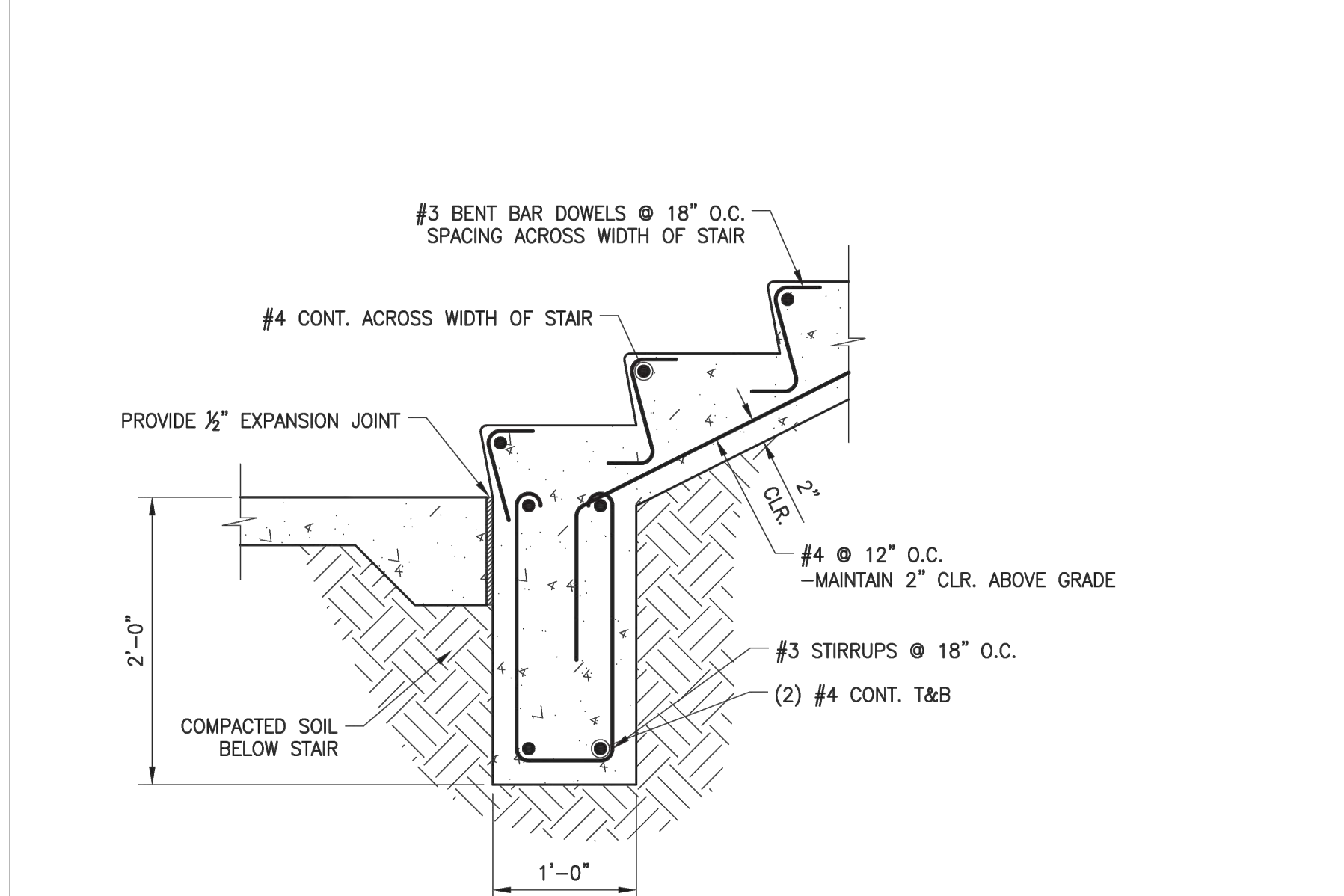
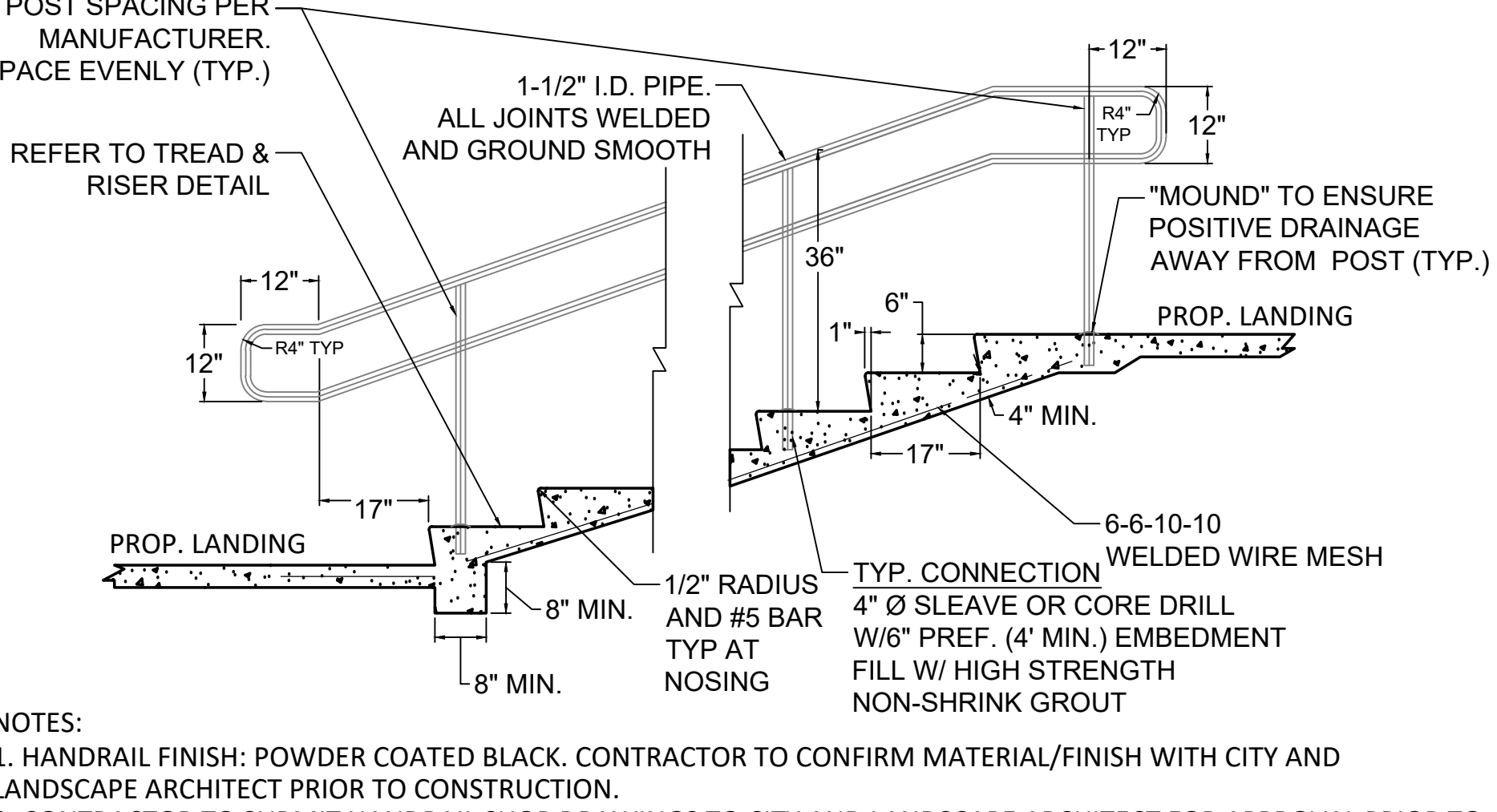
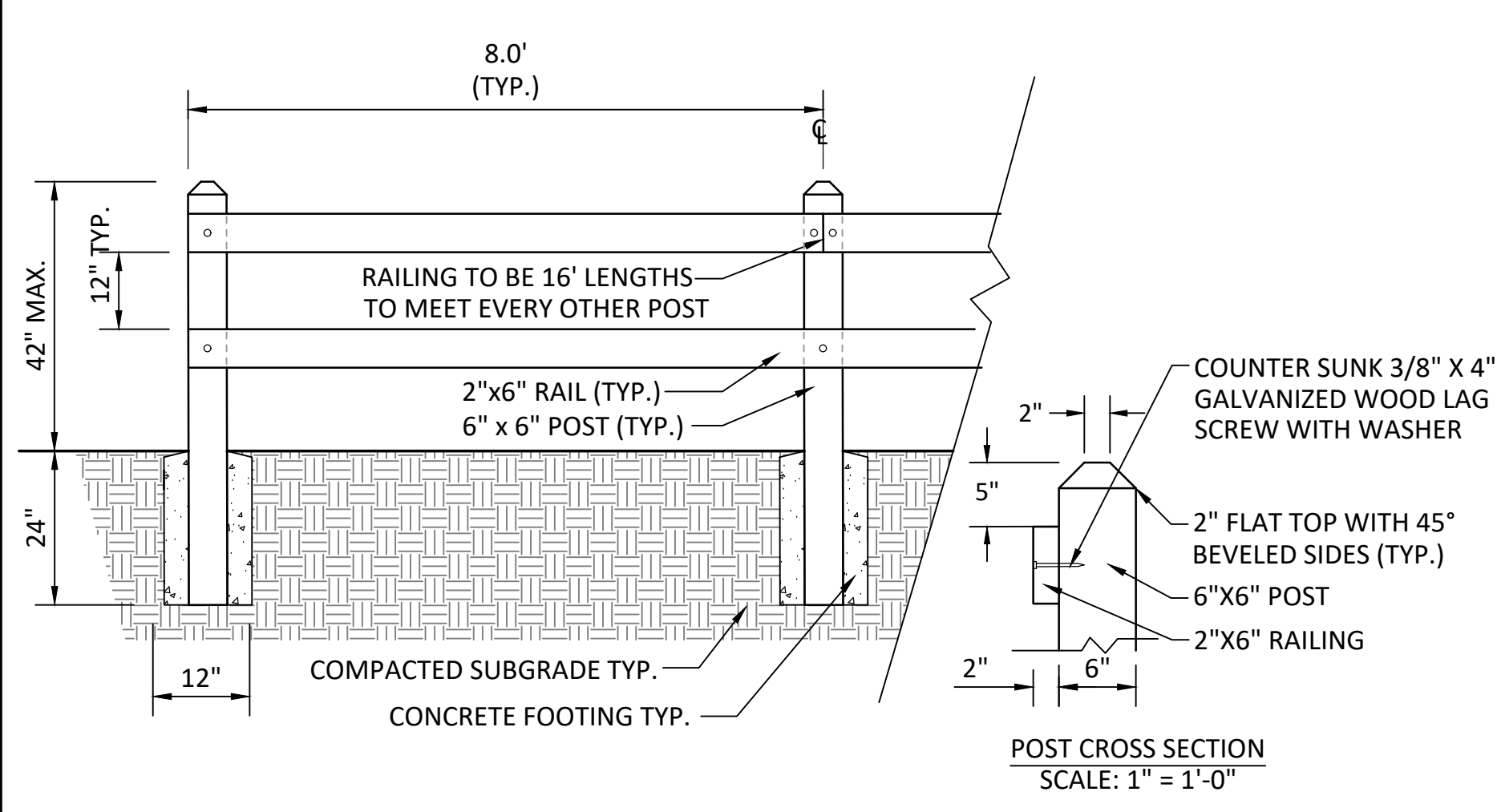
SHEET #	CD-01
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1 SPEED TABLE CROSS-SECTION
CD-02 SCALE: 1/4" = 1'-0"

2 TYPICAL SIDEWALK
CD-02 SCALE: 1/2" = 1'-0"

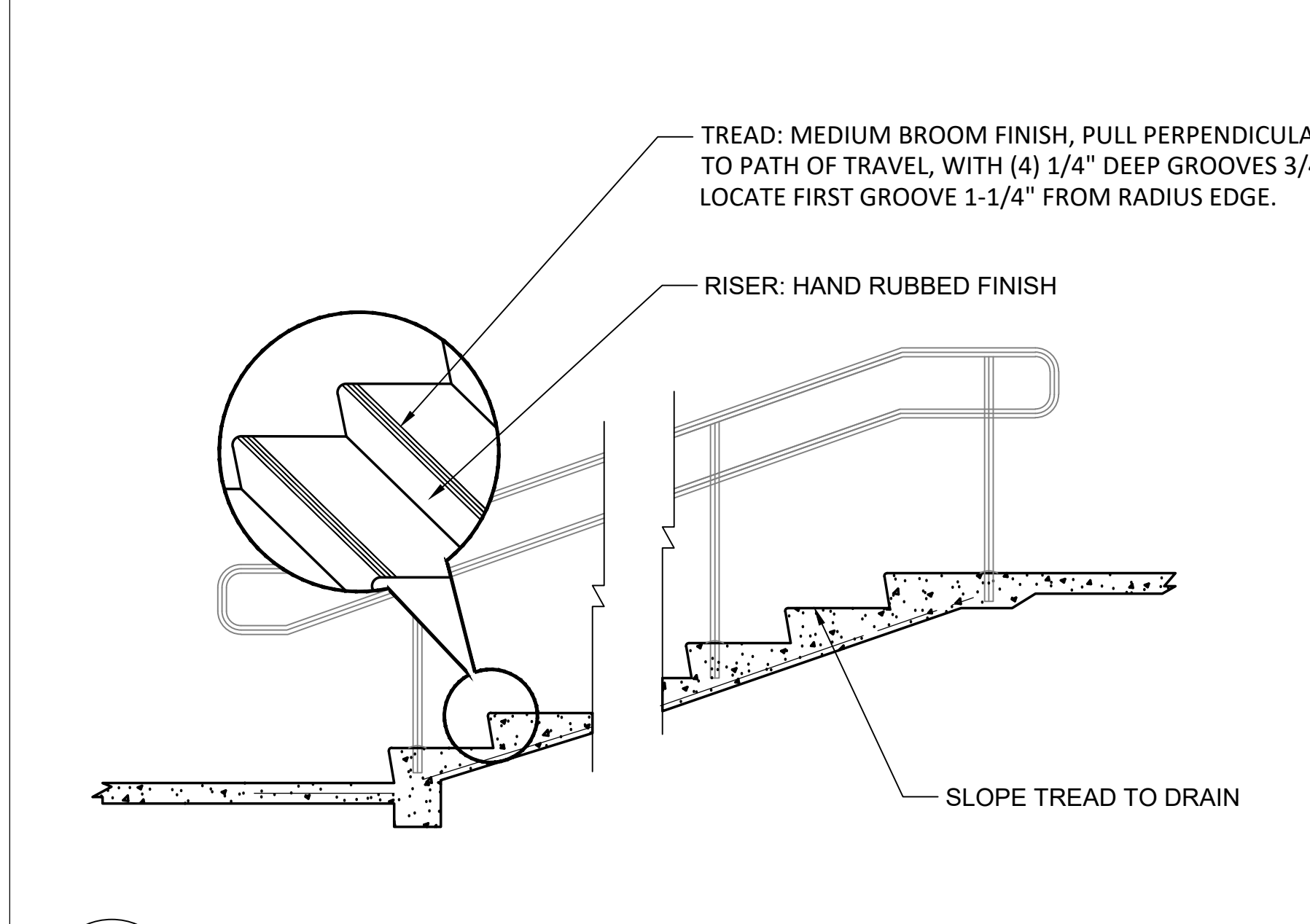
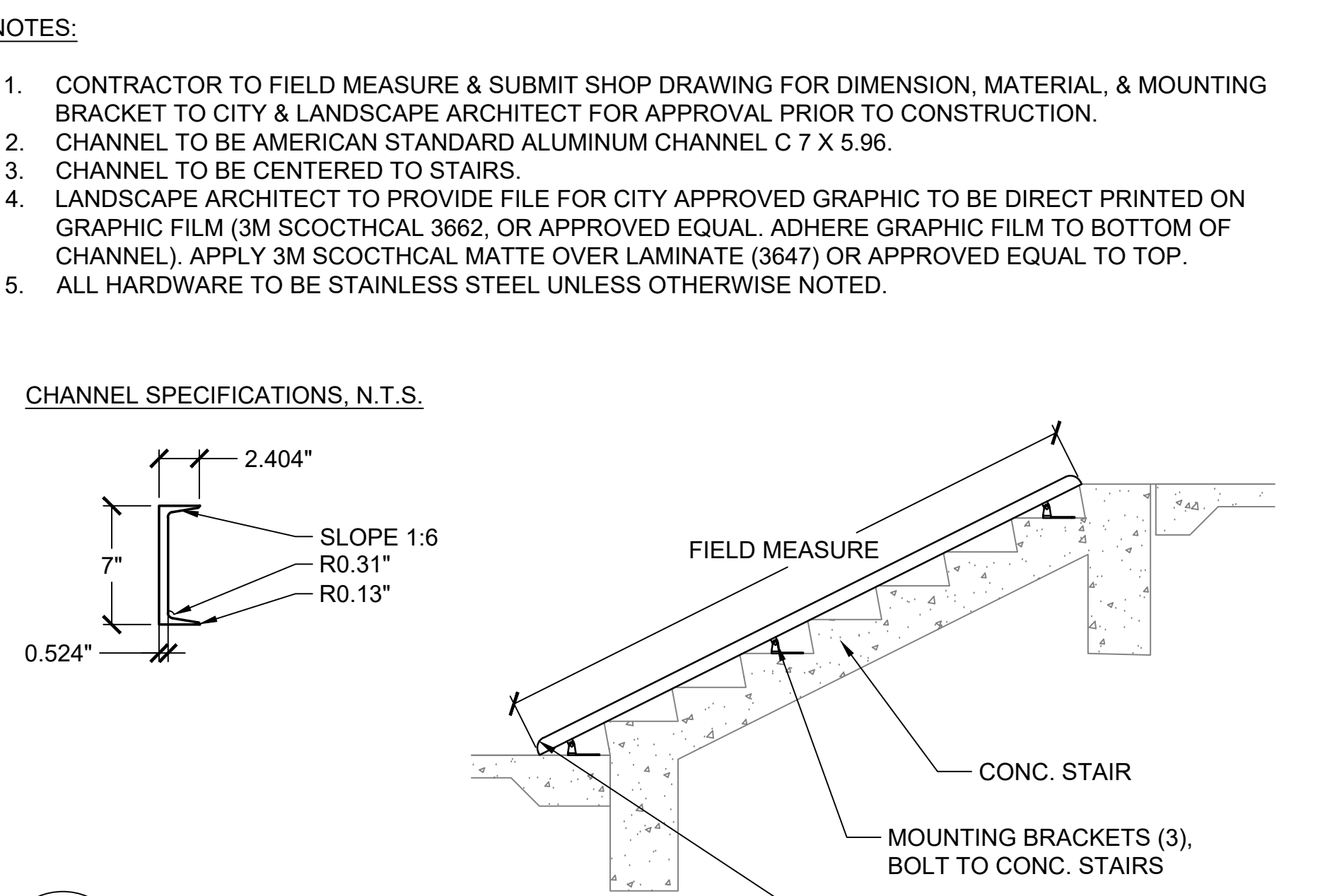
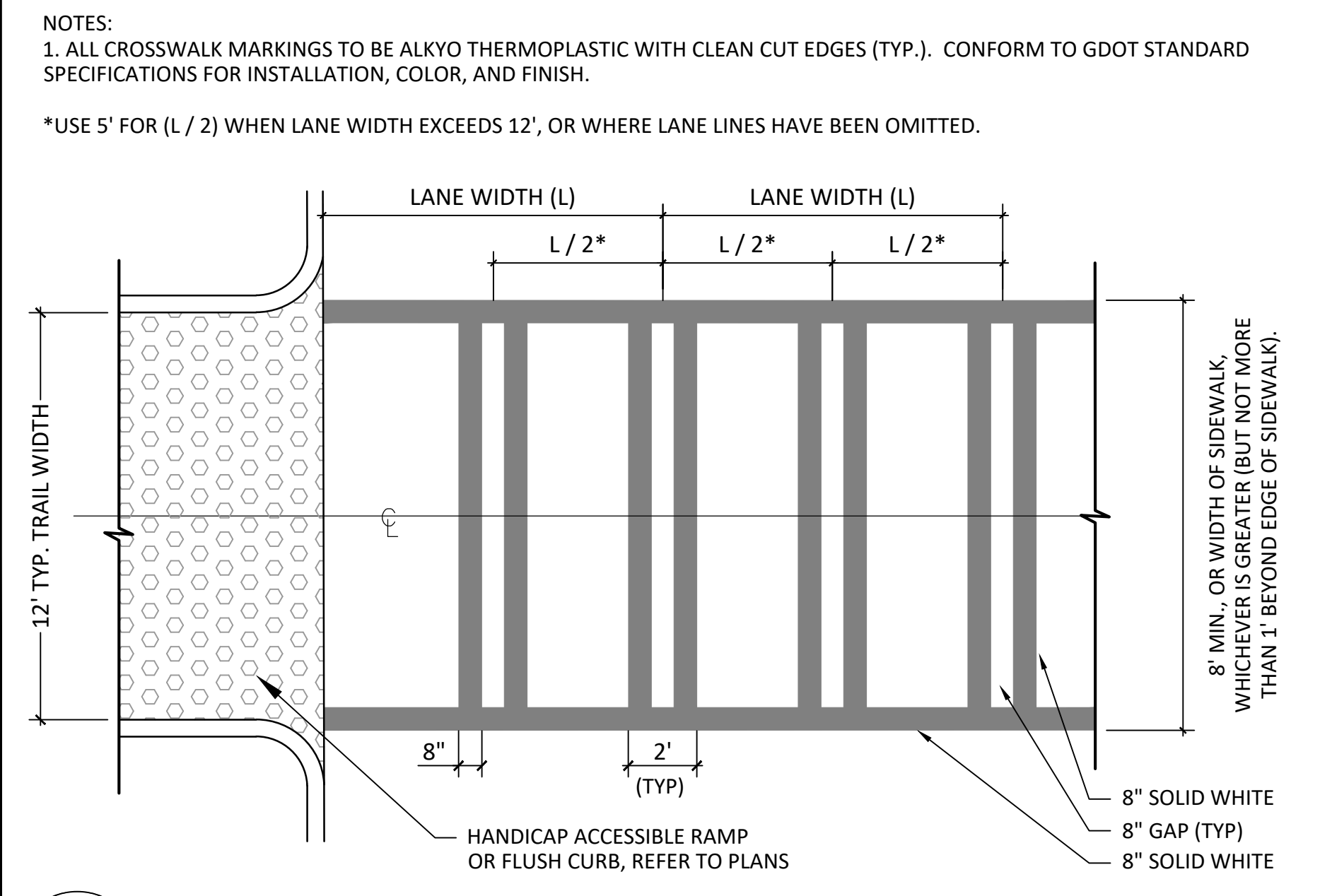
3 STRUCTURAL SLAB DETAIL
CD-02 N.T.S.



4 2 PANEL WOOD FENCE
CD-02 SCALE: 1/2" = 1'-0"

5 STAIRS WITH RAILING
CD-02 SCALE: 1'-0" = 1'-0"

6 STAIR REINFORCEMENT DETAIL
CD-02 SCALE: 1" = 1'-0"



7 GDOT CROSSWALK STRIPING
CD-02 SCALE: 1/4" = 1'-0"

8 BIKE CHANNEL
CD-02 SCALE: 1/2" = 1'-0"

9 STAIR TREAD & RISER DETAIL
CD-02 SCALE: 1'-0" = 1'-0"

KAIZENCOLLABORATIVE
2390 MAIN STREET | TUCKER, GEORGIA 30084 | 404.239.2521
CHARLES M. ABBOTT JR., P.E.
DESIGN ENGINEER LEVEL II CERTIFICATION
GSWCC # 000004168 EXPIRES: 04/28/2025
CHUCK.ABBOTT@KAIZENCOLLABORATIVE.COM
O: 404-239-2521

PATH FOUNDATION
PO BOX 1432, ATLANTA, GA 30305
24 HOUR CONTACT - PETE PELLEGRINI
E: PETEVP@PATHFOUNDATION.ORG
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02/17/2023	50% DESIGN REVIEW
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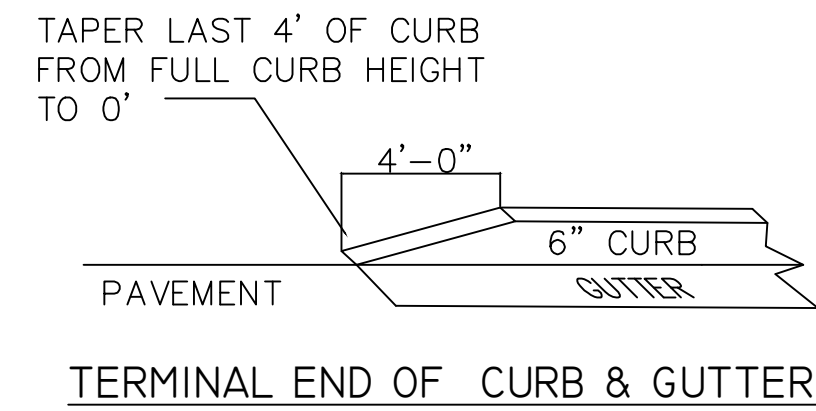
PROJECT # 2022 - 256
PROJECT MANAGER AC

LaGRANGE BICYCLE PARK
LaGRANGE, GA

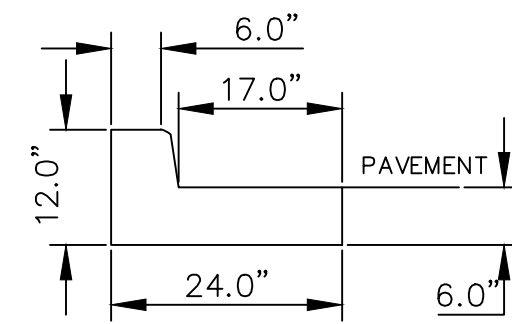
REGISTERED PROFESSIONAL ENGINEER
No. 31674
CHARLES M. ABBOTT JR.
01/21/23

CONSTRUCTION DETAILS

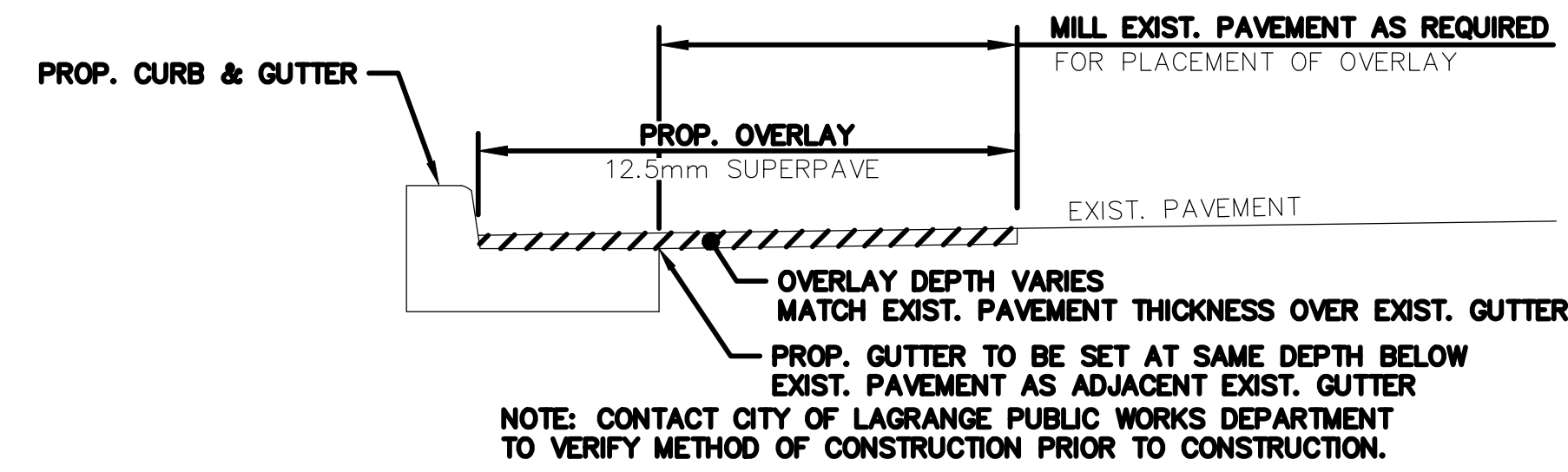
SCALE AS SHOWN
DATE JULY 21, 2023
SHEET # **CD-02**



TERMINAL END OF CURB & GUTTER



CONCRETE CURB & GUTTER DETAIL



PAVEMENT OVER GUTTER DETAIL
N.T.S.

THIS SPACE INTENTIONALLY LEFT BLANK

1 CONCRETE CURB AND GUTTER
CD-04 SCALE: N.T.S.

2 PAVEMENT OVER GUTTER DETAIL
CD-04 N.T.S.

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THIS SPACE INTENTIONALLY LEFT BLANK

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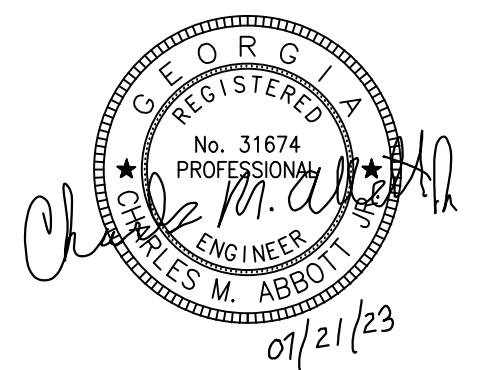
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07/21/2023	100% ISSUE FOR PERMIT
08/16/2023	100% ISSUE FOR BID

PROJECT #	2022 - 256
PROJECT MANAGER	AC

LaGRANGE BICYCLE PARK
LaGRANGE, GA



CONSTRUCTION DETAILS

SCALE	AS SHOWN
DATE	JULY 21, 2023

	SHEET #	CD-04
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- EROSION CONTROL NOTES**
- 1) EROSION CONTROL MEASURES WILL BE MAINTAINED AT ALL TIMES. IF FULL IMPLEMENTATION OF THE APPROVED PLAN DOES NOT PROVIDE FOR EFFECTIVE EROSION CONTROL, ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IMPLEMENTED TO CONTROL OR TREAT THE SEDIMENT SOURCE.
 - 2) ALL BMPs WILL BE INSPECTED DAILY AND ANY DEFICIENCIES NOTED WILL BE CORRECTED BY THE END OF EACH DAY. ADDITIONAL BMPs WILL BE INSTALLED IF DEEMED NECESSARY BY ON-SITE INSPECTION.
 - 3) ALL DISTURBED AREAS MUST BE SEED, FERTILIZED, AND MULCHED AS SOON AS CONSTRUCTION PHASE PERMIT. ALSO, THESE DISTURBED AREAS MUST BE PROTECTED UNTIL PERMANENT VEGETATION IS ESTABLISHED.
 - 4) THE ESCAPE OF SEDIMENT FROM THE SITE SHALL BE PREVENTED BY THE INSTALLATION OF EROSION AND SEDIMENT CONTROL MEASURES AND PRACTICES PRIOR TO LAND-DISTURBING ACTIVITIES.
 - 5) ALL UNSURFACED AREAS DISTURBED BY GRADING OPERATIONS SHALL RECEIVE FOUR (4) INCHES OF TOPSOIL. CONTRACTOR SHALL APPLY STABILIZATION FABRIC TO ALL SLOPES THAT ARE 10° OR GREATER IN HEIGHT & SLOPE OF 3H:1V OR GREATER AS NECESSARY TO RETAIN TOPSOIL. CONTRACTOR SHALL MAINTAIN BEST MANAGEMENT PRACTICES ON DISTURBED SLOPES IN ACCORDANCE WITH THE MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA UNTIL A HEALTHY STAND OF GRASS IS MAINTAINED OVER MORE THAN 70% OF THE DISTURBED AREA AND TO THE SATISFACTION OF THE OWNER.
 - 6) IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO CLEAN OUT ALL EXISTING AND PROPOSED INLETS, PIPES, AND MANHOLES OF DEBRIS AND SEDIMENT AT COMPLETION OF THE SITE WORK IN CONFORMANCE WITH ALL STATE AND LOCAL SPECIFICATIONS, AND TO THE SATISFACTION OF THE OWNER.
 - 7) SILT FENCE SHALL MEET THE REQUIREMENTS OF SECTION 171, "SILT FENCE" OF THE STATE OF GEORGIA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS, AND MEET SPECIFICATIONS FOR TYPE "C" SILT FENCE IN THE "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA", AND SHALL BE WIRE REINFORCED AS REQUIRED BY THESE SPECIFICATIONS. A DOUBLE ROW MUST BE INSTALLED BETWEEN LAND DISTURBING ACTIVITIES AND STATE WATERS.
 - 8) ALL EARTHWORK OPERATIONS SHOULD BE SCHEDULED IN A MANNER TO MAINTAIN PROPER ROUTING OF STORM WATER THROUGH SEDIMENT CONTROL DEVICES. IF IT IS NECESSARY TO PERFORM CONSTRUCTION ACTIVITIES IN AN ORDER THAT IS NOT IN ACCORDANCE WITH THE ACTIVITY SCHEDULE ON THIS PLAN, OR THE CONSTRUCTION SCHEDULE WILL ALLOW FOR DISTURBED AREAS TO BYPASS BEST MANAGEMENT PRACTICES, THE CONTRACTOR IS TO CONTACT THE ENGINEER PRIOR TO COMMENCEMENT OF SUCH ACTIVITIES AND IMPLEMENT EROSION CONTROL DEVICES THAT WILL CONTROL SEDIMENT, AT THE SATISFACTION OF THE ENGINEER AND IN ACCORDANCE WITH THE MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA.
 - 9) DETENTION FACILITIES AND EROSION CONTROL MEASURES ARE TO BE ACCOMPLISHED PRIOR TO ANY OTHER CONSTRUCTION ON THE SITE AND MAINTAINED UNTIL PERMANENT GROUND COVER IS ESTABLISHED.
 - 10) LENGTH OF RIPRAP SHALL BE 6 TIMES THE DIAMETER OF THE STORMWATER OUTLET PIPE AT A MINIMUM.
 - 11) FILE NOTICE OF INTENT AND NOTICE OF TERMINATION WITH GA EPD IF REQUIRED.
 - 12) NO CONCRETE VEHICLE WASHDOWN OR UNPROTECTED STORAGE OF PETROLEUM PRODUCTS IS ALLOWED ON SITE.
 - 13) STORMWATER POLLUTANTS ARE DECREASED ON THIS SITE WITH THE INSTALLATION OF SEDIMENT BARRIERS AND PERMANENT VEGETATIVE COVER. THE VEGETATIVE COVER WILL REMAIN AS A PERMANENT GROUND STABILIZATION MEASURE.
 - 14) REVISIONS TO THE ES&PC PLAN WHICH HAVE A SIGNIFICANT HYDRAULIC COMPONENT MUST BE CERTIFIED BY THE DESIGN PROFESSIONAL.
 - 15) WASTE MATERIALS SHALL NOT BE DISCHARGED TO WATERS OF THE STATE, EXCEPT AS AUTHORIZED BY A SECTION 404 PERMIT.
 - 16) OWNER TO VERIFY ALL WASTE DISPOSAL, SANITARY SEWER, AND SEPTIC TANK REGULATIONS FOR REMOVAL AND REMEDIATION HAVE BEEN IMPLEMENTED.
 - 17) ANY DISTURBED AREA LEFT EXPOSED FOR A PERIOD GREATER THAN 14 DAYS SHALL BE STABILIZED WITH TEMPORARY VEGETATION.
 - 18) ANY DISTURBED AREA REMAINING IDLE FOR 30 DAYS SHALL BE STABILIZED WITH PERMANENT VEGETATION.
 - 19) EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSPECTED AT LEAST WEEKLY, AFTER EACH RAIN AND REPAIRED AS NECESSARY.
 - 20) ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED IF DETERMINED NECESSARY BY ON-SITE INSPECTION.
 - 21) "SILT FENCE SHALL MEET THE REQUIREMENTS OF SECTION 171-TYPE C TEMPORARY SILT FENCE, OF THE GEORGIA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS, 1993 EDITION".
 - 22) THE PROPERTY OWNER AND CONTRACTOR ARE EQUALLY RESPONSIBLE FOR ALL EROSION CONTROL ACTIVITIES.
 - 23) IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN QUALIFIED PROFESSIONAL ADVICE WHERE QUESTIONS ARISE CONCERNING DESIGN AND EFFECTIVENESS OF EROSION CONTROL MEASURES, NOT THE CITY OF ATLANTA.
 - 24) ALL TEMPORARY AND PERMANENT SEEDING SHALL BE PERFORMED IN THE APPROPRIATE SEASON. IN SUCH INSTANCES WHERE THE ESTABLISHED VEGETATION IS INADEQUATE DUE TO SEASON OR DROUGHT, DISTURBED AREAS SHALL BE STABILIZED USING 2"-4" OF MULCH (Ds1). ADDITIONAL PLANTS IN WILL BE NECESSARY IF A SUFFICIENT STAND OF GRASS FAILS TO GROW.
 - 25) THE CITY INSPECTOR OR DESIGNEE WILL VERIFY ADEQUATE GROUND COVER (100% COVER, 70% DENSITY) OF PERMANENT VEGETATION (Ds3, Ds4).
 - 26) SILT FENCES SHALL NOT BE PLACED IN STREAM BUFFER LIMITS OR FLOOD PLAIN LIMITS UNLESS UTILIZED FOR THE CONSTRUCTION OF AN EXEMPT ACTIVITY (EG ROADWAY DRAINAGE STRUCTURES, SEWER/WATER UTILITY CROSSINGS, ETC) AS PER THE APPROVED PLANS. FOR SUCH DISTURBANCES WITHIN THE UNDISTURBED BUFFER LIMITS, THE BUFFER SHALL BE IMMEDIATELY STABILIZED WITH MATTING AND BLANKETS ONCE THE CONSTRUCTION ACTIVITY IS COMPLETE.
 - 27) FOR EACH SITE ON WHICH LAND DISTURBING ACTIVITY OCCURS, EACH ENTITY OR PERSON ACTING AS EITHER A PRIMARY, SECONDARY OR TERTIARY PERMITTEE, AS DEFINED IN THE STATE GENERAL PERMIT, SHALL HAVE AS A MINIMUM ONE PERSON WHO IS IN RESPONSIBLE CHARGE OF EROSION AND SEDIMENTATION CONTROL ACTIVITIES ON BEHALF OF SAID ENTITY OR PERSON AND MEETS THE APPLICABLE (LEVEL 1A) EDUCATION OR TRAINING CERTIFICATION REQUIREMENTS (O.C.G.A. 12-7-19 (A)(2)). 28) SUBCONTRACTORS INVOLVED WITH LAND DISTURBANCE ACTIVITIES SHALL MEET THE EDUCATION REQUIREMENTS (LEVEL 1) DESCRIBED IN O.C.G.A. 12-7-19.
 - 28) SD1-S SEDIMENT BARRIERS MAY BE EITHER SILT FENCE OR FILTER MEDIA SOCK AS PER DETAILS SHOWN ON SHEET ECD-103. CONTRACTOR MUST PRICE SILT FENCE IN BASE BID AND SHOW ADD/DEDUCT FOR FILTER MEDIA SOCK IN BID ALTERNATE. USE FILTER MEDIA SOCK IN AREAS OF CRITICAL ROOT ZONES.
 - 29) THE DESIGN PROFESSIONAL WHO PREPARED THE ES&PC PLAN IS TO INSPECT THE INSTALLATION OF THE INITIAL SEDIMENT STORAGE REQUIREMENTS, PERIMETER CONTROL BMPs, AND SEDIMENT BASINS WITHIN 7 DAYS AFTER INSTALLATION.
 - 30) NON-EXEMPT ACTIVITIES SHALL NOT BE CONDUCTED WITHIN THE 25 OR 50-FOOT UNDISTURBED STREAM BUFFERS AS MEASURED FROM THE POINT OF WRESTED VEGETATION OR WITHIN 25-FEET OF THE COASTAL MARSHLAND BUFFER AS MEASURED FROM THE JURISDICTIONAL DETERMINATION LINE WITHOUT FIRST ACQUIRING THE NECESSARY VARIANCES AND PERMITS.
 - 31) AMENDMENTS/REVISIONS TO THE ES&PC PLAN WHICH HAVE A SIGNIFICANT EFFECT ON BMPs WITH A HYDRAULIC COMPONENT MUST BE CERTIFIED BY THE DESIGN PROFESSIONAL.

NOTE:
ANY CONSTRUCTION ACTIVITY WHICH DISCHARGES STORMWATER INTO AN IMPAIRED STREAM SEGMENT, OR WITHIN 1 LINEAR MILE UPSTREAM OF AND WITHIN THE SAME WATERSHED AS, ANY PORTION OF A BIOTA IMPAIRED STREAM SEGMENT MUST COMPLY WITH PART III.C. OF THE PERMIT, INCLUDE THE COMPLETED APPENDIX 1 LISTING ALL THE BMPs THAT WILL BE USED FOR THOSE AREAS OF THE SITE WHICH DISCHARGE TO THE IMPAIRED STREAM SEGMENT.

IF A TMDL IMPLEMENTATION PLAN FOR SEDIMENT HAS BEEN FINALIZED FOR THE IMPAIRED STREAM SEGMENT (IDENTIFIED ABOVE) AT LEAST SIX MONTHS PRIOR TO SUBMITTAL OF THE NOI, THE ES&PC PLAN MUST ADDRESS ANY SITE-SPECIFIC CONDITIONS OR REQUIREMENTS INCLUDED IN THE TMDL IMPLEMENTATION PLAN.

GEORGIA'S 2020 OR SUBSEQUENT 305 (b) / 305 (d) LIST DOCUMENTS HAVE BEEN CONSULTED. IT WAS DETERMINED THAT THIS SITE DOES NOT DRAIN INTO AN IMPAIRED STREAM SEGMENT, AND IS NOT WITHIN ONE (1) LINEAR MILE UPSTREAM OF, AND WITHIN THE SAME WATERSHED AS, ANY PORTION OF A BIOTA IMPAIRED STREAM SEGMENT.

THE CONTRACTOR WILL IMPLEMENT THE SPILL PREVENTION CONTROL COUNTERMEASURES (SPCC) PLAN FOUND WITHIN THIS ES&PC AND WILL TRAIN ALL PERSONNEL IN THE PROPER CLEANUP AND HANDLING OF SPILLED MATERIALS. NO SPILLED HAZARDOUS MATERIALS OR HAZARDOUS WASTES WILL BE ALLOWED TO COME IN CONTACT WITH STORMWATER DISCHARGES. IF SUCH CONTACT OCCURS, THE STORMWATER DISCHARGE WILL BE CONTAINED ON SITE UNTIL APPROPRIATE MEASURES IN COMPLIANCE WITH STATE AND FEDERAL REGULATIONS ARE TAKEN TO DISPOSE OF SUCH CONTAMINATED STORMWATER. IT SHALL BE THE RESPONSIBILITY OF THE JOB SITE SUPERINTENDENT TO PROPERLY TRAIN PERSONNEL IN THE USE OF THE SPCC PLAN.

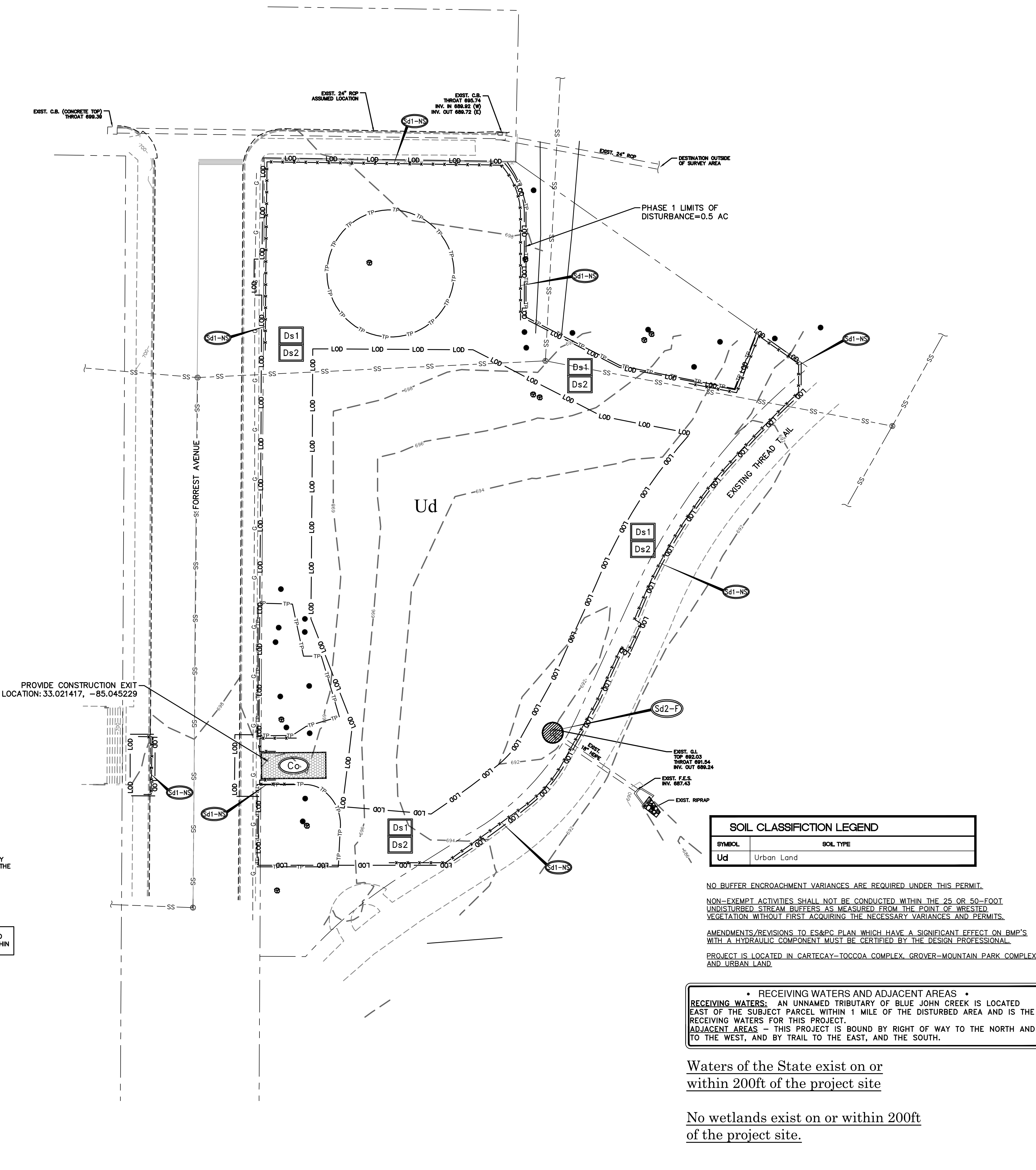
NOTE:
SEDIMENT STORAGE IN THE PROJECT IS ACCOMPLISHED WITH THE USE OF TYPE NS SILT FENCE INSTALLED ALONG THE DOWNHILL SIDE OF THE ENTIRE DISTURBED LENGTH.

SEDIMENT STORAGE REQUIRED: 67 CU. YD./ACRE
67 x 0.9 = 61 CU. YD. STORAGE

TYPE NS FENCE WILL STORE SEDIMENT = 1/4 ACRE / 100 L.F.
(SOURCE: US EPA, NPDES, COMPOST FILTER BERM GUIDANCE DOCUMENT AND GSICC 2016 EDITION, PAGE 6-137)

0.9 ACRE / 1/4 ACRE = 3.6

3.6 x 100 L.F. FENCE = 360 L.F. REQUIRED
550 L.F. OF SILT FENCE PROVIDED



SOIL CLASSIFICATION LEGEND

SYMBOL	SOIL TYPE
Ud	Urban Land

NO BUFFER ENCROACHMENT VARIANCES ARE REQUIRED UNDER THIS PERMIT.
NON-EXEMPT ACTIVITIES SHALL NOT BE CONDUCTED WITHIN THE 25 OR 50-FOOT UNDISTURBED STREAM BUFFERS AS MEASURED FROM THE POINT OF WRESTED VEGETATION WITHOUT FIRST ACQUIRING THE NECESSARY VARIANCES AND PERMITS.
AMENDMENTS/REVISIONS TO ES&PC PLAN WHICH HAVE A SIGNIFICANT EFFECT ON BMPs WITH A HYDRAULIC COMPONENT MUST BE CERTIFIED BY THE DESIGN PROFESSIONAL.
PROJECT IS LOCATED IN CARTECAY-TOCCOA COMPLEX, GROVER-MOUNTAIN PARK COMPLEX AND URBAN LAND.

RECEIVING WATERS AND ADJACENT AREAS
RECEIVING WATERS: AN UNNAMED TRIBUTARY OF BLUE JOHN CREEK IS LOCATED EAST OF THE SUBJECT PARCEL WITHIN 1 MILE OF THE DISTURBED AREA AND IS THE RECEIVING WATERS FOR THIS PROJECT.
ADJACENT AREAS - THIS PROJECT IS BOUND BY RIGHT OF WAY TO THE NORTH AND TO THE WEST, AND BY TRAIL TO THE EAST, AND THE SOUTH.

Waters of the State exist on or within 200ft of the project site

No wetlands exist on or within 200ft of the project site.

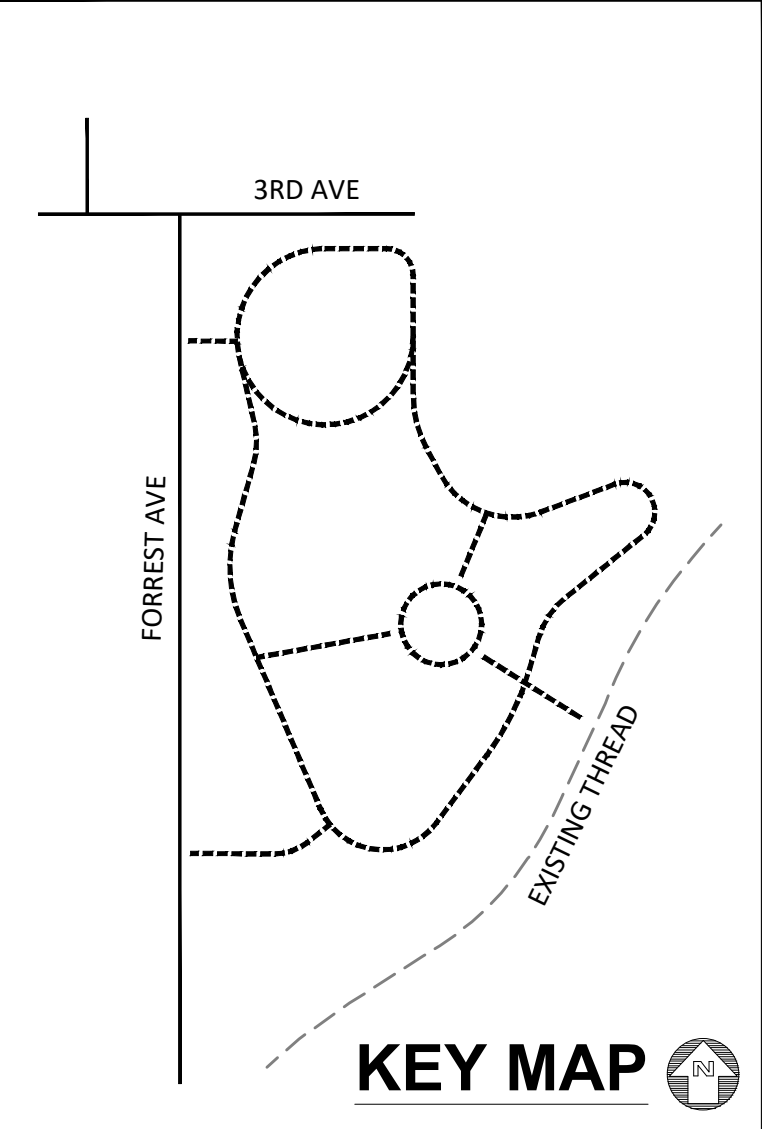
TOTAL ACREAGE = 0.9 AC
PHASE 1 DISTURBED ACREAGE = 0.5 AC

LEGEND

- Co CONSTRUCTION EXIT
- SILT FENCE OR FILTER MEDIA SOCK
- Sd1-NS INLET SEDIMENT TRAP w/ FILTER FENCE
- Sd2-F INLET SEDIMENT TRAP PIGS IN A BLANKET CMU BLOCKS OR FILTER SOCK
- Sd2-P
- S1 STORM DRAIN OUTLET PROTECTION
- SOIL STABILIZATION/MATTING
- Ds1 DISTURBED AREA STABILIZATION WITH MULCH
- Ds2 DISTURBED AREA STABILIZATION WITH TEMPORARY SEEDING
- Ds3 DISTURBED AREA STABILIZATION WITH PERMANENT SEEDING
- Ds4 DISTURBED AREA STABILIZATION WITH PERMANENT SODDING
- Du DUST CONTROL

KAIZENCOLLABORATIVE
2390 MAIN STREET | TUCKER, GEORGIA 30084 | 404.239.2521
CHARLES M. ABBOTT JR, P.E.
DESIGN ENGINEER LEVEL II CERTIFICATION
GSWCC # 000004168 EXPIRES: 04/28/2025
CHUCK.ABBOTT@KAIZENCOLLABORATIVE.COM
O: 404-239-2521

PATH FOUNDATION
PO BOX 1432, ATLANTA, GA 30305
24 HOUR CONTACT - PETE PELLEGRINI
E: PETEVP@PATHFOUNDATION.ORG
O: 404-875-7284 x 2 C: 404-277-5392

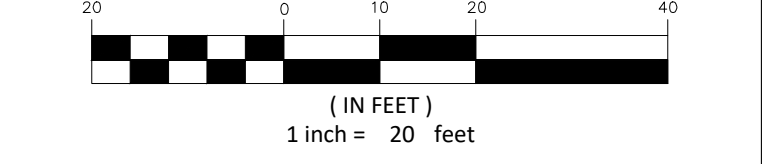


DATE	DESCRIPTION
02/17/2023	50% DESIGN REVIEW
07/21/2023	100% ISSUE FOR PERMIT
08/16/2023	100% ISSUE FOR BID

PROJECT #	2022 - 256
PROJECT MANAGER	AC

LaGRANGE BICYCLE PARK
LaGRANGE, GA

REGISTERED PROFESSIONAL ENGINEER
No. 31674
CHARLES M. ABBOTT JR.
07/21/23

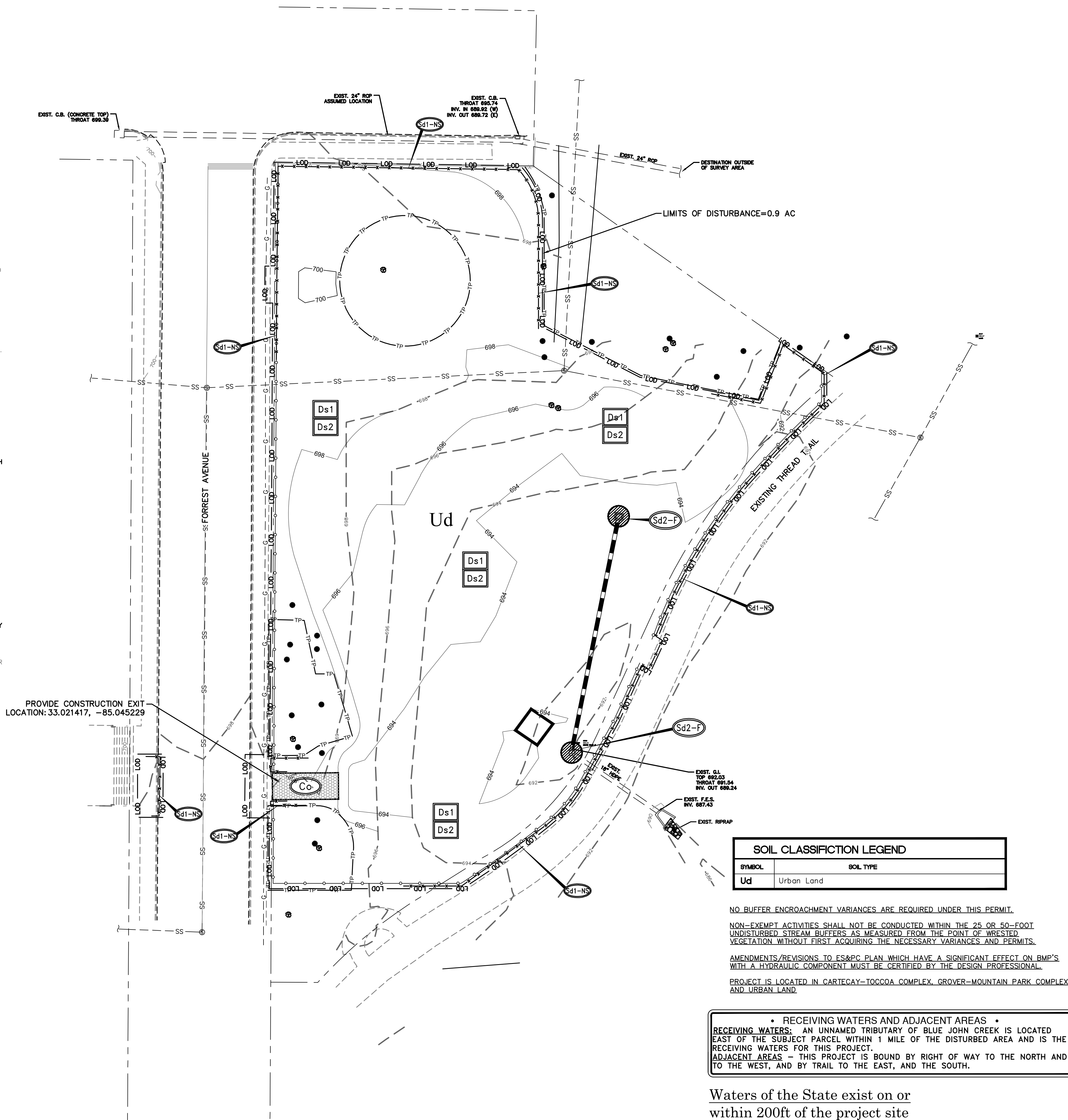


INITIAL PHASE EROSION, SEDIMENTATION, & POLLUTION CONTROL PLAN

SCALE	1" = 20'-0"
DATE	JULY 21, 2023

SHEET #	EC-01
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- EROSION CONTROL NOTES**
- 1) EROSION CONTROL MEASURES WILL BE MAINTAINED AT ALL TIMES. IF FULL IMPLEMENTATION OF THE APPROVED PLAN DOES NOT PROVIDE FOR EFFECTIVE EROSION CONTROL, ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IMPLEMENTED TO CONTROL OR TREAT THE SEDIMENT SOURCE.
 - 2) ALL BMPs WILL BE INSPECTED DAILY AND ANY DEFICIENCIES NOTED WILL BE CORRECTED BY THE END OF EACH DAY. ADDITIONAL BMPs WILL BE INSTALLED IF DEEMED NECESSARY BY ON-SITE INSPECTION.
 - 3) ALL DISTURBED AREAS MUST BE SEED, FERTILIZED, AND MULCHED AS SOON AS CONSTRUCTION PHASE PERMIT. ALSO, THESE DISTURBED AREAS MUST BE PROTECTED UNTIL PERMANENT VEGETATION IS ESTABLISHED.
 - 4) THE ESCAPE OF SEDIMENT FROM THE SITE SHALL BE PREVENTED BY THE INSTALLATION OF EROSION AND SEDIMENT CONTROL MEASURES AND PRACTICES PRIOR TO LAND-DISTURBING ACTIVITIES.
 - 5) ALL UNSURFACED AREAS DISTURBED BY GRADING OPERATIONS SHALL RECEIVE FOUR (4) INCHES OF TOPSOIL. CONTRACTOR SHALL APPLY STABILIZATION FABRIC TO ALL SLOPES THAT ARE 10' OR GREATER IN HEIGHT & SLOPE OF 3H:1V OR GREATER AS NECESSARY TO RETAIN TOPSOIL. CONTRACTOR SHALL MAINTAIN BEST MANAGEMENT PRACTICES ON DISTURBED SLOPES IN ACCORDANCE WITH THE MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA UNTIL A HEALTHY STAND OF GRASS IS MAINTAINED OVER MORE THAN 70% OF THE DISTURBED AREA AND TO THE SATISFACTION OF THE OWNER.
 - 6) IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO CLEAN OUT ALL EXISTING AND PROPOSED INLETS, PIPES, AND MANHOLES OF DEBRIS AND SEDIMENT AT COMPLETION OF THE SITE WORK IN CONFORMANCE WITH ALL STATE AND LOCAL SPECIFICATIONS, AND TO THE SATISFACTION OF THE OWNER.
 - 7) SILT FENCE SHALL MEET THE REQUIREMENTS OF SECTION 171, "SILT FENCE" OF THE STATE OF GEORGIA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS, AND MEET SPECIFICATIONS FOR TYPE "C" SILT FENCE IN THE "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA", AND SHALL BE WIRE REINFORCED AS REQUIRED BY THESE SPECIFICATIONS. A DOUBLE ROW MUST BE INSTALLED BETWEEN LAND DISTURBING ACTIVITIES AND STATION WATERS.
 - 8) ALL EARTHWORK OPERATIONS SHOULD BE SCHEDULED IN A MANNER TO MAINTAIN PROPER ROUTING OF STORM WATER THROUGH SEDIMENT CONTROL DEVICES. IF IT IS NECESSARY TO PERFORM CONSTRUCTION ACTIVITIES IN AN ORDER THAT IS NOT IN ACCORDANCE WITH THE ACTIVITY SCHEDULE ON THIS PLAN, OR THE CONSTRUCTION SCHEDULE WILL ALLOW FOR DISTURBED AREAS TO BYPASS BEST MANAGEMENT PRACTICES, THE CONTRACTOR IS TO CONTACT THE ENGINEER PRIOR TO COMMENCEMENT OF SUCH ACTIVITIES AND IMPLEMENT EROSION CONTROL DEVICES THAT WILL CONTROL SEDIMENT, AT THE SATISFACTION OF THE ENGINEER AND IN ACCORDANCE WITH THE MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA.
 - 9) DETENTION FACILITIES AND EROSION CONTROL MEASURES ARE TO BE ACCOMPLISHED PRIOR TO ANY OTHER CONSTRUCTION ON THE SITE AND MAINTAINED UNTIL PERMANENT GROUND COVER IS ESTABLISHED.
 - 10) LENGTH OF RIPRAP SHALL BE 6 TIMES THE DIAMETER OF THE STORMWATER OUTLET PIPE AT A MINIMUM.
 - 11) FILE NOTICE OF INTENT AND NOTICE OF TERMINATION WITH GA EPD IF REQUIRED.
 - 12) NO CONCRETE VEHICLE WASHDOWN OR UNPROTECTED STORAGE OF PETROLEUM PRODUCTS IS ALLOWED ON SITE.
 - 13) STORMWATER POLLUTANTS ARE DECREASED ON THIS SITE WITH THE INSTALLATION OF SEDIMENT BARRIERS AND PERMANENT VEGETATIVE COVER. THE VEGETATIVE COVER WILL REMAIN AS A PERMANENT GROUND STABILIZATION MEASURE.
 - 14) REVISIONS TO THE ES&PC PLAN WHICH HAVE A SIGNIFICANT HYDRAULIC COMPONENT MUST BE CERTIFIED BY THE DESIGN PROFESSIONAL.
 - 15) WASTE MATERIALS SHALL NOT BE DISCHARGED TO WATERS OF THE STATE, EXCEPT AS AUTHORIZED BY A SECTION 404 PERMIT.
 - 16) OWNER TO VERIFY ALL WASTE DISPOSAL, SANITARY SEWER, AND SEPTIC TANK REGULATIONS FOR REMOVAL AND REMEDIATION HAVE BEEN IMPLEMENTED.
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 - 24) ALL TEMPORARY AND PERMANENT SEEDING SHALL BE PERFORMED IN THE APPROPRIATE SEASON. IN SUCH INSTANCES WHERE THE ESTABLISHED VEGETATION IS INOPPORTUNE DUE TO SEASON OR DROUGHT, DISTURBED AREAS SHALL BE STABILIZED USING 2"-4" OF MULCH (DS1). ADDITIONAL PLANTS IN WILL BE NECESSARY IF A SUFFICIENT STAND OF GRASS FAILS TO GROW.
 - 25) THE CITY INSPECTOR OR DESIGNEE WILL VERIFY ADEQUATE GROUND COVER (100% COVER, 70% DENSITY) OF PERMANENT VEGETATION (DS3, DS4).
 - 26) SILT FENCES SHALL NOT BE PLACED IN STREAM BUFFER LIMITS OR FLOOD PLAIN LIMITS UNLESS UTILIZED FOR THE CONSTRUCTION OF AN EXEMPT ACTIVITY (EG ROADWAY DRAINAGE STRUCTURES, SEWER/WATER UTILITY CROSSINGS, ETC) AS PER THE APPROVED PLANS. FOR SUCH DISTURBANCES WITHIN THE UNDISTURBED BUFFER LIMITS, THE BUFFER SHALL BE IMMEDIATELY STABILIZED WITH MATTING AND BLANKETS ONCE THE CONSTRUCTION ACTIVITY IS COMPLETE.
 - 27) FOR EACH SITE ON WHICH LAND DISTURBING ACTIVITY OCCURS, EACH ENTITY OR PERSON ACTING AS EITHER A PRIMARY, SECONDARY OR TERTIARY PERMITTEE, AS DEFINED IN THE STATE GENERAL PERMIT, SHALL HAVE AS A MINIMUM ONE PERSON WHO IS IN RESPONSIBLE CHARGE OF EROSION AND SEDIMENTATION CONTROL ACTIVITIES ON BEHALF OF SAID ENTITY OR PERSON AND MEETS THE APPLICABLE (LEVEL 1A) EDUCATION OR TRAINING CERTIFICATION REQUIREMENTS (O.C.G.A. 12-7-19 (A)(2)). 28) SUBCONTRACTORS INVOLVED WITH LAND DISTURBANCE ACTIVITIES SHALL MEET THE EDUCATION REQUIREMENTS (LEVEL 1) DESCRIBED IN O.C.G.A. 12-7-19.
 - 28) SD1-S SEDIMENT BARRIERS MAY BE EITHER SILT FENCE OR FILTER MEDIA SOCK AS PER DETAILS SHOWN ON SHEET ECD-103. CONTRACTOR MUST PRICE SILT FENCE IN BASE BID AND SHOW ADD/DEDUCT FOR FILTER MEDIA SOCK IN BID ALTERNATE. USE FILTER MEDIA SOCK IN AREAS OF CRITICAL ROOT ZONES.
 - 29) THE DESIGN PROFESSIONAL WHO PREPARED THE ES&PC PLAN IS TO INSPECT THE INSTALLATION OF THE INITIAL SEDIMENT STORAGE REQUIREMENTS, PERIMETER CONTROL BMPs, AND SEDIMENT BASINS WITHIN 7 DAYS AFTER INSTALLATION.
 - 30) NON-EXEMPT ACTIVITIES SHALL NOT BE CONDUCTED WITHIN THE 25 OR 50-FOOT UNDISTURBED STREAM BUFFERS AS MEASURED FROM THE POINT OF WRESTED VEGETATION OR WITHIN 25-FEET OF THE COASTAL MARSHLAND BUFFER AS MEASURED FROM THE JURISDICTIONAL DETERMINATION LINE WITHOUT FIRST ACQUIRING THE NECESSARY VARIANCES AND PERMITS.
 - 31) AMENDMENTS/REVISIONS TO THE ES&PC PLAN WHICH HAVE A SIGNIFICANT EFFECT ON BMPs WITH A HYDRAULIC COMPONENT MUST BE CERTIFIED BY THE DESIGN PROFESSIONAL.



SOIL CLASSIFICATION LEGEND

SYMBOL	SOIL TYPE
Ud	Urban Land

NO BUFFER ENCROACHMENT VARIANCES ARE REQUIRED UNDER THIS PERMIT.

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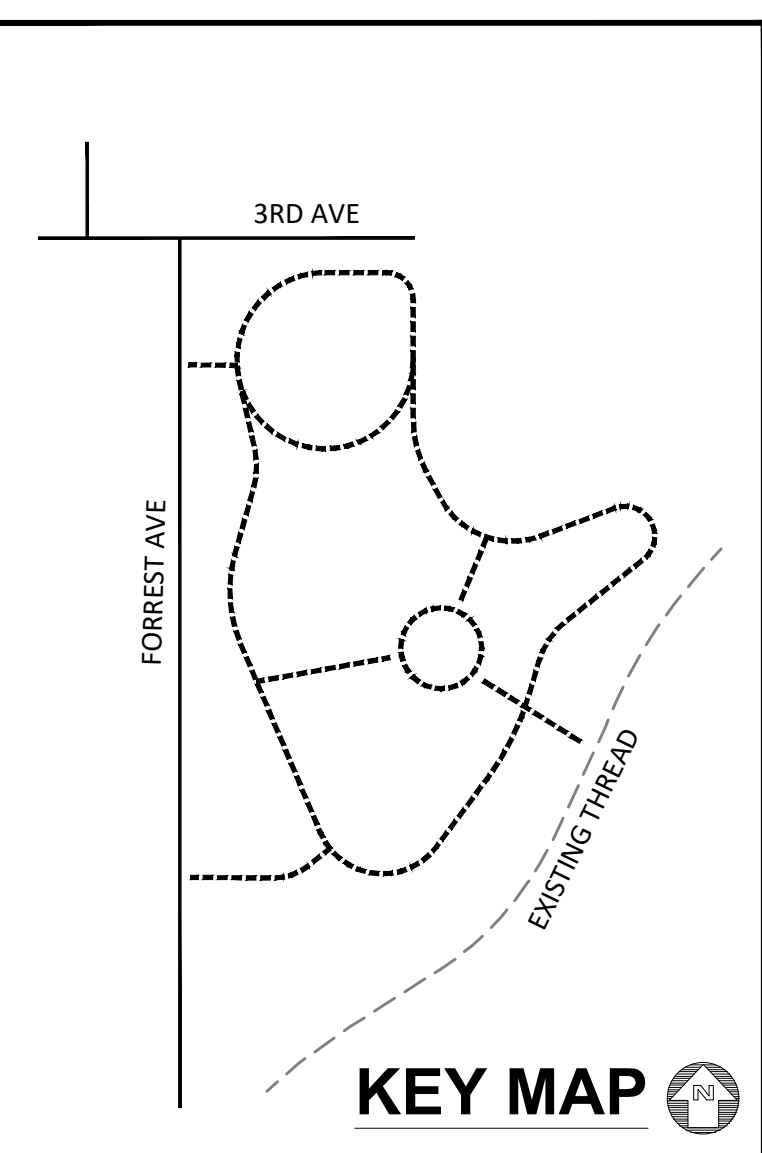
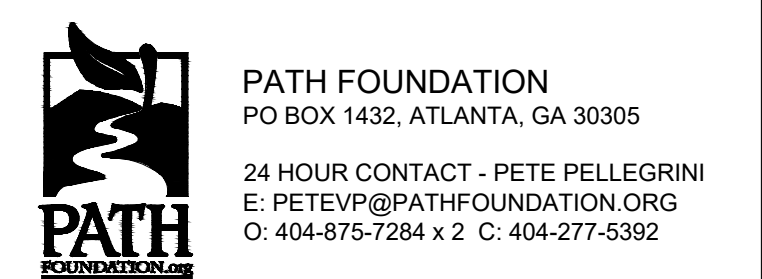
Waters of the State exist on or within 200ft of the project site

No wetlands exist on or within 200ft of the project site.

TOTAL ACREAGE = 0.9 AC
PHASE 2 DISTURBED ACREAGE = 0.9 AC

LEGEND

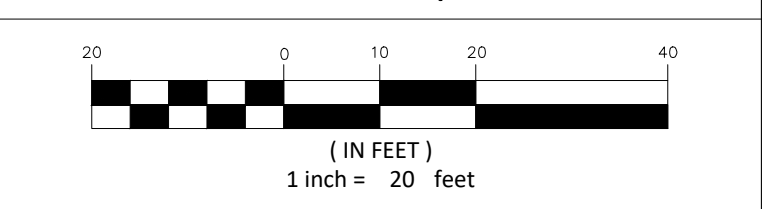
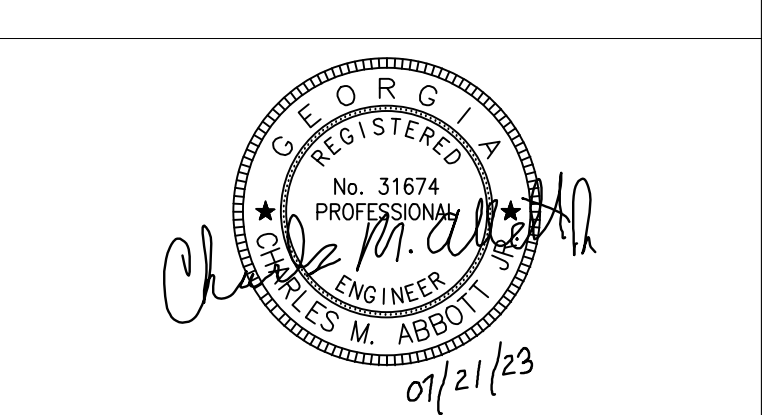
Co	CONSTRUCTION EXIT
X	SEDIMENT BARRIER (SILT FENCE OR FILTER MEDIA SOCK)
Sd2-F	INLET SEDIMENT TRAP w/ FILTER FENCE
Sd2-P	INLET SEDIMENT TRAP PIGS IN A BLANKET CMU BLOCKS OR FILTER SOCK
Sd1	STORM DRAIN OUTLET PROTECTION
SOIL STABILIZATION/MATTING	
Ds1	DISTURBED AREA STABILIZATION WITH MULCH
Ds2	DISTURBED AREA STABILIZATION WITH TEMPORARY SEEDING
Ds3	DISTURBED AREA STABILIZATION WITH PERMANENT SEEDING
Ds4	DISTURBED AREA STABILIZATION WITH PERMANENT SODDING
Du	DUST CONTROL



DATE	DESCRIPTION
02/17/2023	50% DESIGN REVIEW
07/21/2023	100% ISSUE FOR PERMIT
08/16/2023	100% ISSUE FOR BID

PROJECT # 2022 - 256
PROJECT MANAGER AC

LaGRANGE BICYCLE PARK
LaGRANGE, GA

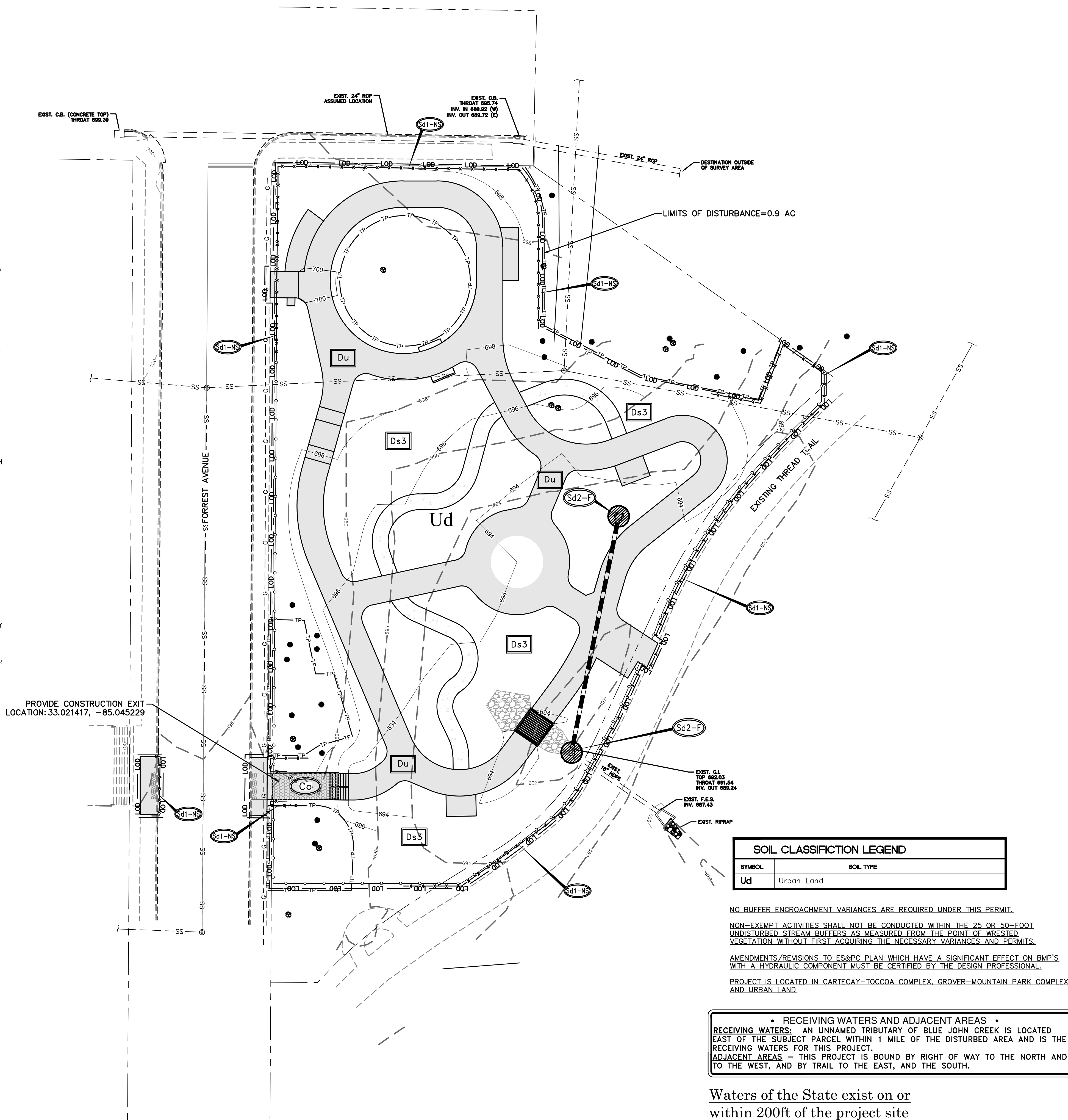


INTERMEDIATE PHASE EROSION, SEDIMENTATION, & POLLUTION CONTROL PLAN

SCALE 1" = 20'-0"
DATE JULY 21, 2023

SHEET # **EC-02**

- EROSION CONTROL NOTES**
- 1) EROSION CONTROL MEASURES WILL BE MAINTAINED AT ALL TIMES. IF FULL IMPLEMENTATION OF THE APPROVED PLAN DOES NOT PROVIDE FOR EFFECTIVE EROSION CONTROL, ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IMPLEMENTED TO CONTROL OR TREAT THE SEDIMENT SOURCE.
 - 2) ALL BMPs WILL BE INSPECTED DAILY AND ANY DEFICIENCIES NOTED WILL BE CORRECTED BY THE END OF EACH DAY. ADDITIONAL BMPs WILL BE INSTALLED IF DEEMED NECESSARY BY ON-SITE INSPECTION.
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 - 4) THE ESCAPE OF SEDIMENT FROM THE SITE SHALL BE PREVENTED BY THE INSTALLATION OF EROSION AND SEDIMENT CONTROL MEASURES AND PRACTICES PRIOR TO LAND-DISTURBING ACTIVITIES.
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 - 6) IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO CLEAN OUT ALL EXISTING AND PROPOSED INLETS, PIPES, AND MANHOLES OF DEBRIS AND SEDIMENT AT COMPLETION OF THE SITE WORK IN CONFORMANCE WITH ALL STATE AND LOCAL SPECIFICATIONS, AND TO THE SATISFACTION OF THE OWNER.
 - 7) SILT FENCE SHALL MEET THE REQUIREMENTS OF SECTION 171, "SILT FENCE" OF THE STATE OF GEORGIA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS, AND MEET SPECIFICATIONS FOR TYPE "C" SILT FENCE IN THE "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA", AND SHALL BE WIRE REINFORCED AS REQUIRED BY THESE SPECIFICATIONS. A DOUBLE ROW MUST BE INSTALLED BETWEEN LAND DISTURBING ACTIVITIES AND STATE WATERS.
 - 8) ALL EARTHWORK OPERATIONS SHOULD BE SCHEDULED IN A MANNER TO MAINTAIN PROPER ROUTING OF STORM WATER THROUGH SEDIMENT CONTROL DEVICES. IF IT IS NECESSARY TO PERFORM CONSTRUCTION ACTIVITIES IN AN ORDER THAT IS NOT IN ACCORDANCE WITH THE ACTIVITY SCHEDULE ON THIS PLAN, OR THE CONSTRUCTION SCHEDULE WILL ALLOW FOR DISTURBED AREAS TO BYPASS BEST MANAGEMENT PRACTICES, THE CONTRACTOR IS TO CONTACT THE ENGINEER PRIOR TO COMMENCEMENT OF SUCH ACTIVITIES AND IMPLEMENT EROSION CONTROL DEVICES THAT WILL CONTROL SEDIMENT, AT THE SATISFACTION OF THE ENGINEER AND IN ACCORDANCE WITH THE MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA.
 - 9) DETENTION FACILITIES AND EROSION CONTROL MEASURES ARE TO BE ACCOMPLISHED PRIOR TO ANY OTHER CONSTRUCTION ON THE SITE AND MAINTAINED UNTIL PERMANENT GROUND COVER IS ESTABLISHED.
 - 10) LENGTH OF RIPRAP SHALL BE 6 TIMES THE DIAMETER OF THE STORMWATER OUTLET PIPE AT A MINIMUM.
 - 11) FILE NOTICE OF INTENT AND NOTICE OF TERMINATION WITH GA EPD IF REQUIRED.
 - 12) NO CONCRETE VEHICLE WASHDOWN OR UNPROTECTED STORAGE OF PETROLEUM PRODUCTS IS ALLOWED ON SITE.
 - 13) STORMWATER POLLUTANTS ARE DECREASED ON THIS SITE WITH THE INSTALLATION OF SEDIMENT BARRIERS AND PERMANENT VEGETATIVE COVER. THE VEGETATIVE COVER WILL REMAIN AS A PERMANENT GROUND STABILIZATION MEASURE.
 - 14) REVISIONS TO THE ES&PC PLAN WHICH HAVE A SIGNIFICANT HYDRAULIC COMPONENT MUST BE CERTIFIED BY THE DESIGN PROFESSIONAL.
 - 15) WASTE MATERIALS SHALL NOT BE DISCHARGED TO WATERS OF THE STATE, EXCEPT AS AUTHORIZED BY A SECTION 404 PERMIT.
 - 16) OWNER TO VERIFY ALL WASTE DISPOSAL, SANITARY SEWER, AND SEPTIC TANK REGULATIONS FOR REMOVAL AND REMEDIATION HAVE BEEN IMPLEMENTED.
 - 17) ANY DISTURBED AREA LEFT EXPOSED FOR A PERIOD GREATER THAN 14 DAYS SHALL BE STABILIZED WITH TEMPORARY VEGETATION.
 - 18) ANY DISTURBED AREA REMAINING IDLE FOR 30 DAYS SHALL BE STABILIZED WITH PERMANENT VEGETATION.
 - 19) EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSPECTED AT LEAST WEEKLY, AFTER EACH RAIN AND REPAIRED AS NECESSARY.
 - 20) ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED IF DETERMINED NECESSARY BY ON-SITE INSPECTION.
 - 21) "SILT FENCE SHALL MEET THE REQUIREMENTS OF SECTION 171-TYPE C TEMPORARY SILT FENCE, OF THE GEORGIA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS, 1993 EDITION".
 - 22) THE PROPERTY OWNER AND CONTRACTOR ARE EQUALLY RESPONSIBLE FOR ALL EROSION CONTROL ACTIVITIES.
 - 23) IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN QUALIFIED PROFESSIONAL ADVICE WHEN QUESTIONS ARISE CONCERNING DESIGN AND EFFECTIVENESS OF EROSION CONTROL MEASURES, NOT THE CITY OF ATLANTA.
 - 24) ALL TEMPORARY AND PERMANENT SEEDING SHALL BE PERFORMED IN THE APPROPRIATE SEASON. IN SUCH INSTANCES WHERE THE ESTABLISHED VEGETATION IS INOPPORTUNE DUE TO SEASON OR DROUGHT, DISTURBED AREAS SHALL BE STABILIZED USING 2"-4" OF MULCH (DS1). ADDITIONAL PLANTS IN WILL BE NECESSARY IF A SUFFICIENT STAND OF GRASS FAILS TO GROW.
 - 25) THE CITY INSPECTOR OR DESIGNEE WILL VERIFY ADEQUATE GROUND COVER (100% COVER, 70% DENSITY) OF PERMANENT VEGETATION (DS3, DS4).
 - 26) SILT FENCES SHALL NOT BE PLACED IN STREAM BUFFER LIMITS OR FLOOD PLAIN LIMITS UNLESS UTILIZED FOR THE CONSTRUCTION OF AN EXEMPT ACTIVITY (EG ROADWAY DRAINAGE STRUCTURES, SEWER/WATER UTILITY CROSSINGS, ETC) AS PER THE APPROVED PLANS. FOR SUCH DISTURBANCES WITHIN THE UNDISTURBED BUFFER LIMITS, THE BUFFER SHALL BE IMMEDIATELY STABILIZED WITH MATTING AND BLANKETS ONCE THE CONSTRUCTION ACTIVITY IS COMPLETE.
 - 27) FOR EACH SITE ON WHICH LAND DISTURBING ACTIVITY OCCURS, EACH ENTITY OR PERSON ACTING AS EITHER A PRIMARY, SECONDARY OR TERTIARY PERMITTEE, AS DEFINED IN THE STATE GENERAL PERMIT, SHALL HAVE AS A MINIMUM ONE PERSON WHO IS IN RESPONSIBLE CHARGE OF EROSION AND SEDIMENTATION CONTROL ACTIVITIES ON BEHALF OF SAID ENTITY OR PERSON AND MEETS THE APPLICABLE (LEVEL 1A) EDUCATION OR TRAINING CERTIFICATION REQUIREMENTS (O.C.G.A. 12-7-19 (A)(2)). 28) SUBCONTRACTORS INVOLVED WITH LAND DISTURBANCE ACTIVITIES SHALL MEET THE EDUCATION REQUIREMENTS (LEVEL 1) DESCRIBED IN O.C.G.A. 12-7-19.
 - 28) SD1-S SEDIMENT BARRIERS MAY BE EITHER SILT FENCE OR FILTER MEDIA SOCK AS PER DETAILS SHOWN ON SHEET ECD-103. CONTRACTOR MUST PRICE SILT FENCE IN BASE BID AND SHOW ADD/DEDUCT FOR FILTER MEDIA SOCK IN BID ALTERNATE. USE FILTER MEDIA SOCK IN AREAS OF CRITICAL ROOT ZONES.
 - 29) THE DESIGN PROFESSIONAL WHO PREPARED THE ES&PC PLAN IS TO INSPECT THE INSTALLATION OF THE INITIAL SEDIMENT STORAGE REQUIREMENTS, PERIMETER CONTROL BMPs, AND SEDIMENT BASINS WITHIN 7 DAYS AFTER INSTALLATION.
 - 30) NON-EXEMPT ACTIVITIES SHALL NOT BE CONDUCTED WITHIN THE 25 OR 50-FOOT UNDISTURBED STREAM BUFFERS AS MEASURED FROM THE POINT OF WRESTED VEGETATION OR WITHIN 25-FEET OF THE COASTAL MARSHLAND BUFFER AS MEASURED FROM THE JURISDICTIONAL DETERMINATION LINE WITHOUT FIRST ACQUIRING THE NECESSARY VARIANCES AND PERMITS.
 - 31) AMENDMENTS/REVISIONS TO THE ES&PC PLAN WHICH HAVE A SIGNIFICANT EFFECT ON BMPs WITH A HYDRAULIC COMPONENT MUST BE CERTIFIED BY THE DESIGN PROFESSIONAL.



TOTAL ACREAGE = 0.9 AC
 PHASE 1 DISTURBED ACREAGE = 0.9 AC

SOIL CLASSIFICATION LEGEND	
SYMBOL	SOIL TYPE
Ud	Urban Land

NO BUFFER ENCROACHMENT VARIANCES ARE REQUIRED UNDER THIS PERMIT.
 NON-EXEMPT ACTIVITIES SHALL NOT BE CONDUCTED WITHIN THE 25 OR 50-FOOT UNDISTURBED STREAM BUFFERS AS MEASURED FROM THE POINT OF WRESTED VEGETATION WITHOUT FIRST ACQUIRING THE NECESSARY VARIANCES AND PERMITS.
 AMENDMENTS/REVISIONS TO ES&PC PLAN WHICH HAVE A SIGNIFICANT EFFECT ON BMPs WITH A HYDRAULIC COMPONENT MUST BE CERTIFIED BY THE DESIGN PROFESSIONAL.
 PROJECT IS LOCATED IN CARTECAY-TOCCOA COMPLEX, GROVER-MOUNTAIN PARK COMPLEX AND URBAN LAND.

RECEIVING WATERS: AN UNNAMED TRIBUTARY OF BLUE JOHN CREEK IS LOCATED EAST OF THE SUBJECT PARCEL WITHIN 1 MILE OF THE DISTURBED AREA AND IS THE RECEIVING WATERS FOR THIS PROJECT.
 ADJACENT AREAS - THIS PROJECT IS BOUND BY RIGHT OF WAY TO THE NORTH AND TO THE WEST, AND BY TRAIL TO THE EAST, AND THE SOUTH.

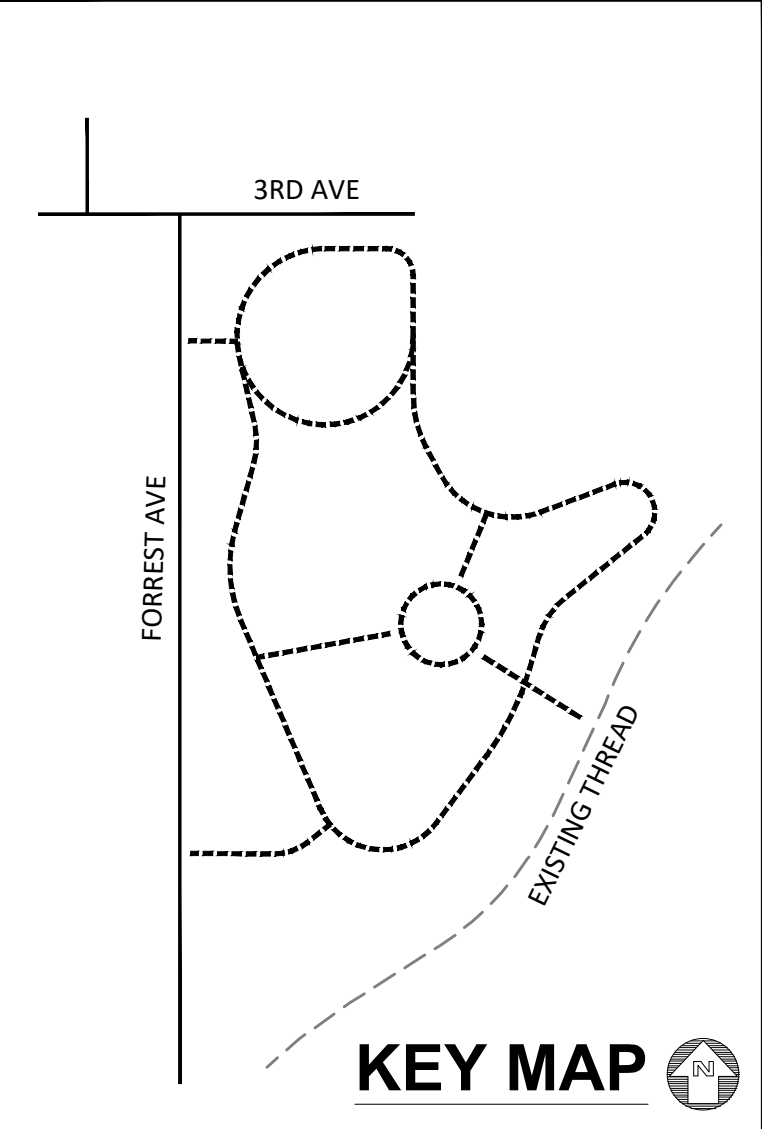
Waters of the State exist on or within 200ft of the project site

No wetlands exist on or within 200ft of the project site.

LEGEND	
Co	CONSTRUCTION EXIT
X	SEDIMENT BARRIER (SILT FENCE OR FILTER MEDIA SOCK)
Sd2-F	INLET SEDIMENT TRAP w/ FILTER FENCE
Sd2-P	INLET SEDIMENT TRAP PIGS IN A BLANKET CMU BLOCKS OR FILTER SOCK
St	STORM DRAIN OUTLET PROTECTION
SOIL STABILIZATION/MATTING	
Ds1	DISTURBED AREA STABILIZATION WITH MULCH
Ds2	DISTURBED AREA STABILIZATION WITH TEMPORARY SEEDING
Ds3	DISTURBED AREA STABILIZATION WITH PERMANENT SEEDING
	DISTURBED AREA STABILIZATION WITH PERMANENT SODDING
Du	DUST CONTROL

KAIZENCOLLABORATIVE
 2390 MAIN STREET | TUCKER, GEORGIA 30084 | 404.239.2521
CHARLES M. ABBOTT JR, P.E.
 DESIGN ENGINEER LEVEL II CERTIFICATION
 GSWCC # 000004168 EXPIRES: 04/28/2025
 CHUCK.ABBOTT@KAIZENCOLLABORATIVE.COM
 O: 404-239-2521

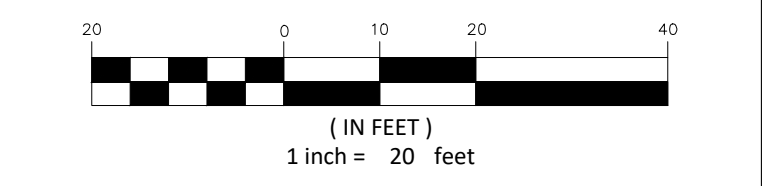
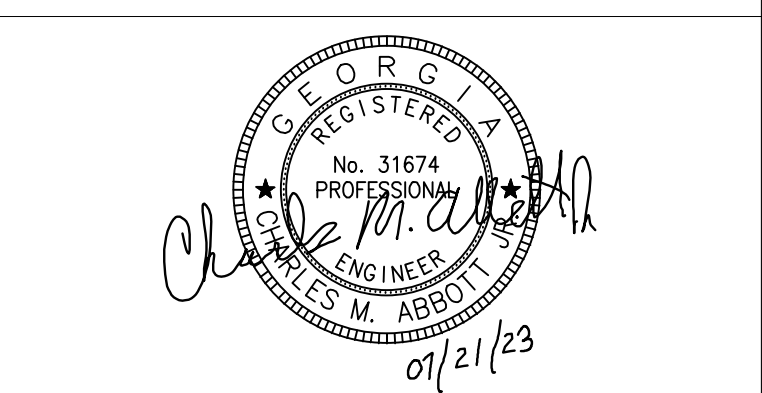
PATH FOUNDATION
 PO BOX 1432, ATLANTA, GA 30305
 24 HOUR CONTACT - PETE PELLEGRINI
 E: PETEVP@PATHFOUNDATION.ORG
 O: 404-875-7284 x 2 C: 404-277-5392



DATE	DESCRIPTION
02/17/2023	50% DESIGN REVIEW
07/21/2023	100% ISSUE FOR PERMIT
08/16/2023	100% ISSUE FOR BID

PROJECT # 2022-256
 PROJECT MANAGER AC

LaGRANGE BICYCLE PARK
LaGRANGE, GA



FINAL PHASE EROSION, SEDIMENTATION, & POLLUTION CONTROL PLAN

SCALE 1" = 20'-0"
 DATE JULY 21, 2023

SHEET # **EC-03**

EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN

1 certify that the permittee's Erosion, Sedimentation and Pollution Control Plan provides for an appropriate and comprehensive system of best management practices required by the Georgia Water Quality Control Act and the document Manual for Erosion and Sediment Control in Georgia (Manual) published by the Georgia Soil and Water Conservation Commission as of January 1 of the year in which the land-disturbing activity was permitted, provided for the sampling of the receiving water(s) or the sampling of the storm water outfalls and that the designed system of best management practices and sampling methods are expected to meet the requirements contained in the General NPDES Permit No. GAR 100002.

Charles M. Abbott

FOR THE FIRM - KAIZEN COLLABORATIVE DATE CHARLES M. ABBOTT JR. GSWCC LEVEL II #0000041686

07-21-2023

1 certify under penalty of law that this Plan was prepared after a site visit to the locations described herein by myself or my authorized agent, under my supervision. The Plan shall include, as a minimum, best management practices, including sound conservation and engineering practices to prevent and minimize erosion and resultant sedimentation, which are consistent with, and no less stringent than, those practices contained in the Manual for Erosion and Sediment Control in Georgia (Manual) published by the Georgia Soil and Water Conservation Commission as of January 1 of the year in which the land disturbing activity was permitted and O.C.G.A. 12-7-6, as well as the following:

Charles M. Abbott

FOR THE FIRM - KAIZEN COLLABORATIVE DATE CHARLES M. ABBOTT JR. GSWCC LEVEL II #0000041686

07-21-2023

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that certified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Charles M. Abbott

FOR THE FIRM - KAIZEN COLLABORATIVE DATE CHARLES M. ABBOTT JR. GSWCC LEVEL II #0000041686

07-21-2023

I certify that the permittee's Erosion, Sedimentation and Pollution Control Plan provides for the monitoring of: (a) all perennial and intermittent streams and other water bodies shown on the USGS topographic map and all other field verified perennial and intermittent streams and other water bodies, (b) where any such specific identified perennial or intermittent stream and other water body is not proposed to be sampled, I have determined in my professional judgment, utilizing the factors required in the General NPDES Permit No. GAR100002 that the increase in the turbidity of each specific identified sampled receiving water will be representative of the increase in the turbidity of a specific identified un-sampled receiving water.

Charles M. Abbott

FOR THE FIRM - KAIZEN COLLABORATIVE DATE CHARLES M. ABBOTT JR. GSWCC LEVEL II #0000041686

07-21-2023

(i). Except as provided in Part IV.(iii) below, no construction activities shall be conducted within a 25 foot buffer along the banks of all State waters, as measured horizontally from the point where vegetation has been wrested by normal stream flow or wave action, except where the Director has determined to allow a variance that is at least as protective of natural resources and the environment in accordance with the provisions of O.C.G.A. 12-7-6, or where a drainage structure or a roadway drainage structure must be constructed, provided that adequate erosion control measures are incorporated in the project plans and specifications and are implemented. The buffer shall not apply to the following activities provided that adequate erosion control measures are incorporated into the project plans and specifications are implemented:

- (1) public drinking water system reservoirs,
(2) stream crossings for water lines, provided that the stream crossings occur at an angle, as measured from the point of crossing, within 25 degrees of perpendicular to the stream and cause a width of disturbance of not more than 50 feet within the buffer,
(3) stream crossings for sewer lines, provided that the stream crossings occur at an angle, as measured from the point of crossing, within 25 degrees of perpendicular to the stream and cause a width of disturbance of not more than 50 feet within the buffer,
(4) buffer crossing for fences, provided that the crossings occur at an angle, as measured from the point of crossing, within 25 degrees of perpendicular to the stream and, cause a width of disturbance of not more than 50 feet within the buffer, and
(5) stream crossings for aerial utility lines, provided that: (a) the new utility line right-of-way width does not exceed 100 linear feet, (b) utility lines are routed and constructed so as to minimize the number of stream crossings and disturbances to the buffer, (c) only trees and tree debris are removed from within the buffer resulting in only minor soil erosion (i.e., disturbance to underlying vegetation is minimized), and (d) functional native riparian vegetation is re-established in any bare or disturbed areas within the buffer. The Plan shall include a description of the stream crossings with details of the buffer disturbance including area and length of buffer disturbance, estimated length of time of buffer disturbance, and justification.

SEE EROSION, SEDIMENTATION AND POLLUTION CONTROL PLANS FOR STATE WATER BUFFER DISTURBANCES.

(ii). No construction activities shall be conducted within a 50 foot buffer, as measured horizontally from the point where vegetation has been wrested by normal stream flow or wave action, along the banks of any State waters classified as "trout streams" except when approval is granted by the Director for alternate buffer requirements in accordance with the provisions of O.C.G.A. 12-7-6, or where a roadway drainage structure must be constructed; provided, however, that small springs and streams classified as "trout streams" which discharge an average annual flow of 25 gallons per minute or less shall have a 25 foot buffer and they may be piped, at the discretion of the permittee, pursuant to the terms of a rule providing for a general variance promulgated by the Board of Natural Resources including notification of such to EPD and the Local Issuing Authority of the location and extent of the piping and prescribed methodology for minimizing the impact of such piping and for

measuring the volume of water discharged by the stream. Any such pipe must stop short of the downstream permittee's property, and the permittee must comply with the buffer requirement for any adjacent trout stream. The buffer shall not apply to the following activities provided that adequate erosion control measures are incorporated into the project plans and specifications are implemented:

- (1) public drinking water system reservoirs,
(2) stream crossings for water lines, provided that the stream crossings occur at an angle, as measured from the point of crossing, within 25 degrees of perpendicular to the stream and cause a width of disturbance of not more than 50 feet within the buffer,
(3) stream crossings for sewer lines, provided that the stream crossings occur at an angle, as measured from the point of crossing, within 25 degrees of perpendicular to the stream and cause a width of disturbance of not more than 50 feet within the buffer,
(4) buffer crossing for fences, provided that the crossings occur at an angle, as measured from the point of crossing, within 25 degrees of perpendicular to the stream and, cause a width of disturbance of not more than 50 feet within the buffer, and
(5) stream crossings for aerial utility lines, provided that: (a) the new utility line right-of-way width does not exceed 100 linear feet, (b) utility lines are routed and constructed so as to minimize the number of stream crossings and disturbances to the buffer, (c) only trees and tree debris are removed from within the buffer resulting in only minor soil erosion (i.e., disturbance to underlying vegetation is minimized), and (d) functional native riparian vegetation is re-established in any bare or disturbed areas within the buffer. The Plan shall include a description of the stream crossings with details of the buffer disturbance including area and length of buffer disturbance, estimated length of time of buffer disturbance, and justification.

SEE EROSION, SEDIMENTATION AND POLLUTION CONTROL PLANS FOR TROUT STREAM BUFFER DISTURBANCES.

(iii). Except as provided above, for buffers required pursuant to Part IV.(i), and (ii), no construction activities shall be conducted within a buffer and a buffer shall remain in its natural, undisturbed, state of vegetation until all land disturbing activities on the construction site are completed. After the submittal of a Notice of Termination, a buffer may be thinned or trimmed of vegetation as long as a protective vegetative cover remains to protect water quality and aquatic habitat and a natural canopy is left in sufficient quantity to keep shade on the stream bed.

SEE EROSION, SEDIMENTATION AND POLLUTION CONTROL PLANS FOR ALL BUFFER LOCATIONS. NO CONSTRUCTION ACTIVITIES ARE TO BE CONDUCTED IN BUFFERS ON THIS SITE UNLESS COVERED UNDER AN APPROVED VARIANCE.

The Erosion, Sedimentation and Pollution Control Plan shall identify all potential sources of pollution which may reasonably be expected to affect the quality of storm water discharges from the construction site. In addition, the Plan shall describe and the applicable permittee shall implement the implementation of practices which will be used to reduce the pollutants in storm water discharges associated with construction activity at the site and to assure compliance with the terms and conditions of this permit. The applicable permittee must implement and maintain the provisions of the Plan required under this part as a condition of this permit.

POTENTIAL SOURCES OF POLLUTION

SEDIMENT Sediment from Clearing and Grubbing Sediment from Construction

LITTER Shipping and Packing Materials Illegal Dumping Food and Drink Containers

PETROLEUM Heavy Equipment Fuel Tanks, Drums, Cans and Containers

Except as provided in Part IV.A.2., a single Erosion, Sedimentation and Pollution Control Plan for infrastructure projects must be prepared by the primary permittee for all sites within the infrastructure projects whether or not all of the sites within the infrastructure projects are owned or operated by a single entity or by multiple entities. The Erosion, Sedimentation and Pollution Control Plan must address the best management practices for the phase or phases of the infrastructure projects which includes all sites (i.e., individual home lots, out-parcels, etc) regardless of who owns or operates the individual sites.

SEE EROSION, SEDIMENTATION AND POLLUTION CONTROL PLANS FOR THE BEST MANAGEMENT PRACTICES.

For construction that commences after the effective date of this permit, the primary permittee must provide a copy of the Plan or applicable portions of the Plan to each secondary permittee prior to the secondary permittee conducting any construction activity. Any revisions to the Plan must be provided to the secondary permittees in a timely manner. A written acknowledgment of receipt of the Plan must be made by the secondary permittee and a copy of such be retained in the primary permittee's records in accordance with Part IV.F. of this permit. If the primary permittee changes after the Plan is prepared and implemented, any subsequent primary permittee must ensure that the Plan complies with all terms and conditions of this permit and that each secondary permittee is provided with any revisions to the Plan made by the new primary permittee. A written acknowledgment of receipt of the Plan or amendments to the Plan must be made by the secondary permittee and a copy of such be retained in the new primary permittee's records in accordance with Part IV.F. of this permit.

A. DEADLINES FOR PLAN PREPARATION AND COMPLIANCE.

- 1. Except as provided in Part IV.A.2. and Part IV.A.6., the Erosion, Sedimentation and Pollution Control Plan shall be completed prior to submitting the NOI and prior to conducting any construction activity by any permittee.
2. For construction activities that began on or before the effective date of this permit and were subject to regulations under the previous general permit, the permittee(s) shall continue to operate under the existing Plan.
3. For construction activities that begin after the effective date of this permit, the primary permittee shall be required to prepare the Plan for that phase of the infrastructure projects that corresponds with the NOI being submitted and the primary and all secondary permittee(s) shall implement the applicable portion of the Plan on or before the day construction activities begin.
4. Additional Plan Submittals.

a. For all projects identified under Part I.C.1.b., which begin after the effective date of this permit, in a jurisdiction where there is no certified Local Issuing Authority regulating that project, a single copy of the Plan must be submitted to the EPD Watershed Protection Branch and a second copy of the Plan must be submitted to the appropriate EPD District Office prior to the NOI submittal. The EPD Watershed Protection Branch will review Plans for deficiencies using the applicable Erosion, Sedimentation and Pollution Control Plan Checklist established by the Georgia Soil and Water Conservation Commission as of January 1 of the year in which the land-disturbing activity was permitted.

b. For sites that are equal to or greater than 50 acres of disturbed area, regardless of the existence of a certified Local Issuing Authority in the jurisdiction, one of the following submissions is also required:

- (i) for all projects which begin after the effective date of this permit a single copy of the NOI and a single copy of the Plan shall be submitted to the appropriate EPD District Office.
(ii) for all projects which began on or before the effective date of this permit single copy of the NOI and a single copy of the Plan, if amended, shall be submitted to the appropriate EPD District Office.

5. For infrastructure projects that begin construction activity after the effective date of this permit, the primary permittee and tertiary permittee(s) shall retain a design professional who prepared the Erosion, Sedimentation and Pollution Control Plan, except when the permittee has requested in writing and EPD has agreed to an alternate design professional, to inspect the installation of the initial sediment storage requirements and perimeter control BMPs which the design professional designed within seven (7) days after installation. The design professional shall determine if these BMPs have been installed and are being maintained as designed. The design professional shall report the results of the inspection to the permittee within seven (7) days and the permittee must correct all deficiencies within two (2) business days of receipt of the inspection report from the design professional unless weather related site conditions are such that additional time is required.

6. For storm- or emergency-related repair work, the permittee shall implement appropriate BMPs and certified personnel (provided by the primary permittee) shall inspect at least once every seven (7) calendar days and within 24 hours of the end of a storm that is 0.5 inches or greater. If the storm- or emergency-related repair work will not be completed within sixty (60) days of commencement of construction activity, a single copy of the Plan shall be submitted to EPD and the permittee shall comply with all requirements of this permit on the sixty-first (61st) day.

B. SIGNATURE AND PLAN REVIEW.

1. The Erosion, Sedimentation and Pollution Control Plan shall be signed in accordance with Part V.G., and be retained on the site (or, if not possible, at a readily accessible location) which generates the storm water discharge in accordance with Part IV.F. of this permit. The primary permittee shall ensure, as provided for elsewhere in this permit, that each secondary permittee is provided with a copy of the Plan and that the secondary permittee understands their role in implementing the Plan. The secondary permittee shall sign the Plan or the portion of the Plan applicable to their site in accordance with Part V.G. and the Plan or applicable portion thereof shall be retained on the site or be readily available at a designated alternate location from the date of project initiation to the date of final stabilization.

2. The primary permittee and tertiary permittee(s) shall make Plans available upon request to the EPD, to designated officials of the local government reviewing soil erosion and sediment control plans, grading plans, or storm water management plans; or in the case of a buffer or a discharge associated with construction activity which discharges through a municipal separate storm sewer system with an NPDES permit, to the local government operating the municipal separate storm sewer system. A secondary shall make the Plan or a portion of the Plan applicable to their site available upon request to the EPD; to the local government reviewing soil erosion and sediment control plans, grading plans, or storm water management plans; or in the case of a storm water discharge associated with construction activity which discharges through a municipal separate storm sewer system with an NPDES permit, to the local government operating the municipal separate storm sewer system. The Plan must be submitted to EPD or to the local government within three business days of such notification or within an alternate time frame established by EPD.

3. EPD may notify the primary, secondary or tertiary permittee at any time that the Plan does not meet one or more of the minimum requirements of this Part. Within seven (7) days of such notification (or as otherwise provided by EPD), the primary or tertiary permittee shall make the required changes to the Plan and shall submit to EPD either the amended Plan or a written certification that the requested changes have been made. For sites commencing construction or before the effective date of this permit, EPD may notify the secondary permittee at any time that the Plan does not meet one or more of the minimum requirements of this permit. Within seven (7) days of such notification (or as otherwise provided by EPD), the secondary permittee shall implement the required changes to the Plan and submit to EPD either the amended Plan or a written certification that the requested changes have been made. For sites commencing construction after the effective date of this permit, when EPD notifies a secondary permittee of any Plan deficiencies, the secondary permittee must notify the primary permittee within seven (7) days of the notification. The primary permittee must amend the Plan in accordance with this paragraph to address those deficient BMPs within seven (7) days of being notified by the secondary permittee. When the Plan is amended, the primary permittee must notify and provide a copy of the amendment to any and all affected secondary permittees within this seven (7) day period. The secondary permittees must implement any new Plan requirements within 48-hours of notification by the primary permittee.

C. KEEPING PLANS CURRENT. The primary, secondary or tertiary permittees, as applicable, shall amend their Plan whenever there is a change in design, construction, operation, or maintenance, which has a significant effect on BMPs with a hydraulic component (i.e., those BMPs where the design is based upon rainfall intensity, duration and return frequency of storms) or if the Plan proves to be ineffective in eliminating or significantly minimizing pollutants from sources at the applicable area and the sediment basins. For all projects, the primary permittee must notify the primary permittee within 24-hours of becoming aware of any suspected BMP designed deficiencies which are not effective in controlling the discharge of pollutants from the secondary permittee's site. The primary permittee must evaluate whether these deficiencies exist within 48-hours of such notice, and if these deficiencies are found to exist must amend the Plan in accordance with this paragraph to address those deficient BMPs within seven (7) days of being notified by the secondary permittee. When the Plan is amended, the primary permittee must notify and provide a copy of the amendment to all affected secondary permittees within this seven (7) day period. The secondary permittee(s) must implement any new Plan requirements affecting their site(s) within 48-hours of notification by the primary permittee. Notwithstanding the foregoing, the primary or tertiary permittee remains responsible for insuring that the Plan, as appropriate, meets the requirements of this permit.

D. CONTENTS OF PLAN.

The Erosion, Sedimentation and Pollution Control Plan shall include, as a minimum, best management practices, including sound conservation and engineering practices to prevent and minimize erosion and resultant sedimentation, which are consistent with, and no less stringent than, those practices contained in the Manual for Erosion and Sedimentation Control in Georgia (Manual) published by the Georgia Soil and Water Conservation Commission as of January 1 of the year in which the land-disturbing activity was permitted, as well as the following:

- 1. CHECKLIST. Each Plan shall include the applicable Erosion, Sedimentation and Pollution Control Plan Checklist established by the Georgia Soil and Water Conservation Commission as of January 1 of the year in which the land disturbing activity was permitted. The Checklist is available on the EPD website, www.gappc.org.
2. SITE DESCRIPTION. Each Plan shall provide a description of pollutant sources and other information as indicated:
a. A description of the nature of the construction activity.
CHILDREN'S BIKE PARK
b. A description and chart or timeline of the intended sequence of major activities which include soil stabilization on the site (i.e., initial sediment storage requirements and perimeter BMPs, clearing and grubbing activities, excavation activities, grading activities, utility activities, immediate and final stabilization activities).
SEE CONSTRUCTION ACTIVITY SCHEDULE ON SHEET EC-01

c. Estimates of the total area of the site and the total area of the site that is expected to be disturbed by excavation, grading, or other activities;

TOTAL SITE AREA: 0.9 AC. ± DISTURBED AREA: 0.9 TOTAL AC. ±

d. An estimate of the runoff coefficient or peak discharge flow of the site prior to the construction activities and after construction activities are completed and existing data describing the soil or the quality of any discharge from the site;

PRE-CONSTRUCTION RUNOFF COEFFICIENT: 0.80 POST-CONSTRUCTION RUNOFF COEFFICIENT: 0.80 SEE SOIL DATA CHART ON SHEET EC-01

e. A site map indicating drainage patterns and approximate slopes anticipated after major grading activities, areas of soil disturbance, an outline of areas which are not to be disturbed, the location of major structural and nonstructural controls identified in the Plan, the location of areas where stabilization practices are expected to occur, surface waters (including wetlands), and locations where storm water is discharged to a surface water;

SEE EROSION, SEDIMENT AND POLLUTION CONTROL PLANS f. Identify the receiving water(s) and areal extent of wetland coverage at the site; and,

RECEIVING WATER: UNNAMED TRIBUTARY OF BLUE JOHN CREEK AREA OF WETLANDS: 0.0 AC. SEE CONSTRUCTION PLANS SHEETS N/A FOR LOCATIONS.

g. For Plans prepared by a primary permittee for an infrastructure projects, a list of the names and addresses of all secondary permittees must be included in the Plan and be amended as appropriate. These amendments are not subject to the design professional certification requirements specified in Part IV.C.

3. CONTROLS.

EROSION AND SEDIMENT CONTROLS.

(1). Stabilization Measures. A description of interim and permanent stabilization measures, including site-specific scheduling of the implementation of the measures. Site plans should ensure that existing vegetation is preserved and that disturbed portions of the site are stabilized. Stabilization measures may include: temporary seeding, permanent seeding, mulching, geotextiles, and stabilization vegetative buffer strips, protection of trees, preservation of mature vegetation, and other appropriate measures. A record of the dates that major grading activities occur, when construction temporarily or permanently ceases on a portion of the site, and when stabilization measures are initiated shall be included in the Plan. Except as provided in paragraphs IV.D.3.(g)(1),(i),(j), and (b), below, stabilization measures shall be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, but in no case more than 14 days after construction activities have been initiated on that portion of the site has temporarily or permanently ceased.

(a). Where the initiation of stabilization measures by the 14th day after construction activity temporarily or permanently ceases is precluded by snow cover or other adverse weather conditions, stabilization measures shall be initiated as soon as practicable.

(b). Where construction activity will resume on a portion of the site within 21 days from when activities ceased, (i.e., the total time period that construction activity is temporarily ceased is less than 21 days) then stabilization measures do not have to be initiated on that portion of site by the 14th day after construction activity temporarily ceased.

SEE EROSION, SEDIMENTATION AND POLLUTION CONTROL PLANS FOR DESCRIPTION AND SCHEDULES OF STABILIZATION.

(2). Structural Practices. A description of structural practices to divert flows from exposed soils, store flows or otherwise limit runoff and the discharge of pollutants from exposed areas of the site to the degree attainable. Such practices may include silt fences, earth dikes, drainage swales, sediment traps, check dams, subsurface drains, pipe slope drains, level spreaders, storm drain inlet protection, rock outlet protection, reinforced soil retaining systems, gabions, and temporary or permanent sediment basins. Structural practices should be placed on upland soils to the degree attainable. The installation of these devices may be subject to Section 404 of the CWA.

SEE EROSION, SEDIMENTATION AND POLLUTION CONTROL PLANS FOR LOCATION AND DESCRIPTION OF ALL STRUCTURAL PRACTICES.

(3). Sediment Basins. For common drainage locations a temporary (or permanent) sediment basin providing at least 1800 cubic feet (67 cubic yards) of storage per acre drained, or equivalent control measures, shall be provided until final stabilization of the site. The 1800 cubic feet (67 cubic yards) of storage per acre drained does not apply to flows from off-site areas and flows from on-site areas that are either undisturbed or have undergone final stabilization where such flows are diverted around both the applicable area and the sediment basin. For all locations where a temporary sediment basin providing at least 1800 cubic feet (67 cubic yards) of storage per acre drained, or equivalent controls is not attainable, sediment traps, silt fences, wood mulch berms or equivalent sediment controls are required for all side slope and down slope boundaries of the construction area. When the sediment fills to a volume at most of 22 cubic yards per acre for each acre of the disturbed area, the sediment shall be removed to the original design volume. This sediment must be properly disposed. Sediment basins may not be appropriate at some construction projects. Careful consideration must be used to determine when a sediment basin is not to be used and a written rationale explaining the decision not to use sediment basins must be included in the Plan. Notwithstanding any other provisions of this paragraph, the removal and intermittent waters of the State shall not be used for temporary or permanent sediment detention.

SEE EROSION, SEDIMENTATION AND POLLUTION CONTROL PLANS FOR LOCATION OF SEDIMENT BASINS. SEE EROSION SEDIMENT AND POLLUTION CONTROL NOTES AND DETAILS FOR SEDIMENT BASIN CALCULATIONS.

(4). Alternative BMPs. The use of alternative BMPs whose performance has been documented to be equivalent or superior to conventional BMPs as certified by a Design Professional may be allowed (unless disapproved by EPD or the Georgia Soil and Water Conservation Commission).

(5). High performance BMPs. The use of infiltration trenches, seep berms, sand filters, dry wells, polyacrylamide, etc. for minimizing point source discharges except for large rainfall events is encouraged.

STORM WATER MANAGEMENT.

A description of measures that will be installed during the construction process to control pollutants in storm water discharges that will occur after construction operations have been completed. Structural measures should be placed on upland soils to the degree attainable. The installation of these devices may be subject to Section 404 of the CWA. This permit only addresses the installation of storm water management measures, and not the ultimate operation and maintenance of such structures after the construction activities have been completed and the site has undergone final stabilization. Operators are only responsible for the installation and maintenance of storm water management measures prior to final stabilization of the site, and are not responsible for maintenance after storm water discharges associated with construction activity have been eliminated from the site.

SEE EROSION, SEDIMENTATION AND POLLUTION CONTROL PLANS FOR LOCATION OF ALL STORMWATER MANAGEMENT MEASURES. SEE THE HYDROLOGY STUDY FOR STORMWATER MANAGEMENT CALCULATIONS.

(1). Such practices may include: storm water detention structures (including wet ponds); storm water retention structures; flow attenuation by use of open vegetated swales and natural depressions; infiltration of runoff on-site and sequential systems (which combine several practices). The Plan shall include an explanation of the technical basis used to select the practices to

control pollution where flows exceed pre-development levels.

SEE EROSION, SEDIMENTATION AND POLLUTION CONTROL PLANS FOR LOCATION OF ALL STORMWATER MANAGEMENT FACILITIES. SEE THE HYDROLOGY STUDY FOR STORMWATER MANAGEMENT CALCULATIONS.

(2). Velocity dissipation devices shall be placed at discharge locations and along the length of any outfall channel for the purpose of providing a non-erosive velocity flow from the structure to a water course so that the natural physical and biological characteristics and functions are maintained and protected (e.g. no significant changes in the hydrological regime of the receiving water(s)).

SEE EROSION, SEDIMENTATION AND POLLUTION CONTROL PLANS FOR LOCATION OF ALL VELOCITY DISSIPATION DEVICES. SEE EROSION AND SEDIMENT CONTROL NOTES AND DETAILS FOR VELOCITY DISSIPATION CALCULATIONS.

(3). Installation and use of Green Infrastructure approaches and practices that mimic natural processes and direct storm water through vegetated median strips, protection and enhancement of riparian buffers and floodplains, and the overall reduction in site disturbance and impervious area. Design information on Green Infrastructure practices and other ways to manage storm water can be found in the Georgia Stormwater Management Manual (www.georgiastormwater.com) and the Georgia Green Growth Guidelines (ord.dnr.state.ga.us). Additional information on Green Infrastructure practices can be found at cfpub.epa.gov/npdes/home.cfm?program_id=298, greenvalues.cnt.org/greeninfrastructure, and www.epa.gov/npdes/pubs/gl_action_strategy.pdf.

OTHER CONTROLS

(1). Waste disposal. Locate waste collection areas away from streets, gutters, watercourses and storm drains. Waste collection areas, such as dumpsters, are often best located near construction site entrances to minimize traffic on disturbed soils. The Plan should include secondary containment around liquid waste collection areas to further minimize the likelihood of contaminant discharges. Solid materials, including building materials, shall not be discharged to waters of the State, except as authorized by a Section 404 permit.

SEE EROSION, SEDIMENTATION AND POLLUTION CONTROL PLANS FOR LOCATION OF WASTE COLLECTION AREAS.

ALL WASTE MATERIALS WILL BE COLLECTED AND STORED IN A SECURELY LIDDED METAL DUMPSTER RENTED FROM A LICENSED SOLID WASTE MANAGEMENT COMPANY IN THE PROJECT COUNTY. THE DUMPSTER WILL MEET ALL LOCAL AND ANY STATE SOLID WASTE MANAGEMENT REGULATIONS. ALL TRASH AND CONSTRUCTION DEBRIS FROM THE SITE WILL BE DEPOSITED IN THE DUMPSTER. THE DUMPSTER WILL BE EMPTIED A MINIMUM OF TWICE PER WEEK OR MORE OFTEN IF NECESSARY, AND THE TRASH WILL BE HAULED TO AN APPROVED SOLID WASTE LANDFILL. NO CONSTRUCTION WASTE MATERIALS WILL BE BURIED ON-SITE. ALL PERSONNEL WILL BE INSTRUCTED REGARDING THE CORRECT PROCEDURE FOR WASTE DISPOSAL. NOTICES STATING THESE PRACTICES WILL BE POSTED IN THE OFFICE TRAILER AND 24-HOUR EMERGENCY CONTACT WILL BE RESPONSIBLE FOR SEEING THAT THESE PROCEDURES ARE FOLLOWED.

ALL HAZARDOUS WASTE MATERIALS WILL BE DISPOSED OF IN THE MANNER SPECIFIED BY LEGISLATION OR STATE REGULATIONS. ALL SANITARY WASTE WILL BE COLLECTED FROM THE PORTABLE UNITS A MINIMUM OF THREE TIMES PER WEEK BY A LICENSED WASTE MANAGEMENT CONTRACTOR, OR AS REQUIRED BY LOCAL REGULATIONS.

(2). Off-site vehicle tracking of dirt, soils, and sediments and the generation of dust shall be minimized or eliminated to the maximum extent practical. The Plan shall include the best management practice to be implemented at the site or infrastructure projects.

SEE EROSION, SEDIMENTATION AND POLLUTION CONTROL PLANS FOR BMP LOCATIONS.

ALL VEHICLES LEAVING THE PROJECT SHALL EXIT VIA THE CONSTRUCTION EXIT TO CONTROL THE OFF-SITE VEHICLE TRACKING OF DIRT, SOILS AND SEDIMENTS. ALL DISTURBED AREAS SHALL BE COVERED WITH MULCH, TEMPORARY OR PERMANENT VEGETATION AND/OR IMPERVIOUS SURFACES AS SOON AS PRACTICAL. ALL OTHER AREAS SHALL BE SPRAYED WITH AN ADHESIVE-WATERED SOLUTION AS REQUIRED TO CONTROL DUST FROM THE PROJECT. CONSTRUCTION TRAFFIC SHOULD BE KEPT TO A MINIMUM IN THESE AREAS. THE PAVED STREET ADJACENT TO THE CONSTRUCTION ENTRANCE WILL BE SWEEP DAILY TO REMOVE ANY EXCESS MUD, DIRT OR ROCK TRACKED FROM THE SITE. DUMP TRUCKS HAULING MATERIAL FROM THE CONSTRUCTION SITE WILL BE COVERED WITH A TARPULIN.

(3). All permittees shall ensure and demonstrate that their Plan is in compliance with applicable State and local waste disposal, sanitary sewer or septic system regulations.

SEE CONSTRUCTION PLANS FOR LOCATION AND SIZE OF SANITARY SEWER AND SEPTIC TANK SYSTEMS. DESIGN OF SANITARY SEWER AND SEPTIC TANK SYSTEMS ARE TO BE APPROVED BY THE APPLICABLE STATE OR LOCAL JURISDICTION.

(4). The Plan shall include best management practices for the remediation of all petroleum spills and leaks as appropriate.

SEE EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN FOR LOCATION OF THE FUELING AND EQUIPMENT STORAGE AREA. SEE EROSION, SEDIMENT AND POLLUTION CONTROL NOTES AND DETAILS FOR SPILL PREVENTION AND SPILL CONTROL BEST MANAGEMENT PRACTICES.

(5). The Plan shall include best management practices for concrete washdown of tools, concrete mixer chutes, hoppers and the rear of vehicles. Washout of the drum at the construction site is prohibited.

THE DESIGN PROFESSIONAL WHO PREPARED THE ES&P PLAN IS TO INSPECT THE INSTALLATION OF THE INITIAL SEDIMENT STORAGE REQUIREMENTS AND PERMITTER CONTROL BMP'S WITHIN 7 DAYS AFTER INSTALLATION.

Charles M. Abbott 07-21-2023 CHARLES M. ABBOTT JR., P.E. GSWCC # 0000041686 EXPIRES: 04/28/2025



KAIZENCOLLABORATIVE

2390 MAIN STREET | TUCKER, GEORGIA 30084 | 404.239.2521

CHARLES M. ABBOTT JR., P.E. DESIGN ENGINEER LEVEL II CERTIFICATION GSWCC # 000004168 EXPIRES: 04/28/2025 CHUCK.ABBOTT@KAIZENCOLLABORATIVE.COM 04-239-2521



PATH FOUNDATION PO BOX 1432, ATLANTA, GA 30305 24 HOUR CONTACT - PETE PELLEGRINI E. PETEVP@PATHFOUNDATION.ORG O: 404-875-7284 x 2 C: 404-277-5392

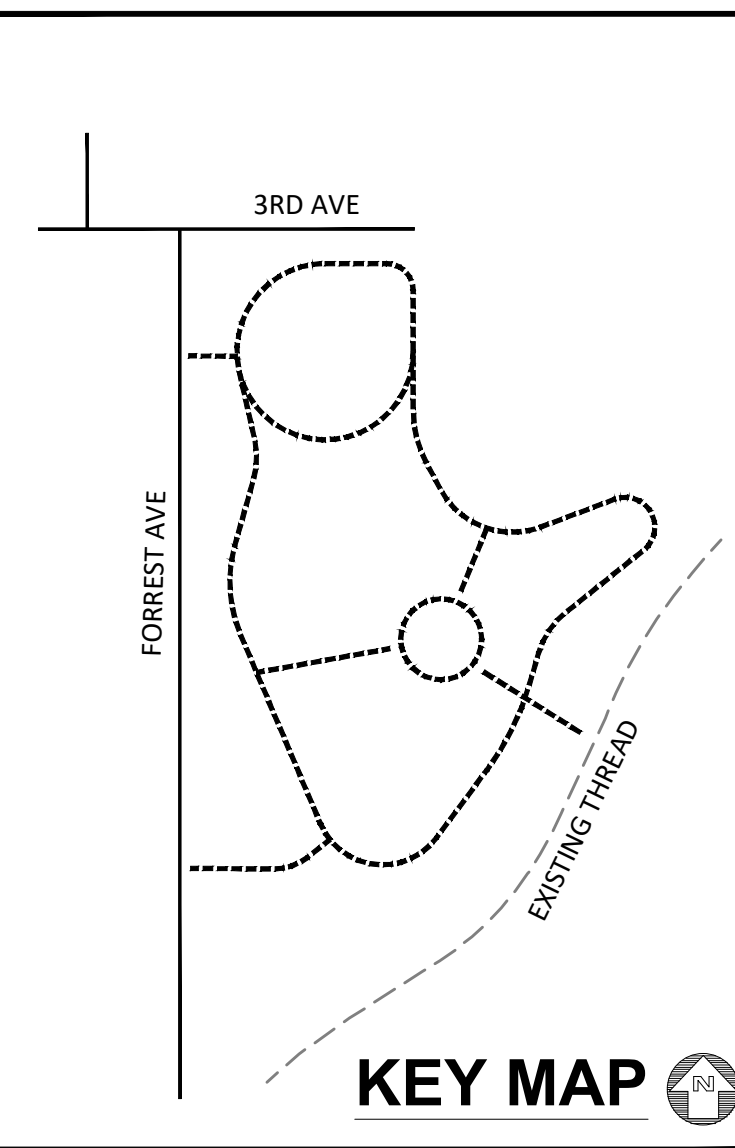
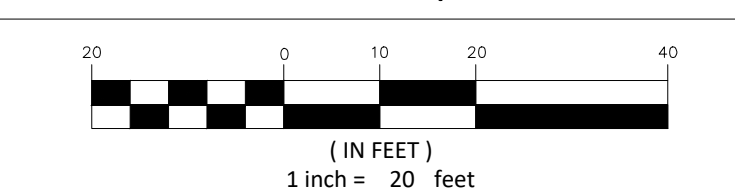
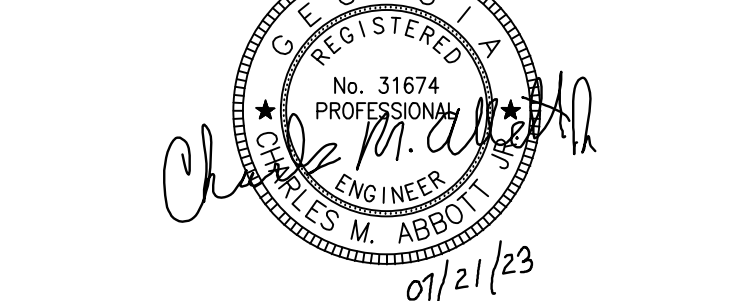


Table with 2 columns: DATE, DESCRIPTION. Rows include 02/17/2023 (50% DESIGN REVIEW), 07/21/2023 (100% ISSUE FOR PERMIT), 08/16/2023 (100% ISSUE FOR BID).

Table with 2 columns: PROJECT #, 2022 - 256; PROJECT MANAGER, AC.

LaGRANGE BICYCLE PARK LaGRANGE, GA

Charles M. Abbott 07-21-2023 CHARLES M. ABBOTT JR., P.E. GSWCC # 0000041686 EXPIRES: 04/28/2025



EROSION, SEDIMENTATION, & POLLUTION CONTROL NOTES

Table with 2 columns: SCALE, 1" = 20'-0"; DATE, JULY 21, 2023.

SHEET # EC-04

4. Inspections.

a. Primary Permitee.

(1). Each day when any type of construction activity has taken place at a primary permittee's site, certified personnel provided by the primary permittee shall inspect: (a) all areas at the primary permittee's site where petroleum products are stored, used, or handled for spills and leaks from vehicles and equipment and (b) all locations at the primary permittee's site where vehicles enter or exit the site for evidence of off-site sediment tracking. These inspections must be conducted until a Notice of Termination is submitted.

(2). Measure rainfall once every 24 hours except any non-working Saturday, non-working Sunday and non-working Federal holiday until a Notice of Termination is submitted. Measurement of rainfall may be suspended if all areas of the site have undergone final stabilization or established a crop of annual vegetation and a seeding of target perennials appropriate for the region.

(3). Certified personnel (provided by the primary permittee) shall inspect the following at least once every seven (7) calendar days and within 24 hours of the end of a storm that is 0.5 inches rainfall or greater (unless such storm ends after 5:00 PM on any Friday or on any non-working Saturday, non-working Sunday or any non-working Federal holiday in which case the inspection shall be completed by the end of the next business day and/or working day, whichever occurs first): (a) disturbed areas of the primary permittee's construction site; (b) areas used by the primary permittee for storage of materials that are exposed to precipitation; and (c) structural control measures. Erosion and sediment control measures identified in the Plan applicable to the discharge locations or points are accessible, they shall be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to receiving water(s). For areas of a site that have undergone final stabilization or established a crop of annual vegetation and a seeding of target perennials appropriate for the region, the permittee must comply with Part IV.D.4.a.(4). These inspections must be conducted until a Notice of Termination is submitted.

(4). Certified personnel (provided by the primary permittee) shall inspect at least once per month during the term of this permit (i.e., until a Notice of Termination is submitted to EPD) the areas of the site that have undergone final stabilization or established a crop of annual vegetation and a seeding of target perennials appropriate for the region. These areas shall be inspected for evidence of, or the potential for, pollutants entering the drainage system and the receiving water(s). Erosion and sediment control measures identified in the Plan shall be observed to ensure that they are operating correctly. Where discharge locations or points are accessible, they shall be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to receiving water(s).

(5). Based on the results of each inspection, the site description and the pollution prevention and control measures identified in the Erosion, Sedimentation and Pollution Control Plan, the Plan shall be revised as appropriate not later than seven (7) calendar days following each inspection. Implementation of such changes shall be made as soon as practical but in no case later than seven (7) calendar days following each inspection. The primary permittee must amend the Plan in accordance with Part IV.D.4.b.(5), when a secondary permittee notifies the primary permittee of any Plan deficiencies.

(6). A report of each inspection that includes the name(s) of certified personnel making each inspection, the date(s) of each inspection, construction phase (i.e., initial, intermediate or final), major observations relating to the implementation of the Erosion, Sedimentation and Pollution Control Plan, and actions taken in accordance with Part IV.D.4.a.(5), of the permit shall be made and retained at the site or be readily available at a designated alternate location until the entire site or that portion of a construction project that has been phased has undergone final stabilization and a Notice of Termination is submitted to EPD. Such reports shall be readily available by the end of the second business day and/or working day and shall include all records of best management practices that have not been properly installed and/or maintained as described in the Plan. Where the report does not identify an incident, the inspection report shall contain a statement that the best management practices are in compliance with the Erosion, Sedimentation and Pollution Control Plan. The report shall be signed in accordance with Part V.G.2. of this permit.

b. Secondary Permitee.

(1). Each day when any type of construction activity has taken place at a secondary permittee's site, certified personnel provided by the secondary permittee shall inspect: (a) all areas used by the secondary permittee where petroleum products are stored, used, or handled for spills and leaks from vehicles and equipment; and (b) all locations at the secondary permittee site where that permittee's vehicles enter or exit the site for evidence of off-site sediment tracking. These inspections must be conducted until a Notice of Termination is submitted. This paragraph is not applicable to utility companies and utility contractors if they are secondary permittees.

(2). Certified personnel (provided by the utility companies and utility contractors if they are secondary permittees) shall inspect the following each day any type of construction activity has taken place at the construction site: (a) areas of the construction site disturbed by the utility companies and utility contractors that have not undergone final stabilization or established a crop of annual vegetation and a seeding of target perennials appropriate for the region; (b) areas used by the utility companies and utility contractors for storage of materials that are exposed to precipitation that have not undergone final stabilization or established a crop of annual vegetation and a seeding of target perennials appropriate for the region or established a crop of annual vegetation and a seeding of target perennials appropriate for the region; and (c) structural control measures. Erosion and sediment control measures identified in the Plan applicable to the utility companies and utility contractors' construction activities shall be observed to ensure that they are operating correctly. Where discharge locations or points are accessible, they shall be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to receiving water(s). This paragraph is not applicable to utility companies and utility contractors if they are secondary permittees performing service line installations or when conducting repairs on existing line installations.

(3). Certified personnel (provided by the secondary permittee) shall inspect the following at least once every seven calendar days and within 24 hours of the end of a storm that is 0.5 inches rainfall or greater (unless such storm ends after 5:00 PM on any Friday or on any non-working Saturday, non-working Sunday or any non-working Federal holiday in which case the inspection shall be completed by the end of the next business day and/or working day, whichever occurs first): (a) disturbed areas of the secondary permittee's construction site; (b) areas used by the secondary permittee for storage of materials that are exposed to precipitation; and (c) structural control measures. Erosion and sediment control measures identified in the Plan applicable to the secondary permittee's site shall be observed to ensure that they are operating correctly. Where discharge locations or points are accessible, they shall be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to receiving water(s). This paragraph is not applicable to utility companies and utility contractors if they are secondary permittees.

(4). Certified personnel (provided by the secondary permittee) shall inspect at least once per month during the term of this permit (i.e., until a Notice of Termination is submitted to EPD) the areas of their sites that have undergone final stabilization or established a crop of annual vegetation and a seeding of target perennials appropriate for the region. These areas shall be inspected for evidence of, or the potential for, pollutants entering the drainage system and the receiving water(s). Erosion and sediment control measures identified in the Plan shall be observed to ensure that they are operating correctly. Where discharge locations or points are accessible, they shall be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to receiving water(s). This paragraph is not applicable to utility companies and utility contractors if they are secondary permittees.

(5). All sampling pursuant to this permit must be done in such a way (including generally accepted sampling methods, locations, timing, and frequency) as to accurately reflect whether storm water runoff from the construction site is in compliance with the standard set forth in Parts III.D.3. or III.D.4., whichever is applicable.

seeding of target perennials appropriate for the region, the permittee must comply with Part IV.D.4.c.(4). These inspections must be conducted until a Notice of Termination is submitted. This paragraph is not applicable to utility companies and utility contractors performing utility line installations or when conducting repairs on existing line installations.

(4). Certified personnel (provided by the tertiary permittee) shall inspect at least once per month during the term of this permit (i.e., until a Notice of Termination is submitted to EPD) the areas of their sites that have undergone final stabilization or established a crop of annual vegetation and a seeding of target perennials appropriate for the region. These areas shall be inspected for evidence of, or the potential for, pollutants entering the drainage system and the receiving water(s). Erosion and sediment control measures identified in the Plan shall be observed to ensure that they are operating correctly. Where discharge locations or points are accessible, they shall be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to receiving water(s). This paragraph is not applicable to utility companies and utility contractors performing utility service line installations or when conducting repairs on existing line installations.

(5). Based on the results of each inspection, the site description and the pollution prevention and control measures identified in the Erosion, Sedimentation and Pollution Control Plan, the Plan shall be revised as appropriate not later than seven (7) calendar days following each inspection. Implementation of such changes shall be made as soon as practical but in no case later than seven (7) calendar days following the inspection.

(6). A report of each inspection that includes the name(s) of certified personnel making each inspection, the date(s) of each inspection, construction phase (i.e., initial, intermediate or final), major observations relating to the implementation of the Erosion, Sedimentation and Pollution Control Plan, and actions taken in accordance with Part IV.D.4.a.(5) of the permit shall be made and retained at the site or be readily available at a designated alternate location until the entire site has undergone final stabilization and a Notice of Termination is submitted to EPD. Such reports shall be readily available by the end of the second business day and/or working day and shall include all records of best management practices that have not been properly installed and/or maintained as described in the Plan. Where the report does not identify any incidents, the inspection report shall contain a statement that the best management practices are in compliance with the Erosion, Sedimentation and Pollution Control Plan. The report shall be signed in accordance with Part V.G.2. of this permit. This paragraph is not applicable to utility companies and utility contractors performing utility service line installations or when conducting repairs on existing line installations.

(7). Non-storm water discharges. Except for flows from fire fighting activities, sources of non-storm water listed in Part III.A.2. of this permit that are combined with storm water discharges associated with construction activity must be identified in the Plan. The Plan shall identify and ensure the implementation of appropriate pollution prevention measures for the non-storm water component(s) of the discharge.

(8). Reporting. The primary permittee shall submit the following records at the construction site or the records shall be readily available at a designated alternate location from commencement of construction until such time as a NOT is submitted in accordance with Part VI:

(1). A USGS topographic map, a topographic map or a drawing (referred to as a topographic map) that is a scale equal to or more detailed than a 1:24000 map showing the location of the site and the location of all perennial and intermittent streams and other water bodies as shown on a USGS topographic map, and all other perennial and intermittent streams and other water bodies located during mandatory field verification, into which the storm water is discharged and (b) the receiving water and/or outfall sampling location(s). When the permittee has chosen to use a USGS topographic map and the receiving water(s) is not shown on the USGS topographic map, the location of the receiving water(s) must be drawn on the USGS topographic map from where the storm water enters the receiving water(s) to the point where the receiving water(s) combines with the first blue line stream shown on the USGS topographic map.

(2). The analytical method used to collect and analyze the samples including quality control/quality assurance procedures. This narrative must include precise sampling methodology for each sampling location.

(3). Where the permittee has determined that some of all outfalls will be sampled, a rationale must be included in the Plan for the NTU limit(s) selected from Appendix B. This rationale must include the size of the construction site, the calculation of the size of the surface water drainage area, and the type of receiving water(s) (i.e., trout stream or supporting warm water fisheries); and

(4). Any additional information EPD determines necessary to be part of the Plan. EPD will provide written notice to the permittee of the information necessary and the time line for submittal.

(b). Sample Type. All sampling shall be collected by "grab samples" and the analysis of these samples must be conducted in accordance with methodology and test procedures established by 40 CFR Part 136 (unless other test procedures have been approved); the guidance document titled "NPDES Storm Water Sampling Guidance Document, EPA 833-B-92-001" and guidance documents that may be prepared by the EPD.

(1). Sample containers should be labeled prior to collecting the samples.

(2). Samples should be well mixed before transferring to a secondary container.

(3). Large mud, clean and rinsed glass or plastic jars should be used for collecting samples. The jars should be cleaned thoroughly to avoid contamination.

(4). Manual, automatic or rising stage sampling may be utilized. Samples required by this permit should be analyzed immediately, but in no case later than 48 hours after collection. However, samples from automatic samplers must be collected no later than the next business day after their accumulation, unless flow through automated samplers is utilized. If automatic sampling is utilized and the automatic sampler is not activated during the qualifying event, the permittee must utilize manual sampling or rising stage sampling during the next qualifying event. Dilution of samples is not required. Samples may be collected using a direct reading, properly calibrated turbidimeter. Samples are not required to be cooled.

(5). Sampling and analysis of the receiving water(s) or outfalls below the minimum frequency stated in this permit must be reported to EPD as specified in Part IV.E.

(1). For construction activities the primary permittee with a total planned disturbance equal to or greater than one (1) acre and tertiary permittee with a total planned disturbance equal to or greater than five (5) acres must sample all receiving water(s), or all outfalls(s), or a combination of receiving water(s) and outfalls(s). Samples taken for the purpose of compliance with this permit shall be representative of the monitored activity and representative of the water quality of the receiving water(s) and/or the storm water outfalls using the following minimum guidelines:

(a). The upstream sample for each receiving water(s) must be taken immediately upstream of the confluence of the first storm water discharge into the receiving water(s) (i.e., the discharge farthest upstream at the site) but downstream of any other storm water discharges not associated with the permitted activity. Where appropriate, several upstream samples from across the receiving water(s) may be taken and the arithmetic average of the turbidity of these samples used for the upstream turbidity value.

(b). The downstream sample for each receiving water(s) must be taken downstream of confluence of the last storm water discharge from the permitted activity (i.e., the discharge farthest downstream at the site) but upstream of any other storm water discharge not associated with the permitted activity. Where appropriate, several downstream samples from across the receiving water(s) may be taken and the arithmetic average of the turbidity of these samples used for the downstream turbidity value.

(c). Ideally the samples should be taken from the horizontal and vertical center of the receiving water(s) or the storm water outfall channel(s).

(d). Care should be taken to avoid stirring the bottom sediments in the receiving water(s) or in the outfall storm water channel.

(e). The sampling container should be held so that the opening faces upstream.

(f). The samples should be kept free from floating debris.

(g). Permittees do not have to sample sheetflow that flows onto undisturbed natural areas or areas stabilized by the project. For purposes of this section, stabilized shall mean, for unpaved areas and areas not covered by permanent structures and areas located outside the waste disposal limits of a landfill cell that has been certified by EPD for waste disposal, 100% of the soil surface is uniformly covered in permanent vegetation activity or other permanent stabilization measures as defined in the Manual (excluding a crop of annual vegetation and seeding of target crop perennials appropriate for the region).

(h). All sampling pursuant to this permit must be done in such a way (including generally accepted sampling methods, locations, timing, and frequency) as to accurately reflect whether storm water runoff from the construction site is in compliance with the standard set forth in Parts III.D.3. or III.D.4., whichever is applicable.

(1). The primary permittee with a total planned disturbance equal to or greater than one (1) acre and tertiary permittee with a total planned disturbance equal to or greater than five (5) acres must sample in accordance with the Plan at least once for each rainfall event described below. For a qualifying event, the permittee shall sample at the beginning of any storm water discharge to a monitored receiving water and/or from a monitored outfall within forty-five (45) minutes or as soon as possible.

(2). However, where manual and automatic sampling are impossible (as defined in this permit), or are beyond the permittee's control, the permittee shall take samples as soon as possible, but in no case more than twelve (12) hours after the beginning of the storm water discharge.

(3). Sampling by the permittee shall occur for the following qualifying events:

(a). For each area of the site that discharges to a receiving water or from an outfall, the first rain event that reaches or exceeds 0.5 inch with a storm water discharge that allows for sampling during normal business hours as defined in this permit after all clearing and grubbing operations have been completed, but prior to completion of mass grading operations, in the drainage area of the location selected as the sampling location;

(b). In addition to (a) above, for each area of the site that discharges to a receiving water or from an outfall, the first rain event that reaches or exceeds 0.5 inch with a storm water discharge that allows for sampling during normal business hours as defined in this permit either 90 days after the first sampling event or after all mass grading operations have been completed, but prior to submittal of a NOT, in the drainage area of the location selected as the sampling location, whichever comes first;

(c). At the time of sampling performed pursuant to (a) and (b) above, if BMPs in any area of the site that discharges to a receiving water or from an outfall are not properly designed, installed and maintained, corrective action shall be defined and implemented within two (2) business days, and turbidity samples shall be taken from discharges from that area of the site for each subsequent rain event that reaches or exceeds 0.5 inch during normal business hours* until the selected turbidity standard is attained, or until post-storm event inspections determine that BMPs are properly designed, installed and maintained;

(d). Where sampling pursuant to (a), (b) or (c) above is required but not possible (or not required because there is no discharge to a receiving water or from an outfall), in accordance with Part IV.D.4.a.(6), or the tertiary permittee, in accordance with Part IV.D.4.c.(6), must include a written justification in the inspection report of why sampling was not performed. Implementation of such changes shall be made as soon as practical but in no case later than seven (7) calendar days following the inspection.

(e). Existing construction activities, i.e., those that are occurring on or before the effective date of this permit, that have met the sampling required by (a) above shall sample in accordance with (b) above. Those existing construction activities that have met the sampling required by (b) above shall not be required to conduct additional sampling other than as required by (c) above.

*Note that the Permittee may choose to meet the requirements of (a) and (b) above by collecting turbidity samples from any rain event that reaches or exceeds 0.5 inch and allows for sampling at any time of the day or week.

(1). The applicable permittees are required to submit the sampling results to the EPD at the address shown in Part II.C. by the fifteenth day of the month following the reporting period. Reporting periods are months during which samples are taken in accordance with this permit. Sampling results shall be in a clearly legible format. Upon written notification, EPD may require the applicable permittee to submit the sampling results on a more frequent basis. Sampling and analysis of any storm water discharge(s) or the receiving water(s) beyond the minimum frequency stated in this permit shall be reported in a similar manner to the EPD. The sampling reports must be signed in accordance with Part V.G.2. Sampling reports must be submitted to EPD until such time as a NOT is submitted in accordance with Part VI.

(2). All sampling reports shall include the following information:

a. The rainfall amount, date, exact place and time of sampling or measurements; b. The name(s) of the certified personnel who performed the sampling and measurements; c. The date(s) analyses were performed; d. The time(s) analyses were initiated; e. The name(s) of the certified personnel who performed the analyses; f. References and written procedures, when available, for the analytical techniques or methods used; g. The results of such analyses, including the bench sheets, instrument readouts, computer disks or files, etc., used in the analyses; h. Results which exceed 1000 NTU shall be reported as "exceeds 1000 NTU"; and i. Certification statement that sampling was conducted as per the Plan.

(3). All written correspondence required by this permit shall be submitted by return receipt certified mail (or similar service) to the appropriate District Office of the EPD according to the schedule in Appendix A of this permit. The applicable permittees shall retain a copy of the proof of submittal at the construction site or the proof of submittal shall be readily available at a designated location from commencement of construction until such time as a NOT is submitted in accordance with Part VI. If an electronic submittal is provided by EPD then the written correspondence may be submitted electronically; if required, a paper copy must also be submitted by return receipt certified mail or similar service.

(4). Each secondary permittee shall retain the following records at the construction site or the records shall be readily available at a designated alternate location from commencement of construction until such time as a NOT is submitted in accordance with Part VI:

a. A copy of all Notices of Intent submitted to EPD; b. A copy of the Erosion, Sedimentation and Pollution Control Plan required by this permit; c. The design professional's report of the results of the inspection conducted in accordance with Part IV.A.5. of this permit; d. A copy of all sampling information, results, and reports required by this permit; e. A copy of all inspection reports generated in accordance with Part IV.D.4.a of this permit; f. A copy of all violation summaries and violation summary reports generated in accordance with Part III.D.2 of this permit; and g. Daily rainfall information collected in accordance with Part IV.D.4.a.(2) of this permit.

(5). Sampling and analysis of the receiving water(s) or outfalls below the minimum frequency stated in this permit must be reported to EPD as specified in Part IV.E.

(1). For construction activities the primary permittee with a total planned disturbance equal to or greater than one (1) acre and tertiary permittee with a total planned disturbance equal to or greater than five (5) acres must sample all receiving water(s), or all outfalls(s), or a combination of receiving water(s) and outfalls(s). Samples taken for the purpose of compliance with this permit shall be representative of the monitored activity and representative of the water quality of the receiving water(s) and/or the storm water outfalls using the following minimum guidelines:

(a). The upstream sample for each receiving water(s) must be taken immediately upstream of the confluence of the first storm water discharge into the receiving water(s) (i.e., the discharge farthest upstream at the site) but downstream of any other storm water discharges not associated with the permitted activity. Where appropriate, several upstream samples from across the receiving water(s) may be taken and the arithmetic average of the turbidity of these samples used for the upstream turbidity value.

(b). The downstream sample for each receiving water(s) must be taken downstream of confluence of the last storm water discharge from the permitted activity (i.e., the discharge farthest downstream at the site) but upstream of any other storm water discharge not associated with the permitted activity. Where appropriate, several downstream samples from across the receiving water(s) may be taken and the arithmetic average of the turbidity of these samples used for the downstream turbidity value.

(c). Ideally the samples should be taken from the horizontal and vertical center of the receiving water(s) or the storm water outfall channel(s).

(d). Care should be taken to avoid stirring the bottom sediments in the receiving water(s) or in the outfall storm water channel.

(e). The sampling container should be held so that the opening faces upstream.

(f). The samples should be kept free from floating debris.

(g). Permittees do not have to sample sheetflow that flows onto undisturbed natural areas or areas stabilized by the project. For purposes of this section, stabilized shall mean, for unpaved areas and areas not covered by permanent structures and areas located outside the waste disposal limits of a landfill cell that has been certified by EPD for waste disposal, 100% of the soil surface is uniformly covered in permanent vegetation activity or other permanent stabilization measures as defined in the Manual (excluding a crop of annual vegetation and seeding of target crop perennials appropriate for the region).

(h). All sampling pursuant to this permit must be done in such a way (including generally accepted sampling methods, locations, timing, and frequency) as to accurately reflect whether storm water runoff from the construction site is in compliance with the standard set forth in Parts III.D.3. or III.D.4., whichever is applicable.

(1). The primary permittee with a total planned disturbance equal to or greater than one (1) acre and tertiary permittee with a total planned disturbance equal to or greater than five (5) acres must sample in accordance with the Plan at least once for each rainfall event described below. For a qualifying event, the permittee shall sample at the beginning of any storm water discharge to a monitored receiving water and/or from a monitored outfall within forty-five (45) minutes or as soon as possible.

(2). However, where manual and automatic sampling are impossible (as defined in this permit), or are beyond the permittee's control, the permittee shall take samples as soon as possible, but in no case more than twelve (12) hours after the beginning of the storm water discharge.

(3). Sampling by the permittee shall occur for the following qualifying events:

(a). For each area of the site that discharges to a receiving water or from an outfall, the first rain event that reaches or exceeds 0.5 inch with a storm water discharge that allows for sampling during normal business hours as defined in this permit after all clearing and grubbing operations have been completed, but prior to completion of mass grading operations, in the drainage area of the location selected as the sampling location;

(b). In addition to (a) above, for each area of the site that discharges to a receiving water or from an outfall, the first rain event that reaches or exceeds 0.5 inch with a storm water discharge that allows for sampling during normal business hours as defined in this permit either 90 days after the first sampling event or after all mass grading operations have been completed, but prior to submittal of a NOT, in the drainage area of the location selected as the sampling location, whichever comes first;

(c). At the time of sampling performed pursuant to (a) and (b) above, if BMPs in any area of the site that discharges to a receiving water or from an outfall are not properly designed, installed and maintained, corrective action shall be defined and implemented within two (2) business days, and turbidity samples shall be taken from discharges from that area of the site for each subsequent rain event that reaches or exceeds 0.5 inch during normal business hours* until the selected turbidity standard is attained, or until post-storm event inspections determine that BMPs are properly designed, installed and maintained;

(d). Where sampling pursuant to (a), (b) or (c) above is required but not possible (or not required because there is no discharge to a receiving water or from an outfall), in accordance with Part IV.D.4.a.(6), or the tertiary permittee, in accordance with Part IV.D.4.c.(6), must include a written justification in the inspection report of why sampling was not performed. Implementation of such changes shall be made as soon as practical but in no case later than seven (7) calendar days following the inspection.

(e). Existing construction activities, i.e., those that are occurring on or before the effective date of this permit, that have met the sampling required by (a) above shall sample in accordance with (b) above. Those existing construction activities that have met the sampling required by (b) above shall not be required to conduct additional sampling other than as required by (c) above.

*Note that the Permittee may choose to meet the requirements of (a) and (b) above by collecting turbidity samples from any rain event that reaches or exceeds 0.5 inch and allows for sampling at any time of the day or week.

SPILL PREVENTION BEST MANAGEMENT PRACTICES

MATERIAL MANAGEMENT PRACTICES

The following are the material management practices that will be used to reduce the risk of spills or accidental exposure of materials and substances to water runoff.

The following GOOD HOUSEKEEPING PRACTICES will be followed onsite during the construction project.

An effort will be made to store only enough product required to do the job.

All materials stored onsite will be stored in a neat, orderly manner in their appropriate containers and, if possible, under a roof or other enclosure.

Products will be kept in their original containers with the original manufacturer's label.

Substances will not be mixed with one another unless recommended by the manufacturer.

Whenever possible, all of a product will be used up before disposing of the container.

Manufacturers' recommendations for proper use disposal will be followed.

The site superintendent will inspect daily to ensure proper use disposal of materials onsite.

HAZARDOUS MATERIAL PRACTICES

These practices are used to reduce the risks associated with hazardous materials:

Products will be kept in original containers unless they are not resealable.

Original labels and material safety data will be retained; they contain important product information.

If surplus product must be disposed of, manufacturers' or local and State recommended methods for proper disposal will be followed.

PRODUCT SPECIFIC PRACTICES

The following product specific practices will be followed onsite:

PETROLEUM BASED PRODUCTS:

Containers for products such as fuels, lubricants and tars will be inspected daily for leaks and spills. This includes on-site vehicle and machinery daily inspections and regular preventative maintenance of such equipment. Equipment maintenance areas will be located away from state water, natural drains and storm water drainage inlets. In addition, temporary fueling tanks shall have a secondary containment liner to prevent/minimize site contamination. Discharge of oils, fuels and lubricants is prohibited. Proper disposal methods will include collection in a suitable container and disposal as required by local and State regulations.

POINTS/FINISHES/SOLVENTS:

All products will be stored in tightly sealed original containers when not in use. Excess products will not be discharged to the storm water collection system. Excess product, materials used with these products and product containers will be disposed of according to manufacturer's specifications and recommendations.

CONCRETE TRUCK WASHING:

No concrete trucks will not be allowed to wash out or discharge surplus concrete or drum wash water onsite.

FERTILIZER/HERBICIDES:

These products will be applied at rates that do not exceed the manufacturer's specifications or above the guidelines set forth in the crop establishment or in the GSWCC Manual for Erosion and Sediment Control in Georgia. Any storage of these materials will be under roof in sealed containers.

BUILDING MATERIALS:

No building or construction materials will be buried or disposed of onsite. All such material will be disposed of in proper waste disposal procedures.

SOIL CLEANUP AND SPILL CONTROL PRACTICES

Local, State and manufacturer's recommended methods for spill cleanup will be clearly posted and procedures will be made available to site personnel.

Material and equipment necessary for spill cleanup will be kept in the material storage areas. Typical materials and equipment includes, but is not limited to, brooms, dustpans, mops, rags, gloves, goggles, cat litter, sand, sawdust and properly labeled plastic and metal waste containers.

Spill prevention practices and procedures will be reviewed after a spill and adjusted as necessary to prevent future spills.

All spills will be cleaned up immediately upon discovery. All spills will be reported as required by local, State and Federal regulations.

FOR SPILLS THAT IMPACT SURFACE WATER (LEAVE A SHEEN ON SURFACE WATER). THE NATIONAL RESPONSE CENTER (NCR) WILL BE CONTACTED WITHIN 24 HOURS AT 1-800-426-2675.

FOR SPILLS OF AN UNKNOWN AMOUNT, THE NATIONAL CENTER (NCR) WILL BE CONTACTED WITH 24 HOURS AT 1-800-426-2675.

FOR SPILLS GREATER THAN 25 GALLONS AND NO SURFACE WATER IMPACTS, THE GEORGIA EPD WILL BE CONTACTED WITHIN 24 HOURS.

FOR SPILLS LESS THAN 25 GALLONS AND NO SURFACE WATER IMPACTS, THE SPILL WILL BE CLEANED UP AND LOCAL AGENCIES WILL BE CONTACTED AS REQUIRED.

The contractor shall notify licensed professional who prepared this plan if more than 1320 gallons of petroleum is stored onsite (this includes capacities of equipment) or if any one piece of equipment has a capacity greater than 550 gallons. The contractor will need a Spill Prevention Containment and Countermeasures Plan prepared by that licensed professional.

ALL SANITARY WASTE UNITS WILL BE LOCATED IN AN AREA WHERE THE LIKELIHOOD OF THE UNIT CONTRIBUTING TO STORM WATER DISCHARGE IS NEGLIGIBLE. ADDITIONAL CONTAINMENT BMP'S MUST BE IMPLEMENTED, SUCH AS GRAVEL BAGS OR SPECIALLY DESIGNED PLASTIC SKID CONTAINERS AROUND THE BASE, TO PREVENT WASTES FROM CONTRIBUTING TO STORM WATER DISCHARGES. THE LOCATION OF SANITARY WASTE UNITS MUST BE IDENTIFIED ON THE EROSION CONTROL PLAN GRADING PHASE, SHEET C-4.1, BY THE CONTRACTOR ONCE THE LOCATIONS HAVE BEEN DETERMINED.

SANITARY SEWER IS LOCATED ON THIS PROJECT.

Warm Water (Supporting Warm Water Fisheries)

Table with 2 columns: Surface Water Drainage Area, square miles and NTU Value from Appendix B. Rows include 0.9 AC, < 0.1 sq. mi., Warm Waters 75, and various drainage area ranges from 1.00-10 to 100.01+.

Site Area: 0.9 AC. Surface Water Drainage Basin: < 0.1 sq. mi. Type of Receiving Water: Warm Waters 75. NTU Value from Appendix B: 75.

Table with 2 columns: Site Size, acres and NTU Value from Appendix B. Rows include 1.00-10, 10.01-25, 25.01-100, 50.01-100, and 100.01+.

MAINTENANCE AND INSPECTION PROCEDURES

EROSION AND SEDIMENT CONTROL INSPECTION AND MAINTENANCE PRACTICES

These are the inspection and maintenance practices that will be used to maintain erosion and sediment controls.

1. Less than one half of the site will be denuded at one time.

2. All control measures will be inspected at least once each week and following any storm event of 0.5 inches or greater.

3. All measures will be maintained in good working order; if a repair is necessary, it will be initiated within 24 hours of report.

4. Built up sediment will be removed from silt fence when it has reached one-third the height of the fence.

5. Silt fence will be inspected for depth of sediment, tears, to see if the fabric is securely attached to the fence posts, and to see that the fence posts are firmly in the ground.

6. The sediment basin will be inspected for depth of sediment, and built up sediment will be removed when it reaches one-third of the design capacity or at the end of the job.

7. Diversion dike will be inspected and any breaches promptly repaired.

8. Temporary and permanent seeding and planting will be inspected for bare spots, washouts, and healthy growth.

9. A maintenance inspection report will be made after each inspection.

10. The 24-hour emergency contact will select individuals who will be responsible for inspections, maintenance and repair activities, and filing out the inspection and maintenance report.

11. Personnel selected for inspection and maintenance responsibilities will receive training from the 24-hour emergency contact. They will be trained in all the inspection and maintenance procedures for keeping the erosion and sediment controls used onsite in good working order.

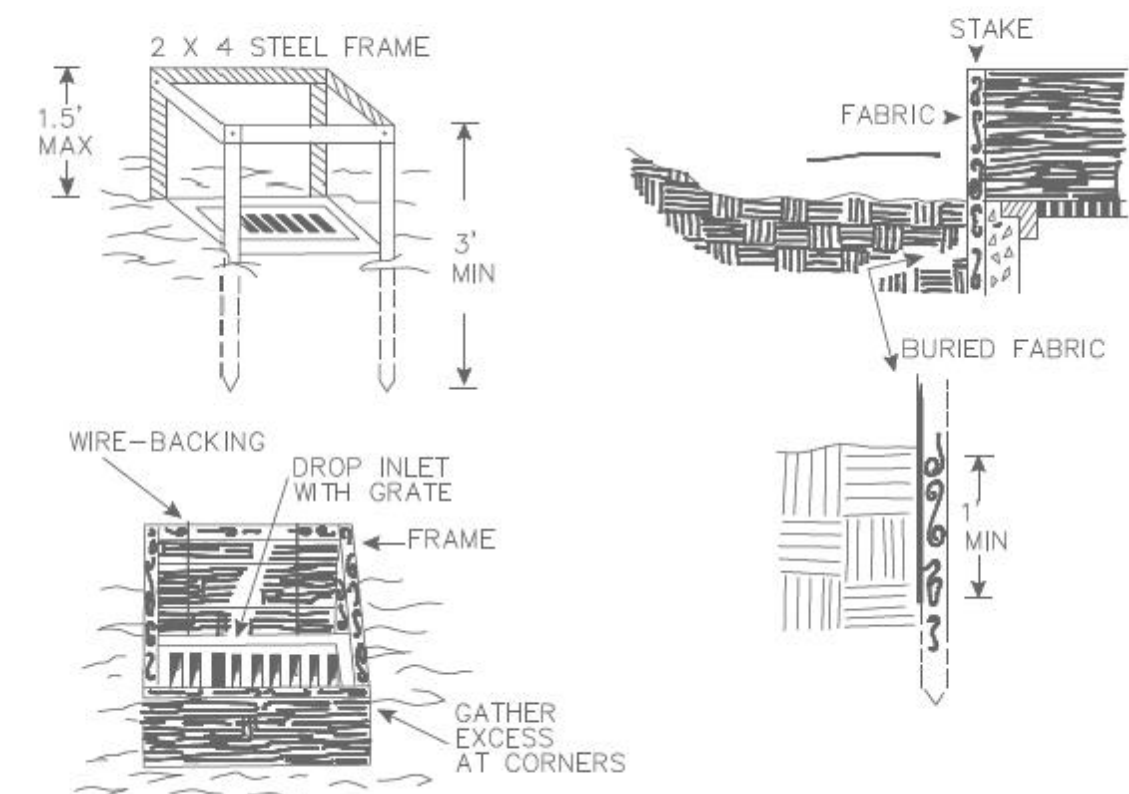
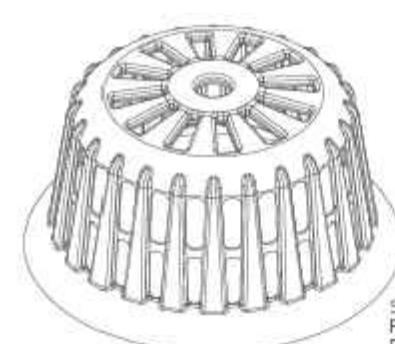


FIGURE 6-21.1
FABRIC AND SUPPORTING
FRAME FOR INLET PROTECTION

Sd2-F



ALTERNATIVE SEDIMENT TRAP

Sd2

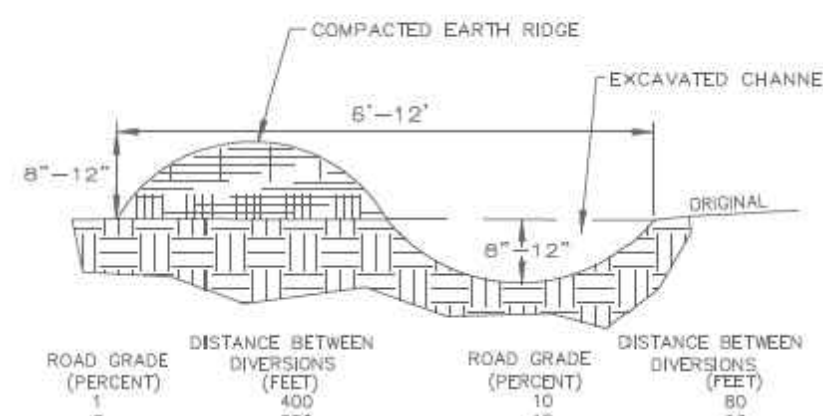
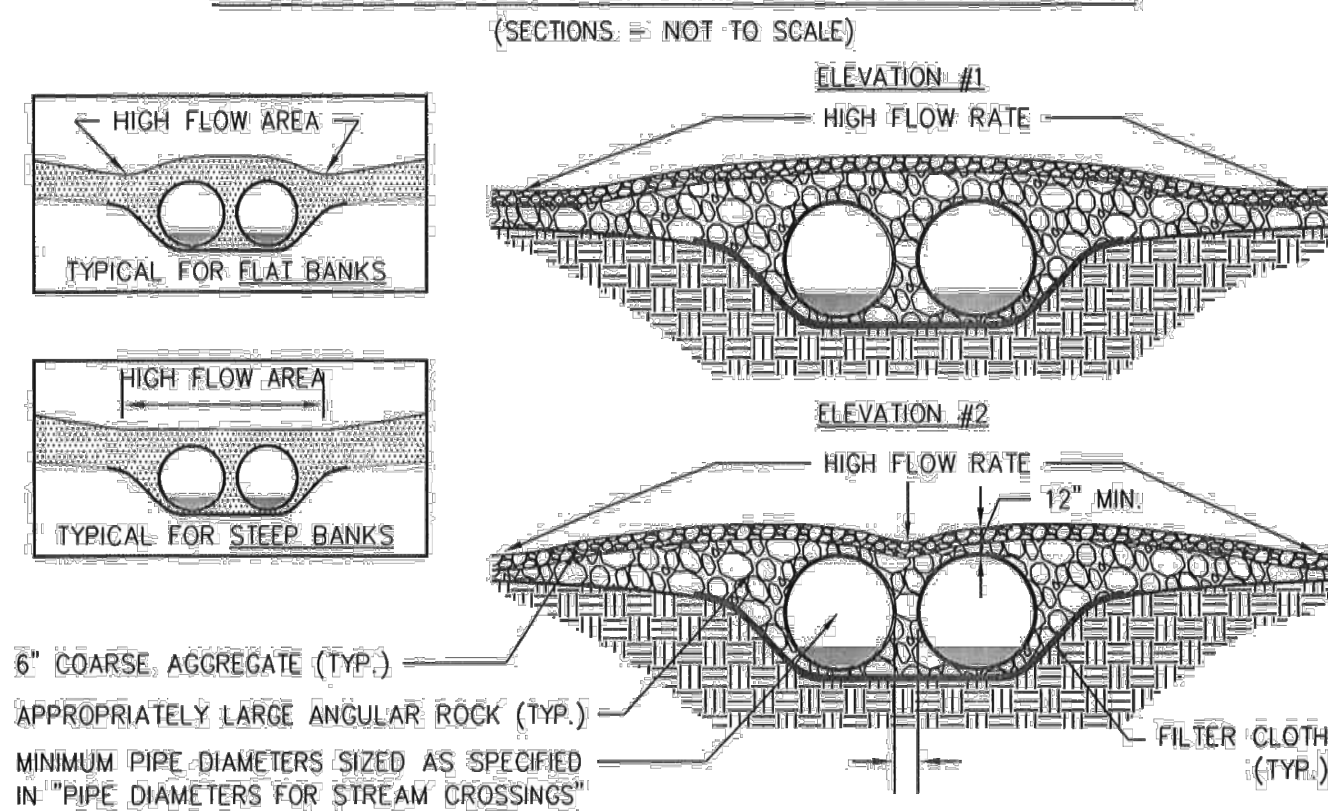


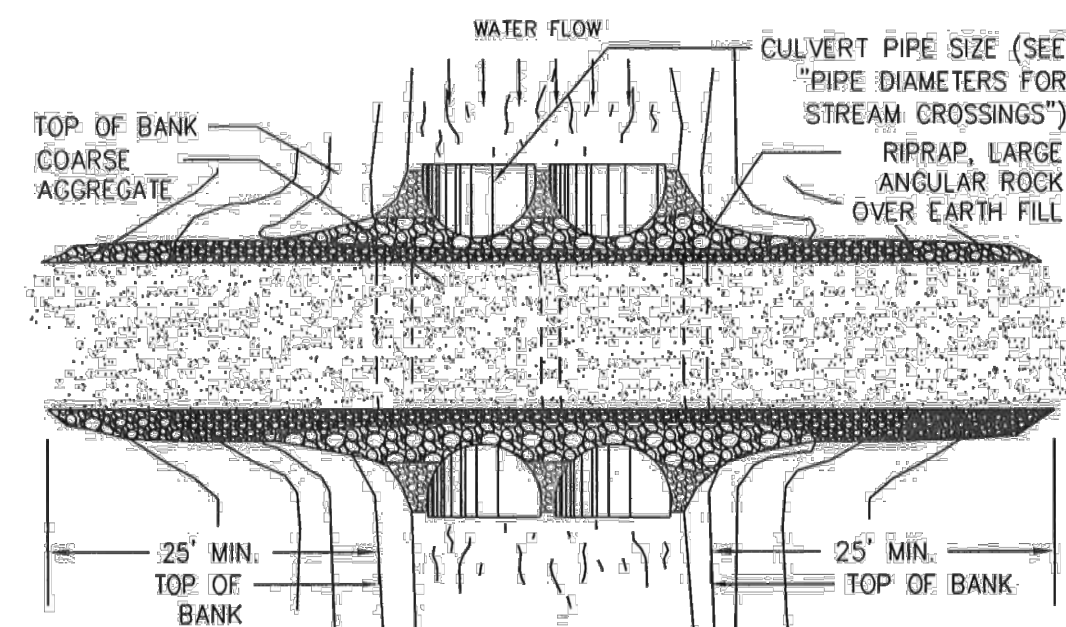
FIGURE 6-13.1
DIVERSION CHANNEL

DI

CONFIGURATION OF TEMPORARY CULVERT CROSSINGS



TYPICAL CULVERT CROSSING PLAN (NOT TO SCALE)

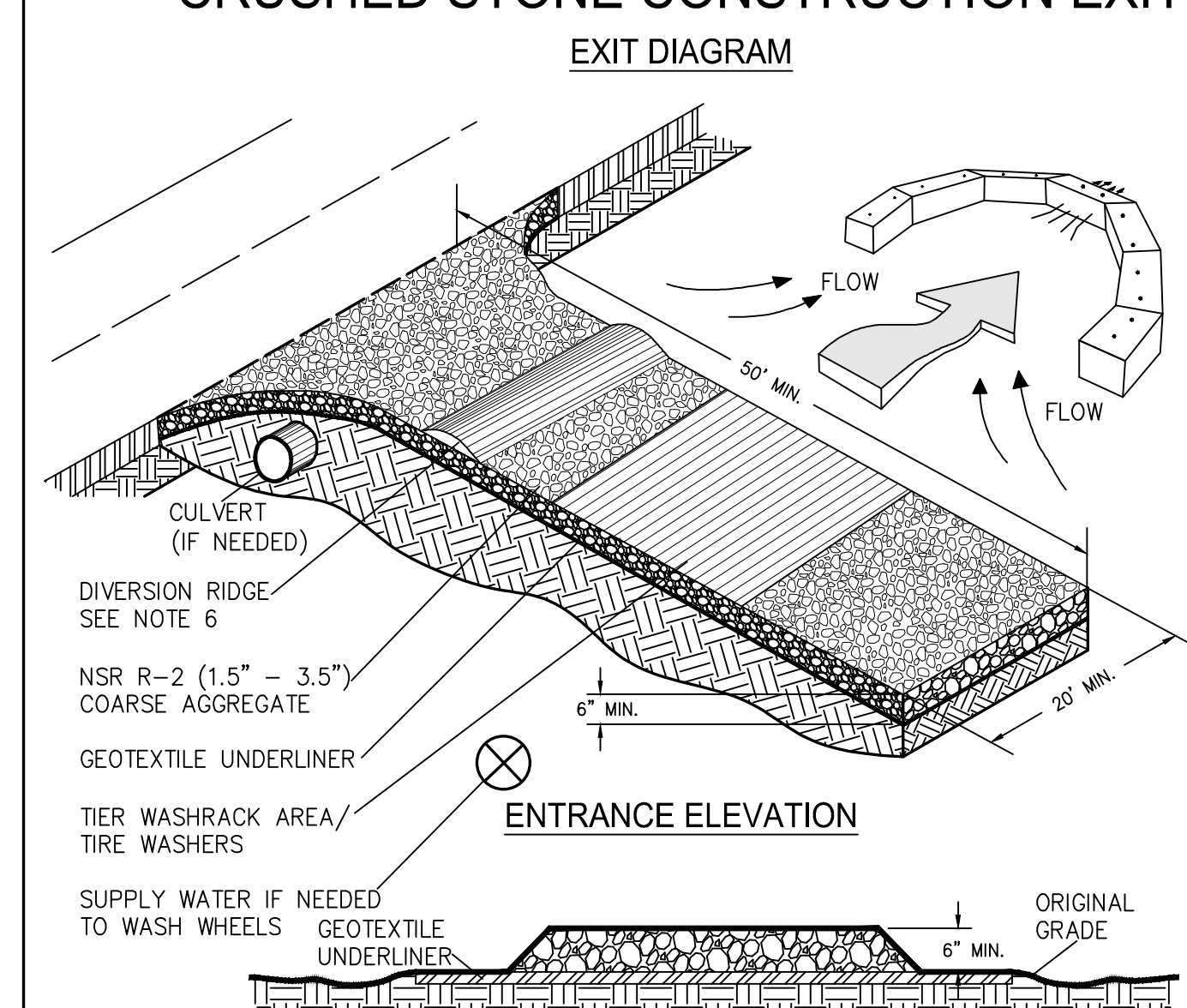


- NOTES:
- THIS TYPE OF CROSSING CAN BE INSTALLED IN BOTH A WET OR DRY WEATHER STREAM CONDITION WHERE THE DRAINAGE AREA EXCEEDS 10 ACRES.
 - REMOVE DURING CLEANUP.

Figure 6-33.2

Sr

CRUSHED STONE CONSTRUCTION EXIT



- NOTES:
- AVOID LOCATING ON STEEP SLOPES OR AT CURVES ON PUBLIC ROADS.
 - REMOVE ALL VEGETATION AND OTHER UNSUITABLE MATERIAL FROM THE FOUNDATION AREA, GRADE, AND CROWN FOR POSITIVE DRAINAGE.
 - AGGREGATE SIZE SHALL BE IN ACCORDANCE WITH NATIONAL STONE ASSOCIATION R-2 (1.5"-3.5" STONE).
 - GRAVEL PAD SHALL HAVE A MINIMUM THICKNESS OF 6".
 - PAD WIDTH SHALL BE EQUAL FULL WIDTH AT ALL POINTS OF VEHICULAR EGRESS, BUT NO LESS THAN 20'.
 - A DIVERSION RIDGE SHOULD BE CONSTRUCTED WHEN GRADE TOWARD PAVED AREA IS GREATER THAN 2%.
 - INSTALL PIPE UNDER THE ENTRANCE IF NEEDED TO MAINTAIN DRAINAGE DITCHES.
 - WHEN WASHING IS REQUIRED, IT SHOULD BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN (DIVERT ALL SURFACE RUNOFF AND DRAINAGE FROM THE ENTRANCE TO A SEDIMENT CONTROL DEVICE).
 - WASHRACKS AND/OR TIRE WASHERS MAY BE REQUIRED DEPENDING ON SCALE AND CIRCUMSTANCE. IF NECESSARY, WASHRACK DESIGN MAY CONSIST OF ANY MATERIAL SUITABLE FOR TRUCK TRAFFIC THAT REMOVE MUD AND DIRT.
 - MAINTAIN AREA IN A WAY THAT PREVENTS TRACKING AND/OR FLOW OF MUD ONTO PUBLIC RIGHTS-OF-WAYS. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.

Co

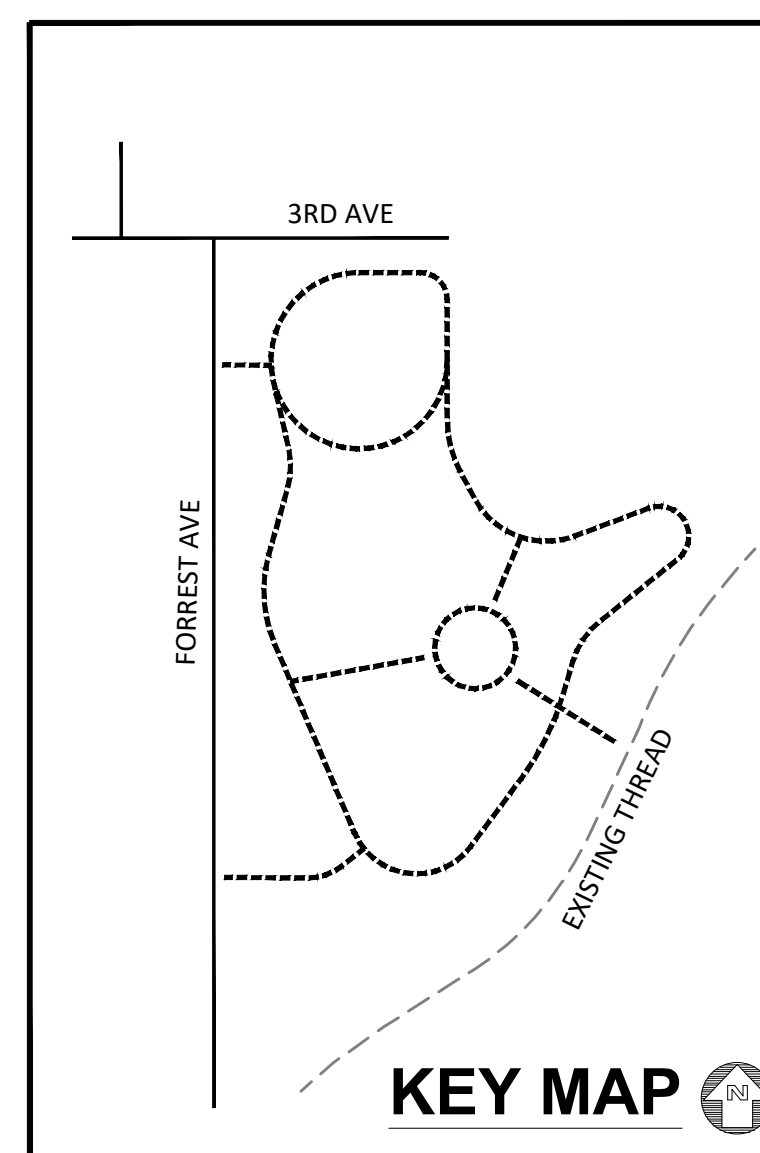
KAIZENCOLLABORATIVE

2390 MAIN STREET | TUCKER, GEORGIA 30084 | 404.239.2521

CHARLES M. ABBOTT JR., P.E.
DESIGN ENGINEER LEVEL II CERTIFICATION
GSWCC # 000004168 EXPIRES: 04/28/2025
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PATH FOUNDATION
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E: PETEVP@PATHFOUNDATION.ORG
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KEY MAP

Dust Control on Disturbed Areas



DEFINITION
Controlling surface and air movement of dust on construction sites, roads, and demolition sites.

PURPOSE
To prevent surface and air movement of dust from exposed soil surfaces.

CONDITIONS
This practice is applicable to areas subject to surface and air movement of dust where on and off-site damage may occur without treatment.

METHOD AND MATERIALS
A. Temporary Methods
Mulches. See standard Ds1 - Disturbed Area Stabilization (With Mulching Only). Synthetic resins may be used instead of asphalt to bind mulch material. Refer to specification Tac - Tackifiers. Resins such as Curasol or Terrastack should be used according to manufacturer's recommendations.

Vegetative Cover. See specification Ds2 - Disturbed Area Stabilization (With Temporary Seeding).

Spray-on Adhesives. These are used on mineral soils (not effective on muck soils). Keep traffic off these areas. Refer to specification Tac - Tackifiers.

Tillage. This practice is designed to roughen

and bring clods to the surface. It is an emergency measure which should be used before wind erosion starts. Begin plowing on windward side of site. Chisel-type plows spaced about 12 inches apart, spring-toothed harrows, and similar plows are examples of equipment which may produce the desired effect.

Irrigation. This is generally done as an emergency treatment. Site is sprinkled with water until the surface is wet. Repeat as needed.

Barriers. Solid board fences, snowfences, burlap fences, crate walls, bales of hay and similar material can be used to control air currents and soil blowing. Barriers placed at right angles to prevailing currents at intervals of about 15 times their height are effective in controlling wind erosion.

Calcium Chloride. Apply at rate that will keep surface moist. May need retreatment.

B. Permanent Methods
Permanent Vegetation. See specification Ds3 - Disturbed Area Stabilization (With Permanent Vegetation). Existing trees and large shrubs may afford valuable protection if left in place.

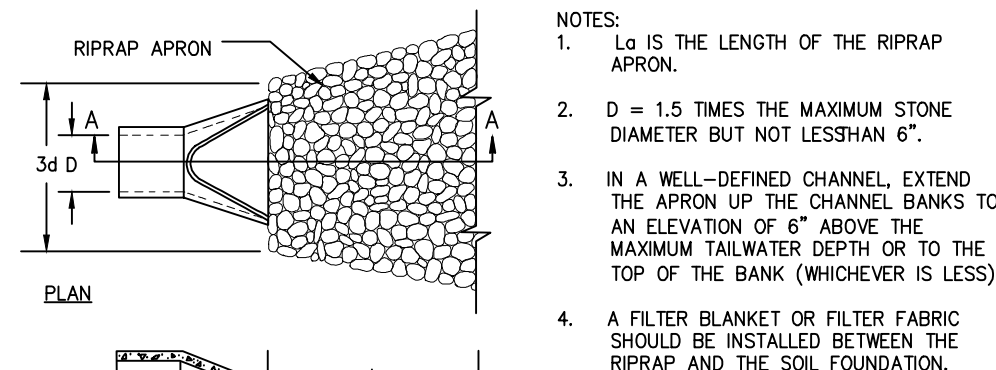
Topsoiling. This entails covering the surface with less erosive soil material. See specification Tp - Topsoiling.

Stone. Cover surface with crushed stone or coarse gravel. See specification Cr-Construction Road Stabilization.

6-107

RIPRAP OUTLET PROTECTION

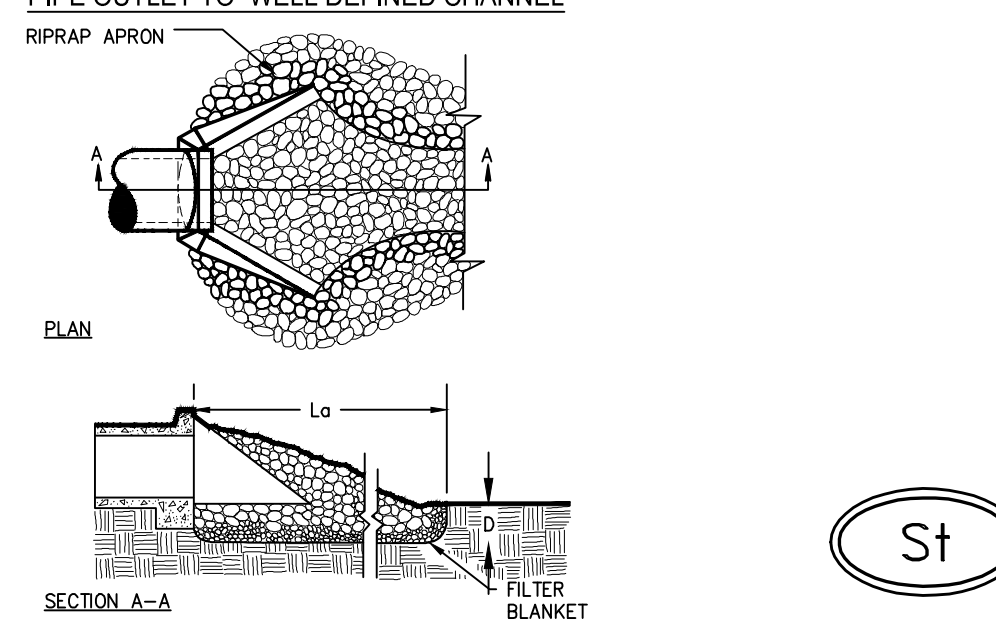
PIPE OUTLET TO FLAT AREA -- NO WELL DEFINED CHANNEL



NOTES:

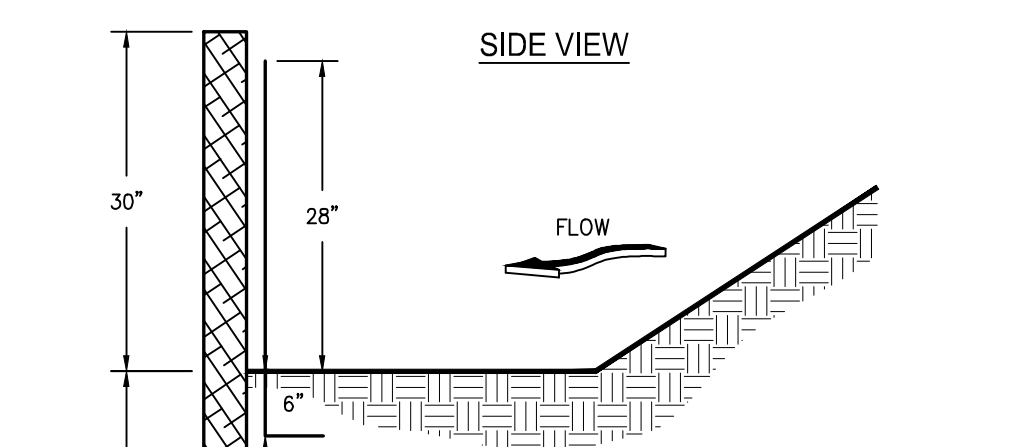
- Lo IS THE LENGTH OF THE RIPRAP APRON.
- D = 1.5 TIMES THE MAXIMUM STONE DIAMETER BUT NOT LESS THAN 6".
- IN A WELL-DEFINED CHANNEL, EXTEND THE APRON UP THE CHANNEL BANKS TO AN ELEVATION OF 6" ABOVE THE MAXIMUM TAILWATER DEPTH OR TO THE TOP OF THE BANK (WHICHEVER IS LESS).
- A FILTER BLANKET OR FILTER FABRIC SHOULD BE INSTALLED BETWEEN THE RIPRAP AND THE SOIL FOUNDATION.

PIPE OUTLET TO WELL DEFINED CHANNEL

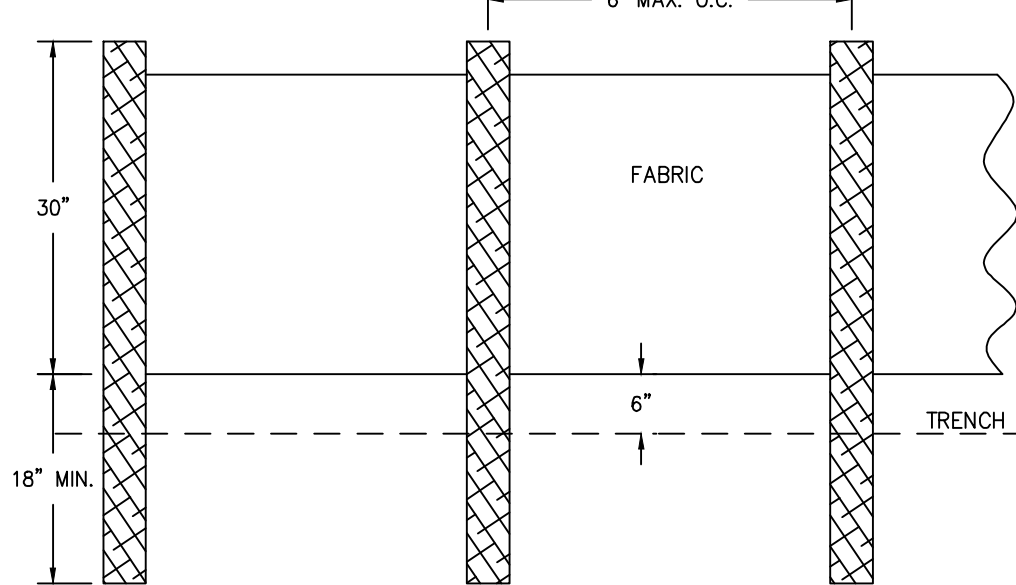


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SILT FENCE - TYPE NON-SENSITIVE

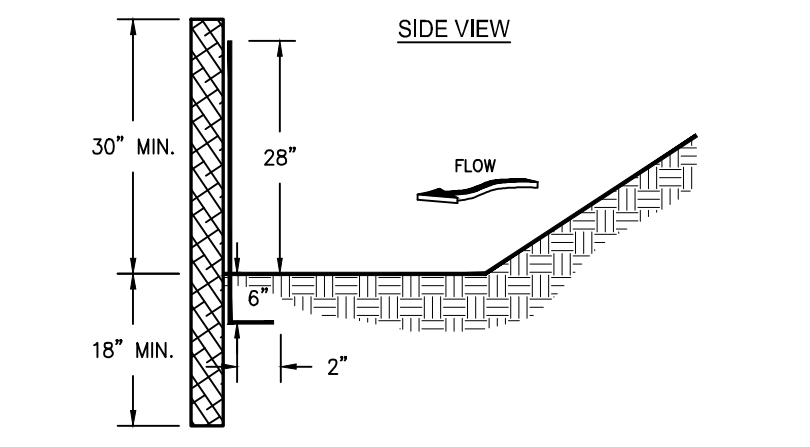


FRONT VIEW

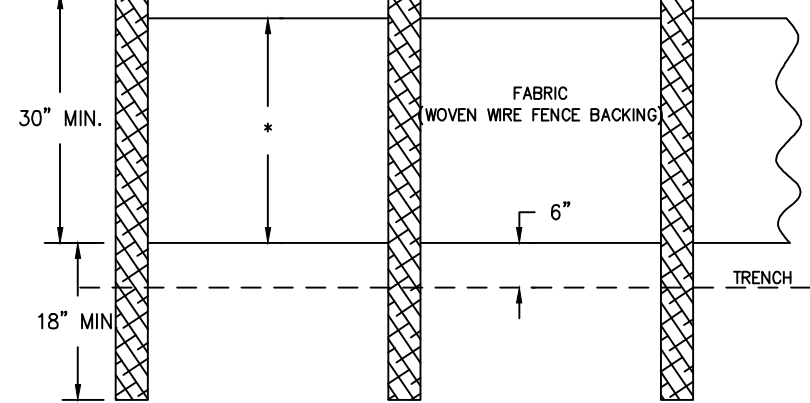


- NOTES:
- USE STEEL OR WOOD POSTS OR AS SPECIFIED BY THE EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN.

SILT FENCE - TYPE SENSITIVE



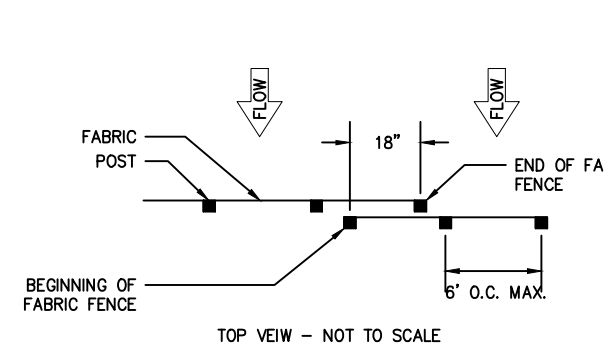
FRONT VIEW



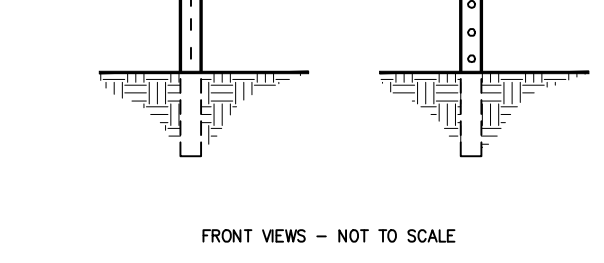
- NOTES:
- USE STEEL POSTS WITH WIRE REINFORCEMENT.
 - HEIGHT (H) IS TO BE SHOWN ON THE EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN.

FASTENERS FOR SILT FENCES

OVERLAP AT FABRIC ENDS



WOOD POST WITH STAPLE PLACEMENT

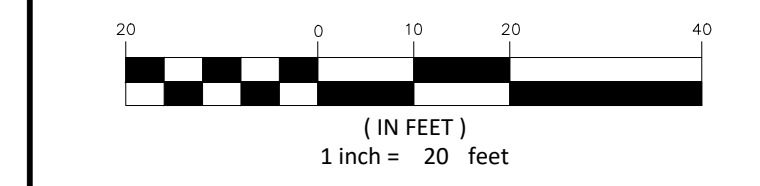


- NOTES:
- THE FABRIC AND WIRE SHOULD BE SECURELY FASTENED TO POSTS AND FABRIC ENDS MUST BE OVERLAPPED A MINIMUM OF 18" OR WRAPPED TOGETHER AROUND A POST TO PROVIDE A CONTINUOUS FABRIC BARRIER AROUND THE INLET.

DATE	DESCRIPTION
02/17/2023	50% DESIGN REVIEW
07/21/2023	100% ISSUE FOR PERMIT
08/16/2023	100% ISSUE FOR BID

PROJECT # 2022 - 256
PROJECT MANAGER AC

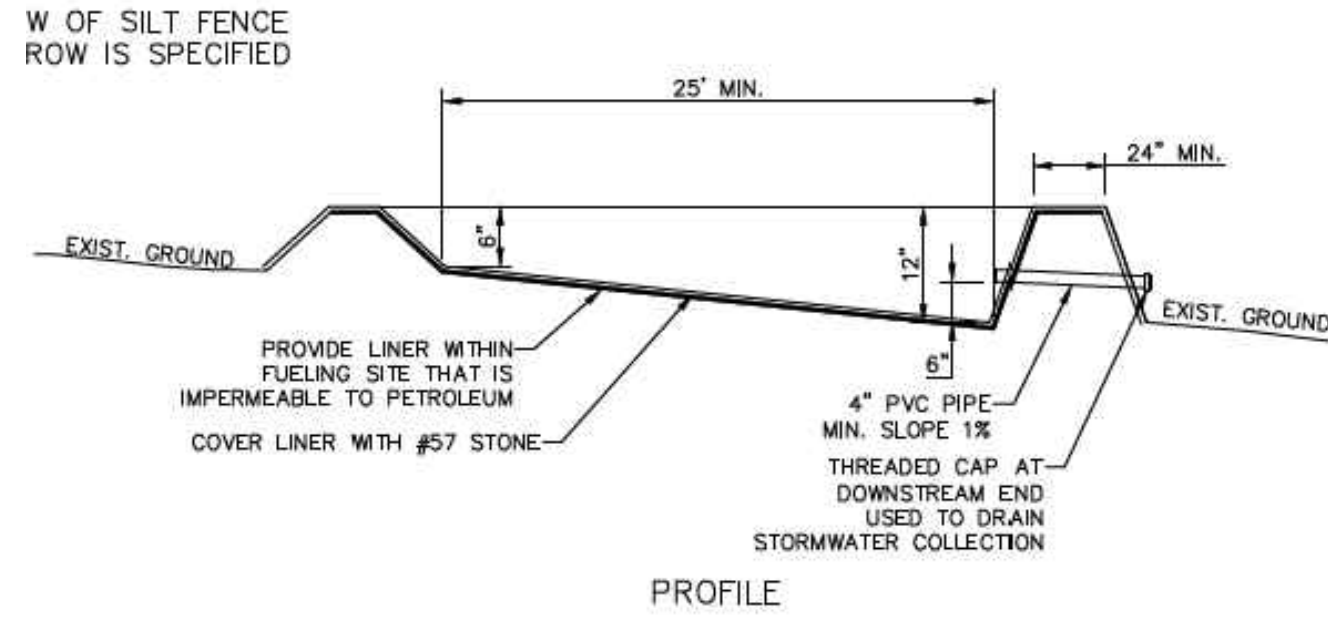
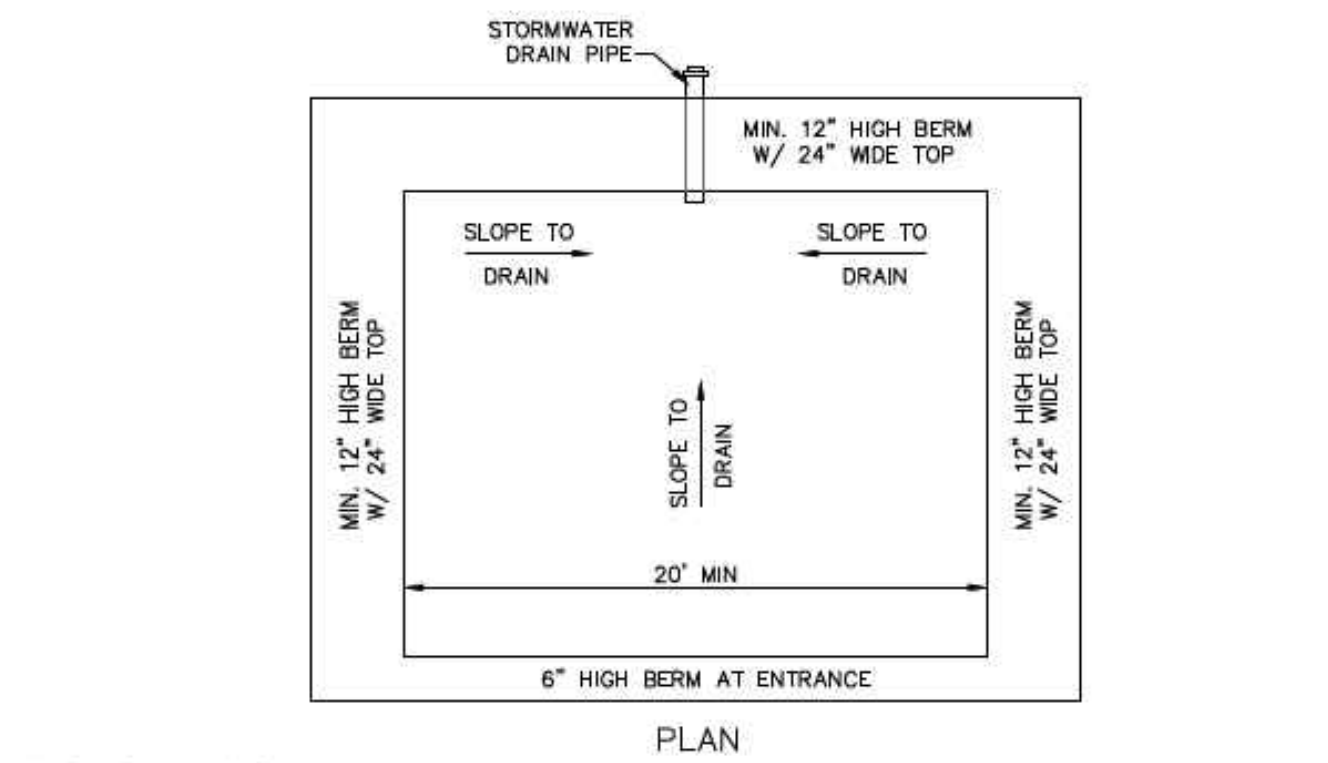
LaGRANGE BICYCLE PARK
LaGRANGE, GA



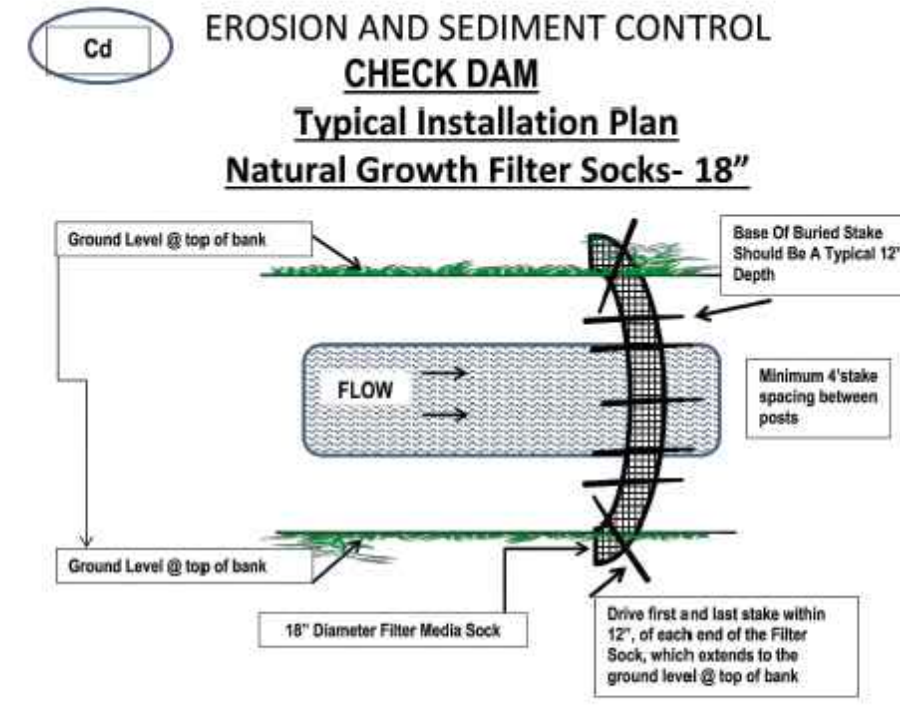
EROSION, SEDIMENTATION, & POLLUTION CONTROL DETAILS

SCALE 1" = 20'-0"
DATE JULY 21, 2023

SHEET # ECD-01



TYPICAL DETAIL OF TEMPORARY RE-FUELING SITE
N.T.S.



CD EROSION AND SEDIMENT CONTROL CHECK DAM
Typical Installation Plan
Natural Growth Filter Socks - 18"

Ground Level @ top of bank

Base of Buried Stake Should Be A Typical 12" Depth

Minimum 4" stake spacing between points

18" Diameter Filter Media Sock

Drive first and last stake within 12" of each end of the Filter Sock, which extends to the ground level @ top of bank

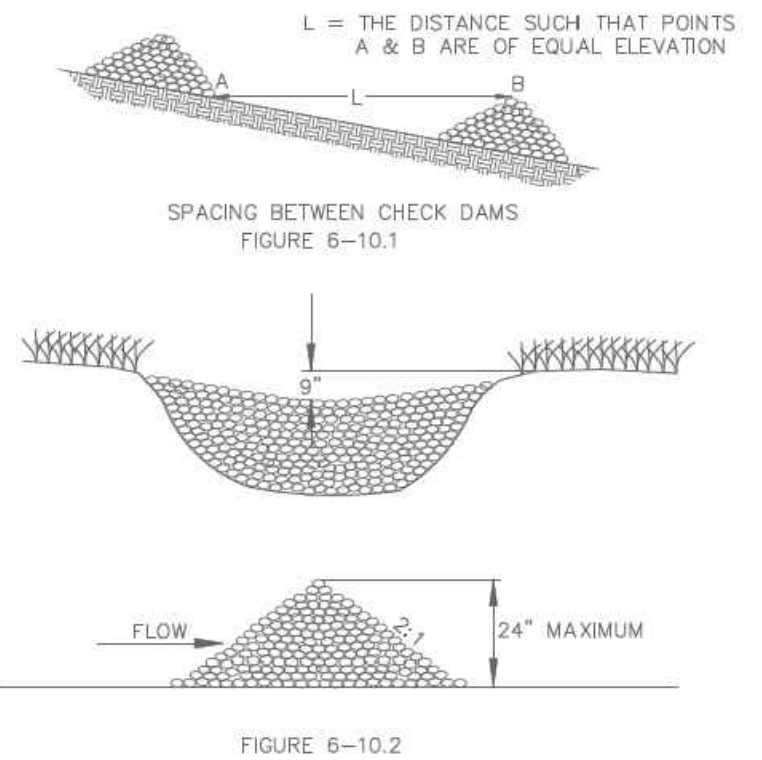
Note: Filter Media Socks Should Be Sized To Suit Conditions

Natural Growth Filter Socks will be installed across the ditch extending to the outside tops of each bank and securely staked at each end of the filter sock.

Wooden Hardware Stakes 1 1/2" x 1 1/2" x 36" (min) are driven through the Filter Sock with a maximum spacing of 4' between each stake.

Should overlapping be required within the installation due to the conditions of the channel, it would include a minimum overlap of 1'. Hardware Stakes Should Be Driven Through Both Filter Media Socks At Overlap Section.

Filter socks should be monitored after storm events and once sediment reaches 1/2 the height of the Filter Sock, that sediment should be removed for the continued maximum effectiveness of the Filter Sock.



CD-5 STONE CHECK DAM

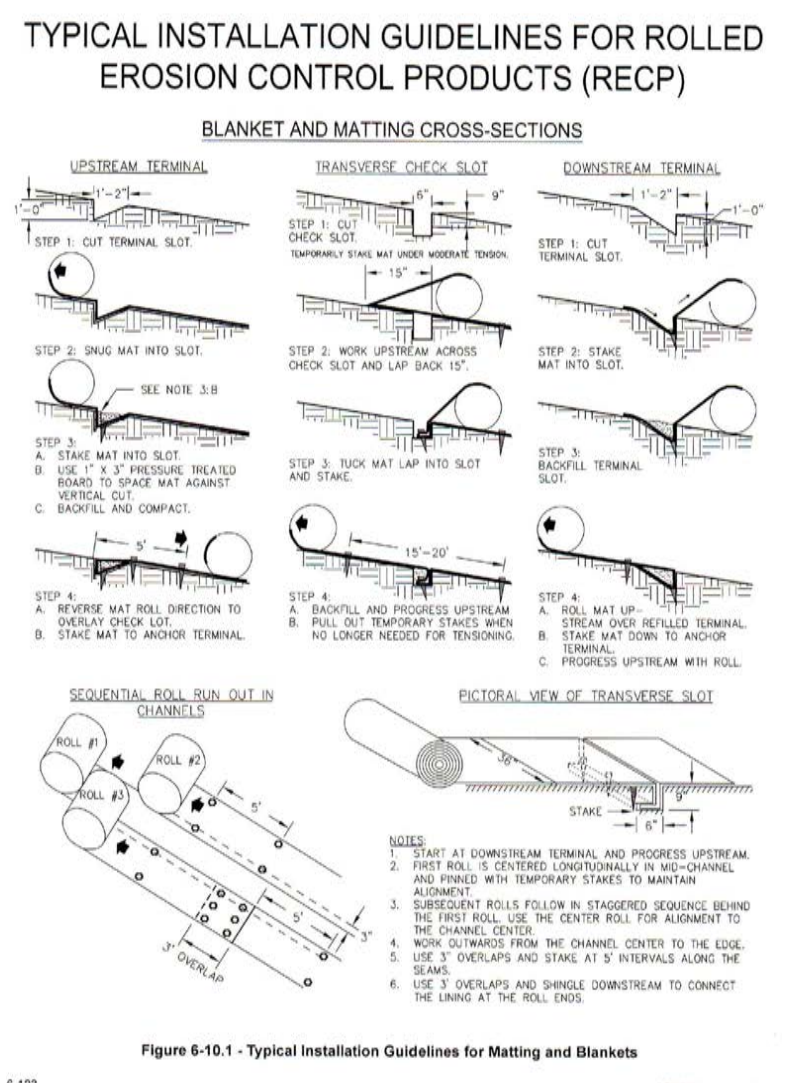
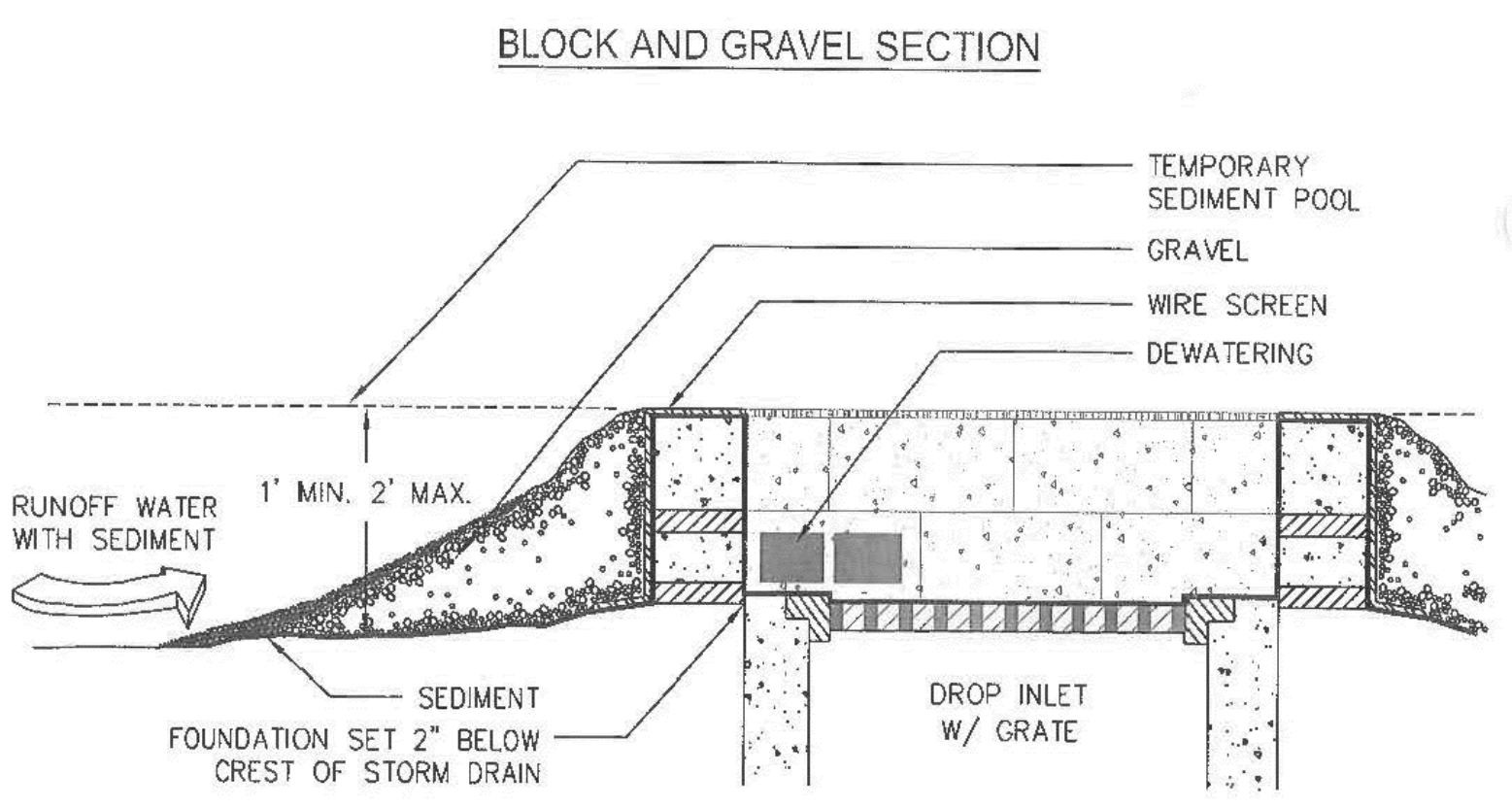
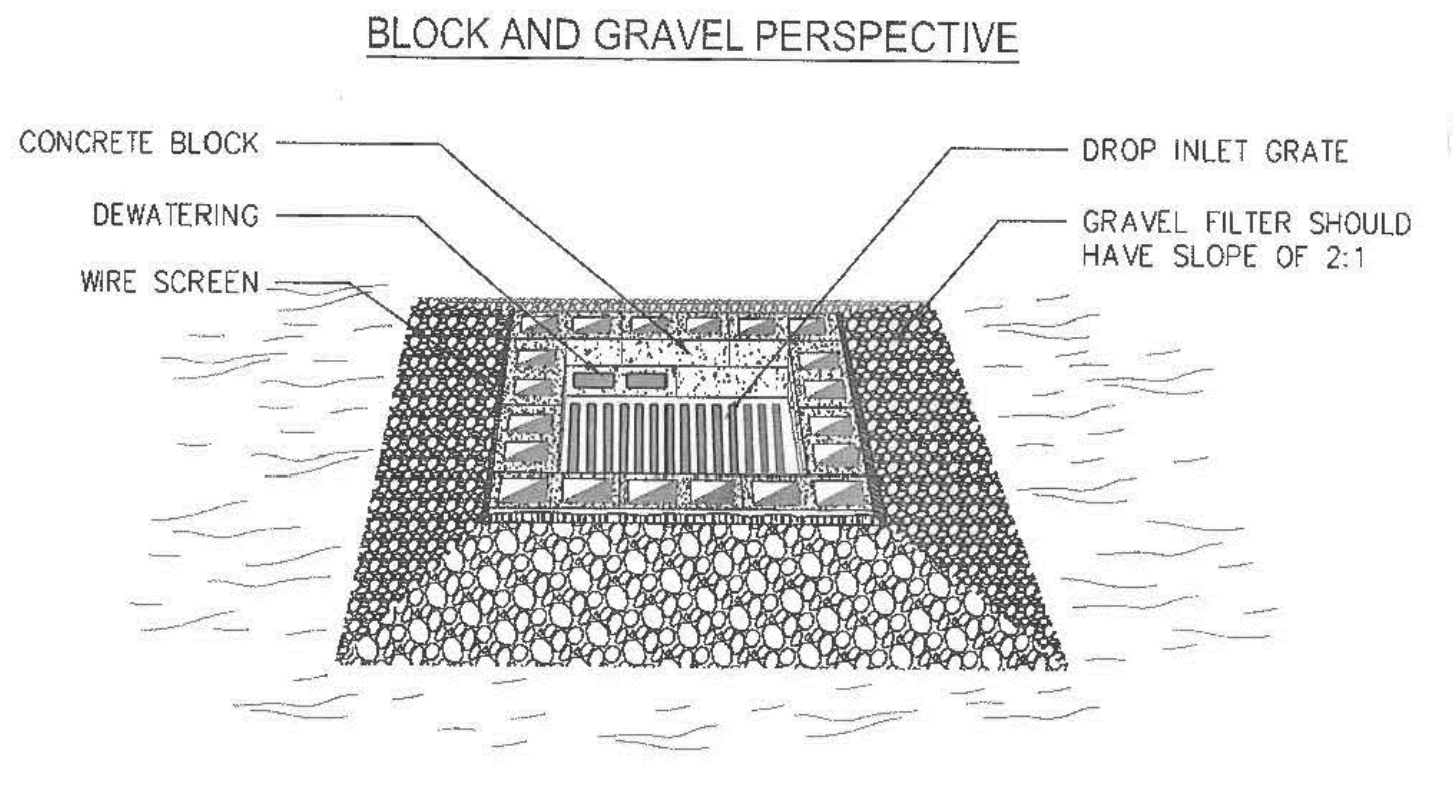


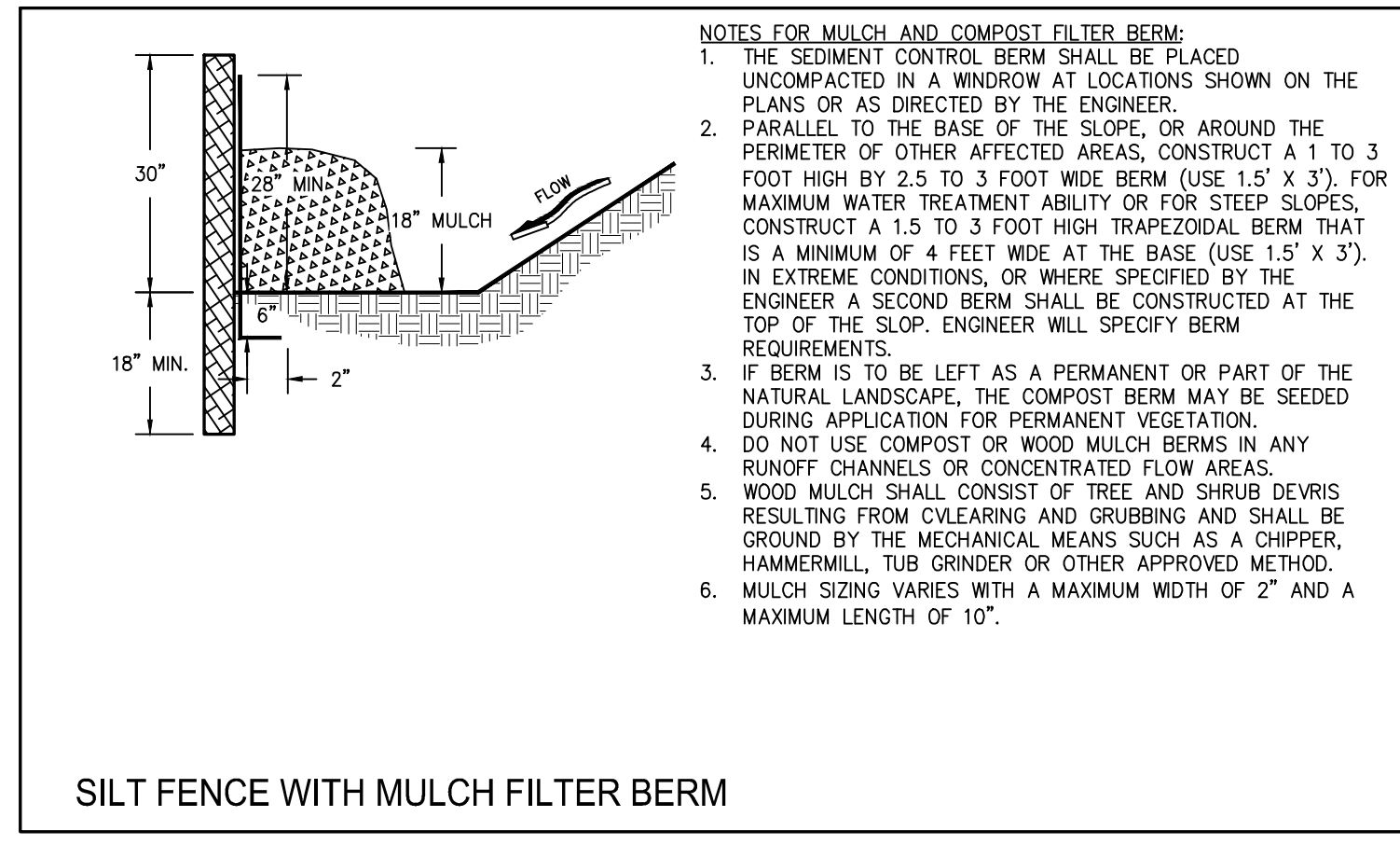
Figure 6-10.1 - Typical Installation Guidelines for Matting and Blankets



NOTE:

- HARDWARE CLOTH OR COMPARABLE WIRE MESH WITH 1/2 INCH OPENINGS SHALL BE FITTED OVER ALL BLOCK OPENINGS TO HOLD GRAVEL IN PLACE.
- THE FOUNDATION SHOULD BE EXCAVATED AT LEAST 2 INCHES BELOW THE CREST OF THE STORM DRAIN. THE FIRST ROW OF BLOCKS WILL BE PLACED HERE FOR LATERAL SUPPORT.
- ONE BLOCK (AS SHOWN) IS TO BE PLACED ON EACH SIDE OF THE STRUCTURE ON ITS SIDE IN THE BOTTOM ROW TO ALLOW FOR POOL DRAINAGE.

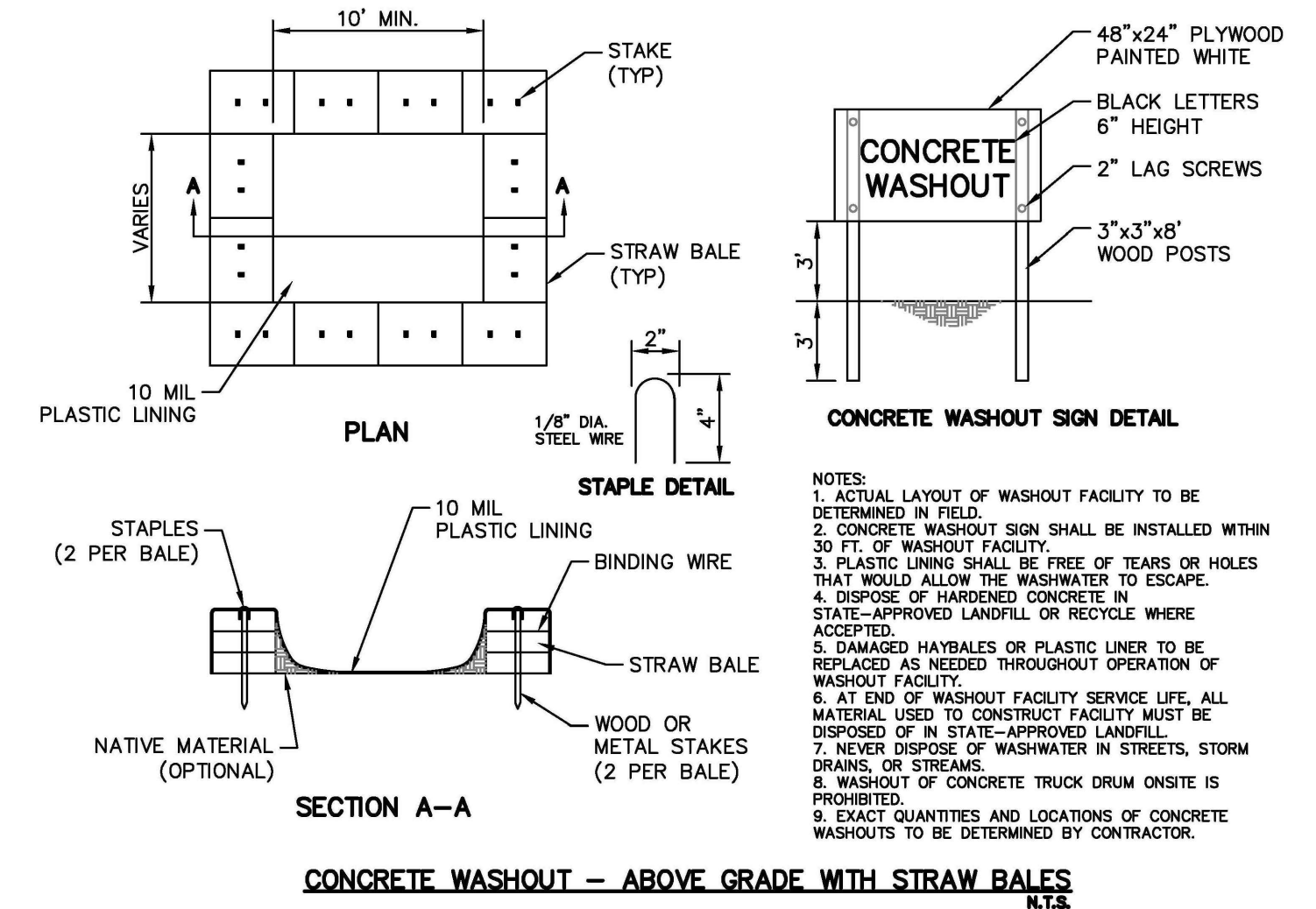
Figure 6-28.3 Block and Gravel Drop Inlet Protections



NOTES FOR MULCH AND COMPOST FILTER BERM:

- THE SEDIMENT CONTROL BERM SHALL BE PLACED UNCOMPACTED IN A WINDROW AT LOCATIONS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.
- PARALLEL TO THE BASE OF THE SLOPE, OR AROUND THE PERIMETER OF OTHER AFFECTED AREAS, CONSTRUCT A 1 TO 3 FOOT HIGH BY 2.5 TO 3 FOOT WIDE BERM (USE 1.5' X 3'). FOR MAXIMUM WATER TREATMENT ABILITY OR FOR STEEP SLOPES, CONSTRUCT A 1.5 TO 3 FOOT HIGH TRAPEZOIDAL BERM THAT IS A MINIMUM OF 4 FEET WIDE AT THE BASE (USE 1.5' X 3'). IN EXTREME CONDITIONS, OR WHERE SPECIFIED BY THE ENGINEER A SECOND BERM SHALL BE CONSTRUCTED AT THE TOP OF THE SLOPE. ENGINEER WILL SPECIFY BERM REQUIREMENTS.
- IF BERM IS TO BE LEFT AS A PERMANENT OR PART OF THE NATURAL LANDSCAPE, THE COMPOST BERM MAY BE SEED DURING APPLICATION FOR PERMANENT VEGETATION.
- DO NOT USE COMPOST OR WOOD MULCH BERMS IN ANY RUNOFF CHANNELS OR CONCENTRATED FLOW AREAS.
- WOOD MULCH SHALL CONSIST OF TREE AND SHRUB DEBRIS RESULTING FROM CLEAVING AND GRUBBING AND SHALL BE GROUND BY MECHANICAL MEANS SUCH AS A CHIPPER, HAMMERMILL, TUB GRINDER OR OTHER APPROVED METHOD.
- MULCH SIZING VARIES WITH A MAXIMUM WIDTH OF 2" AND A MAXIMUM LENGTH OF 10".

SILT FENCE WITH MULCH FILTER BERM

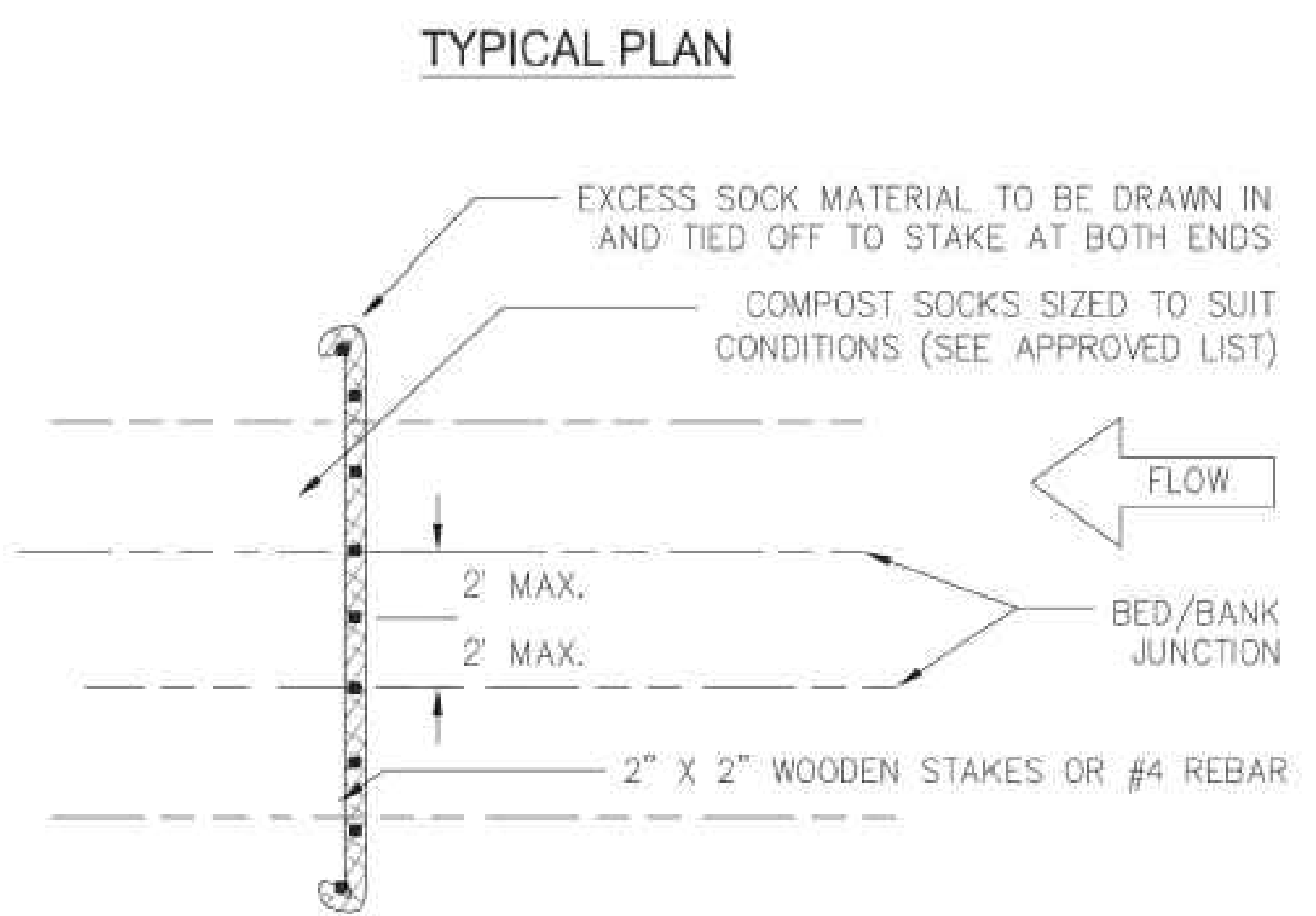


NOTES:

- ACTUAL LAYOUT OF WASHOUT FACILITY TO BE DETERMINED IN FIELD.
- CONCRETE WASHOUT SIGN SHALL BE INSTALLED WITHIN 30 FT. OF WASHOUT FACILITY.
- PLASTIC LINING SHALL BE FREE OF TEARS OR HOLES THAT WOULD ALLOW THE WASHWATER TO ESCAPE.
- DISPOSE OF HANDLED CONCRETE IN STATE-APPROVED LANDFILL OR RECYCLE WHERE ACCEPTED.
- DAMAGED HAYBALES OR PLASTIC LINER TO BE REPLACED AS NEEDED THROUGHOUT OPERATION OF WASHOUT FACILITY.
- AT END OF WASHOUT FACILITY SERVICE LIFE, ALL MATERIAL USED TO CONSTRUCT FACILITY MUST BE DISPOSED OF IN STATE-APPROVED LANDFILL.
- NEVER DISPOSE OF WASHWATER IN STREETS, STORM DRAINS, OR STREAMS.
- WASHOUT OF CONCRETE TRUCK DRUM ON SITE IS PROHIBITED.
- EXACT QUANTITIES AND LOCATIONS OF CONCRETE WASHOUTS TO BE DETERMINED BY CONTRACTOR.

CONCRETE WASHOUT - ABOVE GRADE WITH STRAW BALES
N.T.S.

COMPOST SOCKS FOR CHECK DAMS



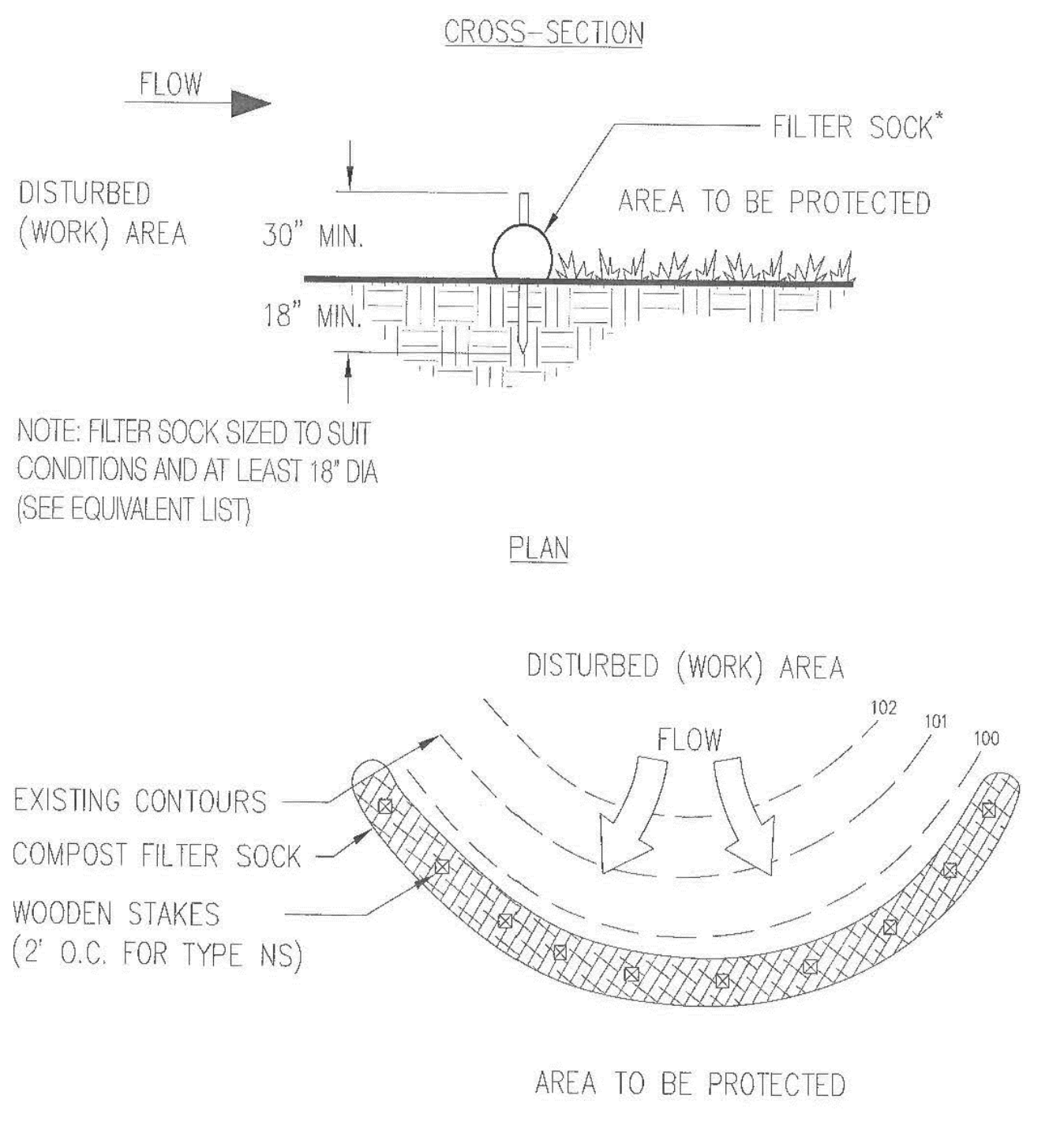
NOTES:

- ALL MATERIAL TO MEET SPECIFICATIONS.
- PLACE ONE STAKE AT THE CENTER OF THE DITCH/CHANNEL. ALSO PLACE STAKES AT THE BED/BANK JUNCTION AND AT END OF THE DEVICE NOT SPACED MORE THAN 2 FEET APART.
- SEDIMENT SHOULD BE REMOVED FROM BEHIND THE CHECK DAM ONCE THE ACCUMULATED HEIGHT HAS REACHED 1/2 THE HEIGHT OF THE CHECK DAM.
- CHECK DAMS CAN BE DIRECT SEEDED AT THE TIME OF INSTALLATION.
- MINIMUM STAKING DEPTH FOR SAND, SILT, AND CLAY SHALL BE 18".
- COMPOST FILTER SOCK TO BE AT LEAST 18" DIA.

Figure 6-12.4

EROSION AND SEDIMENT CONTROL

TYPE B COMPOST FILTER SOCK

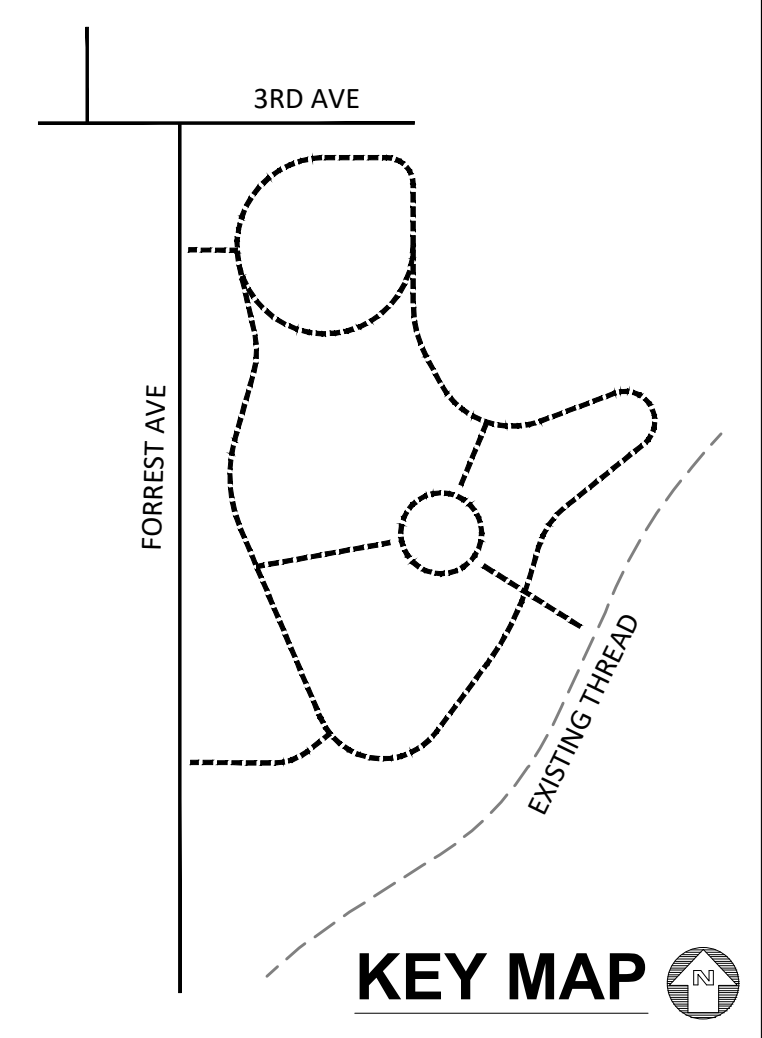


NOTE: FILTER SOCK SIZED TO SUIT CONDITIONS AND AT LEAST 18" DIA (SEE EQUIVALENT LIST)

Figure 6-27.3

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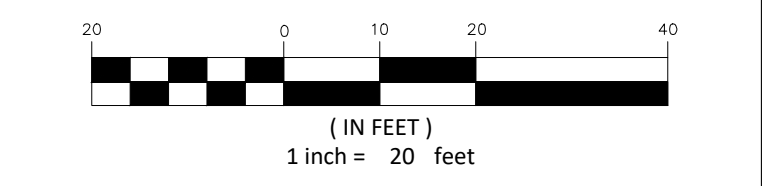
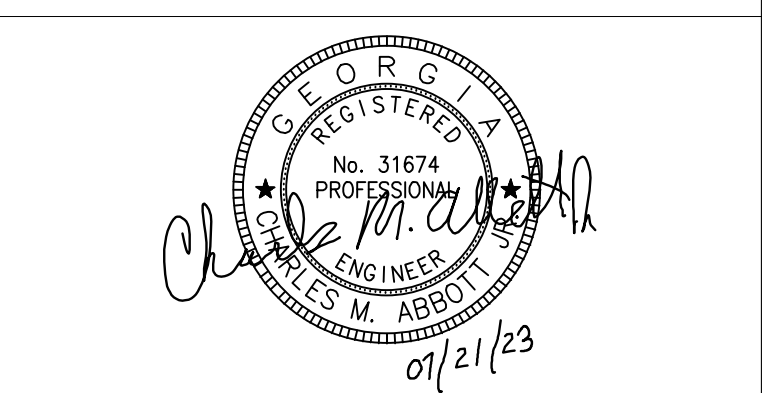


KEY MAP

DATE	DESCRIPTION
02/17/2023	50% DESIGN REVIEW
07/21/2023	100% ISSUE FOR PERMIT
08/16/2023	100% ISSUE FOR BID

PROJECT #	2022 - 256
PROJECT MANAGER	AC

LaGRANGE BICYCLE PARK
LaGRANGE, GA



EROSION, SEDIMENTATION, & POLLUTION CONTROL DETAILS

SCALE	1" = 20'-0"
DATE	JULY 21, 2023

SHEET #	ECD-02
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REQUIREMENT FOR REGULATORY COMPLIANCE

Mulch or temporary seeding shall be applied to all exposed areas within 14 days of disturbance. Mulch can be used as a singular erosion control device for up to six months, but it shall be applied at the appropriate depth, depending on the material used, anchored, and have a continuous 90% cover or greater of the soil surface. Maintenance shall be required to maintain appropriate depth and 90% cover. Temporary vegetation may be employed instead of mulch if the area will remain undisturbed for less than six months. If an area will remain undisturbed for greater than six months, permanent vegetative techniques shall be employed. Refer to Ds3-Disturbed Area Stabilization (With Temporary Seeding), Ds3-Disturbed Area Stabilization (With Permanent Seeding), and Ds4-Disturbed Area Stabilization (With Sodding).

SPECIFICATIONS

Mulching without seeding

This standard applies to grades or cleared areas where seedings may not have a suitable growing season to produce an erosion retardant cover, but can be stabilized with a mulch cover.

Site Preparation

- Grade to permit the use of equipment for applying and anchoring mulch.
- Install needed erosion control measures as required such as dikes, diversions, berms, terraces and sediment barriers.
- Loosen compact soil to a minimum depth of 3 inches.

Mulching Materials

Select one of the following materials and apply at the depth indicated:
 1. Dry straw or hay shall be applied at a depth of 2 to 4 inches providing complete soil coverage. One advantage of this material is ease of application.
 2. Wood waste (chips, sawdust or bark) shall be applied at a depth of 2 to 3 inches. Organic material from the clearing stage of development should remain on site, be chipped, and applied as mulch. This method of mulching can greatly reduce erosion control costs.
 3. Polyethylene film shall be secured over banks or stockpiled soil material for temporary protection. This material can be salvaged and re-used.

Applying Mulch

- When mulch is used without seeding, mulch shall be applied to provide full coverage of the exposed area.
- Dry straw or hay shall be applied uniformly by hand or by mechanical equipment.
 - If the area will eventually be covered with perennial vegetation, 20-30 pounds of nitrogen per acre in addition to the normal amount shall be applied to offset the uptake of nitrogen caused by the decomposition of the organic mulches.
 - Apply polyethylene film on exposed areas.

Anchoring Mulch

1. Straw or hay mulch can be pressed into the soil with a disk arrow with the disk set straight or with a special "pucker disk." Disks may be smooth or serrated and should be 20 inches or more in diameter and 8 to 12 inches apart. The edges of the disk should be dull enough not to cut the mulch but to press it into the soil leaving much of it in an erect position. **STRAW OR HAY MULCH SHALL BE ANCHORED IMMEDIATELY AFTER APPLICATION.** Straw or hay mulch spread with special blower-type equipment may be anchored. Tackifiers, binders and hydraulic mulch with tackifier specifically designed for locking straw can be substituted for emulsified asphalt. Please refer to specification Tac-Tackifiers. Plastic mesh or netting with mesh no larger than one inch by one inch shall be installed according to manufacturer's specifications.

- Netting of the appropriate size shall be used to anchor wood waste. Openings of the netting shall not be larger than the average size of the wood waste chips.
- Polyethylene film shall be anchored trenched at the top as well as incrementally as necessary.

DISTURBED AREA STABILIZATION (WITH MULCHING ONLY)

(NTS)

Ds1

REQUIREMENT FOR REGULATORY COMPLIANCE

Refer to specification Ds1 - Disturbed Area Stabilization (With Temporary Seeding).

INSTALLATION SPECIFICATIONS

Grading and shaping

Excessive water run-off shall be reduced by properly designed and installed erosion control practices such as closed drains, ditches, dikes, diversions, sediment barriers and others. No shaping or grading is required if slopes can be stabilized by hand-seeded vegetation or if hydraulic seeding equipment is to be used.

Seedbed preparation

When a hydraulic seeder is used, seedbed preparation is not required. When using conventional or hand-seeding, seedbed preparation is not required if the soil material is loose and not sealed by rainfall. When soil has been sealed by rainfall or consists of smooth cut slopes, the soil shall be pitted, trenched or otherwise scarified to provide a place for seed to lodge and germinate.

Lime and fertilizer

Agricultural lime is required unless soil tests indicate otherwise. Apply agricultural lime at a rate determined by soil test for pH. Quick acting lime should be incorporated to mildly pH during the germination period. Bio stimulants should also be considered when there is less than 3% organic matter in the soil. Graded areas require lime application. Soils must be tested to determine required amounts of fertilizer and amendments. Fertilizer should be applied before land preparation and incorporated with a disk, ripper or chisel. On slopes too steep for, or inaccessible to equipment, fertilizer shall be hydraulically applied, preferably in the first pass with seed, and shoume hydraulic mulch, then topped with the remaining required application rate.

Apply agricultural lime at a rate of one ton per acre. Graded areas require lime application. Soils can be tested to determine if fertilizer is needed. On reasonably fertile soils or soil material, fertilizer is not required. For soils with very low fertility, 500 to 700 pounds of 10-10-10 fertilizer or the equivalent per acre (12-16 lbs./1,000 sq. ft.) shall be applied. Fertilizer should be applied before land preparation and incorporated with a disk, ripper or chisel.

Seeding

Select a grass or grass-legume mixture suitable to the area and season of the year. Seed shall be applied uniformly by hand, cyclone seeder, drill, cultipacker-seeder, or hydraulic seeder (slurry including seed and fertilizer). Drill or cultipacker seeders should normally place seed one-quarter to one-half inch deep. Appropriate depth of planting is ten times the seed diameter. Soil should be "raked" lightly to cover seed with soil if seeded by hand. See Table 6-4.1

Mulching

Temporary vegetation can, in most cases, be established without the use of mulch, provided there is little to no erosion potential. However, the use of mulch can often accelerate and enhance germination and vegetation establishment. Mulch without seeding should be considered for short term protection. Refer to Ds1-Disturbed Area Stabilization (With Mulching Only).

Irrigation

During times of drought, water shall be applied at a rate not causing runoff and erosion. The soil shall be thoroughly wetted to a depth that will insure germination of the seed. Subsequent applications should be made when needed.

SUGGESTED SEEDBED DEPTHS

SLOPE	SEEDBED DEPTHS
3:1 OR FLATTER	LESS THAN 4" DEPTH
2:1 TO 3:1	1" TO 4" DEPTH
2:1 OR STEEPER	DEPRESSIONS EVERY 6"-8" HAND DUG, IF NECESSARY

MAINTENANCE

Re-seed areas where an adequate stand of temporary vegetation fails to emerge or where a poor stand exists.

DISTURBED AREA STABILIZATION (WITH TEMPORARY SEEDING)

Ds2

Species	Broadcast Rates 2/ - PLS 3/ Per Acre	Resource Area 4/	Resource Area 4/	J	F	M	A	M	J	J	A	S	O	N	D	Notes
BARLEY (Hordeum vulgare)	3 bu (144 lbs.) 1/2 bu (24 lbs.)	M-L P C														
LESPEDeza, ANNUAL (Lepeseza striata)	40 lbs. 0.9 lb. 10 lbs. 0.2 lb.	M-L P C														1,500,000 seed per pound. May last for several years. Mix with Sericea lespedeza.
MILLET, BROWNTOP (Panicum fasciculatum)	40 lbs. 0.9 lb. 10 lbs. 0.2 lb.	M-L P C														137,000 seed per pound. Will provide less than 100% cover in mixtures if seeded at high rates.
MILLET, FEAR (Pennisetum glaucum)	50 lbs. 1.1 lb.	M-L P C														88,000 seed per pound. Quick dense cover. May require seed in mixtures. Not recommended for mixtures.
OATS (Avena sativa)	4 bu (128 lbs.) 1 bu (32 lbs.)	M-L P C														13,000 seed per pound. Use on productive soils. Not as winterhardy as rye or barley.
RYE (Secale cereale)	3 bu (144 lbs.) 1/2 bu (24 lbs.)	M-L P C														18,000 seed per pound. Quick cover. Brought tolerant and winterhardy.
RYEGRASS, ANNUAL (Lolium temulentum)	40 lbs. 0.9 lb.	M-L P C														227,000 seed per pound. Dense cover. Very competitive and a DOT to be used in mixtures.
RYEGRASS (Sorghum sudanese)	60 lbs. 1.4 lb.	M-L P C														55,000 seed per pound. Good on drought sites. Not recommended for mixtures.
TRITICALE (Triticosecace)	3 bu (144 lbs.) 1/2 bu (24 lbs.)	M-L P C														Use on lower part of Southern Coastal Plain and in Atlantic Coastal Flatwoods only.
WHEAT (Triticum aestivum)	3 bu (180 lbs.) 1/2 bu (30 lbs.)	M-L P C														18,000 seed per pound. Quick cover. Brought tolerant and winterhardy.

1/ Temporary cover crops are very competitive and will crowd out perennials if seeded too heavily.
 2/ Reduce seeding rates by 50% when drilled.
 3/ PLS is an abbreviation for Pure Live Seed.
 4/ M-L represents the Mountain, Blue Ridge, and Ridges and Valleys MURAs
 P represents the Southern Piedmont MUSA
 C represents Southern Coastal Plain, Sand Hills, Black Lands and Atlantic Coastal Flatwoods MURA

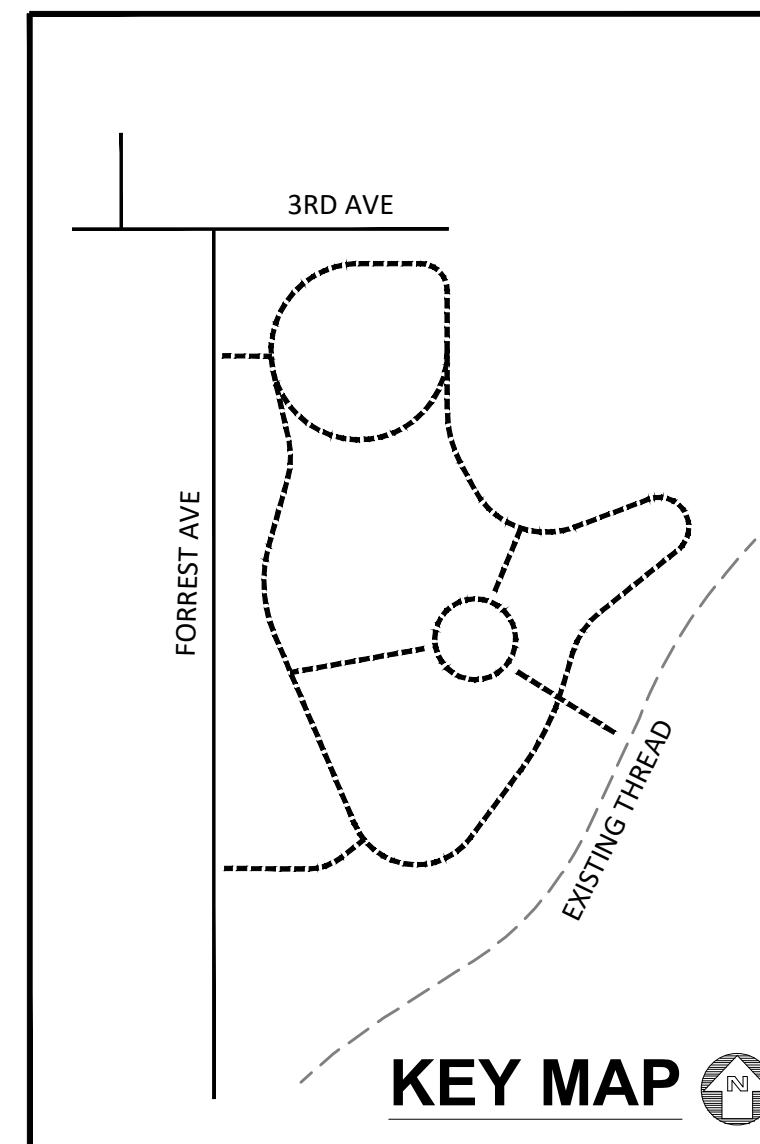
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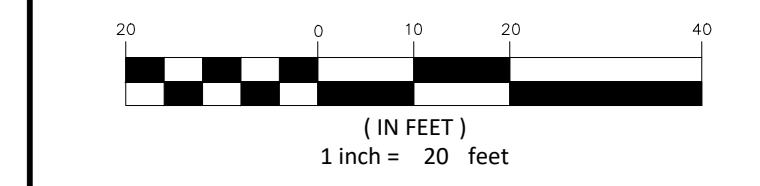
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DATE	DESCRIPTION
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07/21/2023	100% ISSUE FOR PERMIT
08/16/2023	100% ISSUE FOR BID

PROJECT # 2022 - 256
 PROJECT MANAGER AC

LaGRANGE BICYCLE PARK
LaGRANGE, GA



EROSION, SEDIMENTATION, & POLLUTION CONTROL DETAILS

SCALE 1" = 20'-0"
 DATE JULY 21, 2023

SHEET # **ECD-03**

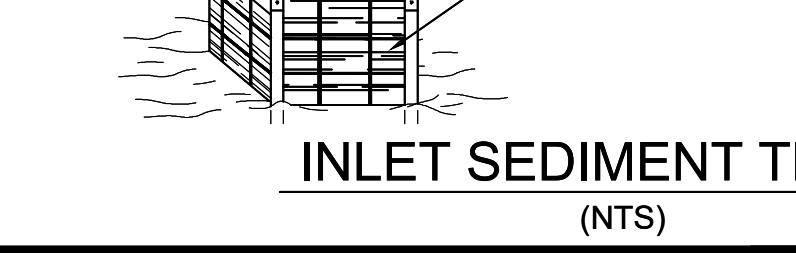
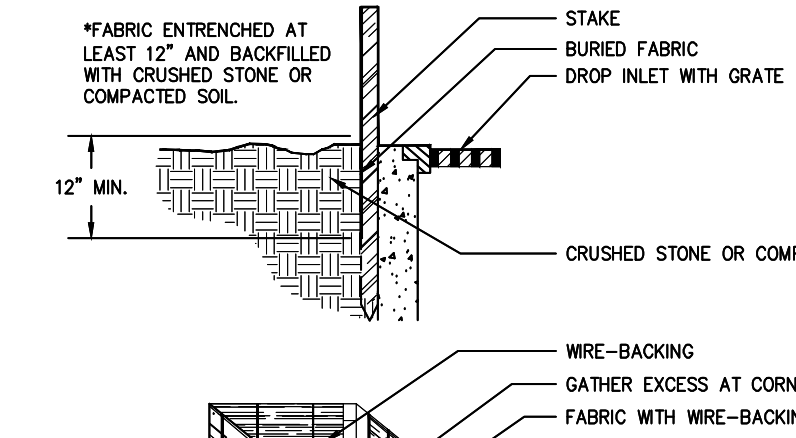
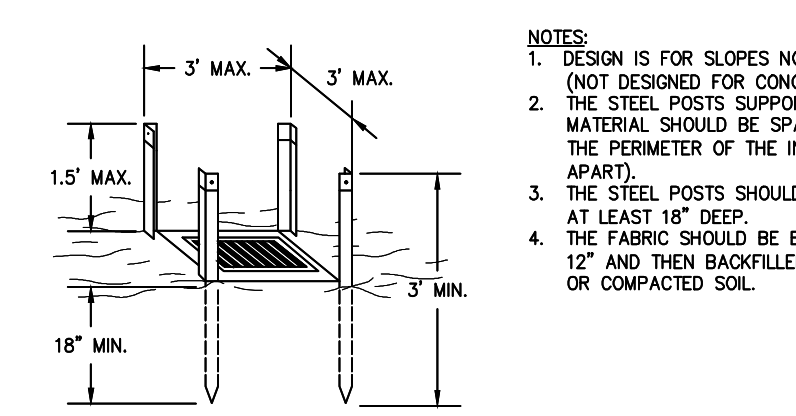
CONSTRUCTION SPECIFICATIONS

Sediment traps may be constructed on natural ground surface, on an excavated surface, or on machine compacted fill provided they have a non-erodible outlet.

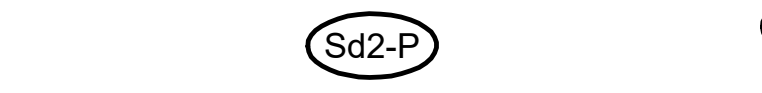
Filter Fabric with Supporting Frame
 This method of inlet protection is applicable where the inlet drains a relatively flat area (slope no greater than 5%) and shall not apply to inlets receiving concentrated flows, such as in street or highway medians. As shown in Figure 6-28.1, Type C silt fence supported by steel posts shall be used. The stakes shall be spaced evenly around the perimeter of the inlet a maximum of 3 feet apart, and securely driven into the ground, approximately 18 inches deep. The fabric shall be 36" tall and entrenched 12 inches and backfilled with crushed stone or compacted soil. Fabric and wire shall be securely fastened to the posts, and fabric ends must be overlapped a minimum of 18 inches or wrapped together around a post to provide a continuous fabric barrier around the inlet. Block and Gravel Drop Inlet Protection This method of inlet protection is applicable where

FABRIC AND SUPPORTING FRAME FOR INLET PROTECTION

STEEL FRAME AND SILT FENCE INSTALLATION



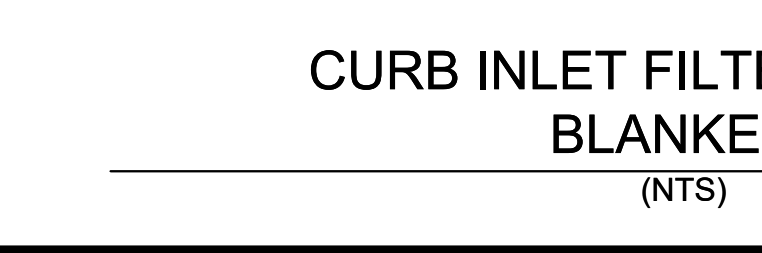
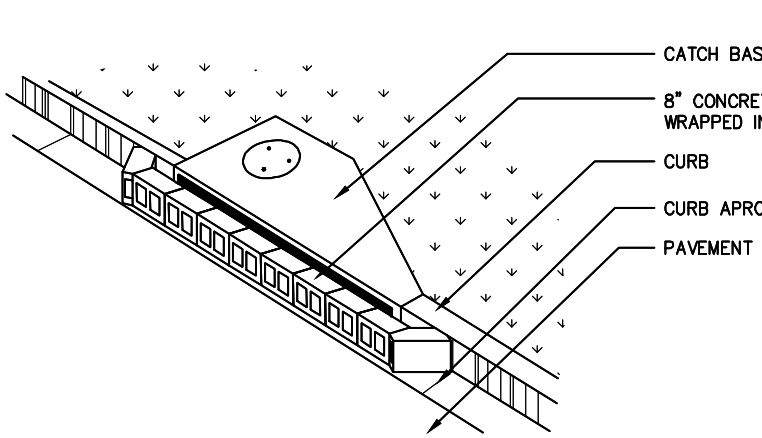
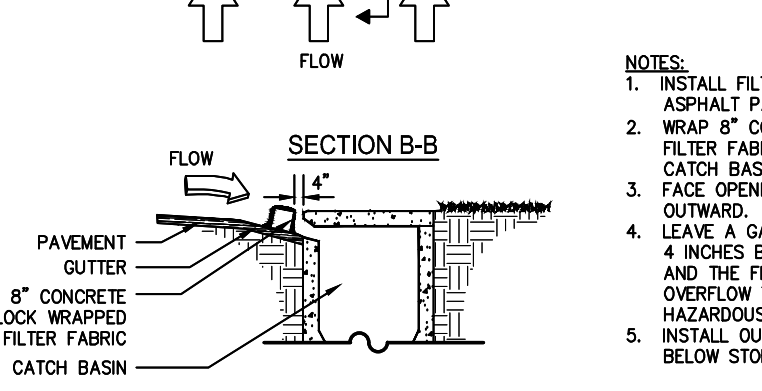
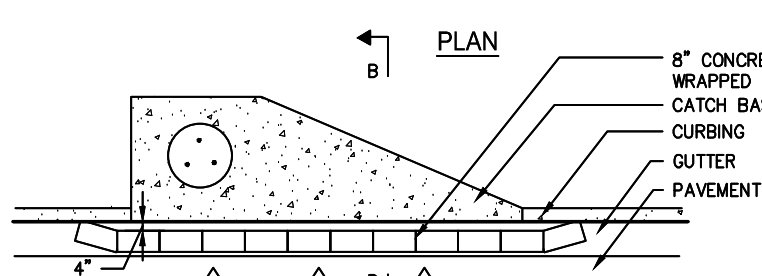
heavy flows are expected and where an overflow capacity is necessary to prevent excessive ponding around the structure. As shown in Figure 6-21.3, one block is placed on each side of the structure on its side in the bottom row to allow pool drainage. The foundation should be excavated at least 2 inches below the crest of the storm drain. The bottom row of blocks are placed against the edge of the storm drain for lateral support and to avoid washouts when overflow occurs. If needed, lateral support may be given to subsequent rows by placing 2" x 4" wood studs through block openings. Hardware cloth or comparable wire mesh with 1/2 inch openings shall be fitted over all block openings to hold gravel in place. Clean gravel should be placed 2 inches below the top of the block on a 2:1 slope or flatter and smoothed to an even grade. DOT #57 washed stone is recommended. Curb Inlet Protection Once pavement has been installed, a curb inlet filter



MAINTENANCE

shall be installed on inlets receiving runoff from disturbed areas. This method of inlet protection shall be removed if a safety hazard is created. One method of curb inlet protection uses "pigs-in-blanket" - 8-inch concrete blocks wrapped in filter fabric. See Figure 6-28.6. Another method uses gravel bags constructed by wrapping DOT #57 stone with filter fabric, wire, plastic mesh, or equivalent material. A gap of approximately 4 inches shall be left between the inlet filter and the inlet to allow for overflow and prevent hazardous ponding in the roadway. Proper installation and maintenance are crucial due to possible ponding in the roadway, resulting in a hazardous condition. Several other methods are available to prevent the entry of sediment into storm drain inlets. Figure 6-28.7 shows one of these alternative methods. The trap shall be inspected daily and after each rain

CURB INLET FILTER "PIGS IN BLANKET"



and repairs made as needed. Sediment shall be removed when the sediment has accumulated to one-half the height of the trap. Sediment shall be removed from each inlet protection immediately. For excavated inlet sediment traps, sediment shall be removed when one-half of the sediment storage capacity has been lost to sediment accumulation. Sediment shall not be washed into the inlet. It shall be removed from the sediment trap and disposed of properly. When the contributing drainage area has been permanently stabilized, all materials and any sediment shall be removed, and either salvaged or disposed of properly. The disturbed area shall be brought to proper grade, then smoothed and compacted. Appropriately stabilize all disturbed areas around the inlet.

Disturbed Area Stabilization (With Permanent Vegetation)



DEFINITION
The planting of perennial vegetation such as trees, shrubs, vines, grasses, or legumes on exposed areas for final permanent stabilization. Permanent permanent vegetation shall be used to achieve final stabilization.

PURPOSE
To protect the soil surface from erosion
To reduce damage from sediment and runoff to down-stream areas
To improve wildlife habitat and visual resources
To improve aesthetics

REQUIREMENT FOR REGULATORY COMPLIANCE
This practice shall be applied immediately to rough graded areas that will be undisturbed for longer than six months. This practice or sodding shall be applied immediately to all areas of final grading. Final Stabilization means that all soil disturbing activities at the site have been completed, and that for ungraded areas and areas not covered by permanent structures and areas located outside the waste disposal limits of a landfill cell that has been certified by the GA EPCO for waste disposal. 100% of the soil surface is unincorporated in permanent vegetation with a density of 70% greater or landscaped according to the Plan (uniformly cover with landscaping materials in planned landscaped areas), or equivalent permanent stabilization measures.

Wildlife Plantings
Commonly available plants beneficial to wildlife species include the following:
Mat Bearing Trees
Beech, Black Cherry, Hackberry, Chestnut, Chickadee, Hackberry, Hickory, Honey Locust, Shreve Oak, Persimmon, Sawtooth Oak and Sweetgum.

All trees that produce nuts or fruits are favored by many game species. Hickory provides nuts used mainly by squirrels and bears.
Shrubs and Small Trees
Bayberry, Bicolor Spicebush, Crabapple, Dogwood, Hackberry or Native Bayberry, Mountain Laurel, Native Holly, Red Cedar, Red Mulberry, Sumac, Wax Myrtle, Wild Plum and Blackberry.

Plants in patches without tall trees to develop stable shrub communities. All shrubs produce fruit by many kinds of wildlife, except for hawberries which produces seeds used by quail and songbirds.
Grasses, Legumes, Vines and Temporary Cover
Bahagrass, Bermudagrass, Grass-Legume mixtures, Partridge Pea, Annual Legume, Chickadee, Cowpea, Broomrape Millet (for temporary cover), and Native grasses.

Provides herbaceous cover in clearing for a game and brood-rearing habitat. Appropriate legumes such as vetches, clovers, and lespedezas may be mixed with grass, but they may die out after a few years.
CONSTRUCTION SPECIFICATIONS
Grading and Shaping
Grading and shaping may not be required where hydraulic seeding and fertilizing equipment is to be used. Vertical banks shall be sloped to enable plant establishment.

When conventional seeding and fertilizing are to be done, grade and shape where feasible and practical, so that equipment can be used safely and efficiently during seeded preparation, seeding, mulching and maintenance of the vegetation.
Concentrations of water that will cause excessive hydroseeder:
Fine seed ground limestone can be applied in the mulch slurry or in combination with the top dressing.
When conventional planting is to be done, lime and fertilizer shall be applied uniformly in one of the following ways:

- Apply before land preparation so that it will be mixed with the soil during seeded preparation.
- Mix with the soil used to fill the holes, distribute in furrows.
- Broadcast after steep surfaces are scarified, pitted or trenched.
- A fertilizer pellet shall be placed at root depth in the closing hole beside each pine tree seedling.

Plant Selection
Refer to Tables 6-4.1, 6-5.2, 6-6.3 and 6-6.4 for approved species. Species not listed shall be approved by the State Resource Conservationist of the Natural Resources Conservation Service before they are used.
Plants shall be selected on the basis of species characteristics, site and soil conditions, planned use and maintenance of the area, time of year of planting, method of planting, and the needs and desires of the land user.
Some perennial species are easily established and can be planted alone. Examples of these are Common Bermuda, Tall Fescue, and Weeping Lovegrass.

Other perennials, such as Bahia Grass and Sericea Lespedeza, are slow to become established and should be planted with another perennial species. The additional species will provide quick cover and ample soil protection until the target perennial species become established. For example, Common seeding combinations are 1) Weeping Lovegrass with Sericea Lespedeza (scarified) and 2) Tall Fescue with Sericea Lespedeza (unscarified).
Plant selection may also include annual companion crops. Annual companion crops should be used only when the perennial species are not planted during their optimum planting period. A common

loosen the soil to a depth of 4 to 6 inches, alkali carbonate, incorporate lime and fertilizer (both from the soil) for the proper placement of seed, sprigs, or plants; and allow for the anchoring of straw or hay mulch if a disk is to be used.

- Tillage may be done with any suitable equipment.
- Tillage should be done on the contour where feasible.
- On slopes too steep for the safe operation and permanent control measures and facilities are operational, interim stabilization measures and temporary erosion and sedimentation control measures shall not be removed.

CONDITIONS
Permanent perennial vegetation is used to provide a protective cover for exposed areas including cuts, fills, dams, and other denuded areas.

PLANNING CONSIDERATIONS
1. Use conventional planting methods where possible.
2. When mixed plantings are done during marginal planting periods, companion crops shall be used.
3. No till planting is effective when planting is done following a summer or winter annual cover crop. Sericea Lespedeza planted row into stands of rye is an excellent procedure.
4. Block sod provides immediate cover. It is especially effective in controlling erosion adjacent to concrete flumes and other structures that would be used to transport runoff. Final Stabilization (With Sodding).
5. Irrigation should be used when the soil is dry or when summer plantings are done.
6. Low maintenance plants, as well as natives, should be used to waste disposal long-lasting erosion control.
7. Mowing should not be performed during the quality rating season (May to September).
8. Wildlife plantings should be included in critical areas plantings.

soil erosion shall be diverted to a safe outlet. Diversions and other treatment practices shall conform with the appropriate standards and specifications.

Lime and Fertilizer Rates and Analysis
Agricultural lime is required at the rate of one to two tons per acre unless soil tests indicate otherwise. Cracked areas require lime application. If lime is applied within six months of planting permanent perennial vegetation, additional lime is not required. Agricultural lime shall be within the specifications of the Georgia Department of Agriculture.
Lime spread by conventional equipment shall be "ground limestone." Ground limestone is calcitic or dolomitic limestone ground so that 80 percent of the material will pass through a 10-mesh sieve, not less than 50 percent will pass through a 20-mesh sieve and not less than 25 percent will pass through a 40-mesh sieve.
Fast seeding lime spread by hydraulic seeding equipment should be "fine ground limestone" spanning from the 180 micron size to the 2 micron size. Fine ground limestone requires lime application. Limestone ground so that 55 percent of the material will pass through a 100-mesh sieve.

It is desirable to use domestic limestone in the Sand Hills, Southern Coastal Plain and Atlantic Coast Flatwoods MLRAs. (See Figure 6-4.1)

Agricultural lime is generally not required where only trees are planted.
Initial fertilization, nitrogen, phosphorus, and potassium fertilizer requirements for each species or combination of species are listed in Table 6-5.1.

Lime and Fertilizer Application
When hydraulic seeding equipment is used, the initial fertilizer shall be mixed with seed, inoculant (if needed), and wood cellulose or wood pulp fiber mulch and applied in a slurry. The inoculant, if needed, shall be mixed with the seed prior to being placed into the hydraulic seeding. The slurry mixture may be agitated during application to keep the ingredients thoroughly mixed. The mixture will be spread uniformly over the area within one hour after being placed in the

mixture is Brown Top Millet with Common Bermuda in mid-summer. Care should be taken in selecting companion crop species and seeding rates because annual crops will compete with perennial species for water, nutrients, and growing space. A high seeding rate of the companion crop may prevent the establishment of perennial species.
Ryegrass shall not be used in any seeding areas unless the ryegrass is certified to be free of ability to out-compete desired species chosen for permanent perennial cover.
Seed Quality
The term "pure live seed" is used to express the quality of seed and is not shown on the label. Pure live seed, PLS, is expressed as a percentage of the seeds that are pure and will germinate. Information on percent germination and purity can be found on seed tags. PLS is determined by multiplying the percent of pure seed with the percent of germination, i.e.
PLS = % germination x % purity
EXAMPLE:
Common Bermuda seed
70% germination, 80% purity
PLS = 56%
The percent of PLS helps you determine the amount of seed you need. If the seeding rate is 10 pounds PLS and the bulk seed is 56% PLS, the bulk seeding rate is:
10 lbs. PLS/acre = 17.9 lb/acre
56% PLS
You would need to plant 17.9 lb/acre to provide 10 lb/acre of pure live seed.

Seeded Preparation
Seeded preparation may not be required where hydraulic seeding and fertilizing equipment is to be used but is strongly recommended for any seeding process, when possible. When conventional seeding is to be used, seeded preparation will be done as follows:
Broadcast plantings
1. Tillage, at a minimum, shall adequately

loosen the soil to a depth of 4 to 6 inches, alkali carbonate, incorporate lime and fertilizer (both from the soil) for the proper placement of seed, sprigs, or plants; and allow for the anchoring of straw or hay mulch if a disk is to be used.

Conventional Seeding
Seeding will be done on a freshly prepared and limed seedbed. For broadcast seeding, use a culti-packer-seeder, disc, rotary seeder, other mechanical seeder, or hand seeding to distribute the seed uniformly over the area to be treated. Cover the seed lightly with 1/8 to 1/4 inch of soil for small seed and 1/2 to 1 inch for large seed when using a culti-packer or other suitable equipment.

No-Till Seeding
No-till seeding is permissible into annual cover crops when planting is done following maturity of the cover crop or if the temporary cover stands is dense enough to allow adequate growth of the permanent (perennial) species. No-till seeding shall be done with appropriate no-till seeding equipment. The seed must be uniformly distributed and planted in the proper depth.

Individual Plants
Where individual plants are to be set, the soil should be prepared by excavating holes, opening furrows, or double planting.
For nursery stock plants, holes shall be large enough to accommodate roots without crowding.
Where pine seedlings are to be planted, subsoil under the row 30 inches deep on the contour for six months prior to planting. Seedlings shall be planted in the row, 2 feet apart, in a staggered pattern.

Inoculants
All legume seed shall be inoculated with appropriate nitrogen-fixing bacteria. The inoculant shall be a pure culture prepared specifically for the seed species and used within the dates on the container.
A mixing medium recommended by the manufacturer shall be used to band the inoculant to the seed. For conventional seeding, use twice the amount of inoculant recommended by the manufacturer. For hydraulic seeding, four times the amount of inoculant recommended by the manufacturer shall be used.
All inoculated seed shall be protected from the sun and high temperatures and shall be planted

the same day inoculated. No inoculated seed shall remain in the hydroseeder longer than one hour.

Planting
Hydraulic Seeding
Mix the seed (inoculated if needed), fertilizer, and inoculant with wood pulp fiber mulch with water and apply in a slurry uniformly over the area to be treated. Apply within one hour after the mixture is made.
Conventional Seeding
Seeding will be done on a freshly prepared and limed seedbed. For broadcast seeding, use a culti-packer-seeder, disc, rotary seeder, other mechanical seeder, or hand seeding to distribute the seed uniformly over the area to be treated. Cover the seed lightly with 1/8 to 1/4 inch of soil for small seed and 1/2 to 1 inch for large seed when using a culti-packer or other suitable equipment.

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Mulching
Mulch is required for all permanent vegetation applications. Mulch applied to seeded areas shall achieve 75% to 100% soil cover. When selecting a mulch, design professionals should consider the mulch's functional longevity, vegetating the mulch may be spread by blower-type spreading equipment, other spreading equipment or by hand. Mulch shall be applied to cover 75% of the soil surface.
Wool cellulose or wood pulp fiber mulch shall be applied uniformly with hydraulic seeding equipment.

Anchoring Mulch
Anchor straw or hay mulch immediately after application by one of the following methods:
1. Hay and straw mulch shall be pressed into the soil immediately after the mulch is spread. A special "packer" disk or disk harrow with the disks set straight may be used. The disks may be smooth or serrated and should be 20 inches or more in diameter and 8 to 12 inches apart. The edges of the disks shall be dull enough to press the mulch into the ground without cutting it, leaving mulch of 4 in an erect position. Mulch shall not be plowed into the soil.
2. Synthetic tackifiers, binders or hydraulic mulch specifically designed for tack straw shall be applied in conjunction with or immediately after the mulch is spread. Synthetic tackifiers shall be mixed and applied according to manufacturer's specifications. All tackifiers, binders or hydraulic mulch specifically designed to tack straw should be verified through EPA 2021 testing. Refer to **Tackifiers-A**.

Bedding Material
Mulch used as a bedding material to conserve moisture and control weeds in nurseries, ornamental beds, around shrubs, and on bare areas on lawns.

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