VICINITY MAP

RALEIGH, WAKE COUNTY
NORTH CAROLINA

TRENTON ROAD CONNECTOR

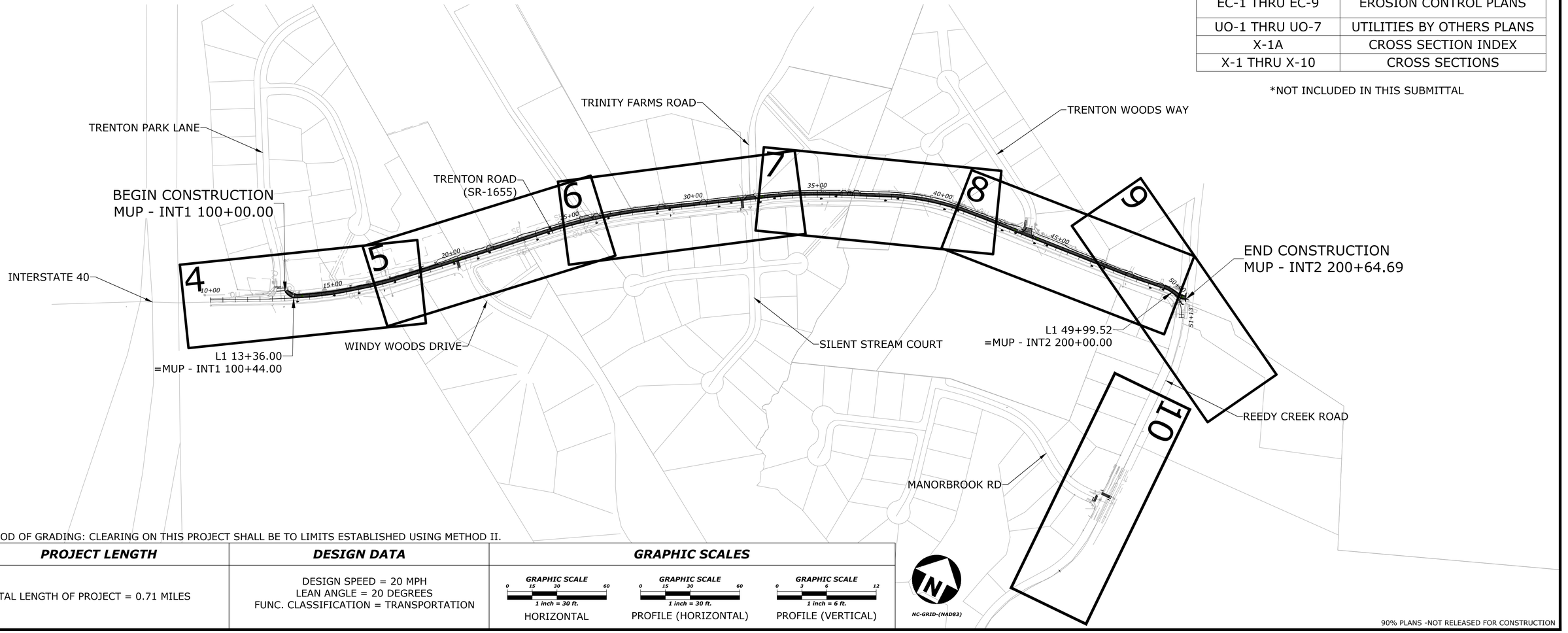
PROJECT DESCRIPTION:
10' WIDE MULTI-USE PATH CONNECTING TRENTON PARK LANE TO EXISTING MULTI-USE PATH ALONG OLD REEDY CREEK ROAD

TYPE OF WORK:
GRADING, PAVING, DRAINAGE, PAVEMENT MARKING, & EROSION CONTROL

CITY OF RALEIGH #: xxx

INDEX OF SHEETS

*NOT INCLUDED IN THIS SUBMITTAL



METHOD OF GRADING: CLEARING ON THIS PROJECT SHALL BE TO LIMITS ESTABLISHED USING METHOD II.

PROJECT LENGTH	DESIGN DATA	GRAPHIC SCALES
TOTAL LENGTH OF PROJECT = 0.71 MILES	DESIGN SPEED = 20 MPH LEAN ANGLE = 20 DEGREES FUNC. CLASSIFICATION = TRANSPORTATION	GRAPHIC SCALE 0 15 30 60 — 1 inch = 30 ft. — HORIZONTAL GRAPHIC SCALE 0 15 30 60 — 1 inch = 30 ft. — PROFILE (HORIZONTAL) GRAPHIC SCALE 0 3 6 12 — 1 inch = 6 ft. — PROFILE (VERTICAL)

90% PLANS -NOT RELEASED FOR CONSTRUCTION

MCADAMS

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SUITE 600
RALEIGH, NC 27601
919-996-4798
CONTACT:
DAVID BENDER, PROJECT MANAGER

REVISIONS
NO. DATE

GREENWAY ENGINEER — PRELIMINARY NOT FOR CONSTRUCTION

HYDRAULICS ENGINEER — PRELIMINARY NOT FOR CONSTRUCTION

TRENTON ROAD CONNECTOR
TRENTON PARK LANE TO REEDY CREEK RD

COVER SHEET

PLAN INFORMATION
PROJECT NO. 2020110233
FILENAME 2020110233_CS.dwg
CHECKED BY GDB
DRAWN BY JP
SCALE 1" = 200'
DATE 03/15/2022

1

NOTES

1. THE CONTRACTOR SHALL PERFORM ALL CONSTRUCTION ACTIVITIES IN ACCORDANCE WITH THE APPLICABLE REQUIREMENTS OF THE MOST RECENT EDITION OF THE NCDOT STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES (JANUARY 2018).

2. WHERE ASPHALT SECTION IS REMOVED, CONTRACTOR SHALL USE A SAW CUT AT THE LIMIT OF DEMOLITION TO OBTAIN A CLEAN EDGE.

3. NO GRADING IS TO OCCUR IN THE TREE PROTECTION AREAS OR TREE CRITICAL ROOT ZONE.

4. THE CONTRACTOR MUST, AT ALL TIMES, KEEP THE PREMISES FREE FROM ACCUMULATIONS OF WASTE MATERIALS OR RUBBISH CAUSED BY HIM, HIS EMPLOYEES, OR HIS WORK. ALL DEBRIS SHALL BE REMOVED FROM THE SITE ON A DAILY BASIS.

5. EXISTING UTILITIES AND STRUCTURES SHOWN BOTH UNDERGROUND AND ABOVE ARE BASED ON THE BEST AVAILABLE RECORD DRAWINGS. THE CONTRACTOR SHALL VERIFY FIELD CONDITIONS PRIOR TO BEGINNING RELATED CONSTRUCTION. ANY DISCREPANCIES SHALL BE REPORTED TO THE OWNER'S REPRESENTATIVE IMMEDIATELY.

6. CONTRACTOR SHALL LOCATE ALL UTILITIES AND UTILITY ELEVATIONS PRIOR TO CONSTRUCTION BY CALLING 811 (1-800-632-4949). ALL UTILITIES TO REMAIN SHALL BE PROTECTED BY THE CONTRACTOR. ANY UTILITIES DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED BY CONTRACTOR.

7. CONTRACTOR SHALL RESTORE ALL LAY DOWN AND STAGING AREAS TO ORIGINAL CONDITIONS AND TO THE SATISFACTION OF THE OWNER, PRIOR TO DEMOBILIZATION AT THE CONCLUSION OF THE PROJECT.

8. SHOULDERS SHALL BE SEEDED AND MULCHED AT THE SAME RATE AND WITH THE SAME SEED MIX USED FOR THE REST OF THE PROJECT.

9. ANY EXCAVATION MUST BE FILLED IN AND TAMPED AT THE CONCLUSION OF EACH WORK PERIOD, AND EQUIPMENT AND SUPPLIES RETURNED TO THE CONSTRUCTION STAGING AREA.

10. ORANGE CONSTRUCTION/SAFETY FENCING REMOVED TO FACILITATE ACCESS BY THE CONTRACTOR FOR CONSTRUCTION MUST BE REPLACED AT THE END OF EACH WORK PERIOD TO DIRECT PEDESTRIAN AND VEHICULAR TRAFFIC AWAY FROM HAZARDOUS AREAS.

11. CONTRACTOR SHALL STAKE CENTERLINE OF TRAIL ACCORDING TO PLANS AND OBTAIN APPROVAL FROM OWNER'S REPRESENTATIVE PRIOR TO CONSTRUCTION. ANY DISCREPANCIES SHALL BE RESOLVED PRIOR TO CONSTRUCTION.

12. CONTRACTOR SHALL REVIEW TREE REMOVAL WITH OWNER'S REPRESENTATIVE AND OBTAIN APPROVAL PRIOR TO TREE REMOVAL. TRIM UP BRANCHES OF TREES TO PROVIDE 10-FT VERTICAL CLEARANCE ABOVE PAVEMENT SURFACE

13. THE ENGINEER AND/OR OWNER DISCLAIM ANY ROLE IN THE CONSTRUCTION MEANS AND METHODS ASSOCIATED WITH PROJECT AS SET FORTH IN THESE PLANS. IF DEPARTURES FROM THE SPECIFICATIONS OR DRAWINGS ARE DEEMED NECESSARY BY THE CONTRACTOR, DETAILS OF SUCH DEPARTURES AND REASONS THEREOF SHALL BE SUBMITTED TO THE OWNER IN WRITING FOR REVIEW. NO DEPARTURES FROM THE CONTRACT DOCUMENTS SHALL BE MADE WITHOUT THE WRITTEN PERMISSION OF THE OWNER.

14. TREES AND PLANTS WILL NOT BE DAMAGED OR REMOVED IN ORDER TO SERVICE AND MAINTAIN THE UTILITY, SIDEWALK, GREENWAY OR OTHER SIMILAR FEATURE.

15. SUPERELEVATION TRANSITION IS SHOWN ON THE PLAN VIEW.

16. CONTRACTOR SHALL INSTALL REQUIRED TREE PROTECTION FENCE AS SHOWN ON THE APPROVED PLAN AND HAVE IT INSPECTED BY CITY STAFF BEFORE PROCEEDING WITH ADDITIONAL WORK.

17. CONTRACTOR SHALL REFRAIN FROM ADDITIONAL CONSTRUCTION ACTIVITIES ON CITY-OWNED OR CONTROLLED PROPERTY UNTIL A SATISFACTORY INSPECTION HAS BEEN COMPLETED BY THE CITY OF THE REQUIRED TREE PROTECTION FENCING AS APPROVED. DISTURBANCE WITHIN THE REQUIRED TREE PROTECTION AREAS WILL RESULT IN THE ISSUANCE OF A STOP WORK ORDER AND MAY REQUIRE MITIGATION INCLUDING BUT NOT LIMITED TO MONETARY PENALTIES, PRUNING, TREE REMOVAL, AND REPLANTING AS DETERMINED BY THE CITY.

18. ADDITIONAL TREES MAY BE REQUIRED TO BE REMOVED ON CITY-OWNED OR CONTROLLED PROPERTY AT THE DISCRETION OF THE URBAN FORESTER.

NCDOT STANDARDS:

THE FOLLOWING ROADWAY STANDARDS AS APPEAR IN "ROADWAY STANDARD DRAWINGS" HIGHWAY DESIGN BRANCH - N.C. DEPARTMENT OF TRANSPORTATION - RALEIGH, N.C., DATED JANUARY, 2018 ARE APPLICABLE TO THIS PROJECT AND BY REFERENCE HEREBY ARE CONSIDERED A PART OF THESE PLANS:

STD.NO.	TITLE
DIVISION 2 - EARTHWORK	
200.02	Method of Clearing - Method II
DIVISION 3 - PIPE CULVERTS	
300.01	Method of Pipe Installation
310.10	Driveway Pipe Construction
DIVISION 8 - INCIDENTALS	
840.14	Concrete Drop Inlet - 12" thru 30" Pipe
840.16	Drop Inlet Frame and Grates - for use with Std. Dwg 840.14 and 840.15
840.31	Concrete Junction Box (with Optional Manhole) - 12" thru 66" Pipe
840.51	Brick Manhole - 12" thru 36" Pipe
840.52	Precast Manhole 4', 5', and 6' Diameter - 12" thru 48" Pipe
840.53	Precast Manhole w/ Masonry Base- 12" thru 42" Pipe
840.54	Manhole Frame and Cover
840.72	Pipe Collar
846.01	Concrete Curb, Gutter, and Curb & Gutter
848.01	Concrete Sidewalk
852.01	Concrete Islands
876.04	Drainage Ditches with Class 'B' Rip Rap
DIVISION 9 - SIGNING	
904.10	Orientation of Ground Mounted Signs
904.50	Mounting of Type 'D', 'E', and 'F' Signs on 'U' Channel Posts
DIVISION 11 - WORK ZONE TRAFFIC CONTROL	
1101.02	Temporary Lane Closures
1101.04	Temporary Shoulder Closures
1101.11	Traffic Control Design Tables
1130.01	Drum
1135.01	Cones
1150.01	Flagging Devices
1180.01	Skinny Drum
DIVISION 12 - PAVEMENT MARKINGS, MARKERS, AND DELINEATION	
1205.01	Pavement Markings - Line Types and Offsets
1205.07	Pavement Markings - Pedestrian Crosswalks
1205.08	Pavement Markings - Symbols and Word Messages
1266.01	Raised Pavement Markers - Tubular Markers
DIVISION 16 - EROSION CONTROL AND ROADSIDE DEVELOPMENT	
SEE SHEET ####	

ADDITIONAL NCDOT STANDARDS NOT ON THE LIST ABOVE MAY BE REQUIRED AS PER PLAN DETAILS AND SPECIFICATIONS.

CITY OF RALEIGH STANDARDS:

TRANSPORTATION	
T-10.03	Residential Driveway Installation on Non Curb & Guttered Streets
T-10.04	Driveway Grades
T-10.05	Asphalt Pavement Patch
T-10.26.1	Curb & Gutter
T-20.04.1	Detectable Warning Surface Placement
BICYCLE FACILITIES	
B-10.05	Shared Lane Signs & Markings

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HYDRAULICS ENGINEER

PRELIMINARY NOT FOR CONSTRUCTION

TRENTON ROAD CONNECTOR

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GENERAL NOTES

PLAN INFORMATION

PROJECT NO.	2020110233
FILENAME	2020110233_D1.dwg
CHECKED BY	GDB
DRAWN BY	xxx
SCALE	NTS
DATE	03/15/2022

1A

STATE OF NORTH CAROLINA, DIVISION OF HIGHWAYS

CONVENTIONAL PLAN SHEET SYMBOLS

Note: Not to Scale **S.U.E. = Subsurface Utility Engineering*

BOUNDARIES AND PROPERTY:

- State Line
- County Line
- Township Line
- City Line
- Reservation Line
- Property Line
- Existing Iron Pin (EIP)
- Computed Property Corner
- Property Monument (ECM)
- Parcel/Sequence Number (123)
- Existing Fence Line
- Proposed Woven Wire Fence
- Proposed Chain Link Fence
- Proposed Barbed Wire Fence
- Existing Wetland Boundary (WLB)
- Proposed Wetland Boundary (WLB)
- Existing Endangered Animal Boundary (EAB)
- Existing Endangered Plant Boundary (EPB)
- Existing Historic Property Boundary (HPB)
- Known Contamination Area: Soil (S)
- Potential Contamination Area: Soil (S)
- Known Contamination Area: Water (W)
- Potential Contamination Area: Water (W)
- Contaminated Site: Known or Potential

BUILDINGS AND OTHER CULTURE:

- Gas Pump Vent or U/G Tank Cap
- Sign ($)
- Well
- Small Mine
- Foundation
- Area Outline
- Cemetery (†)
- Building
- School
- Church
- Dam

HYDROLOGY:

- Stream or Body of Water
- Hydro, Pool or Reservoir
- Jurisdictional Stream (JS)
- Buffer Zone 1 (BZ 1)
- Buffer Zone 2 (BZ 2)
- Flow Arrow
- Disappearing Stream
- Spring
- Wetland
- Proposed Lateral, Tail, Head Ditch (FLOW)
- False Sump

RAILROADS:

- Standard Gauge (CSX TRANSPORTATION)
- RR Signal Milepost (MILEPOST 35)
- Switch (SWITCH)
- RR Abandoned
- RR Dismantled

RIGHT OF WAY & PROJECT CONTROL:

- Secondary Horiz and Vert Control Point
- Primary Horiz Control Point
- Primary Horiz and Vert Control Point
- Exist Permanent Easement Pin and Cap
- New Permanent Easement Pin and Cap
- Vertical Benchmark
- Existing Right of Way Marker
- Existing Right of Way Line
- New Right of Way Line (RW)
- New Right of Way Line with Pin and Cap (RW)
- New Right of Way Line with Concrete or Granite R/W Marker (RW)
- New Control of Access Line with Concrete C/A Marker (CA)
- Existing Control of Access (CA)
- New Control of Access (CA)
- Existing Easement Line (E)
- New Temporary Construction Easement (E)
- New Temporary Drainage Easement (TDE)
- New Permanent Drainage Easement (PDE)
- New Permanent Drainage / Utility Easement (DUE)
- New Permanent Utility Easement (PUE)
- New Temporary Utility Easement (TUE)
- New Aerial Utility Easement (AUE)

ROADS AND RELATED FEATURES:

- Existing Edge of Pavement
- Existing Curb
- Proposed Slope Stakes Cut (C)
- Proposed Slope Stakes Fill (F)
- Proposed Curb Ramp (CR)
- Existing Metal Guardrail
- Proposed Guardrail
- Existing Cable Guiderail
- Proposed Cable Guiderail
- Equality Symbol
- Pavement Removal

VEGETATION:

- Single Tree
- Single Shrub
- Hedge
- Woods Line
- Orchard
- Vineyard (Vineyard)

EXISTING STRUCTURES:

MAJOR:

- Bridge, Tunnel or Box Culvert (CONC)
- Bridge Wing Wall, Head Wall and End Wall (CONC WW)

MINOR:

- Head and End Wall (CONC HW)
- Pipe Culvert
- Footbridge
- Drainage Box: Catch Basin, DI or JB (CB)
- Paved Ditch Gutter
- Storm Sewer Manhole (S)
- Storm Sewer (S)

UTILITIES:

POWER:

- Existing Power Pole
- Proposed Power Pole
- Existing Joint Use Pole
- Proposed Joint Use Pole
- Power Manhole (P)
- Power Line Tower
- Power Transformer
- U/G Power Cable Hand Hole
- H-Frame Pole
- U/G Power Line LOS B (S.U.E.*) (P)
- U/G Power Line LOS C (S.U.E.*) (P)
- U/G Power Line LOS D (S.U.E.*) (P)

TELEPHONE:

- Existing Telephone Pole
- Proposed Telephone Pole
- Telephone Manhole (T)
- Telephone Pedestal (T)
- Telephone Cell Tower
- U/G Telephone Cable Hand Hole (HH)
- U/G Telephone Cable LOS B (S.U.E.*) (T)
- U/G Telephone Cable LOS C (S.U.E.*) (T)
- U/G Telephone Cable LOS D (S.U.E.*) (T)
- U/G Telephone Conduit LOS B (S.U.E.*) (TC)
- U/G Telephone Conduit LOS C (S.U.E.*) (TC)
- U/G Telephone Conduit LOS D (S.U.E.*) (TC)
- U/G Fiber Optics Cable LOS B (S.U.E.*) (T FO)
- U/G Fiber Optics Cable LOS C (S.U.E.*) (T FO)
- U/G Fiber Optics Cable LOS D (S.U.E.*) (T FO)

WATER:

- Water Manhole (W)
- Water Meter
- Water Valve
- Water Hydrant
- U/G Water Line LOS B (S.U.E.*) (W)
- U/G Water Line LOS C (S.U.E.*) (W)
- U/G Water Line LOS D (S.U.E.*) (W)
- Above Ground Water Line (A/G Water)

TV:

- TV Pedestal (C)
- TV Tower
- U/G TV Cable Hand Hole (HH)
- U/G TV Cable LOS B (S.U.E.*) (TV)
- U/G TV Cable LOS C (S.U.E.*) (TV)
- U/G TV Cable LOS D (S.U.E.*) (TV)
- U/G Fiber Optic Cable LOS B (S.U.E.*) (TV FO)
- U/G Fiber Optic Cable LOS C (S.U.E.*) (TV FO)
- U/G Fiber Optic Cable LOS D (S.U.E.*) (TV FO)

GAS:

- Gas Valve
- Gas Meter
- U/G Gas Line LOS B (S.U.E.*) (G)
- U/G Gas Line LOS C (S.U.E.*) (G)
- U/G Gas Line LOS D (S.U.E.*) (G)
- Above Ground Gas Line (A/G Gas)

SANITARY SEWER:

- Sanitary Sewer Manhole
- Sanitary Sewer Cleanout
- U/G Sanitary Sewer Line (SS)
- Above Ground Sanitary Sewer (A/G Sanitary Sewer)
- SS Forced Main Line LOS B (S.U.E.*) (FSS)
- SS Forced Main Line LOS C (S.U.E.*) (FSS)
- SS Forced Main Line LOS D (S.U.E.*) (FSS)

MISCELLANEOUS:

- Utility Pole
- Utility Pole with Base
- Utility Located Object
- Utility Traffic Signal Box (S)
- Utility Unknown U/G Line LOS B (S.U.E.*) (?UTL)
- U/G Tank; Water, Gas, Oil
- Underground Storage Tank, Approx. Loc. (UST)
- A/G Tank; Water, Gas, Oil
- Geoenvironmental Boring
- U/G Test Hole LOS A (S.U.E.*)
- Abandoned According to Utility Records (AATUR)
- End of Information (E.O.I.)

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REVISIONS
NO. DATE

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PRELIMINARY NOT FOR CONSTRUCTION

HYDRAULICS ENGINEER
PRELIMINARY NOT FOR CONSTRUCTION

TRENTON ROAD CONNECTOR

TRENTON PARK LANE TO REEDY CREEK RD

CONVENTIONAL SYMBOLS

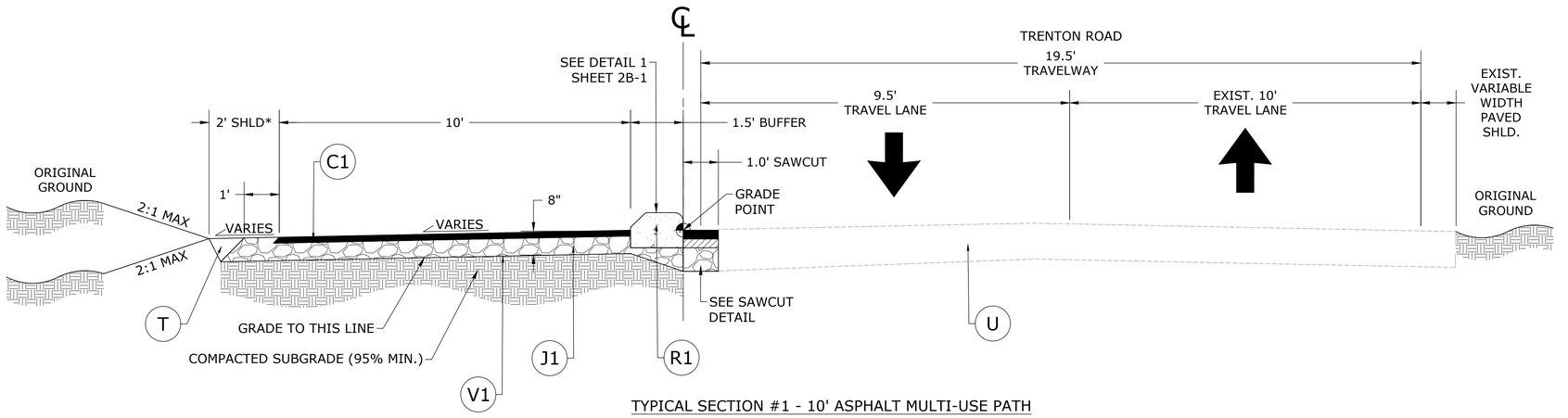
PLAN INFORMATION
PROJECT NO. 2020110233
FILENAME 2020110233_D1.dwg
CHECKED BY GDB
DRAWN BY JP, ED
SCALE NTS
DATE 03/15/2022

1B

PAVEMENT SCHEDULE

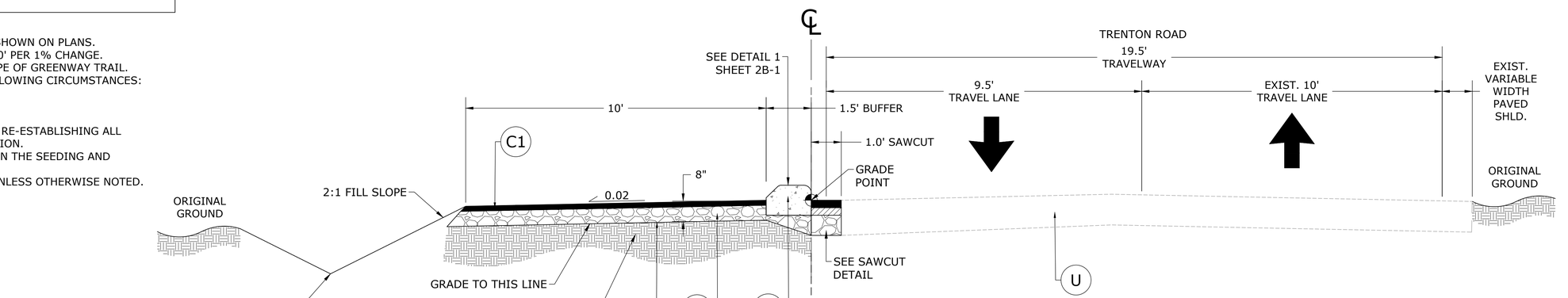
A1	PROPOSED 6" PORTLAND CEMENT CONCRETE PAVEMENT
C1	PROPOSED 2" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 224 LBS.PER SQ.YD.
C2	PROPOSED 3" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 336 LBS.PER SQ.YD.
D1	PROPOSED 3" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0B, AT AN AVERAGE RATE OF 342 LBS. PER SQ. YD.
J1	PROPOSED 6" AGGREGATE BASE COURSE
J2	PROPOSED 8" AGGREGATE BASE COURSE
R1	PROPOSED 6" MONOLITHIC CONCRETE ISLAND
U	EXISTING PAVEMENT
V1	PROPOSED GEOTEXTILE SEPARATOR FABRIC
T	EARTH MATERIAL STRUCTURAL FILL SHOULD BE PLACED IN UNIFORM LIFTS OF 8 INCHES OR LESS (LOOSE MEASURE), AND COMPACTED TO AT LEAST 95 PERCENT OF MAXIMUM DRY DENSITY AND WITHIN 3 PERCENT OF THE OPTIMUM MOISTURE AS DEFINED BY THE STANDARD PROCTOR COMPACTION TEST. THE UPPER 12 INCHES OF THE STRUCTURAL FILL PLACED SHOULD BE COMPACTED TO 98 PERCENT OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY. TO CONFIRM THAT THE SPECIFIED DEGREE OF COMPACTION IS OBTAINED, FIELD DENSITY TESTING SHOULD BE PERFORMED IN EACH LIFT BY A SOILS TECHNICIAN. SEE PROJECT GEOTECH REPORT FOR MORE DETAILED INFORMATION

NOTES:
1. TRANSITION SUPERELEVATION AS SHOWN ON PLANS. TRANSITION DISTANCE SHALL BE 10' PER 1% CHANGE.
2. SHOULDERS TO MATCH CROSS SLOPE OF GREENWAY TRAIL.
3. PROVIDE SAFETY RAIL FOR THE FOLLOWING CIRCUMSTANCES:
   SLOPE ≥ 3:1 AND DROP OF 6'
   SLOPE ≥ 2:1 AND DROP OF 4'
   SLOPE ≥ 1:1 AND DROP OF 1'
4. CONTRACTOR IS RESPONSIBLE FOR RE-ESTABLISHING ALL SLOPES DISTURBED BY CONSTRUCTION.
5. *SHOULDERS SHALL BE INCLUDED IN THE SEEDING AND MULCHING.
6. PAVEMENT EDGE SLOPES ARE 1:1 UNLESS OTHERWISE NOTED.



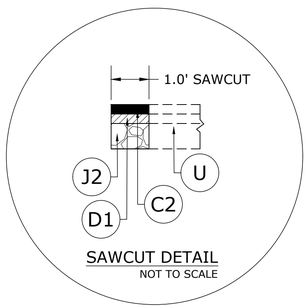
TYPICAL SECTION #1 - 10' ASPHALT MULTI-USE PATH
NOT TO SCALE

ALIGNMENT	BEGIN STATION	END STATION
-L1-	13+66	19+36
-L1-	49+64	50+00
-MUP-INT2-	200+00	200+43



TYPICAL SECTION #2 - 10' ASPHALT MULTI-USE PATH W/ DITCH
NOT TO SCALE

ALIGNMENT	BEGIN STATION	END STATION
-L1-	19+36	21+21
-L1-	21+91	25+18
-L1-	26+40	28+33
-L1-	29+03	30+04
-L1-	30+74	31+90
-L1-	32+66	35+72
-L1-	36+92	43+29
-L1-	44+07	47+81
-L1-	48+51	49+34



SAWCUT DETAIL
NOT TO SCALE

TYPICAL SECTION #2A - 10' CONCRETE MULTI-USE PATH W/ PAVED BUFFER
NOT TO SCALE

ALIGNMENT	BEGIN STATION	END STATION
-L1-	25+86	25+90
-L1-	36+22	36+42

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REVISIONS
NO. DATE

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PRELIMINARY NOT FOR CONSTRUCTION

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TRENTON PARK LANE TO REEDY CREEK RD

TYPICAL SECTIONS

PLAN INFORMATION
PROJECT NO. 2020110233
FILENAME 2020110233_D2.dwg
CHECKED BY GDB
DRAWN BY xxx
SCALE NTS
DATE 03/15/2022

2A-1

PAVEMENT SCHEDULE	
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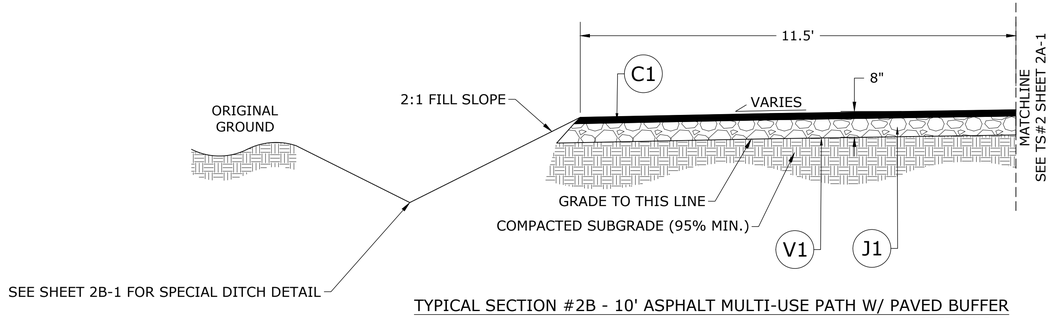
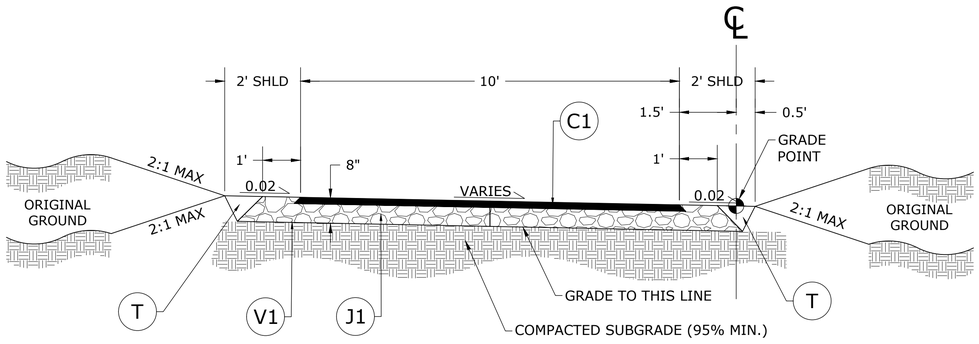
5. *SHOULDERS SHALL BE INCLUDED IN THE SEEDING AND MULCHING.
6. PAVEMENT EDGE SLOPES ARE 1:1 UNLESS OTHERWISE NOTED.



TYPICAL SECTION #2B - 10' ASPHALT MULTI-USE PATH W/ PAVED BUFFER

NOT TO SCALE

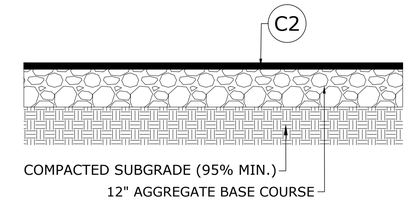
ALIGNMENT	BEGIN STATION	END STATION
-L1-	21+21	21+41
-L1-	21+71	21+91
-L1-	25+18	25+38
-L1-	26+20	26+40
-L1-	28+33	28+53
-L1-	28+83	29+03
-L1-	30+04	30+24
-L1-	30+54	30+74
-L1-	35+72	35+92
-L1-	36+72	36+92
-L1-	47+81	48+01
-L1-	48+31	48+51



TYPICAL SECTION #3 - 10' ASPHALT MULTI-USE PATH

NOT TO SCALE

ALIGNMENT	BEGIN STATION	END STATION
-MUP-INT2-	200+43	200+65



ROADWAY PAVEMENT RESURFACING SECTION

NOT TO SCALE

NOTE:
1. SECTION TO BE USED FOR RESURFACING LOCATIONS AT TRINITY FARMS ROAD AND TRENTON WOODS WAY. SEE PLANS.

MCADAMS
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222 W. HARGETT STREET
SUITE 600
RALEIGH, NC 27601
919-996-4798
CONTACT:
DAVID BENDER, PROJECT MANAGER

REVISIONS
NO. DATE

GREENWAY ENGINEER
PRELIMINARY NOT FOR CONSTRUCTION

HYDRAULICS ENGINEER
PRELIMINARY NOT FOR CONSTRUCTION

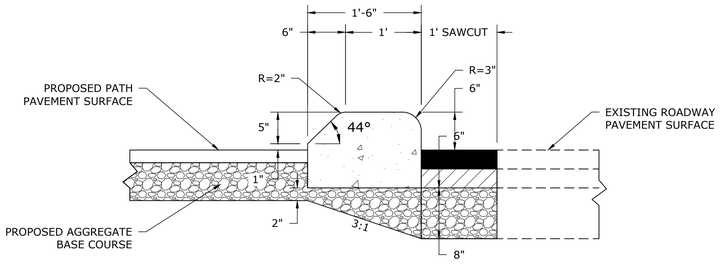
TRENTON ROAD CONNECTOR

TRENTON PARK LANE TO REEDY CREEK RD

TYPICAL SECTIONS

PLAN INFORMATION
PROJECT NO. 2020110233
FILENAME 2020110233_D2.dwg
CHECKED BY GDB
DRAWN BY xxx
SCALE NTS
DATE 03/15/2022

2A-2

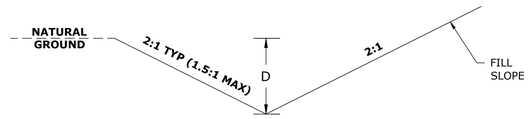


01 6" MONOLITHIC CONCRETE ISLAND

SCALE: NTS

DETAIL A
SPECIAL LATERAL 'V' DITCH

NOT TO SCALE



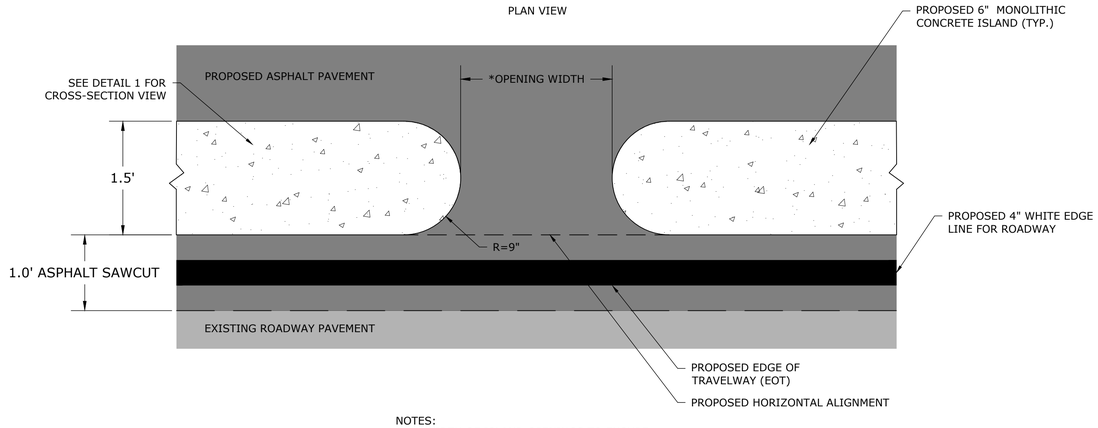
MIN D= 1.0 FT

NOTES:
1. ALL PROPOSED DITCHES ARE ALONG LEFT SIDE OF -L1- ALIGNMENT.
2. DITCH STATION RANGES SHOWN ARE NOT BROKEN ACROSS PROPOSED DRIVEWAY PIPE SEGMENTS AND ARE NUMBERED TO REFLECT SHARED DRAINAGE DIRECTION/PATTERNS.
3. ALL DITCH SIDE SLOPES SHALL REMAIN WITHIN THE EXISTING RIGHT-OF-WAY.
4. SEE PLANS FOR COIR FIBER MATTING LOCATIONS.
5. DITCH SLOPES SHALL BE ARMORED WHEN SIDE SLOPES ARE STEEPER THAN 2:1 OR LONGITUDINAL SLOPE EXCEEDS 4.0%. FURTHER DETAIL TO BE INCLUDED IN FUTURE SUBMITTAL.
6. REFER TO CROSS SECTIONS FOR ADDITIONAL DITCH INFORMATION.

DITCH	ALIGNMENT	BEGIN STATION	END STATION
1	-L1-	19+36	21+00
2	-L1-	21+00	22+98
3	-L1-	22+98	33+45
4	-L1-	33+45	45+24
5	-L1-	45+24	47+30
6	-L1-	47+30	49+27

02 SPECIAL DITCH DETAIL

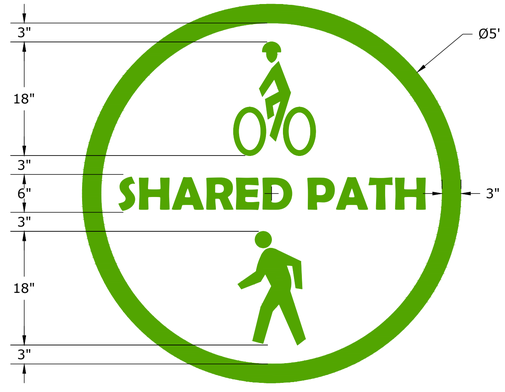
SCALE: NTS



NOTES:
1. *WIDTH OF ISLAND OPENINGS TO ENSURE POSITIVE ROADWAY DRAINAGE ARE LABELED ON PLAN SHEETS.

03 MONOLITHIC ISLAND BREAK/OPENING

SCALE: NTS



04 SHARED-USE PATH PAVEMENT MARKING SYMBOL

SCALE: NTS

90% PLANS -NOT RELEASED FOR CONSTRUCTION

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REVISIONS

NO. DATE

GREENWAY ENGINEER

PRELIMINARY NOT FOR CONSTRUCTION

HYDRAULICS ENGINEER

PRELIMINARY NOT FOR CONSTRUCTION

TRENTON ROAD CONNECTOR

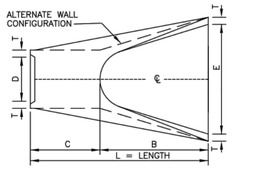
TRENTON PARK LANE TO REEDY CREEK RD

DETAILS

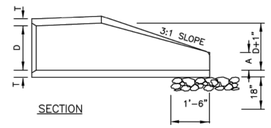
PLAN INFORMATION

PROJECT NO.	2020110233
FILENAME	2020110233_D2.dwg
CHECKED BY	GDB
DRAWN BY	JP, ED
SCALE	NTS
DATE	03/15/2022

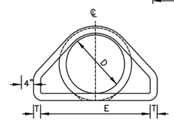
2B-1



PLAN



SECTION



END VIEW

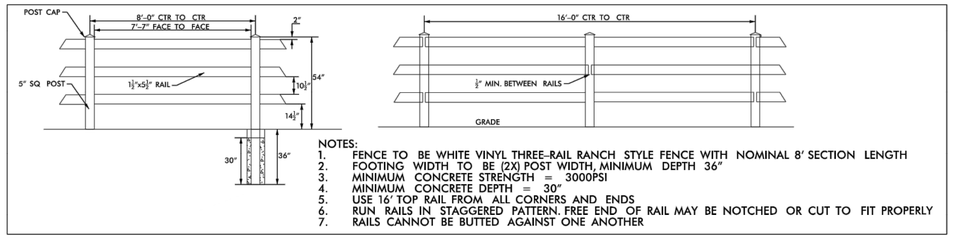
TABLE OF DIMENSIONS							
D	T	A	B	C	E	L	WT.
12"	2–1/4"	4"	2'–0"	4'–1"	2'–0"	6'–1"	730
15"	2–1/4"	6"	2'–3"	3'–10"	2'–0"	6'–1"	730
18"	2–1/2"	9"	2'–3"	3'–10"	3'–0"	6'–1"	1190
24"	3"	10"	3'–8"	2'–6"	4'–0"	6'–2"	1770
30"	3–1/2"	1'–0"	4'–6"	1'–8"	5'–0"	6'–2"	2380
36"	4"	1'–3"	5'–3"	2'–11"	6'–0"	8'–2"	5320
42"	4–1/2"	1'–9"	5'–3"	2'–11"	6'–6"	8'–2"	5920
48"	5"	2'–0"	6'–0"	2'–2"	7'–0"	8'–2"	7470
54"	5–1/2"	2'–3"	5'–6"	2'–10"	7'–6"	8'–4"	8810
60"	6"	2'–6"	5'–0"	3'–3"	8'–0"	8'–3"	11180
66"	6–1/2"	3'–0"	6'–0"	2'–3"	8'–6"	8'–3"	12530
72"	7"	3'–0"	6'–6"	1'–9"	9'–0"	8'–3"	13980

GENERAL NOTES:

1. SEE FORMER NCDOT STANDARD 310.01 FOR DETAILS.
2. REINFORCEMENT SHALL CONFORM TO THE REQUIREMENTS OF REINFORCED CONCRETE PIPE OF LIKE DIAMETER PER AASHTO M170, TABLE 2, WALL B.
3. ALL CONCRETE TO BE 3600 P.S.I COMPRESSIVE STRENGTH.
4. PROVIDE TONGUE OR SPIGOT JOINT AT INLET END SECTION.
5. PROVIDE GROOVE OR BELL JOINT AT OUTLET END SECTION.
6. THE DIMENSIONS FOR END SECTIONS SHALL SUBSTANTIALLY AGREE WITH THE TABLE. MINOR VARIATIONS WILL BE PERMITTED BASED ON THE MANUFACTURER'S STANDARD FORMS AND TEMPLATES.

01 FLARED END SECTION

SCALE: NTS

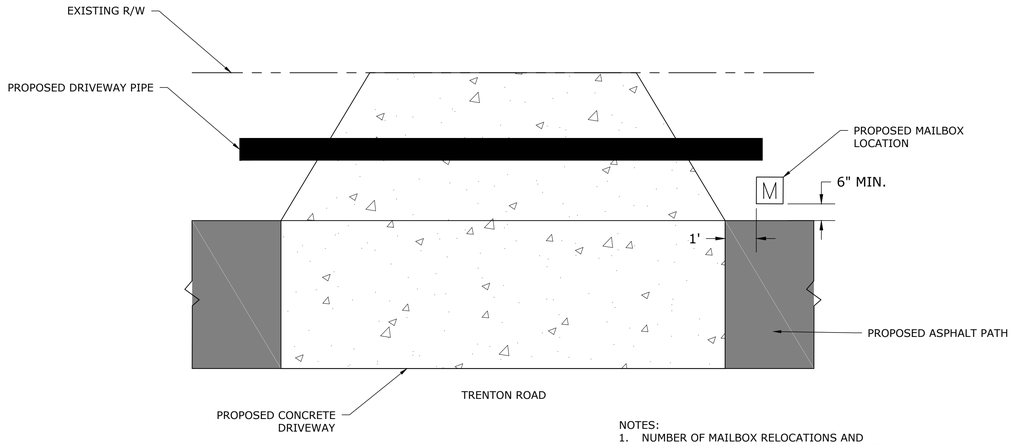


NOTES:

1. FENCE TO BE WHITE VINYL THREE-RAIL RANCH STYLE FENCE WITH NOMINAL 8' SECTION LENGTH
2. FOOTING WIDTH TO BE (2X) POST WIDTH, MINIMUM DEPTH 36"
3. MINIMUM CONCRETE STRENGTH = 3000PSI
4. MINIMUM CONCRETE DEPTH = 30"
5. USE 16' TOP RAIL FROM ALL CORNERS AND ENDS
6. RUN RAILS IN STAGGERED PATTERN. FREE END OF RAIL MAY BE NOTCHED OR CUT TO FIT PROPERLY
7. RAILS CANNOT BE BUTTED AGAINST ONE ANOTHER

02 WHITE VINYL FENCE

SCALE: NTS



NOTES:

1. NUMBER OF MAILBOX RELOCATIONS AND MAILBOX TYPE MAY VARY FOR EACH PRIVATE DRIVEWAY
2. FINISHED MAILBOX HEIGHT ABOVE PAVEMENT SHALL RANGE FROM 41" TO 45"

03 MAILBOX RELOCATION/PLACEMENT AT DRIVEWAYS

SCALE: NTS

90% PLANS -NOT RELEASED FOR CONSTRUCTION

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REVISIONS
NO. DATE

GREENWAY ENGINEER
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HYDRAULICS ENGINEER
PRELIMINARY NOT FOR CONSTRUCTION

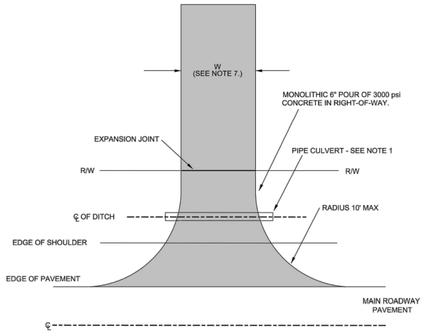
TRENTON ROAD CONNECTOR

TRENTON PARK LANE TO REEDY CREEK RD

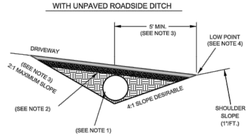
DETAILS

PLAN INFORMATION
PROJECT NO. 2020110233
FILENAME 2020110233_D2.dwg
CHECKED BY GDB
DRAWN BY JP, ED
SCALE NTS
DATE 03/15/2022

2B-2



WITH UNPAVED ROADSIDE DITCH

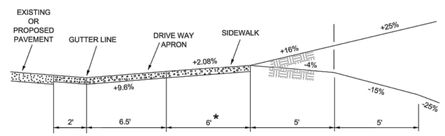


NOTES:

1. PIPE TO BE RCP OR HDPE AND SIZED TO CARRY THE DESIGN FLOW OF THE DITCH FOR A 10-YEAR, 24-HOUR STORM EVENT; THE MINIMUM ACCEPTABLE PIPE SIZE IS 15" IF THE DESIGN FLOW WOULD REQUIRE A SMALLER PIPE, PIPE TO BE EXTENDED TO ALLOW ACCEPTABLE COVER AND SLOPES.
2. 12" MINIMUM COVER OVER PIPE MEASURED FROM TOP OF PAVEMENT.
3. STEEPER SLOPES CAN BE ALLOWED WHERE SPECIAL STABILIZATION IS PROVIDED IN ACCORDANCE WITH EROSION AND SEDIMENTATION CONTROL ORDINANCE.
4. USE 5' VERTICAL CURVE FOR TRANSITION.
5. SEE CITY OF RALEIGH STREET DESIGN MANUAL FOR COMMERCIAL DRIVEWAYS.
6. NO EXPOSED AGGREGATE OR OTHER SPECIAL SURFACE TREATMENTS IN RIGHT OF WAY.
7. W-DIMENSION AS SHOWN ON PLANS SHALL BE AS FOLLOWS; 10' MINIMUM, 18' MAXIMUM FOR RESIDENTIAL DRIVEWAYS.

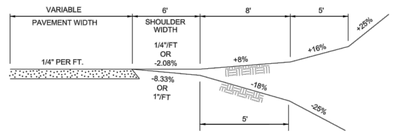
CITY OF RALEIGH STANDARD DETAIL		
REVISIONS	DATE: 8/2020	NOT TO SCALE
	RESIDENTIAL DRIVEWAY INSTALLATION ON NON CURB & GUTTERED STREETS	
	T-10.03	

DRIVEWAY GRADES



★ 5' FOR SENSITIVE AREA AVENUE AND SENSITIVE AREA RESIDENTIAL STREET

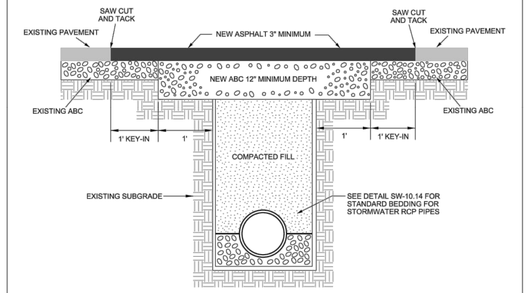
A. CURB & GUTTER , SIDEWALK SECTION



B. SHOULDER SECTION

NOTES:
IF THE SLOPE BETWEEN THE TOP OF CURB AND GUTTER AND A POINT 30 FEET FROM THE CURB AND GUTTER EXCEEDS 20%, THIS SLOPE SHALL BE ADJUSTED TO A MAXIMUM OF 8.33% (1"/FT) UP OR 4.17% (1/2" /FT) DOWN.

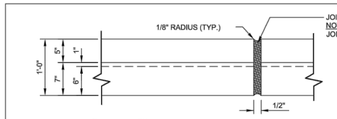
CITY OF RALEIGH STANDARD DETAIL		
REVISIONS	DATE: 8/2020	NOT TO SCALE
	DRIVEWAY GRADES	
	T-10.04	



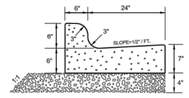
NOTES:

1. THE PAVEMENT EDGE SHALL BE DEFINED BY A STRAIGHT EDGE FORMED BY A MACHINED SAW CUT.
2. THE TRENCH SUBGRADE MATERIAL SHALL BE BACKFILLED WITH SUITABLE MATERIAL AND COMPACTED TO A DENSITY OF AT LEAST 95% OF THAT OBTAINED BY COMPACTING A SAMPLE OF THE MATERIAL IN ACCORDANCE WITH AASHTO T-99 AS MODIFIED BY NCDOT.
3. THE FINAL 1' OF FILL SHALL CONSIST OF ABC MATERIAL COMPACTED TO A DENSITY EQUAL TO 100% OF THAT OBTAINED BY COMPACTING A SAMPLE OF THE MATERIAL IN ACCORDANCE WITH AASHTO T-80 AS MODIFIED BY NCDOT. BITUMINOUS BASE OR BINDER MAY BE SUBSTITUTED IF APPROVED BY TRANSPORTATION DIRECTOR OR DESIGNEE.
4. THE ENTIRE THICKNESS/VERTICAL EDGE OF THE CUT SHALL BE TACKED.
5. THE SAME DEPTH OF PAVEMENT MATERIAL WHICH EXISTS SHALL BE REINSTALLED, BUT IN NO CASE SHALL THE ASPHALT BE LESS THAN 3" THICK.
6. THE ASPHALT PAVEMENT MATERIAL SHALL BE INSTALLED AND COMPACTED THOROUGHLY AND ROLLED WITH A SMOOTH DRUM ROLLER TO ACHIEVE A SMOOTH, LEVEL PATCH.

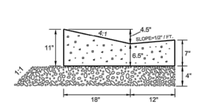
CITY OF RALEIGH STANDARD DETAIL		
REVISIONS	DATE: 8/2020	NOT TO SCALE
	ASPHALT PAVEMENT PATCH AND RCP PIPE BACKFILL	
	T-10.05	



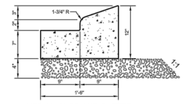
FRONT ELEVATION
TRANSVERSE EXPANSION JOINT



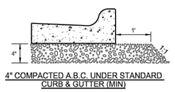
1. 30" CURB & GUTTER



2. 30" VALLEY TYPE GUTTER

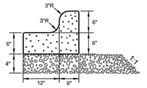


MEDIAN CURB AND GUTTER SIDE ELEVATION

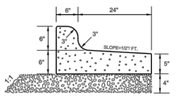


4" COMPACTED A.B.C. UNDER STANDARD CURB & GUTTER (MIN)

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



MEDIAN CURB AND GUTTER (NON-MOUNTABLE)



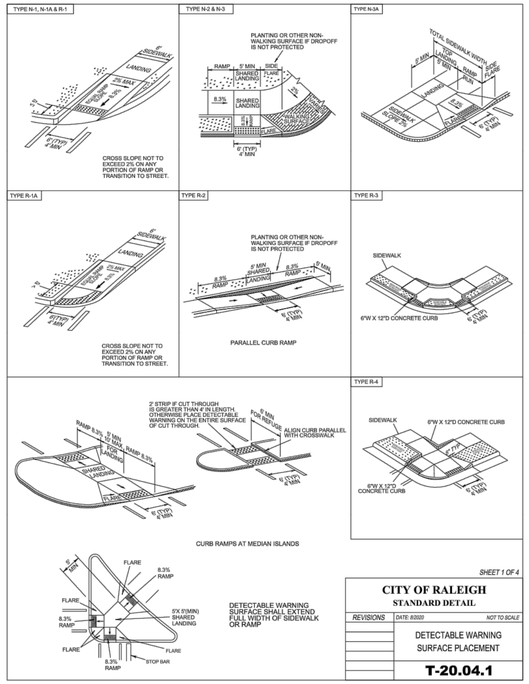
SPILL CURB DETAIL

NOTES:

1. 10' MAXIMUM BETWEEN DUMMY JOINTS. 15' MAXIMUM BETWEEN DUMMY JOINTS ON MACHINE POURS.
2. 1/2" EXPANSION JOINT EVERY 50'.
3. 3000 PSI CONCRETE MINIMUM, 4" SLUMP MAXIMUM.
4. LIQUID MEMBRANE CURING COMPOUND SHALL MEET THE REQUIREMENTS OF SECTION 1026-2 OF NCDOT STANDARDS & SPECIFICATIONS FOR ROADS AND STRUCTURES.
5. ALL CONSTRUCTION JOINTS SHALL BE FILLED WITH JOINT FILLER AND SEALER IN ACCORDANCE WITH NCDOT ROADWAY STANDARD DETAIL 846.01 THE JOINT MATERIAL SHALL CONFORM TO SECTION 1028-2 OF NCDOT STANDARD & SPECIFICATIONS FOR ROADS AND STRUCTURES.
6. REFER TO NCDOT DETAIL 846.01 FOR CURB AND GUTTER SUPERELEVATION RATES.

SHEET 1 OF 2

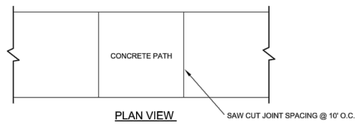
CITY OF RALEIGH STANDARD DETAIL		
REVISIONS	DATE: 8/2020	NOT TO SCALE
	CURB AND GUTTER	
	T-10.26.1	



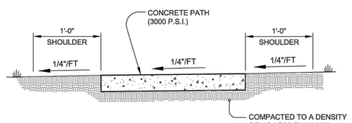
DETECTABLE WARNING SURFACE SHALL EXTEND FULL WIDTH OF SIDEWALK OR RAMP

SHEET 1 OF 4

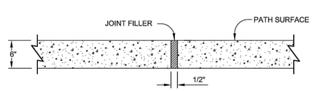
CITY OF RALEIGH STANDARD DETAIL		
REVISIONS	DATE: 8/2020	NOT TO SCALE
	DETECTABLE WARNING SURFACE PLACEMENT	
	T-20.04.1	



PLAN VIEW



TYPICAL SECTION



TRANSVERSE EXPANSION JOINT

NOTES:

1. TRANSVERSE EXPANSION JOINTS TO BE A MAXIMUM OF 50 FEET APART.
2. ALL CONCRETE TO BE FINISHED WITH CURING COMPOUND.
3. A 6 INCH DEPTH IS REQUIRED.
4. SAW CUT JOINTS EVERY 10 FEET OR SAME AS WIDTH, WHICHEVER IS LESS.
5. NO UTILITY SURFACE COVERS/PLATES/MANHOLES (i.e. WATERLINE VALVE COVERS, ETC.) SHALL BE LOCATED WITHIN PATH AND SHALL BE MINIMUM 1 FOOT FROM THE EDGE OF PATH.
6. ALL PATHS SHALL BE LOCATED MINIMUM 6 FEET FROM THE BACK OF CURB.
7. MULTI-USE PATH WIDTH TO BE DETERMINED BY CITY OF RALEIGH BASED ON ROADWAY TYPE, LOCATION AND PEDESTRIAN VOLUMES.

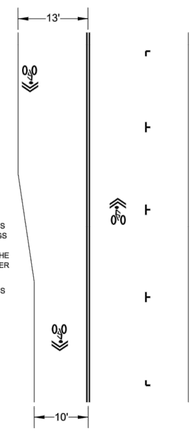
SHEET 2 OF 2

CITY OF RALEIGH STANDARD DETAIL		
REVISIONS	DATE: 8/2020	NOT TO SCALE
	CONCRETE MULTI-PURPOSE PATH	
	T-30.02.2	

PLACEMENT AND SPACING

PLACE SHARED LANE MARKINGS AFTER EVERY INTERSECTION AND MAJOR HIGHWAYS.

ADDITIONALLY, PLACE SHARED LANE MARKINGS EVERY 150' IN DOWNTOWN RALEIGH AND 250' ELSEWHERE.



WIDE LANES

WHERE THE TRAVEL LANE WIDTH IS 13', PLACE SHARED LANE MARKINGS 4' FROM THE EDGE OF PAVEMENT (MEASURED FROM THE APEX OF THE CHEVRON), EXCLUDING THE GUTTER PAN.

WHERE THE TRAVEL LANE WIDTH IS 14' OR WIDER, INSTALL BIKE LANE MARKINGS.

NARROW LANES OR ADJACENT TO PARKING LANES

WHERE THE TRAVEL LANE WIDTH IS LESS THAN 13' OR WHERE ADJACENT TO PARKING LANES, PLACE SHARED LANE MARKINGS IN THE CENTER OF THE TRAVEL LANE.

STREET CRITERIA

SHARED LANE MARKINGS DO NOT ESTABLISH A BICYCLE FACILITY AND SHOULD ONLY BE USED WHEN ONE OR MORE OF THE CONDITIONS APPLY:

- THE POSTED SPEED LIMIT OR PREVAILING SPEED IS 25 MPH OR LESS.
- THE AVERAGE DAILY TRAFFIC VOLUME IS 4,000 VEHICLES OR LESS.
- PLACEMENT THROUGH MEDIAN AREAS OR COMBINED BIKE LANE/RIGHT-TURN LANE.
- INSTALLATION PAIRED WITH TRAFFIC CALMING MEASURES, WAYFINDING SIGNAGE, AND INTERSECTION TREATMENTS TO ESTABLISH A NEIGHBORHOOD BIKEWAY.

CITY OF RALEIGH STANDARD DETAIL		
REVISIONS	DATE: 8/2020	NOT TO SCALE
	SHARED LANE SIGNS & MARKINGS	
	B-10.05	

90% PLANS -NOT RELEASED FOR CONSTRUCTION

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RALEIGH, NC 27601
919-996-4798
CONTACT:
DAVID BENDER, PROJECT MANAGER

REVISIONS
NO. DATE

GREENWAY ENGINEER
PRELIMINARY NOT FOR CONSTRUCTION

HYDRAULICS ENGINEER
PRELIMINARY NOT FOR CONSTRUCTION

TRENTON ROAD CONNECTOR

TRENTON PARK LANE TO REEDY CREEK RD

DETAILS

PLAN INFORMATION
PROJECT NO. 2020110233
FILENAME 2020110233_D2.dwg
CHECKED BY GDB
DRAWN BY JP, ED
SCALE NTS
DATE 03/15/2022

2B-3

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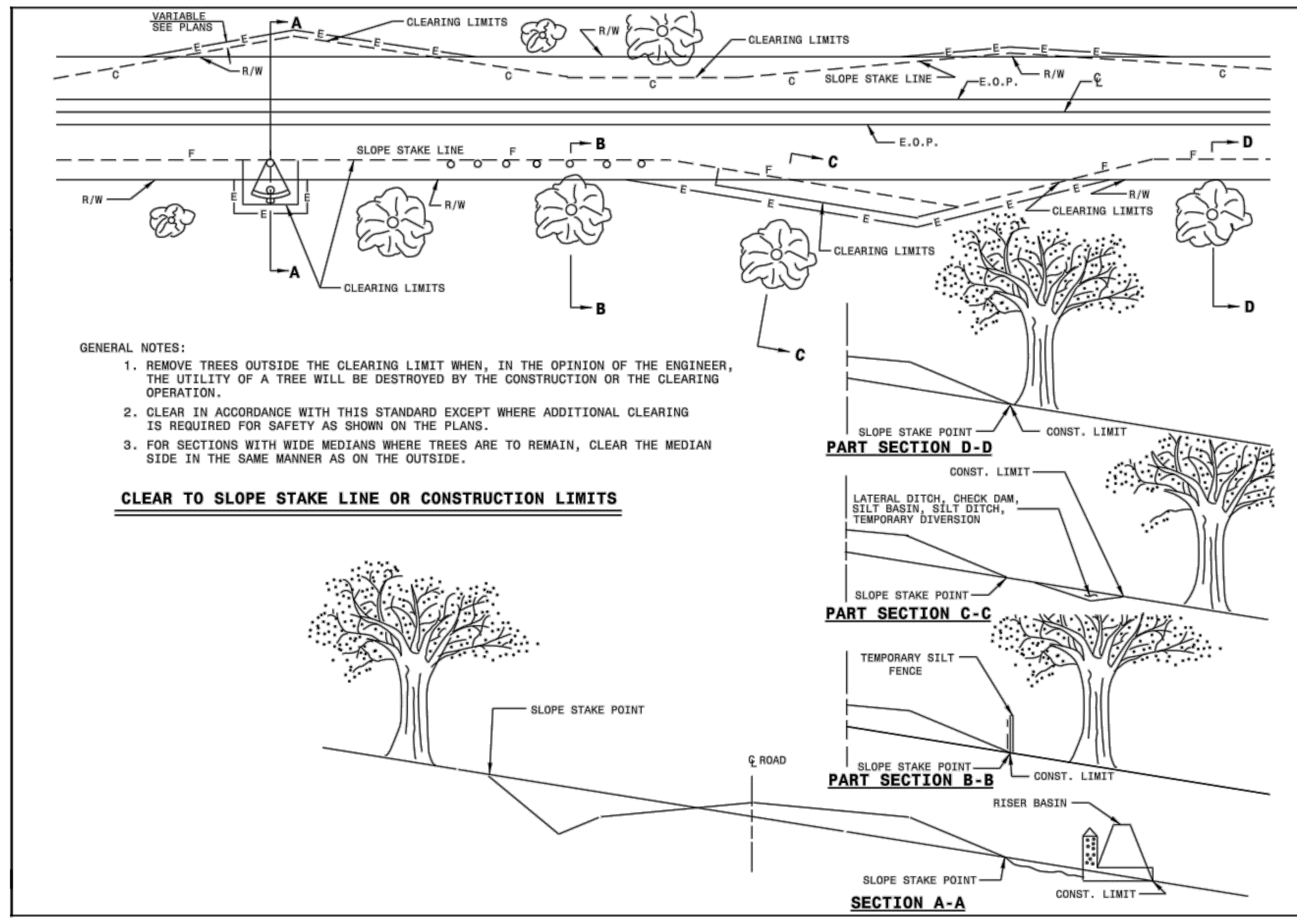
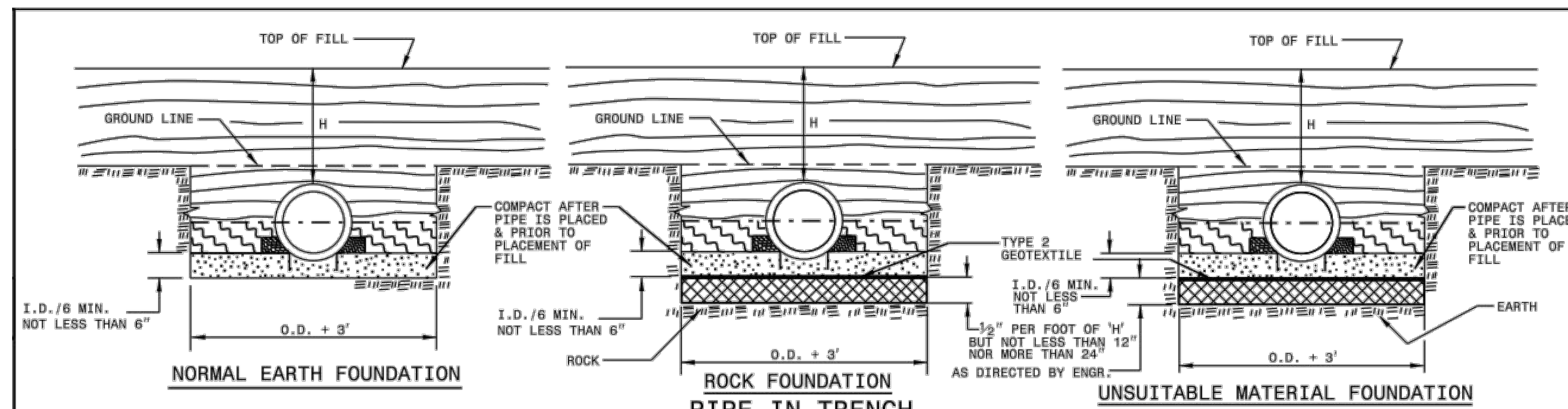


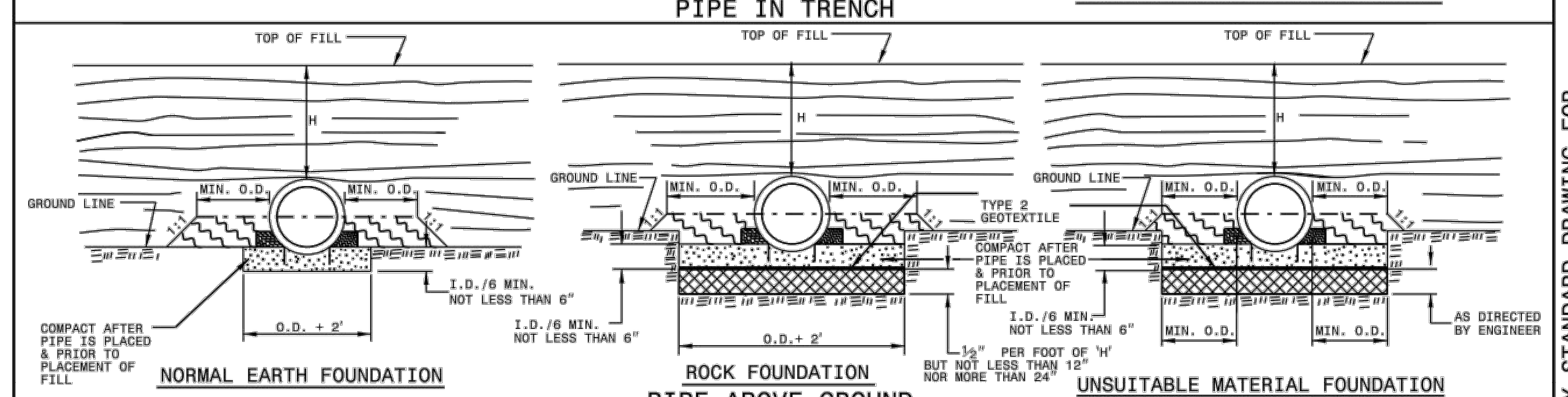
GENERAL NOTES:

1. REMOVE TREES OUTSIDE THE CLEARING LIMIT WHEN, IN THE OPINION OF THE ENGINEER, THE UTILITY OF A TREE WILL BE DESTROYED BY THE CONSTRUCTION OR THE CLEARING OPERATION.
2. CLEAR IN ACCORDANCE WITH THIS STANDARD EXCEPT WHERE ADDITIONAL CLEARING IS REQUIRED FOR SAFETY AS SHOWN ON THE PLANS.
3. FOR SECTIONS WITH WIDE MEDIANS WHERE TREES ARE TO REMAIN, CLEAR THE MEDIAN SIDE IN THE SAME MANNER AS ON THE OUTSIDE.

CLEAR TO SLOPE STAKE LINE OR CONSTRUCTION LIMITS

STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.
1-18
ROADWAY STANDARD DRAWING FOR **METHOD OF CLEARING** METHOD - II
SHEET 1 OF 1
200.02





GENERAL NOTES:

I.D. = THE MAXIMUM HORIZONTAL INSIDE DIAMETER DIMENSION.

O.D. = THE MAXIMUM HORIZONTAL OUTSIDE DIAMETER DIMENSION.

H = THE FILL HEIGHT MEASURED VERTICALLY AT ANY POINT ALONG THE PIPE FROM THE TOP OF THE PIPE TO THE TOP OF THE EMBANKMENT AT THAT POINT.

■ TAKE CARE TO FULLY COMPACT HAUNCH ZONE OF PIPE BACKFILL.

▨ LOOSELY PLACED SELECT MATERIAL CLASS III OR CLASS II, TYPE 1 FOR PIPE BEDDING. LEAVE SECTION DIRECTLY BENEATH PIPE UNCOMPACTED AS PIPE SEATING AND BACKFILL WILL ACCOMPLISH COMPACTION.

DO NOT OPERATE HEAVY EQUIPMENT OVER ANY PIPE CULVERT UNTIL THE PIPE CULVERT HAS BEEN PROPERLY BACKFILLED AND COVERED WITH AT LEAST 3 FEET OF APPROVED MATERIAL.

— - — - SPRINGLINE OF PIPE

▨ SELECT BACKFILL MATERIAL CLASS III OR CLASS II, BELOW SPRINGLINE.

▨ APPROVED SUITABLE LOCAL MATERIAL ABOVE SPRINGLINE.

▨ UNDISTURBED EARTH MATERIAL

▨ SELECT MATERIAL CLASS V OR VI FOR FOUNDATION CONDITIONING. ENCAPSULATE WITH TYPE 2 GEOTEXTILE AS DIRECTED BY THE ENGINEER.

STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.
1-18
ROADWAY STANDARD DRAWING FOR **METHOD OF PIPE INSTALLATION** RIGID PIPE
SHEET 2 OF 3
300.01

FLEXIBLE PIPE

Round Corrugated Steel Pipe
2 2/3 x ½ corrugation **

Diameter (inches)	Minimum cover (inches)	Maximum Height of Cover (feet) (Ga) 16	14	12	10	8
12	12	204	256			
15	12	162	204			
18	12	135	169	239		
21	12	115	145	204		
24	12	100	126	178		
30	12	79	100	142		
36	12	65	83	117	152	
42	12	55	70	100	130	160
48	12	48	61	87	113	139
54	12		54	77	100	123
60	12			69	90	111
66	12				81	100
72	12				74	91
78	12					81
84	12					69

Round Corrugated Aluminum Pipe
2 2/3 x ½ corrugation **

Diameter (inches)	Minimum cover (inches)	Maximum Height of Cover (feet) (Ga) 16	14	12	10	8
12	12	123	155	218	281	344
15	12	98	123	174	224	275
18	12	81	102	144	187	228
21	12	69	87	123	160	195
24	12	60	76	108	139	171
27	12		67	95	123	151
30	12		60	85	111	136
36	12		50	71	92	113
42	12			60	78	96
48	12			52	68	84
54	12			46	50	74
60	12				50	62
66	12					51
72	12					41

** FOR DIFFERENT CORRUGATIONS AND ARCH PIPES REFER TO ROADWAY DESIGN MANUAL OR MANUFACTURERS SPECIFICATION.

REFER TO THE FOLLOWING FOR PIPE SPECIFICATIONS

CSP - AASHTO M36
CAAP - AASHTO M196
HDPE - AASHTO M294
PVC - ASTM F949 or AASHTO M304

HDPE - * (Minimum fill) 2' for pipe diameters ≥ 12" and ≤ 60"
* (Maximum fill) 20' for pipe diameters ≤ 24"
17' for pipe diameters ≥ 30" and ≤ 60"

PVC - * (Minimum fill) 2' for pipe diameters ≥ 12" and ≤ 36"
* (Maximum fill) 30' for pipe diameters ≥ 12" and ≤ 36"

* FILL HEIGHT IS MEASURED FROM THE TOP OF THE PIPE TO THE BOTTOM OF THE PAVEMENT STRUCTURE

NOTES: FILL HEIGHTS SHOWN WERE CALCULATED USING AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS

1' MINIMUM COVER FOR ALL SIDE DRAIN PIPE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS

RIGID PIPE

RCP - * (Minimum fill) 1' for Class IV & CLASS V
2' for Class III & Class II

* (Maximum fill) 10' - Class II pipe
20' - Class III pipe
30' - Class IV pipe
40' - Class V pipe

(For fills > 40' & < 80' use LRFD Direct Design Method)

* FILL HEIGHT IS MEASURED FROM THE TOP OF THE PIPE TO THE BOTTOM OF THE PAVEMENT STRUCTURE

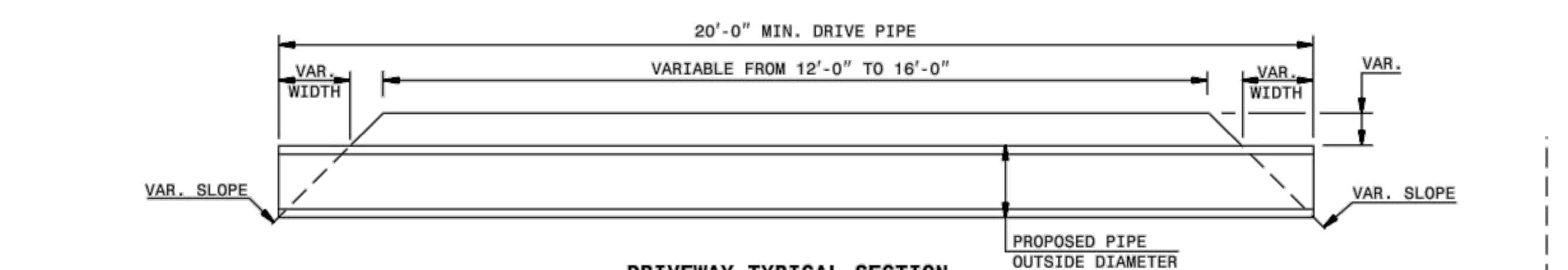
REFER TO THE FOLLOWING FOR PIPE SPECIFICATIONS

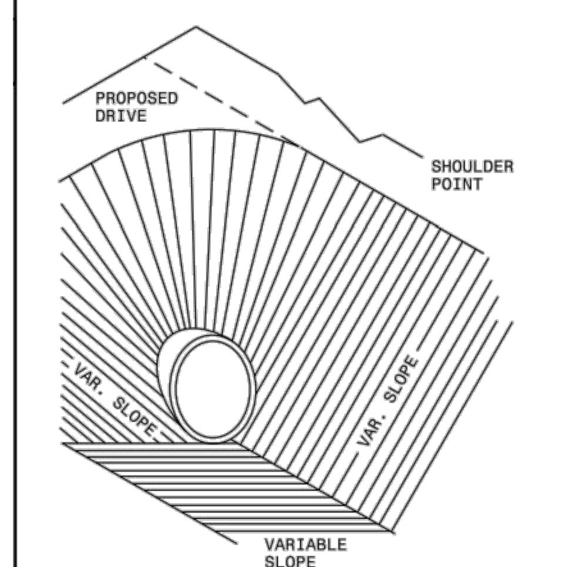
RCP - AASHTO M170

NOTES: FILL HEIGHTS SHOWN WERE CALCULATED USING AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS

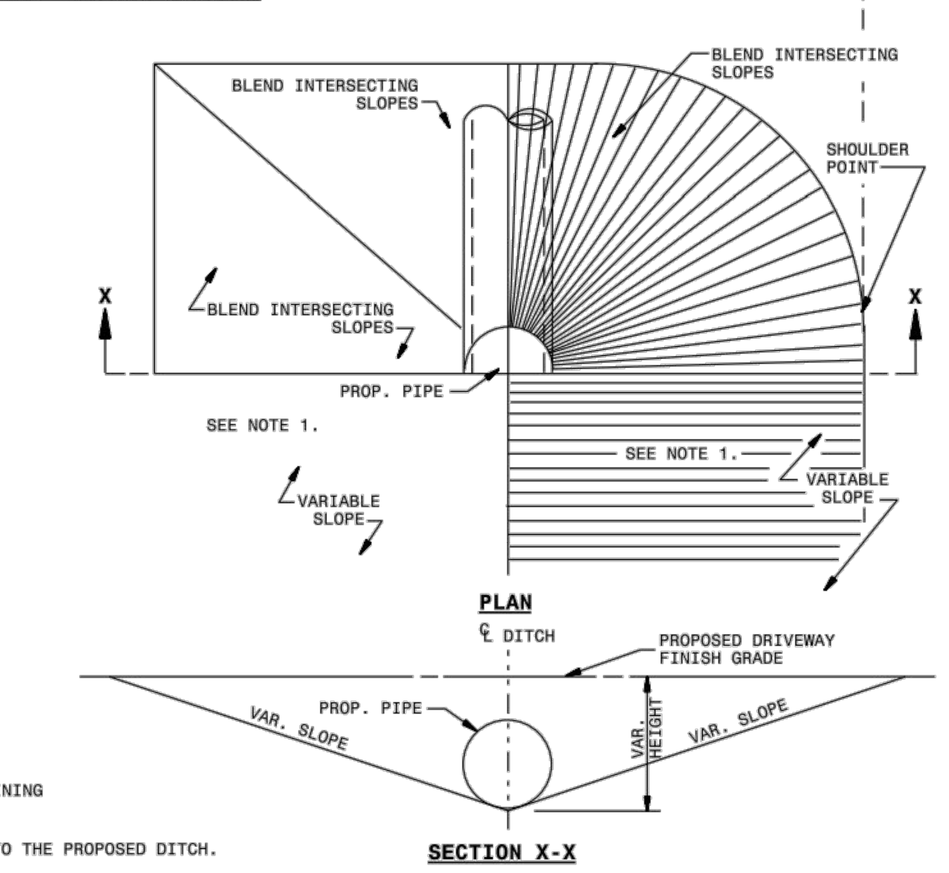
1' MINIMUM COVER FOR ALL SIDE DRAIN PIPE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS

STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.
1-18
ROADWAY STANDARD DRAWING FOR **METHOD OF PIPE INSTALLATION** FILL HEIGHT TABLES
SHEET 3 OF 3
300.01





ISOMETRIC OF END PIPE TREATMENT
USE AT LOCATIONS AS DIRECTED BY THE ENGINEER



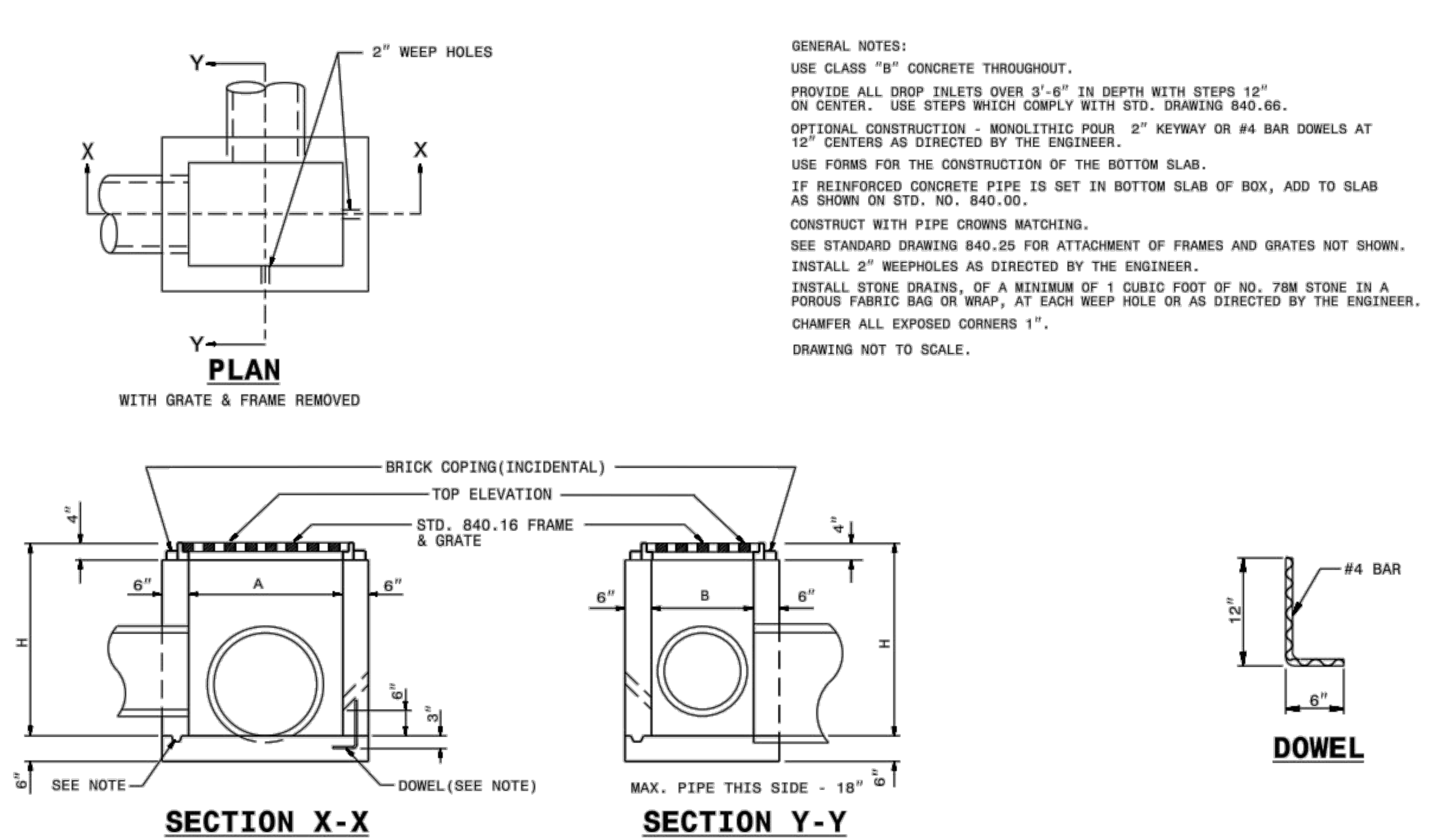
GENERAL NOTES:

ALL DIMENSIONS GIVEN ARE FOR MINIMUM CONDITIONS. PROPER ENGINEERING JUDGEMENT MUST BE USED IN DETERMINING DRIVEWAY LOCATIONS, WIDTHS, AND PIPE LENGTHS.

FACTORS SUCH AS VEHICLE TURNING RADIUS, TRAFFIC VOLUMES, DRIVEWAY SKEW, OFFSET DISTANCE OF PIPE FROM EDGE OF PAVEMENT, PIPE DEPTHS, AND DESIGN SPEED SHOULD BE CONSIDERED IN DETERMINING DRIVEWAY WIDTHS.

NOTE:
1. THESE AREAS ARE TO BE USED TO BLEND THE INTERSECTING SLOPES TO THE PROPOSED DITCH.

STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.
1-18
ROADWAY STANDARD DRAWING FOR **DRIVEWAY PIPE CONSTRUCTION** USING NO SPECIAL END SECTIONS
SHEET 1 OF 1
310.10



GENERAL NOTES:

USE CLASS "B" CONCRETE THROUGHOUT.

PROVIDE ALL DROP INLETS OVER 3'-6" IN DEPTH WITH STEPS 12" ON CENTER. USE STEPS WHICH COMPLY WITH STD. DRAWING 840.66.

OPTIONAL CONSTRUCTION - MONOLITHIC POUR 2" KEYWAY OR #4 BAR DOWELS AT 12" CENTERS AS DIRECTED BY THE ENGINEER.

USE FORMS FOR THE CONSTRUCTION OF THE BOTTOM SLAB.

IF REINFORCED CONCRETE PIPE IS SET IN BOTTOM SLAB OF BOX, ADD TO SLAB AS SHOWN ON STD. NO. 840.00.

CONSTRUCT WITH PIPE CROWNS MATCHING.

SEE STANDARD DRAWING 840.25 FOR ATTACHMENT OF FRAMES AND GRATES NOT SHOWN.

INSTALL 2" WEEPHOLES AS DIRECTED BY THE ENGINEER.

INSTALL STONE DRAINS, OF A MINIMUM OF 1 CUBIC FOOT OF NO. 78M STONE IN A POROUS FABRIC BAG OR WRAP, AT EACH WEEP HOLE OR AS DIRECTED BY THE ENGINEER.

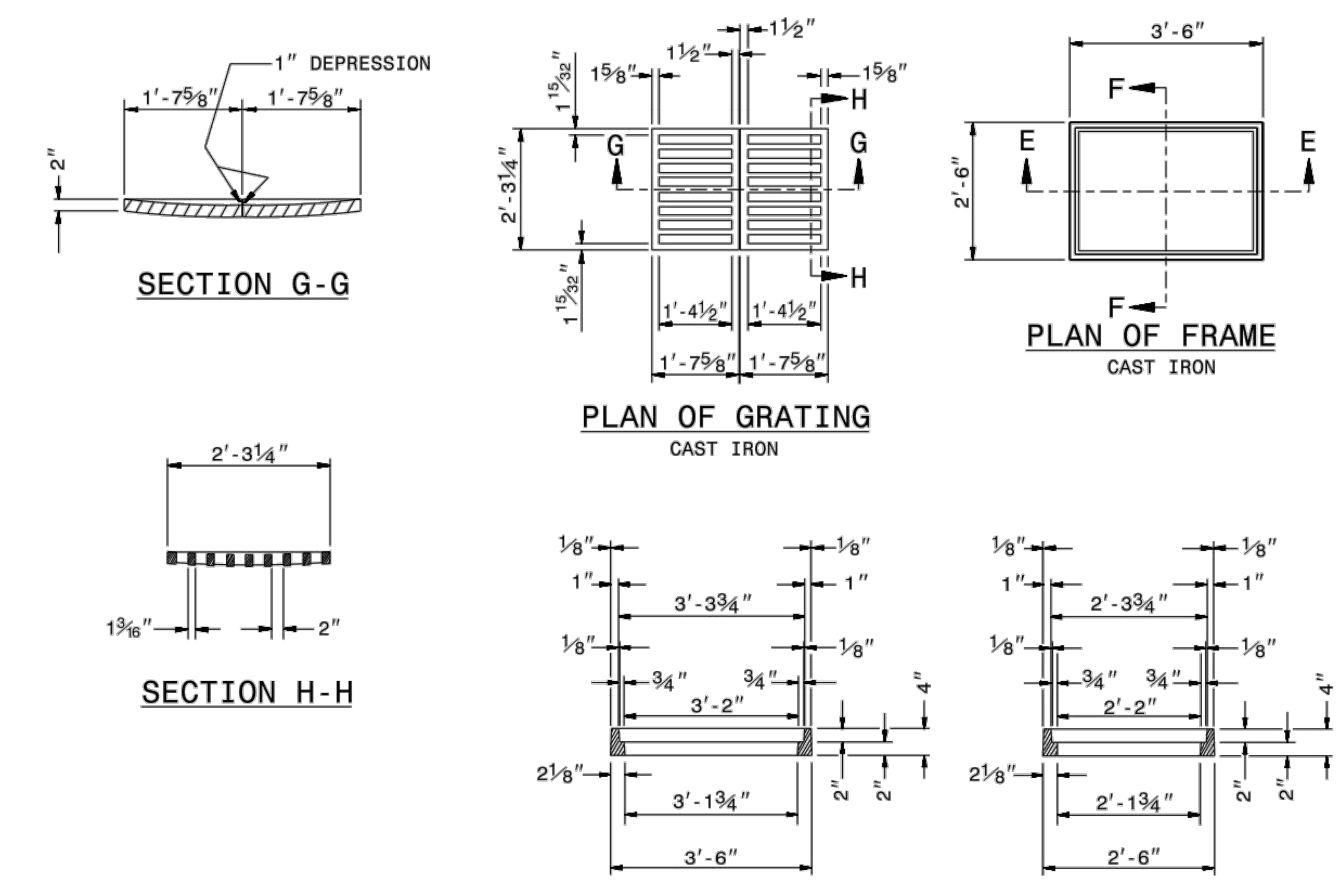
CHAMFER ALL EXPOSED CORNERS 1".

DRAWING NOT TO SCALE.

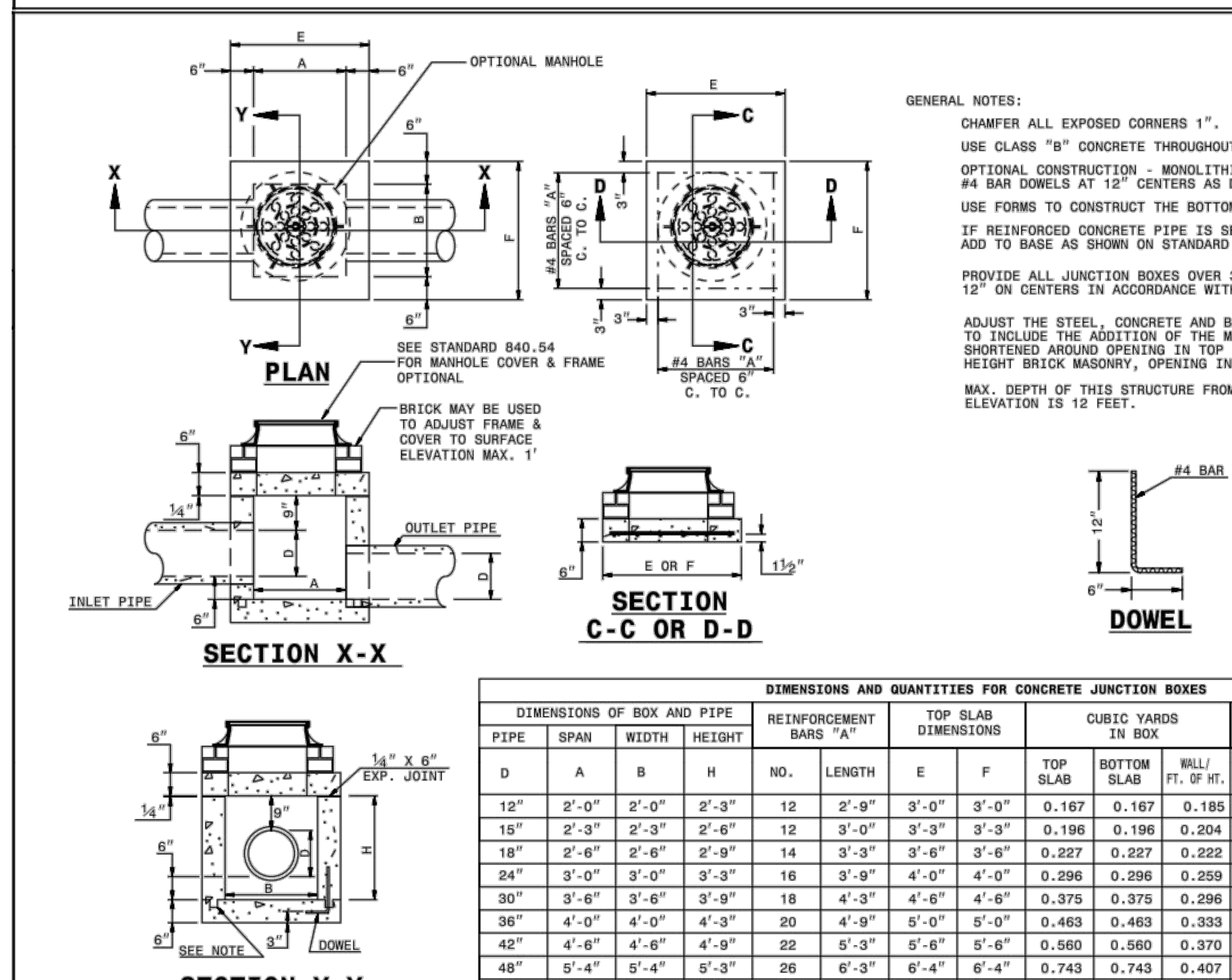
DIMENSIONS AND QUANTITIES FOR DROP INLET(BASED ON MIN. HEIGHT, H)

DIMENSIONS OF BOX & PIPE: PIPE D	SPAN A	WIDTH B	MIN. HEIGHT H	CUBIC YARDS CONC. IN BOX: BOTTOM SLAB	WALL PER FT. HT.	TOTAL CONCRETE FOR MINIMUM HEIGHT, H	DEDUCTIONS FOR ONE PIPE: C.M.	R.C.
12"	3'-0"	2'-0"	2'-0"	0.222	0.222	0.592	0.015	0.026
15"			2'-3"			0.648	0.023	0.036
18"			2'-6"			0.703	0.033	0.049
24"			3'-0"			0.814	0.059	0.085
30"	3'-0"	2'-0"	3'-6"	0.222	0.222	0.925	0.092	0.127

STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.
1-18
ROADWAY STANDARD DRAWING FOR **CONCRETE DROP INLET** 12" THRU 30" PIPE
SHEET 1 OF 1
840.14



STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.
1-18
ROADWAY STANDARD DRAWING FOR **DROP INLET FRAME AND GRATES** FOR USE WITH STD. DWG.S 840.14 AND 840.15
SHEET 1 OF 1
840.16



GENERAL NOTES:

CHAMFER ALL EXPOSED CORNERS 1".

USE CLASS "B" CONCRETE THROUGHOUT.

OPTIONAL CONSTRUCTION - MONOLITHIC POUR, 2" KEYWAY, OR #4 BAR DOWELS AT 12" CENTERS AS DIRECTED BY THE ENGINEER.

USE FORMS TO CONSTRUCT THE BOTTOM SLAB.

IF REINFORCED CONCRETE PIPE IS SET IN BASE SLAB OF BOX, ADD TO BASE AS SHOWN ON STANDARD NO. 840.00.

PROVIDE ALL JUNCTION BOXES OVER 3'-6" IN DEPTH WITH STEPS 12" ON CENTERS IN ACCORDANCE WITH STD. NO. 840.66.

ADJUST THE STEEL, CONCRETE AND BRICK MASONRY QUANTITIES TO INCLUDE THE ADDITION OF THE MANHOLE (I.E. DIAGONAL BARS SHORTENED AROUND OPENING IN TOP SLAB, ADDITIONAL VARIABLE HEIGHT BRICK MASONRY, OPENING IN TOP SLAB.)

MAX. DEPTH OF THIS STRUCTURE FROM TOP OF BOTTOM SLAB TO TOP ELEVATION IS 12 FEET.

DIMENSIONS AND QUANTITIES FOR CONCRETE JUNCTION BOXES

DIMENSIONS OF BOX AND PIPE: PIPE D	SPAN A	WIDTH B	HEIGHT H	REINFORCEMENT BARS "A": NO.	LENGTH	TOP SLAB DIMENSIONS: E	F	CUBIC YARDS IN BOX: TOP SLAB	BOTTOM SLAB	WALL/FT. OF HT.	TOTAL QUANTITIES BOX AND SLABS: LBS. REINF	CU. YDS. MIN. "H"	DEDUCTIONS FOR ONE PIPE CU.YDS.: C.S.	R.C.
12"	2'-0"	2'-0"	2'-3"	12	2'-9"	3'-0"	3'-0"	0.167	0.167	0.185	22	0.750	0.015	0.024
15"	2'-3"	2'-3"	2'-6"	12	3'-0"	3'-3"	3'-3"	0.196	0.196	0.204	24	0.902	0.023	0.036
18"	2'-6"	2'-6"	2'-9"	14	3'-3"	3'-6"	3'-6"	0.227	0.227	0.222	30	1.065	0.033	0.049
24"	3'-0"	3'-0"	3'-3"	16	3'-9"	4'-0"	4'-0"	0.296	0.296	0.259	40	1.434	0.059	0.085
30"	3'-6"	3'-6"	3'-9"	18	4'-3"	4'-6"	4'-6"	0.375	0.375	0.296	51	1.860	0.092	0.127
36"	4'-0"	4'-0"	4'-3"	20	4'-9"	5'-0"	5'-0"	0.463	0.463	0.333	64	2.341	0.132	0.178
42"	4'-6"	4'-6"	4'-9"	22	5'-3"	5'-6"	5'-6"	0.560	0.560	0.370	77	2.878	0.180	0.243
48"	5'-4"	5'-4"	5'-3"	26	6'-3"	6'-4"	6'-4"	0.743	0.743	0.407	111	3.623	0.235	0.317
54"	5'-10"	5'-10"	5'-9"	28	6'-7"	6'-10"	6'-10"	0.865	0.865	0.444	126	4.283	0.297	0.401
60"	6'-6"	6'-6"	6'-3"	30	7'-3"	7'-6"	7'-6"	1.042	1.042	0.481	145	5.090	0.367	0.495
66"	7'-1"	7'-1"	6'-9"	32	7'-10"	8'-1"	8'-1"	1.210	1.210	0.518	169	5.917	0.444	0.589

STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.
1-18
ROADWAY STANDARD DRAWING FOR **CONCRETE JUNCTION BOX** (WITH OPTIONAL MANHOLE) 12" THRU 66" PIPE
SHEET 1 OF 1
840.31

90% PLANS -NOT RELEASED FOR CONSTRUCTION

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919-996-4798
CONTACT:
DAVID BENDER, PROJECT MANAGER

REVISIONS
NO. DATE

GREENWAY ENGINEER HYDRAULICS ENGINEER

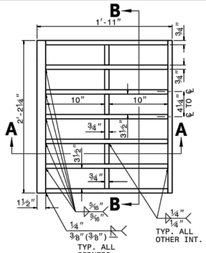
PRELIMINARY NOT FOR CONSTRUCTION
PRELIMINARY NOT FOR CONSTRUCTION

TRENTON ROAD CONNECTOR
TRENTON PARK LANE TO REEDY CREEK RD

DETAILS

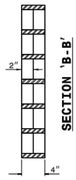
PLAN INFORMATION
PROJECT NO. 2020110233
FILENAME 2020110233_D2.dwg
CHECKED BY GDB
DRAWN BY JP, ED
SCALE NTS
DATE 03/15/2022

2B-4



PLAN VIEW

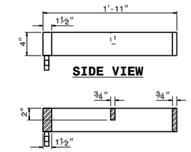
END VIEW



SECTION 'B-B'

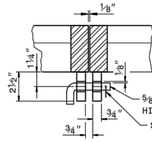
NOTES:

1. HOT DIP GALVANIZE FRAME AND GRATE IN ACCORDANCE WITH ASTM DESIGNATION A-123 AND AASHTO M-111.
2. GRATE IS DESIGNED TO WITHSTAND HS25-44 LOADING .
3. TWO (2) GRATES REQUIRED PER FRAME. ONE (1) GRATE DEPICTED FOR CLARITY.
4. PROVIDE STEEL CONFORMING TO THE REQUIREMENTS OF A.S.T.M. DESIGNATION A-36.
5. WELD IN ACCORDANCE WITH THE ANSI/AASHTO/AWS D1.5 WELDING CODE. SEAL WELD ALL CONNECTIONS ALONG TOP AND BOTTOM HORIZONTAL SEAMS OF CONNECTIONS IN ADDITION TO ANY REQUIRED STRUCTURAL WELDS.
6. USE 5/16" DOUBLE FILLET WELDS FOR CONNECTING MAIN BARS TO EDGE BARS AND 1/4" FILLETS AT ALL THER LOCATIONS.
7. NOTCHING OF BEARING BARS TO ACCEPT CROSS BAR IS PROHIBITED.



SIDE VIEW

SECTION 'A-A'



DETAIL 'B' CENTER LOCK

STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.

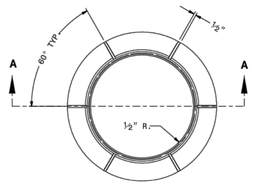
1-18

ROADWAY STANDARD DRAWING FOR

STEEL GRATE AND FRAME

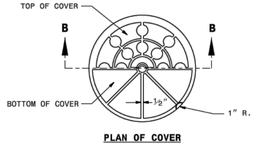
SHEET 2 OF 2

840.37

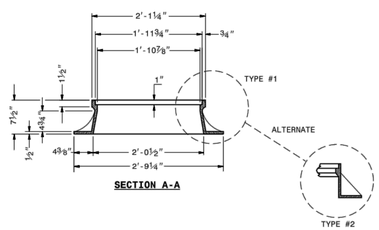


PLAN OF FRAME

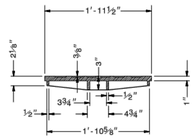
SOLID COVER SHOWN PERFORATED. PERFORATED AVAILABLE IF SPECIFIED.
STATE USE OF SYSTEM ON COVER
(I.E.: SEWER, STORM DRAIN, ELECTRICAL)



PLAN OF COVER



SECTION A-A



SECTION B-B

MINIMUM WEIGHTS - LBS.
FRAME - 180
COVER - 120
TOTAL - 300

STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.

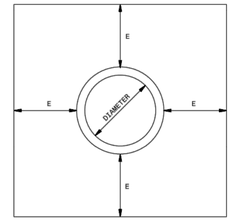
1-18

ROADWAY STANDARD DRAWING FOR

MANHOLE FRAME AND COVER

SHEET 1 OF 1

840.54



ELEVATION

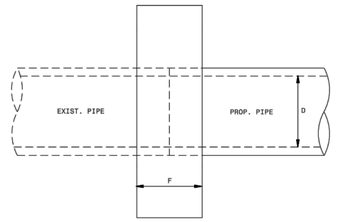
GENERAL NOTES:

USE PIPE COLLAR FOR EXTENDING EXISTING CONCRETE PIPE CULVERTS AT LOCATIONS SHOWN ON PLANS OR AS DIRECTED BY THE ENGINEER. THIS INCLUDES EXTENDING EXISTING PIPES WITH PIPES OF DIFFERENT MATERIALS.

CONSTRUCT THE PIPE COLLAR WITH CLASS "B" OR BETTER CONCRETE.

OBSERVE ALL REQUIREMENTS OF SECTION 840 OF THE STANDARD SPECIFICATIONS.

* USE 12 INCH DIAMETER VALUES FOR PIPE DIAMETERS LESS THAN 12 INCH.



SIDE ELEVATION

D	E	F	CU. YD.
12"	12"	12"	0.3528
15"	12"	12"	0.3990
18"	12"	12"	0.4465
24"	12"	12"	0.5526
30"	12"	12"	0.6560
36"	12"	12"	0.7640
42"	12"	12"	0.8856
48"	12"	12"	1.0126
54"	18"	18"	2.5793
60"	18"	18"	2.8506
66"	18"	18"	3.1307
72"	18"	18"	3.4176

STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.

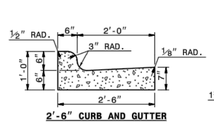
1-18

ROADWAY STANDARD DRAWING FOR

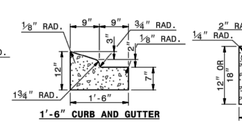
PIPE COLLAR

SHEET 1 OF 1

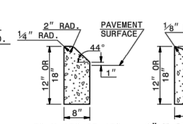
840.72



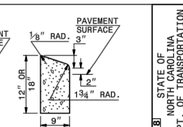
2'-6" CURB AND GUTTER



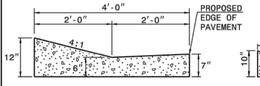
1'-6" CURB AND GUTTER



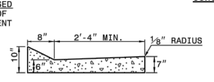
8" X 12" OR 18" CONCRETE CURB



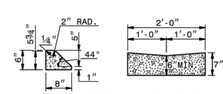
9" X 12" OR 18" CONCRETE CURB



EXPRESSWAY GUTTER



SHOULDER BERM GUTTER

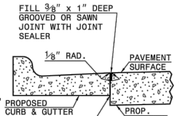


8" X 6" MEDIAN CURB

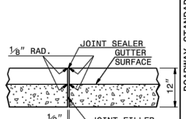
VALLEY GUTTER

SECTION VIEW OF CURBS OR CURBS AND GUTTERS

GENERAL NOTES:
-PLACE CONTRACTION JOINTS AT 10' INTERVALS, EXCEPT THAT A 15' SPACING MAY BE USED WHEN A MACHINE IS USED OR WHEN SATISFACTORY SUPPORT FOR THE FACE FORM CAN BE OBTAINED WITHOUT THE USE OF TEMPLATES AT 10' INTERVALS.
-JOINT SPACING MAY BE ALTERED IF REQUIRED BY THE ENGINEER.
-CONTRACTION JOINTS MAY BE INSTALLED WITH THE USE OF TEMPLATES OR FORMED BY OTHER APPROVED METHODS. CONSTRUCT NON-TEMPLATE FORMED JOINTS A MIN. OF 1 1/2" DEEP.
-FILL ALL CONSTRUCTION JOINTS, EXCEPT IN 8"x6" MEDIAN CURB, WITH JOINT FILLER AND SEALER.
-SPACE EXPANSION JOINTS AT 90' INTERVALS AND ADJACENT TO ALL RIGID OBJECTS.



LONGITUDINAL JOINT



TRANSVERSE EXPANSION JOINT IN CURB AND GUTTER

SECTION VIEW OF JOINTS

STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.

1-18

ROADWAY STANDARD DRAWING FOR

CONCRETE CURB, GUTTER AND CURB & GUTTER

SHEET 1 OF 3

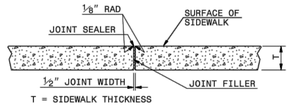
846.01

NOTES:

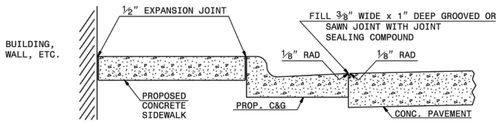
CONSTRUCT STANDARD SIDEWALK 5' WIDE AND 4" THICK UNLESS OTHERWISE DENOTED ON PLANS.

PLACE A GROOVE JOINT 1" DEEP WITH 1/8" RADII IN THE CONCRETE SIDEWALK AT 5' INTERVALS. ONE 1/2" EXPANSION JOINT WILL BE REQUIRED AT 50' INTERVALS. A 1/2" EXPANSION JOINT WILL BE REQUIRED WHERE THE SIDEWALK JOINS ANY RIGID STRUCTURE.

SEE STD. DWG. 848.05 FOR CURB RAMP LOCATION REQUIREMENTS AND CONSTRUCTION GUIDELINES.



TRANSVERSE EXPANSION JOINT IN SIDEWALK



DETAILS SHOWING JOINTS IN CONCRETE SIDEWALK

STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.

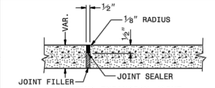
1-18

ROADWAY STANDARD DRAWING FOR

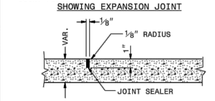
CONCRETE SIDEWALKS

SHEET 1 OF 1

848.01



SHOWING EXPANSION JOINT



SHOWING GROOVED JOINT

PARTIAL LONGITUDINAL SECTIONS OF PAVED ISLANDS

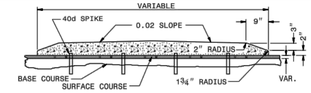
NOTE:
WHEN MONOLITHIC CONCRETE ISLAND IS ON TOP OF SURFACE COURSE, DRIVE 40d SPIKES INTO SURFACE UNDER MONOLITHIC CONCRETE ISLAND. STAGGER SPIKES ON 2' CENTERS EACH WAY.

IN THE CONCRETE PAVEMENT (ISLAND) AND CONCRETE ISLAND (MONOLITHIC) PLACE 1/2" EXPANSION JOINTS AT 30' INTERVALS AND GROOVED JOINTS 1" DEEP AT 10' INTERVALS BETWEEN EXPANSION JOINTS.

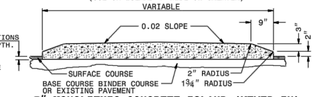
LINE UP THE JOINTS IN THE CONCRETE PAVEMENT (ISLAND) WITH THE JOINTS IN THE CURB OR CURB AND GUTTER. FILL AND SEAL THE TOP 1/2" OF THE EXPANSION JOINTS AND THE ENTIRE DEPTH OF GROOVED JOINTS WITH JOINT SEALER.

FOR JOINTS IN THE CURB AND/OR CURB AND GUTTER, SEE STANDARD NO. 846.01

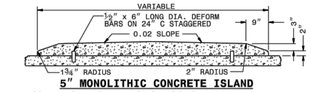
SEE TYPICAL SECTIONS FOR PAVEMENT DEPTH. KEY IN ON THE LAST LAYER OF PAVEMENT SURFACE COURSE



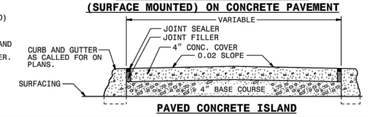
5" MONOLITHIC CONCRETE ISLAND (SURFACE MOUNTED) ON ASPHALT CONCRETE PAVEMENT
(USE ON ISLAND 4' WIDE OR GREATER)



5" MONOLITHIC CONCRETE ISLAND (KEYED IN) ON ASPHALT CONCRETE PAVEMENT
(USE ON ISLAND LESS THAN 4' WIDE)



5" MONOLITHIC CONCRETE ISLAND (SURFACE MOUNTED) ON CONCRETE PAVEMENT



PAVED CONCRETE ISLAND

STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.

1-18

ROADWAY STANDARD DRAWING FOR

CONCRETE ISLANDS

SHEET 1 OF 1

852.01

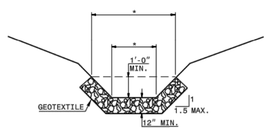
GENERAL NOTES:

-USE CLASS 'B' RIP RAP.

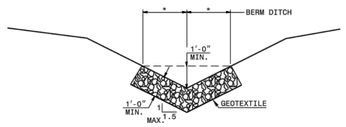
-CONSTRUCT WIDTH AND SHAPE OF THE DITCHES AS SHOWN OR DIRECTED BY THE ENGINEER.

-USE GEOTEXTILE UNDER CLASS 'B' RIP RAP IF SPECIFIED ON PLANS.

*AS SPECIFIED ON PLANS.



SIDE DRAINS, BASE DITCH OR OTHER OUTLET DITCHES



VEE DITCH

STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.

1-18

ROADWAY STANDARD DRAWING FOR

DRAINAGE DITCHES WITH CLASS 'B' RIP RAP

SHEET 1 OF 1

876.04

90% PLANS -NOT RELEASED FOR CONSTRUCTION

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222 W. HARGETT STREET
SUITE 600
RALEIGH, NC 27601
919-996-4798
CONTACT:
DAVID BENDER, PROJECT MANAGER

REVISIONS
NO. DATE

GREENWAY ENGINEER

PRELIMINARY NOT FOR CONSTRUCTION

HYDRAULICS ENGINEER

PRELIMINARY NOT FOR CONSTRUCTION

TRENTON ROAD CONNECTOR

TRENTON PARK LANE TO REEDY CREEK RD

DETAILS

PLAN INFORMATION

PROJECT NO.	2020110233
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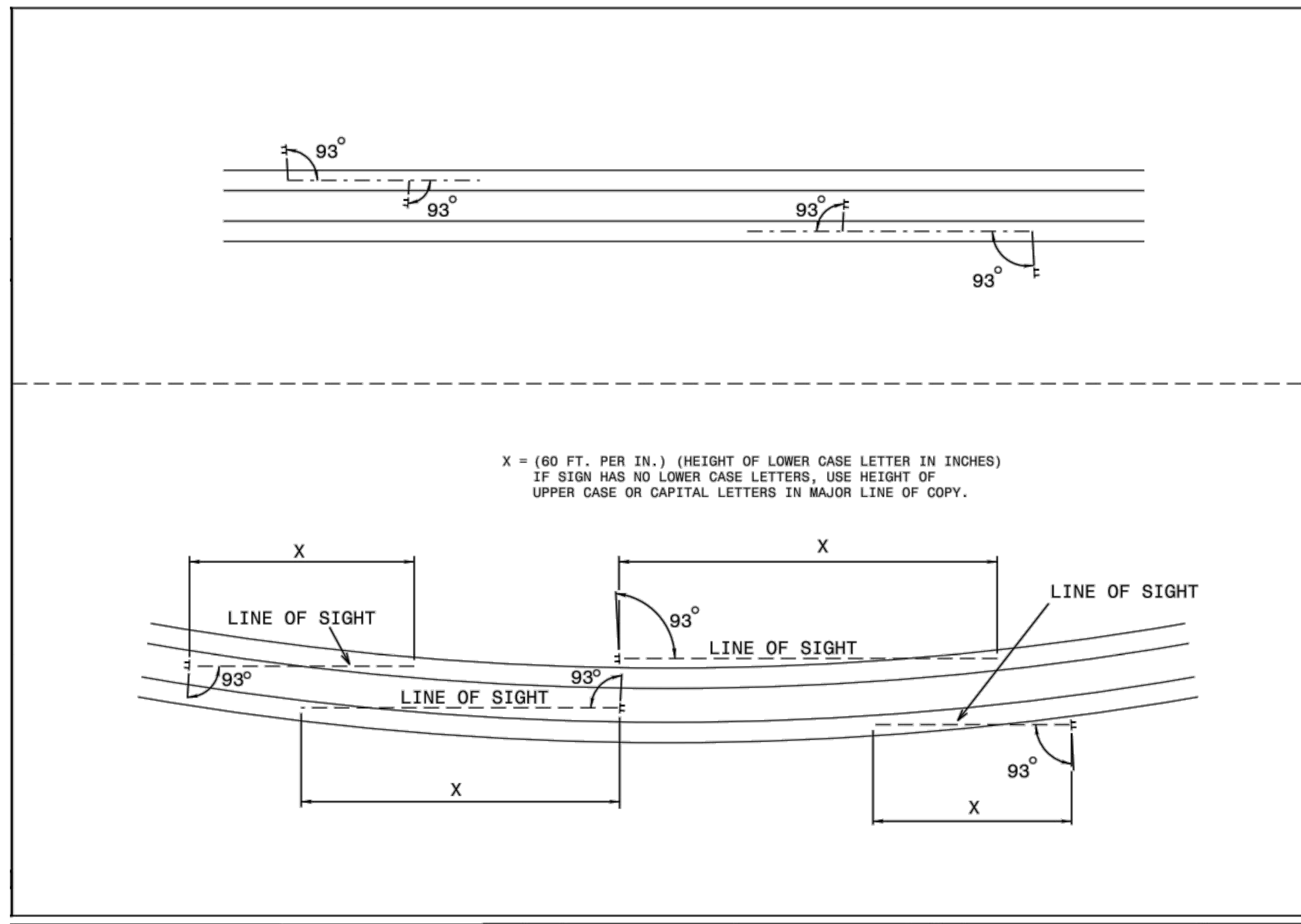
CHECKED BY	GDB
DRAWN BY	JP, ED
SCALE	NTS
DATE	03/15/2022

2B-5



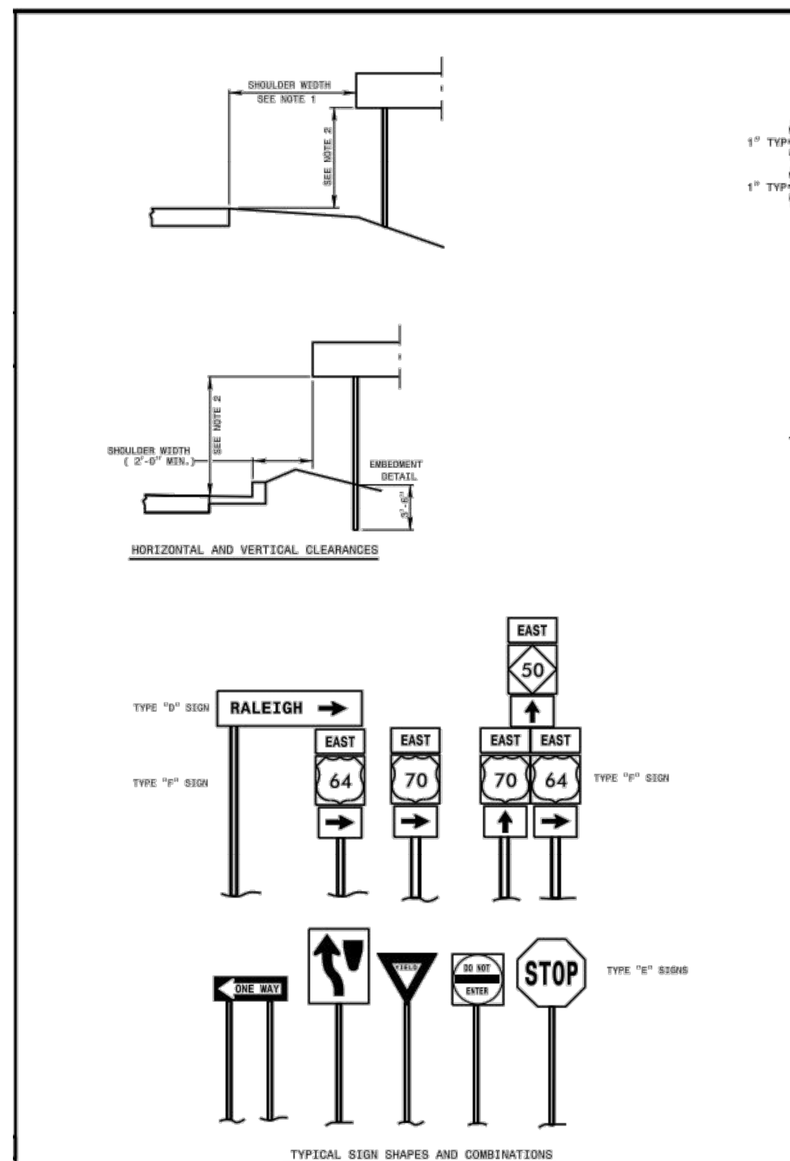
STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.

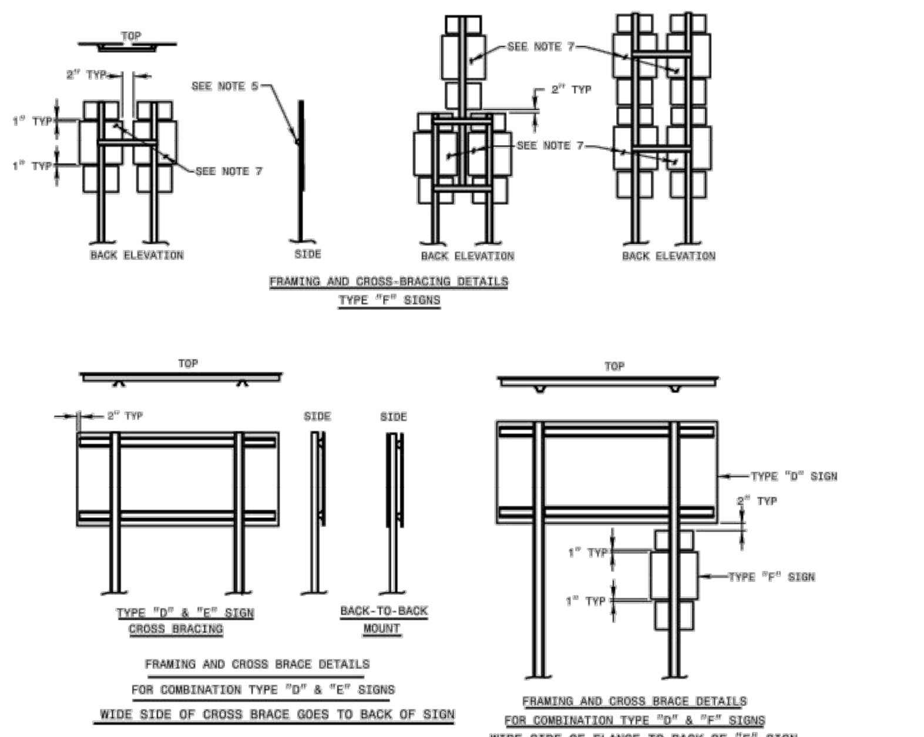
1-18

ROADWAY STANDARD DRAWING FOR **ORIENTATION OF GROUND MOUNTED SIGNS**

SHEET 1 OF 1

904.10





NOTES:

1. ERECT TYPE "D", "E", AND "F" SIGNS ON FREEWAYS WITH THE NEAR EDGE OF THE SIGN 20 FT. FROM THE TRAVEL LANE. ERECT ALL OTHER "D", "E", AND "F" SIGNS WITH THE NEAR EDGE OF THE SIGN AT THE EDGE OF THE SHOULDER BREAK (6 FT. MINIMUM CLEARANCE, 12 FT. DESIRABLE, FROM THE EDGE OF TRAVEL LANE), OR AS DIMENSIONED ON PLAN SHEETS.
2. ERECT TYPE "D", "E", AND "F" SIGNS WITH THE BOTTOM OF SIGN ASSEMBLY AT LEAST 7 FT. ABOVE THE EDGE OF THE TRAVEL LANE ON ROADS WITH 2 OR MORE LANES AND AT LEAST 5 FT. ON OTHER ROUTES. THE VERTICAL CLEARANCE IS 7 FT. WHERE REQUIRED FOR PEDESTRIAN TRAFFIC AND/OR PARKED VEHICLES.
3. THE VERTICAL DIMENSION BETWEEN MOUNTING HOLE CENTERS ON ALL TYPES "D", "E", AND "F" SIGNS IS 30" MAXIMUM. THE VERTICAL AND HORIZONTAL DIMENSIONS BETWEEN MOUNTING HOLES IS TO THE WHOLE INCH. EACH SIGN PANEL HAS A MINIMUM OF 2 BOLTS PER SUPPORT.
4. ATTACH SIGN W/ 5/16" HEX HEAD BOLT, NYLON WASHER, SHIM, FLAT WASHER, LOCK WASHER, HEX NUT NO BUCKLING OF THE SIGN WILL BE PERMITTED. SEE ASSEMBLY DETAIL SHEET# 2 OF 904.50.
5. FURNISH AND INSTALL CROSS-BRACING AS SHOWN IN DETAIL. PAINT ENDS OF CROSS BRACES W/ APPROVED. ZINC PAINT
6. INSTALL POST AND CROSS-BRACING WITH THE WIDE SIDE OF THE FLANGE TOWARD THE BACK OF SIGN(S) FOR COMBINATION TYPE "D" AND "F" SIGNS.
7. THE SHIELD HEIGHTS IN THESE ASSEMBLIES CAN NOT BE LARGER THAN 24".
8. IF SIGN ASSEMBLIES REQUIRE MORE THAN TWO U-CHANNEL SUPPORTS, THE SUPPORTS SHALL BE PLACED A MINIMUM OF 4 FT. BETWEEN POSTS. NO MORE THAN TWO POSTS SHALL FALL WITHIN 7 FT. PATH, OR THE SIGN ASSEMBLY MUST BE PLACED BEHIND BARRIER PROTECTION.

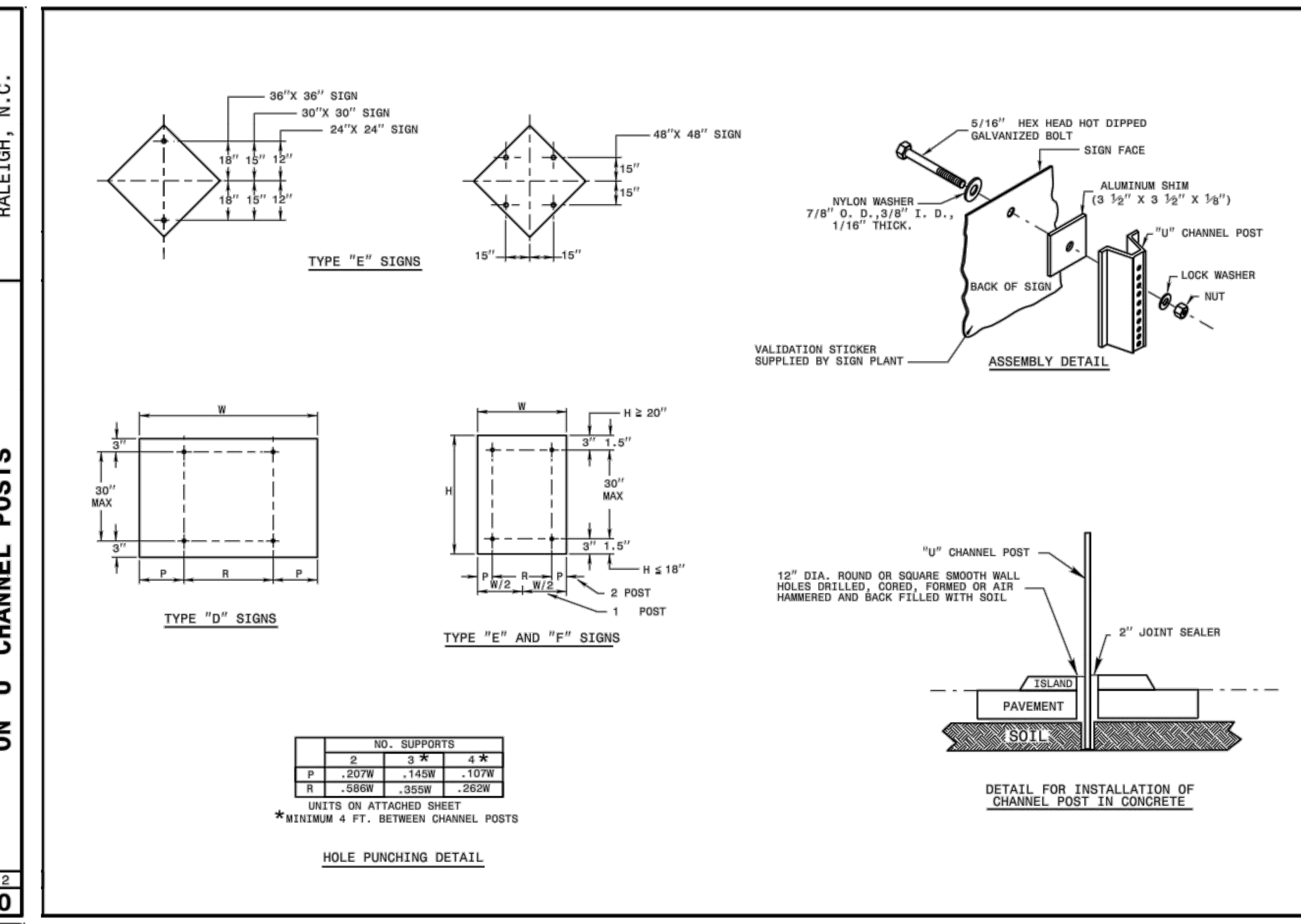
STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.

1-18

ENGLISH STANDARD DRAWING FOR **MOUNTING OF TYPE 'D', 'E' AND 'F' SIGNS ON 'U' CHANNEL POSTS**

SHEET 1 OF 2

904.50



	NO. SUPPORTS		
	2	3 *	4 *
P	.207W	.145W	.107W
R	.586W	.355W	.262W

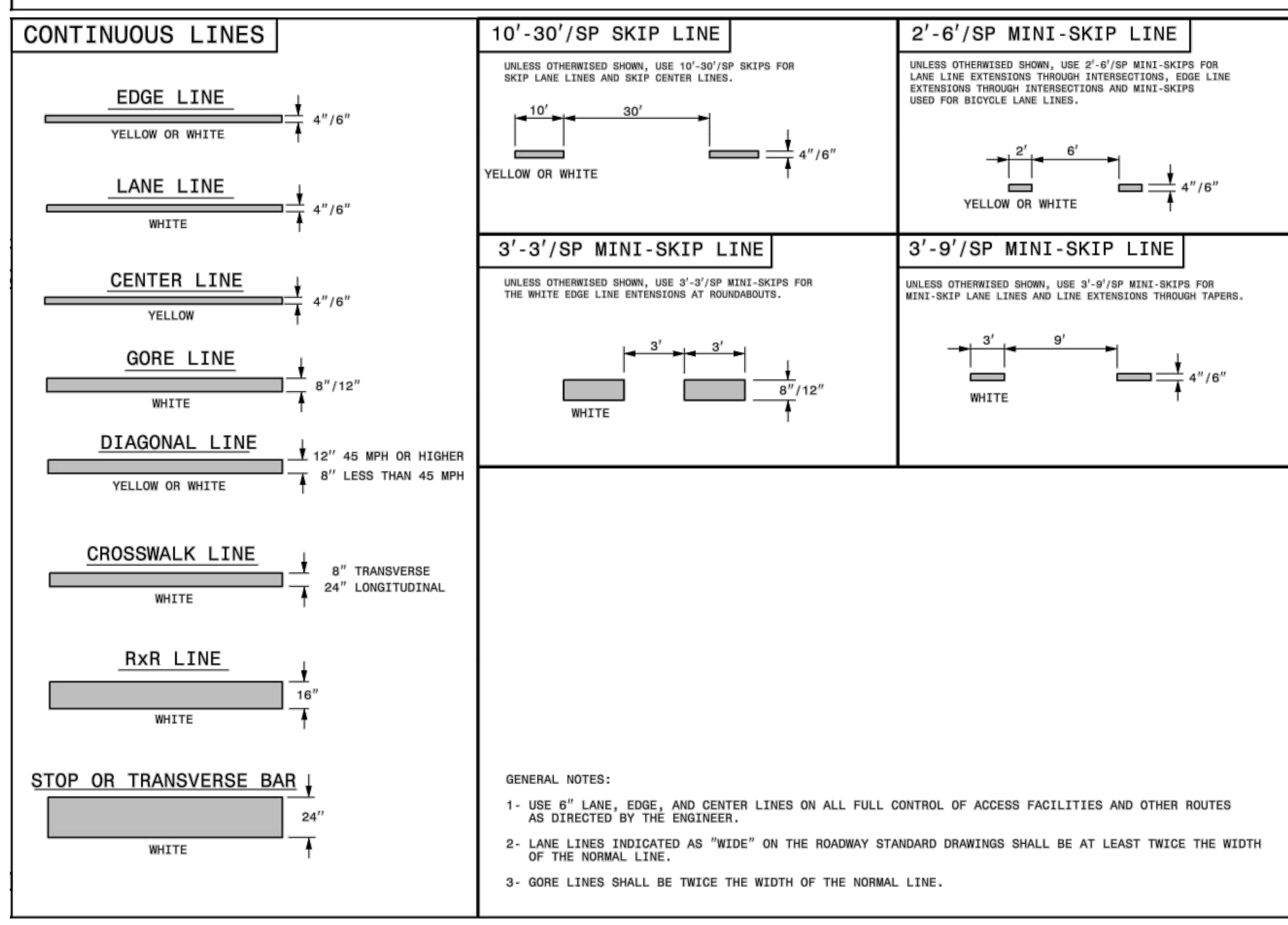
STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.

1-18

ENGLISH STANDARD DRAWING FOR **MOUNTING OF TYPE 'D', 'E' AND 'F' SIGNS ON 'U' CHANNEL POSTS**

SHEET 2 OF 2

904.50



GENERAL NOTES:

1- USE 6" LANE, EDGE, AND CENTER LINES ON ALL FULL CONTROL OF ACCESS FACILITIES AND OTHER ROUTES AS DIRECTED BY THE ENGINEER.

2- LANE LINES INDICATED AS "WIDE" ON THE ROADWAY STANDARD DRAWINGS SHALL BE AT LEAST TWICE THE WIDTH OF THE NORMAL LINE.

3- GORE LINES SHALL BE TWICE THE WIDTH OF THE NORMAL LINE.

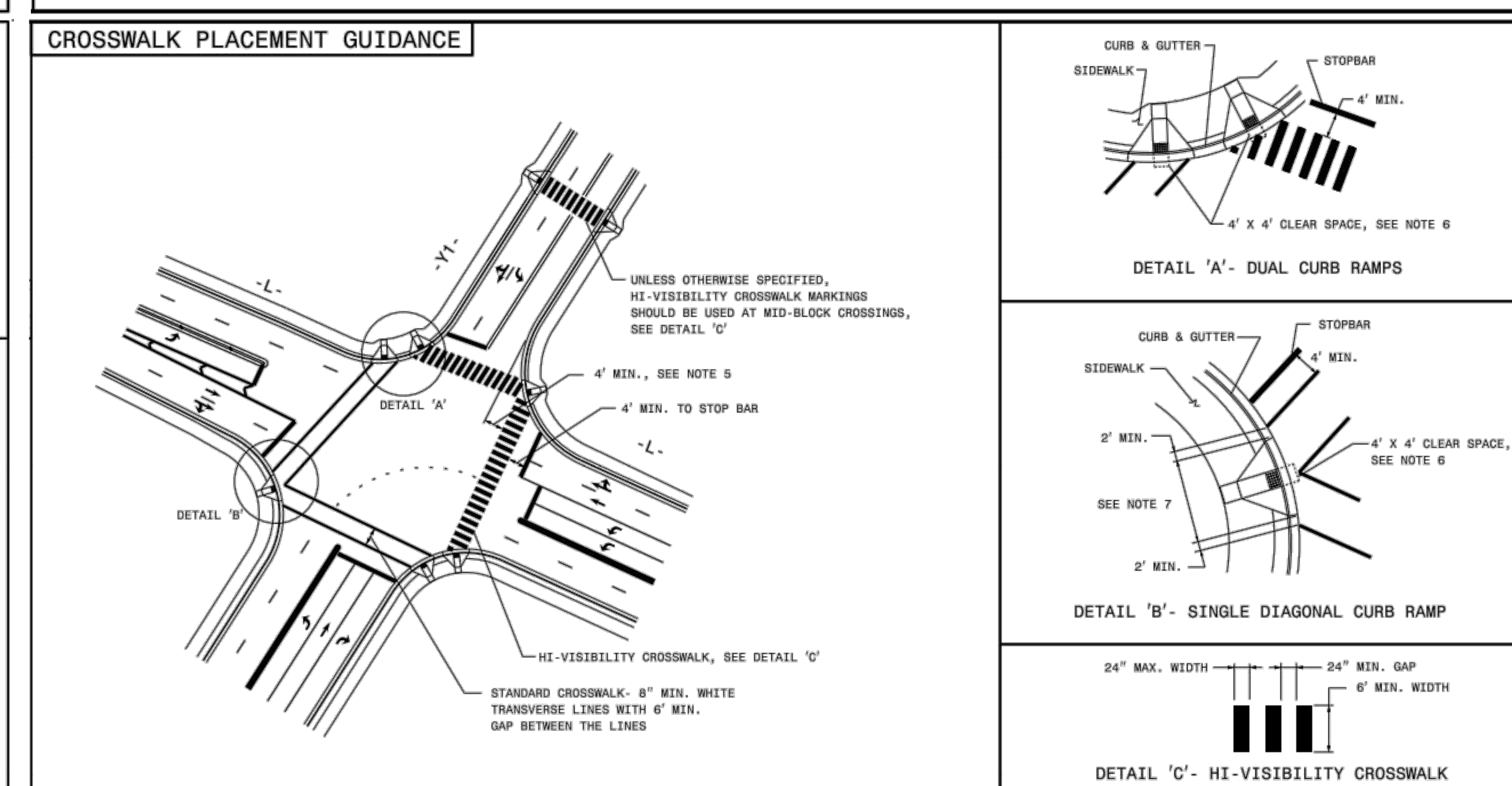
STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.

1-18

ROADWAY STANDARD DRAWING FOR **PAVEMENT MARKINGS** LINE TYPES AND OFFSETS

SHEET 1 OF 2

1205.01



GENERAL NOTES:

1- USE THE DETAILS ABOVE AND THE FOLLOWING NOTES FOR GUIDANCE IN PLACING CROSSWALK MARKINGS. REFER TO NCDOT ROADWAY STANDARD DRAWINGS, MUTCD AND ADA STANDARDS FOR ADDITIONAL GUIDANCE.

2- THE LOCATION AND TYPE OF CROSSWALK MARKINGS SHOWN ON THE ABOVE DETAILS ARE FOR REFERENCE ONLY. LOCATE CROSSWALK MARKINGS AS SHOWN ON THE PROJECT DETAIL SHEETS OR AS DIRECTED BY THE ENGINEER. THE CROSSWALK MARKING TYPE, STANDARD OR HI-VISIBILITY, SHALL BE INSTALLED AS SPECIFIED ON THE PROJECT DETAIL SHEETS OR AS DIRECTED BY THE ENGINEER.

3- THE STANDARD CROSSWALK IS TWO WHITE 8" MIN. TRANSVERSE LINES WITH A 6' MIN. GAP BETWEEN THE LINES. THE HI-VISIBILITY CROSSWALK IS WHITE 24" MAX. WIDE LONGITUDINAL LINES WITH 24" MIN. GAPS BETWEEN LINES, SEE DETAIL 'C'. HI-VISIBILITY CROSSWALKS SHOULD BE A MINIMUM OF 6' WIDE. CURB RAMPS SHALL BE WHOLLY CONTAINED WITHIN THE MARKINGS, EXCLUDING ANY FLARES.

4- STOP BARS SHOULD BE PLACED A 4' MIN. IN ADVANCE OF NEAREST CROSSWALK LINE.

5- SET BACK DISTANCE FROM INSIDE CROSSWALK MARKING TO NEAREST EDGE OF TRAVEL IS 4' MIN.

6- BEYOND THE BOTTOM GRADE BREAK, A CLEAR SPACE OF 4' X 4' MIN. SHALL BE PROVIDED WITHIN THE MARKINGS.

7- SINGLE DIAGONAL CURB RAMPS WITH FLARED SIDES SHALL HAVE A SEGMENT OF CURB 2' MIN. LONG LOCATED ON EACH SIDE OF THE CURB RAMP AND WITHIN THE MARKED CROSSING, SEE DETAIL 'B'.

8- CURB RAMPS SHALL BE CONSTRUCTED IN ACCORDANCE TO THE LATEST NCDOT ROADWAY STANDARD DRAWINGS. CURB RAMPS THROUGH MEDIAN ISLANDS, SINGLE RAMPS AT DUAL CROSSWALKS OR LIMITED R/W SITUATIONS, WILL BE HANDLED BY SPECIAL DETAILS. CONTACT THE CONTRACT STANDARDS AND DEVELOPMENT UNIT FOR DETAILS OR A SPECIAL DESIGN.

STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.

1-18

ROADWAY STANDARD DRAWING FOR **PAVEMENT MARKINGS** PEDESTRIAN CROSSWALKS

SHEET 1 OF 1

1205.07

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CONTACT:
DAVID BENDER, PROJECT MANAGER

REVISIONS
NO. DATE

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HYDRAULICS ENGINEER
PRELIMINARY NOT FOR CONSTRUCTION

TRENTON ROAD CONNECTOR
TRENTON PARK LANE TO REEDY CREEK RD

DETAILS

PLAN INFORMATION
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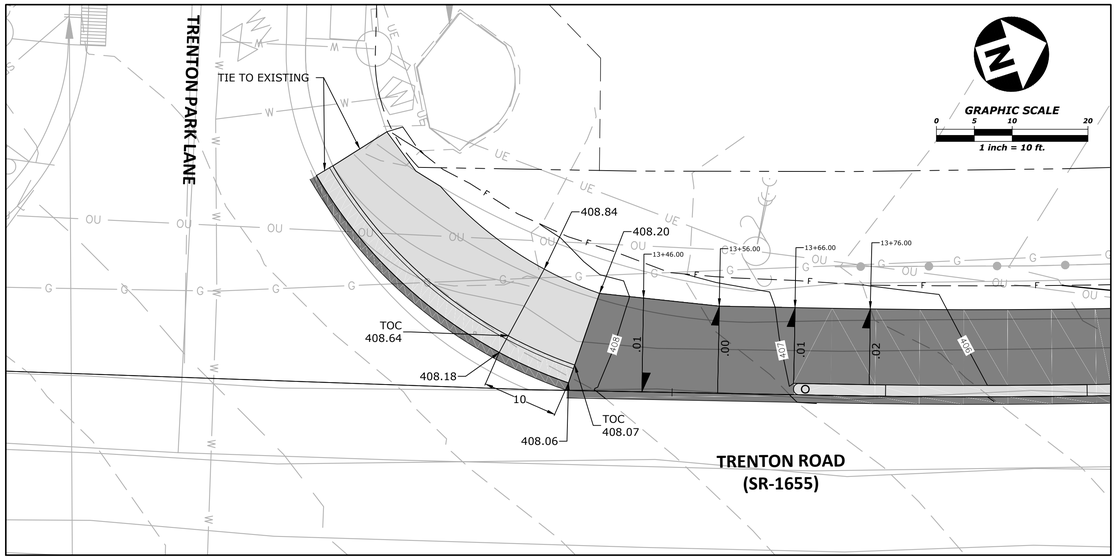
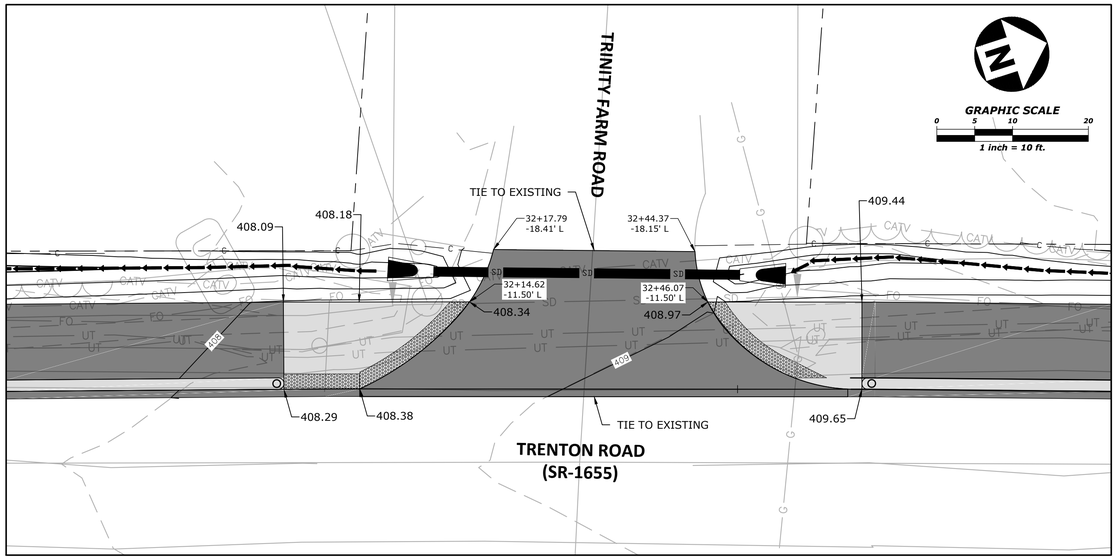
FILENAME 2020110233_D2.dwg
CHECKED BY GDB
DRAWN BY JP, ED
SCALE NTS
DATE 03/15/2022

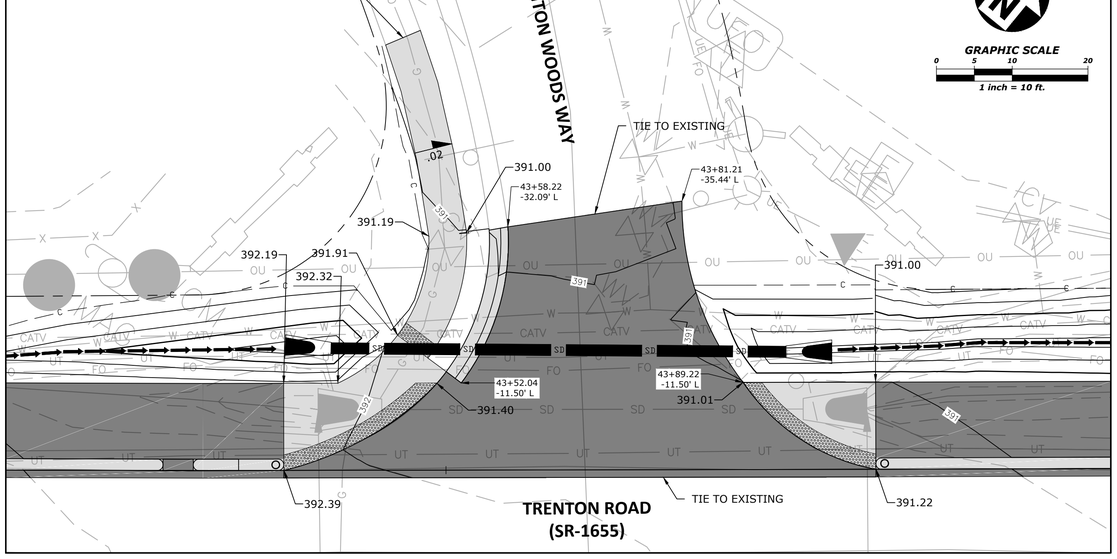
2B-6



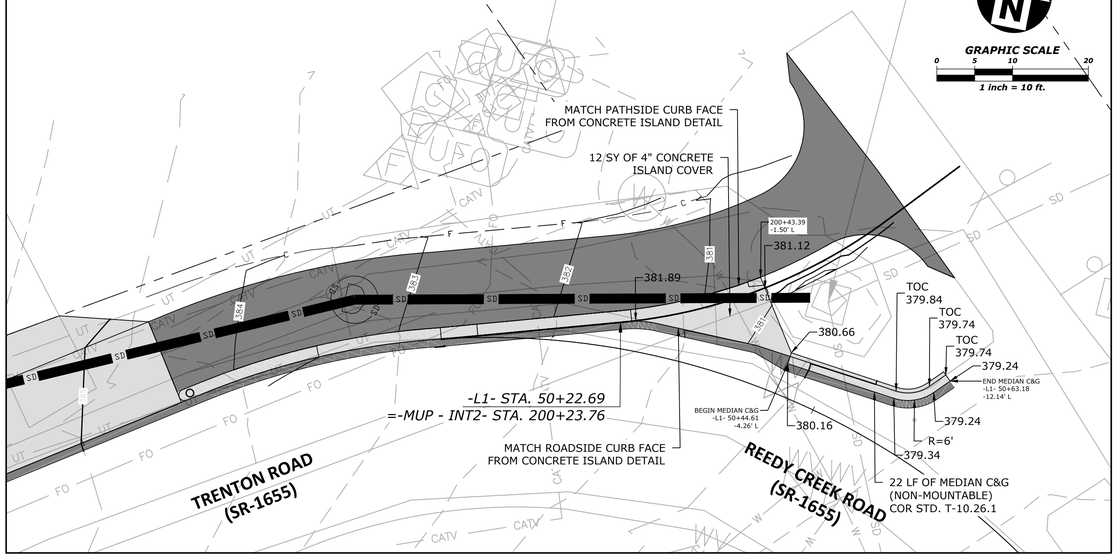
GRADING DETAIL #1



GRADING DETAIL #2



GRADING DETAIL #3



GRADING DETAIL #4

NOTES:
TOC = TOP OF CURB

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222 W. HARGETT STREET
SUITE 600
RALEIGH, NC 27601
919-996-4798
CONTACT:
DAVID BENDER, PROJECT MANAGER

REVISIONS
NO. DATE

GREENWAY ENGINEER

PRELIMINARY
NOT FOR CONSTRUCTION

HYDRAULICS ENGINEER

PRELIMINARY
NOT FOR CONSTRUCTION

TRENTON ROAD CONNECTOR

TRENTON PARK LANE TO REEDY CREEK RD

DETAILS

PLAN INFORMATION

PROJECT NO.	2020110233
FILENAME	2020110233_D2.dwg
CHECKED BY	GDB
DRAWN BY	JP, ED
SCALE	NTS
DATE	03/15/2022

2B-10

LIST OF PIPES, ENDWALLS, ETC. (FOR PIPES UNDER 48" & UNDER)

COMPUTED BY: JAP DATE: 01/12/2022
CHECKED BY: GDB DATE: 01/12/2022

Note: Invert Elevations indicated are for Bid Purposes only and shall not be used for project construction stakeout. See "Standard Specifications for Roads and Structures, Section 300-5".

STATION / SIZE / THICKNESS OR GAUGE	LOCATION (LT,RT, OR CL)	OFFSET	STRUCTURE NO. FROM	STRUCTURE NO. TO	TOP ELEVATION	INVERT ELEVATION	INVERT ELEVATION	SLOPE CRITICAL	DRAINAGE PIPE (RCP, CSP, CAAP, HDPE, or PVC) 12"	15"	18"	DO NOT USE RCP	DO NOT USE CSP	DO NOT USE CAAP	DO NOT USE HDPE	DO NOT USE PVC	CLASS III R.C PIPE 12"	15"	18"	24"	30"	36"	42"	48"	CLASS IV R.C. PIPE 12"	15"	18"	24"	30"	36"	42"	48"
-L1- 21+38	LT	15.5	0501			393.38	392.85																			36						
-L1- 22+98	LT	13.67	0503		391.8																											
			0503	0504		389.51	389.97											8														
-L1- 25+34	LT	15.2	0601			396.20	397.26																			88						
-L1- 28+50	LT	14.2	0603			400.80	401.20																			36						
-L1- 30+21	LT	16	0605			402.30	402.80																			36						
-L1-32+10	LT	15.5	0607		406.72																											
			0607	0608		405.47	405.97																			40						
-L1- 32+50	LT	15		0608	407.22																											
-L1- 35+90	LT	15	0701			403.19	401.25																			84						
-L1- 43+35	LT	16.1	0801		389.67																											
			0801	0802		388.17	387.76																				60					
-L1- 43+95	LT	15.5		0802	389.27																											
-L1- 45+24	LT	9.4	0803		389.4																											
			0803	0804		387.10	387.37											8														
-L1- 47+97	LT	14.5	0805			388.50	387.50																			36						
-L1- 49+27	LT	13.5	0901		385.17																											
			0901	0902		382.92	379.34											64														
-L1- 49+89	LT	6.5		0902	383.34																											
			0902	0903		379.34	375.40											60														
-L1- 50+46	LT	13.7		0903	EXIST																											
TOTALS									0	0	0	0	0	0	0	0	0	140	0	0	0	0	0	0	0	356	60	0	0	0	0	0

STATION	15" SIDE DRAIN PIPE	18" SIDE DRAIN PIPE	24" SIDE DRAIN PIPE	ENDWALLS STD. 838.01, STD. 838.11 OR STD. 838.80 (UNLESS NOTED OTHERWISE) CU. YDS. R.C.P.	C.S.P.	QUANTITIES FOR DRAINAGE STRUCTURES * TOTAL L.F. FOR PAY QUANTITY SHALL BE COL. 'A' + (1.3 X COL. 'B') PER EACH (0' THRU 5.0')	LIN. *FT. A 5.0' THRU 10.0'	B 10.0' AND ABOVE	C.B. STD. 840.01 OR STD. 840.02	FRAME, GRATES AND HOOD STANDARD 840.03 TYPE OF GRATE E	F	G		D.I STD. 840.14 OR STD. 840.15	D.I. FRAME & GRATE STD. 840.16	G.D.I. TYPE "A" STD. 840.14 OR 840.26	G.D.I. TYPE "B" STD. 840.18 OR 840.27	G.D.I. TYPE "D" STD. 840.19 OR 840.28	G.D.I. FRAME WITH GRATE STD. 840.22	G.D.I. FRAME WITH TWO GRATES STD. 840.22	G.D.I. (N.S.) FRAME WITH GRATE STD. 840.24	G.D.I. (N.S.) FRAME WITH TWO GRATES STD. 840.24	G.D.I. (N.S.) FRAME WITH TWO GRATES STD. 840.29	J.B. STD. 840.31 OR 840.32	MH. STD. 840.51,STD. 840.52, OR STD. 840.53	15" FLARED END SECTION (SEE DETAIL SHEET 2B-2)	18" FLARED END SECTION (SEE DETAIL SHEET 2B-2)		15" C.S. ELBOWS	CONC COLLARS CL. "B" C.Y. STD 840.72	BERM DRAINAGE OUTLET STD. 850.10	PIPE REMOVAL LIN. FT.	REMARKS
-L1- 21+38																																	
-L1- 22+98																														0.399			
-L1- 25+34																																	
-L1- 28+50																																	
-L1- 30+21																																	
-L1-32+10																										1							
-L1- 32+50																										1							
-L1- 35+90																																	
-L1- 43+35																											1						
-L1- 43+95																											1						
-L1- 45+24																														0.399			
-L1- 47+97																																	
-L1- 49+27						1								1	1																		
-L1- 49+89						1																		1	1								
-L1- 50+46																																	EXIST. DI
TOTALS	0	0	0	0	0	2	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1	1	2	2	0	0	0.798	0	0	

ABBREVIATIONS

- C.B CATCH BASIN
- N.D.I. NARROW DROP INLET
- D.I. DROP INLET
- G.D.I. GRATED DROP INLET
- G.D.I. (N.S.) GRATED DROP INLET (NARROW SLOT)
- J.B. JUNCTION BOX
- M.H. MANHOLE
- T.B.D.I. TRAFFIC BEARING DROP INLET
- T.B.J.B. TRAFFIC BEARING JUNCTION BOX

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TRENTON ROAD CONNECTOR
TRENTON PARK LANE TO REEDY CREEK RD

DRAINAGE SUMMARY

PLAN INFORMATION
PROJECT NO. 2020110233
FILENAME 2020110233_D3.dwg
CHECKED BY GDB
DRAWN BY JP, ED
SCALE NTS
DATE 03/15/2022

STATION	PARCEL ID	PARCEL OWNER	ADJACENT PROPERTY OWNER (PIN)	TREE SIZE	TREE TYPE
37+32	N/A	EXISTING R/W	KRAEMER (775-76-5208)	15"	OAK
38+84	N/A	EXISTING R/W	KRAEMER (775-76-5208)	18"	PINE
38+89	N/A	EXISTING R/W	KRAEMER (775-76-5208)	6"	SWEET GUM
39+02	N/A	EXISTING R/W	JANAS (775-76-6347)	2 X 15"	PINE (2)
39+12	N/A	EXISTING R/W	JANAS (775-76-6347)	15"	PINE
39+12	N/A	EXISTING R/W	JANAS (775-76-6347)	8"	CEDAR
39+20	N/A	EXISTING R/W	JANAS (775-76-6347)	15"	PINE
39+30	N/A	EXISTING R/W	JANAS (775-76-6347)	10"	CEDAR
41+80	N/A	EXISTING R/W	PORTER/BHADA (775-76-8543)	8"	OAK
42+14	N/A	EXISTING R/W	PORTER/BHADA (775-76-8543)	6"	OAK

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TREE REMOVAL SUMMARY

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FILENAME	2020110233_D3.dwg
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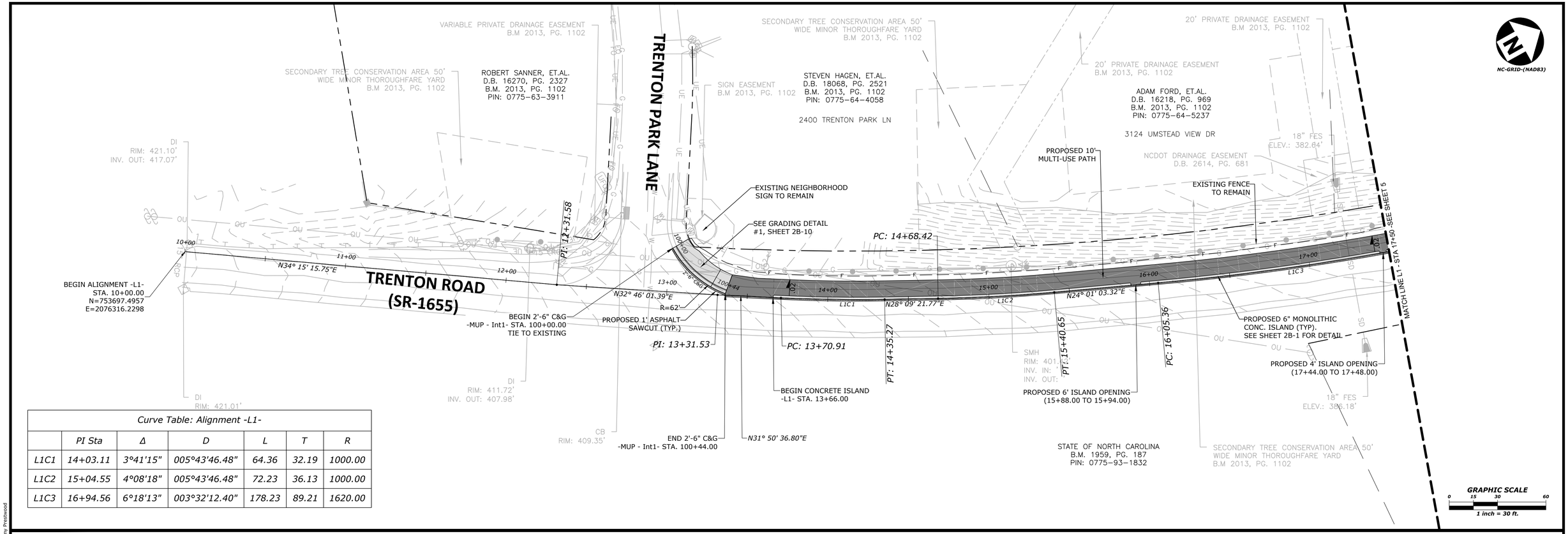
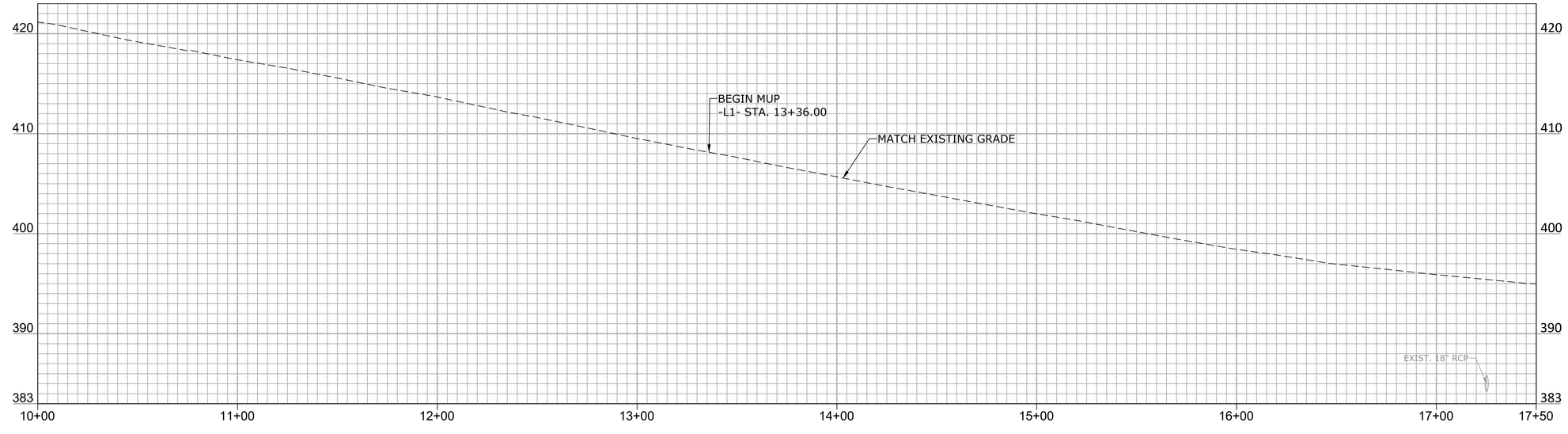
DRAWN BY	JP, ED
SCALE	NTS
DATE	03/15/2022

3T-1



Curve Table: Alignment -L1-						
	PI Sta	Δ	D	L	T	R
L1C1	14+03.11	3°41'15"	005°43'46.48"	64.36	32.19	1000.00
L1C2	15+04.55	4°08'18"	005°43'46.48"	72.23	36.13	1000.00
L1C3	16+94.56	6°18'13"	003°32'12.40"	178.23	89.21	1620.00

- L1 -



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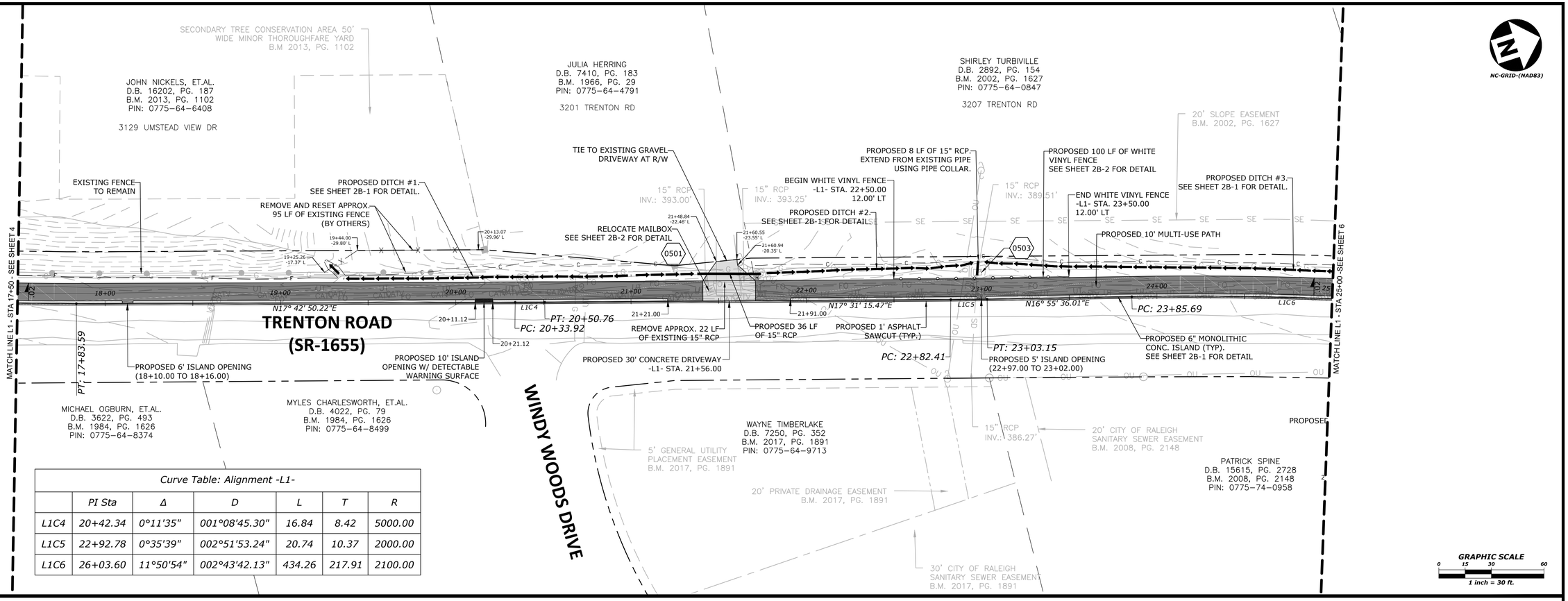
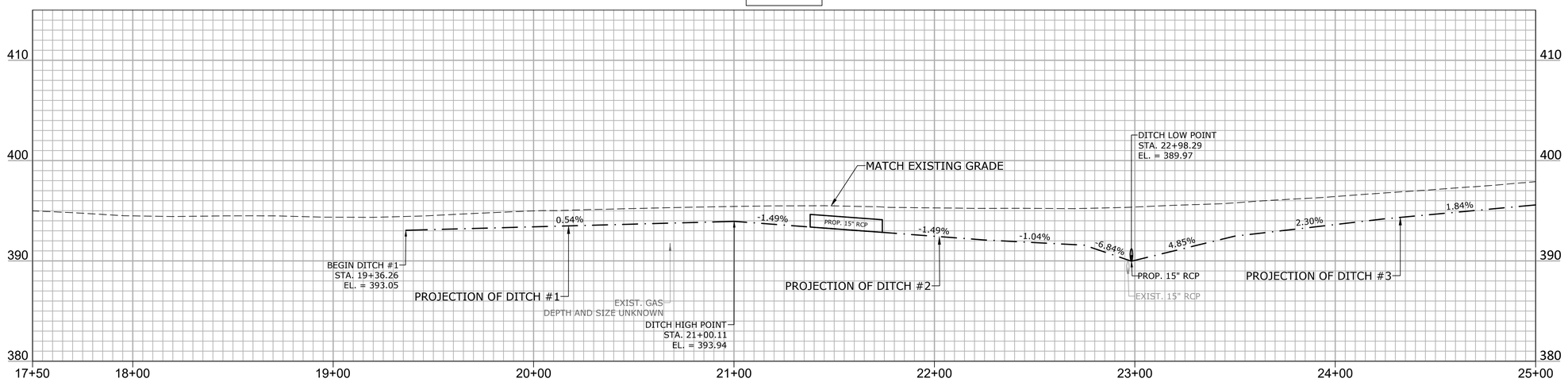
4



Curve Table: Alignment -L1-						
	PI Sta	Δ	D	L	T	R
L1C4	20+42.34	0°11'35"	001°08'45.30"	16.84	8.42	5000.00
L1C5	22+92.78	0°35'39"	002°51'53.24"	20.74	10.37	2000.00
L1C6	26+03.60	11°50'54"	002°43'42.13"	434.26	217.91	2100.00

- L1 -



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5

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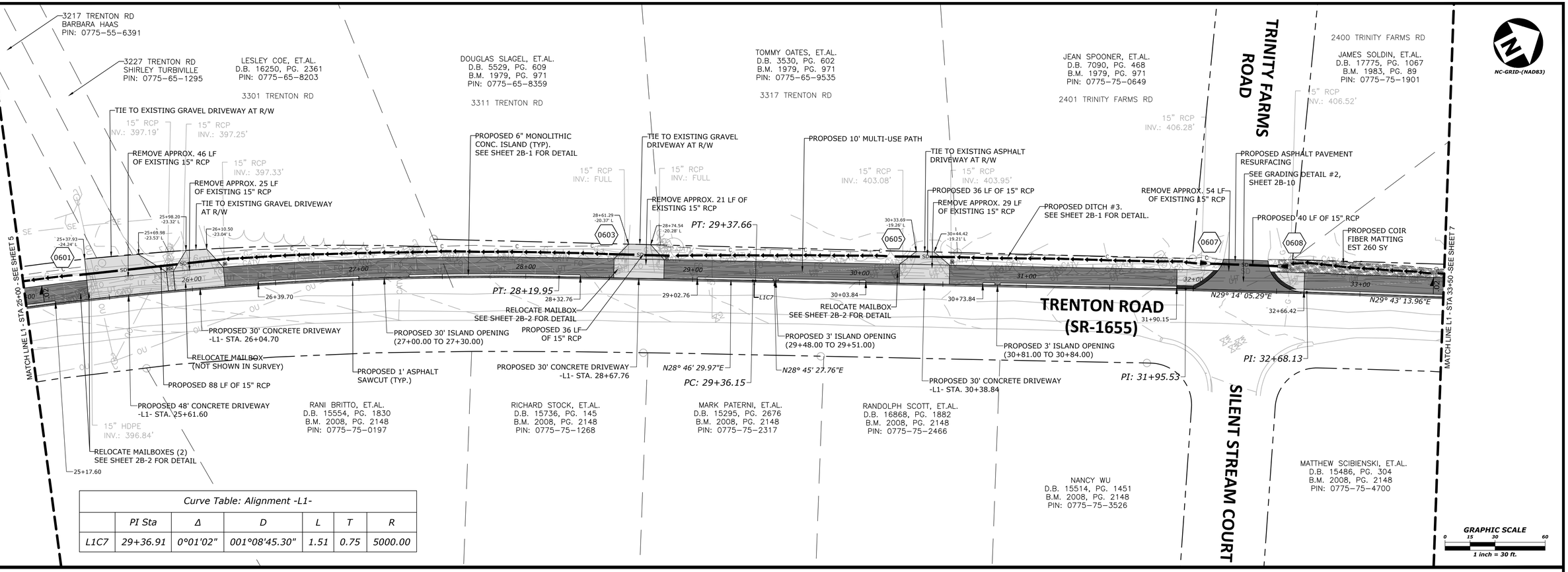
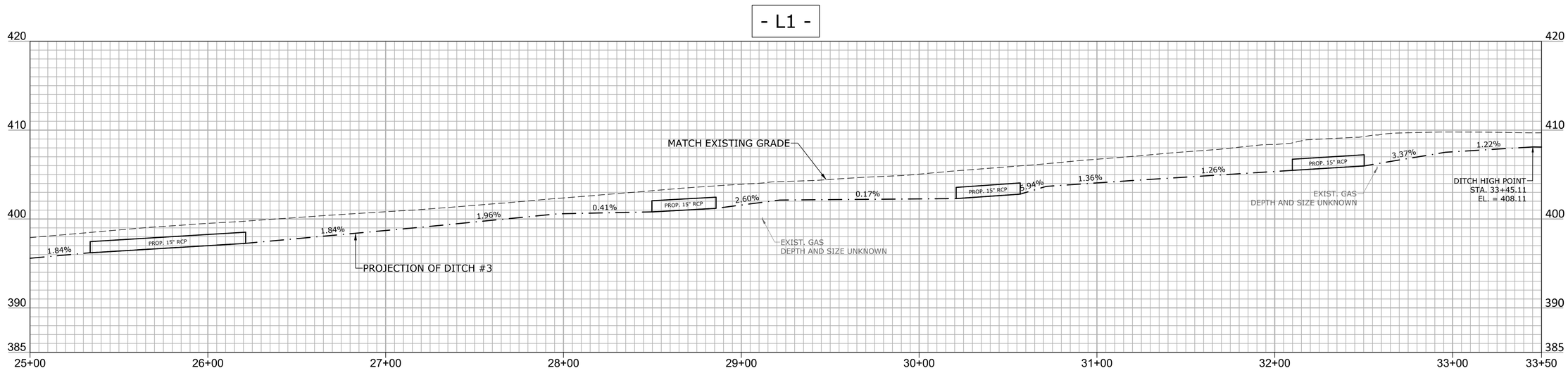


Curve Table: Alignment -L1-

	PI Sta	Δ	D	L	T	R
L1C7	29+36.91	0°01'02"	001°08'45.30"	1.51	0.75	5000.00



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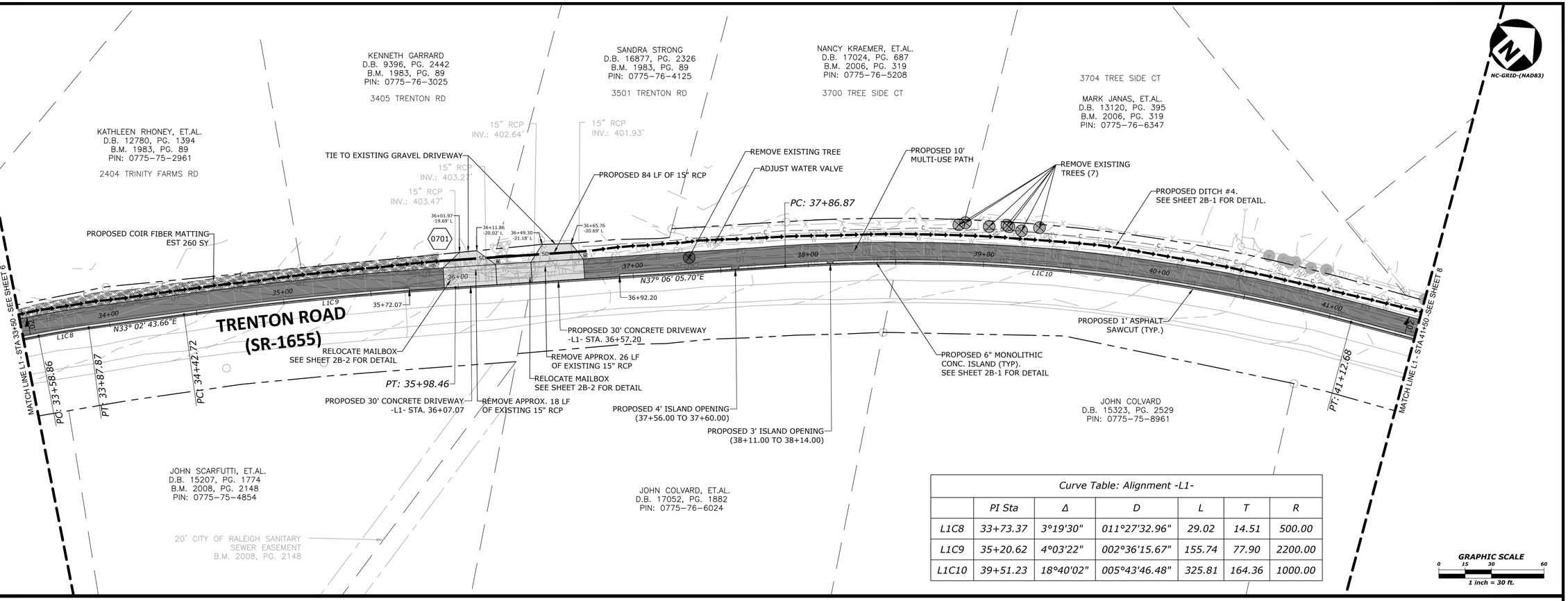
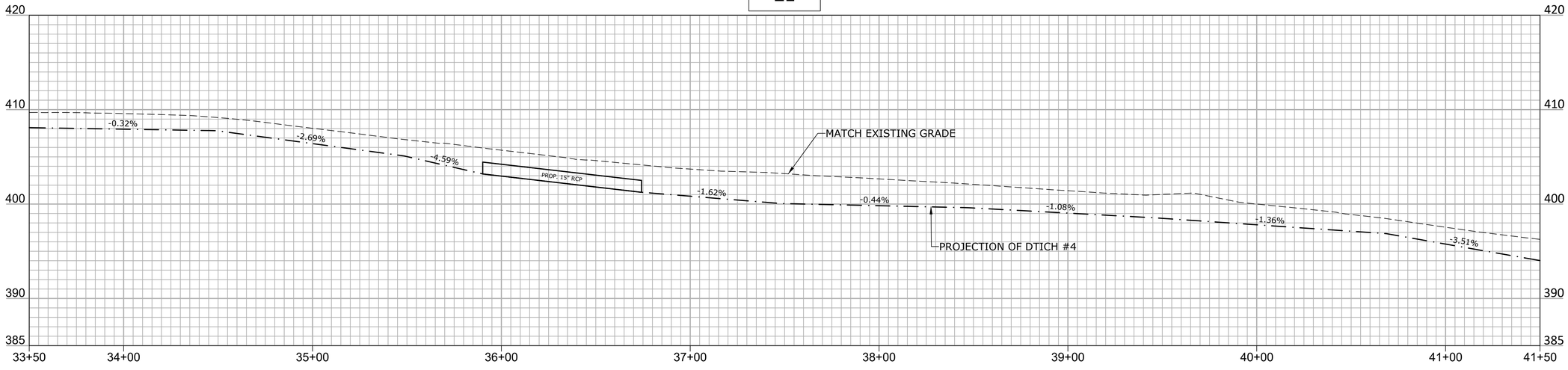


Curve Table: Alignment -L1-

	PI Sta	Δ	D	L	T	R
L1C8	33+73.37	3°19'30"	011°27'32.96"	29.02	14.51	500.00
L1C9	35+20.62	4°03'22"	002°36'15.67"	155.74	77.90	2200.00
L1C10	39+51.23	18°40'02"	005°43'46.48"	325.81	164.36	1000.00

- L1 -



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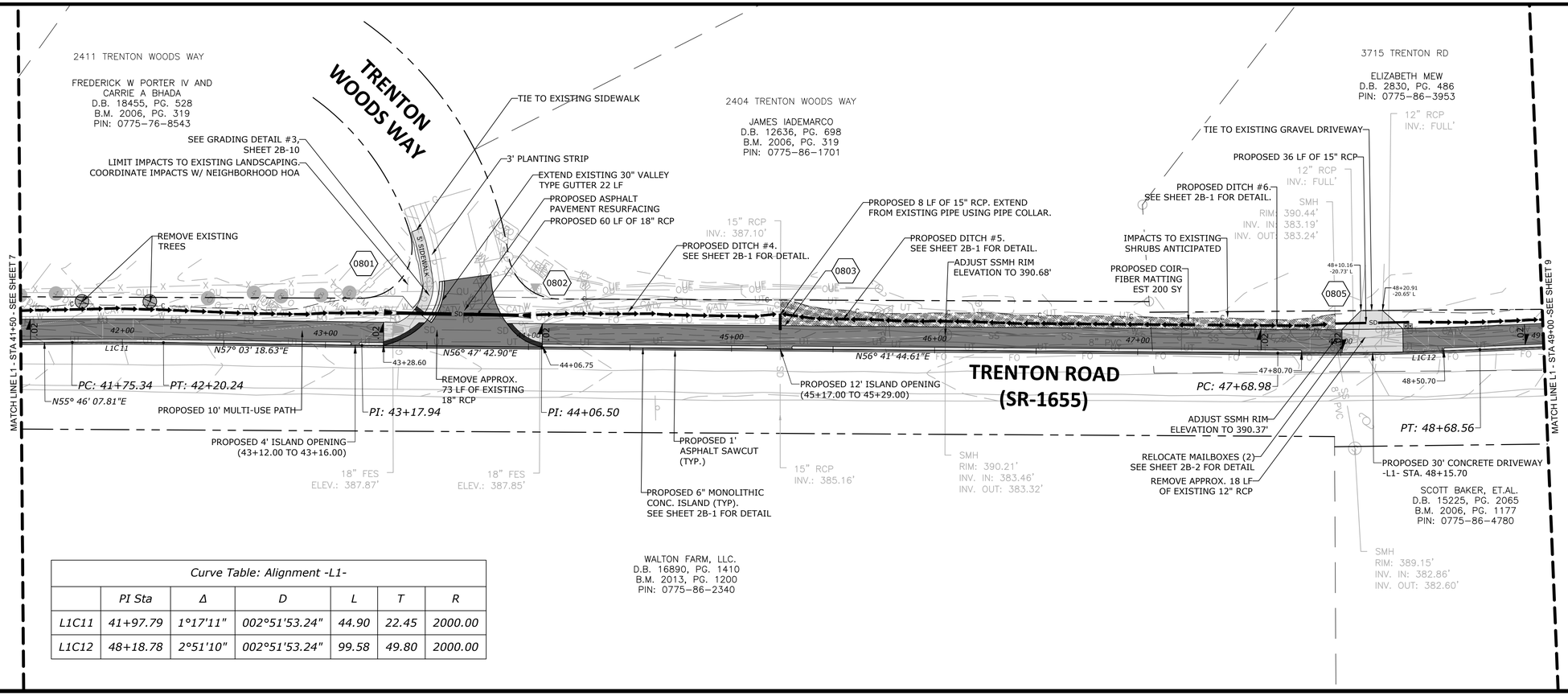
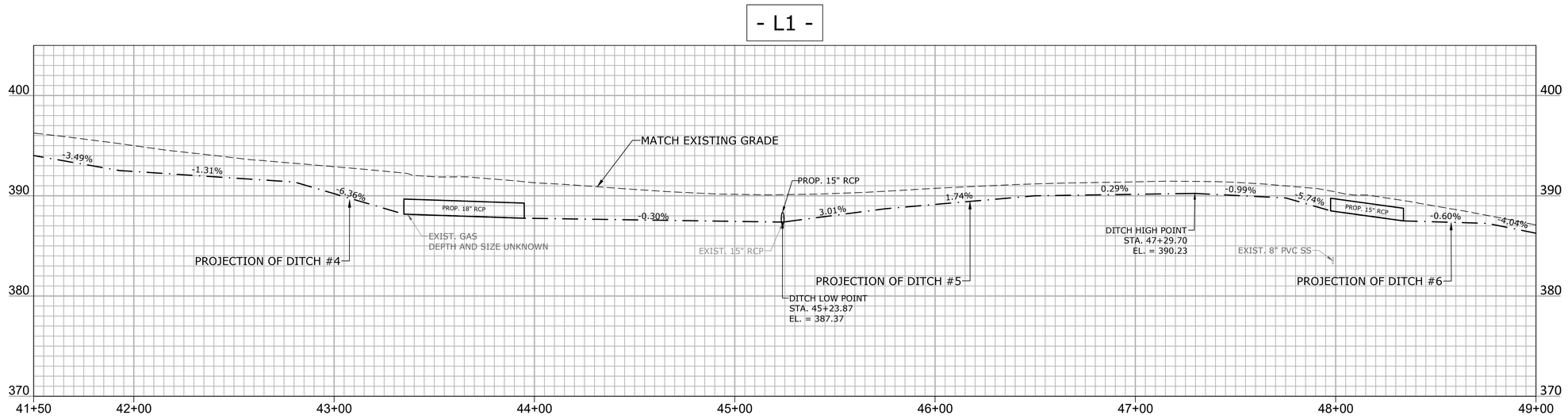


Curve Table: Alignment -L1-

	PI Sta	Δ	D	L	T	R
L1C11	41+97.79	1°17'11"	002°51'53.24"	44.90	22.45	2000.00
L1C12	48+18.78	2°51'10"	002°51'53.24"	99.58	49.80	2000.00



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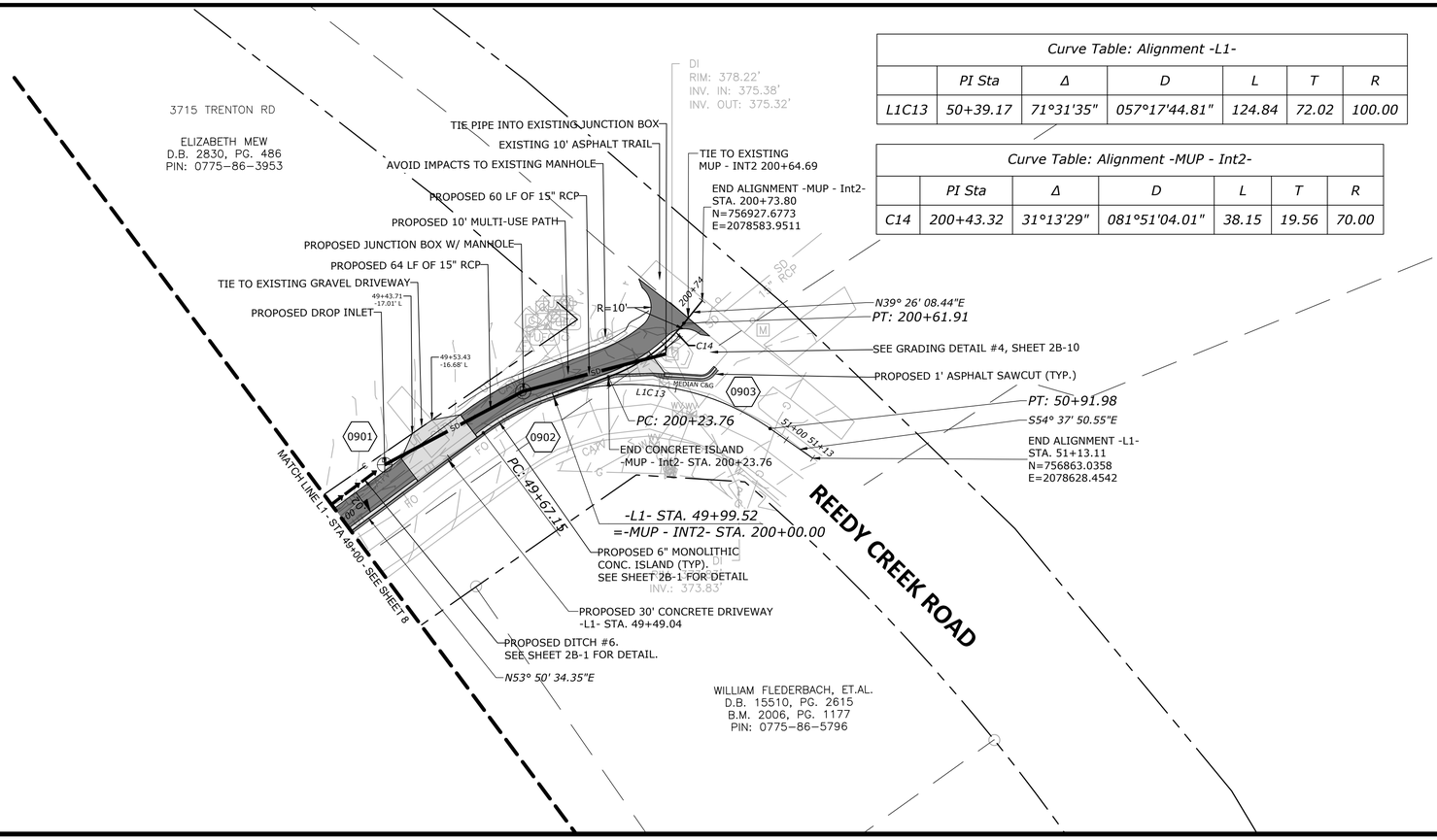
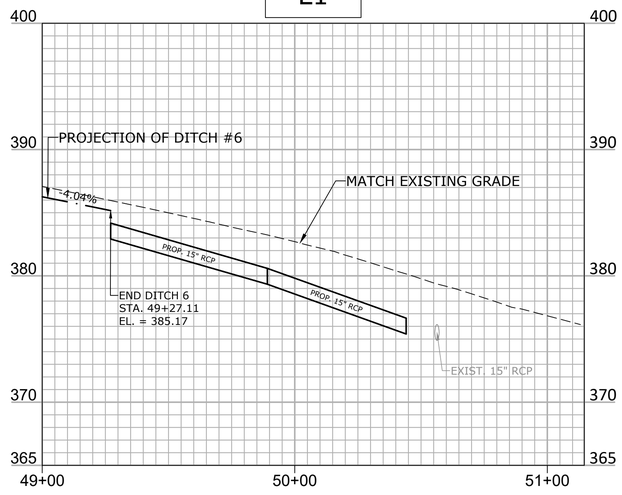
Curve Table: Alignment -L1-						
	PI Sta	Δ	D	L	T	R
L1C13	50+39.17	71°31'35"	057°17'44.81"	124.84	72.02	100.00

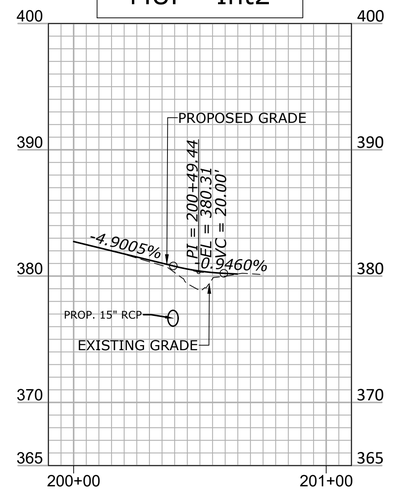
Curve Table: Alignment -MUP - Int2-						
	PI Sta	Δ	D	L	T	R
C14	200+43.32	31°13'29"	081°51'04.01"	38.15	19.56	70.00



- L1 -



- MUP - Int2 -



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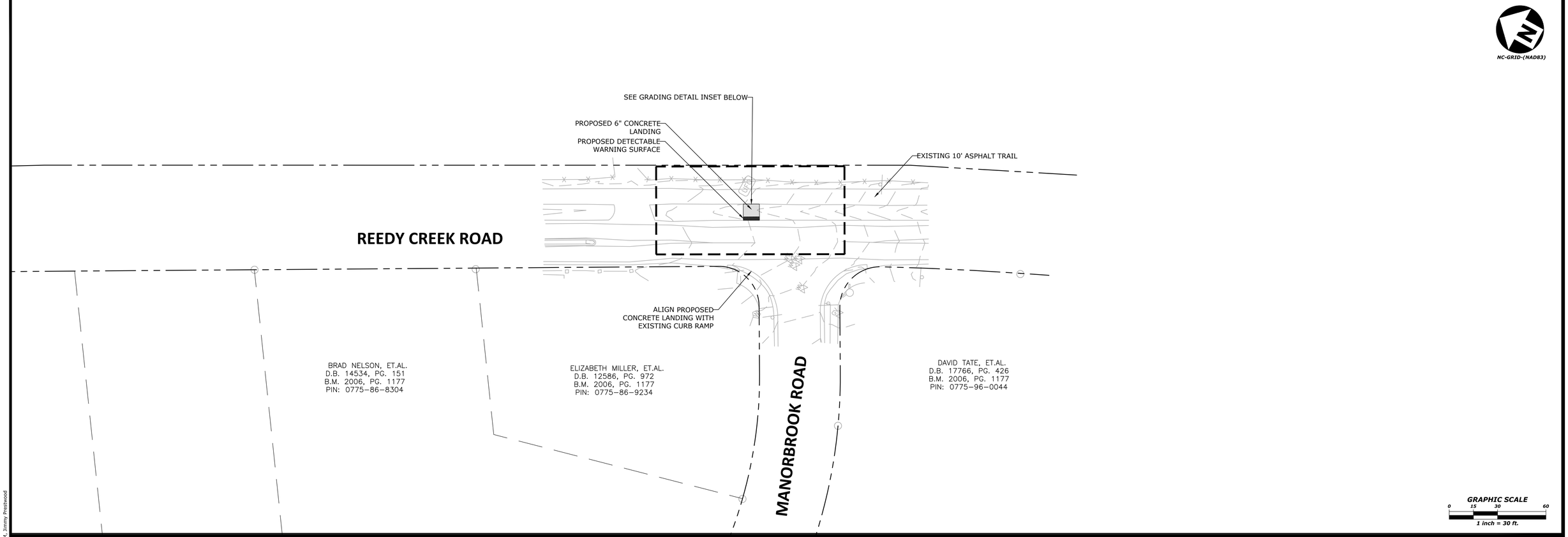
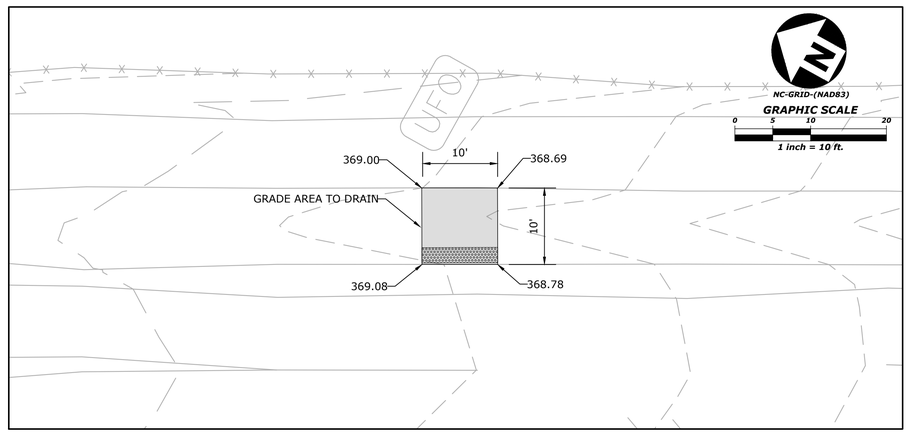
DATE	03/15/2022





GRADING DETAIL

90% PLANS -NOT RELEASED FOR CONSTRUCTION

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222 W. HARGETT STREET
SUITE 600
RALEIGH, NC 27601
919-996-4798
CONTACT:
DAVID BENDER, PROJECT MANAGER

REVISIONS

NO. DATE

GREENWAY ENGINEER

PRELIMINARY NOT FOR CONSTRUCTION

HYDRAULICS ENGINEER

PRELIMINARY NOT FOR CONSTRUCTION

TRENTON ROAD CONNECTOR

TRENTON PARK LANE TO REEDY CREEK RD

PLAN & PROFILE

PLAN INFORMATION

PROJECT NO.	2020110233
FILENAME	2020110233_P1.dwg
CHECKED BY	GDB
DRAWN BY	xxx
SCALE	1" = 30' / 1"=6'
DATE	03/15/2022

10

GENERAL NOTES

CHANGES MAY BE REQUIRED WHEN PHYSICAL DIMENSIONS IN THE DETAIL DRAWINGS, STANDARD DETAILS, AND ROADWAY DETAILS ARE NOT ATTAINABLE TO MEET FIELD CONDITIONS OR RESULT IN DUPLICATE OR UNDESIRED OVERLAPPING OF DEVICES. MODIFICATION MAY INCLUDE: MOVING, SUPPLEMENTING, COVERING, OR REMOVAL OF DEVICES AS DIRECTED BY THE ENGINEER.

THE FOLLOWING GENERAL NOTES APPLY AT ALL TIMES FOR THE DURATION OF THE CONSTRUCTION PROJECT EXCEPT WHEN OTHERWISE NOTED IN THE PLAN OR DIRECTED BY THE ENGINEER.

TIME RESTRICTIONS

A) DO NOT CLOSE OR NARROW TRAVEL LANES AS FOLLOWS:

ROAD NAME	DAY AND TIME RESTRICTIONS		
TRENTON ROAD	MONDAY-FRIDAY 6:00 AM - 9:00 AM 4:00 PM - 7:00 PM	SATURDAY 4:00 PM - 12:00 AM	SUNDAY NO WORK

B) SEE INTERMEDIATE CONTRACT TIME FOR TIME RESTRICTIONS CONCERNING HOLIDAYS, HOLIDAY WEEKENDS, SPECIAL EVENTS, OR ANY OTHER TIME WHEN TRAFFIC IS UNUSUALLY HEAVY.

LANE AND SHOULDER CLOSURE REQUIREMENTS

C) REMOVE LANE CLOSURE DEVICES FROM THE LANE WHEN WORK IS NOT BEING PERFORMED BEHIND THE LANE CLOSURE OR WHEN A LANE CLOSURE IS NO LONGER NEEDED OR AS DIRECTED BY THE ENGINEER.

D) WHEN PERSONNEL AND/OR EQUIPMENT ARE WITHIN 15 FT OF AN OPEN TRAVEL LANE, CLOSE THE NEAREST OPEN SHOULDER USING ROADWAY STD. DRAWING NO. 1101.04 UNLESS THE WORK AREA IS PROTECTED BY BARRIER OR GUARDRAIL OR A LANE CLOSURE IS INSTALLED.

E) WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING ON THE SHOULDER ADJACENT TO AN UNDIVIDED FACILITY AND WITHIN 5 FT OF AN OPEN TRAVEL LANE, CLOSE THE NEAREST OPEN TRAVEL LANE USING ROADWAY STD. DRAWING NO. 1101.02 UNLESS THE WORK AREA IS PROTECTED BY BARRIER OR GUARDRAIL.

F) WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING WITHIN A LANE OF TRAVEL OF AN UNDIVIDED OR DIVIDED FACILITY, CLOSE THE LANE ACCORDING TO THE TRAFFIC CONTROL PLANS, ROADWAY STD. DRAWINGS, OR AS DIRECTED BY THE ENGINEER. CONDUCT THE WORK SO THAT ALL PERSONNEL AND/OR EQUIPMENT REMAIN WITHIN THE CLOSED TRAVEL LANE.

G) DO NOT WORK SIMULTANEOUSLY WITHIN 15 FT ON BOTH SIDES OF AN OPEN TRAVEL WAY, RAMP, OR LOOP WITHIN THE SAME LOCATION UNLESS PROTECTED WITH GUARDRAIL OR BARRIER.

H) DO NOT INSTALL MORE THAN ONE LANE CLOSURE IN ANY ONE DIRECTION ON TRENTON ROAD.

I) MAINTAIN TWO WAY TRAVEL ON TRENTON ROAD AT ALL TIMES.

PAVEMENT EDGE DROP OFF REQUIREMENTS

J) BACKFILL AT A 6:1 SLOPE UP TO THE EDGE AND ELEVATION OF EXISTING PAVEMENT IN AREAS ADJACENT TO AN OPENED TRAVEL LANE THAT HAS AN EDGE OF PAVEMENT DROP-OFF AS FOLLOWS:

BACKFILL DROP-OFFS THAT EXCEED 2 INCHES ON ROADWAY WITH POSTED SPEED LIMITS OF 45 MPH OR GREATER.

BACKFILL DROP-OFFS THAT EXCEED 3 INCHES ON ROADWAY WITH POSTED SPEED LIMITS LESS THAN 45 MPH.

BACKFILL WITH SUITABLE COMPACTED MATERIAL, AS APPROVED BY THE ENGINEER, AT NO EXPENSE TO THE DEPARTMENT.

K) DO NOT EXCEED A DIFFERENCE OF 2 INCHES IN ELEVATION BETWEEN OPEN LANES OF TRAFFIC FOR NOMINAL LIFTS OF 1.5 INCHES. INSTALL ADVANCE WARNING "UNEVEN LANES" SIGNS (W8-11) 200 FT IN ADVANCE AND A MINIMUM OF EVERY HALF MILE THROUGHOUT THE UNEVEN AREA.

TRAFFIC PATTERN ALTERATIONS

L) CONTRACTOR SHALL CONTACT THE ENGINEER, THE CITY OF RALEIGH, AND NCDOT TRAFFIC OPERATIONS GROUP 21 DAYS PRIOR TO WORK COMMENCING.

M) THE DYNAMIC MESSAGE BOARD SHALL BE IN PLACE TWO WEEKS PRIOR TO COMMENCING WORK TO NOTIFY THE TRAVELING PUBLIC.

SIGNING

N) INSTALL ADVANCE WORK ZONE WARNING SIGNS WHEN WORK IS WITHIN 40 FT FROM THE EDGE OF TRAVEL AND NO MORE THAN 3 DAYS PRIOR TO THE BEGINNING OF CONSTRUCTION.

O) ENSURE ALL NECESSARY SIGNING IS IN PLACE PRIOR TO ALTERING ANY TRAFFIC PATTERN.

P) INSTALL BLACK ON ORANGE "DIP" SIGNS (W8-2) AND/OR "BUMP" SIGNS (W8-1) 200 FT IN ADVANCE OF THE UNEVEN AREA, OR AS DIRECTED BY THE ENGINEER.

Q) INSTALL "SIDEWALK CLOSED" SIGNS (R9-9) WHERE PROPOSED WORK ABUTS EXISTING SIDEWALKS TO DISCOURAGE USE OF CONSTRUCTED FACILITY DURING CONSTRUCTION.

TRAFFIC CONTROL DEVICES

R) WHEN LANE CLOSURES ARE NOT IN EFFECT, SPACE CHANNELIZING DEVICES IN WORK AREAS NO GREATER IN FEET THAN TWICE THE POSTED SPEED LIMIT (MPH) EXCEPT, 10 FT ON-CENTER IN RADII, AND 3 FT OFF THE EDGE OF AN OPEN TRAVELWAY. REFER TO STD. SPECIFICATIONS FOR ROADS AND STRUCTURES SECTIONS 1130 (DRUMS), 1135 (CONES) AND 1180 (SKINNY DRUMS) FOR ADDITIONAL REQUIREMENTS.

S) PLACE ADDITIONAL SETS OF THREE CHANNELIZING DEVICES (SKINNY DRUMS) PERPENDICULAR TO THE EDGE OF TRAVELWAY ON 500 FT CENTERS WHEN UNOPENED LANES ARE CLOSED TO TRAFFIC.

T) MAINTAIN NO LESS THAN 1 FT OFFSET FROM SIDEWALK TO THE PORTABLE WATER-FILLED BARRIER WHERE A MINIMUM OF 2 FT IS NOT OBTAINABLE.

PAVEMENT MARKINGS AND MARKERS

U) INSTALL TEMPORARY PAVEMENT MARKINGS AND TEMPORARY PAVEMENT MARKERS ON INTERIM LAYERS AS FOLLOWS:

ROAD NAME	MARKING	MARKER
TRENTON ROAD	PAINT (IF NECESSARY)	NONE

V) TIE PROPOSED PAVEMENT MARKING LINES TO EXISTING PAVEMENT MARKING LINES.

W) REMOVE/REPLACE ANY CONFLICTING/DAMAGED PAVEMENT MARKINGS AND MARKERS BY THE END OF EACH DAYS OPERATIONS.

X) TRACE THE PROPOSED CONCRETE ISLAND LOCATIONS WITH PROPER COLOR PAVEMENT MARKINGS PRIOR TO INSTALLATION. PLACE DRUMS TO DELINEATE ANY PROPOSED MONOLITHIC ISLANDS BEFORE INSTALLATION.

MISCELLANEOUS

Y) LAW ENFORCEMENT MAY BE USED TO MAINTAIN TRAFFIC THROUGH THE WORK AREA AND/OR INTERSECTIONS AS DIRECTED BY THE ENGINEER.

Z) ALL CURB RAMP LOCATIONS SHALL BE DERIVED FROM STATIONING SHOWN ON THE PAVEMENT MARKING PLANS OR AS DIRECTED BY THE ENGINEER.

AA) CONTRACTOR SHALL MAINTAIN SIDEWALK ACCESS AT ALL TIMES AS STATED IN THE PHASING. CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE TEMPORARY SIDEWALKS (CONCRETE, ASPHALT, OR OTHER SUITABLE MATERIAL AS APPROVED BY THE ENGINEER) AT ALL LOCATIONS WHERE THE OPEN PEDESTRIAN TRAVELWAY HAS BEEN REMOVED FOR CONSTRUCTION OPERATIONS (UTILITIES, DRAINAGE, ETC.)

PHASING NOTES

THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL EXISTING DRIVEWAYS AND SIDE STREETS AS DIRECTED BY THE ENGINEER.

THE CONTRACTOR SHALL COORDINATE WITH LOCAL BUSINESSES 48 HOURS PRIOR TO COMMENCING ANY WORK TO PROVIDE NOTIFICATION.

THE CONTRACTOR SHALL USE FLAGGER CONTROL DURING ANY PHASE IF NECESSARY ACCORDING TO RSD 1101.02.

THE CONTRACTOR MUST RETURN TRAFFIC TO EXISTING PATTERN AT THE END OF EACH WORK DAY UNLESS OTHERWISE NOTED IN THE PHASING BELOW OR AS DIRECTED BY THE ENGINEER.

WORKING IN A CONTINUOUS MANNER, COMPLETE ALL CONSTRUCTION WITHIN ____ DAYS. (SEE INTERMEDIATE CONTRACT TIME AND LIQUIDATED DAMAGES)

ROADWAY STANDARD DRAWINGS

THE FOLLOWING ROADWAY STANDARDS AS APPEAR IN "ROADWAY STANDARD DRAWINGS" HIGHWAY DESIGN BRANCH - N.C. DEPARTMENT OF TRANSPORTATION - RALEIGH, N.C., DATED JANUARY, 2018 ARE APPLICABLE TO THIS PROJECT
AND BY REFERENCE HEREBY ARE CONSIDERED A PART OF THESE PLANS:

STD.NO.	TITLE
DIVISION 11 - WORK ZONE TRAFFIC CONTROL	
1101.02	Temporary Lane Closures (2 Lane, 2-Way Roadway - 1 Lane Closed)
1101.04	Temporary Shoulder Closures
1101.11	Traffic Control Design Tables
1130.01	Drum
1135.01	Cones
1150.01	Flagging Devices
1180.01	Skinny Drum

ADDITIONAL NCDOT STANDARDS NOT ON THE LIST ABOVE MAY BE REQUIRED AS PER PLAN DETAILS AND SPECIFICATIONS.

90% PLANS -NOT RELEASED FOR CONSTRUCTION

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DAVID BENDER, PROJECT MANAGER

REVISIONS
NO. DATE

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PRELIMINARY NOT FOR CONSTRUCTION

HYDRAULICS ENGINEER
PRELIMINARY NOT FOR CONSTRUCTION

TRENTON ROAD CONNECTOR
TRENTON PARK LANE TO REEDY CREEK RD

TRANSPORTATION MANAGEMENT PLAN

PLAN INFORMATION
PROJECT NO. 2020110233
FILENAME 2020110233_TM1.dwg
CHECKED BY GDB
DRAWN BY JP, ED
SCALE NTS
DATE 03/15/2022

TMP-1

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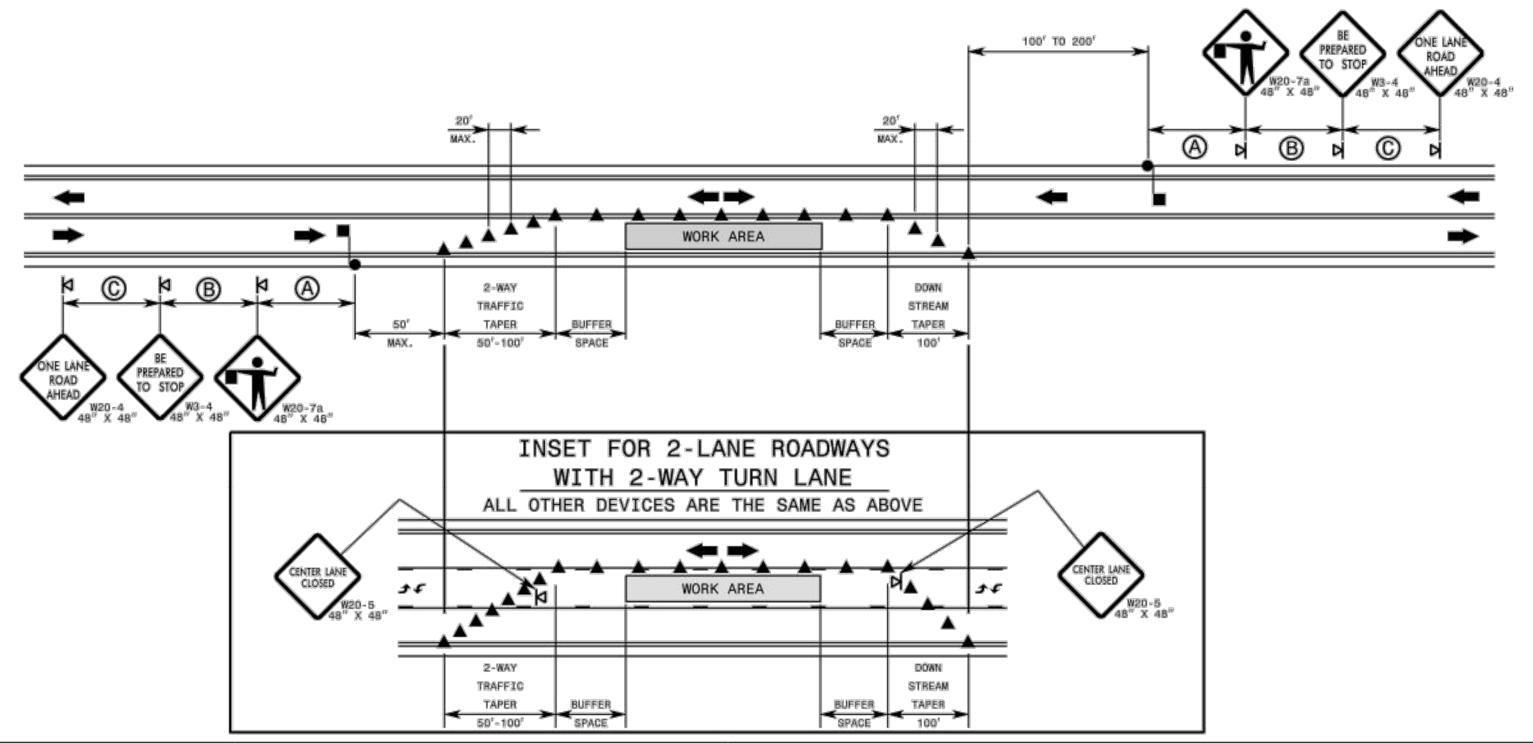


GENERAL NOTES FOR FLAGGING OPERATIONS

1- REFER TO RSD. 1101.11, SHEETS 1 & 4, FOR "L" DISTANCE AND SIGN SPACING.
2- INSTALL LANE CLOSURES WITH THE TRAFFIC FLOW, BEGINNING WITH DEVICES ON THE UPSTREAM SIDE OF TRAFFIC.
3- REMOVE LANE CLOSURES AGAINST THE TRAFFIC FLOW, BEGINNING WITH DEVICES ON THE DOWNSTREAM SIDE OF TRAFFIC.
4- PLACE CONES THRU THE WORK AREA AT THE MAXIMUM SPACING EQUAL IN FEET TO 2 TIMES THE POSTED SPEED LIMIT.
5- EXTEND LANE CLOSURES AT THE BUFFER SPACE SUCH THAT STOPPING SIGHT DISTANCE IS PROVIDED TO THE FLAGGER (REFER TO RSD. 1101.11, SHEET 2).
6- DO NOT STOP TRAFFIC IN ANY ONE DIRECTION FOR MORE THAN 5 MINUTES AT A TIME.
7- DRUMS OR SKINNY DRUMS MAY BE USED IN LIEU OF CONES. REFER TO RSD. 1180.01 FOR SKINNY DRUM REQUIREMENTS.
8- USE FLAGGERS TO CONTROL TRAFFIC AT INTERSECTIONS AFFECTED BY THE LANE CLOSURE. SUPPLEMENT FLAGGERS LOCATED AT INTERSECTIONS WITH FLAGGER AHEAD SIGNS (W20-7a) PLACED APPROXIMATELY 250 FT. IN ADVANCE OF THE FLAGGER. FOR SIGNALIZED INTERSECTIONS PLACE SIGNALS IN THE FLASH MODE AND USE LAW ENFORCEMENT.
9- REFER TO THE CURRENT MUTCD FOR FLAGGER CONTROL, REQUIREMENTS, AND PROCEDURES.
10- DO NOT EXCEED A 1 MILE LANE CLOSURE LENGTH UNLESS OTHERWISE SHOWN IN THE TMP OR AS DIRECTED BY THE ENGINEER.
11- IF VEHICLE QUEUES WILL REACH WITHIN 15' OF EITHER SIDE OF ACTIVE RAILROAD TRACKS, PROVIDE A UNIFORMED LAW ENFORCEMENT OFFICER OR FLAGGER TO PREVENT VEHICLES FROM STOPPING WITHIN THE GRADE CROSSING. PROVIDE OFFICER OR FLAGGER EVEN IF AUTOMATIC WARNING MEASURES ALREADY EXIST.

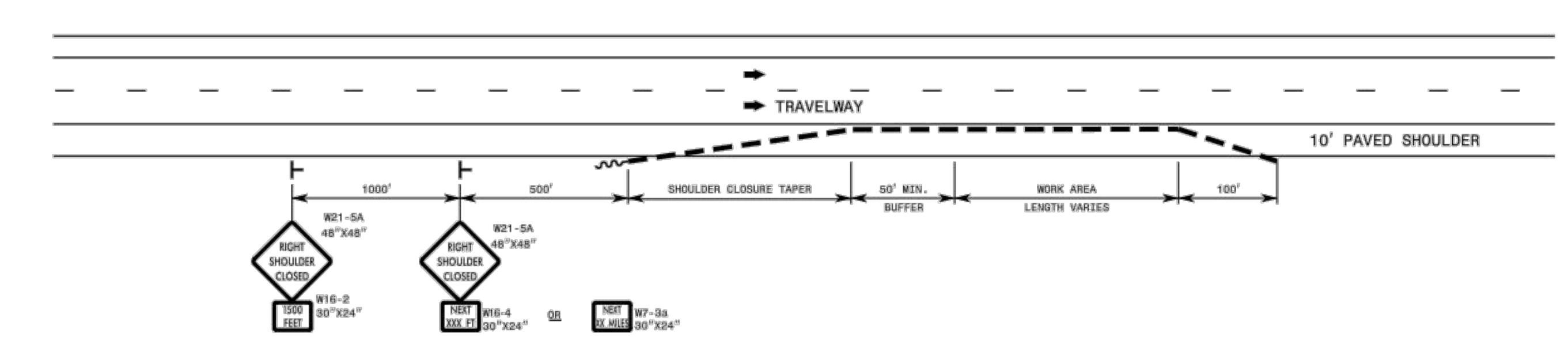
GENERAL NOTES FOR PILOT CAR OPERATIONS

1- USE PILOT CARS WHEN DIRECTED BY THE ENGINEER.
2- IF ROADWAY WIDTH IS LESS THAN 22 FEET (EOP TO EOP), CONES MAY NOT BE REQUIRED ALONG WORK AREA, AND AT THE DISCRETION OF THE ENGINEER, CONES MAY BE OMITTED ALONG THE WORK AREA IF USING A PILOT CAR.
3- CONES ARE ALWAYS REQUIRED IN THE UPSTREAM AND DOWNSTREAM TAPERS.
4- MOUNT SIGN G20-4 "PILOT CAR FOLLOW ME" AT A CONSPICUOUS POSITION ON THE REAR OF THE PILOT VEHICLE.
5- DO NOT INSTALL MORE THAN ONE (1) MILE OF LANE CLOSURE, MEASURED FROM THE BEGINNING OF THE MERGE TAPER TO THE END OF THE LANE CLOSURE.
6- ADVISE RESIDENTS AND BUSINESSES WITHIN THE LANE CLOSURE LIMITS ABOUT METHODS OF SAFE EGRESS AND INGRESS FROM DRIVEWAYS DURING FLAGGING AND PILOT CAR OPERATIONS.

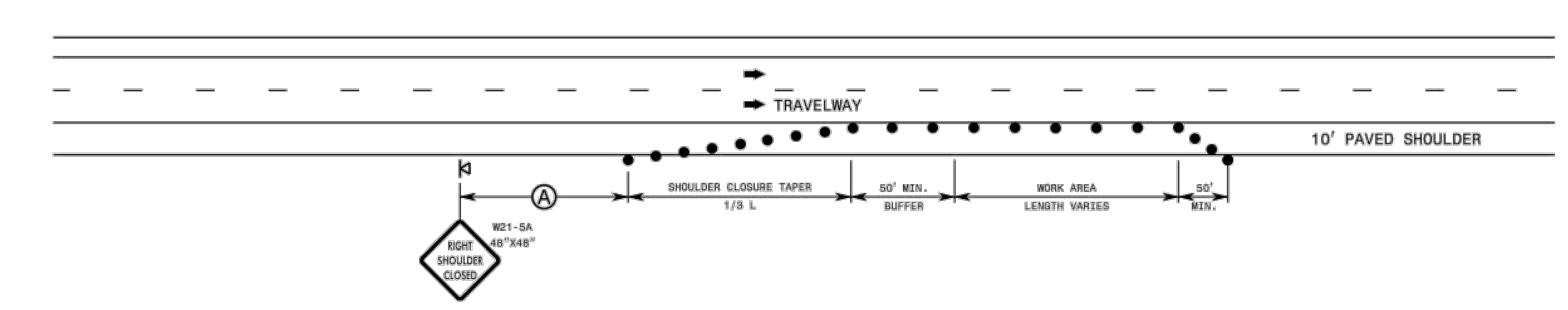
LEGEND
- FLAGGER
- ▲ CONE
- PORTABLE SIGN
- DIRECTION OF TRAFFIC FLOW

STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.
1-18
ROADWAY STANDARD DRAWING FOR **TEMPORARY LANE CLOSURES** 2-LANE, 2-WAY ROADWAY-1 LANE CLOSED
SHEET 1 OF 14
1101.02

SHOULDER CLOSURE ON CONTROLLED ACCESS FACILITIES



SHOULDER CLOSURE ON DIVIDED FACILITIES



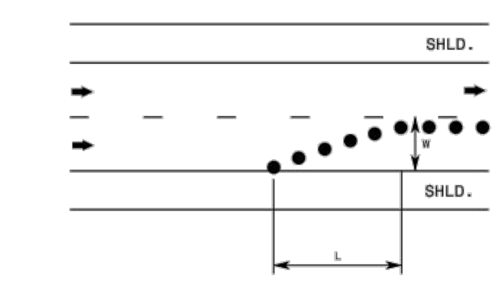
GENERAL NOTES

1- PLACE SHOULDER CLOSURE SIGNS ON THE SAME SIDE AS THE SHOULDER THAT IS CLOSED.
2- PLACE DRUMS IN THE SHOULDER TAPER AT THE MAXIMUM SPACING EQUAL IN FEET TO THE POSTED SPEED LIMIT. THE MAXIMUM SPACING OF DRUMS ALONG THE WORK AREA IS EQUAL IN FEET TO 2 TIMES THE POSTED SPEED LIMIT.
3- USE STATIONARY SIGNS FOR OPERATIONS IN EFFECT LONGER THAN 3 DAYS.
4- REFER TO RSD. 1101.11, SHEETS 1, 3 & 4, FOR "L" DISTANCE, BARRIER FLARE RATES, AND SIGN SPACING.

LEGEND
- ● DRUM
- STATIONARY SIGN
- PORTABLE SIGN
- PORTABLE CONCRETE BARRIER
- DIRECTION OF TRAFFIC FLOW
- TEMPORARY CRASH CUSHION

STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.
1-18
ROADWAY STANDARD DRAWING FOR **TEMPORARY SHOULDER CLOSURES**
SHEET 1 OF 1
1101.04

EXAMPLE OF "L" & "W" DESIGNATIONS



TAPER LENGTH CRITERIA FOR CHANNELIZING DEVICES IN WORK ZONES

TYPES OF TAPERS	TAPER LENGTH
UPSTREAM TAPER	
MERGING TAPER	L MINIMUM
SHIFTING TAPER	½ L MINIMUM
SHOULDER TAPER	⅓ L MINIMUM
TWO-WAY TRAFFIC TAPER	50 - 100 FEET MAXIMUM
DOWNSTREAM TAPER	100 FEET MAXIMUM

DO NOT INTRODUCE A MERGING OR SHIFTING TAPER WITHIN A CURVE OF THE ROADWAY

QUICK REFERENCE - "L" DISTANCE TABLE

MINIMUM LONGITUDINAL DISTANCE "L" (FEET) (ROUNDED VALUES)

POSTED SPEED "S" (MPH)	LATERAL WIDTH "W" (FEET) 1	2	3	4	5	6	7	8	9	10	11	12
20	10	15	20	30	35	40	50	55	60	70	75	80
25	15	25	35	45	55	65	75	85	95	105	115	125
30	15	30	45	60	75	90	105	120	135	150	165	180
35	25	45	65	85	105	125	145	165	185	205	225	245
40	30	55	80	110	135	160	190	215	240	270	295	320
45	45	90	135	180	225	270	315	360	405	450	495	540
50	50	100	150	200	250	300	350	400	450	500	550	600
55	55	110	165	220	275	330	385	440	495	550	605	660
60	60	120	180	240	300	360	420	480	540	600	660	720
65	65	130	195	260	325	390	455	520	585	650	715	780
70	70	140	210	280	350	420	490	560	630	700	770	840

GENERAL NOTES

1- TABLE FOR "L" DISTANCE IS BASED ON CHANNELIZATION TAPER FORMULA FROM THE MUTCD. WHERE:

SPEED LIMIT	FORMULA
40 MPH OR LESS	$L_{MIN} = \frac{W \times S^2}{60}$
45 MPH OR GREATER	$L_{MIN} = W \times S$

L = MINIMUM TAPER LENGTH IN FEET (LONGITUDINAL DISTANCE)
W = WIDTH OF OFFSET IN FEET (LATERAL DISTANCE)
S = POSTED SPEED LIMIT, OR OFF-PEAK 85 PERCENTILE SPEED IN MPH PRIOR TO WORK STARTING, OR THE ANTICIPATED OPERATING SPEED IN MPH

2- "L" DISTANCE IS FOR APPLICATION WITH CHANNELIZING DEVICE AND PAVEMENT MARKING TAPERS AND TRANSITIONS. CHANNELIZING DEVICES INCLUDE DRUMS, CONES, TUBULAR MARKERS, BARRICADES, RAISED ASPHALT ISLANDS, AND VERTICAL PANELS.

STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.
1-18
ROADWAY STANDARD DRAWING FOR **TRAFFIC CONTROL DESIGN TABLES** "L" DISTANCE AND CHANNELIZING DEVICE TAPER CRITERIA
SHEET 1 OF 4
1101.11

DESIGN SPEED (MPH)	MINIMUM SIGHT DISTANCE: STOPPING SIGHT DISTANCE (FEET)	MINIMUM SIGHT DISTANCE: PASSING SIGHT DISTANCE (FEET)	MINIMUM LONGITUDINAL BUFFER SPACE (FEET)
30	200	1090	85
35	250	1280	120
40	305	1470	155
45	360	1625	195
50	425	1835	240
55	495	1985	290
60	570	2135	345
65	645	2285	405
70	730	2480	470
75	820	2580	540
80	910	2680	615

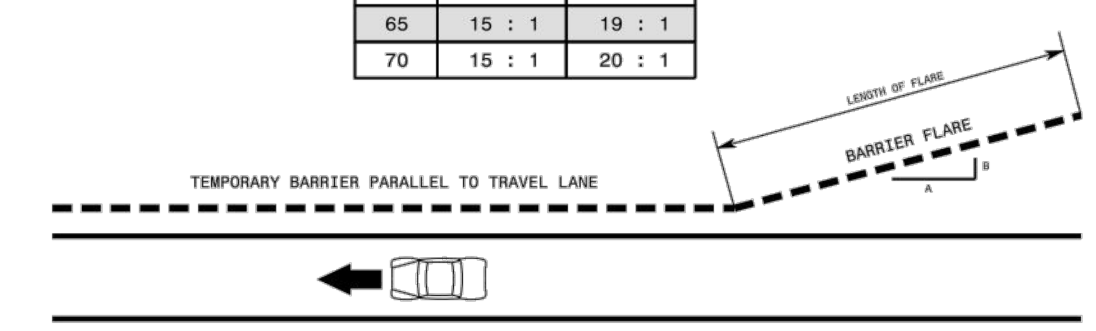
GENERAL NOTES

1- TABLES ARE BASED ON THE AASHTO GREEN BOOK "A POLICY ON GEOMETRIC DESIGN OF HIGHWAYS AND STREETS" AND THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES". MINIMUM SIGHT DISTANCE VALUES ARE FOR PASSENGER CAR VEHICLES ON WET AND LEVEL ROADWAYS. CONSULT THE AASHTO GREEN BOOK TO MAKE FINAL DETERMINATION OF STOPPING SIGHT DISTANCE REQUIREMENTS.
2- BUFFER SPACE TABLE IS BASED ON THE BRAKING DISTANCE PORTION OF STOPPING SIGHT DISTANCE FOR WET AND LEVEL PAVEMENTS.
3- USE OF STOPPING SIGHT DISTANCE IN TRAFFIC CONTROL PLAN APPLICATIONS INCLUDES PROVIDING SIGHT DISTANCE FOR TRAFFIC APPROACHING A LANE CLOSURE. PROVIDE 2-LANE, 2-WAY ROADWAYS STOPPING SIGHT DISTANCE TO THE FLAGGER. FOR LANE CLOSURES ON MULTILANE ROADWAYS PROVIDE STOPPING SIGHT DISTANCE TO THE BEGINNING OF THE LANE CLOSURE MERGE TAPER, OR FLASHING ARROW BOARD. EXTEND LANE CLOSURES AT THE BUFFER SPACE SUCH THAT STOPPING SIGHT DISTANCE IS PROVIDED.
4- USE OF MINIMUM PASSING SIGHT DISTANCE TABLE IN TRAFFIC CONTROL PLAN APPLICATIONS INCLUDES PROVIDING SIGHT DISTANCE REQUIREMENTS FOR PLACEMENT OF PAVEMENT MARKING PASSING/NO-PASSING ZONES FOR 2-LANE, 2-WAY ROADWAYS.

STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.
1-18
ROADWAY STANDARD DRAWING FOR **TRAFFIC CONTROL DESIGN TABLES** BUFFER SPACE & SIGHT DISTANCE
SHEET 2 OF 4
1101.11

TEMPORARY BARRIER FLARE RATES

POSTED SPEED LIMIT (MPH)	UNANCHORED (A:B)	ANCHORED (A:B)
≤ 30	7 : 1	8 : 1
35	8 : 1	9 : 1
40	8 : 1	10 : 1
45	10 : 1	12 : 1
50	11 : 1	14 : 1
55	12 : 1	16 : 1
60	14 : 1	18 : 1
65	15 : 1	19 : 1
70	15 : 1	20 : 1



GENERAL NOTES

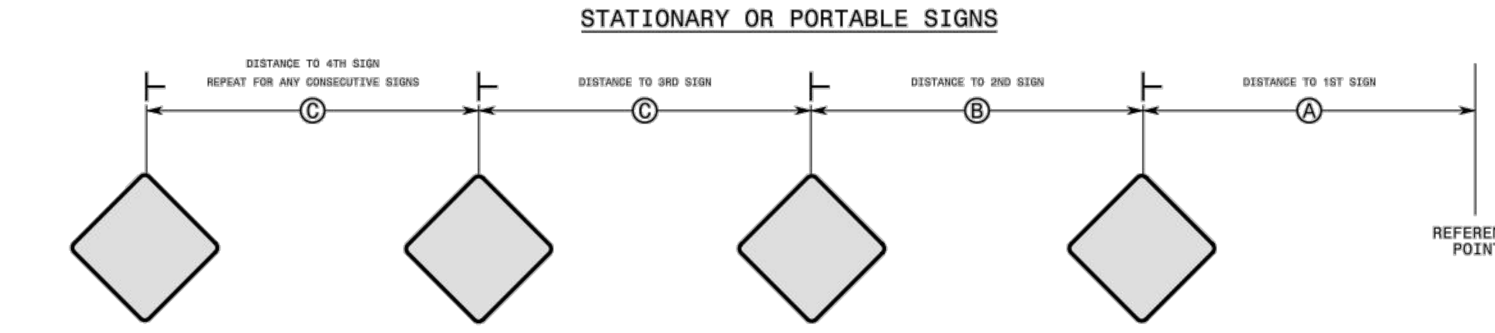
1- REFER TO THE 2011 ROADSIDE DESIGN GUIDE OR THE LATEST EDITION.
2- A BARRIER IS CONSIDERED FLARED WHEN IT IS NOT PARALLEL TO THE EDGE OF THE TRAVELWAY.

STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.
1-18
ROADWAY STANDARD DRAWING FOR **TRAFFIC CONTROL DESIGN TABLES** TEMPORARY BARRIER FLARE RATES
SHEET 3 OF 4
1101.11

ADVANCE WARNING SIGN SPACING CHART

POSTED SPEED LIMIT (MPH)	RECOMMENDED DISTANCE BETWEEN SIGNS (FEET)± Ⓐ	Ⓑ	Ⓒ
≤ 35	200	200	200
40-50	350	350	350
55	500	500	500
CONTROLLED ACCESS ROADS (≥ 55)	1000	1500	2700

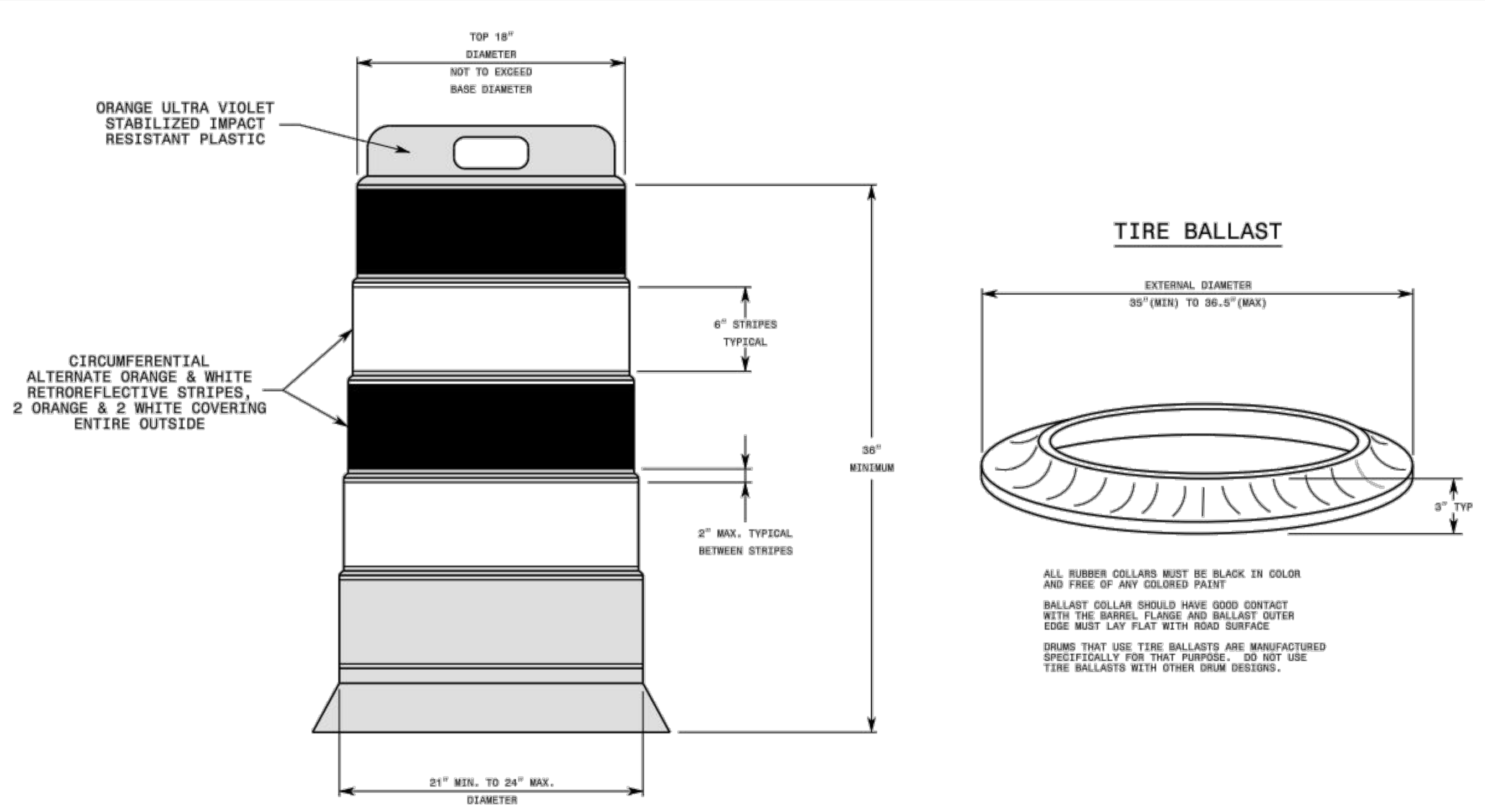
STATIONARY OR PORTABLE SIGNS



GENERAL NOTES

1- REFER TO 2009 MUTCD OR THE LATEST EDITION.
2- USE THIS STANDARD DRAWING IN CONJUNCTION WITH OTHER TRAFFIC CONTROL ROADWAY STANDARD DRAWINGS WHERE SIGN SPACING DISTANCES A, B, C, ARE SPECIFIED.
3- APPLY THE ADVANCE WARNING SIGN SPACING CHART WHERE A SERIES OF 2 OR MORE SIGNS ARE USED. ALL SIGN SPACING DIMENSIONS ARE APPROXIMATE. FIELD ADJUST AS VARIOUS CONDITIONS OCCUR, SUCH AS LIMITED SIGHT DISTANCE, OBSTRUCTION INTERFERENCE, ETC.

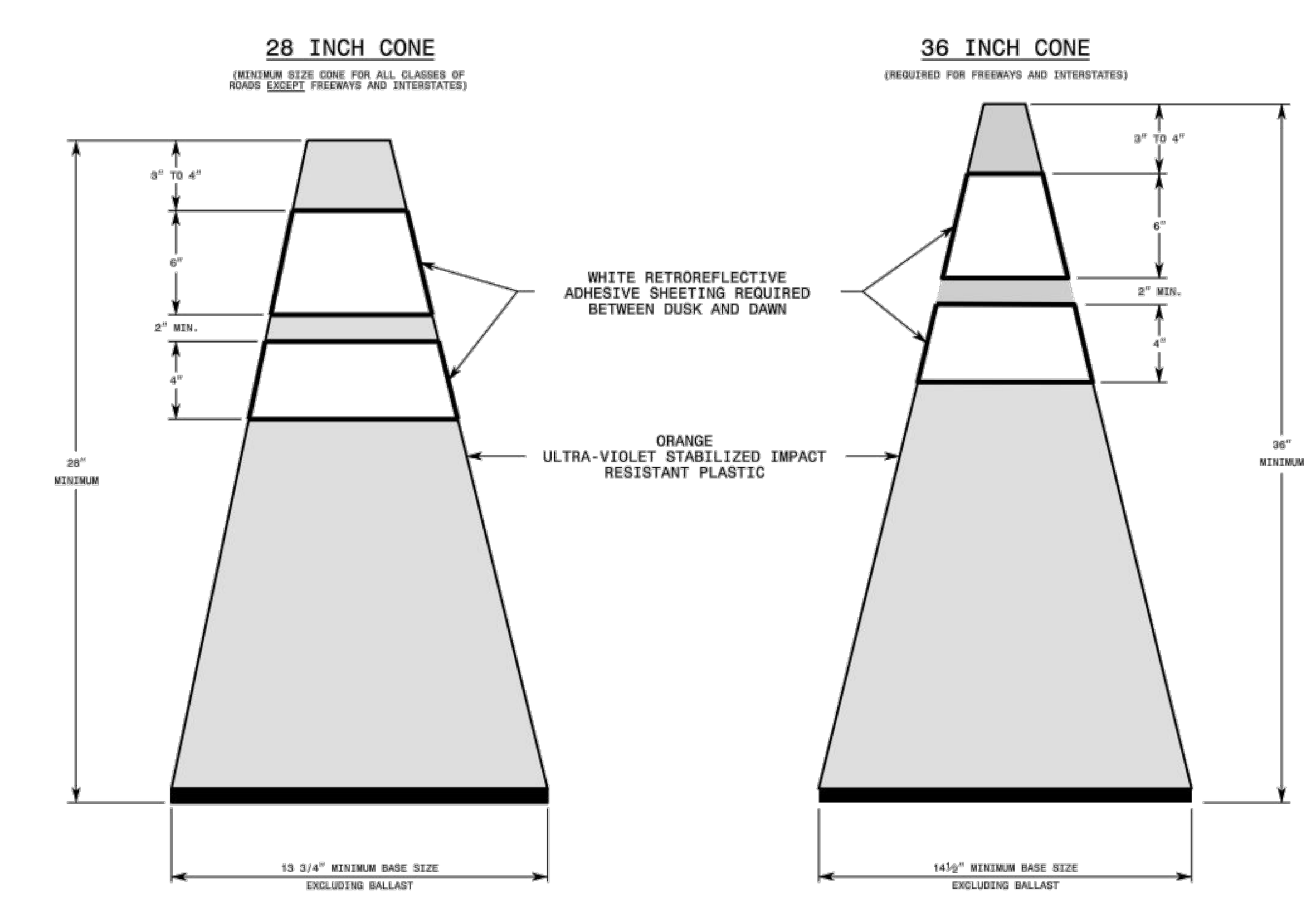
STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.
1-18
ROADWAY STANDARD DRAWING FOR **TRAFFIC CONTROL DESIGN TABLES** SPACING OF TEMPORARY SIGNS IN SERIES
SHEET 4 OF 4
1101.11



GENERAL NOTES

1- BALLASTING SHALL BE ACHIEVED BY THE SAND BAG, TIRE-SIDEWALL, OR PREFORMED WEIGHTED BASE METHODS. USE THE TIRE BALLAST AS SPECIFIED BY THE MANUFACTURER. DO NOT PLACE BALLAST ON TOP OF THE DRUM.
2- IF NECESSARY PLACE THE NAME OF THE AGENCY, CONTRACTOR, OR SUPPLIER ON NON-RETROREFLECTIVE DRUM SURFACES. SHOW THE LETTERS AND NUMBERS USING A NON-RETROREFLECTIVE COLOR AND NOT OVER 2" IN HEIGHT.
3- ALL DRUMS MUST BE LISTED ON THE DEPARTMENT'S APPROVED PRODUCT LIST.
4- REFER TO THE STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES FOR ADDITIONAL INFORMATION.

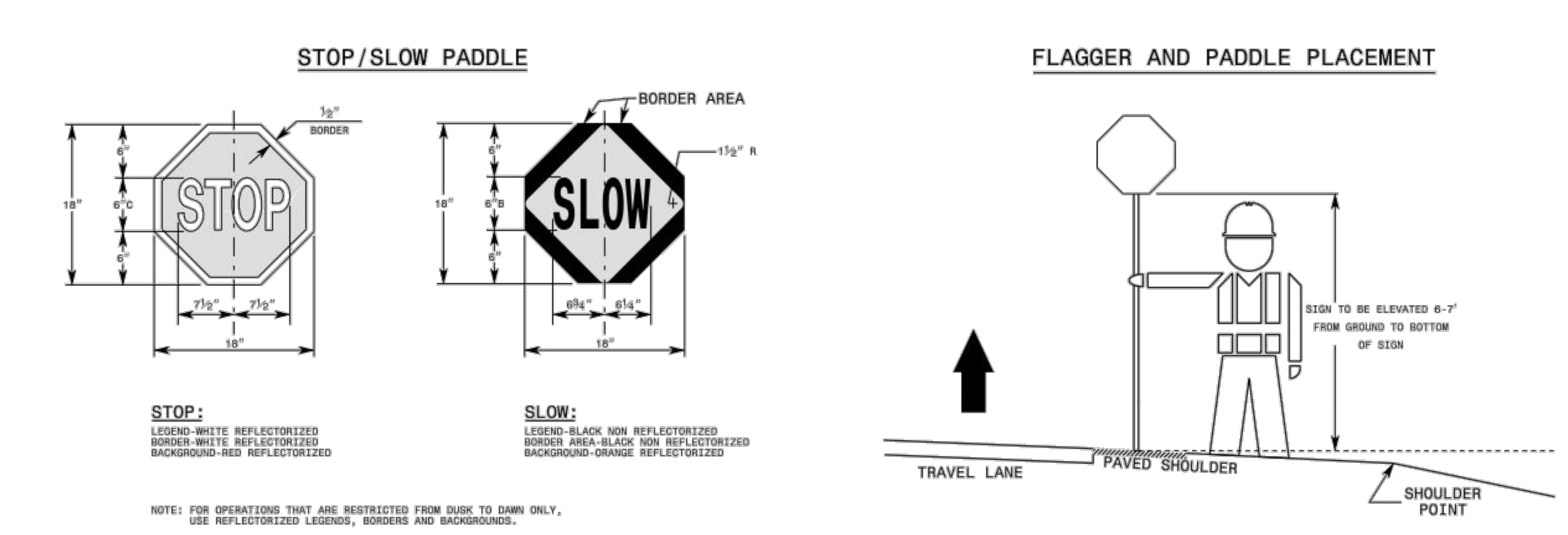
STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.
1-18
ROADWAY STANDARD DRAWING FOR **DRUMS**
SHEET 1 OF 1
1130.01



GENERAL NOTES

1- ACHIEVE BALLASTING BY USING SPECIAL WEIGHTED BASES SUCH AS SAND BAG RINGS, DOUBLING CONES, OR BASES THAT CAN BE FILLED WITH BALLAST. SEVENTY PERCENT OF THE WEIGHT OF THE CONE MUST BE IN THE BASE. USE BALLAST'S THAT DO NOT PRESENT A HAZARD WHEN STRUCK.
2- ALL CONES MUST BE LISTED ON THE DEPARTMENT'S APPROVED PRODUCTS LIST.

STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.
1-18
ROADWAY STANDARD DRAWING FOR **CONES**
SHEET 1 OF 1
1135.01



GENERAL NOTES

1- USE HAND SIGNALING DEVICES SUCH AS STOP-SLOW PADDLES, FLASHLIGHTS TO CONTROL TRAFFIC. USE STOP-SLOW PADDLES AS THE PRIMARY DEVICE.
2- FABRICATE STOP-SLOW PADDLES FROM SHEET METAL OR OTHER LIGHT SEMI RIGID MATERIAL. PROVIDE A RIGID HANDLE OF SUFFICIENT LENGTH SO THE PADDLE IS HELD AT 6-7' ABOVE GROUND LEVEL.
3- PROVIDE STOPPING SIGHT DISTANCE TO EACH FLAGGER STATION. REFER TO RSD. 1101.11, SHEET 2.
4- ILLUMINATE FLAGGER STATIONS DURING NIGHT OPERATIONS.
5- FOLLOW FLAGGER QUALIFICATIONS AND METHODS OF HAND-SIGNALING PROCEDURES IN ACCORDANCE WITH PART VI OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
6- ALL FLAGGERS MUST BE CERTIFIED BY AN NCDOT APPROVED TRAINING RESOURCE.

STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.
1-18
ROADWAY STANDARD DRAWING FOR **FLAGGERS**
SHEET 1 OF 1
1150.01

90% PLANS -NOT RELEASED FOR CONSTRUCTION

MCADAMS
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222 W. HARGETT STREET
SUITE 600
RALEIGH, NC 27601
919-996-4798
CONTACT:
DAVID BENDER, PROJECT MANAGER

REVISIONS
NO. DATE

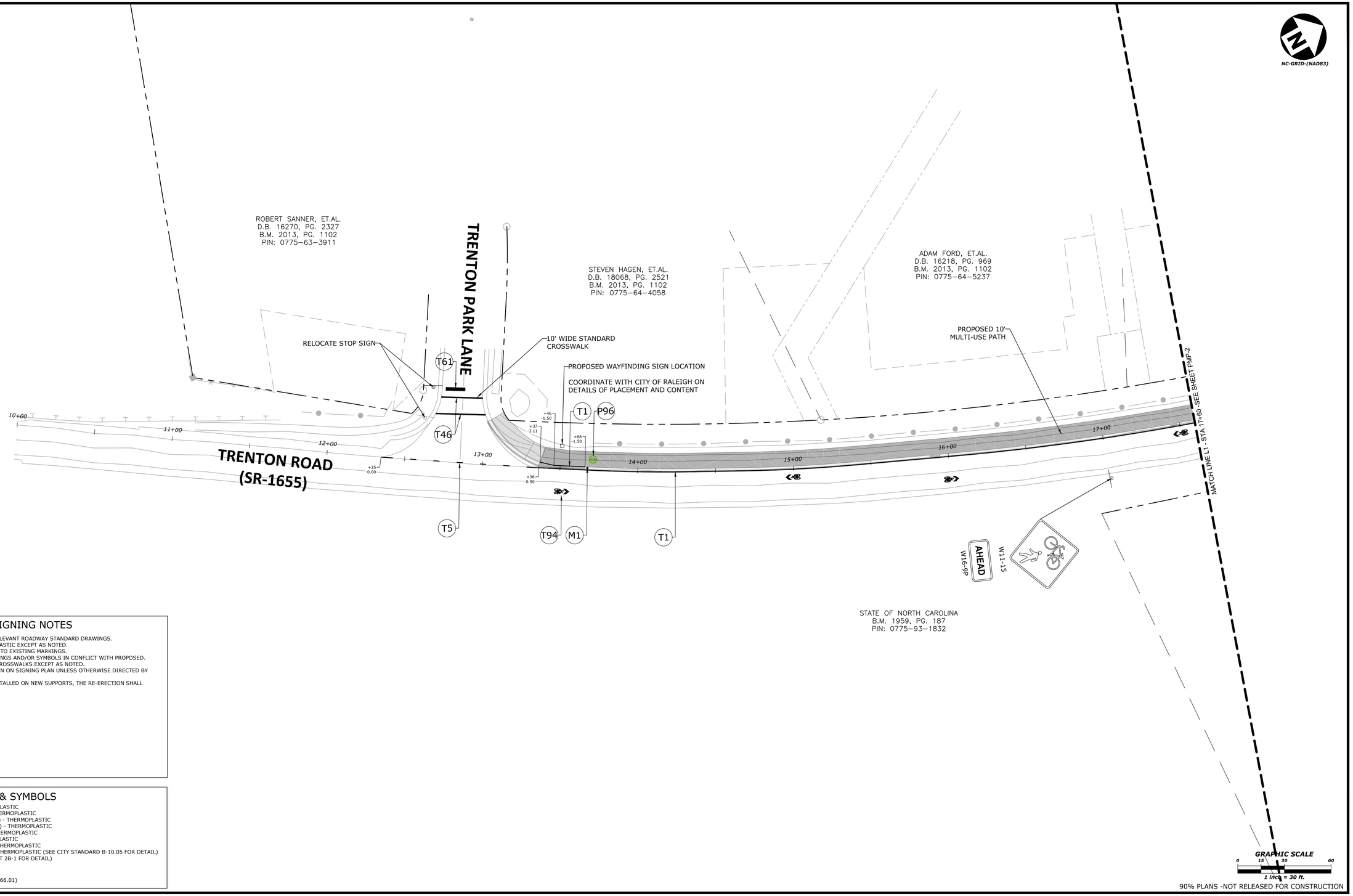
GREENWAY ENGINEER
PRELIMINARY NOT FOR CONSTRUCTION
HYDRAULICS ENGINEER
PRELIMINARY NOT FOR CONSTRUCTION

TRENTON ROAD CONNECTOR
TRENTON PARK LANE TO REEDY CREEK RD

TRANSPORTATION MANAGEMENT PLAN

PLAN INFORMATION
PROJECT NO. 2020110233
FILENAME 2020110233_TM1.dwg
CHECKED BY GDB
DRAWN BY JP, ED
SCALE NTS
DATE 03/15/2022

TMP-2



PAVEMENT MARKING AND SIGNING NOTES

1. SEE GENERAL NOTES SHEET 1A FOR LIST OF RELEVANT ROADWAY STANDARD DRAWINGS.
2. ALL PAVEMENT MARKINGS SHALL BE THERMOPLASTIC EXCEPT AS NOTED.
3. CONTRACTOR SHALL TIE PROPOSED MARKINGS TO EXISTING MARKINGS.
4. CONTRACTOR SHALL MILL ANY EXISTING MARKINGS AND/OR SYMBOLS IN CONFLICT WITH PROPOSED.
5. DO NOT PLACE PAVEMENT MARKINGS WITHIN CROSSWALKS EXCEPT AS NOTED.
6. RETAIN ALL OTHER EXISTING SIGNS NOT SHOWN ON SIGNING PLAN UNLESS OTHERWISE DIRECTED BY CITY.
7. WHEN EXISTING SIGNS ARE REMOVED AND INSTALLED ON NEW SUPPORTS, THE RE-ERECTION SHALL IMMEDIATELY FOLLOW THE REMOVAL.

PAVEMENT MARKING LINES & SYMBOLS

T1 - WHITE EDGE LINE (4", 90 MIL) - THERMOPLASTIC
T2 - WHITE SOLID LANE LINE (4", 90 MIL) - THERMOPLASTIC
T5 - 2FT.-6FT./SP WHITE MINISKIP (4", 90 MIL) - THERMOPLASTIC
T13 - YELLOW DOUBLE CENTER LINE (4", 90 MIL) - THERMOPLASTIC
T46 - WHITE CROSSWALK LINE (8", 90 MIL) - THERMOPLASTIC
T61 - WHITE STOPBAR (24", 90 MIL) - THERMOPLASTIC
T62 - WHITE CROSSWALK LINE (24", 90 MIL) - THERMOPLASTIC
T94 - SHARROW, HEATED-IN-PLACE (90 MIL) - THERMOPLASTIC (SEE CITY STANDARD B-10.05 FOR DETAIL)
P96 - SHARED PATH SYMBOL - PAINT (SEE SHEET 2B-1 FOR DETAIL)

PAVEMENT MARKERS

M1 - TUBULAR MARKER WHITE (NCDOT STD. 1266.01)

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REVISIONS
NO. DATE

GREENWAY ENGINEER
PRELIMINARY NOT FOR CONSTRUCTION

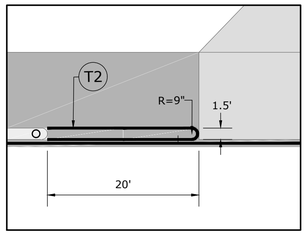
HYDRAULICS ENGINEER
PRELIMINARY NOT FOR CONSTRUCTION

TRENTON ROAD CONNECTOR
TRENTON PARK LANE TO REEDY CREEK RD

PAVEMENT MARKING & SIGNAGE PLANS

PLAN INFORMATION
PROJECT NO. 2020110233
FILENAME 2020110233_PM1.dwg
CHECKED BY GDB
DRAWN BY JP, ED
SCALE 1" = 30'
DATE 03/15/2022

PMP-1



BUFFER PAVEMENT MARKING DETAIL AT DRIVEWAYS

NC-GRID-(NAD83)

JOHN NICKELS, ET.AL.
D.B. 16202, PG. 187
B.M. 2013, PG. 1102
PIN: 0775-64-6408

JULIA HERRING
D.B. 7410, PG. 183
B.M. 1966, PG. 29
PIN: 0775-64-4791

SHIRLEY TURBIVILLE
D.B. 2892, PG. 154
B.M. 2002, PG. 1627
PIN: 0775-64-0847

W11-15 W16-7PL

W11-15 AHEAD W16-9P

MATCH LINE L1 - STA 17+60 - SEE SHEET PMP-1

MATCH LINE L1 - STA 25+00 -SEE SHEET PMP-3

P96 P96 M1 T2 M1

SE SE SE SE SE SE SE SE SE SE SE SE SE

18+00 19+00 20+00 21+00 22+00 23+00 24+00

+09 0.50

+23 0.50

T62

T1 T94 T1

TRENTON ROAD (SR-1655)

10' WIDE HI-VISIBILITY CROSSWALK

PROPOSED 10' MULTI-USE PATH

WINDY WOODS DRIVE

W16-7PL W11-15

MICHAEL OGBURN, ET.AL.
D.B. 3622, PG. 493
B.M. 1984, PG. 1626
PIN: 0775-64-8374

MYLES CHARLESWORTH, ET.AL.
D.B. 4022, PG. 79
B.M. 1984, PG. 1626
PIN: 0775-64-8499

WAYNE TIMBERLAKE
D.B. 7250, PG. 352
B.M. 2017, PG. 1891
PIN: 0775-64-9713

PATRICK SPINE
D.B. 15615, PG. 2728
B.M. 2008, PG. 2148
PIN: 0775-74-0958

PAVEMENT MARKING LINES & SYMBOLS

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T62 - WHITE CROSSWALK LINE (24", 90 MIL) - THERMOPLASTIC
T94 - SHARROW, HEATED-IN-PLACE (90 MIL) - THERMOPLASTIC (SEE CITY STANDARD B-10.05 FOR DETAIL)
P96 - SHARED PATH SYMBOL - PAINT (SEE SHEET 2B-1 FOR DETAIL)

PAVEMENT MARKERS

M1 - TUBULAR MARKER WHITE (NCDOT STD. 1266.01)

GRAPHIC SCALE
0 15 30 60
1 inch = 30 ft.

90% PLANS -NOT RELEASED FOR CONSTRUCTION

M:\Projects\RAL\2020110233.00 City of Raleigh Trenton Sidewalks\04-Production\Engineering\Current Drawings\2020110233_PM1.dwg, 3/15/2022 10:54:38 AM, Jimmy Prestwood

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DAVID BENDER, PROJECT MANAGER

REVISIONS
NO. DATE

GREENWAY ENGINEER

PRELIMINARY NOT FOR CONSTRUCTION

HYDRAULICS ENGINEER

PRELIMINARY NOT FOR CONSTRUCTION

TRENTON ROAD CONNECTOR

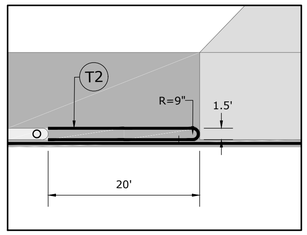
TRENTON PARK LANE TO REEDY CREEK RD

PAVEMENT MARKING & SIGNAGE PLANS

PLAN INFORMATION

PROJECT NO.	2020110233
FILENAME	2020110233_PM1.dwg
CHECKED BY	GDB
DRAWN BY	JP, ED
SCALE	1" = 30'
DATE	03/15/2022

PMP-2



BUFFER PAVEMENT MARKING DETAIL AT DRIVEWAYS

NC-GRID-(NAD83)

LESLEY COE, ET.AL.
D.B. 16250, PG. 2361
PIN: 0775-65-8203

DOUGLAS SLAGEL, ET.AL.
D.B. 5529, PG. 609
B.M. 1979, PG. 971
PIN: 0775-65-8359

TOMMY OATES, ET.AL.
D.B. 3530, PG. 602
B.M. 1979, PG. 971
PIN: 0775-65-9535

JEAN SPOONER, ET.AL.
D.B. 7090, PG. 468
B.M. 1979, PG. 971
PIN: 0775-75-0649

JAMES SOLDIN, ET.AL.
D.B. 17775, PG. 1067
B.M. 1983, PG. 89
PIN: 0775-75-1901

TRINITY FARMS ROAD

RETAIN STOP SIGN

PROPOSED WAYFINDING SIGN LOCATION

COORDINATE WITH CITY OF RALEIGH ON DETAILS OF PLACEMENT AND CONTENT

PROPOSED 10' MULTI-USE PATH

RELOCATE SPEED LIMIT SIGN

MATCH LINE L1 - STA 25+00 - SEE SHEET PMP-2

MATCH LINE L1 - STA 33+50 -SEE SHEET PMP-4

TRENTON ROAD (SR-1655)

10' WIDE HI-VISIBILITY CROSSWALK

10' WIDE HI-VISIBILITY CROSSWALK

RELOCATE STREET NAME SIGN

SILENT STREAM COURT

RANI BRITTO, ET.AL.
D.B. 15554, PG. 1830
B.M. 2008, PG. 2148
PIN: 0775-75-0197

RICHARD STOCK, ET.AL.
D.B. 15736, PG. 145
B.M. 2008, PG. 2148
PIN: 0775-75-1268

MARK PATERNI, ET.AL.
D.B. 15295, PG. 2676
B.M. 2008, PG. 2148
PIN: 0775-75-2317

RANDOLPH SCOTT, ET.AL.
D.B. 16868, PG. 1882
B.M. 2008, PG. 2148
PIN: 0775-75-2466

NANCY WU
D.B. 15514, PG. 1451
B.M. 2008, PG. 2148
PIN: 0775-75-3526

MATTHEW SCIBIENSKI, ET.AL.
D.B. 15486, PG. 304
B.M. 2008, PG. 2148
PIN: 0775-75-4700

PAVEMENT MARKING LINES & SYMBOLS

T1 - WHITE EDGE LINE (4", 90 MIL) - THERMOPLASTIC
T2 - WHITE SOLID LANE LINE (4", 90 MIL) - THERMOPLASTIC
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T94 - SHARROW, HEATED-IN-PLACE (90 MIL) - THERMOPLASTIC (SEE CITY STANDARD B-10.05 FOR DETAIL)
P96 - SHARED PATH SYMBOL - PAINT (SEE SHEET 2B-1 FOR DETAIL)

PAVEMENT MARKERS

M1 - TUBULAR MARKER WHITE (NCDOT STD. 1266.01)

GRAPHIC SCALE
0 15 30 60
1 inch = 30 ft.

90% PLANS -NOT RELEASED FOR CONSTRUCTION

M:\Projects\RAL\2020110233.00 City of Raleigh Trenton Sidewalks\04-Production\Engineering\Current Drawings\2020110233_PM1.dwg, 3/15/2022 10:55:15 AM, Jimmy Prestwood

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CONTACT:
DAVID BENDER, PROJECT MANAGER

REVISIONS
NO. DATE

GREENWAY ENGINEER

PRELIMINARY NOT FOR CONSTRUCTION

HYDRAULICS ENGINEER

PRELIMINARY NOT FOR CONSTRUCTION

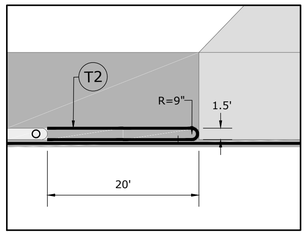
TRENTON ROAD CONNECTOR

TRENTON PARK LANE TO REEDY CREEK RD

PAVEMENT MARKING & SIGNAGE PLANS

PLAN INFORMATION
PROJECT NO. 2020110233
FILENAME 2020110233_PM1.dwg
CHECKED BY GDB
DRAWN BY JP, ED
SCALE 1" = 30'
DATE 03/15/2022

PMP-3



BUFFER PAVEMENT MARKING DETAIL AT DRIVEWAYS

NC-GRID-(NAD83)

KENNETH GARRARD
D.B. 9396, PG. 2442
B.M. 1983, PG. 89
PIN: 0775-76-3025

KATHLEEN RHONEY, ET.AL.
D.B. 12780, PG. 1394
B.M. 1983, PG. 89
PIN: 0775-75-2961

SANDRA STRONG
D.B. 16877, PG. 2326
B.M. 1983, PG. 89
PIN: 0775-76-4125

NANCY KRAEMER, ET.AL.
D.B. 17024, PG. 687
B.M. 2006, PG. 319
PIN: 0775-76-5208

MARK JANAS, ET.AL.
D.B. 13120, PG. 395
B.M. 2006, PG. 319
PIN: 0775-76-6347

W11-15 AHEAD W16-9P

RELOCATE SPEED LIMIT SIGN

PROPOSED 10' MULTI-USE PATH

RELOCATE "NO PARKING" SIGN

T1 T2 M1 T94

34+00 35+00 36+00 37+00 38+00 39+00 40+00 41+00

TRENTON ROAD (SR-1655)

MATCH LINE L1 - STA 33+50 - SEE SHEET PMP-3

MATCH LINE L1 - STA 41+50 - SEE SHEET PMP-5

JOHN COLVARD, ET.AL.
D.B. 17052, PG. 1882
PIN: 0775-76-6024

JOHN COLVARD
D.B. 15323, PG. 2529
PIN: 0775-75-8961

JOHN SCARFUTTI, ET.AL.
D.B. 15207, PG. 1774
B.M. 2008, PG. 2148
PIN: 0775-75-4854

PAVEMENT MARKING LINES & SYMBOLS

T1 - WHITE EDGE LINE (4", 90 MIL) - THERMOPLASTIC
T2 - WHITE SOLID LANE LINE (4", 90 MIL) - THERMOPLASTIC
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P96 - SHARED PATH SYMBOL - PAINT (SEE SHEET 2B-1 FOR DETAIL)

PAVEMENT MARKERS

M1 - TUBULAR MARKER WHITE (NCDOT STD. 1266.01)

GRAPHIC SCALE
0 15 30 60
1 inch = 30 ft.

90% PLANS -NOT RELEASED FOR CONSTRUCTION

M:\Projects\RAL\2020110233.00 City of Raleigh Trenton Sidewalks\04-Production\Engineering\Current Drawings\2020110233_PM1.dwg, 3/15/2022 10:55:31 AM, Jimmy Prestwood

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DAVID BENDER, PROJECT MANAGER

REVISIONS

NO. DATE

GREENWAY ENGINEER

PRELIMINARY NOT FOR CONSTRUCTION

HYDRAULICS ENGINEER

PRELIMINARY NOT FOR CONSTRUCTION

TRENTON ROAD CONNECTOR

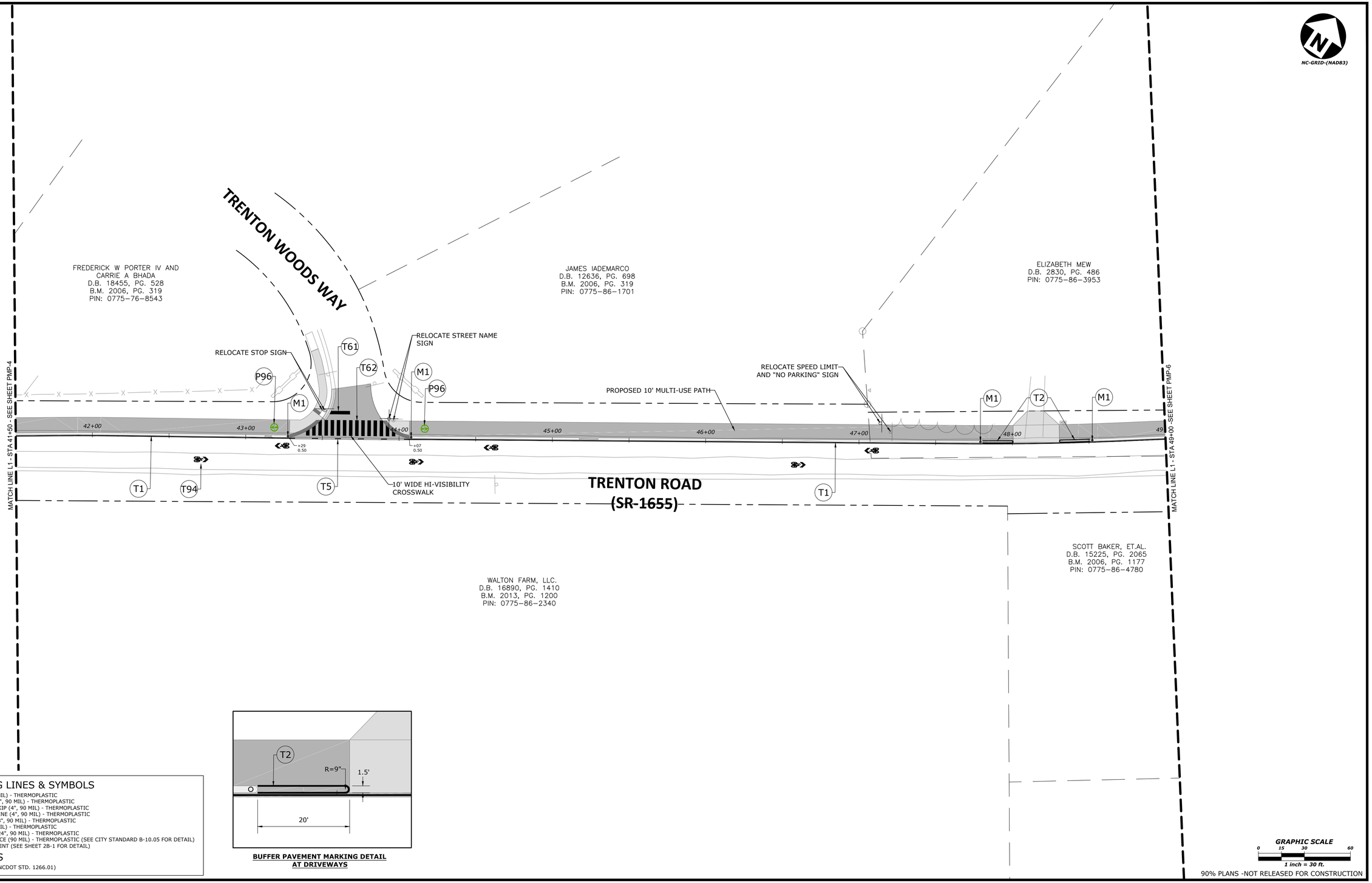
TRENTON PARK LANE TO REEDY CREEK RD

PAVEMENT MARKING & SIGNAGE PLANS

PLAN INFORMATION

PROJECT NO. 2020110233
FILENAME 2020110233_PM1.dwg
CHECKED BY GDB
DRAWN BY JP, ED
SCALE 1" = 30'
DATE 03/15/2022

PMP-4



BUFFER PAVEMENT MARKING DETAIL AT DRIVEWAYS

PAVEMENT MARKING LINES & SYMBOLS

T1 - WHITE EDGE LINE (4", 90 MIL) - THERMOPLASTIC
T2 - WHITE SOLID LANE LINE (4", 90 MIL) - THERMOPLASTIC
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PAVEMENT MARKERS

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TRENTON ROAD CONNECTOR

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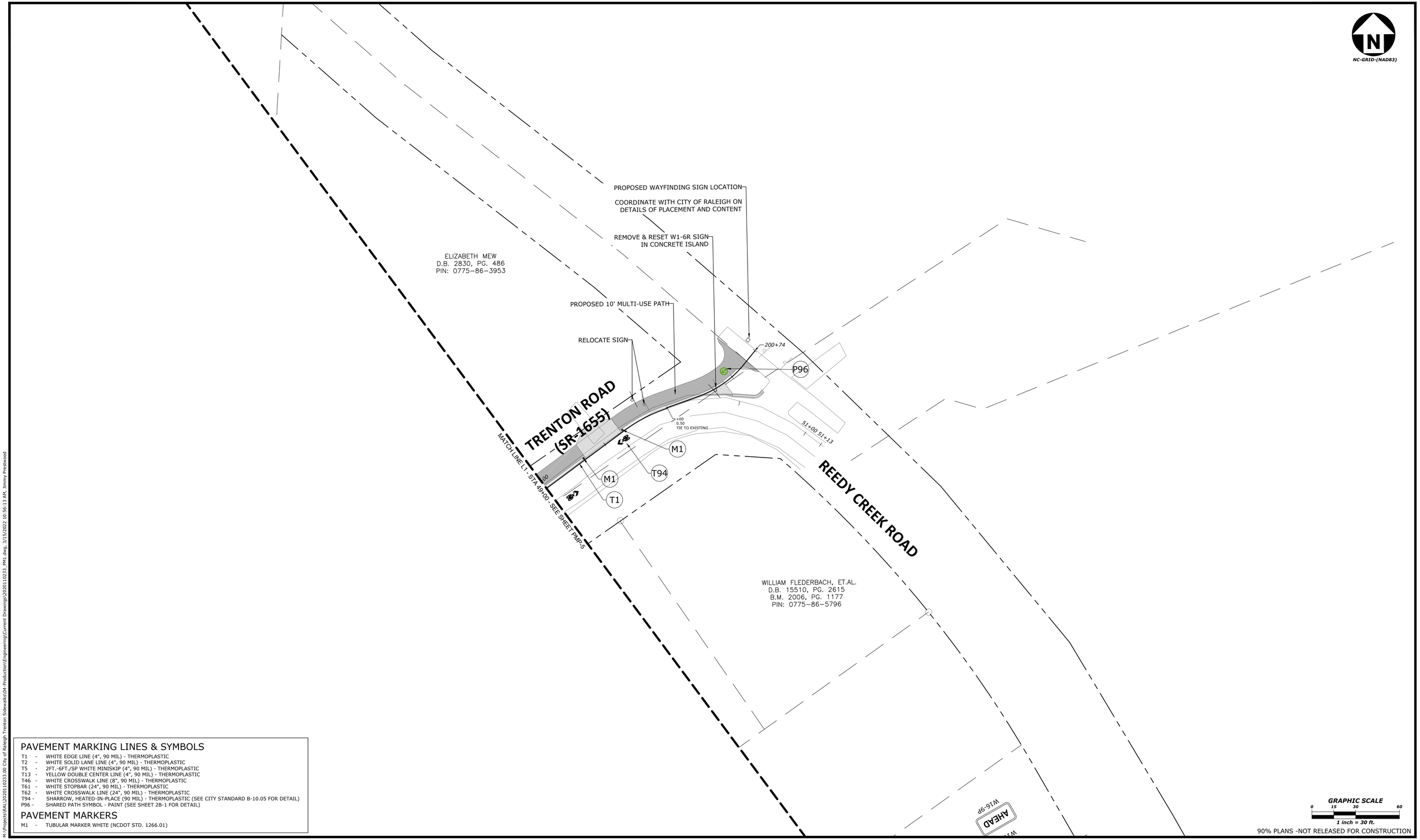
PAVEMENT MARKING & SIGNAGE PLANS

PLAN INFORMATION

PROJECT NO.	2020110233
FILENAME	2020110233_PM1.dwg
CHECKED BY	GDB
DRAWN BY	JP, ED
SCALE	1" = 30'
DATE	03/15/2022

PMP-5



PAVEMENT MARKING LINES & SYMBOLS

T1	-	WHITE EDGE LINE (4", 90 MIL) - THERMOPLASTIC
T2	-	WHITE SOLID LANE LINE (4", 90 MIL) - THERMOPLASTIC
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P96	-	SHARED PATH SYMBOL - PAINT (SEE SHEET 2B-1 FOR DETAIL)

PAVEMENT MARKERS

M1	-	TUBULAR MARKER WHITE (NCDOT STD. 1266.01)

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GREENWAY ENGINEER

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TRENTON ROAD CONNECTOR

TRENTON PARK LANE TO REEDY CREEK RD

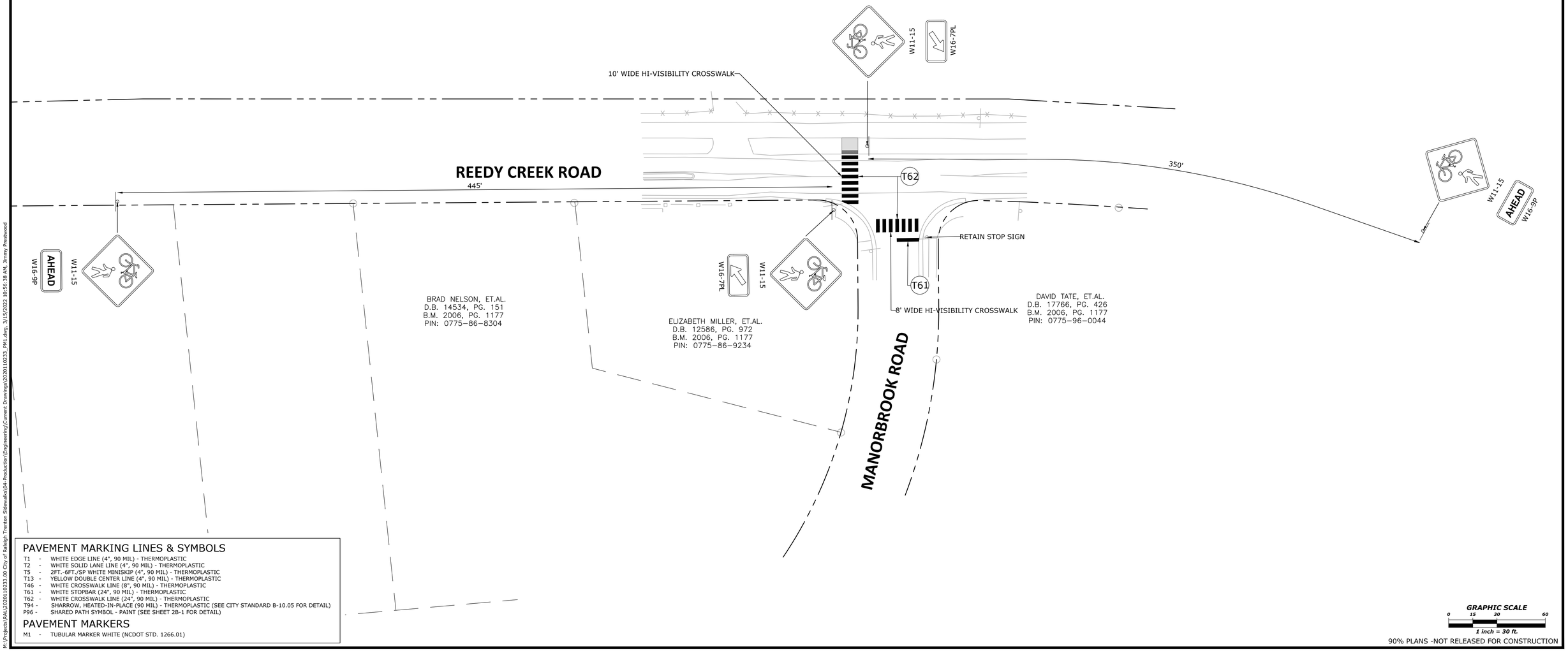
PAVEMENT MARKING & SIGNAGE PLANS

PLAN INFORMATION

PROJECT NO.	2020110233
FILENAME	2020110233_PM1.dwg
CHECKED BY	GDB
DRAWN BY	JP, ED
SCALE	1" = 30'
DATE	03/15/2022

PMP-6

NC-GRID-(NAD83)



PAVEMENT MARKING LINES & SYMBOLS

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T5 - 2FT.-6FT./SP WHITE MINISKIP (4", 90 MIL) - THERMOPLASTIC
T13 - YELLOW DOUBLE CENTER LINE (4", 90 MIL) - THERMOPLASTIC
T46 - WHITE CROSSWALK LINE (8", 90 MIL) - THERMOPLASTIC
T61 - WHITE STOPBAR (24", 90 MIL) - THERMOPLASTIC
T62 - WHITE CROSSWALK LINE (24", 90 MIL) - THERMOPLASTIC
T94 - SHARROW, HEATED-IN-PLACE (90 MIL) - THERMOPLASTIC (SEE CITY STANDARD B-10.05 FOR DETAIL)
P96 - SHARED PATH SYMBOL - PAINT (SEE SHEET 2B-1 FOR DETAIL)

PAVEMENT MARKERS

M1 - TUBULAR MARKER WHITE (NCDOT STD. 1266.01)

GRAPHIC SCALE
0 15 30 60
1 inch = 30 ft.

90% PLANS -NOT RELEASED FOR CONSTRUCTION

MCADAMS

The John R. McAdams Company, Inc.
One Glenwood Avenue
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CLIENT

Raleigh

PARKS, RECREATION, AND CULTURAL RESOURCES
RALEIGH MUNICIPAL BUILDING
222 W. HARGETT STREET
SUITE 600
RALEIGH, NC 27601
919-996-4798
CONTACT:
DAVID BENDER, PROJECT MANAGER

REVISIONS
NO. DATE

GREENWAY ENGINEER
PRELIMINARY NOT FOR CONSTRUCTION

HYDRAULICS ENGINEER
PRELIMINARY NOT FOR CONSTRUCTION

TRENTON ROAD CONNECTOR

TRENTON PARK LANE TO REEDY CREEK RD

PAVEMENT MARKING & SIGNAGE PLANS

PLAN INFORMATION

PROJECT NO.	2020110233
FILENAME	2020110233_PM1.dwg
CHECKED BY	GDB
DRAWN BY	JP, ED
SCALE	1" = 30'
DATE	03/15/2022

PMP-7

M:\Projects\RAL\2020110233.00 City of Raleigh Trenton Sidewalks\04 Production\Engineering\Current Drawings\2020110233_PM1.dwg, 3/15/2022 10:56:38 AM, Jimmy Prestwood

VICINITY MAP

RALEIGH, WAKE COUNTY NORTH CAROLINA

TRENTON ROAD CONNECTOR

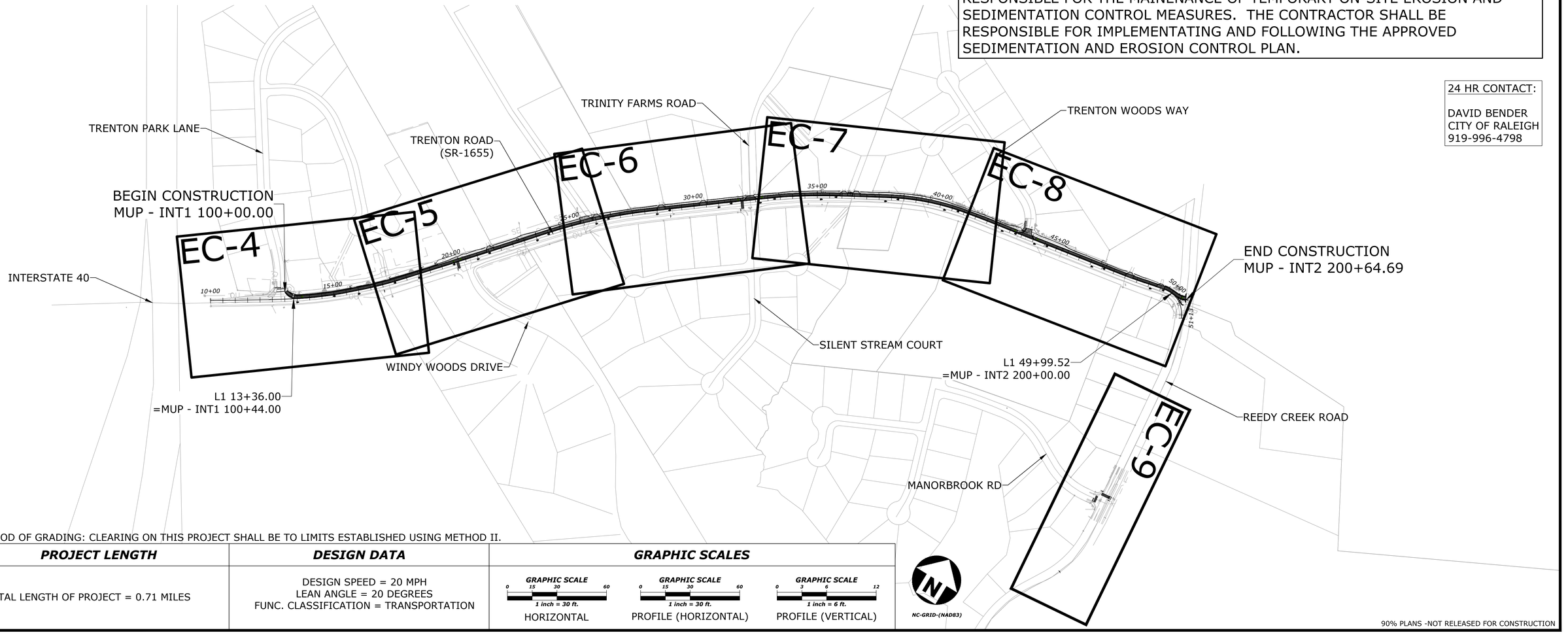
EROSION CONTROL PLANS

INDEX OF SHEETS

MAINTENANCE PLAN:
QUALIFIED PERSONNEL SHALL EVALUATE ALL TEMPORARY EROSION AND SEDIMENTATION CONTROL PRACTICES ON A DAILY BASIS FOR STABILITY AND OPERATION. WEEKLY INSPECTIONS SHALL BE PERFORMED AND WRITTEN LOGS KEPT. A RAIN GAUGE SHALL ALSO BE KEPT ON SITE AND RAINFALL AMOUNTS RECORDED. ANY REQUIRED REPAIRS SHALL BE PERFORMED IMMEDIATELY TO MAINTAIN ALL PRACTICES AS DESIGNED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MAINENANCE OF TEMPORARY ON-SITE EROSION AND SEDIMENTATION CONTROL MEASURES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR IMPLEMENTATING AND FOLLOWING THE APPROVED SEDIMENTATION AND EROSION CONTROL PLAN.

24 HR CONTACT:

DAVID BENDER
CITY OF RALEIGH
919-996-4798



METHOD OF GRADING: CLEARING ON THIS PROJECT SHALL BE TO LIMITS ESTABLISHED USING METHOD II.

PROJECT LENGTH	DESIGN DATA	GRAPHIC SCALES
TOTAL LENGTH OF PROJECT = 0.71 MILES	DESIGN SPEED = 20 MPH LEAN ANGLE = 20 DEGREES FUNC. CLASSIFICATION = TRANSPORTATION	GRAPHIC SCALE 0 15 30 60 — 1 inch = 30 ft. — HORIZONTAL GRAPHIC SCALE 0 15 30 60 — 1 inch = 30 ft. — PROFILE (HORIZONTAL) GRAPHIC SCALE 0 3 6 12 — 1 inch = 6 ft. — PROFILE (VERTICAL)

NC-GRID-(NAD83)

90% PLANS -NOT RELEASED FOR CONSTRUCTION

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HYDRAULICS ENGINEER — PRELIMINARY NOT FOR CONSTRUCTION

TRENTON ROAD CONNECTOR
TRENTON PARK LANE TO REEDY CREEK RD

COVER SHEET

PLAN INFORMATION

PROJECT NO.	2020110233
FILENAME	2020110233_EC2.dwg
CHECKED BY	GDB
DRAWN BY	JP, ED
SCALE	1" = 200'
DATE	03/15/2022

EC-1

M:\Projects\RAL\2020110233.00 City of Raleigh Trenton Sidewalks\04-Production\Engineering\Current Drawings\2020110233_EC2.dwg, 3/15/2022 10:57:47 AM, Jimmy Prestwood

GENERAL NOTES:

1. SURVEY PERFORMED BY MCADAMS DATED: JUNE 2021
2. ALL DISTANCES ARE HORIZONTAL GROUND DISTANCES.
3. PRIOR TO ANY CLEARING, GRADING OR CONSTRUCTION ACTIVITY, CONSTRUCTION FENCE OR TREE PROTECTION FENCING (IF APPLICABLE) SHALL BE INSTALLED AROUND PROTECTED TREES OR GROVES OF TREES. NO CONSTRUCTION WORKERS, TOOLS, MATERIALS, OR VEHICLES ARE PERMITTED WITHIN THE TREE PROTECTION FENCING.
4. ANY TREES AND/OR AREAS DESIGNATED TO BE PROTECTED MUST BE PROPERLY BARRICADED WITH FENCING AND PROTECTED THROUGHOUT CONSTRUCTION TO INSURE THAT NO CLEARING, GRADING, OR STAGING OF MATERIALS WILL OCCUR IN THOSE AREAS.
5. PROTECTIVE FENCING IS TO BE MAINTAINED THROUGHOUT THE DURATION OF THE PROJECT, AND CONTRACTORS SHALL RECEIVE ADEQUATE INSTRUCTION ON TREE PROTECTION METHODS.
6. CONTRACTOR SHALL NOTIFY "NC811" (811) OR (1-800-632-4949) AT LEAST 3 FULL BUSINESS DAYS PRIOR TO BEGINNING CONSTRUCTION OR EXCAVATION TO HAVE EXISTING UTILITIES LOCATED. CONTRACTOR SHALL CONTACT ANY LOCAL UTILITIES THAT PROVIDE THEIR OWN LOCATOR SERVICES INDEPENDENT OF NC811. REPORT ANY DISCREPANCIES TO THE ENGINEER IMMEDIATELY.
7. EXISTING UTILITIES AND STRUCTURES, SHOWN BOTH UNDERGROUND AND ABOVE GROUND, ARE BASED ON THE BEST AVAILABLE INFORMATION. THE CONTRACTOR SHALL VERIFY FIELD CONDITIONS, BOTH HORIZONTAL AND VERTICAL, PRIOR TO BEGINNING RELATED CONSTRUCTION. ANY DISCREPANCIES SHALL BE REPORTED TO THE ENGINEER IMMEDIATELY.
8. CONTRACTOR SHALL ROOT SPADE WITHIN ALL TREE DRIPLINES AND TAKE ALL PRECAUTIONS NECESSARY TO SAVE TREES NOT SHOWN TO BE DEMOLISHED.
9. ALL GROUND COVER SHALL BE APPLIED PER CONDITIONS OF THE NPDES PERMIT OR IN CRITICAL AREAS AT THE END OF EACH DAY.

EROSION CONTROL NOTES:

1. CONTRACTOR SHALL LOCATE AND VERIFY THE LOCATION AND DEPTH OF ALL EXISTING UNDERGROUND UTILITIES PRIOR TO BEGINNING CONSTRUCTION AND NOTIFY THE ENGINEERING OF ANY CONFLICTS/DISCREPANCIES.
2. NEW EROSION AND SEDIMENT CONTROL DEVICES MUST BE INSTALLED AS SHOWN ON PLANS AND INSPECTED PRIOR TO ANY GRADING OR DEMOLITION ON SITE. MAINTENANCE AND REPAIR SHALL BE MADE, AS NECESSARY, DURING CONSTRUCTION ACTIVITIES. THE CONTRACTOR SHALL CALL FOR AN INSPECTION ONCE INITIAL MEASURES ARE IN PLACE.
3. SEDIMENT/EROSION CONTROL DEVICES MUST BE CHECKED AFTER EACH STORM EVENT. EACH DEVICE IS TO BE MAINTAINED OR REPLACED IF SEDIMENT ACCUMULATION HAS REACHED ONE HALF THE CAPACITY OF THE DEVICE.
4. A COPY OF THE APPROVED EROSION CONTROL PLAN MUST BE ON FILE AT THE JOB SITE AT ALL TIMES.
5. INSTALL A RAIN GAUGE (6" CAPACITY OR GREATER) ONSITE.
6. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE MAINTAINED UNTIL ALL UPSLOPE DRAINAGE AREAS HAVE BEEN STABILIZED AND PERMANENT VEGETATION HAS BEEN ESTABLISHED.
7. CONSTRUCTION, MAINTENANCE, AND REMOVAL OF ALL EROSION CONTROL DEVICES ARE THE RESPONSIBILITY OF THE GRADING CONTRACTOR UNLESS OTHERWISE NOTED. ANY DEWATERING ASSOCIATED WITH THIS PROJECT IS TO BE DONE THROUGH A SILT BAG. CONTRACTOR SHALL WORK IN DRY CONDITIONS TO THE MAXIMUM EXTENT POSSIBLE.
8. ANY GRADING BEYOND THE DENUDED LIMITS SHOWN ON THE PLAN IS A VIOLATION OF THE EROSION CONTROL PERMIT AND IS SUBJECT TO A FINE. ANY NEED TO DISTURB BEYOND THE APPROVED PLAN SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER, ENGINEER AND EROSION CONTROL INSPECTOR.
9. THE ANGLE FOR GRADED SLOPES AND FILLS SHALL BE NO GREATER THAN THE ANGLE THAT CAN BE RETAINED BY VEGETATIVE COVER OR OTHER ADEQUATE EROSION-CONTROL DEVICES OR STRUCTURES. IN ANY EVENT, SLOPES LEFT EXPOSED WILL, WITHIN 7 OR 14 CALENDAR DAYS OF COMPLETION OF ANY PHASE OF GRADING, BE PLANTED OR OTHERWISE PROVIDED WITH TEMPORARY GROUND COVER, DEVISES OR STRUCTURES SUFFICIENT TO RESTRAIN EROSION. PERMANENT GROUNDCOVER WILL BE PROVIDED FOR ALL DISTURBED AREAS WITHIN 15 WORKING DAYS OR NO MORE THAN 90 CALENDAR DAYS (WHICHEVER IS SHORTER) FOLLOWING COMPLETION OF CONSTRUCTION. TEMPORARY SEEDING IS NECESSARY TO ACHIEVE EROSION CONTROL ON LARGE DENUDED AREAS AND ESPECIALLY WHEN SPECIFICALLY REQUIRED AS PART OF THE CONSTRUCTION SEQUENCE ON THE PLAN. ALL GRADED SLOPES STEEPER THAN 3:1 MUST BE SEEDED & COMPOST LAID WITHIN 7 DAYS OF COMPLETION OF GRADING. ALL REMAINING DISTURBED AREAS ARE TO BE SEEDED AND COMPOST LAID WITHIN 14 DAYS. PERMANENT SWALES ARE TO BE STABILIZED WITHIN 7 DAYS. SEE THE GROUND STABILIZATION CHART FOR ADDITIONAL REQUIREMENTS.
10. ADDITIONAL MEASURES TO CONTROL EROSION AND SEDIMENT MAY BE REQUIRED BY REPRESENTATIVE OF THE NCDEQ DEMLR DEPARTMENT. ADDITIONAL SILT FENCE OUTLETS AT LOW AREAS MAY BE INSTALLED BY CONTRACTOR AS REQUIRED. E&SC MEASURES ARE TO BE INSTALLED AT ANY AREAS USED FOR CONTRACTOR EQUIPMENT STAGING, MATERIALS LAYDOWN, SPOIL OR WASTE AREA.
11. PROTECTION OF EXISTING VEGETATION (IF APPLICABLE): AT THE START OF GRADING INVOLVING THE STRIPPING OF TOPSOIL OR LOWERING OF EXISTING GRADE AROUND A TREE, A CLEAN, SHARP, VERTICAL CUT SHALL BE MADE AT THE EDGE OF THE TREE SAVE AREA AT THE SAME TIME AS OTHER EROSION CONTROL MEASURES ARE INSTALLED. THE TREE PROTECTION FENCING SHALL BE INSTALLED ON THE SIDE OF THE CUT FARTHEST AWAY FROM THE TREE TRUNK AND SHALL REMAIN IN PLACE UNTIL ALL CONSTRUCTION IN THE VICINITY OF THE TREES IS COMPLETE. NO STORAGE OF MATERIALS, FILL, OR EQUIPMENT AND NO TRESPASSING SHALL BE ALLOWED WITHIN THE BOUNDARY OF THE PROTECTED AREA AND SHALL BE POSTED ON THE PROTECTION FENCE. A PROTECTION FENCE CONSTRUCTED OF MATERIAL RESISTANT TO DEGRADATION BY SUN, WIND, AND MOISTURE FOR THE DURATION OF THE CONSTRUCTION, SHALL BE INSTALLED AT THE SAME TIME AS THE EROSION CONTROL MEASURES AND SHALL BE IN PLACE UNTIL ALL CONSTRUCTION IN THE VICINITY OF THE TREES IS COMPLETE.
12. INSTALLATION AND MAINTENANCE OF ALL PROPOSED SEDIMENTATION & EROSION CONTROL MEASURES IS REQUIRED. THE CONTRACTOR MAY BE ALLOWED, WITH PRIOR APPROVAL FROM THE OWNER, TO COORDINATE CHANGES TO THE PLAN WITH THE ON-SITE NCDEQ DEMLR INSPECTOR AND THE ENGINEER OR THE OWNER'S REPRESENTATIVE.
13. CONTRACTOR WILL FIELD LOCATE SILT FENCE OUTLETS AT LOW POINTS IN SILT FENCE AS REQUIRED TO PROVIDE RELIEF FROM CONCENTRATED FLOWS.
14. ALL DIMENSIONS AND GRADES SHOWN ON THE PLANS SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. CONTRACTOR SHALL NOTIFY THE OWNER IF ANY DISCREPANCIES EXIST PRIOR TO PROCEEDING WITH CONSTRUCTION FOR NECESSARY PLAN OR GRADE CHANGES. NO EXTRA COMPENSATION SHALL BE PAID TO THE CONTRACTOR FOR ANY WORK DONE DUE TO DIMENSIONS OR GRADES SHOWN INCORRECTLY ON THESE PLANS IF SUCH NOTIFICATION HAS NOT BEEN GIVEN.
15. REQUIRED CONSTRUCTION/SAFETY FENCING SHALL BE INSTALLED PRIOR TO BEGINNING LAND DISTURBANCE.
16. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO KEEP ALL DIRT OFF PAVED ROADS. HEAVY MATS MAY BE USED IN LIEU OF ROCK CONSTRUCTION ENTRANCES AS DETERMINED BY THE ON-SITE INSPECTOR.
17. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO KEEP ALL SEDIMENT ON SITE AND ENSURE NO SEDIMENT LEAVES THE LIMITS OF DISTURBANCE OF THE PROJECT. THIS MAY REQUIRE INSTALLATION OF ADDITIONAL EROSION CONTROL MEASURES ABOVE AND BEYOND WHAT IS SHOWN ON THE PLANS. IF ENVIRONMENTAL OR SITE CONDITIONS WARRANT ADDITIONAL EROSION CONTROL MEASURES, CONTRACTOR SHALL OBTAIN PRIOR APPROVAL FROM DEP REPRESENTATIVE. EROSION CONTROL MEASURES DAMAGED OR REQUIRED DUE TO CONTRACTOR ACTIONS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. ALL EROSION CONTROL MEASURES SHALL BE PROPERLY MAINTAINED THROUGHOUT CONSTRUCTION AT NO ADDITIONAL COST TO DEPT.
18. ALL CONSTRUCTION DEBRIS SHALL BE TESTED AND DISPOSED OF OFF-SITE IN A STATE PERMITTED LINED LANDFILL.
19. ALL EARTHEN MATERIAL BROUGHT TO OR REMOVED FROM THE PROJECT SITE SHALL COME FROM OR BE DELIVERED TO A SITE THAT HAS A CURRENT EROSION AND SEDIMENTATION CONTROL PLAN.

MAINTENANCE PLAN:

1. ALL EROSION AND SEDIMENTATION CONTROL DEVICES WILL BE CHECKED BY THE CONTRACTOR FOR STABILITY AND OPERATION FOLLOWING EVERY RUNOFF PRODUCING RAINFALL, BUT IN NO CASE LESS THAN ONCE EVERY WEEK. ANY NEEDED REPAIRS WILL BE MADE IMMEDIATELY TO MAINTAIN ALL PRACTICES AS DESIGNED. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE MAINTAINED CONTINUOUSLY, RELOCATED WHEN AND AS NECESSARY, AND SHALL BE CHECKED AFTER EVERY RAINFALL. SEEDED AREAS SHALL BE CHECKED REGULARLY AND SHALL BE WATERED, FERTILIZED, RESEEDED AND MULCHED AS NECESSARY TO OBTAIN A DENSE STAND OF GRASS.
2. MAINTAIN EROSION CONTROL DEVICES AS FOLLOW:

   TEMPORARY SILT FENCE- REMOVE SEDIMENT DEPOSITS AS NECESSARY TO PROVIDE ADEQUATE STORAGE VOLUME FOR THE NEXT RAIN AND TO REDUCE PRESSURE ON THE FENCE. AVOID UNDERMINING THE FENCE.

   TEMPORARY CHECK DAM- REMOVE SEDIMENT ACCUMULATION BEHIND THE DAMS AS NEEDED TO PREVENT DAMAGE TO CHANNEL VEGETATION. ADD STONE TO DAMS AS NEEDED TO MAINTAIN DESIGN HEIGHT AND CROSS SECTION.

   STORM DRAIN INLET PROTECTION- REMOVE SEDIMENT AS NECESSARY TO PROVIDE ADEQUATE STORAGE VOLUME FOR THE NEXT RAINFALL.

   TEMPORARY DIVERSION DITCH- INSPECT TEMPORARY DIVERSIONS ONCE A WEEK AND AFTER EVERY RAINFALL. IMMEDIATELY REMOVE SEDIMENT FROM THE FLOW AREA AND REPAIR THE DIVERSION RIDGE. CAREFULLY CHECK OUTLETS AND MAKE TIMELY REPAIRS AS NEEDED. WHEN THE AREA PROTECTED IS PERMANENTLY STABILIZED, REMOVE THE RIDGE AND THE CHANNEL TO BLEND WITH THE NATURAL GROUND.

3. ALL GRADED AREAS WILL BE SEEDED, FERTILIZED AND MULCHED ACCORDING TO SPECIFICATIONS IN THE VEGETATIVE PLAN TO MAINTAIN A VIGOROUS, DENSE, VEGETATIVE COVER WITHIN FOURTEEN (14) DAYS OF COMPLETION OF ANY PHASE OF GRADING. IF WORK ON THE PROJECT CEASES FOR MORE THAN THE AFOREMENTIONED LENGTH OF TIME, ALL DISTURBED AREAS SHALL HAVE TEMPORARY VEGETATIVE GROUND COVER ESTABLISHED AND EROSION CONTROL DEVICES MAINTAINED.

GRADING:

1. THE CONTRACTOR IS RESPONSIBLE FOR THE LOCATION AND PROTECTION OF ALL EXISTING UTILITIES DURING CONSTRUCTION. AT LEAST 48 HOURS PRIOR TO ANY DEMOLITION, GRADING, OR CONSTRUCTION ACTIVITY THE CONTRACTOR SHALL NOTIFY THE NORTH CAROLINA ONE-CALL UTILITIES LOCATION SERVICE AT 1-800-632-4949 FOR PROPER IDENTIFICATION OF EXISTING UTILITIES WITHIN THE PROJECT SITE.
2. CONTRACTOR IS RESPONSIBLE FOR THE REPAIR AND REPLACEMENT OF ANY CURB & GUTTER, PAVEMENT, LANDSCAPING, ETC. THAT MAY BE DAMAGED DURING CONSTRUCTION. DAMAGED ITEMS SHALL BE REPAIRED TO AT LEAST THE QUALITY OF WORKMANSHIP FOUND IN THE ORIGINAL ITEM.
3. ALL AREAS SHALL BE GRADED FOR POSITIVE DRAINAGE.
4. CONTRACTOR IS RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF ALL EROSION CONTROL DEVICES SHOWN ON THE APPROVED PLANS FOR THE DURATION OF CONSTRUCTION OR UNTIL FINAL INSPECTION AND APPROVAL.
5. IN ORDER TO ENSURE PROPER DRAINAGE, MAINTAIN A MINIMUM 0.50% SLOPE ON THE CURB.
6. ALL MATERIALS USED FOR FILL OR BACK-FILL SHALL BE FREE OF WOOD, ROOTS, ROCKS, BOULDERS OR ANY OTHER NON-COMPACTABLE SOIL TYPE MATERIAL. UNSATISFACTORY MATERIALS ALSO INCLUDE MAN-MADE FILLS REFUSE DEBRIS DERIVED FROM ANY SOURCE.
7. ALL CONTOURS AND SPOT ELEVATIONS REFLECT FINISHED GRADES. REFER TO THE PAVEMENT CROSS-SECTION DETAILS TO ESTABLISH THE CORRECT SUBBASE OR AGGREGATE BASE COURSE ELEVATIONS.
8. ALL CONTOURS ARE IN REFERENCE TO THE BENCHMARK AND MUST BE VERIFIED BY THE CONTRACTOR PRIOR TO GROUND BREAKING.
9. CONTRACTOR SHALL BLEND NEW EARTHWORK SMOOTHLY TO TRANSITION BACK TO EXISTING GRADE.
10. THE LIMITS OF CLEARING SHOWN ON THE GRADING AND EROSION CONTROL PLAN IS BASED ON THE APPROXIMATE CUT AND FILL SLOPE LIMITS, OR OTHER GRADING REQUIREMENTS.
11. SLOPES SHALL BE GRADED NO STEEPER THAN 2:1.
12. COORDINATE ALL CURB AND STREET GRADES AT INTERSECTIONS WITH CITY/TOWN INSPECTORS.
13. ALL DEBRIS FROM CLEARING OPERATIONS SHALL BE DISPOSED OF IN A LEGAL MANNER.
14. HAUL ROADS USED DURING CONSTRUCTION SHALL BE OUTSIDE THE STREAM TOP OF BANK TO THE EXTENT POSSIBLE. HAUL ROADS SHALL FOLLOW THE NATURAL CONTOURS OF THE TERRAIN IF POSSIBLE. A 6" COURSE OF #57 STONE SHALL BE SPREAD OVER HAUL ROADS IN AREAS THAT ARE SUBJECT TO WET CONDITIONS. PROVIDE SUBSURFACE DRAINS IN SEEPAGE AREAS OR SEASONALLY WET AREAS.

SEEDBED PREPARATION:

AREAS TO BE SEEDED TO BE SCARIFIED 4" TO 6" DEEP. A FIRM, WELL PULVERIZED, UNIFORM SEEDBED SHOULD BE PROVIDED. FERTILIZER SHALL BE PLACED DURING SCARIFICATION AS FOLLOWS:

LIME: 45 LBS/1000 SF
PHOSPOROUS: 20 LBS/1000 SF
FERTILIZER: 17 LBS/1000 SF

PER NORTH CAROLINA SOIL AND SEDIMENTATION LAW, A VEGETATIVE GROUND COVER SUFFICIENT TO PERMANENTLY RESTRAIN EROSION SHALL BE RE-ESTABLISHED WITHIN 21 CALENDAR DAYS AFTER COMPLETION OF ANY PHASE OF GRADING. PERMANENT GROUNDCOVER FOR ALL DISTURBED AREAS WITHIN 15 WORKING DAYS OR 90 CALENDAR DAYS (WHICHEVER IS SHORTER) FOLLOWING COMPLETION OF CONSTRUCTION.

TEMPORARY SEEDING SCHEDULE:

REFER TO THE CITY STANDARD FOR TEMPORARY SEEDING SCHEDULE.

PERMANENT SEEDING SCHEDULE:

FOR PERMANENT SEEDING SPECIFICATIONS, SEASONAL LIMITATIONS FOR SEEDING OPERATIONS, THE KINDS OF GRADES OF FERTILIZERS, TYPE OF SEED, AND THE RATES OF APPLICATION, REFER TO NCDENR ESCPDM SECTION 6.11 AND THE CITY STANDARDS

CONSTRUCTION SEQUENCE:

THE FOLLOWING SEQUENCE IS FURNISHED AS A GENERAL GUIDE FOR PREPARATION OF A SEQUENCE OF CONSTRUCTION EVENTS. ADDITIONS, DELETIONS, AND MODIFICATIONS SHOULD BE MADE AS APPROPRIATE.

PHASE 1:

1. THE CONTRACTOR SHALL SET UP AN ON-SITE PRE-CONSTRUCTION CONFERENCE WITH NCDEMLR EROSION CONTROL INSPECTOR TO DISCUSS EROSION CONTROL MEASURES. FAILURE TO SCHEDULE SUCH CONFERENCE 48 HOURS PRIOR TO ANY LAND DISTURBING ACTIVITY IS A VIOLATION AND IS SUBJECT TO FINE.
2. CONTRACTOR TO MAINTAIN ALL EXISTING EROSION CONTROL FEATURES AND INSTALL SILT FENCE,INLET PROTECTION, SEDIMENT BASINS, DIVERSION DITCHES, AND OTHER MEASURES AS SHOWN ON PLANS, CLEARING ONLY AS NECESSARY TO INSTALL THESE DEVICES.
3. SCHEDULE AN ON-SITE INSPECTION BY NCDEMLR INSPECTOR. WHEN APPROVED, INSPECTOR ISSUES THE GRADING PERMIT AND CLEARING AND GRUBBING MAY BEGIN.
4. THE CONTRACTOR SHALL DILIGENTLY AND CONTINUOUSLY MAINTAIN ALL EROSION CONTROL DEVICES AND STRUCTURES.
5. THE CONTRACTOR SHALL NOT BEGIN WORK THAT CANNOT BE STABILIZED BY THE END OF THE WORK DAY.
6. ALL EARTH MOVING EQUIPMENT SHALL BE SERVICED PRIOR TO WORK COMMENCING EACH DAY. EQUIPMENT SHALL BE MAINTAINED TO PREVENT FUEL, OIL, AND LUBRICANT SPILLS IN THE VICINITY OF A STREAM.
7. FOR PHASED EROSION CONTROL PLANS, CONTRACTOR SHALL MEET WITH EROSION CONTROL INSPECTOR PRIOR TO COMMENCING WITH EACH PHASE OF EROSION CONTROL MEASURES.

PHASE 2:

1. BEGIN EARTHWORK/GRADING ACTIVITIES. BEGIN GRADING OF FILL SLOPES. MAINTAIN AND VERTICALLY ADJUST ALL ROCK CHECK DAMS, INLET PROTECTION DEVICES, DITCHES, AND SILT FENCE THROUGHOUT GRADING ACTIVITIES TO MAINTAIN DRAINAGE PATTERNS. CONTRACTOR TO ENSURE ALL EROSION CONTROL MEASURES DO NOT ADVERSELY AFFECT CONSTRUCTABILITY OF PROJECT PER TRAFFIC CONTROL PLANS.

   AS EARTHWORK ALLOWS, BEGIN INSTALLING STORM DRAINAGE STRUCTURES AND PROPOSED DITCHES. AS STORM DRAINAGE IS INSTALLED, CONTRACTOR SHALL PLACE INLET PROTECTION ON ALL STORM STRUCTURES AND REMOVE INLET PROTECTION WHERE EXISTING STORM DRAINAGE IS REMOVED.
2. DILIGENTLY AND CONTINUOUSLY MAINTAIN ALL EROSION CONTROL DEVICES AND STRUCTURES TO MINIMIZE EROSION. THE CONTRACTOR SHALL MAINTAIN CLOSE CONTACT WITH THE STATE INSPECTOR SO THAT PERIODIC INSPECTIONS CAN BE PERFORMED AT APPROPRIATE STAGES OF CONSTRUCTION.
3. AS CONSTRUCTION PROGRESSES, INSTALL PERMANENT EROSION CONTROL MEASURES SUCH AS RIP RAP APRONS, VELOCITY DISSIPATORS, CHANNEL LINERS, GRAVEL BASE COURSE, ETC.
4. GRADED SLOPES AND FILLS ARE TO BE PLANTED OR PROVIDED WITH PROTECTIVE COVER SUFFICIENT TO RESTRAIN EROSION WITHIN 14 CALENDAR DAYS AFTER THE COMPLETION OF ANY PHASE OF GRADING. ALL AREAS UPON WHICH NO FURTHER LAND DISTURBING ACTIVITY WILL BE UNDERTAKEN ARE TO BE PLANTED OR PROVIDED WITH PROTECTIVE COVER WITHIN 21 CALENDAR DAYS.
5. ALL EROSION CONTROL MEASURES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE N.C. EROSION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL AND U.S. DEPT. OF AGRICULTURE

PHASE 3:

1. AS AREAS ARE BROUGHT TO FINISHED GRADE, CONTRACTOR TO INSTALL FINAL GRASSING AND STABILIZE ALL SLOPES PER THE EROSION CONTROL NOTES AND DETAILS.
2. CONTRACTOR SHALL COORDINATE WITH THE EROSION CONTROL INSPECTOR PRIOR TO REMOVAL OF EROSION CONTROL MEASURES.

NCDOT STANDARDS:

THE FOLLOWING ROADWAY STANDARDS AS APPEAR IN "ROADWAY STANDARD DRAWINGS" HIGHWAY DESIGN BRANCH - N.C. DEPARTMENT OF TRANSPORTATION - RALEIGH, N.C., DATED JANUARY, 2018 ARE APPLICABLE TO THIS PROJECT AND BY REFERENCE HEREBY ARE CONSIDERED A PART OF THESE PLANS:

STD.NO.	TITLE
DIVISION 16 - EROSION CONTROL AND ROADSIDE DEVELOPMENT	
1605.01	Temporary Silt Fence
1606.01	Special Sediment Control Fence
1631.01	Matting Installation
1632.03	Rock Inlet Sediment Trap Type C
1633.02	Temporary Rock Silt Check Dam Type B
1635.02	Rock Pipe Inlet Sediment Trap Type B

ADDITIONAL NCDOT STANDARDS NOT ON THE LIST ABOVE MAY BE REQUIRED AS PER PLAN DETAILS AND SPECIFICATIONS.

PROJECT DESCRIPTION:

THE PROJECT SITE IS LOCATED IN WAKE COUNTY WITHIN THE CITY OF RALEIGH AND IS WITHIN THE NEUSE RIVER BASIN. THE PROPOSED PROJECT INCLUDES THE CONSTRUCTION OF APPROXIMATELY 0.71 MILES OF NEW MULTI-USE PATH ALONG TRENTON ROAD BETWEEN TRENTON PARK LANE AND REEDY CREEK ROAD. THE LIMITS OF DISTURBANCE WERE CALCULATED BASED ON CLEARING METHOD II AT APPROXIMATELY 2.0 ACRES FOR THIS SITE. ALL DISTURBED AREAS WILL BE STABILIZED WITH VEGETATION BY SEEDING AND MULCHING.

THE PROJECT DESIGN SHALL COMPLY WITH NORTH CAROLINA LAND QUALITY GUIDELINES AND PROCEDURES AND ALL APPLICABLE FEDERAL, STATE, AND TOWN REQUIREMENTS.

TOTAL DISTURBED AREA = ±2.00 AC

90% PLANS -NOT RELEASED FOR CONSTRUCTION

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REVISIONS

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PRELIMINARY NOT FOR CONSTRUCTION

HYDRAULICS ENGINEER

PRELIMINARY NOT FOR CONSTRUCTION

TRENTON ROAD CONNECTOR

TRENTON PARK LANE TO REEDY CREEK RD

GENERAL NOTES

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EC-2A

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GROUND STABILIZATION AND MATERIALS HANDLING PRACTICES FOR COMPLIANCE WITH THE NCG01 CONSTRUCTION GENERAL PERMIT

Implementing the details and specifications on this plan sheet will result in the construction activity being considered compliant with the Ground Stabilization and Materials Handling sections of the NCG01 Construction General Permit (Sections E and F, respectively). The permittee shall comply with the Erosion and Sediment Control plan approved by the delegated authority having jurisdiction. All details and specifications shown on this sheet may not apply depending on site conditions and the delegated authority having jurisdiction.

SECTION E: GROUND STABILIZATION

Required Ground Stabilization Timeframes

Site Area Description	Stabilize within this many calendar days after ceasing land disturbance	Timeframe variations
(a) Perimeter dikes, swales, ditches, and perimeter slopes	7	None
(b) High Quality Water (HQW) Zones	7	None
(c) Slopes steeper than 3:1	7	If slopes are 10' or less in length and are not steeper than 2:1, 14 days are allowed
(d) Slopes 3:1 to 4:1	14	-7 days for slopes greater than 50' in length and with slopes steeper than 4:1 -7 days for perimeter dikes, swales, ditches, perimeter slopes and HQW Zones -10 days for Falls Lake Watershed
(e) Areas with slopes flatter than 4:1	14	-7 days for perimeter dikes, swales, ditches, perimeter slopes and HQW Zones -10 days for Falls Lake Watershed unless there is zero slope

Note: After the permanent cessation of construction activities, any areas with temporary ground stabilization shall be converted to permanent ground stabilization as soon as practicable but in no case longer than 90 calendar days after the last land disturbing activity. Temporary ground stabilization shall be maintained in a manner to render the surface stable against accelerated erosion until permanent ground stabilization is achieved.

GROUND STABILIZATION SPECIFICATION

Stabilize the ground sufficiently so that rain will not dislodge the soil. Use one of the techniques in the table below:

Temporary Stabilization	Permanent Stabilization
• Temporary grass seed covered with straw or other mulches and tackifiers • Hydroseeding • Rolled erosion control products with or without temporary grass seed • Appropriately applied straw or other mulch • Plastic sheeting	• Permanent grass seed covered with straw or other mulches and tackifiers • Geotextile fabrics such as permanent soil reinforcement matting • Hydroseeding • Shrubs or other permanent plantings covered with mulch • Uniform and evenly distributed ground cover sufficient to restrain erosion • Structural methods such as concrete, asphalt or retaining walls • Rolled erosion control products with grass seed

POLYACRYLAMIDES (PAMS) AND FLOCCULANTS

1. Select flocculants that are appropriate for the soils being exposed during construction, selecting from the *NC DWR List of Approved PAMS/Flocculants*.
2. Apply flocculants at or before the inlets to Erosion and Sediment Control Measures.
3. Apply flocculants at the concentrations specified in the *NC DWR List of Approved PAMS/Flocculants* and in accordance with the manufacturer's instructions.
4. Provide ponding area for containment of treated Stormwater before discharging offsite.
5. Store flocculants in leak-proof containers that are kept under storm-resistant cover or surrounded by secondary containment structures.

EQUIPMENT AND VEHICLE MAINTENANCE

1. Maintain vehicles and equipment to prevent discharge of fluids.
2. Provide drip pans under any stored equipment.
3. Identify leaks and repair as soon as feasible, or remove leaking equipment from the project.
4. Collect all spent fluids, store in separate containers and properly dispose as hazardous waste (recycle when possible).
5. Remove leaking vehicles and construction equipment from service until the problem has been corrected.
6. Bring used fuels, lubricants, coolants, hydraulic fluids and other petroleum products to a recycling or disposal center that handles these materials.

LITTER, BUILDING MATERIAL AND LAND CLEARING WASTE

1. Never bury or burn waste. Place litter and debris in approved waste containers.
2. Provide a sufficient number and size of waste containers (e.g dumpster, trash receptacle) on site to contain construction and domestic wastes.
3. Locate waste containers at least 50 feet away from storm drain inlets and surface waters unless no other alternatives are reasonably available.
4. Locate waste containers on areas that do not receive substantial amounts of runoff from upland areas and does not drain directly to a storm drain, stream or wetland.
5. Cover waste containers at the end of each workday and before storm events or provide secondary containment. Repair or replace damaged waste containers.
6. Anchor all lightweight items in waste containers during times of high winds.
7. Empty waste containers as needed to prevent overflow. Clean up immediately if containers overflow.
8. Dispose waste off-site at an approved disposal facility.
9. On business days, clean up and dispose of waste in designated waste containers.

PAINT AND OTHER LIQUID WASTE

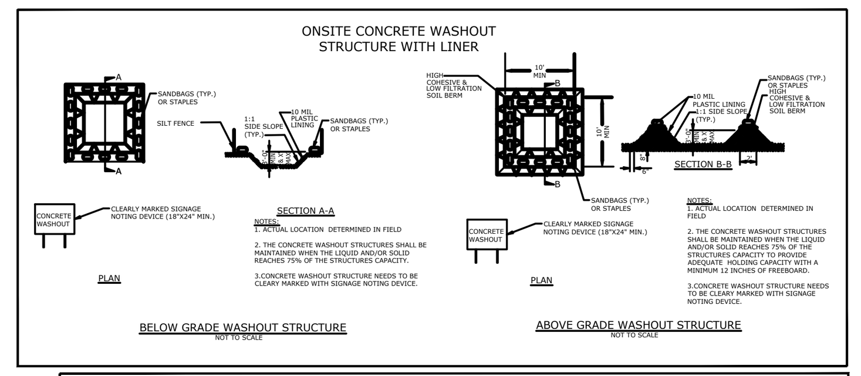
1. Do not dump paint and other liquid waste into storm drains, streams or wetlands.
2. Locate paint washouts at least 50 feet away from storm drain inlets and surface waters unless no other alternatives are reasonably available.
3. Contain liquid wastes in a controlled area.
4. Containment must be labeled, sized and placed appropriately for the needs of site.
5. Prevent the discharge of soaps, solvents, detergents and other liquid wastes from construction sites.

PORTABLE TOILETS

1. Install portable toilets on level ground, at least 50 feet away from storm drains, streams or wetlands unless there is no alternative reasonably available. If 50 foot offset is not attainable, provide relocation of portable toilet behind silt fence or place on a gravel pad and surround with sand bags.
2. Provide staking or anchoring of portable toilets during periods of high winds or in high foot traffic areas.
3. Monitor portable toilets for leaking and properly dispose of any leaked material. Utilize a licensed sanitary waste hauler to remove leaking portable toilets and replace with properly operating unit.

EARTHEN STOCKPILE MANAGEMENT

1. Show stockpile locations on plans. Locate earthen-material stockpile areas at least 50 feet away from storm drain inlets, sediment basins, perimeter sediment controls and surface waters unless it can be shown no other alternatives are reasonably available.
2. Protect stockpile with silt fence installed along toe of slope with a minimum offset of five feet from the toe of stockpile.
3. Provide stable stone access point when feasible.
4. Stabilize stockpile within the timeframes provided on this sheet and in accordance with the approved plan and any additional requirements. Soil stabilization is defined as vegetative, physical or chemical coverage techniques that will restrain accelerated erosion on disturbed soils for temporary or permanent control needs.



CONCRETE WASHOUTS

1. Do not discharge concrete or cement slurry from the site.
2. Dispose of, or recycle settled, hardened concrete residue in accordance with local and state solid waste regulations and at an approved facility.
3. Manage washout from mortar mixers in accordance with the above item and in addition place the mixer and associated materials on impervious barrier and within lot perimeter silt fence.
4. Install temporary concrete washouts per local requirements, where applicable. If an alternate method or product is to be used, contact your approval authority for review and approval. If local standard details are not available, use one of the two types of temporary concrete washouts provided on this detail.
5. Do not use concrete washouts for dewatering or storing defective curb or sidewalk sections. Stormwater accumulated within the washout may not be pumped into or discharged to the storm drain system or receiving surface waters. Liquid waste must be pumped out and removed from project.
6. Locate washouts at least 50 feet from storm drain inlets and surface waters unless it can be shown that no other alternatives are reasonably available. At a minimum, install protection of storm drain inlet(s) closest to the washout which could receive spills or overflow.
7. Locate washouts in an easily accessible area, on level ground and install a stone entrance pad in front of the washout. Additional controls may be required by the approving authority.
8. Install at least one sign directing concrete trucks to the washout within the project limits. Post signage on the washout itself to identify this location.
9. Remove leavings from the washout when at approximately 75% capacity to limit overflow events. Replace the tarp, sand bags or other temporary structural components when no longer functional. When utilizing alternative or proprietary products, follow manufacturer's instructions.
10. At the completion of the concrete work, remove remaining leavings and dispose of in an approved disposal facility. Fill pit, if applicable, and stabilize any disturbance caused by removal of washout.

HERBICIDES, PESTICIDES AND RODENTICIDES

1. Store and apply herbicides, pesticides and rodenticides in accordance with label restrictions.
2. Store herbicides, pesticides and rodenticides in their original containers with the label, which lists directions for use, ingredients and first aid steps in case of accidental poisoning.
3. Do not store herbicides, pesticides and rodenticides in areas where flooding is possible or where they may spill or leak into wells, stormwater drains, ground water or surface water. If a spill occurs, clean area immediately.
4. Do not stockpile these materials onsite.

HAZARDOUS AND TOXIC WASTE

1. Create designated hazardous waste collection areas on-site.
2. Place hazardous waste containers under cover or in secondary containment.
3. Do not store hazardous chemicals, drums or bagged materials directly on the ground.

NCG01 GROUND STABILIZATION AND MATERIALS HANDLING

EFFECTIVE: 04/01/19

PART III
SELF-INSPECTION, RECORDKEEPING AND REPORTING

SECTION A: SELF-INSPECTION

Self-inspections are required during normal business hours in accordance with the table below. When adverse weather or site conditions would cause the safety of the inspection personnel to be in jeopardy, the inspection may be delayed until the next business day on which it is safe to perform the inspection. In addition, when a storm event of equal to or greater than 1.0 inch occurs outside of normal business hours, the self-inspection shall be performed upon the commencement of the next business day. Any time when inspections were delayed shall be noted in the Inspection Record.

Inspect	Frequency (during normal business hours)	Inspection records must include:
(1) Rain gauge maintained in good working order	Daily	Daily rainfall amounts. If no daily rain gauge observations are made during weekend or holiday periods, and no individual-day rainfall information is available, record the cumulative rain measurement for those unattended days (and this will determine if a site inspection is needed). Days on which no rainfall occurred shall be recorded as "zero." The permittee may use another rain-monitoring device approved by the Division.
(2) E&SC Measures	At least once per 7 calendar days and within 24 hours of a rain event ≥ 1.0 inch in 24 hours	1. Identification of the measures inspected, 2. Date and time of the inspection, 3. Name of the person performing the inspection, 4. Indication of whether the measures were operating properly, 5. Description of maintenance needs for the measure, 6. Description, evidence, and date of corrective actions taken.
(3) Stormwater discharge outfalls (SDOs)	At least once per 7 calendar days and within 24 hours of a rain event ≥ 1.0 inch in 24 hours	1. Identification of the discharge outfalls inspected, 2. Date and time of the inspection, 3. Name of the person performing the inspection, 4. Evidence of indicators of stormwater pollution such as oil sheen, floating or suspended solids or discoloration, 5. Indication of visible sediment leaving the site, 6. Description, evidence, and date of corrective actions taken.
(4) Perimeter of site	At least once per 7 calendar days and within 24 hours of a rain event ≥ 1.0 inch in 24 hours	If visible sedimentation is found outside site limits, then a record of the following shall be made: 1. Actions taken to clean up or stabilize the sediment that has left the site limits, 2. Description, evidence, and date of corrective actions taken, and 3. An explanation as to the actions taken to control future releases.
(5) Streams or wetlands onsite or offsite (where accessible)	At least once per 7 calendar days and within 24 hours of a rain event ≥ 1.0 inch in 24 hours	If the stream or wetland has increased visible sedimentation or a stream has visible increased turbidity from the construction activity, then a record of the following shall be made: 1. Description, evidence and date of corrective actions taken, and 2. Records of the required reports to the appropriate Division Regional Office per Part III, Section C, Item (2)(a) of this permit.
(6) Ground stabilization measures	After each phase of grading	1. The phase of grading (installation of perimeter E&SC measures, clearing and grubbing, installation of storm drainage facilities, completion of all land-disturbing activity, construction or redevelopment, permanent ground cover). 2. Documentation that the required ground stabilization measures have been provided within the required timeframe or an assurance that they will be provided as soon as possible.

NOTE: The rain inspection resets the required 7 calendar day inspection requirement.

PART III
SELF-INSPECTION, RECORDKEEPING AND REPORTING

SECTION B: RECORDKEEPING

1. E&SC Plan Documentation

The approved E&SC plan as well as any approved deviation shall be kept on the site. The approved E&SC plan must be kept up-to-date throughout the coverage under this permit. The following items pertaining to the E&SC plan shall be kept on site and available for inspection at all times during normal business hours.

Item to Document	Documentation Requirements
(a) Each E&SC measure has been installed and does not significantly deviate from the locations, dimensions and relative elevations shown on the approved E&SC plan.	Initial and date each E&SC measure on a copy of the approved E&SC plan or complete, date and sign an inspection report that lists each E&SC measure shown on the approved E&SC plan. This documentation is required upon the initial installation of the E&SC measures or if the E&SC measures are modified after initial installation.
(b) A phase of grading has been completed.	Initial and date a copy of the approved E&SC plan or complete, date and sign an inspection report to indicate completion of the construction phase.
(c) Ground cover is located and installed in accordance with the approved E&SC plan.	Initial and date a copy of the approved E&SC plan or complete, date and sign an inspection report to indicate compliance with approved ground cover specifications.
(d) The maintenance and repair requirements for all E&SC measures have been performed.	Complete, date and sign an inspection report.
(e) Corrective actions have been taken to E&SC measures.	Initial and date a copy of the approved E&SC plan or complete, date and sign an inspection report to indicate the completion of the corrective action.

2. Additional Documentation to be Kept on Site

In addition to the E&SC plan documents above, the following items shall be kept on the site and available for inspectors at all times during normal business hours, unless the Division provides a site-specific exemption based on unique site conditions that make this requirement not practical:

(a) This General Permit as well as the Certificate of Coverage, after it is received.

(b) Records of inspections made during the previous twelve months. The permittee shall record the required observations on the Inspection Record Form provided by the Division or a similar inspection form that includes all the required elements. Use of electronically-available records in lieu of the required paper copies will be allowed if shown to provide equal access and utility as the hard-copy records.

3. Documentation to be Retained for Three Years

All data used to complete the e-NOI and all inspection records shall be maintained for a period of three years after project completion and made available upon request. [40 CFR 122.41]

PART III
SELF-INSPECTION, RECORDKEEPING AND REPORTING

SECTION C: REPORTING

1. Occurrences that Must be Reported

Permittees shall report the following occurrences:

(a) Visible sediment deposition in a stream or wetland.

(b) Oil spills if:
- They are 25 gallons or more,
- They are less than 25 gallons but cannot be cleaned up within 24 hours,
- They cause sheen on surface waters (regardless of volume), or
- They are within 100 feet of surface waters (regardless of volume).

(c) Releases of hazardous substances in excess of reportable quantities under Section 311 of the Clean Water Act (Ref: 40 CFR 110.3 and 40 CFR 117.3) or Section 102 of CERCLA (Ref: 40 CFR 302.4) or G.S. 143-215.85.

(d) Anticipated bypasses and unanticipated bypasses.

(e) Noncompliance with the conditions of this permit that may endanger health or the environment.

2. Reporting Timeframes and Other Requirements

After a permittee becomes aware of an occurrence that must be reported, he shall contact the appropriate Division regional office within the timeframes and in accordance with the other requirements listed below. Occurrences outside normal business hours may also be reported to the Department's Environmental Emergency Center personnel at (800) 858-0368.

Occurrence	Reporting Timeframes (After Discovery) and Other Requirements
(a) Visible sediment deposition in a stream or wetland	• *Within 24 hours*, an oral or electronic notification. • *Within 7 calendar days*, a report that contains a description of the sediment and actions taken to address the cause of the deposition. Division staff may waive the requirement for a written report on a case-by-case basis. • If the stream is named on the NC 303(d) list as impaired for sediment-related causes, the permittee may be required to perform additional monitoring, inspections or apply more stringent practices if staff determine that additional requirements are needed to assure compliance with the federal or state impaired-waters conditions.
(b) Oil spills and release of hazardous substances per Item 1(b)-(c) above	• *Within 24 hours*, an oral or electronic notification. The notification shall include information about the date, time, nature, volume and location of the spill or release.
(c) Anticipated bypasses [40 CFR 122.41(m)(3)]	• *A report at least ten days before the date of the bypass, if possible.* The report shall include an evaluation of the anticipated quality and effect of the bypass.
(d) Unanticipated bypasses [40 CFR 122.41(m)(3)]	• *Within 24 hours*, an oral or electronic notification. • *Within 7 calendar days*, a report that includes an evaluation of the quality and effect of the bypass.
(e) Noncompliance with the conditions of this permit that may endanger health or the environment [40 CFR 122.41(l)(7)]	• *Within 24 hours*, an oral or electronic notification. • *Within 7 calendar days*, a report that contains a description of the noncompliance, and its causes; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time noncompliance is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance. [40 CFR 122.41(l)(6)]. • Division staff may waive the requirement for a written report on a case-by-case basis.

PART II, SECTION G, ITEM (4)
DRAW DOWN OF SEDIMENT BASINS FOR MAINTENANCE OR CLOSE OUT

Sediment basins and traps that receive runoff from drainage areas of one acre or more shall use outlet structures that withdraw water from the surface when these devices need to be drawn down for maintenance or close out unless this is infeasible. The circumstances in which it is not feasible to withdraw water from the surface shall be rare (for example, times with extended cold weather). Non-surface withdrawals from sediment basins shall be allowed only when all of the following criteria have been met:

(a) The E&SC plan authority has been provided with documentation of the non-surface withdrawal and the specific time periods or conditions in which it will occur. The non-surface withdrawal shall not commence until the E&SC plan authority has approved these items,
(b) The non-surface withdrawal has been reported as an anticipated bypass in accordance with Part III, Section C, Item (2)(c) and (d) of this permit,
(c) Dewatering discharges are treated with controls to minimize discharges of pollutants from stormwater that is removed from the sediment basin. Examples of appropriate controls include properly sited, designed and maintained dewatering tanks, weir tanks, and filtration systems,
(d) Vegetated, upland areas of the sites or a properly designed stone pad is used to the extent feasible at the outlet of the dewatering treatment devices described in Item (c) above,
(e) Velocity dissipation devices such as check dams, sediment traps, and riprap are provided at the discharge points of all dewatering devices, and
(f) Sediment removed from the dewatering treatment devices described in Item (c) above is disposed of in a manner that does not cause deposition of sediment into waters of the United States.

NCG01 SELF-INSPECTION, RECORDKEEPING AND REPORTING

EFFECTIVE: 04/01/19

DEMLR Monitoring Form DEMLR Form Rev. 04012019 — Page 1 of 2

INSPECTION AND MONITORING RECORDS FOR ACTIVITIES UNDER STORMWATER GENERAL PERMIT NCG010000
AND SELF-INSPECTION RECORDS FOR LAND DISTURBING ACTIVITIES PER G.S. 113A-54.1

Project Name			Land Quality or Local Program Project #	
Financially Responsible Party, (FRP) / Permittee			County	
INSPECTOR		Name	Employer	
Inspector Type (Mark)	X	Address		
FRP/Permittee				
Agent/Designee		Phone Number	Email Address	

PART 1A: Rainfall Data

Day / Date	Rain Amt (inches) Daily Rainfall Required, except for Holidays or Weekends. If no rain, indicate with a "zero"
M	
T	
W	
Th	
F	
Sat (Optional)	
Sun (Optional)	

PART 1B: Current Phase of Project

Phase of Grading check the applicable box(es)	X
Installation of perimeter erosion and sediment control measures	
Clearing and grubbing of existing ground cover	
Completion of any phase of grading of slopes or fills	
Installation of storm drainage facilities	
Completion of all land-disturbing activity, construction or development	
Permanent ground cover sufficient to restrain erosion has been established	

PART 1C: Signature of Inspector

By this signature, I certify in accordance with the NCG010000 permit & G.S. 113A-54.1 that this report is accurate and complete to the best of my knowledge.

Financially Responsible Party / Permittee or Agent / Designee	Date

GROUND STABILIZATION TIMEFRAMES

Site Area Description	Stabilization	Timeframe Variations
Perimeter dikes, swales and slopes	7 Days	None
High Quality Water (HQW) Zones	7 Days	None
Slopes Steeper than 3:1	7 Days	14 days for slopes 10 ft or less in length and not steeper than 2:1 10 days for Falls Lake Watershed
Slopes 3:1 to 4:1	14 Days	7 days for slopes greater than 50 ft in length, 10 days for Falls Lake Watershed
All other areas with slopes flatter than 4:1	14 Days	10 days for Falls Lake Watershed

DEMLR Monitoring Form DEMLR Form Rev. 04012019 — Page 2 of 2

PART 2A: EROSION AND SEDIMENTATION CONTROL MEASURES: Measures must be inspected at least ONCE PER 7 CALENDAR DAYS AND WITHIN 24 HOURS OF A RAINFALL EVENT EQUAL TO OR GREATER THAN 1.0 INCH PER 24 HOUR PERIOD.

Erosion and Sedimentation Control Measures Inspected						Inspection Date	Describe Actions Needed Corrective actions should be performed as soon as possible and before the next storm event	Date Noted as Corrected
Measure ID or Location and Description	Operating Properly? (Y/N)	Any Repair or Maintenance Needed? (Y/N)	New Measures Installed * Proposed Dimensions (ft.)	Actual Dimensions (ft.)	Significant Deviation from Plan? (Y/N)			

*New erosion and sedimentation control measures installed since the last inspection should be documented here or by initialing and dating each measure or practice shown on a copy of the approved erosion and sedimentation control plan. List Dimensions of Measures such as Sediment Basins and Riprap Aprons

PART 2B: STORMWATER DISCHARGE OUTFALLS (SDOs): SDOs must be inspected at least ONCE PER 7 CALENDAR DAYS AND WITHIN 24 HOURS OF A RAINFALL EVENT EQUAL TO OR GREATER THAN 1.0 INCH PER 24 HOUR PERIOD.

Stormwater Discharge Outfalls Inspected					Inspection Date	Report Visible Sedimentation to streams or wetlands to Land Quality within 24 Hours https://deq.nc.gov/contact/regional-offices Describe Actions Needed Corrective actions should be performed as soon as possible and before the next storm event	Date Noted as Corrected
Stormwater Discharge Outfall ID or Location	Any Visible Sedimentation in Streams, Wetlands or Outside Site Limits? (Y/N)	Any Increase in Stream Turbidity from Discharge? (Y/N)	Any Visible Erosion below SDO? (Y/N)	Any visible oil sheen, floating or suspended solids or discoloration? (Y/N)			

PART 2C: GROUND STABILIZATION Must be recorded after each Phase of Grading

Areas Where Land Disturbance Has Been Completed or Temporarily Stopped	Time Limit for Ground Cover 7 days or 14 days	Is Ground Cover Sufficient to Restrain Erosion? (Y/N)	Inspection Date	Describe Actions Needed	Date Noted as Corrected

90% PLANS -NOT RELEASED FOR CONSTRUCTION

MCADAMS

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fax 919. 361. 2269
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CLIENT

Raleigh

PARKS, RECREATION, AND CULTURAL RESOURCES
RALEIGH MUNICIPAL BUILDING
222 W. HARGETT STREET
SUITE 600
RALEIGH, NC 27601
919-996-4798
CONTACT:
DAVID BENDER, PROJECT MANAGER

REVISIONS
N0. DATE

GREENWAY ENGINEER
PRELIMINARY
NOT FOR CONSTRUCTION

HYDRAULICS ENGINEER
PRELIMINARY
NOT FOR CONSTRUCTION

TRENTON ROAD CONNECTOR

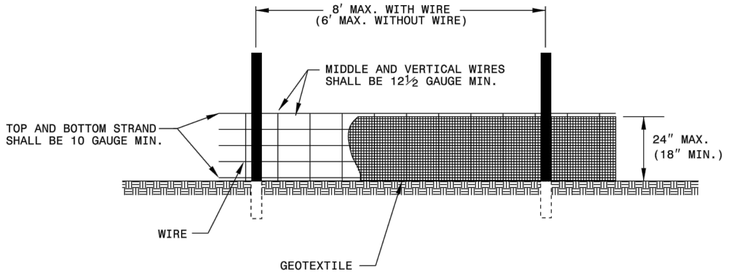
TRENTON PARK LANE TO REEDY CREEK RD

GENERAL NOTES

PLAN INFORMATION

PROJECT NO. 2020110233
FILENAME 2020110233_EC2.dwg
CHECKED BY GDB
DRAWN BY JP, ED
SCALE 1" = 200'
DATE 03/15/2022

EC-2B



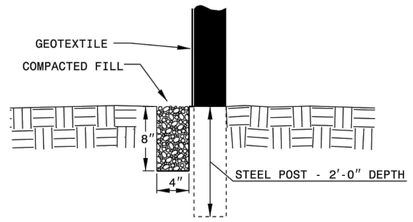
NOTES

USE GEOTEXTILE A MINIMUM OF 36″ IN WIDTH AND FASTEN ADEQUATELY TO THE POSTS AND WIRE AS DIRECTED.

USE WIRE A MINIMUM OF 32″ IN WIDTH AND WITH A MINIMUM OF 5 LINE WIRES WITH 12″ VERTICAL SPACING.

PROVIDE 5′-0″ STEEL POST OF THE SELF-FASTENER ANGLE STEEL TYPE.

FOR MECHANICAL SLICING METHOD INSTALLATION, GEOTEXTILE SHALL BE A MAXIMUM OF 18″ ABOVE GROUND SURFACE.



EXTENSION OF GEOTEXTILE AND WIRE INTO TRENCH

1-18

STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

ROADWAY STANDARD DRAWING FOR
TEMPORARY SILT FENCE

SHEET 1 OF 1
1605.01

NOTES

USE NO. 5 OR NO. 57 STONE FOR SEDIMENT CONTROL STONE.

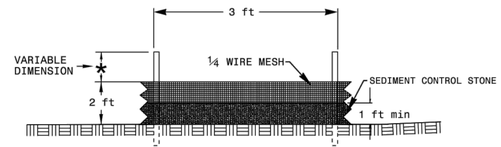
USE HARDWARE CLOTH 24 GAUGE WIRE MESH WITH ¼ INCH MESH OPENINGS.

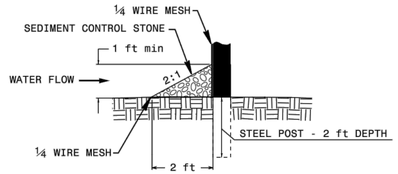
INSTALL 5 FT. SELF FASTENER ANGLE STEEL POST 2 FT. DEEP MINIMUM.

ATTACH HARDWARE CLOTH TO POSTS WITH WIRE STAPLE OR OTHER ACCEPTABLE METHODS.

SPACE POSTS A MAXIMUM OF 3 FT.

FOR INSTALLATION BETWEEN SECTIONS OF SILT FENCE, EXTEND SEDIMENT CONTROL STONE A MINIMUM OF 12″ ON EACH SIDE OF SPECIAL SEDIMENT CONTROL FENCE SECTION.



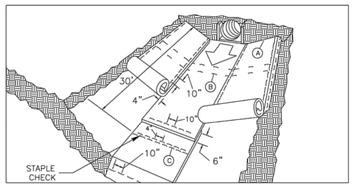


1-18

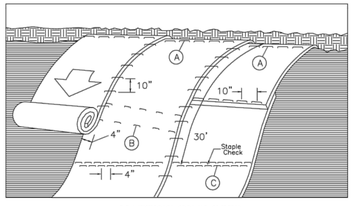
STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

ROADWAY STANDARD DRAWING FOR
SPECIAL SEDIMENT CONTROL FENCE

SHEET 1 OF 1
1606.01



MATTING IN DITCHES



MATTING ON SLOPES

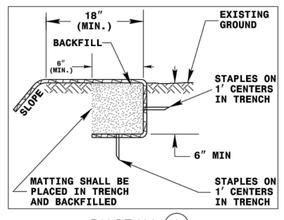
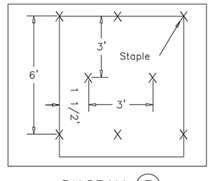


DIAGRAM (A)



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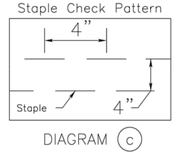


DIAGRAM (c)

NOTES

THIS DETAIL APPLIES TO STRAW, EXCELSIOR, COIR FIBER MAT AND PERMANENT SOIL REINFORCEMENT MAT (PSRM) INSTALLATION AND AS DIRECTED.

STAPLES SHALL BE NO. 11 GAUGE STEEL WIRE FORMED INTO A "U" SHAPE WITH A MINIMUM THROAT WIDTH OF 1 INCH AND NOT LESS THAN 6 INCHES IN LENGTH.

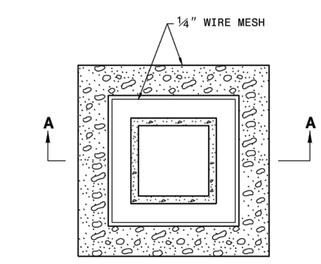
NOT TO SCALE

1-18

STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

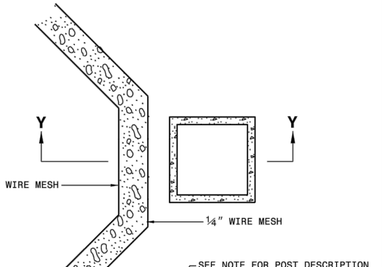
ROADWAY STANDARD DRAWING FOR
MATTING INSTALLATION

SHEET 1 OF 1
1631.01



SECTION A-A

MULTI-DIRECTIONAL FLOW



SECTION Y-Y

SINGLE-DIRECTIONAL FLOW

NOTES

USE NO. 5 OR NO. 57 STONE FOR SEDIMENT CONTROL STONE.

USE 24 GAUGE MINIMUM WIRE MESH HARDWARE CLOTH WITH ¼ INCH MESH OPENINGS.

PLACE TOP OF WIRE MESH A MINIMUM OF ONE FOOT BELOW THE SHOULDER OR ANY DIVERSION POINT.

ATTACH HARDWARE CLOTH TO POSTS WITH PLASTIC TIES, WIRE FASTENERS, OR OTHER APPROVED ATTACHMENT DEVICE.

INSTALL WIRE MESH UNDER SEDIMENT CONTROL STONE.

USE 5′ STEEL POST, INSTALLED 2′ DEEP MINIMUM, AND OF THE SELF-FASTENER ANGLE STEEL TYPE.

SPACE POST A MAXIMUM OF 4′.

1-18

STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

ROADWAY STANDARD DRAWING FOR
ROCK INLET SEDIMENT TRAP TYPE C

SHEET 1 OF 1
1632.03

90% PLANS -NOT RELEASED FOR CONSTRUCTION

MCADAMS

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Raleigh

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222 W. HARGETT STREET
SUITE 600
RALEIGH, NC 27601
919-996-4798
CONTACT:
DAVID BENDER, PROJECT MANAGER

REVISIONS

NO. DATE

GREENWAY ENGINEER

PRELIMINARY NOT FOR CONSTRUCTION

HYDRAULICS ENGINEER

PRELIMINARY NOT FOR CONSTRUCTION

TRENTON ROAD CONNECTOR

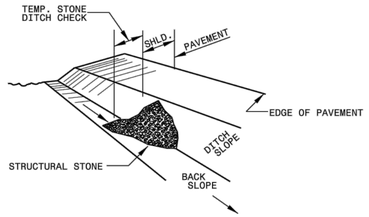
TRENTON PARK LANE TO REEDY CREEK RD

DETAILS

PLAN INFORMATION

PROJECT NO.	2020110233
FILENAME	2020110233_EC2.dwg
CHECKED BY	GDB
DRAWN BY	JP, ED
SCALE	1" = 200'
DATE	03/15/2022

EC-3A

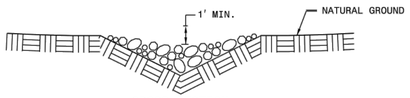


ISOMETRIC VIEW

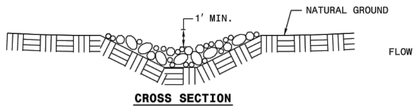
NOTES

USE CLASS B EROSION CONTROL STONE FOR STRUCTURAL STONE.

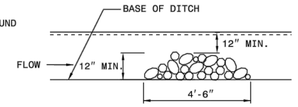
THE ENGINEER MAY DIRECT THE OPTION OF CLASS A STONE FOR SITES HAVING LESS THAN ONE (1) ACRE DRAINAGE AREA AND A DITCH GRADE LESS THAN 3%.



CROSS SECTION VEE DITCH



CROSS SECTION TRAPEZOIDAL DITCH



ELEVATION VIEW

STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

1-18

ROADWAY STANDARD DRAWING FOR

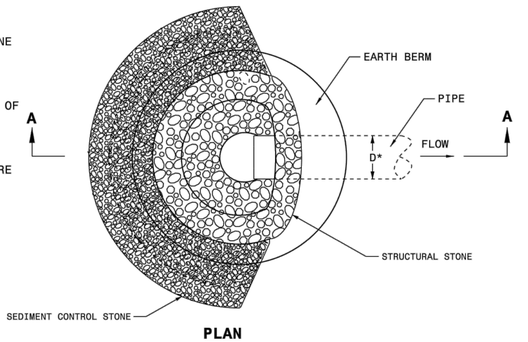
TEMPORARY ROCK SILT CHECK TYPE B

SHEET 1 OF 1

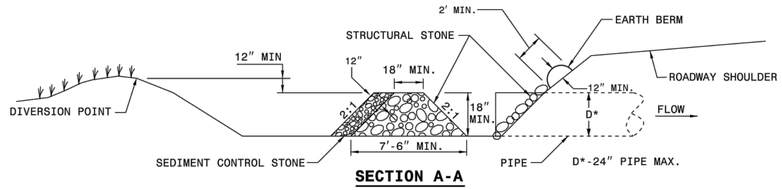
1633.02

NOTES

USE CLASS A EROSION CONTROL STONE FOR STRUCTURAL STONE.
USE NO. 5 OR NO. 57 STONE FOR SEDIMENT CONTROL STONE.
CONSTRUCT TOP OF BERM A MINIMUM OF ONE FOOT BELOW THE SHOULDER OR DIVERSION POINT.
PROVIDE A TOTAL SEDIMENT TRAP VOLUME OF 3600± CUBIC FEET PER ACRE OF DISTURBED AREA. SOME OF THE REQUIRED VOLUME MAY BE PROVIDED BY UP OR DOWNSTREAM CONTROLS.



PLAN



SECTION A-A

STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

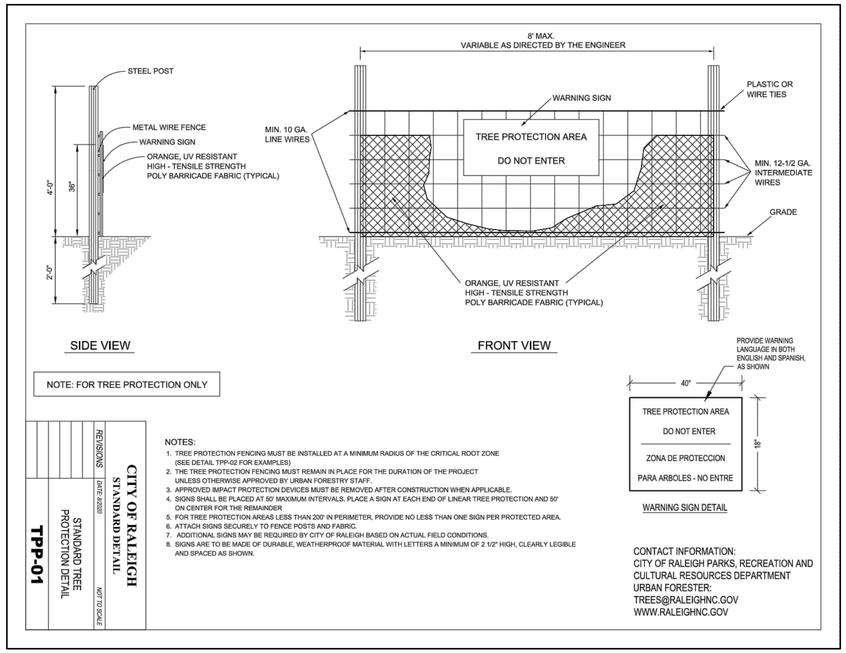
1-18

ROADWAY STANDARD DRAWING FOR

ROCK PIPE INLET SEDIMENT TRAP TYPE B

SHEET 1 OF 1

1635.02



NOTES:
1. TREE PROTECTION FENCING MUST BE INSTALLED AT A MINIMUM RADIUS OF THE CRITICAL ROOT ZONE (SEE DETAIL TPP-02 FOR EXAMPLES)
2. THE TREE PROTECTION FENCING MUST REMAIN IN PLACE FOR THE DURATION OF THE PROJECT UNLESS OTHERWISE APPROVED BY URBAN FORESTRY STAFF.
3. APPROVED IMPACT PROTECTION DEVICES MUST BE REMOVED AFTER CONSTRUCTION WHEN APPLICABLE.
4. SIGNS SHALL BE PLACED AT 50' MAXIMUM INTERVALS. PLACE A SIGN AT EACH END OF LINEAR TREE PROTECTION AND 50' ON CENTER FOR THE REMAINDER
5. FOR TREE PROTECTION AREAS LESS THAN 200' IN PERIMETER, PROVIDE NO LESS THAN ONE SIGN PER PROTECTED AREA.
6. ATTACH SIGNS SECURELY TO FENCE POSTS AND FABRIC.
7. ADDITIONAL SIGNS MAY BE REQUIRED BY CITY OF RALEIGH BASED ON ACTUAL FIELD CONDITIONS.
8. SIGNS ARE TO BE MADE OF DURABLE, WEATHERPROOF MATERIAL WITH LETTERS A MINIMUM OF 2 1/2" HIGH, CLEARLY LEGIBLE AND SPACED AS SHOWN.

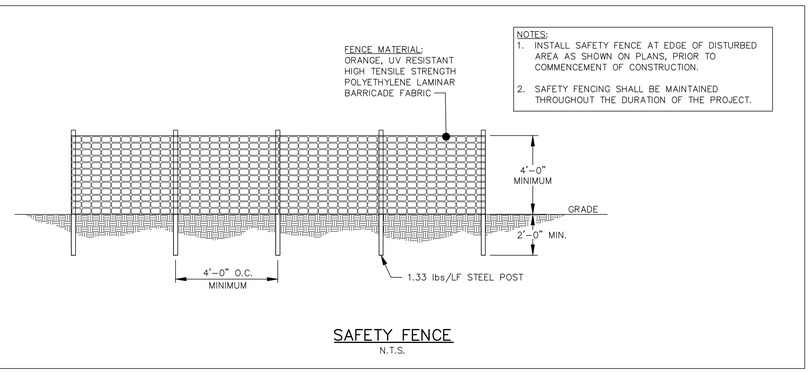
CONTACT INFORMATION:
CITY OF RALEIGH PARKS, RECREATION AND CULTURAL RESOURCES DEPARTMENT
URBAN FORESTER:
TREES@RALEIGHNC.GOV
WWW.RALEIGHNC.GOV

CITY OF RALEIGH
STANDARD DETAIL

STANDARD TREE PROTECTION DETAIL

TPP-01

REVISIONS
DATE: 8/2020
NOT TO SCALE



SAFETY FENCE
N.T.S.

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CONTACT:
DAVID BENDER, PROJECT MANAGER

REVISIONS
NO. DATE

GREENWAY ENGINEER

PRELIMINARY NOT FOR CONSTRUCTION

HYDRAULICS ENGINEER

PRELIMINARY NOT FOR CONSTRUCTION

TRENTON ROAD CONNECTOR

TRENTON PARK LANE TO REEDY CREEK RD

DETAILS

PLAN INFORMATION

PROJECT NO.	2020110233
FILENAME	2020110233_EC2.dwg
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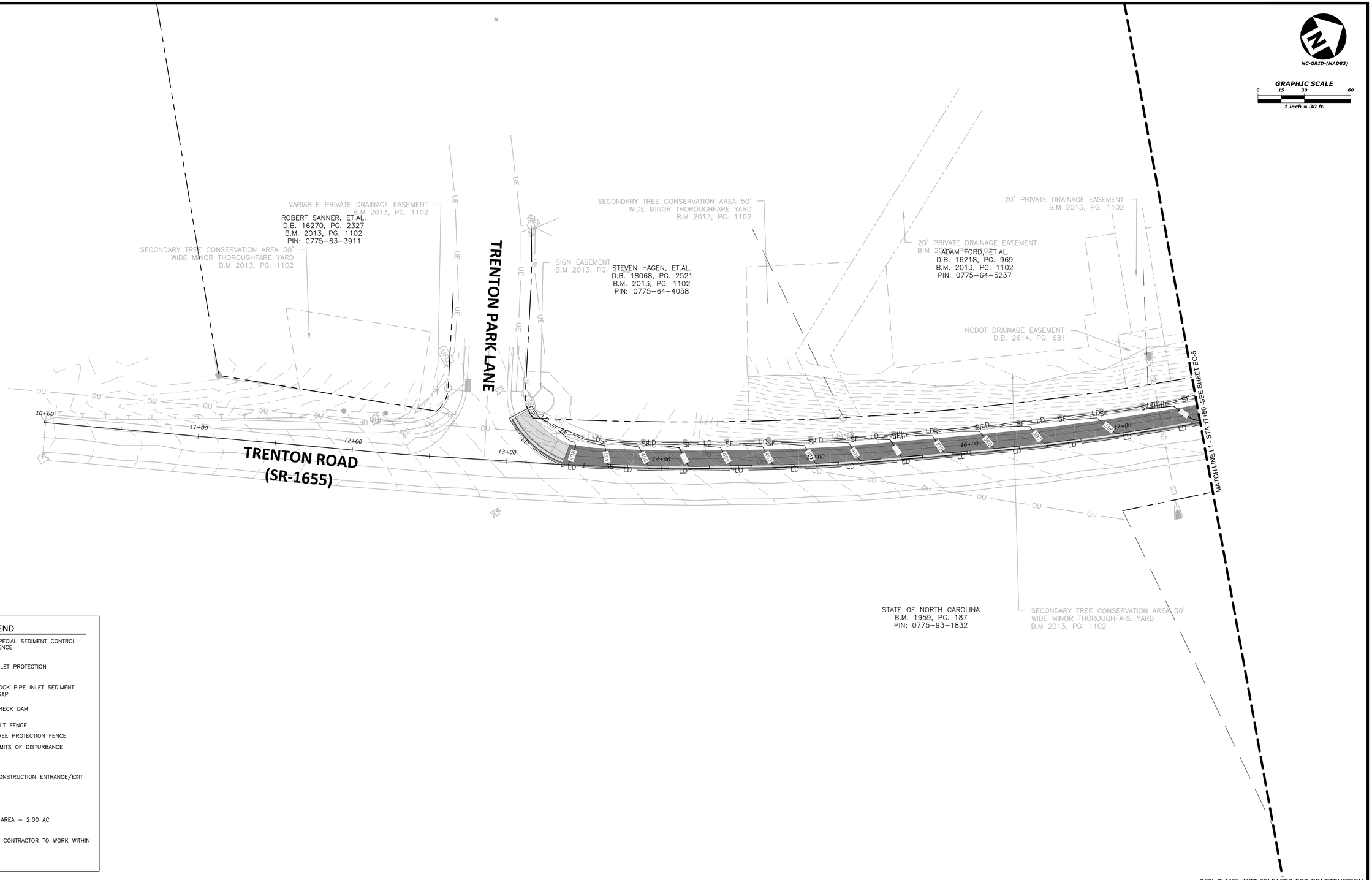
DRAWN BY	JP, ED
SCALE	1" = 200'
DATE	03/15/2022

EC-3B



EROSION CONTROL LEGEND

- SPECIAL SEDIMENT CONTROL FENCE
- INLET PROTECTION
- ROCK PIPE INLET SEDIMENT TRAP
- CHECK DAM
- SF — SF — SF — SILT FENCE
- TP — TP — TP — TREE PROTECTION FENCE
- LD — LD — LIMITS OF DISTURBANCE
- CONSTRUCTION ENTRANCE/EXIT

TOTAL DISTURBED AREA = 2.00 AC

NOTE: NO EASEMENTS OBTAINED. CONTRACTOR TO WORK WITHIN EXISTING R/W.

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TRENTON PARK LANE TO REEDY CREEK RD

EROSION CONTROL PLAN

PLAN INFORMATION

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SCALE	1" = 30'
DATE	03/15/2022

EC-4

NC-GRID-(NAD83)

SECONDARY TREE CONSERVATION AREA 50' WIDE MINOR THOROUGHFARE YARD B.M 2013, PG. 1102

JOHN NICKELS, ET.AL.
D.B. 16202, PG. 187
B.M. 2013, PG. 1102
PIN: 0775-64-6408

JULIA HERRING
D.B. 7410, PG. 183
B.M. 1966, PG. 29
PIN: 0775-64-4791

SHIRLEY TURBIVILLE
D.B. 2892, PG. 154
B.M. 2002, PG. 1627
PIN: 0775-64-0847

20' SLOPE EASEMENT
B.M. 2002, PG. 1627

MATCH LINE L1 - STA 17+50 - SEE SHEET EC-4

TRENTON ROAD
(SR-1655)

MATCH LINE L1 - STA 25+00 -SEE SHEET EC-6

18+00 19+00 20+00 21+00 22+00 23+00 24+00

WINDY WOODS DRIVE

MICHAEL OGBURN, ET.AL.
D.B. 3622, PG. 493
B.M. 1984, PG. 1626
PIN: 0775-64-8374

MYLES CHARLESWORTH, ET.AL.
D.B. 4022, PG. 79
B.M. 1984, PG. 1626
PIN: 0775-64-8499

5' GENERAL UTILITY PLACEMENT EASEMENT
B.M. 2017, PG. 1891

WAYNE TIMBERLAKE
D.B. 7250, PG. 352
B.M. 2017, PG. 1891
PIN: 0775-64-9713

20' PRIVATE DRAINAGE EASEMENT
B.M. 2017, PG. 1891

30' CITY OF RALEIGH SANITARY SEWER EASEMENT
B.M. 2017, PG. 1891

20' CITY OF RALEIGH SANITARY SEWER EASEMENT
B.M. 2008, PG. 2148

PATRICK SPINE
D.B. 15615, PG. 2728
B.M. 2008, PG. 2148
PIN: 0775-74-0958

EROSION CONTROL LEGEND

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- ROCK PIPE INLET SEDIMENT TRAP
- CHECK DAM
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- LD — LD — LIMITS OF DISTURBANCE
- CONSTRUCTION ENTRANCE/EXIT

TOTAL DISTURBED AREA = 2.00 AC

NOTE: NO EASEMENTS OBTAINED. CONTRACTOR TO WORK WITHIN EXISTING R/W.

GRAPHIC SCALE
0 15 30 60
1 inch = 30 ft.

90% PLANS -NOT RELEASED FOR CONSTRUCTION

M:\Projects\RAL\2020110233.00 City of Raleigh Trenton Sidewalks\04-Production\Engineering\Current Drawings\2020110233_EC1.dwg, 3/15/2022 12:24:10 PM, Jimmy Prestwood

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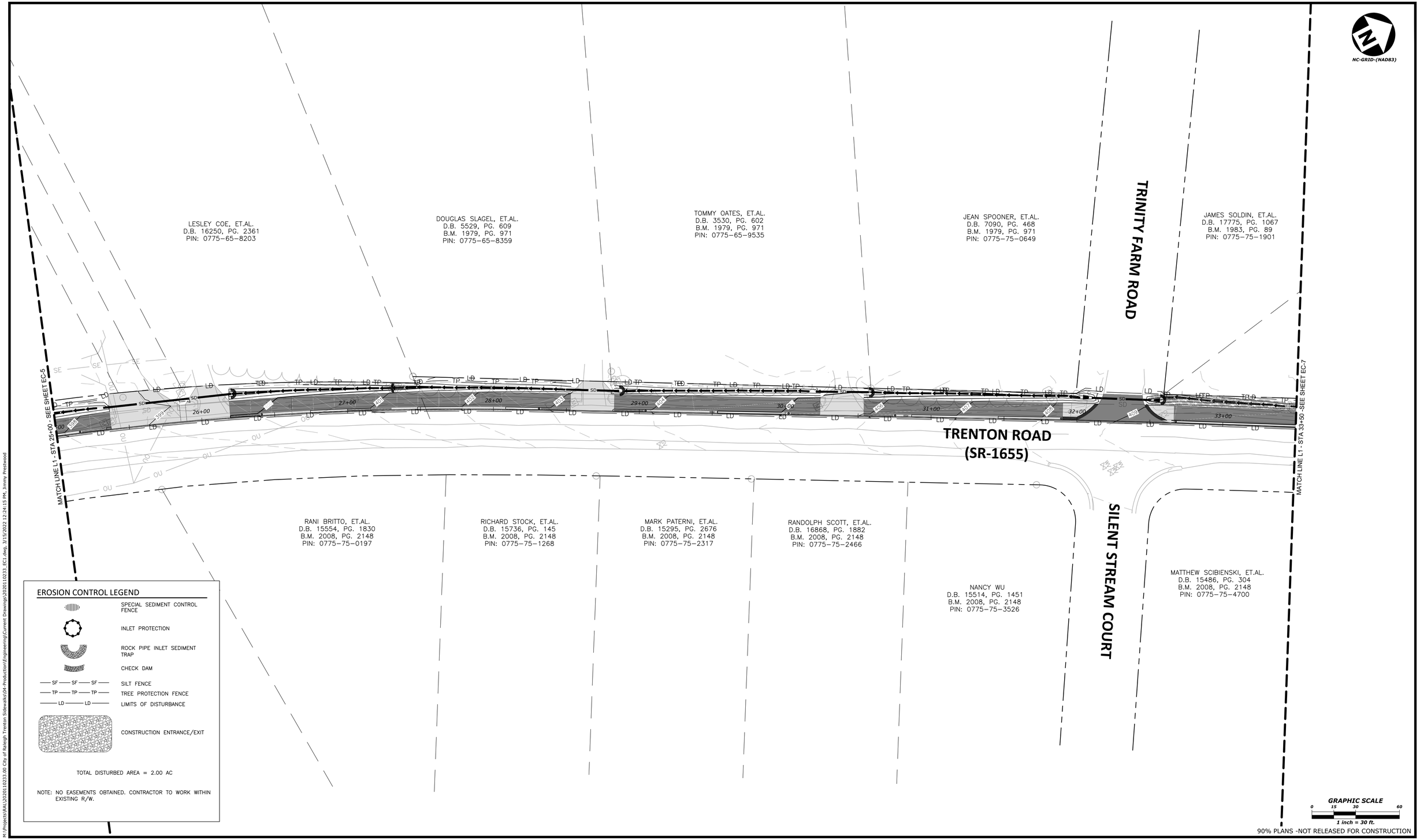
HYDRAULICS ENGINEER
PRELIMINARY NOT FOR CONSTRUCTION

TRENTON ROAD CONNECTOR
TRENTON PARK LANE TO REEDY CREEK RD

EROSION CONTROL PLAN

PLAN INFORMATION
PROJECT NO. 2020110233
FILENAME 2020110233_EC1.dwg
CHECKED BY GDB
DRAWN BY JP, ED
SCALE 1" = 30'
DATE 03/15/2022

EC-5



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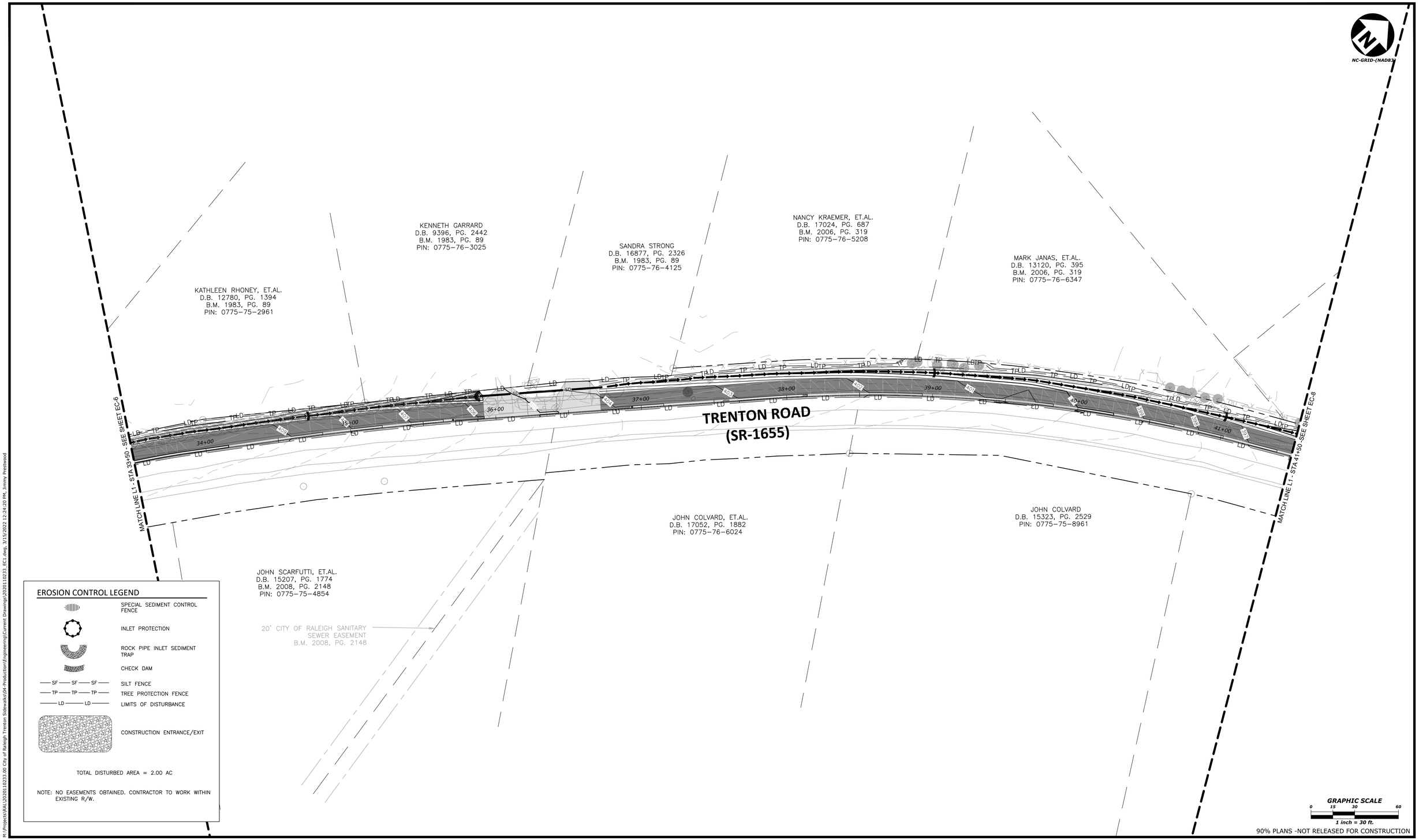
TRENTON ROAD CONNECTOR
TRENTON PARK LANE TO REEDY CREEK RD

EROSION CONTROL PLAN

PLAN INFORMATION
PROJECT NO. 2020110233
FILENAME 2020110233_EC1.dwg
CHECKED BY GDB
DRAWN BY JP, ED
SCALE 1" = 30'
DATE 03/15/2022

EC-6



EROSION CONTROL LEGEND

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NO.	DATE

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HYDRAULICS ENGINEER — PRELIMINARY NOT FOR CONSTRUCTION

TRENTON ROAD CONNECTOR

TRENTON PARK LANE TO REEDY CREEK RD

EROSION CONTROL PLAN

PLAN INFORMATION

PROJECT NO.	2020110233
FILENAME	2020110233_EC1.dwg
CHECKED BY	GDB
DRAWN BY	JP, ED
SCALE	1" = 30'
DATE	03/15/2022

EC-7

90% PLANS -NOT RELEASED FOR CONSTRUCTION

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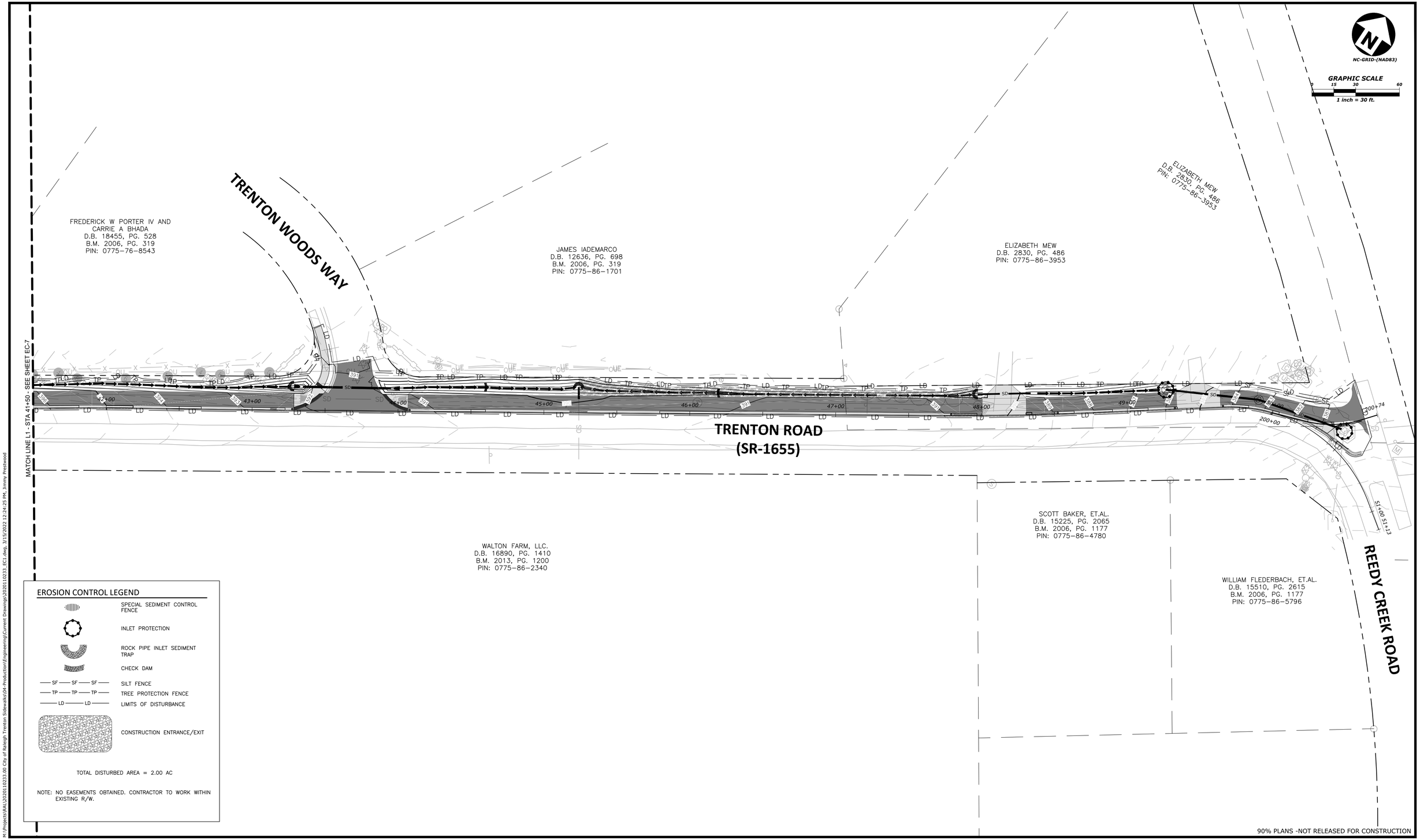

EROSION CONTROL LEGEND

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TOTAL DISTURBED AREA = 2.00 AC

NOTE: NO EASEMENTS OBTAINED. CONTRACTOR TO WORK WITHIN EXISTING R/W.

90% PLANS -NOT RELEASED FOR CONSTRUCTION

M:\Projects\RAL\2020110233.00 City of Raleigh Trenton Sidewalks\04-Production\Engineering\Current Drawings\2020110233_EC1.dwg, 3/15/2022 12:24:25 PM, Jimmy Prestwood

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DAVID BENDER, PROJECT MANAGER

REVISIONS

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GREENWAY ENGINEER

PRELIMINARY NOT FOR CONSTRUCTION

HYDRAULICS ENGINEER

PRELIMINARY NOT FOR CONSTRUCTION

TRENTON ROAD CONNECTOR

TRENTON PARK LANE TO REEDY CREEK RD

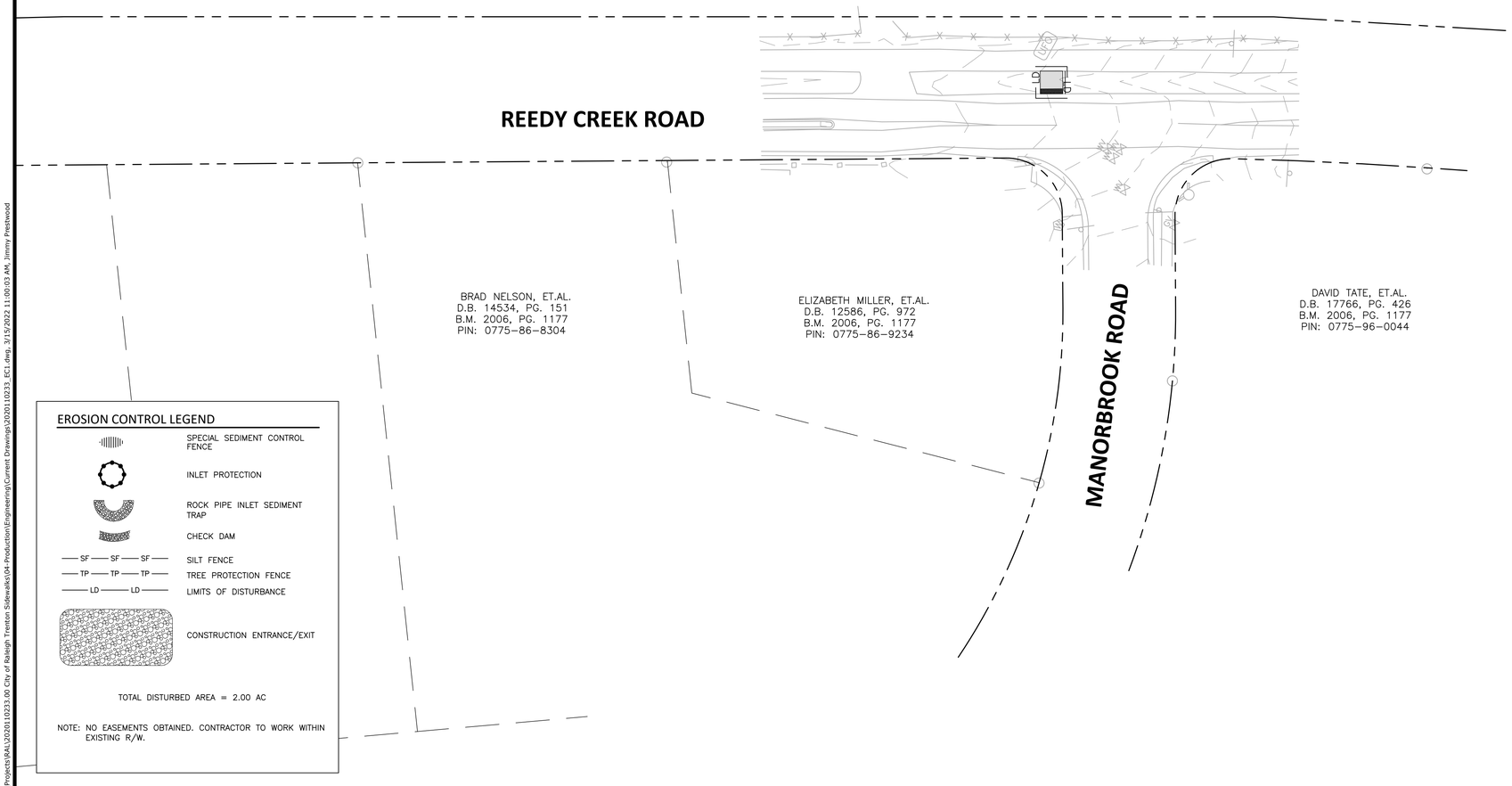
EROSION CONTROL PLAN

PLAN INFORMATION

PROJECT NO.	2020110233
FILENAME	2020110233_EC1.dwg
CHECKED BY	GDB
DRAWN BY	JP, ED
SCALE	1" = 30'
DATE	03/15/2022

EC-8

NC-GRID-(NAD83)



EROSION CONTROL LEGEND

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NOTE: NO EASEMENTS OBTAINED. CONTRACTOR TO WORK WITHIN EXISTING R/W.

GRAPHIC SCALE
0 15 30 60
1 inch = 30 ft.

90% PLANS -NOT RELEASED FOR CONSTRUCTION

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GREENWAY ENGINEER

PRELIMINARY NOT FOR CONSTRUCTION

HYDRAULICS ENGINEER

PRELIMINARY NOT FOR CONSTRUCTION

TRENTON ROAD CONNECTOR

TRENTON PARK LANE TO REEDY CREEK RD

EROSION CONTROL PLAN

PLAN INFORMATION

PROJECT NO.	2020110233
FILENAME	2020110233_EC1.dwg
CHECKED BY	GDB
DRAWN BY	JP, ED
SCALE	1" = 30'
DATE	03/15/2022

EC-9

NC-GRID-(NAD83)

TRENTON PARK LANE

TRENTON ROAD
(SR-1655)

VARIABLE PRIVATE DRAINAGE EASEMENT
B.M 2013, PG. 1102
ROBERT SANNER, ET.AL.
D.B. 16270, PG. 2327
B.M. 2013, PG. 1102
PIN: 0775-63-3911

SECONDARY TREE CONSERVATION AREA 50'
WIDE MINOR THOROUGHFARE YARD
B.M 2013, PG. 1102

SIGN EASEMENT
B.M 2013, PG.

STEVEN HAGEN, ET.AL.
D.B. 18068, PG. 2521
B.M. 2013, PG. 1102
PIN: 0775-64-4058

SECONDARY TREE CONSERVATION AREA 50'
WIDE MINOR THOROUGHFARE YARD
B.M 2013, PG. 1102

20' PRIVATE DRAINAGE EASEMENT
B.M 2013, PG. 1102

20' PRIVATE DRAINAGE EASEMENT
B.M 2013, PG. 1102

ADAM FORD, ET.AL.
D.B. 16218, PG. 969
B.M. 2013, PG. 1102
PIN: 0775-64-5237

18" FES
ELEV.: 382.64'

NCDOT DRAINAGE EASEMENT
D.B. 2614, PG. 681

DI
RIM: 421.10'
INV. OUT: 417.07'

DI
RIM: 421.01'
INV. IN: 416.94'
INV. OUT: 416.90'

DI
RIM: 411.72'
INV. OUT: 407.98'

CB
RIM: 409.35'

SMH
RIM: 401.42'
INV. IN: '
INV. OUT: '

STATE OF NORTH CAROLINA
B.M. 1959, PG. 187
PIN: 0775-93-1832

18" FES
ELEV.: 386.18'

SECONDARY TREE CONSERVATION AREA 50'
WIDE MINOR THOROUGHFARE YARD
B.M 2013, PG. 1102

MATCH LINE L1 - STA 17+50 SEE SHEET UO-2

GRAPHIC SCALE
0 15 30 60
1 inch = 30 ft.

NOTE:

NO UTILITY WORK PROPOSED ON THIS SHEET.

90% PLANS -NOT RELEASED FOR CONSTRUCTION

M:\Projects\RAL\2020110233.00 City of Raleigh Trenton Sidewalks\04-Production\Engineering\Current Drawings\2020110233_UO1.dwg, 3/15/2022 11:01:45 AM, Jimmy Prestwood

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222 W. HARGETT STREET
SUITE 600
RALEIGH, NC 27601
919-996-4798
CONTACT:
DAVID BENDER, PROJECT MANAGER

REVISIONS
NO. DATE

GREENWAY ENGINEER

PRELIMINARY
NOT FOR CONSTRUCTION

HYDRAULICS ENGINEER

PRELIMINARY
NOT FOR CONSTRUCTION

TRENTON ROAD CONNECTOR

TRENTON PARK LANE TO REEDY CREEK RD

UTILITIES BY OTHERS PLANS

PLAN INFORMATION

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UO-1

NC-GRID-(NAD83)

SECONDARY TREE CONSERVATION AREA 50' WIDE MINOR THOROUGHFARE YARD B.M 2013, PG. 1102

JOHN NICKELS, ET.AL.
D.B. 16202, PG. 187
B.M. 2013, PG. 1102
PIN: 0775-64-6408

JULIA HERRING
D.B. 7410, PG. 183
B.M. 1966, PG. 29
PIN: 0775-64-4791

SHIRLEY TURBIVILLE
D.B. 2892, PG. 154
B.M. 2002, PG. 1627
PIN: 0775-64-0847

20' SLOPE EASEMENT
B.M. 2002, PG. 1627

RELOCATE FO MARKER INTO DITCH BACKSLOPE (BY OTHERS)

ADJUST HANDHOLE TO PROPOSED GRADE (BY OTHERS)

RELOCATE PEDESTALS INTO DITCH BACKSLOPE (BY OTHERS)

15" RCP
INV.: 393.00'

15" RCP
INV.: 393.25'

15" RCP
INV.: 389.51'

MATCH LINE L1 - STA 17+50 - SEE SHEET UO-1

18+00 19+00 20+00 21+00 22+00 23+00 24+00 25+00

MATCH LINE L1 - STA 25+00 -SEE SHEET UO-3

TRENTON ROAD (SR-1655)

ADJUST GAS VALVE TO PROPOSED GRADE (BY OTHERS)

WINDY WOODS DRIVE

MICHAEL OGBURN, ET.AL.
D.B. 3622, PG. 493
B.M. 1984, PG. 1626
PIN: 0775-64-8374

MYLES CHARLESWORTH, ET.AL.
D.B. 4022, PG. 79
B.M. 1984, PG. 1626
PIN: 0775-64-8499

5' GENERAL UTILITY PLACEMENT EASEMENT
B.M. 2017, PG. 1891

WAYNE TIMBERLAKE
D.B. 7250, PG. 352
B.M. 2017, PG. 1891
PIN: 0775-64-9713

20' PRIVATE DRAINAGE EASEMENT
B.M. 2017, PG. 1891

30' CITY OF RALEIGH SANITARY SEWER EASEMENT
B.M. 2017, PG. 1891

15" RCP
INV.: 386.27'

20' CITY OF RALEIGH SANITARY SEWER EASEMENT
B.M. 2008, PG. 2148

PATRICK SPINE
D.B. 15615, PG. 2728
B.M. 2008, PG. 2148
PIN: 0775-74-0958

NOTE:

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GREENWAY ENGINEER

PRELIMINARY NOT FOR CONSTRUCTION

HYDRAULICS ENGINEER

PRELIMINARY NOT FOR CONSTRUCTION

TRENTON ROAD CONNECTOR

TRENTON PARK LANE TO REEDY CREEK RD

UTILITIES BY OTHERS PLANS

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UO-2

NC-GRID-(NAD83)

LESLEY COE, ET.AL.
D.B. 16250, PG. 2361
PIN: 0775-65-8203

DOUGLAS SLAGEL, ET.AL.
D.B. 5529, PG. 609
B.M. 1979, PG. 971
PIN: 0775-65-8359

TOMMY OATES, ET.AL.
D.B. 3530, PG. 602
B.M. 1979, PG. 971
PIN: 0775-65-9535

JEAN SPOONER, ET.AL.
D.B. 7090, PG. 468
B.M. 1979, PG. 971
PIN: 0775-75-0649

JAMES SOLDIN, ET.AL.
D.B. 17775, PG. 1067
B.M. 1983, PG. 89
PIN: 0775-75-1901

TRINITY FARM ROAD

15" RCP
INV.: 397.19'

15" RCP
INV.: 397.25'

IMPACTS TO PEDESTAL NOT ANTICIPATED
INV.: 397.33'

RELOCATE PEDESTALS INTO DITCH BACKSLOPE (BY OTHERS)

APPROX. 4" OF CUT FROM PROPOSED DITCH BACKSLOPE AT BASE OF POLE

15" RCP
INV.: FULL

15" RCP
INV.: FULL

RELOCATE PEDESTAL INTO DITCH BACKSLOPE (BY OTHERS)

15" RCP
INV.: 403.08'

15" RCP
INV.: 403.95'

RELOCATE FO MARKER (BY OTHERS)

RELOCATE HANDHOLE INTO PATH AND MATCH PROPOSED GRADE (BY OTHERS)

15" RCP
INV.: 406.28'

15" RCP
INV.: 406.52'

MATCH LINE L1 - STA 25+00 - SEE SHEET UO-2

MATCH LINE L1 - STA 33+60 -SEE SHEET UO-4

TRENTON ROAD
(SR-1655)

ADJUST GAS VALVE TO PROPOSED GRADE (BY OTHERS)

15" HDPE
INV.: 396.84'

RANI BRITTO, ET.AL.
D.B. 15554, PG. 1830
B.M. 2008, PG. 2148
PIN: 0775-75-0197

RICHARD STOCK, ET.AL.
D.B. 15736, PG. 145
B.M. 2008, PG. 2148
PIN: 0775-75-1268

MARK PATERNI, ET.AL.
D.B. 15295, PG. 2676
B.M. 2008, PG. 2148
PIN: 0775-75-2317

RANDOLPH SCOTT, ET.AL.
D.B. 16868, PG. 1882
B.M. 2008, PG. 2148
PIN: 0775-75-2466

NANCY WU
D.B. 15514, PG. 1451
B.M. 2008, PG. 2148
PIN: 0775-75-3526

SILENT STREAM COURT

MATTHEW SCIBIENSKI, ET.AL.
D.B. 15486, PG. 304
B.M. 2008, PG. 2148
PIN: 0775-75-4700

NOTE:

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GRAPHIC SCALE
0 15 30 60
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REVISIONS
NO. DATE

GREENWAY ENGINEER

PRELIMINARY
NOT FOR CONSTRUCTION

HYDRAULICS ENGINEER

PRELIMINARY
NOT FOR CONSTRUCTION

TRENTON ROAD CONNECTOR

TRENTON PARK LANE TO REEDY CREEK RD

UTILITIES BY OTHERS PLANS

PLAN INFORMATION

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UO-3

NC-GRID-(NAD83)

KENNETH GARRARD
D.B. 9396, PG. 2442
B.M. 1983, PG. 89
PIN: 0775-76-3025

KATHLEEN RHONEY, ET.AL.
D.B. 12780, PG. 1394
B.M. 1983, PG. 89
PIN: 0775-75-2961

SANDRA STRONG
D.B. 16877, PG. 2326
B.M. 1983, PG. 89
PIN: 0775-76-4125

NANCY KRAEMER, ET.AL.
D.B. 17024, PG. 687
B.M. 2006, PG. 319
PIN: 0775-76-5208

MARK JANAS, ET.AL.
D.B. 13120, PG. 395
B.M. 2006, PG. 319
PIN: 0775-76-6347

15" RCP
INV.: 402.64'

15" RCP
INV.: 403.27'

15" RCP
INV.: 403.47'

15" RCP
INV.: 401.93'

RELOCATE PEDESTAL
INTO DITCH BACKSLOPE
(BY OTHERS)

RELOCATE PEDESTAL BEHIND
DITCH (BY OTHERS)

TRENTON ROAD
(SR-1655)

MATCH LINE L1 - STA 33+50 - SEE SHEET UO-3

MATCH LINE L1 - STA 41+50 - SEE SHEET UO-5

JOHN COLVARD, ET.AL.
D.B. 17052, PG. 1882
PIN: 0775-76-6024

JOHN COLVARD
D.B. 15323, PG. 2529
PIN: 0775-75-8961

JOHN SCARFUTTI, ET.AL.
D.B. 15207, PG. 1774
B.M. 2008, PG. 2148
PIN: 0775-75-4854

20' CITY OF RALEIGH SANITARY
SEWER EASEMENT
B.M. 2008, PG. 2148

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GRAPHIC SCALE
0 15 30 60
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GREENWAY ENGINEER
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HYDRAULICS ENGINEER
PRELIMINARY
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TRENTON ROAD CONNECTOR

TRENTON PARK LANE TO REEDY CREEK RD

UTILITIES BY OTHERS PLANS

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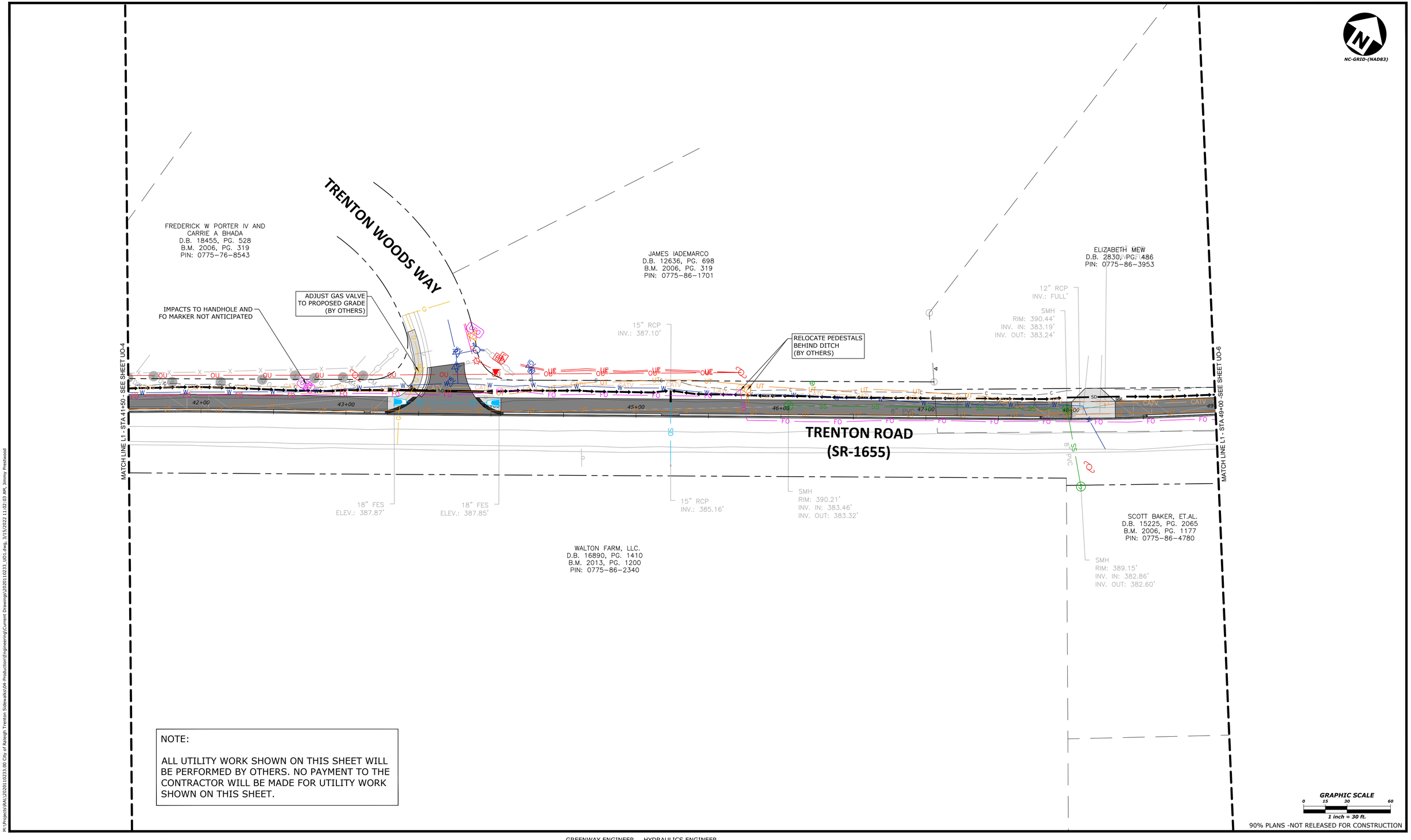
UO-4



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GREENWAY ENGINEER
PRELIMINARY NOT FOR CONSTRUCTION

HYDRAULICS ENGINEER
PRELIMINARY NOT FOR CONSTRUCTION

TRENTON ROAD CONNECTOR
TRENTON PARK LANE TO REEDY CREEK RD

UTILITIES BY OTHERS PLANS

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UO-5

NC-GRID-(NAD83)

ELIZABETH MEW
D.B. 2830, PG. 486
PIN: 0775-86-3953

DI
RIM: 378.22'
INV. IN: 375.38'
INV. OUT: 375.32'

POTENTIAL IMPACTS TO UT AND CATV LINES CAUSED BY PROPOSED DRAINAGE FEATURES

200+74

SD RCP

51+00 51+13

MATCH LINE L1 - STA 49+00 - SEE SHEET UO-5

REEDY CREEK ROAD

DI
RIM: 373.83'
INV.: 373.83'

WILLIAM FLEDERBACH, ET.AL.
D.B. 15510, PG. 2615
B.M. 2006, PG. 1177
PIN: 0775-86-5796

NOTE:

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TRENTON ROAD CONNECTOR
TRENTON PARK LANE TO REEDY CREEK RD

UTILITIES BY OTHERS PLANS

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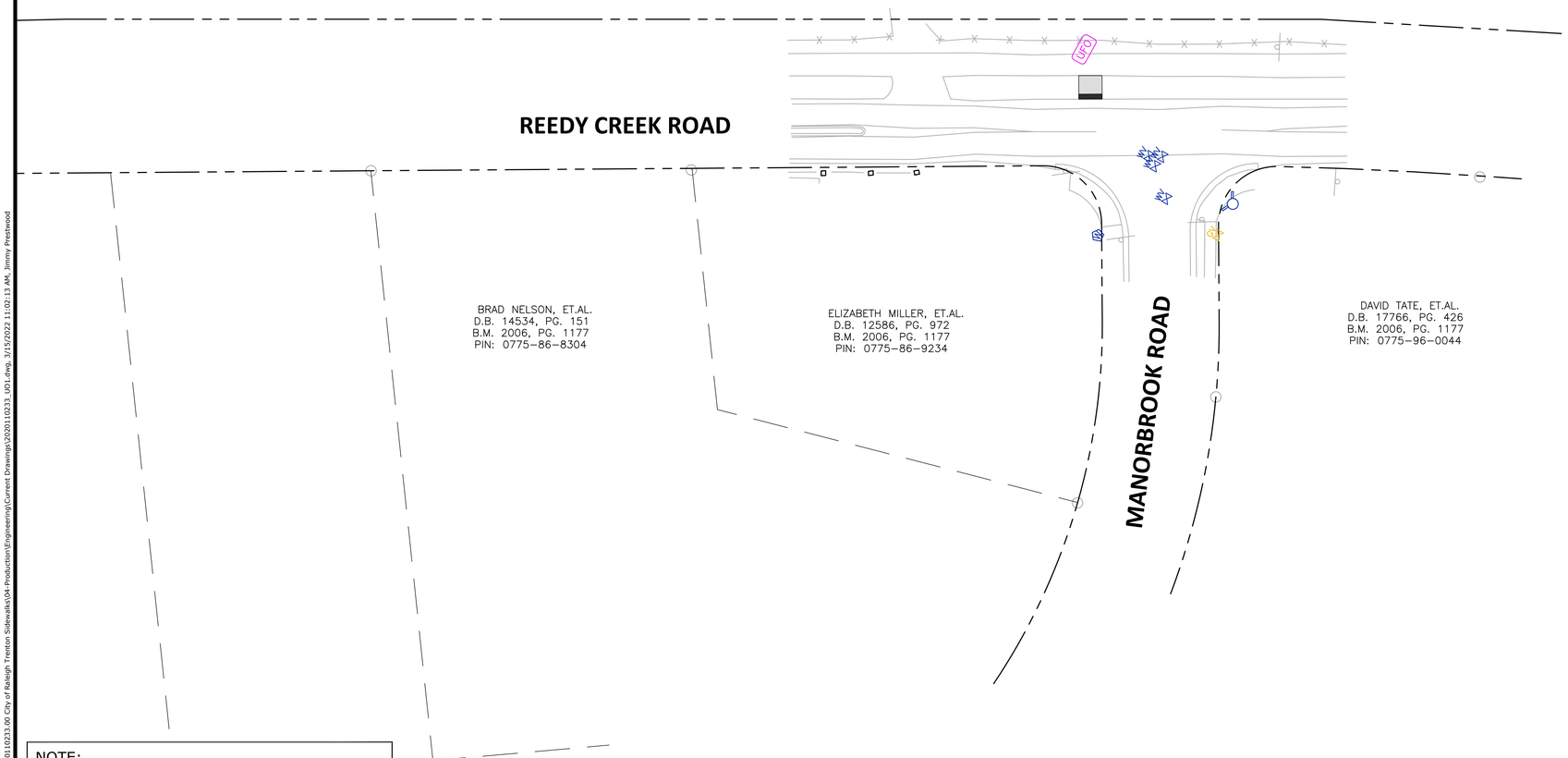
UO-6



NOTE:

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NC-GRID-(NAD83)

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TRENTON ROAD CONNECTOR

TRENTON PARK LANE TO REEDY CREEK RD

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UO-7

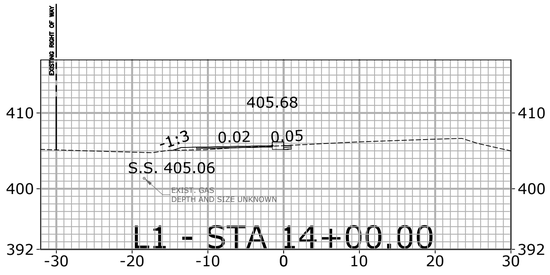
0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	2020110233	X-1A

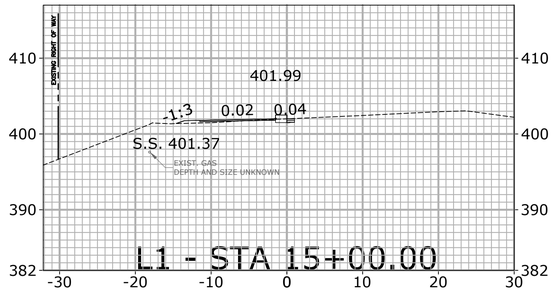
TRENTON ROAD CONNECTOR

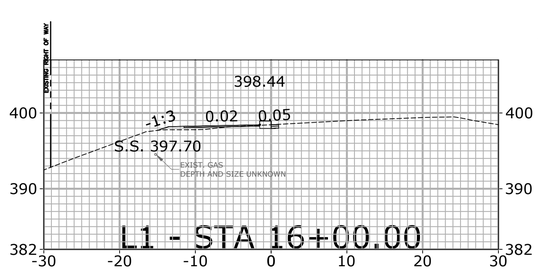
CROSS-SECTION INDEX

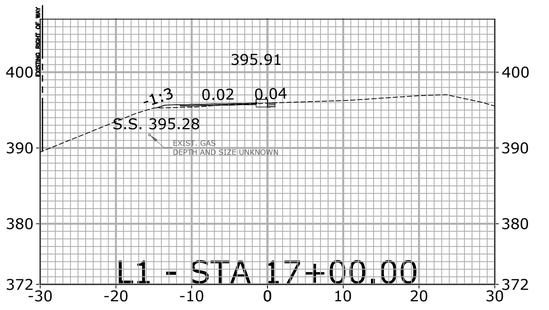
LINE	STATION	STATION	SHEET NO.
L1	13+25.00	17+00.00	X-1
L1	17+25.00	21+00.00	X-2
L1	21+25.00	26+00.00	X-3
L1	26+25.00	30+00.00	X-4
L1	30+25.00	34+00.00	X-5
L1	34+25.00	38+00.00	X-6
L1	38+25.00	42+00.00	X-7
L1	42+25.00	46+00.00	X-8
L1	46+25.00	50+00.00	X-9
L1	50+25.00	51+00.00	X-10

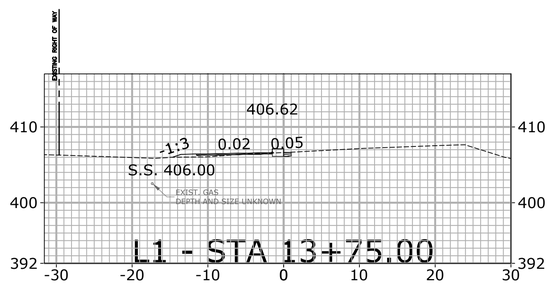
0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	2020110233	X-1

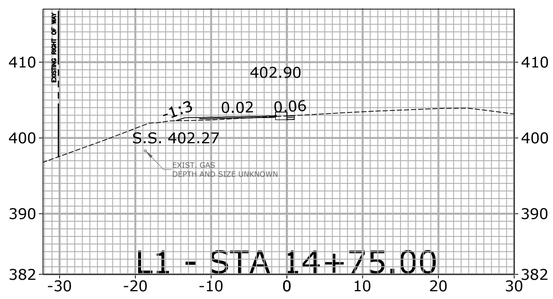


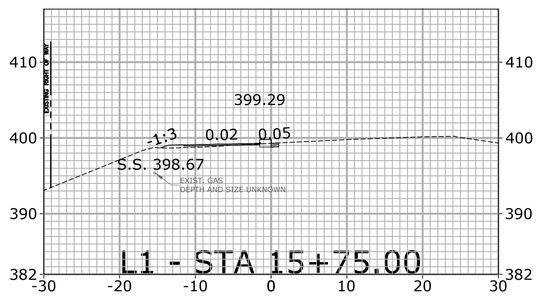


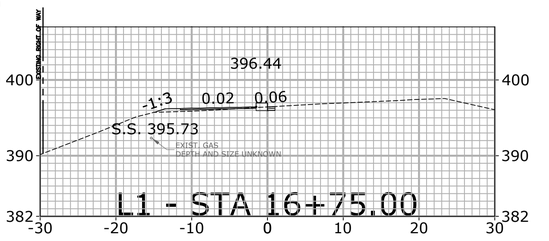


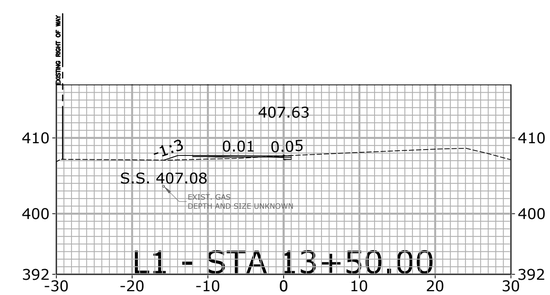


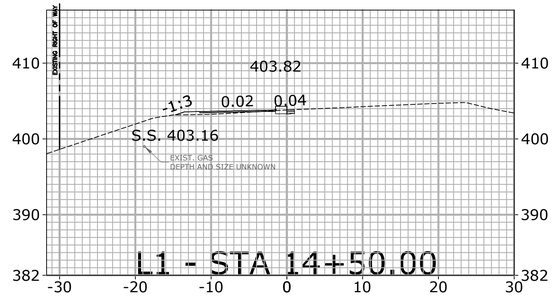


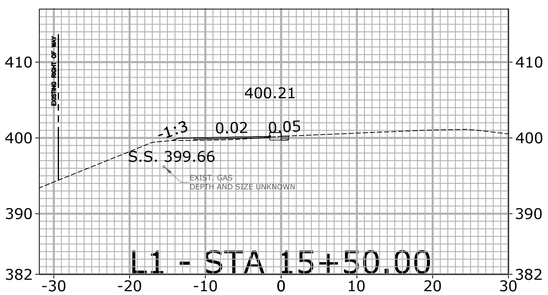


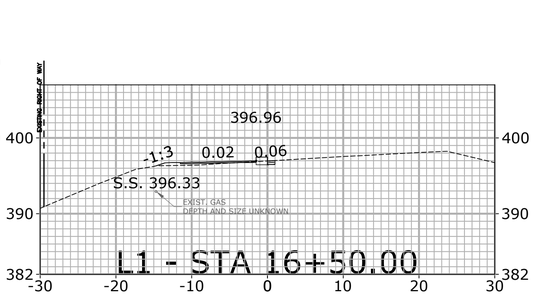


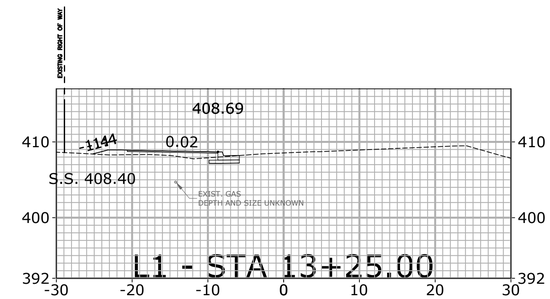


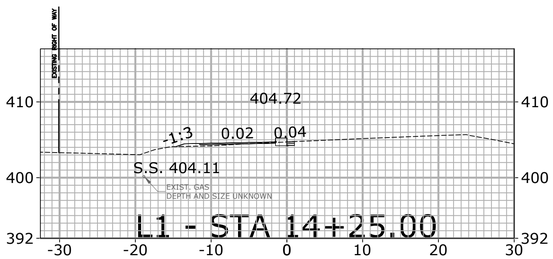


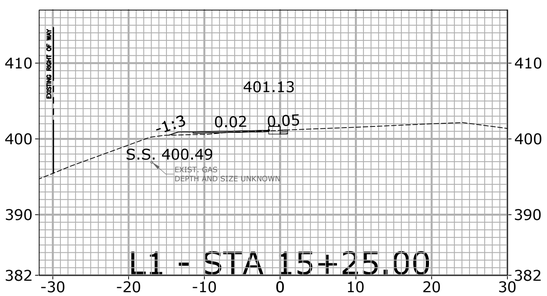


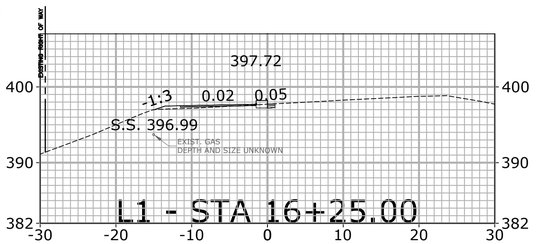












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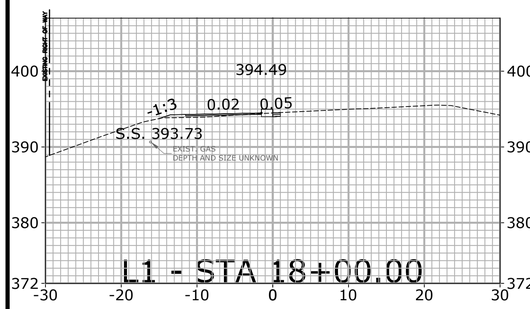

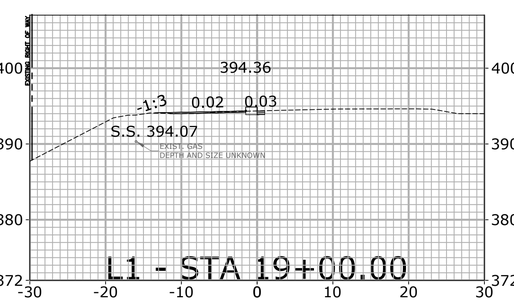

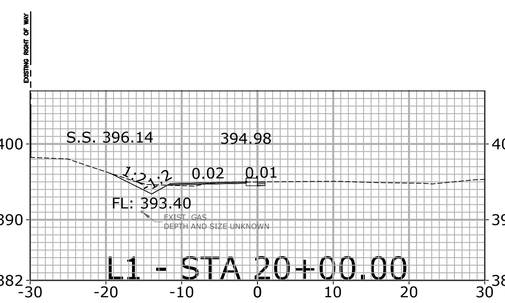

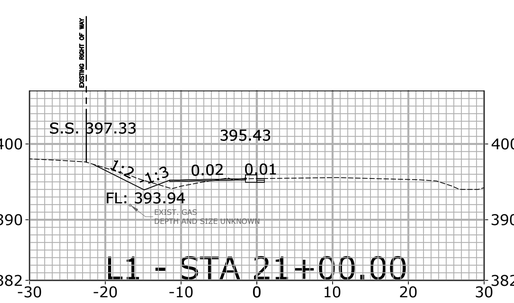

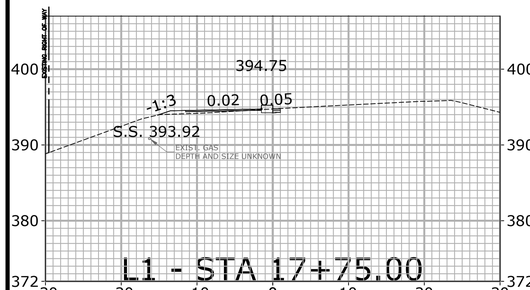

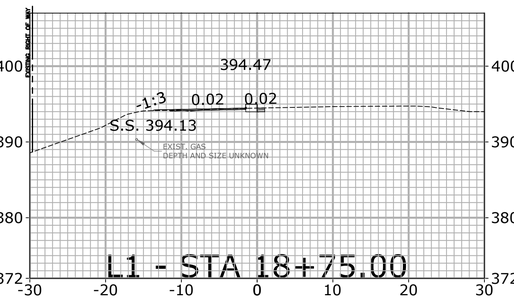

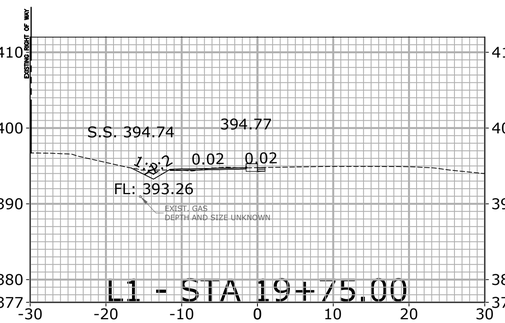

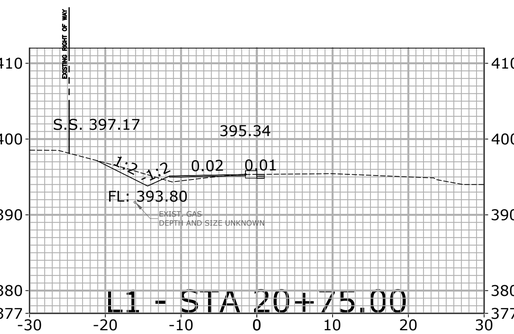

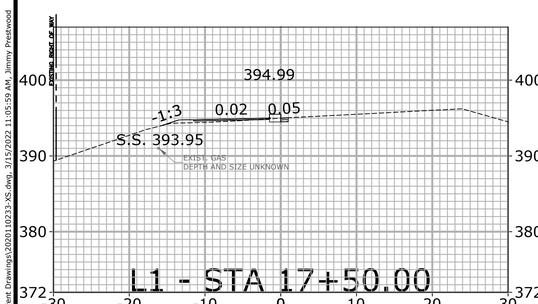

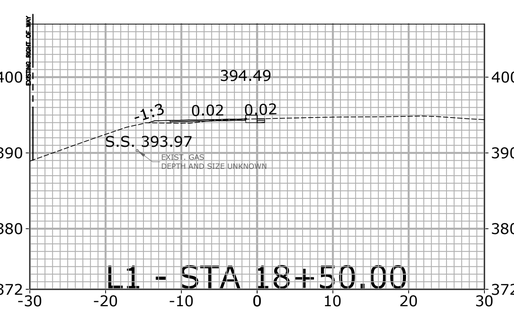

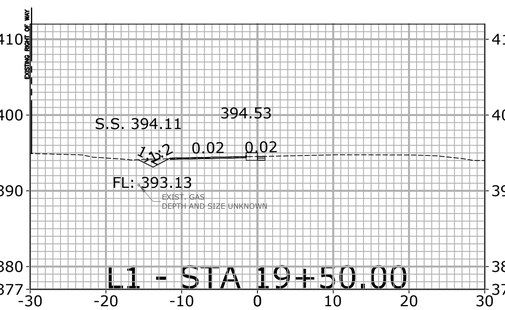

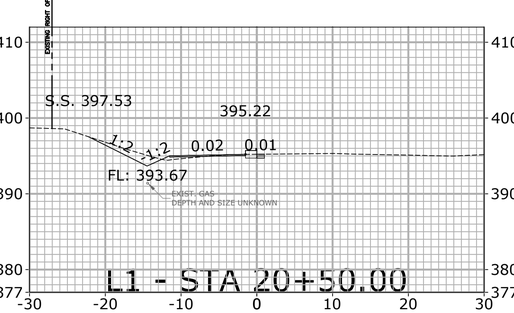

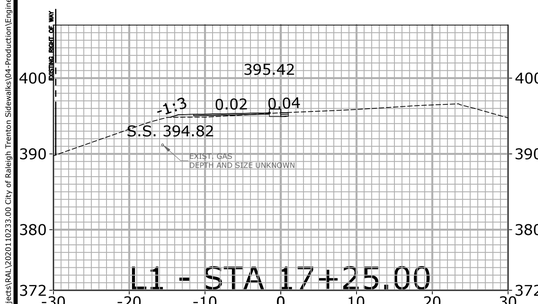

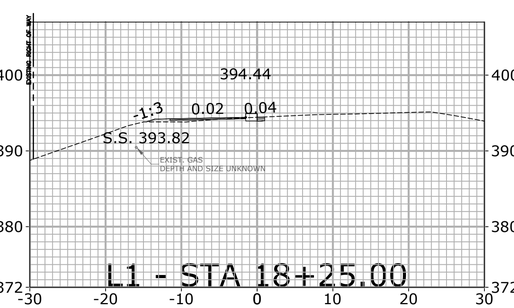

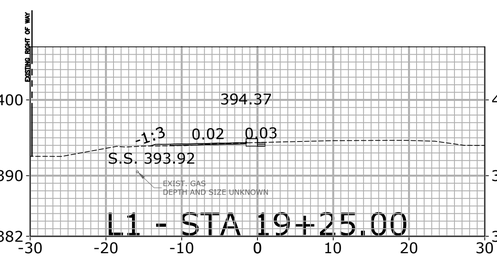

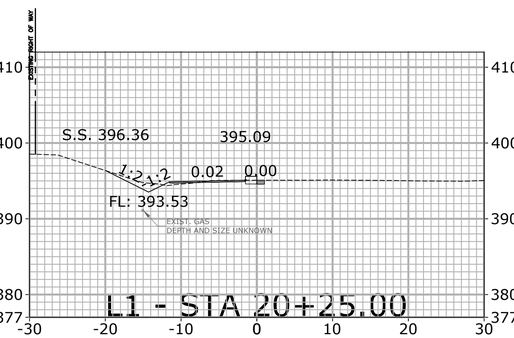

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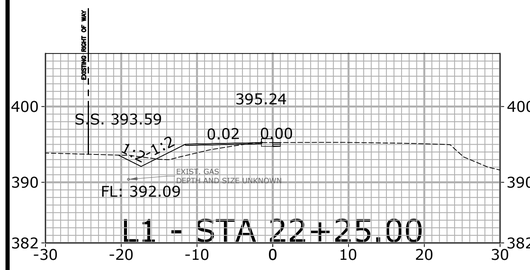

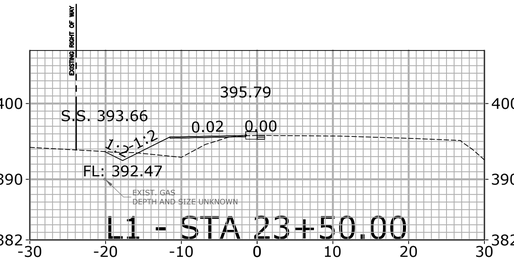

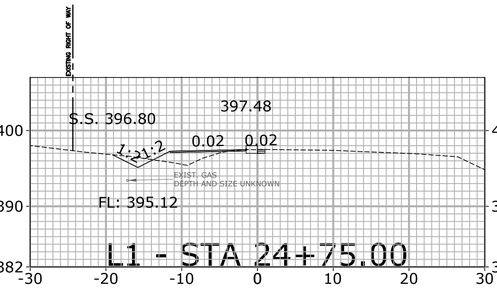

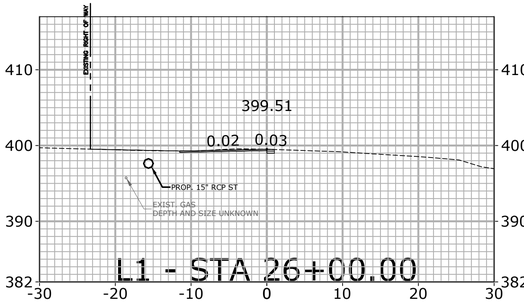

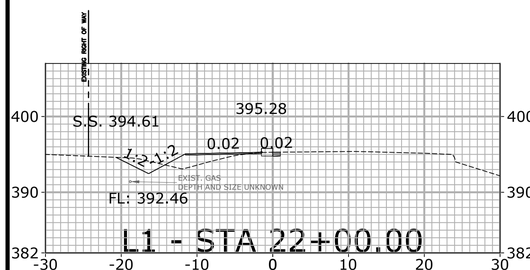

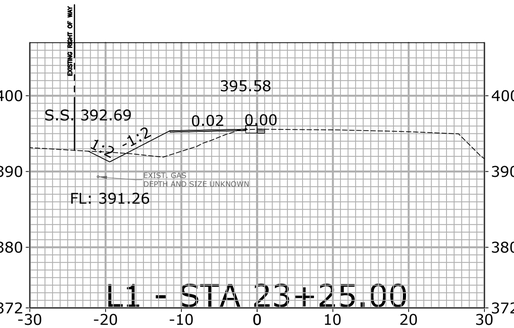

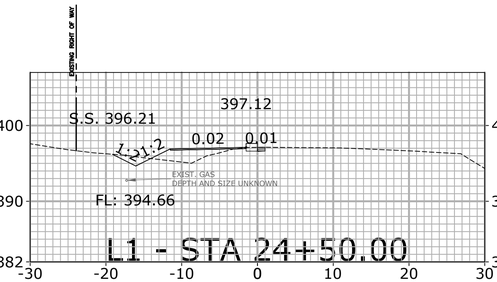

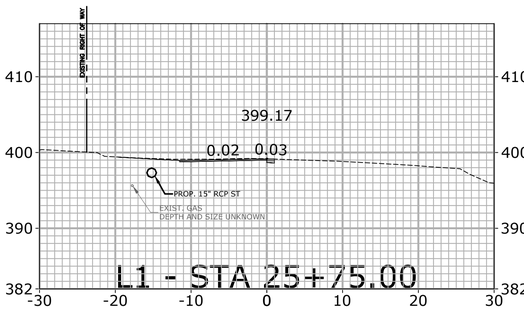

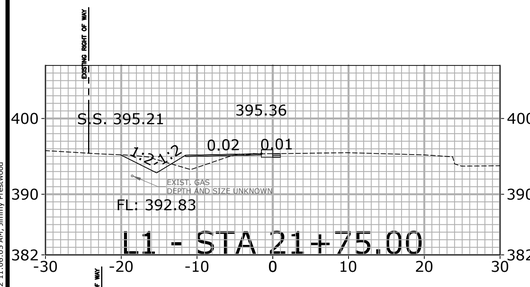

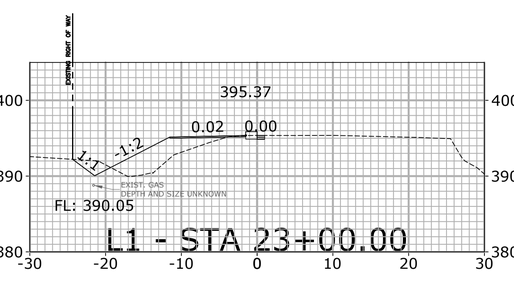

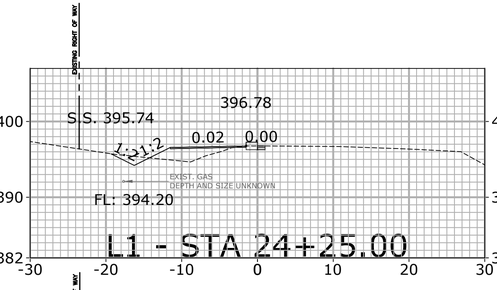

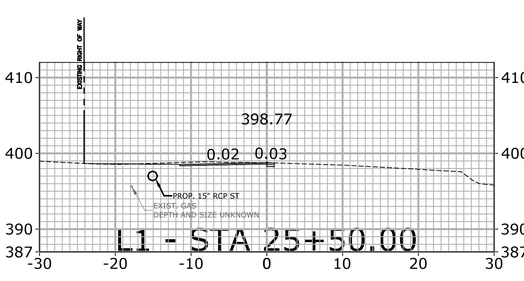

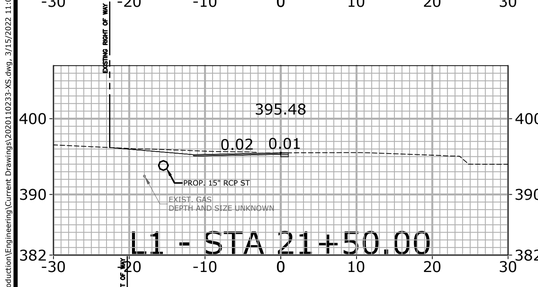

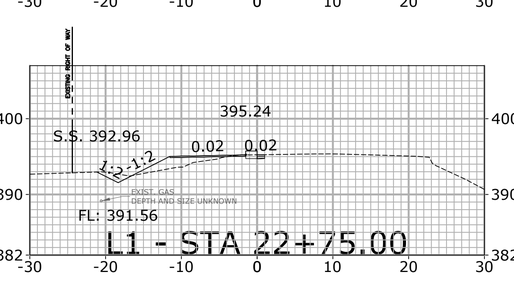

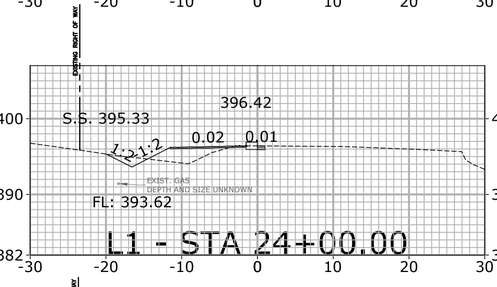

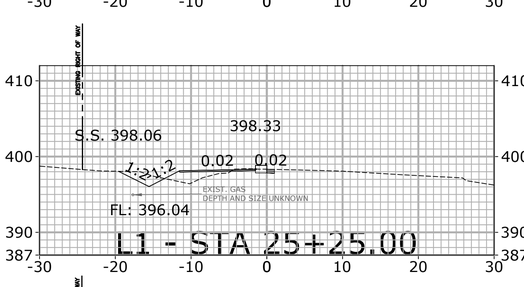

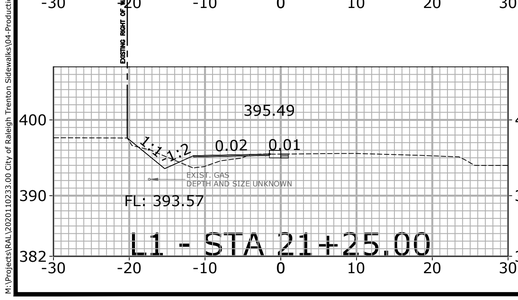

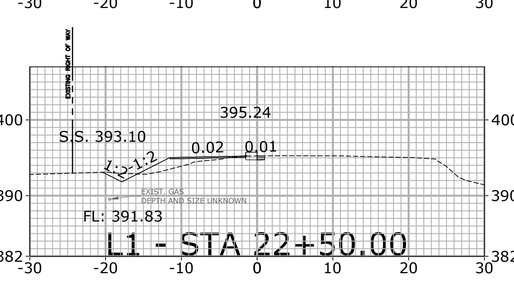

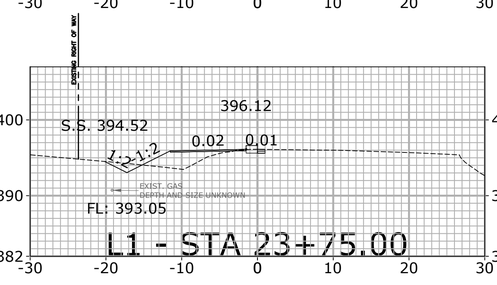

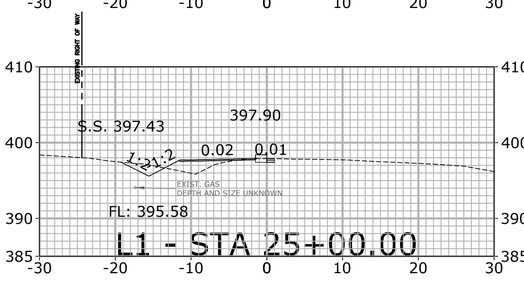

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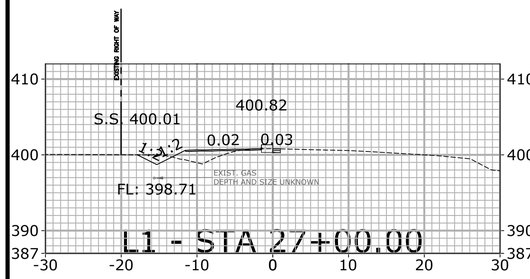

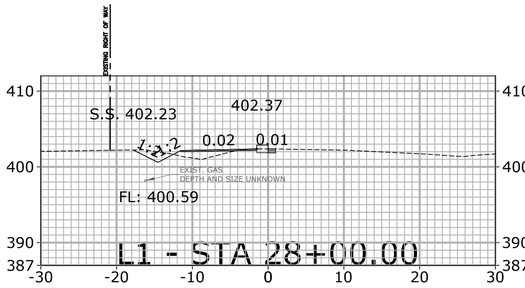

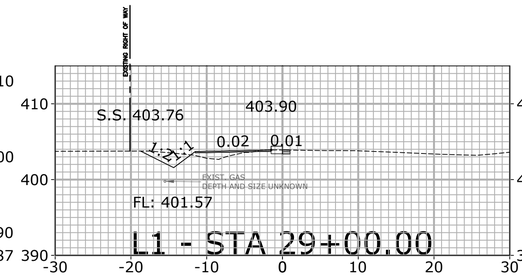

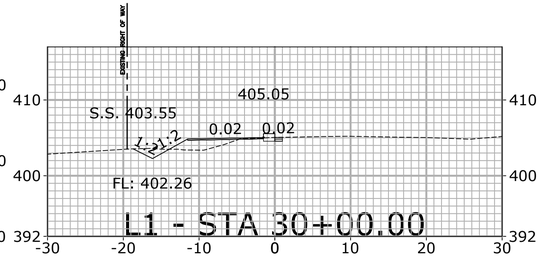

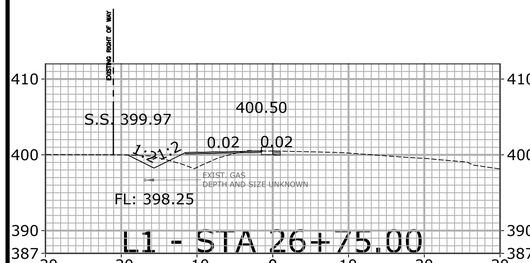

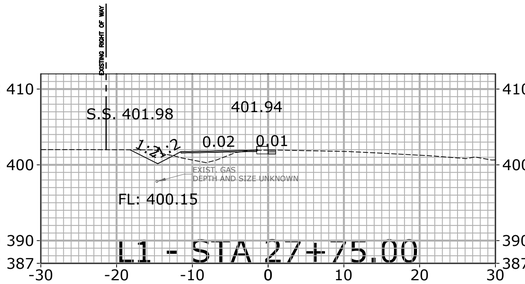

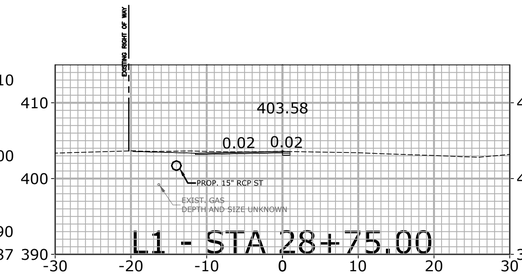

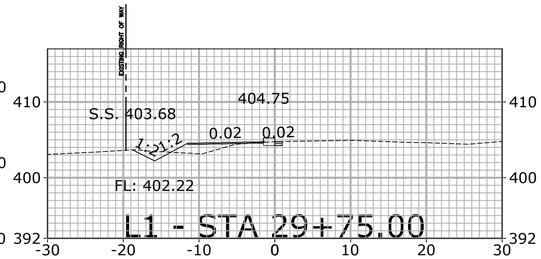

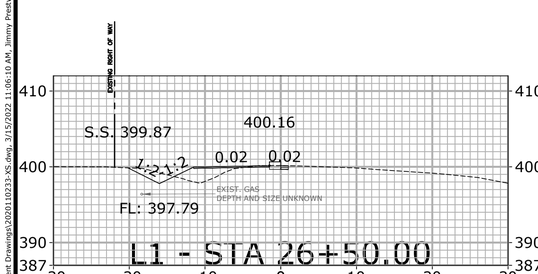

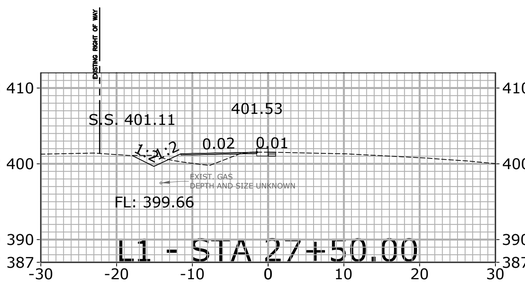

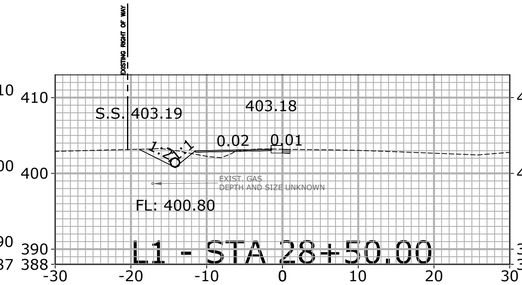

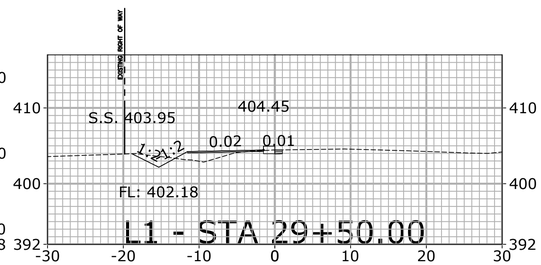

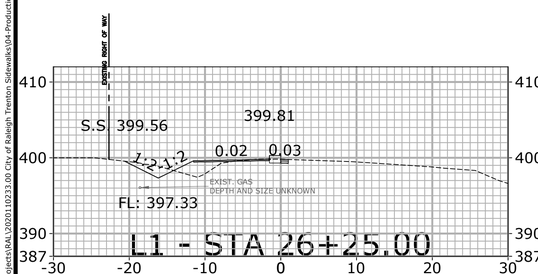

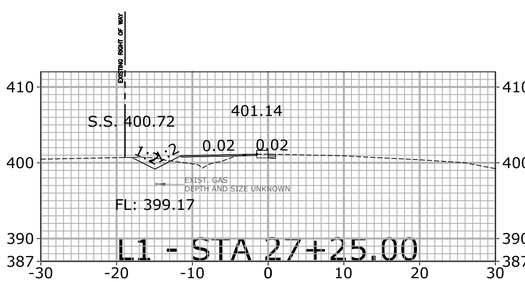

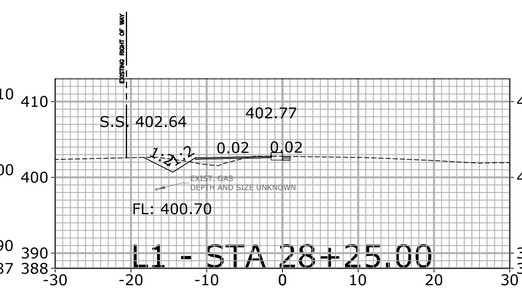

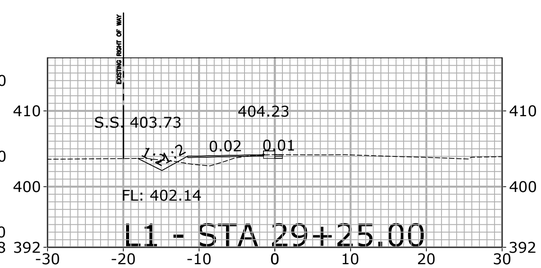

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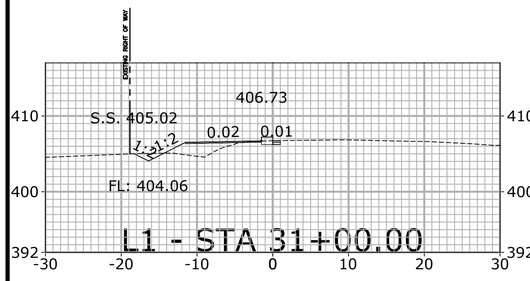

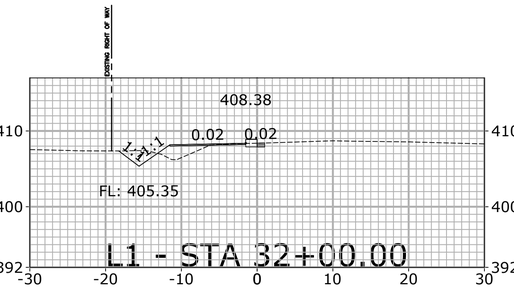

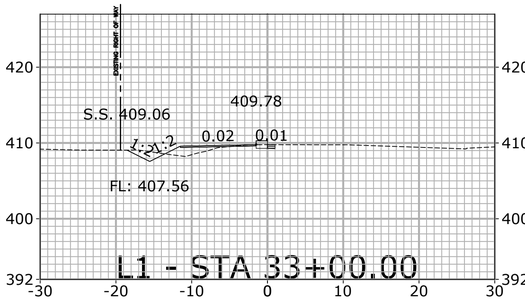

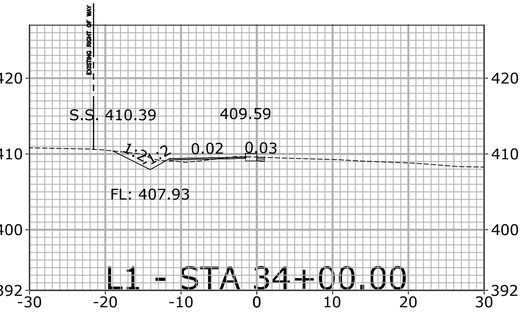

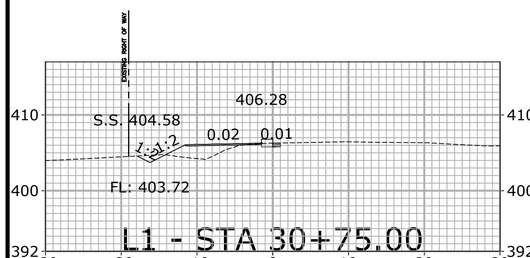

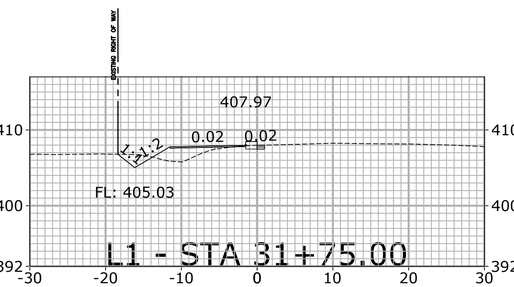

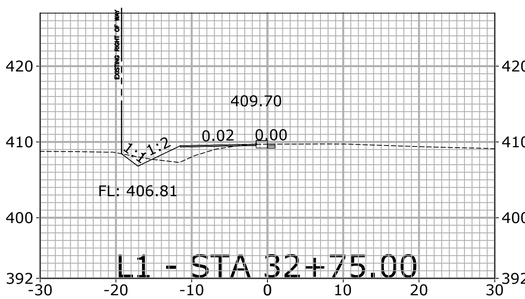

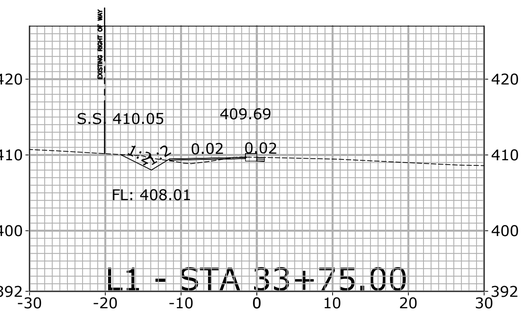

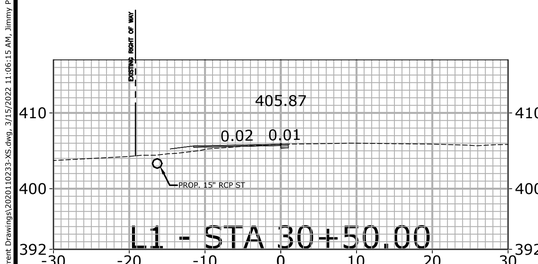

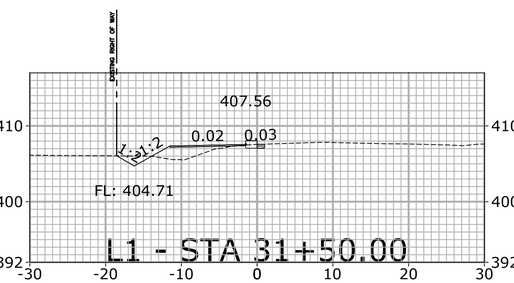

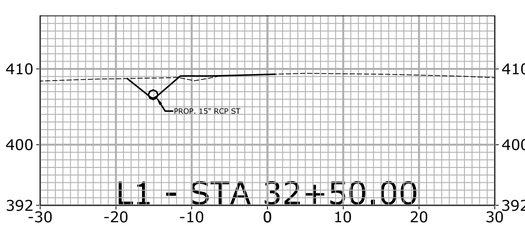

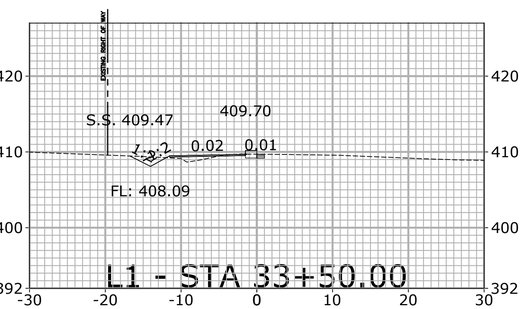

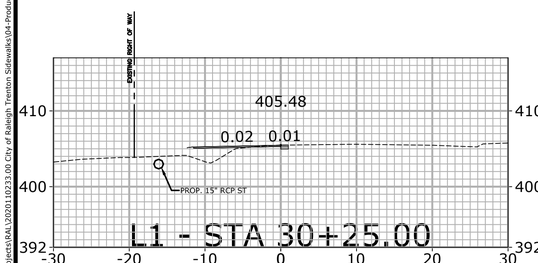

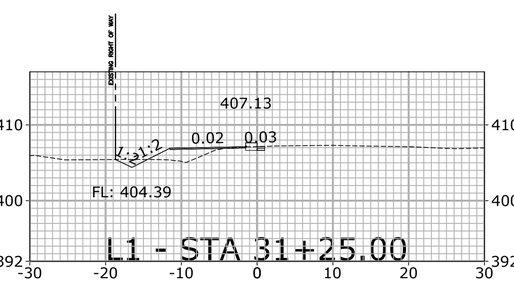

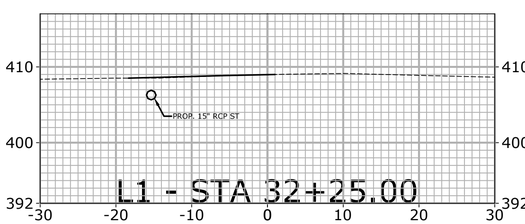

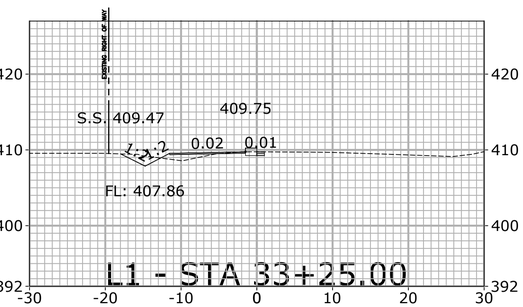

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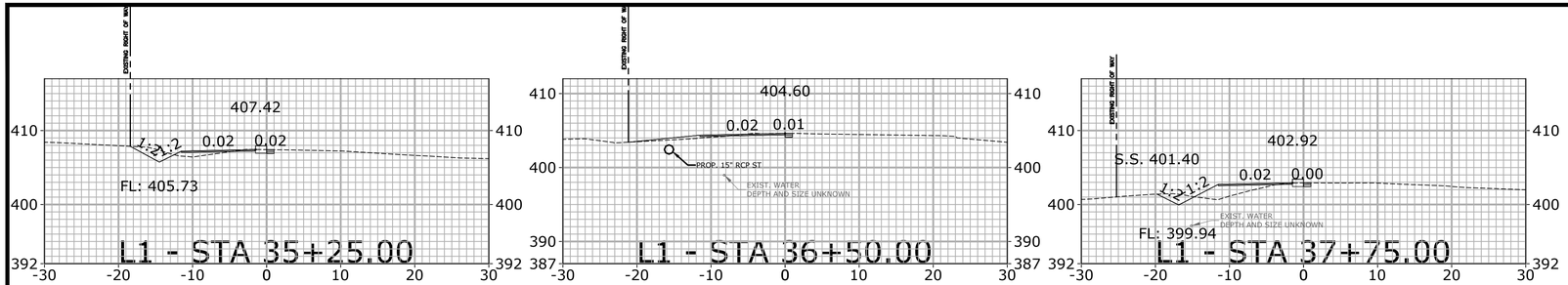

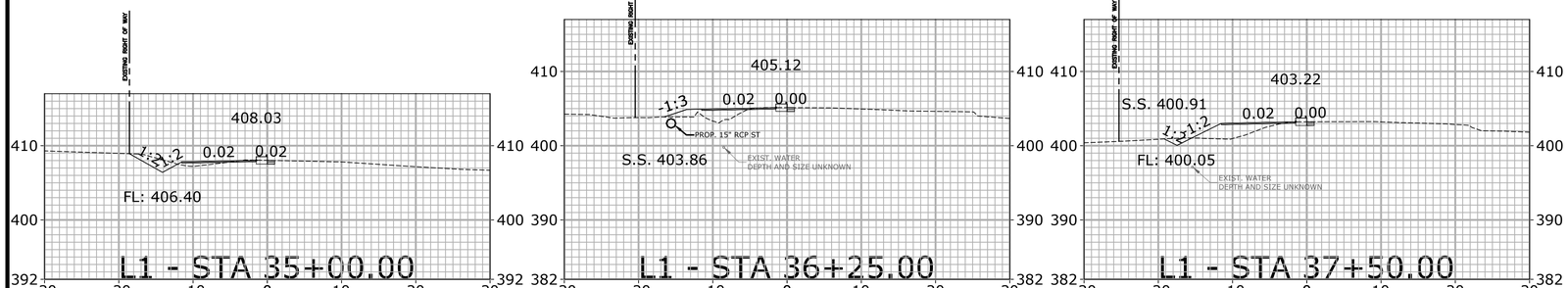

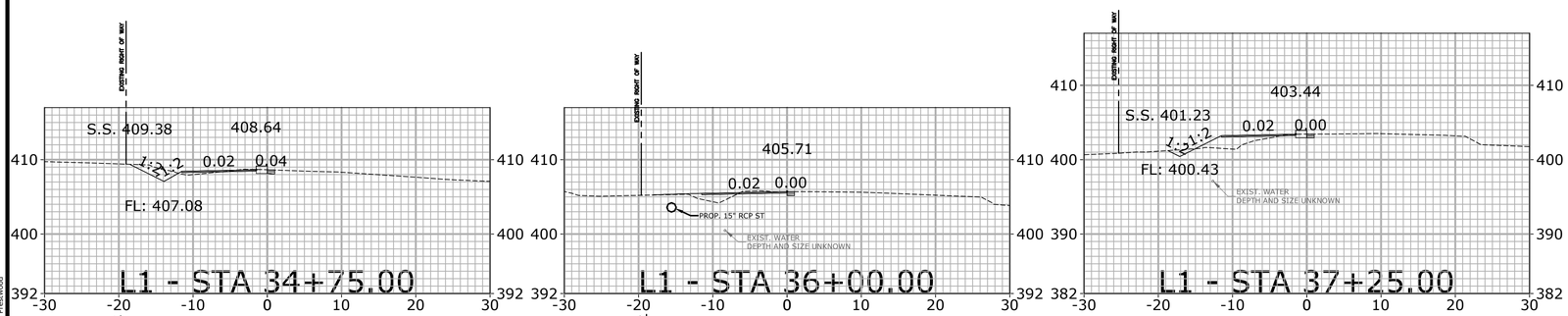

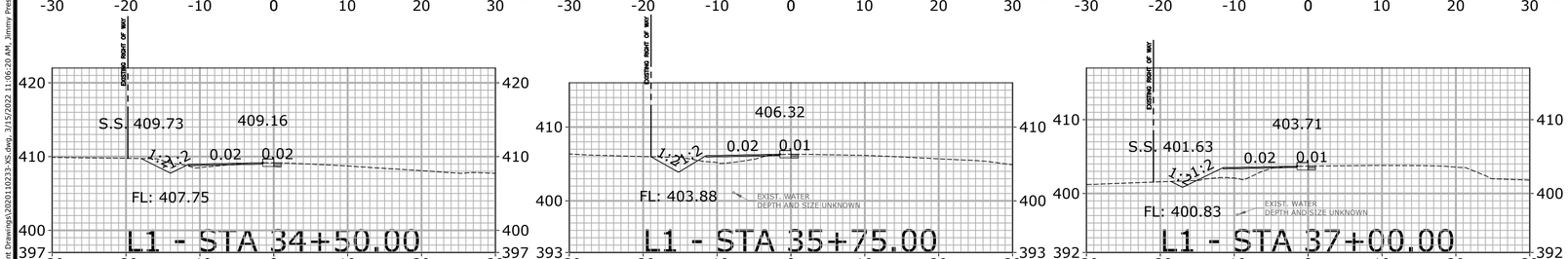

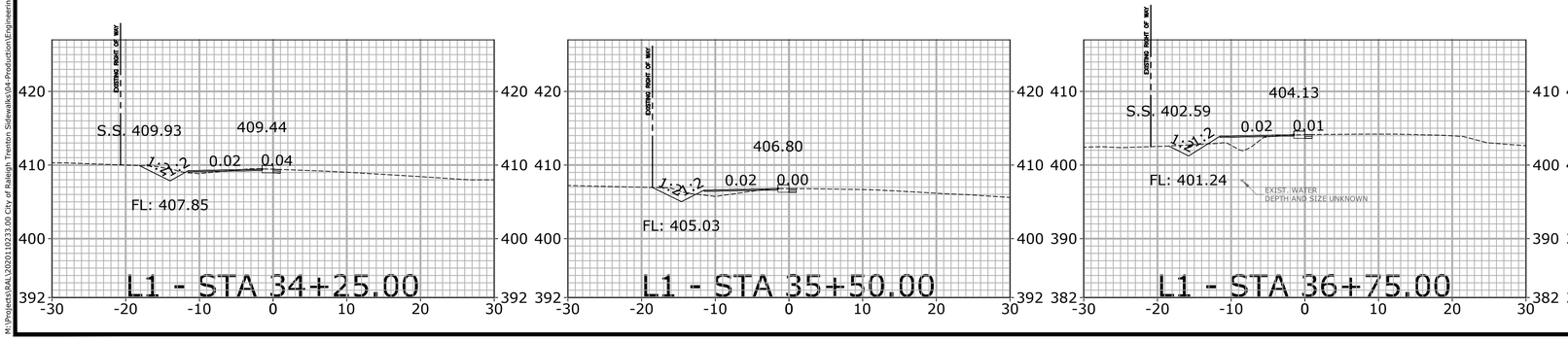

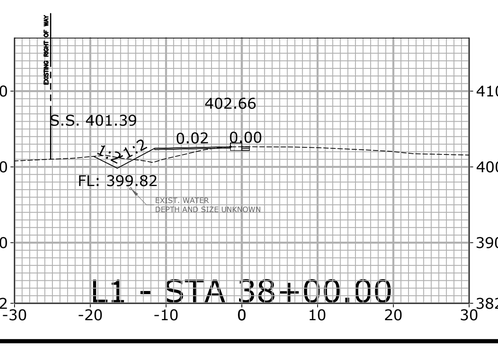

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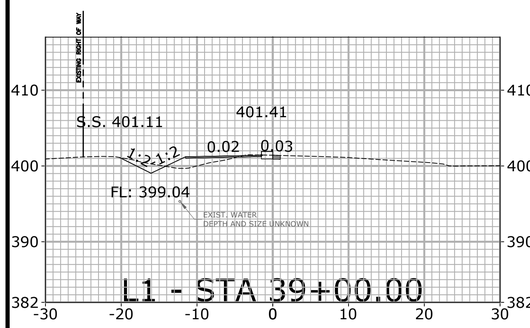

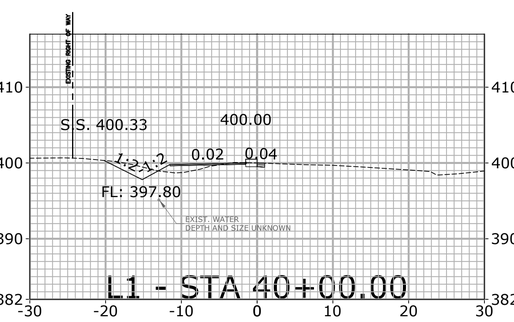

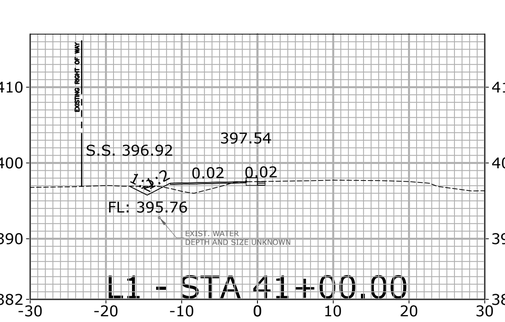

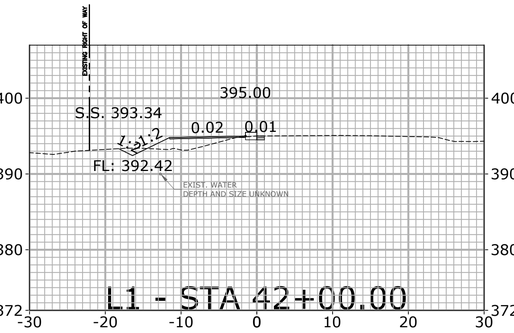

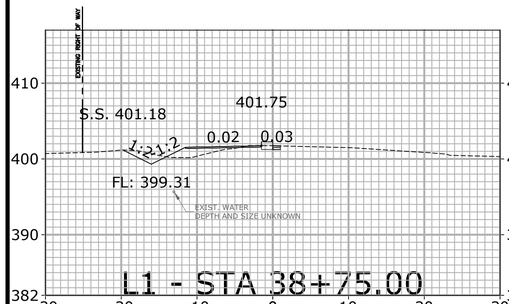

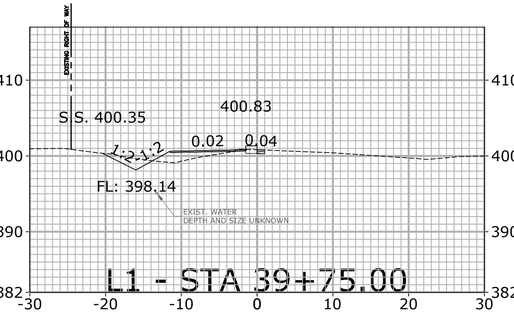

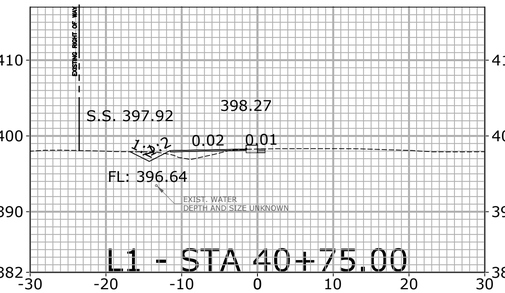

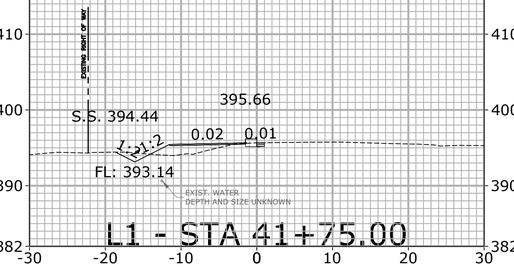

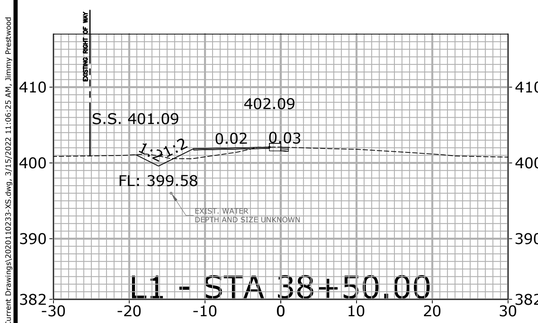

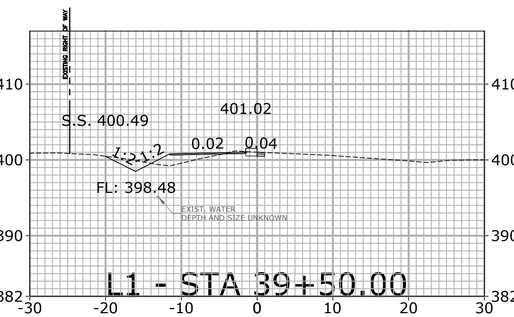

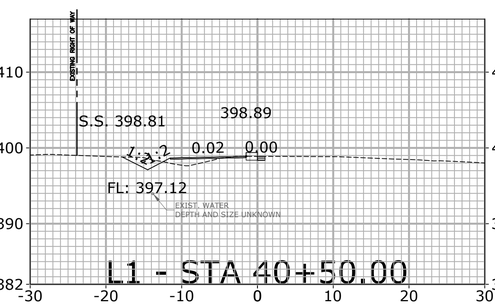

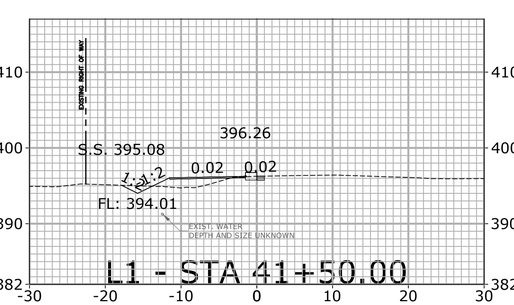

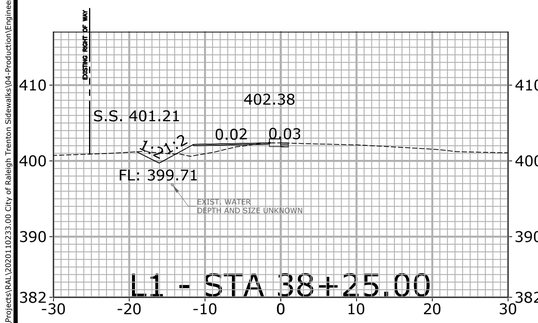

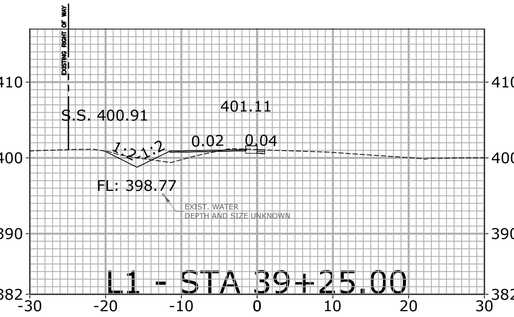

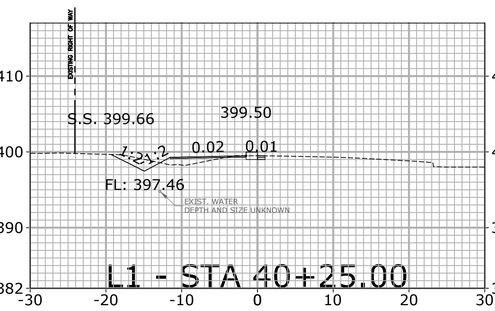

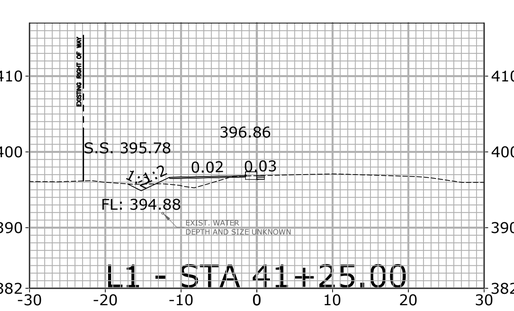

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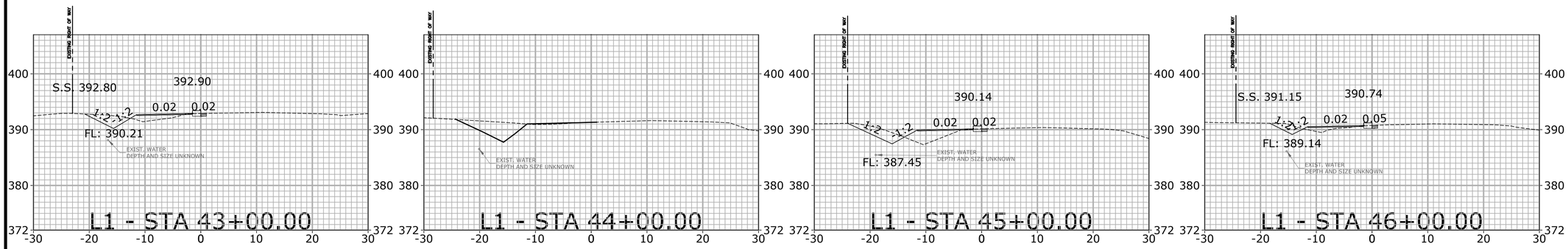

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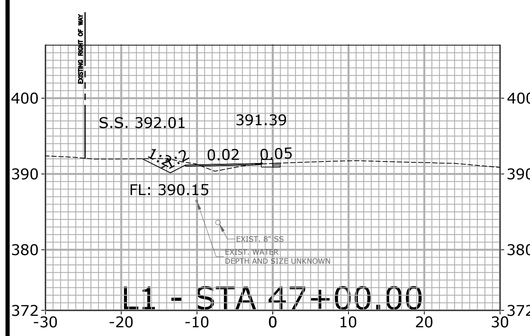

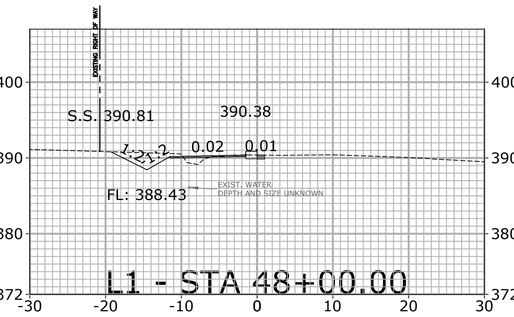

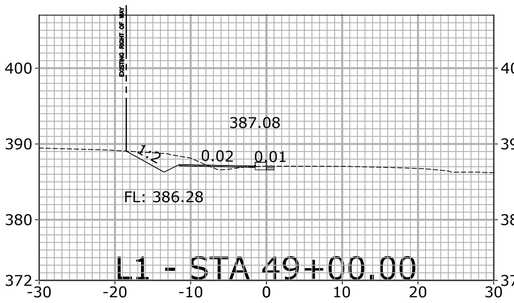

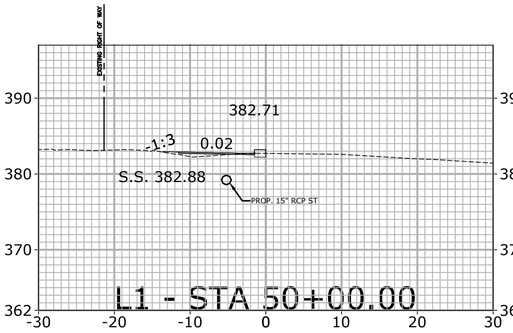

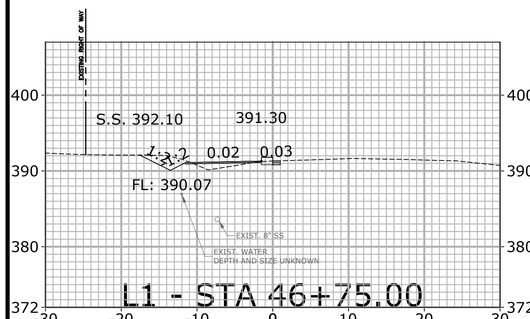

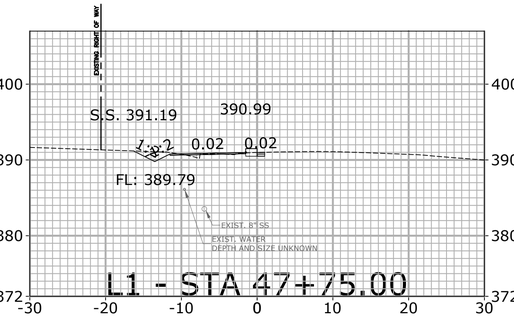

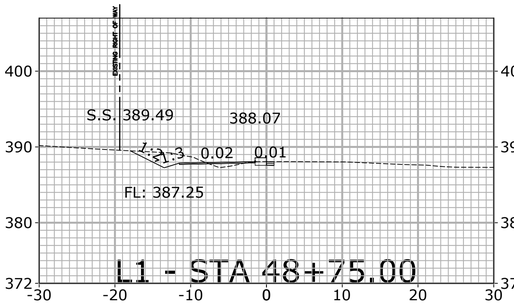

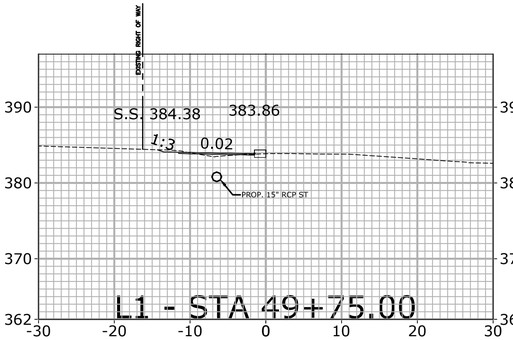

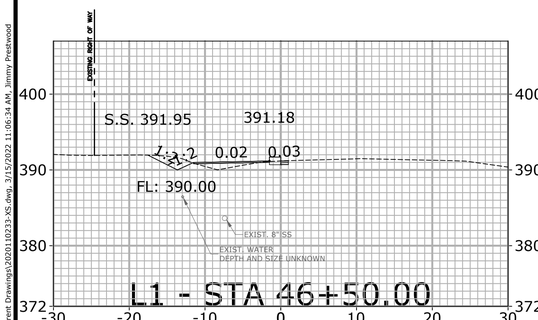

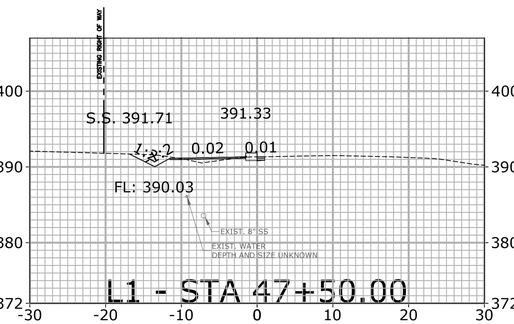

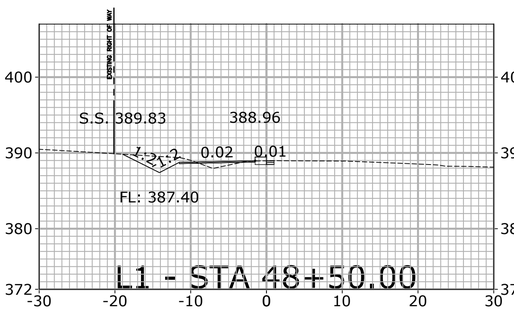

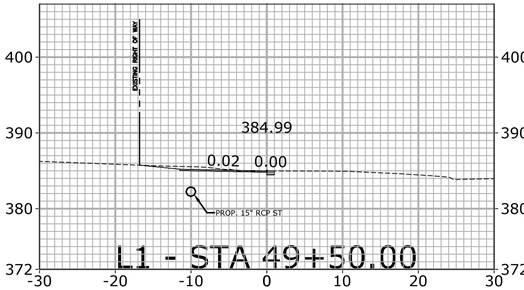

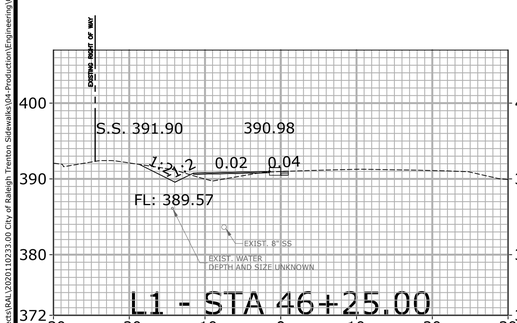

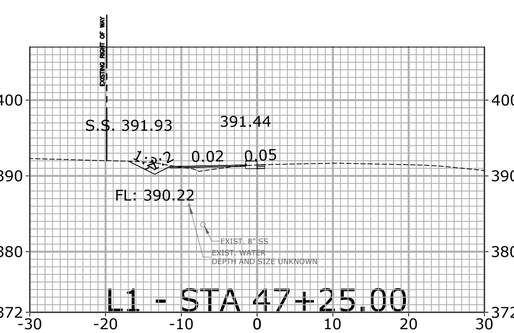

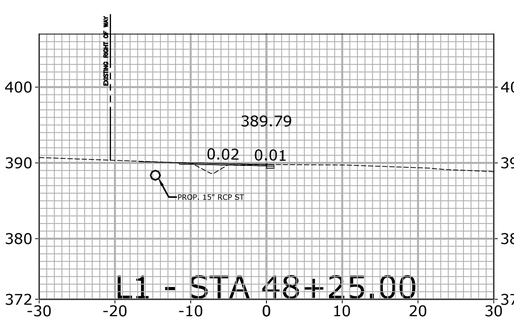

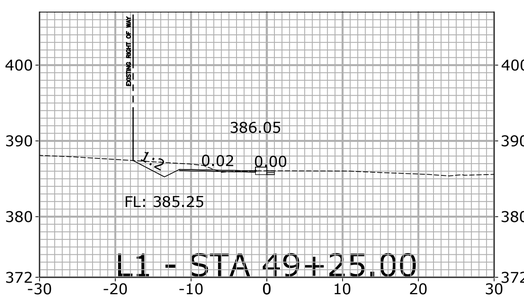

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