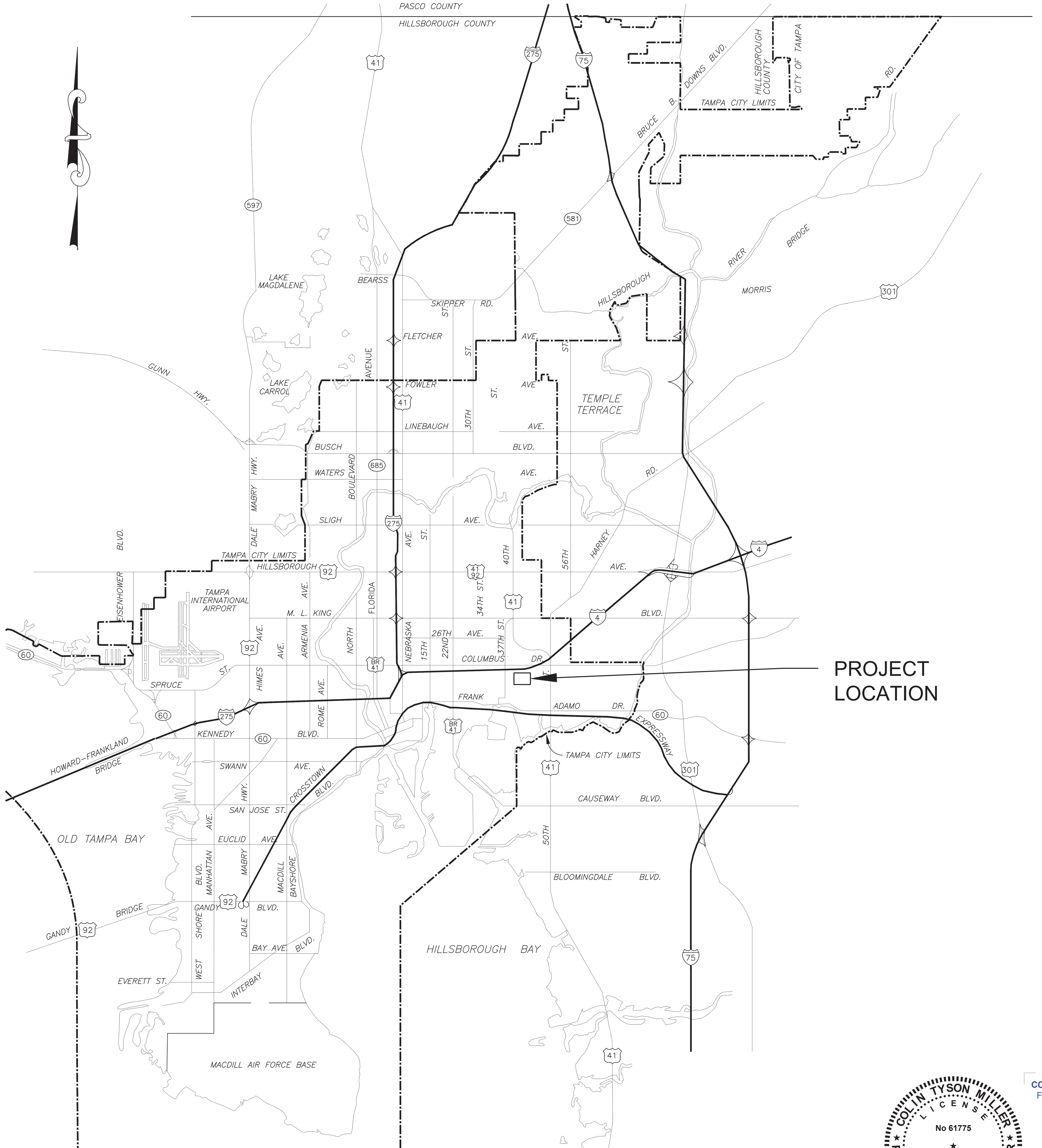
08/05/2024

SW2024-09



CITY of TAMPA

CITY OF TAMPA FLORIDA
ORGANIZED JULY 15 1887
MASCOTTE

MOBILITY DEPARTMENT

STORMWATER ENGINEERING DIVISION

PLANS FOR

43RD STREET DRAINAGE IMPROVEMENTS

COLIN TYSON MILLER, State of Florida, Professional Engineer, License No. 61775

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COLIN TYSON MILLER
STATE OF FLORIDA,
PROFESSIONAL ENGINEER,
LICENSE NO. 61775

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Anthony Wang
2024.08.05
08:22:34-04'00'

GANG WANG
STATE OF FLORIDA,
PROFESSIONAL ENGINEER,
LICENSE NO. 64477

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Richard F Peterika
2024.08.02
16:36:26
-04'00'
AUGUST 2, 2024

RICHARD F. PETERIKA
ASLA, AICP, RCA #641,
ISA-FL #5893B
DARK MOSS LLC

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY RICHARD F. PETERIKA ON THE DATE ADJACENT TO THE SEAL.PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

CIVIL

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1	COVER
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3	GENERAL NOTES
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6-7	DEMOLITION
8	TYPICAL SECTION
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STRUCTURAL

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17	STRUCTURAL TYPICAL CHANNEL PLAN
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SHEET NUMBER	SHEET TITLE
21	TREE INVENTORY AND DISPOSITION PLAN
22	TREE PROTECTION DETAILS

24-C-00041; Ditch Rehabilitation – Grady Avenue & 43rd Street-REBID

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No.	DATE	REVISIONS	No.	DATE	REVISIONS

DES: RTV
DRN: RTV
CKD: TLW
DATE: 01/18/23

CITY of TAMPA
Mobility Department
Stormwater Engineering Division

43RD STREET DRAINAGE IMPROVEMENTS

COVER

I:\02848\0040\ENG\80-DRAWINGS\CIVIL\SITE_1\C1.0 COVER 028480040_1 V1.DWG

LEGEND

EX STORMWATER	UP to 18" & SMALLER	24" & LARGER
FORCE MAIN		
PIPES & MANHOLES		
CATCH BASIN, GRATE		
DITCHES, SWALES		

PROP STORMWATER

- FORCE MAIN
- PIPES & MANHOLES

OTHER UTILITIES

- SAN SEWER & MANHOLES
- WATER LINE
- GAS LINE
- ELECTRICAL CABLE or DUCT
- TELEPHONE CABLE or DUCT
- TV CABLE
- VALVE
- HYDRANT
- CLEAN OUT
- EXISTING WYE
- POWER POLE
- TELEPHONE POLE
- GUY POLE
- GUY WIRE
- VALVE VAULT (V)
- WATER METER (M)
- ELECTRICAL MANHOLE or VAULT (E)
- TELEPHONE MANHOLE or VAULT (T)
- TRAFFIC BOX or VAULT (TR)

OTHER FEATURES

- RIGHT of WAY LINE (R/W)
- EDGE of PAVEMENT
- BUILDING LIMIT (1236)
- PROPERTY OWNERSHIP
- BORING LOCATIONS
- MONITORING WELL (MW)
- POWER LINE (OU)

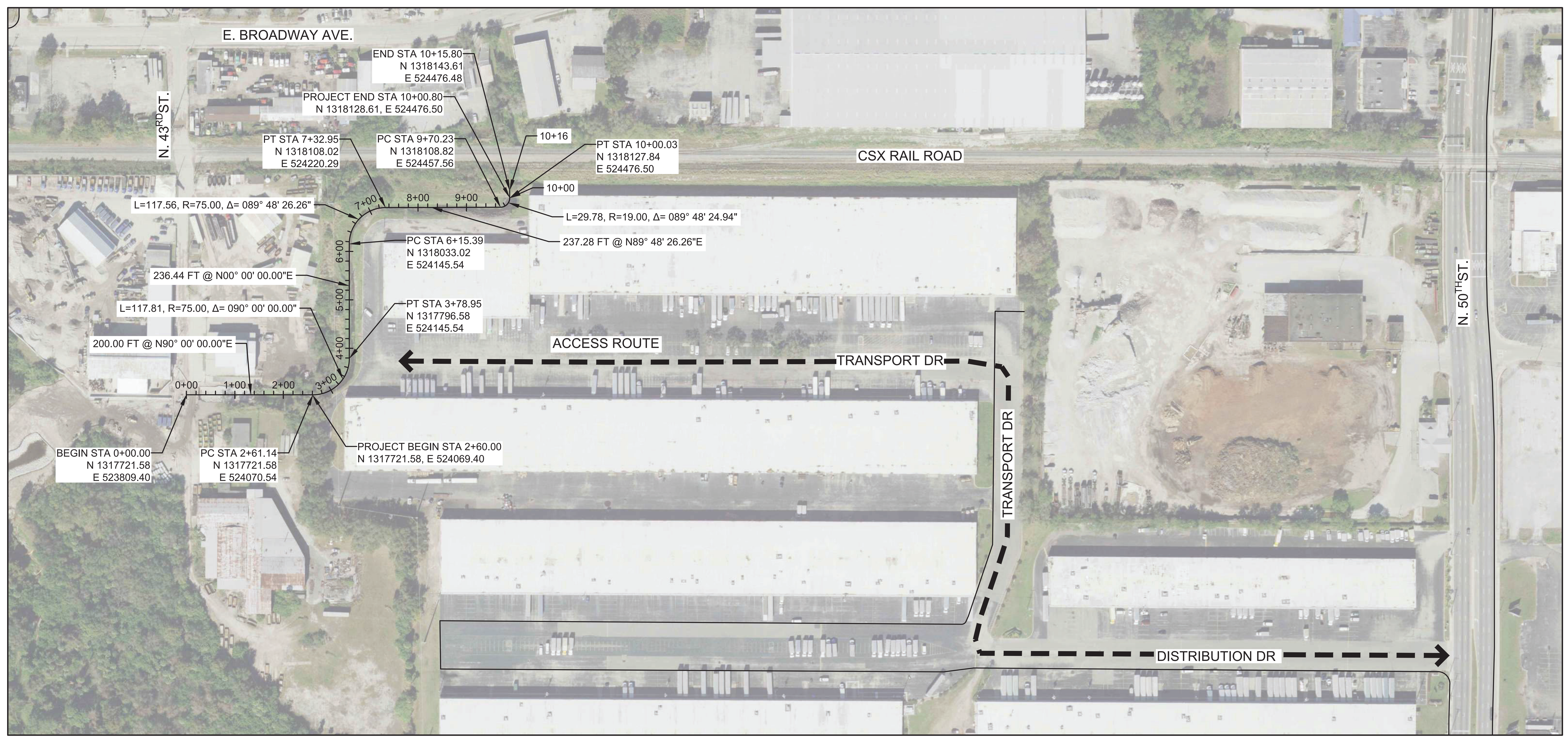
LEGEND

- FENCE
- CONIFER (6")
- PALM (8")
- OAK (10")
- OTHER (12")
- SHRUB
- HEDGE
- RAILROAD TRACKS
- IRON PIPE
- CONCRETE MONUMENT
- TOP-OF-BANK EXISTING
- TOP-OF-BANK PROPOSED
- TOE-OF-SLOPE EXISTING/PROPOSED

ABBREVIATIONS

TOP of PIPE	TP
INVERT ELEVATION	IE or INV EL
RIGHT of WAY	R/W
MANHOLE	MH
POLYVINYL CHLORIDE PIPE	PVCP
VITRIFIED CLAY PIPE	VCP
ADVANCED DRAINAGE SYSTEM	ADS
DUCTILE IRON PIPE	DIP
REINFORCED CONCRETE PIPE	RCP
CONCRETE PIPE	CP
APPROXIMATE LOCATION	AL
BENCH MARK	BM
POINT of INTERSECTION	PI
DRAINAGE EASEMENT	DE
TOP OF BANK	TOB
TOE OF SLOPE	TOE

INDEX



LOCATION MAP

150' 0 150' 300'
SCALE: 1"=150' (Horiz.)
N

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CITY of TAMPA
Mobility Department
Stormwater Engineering Division

43RD STREET DRAINAGE IMPROVEMENTS

LEGEND, INDEX, & LOCATION MAP

GENERAL NOTES

1. ELEVATIONS BASED ON NATIONAL GEODETIC VERTICAL DATUM OF 1988.
2. LOCATIONS, ELEVATIONS AND DIMENSIONS OF THE EXISTING UTILITIES, STRUCTURES AND OTHER FEATURES ARE SHOWN ACCORDING TO THE BEST INFORMATION AVAILABLE AT THE TIME OF THE PREPARATION OF THESE PLANS BUT DO NOT PURPORT TO BE ABSOLUTELY CORRECT. THE CONTRACTOR SHALL VERIFY THE LOCATIONS, ELEVATIONS, AND DIMENSIONS, OF ALL EXISTING UTILITIES, STRUCTURE, AND OTHER FEATURES AFFECTING HIS WORK PRIOR TO CONSTRUCTION. GAS, VERIZON, WATER MAIN, WATER SERVICES, SEWER LATERALS AND OTHER SUBSURFACE PIPING HAS NOT BEEN LOCATED. ENGINEER OF RECORD SHOWS LOCATIONS AS APPROXIMATE AS PROVIDED BY OTHERS.
3. EXISTING UTILITIES AND TOPOGRAPHIC INFORMATION DENOTED BY UPPER AND LOWER CASE. PROPOSED WORK DENOTED BY ALL UPPER CASE.
4. THE CONTRACTOR SHALL CALL SUNSHINE (1–800–432–4770) AT LEAST 72 HOURS PRIOR TO ANY CONSTRUCTION ACTIVITIES.
5. WHEN IN CONFLICT, UTILITY POLES, GAS LINES, UNDERGROUND ELECTRIC, TELEPHONE AND OTHER COMMUNICATION CABLES AND CONDUIT WILL BE RELOCATED BY THE RESPECTIVE UTILITY OWNERS AT THEIR OWN EXPENSE.
6. PRIOR TO ANY CONSTRUCTION, CONTACT TAMPA ELECTRIC COMPANY (PH: 813–228–4111 OR 813–275–3037) FOR EXACT LOCATION OF UNDERGROUND LINES. TECO TO RELOCATE ANY CONFLICTING LINES.
7. PRIOR TO ANY CONSTRUCTION, CONTACT TECO GAS (813–275–3743) FOR EXACT LOCATION OF UNDERGROUND LINES. TECO GAS TO RELOCATE ANY CONFLICTING LINES.
8. PRIOR TO ANY CONSTRUCTION, CONTACT VERIZON (813–978–2164) FOR EXACT LOCATION OF UNDERGROUND LINES. VERIZON TO RELOCATE ANY CONFLICTING LINES.
9. STATIONS AND OFFSETS GIVEN ARE TO THE CENTER LINE OF THE INLETS AND MANHOLES, AND REFER TO THE CONSTRUCTION CENTER LINE (CONST CL).
10. THE SOLID WASTE DEPARTMENT (813–348–1146) IS TO BE NOTIFIED PRIOR TO ANY STREET CLOSURES IN THE PROJECT AREA.
11. TREE REMOVAL CONTRACTOR IS RESPONSIBLE FOR OBTAINING SITE CLEARING PERMIT PRIOR TO START OF ANY CONSTRUCTION.
12. NECESSARY ROOT PRUNING AND TRIMMING OF BRANCHES SHALL BE DONE BY A CERTIFIED ARBORIST.
13. THE CONTRACTOR SHALL COMPLY WITH THE PROVISIONS OF THE LATEST "TREE ORDINANCE" OF THE CITY OF TAMPA. THE CONTRACTOR IS REQUIRED TO RELOCATE THE TREES REMOVED AS A PART OF THE NECESSARY CONSTRUCTION INDICATED ON PLANS.
14. SOD ALL THE DISTURBED AREAS WITHIN APPROVED TRENCH LIMITS.
15. WHERE CONNECTIONS TO EXISTING DRIVES AND WALKS ARE NOT INDICATED ON THE PLANS, PROPER CONNECTIONS SHALL BE MADE AT THE DIRECTION OF THE ENGINEER.
16. STREET SIGNS, STREET MARKERS AND R–O–W MARKERS SHALL BE REMOVED AND RELOCATED AS DIRECTED BY THE ENGINEER.
17. MAILBOXES SHALL BE REMOVED AND REPLACED IN–KIND.
18. DRIVEWAYS SHALL BE RECONSTRUCTED IN ACCORDANCE WITH CHAPTER 25 OF THE CITY CODE AND THE TRANSPORTATION TECHNICAL MANUAL. DEVIATION FROM ESTABLISHED STANDARDS SHALL BE APPROVED BY THE CITY TRAFFIC ENGINEER.
19. THE CONTRACTOR SHALL PROTECT ALL TREES, NOT DESIGNATED FOR REMOVAL, IN THE VICINITY OF THE PROPOSED CONSTRUCTION IN ACCORDANCE WITH CHAPTER 13 OF THE CITY OF TAMPA CODE. NO TREES SHALL BE PRUNED WITHOUT PRIOR APPROVAL FROM THE CITY OF TAMPA PARKS & RECREATION DEPARTMENT, NATURAL RESOURCES DIVISION, AND SHALL BE COMPLETED BY A CERTIFIED ARBORIST. ROOT PRUNING MAY BE REQUIRED AT CERTAIN LOCATIONS AND SHALL BE COMPLETED IN ACCORDANCE WITH CHAPTER 13 TECHNICAL MANUAL SPECIFICATIONS.
20. ALL CONSTRUCTION SHALL CONFORM TO THE APPLICABLE CITY OF TAMPA DEPARTMENT ORDINANCES AND REGULATIONS.
21. THE CONTRACTOR SHALL MAINTAIN COPIES OF ALL APPLICABLE PERMITS ON–SITE AND SHALL BE RESPONSIBLE TO ADHERE TO ALL PERMIT CONDITIONS DURING CONSTRUCTION.
22. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS ON ALL PRECAST AND MANUFACTURED ITEMS TO THE ENGINEER FOR APPROVAL. FAILURE TO OBTAIN APPROVAL BEFORE INSTALLATION MAY RESULT IN REMOVAL AND REPLACEMENT AT CONTRACTOR'S EXPENSE.
23. COMPACTION FOR PIPE BACKFILL SHALL COMPLY WITH AASHTO T–99 (100%).

SITE NOTES

1. ALL DESIGN AND CONSTRUCTION MUST CONFORM TO THE MINIMUM STANDARDS SET DOWN IN CITY OF TAMPA STORMWATER TECHNICAL MANUAL, LATEST VERSION.
2. ALL RIGHT–OF–WAY INSTALLATIONS MUST COMPLY WITH THE CITY OF TAMPA STANDARDS AND TECHNICAL MANUALS.
3. IN AREAS WHERE FILL MATERIAL IS REQUIRED, BUT THERE IS NO PROPOSED STRUCTURE, THE EXISTING VEGETATION AND ROOTS SHALL BE REMOVED PRIOR TO PLACING ANY FILL MATERIAL. THE FILL SHALL BE PLACED IN LIFTS NO GREATER THAN 12 INCHES AS MEASURED LOOSE, AND COMPACTED TO A UNIFORM DENSITY ASTM D698 (80%). THE MATERIAL SHALL BE COMPACTED AT A MOISTURE CONTENT PERMITTING THE SPECIFIED COMPACTION. THE FILL SHALL BE TESTED BY THE CITY OF TAMPA THROUGH THE CITY INSPECTOR AND THE RESULTS SUPPLIED TO THE ENGINEER.
4. THE CONTRACTOR SHALL CONTACT THE ENGINEER'S OFFICE IMMEDIATELY ON ANY CONFLICTS ARISING DURING CONSTRUCTION OF ANY IMPROVEMENTS SHOWN ON THESE DRAWINGS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CONSULT WITH THE ENGINEER FOR MAKING ANY AND ALL REQUIRED INTERPRETATIONS OF THE PLANS. HOWEVER, THIS IN NO WAY RELIEVES THE CONTRACTOR OF HIS RESPONSIBILITY FOR CONSTRUCTING THE PROJECT TO ACCOMPLISH THE INTENT OF THE PLANS.
5. REPAIR AND REPLACEMENT OF ALL PRIVATE AND PUBLIC PROPERTY AFFECTED BY THIS WORK SHALL BE RESTORED TO A CONDITION EQUAL TO OR BETTER THAN EXISTING BEFORE COMPLETING CONSTRUCTION UNLESS SPECIFICALLY EXEMPTED BY THE PLANS.

6. EROSION/SEDIMENTATION CONTROL: THE CONTRACTOR IS TO PROVIDE EROSION CONTROL/SEDIMENTATION BARRIER (HAY BALES OR SILTATION CURTAIN), IF REQUIRED TO PREVENT SILTATION OF ADJACENT PROPERTY, STREETS, STORM SEWERS AND WATERWAYS. IN ADDITION, THE CONTRACTOR SHALL PLACE STRAW, MULCH OR OTHER SUITABLE MATERIAL ON THE GROUND, AS REQUIRED, IN AREAS WHERE CONSTRUCTION RELATED TRAFFIC IS TO ENTER AND EXIT THE SITE. IF, IN THE OPINION OF THE ENGINEER AND/OR LOCAL AUTHORITIES, EXCESSIVE QUANTITIES OF EARTH ARE TRANSPORTED OFF–SITE, EITHER BY NATURAL DRAINAGE OR BY VEHICLE TRAFFIC, THE CONTRACTOR IS TO REMOVE AND CLEAN SAID EARTH TO THE SATISFACTION OF THE ENGINEER AND/OR LOCAL AUTHORITIES AT NO ADDITIONAL COST.
7. CONTRACTOR SHALL SPRINKLE OR OTHERWISE APPLY WATER TO AFFECTED CONSTRUCTION AREA TO CONTROL BOTH SIGNIFICANT WIND EROSION OR FUGITIVE DUST.
8. CONCRETE SHALL HAVE A COMPRESSIVE STRENGTH OF 3000 PSI AT 28 DAYS. PORTLAND CEMENT SHALL CONFORM TO ASTM C150. AGGREGATE SHALL CONFORM TO ASTM C33. READY MIXED CONCRETE SHALL CONFORM TO ASTM C–04. SUBSURFACE SHALL BE FREE FROM TROWEL OR MACHINE MARKS. SURFACE VARIATIONS SHALL NOT EXCEED 1/4 INCH UNDER TEN–FOOT (10') STRAIGHT EDGE.
9. ALL GRADING OF SIDEWALKS AND PEDESTRIAN WALKWAYS SHALL MEET MINIMUM 'ADA' STANDARDS. SIDEWALK CROSS SLOPES AND DRIVEWAY CROSSINGS FOR SIDEWALKS TO BE 2.0% MAX. SLOPE. ALL SIDEWALK RUNNING SLOPES SHALL NOT EXCEED 5% WITHOUT USE OF PROPER RAMPS FOR FDOT OR FLORIDA BUILDING CODE. CONTRACTOR SHALL FIELD–VERIFY SIDEWALK FORM BOARDS PRIOR TO CONSTRUCTING WALKWAYS.
10. ALL INLET GRATE SEATS SHALL BE GALVANIZED GRATE SEATS.

CONSTRUCTION NOTES

1. PRICE FOR ALL REMOVAL, AS SHOWN ON THE PLANS OUTSIDE OF CONSTRUCTION EXCAVATION AREA, SHALL BE INCLUDED IN THE VARIOUS ITEMS OF THE STORMWATER UNIT PRICES.
2. CONTRACTOR TO SOD DISTURBED AREA WITHIN THE PROJECT LIMITS WITH BAHIA SOD AND/OR LIKE KIND OF EXISTING SOD.
3. CONTRACTOR TO RESTORE DISTURBED RESIDENTIAL YARDS WITHIN CONSTRUCTION LIMITS WITH BAHIA, ST. AUGUSTINE, AND/OR LIKE KIND OF SOD.
4. CONTRACTOR SHALL RESTORE ALL NEIGHBORING RESIDENTIAL YARDS WITH LIKE KIND OF LANDSCAPING, MAILBOXES, WALK WAYS, DRIVEWAYS, ETC. EACH YARD SHALL BE RESTORED TO EXISTING CONDITIONS UP TO AND INCLUDING FROM BACK OF CURB TO RIGHT OF WAY LINE.
5. CONTRACTOR TO PROTECT EXISTING IRRIGATION SYSTEMS AND ANY OTHER UTILITIES IN RESIDENTIAL YARDS WITHIN CONSTRUCTION LIMITS AND/OR RESTORE ANY DAMAGED SYSTEMS DURING CONSTRUCTION BACK TO EXISTING CONDITIONS.
6. CONTRACTOR TO PROTECT EXISTING PRIVATE FENCES DURING CONSTRUCTION OR REPLACE IN LIKE KIND.
7. CONTRACTOR TO PROTECT THE EXISTING CONDUIT THAT IS TO REMAIN.
8. ALL REMOVAL WITHIN PROPOSED EXCAVATION AREAS IS PART OF PIPE & DITCH CONSTRUCTION.
9. CONTRACTOR TO PROTECT ALL POWER POLES & SUBSURFACE UTILITIES. IN THE EVENT OF A CONFLICT THE CONTRACTOR SHALL COORDINATE WITH THE UTILITY PROVIDER RESPONSIBLE FOR THE RELOCATION.
10. ALL RCP PIPES SHALL BE CLASS III WITH MINIMUM COVER OF 18". ALL RCP PIPES WITH LESS THAN 18" OF COVER ON RESIDENTIAL ROADS SHALL BE CLASS IV.
11. CONCRETE STRUCTURES AND JUNCTION BOXES MAY BE PRECAST OR CAST IN PLACE.
12. CONTRACTOR TO PROVIDE DEWATERING PLANS TO CITY PRIOR TO IMPLEMENTATION. THE DEWATERING PLAN SHOULD INCLUDE: 1. METHOD OF DEWATERING; 2. DISCHARGE POINT FOR GROUNDWATER; 3. TURBIDITY CONTROL METHODS; 4. PUMPING RATES/DURATION.
13. CONTRACTOR TO LIMIT STAGING AND WORK TO DRAINAGE EASEMENT & CONSTRUCTION ACCESS AREA.
14. CONTRACTOR TO RESTORE CONSTRUCTION ACCESS AREA DAMAGED DURING CONSTRUCTION BY MILLING AND RESURFACING ASPHALT PAVEMENT (1" DEEP), RESTORING ALL STRIPING, AND REPLACING ALL SIGNAGE.

COLIN TYSON MILLER, State of Florida, Professional Engineer, License No. **61775**

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DES: RTV
DRN: RTV
CKD: TLW
DATE: 01/18/23

CITY of TAMPA
Mobility Department
Stormwater Engineering Division

43RD STREET DRAINAGE IMPROVEMENTS

GENERAL NOTES


MATCHLINE 1
N
20' 0 20' 40'
SCALE: 1"=20' (Horiz.)
LEGEND:
EXIST. CONTOURS
24.3 EXIST. SPOT ELEV.
EASEMENTS
CHANNEL TOP OF BANK
CHANNEL TOE OF SLOPE
CHAINLINK FENCE
TYPE "D" CURB
BORING LOCATIONS
MONITORED WELL
ELECTRIC POLE
GUY WIRES
EXIST. RIP RAP
EXIST. SURFACE WATER
APPROX. BUILDING FOOTPRINT
BRE TAMPA DISTRIBUTION CENTER OWNER, LLC
ORB 26779, Page 799
INSTR # 2019296960
Parcel ID:
A-16-29-19-ZZZ-000005-80750.0
HIGH VOLTAGE LINE
SPT B-1
MWELL
SURFACE WATER
TYPE 'D' CURB
SPILLWAY
WEST LINE OF THE SE 1/4 OF SECTION 16
43rd STREET
APPR. R/W ±20
SECTION LINE
1607 PROPERTY, INC.
ORB 14399, Page 1749
INSTR # 2004441398
Parcel ID:
A-16-29-19-ZZZ-000005-80520.0
50.00 PERPETUAL CITY OF TAMPA DRAINAGE DITCH EASEMENT ORB 2964, PAGE 1696
SPILLWAY EL. = 14.06'
CHANNEL BOTTOM EL. = 13.08'
HA-4
6' CHAINLINK
SURFACE WATER
RIPRAP
12.0'X4.0' BOX CULVERT INVERT = 10.69'
12.0'X4.0' BOX CULVERT BOTTOM = 10.42'
HEADWALL
HA-1
HA-2
SND CP2 SET MAG NAIL AND DISK "LB 7917"
N 1317728.92, E 524130.99, Z 18.86
1
SIR CP1 SET 5/8" IRON ROD AND CAP "LB 7917"
N 1317718.03, E 523815.42, Z 19.09
PAMELA J. SNEAD
ORB 21119, Page 1657
INSTR # 2012165913
Parcel ID:
A-16-29-19-ZZZ-000005-80530.0
30.00 DRAINAGE EASEMENT
12.00 APPARENT GAP
Parcel ID: A-16-29-19-ZZZ-000005-80750.1
60.00 TAMPA ELECTRIC COMPANY EASEMENT ORB 2459, PAGE 668

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43RD STREET DRAINAGE IMPROVEMENTS

EXISTING CONDITIONS

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43RD STREET DRAINAGE IMPROVEMENTS

EXISTING CONDITIONS

SW2024-09


MATCHLINE 2
LEGEND
DEMO AREA
DEMO LINEAR ITEM
ABANDON LINEAR ITEM
DEMO EX. ITEM
SILT FENCE
DBL SILT FENCE
TURBIDITY CURTAIN
CHECK STRUCTURE
N
SCALE: 1"=20' (Horiz.)
WEST LINE OF THE SE 1/4 OF SECTION 16
43rd STREET
APPR. R/W ±20
SECTION LINE
APPROX. BUILDING FOOTPRINT
INSTALL & MAINTAIN E/C ROCK CHECK STRUCTURE DURING CONSTRUCTION (SEE SHEET 14)
HIGH VOLTAGE LINE
SPT B-1
MW MWELL
REMOVE 0.21 AC SURFACE WATER
SURFACE WATER
TYPE 'D' CURB
REMOVE 150 LF EX. CURB
BRE TAMPA DISTRIBUTION CENTER OWNER, LLC
ORB 26779, Page 799
INSTR # 2019296960
Parcel ID:
A-16-29-19-ZZZ-000005-80750.0
PROTECT EX. UTIL. POLE
CONST BL
REMOVE SPILLWAY
SPILLWAY
30.00' CONST. ACCESS
REMOVE 49 LF EX. CURB
LIMITS OF DISTURBANCE
50.00 PERPETUAL CITY OF TAMPA DRAINAGE DITCH EASEMENT ORB 2964, PAGE 1696
REMOVE 29 LF EX. CURB
1607 PROPERTY, INC.
ORB 14399, Page 1749
INSTR # 2004441398
Parcel ID:
A-16-29-19-ZZZ-000005-80520.0
HA-4
SPILLWAY EL. = 14.06'
CHANNEL BOTTOM EL. = 13.08'
6' CHAINLINK
SURFACE WATER
REMOVE 72 LF EX. CURB
12.0'X4.0' BOX CULVERT INVERT = 10.69'
RIPRAP
1+00
2+00
3+00
4+00
5+00
0+00
SND CP2 SET MAG NAIL AND DISK "LB 7917"
N 1317728.92, E 524130.99, Z 18.86
12.0'X4.0' BOX CULVERT BOTTOM = 10.42'
HEADWALL
HA-2
HA-1
PROTECT
SIR CP1 SET 5/8" IRON ROD AND CAP "LB 7917"
N 1317718.03, E 523815.42, Z 19.09
PAMELA J. SNEAD
ORB 21119, Page 1657
INSTR # 2012165913
Parcel ID:
A-16-29-19-ZZZ-000005-80530.0
30.00 DRAINAGE EASEMENT
12.00 APPARENT GAP
Parcel ID: A-16-29-19-ZZZ-000005-80750.1
60.00 TAMPA ELECTRIC COMPANY EASEMENT ORB 2459, PAGE 668

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Stormwater Engineering Division

43RD STREET DRAINAGE IMPROVEMENTS

DEMOLITION & SWPPP

SHEET 6 of 22

SW2024-09

NORTH LINE OF THE SE 1/4 OF SECTION 16
SECTION LINE
50.00 PERPETUAL CITY OF TAMPA DRAINAGE DITCH EASEMENT ORB 2964, PAGE 1696
6.0'X4.8' ERCP IE 15.01'
6.0'X4.8' ERCP IE 15.29'
6.0'X4.8' ERCP IE 15.12'
LIMITS OF DISTURBANCE
HEADWALL
INSTALL & MAINTAIN E/C ROCK CHECK STRUCTURE DURING CONSTRUCTION (SEE SHEET 14)
LIMITS OF DISTURBANCE
REMOVE BELOW GRADE ROOF DRAINS
3 PROTECT SIR CP3 SET 5/8" IRON ROD AND CAP "LB 7917" N 1318124.87, E 524137.93, Z 28.47
REMOVE 12" TREE
60.00 TAMPA ELECTRIC COMPANY EASEMENT ORB 2459, PAGE 668
SPT B-2
HA-3 TP-1
HA-5
SPT B-3
REMOVE 0.42 AC SURFACE WATER
HA-6
SPT B-4
APPROX. BUILDING FOOTPRINT
12.00 APPARENT GAP Parcel ID: A-16-29-19-ZZZ-000005-80750.1
6' CHAINLINK
HIGH VOLTAGE LINE
CONST BL
SURFACE WATER
SPILLWAY
7' CHAINLINK
RIPRAP
REMOVE ±715 SF RIP RAP
REMOVE 343 LF FENCE
CUT & REMOVE ±110 SF CONCRETE SPILLWAY. GRADE TO DRAIN
REMOVE ±2,097 SF RIP RAP
TYPE 'D' CURB
REMOVE 244 LF EX. CURB
REMOVE & REPLACE EX. FENCE
METAL
GATE
30.00' CONST. ACCESS
PAVEMENT
REMOVE 148 LF EX. CURB
APPROX. BUILDING FOOTPRINT
BRE TAMPA DISTRIBUTION CENTER OWNER, LLC ORB 26779, Page 799 INSTR # 2019296960 Parcel ID: A-16-29-19-ZZZ-000005-80750.0
MATCHLINE 2
N
20' 0 20' 40'
SCALE: 1"=20' (Horiz.)

LEGEND

- DEMO AREA
- DEMO LINEAR ITEM
- ABANDON LINEAR ITEM
- DEMO EX. ITEM
- SILT FENCE
- DBL SILT FENCE
- TURBIDITY CURTAIN
- CHECK STRUCTURE

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No.	DATE	REVISIONS	No.	DATE	REVISIONS

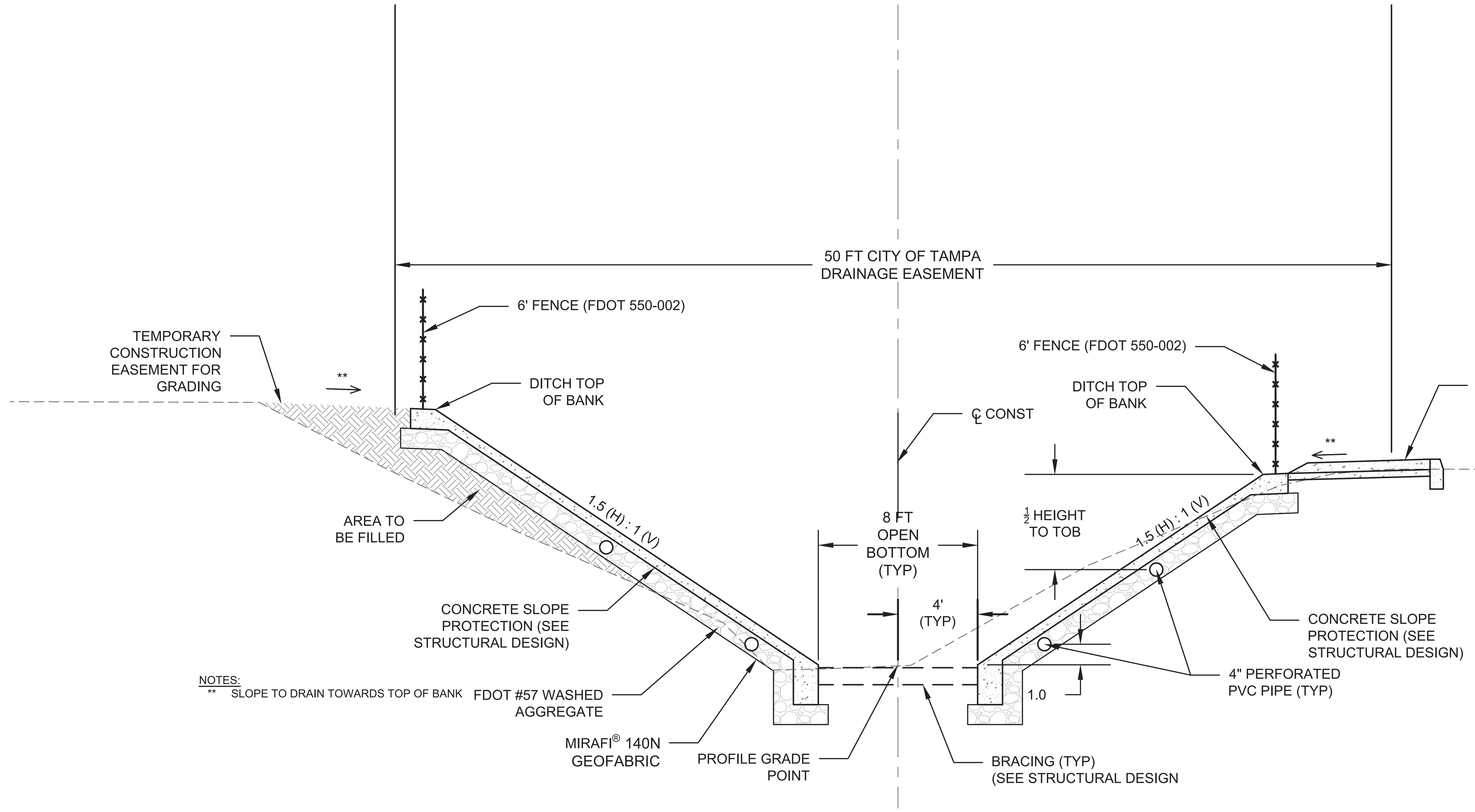
DES: RTV
DRN: RTV
CKD: TLW
DATE: 01/18/23

CITY of TAMPA
Mobility Department
Stormwater Engineering Division

43RD STREET DRAINAGE IMPROVEMENTS

DEMOLITION & SWPPP

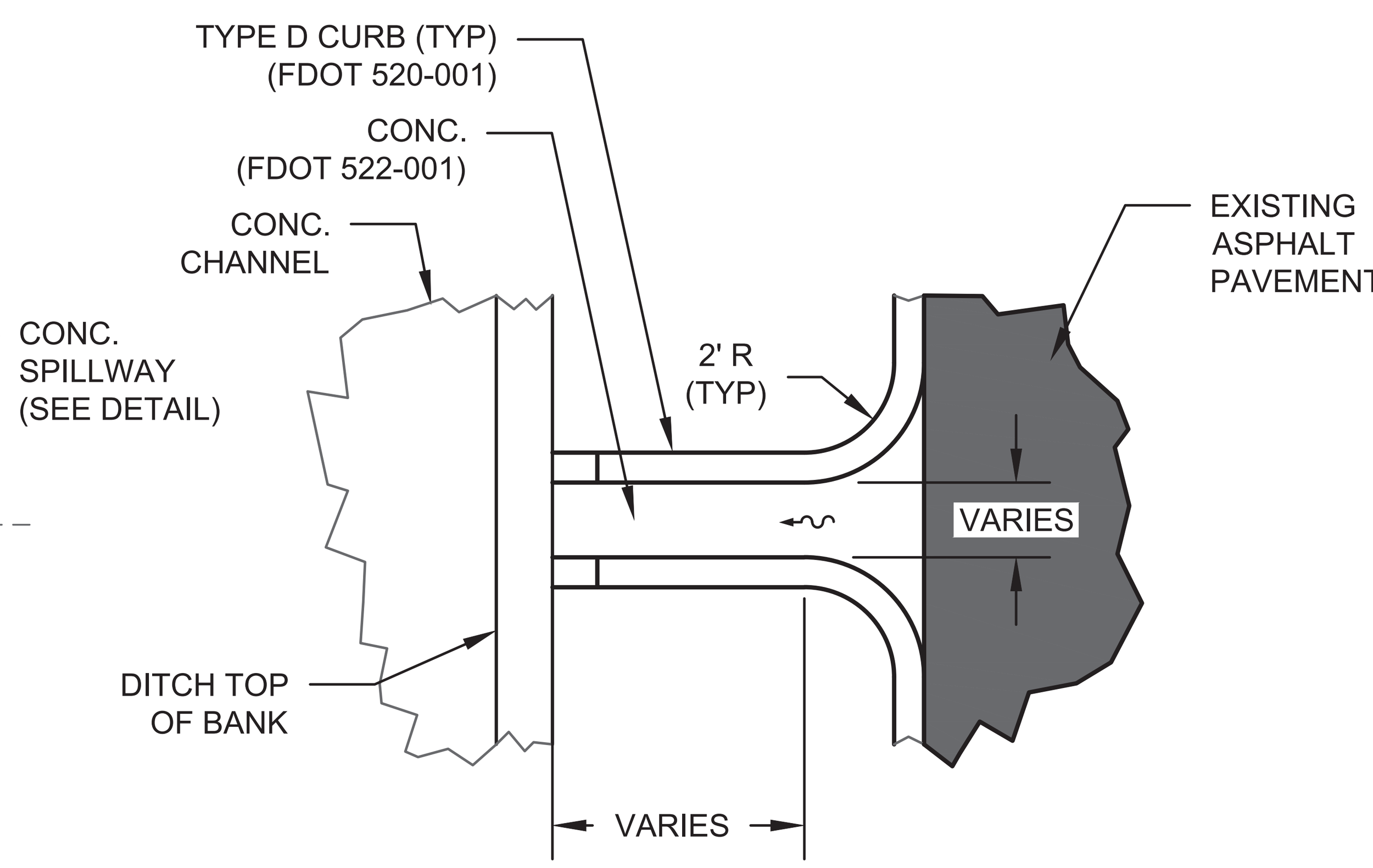
SW2024-09



NOTES:
** SLOPE TO DRAIN TOWARDS TOP OF BANK

(A) CONCRETE CHANNEL TYPICAL SECTION

SCALE: NTS



CONCRETE SPILLWAY

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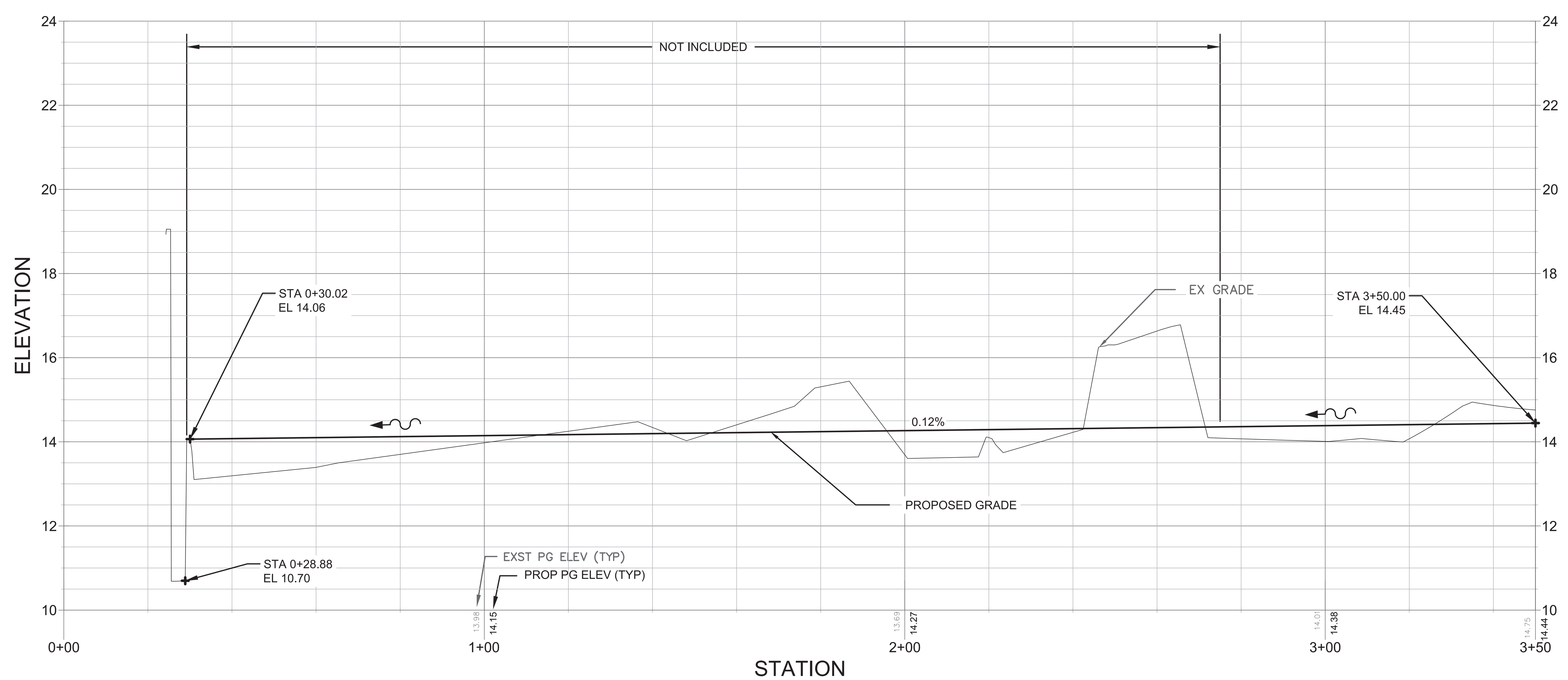
Stormwater Engineering Division

43RD STREET DRAINAGE IMPROVEMENTS

TYPICAL SECTION

STA. 0+00 TO 3+50 PLAN VIEW
HORZ. SCALE: 1"=20'



STA. 0+00 TO 3+50 PROFILE VIEW
HORZ. SCALE: 1"=20'
VERT. SCALE: 1"=2'

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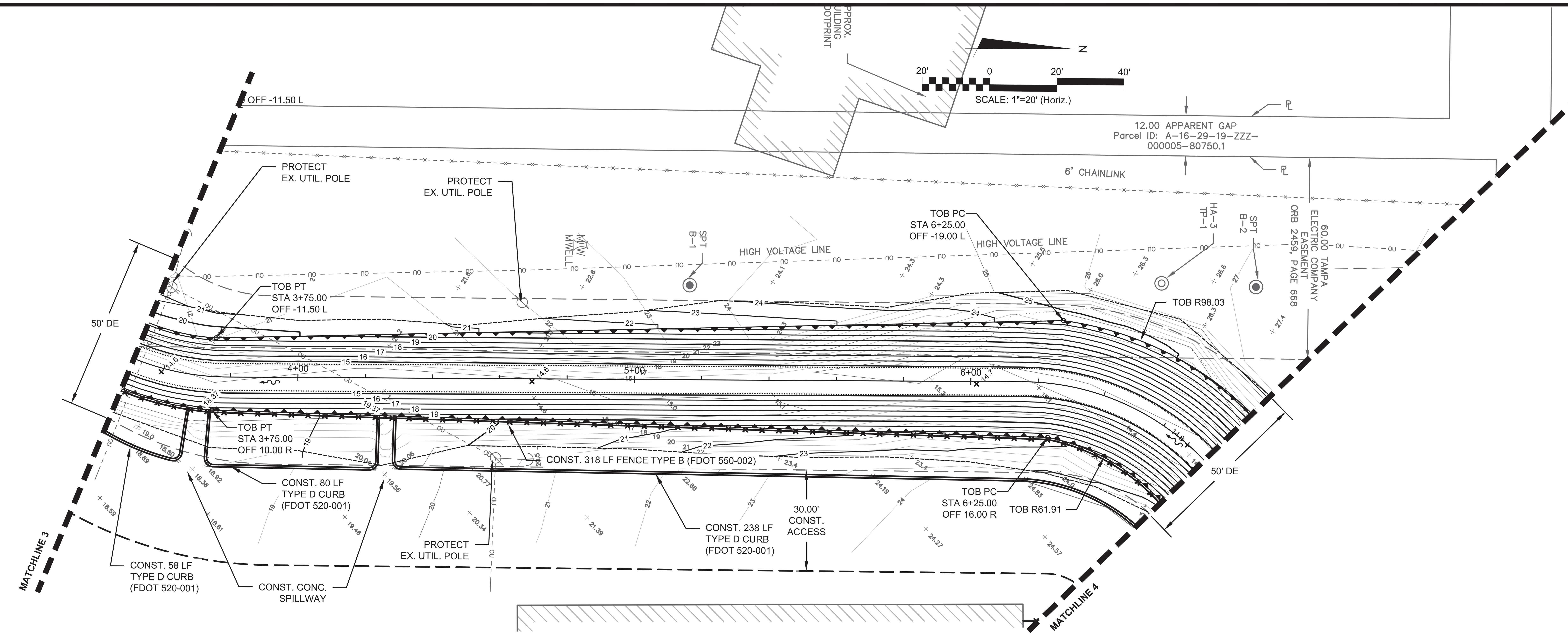
Mobility Department
Stormwater Engineering Division

43RD STREET DRAINAGE IMPROVEMENTS

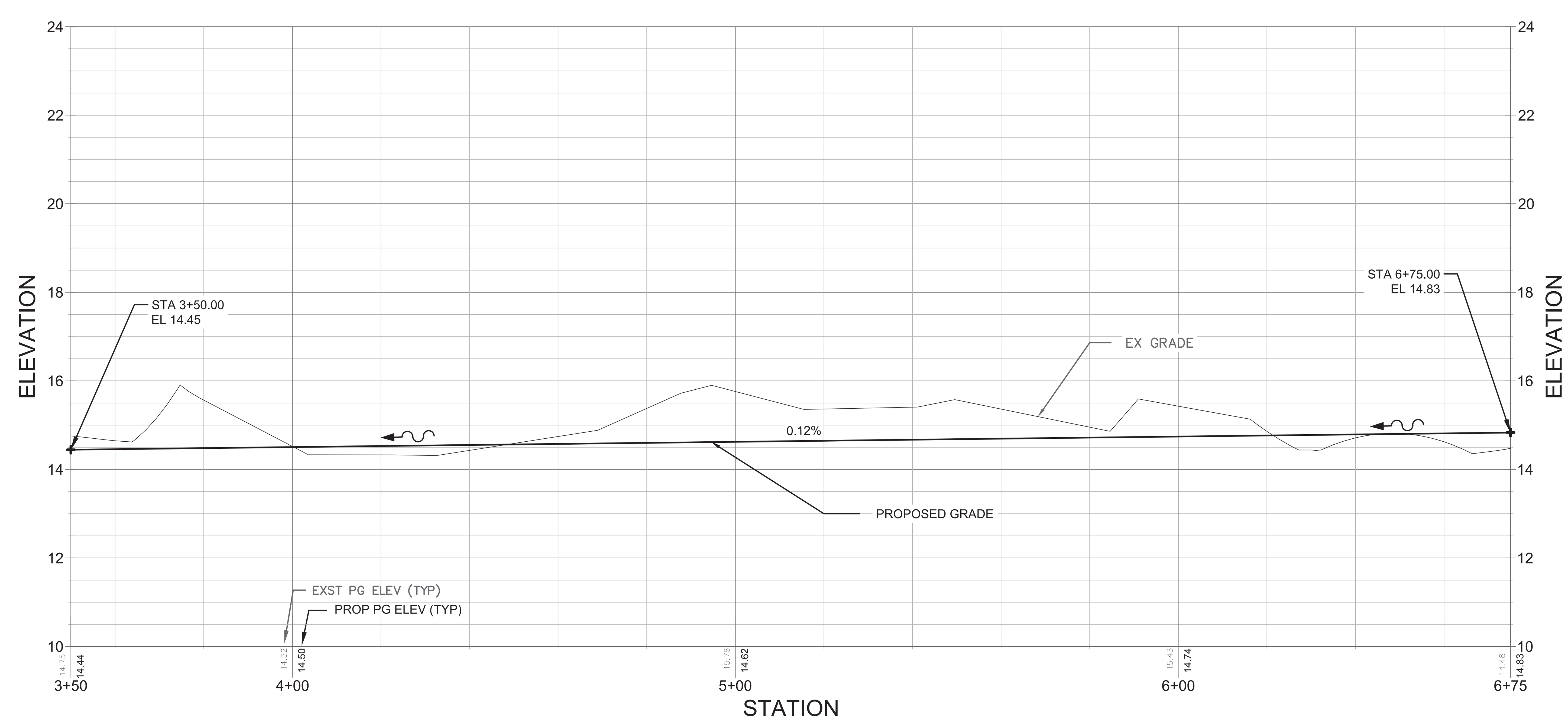
PLAN & PROFILE

SW2024-09



STA. 3+50 TO 6+75 PLAN VIEW

HORZ. SCALE: 1"=20'



STA. 3+50 TO 6+75 PROFILE VIEW

HORZ. SCALE: 1"=20'
VERT. SCALE: 1"=2'

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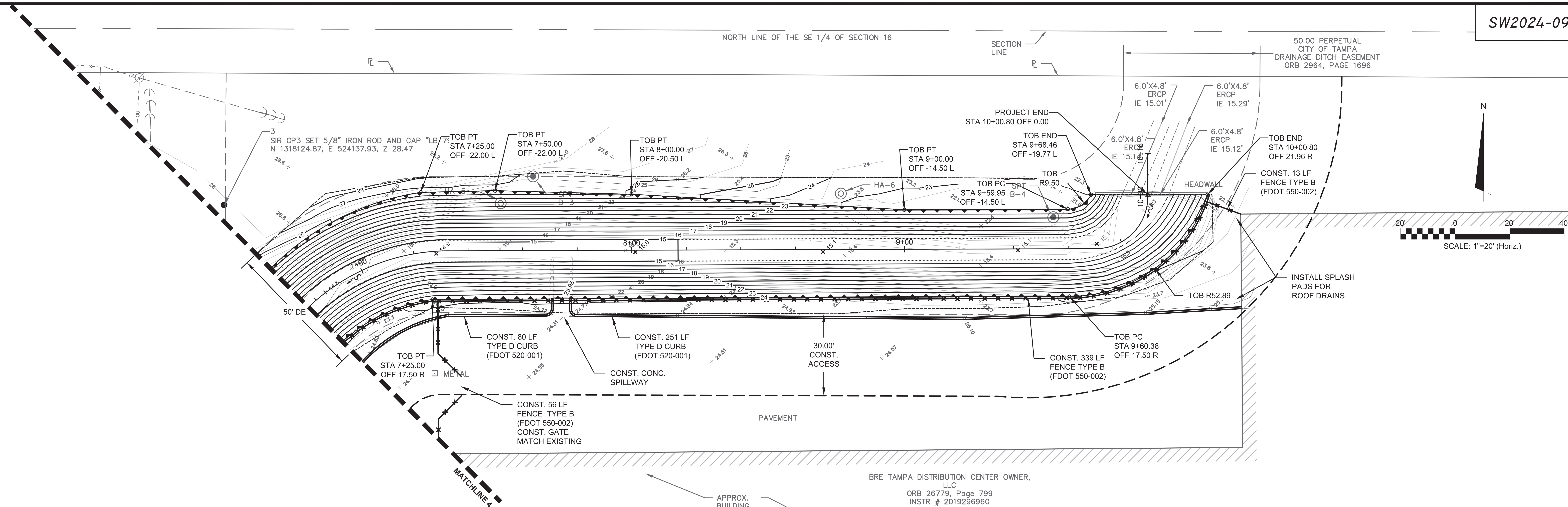
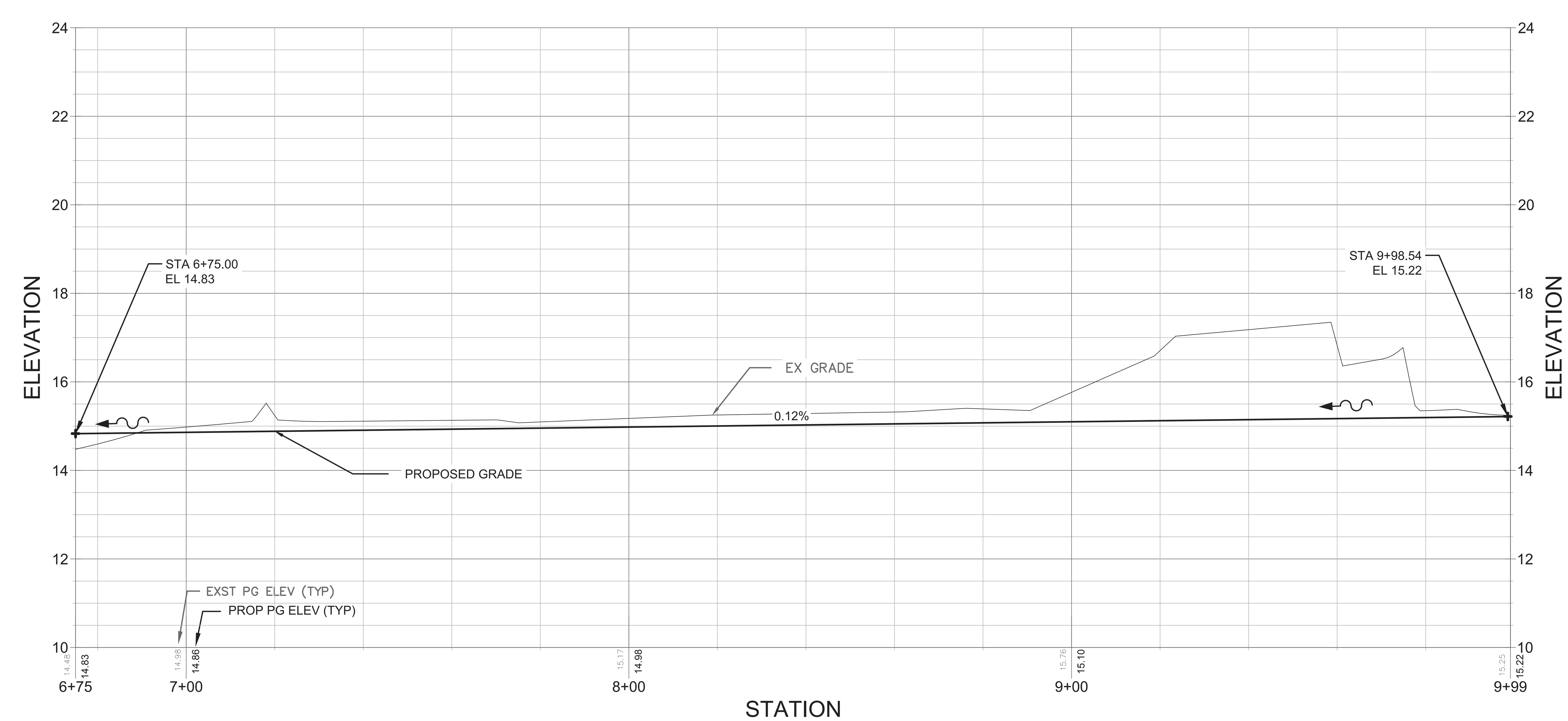
43RD STREET DRAINAGE IMPROVEMENTS

PLAN & PROFILE



STA. 6+75 TO 9+99 PLAN VIEW

HORZ. SCALE: 1"=20'



STA. 6+75 TO 9+99 PROFILE VIEW

HORZ. SCALE: 1"=20'
VERT. SCALE: 1"=2'

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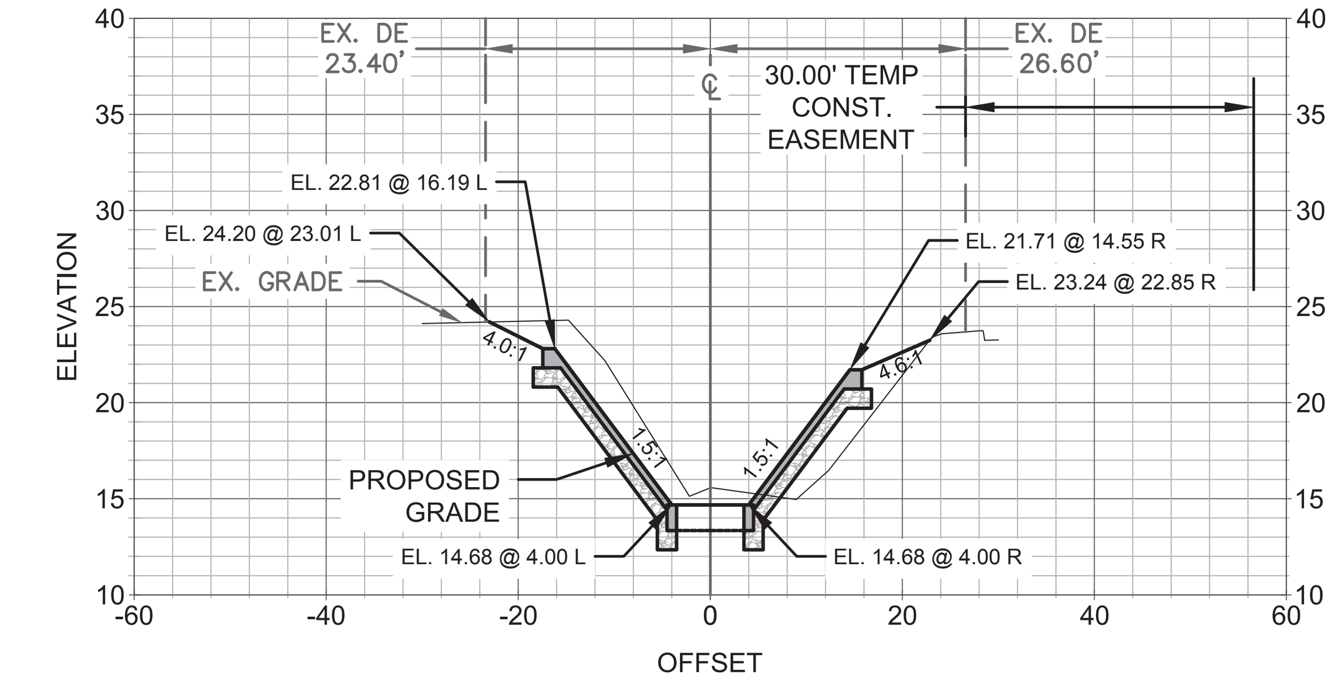
Stormwater Engineering Division

43RD STREET DRAINAGE IMPROVEMENTS

PLAN & PROFILE

SW2024-09

5+50



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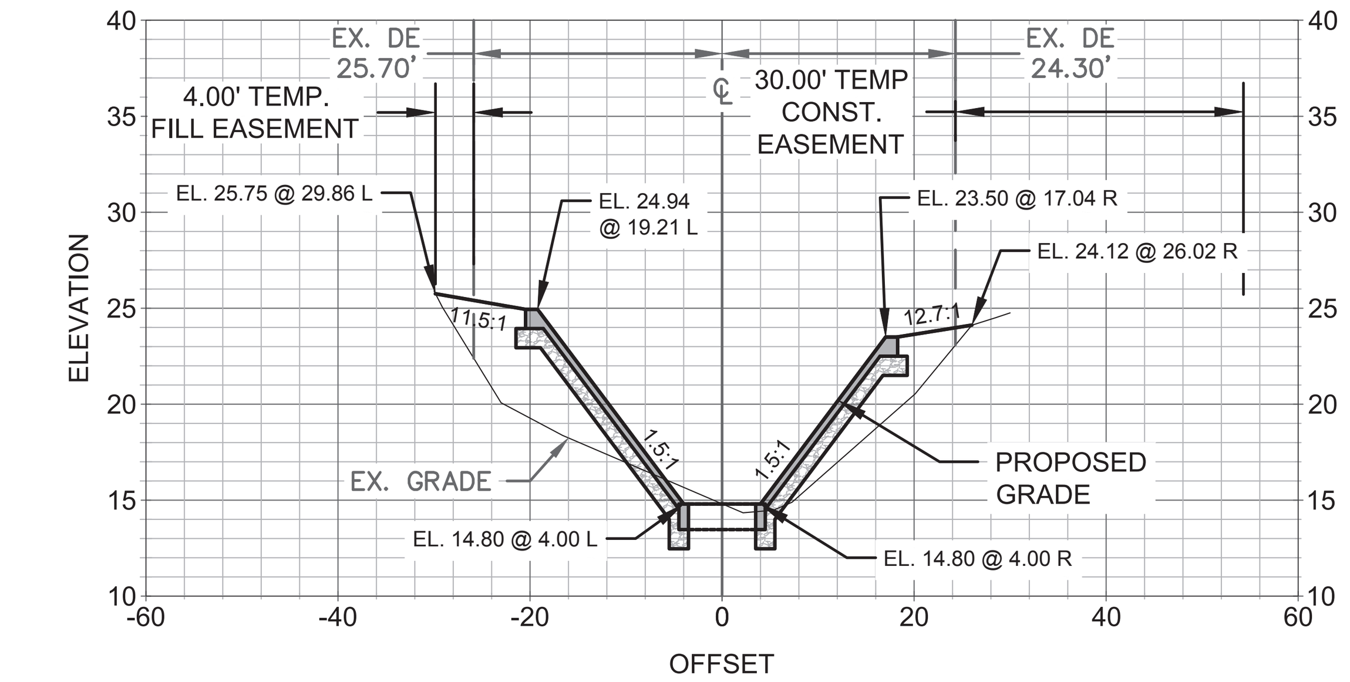

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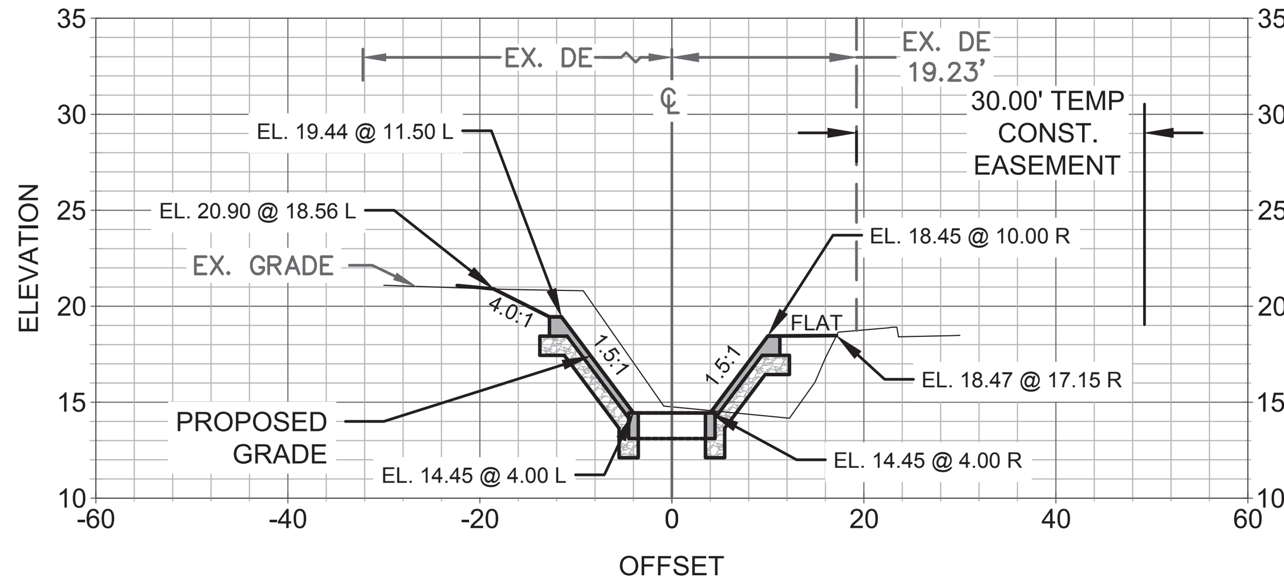

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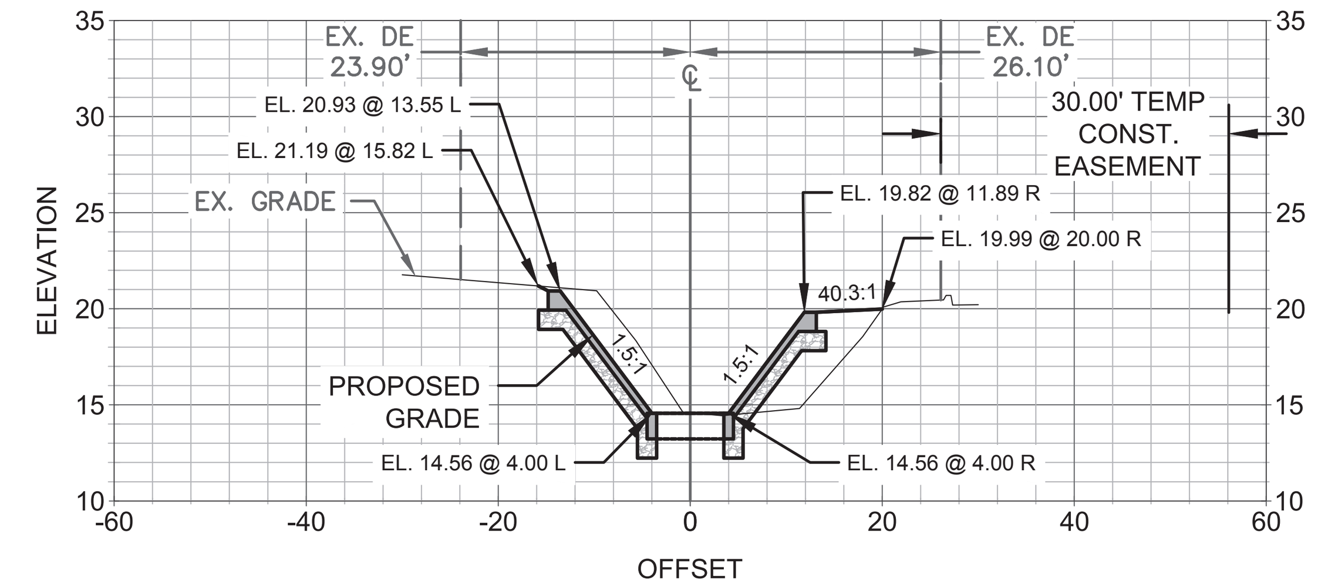

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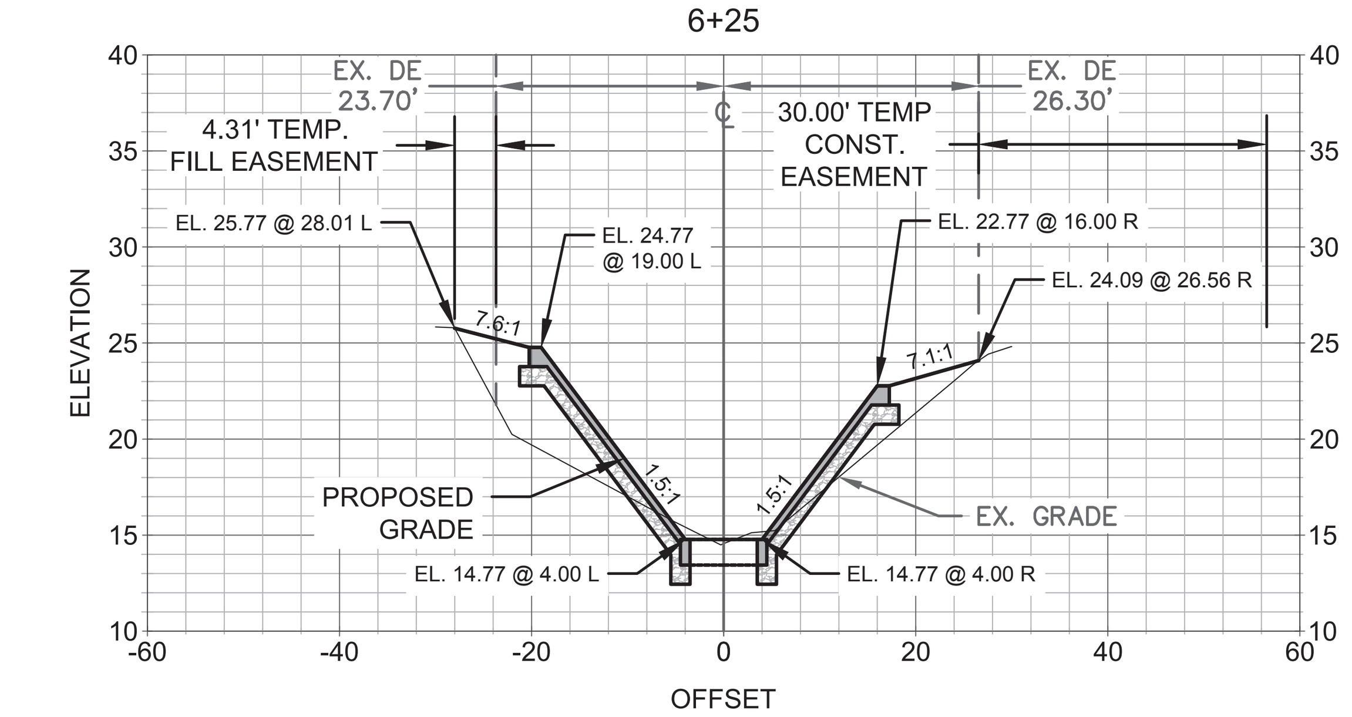

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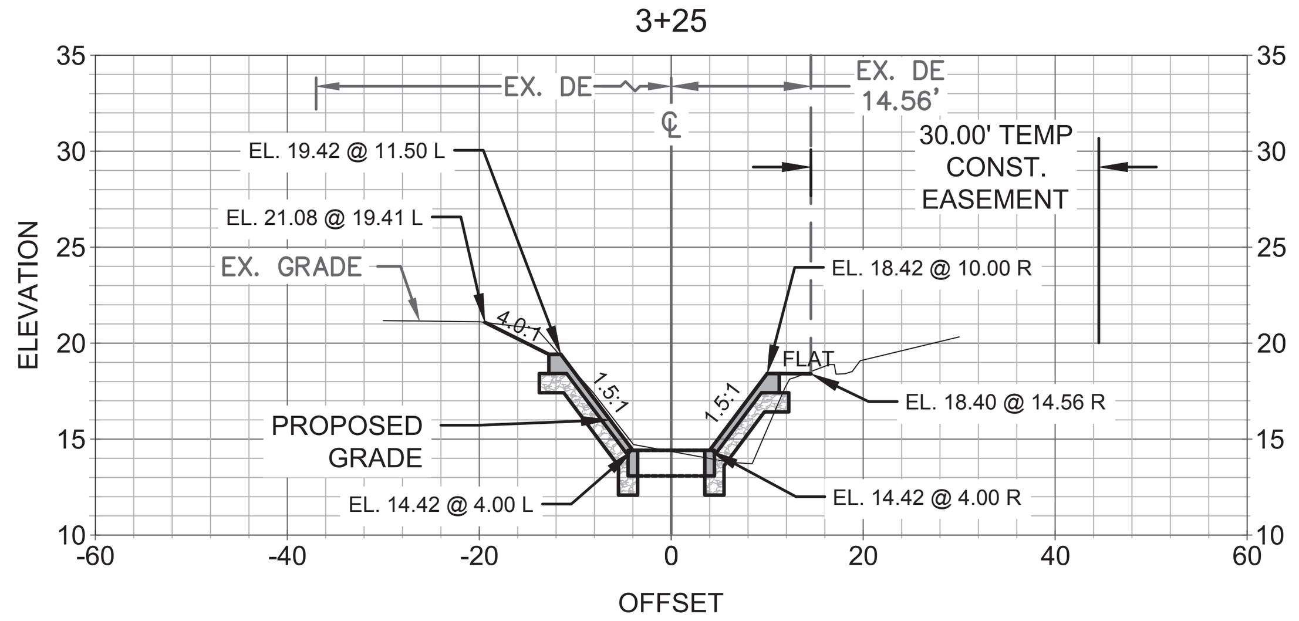

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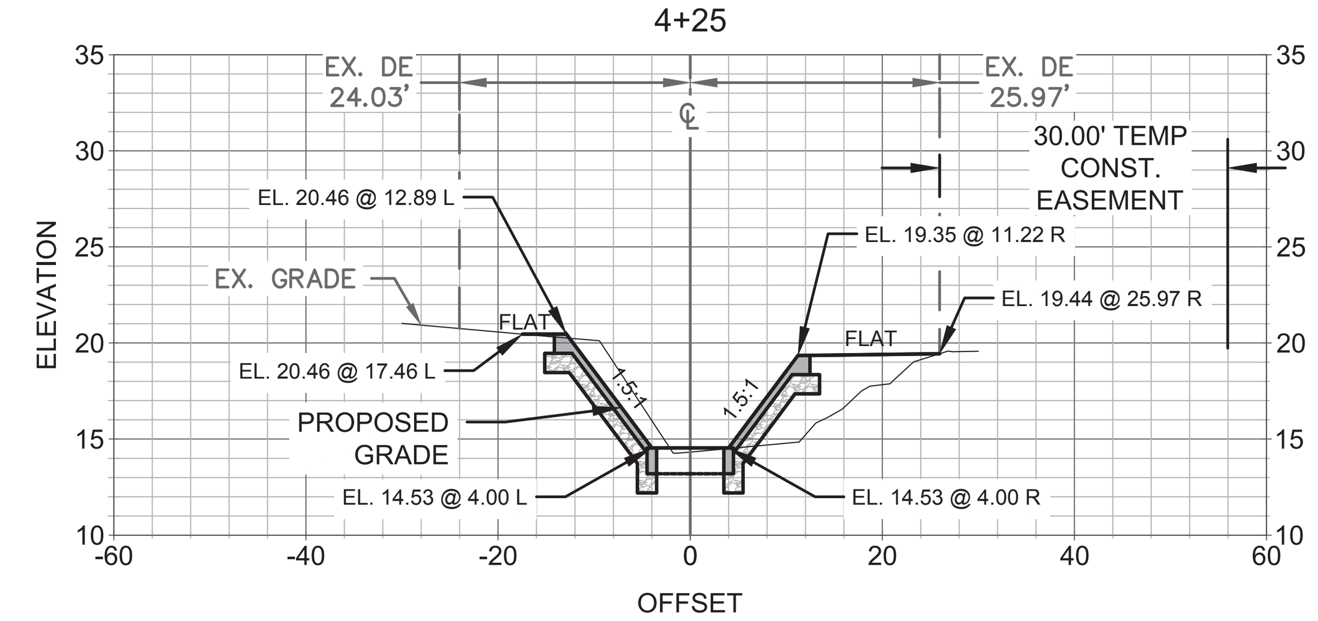

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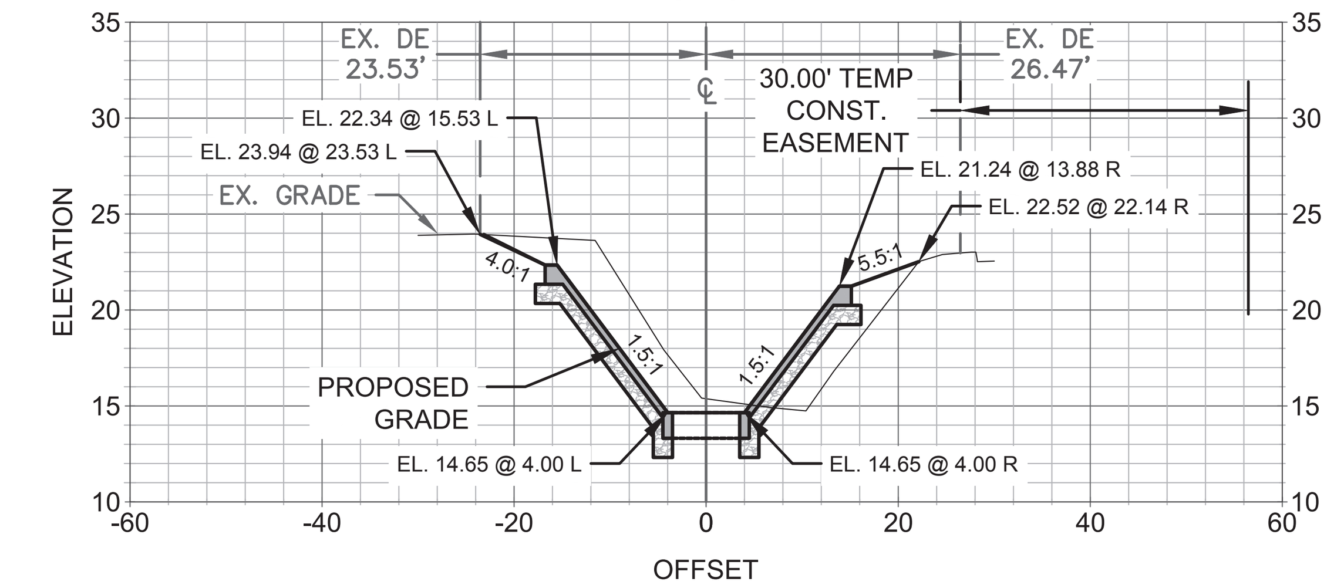

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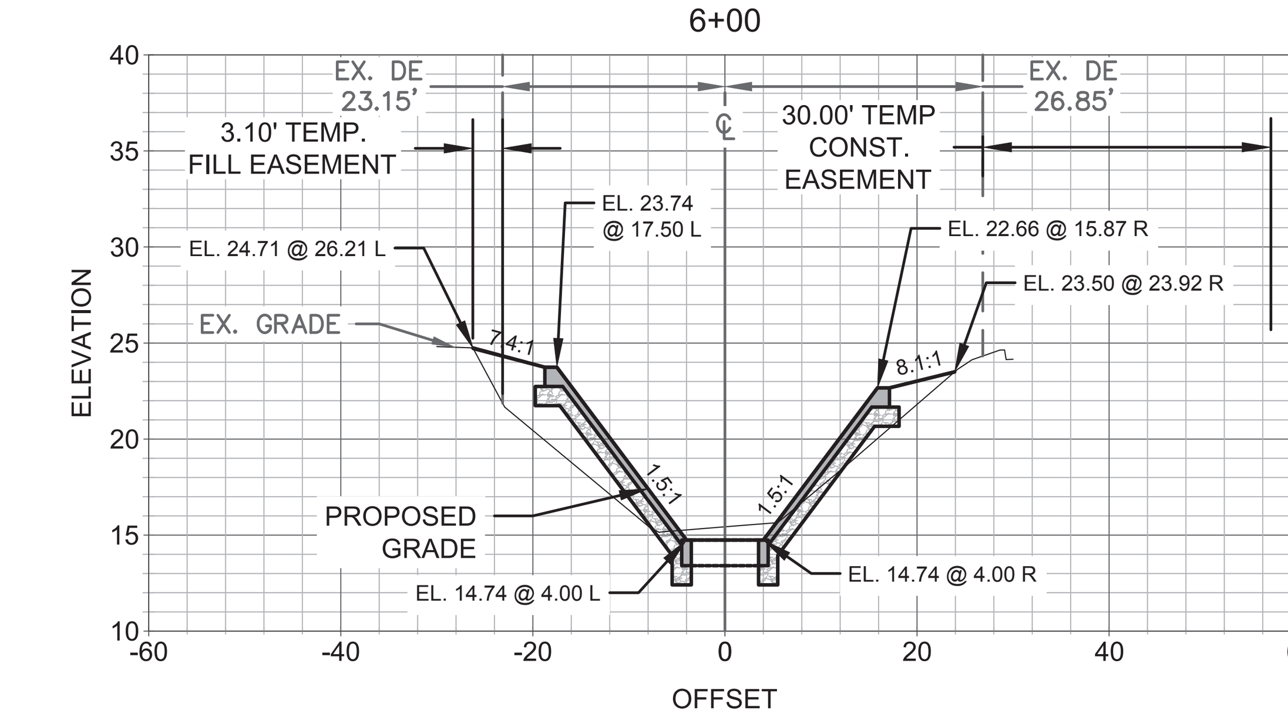

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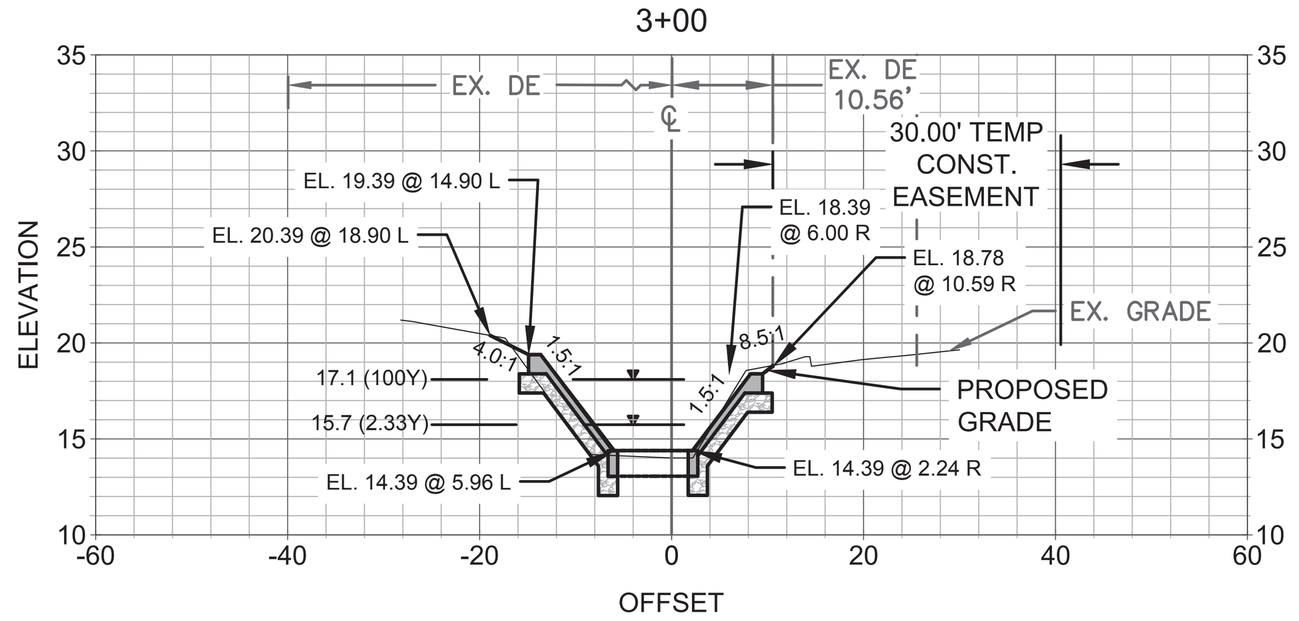

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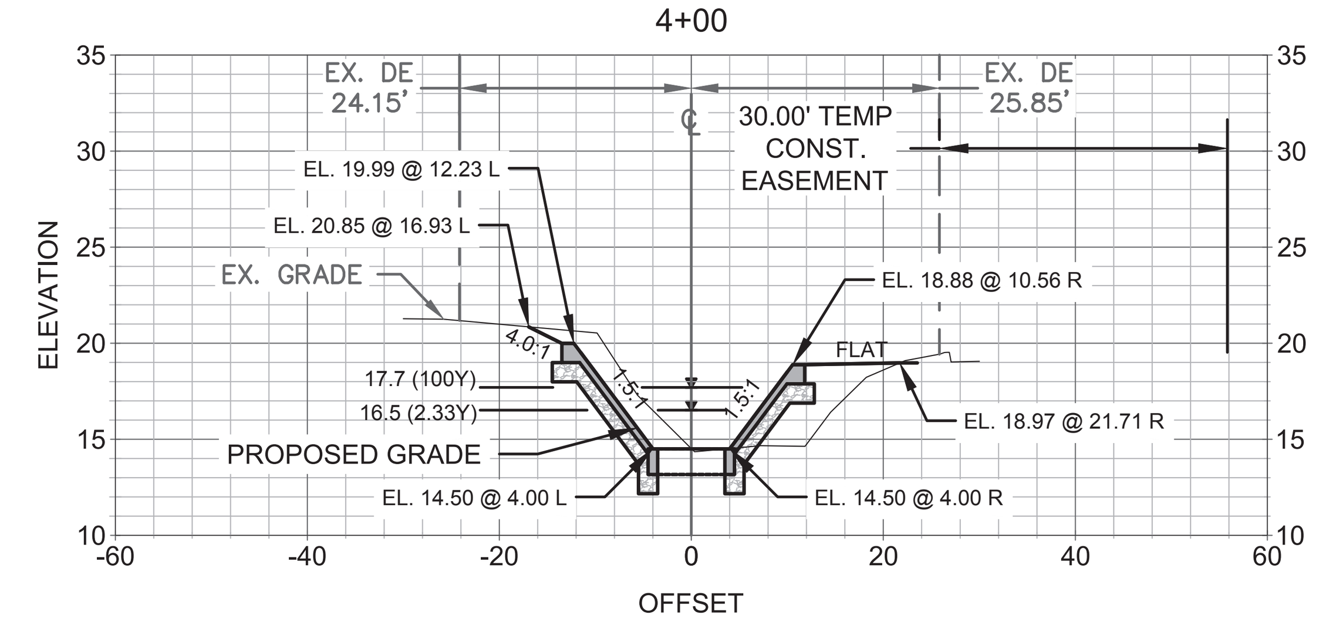

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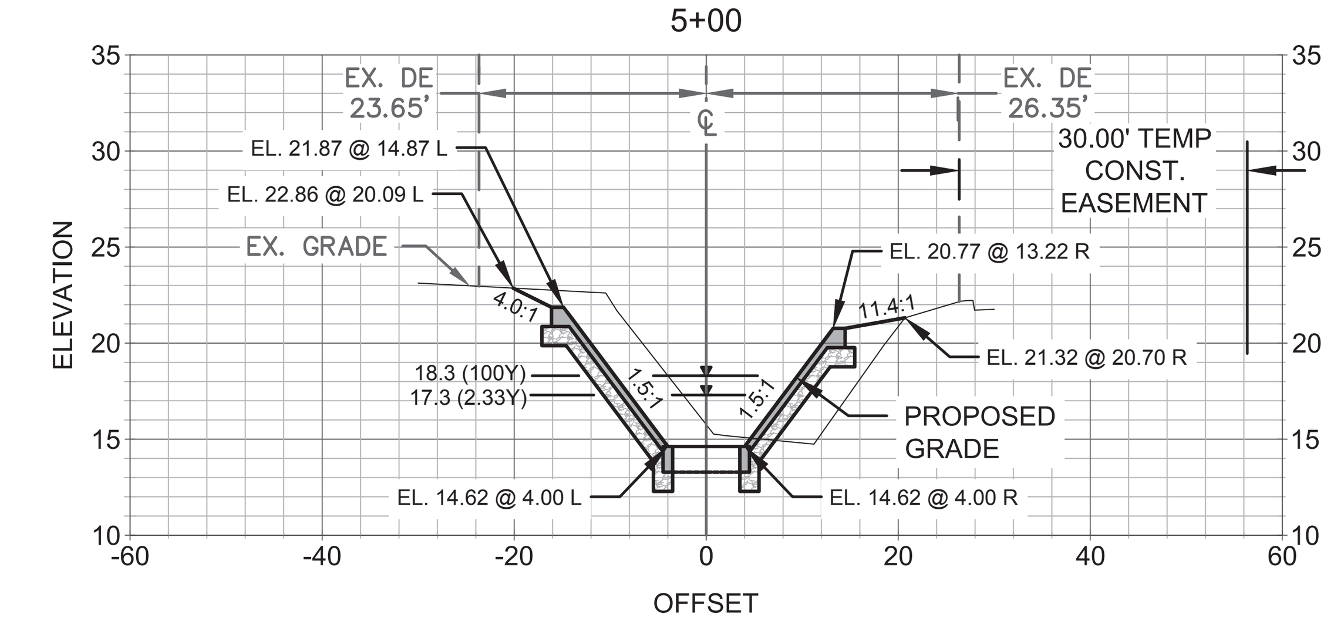

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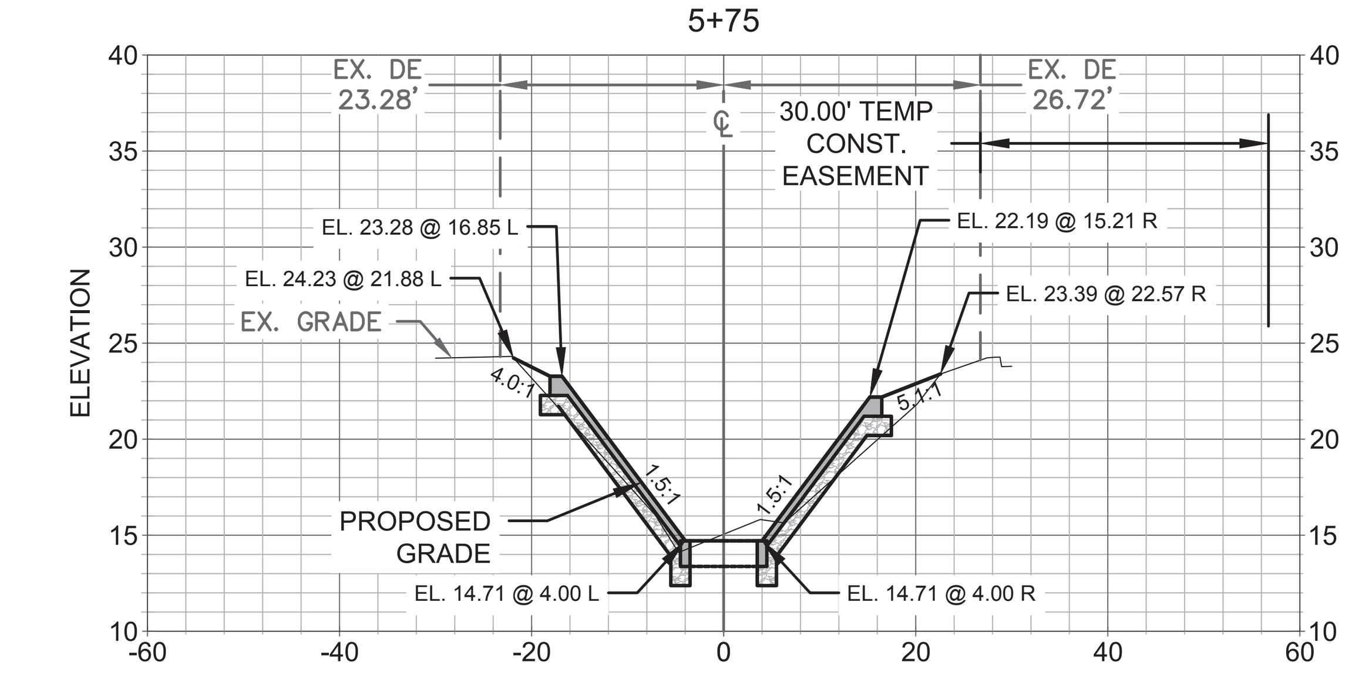

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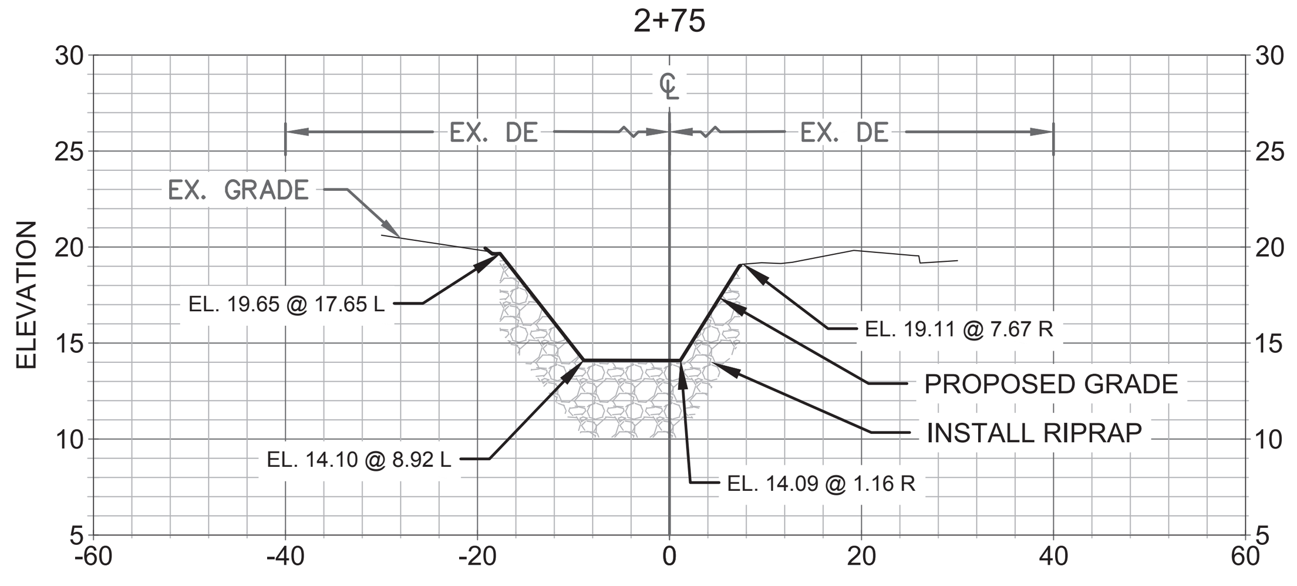

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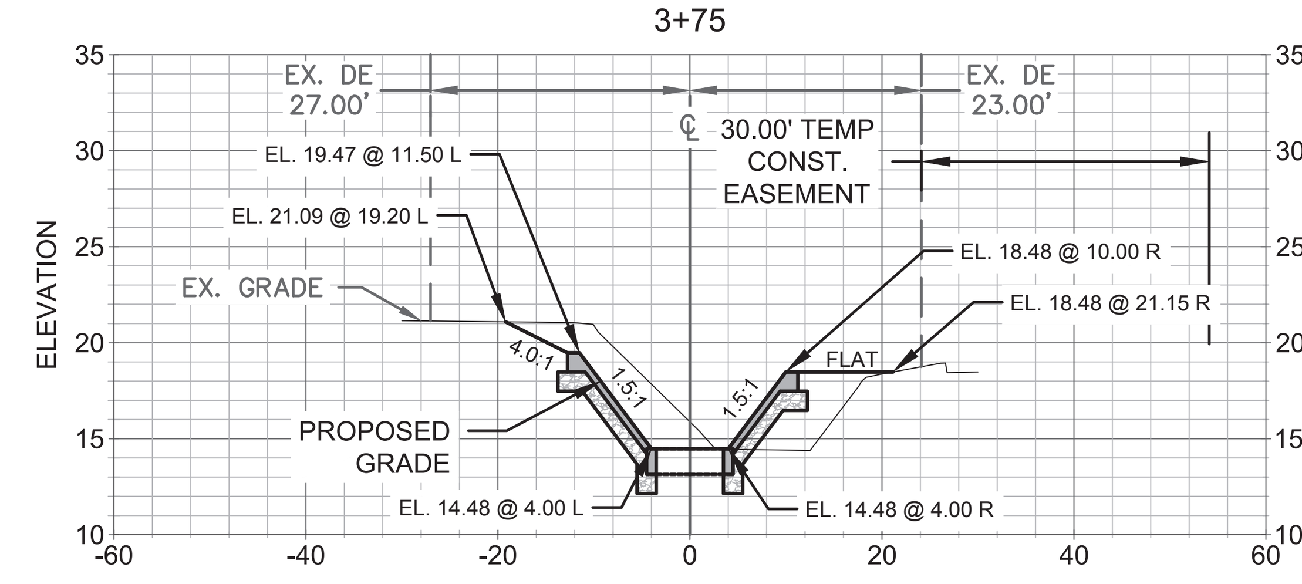

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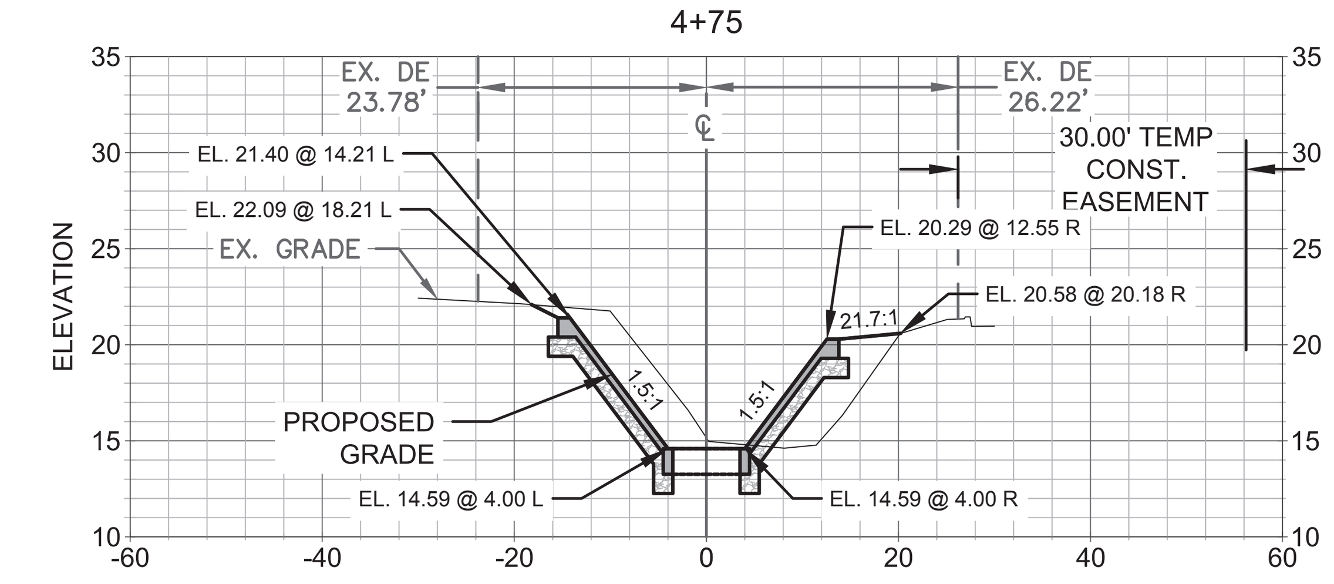

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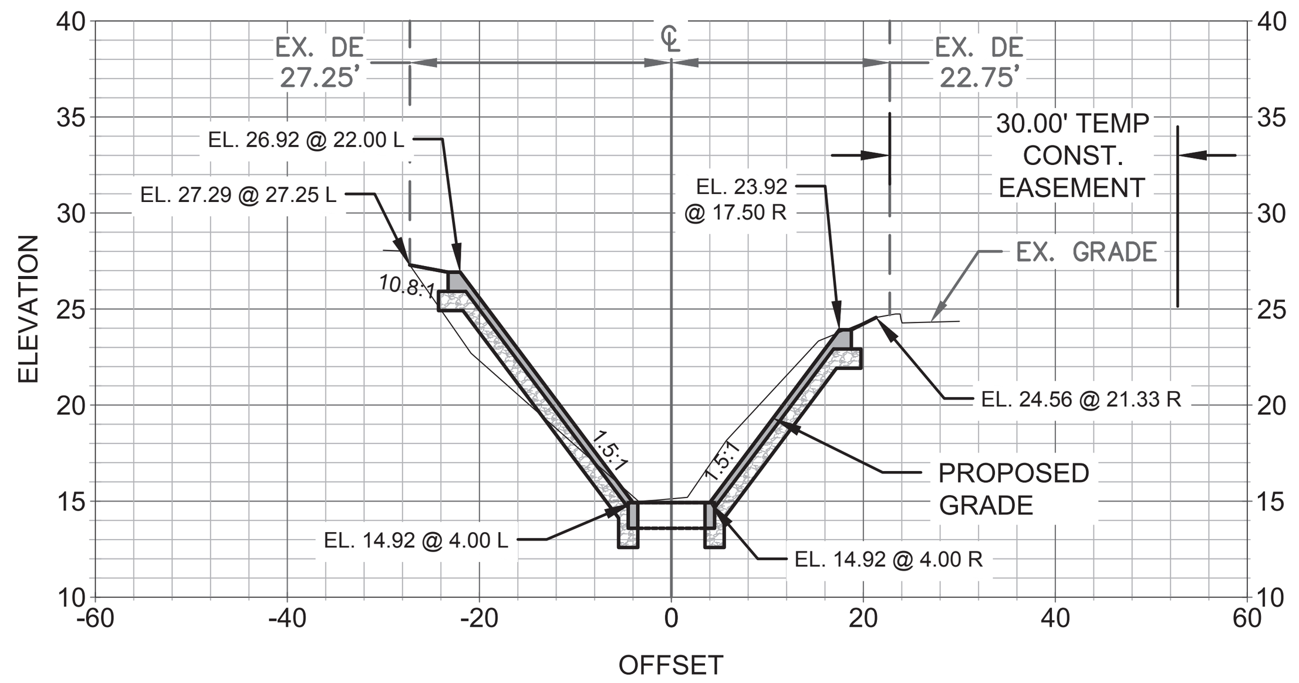
CITY of TAMPA
Mobility Department
Stormwater Engineering Division

43RD STREET DRAINAGE IMPROVEMENTS

CROSS SECTONS

SW2024-09

7+50



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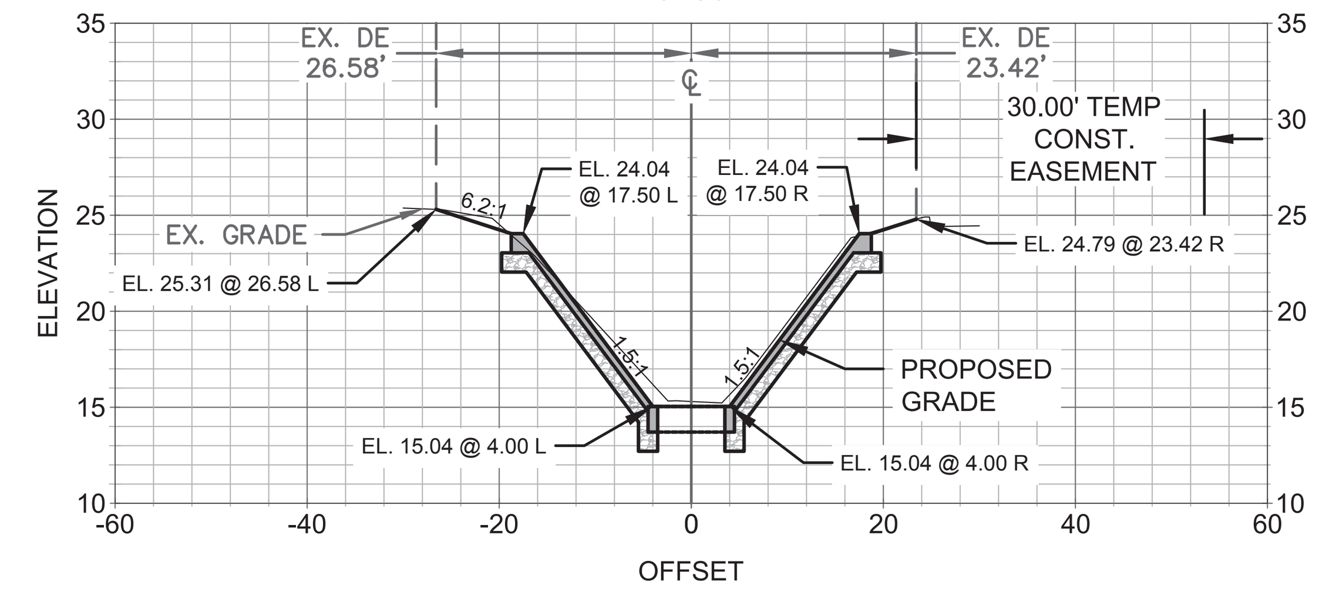

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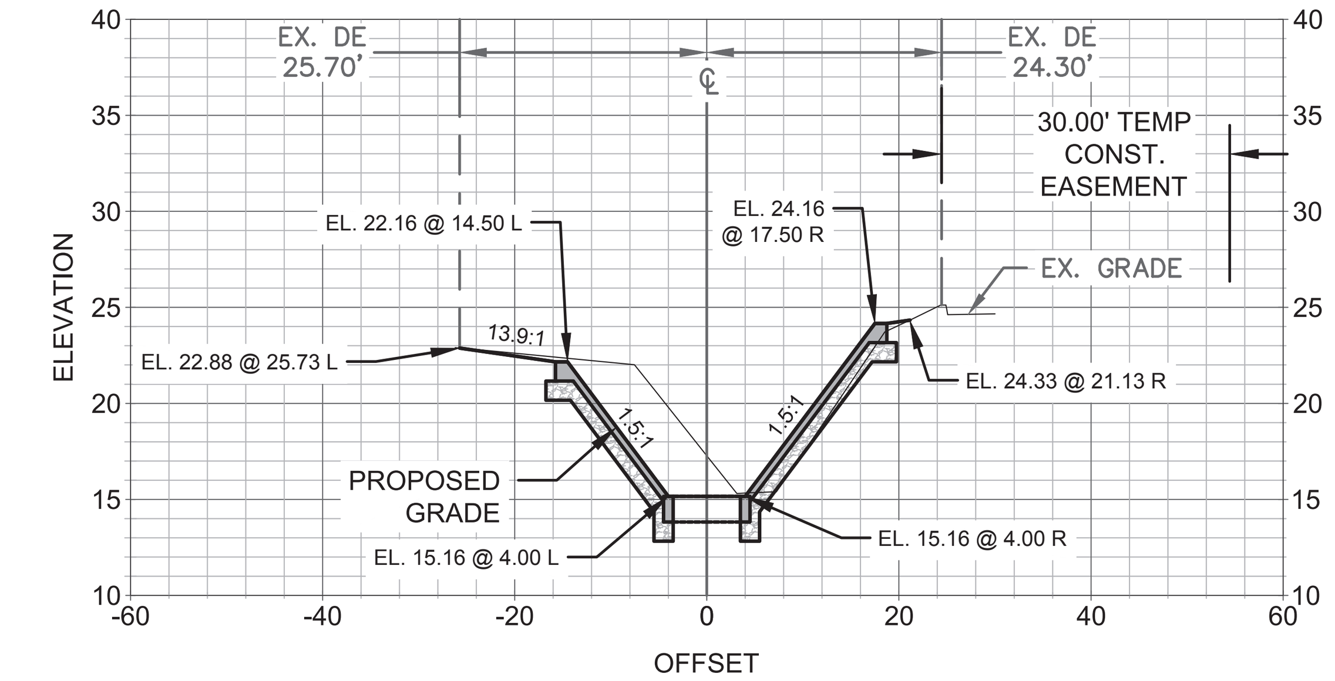

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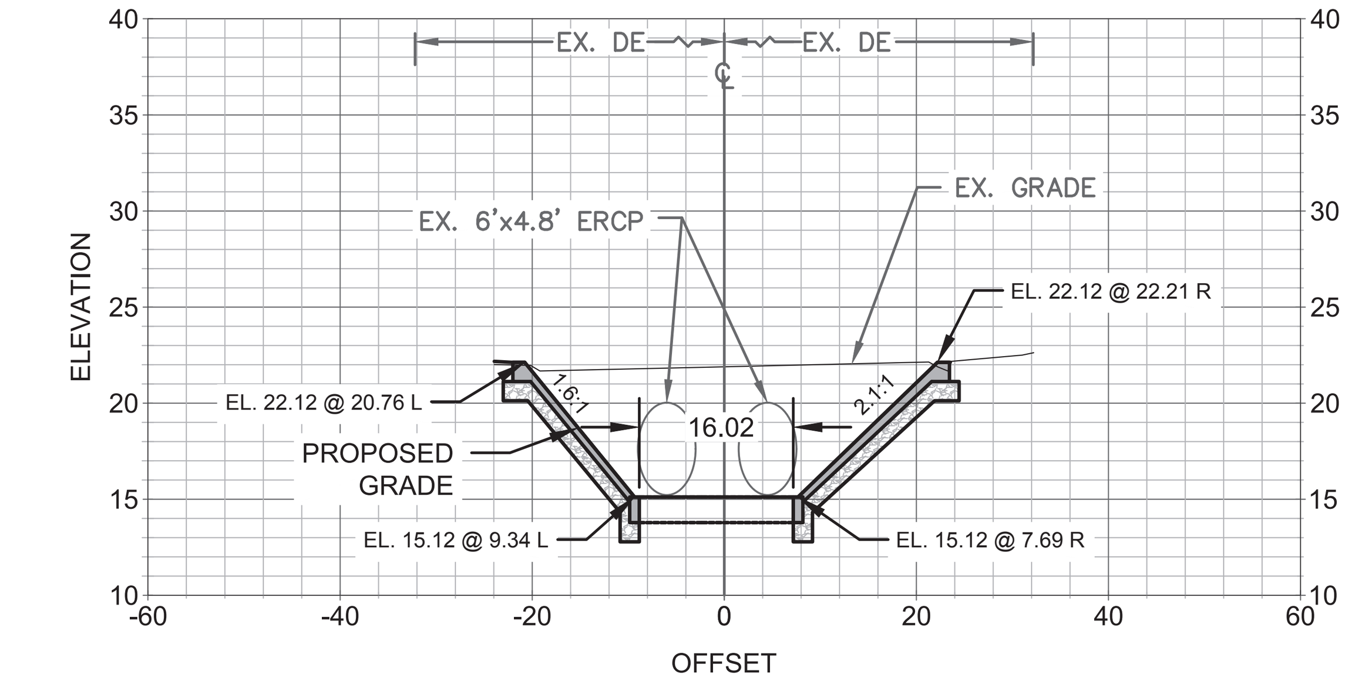

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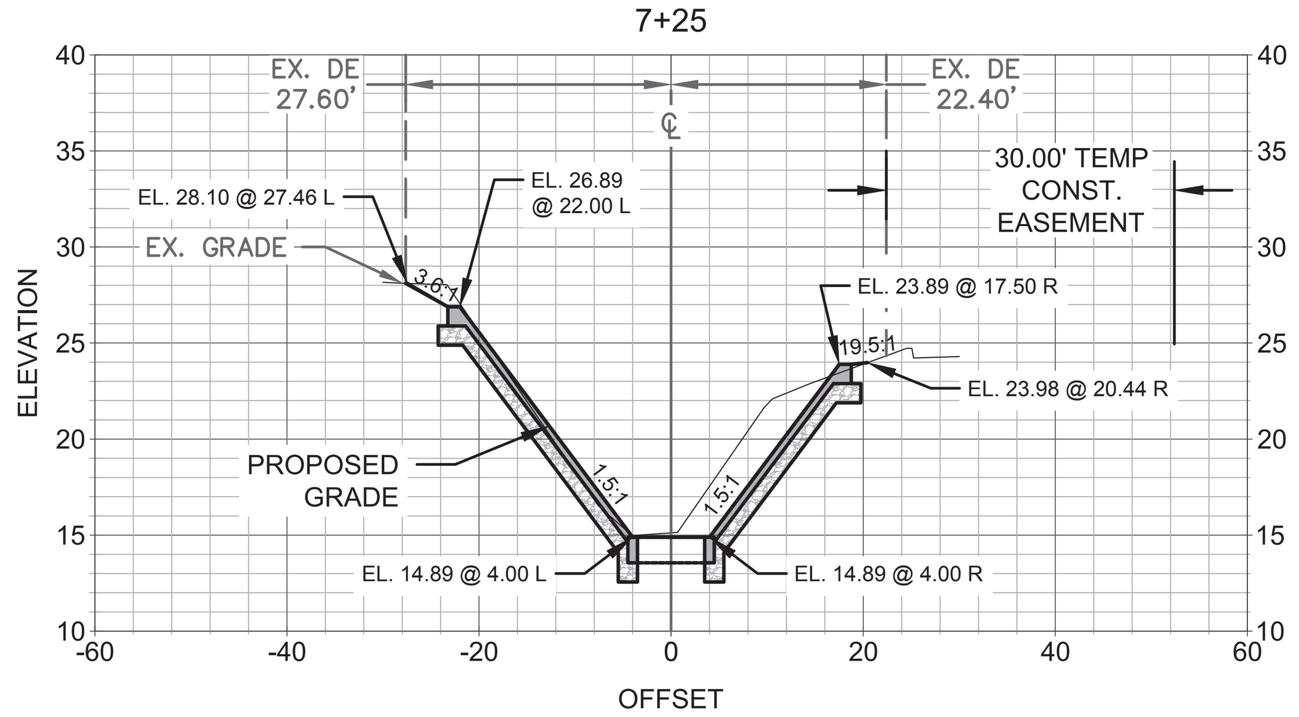

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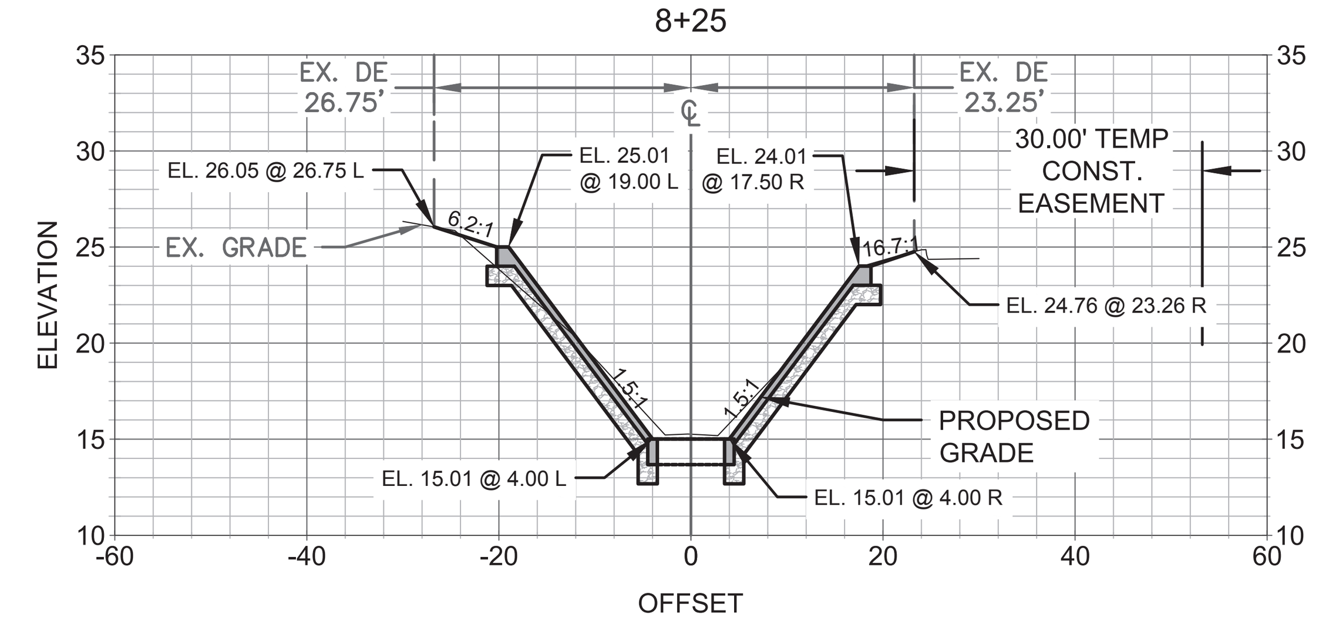

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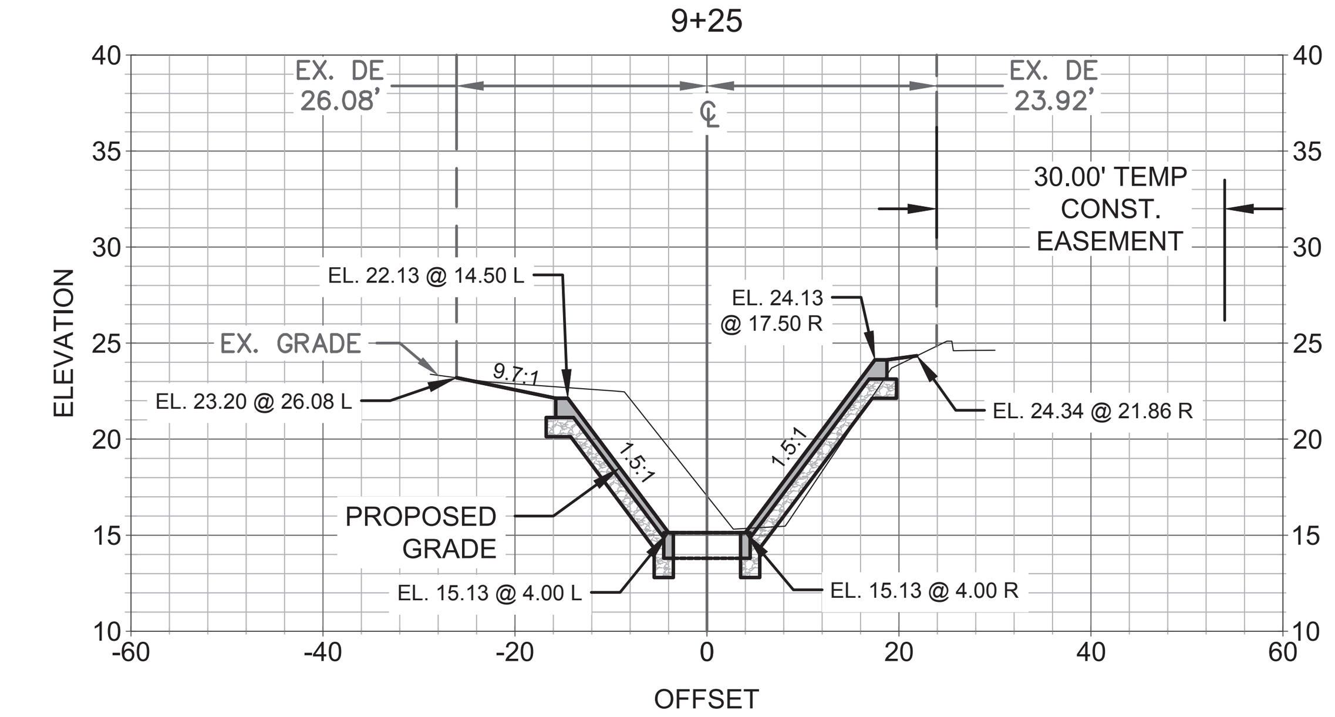

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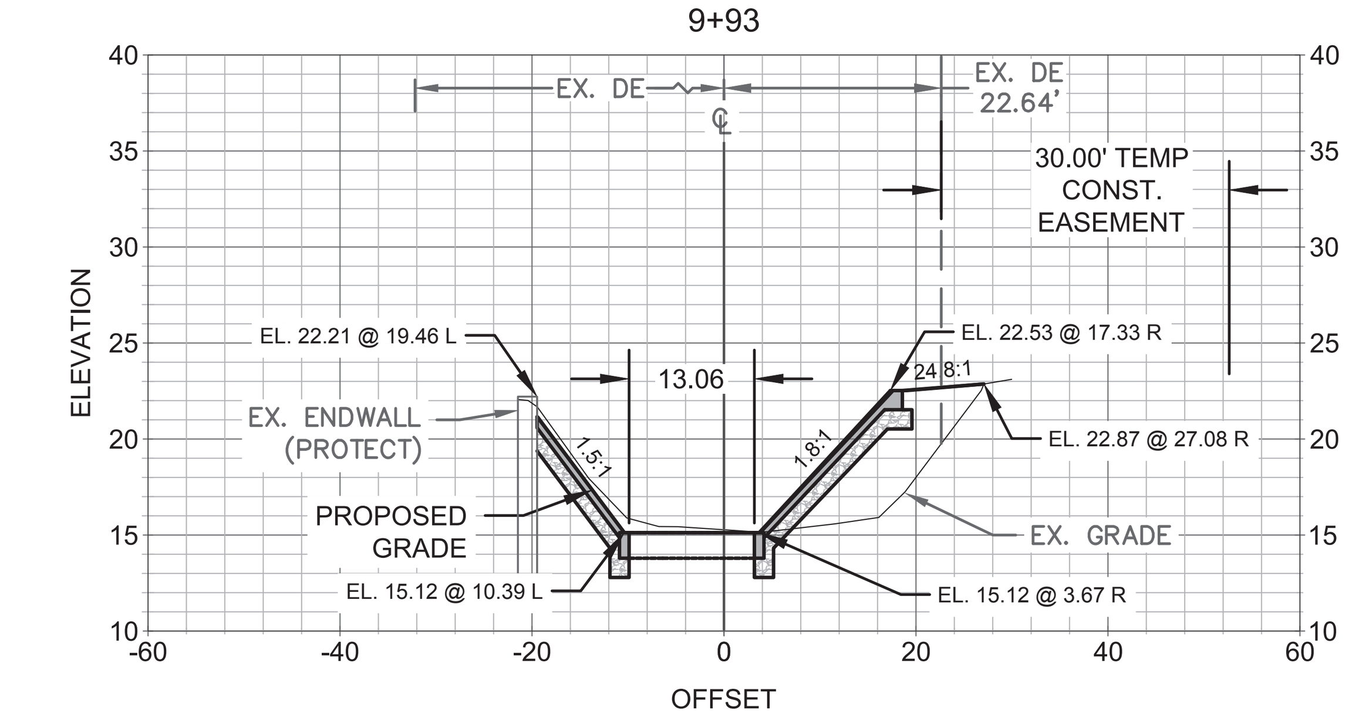

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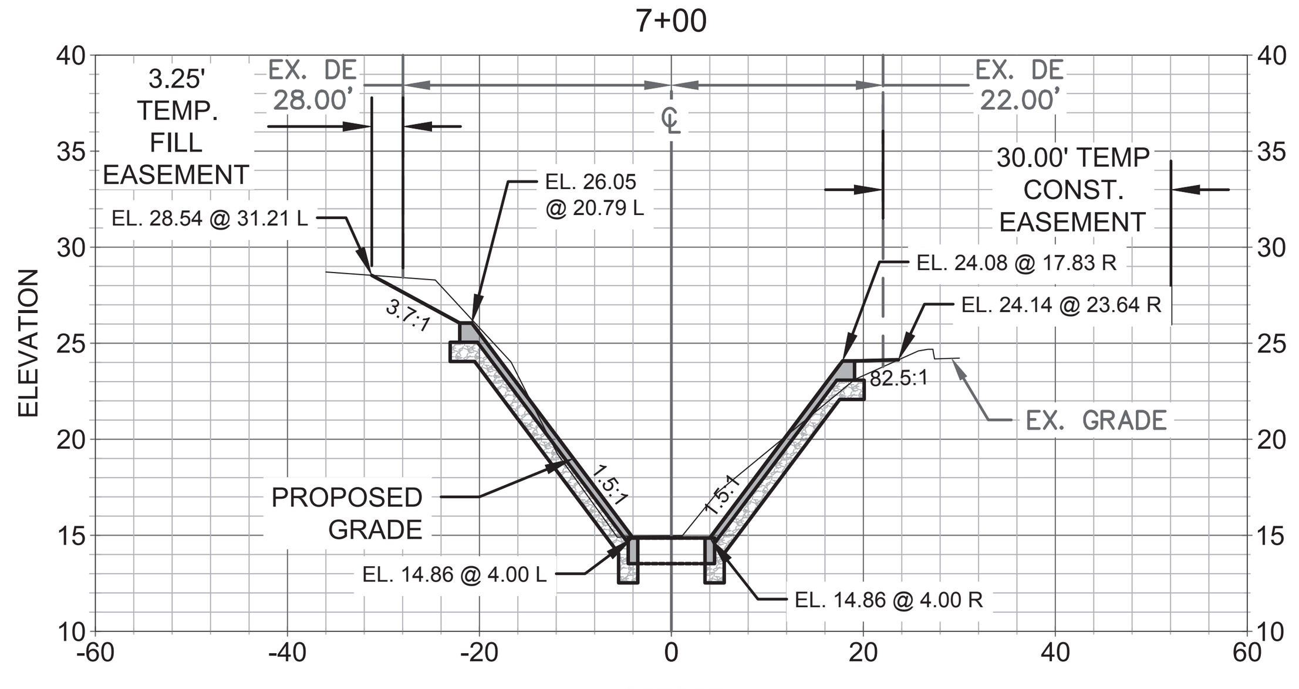

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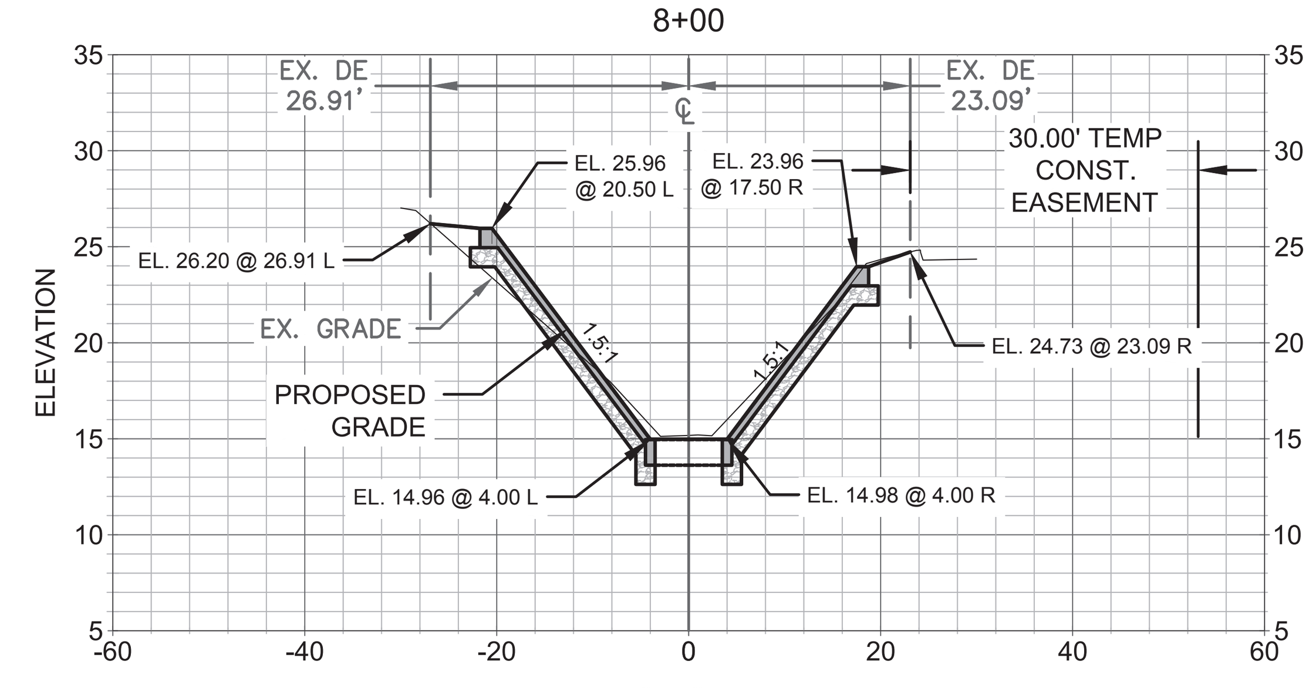

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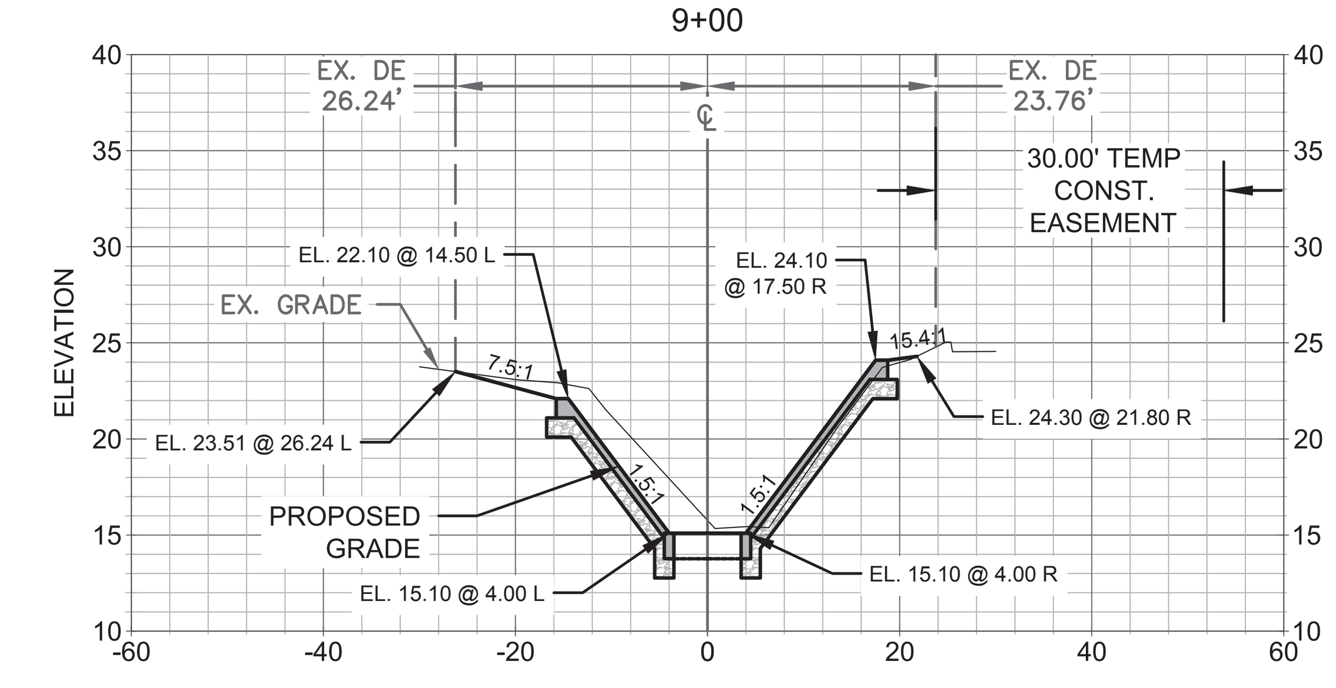

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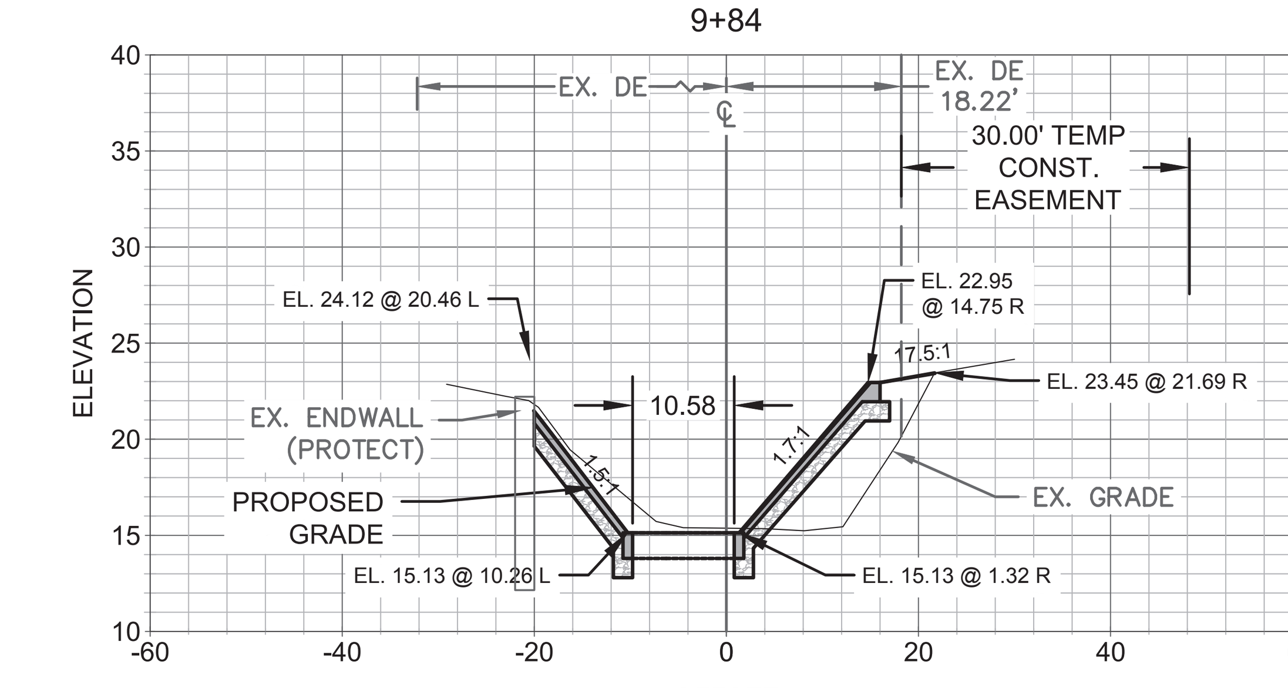

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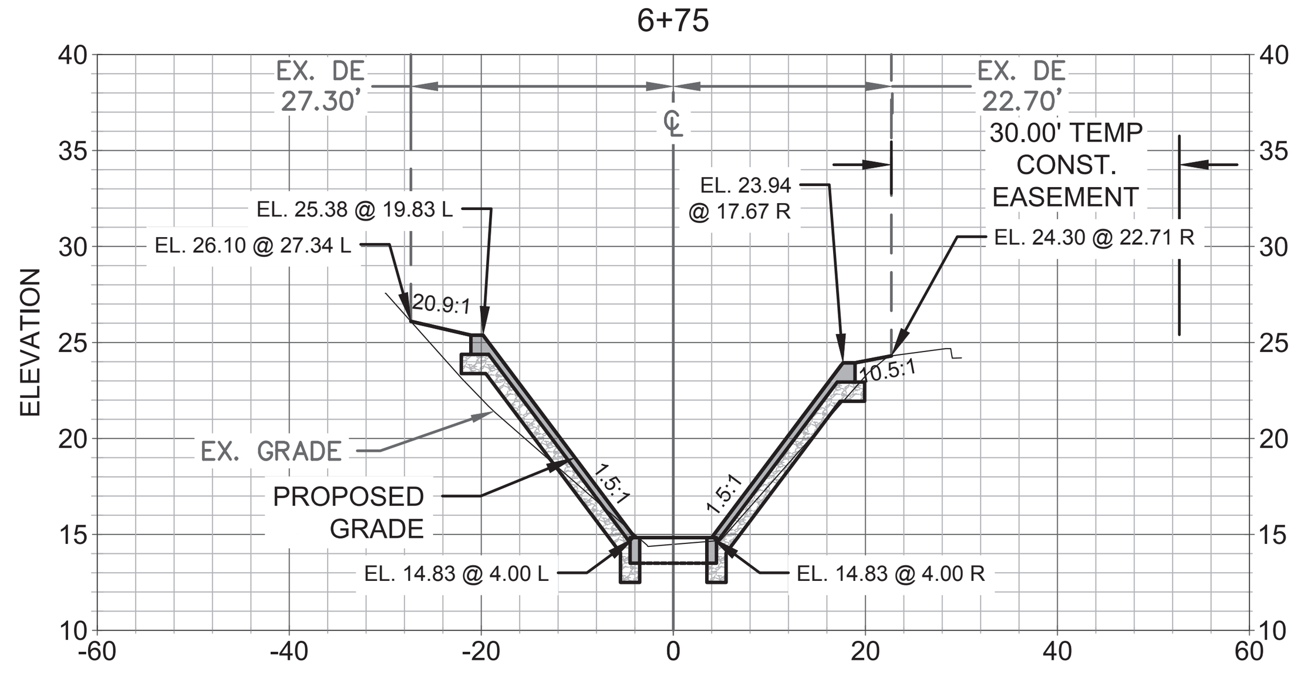

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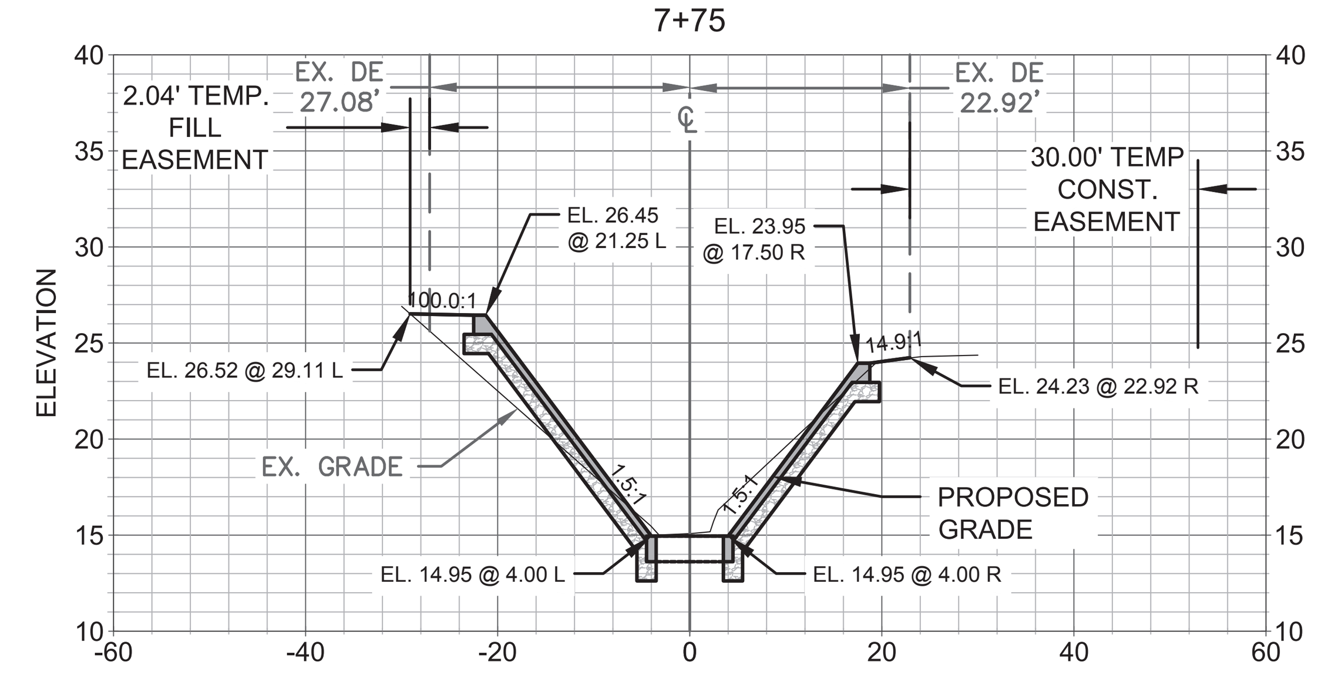

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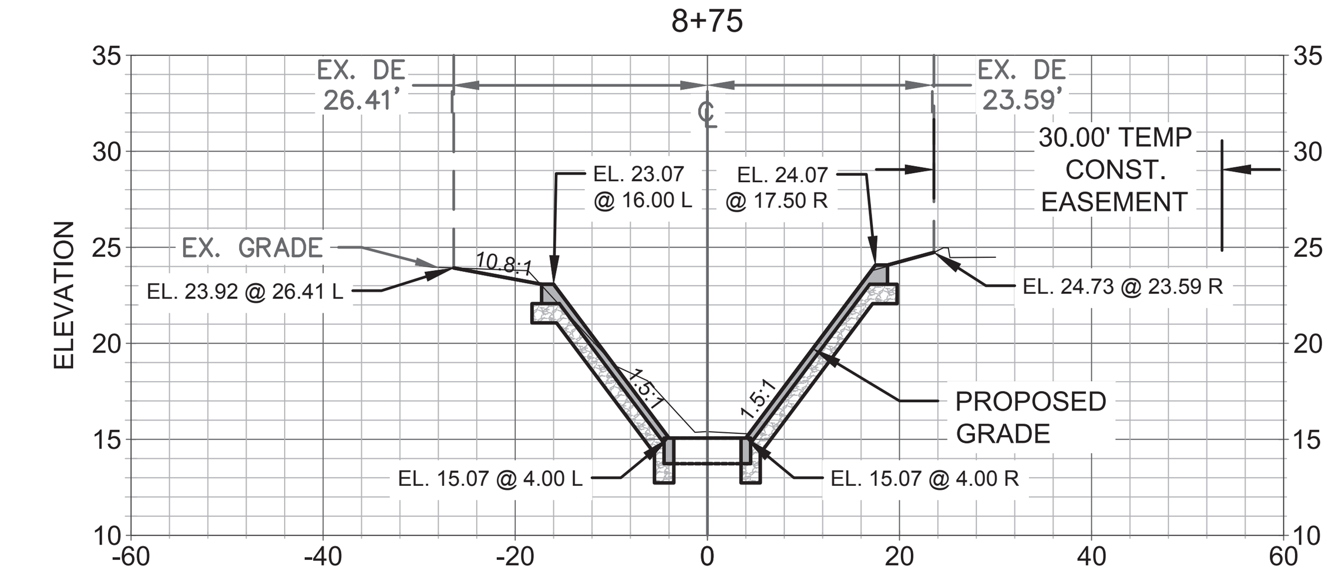

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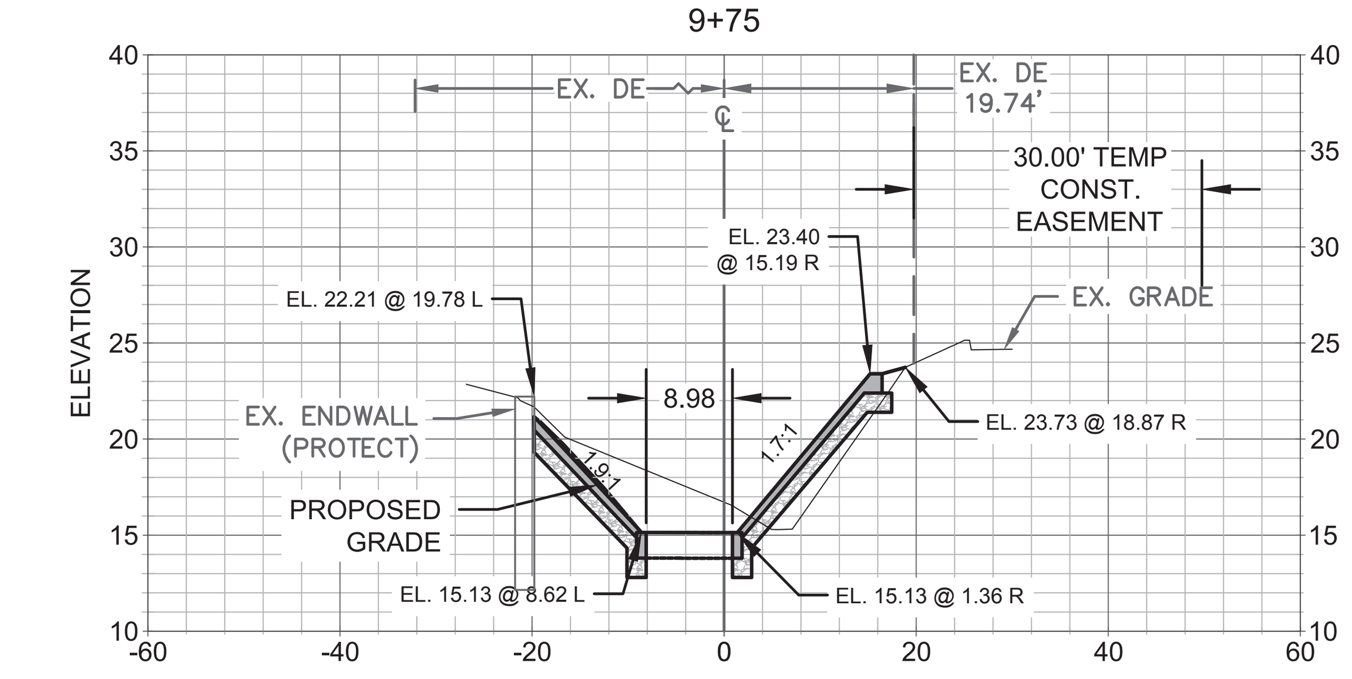

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Mobility Department
Stormwater Engineering Division

43RD STREET DRAINAGE IMPROVEMENTS

CROSS SECTONS

SHEET 13 of 22

STORMWATER POLLUTION PREVENTION PLAN (SWPPP)

1. THE FOLLOWING IS PROVIDED FOR PERMIT REVIEW AND WILL NEED TO BE ADJUSTED BY THE CONTRACTOR FOR PROPOSED CONSTRUCTION METHODS AND PHASING. THIS SWPPP IS FOR GENERAL INFORMATION ONLY.

2. CONSTRUCTION ACTIVITIES WHICH DISTURB EXISTING GROUND COVER WILL REQUIRE APPROPRIATE EROSION AND SEDIMENTATION CONTROL (E&SC) MEASURES. CONSTRUCTION ACTIVITIES WHICH MAY CAUSE SURFACE AND AIRBORNE DISCHARGES OF SEDIMENT ARE, BUT NOT LIMITED TO: CLEARING, GRUBBING, EXCAVATION, BACKFILLING, GRADING, AND INSTALLATION OF INFRASTRUCTURE. THE CONTRACTOR SHOULD ONLY EXPOSE (DENUDE) THE SMALLEST AREA NECESSARY TO COMPLETE A CONSTRUCTION ACTIVITY. THE CONTRACTOR MUST STABILIZE EXPOSED SOIL AS SOON AS POSSIBLE OR NO LATER THAN 14 DAYS AFTER CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED.

3. ALL E&SC MEASURES AND DEVICES SHOULD BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH THE EROSION AND SEDIMENT CONTROL DESIGNER AND REVIEWER MANUAL, JULY 2013, FLORIDA DEPARTMENTS OF TRANSPORTATION AND ENVIRONMENTAL PROTECTION.

4. THE CONTRACTOR IS RESPONSIBLE FOR ALL IMPACTS OF EROSION AND SEDIMENTS DURING CONSTRUCTION. THIS INCLUDES BUT IS NOT LIMITED TO: FINES, COST OF REPAIR, MITIGATION, LEGAL COSTS, AND LEGAL SETTLEMENTS.

5. CONTRACTOR SHALL MAINTAIN CURRENT E&SC PLANS, BASED ON CONSTRUCTION METHODS, PHASE, AND OPERATIONS. THE CONTRACTOR SHALL MAINTAIN RAIN GAUGES ON THE PROJECT SITE AND RECORD THE WEEKLY RAINFALL. THE CONTRACTOR SHALL INSPECT AND MAINTAIN ALL ACTIVE E&SC DEVICES WEEKLY OR WITHIN 24 HOURS OF A STORM EVENT THAT IS 0.5-INCHES OR GREATER. THE CONTRACTOR SHALL PREPARE REPORTS OF ALL INSPECTIONS, REPAIRS, AND MODIFICATIONS. THESE REPORTS WILL BE PROVIDED TO THE PROJECT OWNER AND ALL AUTHORITIES HAVING JURISDICTION AS REQUIRED.

6. ADDITIONAL PERMITTING COORDINATION MAY BE REQUIRED FOR CERTAIN ACTIVITIES. DEWATERING ACTIVITIES MAY REQUIRE ADDITIONAL E&SC DEVICES. THE CONTRACTOR SHALL REVIEW THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) REQUIREMENTS FROM AUTHORITIES HAVING JURISDICTION (AHJs), WHICH MAY INCLUDE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (FDEP) AND OTHER LOCAL AUTHORITIES.

7. THE CONTRACTOR SHALL PROVIDE DETAILED CONSTRUCTION SCHEDULE AND UPDATED E&SC PLAN TO THE OWNER PRIOR TO BEGINNING CONSTRUCTION AND RECONFIGURING E&SC DEVICES, WHICH INDICATES MAJOR ACTIVITIES WHICH MAY EXPOSE SOIL AND WHERE TEMPORARY AND PERMANENT E&SC MEASURES AND DEVICES WILL BE INSTALLED.

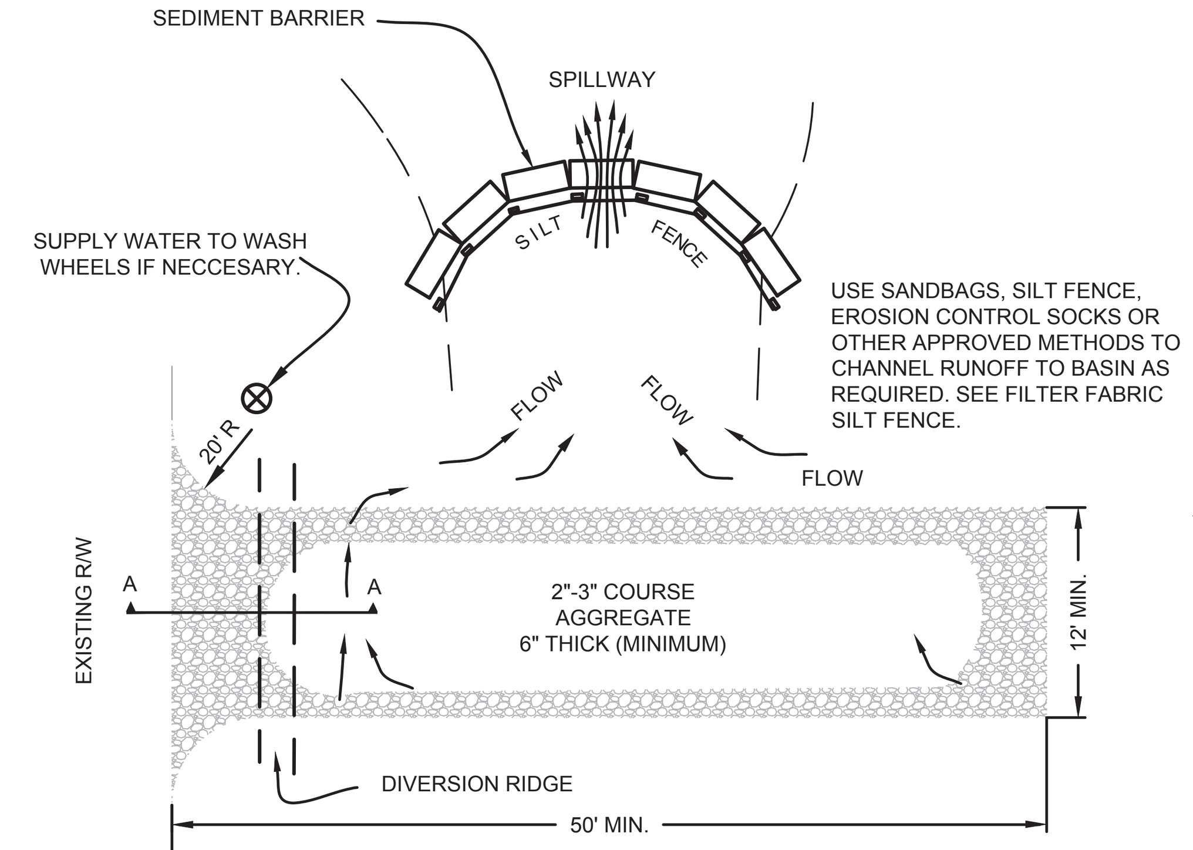
8. CONSTRUCTION ENTRANCE SHALL BE MAINTAINED TO PREVENT TRACKING SEDIMENT OFFSITE. VEHICLES LEAVING THE PROJECT AREA WITH SOIL MUST HAVE SOIL COVERED WITH TARPAULIN. EXCESS SEDIMENT WILL BE REMOVED FROM PUBLIC RIGHT-OF-WAY DAILY.

PROJECT SUMMARY
TYPE = CAPITAL IMPROVEMENT (DRAINAGE)
AREA = ± 0.75 AC
DISTURBED AREA = ± 0.75 AC
PHASED PROJECT = NO

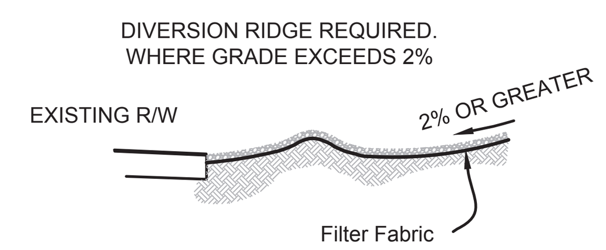
PROJECT DESCRIPTION
REHABILITATION OF 43RD STREET DITCH IN ORDER TO STABILIZE DITCH AND MINIMIZE FUTURE EROSION

DRAINAGE SUMMARY
DRAINAGE AREA: N/A
LOCATION OF DRAINAGE POINTS: INFLOW AND OUTFLOW POINTS DISPLAYED BELOW
RECEIVING WATER BODIES: DOWNSTREAM UNNAMED WATER BODY

SOILS
SEE GEOTECHNICAL REPORT
SOIL 56, URBAN LAND



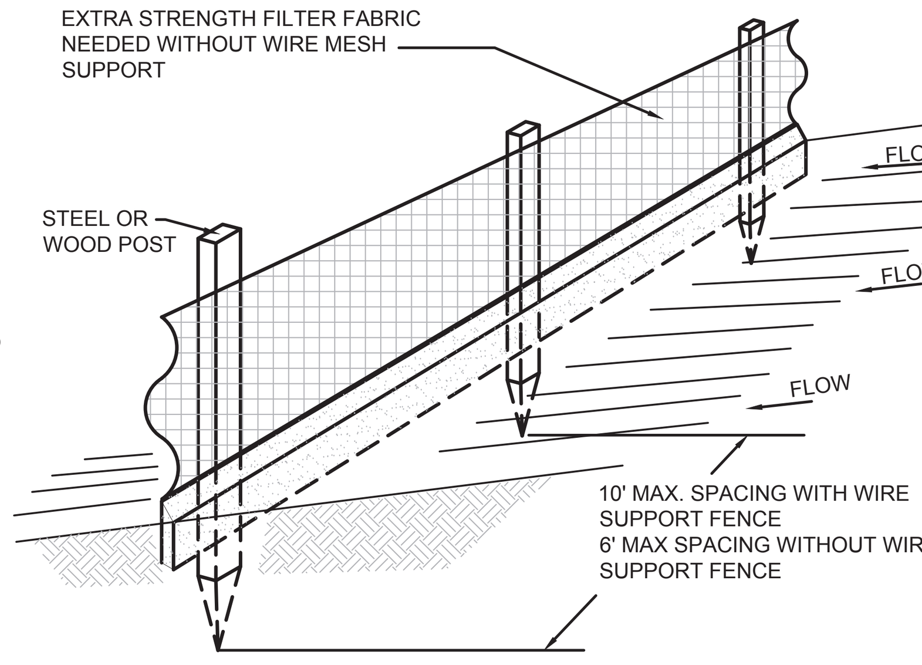
PLAN VIEW
NTS



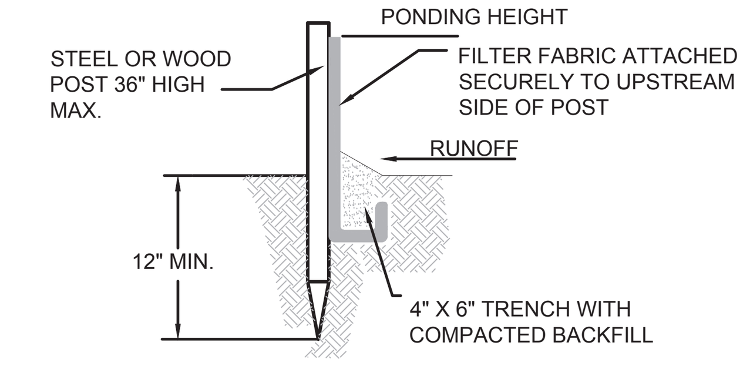
SECTION A - A
NTS

NOTES:
1. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAY. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEANING OF ANY MEASURES USED TO TRAP SEDIMENT.
2. WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY.
3. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.

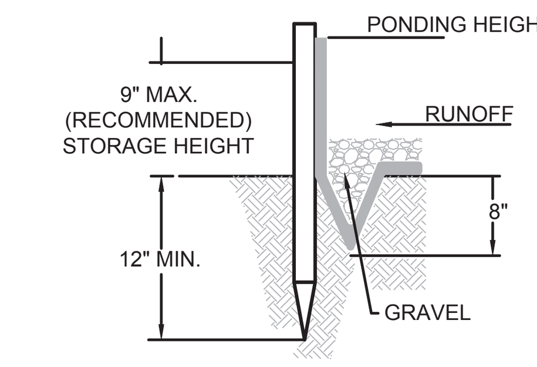
CONSTRUCTION ENTRANCE
NTS



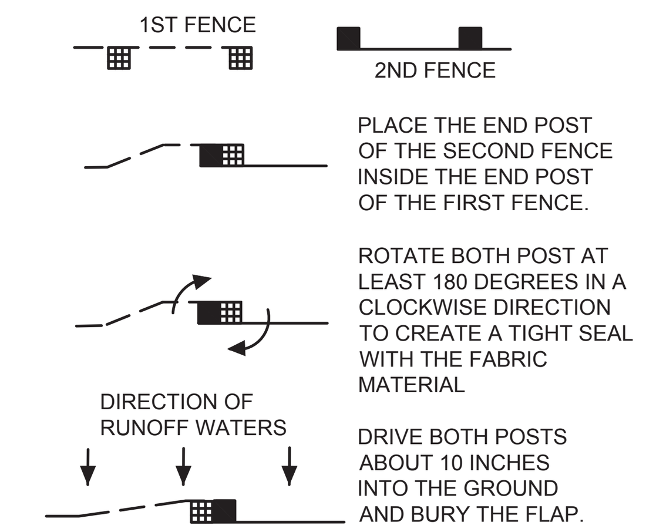
ISOMETRIC VIEW
NTS



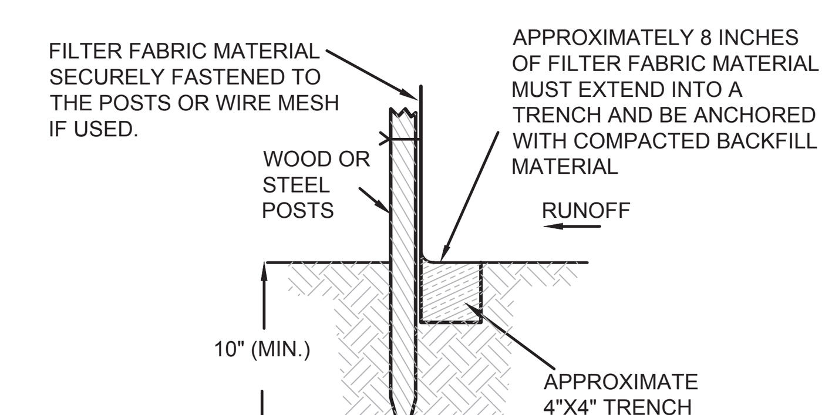
STANDARD DETAIL TRENCH WITH NATIVE BACKFILL



ALTERNATE DETAIL TRENCH WITH GRAVEL

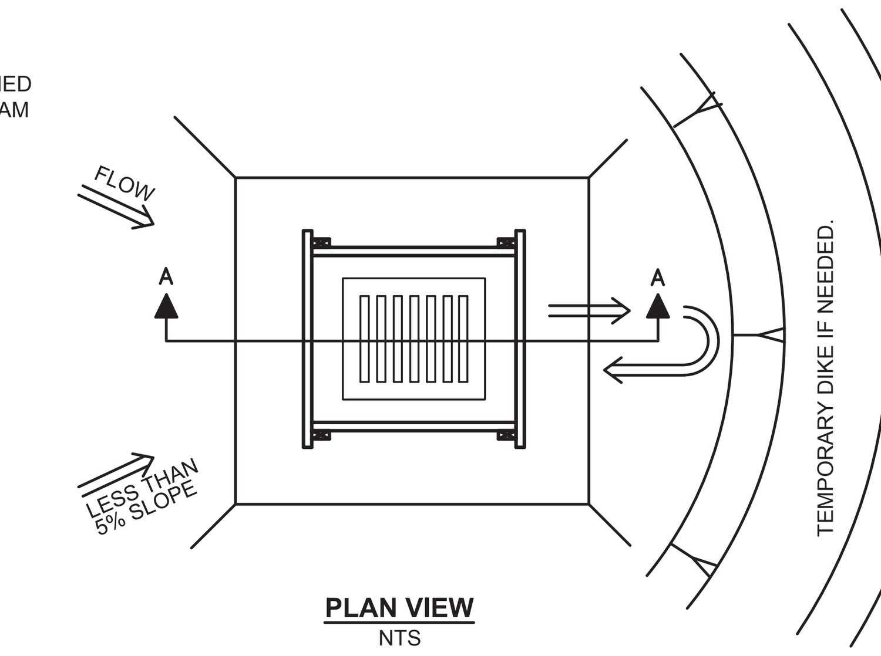


ATTACHING TWO SILT FENCES
NTS

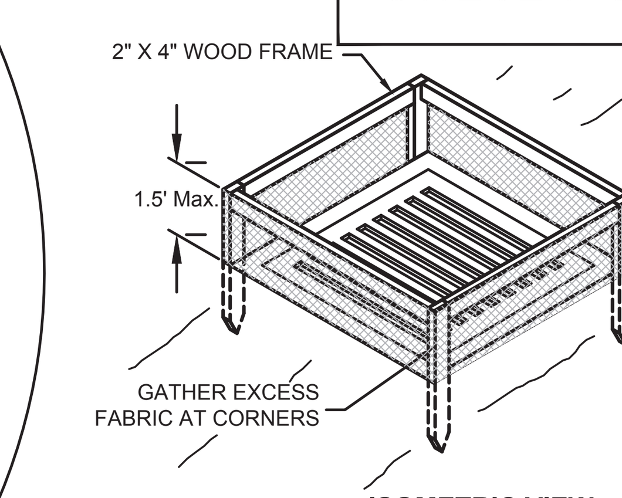


NOTES:
1. INSPECT AND REPAIR FENCE AFTER EACH STORM EVENT AND REMOVE SEDIMENT WHEN NECESSARY.
2. REMOVED SEDIMENT SHALL BE DEPOSITED TO AN AREA THAT WILL NOT CONTRIBUTE SEDIMENT OFF-SITE AND CAN BE PERMANENTLY STABILIZED.
3. SILT FENCE SHALL BE PLACED ON SLOPE CONTOURS TO MAXIMIZE PONDING EFFICIENCY.

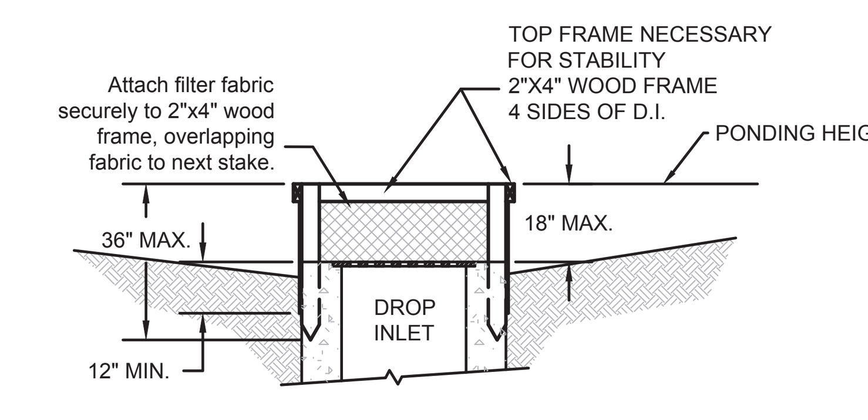
FILTER FABRIC SILT FENCE
NTS



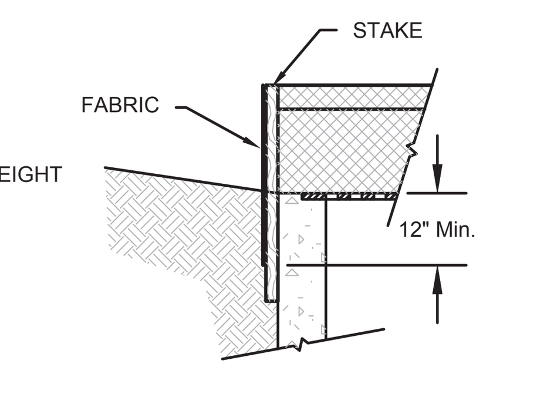
PLAN VIEW
NTS



ISOMETRIC VIEW
NTS



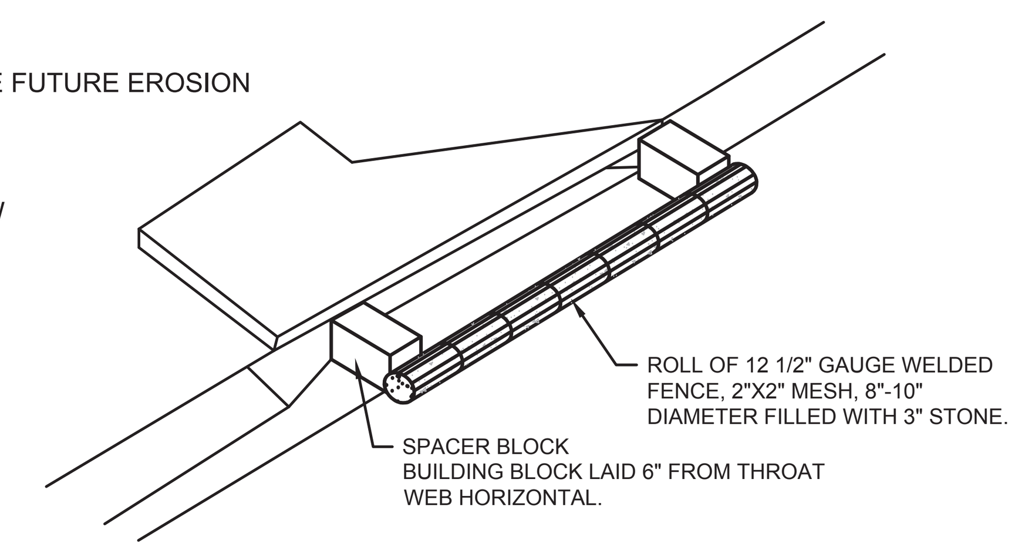
SECTION A-A
NTS



DETAIL OF STAKE & FABRIC ORIENTATION
NTS

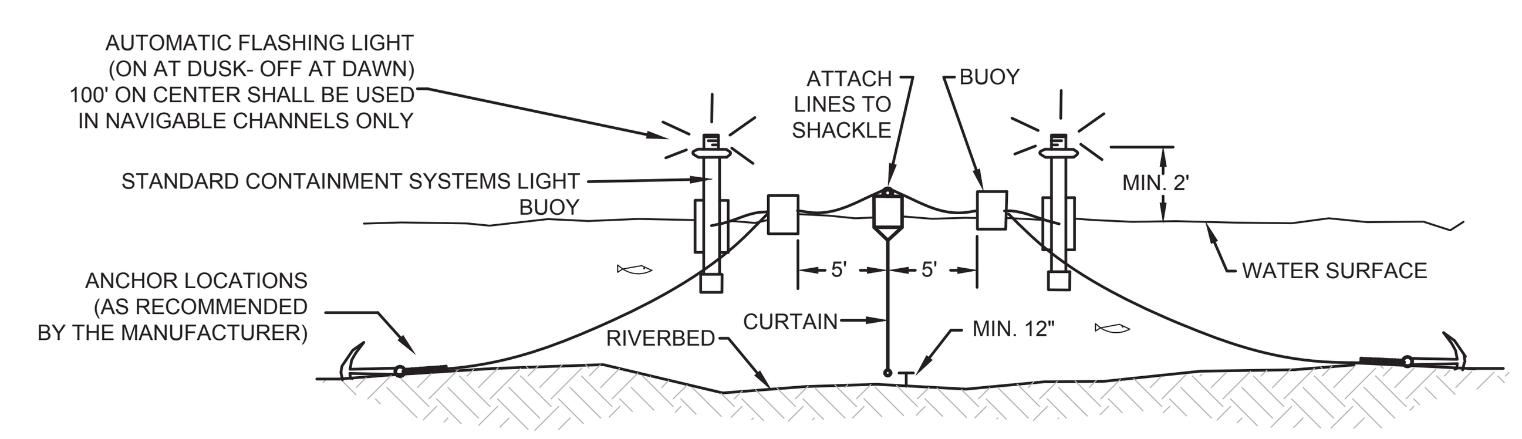
NOTES:
1. DROP INLET SEDIMENT BARRIERS ARE TO BE USED FOR SMALL, NEARLY LEVEL DRAINAGE AREAS. (LESS THAN 5%).
2. USE 2"X4" WOOD OR EQUIVALENT METAL STAKES. (3' MIN. LENGTH).
3. INSTALL 2"X4" WOOD TOP FRAME TO INSURE STABILITY.
4. THE TOP OF THE FRAME (PONDING HEIGHT) MUST BE WELL BELOW THE GROUND ELEVATION DOWNSLOPE TO PREVENT RUNOFF FROM BYPASSING THE INLET. A TEMPORARY DIKE MAY BE NECESSARY ON THE DOWNSLOPE SIDE OF THE STRUCTURE.
5. MIRAFI OR APPROVED EROSION CONTROL FABRIC SHALL BE WRAPPED AROUND GRATE.
6. THE METHOD SHALL NOT APPLY TO INLETS RECEIVING CONCENTRATED FLOWS, SUCH AS IN STREET OR HIGHWAY MEDIANS.

DROP INLET PROTECTION
NTS

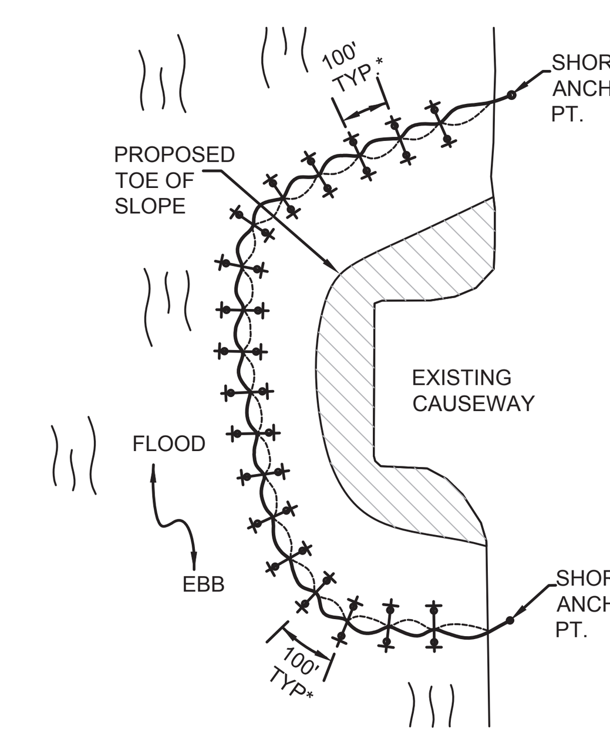


NOTES:
1. FIBROUS FILLER MATERIAL IN FRONT OF BLOCK PREVENTS GRAVEL FROM WASHING INTO STRUCTURE.
2. 2"X4" BEHIND BLOCK AND ACROSS THROAT HELPS KEEP BLOCK IN PLACE. PLACE IN OUTER HOLE OF SPACER BLOCK.

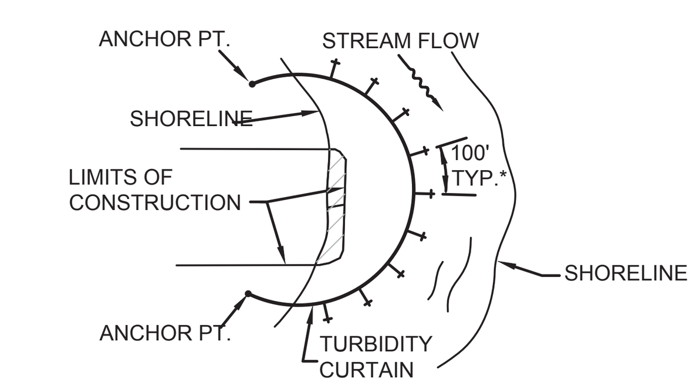
CURB INLET PROTECTION
NTS



TYPICAL LAYOUT IN TIDAL SITUATION SECTION VIEW
NTS



TYPICAL LAYOUT TIDAL WATERS AND/OR HEAVY WIND AND WAVE ACTION PLAN VIEW
NTS

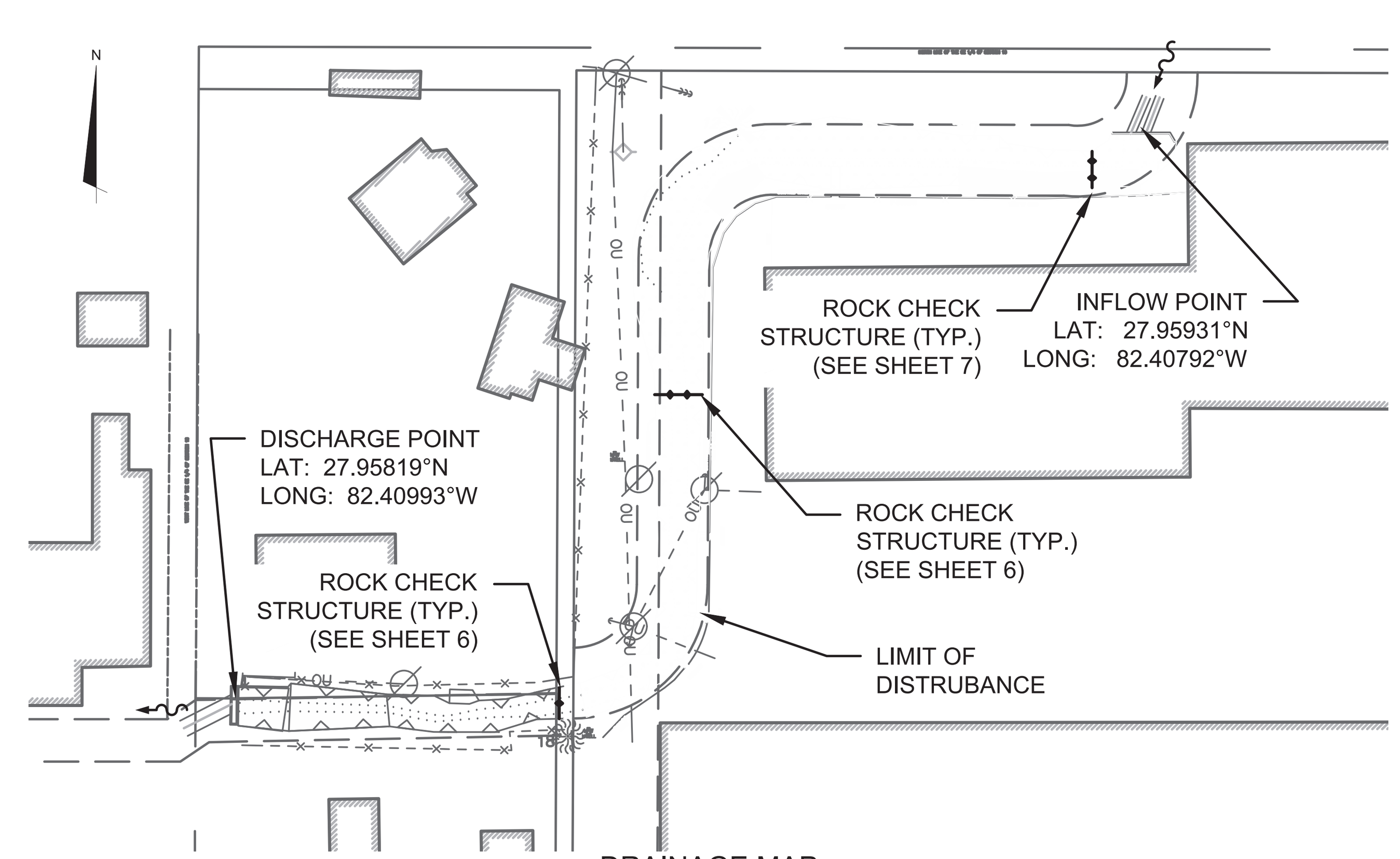


TYPICAL LAYOUT STREAMS, PONDS, AND LAKES (PROTECTED AND NON-TIDAL) PLAN VIEW
NTS

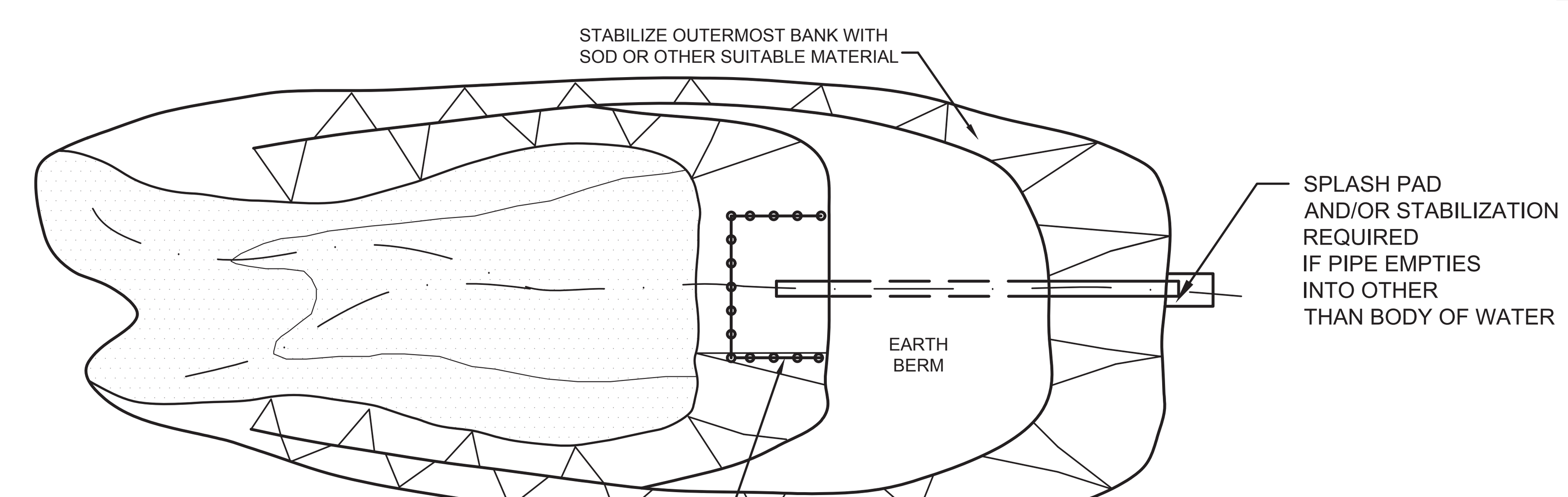
LEGEND:
* THIS DISTANCE IS VARIABLE
STAKE OR ANCHOR EVERY 100' (TYPICAL)
ANCHOR & ANCHOR BUOY
BARRIER MOVEMENT DUE TO TIDAL CHANGE
FILL AREA

NOTE:
ANCHORING WITH BUOYS, AS SHOWN, REMOVES ALL VERTICAL FORCES FROM THE CURTAIN. HENCE, THE CURTAIN WILL NOT SINK FROM WIND OR CURRENT LOADS.

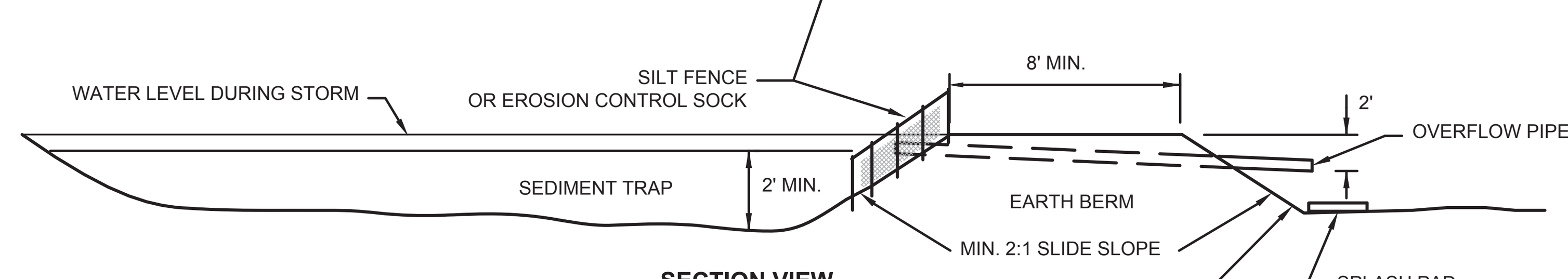
FLOATING TURBIDITY BARRIERS
NTS



DRAINAGE MAP

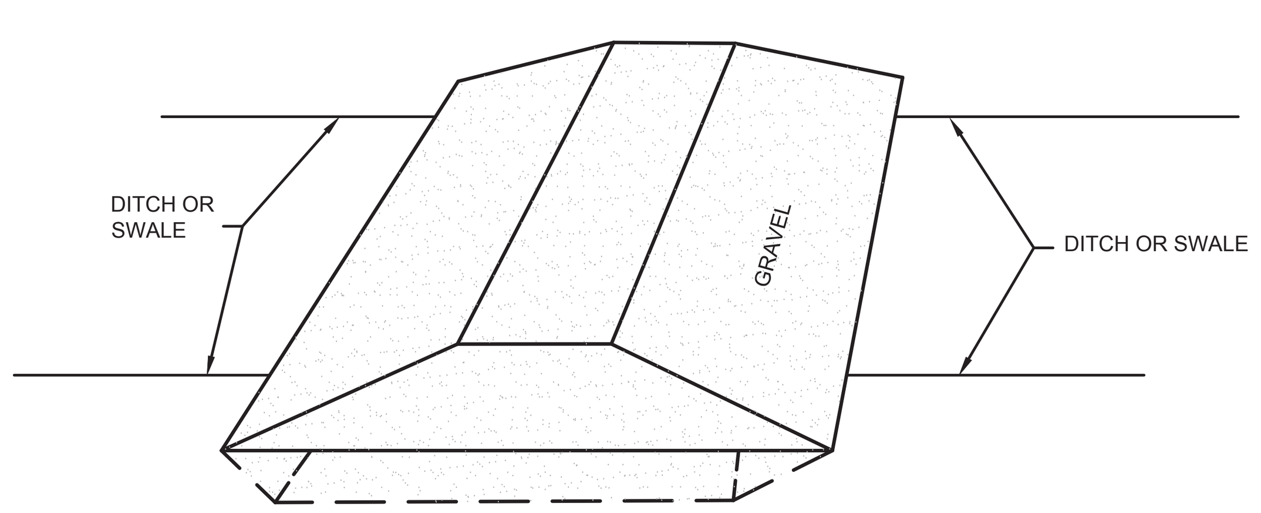


PLAN VIEW
NTS

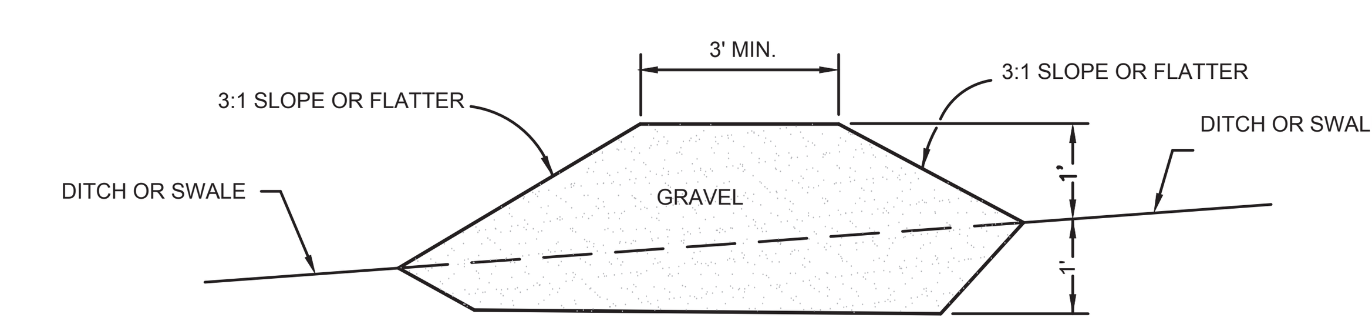


SECTION VIEW
NTS

TEMPORARY SEDIMENT BASIN
NTS



ISOMETRIC VIEW
NTS



CROSS SECTION
NTS

ROCK CHECK STRUCTURE
NTS

COLIN TYSON MILLER, State of Florida, Professional Engineer, License No. **61775**

This item has been digitally signed and sealed by **COLIN TYSON MILLER** on the date indicated here.

Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

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No.	DATE	REVISIONS	No.	DATE	REVISIONS	
						DES:
						DRN:
						CKD:
						DATE:

CITY of TAMPA
Mobility Department
Stormwater Engineering Division

43RD STREET DRAINAGE IMPROVEMENTS
SWPPP DETAILS & NOTES

1.0 GENERAL

1.1 ALL WORK IS TO BE PERFORMED IN A GOOD, WORKMANLIKE AND PROFESSIONAL MANNER.

1.2 ALL CONSTRUCTION SHALL BE IN STRICT COMPLIANCE WITH THE REQUIREMENTS OF THE LATEST EDITION OF THE FLORIDA BUILDING CODE, 2020 EDITION, OR LOCAL BUILDING CODE REQUIREMENTS IF MORE STRINGENT.

1.3 THESE DRAWINGS DO NOT SHOW PROVISIONS FOR SAFETY DURING CONSTRUCTION. IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO PROVIDE THE REQUIRED BRACING, SHORING, AND SAFETY DEVICES THROUGHOUT THE CONSTRUCTION OF THIS PROJECT.

2.0 COORDINATION

2.1 STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH AND COORDINATED WITH ARCHITECTURAL, CIVIL, ELECTRICAL, HVAC, MECHANICAL & PLUMBING DRAWINGS, INCLUDING VENDOR SUBMITTAL DRAWINGS AND OTHER CONTRACT DOCUMENTS.

2.2 COORDINATE THE EXACT SIZE AND LOCATION OF ALL SLEEVES AND OPENINGS THROUGH WALLS OR CONCRETE SLABS WITH ARCHITECTURAL, CIVIL, ELECTRICAL, HVAC, MECHANICAL & PLUMBING DRAWINGS, INCLUDING VENDOR SUBMITTAL DRAWINGS AND OTHER CONTRACT DOCUMENTS.

2.3 ANY DISCREPANCIES BETWEEN ACTUAL CONDITIONS AND THOSE SHOWN ON THESE DRAWINGS ARE TO BE BROUGHT TO THE ATTENTION OF THE STRUCTURAL ENGINEER BEFORE WORK PROCEEDS, INCLUDING ORDERING AND FABRICATING MATERIALS.

2.4 INDEPENDENT TESTING OF MATERIALS SHALL BE PROVIDED AS DEFINED IN PROJECT SPECIFICATIONS. IN GENERAL PROJECT INVOLVES THE FOLLOWING:

A. SOIL/FILL COMPACTION & BEARING.

B. C.I.P. CONCRETE.

2.5 IF COORDINATION OF INFORMATION PRESENTED CONFLICTS w/ THE PROJECT SPECIFICATIONS, THE SPECIFICATIONS WILL TAKE PRECEDENCE.

2.6 IN GENERAL CALL-OUTS ARE FOR NEW CONSTRUCTION U.N.O.. EXISTING CONSTRUCTION CALL-OUTS AND DIMENSIONS OF EXISTING STRUCTURES ARE BASED ON EXISTING RECORD DRAWINGS PROVIDED TO McKIM & CREED. EXISTING ELEVATIONS ARE BASED ON SURVEY DATA AND EXISTING RECORD DRAWINGS PROVIDED TO McKIM & CREED. THE (*) SYMBOL ON INDIVIDUAL FACILITY "STRUCTURAL" DRAWINGS INDICATES EXISTING CONSTRUCTION CALL-OUTS, CONDITIONS, ELEVATIONS AND DIMENSIONS TO BE FIELD VERIFIED BY THE GENERAL CONTRACTOR U.N.O. PRIOR TO CONSTRUCTION, INCLUDING ORDERING AND FABRICATING MATERIALS. RECORD DRAWINGS PROVIDED BY CITY OF TAMPA UTILIZED INCLUDES:

A. NONE.

2.7 SPECIAL INSPECTIONS (IF APPLICABLE): ALL FOUNDATION SOILS, REINF. STEEL, C.I.P. CONCRETE & STRUCTURAL STEEL WORK SHALL BE REVIEWED AS STATED IN CONJUNCTION w/ THEIR RESPECTIVE NOTES BELOW.

3.0 FOUNDATIONS

3.1 SHALLOW FOUNDATION CRITERIA:
DESIGN ALLOWABLE SOIL BEARING PRESSURE - IN ACCORDANCE WITH THE PROJECT GEOTECHNICAL REPORT AS PREPARED BY MADRID CPWG (PROJECT NO. 12883.8, DTD. JUNE 16, 2023). SHALLOW FOUNDATIONS HAVE BEEN PROPORTIONED FOR A MINIMUM ALLOWABLE BEARING CAPACITY OF 2,000 PSF. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THIS VALUE PRIOR TO FOUNDATION CONSTRUCTION. IN AREAS WHERE THE SOIL DOES NOT YIELD THIS BEARING STRESS VALUE, ADJUSTMENT IN THE FOOTING DEPTHS AND FOUNDATION DIMENSION MAY BE MADE BY THE ENGINEER BEFORE WORK PROCEEDS. CONTRACTOR IS RESPONSIBLE FOR PERFORMING ANY SUCH ADJUSTMENTS.

3.2 PREPARE THE EXISTING SUBGRADE IN ACCORDANCE w/ THE PROJECT GEOTECHNICAL REPORT AS PREPARED BY MADRID CPWG (PROJECT NO. 12883.8, DTD. JUNE 16, 2023). IN THE EVENT UNUSUAL SOIL CONDITIONS ARE UNCOVERED, INCLUDING CONDITIONS THAT DEVIATE FROM THOSE DESCRIBED IN THE PROJECT GEOTECHNICAL REPORT, NOTIFY THE OWNER AND ENGINEER PRIOR TO FOUNDATION CONSTRUCTION FOR INSTRUCTIONS HOW TO PROCEED. ADJUSTMENT IN THE FOOTING DEPTHS AND GENERAL FOUNDATION CONSTRUCTION MAY BE MADE BY THE ENGINEER BEFORE WORK PROCEEDS. CONTRACTOR IS RESPONSIBLE FOR PERFORMING ANY SUCH ADJUSTMENTS.

3.3 FOOTING & BASE SLAB EXCAVATIONS AND FORMS SHALL BE REVIEWED BY AN OWNER'S CONSTRUCTION REPRESENTATIVE PRIOR TO PLACEMENT OF CONCRETE.

3.4 FOOTING & BASE SLAB ELEVATIONS SHALL NOT BE RAISED OR LOWERED WITHOUT APPROVAL OF THE STRUCTURAL ENGINEER.

3.5 ALL EXCAVATIONS SHALL BE ADEQUATELY DEWATERED BEFORE PLACEMENT OF CONCRETE. NO CONCRETE OR CONCRETE FILL SHALL BE PLACED IN STANDING WATER. ACCUMULATION EXCEEDING 1 INCH SHALL BE PUMPED OUT.

3.6 ALL FILL BELOW FOUNDATION's SHALL BE SELECT MATERIAL FREE FROM ROOTS, TRASH WOOD SCRAPS, AND OTHER EXTRANEOUS MATERIALS. PLACE FILL IN LIFTS NOT EXCEEDING THE RECOMMENDATIONS OF THE PROJECT GEOTECHNICAL REPORT AS PREPARED BY MADRID CPWG (PROJECT NO. 12883.7, DTD. MAY 5, 2021).

3.7 ALL FOOTINGS SHALL BE CENTERED UNDER THE SUPPORTED WALL/COLUMN MEMBER UNLESS NOTED OTHERWISE.

3.8 CONSTRUCTION JOINTS IN FOUNDATION SLABS, WALLS, FOOTINGS SHALL BE MADE AT LOCATIONS SHOWN ON DRAWINGS.

3.9 ANCHOR BOLTS SHALL BE SET BY MEANS OF TEMPLATE. "FLOATING" ANCHOR BOLTS INTO PLACE IS PROHIBITED.

3.10 CONTRACTOR IS TO VERIFY THE ELEVATION AND LOCATION OF ALL EXISTING AND PROPOSED UTILITIES PRIOR TO CONSTRUCTION. ANY "KNOWN" UTILITY LINES DAMAGED WILL BE REPLACED AT THE CONTRACTOR'S EXPENSE. IF ANY "UNKNOWN" UTILITY LINES ARE ENCOUNTERED WHEN EXCAVATING THE CONTRACTOR IS TO CEASE ALL EXCAVATION ACTIVITY UNTIL THE ENGINEER AND OWNER ARE NOTIFIED AND INSTRUCTIONS ARE PROVIDED ABOUT HOW TO PROCEED.

3.11 THE CONTRACTOR SHALL OBTAIN THE OWNER'S PERMISSION BEFORE ENCASING OR BACK FILLING AROUND ANY EXISTING UNDERGROUND STRUCTURE, PIPING, ELECTRICAL, OR OTHER UNDERGROUND WORK.

4.0 REINFORCING STEEL

4.1 BARS SHALL BE ROLLED FROM NEW BILLET-STEEL OF DOMESTIC MANUFACTURE CONFORMING TO "STANDARD SPECIFICATION FOR DEFORMED AND PLAIN BILLET STEEL BARS FOR CONC. REINFORCEMENT," ASTM A615, GRADE 60.

4.2 DETAIL AND FABRICATE REINFORCING STEEL IN ACCORDANCE WITH THE AMERICAN CONCRETE INSTITUTE "ACI DETAILING MANUAL," LATEST PUBLICATION.

4.3 REINFORCING STEEL IN PLACE SHALL BE REVIEWED BY THE OWNER'S CONSTRUCTION REPRESENTATIVE PRIOR TO PLACEMENT OF CONCRETE.

4.4 WELDED WIRE FABRIC SHALL CONFORM TO "STANDARD SPECIFICATION FOR WELDED STEEL WIRE FABRIC FOR CONCRETE REINFORCEMENT," ASTM A1064.

4.5 PLACE WELDED WIRE FABRIC AT CENTER OF SLABS-ON-GRADE AND ELEVATED SLAB TOPPINGS OVER METAL DECK, UNLESS NOTED OTHERWISE.

4.6 PROVIDE BARS AT CORNERS AND INTERSECTIONS OF WALLS & FOOTINGS OF THE SAME NUMBER AND SIZE AS LONGITUDINAL BARS, U.N.O. ON THE DRAWINGS.

4.7 FABRICATE CONTINUOUS BARS IN WALLS, SLABS & FOOTINGS TO THE LONGEST PRACTICABLE LENGTHS.

4.8 REINFORCING STEEL SHALL NOT BE BENT AFTER BEING PARTIALLY EMBEDDED IN HARDENED CONCRETE.

4.9 BARS SHALL BE COLD BENT AND SHALL NOT BE HEATED FOR ANY REASON.

4.10 REINFORCING BARS SHALL NOT BE WELDED U.N.O. ON THE DRAWINGS.

4.11 REFERENCE DRAWINGS FOR REQUIREMENTS FOR LAP SPLICING REINFORCING STEEL IN CONCRETE. ALL "LCS" SHALL CONFORM TO CLASS B SPLICE CRITERIA & IT IS ACCEPTABLE TO LAP SPLICE NON "LCS" A MINIMUM 50 BAR DIAMETERS, UNLESS NOTED OTHERWISE.

4.12 LAP SPLICED BARS IN CONCRETE ARE TO BE WIRE TIED.

5.0 CONCRETE

5.1 IN GENERAL CONCRETE SHALL DEVELOP 4,000 PSI MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS. REFERENCE "DESIGN CRITERIA" THIS DWG. & PROJECT SPECIFICATIONS, FOR APPLICATION & SPECIFIC CONCRETE MIX DESIGN REQUIREMENTS.

5.2 CONCRETE WORK SHALL CONFORM T0 "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE", ACI 318 & TO "CODE REQUIREMENTS FOR ENVIRONMENTAL ENGINEERING CONCRETE STRUCTURES", ACI 350 (LATEST EDITIONS).

5.3 PLACE 1/2 INCH EXPANSION JOINT MATERIAL BETWEEN EDGES OF SLABS AND VERTICAL SURFACES UNLESS NOTED OTHERWISE. PRE-MOULDED EXPANSION JOINTS SHALL BE OF NON-EXTRUDING, RESILIENT, NON-BITUMINOUS MATERIAL.

5.4 PROVIDE CONSTRUCTION OR CONTROL JOINTS IN SLABS & WALLS AT LOCATIONS SHOWN ON DRAWINGS, AT OFFSETS AND CHANGES IN DIRECTION AND AT FIFTEEN (15) FEET MAXIMUM U.N.O.. GENERAL CONTRACTOR TO PROVIDE CONSTRUCTION JOINT LAYOUT PLAN PER THE PROJECT SPECIFICATIONS PRIOR TO CONSTRUCTION, INCLUDING ORDERING & FABRICATING MATERIALS.

5.5 CHAMFER EXPOSED EDGES OF CONCRETE 3/4 INCH, UNLESS NOTED OTHERWISE.

5.6 CONTRACTOR SHALL BE RESPONSIBLE FOR PROPER CURING OF ALL CONCRETE. CONCRETE SHALL ADHERE TO "WET" CURING METHODS & SHALL CONFORM TO "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE", ACI 318, "CODE REQUIREMENTS FOR ENVIRONMENTAL ENGINEERING CONCRETE STRUCTURES" ACI 350 AND "STANDARD PRACTICE FOR CURING CONCRETE," ACI 308, LATEST EDITIONS. MAINTAIN WATER COVERAGE OVER CONCRETE SURFACES FOR A PERIOD OF FOUR (4) DAYS MINIMUM.

5.7 UNLESS NOTED OTHERWISE DOWELS SHALL BE THE SAME NUMBER AND SIZE AS THE LARGEST VERTICAL BAR TO WHICH THEY ARE SPLICED.

5.8 REFERENCE PROJECT SPECIFICATIONS FOR REQUIRED FINISHES.

5.9 CONTRACTOR SHALL SUBMIT REBAR SHOP DRAWINGS FOR APPROVAL TO OWNER PRIOR TO FABRICATION. DO NOT FABRICATE REINFORCING PRIOR TO RECEIPT OF APPROVED SHOP DRAWINGS.

5.10 CAST-IN-PLACE REINFORCED CONCRETE SHALL HAVE A MINIMUM (28) DAY OF COMPRESSIVE STRENGTH 4,000 PSI. DOCUMENTATION INDICATING THE PROPOSED CONCRETE PROPORTIONS WILL PRODUCE AN AVERAGE COMPRESSIVE STRENGTH EQUAL TO OR GREATER THAN THE REQUIRED AVERAGE COMPRESSIVE STRENGTH IN ACCORDANCE WITH ACI 301-10, SECTIONS 4.2.3.4.A OR 4.2.3.4.B SHALL BE SUBMITTED FOR ACCEPTANCE PRIOR TO CONCRETE PLACEMENT.

5.11 ROUGHEN THE "BASE" CONCRETE POUR SURFACE TO A FULL AMPLITUDE OF 1/4" MINIMUM, WHERE NOTED ON THE CONSTRUCTION DRAWINGS.

5.12 CONCRETE ACCESSORIES AS FOLLOWS:

A. PREFORMED WATERSTOPS SHALL BE PVC 6 INCH LONG w/ 3/8 INCH (MIN.) CENTER BULB & TAPERED RIB ENDS AND IN ACCORDANCE w/ THE PROJECT SPECIFICATIONS.

B. EXPANSIVE WATERSTOPS SHALL BE ADEKA ULTRA SEAL TYPE MC-2010M. THE WATERSTOPS CAN BE EITHER ADHERED TO THE CONCRETE WITH 3M-2141 BONDING ADHESIVE OR NAILED IN PLACE USING 1.5 INCH CONCRETE NAILS 3 TO 6 INCHES APART OR EQUAL.

C. RETROFIT WATERSTOPS SHALL BE SIKA WESTEC ENVIROSTOP TPE TYPE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS.

D. CAULK/SEALANT - BASF MASTERSEAL CR125.

E. BONDING AGENT - SHALL BE STRUCTURAL EPOXY ADHESIVE CONFORMING TO ASTM C-881 TYPE I STRENGTH AND II, GRADE 2, CLASS B AND C WITH A MINIMUM BOND STRENGTH OF 1900 PSI.
    1.) SIKA ARMATEC 110 EpoCem OR EQUAL.

5.13 CONCRETE POST INSTALLED ANCHORS NOTE THE FOLLOWING:

A. BOLTED ANCHORING SYSTEMS EMBEDDED IN CONCRETE SHALL BE RED HEAD, C6 EPOXY ADHESIVE ANCHORING SYSTEM OR EQUAL. MECHANICAL WEDGE TYPE ANCHORS ARE NOT ALLOWED.

B. REBAR ANCHORING SYSTEM EMBEDDED IN CONCRETE SHALL BE RED HEAD, C6 EPOXY ADHESIVE ANCHORING SYSTEM OR EQUAL. DEPTH OF REBAR EMBEDMENT SHALL MEET MFG.'s RECOMMENDATIONS TO ENSURE DEVELOPMENT OF THE FULL TENSILE STRENGTH OF THE REINFORCING BAR.

GANG WANG, P.E.
LICENSE NO. 64477

GANG WANG LICENSE No 64477 STATE OF FLORIDA PROFESSIONAL ENGINEER

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No.	DATE	REVISIONS	No.	DATE	REVISIONS

6.0 ABBREVIATIONS

6.1 THE FOLLOWING LIST OF ABBREVIATIONS IS NOT INTENDED TO REPRESENT ALL THOSE USED ON THE DRAWINGS, BUT TO SUPPLEMENT THE MORE COMMON ABBREVIATIONS USED.

ADD'L	=	ADDITIONAL
AL	=	ALUMINUM
ALT.	=	ALTERNATE
BLDG.	=	BUILDING
BLK.	=	BLOCK
BM.	=	BEAM
B.O.	=	BOTTOM OF
BRG.	=	BEARING
C.I.P.	=	CAST-IN-PLACE
CLR.	=	CLEAR
CMU	=	CONC. MAS. UNIT
C.O.	=	CLEAN OUT
COL.	=	COLUMN
CONC.	=	CONCRETE
CONN.	=	CONNECTION
CONST.	=	CONSTRUCTION
CONT.	=	CONTINUOUS
COORD.	=	COORDINATE
CTR.	=	CENTER
CTR'D.	=	CENTERED
DBL.	=	DOUBLE
DIR.	=	DIRECTION
DWG.	=	DRAWING
DWG.'s.	=	DRAWINGS
EA.	=	EACH
EL	=	ELEVATION
E.O.	=	EDGE OF
EQ.	=	EQUAL
EQUIP.	=	EQUIPMENT
EXIST.	=	EXISTING
EXP.	=	EXPANSION
FLG.	=	FLANGE
FDN.	=	FOUNDATION
F.S.	=	FAR SIDE
FT.	=	FEET
FTG.	=	FOOTING
GA.	=	GAGE
GALV.	=	GALVANIZED
GALV'D	=	GALVANIZED
HORZ.	=	HORIZONTAL
H.P.	=	HIGH POINT
HRS.	=	HOURS
I/F	=	INSIDE FACE
INFO.	=	INFORMATION
INTR.	=	INTERIOR
JST.	=	JOIST
JT.	=	JOINT
KB	=	KNEE BRACE
LCS	=	LIQUID CONTAINMENT STRUCTURES
LLH	=	LONG LEG HORIZONTAL
LLV	=	LONG LEG VERTICAL
L.P.	=	LOW POINT
LSL	=	LONG SLOTTED
MAS.	=	MASONRY
MAT'L.	=	MATERIAL
MFG.	=	MANUFACTURER
MIN.	=	MINIMUM
MTL.	=	METAL
NA	=	NOT APPLICABLE
N/A	=	NOT APPLICABLE
NOM.	=	NOMINAL
N.S.	=	NEAR SIDE
N.T.S.	=	NOT TO SCALE
O.C.	=	ON CENTER
O/F	=	OUTSIDE FACE
O/H	=	OVERHANG
O/O	=	OUT TO OUT
OPNG.	=	OPENING
OPP.	=	OPPOSITE
ORIENT.	=	ORIENTATION
PLCS.	=	PLACES
P.P.	=	PUMP PAD
RAD.	=	RADIUS
REF.	=	REFERENCE
REINF.	=	REINFORCING
REQ'D.	=	REQUIRED
RET.	=	RETAINING
ROT.	=	ROTATE
SIM.	=	SIMILAR
SPA.	=	SPACED
SPECS.	=	SPECIFICATIONS
S.S.	=	STAINLESS STEEL
SSL	=	SHORT SLOTTED
STD.	=	STANDARD
STL.	=	STEEL
T&B	=	TOP & BOTTOM
T/D	=	TURN DOWN
THK.	=	THICK
THK'D	=	THICKENED
T.O.	=	TOP OF
T.O.S	=	TOP OF STEEL
TYP.	=	TYPICAL
U.N.O.	=	UNLESS NOTED OTHERWISE
XB	=	CROSS OR "X"-BRACE
VERT.	=	VERTICAL
W.P.	=	WORK POINT

7.0 DESIGN LOADS

DESIGN LOADS BASIS OF DESIGN:
FLORIDA BUILDING CODE 2020 EDITION & ASCE 24-14 FOR FLOOD DESIGN

LIVE LOAD: 50 PSF UNIFORM AT CONCRETE SURFACES (TRAFFIC LOADS NOT ALLOWED)

SOIL BEARING: REF. "FOUNDATIONS" NOTE 3.1

8.0 LEGEND

ENLARGED PLAN AREA, DETAIL =

CONC. MASONRY BLOCK = (EXIST.) (NEW)

BRICK VENEER = (EXIST.) (NEW)

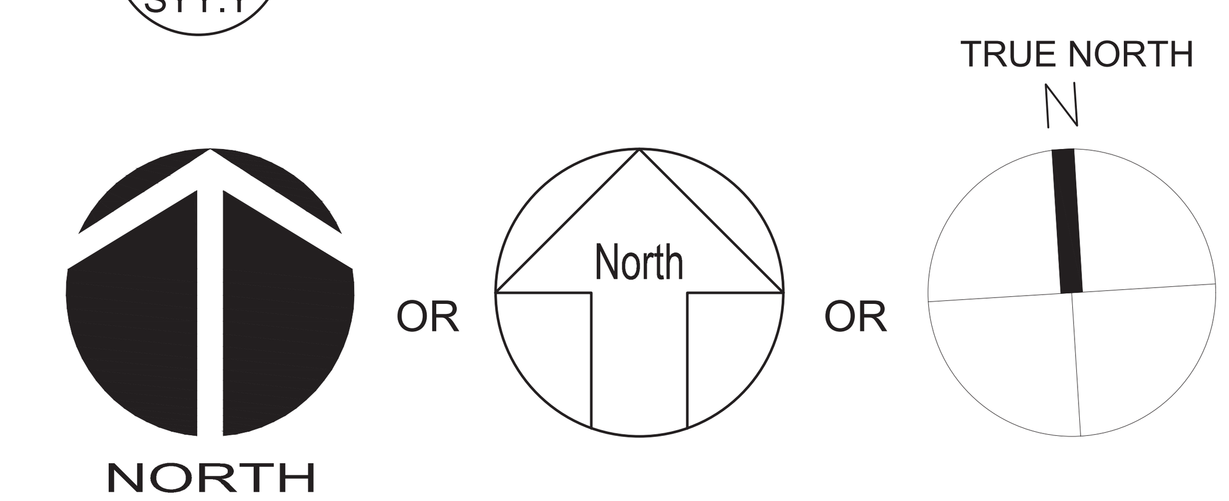
CONC. WALL, SLAB, ETC. = (EXIST.) (NEW)

GROUT = (EXIST.) (NEW)

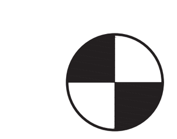
GRATING = (EXIST.) (NEW)

DETAIL OR SECTION NO./SHEET NO. REFERENCE =

PROJECT NORTH =



ELEVATION DATUM =



ELEVATION NO./SHEET NO. REFERENCE =

ELEVATIONS X'-X" = X'-X" = EQUIVALENT SITE EL VERTICAL DATUM

STEP IN FOOTING ELEVATION = $

STL. FRAMING COL./BM. MOMENT CONNECTION = ▶

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EB 0029588 www.mckimcreed.com

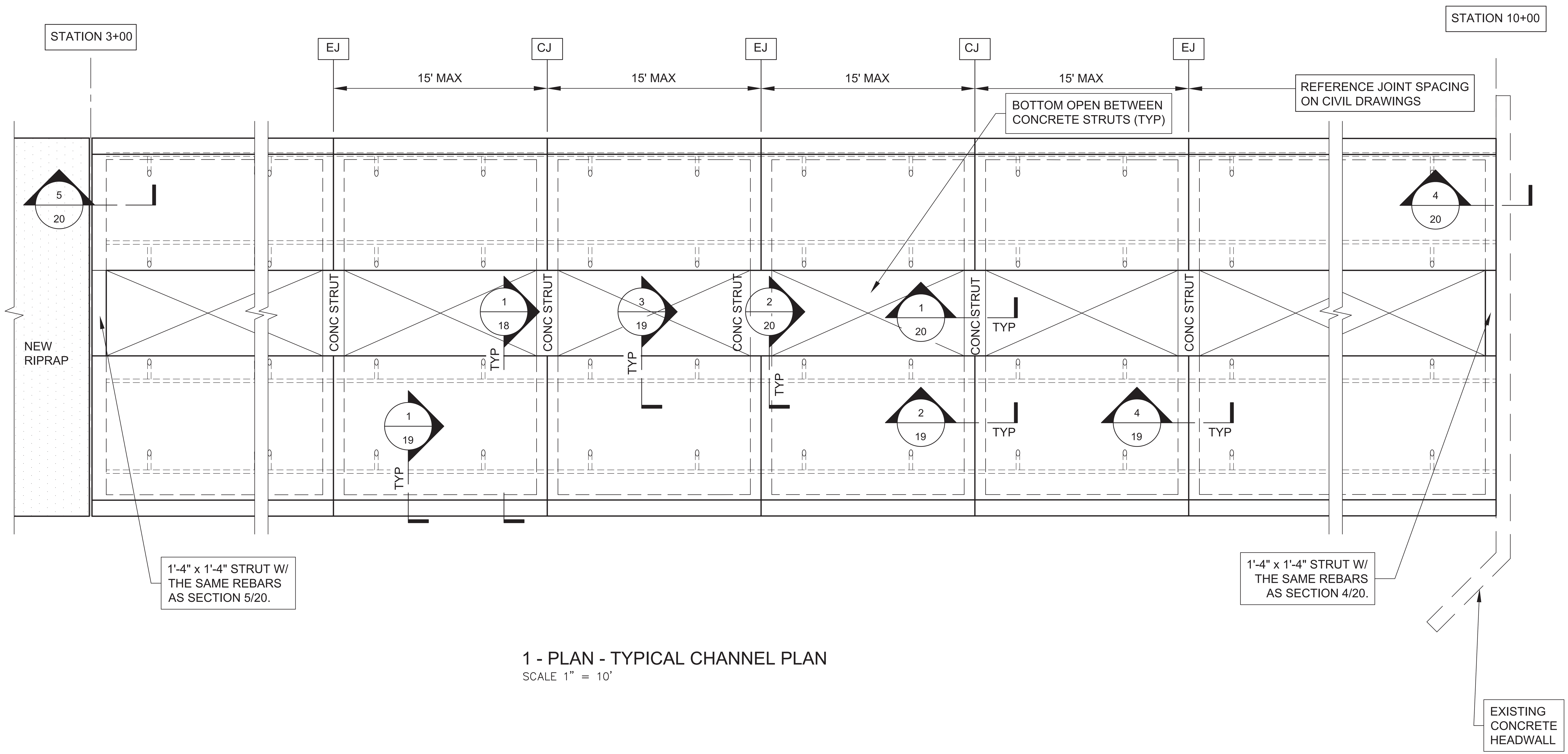
No.	DATE	REVISIONS	No.	DATE	REVISIONS

DES: AEA
DRN: MMP
CKD: WFB
DATE: 1/18/23

CITY of TAMPA
Mobility Department
Stormwater Engineering Division

43RD STREET DRAINAGE IMPROVEMENTS
STRUCTURAL
ABBREVIATIONS, DESIGN LOADS, DESIGN CRITERIA & LEGEND

SW2024-09



1 - PLAN - TYPICAL CHANNEL PLAN

SCALE 1" = 10'

I:\02848\0040\ENG\80-DRAWINGS\STRUCTURAL\S01.1-SC001-028480040.DWG 8/2/2024 8:50 AM 8/29/2023 1:57 PM TRACEY L WEBB

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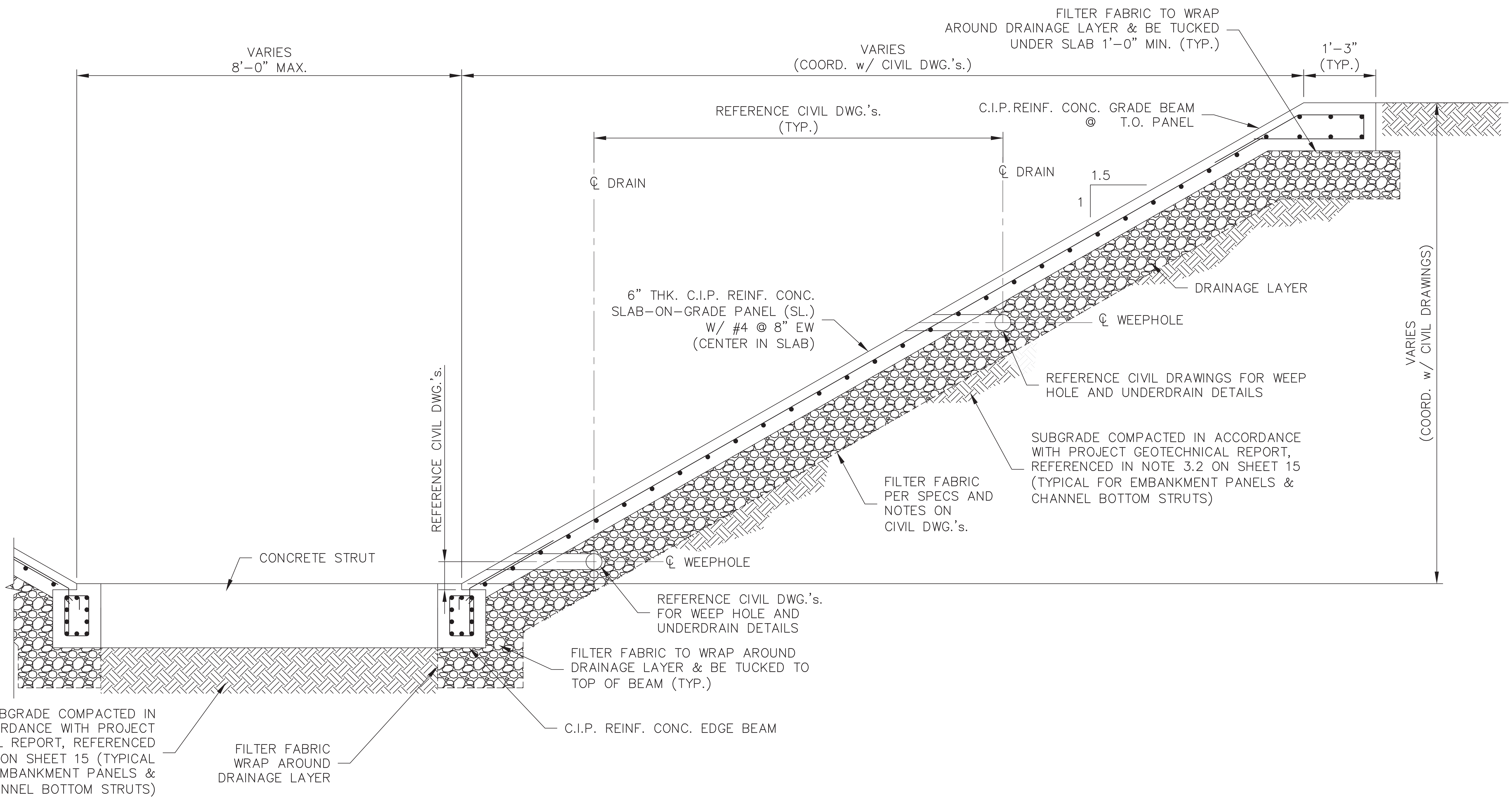
CITY of TAMPA
Mobility Department
Stormwater Engineering Division

43RD STREET DRAINAGE IMPROVEMENTS
STRUCTURAL
TYPICAL CHANNEL PLAN

NOTES:
1. REINFORCEMENT COVER FOR CONCRETE CAST AGAINST DRAINAGE LAYER SHALL BE 3". FOR ALL OTHER SURFACES COVER SHALL BE 2".



1 - SECTION - THRU CHANNEL LINING SLAB-ON-GRADE PANEL

SCALE: 3/8" = 1'–0"

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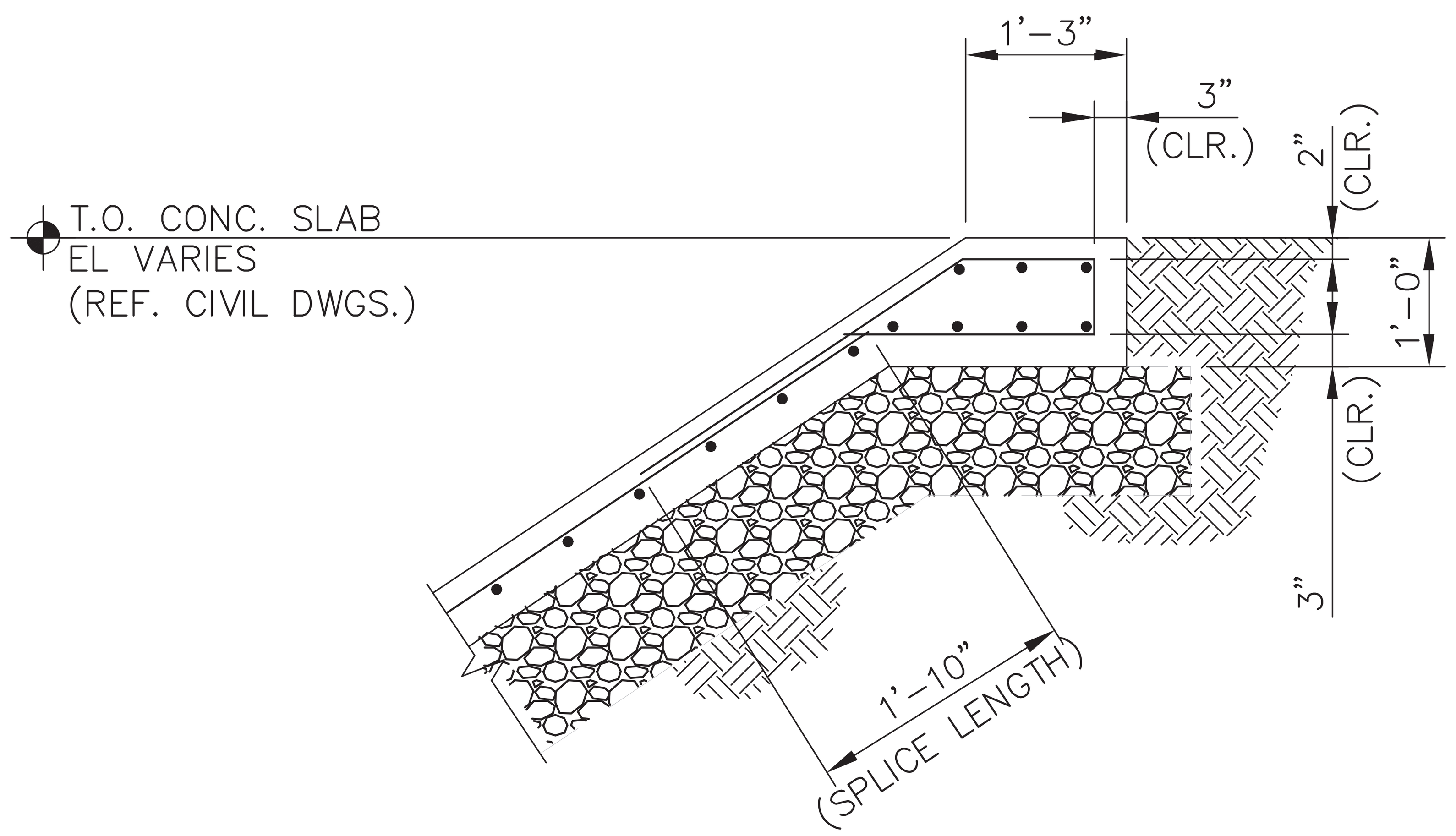
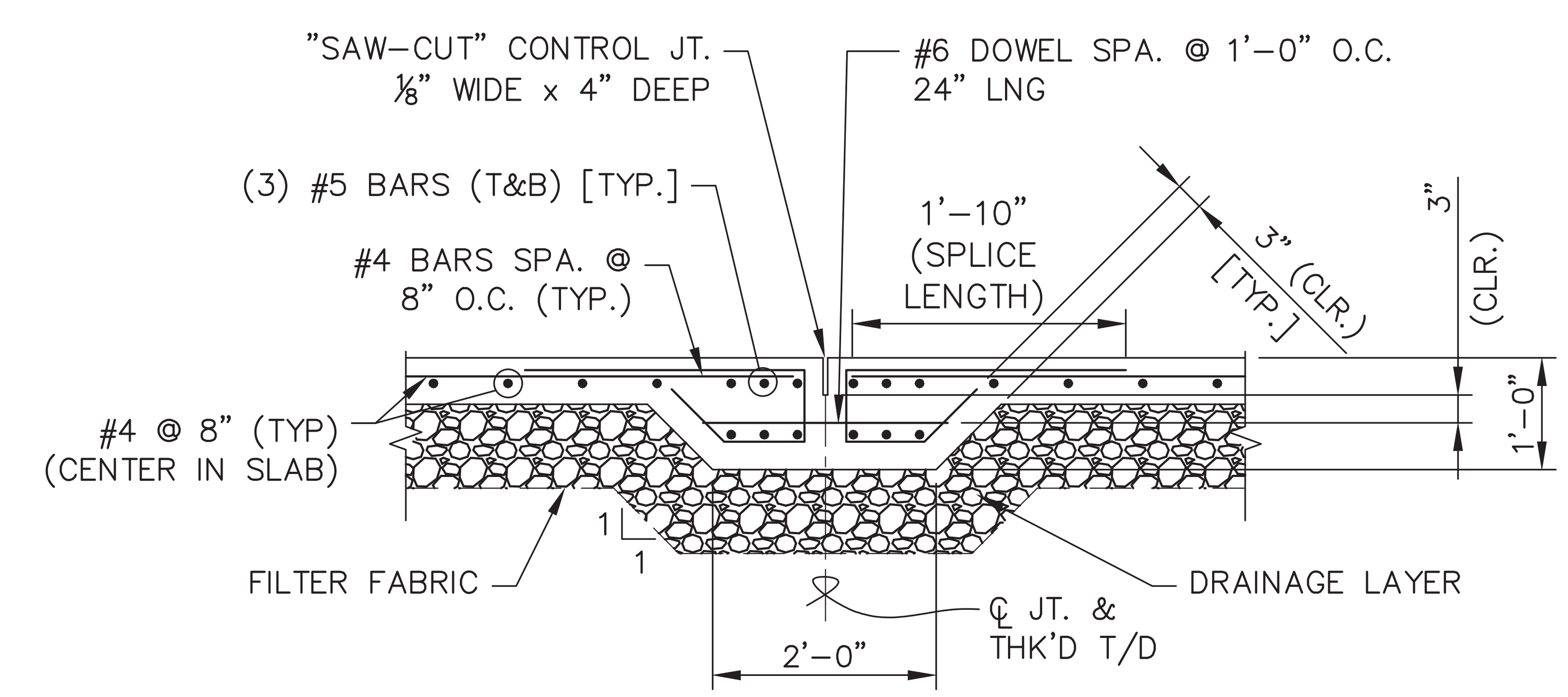
CITY of TAMPA
Mobility Department
Stormwater Engineering Division

43RD STREET DRAINAGE IMPROVEMENTS
STRUCTURAL
SECTIONS



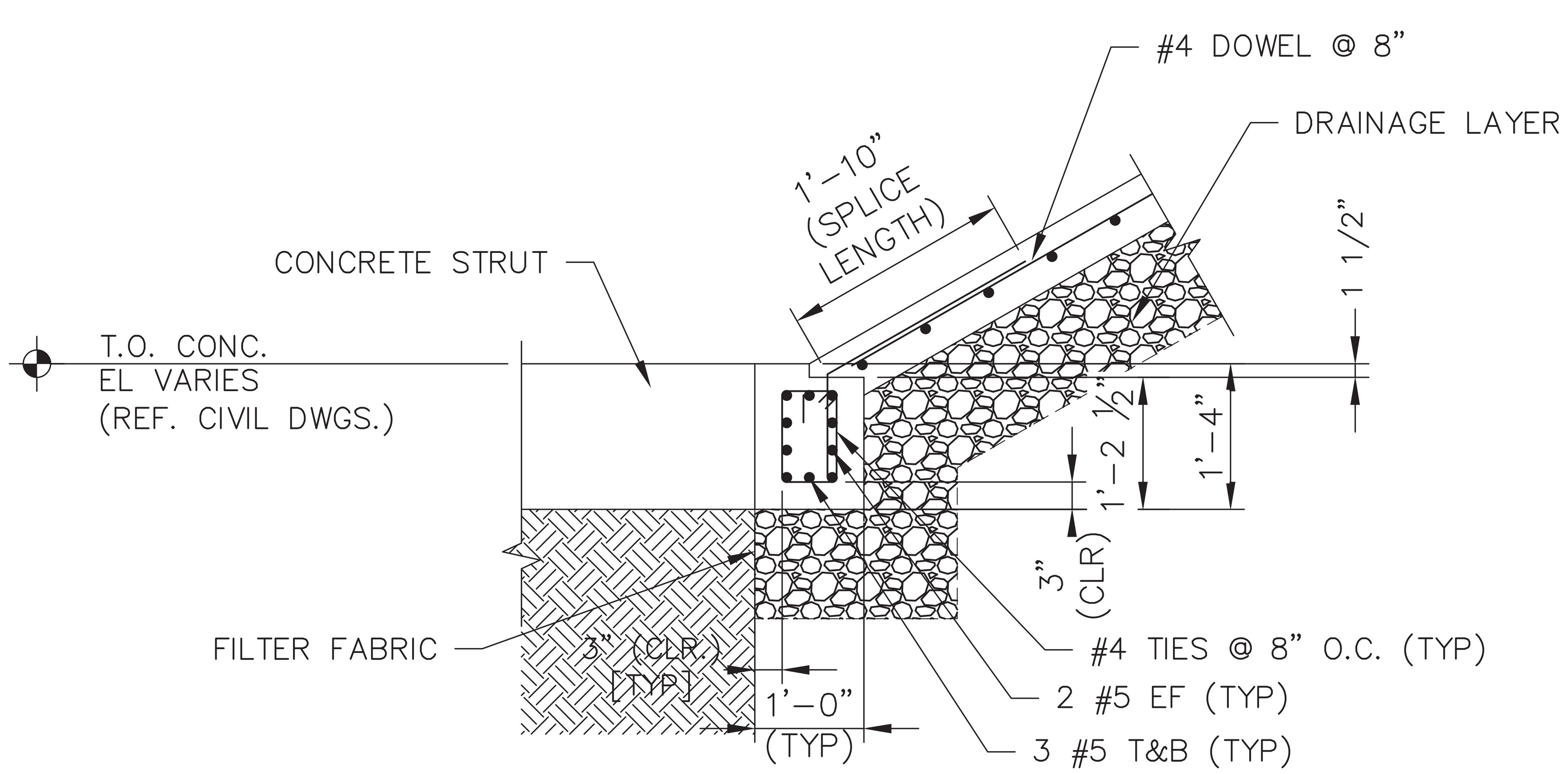
1 - DETAIL - TYP. T.O. PANEL GRADE BEAM

SCALE: 3/8" = 1'-0"



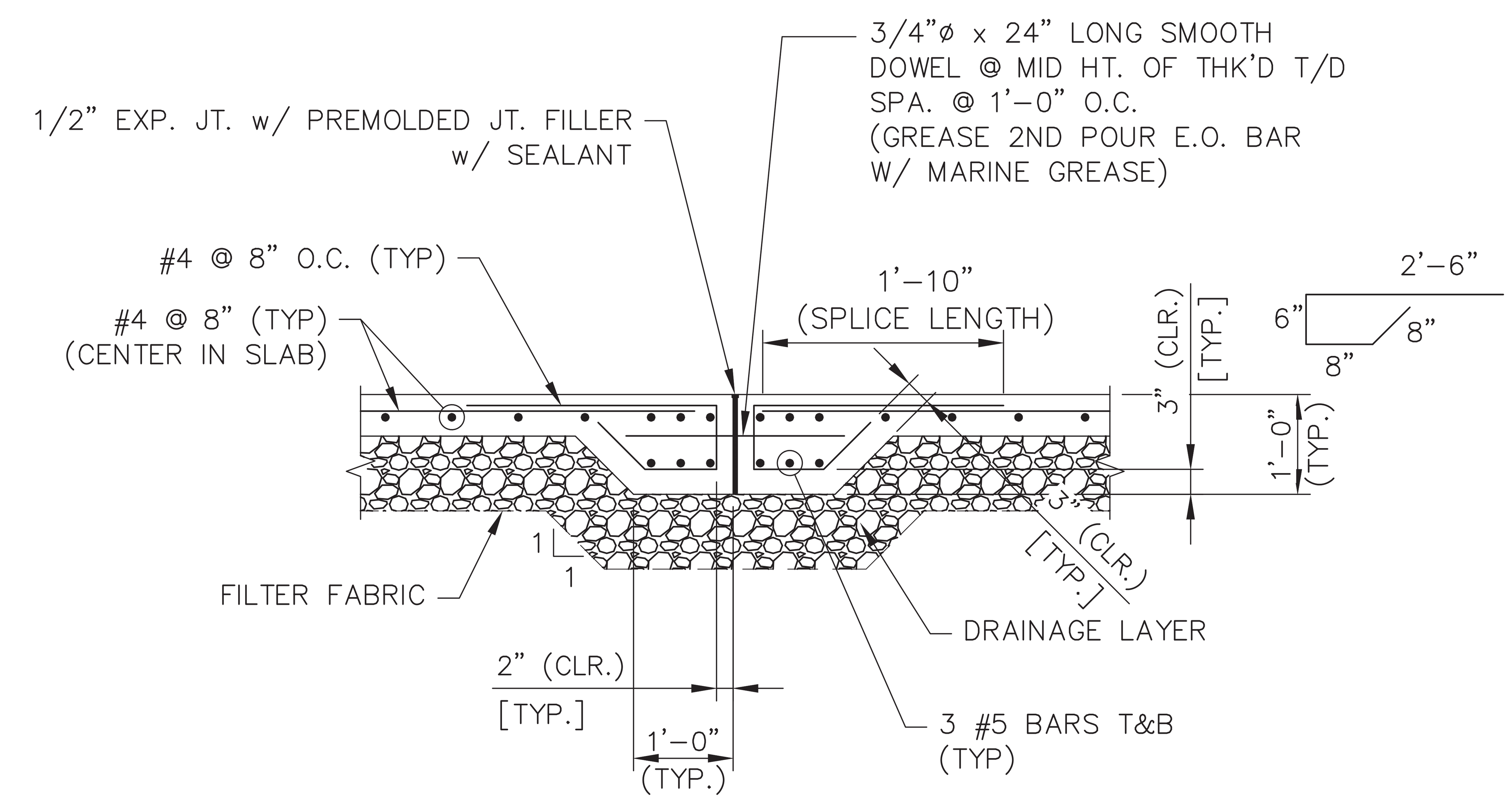
2 - SECTION - TYP. PANEL CONTROL JOINT (CJ)

SCALE: 3/8" = 1'-0"



3 - DETAIL - TYP. BOTTOM PANEL EDGE BEAM(S)

SCALE: 3/8" = 1'-0"



4 - SECTION - TYP. PANEL EXP. JOINT (EJ)

SCALE: 3/8" = 1'-0"

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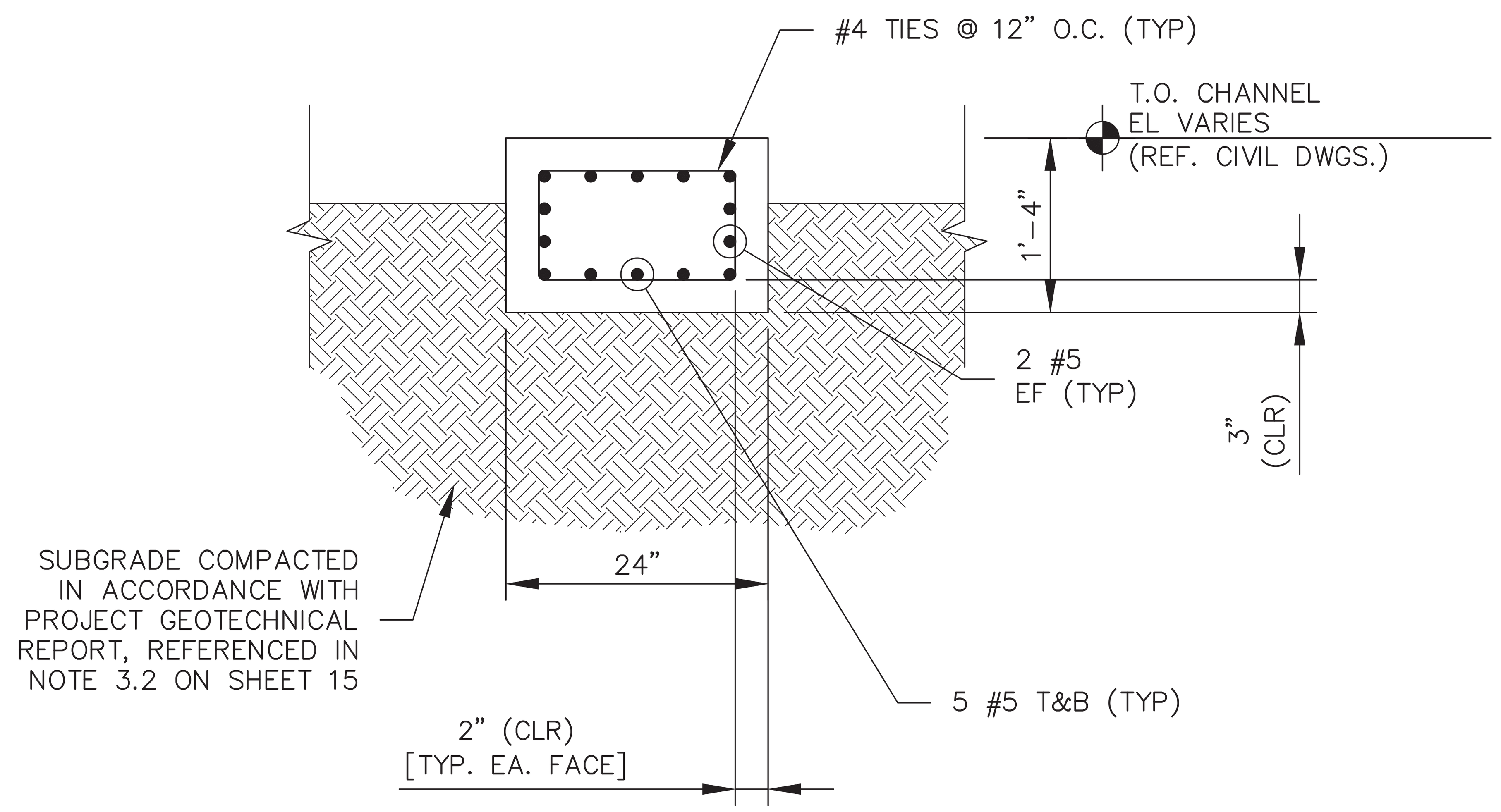
CITY of TAMPA
Mobility Department
Stormwater Engineering Division

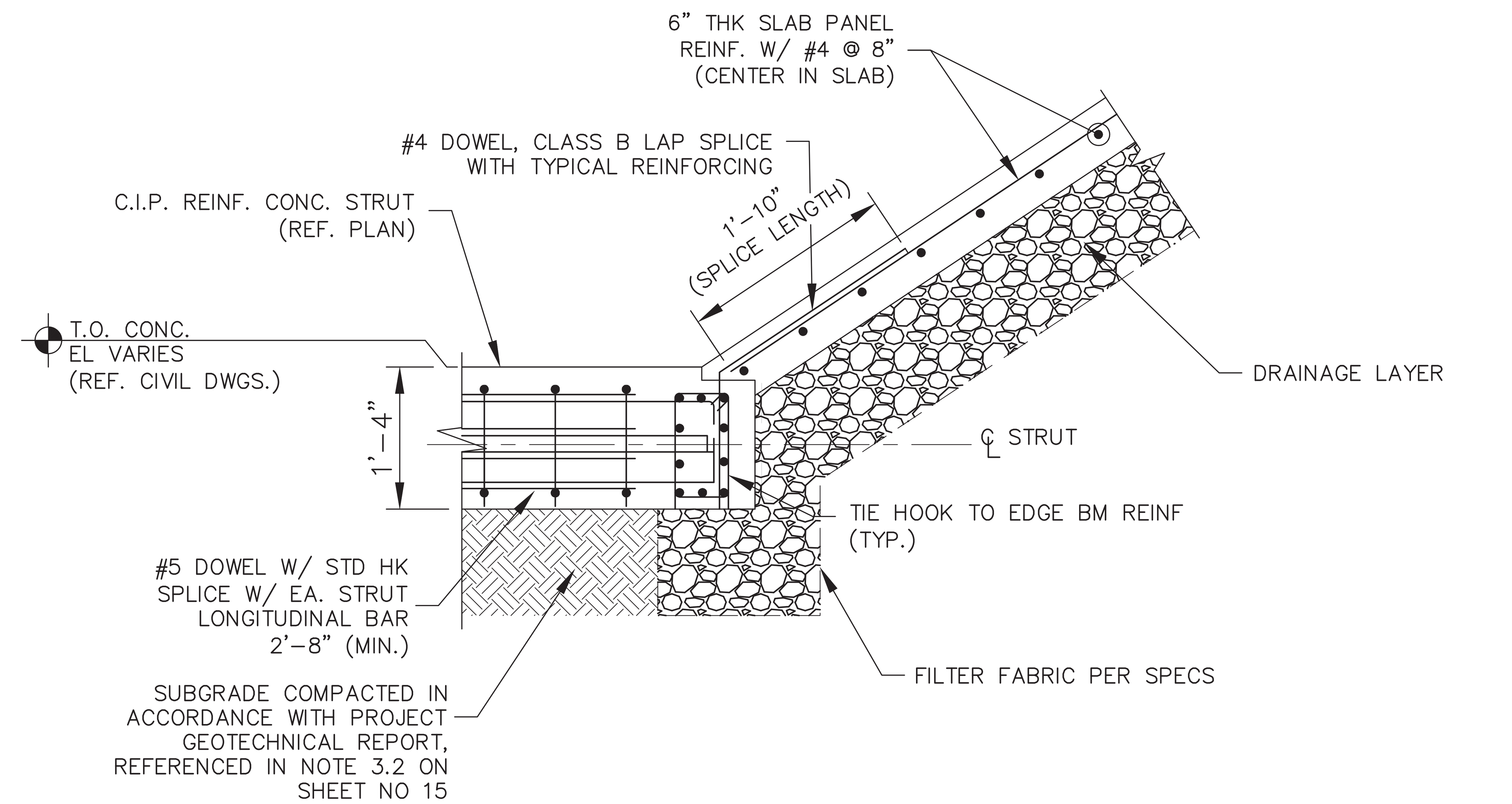
43RD STREET DRAINAGE IMPROVEMENTS
STRUCTURAL
SECTIONS & DETAILS I

SW2024-09



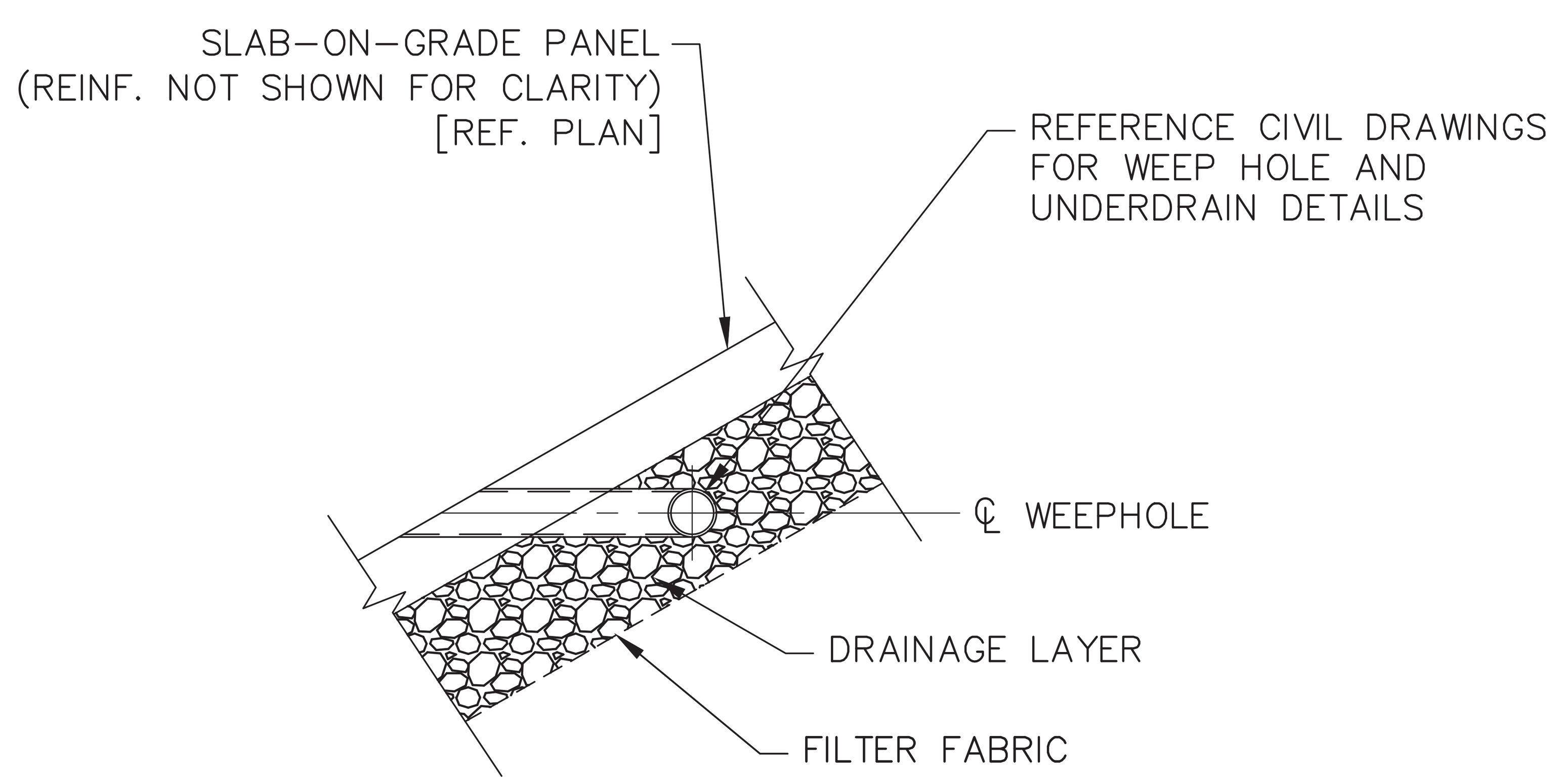
1 - STRUT @ CHANNEL BASE

SCALE: 1/2" = 1'-0"



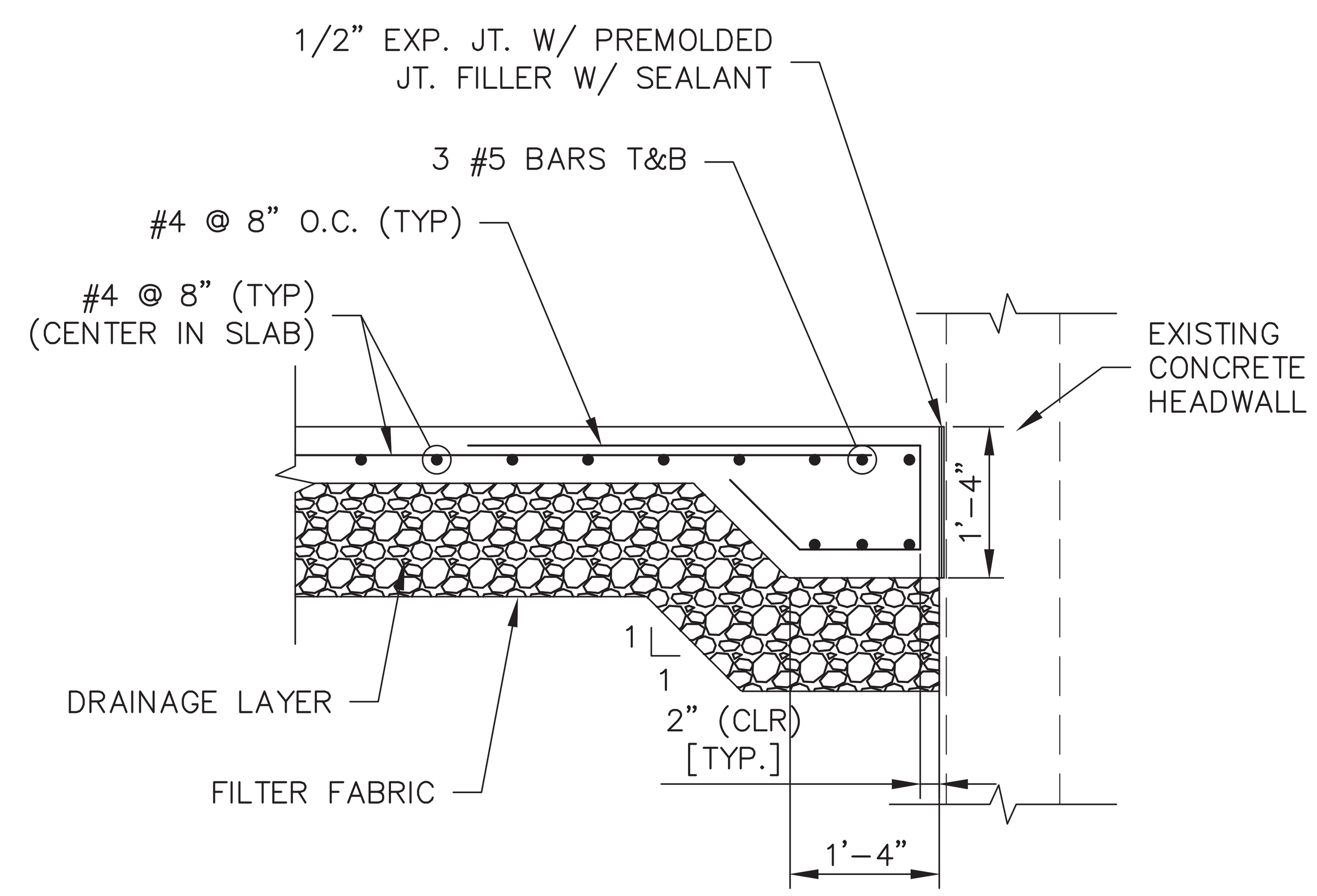
2 - SECTION - PANEL EDGE BM. STRUT CONN.

SCALE: 1/2" = 1'-0"



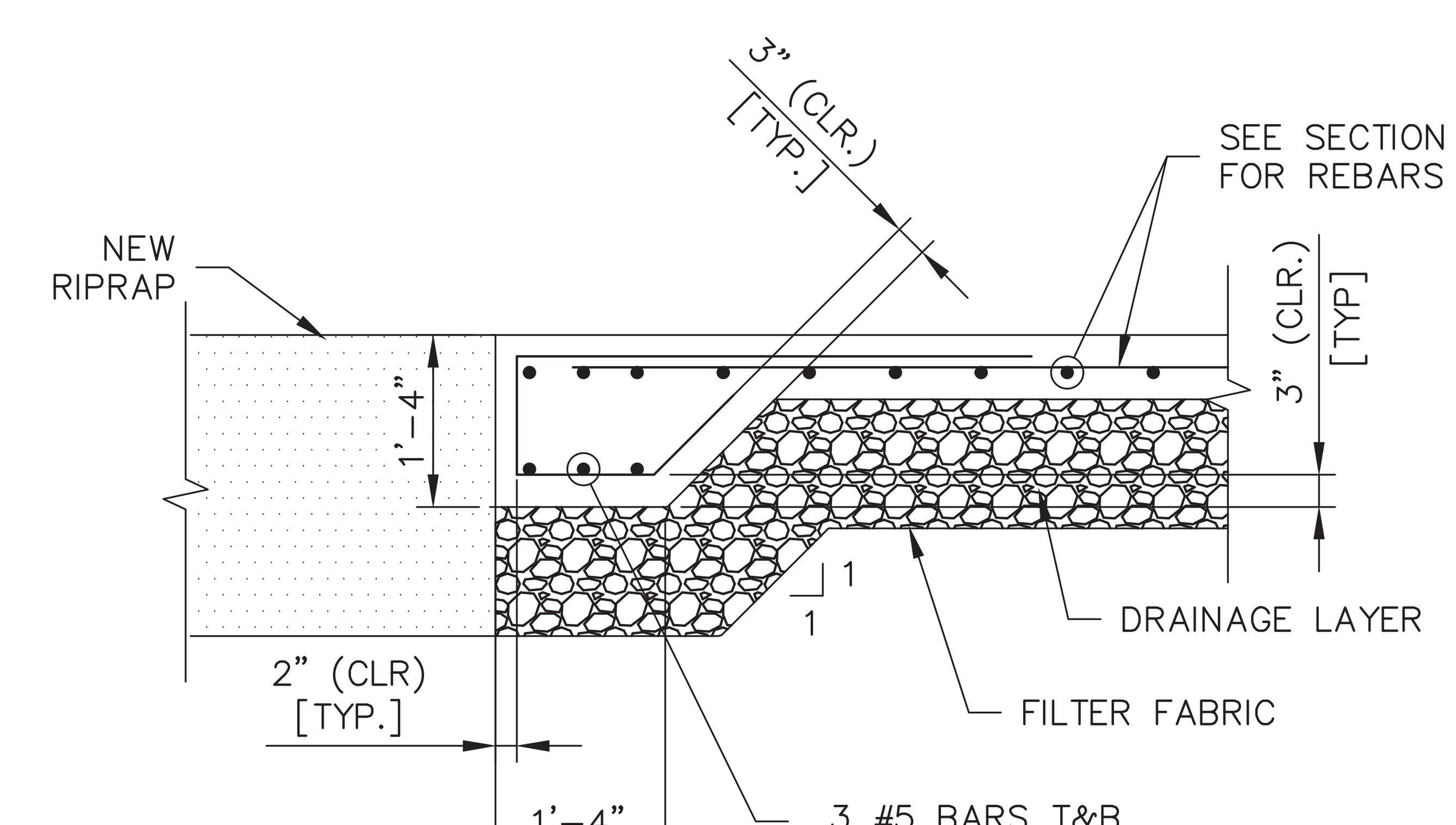
3 - DETAIL - UNDERDRAIN / WEEPHOLE INFO

SCALE: 3/8" = 1'-0"



4 - DETAIL - SECTION-PANEL EDGE TURNDOWN

SCALE: 3/8" = 1'-0"



5 - DETAIL - SECTION-PANEL EDGE TURNDOWN

SCALE: 3/8" = 1'-0"

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CITY of TAMPA
Mobility Department
Stormwater Engineering Division

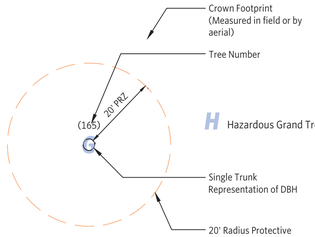
43RD STREET DRAINAGE IMPROVEMENTS
STRUCTURAL
SECTIONS & DETAILS II

SHEET 20 of 22

SW2024-09

TREE INVENTORY LEGEND

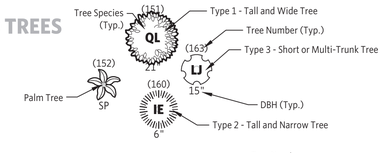
GRAND TREES



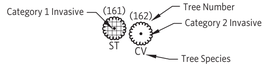
Note:
Trees to be removed are marked with a RED x mark.

Offsite removals are marked with a PURPLE x mark.

PROTECTED TREES



EXEMPT TREES



DATE OF ASSESSMENT: October 10th, 2022.

INVENTORY ASSIGNMENT NOTES

The objectives of the assignment were limited to the following components:
1. *to conduct a tree inventory to identify all the on-site trees,*
2. *to identify any grand trees as defined by City of Tampa LDC Sec. 27-43, Definitions,*
3. *to rectify any tree identification errors shown on the survey, if applicable,*
4. *to establish natural resource permitting requirements associated with the inventory.*

A field investigation was conducted on the date of assessment. Each investigation was limited to the visual inspection of the on-site trees, their surrounding context, and a review of a tree survey prepared by a third-party surveyor. An arborist trainee assisted me in collecting tree dimensional data.

Tree survey data was imported to a data collection field tablet. The tablet was used to collect observations and photographs as needed. No physical notes were taken. If individual trees not captured on the survey were found, they were added to the digital record by generally located each tree using a Dual XGPS160 SkyPro GPS unit combined with aerial photograph interpretation.

Upon arrival to the site, I employed the following field review techniques to gather data:
- *Trunk diameter at breast height (dbh) or 54 inches above the ground, taken with a diameter tape. For trees with more than one trunk (stem) originating at or near ground level (less than 36" high), the dbh of each stem was measured at 54" and the cross-sectional area of each stem was summed to derive a equivalent single trunk representative dbh.*
- *Photographs, taken with a field tablet or a Canon EOS 6D Mark II camera.*

When advanced assessment was applicable, the following simple tools and review techniques were used:
- *Crown spread measurement, taken with a mechanical wheel from the centroid of the trunk. When ground conditions or thick vegetation precluded use of the wheel, a tape measure or recent aerial photograph was used to measure spread.*
- *Height to base of limb, taken with a 35-foot Tel-O-Pole II measuring stick, when applicable.*
- *Tree height, taken with a laser hypsometer using three averaged points from one position. When the crown restricted measurement, an average height of 45 was used for tree point calculations.*
- *Approximation of extent of decay by sounding, listening for tones that may indicate certain conditions, taken with a soft-face mallet.*
- *Approximation of extent of decay by probing, taken with a 48" steel soil probe.*

When overgrowth or obstructions restricted the collection of measurements, the applicable data element was omitted or approximated. No soil, water, or tissue tests were conducted unless otherwise noted. Assessments were a one-sided ground-based and generally followed ANSI A300 (Part 9)-2017 guidance. However, this assessment is not intended to be used as a tree risk assessment except as described in the City of Tampa Land Development Code Section 27-284.1.1 ("Matheny and Clark" hazard rating format for Grand Trees only). Within this permitting context, the time frame for the assessment was two years.

When typically single-trunked trees are fused at or near the ground, a pith test is performed to determine whether the tree grouping is separate trees or a single tree. The pith test is based on a technique discussed in the American Forests Champion Trees Measuring Guidelines Handbook (2019).

To tailor the inventory to jurisdictional requirements, data elements collected varied by tree classification:
- *Grand Trees: species, dbh, condition rating, crown spread, and "Risk Evaluation" as described in the City of Tampa Land Development Code Section 27-284.1.1 (foreseeable targets may not be known at the time of assessment)*
  - *Level 2 Basic Tree Risk Assessments were not performed unless specifically noted.*
- *Protected and specimen trees (not palms): species, dbh, condition rating, and Level 1: Limited Visual Tree Risk Assessment (foreseeable targets may not be known at the time of assessment).*
- *Palms: species and overall condition rating.*
- *Invasive trees: species only.*

ASSUMPTIONS AND LIMITING CONDITIONS

1. *Any legal description provided to the consultant is assumed to be correct. Any titles and ownerships to any property are assumed to be good and marketable. No responsibility is assumed for matters legal in character. Any and all property is appraised or evaluated as though free and clear, under responsible ownership and competent management.*
2. *Care has been taken to obtain all information from reliable sources. All data has been verified insofar as possible; however, the consultant can neither guarantee nor be responsible for the accuracy of information provided by others.*
3. *Unless expressed otherwise: (1) information contained in this inventory covers only those items that were examined and reflects the condition of those items at the time of inspection; and (2) the inspection is limited to visual examination of accessible items without dissection, excavation, probing, or coring. There is no warranty or guarantee, expressed or implied, that problems or deficiencies of the plants or property in question may not arise in the future.*
4. *Not all defects or conditions that predispose a tree or tree part to failure are detectable, nor are all failures predictable.*
5. *This inventory is not intended to establish a risk rating for every inventoried tree or tree part, evaluate risk mitigation options or recommendations, provide recommendations for additional assessments, determine residual risk following mitigation, or provide recommendations for monitoring or follow-up.*

CERTIFICATION OF PERFORMANCE

I, Richard Peterika, certify that:

- *I have personally inspected the trees and the property referred to in this inventory and have stated my findings accurately. The extent of the inventory is stated in the Inventory Assignment Notes.*
- *I have no current or prospective interest in the vegetation or the property that is the subject of this inventory and have no personal interest or bias with respect to the parties involved.*
- *The analysis, opinions, and conclusions stated herein are my own and are based on current scientific procedures and facts.*
- *My analysis, opinions, and conclusions were developed and this inventory has been prepared according to commonly accepted arboricultural practices.*
- *No one provided significant professional assistance to me, except as indicated within the assignment.*
- *My compensation is not contingent upon the reporting of a predetermined conclusion that favors the cause of the client or any other party nor upon the results of the assessment, the attainment of stipulated results, or the occurrence of any subsequent events.*

I further certify that I am a member in good standing of the American Society of Consulting Arborists and the International Society of Arboriculture. I am licensed by the Florida Department of Business and Professional Regulation as a Landscape Architect. I have been involved in the fields of Landscape Architecture and Arboriculture in a full-time capacity since 2009.

October 27, 2023

This document has been digitally signed and sealed by: RICHARD F. PETERIKA
Printed copies of this document are not considered signed and sealed. The signature must be verified on the electronic documents.
Dark Moss LLC, 308 E 7th Ave Tampa, Florida 33602
Richard Peterika, ASLA, AICP, RCA #641, ISA-FL #5893B

RICHARD PETERIKA
ASLA, AICP, RCA #641, ISA-FL #5893B
DARK MOSS LLC
308 E 7TH AVE
TAMPA, FL 33602
813-532-3440

INVENTORY METRICS

GRAND TREES REMOVED?	RETENTION % REQUIRED	FAIR OR BETTER % PRESERVED
NO	0% (not applicable)	50% (1) / (2.)
TOTAL ONSITE TREES	**ONSITE JURISDICTIONAL TREES**	**WEIGHTED % PRESERVED**
3	2	60% (2.7) / (4.5)

JURISDICTIONAL TREES BY CR	FAIR OR BETTER (ABC) TREES	POOR OR WORSE (D-F) TREES
SUBTOTAL	2	0
PALMS	0 *not included in retention %*	0
TYPE 1, 2, & 3 TREES	2	0 *not included in retention %*

ABC NON-PALMS BY SIZE CLASS	Preserved	[--REMOVED--]
NON-HAZARDOUS GRANDS	0	0 *non-hazardous grand tree removals require a variance or waiver*
HAZARDOUS GRAND TREES	0	0
PROTECTED & SPECIMEN	1	1
SUBTOTAL	1	1

OFFSITE TREES REMOVED	MOST ABUNDANT ONSITE SPECIES (% OF POPULATION)
0 *included in mitigation, but not retention %*	67% *Quercus virginiana (2)*
	33% *Leucaena leucocephala (1)*
	100% *Grand Total (3)*

CONDITION RATING COLOR KEY

Color representations of Condition Rating are provided as a visual aid. Preservation or removal suggestions are: 1) not recommendations, 2) apply only to onsite trees, and 3) are based on an opinion of preservation suitability near development. Circles are colored by the following convention:

- *Dark Green: Excellent (suitable for preservation)*
- *Light Green: Good (suitable for preservation)*
- *White: Fair (somewhat suitable for preservation)*
- *Light Tan: Poor (removal may be warranted unless the consequence of failure is "negligible" or "minor")*
- *Brown: Very Poor (removal is likely warranted unless the consequence of failure is "negligible")*
- *Lavender: Category 1 Invasive (removal is usually required per AHJ) or Category 2 Invasive (consider removing)*

For grand tree mitigation, the condition ratings are converted to percentages based on the TABLE 284.4.1-A: TREE RETENTION-MITIGATION EQUIVALENCY TABLES BY TREE TYPE, Footnote 3.

RATING NOTES:

1. **DBH and Permit DBH:**
   The species or structure of a tree can be incompatible with a municipal or jurisdictional ordinance. DBH is the arborist's field adjusted dbh determination, based on DBH measurement guidelines provided in the Guide for Plant Appraisal, 10th Edition (2018). Permit DBH is a translation of the field adjusted dbh to a value relevant to applicable permitting requirements. Typically, multi-stem trees are resolved into single-stem equivalents using trunk formula method. The Permit DBH for small multi-stem species may be visually estimated.
2. **H-S-F = CR**
   "Health, Structure, and Form" to Condition Rating:
   A composite, weighted assessment of health, structure, and form. Adapted from the Guide for Plant Appraisal, 10th Edition, second printing (2019)"10th Edition"). Values range from: A-Excellent, B-Good, C-Fair, D-Poor, F-Very Poor or Dead.
   2.1. "Y" is used when no value is applicable.
3. **Excluded or Reserved**
   Tree survey data quality and utility can vary widely between different surveyors. The initial inventory data involves data transformation to isolate tree data and prepare it for field data collector import. Occasionally extra data points are imported. During the assessment, these points are field verified and either assessed or excluded. The excluded values are preserved in the table to provide consecutive numbering. Reasons to exclude a data point include:
   3.1. another type of survey point, such as a ground shot or irrigation valve;
   3.2. a surveyed tree that did not exist at the time of assessment;
   3.3. a tree part, such as a canopy extent measurement;
   3.4. a tree that is not recognized or protected in the jurisdiction due to size;
   3.5. or by the arborist's professional opinion.
4. **Disposition**
   Tree disposition is the decision to retain or remove the tree based on a the arborist's evaluation of the cumulative impact of the proposed construction activity. This decision is based on the tree protection provided, general knowledge of the species, information on the tree's age and condition, and other relevant factors that may be applicable.

TREE EQUIVALENCY TABLE

1: Tall and Wide

PROTECTED TREES	# of Trees	Multiplier	Credits
Trees Retained			
5" to 10"	0	0	0
11" to 20"	0	0	0
21" to 25"	1	0	0
26" to <32"	0	0	0
Subtotal	**1**		**0**
Trees Removed			
5" to 10"	0	1	0
11" to 20"	1	2	2
21" to 25"	0	3	0
26" to <32"	0	4	0
Subtotal	**1**		**2**

(0) + (2) + (0) + (0) = 2

GRAND TREES	# of Trees	Credits*
Trees Retained		
Grand Trees	**0**	
		0
Trees Removed		
Grand Trees	**0**	
		0.00

Total Mitigation Trees Required: TYPE 1 = 2

2: Tall and Narrow

PROTECTED TREES	# of Trees	Multiplier	Credits
Trees Retained			
5" to 17"	0	0	0
18" to 29"	0	0	0
30" to <32"	0	0	0
Subtotal	**0**		**0**
Trees Removed			
5" to 17"	0	1	0
18" to 29"	0	2	0
30" to <32"	0	3	0
Subtotal	**0**		**0**

(0) + (0) + (0) + (0) = 0

GRAND TREES	# of Trees	Credits*
Trees Retained		
Grand Trees	**0**	
		0.00
Trees Removed		
Grand Trees	**0**	
		0.00

Total Mitigation Trees Required: TYPE 2 = 0

3: Short & Wide/Multi-Stem

PROTECTED TREES	# of Trees	Multiplier	Credits
Trees Retained			
5" to 7"	0	0	0
8" to 17"	0	0	0
18" to 29"	0	0	0
30" to <32"	0	0	0
Subtotal	**0**		**0**
Trees Removed			
5" to 7"	0	1	0
8" to 17"	0	2	0
18" to 29"	0	3	0
30" to <32"	0	4	0
Subtotal	**0**		**0**

(0) + (0) + (0) + (0) = 0

GRAND TREES	# of Trees	Credits*
Trees Retained		
Grand Trees	**0**	
		0.00
Trees Removed		
Grand Trees	**0**	
		0.00

Total Mitigation Trees Required: TYPE 3 = 0

Palms

PROTECTED TREES	# of Trees	Multiplier	Credits
Trees Retained			
Palms with 6' CT			
Any dbh	0	0	0
Subtotal	**0**		**0**
Trees Removed			
Palms with 6' CT			
Any dbh	0	1	0
Subtotal	**0**		**0**

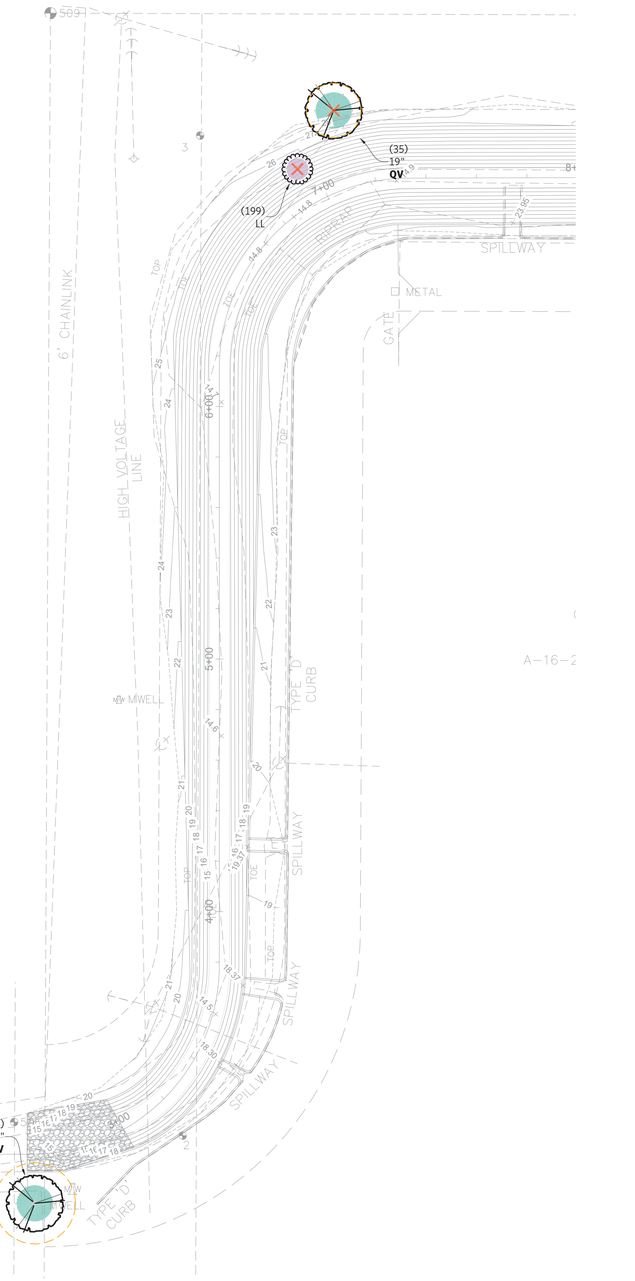
(0) + (0) = 0

Total Mitigation Trees Required: PALMS = 0

* Credits or Debits = Equivalent quantity of 2.5" Cal Trees (or Palms) Required

TREE DISPOSITION SUMMARY TABLE

TREE #	SYM	*Botanical Name*	Common Name	is grand?	Permit DBH	H-S-F= CR	HAZ	CLR	SR	Disposition
34	QV	*Quercus virginiana*	Southern Live Oak		25	(B-C-B)	B-4	B	90	Preserved
35	QV	*Quercus virginiana*	Southern Live Oak		19	(C-B-B)	B-5	B	90	[--REMOVED--]
200	SP	*Sabal palmetto*	Cabbage Palm			(-B-B)	B-3	B	90	Offsite
201	SP	*Sabal palmetto*	Cabbage Palm			(-B-B)	B-3	B	90	Offsite
202	SP	*Sabal palmetto*	Cabbage Palm			(-B-)	B-3	B	90	Offsite
199	LL	*Leucaena leucocephala*	White Lead Tree			(--)	-	Y	0	[--REMOVED--]



No.	DATE	REVISIONS	No.	DATE	REVISIONS
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DES:
DRN:
CKD:
DATE:

CITY of TAMPA
Mobility Department
Stormwater Engineering Division

43RD STREET DRAINAGE IMPROVEMENTS
TREE INVENTORY AND DISPOSITION PLAN

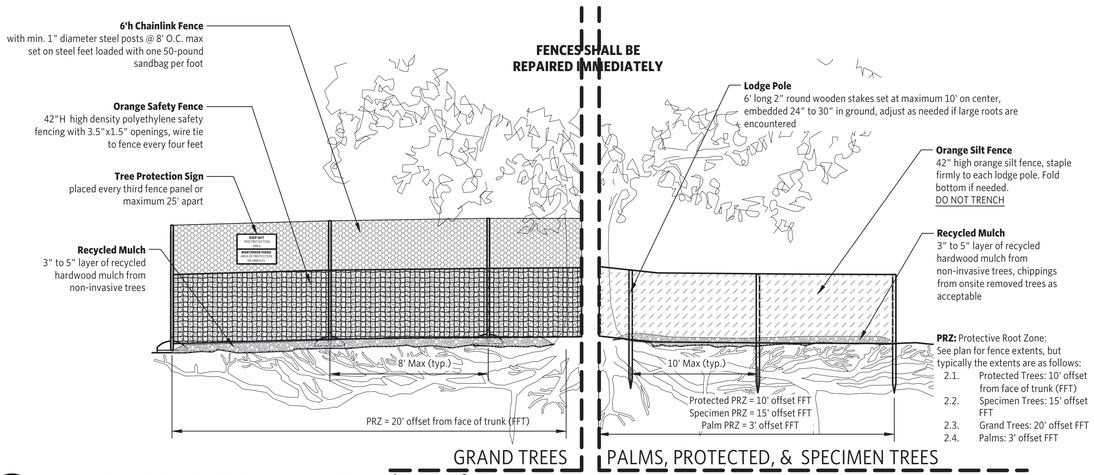
SHEET 21 OF 22

X:\PROJECTS\C-122a - TAMPA DITCH REHAB - 1\ACAD\01-INVENTORY\C-122A INVENTORY.DWG 10/27/2023 11:32 AM 10/27/2023 11:32 AM BRIGG LEVIN

Brigg Levin 10/27/2023 11:32:48 AM X:\PROJECTS\C-122a - Tampa Ditch Rehab - 1\ACAD\01-INVENTORY\C-122a inventory.dwg

TREE PROTECTION NOTES

1. *Minimum protection standards shall be met for all protected trees, prior to commencement of any construction activities on a development site and/or in public or private right-of-way, in accordance with the tree protection graphics below.*
2. *No changes to the predevelopment conditions within the approved protective root zone during the construction process.*
3. *Protective barricades may be removed only to prepare the development site for final landscaping activities. During this activity only nonmechanical techniques may occur within the designated protective root zone. No alteration(s), of any kind, shall be made to any part of the tree (roots, trunk, canopy/crown), other than those that are approved by the Natural Resources Coordinator or designee, as part of the related permit.*
4. *No parking or storing of vehicles, equipment, or materials is permitted within the minimum protective area, at any time.*
5. *No site clearing or grading is permitted within the minimum protective area, other than those changes that are approved by the Natural Resources Coordinator or designee, as part of the related permit.*
6. *In accordance with Section 27-328, Contractor shall adhere to the protection and pruning standards, as set forth in chapter 27-284 and ANSI standards, for protected, specimen, and grand tree species, located in the public rights-of-way and/or on private property. A provider shall not prune, remove, or irreversibly damage any protected or grand tree, as defined in chapter 27-284 of this Code, unless such activity is authorized by a permit issued by the city.*
7. *All root pruning shall be overseen and approved by an arborist, prior to the pre-construction site inspection.*
8. *All roots must be severed clean at the protective root zone of protected and grand trees to prevent root damage.*
9. *Root pruning must be performed using equipment that is specifically design for root pruning, such as hand pruners, loppers, hand saws, reciprocating saws, oscillating saws, or small chain saws or mechanical root cutting equipment (i.e. Vermeer).*
10. *Root pruning must be performed prior to any construction activities and inspected before requesting inspections. Contact Brian Knox, 813-274-3187.*



00 COMPOSITE TREE PROTECTION DETAIL (TAMPA)

1/4" = 1'-0"

DETAIL-FILE

RICHARD PETERIKA
ASLA, AICP, RCA #641, ISA-FL #5893B
DARK MOSS LLC
308 E 7TH AVE
TAMPA, FL 33602
813-532-3440

No.	DATE	REVISIONS	No.	DATE	REVISIONS
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DES:
DRN:
CKD:
DATE:

CITY of TAMPA
Mobility Department
Stormwater Engineering Division

43RD STREET DRAINAGE IMPROVEMENTS

TREE PROTECTION DETAILS

SHEET 22 of 22