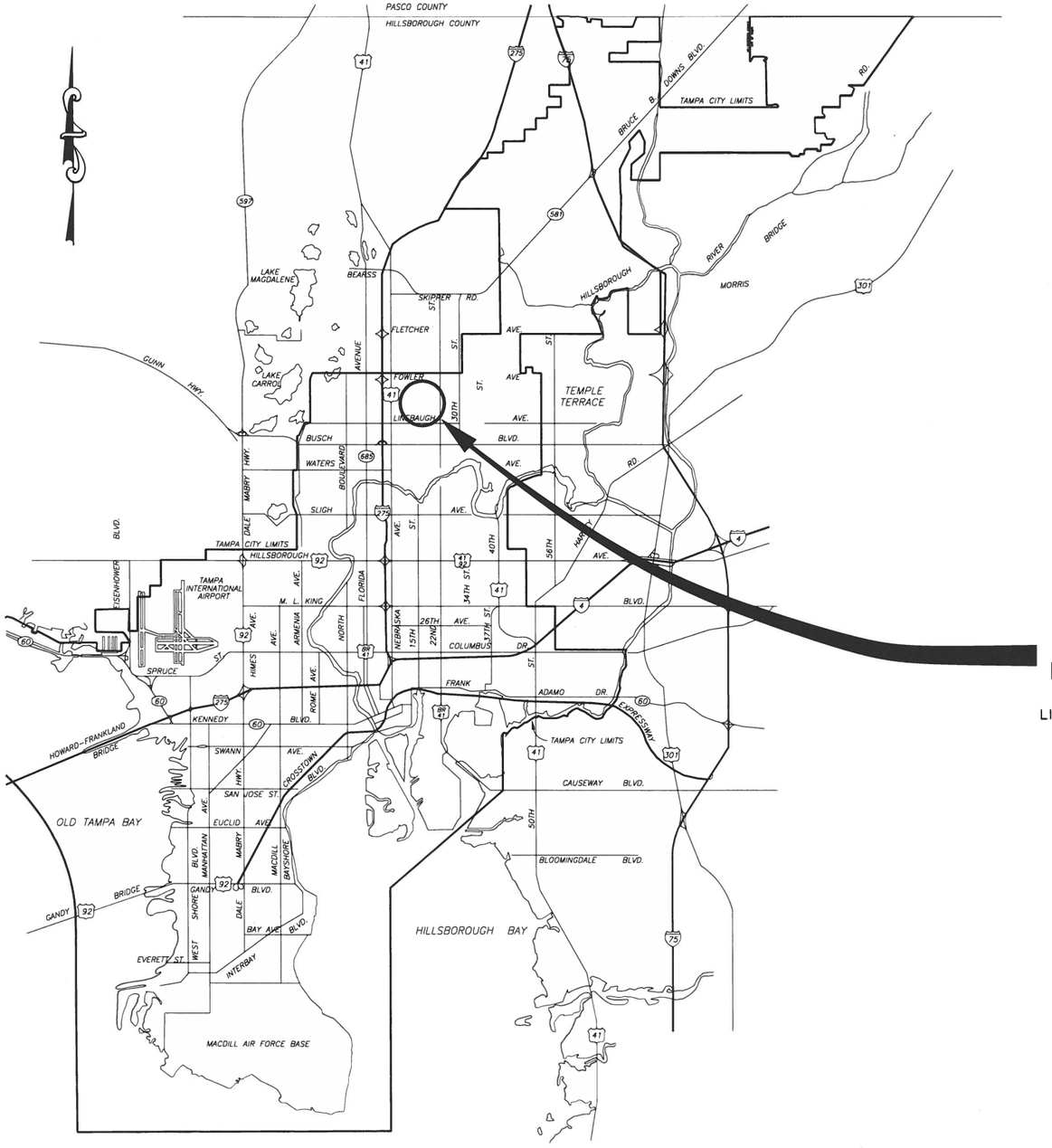
SW 2023-06

CITY of TAMPA



PROJECT LOCATION
17TH STREET
LINEBAUGH AVE. TO
ANNONA AVE.

Mobility Department
Stormwater Engineering Division

PLANS FOR

ANNONA AVE. & 17th STREET DRAINAGE IMPROVEMENTS

Contract No.
25-C-00041

PLOT DATE: THURSDAY, MAY 9, 2024 PLOT

RICHARD ALFRED HOELL P.E. #41026
CHIEF ENGINEER

DES:	C.S.
DRN:	BB
CKD:	JDM
DATE:	3/14/2024

No.	DATE	REVISIONS
3		
2		
1		

CITY of TAMPA
Mobility Department
Stormwater Engineering Division

COVER SHEET

SHEET 1 OF 14

SW 2023-06

LEGEND

	UP to 18" & SMALLER	24" & LARGER
EX STORMWATER		
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		
WATER METER		
ELECTRICAL MANHOLE or VAULT		
TELEPHONE MANHOLE or VAULT		
TRAFFIC BOX or VAULT		
OTHER FEATURES		
RIGHT of WAY LINE	R/W	
EDGE of PAVEMENT		
BUILDING LIMIT	1236	
PROPERTY OWNERSHIP	Z	
FENCE		
CONIFER	6"	
PALM	8"	
OAK	10"	
OTHER	12"	
SHRUB		
HEDGE		
RAILROAD TRACKS		
IRON PIPE		
CONCRETE MONUMENT		
MAIL BOX		

ABBREVIATIONS

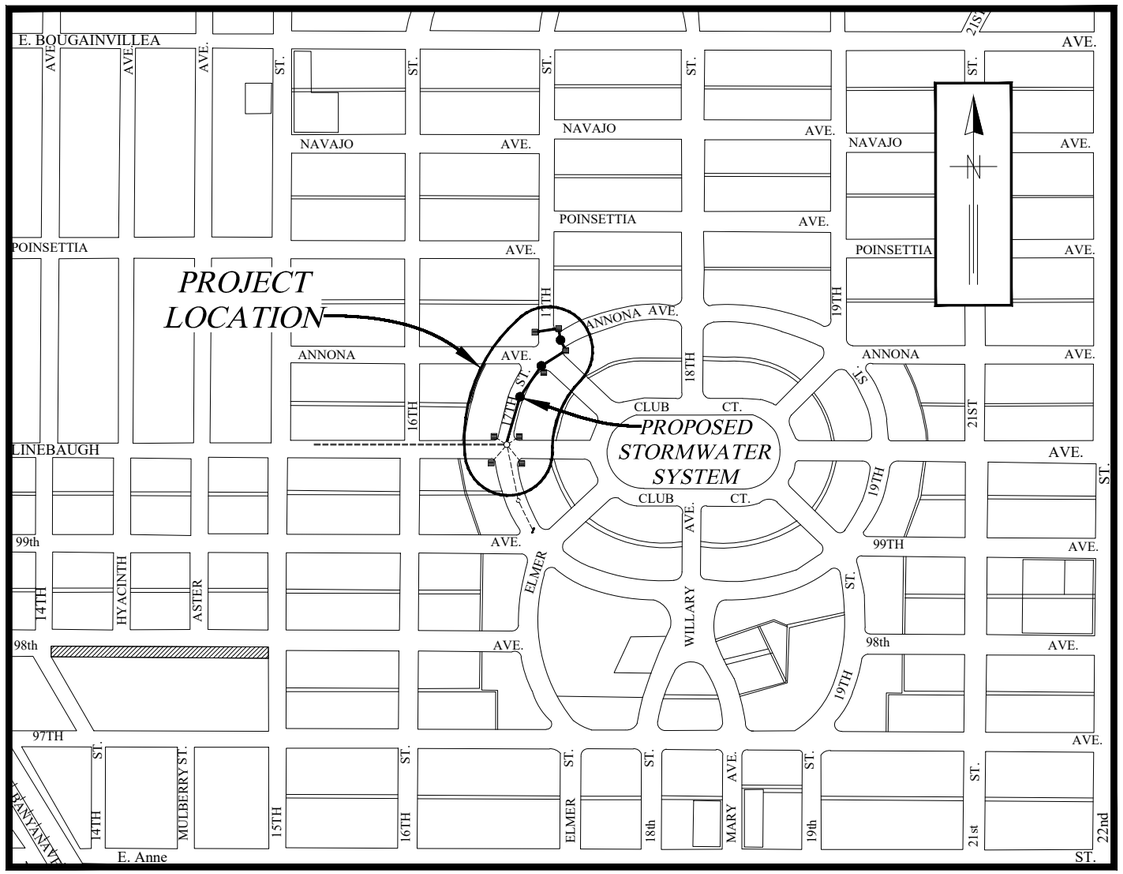
TOP of PIPE	TP
INVERT ELEVATION	IE or INV EL
RIGHT of WAY	R/W
MANHOLE	MH
POLYVINYL CHLORIDE PIPE	PVCP
VITRIFIED CLAY PIPE	VCP
ADVANCED DRAINAGE SYSTEM	ADS
DUCTILE IRON PIPE	DIP
REINFORCED CONCRETE PIPE	RCP
CONCRETE PIPE	CP
APPROXIMATE LOCATION	AL
BENCH MARK	BM
POINT of INTERSECTION	PI
DEPT OF CLEAN OUT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

Bearings and coordinates shown on this survey are based on the North American Datum of 1983, 2011 adjustment (NAD 83/2011) as referenced to the Florida State Plane Coordinate System, West Zone and are shown in U.S. Survey Feet. Control utilized for this survey is as follows:

NGS Designation: 872 4267 TIDAL 2, PID: AA0971, Northing: 119,232.08, Easting: 511,263.40

NGS Designation: 872 4332 G TIDAL, PID: AA0724, Northing: 119,878.66, Easting: 485,330.05

INDEX



PROJECT LOCATION
NOT TO SCALE

No.	DATE	REVISIONS	No.	DATE	REVISIONS
3			6		
2			5		
1			4		

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CITY of TAMPA
Mobility Department
Stormwater Engineering Division

ANNONA AVE. & 17th STREET DRAINAGE IMPROVEMENTS LEGEND, INDEX & PROJECT MAP

SHEET 2 OF 14

PLOT DATE: WEDNESDAY, MAY 8, 2024

SW 2023-06

CITY OF TAMPA
STORMWATER DEPARTMENT
STANDARD DETAIL NOTES

1. ALL DRAINAGE STRUCTURES (MANHOLES, INLETS, OUTFALL STRUCTURES AND OTHERS) SHALL INCLUDE A 6" THICK COMPACTED #57 AGGREGATE FOUNDATION, WRAPPED COMPLETELY WITH FILTER FABRIC MEETING FDOT STANDARD SPECIFICATIONS 441-2.3

2. ALL PIPE JOINTS (ROUND, ELLIPTICAL AND BOX CULVERTS) SHALL BE WRAPPED COMPLETELY WITH FILTER FABRIC MEETING FDOT STANDARD SPECIFICATIONS 441-2.3. FABRIC SHALL EXTEND ONE FOOT ONTO EACH PIPE SECTION (JOINT) AND SHALL OVERLAP A MINIMUM OF ONE FOOT CIRCUMFERENTIALLY. FABRIC SHALL BE HELD IN PLACE WITH RUST-PROOF METAL STRAPPING.

3. THE STRUCTURAL DESIGN SHALL BE CONSISTENT WITH FDOT INDEX 200 AND AS APPROVED BY THE ENGINEER.

City Of Tampa Standard Details	
Schedule Of Castings	
Structure Type	
All Curb Inlets (Cover)	USF 1190 (85 lb.)
All Curb Inlets (Ring)	USF 1190
All Manholes (Cover)	USF Type AO (160 lb.)
All Manholes (Standard Ring)	USF 575
All Manholes (Inverted Ring)	USF 1175
	USF 6289
Type E Grate Inlets	USF 6286
Type H grate Inlets	USF 6288
Grate Seats	USF 7100

Notes:

1. All castings are as above or equal.
2. All castings outside City Of Tampa ROW or easements shall not include the words "City Of Tampa" nor the ship logo.
3. Manhole covers shall include the text "Stormwater" as shown in the Standard Drawing.

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, COMMUNICATION, WATER MAIN, WATER SERVICES, SEWER LATERALS AND OTHER SUBSURFACE PIPING HAS NOT BEEN LOCATED. ENGINEER OF RECORD SHOWS LOCATIONS AS APPROXIMATE FROM INFORMATION 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 SURVEY BASE LINES.
10. THE SOLID WASTE DEPARTMENT (813-348-1146) IS TO BE NOTIFIED PRIOR TO ANY STREET CLOSURES IN THE PROJECT AREA.
11. SOD ALL THE DISTURBED PERVIOUS AREAS WITHIN PROJECT LIMITS.
12. WHERE CONNECTIONS TO EXISTING DRIVES AND WALKS ARE NOT INDICATED ON THE PLANS, PROPER CONNECTIONS SHALL BE MADE AT THE DIRECTION OF THE ENGINEER.
13. STREET SIGNS, STREET MARKERS AND R-O-W MARKERS SHALL BE REMOVED AND RELOCATED AS DIRECTED BY THE ENGINEER.
14. MAILBOXES SHALL BE REMOVED AND REPLACED IN-KIND.
15. 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.
16. THE CONTRACTOR SHALL PROTECT ALL TREES 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 WITNESSED OR PERFORMED BY A CERTIFIED ARBORIST. ROOT PRUNING MAY BE REQUIRED AT CERTAIN LOCATIONS AND SHALL BE COMPLETED IN ACCORDANCE WITH CHAPTER 13 TECHNICAL MANUAL SPECIFICATIONS.
17. ALL CONSTRUCTION SHALL CONFORM TO THE APPLICABLE CITY OF TAMPA DEPARTMENT ORDINANCES AND REGULATIONS.
18. THE CONTRACTOR SHALL MAINTAIN COPIES OF ALL APPLICABLE PERMITS ON-SITE AND SHALL BE RESPONSIBLE TO ADHERE TO ALL PERMIT CONDITIONS DURING CONSTRUCTION.
19. 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.
20. COMPACTION FOR PIPE BACKFILL SHALL COMPLY WITH AASHTO T-99 (100%).

PLOT DATE: WEDNESDAY, MAY 8, 2024

No.	DATE	REVISIONS	No.	DATE	REVISIONS
3			6		
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DES: C.S.
DRN: BB
CKD: JDM
DATE: 3/14/2024

CITY of TAMPA
Mobility Department
Stormwater Engineering Division

ANNONA AVE. & 17th STREET
STORMWATER DRAINAGE IMPROVEMENTS
STORMWATER DETAIL NOTES AND GENERAL NOTES

SHEET 3 OF 14

SW 2023-06

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. 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.
4. 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 COMMENCING CONSTRUCTION UNLESS SPECIFICALLY EXEMPTED BY THE PLANS.
5. 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 ROCK, 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.
6. LOCATIONS, ELEVATIONS AND DIMENSIONS OF EXISTING UTILITIES, STRUCTURES AND OTHER FEATURES ARE SHOWN ACCORDING TO THE BEST INFORMATION AVAILABLE AT THE TIME OF PREPARATION OF THESE PLANS, BUT DO NOT PURPORT TO BE ABSOLUTELY CORRECT. THE CONTRACTOR SHALL FIELD VERIFY THE LOCATIONS, ELEVATIONS AND DIMENSIONS OF ALL EXISTING UTILITIES, STRUCTURES AND OTHER FEATURES AFFECTING HIS WORK PRIOR TO CONSTRUCTION.
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.

CONSTRUCTION NOTES

1. CONTRACTOR TO SOD DISTURBED RIGHT-OF-WAY WITH BAHIA SOD AND/OR LIKE KIND OF EXISTING SOD.
2. CONTRACTOR TO RESTORE DISTURBED RESIDENTIAL YARDS WITHIN CONSTRUCTION LIMITS WITH BAHIA, ST. AUGUSTINE, AND/OR LIKE KIND OF SOD.
3. 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.
4. 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.
5. CONTRACTOR TO PROTECT EXISTING PRIVATE FENCES DURING CONSTRUCTION OR REPLACE IN LIKE KIND.
6. CONTRACTOR TO PROTECT THE EXISTING CONDUIT THAT IS TO REMAIN.
7. 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.
8. 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.
9. CONCRETE STRUCTURES AND JUNCTION BOXES MAY BE PRECAST OR CAST IN PLACE.
10. FOR BRICK/PAVER DRIVEWAYS THE INTENT IS TO STACK AND STORE ANY DISTURBED PAVERS, AND TO RESTORE ANY DAMAGED PAVERS AS CLOSE AS POSSIBLE TO THE PRE-EXISTING CONDITION.

Plot Date: Wednesday, May 8, 2024 PLOT

No.	DATE	REVISIONS	No.	DATE	REVISIONS
3			6		
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1			4		

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DATE: 3/14/2024

CITY of TAMPA
Mobility Department
Stormwater Engineering Division

ANNONA AVE. & 17th STREET
STORMWATER DRAINAGE IMPROVEMENTS
SITE AND CONSTRUCTION NOTES

SHEET 4 OF 14

SW 2023-06

TREE PROTECTION NOTES

1. PROTECTIVE BARRICADES SHALL BE PLACED AROUND ALL PROTECTED TREES AND GRAND TREES DURING SITE CLEARING, AND SHALL REMAIN IN PLACE UNTIL LAND ALTERATION, SITE CLEARING AND CONSTRUCTION ACTIVITIES ARE COMPLETE. BARRICADES SHALL BE ERECTED AT A MINIMUM DISTANCE OF TEN FEET (10') FROM THE BARK OF PROTECTED TREES AND TWENTY FEET (20') FROM THE BARK OF GRAND TREES.

2. REQUIRED TREE BARRICADES AND EROSION CONTROL MEASURES MUST REMAIN INTACT THROUGHOUT CONSTRUCTION. ENCROACHMENT INTO OR FAILURE TO MAINTAIN TREE BARRICADES WILL RESULT IN ENFORCEMENT ACTION WHICH MAY INCLUDE CITATIONS AND/OR PERMIT REVOCATION.

3. A MINIMUM DISTANCE OF TEN FEET (10') SHALL BE MAINTAINED FROM ALL PROTECTED TREES WHEN INSTALLING UNDERGROUND UTILITIES. IF THIS RESULTS IN UNREASONABLE HARDSHIP, A SOIL AUGER SHALL BE USED TO TUNNEL UNDER THE ROOT SYSTEMS.

4. THE CONTRACTOR IS REQUIRED TO PREVENT DAMAGE TO TREES WHICH ARE TO REMAIN. THE CONTRACTOR SHALL BE LIABLE FOR FINES DUE TO ALL DAMAGE OF TREES THAT ARE DESIGNATED TO BE SAVED DURING CONSTRUCTION. SPECIAL CARE IS REQUIRED TO PREVENT DAMAGE TO TREES WHICH ARE TO REMAIN.

5. INSTALLATION OF ARTIFICIAL BARRIERS SUCH AS PROTECTIVE BARRICADES, FENCES, POSTS, OR WALLS SHALL NOT DESTROY OR IRREVERSIBLY HARM THE ROOT SYSTEM OF PROTECTED TREES AND GRAND TREES. FOOTERS FOR WALLS SHALL BE AT THE POINT WHERE LARGER ROOTS ARE ENCOUNTERED, AND THE ROOTS SHALL BE BRIDGED. POST HOLES AND TRENCHES LOCATED CLOSE TO PROTECTED TREES OR GRAND TREES SHALL BE ADJUSTED TO AVOID DAMAGE TO MAJOR ROOTS.

6. ALL ROOTS TO BE REMOVED DURING THE SITE CLEARING PHASE SHALL BE SEVERED CLEAN AT THE PERIMETER OF THE DESIGNATED PROTECTED RADIUS AND SHALL BE WITNESSED OR PERFORMED BY A CERTIFIED ARBORIST.

7. ALL TREES SHALL BE PROTECTED, ROOT PRUNING AND CANOPY PRUNING SHALL BE PERFORMED BY A CERTIFIED ARBORIST. ALL ROOT PRUNING AS WELL AS CANOPY PRUNING SHALL BE PERFORMED UNDER THE CITY OF TAMPA PARKS DEPARTMENT SUPERVISION.

8. A TWO-INCH (2") LAYER OF MULCH SHALL BE APPLIED OVER THE SURFACE OF EXPOSED ROOTS OF PROTECTED TREES AND GRAND TREES DURING THE SITE CLEARING PHASE.

9. CONTRACTOR SHALL COORDINATE WITH CITY ARBORIST AND APPROVAL FOR ROOT PRUNING AND LIMB TRIMMING FOR CONSTRUCTION ACTIVITIES.

10. CONTRACTOR IS RESPONSIBLE FOR ANY PERMITS FOR TREE REMOVAL, TRIMMING, AND ROOT PRUNING, AS WELL AS ANY NECESSARY NOTICING FOR BOTH GRAND TREES AND NON GRAND TREES.

SANITARY NOTES

1. PROPOSED SANITARY SEWER SHALL BE CONSTRUCTED PER CITY OF TAMPA WASTEWATER DEPARTMENT TECHNICAL STANDARDS.

2. UNLESS INDICATED, ALL PROPOSED GRAVITY SEWER SHALL BE PVC ASTM D3034 SDR-35.

3. CONTRACTOR SHALL MAINTAIN CONTINUOUS SEWER SERVICE.

4. CONTRACTOR SHALL RAISE OR LOWER EXISTING MANHOLE FRAME AND COVER TO MATCH PROPOSED GRADE AS REQUIRED.

5. ALL ABANDONED SANITARY SEWERS SHALL BE REMOVED OR ABANDONED IN PLACE WITH FLOWABLE FILL.

6. OSHA STANDARD SAFETY EQUIPMENT SUCH AS SAFETY HARNESSES, GAS MONITORS, LOWER EXPLOSIVE LIMIT (LEL) DETECTORS, BREATHING APPARATUS, ETC. SHALL BE UTILIZED WHERE THE WORK DICTATES THEIR USE.

7. SEWER SERVICE LATERALS FOUND TO BE IN CONFLICT WITH THE WORK SHALL BE REMOVED AND REPLACED IN ACCORDANCE WITH THE CITY OF TAMPA WASTEWATER DEPARTMENT REQUIREMENTS.

EROSION/TURBIDITY-CONTROL NOTES

1. THE INSTALLATION OF TEMPORARY EROSION CONTROL BARRIERS SHALL BE COORDINATED WITH THE CONSTRUCTION OF THE PERMANENT EROSION CONTROL FEATURES TO THE EXTENT NECESSARY TO ASSURE ECONOMICAL, EFFECTIVE AND CONTINUOUS CONTROL OF EROSION AND WATER POLLUTION THROUGHOUT THE LIFE OF THE CONSTRUCTION PHASE.

2. THE TYPE OF EROSION CONTROL BARRIERS USED SHALL BE GOVERNED BY THE NATURE OF THE CONSTRUCTION OPERATION AND SOIL TYPE THAT WILL BE EXPOSED. SILTY AND CLAYEY MATERIAL USUALLY REQUIRE SOLID SEDIMENT BARRIERS TO PREVENT TURBID WATER DISCHARGE, WHILE SANDY MATERIAL MAY NEED ONLY SILT SCREENS OR HAY BALES TO PREVENT EROSION. FLOATING TURBIDITY CURTAINS SHALL BE USED IN OPEN WATER SITUATIONS. DIVERSION DITCHES OR SWALES MAY BE REQUIRED TO PREVENT TURBID STORMWATER RUNOFF FROM BEING DISCHARGED TO WETLANDS OR OTHER WATER BODIES. IT MAY BE NECESSARY TO EMPLOY A COMBINATION OF BARRIERS, DITCHES AND OTHER EROSION/TURBIDITY CONTROL MEASURES IF CONDITIONS WARRANT.

3. CONSTRUCTION OPERATIONS IN OR ADJACENT TO WETLANDS SHALL BE RESTRICTED TO THOSE AREAS IDENTIFIED IN THE PLANS AND IN THE SPECIFICATIONS.

4. EXCAVATED MATERIAL SHALL NOT BE DEPOSITED IN THE WETLANDS OR IN A POSITION CLOSE ENOUGH THERETO TO BE WASHED AWAY BY HIGH WATER OR RUNOFF.

5. WHERE PUMPS ARE TO BE USED TO REMOVE TURBID WATERS FROM CONSTRUCTION AREAS, THE WATER SHALL BE TREATED PRIOR TO DISCHARGE TO THE WETLANDS. TREATMENT METHODS INCLUDE AND ARE NOT LIMITED TO, TURBID WATER BEING PUMPED INTO GRASSED SWALES OR APPROPRIATE VEGETATED AREAS, SEDIMENT BASINS, OR CONFINED BY AN APPROPRIATE ENCLOSURE SUCH AS TURBIDITY BARRIERS, AND KEPT CONFINED UNTIL ITS TURBIDITY LEVEL MEETS STATE WATER QUALITY STANDARDS.

6. THE CONTRACTOR SHALL SCHEDULE HIS OPERATIONS SUCH THAT THE AREA OF UNPROTECTED ERODIBLE EARTH EXPOSED AT ANY ONE TIME IS NOT LARGER THAN THE MINIMUM AREA NECESSARY FOR EFFICIENT CONSTRUCTION OPERATIONS, AND THE DURATION OF EXPOSED, UNCOMPLETED CONSTRUCTION TO THE ELEMENTS SHALL BE AS SHORT AS PRACTICABLE. CLEARING AND GRUBBING SHALL BE SO SCHEDULED AND 3PERFORMED THAT GRADING OPERATIONS CAN FOLLOW IMMEDIATELY THEREAFTER, AND GRADING OPERATIONS SHALL BE SCHEDULED AND PERFORMED THAT PERMANENT EROSION CONTROL FEATURES CAN FOLLOW IMMEDIATELY THEREAFTER IF CONDITIONS ON THE PROJECT PERMIT.

7. THE CONTRACTOR AND/OR OWNER'S REPRESENTATIVE SHALL PROVIDE ROUTINE MAINTENANCE OF PERMANENT AND TEMPORARY EROSION CONTROL FEATURES UNTIL THE PROJECT IS COMPLETE AND ALL BARED SOILS ARE STABILIZED.

8. SILT FENCE SHALL BE LOCATED AT THE PERIMETER OF CONSTRUCTION LIMITS, AS DEFINED BY FIELD CONDITIONS.

9. CONTRACTOR IS TO PROVIDE EROSION CONTROL AND SEDIMENTATION BARRIER (HAY BALES OR SILTATION CURTAIN) TO PREVENT SILTATION OF ADJACENT PROPERTY, STREETS, STORM SEWERS AND WATERWAYS. IN ADDITION, CONTRACTOR SHALL PLACE ROCK OR OTHER SUITABLE MATERIAL ON GROUND IN AREAS WHERE CONSTRUCTION RELATED TRAFFIC IS TO ENTER AND EXIT 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 VEHICULAR TRAFFIC, THE CONTRACTOR IS TO REMOVE SAID EARTH TO THE SATISFACTION OF THE ENGINEER AND/OR AUTHORITIES.

10. IF WIND EROSION BECOMES SIGNIFICANT DURING CONSTRUCTION, THE CONTRACTOR SHALL STABILIZE THE AFFECTED AREA USING SPRINKLING, IRRIGATION OR OTHER ACCEPTABLE METHODS.

11. CONTRACTOR SHALL PROTECT ALL EXPOSED OPENINGS TO CONSTRUCTED STORM SEWER SYSTEM TO PREVENT SEDIMENT FROM ENTERING DOWNSTREAM SYSTEM. CONTRACTOR SHALL BE RESPONSIBLE FOR CLEANING DOWNSTREAM SYSTEM, NEW AND EXISTING, IF SEDIMENT HAS BEEN ALLOWED TO ENTER.

Plot Date: Thursday, May 9, 2024 PLOT

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CITY of TAMPA
Mobility Department
Stormwater Engineering Division

ANNONA AVE. & 17th STREET
STORMWATER DRAINAGE IMPROVEMENTS
TREE PROTECTION, SANITARY AND EROSION CONTROL NOTES

SHEET 5 OF 14

SW 2023-06

WATER NOTES

1. ALL WORKMANSHIP AND MATERIALS USED IN THE CONSTRUCTION OF THIS PROJECT SHALL CONFORM TO CITY OF TAMPA WATER DEPARTMENT SPECIFICATIONS, AND TECHNICAL MANUAL, LATEST EDITION.

2. THE LOCATIONS AND SIZE OF THE UTILITIES AS SHOWN ON THE PLANS ARE APPROXIMATE ONLY. HOWEVER, THERE IS NO GUARANTEE THAT ALL EXISTING UTILITIES HAVE BEEN FOUND OR SHOWN. THE CONTRACTOR IS FOREWARNED TO ASCERTAIN AND DETERMINE PRECISE LOCATIONS PRIOR TO EXCAVATION AND ALSO TO FAMILIARIZE HIM/HER SELF WITH ALL VOLTAGES CARRIED IN OVERHEAD OR UNDERGROUND UTILITY SERVICES. NO CLAIM FOR EXTRA COST SHALL BE MADE AS A RESULT OF THE AFOREMENTIONED APPROXIMATIONS.

3. THE INFORMATION PROVIDED IN THESE PLANS IS SOLELY TO ASSIST THE CONTRACTOR IN ASSESSING THE NATURE AND EXTENT OF CONDITIONS WHICH WILL BE ENCOUNTERED DURING THE COURSE OF THE WORK. THE CONTRACTORS ARE DIRECTED, PRIOR TO BIDDING, TO CONDUCT WHATEVER INVESTIGATIONS THEY DEEM NECESSARY TO ARRIVE AT THEIR OWN CONCLUSION REGARDING THE ACTUAL CONDITIONS THAT WILL BE ENCOUNTERED, AND UPON WHICH THEIR BIDS ARE BASED.

4. ALL PIPE LENGTHS ARE PLUS OR MINUS AND MAY BE ADJUSTED IN THE FIELD AS REQUIRED. PIPE MEASUREMENTS ARE TO CENTER OF STRUCTURES OR FITTINGS.

5. THE INTENT OF THIS PROJECT'S PLANS AND TECHNICAL PROVISIONS IS FOR ALL WATER MAINS TO BE INSTALLED AS A CONTINUOUS PROJECT. CONNECTIONS TO EXISTING WATER MAINS SHALL BE DONE IN A TIMELY MANNER. AT NO TIME SHALL THE FLOW OF WATER RUNNING THE LENGTH OF THE PROJECT BE STOPPED EXCEPT TO RECONNECT WATER MAINS THAT HAVE BEEN TESTED AND CLEARED FOR POTABLE WATER USE.

6. CONNECTIONS TO EXISTING SYSTEMS: THE CITY WATER DEPARTMENT REQUIRES THAT ITS CUSTOMERS BE KEPT IN SERVICE AT ALL TIMES. THE CONTRACTOR MUST PROVIDE TEMPORARY SERVICE TO CUSTOMERS WHOSE SERVICE WILL BE AFFECTED BY A SHUTDOWN.

7. WHEN A SHUTDOWN IS AUTHORIZED BY THE CITY WATER DEPARTMENT AND CUSTOMERS WILL HAVE THEIR WATER SHUT OFF, THE CONTRACTOR MUST HAVE PRE-ASSEMBLED ALL NEW PIPING EXCEPT AT THE POINT OF TIE-IN INCLUDING SERVICE LINES BEING TRANSFERRED TO THE NEW MAIN. THE ENTIRE PRE-ASSEMBLY SHALL BE SUCCESSFULLY PRESSURE TESTED AND BACTERIOLOGICAL TESTED PRIOR TO THE SHUTDOWN. THE CONTRACTOR SHALL HAVE SUFFICIENT CREWS ON SITE TO ACCOMPLISH THE SHUTDOWN IN LESS THAN FOUR HOURS.

8. CONTRACTOR SHALL INSTALL LINESTOPS IF AND AS REQUIRED TO KEEP CUSTOMERS IN SERVICE DURING SHUTDOWNS, WITH THE CONCURRENCE OF THE CITY WATER DEPARTMENT.

9. THE CONTRACTOR'S SCHEDULE PROPOSED FOR WATER MAIN RELOCATION CONSTRUCTION AND REMOVALS SHALL BE SUBMITTED TO, AND MUST BE APPROVED BY, THE CITY WATER DEPARTMENT. NOTE THAT THE SCHEDULE PROPOSED IN THE PROJECT ROADWAY PLANS IS INTENDED FOR ROADWAY & DRAINAGE CONSTRUCTION ONLY – WATER MAINS CANNOT BE CONSTRUCTED IN THE PROPOSED BLOCK-BY-BLOCK MANNER. IT IS RECOMMENDED THAT WATER MAIN RELOCATIONS BE ACCOMPLISHED PRIOR TO THE DRAINAGE AND ROADWAY CONSTRUCTION.

10. WATER SERVICE LINES FOUND TO BE IN CONFLICT WITH THE WORK SHALL BE RELOCATED IN ACCORDANCE WITH THE CITY OF TAMPA WATER DEPARTMENT REQUIREMENTS.

Plot Date: Wednesday, May 01, 2024 PLOT

No.	DATE	REVISIONS	No.	DATE	REVISIONS
3			6		
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1			4		

DES: C.S.
DRN: BB
CKD: JDM
DATE: 3/14/2024

CITY of TAMPA
Mobility Department
Stormwater Engineering Division

ANNONA AVE. & 17th STREET
STORMWATER DRAINAGE IMPROVEMENTS
WATER DEPARTMENT NOTES

SHEET 6 OF 14

SW2023-06

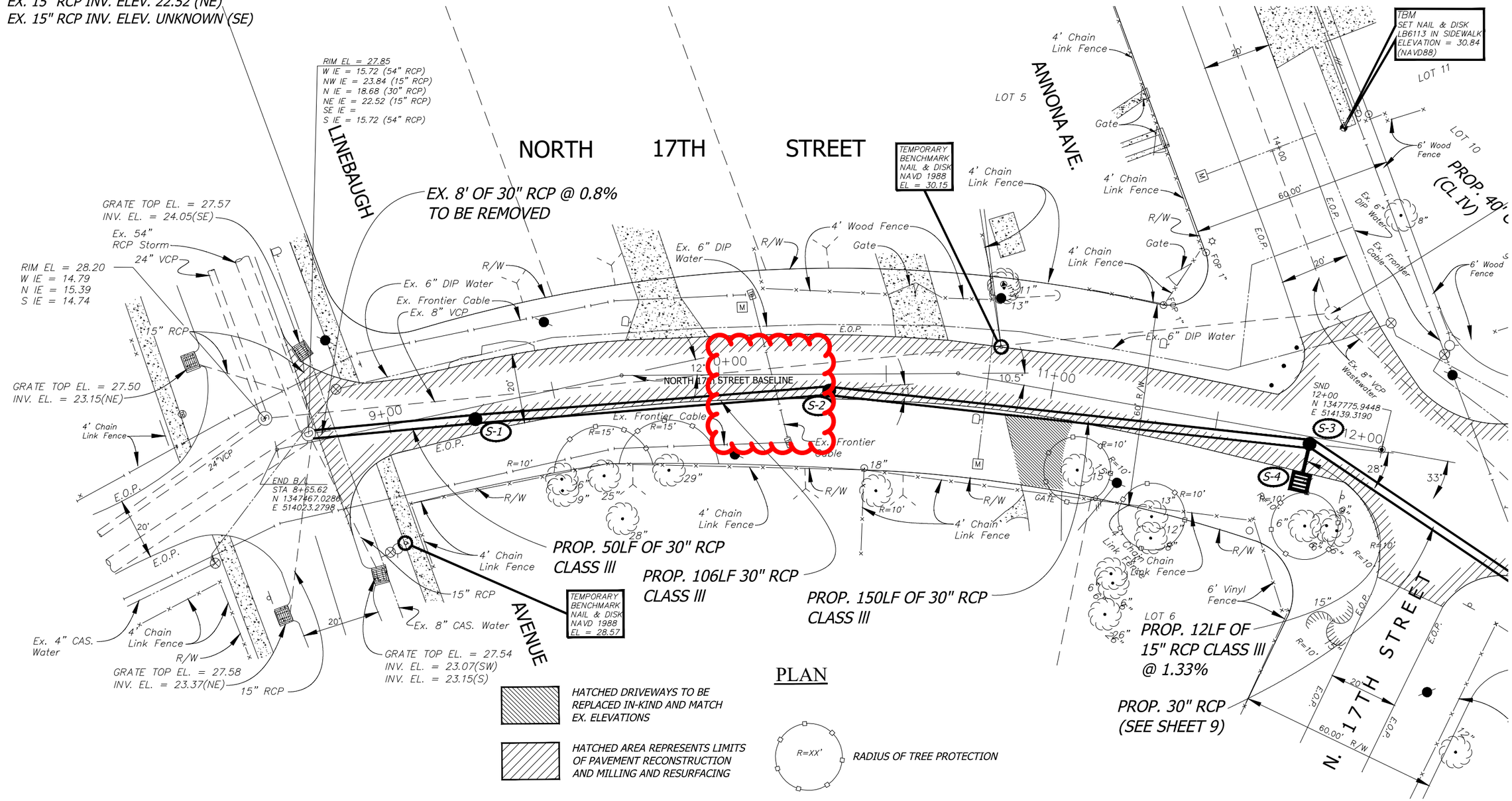
CONNECT TO EX. BX-7B MANHOLE
STA. 8+79.30, 2.50' Lt.
RIM ELEV. 27.85
PROP. 30" RCP INV. ELEV. 17.40
EX. 54" RCP INV. ELEV. 23.84 (W)
EX. 54" RCP INV. ELEV. 15.72 (S)
EX. 30" RCP INV. ELEV. 18.68 (N)
EX. 15" RCP INV. ELEV. 22.52 (NE)
EX. 15" RCP INV. ELEV. UNKNOWN (SE)

S-1 PROP. 6'-0" DIA. TYPE "J" MANHOLE
STA. 9+26, 3.60' Rt.
TOP ELEV. 28.80
INV. ELEV. 23.00(NE)
INV. ELEV. 20.25(SW)

S-2 PROP. 6'-0" DIA. TYPE "J" MANHOLE
STA. 10+33, 5.00' Rt.
TOP ELEV. 30.10
INV. ELEV. 23.50(NE)
INV. ELEV. 23.50(SW)

S-3 PROP. 6'-0" DIA. TYPE "J" MANHOLE
STA. 11+78, 2.00' Rt.
TOP ELEV. 29.90
INV. ELEV. 24.20(NE)
INV. ELEV. 24.20(SW)
INV. ELEV. 26.20(SE)

S-4 PROP. TYPE "T" GRATE INLET
STA. 11+79, 14.00' Rt.
TOP ELEV. 29.15
INV. ELEV. 26.40(NW)



PLAN

HATCHED DRIVEWAYS TO BE REPLACED IN-KIND AND MATCH EX. ELEVATIONS

HATCHED AREA REPRESENTS LIMITS OF PAVEMENT RECONSTRUCTION AND MILLING AND RESURFACING

R=XX' RADIUS OF TREE PROTECTION

Plot Date: Wednesday, May 8, 2024 1 = 1

No.	DATE	REVISIONS	No.	DATE	REVISIONS
3			6		
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DES: C.S.
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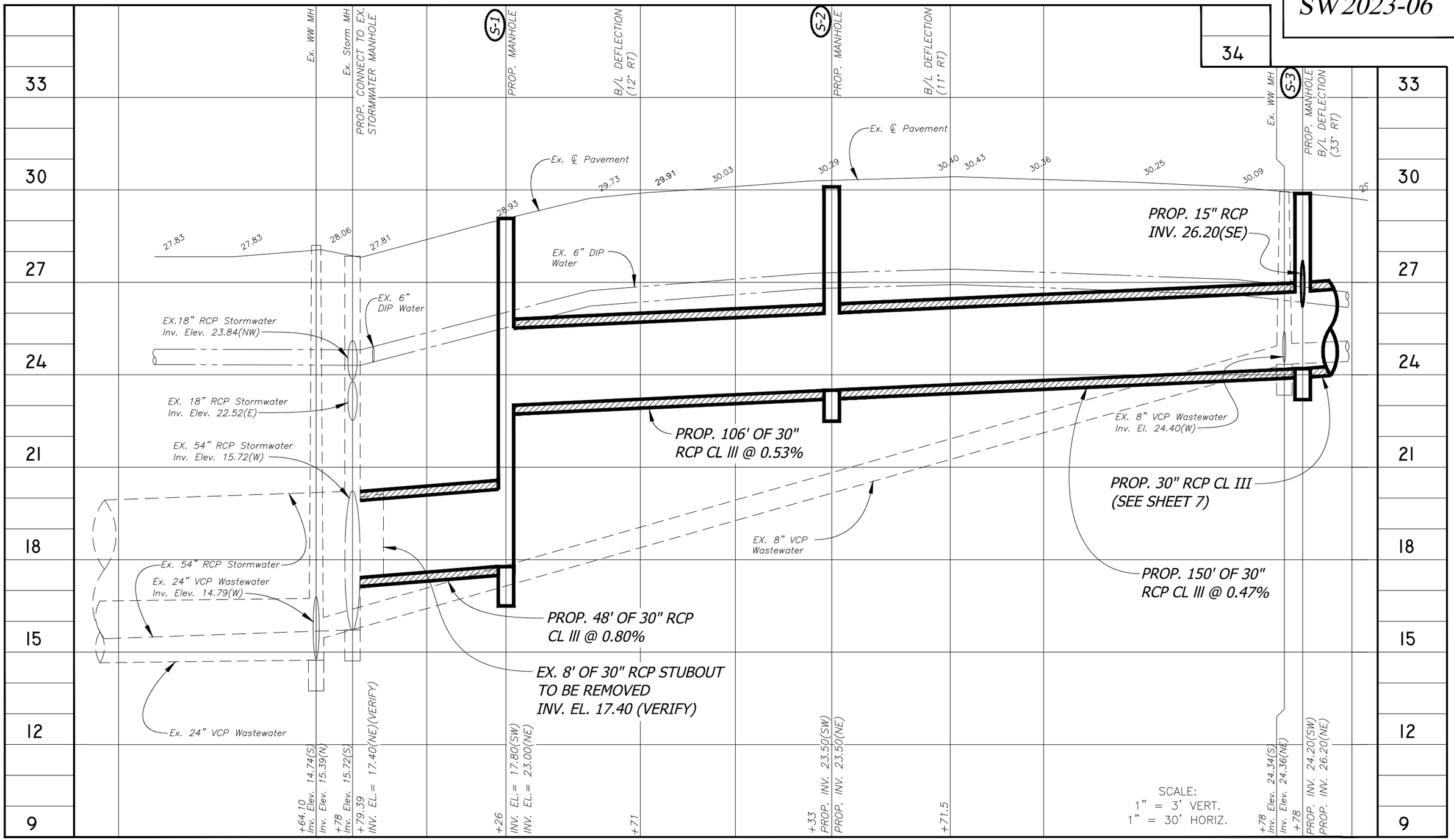
CITY of TAMPA
Mobility Department
Stormwater Engineering Division

ANNONA AVE. & 17th STREET DRAINAGE IMPROVEMENTS PLAN SHEET

SHEET 7 OF 14

SW2023-06



PROFILE

Plot Date: Wednesday, May 8, 2024 1 = 1

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No.	DATE	REVISIONS
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DES: C.S.
DRN: ~~BB~~
CKD: JDM
DATE: 3/14/2024

CITY of TAMPA
Mobility Department
Stormwater Engineering Division

ANNONA AVE. & 17th STREET DRAINAGE IMPROVEMENTS PROFILE SHEET

SHEET 8 OF 14

SW2023-06

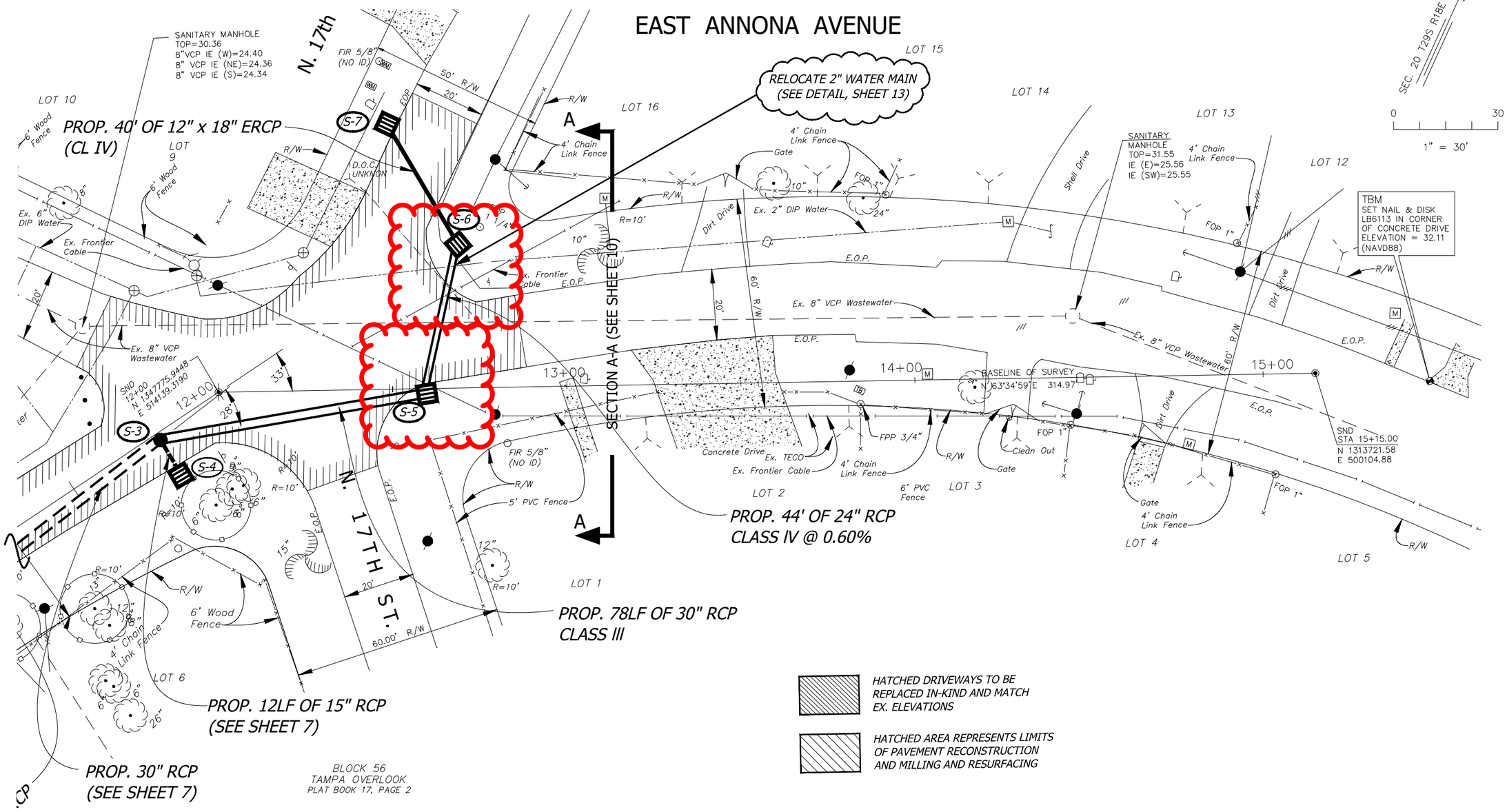
S-3 SEE SHEET 7

S-4 SEE SHEET 7

S-5 PROP. TYPE "T" GRATED INLET
STA. 12+60, 1.50' Rt.
TOP ELEV. 28.80
INV. ELEV. 25.69(N)
INV. ELEV. 24.60(SW)

S-6 PROP. TYPE "E" GRATED INLET
STA. 12+69, 41.00' Lt.
TOP ELEV. 28.40
INV. ELEV. 26.50(NW)
INV. ELEV. 26.00(S)

S-7 PROP. TYPE "T" GRATED INLET STA.
12+48, 76.00' Lt.
TOP ELEV. 29.00
INV. ELEV. 26.90(SE)



HATCHED DRIVEWAYS TO BE REPLACED IN-KIND AND MATCH EX. ELEVATIONS

HATCHED AREA REPRESENTS LIMITS OF PAVEMENT RECONSTRUCTION AND MILLING AND RESURFACING

PLAN

No.	DATE	REVISIONS	No.	DATE	REVISIONS
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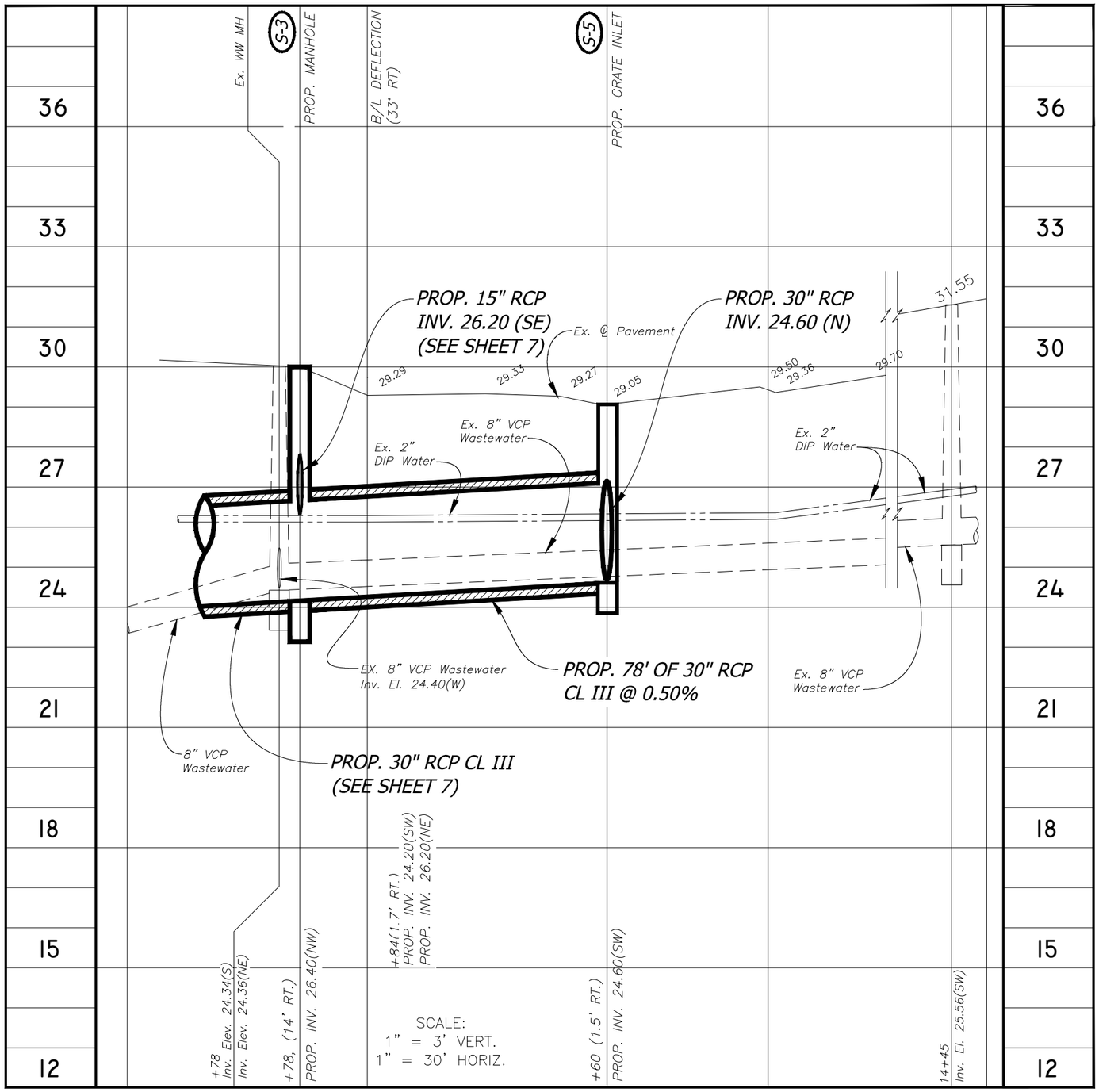
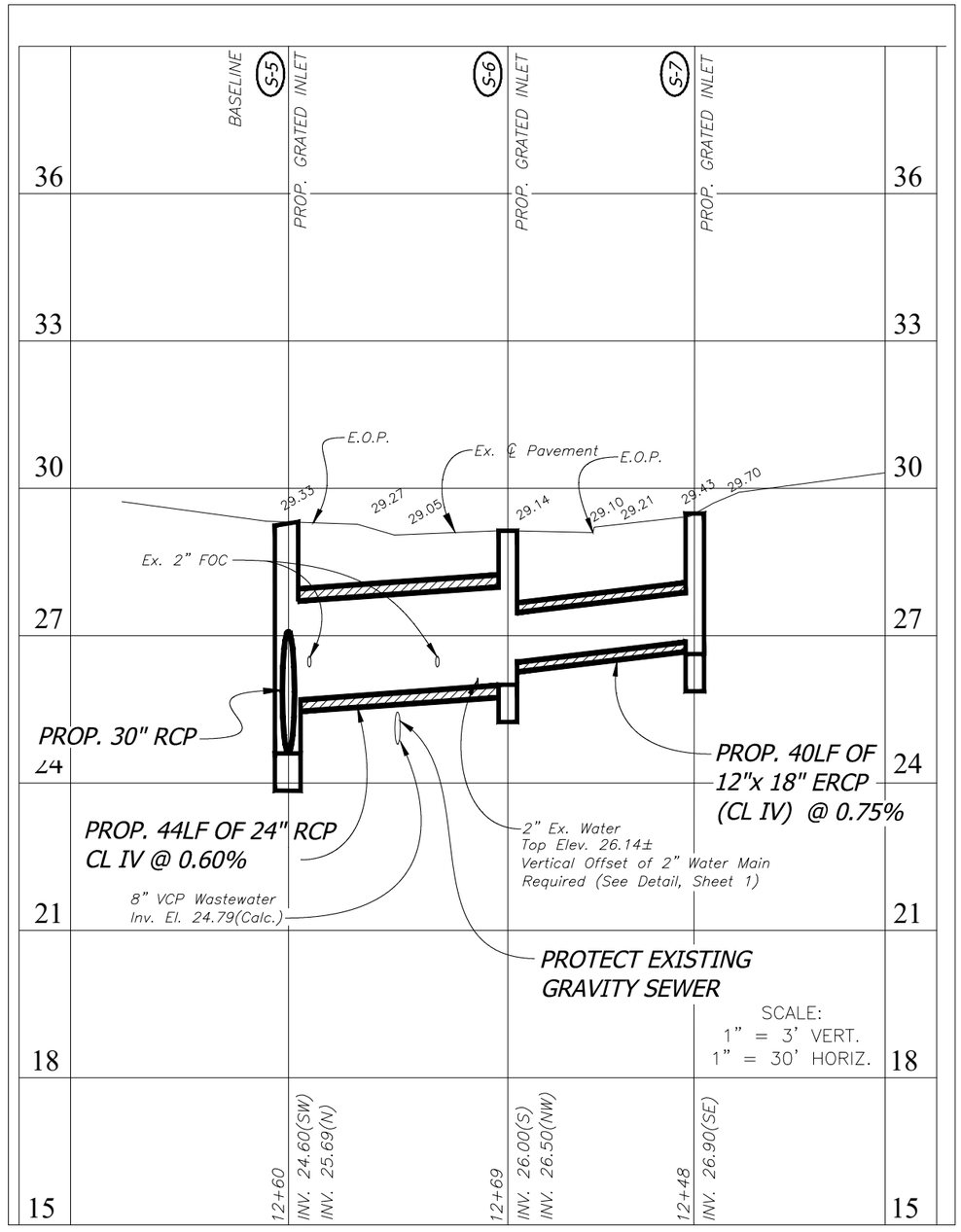
CITY of TAMPA
Mobility Department
Stormwater Engineering Division

ANNONA AVE. & 17th STREET DRAINAGE IMPROVEMENTS PLAN VIEW

SHEET 9 OF 14

SW 2023-06





SECTION A-A

No.	DATE	REVISIONS	No.	DATE	REVISIONS
3			6		
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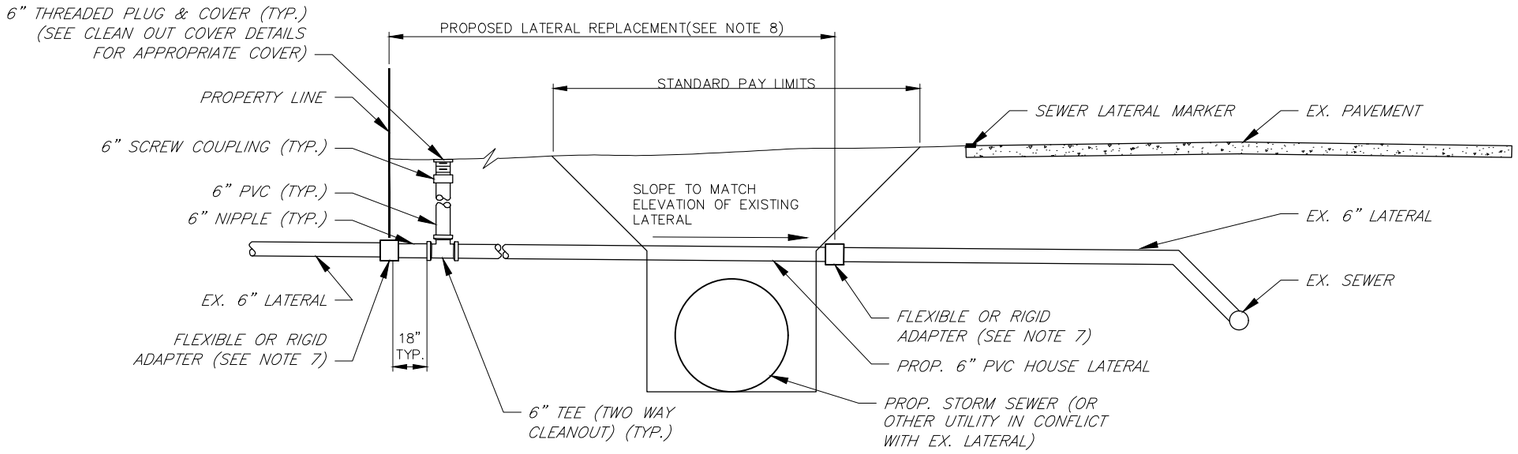
DES: C.S.
DRN: BB
CKD: JDM
DATE: 3/14/2024

CITY of TAMPA
Mobility Department
Stormwater Engineering Division

ANNONA AVE. & 17th STREET DRAINAGE IMPROVEMENTS PROFILE & CROSS SECTIONS

SHEET 10 OF 14



HOUSE LATERAL REPLACEMENT DETAIL

N.T.S.

NOTES:

1. CONTRACTOR SHALL REMOVE AND REPLACE THE EXISTING LATERALS WITHIN THE PAY LIMITS AND FROM THE PAY LIMITS TO THE PROPERTY LINE. THE NEW 6" PVC LATERAL SHALL BE CONNECTED TO THE EXISTING LATERAL PIPE USING FLEXIBLE ADAPTERS. A NEW CLEAN–OUT AND CLEAN–OUT COVER SHALL BE INSTALLED ON THE R/W SIDE OF THE PROPERTY LINE.

2. SEWER SERVICE MUST BE MAINTAINED DURING CONSTRUCTION.

3. THE LOCATIONS OF HOUSE LATERALS BY SYMBOLS ON PLANS ARE APPROXIMATE ONLY AND THE ACTUAL LOCATION AND SLOPES WILL BE DETERMINED IN THE FIELD BY THE CONTRACTOR WITH THE APPROVAL OF THE ENGINEER.

4. THE MINIMUM DIAMETER OF ALL HOUSE LATERALS SHALL BE 6".

5. HOUSE LATERALS WHICH PASS UNDER DRAINAGE DITCHES WITH LESS THAN 18" OF COVER OR WHICH HAVE LESS THAN 30" OF COVER UNDER PAVEMENT SHALL BE DUCTILE IRON PIPE WITH A MINIMUM PRESSURE CLASS OF 350 WITH 40 MILS (MDFT) OF PROTECTO 401 INTERIOR COATING.

6. A MINIMUM VERTICAL CLEARANCE OF 12–INCHES SHALL BE PROVIDED WHEN CROSSING ABOVE A WATER MAIN. HOWEVER, A VERTICAL CLEARANCE LESS THAN 12–INCHES BUT GREATER THAN 6–INCHES WILL BE ALLOWED IF THE LATERAL IS INSTALLED USING ONE THE FOLLOWING CRITERIA:

   - THE LATERAL IS CONSTRUCTED OF DUCTILE IRON PIPE WITH A MINIMUM PRESSURE CLASS OF 350 WITH 40 MILS (MDFT) OF PROTECTO 401 INTERIOR COATING.
   - THE LATERAL IS ENCASED IN AT LEAST 4–INCHES OF CONCRETE.
   - THE LATERAL IS INSTALLED IN A CASING PIPE WITH AN IMPACT STRENGTH EQUAL TO THE IMPACT STRENGTH OF PRESSURE CLASS 350 DUCTILE IRON.

   A MINIMUM OF 6–INCHES OF VERTICAL CLEARANCE SHALL BE PROVIDED WHEN CROSSING BELOW WATER MAINS WITH A DIAMETER 6–INCHES OR LESS. A MINIMUM OF 12–INCHES OF CLEARANCE SHALL BE PROVIDED WHEN CROSSING BELOW A WATER MAIN WITH A DIAMETER GREATER THAN 6–INCHES UP TO A DIAMETER OF 18–INCHES. A MINIMUM OF 18–INCHES OF VERTICAL CLEARANCE WILL BE REQUIRED WHEN CROSSING UNDER A WATER MAIN WITH DIAMETERS GREATER THAN 18–INCHES.

   AT ALL WATER MAIN CROSSINGS, JOINTS OF THE LATERAL PIPE AT THE CROSSING SHALL BE ARRANGED SO THAT NO JOINT IS WITHIN 6–FT OF A JOINT ALONG THE WATER MAIN. IF THE JOINT SPACING CAN NOT BE ACHIEVED, THEN THE GRAVITY SEWER AT THE CROSSING SHALL BE CONSTRUCTED OF C–900 PVC.

   A MINIMUM VERTICAL CLEARANCE OF 6–INCHES SHALL BE PROVIDED WHEN CROSSING ABOVE ALL UTILITIES OTHER THAN A WATER MAIN. A MINIMUM OF 6–INCHES OF VERTICAL CLEARANCE SHALL BE PROVIDED WHEN CROSSING BELOW A UTILITY WITH A DIAMETER 6–INCHES OR LESS. A MINIMUM OF 12–INCHES OF CLEARANCE SHALL BE PROVIDED WHEN CROSSING BELOW A UTILITY WITH A DIAMETER GREATER THAN 6–INCHES UP TO A DIAMETER OF 18–INCHES. A MINIMUM OF 18–INCHES OF VERTICAL CLEARANCE WILL BE REQUIRED WHEN CROSSING UNDER UTILITIES WITH DIAMETERS GREATER THAN 18–INCHES. WHERE THESE CLEARANCES CANNOT BE MAINTAINED, THE LATERAL SHALL BE INSTALLED USING ONE OF THE FOLLOWING CRITERIA:

   - THE LATERAL IS CONSTRUCTED OF DUCTILE IRON PIPE WITH A MINIMUM PRESSURE CLASS OF 350 WITH 40 MILS (MDFT) OF PROTECTO 401 INTERIOR COATING.
   - THE LATERAL IS ENCASED IN AT LEAST 4–INCHES OF CONCRETE.
   - THE LATERAL IS INSTALLED IN A CASING PIPE WITH AN IMPACT STRENGTH EQUAL TO THE IMPACT STRENGTH OF PRESSURE CLASS 350 DUCTILE IRON.

7. TRANSITIONS FROM SDR 35 PVC TO EITHER C900 OR DUCTILE IRON PIPES SHALL BE MADE WITH PVC RIGID ADAPTORS. TRANSITIONS FROM SDR 35 PVC TO EITHER EXISTING CLAY OR CONCRETE PIPES SHALL BE MADE WITH FERNCO 1000 SERIES FLEXIBLE COUPLING WITH STAINLESS STEEL SHEAR RING OR APPROVED EQUAL.

8. LOCATION OF THE CONNECTION TO THE EXISTING LATERAL DOWNSTREAM OF THE CROSSING SHALL BE ADJUSTED, AS NECESSARY TO RE–ROUTE THE LATERAL OVER OR UNDER THE NEW PIPE.

Plot Date: Thursday, May 9, 2024

No.	DATE	REVISIONS	No.	DATE	REVISIONS
3			6		
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DES: C.S.
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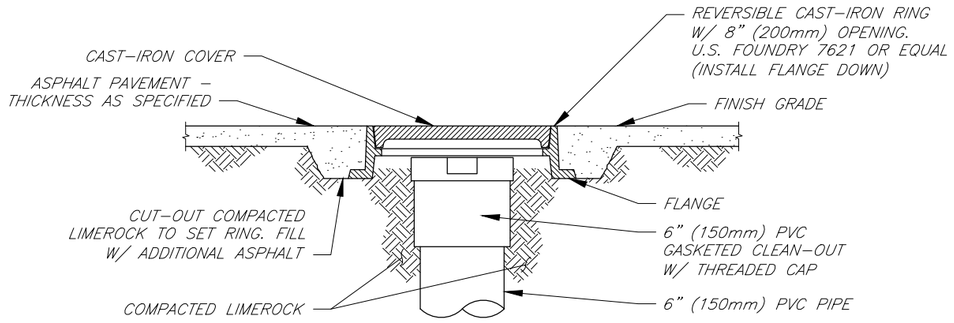
CKD: JDM
DATE: 3/14/2024

CITY of TAMPA
Mobility Department
Stormwater Engineering Division

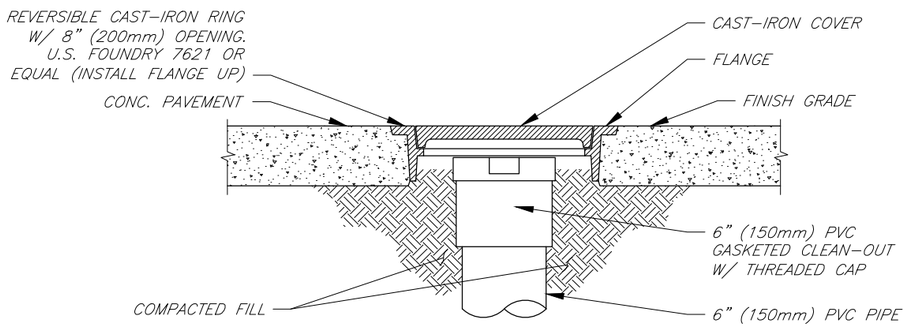
ANNONA AVE. & 17th STREET
STORMWATER IMPROVEMENTS
HOUSE LATERAL REPLACEMENT DETAIL

SW 2023-06



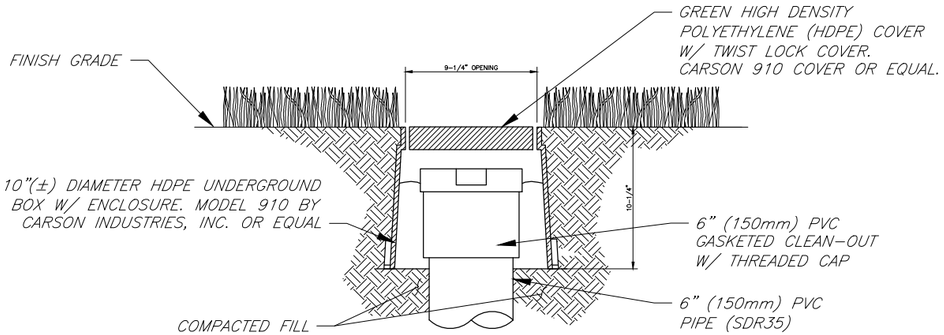
CLEAN-OUT W/ COVER FOR ASPHALT PAVED AREAS

N.T.S.



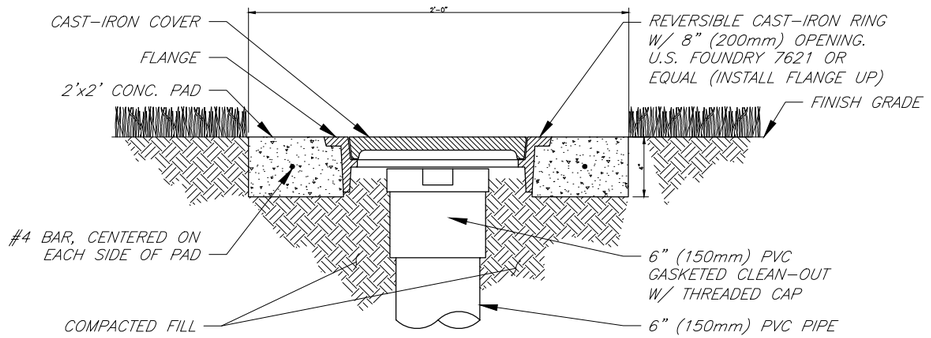
CLEAN-OUT W/ COVER FOR CONCRETE PAVED AREAS

N.T.S.



CLEAN-OUT W/ COVER FOR GRASS
(NON-VEHICULAR TRAFFIC) AREAS

N.T.S.



CLEAN-OUT W/ COVER FOR GRASS
AREAS W/ VEHICULAR TRAFFIC

N.T.S.

NOTES:

1. CONTRACTOR SHALL ADJUST THE CLEAN–OUT AND CAST IRON RING AND COVER OR HDPE BOX AND COVER SO THAT THE COVER IS SEATED SECURELY AND THE TOP OF THE COVER IS FLUSH WITH THE FINISH GRADE. THE PVC CAP OF THE CLEAN–OUT SHALL BE NO MORE THAN 4 INCHES DEEPER THAN THE FINISH GRADE.
2. PVC CAP MAY BE PROVIDED RECESSED NUT.
3. CAST IRON SHALL BE PROVIDED WITH AN EMBOSSED LETTER "S" FOR IDENTIFICATION, HDPE COVER SHALL BE MARKED "SEWER" FOR IDENTIFICATION.
4. CAST IRON RING AND COVER, OR HDPE AND COVER, AS WELL AS THE FOUR (4 SF) SQUARE FEET OF MATERIAL (CONCRETE OR ASPHALT AROUND THE CLEAN–OUT), ARE PART OF THE CLEAN–OUT INSTALLATION AND COST SHALL BE INCLUDED WITHIN THE UNIT PRICE FOR CLEAN–OUT WITH NO ADDITIONAL PAYMENT.
5. ALL CLEAN–OUTS ON THIS PROJECT SHALL BE ONE OF THE FOUR TYPES SHOWN ON THIS SHEET. FIELD CONDITIONS WILL DETERMINE WHICH TYPE.

CLEAN-OUT COVER DETAILS

N.T.S.

Plot Date: Wednesday, May 8, 2024

No.	DATE	REVISIONS	No.	DATE	REVISIONS
3			6		
2			5		
1			4		

DES: C.S.
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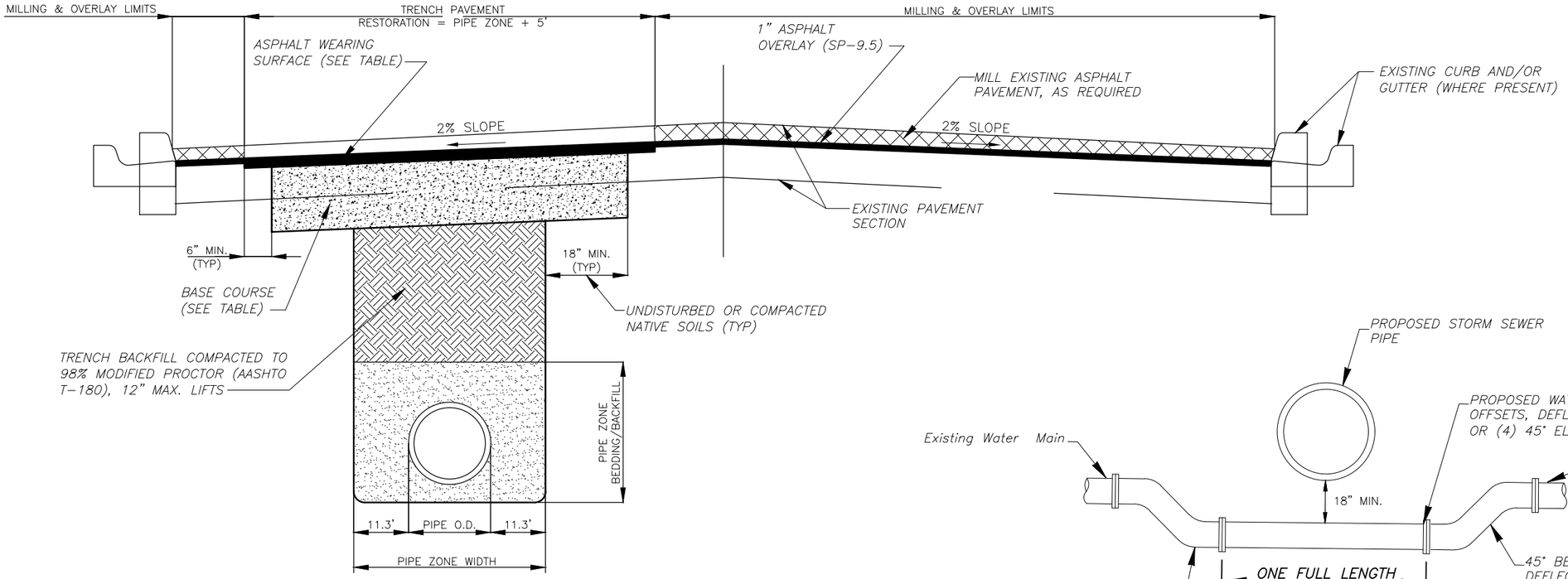
DATE: 3/14/2024

CITY of TAMPA
Mobility Department
Stormwater Engineering Division

ANNONA AVE. & 17th STREET
STORMWATER IMPROVEMENTS
WASTEWATER CLEAN-OUT COVER DETAILS

SHEET 12 OF 14



PAVEMENT RESTORATION DETAIL

NTS

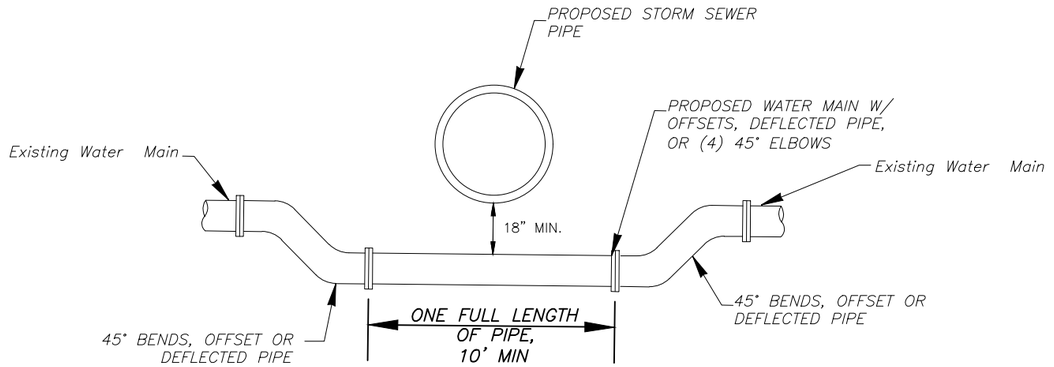
PAVEMENT REQUIREMENTS:

STREET CLASSIFICATION	BASE MATERIAL/THICKNESS (IN.)	ASPHALT MATERIAL/THICKNESS (IN.)
ALLEY (A)	CRUSHED CONC. / 6"	1"
RESIDENTIAL (I)	CRUSHED CONC. / 8"	2"
COLLECTOR / ARTERIAL. (II)	CRUSHED CONC. / 12"	3"

PAVEMENT RESTORATION NOTES:

1. OPEN CUT TRENCH FOR UTILITY INSTALLATION.
2. PROVIDE BEDDING AND PIPE BACKFILL WITHIN THE PIPE ZONE AS OTHERWISE REQUIRED.
3. ROAD BASE AND ASPHALT WEARING COURSES SHALL BE CONSTRUCTED IN ACCORDANCE WITH C.O.T. TRANSPORTATION TECHNICAL STANDARDS
4. FOR ROADWAY AREA OUTSIDE OF THE TRENCH ZONE, EXISTING ASPHALT PAVEMENT SHALL BE MILLED SUFFICIENTLY DEEP TO PROVIDE FOR ASPHALT OVERLAY TO THE LEVEL AND CROSS SLOPES INDICATED.
5. FINISHED ASPHALT SURFACE SHALL MEET CROSS SLOPE INDICATED AND SHALL MATCH GUTTER LINE FOR EXISTING CURB/GUTTER STREETS OR SHALL PROVIDE A 6" CURB REVEAL FOR BARRIER CURB STREETS. FOR NON-CURBED STREETS, MILLING SHALL EXTEND TO A DEPTH REQUIRED TO ALLOW ALL DRIVEWAY APRONS TO ADEQUATELY DRAIN.

5.1. CONTRACTOR SHALL REVIEW ROADWAY LONGITUDINAL GRADES PRIOR TO PAVEMENT RESTORATION WORK TO ENSURE THAT NO PONDING GREATER THAN ¼" DEEP SHALL REMAIN AT A TIME 2 HOURS AFTER THE SURFACE HAS BEEN FLOODED BY A STORM EVENT OR OTHERWISE BY THE CONTRACTOR APPLIED AT A SUFFICIENT RATE TO SATISFY ENGINEER OR HIS DESIGNEE.



POTABLE & RECLAIMED WATER MAIN RELOCATION (TYP.)

NTS

NOTE:

1. CONTRACTOR TO COORDINATE RELOCATION OF WATER MAIN WITH THE CITY OF TAMPA WATER DEPARTMENT.
2. ALL WORK SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF TAMPA WATER DEPT. TECHNICAL STANDARDS.
3. CONTRACTOR TO EXPOSE WATER MAIN AT PROPOSED CROSSING LOCATION AND CONFIRM EXISTING CONDITIONS INCLUDING WATER MAIN VERTICAL LOCATION.
4. SEE PLAN/PROFILE SHEETS FOR LOCATIONS, WATER MAIN DIAMETER & DEPTH OR ELEVATIONS OF STORM SEWER PIPE.

Plot Date: Wednesday, May 8, 2024

No.	DATE	REVISIONS	No.	DATE	REVISIONS
3			6		
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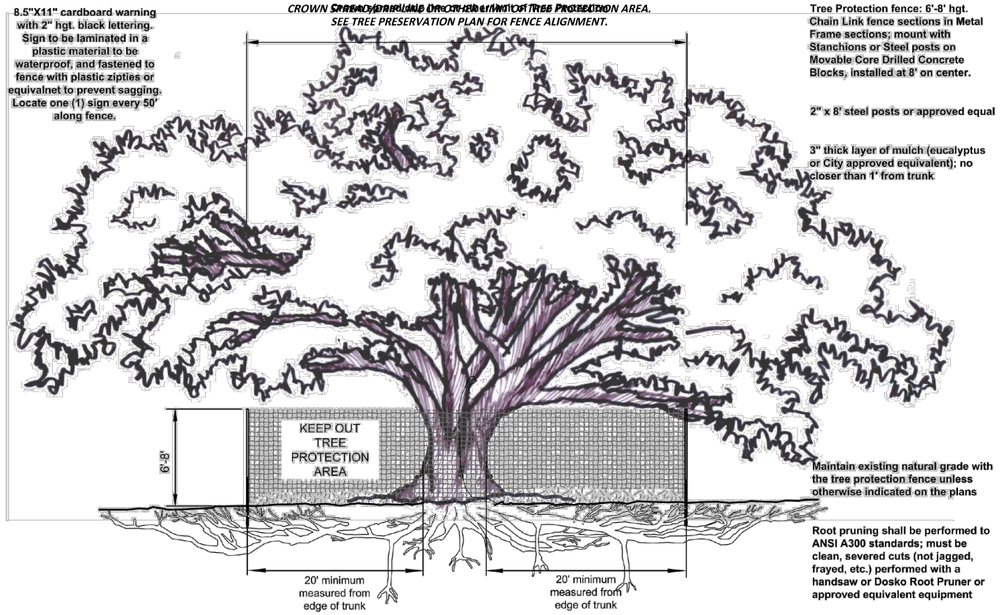
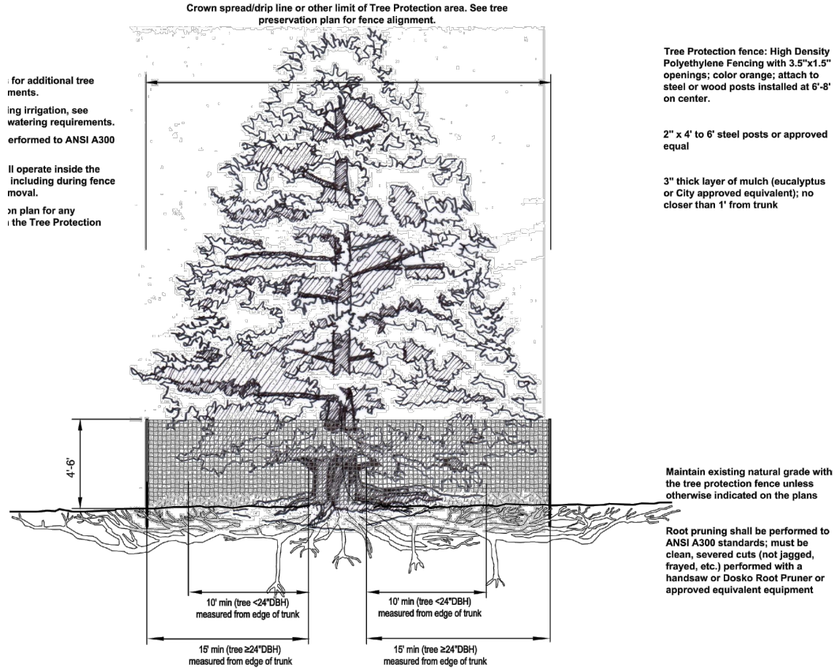
CITY of TAMPA
Mobility Department
Stormwater Engineering Division

ANNONA AVE. & 17th STREET
STORMWATER IMPROVEMENTS
PAVEMENT RESTORATION & WATER OFFSET DETAILS

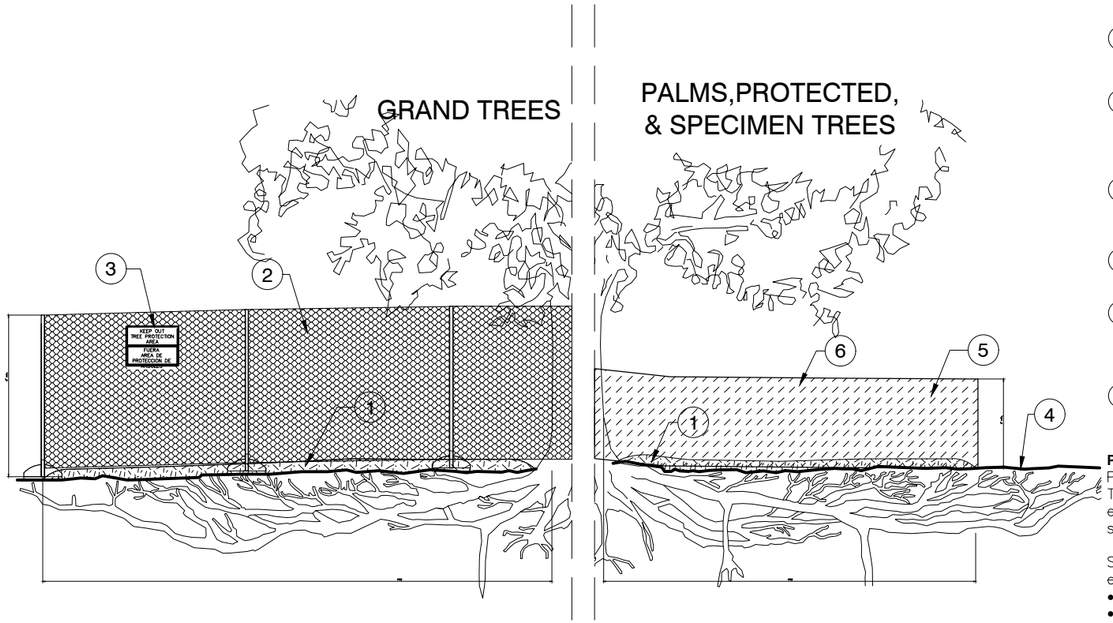
SW 2023-06

TREE PROTECTION FOR GRAND TREE





TREE PROTECTION FOR LARGE ORNAMENTAL, SHADE, AND CONIFER TREES
15' MINIMUM PROTECTIVE ROOT ZONE APPLIES TO SPECIMEN TREES. SEE SEC. 27-43.



1. 3–inch layer of mulch (eucalyptus or city approved equivalent); no mulch shall be placed within one foot of the trunk.
2. Grand Tree Protection Fence: 6–foot or 8–foot high chain link in metal frame sections; mount with stanchions or stell posts on movable core drilled concrete blocks, installed on 8' on center max spacing.
3. Notice Sign: 8.5" x11" corrugated plastic warning with 2" high black lettering. Fasten to fence with plastic zip toes or similar. Locate one sign every 50' of along the fence.
4. Maintain existing natural grade within the tree protection fence unless noted otherwise on the plans.
5. Standard Tree Protection Fence: high density polyethylene fencing with 3.5–inch x 1.5–inch openings; color orange; attach to steel or wood posts installed at eight–foot on center max.
6. 2x2x6' posts embedded a minimum of 24–inches (or similar approved post)

PRZ:
Protective Root Zone:
The entire surface and subsurface soil area encompassed by prescribed radius for protected, specimen, and grand trees.

See plan for fence extents, but typically the extents are as follows:

- **Palms: 3' offset FFT**
- **Protected Trees (5- to 23-inch DBH): 10' offset from face of trunk (FFT)**
- **Specimen Trees: (24- to 31-inch DBH):15' offset FFT**
- **Grand Trees (32-inch DBH): 20' offset FFT**

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 non–mechanical 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. All canopy pruning must Meet ANSI A300 pruning per "American National Standards for Tree Care Operations". ANSI. A300, current edition. Work should be planned and supervised by an ISA Certified Arborist.
7. Root Pruning shall be performed to ANSI A300 standards; must be clean, severed cuts (not jagged or frayed). Root pruning shall be performed with specifically designed mechanical root pruning tools (Vermeer or Dosko) or hand pruners, loppers, hand saws, reciprocating saws, oscillating saws, or small chain saws. Trenchers, excavators, and backhoes shall not be used to prune or crush roots.

00 TAMPA TREE PROTECTION DETAIL AND NOTES

DETAIL–FILE

Plot Date: Wednesday, May 8, 2024

No.	DATE	REVISIONS	No.	DATE	REVISIONS
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Mobility Department
Stormwater Engineering Division

ANNONA AVE. & 17th STREET
STORMWATER IMPROVEMENTS
TREE PROTECTION DETAILS

SHEET 14 OF 14