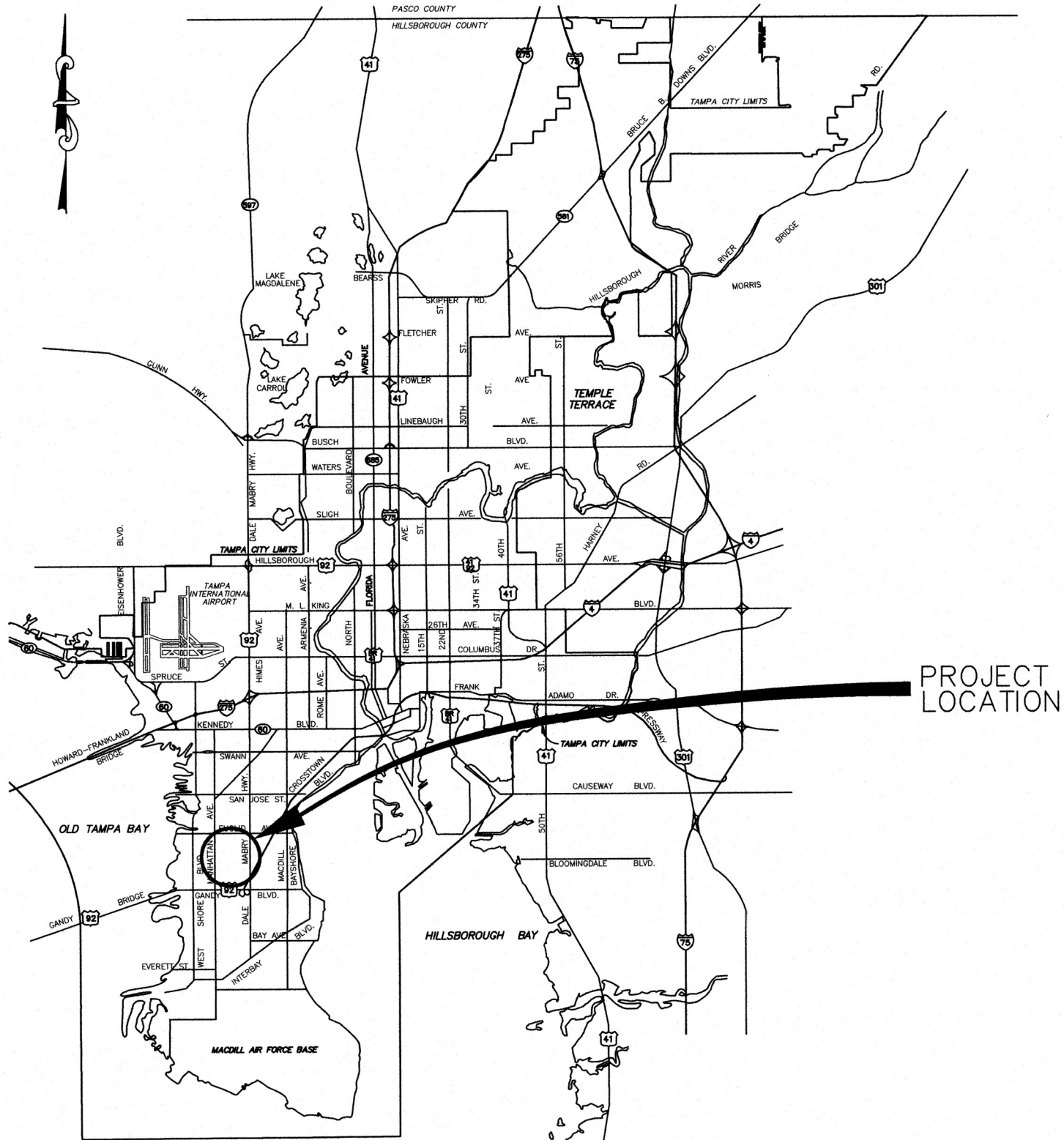
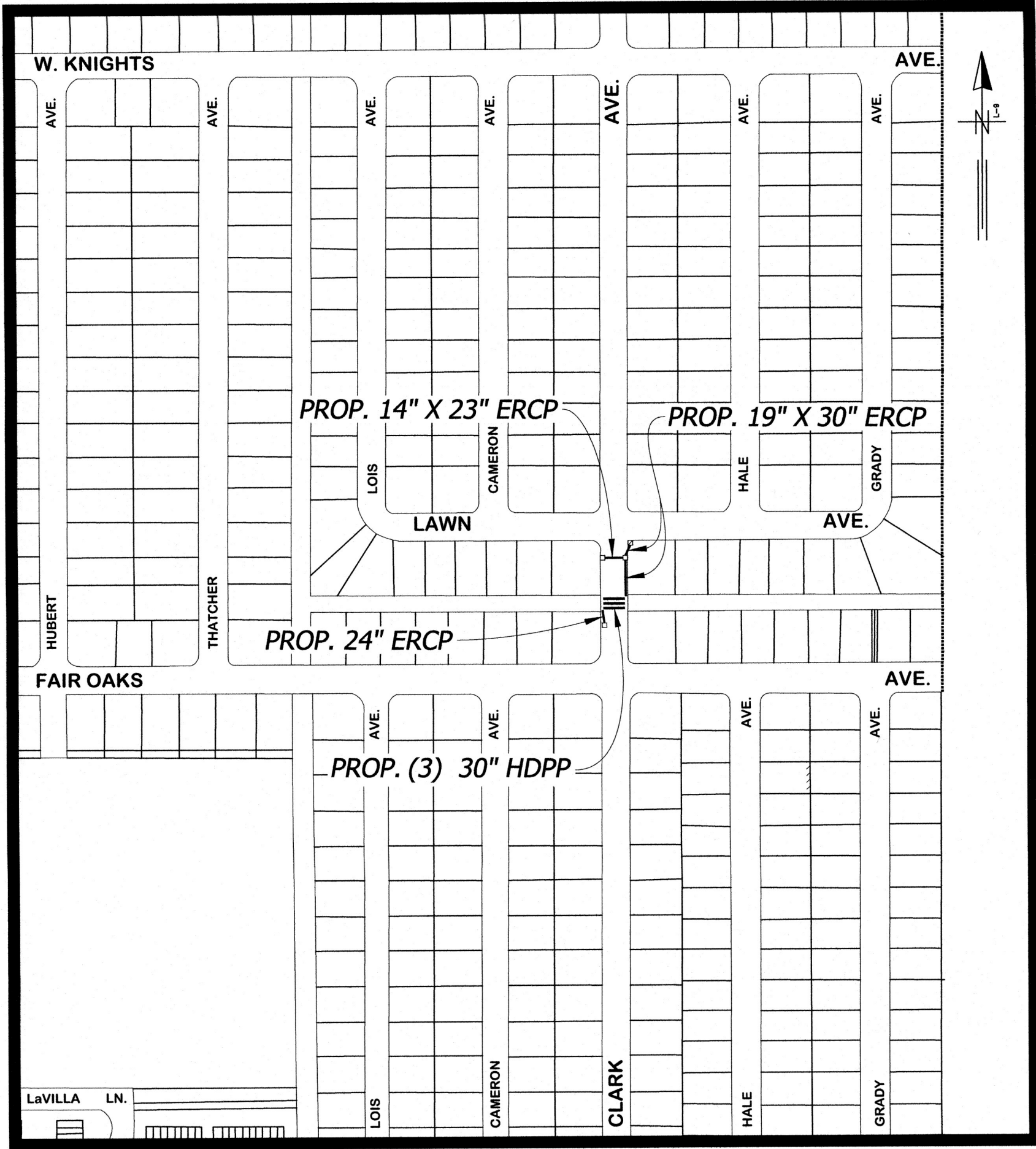
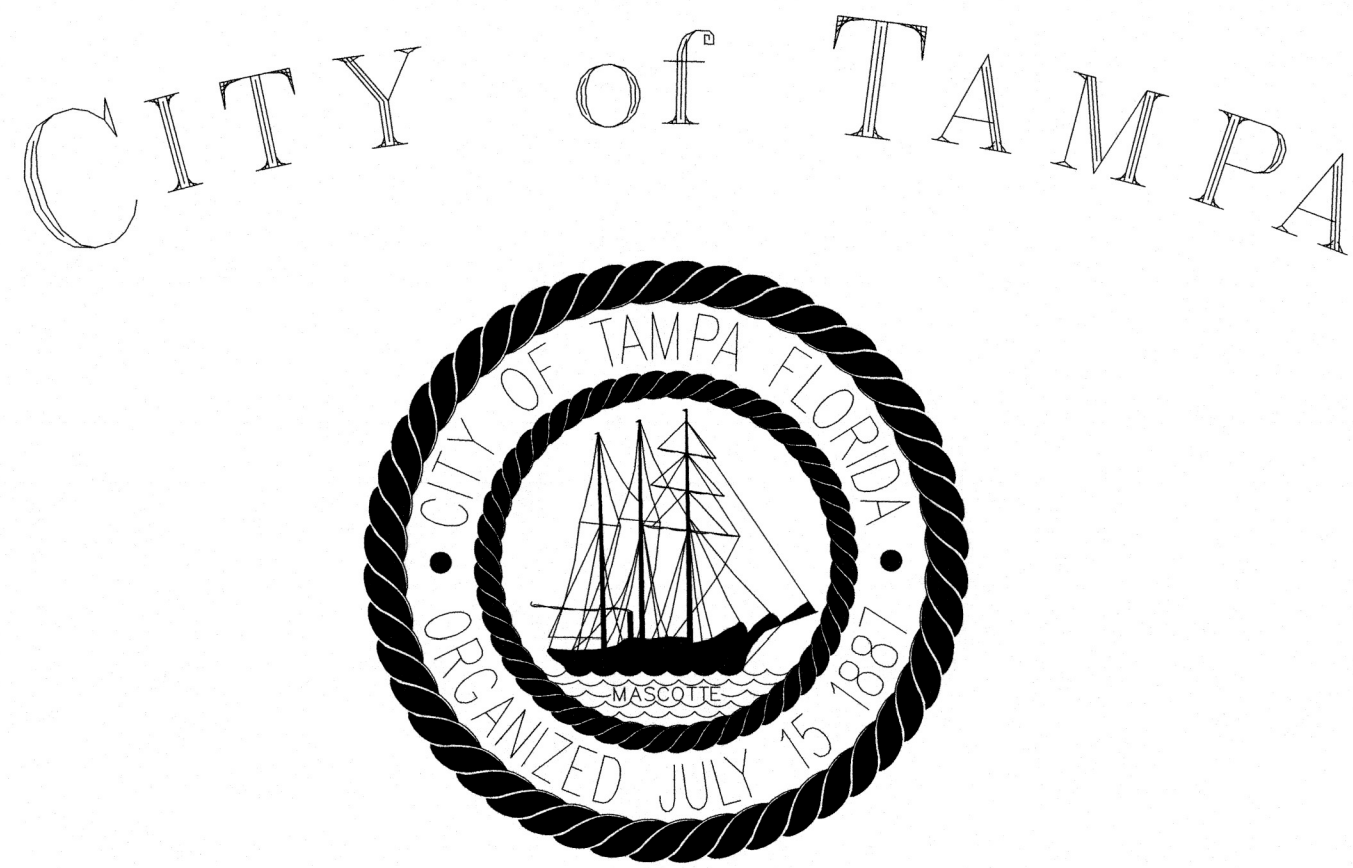




INDEX	
No.	DESCRIPTION
1	COVER SHEET, GENERAL NOTES, LEGEND, INDEX, AND MAP
2	PLAN AND PROFILE SHEET
3	SECTION VIEWS
4	GRADING DETAILS
5	DETAILS SHEET



PROJECT MAP
NOT TO SCALE



Mobility Department
Stormwater Engineering Division

PLANS FOR
CLARK & FAIROAKS
DRAINAGE IMPROVEMENTS

Contract No.
25-C-00041

GENERAL NOTES

- The Contractor shall perform all construction in accordance with the lines and grades shown on the Plans and to tolerances stated herein or in the specifications. Refer to the boundary and/or topographic survey for additional information on existing conditions. An electronic CADD drawing of the existing survey data and of the proposed site improvements is available and may be used for convenience in layout of the work. However, use of this electronic format is at the contractor's sole responsibility as all work must be in accordance with the contract documents for the project. The accuracy of these files shall be checked and verified by the user. Any discrepancies are to be brought to the attention of the Engineer prior to use of this information.
- Contractor shall be responsible for maintaining all horizontal and vertical control markers, right-of-way and property corners (monuments, pipes, etc.) for the duration of construction. Markers shall be continuously flagged and shall be reset immediately by a Florida licensed land surveyor if any should become disturbed.
- Contractor is to exercise caution when operating near or adjacent to existing public and private utilities. Locations, elevations and dimensions of existing utilities, structures and other features are shown according to the best information available at the time of the preparation of these drawings and do not purport to be absolutely correct. The Contractor shall verify the locations, elevations and dimensions of all existing utilities, structures, etc. affecting his work prior to construction.
- If utility field location markings are required, the Contractor shall coordinate his construction schedule with all utility companies as well as any affected City and County departments by providing a minimum 48-hour notice of when construction will commence in an area in order to permit field location of utility lines prior to construction. The Contractor is responsible for contacting SUNSHINE 811 for this purpose by dialing 811. Further, the Contractor is cautioned that the SUNSHINE 811 system may not reveal all onsite utilities and his further investigation may be required. Contractor shall coordinate utility relocation work with affected utility owner(s) and shall endeavor to coordinate his own work to avoid delays in his schedule.
- All utilities shall be kept in operation except with the express written consent of the utility owner. It shall be the Contractor's responsibility to preserve existing utilities and any and all damage to existing utilities as a result of the Contractor's actions shall be repaired at the Contractor's expense.
- The Contractor shall endeavor to protect all adjacent improvements within the project area and replace all pavement, stabilized earth, driveways, sidewalks, retaining walls, mailboxes, traffic signs, etc. removed or damaged during construction with the same material removed or damaged or as otherwise directed by the Engineer.
- The Contractor shall contact the Engineer prior to proceeding with any work with which a conflict has arisen during construction of any improvements shown in these documents.
- Construction shall be carried out "in the dry". The Contractor shall review site conditions and determine methods and extent of dewatering and/or bypassing of flows necessary and shall include costs of dewatering or bypassing in the bid. No additional compensation shall be provided for control of ground or surface water or for additional materials or rework required as a result of inadequate or insufficient dewatering.
- All work to be performed on this project shall be constructed according to the best practices of the industry and in accordance with applicable Federal, State, County and/or City codes, ordinances, technical standards and permit conditions.
- The Contractor shall be responsible for supplying a record survey(s) prepared and submitted by a licensed Professional Surveyor and Mapper including, but not limited to, location and finished grade elevations sufficient to determine direction of drainage and elevations of retention/detention areas, mitigation areas and ditch/channel conveyances including tops of banks, toes of slopes, pond bottoms and water levels; elevations and dimensions of point control structures, spillways, skimmers/baffles, sumps and underdrains; ties to water lines, valves, bends, service connections, water line elevations and clearances from sanitary and storm sewer pipes; ties to sanitary sewer lines, cleanouts and service connections, manhole rim and invert elevations; ties to storm sewer lines and storm structure top and invert elevations; plus locations, dimensions and elevations of all other construction components which vary from the design. Ties to underground utilities shall be dimensioned from permanent above ground structures (buildings, walls, poles, manholes, valve boxes, etc.). Four copies of the signed and sealed record survey and one copy of the survey in AutoCAD (.dwg) format shall be provided. A record survey depicting the as-built condition of only water and sewer utilities shall be provided if these utilities are to be placed in service prior to closeout of the project.

PROJECT NOTES:

- Reference Survey: Topographic survey prepared by Polaris Associates, Inc., dated May 19, 2020.
- The project site is located within Zone AE, Special Flood Hazard Areas Inundated by 100-year Flood, as shown on the Flood Insurance Rate Map Community Panel Number 12057C0344J114, dated 10/7/2021. Base Flood Elevation is 11, NGVD 1988.
- Elevations shown hereon are based on the North American Vertical Datum of 1988 (NAVD88) and utilize City of Tampa Bench Mark HV-02 0066, having an elevation of 8.606, NAVD 88.
- Bearings and coordinates shown hereon are based on the Florida State Plane Coordinate System, West Zone as referenced to the North American Datum 1983, adjustment of 2011, NAD83(2011) and are shown in US Survey Feet.

ROAD, DRAINAGE AND GRADING CONSTRUCTION NOTES

- All improvements within public rights-of-way shall be constructed in accordance with the project specifications, and the latest edition of City of Tampa Technical Standards, FDOT Standard Specifications for Road and Bridge Construction, the FDOT Roadway and Traffic Design Standard Indexes, and the FDOT Utility Accommodation Manual or in accordance with the requirements of the State or local authority having jurisdiction over the right-of-way, as applicable.
- Pavement and grading shall be sloped to the proposed elevations and/or contours shown on the drawings. Smooth, constant slopes shall be maintained between proposed elevations and contours. Proposed contour elevations, spot elevations and finished grade elevations in non-paved areas refer to finished surface elevations once sodding or seeding is complete and in paved areas refer to finished pavement elevations.
- All storm sewer pipes shall be reinforced concrete pipe (RCP), unless otherwise noted. Drainage inlet structures shall be precast and constructed in accordance with the City of Tampa Technical Standards and Standard Details. Cast-in-place or precast junction boxes or manholes shall be constructed in accordance with FDOT Roadway and Traffic Design Standards.
- All areas disturbed during construction (except landscape beds), shall be sodded to provide a restoration that is fully grassed at substantial completion. Contractor is responsible for controlling site erosion and shall provide additional sod, sod staking and shall fill, level, repair and re-grass all eroded or dead areas as necessary, to achieve an erosion-free restoration area (free from rutting, etc.) to the lines & grades shown herein upon final acceptance. Sod shall be 95% weed-free Argentine Bahia unless otherwise indicated or otherwise required to match existing sod type and shall be installed and maintained in accordance with FDOT Specification Section 570 and 575, as applicable, including the initial rolling to fully seat sod to the subgrade and eliminate irregular surface.
- Upon final pavement restoration, restripe road centerline to match pre-existing conditions, as follows:
 - Sta. 11+86 to Sta. 12+80 - Double Yellow
 - Sta. 12+80 to Sta. 14+11 - Skip Traffic Stripe (Yellow)

DEMOLITION NOTES

- All existing underground water, sewer, irrigation and storm sewer piping and structures which fall within 5 feet of the limits of new infrastructure, unless otherwise noted, shall be completely removed and legally disposed of offsite. All other found underground utilities left in place shall be clearly shown on the contractor as-built and grouted in-place unless otherwise approved by the Engineer.
- All incidental paving, sidewalks, bollards, fences, hedges, bushes and other appurtenances within construction limits shall also be removed. Trees not specifically shown to be removed shall be protected with tree barricades for the duration of construction. Tree limb or root pruning shall be done in the presence of a certified arborist and in accordance with the City Tree Permit.
- All materials demolished or removed shall be removed from the site and properly disposed of at the contractor's expense unless on-site use is otherwise approved.
- No open burning will be allowed at the site unless a plan is approved by the Owner, Engineer and the appropriate regulatory authority.
- Contractor shall repair, in kind, all adjacent structures, pavements, etc. damaged during demolition or construction.

ENVIRONMENTAL PROTECTION NOTES

General:

- Construction shall proceed such that all stormwater facilities (ponds, retention areas, control structures, storm sewers) to which a construction area drains are in place and operational prior to construction of impervious surfaces within that area.
- No excavation shall extend below the permitted design depths or elevations shown on the drawings unless additional testing supports such over-excavation and no lower semi-confining unit clayey soil material and/or limestone materials shall be excavated regardless if these materials are encountered within the permitted excavation depths or elevations. If any lower semi-confining unit clayey soil materials or limestone materials are encountered above the permitted depths or elevations, excavation operations shall immediately cease in the general area. Contractor shall notify the Engineer (and SWFVMD and/or Hills, City, E.P.C., as applicable) prior to any further excavation in these areas.

Dewatering Activities:

- Prior to any groundwater dewatering activities, Contractor shall obtain coverage under the FDEP Generic Permit for the Discharge of Produced Groundwater from any Non-Contaminated Site Activity pursuant to Chapter 62-621.300(2), F.A.C.
- All water collected and pumped during trench dewatering activities shall be disposed of in upland areas into double stacked hay bales. Discharge locations shall be a minimum of 75 feet from the nearest property boundary, wetland jurisdictional or surface water area, to allow for maximum overland filtration of soil particles.

Erosion & Sediment Control BMPs:

- Staked or floating silt screens, hay bales, or other appropriate best management practices (BMPs), shall be utilized as silt barriers and placed in locations as required to keep sediment from reaching downstream waters, including ditches, storm sewers, water bodies, wetland areas, adjacent properties or rights-of-way. These barriers shall be installed prior to commencing construction and shall be considered as limits of construction. Perimeter clearing and grubbing along the limits of construction is allowed, if necessary, to facilitate installation of silt barriers providing that disturbance is the minimum width necessary for such work. Perimeter barriers shall be fully installed, including backfilling if necessary, prior to any additional clearing and grubbing operations within the construction limits.
- Temporary stockpiles shall not be located adjacent to storm sewer inlets, ditches, undisturbed wetlands or surface water areas where sedimentation from stockpiles may cause damage. Additionally, silt barriers shall continuously and fully enclose all stockpiles which will remain for longer than 24 hours to contain materials within a reasonably confined area.
- Off-site vehicle tracking of sediment shall be minimized by cleaning vehicle undercarriage areas or other effective methods prior to site departure.
- All fugitive dust shall be controlled on site. Only areas scheduled for immediate construction shall be cleared or stripped of vegetation. Watering, application of calcium chloride or other prior approved means of dust control shall be employed to prevent the emanation of dust from the site. Permanent grassing, landscaping and other site work shall be incorporated as soon as possible.
- Contractor shall use other structural BMPs, as necessary, to divert runoff from exposed soils, store runoff and/or sediment on-site, or otherwise limit runoff and the discharge of pollutants from exposed areas of the site.
- Contractor shall inspect and maintain all sediment and erosion control BMPs to assure proper operation. Inspections shall occur at a minimum interval of once every 7 calendar days and within 24 hours of the end of a storm that is 1/4-inch or greater.
- Any maintenance operations needed to assure proper operation of all controls, shall be done in a timely manner, but in no case later than 7 calendar days following the inspection in which the need is identified.
- Temporary or permanent stabilization BMPs shall be used as soon as practicable, but in no case less than 14 days, in portions of the site where construction activities have been temporarily or permanently ceased. Stabilization BMPs may include temporary seeding, permanent seeding, mulching, geotextiles, sod stabilization, swale sodding, vegetative buffer strips, protection of trees, preservation of mature vegetation, and other appropriate measures.
- Once construction is completed and finished grading and final stabilization has been achieved, silt barriers shall be completely removed to the satisfaction of the Engineer and prior to final acceptance.

LEGEND

A/C = AIR CONDITIONER UNIT BLDG = BUILDING (C) = CALCULATED DATA CCR = CERTIFIED CORNER RECORD CLF = CHAIN LINK FENCE CMP = CORRUGATED METAL PIPE CONC = CONCRETE COR = CORNER CPB = CONDOMINIUM PLAT BOOK C/T = CURB TIE (D) = DEED DATA DB = DEED BOOK DIP = DUCTILE IRON PIPE EOMP = ELLIPTICAL CORRUGATED METAL PIPE EL = ELEVATION EP = EDGE OF PAVEMENT ERCP = ELLIPTICAL REINFORCE CONCRETE PIPE (F) = FIELD DATA FCM = FOUND CONCRETE MONUMENT FDOT = FLORIDA DEPARTMENT OF TRANSPORTATION FIR = FOUND IRON ROD FND = FOUND NAIL & DISC FOP = FOUND OPEN PIPE FPP = FOUND PINCHED PIPE FRRS = FOUND RAILROAD SPIKE F/T = FENCE TIE GE = GRATE ELEVATION GE = GRATE ELEVATION (IE) = INVERT ELEVATION (L) = LEGAL DESCRIPTION DATA LB = LICENSED BUSINESS LS = LICENSED SURVEYOR MAS = MASONRY MHW = MEAN HIGH WATER NP = NORMAL POOL O/A = OVERALL OR = OFFICIAL RECORDS BOOK (P) = PLAT DATA PB = PLAT BOOK PG = PAGE PLS = PROFESSIONAL LAND SURVEYOR POB = POINT OF BEGINNING POC = POINT OF COMMENCEMENT PRM = PERMANENT REFERENCE MONUMENT PSM = PROFESSIONAL SURVEYOR & MAPPER P/T = PAVEMENT TIE PVC = POLY VINYL CHLORIDE RCP = REINFORCE CONCRETE PIPE RLS = REGISTERED LAND SURVEYOR R/W = RIGHT-OF-WAY SEC = SECTION SHW = SEASONAL HIGH WATER SIB = SET FROM ROD 1/2" LB 6113 SND = SET NAIL & DISC LB 6113 SR = STATE ROAD S/T = SIDEWALK TIE ST = STORY SW = SIDEWALK TBM = TEMPORARY BENCH MARK (TYP) = TYPICAL VCP = VITRIFIED CLAY PIPE WF = VINYL FENCE W = WITH WW = WOOD FENCE W/T = WALL TIE + 25.25 = POINT OF ELEVATION	= BACKFLOW PREVENTER = BOLLARD or POST [BX] = BOX, CABLE TELEVISION [BX] = BOX, ELECTRIC UTILITY [BX] = BOX, ELECTRIC UTILITY (TRANSFORMER) [BX] = BOX, TELEPHONE [BX] = DECORATIVE LIGHT POLE [BX] = ELECTRIC OUTLET [BX] = FIRE HYDRANT [BX] = FLAGPOLE [BX] = FLARED END SECTION [BX] = GRATE INLET [BX] = GROUND LIGHT [BX] = GUY ANCHOR [BX] = LIGHT POLE, CONCRETE [BX] = LIGHT POLE, METAL [BX] = LIGHT POLE, WOOD [BX] = MAILBOX [BX] = MANHOLE, ELECTRIC [BX] = MANHOLE, GREASE TRAP [BX] = MANHOLE, SANITARY SEWER [BX] = STORM SEWER STRUCTURE [BX] = MANHOLE, TELEPHONE [BX] = METER, ELECTRIC [BX] = METER, GAS [BX] = METER, RECLAIMED WATER [BX] = METER, WATER [BX] = MITERED END SECTION [BX] = MONITORING WELL [BX] = PEDESTRIAN CROSSING SIGNAL [BX] = SANITARY CLEANOUT [BX] = SCHEDULE B-2 ITEM [BX] = TELEPHONE RISER [BX] = TRAFFIC SIGN [BX] = TRAFFIC SIGNAL BOX [BX] = TRAFFIC SIGNAL POLE [BX] = UNDERGROUND CABLE TELEVISION MARKER [BX] = UNDERGROUND CABLE TELEVISION WARNING SIGN [BX] = UNDERGROUND ELECTRIC MARKER [BX] = UNDERGROUND ELECTRIC WARNING SIGN [BX] = UNDERGROUND FIBER OPTIC MARKER [BX] = UNDERGROUND FIBER OPTIC WARNING SIGN [BX] = UNDERGROUND FORECMAIN MARKER [BX] = UNDERGROUND FORECMAIN WARNING SIGN [BX] = UNDERGROUND GAS MARKER [BX] = UNDERGROUND GAS WARNING SIGN [BX] = UNDERGROUND RECLAIMED WATER MARKER [BX] = UNDERGROUND RECLAIMED WATER WARNING SIGN [BX] = UNDERGROUND SANITARY SEWER MARKER [BX] = UNDERGROUND SANITARY SEWER WARNING SIGN [BX] = UNDERGROUND TELEPHONE MARKER [BX] = UNDERGROUND TELEPHONE WARNING SIGN [BX] = UNDERGROUND WATER MARKER [BX] = UNDERGROUND WATER WARNING SIGN [BX] = UTILITY POLE, CONCRETE [BX] = UTILITY POLE, METAL [BX] = UTILITY POLE, WOOD [BX] = VALVE, GAS [BX] = VALVE, RECLAIMED WATER [BX] = VALVE, SANITARY [BX] = VALVE, WATER [BX] = WELL
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Plot Date: Tuesday, May 14, 2024

 RICHARD ALFRED HOEL, P.E. #41026 CHIEF ENGINEER	No.	DATE	REVISIONS	No.	DATE	REVISIONS	DES: JWD DRN: JDM CKD: JDM DATE: 05/14/2024	CITY of TAMPA MOBILITY DEPARTMENT STORMWATER ENGINEERING DIVISION	CLARK & FAIROAKS DRAINAGE IMPROVEMENTS	SHEET 1 OF 5
	3			6						
	2	5/31/2024	UTILITY REVISIONS	5						
	1	5/17/2024	PROFILE UTILITY REVISION	4						

- S-1** STA. 11+95.08, 17.5' LT
PROP. TYPE "E" INLET
TOP ELEV. 7.75'
N. INV. = 5.06'
- S-2** STA. 13+72.44, 16' LT
PROP. TYPE "T" INLET
TOP ELEV. 7.25'
E. INV. = 5.28'
- S-3** STA. 13+72.44, 24' RT
PROP. TYPE "E" INLET
TOP ELEV. 7.25'
W. INV. = 5.20'
NE. INV. = 5.10'
S. INV. = 5.10'
- S-4** STA. 13+95.30, 48' RT
PROP. TYPE "E" INLET
TOP ELEV. = 7.40'
SW. INV. = 5.20'

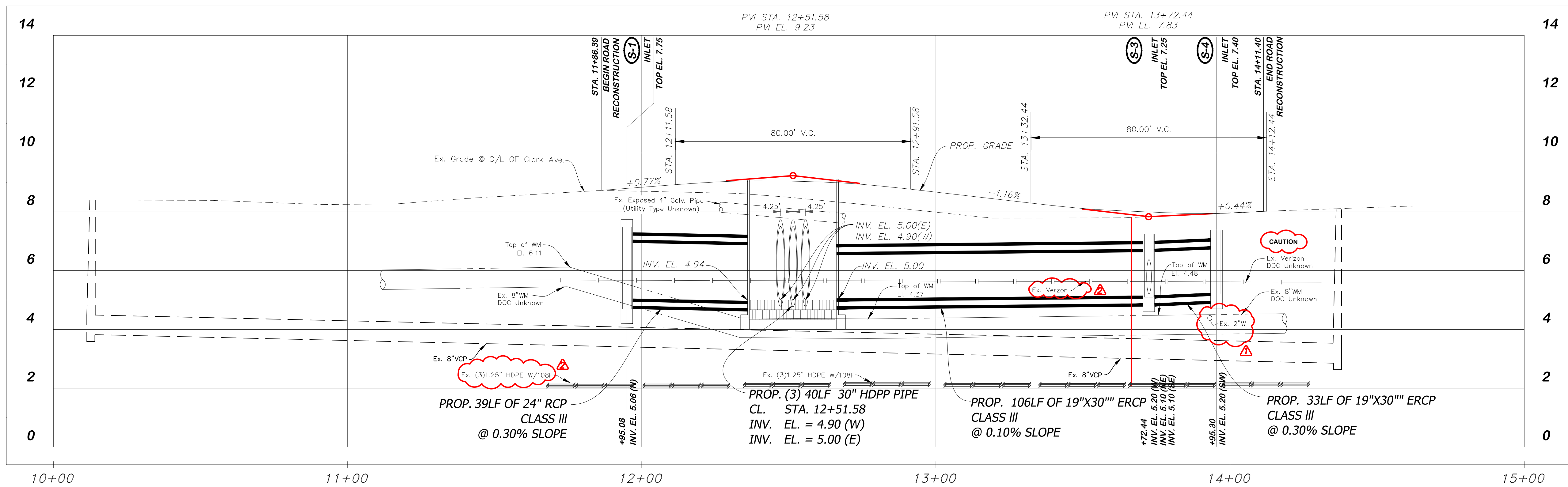
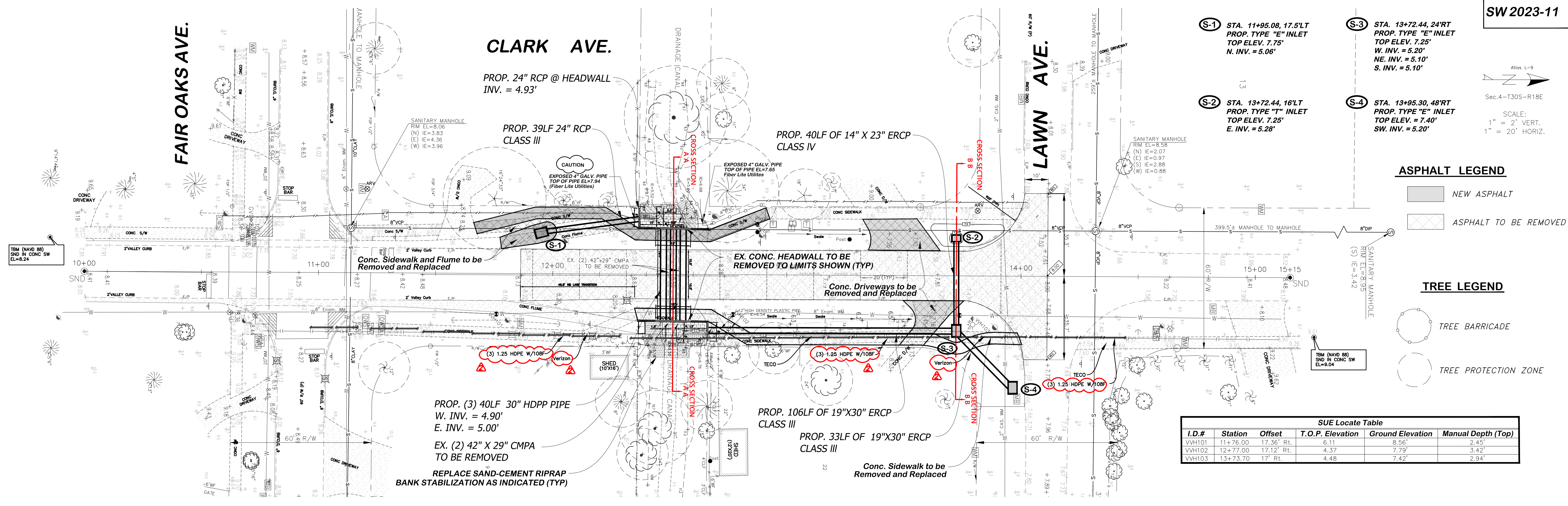
ASPHALT LEGEND

- NEW ASPHALT
- ASPHALT TO BE REMOVED

TREE LEGEND

- TREE BARRICADE
- TREE PROTECTION ZONE

SUE Locate Table					
I.D.#	Station	Offset	T.O.P. Elevation	Ground Elevation	Manual Depth (Top)
VH101	11+76.00	17.36' Rt.	6.11	8.56'	2.45'
VH102	12+77.00	17.12' Rt.	4.37	7.79'	3.42'
VH103	13+73.70	17' Rt.	4.48	7.42'	2.94'



No.	DATE	REVISIONS	No.	DATE	REVISIONS
3			6		
4	5/31/2024	UTILITY REVISION	5		
5	5/17/2024	PROFILE UTILITY REVISION	4		

DES: JWD
DRN: JDM
CKD: JDM
DATE: 05/14/2024

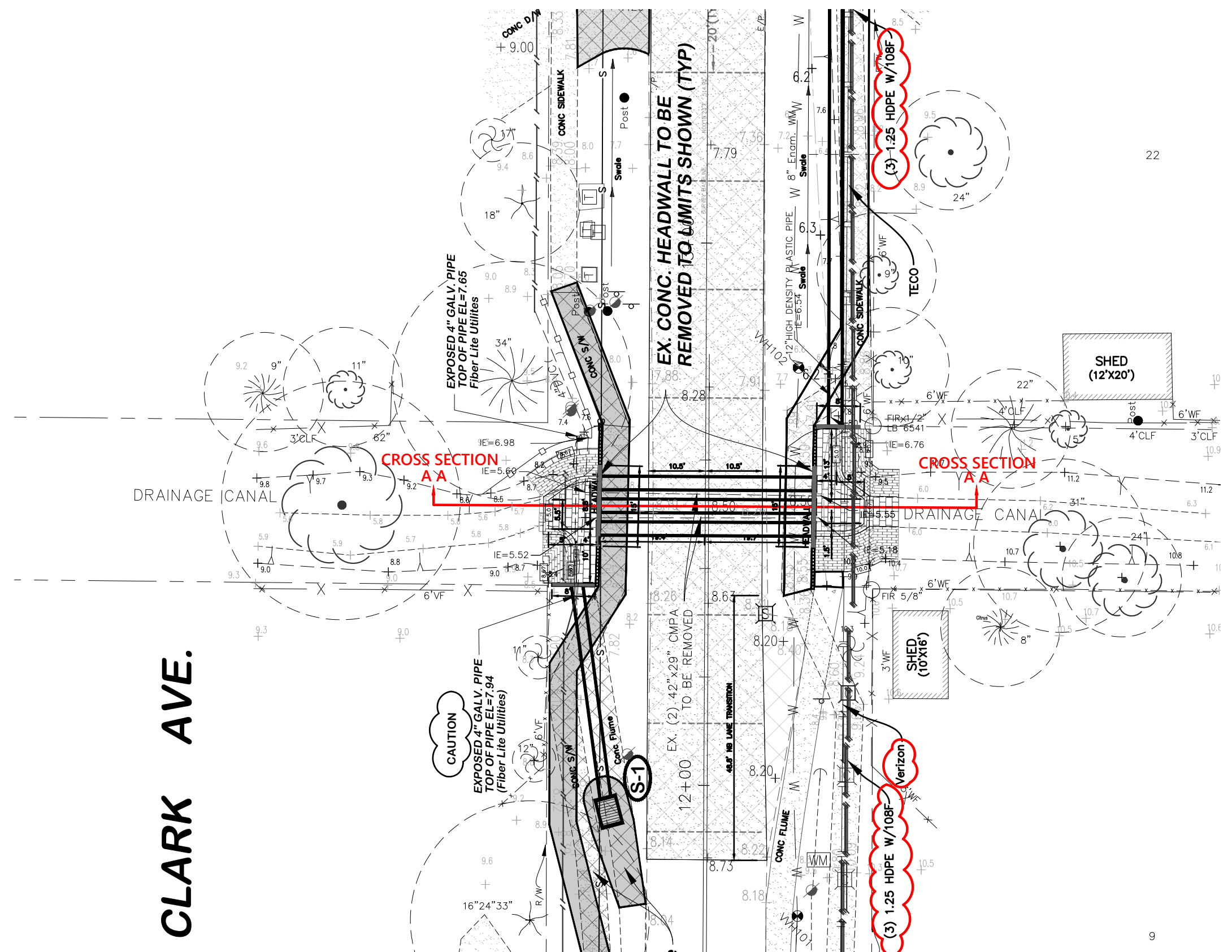
CITY of TAMPA
Mobility Department
Stormwater Engineering Division

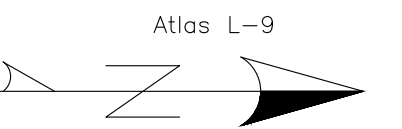
**CLARK AVE & FAIR OAKS
PLAN & PROFILE**

Sec. 4-T305-R18E
SCALE:
1" = 2' VERT.
1" = 20' HORIZ.

TREE LEGEND

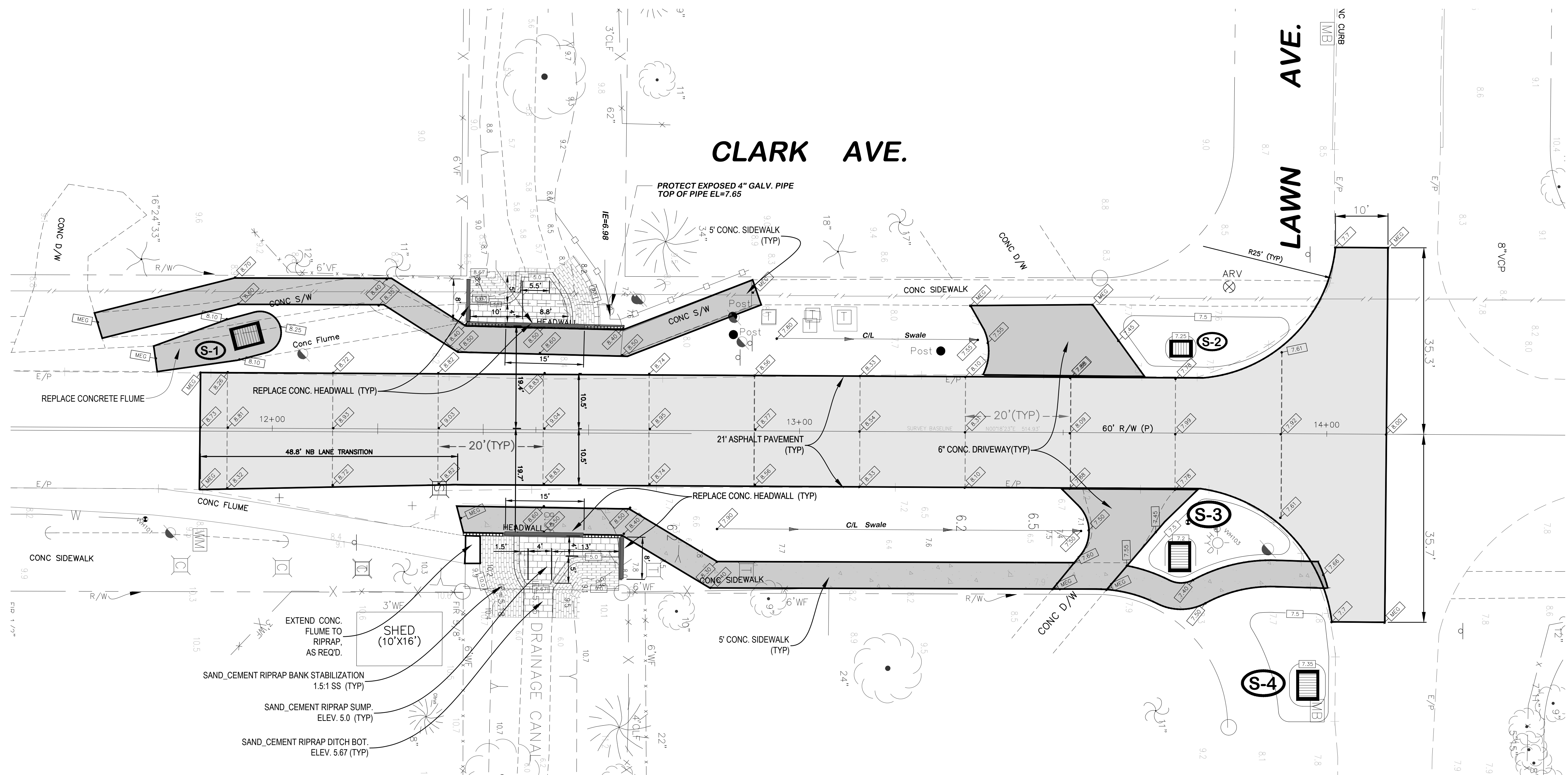
- TREE BARRICADE
- TREE PROTECTION ZONE





Sec.4-T30S-R18E

SCALE:
1" = 10' HORIZ.



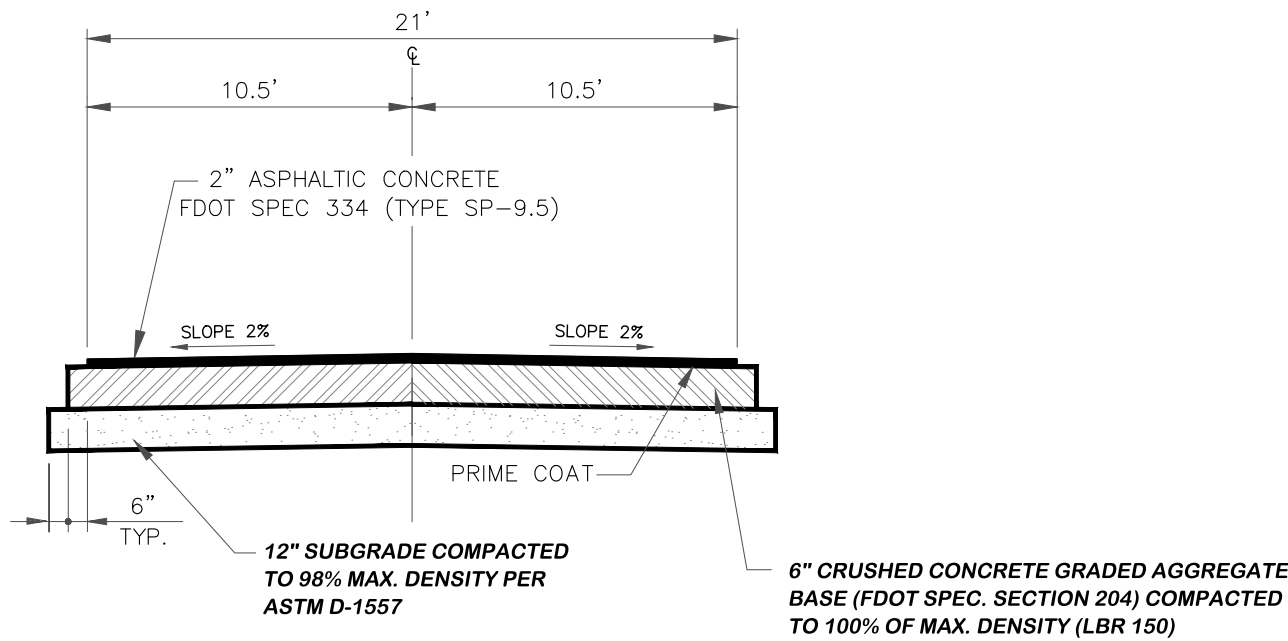
No.	DATE	REVISIONS	No.	DATE	REVISIONS	DES: JWD DRN: JDM CKD: JDM DATE: 05/14/2024	 CITY of TAMPA Mobility Department Stormwater Engineering Division	CLARK AVE GRADING PLANS	SHEET
3			6						4
2			5						
1			4						of 5

(HDPP) INSTALLATION NOTES:

1. ALL PIPE SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH ASTM D2321, "STANDARD PRACTICE FOR UNDERGROUND INSTALLATION OF THERMOPLASTIC PIPE FOR SEWERS AND OTHER GRAVITY FLOW APPLICATIONS", LATEST EDITION, WITH THE EXCEPTION THAT THE INITIAL BACKFILL MAY EXTEND TO THE CROWN OF THE PIPE. SOIL CLASSIFICATIONS ARE PER THE LATEST VERSION OF ASTM D2321. CLASS IVB MATERIALS (MH, CH) AS DEFINED IN PREVIOUS VERSIONS OF ASTM D2321 ARE NOT APPROPRIATE BACKFILL MATERIALS.
2. MEASURES SHOULD BE TAKEN TO PREVENT MIGRATION OF NATIVE FINES INTO BACKFILL MATERIAL, WHEN REQUIRED.
3. FOUNDATION: WHERE THE TRENCH BOTTOM IS UNSTABLE, THE CONTRACTOR SHALL EXCAVATE TO A DEPTH REQUIRED BY THE ENGINEER AND REPLACE WITH SUITABLE MATERIAL AS SPECIFIED BY THE ENGINEER, AS AN ALTERNATIVE AND AT THE DISCRETION OF THE DESIGN ENGINEER, THE TRENCH BOTTOM MAY BE STABILIZED USING A GEOTEXTILE MATERIAL.
4. BEDDING: SUITABLE MATERIAL SHALL BE CLASS I, II, OR III. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER. COMPACTION SHALL BE 95% MAX.DENSITY. UNLESS OTHERWISE NOTED BY THE ENGINEER, MINIMUM BEDDING THICKNESS SHALL BE 4"FOR 12"-24" DIAMETER PIPE; 6" FOR 30"-36" DIAMETER PIPE. THE MIDDLE 1/3 BENEATH THE PIPE INVERT SHALL BE LOOSELY PLACED.
5. PRECAST CONCRETE ANCHORS OR OTHER APPROVED ANCHORING DEVICE SHALL BE PROVIDED AND PLACED IN SUFFICIENT QUANTITY TO PREVENT HDPP FROM BEING DISPLACED DURING AND POST-CONSTRUCTION DUE TO FLOATATION OR STORMWATER STREAM FLOW FORCES.
6. INITIAL BACKFILL: SUITABLE MATERIAL SHALL BE CLASS I, II, OR III IN THE PIPE ZONE EXTENDING TO THE CROWN OF THE PIPE. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER. MATERIAL SHALL BE INSTALLED AS REQUIRED IN ASTM D2321, LATEST EDITION. COMPACTION SHALL 95% MAX.DENSITY.
7. MINIMUM COVER: MINIMUM COVER, IN NON-TRAFFIC APPLICATIONS (GRASS OR LANDSCAPE AREAS) IS 12" FROM THE TOP OF PIPE TO GROUND SURFACE. FOR TRAFFIC APPLICATIONS, CLASS I OR II MATERIAL COMPACTED TO 90% SPD AND CLASS III COMPACTED TO 95% SPD IS REQUIRED. FOR TRAFFIC APPLICATIONS, MINIMUM COVER, H, IS 12" UP TO 36" DIAMETER PIPE, MEASURED FROM TOP OF PIPE TO BOTTOM OF FLEXIBLE PAVEMENT OR TO TOP OF RIGID PAVEMENT.

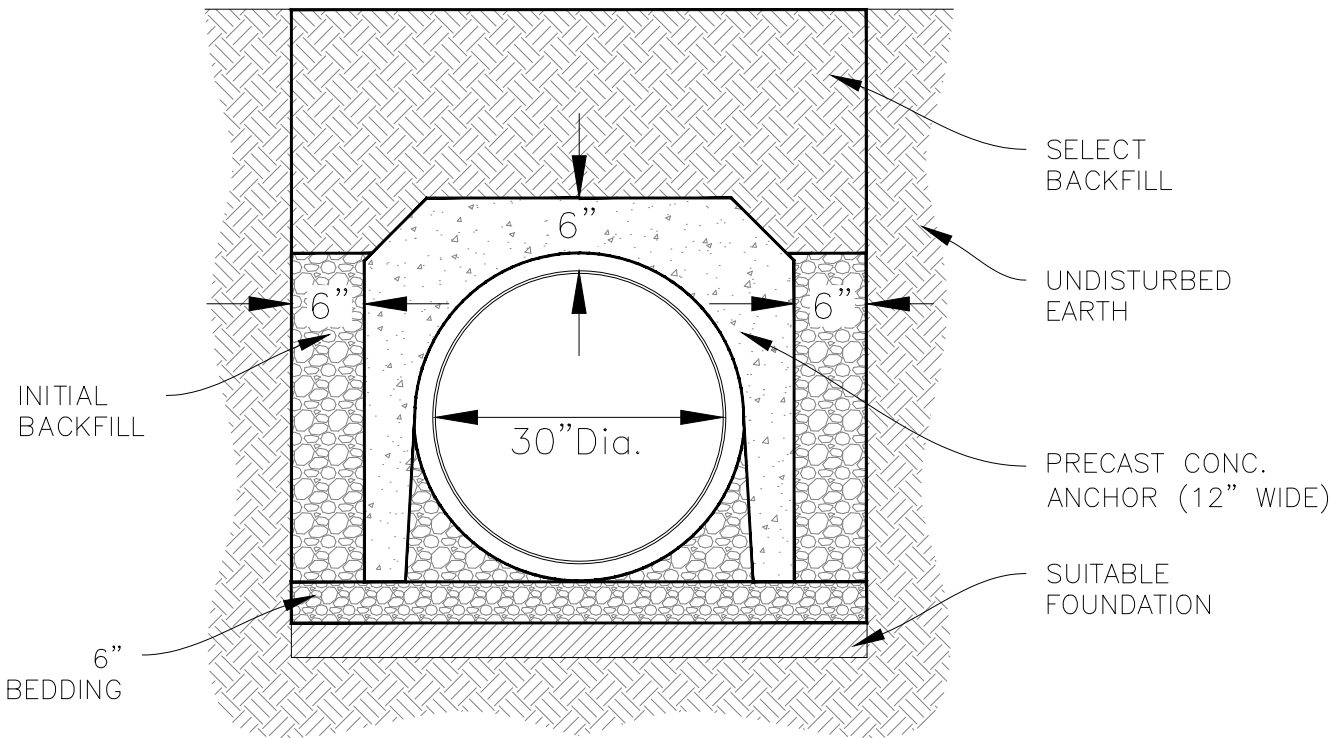
HEADWALL CONSTRUCTION – BOND WALLS TO EXISTING:

1. GENERAL: HEADWALL CONSTRUCTION SHALL GENERALLY COMPLY WITH FDOT STANDARD PLAN INDEX 430-031 EXCEPT AS MODIFIED AND DETAILED HEREIN.
2. PRIOR TO RECONSTRUCTING HEADWALLS, CONTACTOR SHALL TAKE THE FOLLOWING STEPS TO STRUCTURALLY BOND THE NEW HEADWALL TO THE EXISTING HEADWALL SECTIONS BY INSTALLATION OF #4 REBAR @ 6" OC AT THE NEW-TO-EXISTING INTERFACE:
 - 2.a.CREATE MIN. 5/8" DIAMETER HOLES 6" DEEP AT THE MIDDLE OF THE WALL THICKNESS USING 5/8" CONCRETE DRILL. THE HOLES SHALL BE MADE ON SOUND PRECAST WALLS ALL AROUND THE REPAIR AREA. DRILL HOLES AT 8" ON CENTER.
 - 2.b.USING EPON C-6 OR SIMPSON STRONG TIE SET XP OR EQUIVALENT FAST SETTING EPOXY, INSTALL #4 DOWEL / REBAR. OBJECTIVE OF THESE REBAR IS TO CREATE A REINFORCING MESH OF 6"X6". THE MINIMUM 24" OVERLAP IS REQUIRED AT THE SPLICE.
 - 2.c.THE CLEAR COVER OF THE REBAR FROM THE RCP PIPE OUTSIDE SHALL BE 2" (WITH ~1/4" TOLERANCE).
 - 2.d.PLEASE NOTE, INSTALL REBAR WHERE THE GAP BETWEEN PRECAST OPENING EDGE AND PIPE OUTER EDGE IS 6" OR MORE. THE AREAS WHERE MENTIONED GAP IS LESS THAN 6", INSTALLATION OF REBAR / DOWEL BAR IS NOT REQUIRED. SUCH AS AT THE TOP OF THE 76"X48" ERCP ON WALL C ON STR 179A.
3. AFTER CURING THE EPOXY, CUT A MAT OF WELDED WIRE MESH REINFORCING (3X8-W3XW2 OR HIGHER AREA OF STEEL MAT) TO FIT THE OPENING AND TIE TO THE #4 DOWELS / REBARS AT THE OUTER SIDE OF THE REBAR / DOWELS. TIE MESH AND REBAR AT ALL ALTERNATE REBAR INTERSECTION.
4. APPLY SIKADUR-32 HI-MOD – HIGH MODULUS, HI STRENGTH, EPOXY BONDING/GROUTING ADHESIVE TO SCARIFIED SURFACE. APPLY BY BRUSH, ROLLER, BROOM, OR SPRAY. ADHERE TO THE MANUFACTURE'S RECOMMENDATIONS FOR PREPARATION AND APPLICATION. USE OF SIMILAR PRODUCT FROM FDOT APPROVED PRODUCT LIST IS ACCEPTABLE.
5. FORM AND FILL THE OPENING USING QUICKKRETE COMMERCIAL GRADE FASTSET DOT MORTAR OR SIMILAR. PREPARE CONCRETE GROUT TO HAVE ZERO SLUMP. GROUT SHALL BE COMPACTED AND FILLED COMPLETELY IN FORM WITHOUT ANY AIR POCKETS. SCREED THE REPAIRED SURFACE. ADHERE TO THE MANUFACTURE'S RECOMMENDATIONS FOR PREPARATION AND APPLICATION. NO SPECIAL CURING METHODS ARE REQUIRED. USE OF SIMILAR PRODUCT FROM FDOT APPROVED PRODUCT LIST IS ACCEPTABLE.
6. COVER THE FRESH GROUT WITH TARPAULINS OR BURLAP SACK AND ALLOW TO CURE. NO SPECIAL CURING TREATMENT IS REQUIRED.



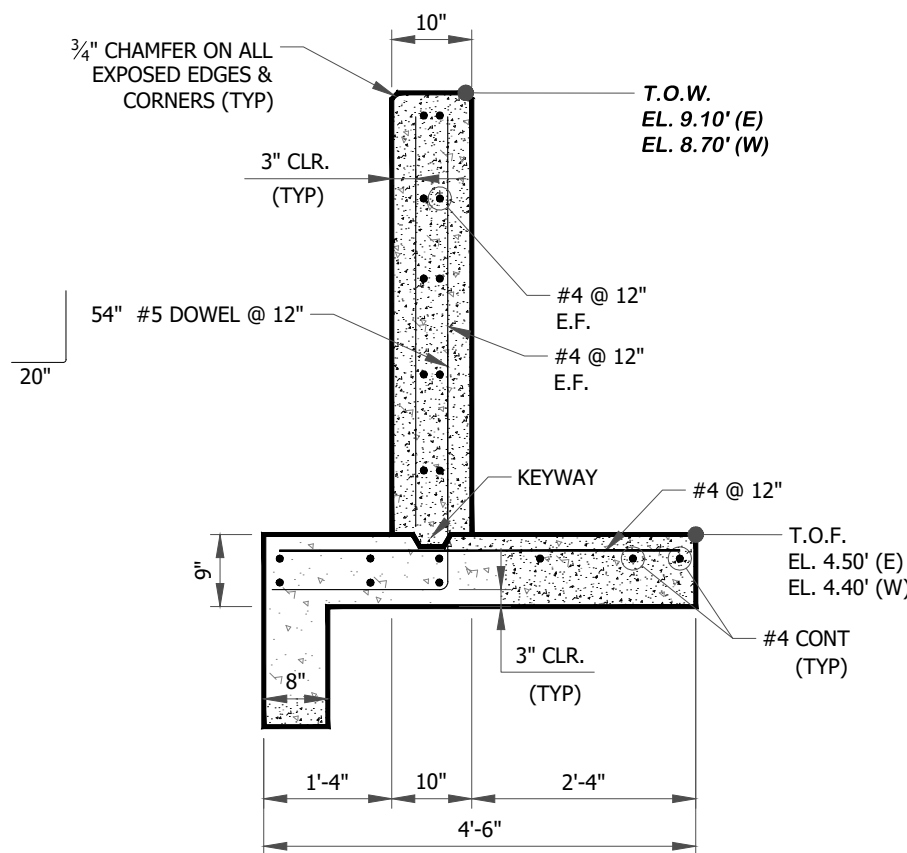
TYPICAL ROADWAY SECTION

N.T.S.



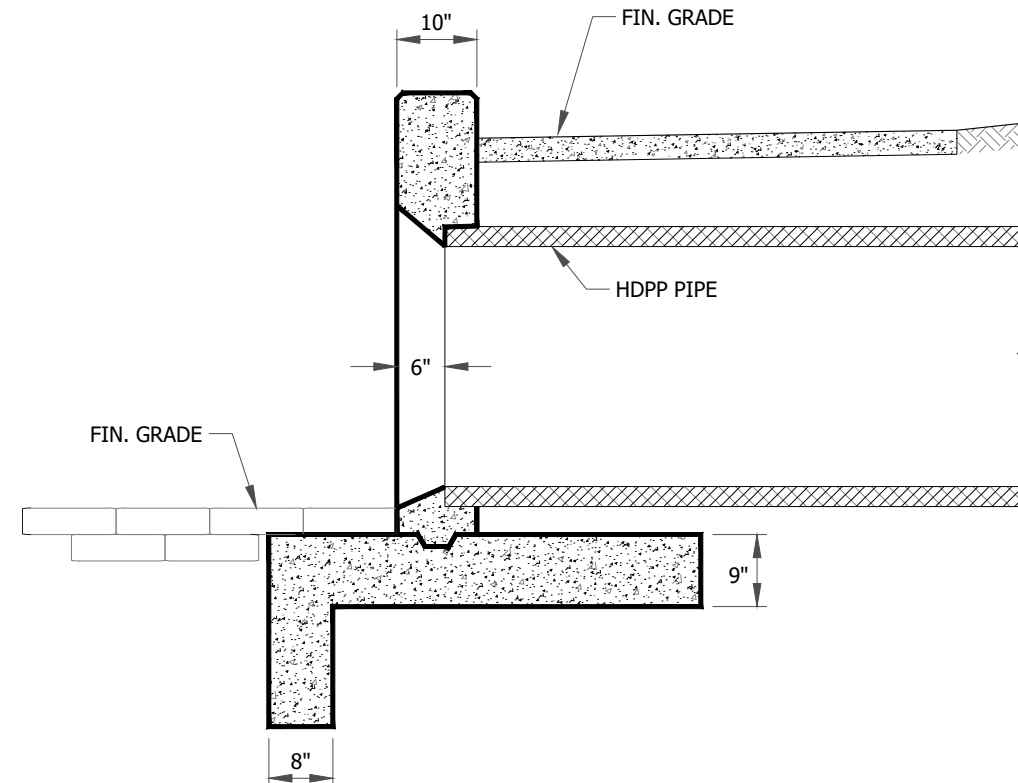
HDPP PIPE TRENCH & ANCHOR DETAIL

N.T.S.



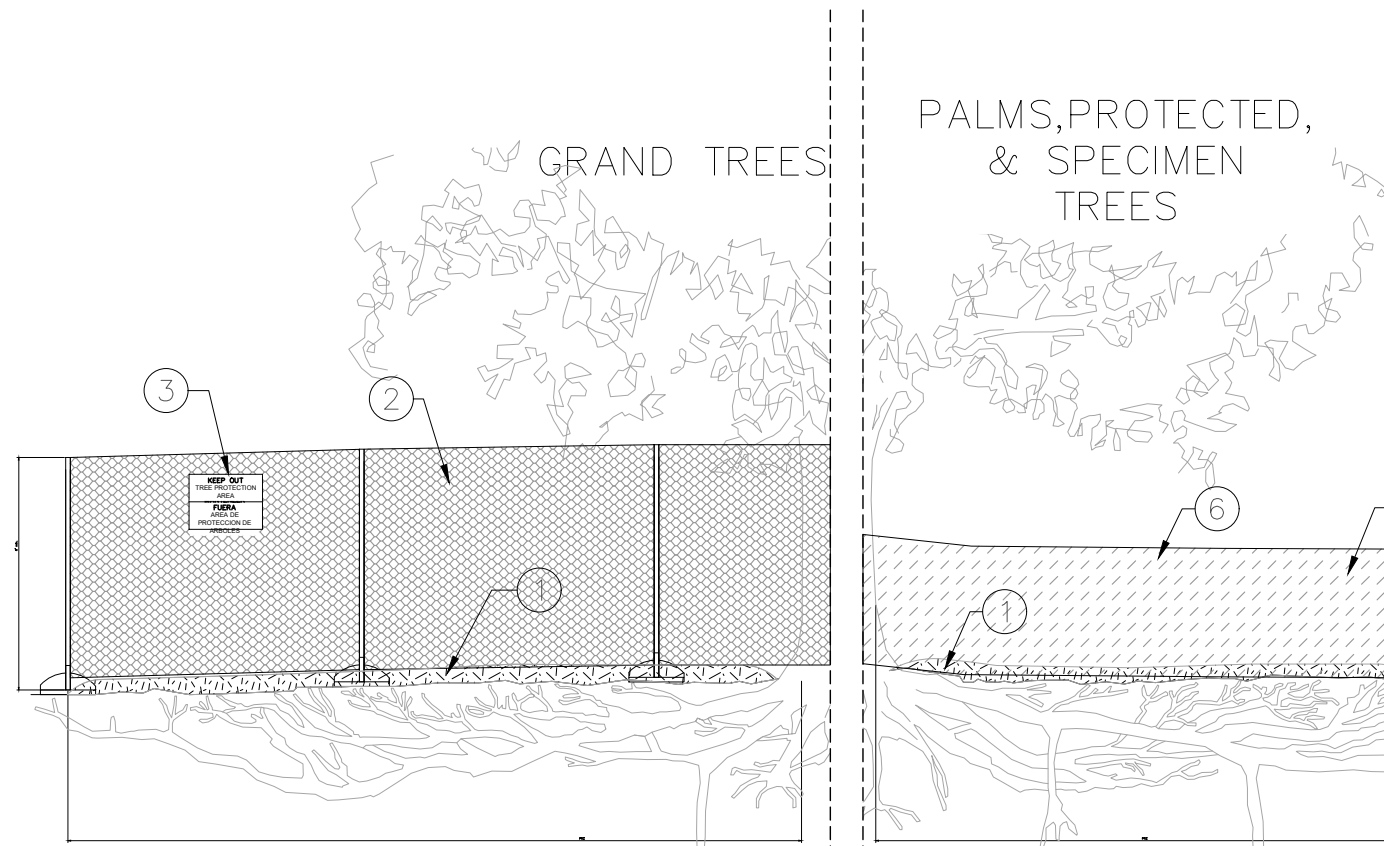
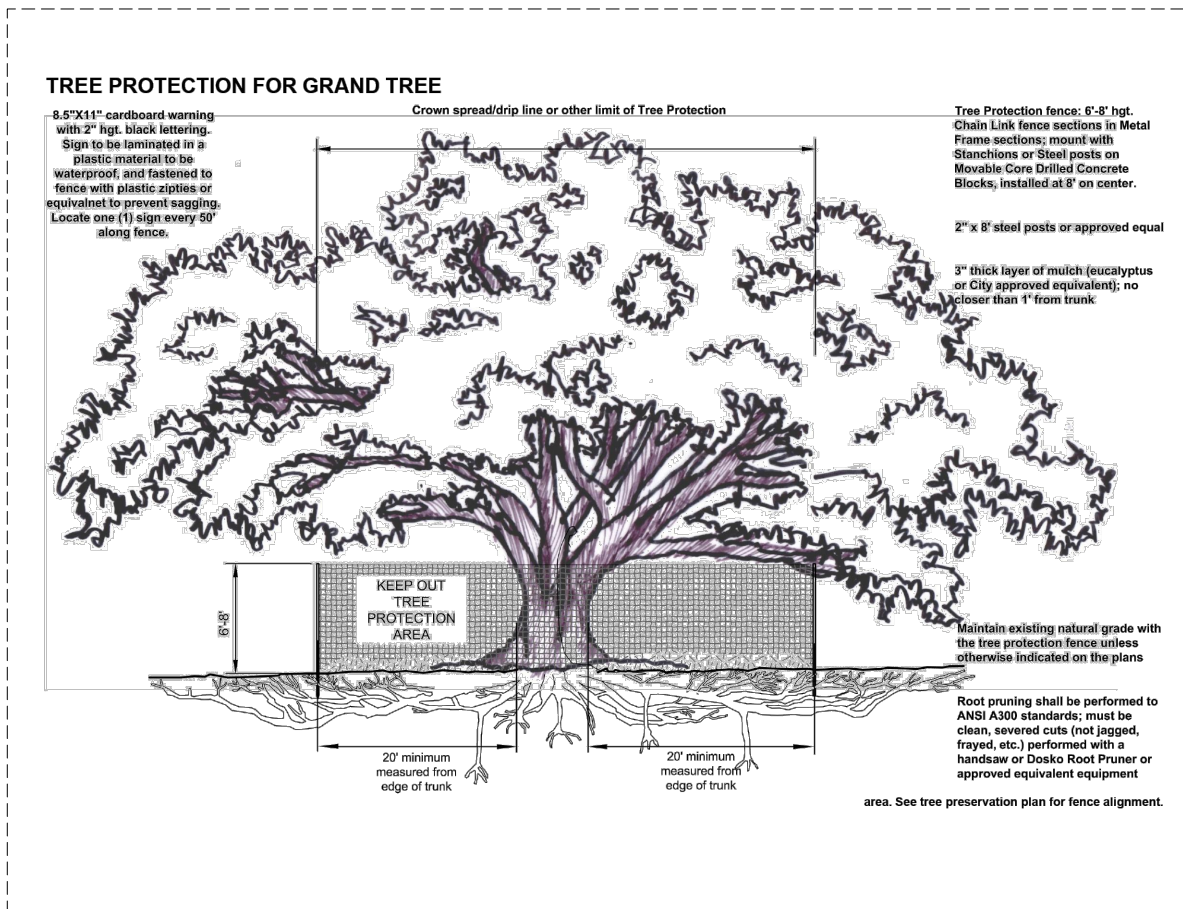
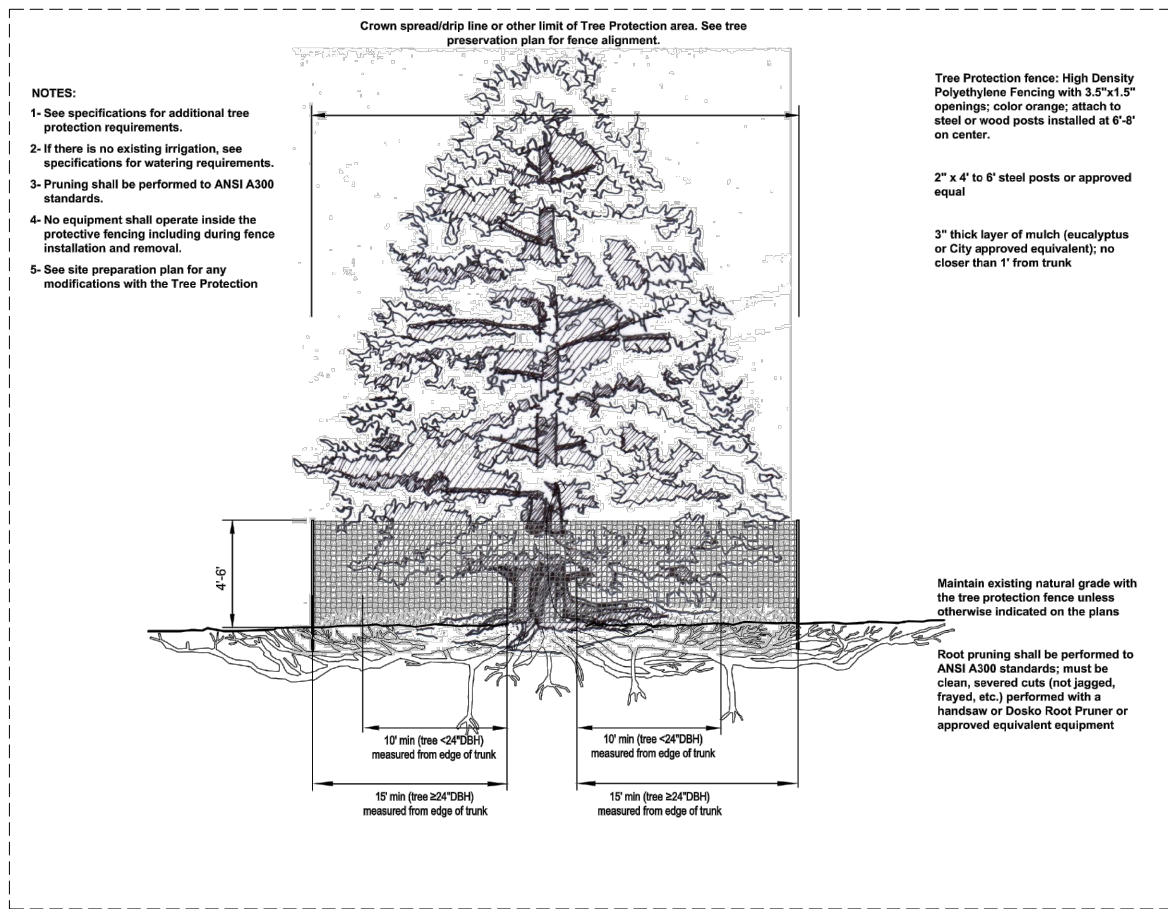
HEADWALL TYPICAL SECTION

N.T.S.



HEADWALL SECTION

N.T.S.



- 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 steel posts on movable core drilled concrete blocks, installed on 8' on center max spacing.
- ③ Notice Sign: 8.5' x 11' corrugated plastic warning with 2" high black lettering. Fasten to fence with plastic zip ties 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.

DETAIL-FILE

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

DES: JWD
DRN: JDM
CKD: JDM
DATE: 05/14/2024

CITY of TAMPA
Mobility Department
Stormwater Engineering Division

CLARK AVE & FAIR OAKS
MISC. DETAIL SHEET