

CITY OF
TAMPA, FLORIDA

NOTICE TO BIDDERS, INSTRUCTIONS TO BIDDERS
PROPOSAL, BID BOND, FORM OF NOTICE OF AWARD,
AGREEMENT, PERFORMANCE BOND AND
SPECIFICATIONS

FOR

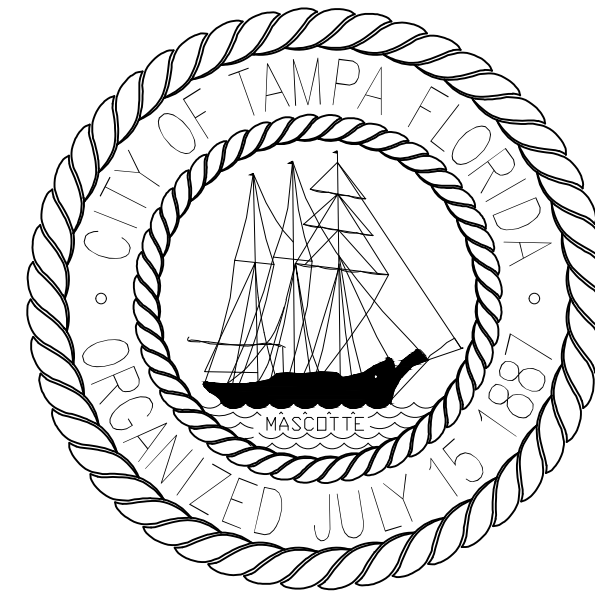
Contract 13-C-00037

**HOWARD F. CURREN AWTP SLUDGE DRYING BED
IMPROVEMENTS - SHELTERED MARKET**

City of Tampa
CONTRACT ADMINISTRATION DEPARTMENT
TAMPA MUNICIPAL OFFICE BUILDING
306 E. JACKSON STREET - 4TH FLOOR NORTH
TAMPA, FLORIDA 33602

JULY 2013

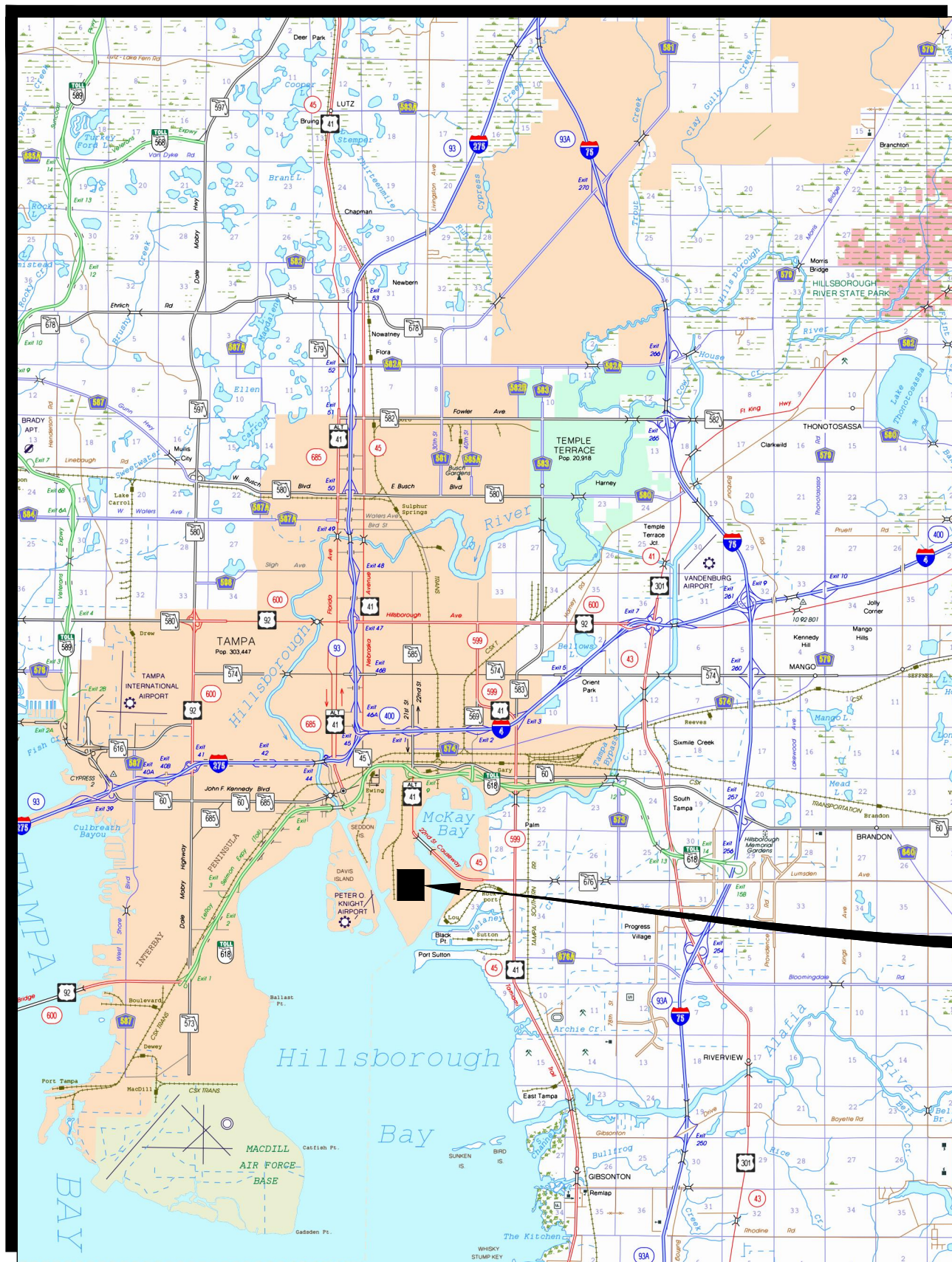
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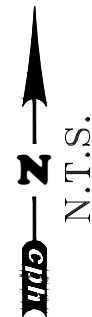
WASTEWATER DEPARTMENT

PLANS FOR HOWARD F. CURREN AWWTP SLUDGE DRYING BED IMPROVEMENTS

CONTRACT NO. 13-C-00037



LOCATION MAP



PROJECT
LOCATION

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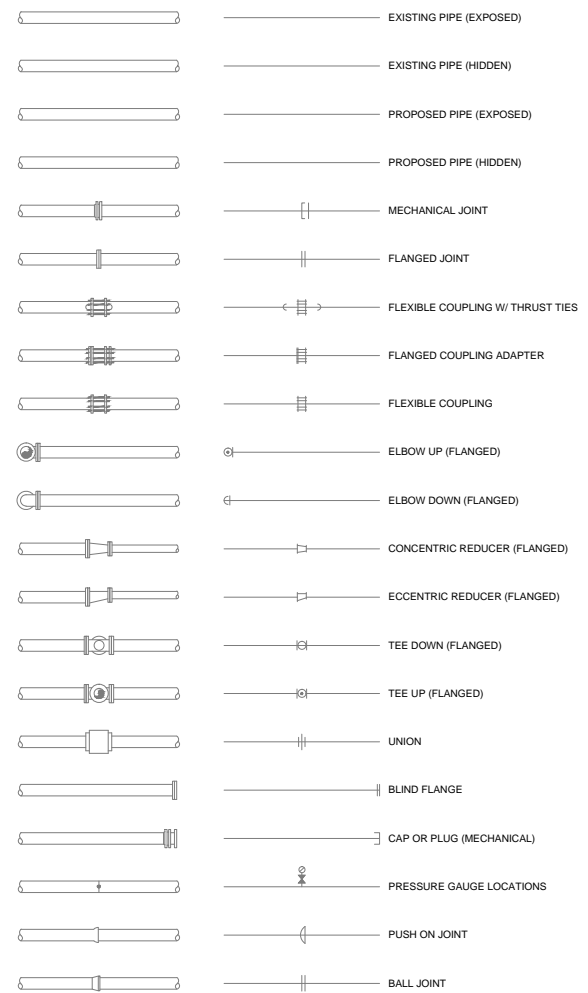
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REG-# 69051

COVER

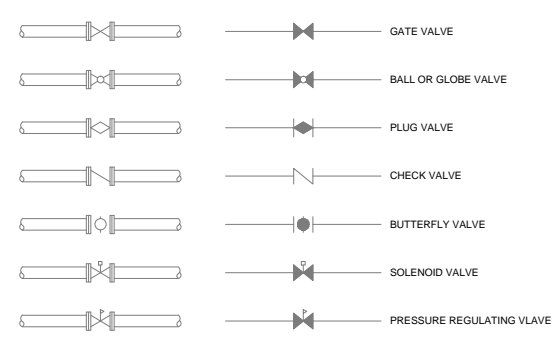
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WASTEWATER DEPARTMENT

Sheet No.
1

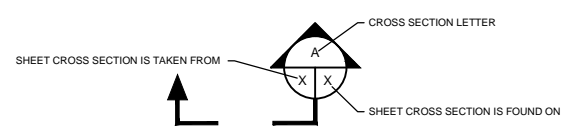
PIPING SYMBOLS



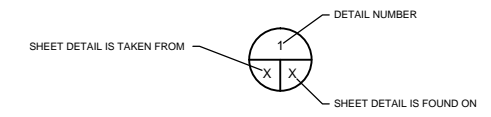
VALVE SYMBOLS



SECTION SYMBOLS



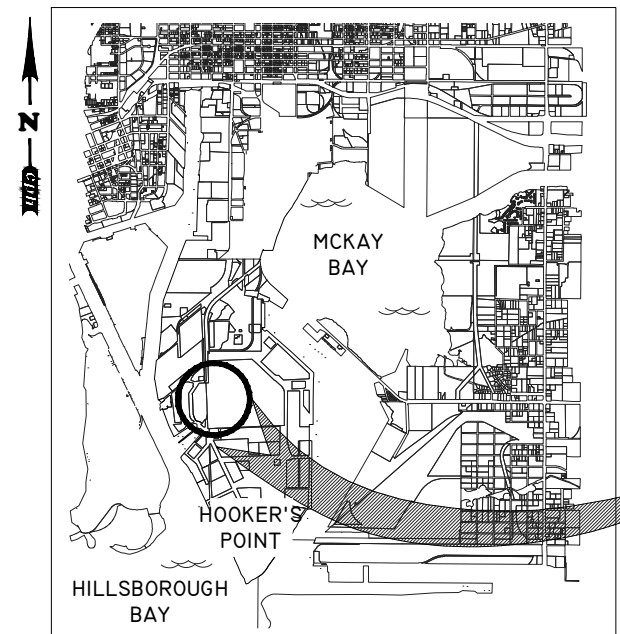
DETAIL SYMBOLS



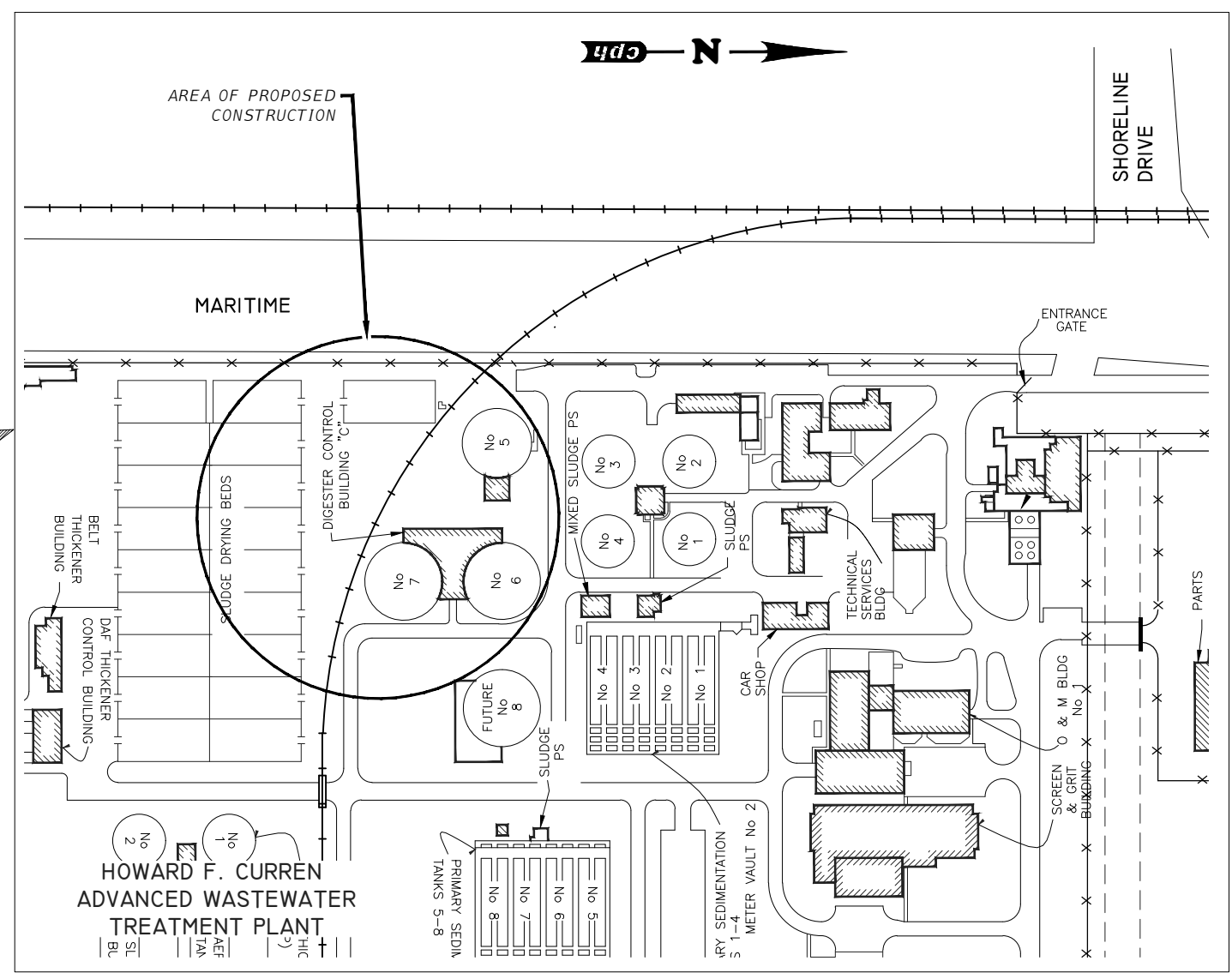
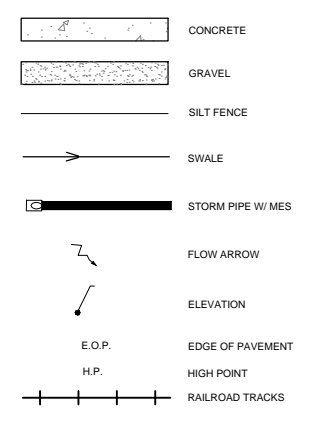
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12	MISCELLANEOUS DETAILS

STANDARD ABBREVIATIONS

AL. or ALUM.	ALUMINUM	MAX	MAXIMUM
ASPH. BLDG.	ASPHALT BUILDING	MANF. MAT.	MANUFACTURER MATERIAL
BT	BURIED TELEPHONE	NG	NATURAL GRADE
B.M.	BENCH MARK	NPL	NON-POTABLE WATER
Ba.V.	BALL VALVE	NWL	NORMAL WATER LEVEL
B.V.	BUTTERFLY VALVE	NTS	NOT TO SCALE
CIP or CI	CAST IRON PIPE	OC	ON CENTER
CONC.	CONCRETE	OHE	OVERHEAD ELECTRIC
CONT.	CONTINUED	PL	PLATE
CMU	CONCRETE MASONRY UNIT	PW	POTABLE WATER
CONST.	CONSTRUCTION	PS	PUMP STATION
C.V.	CHECK VALVE	PROP.	PROPOSED
DIP or DI	DUCTILE IRON PIPE	PVMT.	PAVEMENT
DIA.	DIAMETER	PP	POWER POLE
DOT	DEPT. OF TRANSPORTATION	PT	PRESSURE TREATED
DR. OR DW.	DRIVE or DRIVEWAY	P.V.	PLUG VALVE
EQUIP.	EQUIPMENT	PVC	POLYVINYL CHLORIDE
ED	EQUIPMENT DRAIN	PAV.	PAVING
ESMT	EASEMENT	PE	PLAIN END
EFF.	EFFLUENT	RCP	REINFORCED CONCRETE PIPE
EXP.	EXPANSION	RW	REUSE WATER
ELEV. or EL.	ELEVATION	RT.	RIGHT
EXIST.	EXISTING	R	RADIUS
ELEC.	ELECTRICAL	RED.	REDUCER
EF	EACH FACE	REIN.	REINFORCED
EXT.	EXTENDED	REDD	REQUIRED
EW	EACH WAY	R/W	RIGHT-OF-WAY
FD	FLOOR DRAIN	STA.	STATION
F&I	FURNISH & INSTALL	STA.	STATION
FM	FORCE MAIN	SPEC.	SPECIFICATION
FLG.	FLANGED	SW (S/W)	SIDEWALK
FLEX.	FLEXIBLE	SWD	SIDE WATER DEPTH
GM	GAS MAIN	SS	STAINLESS STEEL
GPM	GALLONS PER MINUTE	STN. STL.	STAINLESS STEEL
GS	GALVANIZED STEEL	SAN.	SANITARY
GSP	GALVANIZED STEEL PIPE	T	TELEPHONE CABLE
GALV.	GALVANIZED	TBM	TEMPORARY BENCHMARK
G.V.	GATE VALVE	TOF	TOP OF FLOOR
HB	HOSE BIB	TYP.	TYPICAL
HORIZ.	HORIZONTAL	TRANS.	TRANSFORMER
HP	HIGH PRESSURE	UE	UNDERGROUND ELECTRIC
HPAC	HIGH PRESSURE AIR COPPER	UG	UNDERGROUND
HPAG	HIGH PRESSURE AIR GALVANIZED	UT	UNDERGROUND TELEPHONE
HWL	HIGH WATER LEVEL	VCP	VITRIFIED CLAY PIPE
I.P.	IRON PIPE	VERT.	VERTICAL
INF.	INFLENT	WL	WATER LINE
INV.	INVERT	WM	WATER MAIN
ID	IDENTIFICATION		



GENERAL LEGEND



LOCATION MAP
N.T.S.

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LEGEND INDEX
LOCATION MAP

CITY of TAMPA
WASTEWATER DEPARTMENT

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2

GENERAL PROJECT DATA

FOR IDENTIFICATION OF CONTRACTUAL AGREEMENTS, THE ENGINEERING PLANS SHALL BE DATED AS JULY 2013. ANY REVISIONS THEREAFTER WILL BE NOTED AND DATED ON THE AFFECTED DRAWING(S).

PROJECT DESCRIPTION

THE PROJECT CONSISTS OF REMOVING AND REPLACING THE EXISTING WALLS OF THE SLUDGE DRYING BED AS SHOWN IN THE PLANS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROPERLY REMOVING THE EXISTING WALL WITHOUT DAMAGING THE UNDERGROUND PIPING AND RAILROAD. THE CONTRACTOR SHALL TAKE CAUTION WHEN REMOVING EXISTING SLUDGE DRYING BED WALLS TO MINIMIZE DISTURBANCE TO THE BED MATERIAL. ALL DISTURBED BED MATERIAL SHALL BE REPLACED WITH 57 STONE. CONTRACTOR SHALL PROVIDE A PAVED UNLOADING AREA AS INDICATED IN THE PLANS. WASHDOWN WATER SHALL BE PROVIDED THROUGH A NEW 3-INCH EFFLUENT LINE AS SHOWN. THE NEW 3-INCH EFFLUENT LINE SHALL BE RESTRAINED USING APPROVED MATERIALS. CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFYING AND LOCATING PROPOSED POINT OF CONNECTION.

LAYOUT AND CONTROL

SURVEY USED FOR THIS PROJECT WAS PROVIDED BY THE CITY OF TAMPA. THE CONTRACTOR SHALL COORDINATE WITH THE CITY TO LOCATE BENCHMARKS USED. THE SURVEY DATUM IS NGVD 1929.

EXISTING UTILITY LOCATION

THE LOCATIONS OF ALL EXISTING UNDERGROUND PIPE LINES SHOWN ON THE PLANS HAVE BEEN DETERMINED FROM THE BEST INFORMATION AVAILABLE. PRIOR TO THE START OF ANY CONSTRUCTION ACTIVITY, THE CONTRACTOR SHALL EXERCISE CAUTION WHEN CROSSING AN UNDERGROUND UTILITY, WHETHER SHOWN ON THE PLANS OR LOCATED BY THE CONTRACTOR.

THE QUANTITIES INCLUDING PIPE LENGTHS ARE APPROXIMATE ONLY. THE CONTRACTOR SHALL PERFORM AN INDEPENDENT TAKE OFF AND SHALL BASE THE BID ON THAT TAKE OFF.

AS-BUILTS

AS-BUILTS SHALL BE PROVIDED BY THE CONTRACTOR TO THE CITY OF TAMPA'S PROJECT REPRESENTATIVE TWO WEEKS PRIOR TO FINAL INSPECTION. ALL AS-BUILT DATA SHALL BE PROVIDED BY FLORIDA LICENSED SURVEYOR, SIGNED, SEALED, AND DATED BY THE RESPONSIBLE PARTY. SEE PROJECT SPECIFICATIONS FOR ADDITIONAL AS-BUILT REQUIREMENTS.

NOTICE OF APPLICABILITY

WHEREVER STATE, COUNTY, CITY, OR LOCAL STANDARD SPECIFICATIONS DIFFER FROM THOSE CONTAINED HEREIN: THE CONTRACTOR SHALL NOTIFY THE ENGINEER AND CITY FOR CLARIFICATION. TYPICALLY THE MORE STRINGENT SHALL GOVERN.

SURFACE DRAINAGE

THE CONTRACTOR SHALL BE EXPECTED, AT THE END OF EACH DAY, TO HAVE THE SITE GRADED IN SUCH A WAY AS TO NOT CAUSE ANY ADVERSE IMPACT FROM RUNOFF OR SILTATION TO ANY ADJACENT PROPERTIES. SILTATION BARRIERS SHALL BE MAINTAINED AND REPAIRED AT THE END OF EACH WORKING DAY.

THE CONTRACTOR SHALL BE EXPECTED TO GRADE THE DISTURBED AREA TO PROVIDE POSITIVE DRAINAGE IN ALL AREAS THROUGHOUT THE SITE. SMOOTH TRANSITIONS SHALL BE PROVIDED BETWEEN CONTOURS OR SPOT ELEVATIONS SHOWN ON THE PLANS TO ACCOMPLISH THE GRADING INTENT. ALL SLOPES SHALL BE STABILIZED IMMEDIATELY AFTER FINAL GRADING HAS BEEN COMPLETED. THE CONTRACTOR SHALL NOTIFY THE CITY AND ENGINEER PRIOR TO DEMOBILIZATION OF GRADING EQUIPMENT TO DETERMINE THAT THE GRADING INTENT HAS BEEN ACHIEVED.

FILL MATERIAL

SELECT FILL MATERIAL SHALL BE USED FOR PIPE BEDDING, MANHOLE BEDDING, TRENCH AND STRUCTURAL BACKFILL. SELECT FILL MATERIAL SHALL BE SAND OR CRUSHED STONE. CRUSHED STONE USED FOR PIPE BEDDING, MANHOLE BASE BEDDING, OR AS SELECT FILL MATERIAL FOR TRENCH OR STRUCTURE BACKFILL SHALL CONSIST OF CLEAN, DURABLE ROCK, ANGULAR IN SHAPE, WHICH CAN BE READILY AND THOROUGHLY COMPACTED. CRUSHED STONE SHALL BE REASONABLY WELL GRADED AND SHALL BE NO GREATER THAN A NO. 57 STONE. SAND USED FOR PIPE BEDDING OR AS SELECT FILL MATERIAL FOR TRENCH OR STRUCTURAL BACKFILL SHALL CONSIST OF JOB EXCAVATED

SAND OR IMPORTED SAND WHICH CAN BE READILY AND THOROUGHLY COMPACTED. SAND SHALL NOT BE USED FOR BEDDING FOR MANHOLES OR OTHER STRUCTURES. SAND SHALL BE REASONABLY WELL GRADED AND SHALL FALL WITHIN THE FOLLOWING GRADATION LIMITS: PASSING NO. 4 SIEVE - 95 PERCENT (MINIMUM) AND PASSING NO. 200 SIEVE - 10 PERCENT (MAXIMUM).

COMPACTION

FILL MATERIALS PLACED UNDER ROADWAYS SHALL BE COMPACTED TO AT LEAST 98% OF THE MAXIMUM DENSITY AS SPECIFIED IN ASTM D1557. ALL OTHER FILL AREAS ARE TO BE COMPACTED TO AT LEAST 95% MAXIMUM DENSITY AS SPECIFIED IN ASTM D1557. FILL MATERIALS SHALL BE PLACED AND COMPACTED IN A MAXIMUM OF 12" LIFTS. THE CONTRACTOR SHALL PROVIDE THE ENGINEER AND OWNER WITH ALL (PASSING AND FAILING) TESTING RESULTS. RESULTS SHALL BE PROVIDED ON A TIMELY AND REGULAR BASIS PRIOR TO CONTRACTOR'S PAY REQUEST SUBMITTAL.

TRAFFIC CONTROL AND MAINTENANCE

THE CONTRACTOR SHALL MAINTAIN UNINTERRUPTED VEHICLE ACCESS FOR PLANT OPERATIONS AND PLANT SUPPLIERS. THE CONTRACTOR SHALL COORDINATE WITH THE CITY AND SHALL SCHEDULE ALL WORK TO FACILITATE CONTINUOUS UNINTERRUPTED PLANT OPERATION.

STRIPING

STRIPING PAVEMENT MARKINGS SHALL BE PAINTED. PAINT SHALL MEET THE REQUIREMENTS OF FDOT SPECIFICATION SECTION 971, NON-REFLECTIVE WHITE TRAFFIC PAINT.

PIPE EMBEDMENT

ALL PIPE MUST BE BEDDED TRUE TO LINE AND GRADE WITH UNIFORM AND CONTINUOUS LONGITUDINAL SUPPORT FROM A FIRM BASE. BLOCKING MAY NOT BE USED TO BRING THE PIPE TO GRADE. PIPE BED SHALL BE UNDISTURBED EARTH AND IN THE EVENT OF OVER-EXCAVATION, THE CONTRACTOR SHALL REPLACE MATERIALS WITH MATERIALS SPECIFIED BY THE ENGINEER AND COMPACTED TO A DENSITY EQUAL TO THE NATIVE SOIL.

TRENCH OR EXCAVATION BOTTOM STABILIZATION MATERIAL

A. SAND

SAND SHALL BE WELL GRADED, ORGANIC FREE, DURABLE, GRANULAR MATERIAL AND SHALL PASS A NO. 4 SIEVE. NOT MORE THAN 15 PERCENT SHALL PASS A NO. 200 SIEVE

B. PIT RUN GRAVEL

PIT RUN GRAVEL SHALL BE ORGANIC FREE AND SHALL PASS A 3/4-INCH SIEVE.

C. GRANULAR MATERIAL

GRANULAR MATERIAL SHALL BE WELL GRADED, ORGANIC AND SOIL FREE, DURABLE AGGREGATE AND SHALL PASS A 3/4 INCH SIEVE. NOT MORE THAN 15 PERCENT SHALL PASS A NO. 200 SIEVE.

TRENCH SAFETY

THE CONTRACTOR SHALL RECOGNIZE AND ABIDE BY ALL OSHA EXCAVATION SAFETY STANDARDS, INCLUDING THE FLORIDA TRENCH SAFETY ACT (90-96, LAW OF FLORIDA). ANY MATERIAL, CONSTRUCTION METHODS, OR MATERIAL COST TO COMPLY WITH THESE LAWS SHALL BE INCIDENTAL TO THE CONTRACT.

CLEARING AND GRUBBING

THE CONTRACTOR SHALL BE RESPONSIBLE FOR CLEARING AND GRUBBING FOR SITE CONSTRUCTION INCLUDING CLEARING FOR PAVING, UTILITIES, AND DRAINAGE FACILITIES. SEE PLANS FOR LIMITS OF CLEARING AND GRUBBING. ALL AREAS TO BE CLEARED SHALL BE FIELD STAKED AND REVIEWED BY THE OWNER AND ENGINEER PRIOR TO ANY CONSTRUCTION.

EROSION AND SEDIMENT CONTROLS

AN EROSION CONTROL PLAN SHALL BE PREPARED BY THE CONTRACTOR AND SUBMITTED TO THE CITY AND ENGINEER FOR APPROVAL PRIOR TO THE PRE-CONSTRUCTION MEETING. THE CONTRACTOR SHALL EXECUTE ALL MEASURES NECESSARY TO LIMIT THE TRANSPORT OF SEDIMENTS OUTSIDE THE LIMITS OF THE PROJECT TO THE VOLUME AND AMOUNT AS ARE EXISTING PRIOR TO THE COMMENCEMENT OF CONSTRUCTION PERIOD.

1. STOCKPILING MATERIAL

NO EXCAVATED MATERIAL SHALL BE STOCKPILED IN SUCH A MANNER AS TO DIRECT RUNOFF DIRECTLY OFF THE PROJECT SITE OR INTO ANY ADJACENT WATER BODY OR STORM WATER COLLECTION FACILITY

2. SILT FENCE

SILT FENCE SHALL BE INSTALLED AROUND THE PROJECT PERIMETER AND MAINTAINED DURING CONSTRUCTION.

3. INLET PROTECTION

THE CATCH BASIN ADJACENT TO THE RAILROAD TRACK SHALL BE CLEANED OF ALL DEBRIS FOLLOWING FINAL COMPACTION OF PROJECT AREA.

4. MAINTENANCE

ALL FEATURES OF THE PROJECT SHALL BE CONSTRUCTED TO PREVENT EROSION AND SEDIMENT AND SHALL BE MAINTAINED DURING THE LIFE OF THE CONSTRUCTION SO AS TO FUNCTION PROPERLY WITHOUT THE TRANSPORT OF SEDIMENTS OUTSIDE THE LIMITS OF THE PROJECT.

UTILITY GENERAL NOTES

1. THE CONTRACTOR IS RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH THE PROTECTION OF EXISTING FACILITIES DURING CONSTRUCTION.

2. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO MAINTAIN IN SERVICE ALL EXISTING PIPING ENCOUNTERED DURING CONSTRUCTION UNLESS OTHERWISE INDICATED IN THE DRAWINGS.

3. TYPICAL DETAILS AND PROPOSED CONSTRUCTION AS SHOWN ILLUSTRATE THE ENGINEERS INTENT AND ARE NOT PRESENTED AS A SOLUTION TO ALL CONSTRUCTION PROBLEMS ENCOUNTERED IN THE FIELD. THE CONTRACTOR MAY ALTER THE PROPOSED CONSTRUCTION TO SUIT FIELD CONDITIONS, PROVIDED IT COMPLIES WITH THE PROJECT SPECIFICATIONS AND APPROVAL IS RECEIVED FROM THE CITY AND THE ENGINEER.

4. FOR EACH RESPECTIVE PIPELINE CONSTRUCTION REQUIRED, THE CONTRACTOR SHALL FIELD VERIFY THE LOCATION, DEPTH, AND ALIGNMENT OF ALL EXISTING PIPES, TO BE CROSSED OR CONNECTED TO. IF THE CONTRACTOR DEEMS NECESSARY (A.) A CHANGE IN ALIGNMENT OR DEPTH, OR THE NEED FOR ADDITIONAL FITTINGS, BENDS OR COUPLINGS, WHICH REPRESENT A DEPARTURE FROM THE CONTRACT DRAWINGS, OR (B.) A NEED FOR RELOCATION OF EXISTING UTILITIES, THEN DETAILS OF SUCH DEPARTURES, RELOCATIONS, OR ADDITIONAL REASONS THEREFORE SHALL BE SUBMITTED WITH SHOP DRAWINGS. APPROVED DEPARTURES FOR THE CONTRACTORS CONVENIENCE SHALL BE MADE AT NO ADDITIONAL COST TO THE CITY.

OWNER/OPERATOR

THE ENTITY THAT WILL OWN, OPERATE AND MAINTAIN THE SYSTEM SHOWN ON THESE PLANS IS THE CITY OF TAMPA. THE CONTRACTOR SHALL BE EXPECTED TO MEET ALL THE REQUIREMENTS OF THE ENTITY.

MATERIALS

MATERIAL SHALL BE AS NOTED IN SPECIFICATIONS.

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GENERAL NOTES

CITY of TAMPA

WASTEWATER DEPARTMENT

Sheet No.

3

SEQUENCE OF CONSTRUCTION

CONSTRUCTION OPERATIONS MUST ALLOW FOR THE CONTINUOUS OPERATION OF THE FACILITY. CONTRACTOR SHALL PREPARE A PROPOSED SEQUENCE OF CONSTRUCTION ACTIVITIES FOR REVIEW AND APPROVAL FOR REVIEW AND APPROVAL BY THE OWNER/ENGINEER PRIOR TO COMMENCING ANY CONSTRUCTION ACTIVITIES ON SITE.

EFFLUENT WATER INFRASTRUCTURE SYSTEMS

ALL DUCTILE IRON PIPE SHALL MEET THE REQUIREMENTS OF AWWA C151. PIPE JOINTS AND FITTINGS SHALL BE MECHANICAL JOINT AND MEET THE APPLICABLE REQUIREMENTS OF AWWA C111 AND HAVE A PRESSURE RATING OF 150 PSI. JOINTS SHALL BE RESTRAINED USING EBBA IRON MEGA-LUGS OR APPROVED EQUAL. DUCTILE IRON PIPE AND DUCTILE IRON FITTINGS SHALL HAVE A MINIMUM THICKNESS OF CLASS 52. PIPE WHICH IS TO BE BURIED SHALL HAVE THE STANDARD OUTSIDE COATING SPECIFIED IN AWWA C151-8.1. ALL DUCTILE IRON PIPE AND FITTINGS SHALL HAVE A CEMENT-MORTAR LINING MEETING THE REQUIREMENTS OF AWWA C151-8.2. THE WEIGHT AND CLASS DESIGNATION SHALL BE PAINTED CONSPICUOUSLY IN WHITE ON THE OUTSIDE OF EACH PIPE, FITTING, AND SPECIAL CASTING AFTER THE SHOP COAT HAS HARDENED. ALL PIPE AND FITTINGS SHALL HAVE AN EXTERIOR ASPHALTIC COATING CONFORMING TO THE FOLLOWING REQUIREMENTS:

VISCOSITY, KU AT 25 DEGREES C	56-60
FLASHPOINT, DEGREES F (TCC)	40 DEGREES F MIN
DRY SET TO TOUCH, MINUTES	6
DRY HARD, MINUTES	22

PLUG VALVES

PLUG VALVES SHALL BE DEZURIK PEF (100%) OR APPROVED EQUAL.

VALVE BOXES

VALVE BOXES ON BURIED EFFLUENT WATER MAINS SHALL BE ADJUSTABLE, CAST IRON CONSTRUCTION; WITH A MINIMUM INTERIOR DIAMETER OF 5" WITH COVERS CAST WITH THE INSCRIPTION IN LEGIBLE LETTERING ON THE TOP: EFFLUENT WATER. BOXES SHALL BE SUITABLE FOR THE APPLICABLE SURFACE LOADING AND VALVE SIZE, AND SHALL BE MANUFACTURED BY MUELLER COMPANY, MODEL 10364, OR APPROVED EQUAL.

PIPE INSTALLATION

PIPE INSTALLATION OF PVC EFFLUENT WATER MAIN SHALL BE IN CONFORMANCE WITH ASTM D2774 (LATEST EDITION). INSTALLATION OF DUCTILE IRON PIPE EFFLUENT WATER MAIN SHALL BE IN CONFORMANCE WITH AWWA C600.87 (LATEST EDITION).

COMPACTED BACKFILL SHALL BE TO 98% MAXIMUM DENSITY AS DETERMINED BY AASHTO T-180 UNDER ALL PAVEMENTS WITH 12" MAXIMUM LIFT THICKNESS. OTHER COMPACTION OF BACKFILL SHALL BE TO 95% MAXIMUM DENSITY AS DETERMINED BY AASHTO T-180 WITH 12" MAXIMUM LIFT THICKNESS. SEE PIPE TRENCHING DETAILS. MINIMUM COVER OVER ALL PIPES SHALL BE 36" FROM TOP OF PIPE TO FINISHED GRADE.

EFFLUENT WATER MAINS ARE TO BE INSTALLED SO AS TO PROVIDE A MINIMUM VERTICAL CLEARANCE OF 12" OR A MINIMUM HORIZONTAL CLEARANCE OF 5 FEET FROM ALL SANITARY HAZARDS INCLUDING STORM DRAINAGE PIPES AND STRUCTURES, AS WELL AS SEPTIC TANK DRAINFIELDS AND SEWER PIPING. IF CLEARANCE CANNOT BE ACHIEVED, THE PVC WATER MAIN SHALL BE ENCASED IN CONCRETE OR DUCTILE IRON PIPE USED IN LIEU OF PVC PIPE FOR 10' EACH SIDE OF WATER/STORM SEWER CROSSING. IF WATER/SANITARY SEWER CROSSING THEN SANITARY SEWER PIPE SHALL BE ENCASED OR D.I.P. USED FOR 10' EACH SIDE OF CROSSING.

TESTING

THE CONTRACTOR SHALL PROVIDE AT HIS OWN EXPENSE ALL NECESSARY TEST PUMPING EQUIPMENT, WATER, WATER METERS, PRESSURE GAUGES, AND OTHER EQUIPMENT, MATERIAL AND FACILITIES REQUIRED FOR ALL HYDROSTATIC AND LEAKAGE TESTING. CONTRACTOR SHALL CONTACT THE ENGINEER AND OWNER/OPERATOR IN WRITTEN FORM, FORTY-EIGHT (48) HOURS IN ADVANCE OF PROPOSED TESTING. THE CONTRACTOR SHALL PERFORM SATISFACTORY PRETESTING PRIOR TO NOTIFICATION. TESTING SHALL ONLY BE SCHEDULED ON A TUESDAY, WEDNESDAY OR THURSDAY.

THE EFFLUENT WATER SYSTEM SHALL BE TESTED FOR LEAKAGE AT 150 PSI FOR TWO (2) HOURS, WITH ALLOWABLE LEAKAGE IN ACCORDANCE WITH ABOVE STANDARDS.

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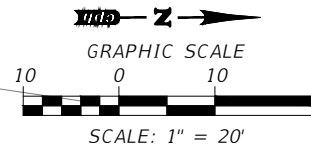
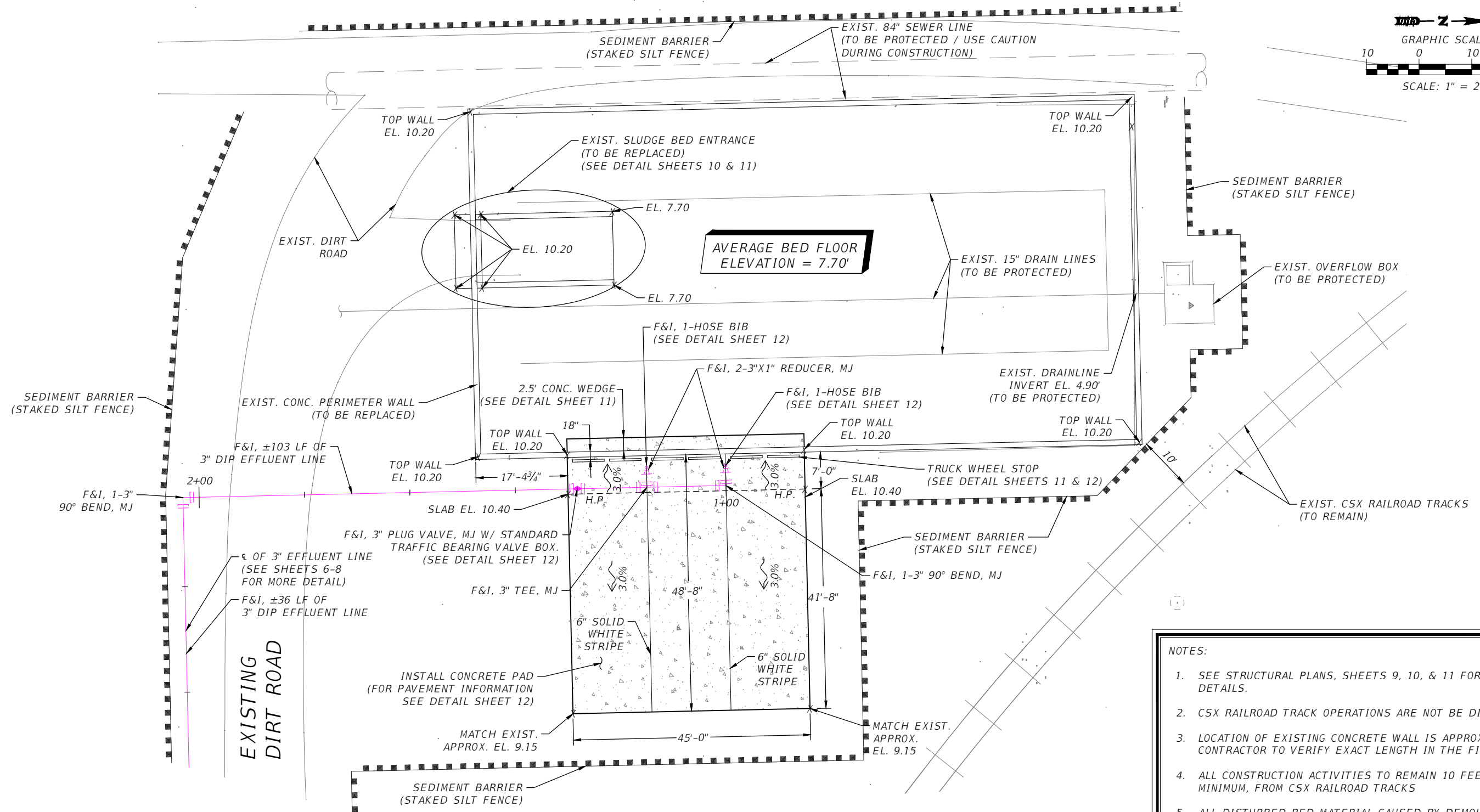
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GENERAL NOTES

CITY of TAMPA
 WASTEWATER DEPARTMENT

Sheet No.
4



- NOTES:**
1. SEE STRUCTURAL PLANS, SHEETS 9, 10, & 11 FOR WALL DETAILS.
 2. CSX RAILROAD TRACK OPERATIONS ARE NOT BE DISRUPTED.
 3. LOCATION OF EXISTING CONCRETE WALL IS APPROXIMATE. CONTRACTOR TO VERIFY EXACT LENGTH IN THE FIELD.
 4. ALL CONSTRUCTION ACTIVITIES TO REMAIN 10 FEET, AT MINIMUM, FROM CSX RAILROAD TRACKS
 5. ALL DISTURBED BED MATERIAL CAUSED BY DEMOLITION OF THE EXISTING WALL SHALL BE REPLACED WITH 57 STONE.

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Febre, Scan

Designed by:	DFB	Date:	07/2013
Drawn by:	SDF	Job No.:	T8121
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Scale:	1" = 20'	©	2013



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 Licenses:
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 Survey L.B. No. 7143
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WILLIAM W. WOOD, P.E.
 REG.# 69051

SITE PLAN

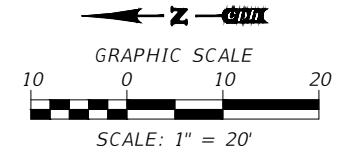
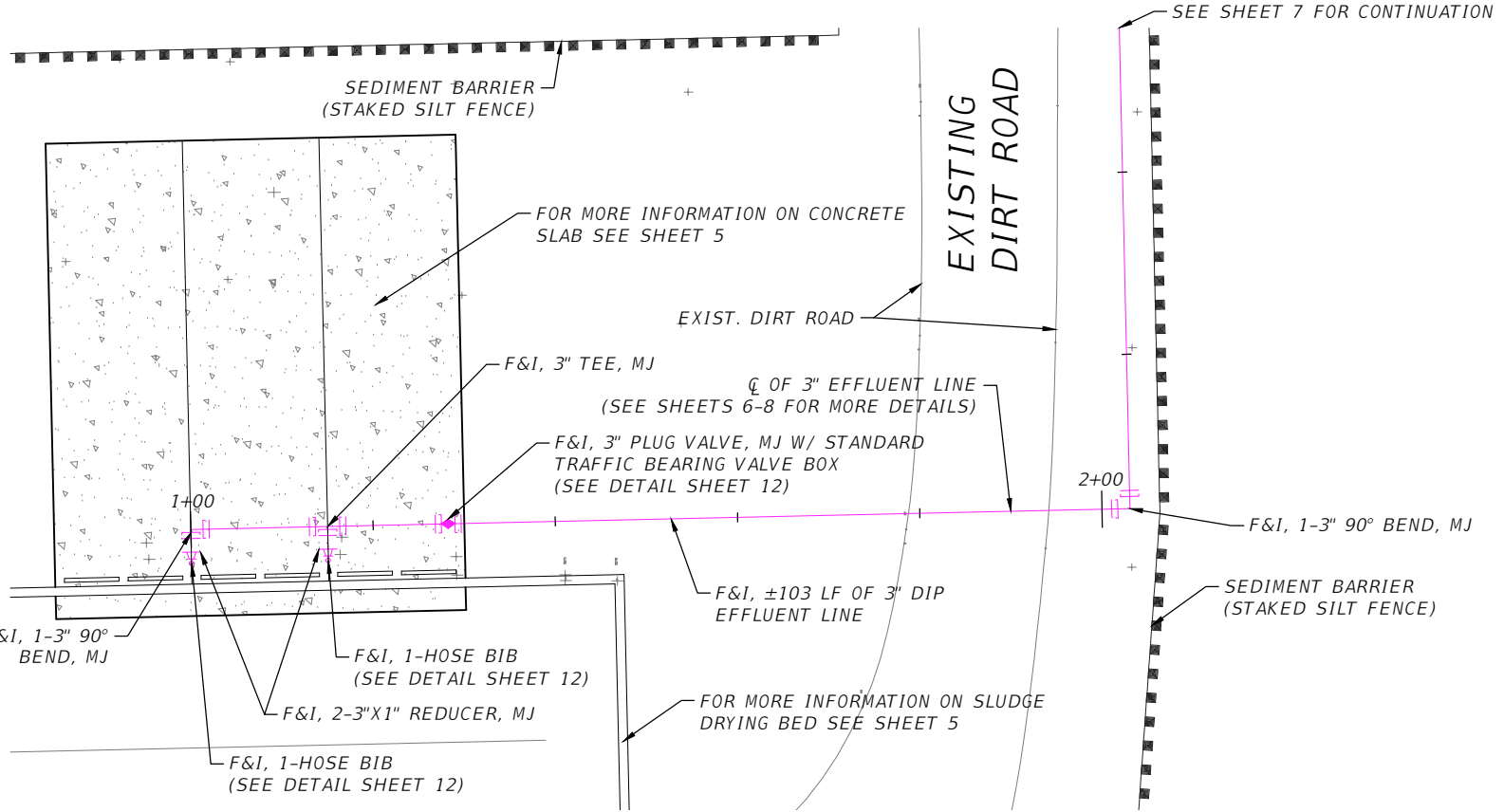
CITY of TAMPA
 WASTEWATER DEPARTMENT

Sheet No.
5

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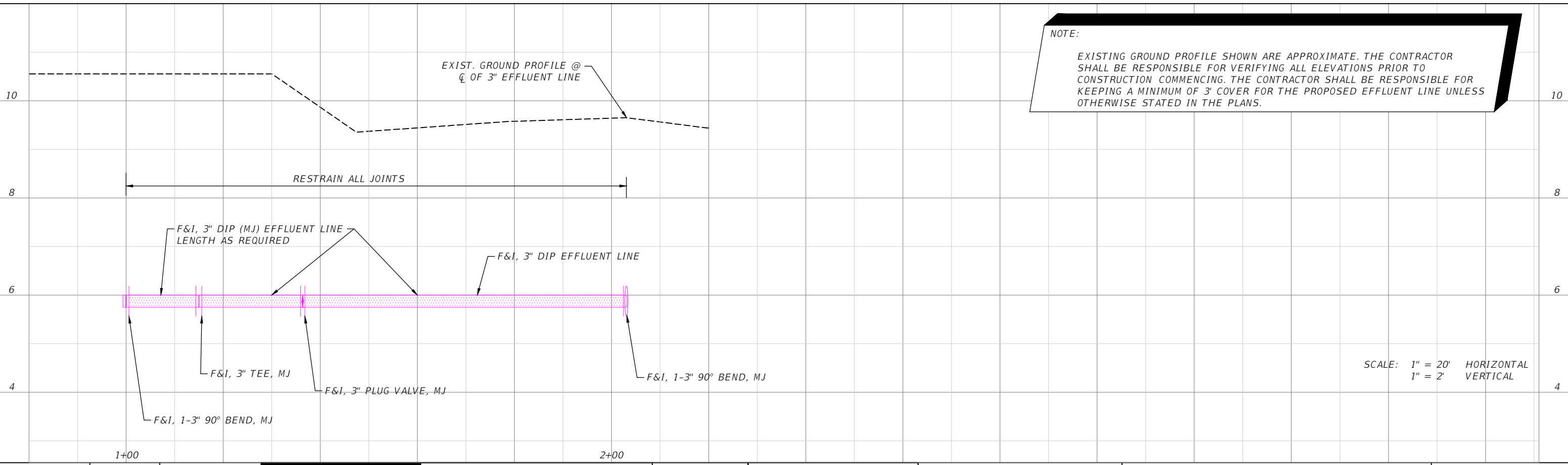
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NOTE:

1. LOCATION OF EFFLUENT LINE IS APPROXIMATE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFYING ALL LOCATIONS PRIOR TO CONSTRUCTION.
2. CSX RAILROAD TRACK OPERATIONS ARE NOT TO BE DISRUPTED.
3. ALL CONSTRUCTION ACTIVITIES TO REMAIN 10 FEET, AT MINIMUM, FROM CSX RAILROAD TRACKS



NOTE:

EXISTING GROUND PROFILE SHOWN ARE APPROXIMATE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL ELEVATIONS PRIOR TO CONSTRUCTION COMMENCING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR KEEPING A MINIMUM OF 3' COVER FOR THE PROPOSED EFFLUENT LINE UNLESS OTHERWISE STATED IN THE PLANS.

SCALE: 1" = 20' HORIZONTAL
1" = 2' VERTICAL

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REG-# 69051

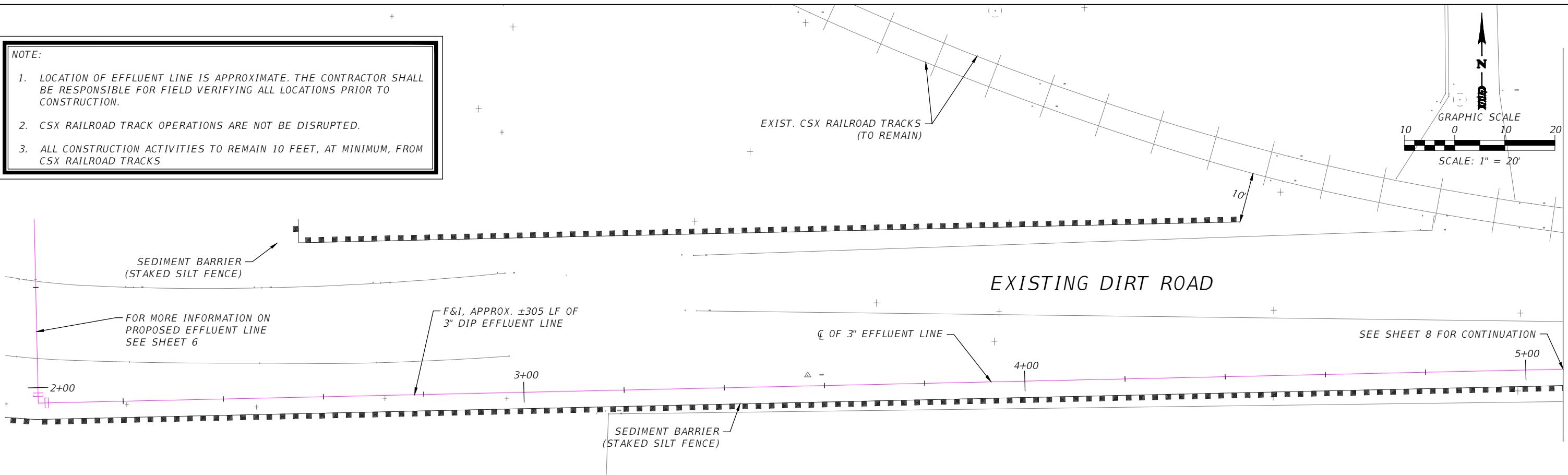
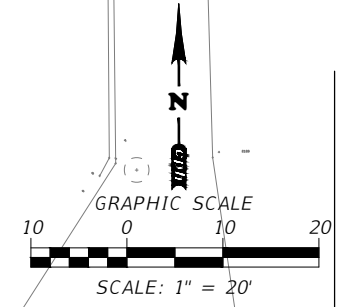
PLAN & PROFILE (1)

CITY of TAMPA
WASTEWATER DEPARTMENT

Sheet No.
6

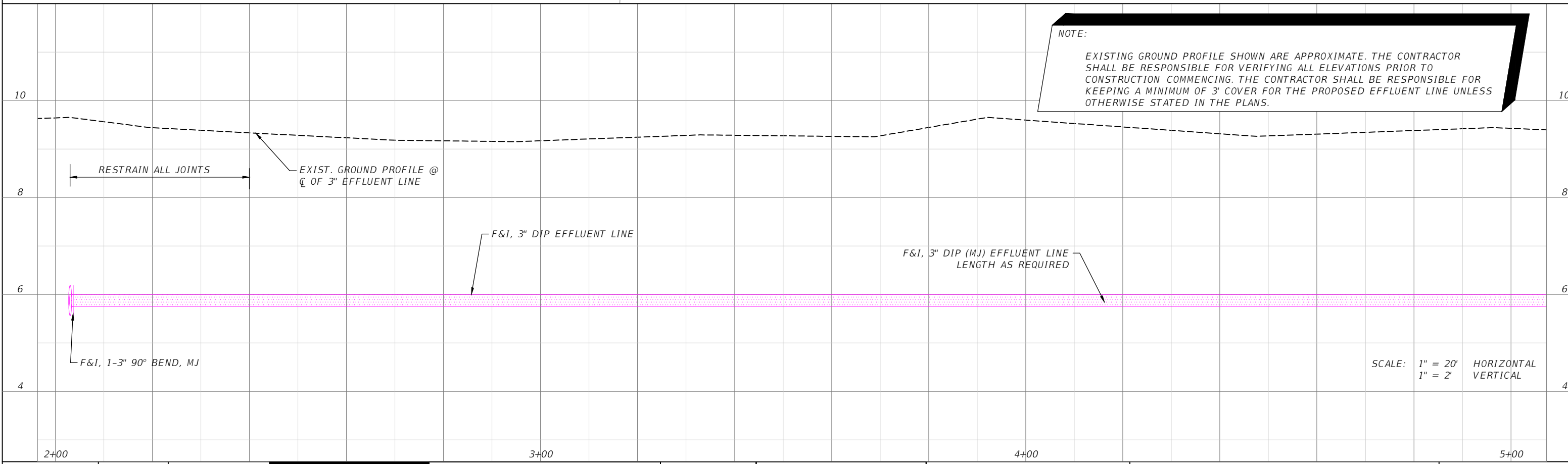
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 REG.# 69051

PLAN & PROFILE (2)

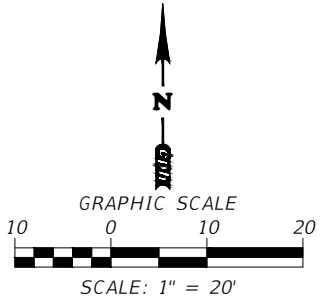
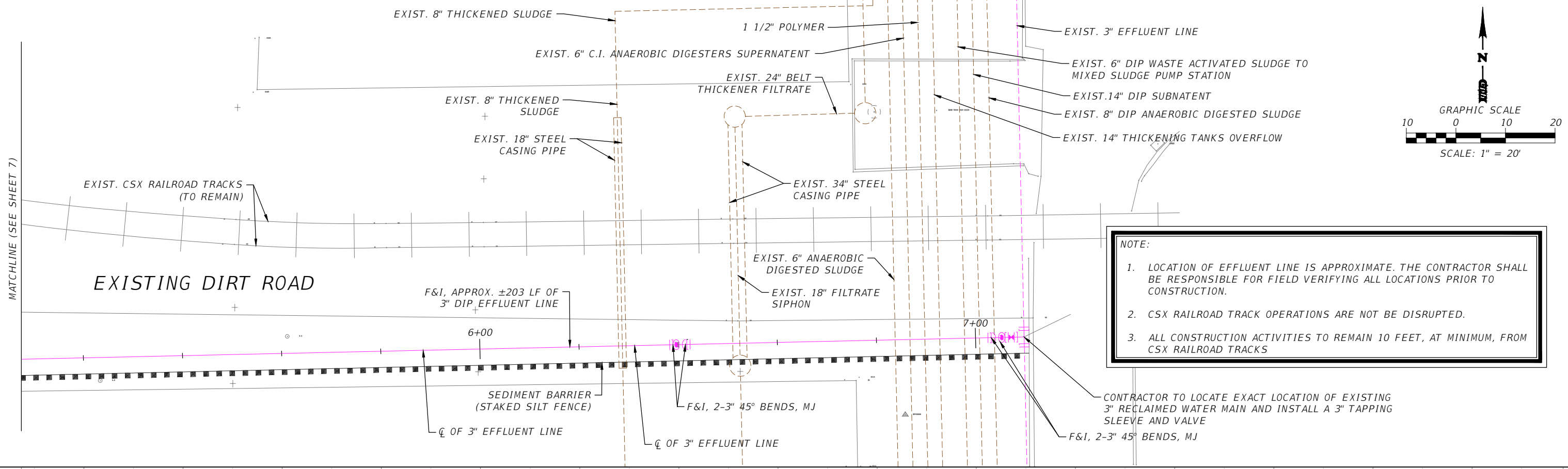
CITY of TAMPA
 WASTEWATER DEPARTMENT

Sheet No.
7

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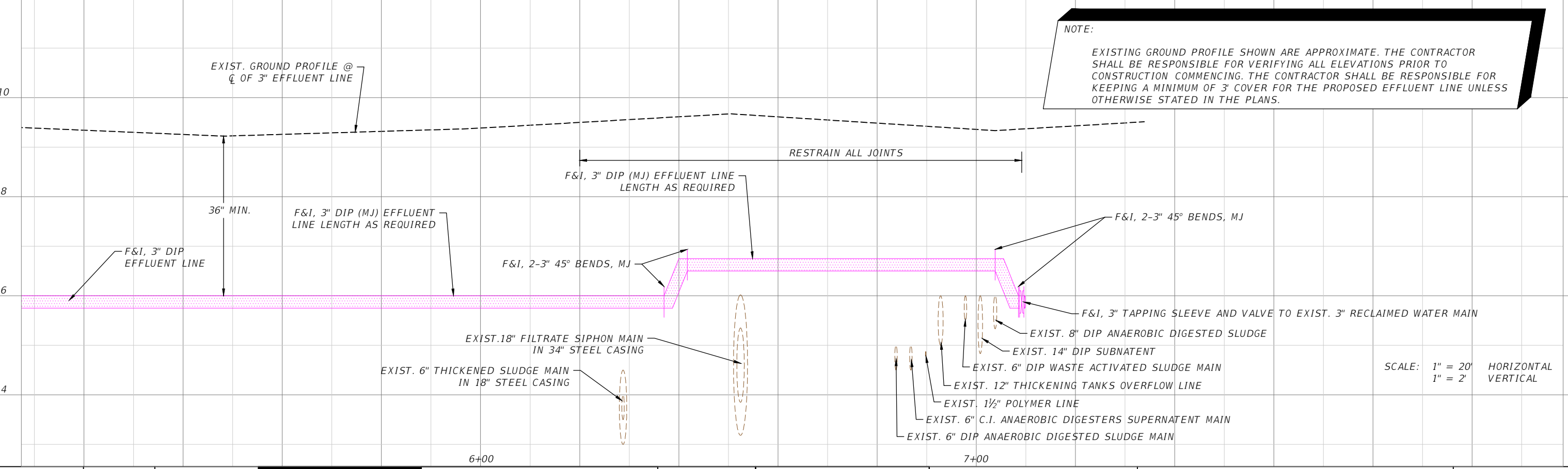
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Febre, Scan



NOTE:

1. LOCATION OF EFFLUENT LINE IS APPROXIMATE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFYING ALL LOCATIONS PRIOR TO CONSTRUCTION.
2. CSX RAILROAD TRACK OPERATIONS ARE NOT BE DISRUPTED.
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NOTE:

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SCALE: 1" = 20' HORIZONTAL
1" = 2' VERTICAL

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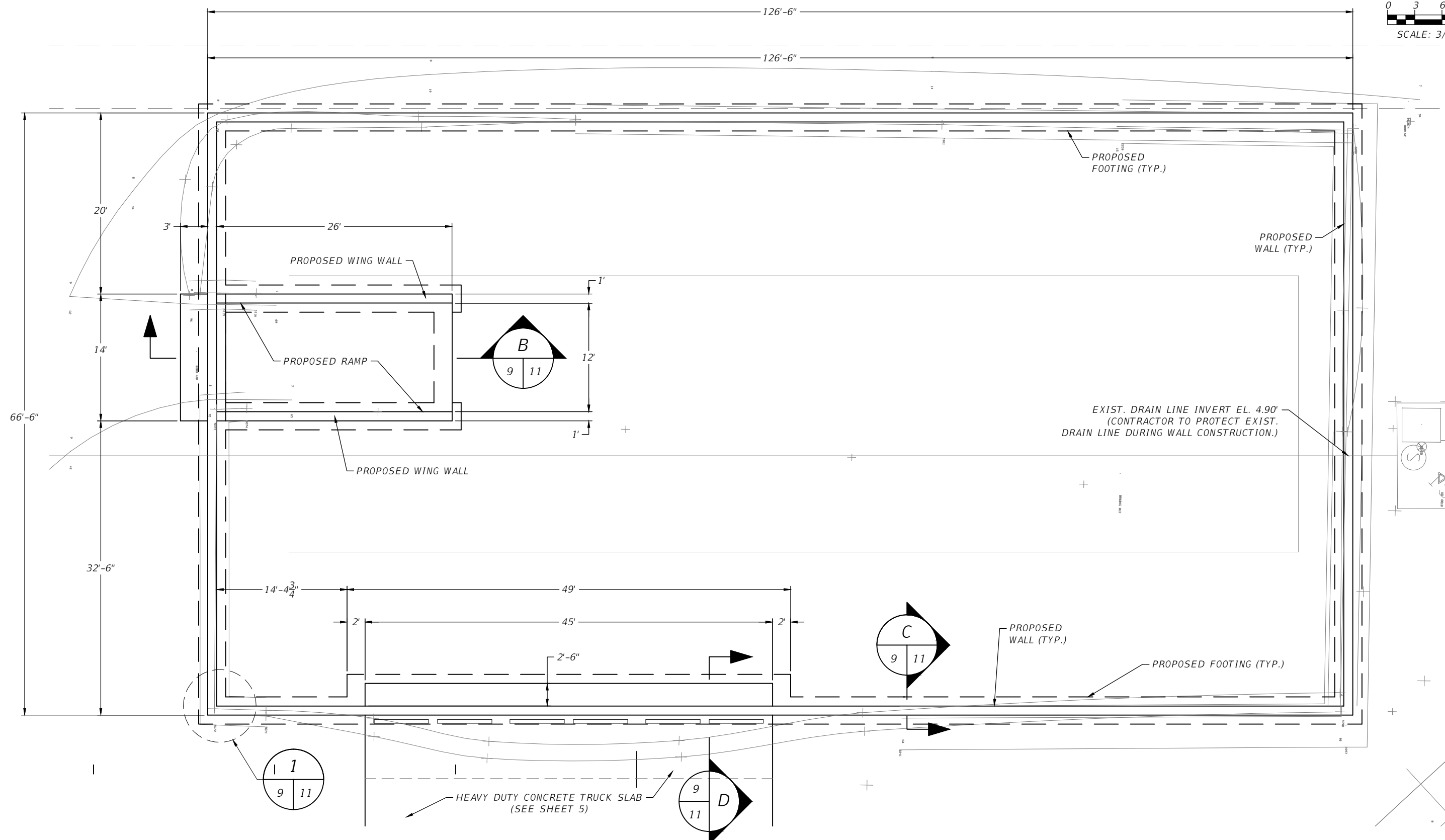
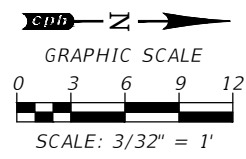
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REG# 69051

PLAN & PROFILE (3)

CITY of TAMPA
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8



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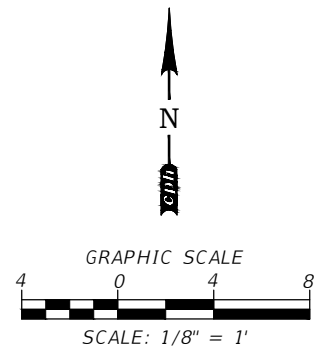
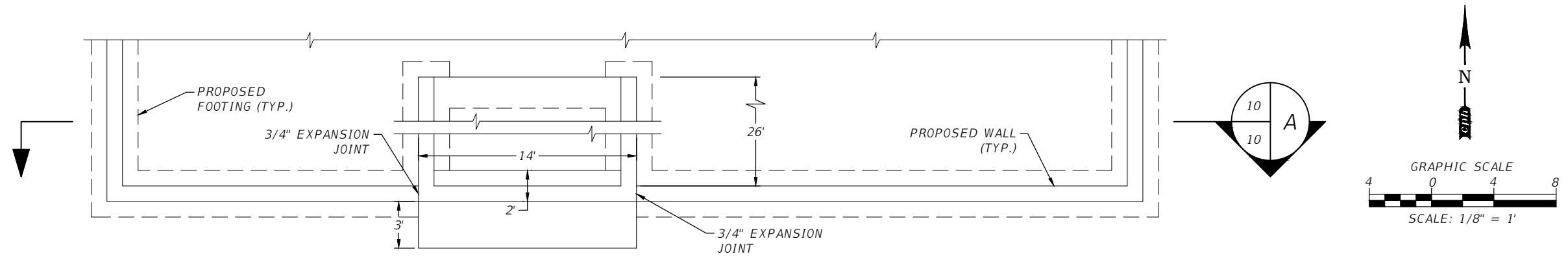
DEVIN F. BARRS, P.E.
REG-# 70588

*SLUDGE DRYING BED
STRUCTURAL PLAN*

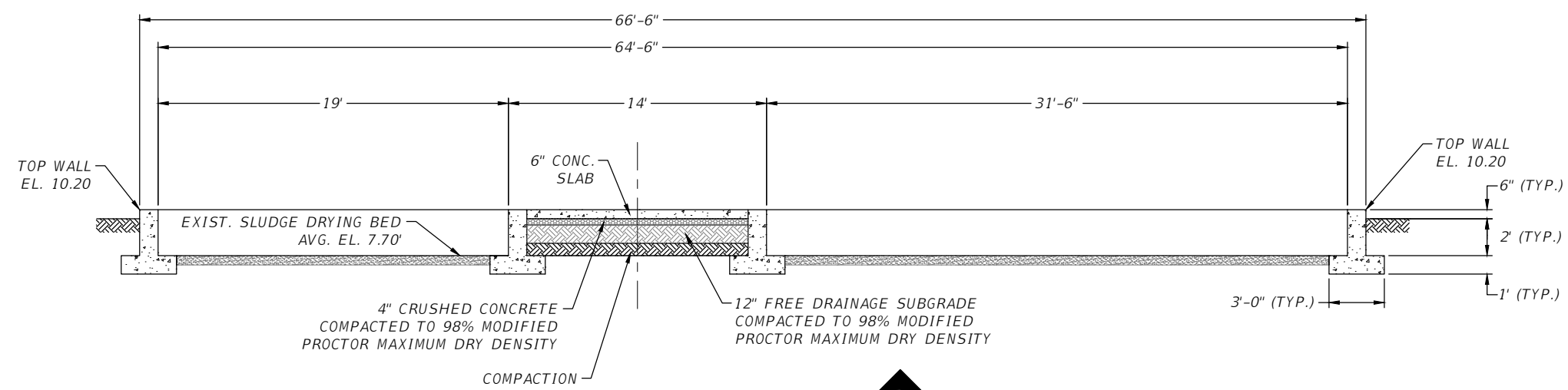
CITY of TAMPA
WASTEWATER DEPARTMENT

Sheet No.
9

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PARTIAL - PLAN
SCALE: 1/8"=1'-0"



SECTION
SCALE: 1/8"=1'-0"
A
10
10

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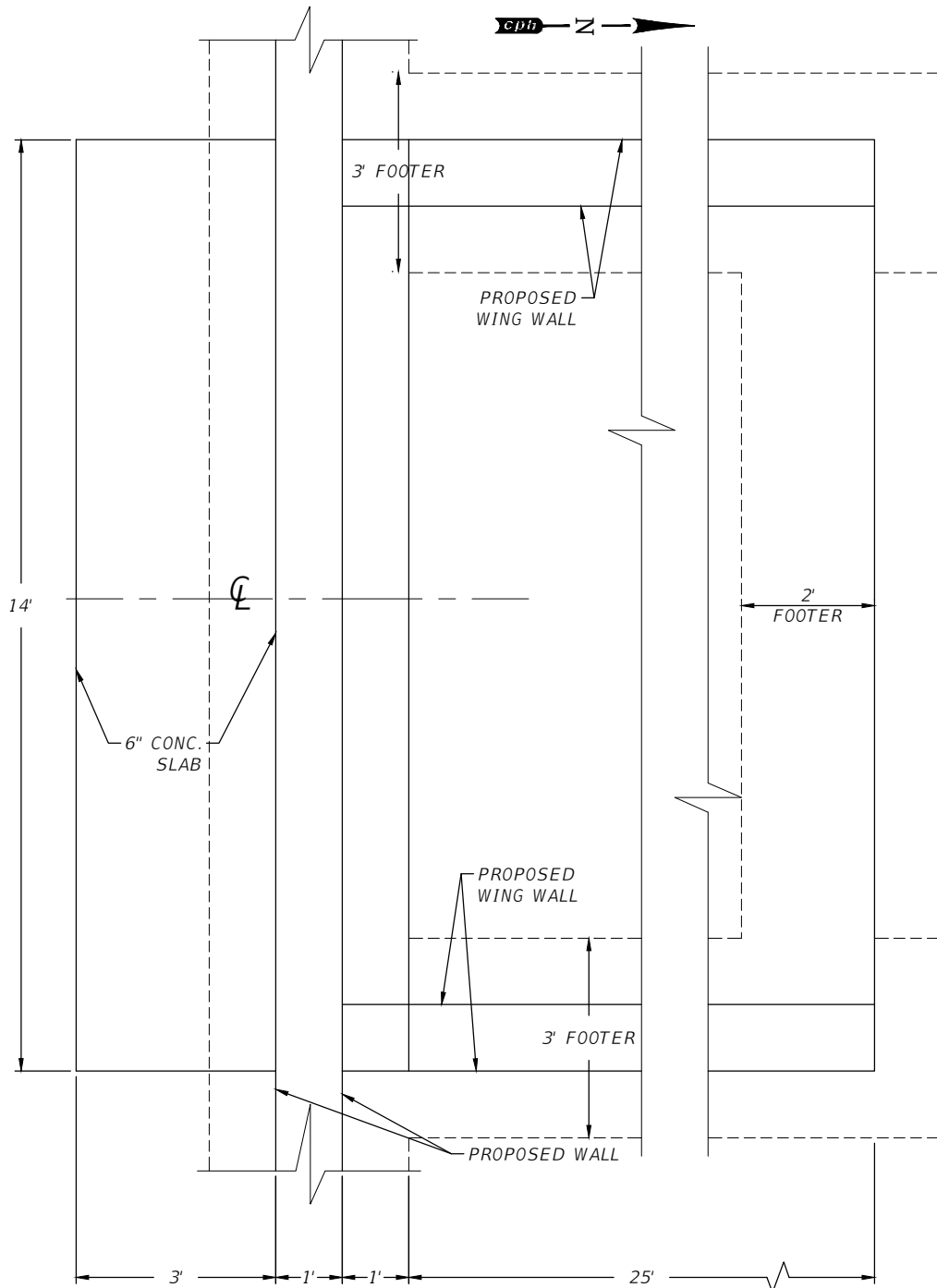
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REG-# 70588

*SLUDGE DRYING BED STRUCTURAL
PARTIAL PLAN & SECTION*
CITY of TAMPA
WASTEWATER DEPARTMENT

Sheet No.
10

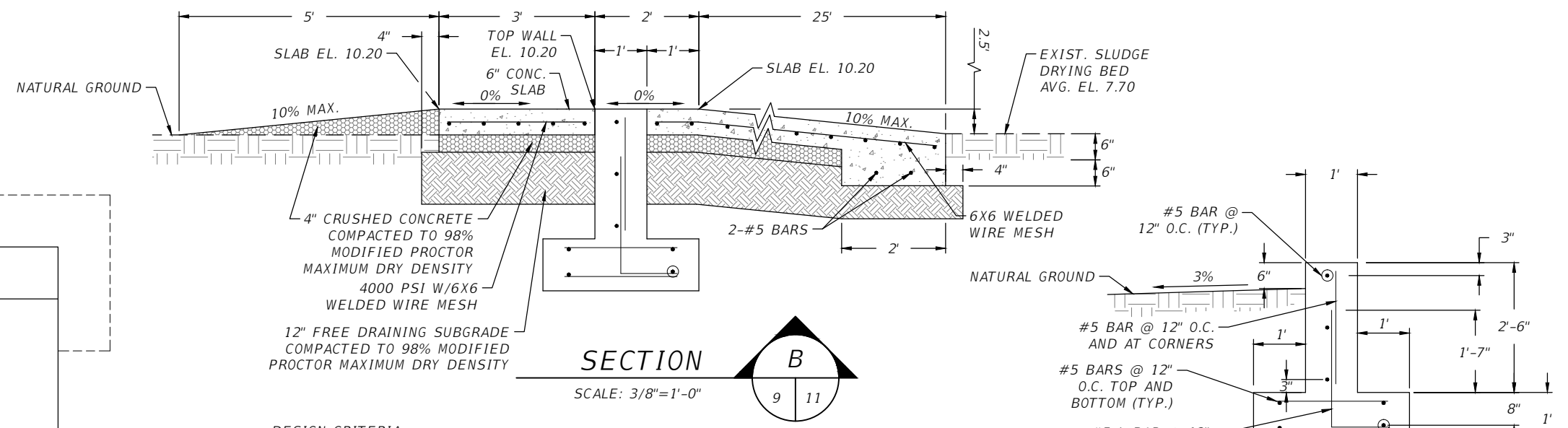
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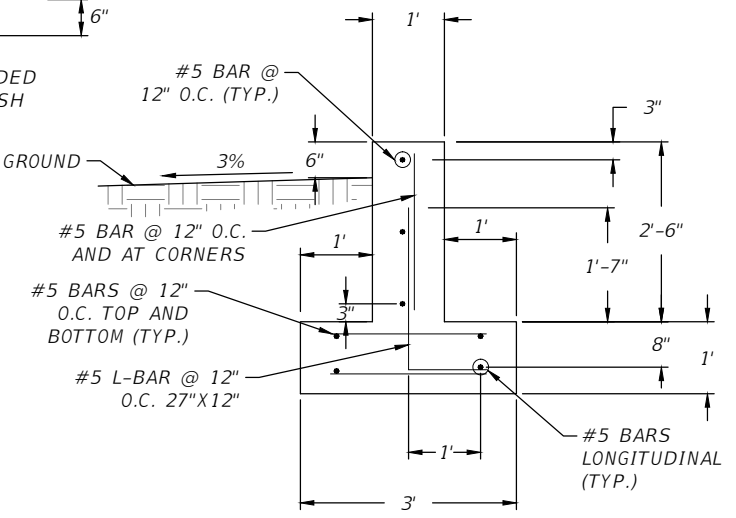
RAMP ENTRANCE PARTIAL PLAN

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



SECTION B

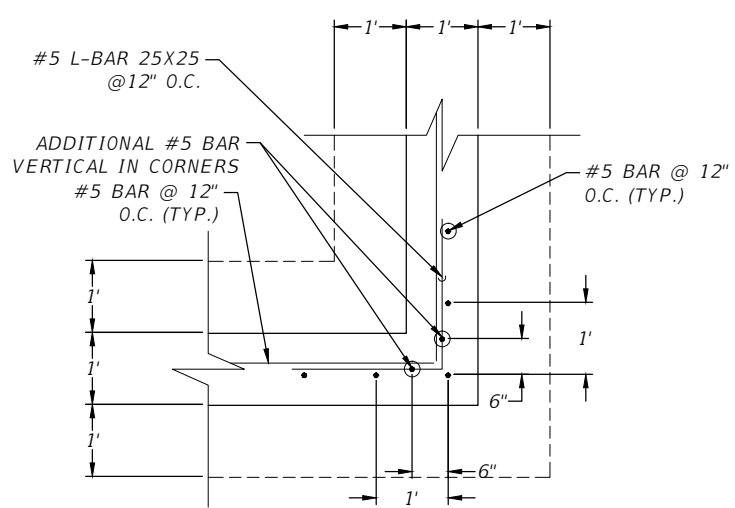
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SECTION C

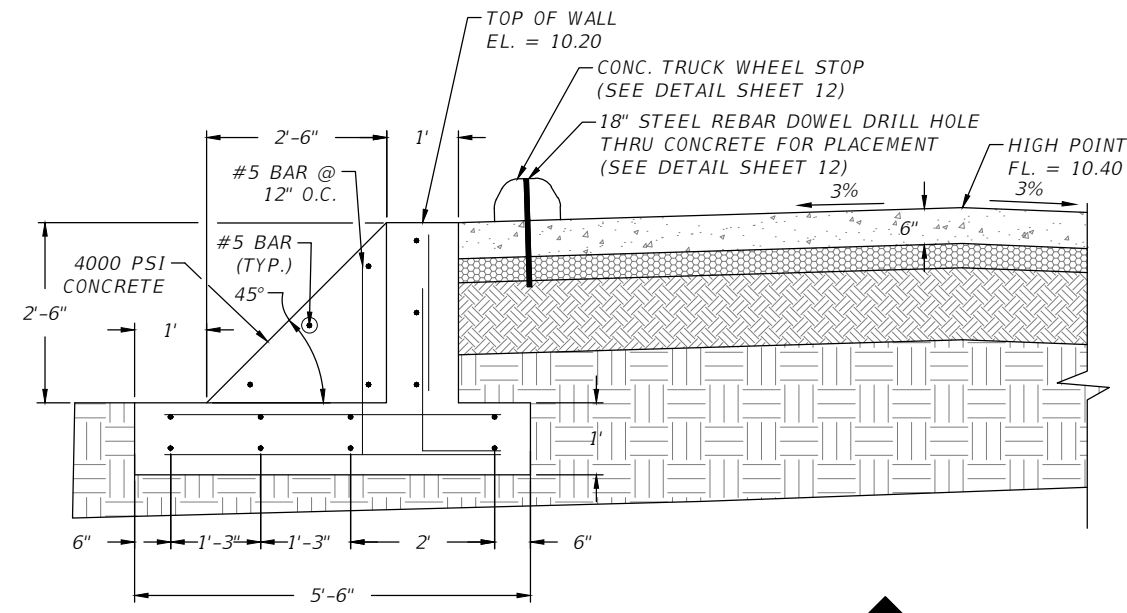
SCALE: 3/8"=1'-0"

- DESIGN CRITERIA:**
- GRADE 60 BARS: FS=36,000 PSI
FY=60,000 PSI
 - MAXIMUM HEIGHT 3 FEET
 - * FOR GREATER HEIGHT ENGINEERING CALCULATIONS ARE REQUIRED
 - CONCRETE: MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS-4000 PSI.
- ALL MATERIALS AND METHODS OF CONSTRUCTION SHALL BE IN ACCORDANCE WITH DRAWINGS AND SPECIFICATIONS AND;
- ACI 318 "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE".
 - WELDED WIRE MESH SHALL CONFORM TO ASTM A185



CORNER REINFORCING DETAIL

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



SECTION D

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

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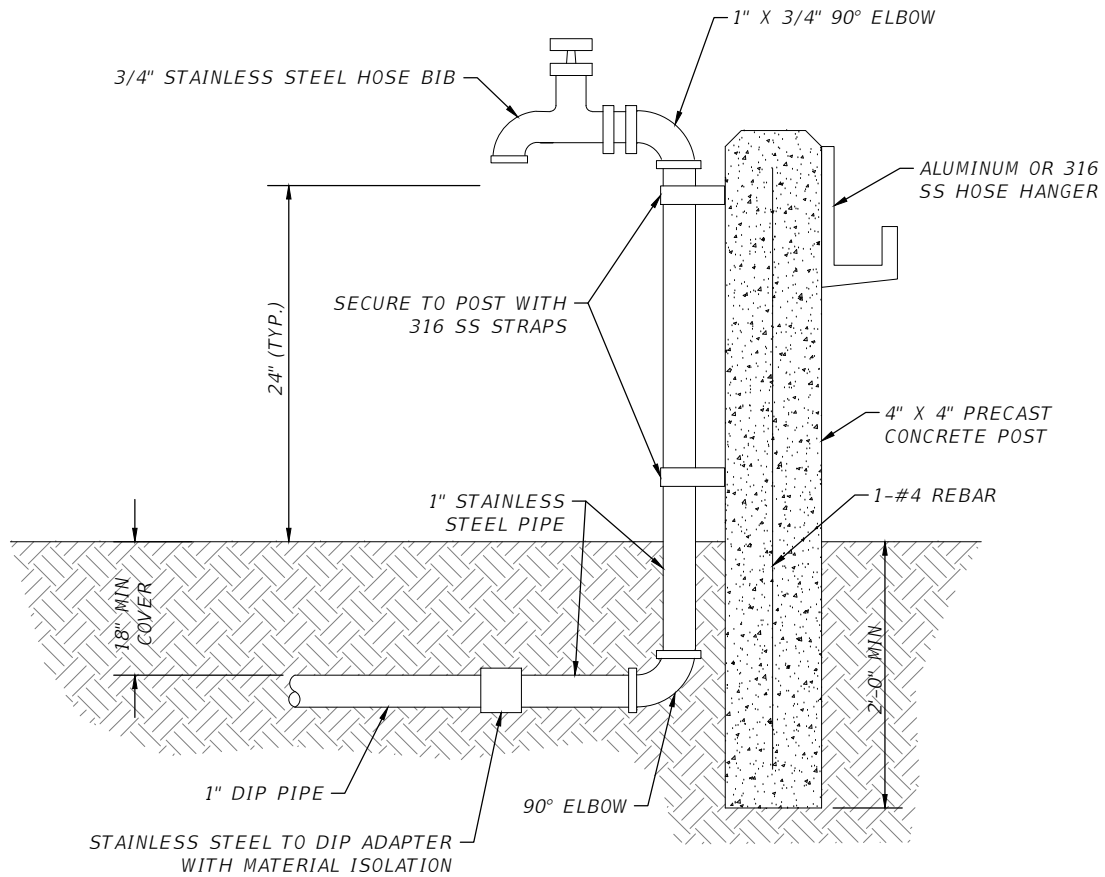
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Landscape Lic. No. LC0000298

DEVIN F. BARRS, P.E.
REG-# 70588

SLUDGE DRYING BED STRUCTURAL SECTIONS & DETAILS

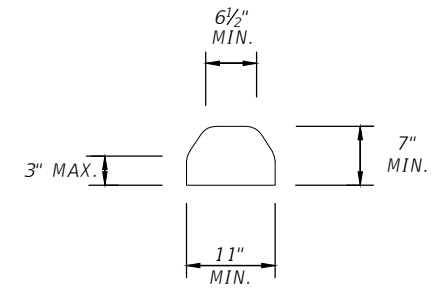
CITY of TAMPA
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11

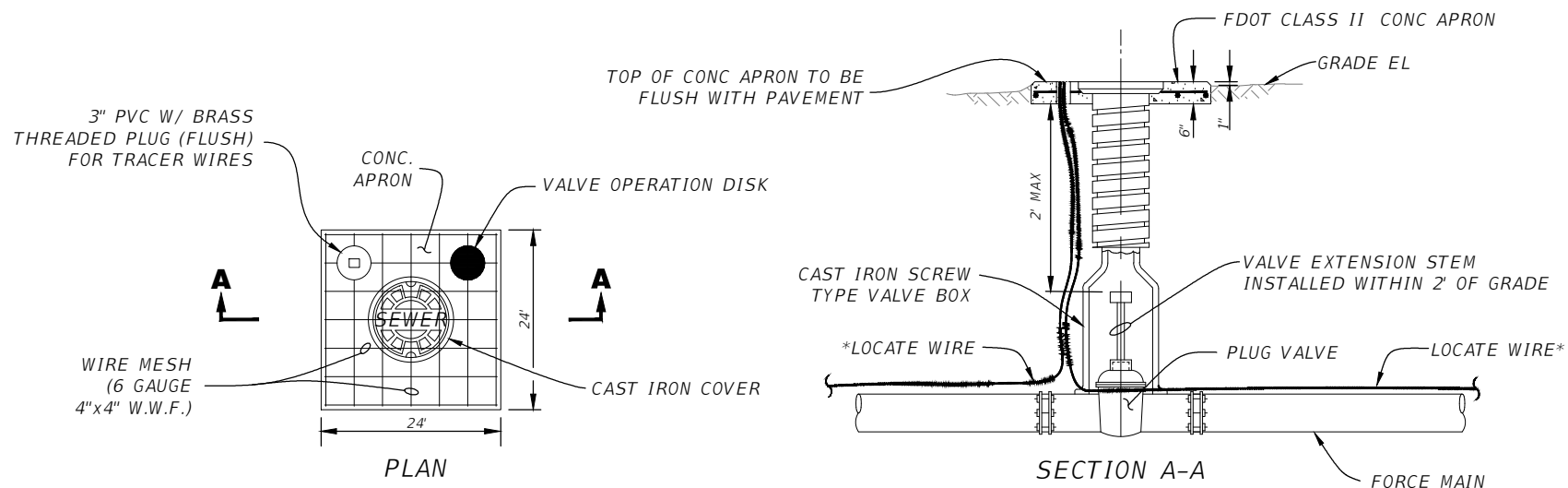


NOTE:
WARNING SIGN SHALL BE ADDED TO PRECAST
CONCRETE POST STATING "NON-POTABLE WATER"

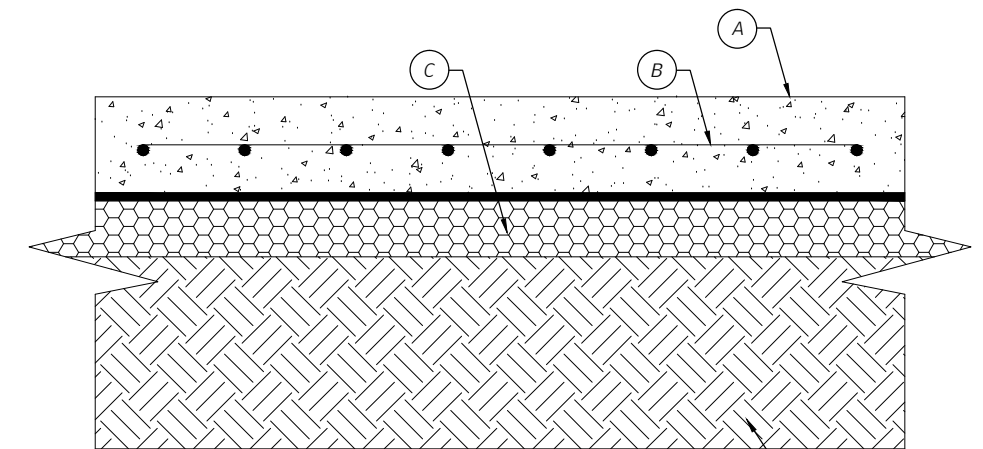
HOSE BIB DETAIL
N.T.S.



**CONCRETE TRUCK
WHEEL STOP DETAIL**
N.T.S.



VALVE BOX DETAIL
N.T.S.



- (A) 6" HEAVY DUTY CONCRETE WITH A MIN. 28 DAY COMPRESSIVE STRENGTH OF AT LEAST 4000 PSI, WITH FIBER MESH 12' X 12' MAX. CONTROL JOINT SPACING @ 1 1/2 INCH DEPTH.
- (B) 6 X 6 WELDED WIRE MESH EMBEDDED AND CENTERED IN CONCRETE SLAB.
- (C) 4" OF "FREE DRAINING" CRUSHED CONCRETED BASE COURSE COMPACTED TO AT LEAST 98% MODIFIED PROCTOR MAXIMUM DRY DENSITY (ASTM D-1557, AASHTO T-180)
- (D) 12" OF "FREE DRAINING" SUBGRADE, COMPACTED TO AT LEAST 98% MODIFIED PROCTOR MAXIMUM DRY DENSITY (ASTM D-1557, AASHTO T-180)

HEAVY DUTY CONCRETE PAVING
N.T.S.

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MISCELLANEOUS DETAILS

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12