The Enclosed Document Is Provided For Your Convenience.

Please Email ALL Questions:

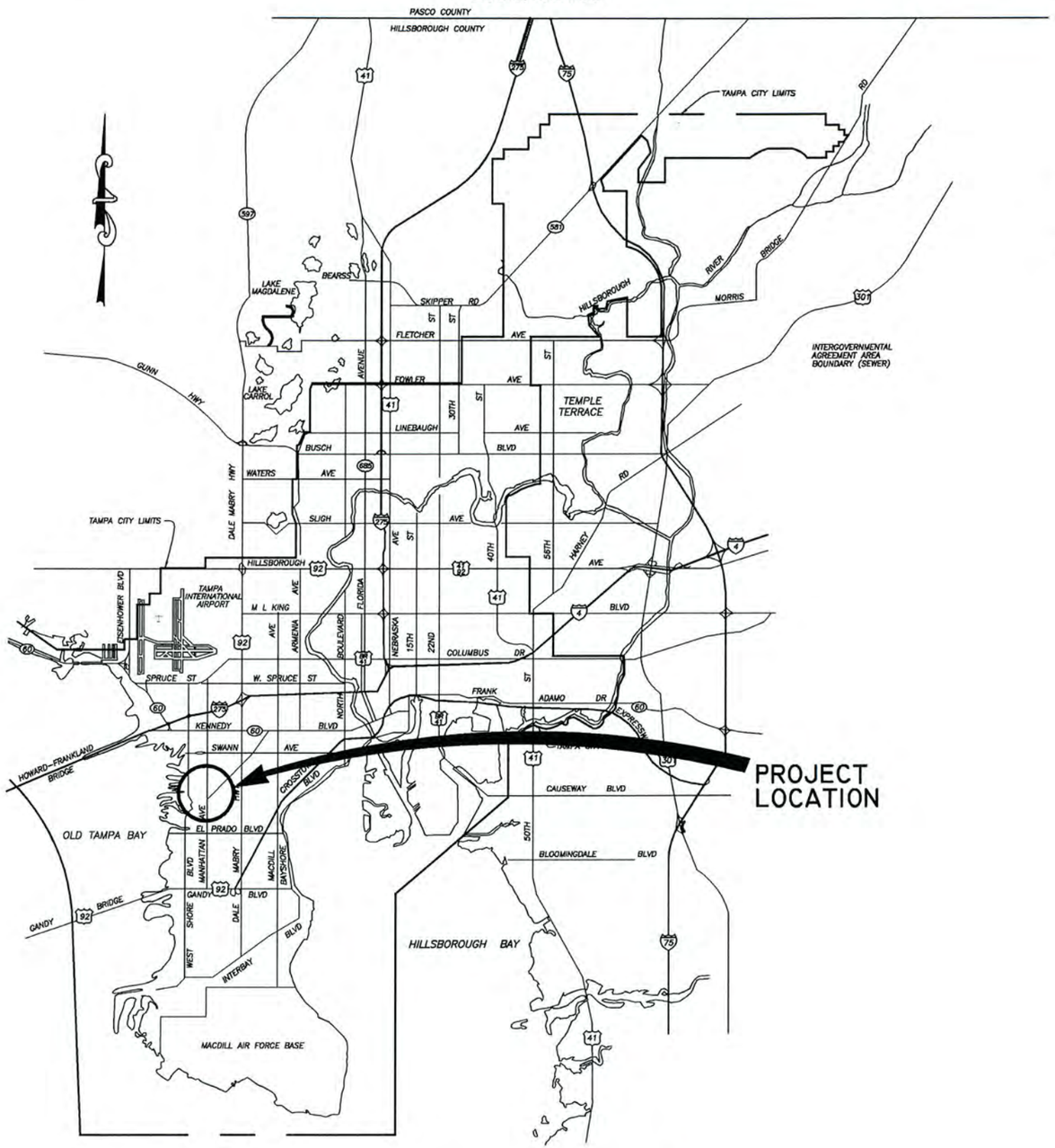
MailTo:ContractAdministration@TampaGov.net

Please Let Us Know If You Plan To Bid

City of Tampa
Contract Administration Department
306 E. Jackson St. #280A4N
Tampa, FL 33602
(813)274-8456

SW

LOCATION MAP



CITY of TAMPA

CITY OF TAMPA FLORIDA · ORGANIZED JULY 15 1887 · MASCOTTE

DEPARTMENT OF PUBLIC WORKS

STORMWATER ENGINEERING

PLANS FOR

SAN CARLOS FLUME REPLACEMENT

BETWEEN

S. HESPERIDES ST. AND S. MANHATTAN AVE.

CONTRACT No. 14-C-00007

DRAFTING BY:

EMK Consultants of Florida, Inc.

engineers surveyors land planners

7815 North Dale Mabry Highway, Suite 200 • Tampa, FL 33614 • 813-931-8900
fax 813.931.5848 • on the web: www.emkfla.com • e-mail: emk@emkfla.com

EMK PROJECT #: 30527.08

No.	DATE	REVISIONS
3		
2		
1		

RICHARD ALFRED HOEL, P.E. #41026
CHIEF ENGINEER
DPW - STORMWATER ENGINEERING

DES: M.T.M.
DRN: C.M.M.
CKD: H.D.M.
DATE: 10/30/13

CITY of TAMPA
Department of Public Works
Stormwater Engineering

COVER SHEET

W.O. 5232

SHEET 1 OF 10

SW

GENERAL NOTES:

1. The City of Tampa relied entirely upon the Boundary and Topographic Survey prepared be Suncoast Land Surveying, Inc. dated 10/30/12, for the existing conditions which were used as a base for this design.
2. The property shown hereon falls within Flood Zones "AE" and "X", as shown on the Flood Insurance Rate Map. Community Panel Number 12057C0342H, revised date August 28, 2008.
3. Elevations shown hereon are in feet and refer to the North American vertical datum of 1988. (N.A.V.D.)
4. Reference Benchmark is City of Tampa BM. HV-02 0051 Elevation = 11.27' and City of Tampa BM. HV-02 0017 Elevation = 3.76'.
5. State Plane values are tied to the Florida State plane coordinate system (grid), west zone North American Datum 1983-1991, adjustment 1990, and were derived from coordinates published by N.G.S. For stations "FRED" PID-DG 8925 and "FS9" PID-DG 8960
6. The location of existing utilities are approximate as shown and it is the contractor's responsibility to determine the exact location of the utilities prior to construction in their vicinity. The contractor shall notify all concerned public agencies and utility companies in the area before beginning construction, including "Sunshine" at 1-800-432-4770.
7. No underground installations or improvements have been located except as shown.
8. Prior to casting structures, the contractor shall submit five (5) sets of shop drawings to the Engineer for review. Shop drawings shall include:
   a) Manhole shop drawings and conc. strength report.
   b) Frame and cover shop drawings.
   c) Storm structures and piping
   d) Paving data
9. At least five (5) days prior to construction of underground utilities, the contractor shall contact the City of Tampa Construction Administration to ensure availability of inspection personnel. Any work performed prior to notifying Engineer of Record or without a department inspector present may be subject to removal and replacement. Shop drawings shall be made availble to City Inspector(s) upon request.
10. All design and construction must conform to the minimum standards set forth in city of Tampa Land Development Code and/or related ordinances such as Tree and Landscape Code, Stormwater Management Regulations and Fire Codes, allocable to the project at time of permitting.
11. The contractor shall keep record drawings of the utility work and shall submit one certified copy, prepared by a registered land surveyor to the engineer prior to final payment. As built information of the storm chambers construction shall be provided to the engineer for review and approval prior to sodding.
12. Construction material testing will be provided by the contractor. All soil density testing will be provided by the City of Tampa.
13. All right-of-way installations will be in accordance with practices referenced in the State of Florida Utilities Accommodations Manual and permitted through the city of Tampa.
14. All existing traffic signs shall be maintained throughout construction.
15. Prior to any construction/demolition, contractor shall schedule a pre construction meeting with utility providers, F.D.O.T., city of Tampa and shall coordinate meeting with owner.
16. Contractor shall restore all landscaping, sodding and pavement that may be damaged during construction to it's original condition or better. Contractor shall sod all unpaved areas.
17. All existing fences shall be removed during construction and replaced with new fence of like kind, unless owner and engineer agree to install old fence.
18. Contractor shall coordinate with TECO regarding the removal or relocation of power poles at west end of project at Hesperides St.

CITY OF TAMPA CONSTRUCTION NOTES:

1. Grates and Frames to be US Foundry USF 4120-6240, or equal, with 4 - 7/8" anchor holes. Frames to be centered over 18"x28" opening cast in box culvert and secured to culvert using 4 - ¾" stainless steel wedge anchor bolts and preformed flexible plastic gasket material.
2. All construction activities must be planned to provide minimal impact to the trees adjacent to the work area. Most of the trees adjacent to the existing concrete flume are on private property and permission must be obtained from property owner prior to any removal, trimming, or root pruning.
3. All work within the protective radius of the trees must be coordinated with Planning and Development Natural Resources section who can be reached at (813) 274-3100.
4. All nonprotective and nuisance species such as laurel cherry, Brazilian pepper, etc. shall be removed and stumps treated to prevent regrowth.
5. The Planning and Development Natural Resources Coordinator will be available at the pre-bid and preconstruction meetings to discuss construction methods to protect the trees. It is not the intent to allow clear cutting of all trees adjacent to the flume, but selective removal is unavoidable.
6. Protective barricades shall be installed around all protected trees and grand trees prior to any construction activities on the development site.
   a. Barricades shall be installed a minimum of ten (10) feet from a protective tree and a minimum of twenty (20) feet from a grand tree.
7. No changes shall take place to the predevelopment conditions within the protective root zone during the construction process, without the consent of the Planning and Development, Natural Resources Coordinator.
8. No parking or storage of vehicles, equipment, or materials is allowed within the protective root zone.
9. All tree trimming and root pruning must follow the following requirements:
   a. All work must be supervised by a certified arborist
   b. All roots must be severed clean at the protective root zone of the protective and grand trees to prevent root damage.
   c. Root pruning and tree trimming must be performed with an approved cutting type equipment, such as a chainsaw, hand saw, or other cutting equipment.

No.	DATE	REVISIONS
3		
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1		

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fax 813.931.5848 • on the web: www.emkfla.com • e-mail: emk@emkfla.com

EMK PROJECT #: 30527.08

DES: M.T.M.
DRN: C.M.M.
CKD: H.D.M.
DATE: 10/30/13

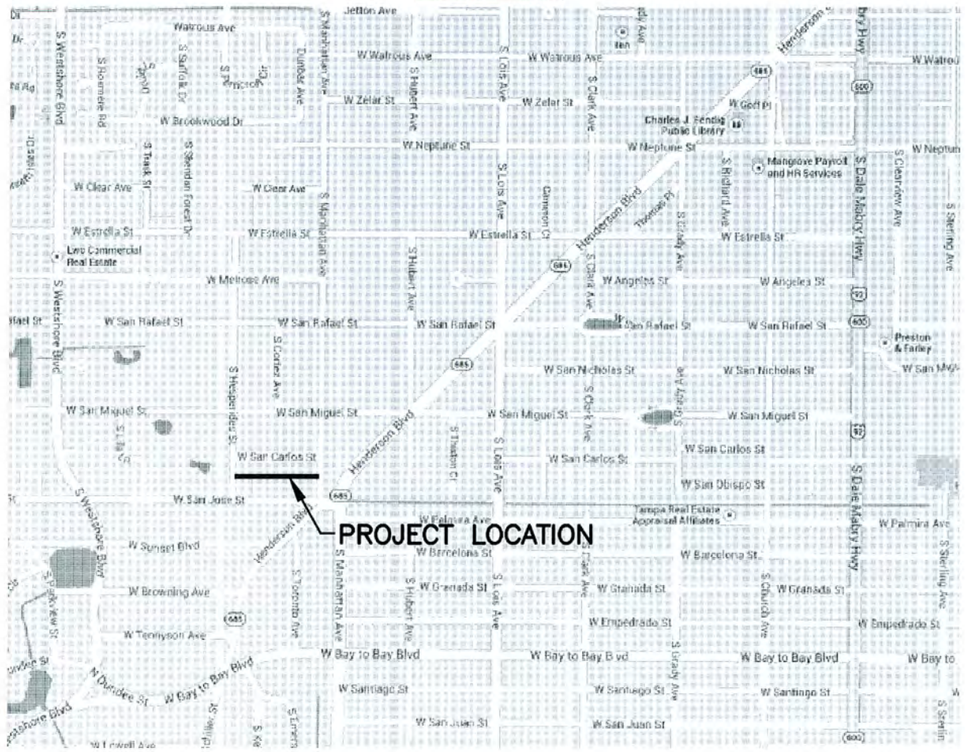
CITY of TAMPA
Department of Public Works
Stormwater Engineering

SAN CARLOS FLUME REPLACEMENT
BETWEEN
S. HESPERIDES ST. AND S. MANHATTAN AVE.

W.O. 5232
SHEET 2 OF 10

SW

VICINITY MAP



TREE LEGEND

WITH SIZES (IN INCHES) AS NOTED

- UNKNOWN
- BAY
- BUSH
- CAMPHOR
- CEDAR
- CHERRY LAUREL
- CHINABERRY
- CITRUS
- CREPE MYRTLE
- CYPRESS
- ELM
- EVERGREEN
- HOLLY
- MAGNOLIA
- MAPLE
- OAK
- PALM
- PINE
- PODACARPUS
- SWEETGUM
- MYRTLE
- JACARANDA
- MULBERRY
- HICKORY
- BOTTLEBRUSH
- CHINESE TALLOW
- RAIN TREE
- MIMOSA
- OTHER (as labeled)

LEGEND

- PROPOSED 3'x5' BOX CULVERT
- PROPOSED GRATE & FRAME (USF 4120–6240) TO BE INSTALLED ON TOP SLAB OF BOX CULVERT
- S–1 STRUCTURE LABEL
- EXISTING WATER MAIN
- EXISTING OVERHEAD POWER LINE
- EXISTING POWER POLE

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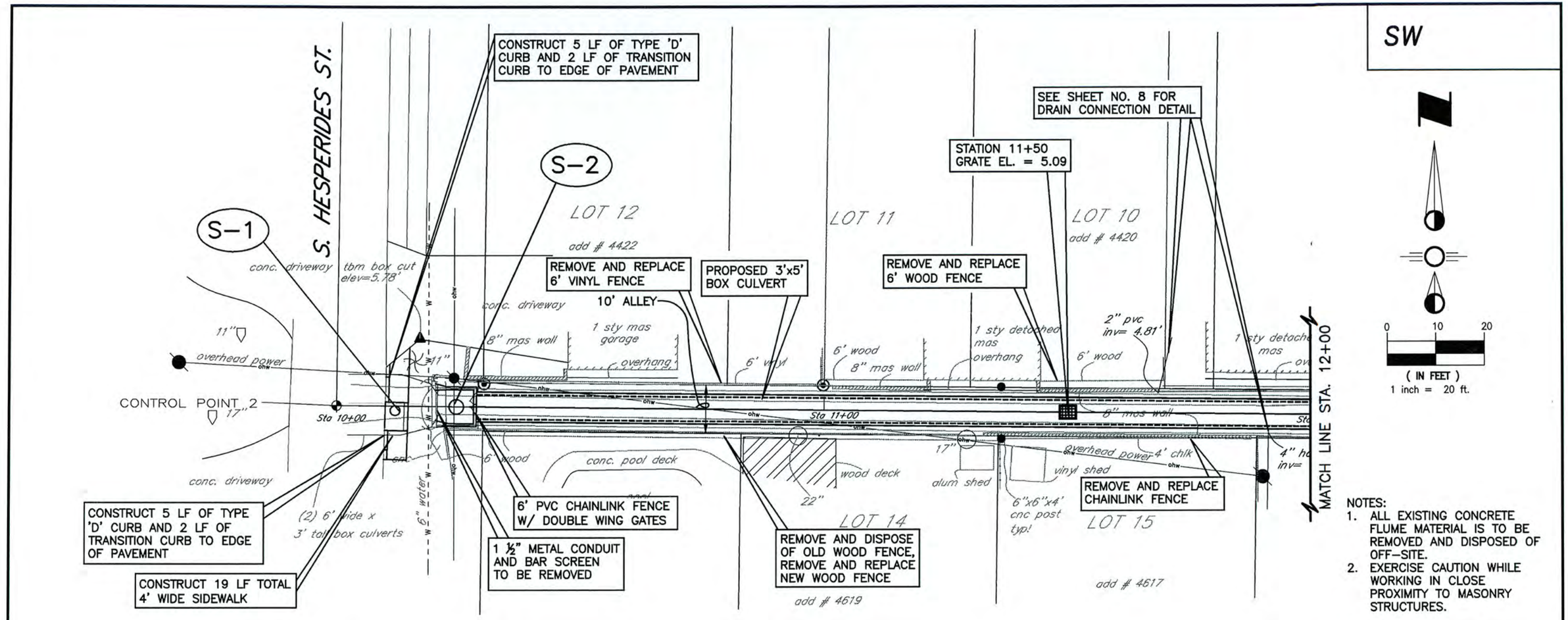
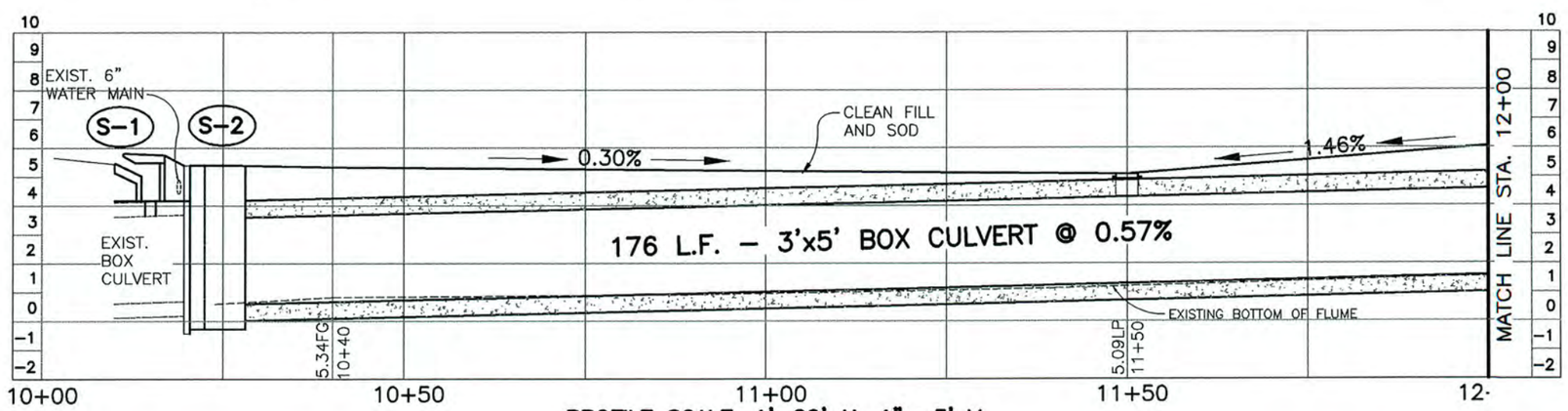
W.O. 5232
SHEET 3 OF 10



NOTES:
1. ALL EXISTING CONCRETE FLUME MATERIAL IS TO BE REMOVED AND DISPOSED OF OFF-SITE.
2. EXERCISE CAUTION WHILE WORKING IN CLOSE PROXIMITY TO MASONRY STRUCTURES.

S-1 Sta. 10+14 2.3' R
CONSTRUCT TYPE 'I' INLET
(CITY OF TAMPA STANDARDS)
(SEE SHT No. 8 FOR DETAILS)
FLOW LINE EL. = 5.5±
(MATCH EXISTING EP)
TOP EL. = 6.0

S-2 Sta. 10+25
CONSTRUCT F.D.O.T. TYPE "J"
PROPOSED MANHOLE (7'x5')
TOP. EL. = 5.47
INV. EL. (E) = 0.6
INV. EL. (W) = 0.6±(MATCH EXISTING)



PROFILE SCALE: 1'=20' H, 1" =5' V

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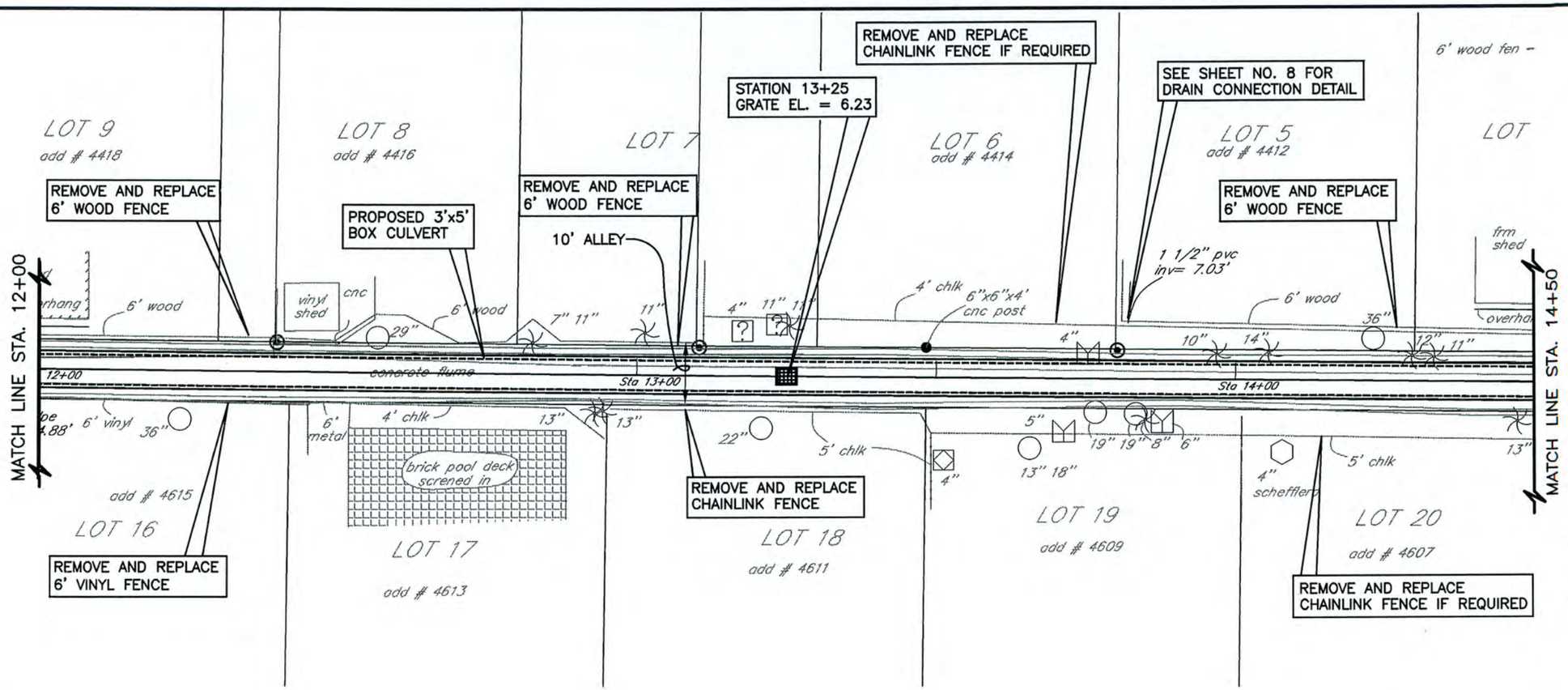
Department of Public Works
Stormwater Engineering

SAN CARLOS FLUME REPLACEMENT
BETWEEN
S. HESPERIDES ST. AND S. MANHATTAN AVE.

W.O. 5232
SHEET 4 OF 10



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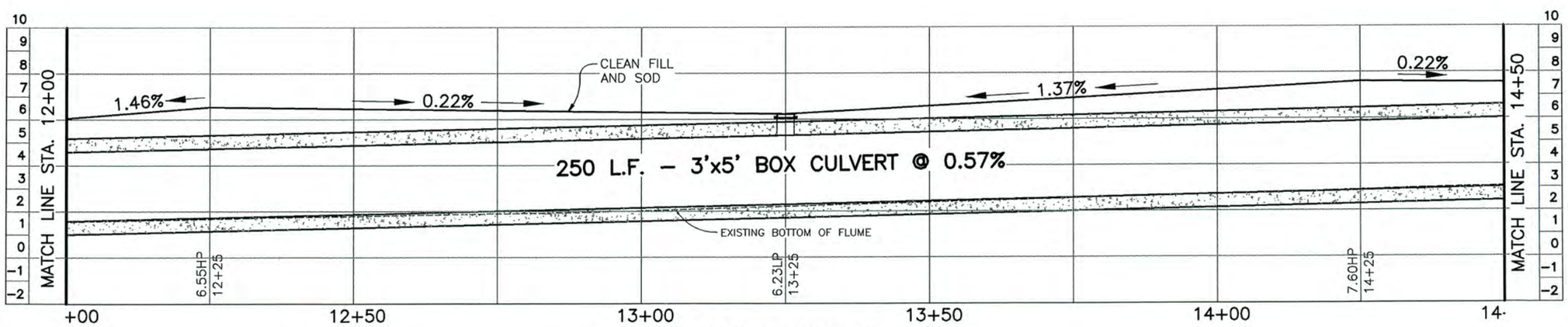

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SAN CARLOS FLUME REPLACEMENT
BETWEEN
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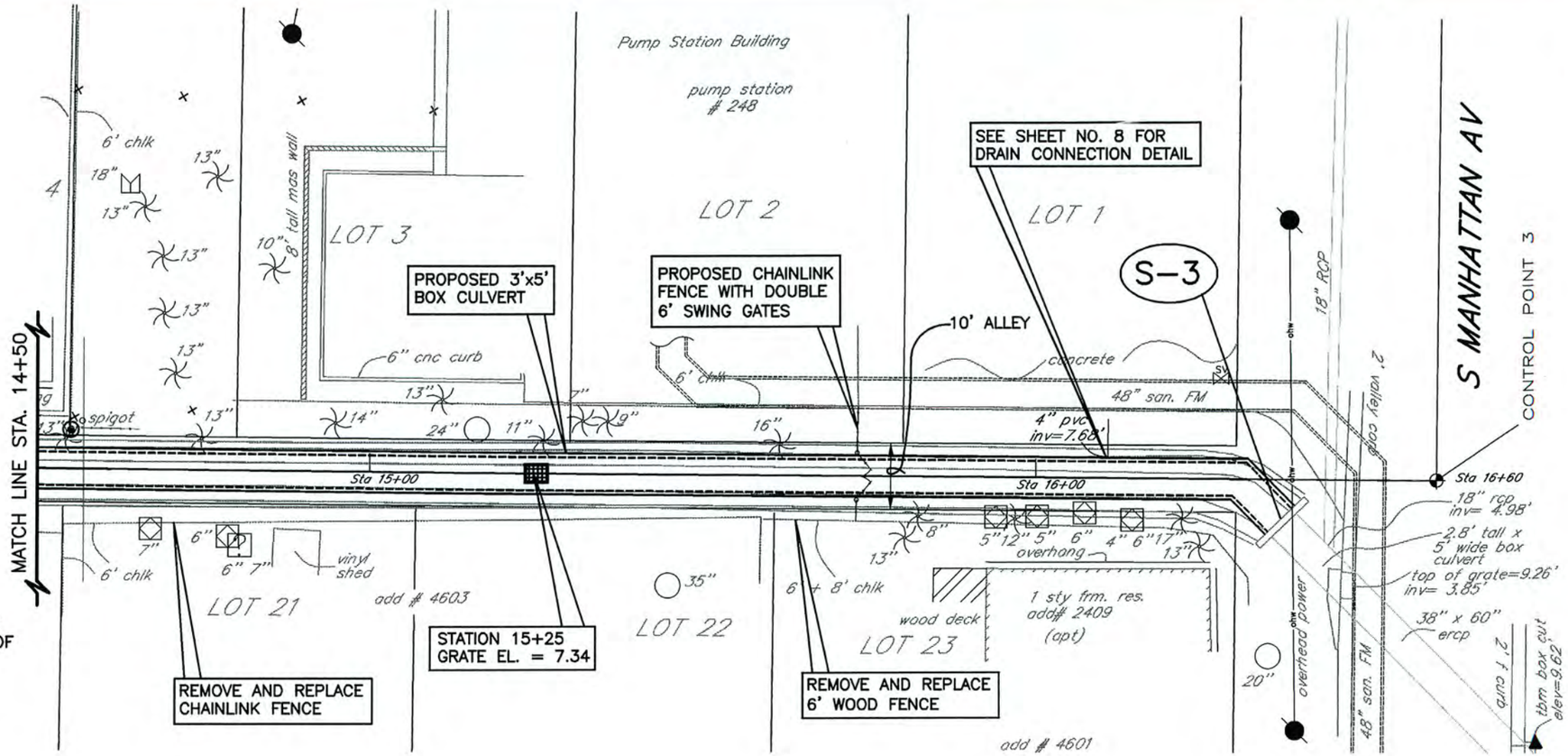
W.O. 5232
SHEET 5 OF 10



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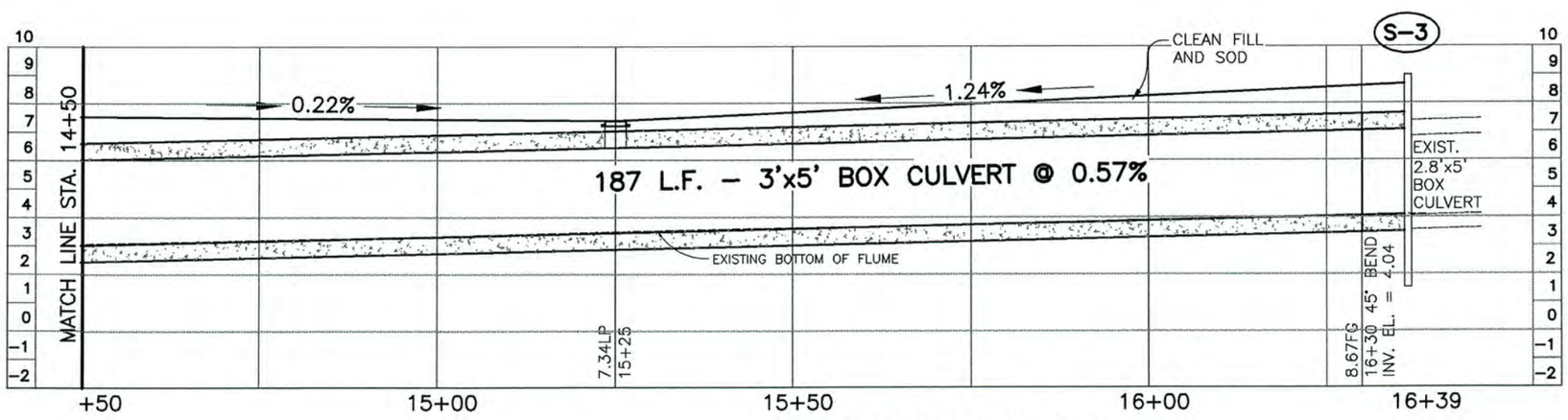

PROFILE SCALE: 1'=20' H, 1" =5' V

(S-3) Sta. 16+36, 5' R
TRANSITION BOX CULVERT
TO HEADWALL
INV. EL. = 4.07±
PER FDOT INDEX No. 289
SEE SHEET NO. 8 FOR DETAIL

No.	DATE	REVISIONS
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2		
1		

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SAN CARLOS FLUME REPLACEMENT
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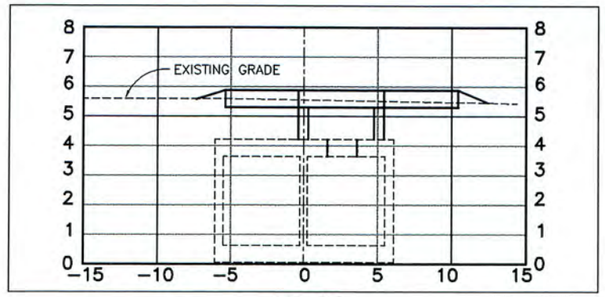
W.O. 5232
SHEET 6 OF 10

SW



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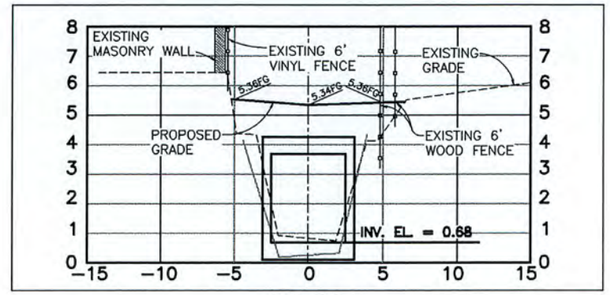

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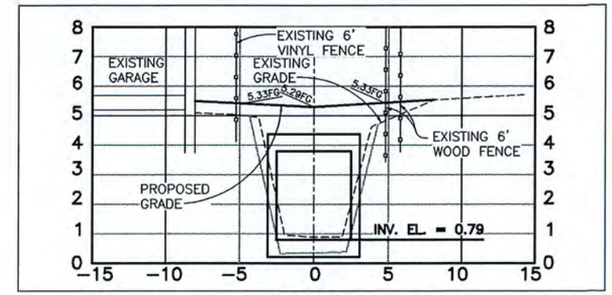

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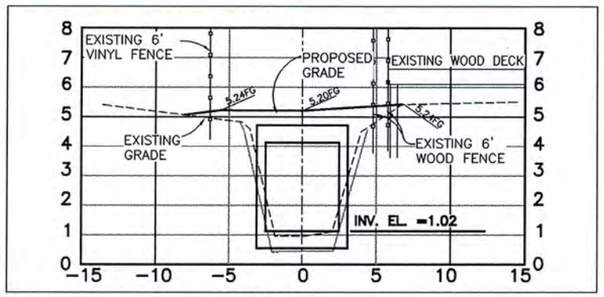

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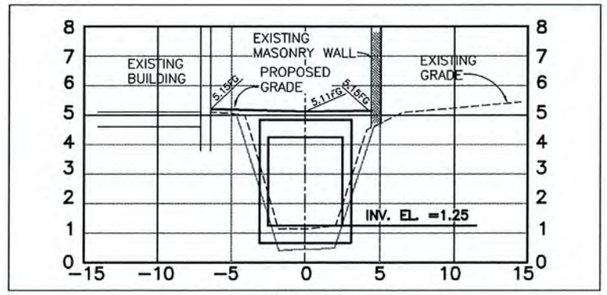

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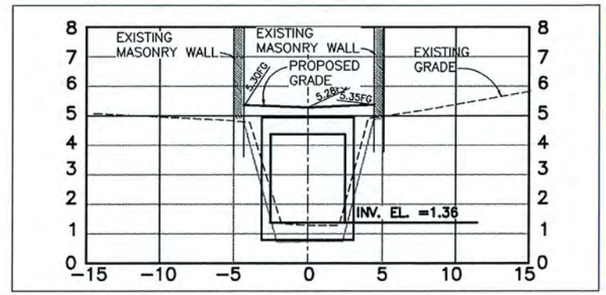

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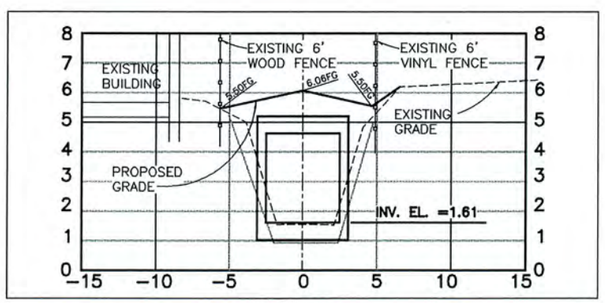

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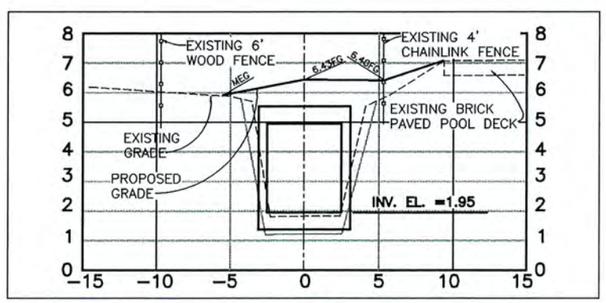

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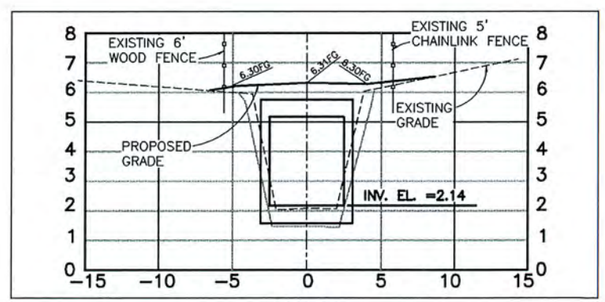

13+00

CROSS SECTIONS
SCALE: 1'=10' H, 1" =5' V

No.	DATE	REVISIONS
3		
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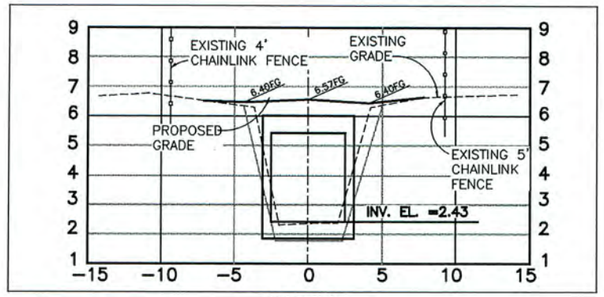
CITY of TAMPA
Department of Public Works
Stormwater Engineering

SAN CARLOS FLUME REPLACEMENT
BETWEEN
S. HESPERIDES ST. AND S. MANHATTAN AVE.

W.O. 5232
SHEET 7 OF 10

SW



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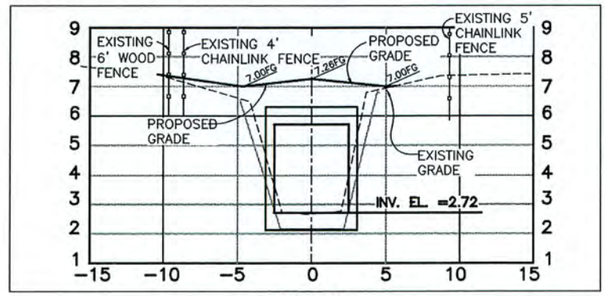

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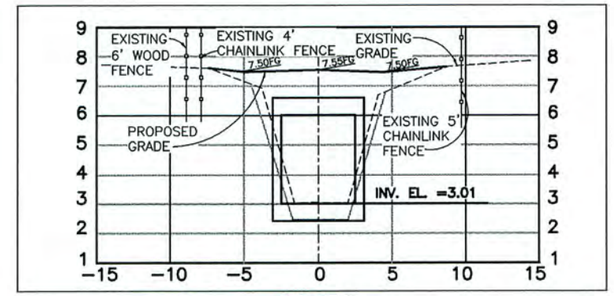

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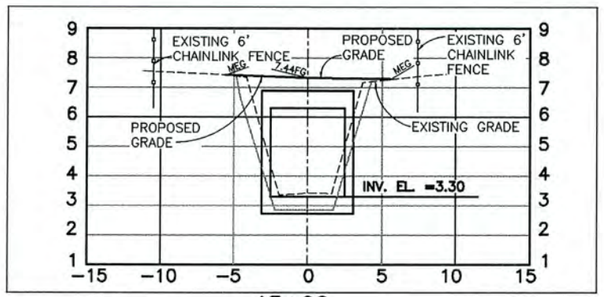

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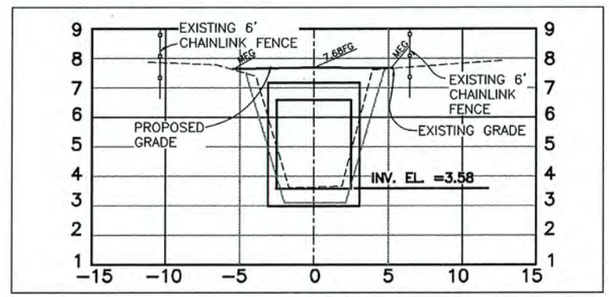

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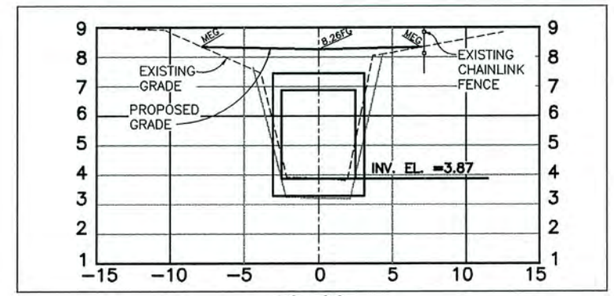

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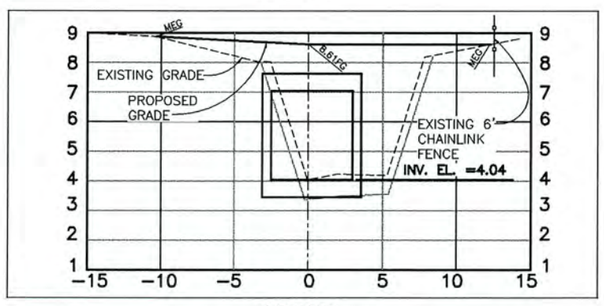

16+30

CROSS SECTIONS
SCALE: 1'=10' H, 1" =5' V

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SHEET 8 OF 10

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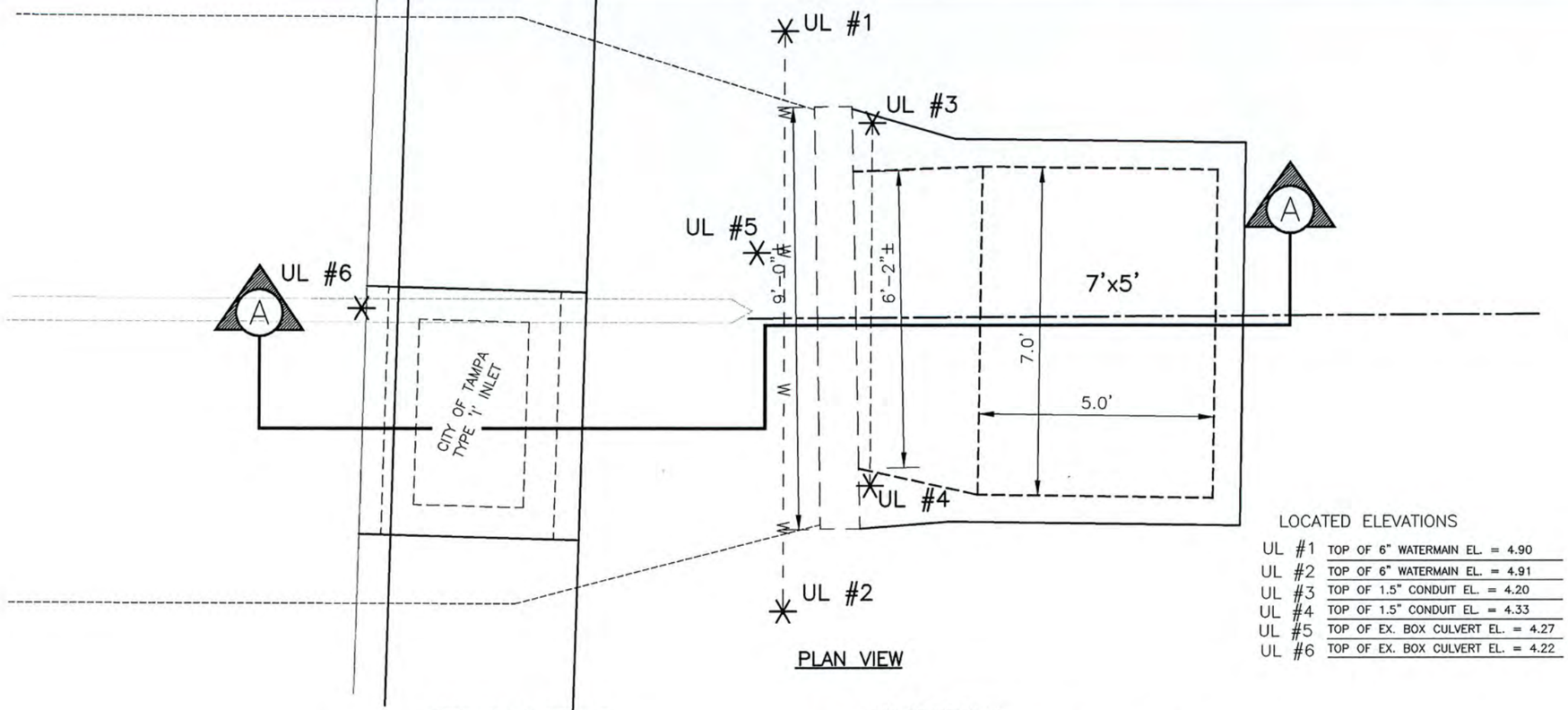
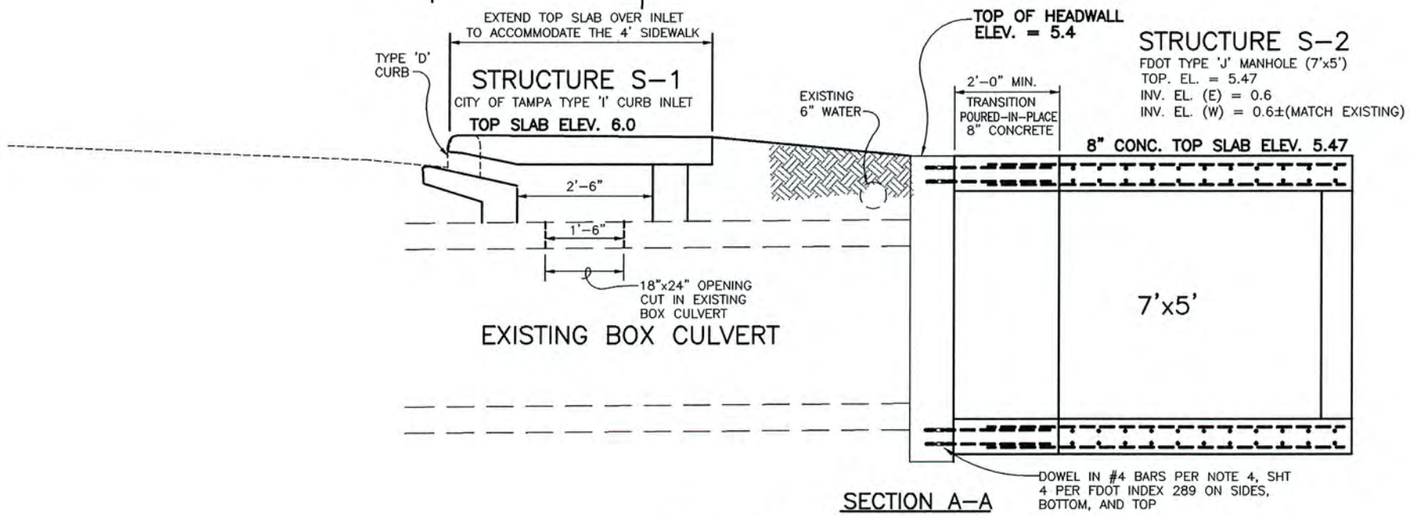


PLAN VIEW

LOCATED ELEVATIONS

UL #1	TOP OF 6" WATERMAIN EL. = 4.90
UL #2	TOP OF 6" WATERMAIN EL. = 4.91
UL #3	TOP OF 1.5" CONDUIT EL. = 4.20
UL #4	TOP OF 1.5" CONDUIT EL. = 4.33
UL #5	TOP OF EX. BOX CULVERT EL. = 4.27
UL #6	TOP OF EX. BOX CULVERT EL. = 4.22



SECTION A–A

DRAINAGE STRUCTURE DETAIL

NTS

No.	DATE	REVISIONS
3		
2		
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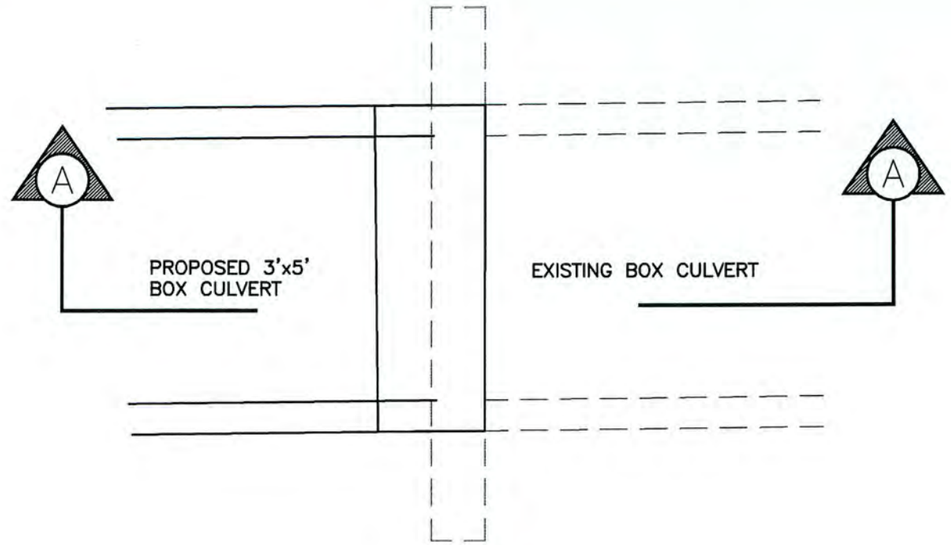
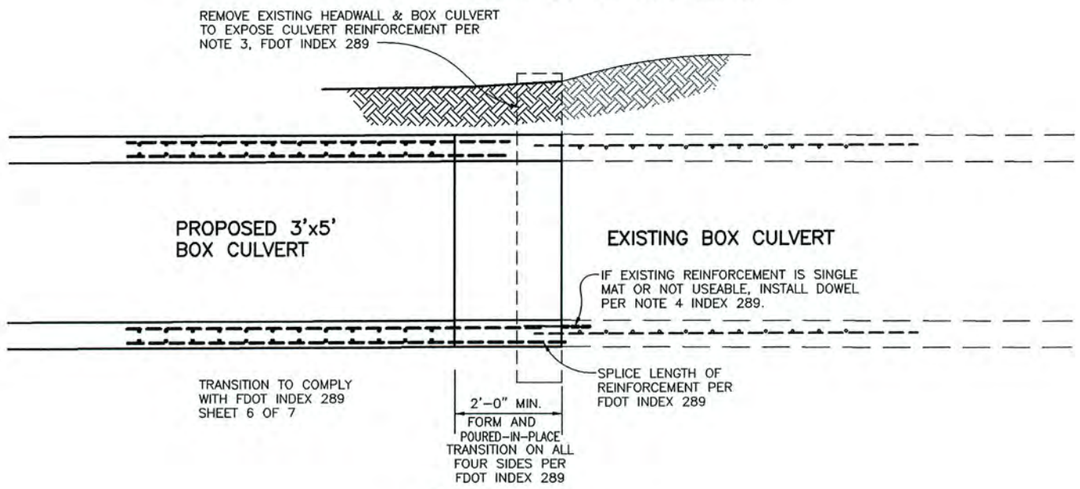
SHEET 9 OF 10

SW ----



PLAN VIEW

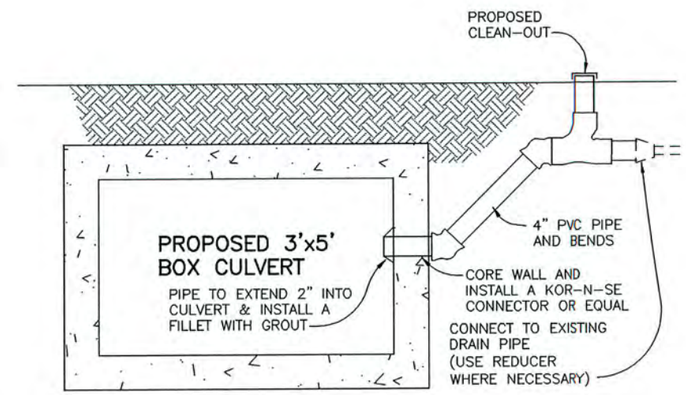
STRUCTURE S-3
POUR-IN-PLACE BOX CULVERT TRANSITION



SECTION A-A

DRAINAGE STRUCTURE DETAIL

NTS



DRAIN PIPE CONNECTION DETAIL

NTS

BOX CULVERT SPECIFICATIONS

1. 5'X3' FDOT TYPE 2 BOX CULVERT WITH < 2' EARTH COVER
2. DIMENSIONS AND STEEL PLACEMENT PER FDOT INDEX 292 TABLE 2A FOR 7" THICK WALLS AND 2" COVER OR EQUAL.
3. ALL REINFORCING STEEL – GRADE 60
4. CONCRETE TO BE CLASS IV
5. ALL BOX CULVERT JOINTS (TOP & SIDES) TO BE COVERED WITH FILTER FABRIC WITH 2' MIN. WIDTH AND MEETING INDEX 199.

No.	DATE	REVISIONS
3		
2		
1		

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EMK PROJECT #: 30527.08

DES: MTM
DRN: CMM
CKD: HDM
DATE: 9/25/13

CITY of TAMPA
Department of Public Works
Stormwater Engineering

SAN CARLOS FLUME REPLACEMENT
BETWEEN
S. HESPERIDES ST. AND S. MANHATTAN AVE.

W.O. 5232
SHEET 10 OF 10