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Please Email ALL Questions:

[MailTo:ContractAdministration@TampaGov.net](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



CITY OF TAMPA

Channel District

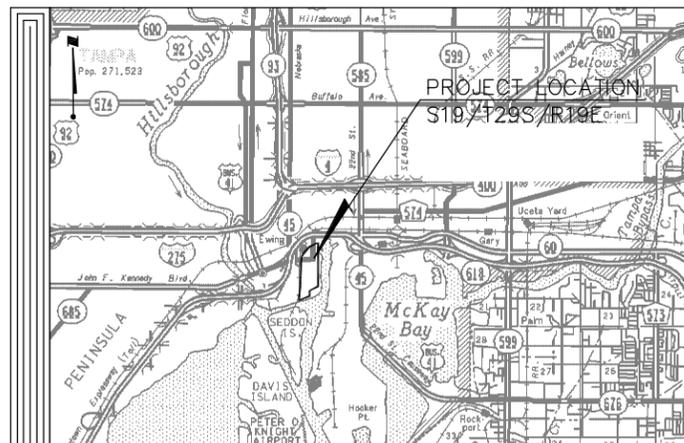
Hillsborough County
E. Madison Street Improvements

Construction Plans

November 2013

CONTRACT No. 14-C-00011

TF PROJECT No. 1000327



VICINITY MAP
NTS

INDEX OF SHEETS

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REVISIONS

NO.	DATE	DESCRIPTION

Call Sunshine One-Call for FREE 800.432.4770 or Visit www.callsunshine.com



CALL SUNSHINE @ 1-800-432-4770
FL. STATUE 553.851 (1979) REQUIRES A
MIN. OF 2 DAYS AND MAX. OF 5 DAYS
NOTICE BEFORE YOU EXCAVATE.

DESIGN STANDARDS
(F.D.O.T. BOOKLET, DATED JAN. 2013)

THESE PLANS HAVE BEEN PREPARED IN ACCORDANCE WITH THE FLORIDA DEPT. OF TRANSPORTATION DESIGN STANDARDS (DATED JAN. 2013), THE FLORIDA DEPT. OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (DATED 2013) AND SUPPLEMENTS THERETO, AND THE LATEST CITY OF TAMPA TECHNICAL STANDARDS FOR TRANSPORTATION CONSTRUCTION, AND THE LATEST CITY OF TAMPA TECHNICAL STANDARDS FOR UTILITIES.

ECONOMIC AND URBAN
DEVELOPMENT DEPARTMENT
CITY OF TAMPA, FLORIDA

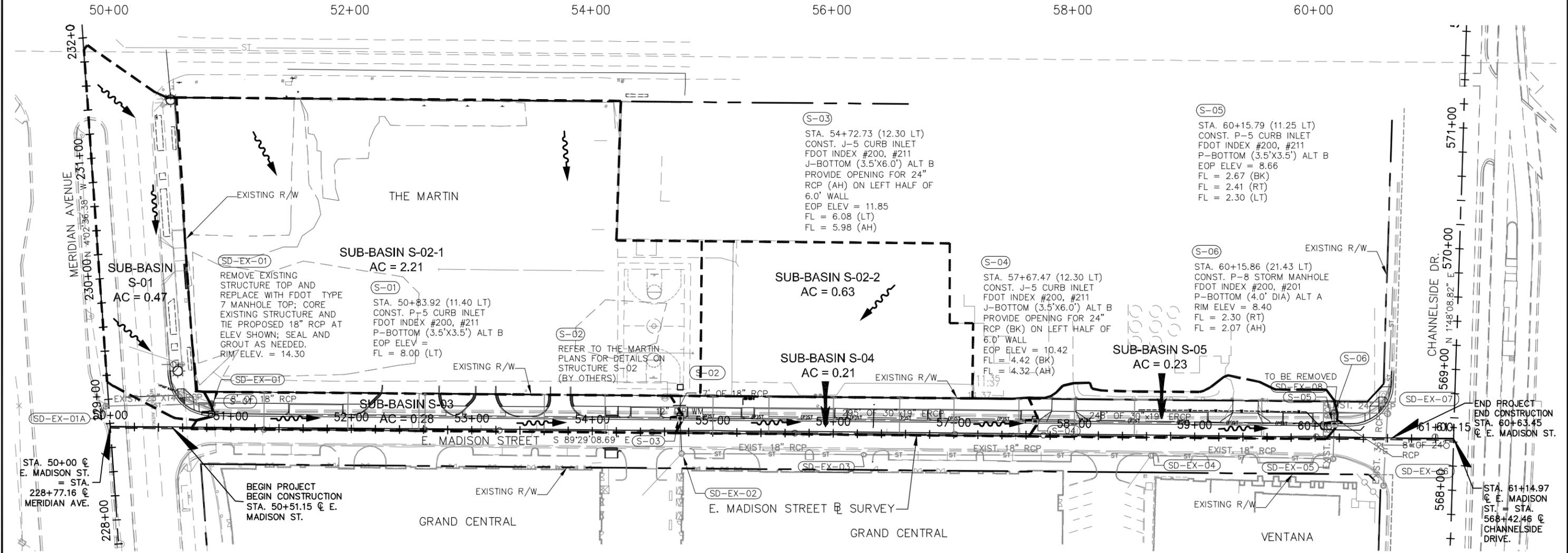
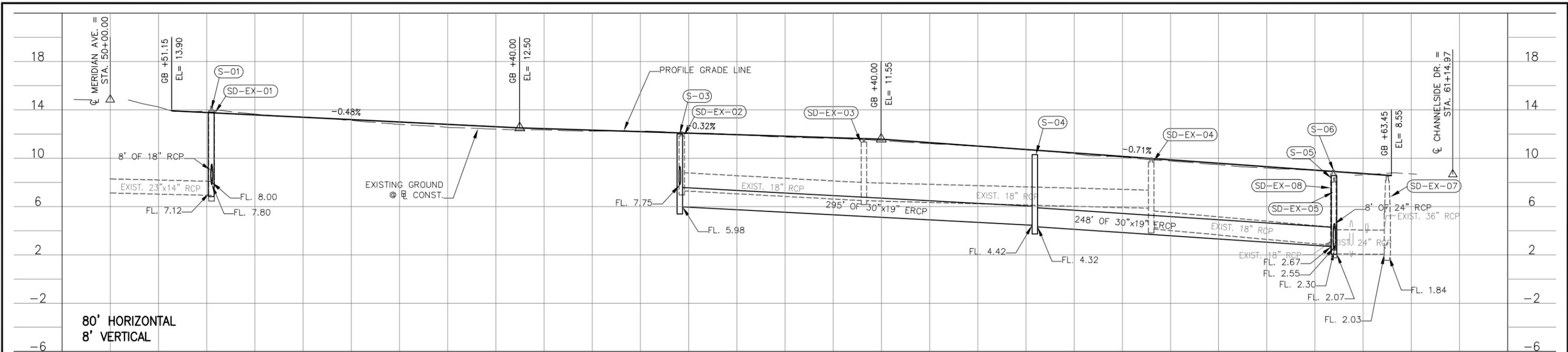


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APPROVED BY:

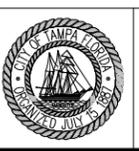
CERTIFICATION

HAMIDREZA SAHEBKAR, P.E.
FLORIDA LICENSE NO. 39991



Drawn: RND	Date: 11/22/2013	
Designed: RND	Date: 11/22/2013	
Checked: JDJ	Date: 11/22/2013	
Reviewed: HS	Date: 11/22/2013	
Approved:	Date:	
Approved:	Date:	No: Date: Revision: By:

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Approved:	Date:	No: Date: Revision: By:



CITY OF TAMPA
ECONOMIC AND URBAN
DEVELOPMENT DEPARTMENT

E. MADISON STREET IMPROVEMENTS
DRAINAGE MAP (1 OF 1)

Field Book:	
Atlas Sheet:	
File No.	Index No.
Job No. 215611523	215611523-008
Scale: N/A	
SHEET 02	

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LEGEND

— SS —	EX. SANITARY SEWER LINE
— ST —	EX. STORM SEWER LINE
— W —	EX. WATER MAIN
— BE —	EX. BURIED ELECTRIC
— FM —	EX. FORCE MAIN
— G —	EX. GAS MAIN
— BHN —	EX. BRIGHTHOUSE NETWORK LINE
— — —	EX. OVERHEAD ELECTRIC
— OH-TRANS —	EX. OVERHEAD TRANS.
— CATV —	EX. CABLE TV LINE
— TEL —	EX. TELECOMMUNICATIONS
— FOC —	EX. FIBER OPTIC CABLE
— (P)OH-TRANS —	PROP. OVERHEAD TRANS.
— (P)FM —	PROP. FORCE MAIN
— (P)SS —	PROP. SANITARY SEWER LINE
— (P)ST —	PROP. STORM SEWER LINE
— (P)WM —	PROP. WATER MAIN
— (P)BE —	PROP. BURIED ELECTRIC
— P WM —	ALT. WATER MAIN LOCATION
— (R)SS —	SANITARY TO BE REMOVED
— (R)ST —	STORM TO BE REMOVED
— (R)WM —	WATER MIAN TO BE REMOVED
— (R)BE —	BURIED ELECTRIC TO BE REMOVED
— - - -	RIGHT-OF-WAY LINE
=====	LOCATED BUILDING LINES
=====	APPROXIMATE EDGE OF BUILDING AS SCALED FROM AERIAL PHOTOGRAPH

LEGEND OF SYMBOLS

	DIRECTION OF FLOW
	SANITARY SEWER MANHOLE
	STORM SEWER MANHOLE
	CURB INLET
	CURB INLET
	CATCH BASIN
	MITERED END SECTION
	REDUCER
	ELECTRICAL HAND HOLE
	SITE BENCH MARK
	FIRE HYDRANT
	ELECTRIC MANHOLE
	TELECOMMUNICATIONS BOX
	LIGHT POLE
	WATER VALVE
	CONFLICT MANHOLE
	EX. CONCRETE UTILITY POLE
	EX. WOODEN UTILITY POLE
	EX. MAST ARM/STRAIN POLE
	EX. LIGHT POLE
	EX. SIGN
	CLEANOUT
	EX. STORM MANHOLE
	EX. WATER METER
	GUY ANCHOR
	TELEPHONE MANHOLE
	TELEPHONE UTILITY BOX
	CABLE TV RISER
	SPRINKLER HEAD
	ELECTRIC BOX
	GROUND/FLOOD LIGHT
	IRRIGATION CONTROL BOX
	PEDESTRIAN CROSSING SIGNAL POLE

TREE LEGEND

	OAK TREE
	UNKNOWN TREE TYPE

SPOT ELEVATION LEGEND

	6.1	GROUND SPOT ELEVATION
	6.13	PAVEMENT SPOT ELEVATION
	25.60	TOP OF CURB ELEVATION
	25.10	FLOWLINE OF CURB ELEVATION
	25.12	EDGE OF PAVEMENT ELEVATION
	25.60	TOP OF CURB ELEVATION
	25.12	EDGE OF PAVEMENT ELEVATION
	6.21	PROPOSED ELEVATION

GENERAL NOTES

- CITY OF TAMPA STANDARD DRAWINGS ARE AVAILABLE AT THE CITY HALL ANNEX, 306 E. JACKSON STREET, 5TH FLOOR, NORTH WING.
- ALL ELEVATIONS REFER TO NAVD1988 DATUM AS REQUIRED BY CITY OF TAMPA.
- 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 PRIOR TO CONSTRUCTION OR ORDERING MATERIALS/STRUCTURES.
- THE CONTRACTOR SHALL CALL SUNSHINE (1-800-432-4770) AT LEAST 48 HOURS PRIOR TO ANY CONSTRUCTION ACTIVITY.
 - CONTACT TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY, 813-272-6740 X117, BOB REARDON, 48 HOURS IN ADVANCE OF RELOCATING OVERHEAD POWER LINES ALONG MERIDIAN AVENUE.
- PRIOR TO ANY CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE FOLLOWING:

TAMPA HILLS EXPR AUTH.	813-272-6740	BOB REARDON
TAMPA ELECTRIC CO.	813-275-3321	HOWARD MARSH
TECO PEOPLES GAS	813-275-3743	TED FELEGY
COT WASTEWATER DEPT.	813-274-8047	FRANK JAMES/RICHARD RIVERA
TAMPA WATER DEPT.	813-274-7096	JANICE DAVIS
VERIZON	813-627-8343	FRED VALDES
MOI	922-729-6016	JOHN BACHOLDER
LEVEL 3 COMM.	720-888-2061	RICK MILLER
BRIGHTHOUSE	954-520-5169	FRANK FARRIS
- STATIONS AND OFFSETS REFER TO THE SURVEY BASELINE OR TO THE CONSTRUCTION CENTERLINE AS NOTED.
- STATIONS AND OFFSETS FOR DB INLETS AND MANHOLES REFER TO THE CENTERPOINT OF THE STEEL FRAME. CURB INLETS SHALL BE POSITIONED LONGITUDINALLY ACCORDING TO STATIONING GIVEN AND LATERRALLY ACCORDING TO THE APPROPRIATE STANDARD, UNLESS NOTED OTHERWISE. CURB INLET TOP AND THROAT ELEVATIONS SHALL BE BASED ON THE EDGE-OF-PAVEMENT ELEVATION (GIVEN OR CALCULATED) AND THE APPROPRIATE STANDARD. INLET THROAT ELEVATIONS TO BE DETERMINED BY THE CONTRACTOR FROM THE EDGE-OF-PAVEMENT ELEVATION.
- MANHOLE TOP ELEVATIONS TO BE DETERMINED BY THE CONTRACTOR AS PER PROPOSED STREET GRADES PROVIDED. IF DISTANCE BETWEEN TOP SLAB AND GRADE IS LESS THAN 7", THE CONTRACTOR SHALL PROVIDE TRAFFIC BEARING INVERTED MANHOLE FRAME AND COVER AT NO ADDITIONAL COST TO THE CITY.
- ALL CURB RADII, P.I., P.C., AND P.T. REFER TO THE EDGE OF PAVEMENT UNLESS NOTED OTHERWISE.
- NO TREES NOR TREE ROOTS SHALL BE REMOVED WITHOUT THE PRIOR APPROVAL OF THE ENGINEER.
- ALL DISTURBED AREAS SHALL BE SODDED AS DIRECTED BY THE ENGINEER.
- STREET SIGNS, STREET MARKERS, AND R-O-W MARKERS SHALL BE REMOVED AND RELOCATED AS DIRECTED BY THE ENGINEER. NO SEPARATE PAYMENT SHALL BE MADE FOR THESE ACTIVITIES. ANY LOST OR DAMAGED SIGNS OR MARKERS SHALL BE REPLACED BY THE CONTRACTOR AT NO COST TO THE CITY.
- THE CONTRACTOR SHALL REPLACE EXISTING DRIVEWAYS FROM THE EDGE OF PAVEMENT TO THE R-O-W LINE, WHEREVER AFFECTED BY CONSTRUCTION. MATERIALS SIMILAR TO THE EXISTING SHALL BE USED UNLESS NOTED OTHERWISE.
- THE CONTRACTOR IS RESPONSIBLE FOR COMPLIANCE WITH ALL APPLICABLE ENVIRONMENTAL RULES AND REGULATIONS OF THE CITY, COUNTY, STATE, US ENVIRONMENTAL PROTECTION AGENCY (EPA), AND ANY OTHER JURISDICTIONAL AGENCIES, AND ALL CONDITIONS SET FORTH IN ENVIRONMENTAL PERMITS.
- THE CONTRACTOR SHALL BECOME FAMILIAR WITH THE PERMIT & INSPECTION REQUIREMENTS SPECIFIED BY THE VARIOUS GOVERNMENTAL AGENCIES AND THE EOR'S SPECIFICATIONS. THE CONTRACTOR SHALL REVIEW ALL ACQUIRED PERMITS PRIOR TO CONSTRUCTION, AND SCHEDULE ANY NECESSARY INSPECTIONS ACCORDING TO AGENCY INSTRUCTIONS.
- REMOVAL OF EXISTING PAVEMENT AND BASE MATERIAL, SIDEWALK, CURB, POLES, UNDERGROUND PIPES, STRUCTURES, FOUNDATIONS, AND OTHER MISCELLANEOUS ITEMS SHALL BE INCLUDED IN THE LUMP SUM PRICE FOR CLEARING AND GRUBBING, AND NO SEPARATE PAYMENT SHALL BE MADE UNLESS SEPARATE BID ITEM IS PROVIDED.
 - ALL BRICK PAVERS ALONG THE EAST SIDE OF MERIDIAN AVENUE WILL BE PROTECTED. ANY DAMAGE, LOSS OR REMOVAL WILL BE REPLACED WITH LIKE KIND.
- THE CONTRACTOR SHALL USE ALL SURPLUS FILL APPROVED BY THE ENGINEER AS SUITABLE FROM EXCAVATION PRIOR TO SUPPLYING FILL FROM OTHER SOURCES.
- THE CONTRACTOR SHALL ENDEAVOR TO PROTECT PRIVATE PROPERTY. ANY DAMAGE CAUSED BY THE CONTRACTOR IN THE PERFORMANCE OF HIS WORK SHALL BE CORRECTED TO THE SATISFACTION OF THE ENGINEER AT THE CONTRACTOR'S EXPENSE. PAYMENT SHALL NOT BE MADE FOR THIS WORK.

- DEMOLITION WORK SHALL NOT BE LIMITED TO THESE DOCUMENTS. CONTRACTOR TO VERIFY ALL EXISTING CONDITIONS AND EXTENT OF REMOVAL OF ITEMS SHOWN PRIOR TO USING THIS INFORMATION FOR BID PURPOSES.
- EXISTING PAVEMENT SHALL BE SAWCUT AT THE LIMITS OF PAVEMENT RECONSTRUCTION.
- DISPOSAL OF CONSTRUCTION AND DEMOLITION DEBRIS MAY ONLY OCCUR AT OFFSITE DISPOSAL FACILITIES APPROVED BY THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY APPLICABLE PERMITS AT NO ADDITIONAL COST TO THE CITY.
- ALL REINFORCED CONCRETE PIPE (ROUND OR ELLIPTICAL) SHALL BE INSTALLED WITH A NON-WOVEN FILTER FABRIC JACKET AS PER THE DETAIL ON THE CITY OF TAMPA STANDARD DRAWING NUMBER D-13.
- REFER TO PROJECT SPECIFICATIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS. COMPLETE CONSTRUCTION DOCUMENTS CONSIST OF PLANS PLUS COMPLETE SPECIFICATIONS (GENERAL PROVISIONS, TECHNICAL SPECIFICATIONS, SPECIFIC PROVISIONS AND ANY ADDENDA), AND CITY AND FDOT STANDARDS, AS APPLICABLE.
- ALL TRAFFIC STRIPES AND MARKINGS ARE TO BE LEAD-FREE, NON-SOLVENT BASED THERMOPLASTIC AND PLACED PER INDEX 17346. IF REMOVAL OF EXISTING MARKINGS IS REQUIRED, IT SHALL BE DONE BY HYDROBLASTING. RPM'S SHALL BE PLACED PER INDEX 17352. THE CONTRACTOR MUST PROVIDE THE FLORIDA DEPARTMENT OF TRANSPORTATION WITH A MANUFACTURER CERTIFICATION OF THE LEAD-FREE THERMOPLASTIC STRIPES AND MARKINGS PRIOR TO THE STRIPING AND MARKING OPERATIONS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR AND OR COORDINATION OF MAINTENANCE OF ALL SERVICES (UTILITIES, ACCESS, EMERGENCY, ETC.) DURING CONSTRUCTION.
- CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTENANCE OF TRAFFIC AND ALL REQUIRED PERMITS. CONTRACTOR SHALL SUBMIT MAINTENANCE OF TRAFFIC PLANS IN CONFORMANCE WITH FDOT INDEX No. 600.
 - MAINTENANCE OF TRAFFIC ON MERIDIAN AVENUE IS RESTRICTED. THERE WILL BE NO LANE CLOSURES ON MERIDIAN AVENUE BETWEEN THE HOURS OF 5:00 am AND 9:00 am AND 3:00 pm THROUGH 7:00 pm, MONDAY THROUGH FRIDAY. IN ADDITION, DDUE TO THE TAMPA BAY TIMES FORUM EVENT SCHEDULE, OTHER RESTRICTIONS MAY APPLY.
- UTILITY LOCATIONS ARE BASED ON BEST AVAILABLE INFORMATION AND SHALL BE FIELD VERIFIED. PROPOSED LOCATIONS ARE SUBJECT TO CHANGE. MAINTAIN ONE LANE OF TRAFFIC OPEN UNLESS PRIOR APPROVAL IS ISSUED BY THE CITY. LANE CLOSURES SHALL CONSIDER ACCESS TO ADJACENT PROPERTIES.
- RIGHT-OF-WAY LOCATIONS REPRESENT BEST AVAILABLE INFORMATION.
- SIDEWALK SHALL BE CONSTRUCTED PER FDOT INDEX 304 AND 310. DETECTABLE WARNING STRIPS, A.K.A. TRUNCATED DOME, FOR CITY OF TAMPA CONSTRUCTION AND MAINTENANCE SHALL BE FULL WIDTH DETECTABLE WARNING STRIPS AND BE CONSTRUCTED PER FDOT SPECIFICATION 527. THE WARNING STRIPS SHALL BE THERMOPLASTIC DETECTABLE AND SHALL BE BLACK IN COLOR.
- ALL WORK PERFORMED SHALL CONFORM TO:
 - FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (2013) (A.K.A. STANDARD SPECS)
 - FDOT DESIGN STANDARDS FOR DESIGN, CONSTRUCTION, MAINTENANCE AND OPERATIONS ON THE STATE HIGHWAY SYSTEM, JAN., 2013. (A.K.A. STANDARD INDEX). COMPLIANCE WITH ALL APPLICABLE INDICES IS REQUIRED.
 - FLORIDA DEPARTMENT OF TRANSPORTATION ROADWAY PLANS PREPARATION MANUAL, VOLUME 1, CHAPTERS 2 AND 25. (2011)
 - FLORIDA DEPARTMENT OF TRANSPORTATION FLEXIBLE PAVEMENT DESIGN MANUAL FOR NEW CONSTRUCTION AND PAVEMENT REHABILITATION, MARCH 2008.
 - ALL CONSTRUCTION AND/OR MAINTENANCE IN THE COT R/W SHALL CONFORM TO THE FEDERAL MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). THE FDOT ROADWAY AND TRAFFIC DESIGN STANDARDS, THE FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND THE COT TECHNICAL STANDARDS FOR TRANSPORTATION, LATEST EDITION.
 - ALL TRAFFIC STRIPES AND MARKINGS ARE TO BE LEAD FREE, NON SOLVENT BASED THERMOPLASTIC. THE PERMITTEE SHALL FURNISH THE DEPARTMENT WITH THE MANUFACTURER'S CERTIFICATION THAT THE THERMOPLASTIC IS "LEAD FREE."
- EROSION CONTROL - THE CONTRACTOR IS ENCOURAGED TO USE APPROPRIATE BEST MANAGEMENT PRACTICES FOR EROSION & SEDIMENT CONTROLS AS DESCRIBED IN THE FLORIDA LAND DEVELOPMENT MANUAL: A GUIDE TO SOUND LAND AND WATER MANAGEMENT (DER,1988).
- CONTRACTOR TO FIELD COORDINATE PHASING OF ALL DEMOLITION AND CONSTRUCTION TO LIMIT INTERRUPTION OF TRAFFIC FLOW AND DAILY OPERATIONS.
- IN AREAS WHERE ASPHALT IS SHOWN TO BE REMOVED, BASE MAY REMAIN IF AREA IS PROPOSED TO BE COVERED WITH CONCRETE (WALKS, PAVEMENT, ETC).

SURVEY NOTES:

- HORIZONTAL AND VERTICAL CONTROL IS BASED UPON A CONTROL SURVEY FOR THE CHANNEL DISTRICT CRA (COMMUNITY REDEVELOPMENT AREA) COMPLETED ON MARCH 9, 2009 BY STANTEC CONSULTING SERVICES, INC.
- COORDINATES SHOWN HEREIN ARE REFERENCED TO THE STATE OF FLORIDA PLANE COORDINATE SYSTEM - FLORIDA WEST - ZONE 0902 (NORTH AMERICAN DATUM OF 1983 - 1990 ADJUSTMENT) AND ARE BASED UPON GPS OBSERVATIONS ORIGINATING FROM AND ADJUSTED TO THE FOLLOWING GEODETIC CONTROL STATIONS:

NATIONAL GEODETIC SURVEY CONTROL STATION Q 18 BEING A BRASS DISK STAMPED "Q 18 1933" SET IN A CONCRETE MONUMENT (NAD83-1990 PUBLISHED VALUE BY NGS HELD)

NATIONAL GEODETIC SURVEY CONTROL STATION FLOPS 59 AZMK BEING A BRASS DISK STAMPED "FLOPS 59 AZ MK 1989" SET IN A CONCRETE SIDEWALK OF BENEFICIAL DRIVE BRIDGE. (NAD83-1990 PUBLISHED VALUE BY NGS HELD)

NATIONAL GEODETIC SURVEY CONTROL STATION THOMPSON2 BEING A BRASS DISK STAMPED "THOMPSON 2 2000" SET IN A CONCRETE MONUMENT (NAD83-1990 PUBLISHED VALUE BY HILLSBOROUGH COUNTY SURVEYING AND MAPPING SECTION HELD [HILLS. COUNTY PROJECT No.90-12-02])
- ELEVATIONS SHOWN HEREON ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 AND ARE BASED UPON THE FOLLOWING CITY OF TAMPA BENCHMARKS:

HV-02 0182 HAVING A PUBLISHED ELEVATION OF 10.730 FEET

HV-02 0213 HAVING A PUBLISHED ELEVATION OF 20.459 FEET

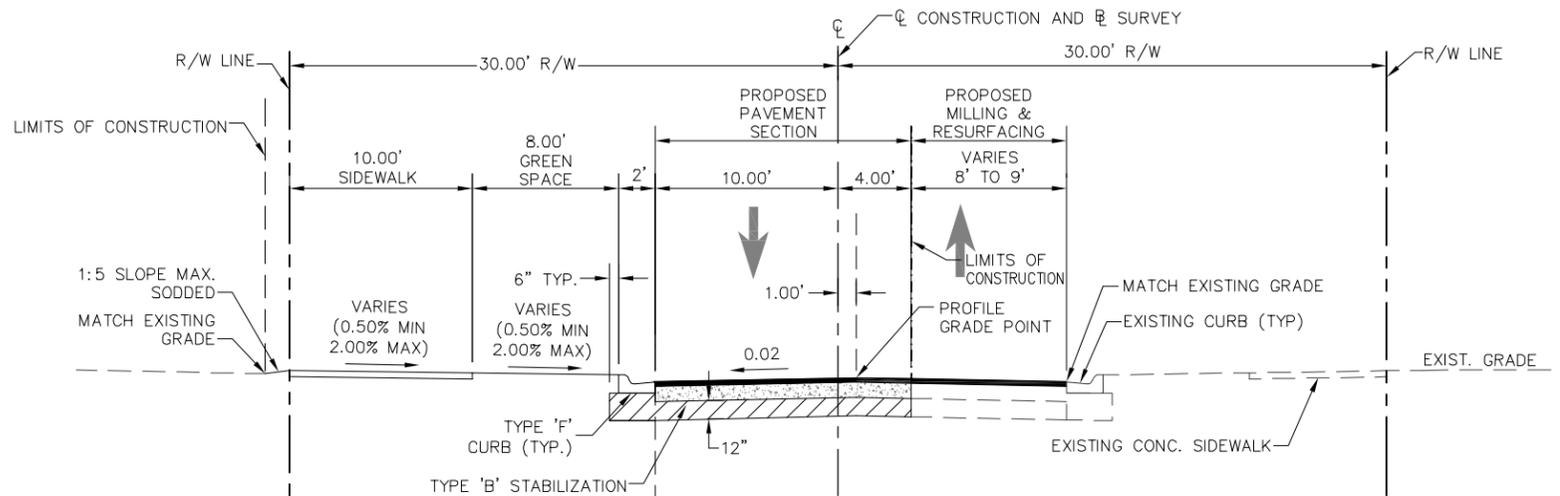
HV-02 0214 HAVING A PUBLISHED ELEVATION OF 15.756 FEET

HV-02 0215 HAVING A PUBLISHED ELEVATION OF 5.983 FEET

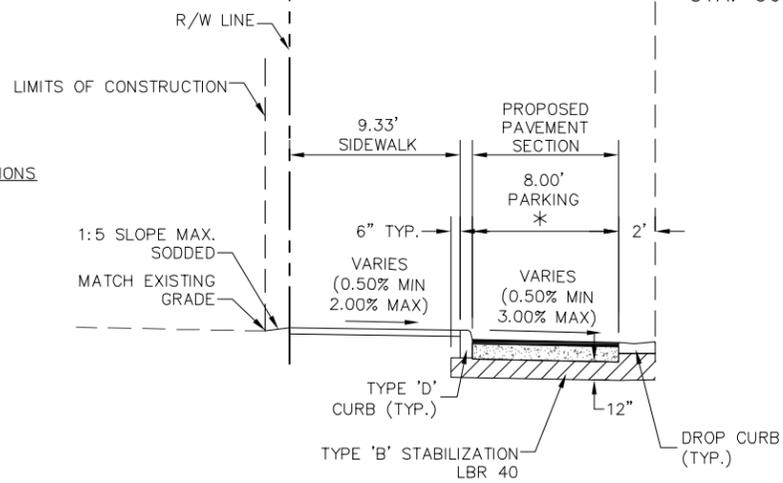
LEGEND OF ABBREVIATIONS

T.B.M.	TEMPORARY BENCH MARK
(P)	PLAT MEASUREMENT
(D)	DEED MEASUREMENT
(M)	FIELD MEASUREMENT
(C)	CALCULATED
CONC	CONCRETE
INV.	INVERT
D.I.P.	DUCTILE IRON PIPE
P.V.C.	POLYVINYL CHLORIDE PIPE
R.C.P.	REINFORCED CONCRETE PIPE
C.M.P.	CORRUGATED METAL PIPE
V.C.P.	VITRIFIED CLAY PIPE
FDOT	FLORIDA DEPARTMENT OF TRANSPORTATION
C.R.	COUNTY ROAD
S.R.	STATE ROAD
O.R.	OFFICIAL RECORD
P.B.	PLAT BOOK
PG.	PAGE
MES	MITERED END SECTION
(T/W)	TOP WALL
ELEV.	ELEVATION
R/W	RIGHT-OF-WAY
(R)	RADIAL LINE
C.L.F.	CHAIN LINK FENCE
O.D.	OUTSIDE DIAMETER
O.H.L.	OVER HEAD LINE

<p>2225 North 20th Street, Tampa, FL 33605 800.643.4336 • 813.223.9500 • F 813.223.0009 www.stantec.com Stantec Consulting Services, Inc. • CA# 27013 • FL Lic. # LC-26000314</p>					<p>CITY OF TAMPA ECONOMIC AND URBAN DEVELOPMENT DEPARTMENT</p>	<p>E. MADISON STREET IMPROVEMENTS GENERAL NOTES (1 OF 1)</p>	Field Book:	
							Atlas Sheet:	
							File No.	Index No.
							Job No. 215611523	215611523-002
							Scale: N/A	
							SHEET 03	



TYPICAL ROADWAY SECTION
STA: 50+51.15 TO 60+63.45



TYPICAL ON-STREET PARKING

- *
8.00' WIDE ON-STREET PARKING LOCATIONS
- STA. 51+48.56 TO STA. 51+92.56
 - STA. 54+32.33 TO STA. 54+56.33
 - STA. 54+79.39 TO STA. 55+23.39
 - STA. 55+34.76 TO STA. 56+00.76
 - STA. 56+12.08 TO STA. 56+78.08
 - STA. 56+89.40 TO STA. 57+44.08
 - STA. 58+22.43 TO STA. 59+10.43
 - STA. 59+73.59 TO STA. 59+97.59

LEGEND

- PROPOSED ASPHALTIC CONCRETE
- PROPOSED BASE
- EXISTING SUBGRADE
- PROPOSED SUBGRADE

DESIGN SPEED = 30 MPH

PROPOSED PAVEMENT SECTION

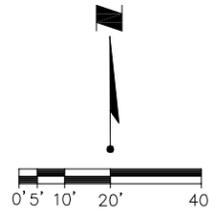
- 12" TYPE 'B' STABILIZED SUBGRADE
- 10" WELL GRADED CRUSHED CONCRETE
- TYPE SP STRUCTURAL COURSE (TRAFFIC B) (2") (RUBBER)
- AND FRICTION COURSE FC-9.5 (1") (RUBBER)

PROPOSED MILLING & RESURFACING SECTION

- MILLING**
- MILL EXISTING ASPHALT PAVEMENT (1" DEPTH)
- RESURFACE**
- 1" FC-9.5 SURFACE COURSE (110 LB/SY AVG.) RUBBER

RESURFACING NOTE:

LEVELING COURSES ARE REQUIRED ALONG PORTIONS OF THE MAINLINE CONSTRUCTION FOR VERTICAL CONTROL. CONTRACTOR TO VERIFY ACTUAL ASPHALT THICKNESSES PRIOR TO CONSTRUCTION.



LEGEND

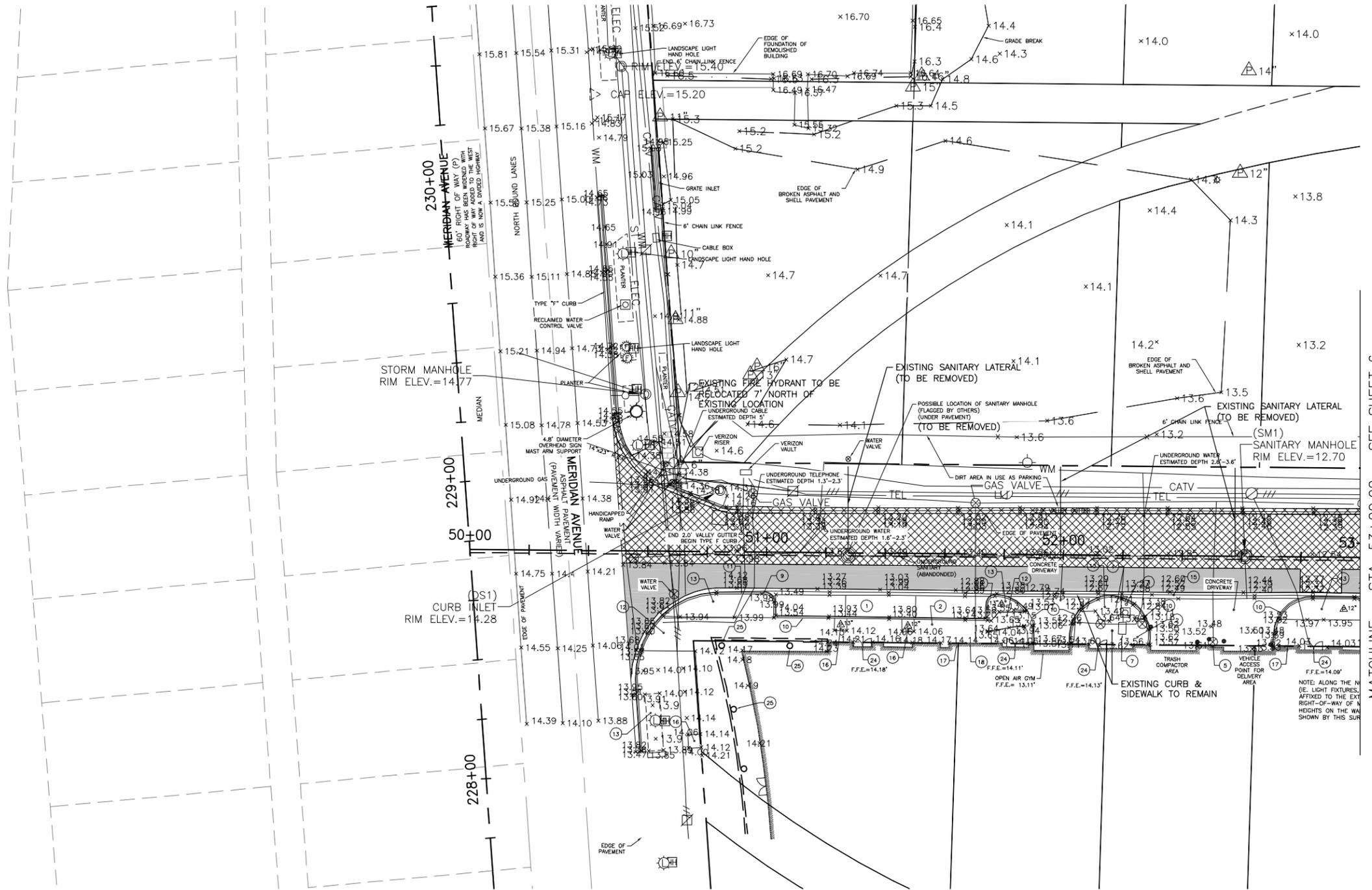
- EXISTING ASPHALT/CONCRETE TO BE REMOVED
- EXISTING PAVEMENT TO REMAIN
- EXISTING TREES TO BE REMOVED
- EXISTING BOLLARDS TO BE REMOVED

NOTES

1. REMOVE EXISTING PARKING BUMPERS LOCATED ALONG NORTH SIDE OF STREET.
2. REFER TO UTILITY ADJUSTMENT PLANS, SHEETS 21-23, FOR DISPOSITION OF EXISTING UTILITIES.

KEYED NOTES

NOTE#	DESCRIPTION
1	ASPHALT PAVEMENT
2	CONCRETE
3	IRRIGATION CONTROL VALVE
4	BACK FLOW PREVENTER
5	GAS VALVE SURROUNDED BY 3 BOLLARDS
6	BOLLARD (TYPICAL)
7	2.5'x4' WATER VAULT
8	METAL HAND RAILS
9	CURB TRANSITION AT THIS POINT
10	0.6' CONCRETE CURB
11	TYPE "F" CURB
12	CONCRETE RAMP
13	PLANTER AREA
14	PET WASTE STATION
15	2' VALLEY GUTTER
16	TREE WELL
17	FIRE DEPARTMENT CONNECTION
18	GAS METER
19	ELECTRIC METER
20	PIPE FLANGE
21	4 VALVE TEST PUMP
22	2' TABLE (ATTACHED TO GROUND)
23	OVERHEAD CANOPY
24	DOOR EXTENDS INTO RIGHT-OF-WAY WHEN OPENED
25	2' DIAMETER COLUMN

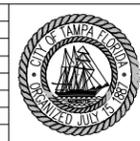


MATCHLINE - STA. 53+00.00 - SEE SHEET 6



HANDEEZA SAHEBKAR, P.E.
FLORIDA LICENSE NO. 39991

Drawn: RND	Date: 11/22/2015	By:
Designed: RND	Date: 11/22/2015	By:
Checked: JDJ	Date: 11/22/2015	By:
Reviewed: HS	Date: 11/22/2015	By:
Approved:	Date:	By:
Approved:	Date:	No: _____ Date: _____ Revision: _____



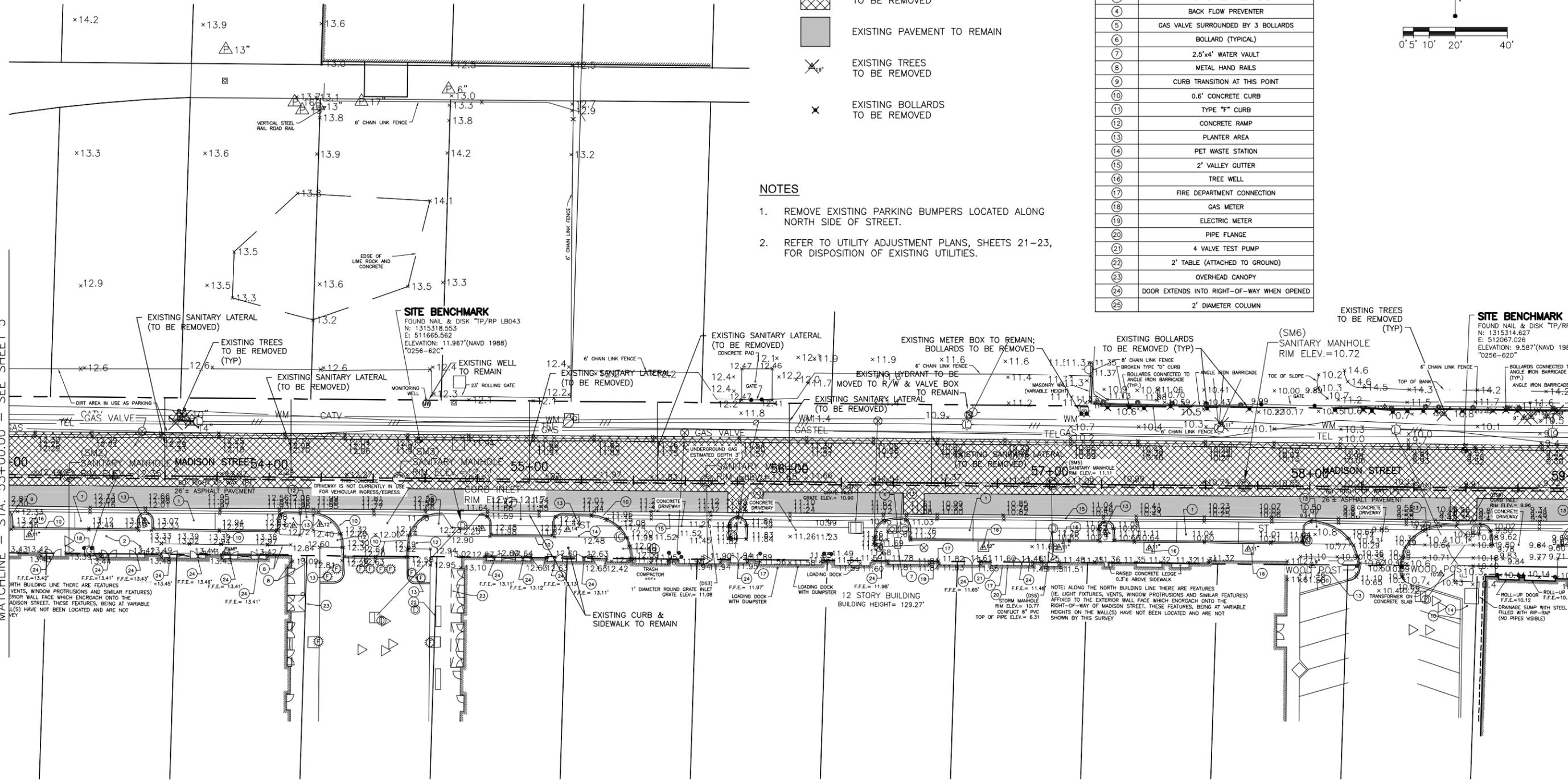
CITY OF TAMPA
ECONOMIC AND URBAN
DEVELOPMENT DEPARTMENT

**E. MADISON STREET IMPROVEMENTS
DEMOLITION PLAN (1 OF 3)**

Field Book:	
Atlas Sheet:	
File No.:	Index No.:
Job No. 215611523	215611523-021
Scale: N/A	SHEET 05

MATCHLINE - STA. 53+00.00 - SEE SHEET 5

MATCHLINE - STA. 59+00.00 - SEE SHEET 7



LEGEND

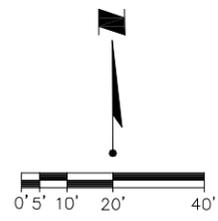
- EXISTING ASPHALT/CONCRETE TO BE REMOVED
- EXISTING PAVEMENT TO REMAIN
- EXISTING TREES TO BE REMOVED
- EXISTING BOLLARDS TO BE REMOVED

NOTES

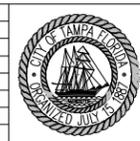
1. REMOVE EXISTING PARKING BUMPERS LOCATED ALONG NORTH SIDE OF STREET.
2. REFER TO UTILITY ADJUSTMENT PLANS, SHEETS 21-23, FOR DISPOSITION OF EXISTING UTILITIES.

KEYED NOTES

NOTE#	DESCRIPTION
1	ASPHALT PAVEMENT
2	CONCRETE
3	IRRIGATION CONTROL VALVE
4	BACK FLOW PREVENTER
5	GAS VALVE SURROUNDED BY 3 BOLLARDS
6	BOLLARD (TYPICAL)
7	2.5'x4' WATER VAULT
8	METAL HAND RAILS
9	CURB TRANSITION AT THIS POINT
10	0.6' CONCRETE CURB
11	TYPE "F" CURB
12	CONCRETE RAMP
13	PLANTER AREA
14	PET WASTE STATION
15	2' VALLEY GUTTER
16	TREE WELL
17	FIRE DEPARTMENT CONNECTION
18	GAS METER
19	ELECTRIC METER
20	PIPE FLANGE
21	4 VALVE TEST PUMP
22	2' TABLE (ATTACHED TO GROUND)
23	OVERHEAD CANOPY
24	DOOR EXTENDS INTO RIGHT-OF-WAY WHEN OPENED
25	2' DIAMETER COLUMN



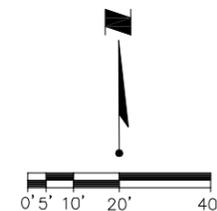
Drawn: RND	Date: 11/22/2015	
Designed: RND	Date: 11/22/2015	
Checked: JDJ	Date: 11/22/2015	
Reviewed: HS	Date: 11/22/2015	
Approved:	Date:	
Approved:	Date:	No: _____ Date: _____ Revision: _____ By: _____



CITY OF TAMPA
ECONOMIC AND URBAN
DEVELOPMENT DEPARTMENT

E. MADISON STREET IMPROVEMENTS
DEMOLITION PLAN (2 OF 3)

Field Book:	
Atlas Sheet:	
File No.:	Index No.
Job No. 215611523	215611523-021
Scale: N/A	
SHEET 06	



LEGEND

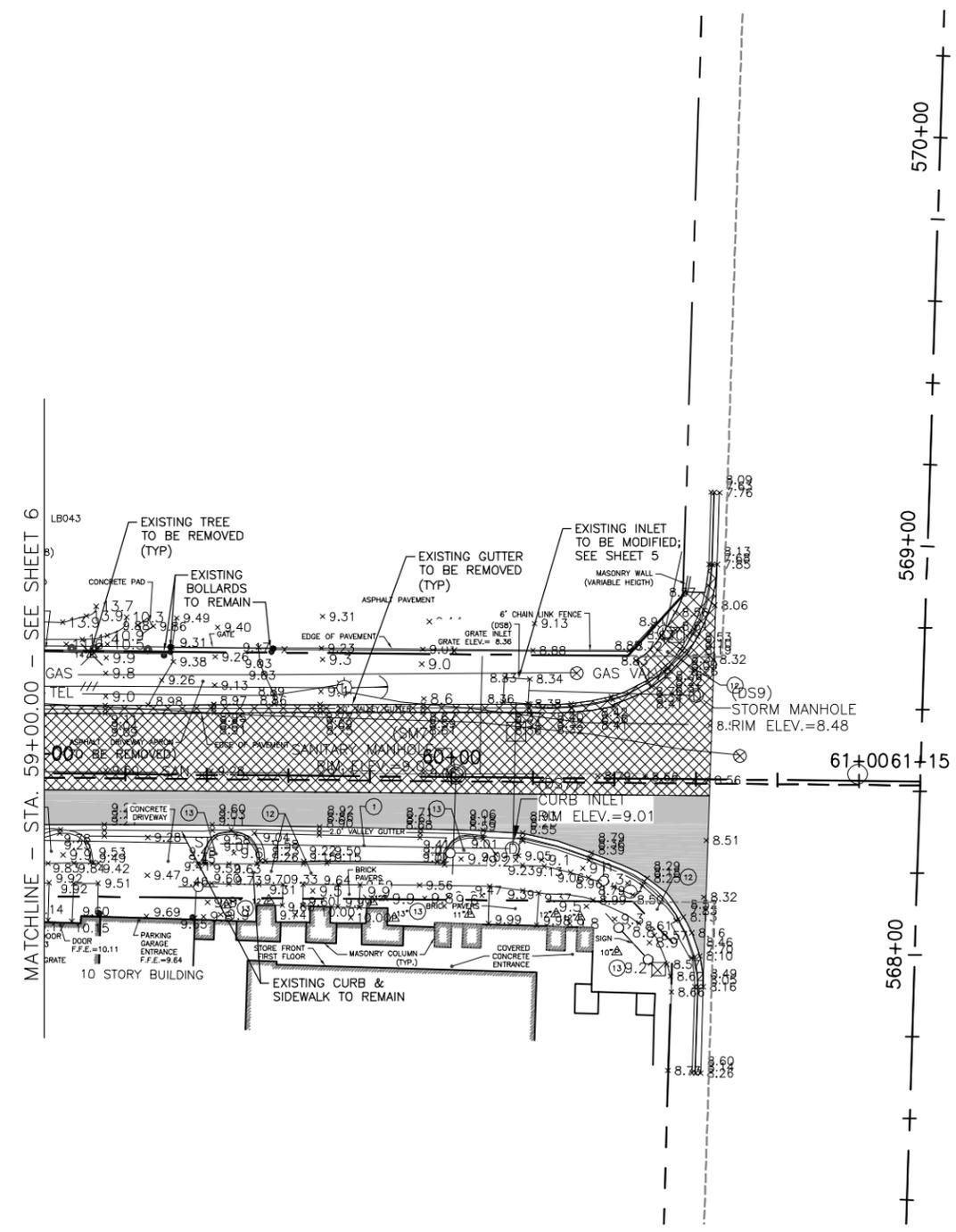
-  EXISTING ASPHALT/CONCRETE TO BE REMOVED
-  EXISTING PAVEMENT TO REMAIN
-  EXISTING TREES TO BE REMOVED
-  EXISTING BOLLARDS TO BE REMOVED

NOTES

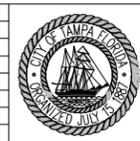
1. REMOVE EXISTING PARKING BUMPERS LOCATED ALONG NORTH SIDE OF STREET.
2. REFER TO UTILITY ADJUSTMENT PLANS, SHEETS 21-23, FOR DISPOSITION OF EXISTING UTILITIES.

KEYED NOTES

NOTE#	DESCRIPTION
1	ASPHALT PAVEMENT
2	CONCRETE
3	IRRIGATION CONTROL VALVE
4	BACK FLOW PREVENTER
5	GAS VALVE SURROUNDED BY 3 BOLLARDS
6	BOLLARD (TYPICAL)
7	2.5'x4' WATER VAULT
8	METAL HAND RAILS
9	CURB TRANSITION AT THIS POINT
10	0.6' CONCRETE CURB
11	TYPE "F" CURB
12	CONCRETE RAMP
13	PLANTER AREA
14	PET WASTE STATION
15	2" VALLEY GUTTER
16	TREE WELL
17	FIRE DEPARTMENT CONNECTION
18	GAS METER
19	ELECTRIC METER
20	PIPE FLANGE
21	4 VALVE TEST PUMP
22	2' TABLE (ATTACHED TO GROUND)
23	OVERHEAD CANOPY
24	DOOR EXTENDS INTO RIGHT-OF-WAY WHEN OPENED
25	2' DIAMETER COLUMN



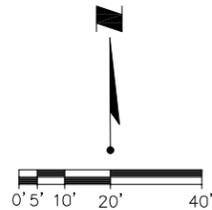
Drawn: RND	Date: 11/22/2015	
Designed: RND	Date: 11/22/2015	
Checked: JDJ	Date: 11/22/2015	
Reviewed: HS	Date: 11/22/2015	
Approved:	Date:	
Approved:	Date:	No: _____ Date: _____ Revision: _____ By: _____



CITY OF TAMPA
ECONOMIC AND URBAN
DEVELOPMENT DEPARTMENT

E. MADISON STREET IMPROVEMENTS
DEMOLITION PLAN (3 OF 3)

Field Book:	
Atlas Sheet:	
File No.:	Index No.
Job No. 215611523	215611523-021
Scale: N/A	
SHEET 07	



LEGEND

PROPOSED PAVEMENT SECTION (SEE SHEET 4)

PROPOSED MILLING & RESURFACING SECTION (SEE SHEET 4)

PROPOSED LIGHT POLE

• SEE HARDSCAPE PLANS FOR SIDEWALK CONSTRUCTION DETAILS

BEGIN PROJECT
BEGIN CONSTRUCTION
STA. 50+51.15 @ E.
MADISON ST.

STA. 50+00 @ E.
MADISON ST. = STA.
228+77.16 @
MERIDIAN AVE.

SD-EX-01A

3+00
4+00
5+00
6+00
7+00
8+00
9+00
10+00
11+00
12+00
13+00
14+00
15+00
16+00
17+00
18+00
19+00
20+00
21+00
22+00
23+00
24+00
25+00
26+00
27+00
28+00
29+00
30+00
31+00
32+00
33+00
34+00
35+00
36+00
37+00
38+00
39+00
40+00
41+00
42+00
43+00
44+00
45+00
46+00
47+00
48+00
49+00
50+00
51+00
52+00
53+00

229+00
230+00
240+00
250+00
260+00
270+00
280+00
290+00
300+00
310+00
320+00
330+00
340+00
350+00
360+00
370+00
380+00
390+00
400+00
410+00
420+00
430+00
440+00
450+00
460+00
470+00
480+00
490+00
50+00
51+00
52+00
53+00

50+00
51+00
52+00
53+00

SD-EX-01

REMOVE EXISTING
STRUCTURE TOP AND
REPLACE WITH FDOT
TYPE
7 MANHOLE TOP; CORE
EXISTING STRUCTURE AND
TIE PROPOSED 18" RCP AT
ELEV SHOWN; SEAL AND
GROUT AS NEEDED.
RIM ELEV. = 14.30

S-01

STA. 50+83.92 (11.40 LT)
CONST. P-5 CURB INLET
FDOT INDEX #200, #211
P-BOTTOM (3.5'X3.5') ALT B
EOP ELEV =
FL = 8.00 (LT)

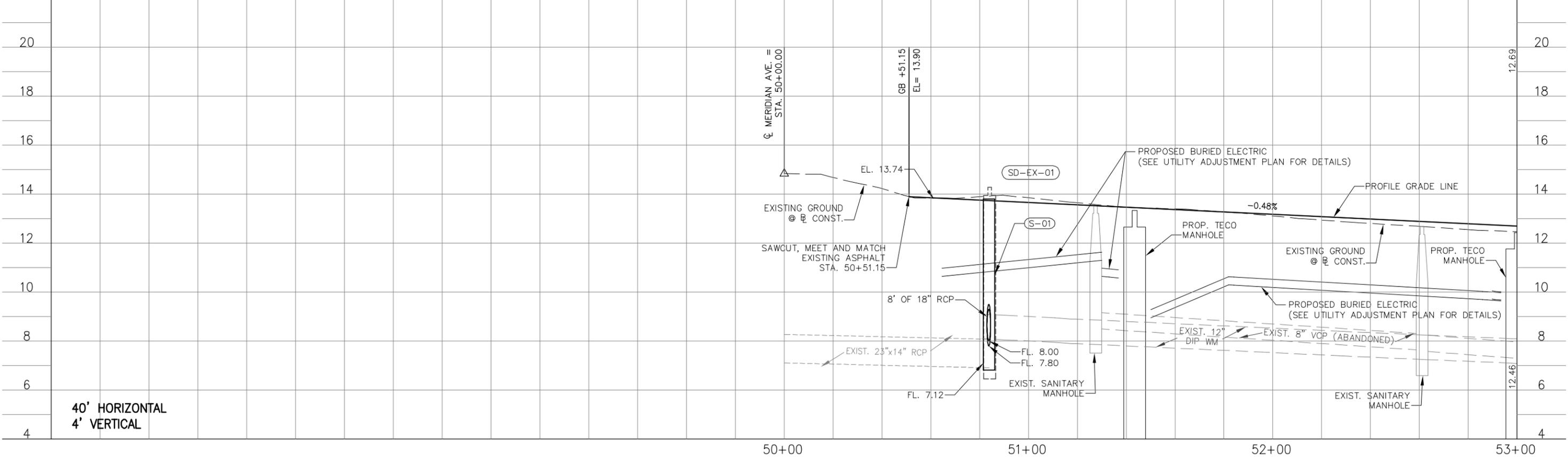
CONST. 6" CONC.
DRIVEWAY PER FOOT
INDEX #515

E. MADISON STREET @ SURVEY

GRAND CENTRAL

MATCHLINE - STA. 53+00.00 - SEE SHEET 09

E. MADISON STREET



40' HORIZONTAL
4' VERTICAL



HAMDREZA SAHEBKAR, P.E.
FLORIDA LICENSE NO. 39991

Drawn: RND	Date: 11/22/2013	By:
Designed: RND	Date: 11/22/2013	
Checked: JDJ	Date: 11/22/2013	
Reviewed: HS	Date: 11/22/2013	
Approved:	Date:	
Approved:	Date:	No: Date: Revision:



CITY OF TAMPA
ECONOMIC AND URBAN
DEVELOPMENT DEPARTMENT

E. MADISON STREET IMPROVEMENTS
PLAN & PROFILE SHEET (1 OF 3)

Field Book:	
Atlas Sheet:	
File No.	Index No.
Job No. 215611523	21561523-004
Scale: N/A	
SHEET 08	

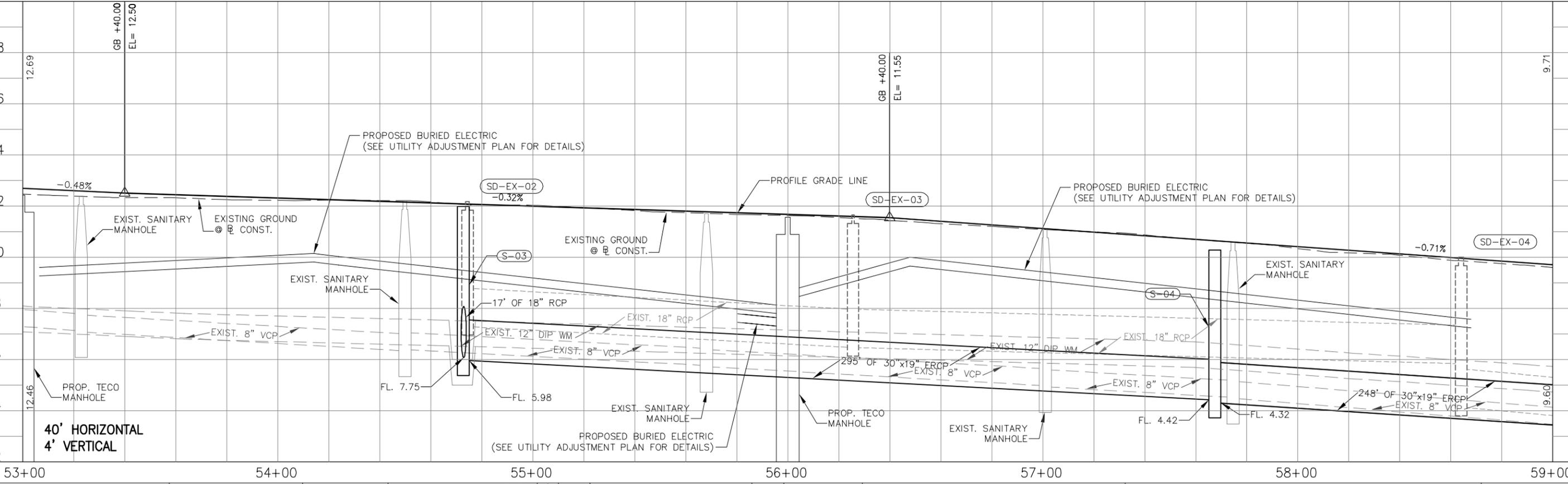
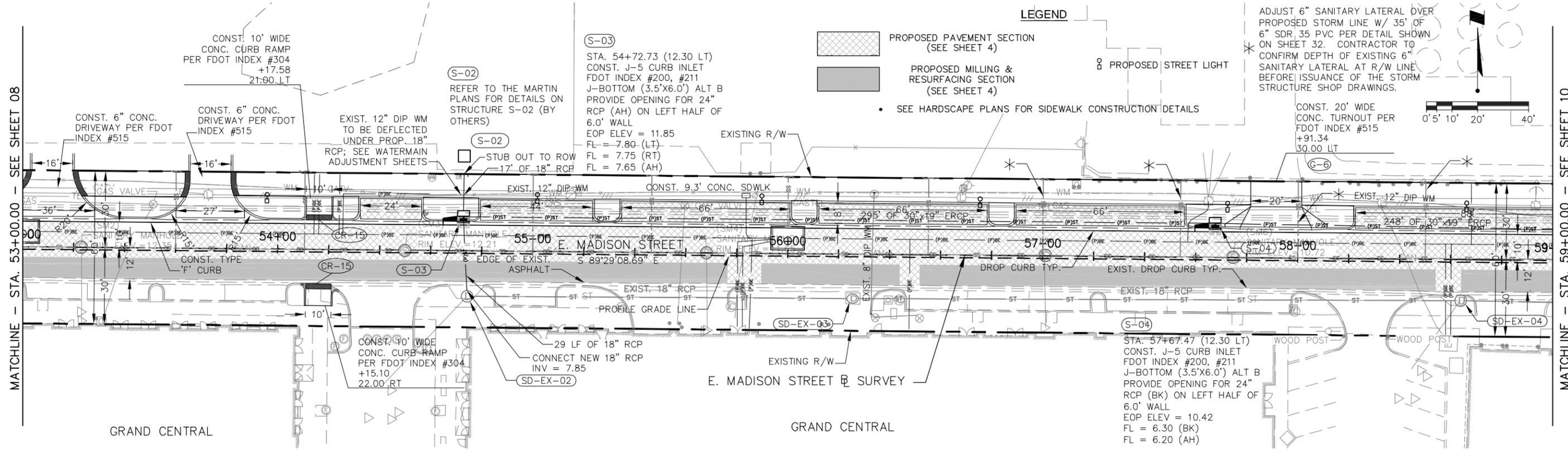
MATCHLINE - STA. 53+00.00 - SEE SHEET 08

MATCHLINE - STA. 59+00.00 - SEE SHEET 10

LEGEND

- PROPOSED PAVEMENT SECTION (SEE SHEET 4)
- PROPOSED MILLING & RESURFACING SECTION (SEE SHEET 4)
- PROPOSED STREET LIGHT
- SEE HARDSCAPE PLANS FOR SIDEWALK CONSTRUCTION DETAILS

ADJUST 6" SANITARY LATERAL OVER PROPOSED STORM LINE W/ 35' OF 6" SDR 35 PVC PER DETAIL SHOWN ON SHEET 32. CONTRACTOR TO CONFIRM DEPTH OF EXISTING 6" SANITARY LATERAL AT R/W LINE BEFORE ISSUANCE OF THE STORM STRUCTURE SHOP DRAWINGS.



Drawn: RND	Date: 11/22/2013	▲
Designed: RND	Date: 11/22/2013	▲
Checked: JDJ	Date: 11/22/2013	▲
Reviewed: HS	Date: 11/22/2013	▲
Approved:	Date:	▲
Approved:	Date:	▲
No:	Date:	▲
Revision:		
By:		



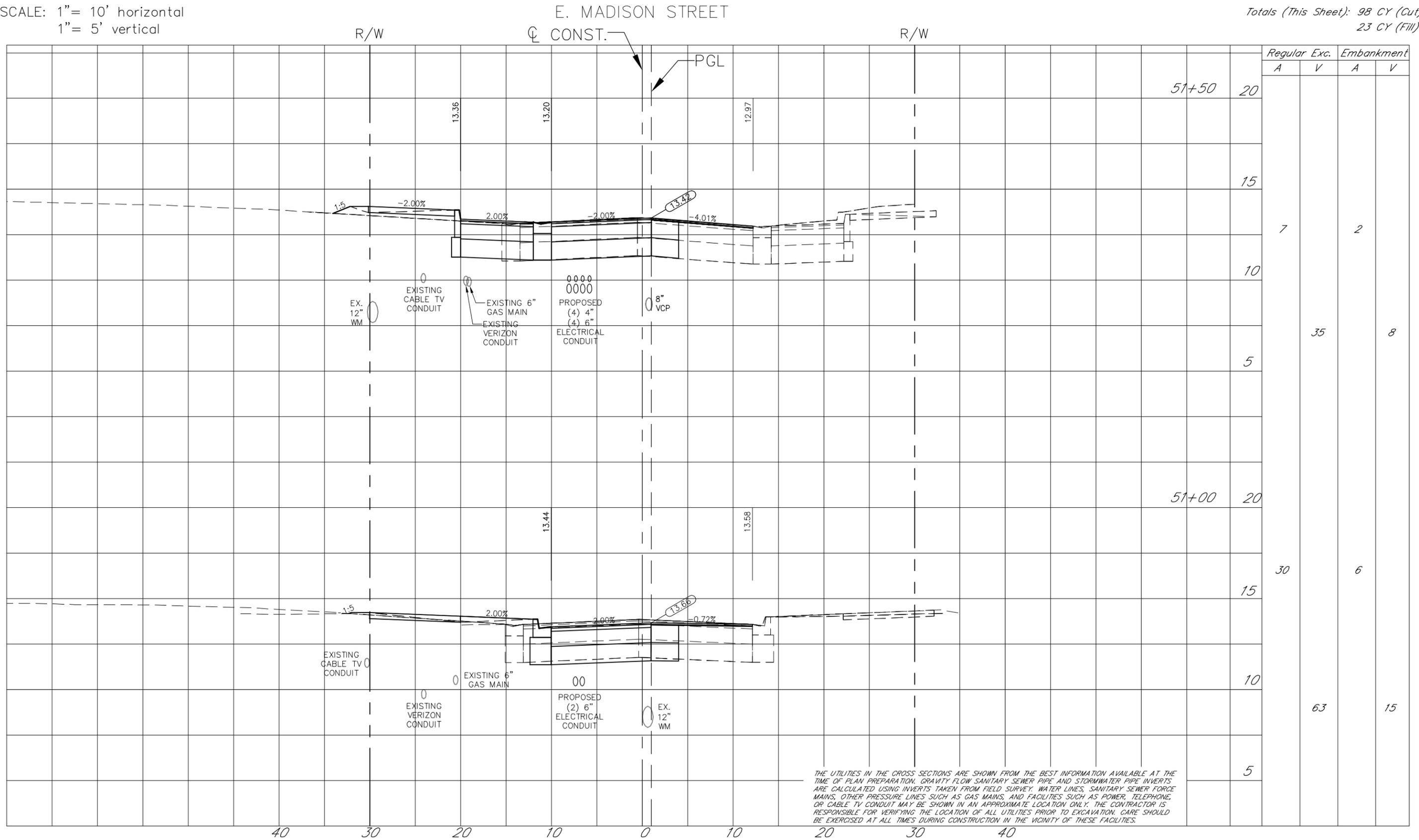
CITY OF TAMPA
ECONOMIC AND URBAN
DEVELOPMENT DEPARTMENT

E. MADISON STREET IMPROVEMENTS
PLAN & PROFILE SHEET (2 OF 3)

Field Book:	
Atlas Sheet:	
File No.	Index No.
Job No. 215611523	215611523-004
Scale: N/A	
SHEET 09	

SCALE: 1" = 10' horizontal
1" = 5' vertical

Totals (This Sheet): 98 CY (Cut)
23 CY (Fill)



THE UTILITIES IN THE CROSS SECTIONS ARE SHOWN FROM THE BEST INFORMATION AVAILABLE AT THE TIME OF PLAN PREPARATION. GRAVITY FLOW SANITARY SEWER PIPE AND STORMWATER PIPE INVERTS ARE CALCULATED USING INVERTS TAKEN FROM FIELD SURVEY. WATER LINES, SANITARY SEWER FORCE MAINS, OTHER PRESSURE LINES SUCH AS GAS MAINS, AND FACILITIES SUCH AS POWER, TELEPHONE, OR CABLE TV CONDUIT MAY BE SHOWN IN AN APPROXIMATE LOCATION ONLY. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE LOCATION OF ALL UTILITIES PRIOR TO EXCAVATION. CARE SHOULD BE EXERCISED AT ALL TIMES DURING CONSTRUCTION IN THE VICINITY OF THESE FACILITIES.

40 30 20 10 0 10 20 30 40

Station	Elevation	Regular Exc.		Embankment	
		A	V	A	V
51+50	20				
	15				
	10	7		2	
	5		35		8
51+00	20				
	15				
	10				
	5		63		15



HANDEEZA SAHEBKAR, P.E.
FLORIDA LICENSE NO. 39991

Drawn: RND	Date: 11/22/2015	▲
Designed: RND	Date: 11/22/2015	▲
Checked: JDJ	Date: 11/22/2015	▲
Reviewed: HS	Date: 11/22/2015	▲
Approved:	Date:	▲
Approved:	Date:	▲
No:	Date:	▲
Revision:		▲
By:		▲



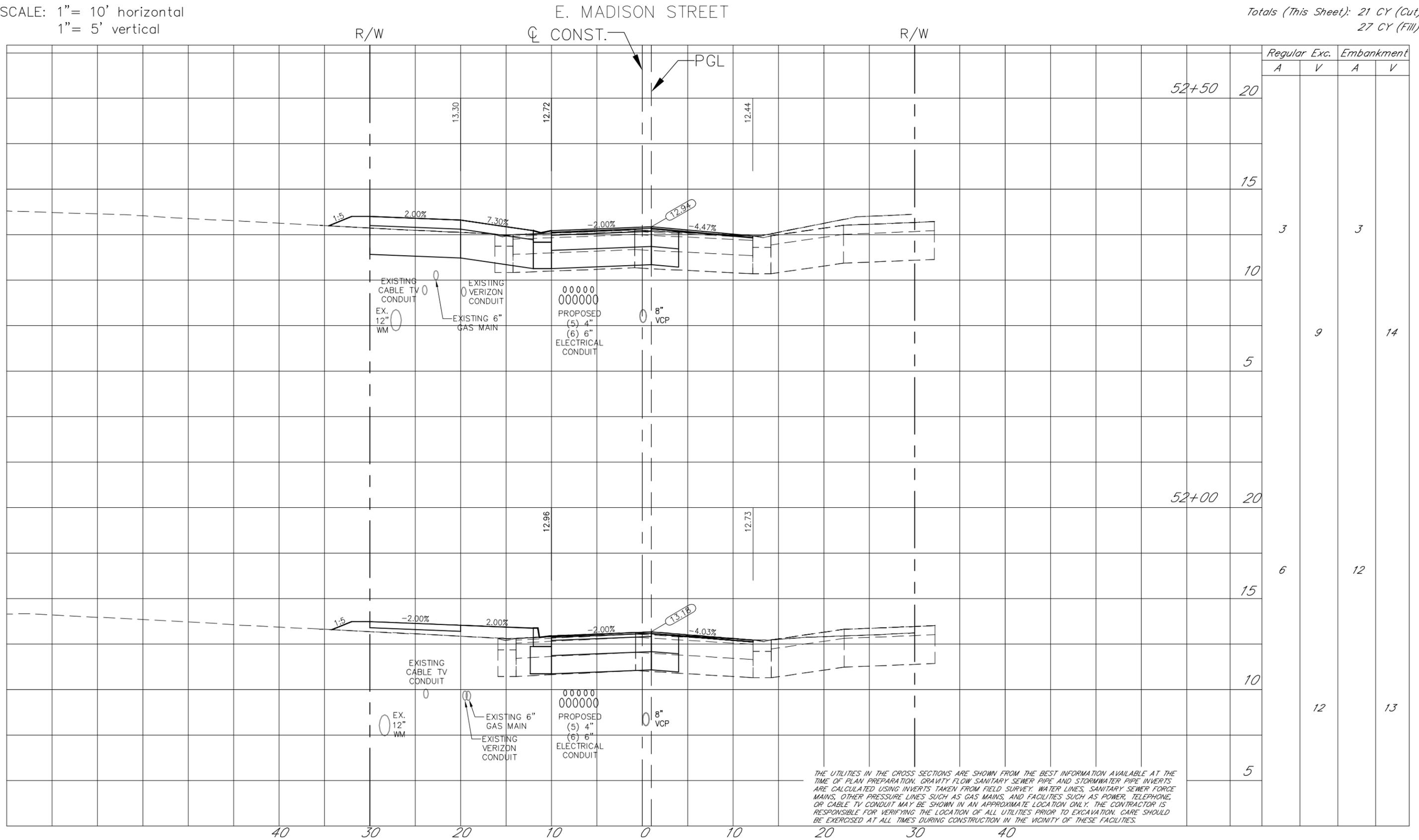
CITY OF TAMPA
ECONOMIC AND URBAN
DEVELOPMENT DEPARTMENT

E. MADISON STREET IMPROVEMENTS
CROSS SECTIONS (1 OF 10)

Field Book:	
Atlas Sheet:	
File No.	Index No.
Job No. 215611523	215611523-009
Scale: N/A	
SHEET 11	

SCALE: 1" = 10' horizontal
1" = 5' vertical

Totals (This Sheet): 21 CY (Cut)
27 CY (Fill)



THE UTILITIES IN THE CROSS SECTIONS ARE SHOWN FROM THE BEST INFORMATION AVAILABLE AT THE TIME OF PLAN PREPARATION. GRAVITY FLOW SANITARY SEWER PIPE AND STORMWATER PIPE INVERTS ARE CALCULATED USING INVERTS TAKEN FROM FIELD SURVEY. WATER LINES, SANITARY SEWER FORCE MAINS, OTHER PRESSURE LINES SUCH AS GAS MAINS, AND FACILITIES SUCH AS POWER, TELEPHONE, OR CABLE TV CONDUIT MAY BE SHOWN IN AN APPROXIMATE LOCATION ONLY. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE LOCATION OF ALL UTILITIES PRIOR TO EXCAVATION. CARE SHOULD BE EXERCISED AT ALL TIMES DURING CONSTRUCTION IN THE VICINITY OF THESE FACILITIES.

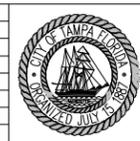
40 30 20 10 0 10 20 30 40

Station	Elevation	Regular Exc.		Embankment	
		A	V	A	V
52+50	20				
	15				
	10	3		3	
	5		9		14
52+00	20				
	15				
	10				
	5		12		13



HANDEEZA SAHEBKAR, P.E.
FLORIDA LICENSE NO. 39991

Drawn: RND	Date: 11/22/2015	By: [Signature]
Designed: RND	Date: 11/22/2015	By: [Signature]
Checked: JDJ	Date: 11/22/2015	By: [Signature]
Reviewed: HS	Date: 11/22/2015	By: [Signature]
Approved:	Date:	By:
Approved:	Date:	No: Date: Revision:



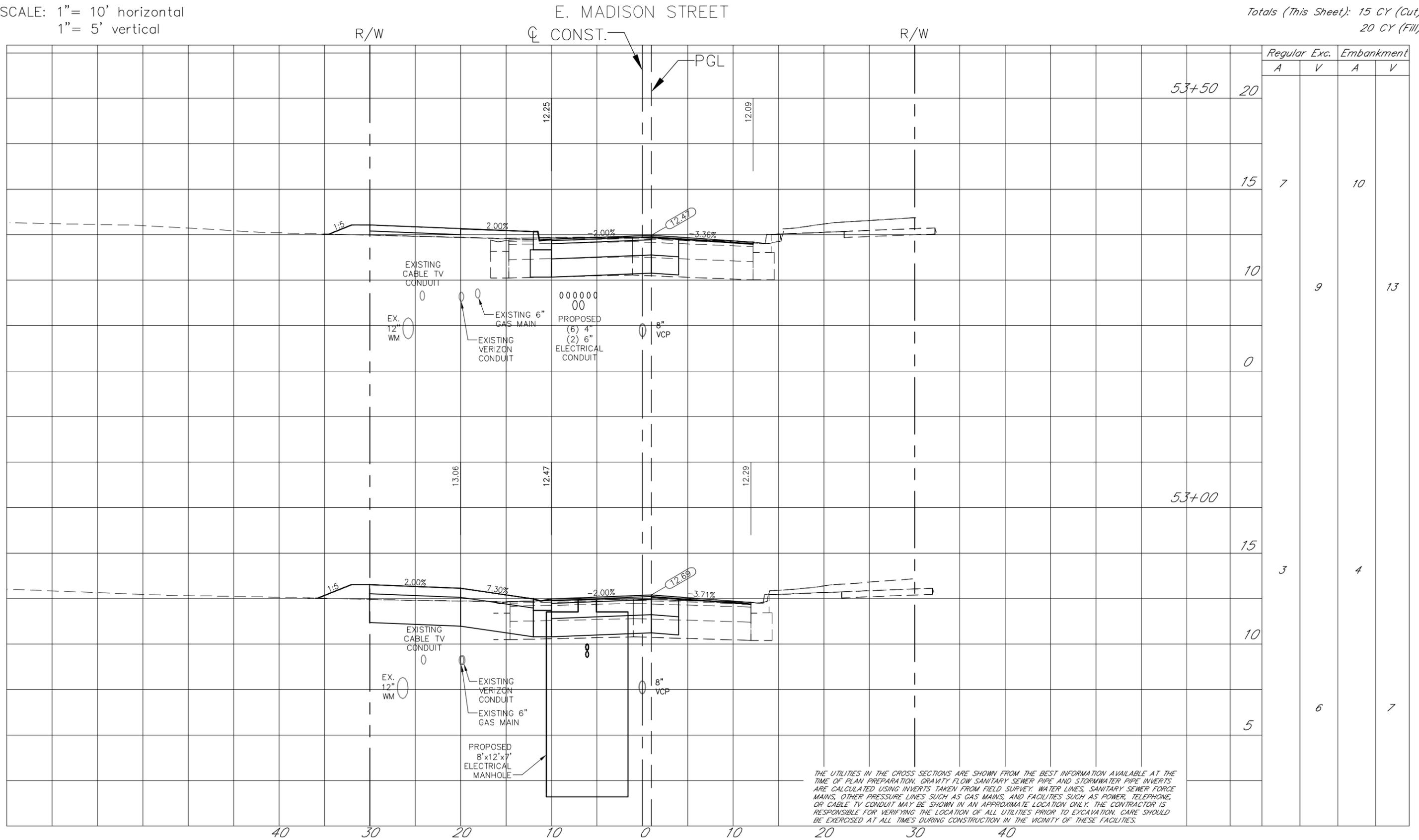
CITY OF TAMPA
ECONOMIC AND URBAN
DEVELOPMENT DEPARTMENT

E. MADISON STREET IMPROVEMENTS
CROSS SECTIONS (2 OF 10)

Field Book:	
Atlas Sheet:	
File No.	Index No.
Job No. 215611523	215611523-010
Scale: N/A	
SHEET 12	

SCALE: 1" = 10' horizontal
1" = 5' vertical

Totals (This Sheet): 15 CY (Cut)
20 CY (Fill)



THE UTILITIES IN THE CROSS SECTIONS ARE SHOWN FROM THE BEST INFORMATION AVAILABLE AT THE TIME OF PLAN PREPARATION. GRAVITY FLOW SANITARY SEWER PIPE AND STORMWATER PIPE INVERTS ARE CALCULATED USING INVERTS TAKEN FROM FIELD SURVEY. WATER LINES, SANITARY SEWER FORCE MAINS, OTHER PRESSURE LINES SUCH AS GAS MAINS, AND FACILITIES SUCH AS POWER, TELEPHONE, OR CABLE TV CONDUIT MAY BE SHOWN IN AN APPROXIMATE LOCATION ONLY. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE LOCATION OF ALL UTILITIES PRIOR TO EXCAVATION. CARE SHOULD BE EXERCISED AT ALL TIMES DURING CONSTRUCTION IN THE VICINITY OF THESE FACILITIES.

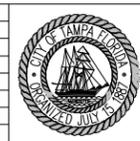
40 30 20 10 0 10 20 30 40

Station	Cut (CY)	Regular Exc.		Embankment	
		A	V	A	V
53+50	20				
	15	7		10	
	10		9		13
	0				
53+00					
	15		3		4
	10				
	5		6		7



HANDEEZA SAHEBKAR, P.E.
FLORIDA LICENSE NO. 39991

Drawn: RND	Date: 11/22/2015	By: [Signature]
Designed: RND	Date: 11/22/2015	By: [Signature]
Checked: JDJ	Date: 11/22/2015	By: [Signature]
Reviewed: HS	Date: 11/22/2015	By: [Signature]
Approved:	Date:	By:
Approved:	Date:	No: Date: Revision: By:



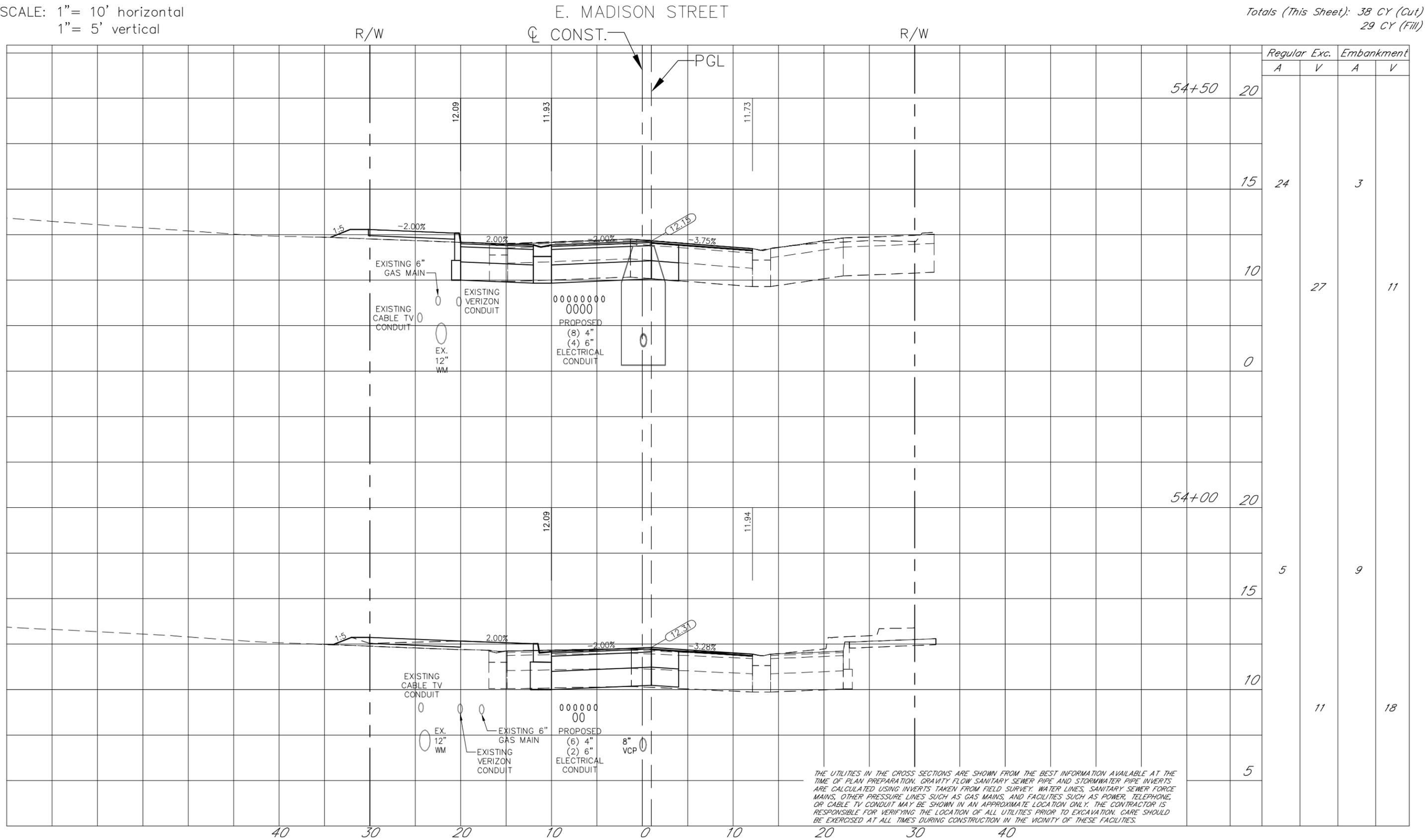
CITY OF TAMPA
ECONOMIC AND URBAN
DEVELOPMENT DEPARTMENT

E. MADISON STREET IMPROVEMENTS
CROSS SECTIONS (3 OF 10)

Field Book:	
Atlas Sheet:	
File No.	Index No.
Job No. 215611523	215611523-011
Scale: N/A	
SHEET 13	

SCALE: 1" = 10' horizontal
1" = 5' vertical

Totals (This Sheet): 38 CY (Cut)
29 CY (Fill)



THE UTILITIES IN THE CROSS SECTIONS ARE SHOWN FROM THE BEST INFORMATION AVAILABLE AT THE TIME OF PLAN PREPARATION. GRAVITY FLOW SANITARY SEWER PIPE AND STORMWATER PIPE INVERTS ARE CALCULATED USING INVERTS TAKEN FROM FIELD SURVEY. WATER LINES, SANITARY SEWER FORCE MAINS, OTHER PRESSURE LINES SUCH AS GAS MAINS, AND FACILITIES SUCH AS POWER, TELEPHONE, OR CABLE TV CONDUIT MAY BE SHOWN IN AN APPROXIMATE LOCATION ONLY. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE LOCATION OF ALL UTILITIES PRIOR TO EXCAVATION. CARE SHOULD BE EXERCISED AT ALL TIMES DURING CONSTRUCTION IN THE VICINITY OF THESE FACILITIES.

40 30 20 10 0 10 20 30 40

Drawn: RND	Date: 11/22/2015	▲
Designed: RND	Date: 11/22/2015	▲
Checked: JDJ	Date: 11/22/2015	▲
Reviewed: HS	Date: 11/22/2015	▲
Approved:	Date:	▲
Approved:	Date:	▲
No:	Date:	▲
Revision:		▲
By:		▲



CITY OF TAMPA
ECONOMIC AND URBAN
DEVELOPMENT DEPARTMENT

E. MADISON STREET IMPROVEMENTS
CROSS SECTIONS (4 OF 10)

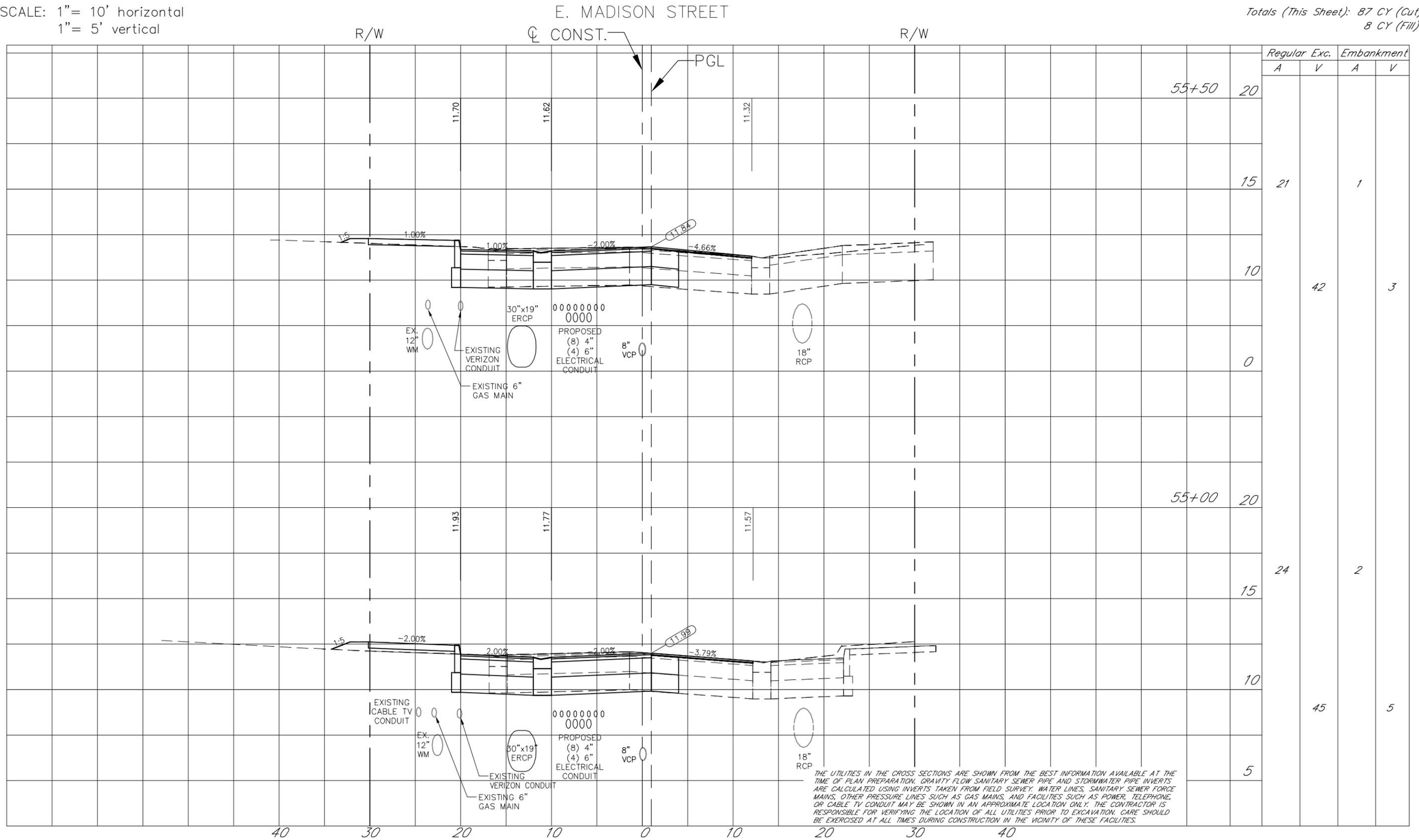
Field Book:	
Atlas Sheet:	
File No.	Index No.
Job No. 215611523	215611523-012
Scale: N/A	
SHEET 14	



HANDEEZA SAHEBKAR, P.E.
FLORIDA LICENSE NO. 39991

SCALE: 1" = 10' horizontal
1" = 5' vertical

Totals (This Sheet): 87 CY (Cut)
8 CY (Fill)



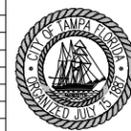
THE UTILITIES IN THE CROSS SECTIONS ARE SHOWN FROM THE BEST INFORMATION AVAILABLE AT THE TIME OF PLAN PREPARATION. GRAVITY FLOW SANITARY SEWER PIPE AND STORMWATER PIPE INVERTS ARE CALCULATED USING INVERTS TAKEN FROM FIELD SURVEY. WATER LINES, SANITARY SEWER FORCE MAINS, OTHER PRESSURE LINES SUCH AS GAS MAINS, AND FACILITIES SUCH AS POWER, TELEPHONE, OR CABLE TV CONDUIT MAY BE SHOWN IN AN APPROXIMATE LOCATION ONLY. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE LOCATION OF ALL UTILITIES PRIOR TO EXCAVATION. CARE SHOULD BE EXERCISED AT ALL TIMES DURING CONSTRUCTION IN THE VICINITY OF THESE FACILITIES.



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HANDEEZA SAHEBKAR, P.E.
 FLORIDA LICENSE NO. 39991

Drawn: RND	Date: 11/22/2015	By: [Signature]
Designed: RND	Date: 11/22/2015	By: [Signature]
Checked: JDJ	Date: 11/22/2015	By: [Signature]
Reviewed: HS	Date: 11/22/2015	By: [Signature]
Approved:	Date:	By:
Approved:	Date:	No: Date: Revision: By:



CITY OF TAMPA
 ECONOMIC AND URBAN
 DEVELOPMENT DEPARTMENT

E. MADISON STREET IMPROVEMENTS
 CROSS SECTIONS (5 OF 10)

Field Book:	
Atlas Sheet:	
File No.	Index No.
Job No. 215611523	215611523-013
Scale: N/A	
SHEET 15	

SCALE: 1" = 10' horizontal
1" = 5' vertical

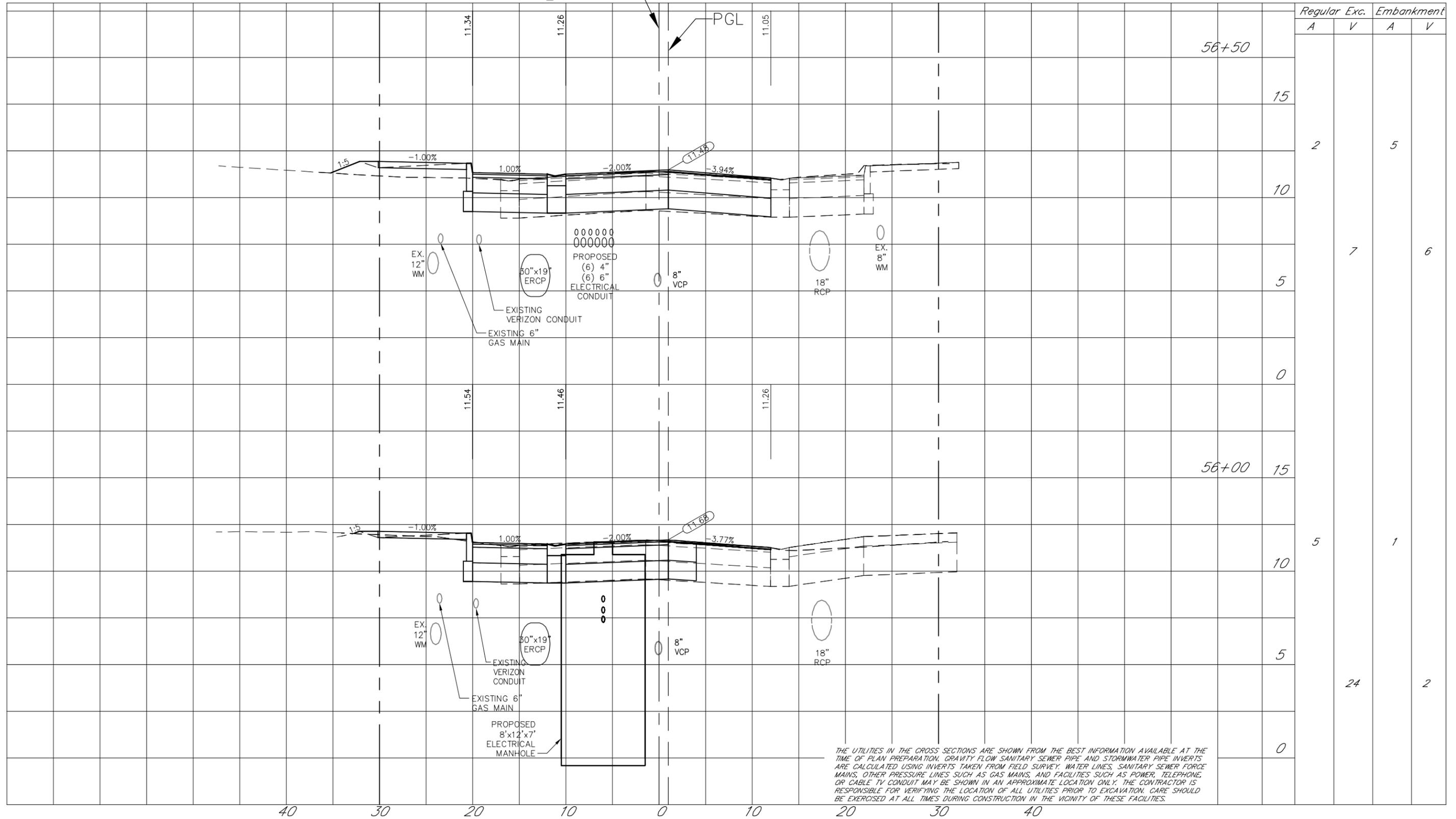
Totals (This Sheet): 31 CY (Cut)
8 CY (Fill)

E. MADISON STREET

R/W

☉ CONST.

R/W



THE UTILITIES IN THE CROSS SECTIONS ARE SHOWN FROM THE BEST INFORMATION AVAILABLE AT THE TIME OF PLAN PREPARATION. GRAVITY FLOW SANITARY SEWER PIPE AND STORMWATER PIPE INVERTS ARE CALCULATED USING INVERTS TAKEN FROM FIELD SURVEY. WATER LINES, SANITARY SEWER FORCE MAINS, OTHER PRESSURE LINES SUCH AS GAS MAINS, AND FACILITIES SUCH AS POWER, TELEPHONE, OR CABLE TV CONDUIT MAY BE SHOWN IN AN APPROXIMATE LOCATION ONLY. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE LOCATION OF ALL UTILITIES PRIOR TO EXCAVATION. CARE SHOULD BE EXERCISED AT ALL TIMES DURING CONSTRUCTION IN THE VICINITY OF THESE FACILITIES.

Station	Regular Exc.		Embankment	
	A	V	A	V
56+50				
15				
2			5	
10				
5		7		6
0				
56+00				
15				
5			1	
10				
5				
24				2
0				

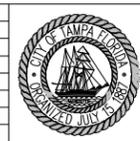
40 30 20 10 0 10 20 30 40



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HANDEEZA SAHEBKAR, P.E.
FLORIDA LICENSE NO. 39991

Drawn: RND	Date: 11/22/2015	▲			
Designed: RND	Date: 11/22/2015	▲			
Checked: JDJ	Date: 11/22/2015	▲			
Reviewed: HS	Date: 11/22/2015	▲			
Approved:	Date:	▲			
Approved:	Date:	No:	Date:	Revision:	By:



CITY OF TAMPA
ECONOMIC AND URBAN
DEVELOPMENT DEPARTMENT

E. MADISON STREET IMPROVEMENTS
CROSS SECTIONS (6 OF 10)

Field Book:	
Atlas Sheet:	
File No.	Index No.
Job No. 215611523	215611523-014
Scale: N/A	
SHEET 16	

SCALE: 1" = 10' horizontal
1" = 5' vertical

Totals (This Sheet): 9 CY (Cut)
17 CY (Fill)

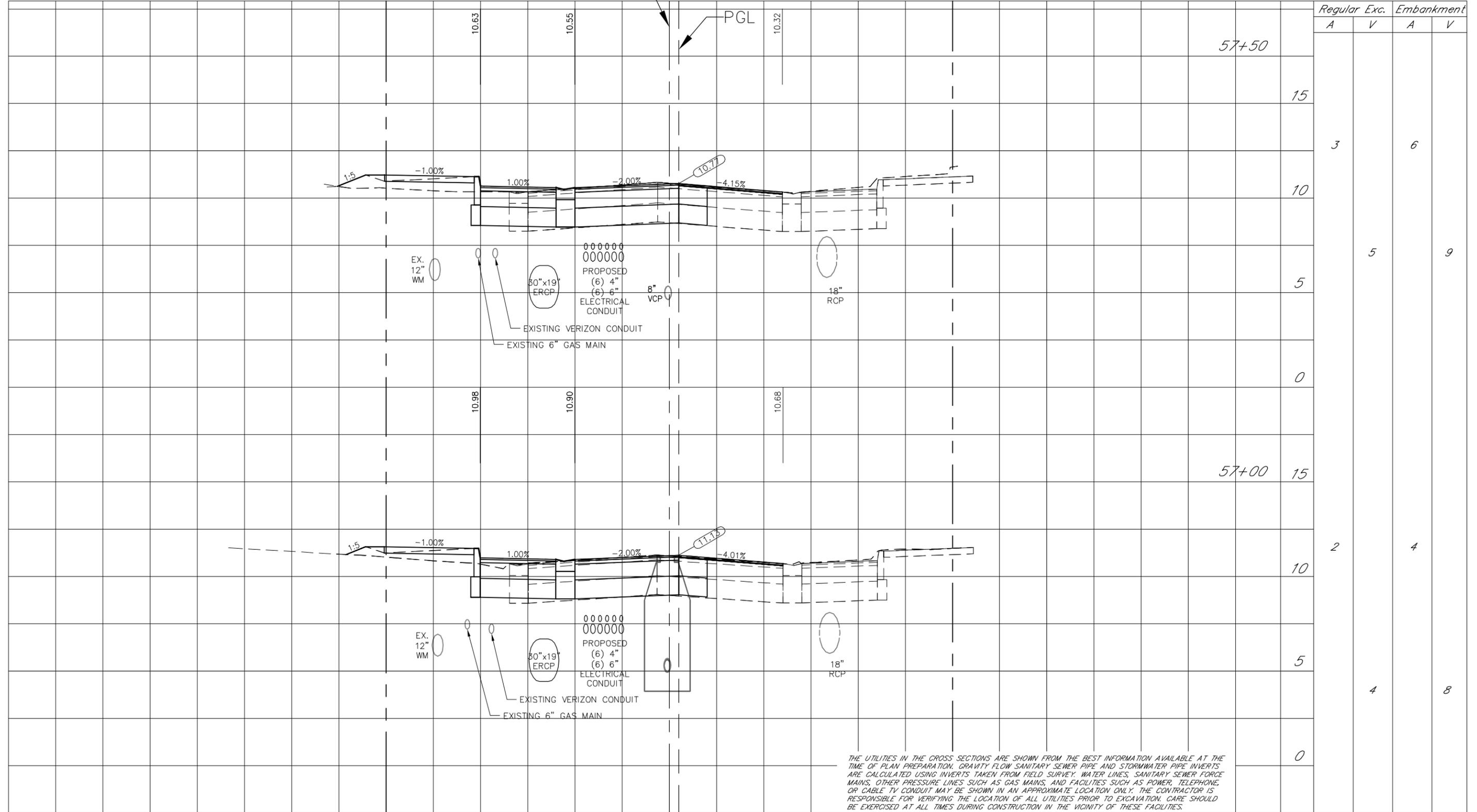
E. MADISON STREET

R/W

☉ CONST.

PGL

R/W



Station	Regular Exc.		Embankment	
	A	V	A	V
57+50				
15				
10	3		6	
5		5		9
0				
57+00				
15				
10	2		4	
5				
0		4		8

THE UTILITIES IN THE CROSS SECTIONS ARE SHOWN FROM THE BEST INFORMATION AVAILABLE AT THE TIME OF PLAN PREPARATION. GRAVITY FLOW SANITARY SEWER PIPE AND STORMWATER PIPE INVERTS ARE CALCULATED USING INVERTS TAKEN FROM FIELD SURVEY. WATER LINES, SANITARY SEWER FORCE MAINS, OTHER PRESSURE LINES SUCH AS GAS MAINS, AND FACILITIES SUCH AS POWER, TELEPHONE, OR CABLE TV CONDUIT MAY BE SHOWN IN AN APPROXIMATE LOCATION ONLY. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE LOCATION OF ALL UTILITIES PRIOR TO EXCAVATION. CARE SHOULD BE EXERCISED AT ALL TIMES DURING CONSTRUCTION IN THE VICINITY OF THESE FACILITIES.

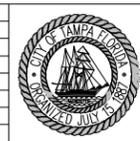
40 30 20 10 0 10 20 30 40



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HANDEEZA SAHEBKAR, P.E.
FLORIDA LICENSE NO. 39991

Drawn: RND	Date: 11/22/2015	▲			
Designed: RND	Date: 11/22/2015	▲			
Checked: JDJ	Date: 11/22/2015	▲			
Reviewed: HS	Date: 11/22/2015	▲			
Approved:	Date:	▲			
Approved:	Date:	▲	No:	Date:	Revision:
		▲			By:



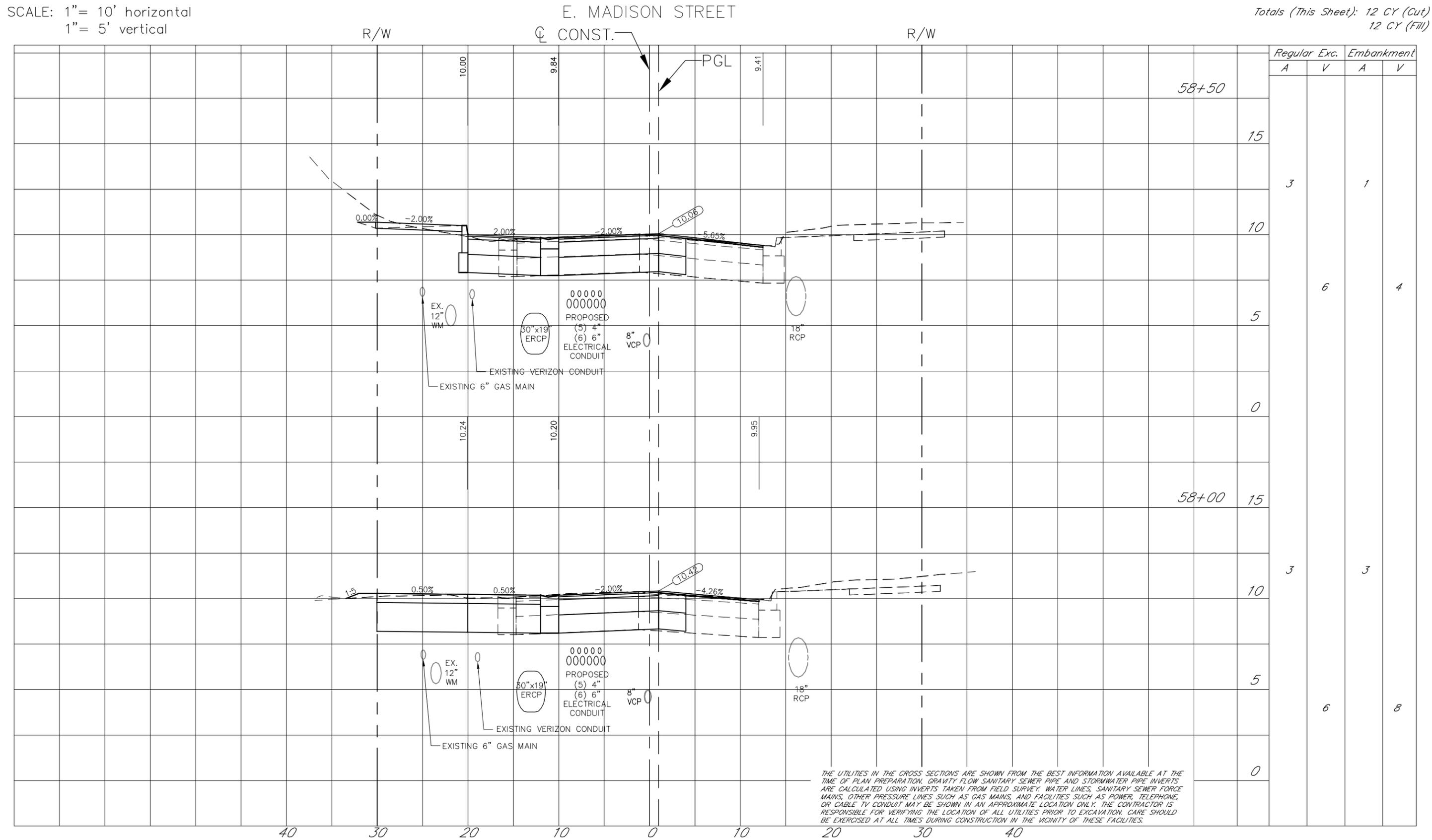
CITY OF TAMPA
ECONOMIC AND URBAN
DEVELOPMENT DEPARTMENT

E. MADISON STREET IMPROVEMENTS
CROSS SECTIONS (7 OF 10)

Field Book:	
Atlas Sheet:	
File No.	Index No.
Job No. 215611523	215611523-015
Scale: N/A	
SHEET 17	

SCALE: 1" = 10' horizontal
1" = 5' vertical

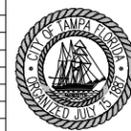
Totals (This Sheet): 12 CY (Cut)
12 CY (Fill)



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Designed: RND	Date: 11/22/2015	▲			
Checked: JDJ	Date: 11/22/2015	▲			
Reviewed: HS	Date: 11/22/2015	▲			
Approved:	Date:	▲			
Approved:	Date:	No:	Date:	Revision:	By:



CITY OF TAMPA
ECONOMIC AND URBAN
DEVELOPMENT DEPARTMENT

E. MADISON STREET IMPROVEMENTS
CROSS SECTIONS (8 OF 10)

Field Book:	
Atlas Sheet:	
File No.	Index No.
Job No. 215611523	215611523-016
Scale: N/A	
SHEET 18	

SCALE: 1" = 10' horizontal
1" = 5' vertical

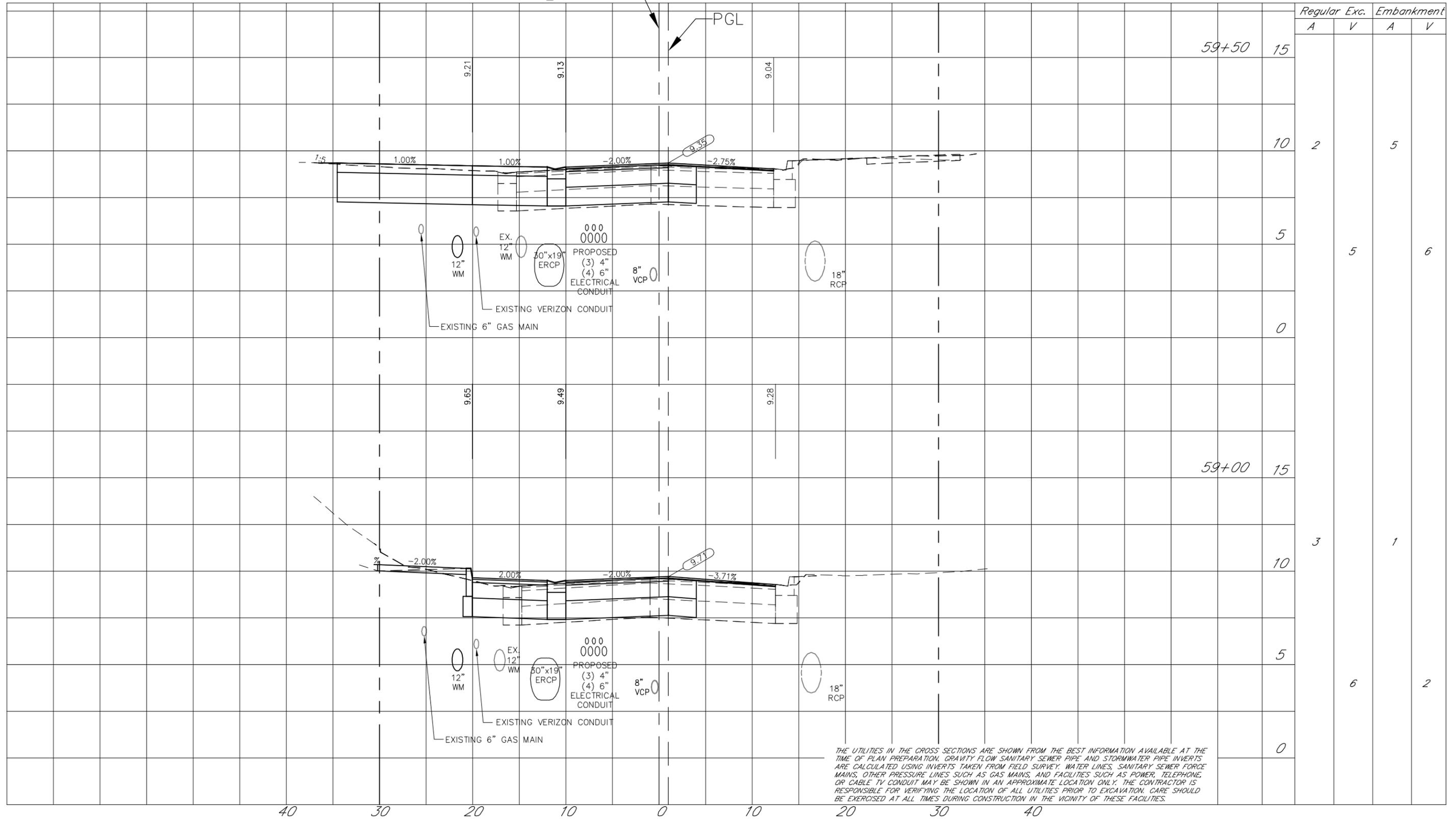
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8 CY (Fill)

E. MADISON STREET

R/W

☉ CONST.

R/W



Station	Cut (CY)	Regular Exc.		Embankment	
		A	V	A	V
59+50	15				
	10	2		5	
	5		5		6
	0				
59+00	15				
	10	3		1	
	5		6		2
	0				

THE UTILITIES IN THE CROSS SECTIONS ARE SHOWN FROM THE BEST INFORMATION AVAILABLE AT THE TIME OF PLAN PREPARATION. GRAVITY FLOW SANITARY SEWER PIPE AND STORMWATER PIPE INVERTS ARE CALCULATED USING INVERTS TAKEN FROM FIELD SURVEY. WATER LINES, SANITARY SEWER FORCE MAINS, OTHER PRESSURE LINES SUCH AS GAS MAINS, AND FACILITIES SUCH AS POWER, TELEPHONE, OR CABLE TV CONDUIT MAY BE SHOWN IN AN APPROXIMATE LOCATION ONLY. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE LOCATION OF ALL UTILITIES PRIOR TO EXCAVATION. CARE SHOULD BE EXERCISED AT ALL TIMES DURING CONSTRUCTION IN THE VICINITY OF THESE FACILITIES.



Drawn: RND	Date: 11/22/2015	▲
Designed: RND	Date: 11/22/2015	▲
Checked: JDJ	Date: 11/22/2015	▲
Reviewed: HS	Date: 11/22/2015	▲
Approved:	Date:	▲
Approved:	Date:	▲
No:	Date:	▲
Revision:		▲
By:		▲



CITY OF TAMPA
ECONOMIC AND URBAN
DEVELOPMENT DEPARTMENT

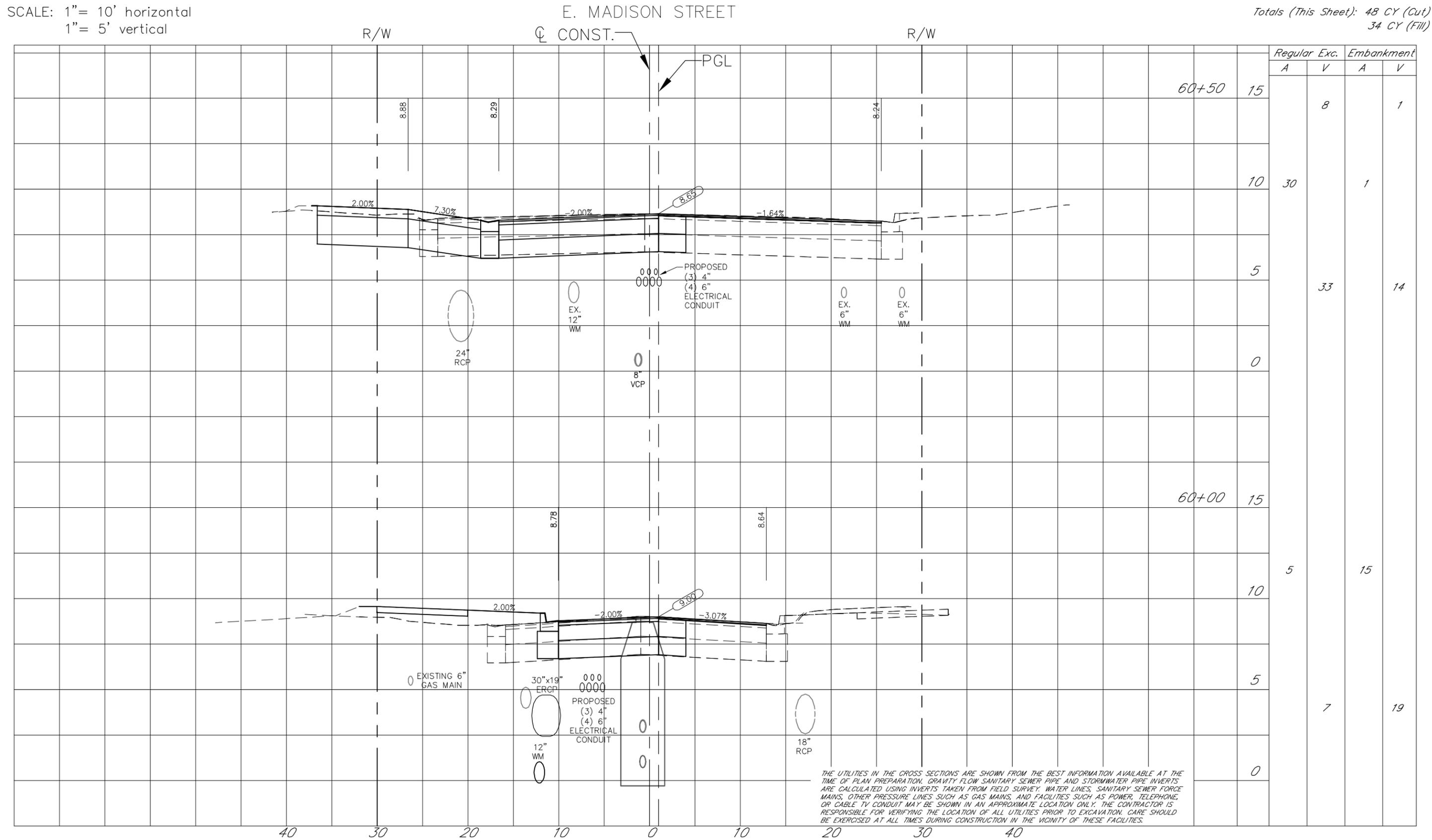
E. MADISON STREET IMPROVEMENTS
CROSS SECTIONS (9 OF 10)

Field Book:	
Atlas Sheet:	
File No.	Index No.
Job No. 215611523	215611523-017
Scale: N/A	
SHEET 19	

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SCALE: 1" = 10' horizontal
1" = 5' vertical

Totals (This Sheet): 48 CY (Cut)
34 CY (Fill)



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	10	30		1	
	5		33		14
60+00	15				
	10	5		15	
	5		7		19
	0				

THE UTILITIES IN THE CROSS SECTIONS ARE SHOWN FROM THE BEST INFORMATION AVAILABLE AT THE TIME OF PLAN PREPARATION. GRAVITY FLOW SANITARY SEWER PIPE AND STORMWATER PIPE INVERTS ARE CALCULATED USING INVERTS TAKEN FROM FIELD SURVEY. WATER LINES, SANITARY SEWER FORCE MAINS, OTHER PRESSURE LINES SUCH AS GAS MAINS, AND FACILITIES SUCH AS POWER, TELEPHONE, OR CABLE TV CONDUIT MAY BE SHOWN IN AN APPROXIMATE LOCATION ONLY. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE LOCATION OF ALL UTILITIES PRIOR TO EXCAVATION. CARE SHOULD BE EXERCISED AT ALL TIMES DURING CONSTRUCTION IN THE VICINITY OF THESE FACILITIES.



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Designed: RND	Date: 11/22/2015	By: [Signature]
Checked: JDJ	Date: 11/22/2015	By: [Signature]
Reviewed: HS	Date: 11/22/2015	By: [Signature]
Approved:	Date:	By:
Approved:	Date:	No: Date: Revision: By:

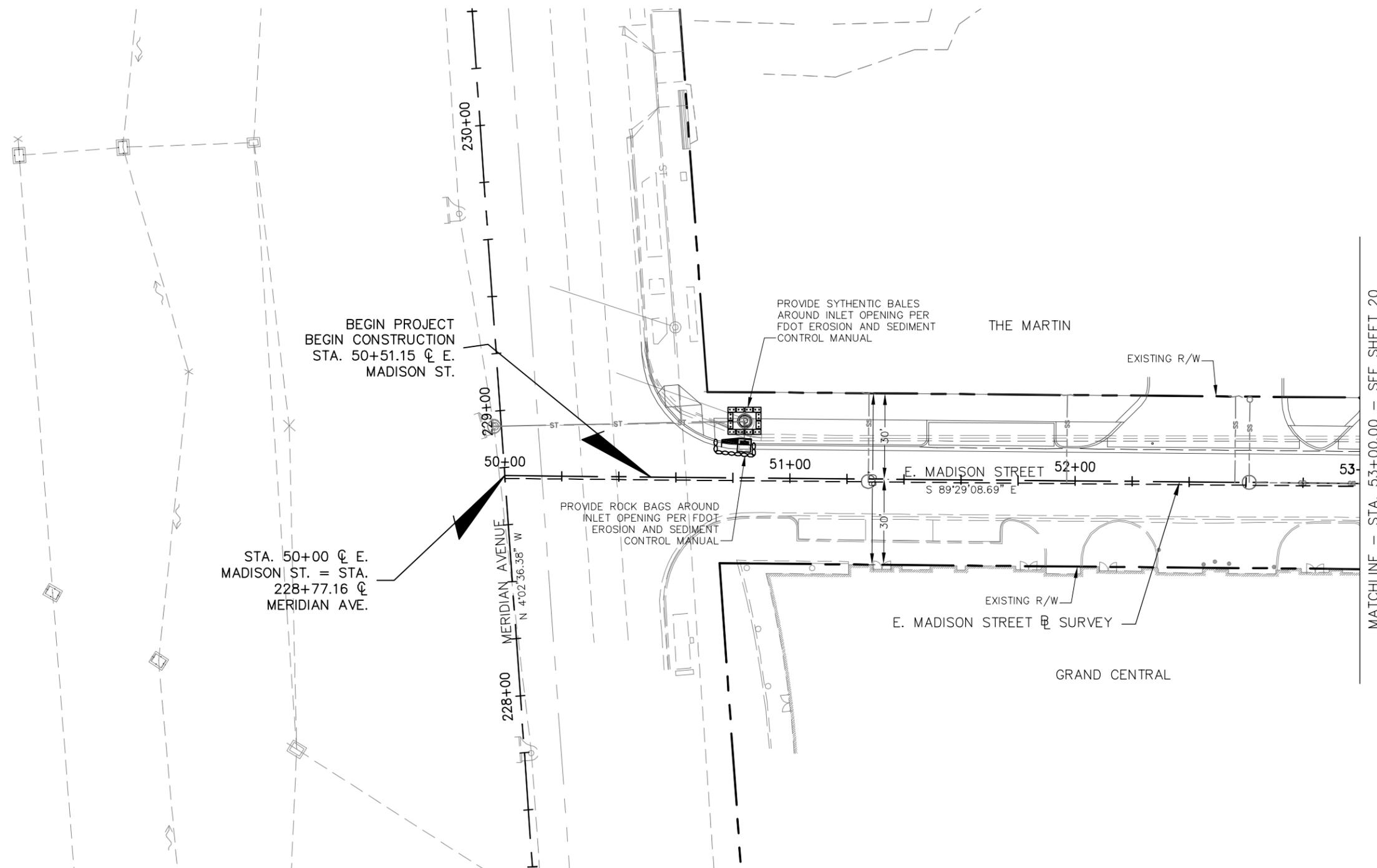
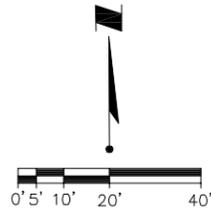


CITY OF TAMPA
ECONOMIC AND URBAN
DEVELOPMENT DEPARTMENT

E. MADISON STREET IMPROVEMENTS
CROSS SECTIONS (10 OF 10)

Field Book:	
Atlas Sheet:	
File No.	Index No.
Job No. 215611523	215611523-019
Scale: N/A	
SHEET 20	

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FLORIDA LICENSE NO. 39991



BEGIN PROJECT
BEGIN CONSTRUCTION
STA. 50+51.15 @ E.
MADISON ST.

STA. 50+00 @ E.
MADISON ST. = STA.
228+77.16 @ E.
MERIDIAN AVE.

PROVIDE SYNTHETIC BALES
AROUND INLET OPENING PER
FDOT EROSION AND SEDIMENT
CONTROL MANUAL

PROVIDE ROCK BAGS AROUND
INLET OPENING PER FDOT
EROSION AND SEDIMENT
CONTROL MANUAL

THE MARTIN

EXISTING R/W

E. MADISON STREET 52+00

E. MADISON STREET @ SURVEY

GRAND CENTRAL

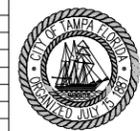
MATCHLINE - STA. 53+00.00 - SEE SHEET 20



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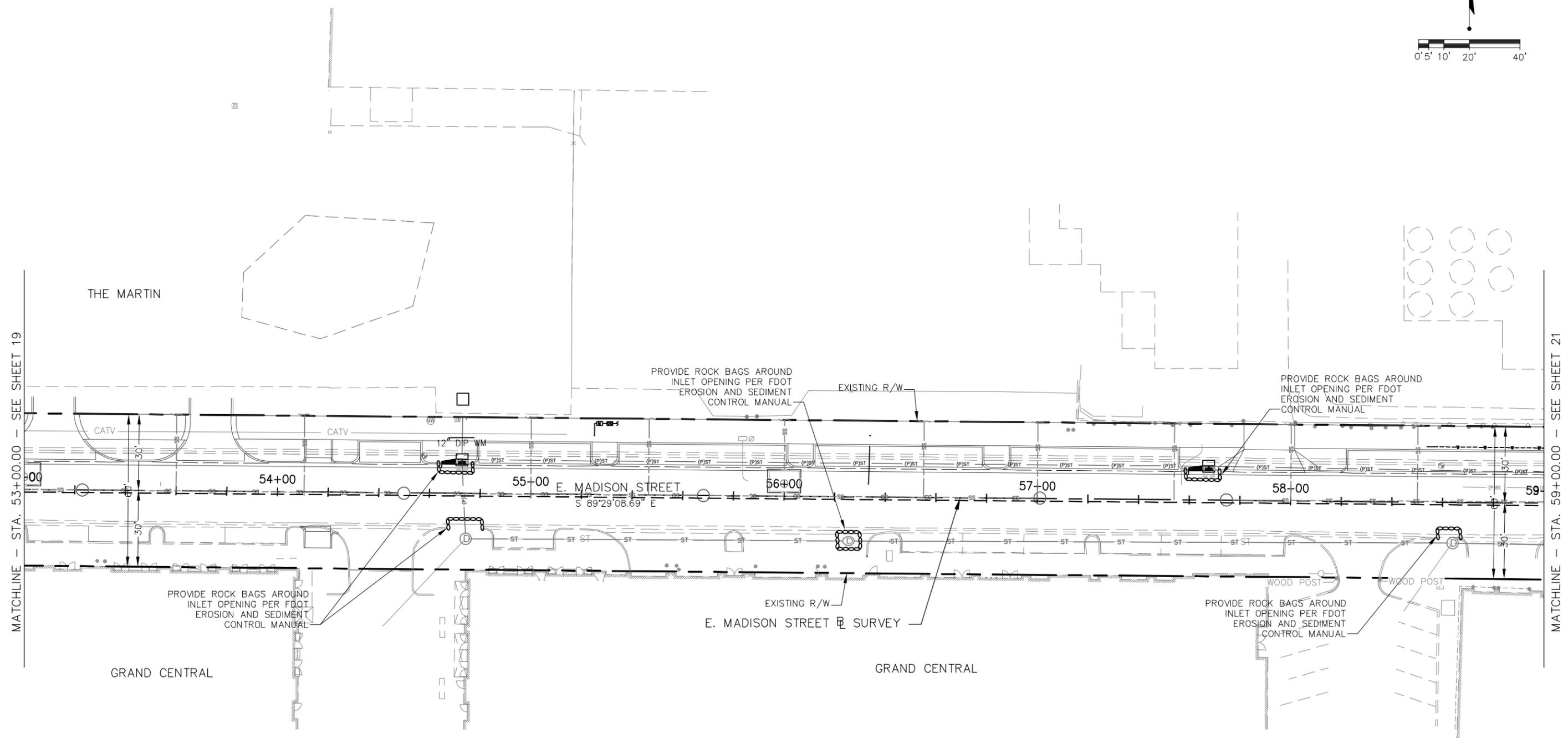
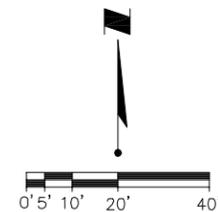
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Checked: JDJ	Date: 11/22/2013	▲			
Reviewed: HS	Date: 11/22/2013	▲			
Approved:	Date:	▲			
Approved:	Date:	No:	Date:	Revision:	By:



CITY OF TAMPA
ECONOMIC AND URBAN
DEVELOPMENT DEPARTMENT

E. MADISON STREET IMPROVEMENTS
EROSION CONTROL (1 OF 3)

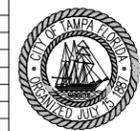
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Atlas Sheet:	
File No.	Index No.
Job No. 215611523	215611523-005
Scale: N/A	
SHEET 21	



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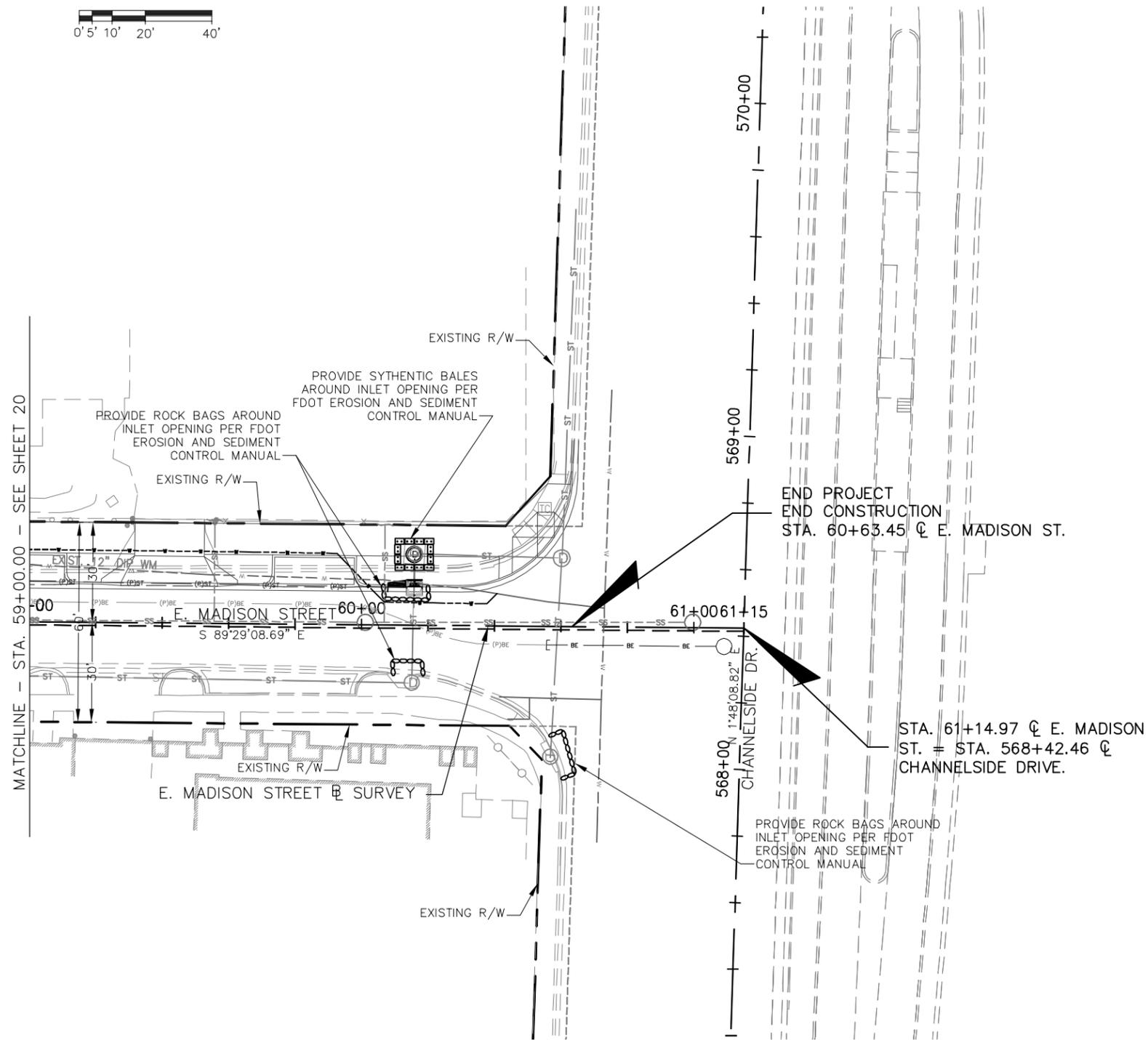
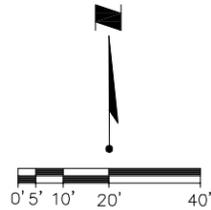
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Designed: RND	Date: 11/22/2013	▲			
Checked: JDJ	Date: 11/22/2013	▲			
Reviewed: HS	Date: 11/22/2013	▲			
Approved:	Date:	▲			
Approved:	Date:	No:	Date:	Revision:	By:



CITY OF TAMPA
 ECONOMIC AND URBAN
 DEVELOPMENT DEPARTMENT

E. MADISON STREET IMPROVEMENTS
 EROSION CONTROL (2 OF 3)

Field Book:	
Atlas Sheet:	
File No.	Index No.
Job No. 215611523	215611523-005
Scale: N/A	
SHEET 22	



NOTES:

1. A COPY OF THE STORMWATER POLLUTION PREVENTION PLAN SHALL BE KEPT AT THE PROJECT SITE AT ALL TIMES.
2. THE CONSTRUCTION WILL BE STAGED IN PHASES WHENEVER POSSIBLE TO MINIMIZE SOIL LOSS AND CONTROL EROSION.
3. PROTECT STORMWATER INLETS IN ACCORDANCE WITH BEST MANAGEMENT PRACTICES TO MINIMIZE SILTATION. SILT BARRIERS SHALL REMAIN IN PLACE UNTIL SITE STABILIZATION IS COMPLETE. INLET GRATES SHOULD REMAIN WRAPPED UNTIL THE COMPLETION OF THE PROJECT.
4. DEWATERING WILL OCCUR, AS REQUIRED, FOR ALL EXCAVATION ACTIVITY INCLUDING, BUT NOT LIMITED TO, STORM SEWERS, SANITARY SEWERS, WATER LINES AND OTHER UTILITIES. ALL DEWATERING ACTIVITY ADJACENT TO TREES WILL BE SUPERVISED BY AN ARBORIST AND THAT A WATERING SCHEDULE WILL BE SUBMITTED TO THE CITY AND WILL BE IMPLEMENTED FOR ALL TREES NEAR THE DEWATERING AREAS.
5. ALL CONSTRUCTION DEWATERING WILL BE CONTAINED ONSITE, AT SPECIFIED LOCATIONS, AND EITHER DIRECTED TO A TEMPORARY SEDIMENTATION BASIN OR ALLOWED TO INFILTRATE THE SOIL. SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT OVERSEES THE REQUIREMENTS OF DEWATERING PERMITTING AND METHODS. IF IT IS NECESSARY TO DISCHARGE DEWATERING EFFLUENT OFF SITE, ALL DEWATERING EFFLUENT SHALL BE ROUTED TO A TEMPORARY SEDIMENT SUMP PRIOR TO DISCHARGE TO THE WETLANDS OR OFFSITE. THE GENERAL PROCESS OF THE DEWATERING SYSTEM SHALL BE ADHERED TO DURING CONSTRUCTION, ALTHOUGH THE ACTUAL LAYOUT OF THE SYSTEM MAY BE CONSTRUCTED AS DICTATED BY FIELD CONDITIONS.
6. THE DEWATERING SYSTEM MUST USE A PUMP AND PIPING THAT IS LESS THAN 6 INCHES IN DIAMETER AND OPERATE LESS THAN A TOTAL OF SIX MONTHS. ANY DEVIATION FROM THIS REQUIREMENT SHALL REQUIRE A WATER USE PERMIT. THE COST OF A WATER USE PERMIT AND ASSOCIATED MATERIALS SHALL BE BORNE BY THE CONTRACTOR.
7. SILTATION ACCUMULATIONS GREATER THAN THE LESSER OF 12 INCHES OR ONE-HALF OF THE DEPTH OF THE SILTATION CONTROL BARRIER OR CONTROL DEVICES SHALL BE IMMEDIATELY REMOVED AND PLACED IN UPLAND AREAS. ALL SILTATION BARRIERS SHALL THEN BE RESTORED TO THEIR ORIGINAL CONDITIONS.
8. ALL SILTATION AND EROSION CONTROL MEASURES SHALL BE INSPECTED AND MAINTAINED AT A MINIMUM OF ONCE PER WEEK OR AFTER ANY 1/2" OR GREATER RAINFALL EVENT. THE CONTRACTOR SHALL MAINTAIN RECORDS OF ALL MAINTENANCE AND INSPECTIONS, ON SITE, UNTIL CONSTRUCTION IS COMPLETE. COPIES SHALL BE FURNISHED TO THE ENGINEER AND/OR OWNER, UPON REQUEST.
9. THE CONTRACTOR SHALL IMPLEMENT OTHER BEST MANAGEMENT PRACTICES AS DIRECTED BY THE ENGINEER OF RECORD OR OTHER REGULATORY AGENCIES.
10. CONTRACTOR SHALL SPRINKLE OR OTHERWISE APPLY WATER TO AFFECTED CONSTRUCTION AREAS AS NEEDED TO CONTROL BOTH SIGNIFICANT WIND EROSION AND FUGITIVE DUST.
11. THE CONTRACTOR SHALL DIRECT ONSITE RUNOFF TO THE WET DETENTION (WITHOUT FILTRATION TREATMENT) STORMWATER MANAGEMENT SYSTEM DURING CONSTRUCTION.
12. DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES PERMANENTLY CEASE SHALL BE STABILIZED WITH SOD IN ACCORDANCE WITH FDOT SPECIFICATION SECTION 575 OR WITH PERMANENT SEED AND MULCH AS SOON AS PRACTICAL BUT IN NO CASE MORE THAN 7 DAYS AFTER THE LAST CONSTRUCTION ACTIVITY IN ACCORDANCE FDOT SPECIFICATION SECTION 570.
13. SODDING INCLUDES MAINTAINING SLOPES AND SOD UNTIL COMPLETION AND ACCEPTANCE OF TOTAL PROJECT OR GROWTH IS ESTABLISHED, WHICHEVER COMES LAST. UNTIL THEN, ALL EROSION, SILTATION, AND MAINTENANCE OF GRADES AND GRASS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
14. TOP SOIL STOCK PILES AND DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY WILL TEMPORARILY CEASE FOR AT LEAST 7 DAYS SHALL BE STABILIZED WITH TEMPORARY SEED AND MULCH AS SOON AS PRACTICABLE. THE TEMPORARY SEED AND MULCH SHALL BE INSTALLED IN ACCORDANCE WITH FDOT SPECIFICATION SECTION 570.
15. FOR DRAINAGE BASINS WITH 10 OR MORE DISTURBED ACRES AT ONE TIME, A TEMPORARY (OR PERMANENT) SEDIMENT BASIN PROVIDING 3,600 CUBIC FEET OF STORAGE PER ACRE DRAINED, OR EQUIVALENT CONTROL MEASURES, SHALL BE PROVIDED WHERE ATTAINABLE UNTIL FINAL STABILIZATION OF THE SITE. THE 3,600 CUBIC FEET OF STORAGE AREA PER ACRE DRAINED DOES NOT APPLY TO FLOWS FROM OFFSITE AREAS AND FLOWS FROM ONSITE AREAS THAT ARE EITHER UNDISTURBED OR HAVE UNDERGONE FINAL STABILIZATION WHERE SUCH FLOWS ARE DIVERTED AROUND BOTH THE DISTURBED AREA AND THE SEDIMENT BASIN. FOR DRAINAGE BASINS WITH 10 OR MORE DISTURBED ACRES AT ONE TIME AND WHERE A TEMPORARY SEDIMENT BASIN PROVIDING 3,600 CUBIC FEET OF STORAGE PER ACRE DRAINED, OR EQUIVALENT CONTROLS IS NOT ATTAINABLE, A COMBINATION OF SMALLER SEDIMENT BASINS AND/OR SEDIMENT TRAPS AND OTHER BMPs SHOULD BE USED. AT A MINIMUM, SILT FENCES, OR EQUIVALENT SEDIMENT CONTROLS ARE REQUIRED FOR ALL SIDESLOPE AND DOWNSLOPE BOUNDARIES OF THE CONSTRUCTION AREA.
16. AREAS THAT ARE DESIGNATED FOR PERMANENT STORMWATER INFILTRATION TREATMENT SYSTEMS (E.G., STORMWATER RETENTION PONDS) SHOULD NOT BE USED FOR TEMPORARY SEDIMENT BASINS UNLESS APPROPRIATE MEASURES ARE TAKEN TO ASSURE REMOVAL OF ACCUMULATED FINE SEDIMENTS, WHICH MAY CAUSE PREMATURE CLOGGING AND LOSS OF INFILTRATION CAPACITY, AND TO AVOID EXCESSIVE COMPACTION OF SOILS BY CONSTRUCTION MACHINERY OR EQUIPMENT.
17. A STABILIZED CONSTRUCTION ENTRANCE WILL BE PROVIDED TO HELP REDUCE VEHICLE TRACKING OF SEDIMENTS. THE PAVED STREET ADJACENT TO THE SITE ENTRANCE WILL BE SWEEPED AS REQUIRED TO REMOVE ANY EXCESS MUD, DIRT OR ROCK TRACKED FROM THE SITE. DUMP TRUCKS HAULING MATERIAL FROM THE CONSTRUCTION SITE WILL BE COVERED WITH A TARPULIN.
18. ALL MEASURES WILL BE MAINTAINED IN GOOD WORKING ORDER; IF A REPAIR IS NECESSARY, IT WILL BE INITIATED WITHIN 24 HOURS OF REPORT.
19. INSPECT SILT FENCE REGULARLY FOR DEPTH OF SEDIMENT, TEARS, TO SEE IF THE FABRIC IS SECURELY ATTACHED TO THE FENCE POSTS, AND TO SEE THAT THE FENCE POSTS ARE FIRMLY IN THE GROUND.
20. SEDIMENT BASINS TO BE INSPECTED REGULARLY FOR DEPTH OF SEDIMENT. BUILT UP SEDIMENT TO BE REMOVED WHEN IT REACHES 10 PERCENT OF THE DESIGN CAPACITY AND/OR AT THE END OF THE JOB.
21. DIVERSION DIKE, IF REQUIRED, WILL BE INSPECTED AND ANY BREACHES PROMPTLY REPAIRED.
22. TEMPORARY AND PERMANENT SEEDING AND PLANTING WILL BE INSPECTED FOR BARE SPOTS, WASHOUTS, AND HEALTHY GROWTH.
23. A MAINTENANCE INSPECTION REPORT WILL BE MADE AFTER EACH INSPECTION. A COPY OF THE REPORT FORM TO BE COMPLETED BY THE INSPECTOR IS INCLUDED IN THE STORMWATER POLLUTION PREVENTION PLAN.
24. THE SITE SUPERINTENDENT, WILL BE RESPONSIBLE FOR INSPECTIONS, MAINTENANCE AND REPAIR ACTIVITIES, FILLING OUT THE INSPECTION AND MAINTENANCE REPORT AND IF NECESSARY, REVISING THE STORMWATER POLLUTION PREVENTION PLAN CONSISTENT WITH MODIFICATIONS MADE DUE TO UNFORESEEN CAUSES, AND DICTATED BY FIELD CONDITIONS.
25. PERSONNEL SELECTED FOR INSPECTION AND MAINTENANCE RESPONSIBILITIES WILL RECEIVE TRAINING FROM SITE SUPERINTENDENT FOR INSPECTION AND MAINTENANCE PRACTICES NECESSARY FOR KEEPING THE EROSION AND SEDIMENT CONTROLS USED ONSITE IN GOOD WORKING ORDER.
26. CONTRACTOR SHALL PROVIDE BYPASS OF EXISTING CREEK FLOWS DURING CONSTRUCTION CONSISTING OF PUMPING FLOWS DOWNSTREAM OF WORKING AREA. PIPE CROSSING IS NOT TO BE USED AS HAUL ROUTE DURING CONSTRUCTION. PUMP(S) UTILIZED FOR BYPASS SHALL BE CAPABLE OF 10YR-24 STORM EVENT FLOWS.



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 FLORIDA LICENSE NO. 39991

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Checked: JDJ	Date: 11/22/2013	▲			
Reviewed: HS	Date: 11/22/2013	▲			
Approved:	Date:	▲			
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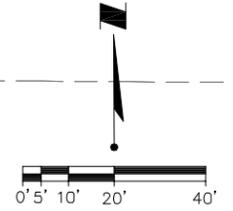
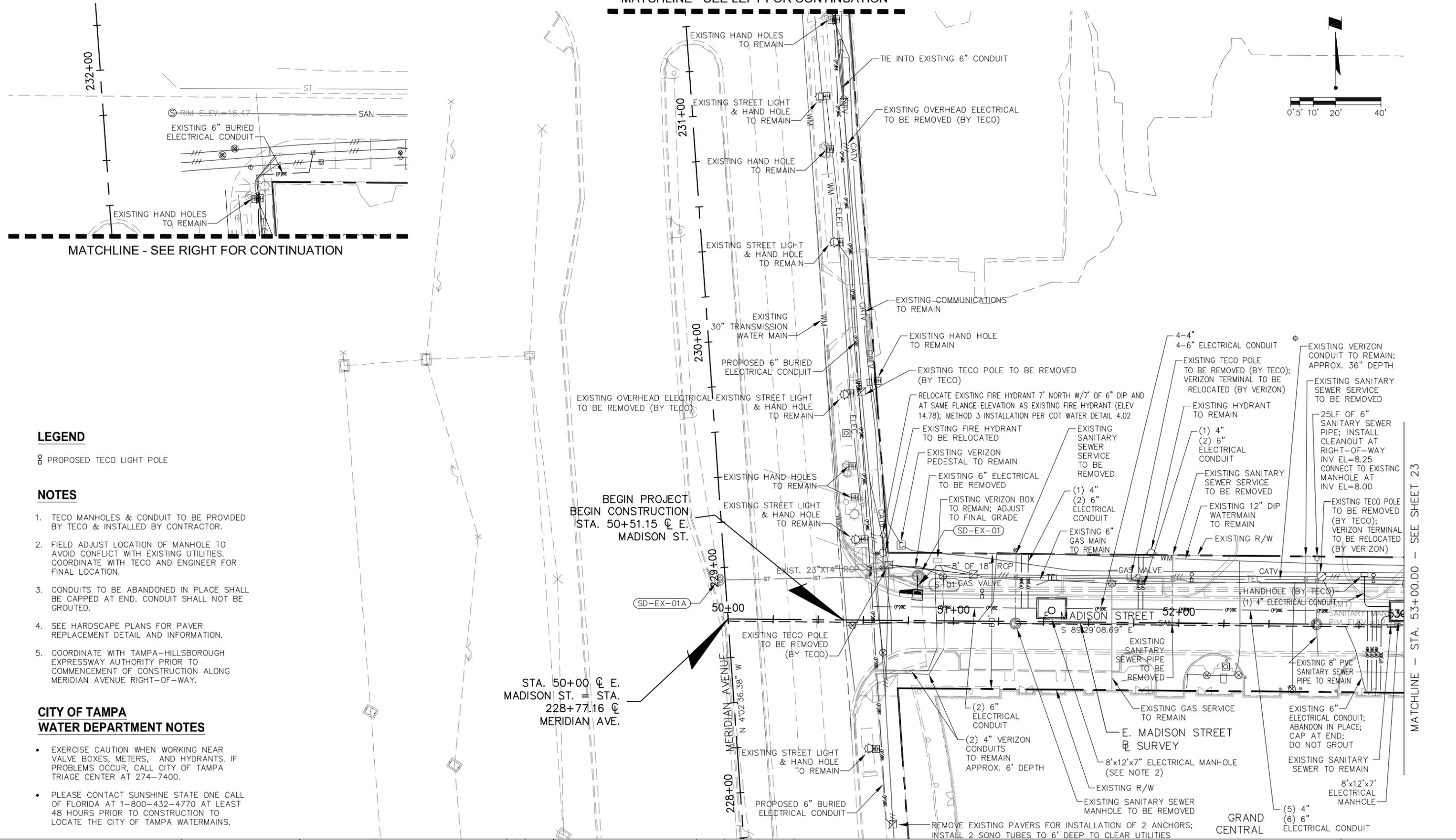


CITY OF TAMPA
 ECONOMIC AND URBAN
 DEVELOPMENT DEPARTMENT

E. MADISON STREET IMPROVEMENTS
 EROSION CONTROL (3 OF 3)

Field Book:	
Atlas Sheet:	
File No.	Index No.
Job No. 215611523	215611523-005
Scale: N/A	
SHEET 23	

MATCHLINE - SEE LEFT FOR CONTINUATION



LEGEND

⊗ PROPOSED TECO LIGHT POLE

NOTES

- TECO MANHOLES & CONDUIT TO BE PROVIDED BY TECO & INSTALLED BY CONTRACTOR.
- FIELD ADJUST LOCATION OF MANHOLE TO AVOID CONFLICT WITH EXISTING UTILITIES. COORDINATE WITH TECO AND ENGINEER FOR FINAL LOCATION.
- CONDUITS TO BE ABANDONED IN PLACE SHALL BE CAPPED AT END. CONDUIT SHALL NOT BE GROUTED.
- SEE HARDSCAPE PLANS FOR PAVER REPLACEMENT DETAIL AND INFORMATION.
- COORDINATE WITH TAMPA-HILLSBOROUGH EXPRESSWAY AUTHORITY PRIOR TO COMMENCEMENT OF CONSTRUCTION ALONG MERIDIAN AVENUE RIGHT-OF-WAY.

CITY OF TAMPA WATER DEPARTMENT NOTES

- EXERCISE CAUTION WHEN WORKING NEAR VALVE BOXES, METERS, AND HYDRANTS. IF PROBLEMS OCCUR, CALL CITY OF TAMPA TRIAGE CENTER AT 274-7400.
- PLEASE CONTACT SUNSHINE STATE ONE CALL OF FLORIDA AT 1-800-432-4770 AT LEAST 48 HOURS PRIOR TO CONSTRUCTION TO LOCATE THE CITY OF TAMPA WATERMAINS.

BEGIN PROJECT
BEGIN CONSTRUCTION
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MADISON ST.

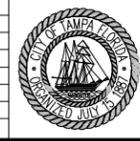
STA. 50+00 @ E.
MADISON ST. = STA.
228+77.16 @
MERIDIAN AVE.

MATCHLINE - STA. 53+00.00 - SEE SHEET 23



HAMIDREZA SAHEBKAR, P.E.
FLORIDA LICENSE NO. 39991

Drawn: RND	Date: 11/22/2013	By: [Signature]
Designed: RND	Date: 11/22/2013	
Checked: JDJ	Date: 11/22/2013	
Reviewed: HS	Date: 11/22/2013	
Approved: [Signature]	Date: [Blank]	
Approved: [Signature]	Date: [Blank]	No: [Blank] Date: [Blank] Revision: [Blank]



CITY OF TAMPA
ECONOMIC AND URBAN
DEVELOPMENT DEPARTMENT

E. MADISON STREET IMPROVEMENTS
UTILITY ADJUSTMENT (1 OF 3)

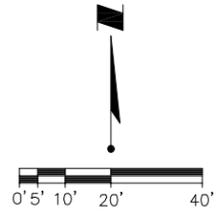
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File No.	Index No.
Job No. 215611523	215611523-006
Scale: N/A	
SHEET 24	

NOTES

- TECO MANHOLES & CONDUIT TO BE PROVIDED BY TECO & INSTALLED BY CONTRACTOR.
- FIELD ADJUST LOCATION OF MANHOLE TO AVOID CONFLICT WITH EXISTING UTILITIES. COORDINATE WITH TECO AND ENGINEER FOR FINAL LOCATION.
- CONDUITS TO BE ABANDONED IN PLACE SHALL BE CAPPED AT END. CONDUIT SHALL NOT BE GROUTED.
- SEE HARDSCAPE PLANS FOR PAVER REPLACEMENT DETAIL AND INFORMATION.
- COORDINATE WITH TAMPA-HILLSBOROUGH EXPRESSWAY AUTHORITY PRIOR TO COMMENCEMENT OF CONSTRUCTION ALONG MERIDIAN AVENUE RIGHT-OF-WAY.

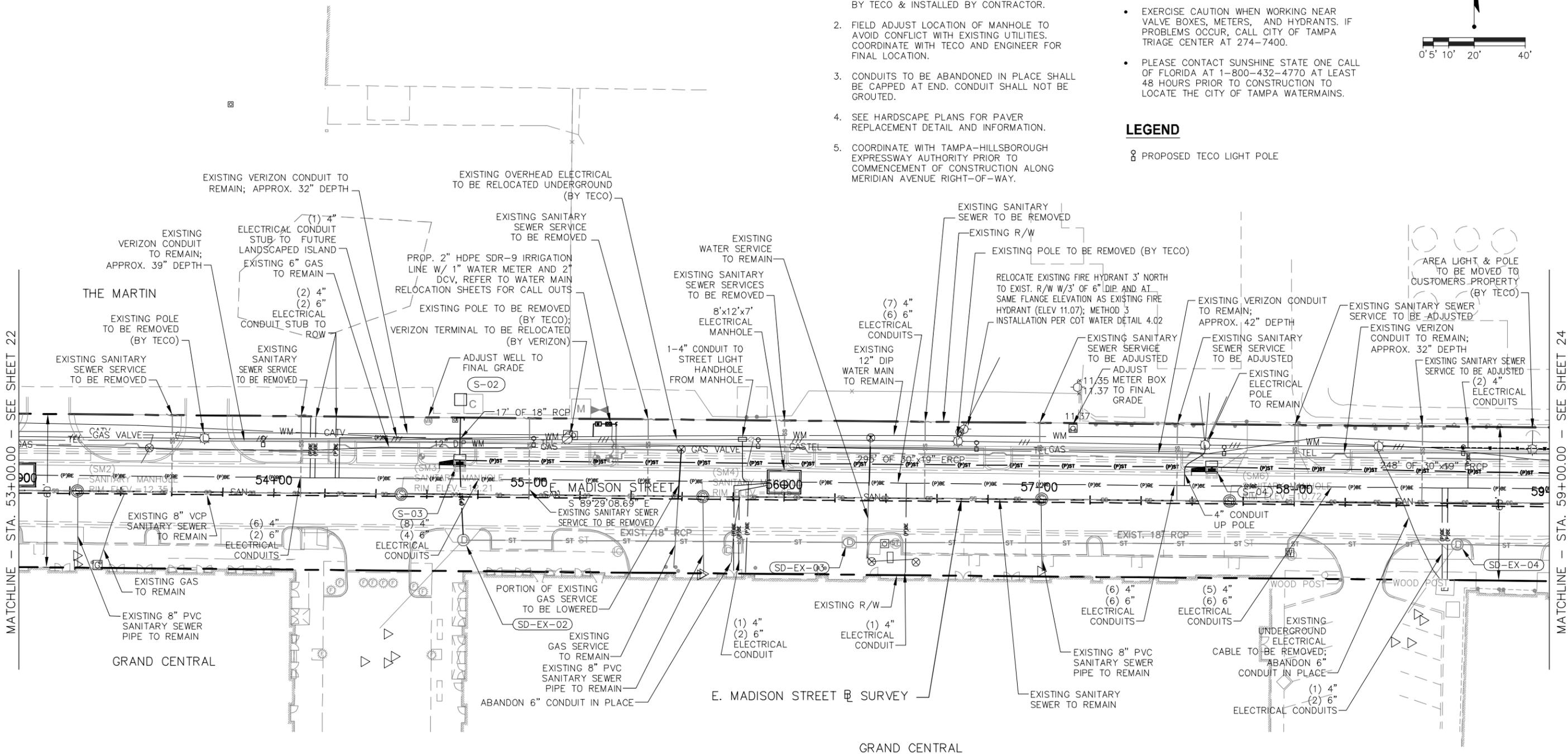
CITY OF TAMPA WATER DEPARTMENT NOTES

- EXERCISE CAUTION WHEN WORKING NEAR VALVE BOXES, METERS, AND HYDRANTS. IF PROBLEMS OCCUR, CALL CITY OF TAMPA TRIAGE CENTER AT 274-7400.
- PLEASE CONTACT SUNSHINE STATE ONE CALL OF FLORIDA AT 1-800-432-4770 AT LEAST 48 HOURS PRIOR TO CONSTRUCTION TO LOCATE THE CITY OF TAMPA WATERMAINS.



LEGEND

⊗ PROPOSED TECO LIGHT POLE



MATCHLINE - STA. 53+00.00 - SEE SHEET 22

MATCHLINE - STA. 59+00.00 - SEE SHEET 24



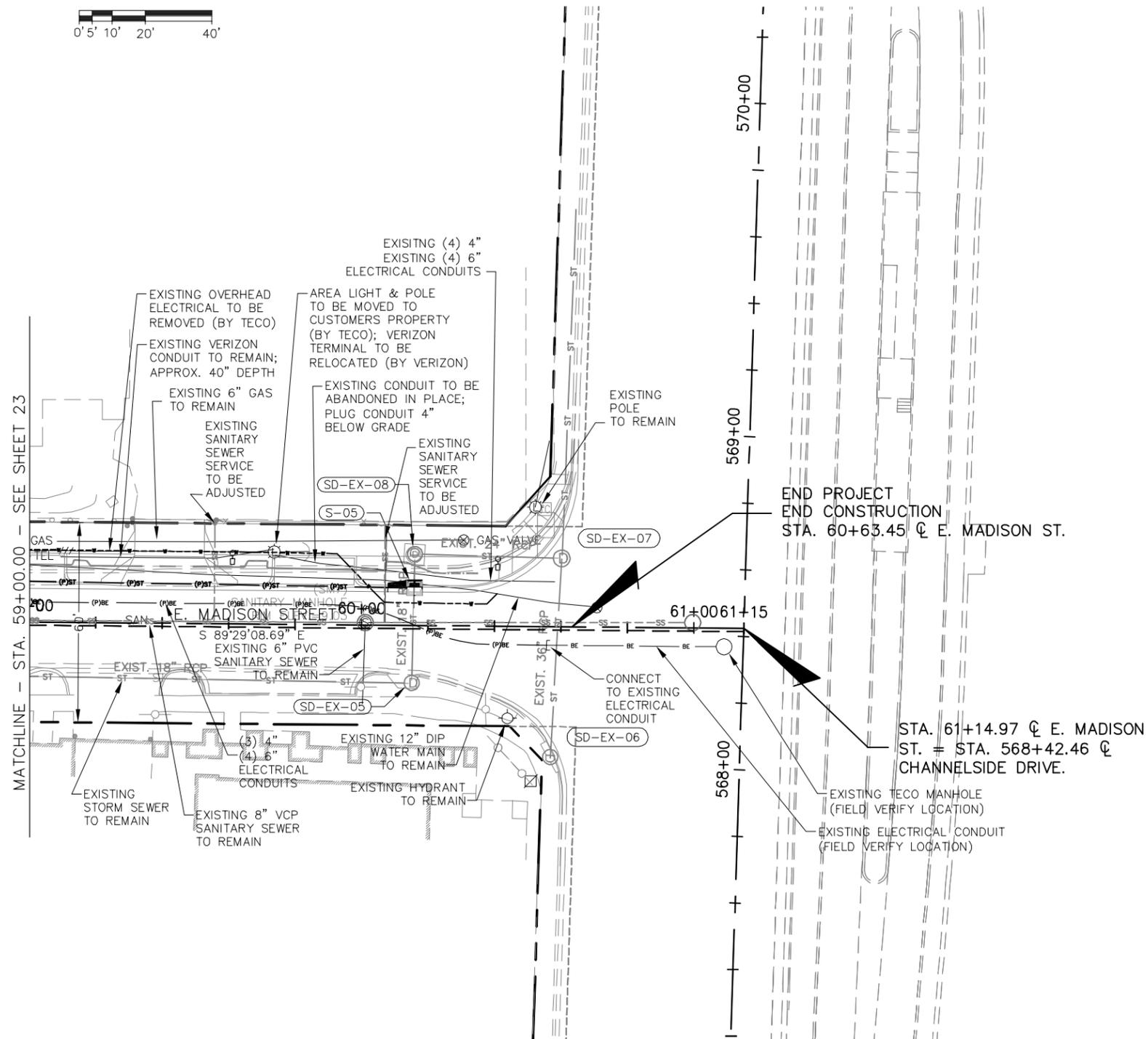
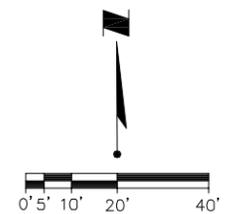
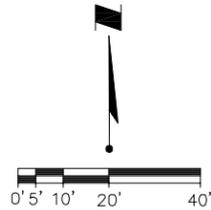
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Approved:	Date:	▲				
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CITY OF TAMPA
ECONOMIC AND URBAN
DEVELOPMENT DEPARTMENT

E. MADISON STREET IMPROVEMENTS
UTILITY ADJUSTMENT (2 OF 3)

Field Book:	
Atlas Sheet:	
File No.	Index No.
Job No. 215611523	215611523-006
Scale: N/A	
SHEET 25	



LEGEND

⊗ PROPOSED TECO LIGHT POLE

NOTES

1. TECO MANHOLES & CONDUIT TO BE PROVIDED BY TECO & INSTALLED BY CONTRACTOR.
2. FIELD ADJUST LOCATION OF MANHOLE TO AVOID CONFLICT WITH EXISTING UTILITIES. COORDINATE WITH TECO AND ENGINEER FOR FINAL LOCATION.
3. CONDUITS TO BE ABANDONED IN PLACE SHALL BE CAPPED AT END. CONDUIT SHALL NOT BE GROUTED.
4. SEE HARDSCAPE PLANS FOR PAVER REPLACEMENT DETAIL AND INFORMATION.
5. COORDINATE WITH TAMPA-HILLSBOROUGH EXPRESSWAY AUTHORITY PRIOR TO COMMENCEMENT OF CONSTRUCTION ALONG MERIDIAN AVENUE RIGHT-OF-WAY.

CITY OF TAMPA WATER DEPARTMENT NOTES

- EXERCISE CAUTION WHEN WORKING NEAR VALVE BOXES, METERS, AND HYDRANTS. IF PROBLEMS OCCUR, CALL CITY OF TAMPA TRIAGE CENTER AT 274-7400.
- PLEASE CONTACT SUNSHINE STATE ONE CALL OF FLORIDA AT 1-800-432-4770 AT LEAST 48 HOURS PRIOR TO CONSTRUCTION TO LOCATE THE CITY OF TAMPA WATERMANS.



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 FLORIDA LICENSE NO. 39991

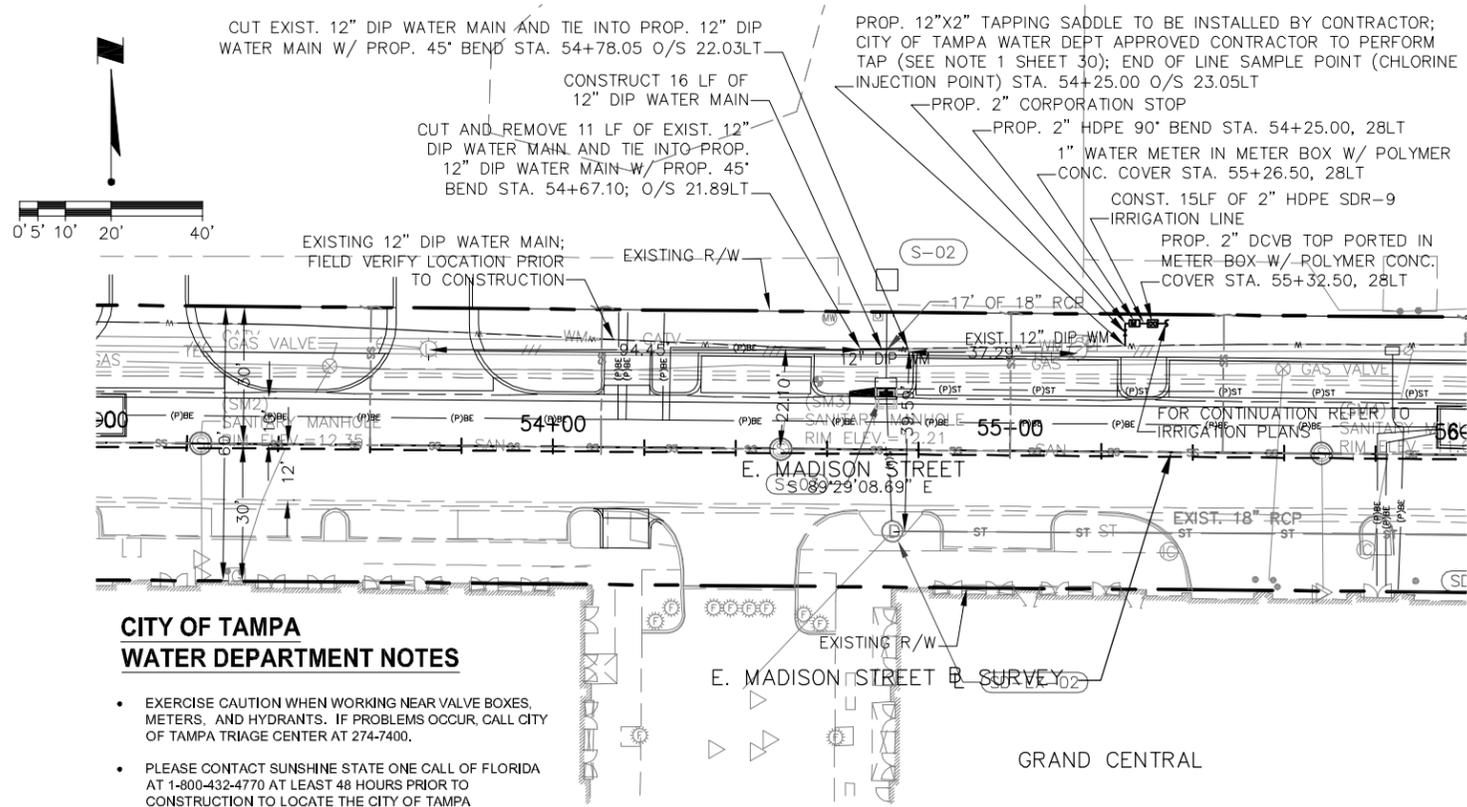
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CITY OF TAMPA
 ECONOMIC AND URBAN
 DEVELOPMENT DEPARTMENT

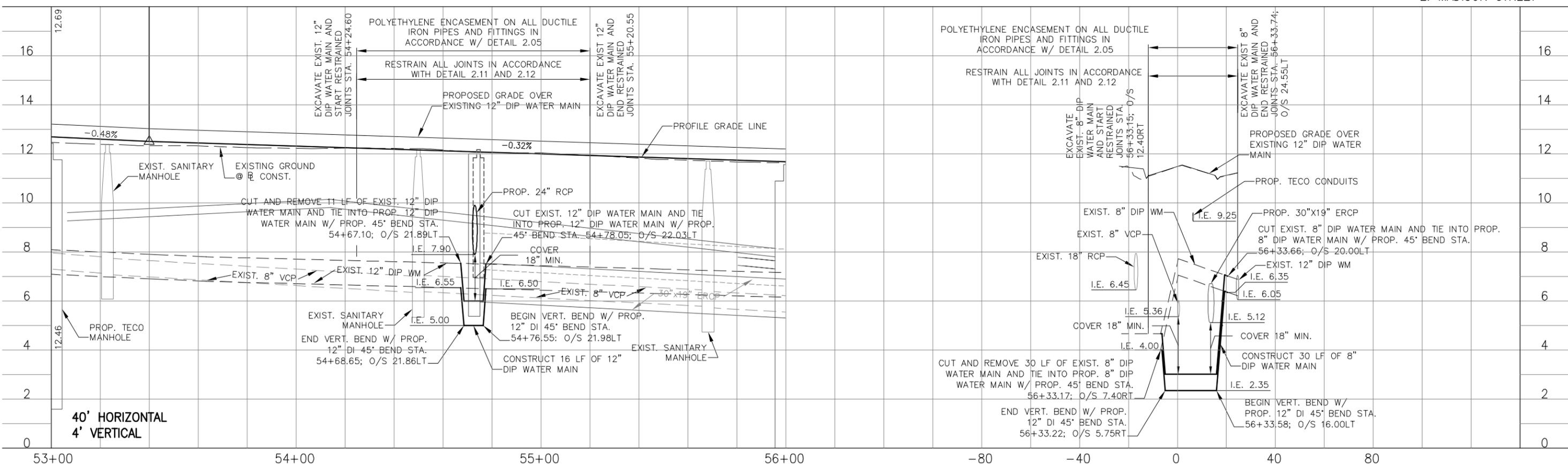
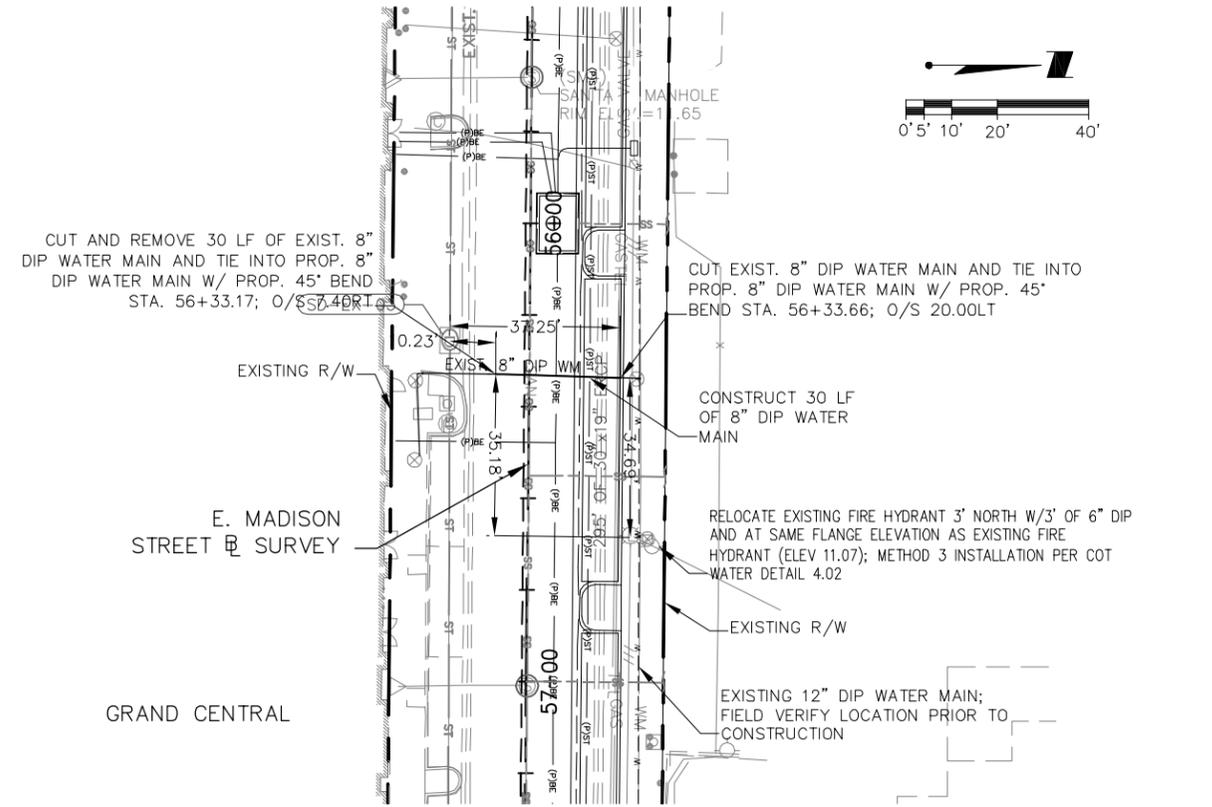
E. MADISON STREET IMPROVEMENTS
 UTILITY ADJUSTMENT (3 OF 3)

Field Book:	
Atlas Sheet:	
File No.	Index No.
Job No. 215611523	215611523-006
Scale: N/A	
SHEET 26	



**CITY OF TAMPA
WATER DEPARTMENT NOTES**

- EXERCISE CAUTION WHEN WORKING NEAR VALVE BOXES, METERS, AND HYDRANTS. IF PROBLEMS OCCUR, CALL CITY OF TAMPA TRIAGE CENTER AT 274-7400.
- PLEASE CONTACT SUNSHINE STATE ONE CALL OF FLORIDA AT 1-800-432-4770 AT LEAST 48 HOURS PRIOR TO CONSTRUCTION TO LOCATE THE CITY OF TAMPA WATERMANS.



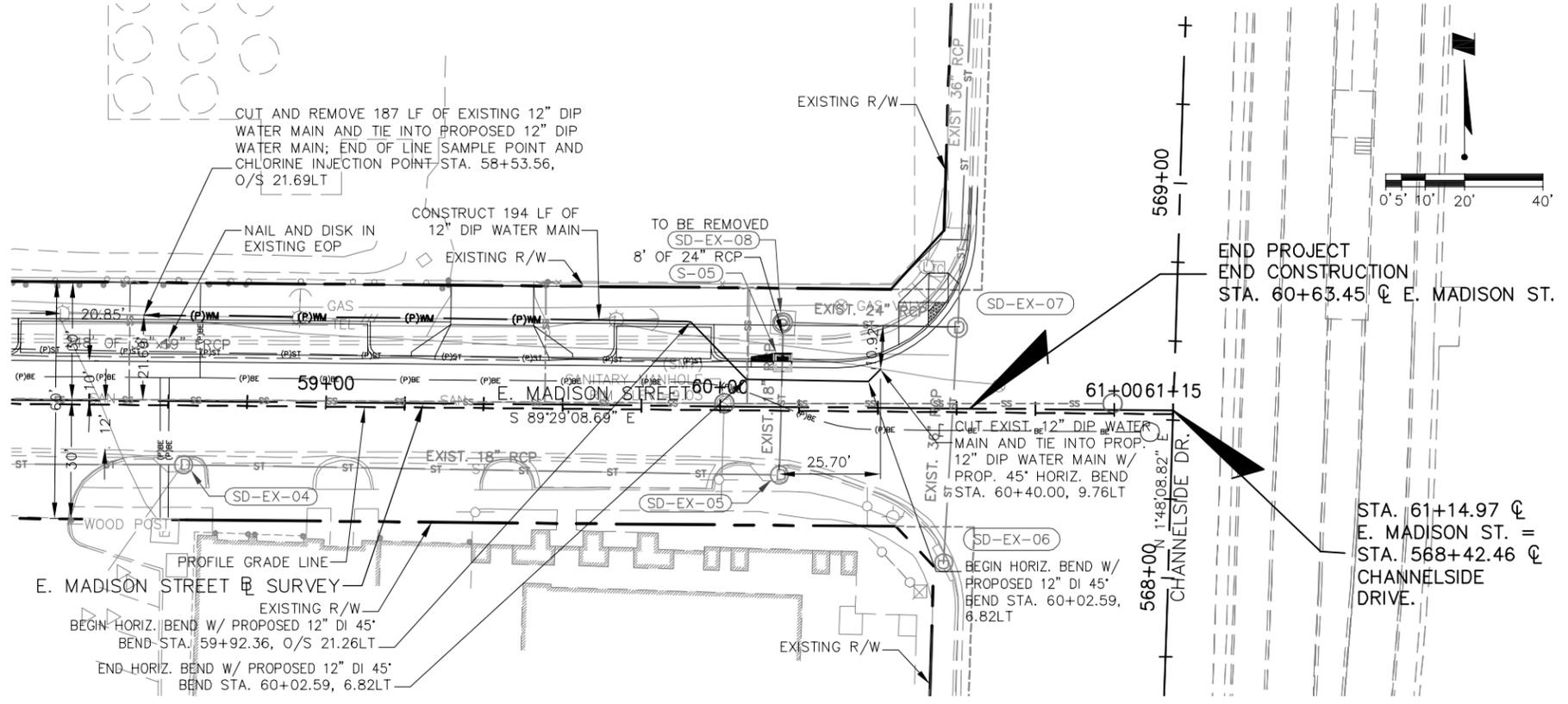
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Checked: JDJ	Date: 11/22/2013	▲			
Reviewed: HS	Date: 11/22/2013	▲			
Approved:	Date:	▲			
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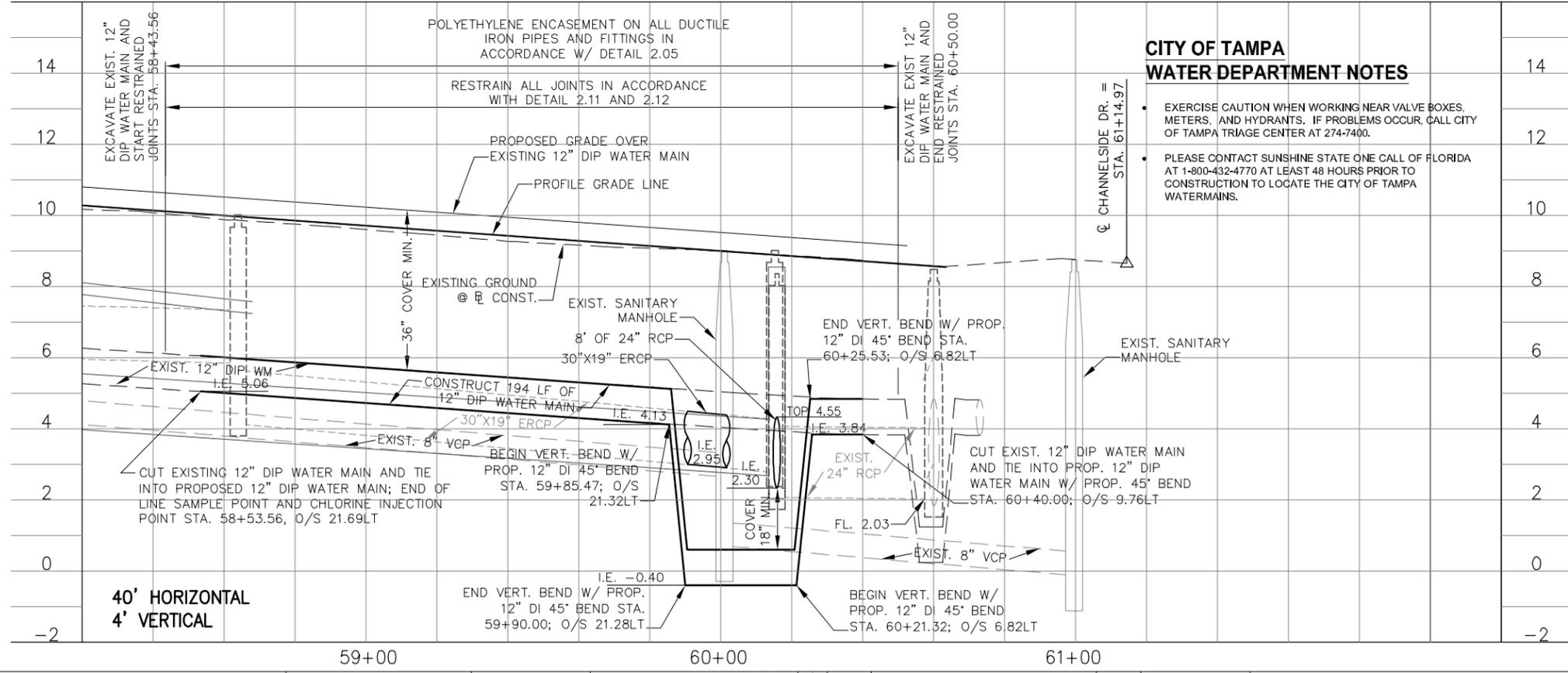
CITY OF TAMPA
ECONOMIC AND URBAN
DEVELOPMENT DEPARTMENT

E. MADISON STREET IMPROVEMENTS
WATER MAIN RELOCATION (1 OF 2)

Field Book:	
Atlas Sheet:	
File No.	Index No.
Job No. 215611523	215611523-019
Scale: N/A	
SHEET 27	



- CITY OF TAMPA WATER SYSTEM NOTES:**
1. WATER SERVICE TO BE PROVIDED BY CITY OF TAMPA WATER DEPARTMENT.
 2. ALL WATER WORK FOR THE CITY SHALL BE PERFORMED IN ACCORDANCE WITH THE TAMPA WATER DEPARTMENT TECHNICAL MANUAL, LATEST EDITION, AND WITH ALL CONSTRUCTION DETAILS THEREIN. THE DETAILS AND STANDARDS DESCRIBED ABOVE SHALL BE CONSIDERED TO BE PART OF THE CONTRACT DOCUMENTS FOR THIS PROJECT.
 3. PRIOR TO PRE-CONSTRUCTION MEETING WITH WATER DEPARTMENT, CONTRACTOR SHALL OBTAIN THE 2002 "TAMPA WATER DEPARTMENT TECHNICAL MANUAL". ALL DEVELOPER INSTALLED CONSTRUCTION MATERIALS AND WORKMANSHIP ARE TO CONFORM WITH THE LATEST CITY OF TAMPA SPECIFICATIONS, AS OUTLINED IN THE TECHNICAL MANUAL.
 4. CONSTRUCTION OF ANY WATER INSTALLATIONS TO BE CITY-OWNED SHALL BE COORDINATED WITH THE WATER DEPARTMENT PRIOR TO THE START OF CONSTRUCTION. CONTRACTOR TO CONTACT TWO TECHNICAL SERVICES @ 622-1911 ABOUT SCHEDULING A PRE-CONSTRUCTION MEETING WITH THE CITY, FOR REVIEW OF INSTALLATION TECHNIQUES AND PROCEDURES, A MINIMUM OF 10 WORKING DAYS PRIOR TO PLANNED CONSTRUCTION.
 5. ALL ELEVATIONS ARE BASED ON NAVD 1988 DATUM UNLESS NOTED OTHERWISE. STATIONING OF THE WATER MAIN AND FITTINGS AS SHOWN HEREON REFERS TO CENTERLINE OF ROADWAY UNLESS OTHERWISE INDICATED.
 6. ALL WATER MAINS SHALL HAVE A MINIMUM COVER OF 36 INCHES UNLESS OTHERWISE NOTED. WATER MAIN SHALL BE LOCATED 5' OFF EDGE OF PAVEMENT UNLESS OTHERWISE INDICATED.
 7. ALL WATER MAINS SHALL BE CONSTRUCTED IN A MANNER SUCH AS TO MAINTAIN A MINIMUM OF THREE (3) FEET HORIZONTAL SEPARATION FROM OTHER UTILITIES, EXCEPT STORM, SANITARY, AND GAS.
 8. IN ACCORDANCE WITH COT WATER DEPARTMENT STANDARD DETAIL 2.06, A SHOCK PAD SHALL BE INSTALLED OVER THE WATER MAIN WHENEVER THE DEPTH OF COVER MUST BE LESS THAN 30". WATER MAIN INSTALLATION WITH <36" COVER MUST BE APPROVED BY THE CITY OF TAMPA WATER DEPARTMENT.
 9. ALL WATER MAIN MATERIALS AND INSTALLATIONS ARE TO BE IN ACCORDANCE WITH THE CITY OF TAMPA SPECIFICATIONS. ALL DUCTILE IRON PIPE (DIP) SHALL BE MANUFACTURED IN ACCORDANCE WITH AWWA STANDARD C-151/A21.51. PIPE SHALL BE LINED WITH A STANDARD THICKNESS CEMENT-MORTAR LINING AND SEAL COATED IN ACCORDANCE WITH THE LATEST EDITION OF AWWA C104/A21.4 AND NSF 61. PIPE SHALL BE PRESSURE CLASS 350. ALL DUCTILE IRON PIPE JOINTS SHALL BE PUSH-ON JOINT OR MECHANICAL JOINT CONFORMING TO AWWA STANDARD C-111/A21.11.
 10. ALL DUCTILE IRON PIPE JOINTS SHALL BE PUSH-ON JOINT OR MECHANICAL JOINT CONFORMING TO AWWA STANDARD C-111/A21.11.
 11. ALL WATER MAIN FITTINGS SHALL BE DUCTILE IRON AND MECHANICAL JOINT. WEDGE-ACTION MJ RESTRAINTS SUCH AS EBBA MEGA-LUG OR APPROVED EQUAL, SHALL BE INSTALLED TO JOIN THE FITTINGS TO THE PIPE.
 12. NO CONCRETE THRUST BLOCKS ARE TO BE USED FOR THRUST RESTRAINT. RESTRAINT OF PUSH-ON DUCTILE IRON PIPE JOINTS, OTHER THAN FOR FITTINGS, SHALL BE IN ACCORDANCE WITH THE RESTRAINT TABLES SHOWN IN THE DETAIL SHEETS, AND AS INDICATED BY THE ENGINEER ON THE PLANS. PUSH-ON PIPE JOINTS SHALL BE RESTRAINED WITH APPROVED GASKET-TYPE (GRIPPER) RESTRAINT DEVICES SUCH AS AMERICAN "FAST-GRIP" OR U.S. PIPE "FIELD-LOK" GASKETS.
 13. BENDS SHALL BE INSTALLED ON DIP WATER MAIN AS NECESSARY, TO MAINTAIN PROPER ALIGNMENT. DIP JOINT DEFLECTION SHALL BE IN ACCORDANCE WITH AWWA C-600, LATEST EDITION, EXCEPT DEFLECTION ALLOWED SHALL BE LESS THAN 80% OF THE DEFLECTION VALUES GIVEN IN THE AWWA DEFLECTION TABLES.
 14. FIRE HYDRANT AND GATE VALVE ASSEMBLIES SHALL CONSIST OF ALL PIPE, VALVES, TEES, FITTINGS AND ANY AND ALL OTHER APPURTENANCES COMPRISING A COMPLETE, WORKING UNIT AS REQUIRED BY THE CITY OF TAMPA SPECIFICATIONS. FIRE HYDRANTS SHALL BE 5-1/4" DNS, WITH BOTTOM OF FLANGE ELEVATION TO BE 3"-6" ABOVE FINISHED GRADE. (SEE CITY OF TAMPA STANDARD DETAILS 4.01 AND 4.02).
 15. ALL FIRE HYDRANTS SHALL BE CONSTRUCTED IN A MANNER THAT MAINTAINS AT LEAST SIX (6) FEET OF CLEARANCE BETWEEN ROADWAY BACK OF CURB AND THE HYDRANT.
 16. SANITARY SEWERS, FORCE MAINS AND STORM SEWERS SHOULD CROSS (UNDER) WATER MAINS. SANITARY SEWERS, FORCE MAINS AND STORM SEWERS CROSSING WATER MAINS SHALL BE LAID TO PROVIDE A MINIMUM VERTICAL CLEARANCE OF 12 INCHES BETWEEN THE INVERT OF THE UPPER PIPE (WATER MAIN) AND THE CROWN OF THE LOWER PIPE (STORM OR SANITARY).
 17. WHEN SANITARY SEWERS, FORCE MAINS AND STORM SEWERS MUST CROSS A WATER MAIN WITH LESS THAN 12 INCHES VERTICAL DISTANCE, BOTH THE SEWER AND WATER MAIN SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE (DIP) AT THE CROSSING (SANITARY SEWER MAIN MAY BE CONSTRUCTED OF PVC MEETING AWWA C-900 STANDARDS; DIP IS NOT REQUIRED FOR STORM SEWERS IF IT IS NOT AVAILABLE IN THE SIZE PROPOSED). SUFFICIENT LENGTHS OF DIP MUST BE USED TO PROVIDE A MINIMUM SEPARATION OF 10 FEET BETWEEN ANY TWO JOINTS. ALL JOINTS ON THE WATER MAIN WITHIN 20 FEET OF THE CROSSING MUST BE LEAK FREE AND MECHANICALLY RESTRAINED. A MINIMUM VERTICAL CLEARANCE OF 6 INCHES MUST BE MAINTAINED AT THE CROSSING.
 18. WHERE THERE IS NO ALTERNATIVE TO SEWER PIPES CROSSING (OVER) A WATER MAIN, THE CRITERIA FOR MINIMUM SEPARATION OF 12 INCHES BETWEEN LINES AND 10 FEET BETWEEN JOINTS SHALL BE REQUIRED.
 19. ALL CROSSINGS SHALL BE ARRANGED SO THAT THE JOINTS OF THE CROSSING PIPES ARE EQUIDISTANT FROM THE POINT OF CROSSING (PIPES CENTERED ON THE CROSSING).
 20. A MINIMUM 6' HORIZONTAL SEPARATION SHALL BE MAINTAINED BETWEEN ANY TYPE OF SEWER/STORM AND WATER MAIN IN PARALLEL INSTALLATIONS. IN CASES WHERE IT IS NOT POSSIBLE TO MAINTAIN A 10 FOOT HORIZONTAL SEPARATION BETWEEN ANY TYPE OF PARALLEL SEWER AND WATER MAIN, THE WATER MAIN MUST BE LAID IN A SEPARATE TRENCH OR ON AN UNDISTURBED EARTH SHELF LOCATED ON ONE SIDE OF THE SEWER OR FORCE MAIN AT SUCH AN ELEVATION THAT THE BOTTOM OF THE WATER MAIN IS AT LEAST 12 INCHES ABOVE THE TOP OF THE SEWER.
 21. WHERE IT IS NOT POSSIBLE TO MAINTAIN A VERTICAL DISTANCE OF 12 INCHES OR A HORIZONTAL DISTANCE OF 6 FEET IN PARALLEL INSTALLATIONS, THE WATER MAIN SHALL BE CONSTRUCTED OF DIP AND THE SEWER OR FORCE MAIN SHALL BE CONSTRUCTED OF DIP (IF AVAILABLE IN SIZE PROPOSED) WITH A MINIMUM VERTICAL DISTANCE OF 6 INCHES. THE WATER MAIN SHOULD ALWAYS BE ABOVE THE SEWER. JOINTS ON THE WATER MAIN SHALL BE LOCATED AS FAR APART AS POSSIBLE FROM JOINTS ON THE SEWER OR FORCE MAIN (STAGGERED JOINTS).
 22. IN AREAS OF HIGH GROUND WATER, UNSATISFACTORY SOILS, CROSSING GAS LINES, OR AS SPECIFIED BY THE ENGINEER, THE WATER MAIN AND APPURTENANCES WILL BE INSTALLED IN LOOSE POLYETHYLENE ENCASEMENT NOT LESS THAN 8 MILS THICK IN ACCORDANCE WITH AMERICAN NATIONAL STANDARDS INSTITUTE SPECIFICATION A21.5 AND CITY OF TAMPA STANDARD DETAIL 2.05.
 23. CLEARANCE BETWEEN ALL TREES AND WATER MAINS SHALL MEET CITY OF TAMPA PARKS DEPARTMENT LATEST REQUIREMENTS. NO TREE SHALL BE PLANTED WITHIN 10 FEET OF INSTALLED OR EXISTING WATER MAINS.



CITY OF TAMPA WATER DEPARTMENT NOTES

- EXERCISE CAUTION WHEN WORKING NEAR VALVE BOXES, METERS, AND HYDRANTS. IF PROBLEMS OCCUR, CALL CITY OF TAMPA TRIAGE CENTER AT 274-7400.
- PLEASE CONTACT SUNSHINE STATE ONE CALL OF FLORIDA AT 1-800-432-4770 AT LEAST 48 HOURS PRIOR TO CONSTRUCTION TO LOCATE THE CITY OF TAMPA WATER MAINS.

WATER SYSTEM TESTING REQUIREMENTS FOR WATER FACILITIES CONSTRUCTED FOR THE CITY

1. ALL COMPONENTS OF THE WATER SYSTEM, INCLUDING FITTINGS, HYDRANTS, CONNECTIONS, AND VALVES SHALL BE PROPERLY PRESSURE TESTED AND ACCEPTED BY THE OWNER'S ENGINEER. PRESSURE TESTS TO BE IN ACCORDANCE WITH WATER DEPARTMENT SPECIFICATIONS. CONTRACTOR TO NOTIFY OWNER'S ENGINEER AND CITY INSPECTOR A MINIMUM OF 3 WORKING DAYS IN ADVANCE OF PERFORMING TESTS.
2. CONTRACTOR SHALL PRESSURE TEST WATER MAINS AT 150 PSI FOR A PERIOD OF 2 HOURS IN ACCORDANCE WITH AWWA C600-87 STANDARDS. THE CONTRACTOR SHALL MAKE ALL NECESSARY APPLICATIONS AND ARRANGEMENTS.
3. CONTRACTOR TO PERFORM CHLORINATION AND COORDINATE BACTERIOLOGICAL SAMPLING WITH THE CITY OF TAMPA CONSTRUCTION INSPECTION SECTION IN ACCORDANCE WITH TAMPA WATER DEPARTMENT TECHNICAL MANUAL AND AWWA SPECIFICATION C651. CONTRACTOR TO OBTAIN SAMPLE CLEARANCE ON DOMESTIC WATER SYSTEM. ALL TEST POINTS AND CHLORINATION POINTS PIPING SHALL BE COMPLETELY REMOVED PRIOR TO FINAL ACCEPTANCE. THE CORPORATION STOP SHALL BE REMOVED AND THE MAIN PLUGGED AFTER OPERATION (SEE CITY OF TAMPA STANDARD DETAIL 2.17).

<p>2205 North 20th Street, Tampa, FL 33605 800.643.4336 • 813.223.9500 • F 813.223.0009 • www.stantec.com Stantec Consulting Services, Inc. • CA# 27013 • FL Lic. # LC-26000314</p>	Drawn: RND	Date: 11/22/2013	▲	<p>CITY OF TAMPA ECONOMIC AND URBAN DEVELOPMENT DEPARTMENT</p>	<p>Field Book: Atlas Sheet: File No. _____ Index No. _____ Job No. 215611523 Scale: N/A SHEET 28</p>
	Designed: RND	Date: 11/22/2013	▲		
	Checked: JDJ	Date: 11/22/2013	▲		
	Reviewed: HS	Date: 11/22/2013	▲		
	Approved: _____	Date: _____	▲		
	Approved: _____	Date: _____	No: _____ Date: _____		

K:\Standard Details 02\201

Suitable backfill compacted in 12-inch lifts to a minimum 98% of the maximum modified proctor density

Suitable backfill compacted in 6-inch lifts to a minimum 98% of the maximum modified proctor density

Compaction by hand in layers of 6 inches, lightly consolidated to centerline

NOTES:

- Type 2 trench is defined as a flat-bottom trench. Lightly consolidate backfill to centerline of pipe.
- This standard shall be utilized in the absence of specific standards. The standard of the agency controlling the Right-of-Way shall govern unless otherwise directed by the Engineer.
- Suitable backfill shall be defined as material free from cinders, ashes, refuse, clay, organic matter, boulders, rocks or stones, or other material that in the opinion of the Engineer is unsuitable.

TAMPA WATER DEPARTMENT	APPROVED	REVISED	TYPICAL TRENCHING, BEDDING AND BACKFILL DETAIL FOR PAVED AREAS	2.01
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K:\Standard Details 02\202

Suitable backfill compacted in 12-inch lifts to a minimum 98% of the maximum modified proctor density

Compaction by hand in layers of 6 inches, lightly consolidated to centerline

NOTES:

- Type 2 trench is defined as a flat-bottom trench. Lightly consolidate backfill to centerline of pipe.
- This standard shall be utilized in the absence of specific standards. The standard of the agency controlling the Right-of-Way shall govern unless otherwise directed by the Engineer.
- Suitable backfill shall be defined as material free from cinders, ashes, refuse, clay, organic matter, boulders, rocks or stones, or other material that in the opinion of the Engineer is unsuitable.

TAMPA WATER DEPARTMENT	APPROVED	REVISED	TYPICAL TRENCHING, BEDDING AND BACKFILL DETAIL FOR NON-PAVED AREAS	2.02
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K:\Standard Details 02\203

METHOD A

Polyethylene tube is cut into lengths approximately two feet longer than the pipe section and placed around it. After the pipe joint is assembled, the polyethylene tube is made to overlap the joint and the overlap secured in place. Since the tube is considerably longer than the barrel of pipe, it is made to fit snugly by folding over at the top and securing at quarter points along the pipe section.

METHOD B

Polyethylene tube is cut one foot shorter than the length of the pipe section. After placement of the pipe, it is folded and secured snugly overall. A three foot length of polyethylene tube placed over the end of the preceding section is then pulled in place over the joint after assembly and secured.

METHOD C

Polyethylene sheet is cut to a length two feet longer than the pipe section. The sheet is wrapped around the pipe so that it overlaps circumferentially over the top quadrant of the pipe, then secured. After joint assembly, the surplus length of polyethylene film is secured around the joint, providing an overlap of each joint. Tape at each joint or at 3' intervals in between.

NOTES:

- Use blue polyethylene film and tape only.
- Polyethylene film shall be a minimum of 8 mil. thickness.

TAMPA WATER DEPARTMENT	APPROVED	REVISED	INSTALLATION OF POLYETHYLENE ENCASEMENT DETAIL	2.03
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K:\Standard Details 02\207

DIMENSIONS OF THRUST BLOCKS FOR GOOD SOIL

SIZE (D)	4"	6"	8"	12"	16"	20"	24"
THRUST (lbs.)	674	1393	2396	5097	8957	12,649	19,472
BEARING AREA (ft. ²)	0.31	1.06	1.80	3.83	6.65	10.25	14.63
CONCRETE (yds. ³)	0.005	0.005	0.033	0.104	0.239	0.459	0.793
H (ft.)	0.6	0.8	1.1	1.6	2.1	2.6	3.1
W (ft.)	0.9	1.3	1.6	2.4	3.2	3.9	4.7
X (ft.)	0.4 Min.	0.8 Min.	0.8 Min.	1.2 Min.	1.6 Min.	2.0 Min.	2.3 Min.

11-1/4" BEND

THRUST (lbs.)	1342	2772	4789	10,146	17,628	27,166	38,757
BEARING AREA (ft. ²)	1.01	2.08	3.58	7.61	13.22	20.37	29.07
CONCRETE (yds. ³)	0.012	0.035	0.080	0.252	0.580	1.113	1.792
H (ft.)	0.8	1.2	1.5	2.3	3.0	3.7	4.4
W (ft.)	1.2	1.8	2.1	3.4	4.5	5.5	6.6
X (ft.)	0.6 Min.	0.8 Min.	1.2 Min.	1.7 Min.	2.2 Min.	2.8 Min.	3.0 Min.

22-1/2" BEND

THRUST (lbs.)	2632	5437	9550	19,901	34,579	53,288	76,924
BEARING AREA (ft. ²)	1.97	4.08 <td>7.02</td> <td>14.93</td> <td>25.94</td> <td>39.88</td> <td>57.04</td>	7.02	14.93	25.94	39.88	57.04
CONCRETE (yds. ³)	0.029	0.067	0.198	0.620	1.387	2.501	3.517
H (ft.)	1.2	1.7	2.2	3.2	4.2	5.2	6.2
W (ft.)	1.7	2.5	3.2	4.7	6.2	7.7	9.3
X (ft.)	0.9 Min.	1.2 Min.	1.6 Min.	2.4 Min.	3.0 Min.	3.0 Min.	3.0 Min.

45° BEND

THRUST (lbs.)	4863	10,047	17,285	36,772	63,894	96,463	140,474
BEARING AREA (ft. ²)	3.65	7.53	12.98	27.58	47.91	73.84	105.34
CONCRETE (yds. ³)	0.068	0.203	0.459	1.360	2.561	4.200	6.496
H (ft.)	1.6	2.2	3.0	4.3	5.7	7.0	8.4
W (ft.)	2.3	3.4	4.4	6.4	8.3	10.3	12.6
X (ft.)	1.2 Min.	1.7 Min.	2.2 Min.	3.0 Min.	3.0 Min.	3.0 Min.	3.0 Min.

90° BEND

NOTES:

- Concrete shall be kept of sufficient distance from joint for removal of all joint accessories including bells.
- All bearing surfaces to be carried to undisturbed soil.
- This table shows the minimum size thrust blocks for soil bearing pressure of 2000 psf and an internal pressure of 150 psi. Cover to T.O.P. is 3 feet for 12" and smaller mains; 4 feet for 16" and larger mains.
- Poor and wet soil (silty soils, clay, muck and peat) will require larger thrust blocks.
- Fittings shall be completely polywrapped prior to pouring thrust blocks. *WARNING

TAMPA WATER DEPARTMENT	APPROVED	REVISED	THRUST BLOCKS FOR BENDS	2.07
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K:\Standard Details 02\211

Fitting	RESTRAIN "A" (LF)								
	4"	6"	8"	12"	16"	20"	24"	30"	36"
11-1/4"	3	4	6	8	9	10	12	15	17
22-1/2"	6	9	12	16	17	21	25	30	35
45°/Offset	13	18	24	34	36	44	52	62	73
90°	31	44	58	82	87	106	125	151	176
Plug/Cap	55	78	102	143	143	174	204	245	285

NOTES:

- This table is based on:
 - maximum test pressure of 150 psi
 - laying condition type 2 (see Details 2.01 and 2.02)
 - poor soil conditions
 - using D.I.P.
 - 3 feet of cover for 12" and smaller mains; 4 feet of cover for 16" and larger mains
 - horizontal bends only - Engineer to submit calculations for vertical restraints
- For polywrapped D.I.P., multiply the footage by 1.25
- For PVC pipe, multiply footage by 1.2.
- Restrained pipe shall be manufactured restrained pipe, push-on restraints or mechanical joint pipe restrained by Megadug or equivalent.
- Any additional fittings within the restrained section shall be restrained accordingly.

TAMPA WATER DEPARTMENT	APPROVED	REVISED	RESTRAINED JOINT STANDARD FOR BENDS, PLUGS, AND CAPS	2.11
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K:\Standard Details 02\217

1" min. curb stop w/ elbow & nipples or hose bibb

30" Min.

1" min. HDPE tubing

1" min. corporation stop

Notes:

- Water outlet shall be held up off the ground so as not to interfere with the sampling process.
- Corporation stop to be removed and plugged after operation.

TAMPA WATER DEPARTMENT	APPROVED	REVISED	TEMPORARY SAMPLE TAP INSTALLATION	2.17
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K:\Standard Details 02\219

3 wraps minimum

NOTES:

- To ensure proper adhesion, each pipe run shall be wrapped with a continuous run of tape.
- All tape shall be min. 2" blue vinyl tape for potable water.

TAMPA WATER DEPARTMENT	APPROVED	REVISED	PIPE IDENTIFICATION DETAIL D.I.P. ONLY	2.19
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K:\Standard Details 02\201

WIRE MESH (6 GAUGE 4" X 4" W.W.F.)

CONCRETE PAD (See notes)

3000 psi CONC. PAD (See notes)

GRADE

6"

GATE VALVE WITH BOX & COVER

WOOD OR CONCRETE BLOCK

CONCRETE PAD

SECTION A-A

Notes:

- Pad required for all applications.
- Cast iron valve boxes shall be firmly supported and centered plumb over the operating nut of the valve by the contractor with valve box cover flush with the surface of the finished pavement or at such other level as may be directed.
- Locate discs required for all valves.

TAMPA WATER DEPARTMENT	APPROVED	REVISED	TYPICAL GATE VALVE VALVE BOX AND PAD INSTALLATION	3.01
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UNFLANGE 1300 RESTRAINER

UNFLANGE 1350 RESTRAINER

PVC

METHOD OF RESTRAINING PUSH-ON JOINT PIPE

RESTRAINING ROD

PVC

RESTRAINER - UNFLANGE 1350

DETAIL PUSH-ON JOINT

RESTRAINING ROD

D.I.P.

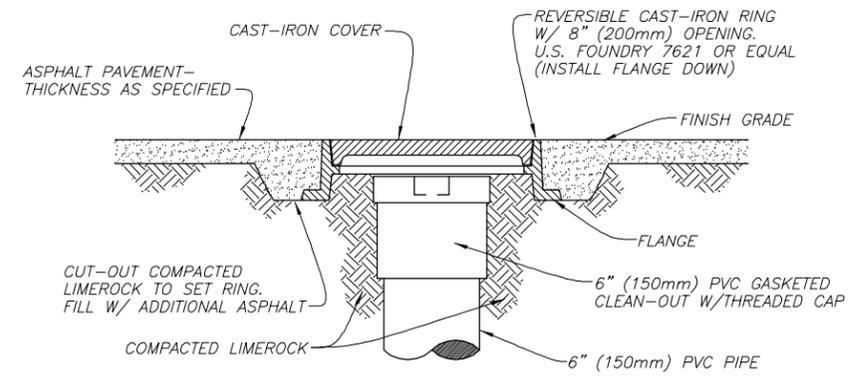
PVC

RESTRAINER - UNFLANGE 1300

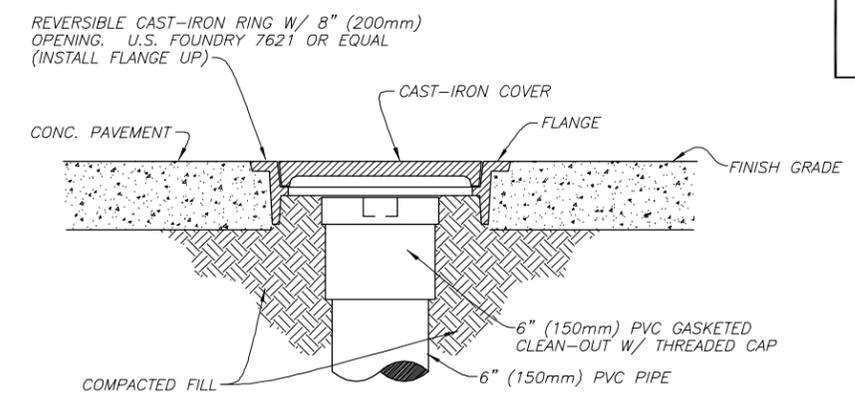
DETAIL M.J. JOINT

RESTRAINED JOINT FOR PVC C-900 PIPE (4" TO 12") N.T.S.

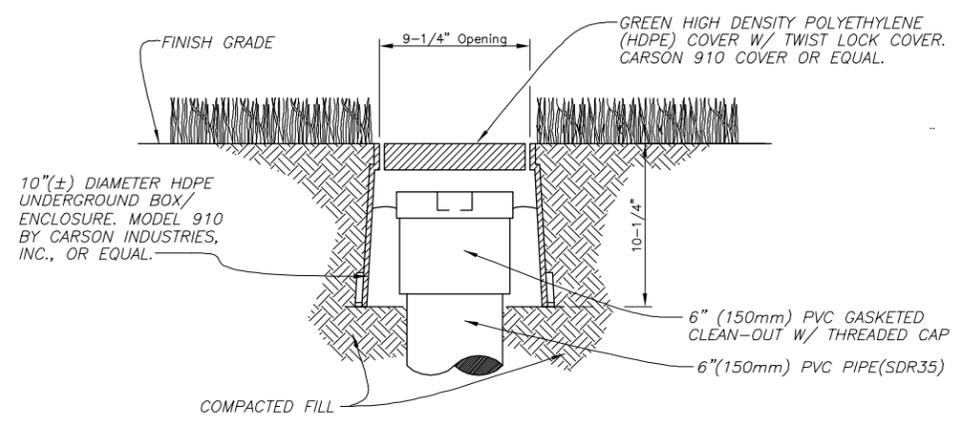
B - - -



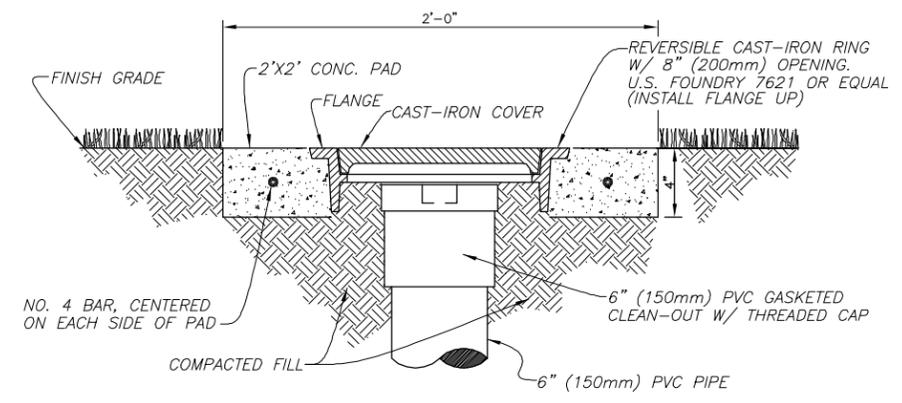
CLEAN-OUT W/ COVER FOR ASPHALT PAVED AREAS
Not to Scale



CLEAN-OUT W/ COVER FOR CONCRETE PAVED AREAS
Not to Scale



CLEAN-OUT W/ COVER FOR GRASS (NON-VEHICULAR TRAFFIC) AREAS
Not to Scale



CLEAN-OUT W/COVER FOR GRASSED AREAS W/VEHICULAR TRAFFIC
Not to Scale

NOTES:

- 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.
- PVC cap may be provided with recessed nut.
- Cast iron cover shall be provided with an embossed letter "S" for identification, HDPE cover shall be marked "SEWER" for identification.
- Cast iron ring and cover, or HDPE box 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.
- All clean-outs on this project shall be one of the four types shown on this sheet. Field conditions will determine which type.

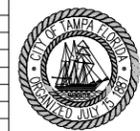
CLEANOUT COVER DETAILS
Not to Scale

User: see8 Drawing Name: K:\Drafting\Standard\Details\CURRENT DETAILS\DETAILS ALL STANDARDS FOR TECH MANUAL.dwg Layout: Cleanout Cover Details Plotted: 2/3/2012 9:38:01 AM CIE: MW-TOSHIBA-CTB Default: LW: 9mm

JACINTO CARLOS FERRAS, P.E. #49454 DESIGN DIVISION HEAD WASTEWATER DEPARTMENT	No.	DATE	REVISIONS	DES: DR	CITY of TAMPA WASTEWATER DEPARTMENT	STANDARD DETAILS CLEANOUT COVER DETAILS	W.O. ----
	3			DRN: BL			SHEET
	2			CKD:			8
	1			DATE:			OF 15



Drawn: RND	Date: 11/22/2013	▲			
Designed: RND	Date: 11/22/2013	▲			
Checked: JDJ	Date: 11/22/2013	▲			
Reviewed: HS	Date: 11/22/2013	▲			
Approved:	Date:	▲			
Approved:	Date:	No:	Date:	Revision:	By:

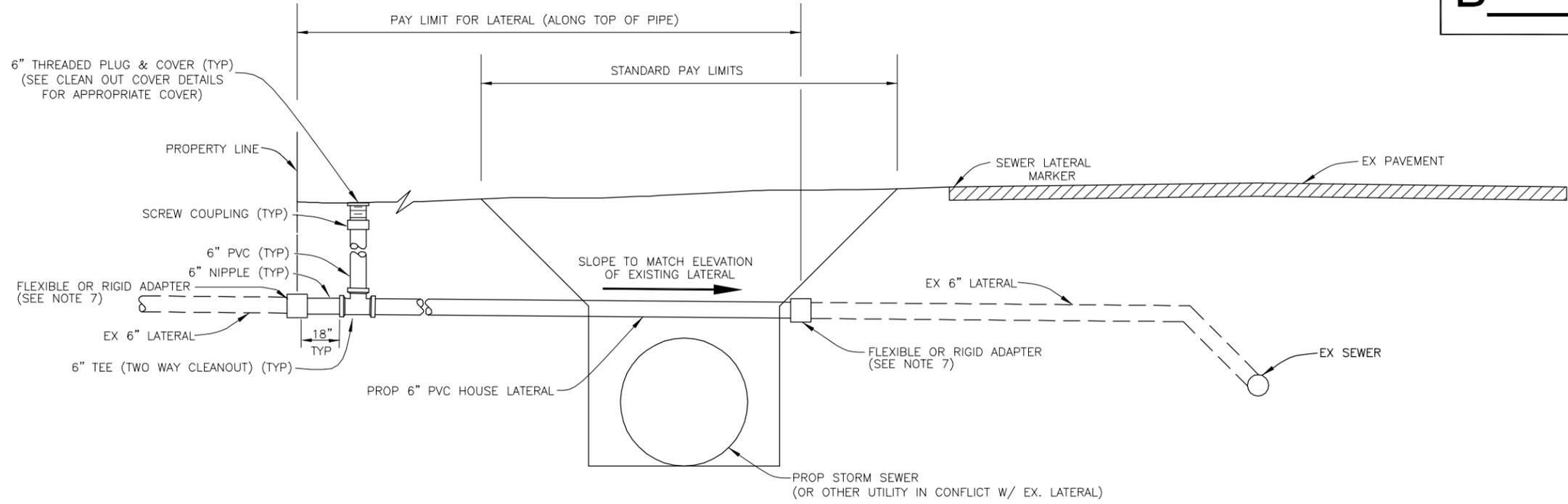


CITY OF TAMPA
ECONOMIC AND URBAN
DEVELOPMENT DEPARTMENT

E. MADISON STREET IMPROVEMENTS
WASTEWATER DETAILS (1 OF 2)

Field Book:	
Atlas Sheet:	
File No.	Index No.
Job No. 215611523	215611523-022
Scale: N/A	
SHEET 3/	

B -



NOTES

- 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 AND WILL BE PAID FOR UNDER SEPARATE PAY ITEM.
- SEWER SERVICE MUST BE MAINTAINED DURING CONSTRUCTION.
- 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.
- THE MINIMUM DIAMETER OF ALL HOUSE LATERALS SHALL BE 6".
- 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 PRESSURE CLASS 350 WITH 40 MILS (MDFT) OF PROTECTO 401 INTERIOR COATING.
- 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.
- 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 FERRO 1000 SERIES FLEXIBLE COUPLING WITH STAINLESS STEEL SHEAR RING OR APPROVED EQUAL.

HOUSE LATERAL REPLACEMENT DETAIL

User: see8 Drawing Name: K:\Drafting\Standard\Details\CURRENT DETAILS\DETAILS ALL STANDARDS FOR TECH MANUAL.dwg Layout: Ex. Lateral Connections Detail Plotted: 2/3/2012 9:37:50 AM CIE: WW-TOSHIBA-CTB Default.LW: 9mm

JACINTO CARLOS FERRAS, P.E. #49454 DESIGN DIVISION HEAD WASTEWATER DEPARTMENT	No.	DATE	REVISIONS	DES: DR	CITY of TAMPA WASTEWATER DEPARTMENT	STANDARD DETAILS EXISTING LATERAL CONNECTIONS (REPLACEMENT FOR UTILITY CONFLICTS)	W.O. ----
	3			DRN: BL			SHEET
	2			CKD:			7
	1			DATE:			OF 15



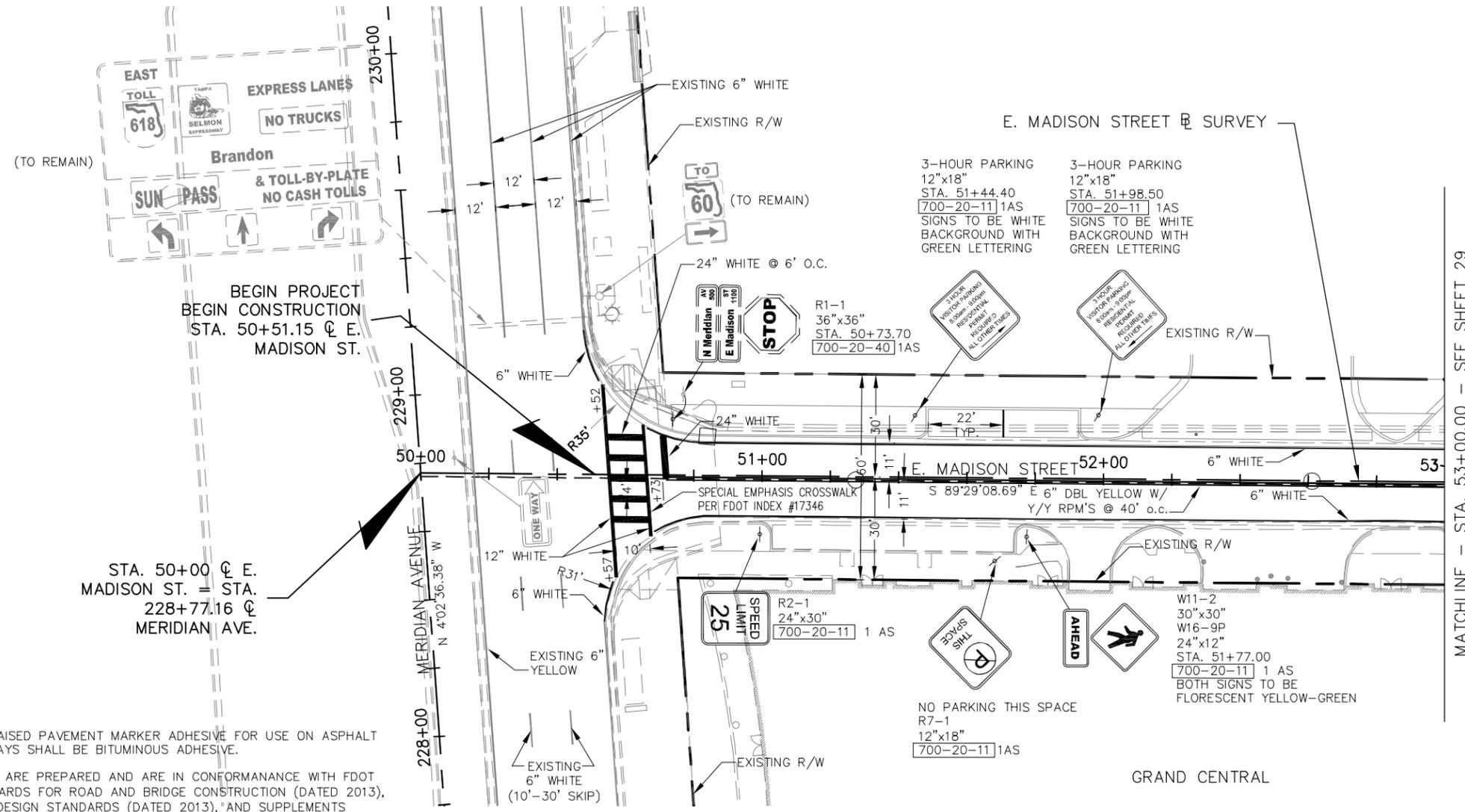
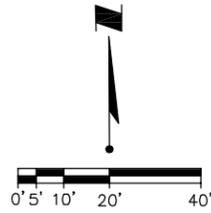
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Reviewed: HS	Date: 11/22/2013	▲			
Approved:	Date:	▲			
Approved:	Date:	No:	Date:	Revision:	By:



CITY OF TAMPA
ECONOMIC AND URBAN
DEVELOPMENT DEPARTMENT

E. MADISON STREET IMPROVEMENTS
WASTEWATER DETAILS (2 OF 2)

Field Book:	
Atlas Sheet:	
File No.	Index No.
Job No. 215611523	215611523-022
Scale: N/A	
SHEET 32	



SIGNING AND PAVEMENT MARKING NOTES:

1. ALL PAVEMENT MARKINGS SHALL BE ALKALINE BASE THERMOPLASTIC.
2. ALL EXISTING TRAFFIC SIGNS SHALL BE MAINTAINED BY THE CONTRACTOR DURING CONSTRUCTION UNTIL THEY ARE REMOVED AND/OR REPLACED BY THE NEW SIGNS UPON COMPLETION OF THE PROJECT. ALL EXISTING SIGN POSTS TO BE REPLACED.
3. ALL PROPOSED TRAFFIC SIGN POSTS SHALL CONFORM (MAKE, DESIGN) WITH POSTS NOW IN USE BY THE CITY OF TAMPA TRAFFIC SERVICES DIVISION.
4. CAUTION SHALL BE EXERCISED WHILE RELOCATING EXISTING SIGNS TO PREVENT UNNECESSARY DAMAGE TO THE SIGNS. IF THE SIGNS ARE DAMAGED BEYOND USE, AS DETERMINED BY THE ENGINEER, SIGNS SHALL BE REPLACED BY THE CONTRACTOR AT HIS EXPENSE.
5. THE SIGN LOCATIONS SHOWN ARE APPROXIMATE AND MAY REQUIRE FIELD ADJUSTMENT AS DIRECTED BY THE ENGINEER.
6. THE RAISED PAVEMENT MARKER ADHESIVE FOR USE ON ASPHALT HIGHWAYS SHALL BE BITUMINOUS ADHESIVE.
7. PLANS ARE PREPARED AND ARE IN CONFORMANCE WITH FDOT STANDARDS FOR ROAD AND BRIDGE CONSTRUCTION (DATED 2013), FDOT DESIGN STANDARDS (DATED 2013), AND SUPPLEMENTS THERETO.
8. ALL PAVEMENT MARKINGS THAT ARE NO LONGER APPLICABLE ARE TO BE REMOVED BY HYDROBLASTING.
9. EXISTING SIGNS AND POSTS THAT ARE IN GOOD CONDITION TO BE RELOCATED ARE TO BE PROPERLY REMOVED AND STORED ON-SITE DURING CONSTRUCTION. EXISTING SIGNS IN POOR CONDITION THAT ARE TO BE RELOCATED ARE TO BE REPLACED WITH NEW SIGNS AND POSTS.
10. COORDINATE LOCATIONS OF PROPOSED SIGNS WITH EXISTING AND / OR PROPOSED LANDSCAPING TO AVOID OBSTRUCTIONS.



HAMDREZA SAHEBKAR, P.E.
FLORIDA LICENSE NO. 39991

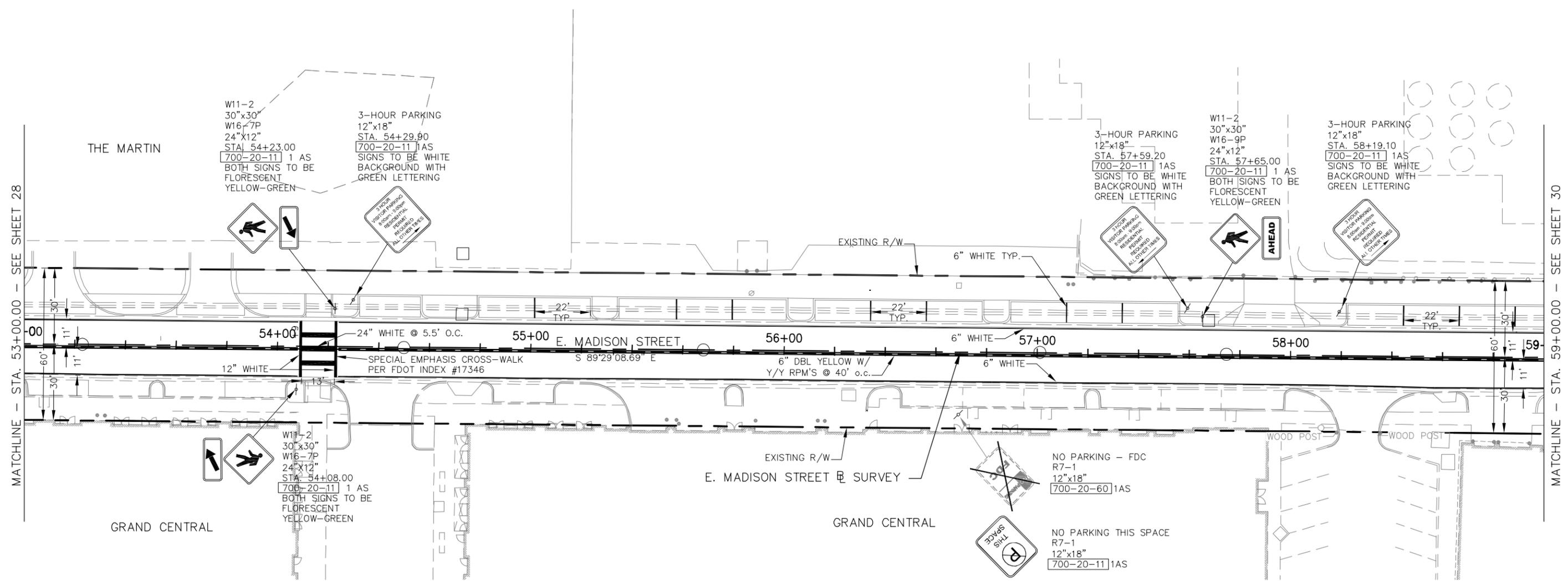
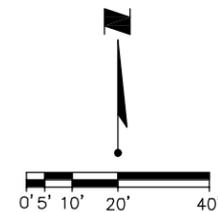
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Approved: [Signature]	Date: [Date]	By: [Signature]
Approved: [Signature]	Date: [Date]	No: [Date] Revision: [Date] By: [Signature]



CITY OF TAMPA
ECONOMIC AND URBAN
DEVELOPMENT DEPARTMENT

E. MADISON STREET IMPROVEMENTS
SIGNAGE AND STRIPING (1 OF 3)

Field Book:	
Atlas Sheet:	
File No.	Index No.
Job No. 215611523	215611523-007
Scale: N/A	
SHEET 33	



HAMDREZA SAHEBKAR, P.E.
FLORIDA LICENSE NO. 39991

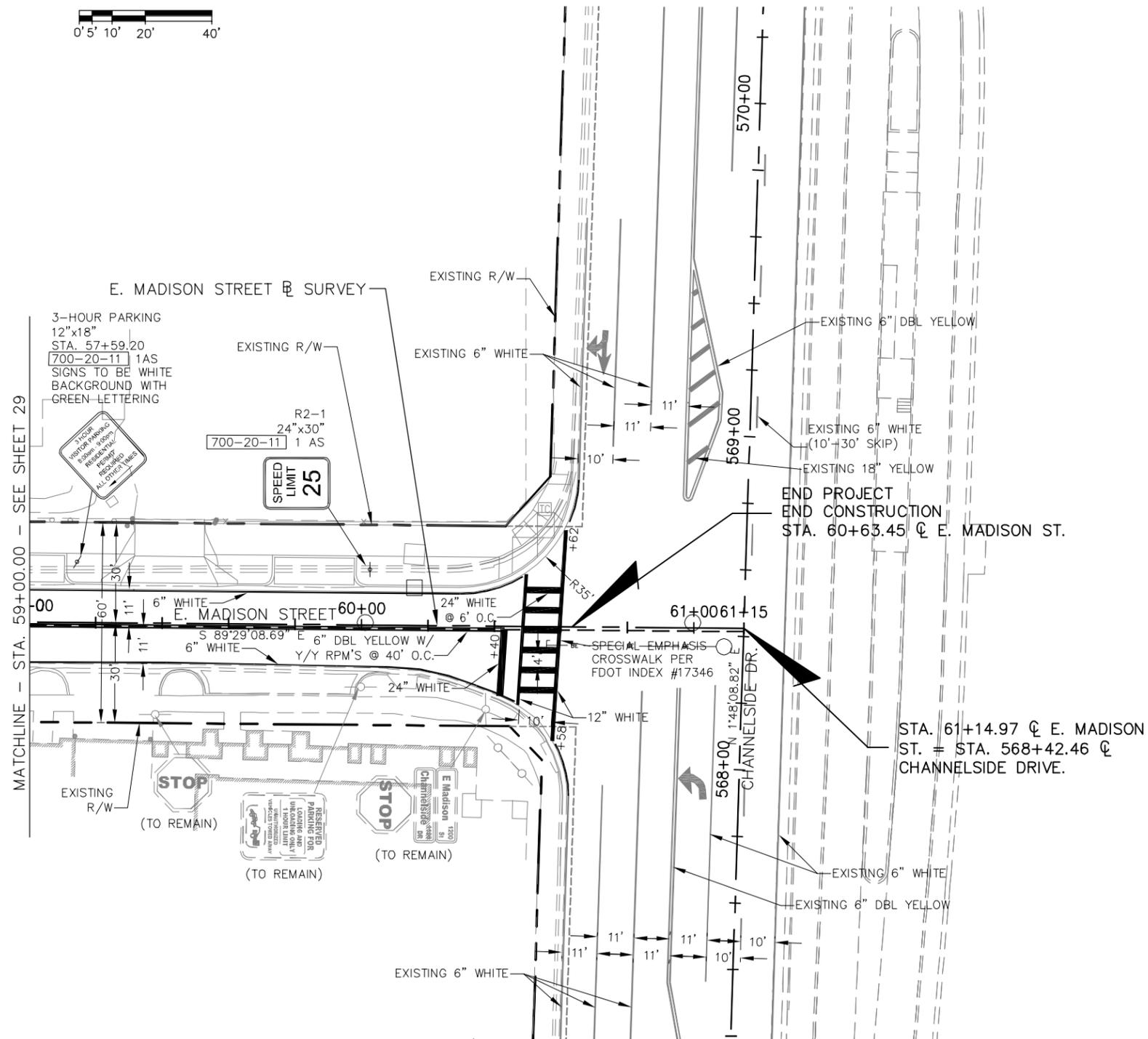
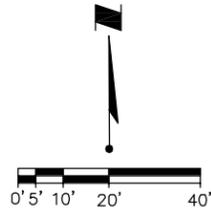
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Reviewed: HS	Date: 11/22/2013	▲			
Approved:	Date:	▲			
Approved:	Date:	No:	Date:	Revision:	By:



CITY OF TAMPA
ECONOMIC AND URBAN
DEVELOPMENT DEPARTMENT

E. MADISON STREET IMPROVEMENTS
SIGNAGE AND STRIPING (2 OF 3)

Field Book:	
Atlas Sheet:	
File No.	Index No.
Job No. 215611523	215611523-007
Scale: N/A	
SHEET 34	



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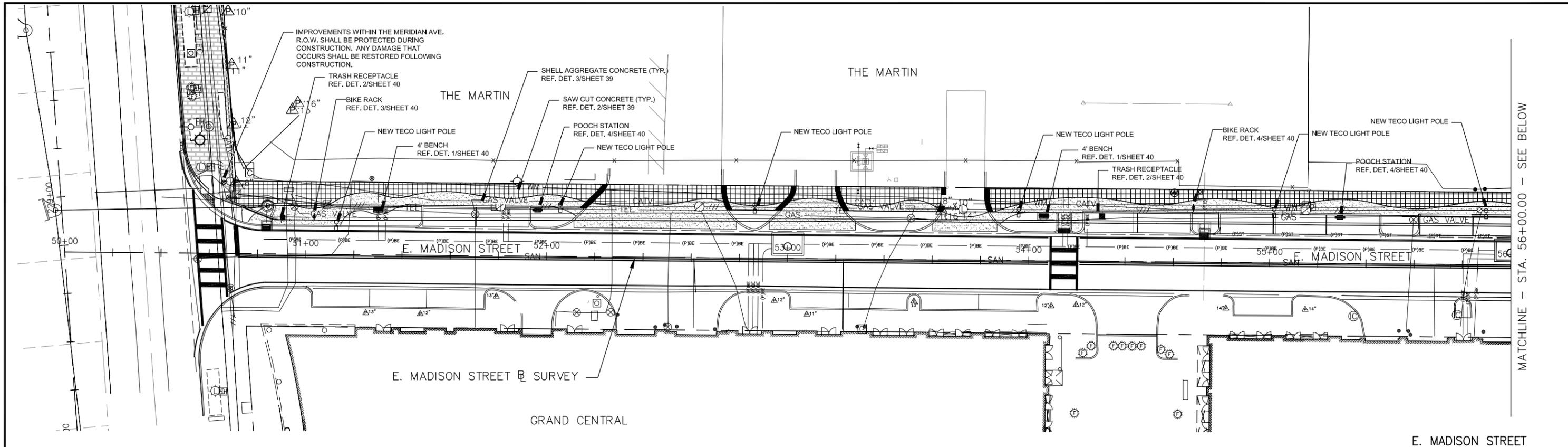
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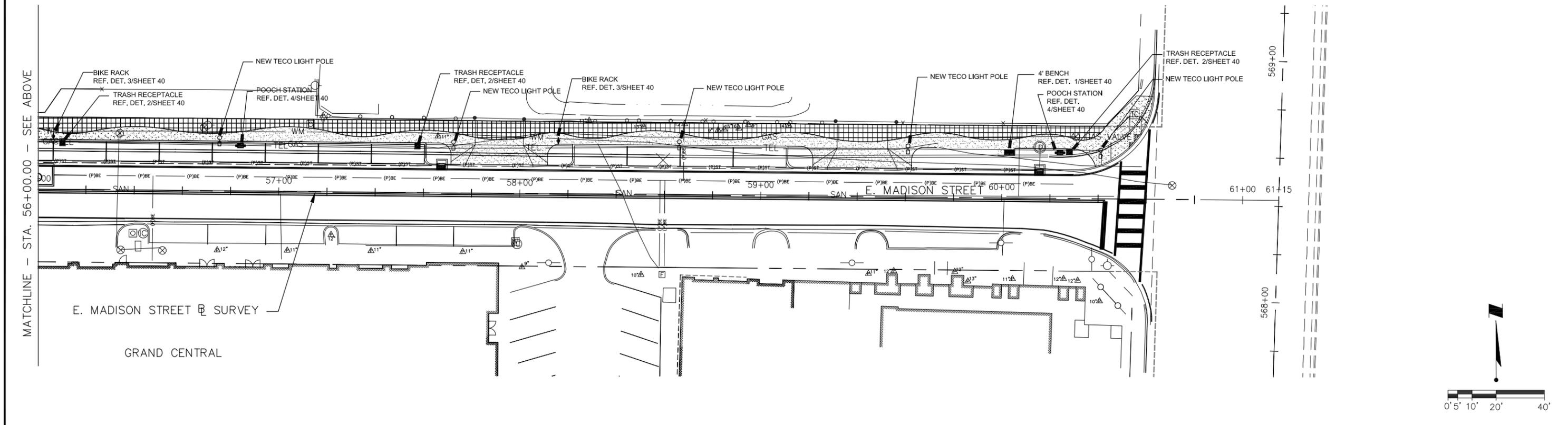
CITY OF TAMPA
 ECONOMIC AND URBAN
 DEVELOPMENT DEPARTMENT

E. MADISON STREET IMPROVEMENTS
 SIGNAGE AND STRIPING (3 OF 3)

Field Book:	
Atlas Sheet:	
File No.	Index No.
Job No. 215611523	215611523-007
Scale: N/A	
SHEET 35	



MATCHLINE - STA. 56+00.00 - SEE BELOW



MATCHLINE - STA. 56+00.00 - SEE ABOVE

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Designed: LDT	Date: 11/22/2013	▲
Checked: LDT	Date: 11/22/2013	▲
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Approved:	Date:	No: Date: Revision: By:

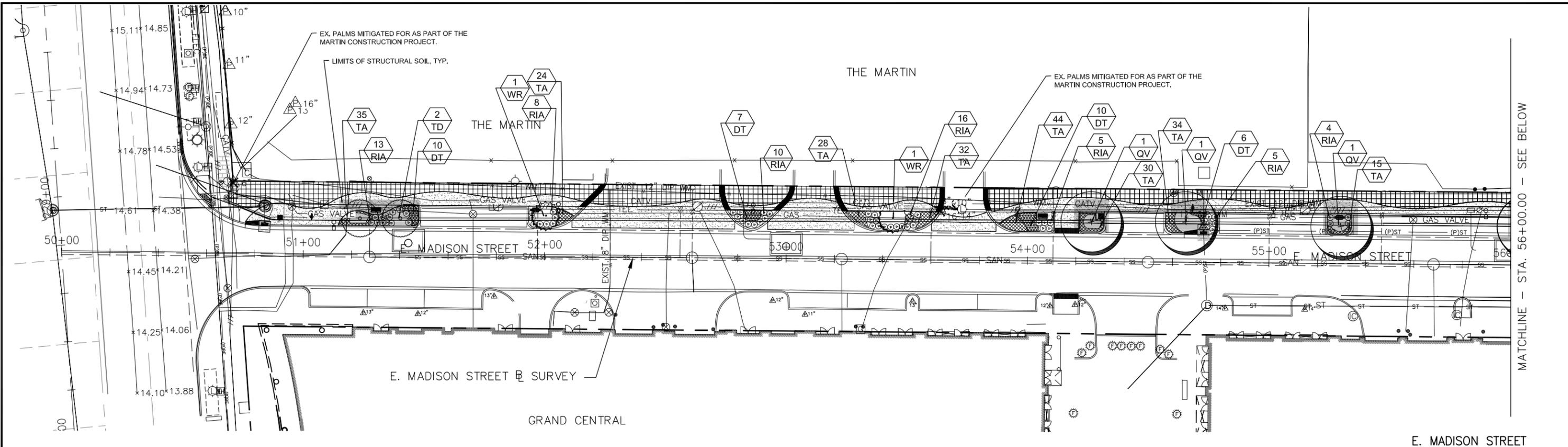
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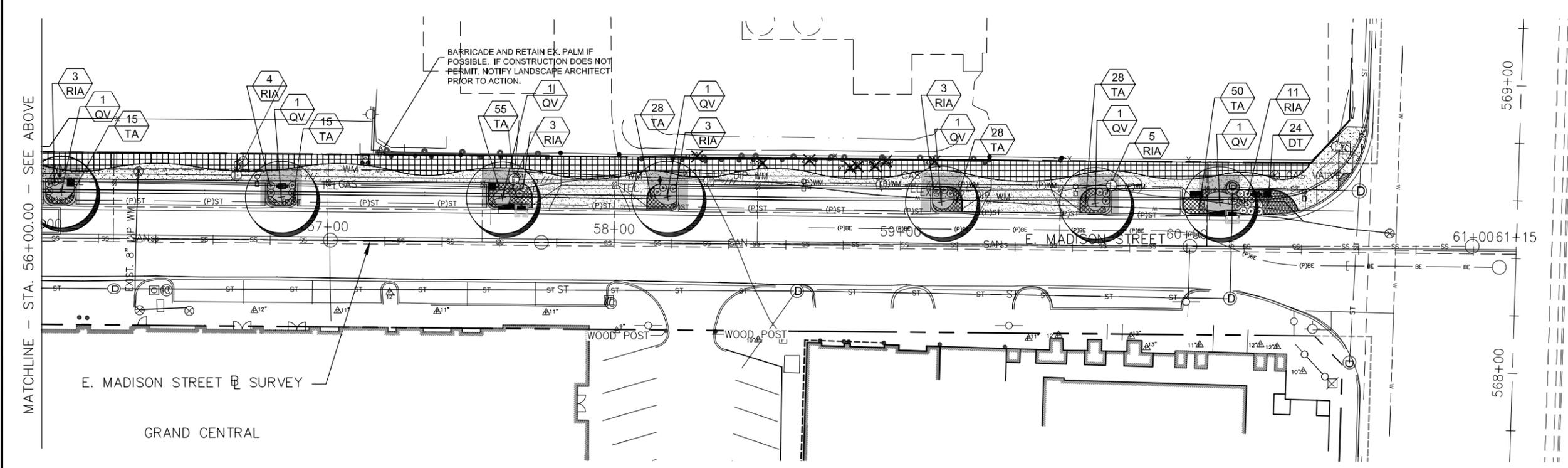
CITY OF TAMPA
 ECONOMIC AND URBAN
 DEVELOPMENT DEPARTMENT

E. MADISON STREET IMPROVEMENTS
 HARDSCAPE PLAN

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Atlas Sheet:	
File No.	Index No.
Job No. 215611523	11523L-101-HSP
Scale: N/A	
SHEET 36	

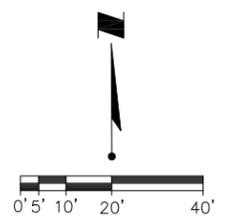


MATCHLINE - STA. 56+00.00 - SEE BELOW



LEGEND

AREA TO RECEIVE STRUCTURAL SOIL



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LEA D. DEL TORO, P.L.A.
 FLORIDA LICENSE NO. 0091133

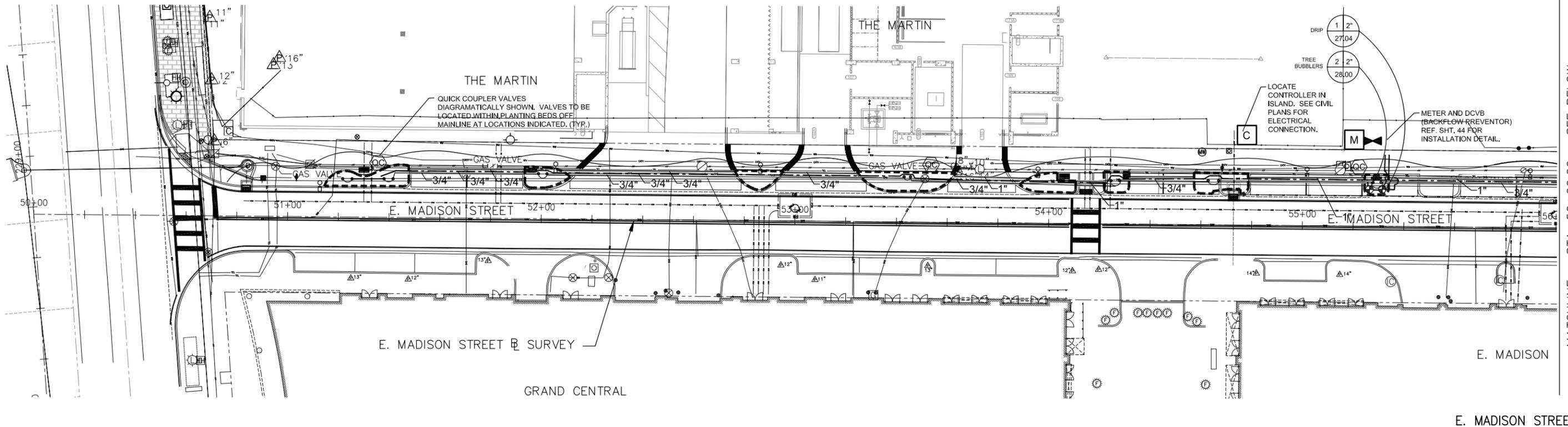
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Approved:	Date:	No:	Date:	Revision:	By:	



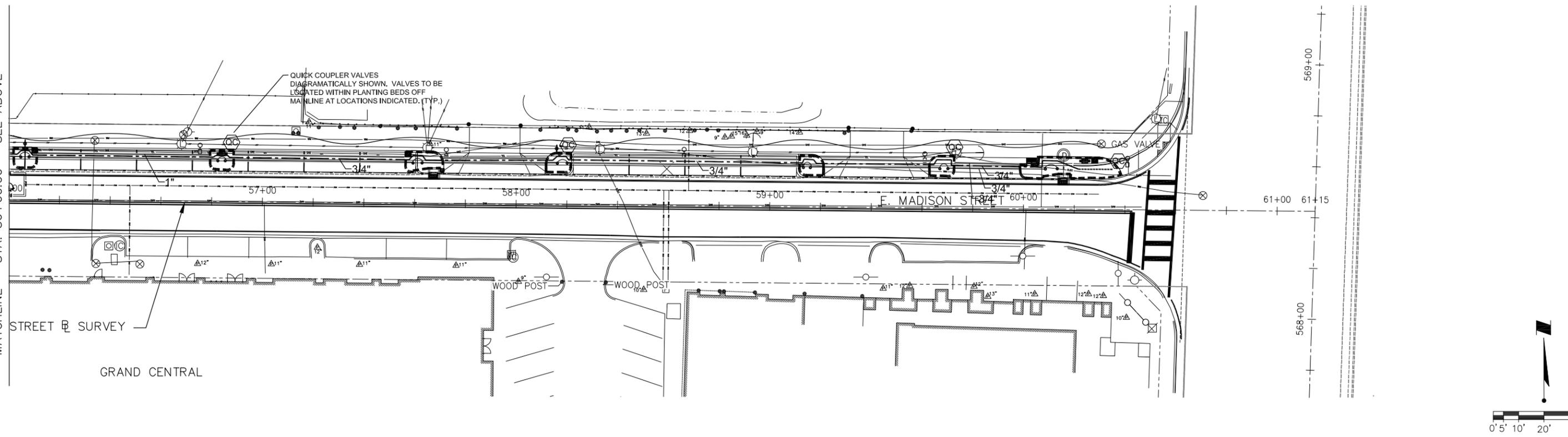
CITY OF TAMPA
 ECONOMIC AND URBAN
 DEVELOPMENT DEPARTMENT

E. MADISON STREET IMPROVEMENTS
 LANDSCAPE PLAN

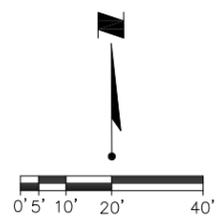
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Job No. 215611523	11523-102-LSP
Scale: N/A	
SHEET 37	



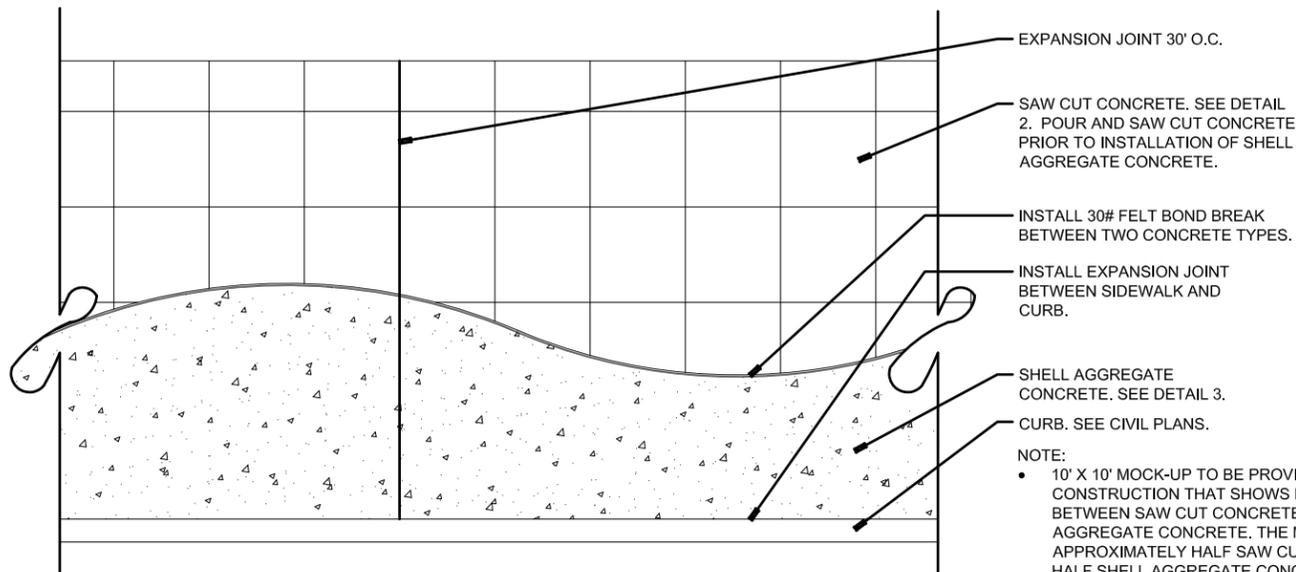
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MATCHLINE - STA. 56+00.00 - SEE ABOVE



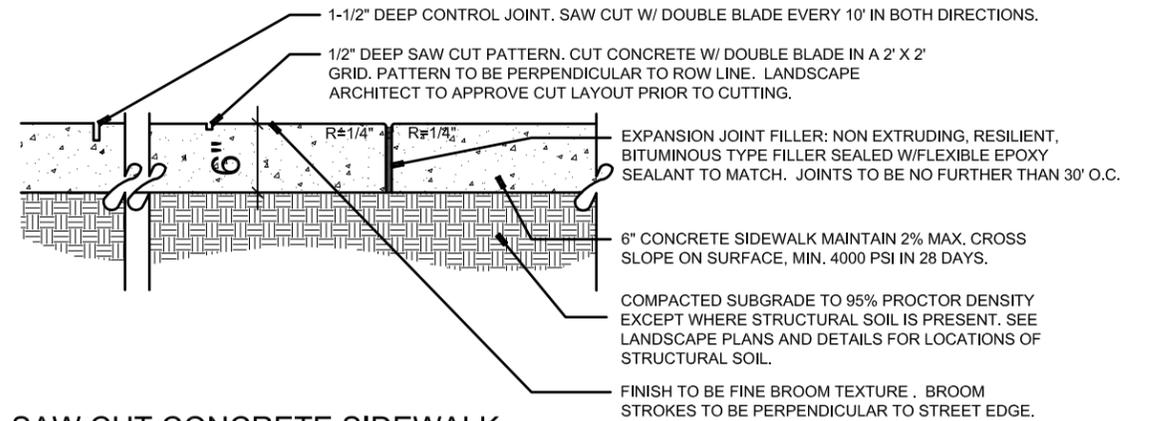
	2205 North 20th Street, Tampa, FL 33605 800.643.4336 • 813.223.9500 • F 813.223.0009 • www.stantec.com Stantec Consulting Services, Inc. • CA# 27013 • FL Lic. # LC-26000314	LEA D. DEL TOSTO, P.E. FLORIDA LICENSE NO. 0001133	Drawn: LDT Date: 11/22/2013		CITY OF TAMPA ECONOMIC AND URBAN DEVELOPMENT DEPARTMENT	E. MADISON STREET IMPROVEMENTS IRRIGATION PLAN	Field Book:
			Designed: LDT Date: 11/22/2013 Checked: LDT Date: 11/22/2013 Reviewed: LDT Date: 11/22/2013 Approved: LDT Date: 11/22/2013 Approved: Date: No: Date: Revision: By:				Atlas Sheet: File No. Index No. Job No. 215611523 1152E-102-ISP Scale: N/A SHEET 38



CONCRETE TYPES- PLAN

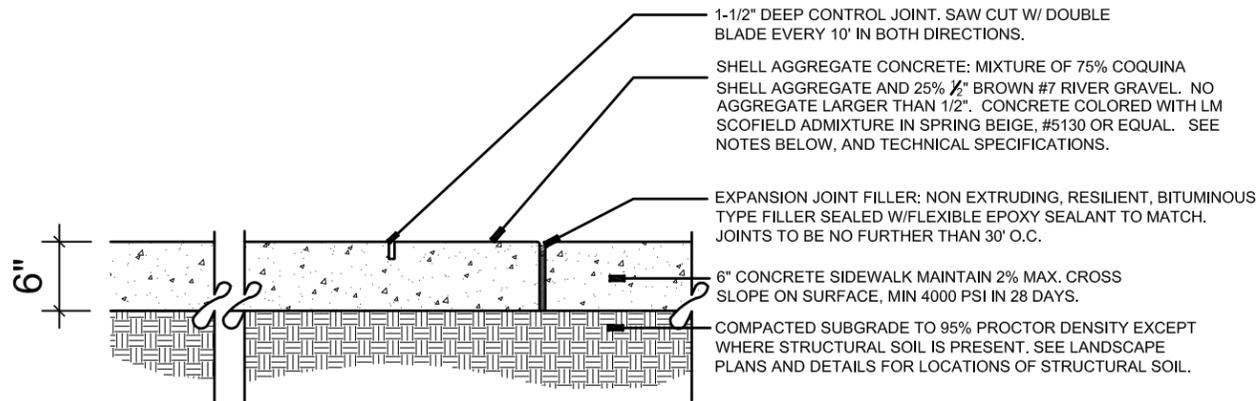
1 SCALE: 1/2" = 1'-0"

- NOTE:
- 10' X 10' MOCK-UP TO BE PROVIDED PRIOR TO CONSTRUCTION THAT SHOWS RELATIONSHIP BETWEEN SAW CUT CONCRETE AND SHELL AGGREGATE CONCRETE. THE MOCK-UP SHALL BE APPROXIMATELY HALF SAW CUT CONCRETE AND HALF SHELL AGGREGATE CONCRETE WITH THE WAVE PATTERN. MOCK-UP TO BE APPROVED BY LANDSCAPE ARCHITECT PRIOR TO HARDSCAPE CONSTRUCTION.



SAW CUT CONCRETE SIDEWALK

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



- NOTE:
- SUBMIT AGGREGATE SAMPLES FOR APPROVAL PRIOR TO PREPARING MOCK UP.
 - WHILE CONCRETE IS STILL IN FLUID STATE, BROADCAST TRIPLE WASHED #3 COQUINA SHELL MIXTURE WITH 50% COVERAGE AND FLOAT INTO SURFACE.
 - IMMEDIATELY REPEAT WITH 50% COVERAGE AND FLOAT INTO SURFACE.
 - TROWEL SMOOTH WITH 1/8" RADIUS EDGER.
 - UPON REACHING 75% OF COMPRESSIVE STRENGTH, MIST BLAST TO EXPOSE AGGREGATE.
 - SEE TECHNICAL SPECIFICATIONS

SHELL AGGREGATE SIDEWALK

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

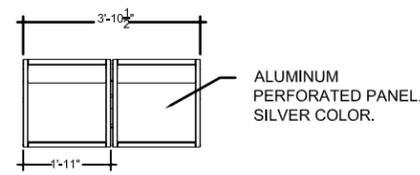
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Approved: LDT	Date: 11/22/2013	▲			
Approved:	Date:	No:	Date:	Revision:	By:



CITY OF TAMPA
ECONOMIC AND URBAN
DEVELOPMENT DEPARTMENT

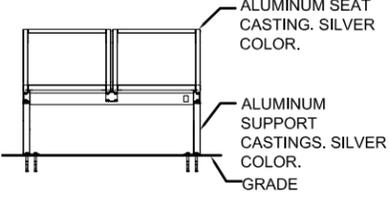
E. MADISON STREET IMPROVEMENTS
PAVING DETAILS

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Atlas Sheet:	Index No.
File No.	
Job No. 215611523	11522-SW-401
Scale: N/A	
SHEET 39	



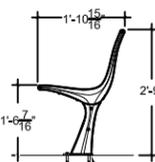
ALUMINUM PERFORATED PANEL. SILVER COLOR.

Landscapeforms
431 Lawndale Ave.
Kalamazoo, MI 49048
Phone: 800-521-2546
Fax: 269-381-3455



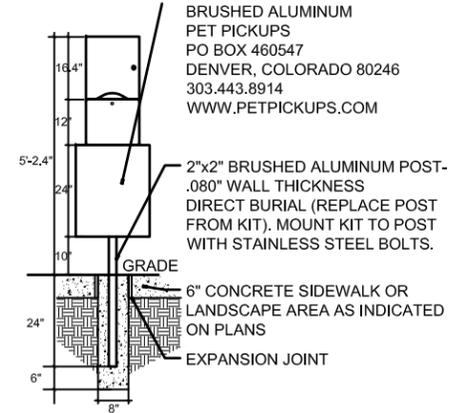
ALUMINUM SEAT CASTING. SILVER COLOR.

ALUMINUM SUPPORT CASTINGS. SILVER COLOR.



SURFACE MOUNT TAB WITH (2) 11/16\"/>

Design Group: Mix
Description: MX515 Backed Unit, no arms, Surface MT
Color: Silver powder coated w/ perforated metal seat.



BRUSHED ALUMINUM PET PICKUPS
PO BOX 460547
DENVER, COLORADO 80246
303.443.8914
WWW.PETPICKUPS.COM

2\"/>

6\"/>

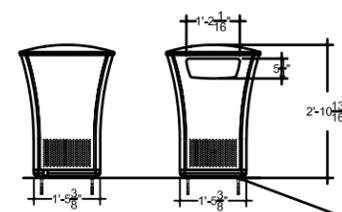
MATERIALS SCHEDULE					
Description	Qty	Manufacturer	Supplier	Phone	Model
Bench	3	Landscapeforms	GAP Architectural Products	407.645.2854	35 Collection: Mix. Two seats, backed, surface mounted, Silver w/ perforated metal seat
Trash Receptacle	5	Landscapeforms	GAP Architectural Products	407.645.2854	35 Collection: Pitch. Side opening, surface mount, silver
Pi Rack	4	Landscapeforms	GAP Architectural Products	407.645.2854	Silver, surface mount
Pooch Station	4	Pooch Station	Belson Outdoors	630.897.8489	16 Gallon Pooch Station, Pewter metal with Slate concrete sides, surface mount
Saw Cut Concrete	5,300 SQ. FT.	See Details on Sheet 34	N/A	N/A	See Technical Specifications
Shell Aggregate Colored Concrete	5,540 SQ. FT.	See Details on Sheet 34	N/A	N/A	See Technical Specifications

BENCH

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

POOCH PICK-UP STATION

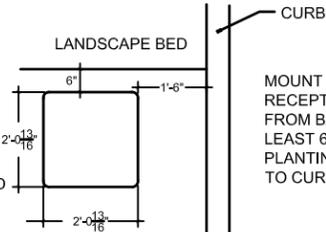
4 SCALE: NTS



Landscapeforms
431 Lawndale Ave
Kalamazoo, MI 49048
Phone: 800-521-2546
Fax: 269-281-3455

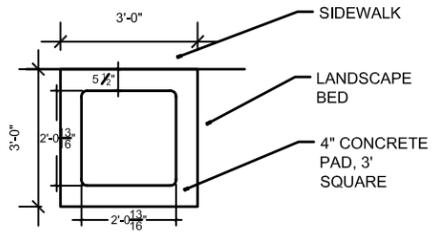
TITLE: Side Opening Litter
DESIGN: PITCH
COLOR: SILVER POWDER COATED

SURFACE MOUNT TAB WITH (2) 11/16\"/>



SIDEWALK MOUNTING

MOUNT SO THAT TOP EDGE OF RECEPTACLE IS AT LEAST 1'-6\"/>

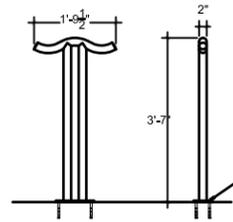


PAD MOUNTING IN LANDSCAPE BED

NOTE: RECEPTACLE OPENINGS SHALL FACE SIDEWALK TRAVEL DIRECTION.

TRASH RECEPTACLE

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



Landscapeforms
431 Lawndale Ave.
Kalamazoo, MI 49048
Phone: 800-521-2546
Fax: 269-381-3455

TITLE: 21-1/2" W X 43"H - PI RACK - SURFACE MOUNT DESIGN: PI RACK
COLOR: SILVER POWDER COATED

SURFACE MOUNT TAB WITH (2) 11/16\"/>

BICYCLE RACK

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

Drawn: LDT	Date: 11/22/2013	▲			
Designed: LDT	Date: 11/22/2013	▲			
Checked: LDT	Date: 11/22/2013	▲			
Reviewed: LDT	Date: 11/22/2013	▲			
Approved: LDT	Date: 11/22/2013	▲			
Approved:	Date:	No:	Date:	Revision:	By:



CITY OF TAMPA
ECONOMIC AND URBAN
DEVELOPMENT DEPARTMENT

E. MADISON STREET IMPROVEMENTS
SITE FURNISHINGS

Field Book:	
Atlas Sheet:	Index No.
File No.	
Job No. 215611523	004-40
Scale: N/A	
SHEET 40	

LANDSCAPE NOTES

- All landscape construction shall conform to the minimum landscape requirements of the City of Tampa Landscape Code.
- Contractor to comply with all state and local code requirements.
- Prior to construction of any improvements, contractor shall obtain a landscape permit from City of Tampa. Permits are the responsibility of the contractor and are to be included as part of the base bid.
- Contractor is responsible for determining all utility locations and installing facilities so as to not conflict.
- All damage to existing utilities or improvements caused by contractor shall be repaired at no additional cost to the owner.
- Soil testing shall be performed in all planting areas prior to construction with results submitted to landscape architect. Soil amendments shall be added as necessary to meet the following parameters:
 pH Range 5.0 - 7.0
 Organic Matter >1.5%
 Magnesium 100+ units
 Phosphorus 150+ units
 Potassium 120+ units
 Soluble Salts/
 Conductivity not to exceed 900 ppm/0.9 mmhos/cm (in soil)
 After amendments have been added, resubmit results to the landscape architect for approval.
- All planting beds shall be excavated a minimum of 6" and backfilled with planting mix to within 3" of top of curb. Reference planting details.
- All road base shall be removed from islands, prior to planting and backfilled with fertile, friable topsoil to within 6" of top of curb.
- New plant material shall surround the tree root balls as shown on planting plan.
- Contractor shall grade all landscape areas, eliminating all surface irregularities, depressions, vegetative matter, sticks, stones, and other debris, and remove them from site.
- Furnish to the owner a unit price breakdown for all materials. The owner may, at their discretion, add or delete from the materials utilizing the unit price breakdown submitted.
- All new plant material shall be guaranteed for 1 year, from time of final acceptance of project, any plant material not in a healthy growing condition will be replaced by the contractor, at no additional cost to the owner within 10 days of notification. Extend warranty period an additional 6 months beyond the original warranty period, for all replacement plant material. Warranty is null and void for plant material which is damaged or dies as a result of "Acts of God" limited to hail, freeze, lightning, automobile damage, and winds exceeding 75 mph as defined by the National Weather Service. All trees that lean or are blown over, caused by winds less than 75 mph, will be re-set and braced by the contractor at no additional cost to the owner.
- All trees, shrubs and ground covers shall be of the sizes as called for in the Plant Schedule. Where there is a discrepancy either in quantities, plant names, sizes or specifications between the plan and Plant Schedule, the plan takes precedence.
- No plant material will be accepted showing evidence of cable, chain marks, equipment scars, or otherwise damaged.
- Plant material will not be accepted when the ball of earth surrounding its roots has been cracked, broken or otherwise damaged.
- New plant material to be installed will be field adjusted to accommodate existing plant material such as overhead canopy trees, under-story trees and shrubs or ground cover. This will insure existing plant material to remain in its natural state. Therefore, no existing plant material will be altered by removing, cutting, trimming or destroying in order to install new plant material.
- All planting holes to be hand dug except where machine dug holes will not adversely effect or damage utilities or improvements.
- Excavate down to native soils to remove roadbed or other compacted materials prior to planting. All beds to be backfilled with Planting soil. Planting soil to be a weed free mixture of 50% coarse native sand and 50% peat, pH between 5.5 and 6.5. All plant material to receive planting soil as per details.
- Use 21 gram Agriform 20-10-5 planting fertilizer tablets per manufacturer's specifications for all plant material.
- Contractor shall stake & guy all trees and palms per City specifications and per the appropriate detail. Contractor is responsible for the maintenance and/or repair of all staking and guying during warranty period.
- Root-prune all non-container grown trees a minimum of (8) weeks prior to planting. See detail. Note size of planting pits on planting details.
- All protected trees, if any, shall be trimmed in a manner consistent with the "American National Standard for Tree Care Operations, ANSI, A300, current edition".
- Protective barricades shall remain in place until land alteration and construction activities are completed.
- During land alteration and construction activities, it shall be unlawful to remove vegetation by grubbing or to place soil deposits, debris, solvents, construction material, machinery or other equipment of any kind within the drip line of a tree to remain on the site unless otherwise approved by the City.
- All waste, objectionable material, and excess fill shall be removed and disposed of on a daily basis off-site in a legal manner.
- Any areas subject to erosion must be adequately stabilized with vegetation material that will, within a reasonable time frame, deter soil disturbance.
- Coordinate the removal of erosion control fencing with site contractor while performing final planting.
- See technical specifications Section 02900 for additional information.

TREE DEBIT TABLE

Trees Retained	# of trees	Multiplier for	Total Credits
Diameter (inches)			
5" to 7"	0	0	0
8" to 12"	0	1	0
13" to 19"	0	2	0
20" to 29"	0	4	0
30" or more	0	inch per inch	0
All Palms	0	1	0
Total	0		0

Trees Removed	# of trees	Multiplier for	Total Debits
Diameter (inches)			
5" to 7"	0	0	0
8" to 12"	0	1	0
13" to 19"	0	2	0
20" to 29"	0	4	0
30" or more (enter total # of inches) (2)	0	inch for inch	0
All Palms	8	1	8
Total	8		8
% Removed	100%		

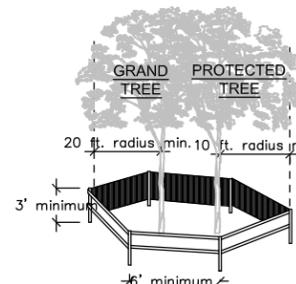
VUA Tree Requirements	LF/SF	Trees Req'd	VUA Trees
Linear Feet VUA adjacent street frontage	0	1 per 40 LF	0
Total Square Footage of VUA	0	1 per 1500 SF	0
Vehicle Use Area Greenspace	0	20% of vua	0

Use Tree Requirements	
Insert proposed use here...if applicable must place "0" if no use trees required	0
Total 2" Trees Required	8
Total 2" or Equivalent Trees Provided	22

TREE PROTECTION STANDARDS

- Protective barricades shall be placed around all protected trees and grand trees during site clearing to create a protective radius and shall remain in place until land alteration, site clearing and construction activities are complete. Barricades for the protective radius shall be erected at a minimum distance of ten (10) feet from the edge of trunk of protected trees and twenty (20) feet from the edge of trunk of grand trees. Barricades shall meet City of Tampa standards as outlined in Chapter 13-164.
- A minimum distance of ten (10) feet from all protected trees and twenty (20) feet from all grand trees shall be maintained when installing underground utilities. If this results in unreasonable hardship, a soil auger shall be used to tunnel under the root systems.
- 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 end 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.
- All roots to be removed during the site clearing phase shall be severed clean at the perimeter of the designated protective radius.
- A two-inch layer of mulch shall be applied over the surface of exposed roots of protected trees and grand trees during the site clearing phase.
- A protective dry well and drainage / aeration system shall be provided where protected trees or grand trees will be adversely affected by raising the grade.
- A protective retaining wall shall be constructed at the perimeter of the protective radius around a protected tree or grand tree where the protected tree or grand tree will be adversely affected by lowering the grade.
- All trimming of protected trees and grand trees during development shall be done by a qualified, licensed tree service.

TREE BARRICADE REQUIREMENTS



Protective barriers are used during land alteration and construction activities to protect trees and natural areas to be retained on a site.

Protective barriers must be erected around trees to be retained within an area where land alteration and construction activities will occur as well as along natural areas where such areas are adjacent to permitted land alteration or construction activities. A protective barrier must remain in place until the land alteration and construction activities are completed or until commencement of grade finishing, sodding, and landscaping. No ground disturbance shall occur within the barricaded area. The following represents the City's minimum protection barrier specifications.

- Trees - To restrict access into the area within the rootzone of a tree, a physical structure not less than 3 feet in height, comprised of wood or other suitable material, is placed around the tree at the minimums shown above, except where land alteration or construction activities are approved within the rootzone. Vertical members shall be made of a minimum of 2x2 wood or 5/8" steel reinforcement bar, at least 3' in height and installed to a minimum depth of 1' below grade. Spacing between vertical members shall be no greater than 6'. Horizontal members shall be made of a minimum 1x2 wood or solid fencing material, such as chain link fencing, and be a minimum of three feet in height.
- Natural Areas - To restrict access into areas where land alteration and construction activities are not authorized, a physical structure not less than 3 feet in height is placed along the perimeter of such areas. Upright stakes of no less than 2" x 2" lumber spaced no more than 25' apart and connected by extra strength filter fabric at 6' maximum spacing without wire support fence. Other methods of demarcation will be considered depending upon the characteristics of the site.

PLANT SCHEDULE

Sym	Qty.	Scientific Name	Common Name	Size Requirements	Spacing	Native Florida	Drought Tolerant
PALMS							
TD	2	Taxodium distichum	Bald Cypress	45 GAL., 12-14" x 5-6", 3.5" cal.	AS SHOWN	YES	NO
QV	10	Quercus virginiana "Sky Climber"	Sky Climber Live Oak	FG, 12-14" x 4-5", 4" cal.	AS SHOWN	YES	YES
WR	2	Washingtonia robusta	Washington Palm	12" C.T. Matched, Boots to remain.	AS SHOWN	NO	YES
SHRUBS							
RIA	91	Rhaphiolepis indica "Albe"	Indian Hawthorne	1 GAL., 10-12" x 10-12"	30" O.C.	NO	YES
GROUNDCOVER							
DT	58	Dianella tasmanica 'Variegata'	Variegated Flax Lily	1 GAL., 12" HT, FULL	18" O.C.	NO	YES
TA	461	Tracheolochloa asiaticum 'Minima'	Dwarf Asian Jasmine	1 GAL., 4" HT, MIN 5 PPP	12" O.C.	NO	YES
ADDITIONAL ITEMS							
MULCH (CY)	18	Sterilized Melaleuca Mulch or Equal w/ 3" mulch depth		To be estimated by contractor; contractor shall provide a unit price for each as part of his/her bid.	Sterilized Melaleuca Mulch or Equal		
(CY)	Approx 50	Planting soil mix, 6-8" depth			50% Course native sand, 50% Peat, pH between 5.5 & 6.5		
(CY)	Approx 220	Structural Soil			Per details and specifications		

TECHNICAL MAINTENANCE PLAN

OPERATION	90 DAY MAINTENANCE WEEKLY CYCLE												CITY OF TAMPA COMMITMENT ON YEARLY CYCLE											
	1	2	3	4	5	6	7	8	9	10	11	12	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
WATERING	7	7	7	7	4	4	4	4	2	2	2	2												
WEEDING/ LITTER PICKUP	X												Weeding every 14 days as indicated using an approved herbicide such as "Round Up" or equal applied at the rate of 1 1/2 oz. per gallon and applied by a licensed applicator or under the supervision of a licensed applicator. Litter pick up is to be performed prior to application of herbicide.											
PRUNING	X												Pruning shall be accomplished using chain saws, hand saws, and/or lopping shears. Shrubs shall be pruned yearly to a height of 24" or less.											
FERTILIZING	X												Shrubs and groundcovers to be fertilized annually per specifications.											
EDGING	X												Every 14 days by mechanical means.											
MULCHING	X												Restore 3" layer of mulch once a year. See Plant List for mulch types to be used.											

WATER APPLICATION RATES

(FOR NON-IRRIGATED AREAS IF APPLICABLE)

TREES AND PALMS	Saturate to 3' depth. Flood/irrigate tree well.
SHRUBS	5 gallons per plant, sprayed over entire planting bed.
GROUNDCOVER/ GRASSES	5 gallons per plant, sprayed over entire planting bed.

FERTILIZER APPLICATION RATES

TREES AND PALMS	Fertilize per specifications shall be applied at time of planting and once annually.
SHRUBS	Fertilize per specifications shall be applied at time of planting and once annually.
GROUNDCOVER/ GRASSES	Fertilize per specifications shall be applied at time of planting and once annually.

CITY OF TAMPA LANDSCAPE AND TREE PLANTING STANDARDS

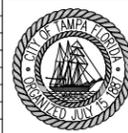
- Recommended trees shall be used to meet the requirements of Chapter 27, Section 285 and, as specified in the technical standards, be at least two (2) inches in diameter when measured at six (6) inches above grade and shall be selected from the recommended tree list set forth in Schedule C. At least fifty (50) percent of the recommended trees planted on a parcel shall be shade trees. At least sixty (60) percent of the recommended trees planted on a parcel shall be native trees. Palm trees shall be replaced one (1) for one (1) with a recommended tree.
- An existing or relocated protected tree which meets the standards of this section shall be credited toward the planting requirements contained in section 127-285.1 for recommended trees on a parcel, in accordance with the tree equivalency table set forth in Schedule E located in section 13-165.
- Any person may request and the department may approve a tree as a replacement tree that is not included on the recommended tree list if the tree is similar in character and function to a tree on the recommended tree list.
- A pervious area with an effective minimum radius of six (6) feet from the trunk of a recommended tree shall be maintained around all recommended trees.
- Paving base may extend to within six (6) feet from the trunk of a protected tree, provided an effective pervious area radius of ten (10) feet is created through the use of turf block, pavement aeration devices or similar products.
- Structural foundations may be located at a radius of six (6) feet from the trunk of a protected tree, provided an effective pervious area radius is extended proportionally in three (3) other directions to allow six hundred (600) square feet of pervious area.
- All recommended trees and plant material shall be planted in accordance with the specifications described in the State Department of Agriculture and Consumer Services, Division of Forestry, Tree Protection Manual for Builders and Developers, October 1980, as revised from time to time.
- All recommended trees and plant material used shall be vigorous, well shaped, branched and foliated and shall be graded State Department of Agriculture Nursery Grade No. 1 or better as outlined by the state division of Plant Industry Grades and Standards for Nursery Plants, third Edition, 1973, as revised from time to time, and Grades and Standards for Nursery Plants, Part II, Palms and Trees, third printing, 1975, as revised from time to time.
- Landscape areas shall consist of at least sixty (60) percent native plant material and/or plant material adapted to local climatic. Recommended trees and plant material shall be planted in such a way as to conserve, preserve and enhance land uses, natural land features, and natural and aesthetic values. Nonliving natural material which permits percolation may also be used as necessary material in landscaping.
- A layer of mulch to a minimum depth of three (3) inches shall be specified on the site plan in plant beds and around individual trees in turf areas. Organic mulches are preferred. The mulch should not be placed directly against the plant stem or tree trunk. Mulch shall not be required in annual beds.
- Areas on the parcel which are used for stormwater retention or detention ponds with depressions of less than two (2) feet and the landscape banks of such ponds from the mean high waterline to the top of the bank shall be credited on a one-to-one area basis toward meeting the landscaped area.
- If a hedge or other screen is used, it must be at least two (2) feet in height at time of planting.
- Turf and grass sod shall be clean and free of weeds, pests, and disease. Grass seed shall be delivered to the job site in bags with the state department of agriculture tags attached.
- All landscape areas must allow for access to public and private utility facilities for maintenance purposes.
- A list of acceptable trees for tree planting within ten (10) feet of the vertical plane of existing powerlines, excluding service wires, as set forth in Section 27-285.1 Schedule D.



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Drawn: LDT	Date: 11/22/2013	△			
Designed: LDT	Date: 11/22/2013	△			
Checked: LDT	Date: 11/22/2013	△			
Reviewed: LDT	Date: 11/22/2013	△			
Approved: LDT	Date: 11/22/2013	△			
Approved:	Date:	No:	Date:	Revision:	By:

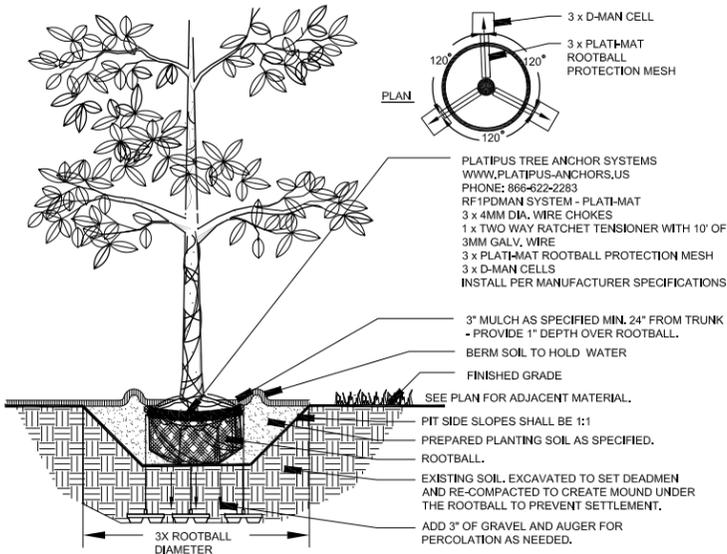


CITY OF TAMPA
 ECONOMIC AND URBAN
 DEVELOPMENT DEPARTMENT

E. MADISON STREET IMPROVEMENTS
 LANDSCAPE NOTES & SCHEDULES

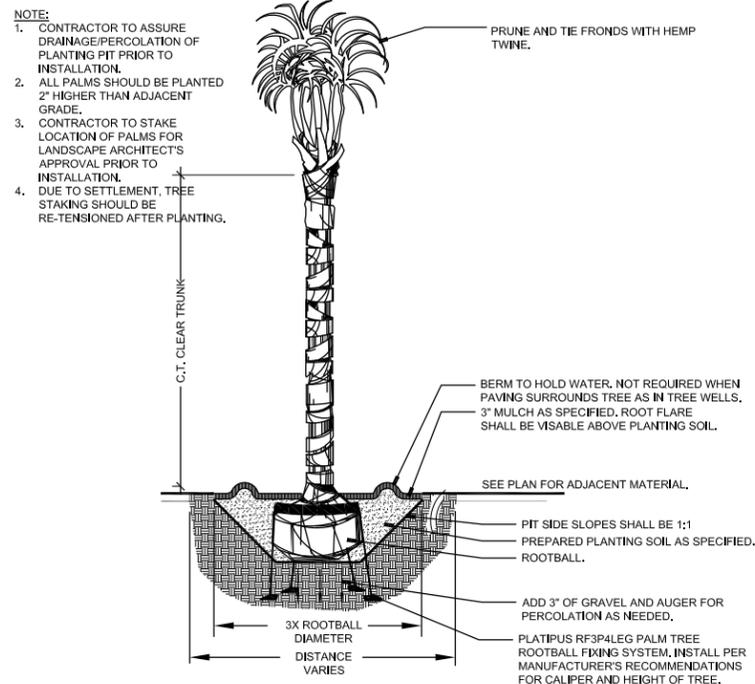
Field Book:	
Atlas Sheet:	
File No.	Index No.
Job No. 215611523	11523-503-L07
Scale: N/A	
SHEET 41	

- NOTES:
- CONTRACTOR SHALL ASSURE PERCOLATION OF ALL PLANTING PITS PRIOR TO INSTALLATION.
 - PLANT TREE 2" HIGHER THAN ADJACENT GRADE SUCH THAT ROOT FLARE IS VISIBLE.
 - DUE TO SETTLEMENT ALL TREES SHOULD BE RE-TENSIONED AFTER PLANTING.



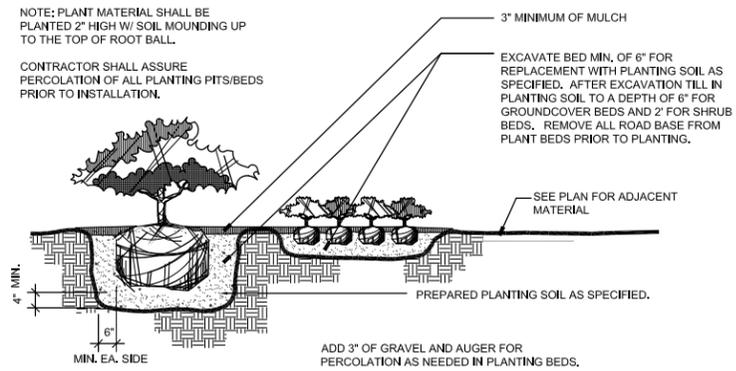
LARGE TREE

1 SCALE: NTS



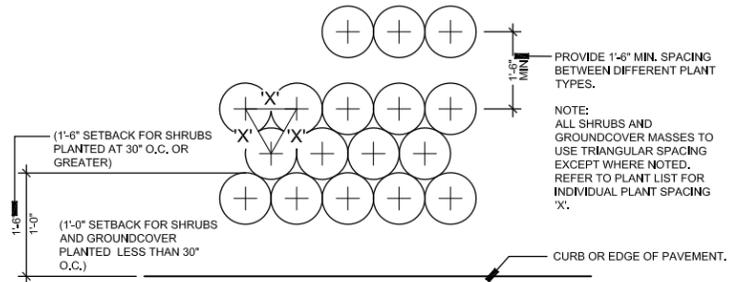
WASHINGTON PALM PLANTING PIT AND BRACING

3 SCALE: NTS



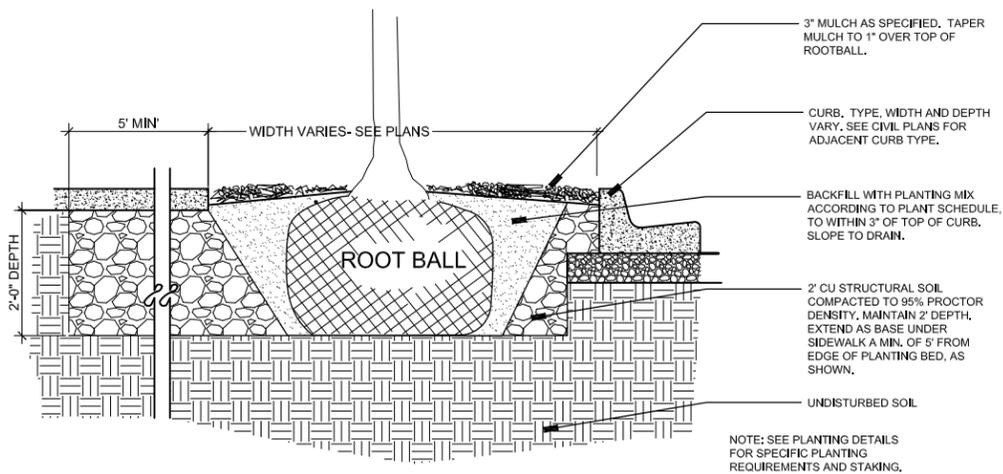
SHRUB AND GROUNDCOVER

5 SCALE: NTS



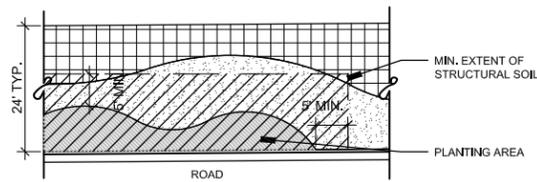
TYPICAL PLANT SPACING

6 SCALE: NTS



STREETSCAPE TREE PLANTING/ STRUCTURAL SOIL

2 SCALE: NTS



STREETSCAPE TREE PLANTING AREA (TYP)

4 SCALE: NTS

Drawn: LDT	Date: 11/22/2013	By: [Signature]
Designed: LDT	Date: 11/22/2013	By: [Signature]
Checked: LDT	Date: 11/22/2013	By: [Signature]
Reviewed: LDT	Date: 11/22/2013	By: [Signature]
Approved: LDT	Date: 11/22/2013	By: [Signature]
Approved:	Date:	No: Date: Revision: By:



CITY OF TAMPA
ECONOMIC AND URBAN
DEVELOPMENT DEPARTMENT

E. MADISON STREET IMPROVEMENTS
LANDSCAPE DETAILS

Field Book:	
Atlas Sheet:	
File No.	Index No.
Job No. 215611523	11523-503-LDT
Scale: N/A	
SHEET 42	



CITY OF TAMPA IRRIGATION STANDARDS

1. All irrigation shall conform to Section #02440 in the technical specifications, Contract #7-D-3.
2. All main line piping shall be schedule 40 pvc and be buried to have a minimum cover of 18". All lateral piping downstream of the main line shall be buried to have a minimum cover of 12".
3. All valve boxes shall be black or green in color (body and lid). Sizes shall be ten (10") inches by fourteen (14") inches (rectangular) for remote control valves and nine (9") inches (round) for gate and quick coupler valves. Place min. 2" of pea gravel in base of valve box.
4. Irrigation contractor to verify location of all utilities prior to digging and is responsible for any damage caused by his/her negligence.
5. Submit shop drawings to landscape architect for approval prior to construction.
6. Drawings shall show heads, low volume irrigation, piping, zoning, pipe sizes, valves, gallons per zone, zone numbers, controller, etc. For approval by owner prior to installation.

ZONE CHART

ZONE NUMBER	VALVE SIZE	G.P.M.
1	1½"	27.04
2	1½"	28.00

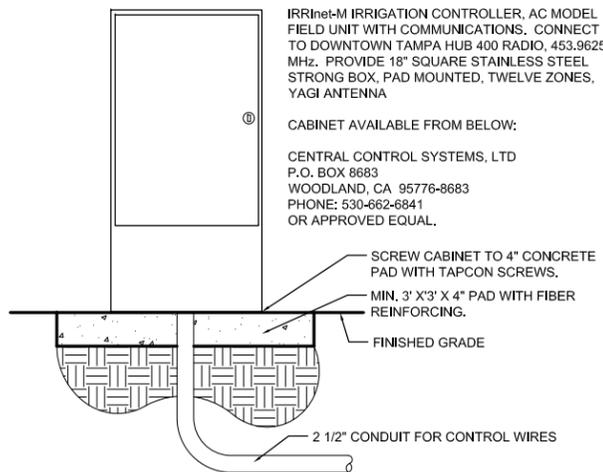
IRRIGATION SYMBOLS LEGEND

-  SLEEVES SHALL BE HDPE, SIZE TWO SIZES LARGER THAN IRRIGATION PIPE
-  RAIN BIRD 1402 PRESSURE COMPENSATING BUBBLER.
-  RAIN BIRD QUICK COUPLING VALVE. PROVIDE 2 VALVE KEYS. LOCATE VALVE IN PLANTING BED WITHIN 9" ROUND VALVE BOX. PLACE 2" OF GRAVEL IN BOTTOM OF BOX.
-  DRIP ZONE
-  SCHEDULE 40 MAINLINE, SIZE AS NOTED
-  IRRITROL 200B REMOTE CONTROL VALVES IN AMETEK VP10 VALVE BOX.
-  IRRInet-M AC 12 STATION CONTROLLER, INSTALLED IN STAINLESS STEEL ENCLOSURE. SEE TECHNICAL SPECIFICATIONS. CONTROLLER IS AVAILABLE THROUGH THE CITY OF TAMPA. CONTACT MARK NEUBERGER, CITY OF TAMPA PARKS, 813-478-5280 FOR CONTROLLER.
-  DOUBLE CHECK BACKFLOW PREVENTOR, TOP PORTED. INSTALLED PER DETAILS.

Drawn: LDT	Date: 11/22/2013					
Designed: LDT	Date: 11/22/2013					
Checked: LDT	Date: 11/22/2013					
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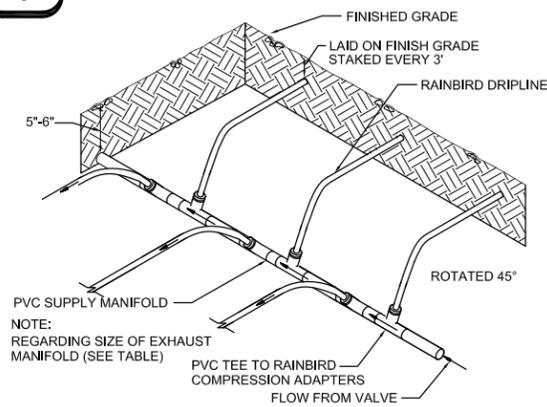


Field Book:	
Atlas Sheet:	
File No.	Index No.
Job No. 215611523	11523-505-017
Scale: N/A	
SHEET 43	



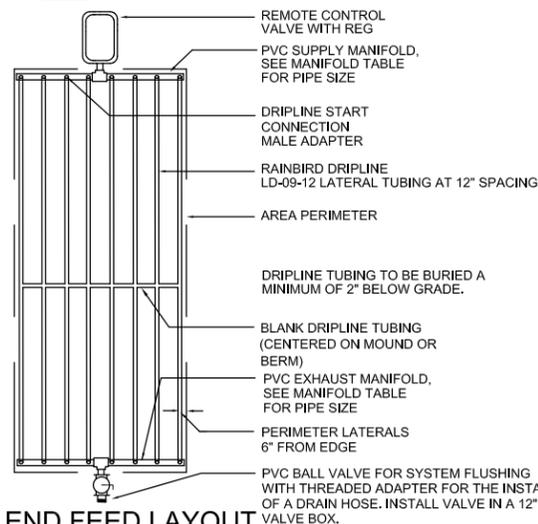
1 IRRInet-M CONTROLLER

SCALE: NTS



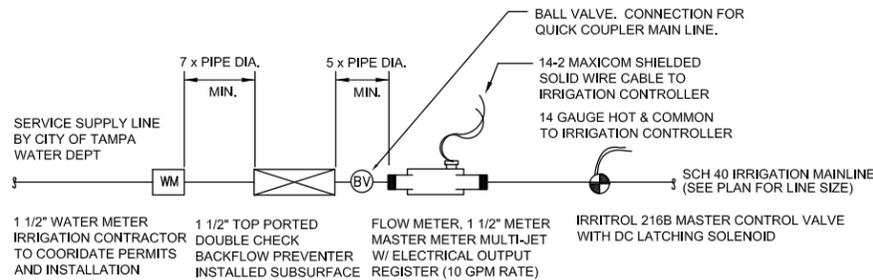
5 CENTER FEED SUPPLY MANIFOLD

SCALE: NTS



9 END FEED LAYOUT

SCALE: NTS

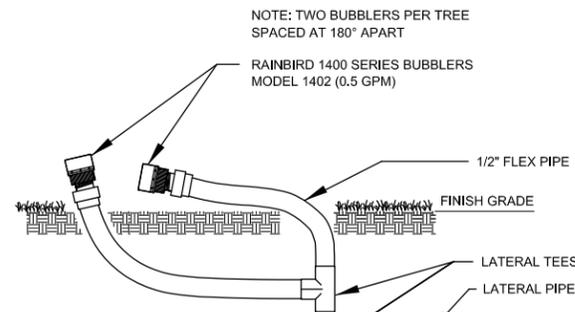


2 METER ASSEMBLY SCHEMATIC

SCALE: NTS

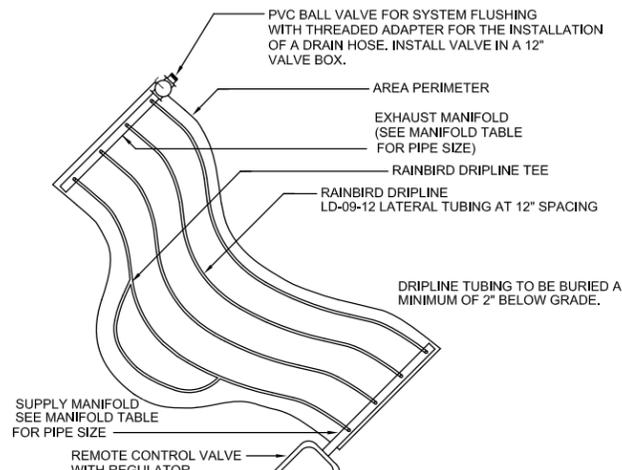
NOTE: ALL COMPONENTS TO BE INSTALLED PER LOCAL CODE AND MANUFACTURER RECOMMENDATIONS. ALL COMPONENTS TO BE INSTALLED IN SEPARATE PURPLE JUMBO VALVE BOXES.

2



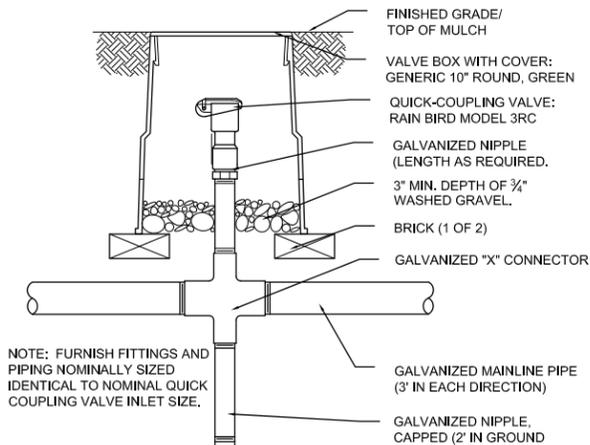
3 RAINBIRD 1400 SERIES BUBBLER

SCALE: NTS



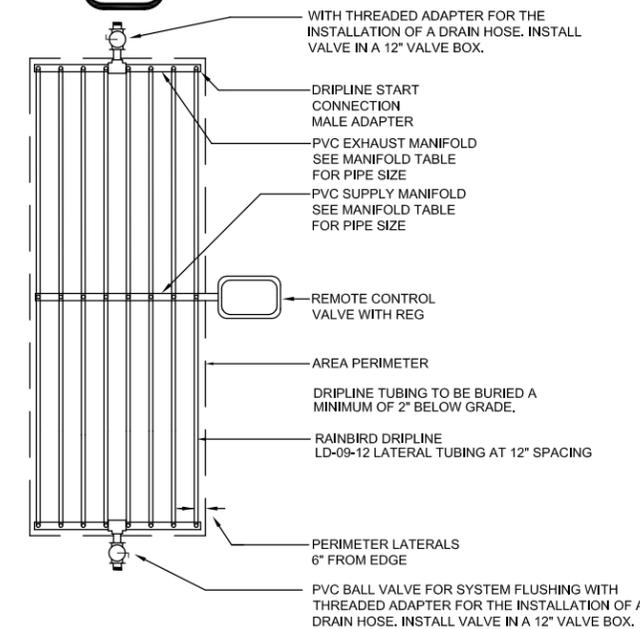
7 IRREGULAR AREAS: ODD CURVES

SCALE: NTS



4 QUICK COUPLER VALVE

SCALE: NTS



8 CENTER FEED LAYOUT

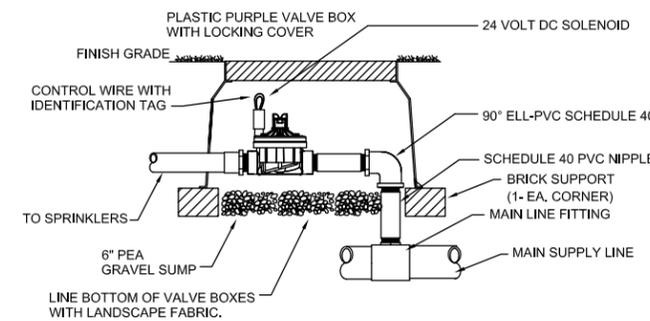
SCALE: NTS

IRRIGATION ZONE DEMAND GALLONS PER MINUTE (GPM)	SUPPLY MANIFOLD PIPE SIZE END AND CENTER FEED	EXHAUST MANIFOLD PIPE SIZE W/END FEED SUPPLY LINE	EXHAUST MANIFOLD PIPE SIZE W/END FEED SUPPLY LINE (TWO EXHAUST MANIFOLDS REQ'D)
0 - 6	3/4"	3/4"	3/4"
7 - 11	1"	1"	3/4"
12 - 19	1 1/4"	1 1/4"	1"
20 - 26	1 1/2"	1 1/2"	1 1/4"
27 - 42	2"	2"	1 1/4"
43 - 60	2 1/2"	2 1/2"	2"
61 - 90	3"	3"	2"

REFER TO EACH DRIPLINE IRRIGATION ZONE ON PLAN DRAWINGS FOR ZONE GPM

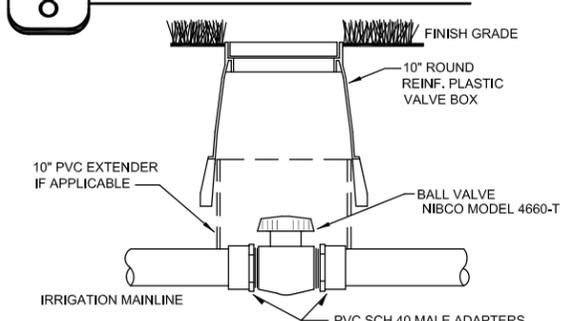
10 DRIPLINE SUPPLY AND EXHAUST PIPE SIZE TABLE

SCALE: NTS



11 IRRITROL 200B SERIES CONTROL VALVE

SCALE: NTS



12 ISOLATION BALL VALVE

SCALE: NTS



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Drawn: LDT	Date: 11/22/2013	▲			
Designed: LDT	Date: 11/22/2013	▲			
Checked: LDT	Date: 11/22/2013	▲			
Reviewed: LDT	Date: 11/22/2013	▲			
Approved: LDT	Date: 11/22/2013	▲			
Approved:	Date:	No:	Date:	Revision:	By:



CITY OF TAMPA
ECONOMIC AND URBAN
DEVELOPMENT DEPARTMENT

E. MADISON STREET IMPROVEMENTS
IRRIGATION DETAILS

Field Book:	
Atlas Sheet:	
File No.	Index No.
Job No. 215611523	
Scale: N/A	11523L-505-01T
SHEET 44	