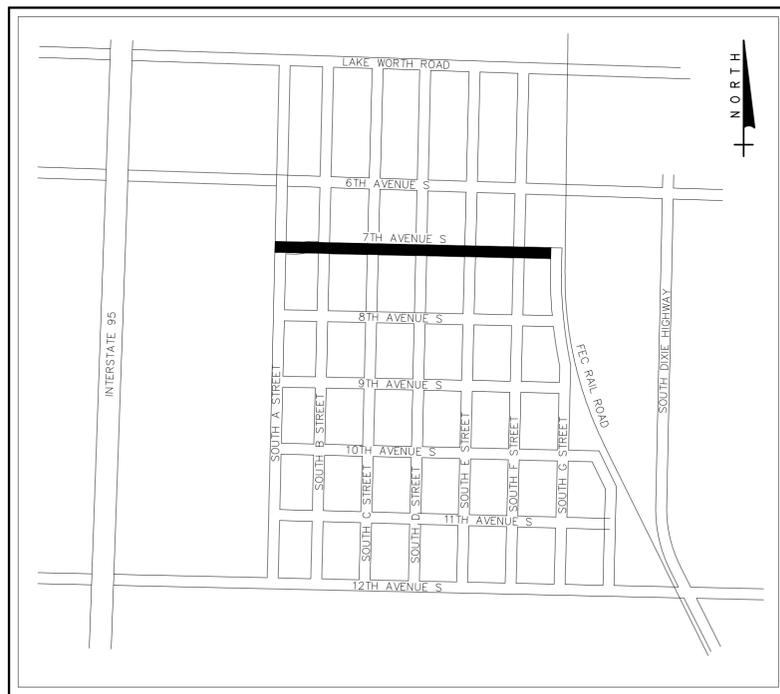


CITY OF LAKE WORTH 7TH AVENUE SOUTH ROADWAY IMPROVEMENTS PROJECT

CITY IFB No. 15-107

DRAWING LIST

SHEET	DRAWING	TITLE
GENERAL		
1	G-1	TITLE SHEET, LOCATION MAP AND DRAWING LIST
2	G-2	SYMBOLS, LEGEND, SURVEY NOTES, HORIZONTAL CONTROL DETAIL AND SITE BENCHMARKS
3	G-3	KEY MAP, GENERAL NOTES AND INFORMATION
CIVIL		
4	C-1	7TH AVENUE SOUTH PLAN AND PROFILE - SHEET 1 STATION 1+00 TO STATION 4+80
5	C-2	7TH AVENUE SOUTH PLAN AND PROFILE - SHEET 2 STATION 4+80 TO STATION 9+40
6	C-3	7TH AVENUE SOUTH PLAN AND PROFILE - SHEET 3 STATION 9+40 TO STATION 14+40
7	C-4	7TH AVENUE SOUTH PLAN AND PROFILE - SHEET 4 STATION 14+40 TO STATION 19+00
8	C-5	TYPICAL ROADWAY SECTIONS
9	C-6	ROADWAY CROSS-SECTIONS AND PARTIAL PROFILES
SIGNAGE & PAVEMENT MARKINGS		
10	SM-1	SIGNAGE & PAVEMENT MARKINGS PLANS - SHEET 1 OF 2
11	SM-2	SIGNAGE & PAVEMENT MARKINGS PLANS - SHEET 2 OF 2
12	SM-3	SIGNAGE & PAVEMENT MARKINGS DETAILS
DETAILS		
13	D-1	STANDARD DETAILS - SHEET 1 OF 5
14	D-2	STANDARD DETAILS - SHEET 2 OF 5
15	D-3	STANDARD DETAILS - SHEET 3 OF 5
16	D-4	STANDARD DETAILS - SHEET 4 OF 5
17	D-5	STANDARD DETAILS - SHEET 5 OF 5



— = LIMITS OF PROJECT AREA
S28, T44S, R43E
PROJECT LOCATION MAP
N.T.S.



BID SET MAY 2015

CITY COMMISSION

PAM TRIOLO - MAYOR
SCOTT MAXWELL - VICE MAYOR & COMMISSIONER, DISTRICT 1
CHRISTOPHER MCVOY - COMMISSIONER, DISTRICT 2
ANDY AMOROSO - COMMISSIONER, DISTRICT 3
RYAN MAIER - COMMISSIONER, DISTRICT 4
MICHAEL BORNSTEIN - CITY MANAGER

PUBLIC SERVICES DEPARTMENT

JAMIE BROWN - DIRECTOR
FELIPE LOFASO - ASSISTANT DIRECTOR

UTILITIES DEPARTMENT

LARRY JOHNSON - W/S UTILITIES DIRECTOR
MONICA SHANER - UTILITIES ENGINEER

FOR INFORMATION REGARDING THIS PROJECT, CONTACT:

DAVID L. MATHEWS, P.E.
MATHEWS CONSULTING, INC.
477 S. ROSEMARY AVENUE, SUITE 330
WEST PALM BEACH, FL 33401
561/655-6175

MATHEWS CONSULTING
CIVIL ENGINEERS

477 S. Rosemary Avenue, Suite 330, West Palm Beach, Florida 33401
Phone: 561-655-6175 • Fax: 561-655-6179
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M. REBECCA TRAVIS, P.E.
No. 40988 (GENERAL, CIVIL)

TITLE SHEET, LOCATION
MAP AND DRAWING LIST

SHEET: 1 of 17

DRAWING: G-1

REPORT OF SURVEY:

- The survey depicted hereon has been classified as a Topographic Survey, as defined in Rule 5J-17.050(10)(K) of the Florida Administrative Code, pursuant to Chapter 472.027, Florida Statutes as amended.
- This survey has been prepared in the office of Dennis J. Leavy & Associates, Inc. located at: 460 Business Park Way, Suite B, Royal Palm Beach, Florida whose certificate of authorization number is 6599, and the certifying surveyors license number is LS 5888.
- Date of field survey: April 1, 2014, as recorded in Field Books: 365, 366, 366 and 368.
- This survey does not meet those standards established by the American Land Title Association.
- Underground apparent use and/or improvements not located unless otherwise noted.
- This instrument may not be reproduced in part or whole without the written consent of Dennis J. Leavy & Associates, Inc.
- This survey is not valid without the signature and the original raised seal of a Florida licensed surveyor and mapper.
- Measurements shown hereon are expressed in feet and decimal parts thereof unless otherwise noted.
- The undersigned makes no representations or guarantees as to the information reflected hereon pertaining to easements, rights of way, setback lines, agreements and other matters, and further, this instrument is not intended to reflect or set forth all such matters. Such information should be obtained and confirmed by others through appropriate title verification. Lands shown hereon were not abstracted for rights of way and/or easements of record.
- All dates shown within the revisions block hereon are for interoffice filing use only and in no way affect the date of the field survey stated herein.
- In some instances, graphic representations have been exaggerated to more clearly illustrate relationships between physical improvements and/or lot lines. In all cases, dimensions shown shall control the location of the improvements over scaled positions.
- Bearings depicted hereon are based on the calculated line between Palm Beach County horizontal control monument "Grover" and the Southeast corner of Section 28, Township 44 South, Range 43 East, Palm Beach County, Florida. Said line having a bearing of South 62°01'01" East based upon the North American Datum of 1983, on the 1990 adjustment for the Florida Transverse Mercator East Zone.
- THIS IS NOT A BOUNDARY SURVEY.
- Benchmarks of Origin: National Geodetic Survey Benchmark "P-233" and Palm Beach County Engineering Department Benchmark "CEC 6TH" whose published elevations are 16.50' and 18.846' respectively, based upon the National Geodetic Vertical Datum of 1929 (NGVD 29).
- Elevations referenced hereon are based on the National Geodetic Vertical Datum of 1929 (NGVD 29).
- The elevations shown hereon are for the purpose of indicating the ground elevation only at the position shown and in no way indicate elevations at any other point than that shown hereon and do not determine subsurface conditions.
- All subsurface locations depicted hereon are as marked out in the field by others, under "Sunshine State One Call" ticket number 063401133. Dennis J. Leavy & Associates, Inc. assumes no liability as to the accuracy of the locations as marked out by others.
- This survey lies within Section 28, Township 44 South, Range 43 East, Palm Beach County, Florida.
- This survey does not address environmental matters, jurisdictional boundaries or hazardous waste concerns, should any of the foregoing exist.
- By graphic plotting only, the subject property lies within Zone C, as shown on the Flood Insurance Rate Map Community Panel Number 120213 0002 C, Panel 2 of 2, Map Revised: September 30, 1982.

SURVEY SYMBOL LEGEND:

∅ DIAMETER	⊠ CATCH BASIN	(A) AIR RELEASE VALVE
⊖ ELECTRIC OUTLET	⊠ = RED FLAG	(F) FPL MANHOLE
BFP ⊠ BACK FLOW PREVENTER	⊠ = WHITE FLAG	(U) UNKNOWN TYPE MANHOLE
W WATER METER	⊠ = BLUE FLAG	(M) DECORATIVE MAILBOX
IV ⊠ IRRIGATION VALVE	⊠ = YELLOW FLAG	(S) SANITARY MANHOLE
SV ⊠ SANITARY VALVE	⊠ = ORANGE FLAG	(D) STORM MANHOLE
WV ⊠ WATER VALVE	⊠ = GREEN FLAG	(LSA) LIMITS OF LANDSCAPING
⊠ SPIGOT	⊠ = RED FLAG	(LST) LIMITS OF TREE CANOPY
⊠ SIGN	CO ⊠ CLEAN OUT	(BUSH/HEDGE)
OHW OVERHEAD UTILITY WIRE	⊠ BLUE PAINT MARKS	CO ⊠ GUY WIRE ANCHOR
X 0.00 EXISTING ELEVATION	⊠ RED PAINT MARKS	⊠ SITE BENCHMARK
⊠ FIRE HYDRANT	⊠ GREEN PAINT MARKS	⊠ MONITORING WELL
⊠ WOOD POWER POLE	⊠ ORANGE PAINT MARKS	⊠ SET NAIL AND DISC LB #6599
⊠ CONCRETE POWER POLE	⊠ PURPLE PAINT MARKS	
⊠ GROUND LIGHT	⊠ WHITE PAINT MARKS	
⊠ WOOD POLE STREET LIGHT	⊠ SPRINKLER HEAD	
⊠ CONCRETE POLE STREET LIGHT	⊠ LIGHT POST	
⊠ FIBER OPTIC MARKER	⊠ MAILBOX	
EM ⊠ ELECTRIC METER	⊠ WOOD GUIDE POLE	
⊠ ELECTRIC HANDHOLD	⊠ CONCRETE SIGNAL LIGHT POLE	
⊠ UNKNOWN HANDHOLD	⊠ TRASH CAN	
⊠ CABLE/TV HANDHOLD	⊠ MONITORING WELL	
EBB ⊠ ELECTRIC BOX	⊠ TRAFFIC HANDHOLD	
ICV ⊠ IRRIGATION CONTROL VALVE IN CONC. BOX	⊠ GAS TEST BOX	
⊠ PARKING METER	⊠ UNKNOWN RISER BOX	
RCWV ⊠ RECLAIMED WATER VALVE	⊠ CONCRETE UTILITY POLE	
KP ⊠ KEY PAD	⊠ BELLSOUTH RISER	
⊠ GAS METER		
⊠ UNKNOWN METER		

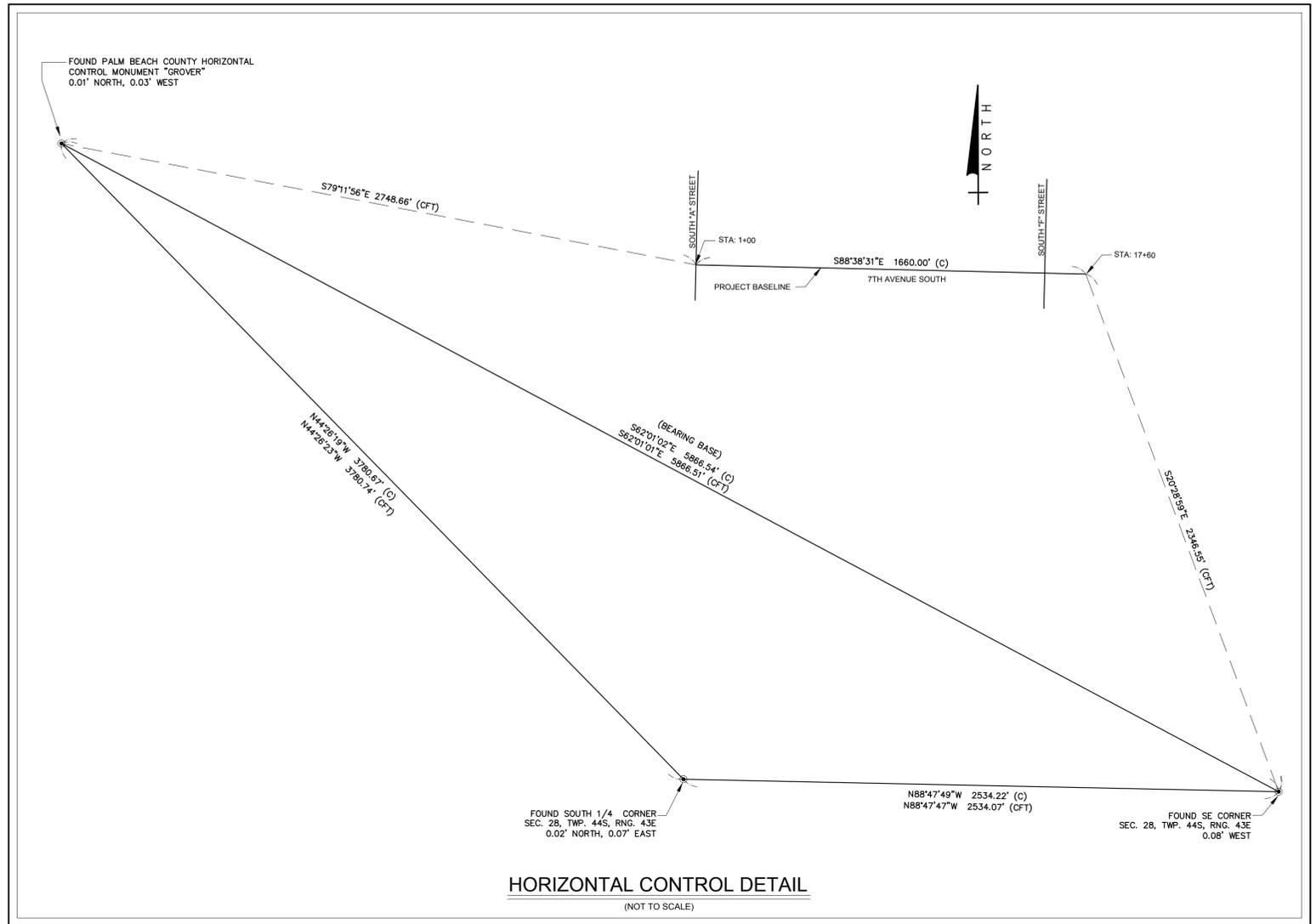
SURVEY TREE LEGEND:

00° ⊠ ACACIA	00° ⊠ UNKNOW	00° ⊠ CITRUS	00° ⊠ PAPAYA
00° ⊠ PALM SPECIES	00° ⊠ BOTTLEBRUSH	00° ⊠ CACTUS	00° ⊠ CYPRESS
00° ⊠ BANANA	00° ⊠ MAPLE	00° ⊠ MANGO	00° ⊠ GUMBO-LIMBO
00° ⊠ FICUS	00° ⊠ MAHOGANY	00° ⊠ HEDGE	
00° ⊠ SEAGRAPE	00° ⊠ OAK	00° ⊠ BUSH	

NOTE: VERIFICATION OF TREE SPECIES SHOULD BE CONDUCTED BY A PROFESSIONAL ENGAGED IN THE FIELD OF NATURAL SCIENCE.

SITE BENCHMARKS:

- BENCHMARK NO. 1**
STA: 0+84.39, 0.27' RT.
SET NAIL W/DISK LB #6599
EL. = 17.45' (NGVD 29)
N 827661.48
E 961535.16
- BENCHMARK NO. 2**
STA: 3+81.91, 8.39' LT.
SET NAIL W/DISK LB #6599
EL. = 23.95' (NGVD 29)
N 827663.09
E 961632.81
- BENCHMARK NO. 3**
STA: 7+03.02, 1.13' LT.
SET NAIL W/DISK LB #6599
EL. = 25.96' (NGVD 29)
N 827648.22
E 962153.66
- BENCHMARK NO. 4**
STA: 10+23.15, 3.53' LT.
SET NAIL W/DISK LB #6599
EL. = 19.88' (NGVD 29)
N 827643.03
E 962473.76
- BENCHMARK NO. 5**
STA: 13+42.80, 8.36' RT.
SET NAIL W/DISK LB #6599
EL. = 17.38' (NGVD 29)
N 827625.57
E 962793.08
- BENCHMARK NO. 6**
STA: 16+80.97, 1.82' RT.
SET NAIL W/DISK LB #6599
EL. = 15.86' (NGVD 29)
N 827622.09
E 963131.27



HORIZONTAL CONTROL DETAIL
(NOT TO SCALE)

SURVEY LEGEND:

ASPH. = ASPHALT	HH = HAND HOLE	R/C = ROD AND CAP
BPP = BLACK PLASTIC PIPE	HDPE = HIGH DENSITY POLYETHYLENE PIPE	RCP = REINFORCED CONCRETE PIPE
BST = BELLSOUTH TELEPHONE	INV = INVERT	R/W = RIGHT OF WAY
C/L = CENTERLINE	I.R.C. = IRON ROD & CAP	RWM = RIGHT OF WAY MAP
C = CALCULATED	L. = LENGTH	RLS = REGISTERED LAND SURVEYOR
CFT = CALCULATED FROM FIELD TRAVERSE	L.F. = LINEAR FEET	SEC. = SECTION
CLF = CHAIN LINK FENCE	LSA = LANDSCAPE AREA	STA. = STATION
CLP = CONCRETE LIGHT POLE	L.W.D.D. LAKE WORTH DRAINAGE DISTRICT	T.O.N. = TOP OF NUT
CMP = CORRUGATED METAL PIPE	MP = METAL PIPE	T.O.P. = TOP OF PIPE
CONC. = CONCRETE	N/A = NOT ACCESSIBLE	T.O.W. = TOP OF WALL
CP = CONCRETE PIPE	N/D = NAIL AND DISK	U.E. = UTILITY EASEMENT
D = CENTRAL ANGLE	OHW = OVERHEAD WIRE	UNK = UNKNOWN
DIP = DUCTILE IRON PIPE	O.R.B. = OFFICIAL RECORD BOOK	VERT. = VERTICAL
DEP. = DEPRESSED (CURB)	P.B. = PLAT BOOK	V.C. = VALLEY GUTTER
EL. = ELEVATION	PBC = PALM BEACH COUNTY	VCP = VITRIFIED CLAY PIPE
EP = EDGE OF PAVEMENT	P.B.C.R. = PALM BEACH COUNTY RECORDS	WPP = WOOD POWER POLE
EW = EDGE OF WATER	PG. = PAGE	
F.D.O.T. = FLORIDA DEPARTMENT OF TRANSPORTATION	PK = PARKER-KALON BRAND	
F.P.L. = FLORIDA POWER AND LIGHT	PRM = PERMANENT REFERENCE MARKER	
F.F. = FINISH FLOOR ELEVATION	PVC = POLYVINYL CHLORIDE	
FND = FOUND	R = RADIUS	

PLAT LEGEND:

- (P1) PER THE PLAT OF THE PALM BEACH FARMS COMPANY PLAT NO. 2 LUCERNE TOWNSITE (P.B. 2, PGS. 29-40, P.B.C.R.)
- (P2) PER THE PLAT OF ROYAL PALM PARK (P.B. 4, PG. 38, P.B.C.R.)

STATEMENT OF PURPOSE:

THE PURPOSE OF THIS SURVEY IS TO DEPICT THE EXISTING TOPOGRAPHY FOR A PORTION OF THE RIGHT-OF-WAY OF 7TH AVENUE SOUTH FROM SOUTH "A" STREET TO SOUTH "F" STREET, CITY OF LAKE WORTH, PALM BEACH COUNTY, FLORIDA.

DENNIS J. LEAVY & ASSOCIATES, INC.
PROFESSIONAL SURVEYORS & MAPPERS
460 BUSINESS PARK WAY, SUITE B, ROYAL PALM BEACH, FL 33411
PHONE (561) 753-0650 / FAX (561) 753-0290

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Date/Time : Thu, 21 May 2015 - 11:28am
User Name : jenkins
Acad Version : R19.0s (LMS Tech)
Current Plotstyle : ByColor
Layout Tab: G-2
Path Name : S:\Projects\LakeWorth\1738 7th Avenue\CAD\Working Folder\1738C02.dwg

NO.	DATE	ISSUED FOR	APRVD BY

DESIGNED: M.R.T.
DRAWN: J.A.J.
CHECKED: D.L.M./A.C.
APPROVED: D.L.M.
M. REBECCA TRAVIS, P.E.
No. 40988

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www.matthewsconsultinginc.com EB-0007929

VERIFY SCALE
1" = 100'
BAR IS ONE INCH ON FULL SIZE (22x34) ORIGINAL DRAWING. ADJUST SCALES AS NECESSARY.

ENGINEER NO.: 1738
CLIENT PROJECT NO.:
CAD REF.: 1738G02

CITY OF LAKE WORTH
7TH AVENUE SOUTH
ROADWAY IMPROVEMENTS PROJECT
SYMBOLS, LEGEND, SURVEY NOTES,
HORIZONTAL CONTROL AND SITE BENCHMARKS

DATE: MAY 2015
SHEET: 2 of 17
DRAWING: G-2

BIDDING

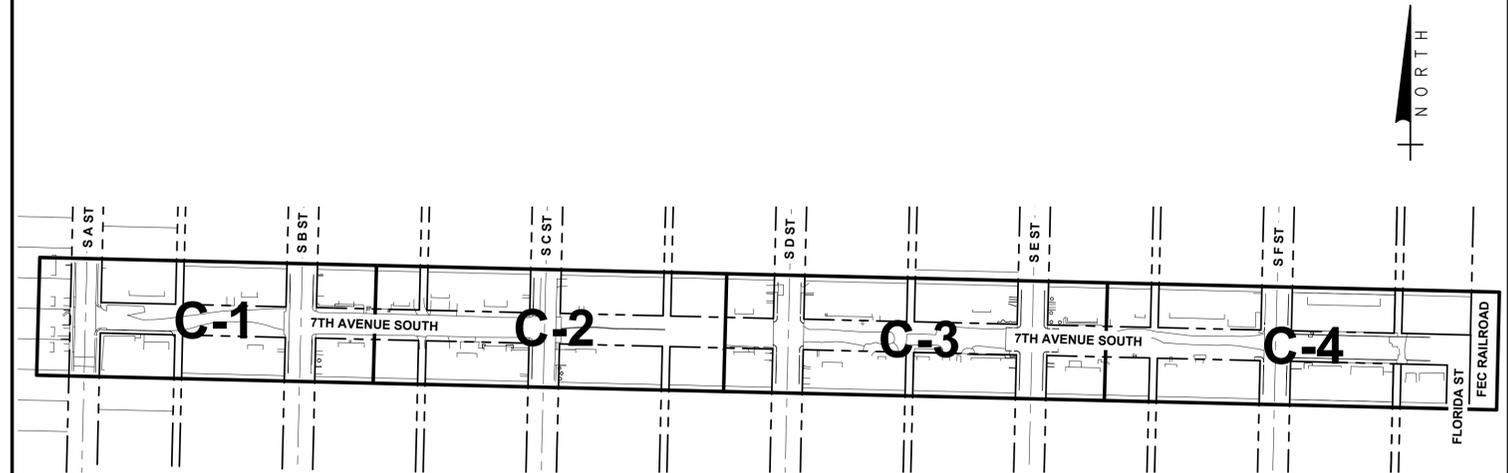
GENERAL NOTES

DEFINITIONS

1. CITY – THE CITY OF LAKE WORTH
2. CONTRACTOR – CONTRACTOR AND ALL SUBCONTRACTORS
3. ENGINEER – ENGINEER RESPONSIBLE FOR INSPECTION AND CERTIFICATION

PROCEDURE

1. A PRE-CONSTRUCTION MEETING IS TO BE HELD PRIOR TO DELIVERY OF MATERIALS AND INITIATION OF ANY CONSTRUCTION. THE MEETING SHALL BE ATTENDED BY THE CITY, CONTRACTOR, SUBCONTRACTORS, ENGINEER AND OTHER INTERESTED PARTIES.
2. ANY REVISIONS TO THE APPROVED PLANS MUST BE APPROVED BY THE CITY PRIOR TO THE PRE-CONSTRUCTION MEETING.
3. ALL APPLICABLE PERMITS MUST BE OBTAINED WITH COPIES PROVIDED TO THE CITY PRIOR TO COMMENCEMENT OF CONSTRUCTION.
4. THE CONTRACTOR SHALL MAINTAIN A CURRENT APPROVED SET OF CONSTRUCTION DOCUMENTS ON SITE AT ALL TIMES.
5. ALL MATERIALS SUPPLIED SHALL CONFORM TO PRODUCT LIST AND SHOP DRAWINGS AS APPROVED BY THE CITY PRIOR TO CONSTRUCTION. ALL REQUESTS FOR MATERIAL SUBSTITUTION SHALL BE APPROVED PRIOR TO DELIVERY OF THESE MATERIALS TO THE JOB SITE.
6. THE LOCATION OF THE EXISTING UTILITIES AS SHOWN ON THE PLANS ARE APPROXIMATE ONLY. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THE ACCURACY OF THE FACILITIES SHOWN NOR FOR ANY FACILITY NOT SHOWN. THE EXACT LOCATIONS SHALL BE DETERMINED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. IN ADDITION, THE CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY IF OTHER UTILITIES (NOT SHOWN ON THE PLAN) EXIST WITHIN THE AREA OF CONSTRUCTION. SHOULD THERE BE UTILITY CONFLICTS, THE CONTRACTOR SHALL INFORM THE CITY AND NOTIFY THE RESPECTIVE UTILITY OWNER TO RESOLVE THE UTILITY CONFLICTS AND THE UTILITY ADJUSTMENTS AS REQUIRED.
7. THE CONTRACTOR SHALL BE RESPONSIBLE AT ALL TIMES THROUGHOUT THE DURATION OF CONSTRUCTION FOR THE PROTECTION OF EXISTING AND NEWLY INSTALLED UTILITIES FROM DAMAGE OR DISRUPTION OF SERVICE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TAKING SUCH MEASURES AS NECESSARY TO PROTECT THE HEALTH, SAFETY, AND WELFARE OF THOSE PERSONS HAVING ACCESS TO THE WORK SITE.
8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING LOCATIONS OF ALL OTHER UTILITY FACILITIES.
9. THE CONTRACTOR SHALL SCHEDULE INSPECTIONS AND TESTS WITH THE CITY A MINIMUM OF 48 HOURS IN ADVANCE.
10. CONTRACTOR SHALL NOT DISTURB EXISTING CITY MAINS OR STRUCTURES WITHOUT THE PRESENCE OF A CITY INSPECTOR. CITY UTILITY SYSTEM VALVES AND APPURTENANCES MAY ONLY BE OPERATED BY CITY PERSONNEL.
11. FACILITIES PROPOSED HEREIN SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE APPROVED PLANS. DEVIATIONS FROM THE APPROVED PLANS MUST BE APPROVED IN ADVANCE BY THE CITY.
12. UPON COMPLETION OF CONSTRUCTION AND PRIOR TO FINAL ACCEPTANCE OF THE WORK, A FINAL INSPECTION SHALL VERIFY PROPER ADHERENCE TO ALL FACETS OF THE PLANS AND SPECIFICATIONS.
13. PAVING, DRAINAGE AND TRAFFIC CONSTRUCTION SHALL CONFORM TO FLORIDA DEPARTMENT OF TRANSPORTATION ROADWAY AND DESIGN STANDARDS, STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, AND MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) UNLESS SHOWN OTHERWISE.
14. AS-BUILT DRAWINGS SHALL BE PREPARED BY A REGISTERED LAND SURVEYOR, REGISTERED IN THE STATE OF FLORIDA, AND SUBMITTED BY THE CONTRACTOR TO THE CITY.
15. CONTRACTOR SHALL NOTIFY SUNSHINE STATE ONE CALL (811) TWO FULL BUSINESS DAYS BEFORE DIGGING.
16. GRADES SHOWN ON PLANS ARE FINISHED GRADES. THE CONTRACTOR SHALL BE REQUIRED TO ADJUST ALL EXISTING UTILITY CASTINGS INCLUDING SANITARY SEWER MANHOLE TOPS, VALVE BOXES, INLETS AND SIMILAR STRUCTURES TO FINISHED GRADE.
17. CONTRACTOR SHALL MAINTAIN LOCAL TRAFFIC AT ALL TIMES DURING CONSTRUCTION AND SHALL BE REQUIRED TO PROVIDE ALL BARRICADES, LIGHTING, SIGNAGE AND FLAGMEN AS NECESSARY TO PROVIDE FOR THE SAFETY OF THE PUBLIC IN THE WORK AREA. THE CONTRACTOR SHALL SUBMIT A DETAILED TRAFFIC MAINTENANCE PLAN AT THE PRECONSTRUCTION MEETING.
18. EXISTING BASE MATERIAL THAT IS REMOVED DURING CONSTRUCTION SHALL NOT BE USED IN THE CONSTRUCTION OF NEW LIMEROCK BASE.
19. ALL VEGETATION, DEBRIS, CONCRETE OR OTHER UNSUITABLE MATERIAL SHALL BE LEGALLY DISPOSED OF OFF-SITE IN AN AREA AT THE CONTRACTORS EXPENSE.
20. CONTRACTOR SHALL UTILIZE CONSTRUCTION METHODS AND DEVICES, SUCH AS TURBIDITY SCREENS, CURTAINS AND FLOATING SILT BARRIERS WHERE NECESSARY IN ORDER TO COMPLY WITH ALL STATE AND LOCAL WATER QUALITY STANDARDS.
21. ALL REINFORCED CONCRETE STORM SEWER PIPE SHALL BE CLASS III, UNLESS OTHERWISE NOTED.
22. EMBANKMENT (FILL) AND EXCESS MATERIAL REQUIRED FOR ROADWAY CONSTRUCTION AND UTILITY INSTALLATIONS SHALL BE SUPPLIED AND/OR DISPOSED OF BY THE CONTRACTOR. ALL COSTS ASSOCIATED WITH EARTHWORK REQUIREMENTS TO COMPLETE THE ROADWAY CONSTRUCTION AND UTILITY IMPROVEMENTS SHALL BE INCLUDED IN THE COSTS OF OTHER APPROPRIATE PAY ITEMS.
23. CONTINUITY OF WATER AND SEWER SERVICE TO CITY UTILITY CUSTOMERS SHALL BE MAINTAINED THROUGHOUT THE DURATION OF THIS PROJECT. IF A BREAK IN SERVICE IS UNAVOIDABLE TO ACCOMMODATE CONNECTION OF NEW FACILITIES, IT SHALL BE SCHEDULED FOR OFF PEAK HOURS WITH THE CITY. DETERMINATION OF SERVICE BREAK REQUIREMENT WILL BE MADE BY THE CITY.
24. SITE INFORMATION BASED ON A SURVEY PREPARED BY: DENNIS J. LEAVY & ASSOCIATES, INC.
25. RELOCATION OF ANY UTILITY POLES AND GAS PIPE LINES SHALL BE COORDINATED BY THE CONTRACTOR WITH LW ELECTRIC, AND FLORIDA PUBLIC UTILITIES, RESPECTIVELY, IF REQUIRED.
26. ALL CONSTRUCTION SHALL BE DONE IN A SAFE MANNER, SPECIFICALLY, THE RULES AND REGULATIONS OF THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION AND THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES SHALL BE STRICTLY OBSERVED.
27. ALL CONSTRUCTION SHALL CONFORM TO THE STANDARDS AND REQUIREMENTS OF THE AGENCIES HAVING JURISDICTION OVER THE R/W WHERE THE PROJECT IS CONSTRUCTED.
28. MAINTENANCE OF TRAFFIC (MOT) PLANS SHALL MEET THE REQUIREMENTS OF SECTION 102 OF THE FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AS FURTHER DEFINED IN THE SPECIFICATIONS OF THESE CONTRACT DOCUMENTS.
29. CONTRACTOR SHALL MAINTAIN ACCESS TO PRIVATE PROPERTY AT ALL TIMES.
30. COVER SHALL BE A MINIMUM OF 2.5 FEET (TYPICAL) UNLESS OTHERWISE NOTED ON DRAWINGS.
31. ALL DELETERIOUS MATERIAL SHALL BE PROPERLY DISPOSED OF BY THE CONTRACTOR AT HIS EXPENSE.
32. IF UPON EXCAVATION, AN EXISTING UTILITY IS FOUND TO BE IN CONFLICT WITH THE PROPOSED CONSTRUCTION OR TO BE OF A SIZE OR MATERIAL DIFFERENT FROM THAT SHOWN ON THE DRAWINGS, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER.
33. ALL OPEN TRENCHES AND HOLES ADJACENT TO ROADWAY OR WALKWAY SHALL BE PROPERLY MARKED AND BARRICADED TO ASSURE THE SAFETY OF BOTH VEHICULAR AND PEDESTRIAN TRAFFIC.
34. TRAFFIC SIGNS TO BE SET PER THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
35. CONTRACTOR SHALL PERFORM ALL WORK NECESSARY TO LOCATE, EXCAVATE AND PREPARE FOR CONNECTIONS TO THE EXISTING SYSTEMS ALL AS SHOWN ON THE DRAWINGS.
36. STATIONS SHOWN ON THE DRAWINGS ARE STATIONS BASED ON THE ESTABLISHED BASELINE AND SHALL NOT BE CONSIDERED AS DISTANCES OR AS A MEASURE OF THE LINEAR FOOTAGE OF PIPE TO BE INSTALLED.
37. CONTRACTOR SHALL MONITOR AND PROHIBIT THE DEFACING OF FRESHLY PLACED CONCRETE SURFACES. ANY CONCRETE SURFACES DEFACED SHALL BE REPLACED AT NO ADDITIONAL COST TO THE CITY.
38. CLEARING AND GRUBBING SHALL INCLUDE REMOVAL OF ALL VEGETATION WITHIN RIGHT-OF-WAY AS REQUIRED TO CONSTRUCT THE REQUIRED IMPROVEMENTS.
39. STRIPING SHALL BE THERMOPLASTIC AND IN CONFORMANCE WITH THE CITY OF LAKE WORTH STANDARDS AND PER PALM BEACH COUNTY TYPICALS FOR PAVEMENT MARKINGS, SIGNING AND GEOMETRICS No. T-P-10-001.
40. PROJECT SITE SAFETY:
 - A. THE ENGINEER/OWNER OR THEIR EMPLOYEES HAVE NO AUTHORITY TO EXERCISE ANY CONTROL OVER THE CONTRACTOR, ANY SUB-CONTRACTOR OR OTHER ENTITY OR THEIR EMPLOYEES IN CONNECTION WITH THEIR WORK OR ANY JOBSITE HEALTH OR SAFETY PRECAUTIONS.
 - B. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR JOBSITE SAFETY, AND WARRANTS THAT THIS INTENT IS MADE EVIDENT BY THE AGREEMENT BETWEEN OWNER AND CONTRACTOR.
 - C. ALL EXISTING OVERHEAD AND UNDERGROUND UTILITIES SHOWN ON THESE DRAWINGS OR ENCOUNTERED THROUGH THE PROGRESSION OF WORK AT THIS PROJECT SITE ARE ASSUMED TO BE LIVE, CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SAFETY PRECAUTIONS WHEN WORKING AROUND EXISTING OVERHEAD OR UNDERGROUND UTILITIES.



KEY MAP
NOT TO SCALE

GENERAL INFORMATION

1. AT&T TELEPHONE, LW ELECTRIC, CABLE TV, GAS, ETC. ARE TAKEN FROM FIELD INSPECTIONS AND SKETCHES PROVIDED BY UTILITIES AND ARE SHOWN FOR THE CONVENIENCE OF THE CONTRACTOR ONLY. THE CONTRACTOR SHALL CONTACT ALL UTILITY OWNERS AND CONFIRM LOCATIONS OF UTILITIES NO LESS THAN TWO FULL BUSINESS DAYS BEFORE DIGGING. THE CONTRACTOR SHALL ACCURATELY LOCATE AND UNCOVER ALL EXISTING UTILITIES BEFORE BEGINNING CONSTRUCTION WHERE CROSSING OR PARALLELING OF EXISTING UTILITIES OCCUR. ANY DAMAGE RESULTING FROM THE CONTRACTORS OPERATION SHALL BE REPAIRED AT THE CONTRACTORS EXPENSE.

EROSION CONTROL NOTES:

1. CUT AND FILL SLOPES TO BE CONSTRUCTED IN A MANNER THAT WILL MINIMIZE EROSION. SILT FENCES TO BE USED WHERE NECESSARY.
2. CONSTRUCTION VEHICLE ACCESS ROUTES SHALL BE SWEEPED CLEAN OF SEDIMENT, CONCRETE AND OTHER CONSTRUCTION MATERIALS AS NEEDED.
3. ALL BERMS, DIKES AND SPOIL PILES SUBJECT TO EROSION MUST BE STABILIZED OR CONTAINED TO PREVENT EROSION AND RUNOFF FROM THE PROJECT.
4. ALL EXISTING STORM SEWER INLET GRATES TO BE COVERED WITH FILTER FABRIC DURING CONSTRUCTION.

TREE REMOVAL TABLE

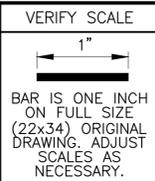
Tree #	DBH (inches)	Type
1	36"	Mango
2	36" clump	unknown
3	36" clump	Areca Palm
4	72" clump	Areca Palm
5	6"	Goldenrain
6	10"	Norfolk Pine
7	8"	Cabbage Palm
8	4"	Frangipani
9	5"	Sabal Palmetto
10	18"	Sabal Palmetto
11	7"	Goldenrain
12	12"	Goldenrain
13	36"	Australian Pine
14	36"	Australian Pine
15	12"	Palm
16	24"	Australian Pine
17	10"	Palm
18	36"	Australian Pine

Acad Version : R19.0s (LMS Tech) User Name : Jenkins Date/Time : Thu, 21 May 2015 - 11:28am Path Name : S:\Projects\LakeWorth\1738 7th Avenue\CAD\Working Folder\1738G03.dwg Current PlotStyle : ByColor Layout Tab: G-3

NO.	DATE	ISSUED FOR	APR'D BY

DESIGNED: M.R.T.
 DRAWN: J.A.J.
 CHECKED: D.L.M./A.C.
 APPROVED: D.L.M.
 M. REBECCA TRAVIS, P.E.
 No. 40988

MATHEWS CONSULTING
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 www.matthewsconsultinginc.com EB-0007929



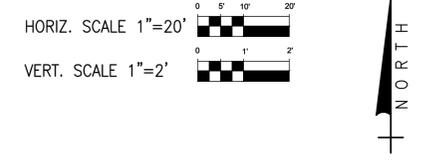
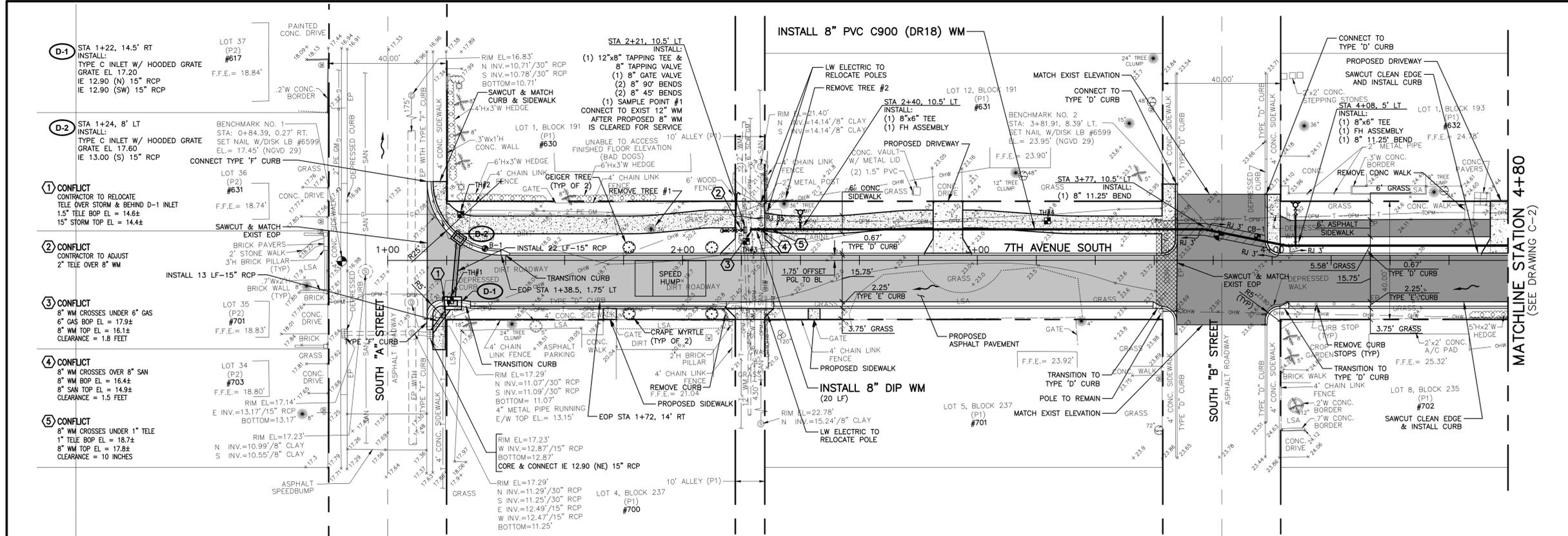
ENGINEER NO.: 1738
 CLIENT PROJECT NO.:
 CAD REF.: 1738G03

CITY OF LAKE WORTH
 7TH AVENUE SOUTH
 ROADWAY IMPROVEMENTS PROJECT

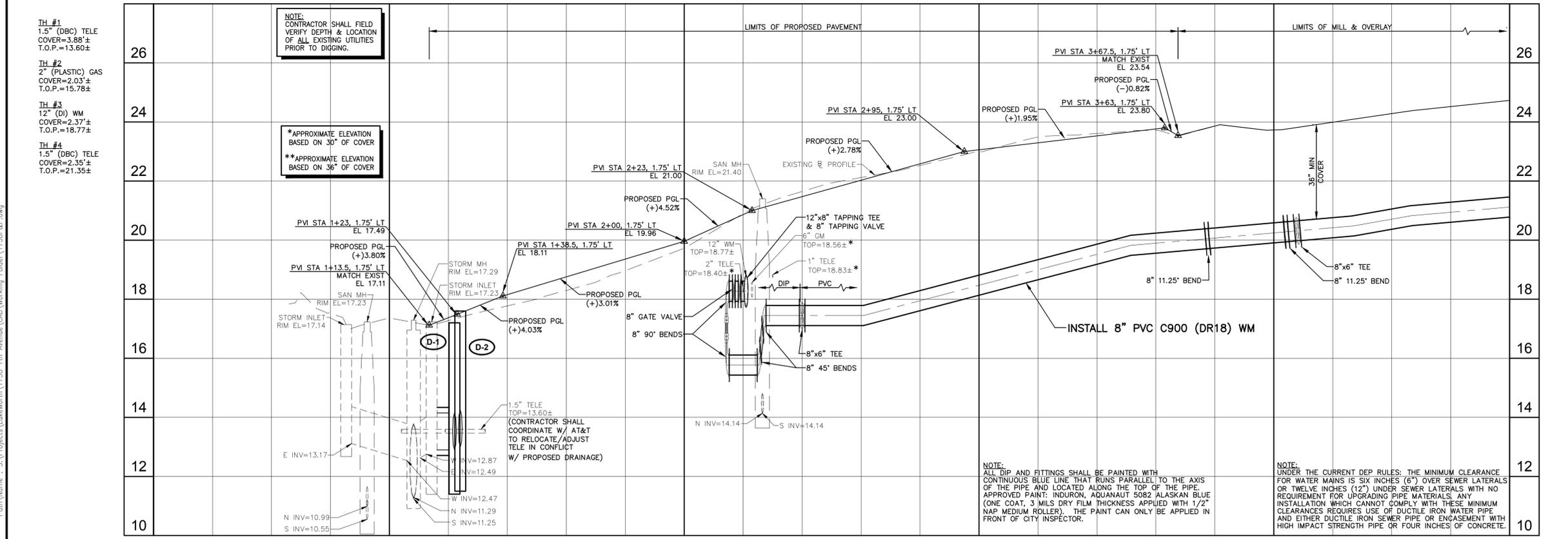
KEY MAP, GENERAL NOTES
 AND INFORMATION

DATE: MAY 2015
 SHEET: 3 of 17
 DRAWING: G-3

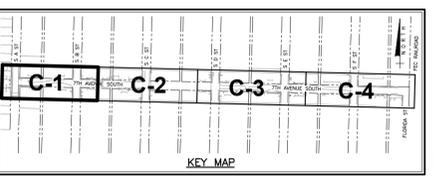
BIDDING



- NOTES:**
- CONTRACTOR SHALL FIELD VERIFY LOCATION (HORIZONTAL & VERTICAL) OF ALL UTILITY CROSSINGS, INCLUDING PARALLELING OF UTILITIES, PRIOR TO CONSTRUCTION OF PROPOSED WATER MAIN AND DRAINAGE.
 - CONTRACTOR SHALL REFER TO DETAILS ON DRAWINGS D-1 THROUGH D-5 FOR STANDARD DETAIL CONSTRUCTION INFORMATION.
 - ALL AREAS DISTURBED BY CONSTRUCTION ACTIVITIES SHALL BE RESTORED IN KIND.
 - IN AREAS OF UNDERGROUND UTILITIES, CONTRACTOR SHALL HAND-DIG AS NECESSARY TO AVOID DAMAGING EXISTING UTILITIES. CONTRACTOR IS RESPONSIBLE FOR REPLACING ANY DAMAGED UTILITIES AS A RESULT OF CONSTRUCTION ACTIVITIES (THIS IS A NON-PAY ITEM).
 - SEE STANDARD DETAIL SHEET D-4 FOR RESTRAINED PIPE LENGTHS.
 - DRAWINGS ARE BASED ON NGVD 1929.
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 - EXISTING WATER SERVICE LINES AND SANITARY SEWER LATERALS ARE SHOWN IN PLAN VIEW ONLY AND ARE APPROXIMATE LOCATIONS.
 - CONTRACTOR SHALL LOCATE ALL EXISTING WATER SERVICE LINES PRIOR TO DIGGING. CONTRACTOR SHALL REPAIR ANY WATER SERVICE LINES DAMAGED DURING CONSTRUCTION IMMEDIATELY (THIS IS A NON-PAY ITEM).
 - ALL PAVEMENT MARKINGS SHALL BE REPLACED IN KIND.
 - CONTRACTOR SHALL ADJUST ALL EXISTING VALVE BOXES AND MANHOLE FRAME AND LIDS TO BE FLUSH WITH PROPOSED PAVEMENT OVERLAY.



- LEGEND**
- OPEN CUT PAVEMENT REPAIR
 - PROPOSED ASPHALT PAVEMENT
 - PROPOSED 1-1/4" ASPHALT PAVEMENT OVERLAY
 - PROPOSED 1" MILL & 1" TYPE S-3 OVERLAY
 - PROPOSED CONCRETE DRIVEWAY
 - PROPOSED CONCRETE SIDEWALK
 - REMOVE EXISTING PAVEMENT/CONCRETE SIDEWALK
 - 1" SINGLE POTABLE WATER SERVICE & BOX**
 - TH#1 ■ TEST HOLE LOCATION
 - B-1 ● SOIL BORING LOCATION
 - CB-1 ● PAVEMENT CORE LOCATION
 - EX-1 ● EXFILTRATION TEST LOCATION
 - - - - - EXISTING WM TO BE ABANDONED IN-PLACE (NO GROUT)
 - - - - - EXISTING WM TO BE REMOVED
 - - - - - EXISTING WM TO BE GROUTED IN-PLACE
 - Ⓞ CONFLICT
 - DIRECTION OF FLOW



NO.	DATE	ISSUED FOR	APR'D BY	DESIGNED:	M.R.T.
				DRAWN:	J.A.J.
				CHECKED:	D.L.M./A.C.
				APPROVED:	D.L.M.

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VERIFY SCALE

1" = 20'

BAR IS ONE INCH ON FULL SIZE (22x34) ORIGINAL DRAWING. ADJUST SCALES AS NECESSARY.

ENGINEER NO.: 1738

CLIENT PROJECT NO.:

CAD REF.: 1738P&P

CITY OF LAKE WORTH

7TH AVENUE SOUTH

ROADWAY IMPROVEMENTS PROJECT

7TH AVENUE SOUTH

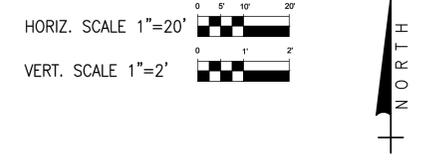
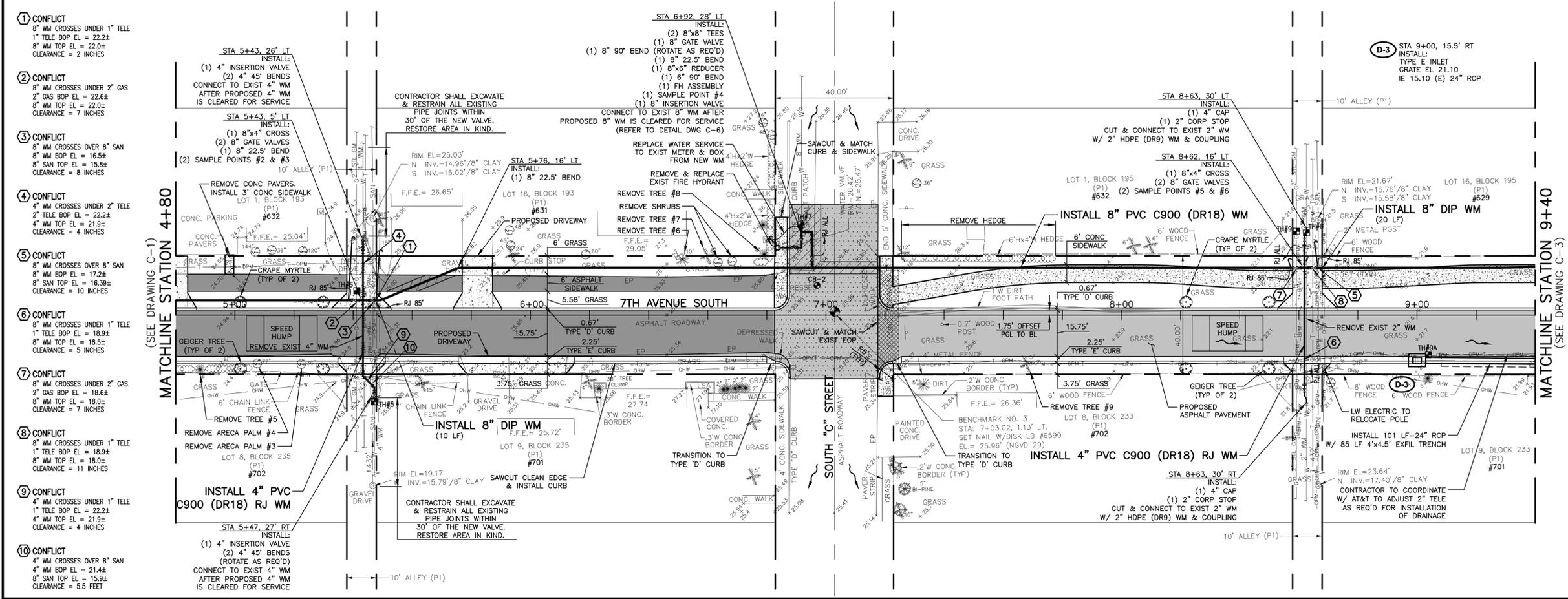
PLAN AND PROFILE - SHEET 1

STATION 1+00 TO STATION 4+80

DATE:	MAY 2015
SHEET:	4 of 17
DRAWING:	C-1

BIDDING

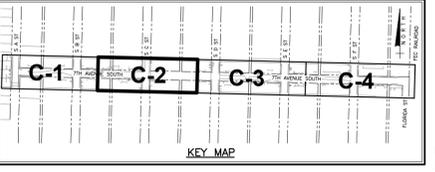
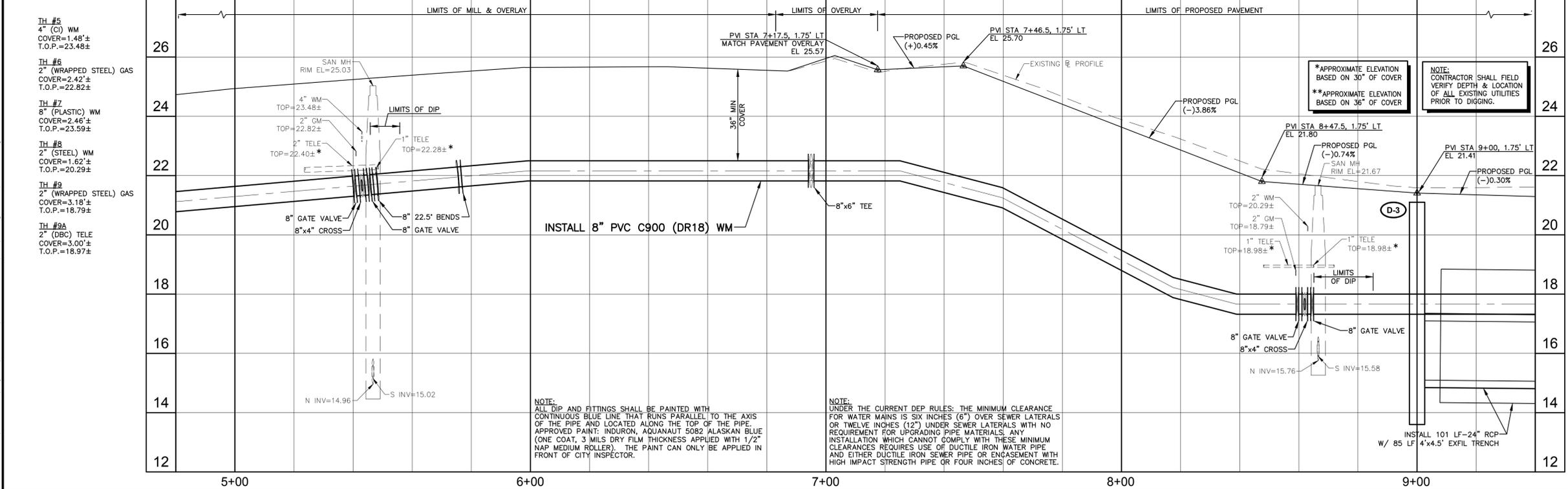
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- CONFLICT**
8" WM CROSSES UNDER 1" TELE
1" TELE BOP EL = 22.2±
8" WM TOP EL = 22.0±
CLEARANCE = 2 INCHES
- CONFLICT**
8" WM CROSSES UNDER 2" GAS
2" GAS BOP EL = 22.6±
8" WM TOP EL = 22.0±
CLEARANCE = 7 INCHES
- CONFLICT**
8" WM CROSSES OVER 8" SAN
8" WM BOP EL = 16.5±
8" SAN TOP EL = 15.8±
CLEARANCE = 8 INCHES
- CONFLICT**
4" WM CROSSES UNDER 2" TELE
2" TELE BOP EL = 22.2±
4" WM TOP EL = 21.9±
CLEARANCE = 4 INCHES
- CONFLICT**
8" WM CROSSES OVER 8" SAN
8" WM BOP EL = 17.2±
8" SAN TOP EL = 16.39±
CLEARANCE = 10 INCHES
- CONFLICT**
8" WM CROSSES UNDER 1" TELE
1" TELE BOP EL = 18.9±
8" WM TOP EL = 18.5±
CLEARANCE = 5 INCHES
- CONFLICT**
8" WM CROSSES UNDER 2" GAS
2" GAS BOP EL = 18.6±
8" WM TOP EL = 18.0±
CLEARANCE = 7 INCHES
- CONFLICT**
8" WM CROSSES UNDER 1" TELE
1" TELE BOP EL = 18.9±
8" WM TOP EL = 18.0±
CLEARANCE = 11 INCHES
- CONFLICT**
4" WM CROSSES UNDER 1" TELE
1" TELE BOP EL = 22.2±
4" WM TOP EL = 21.9±
CLEARANCE = 4 INCHES
- CONFLICT**
4" WM CROSSES OVER 8" SAN
4" WM BOP EL = 21.4±
8" SAN TOP EL = 15.9±
CLEARANCE = 5.5 FEET

- LEGEND**
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 - PROPOSED ASPHALT PAVEMENT
 - PROPOSED 1-1/4" ASPHALT PAVEMENT OVERLAY
 - PROPOSED 1" MILL & 1" TYPE S-3 OVERLAY
 - PROPOSED CONCRETE DRIVEWAY
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 - EXISTING WM TO BE REMOVED
 - XXXXX EXISTING WM TO BE GROUTED IN-PLACE
 - ⊕ CONFLICT
 - DIRECTION OF FLOW



NO.	DATE	ISSUED FOR	APR'D BY

DESIGNED:	M.R.T.
DRAWN:	J.A.J.
CHECKED:	D.L.M./A.C.
APPROVED:	D.L.M.

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VERIFY SCALE
1" = 20'
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ENGINEER NO.: 1738
CLIENT PROJECT NO.:
CAD REF.: 1738P&P

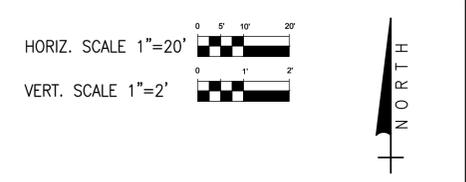
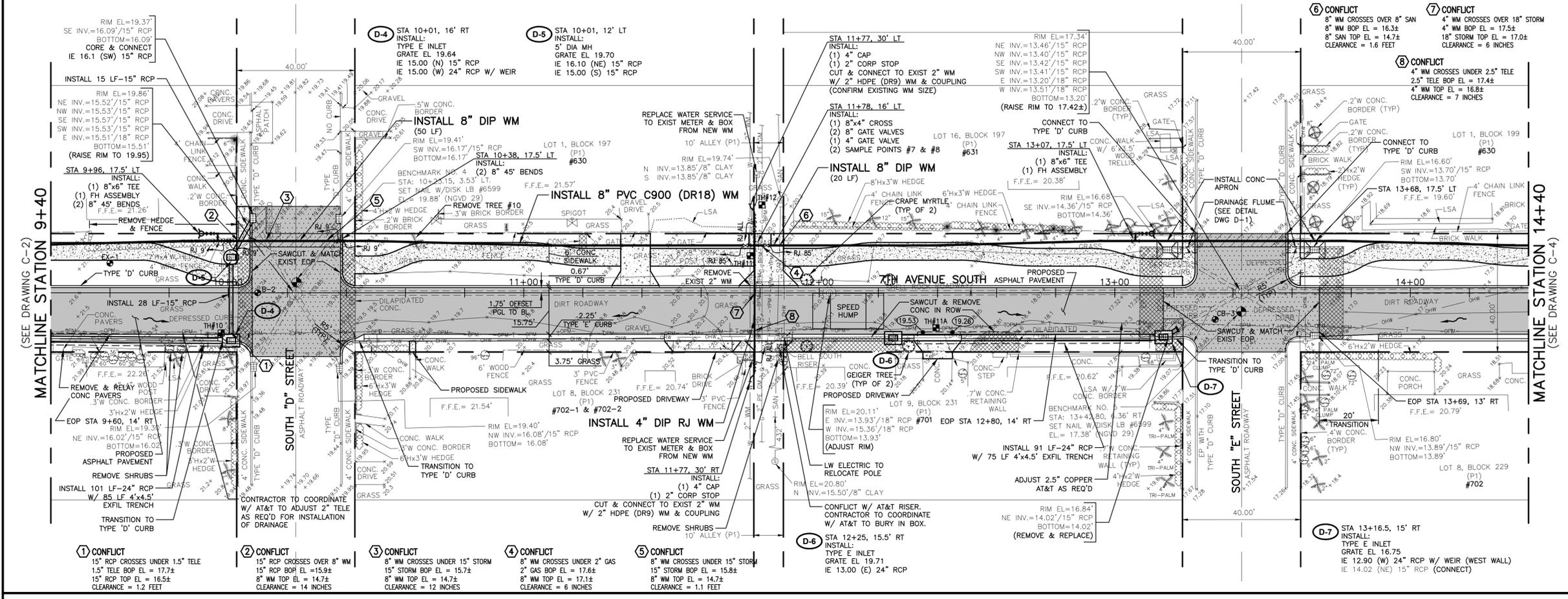
CITY OF LAKE WORTH
7TH AVENUE SOUTH
ROADWAY IMPROVEMENTS PROJECT

7TH AVENUE SOUTH
PLAN AND PROFILE - SHEET 2
STATION 4+80 TO STATION 9+40

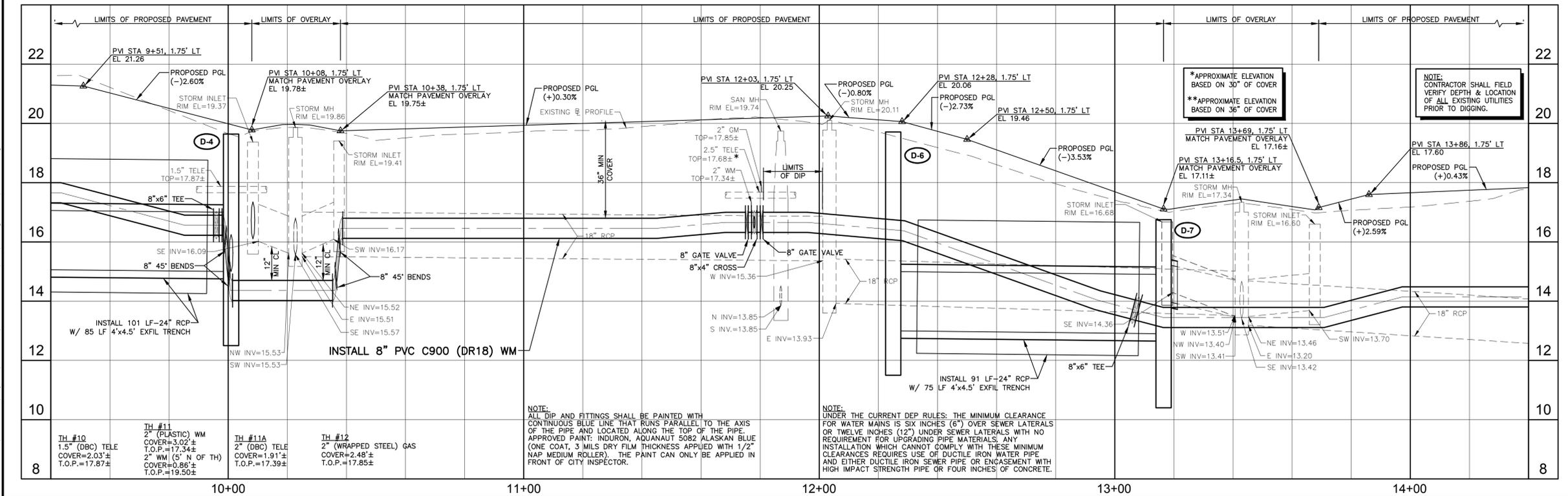
DATE:	MAY 2015
SHEET:	5 of 17
DRAWING:	C-2

Date/Time : Thu, 21 May 2015 - 11:29am
 User Name : jenkins
 Acad Version : R19.0s (LMS Tech)
 Current Plotstyle : ByColor
 Layout Tab: C-2
 Path Name : S:\Projects\LabelNorth\1738_7th Avenue\CAD\Working Folder\1738P&P.dwg

BIDDING



- NOTES:**
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- LEGEND**
- OPEN CUT PAVEMENT REPAIR
 - PROPOSED ASPHALT PAVEMENT
 - PROPOSED 1-1/4\"/>
- TH#1** TEST HOLE LOCATION
B-1 SOIL BORING LOCATION
CB-1 PAVEMENT CORE LOCATION
EX-1 EXFILTRATION TEST LOCATION
 ----- EXISTING WM TO BE ABANDONED IN-PLACE (NO GROUT)
 - - - - - EXISTING WM TO BE REMOVED
 -XXXXXX EXISTING WM TO BE GROUTED IN-PLACE
 (1) CONFLICT
 - - - - - DIRECTION OF FLOW

NO.	DATE	ISSUED FOR	APR'D BY	DESIGNED:	M.R.T.
				DRAWN:	J.A.J.
				CHECKED:	D.L.M./A.C.
				APPROVED:	D.L.M.

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VERIFY SCALE

 BAR IS ONE INCH ON FULL SIZE (22x34) ORIGINAL DRAWING. ADJUST SCALES AS NECESSARY.
 ENGINEER NO.: 1738
 CLIENT PROJECT NO.:
 CAD REF.: 1738P&P

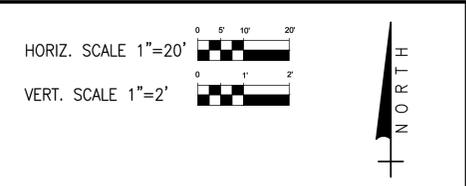
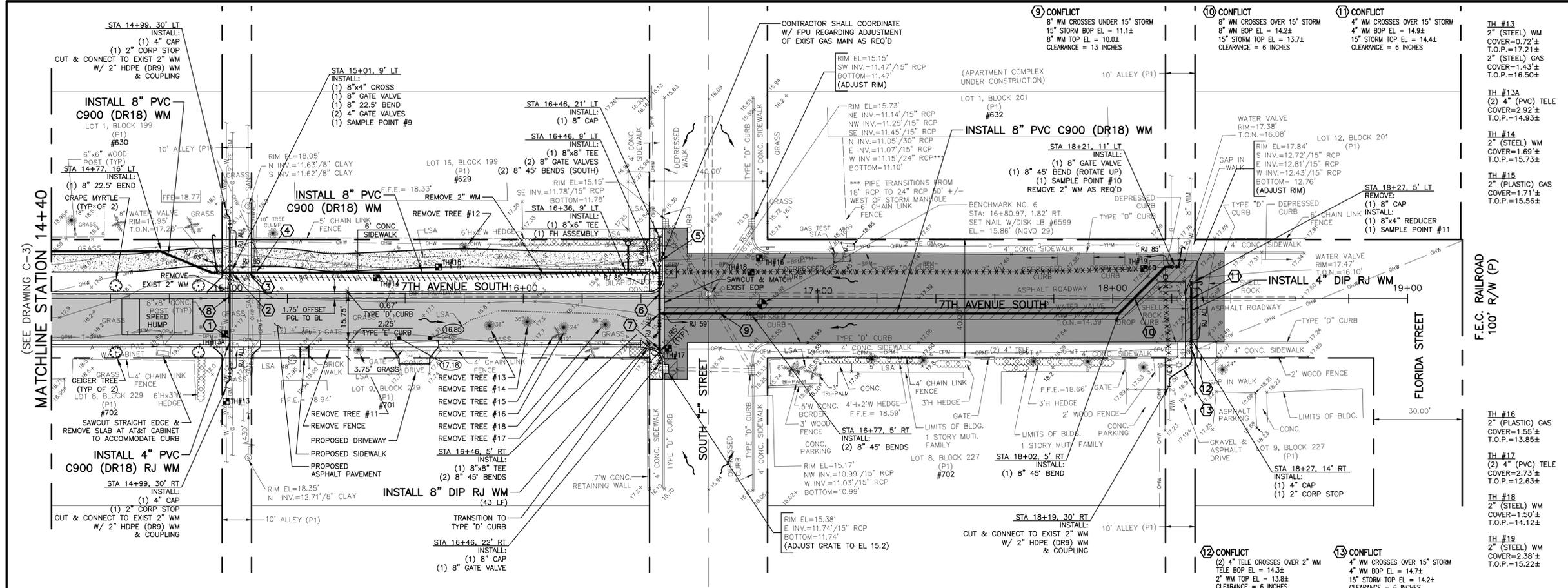
CITY OF LAKE WORTH
7TH AVENUE SOUTH
ROADWAY IMPROVEMENTS PROJECT

7TH AVENUE SOUTH
PLAN AND PROFILE - SHEET 3
STATION 9+40 TO STATION 14+40

DATE:	MAY 2015
SHEET:	6 of 17
DRAWING:	C-3

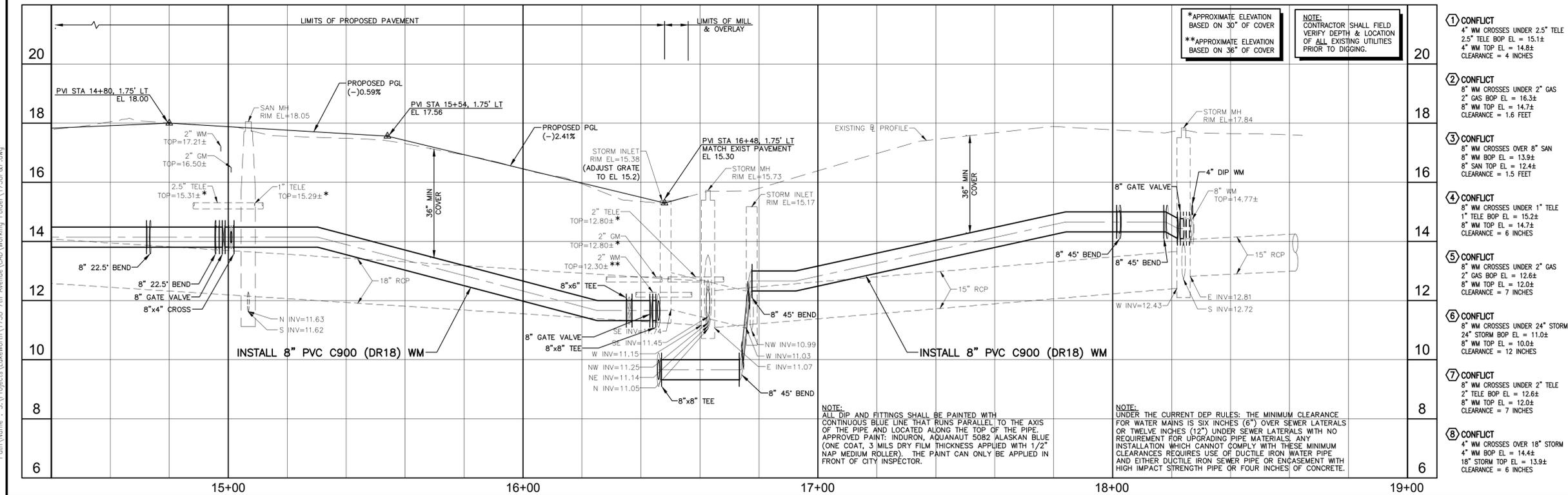
Date: Thu, 21 May 2015 11:29am
 User Name: jenkins
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 Layout Tab: C-3
 Acad Version: R19.0s (LMS Tech)

BIDDING



- NOTES:**
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 - PROPOSED 1-1/4" ASPHALT PAVEMENT OVERLAY
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 - PROPOSED CONCRETE DRIVEWAY
 - PROPOSED CONCRETE SIDEWALK
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 - TH#1 TEST HOLE LOCATION
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 - CB-1 PAVEMENT CORE LOCATION
 - EX-1 EXFILTRATION TEST LOCATION
 - - - - - EXISTING WM TO BE ABANDONED IN-PLACE (NO GROUT)
 - - - - - EXISTING WM TO BE REMOVED
 - - - - - EXISTING WM TO BE GROUTED IN-PLACE
 - CONFLICT
 - DIRECTION OF FLOW



- CONFLICTS:**
- CONFLICT: 4" WM CROSSES UNDER 2.5" TELE. 2.5" TELE BOP EL = 15.1±. 4" WM TOP EL = 14.8±. CLEARANCE = 4 INCHES.
 - CONFLICT: 8" WM CROSSES UNDER 2" GAS. 2" GAS BOP EL = 16.3±. 8" WM TOP EL = 14.7±. CLEARANCE = 1.6 FEET.
 - CONFLICT: 8" WM CROSSES OVER 8" SAN. 8" WM BOP EL = 13.9±. 8" SAN TOP EL = 12.4±. CLEARANCE = 1.5 FEET.
 - CONFLICT: 8" WM CROSSES UNDER 1" TELE. 1" TELE BOP EL = 15.2±. 8" WM TOP EL = 14.7±. CLEARANCE = 6 INCHES.
 - CONFLICT: 8" WM CROSSES UNDER 2" GAS. 2" GAS BOP EL = 12.6±. 8" WM TOP EL = 12.0±. CLEARANCE = 7 INCHES.
 - CONFLICT: 8" WM CROSSES UNDER 24" STORM. 24" STORM BOP EL = 11.0±. 8" WM TOP EL = 10.0±. CLEARANCE = 12 INCHES.
 - CONFLICT: 8" WM CROSSES UNDER 2" TELE. 2" TELE BOP EL = 12.6±. 8" WM TOP EL = 12.0±. CLEARANCE = 7 INCHES.
 - CONFLICT: 4" WM CROSSES OVER 18" STORM. 4" WM BOP EL = 14.4±. 18" STORM TOP EL = 13.9±. CLEARANCE = 6 INCHES.

KEY MAP

811 KNOW WHAT'S BELOW ALWAYS CALL 811 BEFORE YOU DIG

BIDDING

NO.	DATE	ISSUED FOR	APRVD BY	DESIGNED	DRAWN	CHECKED	APPROVED
				M.R.T.	J.A.J.	D.L.M./A.C.	M. REBECCA TRAVIS, P.E. No. 40988

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ENGINEER NO.: 1738

CLIENT PROJECT NO.:

CAD REF.: 1738P&P

CITY OF LAKE WORTH

7TH AVENUE SOUTH

ROADWAY IMPROVEMENTS PROJECT

7TH AVENUE SOUTH

PLAN AND PROFILE - SHEET 4

STATION 14+40 TO STATION 19+00

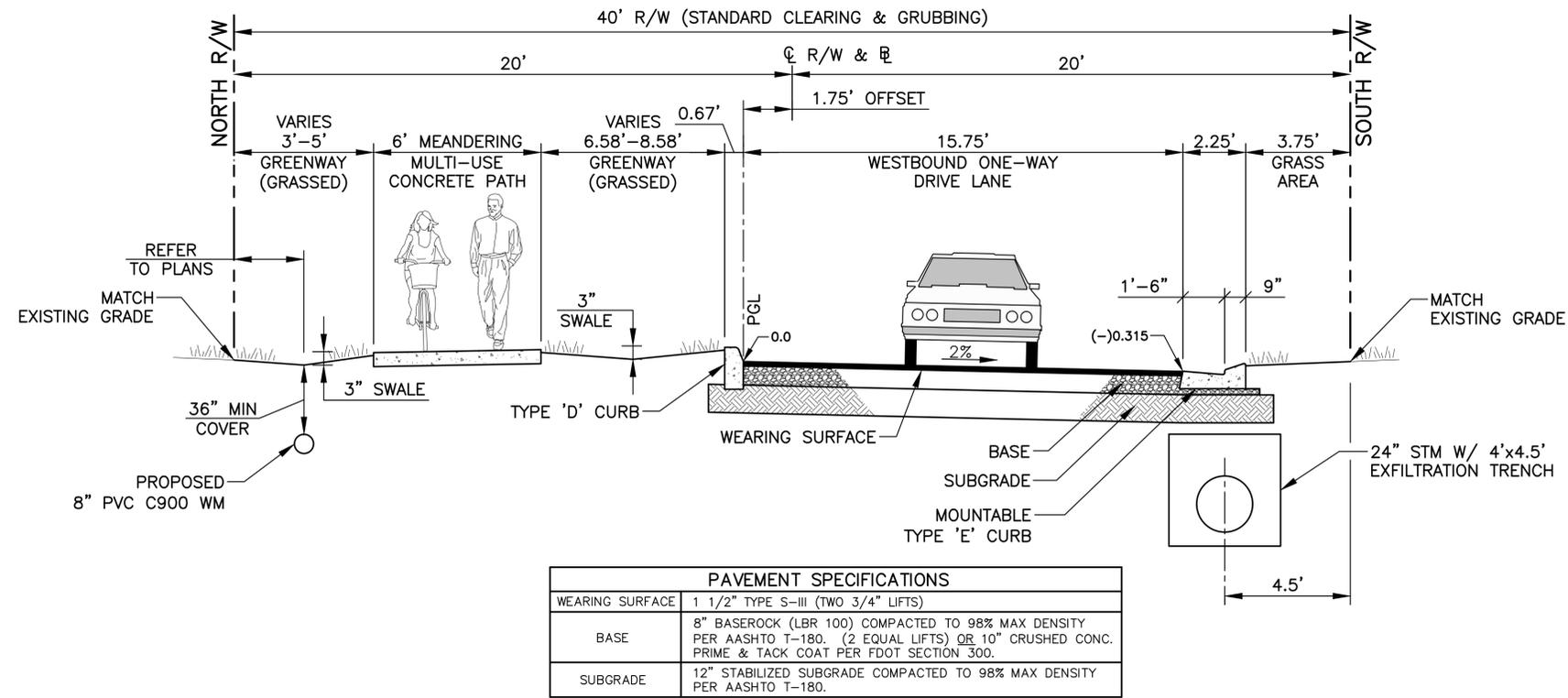
DATE: MAY 2015

SHEET: 7 of 17

DRAWING: C-4

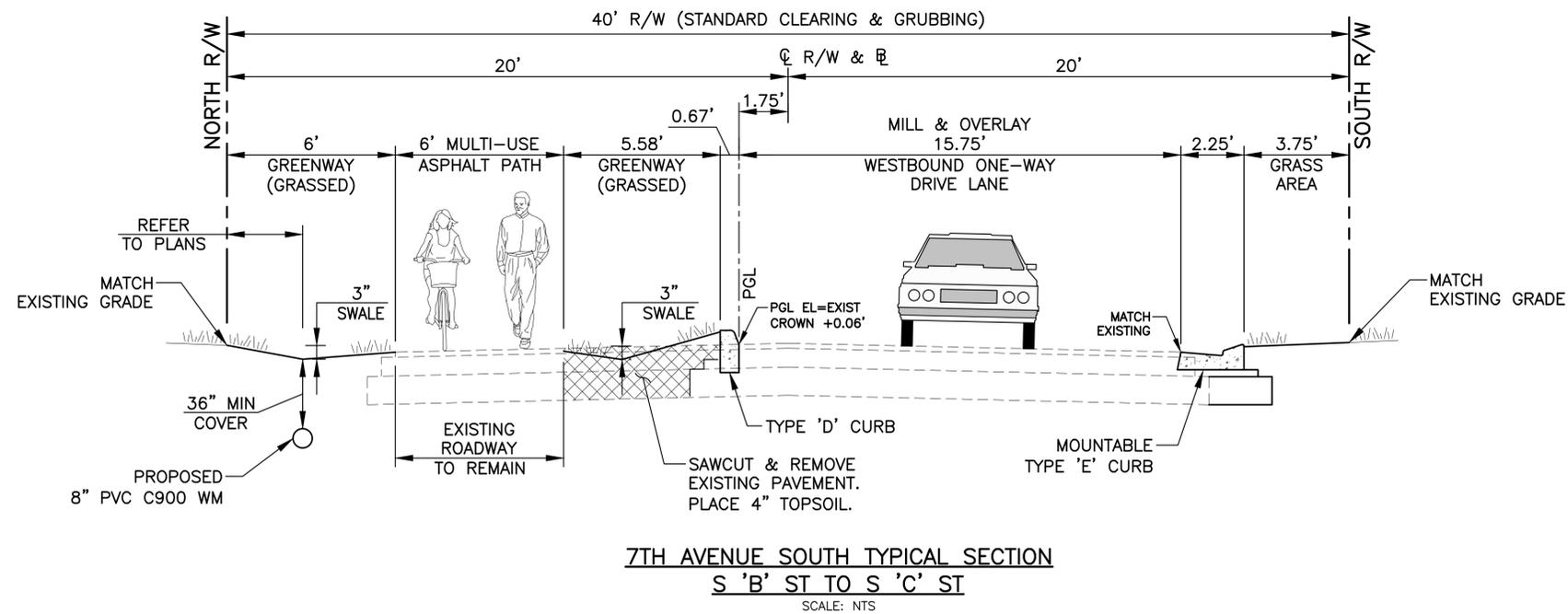
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 Acad Version: R19.0s (LMS Tech)
 User Name: Jenkins

Date/Time : Thu, 21 May 2015 - 11:29am
 Current Plotstyle : ByColor
 Layout Tab: C-5
 Path Name : S:\Projects\LakeWorth\1738 7th Avenue\Working Folder\1738SECTION.dwg
 Acad Version : R19.0s (LMS Tech)
 User Name : jenkins



PAVEMENT SPECIFICATIONS	
WEARING SURFACE	1 1/2" TYPE S-III (TWO 3/4" LIFTS)
BASE	8" BASEROCK (LBR 100) COMPACTED TO 98% MAX DENSITY PER AASHTO T-180. (2 EQUAL LIFTS) OR 10" CRUSHED CONC. PRIME & TACK COAT PER FDOT SECTION 300.
SUBGRADE	12" STABILIZED SUBGRADE COMPACTED TO 98% MAX DENSITY PER AASHTO T-180.

7TH AVENUE SOUTH TYPICAL SECTION ONE WAY W/ MULTI-USE PATH
S 'A' ST TO S 'B' ST AND S 'C' ST TO S 'F' ST
 SCALE: NTS



7TH AVENUE SOUTH TYPICAL SECTION
S 'B' ST TO S 'C' ST
 SCALE: NTS

NO.	DATE	ISSUED FOR	APRVD BY

DESIGNED:	M.R.T.
DRAWN:	J.A.J.
CHECKED:	D.L.M./A.C.
APPROVED:	D.L.M.
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VERIFY SCALE	ENGINEER NO.: 1738
	CLIENT PROJECT NO.:
BAR IS ONE INCH ON FULL SIZE (22x34) ORIGINAL DRAWING. ADJUST SCALES AS NECESSARY.	CAD REF.: 1738SECTIONS

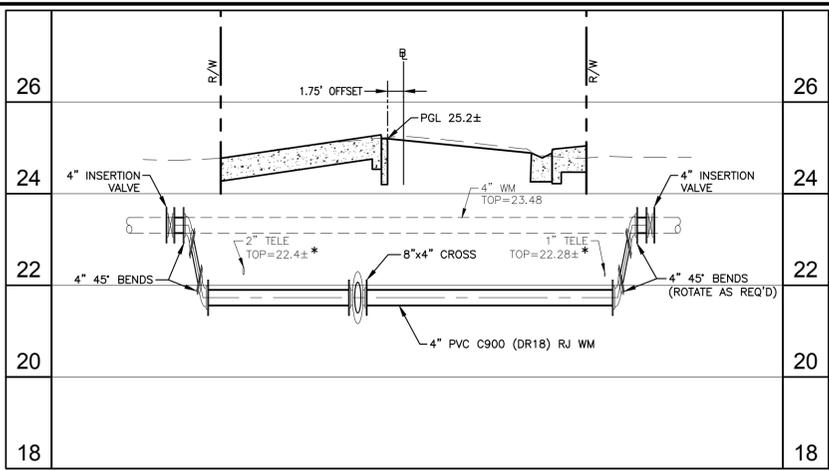
CITY OF LAKE WORTH
 7TH AVENUE SOUTH
 ROADWAY IMPROVEMENTS PROJECT

 TYPICAL ROADWAY SECTIONS

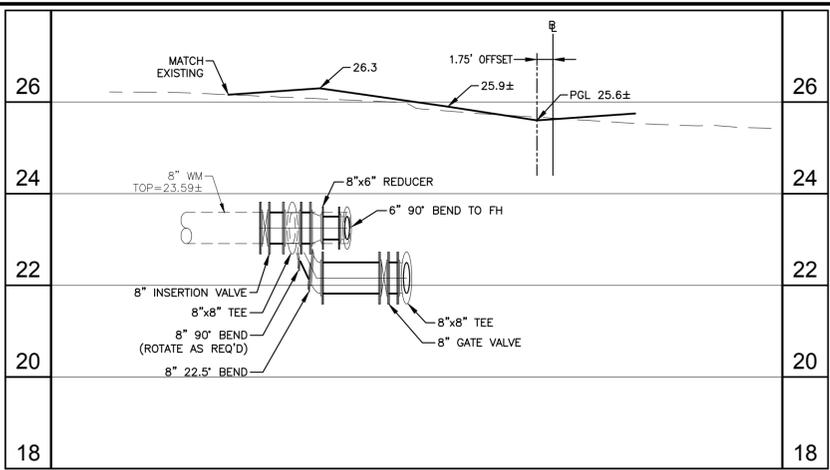
DATE:	MAY 2015
SHEET:	8 of 17
DRAWING:	C-5

BIDDING

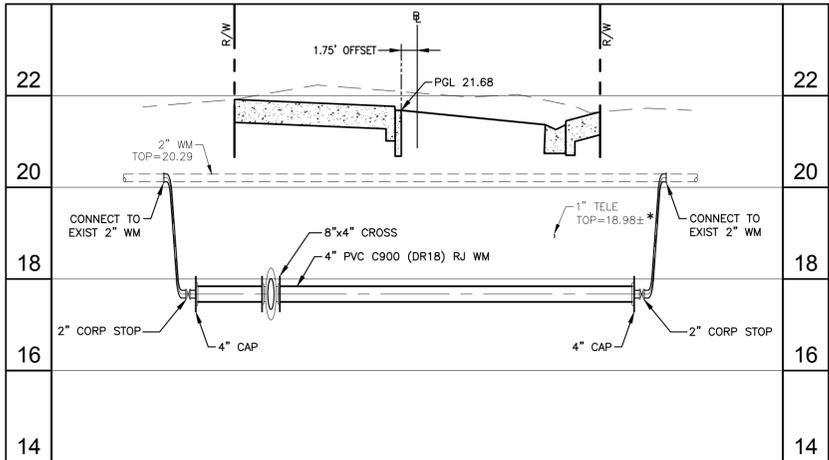
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 Acad Version : R19.0s (LMS Tech)
 User Name : Jenkins



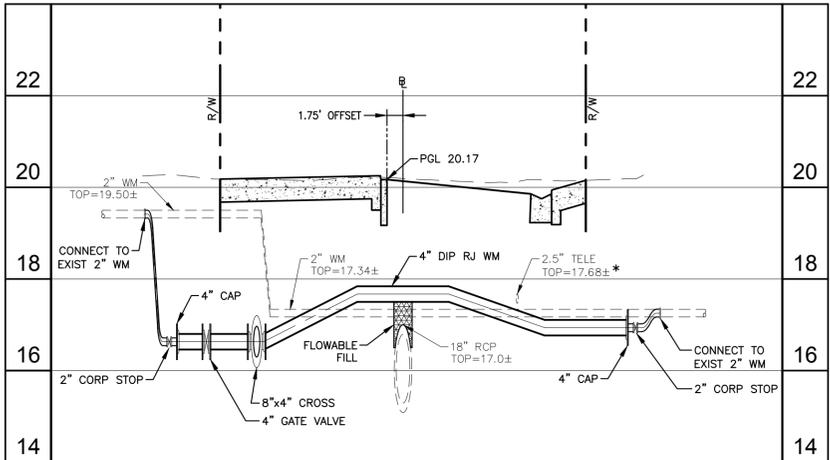
PARTIAL PROFILE @ STA 5+43
(SEE DWG C-2 FOR PLAN)



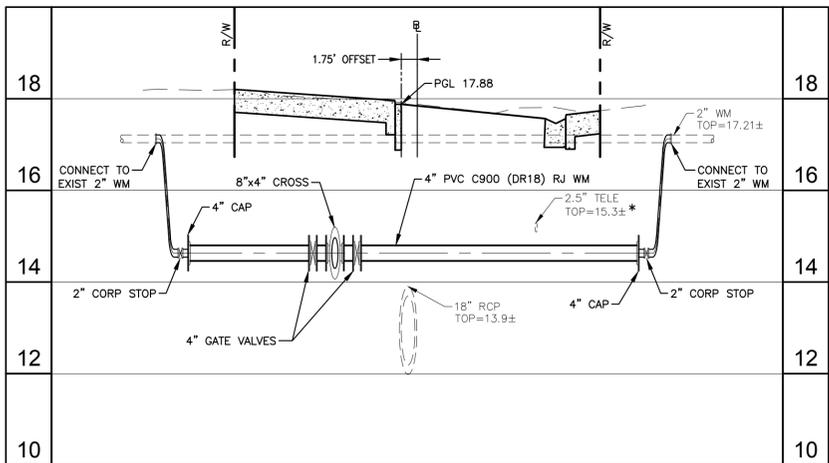
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(SEE DWG C-2 FOR PLAN)



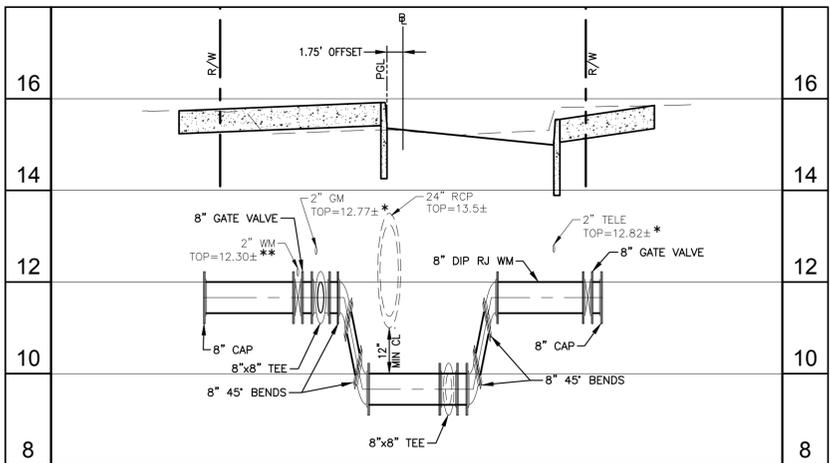
PARTIAL PROFILE @ STA 8+63
(SEE DWG C-2 FOR PLAN)



PARTIAL PROFILE @ STA 11+77
(SEE DWG C-3 FOR PLAN)



PARTIAL PROFILE @ STA 15+00
(SEE DWG C-4 FOR PLAN)

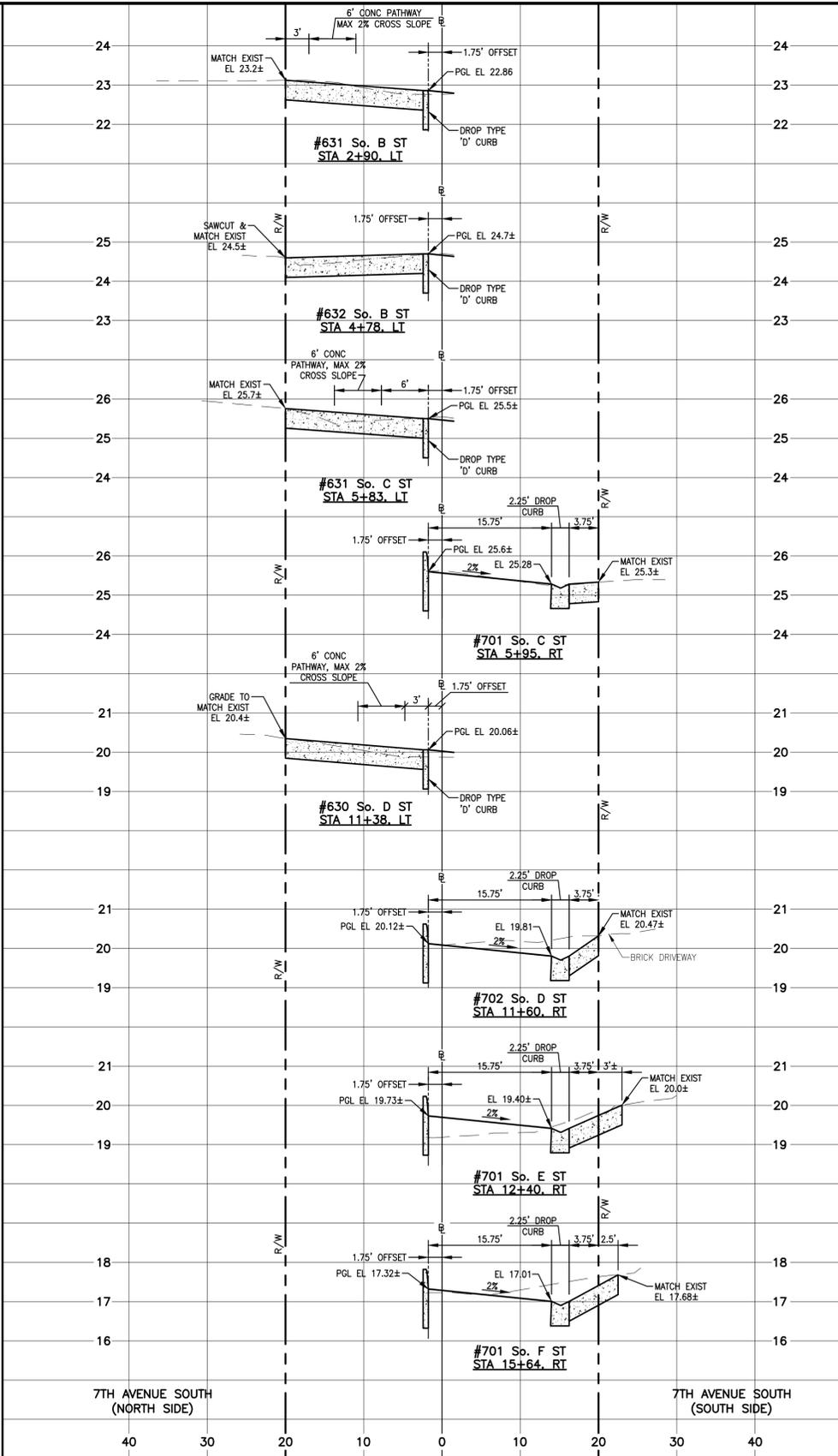


PARTIAL PROFILE @ STA 16+46
(SEE DWG C-4 FOR PLAN)

*APPROXIMATE ELEVATION
BASED ON 30" OF COVER
**APPROXIMATE ELEVATION
BASED ON 36" OF COVER

HORIZ. SCALE 1"=10'

VERT. SCALE 1"=2'



HORIZ. SCALE 1"=10'

VERT. SCALE 1"=2'



BIDDING

NO.	DATE	ISSUED FOR	APR'D BY	DESIGNED: M.R.T.
				DRAWN: J.A.J.
				CHECKED: D.L.M./A.C.
				APPROVED: D.L.M.
				M. REBECCA TRAVIS, P.E. No. 40988

MATHEWS CONSULTING
 CIVIL ENGINEERS
 477 S. Rosemary Avenue, Suite 330, West Palm Beach, Florida 33401
 Phone: 561-655-6175 Fax: 561-655-6179
 www.matthewsconsultinginc.com EB-0007929

VERIFY SCALE

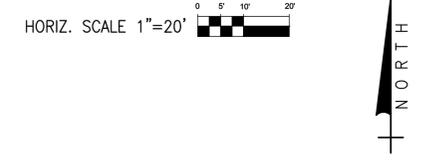
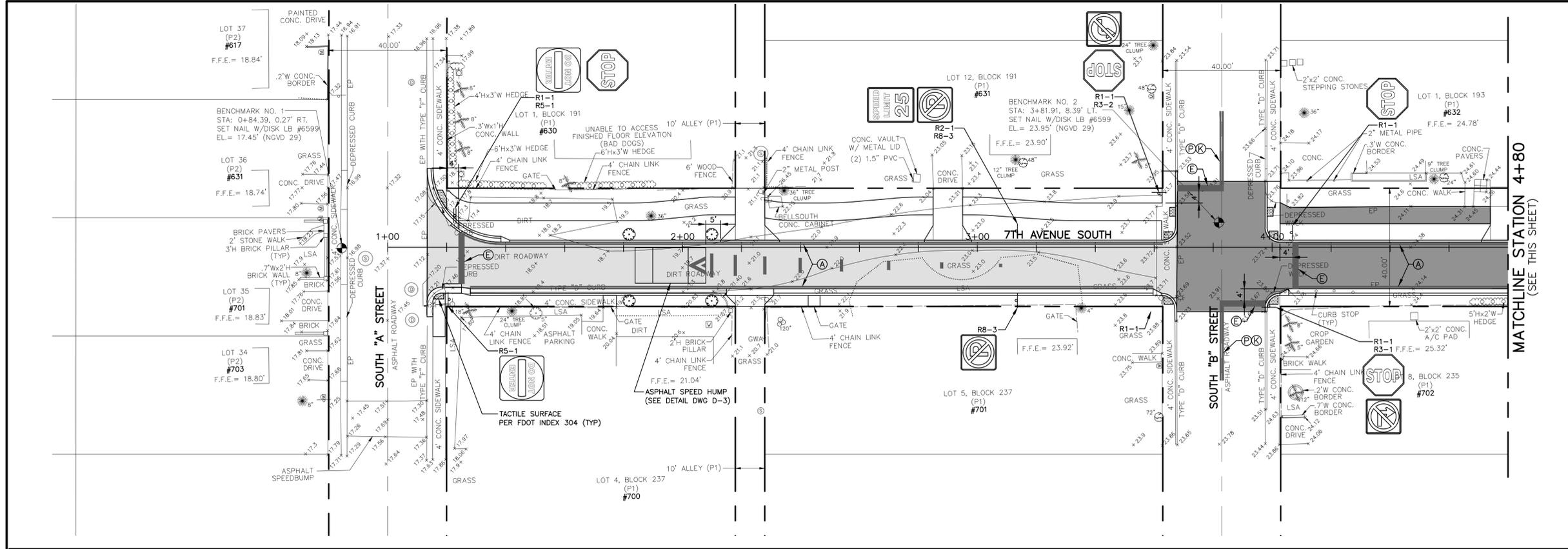
 BAR IS ONE INCH ON FULL SIZE (22x34) ORIGINAL DRAWING. ADJUST SCALES AS NECESSARY.
 ENGINEER NO.: 1738
 CLIENT PROJECT NO.:
 CAD REF.: 1738PROFILES

CITY OF LAKE WORTH
7TH AVENUE SOUTH
ROADWAY IMPROVEMENTS PROJECT

ROADWAY CROSS-SECTIONS
AND PARTIAL PROFILES

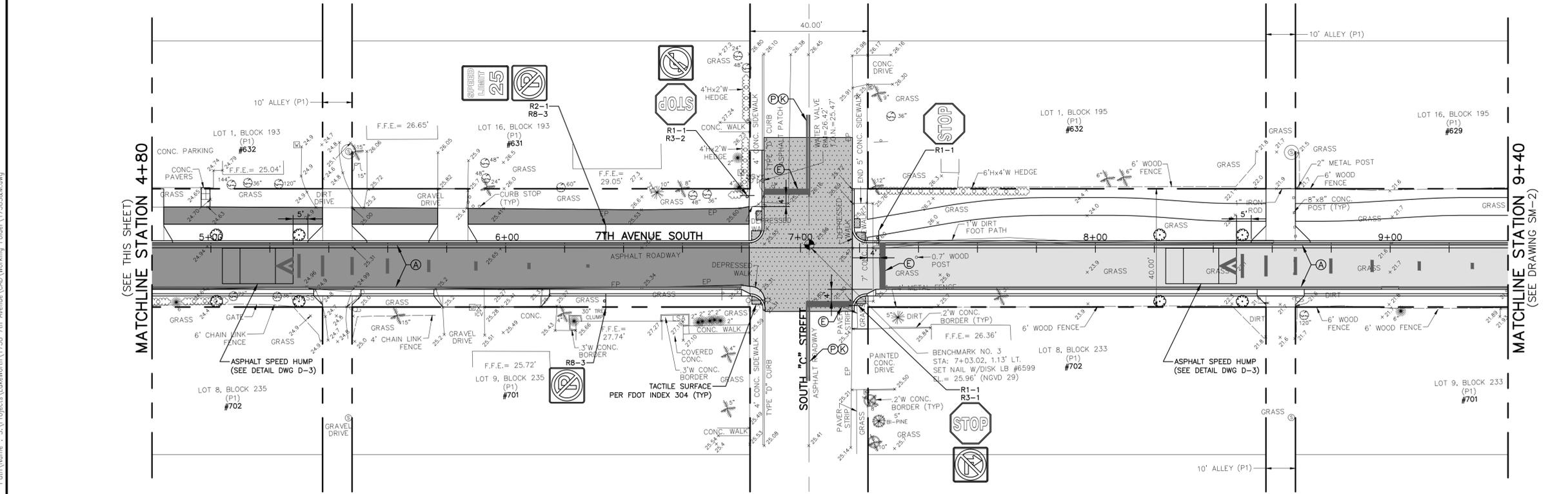
DATE:	MAY 2015
SHEET:	9 of 17
DRAWING:	C-6

Acad Version : R19.0s (LMS Tech)
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 Current Plotstyle : Bicolor
 Layout Tab: SM-1
 Path Name : S:\Projects\LakeWorth\1738 7th Avenue\CAD\Working Folder\1738S&M.dwg



- NOTES:**
- REFER TO THIS SHEET FOR PAVEMENT MARKINGS & SIGNAGE ONLY.
 - PLACE BLUE RPM @ CENTER OF TRAVEL LANE IN LINE WITH ROADSIDE FIRE HYDRANTS.
 - ALL EXISTING SIGNS REMOVED FROM THIS PROJECT ARE TO BE RETURNED TO THE CITY OF LAKE WORTH PUBLIC SERVICES COMPLEX.
 - ALL EXISTING SIGNS WITHIN PROJECT LIMITS TO BE REMOVED UNLESS OTHERWISE SPECIFIED.
 - ALL PAVEMENT MARKINGS SHALL BE THERMOPLASTIC.
 - SIGNS SHALL BE PER MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), 2009 EDITION.

- STRIPING KEY**
- (A) - 6" SOLID WHITE
 - (B) - 8" SOLID WHITE
 - (C) - 18" SOLID YELLOW
 - (D) - 12" SOLID WHITE
 - (E) - 24" SOLID WHITE
 - (F) - 6" SKIP WHITE TYP (6'-10')
 - (G) - 18" SOLID WHITE AT 10' O.C.
 - (H) - 6" DOUBLE YELLOW
 - (I) - 6" SKIP YELLOW TYP (6'-10')
 - (J) - RPM BI-DIRECTIONAL AMBER/AMBER
 - (K) - RPM BI-DIRECTIONAL COLORLESS/RED
 - (L) - RPM BI-DIRECTIONAL BLUE/BLUE

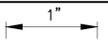


BIDDING

NO.	DATE	ISSUED FOR	APR'D BY	DESIGNED: M.R.T.
				DRAWN: J.A.J.
				CHECKED: D.L.M./A.C.
				APPROVED: D.L.M.

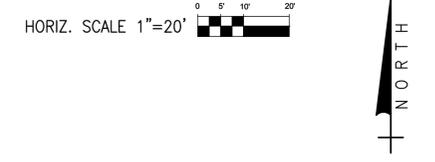
M. REBECCA TRAVIS, P.E.
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VERIFY SCALE

 BAR IS ONE INCH ON FULL SIZE (22x34) ORIGINAL DRAWING. ADJUST SCALES AS NECESSARY.
 ENGINEER NO.: 1738
 CLIENT PROJECT NO.:
 CAD REF.: 1738S&M

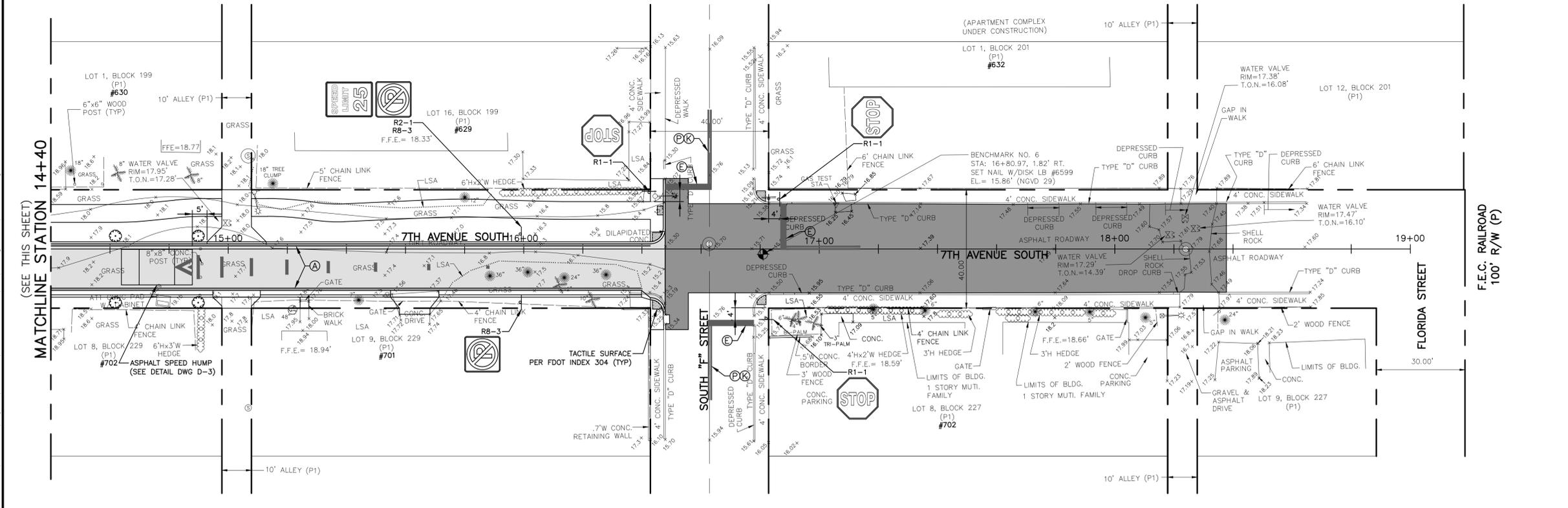
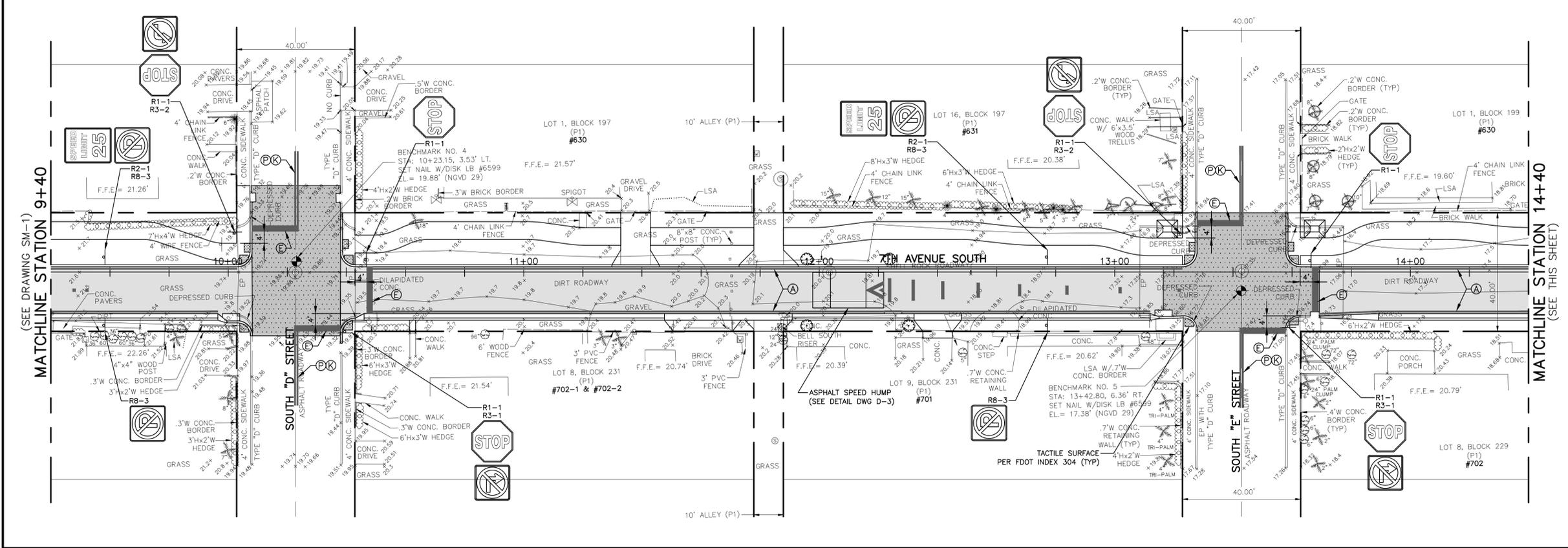
CITY OF LAKE WORTH
7TH AVENUE SOUTH
ROADWAY IMPROVEMENTS PROJECT
SIGNAGE & PAVEMENT MARKINGS
PLANS - SHEET 1 OF 2
STATION 1+00 TO STATION 9+40

DATE:	MAY 2015
SHEET:	10 of 17
DRAWING:	SM-1



- NOTES:**
- REFER TO THIS SHEET FOR PAVEMENT MARKINGS & SIGNAGE ONLY.
 - PLACE BLUE RPM @ CENTER OF TRAVEL LANE IN LINE WITH ROADSIDE FIRE HYDRANTS.
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 - (E) - 24" SOLID WHITE
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 - (K) - RPM BI-DIRECTIONAL COLORLESS/RED
 - (L) - RPM BI-DIRECTIONAL BLUE/BLUE



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DESIGNED: M.R.T.
 DRAWN: J.A.J.
 CHECKED: D.L.M./A.C.
 APPROVED: D.L.M.

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VERIFY SCALE

1" = 20'

BAR IS ONE INCH ON FULL SIZE (22x34) ORIGINAL DRAWING. ADJUST SCALES AS NECESSARY.

ENGINEER NO.: 1738
 CLIENT PROJECT NO.:
 CAD REF.: 1738S&M

CITY OF LAKE WORTH
 7TH AVENUE SOUTH
 ROADWAY IMPROVEMENTS PROJECT

SIGNAGE & PAVEMENT MARKINGS
 PLANS - SHEET 2 OF 2
 STATION 9+40 TO STATION 19+00

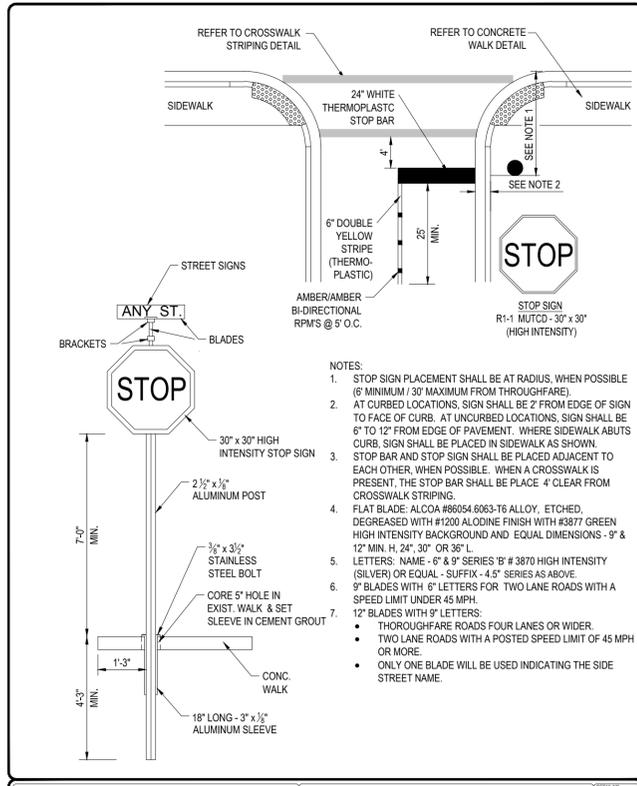
DATE: MAY 2015
 SHEET: 11 of 17
 DRAWING: SM-2



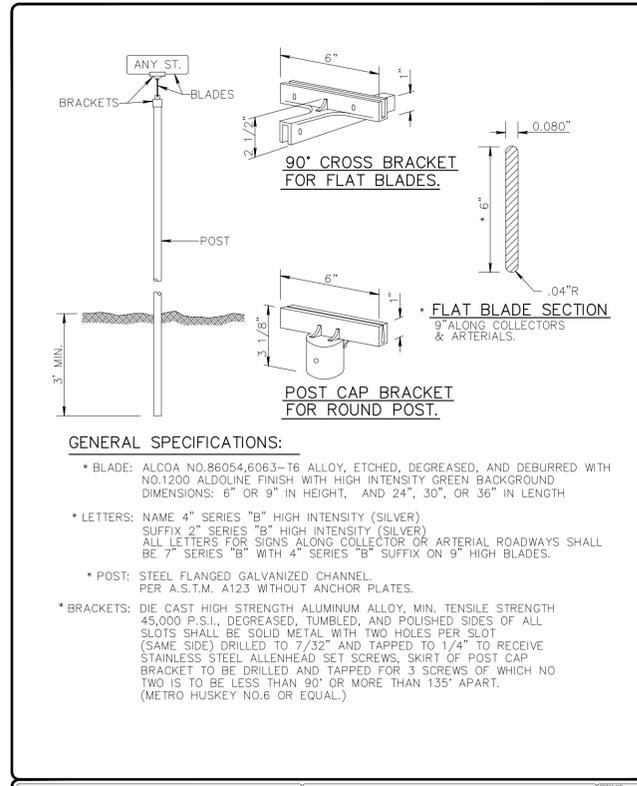
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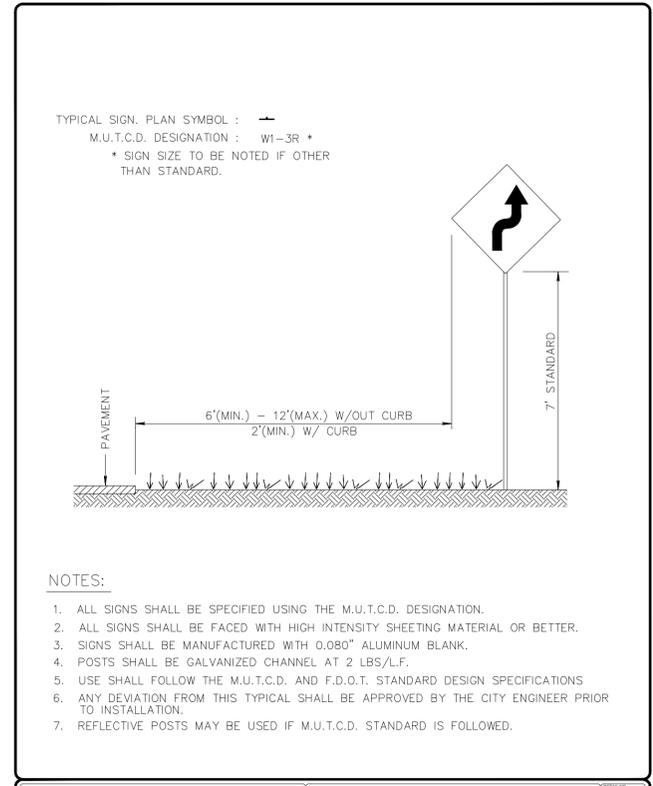
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 Current Plotstyle : ByColor Layout Tab: SM-3



CITY OF LAKE WORTH PUBLIC SERVICES DEPARTMENT
 STOP SIGN AND STOP BAR
 09



CITY OF LAKE WORTH PUBLIC SERVICES DEPARTMENT
 STREET SIGN DETAIL
 10



CITY OF LAKE WORTH PUBLIC SERVICES DEPARTMENT
 STREET SIGN DETAIL
 11

PAVEMENT MARKING SPECIFICATIONS
 All Pavement markings to be installed per these typicals, plans and specifications, and as directed by the City Engineer and shall conform to the requirements of F.D.O.T. and the manual on uniform traffic control devices, (MUTCD).

PERMANENT MARKINGS
 Installation:
 - All markings shall be installed by the extruded method.
 - Markings shall be free of weaves, bows, drips, drags, and other degrading items.
 - Chalk shall be used for all layout markings
 Materials:
 - All materials shall be alkyl or hydrocarbon thermoplastic meeting all FDOT specifications.
 Thickness:
 - All markings shall be installed to yield 90 mils of material measured above the pavement surface.
 Spheres:
 - Reflective glass spheres are to be applied to all stripes and markings per FDOT specifications.
 Alternate Material:
 - STAYMARK marking tape, or equivalent may be used, as approved or directed by the City Engineer.
 Layout:
 - Layout shall be made using marking chalk.
 - It is recommended that marking layout be inspected by the City Engineer prior to the placement of final markings.

TEMPORARY MARKINGS
 Temporary markings may be used only as specified in this section, or as approved or directed by the City Engineer.
 Final Pavement Surface:
 - Only foil backed marking tape is allowed.
 - All tape shall be totally removed concurrent with permanent marking placement.
 Other Pavement Surfaces:
 - Intermediate pavement surfaces may be marked with FDOT approved materials, designs, and specifications.

CITY OF LAKE WORTH PUBLIC SERVICES DEPARTMENT
 PAVEMENT MARKING SPECIFICATIONS
 13

ALL PAVEMENT MARKINGS
 All paved surfaces shall be properly marked prior to the hours of darkness.

RAISED PAVEMENT MARKERS
 - R.P.M.s shall be installed on all lane lines and centerlines, spaced at 20' or 40'.
 - R.P.M.s shall be a 4 x 4 type class "B" marker meeting F.D.O.T. specifications and shall be approved by the City Engineer prior to use.
 - R.P.M.'s shall be installed using alkyl thermoplastic on asphalt and epoxy on concrete.

OTHER NOTES
 - All Materials within right-of-way shall be thermoplastic and per F.D.O.T. specifications.
 - Pavement marking within private parking lots may be painted according to F.D.O.T. specifications, except for all stop bars adjacent to public right-of-way.

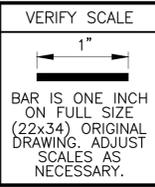
CITY OF LAKE WORTH PUBLIC SERVICES DEPARTMENT
 PAVEMENT MARKING SPECIFICATIONS
 14

NO.	DATE	ISSUED FOR	APRVD BY

DESIGNED: M.R.T.
 DRAWN: J.A.J.
 CHECKED: D.L.M./A.C.
 APPROVED: D.L.M.

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ENGINEER NO.: 1738
 CLIENT PROJECT NO.:
 CAD REF.: 1738&MDETAILS

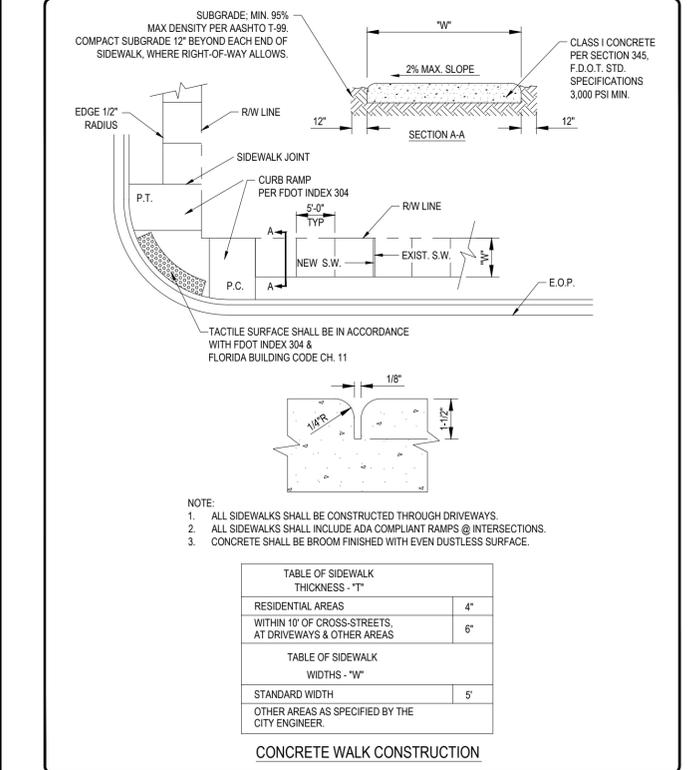
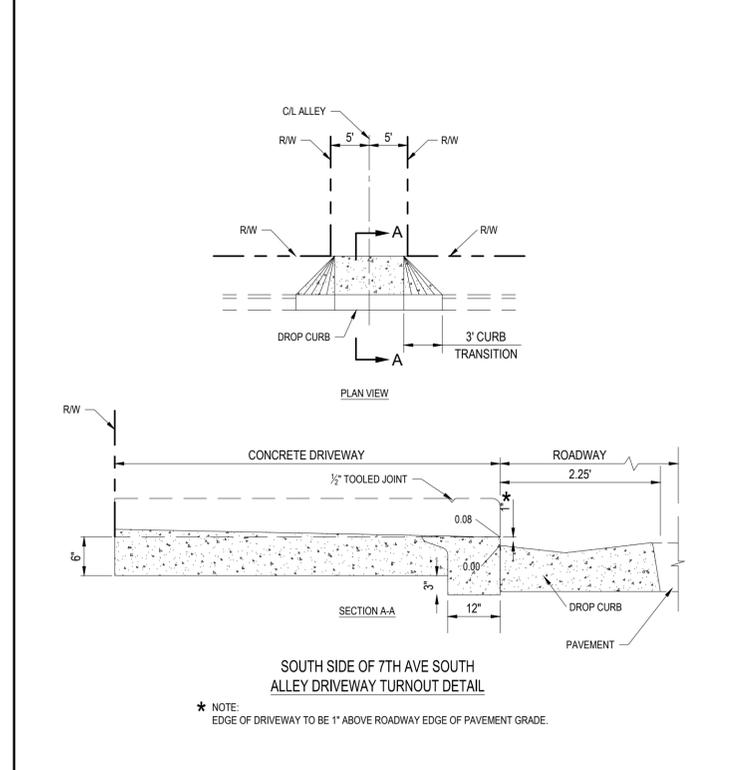
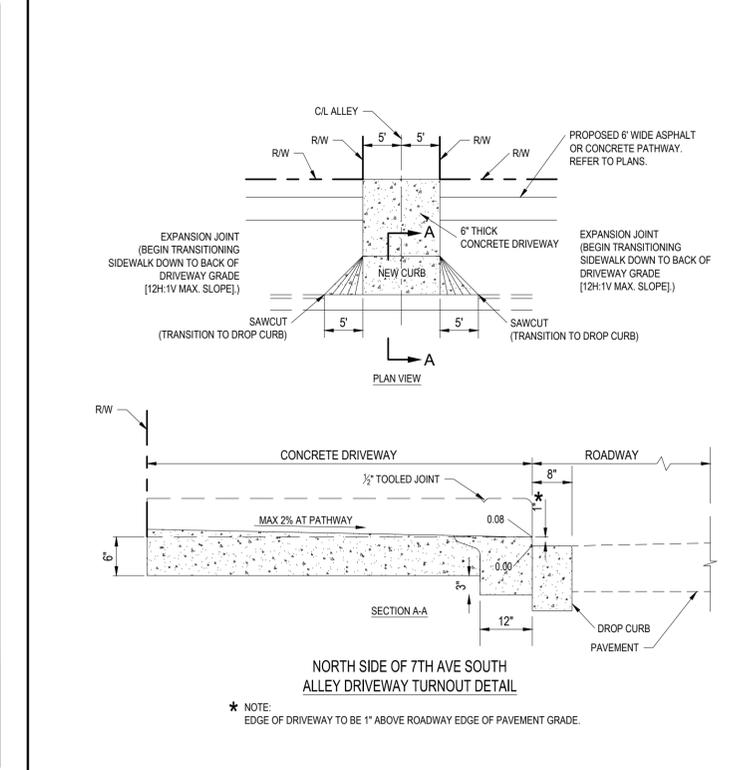
CITY OF LAKE WORTH
 7TH AVENUE SOUTH
 ROADWAY IMPROVEMENTS PROJECT
 SIGNAGE & PAVEMENT MARKINGS DETAILS

DATE: MAY 2015
 SHEET: 12 of 17
 DRAWING: SM-3

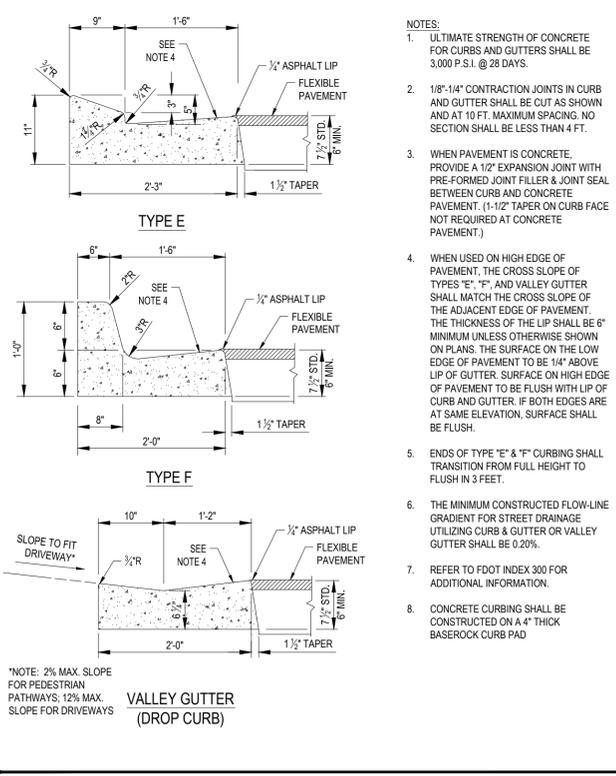
BIDDING

GENERAL NOTES

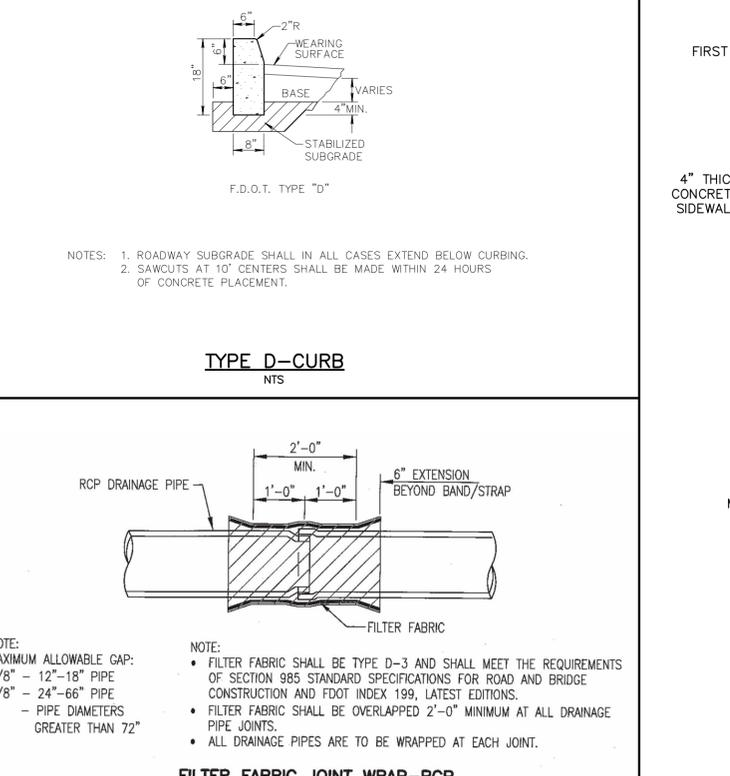
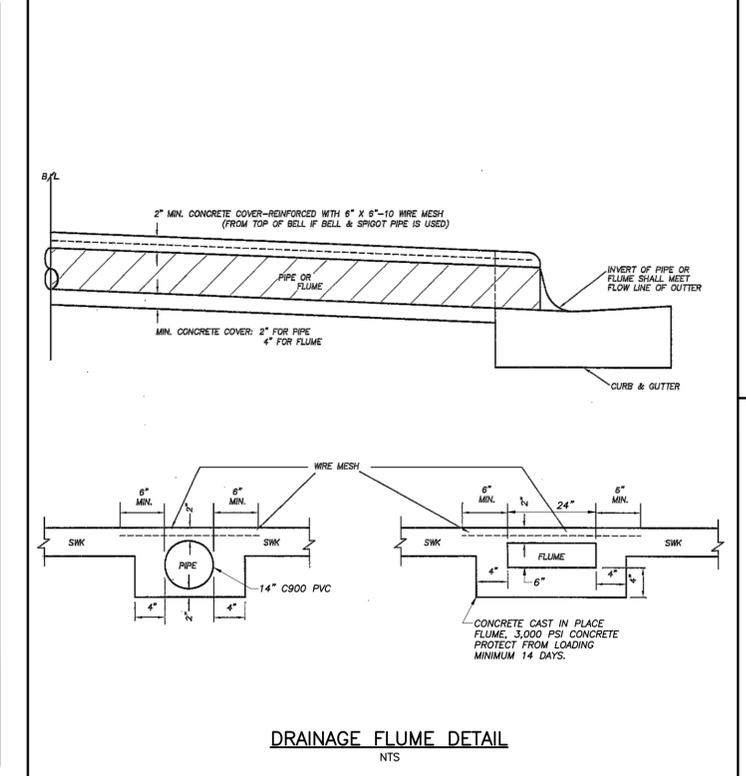
- EXISTING UTILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING ALL UTILITY COMPANIES AND "SUNSHINE STATE ONE CALL OF FLORIDA, INC." TO LOCATE ALL EXISTING UTILITIES WITHIN THE CONSTRUCTION AREA PRIOR TO CONSTRUCTION. CONTRACTOR SHALL VERIFY THE HORIZONTAL AND VERTICAL LOCATION OF ALL EXISTING UTILITIES PRIOR TO COMMENCING CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL EXISTING UTILITIES DURING CONSTRUCTION AND RESETTING UTILITIES TO NEW GRADE AND SLOPE WITHIN THE LIMITS OF CONSTRUCTION.
- SAFETY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLYING WITH THE PROVISIONS OF THE FLORIDA TRENCH SAFETY ACT, THE FLORIDA UNDERGROUND FACILITY DAMAGE PREVENTION AND SAFETY ACT, AND ALL APPLICABLE O.S.H.A. REQUIREMENTS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TAKING ALL NECESSARY PRECAUTIONS WHEN WORKING IN THE VICINITY OF OVERHEAD ELECTRICAL LINES.
- MAINTENANCE OF TRAFFIC. CONTRACTOR SHALL PROVIDE MAINTENANCE OF TRAFFIC (MOT) PLANS, PREPARED BY A WORK SITE TRAFFIC SUPERVISOR AS CERTIFIED BY THE AMERICAN TRAFFIC SAFETY SERVICES ASSOCIATION, PRIOR TO COMMENCING CONSTRUCTION WITHIN CITY OF LAKE WORTH RIGHT-OF-WAY.
- ACCESS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING SAFE VEHICULAR AND PEDESTRIAN ACCESS AT ALL TIMES.
- WARRANTY. ALL WORK, MATERIALS, OR EQUIPMENT SHALL BE WARRANTED FOR A MINIMUM OF ONE YEAR, FROM THE DATE OF FINAL ACCEPTANCE BY THE CITY OF LAKE WORTH, AGAINST DEFECTIVE MATERIALS AND/OR WORKMANSHIP. ALL WORK FOUND TO BE DEFECTIVE WILL BE REPEATED BY THE CONTRACTOR AT NO EXPENSE TO THE CITY OF LAKE WORTH.
- SHOP DRAWINGS. THE CONTRACTOR SHALL PROVIDE A MINIMUM OF SEVEN (7) COPIES (OR MORE, IF REQUIRED) OF SHOP DRAWINGS, PRODUCT DATA, MATERIAL SPECIFICATIONS AND OTHER INFORMATION REGARDING CONSTRUCTION MATERIALS AND STRUCTURES AS REQUESTED BY THE ENGINEER OF RECORD OR THE CITY OF LAKE WORTH. SHOP DRAWINGS MUST BE NEWLY PREPARED INFORMATION, DRAWN TO ACCURATE SCALE. STANDARD INFORMATION PREPARED WITHOUT SPECIFIC REFERENCE TO THE PROJECT WILL BE RETURNED TO THE CONTRACTOR WITHOUT REVIEW. SHOP DRAWINGS SHALL BE SUBJECT TO THE FOLLOWING:
 - BY SUBMITTAL OF ANY SHOP DRAWING OR CATALOG DATA, BEARING AN APPROVAL STAMP, THE CONTRACTOR REPRESENTS THAT IT HAS DETERMINED AND VERIFIED ALL FIELD MEASUREMENTS, FIELD CONSTRUCTION CRITERIA, MATERIALS, DIMENSIONS, CATALOG NUMBERS AND SIMILAR DATA, OR WILL DO SO, AND THAT IT HAS CHECKED AND COORDINATED EACH ITEM WITH OTHER APPLICABLE APPROVED SHOP DRAWINGS AND THE CONTRACT REQUIREMENTS.
 - SHOP DRAWINGS AND CATALOG DATA SUBMITTED WITHOUT THE CONTRACTOR'S STAMP OF APPROVAL WILL BE RETURNED TO THE CONTRACTOR WITHOUT REVIEW. APPROVAL OF SHOP DRAWINGS, SAMPLES, OR CATALOG DATA BY THE ENGINEER OF RECORD OR THE CITY OF LAKE WORTH SHALL NOT AUTHORIZE ANY DEVIATION FROM THE REQUIREMENTS OF THE CONTRACT DOCUMENTS.
 - ANY PROPOSED SUBSTITUTE OR EQUAL TO THAT SHOWN ON THE CONTRACT DOCUMENTS SHALL BE ACCOMPANIED BY CALCULATIONS SUBSTANTIATING EQUIVALENCY. SHOP DRAWINGS WITH SUBSTITUTE MATERIALS NOT ACCOMPANIED BY CALCULATIONS WILL BE RETURNED WITHOUT REVIEW.
 - THE CONTRACTOR SHALL CONFIRM COMPATIBILITY OF PIPE SLOPES AND INVERTS DURING THE SHOP DRAWING AND MATERIALS ORDERING PHASE OF THE PROJECT AND ADVISE THE ENGINEER OF RECORD IN WRITING OF ANY DISCREPANCIES.
 - INDIVIDUAL SHOP DRAWINGS FOR ALL PRECAST STRUCTURES ARE REQUIRED. CATALOG LITERATURE WILL NOT BE ACCEPTED FOR PRECAST STRUCTURES.
- FIELD REVIEWS. THE CONTRACTOR SHALL PROVIDE NOTIFICATION, 48 HOURS (MIN.), PRIOR TO ANY REQUIRED FIELD REVIEWS OR INSPECTIONS AND SHALL SUPPLY ALL NECESSARY EQUIPMENT, LABOR, AND MATERIALS FOR INSPECTION AND/OR TEST. ALL WORK SHALL BE OPEN AND SUBJECT TO REVIEW AND/OR INSPECTION BY AUTHORIZED PERSONNEL OF THE CITY OF LAKE WORTH AND THE ENGINEER OF RECORD.
- DENSITY TESTING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY TESTING TO ENSURE THAT THE PROPER COMPACTION HAS BEEN ACHIEVED FOR ALL SUBGRADE, BASE MATERIAL, PIPE BASE MATERIAL, BACKFILL, & ALL OTHER AREAS WHERE COMPACTION REQUIREMENTS ARE SPECIFIED. ALL TEST RESULTS SHALL BE SIGNED & SEALED BY A FLORIDA LICENSED PROFESSIONAL ENGINEER AND COPIES SHALL BE PROVIDED TO THE ENGINEER OF RECORD AND THE CITY OF LAKE WORTH.
- PERMITS. THE CONTRACTOR SHALL NOT COMMENCE CONSTRUCTION PRIOR TO RECEIPT OF ALL APPLICABLE PERMITS AND APPROVALS INCLUDING AN APPROVED MAINTENANCE OF TRAFFIC PLAN. THE CONTRACTOR SHALL ABIDE BY ALL APPLICABLE PERMITS AND APPROVALS.
- EROSION CONTROL. ALL EROSION CONTROL MEASURES SHALL BE INSTALLED IN ACCORDANCE WITH FDOT INDICES 102, 103 AND 198, THE FDEP NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) GENERAL PERMIT (IF APPLICABLE), AND THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP). FILTER FABRIC, HAY BALES, OR ROCK BAGS SHALL BE INSTALLED IN EACH INLET THROUGHOUT THE CONSTRUCTION PERIOD. A SOIL TRACKING PREVENTION DEVICE (STPD) SHALL CONSTRUCTED AT ALL UNSTABILIZED CONSTRUCTION ACCESS POINTS, PER FDOT INDEX NO. 108.
- STORM DRAINAGE. ALL STORM DRAINAGE PIPE JOINTS SHALL BE WRAPPED IN FILTER FABRIC PER FDOT STANDARD INDEX NO. 280. ALL DRAINAGE STRUCTURES SHALL CONFORM TO THE REQUIREMENTS OF FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION. ALL GRATES SHALL BE SECURED TO THE STRUCTURES WITH AN EYEBOLT AND CHAIN. ALL STORM DRAINAGE SHALL BE FREE OF SILT AND SEDIMENT AT THE TIME OF FINAL ACCEPTANCE BY THE CITY OF LAKE WORTH.
- DEWATERING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING AND COMPLYING WITH ANY DEWATERING PERMITS AND/OR APPROVALS NECESSARY FOR CONSTRUCTION. NO WATER FROM DEWATERING MEASURES SHALL BE DISCHARGED OFF-SITE. ALL DISCHARGE SHALL BE CONTAINED IN ON-SITE SEDIMENT BASINS.
- SIDEWALKS. ALL SIDEWALKS SHALL BE CONSTRUCTED TO MEET THE REQUIREMENTS OF THE FLORIDA BUILDING CODE, CHAPTER 11 - FLORIDA ACCESSIBILITY CODE FOR BUILDING CONSTRUCTION. ALL CURB RAMPS SHALL BE CONSTRUCTED IN ACCORDANCE WITH FDOT STANDARD INDEX NO. 304 AND THE REQUIREMENTS OF THE FLORIDA BUILDING CODE. ALL SIDEWALKS CROSSING VEHICULAR AREAS SHALL HAVE A DETECTABLE WARNING SURFACE (TRUNCATED DOME) IN ACCORDANCE WITH FDOT STANDARD INDEX NO. 304 AND THE FLORIDA BUILDING CODE, CHAPTER 11 - ACCESSIBILITY CODE FOR BUILDING CONSTRUCTION. ALL SIDEWALKS SHALL BE BROOM FINISHED WITH AN EVEN, DUSTLESS SURFACE AND SHALL BE FREE OF CRACKS AT TIME OF FINAL ACCEPTANCE BY THE CITY OF LAKE WORTH.
- PAVEMENT. WHERE FULL DEPTH PAVEMENT REPLACEMENT IS SPECIFIED, EXISTING BASE/ROCK MAY NOT BE RE-USED, HOWEVER IT MAY BE UTILIZED AS SUBGRADE STABILIZATION MATERIAL. ALL SUBGRADE SHALL BE FREE OF MUCK, ROOTS, UNDERBRUSH, VEGETATIVE MATTER, GARBAGE, TRASH, OR ANY OTHER UNSUITABLE MATERIALS. BASE/ROCK AND ASPHALT SHALL BE PLACED IN MULTIPLE LIFTS AND SHALL BE PLACED IN ACCORDANCE WITH THE APPLICABLE FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION. FINAL LIFT OF ASPHALT SHALL PROVIDE A UNIFORM FINISH AND SHALL BE PLACED TO CORRECT MINOR IMPERFECTIONS IN THE FIRST LIFT AND TO PROVIDE POSITIVE DRAINAGE FOR THE ROADWAY.
- SIGNING AND PAVEMENT MARKINGS. ALL PAVEMENT MARKINGS WITHIN CITY OF LAKE WORTH RIGHT-OF-WAY SHALL BE THERMOPLASTIC. THERMOPLASTIC SHALL NOT BE INSTALLED ON PAVEMENT UNTIL A MINIMUM OF FIVE CALENDAR DAYS AFTER THE FINAL LIFT OF ASPHALT HAS BEEN COMPLETED. BLUE/BLUE REFLECTIVE PAVEMENT MARKERS (RPM) SHALL BE INSTALLED TO INDICATE THE LOCATION OF ALL FIRE HYDRANTS.



CITY OF LAKE WORTH PUBLIC SERVICES DEPARTMENT GENERAL NOTES 01



CITY OF LAKE WORTH PUBLIC SERVICES DEPARTMENT CONCRETE CURB AND GUTTER 05



NO.	DATE	ISSUED FOR	APR'D BY

DESIGNED: M.R.T.
 DRAWN: J.A.J.
 CHECKED: D.L.M./A.C.
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VERIFY SCALE
 1" = 1'

BAR IS ONE INCH ON FULL SIZE (22x34) ORIGINAL DRAWING. ADJUST SCALES AS NECESSARY.

ENGINEER NO.: 1738
 CLIENT PROJECT NO.:
 CAD REF.: 1738DETAILS

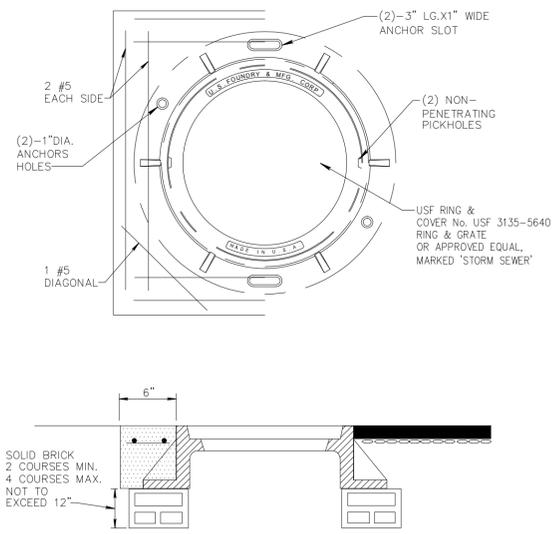
CITY OF LAKE WORTH
 7TH AVENUE SOUTH
 ROADWAY IMPROVEMENTS PROJECT

DATE: MAY 2015
 SHEET: 13 of 17
 DRAWING: D-1

STANDARD DETAILS - SHEET 1 OF 5

Date/Time : Thu, 21 May 2015 - 11:31am
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 Layout Tab: D-1
 Acad Version : R19.0s (LMS Tech)
 User Name : Jenkins

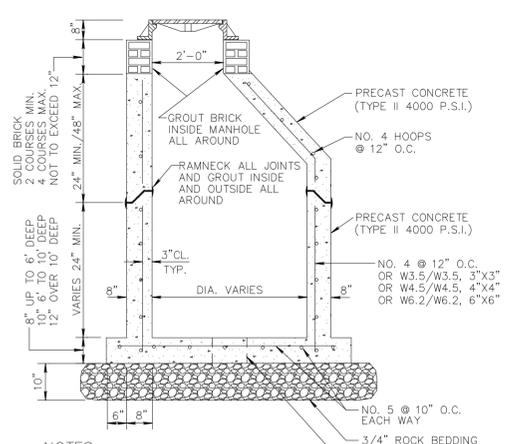
BIDDING



FRAME

NOTES:
 1. COLLAR IS REQUIRED ONLY WHEN MANHOLE IS OUT OF PAVEMENT.
 2. MANHOLE ADJUSTING RINGS SHALL BE CAST IRON, USF TYPE B.

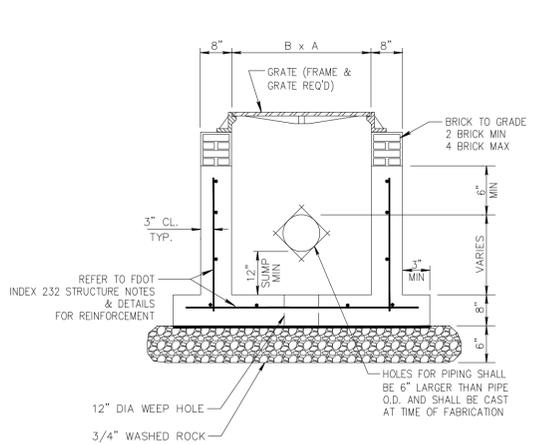
STORM SEWER MANHOLE FRAME & GRATE



DRAINAGE MANHOLE

NOTES:
 1. SEE PLAN FOR DIAMETER.
 2. 12" SUMP REQUIRED ON ALL STRUCTURES.
 24" SUMP REQUIRED ON STRUCTURES WITH WEIRS.
 3. WHERE BAFFLES ARE INSTALLED IN THE DRAINAGE STRUCTURES, THE MIN. DISTANCE BETWEEN THE BAFFLE AND THE OPPOSING WALL SHALL BE 2'-0".
 4. IN LIEU OF BRICK COURSE, HDPE RISER RINGS CAN BE USED W/ ENGINEER & CITY APPROVAL.

DRAINAGE MANHOLE

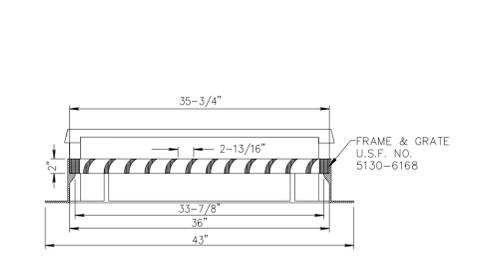


SECTION

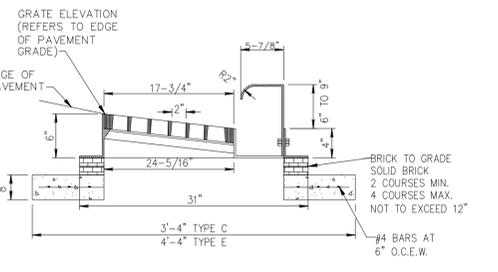
INLET TYPE	DIMENSIONS		GRATE TYPE	MAX. PIPE SIZE	
	A	B		WALL A	WALL B
'C'	2'-0"	3'-1"	U.S. FOUNDRY 5130-6168; 5120-6167 OR APPROVED EQUAL	18" R.C.P.	24" R.C.P.
'E'	3'-0"	4'-6"	U.S. FOUNDRY NO. 5130-6168; 5120-6167 OR APPROVED EQUAL	24" R.C.P.	36" R.C.P.

NOTES:
 1. INLET TO BE PRECAST WITH CLASS 'A' 4000 P.S.I. CONCRETE.
 2. ALL EXPOSED CORNERS AND EDGES TO BE CHAMFERED 3/4".
 3. 12" SUMP REQUIRED IN ALL DRAINAGE STRUCTURES.
 24" SUMP REQUIRED ON STRUCTURES WITH WEIRS.
 4. ALL GRATES SHALL BE SUITABLE FOR H-20 LOADING (HIGHWAY TRAFFIC LOADS).
 5. ALL DRAINAGE MANHOLE CONNECTIONS ARE TO HAVE A WATER STOP GASKET (ADS GASKET OR APPROVED EQUAL).

TYPE C & E INLET DETAIL W/ FRAME & GRATE

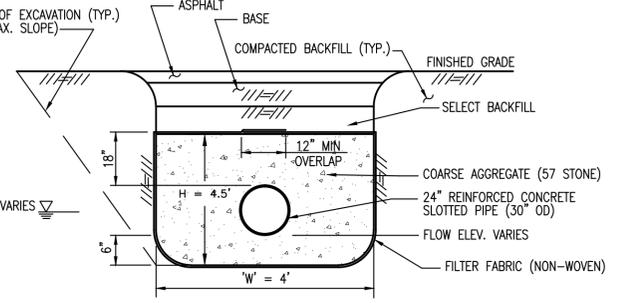


TYPE "F" FRAME & GRATE
NOT TO SCALE

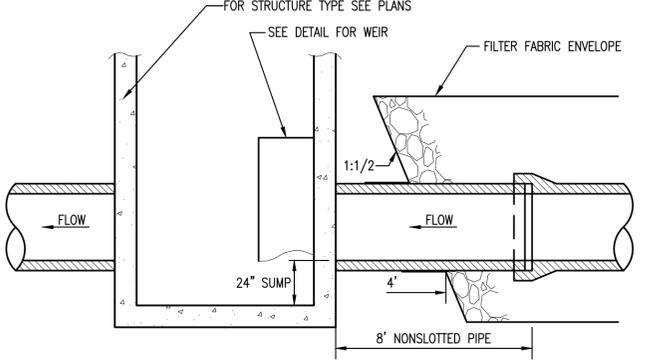


TYPE "F" FRAME & GRATE PROFILE
NOT TO SCALE

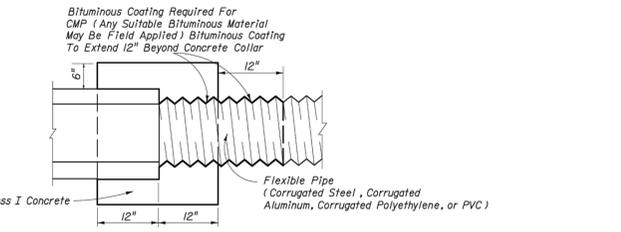
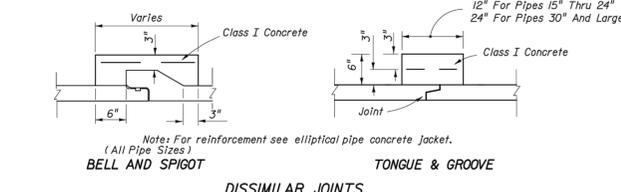
TYPE C & E INLET "F" TYPE CURB FRAME & GRATE DETAIL



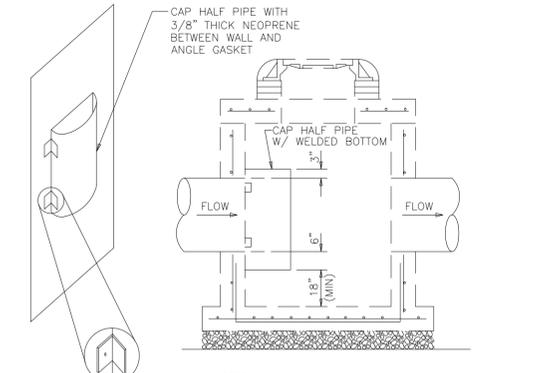
EXFILTRATION TRENCH DETAIL
NOT TO SCALE
(FOR ADDITIONAL INFO, SEE FDOT INDEX NO. 285)



EXFILTRATION TRENCH TERMINATION DETAIL

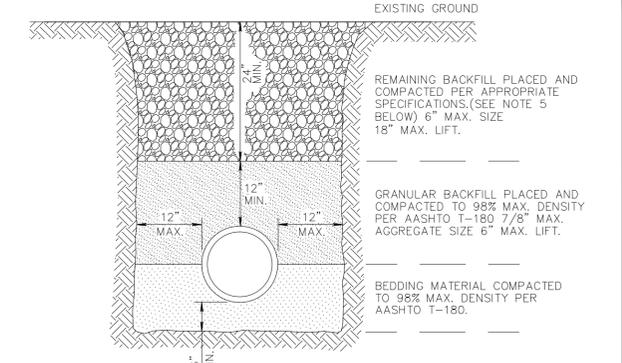


CONCRETE JACKET FOR CONNECTING DISSIMILAR TYPES OF PIPE AND CONCRETE PIPES WITH DISSIMILAR JOINTS
FDOT INDEX 280



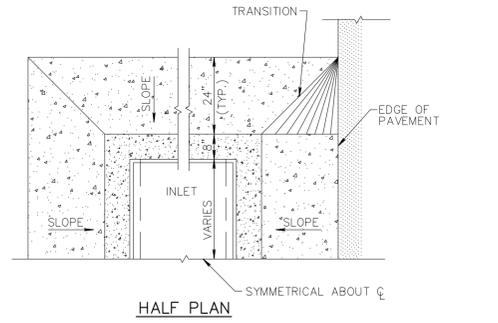
EXFILTRATION TRENCH WEIR DETAIL

STRUCTURE #	BAFFLE DIMENSIONS			WEIR ELEV.
	STORM PIPE DIA.	BAFFLE DIA.	BAFFLE GAUGE	
D-4	24"	36"	14	17.25
D-7	24"	36"	14	15.20



NOTES:
 1. UNSUITABLE IN-SITU MATERIALS SUCH AS MUCK, DEBRIS AND LARGE ROCKS SHALL BE REMOVED; BEDDING MATERIAL AND BACKFILL CONSISTING OF WASHED AND GRADED LIMEROCK 3/8" - 7/8" SIZING.
 2. THE PIPE AND/OR STRUCTURE SHALL BE FULLY SUPPORTED FOR ITS ENTIRE LENGTH WITH APPROPRIATE COMPACTION UNDER THE PIPE HAUNCHES.
 3. THE PIPE AND/OR STRUCTURE SHALL BE PLACED IN A DRY TRENCH.
 4. BACKFILL SHALL BE FREE OF UNSUITABLE MATERIAL SUCH AS LARGE ROCK, MUCK, AND DEBRIS.
 5. COMPACT BACKFILL TO 98% DENSITY UNDER PAVEMENT AND TO 95% DENSITY ELSEWHERE (AASHTO T-180).
 6. COMPACTION AND DENSITY TESTS SHALL BE COMPLETED DURING BACKFILL OPERATIONS, CONTRACTORS NOT FOLLOWING THIS PROCEDURE, FOR WHATEVER REASONS, SHALL BE REQUIRED TO RE-EXCAVATE THE AREA IN QUESTION, DOWN TO THE BEDDING MATERIAL, THEN BACKFILL FOLLOWING THE ABOVE PROCEDURES.

TYPICAL BACKFILL DETAIL



INLET APRON DETAIL

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 Layout Tab: D-2
 Acad Version: R19.0s (LMS Tech)

NO.	DATE	ISSUED FOR	APR'D BY

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 DRAWN: J.A.J.
 CHECKED: D.L.M./A.C.
 APPROVED: D.L.M.
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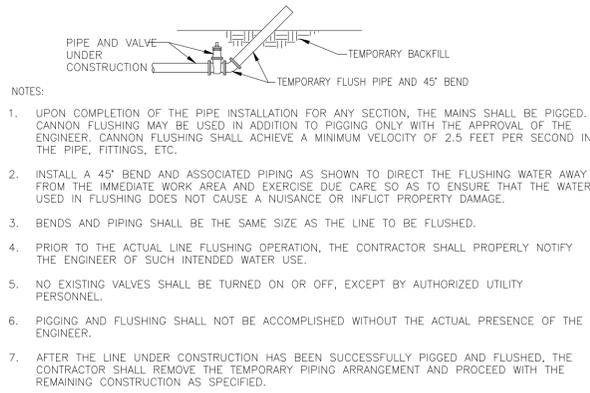
VERIFY SCALE
 1" = 1'
 BAR IS ONE INCH ON FULL SIZE (22x34) ORIGINAL DRAWING. ADJUST SCALES AS NECESSARY.

ENGINEER NO.: 1738
 CLIENT PROJECT NO.:
 CAD REF.: 1738DETAILS

CITY OF LAKE WORTH
 7TH AVENUE SOUTH
 ROADWAY IMPROVEMENTS PROJECT
 STANDARD DETAILS - SHEET 2 OF 5

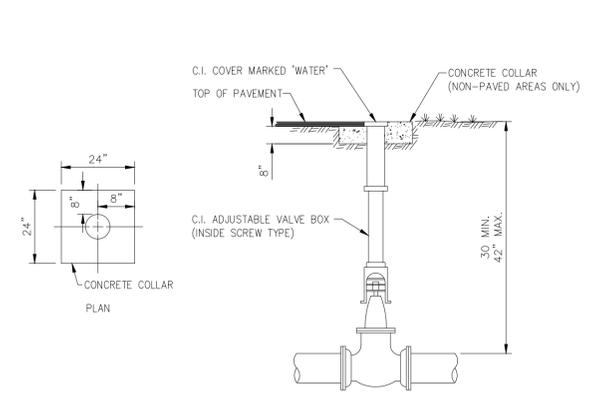
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 SHEET: 14 of 17
 DRAWING: D-2

BIDDING

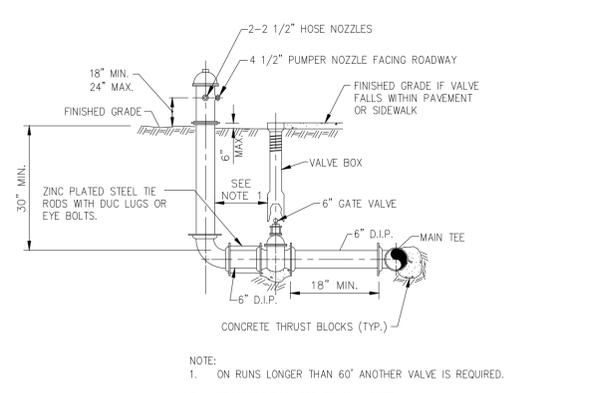


PIGGING AND CANNON FLUSHING
NTS

- NOTES:
- UPON COMPLETION OF THE PIPE INSTALLATION FOR ANY SECTION, THE MAINS SHALL BE PIGGED. CANNON FLUSHING MAY BE USED IN ADDITION TO PIGGING ONLY WITH THE APPROVAL OF THE ENGINEER. CANNON FLUSHING SHALL ACHIEVE A MINIMUM VELOCITY OF 2.5 FEET PER SECOND IN THE PIPE, FITTINGS, ETC.
 - INSTALL A 45° BEND AND ASSOCIATED PIPING AS SHOWN TO DIRECT THE FLUSHING WATER AWAY FROM THE IMMEDIATE WORK AREA AND EXERCISE DUE CARE SO AS TO ENSURE THAT THE WATER USED IN FLUSHING DOES NOT CAUSE A NUISANCE OR INFLECT PROPERTY DAMAGE.
 - BENDS AND PIPING SHALL BE THE SAME SIZE AS THE LINE TO BE FLUSHED.
 - PRIOR TO THE ACTUAL LINE FLUSHING OPERATION, THE CONTRACTOR SHALL PROPERLY NOTIFY THE ENGINEER OF SUCH INTENDED WATER USE.
 - NO EXISTING VALVES SHALL BE TURNED ON OR OFF, EXCEPT BY AUTHORIZED UTILITY PERSONNEL.
 - PIGGING AND FLUSHING SHALL NOT BE ACCOMPLISHED WITHOUT THE ACTUAL PRESENCE OF THE ENGINEER.
 - AFTER THE LINE UNDER CONSTRUCTION HAS BEEN SUCCESSFULLY PIGGED AND FLUSHED, THE CONTRACTOR SHALL REMOVE THE TEMPORARY PIPING ARRANGEMENT AND PROCEED WITH THE REMAINING CONSTRUCTION AS SPECIFIED.

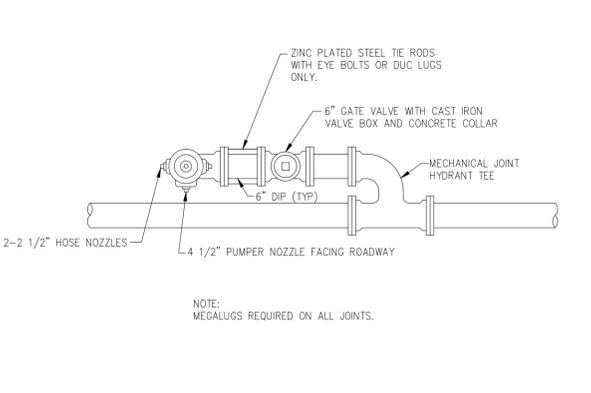


VALVE SETTING
NTS



FIRE HYDRANT INSTALLATION
NTS

- NOTE:
- ON RUNS LONGER THAN 60' ANOTHER VALVE IS REQUIRED.
 - MEGALUGS REQUIRED ON ALL JOINTS.



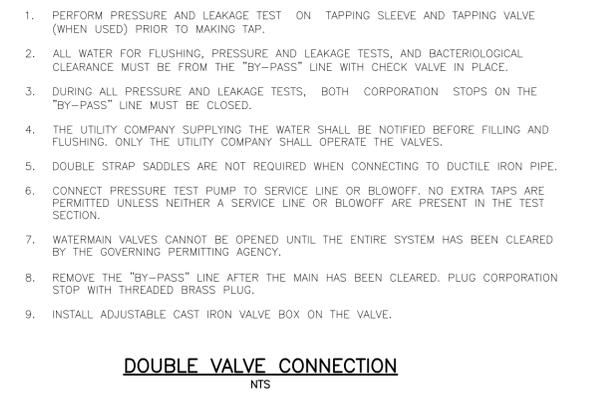
FIRE HYDRANT INSTALLATION PARALLEL TO WATERMAIN
NTS

NOTE: MEGALUGS REQUIRED ON ALL JOINTS.

FITTING TYPE	PIPE SIZE															
	4"	6"	8"	10"	12"	14"	16"	18"	20"	24"	30"	36"	42"	48"		
90° HORIZ. BEND	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
45° HORIZ. BEND	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
22.5° HORIZ. BEND	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
11.25° HORIZ. BEND	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
45° VERT. OFFSET	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
22.5° VERT. OFFSET	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
11.25° VERT. OFFSET	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
DEAD END AND INLINE VALVE	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
TEE (BRANCH RESTRAINT)	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
REDUCER (LARGER PIPE RESTRAINT)	1	1	1	1	1	1	1	1	1	1	1	1	1	1		

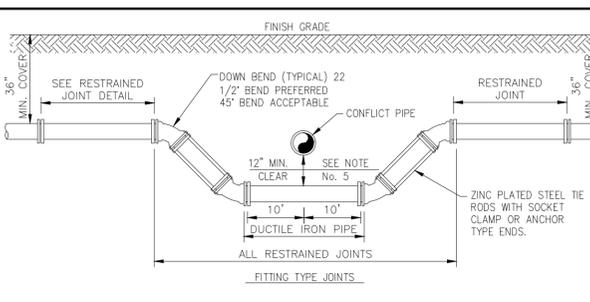
MECHANICAL THRUST RESTRAINT - MINIMUM PIPE LENGTHS
NTS

FITTING TYPE	PIPE SIZE															
	4"	6"	8"	10"	12"	14"	16"	18"	20"	24"	30"	36"	42"	48"		
90° HORIZ. BEND	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
45° HORIZ. BEND	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
22.5° HORIZ. BEND	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
11.25° HORIZ. BEND	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
45° VERT. OFFSET	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
22.5° VERT. OFFSET	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
11.25° VERT. OFFSET	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
DEAD END AND INLINE VALVE	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
TEE (BRANCH RESTRAINT)	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
REDUCER (LARGER PIPE RESTRAINT)	1	1	1	1	1	1	1	1	1	1	1	1	1	1		



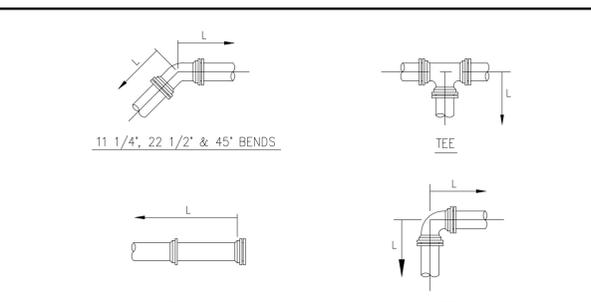
DOUBLE VALVE CONNECTION
NTS

- PERFORM PRESSURE AND LEAKAGE TEST ON TAPPING SLEEVE AND TAPPING VALVE (WHEN USED) PRIOR TO MAKING TAP.
- ALL WATER FOR FLUSHING, PRESSURE AND LEAKAGE TESTS, AND BACTERIOLOGICAL CLEARANCE MUST BE FROM THE "BY-PASS" LINE WITH CHECK VALVE IN PLACE.
- DURING ALL PRESSURE AND LEAKAGE TESTS, BOTH CORPORATION STOPS ON THE "BY-PASS" LINE MUST BE CLOSED.
- THE UTILITY COMPANY SUPPLYING THE WATER SHALL BE NOTIFIED BEFORE FILLING AND FLUSHING. ONLY THE UTILITY COMPANY SHALL OPERATE THE VALVES.
- DOUBLE STRAP SADDLES ARE NOT REQUIRED WHEN CONNECTING TO DUCTILE IRON PIPE.
- CONNECT PRESSURE TEST PUMP TO SERVICE LINE OR BLOWOFF. NO EXTRA TAPS ARE PERMITTED UNLESS NEITHER A SERVICE LINE OR BLOWOFF ARE PRESENT IN THE TEST SECTION.
- WATERMAIN VALVES CANNOT BE OPENED UNTIL THE ENTIRE SYSTEM HAS BEEN CLEARED BY THE GOVERNING PERMITTING AGENCY.
- REMOVE THE "BY-PASS" LINE AFTER THE MAIN HAS BEEN CLEARED. PLUG CORPORATION STOP WITH THREADED BRASS PLUG.
- INSTALL ADJUSTABLE CAST IRON VALVE BOX ON THE VALVE.



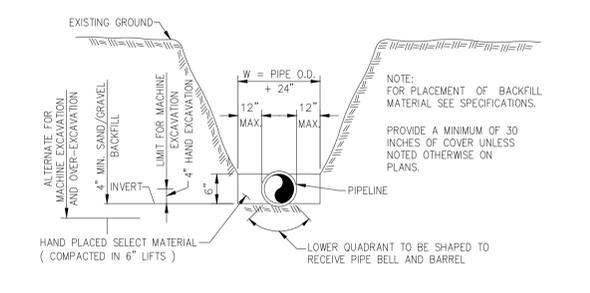
PRESSURE PIPE CONFLICT
NTS

- NOTES:
- THERE SHALL BE, IN ALL CASES, A MINIMUM OF 12" SEPARATION BETWEEN WATER MAINS AND FORCE MAINS.
 - WHEREVER POSSIBLE WATER MAINS SHALL PASS OVER FORCE MAINS OR STORM SEWERS.
 - FITTINGS SHALL BE RESTRAINED WITH MEGALUGS AND TIE RODS BETWEEN OFFSET FITTINGS. THRUST BLOCKS SHALL ONLY BE USED WITH THE APPROVAL OF THE ENGINEER.
 - THE DEFLECTION TYPE CROSSING IS PREFERRED. SEE SPECIFICATIONS AND MANUFACTURER'S SUBMITTAL FOR MAXIMUM DEFLECTION ALLOWED.
 - A MINIMUM OF 12" VERTICAL SEPARATION BETWEEN WATER MAINS AND STORM SEWERS SHALL BE MAINTAINED. WHERE THIS IS NOT POSSIBLE WATER MAIN SHALL BE D.I.P. WITH NO LESS THAN 6" SEPARATION.

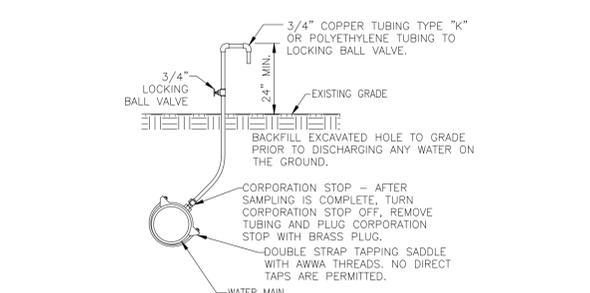


RESTRAINED PIPE JOINTS
NTS

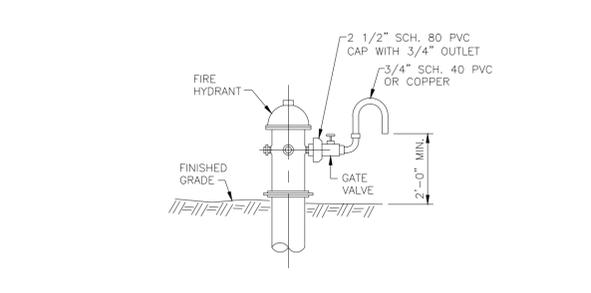
- NOTES:
- LENGTH 'L' IS IN FEET.
 - RESTRAINED LENGTHS ARE BASED ON THE FOLLOWING:
A. 150 PSI TEST PRESSURE
B. MIN. 30" COVER.
C. PVC - PIPE SIZES 4" - 12".
D. DI - PIPE SIZES 4" - 48".
E. SANDY SOIL.
SAFETY FACTOR OF 1.5.
 - LENGTH 'L' SHOWN IN THE TABLE TO BE RESTRAINED IN THE DIRECTION OF THE ARROWS.



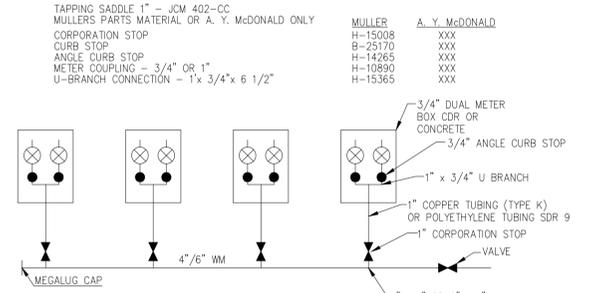
TRENCHING
NTS



SAMPLING POINT
NTS



SAMPLE POINT ON FIRE HYDRANT
NTS



MULTIPLE WATER SERVICES
NTS

Date: Thu, 21 May 2015 11:32am
User: jenkins
Acad Version: R19.0s (LMS Tech)
Current PlotStyle: ByColor
Layout Tab: D-4
Path Name: S:\Projects\LakeWorth\1738 7th Avenue CDD\Working Folder\1738DETALS.dwg

NO.	DATE	ISSUED FOR	APR'D BY

DESIGNED: M.R.T.
DRAWN: J.A.J.
CHECKED: D.L.M./A.C.
APPROVED: D.L.M.

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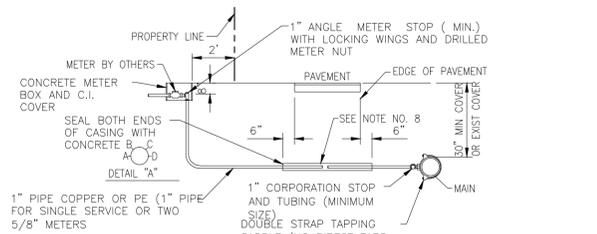
VERIFY SCALE
1"
BAR IS ONE INCH ON FULL SIZE (22x34) ORIGINAL DRAWING. SCALES AS NECESSARY.

ENGINEER NO.: 1738
CLIENT PROJECT NO.:
CAD REF.: 1738DETAILS

CITY OF LAKE WORTH
7TH AVENUE SOUTH
ROADWAY IMPROVEMENTS PROJECT
STANDARD DETAILS - SHEET 4 OF 5

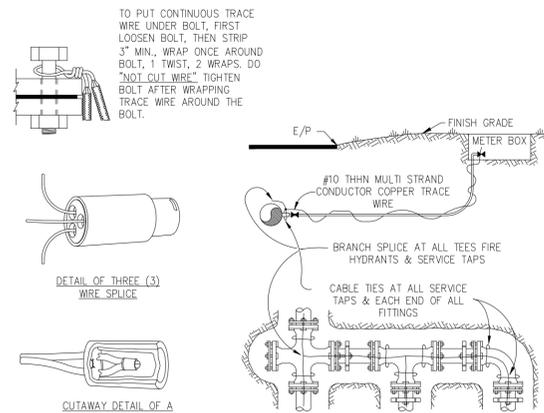
DATE: MAY 2015
SHEET: 16 of 17
DRAWING: D-4

BIDDING



- NOTES:
- SUCCESSIVE TAPS INTO THE WATER MAIN SHALL BE SPACED A MINIMUM OF 18" OFFSET AND AT 45° FROM THE CENTERLINE (ON MAINS WITH GREATER THAN 30" OF COVER, SEE DETAIL 'A').
 - WHERE NO SIDEWALK EXISTS, METER BOXES SHALL BE SET TO CONFORM TO FINISH GRADE.
 - COPPER TUBING SHALL BE TYPE "K" WITH COMPRESSION FITTINGS. POLYETHYLENE TUBING SHALL BE SDR 9, COPPER SIZE TUBING.
 - ROTATE THE CORPORATION STOP SO THAT THE OPERATING NUT IS ACTUATED FROM THE VERTICAL POSITION RATHER THAN THE HORIZONTAL.
 - COPPER SERVICE LINES SHALL BE CONTINUOUS FROM CORPORATION STOP TO ANGLE METER STOP WITH NO FITTINGS IN BETWEEN.
 - TAPPING SADDLES AND CORPORATION STOPS SHALL HAVE CC THREADS.
 - SERVICE CASING SHALL NOT BE INSTALLED BY WATER JETTING UNDER ROADWAY.
 - GALVANIZED CASING REQUIRED FOR JACK AND BORE IN MOST CASES, SCHEDULE 40 PVC MAY BE USED WITH THE APPROVAL OF THE ENGINEER. CASING SHOULD EXTEND SIX (6) FEET BEYOND EDGE OF PAVEMENT AND SIZED AS FOLLOWS:
 - 1" SERVICE USE 2" CASING
 - 2" SERVICE USE 4" CASING
 - METER BOX TO BE SET TWO FEET BEHIND PROPERTY LINE AND TWO FEET INSIDE SIDE PROPERTY LINE ON EITHER SIDE OF PROPERTY.
 - PIPING LAYOUT SHOWN IS TYPICAL FOR 2" SERVICE.

WATER SERVICE FOR 1" OR 2" PIPE
NTS



- NOTES:
- TRACE WIRE IS REQUIRED ON ALL NON METALLIC PIPE.
 - INCLUDE ALL COST OF MATERIAL & LABOR IN PRICE OF PIPE.
 - CONTRACTOR IS RESPONSIBLE FOR CONTINUITY OF ALL TRACE WIRE.
 - WIRE SPlice CONNECTORS SHALL BE DRY-CON DIRECT BURY LUG BY KING INNOVATIONS, DS-500 DRI-SPlice BY SPEARS OR DIRECT BURY PRODUCTS BY 3M

TRACER WIRE INSTALLATION
NTS

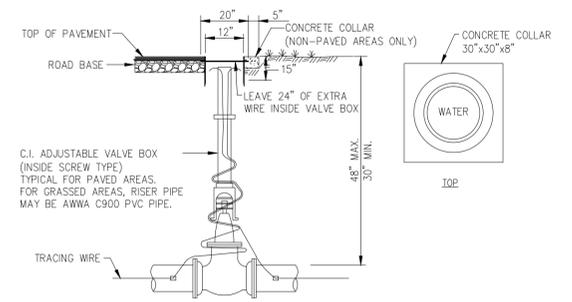
HORIZONTAL SEPARATION BETWEEN UNDERGROUND WATERMANS AND SANITARY OR STORM SEWERS, WASTEWATER OR STORMWATER FORCE MAINS, RECLAIMED WATER PIPELINES AND ON SITE SEWAGE TREATMENT AND DISPOSAL SYSTEMS.

- NEW OR RELOCATED UNDERGROUND WATERMANS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST THREE FEET BETWEEN THE OUTSIDE OF THE WATERMAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED SEWER, STORMWATER FORCEMAIN, OR PIPELINE CONVEYING RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 2-610, F.A.C.
- NEW OR RELOCATED UNDERGROUND WATERMANS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST THREE FEET, AND PREFERABLY TEN FEET, BETWEEN THE OUTSIDE OF THE WATERMAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED VACUUM-TYPE SANITARY SEWER.
- NEW OR RELOCATED UNDERGROUND WATERMANS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST SIX, AND PREFERABLY TEN FEET, BETWEEN THE OUTSIDE OF THE WATERMAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED GRAVITY OR PRESSURE TYPE SANITARY SEWER, WASTEWATER FORCEMAIN, OR PIPELINE CONVEYING RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C. THE MINIMUM HORIZONTAL SEPARATION BETWEEN WATERMANS AND GRAVITY TYPE SANITARY SEWERS SHALL BE REDUCED TO THREE FEET WHERE THE BOTTOM OF THE WATERMAIN IS LAID AT LEAST SIX INCHES ABOVE THE TOP OF THE SEWER.
- NEW OR RELOCATED UNDERGROUND WATERMANS SHALL BE LAID TO PROVIDE A MINIMUM HORIZONTAL DISTANCE OF AT LEAST TEN FEET BETWEEN THE OUTSIDE OF THE WATERMAIN AND ALL PARTS OF ANY EXISTING OR PROPOSED ON SITE SEWAGE TREATMENT AND DISPOSAL SYSTEM AS DEFINED IN SECTION 381.0065(2), F.S. AND RULE 64E-6.002, F.A.C.

VERTICAL SEPARATION BETWEEN UNDERGROUND WATERMANS AND SANITARY OR STORM SEWERS, WASTEWATER OR STORMWATER FORCEMANS, AND RECLAIMED WATER PIPELINES.

- NEW OR RELOCATED UNDERGROUND WATERMANS CROSSING ANY EXISTING OR PROPOSED GRAVITY OR VACUUM TYPE SANITARY OR STORM SEWER SHALL BE LAID SO THE OUTSIDE OF THE WATERMAIN IS AT LEAST SIX INCHES, AND PREFERABLY TWELVE INCHES ABOVE, OR AT LEAST TWELVE INCHES BELOW THE OUTSIDE OF THE OTHER PIPELINE. HOWEVER, IT IS PREFERABLE TO LAY THE WATERMAIN ABOVE THE OTHER PIPELINE.
- NEW OR RELOCATED UNDERGROUND WATERMANS CROSSING ANY EXISTING OR PROPOSED PRESSURE TYPE SANITARY SEWER, WASTEWATER OR STORMWATER FORCE MAIN, OR PIPE LINE CONVEYING RECLAIMED WATER SHALL BE LAID SO THE OUTSIDE OF THE WATERMAIN IS AT LEAST TWELVE INCHES ABOVE OR BELOW THE OUTSIDE OF THE OTHER PIPELINE. HOWEVER, IT IS PREFERABLE TO LAY THE WATERMAIN ABOVE THE OTHER PIPELINE.
- AT THE UTILITY CROSSING DESCRIBED IN PARAGRAPH 1 AND 2 ABOVE, ONE FULL LENGTH OF WATERMAIN PIPE SHALL BE CENTERED ABOVE OR BELOW THE OTHER PIPELINE SO THE WATERMAIN JOINTS SHALL BE AS FAR AS POSSIBLE FROM THE OTHER PIPELINE. ALTERNATIVELY, AT SUCH CROSSINGS, THE PIPES SHALL BE ARRANGED SO THAT ALL WATERMAIN JOINTS ARE AT LEAST THREE FEET FROM ALL JOINTS IN VACUUM TYPE SANITARY SEWER, STORM SEWERS, STORMWATER FORCEMANS, OR PIPELINES CONVEYING RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C. AND AT LEAST SIX FEET FROM ALL JOINTS IN GRAVITY OR PRESSURE TYPE SANITARY SEWERS, WASTEWATER FORCEMANS, OR PIPELINES CONVEYING RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.

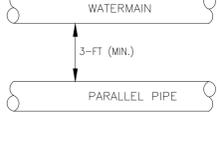
WATER AND SEWER SEPARATION CRITERIA
NTS



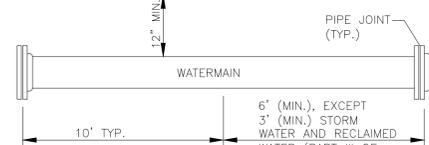
- NOTES:
- TOP OF LID MUST BE FLUSH WITH PAVEMENT OR CONCRETE COLLAR.
 - WHEN VALVE IS DEEPER THAN 36" AN EXTENSION MUST BE REQUIRED TO BRING OPERATING NUT TO 24" OF FINISHED GRADE. EXTENSION MUST BE SET SCREW TYPE AND ATTACHED TO OPERATING NUT.
 - OUTSIDE BOX SHALL BE UNITED STATES FOUNDRY NO. 7630 WITH TYPE FD LID. LID SHALL BE CAST WITH THE WORDS: "WATER" OR "RAW WATER".
 - USE NYLON CABLE TIES TO SECURE TRACE WIRE TO OUTSIDE OF VALVE EXTENSION AND CABLE TIE BEHIND EACH BELL.
 - SEE NOTES ON DETAIL NO. 3, THIS SHEET.

VALVE SETTING
NTS

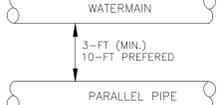
CASE #1
WATER MAIN PARALLEL TO
STORM WATER DRAIN, STORM
WATER FORCEMAIN, AND
RECLAIMED WATER (PART III
OF F.A.C. 62-610).



CASE #1
WATER MAIN UNDER
STORM WATER DRAIN,
STORM WATER FORCEMAIN,
SEWER FORCEMAIN,
GRAVITY SEWER, OR
RECLAIMED WATERMAIN



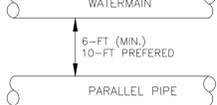
CASE #2
WATER MAIN PARALLEL TO
VACUUM SEWER.



CASE #2
WATERMAIN OVER STORM WATER
FORCEMAIN, SEWER FORCE MAIN,
OR RECLAIMED WATER.



CASE #3
WATER MAIN PARALLEL TO
GRAVITY SEWER AND
WASTEWATER FORCEMAIN



CASE #3
WATERMAIN OVER
STORM DRAIN,
VACUUM SEWER, OR
GRAVITY SEWER

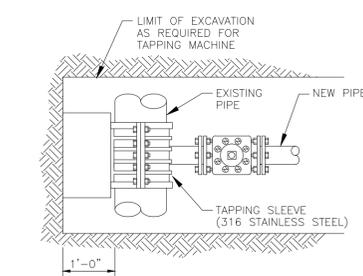


NOTE: THIS DETAIL REPRESENT THE REQUIRED SEPARATION OF WATERMANS TO OTHER PIPING SYSTEM, AS REQUIRED BY F.A.C. 62-555.314 AND WHICH SHALL PREVAIL OVER THESE DETAIL.

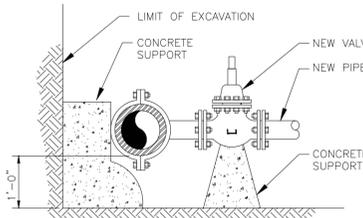
HORIZONTAL SEPARATION DETAIL
NTS

NOTE: THIS DETAIL REPRESENT THE REQUIRED SEPARATION OF WATERMANS TO OTHER PIPING SYSTEM, AS REQUIRED BY F.A.C. 62-555.314 AND WHICH SHALL PREVAIL OVER THESE DETAIL.

VERTICAL SEPARATION DETAIL
NTS

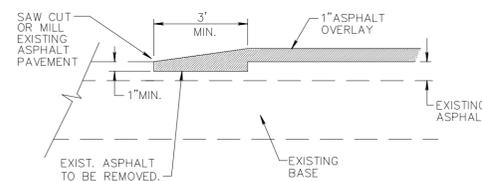


PLAN VIEW



SECTIONAL VIEW

**TAPPING SLEEVE AND VALVE
INSTALLATION DETAIL**
NOT TO SCALE



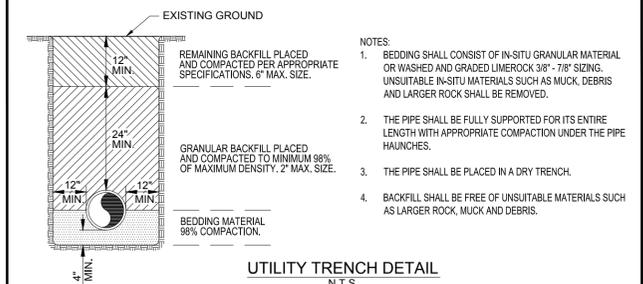
NEW OVERLAY PAVEMENT JOINT

NOTE:
THIS METHOD OF PAVEMENT JOINT SHALL BE USED FOR ANY APPLICATION OR CONSTRUCTION WHERE PROPOSED PAVEMENT WILL BE CONNECTED TO EXISTING PAVEMENT.

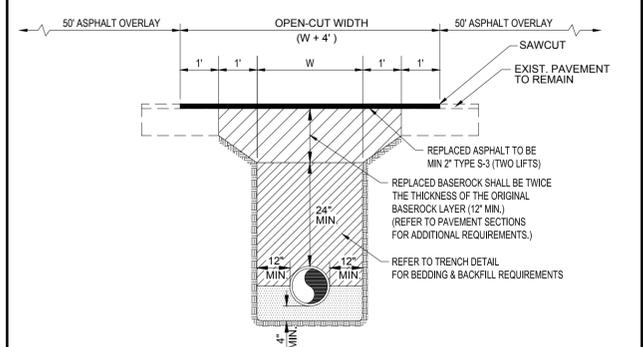
CITY OF LAKE WORTH
PUBLIC SERVICES DEPARTMENT

PAVEMENT JOINT

20



UTILITY TRENCH DETAIL
N.T.S.



PAVEMENT OPEN-CUT DETAIL
N.T.S.

- NOTES:
- PAVEMENT OVERLAY MAY BE REQUIRED IN OPEN-CUT AREAS AT THE DISCRETION OF THE CITY ENGINEER.
 - THE CONTRACTOR SHALL COMPLY WITH APPLICABLE TRENCH SAFETY REGULATIONS.
 - FINISHED SURFACE SHALL HAVE SMOOTH FINISH & SHALL MATCH FLUSH TO SURROUNDING PAVEMENT.
 - ASPHALT OVERLAY SHALL EXTEND A MINIMUM OF 50' BEYOND THE LIMITS OF THE OPEN CUT.

CITY OF LAKE WORTH
PUBLIC SERVICES DEPARTMENT

UTILITY TRENCH AND PAVEMENT
OPEN-CUT

21

Date/Time : Thu, 21 May 2015 - 11:32am
Path Name : S:\Projects\LakeWorth\1738 7th Avenue\1738DETAILS.dwg
Layout Tab: D-5
Acad Version : R19.0s (LMS Tech)
User Name : Jenkins

NO.	DATE	ISSUED FOR	APRV'D BY

DESIGNED:	M.R.T.
DRAWN:	J.A.J.
CHECKED:	D.L.M./A.C.
APPROVED:	D.L.M.
M. REBECCA TRAVIS, P.E. No. 40988	

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www.matthewsconsultinginc.com EB-0007929

VERIFY SCALE
1" = 22x34 ORIGINAL DRAWING. ADJUST SCALES AS NECESSARY.

ENGINEER NO.: 1738
CLIENT PROJECT NO.:
CAD REF.: 1738DETAILS

**CITY OF LAKE WORTH
7TH AVENUE SOUTH
ROADWAY IMPROVEMENTS PROJECT**

STANDARD DETAILS – SHEET 5 OF 5

DATE: MAY 2015
SHEET: 17 of 17
DRAWING: D-5

BIDDING