

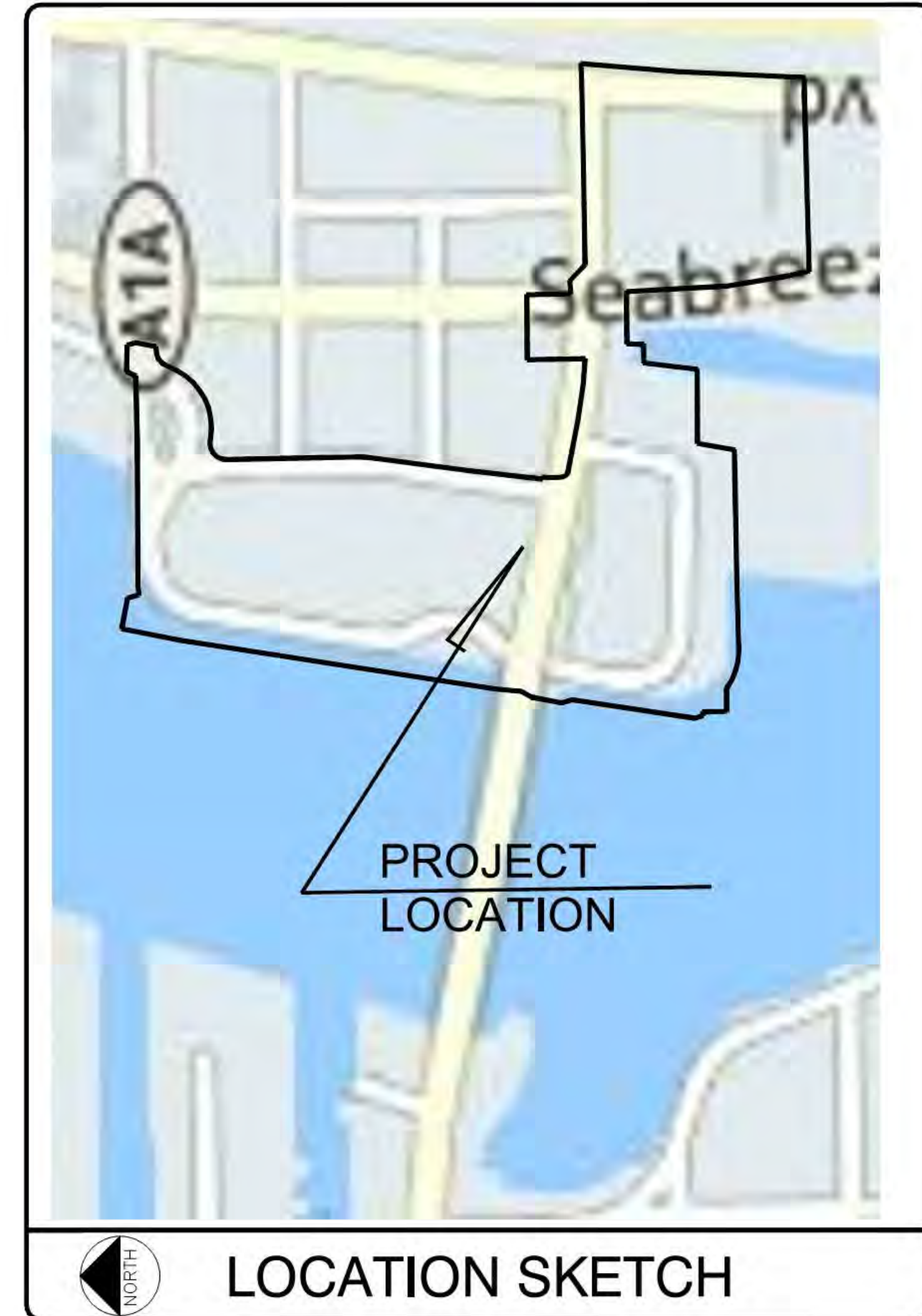
CITY OF FORT LAUDERDALE

PROJECT #11900
LAS OLAS BOULEVARD
CORRIDOR IMPROVEMENTS
FORT LAUDERDALE BEACH, INTRACOASTAL TO SR A1A
FORT LAUDERDALE, FLORIDA

VOLUME 1



ARQUITECTONICA



PROJECT #11900
LAS OLAS BOULEVARD
CORRIDOR IMPROVEMENTS
FORT LAUDERDALE BEACH, FORT LAUDERDALE, FLORIDA

CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING & ARCHITECTURE
100 North Andrews Avenue, Fort Lauderdale, Florida 33301

FORT LAUDERDALE CITY COMMISSION

JOHN P. "JACK" SEILER	MAYOR
BRUCE G. ROBERTS	COMMISSIONER - DISTRICT I
DEAN J. TRANTALIS	COMMISSIONER - DISTRICT II
ROBERT L. McKINZIE	COMMISSIONER - DISTRICT III
ROMNEY ROGERS	COMMISSIONER - DISTRICT IV

PROJECT MANAGER	JOB TITLE	PHONE NO.

DATE: 03/15/2016
CAD FILE:
DRAWING FILE No.:

60% CD SUBMITTAL

Drawing name: G:\Project\PK114042 Las Olas Blvd Corridor Improvements\Drawings\EDS\Adec\Working_CD SUBMITTAL\11900-LO-001-INDX.dwg LC-001 Apr 08, 2016 3:23pm by: abarnard

DRAWING INDEX

SHEET NUMBER	SHEET NAME	60% CD SUBMITTAL 03-15 2016	ADDENDUM:1 03- 16-2016	ADDENDUM:2 03- 25-2016	ADDENDUM:3 04-6- 2016
VOLUME 1					
GENERAL					
L0-0.00 COVER		•			
L0-0.01 INDEX OF DRAWINGS		•	•		
L0-0.02 INDEX OF DRAWINGS		•			
L0-0.03 AERIAL PLAN		•			
L0-0.04 ZONING PLAN		•			
L0-0.05 LAND USE PLAN		•			
L0-1.00 SITE PLAN		•			
L0-2.00 SITE MOBILITY PLAN		•			•
SURVEY					
S-3.01 SURVEY OF EXISTING CONDITIONS		•			
S-3.02 SURVEY OF EXISTING CONDITIONS		•			
S-3.03 SURVEY OF EXISTING CONDITIONS		•			
S-3.04 SURVEY OF EXISTING CONDITIONS		•			
CIVIL					
C1-0.01 GENERAL NOTES		•			
C1-0.02 GENERAL NOTES		•			
C2-1.01 DEMOLITION PLAN		•			
C2-1.02 DEMOLITION PLAN		•			
C2-1.03 DEMOLITION PLAN		•			
C2-1.04 DEMOLITION PLAN		•			
C3-1.01 EROSION CONTROL PLAN		•			
C3-1.02 EROSION CONTROL PLAN		•			
C3-1.03 EROSION CONTROL PLAN		•			
C3-1.04 EROSION CONTROL PLAN		•			
C4-0.01 EROSION CONTROL DETAILS		•			
C4-1.01 SIGNING AND PAVEMENT MARKING PLANS		•			
C4-1.02 SIGNING AND PAVEMENT MARKING PLANS		•			
C4-1.03 SIGNING AND PAVEMENT MARKING PLANS		•			
C4-1.04 SIGNING AND PAVEMENT MARKING PLANS		•			
C4-4.01 CONSTRUCTION DETAILS		•			
C5-1.00 OVERALL PAVING, GRADING, AND DRAINAGE PLAN		•			
C5-1.01 PAVING, GRADING, AND DRAINAGE PLAN		•			
C5-1.02 PAVING, GRADING, AND DRAINAGE PLAN		•			
C5-1.03 PAVING, GRADING, AND DRAINAGE PLAN		•			
C5-1.04 PAVING, GRADING, AND DRAINAGE PLAN		•			
C5-4.01 PAVING, GRADING, AND DRAINAGE DETAILS		•			
C5-4.02 PAVING, GRADING, AND DRAINAGE DETAILS		•			
C5-4.03 PROPOSED CROSS SECTIONS		•			
C5-4.04 PROPOSED CROSS SECTIONS		•			
C6-1.00 OVERALL UTILITY PLAN		•			
C6-1.01 UTILITY PLAN		•			
C6-1.02 UTILITY PLAN		•			
C6-1.03 UTILITY PLAN		•			
C6-1.04 UTILITY PLAN		•			
C6-3.01 UTILITY BLOW UP		•			
C6-3.02 SEWER PROFILES		•			
C6-3.03 FIRE HYDRANT LOCATION PLAN		•			
C6-4.01 UTILITY DETAILS		•			
C6-4.02 UTILITY DETAILS		•			
C6-4.03 UTILITY DETAILS		•			
C6-4.04 UTILITY DETAILS		•			
VOLUME 2					
LANDSCAPE					
L1-0.01 EXISTING TREE DISPOSITION NOTES		•			
L1-0.02 EXISTING TREE DISPOSITION SCHEDULE		•			
L1-0.03 EXISTING TREE DISPOSITION SCHEDULE		•			
L1-1.00 OVERALL EXISTING TREE DISPOSITION PLAN		•			
L1-1.01 EXISTING TREE DISPOSITION PLAN		•			
L1-1.02 EXISTING TREE DISPOSITION PLAN		•			
L1-1.03 EXISTING TREE DISPOSITION PLAN		•			
L1-1.04 EXISTING TREE DISPOSITION PLAN		•			
L2-1.00 OVERALL HARDSCAPE PLAN		•		•	
L2-1.01 HARDSCAPE PLAN		•	•	•	
L2-1.02 HARDSCAPE PLAN		•	•	•	
L2-1.03 HARDSCAPE PLAN		•	•	•	
L2-1.04 HARDSCAPE PLAN		•	•	•	
L2-2.01 HARDSCAPE SECTIONS / ELEVATIONS		•			
L2-3.06 HARDSCAPE ENLARGEMENTS - GARAGE ROOF		•			
L2-4.01 HARDSCAPE DETAILS		•			
L2-4.02 HARDSCAPE DETAILS		•			
L2-4.03 HARDSCAPE DETAILS		•			
L2-4.04 HARDSCAPE DETAILS		•			
L2-4.10 HARDSCAPE DETAILS		•			
L2-4.11 HARDSCAPE DETAILS		•			
L2-4.20 HARDSCAPE DETAILS		•			
L2-4.21 HARDSCAPE DETAILS		•			
L2-4.21A HARDSCAPE DETAILS		•			
L2-4.21B HARDSCAPE DETAILS		•			
L2-4.22 HARDSCAPE DETAILS		•			
L2-4.24 HARDSCAPE DETAILS		•			
L2-4.25 HARDSCAPE DETAILS		•			
L2-4.26 HARDSCAPE DETAILS		•			
L2-4.27 HARDSCAPE DETAILS		•			
L2-4.28 HARDSCAPE DETAILS		•			
L2-4.29 HARDSCAPE DETAILS		•			
VOLUME 3					
ARCHITECTURE					
A0-0.00 SHEET INDEX		•			
A0-0.01 GENERAL NOTES		•			
A1-1.01 PORTE COCHERE - DROP-OFF		•			
A1-1.02 PORTE COCHERE - RESTROOM AND FOUNTAIN PUMP ROOM ROOF		•			
A1-1.03 PORTE COCHERE - CANOPY ROOF		•			
A1-1.04 PORTE COCHERE - GEOMETRY		•			
A1-1.11 PARKING GARAGE - LEVEL 1		•			
A1-1.15 PARKING GARAGE - LEVEL 5 AMENITIES		•			
A1-1.16 PARKING GARAGE ROOF		•			
A2-1.01 PORTE COCHERE ELEVATIONS		•			
A2-1.02 PORTE COCHERE ELEVATIONS		•			
A2-1.11 PARKING GARAGE FACADE ELEVATIONS		•			
A2-1.12 PARKING GARAGE FACADE ELEVATIONS		•			
A2-1.21 AMENITIES LEVEL RESTAURANT SHELL ELEVATIONS		•			
A2-1.22 AMENITIES LEVEL RESTAURANT SHELL ELEVATIONS		•			
A3-1.01 PORTE COCHERE SECTIONS		•			
A3-1.02 PORTE COCHERE DETAIL AXO		•			
A3-1.12 PARKING GARAGE DETAIL WALL SECTIONS		•			
A3-1.13 PARKING GARAGE FACADE DETAIL AXO		•			
A3-1.14 ROOFTOP RESTAURANT SECTION		•			
A4-1.01 PORTE COCHERE ENLARGED BATHROOMS PLAN		•			
A4-1.02 PORTE COCHERE ENLARGED FOUNTAIN STORAGE AND PUMP ROOM		•			
A4-1.11 PARKING GARAGE ENLARGED SOUTHWEST		•			
A4-1.12 PARKING GARAGE ENLARGED SOUTHEAST		•			
A4-1.13 PARKING GARAGE ENLARGED NORTHWEST		•			
A4-1.14 PARKING GARAGE ENLARGED RESTAURANT SHELL		•			
A5-1.01 CMU WALL TYPES		•			
A5-1.02 CMU WALL TYPES		•			
A5-1.03 METAL STUD WALL TYPES		•			
A5-1.04 METAL STUD WALL TYPES		•			
A6-1.01 ADA REQUIREMENTS		•			
A7-1.01 FIRE PENETRATIONS DETAILS		•			
A7-1.02 ROOF AND CEILING DETAILS		•			
A7-1.03 STAIR DETAILS		•			

60% CD SUBMITTAL

EDSA, Inc.

1512 E. Broward Blvd, Suite 110
Fort Lauderdale, FL 33301
954.324.3330

EDSA

REAL:

DESIGNED BY: EDSA

CHECKED BY: EDSA

DATE: 03/15/2016

SCALE: AS SHOWN

FIELD BOOK:

CITY OF FORT LAUDERDALE

PUBLIC WORKS DEPARTMENT

ENGINEERING & ARCHITECTURE

100 North Andrews Avenue, Fort Lauderdale, Florida 33301

REVISIONS

NO.	DATE	BY	CHK'D	DESCRIPTION

PROJECT # 11900

LAS OLAS CORRIDOR IMPROVEMENTS

FORT LAUDERDALE, FL

INDEX OF DRAWINGS

SHEET NO.

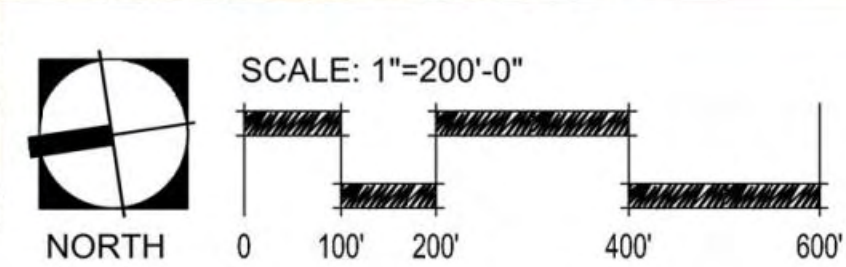
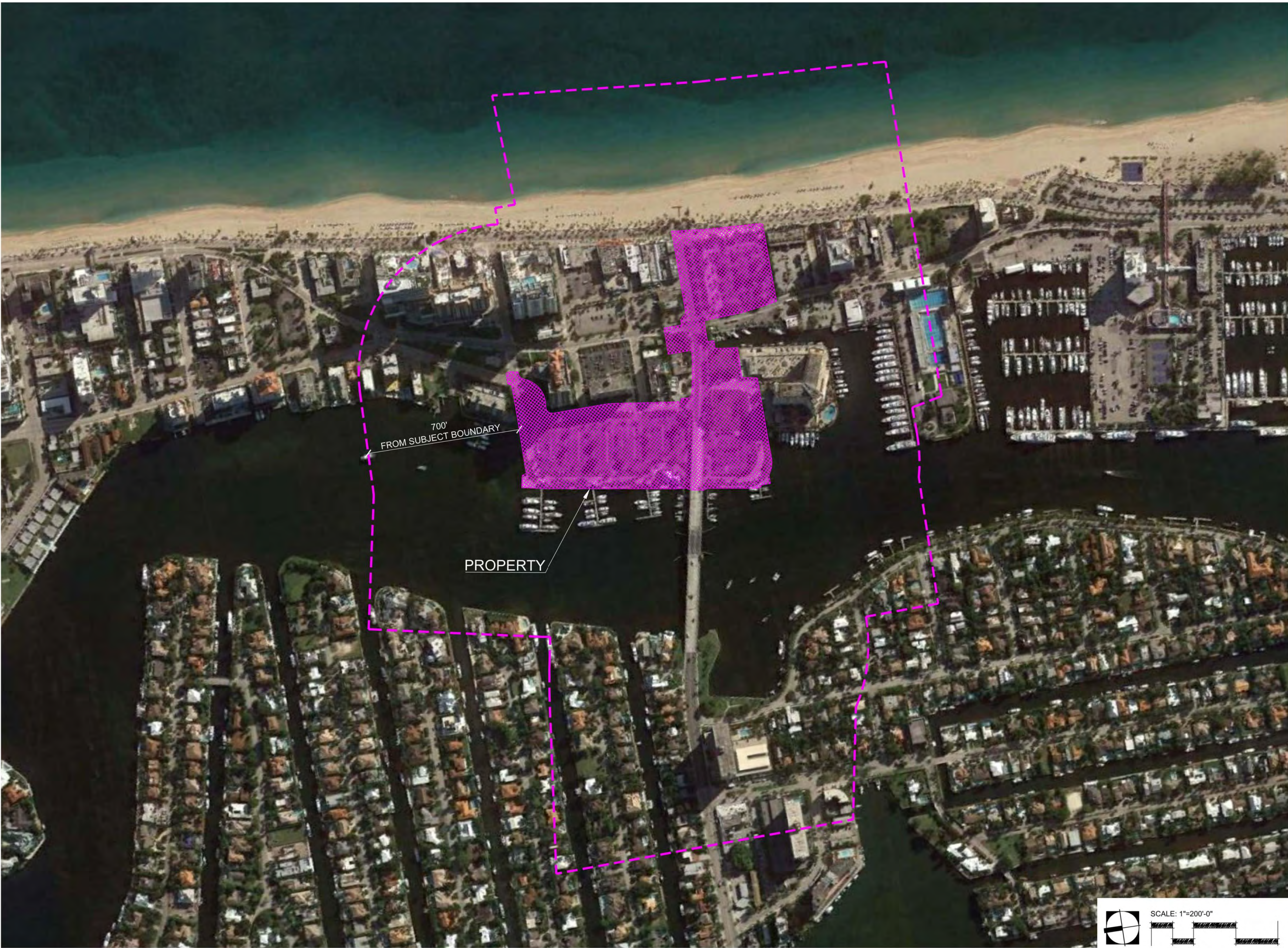
L0-0.01

X OF XX

DRAWING FILE

11900-LO-001-INDX.dwg

Drawing name: G:\Projects\PK114042 Las Olas Blvd Corridor Improvements\Drawings\EDSA\cd\Working_CD SUBMITTAL\11900-L0-003-AERL.dwg L0-0.03 Feb 22, 2016 3:58pm by: clarnard



60% CD SUBMITTAL

PROJECT # 11900
LAS OLAS CORRIDOR IMPROVEMENTS
FORT LAUDERDALE, FL
AERIAL PLAN

SHEET NO.
L0-0.03
DRAWING FILE
11900-L0-003-AERL.dwg

REVISIONS		DESCRIPTION	
NO.	DATE	BY	CHK'D


CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING & ARCHITECTURE
100 North Andrews Avenue, Fort Lauderdale, Florida 33301

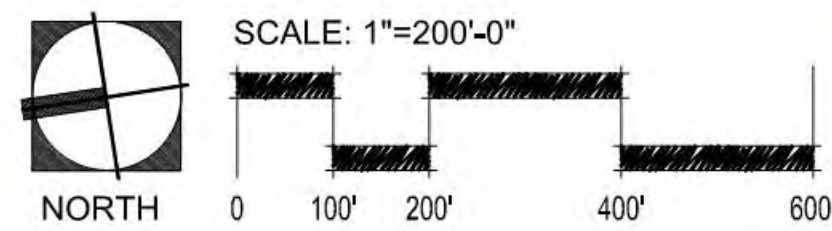
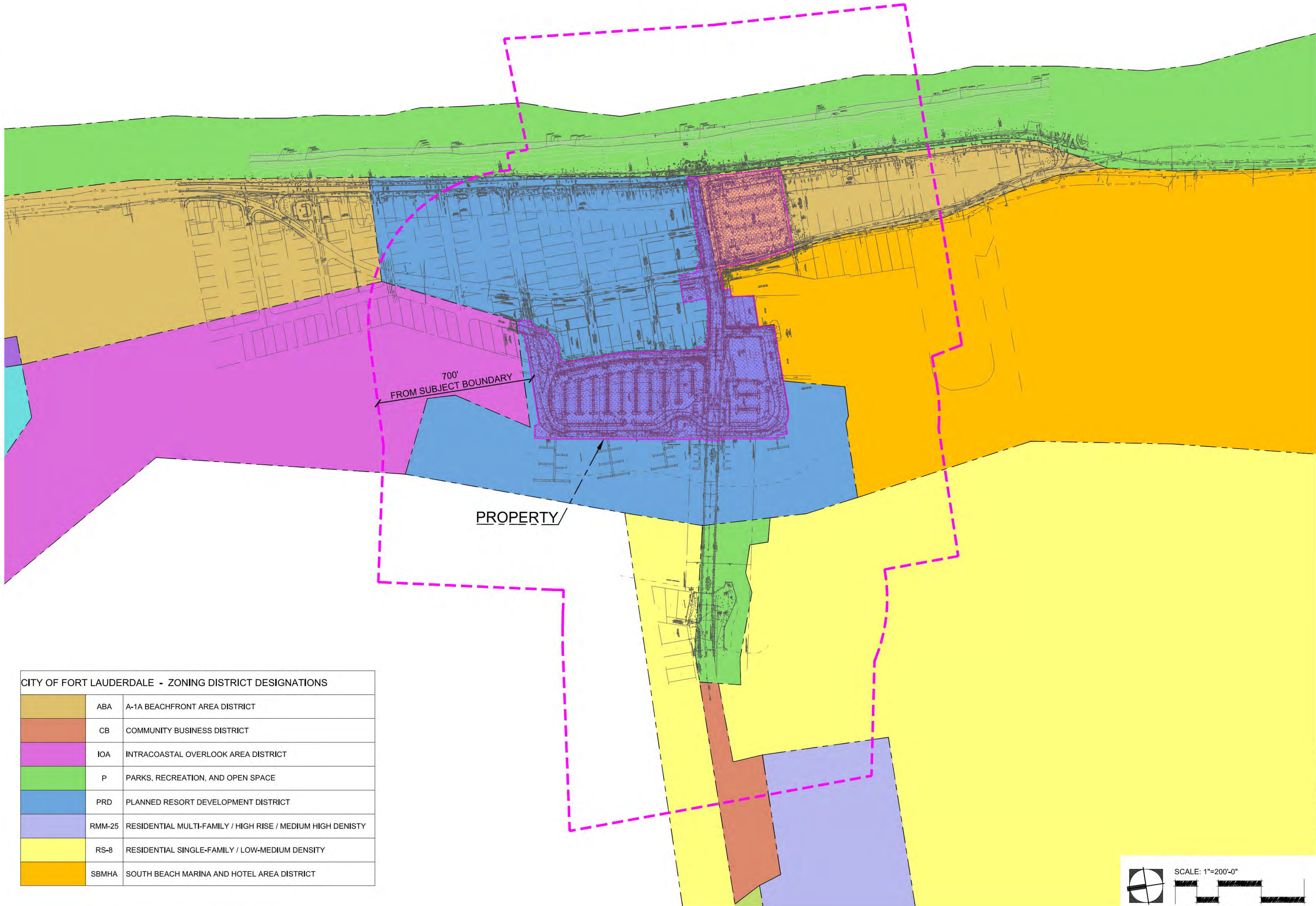
DESIGNED BY: EDSA
CHECKED BY: EDSA
DATE: 03/15/2016
SCALE: AS SHOWN
FIELD BOOK:

SEAL:

EDSA, Inc.
1512 E. Broward Blvd, Suite 110
Fort Lauderdale, FL 33301
954.524.3300

Drawing name: G:\Projects\PK11402 Las Olas Blvd Corridor Improvements\Drawings\EDS\Ade\Working_CD SUBMITTAL\11900-L0-004-ZONE.dwg LC0.04 Feb 22, 2016 4:13pm by starnard

CITY OF FORT LAUDERDALE - ZONING DISTRICT DESIGNATIONS		
	ABA	A-1A BEACHFRONT AREA DISTRICT
	CB	COMMUNITY BUSINESS DISTRICT
	IOA	INTRACOASTAL OVERLOOK AREA DISTRICT
	P	PARKS, RECREATION, AND OPEN SPACE
	PRD	PLANNED RESORT DEVELOPMENT DISTRICT
	RMM-25	RESIDENTIAL MULTI-FAMILY / HIGH RISE / MEDIUM HIGH DENSITY
	RS-8	RESIDENTIAL SINGLE-FAMILY / LOW-MEDIUM DENSITY
	SBMHA	SOUTH BEACH MARINA AND HOTEL AREA DISTRICT



60% CD SUBMITTAL

PROJECT # 11900
LAS OLAS CORRIDOR IMPROVEMENTS
FORT LAUDERDALE, FL

SHEET NO.
L0-0.04

DRAWING FILE
11900-L0-004-ZONE.dwg

ZONING PLAN

X OF XX

REVISIONS		DESCRIPTION	
NO.	DATE	BY	CHK'D

CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING & ARCHITECTURE

100 North Andrews Avenue, Fort Lauderdale, Florida 33301

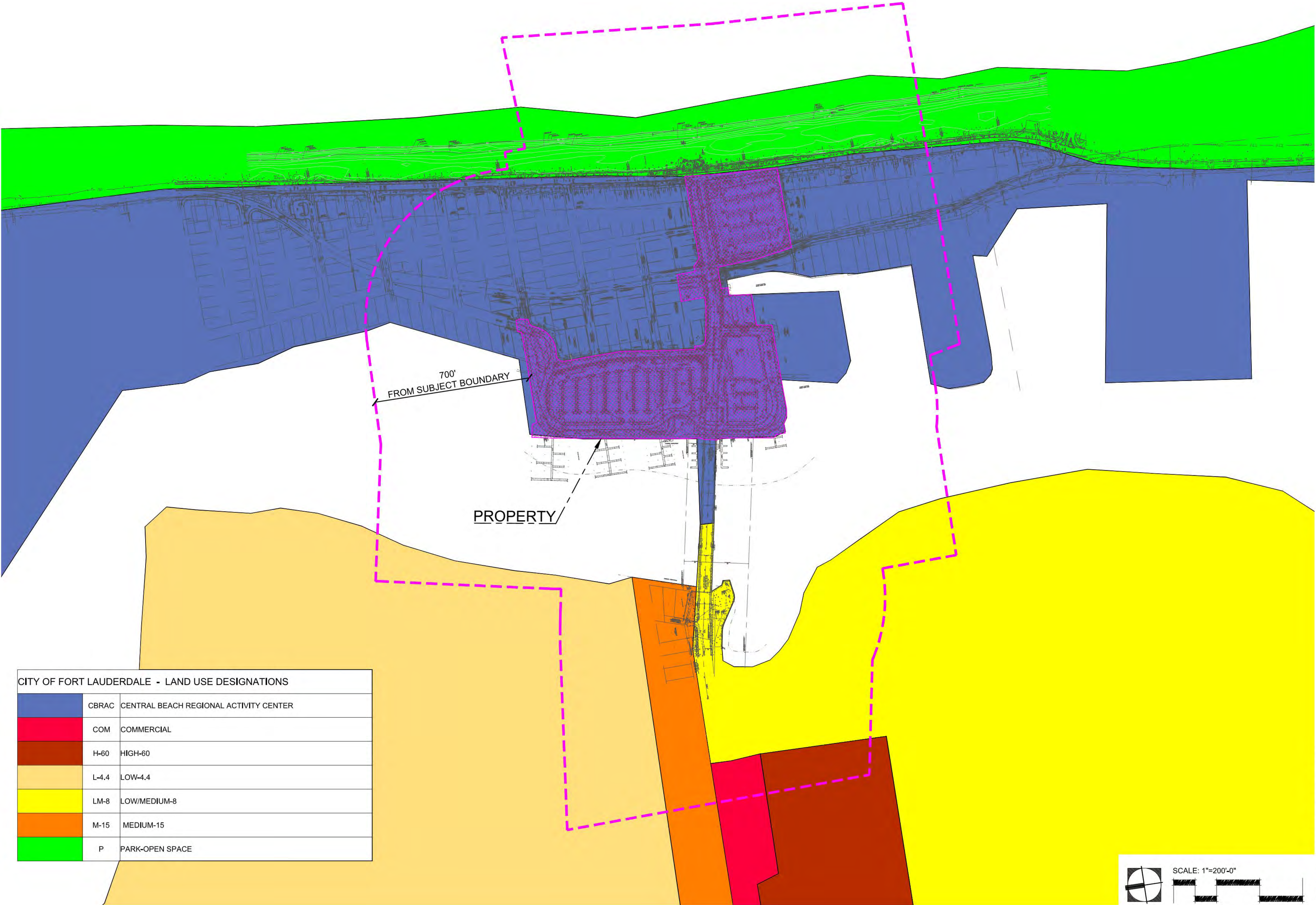
DRAWN BY: EDSA	DATE: 03/15/2016
DESIGNED BY: EDSA	SCALE: AS SHOWN
CHECKED BY: EDSA	FIELD BOOK:

SEAL:

EDSA, Inc.

1512 E. Broward Blvd, Suite 110
Fort Lauderdale, FL 33301
954.324.3330

Drawing name: G:\Projects\PK11402 Las Olas Blvd Corridor Improvements\Drawings\EDS\Adv\Working_CD SUBMITTAL\11900-L0-005-LUSE.dwg UC:05 Feb 22, 2016 4:39pm by: stanard



60% CD SUBMITTAL

PROJECT # 11900
LAS OLAS CORRIDOR IMPROVEMENTS
FORT LAUDERDALE, FL

LAND USE PLAN

SHEET NO.

L0-0.05

DRAWING FILE
11900-L0-005-LUSE.dwg

X OF XX

REVISIONS		DESCRIPTION	
NO.	DATE	BY	CHK'D

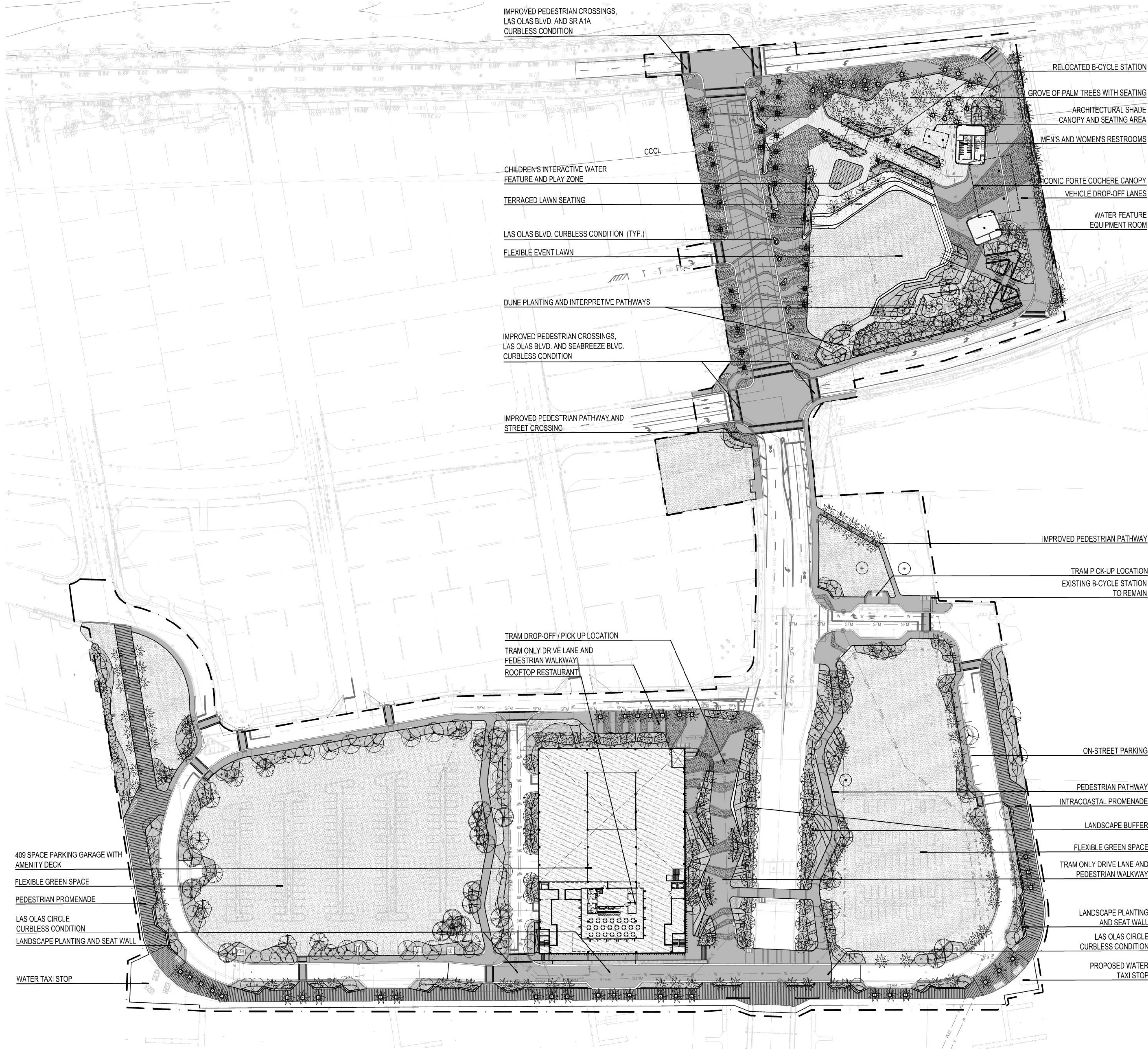
CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING & ARCHITECTURE
100 North Andrews Avenue, Fort Lauderdale, Florida 33301

DRAWN BY:	DATE:
EDSA	03/15/2016
DESIGNED BY:	SCALE:
EDSA	AS SHOWN
CHECKED BY:	
EDSA	
FIELD BOOK:	

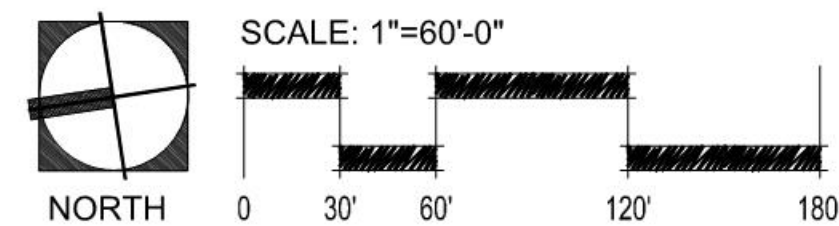
SEAL:

EDSA, Inc.
1512 E. Broward Blvd, Suite 110
Fort Lauderdale, FL 33301
954.524.3330

Drawing name: G:\Projects\PK114042 Las Olas Blvd Corridor Improvements\Drawings\EDSA\cd\Working_CD SUBMITTAL\11900-L0-100 SITE.dwg L0-1.00 Apr 08, 2016 2:38pm by: sbarnard



</



60% CD SUBMITTAL

EDSA, Inc.
1512 E. Broward Blvd, Suite 110
Fort Lauderdale, FL 33301
954.324.3330

EDSA

SEAL:

DESIGNED BY: EDSA
CHECKED BY: EDSA
DATE: 03/15/2016
SCALE: AS SHOWN

FIELD BOOK:

CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING & ARCHITECTURE
100 North Andrews Avenue, Fort Lauderdale, Florida 33301

REVISIONS

NO.	DATE	BY	CHK'D	DESCRIPTION
1	04/08/16	EDSA	EDSA	ADDENDUM - 3

PROJECT # 11900
LAS OLAS CORRIDOR IMPROVEMENTS
FORT LAUDERDALE, FL

SITE PLAN

SHEET NO.
L0-1.00

X OF XX

DRAWING FILE
11900-L0-100-SITE.dwg

CAM 16-0603
Exhibit 2A
Page 7 of 49

Drawing name: G:\Projects\PK11402\Las Olas Blvd Corridor Improvements\Drawings\EDSA\cd\Working_CD SUBMITTAL\11900-L0-200-SITE-MBLY.dwg L0-200 Feb 22, 2016 5:18pm by: sbarnard



CIRCULATION AND MOBILITY LEGEND

NOTE: CIRCULATION AND MOBILITY DIAGRAM TO BE REVIEWED AND APPROVED BY CITY OF FORT LAUDERDALE TRANSPORTATION AND MOBILITY. ONGOING COORDINATION WILL OCCUR THROUGH PERMIT DRAWINGS TO ADDRESS SITE IMPROVEMENTS SUCH AS THE LOCATIONS AND QUANTITIES OF:

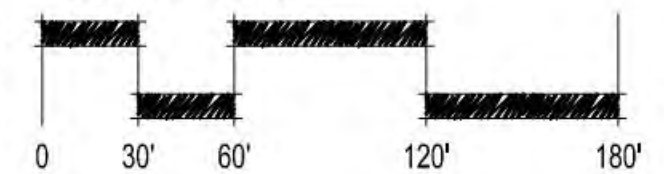
- A. BICYCLE RACKS
- B. B-CYCLE STATION
- C. BICYCLE AMENITIES (BIKE REPAIR, PUMP STATION, BIKE LOCKERS)
- D. TRAM PICK-UP/DROP-OFF
- E. MULTI-MODAL STATION REQUIREMENTS

LEGEND

- MM MULTI-MODAL STATION
- TS TRAM STOP
- VEHICULAR CIRCULATION
- MULTI-MODAL CIRCULATION (PEDESTRIAN, TRAM)
- BIKE CIRCULATION IMPROVEMENTS
- PS PROPOSED B-CYCLE STATIONS
- RS RELOCATED B-CYCLE STATIONS
- ES EXISTING B-CYCLE STATIONS TO REMAIN
- + BICYCLE REPAIR STATION
- WT WATER TAXI STOP



SCALE: 1"=60'-0"



60% CD SUBMITTAL

PROJECT # 11900
LAS OLAS CORRIDOR IMPROVEMENTS
FORT LAUDERDALE, FL

SITE MOBILITY PLAN

SHEET NO.
L0-200
DRAWING FILE
11900-L0-200-SITE-MBLY.dwg

X OF XX

REVISIONS		DESCRIPTION	
NO.	DATE	BY	CHK'D

CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING & ARCHITECTURE
100 North Andrews Avenue, Fort Lauderdale, Florida 33301

DRAWN BY: EDSA
DESIGNED BY: EDSA
CHECKED BY: EDSA
DATE: 03/15/2016
SCALE: AS SHOWN
FIELD BOOK:

SEAL:

EDSA, Inc.
1512 E. Broward Blvd, Suite 110
Fort Lauderdale, FL 33301
954.324.3330



NOTE: SEE SHEET S-3.03 FOR SURVEYORS REPORT, CERTIFICATION AND LEGEND

60% CD SUBMITTAL

PROJECT # 11900
LAS OLAS CORRIDOR IMPROVEMENTS
FORT LAUDERDALE, FL

SHEET NO.
S-3.01
DRAWING FILE
11900-S-3.01-S-3.04-SUR.dwg

X OF XX

SURVEY OF EXISTING CONDITIONS

REVISIONS		DESCRIPTION	
NO.	DATE	BY	CHKD

CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING & ARCHITECTURE

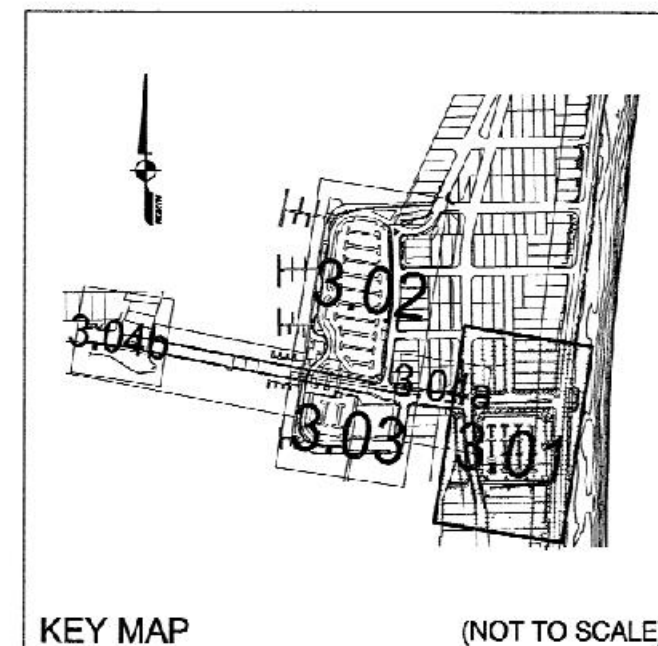
100 North Andrews Avenue, Fort Lauderdale, Florida 33301

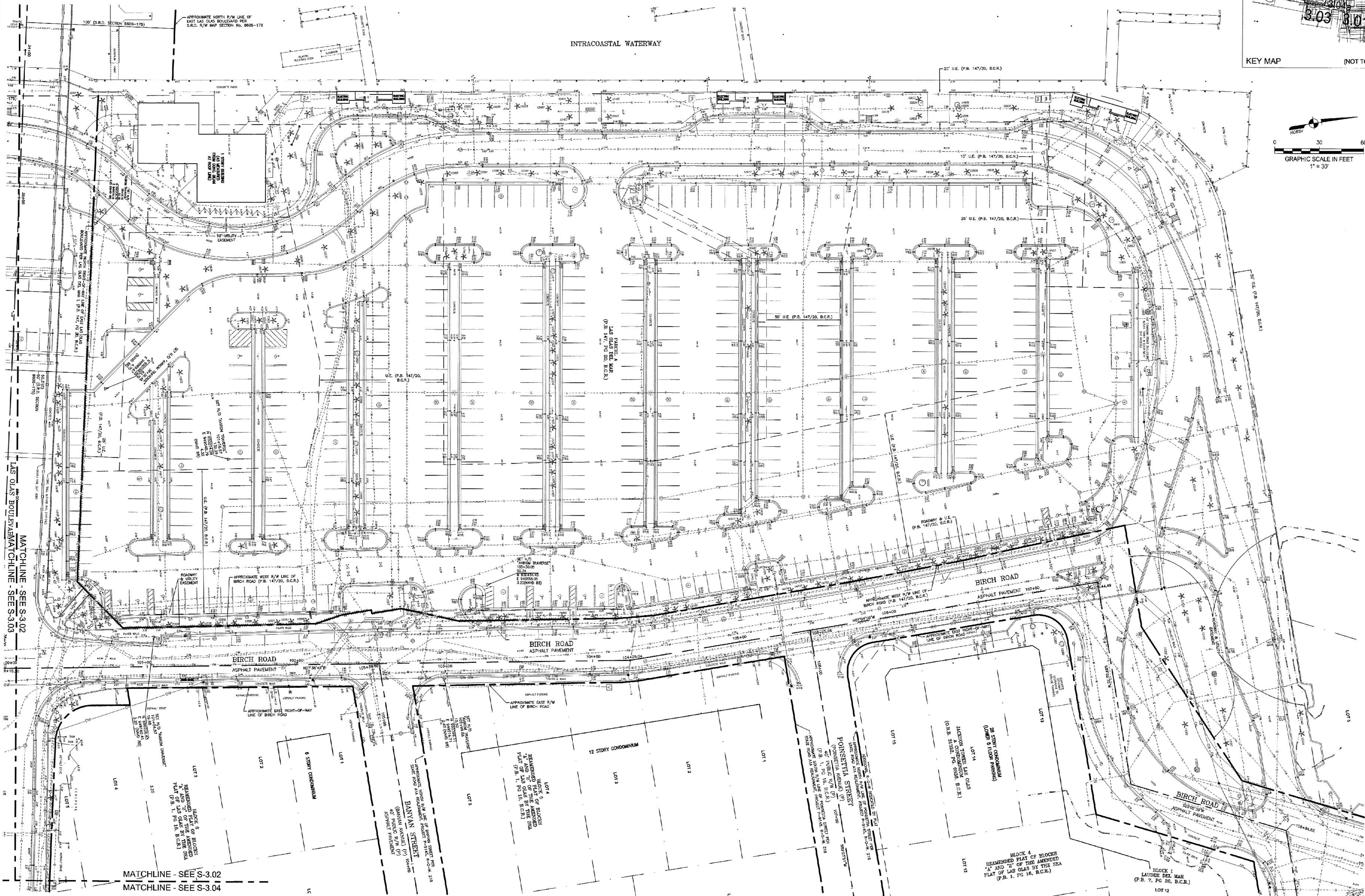
DESIGNED BY: EDNA
CHECKED BY: M.D.A.
DATE: 03/15/2018
SCALE: AS SHOWN

SEAL: FIELD BOOK: 18871, 18821, 173069

EDSA, Inc.
1512 E. Broward Blvd, Suite 110
Fort Lauderdale, FL 33301
954.458.3330

AVIROM & ASSOCIATES, INC.
80 S.W. 2nd Avenue, Suite 102
Fort Lauderdale, FL 33301
TEL 954.382.2594
WWW.AVIROMSURVEY.COM





NOTE: SEE SHEET S-3.03 FOR SURVEYORS REPORT, CERTIFICATION AND LEGEND

60% CD SUBMITTAL

PROJECT # 11900
LAS OLAS CORRIDOR IMPROVEMENTS
FORT LAUDERDALE, FL
SURVEY OF EXISTING CONDITIONS

SHEET NO.
S-3.02
DRAWING FILE
11900-S-3.01-S-3.04-SURV.dwg

NO.	DATE	BY	CHK'D	DESCRIPTION

CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING & ARCHITECTURE
100 North Andrews Avenue, Fort Lauderdale, Florida 33301

DATE: 03/16/2016
DESIGNED BY: EDSA
CHECKED BY: M.D.A.
FIELD BOOK: 168171, 168211, 173079

SEAL:
EDSA, Inc.
1512 E. Broward Blvd., Suite 110
Fort Lauderdale, FL 33301
954.524.3301

AVIROM & ASSOCIATES, INC.
815 W. 34th Avenue, Suite 102
Boca Raton, Florida 33432
TEL: 561.392.2564
WWW.AVIROMSURVEY.COM

NO.	DATE	BY	CHKD	DESCRIPTION

SURVEYOR'S REPORT:

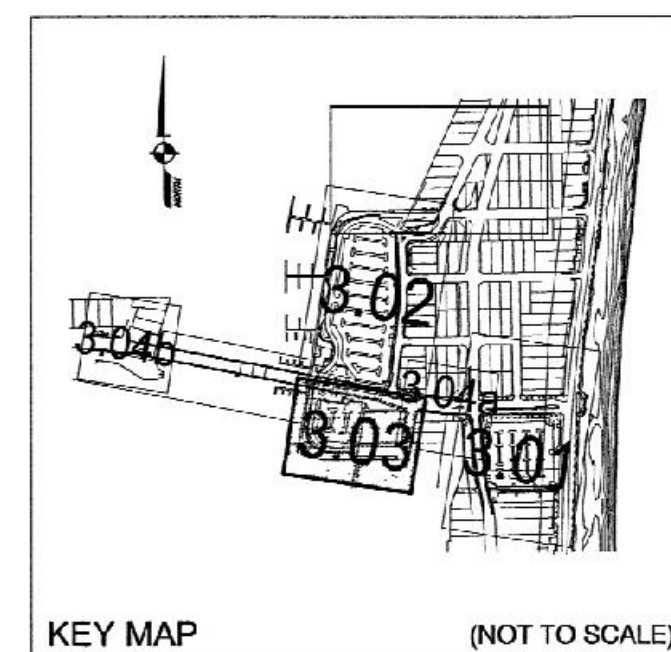
- Reproductions of this Sketch are not valid without the signature and the original raised seal of a Florida licensed surveyor and mapper.
- No Title Opinion or Abstract to the subject property has been provided. It is possible that there are Deeds, Easements, or other instruments (recorded or unrecorded) which may affect the subject property. No search of the Public Records has been made by the Surveyor.
- The underground utilities shown have been located from field survey information and existing drawings. The surveyor makes no warranties that the underground utilities shown comprise all such utilities in the area, either in service or abandoned. The surveyor further does not warrant that the underground utilities shown are in the exact location indicated although he does certify that they are located accurately as possible from information available. The surveyor has not physically located the underground utilities. Flagging of underground utilities in the field was performed by Ground Hound Detection Services, Inc. (Tel. 561 737-9800). Every effort has been made to obtain underground utilities pipe type and size, as shown. It is the responsibility of the end user to verify the invert and pipe size dimensions prior to design of new facilities.
- Bearings and coordinates were established by a Real-time Kinematic (RTK) GPS Control Survey which is certified to a 2 centimeter local accuracy, relative to the nearest control point within the Eastern Broward County Horizontal GPS County Network - NAD 83(90) which is relative to the current adjustment of the North American Datum of 1983 (NAD 83/90), of the Florida State Plane Coordinate System (Transverse Mercator Projection), East Zone.
a) Method: Virtual Reference Station GPS Network.
b) Equipment Used: Trimble RB GNSS (Dual Frequency Receiver).
c) Processing Software: Trimble Geomatics Office, Version 1.63.
d) Ties were made to Control Point "L29", "M29", "K30" and "M30".
- Elevations indicated hereon are in feet and decimals referenced to the North American Vertical Datum of 1988 (NAVD 1988). To convert NAVD 1988 elevations to National Geodetic Vertical Datum of 1929 (NGVD 1929) for this property, the model value of 1.588 must be added algebraically to the NAVD 1988 height. This conversion was calculated utilizing the U.S. Army Corps of Engineers Program Corpcor for Windows, Version 6.0.1.
- Benchmark Description: National Geodetic Survey Benchmarks "872 2939 M" (P.I.D. DM1512) Elevation = 5.24 feet (NAVD 88) and "872 2939 L" (P.I.D. DM1513), Elevation = 8.13 feet (NAVD 88); and the City of Fort Lauderdale Benchmarks "SE 108" (Top of curb @ SE cor of ELO & Poinciano Dr) Elevation = 3.884 feet (NGVD 29), 2.296 feet (NAVD 88) and "SE 109" (Top of curb S side ELO & 24' W of C/L Ext Plaza Las Olas) Elevation = 5.558 feet (NGVD 29), 3.97 feet (NAVD 88).
- The Coastal Construction Control Line (CCCL) shown on the survey is referenced to Miscellaneous Map Book 6, Page 10 of the Public Records of Broward County, Florida which was based on the State Plane Coordinate System of Florida East Zone North American Datum of 1927. Its position as shown is as transformed to the State Plane Coordinate System Florida East Zone North American Datum of 1983, 1990 adjustment as supplied by the Department of Environmental Protection (FDEP). As instructed by FDEP, some R-monuments were reset at a different location but with the same designation as depicted on the original CCCL plat. The surveyor relied on the position calculated by FDEP.
- Data shown hereon was compiled from instrument(s) of record and does not constitute a Boundary Survey.
- Symbols shown hereon and in the legend may have been enlarged for clarity. These symbols have been plotted at the center of the field location and may not represent the actual shape or size of the feature.
- The species of trees as shown hereon were identified to the best of knowledge and ability of the surveyor, without the benefit of an arborist or biologist. It is the responsibility of the end user to verify the identity of the species. Trees on the survey are depicted by a point number and referenced to the accompanying Tree List.
- This map is intended to be displayed at a scale of 1:240 (1"=20').
- Units of measurement are in U.S. Survey Feet and decimal parts thereof. Well identified features in this survey were field measured to a horizontal positional accuracy of 0.10'. The elevations on impervious surfaces were field measured to 0.03' and on ground surfaces to 0.1'.
- Flood Zone lines and designation depicted on the survey are per Federal Emergency Management Agency (FEMA), Community Panel No. 12011C0576H (NAVD 1988 datum), effective date 08/18/2014. These lines as depicted are approximate since they were captured digitally from the Broward County Website (www.broward.org), scaled to existing features within the project limits and digitized. It is the responsibility of the end user to verify.
- The hereon survey does not comply with Chapter 177, Part II Florida Statutes as a Mean High Water Survey. The Atlantic Ocean Mean High Water Elevation at the subject site is 0.38 feet (NAVD 1988) as located on 05/29/2014. Seasonal High Water Elevation is 3.425 feet (NAVD 1988). Both the Mean High Water and Seasonal High Water Elevation are based on information provided by the Florida Department of Environmental Protection on 12/02/2013. Seasonal High Water Elevation is equal to the elevation of the Mean High Water plus 150% of the Mean Range.
- Abbreviation Legend: A/C = Air Conditioner; A.E. = Anchor Easement; APPROX. = Approximate; B.C.R. = Broward County Records; BLDG. = Building; B.M. = Benchmark; C = Calculated; Δ = Centerline; CCCL = Coastal Construction Control Line; C.L.F. = Chain Link Fence; C.M. = Concrete Monument; C.M.P. = Corrugated Metal Pipe; CONC. = Concrete; C.P. = Concrete Pipe; D = Per Dead; D.B. = Dead Back; D.E. = Drainage Easement; D.I.P. = Ductile Iron Pipe; = Existing Elevation; E.L. = Elevation; ELEC. = Electric; ESMT. = Easement; F.B. = Field Book; F.D. = Found; F.F. = Finished Floor; F.M. = Force Main; F.P.L. = Florida Power & Light Company; I.D. = Identification; INV. = Invert; I.P. = Iron Pipe; I.R. = Iron Rod; L = Arc Length; L.B. = Licensed Business; L.M.E. = Lake Management Easement; M.H.W. = Mean High Water; M.S. = Measured; NAD = North American Datum; NAVD = North American Vertical Datum; N/D = Nail & Disk; NGVD = National Geodetic Vertical Datum; N.R. = Non Radial; N/TT = Nail & Tin Tab; O.R.B. = Official Records Book; O/S = Offset; OW = Overhead Wires; P = Per Record Plat; P.B. = Plat Book; P.C. = Point of Curvature; P.G. = Page; P.K. = Parker-Kalon; P.L.S. = Professional Land Surveyor; P.R.M. = Permanent Reference Monument; P.S.M. = Professional Surveyor & Mapper; P.T. = Point of Tangency; R = Radius; R.C.P. = Reinforced Concrete Pipe; R.L.S. = Registered Land Surveyor; R/W = Right-of-Way; S.R. = State Road; STA. = Station; TR = Trash Can; TYP. = Typical; U.E. = Utility Easement; W/ = With; W/CAP = With Wires Cap.
15. THE FIELD WORK WAS COMPLETED ON 06/25/2014.

CERTIFICATION:

I HEREBY CERTIFY that the attached Topographic Survey of the hereon described property is true and correct to the best of my knowledge and belief as surveyed in the field under my direction. I FURTHER CERTIFY that this Topographic Survey meets the Minimum Technical Standards set forth in Chapter 5J-17.050 through 5J-17.052, Florida Administrative Code, pursuant to Section 472.027, Florida Statutes.

Date: _____

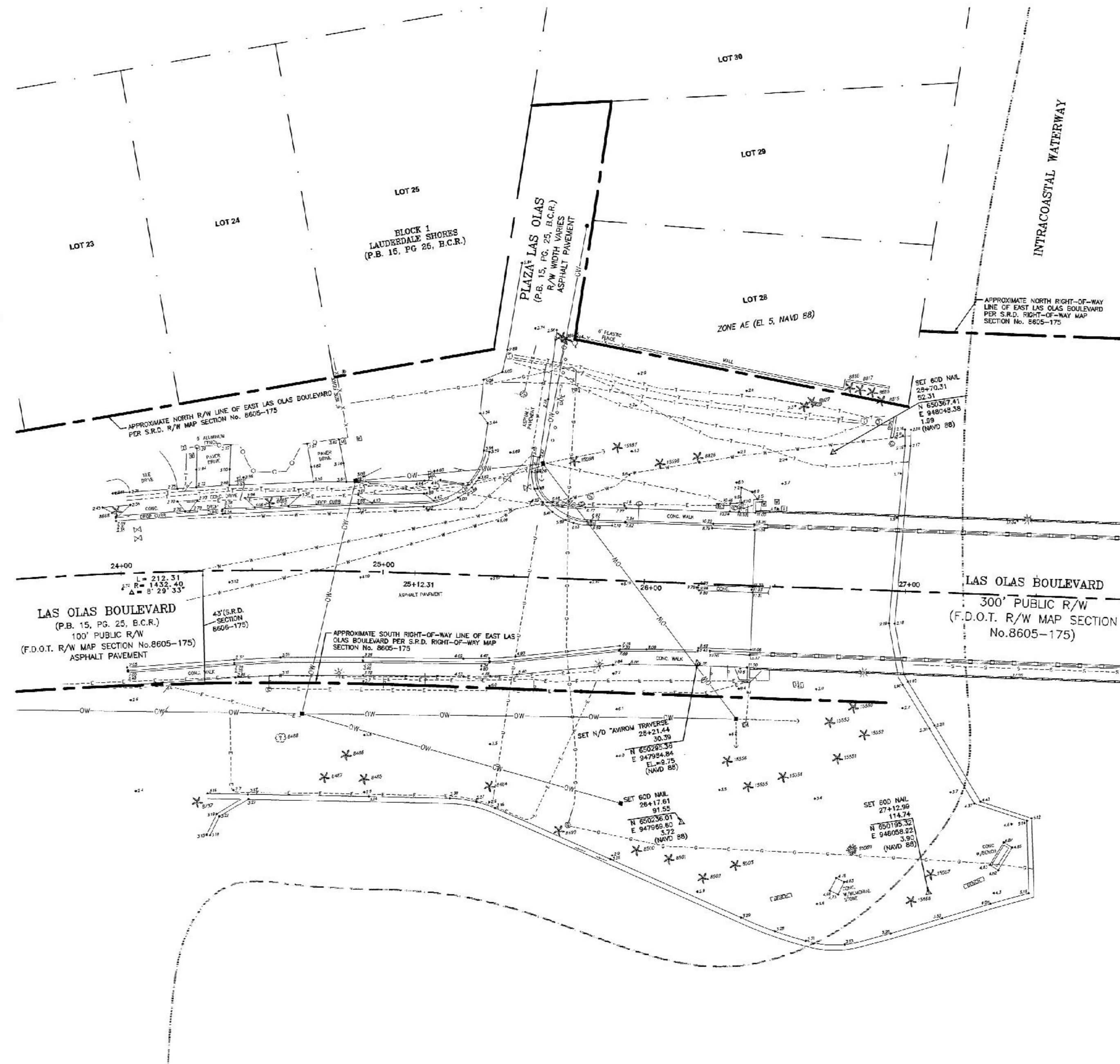
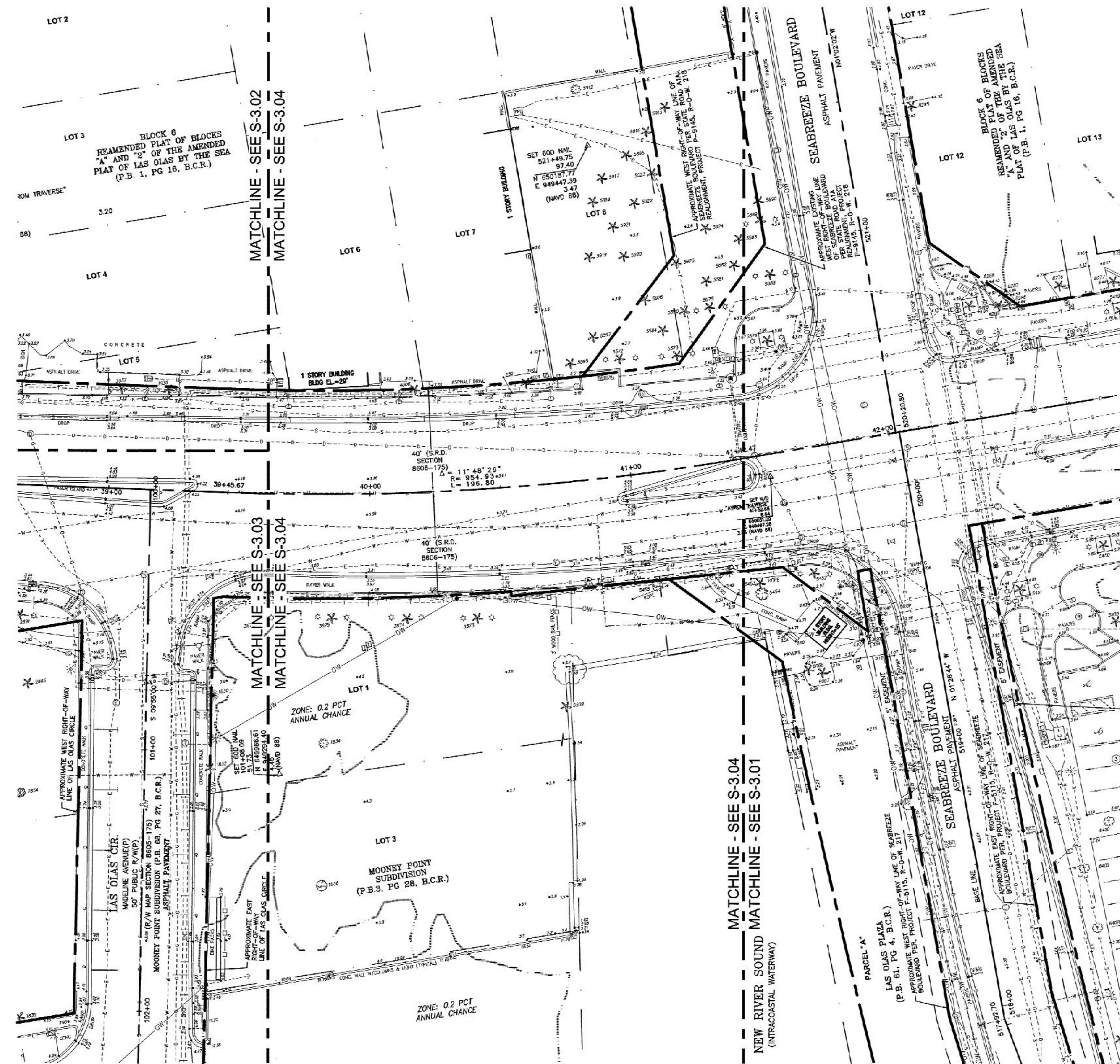
MICHAEL D. AVIROM, P.L.S.
Florida Registration No. 3268
AVIROM & ASSOCIATES, INC.
L.B. No. 3300
EMAIL: mike@aviromsurvey.com



LEGEND	
	ANTENNA
	BACKFLOW PREVENTOR VALVE
	BENCHMARK
	BOLT/LAND (UNLESS NOTED)
	CABLE TELEVISION RISER
	CATCH BASIN
	CLEAN OUT
	CONCRETE LIGHT POLE
	CONCRETE UTILITY POLE
	CROSSWALK SIGNAL POLE
	CURB IN-SET
	DOUBLE-DETECTOR CHECK VALVE
	DRAINAGE MANHOLE
	ELECTRIC MANHOLE
	ELECTRIC METER
	ELECTRIC OUTLET
	ELECTRIC SERVICE BOX
	EXISTING ELEVATION
	FIRE HYDRANT
	FLAG POLE
	GAS METER
	GAS VALVE
	GREASE TRAP
	GUY ANCHOR
	HAND HOLE
	HANDICAP PARKING
	IRRIGATION CONTROL BOX
	IRRIGATION CONTROL VALVE
	MAIL BOX
	MONITORING WELL
	NON-VEHICULAR ACCESS LINE
	NUMBER OF REGULAR PARKING
	OVERHEAD WIRES
	PARKING METER
	PIPE
	CONCRETE PIPE
	SANITARY MANHOLE
	SEWER VALVE
	SIAMESE CONNECTION
	SIGN (UNLESS NOTED)
	TELEPHONE MANHOLE
	TELEPHONE RISER
	TELEPHONE SERVICE BOX
	TRAFFIC LIGHT SUPPORT POLE
	TRAFFIC SIGNAL CONTROL RISER
	TRAFFIC SIGNAL SERVICE BOX
	UNDERGROUND GAS MARKER
	UNKNOWN MANHOLE
	UNKNOWN UTILITY SERVICE BOX
	VAULT
	WATER METER
	WATER VALVE
	WOOD LIGHT POLE
	WOOD UTILITY POLE
	WOOD UTILITY POLE WITH LIGHT
	YARD DRAIN
	YARD LIGHT

TREE LEGEND	
	Banyan
	Black Olive
	Button Wood
	Ficus
	Gumbo Limbo
	Mahogany
	Norfolk Island Pine
	Oak
	Palm
	Poinciana
	Sea Grape
	Unknown Species
	Denotes 12\"/>

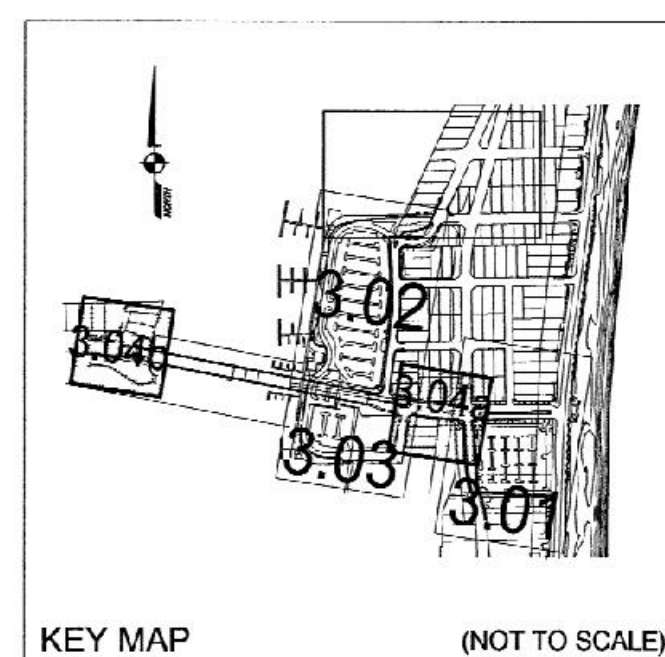
UNDERGROUND UTILITY LEGEND	
	UNDERGROUND DRAINAGE LINE
	UNDERGROUND ELECTRIC CABLE
	UNDERGROUND FIRE LINE
	UNDERGROUND FIBER OPTIC CABLE
	UNDERGROUND FORCE MAIN
	UNDERGROUND GAS LINE
	UNDERGROUND IRRIGATION LINE
	UNDERGROUND SEWER LINE
	UNDERGROUND TELEPHONE CABLE LINE
	UNDERGROUND CABLE TELEVISION LINE
	UNDERGROUND UNKNOWN UTILITY LINE
	UNDERGROUND WATER LINE
UNDERGROUND UTILITIES SHOWN HEREON WERE FLAGGED BY OTHERS (SEE SURVEYOR'S REPORT NO. _____)	



3.04a

3.04b

NOTE: SEE SHEET S-3.03 FOR SURVEYORS REPORT, CERTIFICATION AND LEGEND



60% CD SUBMITTAL

PROJECT # 11900
LAS OLAS CORRIDOR IMPROVEMENTS
FORT LAUDERDALE, FL
SURVEY OF EXISTING CONDITIONS

SHEET NO.
S-3.04
DRAWING FILE
11900-S-301-S-3.04-SURV.dwg

NO.	DATE	REVISIONS	
		BY	DESCRIPTION

CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING & ARCHITECTURE
100 North Andrews Avenue, Fort Lauderdale, Florida 33301

DATE: 03/15/2018
DRAWN BY: M.M.K.
DESIGNED BY: EDSA
CHECKED BY: M.D.A.
FIELD ENGINEER: 168071, 168271, 1730/09

SCALE: AS SHOWN

AVIROM & ASSOCIATES, INC.
80 S.W. 2nd AVENUE, SUITE 102
FORT LAUDERDALE, FL 33301
TEL: 954.524.3330
WWW.AVIROMSURVEY.COM

EDSA, Inc.
1312 E. Broward Blvd. Suite 110
Fort Lauderdale, FL 33301
954.524.3330

GENERAL CONSTRUCTION NOTES

- THE CONTRACTOR AND SUBCONTRACTORS SHALL OBTAIN A COPY OF THE FLORIDA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" (LATEST EDITION), AND BECOME FAMILIAR WITH THE CONTENTS PRIOR TO COMMENCING WORK.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING ALL MATERIAL AND LABOR TO CONSTRUCT THE FACILITY AS SHOWN AND DESCRIBED IN THE CONSTRUCTION DOCUMENTS IN ACCORDANCE WITH THE APPROPRIATE APPROVING AUTHORITIES. SPECIFICATIONS AND REQUIREMENTS, CONTRACTOR SHALL CLEAR AND GRUB ALL AREAS UNLESS OTHERWISE INDICATED, REMOVING TREES, STUMPS, ROOTS, MUCK, EXISTING PAVEMENT AND ALL OTHER DELETERIOUS MATERIAL.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT THE VARIOUS UTILITY COMPANIES WHICH MAY HAVE BURIED OR AERIAL UTILITIES WITHIN OR NEAR THE CONSTRUCTION AREA BEFORE COMMENCING WORK. THE CONTRACTOR SHALL PROVIDE 2 WORKING DAYS MINIMUM NOTICE TO ALL UTILITY COMPANIES PRIOR TO BEGINNING CONSTRUCTION. THE CONTRACTOR MUST CALL THE UTILITY COMPANIES BEFORE COMMENCING WORK.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL REQUIRED CONSTRUCTION PERMITS AND BONDS IF REQUIRED PRIOR TO CONSTRUCTION.
- THE CONTRACTOR SHALL HAVE AVAILABLE AT THE JOB SITE AT ALL TIMES ONE COPY OF THE CONSTRUCTION DOCUMENTS INCLUDING PLANS, SPECIFICATIONS, AND SPECIAL CONDITIONS AND COPIES OF ANY REQUIRED CONSTRUCTION PERMITS.
- ANY DISCREPANCIES ON THE DRAWINGS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE OWNER AND ENGINEER BEFORE COMMENCING WORK, NO FIELD CHANGES OR DEVIATIONS FROM DESIGN ARE TO BE MADE WITHOUT PRIOR APPROVAL OF THE OWNER AND THE ENGINEER.
- ALL COPIES OF COMPACTION, CONCRETE AND OTHER REQUIRED TEST RESULTS ARE TO BE SENT TO THE OWNER AND ENGINEER DIRECTLY FROM THE TESTING AGENCY.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR SUBMITTING TO THE ENGINEER A CERTIFIED RECORD SURVEY SIGNED AND SEALED BY A PROFESSIONAL LAND SURVEYOR REGISTERED IN THE STATE OF FLORIDA DEPICTING THE ACTUAL FIELD LOCATION OF ALL CONSTRUCTED IMPROVEMENTS THAT ARE REQUIRED BY THE JURISDICTIONAL AGENCIES FOR THE CERTIFICATION PROCESS. ALL SURVEY COSTS WILL BE THE CONTRACTOR'S RESPONSIBILITY.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR DOCUMENTING AND MAINTAINING AS-BUILT INFORMATION WHICH SHALL BE RECORDED AS CONSTRUCTION PROGRESSES OR AT THE COMPLETION OF APPROPRIATE CONSTRUCTION INTERVALS AND SHALL BE RESPONSIBLE FOR PROVIDING AS-BUILT DRAWINGS TO THE OWNER FOR THE PURPOSE OF CERTIFICATION TO JURISDICTIONAL AGENCIES AS REQUIRED. ALL AS-BUILT DATA SHALL BE COLLECTED BY A STATE OF FLORIDA PROFESSIONAL LAND SURVEYOR WHOSE SERVICES ARE ENGAGED BY THE CONTRACTOR.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THAT THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS DO NOT CONFLICT WITH ANY KNOWN EXISTING OR OTHER PROPOSED IMPROVEMENTS. IF ANY CONFLICTS ARE DISCOVERED, THE CONTRACTOR SHALL NOTIFY THE OWNER PRIOR TO INSTALLATION OF ANY PORTION OF THE SITE WORK THAT WOULD BE AFFECTED. FAILURE TO NOTIFY OWNER OF AN IDENTIFIABLE CONFLICT PRIOR TO PROCEEDING WITH INSTALLATION RELIEVES OWNER OF ANY OBLIGATION TO PAY FOR A RELATED CHANGE ORDER.
- CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR VERIFYING ALL QUANTITIES, TAKE-OFF MEASUREMENTS, MATERIALS, ETC. DURING THE BID PROCESS, WHEN DISCREPANCIES OCCUR, THE PHYSICAL PLAN TAKES PRECEDENCE, THE ENGINEER, LANDSCAPE ARCHITECT, COUNTY, CITY OR PROJECT MANAGERS ARE NOT TO BE HELD RESPONSIBLE FOR DISCREPANCIES FROM THE SPECIFICATIONS OR PLANS.
- THE CONTRACTOR SHALL LIMIT CONSTRUCTION OPERATIONS TO WITHIN THE LIMITS OF CONSTRUCTION. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR ANY DAMAGES OUTSIDE THE LIMITS OF CONSTRUCTION.
- CONTRACTOR IS ADVISED THAT THE U.S. ENVIRONMENTAL PROTECTION AGENCY REQUIRES THAT ALL OPERATORS FILE A NOTICE OF INTENT (NOI) FOR STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY UNDER THE NPDES GENERAL PERMIT PRIOR TO BEGINNING WORK. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO OBTAIN THE SAME. A COPY SHALL BE SENT TO THE ENGINEER OF RECORD, ARCHITECT OF RECORD AND THE OWNER.
- FLORIDA LAW (F.S. 553.851) PROTECTION OF UNDERGROUND PIPELINES MANDATES THAT "NO EXCAVATOR SHALL COMMENCE OR PERFORM ANY EXCAVATION WITHOUT FIRST OBTAINING INFORMATION CONCERNING THE POSSIBLE LOCATION OF GAS PIPELINES IN THE AREA OF PROPOSED EXCAVATION." THE EXCAVATOR MUST NOTIFY THE GAS UTILITY A MINIMUM OF 2 WORKING DAYS AND A MAXIMUM OF 5 WORKING DAYS PRIOR TO EXCAVATION.
- THE CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE WITH THE LOCAL ELECTRICAL PROVIDER ON ANY WORK IN THE VICINITY OF OVERHEAD OR UNDERGROUND POWER LINES.
- CONTRACTOR SHALL BE RESPONSIBLE FOR REVIEWING ALL PLANS RELATED TO SITE WORK INCLUDING (BUT NOT LIMITED TO) LANDSCAPE, IRRIGATION, SITE LIGHTING, BUILDING FOUNDATION, PLUMBING, FIRE SPRINKLER, AND OTHER APPLICABLE PLANS FOR CONFLICTING INFORMATION AND ALERT OWNER'S REPRESENTATIVE OF ANY CONFLICT FOR RESOLUTION.
- CONTRACTOR SHALL VERIFY LOCATION OF ALL IRRIGATION, STREET LIGHTING, AND ELECTRICAL CONDUIT THAT WILL BE IN CONFLICT WITH ANY PROPOSED CONSTRUCTION AND SHALL RESOLVE CONFLICT ACCORDINGLY. COST OF CONFLICT RESOLUTION SHALL BE INCLUDED IN THE BID.
- ANY DEBRIS RESULTING FROM STRIPPING AND DEMOLITION OPERATIONS SHALL BE REMOVED FROM THE SITE AT FREQUENT INTERVALS TO PREVENT THIS MATERIAL FROM ACCUMULATING ON SITE.
- UPON REMOVAL OF TREES, SHRUBS OR ANY STUMP GRINDING, NO ROOT GREATER THAN THREE INCHES IN DIAMETER SHALL REMAIN WITHIN FIVE FEET OF AN UNDERGROUND STRUCTURE OR UTILITY LINE OR UNDER PAVED FOOTINGS OR PAVED AREAS.
- THE CONTRACTOR SHALL RESTORE ALL DISTURBED VEGETATION IN KIND, UNLESS SHOWN OTHERWISE.

PAVING, GRADING AND DRAINAGE NOTES

- ALL PAVING, CONSTRUCTION, MATERIALS, AND WORKMANSHIP WITHIN PUBLIC RIGHT-OF-WAY SHALL BE IN ACCORDANCE WITH LOCAL COUNTY OR STATE SPECIFICATIONS AND STANDARDS (LATEST EDITION) OR FDOT SPECIFICATIONS AND STANDARDS (LATEST EDITION) IF NOT COVERED BY LOCAL OR COUNTY REGULATIONS, WHICHEVER IS MOST RESTRICTIVE.
- ALL UNPAVED AREAS DISTURBED BY CONSTRUCTION SHALL BE REGRADED AND SODDED, UNLESS OTHERWISE NOTED.
- TRAFFIC CONTROL ON ALL FDOT, LOCAL AND COUNTY RIGHTS-OF-WAY SHALL MEET THE REQUIREMENTS OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (U.S. DOT/FHA) AND THE REQUIREMENTS OF THE STATE AND ANY LOCAL AGENCY HAVING JURISDICTION. IN THE EVENT THAT THE CONTRACT DOCUMENTS AND THE JURISDICTIONAL AGENCY REQUIREMENTS ARE NOT IN AGREEMENT, THE MOST STRINGENT SHALL GOVERN.
- THE CONTRACTOR SHALL GRADE THE SITE TO THE ELEVATIONS INDICATED AND SHALL REGRADE WASHOUTS WHERE THEY OCCUR AFTER EVERY RAINFALL UNTIL A GRASS STAND IS WELL ESTABLISHED OR ADEQUATE STABILIZATION OCCURS.
- ALL OPEN AREAS WITHIN THE PROJECT SITE SHALL BE SODDED WITH BAHIA SOD UNLESS INDICATED OTHERWISE ON THE ENGINEERING OR LANDSCAPE PLANS.
- ALL AREAS INDICATED AS PAVEMENT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE TYPICAL PAVEMENT SECTIONS AS INDICATED ON THE DRAWINGS.
- WHERE EXISTING PAVEMENT IS INDICATED TO BE REMOVED AND REPLACED, THE CONTRACTOR SHALL SAW CUT A MINIMUM 2" DEEP FOR A SMOOTH AND STRAIGHT JOINT AND REPLACE THE PAVEMENT WITH THE SAME TYPE AND DEPTH OF MATERIAL AS EXISTING OR AS INDICATED.
- WHERE NEW PAVEMENT MEETS THE EXISTING PAVEMENT, THE CONTRACTOR SHALL SAW CUT THE EXISTING PAVEMENT A MINIMUM 2" DEEP FOR A SMOOTH AND STRAIGHT JOINT AND MATCH THE EXISTING PAVEMENT ELEVATION WITH THE PROPOSED PAVEMENT UNLESS OTHERWISE INDICATED.
- THE CONTRACTOR SHALL INSTALL FILTER FABRIC OVER ALL DRAINAGE STRUCTURES FOR THE DURATION OF CONSTRUCTION AND UNTIL ACCEPTANCE OF THE PROJECT BY THE OWNER. ALL DRAINAGE STRUCTURES AND PIPES WITHIN THE LIMITS OF CONSTRUCTION SHALL BE CLEANED OF DEBRIS AS REQUIRED DURING AND AT THE END OF CONSTRUCTION TO PROVIDE POSITIVE DRAINAGE FLOWS.
- IF DEWATERING IS REQUIRED, THE CONTRACTOR SHALL OBTAIN ANY APPLICABLE REQUIRED PERMITS. THE CONTRACTOR IS TO COORDINATE WITH THE OWNER AND THE ENGINEER PRIOR TO ANY EXCAVATION.
- CONTRACTOR TO STRIP TOPSOIL AND ORGANIC MATTER FROM ALL AREAS OF THE SITE AS REQUIRED. IN SOME CASES TOPSOIL MAY BE STOCKPILED ON SITE FOR PLACEMENT WITHIN LANDSCAPED AREAS BUT ONLY AS DIRECTED BY THE OWNER.
- FIELD DENSITY TESTS SHALL BE TAKEN AT INTERVALS IN ACCORDANCE WITH THE LOCAL JURISDICTIONAL AGENCY OR TO FDOT STANDARDS. IN THE EVENT THAT THE CONTRACT DOCUMENTS AND THE JURISDICTIONAL AGENCY REQUIREMENTS ARE NOT IN AGREEMENT, THE MOST STRINGENT SHALL GOVERN.
- ALL SLOPES AND AREAS DISTURBED BY CONSTRUCTION SHALL BE GRADED AS PER PLANS. THE AREAS SHALL THEN BE SODDED AS SPECIFIED IN THE PLANS. FERTILIZED, MULCHED, WATERED, AND MAINTAINED UNTIL A GOOD STAND OF GRASS GROWTH IS ESTABLISHED IN ALL AREAS. ANY AREAS DISTURBED FOR ANY REASON PRIOR TO FINAL ACCEPTANCE OF THE JOB SHALL BE CORRECTED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
- ALL CUT OR FILL SLOPES SHALL BE 4 (HORIZONTAL) : 1 (VERTICAL) OR FLATTER UNLESS OTHERWISE SHOWN.
- THE CONTRACTOR SHALL ENSURE THAT ISLAND PLANTING AREAS AND OTHER PLANTING AREAS ARE NOT COMPACTED AND DO NOT CONTAIN ROAD BASE MATERIALS. THE CONTRACTOR SHALL ALSO EXCAVATE AND REMOVE ALL UNDESIRABLE MATERIAL FROM ALL AREAS ON THE SITE TO BE PLANTED AND PROPERLY DISPOSED OF IN A LEGAL MANNER.

MAINTENANCE

- ALL MEASURES STATED ON THE EROSION AND SEDIMENT CONTROL PLAN, AND IN THE STORM WATER POLLUTION PREVENTION PLAN, SHALL BE MAINTAINED IN FULLY FUNCTIONAL CONDITION UNTIL NO LONGER REQUIRED FOR A COMPLETED PHASE OF WORK OR FINAL STABILIZATION OF THE SITE. ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE CHECKED BY A QUALIFIED PERSON AT LEAST ONCE EVERY SEVEN CALENDAR DAYS AND WITHIN 24 HOURS OF THE END OF A 0.5" RAINFALL EVENT, AND CLEANED AND REPAIRED IN ACCORDANCE WITH THE FOLLOWING:
 - INLET PROTECTION DEVICES AND BARRIERS SHALL BE REPAIRED OR REPLACED IF THEY SHOW SIGNS OF UNDERMINING, OR DETERIORATION. INLET PROTECTION DEVICES SHALL BE CLEANED OUT AT REGULAR INTERVALS OR AS THEY BECOME FULL OF DEBRIS.
 - ALL SEEDED AREAS SHALL BE CHECKED REGULARLY TO SEE THAT A GOOD STAND IS MAINTAINED. AREAS SHOULD BE FERTILIZED, WATERED AND RESEEDED AS NEEDED.
 - SILT FENCES SHALL BE REPAIRED TO THEIR ORIGINAL CONDITIONS IF DAMAGED. SEDIMENT SHALL BE REMOVED FROM THE SILT FENCES WHEN IT REACHES ONE-HALF THE HEIGHT OF THE SILT FENCE.
 - THE CONSTRUCTION ENTRANCES SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOW OF MUD ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING OF THE CONSTRUCTION ENTRANCES AS CONDITIONS DEMAND.
 - ALL MAINTENANCE OPERATIONS SHALL BE DONE IN A TIMELY MANNER BUT IN NO CASE LATER THAN 2 CALENDAR DAYS FOLLOWING THE INSPECTION.

EROSION CONTROL NOTES

- THE STORM WATER POLLUTION PREVENTION PLAN ("SWPPP") IS COMPRISED OF THIS EROSION AND SEDIMENTATION CONTROL PLAN, THE STANDARD DETAILS, AND ALL SUBSEQUENT REPORTS AND RELATED DOCUMENTS PROVIDED BY THE CONTRACTOR.
- ALL CONTRACTORS AND SUBCONTRACTORS INVOLVED WITH STORM WATER POLLUTION PREVENTION SHALL OBTAIN A COPY OF THE STORM WATER POLLUTION PREVENTION PLAN AND THE STATE OF FLORIDA NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM GENERAL PERMIT (NPDES PERMIT) AND BECOME FAMILIAR WITH THEIR CONTENTS.
- THE CONTRACTOR SHALL IMPLEMENT BEST MANAGEMENT PRACTICES AS REQUIRED BY THE SWPPP. ADDITIONAL BEST MANAGEMENT PRACTICES SHALL BE IMPLEMENTED AS DICTATED BY CONDITIONS AT NO ADDITIONAL COST TO THE OWNER THROUGHOUT ALL PHASES OF CONSTRUCTION.
- BEST MANAGEMENT PRACTICES (BMP'S) AND CONTROLS SHALL CONFORM TO FEDERAL, STATE, OR LOCAL REQUIREMENTS OR MANUAL OF PRACTICE, AS APPLICABLE. THE CONTRACTOR SHALL IMPLEMENT ADDITIONAL CONTROLS AS DIRECTED BY THE PERMITTING AGENCY OR OWNER.
- EROSION AND SEDIMENTATION CONTROL PLAN MUST CLEARLY DELINEATE ALL STATE WATERS, PERMITS FOR ANY CONSTRUCTION ACTIVITY IMPACTING STATE WATERS OR REGULATED WETLANDS MUST BE MAINTAINED ON SITE AT ALL TIMES.
- THE CONTRACTOR SHALL MINIMIZE CLEARING TO THE MAXIMUM EXTENT PRACTICAL OR AS REQUIRED BY THE GENERAL PERMIT.
- CONTRACTOR SHALL DEMOTE ON PLAN THE TEMPORARY PARKING AND STORAGE AREA WHICH SHALL ALSO BE USED AS THE EQUIPMENT MAINTENANCE AND CLEANING AREA, EMPLOYEE PARKING AREA, AND AREA FOR LOCATING PORTABLE FACILITIES, OFFICE TRAILERS, AND TOILET FACILITIES.
- ALL WASH WATER (CONCRETE TRUCKS, VEHICLE CLEANING, EQUIPMENT CLEANING, ETC.) SHALL BE DETAINED AND PROPERLY TREATED OR DISPOSED.
- SUFFICIENT OIL AND GREASE ABSORBING MATERIALS AND FLOTATION BOOMS SHALL BE MAINTAINED ON SITE OR READILY AVAILABLE TO CONTAIN AND CLEAN-UP FUEL OR CHEMICAL SPILLS AND LEAKS.
- RUBBISH, TRASH, GARBAGE, LITTER, OR OTHER SUCH MATERIALS SHALL BE DEPOSITED INTO SEALED CONTAINERS. MATERIALS SHALL BE PREVENTED FROM LEAVING THE PREMISES THROUGH THE ACTION OF WIND OR STORM WATER DISCHARGE INTO DRAINAGE DITCHES OR WATERS OF THE STATE.
- ALL STORM WATER POLLUTION PREVENTION MEASURES PRESENTED ON THE PLAN, SHALL BE INITIATED AS SOON AS PRACTICABLE.
- STABILIZATION PRACTICES SHOULD BE INITIATED AS SOON AS PRACTICAL, BUT IN NO CASE MORE THAN 7 DAYS WHERE CONSTRUCTION HAS TEMPORARILY OR PERMANENTLY CEASED.
- DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY HAS PERMANENTLY STOPPED SHALL BE PERMANENTLY STABILIZED. THESE AREAS SHALL BE STABILIZED NO LATER THAN 7 DAYS AFTER THE LAST CONSTRUCTION ACTIVITY OCCURRED.
- IF THE ACTION OF VEHICLES TRAVELING OVER THE GRAVEL CONSTRUCTION ENTRANCES IS NOT SUFFICIENT TO REMOVE THE MAJORITY OF DIRT OR MUD, THEN THE TIRES MUST BE WASHED BEFORE THE VEHICLES ENTER A PUBLIC ROAD. IF WASHING IS USED, PROVISIONS MUST BE MADE TO INTERCEPT THE WASH WATER AND TRAP THE SEDIMENT BEFORE IT IS CARRIED OFF THE SITE.
- ALL MATERIALS SPILLED, DROPPED, WASHED, OR TRACKED FROM VEHICLES ONTO ROADWAYS OR INTO STORM DRAINS MUST BE REMOVED AS SOON AS POSSIBLE.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING SEDIMENT IN THE DETENTION POND AND ANY SEDIMENT THAT MAY HAVE COLLECTED IN THE STORM SEWER DRAINAGE SYSTEMS IN CONJUNCTION WITH THE STABILIZATION OF THE SITE.
- ON-SITE & OFF-SITE SOIL STOCKPILE AND BORROW AREAS SHALL BE PROTECTED FROM EROSION AND SEDIMENTATION THROUGH IMPLEMENTATION OF BEST MANAGEMENT PRACTICES. STOCKPILE AND BORROW AREA LOCATIONS SHALL BE NOTED ON THE EROSION AND SEDIMENTATION CONTROL PLAN AND PERMITTED IN ACCORDANCE WITH GENERAL PERMIT REQUIREMENTS.
- SLOPES SHALL BE LEFT IN A ROUGHENED CONDITION DURING THE GRADING PHASE TO REDUCE RUNOFF VELOCITIES AND EROSION.
- DUE TO GRADE CHANGES DURING THE DEVELOPMENT OF THE PROJECT, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADJUSTING THE EROSION CONTROL MEASURES AS NECESSARY AS CONSTRUCTION PROGRESSES (SILT FENCES, ETC.) TO PREVENT EROSION.
- ALL CONSTRUCTION SHALL BE STABILIZED AT THE END OF EACH WORKING DAY. THIS INCLUDES BACK FILLING OF TRENCHES FOR UTILITY CONSTRUCTION AND PLACEMENT OF GRAVEL OR BITUMINOUS PAVING FOR ROAD CONSTRUCTION.
- EROSION AND SEDIMENTATION CONTROL PLANS PROVIDED HEREIN ARE A GUIDELINE ONLY. THE CONTRACTOR IS RESPONSIBLE FOR PREPARING THE FINAL STORM WATER POLLUTION PREVENTION PLAN. THE PLAN SHALL BE SUBMITTED TO THE OWNER AND ENGINEER WHICH DEMONSTRATES THE MECHANISMS AND PRACTICES THAT WILL BE EMPLOYED TO PROTECT THE CONSTRUCTION SITE AND SURROUNDING AREA DURING CONSTRUCTION. THE PLAN SHALL BE CONSISTENT WITH FEDERAL NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES PERMIT REQUIREMENTS PERTAINING TO POLLUTION PREVENTION PLANS. THE PLAN SHALL INCLUDE, BUT NOT BE LIMITED TO, THE LOCATIONS OF SILT BARRIERS, TURBIDITY SCREENS OR TEMPORARY SHEETING, EMERGENCY RESPONSE PRACTICES, AND OTHER METHODS TO PREVENT POLLUTION, REFUELING OR STORAGE OF VEHICLES OR EQUIPMENT THAT UTILIZE PETROLEUM BASED PRODUCTS SHALL BE PROHIBITED ANYWHERE WITHIN 50 FEET OF A WATER'S EDGE. THE PLAN SHALL BE SUBMITTED TO THE OWNER AFTER NOTICE OF AWARD AND PRIOR TO NOTICE TO PROCEED. AFTER REVIEW BY OWNER THE PLAN SHALL BE FILED WITH ALL APPLICABLE REGULATORY AGENCIES BY THE CONTRACTOR, REFER TO FURTHER NOTES AND DETAILS WITHIN THESE DOCUMENTS.
- SILT FENCE IS REQUIRED AS SHOWN ON THE PLANS AND ANYWHERE ADDITIONAL AS REQUIRED BY CONSTRUCTION. SILT FENCE IS NOT APPLICABLE IN PAVEMENT AREAS. LIMITS OF CONSTRUCTION SHOWN ARE DIAGRAMATIC. CONTRACTOR TO PROVIDE PLAN FOR SHOP DRAWING REVIEW.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONTROL OF DUST AND DIRT RISING AND SCATTERING IN THE AIR DURING CONSTRUCTION AND SHALL PROVIDE WATER SPRINKLING OR OTHER SUITABLE METHODS OF CONTROL. THE USE OF MOTOR OILS AND OTHER PETROLEUM BASED OR TOXIC LIQUIDS FOR DUST SUPPRESSION OPERATIONS IS PROHIBITED. THE CONTRACTOR SHALL COMPLY WITH ALL GOVERNING REGULATIONS PERTAINING TO ENVIRONMENTAL PROTECTION.

WATER AND SEWER UTILITY NOTES

- ALL CONSTRUCTION SHALL MEET OR EXCEED THE LOCAL WATER AND SEWER REQUIREMENTS AND THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION REQUIREMENTS UNLESS OTHERWISE NOTED. IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN THE SPECIFICATIONS AND DETAILS FROM THE LOCAL AGENCY.
- THE CONTRACTOR SHALL CONSTRUCT GRAVITY SEWER LATERALS, MANHOLES AND GRAVITY SEWER LINES AS SHOWN ON THESE PLANS. THE CONTRACTOR SHALL FURNISH ALL NECESSARY MATERIALS, EQUIPMENT, MACHINERY, TOOLS, MEANS OF TRANSPORTATION AND LABOR NECESSARY TO COMPLETE THE WORK IN FULL AND COMPLETE ACCORDANCE WITH THE SHOWN, DESCRIBED AND REASONABLY INTENDED REQUIREMENTS OF THE CONTRACT DOCUMENTS AND JURISDICTIONAL AGENCY REQUIREMENTS. IN THE EVENT THAT THE CONTRACT DOCUMENTS AND THE JURISDICTIONAL AGENCY REQUIREMENTS ARE NOT IN AGREEMENT, THE MOST STRINGENT SHALL GOVERN.

- EXISTING UTILITIES SHOWN ARE LOCATED ACCORDING TO THE INFORMATION AVAILABLE TO THE ENGINEER AT THE TIME OF THE TOPOGRAPHIC SURVEY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR THE ENGINEER. GUARANTEE IS NOT MADE THAT ALL EXISTING UNDERGROUND UTILITIES ARE SHOWN OR THAT THE LOCATION OF THOSE SHOWN ARE ENTIRELY ACCURATE. FINDING THE ACTUAL LOCATION OF ANY EXISTING UTILITIES IS THE CONTRACTOR'S RESPONSIBILITY AND SHALL BE DONE BEFORE HE COMMENCES ANY WORK IN THE VICINITY. FURTHERMORE, THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES DUE TO THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES. THE OWNER OR ENGINEER WILL ASSUME NO LIABILITY FOR ANY DAMAGES SUSTAINED OR COST INCURRED BECAUSE OF THE OPERATIONS IN THE VICINITY OF EXISTING UTILITIES OR STRUCTURES, NOR FOR TEMPORARY BRACING AND SHORING OF SAME. IF IT IS NECESSARY TO SHORE, BRACE, SWING OR RELOCATE A UTILITY, THE UTILITY COMPANY OR DEPARTMENT AFFECTED SHALL BE CONTACTED AND THEIR PERMISSION OBTAINED REGARDING THE METHOD TO USE FOR SUCH WORK.
- DEFLECTION OF PIPE JOINTS AND CURVATURE OF PIPE SHALL NOT EXCEED THE MANUFACTURER'S SPECIFICATIONS. SECURELY CLOSE ALL OPEN ENDS OF PIPE AND FITTINGS WITH A WATERIGHT PLUG WHEN WORK IS NOT IN PROGRESS. THE INTERIOR OF ALL PIPES SHALL BE CLEAN AND JOINT SURFACES WIPED CLEAN AND DRY AFTER THE PIPE HAS BEEN LOWERED INTO THE TRENCH. VALVES SHALL BE PLUMB AND LOCATED ACCORDING TO THE PLANS.
- ALL PHASES OF INSTALLATION, INCLUDING UNLOADING, TRENCHING, LAYING AND BACK FILLING, SHALL BE DONE IN A FIRST CLASS WORKMANLIKE MANNER. ALL PIPE AND FITTINGS SHALL BE CAREFULLY STORED FOLLOWING MANUFACTURER'S RECOMMENDATIONS. CARE SHALL BE TAKEN TO AVOID DAMAGE TO THE COATING OR LINING OF ANY D.I. PIPE FITTINGS. ANY PIPE OR FITTING WHICH IS DAMAGED OR WHICH HAS FLAWS OR IMPERFECTIONS WHICH, IN THE OPINION OF THE ENGINEER OR OWNER, REMOVS IT UNFIT FOR USE, SHALL NOT BE USED. ANY PIPE NOT SATISFACTORY FOR USE SHALL BE CLEARLY MARKED AND IMMEDIATELY REMOVED FROM THE JOB SITE, AND SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
- WATER FOR FIRE FIGHTING SHALL BE AVAILABLE FOR USE PRIOR TO COMBUSTIBLES BEING BROUGHT ON SITE.
- ALL UTILITY AND STORM DRAIN TRENCHES LOCATED UNDER AREAS TO RECEIVE PAVING SHALL BE COMPLETELY BACK FILLED IN ACCORDANCE WITH THE GOVERNING JURISDICTIONAL AGENCY'S SPECIFICATIONS. IN THE EVENT THAT THE CONTRACT DOCUMENTS AND THE JURISDICTIONAL AGENCY REQUIREMENTS ARE NOT IN AGREEMENT, THE MOST STRINGENT SHALL GOVERN.
- UNDERGROUND LINES SHALL BE AS-BUILT BY A STATE OF FLORIDA PROFESSIONAL LAND SURVEYOR BEFORE BACK FILLING.
- CONTRACTOR SHALL PERFORM, AT HIS OWN EXPENSE, ANY AND ALL TESTS REQUIRED BY THE SPECIFICATIONS AND/OR ANY AGENCY HAVING JURISDICTION. THESE TESTS MAY INCLUDE, BUT MAY NOT BE LIMITED TO, INFILTRATION AND EXFILTRATION, TELEVISION INSPECTION AND A MANHOLE TEST ON GRAVITY SEWER. A COPY OF THE TEST RESULTS SHALL BE PROVIDED TO THE UTILITY PROVIDER, OWNER AND JURISDICTIONAL AGENCY AS REQUIRED.
- ALL PIPES AND CONNECTIONS ARE TO BE RESTRAINED IN ACCORDANCE WITH THE DETAILS OR JURISDICTIONAL AGENCY REQUIREMENTS, WHICHEVER IS MOST STRINGENT.
- ALL WATER DISTRIBUTION SYSTEM MATERIALS (INCLUDING SERVICES) AND INSTALLATION SHALL CONFORM TO THE SPECIFICATIONS OF THE LOCAL WATER PROVIDER AS PROVIDED IN THEIR STANDARD SPECIFICATIONS MANUAL AND THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION. THE CONTRACTOR IS RESPONSIBLE TO OBTAIN SPECIFICATION MANUALS PRIOR TO BIDDING THE PROJECT.
- ALL POTABLE WATER PIPE AND PIPE FITTINGS INSTALLED UNDER THIS PROJECT WILL BE COLOR CODED OR MARKED IN ACCORDANCE WITH F.A.C. 62-555.320(2)(b)3, USING BLUE AS THE PREDOMINANT COLOR. (UNDERGROUND PLASTIC PIPE WILL BE SOLID-WALL BLUE PIPE WILL HAVE A CO-EXTRUDED BLUE EXTERNAL SKIN, OR WILL BE WHITE OR BLACK WITH BLUE STRIPES INCORPORATED INTO, OR APPLIED TO, THE PIPE WALL. PIPE STRIPED DURING THE MANUFACTURING OF THE PIPE WILL HAVE CONTINUOUS STRIPES THAT RUN PARALLEL TO THE AXIS OF THE PIPE, THAT ARE LOCATED AT NO GREATER THAN 90-DEGREE INTERVALS AROUND THE PIPE, AND THAT WILL REMAIN INTACT DURING AND AFTER INSTALLATION OF THE PIPE. IF TAPE OR PAINT IS USED TO STRIPE PIPE DURING AND AFTER INSTALLATION OF THE PIPE, THE TAPE OR PAINT WILL BE APPLIED IN A CONTINUOUS LINE THAT RUNS PARALLEL TO THE AXIS OF THE PIPE AND THAT IS LOCATED ALONG THE TOP OF THE PIPE. FOR PIPE WITH AN INTERNAL DIAMETER OR 24" OR GREATER, TAPE OR PAINT WILL BE APPLIED IN CONTINUOUS LINES ALONG EACH SIDE OF THE PIPE AS WELL AS ALONG THE TOP OF THE PIPE. ABOVEGROUND PIPE WILL BE PAINTED BLUE OR WILL BE COLOR CODED OR MARKED LIKE UNDERGROUND PIPE.
- ALL WATER MAINS ARE DESIGNED FOR A MINIMUM WORKING PRESSURE OF 150 PSI. HAVE COMPRESSION TYPE BELL JOINTS AND BE EITHER ANSIAWWA C-151/A21.51-02 DUCTILE IRON PIPE (D.I.P.), CLASS 50 FOR 8" DIAMETER PIPE AND LARGER AND CLASS 51 IF PIPE DIAMETER IS SMALLER THAN 6" OR ANSIAWWA C-600-97, PVC PIPE WITH A MAXIMUM SOD OF 18. ALL D.I.P. WATER MAINS SHALL BE CEMENT LINED AND SEAL COATED IN ACCORDANCE WITH ANSIAWWA STANDARDS. ALL D.I.P. FORCE MAINS SHALL BE COATED OUTSIDE WITH A BITUMINOUS COATING APPROXIMATELY ONE MIL THICK IN ACCORDANCE WITH ANSI 21.51-8. CEMENT MORTAR LININGS ARE NOT APPROPRIATE FOR THIS APPLICATION. ALL D.I.P. FORCE MAINS AND GRAVITY SEWER MAINS SHALL BE COATED INSIDE WITH POLYBOND VIRGIN POLYETHYLENE COMPLYING WITH A.S.T.M. DESIGNATION D 1248 AND HAVE A MINIMUM "N" VALUE OF 0.012. SEE PROJECT SPECIFICATIONS MANUAL FOR MORE DETAILS. OR PROTECTOR 401 CEREMIC EPOXY. ALL D.I.P. PIPE SHALL BE LAID WITH A MINIMUM OF 30" CLEAR COVER. ALL PVC PIPE SHALL BE LAID WITH A MINIMUM OF 36" CLEAR COVER.
- NEW OR RELOCATED, UNDERGROUND WATER MAINS INCLUDED IN THIS PROJECT WILL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST THREE FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED VACUUM-TYPE SANITARY SEWER, STORM SEWER, STORMWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER. A HORIZONTAL DISTANCE OF AT LEAST SIX FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED GRAVITY-TYPE SANITARY SEWER (OR A HORIZONTAL DISTANCE OF AT LEAST THREE FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED GRAVITY-TYPE SANITARY SEWER IF THE BOTTOM OF THE WATER MAIN WILL BE LAID AT LEAST SIX INCHES ABOVE THE TOP OF THE SEWER); A HORIZONTAL DISTANCE OF AT LEAST SIX FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED PRESSURE-TYPE SANITARY SEWER, WASTEWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER.
- NEW OR RELOCATED, UNDERGROUND WATER MAINS INCLUDED IN THIS PROJECT THAT WILL CROSS ANY EXISTING OR PROPOSED GRAVITY-OR VACUUM-TYPE SANITARY SEWER OR STORM SEWER WILL BE LAID SO THE OUTSIDE OF THE WATER MAIN IS AT LEAST SIX INCHES ABOVE THE OTHER PIPELINE OR AT LEAST 12 INCHES BELOW THE OTHER PIPELINE. NEW OR RELOCATED, UNDERGROUND WATER MAINS INCLUDED IN THIS PROJECT THAT WILL CROSS ANY EXISTING OR PROPOSED PRESSURE-TYPE SANITARY SEWER, WASTEWATER OR STORMWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER WILL BE LAID SO THE OUTSIDE OF THE WATER MAIN IS AT LEAST 12 INCHES ABOVE OR BELOW THE OTHER PIPELINE.
- THE WATER SYSTEM SHALL BE CLEANED OF DEBRIS, FLUSHED AND TESTED FOR A PERIOD OF NOT LESS THAN 2 HOURS AT A MINIMUM STARTING PRESSURE OF 130 PSI WITH AN ALLOWABLE LEAKAGE NOT TO EXCEED THE ALLOWABLE GAL/HR IN ACCORDANCE WITH THE ANSIAWWA C-600-05 STANDARD SECTION 4.2.2.

$$(EQUATION Q = \frac{L \cdot D \cdot P}{148,000}$$

Q = ALLOWABLE LEAKAGE, GALLONS/HOUR
L = LENGTH OF PIPE TESTED, FEET
D = NOMINAL DIAMETER, INCHES
P = AVERAGE TEST PRESSURE, LB/IN GAUGE

- AFTER THE PRESSURE TEST, THE SYSTEM SHALL BE DISINFECTED. DISINFECTION SHALL BE IN ACCORDANCE W/ANSIAWWA C651-05 STD. BACTERIOLOGICAL TESTS SHALL BE TAKEN TWO (2) CONSECUTIVE DAYS, AT LEAST 24 HOURS APART AND SHALL BE AT LEAST ONE SAMPLE PER 1,200 FEET OF MAIN IN THE SYSTEM. THE SAMPLE SHALL HAVE A HETEROTROPHIC PLATE COUNT (HPC) LESS THAN 500 CFU/ML AND SHALL BE FREE OF COLIFORM BACTERIA.
- FOR 2 HOURS AT LINE PRESSURE AFTER THE 150 PSI TEST & DISINFECTED. DISINFECTION SHALL BE IN ACCORDANCE W/ANSIAWWA C651-05 STD.
- AT THE TIME OF BACTERIOLOGICAL SAMPLING, CHLORINE RESIDUAL DETERMINATION SHALL BE MADE TO INSURE THAT CHLORINE CONCENTRATION IN THE MAIN IS NO HIGHER THAN THAT GENERALLY IN THE SYSTEM (3.0 MG/L FREE OR 4.0 MG/L COMBINED MAXIMUM), OR LESS THAN 0.2 MG/L FREE OR 0.6 MG/L COMBINED. THE RESULT SHALL BE REPORTED ALONG WITH THE BACTERIOLOGICAL TEST RESULTS. ALL TESTING SHALL BE COORDINATED AND PAID FOR BY THE CONTRACTOR.
- NO BENEFICIAL USE SHALL BE MADE OF THE PROPOSED WATER MAINS TO BE INSTALLED PER THIS PERMIT WITHOUT WRITTEN APPROVAL FROM THE BROWARD COUNTY HEALTH DEPARTMENT.

UTILITY CONTACT INFORMATION

1.	OTIS KEEVE	AT&T	954-524-3330
2.	RAY RYNNING	FLORIDA POWER & LIGHT	954-321-2259
3.	CYNTHIA HERNANDEZ	FLORIDA POWER & LIGHT	954-717-2078
4.	DAVID RIVERA	TECO PEOPLES GAS	954-453-0794
5.	JOHN MATUNTI	COMCAST CABLE	954-732-7846
6.	JORGE HOLGUIN	CITY OF FORT LAUDERDALE	954-828-5675

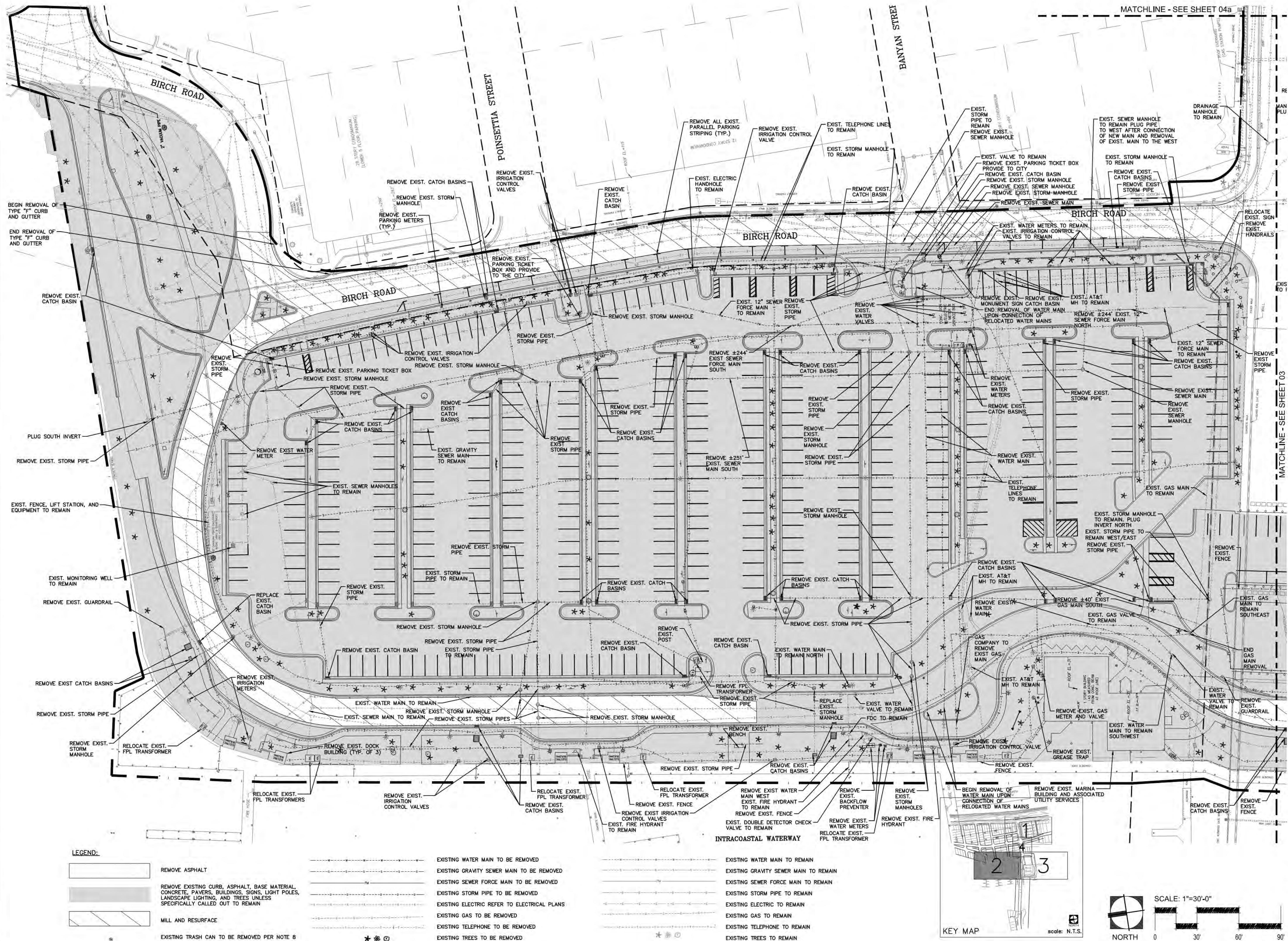
REAL:

JASON A. WEBBER, P.E.
73962

KHA PROJ #:

DRAWN BY:	DATE:	DESIGNED BY:	SCALE:	CHECKED BY:	FIELD BOOK:
JJ	03/15/2016	JJ	AS SHOWN	JAV	

REVISONS		DESCRIPTION	
NO.	DATE	BY	CHK'D



EDSA, Inc.
1512 E. Broward Blvd, Suite 110
Fort Lauderdale, FL 33301
954.524.3330

Kimley-Horn
1800 N. Congress Ave., Suite 100
Fort Lauderdale, FL 33304
954.524.3330
© 2015 KIMLEY-HORN AND ASSOCIATES, INC.

Jason A. Webber, P.E.
73962

KHA PROJ # 040814003

DATE: 03/15/2016
DESIGNED BY: JJ
CHECKED BY: JJ
SCALE: AS SHOWN
FIELD BOOK:

CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING & ARCHITECTURE
100 North Andrews Avenue, Fort Lauderdale, Florida 33301

REVISIONS

NO.	DATE	BY	CHK'D	DESCRIPTION

PROJECT # P11900
LAS OLAS CORRIDOR IMPROVEMENTS
FORT LAUDERDALE, FL

SHEET NO. C2-1.02

DRAWING FILE 11900-MULTI-DEMO

DEMOLITION PLAN

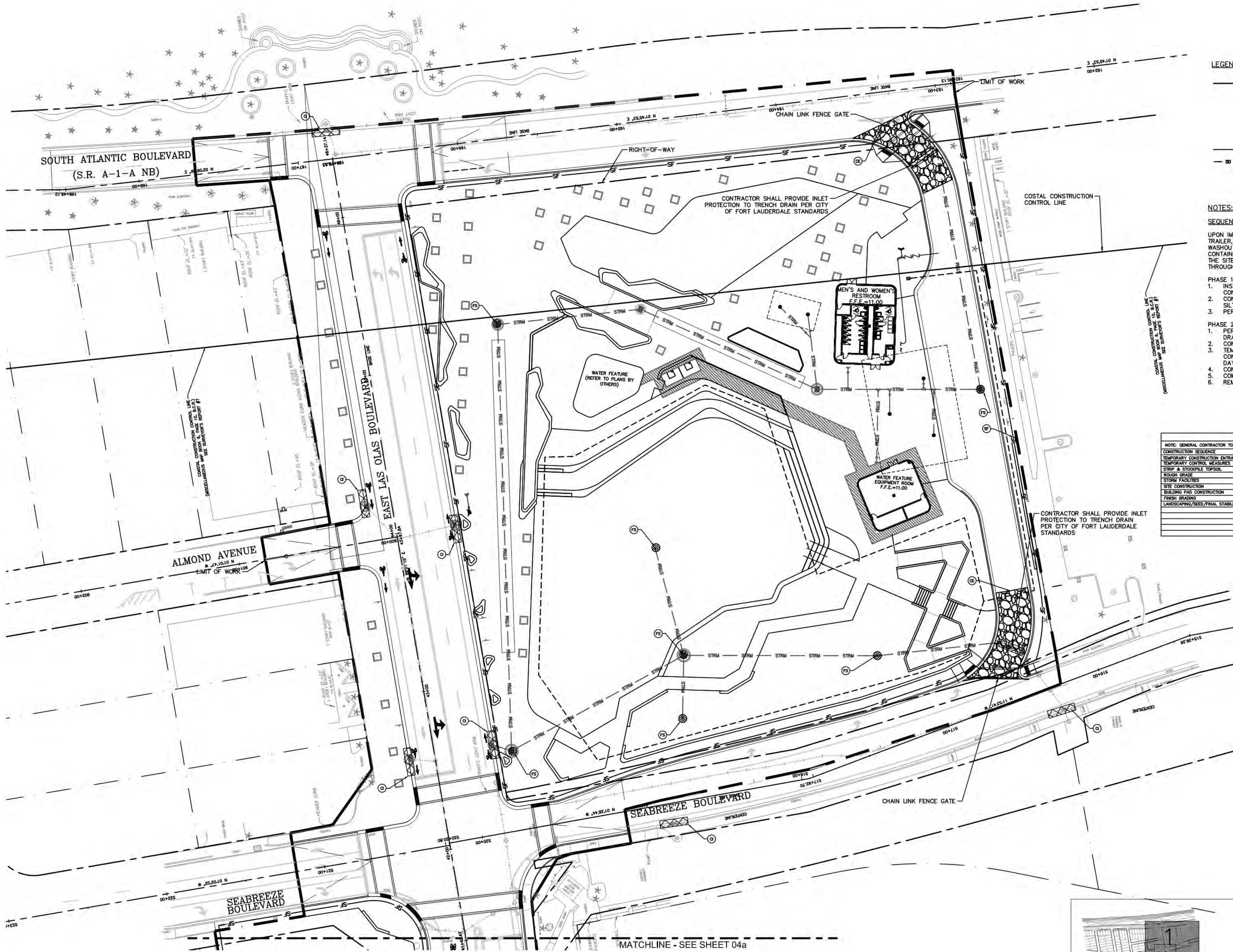
SCALE: 1"=30'-0"

NORTH

0 30' 60' 90'

scale: N.T.S.

60% CD SUBMITTAL

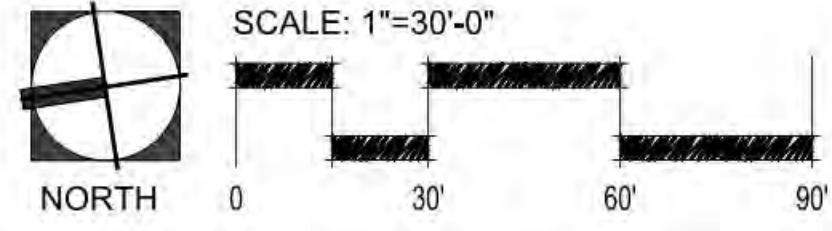
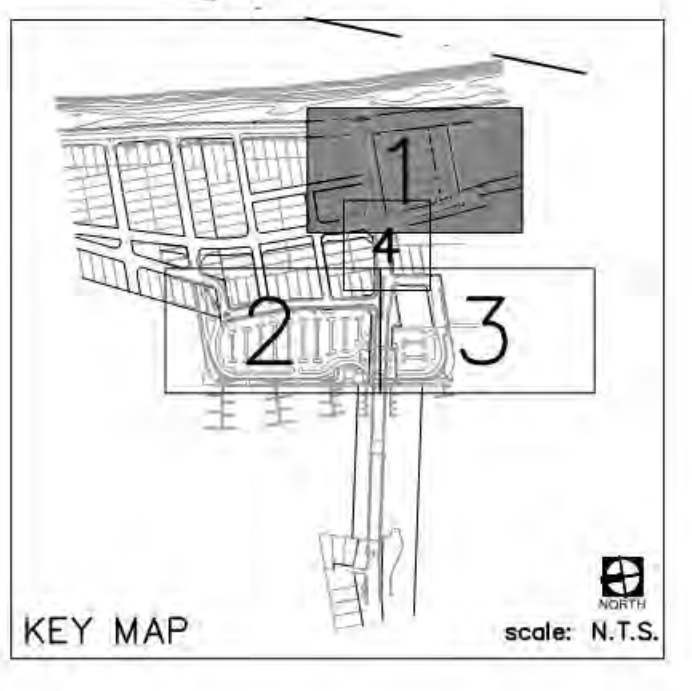


LEGEND:

	RIGHT-OF-WAY
	FILTER SACK INLET PROTECTION
	CURB INLET PROTECTION PER FDOT STANDARDS
	CONSTRUCTION ENTRANCE
	TURBIDITY BARRIER
	SILT FENCE
	SILT DIKE

- NOTES:**
- SEQUENCE OF CONSTRUCTION**
- UPON IMPLEMENTATION AND INSTALLATION OF THE FOLLOWING AREAS: TRAILER, PARKING, LAYDOWN, PORTA-POTTY, WHEEL WASH, CONCRETE WASHOUT, FUEL AND MATERIAL STORAGE CONTAINERS, SOLID WASTE CONTAINERS, ETC., CONTRACTOR SHALL IMMEDIATELY DENOTE THEM ON THE SITE MAPS AND NOTE ANY CHANGES IN LOCATION AS THEY OCCUR THROUGHOUT THE CONSTRUCTION PROCESS.
- PHASE 1:**
1. INSTALL TEMPORARY CHAIN LINK FENCE AS DETERMINED BY CONTRACTOR.
 2. CONSTRUCT STABILIZED CONSTRUCTION ENTRANCES AND INSTALL SILT FENCE, TURBIDITY BARRIER, AND INLET PROTECTION.
 3. PERFORM CLEARING AND GRUBBING AND DEMOLITION.
- PHASE 2:**
1. PERFORM MASS GRADING. ROUGH GRADE TO ESTABLISH PROPOSED DRAINAGE PATTERNS.
 2. CONSTRUCT PROPOSED AND MODIFIED DRAINAGE INFRASTRUCTURE.
 3. TEMPORARILY SEED WITH PURE LIVE SEED, THROUGHOUT CONSTRUCTION. DISTURBED AREAS THAT WILL BE INACTIVE FOR 7 DAYS OR MORE OR AS REQUIRED BY GENERIC PERMIT.
 4. CONSTRUCT PROPOSED IMPROVEMENTS, INCLUDING BUILDING PAD.
 5. COMPLETE FINAL GRADING AND FINAL STABILIZATION.
 6. REMOVE TEMPORARY EROSION CONTROL MEASURES.

SOIL EROSION/SEDIMENTATION CONTROL OPERATION TIME SCHEDULE																								
NOTE: GENERAL CONTRACTOR TO COMPLETE TABLE WITH THEIR SPECIFIC PROJECT SCHEDULE																								
CONSTRUCTION SEQUENCE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
TEMPORARY CONSTRUCTION ENTRANCE																								
TEMPORARY CONTROL MEASURES																								
STRIP & STOCKPILE TOPSOIL																								
ROUGH GRADE																								
STORM FACILITIES																								
SITE CONSTRUCTION																								
BUILDING PAD CONSTRUCTION																								
FINISH GRADING																								
LANDSCAPING/SEED/FINAL STABILIZATION																								



60% CD SUBMITTAL

EDSA, Inc.
1512 E. Broward Blvd. Suite 110
Fort Lauderdale, FL 33301
954.524.3330

Kimley-Horn
1810 S. CONGRESS AVE. SUITE 100
DELMAR, DE 19706
PHONE: 302.438.2424 FAX: 302.438.2425
WWW.KIMLEY-HORN.COM CA 00000006
© 2015 KIMLEY-HORN AND ASSOCIATES, INC.

SEAL:

JASON A. WEBBER, P.E.
73962

KHA PROJ # 040814003

DRAWN BY: JJ	DATE: 03/15/2016	DESIGNED BY: JJ	SCALE: AS SHOWN	FIELD BOOK:
CHECKED BY: JJ				
JAW				

CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING & ARCHITECTURE
100 North Andrews Avenue, Fort Lauderdale, Florida 33301

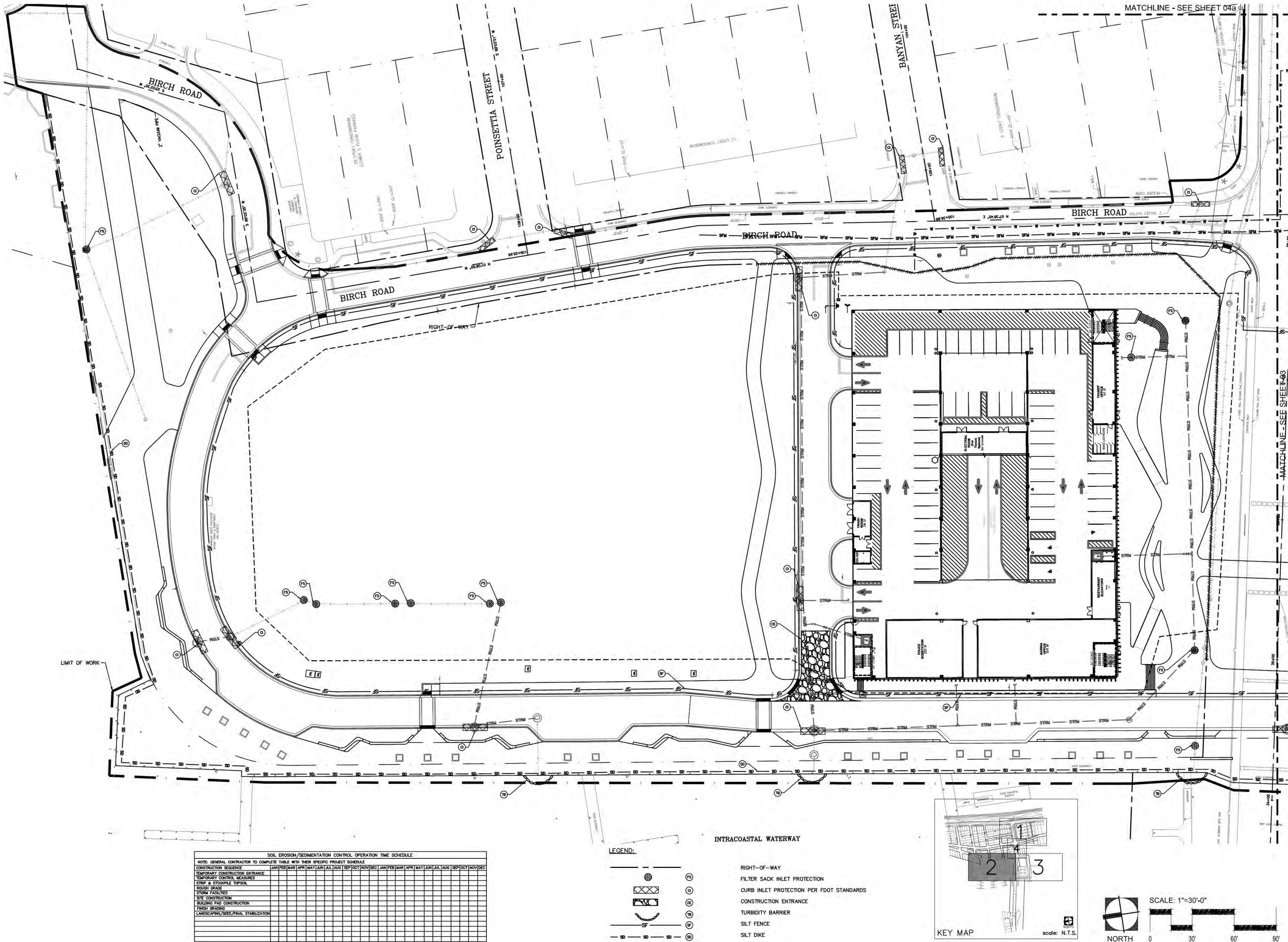
REVISIONS

NO.	DATE	BY	CHK'D	DESCRIPTION

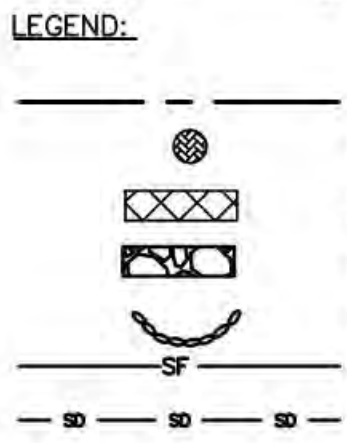
PROJECT # P11900
LAS OLAS CORRIDOR IMPROVEMENTS
FORT LAUDERDALE, FL

EROSION CONTROL PLAN

SHEET NO.	X OF XX
C3-1.01	
DRAWING FILE	11900-MULT-EROS



SOIL EROSION/SEDIMENTATION CONTROL OPERATION TIME SCHEDULE																								
NOTE: GENERAL CONTRACTOR TO COMPLETE TABLE WITH THEIR SPECIFIC PROJECT SCHEDULE																								
CONSTRUCTION SEQUENCE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
TEMPORARY CONSTRUCTION ENTRANCE																								
TEMPORARY CONTROL MEASURES																								
STRIP & STOCKPILE TOPSOIL																								
ROUGH GRADE																								
STORM FACILITIES																								
SITE CONSTRUCTION																								
BUILDING PAD CONSTRUCTION																								
FINISH GRADING																								
LANDSCAPING/SEED/FINAL STABILIZATION																								
												</												



INTRACOASTAL WATERWAY

RIGHT-OF-WAY

FILTER SACK INLET PROTECTION

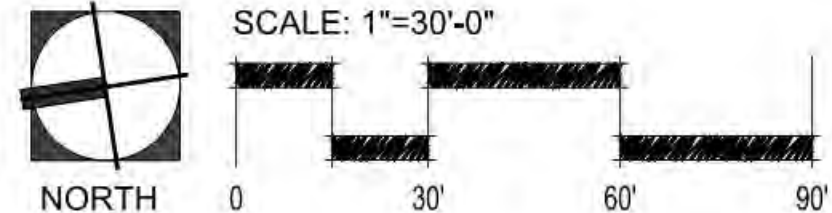
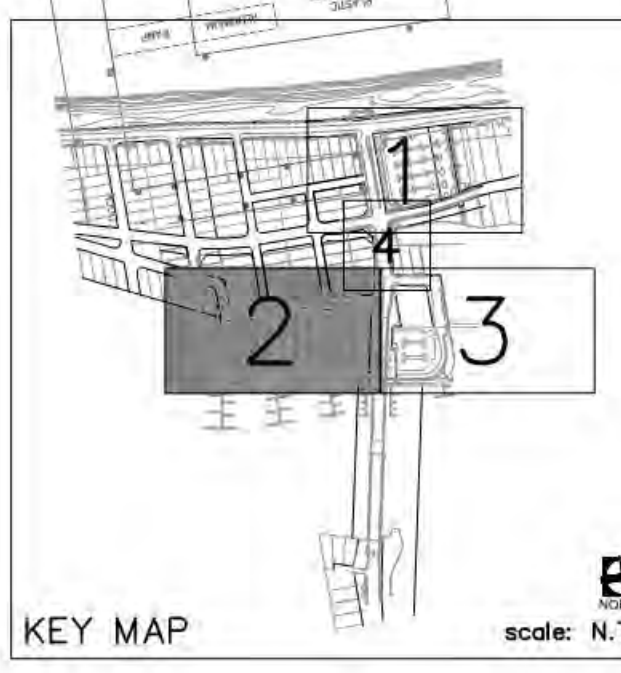
CURB INLET PROTECTION PER FDOT STANDARDS

CONSTRUCTION ENTRANCE

TURBIDITY BARRIER

SILT FENCE

SILT DIKE



60% CD SUBMITTAL

PROJECT # P11900
LAS OLAS CORRIDOR IMPROVEMENTS
FORT LAUDERDALE, FL

EROSION CONTROL PLAN

SHEET NO.
C3-1.02 X OF XX
DRAWING FILE
11900\MULTIEROS

REVISIONS		DESCRIPTION	
NO.	DATE	BY (CHK'D)	DESCRIPTION

CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING & ARCHITECTURE
100 North Andrews Avenue, Fort Lauderdale, Florida 33301

DRAWN BY: JJ
CHECKED BY: JAW
DATE: 03/15/2016
SCALE: AS SHOWN
FIELD BOOK:

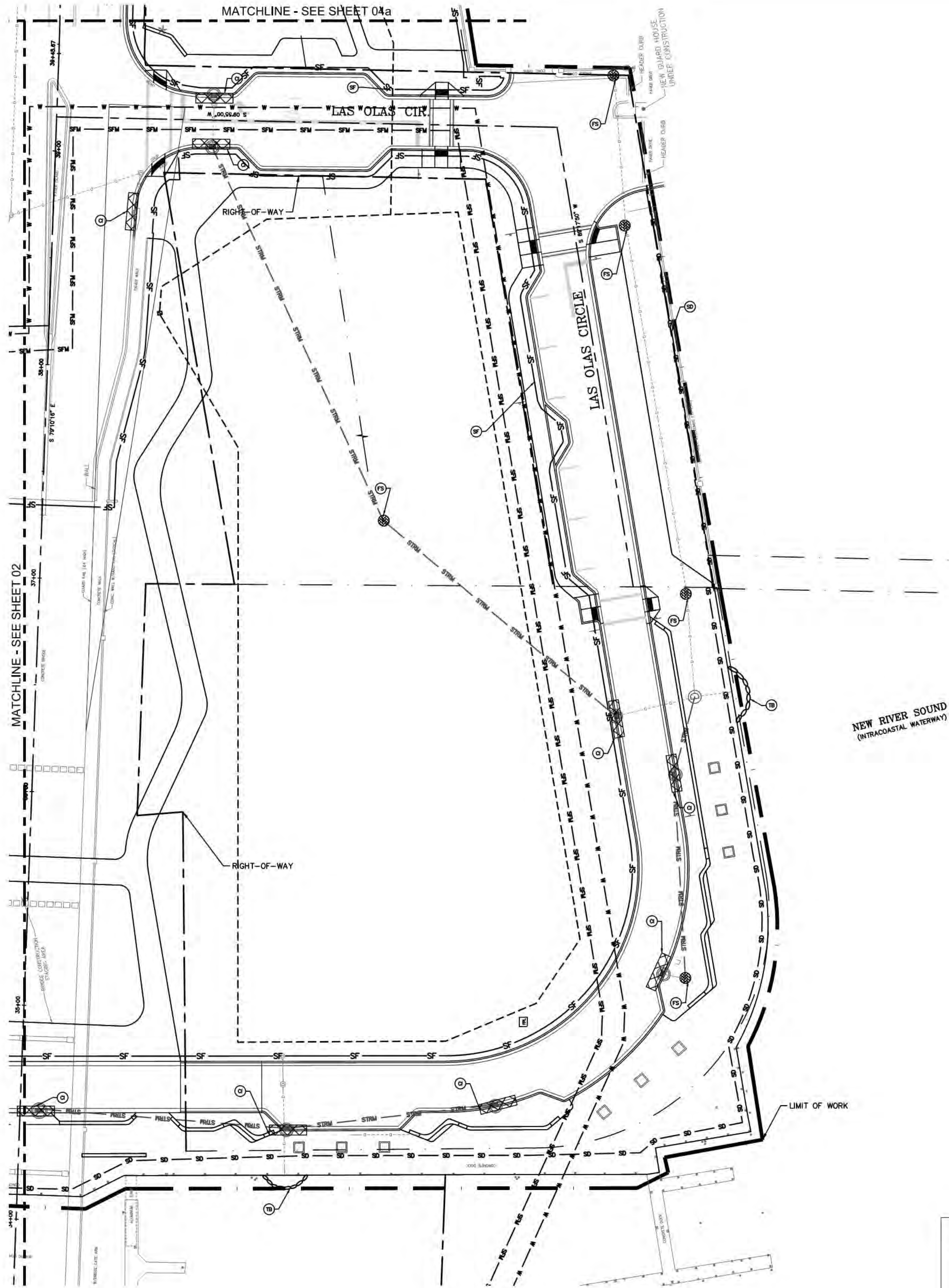
KHA PROJ # 040814003

JASON A. WEBBER, P.E.
73962

EDSA, Inc.
1512 E. Broward Blvd, Suite 110
Fort Lauderdale, FL 33301
954.524.3330

Kimley-Horn

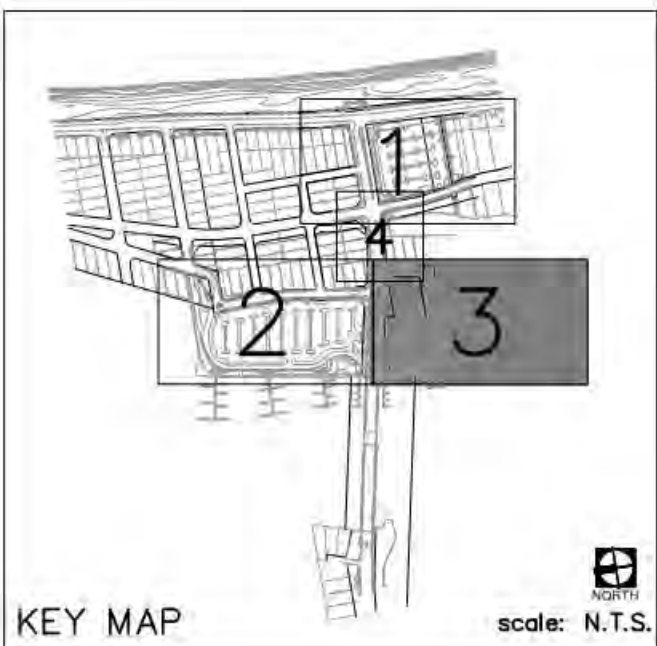
Kimley-Horn and Associates, Inc.



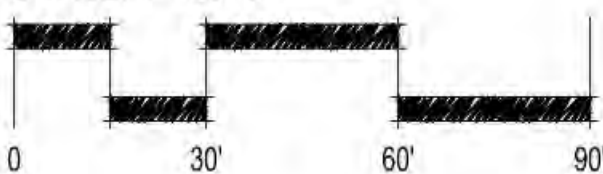
LEGEND:

- RIGHT-OF-WAY
- FILTER SACK INLET PROTECTION
- CURB INLET PROTECTION PER FDOT STANDARDS
- CONSTRUCTION ENTRANCE
- TURBIDITY BARRIER
- SILT FENCE
- SILT DIKE

SOIL EROSION/SEDIMENTATION CONTROL OPERATION TIME SCHEDULE												
NOTE: GENERAL CONTRACTOR TO COMPLETE TABLE WITH THEIR SPECIFIC PROJECT SCHEDULE												
CONSTRUCTION SEQUENCE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
TEMPORARY CONSTRUCTION ENTRANCES												
TEMPORARY CONTROL MEASURES												
STRIP & STOCKPILE TOPSOIL												
ROUGH GRADE												
STORM FACILITIES												
SITE CONSTRUCTION												
BUILDING FOOT CONSTRUCTION												
FINISH GRADING												
LANDSCAPING/SEED/FINAL STABILIZATION												



SCALE: 1"=30'-0"



60% CD SUBMITTAL

PROJECT # P11900
LAS OLAS CORRIDOR IMPROVEMENTS
FORT LAUDERDALE, FL
EROSION CONTROL PLAN

SHEET NO.
C3-1.03
DRAWING FILE
11900-MULT-EROS

X OF XX

REVISIONS			
NO.	DATE	BY (CHK'D)	DESCRIPTION

CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING & ARCHITECTURE
100 North Andrews Avenue, Fort Lauderdale, Florida 33301

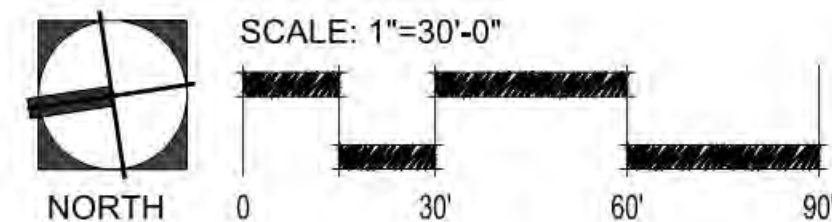
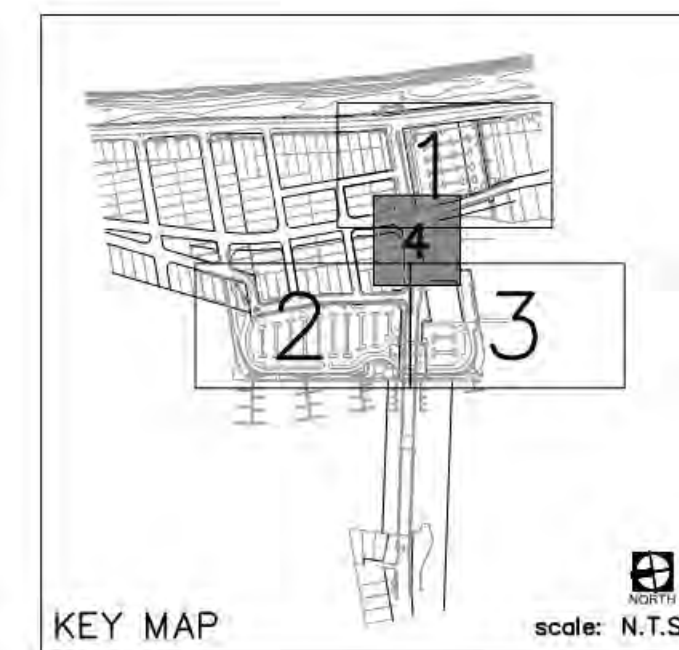
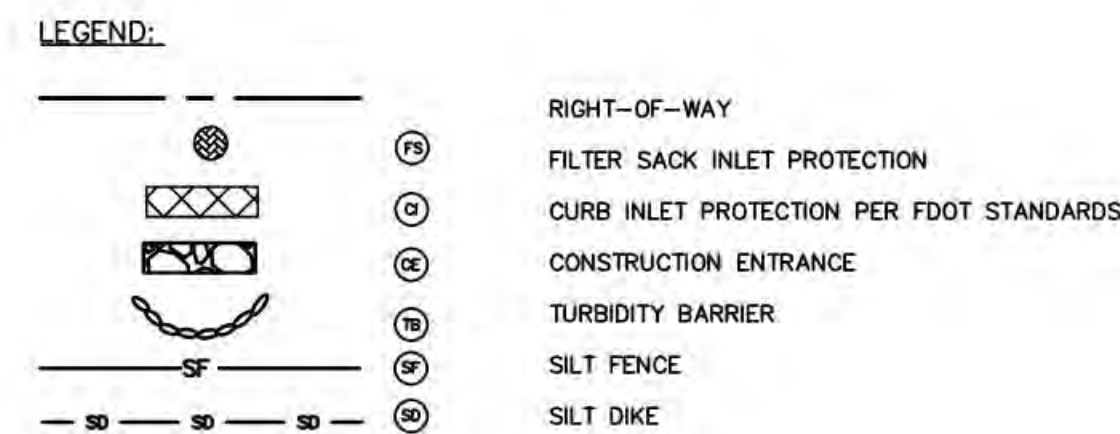
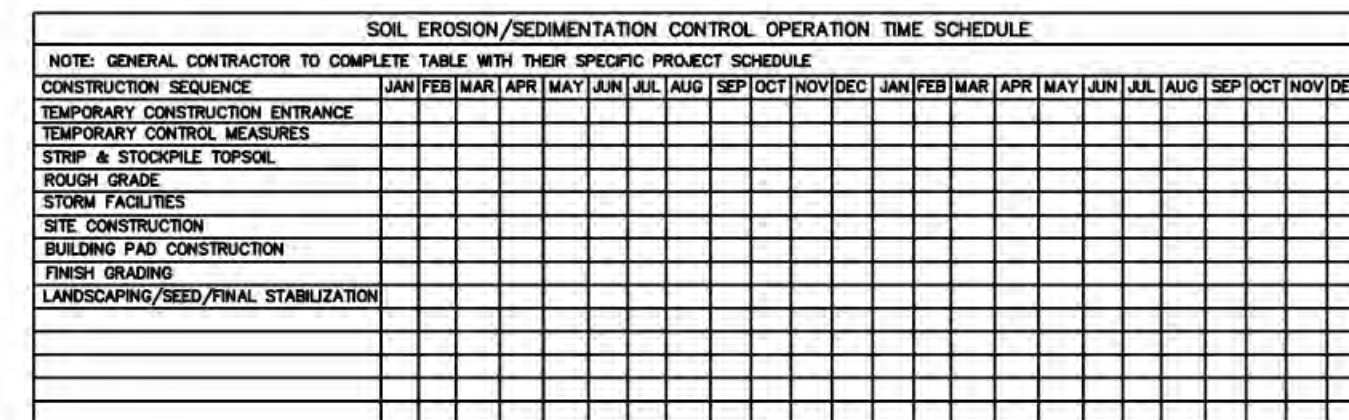
DRAWN BY: JJ
CHECKED BY: JAW
DATE: 03/15/2016
SCALE: AS SHOWN
FIELD BOOK:

JASON A. WEBBER, P.E.
73962

KHA PROJ #: 040814003

Kimley Horn
1512 E. Broward Blvd., Suite 110
Fort Lauderdale, FL 33301
954.524.3330


EDSA, Inc.
1512 E. Broward Blvd., Suite 110
Fort Lauderdale, FL 33301
954.524.3330



60% CD SUBMITTAL

PROJECT # P11900
LAS OLAS CORRIDOR IMPROVEMENTS
FORT LAUDERDALE, FL
EROSION CONTROL PLAN

SHEET NO. C3-1.04	X OF XX
DRAWING FILE 11900-MULTI-EROS	

[illegible]

CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING & ARCHITECTURE
100 North Andrews Avenue, Fort Lauderdale, Florida 33301

DRAWN BY: JJ	DATE: 03/15/2016
DESIGNED BY: JJ	SCALE: AS SHOWN
CHECKED BY: JAW	
FIELD BOOK:	

JASON A. WEBBER, P.E.
73962

KHA PROJ #: 04081400

Kimley»»Horn
1690 S CONGRESS AVE, SUITE 100,
DELRAY BEACH, FL 33445
PHONE: 561-330-2345 FAX: 561-330-2245
WWW.KIMLEY-HORN.COM CA 00000595
© 2015 KIMLEY-HORN AND ASSOCIATES, INC.

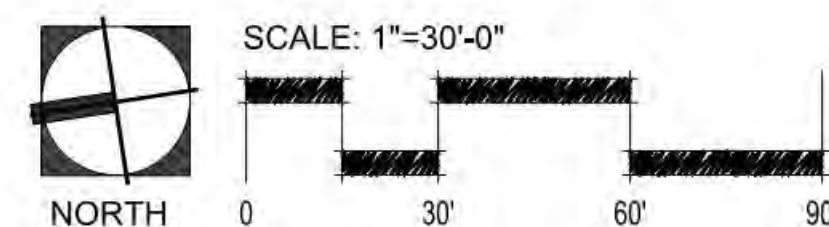
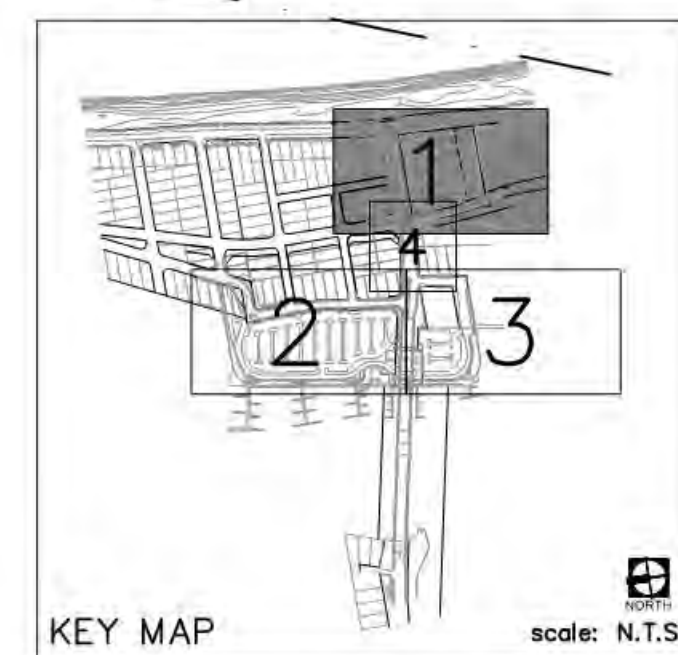
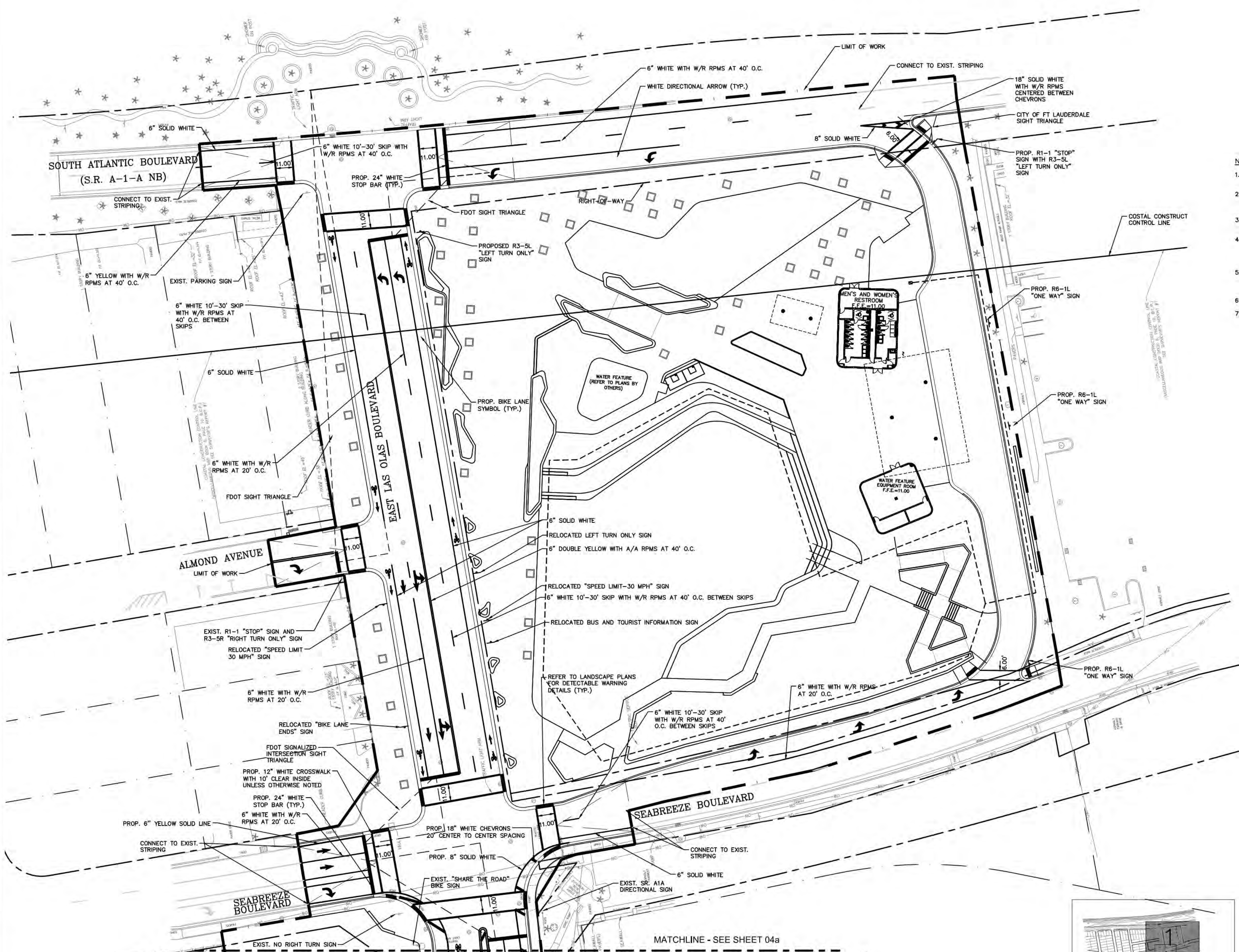
EDSA, Inc.
1512 E. Broward Blvd, Suite
Fort Lauderdale, FL 33301
954.524.3330



FTL CITY OF FORT LAUDERDALE
STANDARD DETAIL

KHA KIMLEY-HORN AND ASSOCIATES DETAIL

NOTE: DETAILS ARE INCLUDED FROM THE ENTITIES LISTED ABOVE AND ARE PROVIDED FOR INFORMATIONAL PURPOSES ONLY. CONTRACTOR SHALL OBTAIN AND CONFORM WITH THE LATEST STANDARDS AND DETAILS.




60% CD SUBMITTAL

PROJECT # P11900
LAS OLAS CORRIDOR IMPROVEMENTS
FORT LAUDERDALE, FL
SIGNING AND PAVEMENT MARKING
PLANS

SHEET NO. C4-1.01	X OF XX
DRAWING FILE	

REVISIONS				
NO.	DATE	BY	CHK'D	DESCRIPTION
1	1/8/2016	JJ	JAW	DRC REVISION - 1

**CITY OF FORT LAUDERDALE**
PUBLIC WORKS DEPARTMENT
ENGINEERING & ARCHITECTURE
100 North Andrews Avenue, Fort Lauderdale, Florida 33301

SEAL:	
JASON A. WEBBER, P.E. 73962	
KHA PROJ #: 04081400	
DATE: 03/15/2016	SCALE: AS SHOWN
DRAWN BY: JJ	CHECKED BY: JAW
FIELD BOOK:	

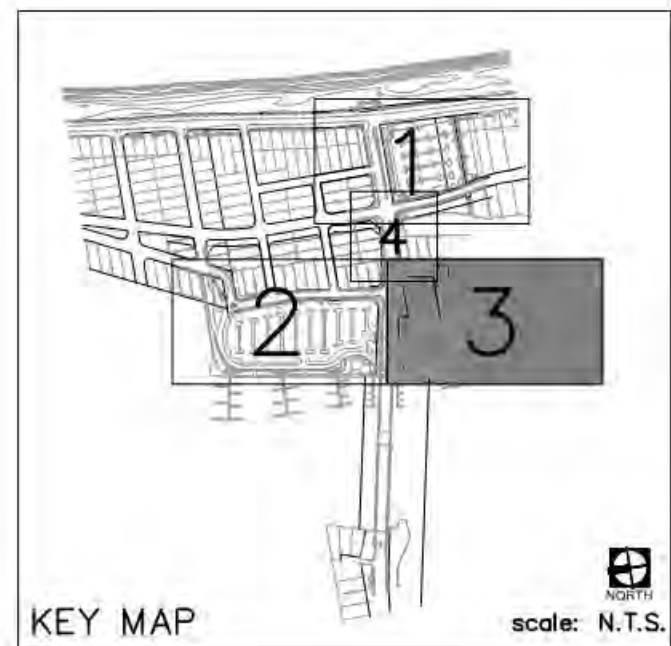
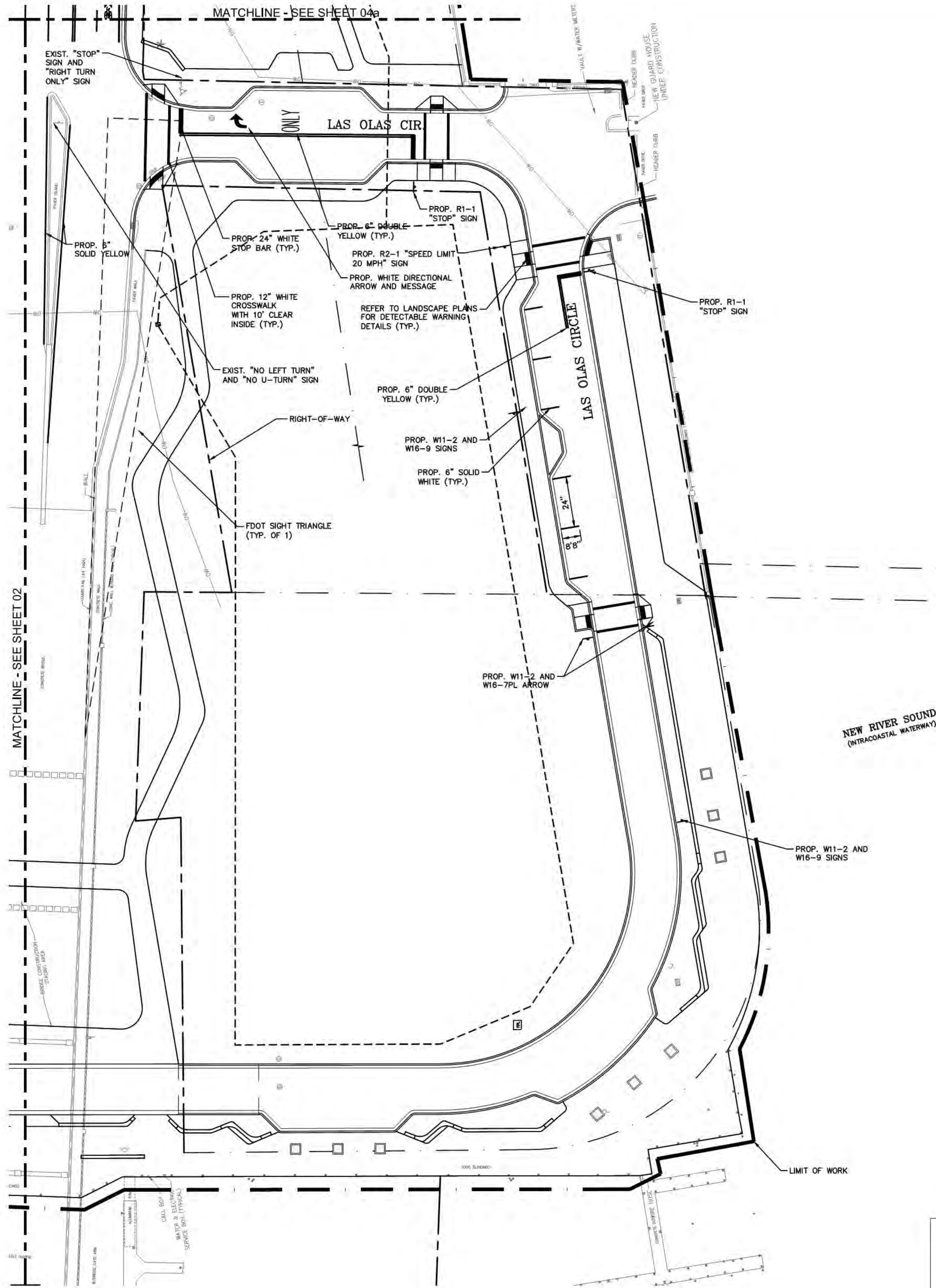
EDSA, Inc.
1512 E. Broward Blvd, Suite
Fort Lauderdale, FL 33301
954.524.3330

EDSA

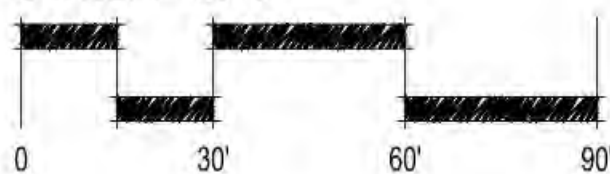
Kimley»Horn

1690 S CONGRESS AVE, SUITE 100,
DELRAY BEACH, FL 33448
PHONE: 561-330-2245 FAX: 561-230-0245
WWW.KIMLEY-HORN.COM CA 0000696

© 2015 KIMLEY-HORN AND ASSOCIATES, INC.



SCALE: 1"=30'-0"



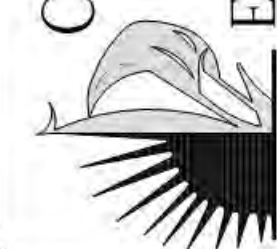
60% CD SUBMITTAL

PROJECT # P11900
LAS OLAS CORRIDOR IMPROVEMENTS
FORT LAUDERDALE, FL
SIGNING AND PAVEMENT MARKING
PLANS

SHEET NO.
C4-1.03
DRAWING FILE

X OF XX

REVISIONS					
NO.	DATE	BY	CHK'D	DESCRIPTION	
1	1/9/2016	JJ	JAW	DRC REVISION - 1	



CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING & ARCHITECTURE
100 North Andrews Avenue, Fort Lauderdale, Florida 33301

DATE:	DESIGNED BY:	SCALE:	AS SHOWN:
03/15/2016	JJ	JJ	JAW

JASON A. WEBBER, P.E.
73962

KHA PROJ #: 040814003

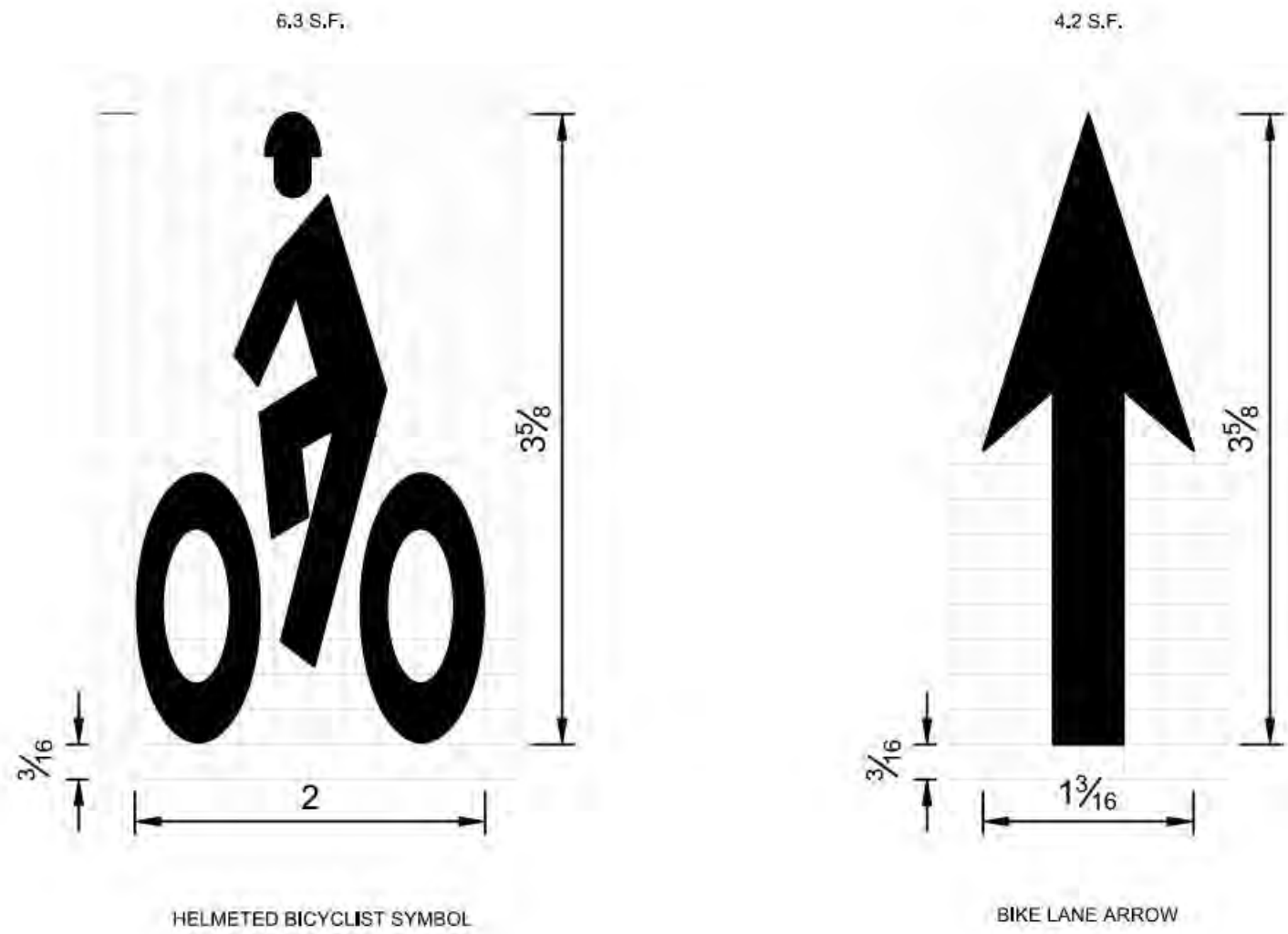
SEAL:



Kimley-Horn
1810 S. CONGRESS AVE., SUITE 100
FORT LAUDERDALE, FL 33301
PHONE: 954.334.3331
WWW.KIMLEY-HORN.COM

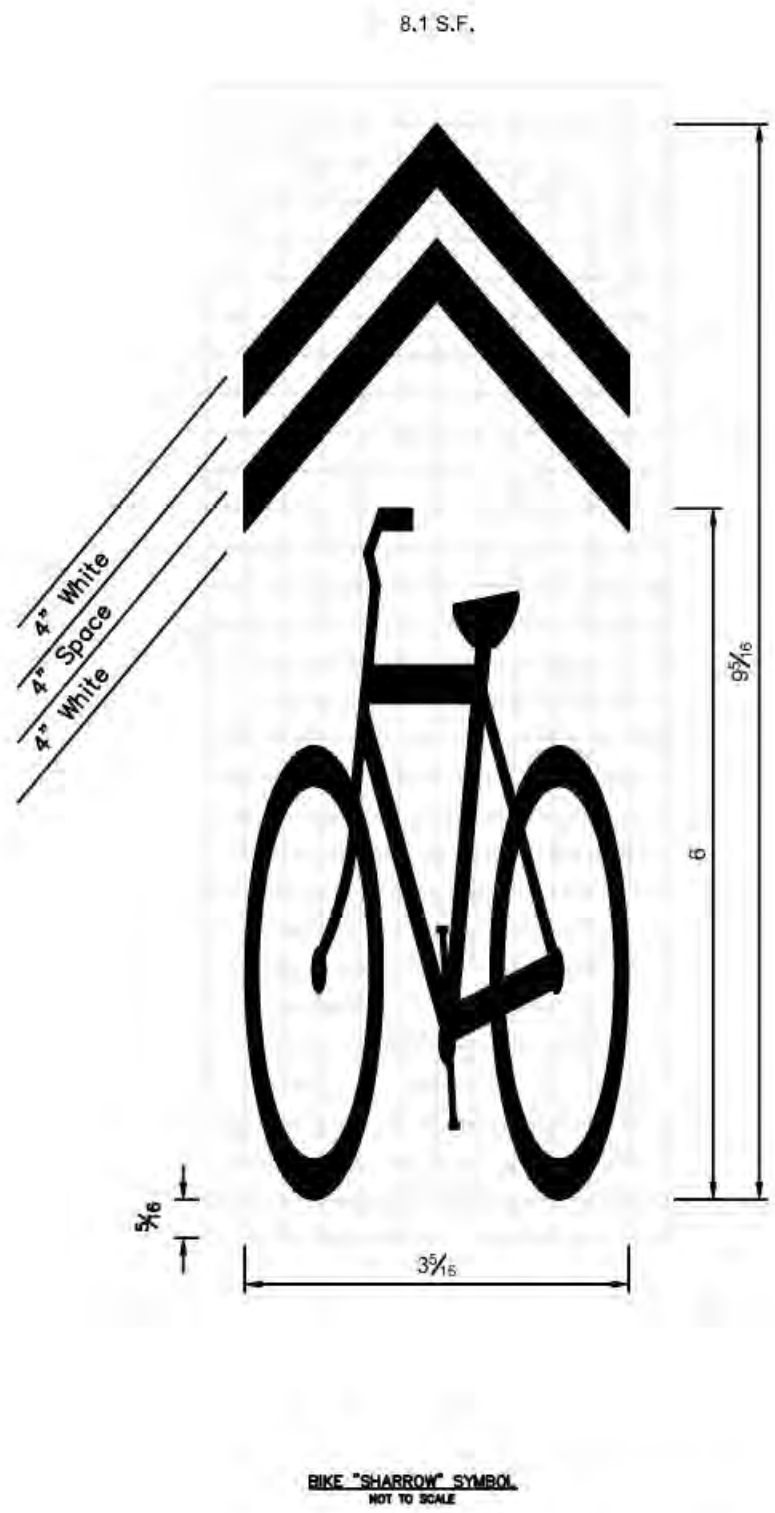


EDSA, Inc.
1512 E. Broward Blvd., Suite 110
Fort Lauderdale, FL 33301
954.524.3330



- NOTES:
1. ALL BICYCLE MARKINGS AND PAVEMENT MESSAGES SHALL BE WHITE.
 2. ALL BICYCLE MARKINGS SHALL BE PREFORMED THERMOPLASTIC.
 3. RECOMMENDED PLACEMENT OF BICYCLE LANE MARKINGS:
 - 3.a. AT THE BEGINNING OF A BICYCLE LANE, ON THE FAR SIDE OF MAJOR INTERSECTIONS, AND PRIOR TO AND WITHIN THE BICYCLE LANE KEYHOLE.
 - 3.b. ALONG THE ROADWAY AS NEEDED TO PROVIDE A MAXIMUM SPACING OF 1,320 FEET FOR POSTED SPEEDS LESS THAN OR EQUAL TO 45 MPH, 2,640 FEET FOR A POSTED SPEED OF 50 MPH OR GREATER.
 4. RECOMMENDED SPACING FOR SHARED LANE MARKING (SLM): IMMEDIATELY AFTER INTERSECTIONS AND AT A MAXIMUM SPACING OF 500 FEET.

FDOT



FDOT



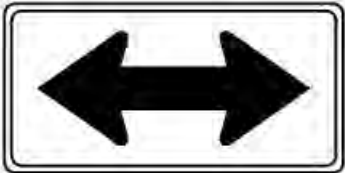
ONE WAY * SIGN R1-1
NOT TO SCALE

FDOT



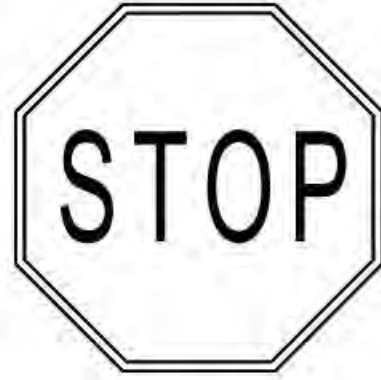
WARNING SIGN - PANEL W16-6P
NOT TO SCALE

FDOT



WARNING SIGN - PANEL W1-2
NOT TO SCALE

FDOT



STOP * SIGN R1-1
NOT TO SCALE

FDOT



LEFT TURN ONLY * SIGN R3-5
NOT TO SCALE

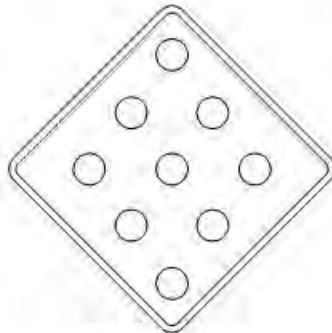
FDOT



- NOTES:
1. BOTH SIGNS SHALL BE IN ACCORDANCE WITH THE LATEST MUTCD EDITION. WARNING SIGNS W11-2 (TOP) AND W16-7PL (BOTTOM) WITH A BLACK LEGEND ON A FLUORESCENT YELLOW-GREEN BACKGROUND.

PEDESTRIAN CROSSING * SIGN W11-2 & W16-7PL
NOT TO SCALE

FDOT



ONE-WAY SIGN PANEL
NOT TO SCALE

FDOT

FDOT	FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD DETAIL
FTL	CITY OF FORT LAUDERDALE STANDARD DETAIL
KHA	KIMLEY-HORN AND ASSOCIATES DETAIL

NOTE: DETAILS ARE INCLUDED FROM THE ENTITIES LISTED ABOVE AND ARE PROVIDED FOR INFORMATIONAL PURPOSES ONLY. CONTRACTOR SHALL OBTAIN AND CONFORM WITH THE LATEST STANDARDS AND DETAILS.

EDSA, Inc.
1512 E. Broward Blvd, Suite 110
Fort Lauderdale, FL 33301
954.534.3330

Kimley»Horn
1810 S. CONGRESS AVE, SUITE 100
DELMAR, DELAWARE 19706
PHONE: 302.446.2424 FAX: 302.446.2425
WWW.KIMLEY-HORN.COM CA 00000000
© 2015 KIMLEY-HORN AND ASSOCIATES, INC.

SEAL:
JASON A. WEBBER, P.E.
73962

KHA PROJ #: 040814003

DRAWN BY: JJ	DESIGNED BY: JJ	CHECKED BY: JAW	DATE: 03/15/2016	SCALE: AS SHOWN	FIELD BOOK:
-----------------	--------------------	--------------------	---------------------	--------------------	-------------

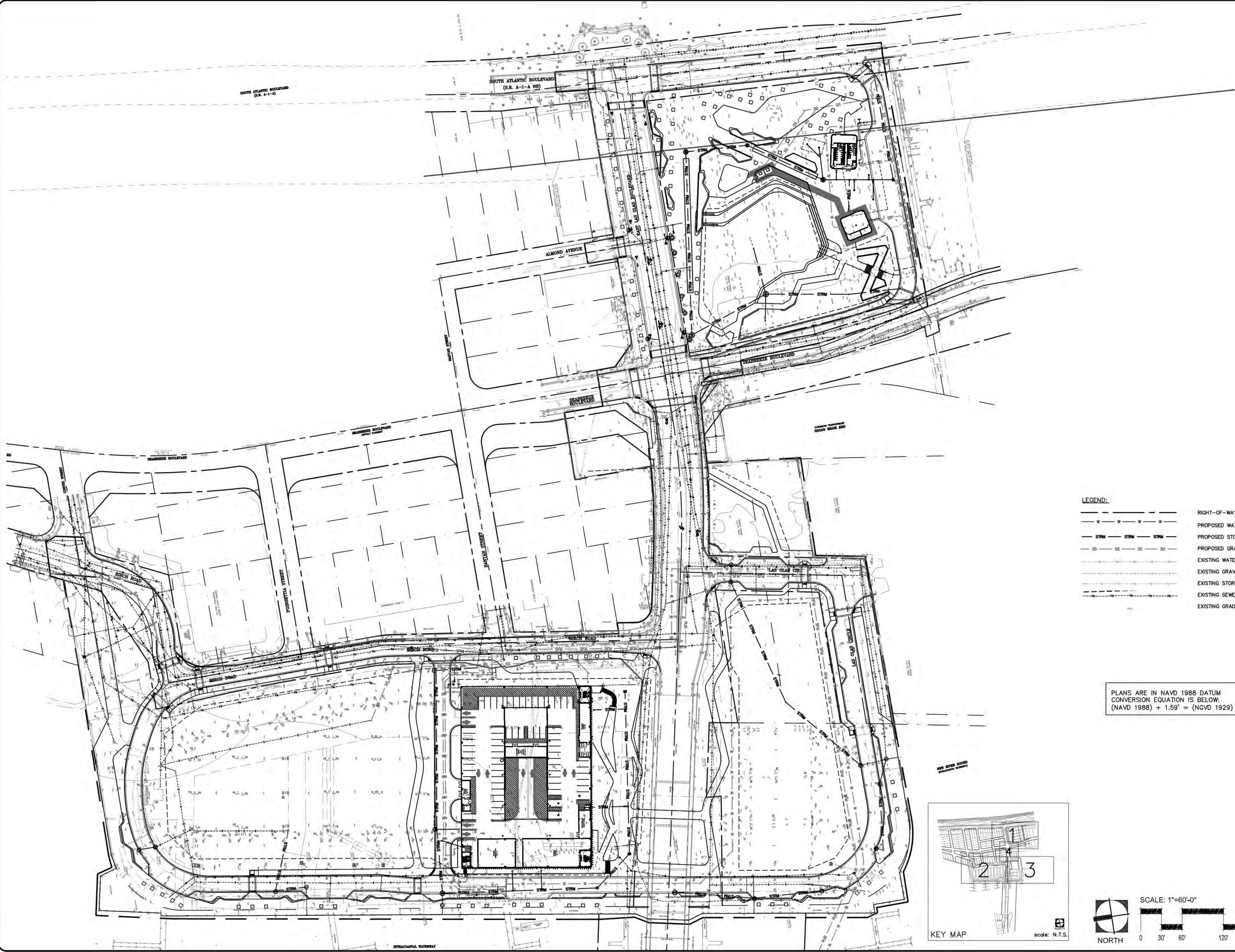
CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING & ARCHITECTURE
100 North Andrews Avenue, Fort Lauderdale, Florida 33301

NO.	DATE	BY	CHK'D	DESCRIPTION

PROJECT # P11900
LAS OLAS CORRIDOR IMPROVEMENTS
FORT LAUDERDALE, FL
CONSTRUCTION DETAILS

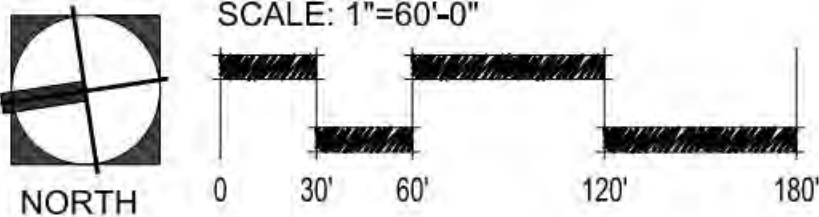
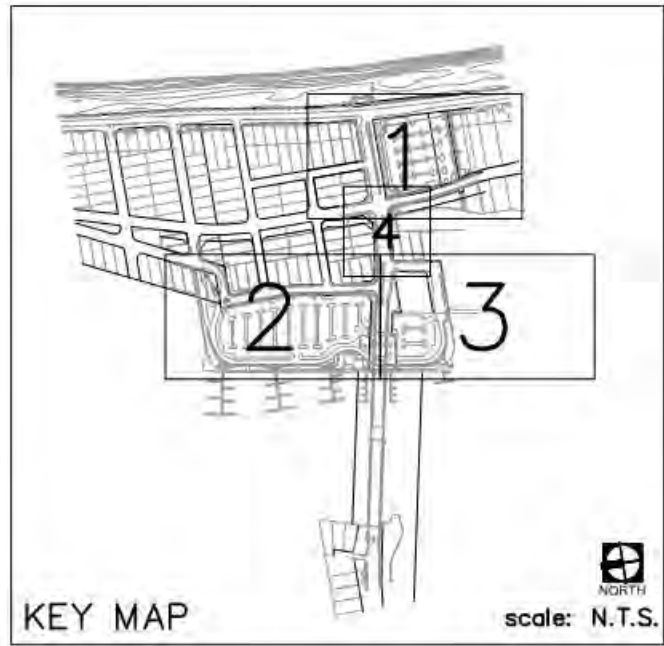
SHEET NO.
C4-4.01
DRAWING FILE
11900-C404-CDET

X OF
XX



- LEGEND:
- RIGHT-OF-WAY LINE
 - PROPOSED WATER MAIN
 - PROPOSED STORM PIPE
 - PROPOSED GRAVITY SEWER MAIN
 - EXISTING WATER MAIN
 - EXISTING GRAVITY SEWER MAIN
 - EXISTING STORM PIPE
 - EXISTING SEWER FORCE MAIN
 - EXISTING GRADE

PLANS ARE IN NAVD 1988 DATUM
CONVERSION EQUATION IS BELOW:
(NAVD 1988) + 1.59' = (NGVD 1929)



60% CD SUBMITTAL

PROJECT # P11900
LAS OLAS CORRIDOR IMPROVEMENTS
FORT LAUDERDALE, FL
OVERALL PAVING, GRADING, AND
DRAINAGE PLAN

SHEET NO.
C5-1.00 X OF XX
DRAWING FILE
11900-MULTI-PGDR

REVISIONS			
NO.	DATE	BY	DESCRIPTION
1	1/8/2016	JJ	DRC REVISION - 1

CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING & ARCHITECTURE
100 North Andrews Avenue, Fort Lauderdale, Florida 33301

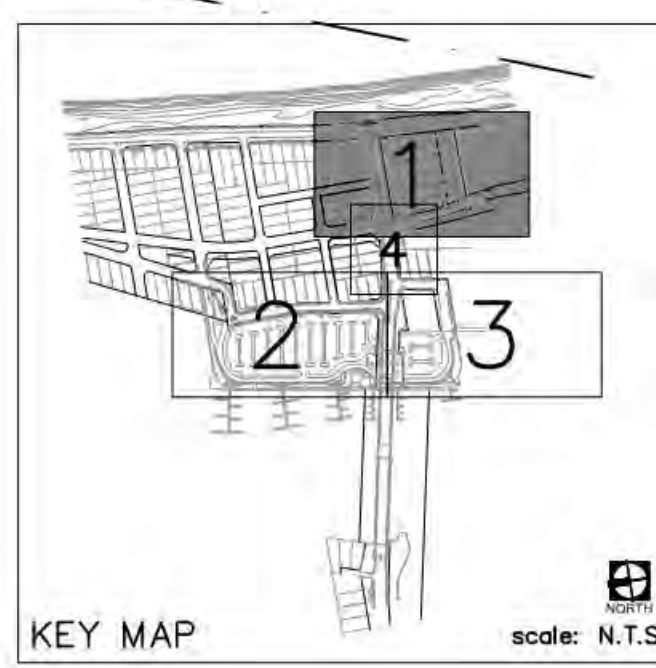
DATE: 03/15/2016
DRAWN BY: JJ
DESIGNED BY: JJ
CHECKED BY: JAW
FIELD BOOK:

JASON A. WEBBER, P.E.
73962

KHA PROJ # 040814003

Kimley Horn
1810 S. CONGRESS AVE. SUITE 100
DELMAR BEACH, FL 33426
PHONE: 813-424-2424 FAX: 813-424-2424
WWW.KIMLEY-HORN.COM CA 000008
© 2015 KIMLEY-HORN AND ASSOCIATES, INC.

EDSA, Inc.
1512 E. BOWARD BLVD. SUITE 110
FORT LAUDERDALE, FL 33301
954.524.3330

[illegible]

RIGHT-OF-WAY LINE

PROPOSED WATER MAIN

PROPOSED STORM PIPE

PROPOSED GRAVITY SEWER MAIN

EXISTING WATER MAIN

EXISTING GRAVITY SEWER MAIN

EXISTING STORM PIPE

EXISTING SEWER FORCE MAIN

FLOW ARROW

PROPOSED GRADE

MATCH EXISTING GRADE

EXISTING GRADE

MECHANICAL PIPING
(REFER TO SHEET X101)

LIMITS OF MILLING AND RESURFACING
FOR CONNECTION OF SANITARY SEWER.
SEE DETAIL ON SHEET C5-4.01.

1. DRAINAGE STRUCTURES SHALL BE CONSTRUCTED USING U.S. PRECAST (USP), U.S. FOUNDRY (USF), OR FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD (FDOT) PRODUCTS AS SPECIFIED, OR APPROVED EQUAL.
2. ALL STORM STRUCTURES SHALL HAVE A MINIMUM 12" SUMP.
3. ALL STORM PIPE SHALL BE REINFORCED CONCRETE PIPE (RCP) WITHIN FDOT ROAD.
4. ALL STORM PIPE SHALL BE REINFORCED CONCRETE PIPE (RCP) OR HIGH DENSITY POLY-ETHYLENE (HDPE) PIPE.
5. ALL PIPE LENGTHS ARE MEASURED FROM CENTER OF STRUCTURES UNLESS OTHERWISE NOTED.
6. CONTRACTOR SHALL PROVIDE ALL FITTINGS, COUPLINGS, OR ADAPTERS NECESSARY TO CONNECT TO THE BUILDING PLUMBING AND TO CONNECT ROOF LEADERS TO THE MAIN STORM LINES. ALL ROOF LEADERS SHALL BE AT 1% MIN. SLOPE UNLESS OTHERWISE NOTED. COORDINATE BUILDING ENTRIES WITH PLUMBING PLANS.
7. THE CROSS SLOPE ON ADA ACCESSIBLE ROUTES SHALL NOT EXCEED 2.0% THE LONGITUDINAL SLOPE ON ADA ACCESSIBLE ROUTES (NOT INCLUDING RAMPS) SHALL NOT EXCEED 5.0% THE LONGITUDINAL SLOPE FOR RAMPS SHALL NOT EXCEED 1%:12H (8.3%). ACCESSIBLE PARKING SPACES SHALL NOT EXCEED 2.0% IN ANY DIRECTION (INCLUDING DIAGONAL).
8. CONTRACTOR SHALL CLEAN ALL PROPOSED AND EXISTING IMPACTED DOWNSTREAM/DRAINAGE STRUCTURES AND PIPES UPON COMPLETION OF CONSTRUCTION.
9. REFER TO LANDSCAPE PLANS FOR ALL HARDSCAPE AND PAVING MATERIALS AND PATTERNS.
10. ALL VALLEY INLET RIM ELEVATIONS REFER TO CENTER OF GRATE.
11. ALL TYPE "D" CURB, TYPE "F" CURB AND GUTTER AND DROP CURB SHALL CONFORM WITH FDOT INDEX 300.

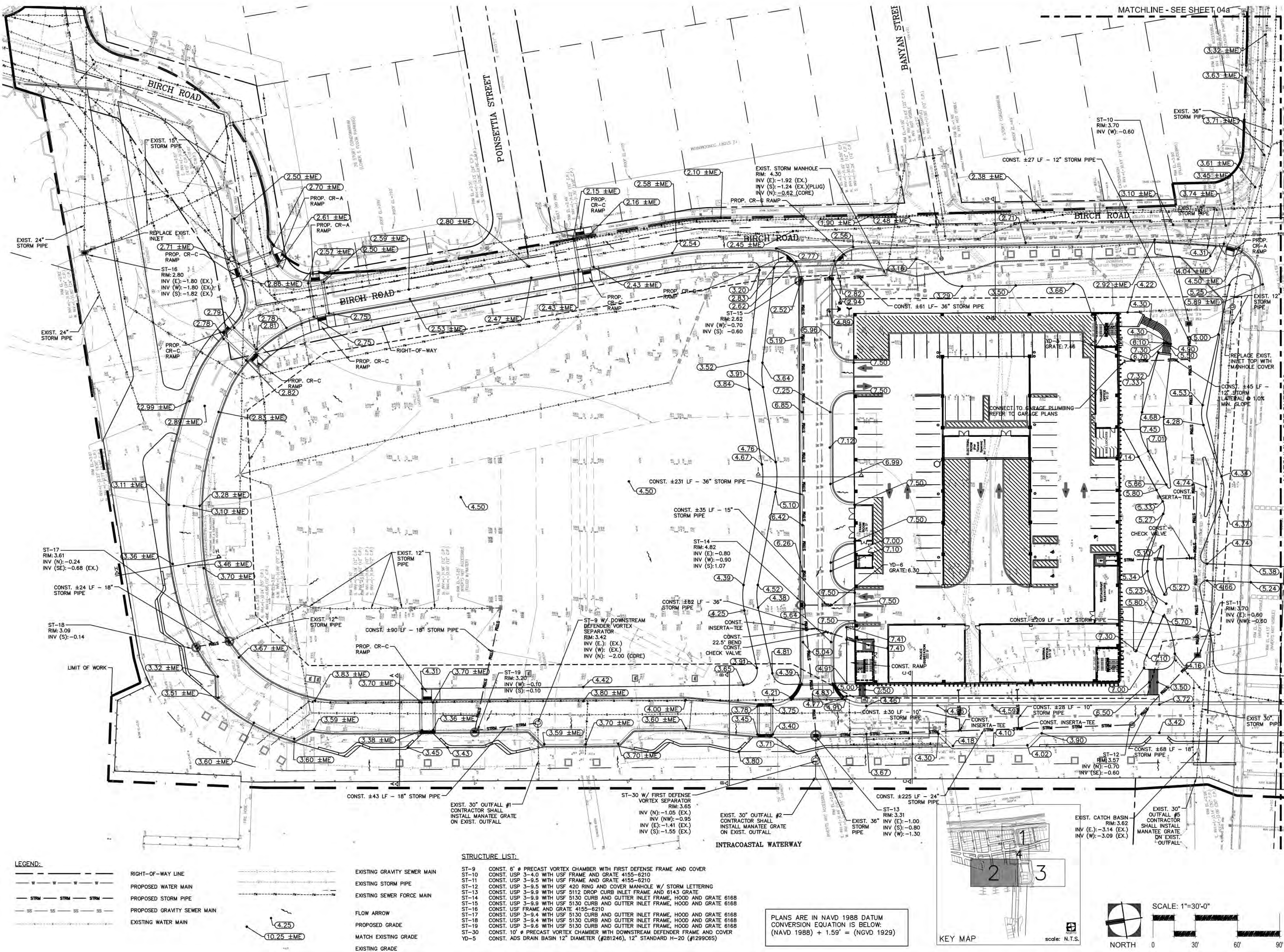
ST-1	CONST.	USP	3-4.0	WITH	USF	FRAME	AND	GRATE	4155-6210
ST-2	CONST.	USP	3-7	WITH	USF	FRAME	AND	GRATE	4123-6179
ST-3	CONST.	USP	3-9.5	WITH	USF	FRAME	AND	GRATE	4123-6179
ST-4	CONST.	USP	3-9.7	WITH	USF	FRAME	AND	GRATE	4123-6179
ST-5	CONST.	USP	3-9.8	WITH	USF	FRAME	AND	GRATE	4123-6179
ST-5A	CONST.	USP	3-9.8	WITH	USF	FRAME	AND	GRATE	4155-6210
ST-5B	CONST.	USP	3-9.4	WITH	USF	5112 DROP	CURB INLET FRAME AND	6143 GRATE	
ST-6	CONST.	USP	3-9.4	WITH	USF	5112 DROP	CURB INLET FRAME AND	6143 GRATE	
ST-7	CONST.	USP	3-9.4	WITH	USF	5112 DROP	CURB INLET FRAME AND	6143 GRATE	
ST-8	CONST.	USP	3-9.4	WITH	USF	5112 DROP	CURB INLET FRAME AND	6143 GRATE	
ST-9	CONST.	DRAIN	BASIN	18"	DIAMETER	(#281246),	12"	STANDARD H-20 (#1299C)	
YD-2	CONST.	ADS	DRAIN	BASIN	18"	DIAMETER	(#281246),	18"	STANDARD H-20 (#1299C)
YD-4	CONST.	ADS	DRAIN	BASIN	18"	DIAMETER	(#281246),	12"	STANDARD H-20 (#1299C)

PLANS ARE IN NAVD 1988 DATUM
CONVERSION EQUATION IS BELOW:
(NAVD 1988) + 1.59' = (NGVD 1929)

60% CD SUBMITTAL

PROJECT # P11900
LAS OLAS CORRIDOR IMPROVEMENTS
FORT LAUDERDALE, FL

SHEET NO. C5-1.01	X OF XX
DRAWING FILE 11900-MULTI-PGDR	



EDSA, Inc.
1512 E. Broward Blvd. Suite 110
Fort Lauderdale, FL 33301
954.524.3330

Kimley-Horn
Kimley-Horn and Associates, Inc.
100 North Andrews Avenue, Fort Lauderdale, Florida 33301
954.524.3330

REAL:

JASON A. WEBBER, P.E.
73962

KHA PROJ # 040814003

DRAWN BY: JJ
DATE: 03/15/2016
REVISIONS BY: JJ
SCALE: AS SHOWN
CHECKED BY: JAW
FIELD BOOK:

CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING & ARCHITECTURE
100 North Andrews Avenue, Fort Lauderdale, Florida 33301

NO.	DATE	BY	CHKD	DESCRIPTION
1	1/19/2016	JJ	JAW	DRG REVISION - 1

PROJECT # P11900
LAS OLAS CORRIDOR IMPROVEMENTS
FORT LAUDERDALE, FL

PAVING, GRADING, AND DRAINAGE PLAN

SHEET NO.
C5-1.02

DRAWING FILE
11900-MULTI-PGDR

X OF XX

60% CD SUBMITTAL

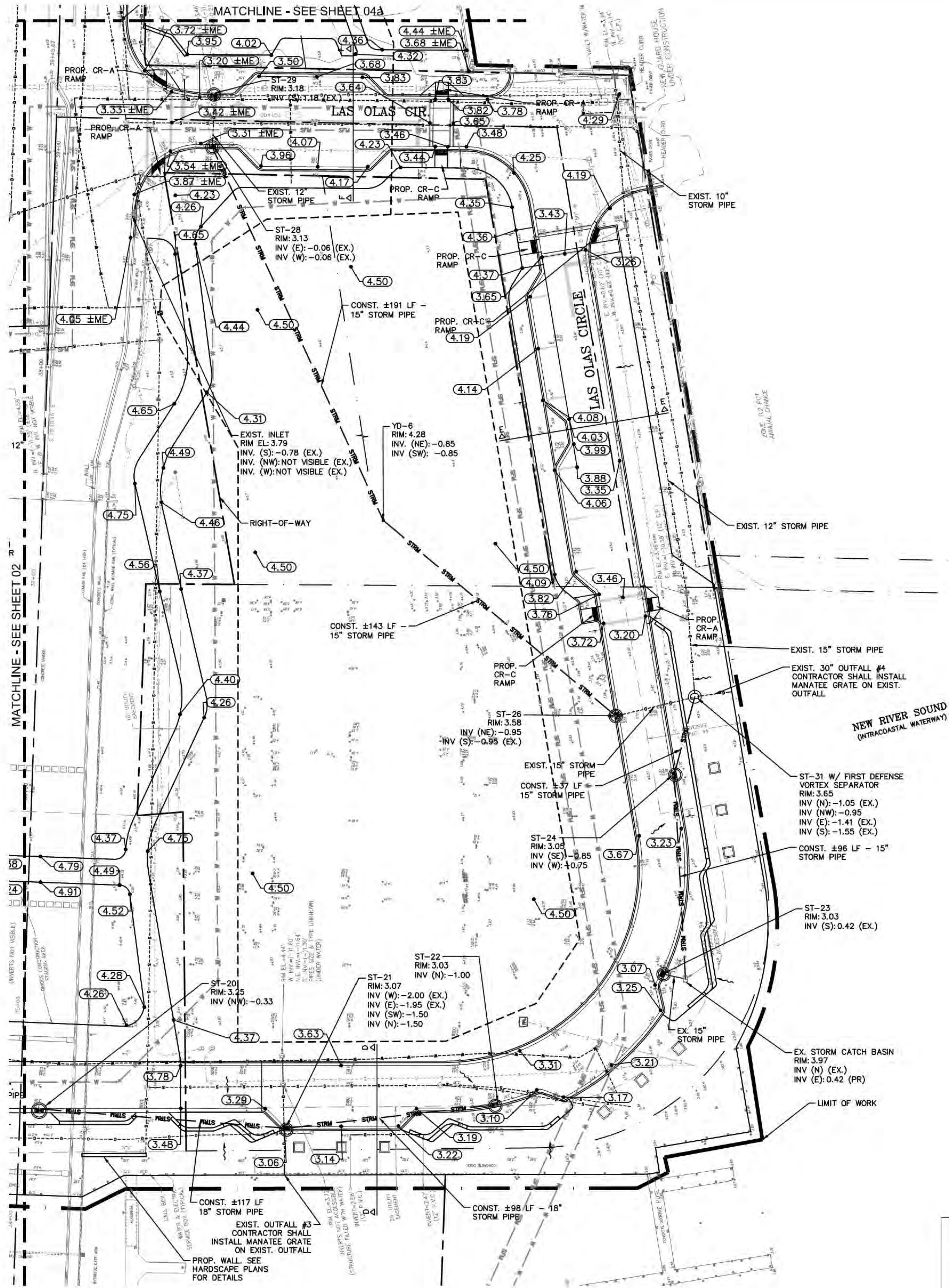
PLANES ARE IN NAVD 1988 DATUM
CONVERSION EQUATION IS BELOW:
(NAVD 1988) + 1.59' = (NGVD 1929)

KEY MAP

scale: N.T.S.

NORTH

0 30' 60' 90'



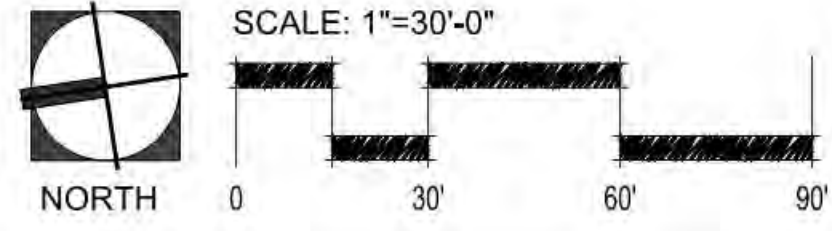
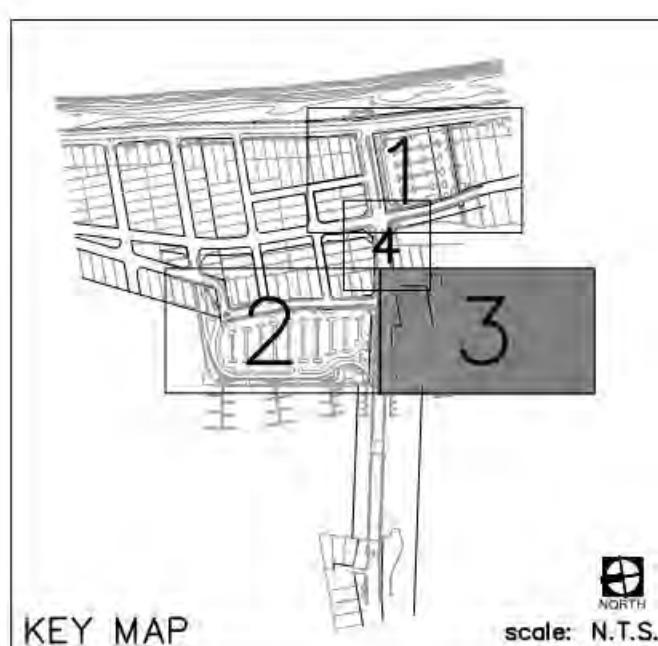
LEGEND:

- RIGHT-OF-WAY LINE
- PROPOSED WATER MAIN
- PROPOSED STORM PIPE
- PROPOSED GRAVITY SEWER MAIN
- EXISTING WATER MAIN
- EXISTING GRAVITY SEWER MAIN
- EXISTING STORM PIPE
- EXISTING SEWER FORCE MAIN
- FLOW ARROW
- PROPOSED GRADE
- MATCH EXISTING GRADE
- EXISTING GRADE

STRUCTURE LIST:

ST-20 CONST. USP 3-9.4 WITH USF 5112 DROP CURB INLET FRAME AND 6143 GRATE
ST-21 CONST. USP 3-9.6 WITH USF 5130 CURB AND GUTTER INLET FRAME, HOOD AND GRATE 6168
ST-22 CONST. USP 3-9.4 WITH USF 5130 CURB AND GUTTER INLET FRAME, HOOD AND GRATE 6168
ST-23 CONST. USP 3-9.4 WITH USF 5130 CURB AND GUTTER INLET FRAME, HOOD AND GRATE 6168
ST-24 CONST. USP 3-9.4 WITH USF 5130 CURB AND GUTTER INLET FRAME, HOOD AND GRATE 6168
ST-26 CONST. USP 3-9.4 WITH USF 5130 CURB AND GUTTER INLET FRAME, HOOD AND GRATE 6168
ST-28 CONST. USP 3-9.4 WITH USF 5130 CURB AND GUTTER INLET FRAME, HOOD AND GRATE 6168
ST-29 CONST. USP 3-9.4 WITH USF 5130 CURB AND GUTTER INLET FRAME, HOOD AND GRATE 6168
ST-31 CONST. 6" PRECAST VORTEX CHAMBER WITH FIRST DEFENSE FRAME AND COVER
ST-32 CONST. ADS DRAIN BASIN 18" DIAMETER (#281246), 12" STANDARD H-20 (#1299C65)
ST-33 CONST. USP 3-9.4 WITH USF 5130 CURB AND GUTTER INLET FRAME, HOOD AND GRATE 6168
ST-34 CONST. USP 3-9.4 WITH USF 5130 CURB AND GUTTER INLET FRAME, HOOD AND GRATE 6168
ST-35 CONST. USP 3-9.4 WITH USF 5130 CURB AND GUTTER INLET FRAME, HOOD AND GRATE 6168
ST-36 CONST. USP 3-9.4 WITH USF 5130 CURB AND GUTTER INLET FRAME, HOOD AND GRATE 6168
ST-37 CONST. USP 3-9.4 WITH USF 5130 CURB AND GUTTER INLET FRAME, HOOD AND GRATE 6168
ST-38 CONST. USP 3-9.4 WITH USF 5130 CURB AND GUTTER INLET FRAME, HOOD AND GRATE 6168
ST-39 CONST. USP 3-9.4 WITH USF 5130 CURB AND GUTTER INLET FRAME, HOOD AND GRATE 6168
ST-40 CONST. USP 3-9.4 WITH USF 5130 CURB AND GUTTER INLET FRAME, HOOD AND GRATE 6168
ST-41 CONST. USP 3-9.4 WITH USF 5130 CURB AND GUTTER INLET FRAME, HOOD AND GRATE 6168
ST-42 CONST. USP 3-9.4 WITH USF 5130 CURB AND GUTTER INLET FRAME, HOOD AND GRATE 6168
ST-43 CONST. USP 3-9.4 WITH USF 5130 CURB AND GUTTER INLET FRAME, HOOD AND GRATE 6168
ST-44 CONST. USP 3-9.4 WITH USF 5130 CURB AND GUTTER INLET FRAME, HOOD AND GRATE 6168
ST-45 CONST. USP 3-9.4 WITH USF 5130 CURB AND GUTTER INLET FRAME, HOOD AND GRATE 6168
ST-46 CONST. USP 3-9.4 WITH USF 5130 CURB AND GUTTER INLET FRAME, HOOD AND GRATE 6168
ST-47 CONST. USP 3-9.4 WITH USF 5130 CURB AND GUTTER INLET FRAME, HOOD AND GRATE 6168
ST-48 CONST. USP 3-9.4 WITH USF 5130 CURB AND GUTTER INLET FRAME, HOOD AND GRATE 6168
ST-49 CONST. USP 3-9.4 WITH USF 5130 CURB AND GUTTER INLET FRAME, HOOD AND GRATE 6168
ST-50 CONST. USP 3-9.4 WITH USF 5130 CURB AND GUTTER INLET FRAME, HOOD AND GRATE 6168
ST-51 CONST. USP 3-9.4 WITH USF 5130 CURB AND GUTTER INLET FRAME, HOOD AND GRATE 6168
ST-52 CONST. USP 3-9.4 WITH USF 5130 CURB AND GUTTER INLET FRAME, HOOD AND GRATE 6168
ST-53 CONST. USP 3-9.4 WITH USF 5130 CURB AND GUTTER INLET FRAME, HOOD AND GRATE 6168
ST-54 CONST. USP 3-9.4 WITH USF 5130 CURB AND GUTTER INLET FRAME, HOOD AND GRATE 6168
ST-55 CONST. USP 3-9.4 WITH USF 5130 CURB AND GUTTER INLET FRAME, HOOD AND GRATE 6168
ST-56 CONST. USP 3-9.4 WITH USF 5130 CURB AND GUTTER INLET FRAME, HOOD AND GRATE 6168
ST-57 CONST. USP 3-9.4 WITH USF 5130 CURB AND GUTTER INLET FRAME, HOOD AND GRATE 6168
ST-58 CONST. USP 3-9.4 WITH USF 5130 CURB AND GUTTER INLET FRAME, HOOD AND GRATE 6168
ST-59 CONST. USP 3-9.4 WITH USF 5130 CURB AND GUTTER INLET FRAME, HOOD AND GRATE 6168
ST-60 CONST. USP 3-9.4 WITH USF 5130 CURB AND GUTTER INLET FRAME, HOOD AND GRATE 6168
ST-61 CONST. USP 3-9.4 WITH USF 5130 CURB AND GUTTER INLET FRAME, HOOD AND GRATE 6168
ST-62 CONST. USP 3-9.4 WITH USF 5130 CURB AND GUTTER INLET FRAME, HOOD AND GRATE 6168
ST-63 CONST. USP 3-9.4 WITH USF 5130 CURB AND GUTTER INLET FRAME, HOOD AND GRATE 6168
ST-64 CONST. USP 3-9.4 WITH USF 5130 CURB AND GUTTER INLET FRAME, HOOD AND GRATE 6168
ST-65 CONST. USP 3-9.4 WITH USF 5130 CURB AND GUTTER INLET FRAME, HOOD AND GRATE 6168
ST-66 CONST. USP 3-9.4 WITH USF 5130 CURB AND GUTTER INLET FRAME, HOOD AND GRATE 6168
ST-67 CONST. USP 3-9.4 WITH USF 5130 CURB AND GUTTER INLET FRAME, HOOD AND GRATE 6168
ST-68 CONST. USP 3-9.4 WITH USF 5130 CURB AND GUTTER INLET FRAME, HOOD AND GRATE 6168
ST-69 CONST. USP 3-9.4 WITH USF 5130 CURB AND GUTTER INLET FRAME, HOOD AND GRATE 6168
ST-70 CONST. USP 3-9.4 WITH USF 5130 CURB AND GUTTER INLET FRAME, HOOD AND GRATE 6168
ST-71 CONST. USP 3-9.4 WITH USF 5130 CURB AND GUTTER INLET FRAME, HOOD AND GRATE 6168
ST-72 CONST. USP 3-9.4 WITH USF 5130 CURB AND GUTTER INLET FRAME, HOOD AND GRATE 6168
ST-73 CONST. USP 3-9.4 WITH USF 5130 CURB AND GUTTER INLET FRAME, HOOD AND GRATE 6168
ST-74 CONST. USP 3-9.4 WITH USF 5130 CURB AND GUTTER INLET FRAME, HOOD AND GRATE 6168
ST-75 CONST. USP 3-9.4 WITH USF 5130 CURB AND GUTTER INLET FRAME, HOOD AND GRATE 6168
ST-76 CONST. USP 3-9.4 WITH USF 5130 CURB AND GUTTER INLET FRAME, HOOD AND GRATE 6168
ST-77 CONST. USP 3-9.4 WITH USF 5130 CURB AND GUTTER INLET FRAME, HOOD AND GRATE 6168
ST-78 CONST. USP 3-9.4 WITH USF 5130 CURB AND GUTTER INLET FRAME, HOOD AND GRATE 6168
ST-79 CONST. USP 3-9.4 WITH USF 5130 CURB AND GUTTER INLET FRAME, HOOD AND GRATE 6168
ST-80 CONST. USP 3-9.4 WITH USF 5130 CURB AND GUTTER INLET FRAME, HOOD AND GRATE 6168
ST-81 CONST. USP 3-9.4 WITH USF 5130 CURB AND GUTTER INLET FRAME, HOOD AND GRATE 6168
ST-82 CONST. USP 3-9.4 WITH USF 5130 CURB AND GUTTER INLET FRAME, HOOD AND GRATE 6168
ST-83 CONST. USP 3-9.4 WITH USF 5130 CURB AND GUTTER INLET FRAME, HOOD AND GRATE 6168
ST-84 CONST. USP 3-9.4 WITH USF 5130 CURB AND GUTTER INLET FRAME, HOOD AND GRATE 6168
ST-85 CONST. USP 3-9.4 WITH USF 5130 CURB AND GUTTER INLET FRAME, HOOD AND GRATE 6168
ST-86 CONST. USP 3-9.4 WITH USF 5130 CURB AND GUTTER INLET FRAME, HOOD AND GRATE 6168
ST-87 CONST. USP 3-9.4 WITH USF 5130 CURB AND GUTTER INLET FRAME, HOOD AND GRATE 6168
ST-88 CONST. USP 3-9.4 WITH USF 5130 CURB AND GUTTER INLET FRAME, HOOD AND GRATE 6168
ST-89 CONST. USP 3-9.4 WITH USF 5130 CURB AND GUTTER INLET FRAME, HOOD AND GRATE 6168
ST-90 CONST. USP 3-9.4 WITH USF 5130 CURB AND GUTTER INLET FRAME, HOOD AND GRATE 6168
ST-91 CONST. USP 3-9.4 WITH USF 5130 CURB AND GUTTER INLET FRAME, HOOD AND GRATE 6168
ST-92 CONST. USP 3-9.4 WITH USF 5130 CURB AND GUTTER INLET FRAME, HOOD AND GRATE 6168
ST-93 CONST. USP 3-9.4 WITH USF 5130 CURB AND GUTTER INLET FRAME, HOOD AND GRATE 6168
ST-94 CONST. USP 3-9.4 WITH USF 5130 CURB AND GUTTER INLET FRAME, HOOD AND GRATE 6168
ST-95 CONST. USP 3-9.4 WITH USF 5130 CURB AND GUTTER INLET FRAME, HOOD AND GRATE 6168
ST-96 CONST. USP 3-9.4 WITH USF 5130 CURB AND GUTTER INLET FRAME, HOOD AND GRATE 6168
ST-97 CONST. USP 3-9.4 WITH USF 5130 CURB AND GUTTER INLET FRAME, HOOD AND GRATE 6168
ST-98 CONST. USP 3-9.4 WITH USF 5130 CURB AND GUTTER INLET FRAME, HOOD AND GRATE 6168
ST-99 CONST. USP 3-9.4 WITH USF 5130 CURB AND GUTTER INLET FRAME, HOOD AND GRATE 6168
ST-100 CONST. USP 3-9.4 WITH USF 5130 CURB AND GUTTER INLET FRAME, HOOD AND GRATE 6168

PLANS ARE IN NAVD 1988 DATUM
CONVERSION EQUATION IS BELOW:
(NAVD 1988) + 1.59' = (NGVD 1929)



60% CD SUBMITTAL

PROJECT # P11900
LAS OLAS CORRIDOR IMPROVEMENTS
FORT LAUDERDALE, FL
PAVING, GRADING, AND DRAINAGE PLAN

SHEET NO.
C5-1.03
DRAWING FILE
11900-MULTI-PGDR

REVISIONS

NO.	DATE	BY	CHK'D	DESCRIPTION
1	1/9/2016	JJ	JAW	DRC REVISION - 1

X OF XX

CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING & ARCHITECTURE
100 North Andrews Avenue, Fort Lauderdale, Florida 33301

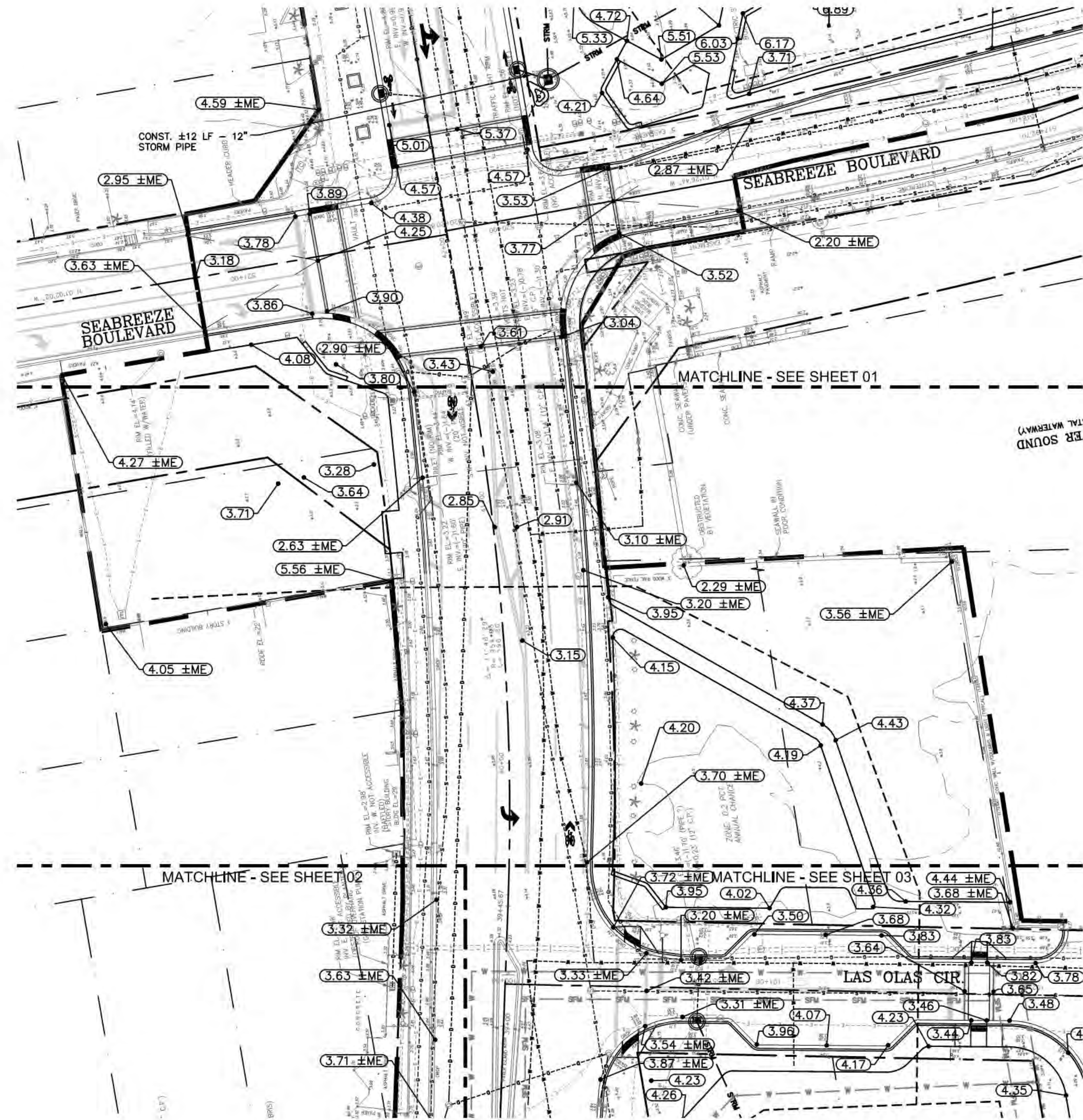
JASON A. WEBBER, P.E.
73962

KHA PROJ # 040814003

DRAWN BY: JJ
CHECKED BY: JJ
DATE: 03/15/2016
SCALE: AS SHOWN
FIELD BOOK:

EDSA, Inc.
1512 E. Broward Blvd. Suite 110
Fort Lauderdale, FL 33301
954.524.3330

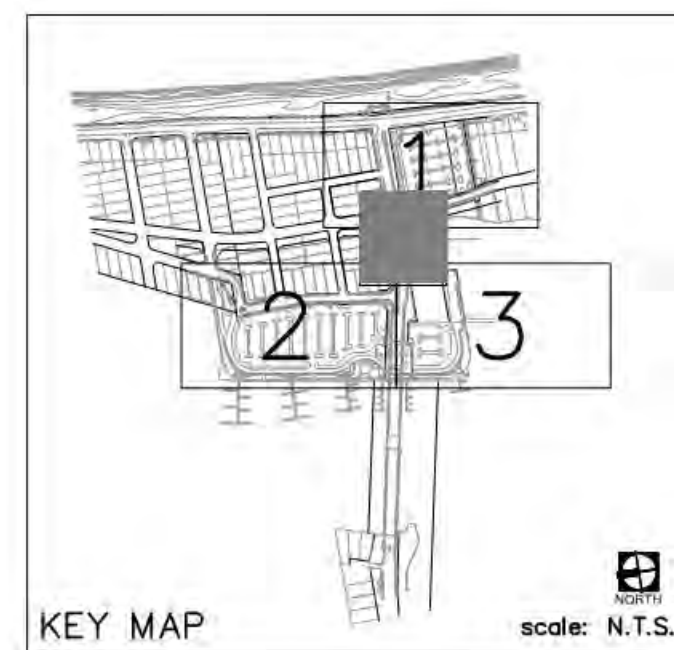
Kimley-Horn
1810 S. UNIVERSITY AVE. SUITE 100
DELMAR, DE 19706
PHONE: 302.438.2424 FAX: 302.438.2425
WWW.KIMLEY-HORN.COM CA 00000000
© 2015 KIMLEY-HORN AND ASSOCIATES, INC.



LEGEND:

- | | |
|--|-----------------------------|
| | RIGHT-OF-WAY LINE |
| | PROPOSED WATER MAIN |
| | PROPOSED STORM PIPE |
| | PROPOSED GRAVITY SEWER MAIN |
| | EXISTING WATER MAIN |
| | EXISTING GRAVITY SEWER MAIN |
| | EXISTING STORM PIPE |
| | EXISTING SEWER FORCE MAIN |
| | FLOW ARROW |
| | PROPOSED GRADE |
| | MATCH EXISTING GRADE |
| | EXISTING GRADE |

PLANS ARE IN NAVD 1988 DATUM
CONVERSION EQUATION IS BELOW:
(NAVD 1988) + 1.59' = (NGVD 1929)



SCALE: 1"=30'-0"



60% CD SUBMITTAL

PROJECT # P11900
LAS OLAS CORRIDOR IMPROVEMENTS
FORT LAUDERDALE, FL

PAVING GRADING AND DRAINAGE PLAN

SHEET NO.
C5-1.04

X OF XX

DRAWING FILE
11900-MULTI-PGDR

REVISIONS

NO.	DATE	BY	CHK'D	DESCRIPTION
1	1/9/2016	JJ	JAW	DRC REVISION - 1

CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING & ARCHITECTURE

100 North Andrews Avenue, Fort Lauderdale, Florida 33301

SEAL:

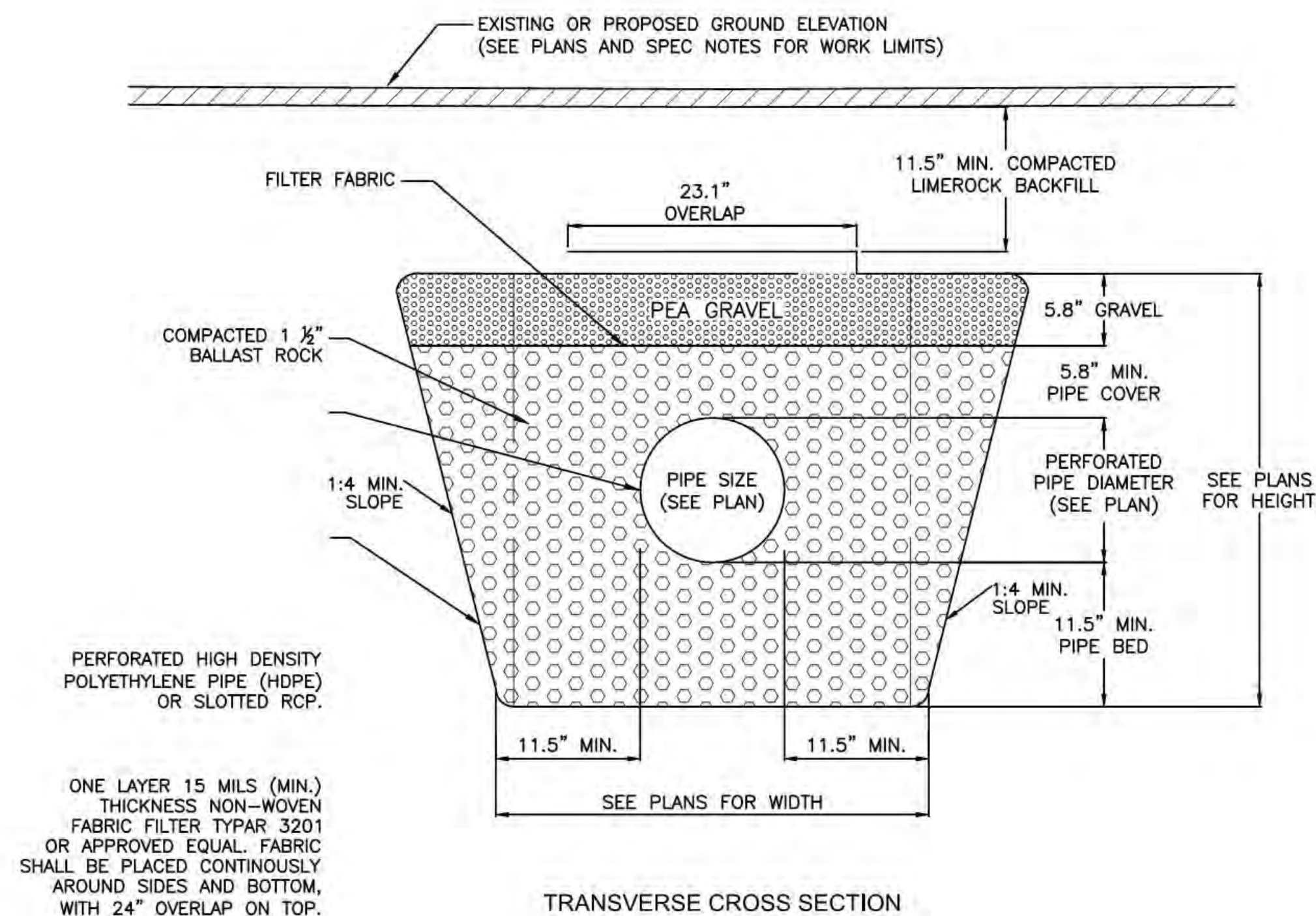
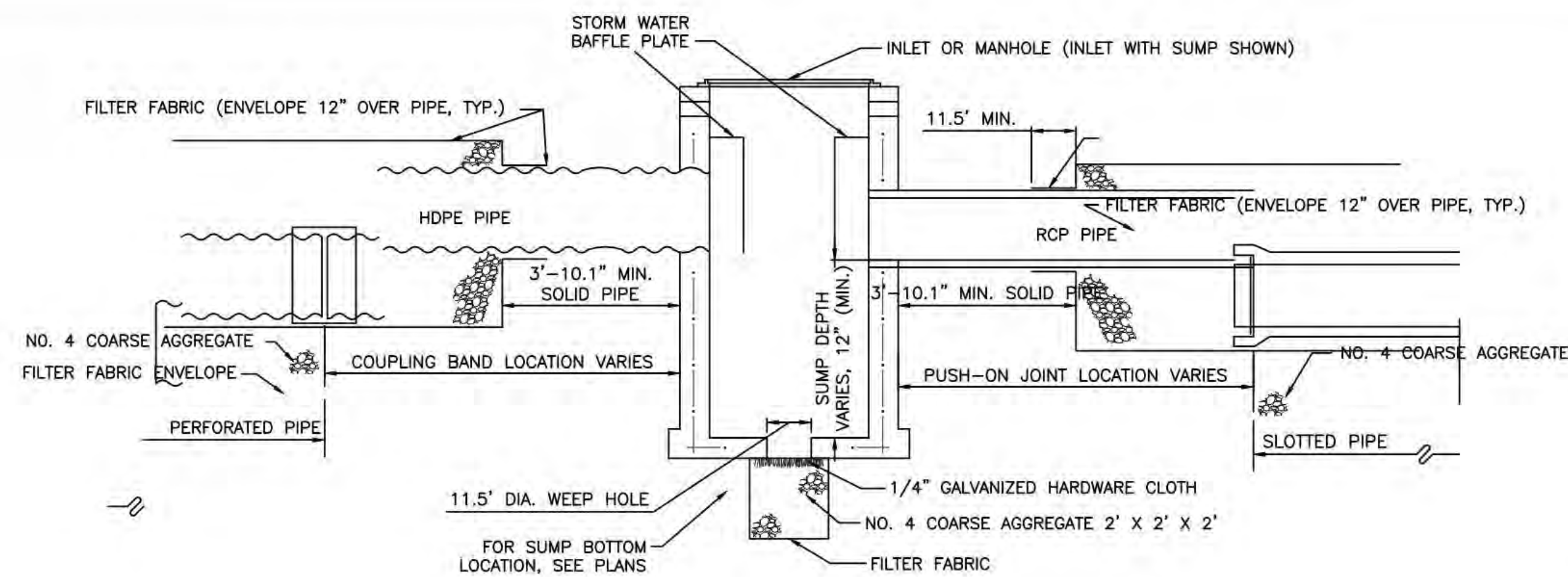
JASON A. WEBBER, P.E.
73962

KHA PROJ #: 040814003

DRAWN BY:	DATE:	DESIGNED BY:	SCALE:	AS SHOWN
JJ	03/15/2016	JJ		
CHECKED BY:		JAW		
				FIELD BOOK:

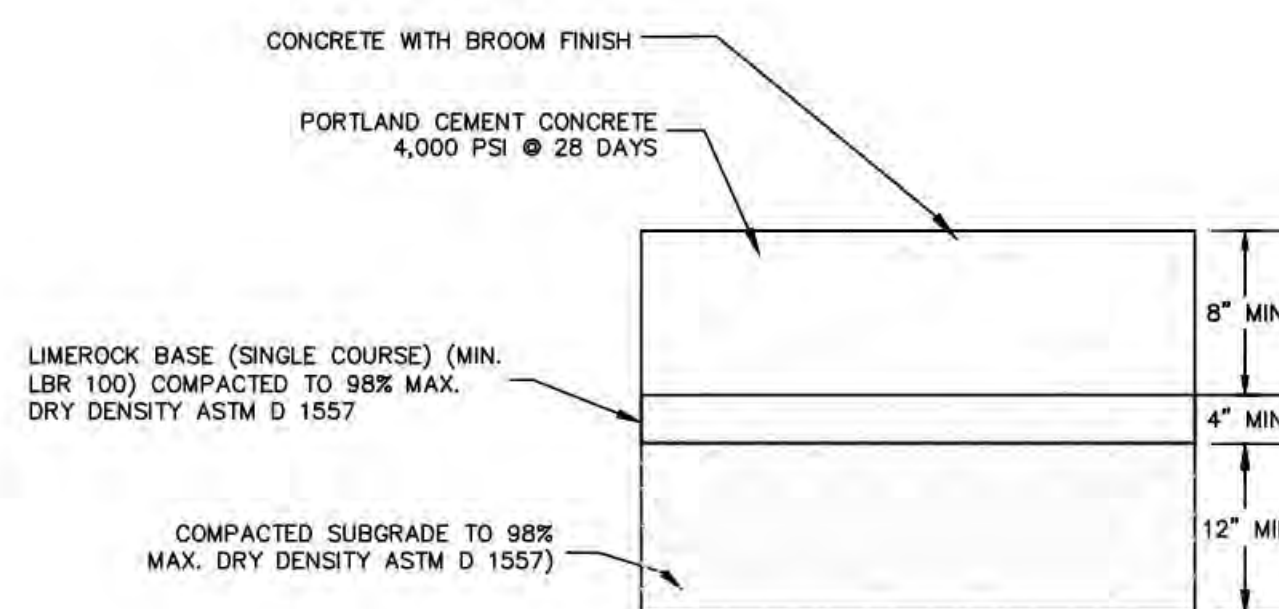
EDSA, Inc.
1512 E. Broward Blvd. Suite 110
Fort Lauderdale, FL 33301
954.524.3330

Kimley-Horn
1810 S. UNIVERSITY AVE. SUITE 100
DELMAR, DE 19706
PHONE: 302.441.2400 FAX: 302.441.2401
WWW.KIMLEY-HORN.COM C-100000000
© 2015 KIMLEY-HORN AND ASSOCIATES, INC.



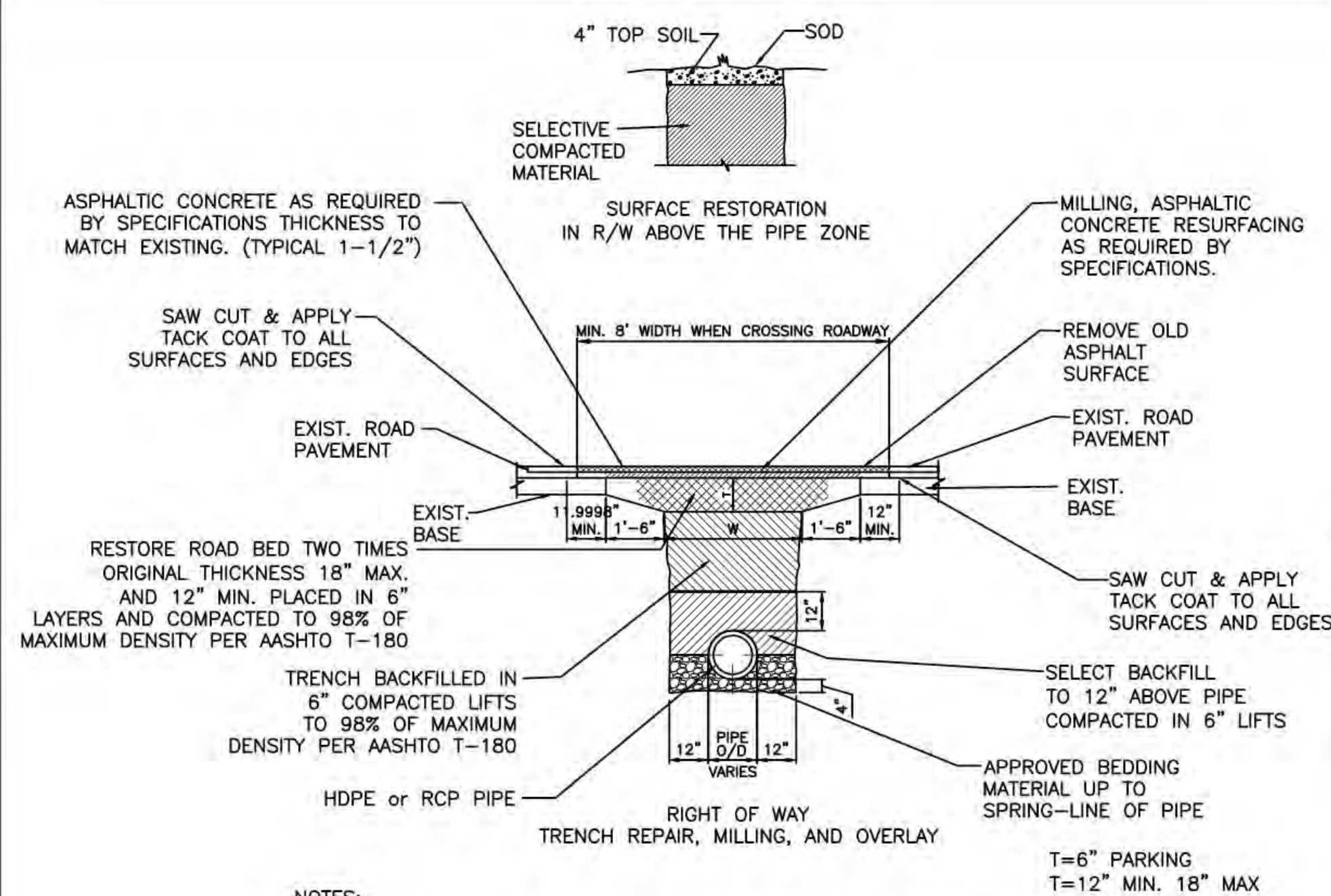
- NOTES:**
1. CONTRACTOR MUST READ AND ABIDE THE CITY'S GENERAL CONSTRUCTION NOTES AND DRAINAGE DESIGN NOTES PRIOR TO STARTING CONSTRUCTION.
 2. THE STANDARD CROSS SECTION SHALL BE CONSTRUCTED UNLESS OTHER SECTIONS ARE DESCRIBED OR DETAILED ON PLANS.
 3. THE CONTRACTOR SHALL TAKE THE NECESSARY PRECAUTIONS TO PREVENT CONTAMINATION OF THE TRENCH WITH SAND, SILT AND FOREIGN MATERIALS.
 4. THE 12" WEEP HOLE SHALL NOT BE USED IF THE BOTTOM OF THE INLET OR MANHOLE IS BELOW THE NORMAL WATER TABLE, UNLESS OTHERWISE SHOWN ON PLANS.
 5. FRENCH DRAINS MUST BE INSPECTED BY THE ENGINEERING INSPECTOR PRIOR TO CONTRACTOR BACKFILLING.

EXFILTRATION TRENCH SYSTEM - D620
NOT TO SCALE



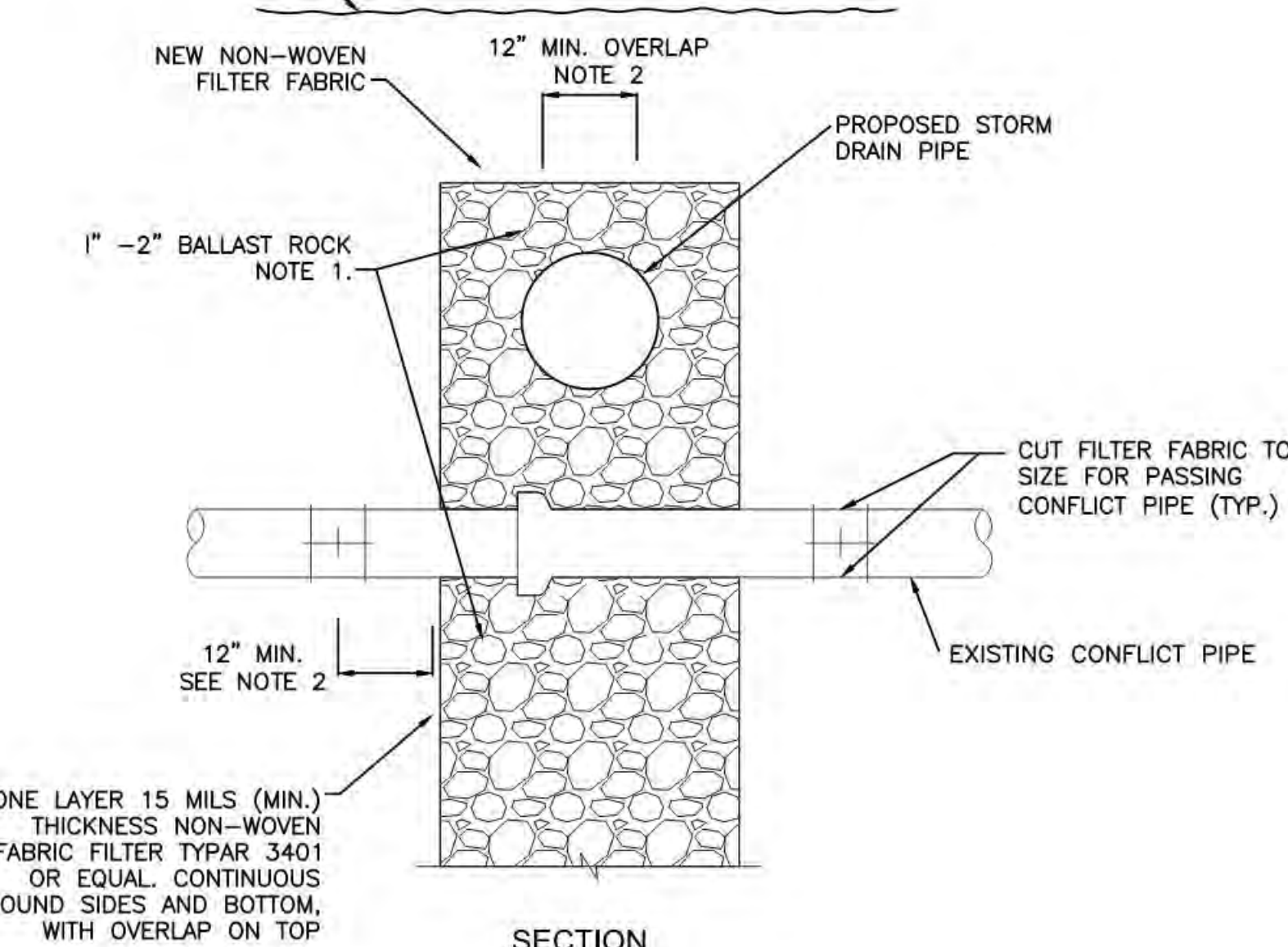
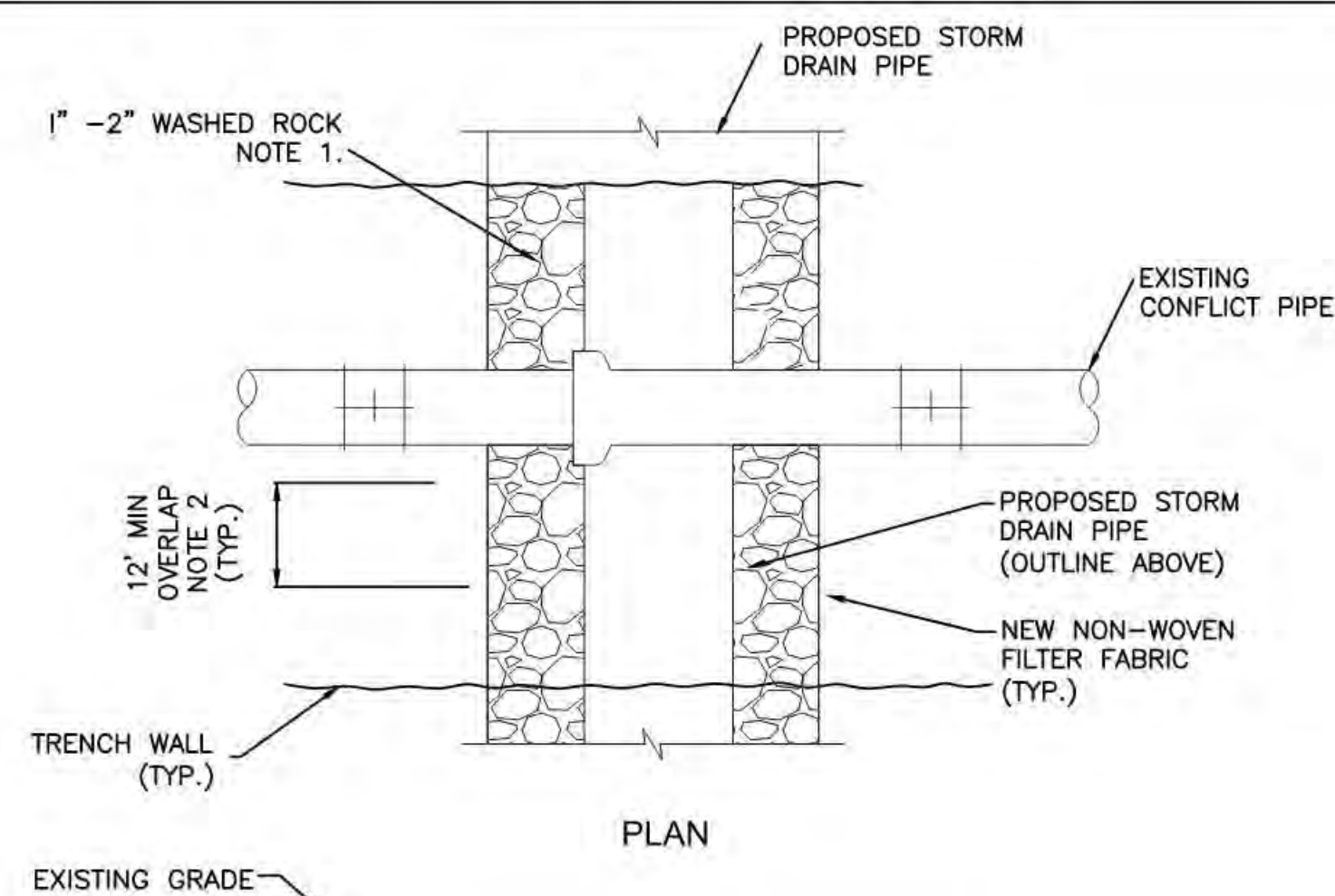
- *NOTES:
1. ADDITIONAL INFORMATION BASED ON A SITE-SPECIFIC GEOTECHNICAL REPORT MAY DICTATE REVISIONS TO THIS PAVEMENT SECTION*
 2. SHALL MEET FDOT RIGID DESIGN PAVEMENT CRITERIA. SEE FDOT DESIGN MANUAL LATEST EDITION.

HEAVY DUTY CONCRETE PAVEMENT SECTION
NOT TO SCALE



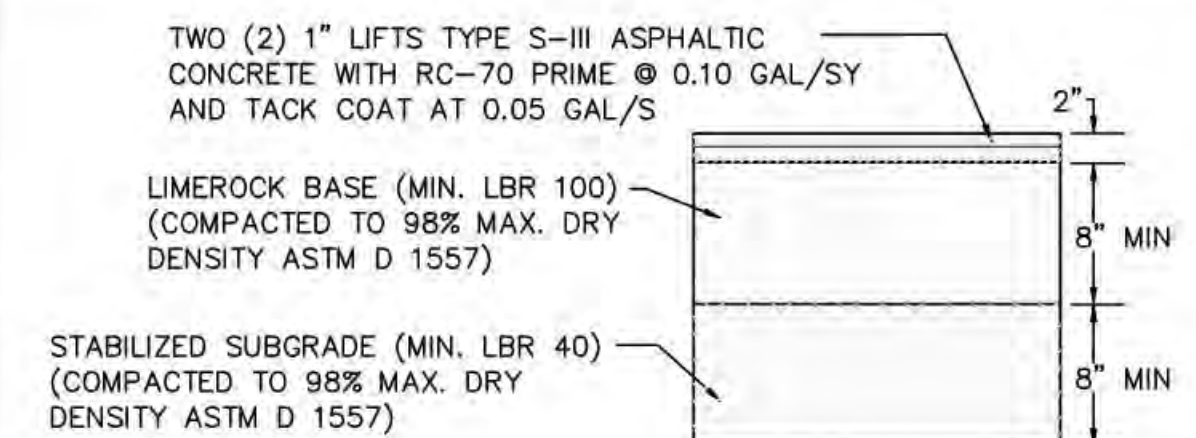
- NOTES:**
1. UNLESS OTHERWISE SPECIFIED SELECTED MATERIAL SHALL BE FREE OF STONES LARGER THAN 3/8" DIA.
 2. REPLACE ALL EXISTING LANE MARKINGS AND REFLECTIVE MARKERS DAMAGED BY CONSTRUCTION ACTIVITIES.

PAVEMENT RESTORATION FOR TRANSVERSE CROSSING - D100
NOT TO SCALE

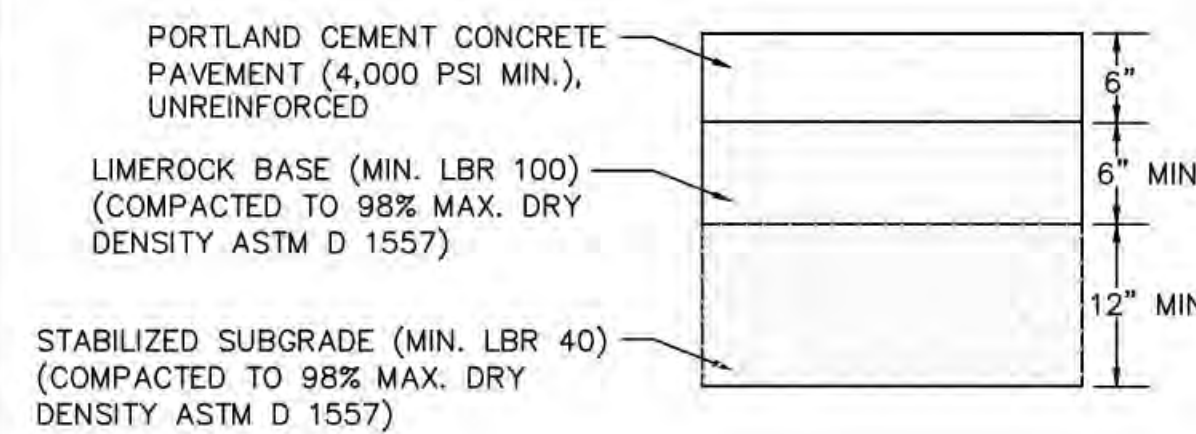


- NOTES:**
1. EQUIVALENT STONE TO REPLACE DISTURBED ROCK (1" TO 2" BALLAST ROCK).
 2. THE RESTORATION OF THE EXISTING TRENCH SHALL OVERLAP THE CUT WITH NEW NON-WOVEN FILTER FABRIC AND EXTENDED BEYOND THE CUT BY 1-FT. BOTTOM OF CUT SHALL ALSO BE REPAIRED WITH OVERLAPPING FABRIC.
 3. AVOID INTRODUCING SAND AND SOIL INTO THE EXPOSED FRENCH DRAIN ROCK.
 4. COMPACT SOIL SURROUNDING THE TRENCH IN 6" LIFTS OR PER TRENCH RESTORATION DETAIL.

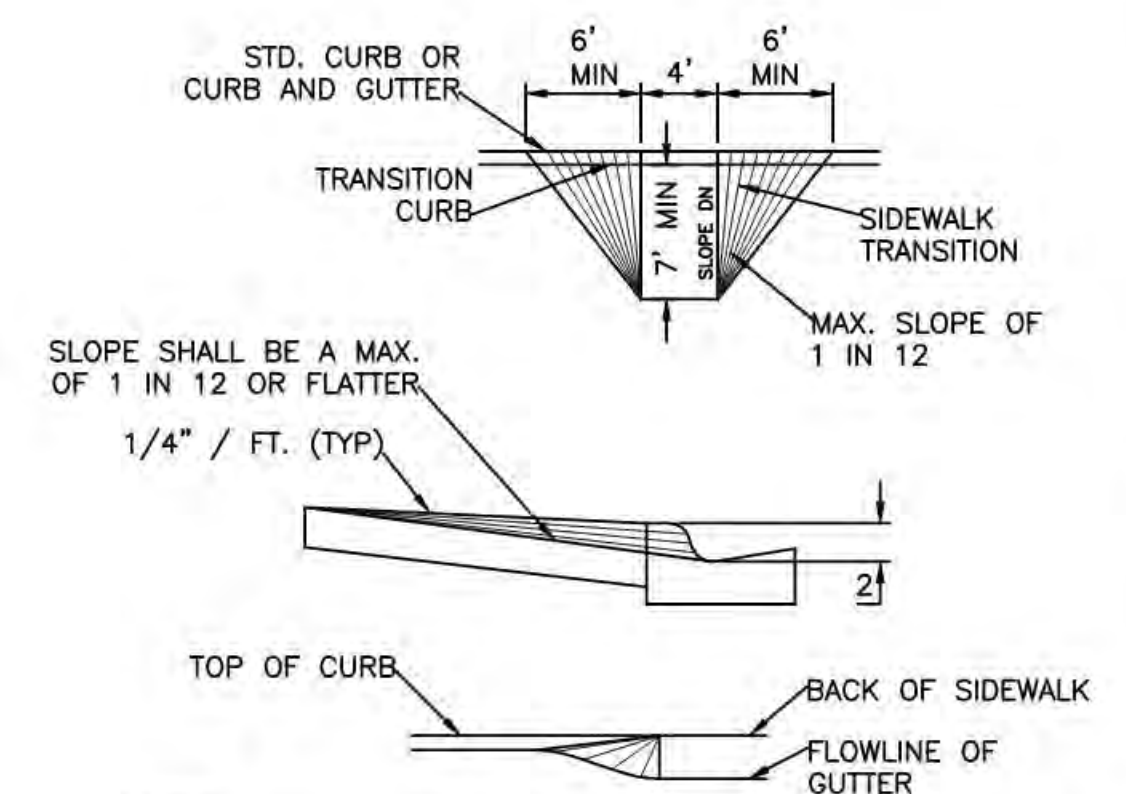
EXFILTRATION TRENCH AND CONFLICT PIPE DETAIL - D602



TYPICAL ASPHALTIC CONCRETE PAVEMENT SECTION
NOT TO SCALE



TYPICAL PORTLAND CEMENT CONCRETE PAVEMENT SECTION
NOT TO SCALE



- NOTES:
1. RAMP PLACEMENT TO BE DETERMINED BY THE ENGINEER IN THE FIELD.
 2. WHERE RIGHT-OF-WAY DOES NOT ALLOW 7' RAMP, PROFILE AT BACK OF SIDEWALK MAY BE ADJUSTED TO MAINTAIN 1 IN 12 SLOPE ON RAMP.
 3. RAMP IN ACCORDANCE WITH FAC (FLORIDA ACCESSIBILITY CODE) FDOT INDEX #304.

CURB RAMP - 104
NOT TO SCALE

FTL	CITY OF FORT LAUDERDALE STANDARD DETAIL
-----	--

KHA	KIMLEY-HORN AND ASSOCIATES DETAIL
-----	-----------------------------------

NOTE: DETAILS ARE INCLUDED FROM THE ENTITIES LISTED ABOVE AND ARE PROVIDED FOR INFORMATIONAL PURPOSES ONLY. CONTRACTOR SHALL OBTAIN AND CONFORM WITH THE LATEST STANDARDS AND DETAILS.

60% CD SUBMITTAL

PROJECT # P11900
LAS OLAS CORRIDOR IMPROVEMENTS
FORT LAUDERDALE, FL
PAVING GRADING AND DRAINAGE
DETAILS

SHEET NO. C5-4.01	X OF XX
DRAWING FILE C:\P001\5001\5001.DWG	


EDSA, Inc.
1512 E. Broward Blvd, Suite 110
Fort Lauderdale, FL 33301
954.524.3330

Kimley»Horn
100 S. CONGRESS AVE., SUITE 100,
RAY BEACH, FL 33445
PHONE: 561-330-2345 FAX: 561-330-2245
WWW.KIMLEY-HORN.COM CA 000020596
©2015 KIMLEY-HORN AND ASSOCIATES, INC.

JASON A. WEBBER, P.E.
73962

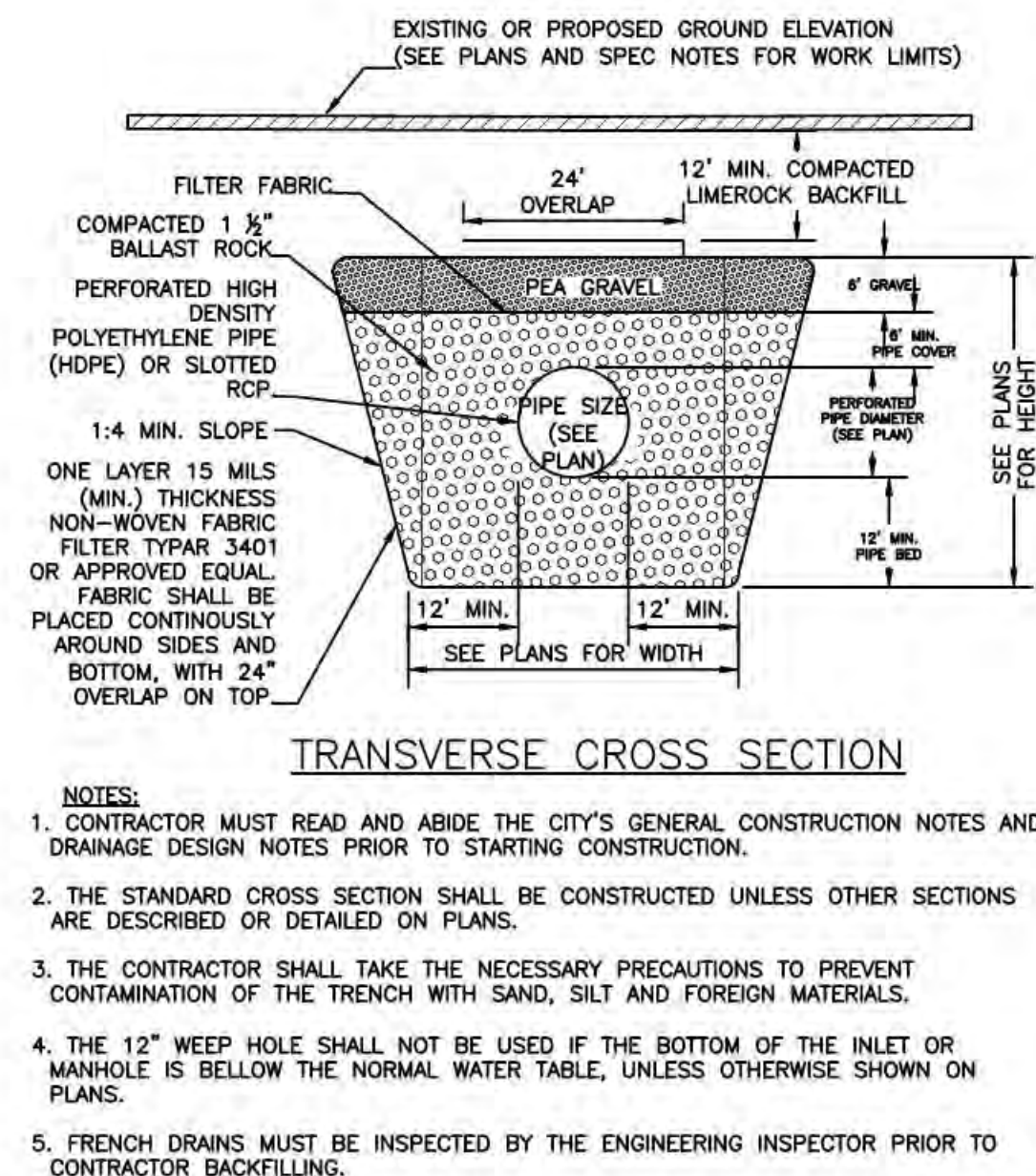
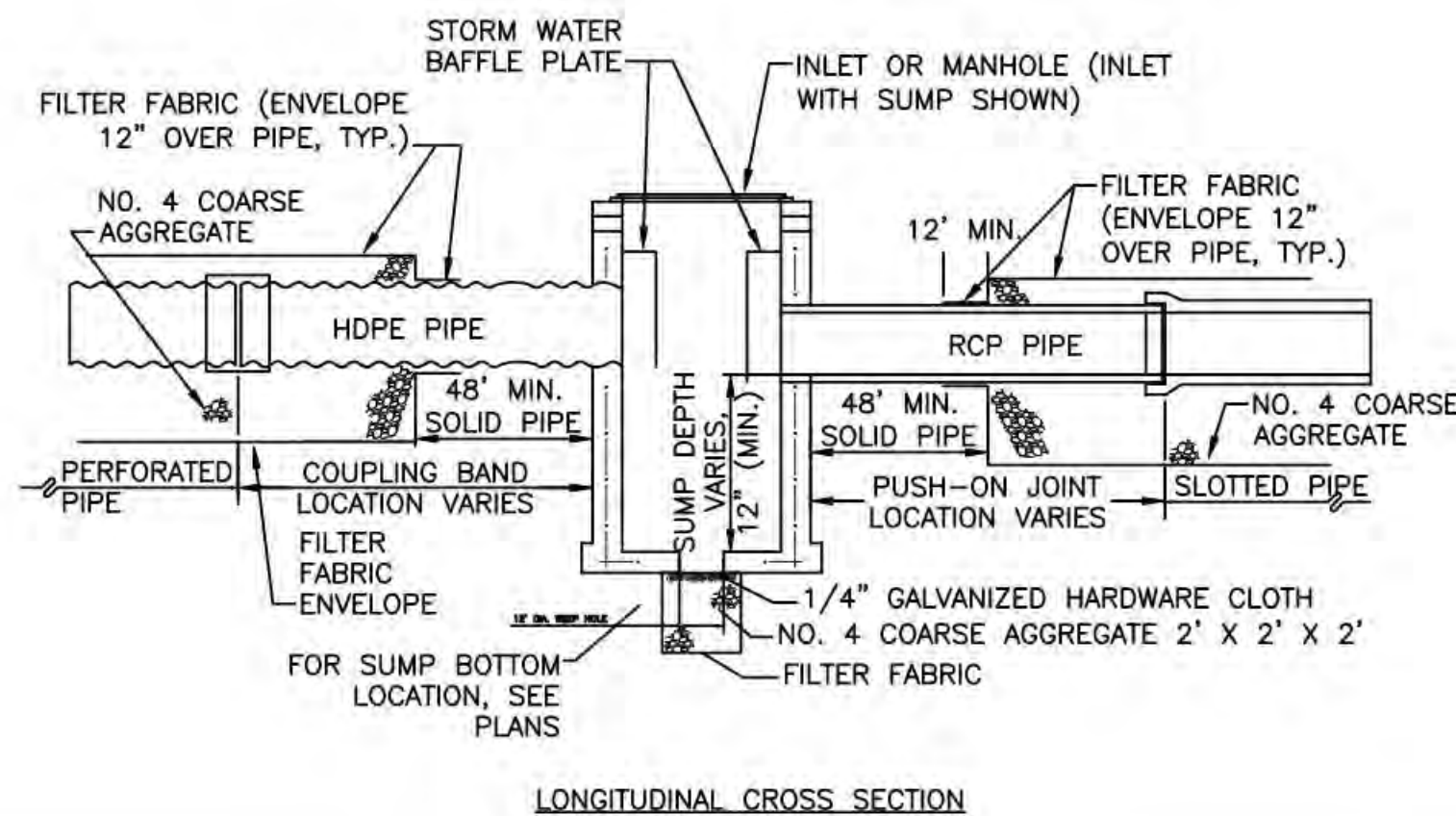
A PROJ #: 040814003

03/15/2016	JJ	DESIGNED BY: JJ	SCALE: AS SHOWN
		CHECKED BY: JAW	
FIELD BOOK:			

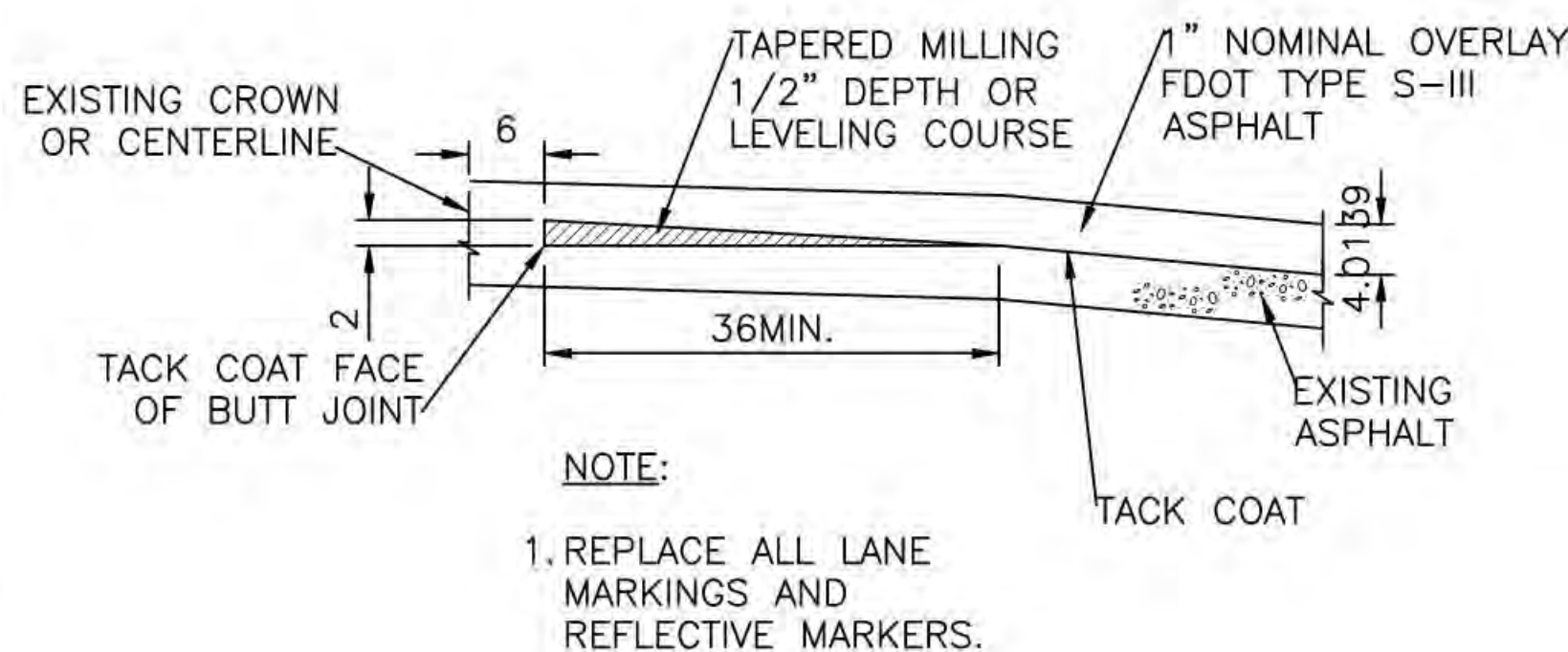


CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING & ARCHITECTURE
100 North Andrews Avenue, Fort Lauderdale, Florida 33301

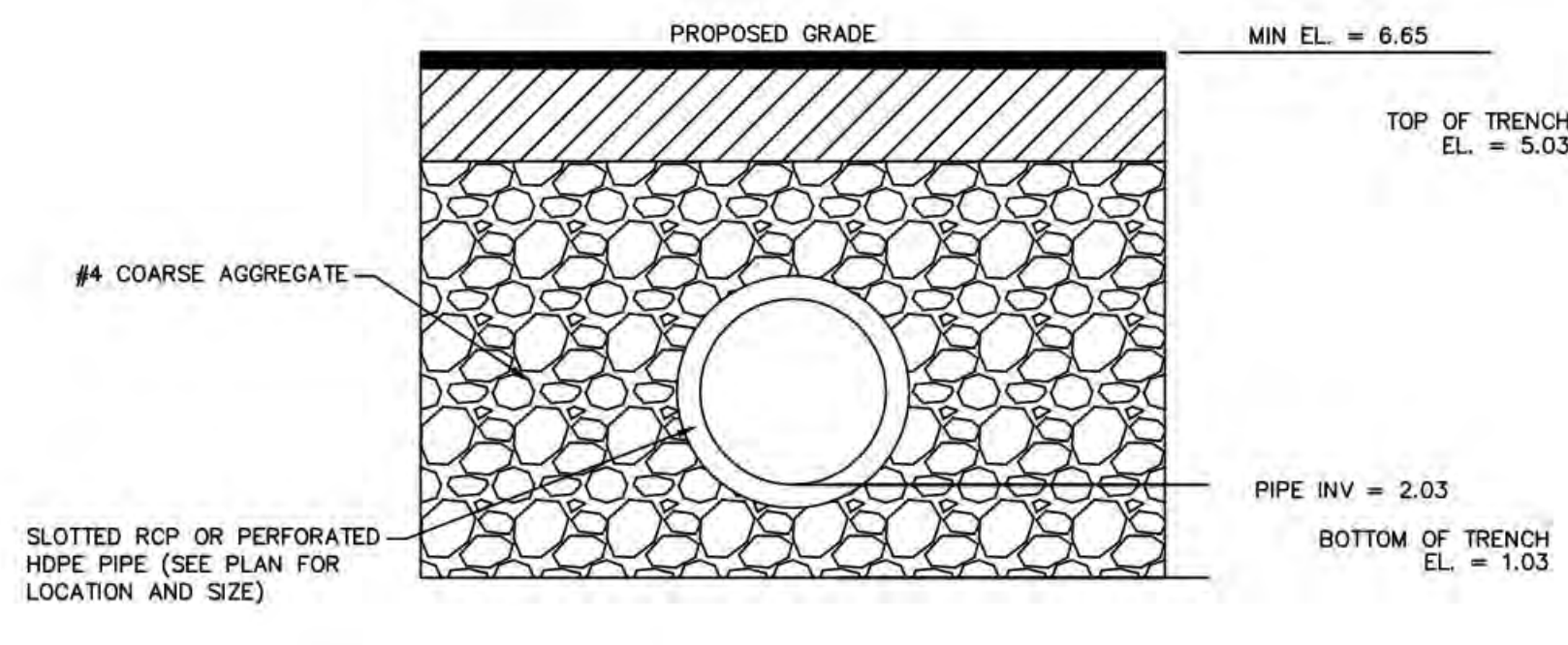
[illegible]



EXFILTRATION TRENCH SYSTEM - D620
NOT TO SCALE

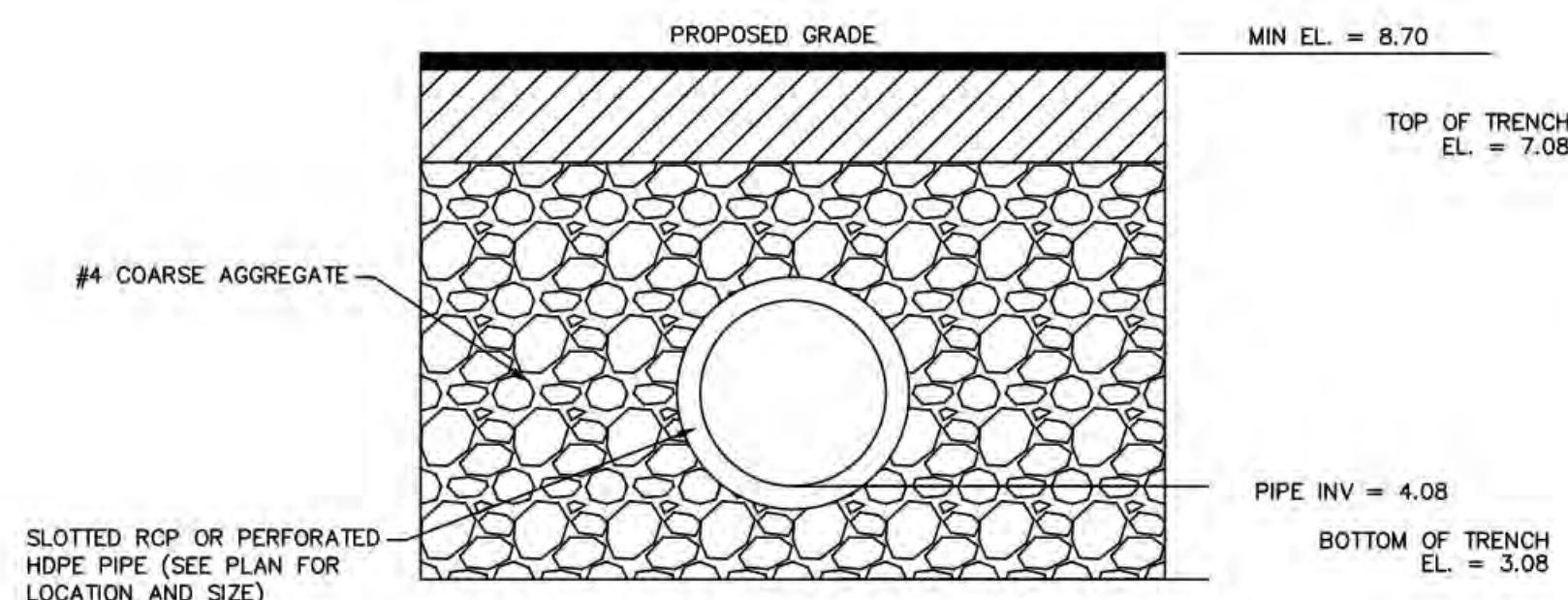


ASPHALT TAPER DETAIL - D101
NOT TO SCALE



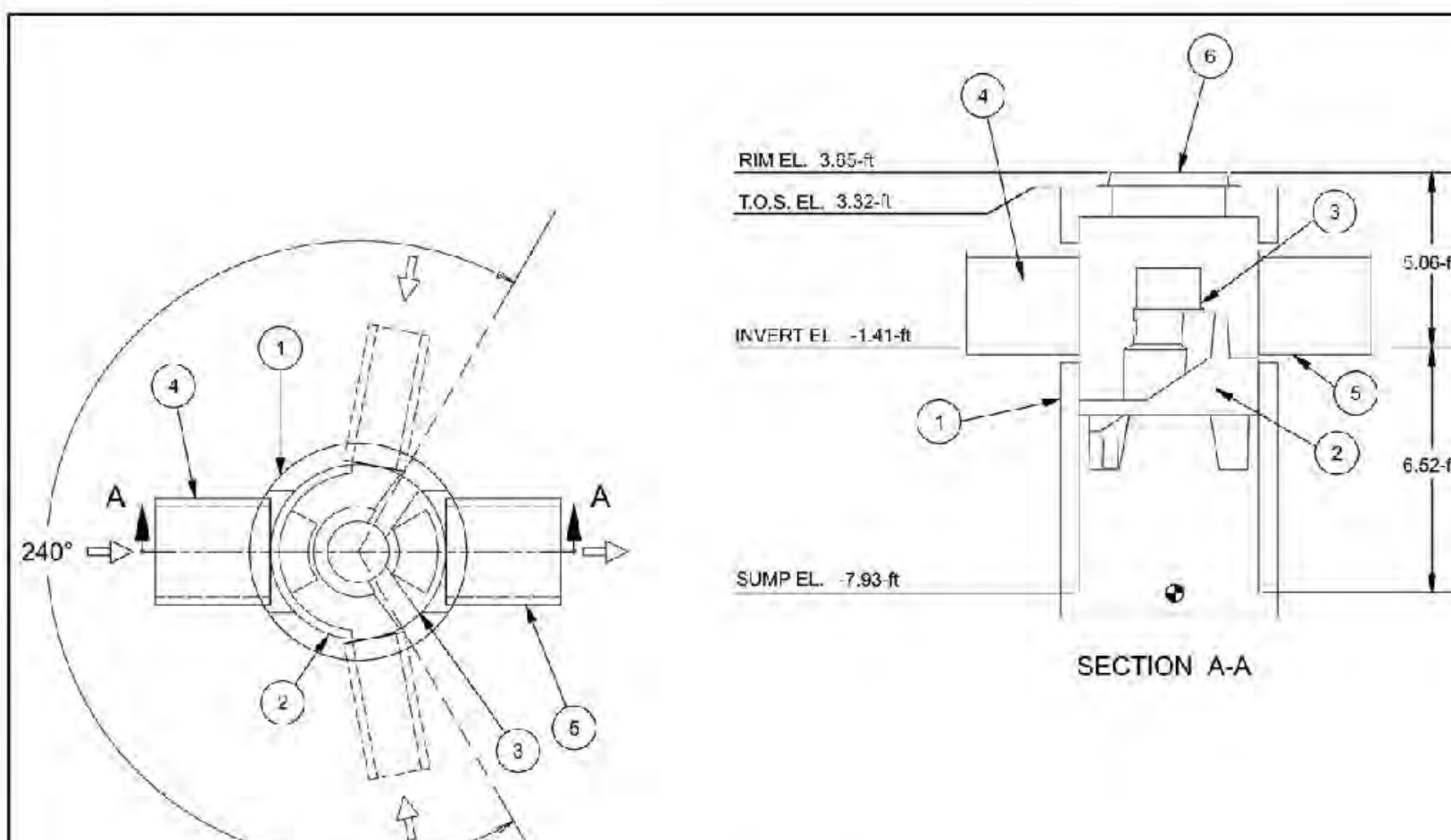
- NOTES:
1. MATERIALS AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH FDOT INDEX 285.
 2. FILTER FABRIC ALL FOUR (4) SIDES OF EXFILTRATION TRENCH WITH 12" OVERLAP AT TOP OF TRENCH.
 3. SLOTS OR PERFORATIONS SHALL BE CONSTRUCTED BY THE PIPE MANUFACTURER AND NOT CUT AT THE PROJECT SITE. SLOTS OR PERFORATIONS SHALL MEET FDOT SPECIFICATIONS.

TYPICAL EXFILTRATION TRENCH DETAIL NO. 2
NOT TO SCALE



- NOTES:
1. MATERIALS AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH FDOT INDEX 285.
 2. FILTER FABRIC ALL FOUR (4) SIDES OF EXFILTRATION TRENCH WITH 12" OVERLAP AT TOP OF TRENCH.
 3. SLOTS OR PERFORATIONS SHALL BE CONSTRUCTED BY THE PIPE MANUFACTURER AND NOT CUT AT THE PROJECT SITE. SLOTS OR PERFORATIONS SHALL MEET FDOT SPECIFICATIONS.

TYPICAL EXFILTRATION TRENCH DETAIL NO. 2
NOT TO SCALE



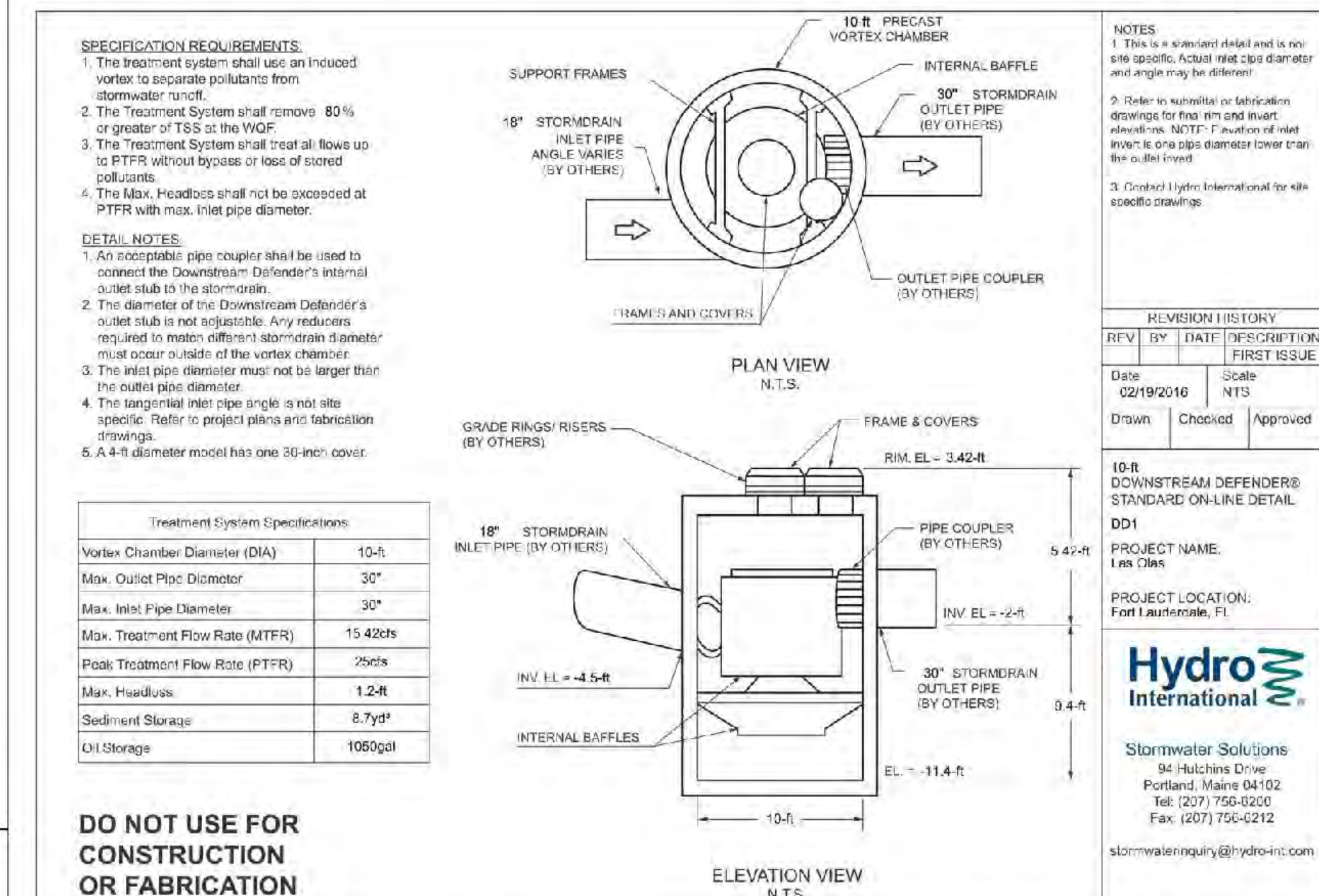
- GENERAL NOTES:
1. General Arrangement drawings only. Contact Hydro International for site specific fabrication drawings.
 2. The maximum diameter of the inlet & outlet pipe is 16". For larger pipes, please contact Hydro International for additional design assistance.
 3. Multiple inlet pipes possible (refer to project plans).
 4. Inlet/outlet pipe angles can vary to align with drainage network (refer to project plans).
 5. Peak flow rate limited by available cover and pipe diameter.
 6. Larger bottom storage capacity may be provided with a deeper dump depth.

Parts List		
ITEM	SIZE (in)	DESCRIPTION
1	72	I.D. PRECAST MANHOLE
2		LEDGER SUPPORT
3		SEPARATION MODULE
4	30	INLET PIPE (BY OTHERS), MAX. 30 in.
5	30	OUTLET PIPE (BY OTHERS), MAX. 30 in.
6	30	GRATE

© 2014
Hydro International

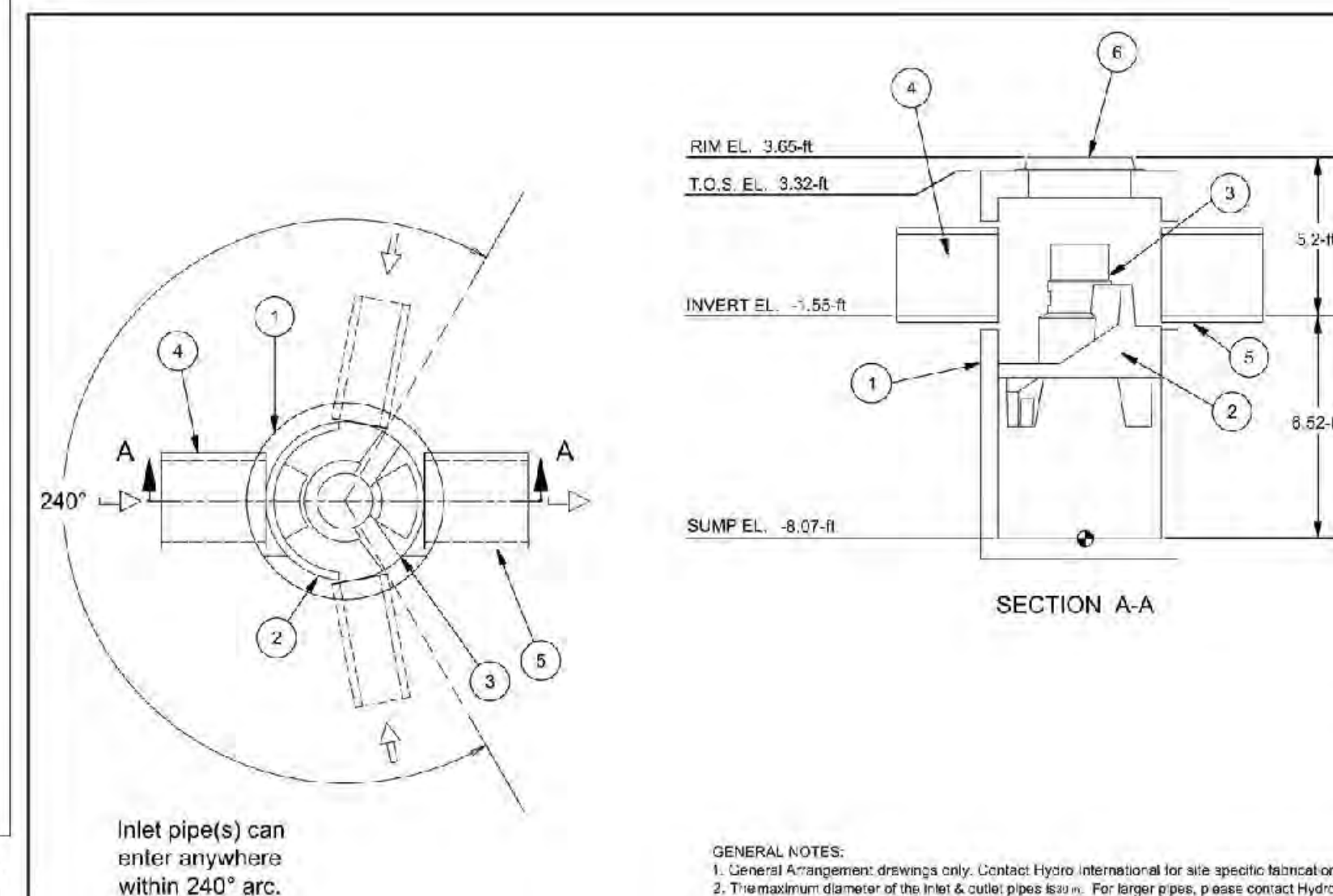
Stormwater Solutions
94 Hutchins Drive
Portland, Maine 04102
Tel: (207) 755-8200
Fax: (207) 756-8212
stormwaterinquiry@hydro-int.com

CAD Ref: WEB SC FD-6HC
Project No. xx-xxxx
Drawing No. Rev. A



DO NOT USE FOR
CONSTRUCTION
OR FABRICATION

© 2014
Hydro International



- GENERAL NOTES:**
1. General Arrangement drawings only. Contact Hydro International for site specific technical on drawings.
 2. The maximum diameter of the Inlet & outlet pipes is 8". For larger pipes, passes contact Hydro International for additional design assistance.
 3. Multiple inlet pipes possible (refer to project plans).
 4. Individual pipe angle can vary to align with drainage network (refer to project plans).
 5. Peak flow rate limited by available cover and pipe diameter.
 6. Larger sediment storage capacity may be provided with a deeper sump depth.

Parts List		
ITEM	SIZE (in)	DESCRIPTION
1	72	I.D. PRECAST MANHOLE
2		LEDGER SUPPORT
3		SEPARATION MODULE
4	30	INLET PIPE (BY OTHERS), MAX. 30 in.
5	30	OUTLET PIPE (BY OTHERS), MAX. 30 in.
6	30	GATE

© 2014
Hydro International

- PRODUCT SPECIFICATIONS**
- A. The treatment system shall use an induced vortex to separate pollutants from stormwater runoff.
 - B. The treatment system shall fit within the limits of acceptance (size and depth) as shown in the project plans or will not exceed the dimensions for the design flow rates specified herein.
 - C. The treatment system shall remove greater than or equal to 80% or 95% of the water quality flow rate.
 - D. The treatment system shall convey the Peak 10-minute Flow Rate at 24 in. lifts without causing upstream stand stage conditions. Full-scale independent laboratory storm surge testing shall demonstrate sufficient control of freeboard and surge to 5 mph, for all flows up to 200% of the maximum treatment flow rate for 106-mm crown pipes.
 - E. The treatment system shall be capable of capturing and retaining fine silt and sand predominately. Analyze of effluent from full-scale field installations shall demonstrate particle size separation.

Notes

1. MANHOLE WALL AND SLAB THICKNESSES ARE NOT TO SCALE.
2. CONTACT HYDRO INTERNATIONAL FOR A BOTTOM OF STRUCTURE ELEVATION PRIOR TO SETTING FIRST DEFENSE MANHOLE.
3. CONTRACTOR TO CONFIRM RIM, PIPE INVERTS, PIPE DIA. AND PIPE ORIENTATION PRIOR TO RELEASE OF UNIT TO FABRICATION.

RC	12/5/2014	FIRST ISSUE
REV	BY	DATE DESCRIPTION
REVISION HISTORY		
Date	Scale	
02/19/2016	1/4" = 10"	
Drawn RC	Checked	Approved

FIRST DEFENSE®
MODEL 6-HC ONLINE
FD1

PROJECT NAME:
Las Olas
PROJECT LOCATION:
Fort Lauderdale, FL



Hydro
International

Stormwater Solutions
94 Hutchins Drive
Portland, Maine 04102
Tel: (207) 756-8200
Fax: (207) 756-6212
stormwaterinquiry@hydro-int.com

CAD Ref: WEB SC FD-6HC
Project No. 10X-XXXXX
Drawing No. Rev. A

FTL	CITY OF FORT LAUDERDALE STANDARD DETAIL
-----	--

KHA	KIMLEY-HORN AND ASSOCIATES DETAIL
-----	--------------------------------------

NOTE: DETAILS ARE INCLUDED FROM THE ENTITIES LISTED ABOVE AND ARE PROVIDED FOR INFORMATIONAL PURPOSES ONLY. CONTRACTOR SHALL OBTAIN AND CONFORM WITH THE LATEST STANDARDS AND DETAILS.

EDSA, Inc.
1512 E. Broward Blvd, Suite 110
Fort Lauderdale, FL 33301
954.524.3330


Kimley»Horn
1690 S CONGRESS AVE, SUITE 100,
DELRAY BEACH, FL 33445
PHONE: 561-330-2345 FAX: 561-330-2245
WWW.KIMLEY-HORN.COM CA 00000916
© 2015 KIMLEY-HORN AND ASSOCIATES, INC.

SEAL-

JASON A. WEBBER, P.E.
73962

KHA PROJ #: 040814003

DRAWN BY: JJ	DATE: 03/15/2016	SCALE: AS SHOWN
DESIGNED BY: JJ	CHECKED BY: JAW	
FIELD BOOK		



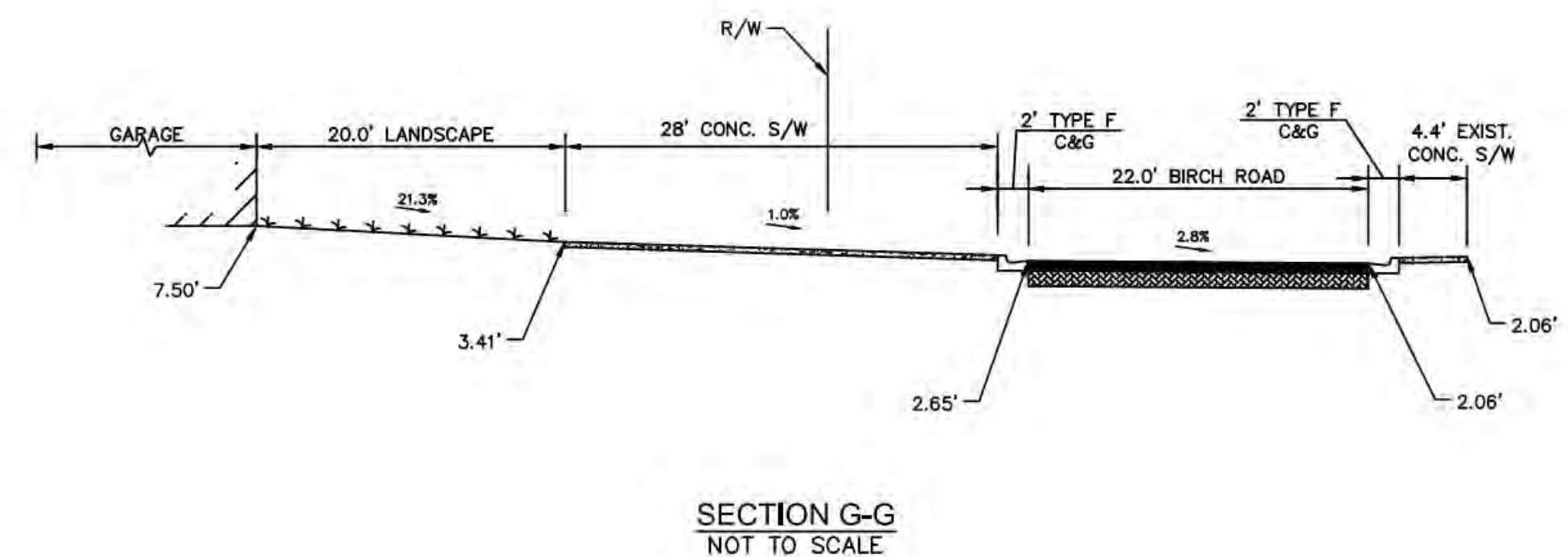
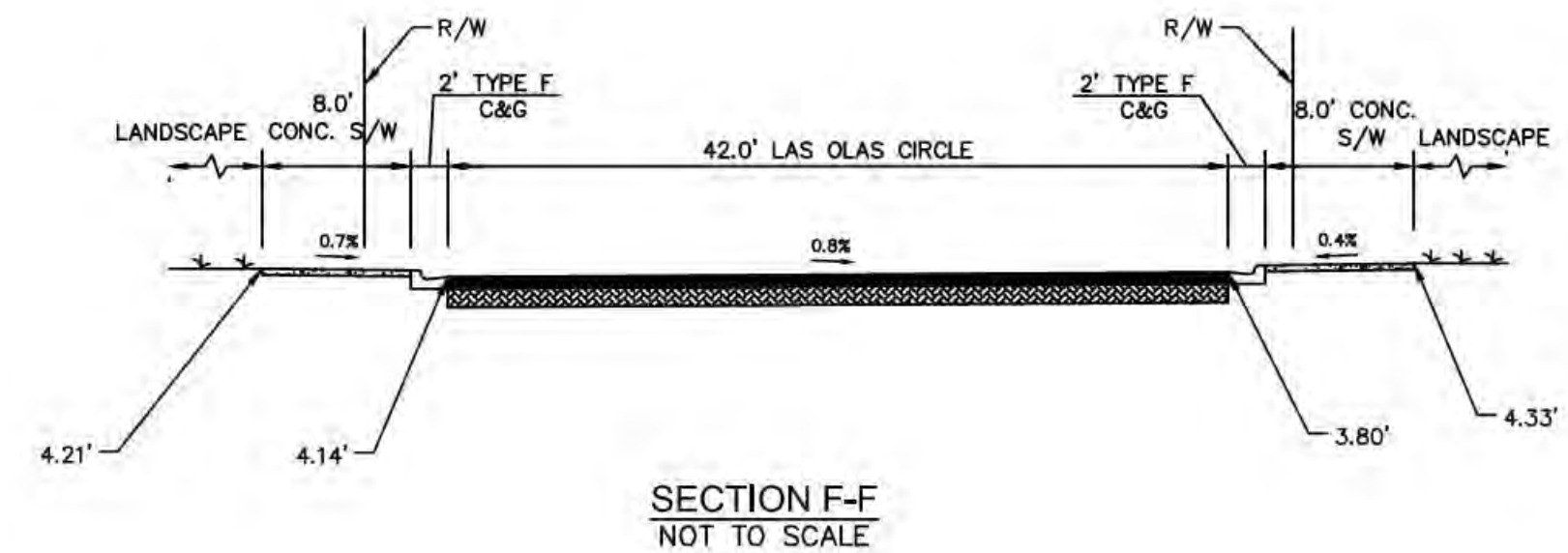
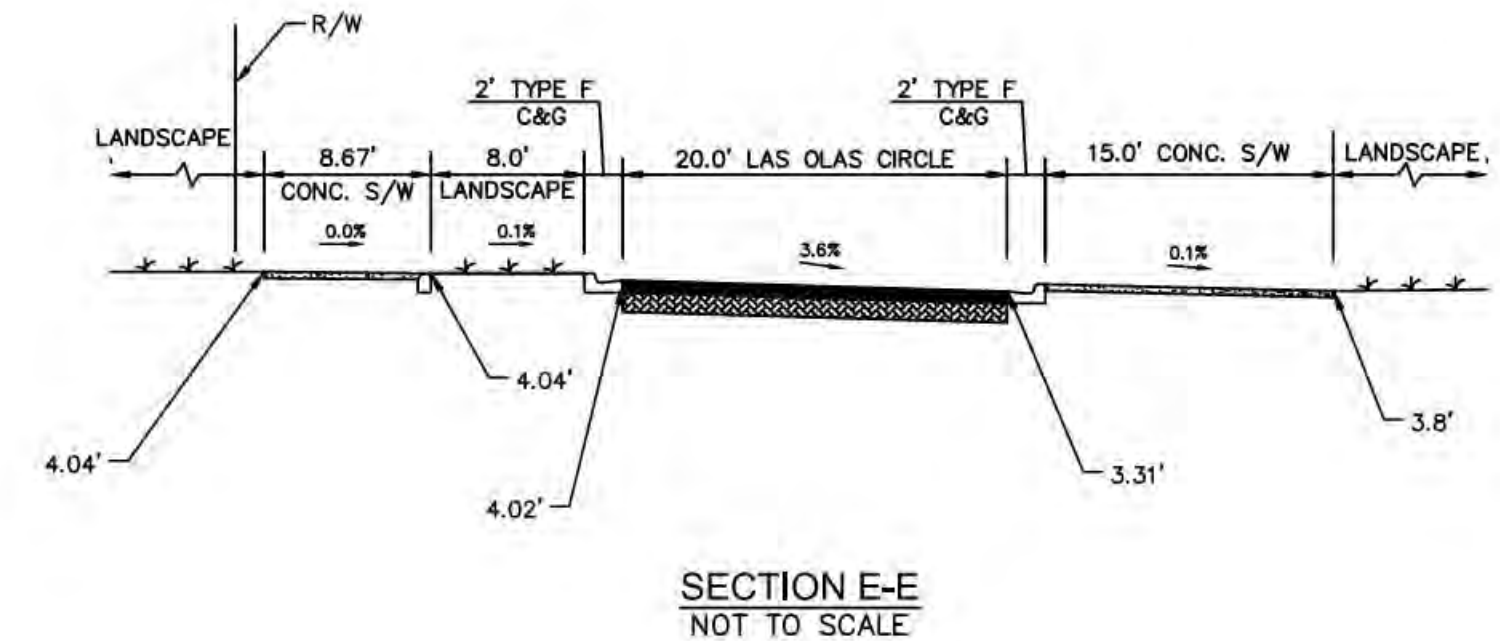
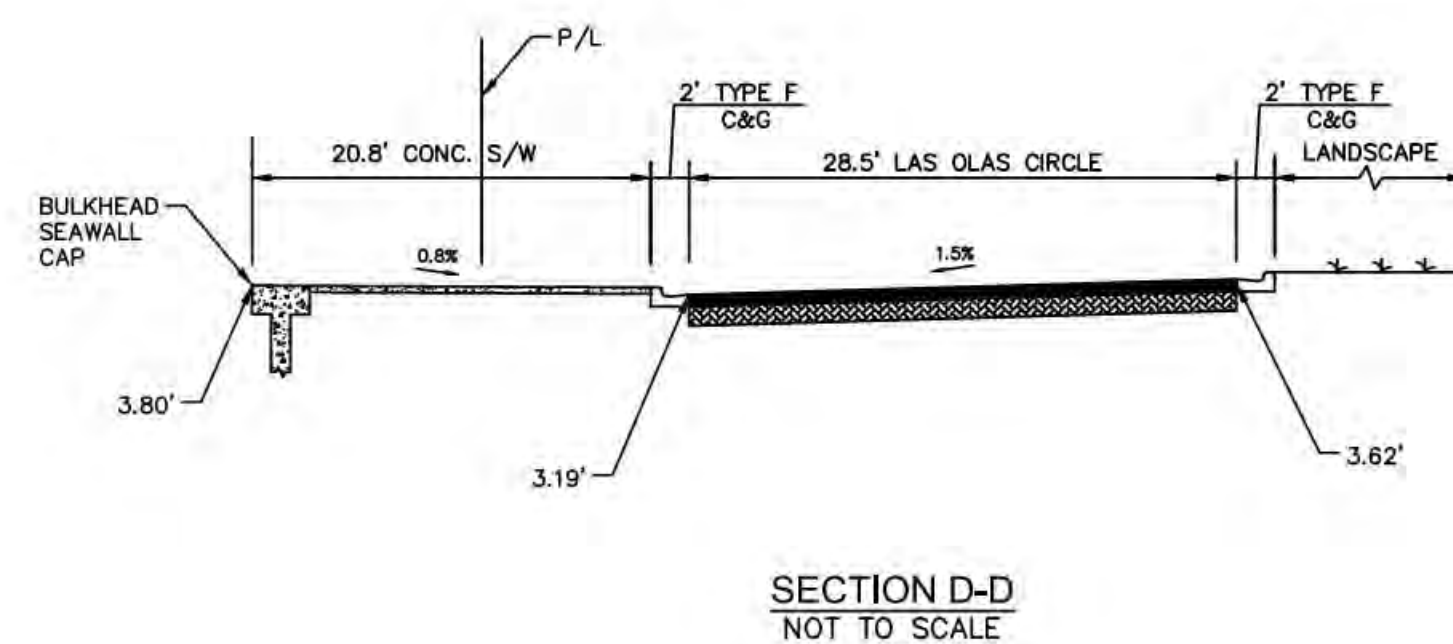
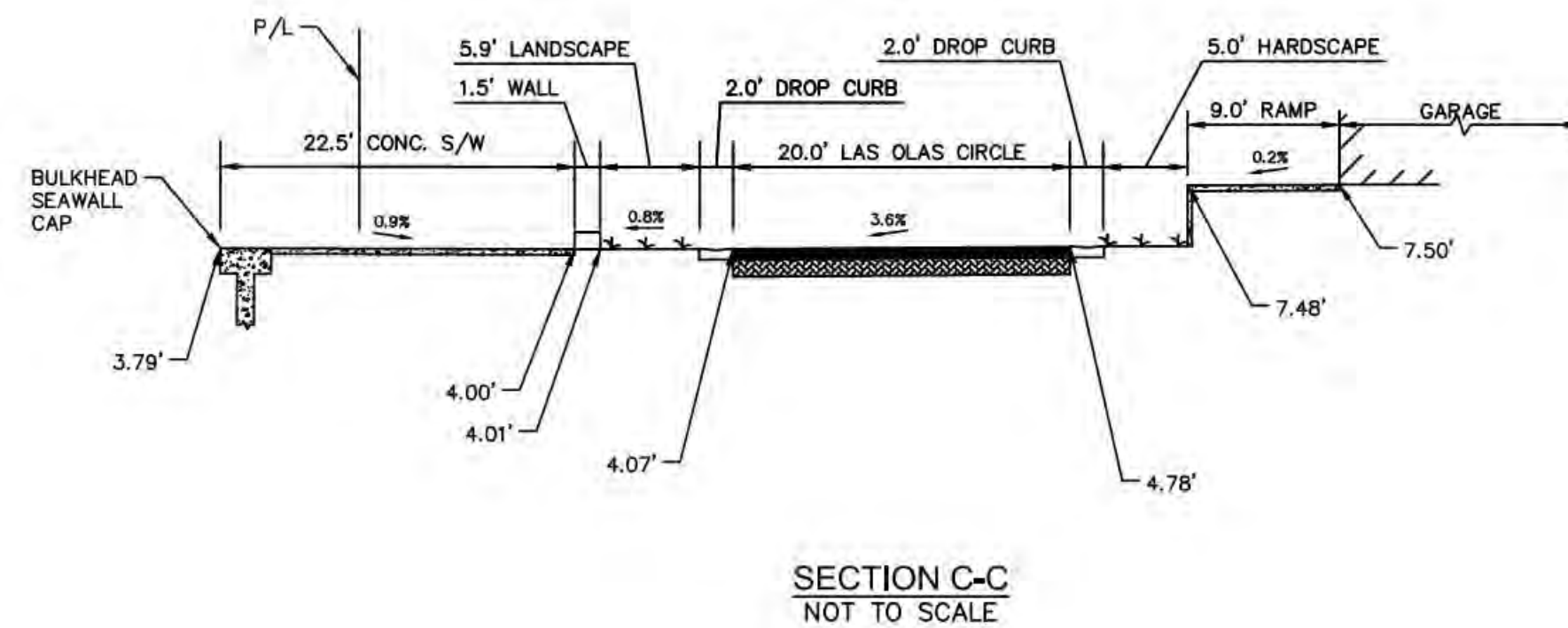
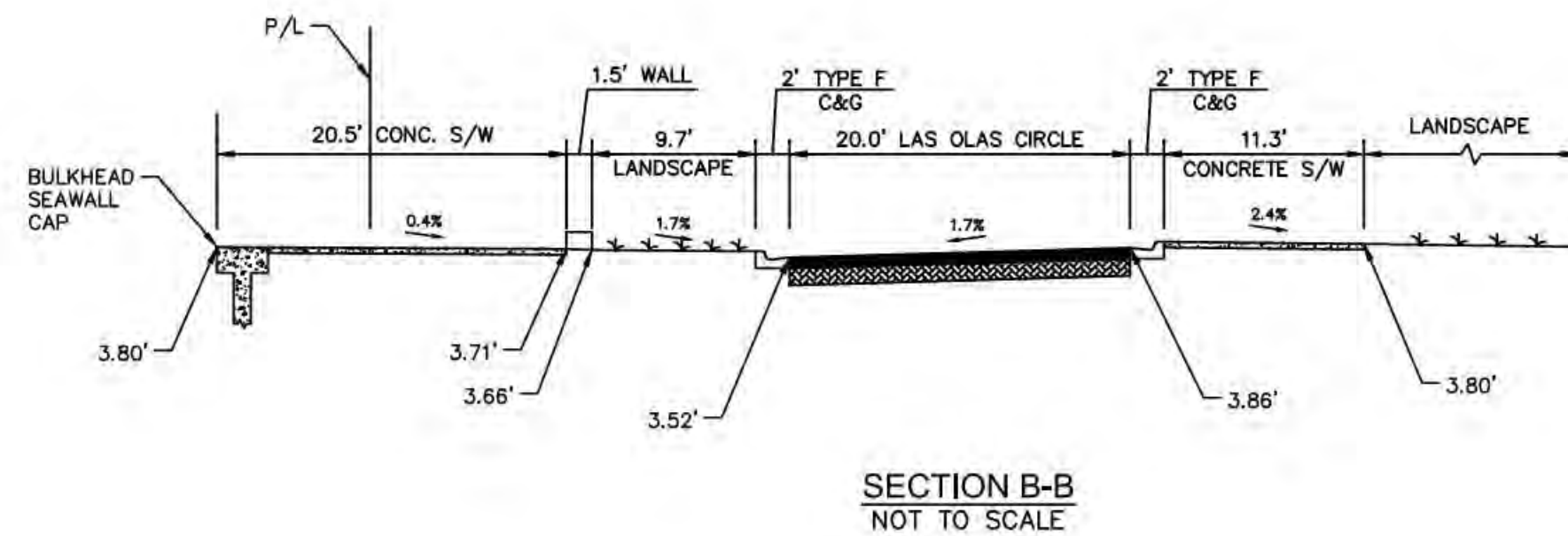
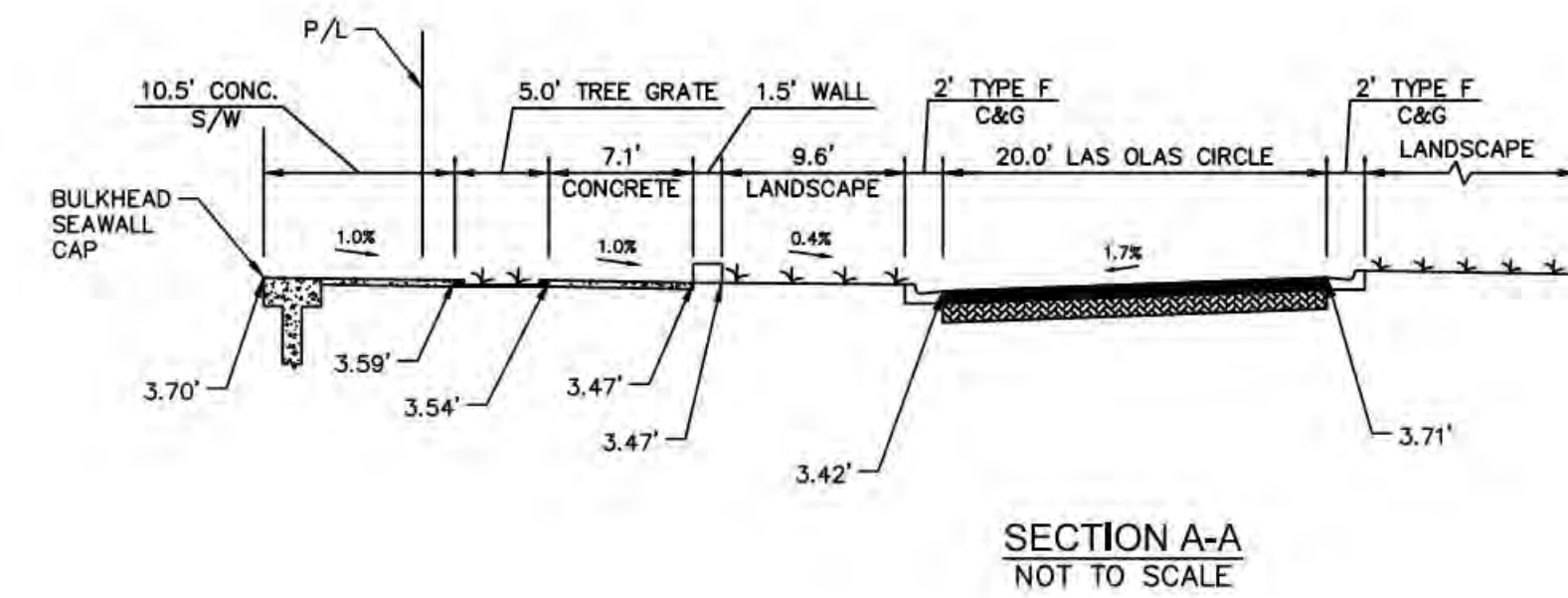
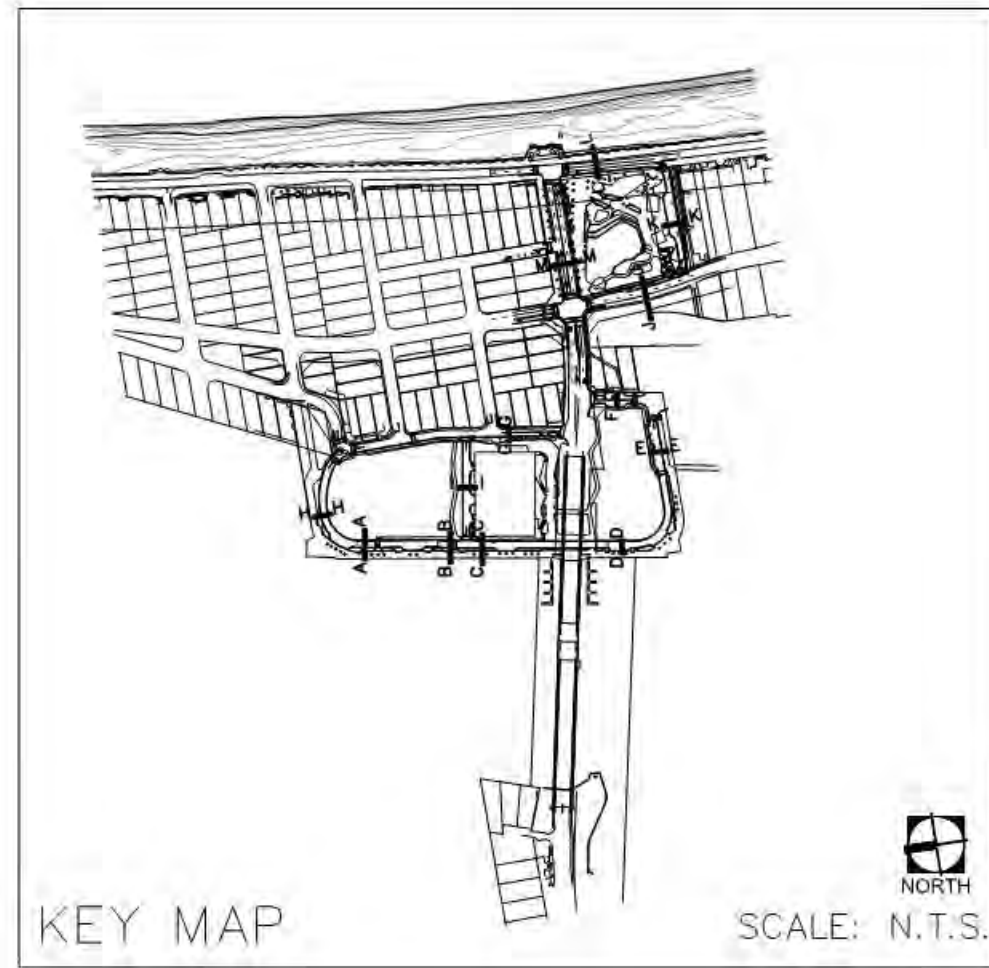
CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING & ARCHITECTURE
100 North Andrews Avenue, Fort Lauderdale, Florida 33301

[illegible]

PROJECT # P11900
LAS OLAS CORRIDOR IMPROVEMENTS
FORT LAUDERDALE, FL
PAVING GRADING AND DRAINAGE
DETAILS

SHEET NO. C5-4.02	X OF XX
DRAWING FILE 11900-C504-PDET	

This document, together with the concepts and designs presented herein, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



60% CD SUBMITTAL

EDSA, Inc.
1512 E. Broward Blvd, Suite 110
Fort Lauderdale, FL 33301
954.534.3330

EDSA

Kimley»Horn
1810 S. UNIVERSITY AVE., SUITE 100
DELMAR, DE 19840
PHONE: 302.438.2400 FAX: 302.438.2401
WWW.KIMLEY-HORN.COM CA 00000000
© 2015 KIMLEY-HORN AND ASSOCIATES, INC.

SEAL:

JASON A. WEBBER, P.E.
73962

KHA PROJ # 040814003

DRAWN BY: JJ
DATE: 03/15/2016
DESIGNED BY: JJ
SCALE: AS SHOWN
CHECKED BY: JAW
FIELD BOOK:

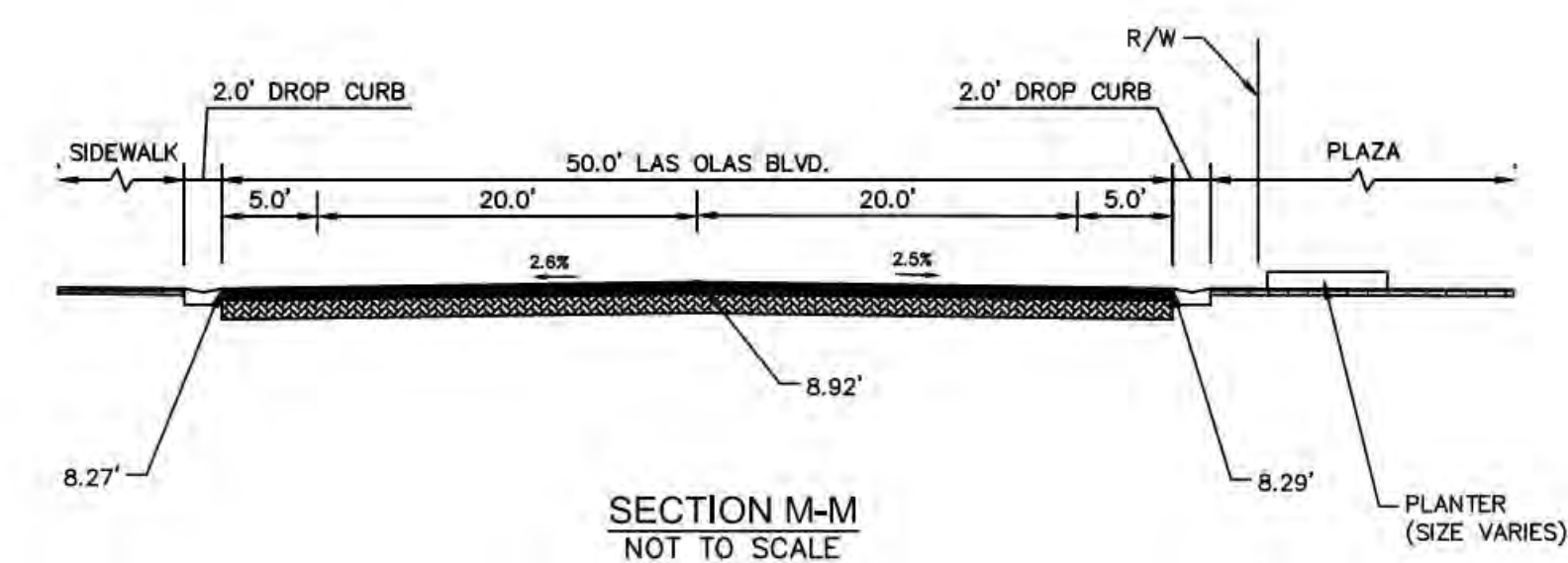
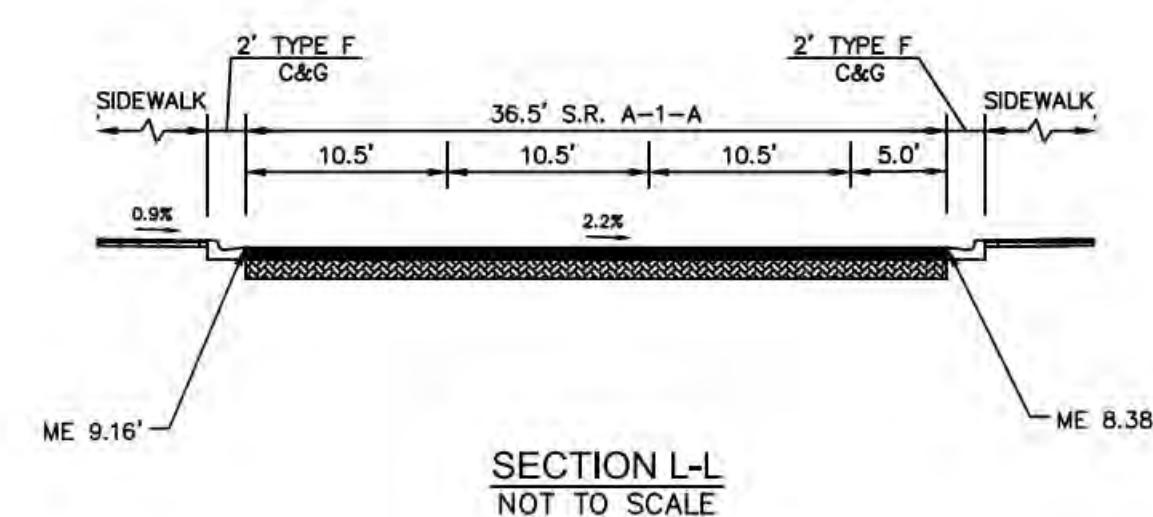
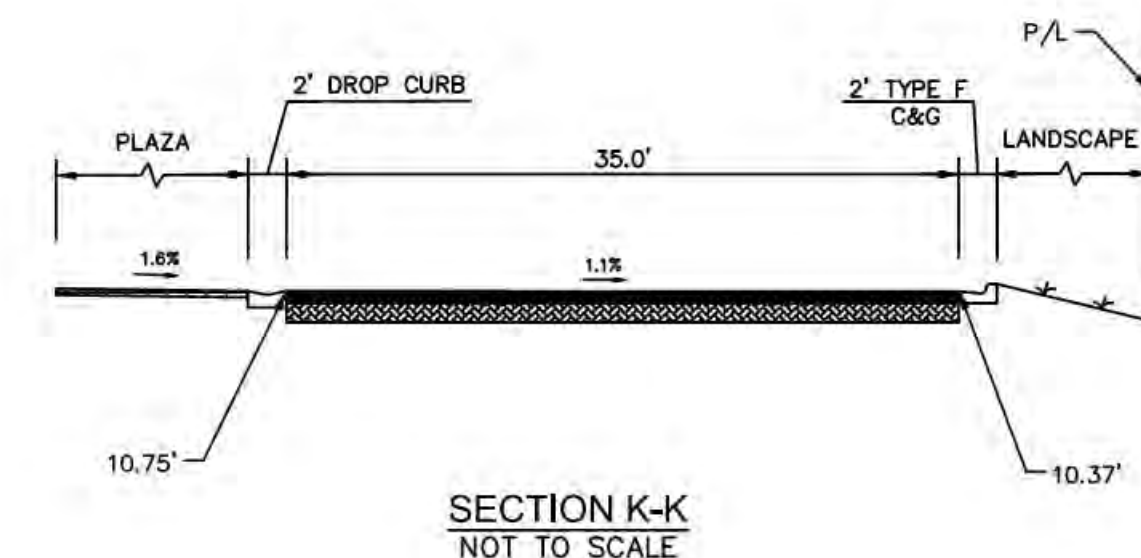
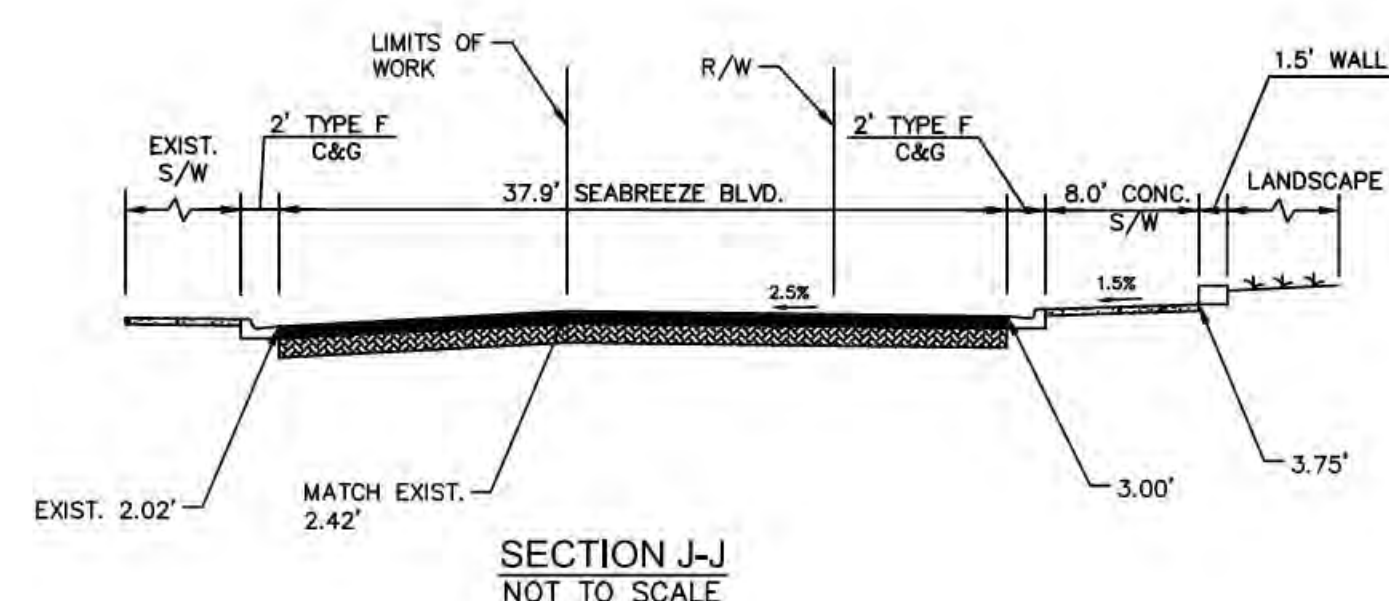
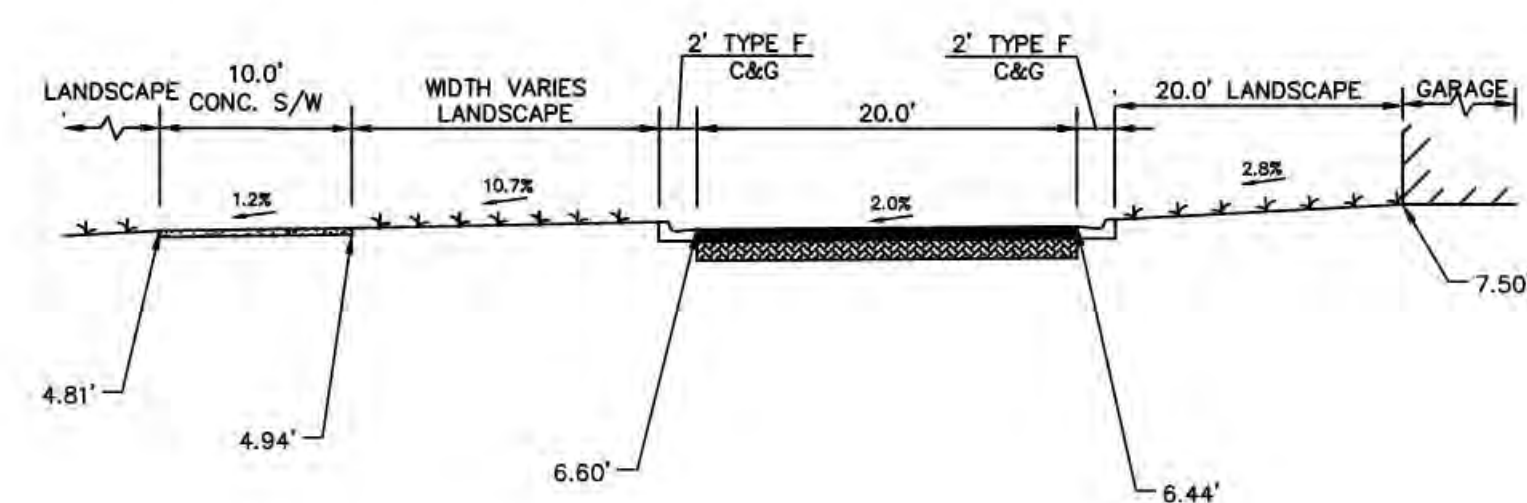
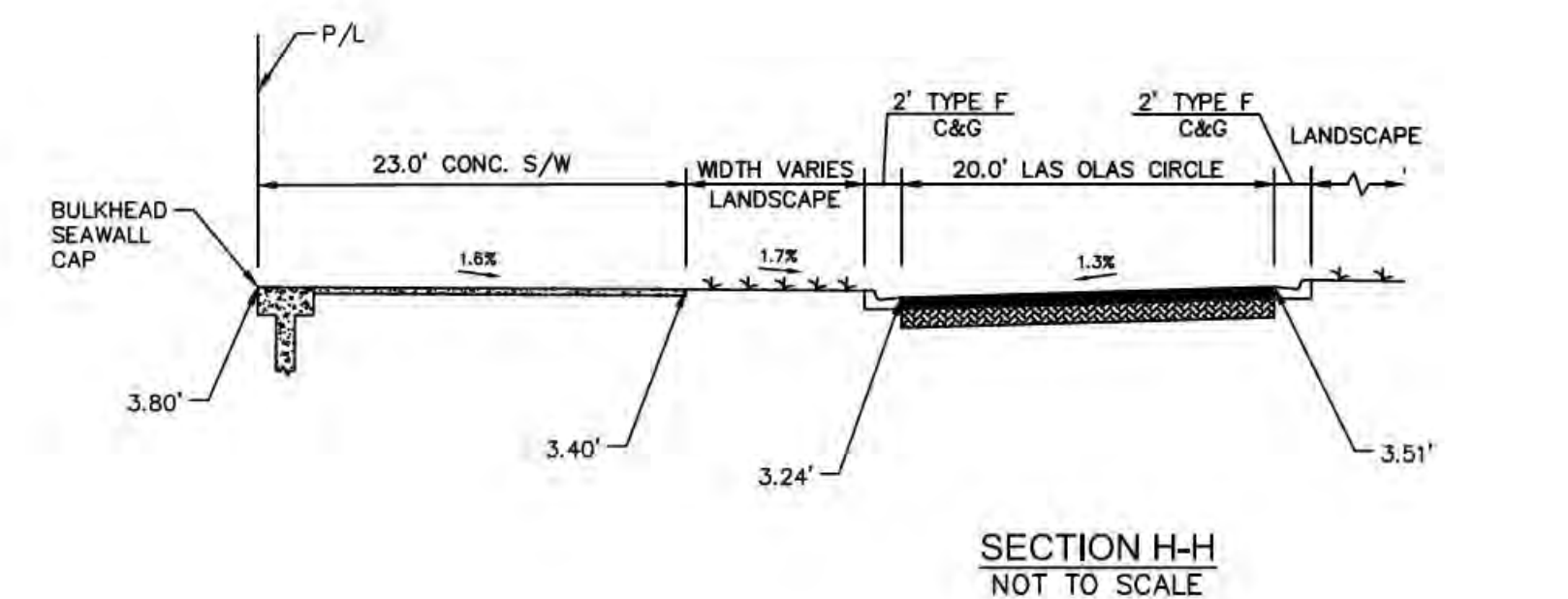
CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING & ARCHITECTURE
100 North Andrews Avenue, Fort Lauderdale, Florida 33301

REVISIONS		NO.	DATE	BY	CHK'D	DESCRIPTION
		1	1/9/2016	JJ	JAW	DRC REVISION - 1

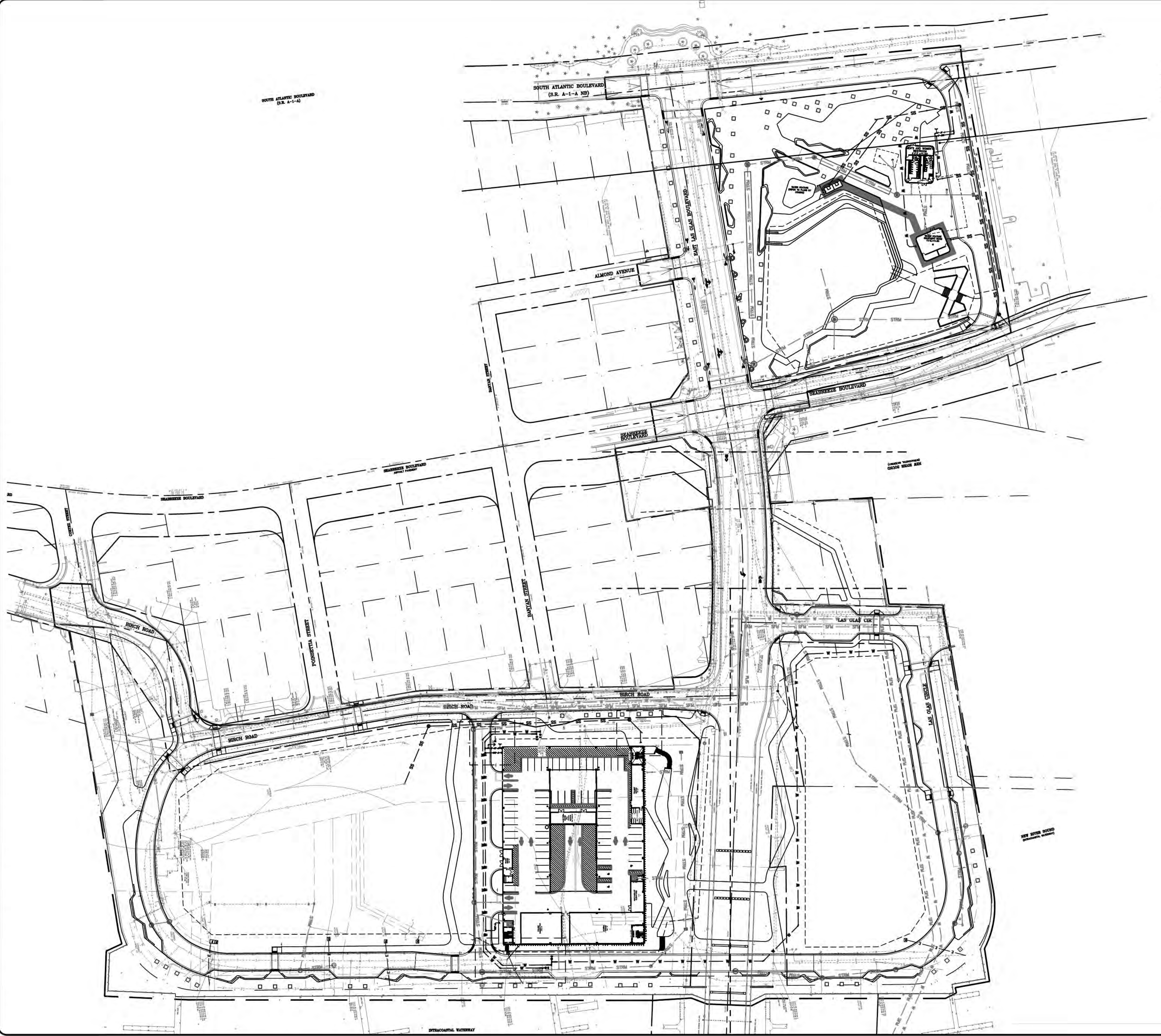
PROJECT # P11900
LAS OLAS CORRIDOR IMPROVEMENTS
FORT LAUDERDALE, FL
PROPOSED CROSS SECTIONS

SHEET NO.
C5-4.03
DRAWING FILE
11900-C505-PRCR

X OF XX



REVISIONS				
NO.	DATE	BY	CHK'D	DESCRIPTION
1	1/8/2016	uj	JAW	DRC REVISION - 1

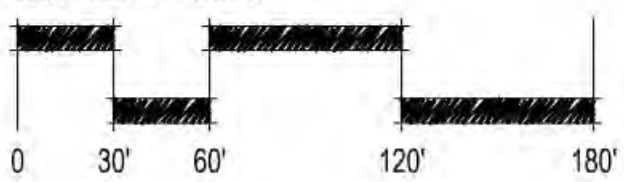


LEGEND:

- RIGHT-OF-WAY
- PROPOSED WATER MAIN
- PROPOSED FIRE MAIN
- PROPOSED STORM PIPE
- PROPOSED GRAVITY SEWER MAIN
- PROPOSED ELECTRIC
- PROPOSED IRRIGATION
- EXISTING WATER MAIN
- EXISTING GRAVITY SEWER MAIN
- EXISTING STORM PIPE
- EXISTING SEWER FORCE MAIN
- EXISTING ELECTRIC
- WATER FEATURE MECHANICAL PIPING (REFER TO SHEET F1.01)



SCALE: 1"=60'-0"



60% CD SUBMITTAL

PROJECT # P11900
LAS OLAS CORRIDOR IMPROVEMENTS
FORT LAUDERDALE, FL

OVERALL UTILITY PLAN

SHEET NO.
C6-1.00

X OF XX

DRAWING FILE
11900-MULTI-UTL

REVISIONS

NO.	DATE	BY	CHK'D	DESCRIPTION
1	1/8/2016	JJ	JAW	DCR REVISION - 1

CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING & ARCHITECTURE

100 North Andrews Avenue, Fort Lauderdale, Florida 33301

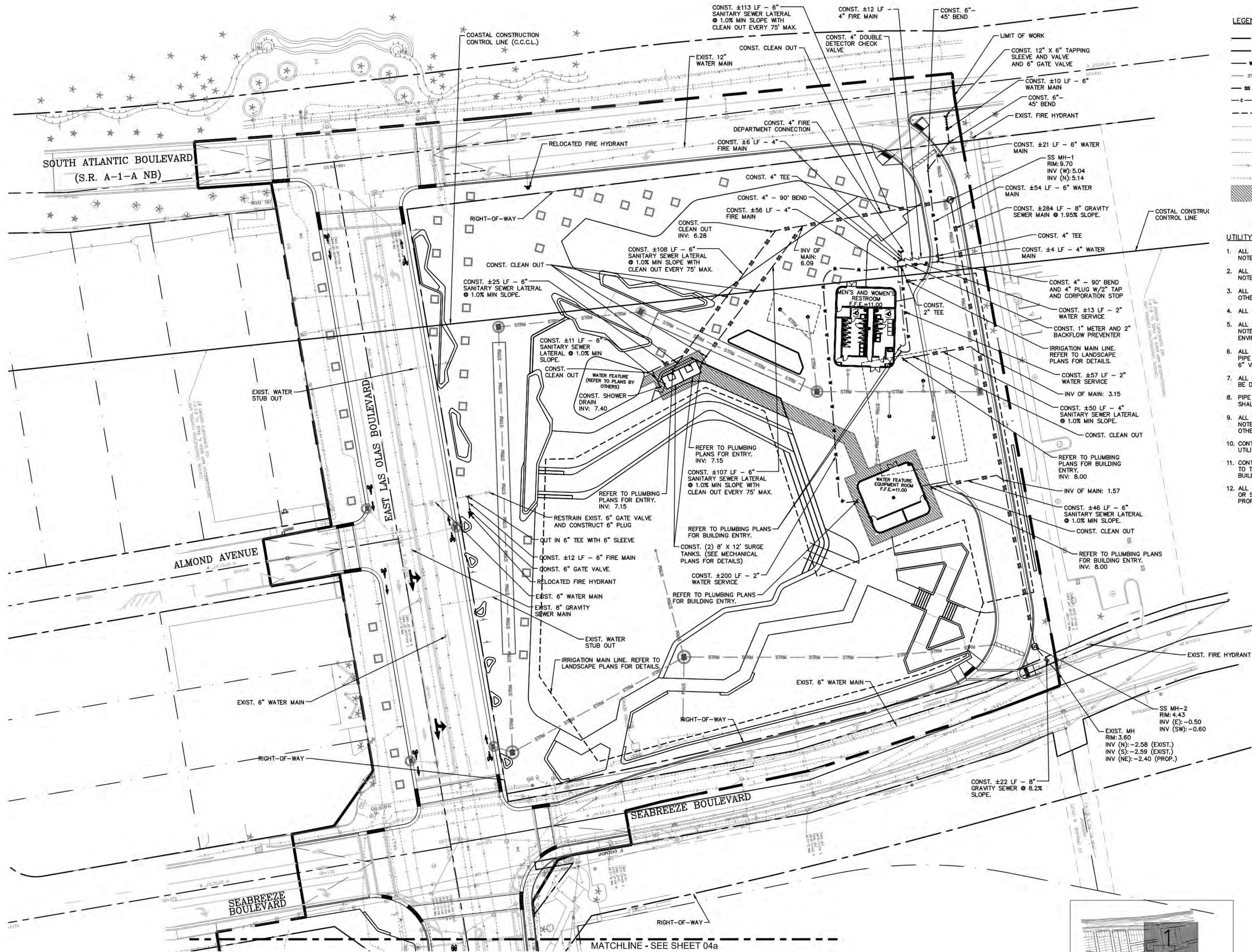
JASON A. WEBBER, P.E.
73962

KHA PROJ # 040814003

DRAWN BY:	DATE:	DESIGNED BY:	SCALE:	AS SHOWN
JJ	03/15/2016	JJ	JAW	JAW
CHECKED BY:	FIELD BOOK:			

EDSA, Inc.
1512 E. Broward Blvd. Suite 110
Fort Lauderdale, FL 33301
954.524.3330

Kimley Horn
1810 S. Congress Ave. Suite 100
Delray Beach, FL 33485
PHONE: 561.424.2424 FAX: 561.424.2425
WWW.KIMLEY-HORN.COM CA-000008
© 2015 KIMLEY-HORN AND ASSOCIATES, INC.

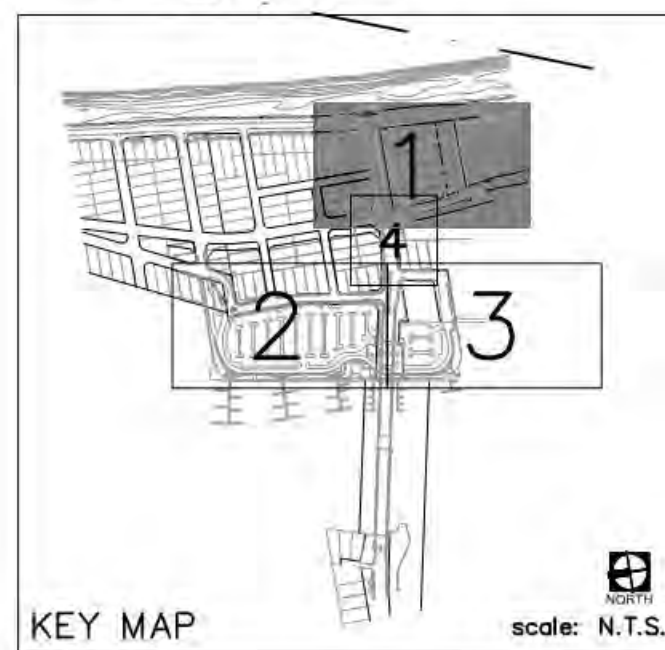


LEGEND:

---	RIGHT-OF-WAY
---	PROPOSED WATER MAIN
---	PROPOSED FIRE MAIN
---	PROPOSED STORM PIPE
---	PROPOSED GRAVITY SEWER MAIN
---	PROPOSED ELECTRIC
---	PROPOSED IRRIGATION
---	EXISTING WATER MAIN
---	EXISTING GRAVITY SEWER MAIN
---	EXISTING STORM PIPE
---	EXISTING SEWER FORCE MAIN
---	EXISTING ELECTRIC
---	WATER FEATURE MECHANICAL PIPING (REFER TO SHEET F1.01)

UTILITY NOTES:

1. ALL WATER MAIN (WM) 4"-12" SHALL BE PVC C-900 UNLESS OTHERWISE NOTED.
2. ALL WATER MAIN (WM) 16" AND LARGER SHALL BE DIP UNLESS OTHERWISE NOTED.
3. ALL WATER SERVICE LINES SHALL BE MINIMUM 2"-SDR9 PE UNLESS OTHERWISE NOTED.
4. ALL FIRE MAIN (F) SHALL BE DIP UNLESS OTHERWISE NOTED.
5. ALL DUCTILE IRON PIPE (DIP) SHALL BE CLASS 350 UNLESS OTHERWISE NOTED. ALL DIP SHALL BE MARKED PER FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (FDEP) STANDARDS.
6. ALL WATER MAIN SHALL HAVE A MINIMUM 36" COVER OVER THE TOP OF THE PIPE UNLESS OTHERWISE NOTED. WATER AND FIRE MAINS SHALL HAVE MIN. 6" VERTICAL SEPARATION FROM EACH OTHER.
7. ALL FITTINGS FOR WATER MAIN, FIRE MAIN, AND SEWER FORCE MAIN SHALL BE DUCTILE IRON MECHANICAL JOINT FITTINGS UNLESS OTHERWISE NOTED.
8. PIPE DEFLECTION OF WATER MAIN, FIRE MAIN, AND SEWER FORCE MAIN SHALL NOT EXCEED MANUFACTURER'S RECOMMENDATIONS.
9. ALL GRAVITY SEWER MAINS (SS) SHALL BE PVC SDR-26 UNLESS OTHERWISE NOTED. ALL GRAVITY SEWER LATERALS SHALL BE PVC SDR-35 UNLESS OTHERWISE NOTED.
10. CONTRACTOR SHALL SUPPORT AND PROTECT ALL EXISTING AND PROPOSED UTILITIES WHEN CONSTRUCTING NEW UTILITIES.
11. CONTRACTOR SHALL FURNISH AND INSTALL NECESSARY PIPE AND FITTINGS TO TRANSITION PIPE MATERIALS WHEN REQUIRED AND TO CONNECT TO BUILDING PLUMBING.
12. ALL MANHOLES, VALVES, CLEANOUTS AND OTHER SUCH BOXES IN PAVEMENT OR SIDEWALKS SHALL BE SET FLUSH WITH PAVEMENT TO MATCH THE PROPOSED SLOPE AND SHALL BE H-20 TRAFFIC RATED.



SCALE: 1"=30'-0"



60% CD SUBMITTAL

PROJECT # P11900
LAS OLAS CORRIDOR IMPROVEMENTS
FORT LAUDERDALE, FL

SHEET NO.
C6-1.01
DRAWING FILE
11900-MULTI-UTL

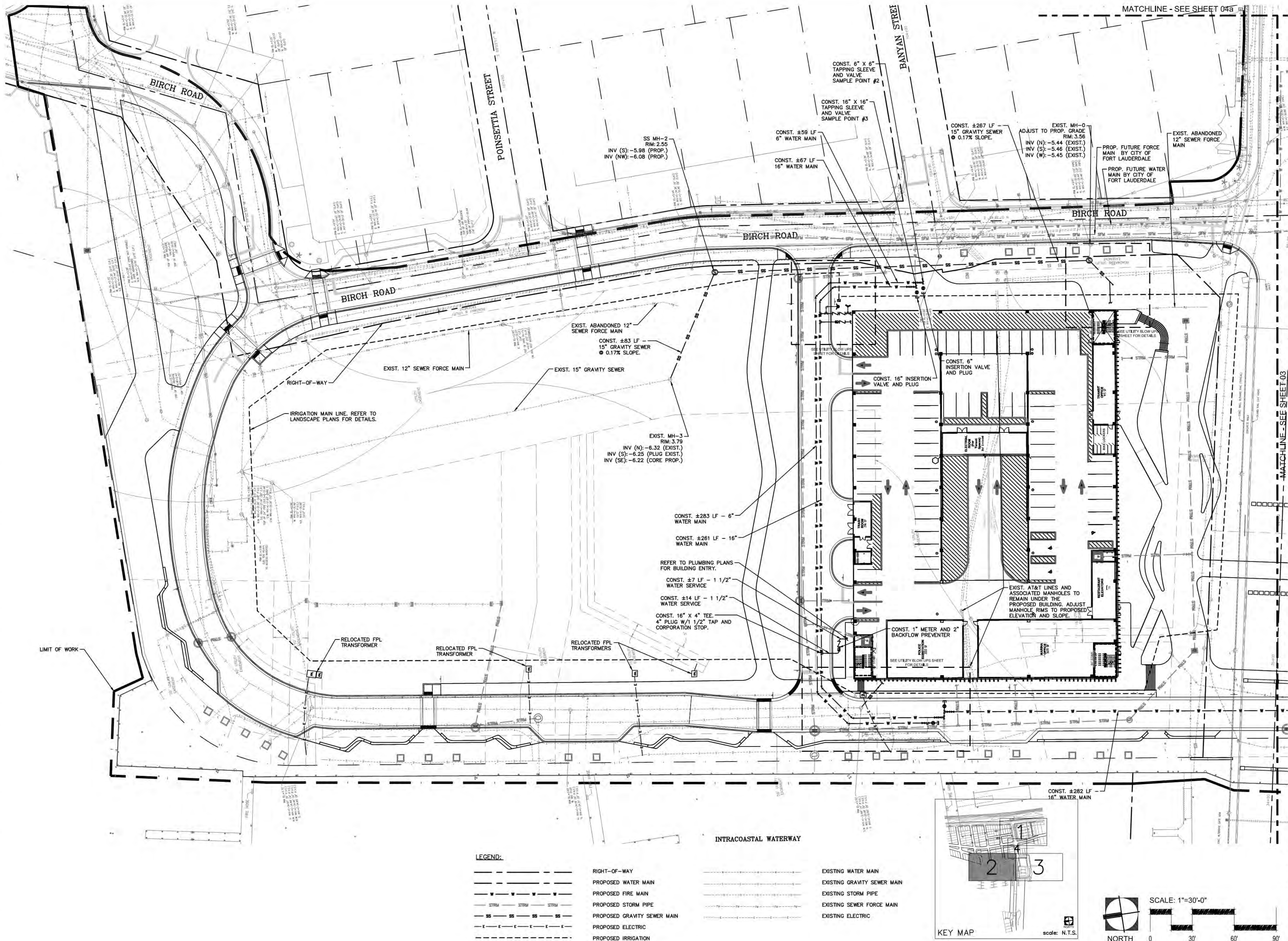
UTILITY PLAN

NO.	DATE	BY	CHK'D	DESCRIPTION
1	1/18/2016	JJ	JAW	DCR REVISION - 1

CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING & ARCHITECTURE
100 North Andrews Avenue, Fort Lauderdale, Florida 33301

DESIGNED BY: JAW
CHECKED BY: JAW
DATE: 03/15/2016
SCALE: AS SHOWN
FIELD BOOK: KHA PROJ # 040814003
JASON A. WEBBER, P.E.
73962

EDSA, Inc.
1512 E. Broward Blvd, Suite 110
Fort Lauderdale, FL 33301
954.524.3330
Kimley-Horn
1800 S. Congress Ave, Suite 100
Delray Beach, FL 33483
PHONE: 561.242.4242 FAX: 561.242.4243
WWW.KIMLEY-HORN.COM CA-000008
© 2015 KIMLEY-HORN AND ASSOCIATES, INC.



EDSA, Inc.
1512 E. Broward Blvd. Suite 110
Fort Lauderdale, FL 33301
954.524.3330

Kimley-Horn
1810 S. Congress Ave. Suite 100
Delray Beach, FL 33434
Phone: 561.242.4242 Fax: 561.242.4245
www.kimley-horn.com CA 0000098
© 2015 KIMLEY-HORN AND ASSOCIATES, INC.

SEAL:

JASON A. WEBBER, P.E.
73962

KHA PROJ #: 040814003

DRAWN BY: JJ
DATE: 03/15/2016
DESIGNED BY: JJ
SCALE: AS SHOWN
CHECKED BY: JJ
FIELD BOOK:

CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING & ARCHITECTURE
100 North Andrews Avenue, Fort Lauderdale, Florida 33301

NO.	DATE	BY	CHK'D	DESCRIPTION
1	1/8/2016	JJ	JAW	DCR REVISION - 1

PROJECT # P11900
LAS OLAS CORRIDOR IMPROVEMENTS
FORT LAUDERDALE, FL

UTILITY PLAN

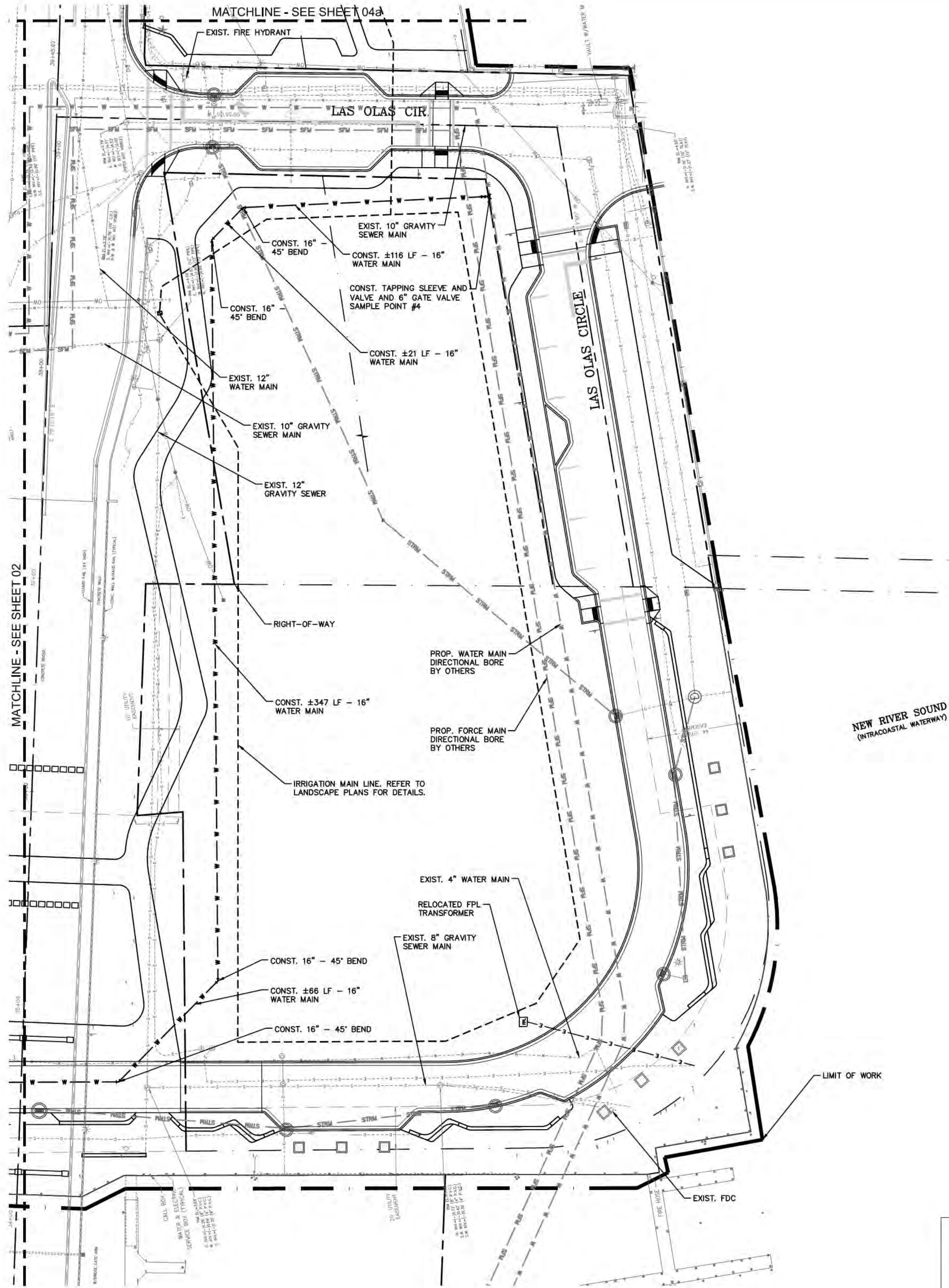
SHEET NO.
C6-1.02
DRAWING FILE
11900-MULTI-UTL

X OF XX

60% CD SUBMITTAL

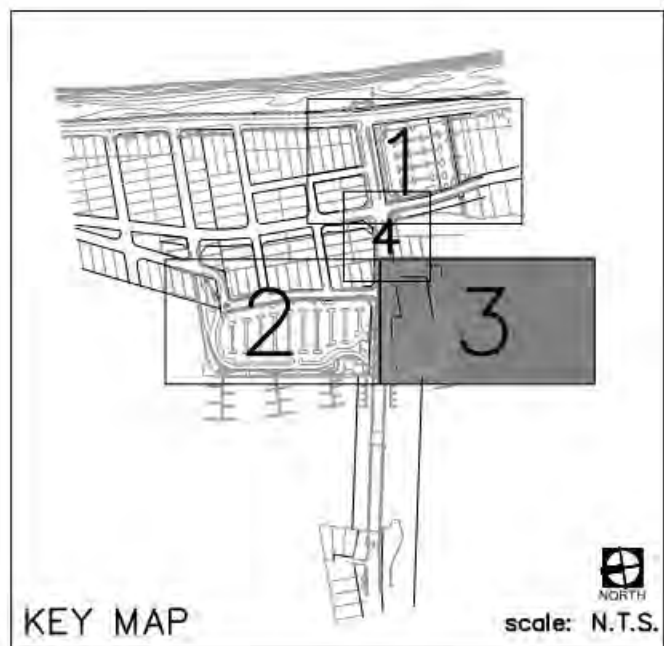
KEY MAP
scale: N.T.S.
NORTH
SCALE: 1"=30'-0"
0 30' 60' 90'

CAM 16-0603
Exhibit 2A
Page 40 of 49

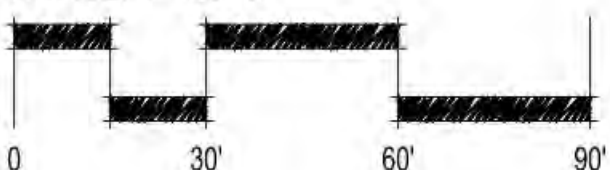


LEGEND:

- RIGHT-OF-WAY
- PROPOSED WATER MAIN
- PROPOSED FIRE MAIN
- PROPOSED STORM PIPE
- PROPOSED GRAVITY SEWER MAIN
- PROPOSED ELECTRIC
- PROPOSED IRRIGATION
- EXISTING WATER MAIN
- EXISTING GRAVITY SEWER MAIN
- EXISTING STORM PIPE
- EXISTING SEWER FORCE MAIN
- EXISTING ELECTRIC



SCALE: 1"=30'-0"



60% CD SUBMITTAL

PROJECT # P11900
LAS OLAS CORRIDOR IMPROVEMENTS
FORT LAUDERDALE, FL

UTILITY PLAN

SHEET NO.
C6-1.03

X OF XX

DRAWING FILE
11900-MULTI-UTL

REVISIONS			
NO.	DATE	BY	DESCRIPTION
1	1/8/2016	JJ	DCR REVISION - 1

CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING & ARCHITECTURE

100 North Andrews Avenue, Fort Lauderdale, Florida 33301

SEALED

JASON A. WEBBER, P.E.
73962

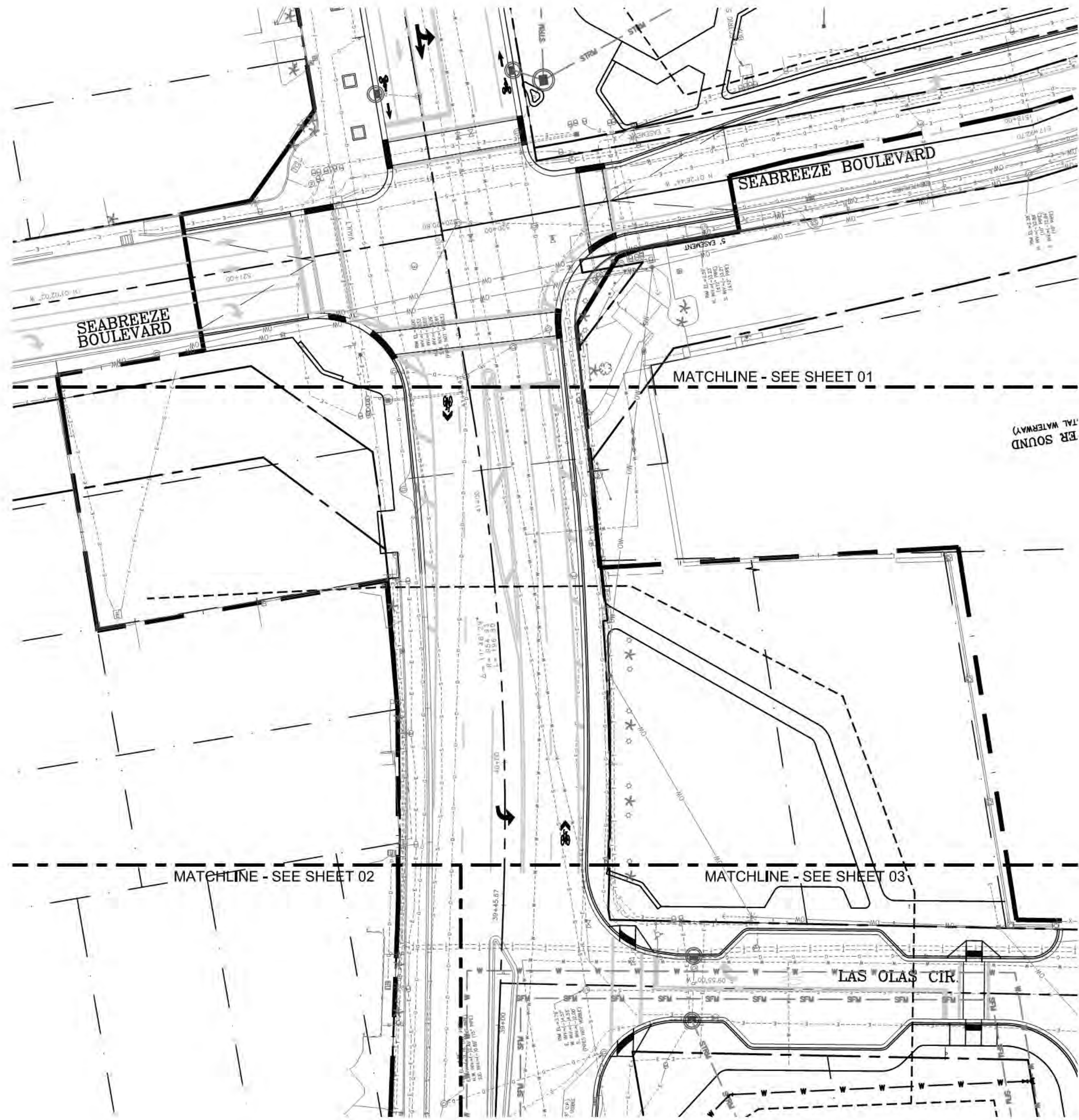
KHA PROJ #: 040814003

DRAWN BY: JJ
CHECKED BY: JJ
DATE: 03/15/2016
SCALE: AS SHOWN
FIELD BOOK:

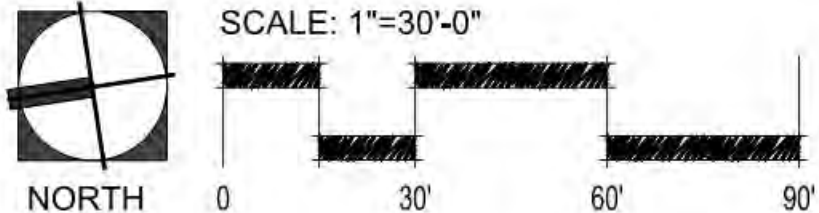
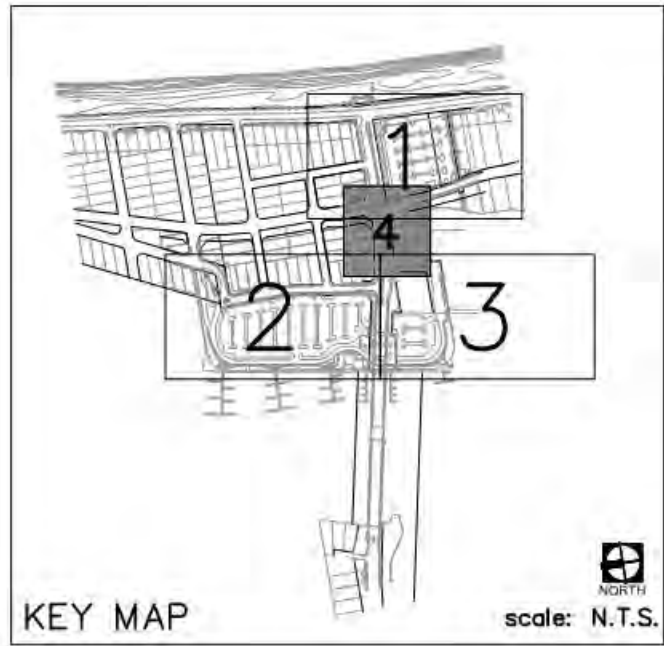
EDSA, Inc.
1512 E. Broward Blvd. Suite 110
Fort Lauderdale, FL 33301
954.524.3330

Kimley Horn

1800 S. Congress Ave. Suite 100
Delray Beach, FL 33483
PHONE: 561.434.2424 FAX: 561.434.2424
WWW.KIMLEY-HORN.COM CA-0000086
© 2015 KIMLEY-HORN AND ASSOCIATES, INC.



- LEGEND:**
- RIGHT-OF-WAY
 - PROPOSED WATER MAIN
 - PROPOSED FIRE MAIN
 - PROPOSED STORM PIPE
 - PROPOSED GRAVITY SEWER MAIN
 - PROPOSED ELECTRIC
 - PROPOSED IRRIGATION
 - EXISTING WATER MAIN
 - EXISTING GRAVITY SEWER MAIN
 - EXISTING STORM PIPE
 - EXISTING SEWER FORCE MAIN
 - EXISTING ELECTRIC



60% CD SUBMITTAL

PROJECT # P11900
LAS OLAS CORRIDOR IMPROVEMENTS
FORT LAUDERDALE, FL
UTILITY PLAN

SHEET NO.
C6-1.04 X OF XX
DRAWING FILE
11900-MULTI-UTL

REVISIONS			
NO.	DATE	BY	DESCRIPTION
1	1/8/2016	JJ	DCR REVISION - 1

CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING & ARCHITECTURE
100 North Andrews Avenue, Fort Lauderdale, Florida 33301

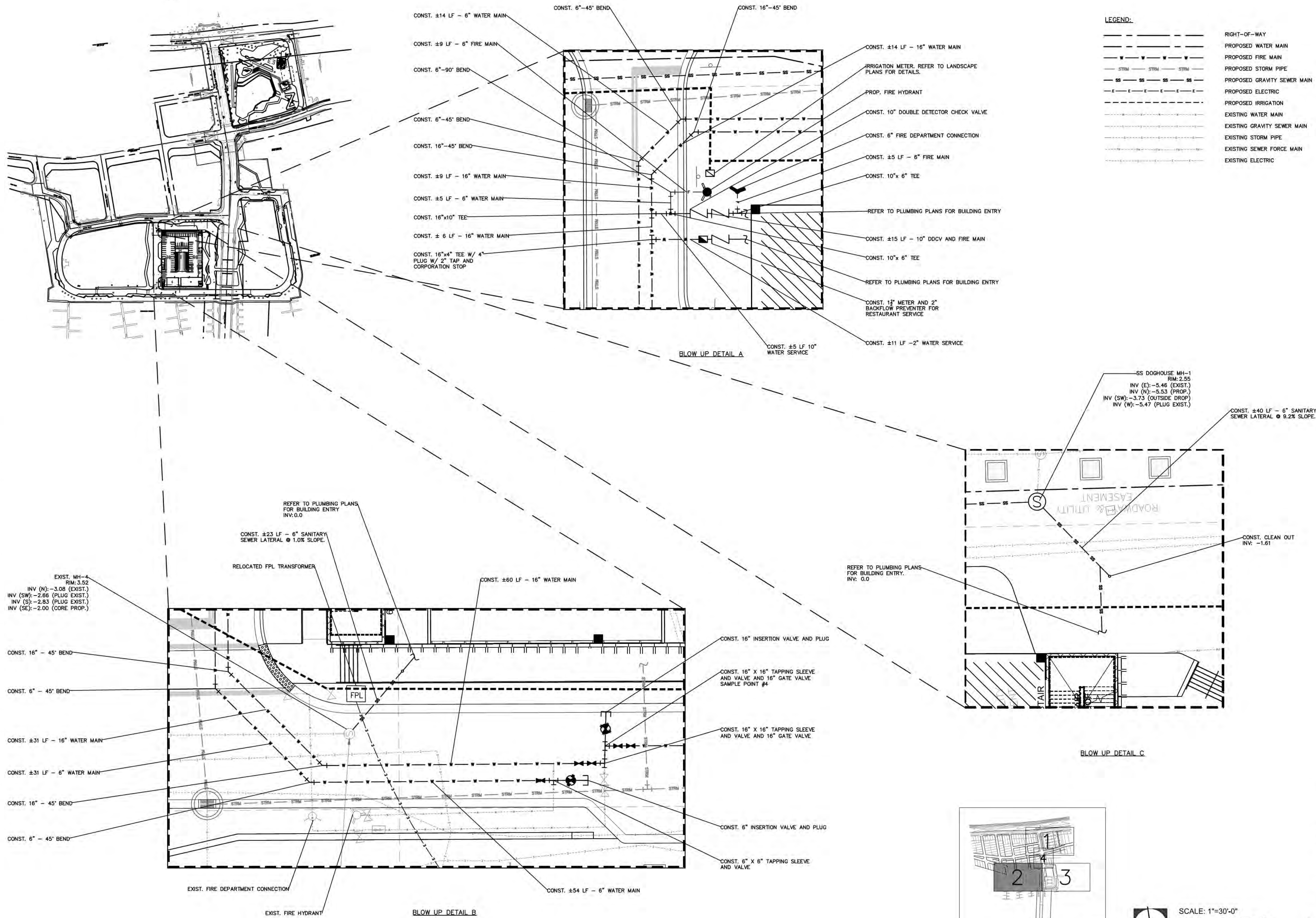
SEAL:

JASON A. WEBBER, P.E.
73962

KHA PROJ # 040814003

DRAWN BY: JJ
DESIGNED BY: JJ
CHECKED BY: JAW
DATE: 03/15/2016
SCALE: AS SHOWN
FIELD BOOK:

EDSA, Inc.
1512 E. Broward Blvd, Suite 110
Fort Lauderdale, FL 33301
954.524.3330
Kimley»Horn
1800 S. Congress Ave, Suite 100
Delray Beach, FL 33483
PHONE: 561.424.2424 FAX: 561.424.2424
WWW.KIMLEY-HORN.COM CA 0000396
© 2015 KIMLEY-HORN AND ASSOCIATES, INC.



EDSA, Inc.
1512 E. Broward Blvd. Suite 110
Fort Lauderdale, FL 33301
954.524.3330

Kimley-Horn
Kimley-Horn & Associates, Inc.
100 North Andrews Avenue, Suite 100
Fort Lauderdale, FL 33301
Phone: 954.524.3330 Fax: 954.524.3331
www.kimley-horn.com

SEAL:

JASON A. WEBBER, P.E.
73962

KHA PROJ #: 040814003

DATE: 02/15/2016
DRAWN BY: JJ
CHECKED BY: JJ
FIELD BOOK:

SCALE: AS SHOWN
APPROVED BY: JAW

CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING & ARCHITECTURE
100 North Andrews Avenue, Fort Lauderdale, Florida 33301

NO.	DATE	BY	CHK'D	DESCRIPTION
1	1/19/2016	JJ	JAW	DCR REVISION - 1

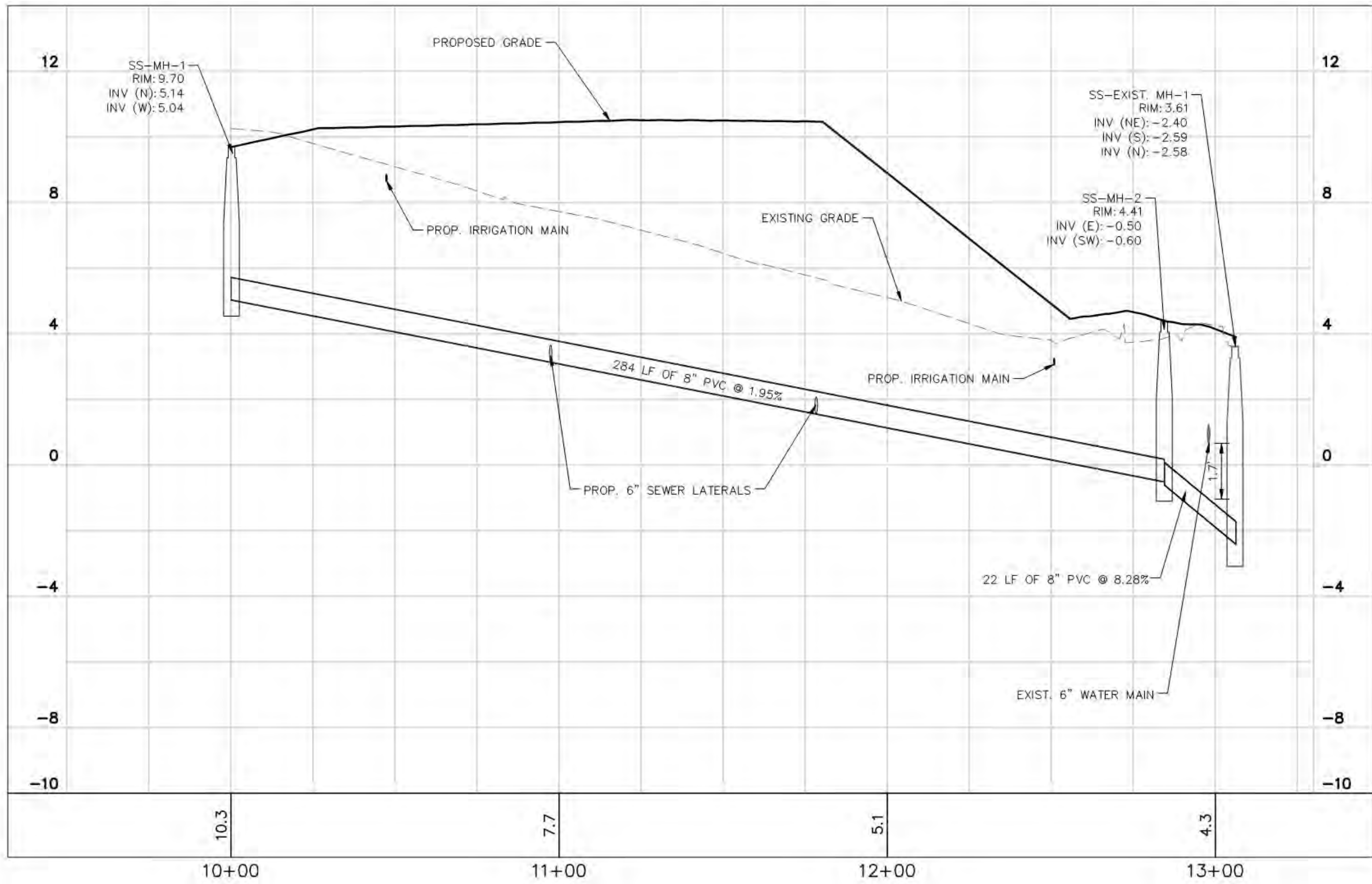
PROJECT # P11900
LAS OLAS CORRIDOR IMPROVEMENTS
FORT LAUDERDALE, FL

UTILITY BLOW UP

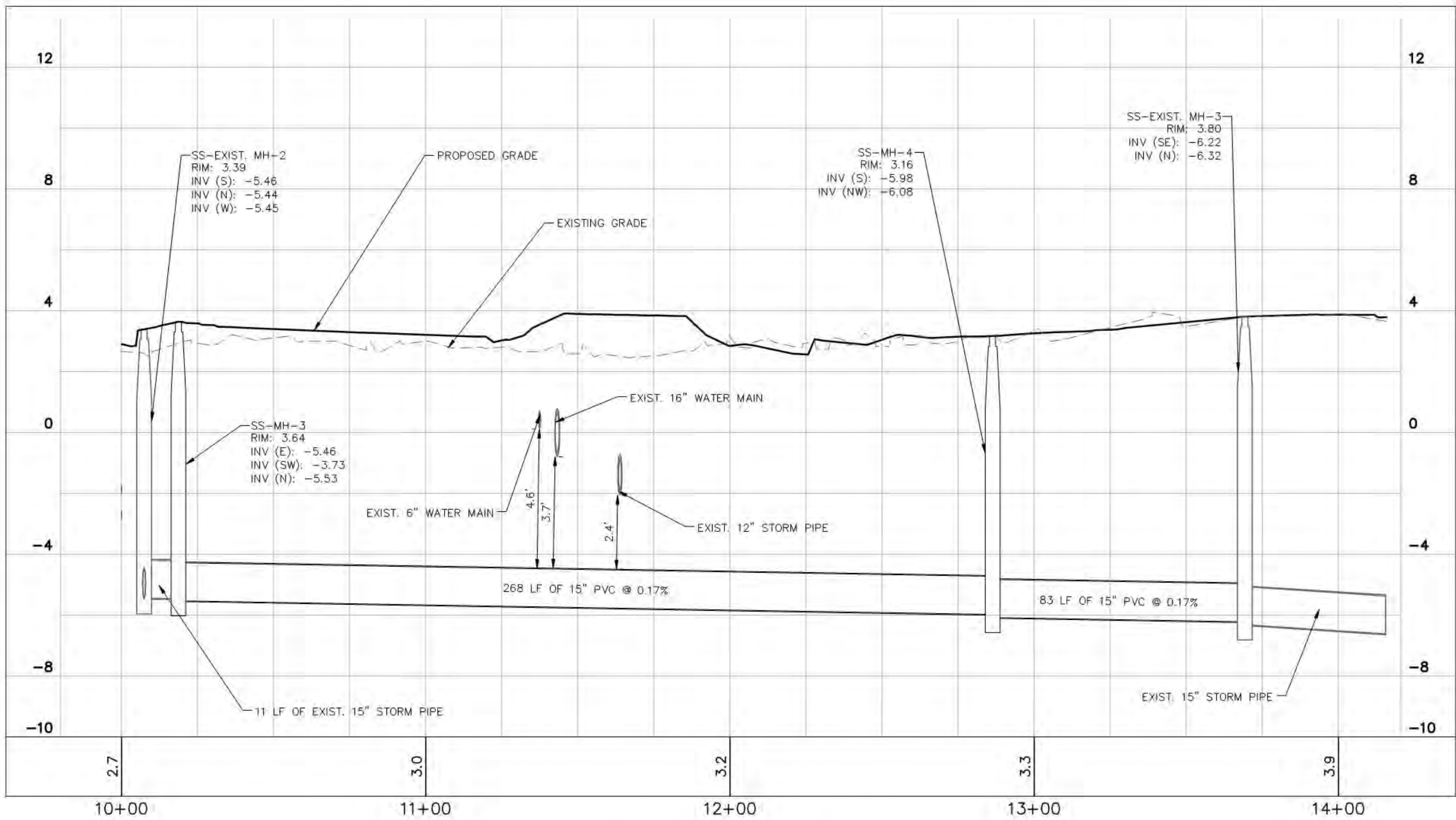
SHEET NO. **C6-3.01** X OF XX

DRAWING FILE 11900-MULTI-UTIL

The document, together with the concepts and designs presented herein, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on the document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



SEWER PROFILE A-A
SEE UTILITY PLAN SHEET C6-1.01



SEWER PROFILE B-B
SEE UTILITY PLAN SHEET C6-1.02

REVISIONS		DESCRIPTION	
NO.	DATE	BY	CHECK'D
1	1/8/2016	JJ	JAW
		DOR REVISION - 1	

LEGEND:

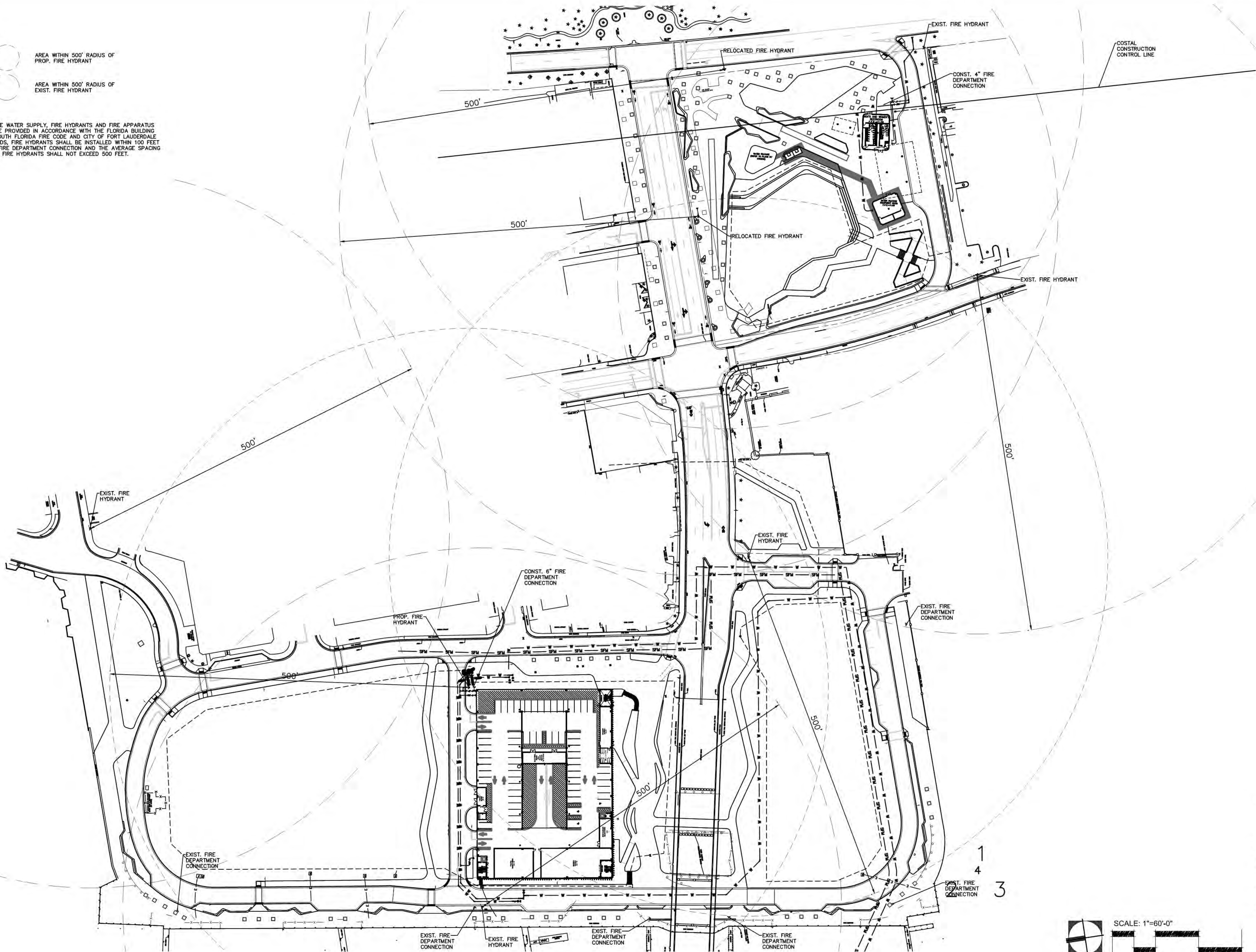


AREA WITHIN 500' RADIUS OF
PROP. FIRE HYDRANT

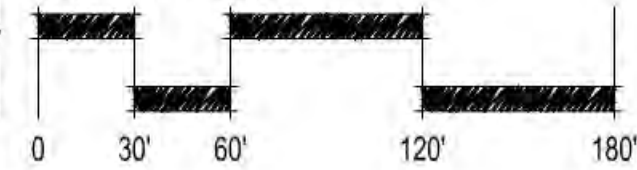
AREA WITHIN 500' RADIUS OF
EXIST. FIRE HYDRANT

NOTES:

1. ADEQUATE WATER SUPPLY, FIRE HYDRANTS AND FIRE APPARATUS SHALL BE PROVIDED IN ACCORDANCE WITH THE FLORIDA BUILDING CODE, SOUTH FLORIDA FIRE CODE AND CITY OF FORT LAUDERDALE STANDARDS. FIRE HYDRANTS SHALL BE INSTALLED WITHIN 100 FEET OF THE FIRE DEPARTMENT CONNECTION AND THE AVERAGE SPACING BETWEEN FIRE HYDRANTS SHALL NOT EXCEED 500 FEET.



SCALE: 1"=60'-0"



60% CD SUBMITTAL

PROJECT # P11900
LAS OLAS CORRIDOR IMPROVEMENTS
FORT LAUDERDALE, FL

FIRE HYDRANT LOCATION PLAN

SHEET NO.
C6-3.03

DRAWING FILE
11900-MULTI-UTL

X OF
XX

REVISIONS

NO.	DATE	BY	CHK'D	DESCRIPTION
1	1/8/2016	JJ	JAW	DCR REVISION - 1

CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING & ARCHITECTURE

100 North Andrews Avenue, Fort Lauderdale, Florida 33301

SEAL:

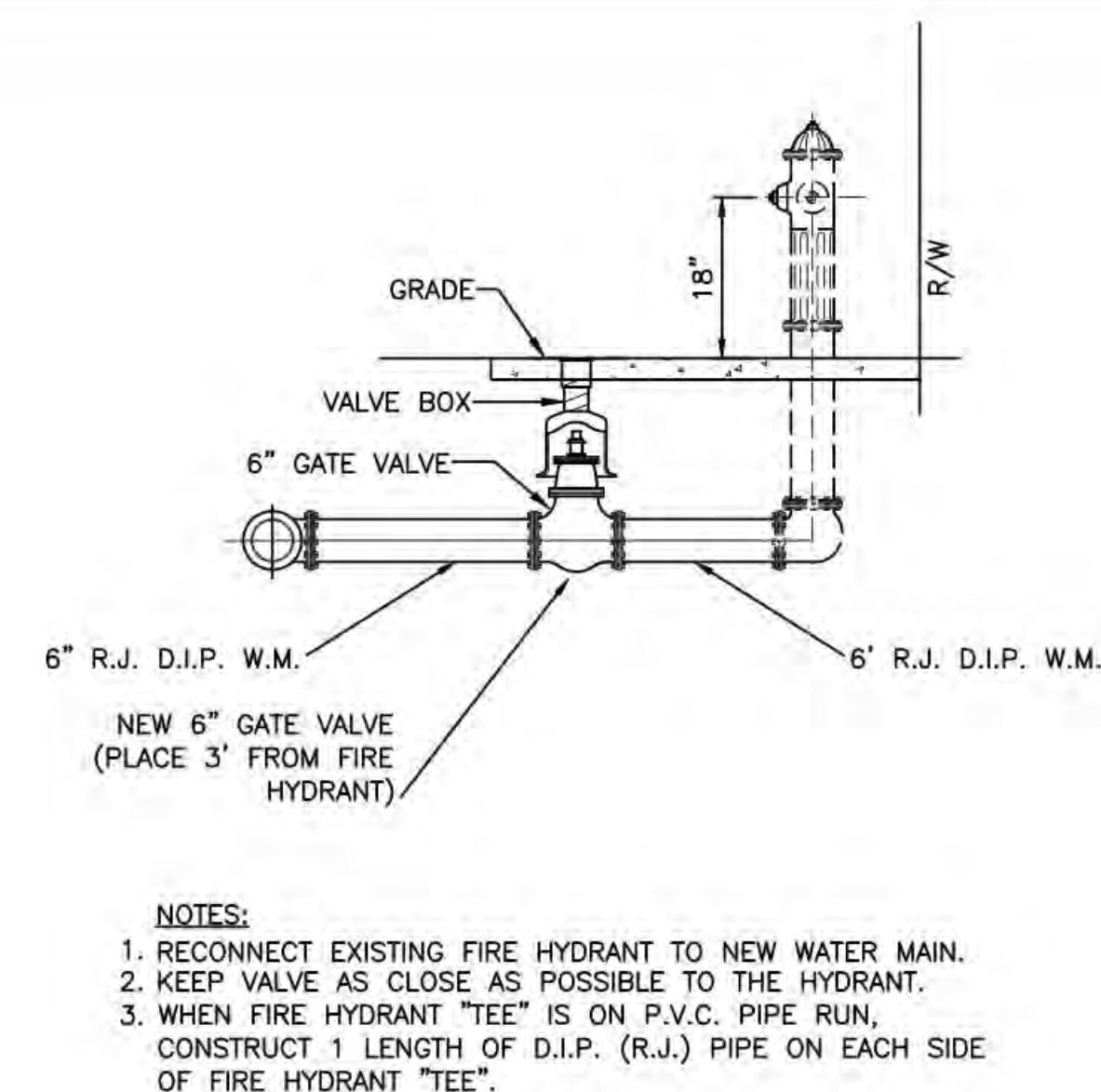
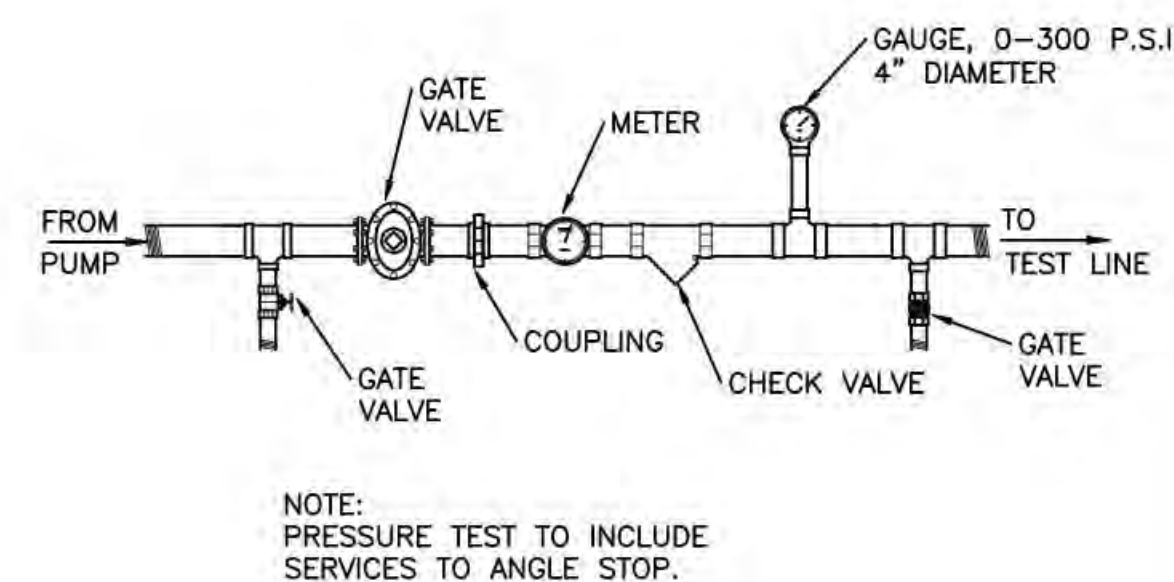
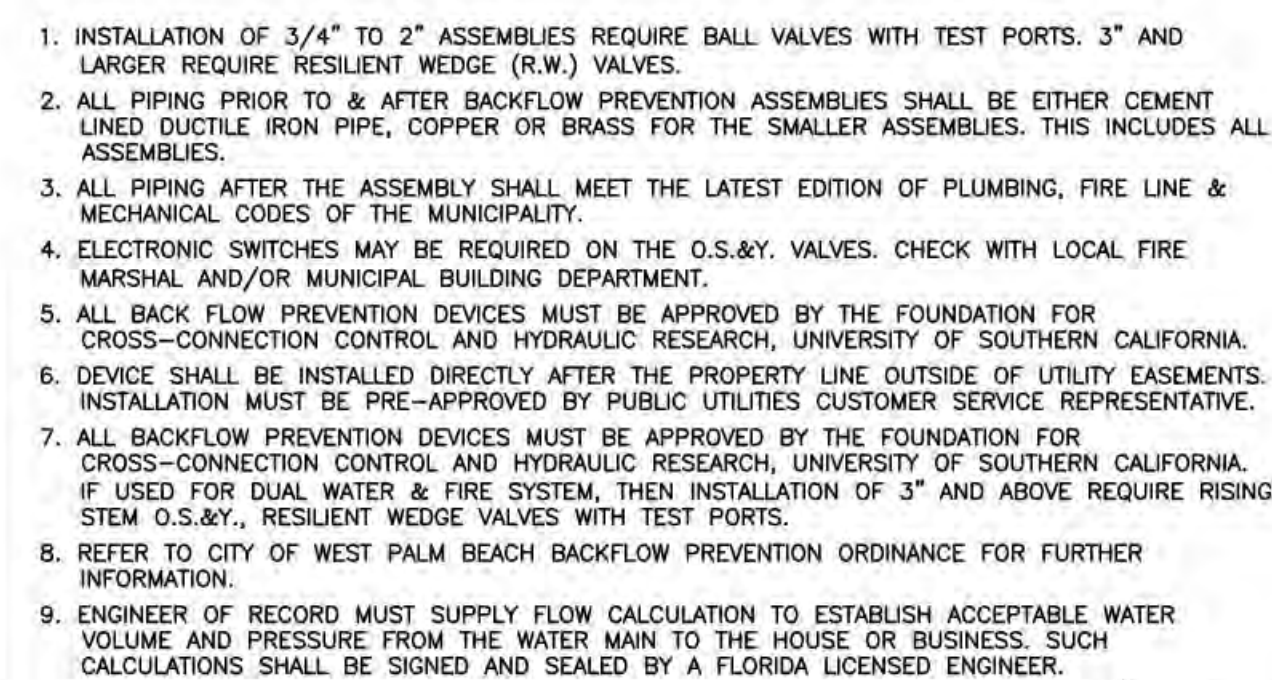
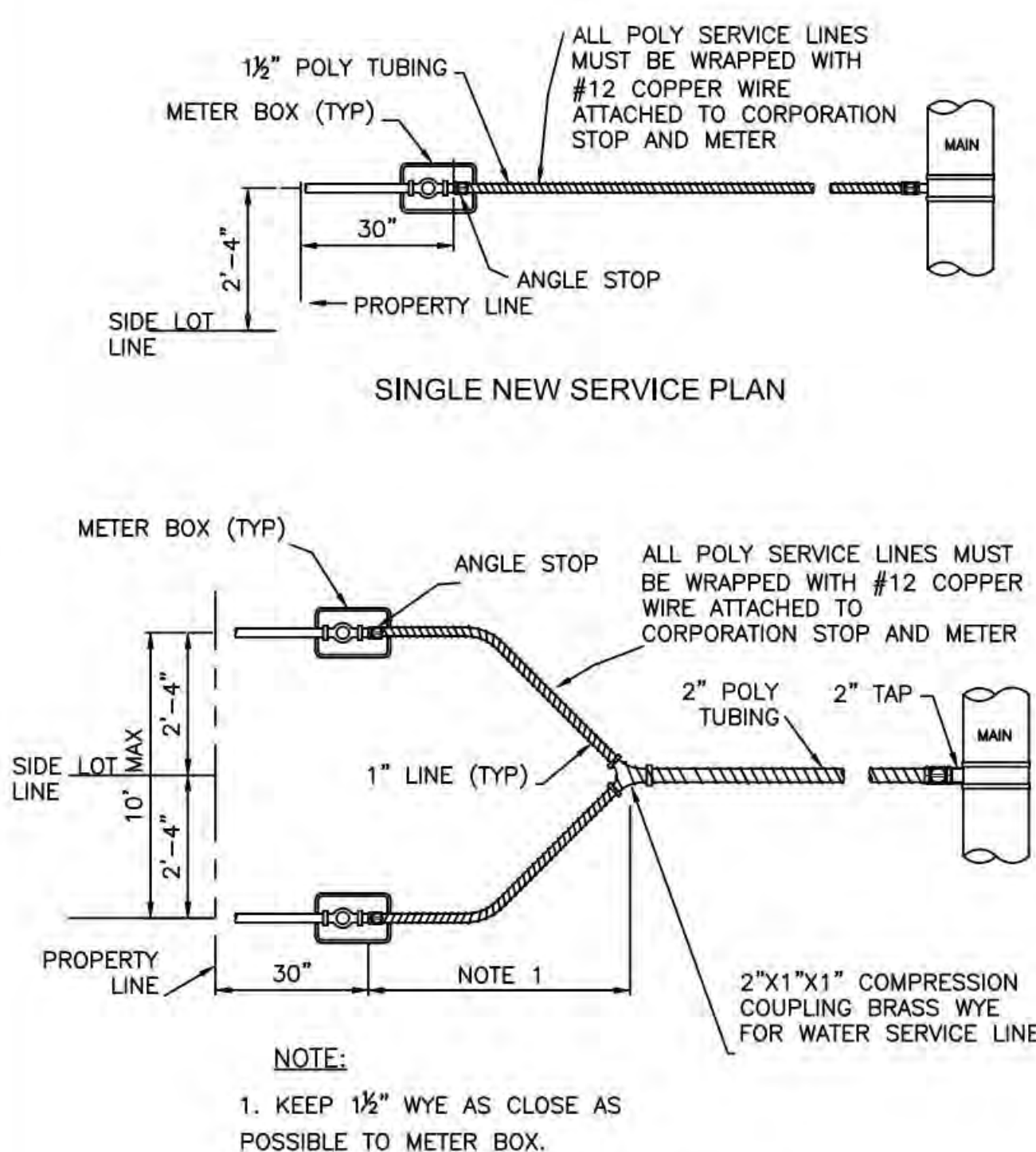
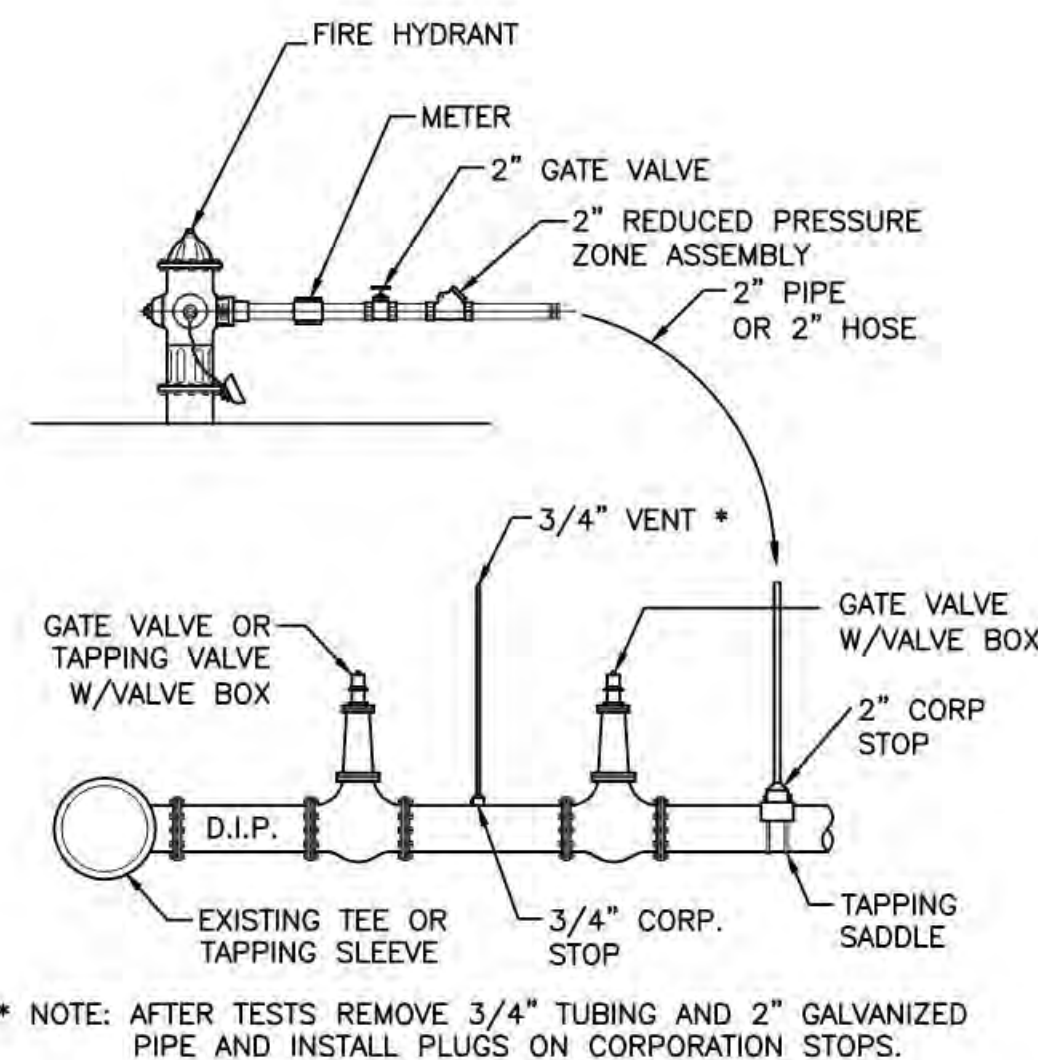
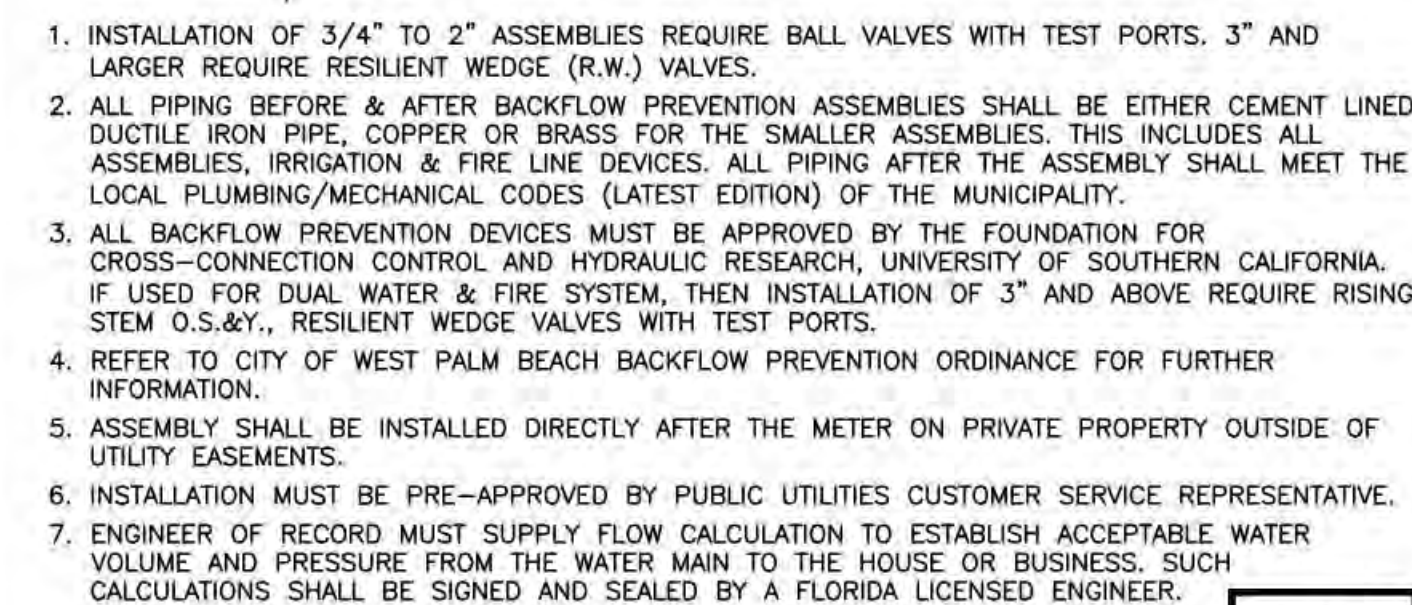
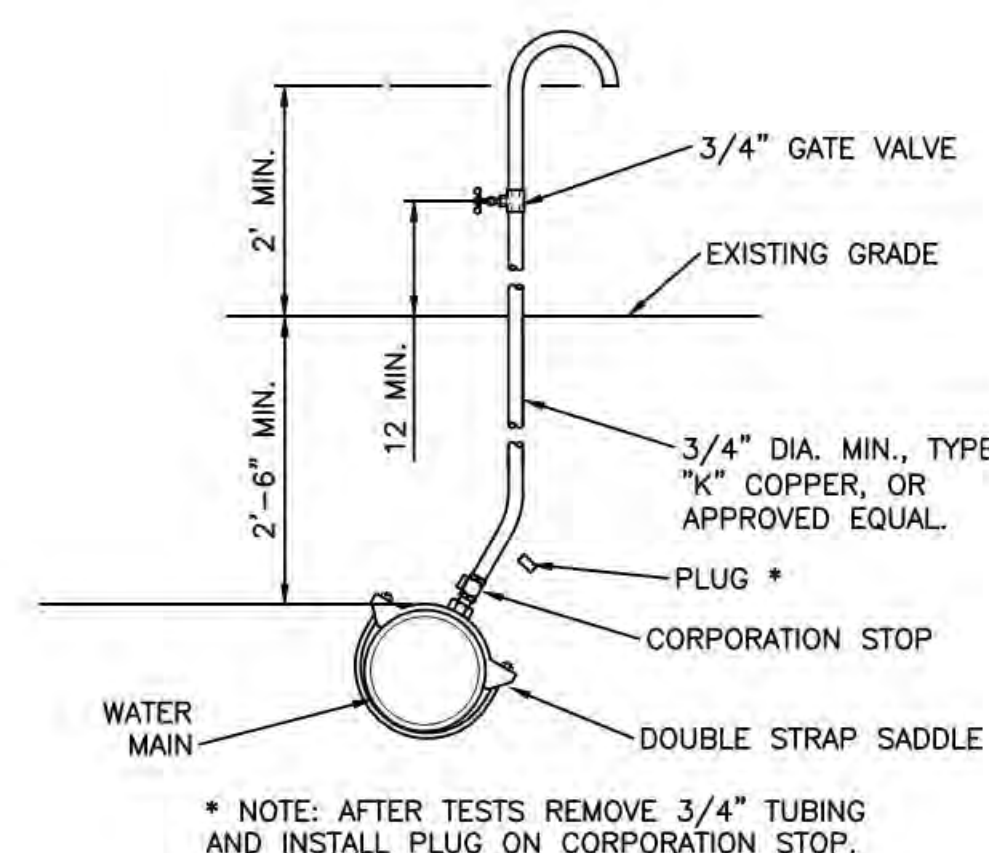
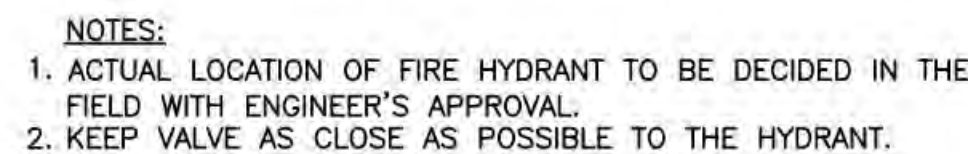
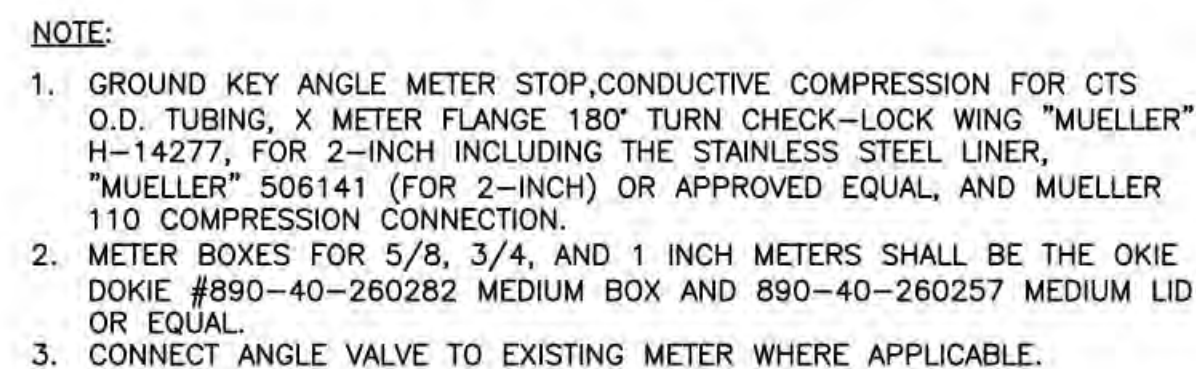
JASON A. WEBBER, P.E.
73962

KHA PROJ. #: 040814003

DATE:	03/15/2016	SCALE:	AS SHOWN
DRAWN BY:	JJ	DESIGNED BY:	JJ
CHECKED BY:	JAW	FIELD BOOK:	

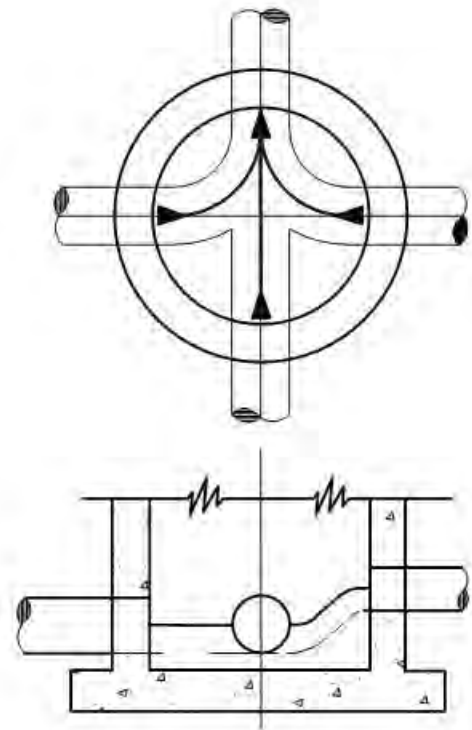
EDSA, Inc.
1512 E. Broward Blvd. Suite 110
Fort Lauderdale, FL 33301
954.524.3330

Kimley-Horn
1810 S. UNIVERSITY AVE. SUITE 100
DELMAR, DE 19840
PHONE: 302.441.2424 FAX: 302.441.2425
WWW.KIMLEY-HORN.COM CA-0000086
© 2015 KIMLEY-HORN AND ASSOCIATES, INC.



Plotted By: Webber, Jason Sheet Sht: LAS OLAS CORRIDOR IMPROVEMENTS Layout: C605 UTILITY DETAILS February 20, 2016 04:00:50pm K:\BCD_Roadway\040814003 - FTL Las Olas CADD\PlanSheets\11900-MULTI-UTD1.dwg

This document, together with the concepts and designs presented herein, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

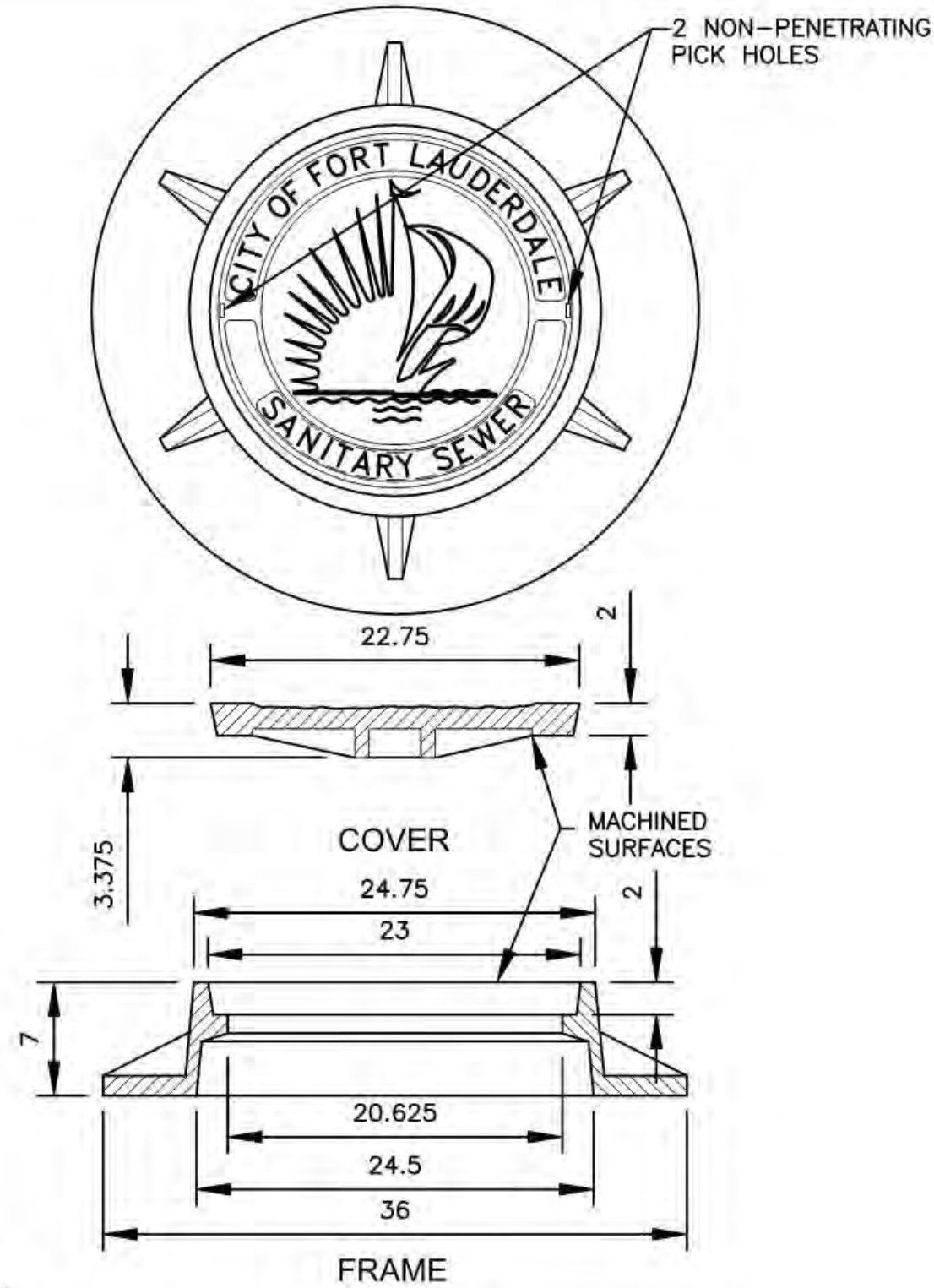


NOTES:

1. ALL INVERT CHANNELS ARE TO BE CONSTRUCTED FOR SMOOTH FLOW WITHOUT OBSTRUCTION.
2. PROPERLY SHAPED SPILLWAYS SHALL BE CONSTRUCTED BETWEEN PIPES WITH DIFFERENT INVERT ELEVATIONS TO PROVIDE FOR SMOOTH FLOWS.
3. SERVICE LATERALS SHALL NOT ENTER MANHOLES UNLESS SPECIFIED ON PLANS AND THEN MUST BE TREATED AS MAINS. (ELEVATIONS SHOWN, PRECAST HOLE, FLOW CHANNEL)
4. BRICK RUBBLE PERMITTED AS FLOW CHANNEL BUILDUP.
5. SIDEWALLS OF FLOW CHANNEL SHALL BE AT LEAST HALF OF PIPE HEIGHT AT ALL POINTS.
6. NO INSIDE DROP LARGER THAN 6" SHALL BE ALLOWED WITH 3 OR 4 INVERTS AND MANHOLES WITH A CHANGE OF DIRECTION OF FLOW OF MORE THAN 45 DEGREES.

INVERT FLOW CHANNELS - 202
NOT TO SCALE

FTL

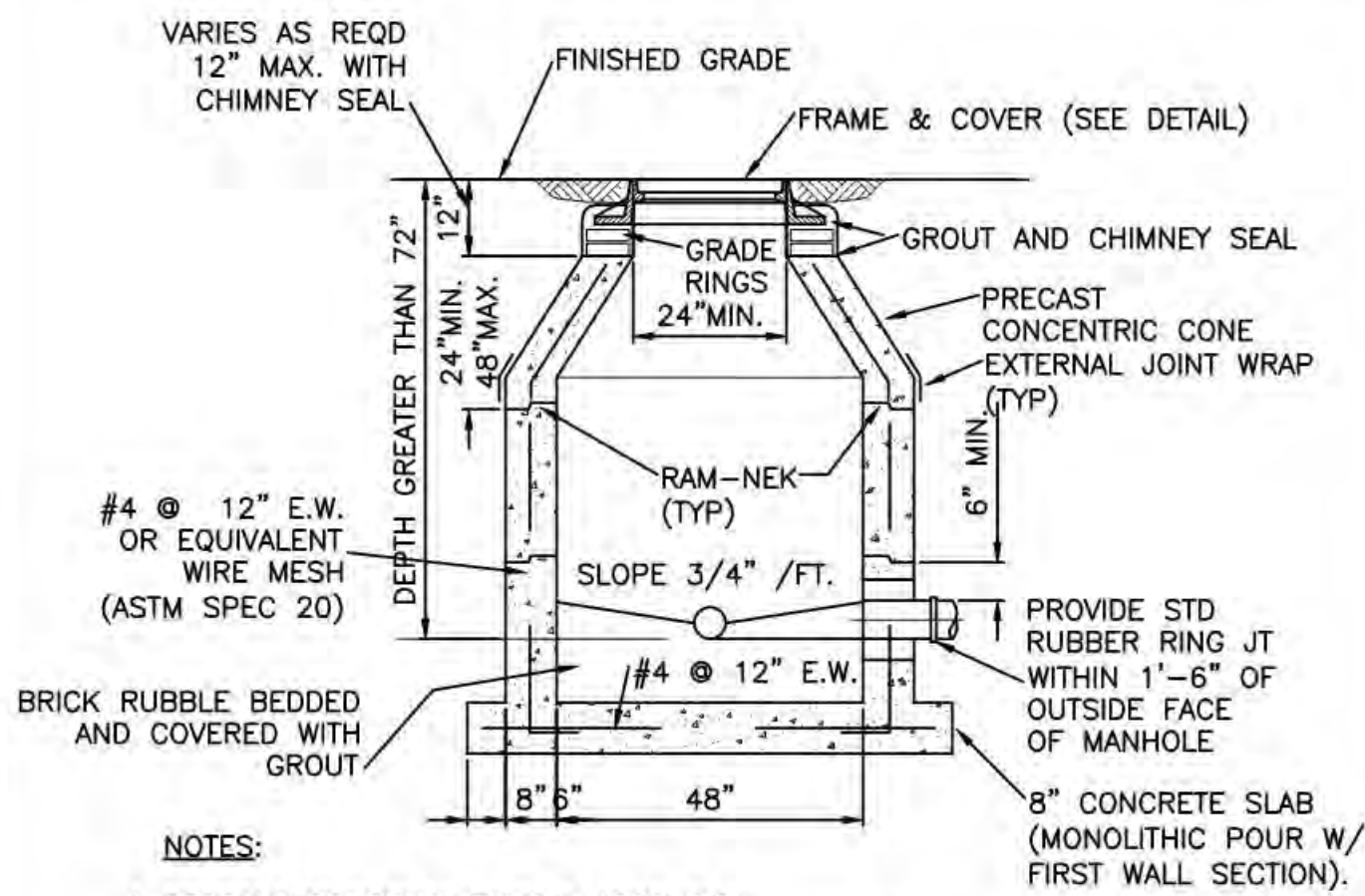


NOTES:

1. MATERIAL: FRAME AND COVER AS SPECIFIED.
2. ADDITIONAL GRADE RINGS MAY BE USED TO ELEVATE EXISTING MANHOLE FRAMES TO RESURFACED GRADE (MAX. 4" HEIGHT).
3. ALL DIMENSIONS ARE NOMINAL.
4. OPTIONAL: HINGED FRAME AND COVER AS SPECIFIED.

MANHOLE FRAME &
COVER-PAVED AREAS - 200
NOT TO SCALE

FTL

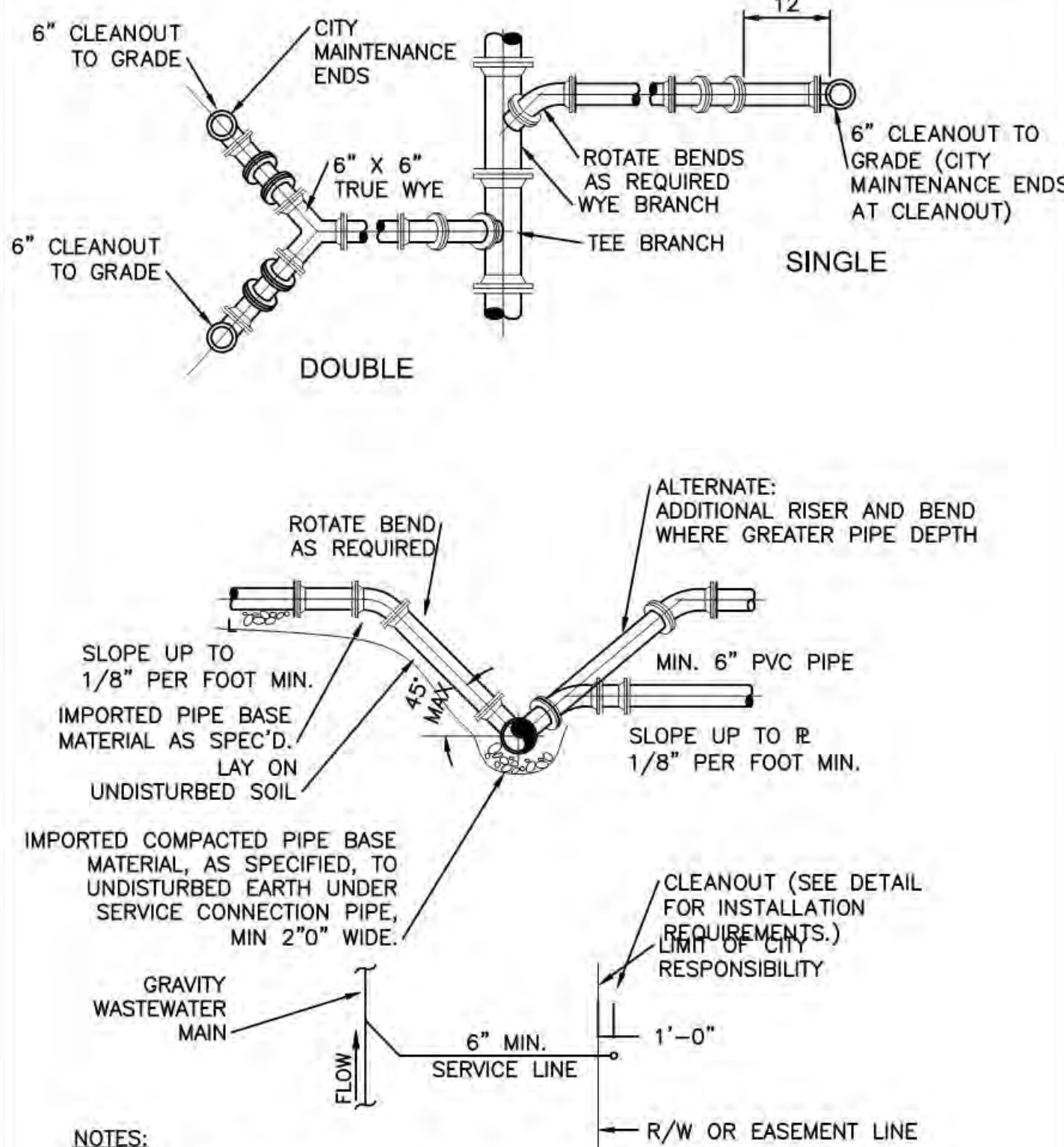


NOTES:

1. PRECAST CONCRETE TYPE II 4000 P.S.I.
2. "RAM-NEK" OR EQUAL AT ALL RISER JOINTS (1/2" THICK WITH THE WIDTH AT LEAST 1/2 THE WALL THICKNESS).
3. ALL OPENINGS SHALL BE SEALED WITH A WATERPROOF NON-SHRINKING GROUT.
4. FLOW CHANNELS SHALL BE CONSTRUCTED TO DIRECT INFLUENT INTO
5. FLOW STREAM. (SEE DETAIL)
6. LIFT HOLES ARE PERMITTED.
7. ALL PIPE HOLES SHALL BE PRECAST OR CORE DRILLED.
 - A. FOR PVC PIPE ENTERING MANHOLE WITH PRECAST HOLES USE THE APPROVED NON-ASBESTOS PVC-MANHOLE ADAPTER OR PRECAST FLEXIBLE MANHOLE SLEEVE FOR THE APPROPRIATE PIPE DIAMETER AND DIMENSION RATIO. THE ADAPTER SHALL NOT EXTEND MORE THAN 1" INTO THE MANHOLE. DOUBLE BANDING IS REQUIRED FOR FLEXIBLE MANHOLE SLEEVE.
 - B. CONNECTION TO A MANHOLE WITH A CORE DRILLED HOLE SHALL BE MADE USING A 5" MIN. DUCTILE IRON PIPE SECTION (EPOXY LINED) OR THE APPROVED PVC-MANHOLE ADAPTER.
8. INSIDE DROPS SHALL NOT BE DESIGNED TO EXCEED 1.80 FEET AND NOT CONSTRUCTED TO EXCEED 2.0 FEET. MAX. 6" INSIDE DROP IS PERMITTED FOR MANHOLES WITH 3 OR MORE INVERTS AND MANHOLES WITH A CHANGE IN FLOW DIRECTION OF MORE THAN 45 DEGREES.
9. MANHOLE FABRICATION SHALL BE IN ACCORDANCE WITH ASTM C-478, LATEST STANDARD.
10. MINIMUM 5 FEET IS REQUIRED BETWEEN OUTSIDE OF MANHOLE AND SERVICE WYE.
11. MANHOLES TO BE PAINTED INSIDE AND OUTSIDE WITH 2 COATS OF AN APPROVED PROTECTIVE COATING. (ONE COAT RED, ONE COAT BLACK) MIN. 8-10 MILS D.F.T. PER COAT.
12. MANHOLE SHALL BE SET PLUMB TO LINE AND GRADE.

STANDARD MANHOLE - 203
NOT TO SCALE

FTL

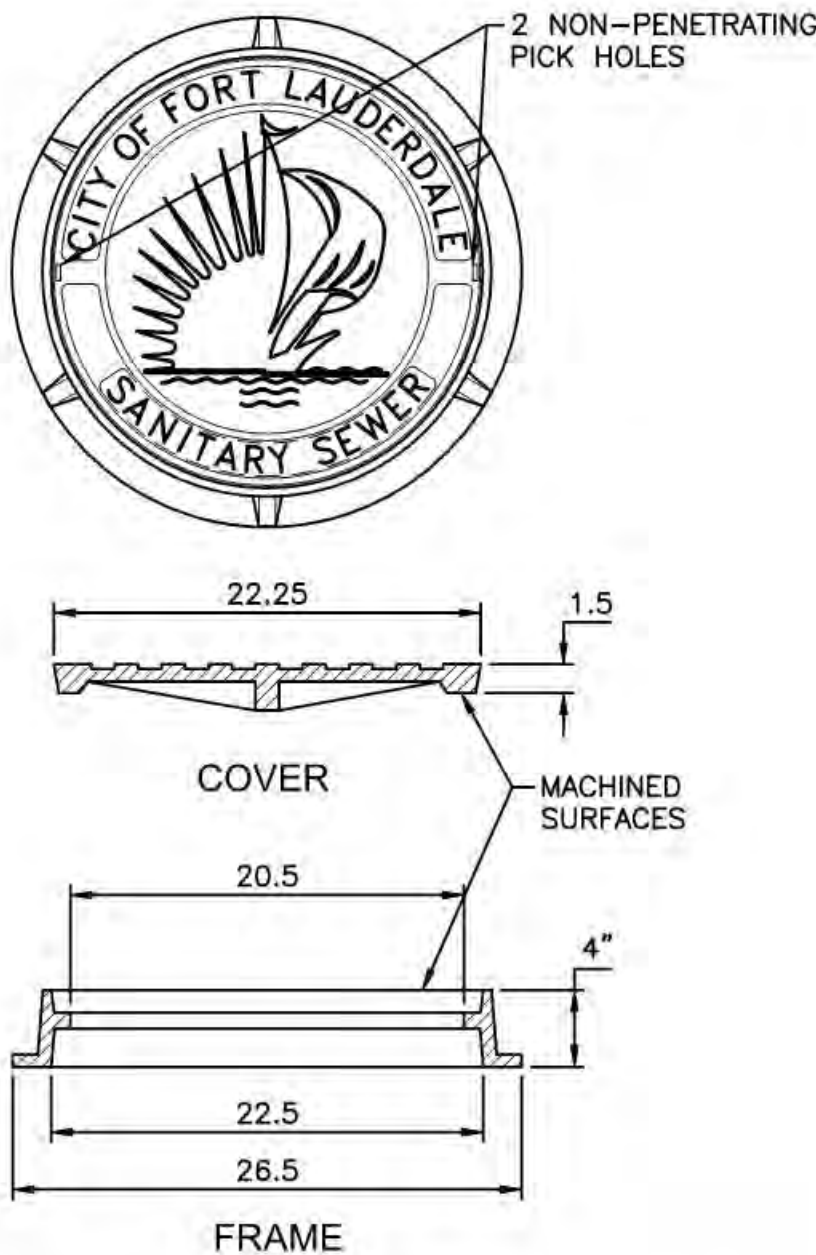


NOTES:

1. WASTEWATER MAIN WYE BRANCH TO MATCH MAIN PIPE MATERIAL.
2. NO 90° BENDS SHALL BE USED FOR WASTEWATER SERVICE AND CLEANOUT INSTALLATIONS.
3. SERVICE LATERALS SHALL TERMINATE AT 12" INSIDE THE PROPERTY LINE AT A DEPTH OF 3 FEET EXCEPT WHERE A DEEPER INVERT IS REQUIRED BY EXISTING BUILDING CONDITIONS.

TYPICAL WASTEWATER SERVICE CONNECTION - 208
NOT TO SCALE

FTL

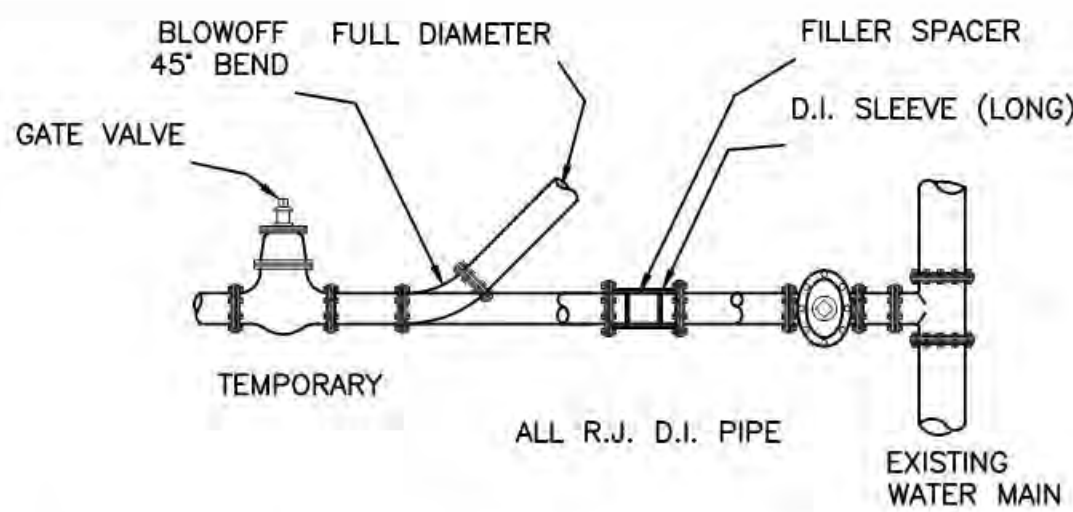


NOTES:

1. MATERIAL: FRAME AND COVER AS SPECIFIED.
2. ADDITIONAL GRADE RINGS MAY BE USED TO ELEVATE EXISTING MANHOLE FRAMES TO RESURFACED GRADE (MAX. 4" HEIGHT).
3. ALL DIMENSIONS ARE NOMINAL.
4. OPTIONAL: HINGED FRAME AND COVER AS SPECIFIED.

MANHOLE FRAME &
COVER-UNPAVED AREAS - 201
NOT TO SCALE

FTL

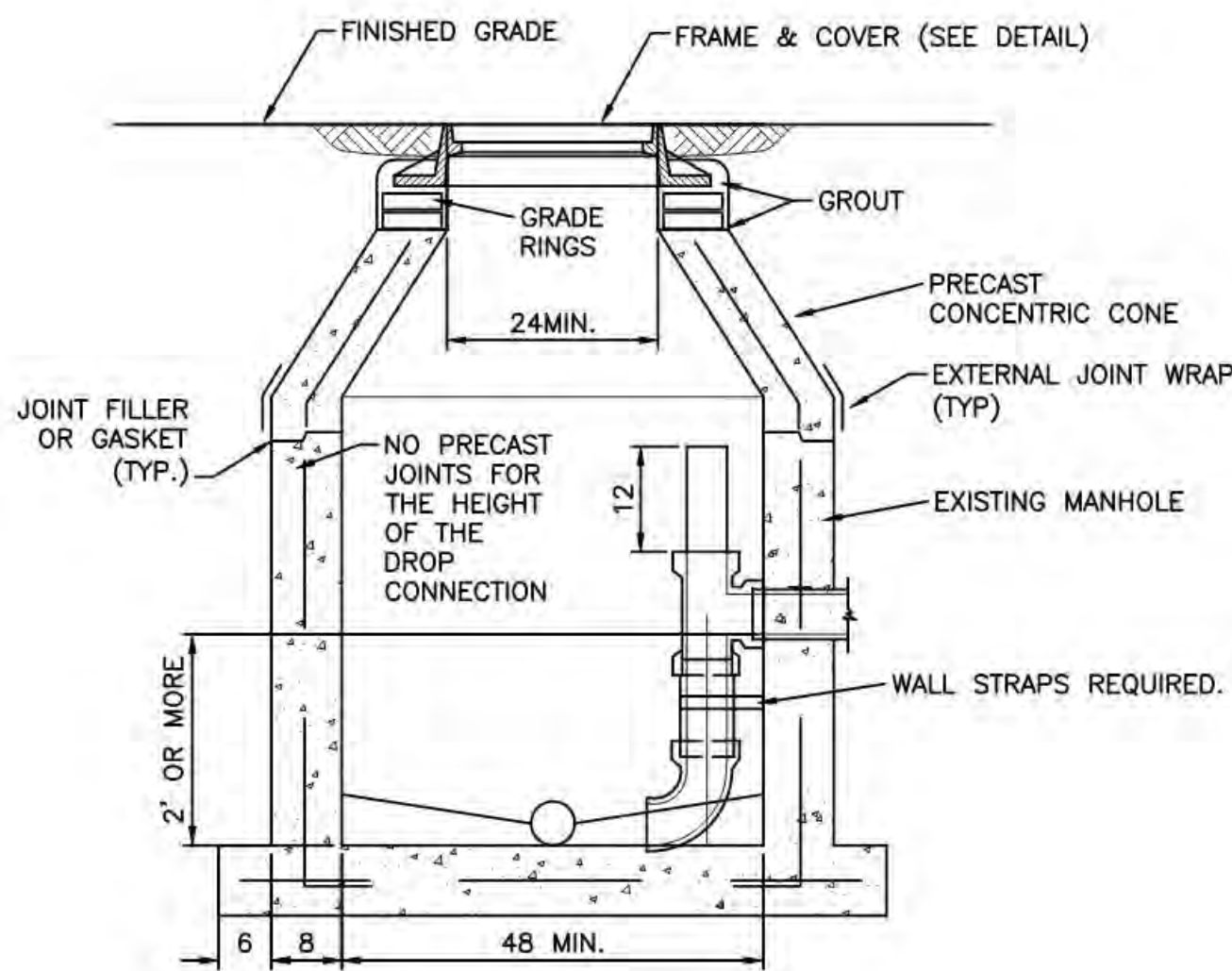


NOTES:

1. UPON COMPLETION OF THE PIPE INSTALLATION FOR ANY SECTION, THE MAINS SHALL BE SWABBED AND FLUSHED TO REMOVE DIRT AND ANY OTHER FOREIGN MATTER BY ACHIEVING A MINIMUM VELOCITY OF 2.5 FEET PER SECOND IN THE PIPE. TEMPORARY FITTINGS, PIPE, ETC. MAY BE NEEDED TO FACILITATE FLUSHING.
2. 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.
3. BENDS AND PIPING SHALL BE THE SAME SIZE AS THE LINE TO BE FLUSHED.
4. PRIOR TO THE ACTUAL LINE FLUSHING OPERATION, THE CONTRACTOR SHALL PROPERLY NOTIFY THE CITY INSPECTOR OF SUCH INTENDED WATER USE.
5. NO EXISTING VALVES SHALL BE TURNED ON OR OFF, EXCEPT BY AUTHORIZED CITY PERSONNEL.
6. FLUSHING SHALL NOT BE ACCOMPLISHED WITHOUT THE ACTUAL PRESENCE OF THE CITY INSPECTOR.
7. AFTER THE LINE UNDER CONSTRUCTION HAS BEEN SUCCESSFULLY FLUSHED THE CONTRACTOR SHALL REMOVE THE TEMPORARY PIPING ARRANGEMENT AND PROCEED WITH THE REMAINING CONSTRUCTION AS SPECIFIED.
8. THERE MAY BE SPECIAL REQUIREMENTS FOR FLUSHING PIPE LARGER THAN 12" DIAMETER.

FLUSHING CONNECTION AND
BLOW OFF DETAIL - 303
NOT TO SCALE

FTL



NOTES:

ALL DETAILS AND SPECIFICATIONS FOR STANDARD MANHOLES ARE APPLICABLE EXCEPT FOR REFERENCES TO DROP ASSEMBLY. INSIDE DROP CONNECTION TO BE USED ONLY FOR A SINGLE DROP CONNECTION TO AN EXISTING MANHOLE. DROP CONNECTIONS SHALL BE REQUIRED WHENEVER AN INFLUENT INVERT IS LOCATED 2.0 FEET OR MORE ABOVE THE MAIN INVERT CHANNEL. DROP CONNECTIONS SHOULD NOT BE DESIGNED FOR LESS THAN A 2.4 FOOT DROP. SOLVENT TYPE JOINT PVC FITTINGS TO BE UTILIZED IN THE DROP ASSEMBLY ONLY.

INSIDE DROP CONNECTION EXISTING
MANHOLE TYPE C-207
NOT TO SCALE

FTL

FTL CITY OF FORT LAUDERDALE
STANDARD DETAIL

KHA KIMLEY-HORN AND
ASSOCIATES DETAIL

NOTE: DETAILS ARE INCLUDED FROM THE ENTITIES LISTED ABOVE AND ARE PROVIDED FOR INFORMATIONAL PURPOSES ONLY. CONTRACTOR SHALL OBTAIN AND CONFORM WITH THE LATEST STANDARDS AND DETAILS.

EDSA, Inc.
15102 E. Broward Blvd, Suite 110
Fort Lauderdale, FL 33301
954.524.3330

Kimley-Horn
1800 S. UNIVERSITY AVE., SUITE 100
DELMAR, DE 19706
PHONE: 302.696.2400 FAX: 302.696.2401
WWW.KIMLEY-HORN.COM CA 00000000
© 2015 KIMLEY-HORN AND ASSOCIATES, INC.

SEAL:
JASON A. WEBBER, P.E.
73962

KHA PROJ #: 040814003

DRAWN BY: JJ
DATE: 03/15/2016
CHECKED BY: JJ
SCALE: AS SHOWN
FIELD BOOK:

CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING & ARCHITECTURE
100 North Andrews Avenue, Fort Lauderdale, Florida 33301

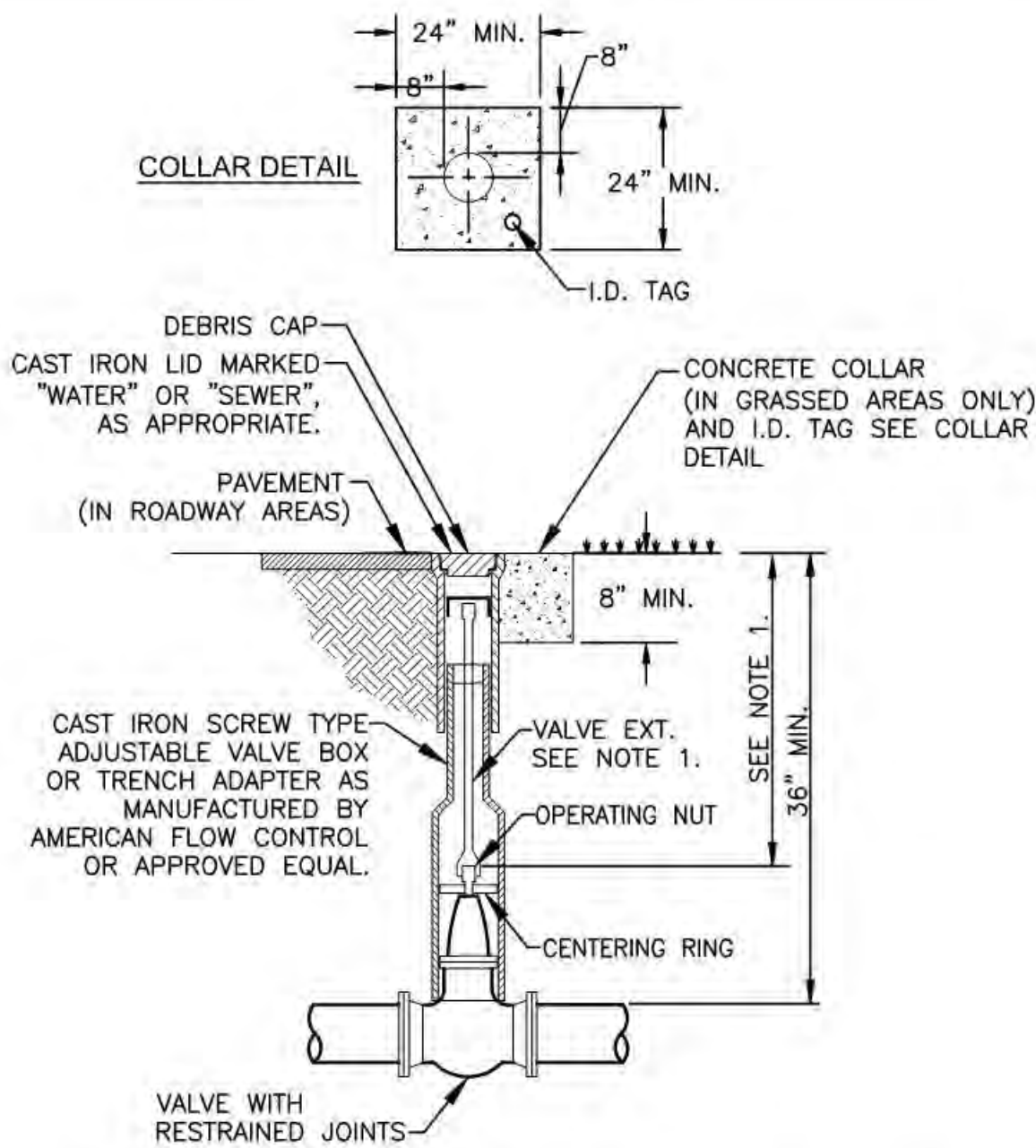
REVISIONS		DESCRIPTION
NO.	DATE	BY (CHK'D)

PROJECT # P11900
LAS OLAS CORRIDOR IMPROVEMENTS
FORT LAUDERDALE, FL
UTILITY DETAILS

SHEET NO.
C6-4.02
DRAWING FILE
11900-MULTI-UTD

X OF
XX

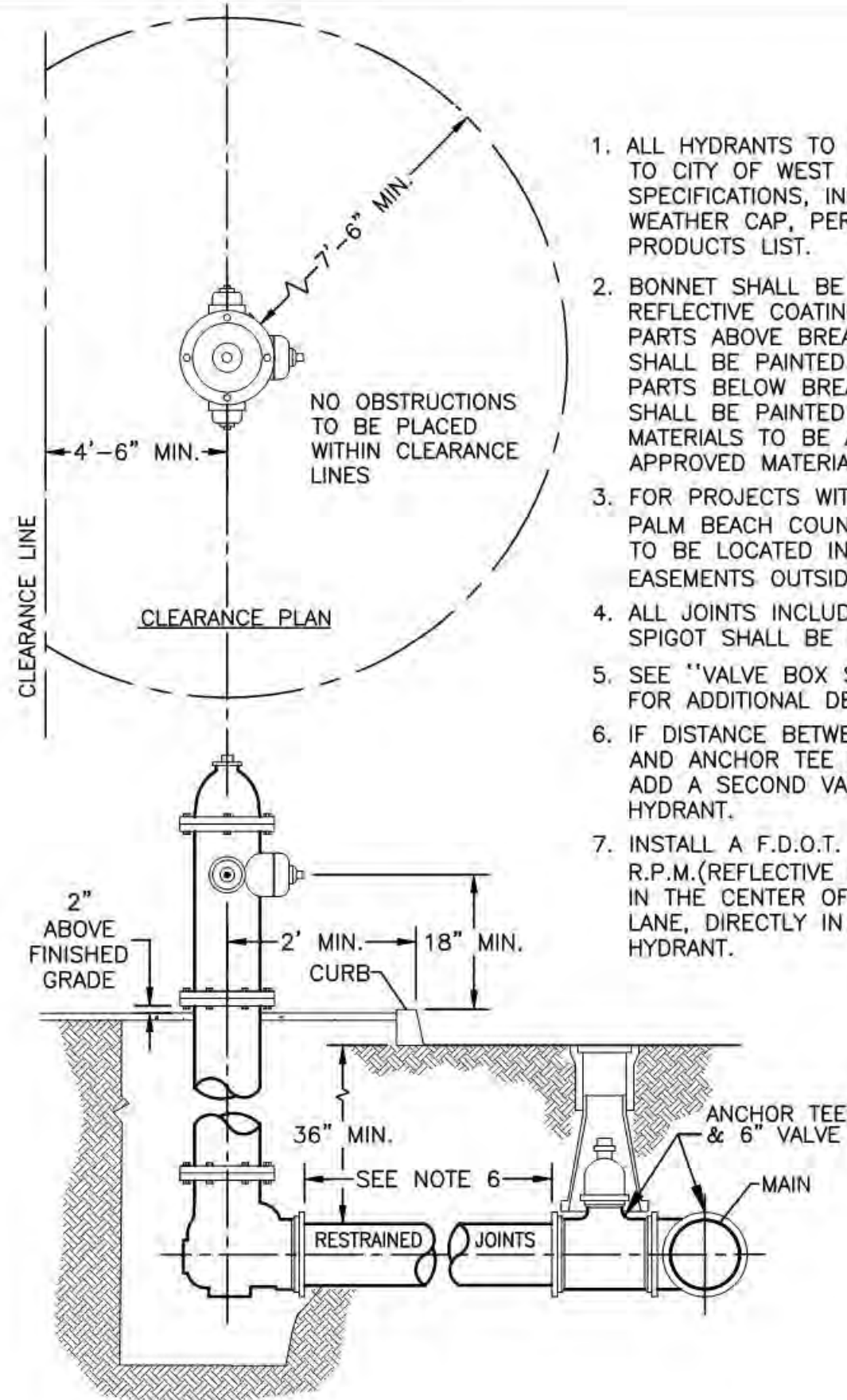
60% CD SUBMITTAL



1. WHEN TOP OF OPERATING NUT IS DEEPER THAN 36", A HIGH STRENGTH STEEL EXTENSION WILL BE REQUIRED TO BRING OPERATING NUT TO NOT MORE THAN 24" BELOW FINISHED GRADE. EXTENSION BOLTS & NUTS SHALL BE 316 STAINLESS STEEL. A STEEL CENTERING PLATE WELDED TO THE EXTENSION IS ALSO REQUIRED.
2. VALVE BOXES IN PAVEMENT SHALL HAVE LOCKING COVERS & LIDS MARKED "WATER" OR "SEWER", AS APPROPRIATE.
3. ALL VALVE BOXES SHALL BE PROVIDED WITH A DEBRIS CAP.
4. A PLUMB DUCTILE IRON PIPE OR C-900 PVC RISER SHALL BE USED IF DEPTH SO REQUIRES, WITH APPROVAL.

PRESSURE PIPE VALVE BOX SETTING
NOT TO SCALE

KHA



1. ALL HYDRANTS TO BE MANUFACTURED TO CITY OF WEST PALM BEACH SPECIFICATIONS, INCLUDING IRON WEATHER CAP, PER W.P.B. APPROVED PRODUCTS LIST.
2. BONNET SHALL BE PAINTED WITH REFLECTIVE COATING. ALL OTHER PARTS ABOVE BREAKWAY FLANGE SHALL BE PAINTED SILVER. ANY OTHER PARTS BELOW BREAKWAY FLANGE SHALL BE PAINTED BLACK. ALL PAINT MATERIALS TO BE AS SPECIFIED ON APPROVED MATERIALS LIST.
3. FOR PROJECTS WITHIN F.D.O.T. & PALM BEACH COUNTY R/W: HYDRANTS TO BE LOCATED IN DEDICATED EASEMENTS OUTSIDE OF R/W.
4. ALL JOINTS INCLUDING BELL AND SPIGOT SHALL BE RESTRAINED.
5. SEE "VALVE BOX SETTING" STANDARD FOR ADDITIONAL DETAILS.
6. IF DISTANCE BETWEEN FIRE HYDRANT AND ANCHOR TEE EXCEEDS 30 FT., ADD A SECOND VALVE 4 FT. FROM HYDRANT.
7. INSTALL A F.D.O.T. APPROVED BLUE R.P.M.(REFLECTIVE PAVEMENT MARKER) IN THE CENTER OF THE TRAVELING LANE, DIRECTLY IN FRONT OF HYDRANT.

PRESSURE PIPE FIRE HYDRANT INSTALLATION
NOT TO SCALE

KHA

FTL CITY OF FORT LAUDERDALE
STANDARD DETAIL

KHA KIMLEY-HORN AND
ASSOCIATES DETAIL

NOTE: DETAILS ARE INCLUDED FROM THE ENTITIES LISTED ABOVE AND ARE PROVIDED FOR INFORMATIONAL PURPOSES ONLY. CONTRACTOR SHALL OBTAIN AND CONFORM WITH THE LATEST STANDARDS AND DETAILS.

60% CD SUBMITTAL

PROJECT # P11900
LAS OLAS CORRIDOR IMPROVEMENTS
FORT LAUDERDALE, FL

UTILITY DETAILS

SHEET NO. **C6-4.04** X OF XX
DRAWING FILE 11900-MULTI-UTDI

REVISIONS		DESCRIPTION	
NO.	DATE	BY	CHK'D

CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING & ARCHITECTURE
100 North Andrews Avenue, Fort Lauderdale, Florida 33301

DRAWN BY: JJ	DATE: 03/15/2016	DESIGNED BY: JJ	SCALE: AS SHOWN	CHECKED BY: JAW	FIELD BOOK:
--------------	------------------	-----------------	-----------------	-----------------	-------------

JASON A. WEBBER, P.E.
73962

KHA PROJ # 040814003

Kimley-Horn
1810 S. UNIVERSITY AVE., SUITE 100
FORT LAUDERDALE, FL 33301
PHONE: 954.334.2334 FAX: 954.334.2335
WWW.KIMLEY-HORN.COM CA 00000861
© 2015 KIMLEY-HORN AND ASSOCIATES, INC.

EDSA, Inc.
1512 E. BROWARD BLVD., SUITE 110
FORT LAUDERDALE, FL 33301
954.524.2330