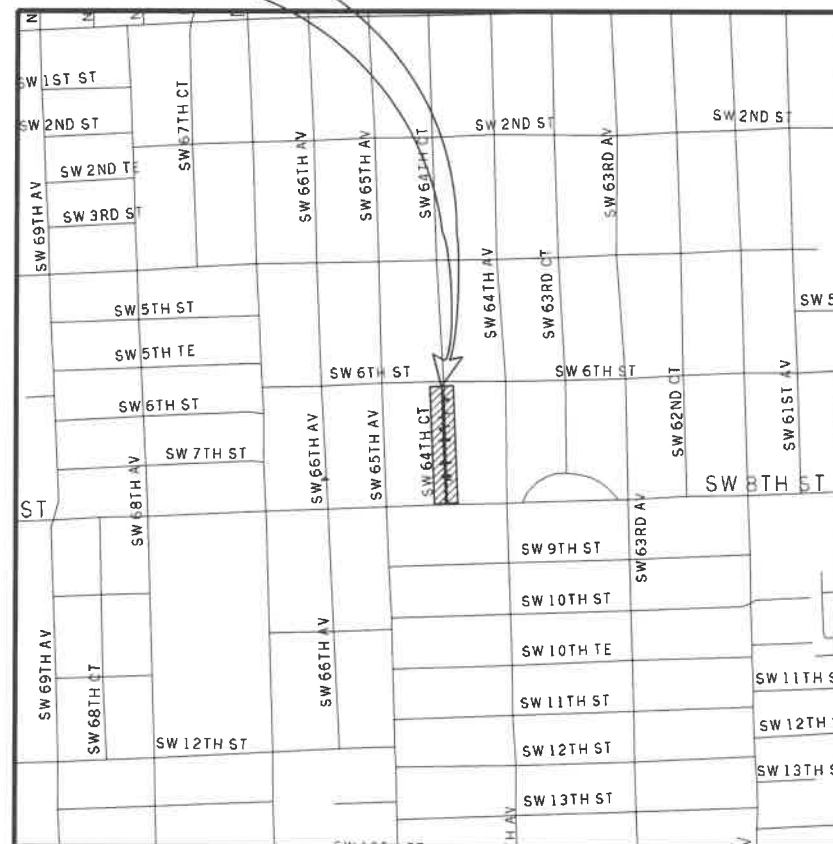


**MIAMI-DADE WATER AND SEWER DEPARTMENT
ENGINEERING AND DESIGN DIVISION
3071 S.W. 38th AVENUE MIAMI, FLORIDA 33146-1520**

**INSTALLATION 8-INCH D.I. WATER MAIN
IN SW 64th COURT FROM SW 8th ST. TO SW 6th ST.
PCTS No.14706 ER No. W017009
CITY OF MIAMI J.P.A. PROJECT No.B-30972**

PROJECT
LOCATION



LOCATION PLAN

CITY OF MIAMI
A PORTION OF SEC. 01 - TWP. 54. - RGE. 40 E.
N.T.S.

SHEET INDEX	
WM-01	KEY SHEET
WM-02	GENERAL NOTES AND LEGEND
WM-03	PROP. 8" D.I. W.M. GENERAL PLAN
04 THRU 07	TOPOGRAPHIC SURVEY
WM-08	PROP. 8" D.I. W.M. PLAN & PROFILE
WM-09	PROP. 8" D.I. W.M. PLAN & PROFILE
WM-10	PROP. 8" D.I. W.M. PLAN & PROFILE
WM-11	PROP. FIRE HYDRANT PLAN & PROFILE
WM-12	TRAFFIC CONTROL PLAN - GENERAL NOTES
WM-13	TRAFFIC CONTROL PLAN - MOT
WM-14	TRAFFIC CONTROL PLAN - DETOUR



CITY OF MIAMI
CAPITAL IMPROVEMENTS PROGRAM

444 S.W. 2ND AVENUE, 8TH FLOOR
MIAMI, FLORIDA 33130
(305) 416-1213 FAX (305) 416-1253

Always call 811 two full business days before you dig



CITY OF MIAMI PROJECT MANAGER: IVELISSE RODRIGUEZ
M-D WASD PROJECT MANAGER: CARLOS BENAVIDES

DWG. HISTORY	DATE	BY	REV No.	DATE	DESCRIPTION	BY
REVIEW	60%	02/22/2017	A.A.			
REVIEW	90%	03/30/2017	A.A.			
SUBMITTAL	100%	05/23/2017	A.A.			
			APPROVED BY	APPROVED BY	DESIGN MGR.	PROJECT ER No.: W017009
			CHIEF ENGINEER	SECTION HEAD		PCTS No.: 14706
			DRAWN: N.P.	DATE: 05/23/17	SHEET	WM-01 OF WM-14
			FILE NAME: KEYSUW01.DGN		DWG. No.	W-22027

GENERAL NOTES

- 1. THE FOLLOWING UTILITY COMPANIES SHOULD BE NOTIFIED 48 HOURS IN ADVANCE OF EXCAVATION IN AREA: - FPL - FLORIDA CITY GAS - AT&T/DISTRIBUTION -MIAMI-DADE CUONTY PUBLIC WORKS & TRAFFIC -COMCAST -FLORIDA POWER & LIGHT TRANSMISSION -MIAMI DADE WATER SEWER -ATLANTIC BROADBAND
2. ALL ELEVATIONS REFER TO NATIONAL GEODETIC VERTICAL DATUM, 1929 ADJUST OR CITY OF MIAMI.
3. VALVES AT INTERSECTIONS, BRANCH MAINS OR STOP OUTS SHALL BE RESTRAINED TO THE ADJACENT FITTING UNLESS OTHERWISE NOTED.
4. CUTTING AND PLUGGING OF EXISTING MAINS SHALL BE ACCOMPLISHED BY MECHANICALLY RESTRAINING THE PLUG OR CAP. SUFFICIENT LENGTH OF PIPE SHALL BE PROVIDED TO INSURE THE STABILITY OF THE INSTALLATION.
5. STATIONING SHOWN IS ALONG THE BASELINE OF SURVEY. GRADING SHOWN IS ALONG THE PROPOSED PIPE ALIGNMENT.
6. EXACT LOCATIONS OF SERVICES TO BE DETERMINED IN THE FIELD.
7. FOR REQUIREMENTS FOR MECHANICAL THRUST RESTRAINT, SEE STANDARD DETAIL GS 2.0
8. THERE MAY BE OTHER EXISTING UTILITIES IN THE AREA WHICH ARE NOT SHOWN ON THE PLANS, DUE TO FAILURE OF THESE UTILITIES TO RESPOND TO OUR REQUEST FOR INFORMATION.
9. IF EVIDENCE OF POTENTIAL CONTAMINATION IS DETECTED DURING EXCAVATION, STOP EXCAVATION WORK AND NOTIFY WASD HAZARDOUS MATERIALS MANAGEMENT SECTION AT (786) 552-8400 AND THE CONSTRUCTION CONTRACTS MANAGEMENT DIVISION AT (786) 268-5191. EVIDENCE OF POTENTIAL CONTAMINATION MAY INCLUDE ANY OF THE FOLLOWING: 1. ODOR 2. SOLID WASTE DEBRIS 3. SHEEN ON THE GROUNDWATER 4. STAINED OR SATURATED SOIL (SOIL THAT CONTAINS PRODUCT THAT DRAINS WHEN IT IS HANDLED OR CREATES STREAKS ON EXCAVATION TOOLS) OR 5. FREE FLOATING PRODUCT ON THE GROUNDWATER (OIL, DIESEL,GASOLINE, ETC.). MATERIAL THAT HAS ODOR, IS STAINED OR IS SATURATED MUST BE SEGREGATED ON AN IMPERMEABLE SURFACE FOR APPROPRIATE FUTURE DISPOSAL.
10. ALL PIPE AND FITTINGS INSTALLED UNDER THIS PROJECT MUST BE COLOR CODED WITH BLUE PAINT AS STATED IN THE FLORIDA ADMINISTRATIVE CODE, SUBPARAGRAPH 62-555.320(21)(B)3 AND AS REQUIRED BY THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION. IF PAINT IS APPLIED DURING INSTALLATION OF THE PIPE, THE PAINT SHALL BE APPLIED IN A CONTINUOUS LINE THAT RUNS PARALLEL TO THE AXIS OF THE PIPE AND THAT IS LOCATED ON THE TOP OF THE PIPE. FOR PIPES WITH AN INTERNAL DIAMETER OF 24-INCHES OR GREATER, PAINT SHALL BE APPLIED IN CONTINUOUS LINES ALONG EACH SIDE OF THE PIPE AS WELL AS ALONG THE TOP OF THE PIPE.
11. USE CAUTION WHEN EXCAVATING AROUND UTILITIES PER SPECIFICATION SECTION 6.00.3
12. PAVEMENT RESTORATION TO BE DONE IN ACCORDANCE WITH CITY OF MIAMI PUBLIC WORKS DEPARTMENT REQUIREMENTS UNLESS OTHERWISE NOTED.
13. THE ENGINEER-OF-RECORD IS IN RESPONSIBLE CHARGE FOR THE DESIGN PART OF THIS PROJECT ONLY. THE DEPARTMENT, THROUGH THE CONSTRUCTION CONTRACTS MANAGEMENT DIVISION, WILL ASSIGN A FLORIDA LICENSED PROFESSIONAL ENGINEER TO TAKE RESPONSIBLE CHARGE OF INSPECTING THE CONSTRUCTION OF THIS PROJECT AND TO DETERMINE, IN GENERAL, IF THE CONSTRUCTION PROCEEDS IN COMPLIANCE WITH THE CONSTRUCTION PERMITS AND TO SUBMIT COMPLETE RECORD DRAWINGS AND CERTIFICATION OF CONSTRUCTION COMPLETION TO THE PERMITTING AGENCIES, AND TO OBTAIN WRITTEN APPROVAL OR CLEARANCE BEFORE PLACING THE MAINS IN SERVICE.
14. LOCATION OF EXISTING FACILITIES AS SHOWN ON CONSTRUCTION DRAWINGS ARE FROM AVAILABLE RECORDS. THE ENGINEER ASSUMES NO RESPONSIBILITY OF THE FACILITIES SHOWN OR NOT SHOWN. CONTRACTOR IS TO FIELD VERIFY THE ELEVATION, TYPE OF PIPE AND LOCATION OF EXISTING FACILITIES PRIOR TO CONSTRUCTION. IF AN EXISTING FACILITY IS FOUND TO BE IN CONFLICT WITH THE PROPOSED CONSTRUCTION UPON EXCAVATION, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE DESIGN ENGINEER/ENGINEER-OF-RECORD THROUGH THE ASSIGNED MDWASD CONSTRUCTION PROJECT MANAGER SO THAT APPROPRIATE MEASURES CAN BE TAKEN TO RESOLVE SAID CONFLICT. CONTRACTOR TO NOTIFY SUNSHINE STATE ONE CALL OF FLORIDA, INC. BY CALLING 811 AT LEAST 48 HOURS PRIOR TO EXCAVATING.
15. MILLING AND RESURFACING PAVEMENT RESTORATION WILL BE AS SHOWN ON PLANS.
16. IN AREAS WHERE POLLUTED GROUND WATER WILL OR MAY BE DRAWN INTO THE DEWATERING SYSTEM AND THE MDWASD HAS GRANTED PERMISSION TO INSTALL THE SYSTEM COMPONENTS VIA THE "ALTERNATE METHOD OF CONSTRUCTION", I.E. IN THE WET, AND THE CONTRACTOR ELECTS TO PERFORM DEWATERING AS PART OF THE WORK, THE CONTRACTOR SHALL BE FULLY RESPONSIBLE TO PROVIDE RELATED PROFESSIONAL SERVICES, PREPARE APPLICATION DOCUMENTS, SUBMIT AND OBTAIN ANY AND ALL REQUIRED DEWATERING/CONTAMINATION PERMIT APPROVALS (INCLUDING ANY ANCILLARY PERMITS THAT MAY BE REQUIRED, I.E. FROM R.E.R. WATER CONTROL OR POLLUTION CONTROL) PRIOR TO COMMENCING THE WORK AND AT NO ADDITIONAL CONTRACT TIME OR COST TO THE DEPARTMENT.
17. THE CONTRACTOR IS RESPONSIBLE FOR IMPLEMENTATION AND MAINTENANCE OF EROSION CONTROL MEASURES CONTAINED WITHIN THE CONTRACT SPECIFICATIONS OR AS REQUIRED BY THE MUNICIPALITY OR ANY OTHER REGULATORY AUTHORITY. THE CONTRACTOR SHALL ALSO PROVIDE ANY ADDITIONAL EROSION CONTROL MEASURES (E.G. HYDROSEEDING MULCHING OF STRAW, SAND BAGGING, DIVERSION DITCHES, ETC) DICTATED BY FIELD CONDITIONS TO PREVENT EROSION OR THE INTRUSION OF DIRT, MUD, OR DEBRIS INTO EXISTING PUBLIC STREETS, WATERWAYS, OR ONTO ADJACENT PROPERTIES DURING ANY PHASE OF CONSTRUCTION OPERATIONS.

- 18. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING A FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION NPDES GENERIC PERMIT FOR STORMWATER DISCHARGE FROM LARGE AND SMALL CONSTRUCTION ACTIVITIES PERMIT (GCP) AND A NOTICE OF INTENT (NOI) TO USE SAID GENERIC PERMIT AS PROVIDED IN SUBSECTION 62-621.300(4), F.A.C. PURSUANT TO THE STATE'S FEDERALLY APPROVED NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM STORMWATER REGULATORY PROGRAM (NPDES). THE CONTRACTOR SHALL BE FULLY RESPONSIBLE TO PROVIDE RELATED PROFESSIONAL SERVICES, PREPARE APPLICATION DOCUMENTS AND OBTAIN ALL REQUIRED APPROVALS PRIOR TO COMMENCEMENT OF THE WORK AND AT NO ADDITIONAL CONTRACT TIME OR COST TO THE DEPARTMENT.
19. PROJECT SPECIFICATIONS SHALL CONFORM TO THE MD-WASD DESIGN AND CONSTRUCTION STANDARD SPECIFICATIONS AND DETAILS.

RER-DERM WATER-SEWER GENERAL NOTES

- 1. A HORIZONTAL DISTANCE OF AT LEAST 6 FEET, AND PREFERABLY 10 FEET (OUTSIDE TO OUTSIDE) SHALL BE MAINTAINED BETWEEN GRAVITY OR PRESSURE SEWER PIPES AND WATER PIPES. THE MINIMUM HORIZONTAL SEPARATION CAN BE REDUCED TO 3 FEET FOR VACUUM-TYPE SEWERS OR FOR GRAVITY SEWERS WHERE THE BOTTOM OF THESEWER PIPE IS AT LEAST 6 INCHES BELOW THE BOTTOM OF THE WATER PIPE. WHEN THE ABOVE SPECIFIED HORIZONTAL DISTANCE CRITERIA CANNOT BE MET DUE TO AN EXISTING UNDERGROUND FACILITY CONFLICT, SMALLER SEPARATIONS ARE ALLOWED IF: A) THE SEWER PIPES ARE DESIGNED AND CONSTRUCTED EQUAL TO THE WATER PIPE AND PRESSURE TESTED AT 150 PSI. B) THE SEWER IS ENCASED IN A WATERTIGHT CARRIER PIPE OR CONCRETE. C) THE TOP OF THE SEWER IS AT LEAST 18 ILICHES BELOW THE BOTTOM OF THE WATER PIPE.
2. A VERTICAL DISTANCE OF AT LEAST 12 INCHES (OUTSIDE TO OUTSIDE) SHALL BE MAINTAINED BETWEEN ANY WATER AND SEWER MAINS WITH SEWER PIPES PREFERABLY CROSSING UNDER WATER MAINS. THE MINIMUM VERTICAL SEPARATION CAN BE REDUCED TO 6 INCHES FOR VACUUM-TYPE SEWERS OR FOR GRAVITY SEWERS WHERE THE SEWER PIPE IS BELOW THE WATER MAIN. THE CROSSING SHALL BE ARRANGED SO THAT ALL WATER MAIN JOINTS ARE AT LEAST 6 FEET FROM ALL JOINTS IN GRAVITY AND PRESSURE SEWER PIPES. THIS DISTANCE CAN BE REDUCED TO 3 FEET FOR VACUUM-TYPE SEWERS. WHEN THE ABOVE SPECIFIED VERTICAL DISTANCE CRITERIA CANNOT BE MET DUE TO AN EXISTING UNDERGROUND FACILITY CONFLICT, SMALLER SEPARATIONS ARE ALLOWED IF: A) THE SEWER PIPES ARE DESIGNED AND CONSTRUCTED EQUAL TO THE WATER PIPE AND PRESSURE TESTED AT 150 PSI. B) THE SEWER IS ENCASED IN A WATERTIGHT CARRIER PIPE OR CONCRETE.
3. AIR RELEASE VALVES SHALL BE PROVIDED AT HIGH POINTS OF NEW FORCE MAIN SANITARY SEWERS.
4. GRAVITY SANITARY SEWERS CONSTRUCTED WITHIN A PUBLIC WELLFIELD PROTECTION AREA SHALL BE C-900 PVC OR DUCTILE IRON PIPE. THE MAXIMUM ALLOWABLE EX-FILTRATION RATE OF GRAVITY SANITARY SEWERS CONSTRUCTED IN A PUBLIC WELLFIELD PROTECTION AREA SHALL BE: A) RESIDENTIAL LAND USES. FIFTY (50) GALLONS PER INCH PIPE DIAMETER PER MILE PER DAY, BASED ON A MINIMUM TWO (2) HOUR TEST HAVING A MINIMUM OF TWO (2) FEET OF POSITIVE HEAD ABOVE THE CROWN OF THE PIPE. B) NON-RESIDENTIAL LAND USES. TWENTY (20) GALLONS PER INCH PIPE DIAMETER PER MILE PER DAY, BASED ON A MINIMUM TWO (2) HOUR TEST HAVING A MINIMUM OF TWO (2) FEET OF POSITIVE HEAD ABOVE THE CROWN OF THE PIPE. C) ANY OBSERVED LEAKS OR ANY OBVIOUSLY DEFECTIVE JOINTS OR PIPES, SHALL BE REPLACED EVEN WHEN THE TOTAL LEAKAGE IS BELOW THAT ALLOWED.
5. THE MAXIMUM ALLOWABLE EXFILTRATION RATE OF GRAVITY SANITARY SEWERS CONSTRUCTED OUTSIDE A PUBLIC WELLFIELD PROTECTION AREA SHALL BE ONE HUNDRED (100) GALLONS PER INCH PIPE DIAMETER PER MILE PER DAY, BASED ON A MINIMUM TWO (2) HOUR TEST HAVING A MINIMUM OF TWO (2) FEET OF POSITIVE HEAD ABOVE THE CROWN OF THE PLPE. ANY OBSERVED LEAKS OR ANY OBVIOUSLY DEFECTIVE JOINTS OR PIPES SHALL BE REPLACED EVEN WHEN THE TOTAL LEAKAGE IS BELOW THAT ALLOWED.
6. FORCE MAIN SANITARY SEWERS CONSTRUCTED WITHIN A PUBLIC WELLFIELD PROTECTION AREA SHALL BE DUCTILE IRON, C-900 PVC, HOPE OR REINFORCED CONCRETE PRESSURE SEWER PIPES.
7. THE MAXIMUM ALLOWABLE EXFILTRATION/LEAKAGE RATE AFFORCE MAIN SANITARY SEWERS SHALL BE: A) DUCTILE IRON, C-900 PVC, HOPE AND PVC PIPE. THE ALLOWABLE LEAKAGE RATE SPECIFIED IN AMERICAN WATER WORKS ASSOCIATION STANDARD (AWWAS) C600-82 AT A TEST PRESSURE OF 100 PSI FOR A DURATION OF NOT LESS THAN TWO (2) HOURS. B) REINFORCED CONCRETE PRESSURE PIPE. HALF (1/2) THE AILOWABLE LEAKAGE RATE SPECIFIED IN AWWA C600-82 AT A TEST PRESSURE OF 100 PSI FOR A DURATION OF NOT LESS THM TWO (2) HOURS. C) ANY OBSERVED LEAKS OR ANY OBVIOUSLY DEFECTIVE JOINTS OR PIPES SHAH BE REPLACED EVEN WHEN THE TOTAL LEAKAGE IS BELOW THAT ALLOWED.
8. THE CONTRACTOR SHALL VERIFY NATURE, DEPTH, AND CHARACTER OF EXISTING UNDERGROUND UTILITIES PRIOR TO START OF CONSTRUCTION.
9. IN NO CASE SHALL A CONTRACTOR INSTALL UTILITY PIPES, CONDUITS, CABLES, ETC. IN THE SAME TRENCH ABOVE AN EXISTING WATER OR SEWER PIPE EXCEPT WHERE THEY CROSS.
10. IF ANY AREA OF THE WORK SITE IS FOUND TO CONTAIN BURIED SOLID WASTE AND/OR GROUND OR GROUND WATER CONTAMINATION, THE FOLLOWING SHALL APPLY: A) ALL WORK IN THE AREA SHAH FOLLOW ALL APPLICABLE SAFETY REQUIREMENTS (E.G., OSHA, ETC.) AND NOTIFICATION MUST BE PROVIDED TO THE APPROPRIATE AGENCIES. B) IMMEDIATELY NOTIFY THE ENVIRONMENTAL MONITORING AND RESTORATION DIVISION (EMRD). THE EMRD CAN BE CONTACTED AT (305) 372-6700. C) IF CONTAMINATED SOILS AND/OR BURIED SOLID WASTE MATERIAL IS EXCAVATED DURING CONSTRUCTION, THEN THEY REQUIRE PROPER HANDLING AND DISPOSAL IN ACCORDANCE WITH THE LOCAL, STATE AND FEDERAL REGULATIONS. BE ADVISED THAT THE LANDFILL OWNER/OPERATOR IS THE FINAL AUTHORITY ON DISPOSAL AND MAY HAVE REQUIREMENTS BEYOND THOSE PROVIDED BY HEREIN. LF DISPOSAL WITHIN A MIAMI-DADE COUNTY OWNED LANDFILL (CLASSI LANDFIU) IS APPROPRIATE AND SELECTED, PLEASE CONTACT THE MIAMI-DADE COUNTY DEPARTMENT OF SOLID WASTE MANAGEMENT AT (305) 594-6666 FOR INFORMATION.

D) THE REUSE OF CONTAMINATED SOILS THAT ARE NOT RETURNED TO THE ORIGINAL EXCAVATION REQUIRES PRIOR APPROVAL OF A SOIL MANAGEMENT PLAN FROM THE ENVIRONMENTAL MONITORING AND RESTORATION DIVISION. THE EMRD CAN BE CONTACTED AT (305) 372-6700.

THE FOLLOWING ARE REQUIREMENTS PER DEPARTMENT OF HEALTH WATER MAIN HORIZONTAL SEPARATIONS

SEPARATIONS SHALL BE MEASURED OUTSIDE EDGE TO OUTSIDE EDGE.

BETWEEN WATER MAINS AND, STORM SEWERS, STORMWATER FORCE MAINS, OR RECLAIMED WATER LINES, SHALL BE 3 FT. MINIMUM.

BETWEEN WATER MAINS AND VACUUM TYPE SEWER PREEFERABLY 10 FT. AND AT LEAST 3 FT. MINIMUM.

GRAVITY OR PRESSURE SANITARY SEWERS, WASTEWATER FORCE MAINS OR RECLAIMED WATER PREFERABLY 10 FT. AND AT LEAST 6 FT.*

*GRAVITY SEWER ONLY MAY BE REDUCED TO 3 FT. WHERE BOTTOM OF WATER MAIN IS AT LEAST 6 INCHES ABOVE TOP OF SEWER.

10 FT. TO ANY PART OF ON-SITE SEWER TREATMENT OR DISPOSAL SYSTEM.

WATER MAIN VERTICAL SEPARATIONS

SEPARATIONS BETWEEN WATER MAINS AND GRAVITY SEWER, VACUUM TYPE SEWER OR STORM SEWERS, TO BE PREEFERABLY 12 INCHES OR AT LEAST 6 INCHES ABOVE OR AT LEAST 12 INCHES BELOW*.

PRESSURE SANITARY SEWER, WASTEWATER OR STORM WATER FORCE MAIN, OR RECLAIMED WATER, AT LEAST 12 INCHES ABOVE OR BELOW*.

* CENTER 1-FULL LENGTH OF WATER MAIN PIPE AT CROSSINGS; ALTERNATIVELY ARRANGE PIPES SO JOINTS ARE AT LEAST 3 FEET FROM JOINTS IN VACUUM, STORM OR STORM FORCE MAINS, AT LEAST 6 FEET FROM JOINTS IN GRAVITY OR PRESSURE SEWERS, WASTEWATER FORCEMAINS OR RECLAIMED WATER.

NOTE: IN ALL CASES, INCLUDING EXCEPTIONS, REFER TO F.A.C. 62-555.314

LEGEND

Table with 2 columns: Symbol and Description. Includes items like W.M., S.S., San., F.M., GAS, Center line, Base line, Monument line, Section line, Right of way line, Property line, Exist. Telephone, U/G, CATV, TRAF, REQD., O/S, D.I., REST. J., and various utility symbols.

MIAMI-DADE WATER AND SEWER DEPARTMENT DESIGN AND CONSTRUCTION STANDARD DETAILS

Table with 3 columns: FOR, SEE DETAIL, SHEET. Lists details like PAVEMENT RESTORATION TYPE V, POLYETHYLENE ENCASEMENT FOR DUCTILE IRON PIPE, TYPICAL TIE-ROD DETAILS, WATER AND GRAVITY SEWER MAIN CROSSINGS, AIR RELEASE VALVE, TYPICAL FLUSHING VALVE OUTLET, No. 2 C.I. VALVE BOX AND LID, TYPICAL FIRE HYDRANT INSTALLATION W/GUARD POSTS, TYPICAL 2" GALVANIZED STEEL CONNECTION TO EXISTING MAIN.

NOTES: 1. THE ABOVE LIST SHALL NOT BE CONSIDERED AS NECESSARILY COMPLETE, NOR SHALL THE STANDARD DETAILS WHICH MAY BE INCLUDED ELSEWHERE HEREIN BE CONSIDERED AS FORMING A COMPLETE LISTING OF ALL STANDARD DETAILS WHICH MAY APPLY TO THIS PROJECT. 2. ALL STANDARD DETAILS ARE INCORPORATED IN THE ABOVE LIST BY REFERENCE AND ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE M-D WASD STANDARD DETAILS.

WATER & SEWER DEPARTMENT 3071 SW 38TH AVENUE MIAMI, FL 33146-1520 305-665-7471 www.miamidade.gov/water

A&P Consulting Transportation Engineers Corp. 10305 N.W. 41 Street, suite 115 Miami, FL 33178 305 592-7283 / fax:305 593-1594 CA No. : EB-0007797 Arnello Alfonso, P.E. No. 52566

INSTALLATION 8 INCH D.I. WATER MAIN IN S.W. 64th CT. FROM S.W. 8th ST. TO S.W. 6th ST. PCTS No. 14706, ER No. W017009 CITY OF MIAMI J.P.A. PROJECT No. B 50972 GENERAL NOTES AND LEGEND

DRAWING HISTORY

Table with 3 columns: RELEASED FOR, DATE, BY. Shows REVIEW 60% on 02/22/17 by A.A. and REVIEW 90% on 03/30/17 by A.A.

REVISIONS

Table with 4 columns: No, DESCRIPTION, DATE, BY. Empty table for revisions.

APPROVALS

PROJECT MGR: B.T. CHECKED: A.A.

DESIGNER: A.A.P. DRAWN: A.A.P.

CHIEF ENGINEER: ARNELLO ALFONSO

DESIGN MGR.: C.B.

No. 52566

Arnello Alfonso, P.E. Civil Engineer No. 52566

State of Florida No. 52566

3071 SW 38th Avenue, Miami, Florida 33146

(305) 592-7283

305-665-7471

Professional Engineer

FILE NAME:

DATE: SCALE:

SHEET WM-02 OF WM-14

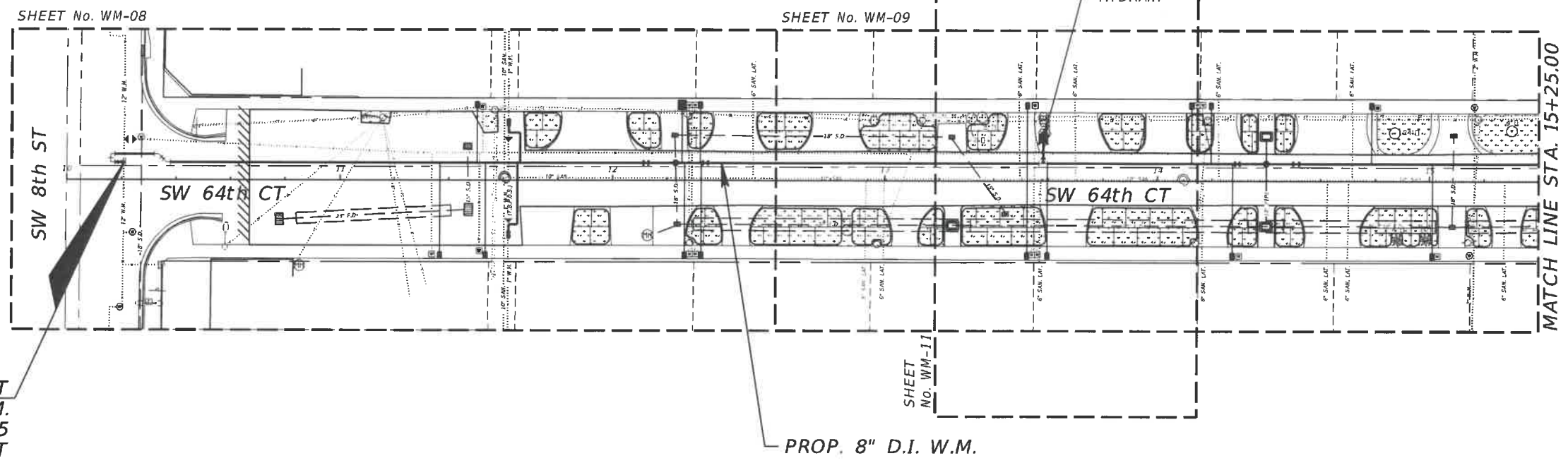
DWG. No. W-22028



WATER & SEWER DEPARTMENT
 3071 SW 38TH AVENUE
 MIAMI, FL 33146-1520
 305-665-7471
 www.miamidade.gov/water

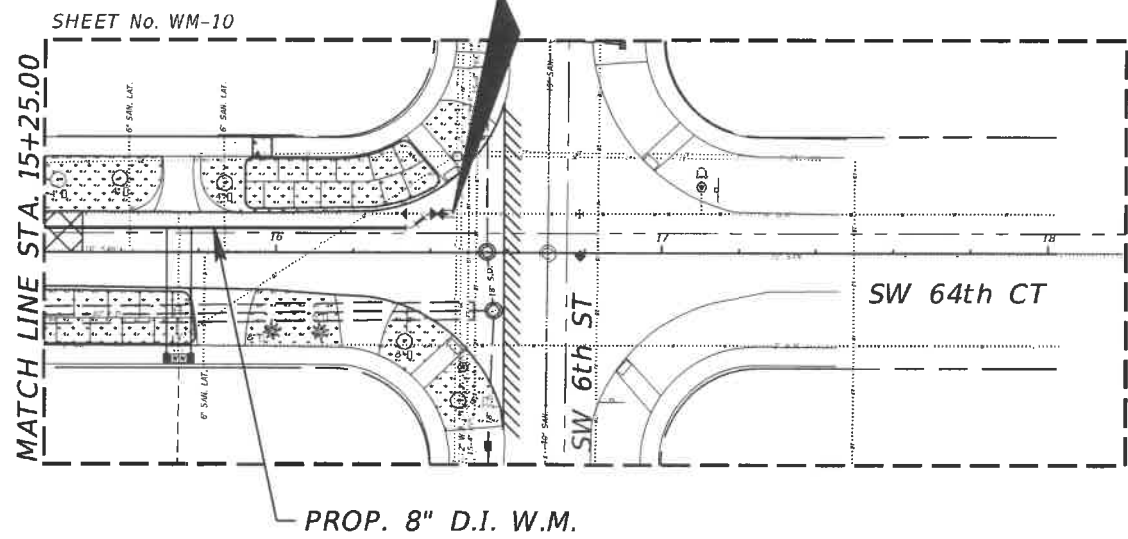
A&P Consulting Transportation Engineers Corp.
 10305 N.W. 41 Street, suite 115
 Miami, FL 33178
 305 592-7283 / fax: 305 593-1594
 CA No. : EB-0007797
 Arnello Alfonso, P.E. No. 52566

INSTALLATION 8 INCH D.I. WATER MAIN
IN S.W. 64TH CT. FROM S.W. 8TH ST. TO S.W. 6TH ST.
 PCTS No. 14706, ER No. W017009
 CITY OF MIAMI J.P.A. PROJECT No. B 30972
 PROP. 8" D.I. W.M. GENERAL PLAN



BEGIN PROJECT
 PROP. 8" D.I. W.M.
 STA. 10+21.05
 OFFSET 6.33' LT

END PROJECT
 PROP. 8" D.I. W.M.
 STA. 16+44.33
 (O/S 10.00' LT)



DRAWING HISTORY

RELEASED FOR	DATE	BY
REVIEW 60%	02/22/17	A.A.
REVIEW 90%	03/30/17	A.A.
SUBMITTAL 100%	05/23/17	A.A.

REVISIONS

No.	DESCRIPTION	DATE	BY

APPROVALS

PROJECT MGR: B.T. CHECKED: A.A.
 DESIGNED: V.M. DRAWN: N.P.
 CHECKED: A.A.
 DESIGNED: C.B.



No. 52566
 Arnello Alfonso, P.E.
 Civil Engineer
 State of Florida License No. 52566
 10305 N.W. 41 Street, Suite 115
 Miami, FL 33178
 (305) 592-7283
 DATE: _____
 SHEET WM-03 OF WM-14
 DWG. No. W-22029

SURVEYOR'S REPORT:

DATE OF SURVEY:

The date of completion of Survey was on July 15, 2015.

SURVEY LIMITS:

A portion of the following Public Right-of-Way; along S.W. 64th Court from S.W. 6th Street and S.W. 8th Street, lying and being in the City of Miami, Miami-Dade County, Florida.

ACCURACY:

The accuracy obtained by field measurement methods and office calculations of closed geometric figures meets and exceeds the Minimum Technical Standards requirement for Suburban Area (Linear 1 foot in 7,500 feet) as defined in Rule 5J-17.051 of the Florida Administrative Code.

Elevations of well identified features as depicted on the Survey Map were measured to an estimated vertical position accuracy of 1/100 of a foot on hard surfaces and 1/10 of a foot on ground surfaces.

Well identified features as depicted on the Survey Map were measured to an estimated horizontal position accuracy of 1/10 of a foot.

This Map of Survey is intended to be displayed at a scale of One inch equals Twenty feet or smaller.

PERTINENT INFORMATION USED FOR SURVEY:

For Horizontal Control:

Bearings and Coordinates are relative to the State Plane Coordinate System, Florida East Zone (0901), North American Datum (N.A.D.) of 1983, adjustment of 1990 (NAD 83 / 1990) Epoch 2010.0000; with a bearing of N02°23'22"W, being established for the centerline of S.W. 64th Court, said line to be considered a well established and monumented line.

Global Positioning System (G.P.S.), measurements were conducted in the field to acquire said coordinate values, which are based on the following Horizontal Control Stations:

Name: 86 ALONSO
Latitude: 25° 45' 45.45152" N
Longitude: 80° 17' 13.69323" W
Ellipsoid Height (Meters): -22.041
State Plane Coordinates
Northing: 520051.230
Easting: 890779.009

All referenced Stations are part of the Florida Permanent Reference Network (FPRN www.dot.state.fl.us/surveyingandmapping/fprn.shtml)

All measurements are in U.S. Survey feet.

This property appears to be located in Flood Zone "X", as per Federal Emergency Management Agency (FEMA) Community-Panel Number 120650 (City of Miami), Map No. 12086C0293, Suffix L, Map Revised Date: September 11, 2009.

For Vertical Control:

All elevations shown hereon are based on the City of Miami Vertical Datum, and a Benchmark supplied by the Public Works Department of Miami-Dade County, Florida.

Benchmark: MDC F-238
Elevation: + 11.44 (N.G.V.D. 29)
Elevation: + 11.70 (City of Miami Vertical Datum)
Located at 54' South of South curb of the centerline of S.W. 8th Street and 330' S.W. of intersection with S.W. 63rd Avenue.

Plat of "FAIR LAWN" recorded in Plat Book 8 at Page 83 of the Public Records of Miami-Dade County, Florida.

City of Miami Municipal Atlas Sheet 30N, prepared by the City of Miami, Public Works Department, last dated on September 12, 1972.

RESTRICTIONS:

Since no other information were furnished other than that is cited under pertinent information, the Client is hereby advised that there may be legal restrictions on the Subject Property that are not shown on the Survey Map that may be found in the Public Records of Miami-Dade County.

The Surveyor makes no representation as to ownership or possession of the Subject Property by any entity or individual that may appear on the Public Records of this County.

No excavation or determination was made as to how the Subject Property is served by utilities.

No improvements were located, other than those shown. No underground foundations, improvements and/or utilities were located or shown hereon.

PURPOSE OF SURVEY:

The purpose of this survey is for design.

CLIENT INFORMATION:

This Topographic Survey was prepared at the insistence of and certified to:

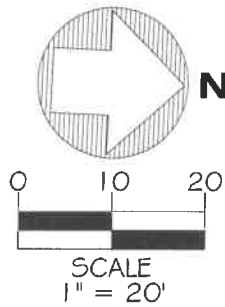
A & P CONSULTING & TRANSPORTATION ENGINEERS

JOB NO.: 15387.0.00
FIELD BOOK: EFB

DRAWN BY: JL
SHEET 1 OF 4

MAP OF TOPOGRAPHIC SURVEY

SECTION 01 - TOWNSHIP 54 SOUTH - RANGE 40 EAST
LYING AND BEING IN THE CITY OF MIAMI, FLORIDA



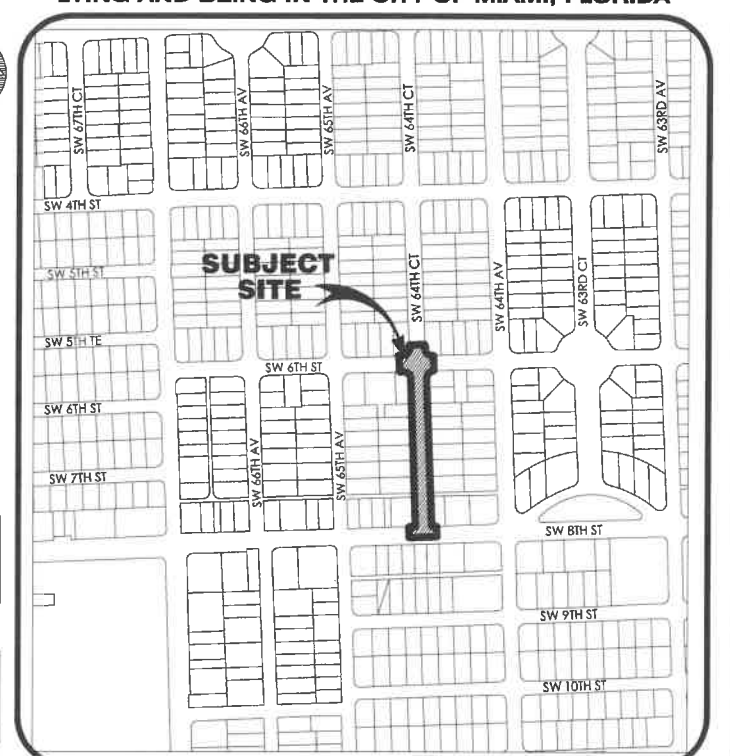
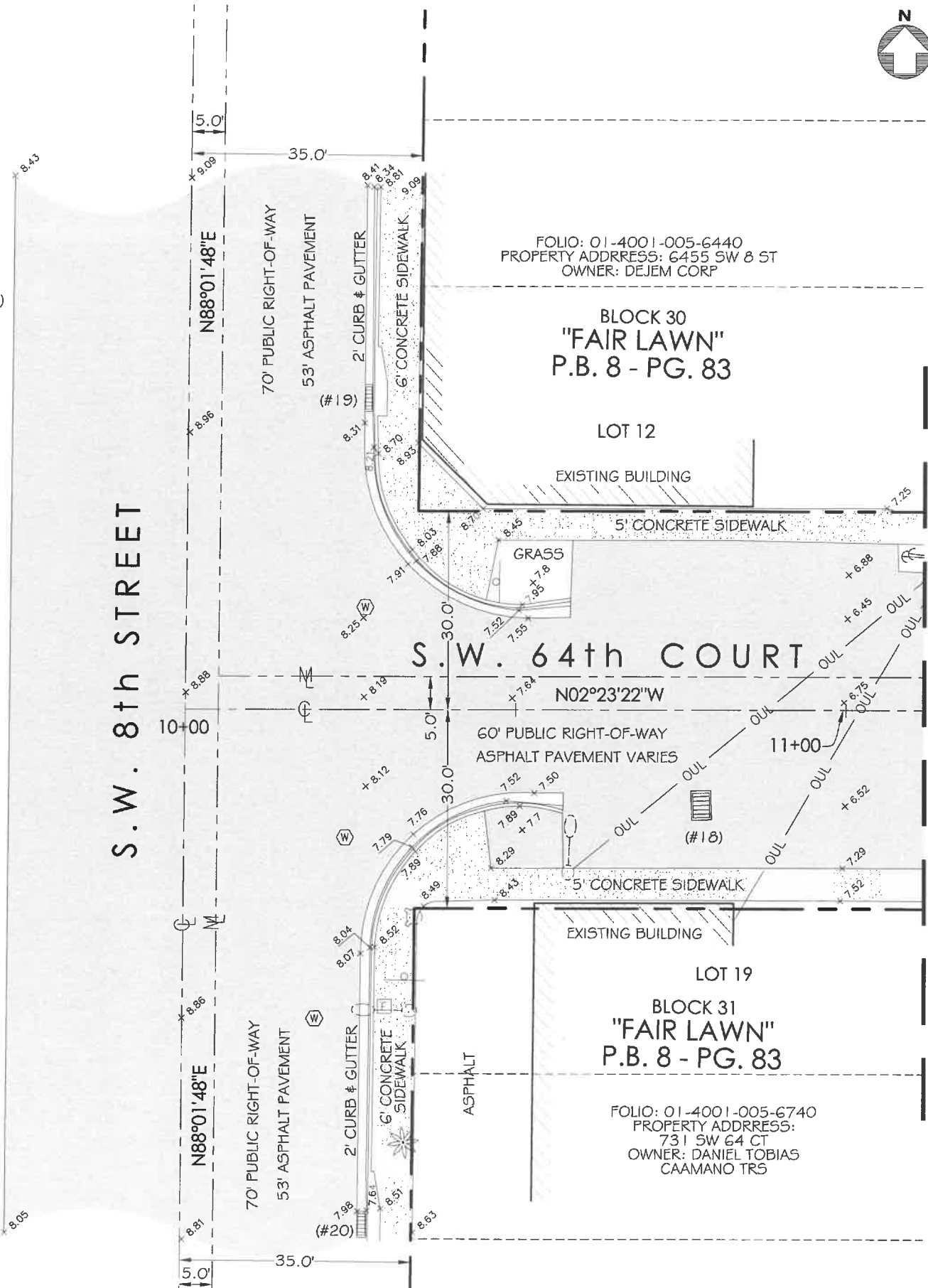
(#18) CATCH BASIN
RIM ELEV.: 6.73
NORTH INV.: 0.88
24" Ø PIPE
(MAT. NOT DETERMINED)
BOTTOM ELEV.: -0.52

(#19) CATCH BASIN
RIM ELEV.: 8.31
EAST INV.: 4.91
18" Ø CONC. PIPE
BOTTOM ELEV.: 4.41

(#20) CATCH BASIN
RIM ELEV.: 7.98
FULL OF DEBRIS
BOTTOM ELEV.: -0.27

SITE TEMPORARY BENCHMARK # 1
(TBM #1)
ELEVATION= 6.70
SET PK NAIL & DISC
(L.B. 7335)
N: 520200.24
E: 886245.35

LEGEND	
CONC.	= CONCRETE
R	= RECORDED VALUE
M	= MEASURED VALUE
(C)	= CALCULATED
P.B.	= CENTERLINE
PG.	= PLAT BOOK
W	= WOOD POWER POLE
A	= GUY ANCHOR
ID.	= IDENTIFICATION
M	= CATCH BASIN
M	= MONUMENT LINE
W	= OVERHEAD WIRE
W	= WATER VALVE
W	= WATER METER
W	= FIRE HYDRANT
W	= TEMPORARY SITE BENCHMARK
W	= CONCRETE POWER POLE
W	= ORNAMENTAL PLANT
W	= LIGHT POLE
W	= TREE
W	= PALM TREE
W	= CLEAN OUT
W	= SANITARY SEWER MANHOLE
W	= STORM DRAINAGE MANHOLE
W	= UNKNOWN MANHOLE
W	= CONCRETE
W	= ASPHALT
W	= SIGN



LOCATION MAP

MATCH LINE STATION: 11+00

LONGITUDE SURVEYORS
7715 NW 48TH STREET, SUITE 310
DORAL, FLORIDA 33166
PHONE: (305) 463-0912 FAX: (305) 513-5680
WWW.LONGITUDESURVEYORS.COM

SURVEYOR'S CERTIFICATE:

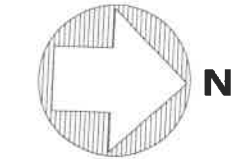
I hereby certify: That this "Topographic Survey" and the Survey Map resulting therefrom was performed under my direction and is true and correct to the best of my knowledge and belief and further, that said "Topographic Survey" meets the intent of the applicable provisions of the "Minimum Technical Standards for Land Surveying in the State of Florida", pursuant to Rule 5J-17.051 through 5J-17.052 of the Florida Administrative Code and its implementing law, Chapter 472.027 of the Florida Statutes.

LONGITUDE SURVEYORS LLC, a Florida Limited Liability Company, Florida Certificate of Authorization Number LB7335

By: Eduardo M. Suarez, PSM Signature Date
Registered Surveyor and Mapper LS6313
State of Florida

NOTICE: Not valid without the signature and original raised seal of a Florida Licensed Surveyor and Mapper. Additions or deletions to Survey Maps by other than the signing party are prohibited without the written consent of the signing party.

MAP OF TOPOGRAPHIC SURVEY



SCALE
1" = 20'

FOLIO: 01-4001-005-6440
PROPERTY ADDRESS: 6455 SW 8 ST
OWNER: DEJEM CORP

(#15) CATCH BASIN
RIM ELEV.: 6.00
EAST INV.: 2.30
14" Ø PIPE
(MAT. NOT DETERMINED)
BOTTOM ELEV.: 0.30

LOT 12

FOLIO: 01-4001-005-6430
PROPERTY ADDRESS: 712 SW 64 CT
OWNER: VENTURA DE PAZ
#W ADA DEL CARMEN

(#12) CATCH BASIN
RIM ELEV.: 5.69
NORTH INV.: 3.14
18" Ø ALUM. PIPE
EAST INV.: 0.99
18" Ø ALUM. PIPE
BOTTOM ELEV.: -1.31

LOT 11

FOLIO: 01-4001-005-6420
PROPERTY ADDRESS: 700 SW 64 CT
OWNER: GONZALEZ 700 LLC

BLOCK 30
"FAIR LAWN"
P.B. 8 - PG. 83

LOT 10

FOLIO: 01-4001-005-6410
PROPERTY ADDRESS: 660 SW 64 CT
OWNER: SOCORRO VALDES

(#11) CATCH BASIN
RIM ELEV.: 6.10
SOUTH INV.: 2.35
18" Ø ALUM. PIPE
BOTTOM ELEV.: 0.40

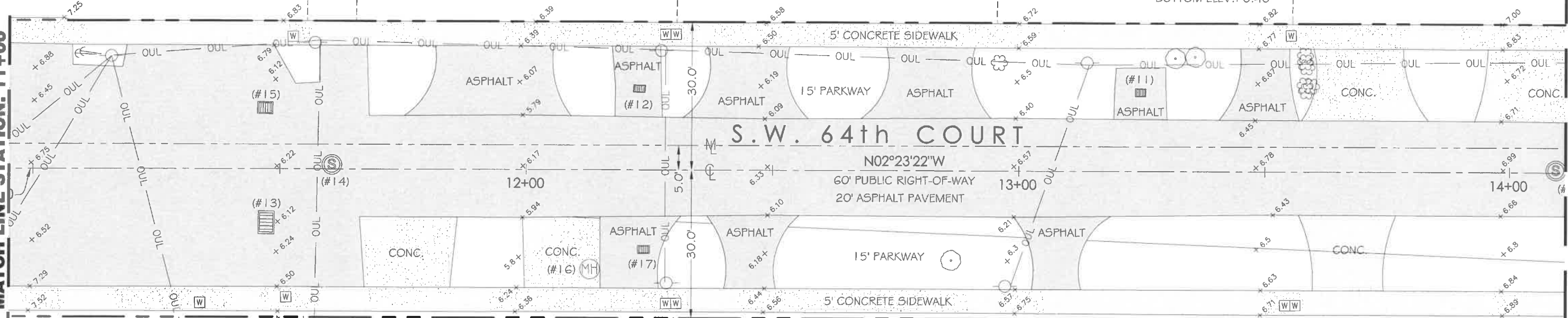
LOT 9

FOLIO: 01-4001-005-6400
PROPERTY ADDRESS:
650 SW 64 CT
OWNER: JOSE D GIL
#W MATILDE A

LOT 8

MATCH LINE STATION: 11+00

MATCH LINE STATION: 14+00



LOT 19
(#13) CATCH BASIN
RIM ELEV.: 6.11
SOUTH INV.: 1.31
24" Ø PIPE
WEST INV.: 1.21
14" Ø PIPE
BOTTOM ELEV.: -0.89
(MAT. NOT DETERMINED)

FOLIO: 01-4001-005-6740
PROPERTY ADDRESS:
731 SW 64 CT
OWNER: DANIEL TOBIAS
CAAMANO TRS

LOT 20
(#14) SANITARY MANHOLE
RIM ELEV.: 6.34
NORTH INV.: 2.47
8" Ø PVC PIPE
EAST INV.: 2.64
8" Ø PVC PIPE
WEST INV.: 2.60
8" Ø PVC PIPE

FOLIO: 01-4001-005-6750
PROPERTY ADDRESS: 711 SW 64 CT
OWNER: DANIEL TOBIAS CAAMANO TRS

(#16) MANHOLE (VALVE)
RIM ELEV.: 6.08
N.W. INV.: 4.43
14" Ø PIPE
(MAT. NOT DETERMINED)
BOTTOM ELEV.: 4.33
TOP OF VALVE: 5.53

LOT 21
(#17) CATCH BASIN
RIM ELEV.: 5.84
NORTH INV.: 0.86
32" Ø ALUM. PIPE
WEST INV.: 0.64
16" Ø PIPE
(MAT. NOT DETERMINED)
BOTTOM ELEV.: -1.41

FOLIO: 01-4001-005-6760
PROPERTY ADDRESS: 701 SW 64 CT
OWNER: JULIO A BOSCH

LOT 22
BLOCK 31
"FAIR LAWN"
P.B. 8 - PG. 83

FOLIO: 01-4001-005-6770
PROPERTY ADDRESS: 665 SW 64 CT
OWNER: DAVID MCCOLLISTER

LOT 23
FOLIO: 01-4001-005-6780
PROPERTY ADDRESS:
655 SW 64 CT
OWNER: RENE PEREZ

LEGEND			
CONC.	= CONCRETE	⊙	= CLEAN OUT
R	= RECORDED VALUE	⊙	= SANITARY SEWER MANHOLE
M	= MEASURED VALUE	⊙	= WATER VALVE
(C)	= CALCULATED	⊙	= STORM DRAINAGE MANHOLE
CL	= CENTERLINE	⊙	= UNKNOWN MANHOLE
P.B.	= PLAT BOOK	⊙	= CONCRETE
PG.	= PAGE	⊙	= ASPHALT
⊙	= WOOD POWER POLE	⊙	= SIGN
⊙	= GUY ANCHOR	⊙	= PALM TREE
ID.	= IDENTIFICATION	⊙	
⊙	= CATCH BASIN	⊙	
— M —	= MONUMENT LINE	⊙	
— OUL —	= OVERHEAD WIRE	⊙	
⊙	= WATER VALVE	⊙	
⊙	= WATER METER	⊙	
⊙	= FIRE HYDRANT	⊙	
⊙	= TEMPORARY SITE BENCHMARK	⊙	
⊙	= CONCRETE POWER POLE	⊙	
⊙	= ORNAMENTAL PLANT	⊙	
⊙	= LIGHT POLE	⊙	
⊙	= TREE	⊙	

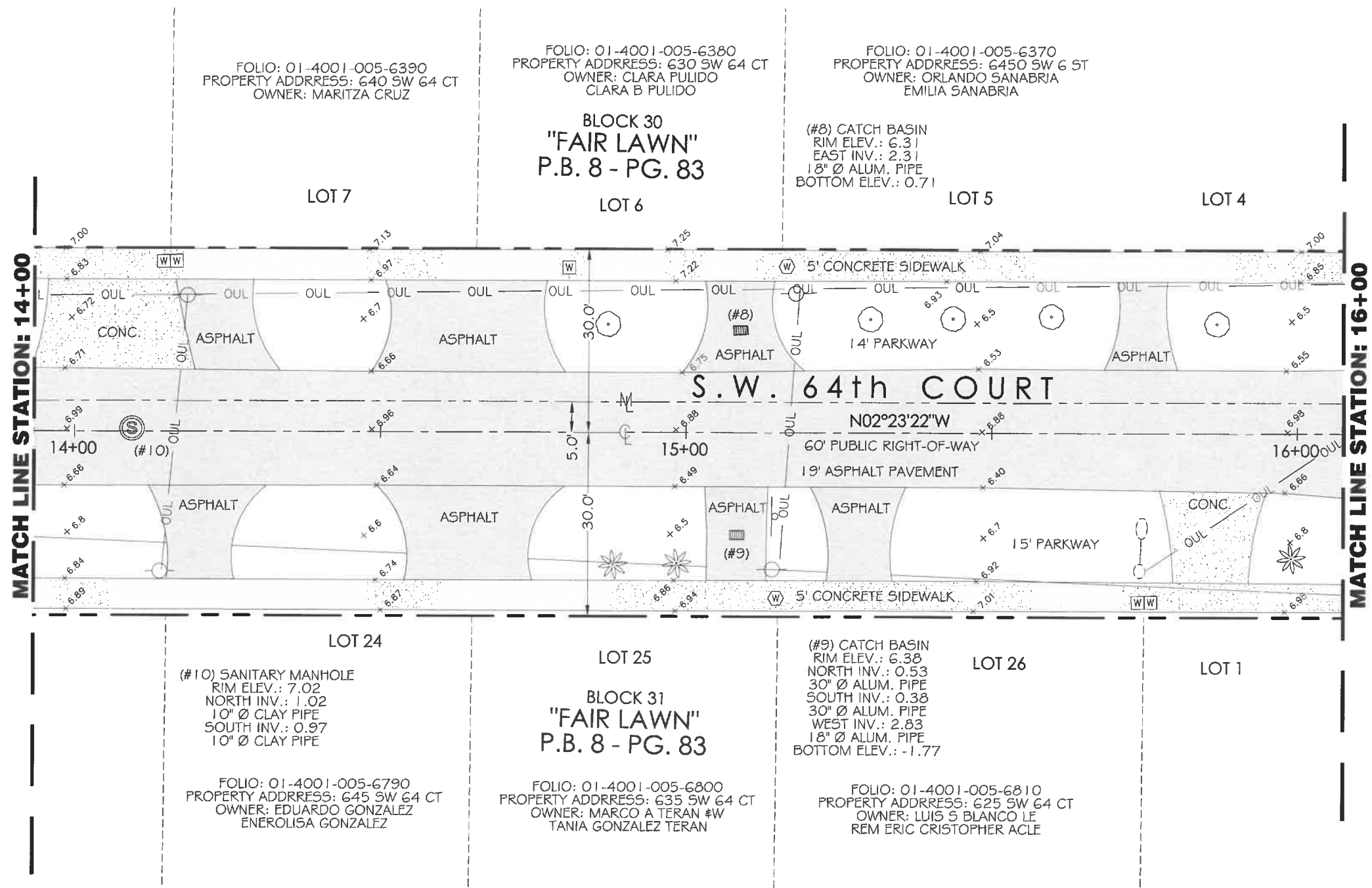
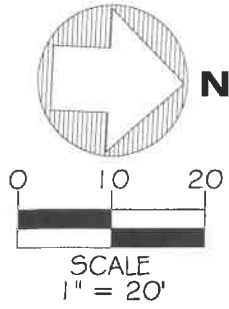
LONGITUDE
SURVEYORS

7715 NW 48TH STREET, SUITE 310
DORAL, FLORIDA 33166
PHONE: (305) 463-0912 FAX: (305) 513-5680
WWW.LONGITUDESURVEYORS.COM

JOB NO.: 15387.0.00
FIELD BOOK: EFB

DRAWN BY: JL
SHEET 2 OF 4

MAP OF TOPOGRAPHIC SURVEY



MATCH LINE STATION: 14+00

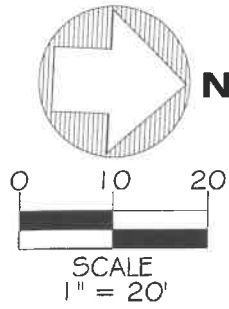
MATCH LINE STATION: 16+00

LEGEND					
CONC.	= CONCRETE	M	= MONUMENT LINE	CO	= CLEAN OUT
R	= RECORDED VALUE	OUL	= OVERHEAD WIRE	S	= SANITARY SEWER MANHOLE
M	= MEASURED VALUE	W	= WATER VALVE	SD	= STORM DRAINAGE MANHOLE
(C)	= CALCULATED	WM	= WATER METER	SH	= UNKNOWN MANHOLE
e	= CENTERLINE	WB	= WATER BENCHMARK	CONC	= CONCRETE
P.B.	= PLAT BOOK	WB	= TEMPORARY SITE BENCHMARK	ASPH	= ASPHALT
PG.	= PAGE	WB	= CONCRETE POWER POLE	SIGN	= SIGN
W	= WOOD POWER POLE	WB	= ORNAMENTAL PLANT	TR	= TREE
GA	= GUY ANCHOR	WB	= LIGHT POLE		
ID.	= IDENTIFICATION	WB	= CATCH BASIN		

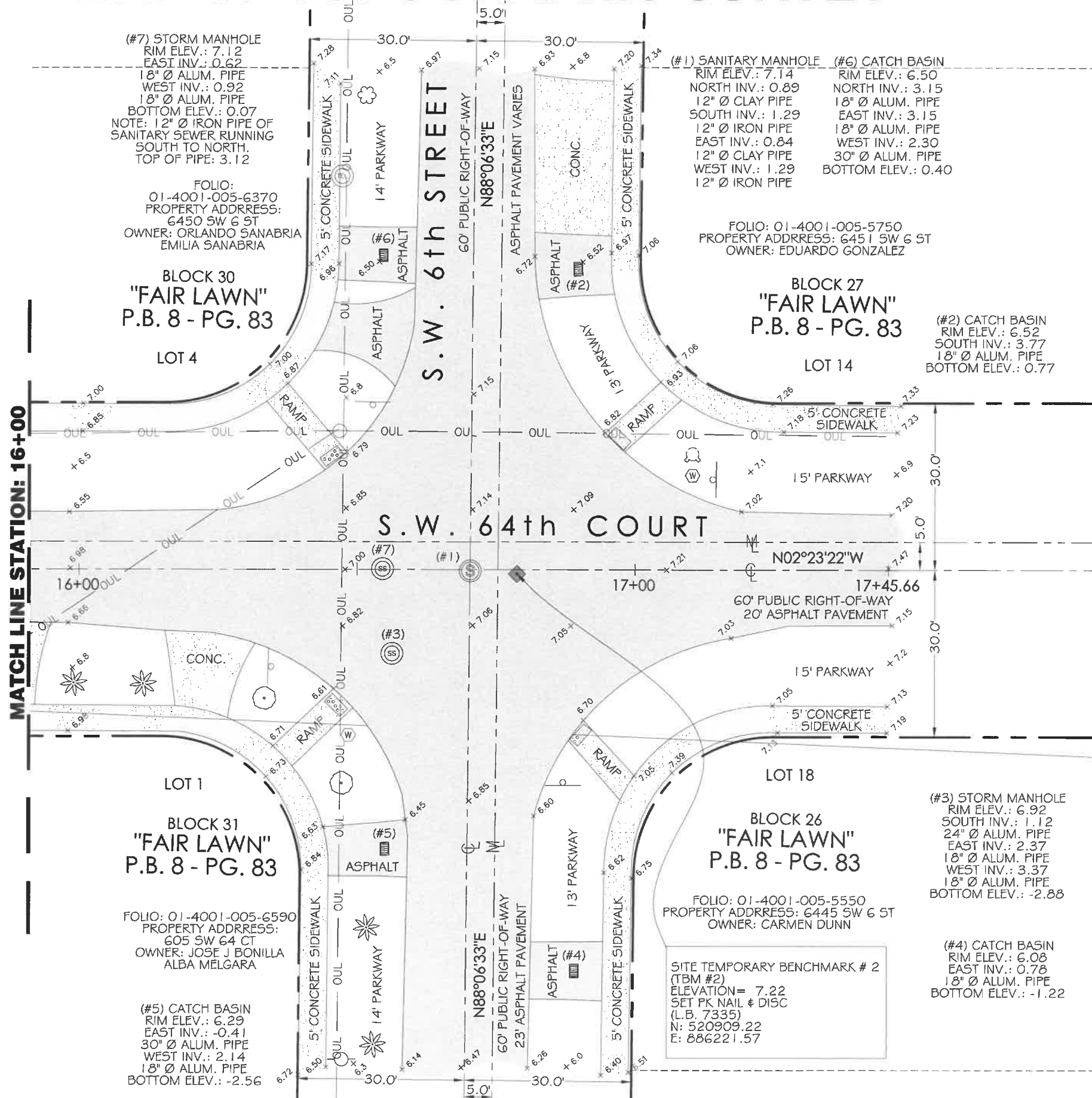
LONGITUDE SURVEYORS
 7715 NW 48th STREET, SUITE 310
 DORAL, FLORIDA 33166
 PHONE: (305)463-0912 FAX: (305)513-5680
 WWW.LONGITUDESURVEYORS.COM

JOB NO.: 15387.0.00 DRAWN BY: JL
 FIELD BOOK: EFB SHEET 3 OF 4

MAP OF TOPOGRAPHIC SURVEY



LEGEND	
CONC.	= CONCRETE
R	= RECORDED VALUE
(C)	= MEASURED VALUE
(M)	= CALCULATED
P.F.	= CENTERLINE
P.B.	= PLAT BOOK
PG.	= PAGE
⊙	= WOOD POWER POLE
⊙	= GUY ANCHOR
ID.	= IDENTIFICATION
⊞	= CATCH BASIN
—	= MONUMENT LINE
—	= OVERHEAD WIRE
—	= WATER VALVE
—	= WATER METER
—	= FIRE HYDRANT
◆	= TEMPORARY SITE BENCHMARK
⊙	= CONCRETE POWER POLE
⊙	= ORNAMENTAL PLANT
⊙	= LIGHT POLE
⊙	= TREE
⊙	= PALM TREE
⊙	= CLEAN OUT
⊙	= SANITARY SEWER MANHOLE
⊙	= STORM DRAINAGE MANHOLE
⊙	= UNKNOWN MANHOLE
⊙	= CONCRETE
⊙	= ASPHALT
⊙	= SIGN
⊙	= TELEPHONE MANHOLE



(#7) STORM MANHOLE
RIM ELEV.: 7.12
EAST INV.: 0.62
18" Ø ALUM. PIPE
WEST INV.: 0.92
18" Ø ALUM. PIPE
BOTTOM ELEV.: 0.07
NOTE: 12" Ø IRON PIPE OF
SANITARY SEWER RUNNING
SOUTH TO NORTH.
TOP OF PIPE: 3.12

FOLIO: 01-4001-005-6370
PROPERTY ADDRESS: 6450 SW 6 ST
OWNER: ORLANDO SANABRIA
EMILIA SANABRIA

BLOCK 30
"FAIR LAWN"
P.B. 8 - PG. 83
LOT 4

(#1) SANITARY MANHOLE
RIM ELEV.: 7.14
NORTH INV.: 0.89
12" Ø CLAY PIPE
SOUTH INV.: 1.29
12" Ø IRON PIPE
EAST INV.: 0.84
12" Ø CLAY PIPE
WEST INV.: 1.29
12" Ø IRON PIPE

FOLIO: 01-4001-005-5750
PROPERTY ADDRESS: 6451 SW 6 ST
OWNER: EDUARDO GONZALEZ

BLOCK 27
"FAIR LAWN"
P.B. 8 - PG. 83
LOT 14

(#2) CATCH BASIN
RIM ELEV.: 6.52
SOUTH INV.: 3.77
18" Ø ALUM. PIPE
BOTTOM ELEV.: 0.77

S.W. 64th COURT

MATCH LINE STATION: 16+00

LOT 1
BLOCK 31
"FAIR LAWN"
P.B. 8 - PG. 83

FOLIO: 01-4001-005-6590
PROPERTY ADDRESS: 605 SW 64 CT
OWNER: JOSE J BONILLA
ALBA MELGARA

(#5) CATCH BASIN
RIM ELEV.: 6.29
EAST INV.: -0.41
30" Ø ALUM. PIPE
WEST INV.: 2.14
18" Ø ALUM. PIPE
BOTTOM ELEV.: -2.56

LOT 18
BLOCK 26
"FAIR LAWN"
P.B. 8 - PG. 83

FOLIO: 01-4001-005-5550
PROPERTY ADDRESS: 6445 SW 6 ST
OWNER: CARMEN DUNN

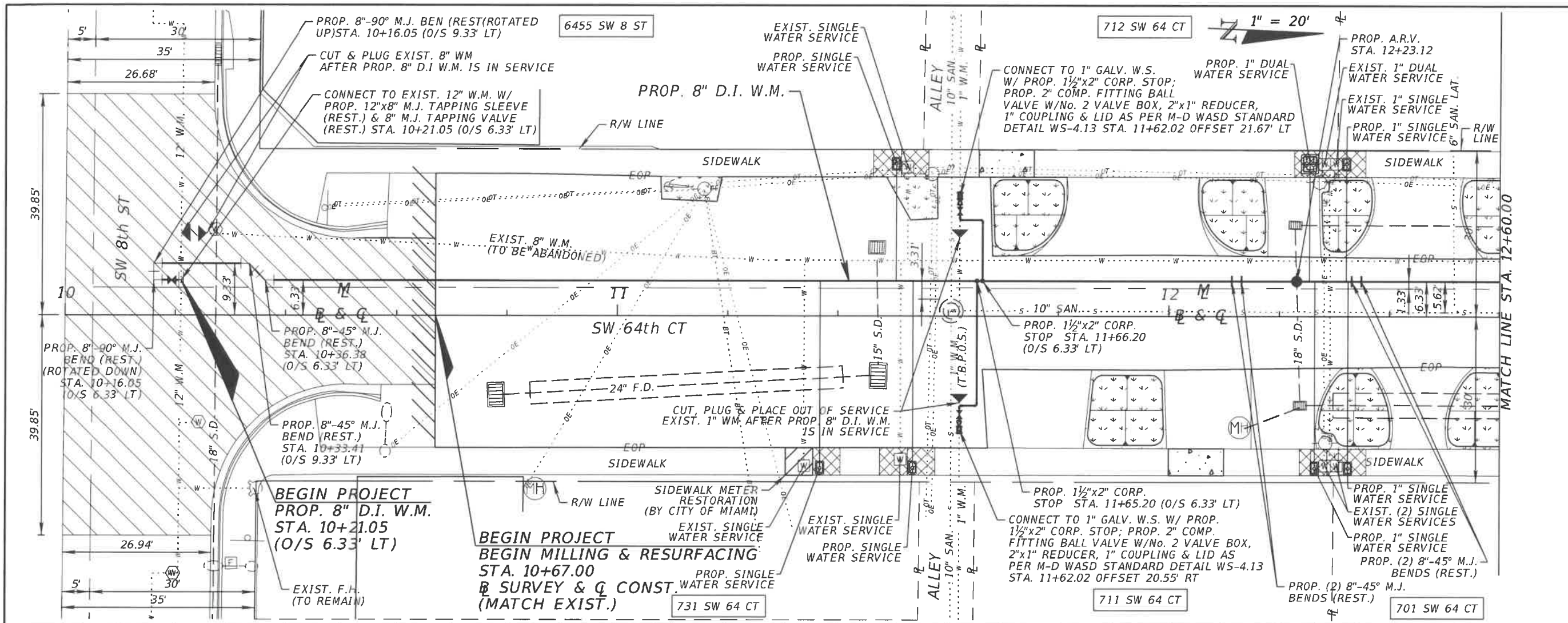
SITE TEMPORARY BENCHMARK # 2
(TBM #2)
ELEVATION = 7.22
SET PK NAIL & DISC
(L.B. 7335)
N: 520909.22
E: 886221.57

(#3) STORM MANHOLE
RIM ELEV.: 6.92
SOUTH INV.: 1.12
24" Ø ALUM. PIPE
EAST INV.: 2.37
18" Ø ALUM. PIPE
WEST INV.: 3.37
18" Ø ALUM. PIPE
BOTTOM ELEV.: -2.88

(#4) CATCH BASIN
RIM ELEV.: 6.08
EAST INV.: 0.78
18" Ø ALUM. PIPE
BOTTOM ELEV.: -1.22

LONGITUDE
SURVEYORS

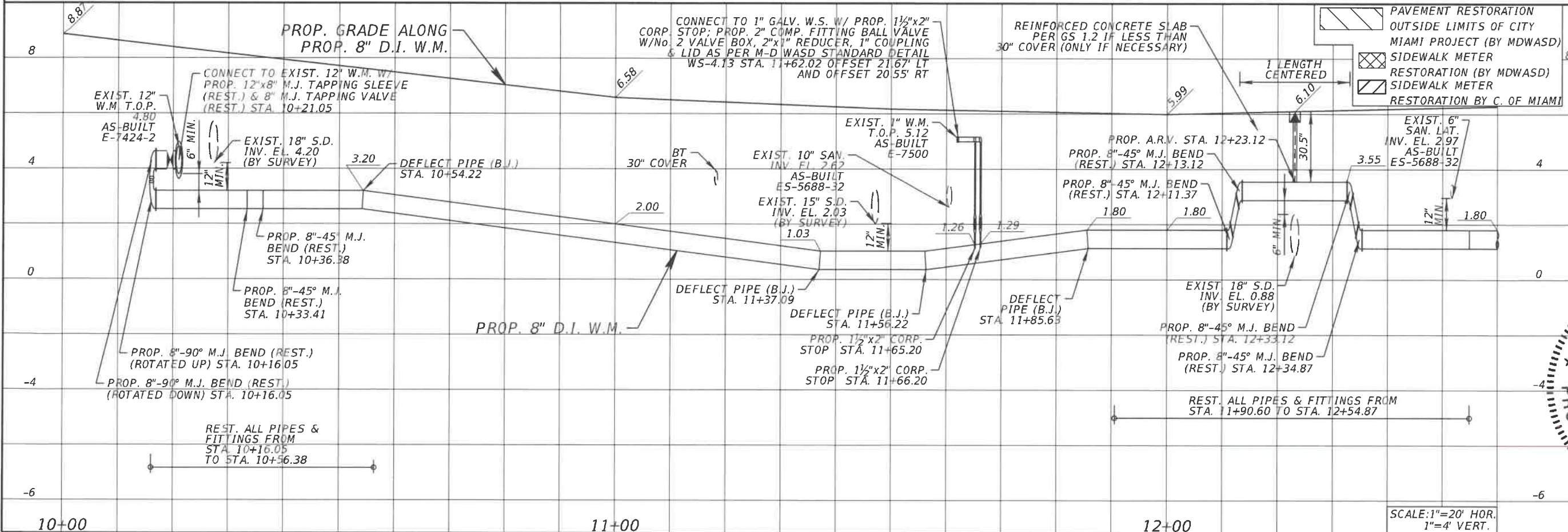
7715 NW 48TH STREET, SUITE 310
DORAL, FLORIDA 33166
PHONE: (305) 463-0912 FAX: (305) 513-5680
WWW.LONGITUDESURVEYORS.COM



WATER & SEWER DEPARTMENT
 3071 SW 38TH AVENUE
 MIAMI, FL 33146-1520
 305-665-7471
 www.miamidade.gov/water

A&P Consulting Transportation Engineers Corp.
 10305 N.W. 41 Street, suite 115
 Miami, FL 33178
 305 592-7283 / fax:305 593-1594
 CA No. : EB-0007797
 Arnello Alfonso, P.E. No. 52566

INSTALLATION 8 INCH D.I. WATER MAIN IN S.W. 64th CT. FROM S.W. 8th ST. TO S.W. 6th ST. PCTS No. 14706, ER No. W017009 CITY OF MIAMI J.P.A. PROJECT No. B 30972 PROP. 8" D.I. W.M. PLAN & PROFILE



DRAWING HISTORY

RELEASED FOR	DATE	BY
REVIEW 60%	2/22/2017	A.A.
REVIEW 90%	3/30/2017	A.A.
SUBMITTAL 100%	5/23/2017	A.A.

REVISIONS

No.	DESCRIPTION	DATE	BY

APPROVALS

PROJECT MGR: BT. CHECKED: AA

DESIGNED: V.M. DRAWN: N.P.

CHIEF ENGINEER: **ARNELLO ALFONSO**

RESIGN. NO. 52566

Civil Engineer

State of Florida - License No. 52566

0305 NW 1st Doral, Florida 33178

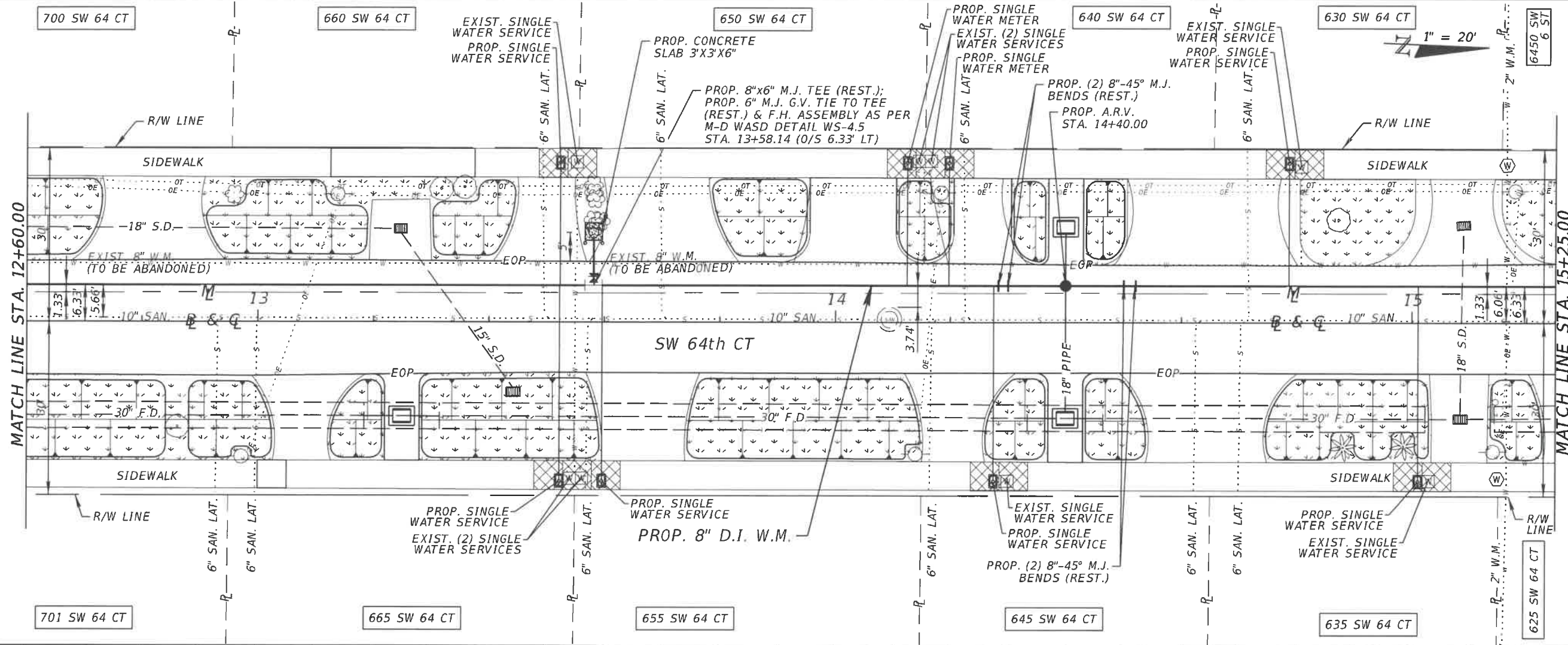
Date: 5/23/2017

PROFESSIONAL ENGINEER

DATE: 5/23/2017

SHEET WM-08 OF WM-14

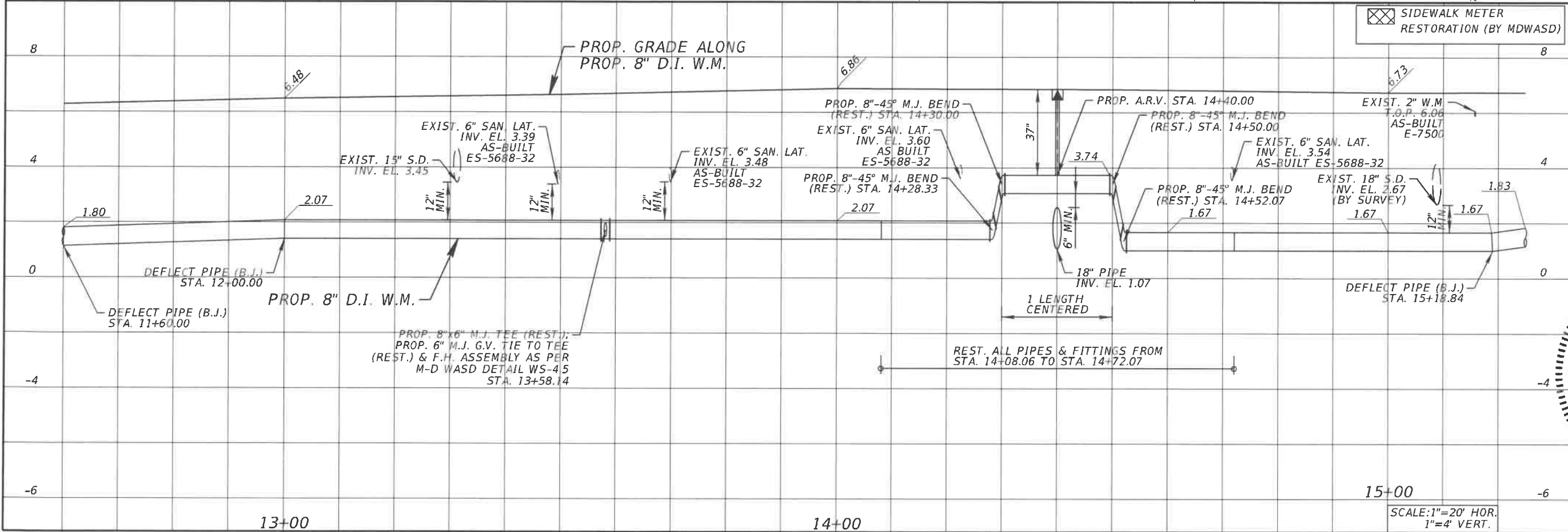
DWG. No. W-22030



WATER & SEWER DEPARTMENT
 3071 SW 38TH AVENUE
 MIAMI, FL 33146-1520
 305-665-7471
 www.miamidade.gov/water

A&P Consulting Transportation Engineers Corp.
 10305 N.W. 41 Street, suite 115
 Miami, FL 33178
 305 592-7283 / fax:305 593-1594
 CA No. : EB-0007797
 Amelio Alfonso, P.E. No. 52566

INSTALLATION 8 INCH D.I. WATER MAIN
IN S.W. 64TH CT. FROM S.W. 8TH ST. TO S.W. 6TH ST.
 PCTS No. 14706, ER No. W017009
 CITY OF MIAMI J.P.A. PROJECT No. B 30972
 PROP. 8" D.I. W.M. PLAN & PROFILE



DRAWING HISTORY

RELEASED FOR	DATE	BY
REVIEW 60%	2/22/2017	A.A.
REVIEW 90%	3/30/2017	A.A.
SUBMITTAL 100%	5/23/2017	A.A.

REVISIONS

No.	DESCRIPTION	DATE	BY

APPROVALS

PROJECT MGR: B.T. CHECKED: A.A.

DESIGNED: [Signature] DRAWN: [Signature]

CHECKED: [Signature] DATE: [Signature]

SEAL: [Signature]

DESIGN MGR.: C.B.

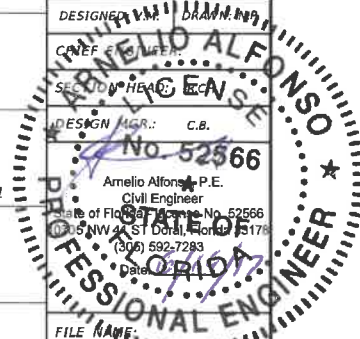
No. 52566

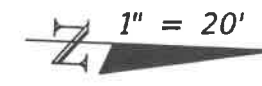
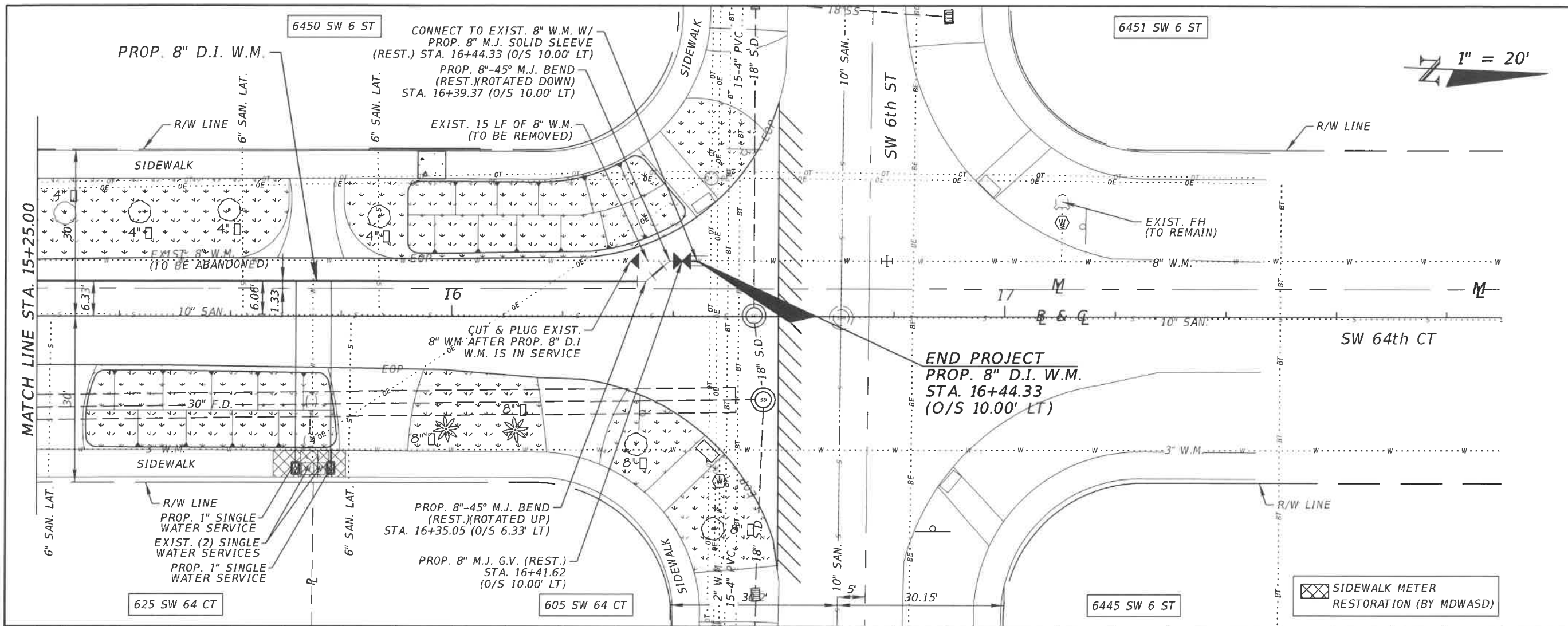
Amelio Alfonso, P.E.
 Civil Engineer
 State of Florida License No. 52566
 10305 N.W. 41 Street, Suite 115
 Miami, FL 33178
 (305) 592-7283
 Date: 1/11/17

FILE NAME: [Blank]

DATE: [Blank] SCALE: 1"=20'

SHEET WM-09 OF WM-14
 DWG. No. W-22031

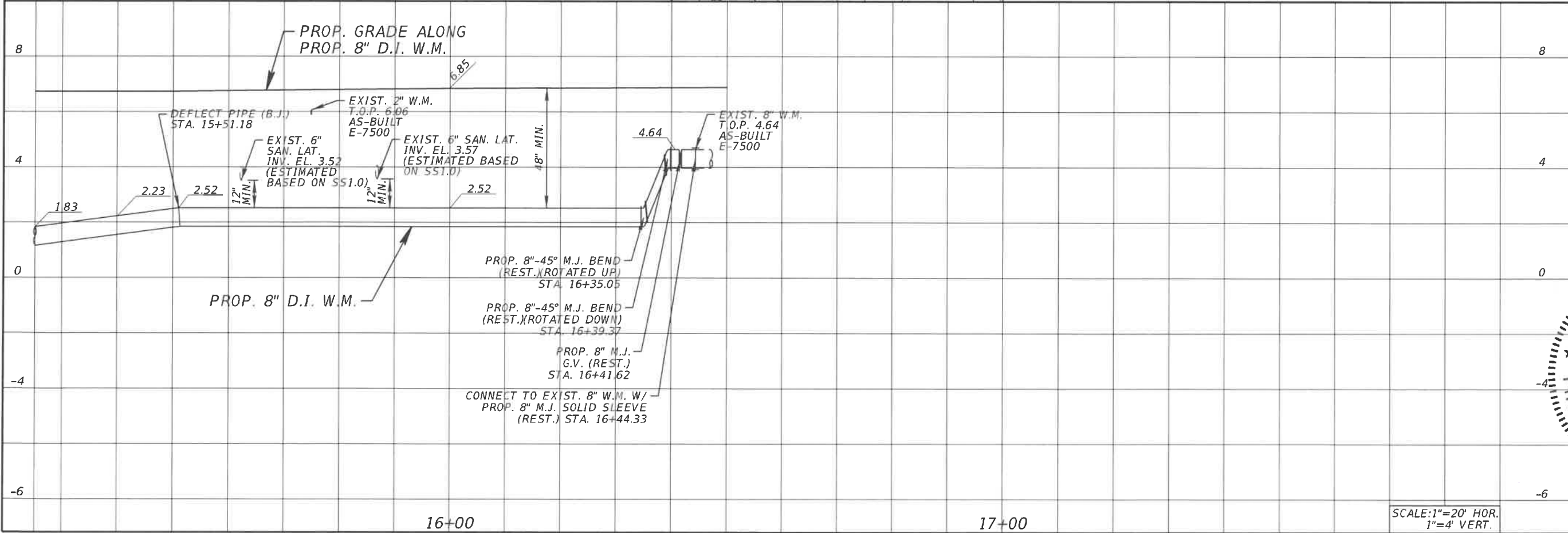




WATER & SEWER DEPARTMENT
 3071 SW 38TH AVENUE
 MIAMI, FL 33146-1520
 305-665-7471
 www.miamidade.gov/water

A&P Consulting Transportation Engineers Corp.
 10305 N.W. 41 Street, suite 115
 Miami, FL 33178
 305 592-7283 / fax:305 593-1594
 CA No. : EB-0007797
 Arnello Alfonso, P.E. No. 52566

INSTALLATION 8 INCH D.I. WATER MAIN
IN S.W. 64TH CT. FROM S.W. 8TH ST. TO S.W. 6TH ST.
 PCTS No. 14706, ER No. W017009
 CITY OF MIAMI J.P.A. PROJECT No. B 50972
PROP. 8" D.I. W.M. PLAN & PROFILE



DRAWING HISTORY

RELEASED FOR	DATE	BY
REVIEW 60%	2/22/2017	A.A.
REVIEW 90%	3/30/2017	A.A.
SUBMITTAL 100%	5/23/2017	A.A.

REVISIONS

No.	DESCRIPTION	DATE	BY

APPROVALS

PROJECT MGR: B.T. CHECKED: A.A.

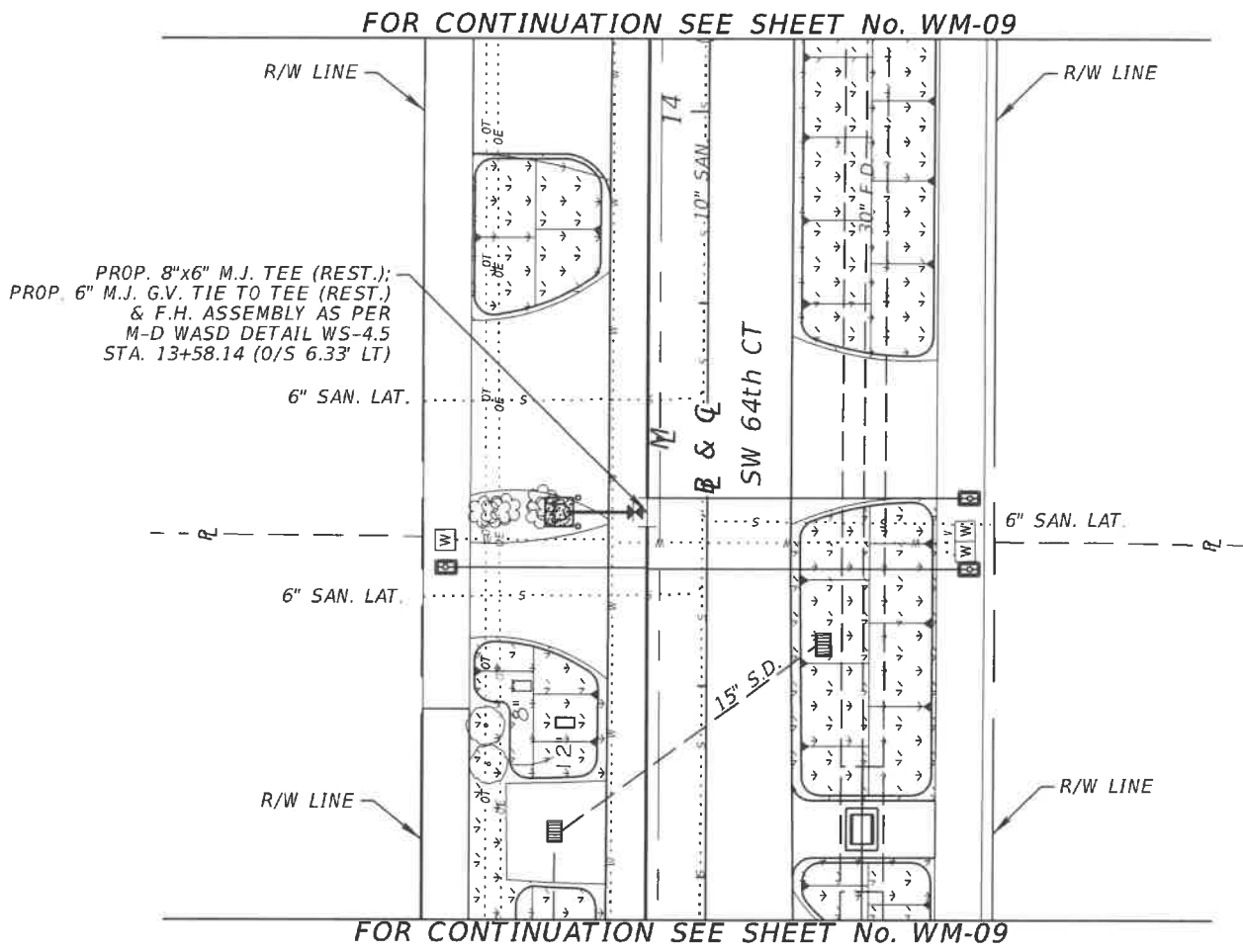
DESIGNER: **ARNELLO ALFONSO**
 PRIOR ENGINEER:
 DESIGN MGR: **ARNELLO ALFONSO**
 No. 52566
 Arnello Alfonso, P.E.
 State of Florida License No. 52566
 305 NW 41 St, Suite 115, Miami, FL 33178
 (305) 592-7283
 Date:

FILE NAME:
 DATE: SCALE: 1"=20'
 SHEET WM-10 OF WM-14
 DWG. No. W-22032

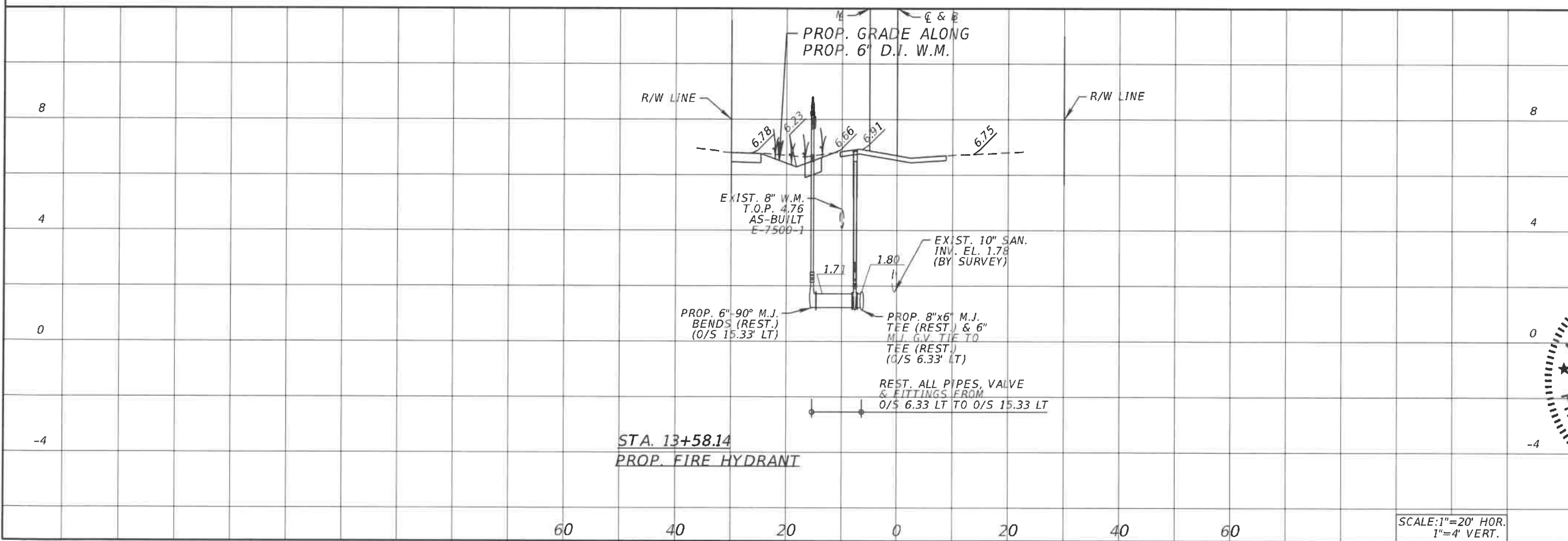


WATER & SEWER DEPARTMENT
 3071 SW 38TH AVENUE
 MIAMI, FL 33146-1520
 305-665-7471
 www.miamidade.gov/water

A&P Consulting Transportation Engineers Corp.
 10305 N.W. 41 Street, suite 115
 Miami, FL 33178
 305 592-7283 / fax:305 593-1594
 CA No. : EB-0007797
 Arnello Alfonso, P.E. No. 52566



INSTALLATION 8 INCH D.I. WATER MAIN
 IN S.W. 64th CT. FROM S.W. 8th ST. TO S.W. 6th ST.
 PCTS No. 14706, ER No. W017009
 CITY OF MIAMI J.P.A. PROJECT No. B 30972
 PROP. FIRE HYDRANT PLAN & PROFILE



DRAWING HISTORY

RELEASED FOR	DATE	BY
REVIEW 60%	2/22/2017	A.A.
REVIEW 90%	3/30/2017	A.A.
SUBMITTAL 100%	5/23/2017	A.A.

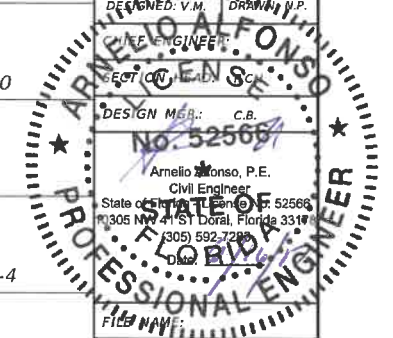
REVISIONS

No.	DESCRIPTION	DATE	BY

APPROVALS

PROJECT MGR: B.T. CHECKED: A.A.

DESIGNED: V.M. DRAWN: J.P.
 CHECKED: C.B. ENGINEER: C.B.
 DESIGN MGR: C.B.
 No. 52566



Arnello Alfonso, P.E.
 Civil Engineer
 State of Florida License No. 52566
 305 NW 41 St Doral, Florida 33178
 305 592-7283

FILE NAME:
 DATE: SCALE: 1"=20'
 SHEET WM-11 OF WM-14
 DWG. No. W-22033

SCALE: 1"=20' HOR.
 1"=4' VERT.

WATER & SEWER DEPARTMENT
 3071 SW 38TH AVENUE
 MIAMI, FL 33146-1520
 305-665-7471
 www.miamidade.gov/water

A&P Consulting
 Transportation Engineers Corp.
 10305 N.W. 41 Street, suite 115
 Miami, FL 33178
 305 592-7283 / fax:305 593-1594
 CA No. : EB-0007797
 Amello Alfonso, P.E. No. 52566

INSTALLATION 8 INCH D.I. WATER MAIN
 IN S.W. 64TH CT. FROM S.W. 8TH ST. TO S.W. 6TH ST.
 PCTS No. 14706, ER No. W017009
 CITY OF MIAMI J.P.A. PROJECT No. B 50972
 TRAFFIC CONTROL PLAN GENERAL - NOTES

GENERAL NOTES

1. TRAFFIC CONTROLS SHALL BE IN ACCORDANCE WITH THE PROJECT PLANS, THE CURRENT EDITION OF THE FLORIDA DOT DESIGN STANDARDS (600 SERIES), THE STANDARD SPECIFICATION FOR ROAD AND BRIDGE CONSTRUCTION, AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES AS MINIMUM CRITERIA.
2. THE CONTRACTOR SHALL IMMEDIATELY REPAIR ALL POTHOLES THAT DEVELOP WITHIN THE PROJECT LIMITS AND WILL MAINTAIN A SUPPLY OF COLD MIX ON THE PROJECT SITE TO EXPEDITE THOSE REPAIRS. COST OF REPAIR TO BE INCLUDED IN MAINTENANCE OF TRAFFIC.
3. THE TRAFFIC AND TRAVEL WAYS SHALL NOT BE ALTERED BY THE CONTRACTOR TO CREATE A WORK ZONE UNTIL ALL LABOR AND MATERIAL ARE AVAILABLE FOR THE CONSTRUCTION IN THAT AREA.
4. NOTIFICATION OF LANE CLOSURES OR TEMPORARY DETOURS SHALL BE ACCOMPLISHED 14 WORKING DAYS PRIOR TO CLOSURE, DETOUR OR MOT PHASE CHANGE BY SUBMITTING THE REQUIRED LANE CLOSURE FORM, SKETCHES, CALCULATIONS, AND OTHER DATA THROUGH THE ENGINEER TO THE FDOT DISTRICT/MDCPW TRAFFIC OPERATIONS OFFICE.
5. AT THE DISCRETION OF THE FIELD ENGINEER, IF A LANE CLOSURE CAUSES EXTENDED CONGESTION OR DELAY, THE CONTRACTOR SHALL BE DIRECTED TO REOPEN THE CLOSED LANE(S) UNTIL SUCH TIME THAT THE TRAFFIC FLOW HAS RETURNED TO AN ACCEPTABLE LEVEL.
6. REGULATORY SPEED ESTABLISHED WITHIN THE WORK ZONE TRAVEL WAYS SHALL BE 25 M.P.H. REDUCED SPEED AND REGULATORY SPEED SIGNS SHALL BE INSTALLED ON SEPARATE POSTS IN ACCORDANCE WITH THE STANDARD INDEXES.
7. AS DETERMINED BY THE ENGINEER, THE CONTRACTOR SHALL COVER WORK ZONE SIGNS WHEN CONDITIONS NO LONGER WARRANT THEIR USE. COST OF COVERING AND UNCOVERING THE SIGNS SHALL BE INCLUDED IN MAINTENANCE OF TRAFFIC.
8. CONTRACTOR SHALL REMOVE, RELOCATE OR COVER ANY EXISTING OR PROPOSED SIGNS THAT CONFLICT WITH THE TRAFFIC CONTROL PLANS. WHEN THE CONFLICT NO LONGER EXISTS, THE CONTRACTOR SHALL RESTORE THE SIGNS TO THEIR ORIGINAL POSITION. COST OF TEMPORARILY REMOVING, RELOCATING, COVERING AND RESTORING THE SIGNS SHALL BE INCLUDED IN MAINTENANCE OF TRAFFIC.
9. THE CONTRACTOR SHALL NOT PROPOSE AN ALTERNATIVE TRAFFIC CONTROL PLAN THAT REDUCES THE NUMBER OF TRAVEL LANES SHOWN ON THE CONTRACT TRAFFIC CONTROL PLANS.
10. ARROWS ON THE TRAFFIC CONTROL PLANS DENOTE THE DIRECTION OF TRAFFIC ONLY AND DO NOT REFLECT PAVEMENT MARKINGS UNLESS SPECIFICALLY NOTED.
11. LANE CLOSURES SHALL NOT BE PERMITTED DURING SCHOOL SPEED ZONE HOURS WHERE SUCH CLOSURES WILL AFFECT TRAFFIC FLOW IN THE VICINITY OF THE SCHOOL SPEED ZONES.
12. EACH EXISTING STREET NAME AND STOP SIGN AFFECTED BY CONSTRUCTION SHALL BE RELOCATED AND MAINTAINED IN AN APPROPRIATE LOCATION FOR THE DURATION OF THE PROJECT. WHEN NO LONGER AFFECTED BY CONSTRUCTION, THESE SIGNS SHALL BE RESTORED TO THEIR ORIGINAL POSITION. COST OF TEMPORARILY RELOCATING AND RESTORING THE SIGNS SHALL BE INCLUDED IN MAINTENANCE OF TRAFFIC.
13. CONTRACTOR SHALL BE RESPONSIBLE FOR THE IMMEDIATE REMOVAL OF STORM WATER FROM ROADWAYS UTILIZED FOR MAINTAINING TRAFFIC IN A MANNER APPROVED BY THE ENGINEER. COST FOR REMOVING THE WATER SHALL BE INCLUDED IN MAINTENANCE OF TRAFFIC.
14. USE METAL PLATES IF THE WORK ZONE IS INACTIVE.

DROP OFFS:

- 1.1. FOR DROP OFFS, THE CONTRACTOR'S ATTENTION IS DIRECTED TO STANDARD INDEX NO. 600, SHEET 10 OF 13. THE CONTRACTOR SHALL USE SHOULDER TREATMENT DETAIL WHEN NO BARRIERS ARE REQUIRED IN THE PLANS. COST TO BE INCLUDED IN MAINTENANCE OF TRAFFIC.

SIGNALS:

1. CONTRACTOR SHALL NOTIFY MIAMI DADE COUNTY SIGNS AND SIGNALS DIVISION LOCATED AT 7100 N.W. 36th STREET MIAMI, FLORIDA 33166 AND PHONE NO. (305) 592-3470, 48 HOURS PRIOR TO ANY MODIFICATION OF AN EXISTING TRAFFIC SIGNAL SYSTEM. THE CONTRACTOR SHALL HAVE FULL RESPONSIBILITY FOR THE MAINTENANCE OF THE EXISTING OR TEMPORARY TRAFFIC SIGNAL(S) WITHIN THE PROJECT LIMITS. COST OF RELOCATING TRAFFIC SIGNAL HEADS, PROVIDING AND REMOVING TEMPORARY SIGNALS, AND MAINTAINING THE EXISTING OR TEMPORARY TRAFFIC SIGNALS SHALL BE INCLUDED IN MAINTENANCE OF TRAFFIC.
2. THE CONTRACTOR SHALL MAINTAIN ONLINE COMMUNICATION OF EXISTING OR TEMPORARY SIGNALIZATION VIA INTERCONNECT OR PHONE LINE DURING CONSTRUCTION. CONTRACTORS SHALL PROVIDE TEMPORARY LINES AND CONNECTIONS IF NECESSARY. COST OF ESTIMATING COMMUNICATION, INCLUDING TEMPORARY LINES AND CONNECTIONS SHALL BE INCLUDED IN MAINTENANCE OF TRAFFIC.

WORK ZONE LIMITS:

1. THE LENGTH OF AN OPEN TRENCH SHALL NOT EXCEED 300 FT. PROPERTY ACCESS SHALL BE MAINTAINED IN ACCORDANCE TO ARTICLE 102-5.5 OF THE FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.








INTERSECTIONS:

1. ADJACENT INTERSECTIONS SHALL NOT BE CONSTRUCTED SIMULTANEOUSLY UNLESS DIRECTED BY THE FIELD ENGINEER.
2. INTERSECTIONS SHALL BE RECONSTRUCTED WORKING ON A CONTINUOUS DAILY BASIS UNTIL COMPLETE AND UNTIL THE STRUCTURAL COURSE IS PLACED.
3. WORK AT MAJOR INTERSECTIONS SHALL BE DONE CONTINUOUSLY UNTIL THE ROAD HAS BEEN PAVED AND DROP OFFS SAFELY SLOPED.
4. TRANSITIONS AND TEMPORARY INTERSECTION CROSSOVERS WHERE CONSTRUCTION HAS CAUSED GRADE DIFFERENCES BETWEEN THE EXISTING AND NEW ROADWAYS SHALL BE CONSTRUCTED USING A 1:20 TYPE 5 ASPHALT CONCRETE SLOPE TO ACCOMMODATE VEHICULAR TRAFFIC FROM ANY DIRECTION. ALL MATERIAL AND WORK, INCLUDING ITS REMOVAL, SHALL BE INCLUDED IN MAINTENANCE OF TRAFFIC.

PEDESTRIAN, BICYCLES AND WHEELCHAIRS:

1. AT THE END OF EACH WORK DAY OR WHENEVER THE WORK ZONE BECOMES INACTIVE, ANY DROP OFF ADJACENT TO THE PEDESTRIAN, BICYCLE, AND WHEELCHAIR TRAVEL PATHS SHALL BE BACKFILLED FLUSH WITH THE SAID PATHS OR PROTECTED WITH BARRICADES, TEMPORARY CONCRETE BARRIER WALL, OR APPROVED HANDRAIL. THE COST OF BACKFILLING AND/OR USE OF OTHER METHODS TO PROTECT THE PEDESTRIAN, BICYCLE AND WHEELCHAIR TRAVEL PATHS SHALL BE INCLUDED IN MAINTENANCE OF TRAFFIC.
2. PEDESTRIAN, BICYCLE, AND WHEELCHAIR TRAFFIC SHALL BE MAINTAINED AND GUIDED USING APPROVED WARNING LIGHTS, SIGNING, AND DELINEATION DEVICES ON AT LEAST ONE SIDE OF THE PROJECT AT ALL TIMES THROUGHOUT THE PROJECT LIMITS. THE TRAVEL PATH SHALL BE A MINIMUM OF 4 FT (1.2 METERS) WIDE WITH A SMOOTH SURFACE THAT IS NOT SLICK AND IT SHOULD BE RAMPED AS NECESSARY FOR CONTINUITY. COST TO CONSTRUCT AND MAINTAIN THE TRAVEL PATH AS REQUIRED SHALL BE INCLUDED IN MAINTENANCE OF TRAFFIC

LEGEND:

-  TYPE III BARRICADE OR VERTICAL PANEL OR DRUM (WITH FLASHING LIGHT AT NIGHT ONLY)
-  TYPE I OR TYPE II BARRICADE OR VERTICAL PANEL OR DRUM (WITH STEADY BURNING LIGHT AT NIGHT ONLY)
-  ADVANCE WARNING ARROW BOARD
-  WORK AREA
-  WORK ZONE SIGN
-  LANE IDENTIFICATION AND DIRECTION OF TRAFFIC
-  LONGITUDINAL CHANNELIZING DEVICE

DRAWING HISTORY

RELEASED FOR	DATE	BY
REVIEW 60%	02/22/17	A.A.
REVIEW 90%	03/30/17	A.A.
SUBMITTAL 100%	05/23/17	A.A.

REVISIONS

No.	DESCRIPTION	DATE	BY

APPROVALS

PROJECT MGR: B.T. CHECKED: A.A.
 DESIGNED: V.M. DRAWN: N.P.

DATE: 05/23/17
 IVO ANNE PLANAS
 LICENSE
 DESIGN MGR.: C.B.

No. 67358
 Ivonne Planas, P.E.
 Civil Engineer
 State of Florida - License No. 67358
 10305 N.W. 41 Street, Suite 115, Miami, FL 33178
 (305) 592-7283
 Date: 05/23/17
 FLORIDA
 PROFESSIONAL ENGINEER

DATE: 05/23/17 SCALE:

SHEET WM-12 OF WM-14

DWG. No. W-22034

WATER & SEWER DEPARTMENT
 3071 SW 38TH AVENUE
 MIAMI, FL 33146-1520
 305-665-7471
 www.miamidade.gov/water

A&P Consulting Transportation Engineers Corp.
 10305 N.W. 41 Street, suite 115
 Miami, FL 33178
 305 592-7283 / fax: 305 593-1594
 CA No. : EB-0007797
 Arnello Alfonso, P.E. No. 52566

INSTALLATION 8 INCH D.I. WATER MAIN
 IN S.W. 64th CT. FROM S.W. 8th ST. TO S.W. 6th ST.
 PCTS No. 14706, ER No. W017009
 CITY OF MIAMI J.P.A. PROJECT No. B 30972

TRAFFIC CONTROL PLAN - MOT

DRAWING HISTORY

RELEASED FOR	DATE	BY
REVIEW 60%	02/22/17	A.A.
REVIEW 90%	03/30/17	A.A.
SUBMITTAL 100%	05/23/17	A.A.

REVISIONS

No.	DESCRIPTION	DATE	BY

APPROVALS

PROJECT MGR: B.T. CHECKED: A.A.

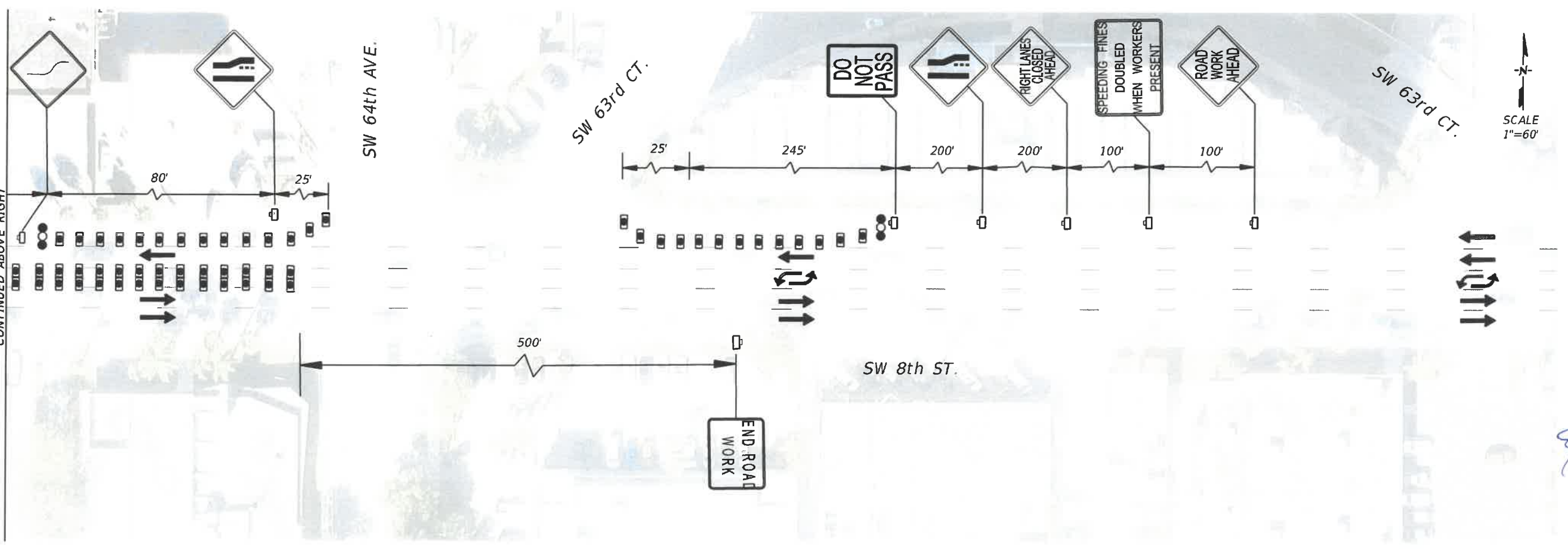
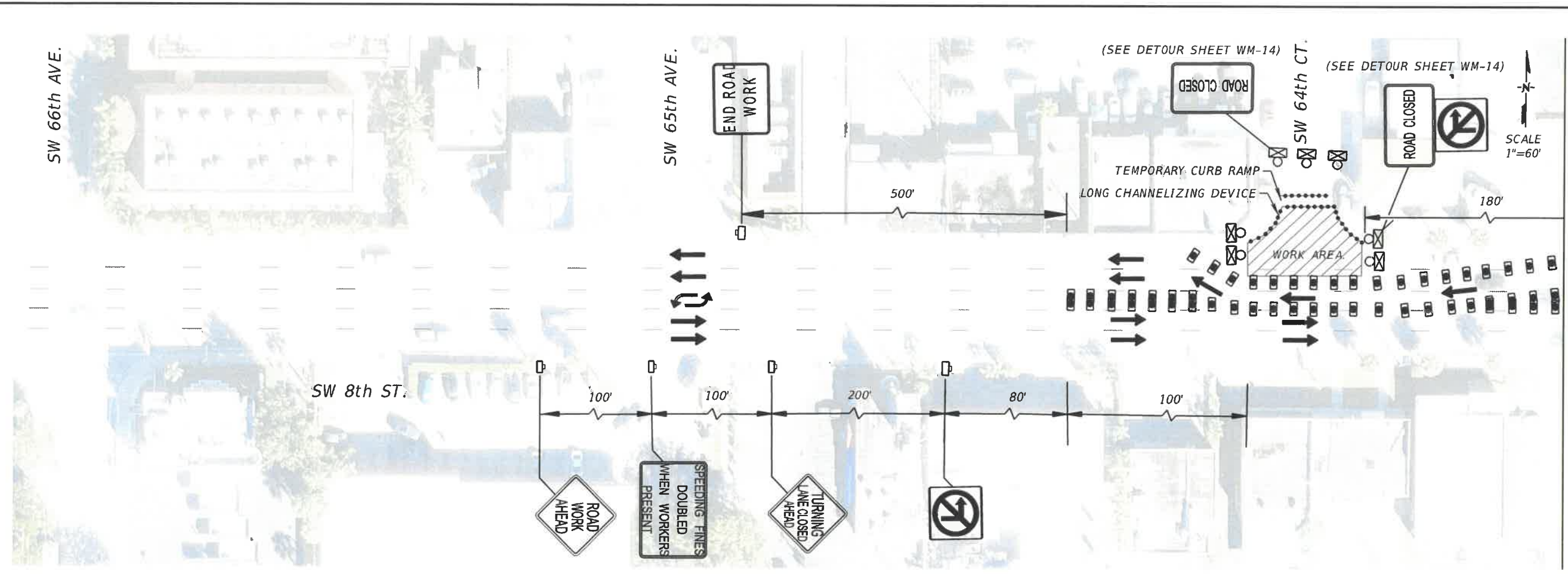
DESIGNED: V.M. DRAWN: N.P.



DATE: _____

SHEET WM-13 OF WM-14

DWG. No. W-22035



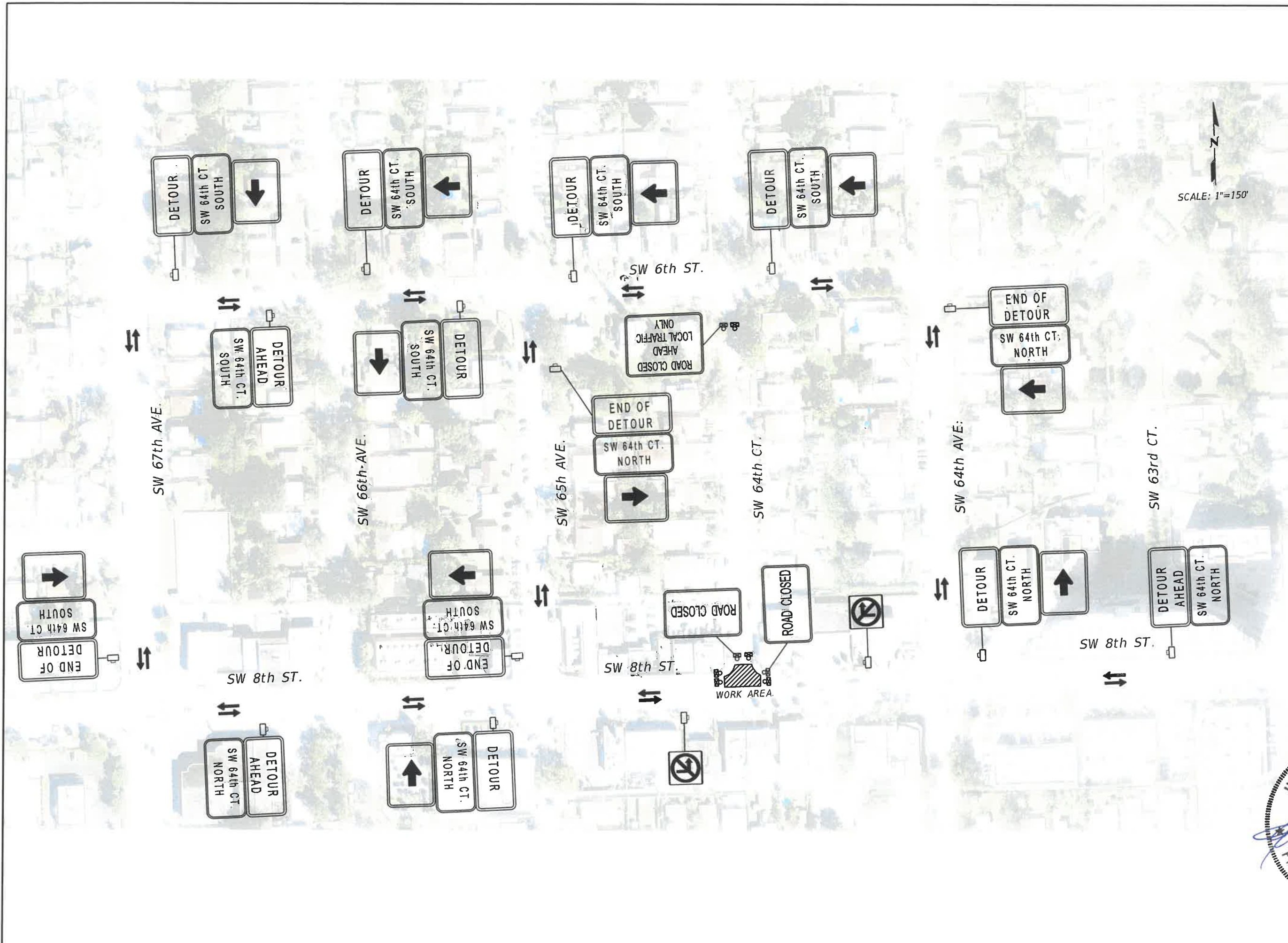
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WATER & SEWER DEPARTMENT
 3071 SW 38TH AVENUE
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 CA No. : EB-0007797
 Amello Alfonso, P.E. No. 52566

SCALE: 1"=150'



INSTALLATION 8 INCH D.I. WATER MAIN
 IN S.W. 64th CT. FROM S.W. 8th ST. TO S.W. 6th ST.
 PCTS No. 14706, ER No. W017009
 CITY OF MIAMI J.P.A. PROJECT No. B 50972
 TRAFFIC CONTROL PLAN - DETOUR

DRAWING HISTORY

RELEASED FOR	DATE	BY
REVIEW 60%	02/22/17	A.A.
REVIEW 90%	03/30/17	A.A.
SUBMITTAL 100%	05/23/17	A.A.

REVISIONS

No.	DESCRIPTION	DATE	BY

APPROVALS

PROJECT MGR: B.T. CHECKED: A.A.

DESIGNED: K.M. DRAWN: N.P.



DATE: SCALE:
 SHEET WM-14 OF WM-14
 DWG. No. W-22036