APPENDIX "L"

APPROVED PLANS

MIAMI-DADE WATER AND SEWER DEPARTMENT

CITY OF MIAMI FIRE DEPARTMENT

MIAMI-DADE COUNTY DEPARTMENT
OF REGULATORY AND ECONOMIC RESOURCES
ENVIRONMENTAL PLAN REVIEW

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
BY FLORIDA DEPARTMENT OF HEALTH IN MIAMI-DADE COUNTY

(14 Pages)

APPROVED BY

Miami-Dade (MIAMI-DADE WATER AND SEWER DEPARTMENT

Department of Regulatory and Economic PENGINE RING AND DESIGN DIVISION Environmental Plan Review 3071 S.W. 38th AVENUE MIAMI, FLORIDA 33146-1520

PROJECT LOCATION ≥

2017 -WAT-EXT- 00112

DATE NOT BELLATION 8-INCH D.I. WATER MAIN

IN SW 64th COURT FROM SW 8th ST. TO SW 6th ST.

PCTS No. 14706 ER No. W-017009 Note: This Approval is not intended to egyer stru-

CITY OF MIAMI J.P.A. PROJECT No.B-30972

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

JUN 0 8 2017

Miami Dade County Department of Health Engineering Section

Always call 811 two full business days before you dig Sunsifine811.com



MIAMI-DADE

E SW 3RD S SW STH ST SW 6TH ST SW 6TH ST SW 7TH ST SW 9TH ST SW LOTH TE SWIITH ST SW 12TH ST SW 12TH ST

> LOCATION PLAN CITY/COUNTY A PORTION OF SEC. 01 - TWP. 54. - RGE. 40 E.

CITY OF MIAMI PROJECT MANAGER: IVELISSE RODRIGUEZ M-D WASD PROJECT MANAGER: BRIAN TRUJILLO, P.E.

DEPARTMENT OF HEALTH

APPROVED WATER SUPPLY ONLY

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

FLORIDA DEPT. OF HEALTH IN

KEY SHEET GENERAL NOTES AND LEGEND
PROP. 8" D.I. W.M. GENERAL PLAN
TOPOGRAPHIC SURVEY
PROP. 8" D.I. W.M. PLAN & PROFILE
PROP. 8" D.I. W.M. PLAN & PROFILE
PROP. 8" D.I. W.M. PLAN & PROFILE
PROP. FIRE HYDRANT PLAN & PROFILE
TRAFFIC CONTROL PLAN - GENERAL NOTES
TRAFFIC CONTROL PLAN - MOT
TRAFFIC CONTROL PLAN - DETOUR

MIAMI-DADE WATER AND SEWER DEPARTMENT

- APPROVED SUBJECT TO NOTATIONS AND

Contract No.: 17009

OWG. HISTORY DATE BY REVIEW 60% 02/22/2017 A.A. DESCRIPTION REVIEW 90% 03/30/2017 A.A. REV No. DATE SUBMITTAL 100% 05/15/2017 A.A. APPROVED BY APPROVED BY PROJECT ER No .: W-01700 PCTS No.: 14706 CHIEF ENGINEER SECTION HEAD DESIGN MGR. SHEET WM-01 OF WM-14 FILE NAME: KEYSUW01.DGN

Norberto.Perez

SW 2ND S

SWBTH

SW 11TH S

SW 12TH S

SW 51

P:\B-30972\utils\KEYSUW01.dar

GENERAL NOTES

-COMCAST

- THE FOLLOWING UTILITY COMPANIES SHOULD BE NOTIFIED 48 HOURS IN ADVANCE OF EXCAVATION IN AREA:
- AT&T/DISTRIBUTION

- FLORIDA CITY GAS

-DADE CUONTY PUBLIC WORKS & TRAFFIC -FLORIDA POWER & LIGHT TRANSMISSION

-MIAMI DADE WATER SEWER

- -ATLANTIC BROADBAND
- 2. ALL ELEVATIONS REFER TO NATIONAL GEODETIC VERTICAL DATUM, 1929 ADJUST
- B. VALVES AT INTERSECTIONS, BRANCH MAINS OR STOP OUTS SHALL BE RESTRAINED TO THE ADJACENT FITTING UNLESS OTHERWISE NOTED
- I CUTTING AND PIUGGING OF EXISTING MAINS SHAIL BE ACCOMPLISHED BY MECHANICALLY RESTRAINING THE PLUG OR CAP. SUFFICIENT LENGTH OF PIPE SHALL BE PROVIDED TO INSURE THE STABILITY OF THE INSTALLATION
- . 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 ISHANDLED 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
- O. 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 ORTAIN 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 FXCAVATING.
- 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 POLILITANT 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. IF EXISTING SERVICE LINES ARE GALVANIZED PIPE, REPLACE WITH 1" COPPER SERVICE WITH DIELECTRIC ADAPTERS.
- 20. RECONNECT EXISTING SERVICES TO PROPOSED 8" WATER MAIN.
- 21. 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 OUTSIDEL 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.
- P. 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 VALVESHALL 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)
- B) REINFORCED CONCRETE PRESSURE PIPE. HALF (1/2) THE AHOWABLE 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 (CLASS! 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

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

SEPARATIONS SHALL BE MEASURED OUTSIDE EDGE TO OUTSIDE EDGE.

MAINS OR RECLAIMED WATER PREFERABLY 10 FT. AND AT LEAST 6 FT.

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 PREFERABLY 10 FT. AND AT LEAST 3 FT. MINIMUM. GRAVITY OR PRESSURE SANITARY SEWERS WASTEWATER FORCE

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

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

WATER MAIN VERTICAL SEPARATIONS

LEGEND

REQ'D.

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— — −W.M.— — Exist. Water Main

---F.M.--- Exist. Force Main

——GAS—— Exist. Gas

--- Center line

---San--- Exist. Sanitary Sewer

- Base line

--- Monument line

--- Section line

----R/W---- Right of way line

----TEL----- Exist. Telephone

—--Ç&B--- Center line and Base line

——CATV—— Exist. Cable underground

TRAF Exist. Traffic loop

Required

Ductile Iron

Exist. Utility Pole

Exist. Flood Light

Offset

— Exist. Electric underground

APPROVED

SEPARATIONS BETWEEN WATER MAINS AND GRAVITY SEWATERUSUPPLY ONLY SEVER OR STORM SEWERS, TO BE REFERABLY 12 INCHE SOFTE OF THE ORIDA
INCHES ABOVE OR AT LEAST 12 INCHES ABOVE OR AT

PRESSURE SANITARY SEWER, WASTEWATER OR STORM WATER FORCE INN. OR RECLAIMED WATER, AT LEAST 12 INCHES ABOVE OR BELOW TO DEPT. OF

* CENTER 1-FULL LENGTH OF WATER MAIN PIPE AT CROSSINGSAL DADE COUNTY ALTERNATIVELY ARRANGE PIPES SO JOINTS ARE AT LEAST 3 FEET FROM JOINTS IN VACUUM, STORM OR STORM PROFILE MAIN MY LEAST & FEET FROM JOINTS IN GRAVITY OR PRESSURE SEWERS WASTEWATER FORCEMAINS OR RECLAIMED WATER

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NOTE: IN ALL CASES, INCLUDING EXCEPTIONS REFERENCE TO COVER STRU

TS No. 1 Date: OFExist. Pedestrian Crossing Light SNI S

HEALTH I

WATER & SEWER

DEPARTMENT

3071 SW 38TH AVENUE

MIAMI, FL 33146-1520 305-665-7471 www.miamidade.gob/water

A&P Consulting

Transportation

Engineers Corp.

0305 N.W. 41 Street, suite 1

Miami, FL 33178

05 592-7283 / fax:305 593-15

CA No.: EB-0007797

Amelio Alfonso, P.E. No. 5256

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Exist. Street Light Box Exist. Telephone Box Exist. Traffic Signal Box Exist. Cable TV Box Exist. C.B. Exist. Electric MH

Exist. Traffic Light Pole

Exist. Electric Box

Exist. Storm MH Exist. Sanitary MH Exist. Telephone MH Exist. Water MH Exist. Well

Exist. Sprinkler Exist. Fire Hydrant Exist. Valve Core Boring

Restrained Joint Exist. Sign Exist. Guy Wire Exist. Single Water Meter Exist. Street Light Pole Prop. Single Water Meter 77 Exist. Utility Conc. Pole

hind Pron Dual Water Meter Limits of milling and resurfacing pavement restoration

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

FOR	SEE DETAIL	SHEET
PAVEMENT RESTORATION TYPE V	A-1.1	1 OF 1
PAVEMENT RESTORATION TYPE M	A-4.0	1 OF 1
POLYETHYLENE ENCASEMENT FOR DUCTILE IRON PIPE.	A-9.0	1 OF 1
ABBREVIATIONS FOR DEPARTMENT'S PROJECTS.	A-10.0	1, 2 & 3 OF 3
STANDARD REQUIREMENTS FOR WATER & SEWER CONSTRUCTION.	GS-0.5	1 OF 2
"AS-BUILT" REQUIREMENTS	GS-0.5	2 OF 2
TYPICAL TIE-ROD DETAILS.	GS-1.0	1 OF 1
WATER AND GRAVITY SEWER MAIN CROSSINGS	GS-1.5	1 OF 1 -
TYPICAL TRENCH BACKFILL FOR D.I. WATER.	GS-1.9	1 OF 1
AIR RELEASE VALVE.	WS-1.60	1 OF 1
TYPICAL FLUSHING VALVE OUTLET.	WS-1.61	1 OF 1
No. 2 C.I. VALVE BOX AND LID	WS-3.10	1 OF 1
No. 3 C.I. VALVE BOX	WS-3.11	1, 2 OF 2
TYPICAL FIRE HYDRANT INSTALLATION W/GUARD POSTS	WS-4.50	1 OF 2
TYPICAL 2" GALVANIZED STEEL CONNECTION TO EXISTING MAIN	WS-4.13	1 OF 1

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

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 2:53:21 PM

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APPROVALS ROJECT ACA BIT CHECKED: A.A. SHO ALFO des CENS

DRAWING HISTORY

REVIEW 60% 02/22/17 A.A.

REVIEW 90% 03/30/17 A.A.

SUBMITTAL 100 05/15/17 A.A.

REVISIONS

NO DESCRIPTION DATE

RELEASED FOR DATE

ENDMS 2566 Citate of Florids - License No. 5,556 0,566 NW41-5 Rept. Berger 31-7. (3,07,582-7235 FILE NAME:

SCALE:

SHEETWM-02 OF WM-14

DWG. No.

WATER & SEWER DEPARTMENT 3071 SW 38TH AVENUE MIAMI, FL 33146-1520 305-665-7471 www.miamidade.gob/water A&P Consulting Transportation Engineers Corp. 10305 N.W. 41 Street, suite 115 Miami, FL 33178 PROP. FIRE HYDRANT 305 592-7283 / fax:305 593-159 SHEET No. WM-08 SHEET No. WM-09 CA No.: EB-0007797 Amelio Alfonso, P.E. No. 52566 STINSTALLATION 8 INCH D.I. WATER MAIN S.W. 647H CT. FROM S.W. 87H ST. TO S.W. 67H PCTS No. 14706, ER No. W-017009 CITY OF MIAMI J.P.A. PROJECT No. B 30972 57 8th GENERAL PLAN SW 64th CT SW 64th CT SW MATCH W.MBEGIN PROJECT 8" D.II. PROP. 8" D.I. W.M. STA. 10+21.05 - PROP. 8" D.I. W.M. OFFSET 6.33' LT IN END PROJECT DRAWING HISTORY PROP. 8" D.I. W.M. RELEASED FOR DATE BY STA. 16+44.33 REVIEW 60% 02/22/17 A.A. (O/S 10.00' LT) REVIEW 90% 03/30/17 A.A. SUBMITTAL 100 05/15/17 A.A. SHEET No. WM-10 **REVISIONS** 5+25.00 No DESCRIPTION DATE BY **APPROVALS** LINE ROJECT MGR: B.T. CHECKED: A.A SW 64th CT DESIGNED: V.M. DRAWN: N.P. NO. 52566

NO. 52566

NO. 52566

STATE OF THE OF TH 6th CHIEF ENGINEER: MATCH DESIGN MGR.: Arnelio Alfonso, P.E. Civil Engineer State of Florida - License No. 52566 10305 NW 41 ST Doral, Florida 3317 PROP. 8" D.I. W.M. (305) 592-7283 FILE NAME: SCALE: SHEET WM-03 OF WM-14 DWG. No.

P:\B-30972\util5\PLANUW01.DGN

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.

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

SCALE

(TBM #1) ELEVATION= 8.70 SET PK NAIL & DISC (L.B. 7335) N: 520200.24

LEGEND

= RECORDED VALUE

MEASURED VALUE

WOOD POWER POLE

= CALCULATED

= CENTERLINE

= GUY ANCHOR

= IDENTIFICATION

= CATCH BASIN

= MONUMENT LINE OVERHEAD WIRE

WATER VALVE

= WATER METER

- FIRE HYDRANT

= LIGHT POLE

= PALM TREE

= CLEAN OUT

CONCRETE

= ASPHALT

= SIGN

= TREE

= TEMPORARY SITE BENCHMARK

= SANITARY SEWER MANHOLE

= STORM DRAINAGE MANHOLE

= UNKNOWN MANHOLE

= CONCRETE POWER POLE

= ORNAMENTAL PLANT

= PLAT BOOK

= PAGE

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E: 886245.35

CONC. = CONCRETE

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 inchequals 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 NO2°23°22°W, being established for the centerline of S.W. 64th Court, said line to be considered a well established and

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 Ellipsold Height (Meters): -22.041 State Plane Coordinates Northing: 520051.230

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

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

-A & P CONSULTING & TRANSPORTATION ENGINEERS

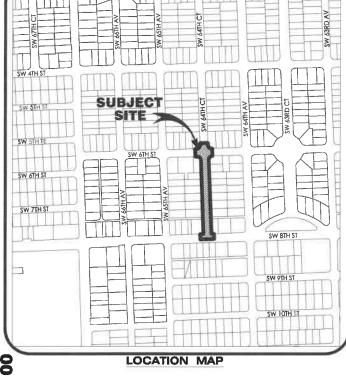
JOB NO.: 15387.0.00 FIELD BOOK: EFB

DRAWN BY: JL SHEET 1 OF 4

MAP OF TOPOGRAPHIC SURVEY 35.0 SIDEWALK ш (#18) CATCH BASIN RIM ELEV.: 6.73 NORTH INV.: 0.88 24" Ø PIPE (MAT. NOT DETERMINED) 48 N88°01' CONCRETE BOTTOM ELEV.: -0.52 BLOCK 30 "FAIR LAWN" (#19) CATCH BASIN RIM ELEV.: 8.3 | EAST INV.: 4.9 | P.B. 8 - PG. 83 ق 8" Ø CONC. PIPE (#19)BOTTOM ELEV .: 4.41 LOT 12 (#20) CATCH BASIN RIM ELEV.: 7.98 FULL OF DEBRIS EXISTING BUILDING BOTTOM ELEV .: -0.27 SITE TEMPORARY BENCHMARK # I ш

FOLIO: 01-4001-005-6440 PROPERTY ADDRRESS: 6455 SW 8 ST OWNER: DEJEM CORP 5' CONCRETE SIDEWALK GRASS 2 Jay -S 64th COURT STATION N02°23'22"W 10+00 ∞ 60' PUBLIC RIGHT-OF-WAY ASPHALT PAVEMENT VARIES Z $\langle W \rangle$ (#18) 5' CONCRETE SIDEWALK للح لل EXISTING BUILDING **LOT 19** BLOCK 31 $\langle \overline{W} \rangle$ "FAIR LAWN" GUTTER RIGHT-OF-WAY P.B. 8 - PG. 83 N88°01'48' FOLIO: 01-4001-005-6740 PROPERTY ADDRRESS: ASPHALT 73 | SW 64 CT OWNER: DANIEL TOBIAS Ñ CAAMANO TRS 53 (#20) 35.0

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



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

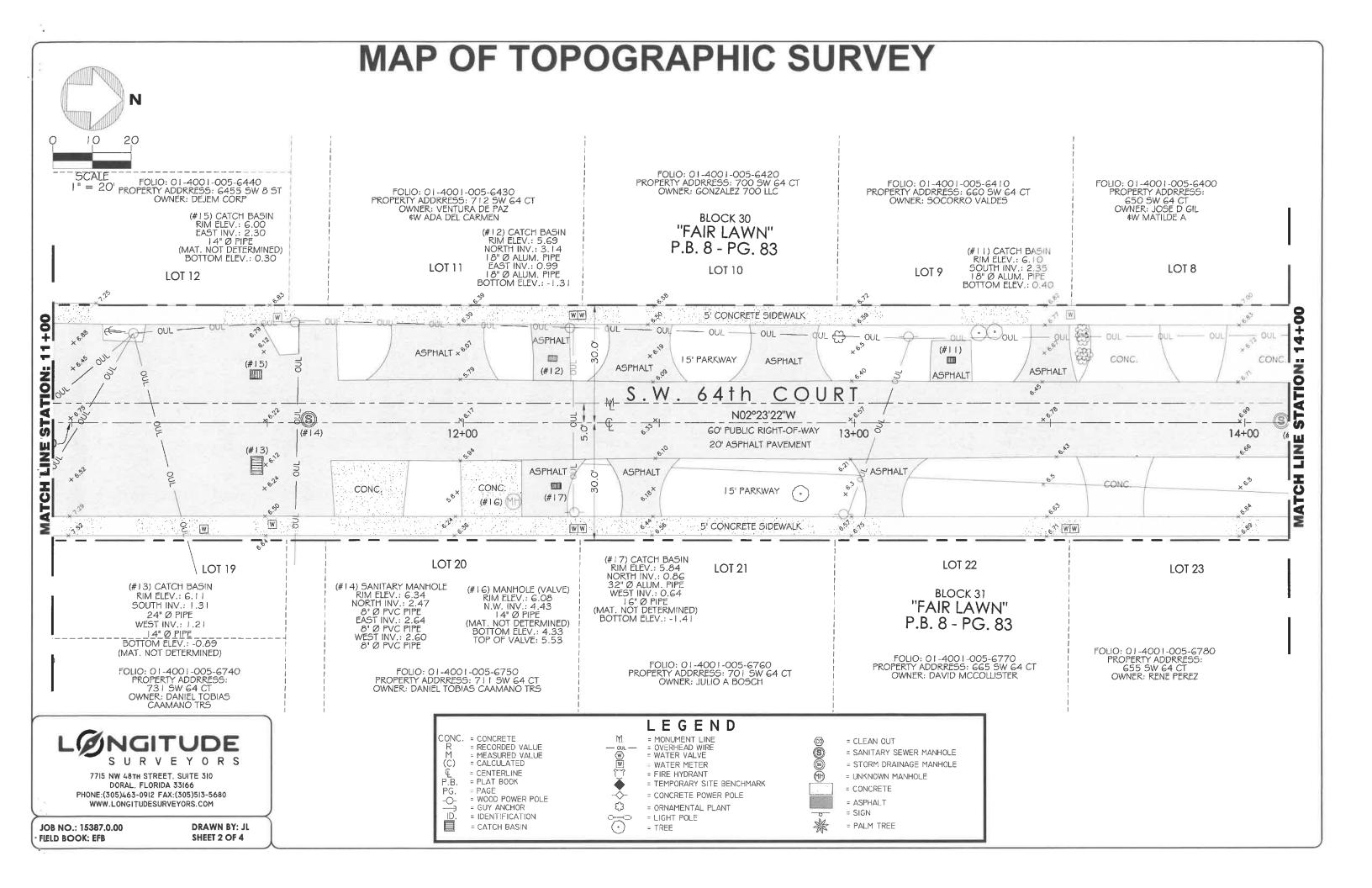
SURVEYOR'S CERTIFICATE:

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.

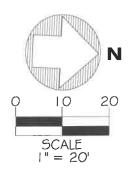
LONGITUDE SURVEYORS LLC., a Florida Limited Hability Company, Florida Certificate of Authorization Number LB7335

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.

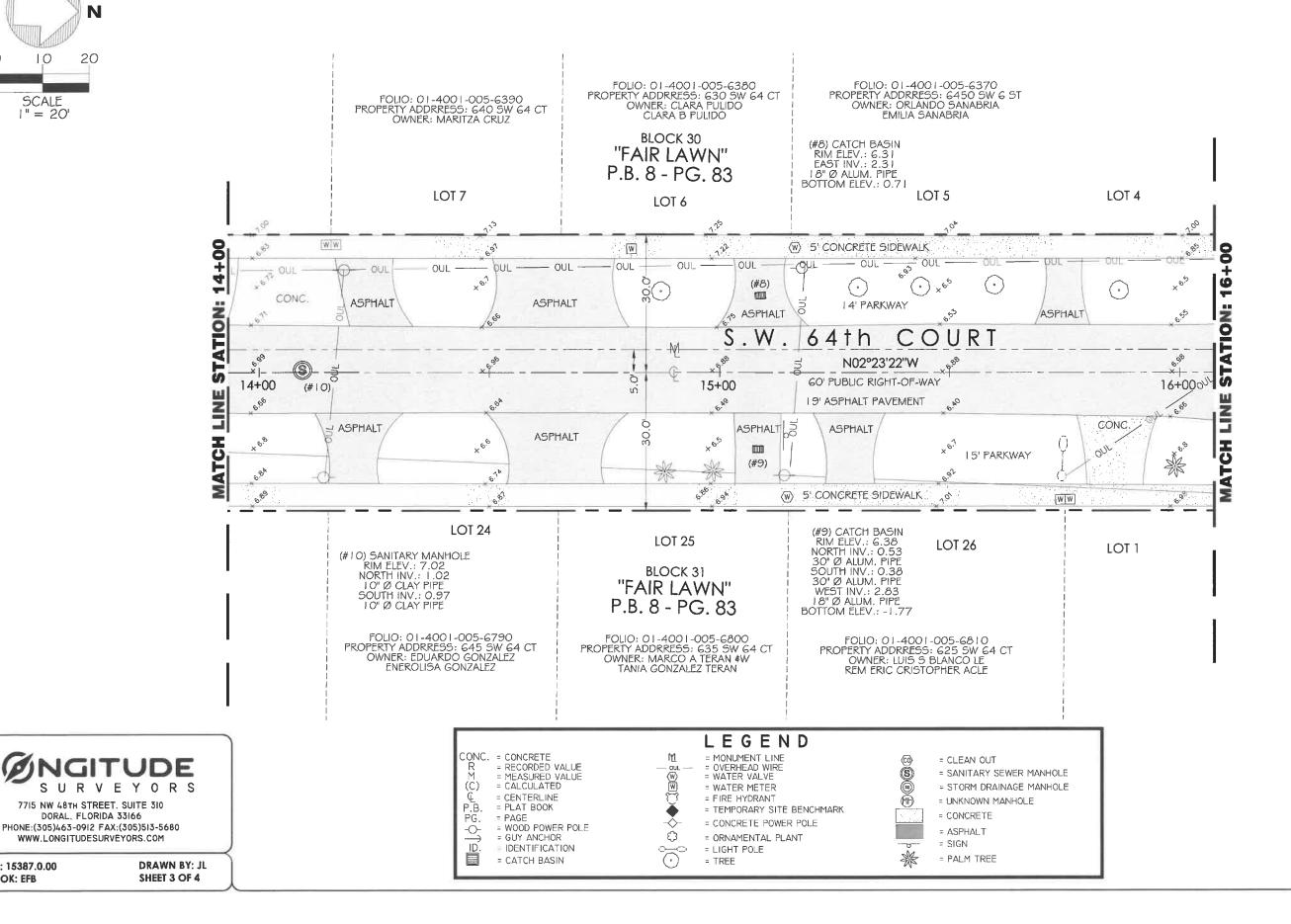


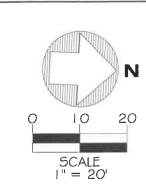
MAP OF TOPOGRAPHIC SURVEY



DORAL, FLORIDA 33166

JOB NO.: 15387.0.00 - FIELD BOOK: EFB





LEGEND

CONC. = CONCRETE R = RECORDED = RECORDED VALUE = MEASURED VALUE = CALCULATED

= CENTERLINE = PLAT BOOK PG. = PAGE

= WOOD POWER POLE = GUY ANCHOR = IDENTIFICATION

= CATCH BASIN - MONUMENT LINE = OVERHEAD WIRE = WATER VALVE

= WATER METER FIRE HYDRANT = TEMPORARY SITE BENCHMARK

= CONCRETE POWER POLE = ORNAMENTAL PLANT

€3 = LIGHT POLE

= TREE = PALM TREE

= CLEAN OUT

= SANITARY SEWER MANHOLE

= STORM DRAINAGE MANHOLE = UNKNOWN MANHOLE

= CONCRETE = ASPHALT

= SIGN

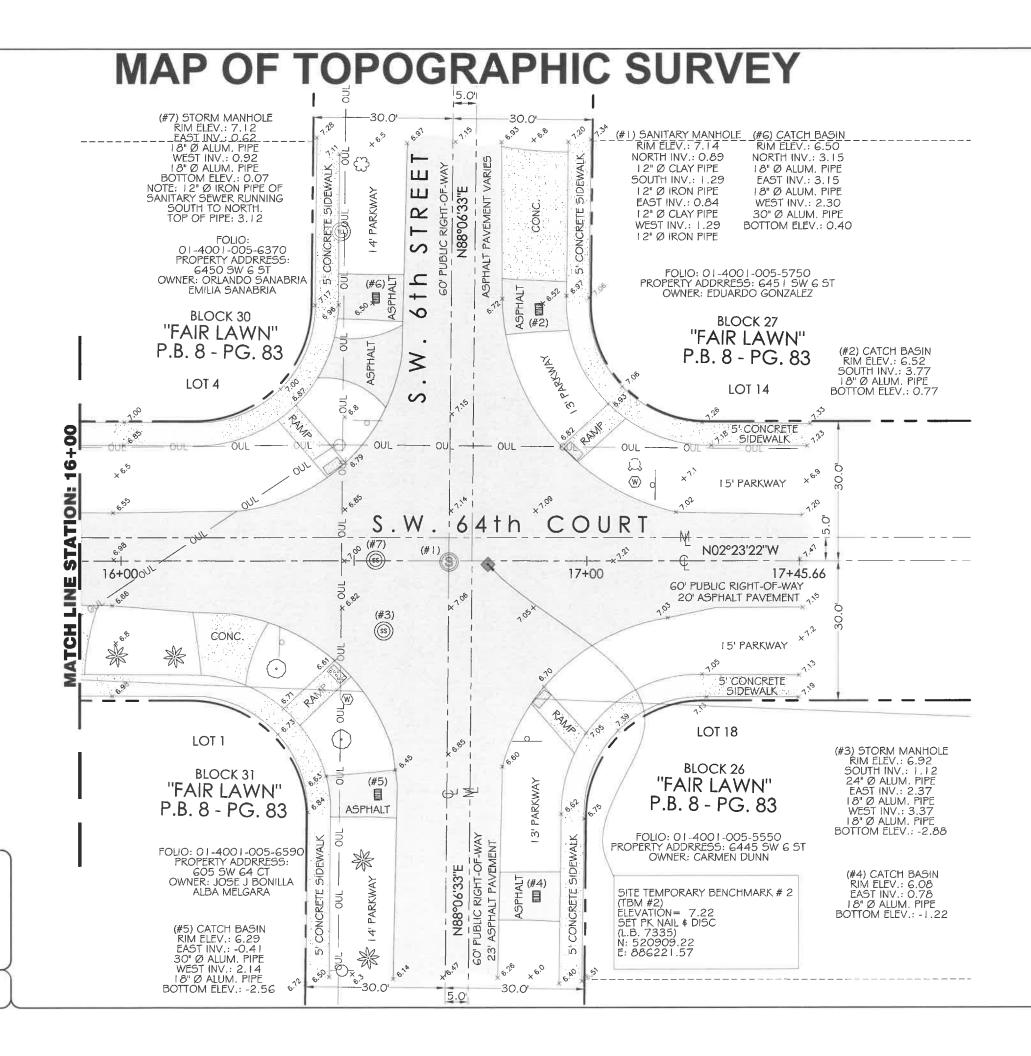
= TELEPHONE MANHOLE

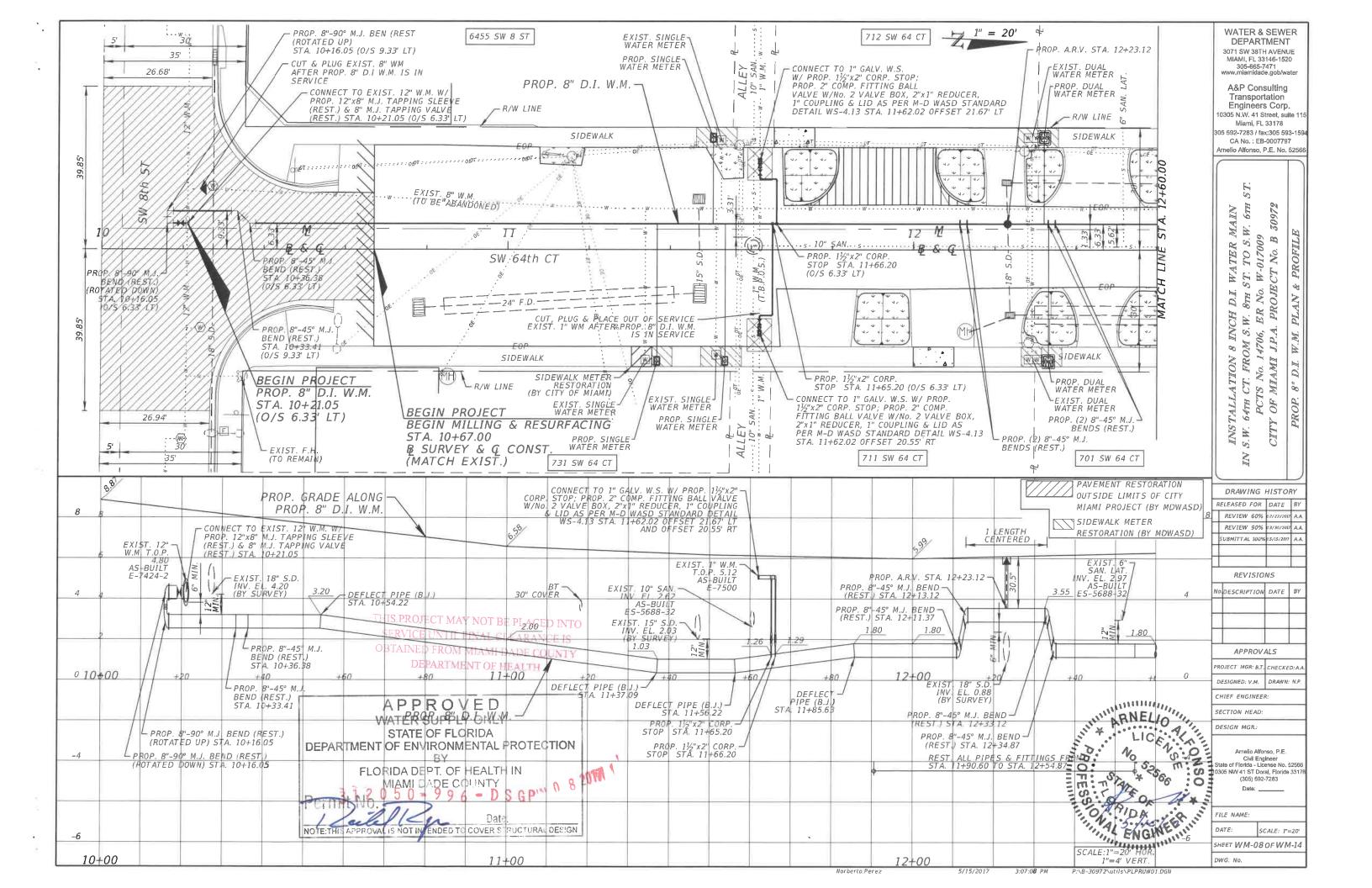


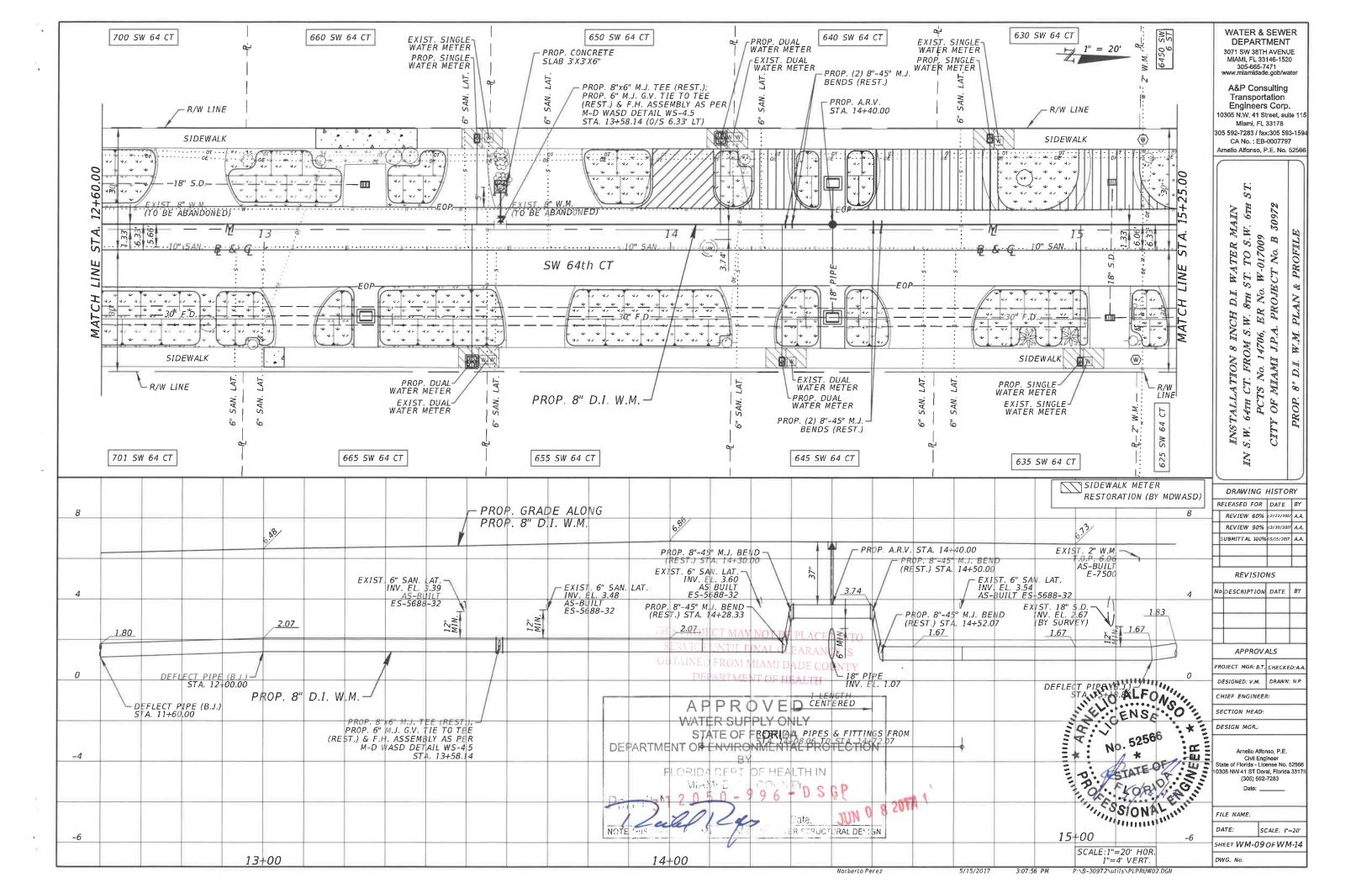
7715 NW 48TH STREET, SUITE 310 DORAL, FLORIDA 33166 PHONE:(305)463-0912 FAX:(305)513-5680 WWW.LONGITUDESURVEYORS.COM

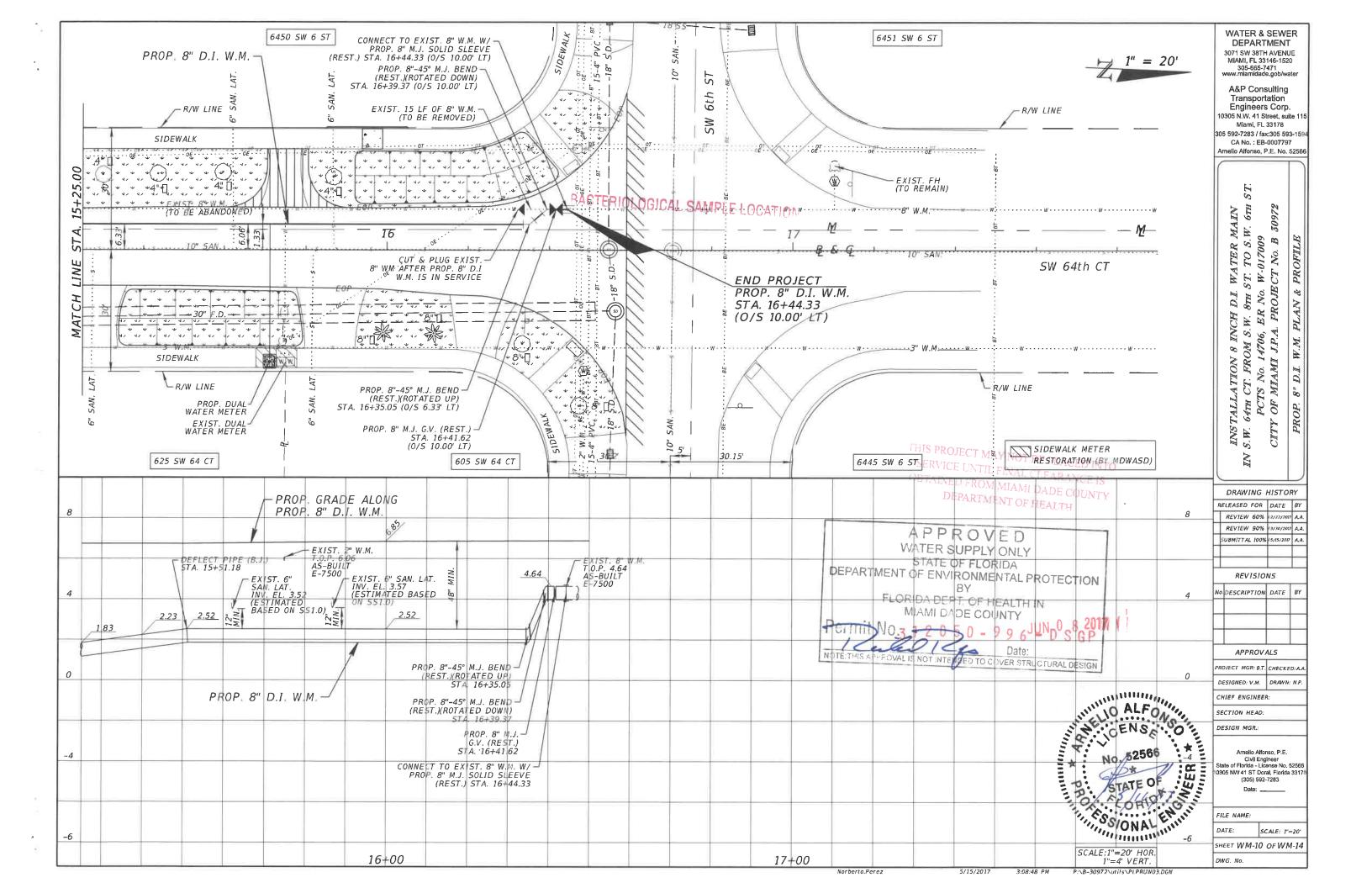
JOB NO.: 15387.0.00 FIELD BOOK: EFB

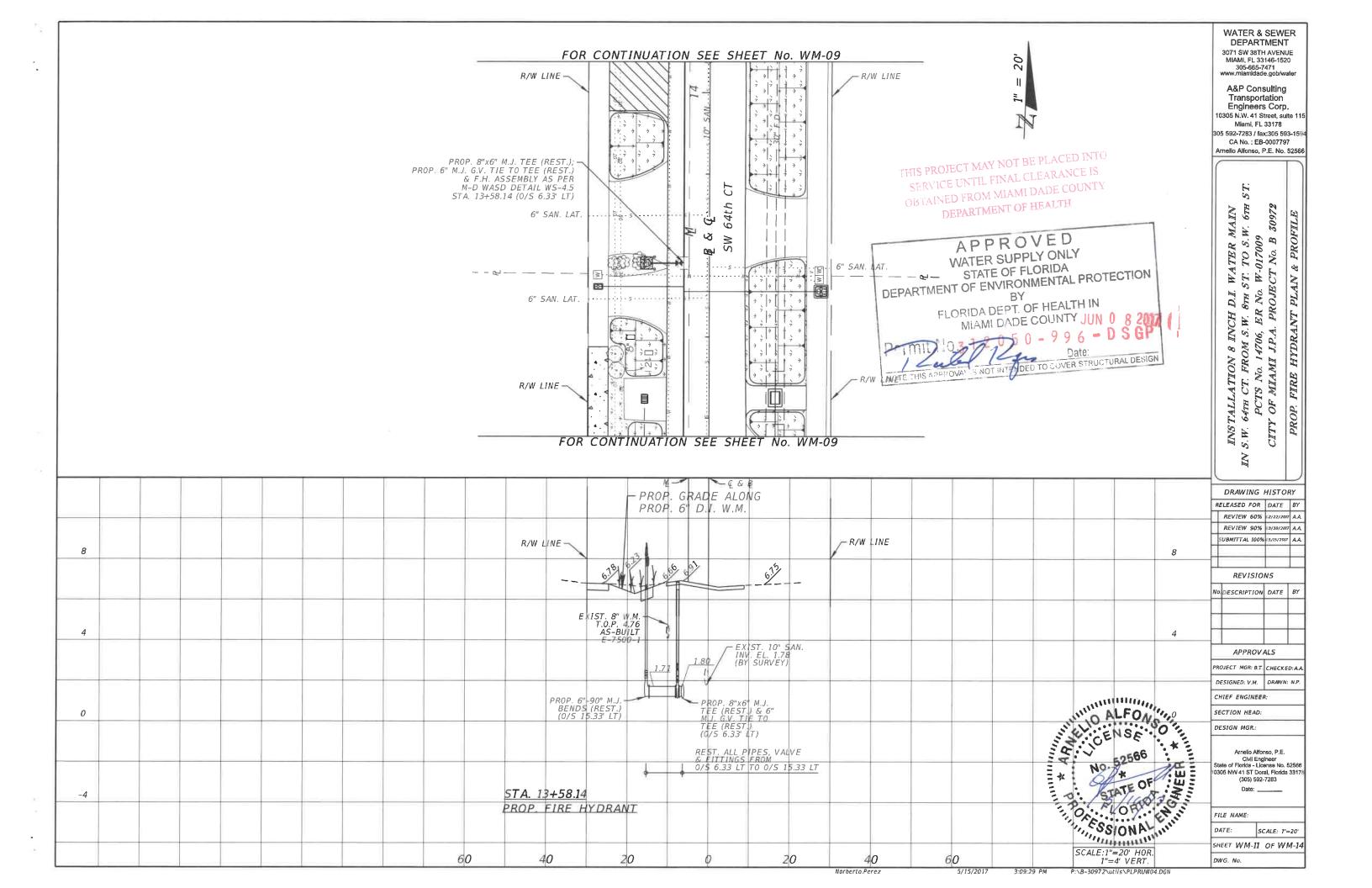
DRAWN BY: JL SHEET 4 OF 4











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
- 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 FOOT 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 MAINTENACE 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 S 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

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 ARFA

WORK ZONE SIGN

LANE IDENTIFICATION AND DIRECTION OF TRAFFIC

LONGITUDINAL CHANNELIZING

LEGEND:

805 592-7283 / fax:305 593-159 CA No.: EB-0007797 rnelio Alfonso, P.E. No. 52566

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

A&P Consulting

Transportation

Engineers Corp.

Miami, FL 33178

0305 N.W. 41 Street, suite 11

ST30972 6TH MAIN W. 6TH 80 WATER ST. TO S. No. INCH S.W. TS No. 1. OFCIITYX S

F	ELEASED FOR	DATE	BY
ľ	REVIEW 60%	02/22/17	A.A
	REVIEW 90%	03/30/17	A.A
ì	SUBMITTAL 100	05/15/17	A.A
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APPROVALS

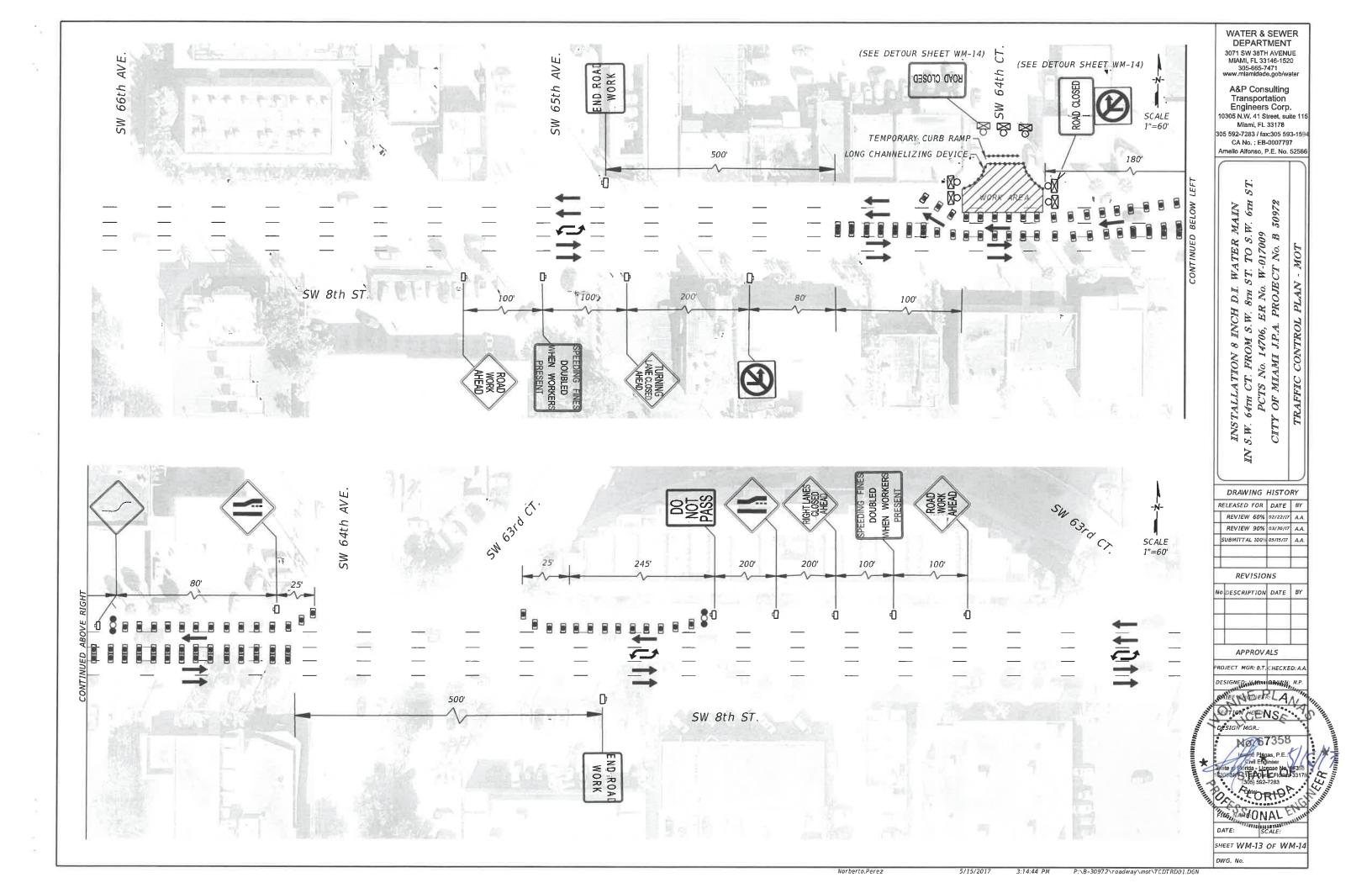
ROJECT MGR: B.T. CHECKED: A A DESIGNED: V.M. DRAWN: N.F

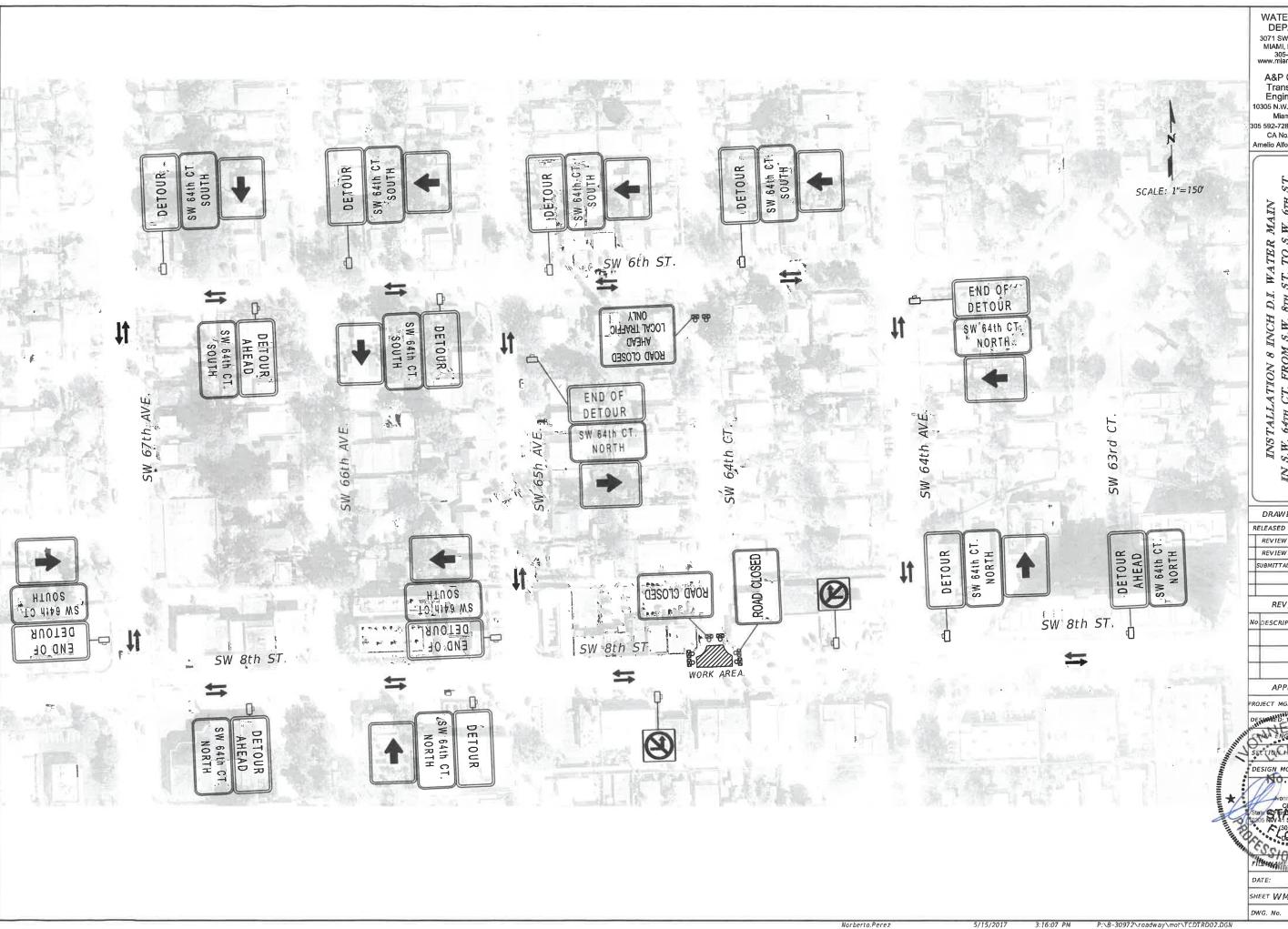
GENT ENGINEERS

ESIN MERD!

SHEET WM-12 OF WM-14 DWG No

P:\B-30972\roadway\mot\TCGNRD01.DGN





WATER & SEWER DEPARTMENT

3071 SW 38TH AVENUE MIAMI, FL 33146-1520 305-665-7471 www.miamidade.gob/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

STINSTALLATION 8 INCH D.I. WATER MAIN S.W. 647H CT. FROM S.W. 87H ST. TO S.W. 67H PCTS No. 14706, ER No. W-017009 CITY OF MIAMI J.P.A. PROJECT No. B 30972 TRAFFIC CONTROL PLAN

DRAWING	HISTO	RY
RELEASED FOR	DATE	BY
REVIEW 60%	02/22/17	A.A.
REVIEW 90%	03/30/17	A.A.
SUBMITTAL 100%	05/15/17	A.A.

I			
1	REVISIO	NS	_
No	DESCRIPTION	DATE	BY

APPROVALS ROJECT MGR: B.T. CHECKED: A.A

ESMANED: V.M. DHAMOU, N.P.

SCALE: SHEET WM-14 OF WM-14

APPENDIX "M"

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION BY FLORIDA DEPARTMENT OF HEALTH IN MIAMI-DADE COUNTY

NOTICE OF INTENT TO USE THE GENERAL PERMIT FOR CONSTRUCTION OF WATER MAIN EXTENSIONS FOR PWSs

NOTIFICATION OF ACCEPTANCE OF USE OF A GENERAL PERMIT

(11 Pages)



INSTRUCTIONS: This notice shall be completed and submitted by persons proposing to construct projects permitted under the "General Permit for Construction of Water Main Extensions for Public Water Systems" in Rule 62-555.405, F.A.C. AT LEAST 30 DAYS BEFORE BEGINNING CONSTRUCTION OF A WATER MAIN EXTENSION PROJECT, complete and submit one copy of this notice to the appropriate Department of Environmental Protection (DEP) District Office or Approved County Health Department (ACHD) along with payment of the proper permit processing fee. (When completed, Part II of this notice serves as the preliminary design report for a water main extension project, and thus, it is unnecessary to submit a separate preliminary design report or drawings, specifications, and design data with this notice.) All information provided in this notice shall be typed or printed in ink. The DEP permit processing fee for projects requiring the services of a professional engineer during design is \$650, and the DEP permit processing fee for projects not requiring the services of a professional engineer during design is \$500.* Some ACHDs charge a county permit processing fee in addition to the DEP permit processing fee. Checks for permit processing fees shall be made payable to the Department of Environmental Protection or the appropriate ACHD. NOTE THAT A SEPARATE NOTIFICATION AND A SEPARATE PERMIT PROCESSING FEE ARE REQUIRED FOR EACH NON-CONTIGUOUS PROJECT.

* Except as noted in paragraphs 62-555.520(3)(a) and (b), F.A.C., projects shall be designed under the responsible charge of one or more professional engineers licensed in Florida.

[†] Non-contiguous projects are projects that are neither interconnected nor located nearby one another (i.e., on the same site, on adjacent streets, or in the same neighborhood).

	adjuction by coas, or in the same neighborhoods.				
I.	. General Project Information				
Ā.	. Name of Project: Proposed 8-Inch D.I. Water Main Along SW 64th Court	From SW 8th ST To SW (6 ^h ST (WASD ER No.		
	. <u>W017009</u>)		× × × × × × × × × × × × × × × × × × ×		
В.	B. Description of Project and Its Purpose: The scope of work for this project consist of: Installing 640 LF of 8-inch D.I.P. and 9 LF				
	of 6-inch D.I.P. along SW 64th Court. from SW 8th ST to SW 6th ST (WAS	SD ER No. W017009) to	upgrade an existing 8-inch		
	cast iron water main pipe.		Ulla Transcom		
		a			
			JUNDO		
	·		2017		
			Missing		
C.	. Location of Project		Department of Health		
	1. County Where Project Located: Miami-Dade	4h			
	2. Description of Project Location: Sec. 01, Township 54 S, Range 40 E; S	SW 64 th Court from SW 8	S th ST to SW 6 th ST, City of		
	Miamí, Florida.				
_	7.1.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.				
	Estimate of Cost to Construct Project: \$169,014.47				
E.	. Estimate of Dates for Starting and Completing Construction of Project: Fro	m September 2017 to No	vember 2017		
T.	Permittee				
Г.		PWS Identifi	4' NT#		
	PWS/Company Name: Miami-Dade Water And Sewer Department PWS Type:* Community Non-Transient Non-Community				
		Transient Non-Com			
	Contact Person's Vincent Morello, P.E. Contact Person's Mailing Address: 3501 NW 46 ST	Contact Person's Title; As	ssistant Director Eng.&Const.		
		State: Fl	7:- Code: 22142		
		Contact Person's Fax Nur	Zip Code: 33142		
	Contact Person's Telephone Number: 780-332-4420 Contact Person's E-Mail Address: Vincent.Morello@miamidade.gov	Contact Person's Fax Nun	noer;		
	* This information is required only if the permittee is a public water system	/DWC)			
G	Public Water System (PWS) Supplying Water to Project	n (FWS).			
u.	PWS Name: Miami-Dade Water And Sewer Department	PWS Identifi	action No :		
	PWS Type: Community Non-Transient Non-Community	Transient Non-Com			
	PWS Owner: Miami-Dade Water And Sewer Department	Hallstellt Non-Coll	infunity Consecutive		
		Contact Person's Title: As	esist Director Water		
	Contact Person's Mailing Address: 3501 NW 46 ST	Contact I cison's Title, As	ssist. Director - water		
		State: Fl	Zip Code: 33142		
		Contact Person's Fax Nun			
	Contact Person's E-Mail Address: Francisco.Martinez2@miamidade.gov	Contact I croom o I da Ivun	11001.		
	Contact 1 of Son 5 L Trans 1 total Cost. 1 fant is contratt in C22 with a mind and c. gov				

			EXTENSIONS	FOR P	WSs		
Pı	oject	Name: Proposed 8-Inch D.I. Water Ma	ain Along SW	Permittee	: Miami-Da	de Water And Sewer	Department
н	Public	c Water System (PWS) that Will Own	Project After It Is Pla	ced into P	ermanent ()	Ineration	
11.		Name: Same As Above	Troject Miter it 15 Til	ccu iiito i		PWS Identification N	0 .*
			n-Transient Non-Con	omunity		ent Non-Community	Consecutive
		S Owner: Miami-Dade Water & Sewer		illiuliity	ITalisi	cht Non-Community	Consecutive
		act Person: Francisco J. Martinez, P.E			Contact D	erson's Title: Assist. D	Virgotor Water
		act Person's Mailing Address: 3501 N			Contact F	cison's Tine. Assist. L	mecioi - water
		Miami	W 40 31		State: Fl	7: 0	- A-, 22140
		act Person's Telephone Number: 786-5	52 0706			erson's Fax Number:	ode: 33142
		act Person's Telephone Number: 780-3		lada -ass	Contact P	erson's rax Number:	
					C		
		s information is required only if the own				*	
1.		ssional Engineer(s) or Other Person(s)			gning Projec	:IT	
		pany Name: A&P Consulting Transpo	rtation Engineers Cor	poration	m'.1 () (· · · · · · · · · · · · · · · · · · ·	-
	Desig	gner(s): Arnelio Alfonso, P.E.			Title(s) of	Designer(s): Project I	√lanager
		ifications of Designer(s):					
		rofessional Engineer(s) Licensed in Fl		` ′			
		ublic Officer(s) Employed by State, Co			ernmental (Jnit of State [†]	
		lumbing Contractor(s) Licensed in Flo					
	Mail	ing Address of Designer(s): 10305 N.V	W. 41st Sreet, Suite 11	5			
	City:	Miami			State: Fl	Zip Co	ode: 33178
	Tele	phone Number of Designer(s): 305-592	2-7283		Fax Numb	per of Designer(s): 305	5-592-1594
	E-Ma	ail Address(es) of Designer(s): aalfons	o@apcte.com				
3		11 70 77 77	0(0)() 1(0) = 1.6				
		ept as noted in paragraphs 62-555.52		., projects	shall be de	signed under the resp	onsible charge of one
		nore professional engineers licensed in					
		ich a detailed construction cost estima					
		ach documentation showing that this pr					
		umentation showing that this project in					
	unii	ts, and a detailed construction cost esti	mate showing that the	e cost to c	onstruct this	s project is \$30,000 or	less.
H.	Prel	iminary Design Report for Project*				11 21 11 11 11	
		e Area, Water Use, and Service Pressu	re Information				
		esign Type and Number of Service Cor		e Daily W	ater Demar	nds and Maximum-Da	v Water Demands, in
		Entire Area to Be Served by the Water					, a
						D = Total Average	
						Daily Water Demanda,	
					erage Daily	gpd (Columns BxC for	E = Total Maximum-
		A = Two of Service Commention	B = Number of Service		emand Per	Residential Service	Day Water Demand ^b
	Si	A = Type of Service Connection ngle-Family Home	Connections	Service Co	nnection, gpd	Connections)	gpd
		obile Home				0	
	_	partment				0	
		ommercial, Institutional, or Industrial Facility ^a				_	
	To	ntal	0			0 1	
	a.	Description of Commercial, Institution	nal, or Industrial Faci	lities and l	Explanation	of Method(s) Used to	Estimate Average
		Daily Water Demand for These Facili	ties: N/A. No addition	nal flow is	being adde	ed.	_
	b.	Explanation of Peaking Factor(s) or M	fethod(s) Used to Est	imate Max	imum-Dav	Water Demand: N/A	

		EXTENDIBITO FOR TWO
Pro	ject Name:	posed 8-Inch D.I. Water Main Along SW Permittee: Miami-Dade Water And Sewer Department
2		of Peaking Factor(s) or Method(s) Used to Estimate Design Peak-Hour Water Demand and, for Small Water Use Hydropneumatic Tanks or that Are Not Designed to Provide Fire Protection, Peak Instantaneous Water A
	8=====	
	\ 	
3	. Design F	Flow Rate and Duration: N/A
1	Decign S	ce Pressure Range: 60 psi
7	. Design 3	ce riessure Range, oo psi
	roject Site	
1		SITE PLAN OR SKETCH SHOWING THE SIZE AND APPROXIMATE LOCATION OF NEW OR
	BLOW-0	WATER MAINS, SHOWING THE APPROXIMATE LOCATION OF HYDRANTS, VALVES, METERS, ANI S IN SAID MAINS, AND SHOWING HOW SAID MAINS CONNECT TO THE PUBLIC WATER SYSTEM
2		G WATER FOR THE PROJECT.
2		of Any Areas Where New or Altered Water Mains Will Cross Above or Under Surface Water or Be Located in Inown to Be Aggressive: N/A
	Son mar	nown to be right essive. I will
C. I	nformation	out Compliance with Design and Construction Requirements
		t is being designed to comply with the following requirements, initial in ink before the requirements. If any of the
		quirements do not apply to this project or if this project includes exceptions to any of the following requirements
		ale, mark "X" before the requirements and complete Part II.C.2 below. RSWW = Recommended Standards for as incorporated into Rule 62-555.330, F.A.C.
	A·A	a. This project is being designed to keep existing water mains and service lines in operation during construction
	- 1 7 1	or to minimize interruption of water service during construction. [RSWW 1.3.a; exceptions allowed under FAC 62-555.330]
	A.A.	o. All pipe, pipe fittings, pipe joint packing and jointing materials, valves, fire hydrants, and meters installed
		under this project will conform to applicable American Water Works Association (AWWA) standards. [FAC 62-555.320(21)(b), RSWW 8.0, and AWWA standards as incorporated into FAC 62-555.330; exceptions allowed under FAC 62-555.320(21)(c)]
	A.A.	555.320(21)(c)] 2. All public water system components, excluding fire hydrants, that will be installed under this project and that
		will come into contact with drinking water will conform to NSF International Standard 61 as adopted in Rule
		62-555.335, F.A.C., or other applicable standards, regulations, or requirements referenced in paragraph 62-
	A A	555.320(3)(b), F.A.C. [FAC 62-555.320(3)(b); exceptions allowed under FAC 62-555.320(3)(d)]
	A.A.	l. All pipe and pipe fittings installed under this project will contain no more than 8.0% lead, and any solder or flux used in this project will contain no more than 0.2% lead. [FAC 62-555.322]
	A.A.	e. All pipe and pipe fittings installed under this project will be color coded or marked in accordance with
		subparagraph 62-555.320(21)(b)3, F.A.C., using blue as a predominant color. (Underground plastic pipe wil
		be solid-wall blue pipe, will have a co-extruded blue external skin, or will be white or black pipe with blue
		stripes incorporated into, or applied to, the pipe wall; and underground metal or concrete pipe will have blue
		stripes applied to the pipe wall. Pipe striped during 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 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 of 24 inches 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 pip
		Aboveground pipe will be painted blue or will be color coded or marked like underground pipe.) [FAC 62-
	X	555.320(21)(b)3] All new or altered water mains included in this project are sized after a hydraulic analysis based on flow
		demands and pressure requirements. ATTACH A HYDRAULIC ANALYSIS JUSTIFYING THE SIZE OF
		ANY NEW OR ALTERED WATER MAINS WITH AN INSIDE DIAMETER OF LESS THAN THREE
		INCHES. (FAC 62-555.320(21)(b) and RSWW 8.11

		EXTENSIONS FOR PWSs
Project Name: I	Propo	osed 8-Inch D.I. Water Main Along SW Permittee: Miami-Dade Water And Sewer Department
A-A-	g.	The inside diameter of new or altered water mains that are included in this project and that are being designed to provide fire protection and serve fire hydrants will be at least six inches. [FAC 62-555.320(21)(b) and RSWW 8.1.2]
<u>A. A.</u>	h.	New or altered water mains that are included in this project and that are <u>not</u> being designed to carry fire flows do <u>not</u> have fire hydrants connected to them. [FAC 62-555.320(21)(b) and RSWW 8.1.5]
A.A.	i.	This project is being designed to minimize dead-end water mains by making appropriate tie-ins where
A.A.	j.	practical. [FAC 62-555.320(21)(b) and RSWW 8.1.6.a] New or altered dead-end water mains included in this project will be provided with a fire or flushing hydrant
A.A.	k.	or blow-off for flushing purposes. [FAC 62-555.320(21)(b) and RSWW 8.1.6.b] Sufficient valves will be provided on new or altered water mains included in this project so that inconvenience
A.A.	1.	and sanitary hazards will be minimized during repairs. [FAC 62-555.320(21)(b) and RSWW 8.2] New or altered fire hydrant leads included in this project will have an inside diameter of at least six inches and
A.A.	m.	will include an auxiliary valve. [FAC 62-555.320(21)(b) and RSWW 8.3.3] All fire hydrants that will be installed under this project and that will have unplugged, underground drains will
		be located at least three feet from any existing or proposed storm sewer, stormwater force main, pipeline conveying reclaimed water regulated under Part III of Chapter 62-610, F.A.C., or vacuum-type sanitary sewer.
		at least six feet from any existing or proposed gravity- or pressure-type sanitary sewer, wastewater force main, or pipeline conveying reclaimed water not regulated under Part III of Chapter 62-10, F.A.C.; and at least ten
A.A.	n.	feet from any existing or proposed "on-site sewage treatment and disposal system." [FAC 62-555.314(4)] At high points where air can accumulate in new or altered water mains included in this project, provisions will
~		be made to remove the air by means of air relief valves, and automatic air relief valves will <u>not</u> be used in situations where flooding of the valve manhole or chamber may occur. [FAC 62-555.320(21)(b) and RSWW 8.4.1]
	0.	The open end of the air relief pipe from all automatic air relief valves installed under this project will be extended to at least one foot above grade and will be provided with a screened, downward-facing elbow. [FAC
A.A.	p.	62-555.320(21)(b) and RSWW 8.4.2] New or altered chambers, pits, or manholes that contain valves, blow-offs, meters, or other such water
	•	distribution system appurtenances and that are included in this project will <u>not</u> be connected directly to any sanitary or storm sewer, and blow-offs or air relief valves installed under this project will <u>not</u> be connected
<i>A A</i>		directly to any sanitary or storm sewer. [FAC 62-555.320(21)(b) and RSWW 8.4.3]
<u>A.A.</u>	q.	New or altered water mains included in this project will be installed in accordance with applicable AWWA standards or in accordance with manufacturers' recommended procedures. [FAC 62-555.320(21)(b), RSWW 8.5.1, and
A.A.	r.	AWWA standards as incorporated into FAC 62-555.330] A continuous and uniform bedding will be provided in trenches for underground pipe installed under this
		project; backfill material will be tamped in layers around underground pipe installed under this project and to a sufficient height above the pipe to adequately support and protect the pipe; and unsuitably sized stones (as described in applicable AWWA standards or manufacturers' recommended installation procedures) found in trenches will be removed for a depth of at least six inches below the bottom of underground pipe installed
		under this project. [FAC 62-555.320(21)(b), RSWW 8.5.2]
A.A.	S.	All water main tees, bends, plugs, and hydrants installed under this project will be provided with thrust blocks or restrained joints to prevent movement. [FAC 62-555.320(21)(b) and RSWW 8.5.4]
X	t.	New or altered water mains that are included in this project and that will be constructed of asbestos-cement or
		polyvinyl chloride pipe will be pressure and leakage tested in accordance with AWWA Standard C603 or C605, respectively, as incorporated into Rule 62-555.330, F.A.C., and all other new or altered water mains included in this project will be pressure and leakage tested in accordance with AWWA Standard C600 as incorporated into Rule 62-555.330. [FAC 62-555.320(21)(b)1 and AWWA standards as incorporated into FAC 62-555.330]
<u>A.A</u>	u.	New or altered water mains, including fire hydrant leads and including service lines that will be under the control of a public water system and that have an inside diameter of three inches or greater, will be disinfected and bacteriologically evaluated in accordance with Rule 62-555.340, F.A.C. [FAC 62-555.320(21)(b)2 and FAC 62-
A.A	v.	New or altered water mains that are included in this project and that will be installed in areas where there are known aggressive soil conditions will be protected through use of corrosion-resistant water main materials,

through encasement of the water mains in polyethylene, or through provision of cathodic protection. [FAC 62-

555.320(21)(b) and RSWW 8.5.7.d]

EXTENSIONS FOR PWSs				
Project Name: F	ropo	osed 8-Inch D.I. Water Main Along SW Permittee: Miami-Dade Water And Sewer Department		
A.A.	w.	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		
		regulated under Part III of Chapter 62-610, F.A.C.; 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 not regulated under Part III of Chapter 62-610, F.A.C.; and a horizontal distance of		
		at least ten feet between the outside of the water main and all parts of any existing or proposed "on-site sewage		
A.A.		treatment and disposal system." [FAC 62-555.314(1); exceptions allowed under FAC 62-555.314(5)]		
77.77.	х.	New or relocated, underground water mains that are included in this project and 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; and new or		
		relocated, underground water mains that are included in this project and that will cross any existing or		
		proposed pressure-type sanitary sewer, wastewater or stormwater force main, or pipeline conveying reclaimed		
A.A.		water will be laid so the outside of the water main is at least 12 inches above or below the other pipeline. [FAC 62-555.314(2); exceptions allowed under FAC 62-555.314(5)]		
71174.	у.	At the utility crossings described in Part II.C.1.w above, one full length of water main pipe will be centered		
		above or below the other pipeline so the water main joints will be as far as possible from the other pipeline or		
		the pipes will be arranged so that all water main joints are at least three feet from all joints in vacuum-type sanitary sewers, storm sewers, stormwater force mains, or pipelines conveying reclaimed water regulated		
		under Part III of Chapter 62-610, F.A.C., and at least six feet from all joints in gravity- or pressure-type		
		sanitary sewers, wastewater force mains, or pipelines conveying reclaimed water <u>not</u> regulated under Part III		
		of Chapter 62-610, F.A.C. [FAC 62-555.314(2); exceptions allowed under FAC 62-555.314(5)]		
×	Z.	New or altered water mains that are included in this project and that will cross above surface water will be		
		adequately supported and anchored, protected from damage and freezing, and accessible for repair or		
		replacement. [FAC 62-555.320(21)(b) and RSWW 8.7.1]		
×	aa.	New or altered water mains that are included in this project and that will cross under surface water will have a		
		minimum cover of two feet. [FAC 62-555.320(21)(b) and RSWW 8.7.2]		
	bb.	New or altered water mains that are included in this project and that will cross under surface water courses		
		greater than 15 feet in width will have flexible or restrained, watertight pipe joints and will include valves at		
		both ends of the water crossing so the underwater main can be isolated for testing and repair; the		
		aforementioned isolation valves will be easily accessible and will <u>not</u> be subject to flooding; the isolation		
		valve closest to the water supply source will be in a manhole; and permanent taps will be provided on each		
		side of the isolation valve within the manhole to allow for insertion of a small meter to determine leakage from		
		the underwater main and to allow for sampling of water from the underwater main. [FAC 62-555.320(21)(b) and RSWW 8.7.2]		
	cc.	This project is being designed to include proper backflow protection at those new or altered service		
		connections where backflow protection is required or recommended under Rule 62-555.360, F.A.C., or in		
		Recommended Practice for Backflow Prevention and Cross-Connection Control, AWWA Manual M14, as		
		incorporated into Rule 62-555.330, F.A.C.; or the public water system that will own this project after it is		
		placed into operation has a cross-connection control program requiring water customers to install proper		
		backflow protection at those service connections where backflow protection is required or recommended		
		under Rule 62-555.360, F.A.C., or in AWWA Manual M14. [FAC 62-555.360 and AWWA Manual M14 as incorporated into FAC 62-555.301]		
×	44	into FAC 62-555.330] Neither steam condensate, cooling water from engine jackets, nor water used in conjunction with heat		
	uu.	exchangers will be returned to the new or altered water mains included in this project. [FAC 62-555.320(21)(b) and		
		RSWW 8.8.2]		

NOTICE OF INTENT TO USE THE GENERAL PERMIT FOR CONSTRUCTION OF WATER MAIN

Explanation for Requirements Marked "X" in Part II.C.1 Above, Including Justification, Documentation, Assurances, and/or Alternatives as Required by Rule for Exceptions to Requirements in Part II.C.1: Items marked "X" do not apply to this project. Item F: No hydraulic Analysis is necessary since this project involves replacement of existing pipe, and no change in liameter. Item O: No Automatic Air Relief Valves will be installed in this project. Item T: No asbestos-cement or polyvinyl chloride pipe will be installed in this project [Item Z: No water main will be crossing above surface water. Items AA and BB: No water main will be crossing under surface water [Item CC: No backflow protection is necessary in this project. Item DD: No steam condensate, cooling water from engine jackets, nor water used in conjuction with heat exchargers is being	EXTENSIONS FOR PWSs
Alternatives as Required by Rule for Exceptions to Requirements in Part II.C.1: Items marked "X" do not apply to this project. Item F: No hydraulic Analysis is necessary since this project involves replacement of existing pipe, and no change in liameter. Item O: No Automatic Air Relief Valves will be installed in this project. Item T: No asbestos-cement or polyvinyl chloride pipe will be installed in this project. Item Z: No water main will be crossing above surface water. Items AA and BB: No water main will be crossing under surface water. Item CC: No backflow protection is necessary in this project. Item DD: No steam condensate, cooling water from engine jackets, nor water used in conjuction with heat exchargers is being	Project Name: Proposed 8-Inch D.I. Water Main Along SW Permittee: Miami-Dade Water And Sewer Department
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Item DD: No steam condensate, cooling water from engine jackets, nor water used in conjuction with heat exchargers is being	Items AA and BB: No water main will be crossing under surface water
	Item CC: No backflow protection is necessary in this project.
	Item DD: No steam condensate, cooling water from engine jackets, nor water used in conjuction with heat exchargers is being
	used in this project.
ated Dent II of this matical and the information unrelied in Dent II and another standard to Dest II and the	mpleted Part II of this notice, and the information provided in Part II and on the attachment(s) to Part II is true and accurate to the

best of my knowledge and belief.

Signature, Seal, and Date of Professional Engineer (PE) or
Signature and Date of Other Person in Responsible Charge of
Designing Project:*

STATE OF WALLSON

Printed/Typed Name Arnelio Alionso, P.E.

License Number of PE or License Number or Title of Other Person in Responsible Charge of Designing Project:* 52566

Portion of Preliminary Design Report for Which Responsible: Entire Water Main Design Signature, Seal, and Date of Professional Engineer (PE) or Signature and Date of Other Person in Responsible Charge of Designing Project:*

Printed/Typed Name:

License Number of PE or License Number or Title of Other Person in Responsible Charge of Designing Project:*

Portion of Preliminary Design Report for Which Responsible:

^{*} Except as noted in paragraphs 62-555.520(3)(a) and (b), F.A.C., projects shall be designed under the responsible charge of one or more PEs licensed in Florida. If this project is being designed under the responsible charge of one or more PEs licensed in Florida, Part II of this notice shall be completed, signed, sealed, and dated by the PE(s) in responsible charge. If this project is not being designed under the responsible charge of one or more PEs licensed in Florida, Part II shall be completed, signed, and dated by the person(s) in responsible charge of designing this project.

Project Name: Proposed 8-Inch D.I. Water Main Along SW	Permittee: Miami-Dade Water And Sewer Department

III. Certifications

A. Certification by Permittee

Signature and Date

I am duly authorized to sign this notice on behalf of the permittee identified in Part I.F of this notice. I certify that, to the best of my knowledge and belief, this project complies with Chapter 62-555, F.A.C. I also certify that construction of this project has <u>not</u> begun yet and that, to the best of my knowledge and belief, this project does <u>not</u> include any of the following construction work:

- construction of water mains conveying raw or partially treated drinking water;
- construction of drinking water treatment, pumping, or storage facilities or conflict manholes;
- construction of water mains in areas contaminated by low-molecular-weight petroleum products or organic solvents;
- construction of an interconnection between previously separate public water systems or construction of water mains that create a "new system" as described under subsection 62-555.525(1), F.A.C.; or
- construction of water mains that will remain dry following completion of construction.

(A specific construction permit is required for each project involving any of the above listed construction work.)

I understand that, if this project is designed under the responsible charge of one or more professional engineers (PEs) licensed in Florida, the permittee must retain a Florida-licensed PE to take responsible charge of inspecting construction of this project for the purpose of determining in general if the construction proceeds in compliance with the Department of Environmental Protection construction permit, including the approved preliminary design report, for this project. I understand that the permittee must have complete record drawings prepared for this project. I also understand that the permittee must submit a certification of construction completion to the Department and obtain written approval, or clearance, from the Department before the permittee places this project into operation for any purpose other than disinfection or testing for leaks.

B. Certification by PWS Supplying Water to Project

I am duly authorized to sign this notice on behalf of the PWS identified in Part I.G of this notice. I certify that said PWS will supply the water necessary to meet the design water demands for this project. As indicated below, the water treatment plant(s) to which this project will be connected has(have) the capacity necessary to meet the design water demands for this project, and I certify that all other PWS components affected by this project also have the capacity necessary to meet the design water demands for this project. I certify that said PWS is in compliance with applicable planning requirements in Rule 62-555.348, F.A.C.; applicable cross-connection control requirements in Rule 62-555.360, F.A.C.; and to the best of my knowledge and belief, all other applicable rules in Chapters 62-550, 62-555, and 62-699, F.A.C.; furthermore, I certify that, to the best of my knowledge and belief, said PWS's connection to this project will not cause said PWS to be in noncompliance with Chapter 62-550 or 62-555, F.A.C. I also certify that said PWS has reviewed the preliminary design report for this project and that said PWS considers the connection(s) between this project and said PWS acceptable as designed.

	• Name(s) of Water Treatment Plant(s) to Which this	Project Will Be Connected: Hialeah-P	reston W.T.P.						
	Total Permitted Maximum Day Operating Capacity	of Plant(s), gpd: 225							
	Total Maximum Day Flow at Plant(s) as Recorded	on Monthly Operating Reports During	Past 12 Months, gpd: 168						
	Vinent Hoult stolp	Vincent Morello, P.E.	Assistant Director Eng.& Const						
	Signature and Date	Printed or Typed Name	Title						
C.	Certification by that Will Own Project After It Is I	Placed into Permanent Operation							
	this project after it is placed into permanent operation. I	also certify that said PWS has reviewe							
	Signature and Date	Vincent Morello, P.E. Printed or Typed Name	Assistant Director Eng.& Const Title						
		that Will Own Project After It Is Placed into Permanent Operation ly authorized to sign this notice on behalf of the PWS identified in Part I.H of this notice. I certify that said PWS will own ject after it is placed into permanent operation. I also certify that said PWS has reviewed the preliminary design report for ject and that said PWS considers this project acceptable as designed. Vincent Morello, P.E. Assistant Director Eng. & Const							

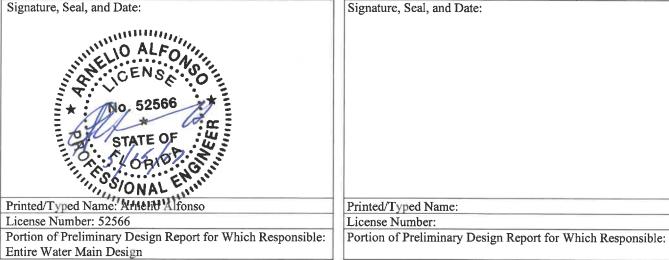
Project Name: Proposed 8-Inch D.I. Water Main Along SW Permittee: Miami-Dade Water And Sewer Department

D. Certification by Professional Engineer(s) in Responsible Charge of Designing Project*

I, the undersigned professional engineer licensed in Florida, am in responsible charge of designing this project. I certify that, to the best of my knowledge and belief, the design of this project complies with Chapter 62-555, F.A.C. I also certify that, to the best of my knowledge and belief, this project is not being designed to include any of the following construction work:

- construction of water mains conveying raw or partially treated drinking water;
- construction of drinking water treatment, pumping, or storage facilities or conflict manholes;
- construction of water mains in areas contaminated by low-molecular-weight petroleum products or organic solvents;
- construction of an interconnection between previously separate public water systems or construction of water mains that create a "new system" as described under subsection 62-555.525(1), F.A.C.; or
- construction of water mains that will remain dry following completion of construction.

(A specific construction permit is required for each project involving any of the above listed construction work.)



^{*} Except as noted in paragraphs 62-555.520(3)(a) and (b), F.A.C., projects shall be designed under the responsible charge of one or more professional engineers (PEs) licensed in Florida. If this project is being designed under the responsible charge of one or more PEs licensed in Florida, Part III.D of this notice shall be completed by the PE(s) in responsible charge. If this project is not being designed under the responsible charge of one or more PEs licensed in Florida, Part III.D does not have to be completed.

To protect, promote & improve the health of all people in Florida through integrated state, county & community efforts.



Rick Scott Governor

Celeste Philip, MD, MPH Surgeon General and Secretary

Vision: To be the Healthiest State in the Nation

June 8, 2017

Notification of Acceptance of Use of a General Permit

Permittee: MDWASD

C/o Vincent Morello, P.E. 3501 SW 46 Street Miami, FL 33142

Vincent.Morello@miamidade.gov

Permit Number: 312050-996-DSGP

Issue Date: June 8, 2017
Expiration Date: June 7, 2022

Project Name: ER W0 17009. Proposed 8-Inch D.I. Water Main Along SW 64 Court, From SW 8

Street to SW 6 Street.
Water Supplier: M.D.W.A.S.D

PWS ID: **4130871** DRER: **2017-00112**

Dear Mr. Morello,

On June 8th, 2017 the Florida Department of Health received a "*Notice of Intent to Use the General Permit for Construction of Water Main Extensions for PWSs*" [DEP Form No. <u>62-555.900(7)</u>], under the provisions of Rule <u>62-5235</u> <u>52354.530</u> and Chapter <u>62-555</u>, Florida Administrative Code (F.A.C.). The proposed project consists of the installation of 640 Linear Feet of 8-Inch Ductile Iron Pipe Water Main and 9 Linear Feet of 6-Inch Ductile Iron Pipe Water Main along SW 64 Court, from SW 8th Street to SW 6th Street. Miami.

Based upon the submitted Notice and accompanying documentation, this correspondence is being sent to advise that the Department does not object to the use of such general permit at this time. Please be advised that the permittee is required to abide by Rule 62-555.405, F.A.C., all applicable rules in Chapters 62-4, 62-550, 62-555, F.A.C., and the General Conditions for All General Drinking Water Permits (found in 62-4.540, F.A.C.).

The permittee shall comply with all sampling requirements specific to this project. These requirements are attached for review and implementation.

Pursuant to Rule <u>62-555.345</u>, F.A.C., the permittee shall submit a certification of construction completion [DEP Form No. <u>62-555.900(9)</u>] to the Department and obtain approval, or clearance, from the Department before placing any water main extension constructed under this general permit into operation for any purpose other than disinfection or testing for leaks.

Within 30 days after the sale or legal transfer of ownership of the permitted project that has not been cleared for service in total by the Department, both the permittee and the proposed Permittee shall sign and submit an application for transfer of the permit using Form 62-555.900(8), F.A.C., with the appropriate



fee. The permitted construction is not authorized past the 30-day period unless the permit has been transferred.

This permit will expire five years from the date of issuance. If the project has been started and not completed by that time, a new permit must be obtained before the expiration date in order to continue work on the project, per Rule 62-4.030, F.A.C.

Sincerely,

Richard M. Rojas, P.E.

Professional Engineer Supervisor I

Drinking Water Program

Florida Health in Miami-Dade County

Cc: Francisco J. Martinez, P.E., MDWASD.; <u>Francisco.Martinez2@miamidade.gov</u>
Arnelio Alfonso, P.E., A&P Consulting Transportación Engineers Corporation Inc..; <u>aalfonso@apcte.com</u>

A Civil Penalty May Be Incurred

if this project is placed into operation before obtaining a clearance from this office.

Requirements for clearance upon completion of projects are as follows:

1) Clearance Form

Submission of a fully completed Department of Environmental Protection (DEP) Form 62-555.900(9) Certification of Construction Completion and Request for Clearance to Place Permitted PWS Components into Operation.

2) Record Drawings, if deviations were made

Submission of the portion of record drawings showing deviations from the DEP construction permit, including preliminary design report or drawings and specifications, if there are any deviations from said permit (Note that it is necessary to submit a copy of only the portion of record drawings showing deviations and not a complete set of record drawings.).

3) Bacteriological Results

Copies of satisfactory bacteriological analysis (a.k.a. Main Clearance), taken within sixty (60) days of completion of construction, from locations within the distribution system or water main extension to be cleared, in accordance with Rules 62-555.315(6), 62-555.340, and 62-555.330, F.A.C. and American Water Works Association (AWWA) Standard C 651-92, as follows:

- Connection to an existing system
- The end point of the proposed addition
- Any water lines branching off a main extension
- Every 1,200 feet on straight runs of pipe

Each location shall be sampled on two consecutive days, with sample points and chlorine residual readings clearly indicated on the report. A sketch or description of all bacteriological sampling locations must also be provided.

4) Pressure Test Results

Copy of satisfactory pressure test results demonstrating compliance with AWWA Standard requirements.

For further clarification contact:

Richard M. Rojas

Richard.Rojas@FLHealth.gov

APPENDIX "N"

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT)

UTILITY PERMIT

(23 Pages)

RULE 14-46

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION

710-010-85 UTILITIES

UTILITY PERMIT

PERMIT NO. : 2017	PERMIT NO.: 2017-H-690-138 SECTION I			.:87120000	STATE ROA	D 90	COUNTY MIAMI-DADE	
FDOT construction	is proposed or	underway.		X Yes	□ No	Financial	I Project ID:43477215901	
Is this work related	l to an approved	Utility Work Schede	ule?	☐ Yes	⊠ No	If yes, Do	ocument Number:	
PERMITTEE: Miami Dade Water & Sewer Department			artment			-		
ADDRESS:	3071 SW 38 Av	renue			TELEPHONE	NUMBER: (7	'86) 268-5250	
CITY/STATE/ZIP: Miami, FL 33146								
The above PERMITT operate and maintain	n the following:	mission from the St nstallation of an 8 street.	tate of Florida -inch diamet	Department of Ter Ductile Iron	ransportation, he Water Main. SW	e reinafter c all 64 Court fro	led the FDOT, to construct, om SW 8 Street to SW 6	
FROM:				TO:				
Submitted for the PERMITTEE by: Name and Company (Typed or Printed Legibly) Contact I Address/Telephone		tact Informati hone/E-Mail (Signature		Date		
Sandra Parellada					Sandra Parell	ada (sig)	05/31/2017	

1.	The Permittee declares that prior to filing this application, the location of all existing utilities that it owns or has an interest in, both aerial and underground are accurately shown on the plans and a letter of notification was mailed on 05/31/2017 to the following utilities known to be involved or
	potentially impacted in the area of the proposed installation: SEE ATTACHMENT(S)
2.	The local Maintenance or Resident Engineer, hereafter referred to as the FDOT Engineer, shall be notified a minimum of forty eight (48) hours in advance
	prior to starting work and again immediately upon completion of work. The FDOT's Engineer is Ali Al-Said
	located at 1000 NW 111th Avenue Miami, FL 33172 , Telephone Number (305) 470-5356
	The Permittee's employee responsible for MOT is
	Telephone Number(This name may be provided at the time of the forty eight (48) hour advance-notice prior to
	starting work).
3.	All work, materials, and equipment shall be subject to inspection and approval by the FDOT Engineer.

- 4. All plans and installations shall conform to the requirements of the FDOT's UAM in effect as of the date this permit is approved by FDOT, and shall be made a part of this permit. This provision shall not limit the authority of the FDOT under Paragraph 8 of this Permit.
- 5. This Permittee shall commence actual construction in good faith within 30 ______ days after issuance of permit, and shall be completed within 335 ______ days after the permitted work has begun. If the beginning date is more than sixty (60) days from the date of permit approval, the Permittee must review the permit with the FDOT Engineer to make sure no changes have occurred to the Transportation Facility that would affect the permitted construction.
- The construction and maintenance of such utility shall not interfere with the property and rights of a prior Permittee.
- 7. It is expressly stipulated that this permit is a license for permissive use only and that the placing of utilities upon public property pursuant to this permit shall not operate to create or vest any property right in said holder, except as provided in executed subordination and Railroad Utility Agreements.
- 8. Pursuant to Section 337.403, Florida Statutes, any utility placed upon, under, over, or along any public road or publicly owned rail corridor that is found by FDOT to be unreasonably interfering in any way with the convenient, safe, or continuous use, or maintenance, improvement, extension, or expansion, of such public road or publicly owned rail corridor shall, upon thirty (30) days written notice to the utility or its agent by FDOT, be removed or relocated by such utility at its own expense except as provided in Section 337.403(1), Florida Statutes, and except for reimbursement rights set forth in previously executed subordination and Railroad Utility Agreements, and shall apply to all successors and assigns for the permitted facility.
- 9. It is agreed that in the event the relocation of said utilities are scheduled to be done simultaneously with the FDOT's construction work, the Permittee will coordinate with the FDOT before proceeding and shall cooperate with the FDOT's contractor to arrange the sequence of work so as not to delay the work of the FDOT's contractor, defend any legal claims of the FDOT's contractor due to delays caused by the Permittee's failure to comply with the approved schedule, and shall comply with all provisions of the law and the FDOT's current UAM. The Permittee shall not be responsible for delay beyond its control.
- 10. In the case of non-compliance with the FDOT's requirements in effect as of the date this permit is approved, this permit is void and the facility will have to be brought into compliance or removed from the R/W at no cost to the FDOT, except for reimbursement rights set forth in previously executed subordination and Railroad Utility Agreements. This provision shall not limit the authority of the FDOT under Paragraph 8 of this Permit.
- 11. It is understood and agreed that the rights and privileges herein set out are granted only to the extent of the State's right, title and interest in the land to be entered upon and used by the Permittee, and the Permittee will, at all times, and to the extent permitted by law, assume all risk of and indemnify, defend, and save harmless the State of Florida and the FDOT from and against any and all loss, damage, cost or expense arising in any manner on account of the exercise or attempted exercises by said Permittee of the aforesaid rights and privileges.
- 12. During construction, all safety regulations of the FDOT shall be observed and the Permittee must take measures, including placing and the display of safety devices that may be necessary in order to safely conduct the public through the project area in accordance with the Federal MUTCD, as amended by the UAM.
- 13. Should the Permittee be desirous of keeping its utilities in place and out of service, the Permittee, by execution of this permit acknowledges its present and continuing ownership of its utilities located between ______ and _____ within the FDOT's R/W as set forth above. Whenever the Permittee removes its facilities, it shall be at the Permittee's sole cost and expense. The
- Permittee, at its sole expense, shall promptly remove said out of service utilities whenever the FDOT determines said removal is in the public interest.

 14. In the event contaminated soil is encountered by the Permittee or anyone within the permitted construction limits, the Permittee shall immediately cease work and notify the FDOT. The FDOT shall notify the Permitee of any suspension or revocation of the permit to allow contamination assessment and remediation. Said suspension or revocation shall remain in effect until otherwise notified by FDOT
- 15. For any excavation, construction, maintenance, or support activities performed by or on behalf of the FDOT, within its R/W, the Permittee may be required by the FDOT or its agents to perform the following activities with respect to a Permittee's facilities: physically expose or direct exposure of underground facilities, provide any necessary support to facilities and/or cover, de-energize or alter aerial facilities as deemed necessary for protection and safety.

UTILITY PERMIT

- 16. Pursuant to Section 337.401(2), Florida Statutes, the permit shall require the permit holder to be responsible for damage resulting from the issuance of the permit. The FDOT may initiate injunctive proceedings as provided in s.120.69 to enforce provisions of this subsection or any rule or order issued or entered into pursuant thereto.
- 17. Pursuant to Section 337.402, Florida Statutes, when any public road or publicly owned rail corridor is damaged or impaired in any way because of the installation, inspection, or repair of a utility located on such road or publicly owned rail corridor, the owner of the utility shall, at his or her own expense, restore the road or publicly owned rail corridor to its original condition before such damage. If the owner fails to make such restoration, the authority is authorized to do so and charge the cost thereof against the owner under the provisions of s.337.404.
- 18. The Permittee shall comply with all provisions of Chapter 556, Florida Statutes, Underground Facilities Damage Prevention and Safety Act.
- 19. Special FDOT instructions:

special Provisions for Utility Permit No. 2017 H 690 138 Section: 87120/ SR: 90 / Miami-Dade Water & Sewer -SEE ATTACHMENT (s) -WORK WITHIN THE F.D.O.T. RIGHT OF WAY SHALL CONFORM TO CURRENT F.D.O.T. STANDARDS AND SPECIFICATIONS - Permit APPROVAL IN NO WAY CONSTITUTES THAT THE PERMITTED HAS AN APPROVED LANE CLOSURE. Please coordinate a preconstruction meeting with FDOT field inspector.

It is understood and agreed that commencement by the Permittee is acknowledgment and acceptance of the binding nature of all the above listed permit conditions and special instructions.

- By receipt of this permit, the Permittee acknowledges responsibility to comply with Section 119.07, Florida Statutes.
- 21. By the below signature, the Permittee hereby represents that no change to the FDOT's standard Utility Permit form, as incorporated by reference into Rule 14-46.001, for this Utility Permit has been made which has not been previously called to the attention of the FDOT (and signified to by checking the appropriate box below) by a separate attached written document showing all changes and the written and dated approval of the FDOT Engineer. Are there attachments reflecting change/s to the standard form? NO YES If Yes, ______ pages are attached.

	District Maintenance				
APPROVED BY:	Ali Al-Said (sig)		ISSUE DATE:	06/15/2017	
	Name & Title of Authorized Permittee or Agent (Typed or Printed Legibly)				
PERMITTEE	Miami Dade Water & Sewer Department	SIGNATURE	See Attached Application Form	DATE:	05/31/2017

UTILITY PERMIT FINAL INSPECTION CERTIFICATION

DATE:	
DATE WORK STARTED:	
DATE WORK COMPLETED:	
INSPECTED BY:	
(Permittee or Agent)	
CHANGE APPROVED BY: N/A	DATE:
District Maintenance Engineer or	Designee

I the undersigned Permittee do hereby CERTIFY that the utility construction approved by the above numbered permit was inspected and installed in accordance with the approved plans made a part of this permit and in accordance with the FDOT's current UAM. All plan changes have been approved by the FDOT's Engineer and are attached to this permit. I also certify that the work area has been left in as good or better condition than when the work was begun.

PERMITTEE: Miami Dade Water & Sewer Department	SIGNATURE: See Attached Application Form	DATE:	
Name & Title of Authorized Permittee or Agent (Typed or Printed Legibly)	1		

CC: District Permit Office Permittee

> APPROVED 2017-H-690-138 All Al-Said 6/16/2017

UTILITY PERMIT

PERMIT NO.:	2017-H-690-138							
Financial Project ID:	43477215901, 43477215602, 43477215601, 43477215202, 43477215201							
COUNTY:								
SECTION NO.:		Telephone E-Mail Sets permission from the State of Florida Department of Transportation, hereinafter called the FDOT, to construct, wing (continued): of provision 1): 1), Milami Dade Water & Sewer (5/31/2017 6:39:17 PM), Atlantic Broadband (5/31/2017 6:38:07 PM), City of 1:15 PM), Comcast (5/31/2017 6:38:22 PM), Dade County Public Works (5/31/2017 6:38:28 PM), Florida City FPL Fibernet (5/31/2017 6:38:46 PM), FPL Transmission (5/31/2017 6:38:56 PM), FPL (5/31/2017 6:39:07 at (continuation of provision 13):						
STATE ROAD:								
Preferred Conta	ct Address Telephor	ne E-Mail						
Location from/to:								
AT&T (5/31/2017	continuation of provision 1): 6:33:14 PM), Miami Dade Water & Sewer (5/31/2017 6:39:17 PM), 1/2017 6:38:15 PM), Compact (5/31/2017 6:38:22 PM), Dado Count	Atlantic Broadband (5/31/2017 6:38:07 PM), City of						
Gas (5/31/2017 6 PM)	i:38:39 PM), FPL Fibernet (5/31/2017 6:38:46 PM), FPL Transmission	n (5/31/2017 6:38:56 PM), FPL (5/31/2017 6:39:07						
Ownership of utili	ties located at (continuation of provision 13):							
Supporting docun	nents attached:							
3-30972 Plans.po	lf, WORK WITHIN FDOT RW.jpg, Special Provisions 2017-H-690-138							

UTILITIES OGC - 08/10

UTILITY PERMIT MAY 3 0 357

PERMIT NO.: SECTION			SECTION NO	.: DEPT.	STATE ROAD	190	COUNTY Miami-Dade
FDOT construction is proposed or underway.			☐ Yes	X No	Financial Project ID: N/A		
Is this work related to an approved Utility Work Schedule?		edule?	☐ Yes	⊠ No	If yes, Document Number:		
PERMITTEE: Miami-Dade Water and Sewer Department			ewer Departme	nt			
ADDRESS: 3501 NW 46th Street				TELEPHONE N	TELEPHONE NUMBER: (786) 552 - 8112		
CITY/STATE/ZIP: Miami, Florida 33142							
The above PERMITT operate and maintai	The above PERMITTEE requests permission from the State of Florida Department of Transportation, hereinafter called the FDOT, to construct, operate and maintain the following: 8-inch diameter Ductile Iron Water Main.						
FROM: The interse	ection of SR 90	and SW 64th Co	ourt	TO: The intersec	tion of SR 90 an	d SW 64	th Court
Submitted for the PERMITTEE by: Name and Company (Typed or Printed Legibly) Contact II Address/Telephone		ontact Informati lephone/E-Mail (Signature		Date		
A C . A M D E		(305) 592-728	33 Ext. 210 aalfon	so@apcte.com	du		05/17/2017

1.	The Permittee declares that prior to filing this application, the location of all existing utilities that it owns or has an interest in, both aerial and underground are accurately shown on the plans and a letter of notification was mailed on _09/02/2015 to the following utilities known to be involved on _09/02/2015 to the following utilities known to be involved on _09/02/2015 to the following utilities known to be involved on _09/02/2015 to the following utilities known to be involved on _09/02/2015 to the following utilities known to be involved on _09/02/2015 to the following utilities known to be involved on _09/02/2015 to the following utilities known to be involved on _09/02/2015 to the following utilities known to be involved on _09/02/2015 to the following utilities known to be involved on _09/02/2015 to the following utilities known to be involved on _09/02/2015 to the following utilities known to be involved on _09/02/2015 to the following utilities known to be involved on _09/02/2015 to the following utilities known to be involved on _09/02/2015 to the following utilities known to _09/02/2015 to the following utilities known to _09/02/2015
	potentially impacted in the area of the proposed installation:Comcast, Florida City Gas, Dade County Public Works and Traffic, FPL,
	Atlantic Broadband, Florida Power & Light Transmission, AT&T Distribution and Miami - Dade Water and Sewer.
2.	The local Maintenance or Resident Engineer, hereafter referred to as the FDOT Engineer, shall be notified a minimum of forty eight (48) hours in advance prior to starting work and again immediately upon completion of work. The FDOT's Engineer isAli Al-Said, P.E.
	located at FDOT 1000 NW 111 AVE, Miami, FI 33172 , Telephone Number
	The Permittee's employee responsible for MOT is
	Telephone Number (305) 592-7283 (This name may be provided at the time of the forty eight (48) hour advance-notice prior to
	starting work).
3.	All work, materials, and equipment shall be subject to inspection and approval by the FDOT Engineer.
	and shall be made

- All plans and installations shall conform to the requirements of the FDOT's UAM in effect as of the date this permit is approved by FDOT, and shall be may a part of this permit. This provision shall not limit the authority of the FDOT under Paragraph 8 of this Permit.
- _ days after issuance of permit, and shall be completed within This Permittee shall commence actual construction in good faith within 60 days after the permitted work has begun. If the beginning date is more than sixty (60) days from the date of permit approval, the Permittee must review the permit with the FDOT Engineer to make sure no changes have occurred to the Transportation Facility that would affect the permitted construction.
- The construction and maintenance of such utility shall not interfere with the property and rights of a prior Permittee.
- It is expressly stipulated that this permit is a license for permissive use only and that the placing of utilities upon public property pursuant to this permit shall not operate to create or vest any property right in said holder, except as provided in executed subordination and Railroad Utility Agreements.
- Pursuant to Section 337.403, Florida Statutes, any utility placed upon, under, over, or along any public road or publicly owned rail corridor that is found by FDOT to be unreasonably interfering in any way with the convenient, safe, or continuous use, or maintenance, improvement, extension, or expansion, of such public road or publicly owned rail corridor shall, upon thirty (30) days written notice to the utility or its agent by FDOT, be removed or relocated by such utility at its own expense except as provided in Section 337.403(1), Florida Statutes, and except for reimbursement rights set forth in previously executed subordination and Railroad Utility Agreements, and shall apply to all successors and assigns for the permitted facility.
- It is agreed that in the event the relocation of said utilities are scheduled to be done simultaneously with the FDOT's construction work, the Permittee will coordinate with the FDOT before proceeding and shall cooperate with the FDOT's contractor to arrange the sequence of work so as not to delay the work of the FDOT's contractor, defend any legal claims of the FDOT's contractor due to delays caused by the Permittee's failure to comply with the approved schedule, and shall comply with all provisions of the law and the FDOT's current UAM. The Permittee shall not be responsible for delay beyond its control.
- In the case of non-compliance with the FDOT's requirements in effect as of the date this permit is approved, this permit is void and the facility will have to be brought into compliance or removed from the R/W at no cost to the FDOT, except for reimbursement rights set forth in previously executed subordination and Railroad Utility Agreements. This provision shall not limit the authority of the FDOT under Paragraph 8 of this Permit.
- It is understood and agreed that the rights and privileges herein set out are granted only to the extent of the State's right, title and interest in the land to be entered upon and used by the Permittee, and the Permittee will, at all times, and to the extent permitted by law, assume all risk of and indemnify, defend, and save harmless the State of Florida and the FDOT from and against any and all loss, damage, cost or expense arising in any manner on account of the exercise or attempted exercises by said Permittee of the aforesaid rights and privileges.
- During construction, all safety regulations of the FDOT shall be observed and the Permittee must take measures, including placing and the display of safety devices that may be necessary in order to safely conduct the public through the project area in accordance with the Federal MUTCD, as amended by the
- Should the Permittee be desirous of keeping its utilities in place and out of service, the Permittee, by execution of this permit acknowledges its present 13. and continuing ownership of its utilities located between SW 64th Court and SW 8th ST of 64th Court
 - within the FDOT's R/W as set forth above. Whenever the Permittee removes its facilities, it shall be at the Permittee's sole cost and expense. The Permittee, at its sole expense, shall promptly remove said out of service utilities whenever the FDOT determines said removal is in the public interest.
- In the event contaminated soil is encountered by the Permittee or anyone within the permitted construction limits, the Permittee shall immediately cease work and notify the FDOT. The FDOT shall notify the Permitee of any suspension or revocation of the permit to allow contamination assessment and remediation. Said suspension or revocation shall remain in effect until otherwise notified by FDOT
- For any excavation, construction, maintenance, or support activities performed by or on behalf of the FDOT, within its R/W, the Permittee may be required by the FDOT or its agents to perform the following activities with respect to a Permittee's facilities: physically expose or direct exposure of underground facilities, provide any necessary support to facilities and/or cover, de-energize or alter aerial facilities as deemed necessary for protection and safety.

UTILITY PERMIT

16. Pursuant to Section 337.401(2), Florida Statutes, the permit shall require the permit holder to be responsible for damage resulting from the issuance of the permit. The FDOT may initiate injunctive proceedings as provided in s.120.69 to enforce provisions of this subsection or any rule or order issued or entered into pursuant thereto.

17. Pursuant to Section 337.402, Florida Statutes, when any public road or publicly owned rail corridor is damaged or impaired in any way because of the installation, inspection, or repair of a utility located on such road or publicly owned rail corridor, the owner of the utility shall, at his or her own expense, restore the road or publicly owned rail corridor to its original condition before such damage. If the owner fails to make such restoration, the authority is authorized to do so and charge the cost thereof against the owner under the provisions of s.337.404.

authorized t 18. The Permitt	road or publicly owned rail corridor to its original condition to do so and charge the cost thereof against the owner un ee shall comply with all provisions of Chapter 556, Florida OT instructions:	der the provision	s of s.337.404.			_	
conditions at 20. By receipt of 21. By the below	ood and agreed that commencement by the Permittee is a nd special instructions. If this permit, the Permittee acknowledges responsibility to vignature, the Permittee hereby represents that no chang for this Utility Permit has been made which has not been	comply with Se	ction 119.07, Flori	ide Statutes.	orporated by refe	rence into Rule	
appropriate i	box below) by a separate attached written document showing reflecting change/s to the standard form? NO YES	no all changes a	nd the written and	dated approval	of the FDOT Engi	neer. Are there	
PERMITTEE	Vincent Morello, P.E. Assistant Director Eng. & Const.	SIGNATURE	1-	-///	DATE:	dala	
	Name & Title of Authorized Permittee or Agent (Typed or Printed Legibly)		Lenzenn	apar		<u>Sirils</u>	
APPROVED BY:					ISSUE DATE:		
	District Maintenance	Engineer or De	signee				
	UTILITY PERMIT FINAL	INSPECTION	CERTIFICATIO	N			
DATE:							
DATE WORK ST	ARTED:						
DATE WORK CO	MPLETED:						
INSPECTED BY:							
	(Permittee or Agent)						
CHANGE APPRO	VED BY:				DATE:		
	District Maintenance Engineer	or Designee					
approved plans n	rmittee do hereby CERTIFY that the utility construction app nade a part of this permit and in accordance with the FDOT permit. I also certify that the work area has been left in as	's current UAM.	Ali plan changes	have been appro-	oved by the FDO	accordance wi I's Engineer ar	
ERMITTEE:		SIGNATURE:			DATE:		
Name	& Title of Authorized Permittee or Agent (Typed or Printed Legibly)						

CC: District Permit Office Permittee

Special Provisions for Utility Permit No. 2017 H 690 138

Section: 87120/ SR: 90 / Miami-Dade Water & Sewer

- 1. Permit APPROVAL IN NO WAY CONSTITUTES THAT THE PERMITTED HAS AN APPROVED LANE CLOSURE. Please coordinate a pre-construction meeting MR. ANTHONY GOLDBERG at (305) 640-7249, (786) 512-0075, Email: Anthony.Goldberg@dot.state.fl.us, a minimum of two (2) weeks prior to beginning of work within the F.D.O.T. Right-of-Way.
- 2. Lane closure for connection at 8th street restricted to PM non-peak hours.
- 3. Based on a review of the State Historic Preservation Officer (SHPO) Historic and Archaeological Site and FDOT's State Historic Highway GIS layers, there is a state historic highway within 300-feet of the project corridor. Therefore, the Permittee should conduct the appropriate coordination in accordance with Florida Law 86-308.
- 4. Ensure appropriate erosion control devices are in place before work begins and are used throughout the project
- 5. There is one contaminated site located within a 500-foot radius of the project have been identified. The Permittee shall assure that any actions carried out are in accordance with all environmental regulatory requirements.
- 6. The Permittee shall be required to obtain a dewatering permit from appropriate environmental agencies to avoid potential contamination plume exacerbation and determine proper groundwater management associated with such site.
- 7. In the event groundwater contamination exacerbation occurs as result of the dewatering activities, the Permittee shall be responsible for all costs associated with the remediation activities as required by all applicable environmental regulatory agencies.
- 8. <u>Damaged sidewalk and/or curb and gutter shall be restored with full flags 4" thick, using expansion material and tactile for handicap ramps FDOT Standards & Specifications (Index 304, 310 and Spec 522)</u>
- 9. The Permitted shall furnish the FDOT with an AsBuilt Drawing showing elevations every 10' within 30 days of the work being completed. If AsBuilt is not submitted Permit will be closed out as Non-Compliant.
- 10. Protect existing palm near beginning of bore during construction per FDOT Index #542.
- 11. Existing FDOT drainage shall be protected at all times by the Permitte. Any damage to the FDOT drainage system shall be repaired / replaced by the permittee at no cost to the department.
- 12. Submit a detailed lane closure form, noting work and time phases thru the Lane Closure Information System (LCIS) at http://www.fdotlcis.com/closures.aspx. The lane closure request shall be approved by the Department at least 2 weeks prior to beginning work within the FDOT Right of Way. There shall be no lane closures (Unless approved by the District Maintenance Engineer for the District Maintenance of Traffic Specialist) from Thanksgiving Day to New Year's Day, due to Moratorium.
- 13. The Department reserves the right to access any portion of the State Right-of-Way as necessary for maintenance, construction or monitoring activities. There may be a Department Representative on location, which will reserve the right to increase or

Special Provisions for Utility Permit No. 2017 H 690 138

Section: 87120/ SR: 90 / Miami-Dade Water & Sewer

decrease the approved time frames. If the Permittee's operations interfere with any current or future FDOT projects, the Permittee shall abide to the conditions of the Department Project Manager.

- 14. When the Permittee's operations encounter or expose any abnormal condition which may indicate the presence of a hazardous waste, toxic waste, or contaminants, such operations shall cease immediately in the vicinity of the abnormal condition and Permittee shall notify the Department's inspector and Ms. Maria Salgado of the District VI Environmental Management Office at 1000 N.W. 111 Ave., Miami, Florida 33172 (telephone number 305-470-5138). Every effort shall be made by the Permittee to minimize the spread of any contamination into uncontaminated areas. Under no circumstances will the Permittee resume operations in the affected area until so directed by the Department's inspector. The Permittee shall assure that any actions carried out during permit activities are in accordance with all environmental agency requirements and provide the Department copies of deliverables submitted to environmental regulatory agencies. The reports are to be submitted to the District Contamination Impact Coordinator at 1000 N.W. 111 Ave. (room # 6109), Miami, Fl. 33172-5800.
- 15. Permittee will be required issuance of a Certificate to Dig prior to any ground-disturbing activity such as directional boring, trenching, drainage installation, landscaping, or road reconstruction in which case's operations are within highly sensitive archaeological zones in the City of Miami. Permittee shall notify **Ms. Megan McLaughlin, AICP, City of Miami Planning and Zoning Department, Preservation Officer** at 444 SW 2nd Avenue 3rd Floor, Miami, FL 33130, at 305-416-1453, fax: 305-416-2156, email: mmclaughlin@miamigov.com. A map of the Archaeological Conservation Areas that identifies areas of probability maybe download at http://maps.miamigis.com/miamizoningsite/.
- 16. Access to remain open at all times. The Permittee shall provide and maintain safe temporary access to all adjacent property at all times and shall maintain accommodations for intersecting and crossing traffic within the construction zone. No road or street crossing shall be blocked or unduly restricted as determined by the engineer. Property owner must be notified seven (7) days in advance when open cutting of existing paved driveway by the permitted.
- 17. A copy of this permit and plans will be on the job site at all times during the construction of this facility.
- 18. Validity of this permit is contingent upon Permittee obtaining necessary permits from all other agencies involved.
- 19. Any hand-hole / pull-box located within a grass area shall be installed with a 1'x 1' (min.) concrete pad. Proposed hand holes / pull boxes may not be located within existing driveways or pedestrian ramps.
- 20. The use of steel plates will be at the discretion of the Department Representative. If the Permittee is proposing to use steel plates, a structural analysis must be submitted prior to installation to determine the stability of the plates and approved by the Department Representative. All plates shall be secured in place with railroad spikes and compacted asphalt and must be removed within 24-hours of installation. Locations for plate installations shall not exceed fifty (50) feet in length.
- 21. SIDEWALK SHALL BE RESTORED WITH FULL 4 INCHES THICK FLAGS WITH EXPANSION MATERIAL AND DETECTABLE DOMES FOR HANDICAP RAMPS ACCORDING TO THE F.D.O.T. ROADWAY AND TRAFFIC DESIGN STANDARDS INDICES 300, 304, AND 310 (CURRENT EDITION) AND CONSTRUCTED ACCORDING TO THE F.D.O.T. STANDARDS SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION SECTION 522.
- 22. In the event that the roadway pavement is damaged, it shall be restored **50-FT. AT EITHER SIDE AND AT FULL LANE WIDTH** TO MATCH OR EXCEED EXISTENT CONDITIONS AND IN ACCORDANCE WITH THE DEPARTMENT'S DESIGN STANDARDS AND SPECIFICATIONS. Pavement restoration scope and method will be as directed in the field by the Department Representative. Damaged pavement will be restored at the expense of the Permittee.
- 23. Final restoration shall be coordinated with the Department Representative. All portions of the State Right-of-Way disturbed in the construction of the proposed work shall be restored to F.D.O.T. Specifications within thirty (30) days upon completion of the permitted installation. As-Built and or Bore Log shall be submitted within 30 days of work being completed, or permit will be closed out as non-compliant.

2017-H-890-138 Ali Al-Said

Special Provisions for Utility Permit No. 2017 H 690 138

Section: 87120/ SR: 90 / Miami-Dade Water & Sewer

- 24. If F.D.O.T. roadway improvements have commenced or recently been completed prior to the installation of the work approved under this permit, this permit shall become void.
- 25. AS-BUILTS SHALL BE RECEIVED WITHIN 30 DAYS OF THE COMPLETION OF THE WORK.
- 26. Beginning any work within the F.D.O.T. Right-of-Way associated with this permit constitutes acceptance of these conditions.
- 27. Tree protection shall be installed per Index 544 to ensure no equipment within tree root zone. Ensure any damage to existing landscape be restored to existing or better condition. If sod is damaged during construction it must be replaced and maintained until the sod is established. The permit will remain open until this is accomplished.

APPROVED

Ali Al-Said

WORK WITHIN THE
F.D.O.T.
RIGHT OF WAY SHALL
CONFORM TO CURRENT
F.D.O.T. STANDARDS
AND SPECIFICATIONS

APPROVED

All Al Saul 8/15/2017

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. W-017009 CITY OF MIAMI J.P.A. PROJECT No.B-30972

LOCATION

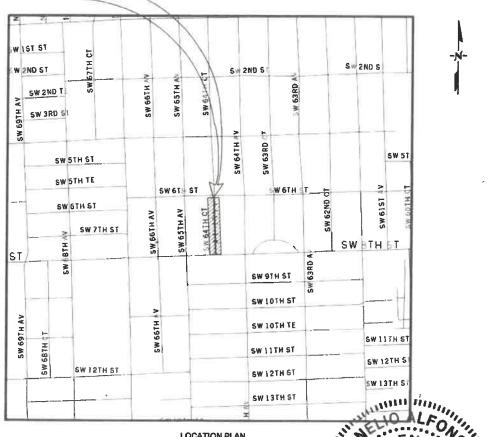
CITY OF MIAMI FIRE PREV. BUREAU



ways call 811 two full business days before you did

Sunshine !!!!com





LOCATION PLAN CITY/COUNTY A PORTION OF SEC. 01 - TWP, 54, - RGE. 40 E.



CITY OF MIAMI PROJECT MANAGER: IVELISSE RODRIGUEZ M-D WASD PROJECT MANAGER: BRIAN TRUJILLO, P.E.

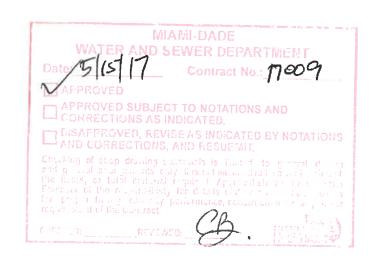
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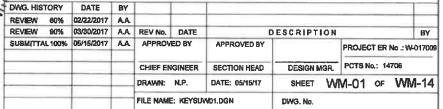
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CEPT. OF TRANSPORTATION

WORK WITHIN THE F.D.O.T. RIGHT OF WAY SHALL CONFORM TO CURRENT F.D.O.T. STANDARDS AND SPECIFICATIONS

SHEET INDEX				
WM-01	KEY SHEET			
WM-02	GENERAL NOTES AND LEGEND			
WM-03	PROP. 6" D.I. W.M. GENERAL PLAN			
04 THRU 07	TOPOGRAPHIC SURVEY			
WM-08	PROP. 8" D.I. W.M. PLAN & PROFILE			
WW-09	PROP. 8" D.I. W.M. PLAN & PROFILE			
VM-10	PROP. 8" D.I. W.M. PLAN & PROFILE			
WM-11	PROP. FIRE HYDRANT PLAN & PROFILE			
V/M-12	TRAFFIC CONTROL PLAN - GENERAL NOTES			
WM-13	TRAFFIC CONTROL PLAN - MOT			
VM-14	TRAFFIC CONTROL PLAN - DETOUR			





5/15/2017



10305 NV 1 68 Appet Fidelia 33176

GENERAL NOTES

- . THE FOLLOWING UTILITY COMPANIES SHOULD BE NOTIFIED 48 HOURS IN ADVANCE OF EXCAVATION IN AREA:
- FPI - AT&T/DISTRIBUTION
- FLORIDA CITY GAS
- -DADE CUONTY PUBLIC WORKS & TRAFFIC -FLORIDA POWER & LIGHT TRANSMISSION -COMCAST
- -MIAMI DADE WATER SEWER
- -ATLANTIC BROADBAND
- 2. ALL ELEVATIONS REFER TO NATIONAL GEODETIC VERTICAL DATUM, 1929 ADJUST.
- 3. VALVES AT INTERSECTIONS, BRANCH MAINS OR STOP OUTS SHALL BE RESTRAINED TO THE ADJACENT FITTING UNLESS OTHERWISE NOTED.
- . 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 ISHANDLED 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 MOWASD 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
- 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 MOWASD 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.
- 7. 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. IF EXISTING SERVICE LINES ARE GALVANIZED PIPE, REPLACE WITH 1" COPPER SERVICE WITH DIELECTRIC ADAPTERS.
- 20. RECONNECT EXISTING SERVICES TO PROPOSED 8" WATER MAIN.
- 21. 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 OUTSIDEL 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
- 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. AIR RELEASE VALVESHALL BE PROVIDED AT HIGH POINTS OF NEW FORCE MAIN SANITARY SEWERS.
- 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.
- 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.
- 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.
- 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)
- B) REINFORCED CONCRETE PRESSURE PIPE. HALF (1/2) THE ALLOWABLE 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.
- 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
- 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.S.
- 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, RE 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 (CLASS! 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 SOLI MANAGEMENT PLAN FROM THE ENVIRONMENTAL MONITORING AND RESTORATION DIVISION. THE EMRD CAN BE CONTACTED AT

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 PREFERABLY 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 PREFERANCY 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 ---- W.M.--- Exist. Water Main Exist. Traffic Light Pole --- 5.5:-- Exist. Storm Sewer Exist. Pedestrian Crossing Light ---- Exist. Sanitary Sewer Exist. Electric Box H Exist. Street Light Box -GAS---- Exist. Gas ш Exist. Telephone Box ----- Center line 1177 Exist. Traffic Signal Box Base line Center line and Base line 1 Exist. Cable TV Box Exist. C.B. ------ Monument line Exist. Electric MH -------- Section line Exist. Storm MH Exist. Sanitary MH ----TEL----- Exist. Telephone Exist. Telephone MH -U/G Exist. Electric underground Exist. Water MH -CATV---Exist. Cable underground

Exist. Well -TRAF-- Exist. Traffic loop Exist. Sprinkler Exist. Fire Hydrant REQ'D. Required Exist. Valve 0/5 Offset Ductile Iron Restrained Joint Core Borina REST. J. Exist, Sign Exist. Guv Wire Exist. Single Water Meter 容 Exist. Street Light Pole Prop. Single Water Meter Exist. Utility Conc. Pole Prop. Dual Water Meter φ Exist. Utility Pole Limits of milling and Exist. Flood Light resurfacing pavement restoration

MIAMI-DADE WATER AND SEWER DEPARTMENT

FOR	SEE DETAIL	SHEET
PAVEMENT RESTORATION TYPE V	A-1.1	1 OF 1
PAVEMENT RESTORATION TYPE M	A-4.0	1 OF 1
POLYETHYLENE ENCASEMENT FOR DUCTILE IRON PIPE.	A-9.0	1 OF 1
ABBREVIATIONS FOR DEPARTMENT'S PROJECTS.	A-10.0	1, 2 & 3 OF 3
STANDARD REQUIREMENTS FOR WATER & SEWER CONSTRUCTION	GS-0.5	1 OF 2
"AS-BUILT" REQUIREMENTS	GS-0.5	2 OF 2
TYPICAL TIE-ROD DETAILS.	GS-1.0	1 OF 1
WATER AND GRAVITY SEWER MAIN CROSSINGS	GS-1.5	1 OF 1
TYPICAL TRENCH BACKFILL FOR D.I. WATER.	GS-1.9	1 OF 1 =
AIR RELEASE VALVE.	W5-1.60	1 OF 1 -
TYPICAL FLUSHING VALVE OUTLET.	W5-J.6J	1 OF 1 =
No. 2 C.I. VALVE BOX AND LID	W5-3.10	1 OF 1
No. 3 C.I. VALVE BOX	WS-3.11	1. 2 OF 2
TYPICAL FIRE HYDRANT INSTALLATION W/GUARD POSTS	W5-4.50	1 OF 2
TYPICAL 2" GALVANIZED STEEL CONNECTION TO EXISTING MAIN	W5-4.13	1 OF 1

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.
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. Norberto.Perez 5/15/2017

WATER & SEWER DEPARTMENT 3071 SW 38TH AVENUE MIAMI, FL 33146-1520

A&P Consulting Transportation Engineers Corp. 10305 N.W. 41 Street, suite 11 Miami, FL 33178 305 592-7283 / fax:305 593-15 CA No. ; EB-0007797

Amelio Alfonso, P.E. No. 52566

ST NI 6774 30972 MA W. B 717009 No. B INCH D.I. WAT I S.W. 8th ST. T '06, ER No. W-01 P.A. PROJECT N AND TS No. 14706, B. WIAMI J.P.A. INSTALLATION { GENERAL PCT OF

DRAWING HISTORY RELEASED FOR DATE BY REVIEW 60% 02/22/07 A.A. REVIEW 90% 03/30/17 A.A.

EN

SUBMITTAL 100: 05/15/17 A.A. **REVISIONS** No ESCRIPTION DATE BY

APPROVALS

ROJECT MGR: B.T. CHECKED: A.A

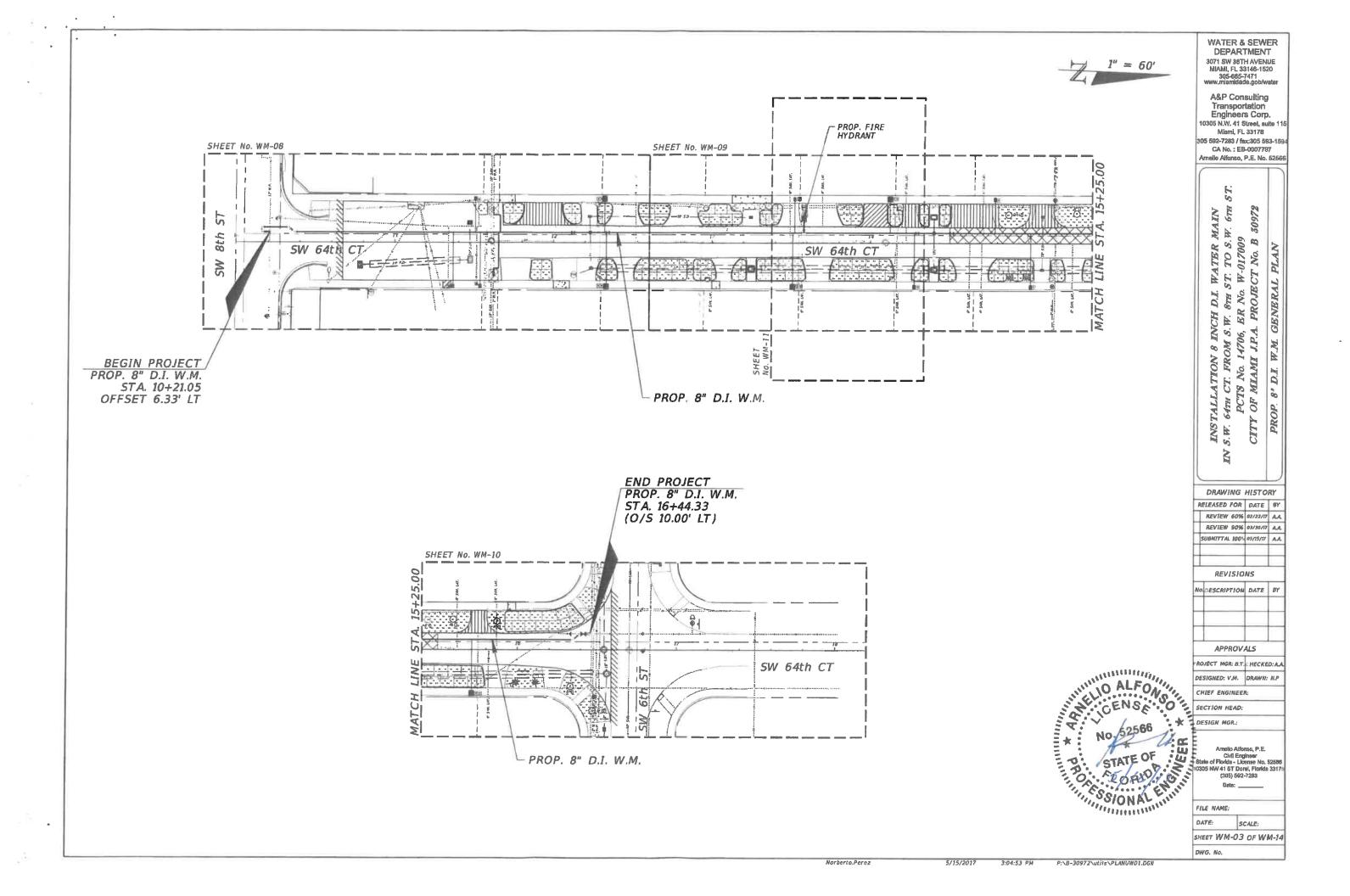
DESIGNEDADM SAMON N. EC ION MEADOR

DESIGN NGR.

Sate of Form to se No. \$2586 Sp. 6W 41 ST To a Greek a 3317 Gap 592-725 Talk: 17 FILE MAY LENGTH

SHEET WM-02 OF WM-14 DWG. No.

2:53:21 PM P:\B-30972\utils\GNNTUW01.DGN



SURVEYOR'S REPORT:

DATE OF SURVEY:

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

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 (Linea 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 inchequals twenty feet or smaller.

PERTINENT INFORMATION USED FOR SURVEY:

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

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 Lafitude: 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 Nětwork (FPRN www.dot.state.fl.us/surveyingandmapping/fprn.shtm

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 120850 (City of Miami), Map No. 12086C0293, Suffix L, Map Revised Date: September 11, 2009.

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 Mop 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

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.

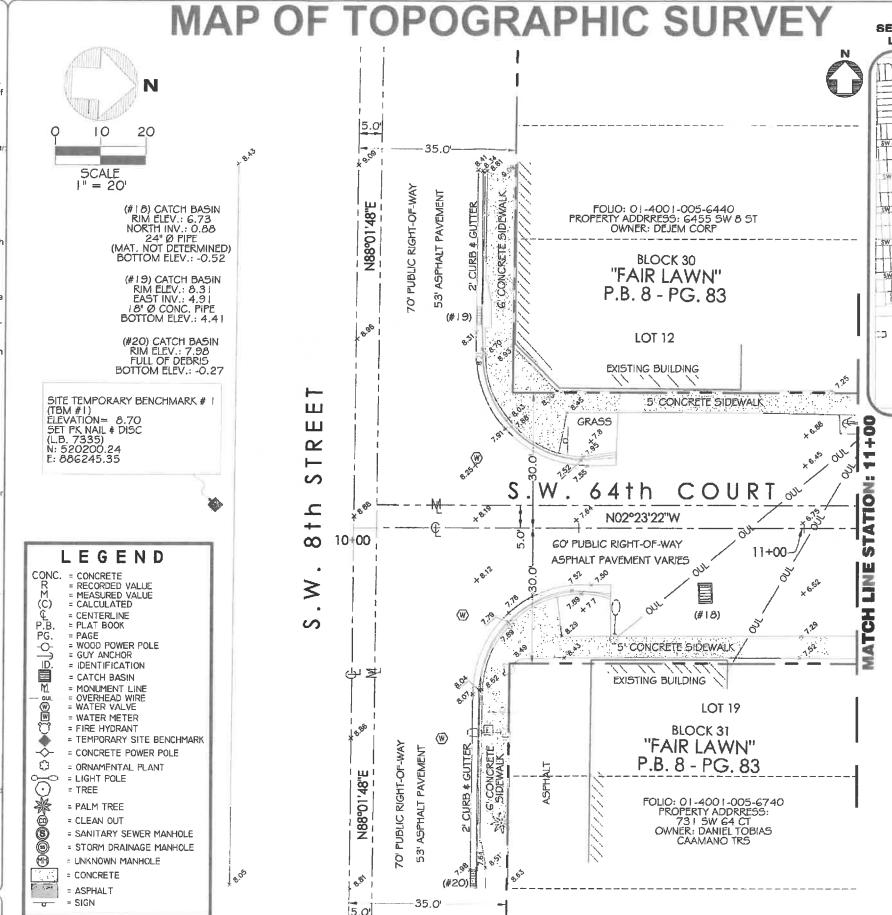
CLIENT INFORMATION:

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

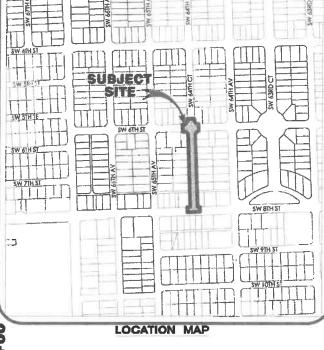
-A & P CONSULTING & TRANSPORTATION ENGINEERS

JOB NO.: 15387.0.00 FIELD BOOK: EFB

DRAWN BY: JL SHEET 1 OF 4



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



MITUDE SURVEYORS

77I5 NW 48TH STREET, SUITE 3IO DORAL, FLORIDA 33166 PHONE:(305)463-0912 FAX:(305)513-5680 WWW.LONGITUDESURVEYORS.COM

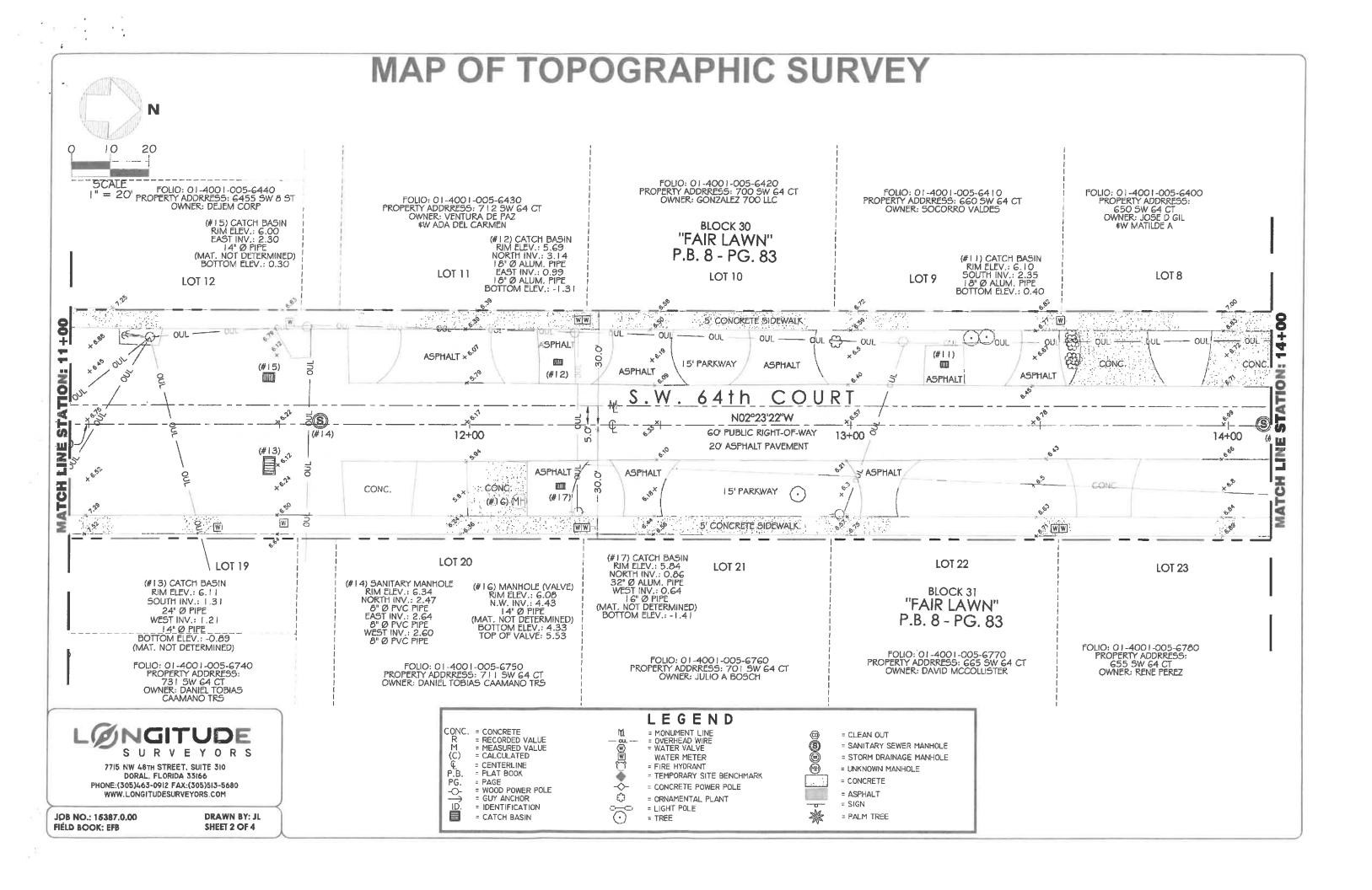
SURVEYOR'S CERTIFICATE:

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.

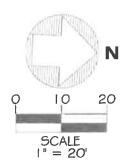
LONGITUDE SURVEYORS LLC., a Florida Limited Liability Company, Florida Certificate of Authorization Number LB7335

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.



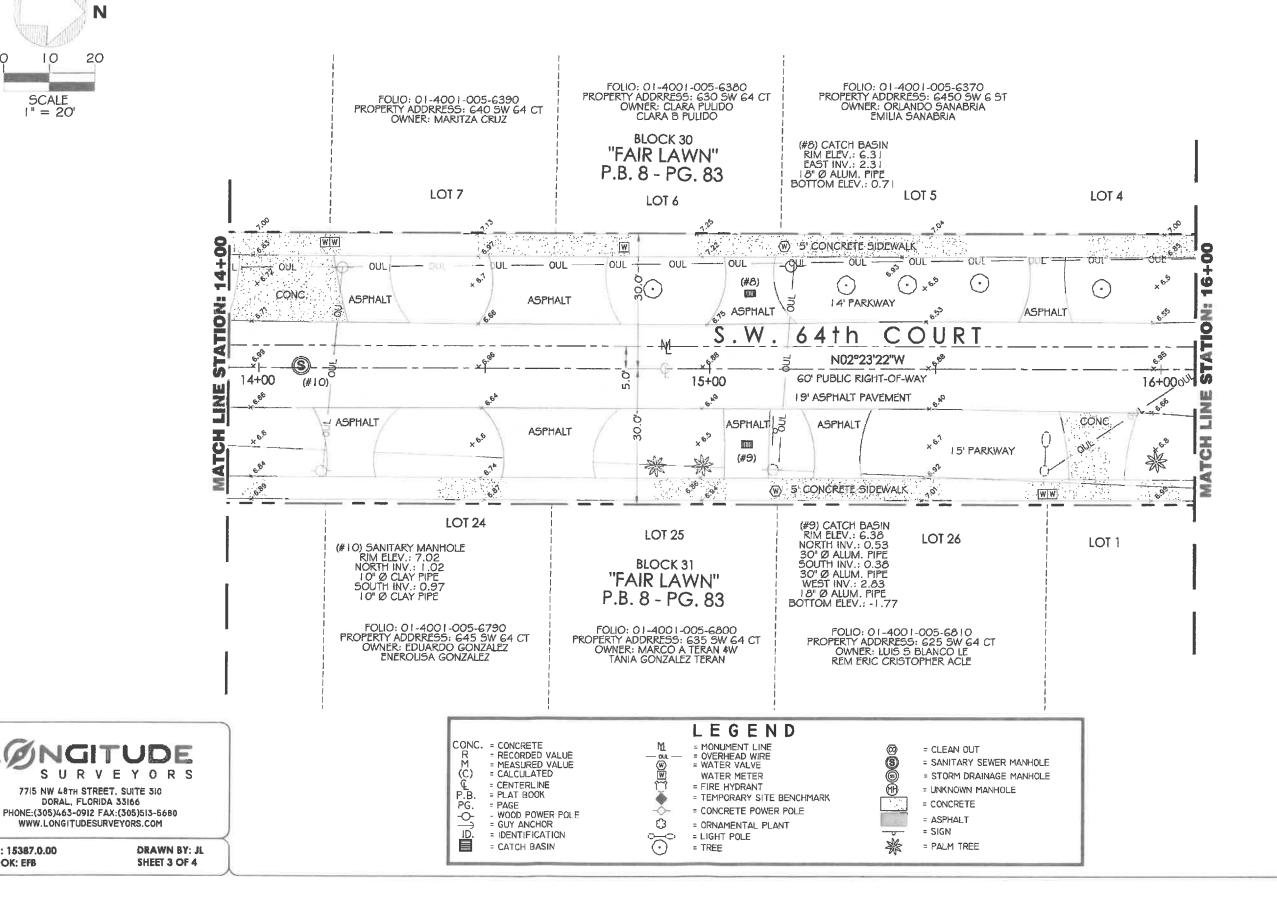
MAP OF TOPOGRAPHIC SURVEY

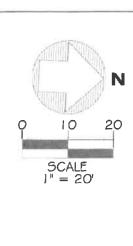


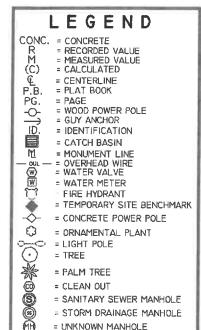
DORAL, FLORIDA 33166

JOB NO.: 15387.0.00

FIELD BOOK; EFB









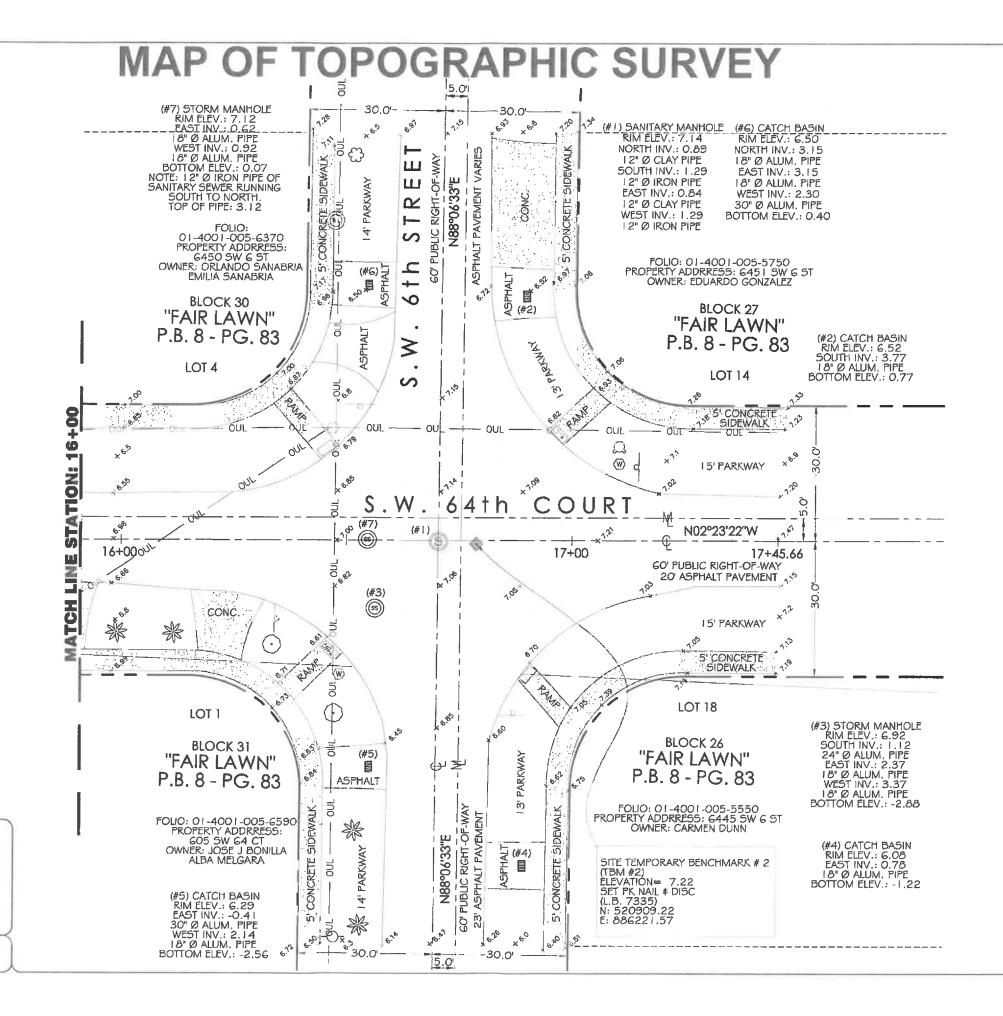
= CONCRETE

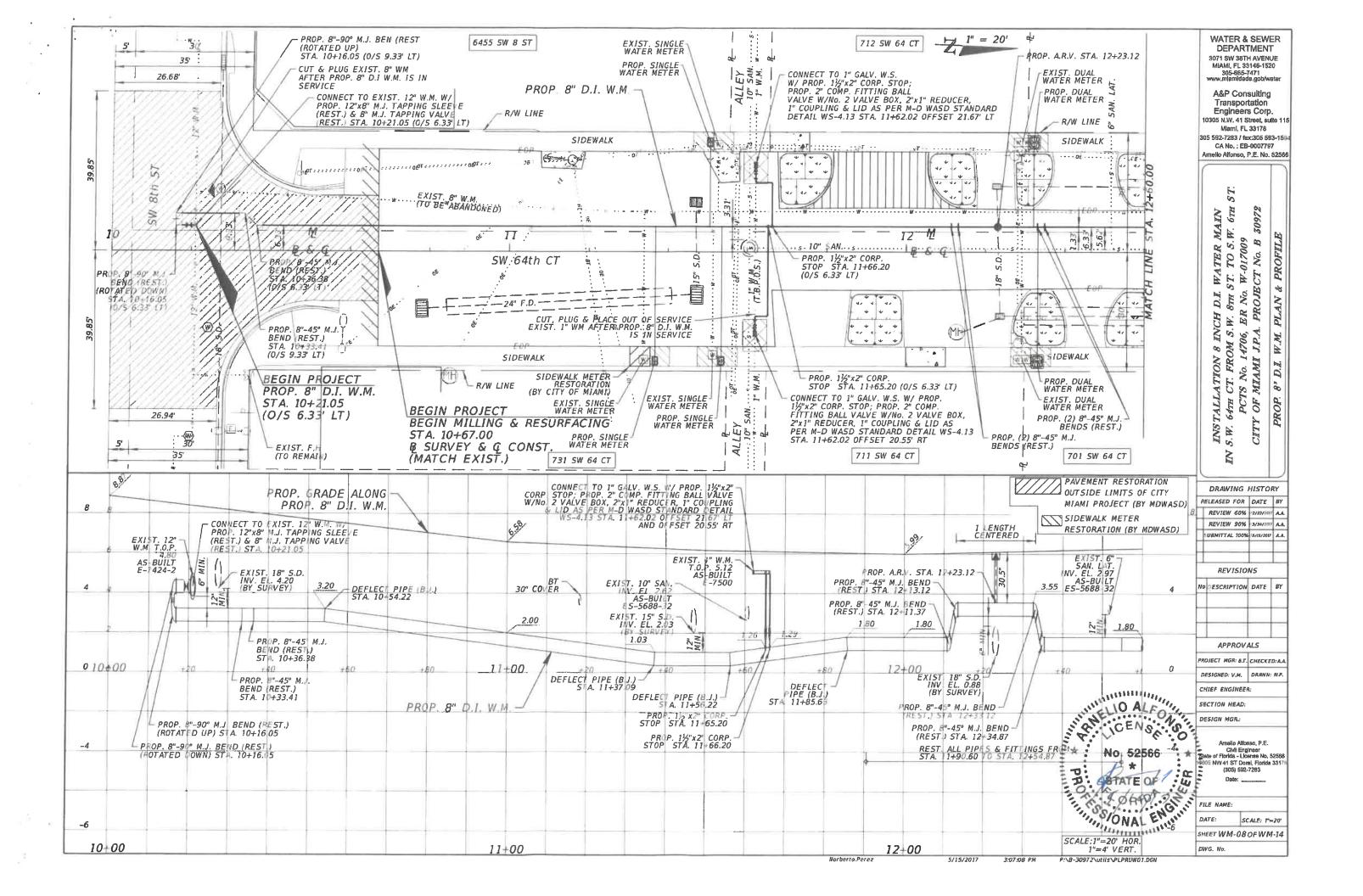
= ASPHALT = SIGN

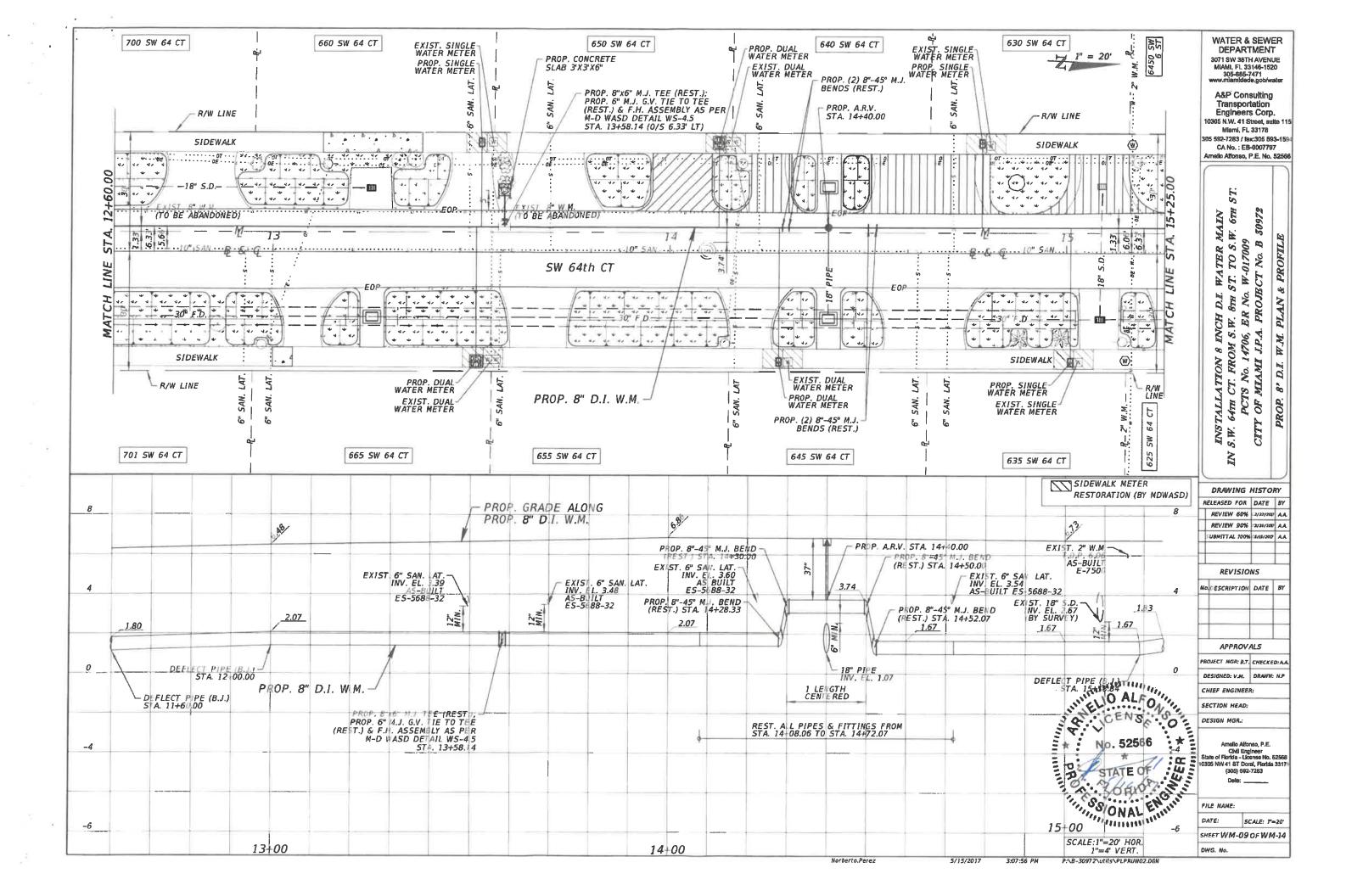
= TELEPHONE MANHOLE

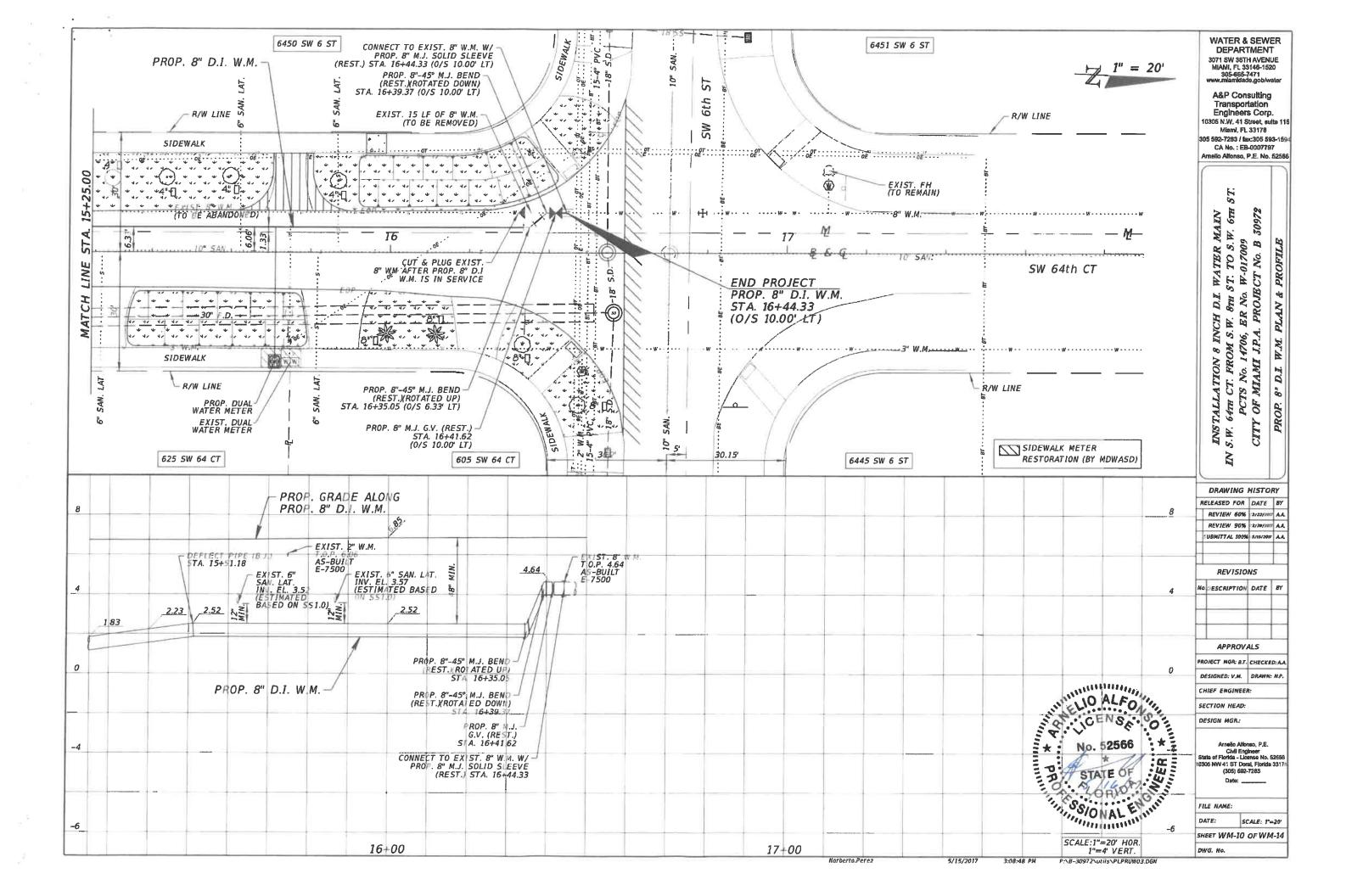
7715 NW 48th STREET, SUITE 310 DORAL, FLORIDA 33166 PHONE:(305)463-0912 FAX:(305)513-5680 WWW.LONGITUDESURVEYORS.COM

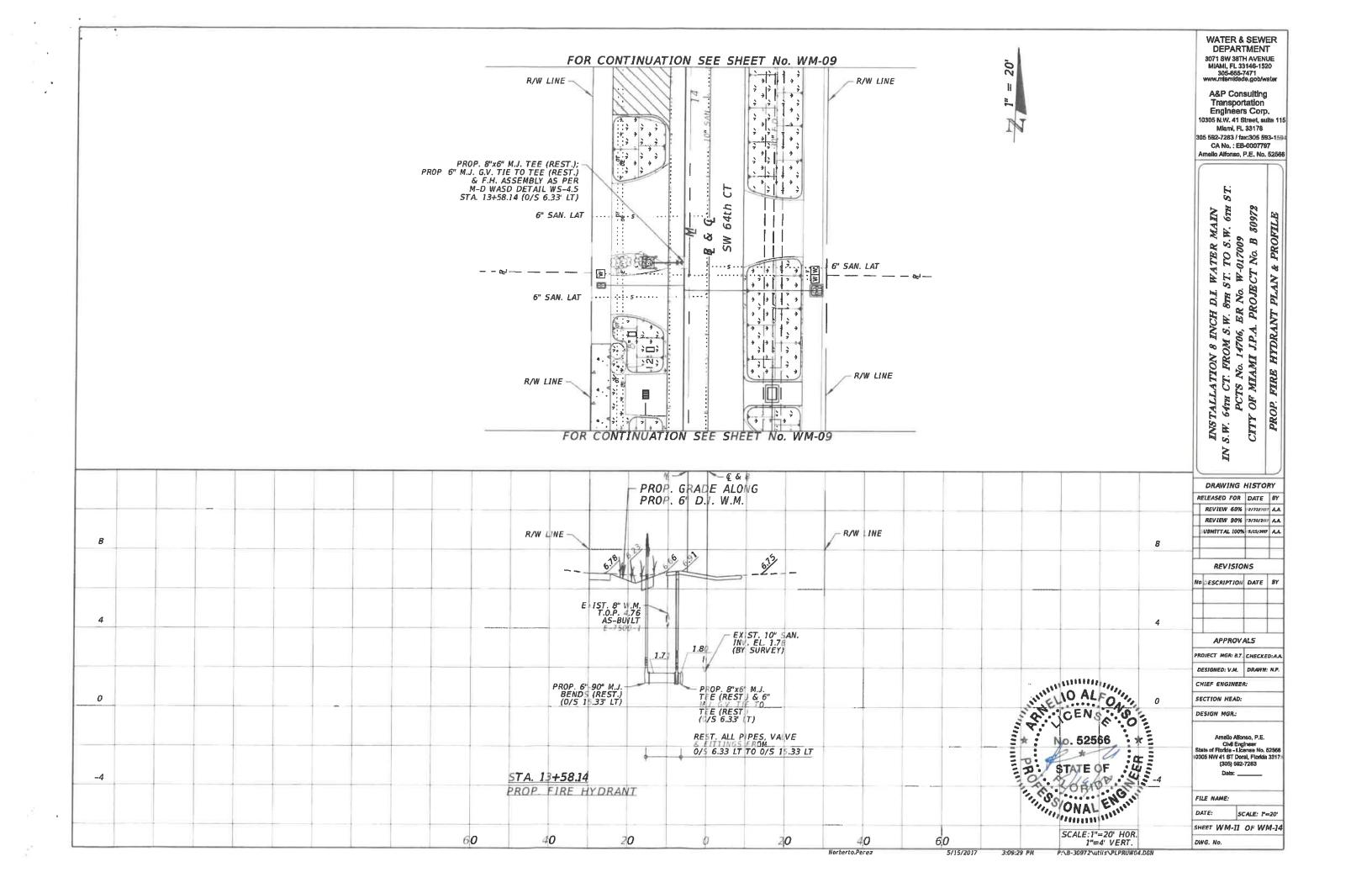
JOB NO.: 15387.0.00 FIELD BOOK: EFB DRAWN BY: JL SHEET 4 OF 4











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 FOOT 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 MAINTENACE 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 S 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)

OD ADVANCE WARNING ARROW BOARD

WORK AREA

₩ORK ZONE SIGN

LANE IDENTIFICATION AND DIRECTION
OF TRAFFIC

LONGITUDINAL CHANNELIZING DEVICE

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

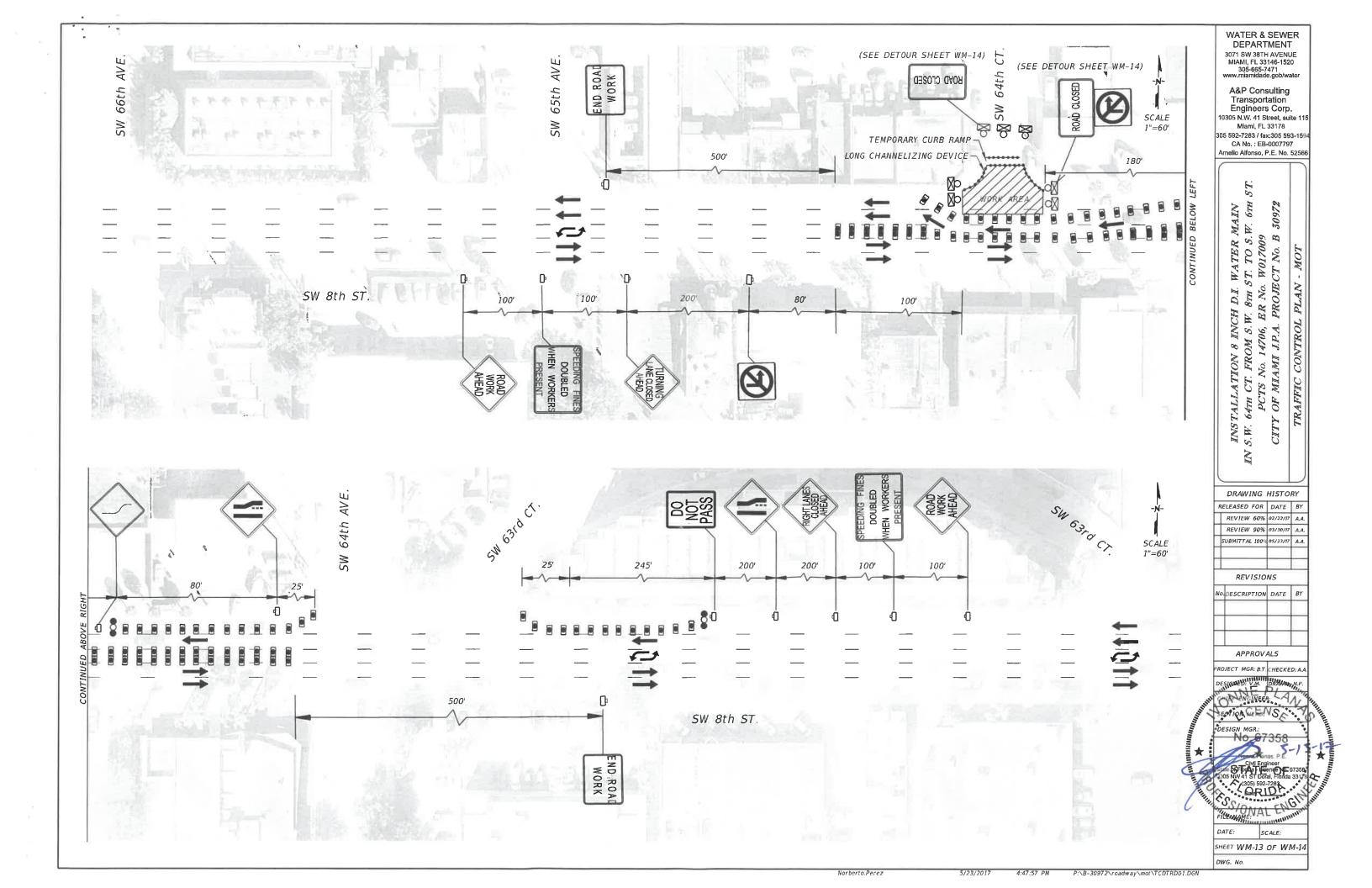
A&P Consulting Transportation Engineers Corp. 10305 N.W. 41 Street, suite 11 Miami, FL 33178 305 592-7283 / fax:305 593-155 CA No.: EB-0007797

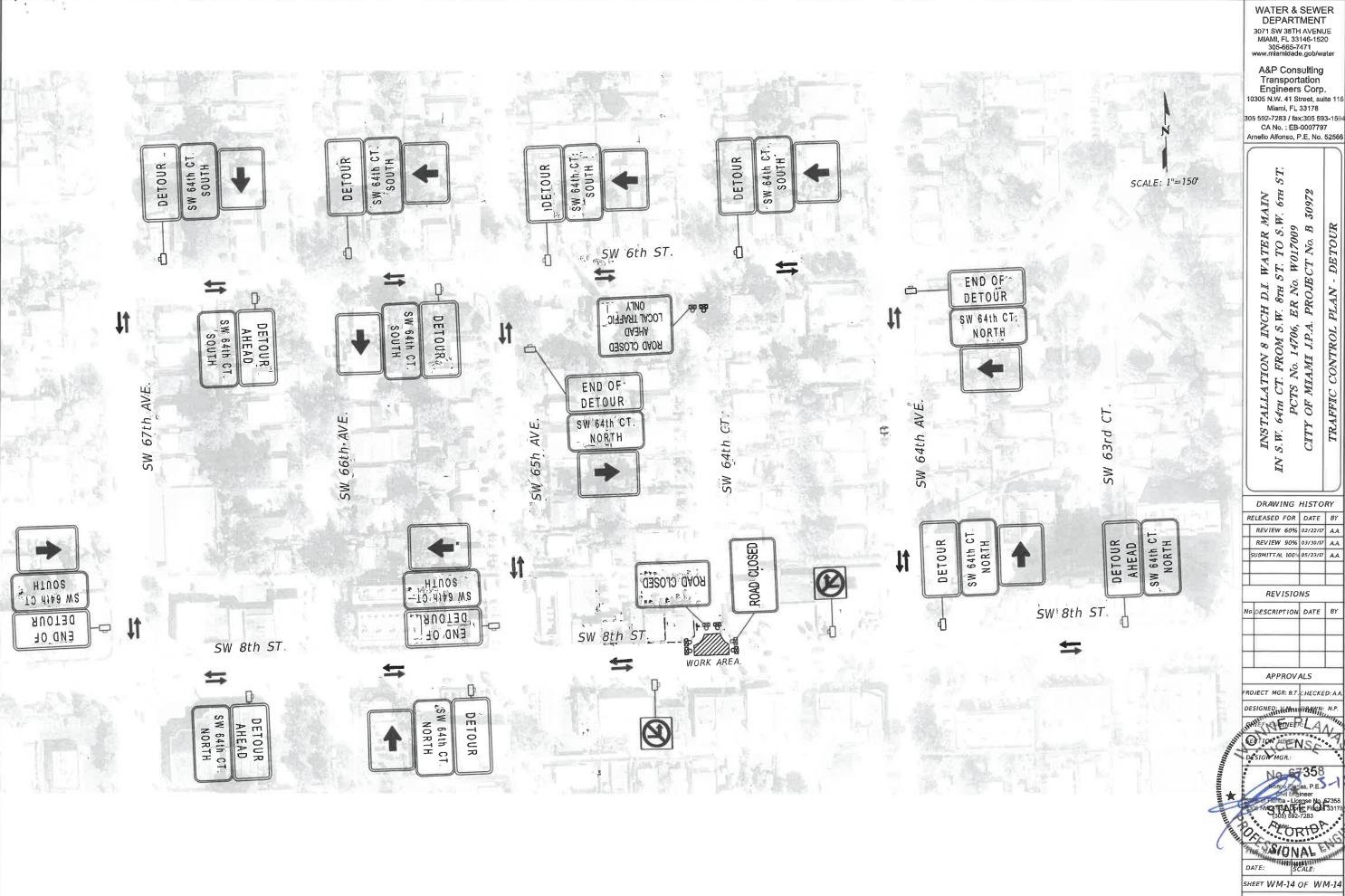
Amelio Alfonso, P.F. No. 52566

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, BR No. W017009
CITY OF MIAMI J.P.A. PROJECT No. B 50972

_3			_
	DRAWING	HISTO	RY
R	RELEASED FOR	DATE	BY
	REVIEW 60%	02/22/17	A.A.
	REVIEW 90%	03/30/17	A.A.
	SUBMITTAL 1009	05/23/17	A.A.
	REVISIO	NS	
N	DESCRIPTION	DATE	BY
	APPROV	ALS	
R	OJECT MGR: B.T	CHECKE	D: A.A
		MITTER	

DATE: SCALE:
SHEET WM-12 OF WM-14





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

A&P Consulting Transportation Engineers Corp.

10305 N.W. 41 Street, suite Miami, FL 33178 05 592-7283 / fax:305 593-15 CA No. : EB-0007797

Arnello Alfonso, P.E. No. 52566

ST. DETOUR

PLAN

CONTROL

TRAFFIIC

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

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 O DESCRIPTION DATE BY

APPROVALS

ROJECT MGR: B.T. CHECKED: A.A.

100 a - License No. 67356 NVC+TSADbret: Flanda 3317 (305) 592-7283

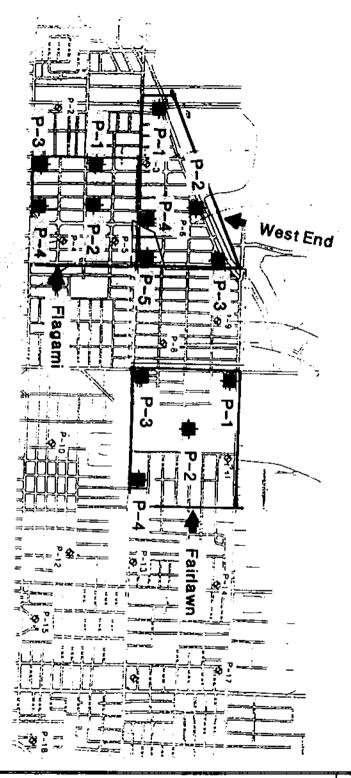
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SHEET WM-14 OF WM-14 DWG. No.

APPENDIX "O"

GEOTECHNICAL REPORT

(16 Pages)



SITE LOCATION MAP

City of Miami Drainage Improvement

Flagami, Fairlawn and West End Miami, Florida

LEGEND

Not to Scale

ATC Project No.: 31.00138.0023

Plate No: 1



MIA-00485 Fairlawn Phase IIB

9955 N.W. 116th Way, Suite 1 Miami, Horida 33178 www.atc-enviro.com 305.882.8200 Fax 305.882 1200

HYDRAULIC CONDUCTIVITY TEST S.F.W.M.D. USUAL OPEN-HOLE TEST

CLIENT:

H.J. Ross Associates, Inc.

TEST:

P-1

800 Douglas Entrance, Annex Bldg., Suite 250

Coral Gables, FL 33134

PROJECT: City of Miami Drainage Improvements

CREW:

O.F./J.H.

Fairlawn Storm Sewers Phase II

NW 57 Ave. & NW 6 Street

NUMBER: 31.00138.0023

On June 17, 2002, ATC Associates Inc. obtained the following data for the test located at the project address above.

Effective Pumping Rate:

0.0069 cfs

Actual Hole (Casing) Diameter:

0.17 ft

Initial Hole Depth: Final Hole Depth:

15.0 ft 15.0 ft

Height of Stabilized Flow:

4.7 ft above groundwater level

Depth to Water:

47 ft

The effective pumping rate raised the water level in the cased hole to the ground surface. This level was maintained for ten minutes.

Hydraulic Conductivity, K

2.16E-04 cfs/ft sqd-ft of head

SOIL LOG: COVER: Grass

0.0'-0.5

Topsoil

0.5'-8.0'

Light tan silty SAND and limestone fragments

8.0'-15.0'

Tan SAND and limestone fragments

Respectfully submitted ATC/Associates Inc

FL. Registration No. 39810





CLIENT:

H.J. Ross Associates, Inc.

TEST:

P-2

800 Douglas Entrance, Annex Bldg., Suite 250

Coral Gables, FL 33134

PROJECT: City of Miami Drainage Improvements

CREW:

O.F./J.H.

Fairlawn Storm Sewers Phase II

NW 55 Ct. & NW 3 Street

NUMBER: 31.00138.0023

On June 17, 2002, ATC Associates Inc. obtained the following data for the test located at the project address above.

0.0228 cfs Effective Pumping Rate: 0.17 ft Actual Hole (Casing) Diameter: 15.0 ft Initial Hole Depth: Final Hole Depth: 15.0 ft

5.2 ft above groundwater level Height of Stabilized Flow:

5.2 ft Depth to Water:

The effective pumping rate raised the water level in the cased hole to the ground surface. This level was maintained for ten minutes.

Hydraulic Conductivity, K

6.59E-04 cfs/ft sad-ft of head

SOIL LOG: COVER: Grass

Brown SAND with some limestone fragments 0.0'-2.0'

2.0'-8.0' Tan SAND and limestone fragments

8.0'-15.0' Light tan silty SAND and limestone fragments

Respectfully submitted ATC/Associates Ind/

Steven E. Black, P.E.

FL. Registration No. 39810





CLIENT:

H.J. Ross Associates, Inc.

TEST:

P-3

800 Douglas Entrance, Annex Bldg., Suite 250

Coral Gables, FL 33134

PROJECT: City of Miami Drainage Improvements

CREW:

O.F./J.H.

Fairlawn Storm Sewers Phase II

NW 57 Ave. & W. Flager Street

NUMBER:

31.00138.0023

On June 17, 2002, ATC Associates Inc. obtained the following data for the test located at the project address above.

Effective Pumping Rate:

0.0079 cfs

Actual Hole (Casing) Diameter:

0.17 ft

Initial Hole Depth:

15.0 ft

Final Hole Depth:

15.0 ft

Height of Stabilized Flow:

5.2 ft above groundwater level

Depth to Water:

5.2 ft

The effective pumping rate raised the water level in the cased hole to the ground surface. This level was maintained for ten minutes.

Hydraulic Conductivity, K.

2.30£ 04 cfs/ft sqd-ft of head

SOIL LOG: COVER: Grass

0.0'-0.3'

Topsoil

0.3'-2.0'

Tan LIMESTONE fragments and sand

2.0'-3.0'

Brown fine SAND

- 3.0'-9.0'

Tan fine SAND

9.0'-15.0'

Tan SAND and limestone fragments

Respectfully submitted AT@ Associates Inc

Steven E. Black, P.E.

FL. Registration No. 39810





CLIENT:

TEST:

H.J. Ross Associates, Inc.

800 Douglas Entrance, Annex Bldg., Suite 250

Coral Gables, FL 33134

PROJECT:

City of Miami Drainage Improvements

CREW:

O.F./J.H.

Fairlawn Storm Sewers Phase II

NW 51 Ave. & W. Flager Street

NUMBER:

31.00138.0023

On June 17, 2002, ATC Associates Inc. obtained the following data for the test located at the project address above.

Effective Pumping Rate:

0.1442 cfs

Actual Hole (Casing) Diameter:

0.17 ft

Initial Hole Depth:

15.0 ft

Final Hole Depth:

15.0 ft

Height of Stabilized Flow:

0.1 ft above groundwater level

Depth to Water:

4.8 ft

The effective pumping rate did not raise the water level in the cased hole to the ground surface. This level was maintained for six minutes and ten seconds.

Hydraulic Conductivity, K

2.62E.01 cfs/ft sqd ft of head

SOIL LOG:

COVER: Grass

0.0'-0.3'

0.3'-4.0'

Topsoil

Brown fine SAND

4.0'-9.0'

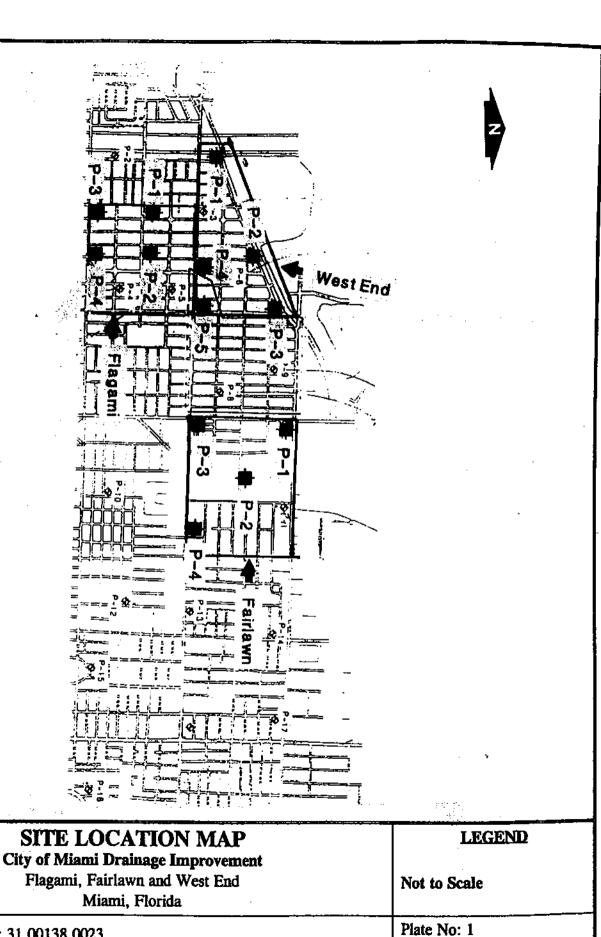
Tan LIMESTONE fragments with some sand

9.0'-15.0'

Gray silty SAND and limestone fragments

Respectfully submitted ATC Missociates Inc.

FL. Registration No. 39810



ATC Project No.: 31.00138.0023



West End MIA-00490

9955 N.W. 116th Way, Suite 1 Miami, Florida 33178 www.atc-enviro.com 305.882.8200 Fax 305.882,1200

HYDRAULIC CONDUCTIVITY TEST S.F.W.M.D. USUAL OPEN-HOLE TEST

CLIENT:

H.J. Ross Associates, Inc.

TEST:

P-1

800 Douglas Entrance, Annex Bldg., Suite 250

Coral Gables, FL 33134

PROJECT: City of Miami Drainage Improvements

CREW:

B.J./J.H.

West End Storm Sewers Phase II

NW 69 Ave. & Tamiami Canal Rd.

NUMBER:

31.00138.0023

On May 21, 2002, ATC Associates Inc. obtained the following data for the test located at the project address above.

Effective Pumping Rate: 0.0037 cfs Actual Hole (Casing) Diameter: 0.17 ft 15.0 ft Initial Hole Depth: Final Hole Depth: 15.0 ft 5.1 ft above groundwater level Height of Stabilized Flow: Depth to Water:

The effective pumping rate raised the water level in the cased

hole to the ground surface. This level was maintained for ten minutes.

Hydraulic Conductivity, K

1.09E.04 cfs/ft sqd-ft of head

SOIL LOG:

COVER: Grass

0.0'-0.5'

Topsoil

0.5'-4.0'

Tan SAND and limestone fragments

4.0'-15.0'

Tan SAND with shell

Respectfully submitted AT@/Associates/Inc.

FL. Registration No. 39810





CLIENT:

H.J. Ross Associates, Inc.

TEST:

P-2

800 Douglas Entrance, Annex Bldg., Suite 250

Coral Gables, FL 33134

PROJECT: City of Miami Drainage Improvements

CREW:

B.J./J.H.

West End Storm Sewers Phase II

NW 64 Ct.& Tamiami Canal Rd.

NUMBER:

31.00138.0023

On May 21, 2002, ATC Associates Inc. obtained the following data for the test located at the project address above.

Effective Pumping Rate:

0.0021 cfs

Actual Hole (Casing) Diameter:

0.17 ft

Initial Hole Depth:

15.0 ft

Final Hole Depth:

15.0 ft

Height of Stabilized Flow:

2.7 ft above groundwater level

Depth to Water:

2.7 ft

The effective pumping rate raised the water level in the cased hole to the ground surface. This level was maintained for ten minutes.

Hydraulic Conductivity, K

1.07E-04 cfs/ft sqd-ft of head

SOIL LOG: COVER: Grass

0.0'-0.5'

Topsoil

0.5'-15.0'

Tan SAND and limestone fragments

Respectfully submitted Associates Mc.

Steven E. Black, P.E.

FL. Registration No. 39810





CLIENT:

H.J. Ross Associates, Inc.

TEST:

P-3

800 Douglas Entrance, Annex Bldg., Suite 250

Coral Gables, FL 33134

PROJECT:

City of Miami Drainage Improvements

CREW:

B.J./J.H.

West End Storm Sewers Phase II

NW 62 Ave. & Tamiami Canal Rd.

NUMBER:

31.00138.0023

On May 21, 2002, ATC Associates Inc. obtained the following data for the test located at the project address above.

Effective Pumping Rate: 0.0021 cfs Actual Hole (Casing) Diameter: 0.17 ft Initial Hole Depth: 15.0 ft Final Hole Depth: 15.0 ft

Height of Stabilized Flow: 2.7 ft above groundwater level

Depth to Water:

2.7 ft

The effective pumping rate raised the water level in the cased hole to the ground surface. This level was maintained for ten minutes.

Hydraulic Conductivity, K

1.07E-04 cfs/ft sqd-ft of head

SOIL LOG: COVER: Grass

0.0'-0.5'

Topsoil

0.5'.2.0'

Light gray SAND and limestone fragments

2.0'-15.0'

Tan SAND and limestone fragments

Respectfully submitted Associates Inc.

FL. Registration No. 39810





CLIENT:

H.J. Ross Associates, Inc.

TEST:

P.4

800 Douglas Entrance, Annex Bldg., Suite 250

Coral Gables, FL 33134

PROJECT: City of Miami Drainage Improvements

CREW:

B.J./J.H.

West End Storm Sewers Phase II

NW 62 Ave. &W. Flagler Street

NUMBER:

31.00138.0023

On May 21, 2002, ATC Associates Inc. obtained the following data for the test located at the project address above.

Effective Pumping Rate:

0.0048 cfs

Actual Hole (Casing) Diameter:

0.17 ft

Initial Hole Depth: Final Hole Depth:

15.0 ft 15.0 ft

Height of Stabilized Flow:

4.0 ft above groundwater level

Depth to Water:

The effective pumping rate raised the water level in the cased hole to the ground surface. This level was maintained for ten minutes.

Hydraulic Conductivity, K

1.71E.04 cfs/ft sqd-ft of head

SOIL LOG:

COVER: Grass

0.0'-2.0'

Topsoil and muck

2.0'-4.0'

Dark tan SAND and limerock fragments

4.0'-15.0'

Tan SAND and limestone fragments

Respectfully submitted ATÆ Associates Inc.

FL. Registration No. 39810





CLIENT:

H.J. Ross Associates, Inc.

TEST:

P-5

800 Douglas Entrance, Annex Bldg., Suite 250

Coral Gables, FL 33134

PROJECT: City of Miami Drainage Improvements

CREW:

B.J./J.H.

West End Storm Sewers Phase II

NW 63 Ct. & W. Flagler Street

NUMBER: 31.00138.0023

On May 21, 2002, ATC Associates Inc. obtained the following data for the test located at the project address above.

Effective Pumping Rate:

0.0048 cfs

Actual Hole (Casing) Diameter:

0.17 ft

Initial Hole Depth:

15.0 ft 15.0 ft

Final Hole Depth: Height of Stabilized Flow:

7.3 ft above groundwater level

Depth to Water:

The effective pumping rate raised the water level in the cased hole to the ground surface. This level was maintained for ten minutes.

Hydraulic Conductivity, K

1 07E 04 cfs/ft sad-ft of head

SOIL LOG:

COVER: Grass

0.0'-0.5'

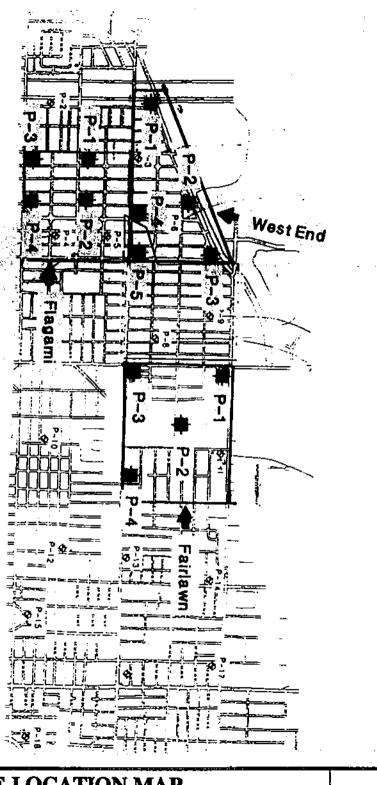
Topsoil and muck

0.5'-15.0'

Tan SAND and limestone fragments

Respectfully submitted AT@Associates Vite.

FL. Registration No. 39810



City of Miami Drainage Improvement

Flagami, Fairlawn and West End Miami, Florida

ATC Project No.: 31.00138.0023

LEGEND

Not to Scale

Plate No: 1



Flagami MIA-00495

9955 N.W. 116th Way, Suite 1 Miami, Florida 33178 www.atc-enviro.com 305.882.8200 Fax 305.882,1200

HYDRAULIC CONDUCTIVITY TEST RY S F.W.M.D. USUAL OPEN:HOLE TEST

CLIENT:

H.J. Ross Associates, Inc.

TEST:

P-1

800 Douglas Entrance, Annex Bidg., Suite 250

Coral Gables, FL 33134

PROJECT:

City of Miami Drainage Improvements

CREW:

B.J./J.H.

Flagami Storm Sewers Phase II

SW 66 Ave. & SW 4 Street

NUMBER:

31.00138.0023

On May 22, 2002, ATC Associates Inc. obtained the following data for the test located at the project address above.

Effective Pumping Rate:

0.0021 cfs

Actual Hole (Casing) Diameter:

0.17 ft

Initial Hole Depth:

15.0 ft

Final Hole Depth:

15.0 ft

Height of Stabilized Flow:

6.3 ft above groundwater level

Depth to Water:

6.3 ft

The effective pumping rate raised the water level in the cased hole to the ground surface. This level was maintained for ten minutes.

Hydraulic Conductivity, K

5.29E-05 cfs/ft sqd-ft of head

SOIL LOG:

COVER: Sand and Limerock

0.0'-2.0'

Brownish tan SAND and limerock fragments

2.0'-4.0'

Dark tan SAND and timestone fragments

4.0'-15.0'

Tan SAND and limestone fragments

Respectfully submitted A7/6 Assøciates/Inc.

Steven E. Black. P.E.

FL. Registration No. 39810



CLIENT:

H.J. Ross Associates, Inc.

TEST:

P-2

800 Douglas Entrance, Annex Bldg., Suite 250

Coral Gables, FL 33134

PROJECT: City of Miami Drainage Improvements

CREW:

B.J./J.H.

Flagami Storm Sewers Phase II

SW 64 Ave. & SW 4 Street

NUMBER: 31.00138.0023

On May 22, 2002, ATC Associates Inc. obtained the following data for the test located at the project address above.

Effective Pumping Rate: Actual Hole (Casing) Diameter: Initial Hole Depth: Final Hole Depth:

15.0 ft 15.0 ft

0.0042 cfs

0.17 ft

Height of Stabilized Flow:

6.8 ft above groundwater level

Depth to Water:

6.8 ft

The effective pumping rate raised the water level in the cased hole to the ground surface. This level was maintained for ten minutes.

Hydraulic Conductivity, K

1.00E-04 cfs/ft sqd-ft of head

SOIL LOG: COVER: Sand and Limerock

0.0'-0.2' Topsoil

Dark SAND and limestone fragments 0.2'-2.0'

2.0'-4.0' Tan SAND and limestone fragments

4.0'-6.0' Dark tan SAND and limestone fragments

6.0'-15.0' Tan SAND and limestone fragments

Respectfully submitted ATQ Associates Wc.

FL. Registration No. 39810



CLIENT:

H.J. Ross Associates, Inc.

TEST:

P.3

800 Douglas Entrance, Annex Bldg., Suite 250

Coral Gables, FL 33134

PROJECT: City of Miami Drainage Improvements

CREW:

B.J./J.H.

Flagami Storm Sewers Phase II

SW 64 Ave. & SW 8 Street

NUMBER: 31.00138.0023

On May 22, 2002, ATC Associates Inc. obtained the following data for the test located at the project address above.

Effective Pumping Rate:

0.0058 cfs

Actual Hole (Casing) Diameter: Initial Hole Depth:

0.17 ft 15.0 ft

Final Hole Depth:

15.0 ft

Height of Stabilized Flow:

5.6 ft above groundwater level

Depth to Water:

5.6 ft

The effective pumping rate raised the water level in the cased hole to the ground surface. This level was maintained for ten minutes.

Hydraulic Conductivity, K.

1.59E-04 cfs/ft sqd-ft of head

SOIL LOG: COVER: Grass

0.0'-0.5'

Topsoil

0.5'-2.0'

Light gray SAND and limestone fragments

2.0'-4.0'

Dark gray SAND and limestone fragments

4.0'-15.0' Tan SAND and limestone fragments

Respectfully submitted Associates/

FL. Registration No. 39810





CLIENT:

H.J. Ross Associates, Inc.

TEST:

P-4

800 Douglas Entrance, Annex Bldg., Suite 250

Coral Gables, FL 33134

PROJECT: City of Miami Drainage Improvements

CREW:

B.J./J.H.

Flagami Storm Sewers Phase II

SW 67 Ave. & SW 8 Street

NUMBER:

31.00138.0023

On May 22, 2002, ATC Associates Inc. obtained the following data for the test located at the project address above.

Effective Pumping Rate:

0.0032 cfs

Actual Hole (Casing) Diameter:

0.17 ft

Initial Hole Depth:

15.0 ft

Final Hole Depth:

15.0 ft

Height of Stabilized Flow:

6.0 ft above groundwater level

Depth to Water:

6.0 ft

The effective pumping rate raised the water level in the cased hole to the ground surface. This level was maintained for ten minutes.

Hydraulic Conductivity, K

8.23E-05 cfs/ft sqd-ft of head

SOIL LOG: COVER: Grass

0.0'-0.5'

Topsoil

0.5'-2.0'

tan SAND and limestone fragments

2.0'-4.0'

Dark tan SAND and limestone fragments

4.0'-15.0'

Tan SAND and limestone fragments

Respectfully submitted ATQ Associates July

FL. Registration No. 39810