



RICKENBACKER CAUSEWAY COMFORT STATION NO. 2 SEWER CONNECTION

Miami-Dade County

PLANS

Volumen 2 Revised

Small Business Enterprise Construction Program (SBE-CONST.):

Not Applicable

Small Business Enterprise SBE-G&S:

1% Goods & Services Goal

Community Workforce Program:

Not Applicable

DTPW Capital Improvements Engineer:

Alicia Arce

RPQ Issue Date:

January 15, 2026

RICKENBACKER CAUSEWAY

COMFORT STATION NO. 2

SANITARY SEWER CONNECTION

RICKENBACKER CAUSEWAY MIAMI - DADE COUNTY, FLORIDA 33165 PROS PROJECT NUMBER 422003-20-001 PERMITTING JULY 2023



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Mayor

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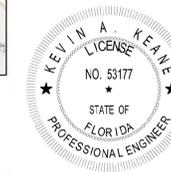
PARKS, RECREATION AND OPEN SPACES

Maria I. Nardi, Director



LOCATION PLAN
MIAMI-DADE COUNTY
A PORTION OF SEC. 18 - TWP. 54 S. - RGE. 42 E.
SCALE: 1" = 100'

Kevin A. Keane, P.E.
Civil Engineer
State of Florida - License No. 53177
2100 Ponce de Leon Blvd, Suite 1270
Coral Gables, Florida 33134
Date: 7/21/2023



This item has been digitally signed and sealed by Kevin Keane, P.E. on the date adjacent to the seal.
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PERMITTING

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PROJECT DESCRIPTION:
CONSTRUCT 4" FORCE MAIN FROM COMFORT STATION NO. 2 TO MDWSD SANITARY SEWER SYSTEM, VIA SEWER MAIN EXTENSION. THE EXISTING SEPTIC BANK SYTEM IS TO BE ABANDONED IN PLACE.

LEGAL DESCRIPTION:
A PORTION OF RICKENBACKER CAUSEWAY RIGHT OF WAY LOCATED ON VIRGINIA KEY, EAST OF WILLIAM POWELL BRIDGE.



SSOCOF DESIGN TICKET NO. 131201528,
DATE: 5/11/2022

Attention is directed to the fact that these plans may have been reduced in size by reproduction. This must be considered when obtaining scaled data.

**GENERAL NOTES
(NOT PART OF MDWASD'S NOTES NOR APPROVAL)**

- THE FOLLOWING UTILITY COMPANIES SHOULD BE NOTIFIED 48 HOURS IN ADVANCE OF EXCAVATION IN AREA:
 - FPL
 - AT&T/DISTRIBUTION
 - MDC-PUBLIC WORKS DEPT
 - COMCAST
 - FPL TRANSMISSION
 - MIAMI-DADE WATER & SEWER
 - CROWN CASTLE FIBER
- ALL ELEVATIONS REFER TO NATIONAL GEODETIC VERTICAL DATUM, 1929 ADJUST.
- VALVES AT INTERSECTIONS, BRANCH MAINS OR STRUB-OUTS SHALL BE RESTRAINED TO THE ADJACENT FITTINGS 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.
- STATIONING SHOWN IS ALONG THE BASELINE OF SURVEY. GRADING SHOWN IS ALONG THE PROPOSED ALIGNMENT.
- 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.
- 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 WASD MANAGER OF THE PROJECT. EVIDENCE OF POTENTIAL CONTAMINATION MAY INCLUDE ANY OF THE FOLLOWING: 1. ODOR 2. SOLID WASTE DEBRIS 3. SHEEN ON THE GROUNDWATER 4. STAINED OR SATURATED SOIL (SOIL THAT CONTAINS PRODUCT THAT DRAINS WHEN IT IS HANDLED OR CREATES STREAKS ON EXCAVATION TOOLS) OR 5. FREE FLOATING PRODUCT ON THE GROUNDWATER (OIL, DIESEL, GASOLINE, ETC.). MATERIAL THAT HAS ODOR, IS STAINED OR IS SATURATED MUST BE SEGREGATED ON AN IMPERMEABLE SURFACE FOR APPROPRIATE FUTURE DISPOSAL.
- ALL PIPE AND FITTINGS INSTALLED UNDER THIS PROJECT MUST BE CLEARLY IDENTIFIED AS A WASTEWATER FORCE MAIN AS REQUIRED BY THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION AND THE RECOMMENDED STANDARDS FOR WASTEWATER FACILITIES 49.7. MDWASD SHALL USE GREEN PAINT TO IDENTIFY FORCE MAINS. 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.
- USE CAUTION WHEN EXCAVATING AROUND EXISTING UTILITIES PER SPECIFICATION SECTION 6.00.3.
- PAVEMENT RESTORATION TO BE DONE IN ACCORDANCE WITH MIAMI-DADE COUNTY PUBLIC WORKS DEPARTMENT UNLESS OTHERWISE NOTED.
- LOCATION OF EXISTING FACILITIES AS SHOWN ON CONSTRUCTION DRAWINGS ARE FROM AVAILABLE RECORDS. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR 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 SO THAT APPROPRIATE MEASURES CAN BE TAKEN TO RESOLVE SAID CONFLICT. CONTRACTOR TO NOTIFY SUNSHINE STATE ONE CALL OF FLORIDA, INC. BY CALLING 811 AT LEAST 48 HOURS PRIOR TO EXCAVATING.
- 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 ALL REQUIRED Dewatering/CONTAMINATION PERMIT APPROVALS INCLUDING ANY ANNUAL 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.
- 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.
- 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.
- A PERMIT IS REQUIRED FROM MD-RER AND DEPARTMENT OF HEALTH FOR ABANDONING EXISTING SEPTIC SYSTEM.

MDWASD NOTES
- PROJECT SPECIFICATIONS SHALL CONFORM TO THE MDWASD DESIGN AND CONSTRUCTION STANDARD SPECIFICATIONS AND DETAILS.
- SALT WATER INTRUSION AREA. ALL PROP. D.I.P. PIPES AND FITTINGS TO BE ZINC COATED AND HAVE POLYETHYLENE ENCASEMENT PER MDWASD DETAIL A 9.0
- ALL EXISTING UTILITIES BEING REMOVED AND/OR RELOCATED MUST REMAIN ACTIVE AND IN SERVICE, UNTIL SUCH TIME WHEN NEW REPLACING UTILITIES HAVE BEEN INSTALLED, IN SERVICE, ACCEPTED BY THE DEPARTMENT AND ALL RELATED SERVICES FROM THE EXISTING MAINS HAVE BEEN TRANSFERRED TO THE NEW ONES BY A LICENSED CONTRACTOR UNDER THE SUPERVISION OF WASD LICENSED OPERATOR AND WASD DONATION INSPECTOR UNDER THE SCOPE AND JURISDICTION OF THE CONTRACTOR'S RIGHT-OF-WAY PERMIT.
- ALL WATER AND/OR SEWER FACILITIES LOCATED IN THE PRIVATE PROPERTY SHALL BE REMOVED AFTER ALL INSTALLED SERVICES FROM THEM HAVE BEEN TRANSFERRED TO THE LICENSED CONTRACTOR AND IN SERVICE. NEW MAINS, ANY ASSOCIATED EXCLUSIVE EASEMENTS SHALL BE CLOSED AND RELEASED AFTER THE REMOVAL OF THE EXISTING WATER AND/OR SEWER FACILITIES.
- FOR CONNECTION TO VCP PIPE, THE CONTRACTOR IS REQUIRED TO TELEVESE THE EXISTING VCP PIPE BEFORE AND AFTER INSTALLATION.

RER-DERM WATER-SEWER GENERAL NOTES (NOT PART OF WASD APPROVAL)

- HORIZONTAL DISTANCE OF AT LEAST 6 FEET, AND PREFERABLY 10 FEET (OUTSIDE TO OUTSIDE), SHALL BE MAINTAINED BETWEEN GRAVITY OR PRESSURE SEWER PIPES AND WATER PIPES. THE MINIMUM HORIZONTAL SEPARATION CAN BE REDUCED TO 3 FEET FOR VACUUM-TYPE SEWERS OR FOR GRAVITY SEWERS WHERE THE TOP OF THE SEWER 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 ONE OF THE FOLLOWING IS MET:
 - THE SEWER PIPES ARE DESIGNED AND CONSTRUCTED EQUAL TO THE WATER PIPE AND PRESSURE TESTED AT 150 PSI.
 - THE SEWER IS ENCASED IN A WATERTIGHT CARRIER PIPE OR CONCRETE.
 - THE TOP OF THE SEWER IS AT LEAST 18 INCHES BELOW THE BOTTOM OF THE WATER PIPE.
- 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 ONE OF THE FOLLOWING IS MET:
 - THE SEWER PIPES ARE DESIGNED AND CONSTRUCTED EQUAL TO THE WATER PIPE AND PRESSURE TESTED AT 150 PSI.
 - THE SEWER IS ENCASED IN A WATERTIGHT CARRIER PIPE OR CONCRETE.
- AIR RELEASE VALVES SHALL 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 EXFILTRATION RATE OF GRAVITY SANITARY SEWERS CONSTRUCTED IN A PUBLIC WELLFIELD PROTECTION AREA SHALL BE:
 - 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.
 - 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.
 - 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 PIPE. 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, HDPE OR REINFORCED CONCRETE PRESSURE SEWER PIPES.
- THE MAXIMUM ALLOWABLE EXFILTRATION/LEAKAGE RATE OF FORCE MAIN SANITARY SEWERS SHALL BE:
 - DUCTILE IRON, C-900 PVC, HDPE AND PVC PIPE. THE ALLOWABLE LEAKAGE RATE SPECIFIED IN AMERICAN WATER WORKS ASSOCIATION STANDARD (AWWA) C600-82 AT A TEST PRESSURE OF 100 PSI FOR A DURATION OF NOT LESS THAN TWO (2) HOURS.
 - 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 THAN TWO (2) HOURS.
 - ANY OBSERVED LEAKS OR ANY OBVIOUSLY DEFECTIVE JOINTS OR PIPES SHALL 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.
- 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.
- 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:
 - ALL WORK IN THE AREA SHALL FOLLOW ALL APPLICABLE SAFETY REQUIREMENTS (E.G., OSHA, ETC.) AND NOTIFICATION MUST BE PROVIDED TO THE APPROPRIATE AGENCIES.
 - IMMEDIATELY NOTIFY THE ENVIRONMENTAL MONITORING AND RESTORATION DIVISION (EMRD). THE EMRD CAN BE CONTACTED AT (305) 372-6700.
 - 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. IF DISPOSAL WITHIN A MIAMI-DADE COUNTY OWNED LANDFILL (CLASS I LANDFILL) IS APPROPRIATE AND SELECTED, PLEASE CONTACT THE MIAMI-DADE COUNTY DEPARTMENT OF SOLID WASTE MANAGEMENT AT (305) 594-6666 FOR INFORMATION.
 - THE REUSE OF CONTAMINATED SOILS THAT ARE NOT RETURNED TO THE ORIGINAL EXCAVATION REQUIRES PRIOR APPROVAL OF A SOIL MANAGEMENT PLAN FROM THE ENVIRONMENTAL MONITORING AND RESTORATION DIVISION. THE EMRD CAN BE CONTACTED AT (305) 372-6700.
- PUMPS MUST COMPLY WITH THE NATIONAL ELECTRICAL CODE (NEC) REQUIREMENTS FOR CLASS I, GROUP D, DIVISION 1 LOCATIONS (EXPLOSION PROOF).
- THE CONTRACTOR IS ADVISED THAT A TREE PERMIT MAY BE REQUIRED FOR TREE REMOVAL. PRIOR TO REMOVING ANY TREES, THE CONTRACTOR SHALL NOTIFY THE REGULATORY AND ECONOMIC RESOURCES DEPARTMENT AT (305) 372-6574 AND CORRESPONDING MUNICIPALITY. THOSE TREES NOT INTERFERING WITH THE CONSTRUCTION SHALL BE PROTECTED IN-PLACE.
- PLEASE NOTE THAT THE DEMOLITION, REMOVAL, AND/OR DISTURBANCE OF EXISTING UNDERGROUND UTILITIES THAT CONTAIN ASBESTOS-CEMENT PIPES (ACP) ARE SUBJECT TO THE PROVISIONS OF 40 CFR-61 SUBPART M. THEREFORE, PURSUANT TO THE PROVISIONS OF 40 CFR-61-145, A NOTICE OF DEMOLITION OR ASBESTOS RENOVATION FORM MUST BE FILED WITH THE AIR QUALITY MANAGEMENT DIVISION (AQMD) OF DERM, AT LEAST TEN (10) WORKING DAYS PRIOR TO STARTING ANY WORK. NOTE THAT THE BACKFILLING AND BURIAL OF CRUSHED ACP WOULD CAUSE THESE LOCATIONS TO BE CONSIDERED ACTIVE DISPOSAL SITES AND SUBJECT TO 40 CFR-61.154, AND 40 CFR-61.151. A YEAR AFTER PROJECT COMPLETION, EXISTING STANDARD OPERATING PROCEDURES, AS WELL AS APPLICABLE FEDERAL, STATE AND LOCAL REGULATORY CRITERIA, MUST BE FOLLOWED AND IMPLEMENTED TO MINIMIZE ANY POTENTIAL RELEASE OF FUGITIVE EMISSIONS, ESPECIALLY DURING PROJECT CONSTRUCTION ACTIVITIES. THE AQMD CAN BE CONTACTED VIA EMAIL AT ASBESTOS@MIAMIADADE.GOV OR 305-372-6925.
- ALL EXISTING MAINS BEING IMPACTED BY THIS PROJECT AND ALL PROP. WATER/SEWER FORCE MAINS AND FITTINGS SHALL BE RESTRAINED PER GS 2.0.

NOTE:

- THE FOLLOWING ACTIVITIES ON EXISTING WATER SERVICES AND/OR EXISTING WATER MAINS SUCH AS:
 - CUT AND PLUGS
 - WATER MAIN OFFSETS
 - INTERCONNECTIONS
 - SERVICE INSTALLATIONS /RETIREMENTS /SERVICE TRANSFERS
 - HYDRANT INSTALLATIONS /RETIREMENTS /RELOCATIONS
 - ANY WORK THAT MAY AFFECT THE QUALITY AND/OR QUANTITY OF WASD'S WATER, TRANSMISSION AND DISTRIBUTION SYSTEM

SHALL BE PERFORMED BY A LICENSED CONTRACTOR UNDER THE SUPERVISION OF WASD LICENSED OPERATOR AND WASD DONATIONS INSPECTOR UNDER THE SCOPE AND JURISDICTION OF THE CONTRACTOR'S RIGHT-OF-WAY PERMIT. PRIOR TO ANY WORK BEING DONE, THE LICENSED CONTRACTOR SHALL COORDINATE WITH WASD DONATION INSPECTOR FOR THE SCHEDULING OF LICENSED OPERATOR TO BE PRESENT FOR PROPOSED ACTIVITY.

HEALTH DEPARTMENT NOTES:

(NOT PART OF MD-WASD NOTES OR APPROVAL)

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 PIPES 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. MAY BE REDUCED TO 3 FT. WHERE THE BOTTOM OF WATER MAINS IS AT LEAST 6 INCHES ABOVE TOP OF SEWER.

WATER MAIN VERTICAL SEPARATIONS

- SEPARATIONS BETWEEN WATER MAINS AND GRAVITY SEWER, VACUUM TYPE SEWER, OR STORM SEWERS, TO BE PREFERABLY 12 INCHES, OR AT LEAST 6 INCHES ABOVE OR BELOW.
- PRESSURE SANITARY SEWER, WASTEWATER OR STORMWATER FORCE MAIN OR RECLAIMED WATER, AT LEAST 12 INCHES ABOVE OR BELOW.

* NOTE: 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 PRESSURE SEWERS, WASTEWATER FORCE MAINS OR RECLAIMED WATER.

LEGEND

- WM ----- Exist. Water Main
 - ST ----- Exist. Storm Sewer
 - San ----- Exist. Sanitary Sewer
 - FM ----- Exist. Force Main
 - BE ----- Exist. Buried Electrical
 - BFO ----- Exist. Buried Fiber Optic
 - G ----- Exist. Gas
 - CL ----- Center line
 - BL ----- Base line
 - CL&BL ----- Center line and Base line
 - M ----- Monument line
 - S ----- Section line
 - R/W ----- Right of way line
 - P ----- Property line
 - TEL ----- Exist. Telephone
 - UG ----- Exist. Electric underground
 - CATV ----- Exist. Cable underground
 - Chainlink ----- Exist. Chainlink fence
- REQ'D. Required
O/S Offset
D.I. Ductile Iron
REST. J. Restrained Joint
- Exist. Guy Wire Anchor
 - Exist. Street Light Pole
 - Exist. Utility Conc. Pole
 - Exist. Utility Pole
 - Exist. Flood Light
 - Exist. Traffic Light Pole
 - Exist. Pedestrian Crossing Light
 - Exist. Electric Box
 - Exist. Street Light Box
 - Exist. Telephone Box
 - Exist. Traffic Signal Box
 - Exist. Cable TV Box
 - Exist. C.B.
 - Exist. Electric MH
 - Exist. Storm MH
 - Exist. Sanitary MH
 - Exist. Telephone MH
 - Exist. Water MH
 - Exist. Well
 - Exist. Sprinkler
 - Exist. Fire Hydrant
 - Exist. Valve
 - Exist. Core Boring
 - Exist. Sign
 - Exist. Single Water Meter
 - Prop. Single Water Meter
 - Prop. Dual Water Meter
 - Limits of milling and resurfacing pavement restoration
 - Exist. Tree BORE
 - Exist. Palm
 - Exist. Hedge

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Date: _____



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**RICKENBACKER CAUSEWAY
COMFORT STATION NO. 2
SANITARY SEWER CONNECTION**
RICKENBACKER CAUSEWAY
MIAMI-DADE COUNTY, FLORIDA

Project Title:

Sheet Title:
GENERAL NOTES AND LEGEND

No.	Date	Description
1	05/19/2023	WASD COMMENTS
2	07/10/2023	PERMIT COMMENTS

DESIGNED BY: MT
DATE: 12/2022
OWN BY: MT
CKD BY: KK
PROJECT MANAGER: KEVIN KEANE, P.E.
PLOT SCALE: NA
SIZE: 36"x24"
FILE NAME: BorderBND.dwg

CONTRACT No. 422003-20-001
C-2
Sheet 2 of 11



This item has been digitally signed and sealed by Kevin Keane, P.E. on the date adjacent to the seal.
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ITEM	CROSS REF.	SPEC. REF.
1. ALL MATERIALS AND LABOR UNDER THIS PROJECT SHALL BE IN STRICT ACCORDANCE WITH THE REQUIREMENTS OF THE MIAMI-DADE WATER AND SEWER DEPARTMENT AND SHALL CONFORM TO THE STANDARDS AND SPECIFICATIONS AVAILABLE AND ON FILE WITH THE DEPARTMENT. SUBMIT SHOP DRAWINGS FOR ALL MATERIALS.		
2. COVER OVER WATER OR SEWER FORCE MAINS SHALL BE 4'-0" MIN.		
3. ALL MAIN LINE VALVES SHALL BE INSTALLED COMPLETE WITH 10" RISER PIPES AND NO. 3 OR S3 VALVE BOXES FIRE HYDRANTS AND SERVICE VALVES SHALL BE INSTALLED COMPLETE WITH 6" RISER PIPES AND NO. 2 VALVE BOXES.		
4. ALL FORCE MAIN SERVICE CONNECTIONS INTO PRESSURE TRANSMISSION MAINS SHALL HAVE A SHUT OFF VALVE AND CHECK VALVE AT THE POINT OF ENTRY.		
5. ALL GRAVITY SYSTEMS SHALL BE CONSTRUCTED IN ACCORDANCE WITH DEPARTMENT STANDARDS.		
6. ALL WATER METERS WILL BE INSTALLED BY THE MIAMI-DADE WATER AND SEWER DEPARTMENT, PROVIDING THE APPROPRIATE CHARGES HAVE BEEN PREPAID.		
7. FIRE HYDRANT REQUIREMENTS (NUMBER AND LOCATION) SHALL BE AS REQUIRED BY MIAMI-DADE COUNTY FIRE DEPARTMENT OR THE APPROPRIATE FIRE AGENCY WITH INSTALLATION IN ACCORDANCE WITH DEPARTMENT STANDARDS.		
8. CONTRACTOR MUST CALL MDWASD INSPECTION DIVISION TO ARRANGE FOR A PRECONSTRUCTION MEETING 2 FULL BUSINESS DAYS PRIOR TO PROPOSED START OF CONSTRUCTION. CONTACT ONE CALL CENTER 48 HRS PRIOR TO EXCAVATION.		
9. CONTRACT INSPECTOR WILL INSPECT ANY FACILITIES APPROVED BY THE DEPARTMENT. ALL OTHER REQUIREMENTS OF THE PERMITTING AGENCY SHALL BE IN ACCORDANCE WITH THEIR STANDARDS AND REQUIREMENTS.		
10. WORK PERFORMED UNDER THIS PROJECT WILL NOT BE CONSIDERED AS COMPLETE UNTIL FINAL ACCEPTANCE OF THE SYSTEM BY THE DEPARTMENT AND UNTIL THE FOLLOWING DOCUMENTS ARE RECEIVED AND APPROVED BY THE DEPARTMENT: <ol style="list-style-type: none"> EASEMENTS, IF REQUIRED CONTRACTOR'S WAIVER AND RELEASE OF LIEN ABSOLUTE BILL OF SALE CONTRACTOR'S LETTER OF WARRANTY (I.E., LETTER AGREEMENT) DEVELOPER'S CONTRACT BOND (I.E., CONTRACT AGREEMENT) 		
11. "RECORD DRAWING" PRINTS (24"x 36") SHOWING SPECIFIC LOCATIONS, DEPTH, ETC. OF ALL WATER AND SEWER FACILITIES AS LOCATED BY A LICENSED SURVEYOR & MAPPER, ALONG WITH PRINTS OF "RECORD DRAWINGS" WHICH HAVE BEEN SIGNED AND SEALED BY A REGISTERED SURVEYOR & MAPPER. (NO. OF PRINTS: 3-FOR WATER, 4-FOR GRAVITY SEWER AND 5-FOR FORCE MAIN OR PUMP STATION PROJECTS). Submit of final CAD Files required.		
12. AN APPROVED PAVING AND DRAINAGE PLAN MUST BE SUBMITTED TO MDWASD FOR ALL NEW SUBDIVISIONS PRIOR TO APPROVAL OF WATER AND SEWER PERMIT PLANS, UPON REQUEST.		
13. UNLESS OTHERWISE SPECIFIED, ALL TAPS 20 INCHES AND SMALLER FOR CONNECTIONS TO EXISTING MAINS WILL BE DONE BY DEPARTMENT FORCES. UNDER NO CIRCUMSTANCES WILL THE CONTRACTOR BE PERMITTED TO TAP EXISTING MAINS IN THE SIZE RANGE SPECIFIED ABOVE. THE TAPPING SLEEVE AND TAPPING VALVE ARE FURNISHED AND INSTALLED BY THE CONTRACTOR UNDER THE SUPERVISION OF THE INSPECTOR.		

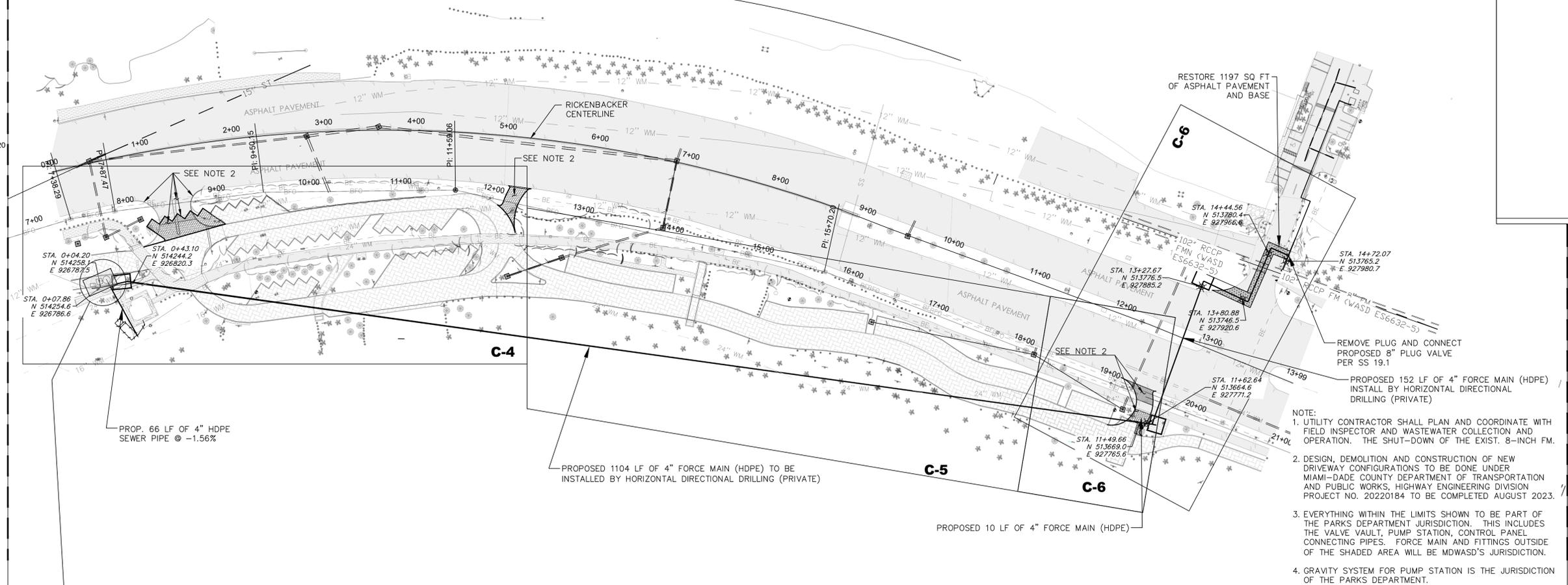
ITEM	CROSS REF.	SPEC. REF.
1. AT THE COMPLETION OF ANY WATER AND SEWER JOB EITHER DONATION OR CONTRACT, THE CONTRACTOR SHALL SUBMIT: <ol style="list-style-type: none"> RECORD DRAWING PRINTS WHICH HAVE BEEN SIGNED AND SEALED BY A FLORIDA LICENSED PROFESSIONAL SURVEYOR AND MAPPER (QTY. OF PRINTS AS REQUIRED BY THE DEPARTMENT). 		
2. "RECORD DRAWING" FORMAT: <ol style="list-style-type: none"> 24"x 36" PRINTS PDF FILE CADD FILE (DWG OR DXF) ROTATED AND TRANSLATED TO STATE PLANE COORDINATES AND 83 FLORIDA EAST ZONE THE WORDS "RECORD DRAWING" IN LARGE LETTERS TITLE BLOCK WITH DEPARTMENT DS, DW OR ER NUMBER AND PERTINENT INFORMATION PREFERRED SCALE TO BE 1"= 40' HORIZONTALLY AND 1"= 4' VERTICALLY* STREET NOMENCLATURE SEPARATE RECORD DRAWINGS FOR WATER AND SEWER SEPARATE WATER AND SEWER PROFILE STATIONING STARTING WITH 0+00 AT PERMANENT REFERENCE POINT (I.E. §, §, ETC.) OR AS SHOWN ON DESIGN PERMIT PLANS, AND TO RUN CONTINUOUSLY TO END OF MAIN EASEMENTS, IF ANY, TIED TO PERMANENT REFERENCE POINT IDENTIFY ALL CONTROL LINES (I.E. BLDG. LINE, PROPERTY LINE, R/W, ETC.) ALL "PROPOSED" INFORMATION TO BE REMOVED FROM PRINTS, LEAVING ONLY RECORD DRAWING INFORMATION REFLECTED IN DRAWINGS 		
3. WATER "RECORD DRAWINGS" MUST INCLUDE: <ol style="list-style-type: none"> PLANS SHOWING PIPE SIZE, MATERIAL AND OFFSET OF MAIN, DEFLECTIONS (IF ANY), STATION OF SERVICES, HYDRANTS, VALVES, FITTINGS, IF ANY, ALL IN STATE PLANE COORDINATES. UTILITY CROSSINGS SHALL BE CLEARLY IDENTIFIED AND LOCATED. PROFILE SHOWING TOP OF GROUND AND TOP OF PIPE ELEVATIONS AT EVERY 100' STATION AND AT ANY CHANGE IN GRADE (WITH CORRESPONDING STATION), PIPE SIZE AND PIPE MATERIALS REFERRED TO PLAN. 		
4. SEWER "RECORD DRAWINGS" MUST INCLUDE: <ol style="list-style-type: none"> PLAN SHOWING MANHOLE NUMBER, PIPE SIZE AND PIPE MATERIAL OF PIPE, DEFLECTION, SLOPE OF GRAVITY SEWER, LOCATION OF LATERALS WITH REFERENCE TO MANHOLE AND CLEANOUTS. THE NORTHERLY AND EASTERLY COORDINATES ON ALL FIELD OBTAINED MEASUREMENTS AND PROVIDED ON ALL RECORD DRAWING SUBMITTALS PROFILE SHOWING MANHOLE NUMBER (AS PER PLAN), RIM AND INVERT ELEVATIONS (IF MORE THAN ONE INVERT, LABEL NORTH, SOUTH, ETC.), AND STATION STARTING AT 0+00 AT DOWNSTREAM MANHOLE. 		
5. FORCE MAIN "RECORD DRAWING" SAME AS WATER MAIN.		
6. EACH RECORD DRAWING SHALL SHOW THE FLORIDA STATE PLANE COORDINATES (CURRENT READJUSTMENT) OF ALL THE MANHOLES AND VALVES AND OF AT LEAST TWO HORIZONTAL CONTROL POINTS PROPERLY IDENTIFIED AND LOCATED WITHIN THE PROJECT.		
* OTHER SCALE MAY BE PERMITTED, BUT MUST BE APPROVED BY THE DEPARTMENT PRIOR TO PREPARATION OF DRAWINGS.		

ISSUE DATE	APPROVED BY	STANDARD DETAIL	CROSS REF.	SPEC. REF.
03/01/2010	V.F.C.	STANDARD REQUIREMENTS WATER AND SEWER CONSTRUCTION	GS	0.5
07/20/2016	D.V.			

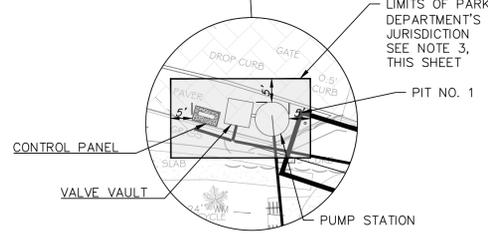
SHEET 1 of 2

ISSUE DATE	APPROVED BY	STANDARD DETAIL	CROSS REF.	SPEC. REF.
03/11/2009	V.F.C.	"RECORD DRAWING" REQUIREMENTS	GS	0.5
07/20/2016	D.V.			

SHEET 2 of 2



- NOTE:**
1. UTILITY CONTRACTOR SHALL PLAN AND COORDINATE WITH FIELD INSPECTOR AND WASTEWATER COLLECTION AND OPERATION. THE SHUT-DOWN OF THE EXIST. 8-INCH FM.
 2. DESIGN, DEMOLITION AND CONSTRUCTION OF NEW DRIVEWAY CONFIGURATIONS TO BE DONE UNDER MIAMI-DADE COUNTY DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS, HIGHWAY ENGINEERING DIVISION PROJECT NO. 20220184 TO BE COMPLETED AUGUST 2023.
 3. EVERYTHING WITHIN THE LIMITS SHOWN TO BE PART OF THE PARKS DEPARTMENT JURISDICTION. THIS INCLUDES THE VALVE VAULT, PUMP STATION, CONTROL PANEL CONNECTING PIPES. FORCE MAIN AND FITTINGS OUTSIDE OF THE SHADED AREA WILL BE MDWASD'S JURISDICTION.
 4. GRAVITY SYSTEM FOR PUMP STATION IS THE JURISDICTION OF THE PARKS DEPARTMENT.



Kevin A. Keane, P.E.
Civil Engineer, No. 53177
State of Florida
2100 Ponce de Leon Blvd., Suite 1270
Coral Gables, Florida 33134
Date: _____



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C.A. No. 6658
(305) 599-8495

Project Title:
**RICKENBACKER CAUSEWAY
COMFORT STATION No. 2
SANITARY SEWER CONNECTION**
RICKENBACKER CAUSEWAY
MIAMI-DADE COUNTY, FLORIDA

Sheet Title:
**PROPOSED 4" FORCE
MAIN (OVERALL SITE
PLAN)**

No	Date	Description
1	06/09/2023	WASD COMMENTS
2	07/10/2023	PERMIT COMMENTS
3	09/21/2023	PERMIT COMMENTS

DESIGNED BY: MT DATE: 12/2022
DWN BY: MT CKD BY: KK
PROJECT MANAGER: KEVIN KEANE, P.E.
PLOT SCALE: SIZE
1" = 60' 36"X24"
FILE NAME: BorderBND.dwg

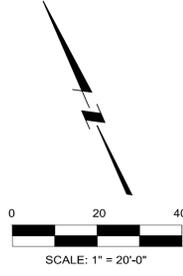
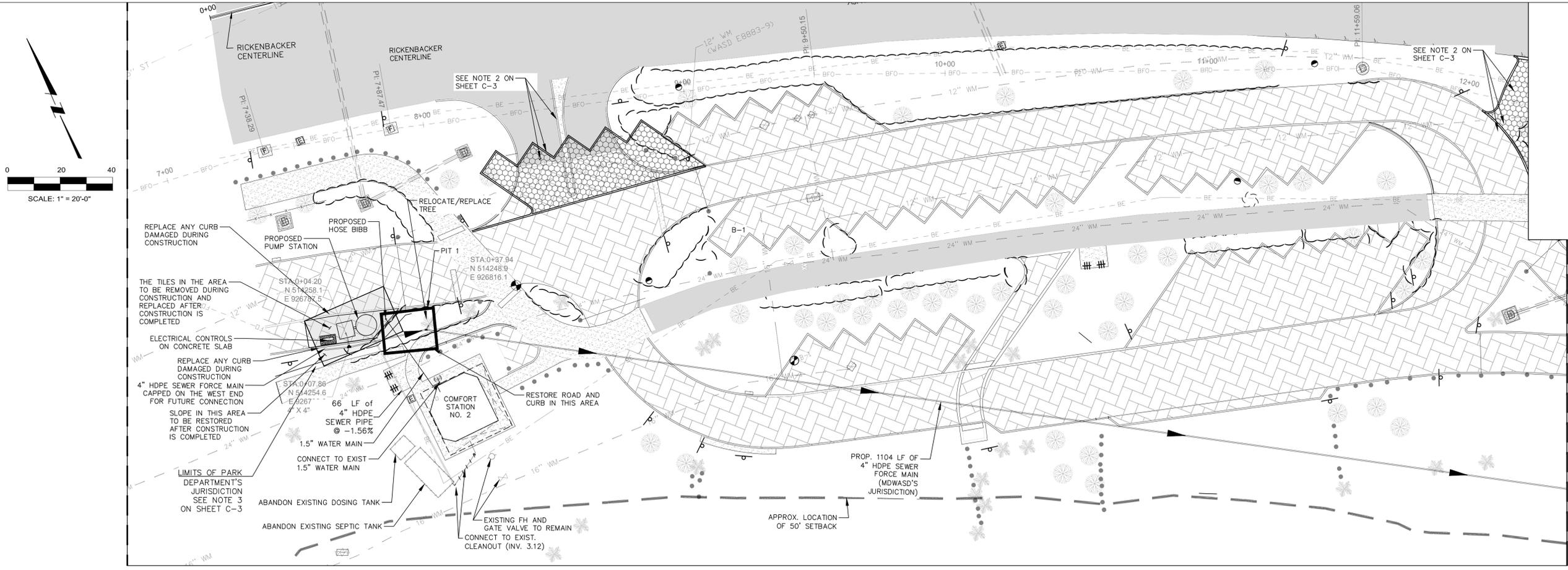
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Sheet
3 of 11



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CONTINUED SHEET C-5

CONTINUED SHEET C-5

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Civil Engineer, No. 53177
State of Florida
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Coral Gables, Florida 33134
Date: _____



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(305) 599-8495

Project Title:
**RICKENBACKER CAUSEWAY
COMFORT STATION NO. 2
SANITARY SEWER CONNECTION**
RICKENBACKER CAUSEWAY
MIAMI-DADE COUNTY, FLORIDA

Sheet Title:
**PROPOSED
4" FORCE MAIN AND
PROFILE (SHEET 1)**

No	Date	Description
1	06/09/2023	WASD COMMENTS
2	07/10/2023	PERMIT COMMENTS
3	09/21/2023	PERMIT COMMENTS

DESIGNED BY: MT DATE: 12/2022
DWN BY: MT CKD BY: KK
PROJECT MANAGER: KEVIN KEANE, P.E.
PLOT SCALE: 1" = 20' SIZE: 36"X24"
FILE NAME: BorderBND.dwg

CONTRACT No
422003-20-001

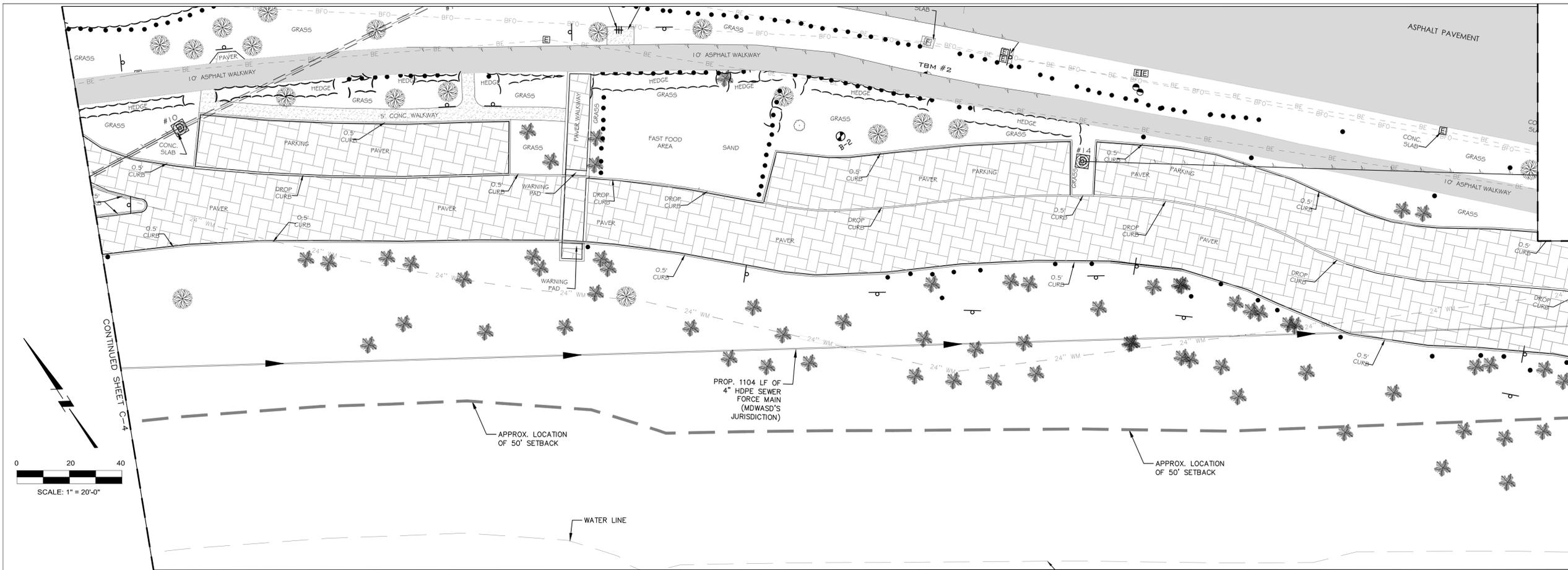
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Sheet
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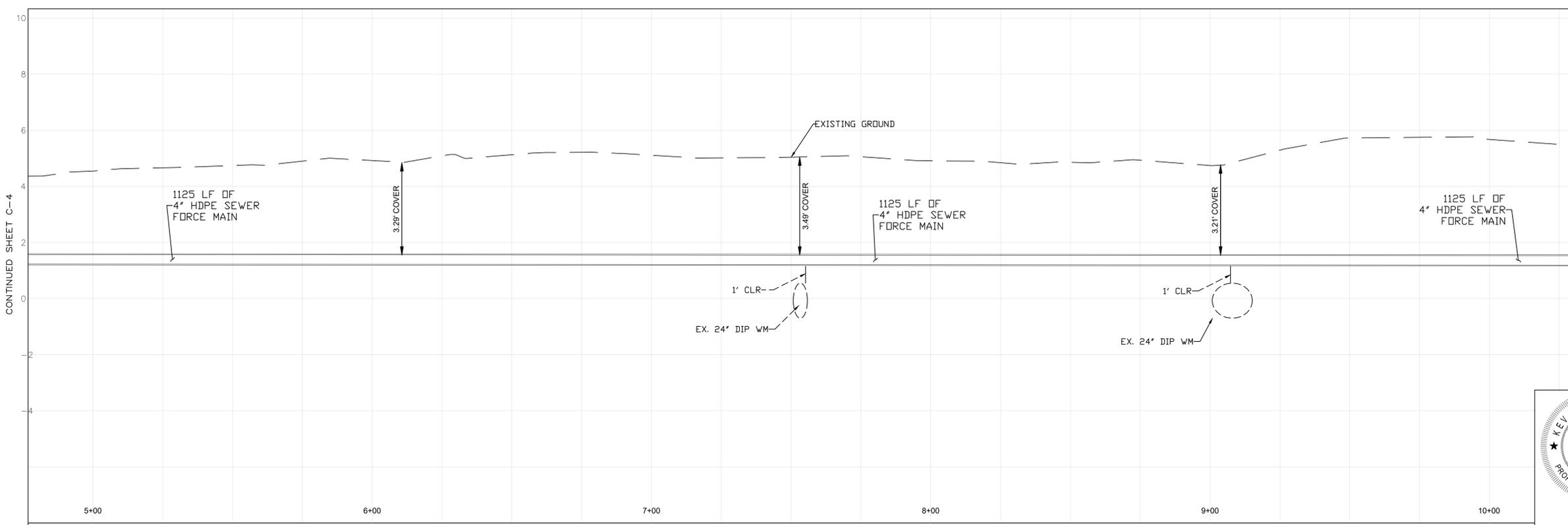
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WASD Agreement No. 31722



CONTINUED SHEET C-6



CONTINUED SHEET C-6



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Date: _____



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Project Title:
**RICKENBACKER CAUSEWAY
COMFORT STATION No. 2
SANITARY SEWER CONNECTION**
RICKENBACKER CAUSEWAY
MIAMI-DADE COUNTY, FLORIDA

Sheet Title:
**PROPOSED
8" FORCE MAIN AND
PROFILE (SHEET 2)**

No.	Date	Description
1	06/09/2023	WASD COMMENTS
2	07/10/2023	PERMIT COMMENTS

DESIGNED BY: MT DATE: 12/2022
DWN BY: MT CKD BY: KK
PROJECT MANAGER: KEVIN KEANE, P.E.
PLOT SCALE: 1" = 20' SIZE: 36" X 24"
FILE NAME: BorderBND.dwg

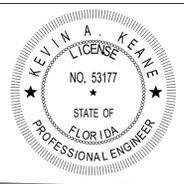
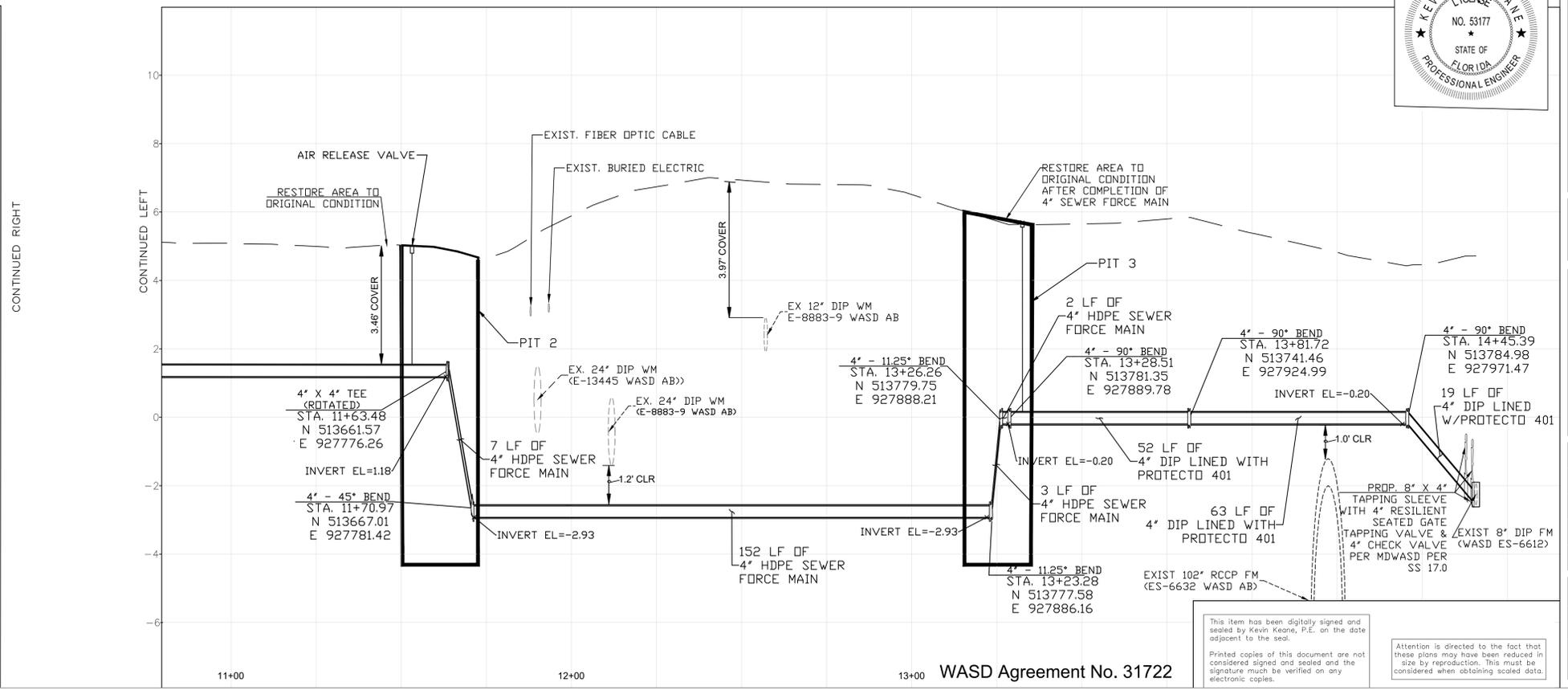
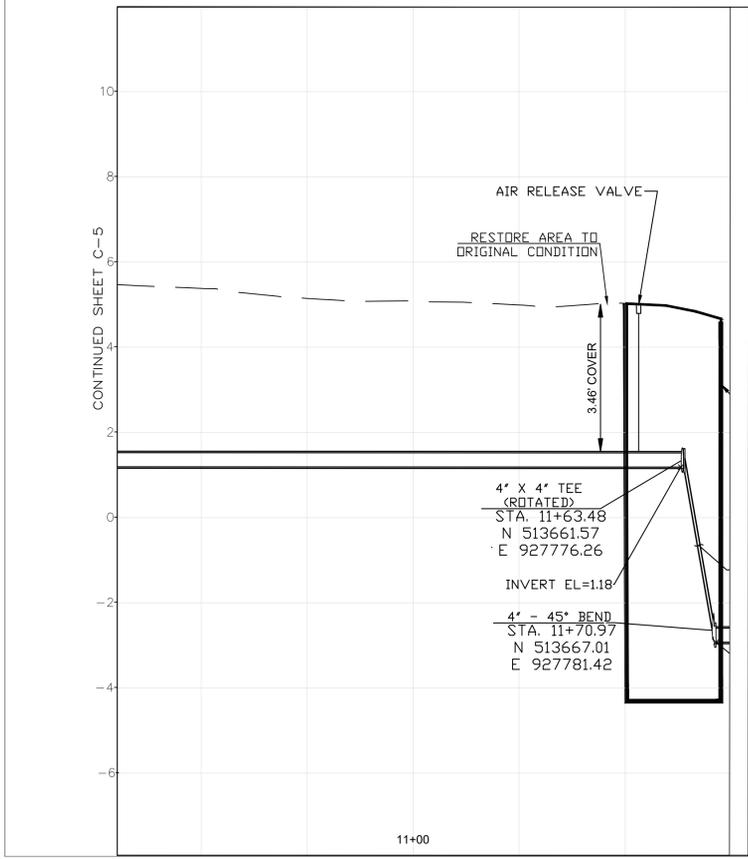
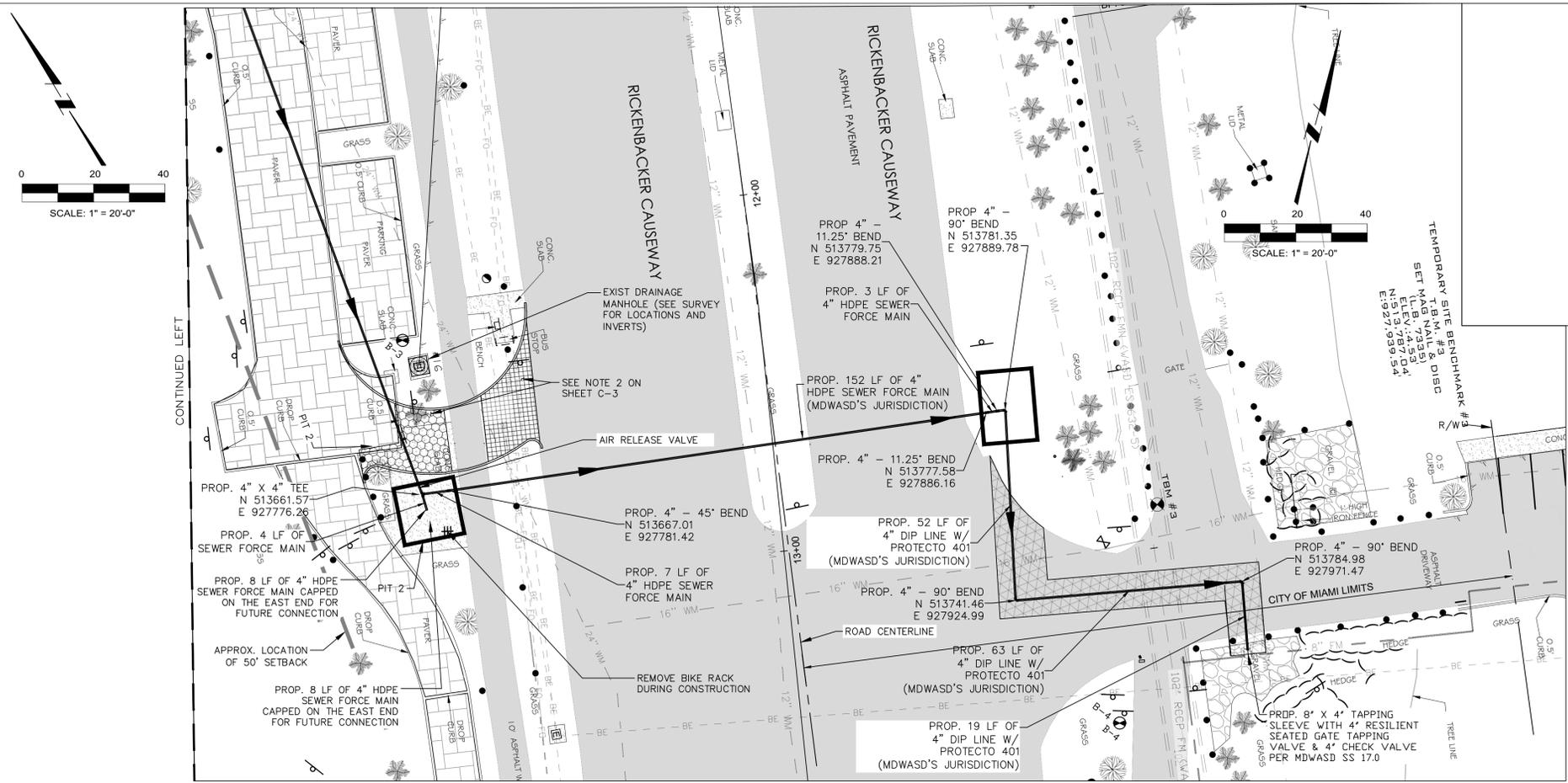
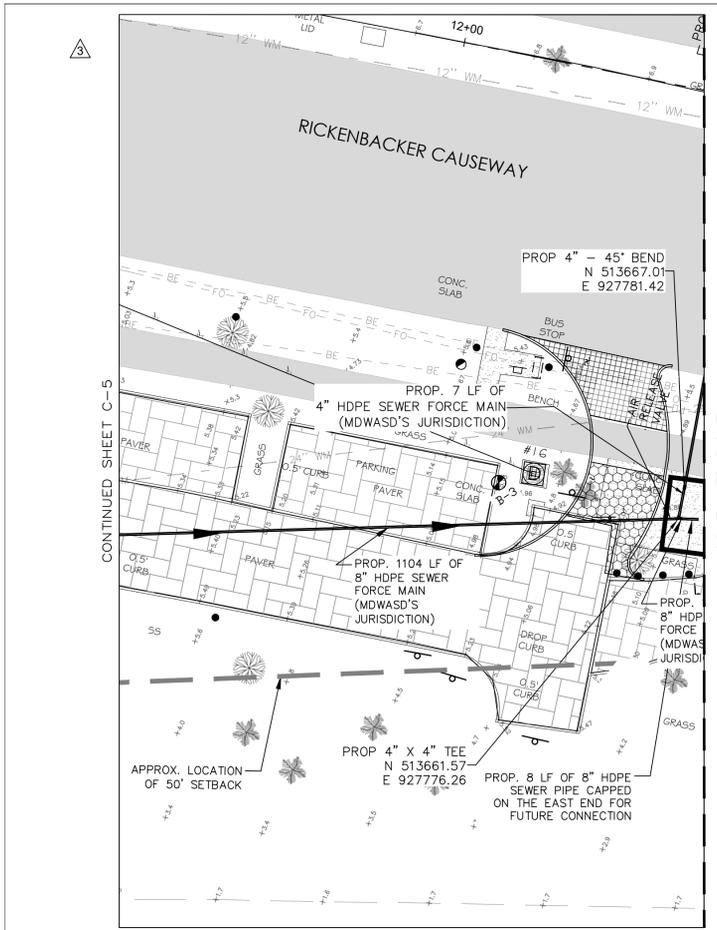
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Sheet
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WASD Agreement No. 31722

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Project Title:
**RICKENBACKER CAUSEWAY
COMFORT STATION No. 2
SANITARY SEWER CONNECTION**
RICKENBACKER CAUSEWAY
MIAMI-DADE COUNTY, FLORIDA

Sheet Title:
**PROPOSED
8" FORCE MAIN AND
PROFILE (SHEET 3)**

No	Date	Description
1	06/09/2023	WASD COMMENTS
2	07/10/2023	PERMIT COMMENTS

DESIGNED BY: MT DATE: 12/2022
DWN BY: MT CKD BY: KK
PROJECT MANAGER: KEVIN KEANE, P.E.
PLOT SCALE: 1" = 20' SIZE: 36"X24"
FILE NAME: BorderBND.dwg

CONTRACT No.
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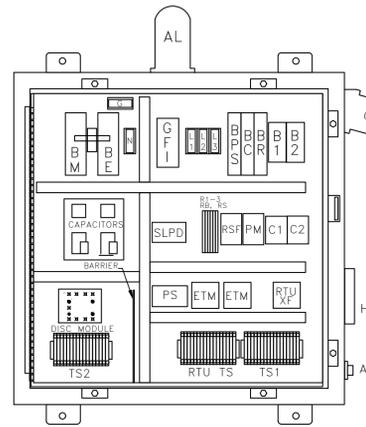
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CONTROL CENTER DESIGNED & MANUFACTURED TO MEET ALL D.E.P. REQUIREMENTS

CONTROL CENTER

SEE SCHEDULE FOR ELECTRICAL SERVICE REQUIREMENTS



INTERIOR LAYOUT (DOOR NOT SHOWN FOR CLARITY)

TS1 TERMINAL SCHEDULE

NO.	DESCRIPTION	NO.	DESCRIPTION	NO.	DESCRIPTION	NO.	DESCRIPTION
1	RTU PUMP	11	RTU PUMP	21	RTU PUMP	31	RTU PUMP
2	RTU PUMP	12	RTU PUMP	22	RTU PUMP	32	RTU PUMP
3	RTU PUMP	13	RTU PUMP	23	RTU PUMP	33	RTU PUMP
4	RTU PUMP	14	RTU PUMP	24	RTU PUMP	34	RTU PUMP
5	RTU PUMP	15	RTU PUMP	25	RTU PUMP	35	RTU PUMP
6	RTU PUMP	16	RTU PUMP	26	RTU PUMP	36	RTU PUMP
7	RTU PUMP	17	RTU PUMP	27	RTU PUMP	37	RTU PUMP
8	RTU PUMP	18	RTU PUMP	28	RTU PUMP	38	RTU PUMP
9	RTU PUMP	19	RTU PUMP	29	RTU PUMP	39	RTU PUMP
10	RTU PUMP	20	RTU PUMP	30	RTU PUMP	40	RTU PUMP

JUMPERS

TS1	TS2	TS3	TS4
ALL OFF	CALL LEAD	CALL LAG	HIGH ALARM

TS2 TERMINAL SCHEDULE

1	2	3	4
5	6	7	8
9	10	11	12
13	14	15	16
17	18	19	20
21	22	23	24
25	26	27	28
29	30	31	32
33	34	35	36
37	38	39	40

PANEL COMPONENTS

- AL ALARM LIGHT
- ALT ALTERNATOR (ON DISC)
- AS ALARM SILENCE SWITCH
- B1-2 MOTOR BREAKERS
- BC CONTROL BREAKER
- BE EMERGENCY BREAKER
- BM MAIN BREAKER
- BFS POWER SUPPLY BREAKER
- BR RECEPTACLE BREAKER
- C1-2 CONTACTOR, MOTOR START
- GF1 CONVENIENCE RECEPTACLE
- DISC DUPLEX INTRINSICALLY SAFE CONTROLLER
- ETM ELAPSED TIME METER
- G GROUND BLOCK
- GR GENERATOR RECEPTACLE
- H HORN
- HOA HAND-OFF-AUTO SWITCH (ON DISC)
- L1,2,3 POWER DISTRIBUTION BLOCK
- N NEUTRAL BLOCK
- PL PILOT LIGHT (ON DISC)
- PM PHASE MONITOR
- PS POWER SUPPLY
- R1-3 RELAYS
- RB BATTERY RELAY
- RS SILENCE RELAY
- RSF SURGE FAIL RELAY
- RTUXF RTU TRANSFORMER
- SLPD SURGE/LIGHTNING PROTECTION DEV.
- TS1 TERMINAL STRIP FOR PUMPS
- TS2 TERMINAL STRIP FOR FLOATS

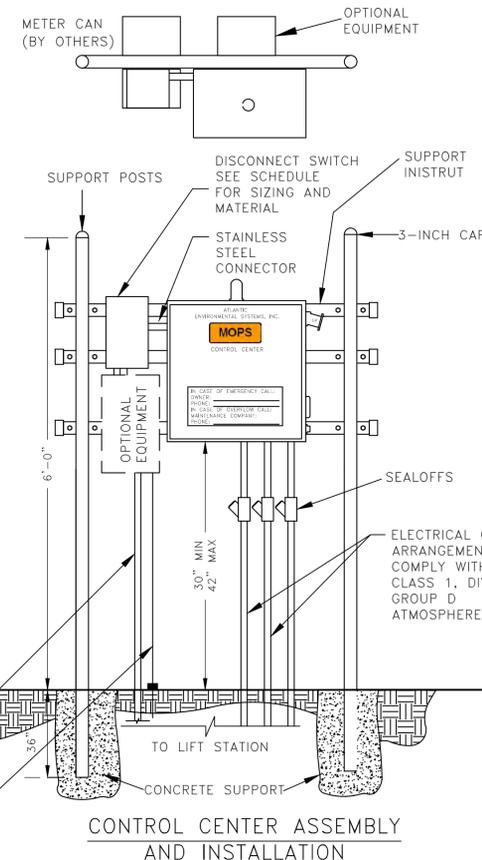
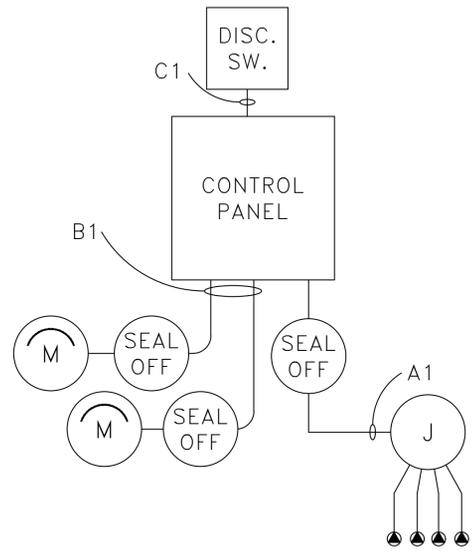
ENCLOSURE

NEMA 4X Stainless Steel
Single Door w/ Padlock Hosp
30"H x 30"W x 8"D

NOTES:

1. PANEL LABELED FOR U.L. 508A "MOTOR CONTROL CENTERS" AND U.L. 698A "HAZARDOUS LOCATION PANELS" (INTRINSICALLY SAFE)
2. COMPLETE BACK-UP, SELF-CHARGING BATTERY, WITH VISUAL/AUDIO ALARM SYSTEM PER RSWF-45.
3. SEE CONTROL PANEL DETAIL SHEET FOR ADDITIONAL NOTES.

SEWAGE PUMP STATION RISER DIAGRAM



THE SIZING, SUPPLY, AND INSTALLATION OF THE INCOMING ELECTRICAL AND GROUND WIRING IS PROVIDED BY OTHERS. (SEE NOTE 5)

CONTROL CENTER ASSEMBLY AND INSTALLATION

ELECTRICAL NOTES AND CHECK LIST

1. RISER DIAGRAM
 - 1.A. SEE DIAGRAM (POWER METER ON REAR SIDE OF CONTROL CENTER MOUNTING ASSEMBLY, WHEN APPLICABLE.)
 - 1.B. ALL PRE-WIRED CONTROL PANELS SHALL BE U.L. LISTED AND LABELED, PRIOR TO INSTALLATION.
 - 1.C. AMPS INTERRUPTING CAPACITY NOTED ON RISER DIAGRAM.
 - 1.D. SEAL OFFS SHALL BE USED AND CONFORM TO N.E.C. CH. 500 ON EACH WETWELL CONDUIT.
 - 1.E. ALL SERVICE EQUIPMENT SHALL HAVE A FUSIBLE DISCONNECT AND SHALL BE SERVICE RATED (WHERE APPLICABLE.)
 - 1.F. SUPPORT RACK DETAIL AND MATERIALS OF CONSTRUCTION ARE SHOWN ON PUMP STATION DRAWING.
 - 1.G. ALL EQUIPMENT SHALL COMPLY WITH N.E.C. 430-120 (ALL BREAKERS SHALL BE CAPABLE OF BEING LOCKED IN THE OPEN POSITION WHEN REQUIRED.)
2. PANEL SCHEDULE
 - 2.A. SERVICE AND METER ATTACHED TO BACK SIDE OF PUMP STATION CONTROL CENTER (WHEN APPLICABLE.)
3. LOAD CALCULATIONS
 - 3.A. NOTE LOAD CALCULATIONS IN DETAIL; NEUTRAL SHALL NOT BE DERATED.
4. MISCELLANEOUS
 - 4.A. ALL ELECTRICAL EQUIPMENT AND APPURTENANCES ARE IN COMPLIANCE WITH N.E.C. 110-16.
 - 4.B. CIRCUIT NUMBERS NOT APPLICABLE TO THIS PUMP STATION.
 - 4.C. CONDUIT SEAL-OFFS SHALL BE USED IN ACCORDANCE WITH N.E.C. SECTION 500-5-1 AND 500-5-A.
 - 4.D. PUMP STATION IS RATED CLASS 1, DIVISION 1, GROUP D, FOR HAZARDOUS LOCATION.
 - 4.E. ALL CABLES SHALL BE LISTED WITH A N.R.T.L. FOR USE AND APPLICATION. SUBMERSIBLE PUMP MOTOR CABLES WILL BE SUPPLIED INTEGRAL WITH THE MOTOR BY MANUFACTURER.
 - 4.F. FOR STATIONS IN MIAMI-DADE COUNTY, THE PUMP STATION IS SUPPLIED WITH A REMOTE-TELEMETRY MONITORING UNIT THROUGH THE A.E.S. MAINTENANCE SERVICE PROGRAM, THE R.T.U. ALLOWS FOR MONITORING OF THE LAG ALARM, HIGH ALARM, AND POWER FAILURE PER CHAPTER 24.42.2(5). THE R.T.U. IS EQUIPPED WITH A BATTERY BACK UP AND IS INSTALLED ABOVE THE 100 YEAR FLOOD ELEVATION.
5. INCOMING POWER SUPPLY AND GROUNDING
 - 5.A. THE DESIGN, SUBMITTAL, SUPPLY, SIZING, AND INSTALLATION OF ALL INCOMING POWER FEEDS, GROUNDING, AND GROUNDING CONDUCTORS ARE TO BE PROVIDED BY OTHERS; AND ARE REQUIRED TO COMPLY WITH THE NATIONAL ELECTRIC CODE AND ALL OTHER LOCAL BUILDING CODES.

SEWAGE PUMP STATION RISER SPECIFICATIONS

POWER = 1 PHASE / 60 HERTZ / 208 VAC / 2 WIRE + NEUTRAL/COMMON + GROUND
(2) 2.0 HP (1.5 KW) PUMP MOTORS WITH FULL LOAD AMPS OF 9.7 EACH
34 AMP MAX. RATING FOR CONTROL PANEL
60 AMP FUSIBLE DISCONNECT SWITCH AS SERVICE ENTRANCE WITH
35 AMP TIME DELAY (INDUCTION MOTOR DUTY) FUSES (QUANTITY 2)

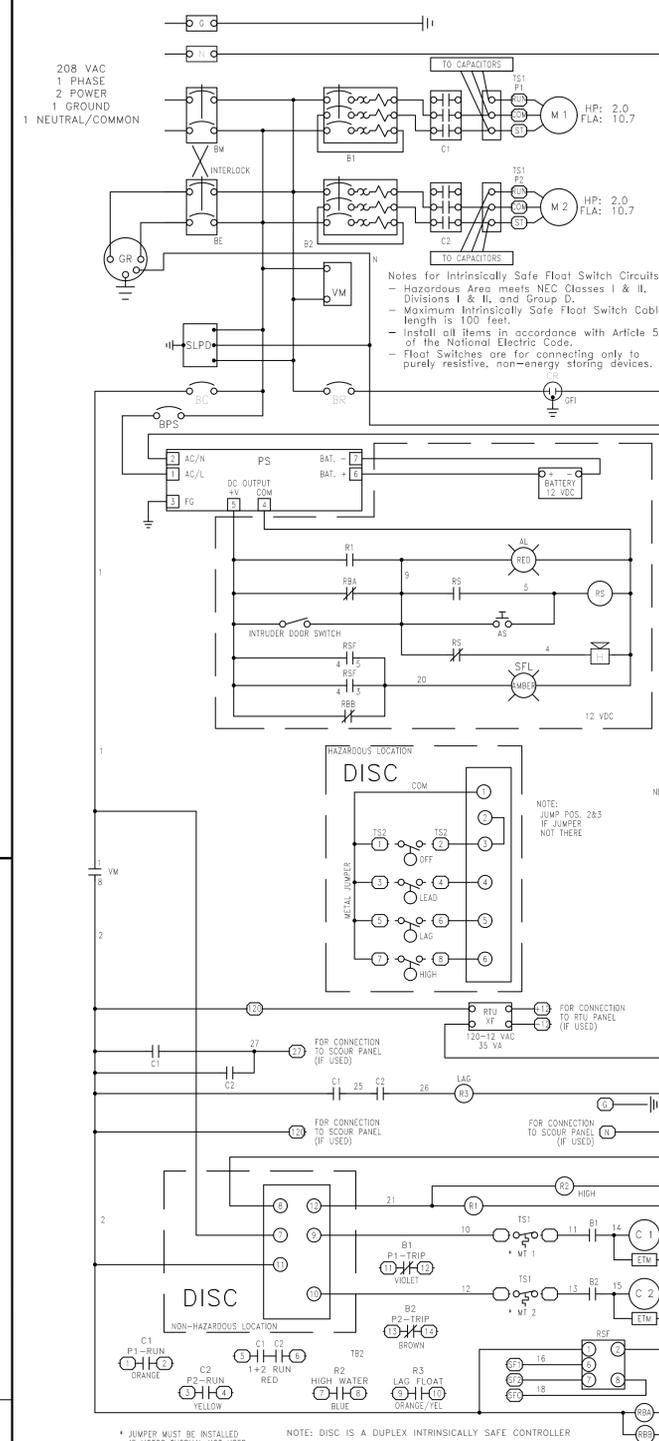
60 AMP DISCONNECT SWITCH
PUMP STATION DUPLEX CONTROL PANEL
PANEL MAIN & EMERGENCY CIRCUIT BREAKERS = 2 POLE
60 AMP, MIN 10 KAIC RATED
MOTOR OCPD RATED FOR 8-12 AMPS ADJUSTABLE

WIRE & CONDUIT SCHEDULE PER DRAWING:
A1 = MIN 1-1/4" RIGID GALVANIZED CONDUIT FOR (4) FLOAT LEVEL SWITCH CORDS
B1 = MIN 1-1/4" RIGID GALVANIZED CONDUIT FOR MOTOR POWER CABLES
C1 = MIN 1" (30A), MIN 1-1/4" (60A) MIN 2/0 (100A) MIN 3/0 (200A)
GALVANIZED STEEL CONDUIT NIPPLE BETWEEN DISCONNECT SWITCH AND CONTROL PANEL, WITH (4) 208-230V, OR (3) 460V MIN. SIZE AWG # 6 CONDUCTORS,
GROUND = AWG # 6 COPPER (GREEN)

SEWAGE PUMP STATION POWER LOAD CALCULATIONS

ALL CALCULATIONS ARE PER NATIONAL ELECTRIC CODE SECTION 230-91, 230-42 AND 220.
POWER = 1 PHASE / 60 HERTZ / 208 VAC / 2 WIRE + NEUTRAL/COMMON + GROUND
MOTOR = 2.0 HP (1.5 KW) WITH FULL LOAD AMPS = 10.7
PUMP MOTOR 1 = 10.7 AMPS
PUMP MOTOR 2 = 10.7 AMPS
MAX. CONTROL POWER = 1 AMPS
MAX. DUPLEX CONVENIENCE RECEPTACLE POWER = 8.0 AMPS
25% OF LARGEST MOTOR LOAD = 2.7 AMPS

TOTAL AMPS = 33.1 MAXIMUM
USE 34 AMP MAX. RATING FOR CONTROL PANEL
USE 60 AMP FUSIBLE DISCONNECT SWITCH AS SERVICE ENTRANCE (IF APPLICABLE)
USE 35 AMP TIME DELAY (INDUCTION MOTOR DUTY) FUSES (QUANTITY 2)



* JUMPER MUST BE INSTALLED IF MOTOR THERMAL NOT USED. NOTE: DISC IS A DUPLEX INTRINSICALLY SAFE CONTROLLER

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Project Title:
RICKENBACKER CAUSEWAY COMFORT STATION NO. 2 SANITARY SEWER CONNECTION
RICKENBACKER CAUSEWAY
MIAMI-DADE COUNTY, FLORIDA

Sheet Title:
ELECTRICAL CONTROL PANEL AND DETAILS

Revisions	Date	Description
1	06/09/2023	WASD COMMENTS
2	07/07/2023	PERMIT COMMENTS

DESIGNED BY: MT DATE: 12/2022
OWN BY: MT OKD BY: KK
PROJECT MANAGER: KEVIN KEANE, P.E.
PLOT SCALE: SIZE 36"X24"
FILE NAME: BorderBND.dwg

CONTRACT No 422003-20-001

C-8
Sheet 8 of 11



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