

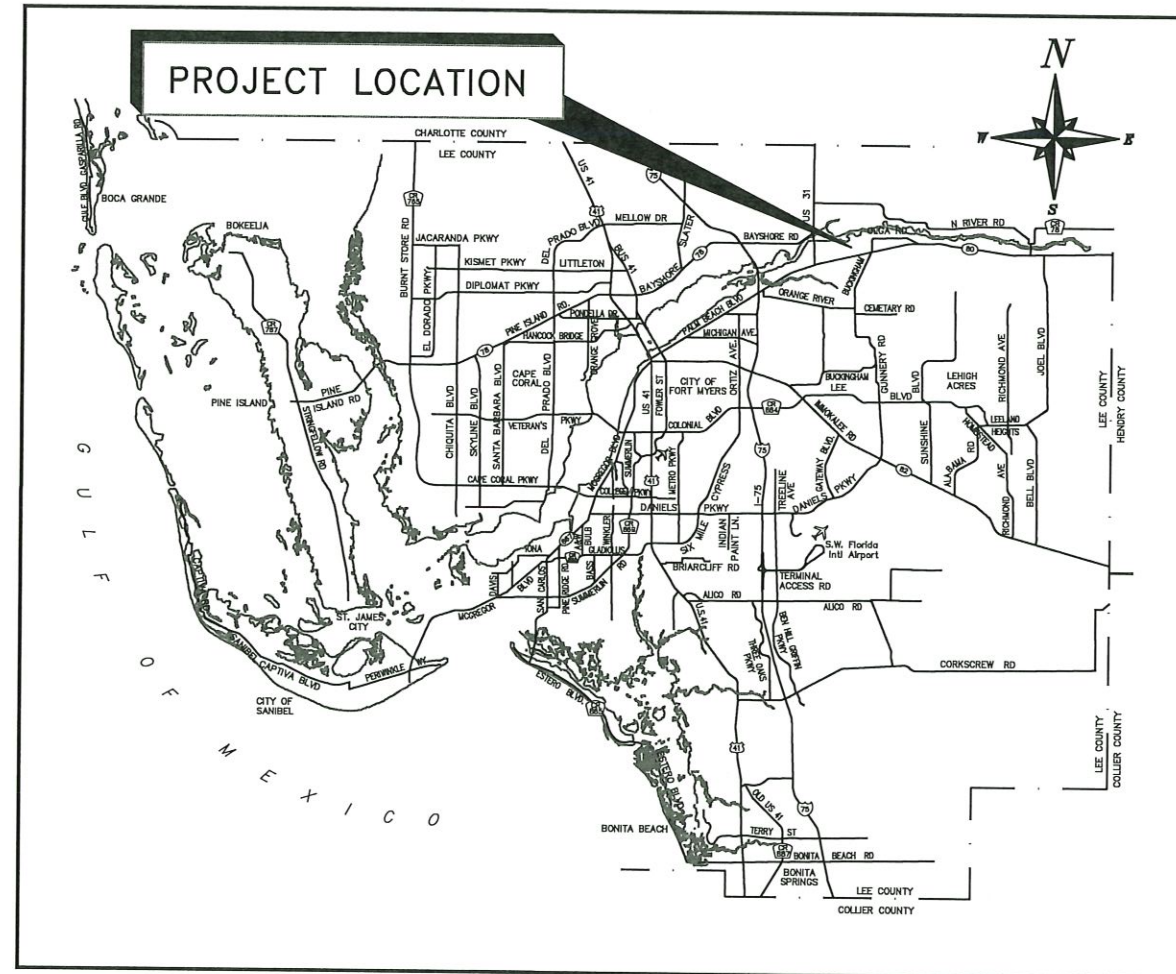
LEE COUNTY BOARD OF COUNTY COMMISSIONERS

LEE COUNTY UTILITIES ENGINEERING

FORT MYERS SHORES PHASE 1B WATER MAIN REPLACEMENT LEE COUNTY, FLORIDA

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ATTENTION IS DIRECTED IN THE FACT THAT THESE PLANS MAY HAVE BEEN REDUCED IN SIZE THROUGH REPRODUCTION. THIS MUST BE CONSIDERED WHEN OBTAINING SCALED DATA.

LEE COUNTY COMMISSIONERS

DIST 1.	Kevin Ruane
DIST 2.	Cecil L Pendergrass
DIST 3.	Raymond Sandelli
DIST 4.	Brian Hamman
DIST 5.	Frank Mann

COUNTY MANAGER

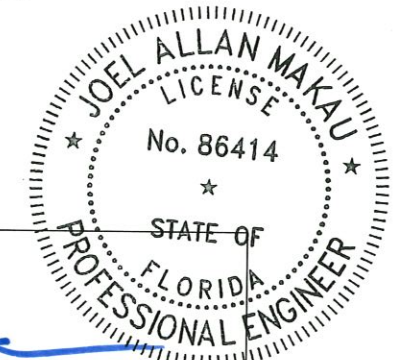
Roger Desjarlais

ASSISTANT COUNTY MANAGER

Christine Brady

DIRECTOR OF PUBLIC UTILITIES

Pamela S. Keyes, P.E.

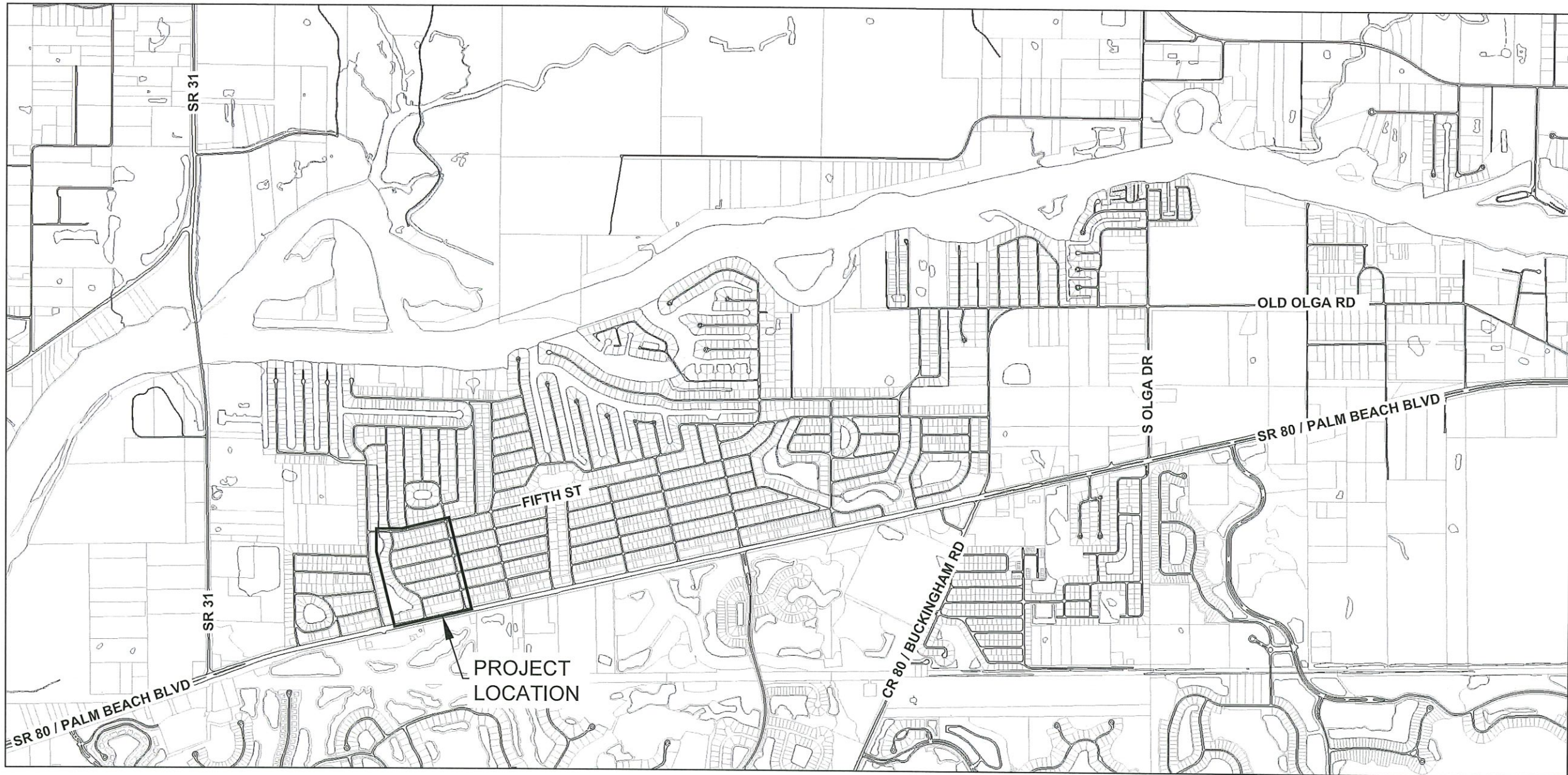


2/9/2021

DATE

JOEL ALLAN MAKAU
FLORIDA P.E. #86414

LEE COUNTY UTILITIES
1500 MONROE STREET, 3rd FLOOR
FT. MYERS, FL 33901



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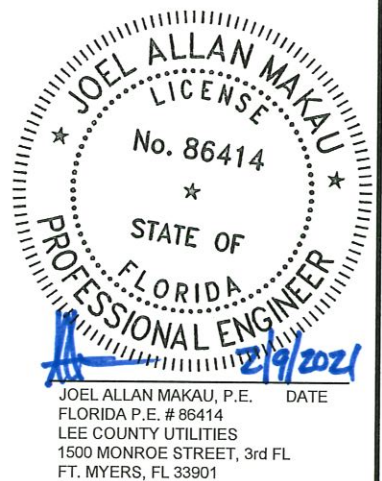
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- EXST. WATER MAIN
- EXST. SANITARY SEWER MAIN
- EXST. BURIED FIBER OPTIC
- EXST. BURIED ELEC
- EXST. BURIED TELE
- BE ... BURIED ELECTRIC
- BFO... BURIED FIBER OPTIC
- EOP... EDGE OF PAVEMENT
- FH FIRE HYDRANT
- FM ... FORCE MAIN
- GM ... GRAVITY MAIN
- G.V. .. GATE VALVE
- RW ... RIGHT OF WAY
- SW ... SIDEWALK
- T.S. ... TAPPING SLEEVE
- WM WATER MAIN
- WS WATER SERVICE

GENERAL NOTES

1. PROJECT SITE TO BE RESTORED TO PREVIOUS CONDITIONS.
2. CONTRACTOR TO FIELD VERIFY ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION.
3. WATER MAIN TO BE CONSTRUCTED WITH 30" MINIMUM GROUND COVER AND 36" MINIMUM UNDER ROADWAY PAVEMENT.
4. ALL EXISTING CUSTOMERS TO BE TRANSFERRED TO THE NEW WATER MAIN. EXISTING 2" WATER MAIN TO BE CAPPED AND ABANDONED IN-PLACE, EXISTING 4" OR LARGER WATER MAIN TO BE GROUTED AND ABANDONED IN-PLACE UPON COMPLETION OF THE NEW WATERMAIN AND ACCEPTANCE INTO SERVICE.
5. ALL EXISTING DRIVEWAYS TO BE RESTORED TO PREVIOUS CONDITIONS. CONCRETE DRIVEWAYS EFFECTED TO BE RESTORED FROM EDGE OF PAVEMENT TO FIRST JOINT.
6. FIRE HYDRANT ASSEMBLIES TO BE INSTALLED PER LCU DETAIL NO. 6.24 AND 6.25.
7. PROVIDE MINIMUM 2' OF HORIZONTAL SEPARATION BETWEEN SIDEWALK/PATH, TO ALL METER BOXES, VALVE PADS, HYDRANT BRANCH VALVES AND ASSEMBLIES.
8. PROVIDE MINIMUM 2' OF HORIZONTAL AND VERTICAL SEPARATION BETWEEN EXISTING DRAINAGE INLETS AND THE NEW WATERMAIN.
9. CONTRACTOR TO MAINTAIN ALL MINIMUM VERTICAL AND HORIZONTAL SEPARATION PER DEP BETWEEN ALL EXISTING AND PROPOSED WATER AND SANITARY SEWER.
10. CONTRACTOR SHALL NOT EXCEED 80% OF THE MANUFACTURERS RECOMMENDED MAXIMUM DEFLECTION WHEN DEFLECTING PIPE.
11. CONTRACTOR SHALL RESTORE ANY SIDEWALK DAMAGED DURING CONSTRUCTION WITH 6" THICK SIDEWALKS ON COMPACTED FILL FOR COUNTY-MAINTAINED ROADS.
12. DO NOT OPEN CUT PAVEMENT FOR WATER SERVICE INSTALLATION UNDER ROADWAY.

DESIGN PLAN NOTES

1. ALL ELEVATIONS ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM (NAVD 88).
2. COORDINATES ARE BASED ON STATE PLANE COORDINATE SYSTEM, FLORIDA WEST, NORTH AMERICAN DATUM OF 1983 (NAD 1983).
3. RIGHT-OF-WAY: THE RIGHT-OF-WAY WAS NOT FIELD VERIFIED. THE CONTRACTOR SHALL RETAIN THE SERVICES OF A REGISTERED PROFESSIONAL LAND SURVEYOR LICENSED IN THE STATE OF FLORIDA TO LOCATE PROPERTY CORNERS IN THE FIELD AND VERIFY RIGHT-OF-WAY IN ADVANCE OF THE WORK AT NO ADDITIONAL COST TO THE OWNER.



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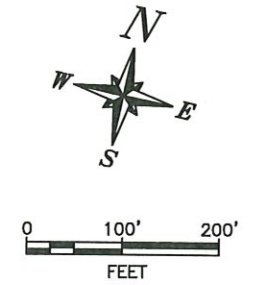
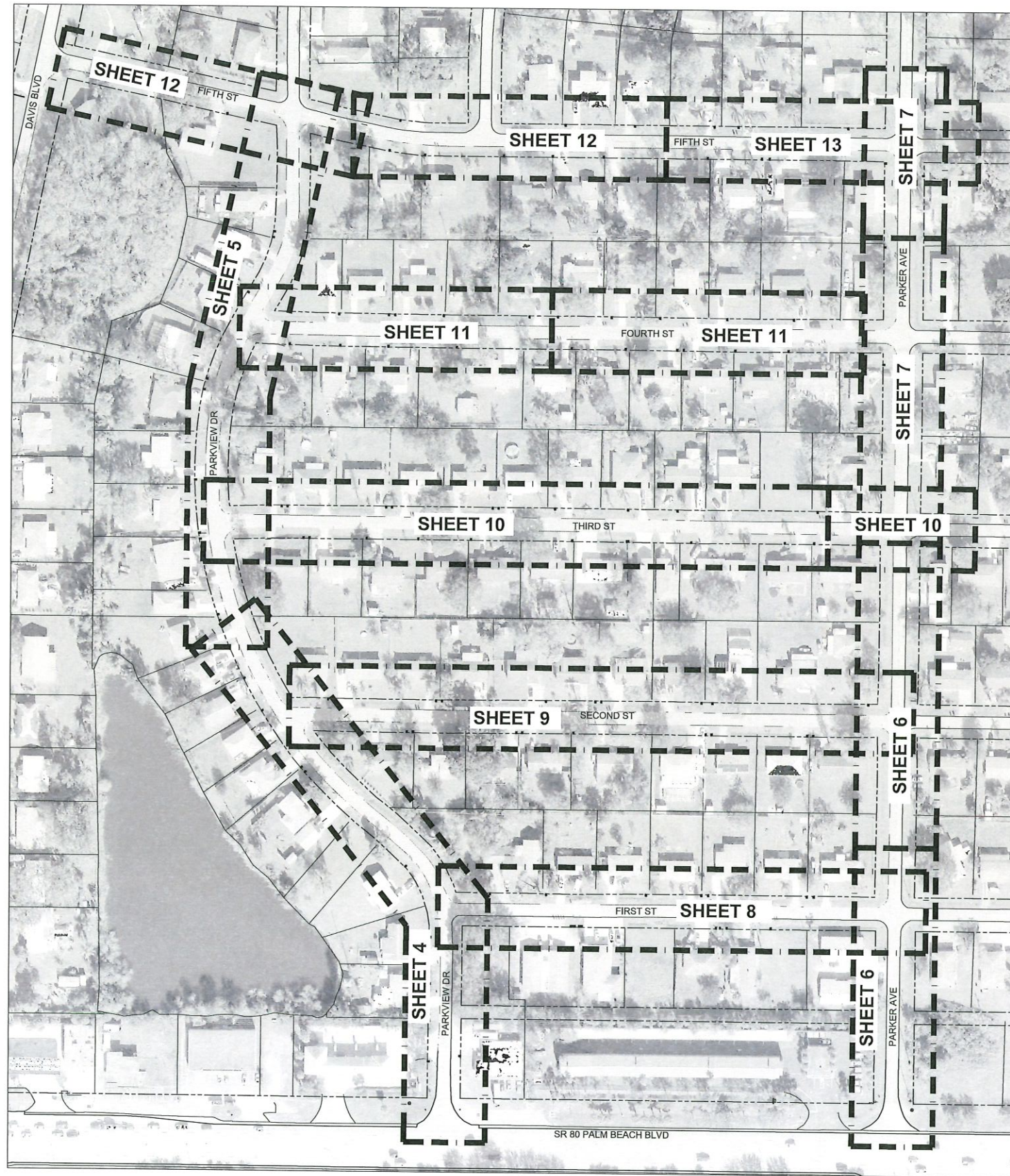
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FORT MYERS SHORES PHASE 1B
WATER MAIN REPLACEMENT

GENERAL NOTES AND LOCATION AREA

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JOEL ALLAN MAKAU
 LICENSE
 No. 86414
 STATE OF
 FLORIDA
 PROFESSIONAL ENGINEER

JA 2/1/2021
 JOEL ALLAN MAKAU, P.E. DATE
 FLORIDA P.E. # 86414
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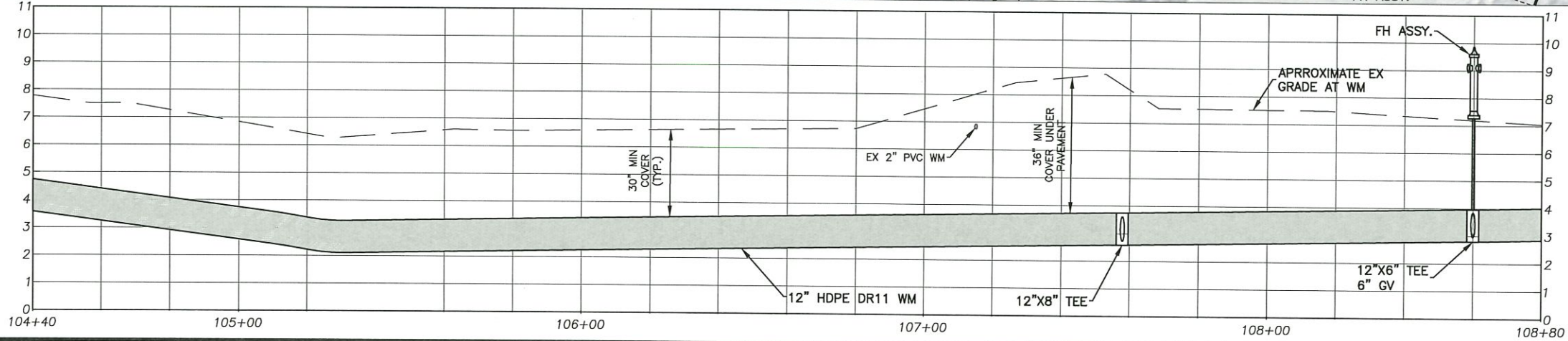
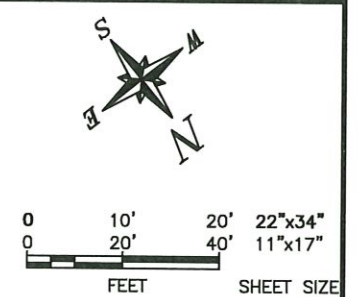
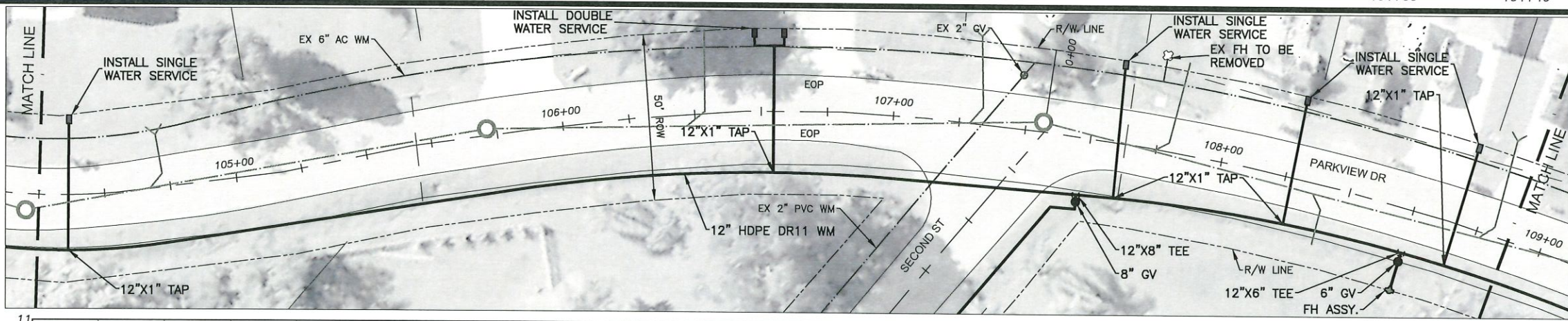
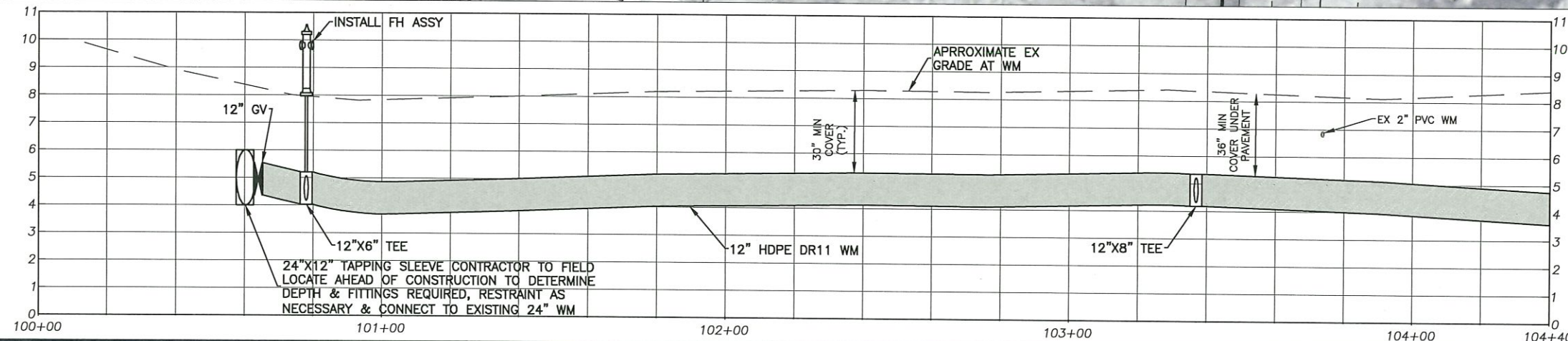
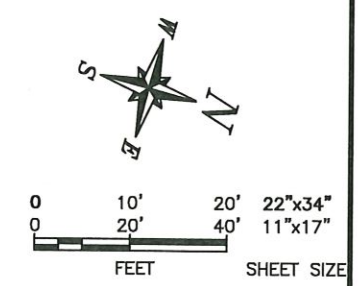
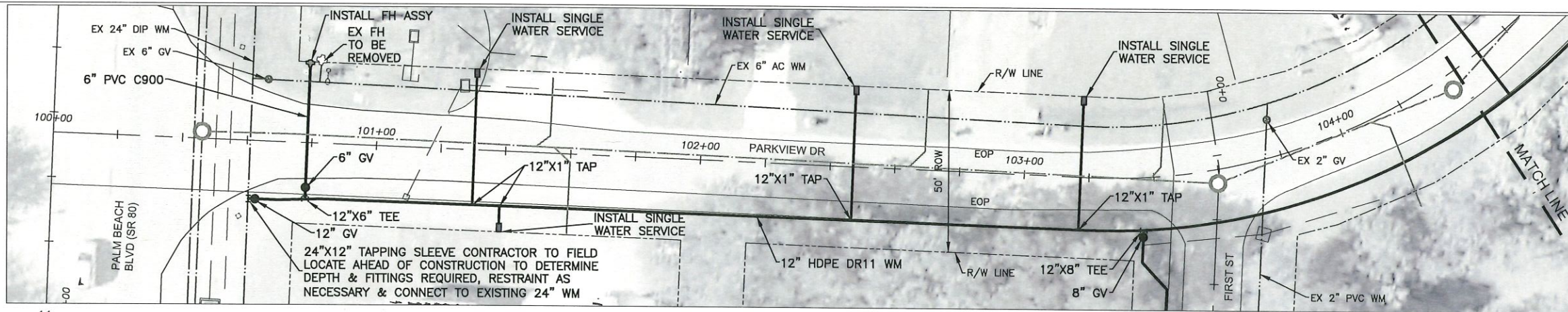
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FORT MYERS SHORES PHASE 1B
WATER MAIN REPLACEMENT

PHASE 1B KEY MAP

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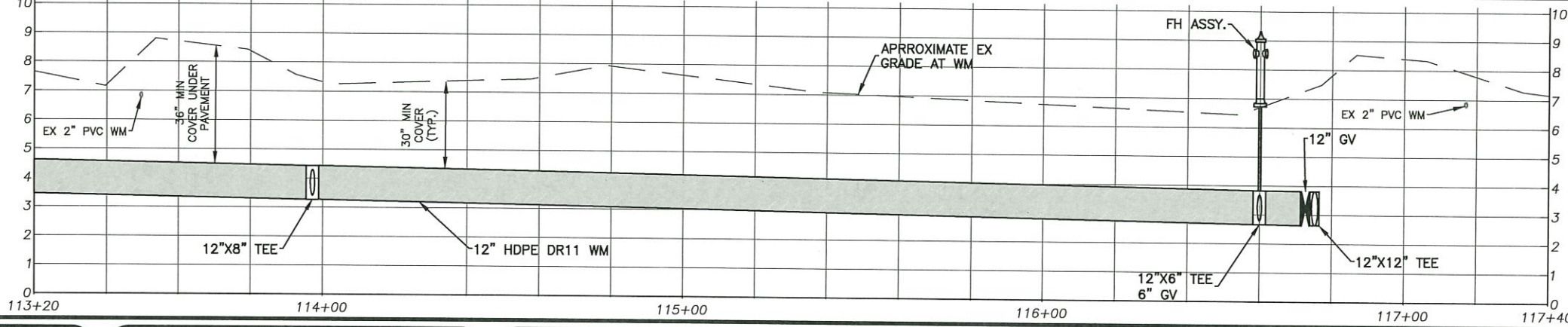
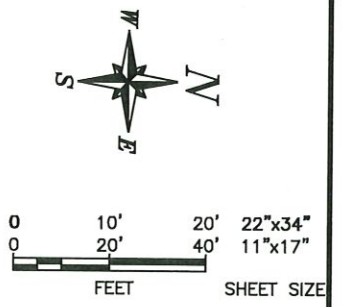
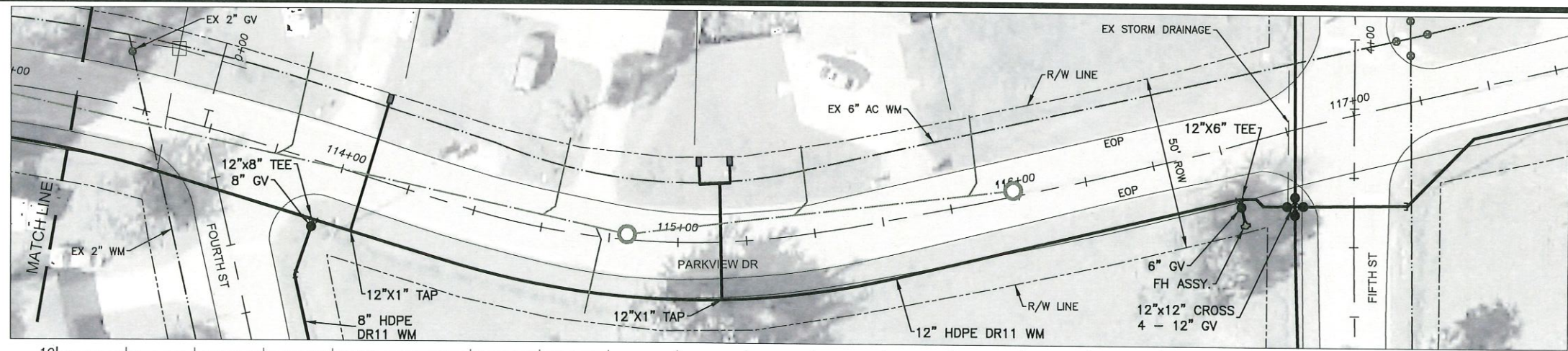
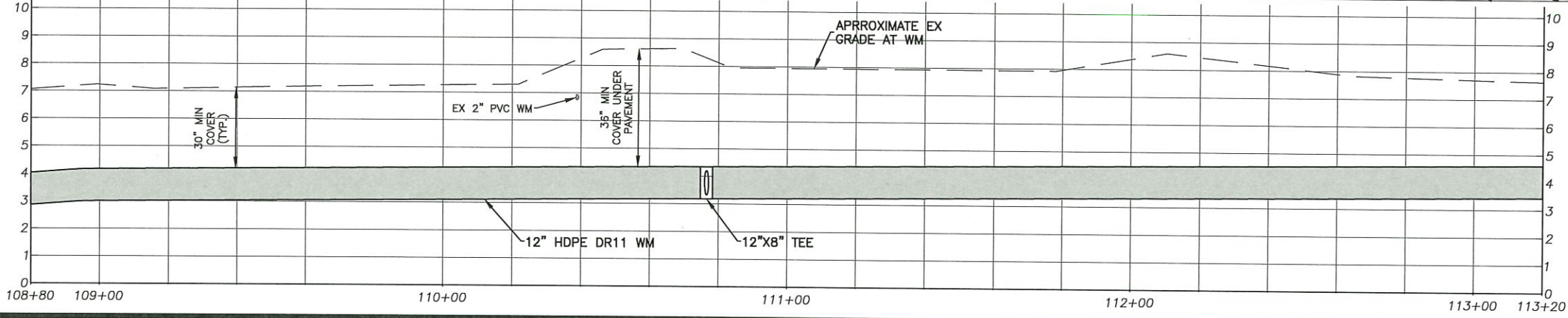
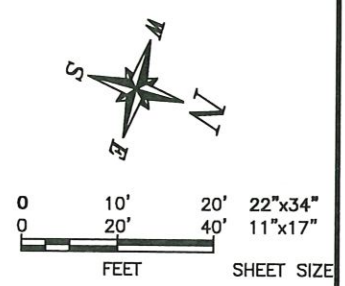
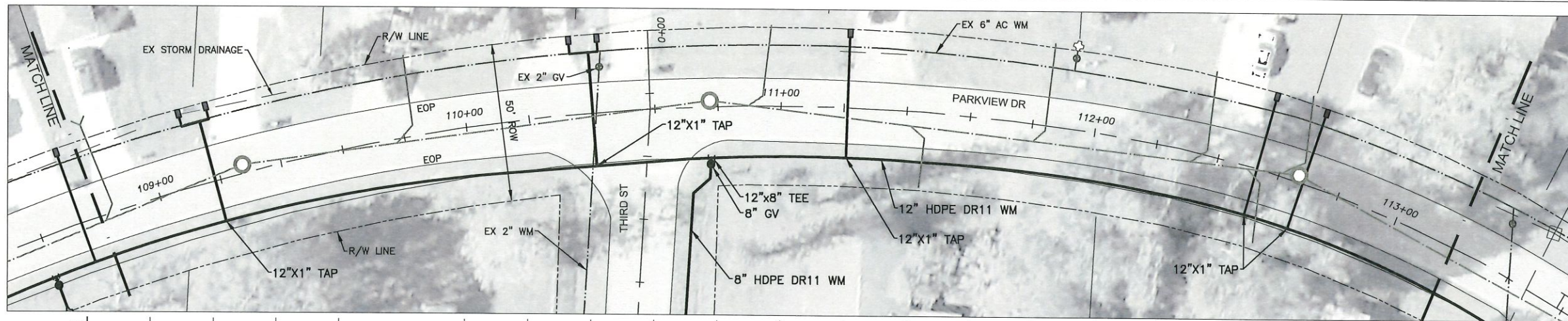
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WATER MAIN REPLACEMENT
PARKVIEW DR PLAN AND PROFILE

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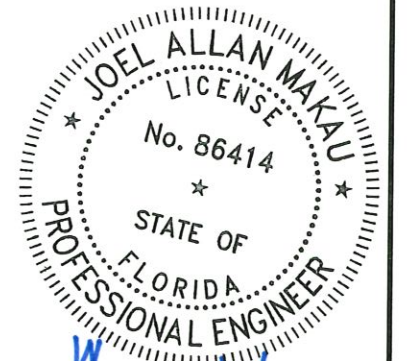
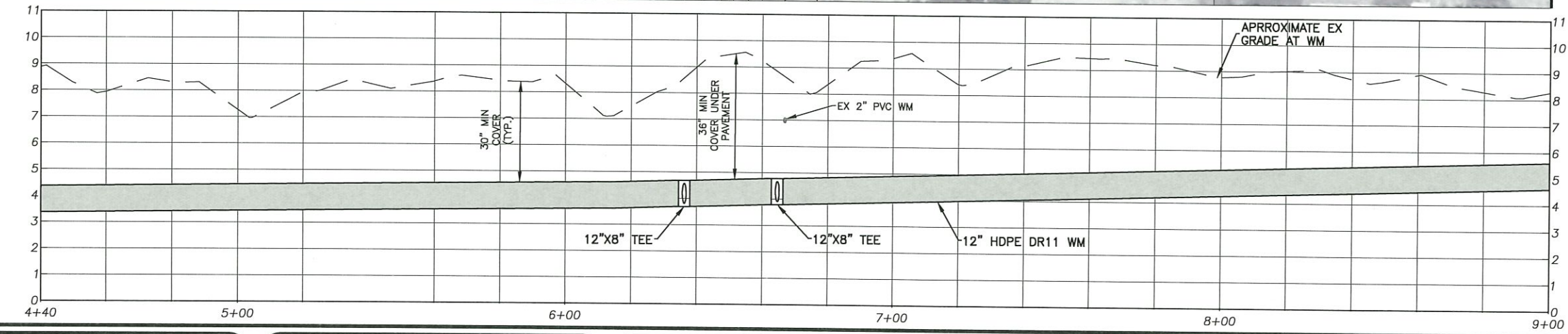
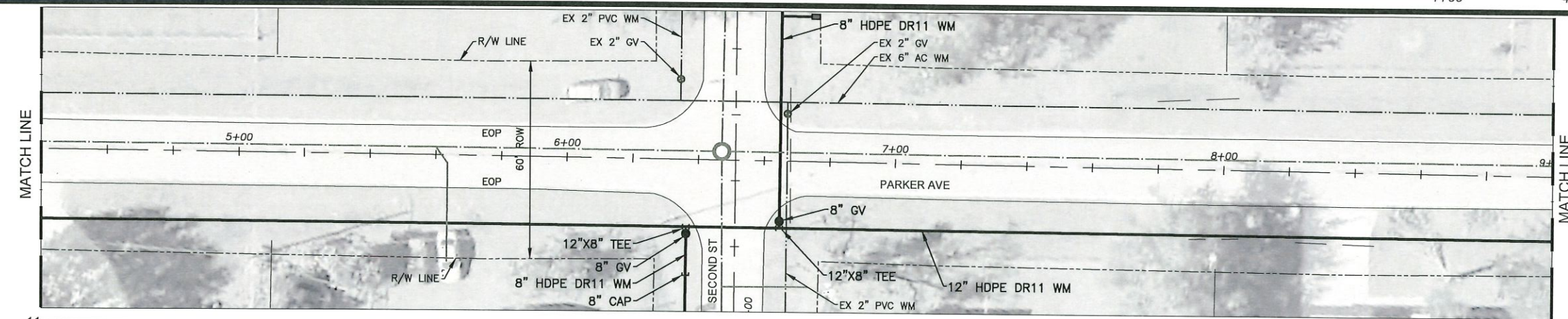
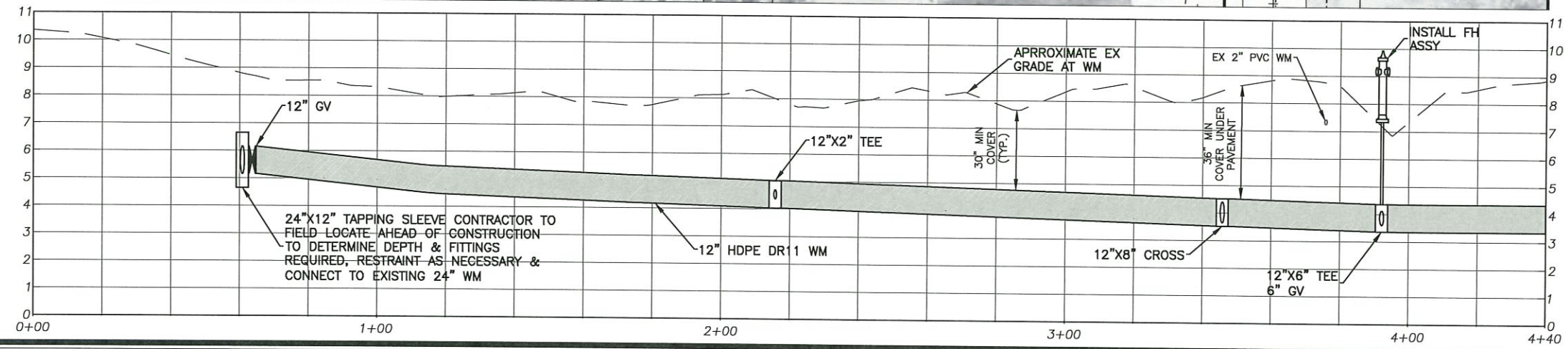
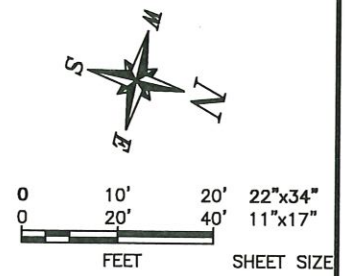
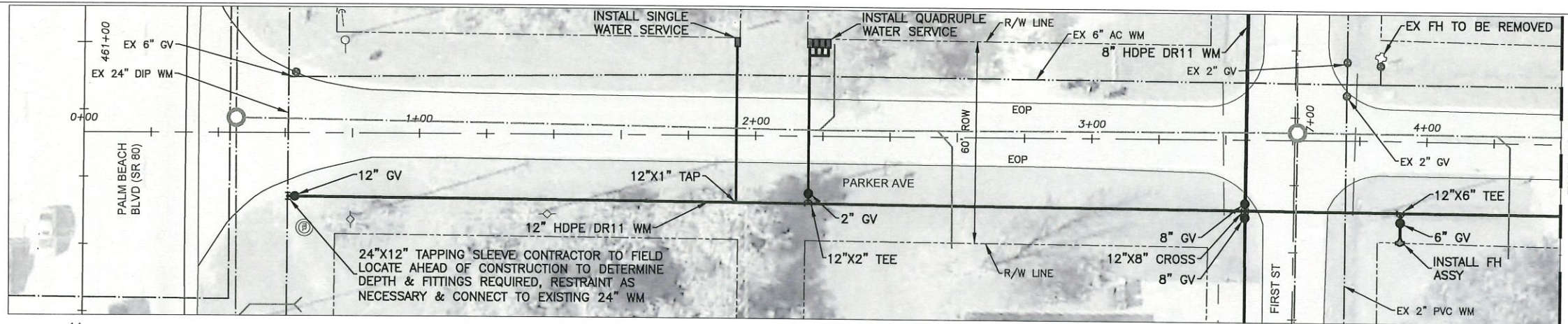
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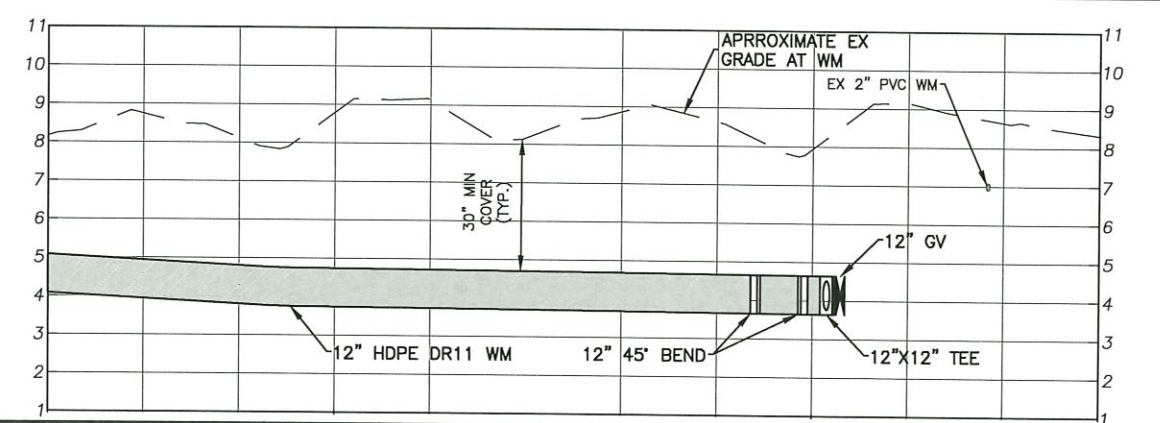
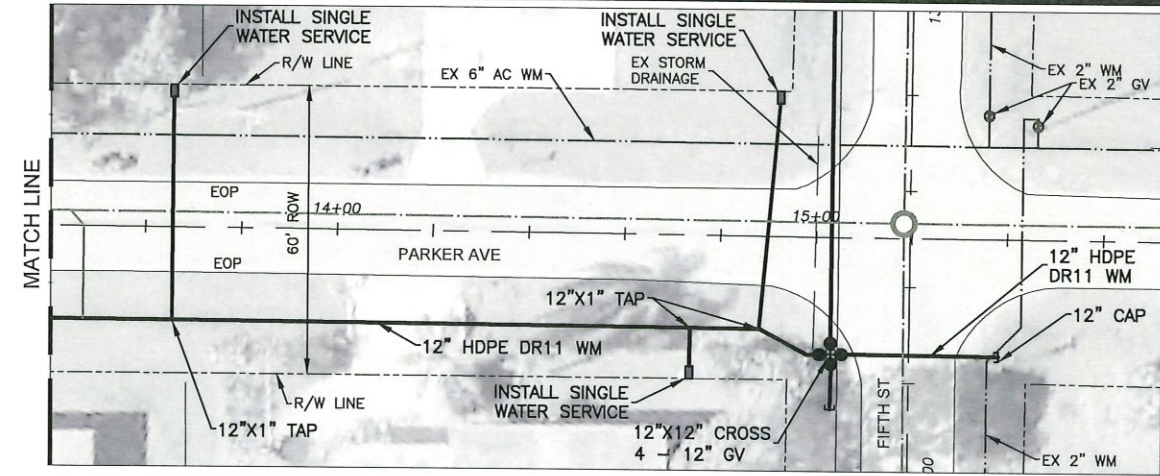
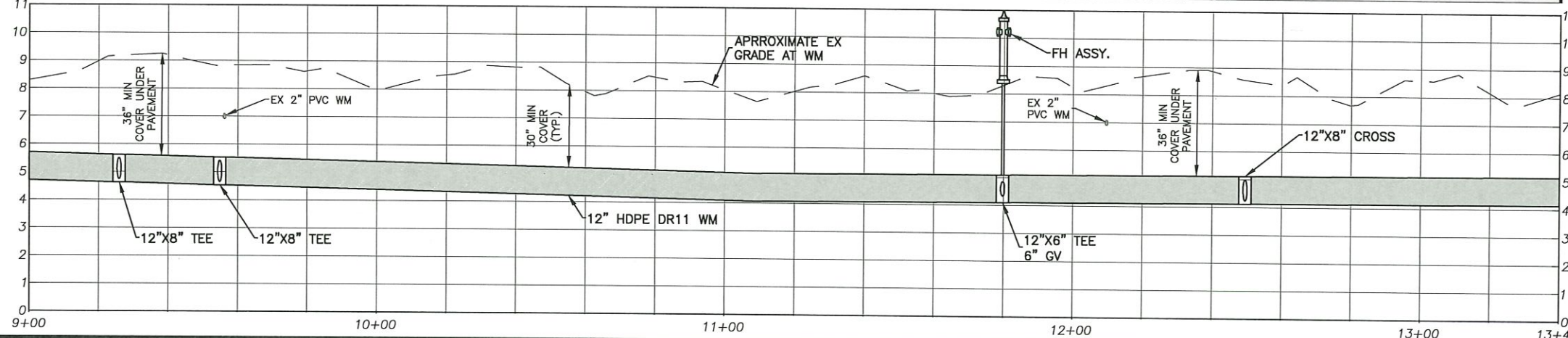
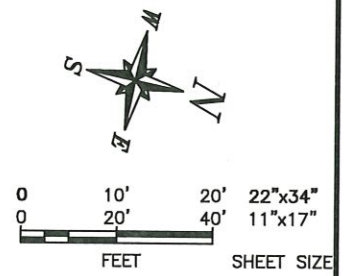
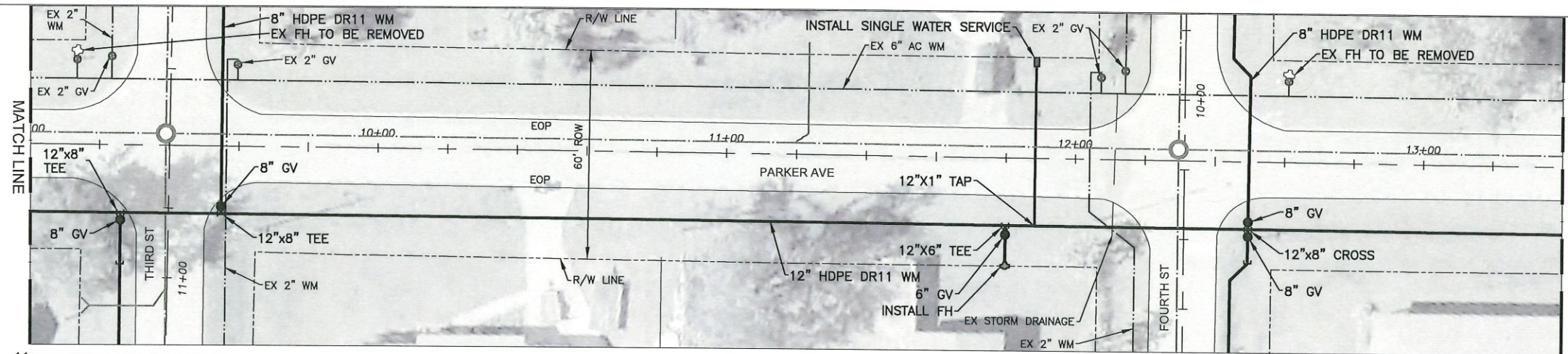
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FORT MYERS SHORES PHASE 1B
 WATER MAIN REPLACEMENT
 PARKER AVE PLAN AND PROFILE

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JOEL ALLAN MAKAU, P.E. DATE: 2/19/2021

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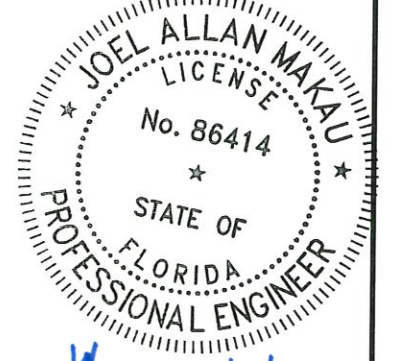
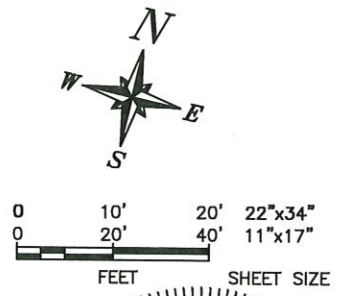
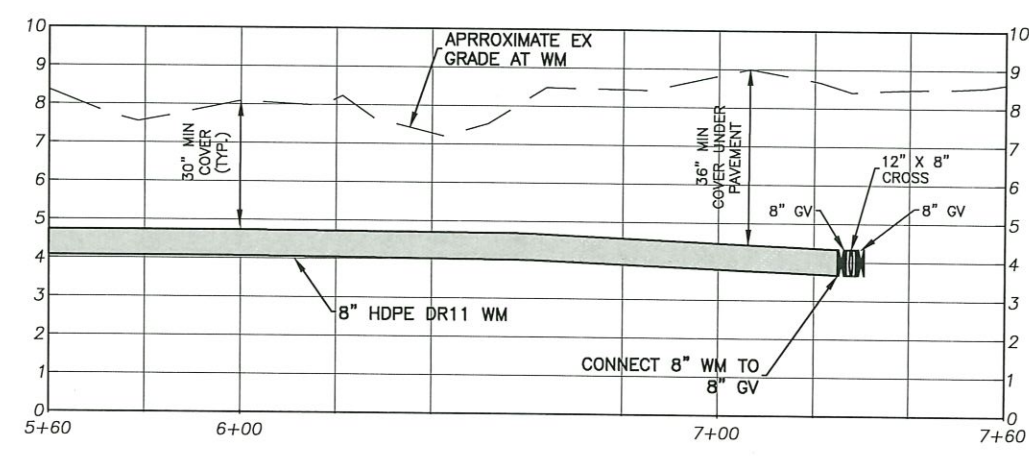
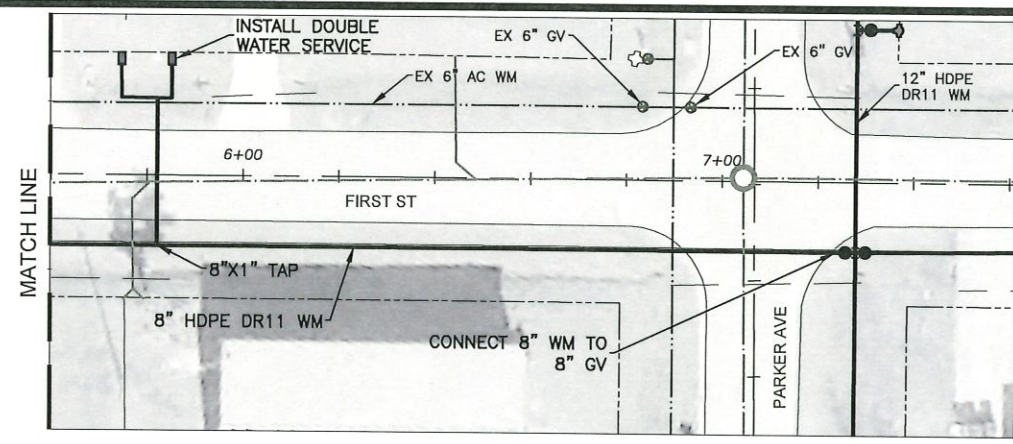
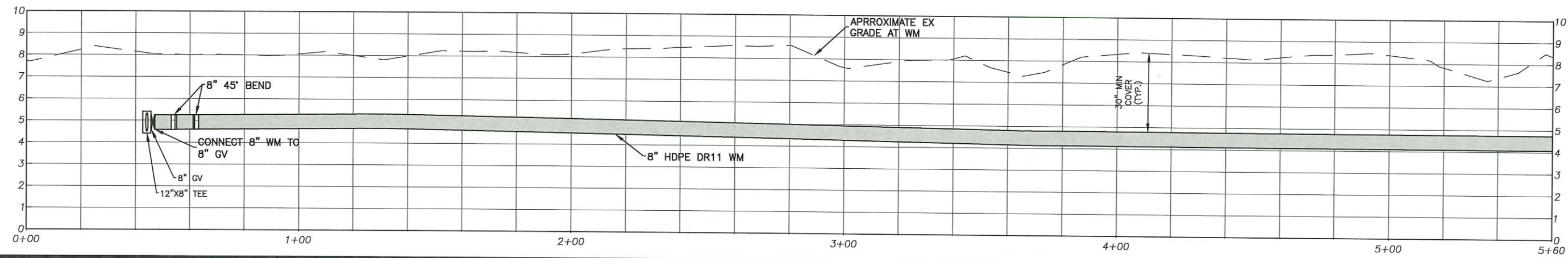
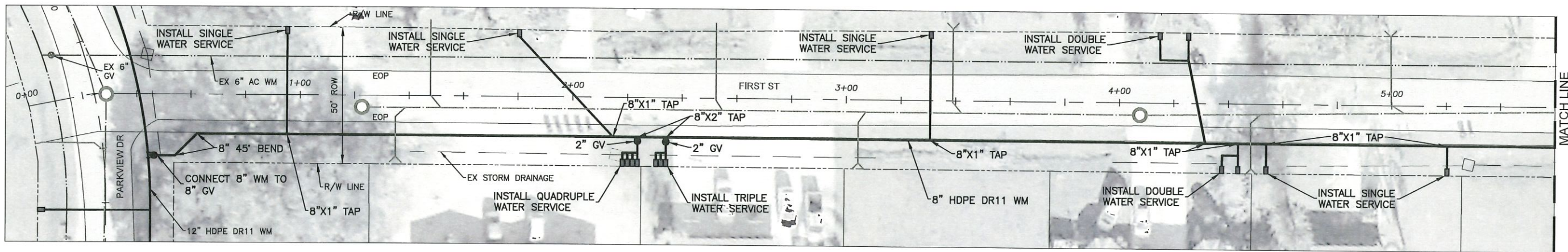
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Joel Allan Makau 2/9/2021
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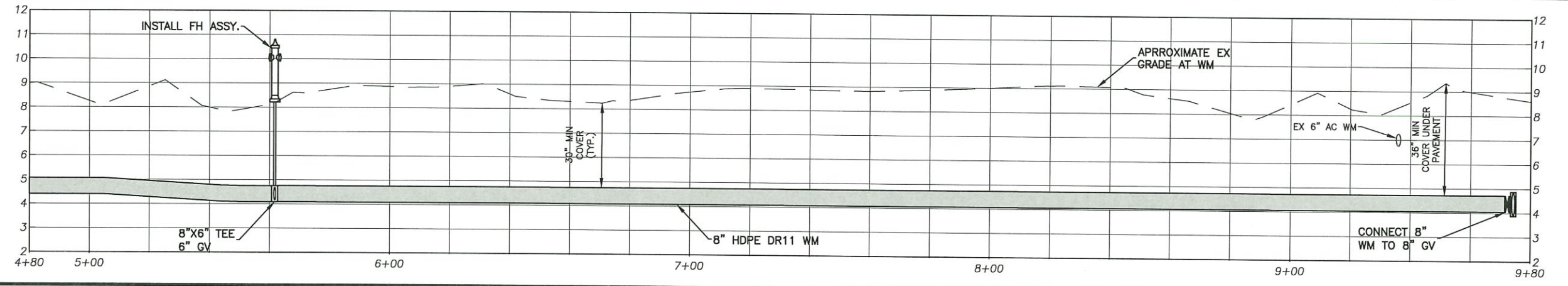
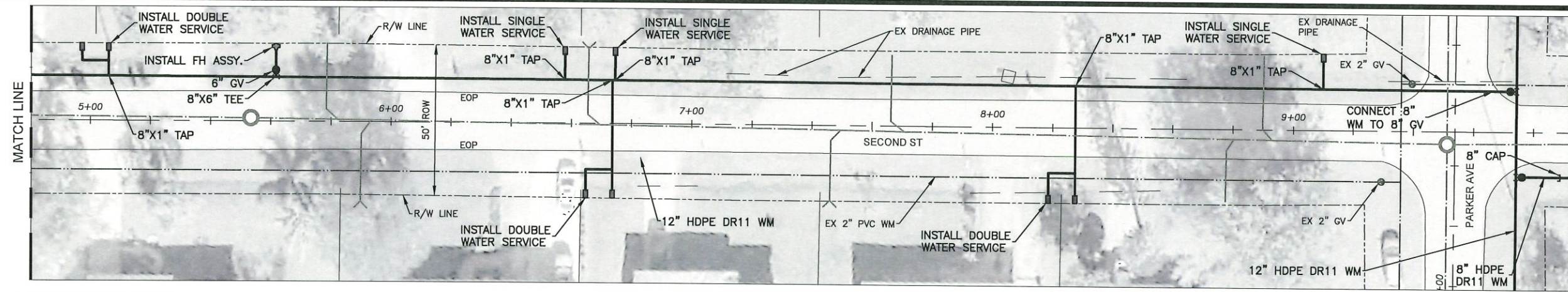
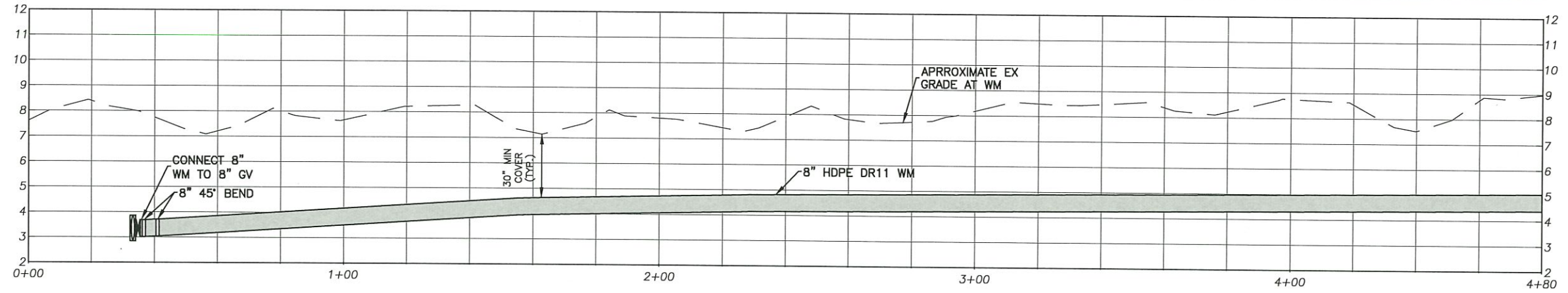
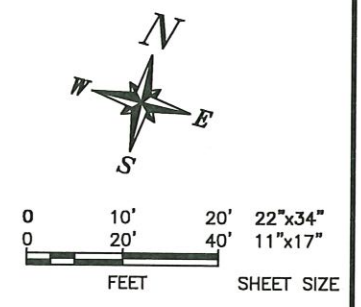
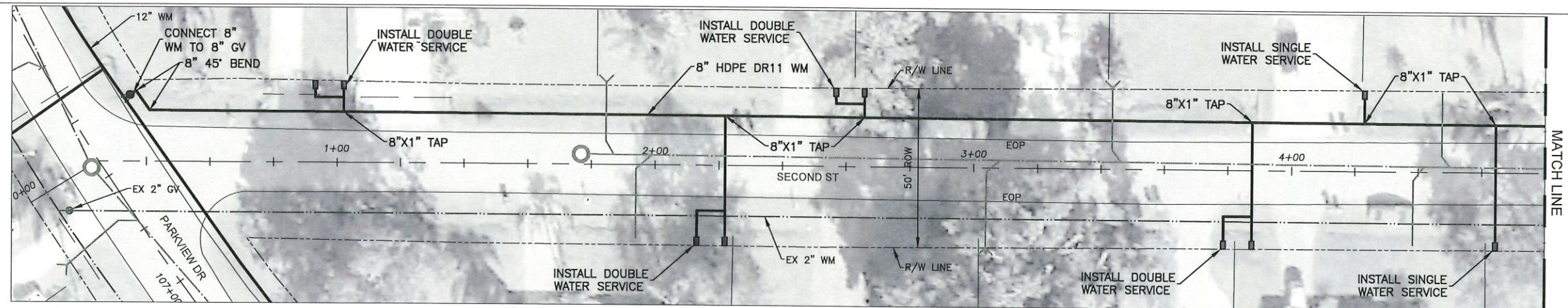

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FORT MYERS SHORES PHASE 1B
WATER MAIN REPLACEMENT

FIRST ST PLAN AND PROFILE

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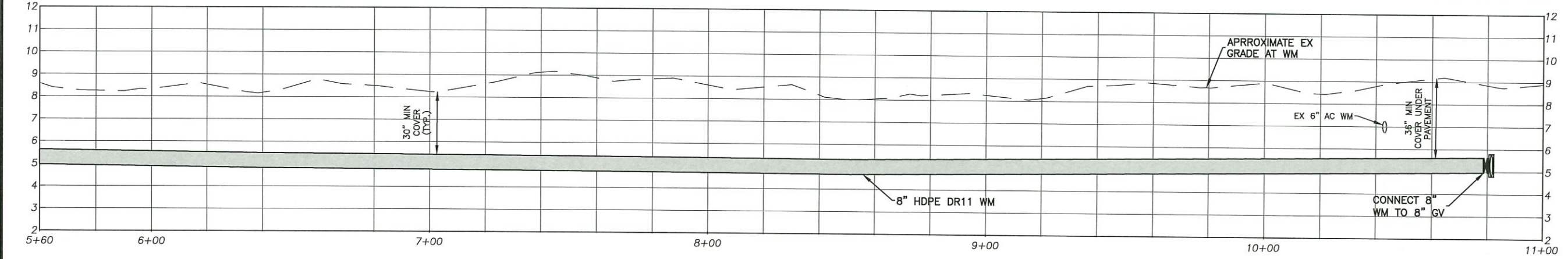
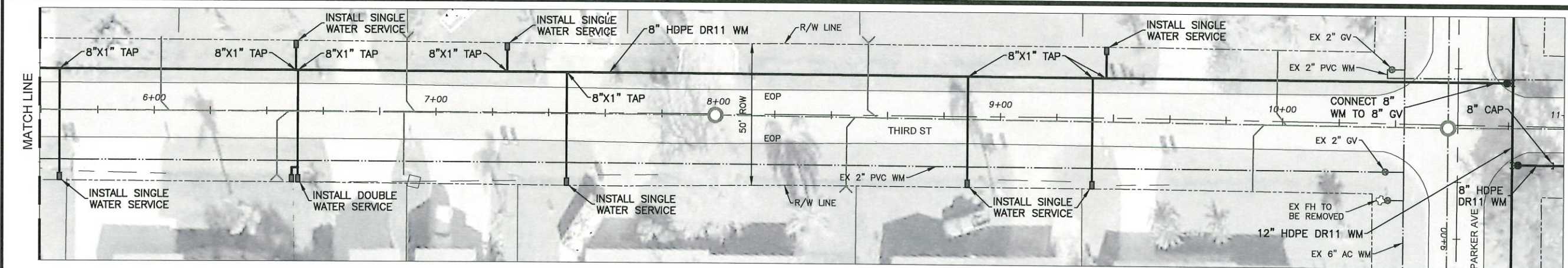
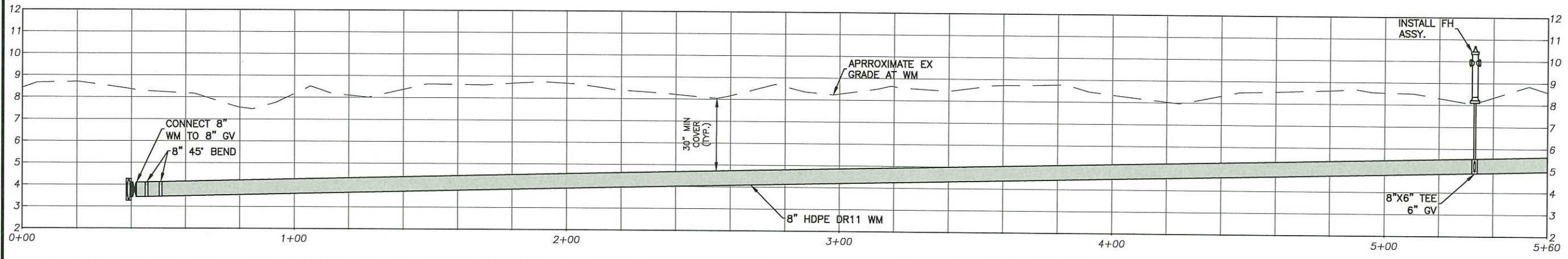
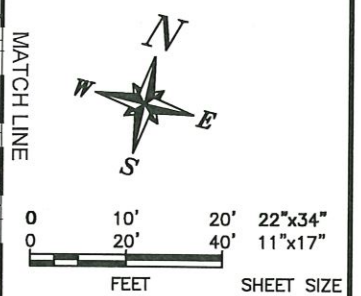
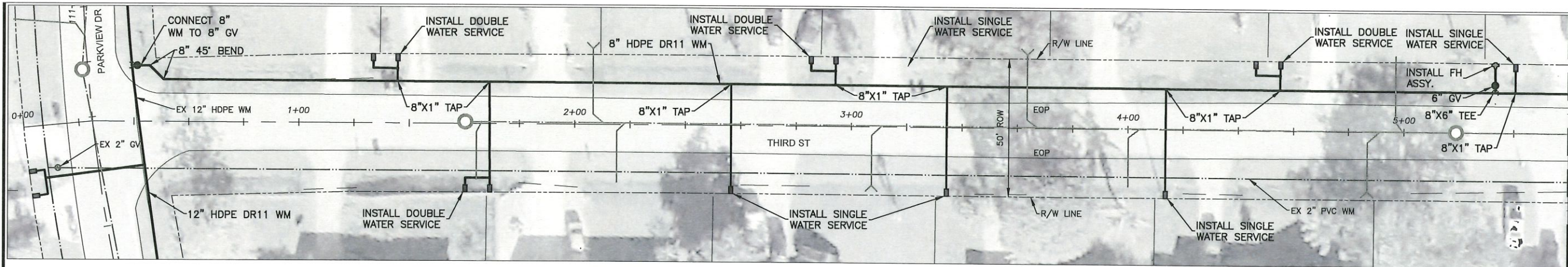
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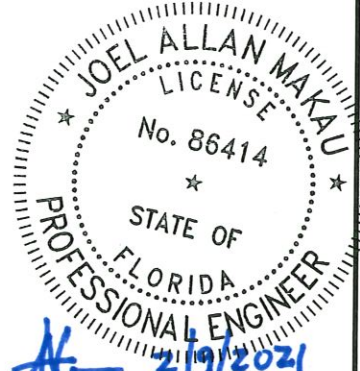
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LEE COUNTY UTILITIES ENGINEERING

FORT MYERS SHORES PHASE 1B
WATER MAIN REPLACEMENT - SECOND ST
SECOND ST PLAN AND PROFILE

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 JOEL ALLAN MAKAU, P.E. DATE 2/19/2021
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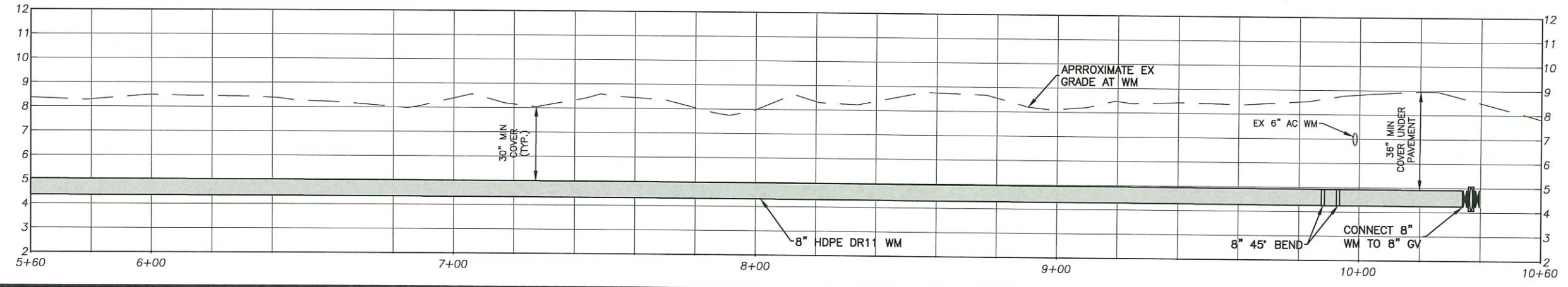
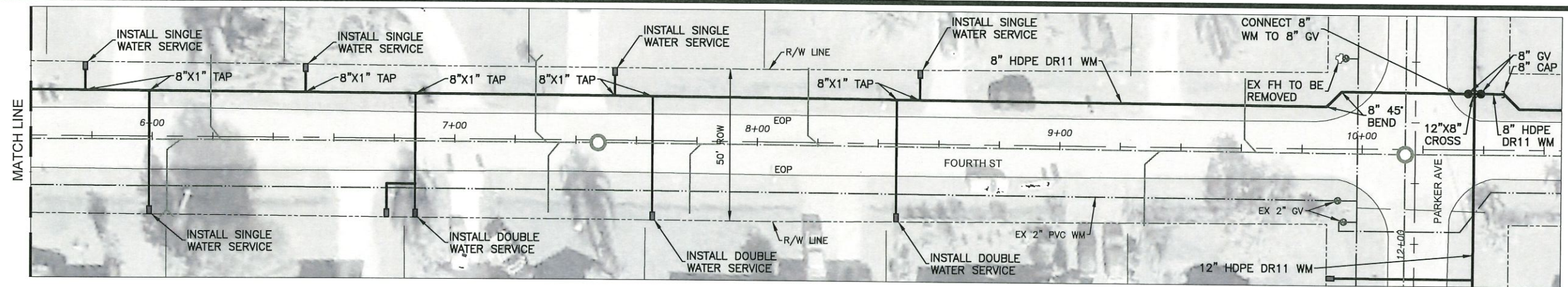
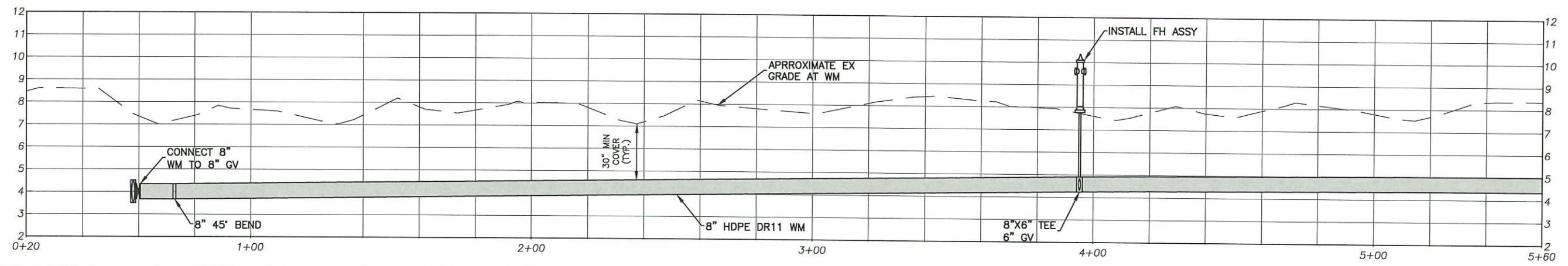
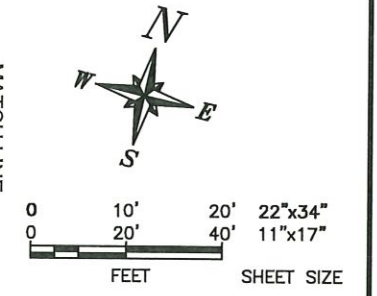
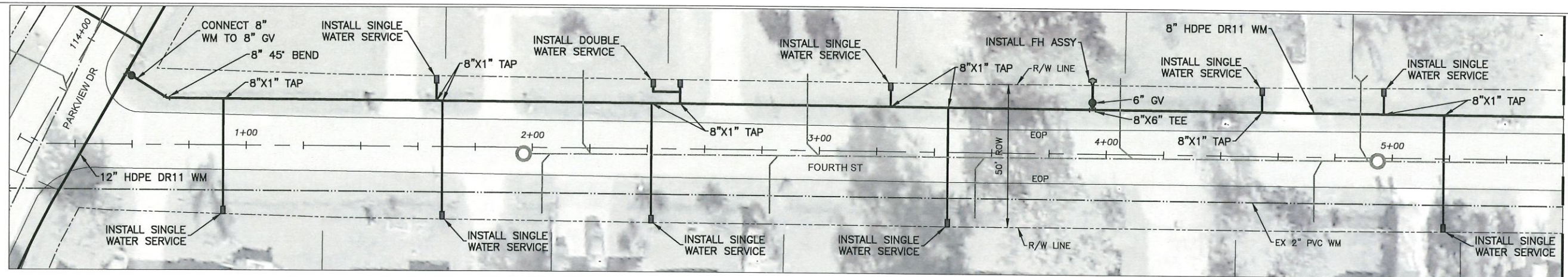
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 FLORIDA PE NO. _____
 DATE: 11/03/20


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FLORIDA
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LEE COUNTY
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FORT MYERS SHORES PHASE 1B
WATER MAIN REPLACEMENT - THIRD ST
THIRD ST PLAN AND PROFILE

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JOEL ALLAN MAKAU, P.E. DATE 2/9/2021
 FLORIDA P.E. # 86414
 LEE COUNTY UTILITIES
 1500 MONROE STREET, 3rd FL
 FT. MYERS, FL 33901

NO.	DATE	BY	REVISIONS - DESCRIPTION

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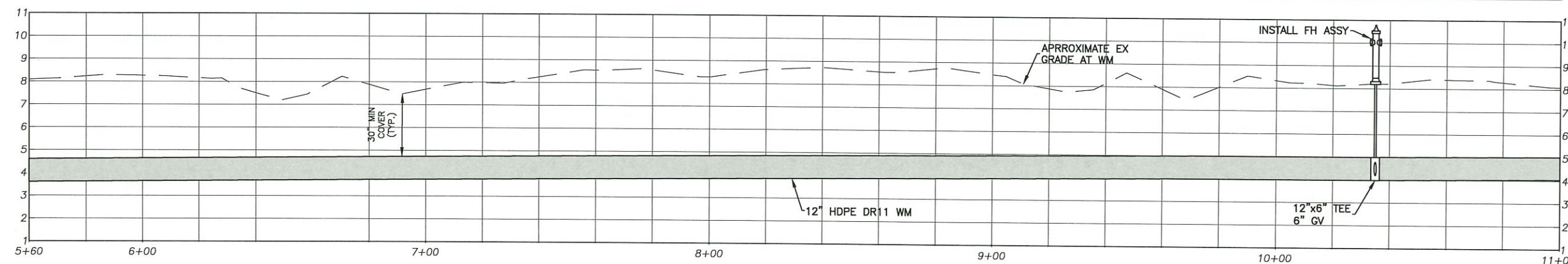
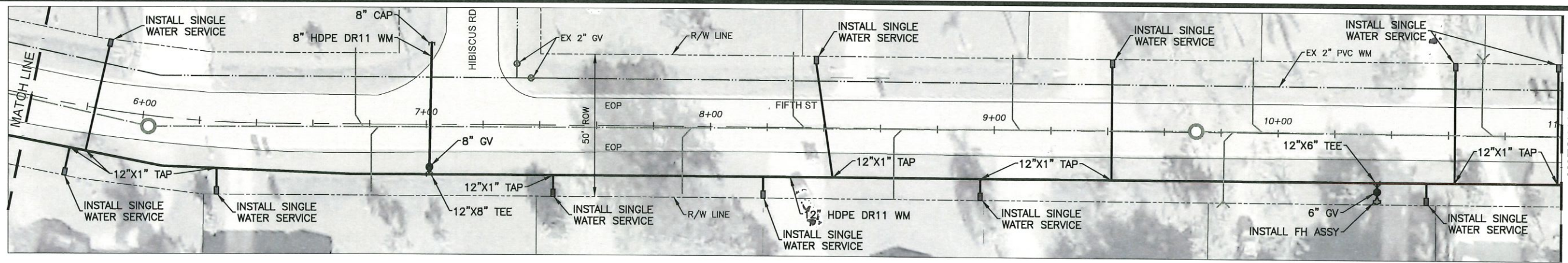
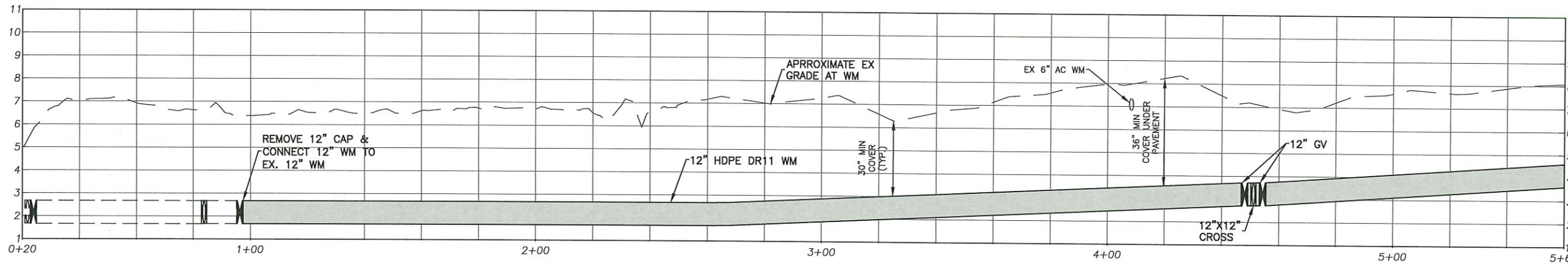
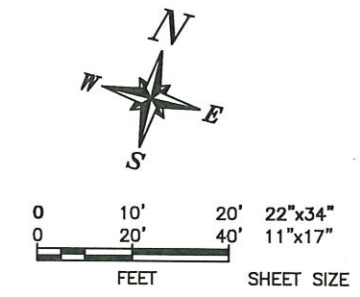
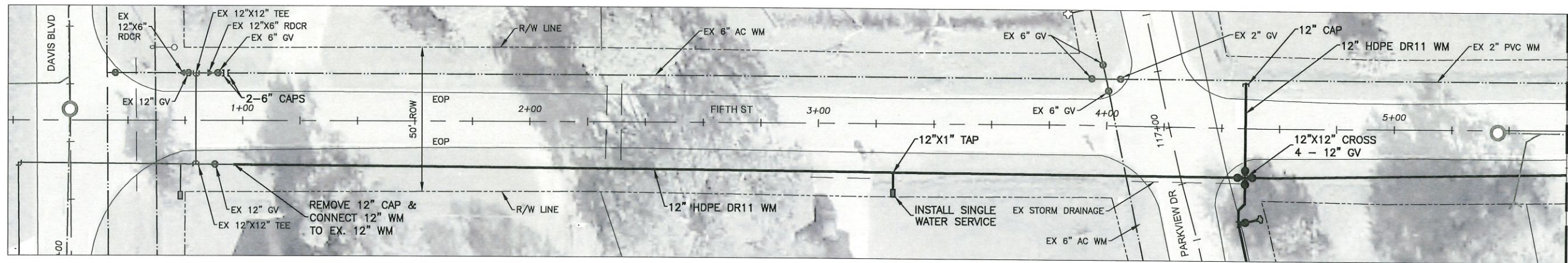
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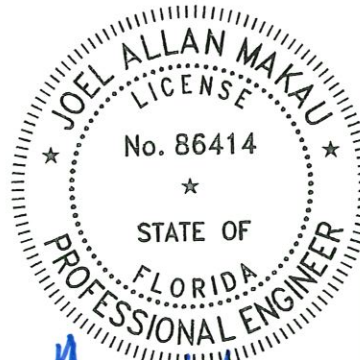
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**FORT MYERS SHORES PHASE 1B
 WATER MAIN REPLACEMENT
 FOURTH ST PLAN AND PROFILE**

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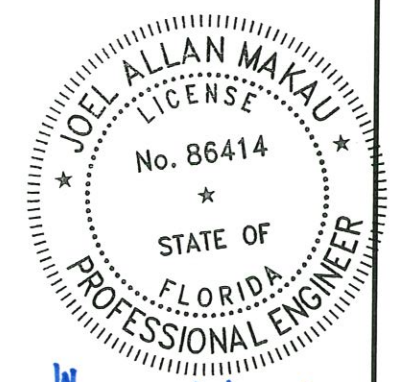
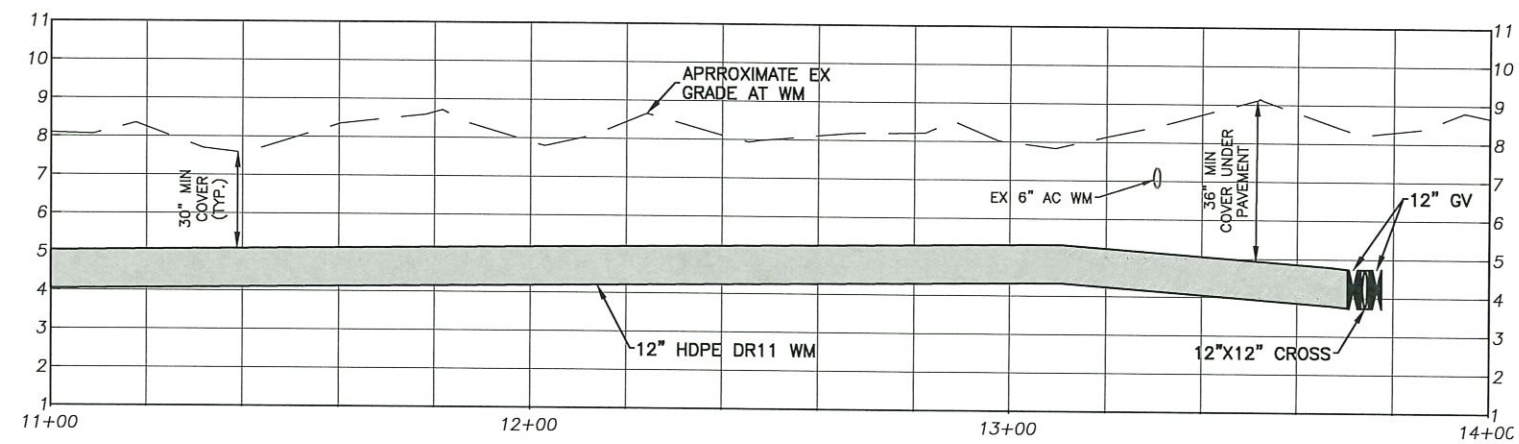
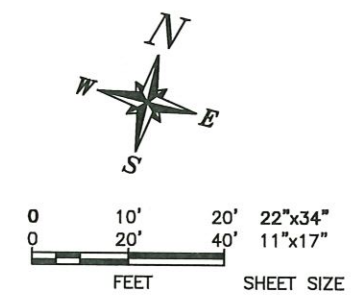
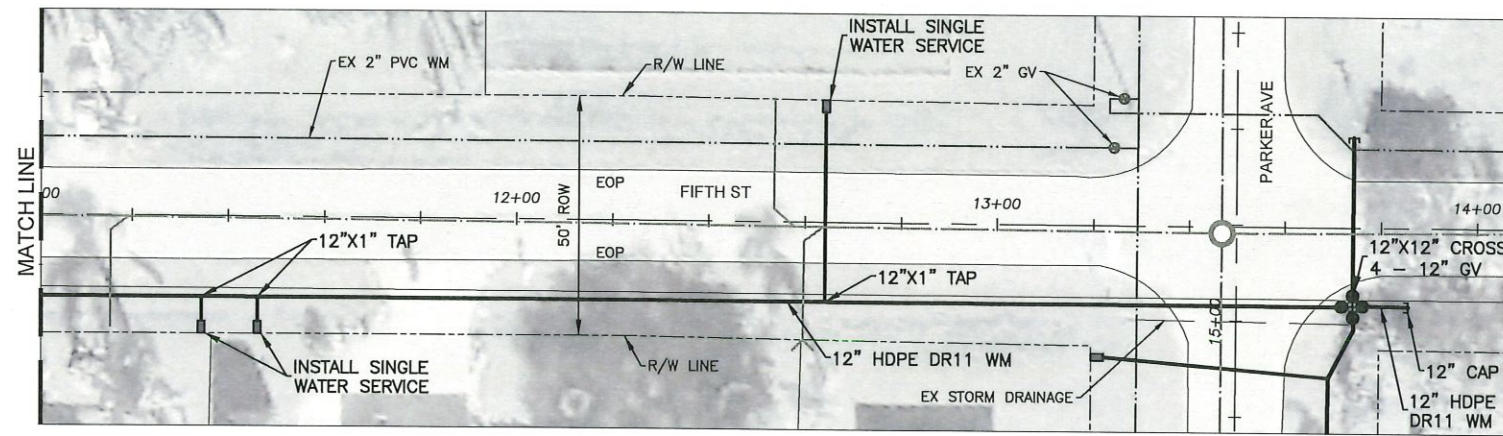
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FORT MYERS SHORES PHASE 1B
WATER MAIN REPLACEMENT
FIFTH ST PLAN AND PROFILE

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Joel 2/9/2021
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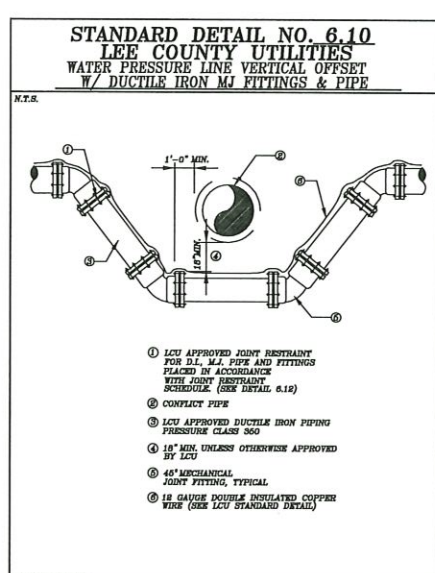
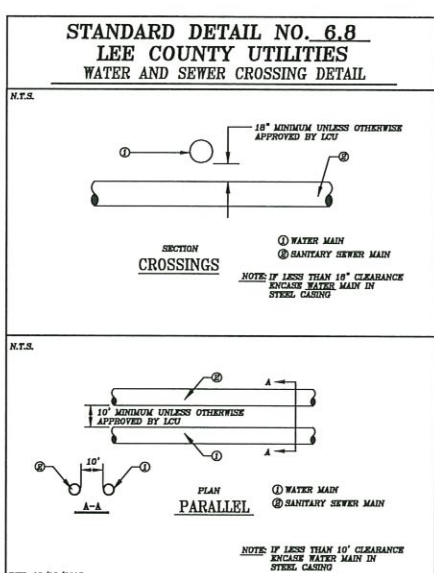
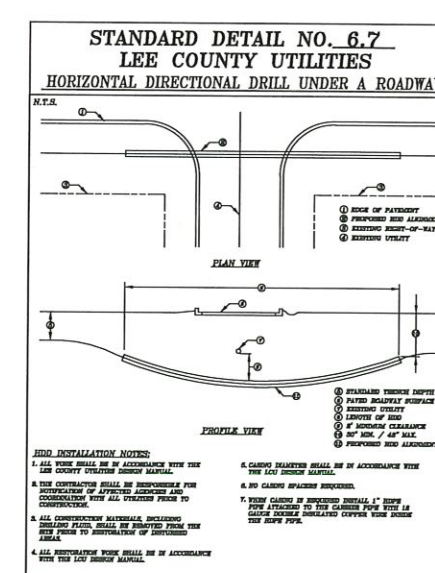
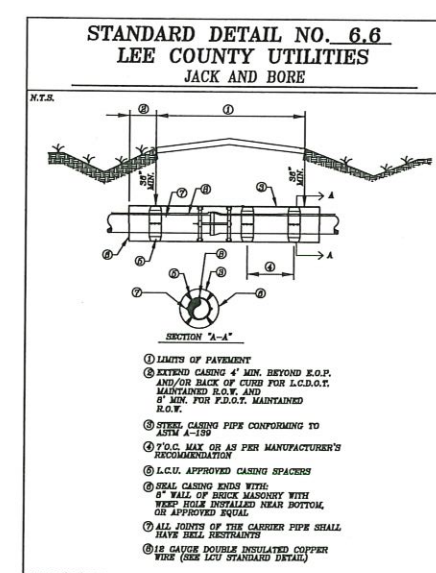
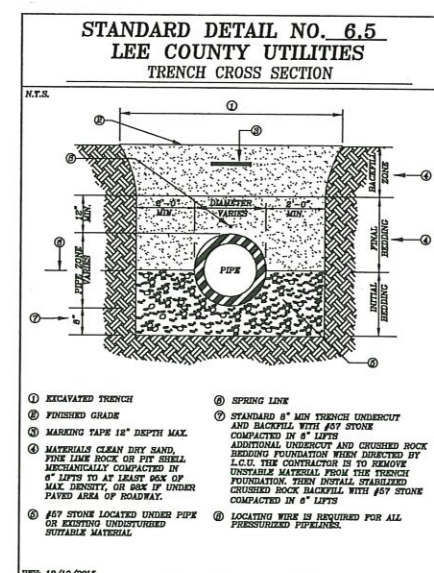
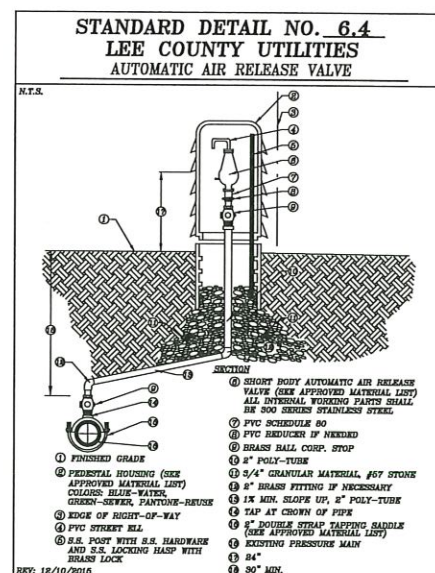
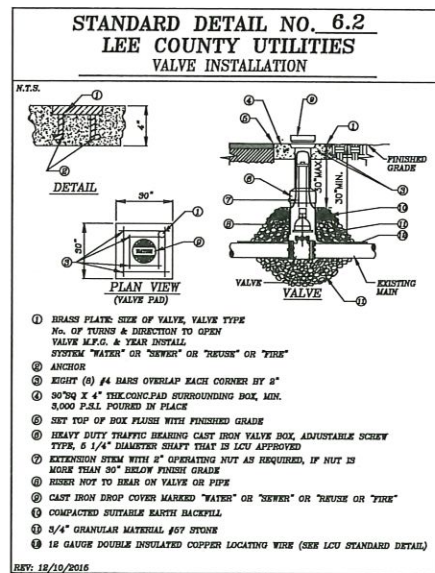
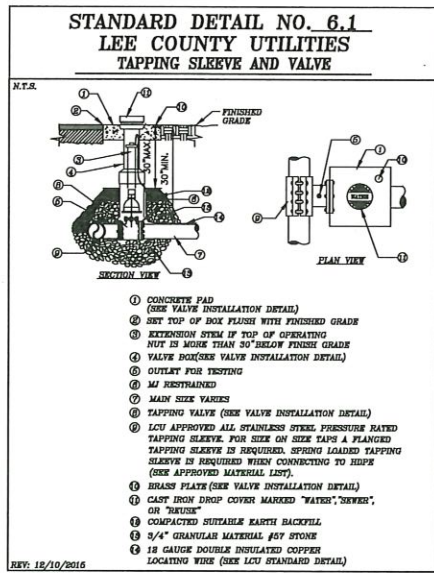
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FORT MYERS SHORES PHASE 1B
 WATER MAIN REPLACEMENT
 FIFTH ST PLAN AND PROFILE

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STANDARD DETAIL NO. 6.12 LEE COUNTY UTILITIES RESTRAINED LENGTH SCHEDULE

DUCTILE IRON PIPE

PIPE SIZE (Inches)	MINIMUM RESTRAINED PIPE LENGTHS (FEET)				
	90°	45°	22-1/2°	11-1/4°	HORIZONTAL
4	17	7	4	2	29
6	23	10	5	2	40
8	29	12	6	3	53
10	35	14	7	4	69
12	41	17	8	4	74
16	51	21	11	5	94
24	69	28	14	7	121
30	81	34	17	8	158

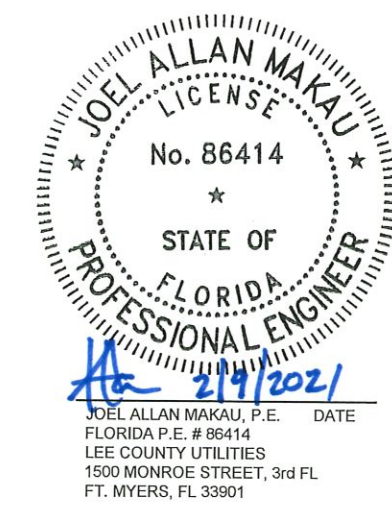
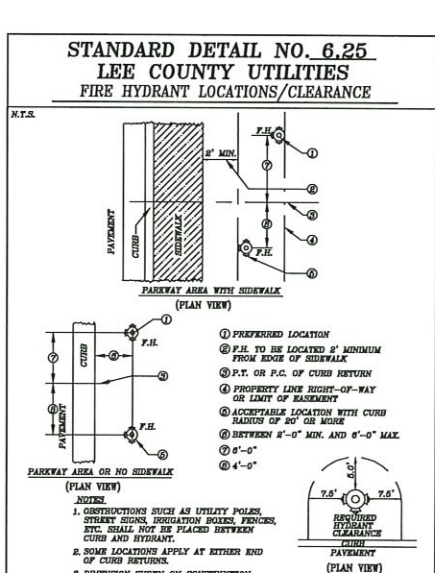
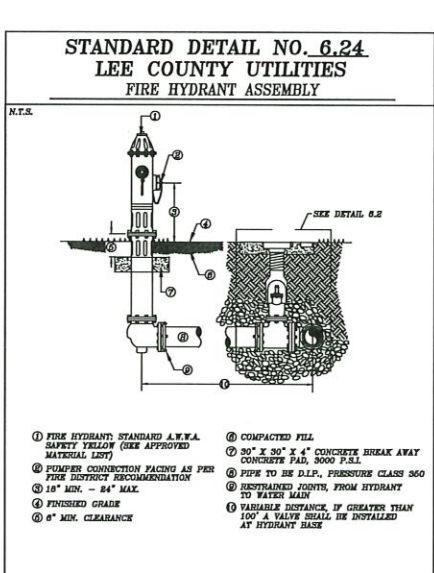
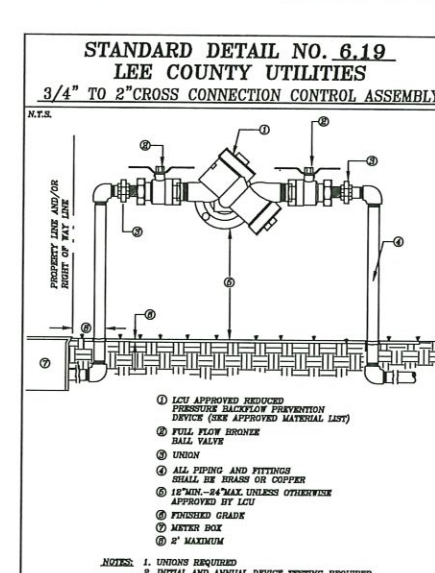
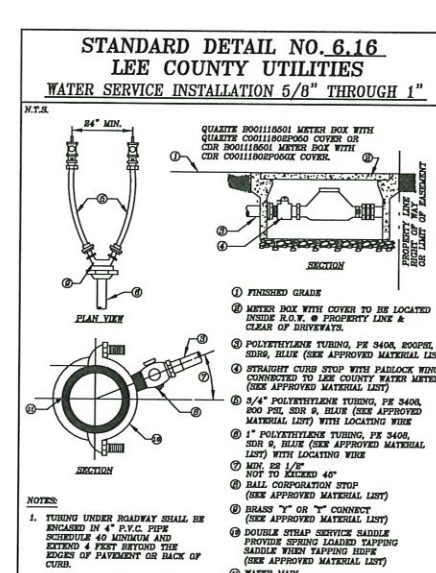
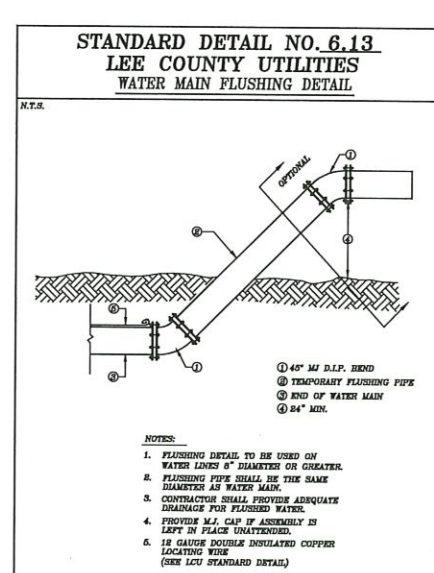
PVC PIPE

PIPE SIZE (Inches)	MINIMUM RESTRAINED PIPE LENGTHS (FEET)				
	90°	45°	22-1/2°	11-1/4°	HORIZONTAL
4	20	8	4	2	45
6	26	12	5	3	50
8	32	15	6	4	53
10	44	18	8	5	59
12	51	21	11	6	74
16	63	26	13	7	149
24	87	35	18	9	200
30	108	42	21	10	248

A COMPLETE JOINT RESTRAINT SCHEDULE FOR ALL ENDOVERSED VERTICAL & HORIZONTAL BENDS, VERTICAL OFFSETS, TEES, AND DEAD ENDS SHALL BE THE RESPONSIBILITY OF THE DESIGN ENGINEER.

LENGTH FIGURES BASED ON FOLLOWING:
 Pressure = 160 psi, FS = 1.6, trench type = 3, 30° cover on bare pipe, Soil type = GP & SP

REV. 12/10/2015



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LEE COUNTY
 UTILITIES
 ENGINEERING

FORT MYERS SHORES PHASE 1B
 WATER MAIN REPLACEMENT

L.C.U. DETAILS SHEET

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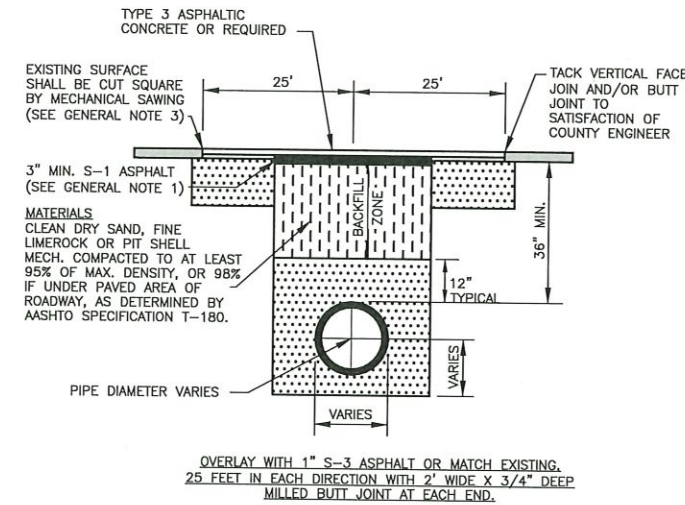
STANDARD PLAN NOTES

10.1 GENERAL

THE STANDARD NOTES SHOWN BELOW SHALL BE INCLUDED ON ALL WATER AND SEWER PLANS SUBMITTED FOR APPROVAL TO LEE COUNTY UTILITIES (LCU).

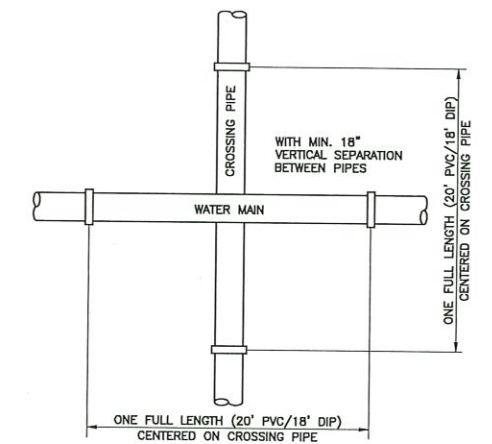
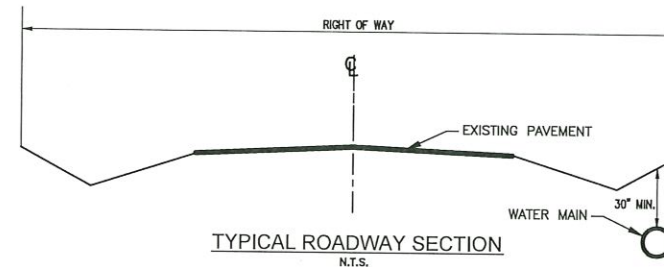
- A. ALL WORK SHALL CONFIRM TO LATEST REVISION OF LEE COUNTY UTILITIES OPERATIONAL MANUAL WHICH IS ON FILE AT THE DIVISION OF LEE COUNTY UTILITIES OFFICE (1500 MONROE STREET, P.O. BOX 398, FORT MYERS, FLORIDA 33902).
- B. LOCATIONS, ELEVATIONS, AND DIMENSIONS OF EXISTING UTILITIES, STRUCTURES, AND OTHER FEATURES ARE SHOWN ACCORDING TO THE BEST INFORMATION AVAILABLE AT THE OF PREPARATION OF THESE PLANS, BUT DO NOT PURPORT TO BE ABSOLUTELY CORRECT. EXTREME CAUTION IS TO BE USED WHEN EXCAVATING, AS THE NUMBER AND LOCATION OF EXISTING UTILITIES HAS NOT BEEN VERIFIED. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD LOCATE AND VERIFY ANY AND ALL EXISTING UTILITIES SHOWN AND NOT SHOWN. THE CONTRACTOR SHALL CONTACT LCDOT, UTILITY COMPANIES AND SUNSHINE STATE ONE CALL NO FEWER THAN 72 HOURS PRIOR TO EXCAVATION FOR FIELD LOCATION OF UTILITIES. ALL COORDINATION AND REQUIRED UTILITY COMPANY TEMPORARY PROTECTION SHALL BE AT CONTRACTORS EXPENSE. INDIVIDUAL WATER SERVICES AND ASSOCIATED METER BOXES ARE NOT SHOWN ON THE PLANS.
- C. ALL QUANTITIES SHOWN ON PLANS ARE NOT VERIFIED BY LCU. QUANTITIES TO BE VERIFIED BY THE CONTRACTOR. IF ANY DISCREPANCIES ARE FOUND, THE CONTRACTOR SHALL NOTIFY LCU IMMEDIATELY.
- D. AT THE SITE KEEP AND MAINTAIN ONE RECORD COPY OF ALL CONTRACT DOCUMENTS, REFERENCE DOCUMENTS AND ALL TECHNICAL DOCUMENTS SUBMITTED IN GOOD ORDER. AS THE WORK PROGRESSES THE CONTRACTOR OR HIS DESIGNATED REPRESENTATIVE SHALL RECORD ON ONE SET OF REPRODUCIBLE DRAWINGS ALL CHANGES AND DEVIATIONS FROM THE ORIGINAL PLANS. HE SHALL RECORD THE EXACT LOCATION OF ALL CHANGES IN VERTICAL AND HORIZONTAL ALIGNMENT BY OFFSETS AND TIES AT EACH; SEWER, WATER, ELECTRIC, GAS, COMMUNICATION AND OTHER SERVICES BY OFF-SET DISTANCE TO PERMANENT IMPROVEMENTS SUCH AS BUILDING AND CURBS. THESE RECORD DRAWINGS MUST BE CERTIFIED BY FLORIDA REGISTERED PROFESSIONAL ENGINEER, WHO PREPARED THE PLANS AND SIGNS AND SEALS THESE PLANS. THE RECORD DRAWINGS SHALL INCLUDE VERTICAL AND HORIZONTAL ALIGNMENT OF ALL WATER, SEWER, AND EFFLUENT REUSE LINES, VALVES, TEES, BEND, REDUCERS, HYDRANTS, PUMP STATIONS, SERVICE CONNECTIONS, METER BOXES AND/ OR PADS, AND OTHER PERTINENT STRUCTURES. PIPELINE RUN EXCESS OF 152.4M, (500'), WITHOUT FITTINGS SHALL INCLUDE VERTICAL ALIGNMENT INFORMATION AT 152.4M, (500') INTERVALS. SAID ALIGNMENT SHALL BE TIED TO PERMANENT IMPROVEMENTS, SUCH AS ROADWAY AND/OR RAILROAD CENTERLINES AND RIGHT-OF-WAY, BUILDING AND PROPERTY CORNERS, AND SHALL BE CERTIFIED BY A PROFESSIONAL LAND SURVEYOR, LICENSED IN THE STATE OF FLORIDA. THE PROFESSIONAL LAND SURVEYOR CAN COORDINATE WITH THE CONTRACTOR TO INSTALL THE NECESSARY APPURTENANCES ON BURIED UTILITIES TO FACILITATE THE SURVEY AFTER CONSTRUCTION IS COMPLETE. IN ADDITION, PROPERTY STRAP NUMBERS AND STREET NAMES SHALL BE SHOWN ON THE PLAN. ON A CASE BY CASE BASIS, LEE COUNTY UTILITIES MAY WAIVE THE REQUIREMENT FOR CERTIFICATION BY A PROFESSIONAL LAND SURVEYOR, LICENSED IN THE STATE OF FLORIDA. HOWEVER, PRIOR CONSENT MUST FIRST BE OBTAINED FROM LEE COUNTY UTILITIES. THE COUNTY SHALL WITHHOLD FINAL ACCEPTANCE OF THE PROJECT UNTIL THE REQUIREMENT FOR RECORD DRAWINGS AND RELATED RECORDS HAS BEEN MET. RECORD DRAWINGS WITHOUT DETAILED FIELD VERIFIED HORIZONTAL AND VERTICAL LOCATIONS OF ALL FACILITIES SHOWN WILL BE REJECTED.
- E. A PRE-CONSTRUCTION MEETING IS REQUIRED BEFORE WORK MAY BEGIN. LEE COUNTY UTILITIES SHALL BE NOTIFIED 48 HOURS PRIOR TO PROJECT MOBILIZATION.
- F. ALL WORK AND MATERIALS, WHICH DO NOT CONFORM TO LCU SPECIFICATIONS, ARE SUBJECT TO REMOVAL AND REPLACEMENT AT THE CONTRACTOR'S EXPENSE.
- G. THE CONTRACTOR SHALL PROVIDE ACCESS TO THE SITE AT ALL TIMES FOR INSPECTION BY LCU, THEIR DESIGNEE, AND REGULATOR AGENCIES TO OBSERVE PROJECT CONSTRUCTION.
- H. THE CONTRACTOR SHALL PROVIDE SUFFICIENT PERSONNEL AND EQUIPMENT ON THE JOB AT ALL TIMES DURING CONSTRUCTION TO SATISFY THE SPECIFICATIONS AND TO COMPLETE WORK.
- I. LCU INSPECTOR TO BE NOTIFIED 24 HOURS IN ADVANCE TO OBSERVE ANY WORK INCLUDING BUT NOT LIMITED TO TIE-IN'S, TESTING AND FLUSHING. ANY WORK PERFORMED WITHOUT THE KNOWLEDGE OF LCU IS SUBJECT TO RE-EXCAVATION, REMOVAL AND REPLACEMENT OF SAME TO BE DONE AT THE CONTRACTOR'S EXPENSE.
- J. THE CONTRACTOR IS TO UNCOVER ALL EXISTING LINES BEING TIED INTO AND VERIFY GRADES BEFORE BEGINNING CONSTRUCTION.
- K. IT IS THE CONTRACTOR'S RESPONSIBILITY TO LOCATE AND TAKE ALL POSSIBLE PRECAUTIONS TO AVOID ANY DAMAGE TO ALL UNDERGROUND PIPELINES, TELEPHONE, CABLE TV, ELECTRIC LINES/CONDUITS AND STRUCTURES IN ADVANCE OF ANY CONSTRUCTION. LCU WILL NOT GUARANTEE ANY LOCATIONS AS SHOWN ON THESE PLANS OR THOSE OMITTED FROM THESE PLANS. THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MAY OCCUR BY HIS FAILURE TO EXACTLY LOCATE AND PROTECT EXISTING UTILITIES AND STRUCTURES.
- L. CONTRACTOR SHALL VERIFY ALL QUANTITIES SHOWN ON THE PLANS. IF ANY DISCREPANCIES IN QUANTITIES ARE FOUND, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER AND LCU.
- M. ALL REGULATORY AND PERMITTING AGENCIES' REQUIREMENTS SHALL BE COMPLIED WITH AT ALL TIMES DURING THE PROGRESS OF THE PROJECT.
- N. APPROPRIATE TURBIDITY CONTROL DEVICES (E.G. SILT FENCES, HAY BAILS) SHALL BE UTILIZED DURING ALL PHASES OF INSTALLATION AND GRADING. CONTRACTOR IS RESPONSIBLE FOR SUBMITTING THE NOTICE OF INTENT AND NOTICE OF TERMINATION TO THE EPA IN COMPLIANCE WITH LEE COUNTY'S NPDES PERMIT. CONTRACTOR IS RESPONSIBLE FOR DEVELOPING AND MAINTAINING AN EFFECTIVE STORM WATER POLLUTION PREVENTION PLAN.
- O. IN THE EVENT THAT HARD LIMESTONE FORMATION IS ENCOUNTERED, MAKING IT IMPOSSIBLE TO EXCAVATE TO THE DEPTH REQUIRED UNDER THIS CONTRACT, THE CONTRACTOR MAY BE ALLOWED TO REDUCE THE PIPE COVER NOT LESS THAN TWO (2) FEET WHILE MAINTAINING THE LCU REQUIRED THICKNESS OF BEDDING UNDER THE PIPE. SUCH DEVIATION FROM THE PLANS MUST FIRST BE APPROVED BY LCU AND THE ENGINEER PRIOR TO THE PIPE LAYING. IF TWO FEET OF COVER OR MORE CAN NOT BE ATTAINED, THE CONTRACTOR SHALL PROVIDE OTHER METHOD OF CONSTRUCTION OR PIPE PROTECTION WHICH SHALL FIRST BE APPROVED BY LCU AND THE ENGINEER, AT NO ADDITIONAL COST TO THE COUNTY.

- P. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL VERIFY AND BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY HIS FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL EXISTING UTILITIES, STRUCTURES, AND OTHER FEATURES AFFECTING HIS WORK. ANYTHING NOT SHOWN ON THESE DRAWINGS SHOULD BE BROUGHT TO THE ATTENTION OF THE ENGINEER AND SHALL NOT CONSTITUTE AN EXTRA, UNLESS APPROVED BY LCU.
- Q. THE CONTRACTOR SHALL CONTACT THE ENGINEER AND LCU IMMEDIATELY CONCERNING ANY CONFLICTS WITH LCU UTILITIES/ STRUCTURES ARISING DURING CONSTRUCTION OF ANY FACILITIES SHOWN ON THESE DRAWINGS.
- R. TRAFFIC MUST BE MAINTAINED AT ALL TIMES AS PER LEE COUNTY DEPARTMENT OF TRANSPORTATION (LCDOT) AND PER FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION.
- S. THE CONTRACTOR SHALL VERIFY ALL UTILITIES AND PROVIDE AT LEAST 48 HOURS NOTICE TO THE INDIVIDUAL UTILITY COMPANIES AND FDOT AND LCDOT PRIOR TO CONSTRUCTION.
- T. THE CONTRACTOR SHALL REPLACE ALL PAVEMENTS, CURBS, DRIVEWAYS, SIDEWALKS, FENCES, ETC., WITH THE SAME TYPE OF MATERIAL THAT WAS REMOVED DURING CONSTRUCTION OR AS DIRECTED BY THE ENGINEER. THE CONTRACT SHALL RESTORE ALL AREAS AFFECTED BY THE CONSTRUCTION TO ITS ORIGINAL CONDITION, OR BETTER.
- U. WITHIN THE FDOT AND LCDOT RIGHT-OF-WAY, ALL DISTURBED AREAS SHALL RECEIVE GRASSING (SEEDING) OR SODDING MATERIALS IN ACCORDANCE WITH FDOT SPECIFICATIONS. THOSE AREAS THAT ARE CLASSIFIED AS DRAINAGE DITCHES SHALL RECEIVE FULL SOLID SOD.
- V. THE INFORMATION PROVIDED IN THESE PLANS IS SOLELY TO ASSIST THE CONTRACTOR IN ASSESSING THE NATURE AND EXTENT OF CONDITIONS WHICH MAY BE ENCOUNTERED DURING THE COURSE OF WORK. ALL CONTRACTORS ARE DIRECTED, PRIOR TO BIDDING, TO CONDUCT WHATEVER INVESTIGATIONS THEY MAY DEEM NECESSARY TO ARRIVE AT THEIR OWN CONCLUSION REGARDING THE ACTUAL CONDITIONS THAT WILL BE ENCOUNTERED, AND UPON WHICH THEIR BIDS WILL BE BASED.
- W. ALL FRAMES, COVER VALVE BOXES, METER BOXES AND MANHOLES SHALL BE ADJUSTED TO FINISHED GRADE UPON COMPLETION OF PAVING OR RELATED CONSTRUCTION. ALL VALVE PADS SHALL BE POURED IN PLACE. NO PRE-FORMED VALVE PADS ALLOWED.



- GENERAL NOTES**
1. THE LIMITS OF ASPHALT (OVERLAY) REPLACEMENT SHALL BE DETERMINED BY LEE COUNTY.
 2. FOR GRAVITY PIPE LINES, MAY USE ROCK 1' (FT) ABOVE PIPE.
 3. USING A 3/4\"/>

PAVEMENT RESTORATION DETAIL FOR PUBLIC ROADS
N.T.S.



TYPICAL WATER MAIN PIPE JOINT LOCATION AT PERPENDICULAR CROSSINGS PURSUANT TO CH. 62-555.314, F.A.C.
N.T.S.

Professional Engineer Seal for Joel Allan Makau, License No. 86414, State of Florida. The seal is circular with the text 'JOEL ALLAN MAKAU LICENSE No. 86414 STATE OF FLORIDA PROFESSIONAL ENGINEER'. A signature and the date '2/19/2021' are written over the seal. Below the seal, the text reads: 'JOEL ALLAN MAKAU, P.E. DATE FLORIDA P.E. # 86414 LEE COUNTY UTILITIES 1500 MONROE STREET, 3rd FL FT. MYERS, FL 33901'.

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FORT MYERS SHORES PHASE 1B
WATER MAIN REPLACEMENT
NOTES AND DETAILS SHEET

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