

CONSTRUCTION PLANS

FOR

CR 555 MULTI-FAMILY APARTMENTS

ADDRESS NOT YET ASSIGNED
BARTOW, FLORIDA
SECTION 07, TOWNSHIP 30 SOUTH, RANGE 25 EAST
BARTOW, POLK COUNTY, FLORIDA

OWNER

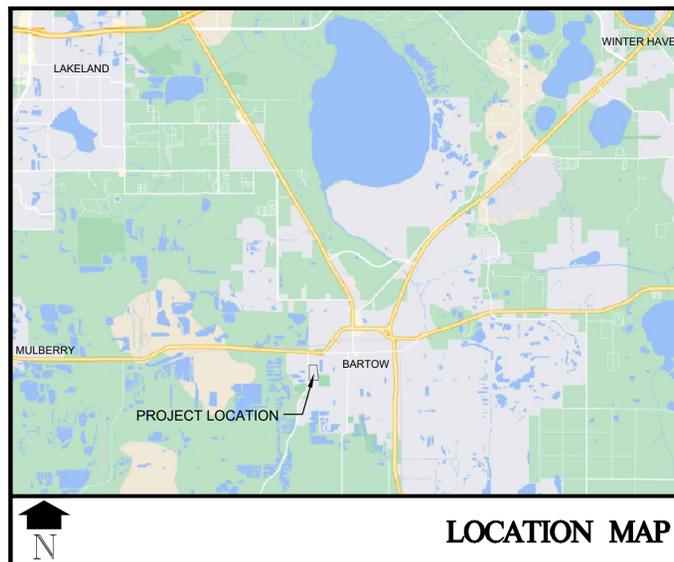
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STEVE GITHENS, MAYOR
TRISH PFEIFER, COMMISSIONER
TANYA TUCKER, COMMISSIONER
LEO LONGWORTH, COMMISSIONER
NICK ADAMS, COMMISSIONER



SHEET INDEX

SHEET NO.	DESCRIPTION
C00.01	COVER SHEET
C00.02	GENERAL NOTES
C01.01	EXISTING CONDITIONS BOUNDARY
C01.01A	EXISTING CONDITIONS TOPOGRAPHIC
C01.02	DEMOLITION & STORMWATER POLLUTION PREVENTION PLAN
C01.03	SITE PLAN
C02.01	PAVING, GRADING & DRAINAGE PLAN
C03.01	UTILITY PLAN
C04.01	ROAD "A" PLAN AND PROFILE
C04.02	ROAD "B" PLAN AND PROFILE (10+00 TO 15+00)
C04.03	ROAD "B" PLAN AND PROFILE (15+00 TO 19+00)
C04.03A	ROAD "B" PLAN AND PROFILE (19+00 TO 21+50)
C04.04	ROAD "B" PLAN AND PROFILE (21+50 TO 25+50)
C04.05	ROAD "B" PLAN AND PROFILE (25+50 TO 30+50)
C04.06	ROAD "B" PLAN AND PROFILE (30+50 TO 35+50)
C04.07	ROAD "B" PLAN AND PROFILE (35+50 TO 39+50)
C04.07A	ROAD "B" PLAN AND PROFILE (39+50 TO 41+00)
C04.08	ROAD "B" PLAN AND PROFILE (41+00 TO 45+50)
C04.09	ROAD "B" PLAN AND PROFILE (45+50 TO 48+93)
C04.10	ROAD "C" PLAN AND PROFILE (10+00 TO 14+00)
C04.11	ROAD "C" PLAN AND PROFILE (14+00 TO 18+50)
C04.12	ROAD "C" PLAN AND PROFILE (18+50 TO 21+65)
C04.13	ROAD "D" PLAN AND PROFILE (10+00 TO 15+00)
C04.14	ROAD "D" PLAN AND PROFILE (15+00 TO 19+00)
C04.15	ROAD "D" PLAN AND PROFILE (19+00 TO 21+00)
C04.16	ROAD "E" PLAN AND PROFILE (10+00 TO 13+00)
C04.17	ROAD "F" PLAN AND PROFILE (10+00 TO 14+50)
C10.01	SITE PLAN DETAILS
C11.01	PAVING AND GRADING DETAILS
C11.02	CROSS SECTIONS AND STRUCTURES TABLE
C11.03	DRAINAGE DETAILS
C12.01	UTILITIES DETAILS



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FLORIDA REGISTRATION NUMBERS:
PE 44116 / PSM 5736
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PREPARED FOR:
THE PARMAN GROUP, LLC
4349 STATE ROAD 60 WEST
MULBERRY, FL 33860

PROJECT NAME:
**CR 555 MULTI-FAMILY
BARTOW, FLORIDA**
SHEET TITLE:
COVER SHEET

SHEET NUMBER
C00.01



GENERAL NOTES:

CONTRACTOR IS RESPONSIBLE FOR COMPLIANCE WITH THE NOTES AND SPECIFICATIONS SET FORTH HEREIN. CONTRACTOR SHALL BE RESPONSIBLE TO ENSURE CONFORMANCE TO THESE REQUIREMENTS BY ALL SUBCONTRACTORS.

1. THE FOLLOWING DOCUMENTS ARE INCORPORATED BY REFERENCE AS PART OF THIS SITE PLAN:

-BOUNDARY AND TOPOGRAPHIC SURVEY BY RAYL ENGINEERING & SURVEYING, LLC DATED 09/23/2021

PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL VERIFY THAT HE/SHE HAS THE LATEST EDITION OF THE DOCUMENTS REFERENCED ABOVE.

2. ALL HANDICAPPED PARKING SPACES SHALL BE CONSTRUCTED TO MEET, AT A MINIMUM, THE MORE STRINGENT OF THE REQUIREMENTS OF THE "AMERICANS WITH DISABILITIES ACT" (ADA) CODE 42 U.S.C. SEC. 12011 ET SEQ. AND 42 U.S.C. SEC. 4151 ET SEQ.) OR THE REQUIREMENTS OF THE JURISDICTION WHERE THIS PROJECT IS TO BE CONSTRUCTED.

3. PRIOR TO STARTING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE TO ENSURE THAT ALL REQUIRED PERMITS AND APPROVALS HAVE BEEN OBTAINED. NO CONSTRUCTION OR FABRICATION SHALL BEGIN UNTIL THE CONTRACTOR HAS RECEIVED AND THOROUGHLY REVIEWED THE COMMENTS TO ALL PLANS AND OTHER DOCUMENTS REVIEWED AND APPROVED BY THE PERMITTING AUTHORITIES. CONTRACTOR SHALL HAVE COPIES OF ALL PERMITS AND APPROVALS ON SITE AT ALL TIMES.

4. THE OWNER/CONTRACTOR SHALL BE FAMILIAR WITH AND RESPONSIBLE FOR THE PROCUREMENT OF ANY AND ALL CERTIFICATIONS REQUIRED FOR THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY.

5. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS AND ALL APPLICABLE REQUIREMENTS AND STANDARDS OF ALL GOVERNMENTAL ENTITIES HAVING JURISDICTION OVER THIS PROJECT.

6. THE GEOTECHNICAL REPORT AND RECOMMENDATIONS SET FORTH THEREIN ARE A PART OF THE REQUIRED CONSTRUCTION DOCUMENTS AND, IN CASE OF CONFLICT, SHALL TAKE PRECEDENCE UNLESS SPECIFICALLY NOTED OTHERWISE ON THE PLANS. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IN WRITING OF ANY SUCH DISCREPANCY TO BE REVIEWED AND APPROVED BY THE PERMITS AND APPROVALS ON SITE AT ALL TIMES.

7. THESE PLANS ARE BASED ON INFORMATION PROVIDED TO RAYL ENGINEERING & SURVEYING, LLC BY THE OWNER AND OTHERS PRIOR TO THE TIME OF PLAN PREPARATION. CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS AND NOTIFY RAYL ENGINEERING & SURVEYING, LLC IF ACTUAL SITE CONDITIONS DIFFER FROM THOSE SHOWN ON THE PLAN, OR IF THE PROPOSED WORK CONFLICTS WITH ANY OTHER SITE FEATURES.

8. ALL DIMENSIONS SHOWN ON THE PLANS SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO THE START OF CONSTRUCTION. CONTRACTOR SHALL NOTIFY THE ENGINEER IN WRITING OF ANY DISCREPANCIES EXIST PRIOR TO PROCEEDING WITH CONSTRUCTION. NO EXTRA COMPENSATION SHALL BE PAID TO THE CONTRACTOR FOR WORK HAVING TO BE REDONE DUE TO DIMENSIONS OR GRADES SHOWN INCORRECTLY ON THESE PLANS PRIOR TO THE GIVING OF SUCH NOTIFICATION AND THE ENGINEER'S WRITTEN AUTHORIZATION OF SUCH ADDITIONAL WORK.

9. CONTRACTOR SHALL REFER TO THE ARCHITECTURAL DRAWING PLANS FOR EXACT LOCATIONS AND DIMENSIONS OF ENTRYPKT POINTS, ELEVATIONS, PRECISE BUILDING DIMENSIONS, EXACT BUILDING UTILITY LOCATIONS.

10. PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL COORDINATE THE BUILDING LAYOUT BY CAREFUL REVIEW OF THE SITE PLAN AND LATEST ARCHITECTURAL PLANS INCLUDING, BUT NOT LIMITED TO, STRUCTURAL, MECHANICAL, ELECTRICAL, PLUMBING AND FIRE SUPPRESSION PLAN, WHERE APPLICABLE. CONTRACTOR SHALL IMMEDIATELY NOTIFY OWNER, ARCHITECT AND SITE ENGINEER OF ANY DISCREPANCIES.

11. DEBRIS SHALL NOT BE BURIED ON THE SUBJECT SITE AND ALL UNSUITABLE EXCAVATED MATERIAL AND DEBRIS (SOLID WASTE) SHALL BE DISPOSED OF IN ACCORDANCE WITH THE REQUIREMENTS OF ALL GOVERNMENTAL AUTHORITIES HAVING JURISDICTION OVER THIS PROJECT.

12. THE CONTRACTOR IS RESPONSIBLE FOR ALL SHORING REQUIRED DURING EXCAVATION (TO BE PERFORMED IN ACCORDANCE WITH CURRENT OSHA STANDARDS) AND ANY ADDITIONAL PRECAUTIONS TO BE TAKEN TO ASSURE THE STABILITY OF ADJACENT AND CONTIGUOUS STRUCTURES.

13. THE CONTRACTOR IS TO EXERCISE EXTREME CARE WHEN PERFORMING ANY WORK ACTIVITIES ADJACENT TO PAVEMENT, STRUCTURES, ETC. WHICH ARE TO REMAIN. CONTRACTOR SHALL BE RESPONSIBLE FOR TAKING THE APPROPRIATE MEASURES REQUIRED TO MAINTAIN THE EXISTING CONDITIONS, AND IN CONFORMANCE WITH APPLICABLE CODES. CONTRACTOR IS RESPONSIBLE TO DOCUMENT ALL EXISTING DAMAGE AND NOTIFY THE OWNER AND THE CONSTRUCTION MANAGER PRIOR TO THE START OF CONSTRUCTION.

14. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY DAMAGE DONE TO ANY NEW OR EXISTING CONSTRUCTION OR PROPERTY DURING THE COURSE OF CONSTRUCTION, INCLUDING BUT NOT LIMITED TO DRAINAGE UTILITIES, PAVEMENT, STRIPING, CURB, ETC. THE CONTRACTOR SHALL BE RESPONSIBLE FOR AND SHALL REPLACE ALL SIGNAL, INTERLOCK, EXISTING CONDITIONS, AND IN CONDUITS, AND ANY UNDERGROUND ACCESSORY EQUIPMENT DAMAGED DURING CONSTRUCTION. THE REPAIR OF ANY SUCH NEW OR EXISTING CONSTRUCTION OR PROPERTY SHALL RESTORE SUCH CONSTRUCTION OR PROPERTY TO A CONDITION EQUIVALENT TO OR BETTER THAN THE EXISTING CONDITIONS, AND IN CONFORMANCE WITH APPLICABLE CODES. CONTRACTOR IS RESPONSIBLE TO DOCUMENT ALL EXISTING DAMAGE AND NOTIFY THE OWNER AND THE CONSTRUCTION MANAGER PRIOR TO THE START OF CONSTRUCTION.

15. ALL CONCRETE SHALL HAVE THE MINIMUM COMPRESSIVE STRENGTH OF 3,000 PSI AT 28 DAYS UNLESS OTHERWISE NOTED ON THE PLANS, DETAILS AND/OR GEOTECHNICAL REPORT.

16. THE ENGINEER IS NOT RESPONSIBLE FOR CONSTRUCTION METHODS / MEANS FOR COMPLETION OF THE WORK DEPICTED NEITHER ON THESE PLANS, NOR FOR ANY CONFLICTS/SCOPE REVISIONS WHICH RESULT FROM SAME. CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE METHODS/MEANS FOR COMPLETION OF THE WORK PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.

17. THE ENGINEER OF RECORD IS NOT RESPONSIBLE FOR JOB SITE SAFETY NOR HAS THE ENGINEER OF RECORD BEEN RETAINED FOR SUCH PURPOSES.

18. ALL CONTRACTORS MUST CARRY THE SPECIFIED STATUTORY WORKER'S COMPENSATION INSURANCE, EMPLOYER'S LIABILITY INSURANCE AND LIMITS OF COMMERCIAL GENERAL LIABILITY INSURANCE (COL). ALL CONTRACTORS MUST HAVE THEIR COL POLICIES ENDORSED TO NAME RAYL ENGINEERING & SURVEYING, LLC AND ITS SUB-CONSULTANTS AS ADDITIONAL NAMED INSURED AND TO PROVIDE CONTRACTUAL LIABILITY COVERAGE SUFFICIENT TO INSURE THIS HOLD HARMLESS AND INDEMNIFY OBLIGATIONS ASSUMED BY THE CONTRACTORS. ALL CONTRACTORS MUST FURNISH RAYL ENGINEERING & SURVEYING, LLC WITH CERTIFICATIONS OF INSURANCE AS EVIDENCE OF THE REQUIRED INSURANCE PRIOR TO COMMENCING WORK AND UPON RENEWAL OF EACH POLICY DURING THE ENTIRE PROJECT. IN ADDITION, ALL CONTRACTORS WILL, TO THE FULLEST EXTENT PERMITTED BY LAW, INDEMNIFY AND HOLD HARMLESS RAYL ENGINEERING & SURVEYING, LLC AND ITS SUB-CONSULTANTS FROM AND AGAINST ANY DAMAGES, LIABILITIES OR COSTS, INCLUDING REASONABLE ATTORNEY'S FEES AND DEFENSE COSTS, ARISING OUT OF OR IN ANY WAY CONNECTED WITH THE PROJECT, INCLUDING ALL CLAIMS BY EMPLOYEES OF THE CONTRACTORS.

19. RAYL ENGINEERING & SURVEYING, LLC WILL REVIEW AND APPROVE OR TAKE OTHER APPROPRIATE ACTION ON THE CONTRACTOR SUBMITTALS, SUCH AS SHOP DRAWINGS, PRODUCT DATA, SAMPLES, AND OTHER DATA, WHICH THE CONTRACTOR IS REQUIRED TO SUBMIT, BUT ONLY FOR THE LIMITED PURPOSE OF CHECKING FOR CONFORMANCE WITH THE DESIGN INTENT AND THE INFORMATION SHOWN IN THE CONSTRUCTION CONTRACT DOCUMENTS. CONSTRUCTION MEANS AND/OR METHODS, COORDINATION OF THE WORK WITH OTHER TRADES, AND CONSTRUCTION SAFETY PRECAUTIONS ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. RAYL ENGINEERING & SURVEYING, LLC SHOP DRAWING REVIEW WILL BE CONDUCTED WITH REASONABLE PROMPTNESS WHILE ALLOWING SUFFICIENT TIME TO PERMIT ADEQUATE REVIEW. REVIEW OF A SPECIFIC ITEM SHALL NOT INDICATE THAT RAYL ENGINEERING & SURVEYING, LLC HAS REVIEWED THE ENTIRE ASSEMBLY OF WHICH THE ITEM IS A COMPONENT. RAYL ENGINEERING & SURVEYING, LLC WILL NOT BE RESPONSIBLE FOR ANY DEVIATIONS FROM THE CONSTRUCTION DOCUMENTS NOT BROUGHT TO ITS ATTENTION, IN WRITING, BY THE CONTRACTOR. RAYL ENGINEERING & SURVEYING, LLC WILL NOT BE REQUIRED TO REVIEW PARTIAL SUBMISSIONS OR THOSE FOR WHICH SUBMISSIONS OF CORRELATED ITEMS HAVE NOT BEEN RECEIVED.

20. NEITHER THE PROFESSIONAL ACTIVITIES OF RAYL ENGINEERING & SURVEYING, LLC NOR THE PRESENCE OF RAYL ENGINEERING & SURVEYING, LLC OR ITS EMPLOYEES AND SUB-CONSULTANTS AT A CONSTRUCTION / PROJECT SITE, SHALL RELIEVE THE GENERAL CONTRACTOR OF ITS OBLIGATIONS, DUTIES AND RESPONSIBILITIES INCLUDING, BUT NOT LIMITED TO, CONSTRUCTION MEANS, METHODS, SEQUENCE, TECHNIQUES OR PROCEDURES NECESSARY FOR PERFORMING, SUPERINTENDING AND COORDINATING THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND ANY HEALTH OR SAFETY PRECAUTIONS REQUIRED BY ANY REGULATORY AGENCIES. RAYL ENGINEERING & SURVEYING, LLC AND ITS PERSONNEL HAVE NO AUTHORITY TO EXERCISE ANY CONTROL OVER ANY CONSTRUCTION CONTRACTOR OR ITS EMPLOYEES IN CONNECTION WITH THEIR WORK OR ANY HEALTH OR SAFETY PROGRAMS OR PROCEDURES. THE GENERAL CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR JOB SITE SAFETY. RAYL ENGINEERING & SURVEYING, LLC SHALL BE INDEMNIFIED BY THE GENERAL CONTRACTOR AND SHALL BE NAMED AN ADDITIONAL INSURED UNDER THE GENERAL CONTRACTOR'S POLICIES OF GENERAL LIABILITY INSURANCE.

21. IF THE CONTRACTOR DEVIATES FROM THE PLANS AND SPECIFICATIONS, INCLUDING THE NOTES CONTAINED HEREIN, WITHOUT FIRST OBTAINING THE PRIOR WRITTEN AUTHORIZATION OF THE ENGINEER FOR SUCH DEVIATIONS, CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE PAYMENT OF ALL COSTS INCURRED IN CORRECTING ANY WORK DONE WHICH DEVIATES FROM THE PLANS, ALL FINES AND/OR PENALTIES ASSESSED WITH RESPECT THERETO AND ALL COMPENSATORY OR PUNITIVE DAMAGES RESULTING THEREFROM. THE CONTRACTOR SHALL INDEMNIFY AND HOLD THE OWNER AND ENGINEER HARMLESS FROM ALL SUCH COSTS RELATED TO SAME.

22. CONTRACTOR IS RESPONSIBLE FOR MAINTENANCE AND PROTECTION OF TRAFFIC PLAN FOR ALL WORK THAT AFFECTS PUBLIC TRAVEL EITHER IN THE R.O.W. OR ON SITE. THE COST FOR THIS ITEM SHOULD BE INCLUDED IN THE CONTRACTOR'S PRICE.

23. CONTRACTOR SHALL CONFIRM ADA ACCESSIBILITY PRIOR TO INSTALLING FINISHING COURSES OF SIDEWALKS AND PARKING AREAS.

24. UPON THE RECEIPT OF THE "NOTICE TO PROCEED", THE CONTRACTOR SHALL CONTACT THE ENGINEER OF RECORD AND ARRANGE A PRE-CONSTRUCTION CONFERENCE TO INCLUDE ALL INVOLVED GOVERNMENTAL AGENCIES, UTILITY OWNERS, THE OWNER AND THE ENGINEER OF RECORD.

25. ALL UTILITY EASEMENTS ARE TO BE SECURED PRIOR TO CERTIFICATE OF OCCUPANCY. THESE EASEMENTS SHALL BE SKETCHED, DESCRIBED, AND RECORDED AT THE SOLE COST OF THE PROPERTY OWNER.

26. CONTRACTOR SHALL PROVIDE MINIMUM 48 HOUR NOTICE TO ENGINEER AND APPLICABLE AGENCIES FOR SCHEDULING INSPECTIONS.

27. PRIOR TO THEIR CONSTRUCTION OR INSTALLATION, SHOP DRAWINGS SHALL BE SUBMITTED TO AND APPROVED BY THE ENGINEER OF RECORD AND THE CITY OF BARTOW FOR THE FOLLOWING: FIRE HYDRANTS, VALVES, SANITARY SEWER MANHOLES, STORM STRUCTURES, AND ALL REQUIRED ACCESSORIES. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN ALL OTHER AGENCY APPROVALS IF REQUIRED.

28. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ARRANGE FOR OR SUPPLY TEMPORARY WATER SERVICE, SANITARY FACILITIES AND ELECTRICITY.

29. MAINTENANCE OF TRAFFIC IN THE PUBLIC RIGHTS-OF-WAY SHALL BE IN ACCORDANCE WITH M.U.T.C.D. AND APPROVED BY THE CITY OF BARTOW WHERE APPLICABLE PRIOR TO IMPLEMENTATION.

30. ALL OPEN TRENCHES AND HOLES ADJACENT TO ROADWAYS OR WALKWAYS SHALL BE PROTECTED AND PROVIDED WITH GUARDRAIL TO ASSURE THE SAFETY OF BOTH VEHICULAR AND PEDESTRIAN TRAFFIC.

31. NO TRENCHES OR HOLES NEAR WALKWAYS, IN ROADWAYS OR THEIR ADJACENT AREAS, ARE TO BE LEFT OPEN DURING NIGHTTIME HOURS WITHOUT EXPRESS PERMISSION FROM THE CITY OF BARTOW.

32. IT SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR FOR ANY NECESSARY CONSTRUCTION MARKING AND SIGNAGE OR ANY PEDESTRIAN SIGNALIZATION AND/OR SIGNAL MODIFICATION TO ACCOMMODATE AN ALTERNATE SAFE WALK ROUTE. ALL RESTORED TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH THE GOVERNING AGENCY'S TRAFFIC ENGINEERING STANDARDS.

GRAVITY SANITARY SEWER NOTES:

A. GENERAL:
1. DISTANCE AND LENGTHS SHOWN ON PLANS AND PROFILE DRAWINGS ARE REFERENCED TO THE CENTER OF STRUCTURES.

2. PRIOR TO COMMENCING CONSTRUCTION, CONTRACTOR TO TELETYPE EXISTING SANITARY SEWER LINE FROM POINT OF CONNECTION THROUGH THE NEXT SEQUENTIAL DOWNSTREAM RUN OF PIPE. ADDITIONALLY, PRIOR TO COMPLETION OF CONSTRUCTION, CONTRACTOR SHALL TELETYPE THE NEWLY INSTALLED SANITARY SEWER MAIN TO ENSURE NO DIPS OR DEBRIS WITHIN LINE.

B. MATERIALS:
1. ALL PVC SEWER PIPE AND FITTINGS SHALL BE NON-PRESSURE POLYVINYL CHLORIDE (PVC) PIPE CONFORMING TO ASTM F679, SDR 26, WITH PUSH-ON RUBBER GASKET JOINTS. PIPES LESS THAN 4" SHALL BE HDPE, PE 4710, DR 9.

2. ALL FITTINGS AND ACCESSORIES SHALL BE AS MANUFACTURED OR SUPPLIED BY THE PIPE MANUFACTURER OR APPROVED EQUAL.
3. ALL SANITARY CLEANOUTS WITHIN PAVEMENT SHALL HAVE A LID THAT IS H20 LOADING.

C. INSTALLATION:
1. PIPE AND FITTINGS:
a. SEWER PIPE SHALL BE INSTALLED IN ACCORDANCE WITH ASTM D2321, AND THE UNI-BELL PLASTICS PIPE ASSOCIATION'S "RECOMMENDED PRACTICE FOR THE INSTALLATION OF PVC SEWER PIPE".
b. BEDDING AND INITIAL BACKFILL (12 INCHES) OVER SEWER MAINS AND SERVICES SHALL BE SAND WITH NO ROCK LARGER THAN 1" IN DIAMETER. PEA ROCK OR 3/4" 4" WASHED ROCK WILL BE USED IN WATER OR WHERE UNSUITABLE BEDDING EXISTS. ALL OTHER FILL SHALL NOT HAVE ROCK LARGER THAN 6" IN DIAMETER.

2. CLEANOUTS:
a. CLEANOUTS SHALL BE SET PLUMB TO LINE AND GRADE ON FIRM CLEAN SUBGRADE PROVIDING UNIFORM BEARING UNDER THE BASE.
b. ALL OPENINGS AND JOINTS SHALL BE SEALED WATER-TIGHT.

3. SERVICE:
a. MINIMUM SLOPE OF ALL SERVICE LINES SHALL BE AS INDICATED IN THE FLORIDA BUILDING CODE.
b. SERVICE LATERALS SHALL TERMINATE AT A DEPTH 30" BELOW FINISHED GRADE, OR OUTSIDE BUILDING FOOTPRINT OR AS INDICATED ON PLUMBING PLAN.
c. EACH SERVICE CONNECTION SHALL BE PLUGGED WATER-TIGHT WITH AN APPROVED PLUG.
d. THE END OF EACH SERVICE CONNECTION SHALL BE MARKED WITH A 2"x4" TREATED STAKE PAINTED GREEN, EXTENDING 18"(MIN) ABOVE GRADE.
e. CONTRACTOR SHALL ROUGH IN RISER TO 1 FOOT ABOVE FINISHED GRADE AND PLUG, AT PROJECT COMPLETION, CUT BACK TO FINISHED GRADE.

f. CONNECTION OF SERVICES TO BUILDING PLUMBING SHALL BE COORDINATED WITH THE CITY OF BARTOW

D. TESTING:
1. AFTER CONSTRUCTION OF THE SEWER SYSTEM, THE ENGINEER MAY REQUIRE A VISUAL INFILTRATION AND/OR EXFILTRATION TEST TO BE PERFORMED ON THE ENTIRE SYSTEM OR ANY PART THEREOF.
2. AN AIR TEST MAY BE SUBSTITUTED FOR THE WATER EXFILTRATION TEST, UPON APPROVAL OF THE ENGINEER.
3. SEWER PIPE LEAKAGE ALLOWABLE SHALL NOT EXCEED 150 GALLONS PER DAY PER INCH DIAMETER PER MILE IN A TWO HOUR TEST PERIOD FOR ANY SECTION TESTED. NO VISIBLE LEAKAGE SHALL BE ALLOWED.

4. SANITARY SEWER SHALL BE TELEVIEWED AND LAMPED AT DEVELOPER'S EXPENSE. PRIOR TO FINAL ACCEPTANCE, OWNER / CONTRACTOR IS RESPONSIBLE FOR CORRECTING ANY DEFICIENCIES PRIOR TO CERTIFICATION TO ANY AGENCY.

5. VISIBLE INFILTRATION LEAKAGE INTO MANHOLES AND SEWER PIPE SHALL NOT BE PERMITTED.
6. CONTRACTOR IS RESPONSIBLE FOR CORRECTING ANY DEFICIENCIES PRIOR TO THE CERTIFICATION TO ANY AGENCY.

7. THE CONTRACTOR SHALL PERFORM AN INFILTRATION/EXFILTRATION TEST ON ALL GRAVITY SEWERS AND A PRESSURE TEST ON ALL FORCE MAINS (AS APPLICABLE) IN ACCORDANCE WITH THE CITY OF BARTOW REGULATIONS. SAID TESTS ARE TO BE CERTIFIED BY THE ENGINEER OF RECORD AND APPROVED BY THE CITY OF BARTOW WASTEWATER DEPARTMENT FOR APPROVAL.

8. ONE OR MORE OF THE FOLLOWING CERTIFICATES/SHOP DRAWINGS, DEPENDING ON THE TYPE OF CONNECTIONS, WILL BE REQUIRED:
• DUCTILE IRON PIPE (DIP) OR POLY-VINYL CHLORIDE (PVC) CERTIFICATE OF MANUFACTURE
• MANHOLE SHOP DRAWINGS AND CONCRETE STRENGTH REPORT 183' FRAME AND COVER SHOP DRAWINGS
• FLEXIBLE COUPLING SHOP DRAWINGS
• CASING PIPE CERTIFICATE
• JACKING PIT DETAIL
• CRUSHED STONE SUBMITTAL
• VALVE SHOP DRAWING
• MANHOLE DROP CONNECTION DETAIL
• THESE ITEMS MUST BE SUBMITTED, REVIEWED, AND APPROVED PRIOR TO STARTING CONSTRUCTION.

9. THE CERTIFICATE OF OCCUPANCY WILL NOT BE ISSUED UNTIL THE FOLLOWING HAS BEEN COMPLETED:
a. FINAL INSPECTION IN CONJUNCTION WITH DEPARTMENT PERSONNEL.
b. AS-BUILDS HAVE BEEN SUBMITTED AND ACCEPTED
c. ALL NECESSARY TESTING COMPLETED AND CERTIFIED
d. PAYMENT OF ALL CAPACITY FEES
e. ISSUANCE OF THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (F.D.E.P.) CERTIFICATION OF COMPLETION APPROVAL (IF APPLICABLE)
f. OTHER STANDARD DEPARTMENT NOTES SPECIFIC TO THE INSTALLATION OF GRAVITY SEWERS OR FORCE MAINS SHALL ALSO BE INCLUDED. THESE NOTES ARE LISTED IN THE SECTIONS PROVIDED BELOW THAT DESCRIBE THE PLAN REQUIREMENTS FOR GRAVITY SEWERS AND FORCE MAINS.

10. PIPE SHALL BE ANWVA C-608 HDPE AND HAVE A DUCTILE IRON PIPE OUTSIDE DIAMETER (ODPS). THE PIPE SHALL CONTAIN A MINIMUM OF 2 IMPREGNATED, LONGITUDINAL GREEN STRIPES. THE DIMENSION RATIO SHALL BE VERIFIED BY THE CONTRACTOR BASED ON THE PIPE PULL STRENGTH REQUIRED FOR THE DIRECTIONAL DRILLING. THE MINIMUM WORKING PRESSURE RATING OF THE PIPE SUPPLIED SHALL BE 160 PSI.

11. HDPE RESIN SHALL BE PE4710 RESIN CHARACTERIZED BY ASTM D3350.
12. HDPE PIPE SHALL HAVE A MINIMUM THICKNESS AS THAT OF SDR-11. HDPE PIPE SHALL BE IN MINIMUM NOMINAL LENGTHS OF 20 FEET AS BDR KIT BY FITTINGS SHALL BE HDPE WITH DUCTILE IRON OUTSIDE DIAMETER MEETING ANSII/AWWA C906, LATEST REVISION, WITH A MINIMUM WORKING PRESSURE RATING OF 160 PSI. DUCTILE IRON FITTINGS MAY BE USED ONLY WHERE SPECIFIED ON THE PLANS.
13. MAIN VALVES SHALL BE INSTALLED AWAY FROM PARKING AREAS. IF THIS IS UNAVOIDABLE, PROPER MEASURES SHALL BE TAKEN TO AVOID THE PARKING OF VEHICLES OVER THE VALVES. HYDRANT VALVES SHALL BE INSTALLED AS CLOSE TO THE MAIN AS POSSIBLE. VALVES LOCATED IN NON-PAVED AREAS OR IN PARKING STALLS REQUIRE A REFLECTIVE PAVEMENT MARKER ON THE CENTER OF THE NEAREST LANE OF ROAD PAVEMENT. WHITE REFLECTORS FOR THE WATER MAIN VALVES.

14. THE DISTANCE FROM THE TOP OF THE VALVE ACTUATOR NUT TO FINAL GRADE SHALL BE A MINIMUM OF 12 INCHES AND A MAXIMUM OF 18 INCHES.

15. SERVICE:
a. COVER OVER SERVICE LINES SHALL BE 18" MINIMUM, 36" MAXIMUM BELOW FINISHED GRADE, AND 36" UNDER PAVEMENT.
b. SERVICES UP TO 2" SHALL BE POLYETHYLENE TUBING PER THE CITY OF BARTOW.

c. METER STOPS SHALL HAVE 8" TO 10" COVER AS REQUIRED FOR PROPER METER BOX INSTALLATION.
d. WATER SERVICES UNDER PAVEMENT SHALL BE ENCASED IN A SCHEDULE 80 PVC SLEEVE FOR THE FULL LENGTH OF THE PAVEMENT AND FOR 2' BEYOND THE EDGE. SLEEVE DIAMETER SHALL BE TWICE THE DIAMETER OF THE SERVICE PIPE.

16. THE END OF EACH SERVICE CONNECTION SHALL BE MARKED WITH A 2"x4" TREATED STAKE, PAINTED BLUE EXTENDING 18" (MINIMUM) ABOVE GRADE UNLESS INDICATED OTHERWISE.

17. TESTING:
a. BEFORE ANY PHYSICAL CONNECTIONS TO THE EXISTING WATER MAINS ARE MADE, THE COMPLETE WATER SYSTEM SHALL BE PRESSURE TESTED AND DISINFECTED HYDROSTATICALLY. TESTING OF NEW MAINS SHALL BE PERFORMED AT A MINIMUM STARTING PRESSURE OF 150 PSI FOR TWO HOURS IN ACCORDANCE WITH ANSII/AWWA C600-99 OR LATEST REVISION. THE PRESSURE TEST SHALL NOT VARY MORE THAN 45 P.S.I. DURING THE TEST. THE PRESSURE TEST SHALL BE WITNESSED BY A REPRESENTATIVE OF THE CITY OF BARTOW AND THE ENGINEER OF RECORD.

18. BEFORE ACCEPTANCE FOR OPERATION, THE WATER SYSTEM SHALL BE DISINFECTED IN ACCORDANCE WITH THE ANSII/AWWA C681-92, 150 PSI MINIMUM STARTING TEST PRESSURE, WITH BACTERIOLOGICAL SAMPLES APPROVED BY THE CITY OF BARTOW.

19. SAMPLING POINTS SHALL BE PROVIDED AT THE LOCATIONS SHOWN ON THE PLANS IF NOT SPECIFIED. SAMPLING POINTS SHALL BE PROVIDED AT INTERVALS OF 1500' MAXIMUM FOR LINES GREATER THAN 1500' IN LENGTH PROVIDE A MINIMUM OF TWO SAMPLING POINTS FOR ALL OTHER TEST SEGMENTS. SAMPLE POINTS MUST BE APPROVED BY THE CITY OF BARTOW.

20. THE ALLOWABLE LEAKAGE SHALL BE LESS THAN THE NUMBER OF GALLONS PER HOUR AS DETERMINED BY THE FORMULA:

$$L = \frac{SD \cdot 0.5}{148,000}$$

IN WHICH: L EQUALS THE ALLOWABLE LEAKAGE IN GALLONS PER HOUR, S EQUALS LENGTH OF PIPE (LINEAR FEET), D EQUALS NOMINAL DIAMETER OF PIPE (INCHES) AND P EQUALS THE MINIMUM TEST PRESSURE (POUNDS PER SQUARE INCH).

A. GENERAL:
1. NO CONNECTIONS TO THE EXISTING LINES SHALL BE MADE UNTIL PRESSURE TESTS, FOR THE WATER MAINS, AND BACTERIOLOGICAL TESTS HAVE BEEN PERFORMED AND THE SYSTEM IS ACCEPTABLE TO THE CITY OF BARTOW WATER DEPARTMENT.

2. INITIAL BACKFILL FOR MAINS SHALL BE SAND WITH NO ROCKS LARGER THAN 1" IN DIAMETER.
3. USE "DETECTO" TAPE ON ALL PVC MAINS (18" ABOVE MAIN), AND USE "NON-DETECTO" TAPE ON ALL D.I.P. MAINS (18" ABOVE).
4. A THREE (3) FOOT HORIZONTAL SEPARATION IS REQUIRED BETWEEN WATER MAINS AND OBSTRUCTIONS (I.E. CATCH BASINS, POWER POLES, ETC.). FIVE (5) FOOT OF SEPARATION IS REQUIRED BETWEEN WATER MAINS AND TREES. CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH THE CITY OF BARTOW STANDARDS AND SPECIFICATIONS.

B. MATERIALS:
1. DUCTILE IRON PIPE (DIP) SHALL BE CLASS 52 UP TO 12" SIZE & CLASS 51 FOR 14" AND LARGER. FOR INTERIOR USE, UNLESS OTHERWISE NOTED, THE BASE INSIDE, WATER MAIN & EPOXY LINED & COATED FORCE MAIN MANUFACTURED IN ACCORDANCE WITH ANSII/AWWA C151/A2.151-91 OR LATEST REVISION. THE PIPE SHALL WITHSTAND A WORKING PRESSURE OF 90 PSI. THE JOINTS SHALL BE BELT AND SPIGOT PUSH-ON TYPE UNLESS OTHERWISE NOTED ON THE PLANS.
2. ALL PVC MAINS SHALL BE SERIES 1120, CLASS 150 (DR 18) PRESSURE PIPE CONFORMING TO ANSII/AWWA C900-89 OR LATEST REVISION, AND SHALL HAVE PUSH-ON JOINTS.
3. FITTINGS FOR MAINS 4" AND LARGER SHALL BE DUCTILE IRON MECHANICAL JOINT CONFORMING TO ANSII/AWWA C110/A2.1.10-93 OR LATEST REVISION. COMPLETE WITH GLANDS, GASKETS, BOLTS AND NUTS. ALL FITTINGS SHALL BE CEMENT LINED AND SEAL COATED WITH THE SAME MATERIALS AS THE PIPE & USE MEGALUG SERIES 1100 RESTRAINED JOINT ADAPTERS.
4. VALVES SHALL BE GATE VALVES, IRON BODY, FULLY RESILIENT SEAT BRONZED MOUNTED NON-RISING STEM, RATED AT 200 PSI AND CONFORMING TO AWWA C509-87 OR LATEST REVISION, AND SHALL HAVE MECHANICAL JOINTS.
5. GATE VALVES 4" AND LARGER SHALL BE MUELLER A-2360-20, RESILIENT SEATED GATE VALVES SHALL BE AMERICAN 500/2500 LINE OR CLOW F-6100, CONFORM TO AWWA C500-87.

6. TAPPING VALVES SHALL BE MUELLER H667 OR APPROVED EQUAL.
7. GATE VALVES 3" OR LESS SHALL BE NIBCO T-133 OR T-136 WITH MALLEABLE HAND WHEELS. NO SUBSTITUTIONS ALLOWED.
8. TAPPING SLEEVES SHALL BE MUELLER H667 OR APPROVED EQUAL PER THE CITY OF BARTOW.

9. VALVE BOXES SHALL BE TYLER/UNION 461-S OR APPROVED EQUAL PER THE CITY OF BARTOW.
10. RETAINER GLANDS SHALL CONFORM TO ANSII/AWWA C111/A2.1.11-90 OR LATEST REVISION. ALL GLANDS SHALL BE MANUFACTURED FROM DUCTILE IRON AS LISTED BY UNDERWRITERS LABORATORIES FOR 250 PSI MINIMUM WATER PRESSURE RATING. CLOW CORPORATION MODEL F-1088 OR STANDARD FIRE PROTECTION EQUIPMENT COMPANY OR APPROVED EQUAL.

8. DRESSER COUPLINGS SHALL BE REGULAR BLACK COUPLINGS WITH PLAIN GASKETS FOR GALVANIZED STEEL PIPE. THEY SHALL BE DRESSER STYLE 90. NO SUBSTITUTIONS ALLOWED.
9. FIRE HYDRANTS SHALL HAVE A 5 1/4" MAIN VALVE OPENING, PUMPER NOZZLE TO BE 1/2" FROM FINISH GRADE. ALL HYDRANTS TO BE INSTALLED WITH ANCHORING TIE AND CONTROL VALVE. FIRE HYDRANT SHALL COMPLY WITH ANSII/AWWA C502-85 (OR LATEST REVISION). HYDRANTS SHALL BE AMERICAN DARING B-84-B WITH CHECK VALVE. BLUE REFLECTIVE PAVEMENT MARKER REQUIRED IN CENTER OF NEAREST DRIVING LANE FOR FIRE HYDRANTS.

C. SERVICE CONNECTION:
1. CORPORATION STOPS SHALL BE MANUFACTURED OF BRASS ALLOY BY MUELLER OR APPROVED EQUAL.
2. CURB STOPS SHALL BE MUELLER OR APPROVED EQUAL.
3. METER STOPS SHALL BE 90° LOCK WING TYPE AND SHALL BE OF BRONZE CONSTRUCTION IN ACCORDANCE WITH ASTM B492. METER STOPS SHALL BE CLOSED BOTTOM DESIGN AND RESILIENT "O" RING SEALED AGAINST EXTERNAL LEAKAGE AT THE TOP. STOPS SHALL BE EQUIPPED WITH A METER COUPLING NUT ON THE OUTLET SIDES, AS MANUFACTURED BY MUELLER OR APPROVED EQUAL.
4. SERVICE PIPING SHALL BE POLYETHYLENE TUBING, IF APPROPRIATE.

D. INSTALLATION:
1. CONNECTION OF ALL NEW SYSTEMS TO EXISTING MAINS SHALL BE DONE BY USING ONE OF THE FOLLOWING METHODS:
a. METHOD A IF APPROVED BY THE CITY OF BARTOW, WHICH INVOLVES A BACKFILL MATERIAL, SHALL BE WELL GRADED GRANULAR MATERIAL, WELL TAMPED IN LAYERS NOT TO EXCEED 6 INCHES TO A HEIGHT OF 12 INCHES ABOVE PIPE AS SHOWN ON THE PLANS
b. METHOD B IF APPROVED BY THE CITY OF BARTOW, WHICH INVOLVES A DIRECT CONNECTION BETWEEN THE NEW AND EXISTING MAINS USING TWO GATE VALVES SEPARATE AND SHALL BE INSTALLED WITH A 2" MINIMUM CLEARANCE EXISTS AT THE DISCRETION OF THE CITY OF BARTOW. ALL OTHER FILL SHALL NOT HAVE ROCK LARGER THAN 6" IN DIAMETER.

2. BEDDING:
BEDDING AND INITIAL BACKFILL (12 INCHES ABOVE PIPE) FOR ALL PIPE SHALL BE SAND WITH NO ROCK LARGER THAN 1" IN DIAMETER. PEA ROCK OR 3/4" WASHED ROCK WILL BE USED IN WATER OR WHERE UNSUITABLE BEDDING EXISTS AT THE DISCRETION OF THE CITY OF BARTOW. ALL OTHER FILL SHALL NOT HAVE ROCK LARGER THAN 6" IN DIAMETER.

3. PVC PIPE:
a. PVC PIPE SHALL BE INSTALLED IN ACCORDANCE WITH THE UNI-BELL PLASTIC PIPE ASSOCIATION'S GUIDE FOR INSTALLATION OF PVC PRESSURE PIPE FOR MUNICIPAL WATER DISTRIBUTION SYSTEMS.
b. PVC PIPE SHALL BE INSTALLED WITH A MINIMUM OF 36" COVER.
c. DETECTOR TAPE SHALL BE INSTALLED THE FULL LENGTH OF ALL PVC MAINS APPROXIMATELY 18" ABOVE THE PIPE. COLOR SIDE UP.

4. DUCTILE PIPE:
a. D.I.P. SHALL BE INSTALLED IN ACCORDANCE WITH ANSII/AWWA C600-99 OR LATEST REVISION.
b. D.I.P. SHALL BE INSTALLED WITH A MINIMUM OF 30" COVER.
c. "NON-DETECTO" TAPE SHALL BE INSTALLED AT A MINIMUM OF 18" ABOVE THE MAINS APPROXIMATELY 18" ABOVE THE MAIN COLOR SIDE UP.

5. VALVES:
a. ALL VALVES SHALL BE INSTALLED WITH ADJUSTABLE CAST IRON VALVE BOXES WITH THE WORD "WATER" CAST IN THE COVER. A BRASS DISK INDICATING, SIZE, TYPE, KIND & OPERATOR INSTRUCTIONS SHALL BE INSTALLED ADJACENT TO VALVE BOX.
b. MAIN VALVES SHALL BE INSTALLED AWAY FROM PARKING AREAS. IF THIS IS UNAVOIDABLE, PROPER MEASURES SHALL BE TAKEN TO AVOID THE PARKING OF VEHICLES OVER THE VALVES. HYDRANT VALVES SHALL BE INSTALLED AS CLOSE TO THE MAIN AS POSSIBLE. VALVES LOCATED IN NON-PAVED AREAS OR IN PARKING STALLS REQUIRE A REFLECTIVE PAVEMENT MARKER ON THE CENTER OF THE NEAREST LANE OF ROAD PAVEMENT. WHITE REFLECTORS FOR THE WATER MAIN VALVES.

6. SERVICE:
a. COVER OVER SERVICE LINES SHALL BE 18" MINIMUM, 36" MAXIMUM BELOW FINISHED GRADE, AND 36" UNDER PAVEMENT.
b. SERVICES UP TO 2" SHALL BE POLYETHYLENE TUBING PER THE CITY OF BARTOW.

c. METER STOPS SHALL HAVE 8" TO 10" COVER AS REQUIRED FOR PROPER METER BOX INSTALLATION.
d. WATER SERVICES UNDER PAVEMENT SHALL BE ENCASED IN A SCHEDULE 80 PVC SLEEVE FOR THE FULL LENGTH OF THE PAVEMENT AND FOR 2' BEYOND THE EDGE. SLEEVE DIAMETER SHALL BE TWICE THE DIAMETER OF THE SERVICE PIPE.

17. TESTING:
a. BEFORE ANY PHYSICAL CONNECTIONS TO THE EXISTING WATER MAINS ARE MADE, THE COMPLETE WATER SYSTEM SHALL BE PRESSURE TESTED AND DISINFECTED HYDROSTATICALLY. TESTING OF NEW MAINS SHALL BE PERFORMED AT A MINIMUM STARTING PRESSURE OF 150 PSI FOR TWO HOURS IN ACCORDANCE WITH ANSII/AWWA C600-99 OR LATEST REVISION. THE PRESSURE TEST SHALL NOT VARY MORE THAN 45 P.S.I. DURING THE TEST. THE PRESSURE TEST SHALL BE WITNESSED BY A REPRESENTATIVE OF THE CITY OF BARTOW AND THE ENGINEER OF RECORD.

18. BEFORE ACCEPTANCE FOR OPERATION, THE WATER SYSTEM SHALL BE DISINFECTED IN ACCORDANCE WITH THE ANSII/AWWA C681-92, 150 PSI MINIMUM STARTING TEST PRESSURE, WITH BACTERIOLOGICAL SAMPLES APPROVED BY THE CITY OF BARTOW.

19. SAMPLING POINTS SHALL BE PROVIDED AT THE LOCATIONS SHOWN ON THE PLANS IF NOT SPECIFIED. SAMPLING POINTS SHALL BE PROVIDED AT INTERVALS OF 1500' MAXIMUM FOR LINES GREATER THAN 1500' IN LENGTH PROVIDE A MINIMUM OF TWO SAMPLING POINTS FOR ALL OTHER TEST SEGMENTS. SAMPLE POINTS MUST BE APPROVED BY THE CITY OF BARTOW.

20. THE ALLOWABLE LEAKAGE SHALL BE LESS THAN THE NUMBER OF GALLONS PER HOUR AS DETERMINED BY THE FORMULA:

$$L = \frac{SD \cdot 0.5}{148,000}$$

IN WHICH: L EQUALS THE ALLOWABLE LEAKAGE IN GALLONS PER HOUR, S EQUALS LENGTH OF PIPE (LINEAR FEET), D EQUALS NOMINAL DIAMETER OF PIPE (INCHES) AND P EQUALS THE MINIMUM TEST PRESSURE (POUNDS PER SQUARE INCH).

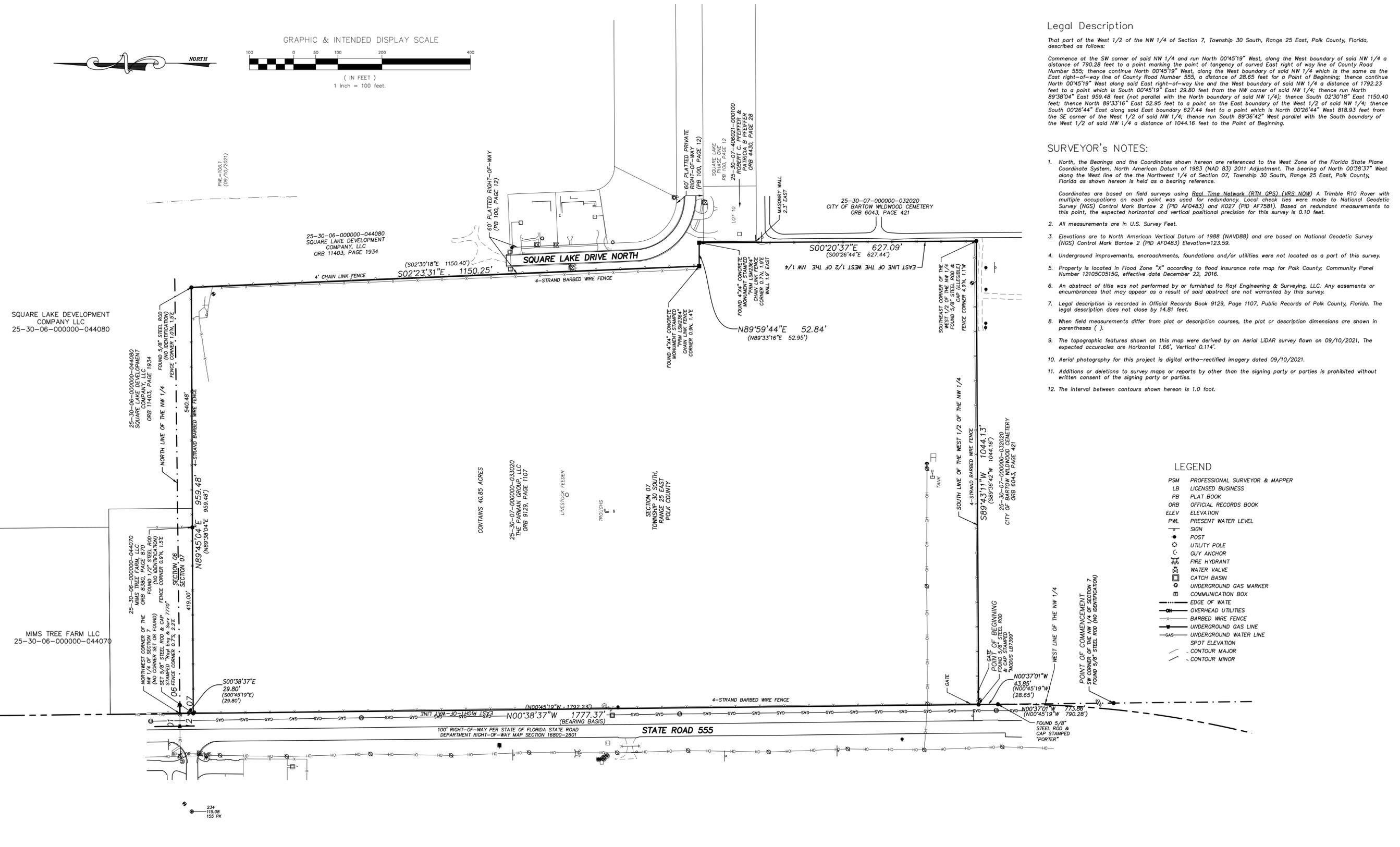
WATER DISTRIBUTION AND/OR SANITARY SEWER FORCE MAIN SYSTEM (PRESSURE PIPES):

A. GENERAL:
1. NO CONNECTIONS TO THE EXISTING LINES SHALL BE MADE UNTIL PRESSURE TESTS, FOR THE WATER MAINS, AND BACTERIOLOGICAL TESTS HAVE BEEN PERFORMED AND THE SYSTEM IS ACCEPTABLE TO THE CITY OF BARTOW WATER DEPARTMENT.

2. INITIAL BACKFILL FOR MAINS SHALL BE SAND WITH NO ROCKS LARGER THAN 1" IN DIAMETER.
3. USE "DETECTO" TAPE ON ALL PVC MAINS (18" ABOVE MAIN), AND USE "NON-DETECTO" TAPE ON ALL D.I.P. MAINS (18" ABOVE).
4. A THREE (3) FOOT HORIZONTAL SEPARATION IS REQUIRED BETWEEN WATER MAINS AND OBSTRUCTIONS (I.E. CATCH BASINS, POWER POLES, ETC.). FIVE (5) FOOT OF SEPARATION IS REQUIRED BETWEEN WATER MAINS AND TREES. CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH THE CITY OF BARTOW STANDARDS AND SPECIFICATIONS.

B. MATERIALS:
1. DUCTILE IRON PIPE (DIP) SHALL BE CLASS 52 UP TO 12" SIZE & CLASS 51 FOR 14" AND LARGER. FOR INTERIOR USE, UNLESS OTHERWISE NOTED, THE BASE INSIDE, WATER MAIN & EPOXY LINED & COATED FORCE MAIN MANUFACTURED IN ACCORDANCE WITH ANSII/AWWA C151/A2.151-91 OR LATEST REVISION. THE PIPE SHALL WITHSTAND A WORKING PRESSURE OF 90 PSI. THE JOINTS SHALL BE BELT AND SPIGOT PUSH-ON TYPE UNLESS OTHERWISE NOTED ON THE PLANS.
2. ALL PVC MAINS SHALL BE SERIES 1120, CLASS 150 (DR 18) PRESSURE PIPE CONFORMING TO ANSII/AWWA C900-89 OR LATEST REVISION, AND SHALL HAVE PUSH-ON JOINTS.
3. FITTINGS FOR MAINS 4" AND LARGER SHALL BE DUCTILE IRON MECHANICAL JOINT CONFORMING TO ANSII/AWWA C110/A2.1.10-93 OR LATEST REVISION. COMPLETE WITH GLANDS, GASKETS, BOLTS AND NUTS. ALL FITTINGS SHALL BE CEMENT LINED AND SEAL COATED WITH THE SAME MATERIALS AS THE PIPE & USE MEGALUG SERIES 1100 RESTRAINED JOINT ADAPTERS.
4. VALVES SHALL BE GATE VALVES, IRON BODY, FULLY RESILIENT SEAT BRONZED MOUNTED NON-RISING STEM, RATED AT 200 PSI AND CONFORMING TO AWWA C509-87 OR LATEST REVISION, AND SHALL HAVE MECHANICAL JOINTS.
5. GATE VALVES 4" AND LARGER SHALL BE MUELLER A-2360-20, RESILIENT SEATED GATE VALVES SHALL BE AMERICAN 500/2500 LINE OR CLOW F-6100, CONFORM TO AWWA C500-87.

6. TAPPING VALVES SHALL BE MUELLER H667 OR APPROVED EQUAL.
7. GATE VALVES 3" OR LESS SHALL BE NIBCO T-133 OR T-136 WITH MALLEABLE HAND WHEELS. NO SUBSTITUTIONS ALLOWED.
8. TAPPING SLEEVES SHALL BE MUELLER H667 OR APPROVED EQUAL PER THE CITY OF BARTOW.



Legal Description

That part of the West 1/2 of the NW 1/4 of Section 7, Township 30 South, Range 25 East, Polk County, Florida, described as follows:
 Commence at the SW corner of said NW 1/4 and run North 00°45'19" West, along the West boundary of said NW 1/4 a distance of 790.28 feet to a point marking the point of tangency of curved East right of way line of County Road Number 555; thence continue North 00°45'19" West, along the West boundary of said NW 1/4 which is the same as the East right-of-way line of County Road Number 555, a distance of 28.65 feet for a Point of Beginning; thence continue North 00°45'19" West along said East right-of-way line and the West boundary of said NW 1/4 a distance of 1792.23 feet to a point which is South 00°45'19" East 29.80 feet from the NW corner of said NW 1/4; thence run North 89°38'04" East 959.48 feet (not parallel with the North boundary of said NW 1/4); thence South 02°30'18" East 1150.40 feet; thence North 89°33'16" East 52.95 feet to a point on the East boundary of the West 1/2 of said NW 1/4; thence South 00°26'44" East along said East boundary 627.44 feet to a point which is North 00°26'44" West 818.93 feet from the SE corner of the West 1/2 of said NW 1/4; thence run South 89°36'42" West parallel with the South boundary of the West 1/2 of said NW 1/4 a distance of 1044.16 feet to the Point of Beginning.

SURVEYOR'S NOTES:

- North, the Bearings and the Coordinates shown hereon are referenced to the West Zone of the Florida State Plane Coordinate System, North American Datum of 1983 (NAD 83) 2011 Adjustment. The bearing of North 00°38'37" West along the West line of the Northwest 1/4 of Section 07, Township 30 South, Range 25 East, Polk County, Florida as shown hereon is held as a bearing reference.
- All measurements are in U.S. Survey Feet.
- Elevations are to North American Vertical Datum of 1988 (NAVD88) and are based on National Geodetic Survey (NGS) Control Mark Bartow 2 (PID AF0483) and K027 (PID AF7581). Based on redundant measurements to this point, the expected horizontal and vertical positional precision for this survey is 0.10 feet.
- Underground improvements, encroachments, foundations and/or utilities were not located as a part of this survey.
- Property is located in Flood Zone "X" according to flood insurance rate map for Polk County, Community Panel Number 12105C0515G, effective date December 22, 2016.
- An abstract of title was not performed by or furnished to Rayl Engineering & Surveying, LLC. Any easements or encumbrances that may appear as a result of said abstract are not warranted by this survey.
- Legal description is recorded in Official Records Book 9129, Page 1107, Public Records of Polk County, Florida. The legal description does not close by 14.81 feet.
- When field measurements differ from plot or description courses, the plot or description dimensions are shown in parentheses ().
- The topographic features shown on this map were derived by an Aerial LiDAR survey flown on 09/10/2021. The expected accuracies are Horizontal 1.66', Vertical 0.114'.
- Aerial photography for this project is digital ortho-rectified imagery dated 09/10/2021.
- Additions or deletions to survey maps or reports by other than the signing party or parties is prohibited without written consent of the signing party or parties.
- The interval between contours shown hereon is 1.0 foot.

LEGEND

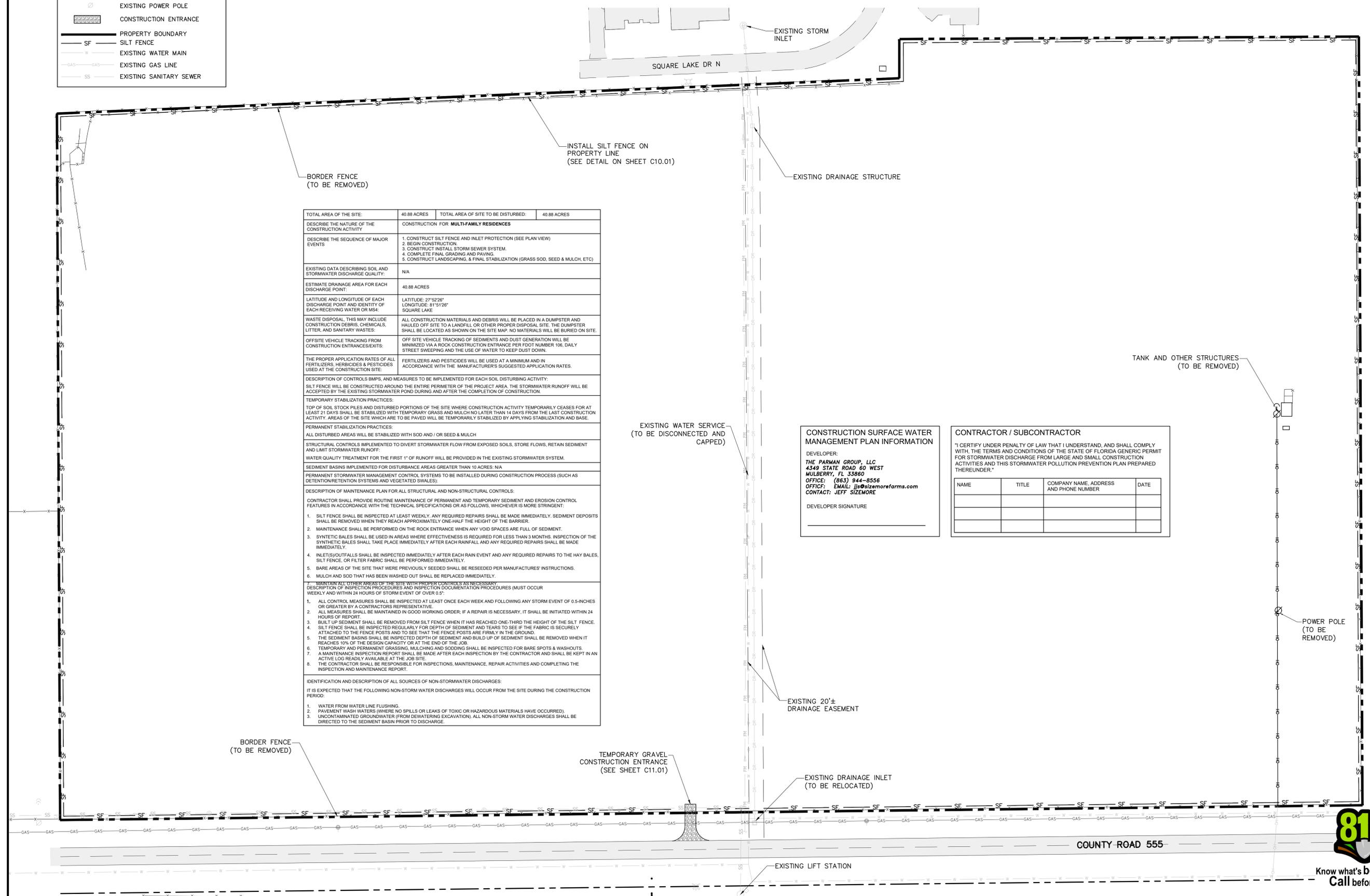
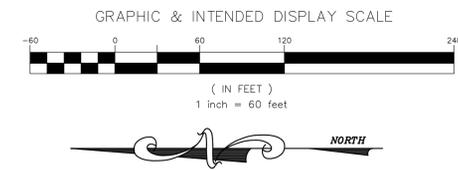
- PSM PROFESSIONAL SURVEYOR & MAPPER
- LB LICENSED BUSINESS
- PB PLAT BOOK
- ORB OFFICIAL RECORDS BOOK
- ELEV ELEVATION
- PWL PRESENT WATER LEVEL
- SI SIGN
- POST
- UTILITY POLE
- GUY ANCHOR
- FIRE HYDRANT
- WATER VALVE
- CATCH BASIN
- UNDERGROUND GAS MARKER
- COMMUNICATION BOX
- EDGE OF WATE
- OVERHEAD UTILITIES
- BARBED WIRE FENCE
- UNDERGROUND GAS LINE
- UNDERGROUND WATER LINE
- SPOT ELEVATION
- CONTOUR MAJOR
- CONTOUR MINOR

AS DEPICTED ON BOUNDARY SURVEY
 BY: RAYL ENGINEERING & SURVEYING, LLC
 DATED 09/23/2021
 PROJECT No. 21-153
 TEL: (863)537-7901

RAYL ENGINEERING & SURVEYING, LLC		FL REG# 28950 © 2022
LICENSED PROFESSIONAL: ALAN L. RAYL, PE, PSM		FL REG# 7770
JOB NO. 21-153		NO. DATE:
DATE: JULY, 2022		NO. DATE:
DRAWN BY: VR		NO. DATE:
PREPARED FOR: THE PARMAN GROUP, LLC 4349 STATE ROAD 60 WEST MULBERRY, FL 33860		NO. DATE:
PROJECT NAME: CR 555 MULTI-FAMILY BARTOW, FLORIDA		NO. DATE:
SHEET TITLE: EXISTING CONDITIONS BOUNDARY		NO. DATE:
SHEET NUMBER: C01.01		NO. DATE:



LEGEND	
	EXISTING SANITARY SEWER
	EXISTING GAS LINE MARKER
	EXISTING FIRE HYDRANT
	EXISTING STORM INLET
	EXISTING STORM MANHOLE
	EXISTING ANCHOR
	EXISTING POWER POLE
	CONSTRUCTION ENTRANCE
	PROPERTY BOUNDARY
	SILT FENCE
	EXISTING WATER MAIN
	EXISTING GAS LINE
	EXISTING SANITARY SEWER



TOTAL AREA OF THE SITE:	40.88 ACRES	TOTAL AREA OF SITE TO BE DISTURBED:	40.88 ACRES
DESCRIBE THE NATURE OF THE CONSTRUCTION ACTIVITY	CONSTRUCTION FOR MULTI-FAMILY RESIDENCES		
DESCRIBE THE SEQUENCE OF MAJOR EVENTS	1. CONSTRUCT SILT FENCE AND INLET PROTECTION (SEE PLAN VIEW) 2. BEGIN CONSTRUCTION 3. CONSTRUCT INSTALL STORM SEWER SYSTEM. 4. COMPLETE FINAL GRADING AND PAVING. 5. CONSTRUCT LANDSCAPING, & FINAL STABILIZATION (GRASS SOD, SEED & MULCH, ETC)		
EXISTING DATA DESCRIBING SOIL AND STORMWATER DISCHARGE QUALITY:	N/A		
ESTIMATE DRAINAGE AREA FOR EACH DISCHARGE POINT:	40.88 ACRES		
LATITUDE AND LONGITUDE OF EACH DISCHARGE POINT AND IDENTITY OF EACH RECEIVING WATER OR WSA:	LATITUDE: 27°52'28" LONGITUDE: 81°51'26" SQUARE LAKE		
WASTE DISPOSAL, THIS MAY INCLUDE CONSTRUCTION DEBRIS, CHEMICALS, LITTER, AND SANITARY WASTES:	ALL CONSTRUCTION MATERIALS AND DEBRIS WILL BE PLACED IN A DUMPSTER AND HAULED OFF SITE TO A LANDFILL OR OTHER PROPER DISPOSAL SITE. THE DUMPSTER SHALL BE LOCATED AS SHOWN ON THE SITE MAP. NO MATERIALS WILL BE BURIED ON SITE.		
OFFSITE VEHICLE TRACKING FROM CONSTRUCTION ENTRANCES/EXITS:	OFF SITE VEHICLE TRACKING OF SEDIMENTS AND DUST GENERATION WILL BE MINIMIZED VIA A ROCK CONSTRUCTION ENTRANCE PER FDOT NUMBER 106, DAILY STREET SWEEPING AND THE USE OF WATER TO KEEP DUST DOWN.		
THE PROPER APPLICATION RATES OF ALL FERTILIZERS, HERBICIDES & PESTICIDES USED AT THE CONSTRUCTION SITE:	FERTILIZERS AND PESTICIDES WILL BE USED AT A MINIMUM AND IN ACCORDANCE WITH THE MANUFACTURER'S SUGGESTED APPLICATION RATES.		
DESCRIPTION OF CONTROLS BMPs, AND MEASURES TO BE IMPLEMENTED FOR EACH SOIL DISTURBING ACTIVITY:	SILT FENCE WILL BE CONSTRUCTED AROUND THE ENTIRE PERIMETER OF THE PROJECT AREA. THE STORMWATER RUNOFF WILL BE ACCEPTED BY THE EXISTING STORMWATER POND DURING AND AFTER THE COMPLETION OF CONSTRUCTION.		
TEMPORARY STABILIZATION PRACTICES:	TOP OF SOIL STOCK PILES AND DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY TEMPORARILY CEASES FOR AT LEAST 21 DAYS SHALL BE STABILIZED WITH TEMPORARY GRASS AND MULCH NO LATER THAN 14 DAYS FROM THE LAST CONSTRUCTION ACTIVITY. AREAS OF THE SITE WHICH ARE TO BE PAVED WILL BE TEMPORARILY STABILIZED BY APPLYING STABILIZATION AND BASE.		
PERMANENT STABILIZATION PRACTICES:	ALL DISTURBED AREAS WILL BE STABILIZED WITH SOD AND / OR SEED & MULCH		
STRUCTURAL CONTROLS IMPLEMENTED TO DIVERT STORMWATER FLOW FROM EXPOSED SOILS, STORE FLOWS, RETAIN SEDIMENT AND LIMIT STORMWATER RUNOFF:	WATER QUALITY TREATMENT FOR THE FIRST 1" OF RUNOFF WILL BE PROVIDED IN THE EXISTING STORMWATER SYSTEM.		
SEDIMENT BASINS IMPLEMENTED FOR DISTURBANCE AREAS GREATER THAN 10 ACRES:	N/A		
PERMANENT STORMWATER MANAGEMENT CONTROL SYSTEMS TO BE INSTALLED DURING CONSTRUCTION PROCESS (SUCH AS DETENTION/RETENTION SYSTEMS AND VEGETATED SWALES):	DESCRIPTION OF MAINTENANCE PLAN FOR ALL STRUCTURAL AND NON-STRUCTURAL CONTROLS:		
CONTRACTOR SHALL PROVIDE ROUTINE MAINTENANCE OF PERMANENT AND TEMPORARY SEDIMENT AND EROSION CONTROL FEATURES IN ACCORDANCE WITH THE TECHNICAL SPECIFICATIONS OR AS FOLLOWS, WHICHEVER IS MORE STRINGENT:	<ol style="list-style-type: none"> SILT FENCE SHALL BE INSPECTED AT LEAST WEEKLY. ANY REQUIRED REPAIRS SHALL BE MADE IMMEDIATELY. SEDIMENT DEPOSITS SHALL BE REMOVED WHEN THEY REACH APPROXIMATELY ONE-HALF THE HEIGHT OF THE BARRIER. MAINTENANCE SHALL BE PERFORMED ON THE ROCK ENTRANCE WHEN ANY VOID SPACES ARE FULL OF SEDIMENT. SYNTHETIC BALES SHALL BE USED IN AREAS WHERE EFFECTIVENESS IS REQUIRED FOR LESS THAN 3 MONTHS. INSPECTION OF THE SYNTHETIC BALES SHALL TAKE PLACE IMMEDIATELY AFTER EACH RAINFALL AND ANY REQUIRED REPAIRS SHALL BE MADE IMMEDIATELY. INLET(S)/OUTFALLS SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAIN EVENT AND ANY REQUIRED REPAIRS TO THE HAY BALES, SILT FENCE, OR FILTER FABRIC SHALL BE PERFORMED IMMEDIATELY. BARE AREAS OF THE SITE THAT WERE PREVIOUSLY SEEDED SHALL BE RESEED PER MANUFACTURER'S INSTRUCTIONS. MULCH AND SOD THAT HAS BEEN WASHED OUT SHALL BE REPLACED IMMEDIATELY. MAINTAIN ALL OTHER AREAS OF THE SITE WITH PROPER CONTROLS AS NECESSARY. 		
DESCRIPTION OF INSPECTION PROCEDURES AND INSPECTION DOCUMENTATION PROCEDURES (MUST OCCUR WEEKLY AND WITHIN 24 HOURS OF STORM EVENT OF OVER 0.5"):	<ol style="list-style-type: none"> ALL CONTROL MEASURES SHALL BE INSPECTED AT LEAST ONCE EACH WEEK AND FOLLOWING ANY STORM EVENT OF 0.5-INCHES OR GREATER BY A CONTRACTOR'S REPRESENTATIVE. ALL MEASURES SHALL BE MAINTAINED IN GOOD WORKING ORDER; IF A REPAIR IS NECESSARY, IT SHALL BE INITIATED WITHIN 24 HOURS OF REPORT. BUILT UP SEDIMENT SHALL BE REMOVED FROM SILT FENCE WHEN IT HAS REACHED ONE-THIRD THE HEIGHT OF THE SILT FENCE. SILT FENCE SHALL BE INSPECTED REGULARLY FOR DEPTH OF SEDIMENT AND TEARS TO SEE IF THE FABRIC IS SECURELY ATTACHED TO THE FENCE POSTS AND TO SEE THAT THE FENCE POSTS ARE FIRMLY IN THE GROUND. THE SEDIMENT BASINS SHALL BE INSPECTED DEPTH OF SEDIMENT AND BUILD UP OF SEDIMENT SHALL BE REMOVED WHEN IT REACHES 10% OF THE DESIGN CAPACITY OR AT THE END OF THE JOB. TEMPORARY AND PERMANENT GRASSING, MULCHING AND SODDING SHALL BE INSPECTED FOR BARE SPOTS & WASHOUTS. A MAINTENANCE INSPECTION REPORT SHALL BE MADE AFTER EACH INSPECTION BY THE CONTRACTOR AND SHALL BE KEPT IN AN ACTIVE LOG READILY AVAILABLE AT THE JOB SITE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSPECTIONS, MAINTENANCE, REPAIR ACTIVITIES AND COMPLETING THE INSPECTION AND MAINTENANCE REPORT. 		
IDENTIFICATION AND DESCRIPTION OF ALL SOURCES OF NON-STORMWATER DISCHARGES:	IT IS EXPECTED THAT THE FOLLOWING NON-STORM WATER DISCHARGES WILL OCCUR FROM THE SITE DURING THE CONSTRUCTION PERIOD:		
	<ol style="list-style-type: none"> WATER FROM WATER LINE FLUSHING. PAVEMENT WASH WATERS (WHERE NO SPILLS OR LEAKS OF TOXIC OR HAZARDOUS MATERIALS HAVE OCCURRED). UNCONTAMINATED GROUNDWATER (FROM WATERING EXCAVATION). ALL NON-STORM WATER DISCHARGES SHALL BE DIRECTED TO THE SEDIMENT BASIN PRIOR TO DISCHARGE. 		

CONSTRUCTION SURFACE WATER MANAGEMENT PLAN INFORMATION

DEVELOPER:
THE PARMAN GROUP, LLC
 4349 STATE ROAD 80 WEST
 MULBERRY, FL 33860
 OFFICE: (863) 944-8556
 EMAIL: js@szmorefarms.com
 CONTACT: JEFF SZEMORE

DEVELOPER SIGNATURE _____

CONTRACTOR / SUBCONTRACTOR

"I CERTIFY UNDER PENALTY OF LAW THAT I UNDERSTAND, AND SHALL COMPLY WITH, THE TERMS AND CONDITIONS OF THE STATE OF FLORIDA GENERIC PERMIT FOR STORMWATER DISCHARGE FROM LARGE AND SMALL CONSTRUCTION ACTIVITIES AND THIS STORMWATER POLLUTION PREVENTION PLAN PREPARED THEREUNDER."

NAME	TITLE	COMPANY NAME, ADDRESS AND PHONE NUMBER	DATE

RAYL ENGINEERING & SURVEYING, LLC

110 EAST MAIN STREET
BARTOW, FL 33830
FL REG# 28830 © 2022

FL REG# 28830 © 2022

LICENSED PROFESSIONAL:
ALAN L. RAYL, PE, PSM

FLORIDA REGISTRATION NUMBERS:
PE 44116 / PSM 5736

JOB NO. 21-153

DATE: JULY, 2022

DRAWN BY: JPT/VR

PREPARED FOR:
THE PARMAN GROUP, LLC
4349 STATE ROAD 80 WEST
MULBERRY, FL 33860

PROJECT NAME:
CR 555 MULTI-FAMILY BARTOW, FLORIDA

SHEET TITLE:
DEMOLITION & STORMWATER POLLUTION PREVENTION PLAN

SHEET NUMBER
C01.02



Know what's below.
Call before you dig.

LEGEND

	PROPOSED PAVEMENT
	PROPOSED BUILDING
	PROPOSED CONCRETE
	PROPERTY BOUNDARY
	PROPOSED PHASE BOUNDARY
	TOTAL BUILDING COUNT
	PROPOSED FDOT TYPE F INLET
	PROPOSED FDOT TYPE 6 INLET

SETBACKS

	REQUIRED	PROPOSED
WEST	=30'	=30'
EAST	=20'	=20'
NORTH	=7.5'	=18.8'
SOUTH	=7.5'	=46'
(BUFFER TYPE C = 30' MAX, 15'-20' MIN)		
NW PHASE	=	160 UNITS
NE PHASE	=	90 UNITS
SE PHASE	=	80 UNITS
SW PHASE	=	160 UNITS
TOTAL	=	490 UNITS

SITE DATA

PARCEL ID	=	25-30-07-000000-033020
TOTAL PARCEL AREA	=	40.88 ACRES
EXISTING USE	=	PASTURE
PROPOSED USE	=	MULTI-FAMILY (APARTMENTS)
ALLOWABLE DENSITY	=	12 DU/AC x 40.88 ACRES=490.56 UNITS
MAX UNITS PROPOSED	=	490 (10 UNITS/BUILDING)
49 BUILDINGS	=	9,600 SQUARE FT (2 STORIES 19,200 SF) PER BUILDING

PARKING REQUIRED = 1.5 SPACES PER UNIT = 735 SPACES (15 HANDICAPPED)

PARKING PROVIDED = 809 SPACES (24 HANDICAPPED)

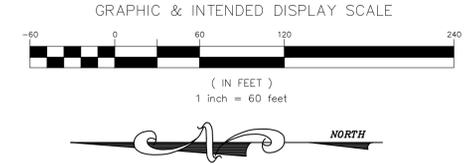
CLUB HOUSE = 12,100 SQUARE FEET

DRAINAGE POND = 4.99 ACRES

TOT LOT = 900 SQUARE FEET

MAIL CENTER = 300 SQUARE FEET

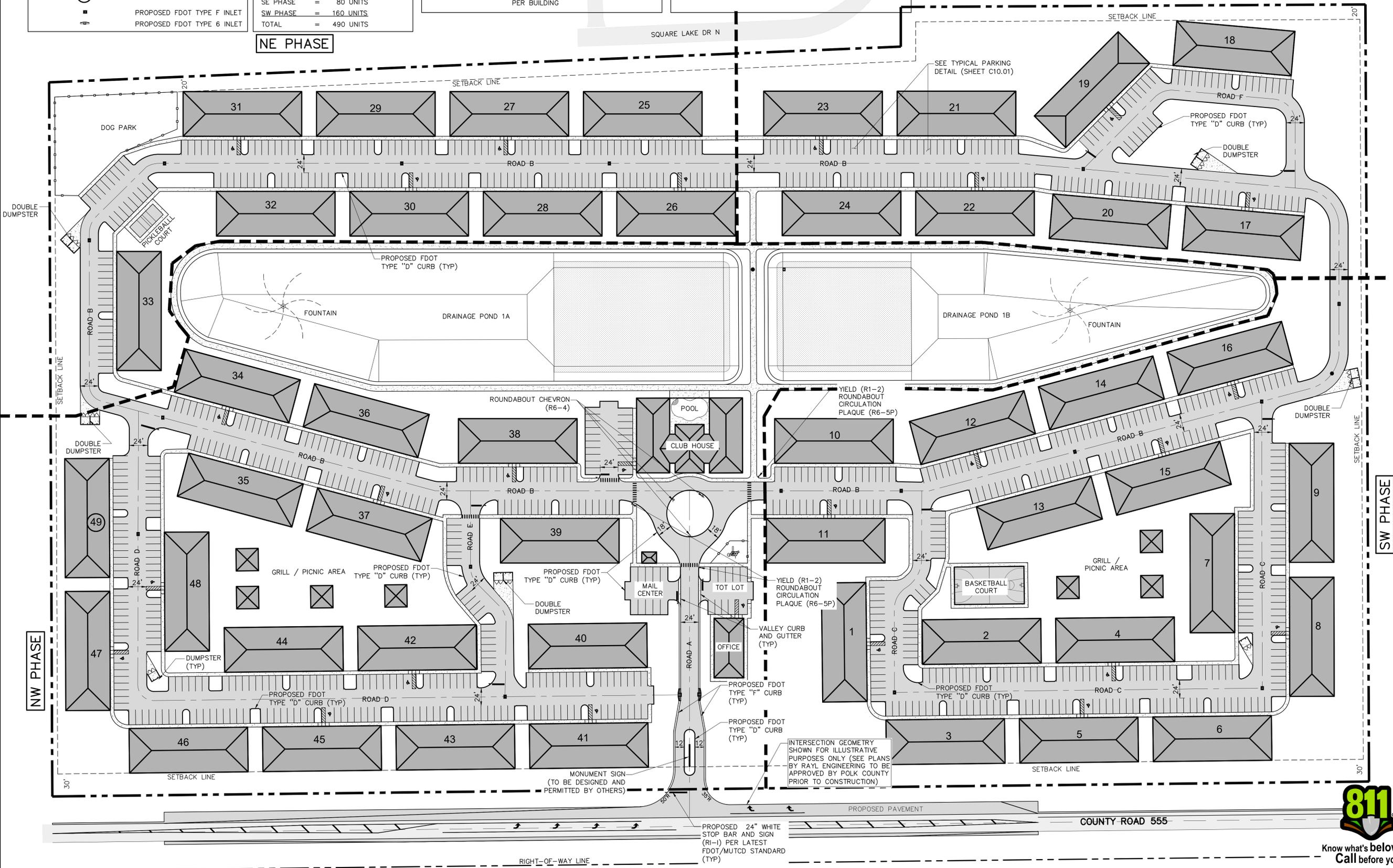
OFFICE = 3,200 SQUARE FEET



SEE SIGNAGE AND PAVEMENT MARKINGS TABLE ON SHEET C10.01

SE PHASE

NE PHASE



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<p>JOB NO. 21-153 DATE: JULY, 2022 DRAWN BY: JPT/VR</p>	<p>PREPARED FOR: THE PARMAN GROUP, LLC 4349 STATE ROAD 60 WEST MULBERRY, FL 33860</p>
<p>PROJECT NAME: CR 555 MULTI-FAMILY BARTOW, FLORIDA</p>	<p>SHEET TITLE: SITE PLAN</p>
<p>SHEET NUMBER C01.03</p>	<p>NO. DATE: _____</p>



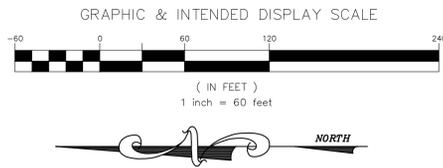
Know what's below. Call before you dig.

LEGEND

	EXIST. GRADING SPOT GRADE
	PROPOSED SPOT GRADE
	MATCH EXISTING GRADE
	HIGH POINT
	TOP OF CURB ELEVATION PAVEMENT ELEVATION
	EXIST. SURFACE FLOW
	PROPOSED SURFACE FLOW LINE
	PROPOSED STORM PIPE
	PROPOSED FDOT TYPE F INLET
	PROPOSED FDOT TYPE 6 INLET
	FLARED END SECTION
	F.F.E. FINISHED FLOOR ELEVATION

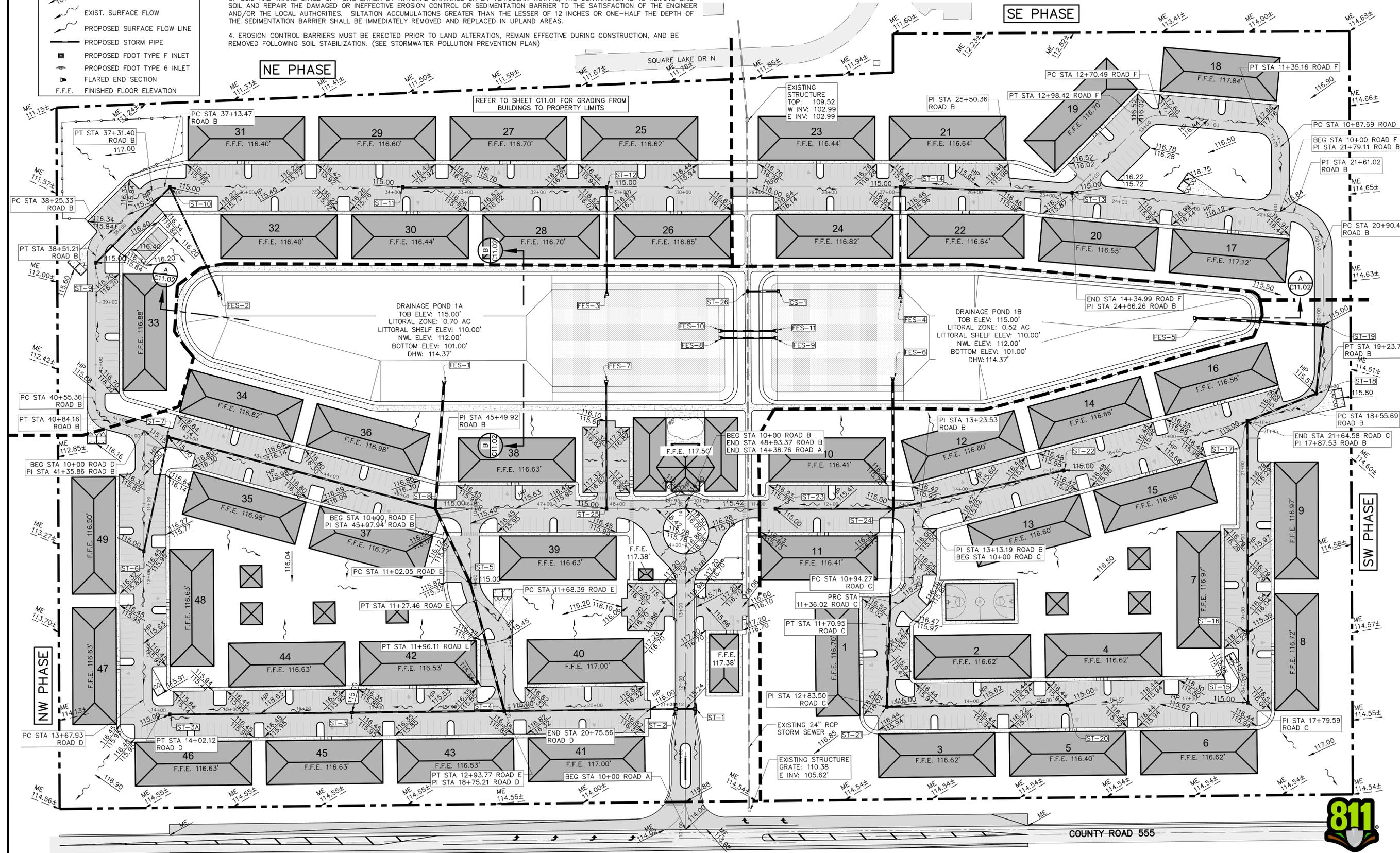
NOTES:

- CONSTRUCTION STAKING TO BE PROVIDED BY CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THESE SERVICES DURING CONSTRUCTION.
- ALL CONSTRUCTION LAYOUT AND STAKING IS TO BE PERFORMED UNDER THE SUPERVISION OF A FLORIDA REGISTERED LAND SURVEYOR.
- EROSION CONTROL OR SEDIMENTATION BARRIER: THE CONTRACTOR IS TO PROVIDE EROSION CONTROL OR SEDIMENTATION BARRIER (SILT SCREEN) TO PREVENT SILTATION OF ADJACENT PROPERTY, STREETS, DETENTION PONDS, STORM SEWERS AND WATERWAYS, AND TO MAINTAIN THE EROSION CONTROL OR SEDIMENTATION BARRIER IN AN EFFECTIVE WORKING MANNER FOR THE DURATION OF CONSTRUCTION. ADDITIONALLY, CONTRACTOR MAY PLACE STRAW, MULCH OR OTHER SUITABLE MATERIAL ON GROUND IN AREAS WHERE CONSTRUCTION RELATED TRAFFIC IS TO ACCESS THE SITE. IF, IN THE OPINION OF THE ENGINEER AND/OR THE LOCAL AUTHORITIES, EXCESSIVE QUANTITIES OF SOIL ARE TRANSPORTED OFF-SITE EITHER BY NATURAL DRAINAGE OR BY VEHICULAR TRAFFIC, THE CONTRACTOR IS TO REMOVE SAID SOIL AND REPAIR THE DAMAGED OR INEFFECTIVE EROSION CONTROL OR SEDIMENTATION BARRIER TO THE SATISFACTION OF THE ENGINEER AND/OR THE LOCAL AUTHORITIES. SILTATION ACCUMULATIONS GREATER THAN THE LESSER OF 12 INCHES OR ONE-HALF THE DEPTH OF THE SEDIMENTATION BARRIER SHALL BE IMMEDIATELY REMOVED AND REPLACED IN UPLAND AREAS.
- EROSION CONTROL BARRIERS MUST BE ERRECTED PRIOR TO LAND ALTERATION, REMAIN EFFECTIVE DURING CONSTRUCTION, AND BE REMOVED FOLLOWING SOIL STABILIZATION. (SEE STORMWATER POLLUTION PREVENTION PLAN)



REFER TO SHEET C11.02 FOR PIPE AND STRUCTURE DATA

REFER TO SHEET C11.01 FOR GRADING FROM BUILDINGS TO PROPERTY LIMITS



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PREPARED FOR:
THE PARMAN GROUP, LLC
 4349 STATE ROAD 80 WEST
 MULBERRY, FL 33860

PROJECT NO.: 21-153
 DATE: JULY, 2022
 DRAWN BY: JPT/VR

FLORIDA REGISTRATION NUMBERS:
 PE 44116 / PSM 5736
 ALAN L. RAYL, PE, PSM

CR 555 MULTI-FAMILY BARTOV, FLORIDA
 PAVING, GRADING AND DRAINAGE PLAN

SHEET TITLE:
 SHEET NUMBER
C02.01



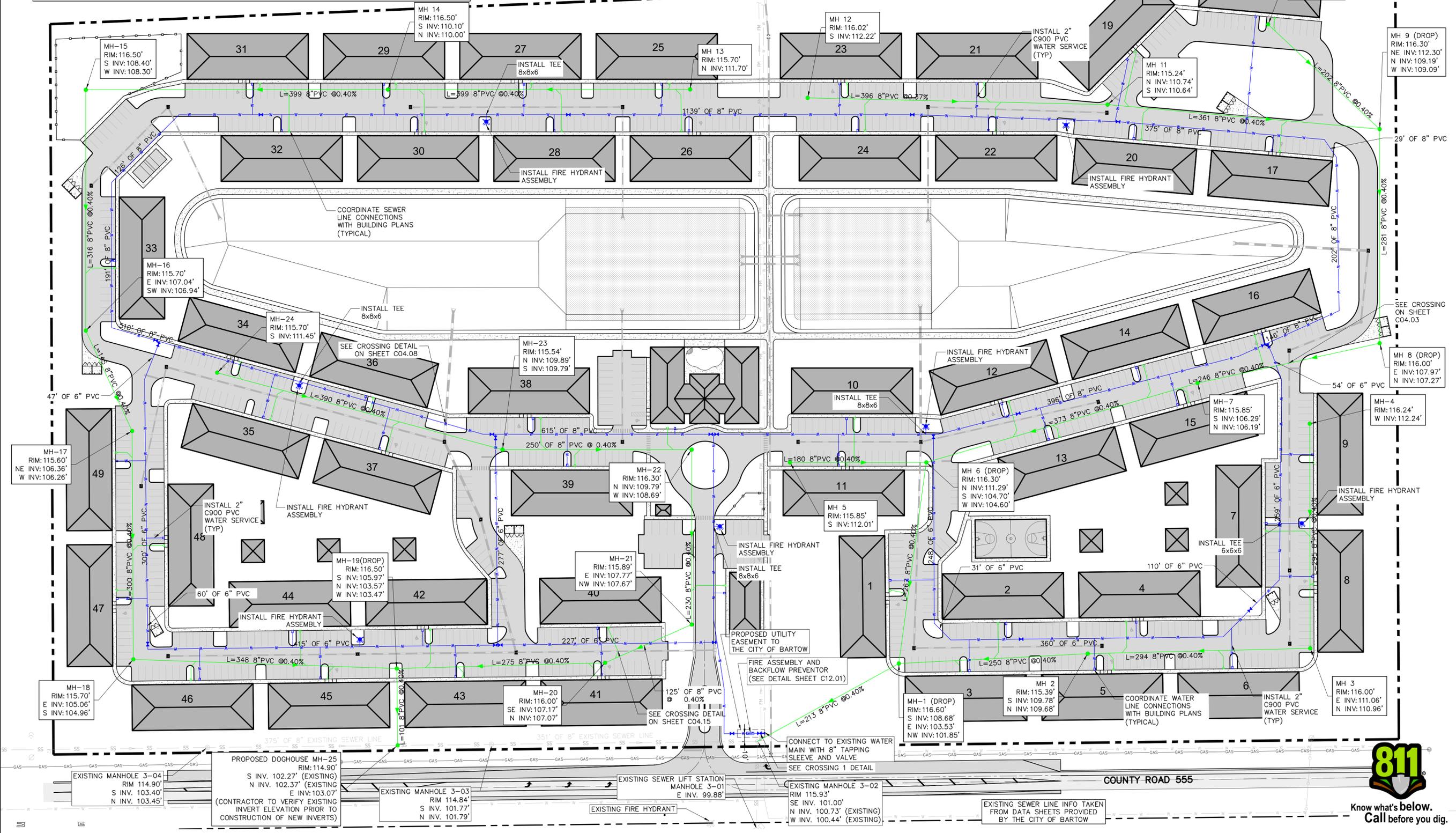
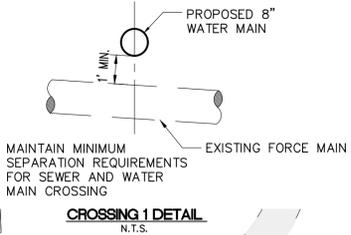
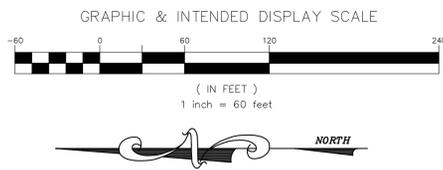
Know what's below.
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LEGEND

- PROPOSED FIRE HYDRANT ASSEMBLY
- EXISTING FIRE HYDRANT ASSEMBLY
- PROPOSED SINGLE WATER SERVICE
- PROPOSED 4" SANITARY SERVICE
- EXISTING SANITARY MANHOLE
- PROPOSED SANITARY MANHOLE
- EXISTING POWER POLE
- EXISTING GUY ANCHOR
- EXISTING GAS LINE MARKER
- EXISTING STORM MANHOLE
- PROPOSED REDUCER
- PROPOSED PVC WATER LINE
- EXISTING 8" WATER MAIN
- EXISTING UNDERGROUND GAS LINE
- EXISTING OVERHEAD POWER LINE
- PROPOSED 8" PVC SANITARY SEWER LINE & DIRECTION
- EXISTING 8" PVC SANITARY SEWER LINE & DIRECTION
- TAPPING SLEEVE AND VALVE
- GATE VALVE

NOTES:

- ALL PROPOSED INTERNAL UTILITIES TO BE PRIVATE.
- ALL BUILDINGS SERVICES LINES ARE 2".
- BUILDINGS TO BE SUB-METERED
- ALL MANHOLE RIM ELEVATIONS TO MATCH ADJACENT PAVEMENT GRADES



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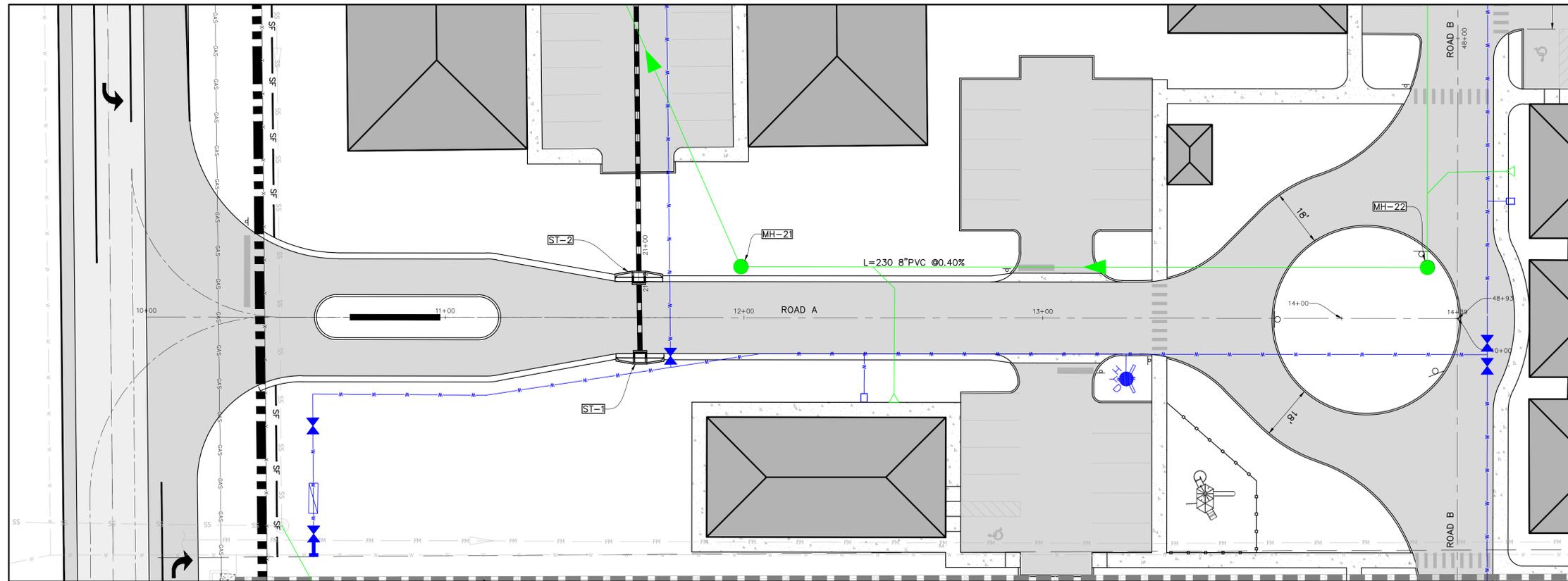
THE PARMAN GROUP, LLC
 4349 STATE ROAD 60 WEST
 MULBERRY, FL 33860

PROJECT NAME: CR 555 MULTI-FAMILY BARTOW, FLORIDA
 SHEET TITLE: UTILITY PLAN

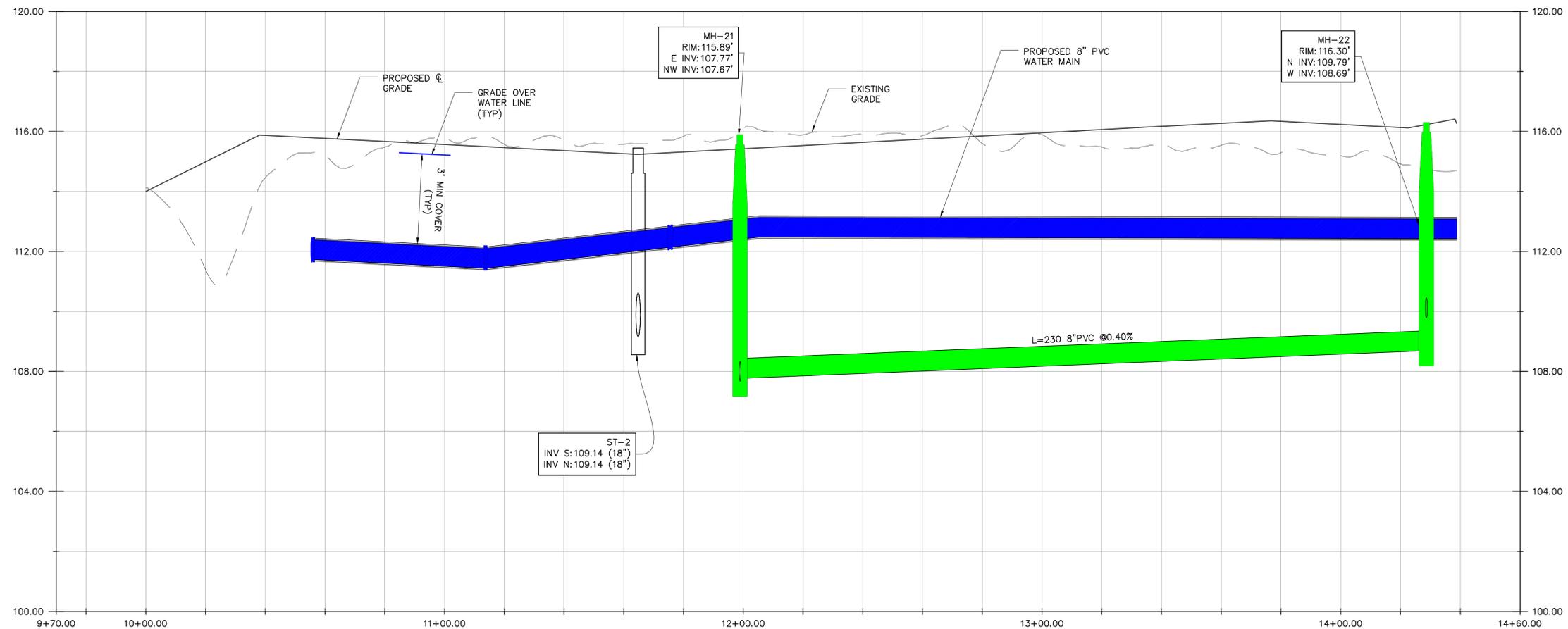
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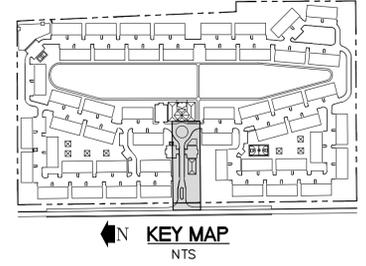
Know what's below.
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ROAD "A" PLAN
SCALE: 1"=20'

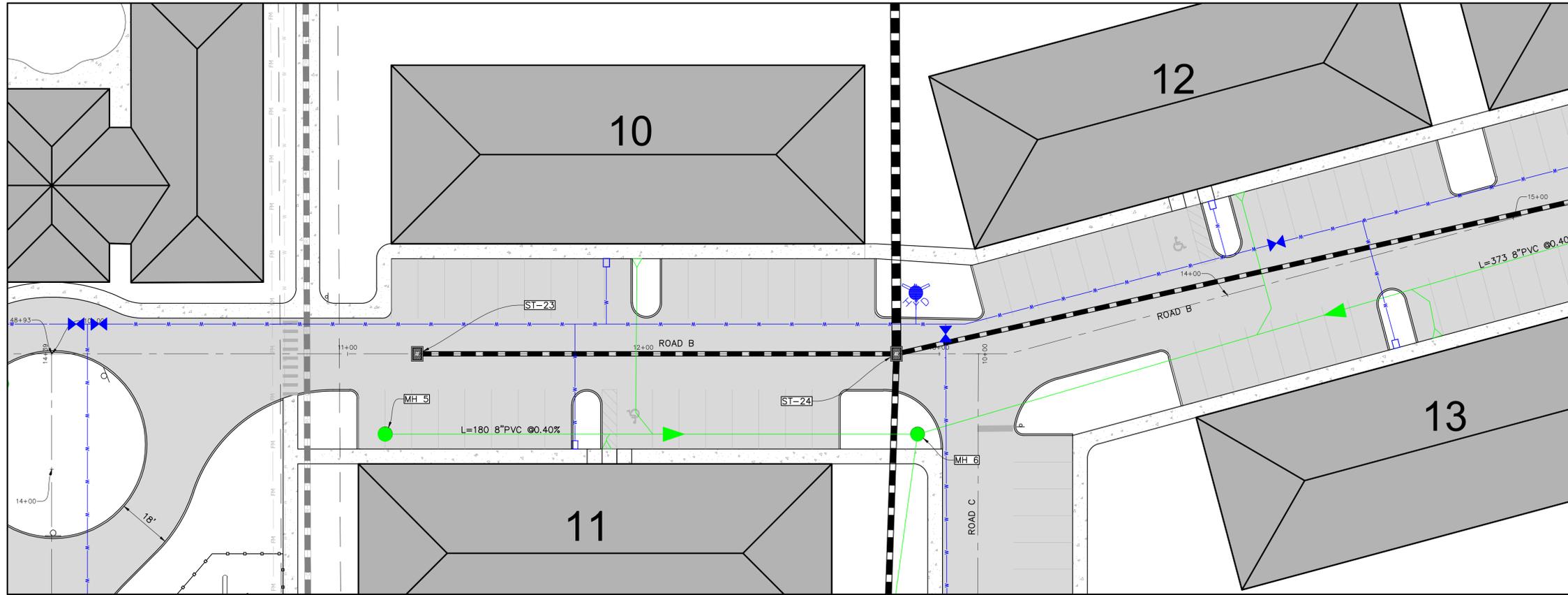


ROAD "A" PROFILE
SCALE: 1"=20' (HORZ.); 1"=2.5' (VERT.)

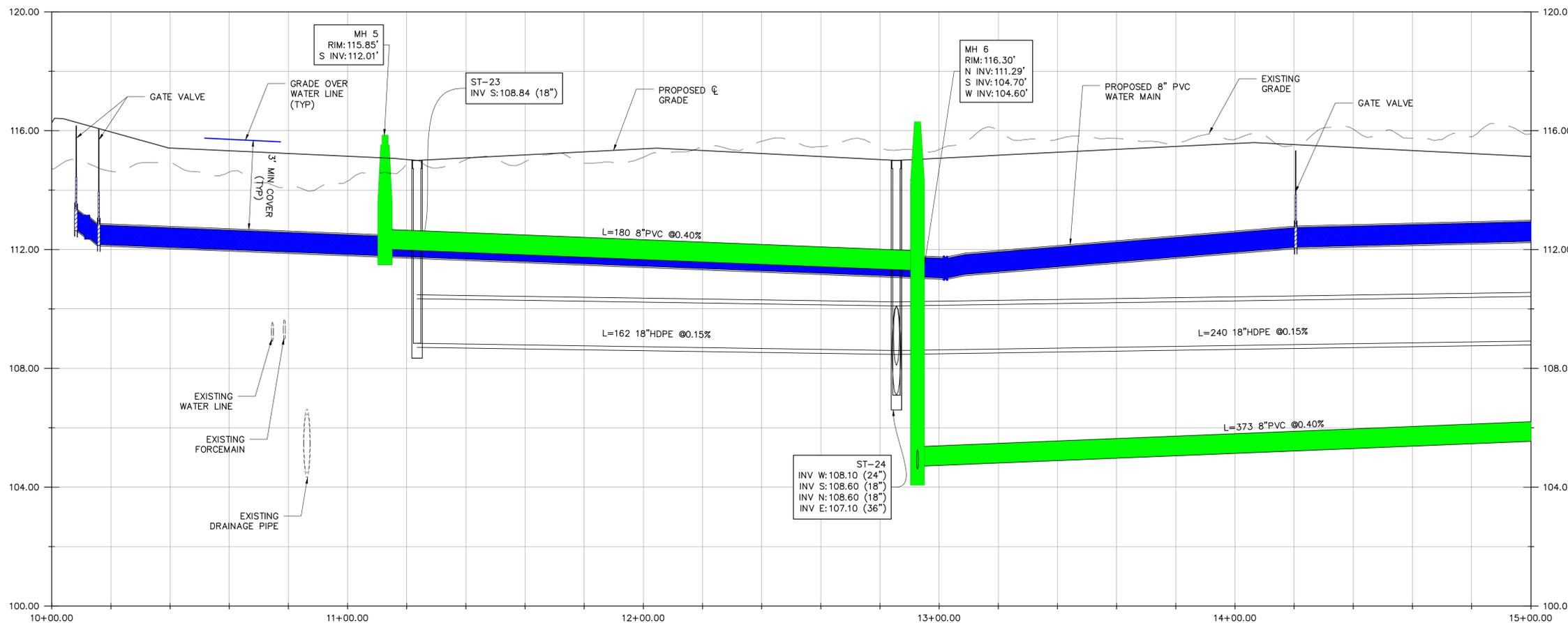
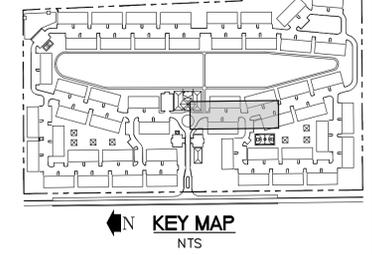


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<p>JOB NO. 21-153</p>	<p>DATE: JULY, 2022</p>
<p>DRAWN BY: JPT/VR</p>	<p>NO. DATE: _____</p>
<p>PREPARED FOR: THE PARMAN GROUP, LLC 4349 STATE ROAD 60 WEST MULBERRY, FL 33860</p>	
<p>PROJECT NAME: CR 555 MULTI-FAMILY BARTOW, FLORIDA</p>	<p>SHEET TITLE: ROAD "A" PLAN AND PROFILE</p>
<p>SHEET NUMBER C04.01</p>	

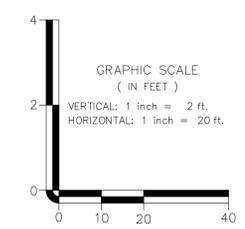




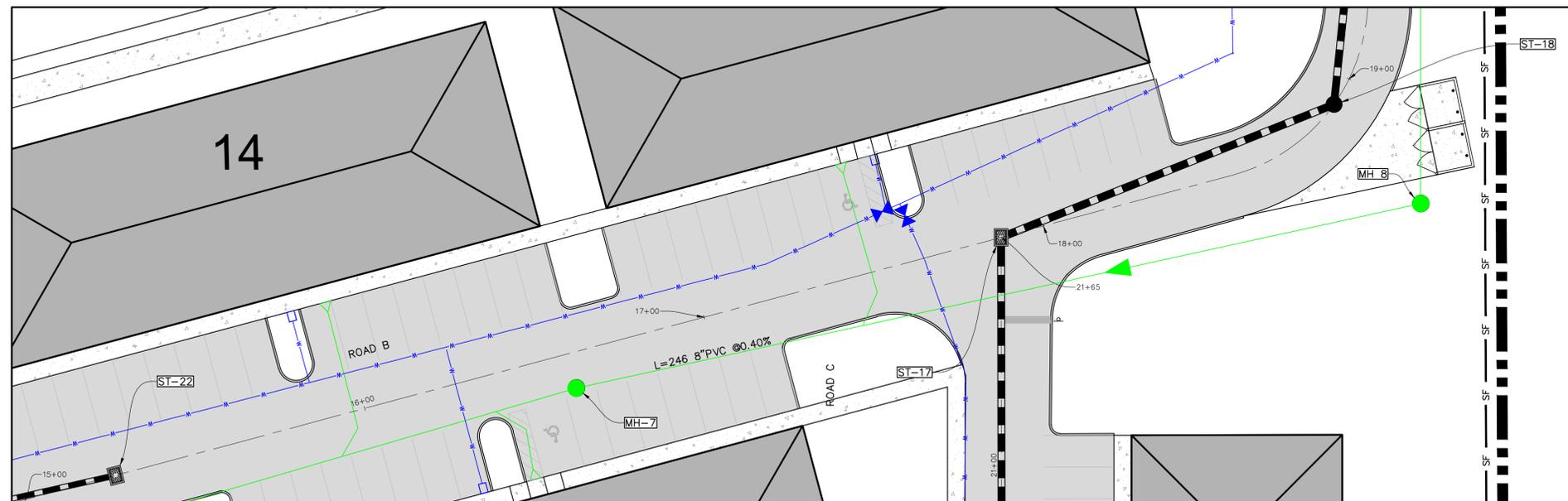
ROAD "B" PLAN (10+00 TO 15+00)
SCALE: 1"=20'



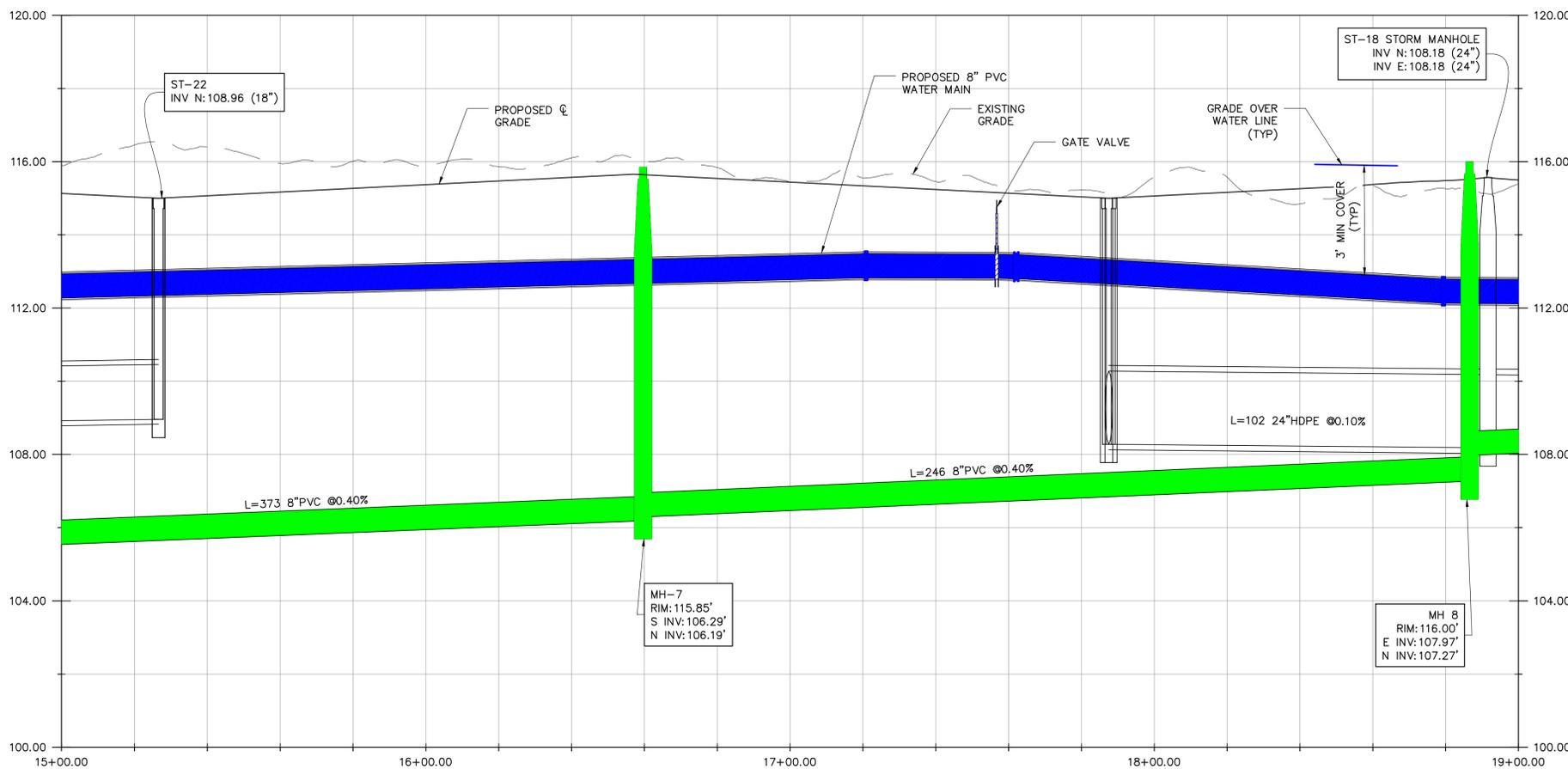
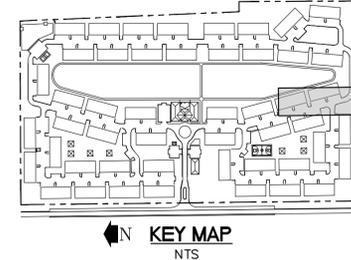
ROAD "B" PROFILE (10+00 TO 15+00)
SCALE: 1"=20' (HORZ.); 1"=2.5' (VERT.)



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<p>LICENSED PROFESSIONAL: ALAN L. RAYL, PE, PSM</p>		<p>FLORIDA REGISTRATION NUMBERS: PE 44116 / PSM 5736</p>	
JOB NO. 21-153	DATE: JULY, 2022	DRAWN BY: VR	
<p>PREPARED FOR: THE PARMAN GROUP, LLC 4349 STATE ROAD 60 WEST MULBERRY, FL 33860</p>			
<p>PROJECT NAME: CR 555 MULTI-FAMILY BARTOW, FLORIDA</p>		<p>SHEET TITLE: ROAD "B" PLAN AND PROFILE 10+00 TO 15+00</p>	
SHEET NUMBER		C04.02	



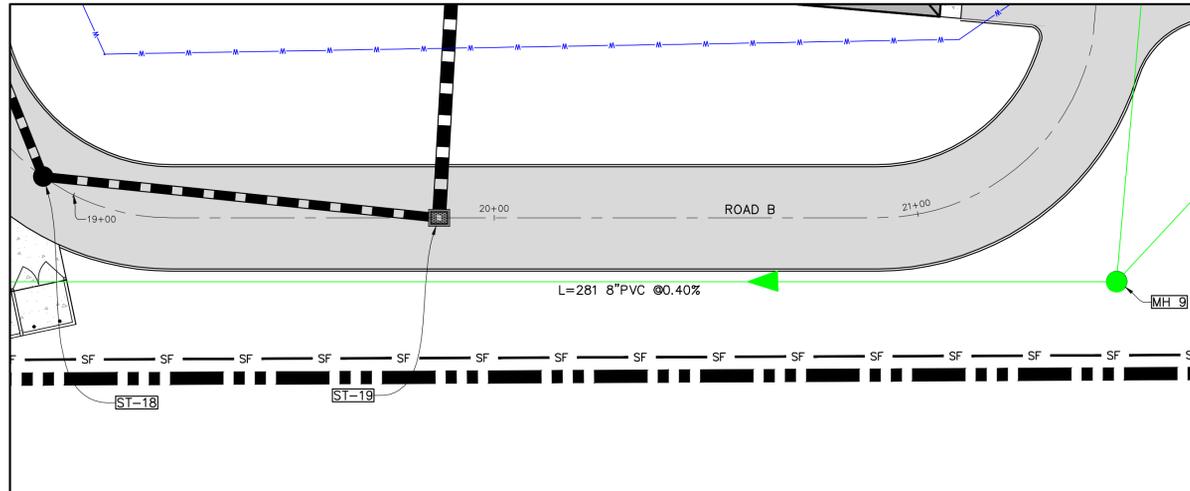
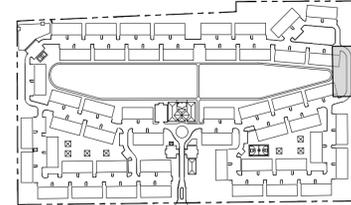
ROAD "B" PLAN (15+00 TO 19+00)
SCALE: 1"=20'



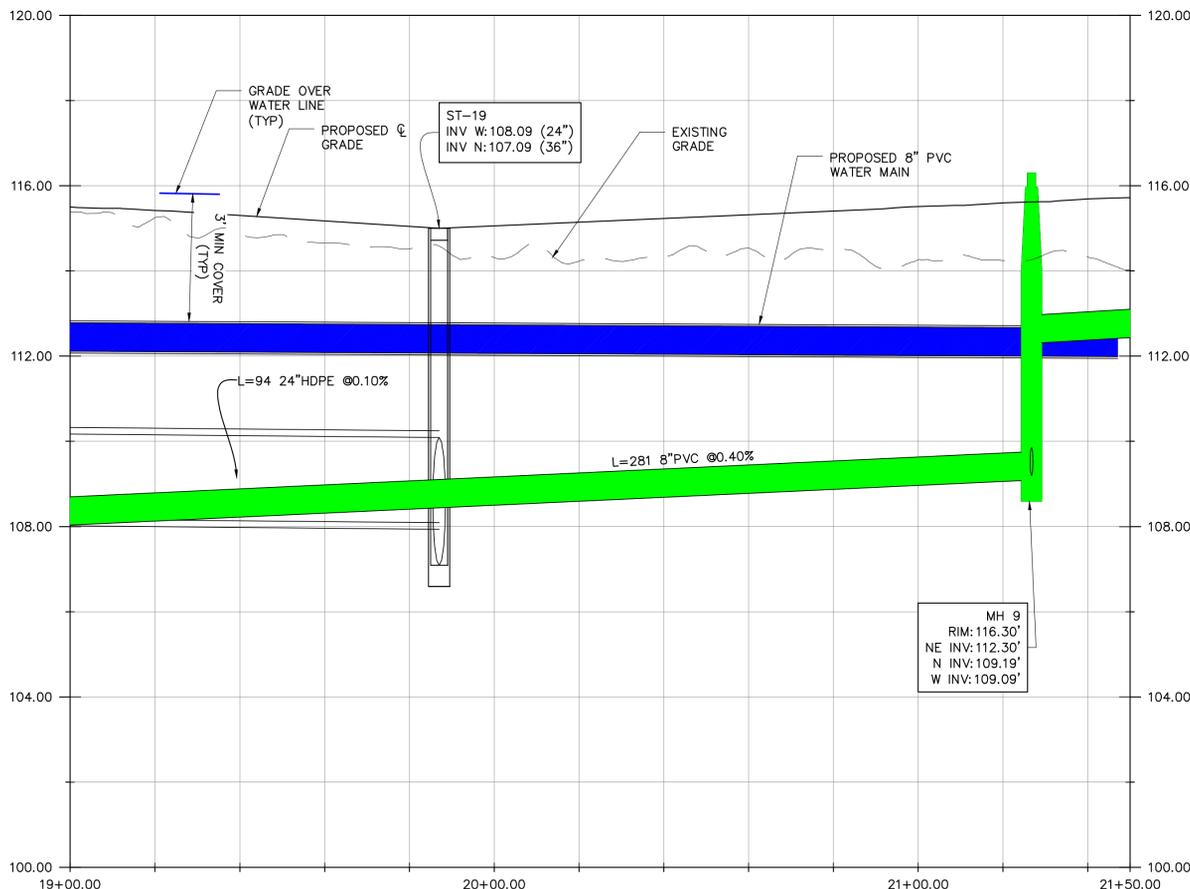
ROAD "B" PROFILE (15+00 TO 19+00)
SCALE: 1"=20' (HORZ.); 1"=2.5' (VERT.)



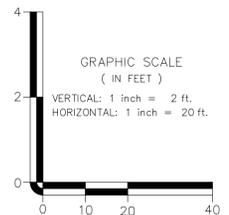
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<p>PROJECT NAME: CR 555 MULTI-FAMILY BARTOW, FLORIDA</p>		<p>DRAWN BY: VR</p>	<p>SHEET NUMBER C04.03</p>
<p>SHEET TITLE: ROAD "B" PLAN AND PROFILE 15+00 TO 19+00</p>		<p>PREPARED FOR: THE PARMAN GROUP, LLC 4349 STATE ROAD 60 WEST MULBERRY, FL 33860</p>	



ROAD "B" PLAN (19+00 TO 21+50)
SCALE: 1"=20'

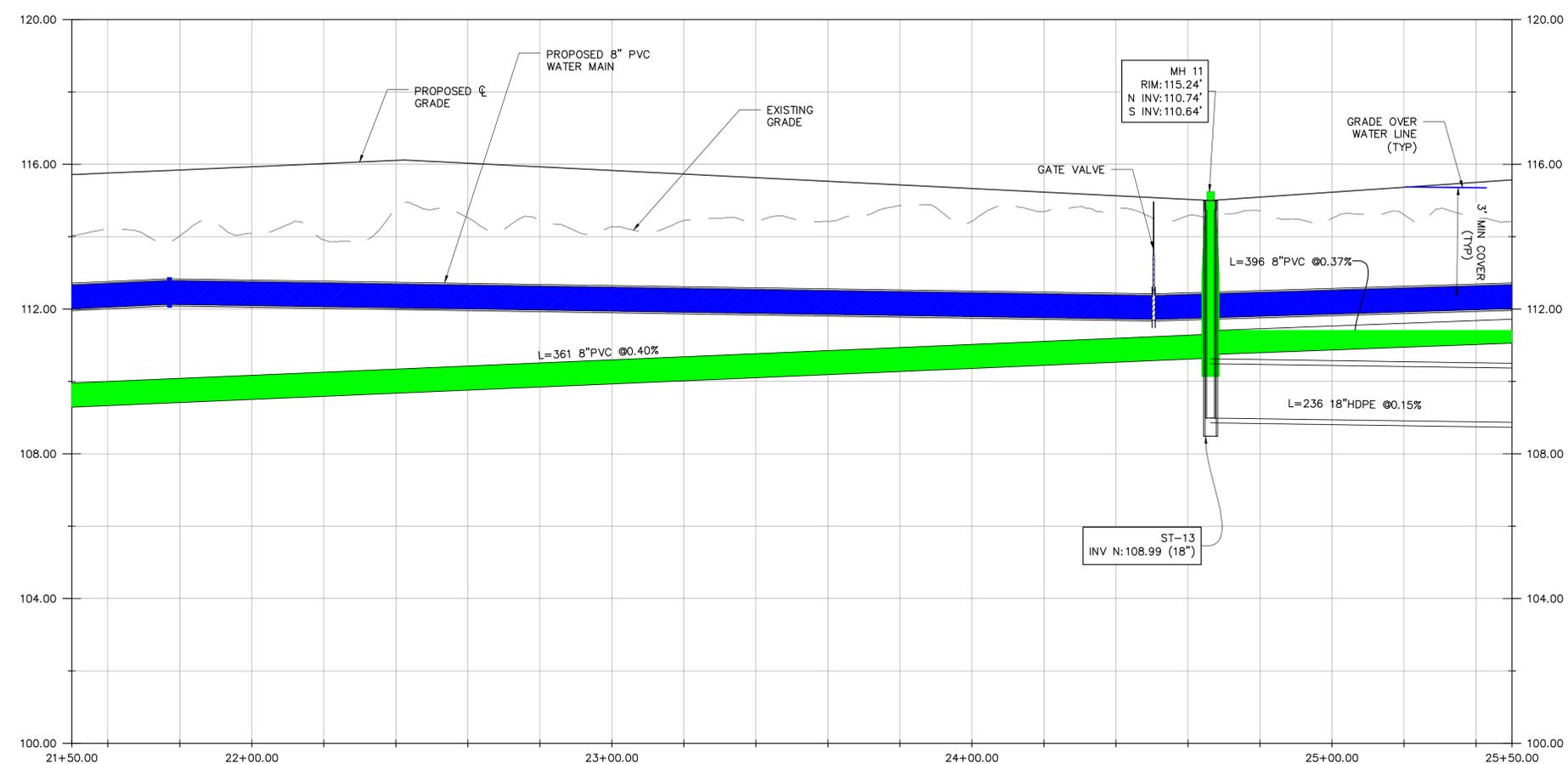
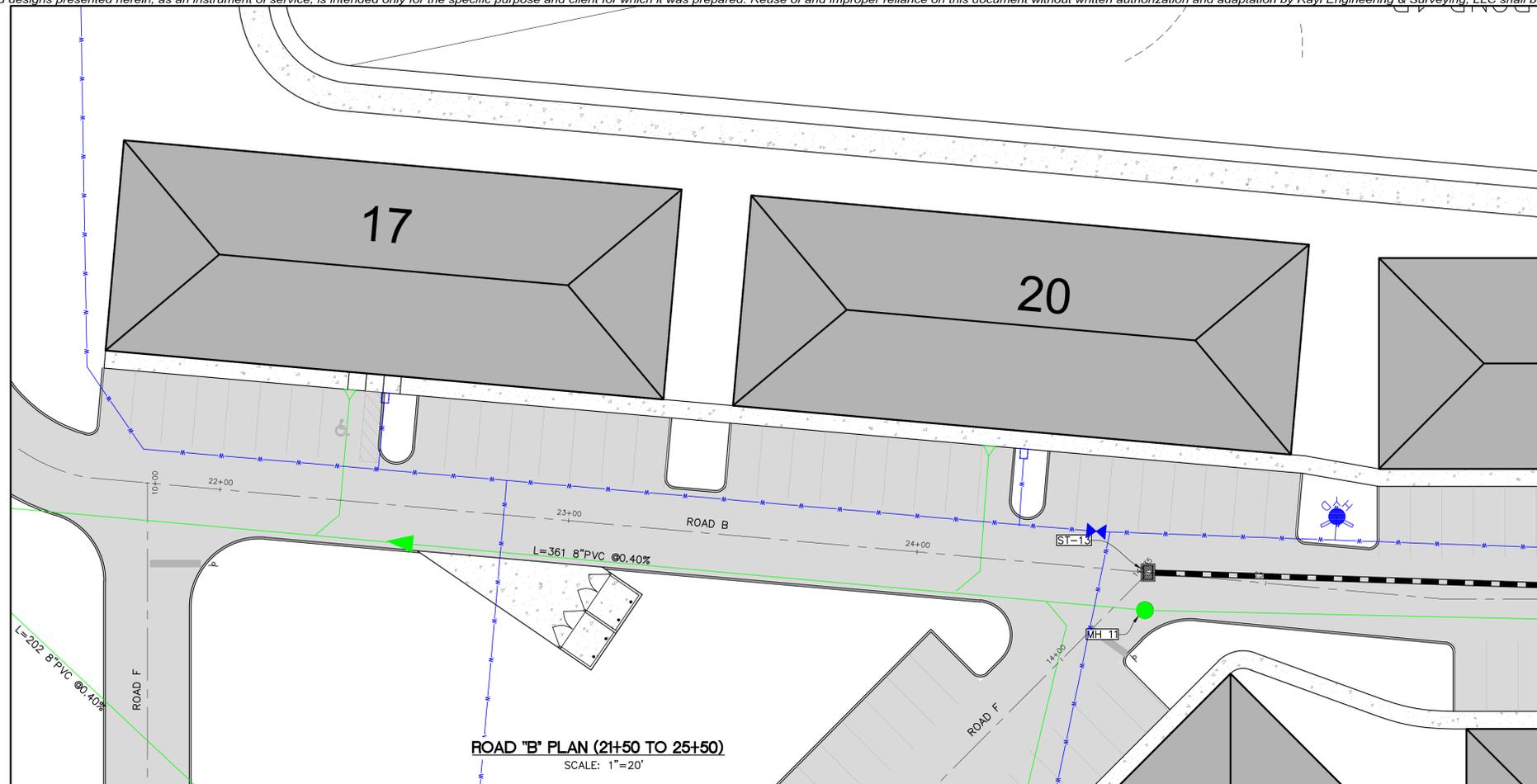


ROAD "B" PROFILE (19+00 TO 21+50)
SCALE: 1"=20' (HORZ.); 1"=2.5' (VERT.)



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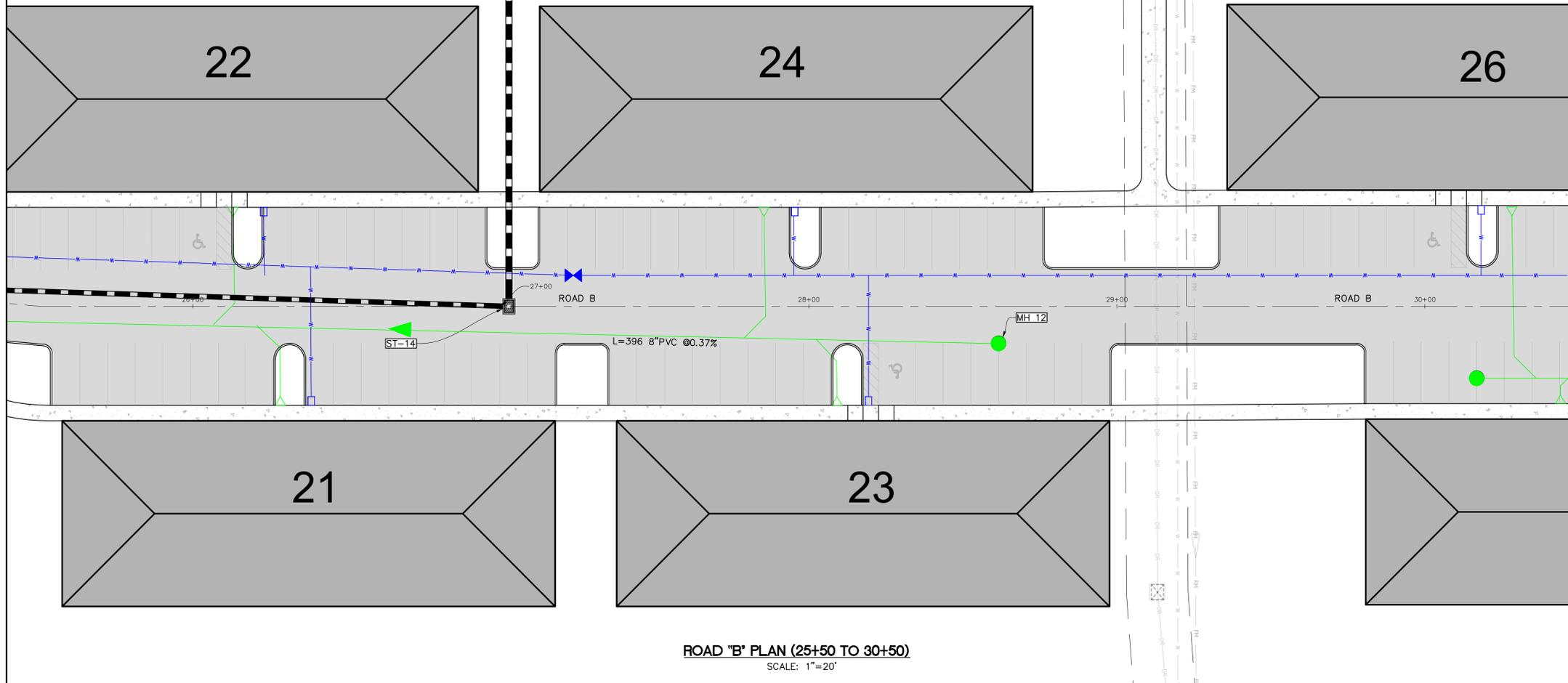
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<p>JOB NO. 21-153</p>	<p>DATE: JULY, 2022</p>
<p>DRAWN BY: VR</p>	<p>NO. DATE:</p>
<p>THE PARMAN GROUP, LLC 4349 STATE ROAD 60 WEST MULBERRY, FL 33860</p>	
<p>PROJECT NAME: CR 555 MULTI-FAMILY BARTOW, FLORIDA</p>	<p>SHEET TITLE: ROAD "B" PLAN AND PROFILE 19+00 TO 21+50</p>
<p>SHEET NUMBER C04.03A</p>	



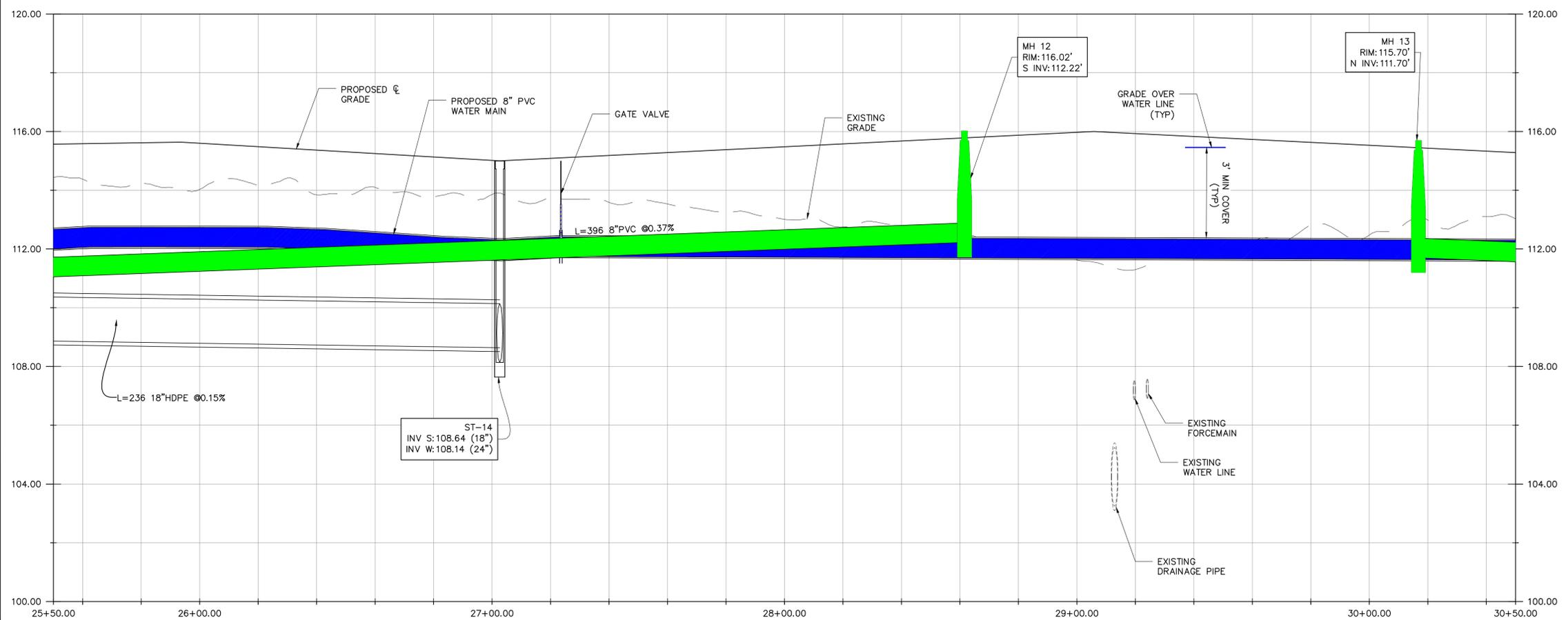
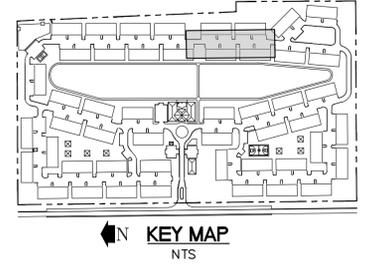
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<p>JOB NO. 21-153</p>	<p>DATE: JULY, 2022</p>
<p>DRAWN BY: VR</p>	<p>PREPARED FOR:</p>
<p>PROJECT NAME: CR 555 MULTI-FAMILY BARTOW, FLORIDA</p>	<p>SHEET TITLE: ROAD "B" PLAN AND PROFILE 21+50 TO 25+50</p>
<p>SHEET NUMBER</p>	<p>C04.04</p>

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ROAD "B" PLAN (25+50 TO 30+50)
SCALE: 1"=20'

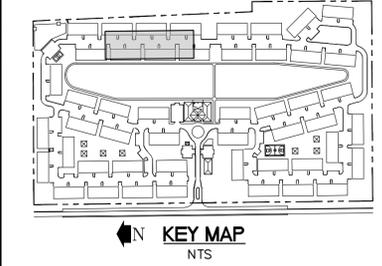
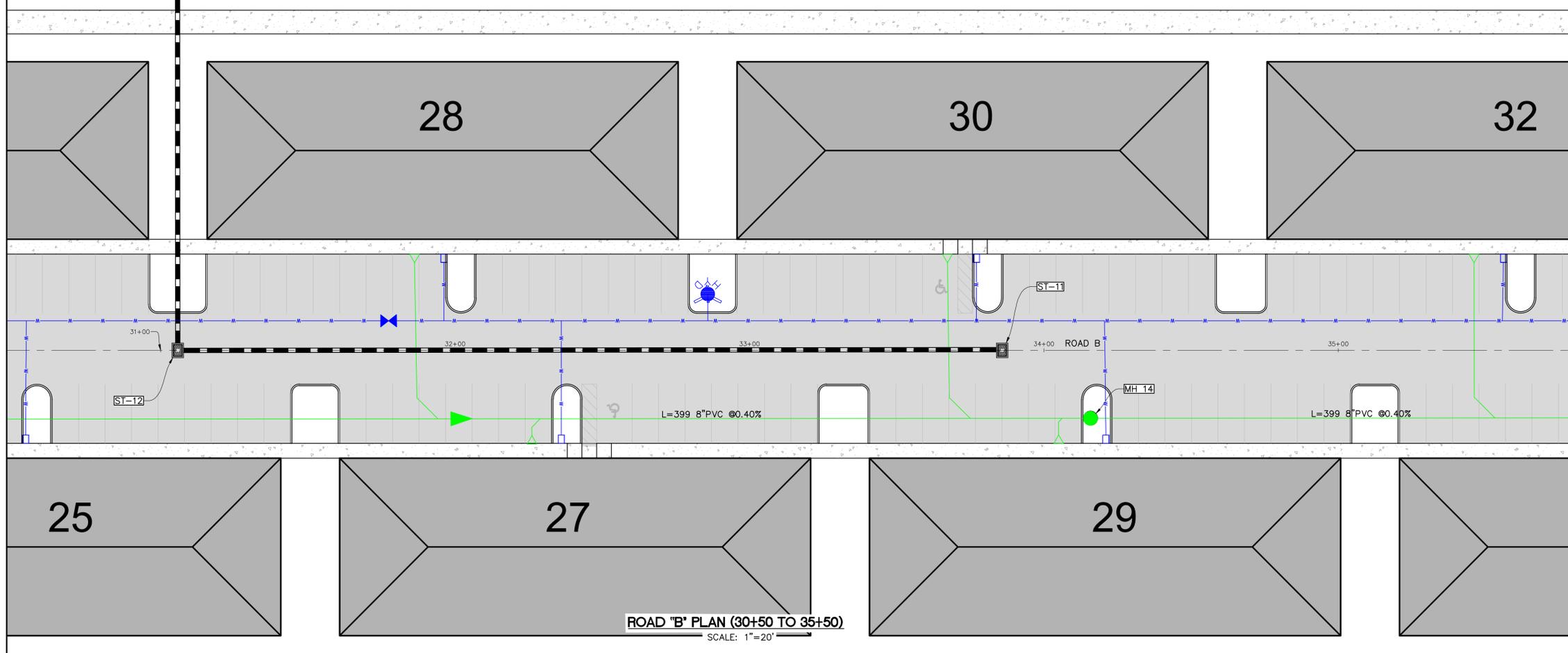


ROAD "B" PROFILE (25+50 TO 30+50)
SCALE: 1"=20' (HORZ.); 1"=2.5' (VERT.)



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<p>FLORIDA REGISTRATION NUMBERS: PE 44116 / PSM 5736</p>		<p>NO. DATE</p>
<p>JOB NO. 21-153</p>	<p>DATE: JULY, 2022</p>	<p>DRAWN BY: VR</p>
<p>PREPARED FOR: THE PARMAN GROUP, LLC 4349 STATE ROAD 80 WEST MULBERRY, FL 33860</p>		
<p>PROJECT NAME: CR 555 MULTI-FAMILY BARTOW, FLORIDA</p>	<p>SHEET TITLE: ROAD "B" PLAN AND PROFILE 25+50 TO 30+50</p>	
<p>SHEET NUMBER C04.05</p>		

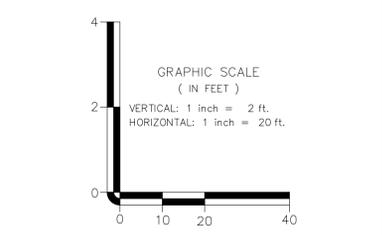
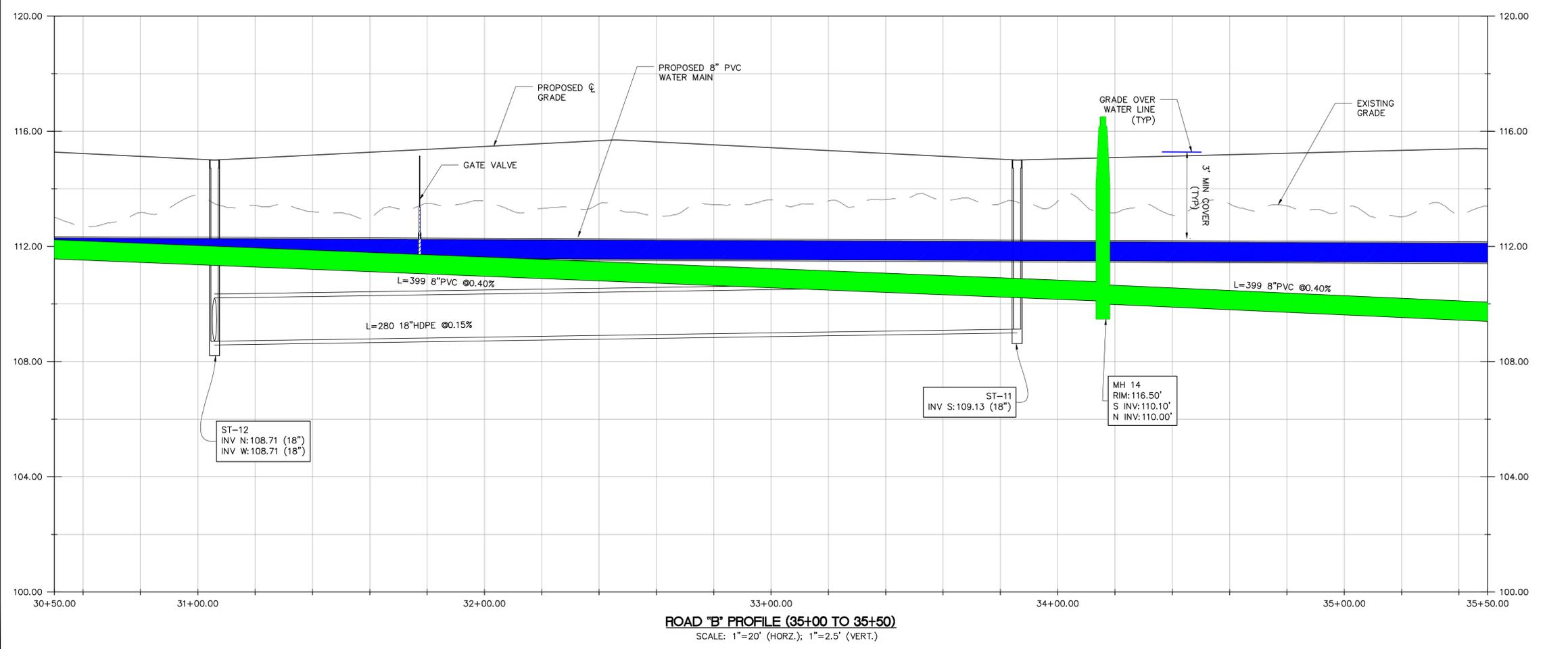
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JOB NO. 21-153
 DATE: JULY, 2022
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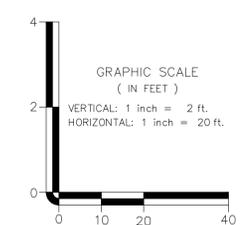
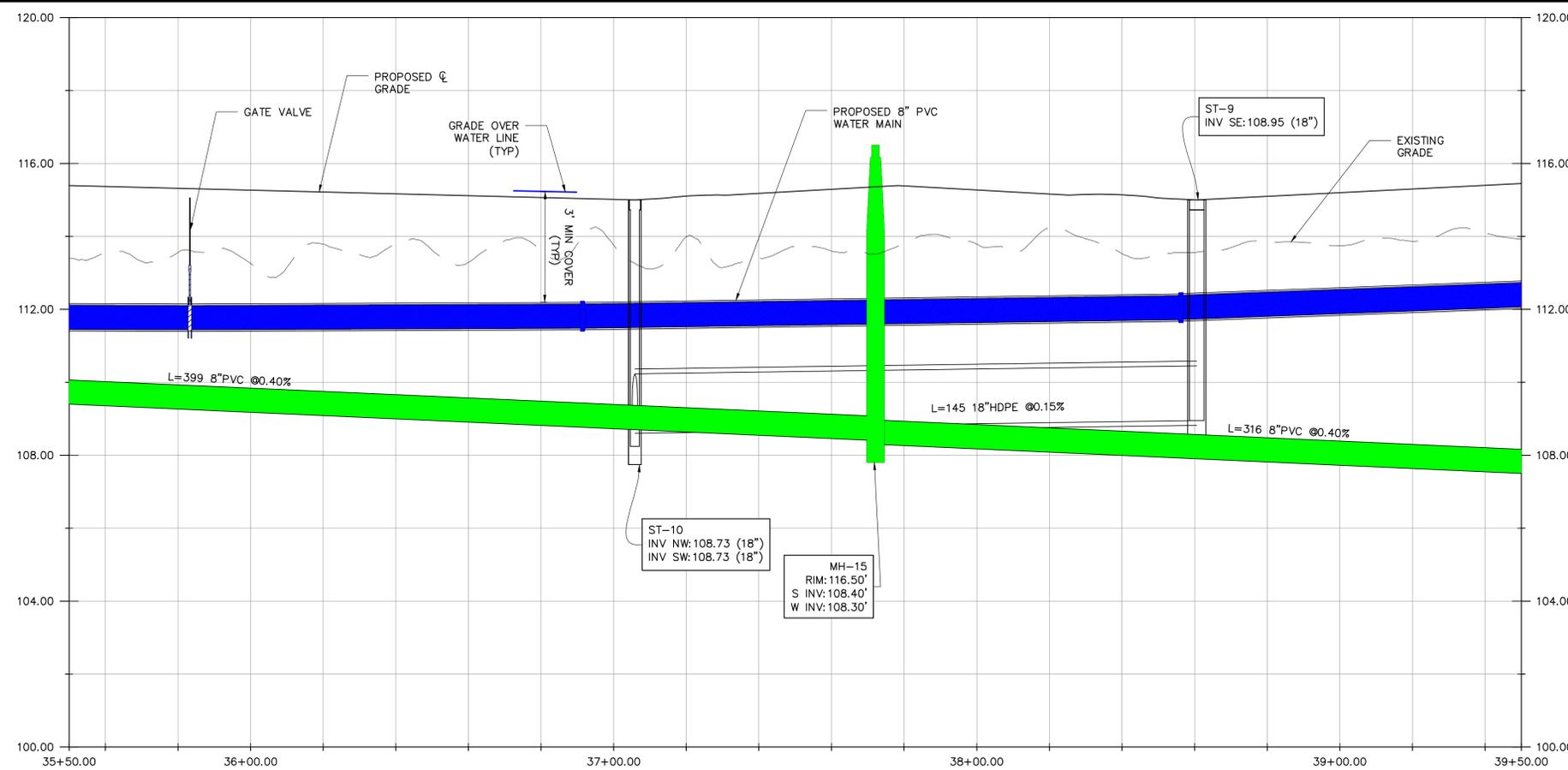
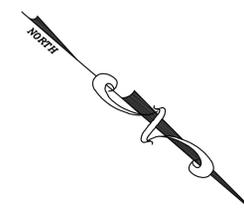
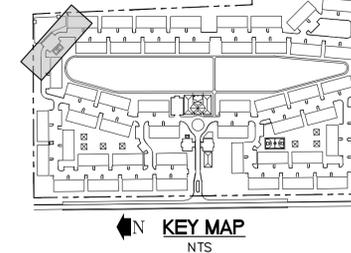
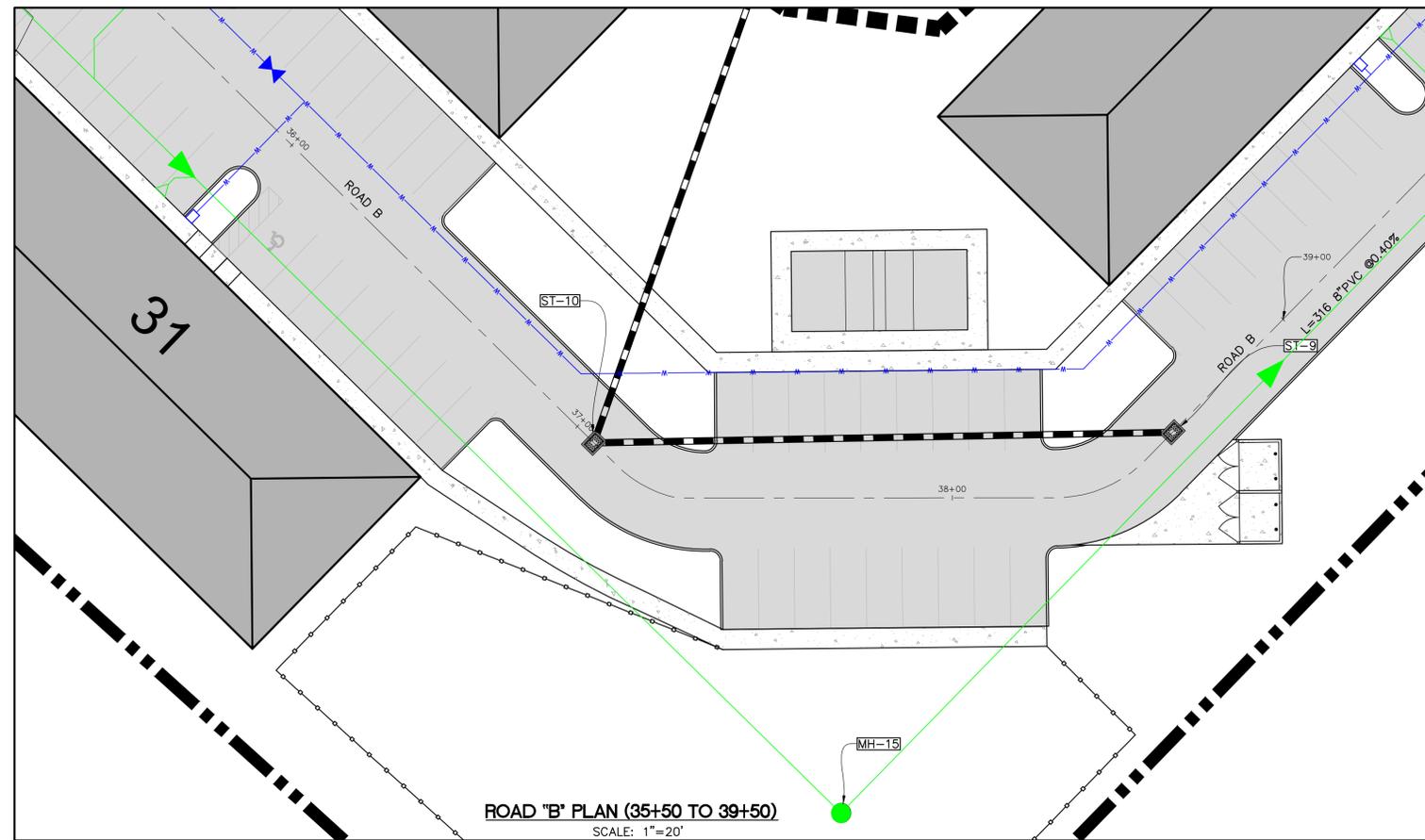
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 4349 STATE ROAD 80 WEST
 MULBERRY, FL 33860

PREPARED FOR:
 CR 555 MULTI-FAMILY
 BARTOW, FLORIDA

SHEET TITLE:
 ROAD "B" PLAN AND PROFILE
 30+50 TO 35+50

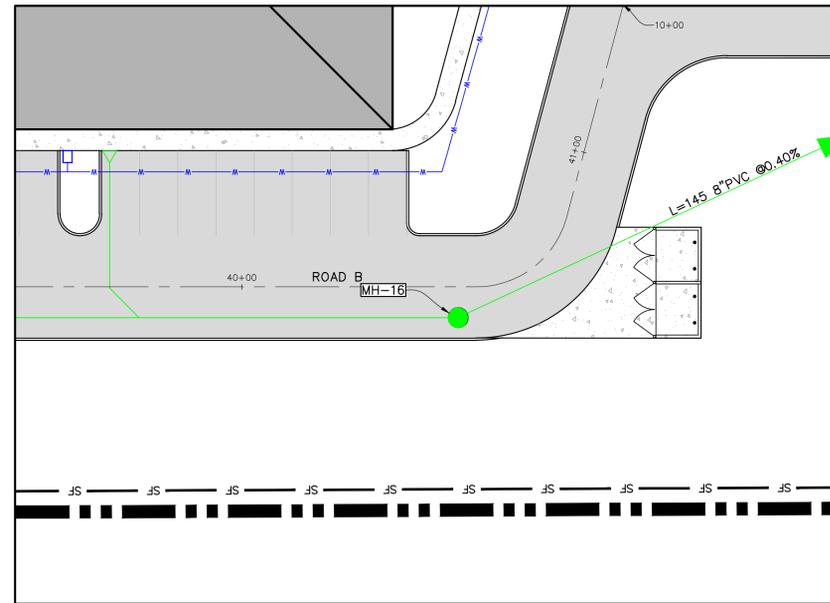
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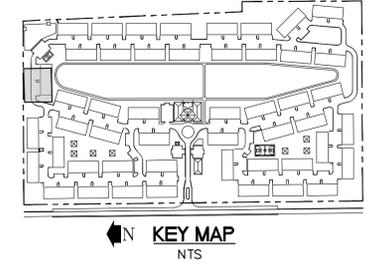


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JOB NO. 21-153	DATE: JULY, 2022	DRAWN BY: VR	
<p>PREPARED FOR: THE PARMAN GROUP, LLC 4349 STATE ROAD 80 WEST MULBERRY, FL 33860</p>			
<p>PROJECT NAME: CR 555 MULTI-FAMILY BARTOW, FLORIDA</p>		<p>SHEET TITLE: ROAD "B" PLAN AND PROFILE 35+50 TO 39+50</p>	
SHEET NUMBER		C04.07	



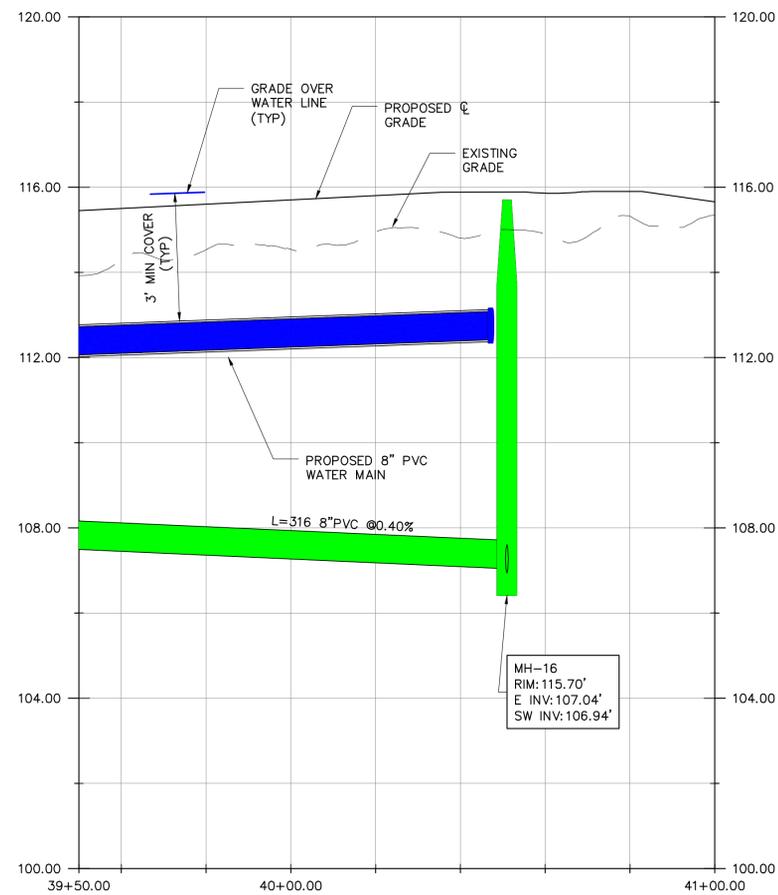


ROAD "B" PLAN (39+50 TO 41+00)
SCALE: 1"=20'

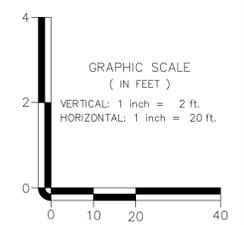


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BARTOW, FL 33830
OFFICE: (850) 537-7901
WWW.RAYLENGINEERING.COM
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JOB NO. 21-153
DATE: JULY, 2022
DRAWN BY: VR
LICENSED PROFESSIONAL:
ALAN L. RAYL, PE, PSM
FLORIDA REGISTRATION NUMBERS:
PE 44116 / PSM 5736



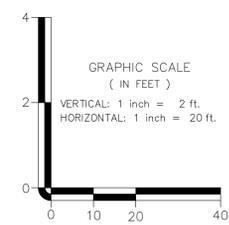
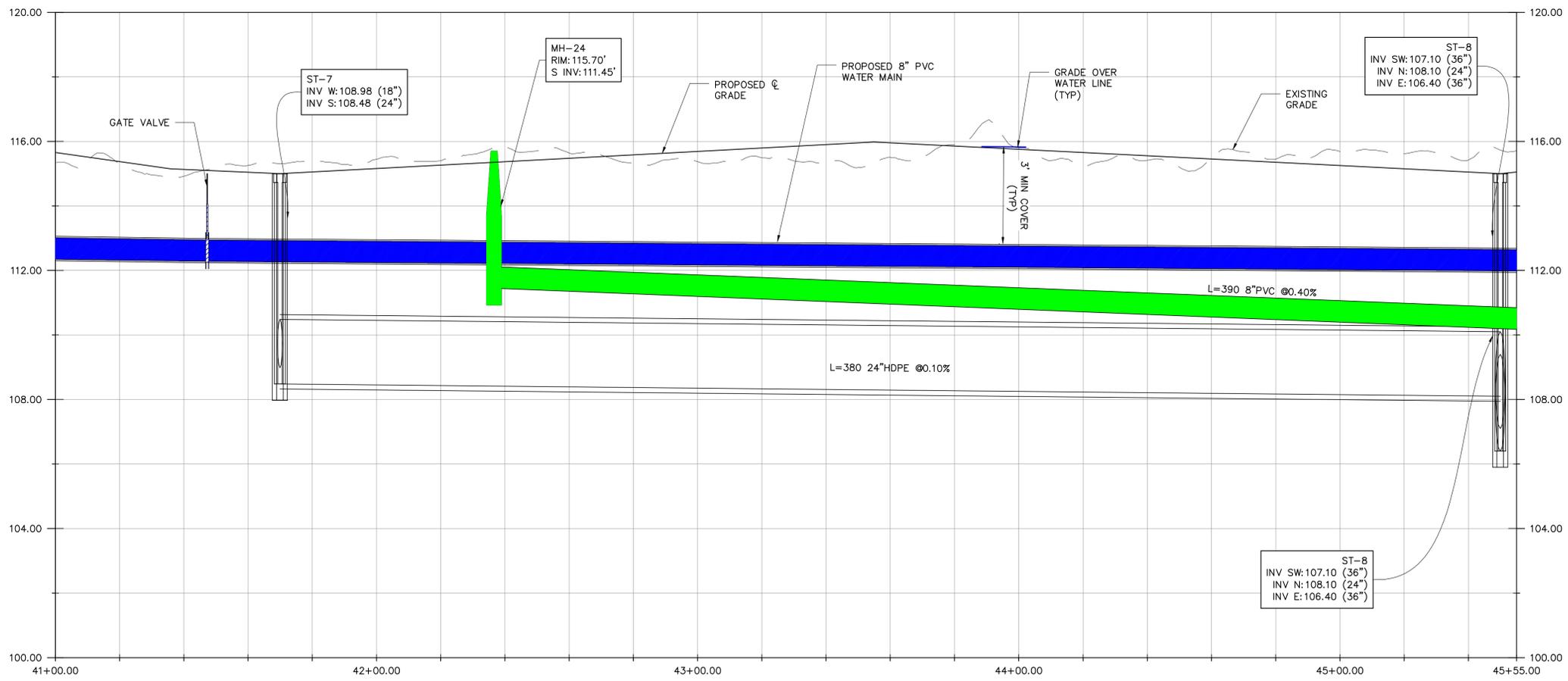
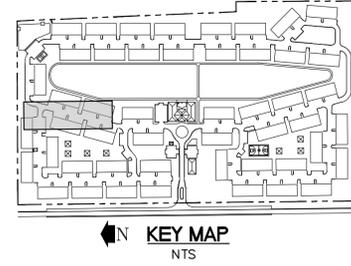
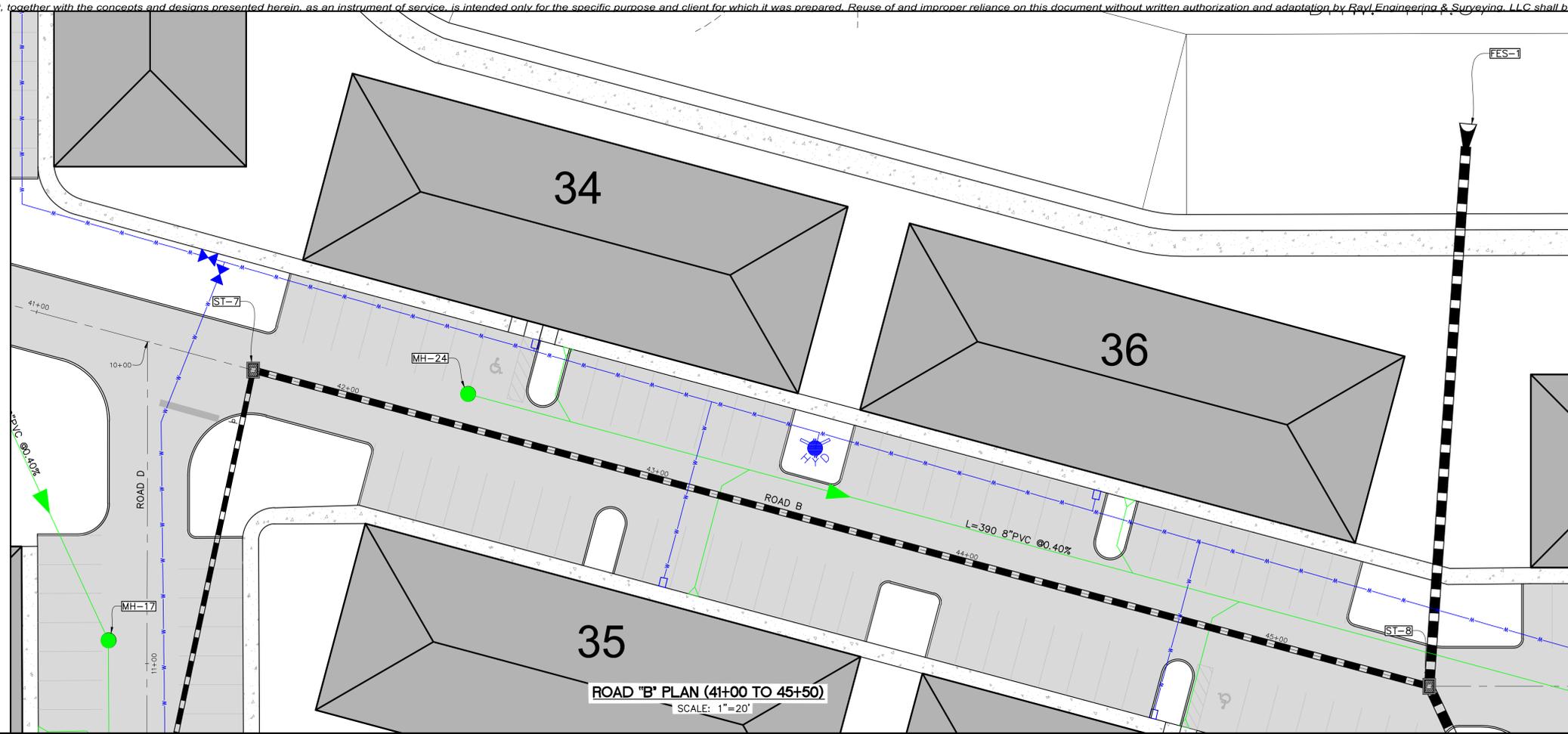
ROAD "B" PROFILE (39+50 TO 41+00)
SCALE: 1"=20' (HORZ.); 1"=2.5' (VERT.)



THE PARMAN GROUP, LLC
4349 STATE ROAD 60 WEST
MULBERRY, FL 33860

PROJECT NAME:
CR 555 MULTI-FAMILY
BARTOW, FLORIDA
SHEET TITLE:
ROAD "B" PLAN AND PROFILE
39+50 TO 41+00

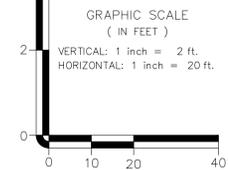
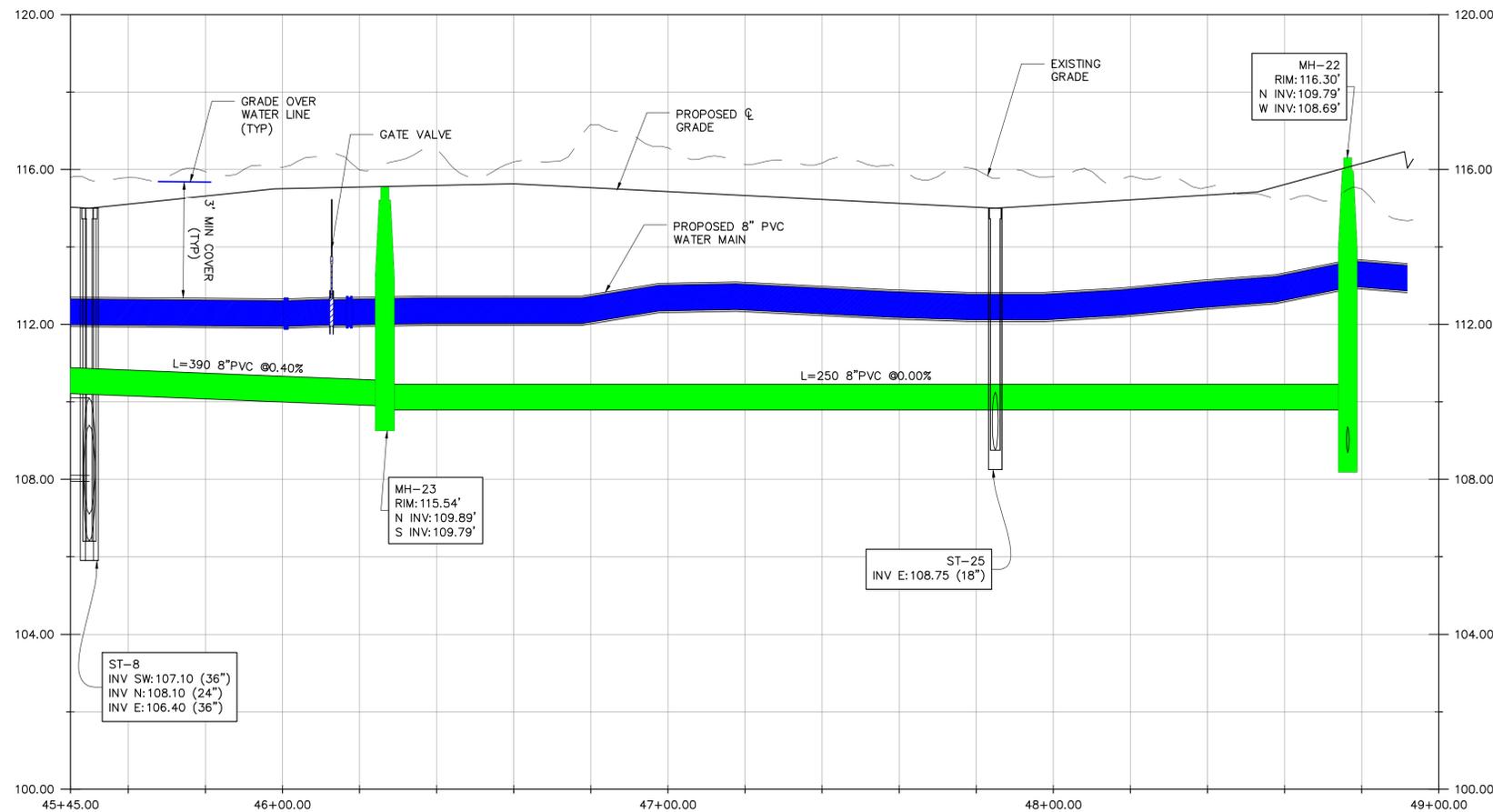
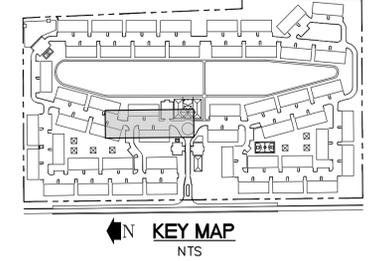
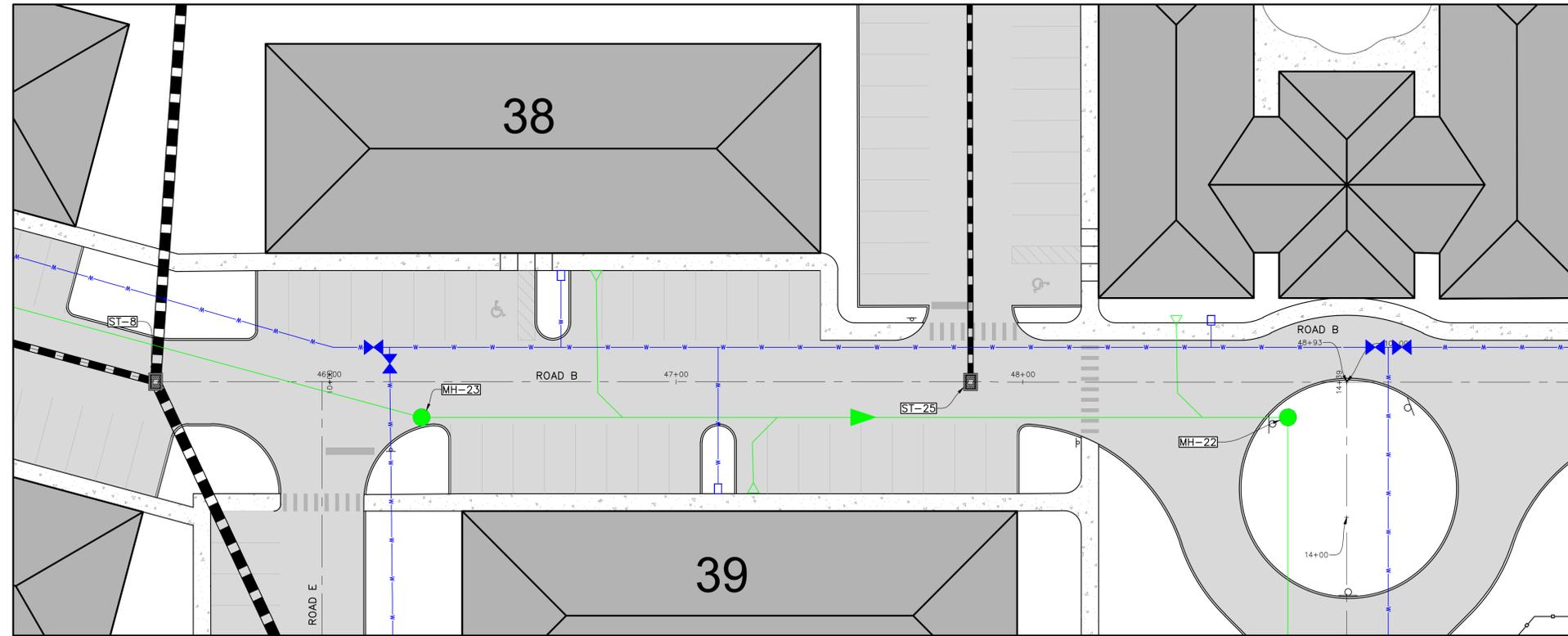
SHEET NUMBER
C04.07A



ROAD "B" PROFILE (41+00 TO 45+50)
SCALE: 1"=20' (HORZ.); 1"=2.5' (VERT.)

<p>RAYL ENGINEERING & SURVEYING, LLC 10 EAST MAIN STREET BARTOW, FL 33830 FL LIC REG# 28890 © 2022 FL LB REG# 7770</p>	
<p>LICENSED PROFESSIONAL: ALAN L. RAYL, PE, PSM</p>	<p>FLORIDA REGISTRATION NUMBERS: PE 44116 / PSM 5736</p>
<p>JOB NO. 21-153</p>	<p>DATE: JULY, 2022</p>
<p>DRAWN BY: VR</p>	<p>NO. DATE:</p>
<p>PREPARED FOR: THE PARMAN GROUP, LLC 4349 STATE ROAD 60 WEST MULBERRY, FL 33860</p>	
<p>PROJECT NAME: CR 555 MULTI-FAMILY BARTOW, FLORIDA</p>	<p>SHEET TITLE: ROAD "B" PLAN AND PROFILE 41+00 TO 45+50</p>
<p>SHEET NUMBER C04.08</p>	





NO.	DATE	REVISION

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LICENSED PROFESSIONAL:
 ALAN L. RAYL, PE, PSM
 FLORIDA REGISTRATION NUMBERS:
 PE 44116 / PSM 5736

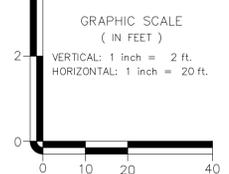
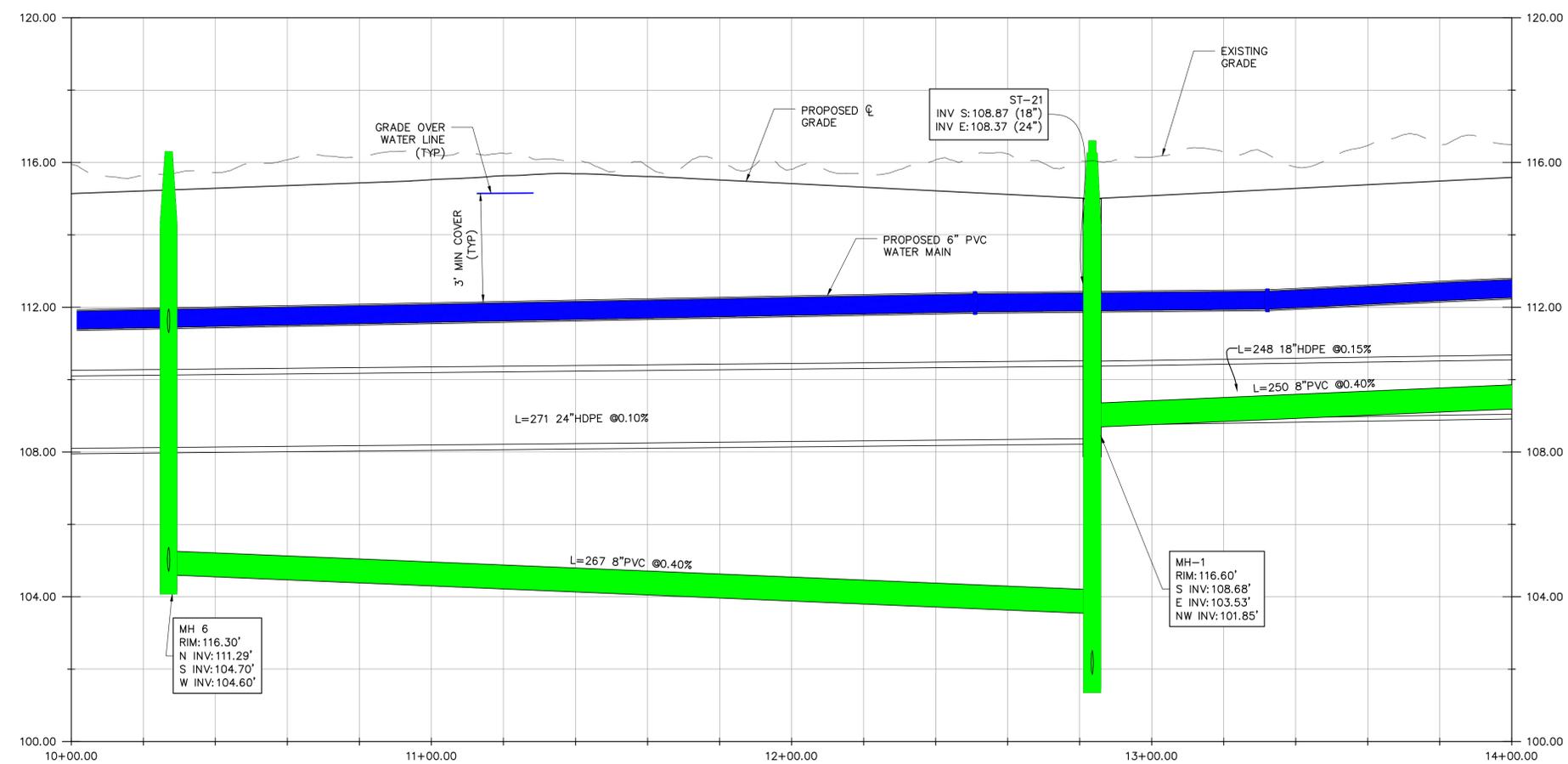
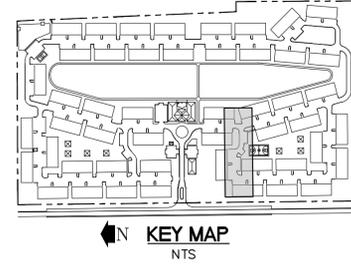
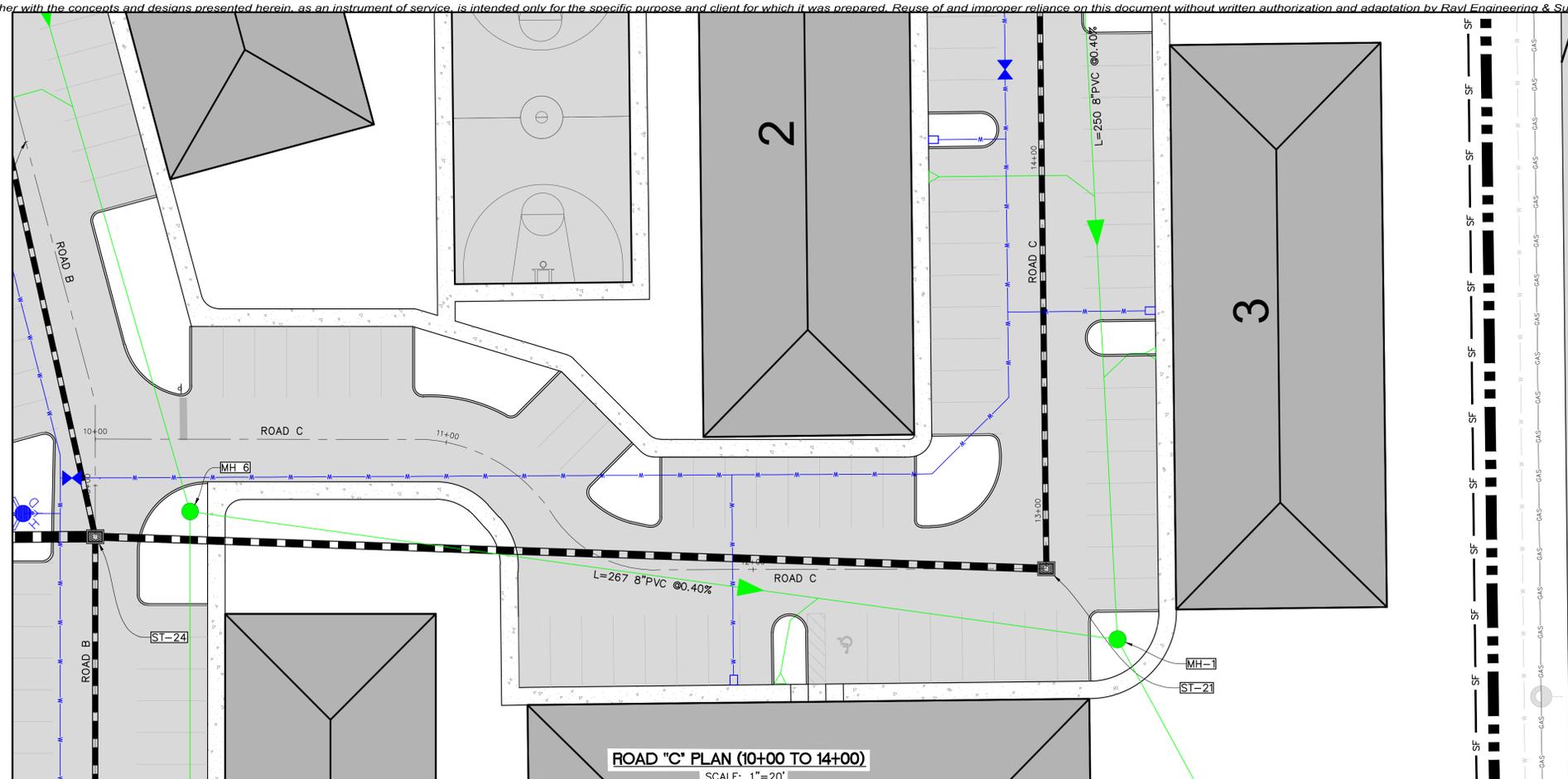
JOB NO. 21-153
 DATE: JULY, 2022
 DRAWN BY: VR

PREPARED FOR:
THE PARMAN GROUP, LLC
 4349 STATE ROAD 80 WEST
 MULBERRY, FL 33860

PROJECT NAME:
 CR 555 MULTI-FAMILY
 BARTOW, FLORIDA
 SHEET TITLE:
 ROAD "B" PLAN AND PROFILE
 45+50 TO 48+93

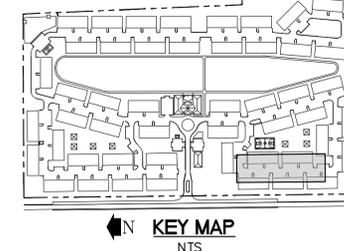
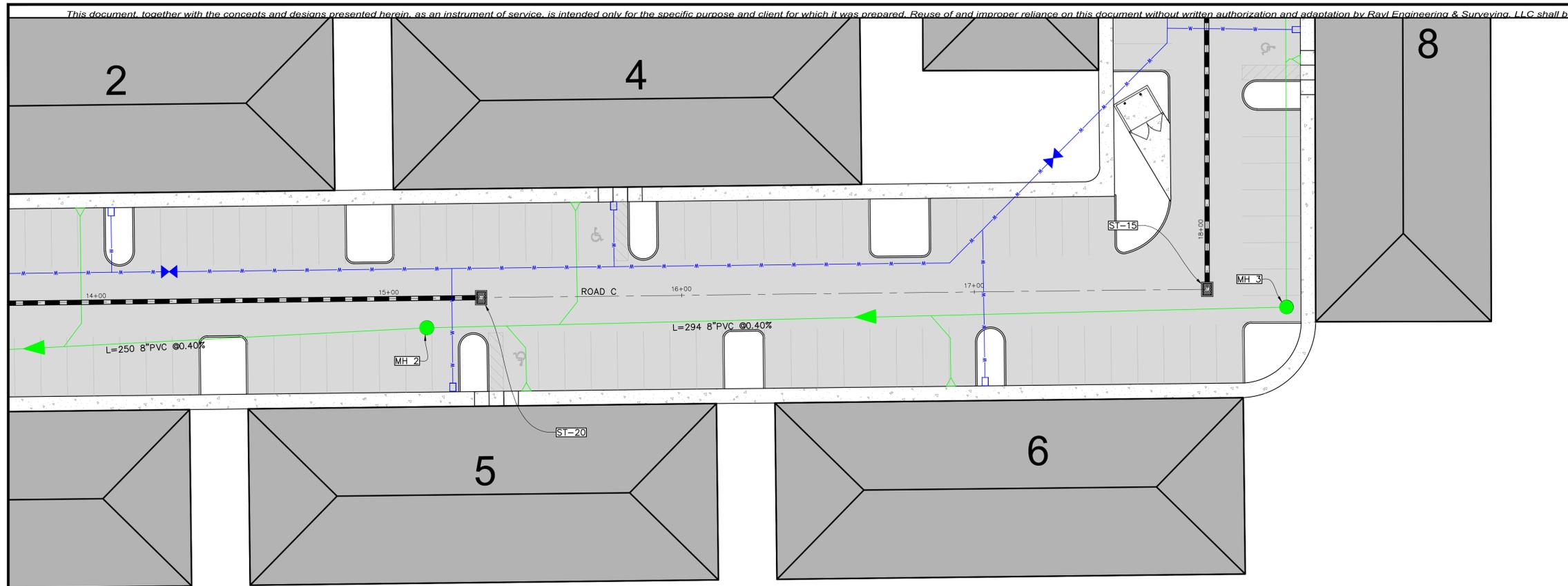
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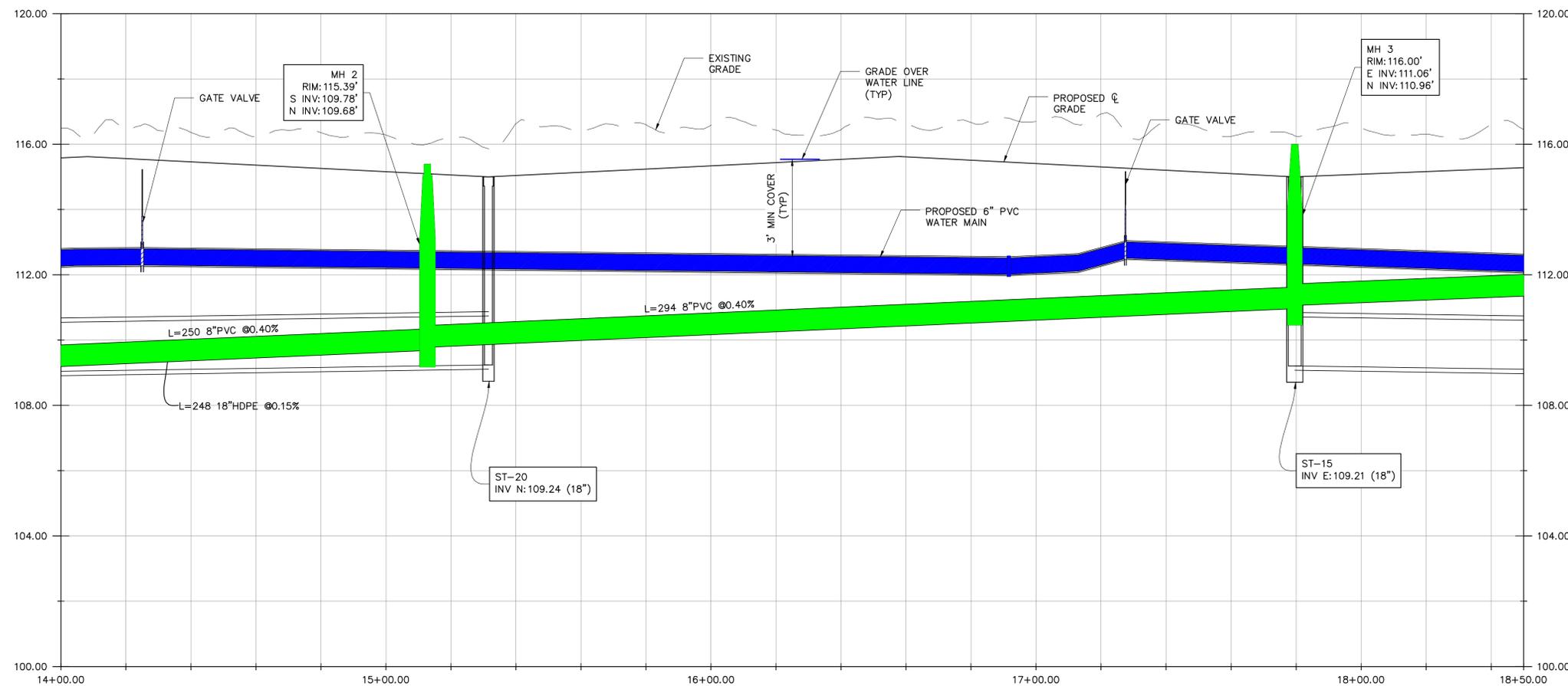
<p>RAYL ENGINEERING & SURVEYING, LLC 10 EAST MAIN STREET BARTOW, FL 33830 FL LB REG# 7770</p>	
<p>LICENSED PROFESSIONAL: ALAN L. RAYL, PE, PSM</p>	<p>FLORIDA REGISTRATION NUMBERS: PE 44116 / PSM 5736</p>
<p>JOB NO. 21-153</p>	<p>DATE: JULY, 2022</p>
<p>DRAWN BY: VR</p>	<p>NO. DATE: _____</p>
<p>PREPARED FOR: THE PARMAN GROUP, LLC 4349 STATE ROAD 60 WEST MULBERRY, FL 33860</p>	
<p>PROJECT NAME: CR 555 MULTI-FAMILY BARTOW, FLORIDA</p>	<p>SHEET TITLE: ROAD "C" PLAN AND PROFILE 10+00 TO 14+00</p>
<p>SHEET NUMBER</p>	<p>C04.10</p>

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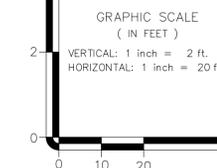
ROAD "C" PLAN (14+00 TO 18+50)

SCALE: 1"=20'



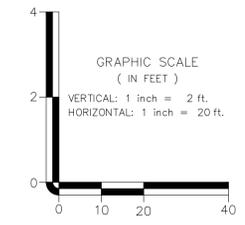
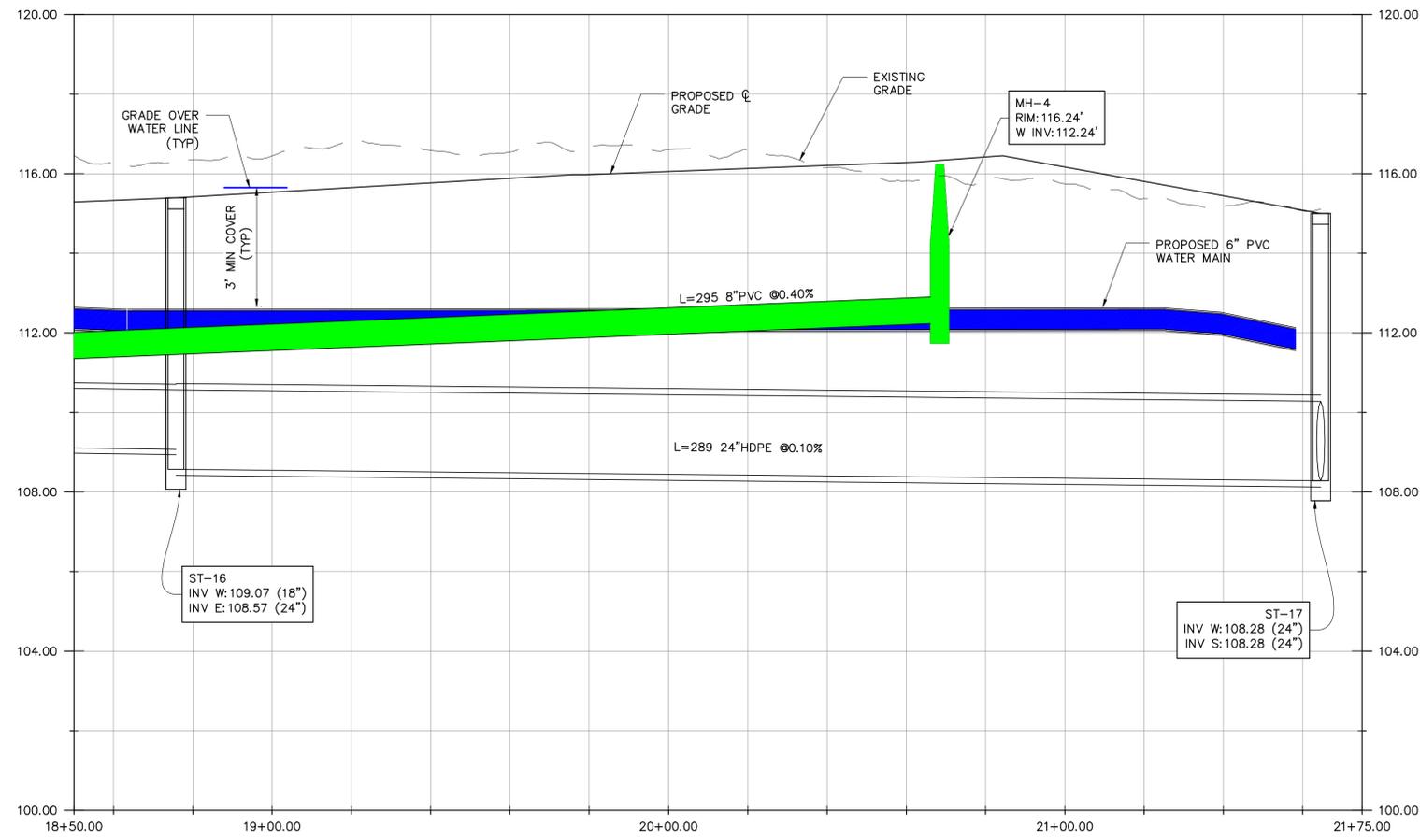
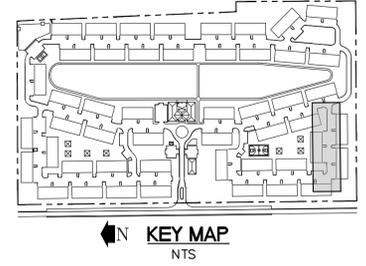
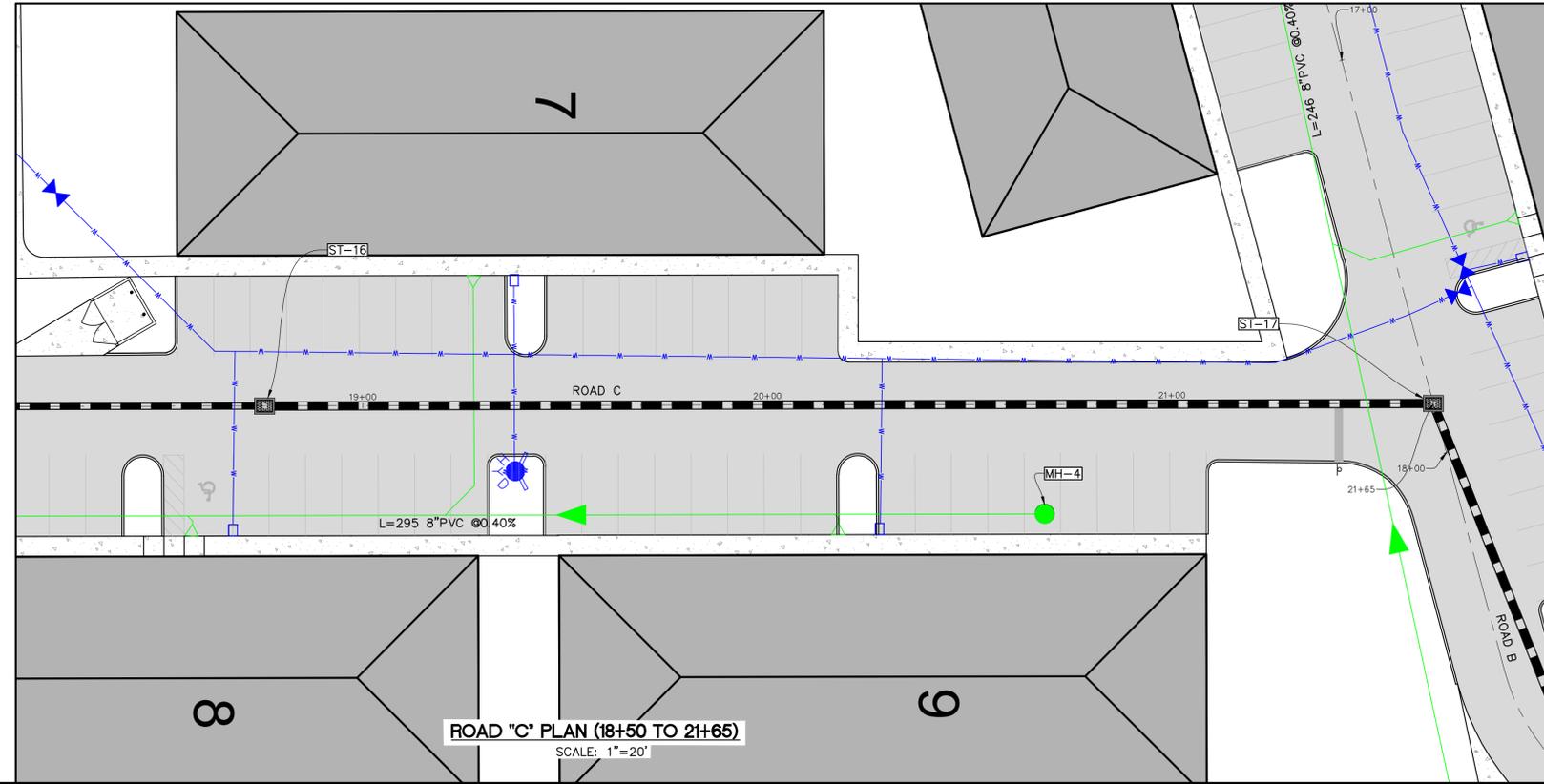
ROAD "C" PROFILE (14+00 TO 18+50)

SCALE: 1"=20' (HORZ.); 1"=2.5' (VERT.)



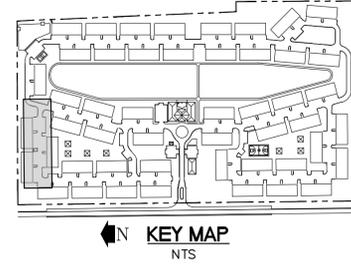
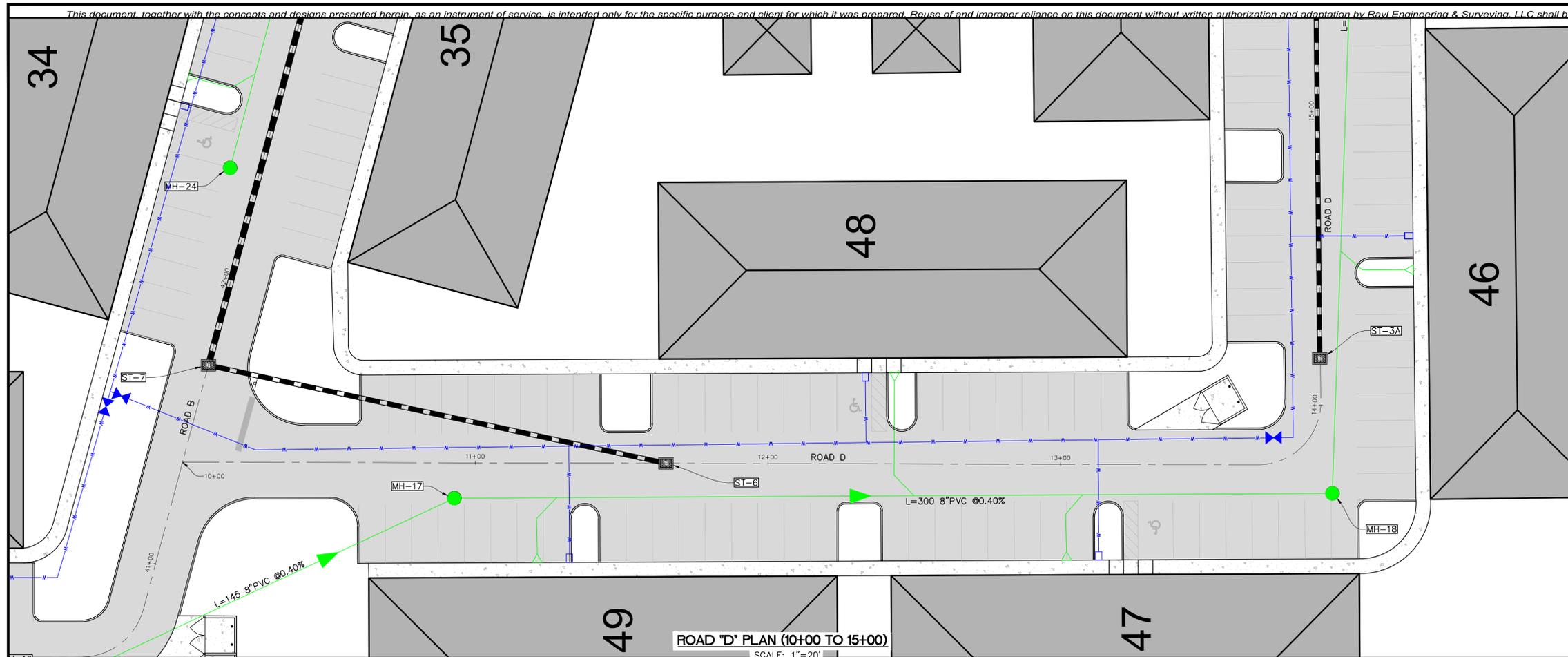
LICENSED PROFESSIONAL: ALAN L. RAYL, PE, PSM FLORIDA REGISTRATION NUMBERS: PE 44116 / PSM 5736 OFFICE: 10 EAST HANS STREET, BARTOW, FL 33830 WWW.RAYLENGINEERING.COM FL REG # 28830 © 2022 FL REG # 7770	
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DRAWN BY: VR	NO. DATE:
PREPARED FOR: THE PARMAN GROUP, LLC 4349 STATE ROAD 80 WEST MULBERRY, FL 33860	
PROJECT NAME: CR 555 MULTI-FAMILY BARTOW, FLORIDA	SHEET TITLE: ROAD "C" PLAN AND PROFILE 14+00 TO 18+50
SHEET NUMBER C04.11	





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		FLORIDA REGISTRATION NUMBERS: PE 44116 / PSM 5736
JOB NO. 21-153	DATE: JULY, 2022	DRAWN BY: VR
PREPARED FOR: THE PARMAN GROUP, LLC 4349 STATE ROAD 60 WEST MULBERRY, FL 33860		
PROJECT NAME: CR 555 MULTI-FAMILY BARTOW, FLORIDA	SHEET TITLE: ROAD "C" PLAN AND PROFILE 18+50 TO 21+65	
SHEET NUMBER C04.12		NO. DATE: _____ NO. DATE: _____ NO. DATE: _____ NO. DATE: _____ NO. DATE: _____

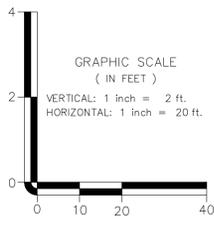
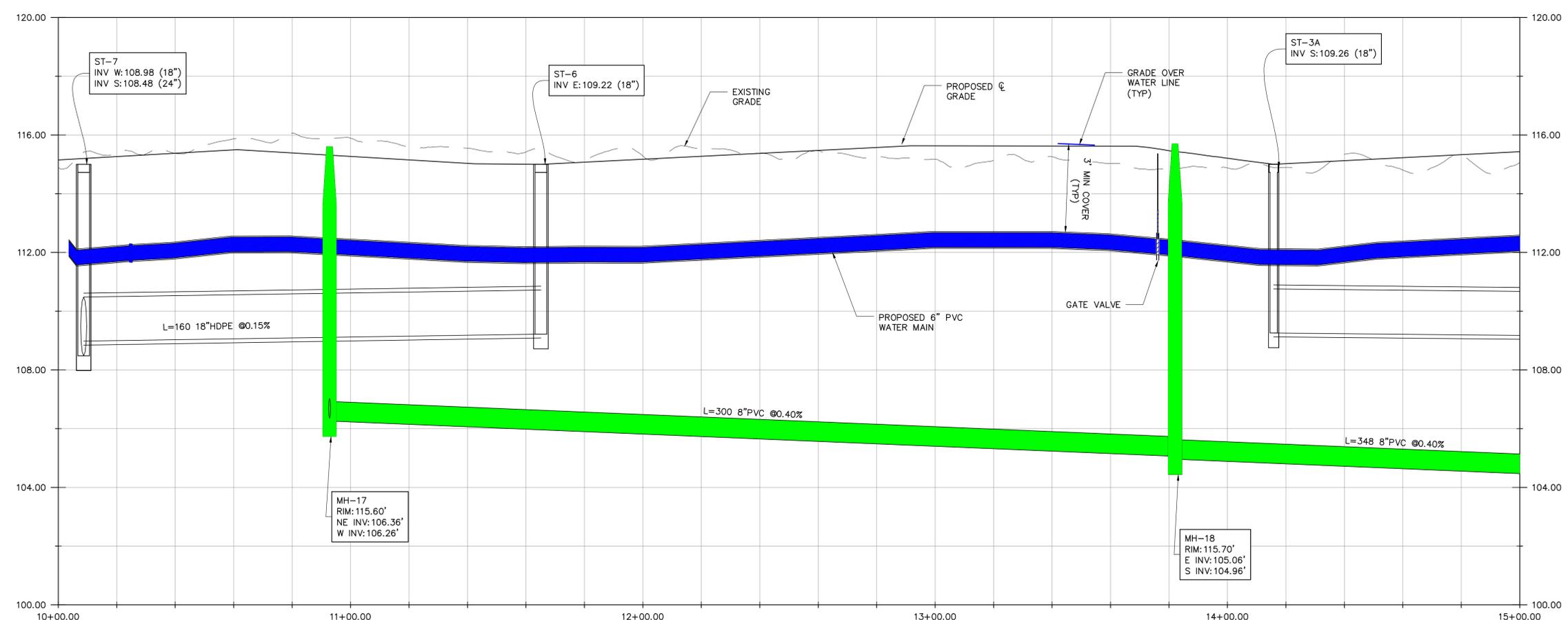




ROAD "D" PLAN (10+00 TO 15+00)
SCALE: 1"=20'

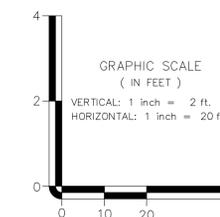
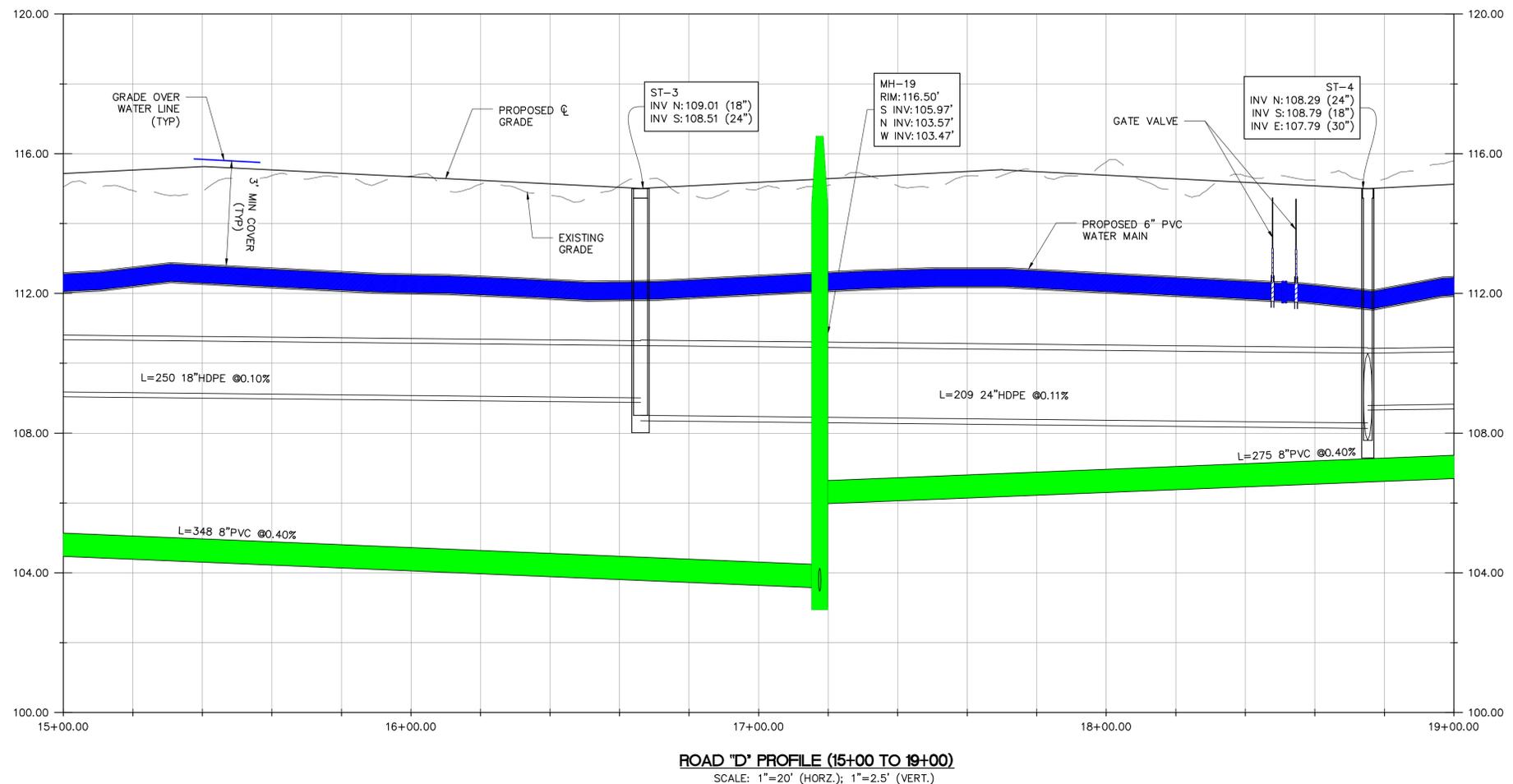
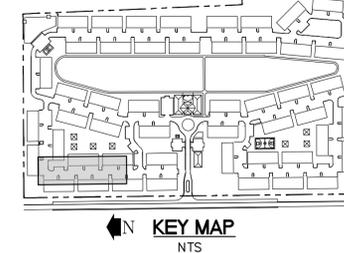
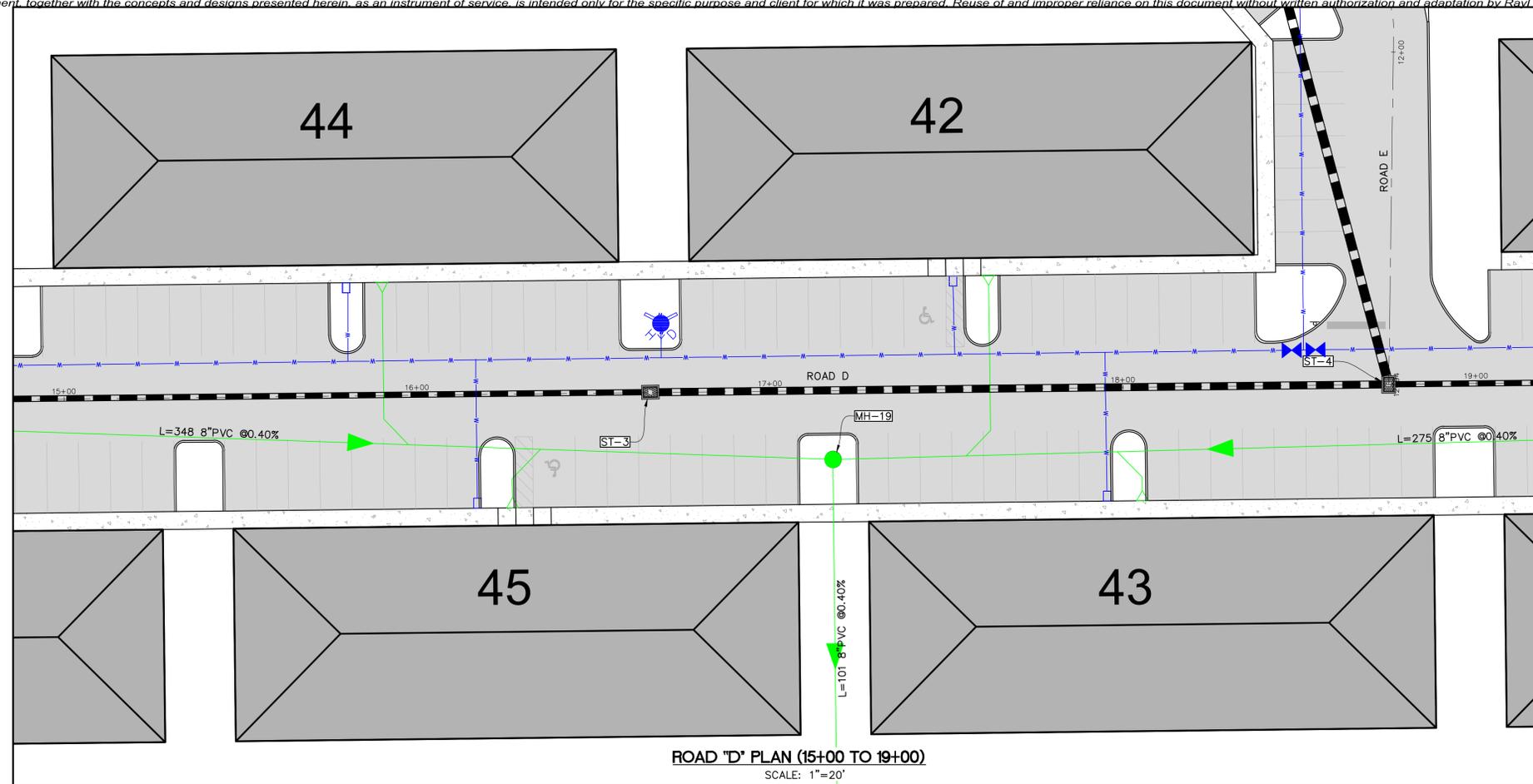
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LICENSED PROFESSIONAL: ALAN L. RAYL, PE, PSM	LICENSED PROFESSIONAL: ALAN L. RAYL, PE, PSM FLORIDA REGISTRATION NUMBERS: PE 44116 / PSM 5736
JOB NO. 21-153	DATE: JULY, 2022
DRAWN BY: VR	

PREPARED FOR: THE PARMAN GROUP, LLC 4349 STATE ROAD 60 WEST MULBERRY, FL 33860	PROJECT NAME: CR 555 MULTI-FAMILY BARTOW, FLORIDA
SHEET TITLE: ROAD "D" PLAN AND PROFILE 10+00 TO 15+00	SHEET NUMBER: C04.13

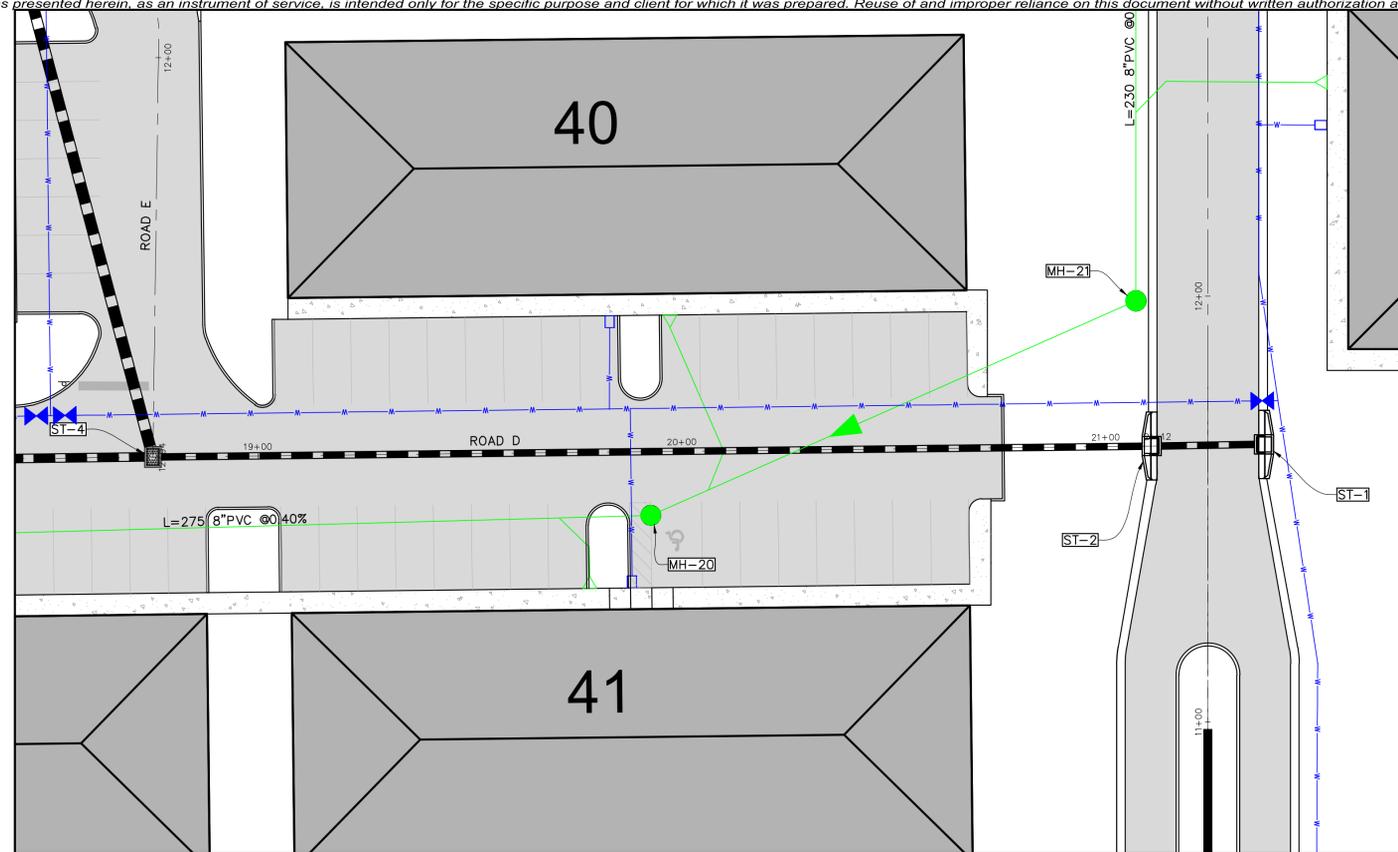


ROAD "D" PROFILE (10+00 TO 15+00)
SCALE: 1"=20' (HORZ.); 1"=2.5' (VERT.)

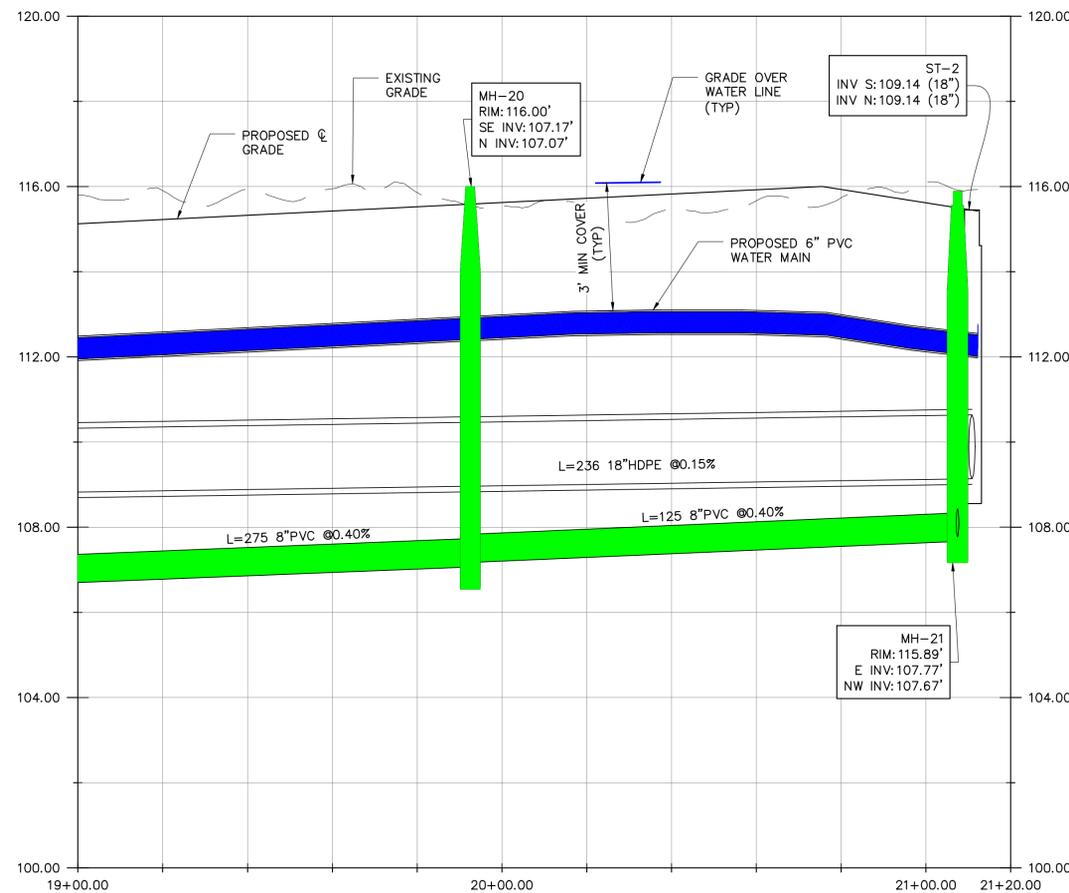
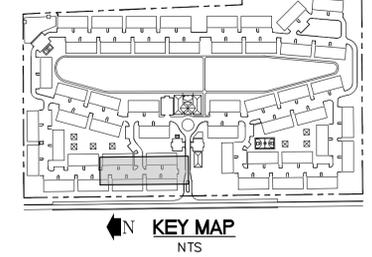




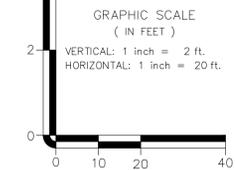
<p>RAYL ENGINEERING & SURVEYING, LLC <small>10 EAST MAIN STREET, BARTOW, FL 33830 OFFICE: (850) 537-7901 WWW.RAYLENG.COM</small></p>	
<p>LICENSED PROFESSIONAL: ALAN L. RAYL, PE, PSM</p>	<p>FLORIDA REGISTRATION NUMBERS: PE 44116 / PSM 5736</p>
<p>JOB NO. 21-153</p>	<p>DATE: JULY, 2022</p>
<p>DRAWN BY: VR</p>	<p>DATE: 02/22</p>
<p>PREPARED FOR: THE PARMAN GROUP, LLC 4349 STATE ROAD 80 WEST MULBERRY, FL 33860</p>	
<p>PROJECT NAME: CR 555 MULTI-FAMILY BARTOW, FLORIDA</p>	<p>SHEET TITLE: ROAD "D" PLAN AND PROFILE 15+00 TO 19+00</p>
<p>SHEET NUMBER C04.14</p>	



ROAD "D" PLAN (19+00 TO 21+00)
SCALE: 1"=20'



ROAD "D" PROFILE (19+00 TO 21+00)
SCALE: 1"=20' (HORZ.); 1"=2.5' (VERT.)



NO.	DATE	REVISION

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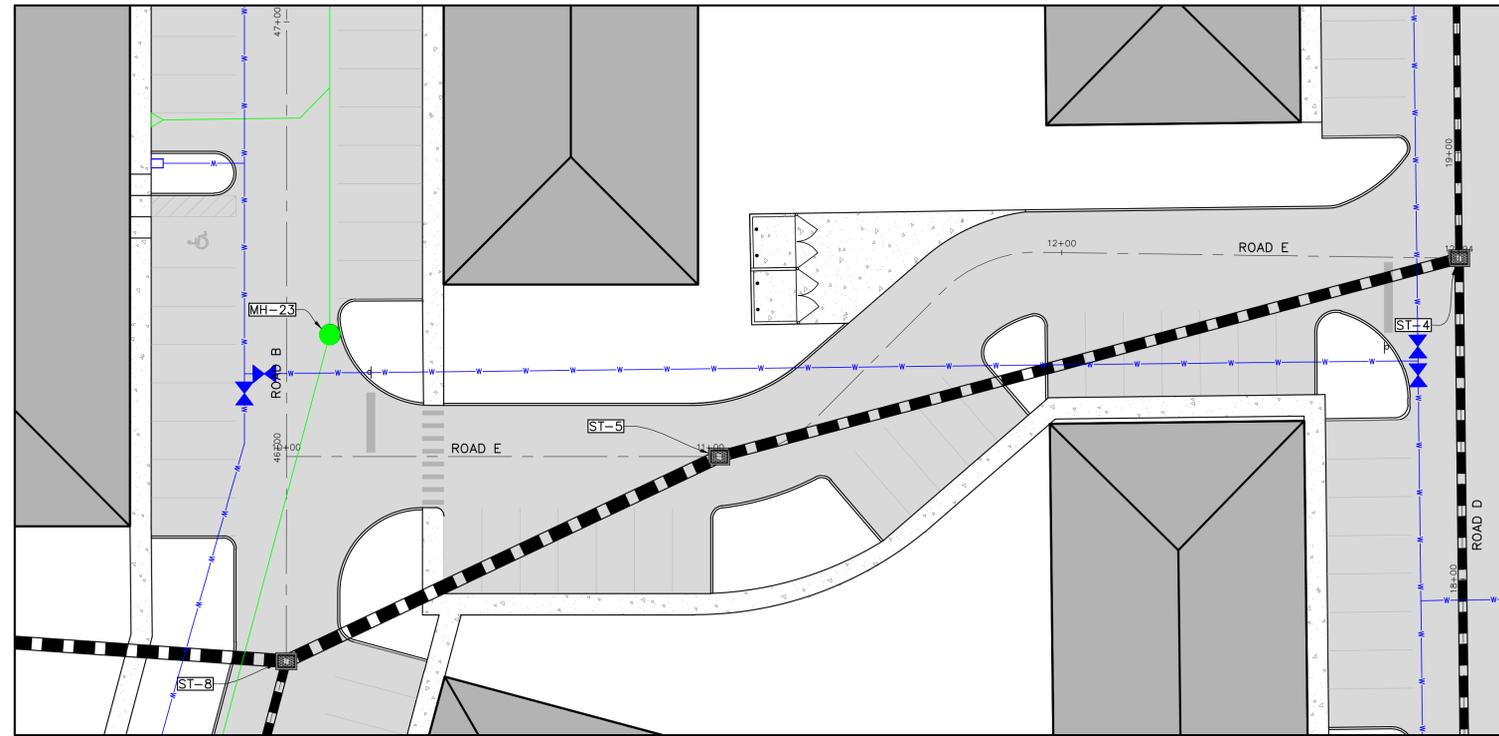
JOB NO. 21-153	DATE: JULY, 2022	DRAWN BY: VR
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 4349 STATE ROAD 60 WEST
 MULBERRY, FL 33860

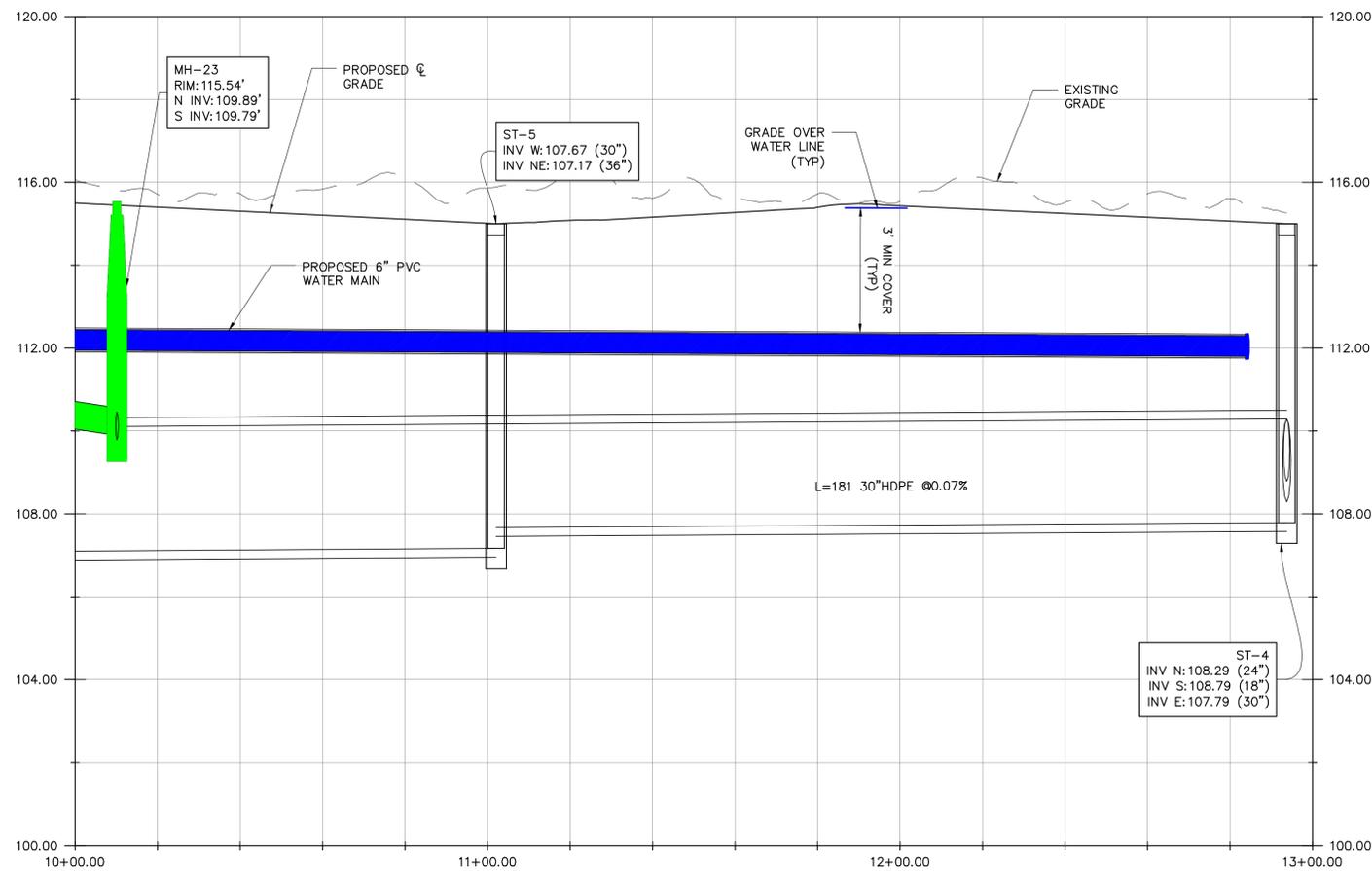
PROJECT NAME:
 CR 555 MULTI-FAMILY
 BARTOW, FLORIDA
 SHEET TITLE:
 ROAD "D" PLAN AND PROFILE
 19+00 TO 21+00

SHEET NUMBER
C04.15

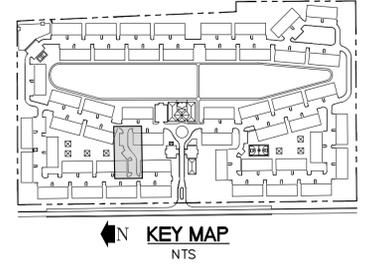




ROAD "E" PLAN (10+00 TO 13+00)
SCALE: 1"=20'



ROAD "E" PROFILE (10+00 TO 13+00)
SCALE: 1"=20' (HORZ.); 1"=2.5' (VERT.)



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FLORIDA REGISTRATION NUMBERS:
PE 44116 / PSM 5736

JOB NO. 21-153
DATE: JULY, 2022
DRAWN BY: VR

PREPARED FOR:
THE PARMAN GROUP, LLC
4349 STATE ROAD 60 WEST
MULBERRY, FL 33860

PROJECT NAME:
CR 555 MULTI-FAMILY
BARTOW, FLORIDA
SHEET TITLE:
ROAD "E" PLAN AND PROFILE
10+00 TO 13+00

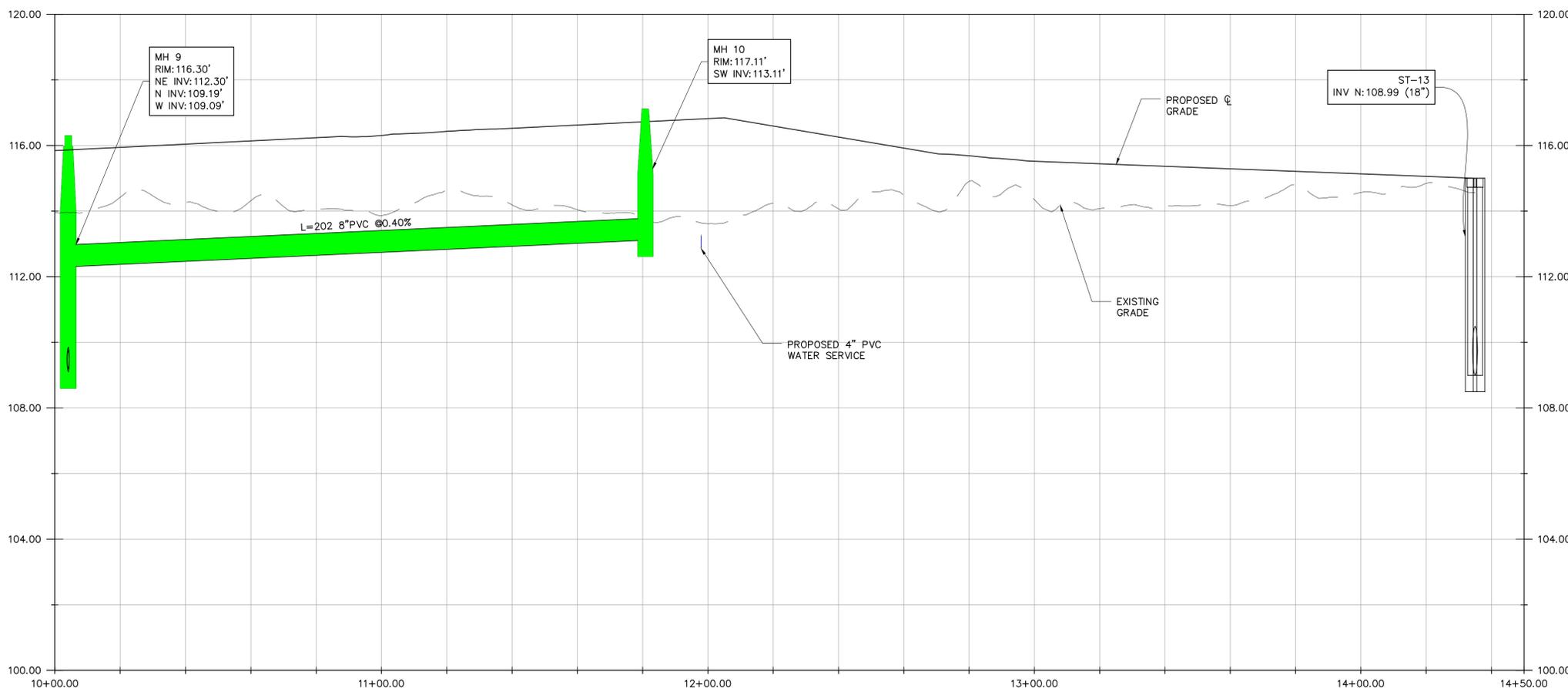
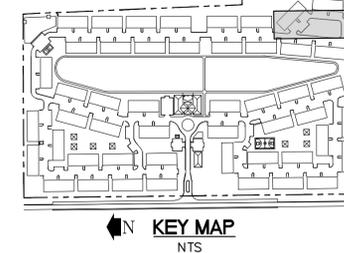
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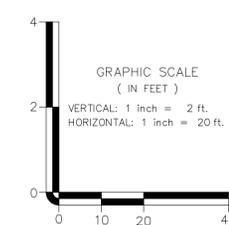
Know what's below.
Call before you dig.



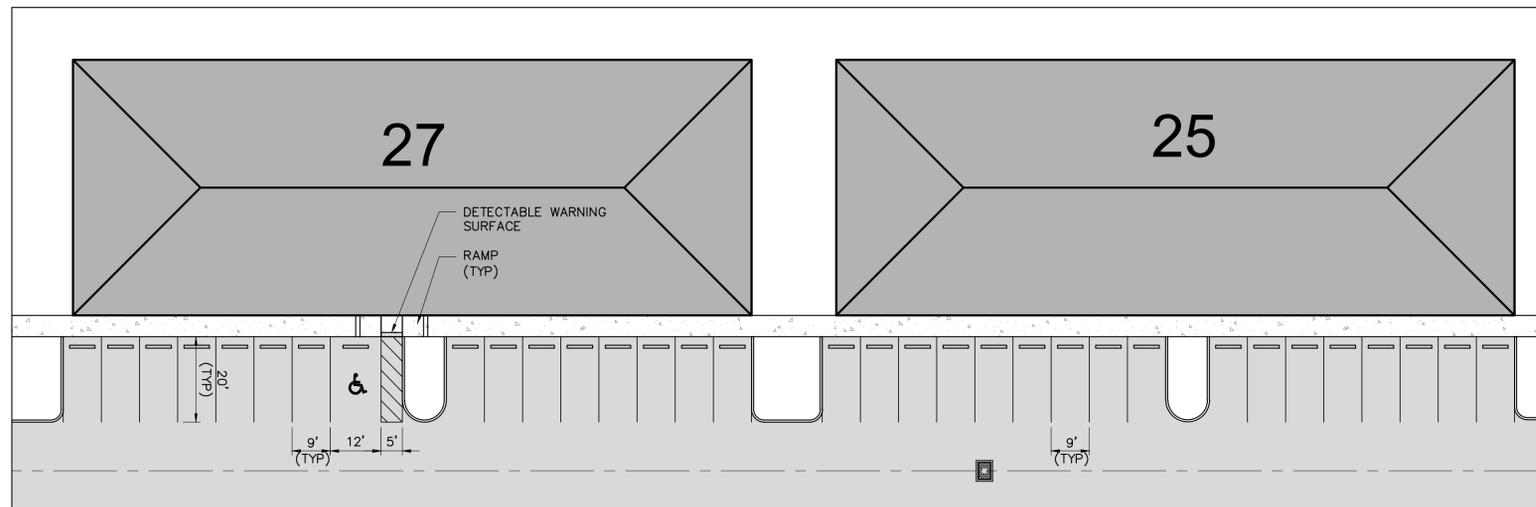
ROAD "F" PLAN (10+00 TO 14+50)
SCALE: 1"=20'



ROAD "F" PROFILE (10+00 TO 14+50)
SCALE: 1"=20' (HORZ.); 1"=2.5' (VERT.)



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LICENSED PROFESSIONAL: ALAN L. RAYL, PE, PSM FLORIDA REGISTRATION NUMBERS: PE 44116 / PSM 5736	JOB NO. 21-153 DATE: JULY, 2022 DRAWN BY: VR
PREPARED FOR: THE PARMAN GROUP, LLC 4349 STATE ROAD 60 WEST MULBERRY, FL 33860	
PROJECT NAME: CR 555 MULTI-FAMILY BARTOW, FLORIDA	SHEET TITLE: ROAD "F" PLAN AND PROFILE 10+00 TO 14+50
SHEET NUMBER C04.17	

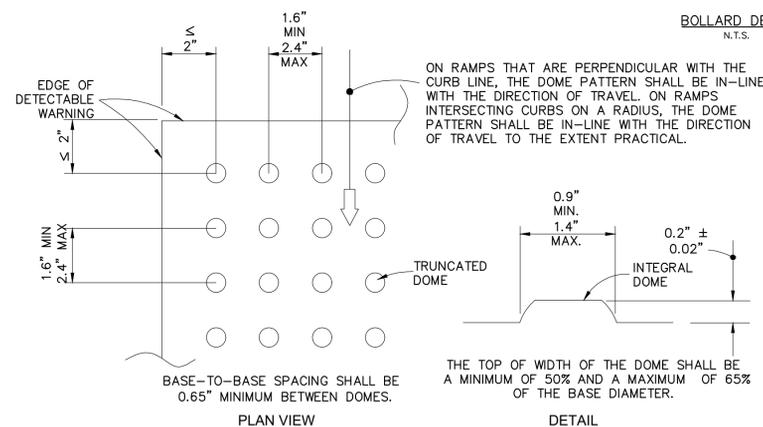


- NOTES:
- ALL PAVEMENT MARKINGS SHALL BE THERMOPLASTIC AND WILL BE INSTALLED PER FDOT INDEX 17346.
 - FOR SIGN DETAILS REFER TO THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), LATEST EDITION AND THE FDOT DESIGN STANDARDS, LATEST EDITION.
 - ALL SIDEWALKS SHALL BE INSTALLED WITH A MAXIMUM LONGITUDINAL SLOPE OF 5% AND A MAXIMUM ALLOWABLE CROSS SLOPE OF 2%.

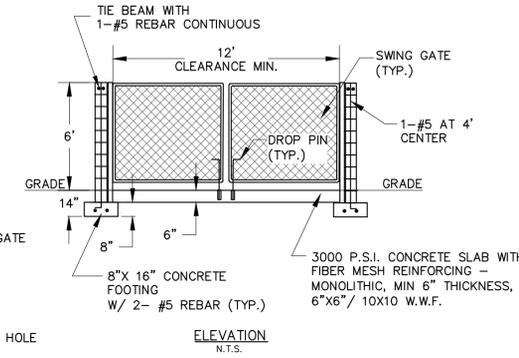
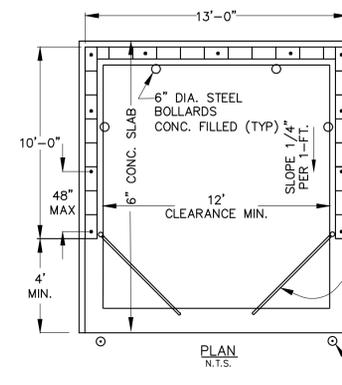
TYPICAL PARKING PLAN
SCALE: 1"=20'

SIGNAGE AND PAVEMENT MARKINGS

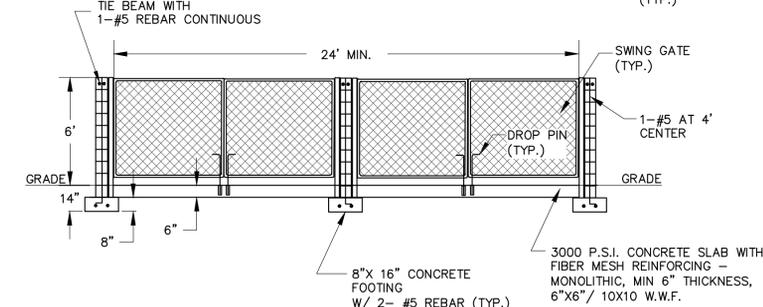
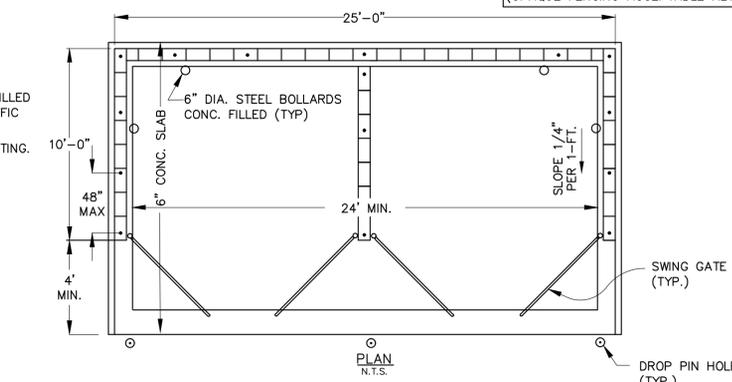
STOP SIGN		R1-1 30"x30"
THROUGH LANE USE ARROW		9.5' LONG (FDOT INDEX NO. 711-001)
STOP LINE		24" WHITE STOP LINE (FDOT INDEX NO. 711-001)
SYMBOL OF ACCESSIBILITY		5" SYMBOL OF ACCESSIBILITY (FDOT INDEX NO. 711-001)
CROSSWALK		5' CROSSWALK (FDOT INDEX NO. 711-001)
YIELD		R1-2 36"x36"
ROUNDBOULT CIRCULATION		R6-5P 18"x18"
ROUNDBOULT CHEVRON		R6-4 30"x24"



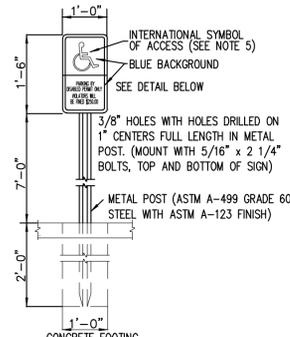
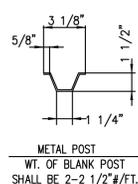
TRUNCATED DOME DETAIL
N.T.S.



SINGLE DUMPSTER ENCLOSURE
N.T.S.

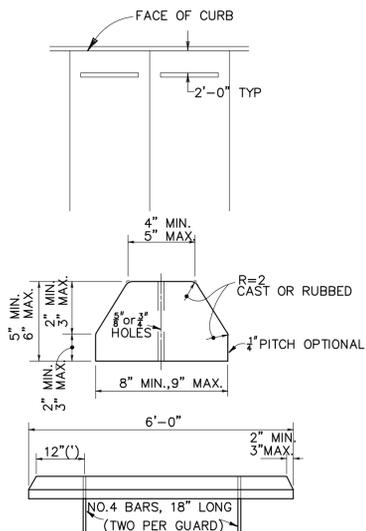


DOUBLE DUMPSTER ENCLOSURE
N.T.S.

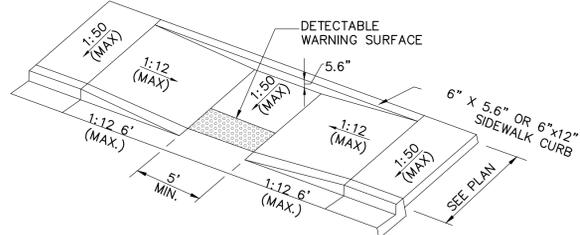


- NOTES:
- METAL POST TO BE GALVANIZED. ALL BOLTS, NUTS, WASHERS AND SCREWS MUST BE RUSTPROOF.
 - CONCRETE FOR FOOTING SHALL BE PORTLAND CEMENT AND HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3,000 p.s.i.
 - SIGNS WILL BE FABRICATED BY USING REFLECTING COATING IN THE SYMBOL, MESSAGE AND BORDER APPLIED TO A SHEET ALUMINUM BACKING (.080) IN THICKNESS.
 - MESSAGE LETTERING SHALL BE UPPER CASE (WHITE)(SERIES B) 2" HIGH IN ACCORDANCE WITH MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
 - THE SYMBOL IS COMPOSED OF TWO ELEMENTS, A WHITE WHEELCHAIR FIGURE (WHICH SHOULD ALWAYS FACE RIGHT) ON A SQUARE BACKGROUND, INTERNATIONAL BLUE IN COLOR (FED. STD. 595a, COLOR #15180).
 - SIGN POST SHALL BE MIN. 2'-0" CLEAR FROM BACK OF CURB. (SIGN FOR THE PHYSICALLY DISABLED)

HANDICAPPED SIGN
N.T.S.



CONCRETE WHEEL STOP
N.T.S.
(SEE FDOT INDEX No. 300)



- NOTES:
- ALL CURB RAMPS SHALL BE CONSTRUCTED PER FLORIDA BUILDING CODE (F.B.C.) SECTION 11, LATEST EDITION.
 - IF CURB RAMPS IS LOCATED WITHIN PUBLIC RIGHT-OF-WAY, THE CURB RAMPS BE CONSTRUCTED PER F.D.O.T. DESIGN STANDARDS INDEX NO.304 WELL AS F.B.C. SECTION 11, LATEST EDITION.
 - SEE SITE PLAN FOR CURB RAMPS LOCATION AND TYPES.
 - CONTRACTOR SHALL VERIFY FIELD CONDITIONS AND NOTIFY ENGINEER IMMEDIATELY IF F.B.C. AND/OR F.D.O.T. DESIGN CRITERIA CAN NOT BE MET, INCLUDING BUT NOT LIMITED TO LANDING, CURB, LENGTH, SLOPE, ECT.
 - RAMPS SHALL HAVE A TACTILE SURFACE, IN CONFORMANCE WITH REQUIREMENTS OF F.D.O.T. DESIGN STANDARDS, INDEX NO.304.

TYPICAL SIDEWALK CURB RAMP
N.T.S.

RAYL ENGINEERING & SURVEYING, LLC
10 EAST MAIN STREET, BARTOW, FL 33830
OFFICE: (888) 537-7901
WWW.RAYLENG.COM
FL REG# 28830 © 2022 FL LB REG# 7770

PROFESSIONAL: ALAN L. RAYL, PE, PSM
FLORIDA REGISTRATION NUMBERS: PE 44116 / PSM 5736

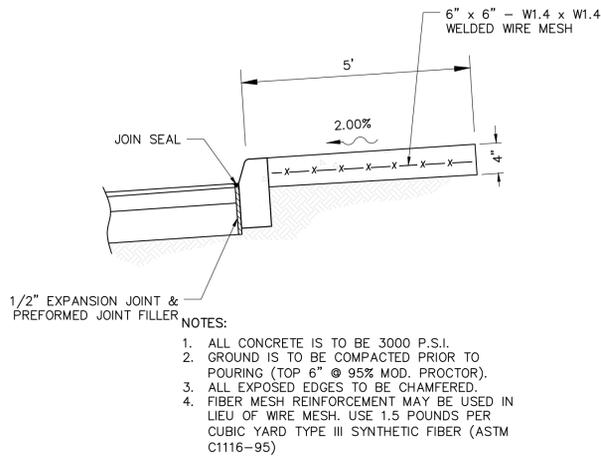
JOB NO. 21-153
DATE: JULY, 2022
DRAWN BY: VR

THE PARMAN GROUP, LLC
4349 STATE ROAD 80 WEST
MULBERRY, FL 33860

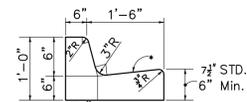
PROJECT NAME: CR 555 MULTI-FAMILY BARTOW, FLORIDA
SHEET TITLE: SITE PLAN DETAILS

SHEET NUMBER
C10.01

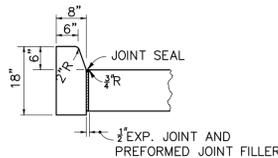




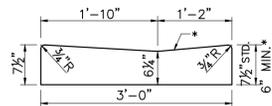
SIDEWALK DETAIL
NTS



TYPE F CURB
N.T.S.
SEE FDOT INDEX No. 300

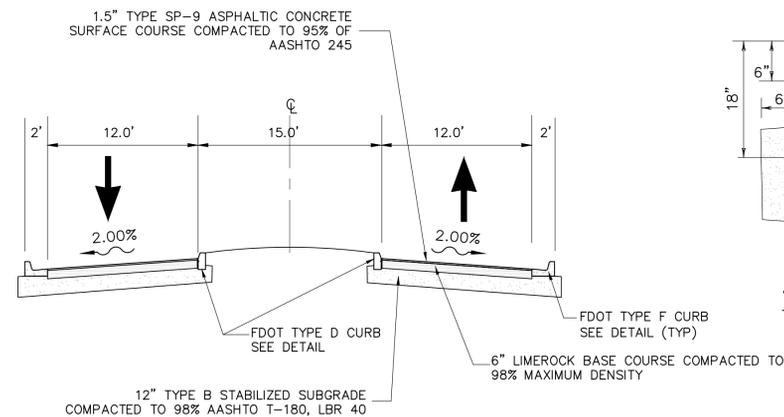


TYPE D CURB
N.T.S.

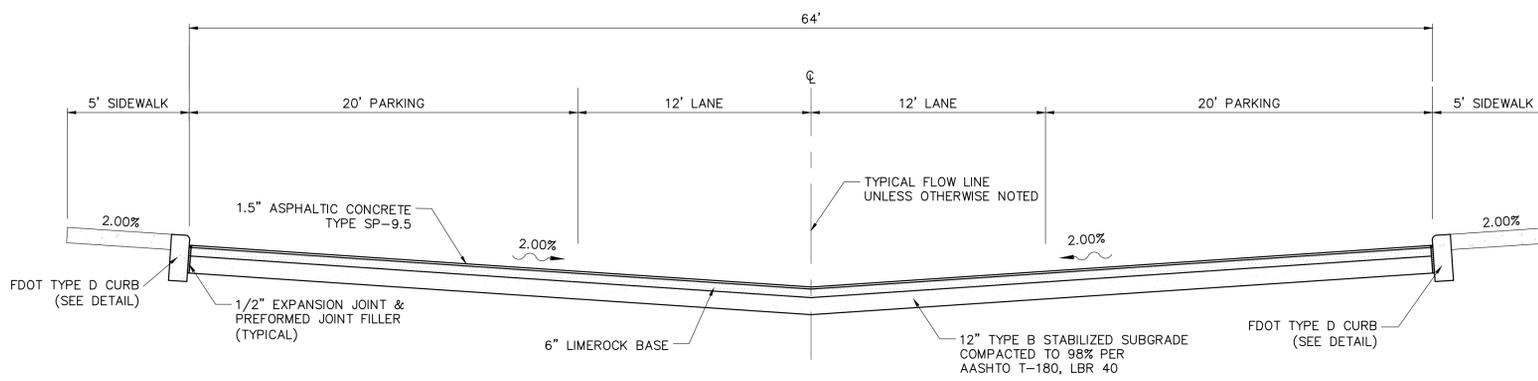


VALLEY GUTTER
N.T.S.

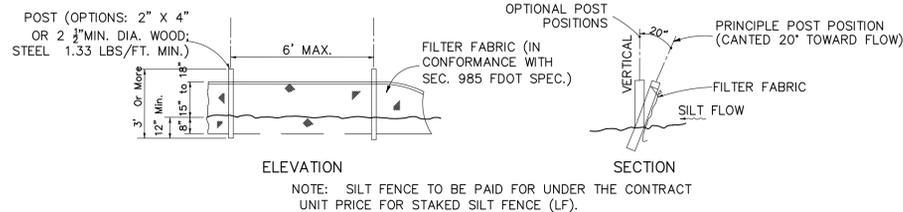
FDOT DESIGN STANDARD
2021-22 CURB AND CURB
INDEX NO 520-001



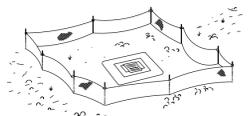
ENTRANCE SECTION
NTS



TYPICAL PAVEMENT SECTION
NTS



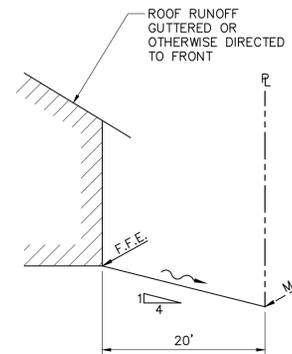
TYPE III SILT FENCE



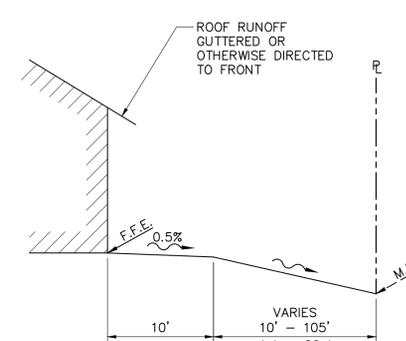
DO NOT DEPLOY IN A MANNER THAT SILT FENCES WILL ACT AS A DAM ACROSS PERMANENT FLOWING WATERCOURSES. SILT FENCES ARE TO BE USED AT UPLAND LOCATIONS AND TURBIDITY BARRIERS USED AT PERMANENT BODIES OF WATER.

EROSION CONTROL DETAILS

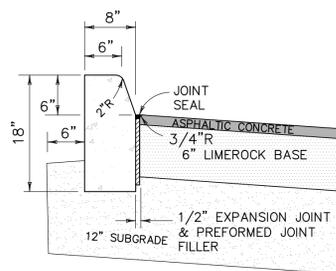
FDOT INDEX No. 102
N.T.S.



BUILDING 31
N.T.S.

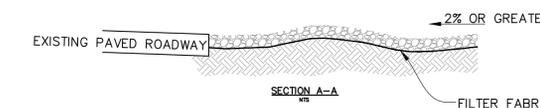
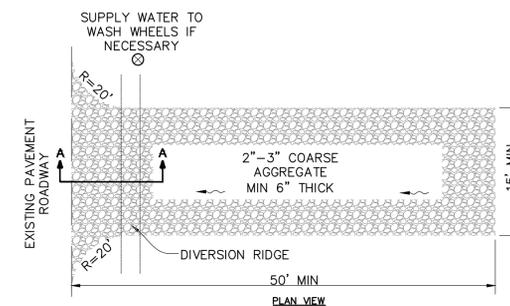


BUILDINGS 1 TO 30, 32 TO 49
N.T.S.



APPLIES TO HIGH SIDES OF PAVEMENT RIGHT SIDE SHOWN

TYPE D CURB DETAIL
NOT TO SCALE



NOTES:

1. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT TO PUBLIC RIGHT-OF-WAY. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEAN OUT OF ANY MEASURES USED TO TRAP SEDIMENT.
2. WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTER PUBLIC RIGHT-OF-WAY.
3. WHEN WASHING IS REQUIRED IT SHALL BE DONE ON AN AREA STABILIZED WITH COARSE AGGREGATE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.

TEMPORARY GRAVEL CONSTRUCTION ENTRANCE
N.T.S.
(REFER TO FDOT DESIGN STANDARDS INDEX No. 102)



Know what's below.
Call before you dig.

NO.	DATE	REVISION

RAYL ENGINEERING & SURVEYING, LLC
 10 EAST MAIN STREET
 BARTOW, FL 33830
 www.rayleng.com
 FL REG# 7770
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LICENSED PROFESSIONAL:
 ALAN L. RAYL, PE, PSM
 FLORIDA REGISTRATION NUMBERS:
 PE 44116 / PSM 5736

JOB NO. 21-153
 DATE: JULY, 2022
 DRAWN BY: JPT/VR

THE PARMAN GROUP, LLC
 4349 STATE ROAD 80 WEST
 MULBERRY, FL 33860

PREPARED FOR:
 CR 555 MULTI-FAMILY
 BARTOW, FLORIDA
 SHEET TITLE:
 PAVING & GRADING DETAILS

SHEET NUMBER
C11.01

SCOPE

THIS SPECIFICATION DESCRIBES 12- THROUGH 36-INCH (300 TO 900MM) ADS FLARED END SECTIONS FOR USE IN CULVERT AND DRAINAGE OUTLET APPLICATIONS.

REQUIREMENTS

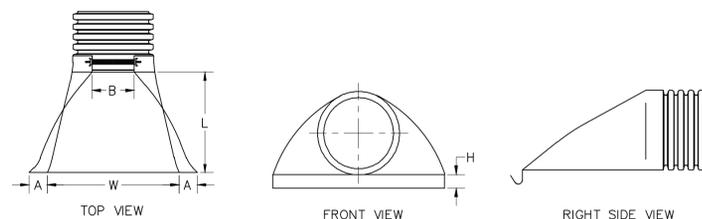
THE ADS FLARED END SECTION SHALL BE HIGH DENSITY POLYETHYLENE MEETING ASTM D3350 MINIMUM CELL CLASSIFICATION 213320C; CONTACT MANUFACTURER FOR ADDITIONAL CELL CLASSIFICATION INFORMATION. WHEN PROVIDED, THE METAL THREADED FASTENING ROD SHALL BE STAINLESS STEEL.

INSTALLATION

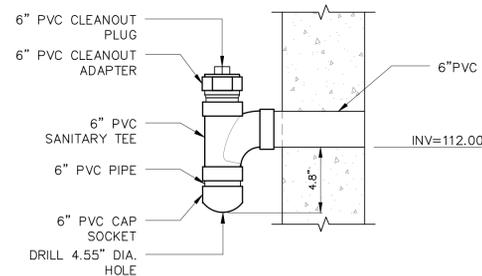
INSTALLATION SHALL BE IN ACCORDANCE WITH ADS INSTALLATION INSTRUCTIONS AND WITH THOSE ISSUED BY STATE OR LOCAL AUTHORITIES. CONTACT YOUR LOCAL ADS REPRESENTATIVE OR VISIT WWW.ADS-PIPE.COM FOR THE LATEST INSTALLATION INSTRUCTIONS.

	PIPE DIAMETER, in (mm)					
Diameter in (mm)	12 (300)	15 (375)	18 (450)	24 (600)	30 (750)	36 (900)
A in (mm)	6.5 (165)	6.5 (165)	7.5 (191)	7.5 (191)	7.5 (191)	7.5 (191)
B (max) in (mm)	10.0 (254)	10.0 (254)	15.0 (381)	18.0 (475)	22.0 (559)	25.0 (635)
H in (mm)	6.5 (165)	6.5 (165)	6.5 (165)	6.5 (165)	8.6 (218)	8.6 (218)
L in (mm)	25.0 (635)	25.0 (635)	32.0 (813)	36.0 (914)	58.0 (1473)	58.0 (1473)
W in (mm)	29.0 (737)	29.0 (737)	35.0 (889)	45.0 (1143)	63.0 (1600)	63.0 (1600)

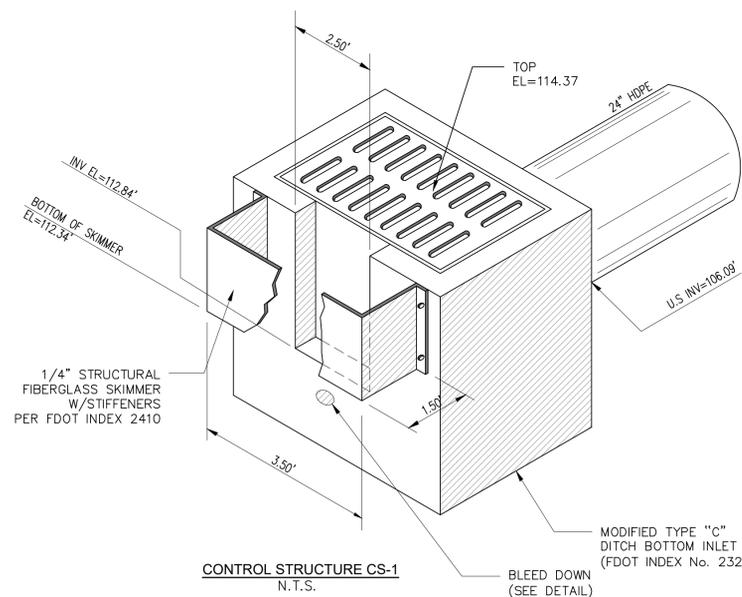
*PRODUCT DETAIL MAY DIFFER SLIGHTLY FROM ACTUAL PRODUCT APPEARANCE



ADS FLARED END SECTION SPECIFICATION
N.T.S.



BLEED DOWN ASSEMBLY
N.T.S.

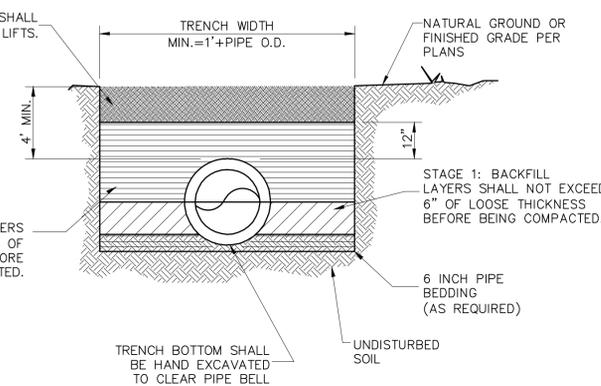


CONTROL STRUCTURE CS-1
N.T.S.

BLEED DOWN (SEE DETAIL)

STAGE 3: BACKFILL LAYERS SHALL NOT EXCEED 12" LIFTS.

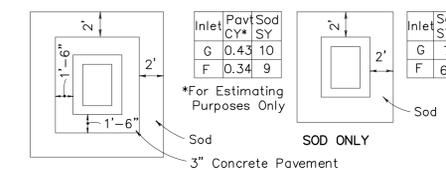
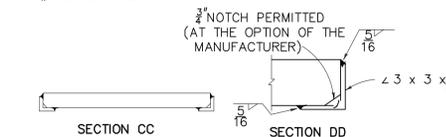
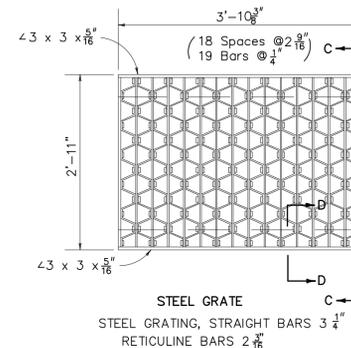
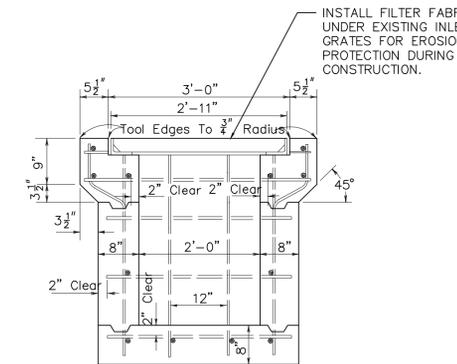
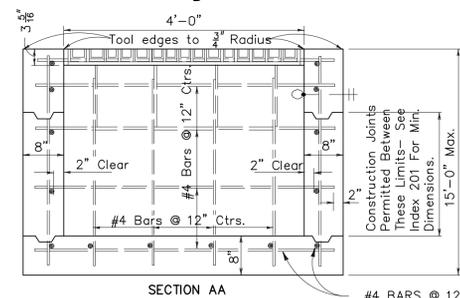
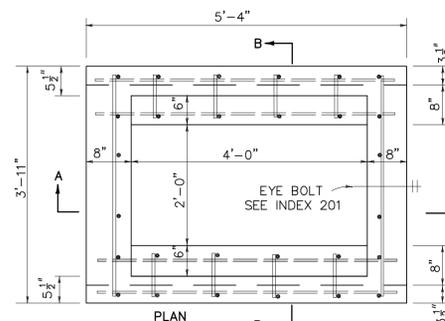
STAGE 2: BACKFILL LAYERS SHALL NOT EXCEED 6" OF LOOSE THICKNESS BEFORE BEING COMPACTED.



TRENCH DETAIL BACKFILL AND COMPACTION
N.T.S.

NOTE:

1. BEDDING: 6" BEDDING (MIN.) AS REQUIRED. IN THE EVENT UNSUITABLE OR UNSTABLE SOIL IS ENCOUNTERED, REMOVE IT AND REPLACE WITH MATERIAL MEETING AASHTO SOIL CLASSIFICATION A-1, A-2, OR A-3. SEE 333001 OR 333002 SECTION 4.4.
2. STAGE 1: ADEQUATE COMPACTED FILL SHALL BE PLACED ABOVE THE BEDDING MATERIAL AND BENEATH THE HAUNCHES OF THE PIPE. 6" OF LOOSE THICKNESS BEFORE BEING COMPACTED.
3. STAGE 2: BACKFILL LAYERS SHALL NOT EXCEED 6" OF LOOSE THICKNESS BEFORE BEING COMPACTED. COMPACTION SHALL BE 98% OF THE MAXIMUM DENSITY (AASHTO T-180/ASTM D1557) TO A POINT 1' ABOVE THE PIPE (OR AS STATED IN THE SPECIFICATION).
4. STAGE 3: BACKFILL LAYERS SHALL NOT EXCEED 12" LIFTS. COMPACTION SHALL BE 98% OF THE MAXIMUM DENSITY (AASHTO T-180/ASTM D1557) OR AS STATED IN THE SPECIFICATION.



- NOTES:
1. PAVEMENT AND/OR SOD TO BE USED ONLY WHERE CALLED FOR IN THE PLANS
 2. COST OF PAVING TO BE INCLUDED IN COST OF INLET. PAVEMENT AND SODDING

TYPE F INLET
N.T.S.
SEE FDOT No. 233

LICENSED PROFESSIONAL: ALAN L. RAYL, PE, PSM	FLORIDA REGISTRATION NUMBERS: PE 44116 / PSM 5736
JOB NO. 21-153	DATE: JULY, 2022
DRAWN BY: VR	NO. DATE:
PREPARED FOR: THE PARMAN GROUP, LLC 4349 STATE ROAD 80 WEST MULBERRY, FL 33860	
PROJECT NAME: CR 555 MULTI-FAMILY BARTOW, FLORIDA	SHEET TITLE: DRAINAGE DETAILS
SHEET NUMBER C11.03	



