

GENERAL NOTES:

- 1. THE LOCATION OF THE EXISTING UTILITIES AS SHOWN ON THE PLANS ARE APPROXIMATE ONLY. THE ENGINEER OF RECORD ASSUMES NO RESPONSIBILITY FOR THE ACCURACY OF THE UTILITIES SHOWN. NOR FOR ANY FACILITY NOT SHOWN. THE EXACT LOCATIONS SHALL BE DETERMINED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. IN ADDITION, THE CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY IF OTHER UTILITIES (NOT SHOWN ON THE PLAN) EXIST WITHIN THE AREA OF CONSTRUCTION. SHOULD THERE BE UTILITY CONFLICTS, THE CONTRACTOR SHALL INFORM THE UTILITY SUPPLIER OF THE UTILITY CONFLICTS AND THE UTILITY ADJUSTMENTS AS REQUIRED.
- 2. THE CONTRACTOR SHALL BE RESPONSIBLE AT ALL TIMES THROUGHOUT THE DURATION OF CONSTRUCTION FOR THE PROTECTION OF EXISTING AND NEWLY INSTALLED UTILITIES FROM DAMAGE OR DISRUPTION OF SERVICE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TAKING SUCH MEASURES AS NECESSARY TO PROTECT THE HEALTH, SAFETY, AND WELFARE OF THOSE PERSONS HAVING ACCESS TO THE WORK SITE.
- 3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING LOCATIONS OF ALL OTHER UTILITY FACILITIES.
- 4. FACILITIES PROPOSED HEREIN SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE APPROVED PLANS. DEVIATIONS FROM THE APPROVED PLANS MUST BE APPROVED IN ADVANCE BY THE ENGINEER OF RECORD.
- 5. UPON COMPLETION OF CONSTRUCTION AND PRIOR TO FINAL ACCEPTANCE OF THE WORK, A FINAL INSPECTION SHALL VERIFY PROPER ADHERENCE TO ALL FACETS OF THE PLANS AND SPECIFICATIONS.
- 6. AS-BUILT DRAWINGS SHALL BE PREPARED BY A REGISTERED LAND SURVEYOR, REGISTERED IN THE STATE OF FLORIDA, AND SUBMITTED BY THE CONTRACTOR TO THE OWNER AND THE ENGINEER OF RECORD (PAVING, GRADING, DRAINAGE, WATER & SEWER, STORM).
- 7. PRIOR TO COMMENCEMENT OF ANY EXCAVATION, THE CONTRACTOR SHALL COMPLY WITH FLORIDA STATUTE 553-851 FOR PROTECTION OF UNDERGROUND GAS PIPE LINES.
- 8. CONTRACTOR SHALL NOTIFY SUNSHINE STATE ONE (1-800-432-4770) 48 HOURS IN ADVANCE OF CONSTRUCTION.
- 9. ALL VEGETATION, DEBRIS, CONCRETE OR OTHER UNSUITABLE MATERIAL SHALL BE LEGALLY DISPOSED OF OFF-SITE IN AN AREA AT THE CONTRACTORS EXPENSE.
- 10. CONTRACTOR SHALL UTILIZE CONSTRUCTION METHODS AND DEVICES, SUCH AS TURBIDITY SCREENS, CURTAINS AND FLOATING SILT BARRIERS WHERE NECESSARY IN ORDER TO COMPLY WITH ALL STATE AND LOCAL WATER QUALITY STANDARDS. CONTRACTOR TO PROVIDE SILT FENCE AS NECESSARY TO PREVENT OFF SITE EROSION TRANSPORT.
- 11. ALL CONSTRUCTION SHALL BE DONE IN A SAFE MANNER, SPECIFICALLY, THE RULES AND REGULATIONS OF THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION AND THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES SHALL BE STRICTLY OBSERVED.
- 12. ALL CONSTRUCTION SHALL CONFORM TO THE STANDARDS AND REQUIREMENTS OF ST LUCIE COUNTY, SFWM, PBCWMD, CITY OF FORT PIERCE & FOOT.
- 13. SAW CUT PAVEMENT AND CONCRETE WHERE IT IS TO BE REMOVED.
- 14. WATER AND SEWER COVER SHALL BE 3.0 FEET (TYPICAL) UNLESS OTHERWISE NOTED ON DRAWINGS.
- 15. ALL OPEN TRENCHES AND HOLES ADJACENT TO ROADWAY OR WALKWAY SHALL BE PROPERLY MARKED AND BARRICADED TO ASSURE THE SAFETY OF BOTH VEHICULAR AND PEDESTRIAN TRAFFIC.
- 16. CONTRACTOR SHALL MONITOR AND PROHIBIT THE DEFACTING OF FRESHLY PLACED CONCRETE SURFACES. ANY CONCRETE SURFACES DEFACTED SHALL BE REPLACED AT NO ADDITIONAL COST TO THE OWNER.
- 17. PROJECT SITE SAFETY:
  - A. THE ENGINEER OF RECORD/OWNER OR THEIR EMPLOYEES HAVE NO AUTHORITY TO EXERCISE ANY CONTROL OVER THE CONTRACTOR. ANY SUB-CONTRACTOR OR OTHER ENTITY OR THEIR EMPLOYEES IN CONNECTION WITH THEIR WORK OR ANY JOBSITE HEALTH OR SAFETY PRECAUTIONS.
  - B. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR JOBSITE SAFETY, AND WARRANTS THAT THIS INTENT IS MADE EVIDENT BY THE AGREEMENT BETWEEN OWNER AND CONTRACTOR.
  - C. ALL EXISTING OVERHEAD AND UNDERGROUND UTILITIES SHOWN ON THESE DRAWINGS OR ENCOUNTERED THROUGH THE PROGRESSION OF WORK AT THIS PROJECT SITE ARE ASSUMED TO BE LIVE. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SAFETY PRECAUTIONS WHEN WORKING AROUND EXISTING OVERHEAD OR UNDERGROUND UTILITIES.
- 20. ALL CONCRETE SHALL DEVELOP A MINIMUM OF 3000 P.S.I. COMPRESSIVE STRENGTH AT 28 DAYS, UNLESS OTHERWISE STATED.
- 21. TRENCHES SHALL BE DRY WHEN PIPES ARE INSTALLED. ALL DEWATERING PERMITS ARE THE RESPONSIBILITY OF THE CONTRACTOR. ALL BACKFILL TO BE COMPACTED TO 98% ASTM D1557. REFER TO DETAIL.
- 22. A PRE-CONSTRUCTION MEETING IS TO BE HELD PRIOR TO DELIVERY OF MATERIALS AND INITIATION OF CONSTRUCTION.
- 23. ANY REVISIONS TO THE APPROVED PLANS SHALL BE CALLED TO THE ATTENTION OF THE ENGINEER OF RECORD PRIOR TO THE PRE-CONSTRUCTION MEETING. REVISED PLANS MUST BE APPROVED PRIOR TO THE MEETING.
- 24. FIVE (5) COPIES OF THE MATERIAL LIST AND ALL NECESSARY SHOP DRAWINGS SHALL BE SUBMITTED FOR APPROVAL PRIOR TO SCHEDULING OR BEFORE THE PRE-CONSTRUCTION MEETING. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS ON ALL SITE WATER, SEWER & DRAINAGE STRUCTURES FOR APPROVAL PRIOR TO ORDERING.

- 25. ALL APPLICABLE PERMITS MUST BE OBTAINED PRIOR TO PRE-CONSTRUCTION MEETING.
- 26. THE CONTRACTOR SHALL MAINTAIN A CURRENT APPROVED SET OF CONSTRUCTION PLANS ON JOB SITE.
- 27. ALL MATERIALS SUPPLIED SHALL CONFORM TO PRODUCT LIST AND SHOP DRAWINGS AS APPROVED PRIOR TO CONSTRUCTION. SUBSTITUTE MATERIALS SHALL NOT BE APPROVED AFTER DELIVERY TO THE JOB SITE. ALL REQUESTS FOR MATERIAL SUBSTITUTION SHALL BE APPROVED PRIOR TO DELIVERY OF THESE MATERIALS TO THE JOB SITE.
- 28. THE CONTRACTOR OR ENGINEER OF RECORD SHALL SCHEDULE INSPECTIONS AND TESTS A MINIMUM OF 24-48 HOURS IN ADVANCE.
- 29. NO CONNECTION OR CONSTRUCTION SHALL BE PERFORMED ON AN EXISTING FORT PIERCE UTILITY AUTHORITY OWNED OR MAINTAINED MAIN OR STRUCTURE WITHOUT THE PRESENCE OF A FORT PIERCE UTILITY AUTHORITY OFFICIAL OR ENGINEER OF RECORD WITHOUT PRIOR NOTIFICATION.
- 30. CONTRACTOR TO COORDINATE WITH THE CITY OF FORT PIERCE FOR ALL TREES TO REMAIN OR RELOCATE. TREE REMOVAL, PRUNING AND RELOCATION SHALL BE AT CONTRACTORS EXPENSE.
- 31. ALL SIGNAGE AND STRIPING SHALL MEET ALL FLORIDA BUILDING CODE ADA REQUIREMENTS, MANUAL OF UNIFORM AND TRAFFIC CONTROL DEVICES, AND PALM BEACH COUNTY TYPICAL DETAILS FOR PAVEMENT MARKINGS, SIGNING AND GEOMETRICS (NO T-P, 10-001). ALL STRIPING TO BE LOW VOC TRAFFIC MARKING PAINT (SUBMIT FOR APPROVAL).
- 32. CONTRACTOR TO PROVIDE EROSION CONTROL DEVICES TO CONTROL DISPERSION OF SEDIMENT ON ROADWAY OR PARKING AREAS. IF SEDIMENT IS SPREAD OUT OF THE SITE AREA THE CONTRACTOR MUST REMOVE AND CLEAN AT OWN EXPENSE.
- 33. ALL TRENCHING, PIPE-LAYING, BACKFILL, MUST COMPLY WITH ALL APPLICABLE FEDERAL, STATE, COUNTY REGULATIONS.
- 34. ANY DAMAGE DONE TO PROPERTY DUE TO CONSTRUCTION ACTIVITY MUST BE REPAIRED TO THE EXISTING CONDITION OR BETTER AT CONTRACTORS EXPENSE.
- 35. TOPOGRAPHIC SURVEY PERFORMED BY CULPEPPER AND TERPENING INC. ALL ELEVATIONS ARE IN NAVD 88 DATUM.
- 36. ALL SERVICE INTERRUPTIONS SHALL BE COORDINATED WITH THE CITY OF FORT PIERCE.
- 37. REFER TO GEOTECHNICAL REPORT FOR TESTING AND APPROVED SITE GRADING MATERIALS.
- 38. ALL WORK SHALL CONFORM TO THE CURRENT EDITION OF THE FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
- 39. ANY MUCK THAT IS FOUND ON SITE SHALL BE REMOVED AT CONTRACTORS EXPENSE. DE-MUCKING (IF NECESSARY SHALL BE PERFORMED PER FDOT SPECIFICATIONS.
- 40. REFER TO ELECTRICAL DRAWINGS FOR SITE LIGHTING PLANS AND DETAILS.
- 41. CONTRACTOR TO COORDINATE WITH OWNER ON TYPE OF SOD TO BE USED.
- 42. ALL CURB RAMPS AND ADA CROSSINGS SHALL CONFORM TO THE REQUIREMENTS OF THE FBC 2010 ACCESSIBILITY.
- 43. IMPORTED SOIL USED FOR BACKFILL SHOULD BE FREE OF HEAVY CLAY, SILTS, STONES, PLANT ROOT, OTHER FOREIGN MATERIAL AND ROCK FRAGMENTS GREATER THAN 1 1/2" IN DIAMETER IN ORDER TO ACHIEVE ADEQUATE COMPACTION AROUND ANY FIXED OBJECT IN GROUND. ALTERNATE WILL BE TO USE FLOWABLE FILL.

CONVENTIONAL CONCRETE PAVING

GENERAL NOTES:

- 1. THICKNESS:
  - A. 6 INCHES
- 28 DAY COMPRESSIVE STRENGTH:
  - A. 4500 PSI
- SUBGRADE PREPARATION:
  - A. STABILIZE 12 INCH THICK SUBGRADE TO A LIMEROCK BEARING RATIO (LBR 40) MINIMUM. COMPACTED 12 INCH THICK SUBGRADE TO 98% ASTM D 1557.

1.0 GENERAL PROVISIONS

- 1.1 SCOPE OF WORK: THE WORK TO BE COMPLETED UNDER THIS CONTRACT INCLUDES THE FURNISHING OF ALL LABOR, MATERIALS AND EQUIPMENT NECESSARY FOR CONSTRUCTION OF THE PROPOSED IMPROVEMENTS IN CONFORMANCE WITH PLANS AND SPECIFICATIONS. ALL WORK TO BE IN ACCORDANCE WITH ACI 330.1-03. ANY CONFLICTS IN SPECIFICATIONS, PLAN NOTES AND DETAILS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER OF RECORD FOR CLARIFICATION.
- 1.2 CONTRACTOR'S QUALIFICATIONS: ACI CERTIFIED CONCRETE FLATWORK FINISHERS OR EQUIVALENT SHALL BE REQUIRED. CONTACT THE FC&PA FOR A LIST OF CERTIFIED FINISHERS.

- 1.3 SUBMITTALS AND APPROVALS: CONTRACTOR TO SUBMIT: "PROPOSED PAVING CONSTRUCTION PLAN," WHICH SHALL SHOW THE CONCRETE PAVING JOINT TYPES AND LOCATIONS AND SHALL INCLUDE A STATEMENT OF PROPOSED SEQUENCING AND SCHEDULING OPERATIONS WITH A BRIEF DESCRIPTION OF MOTORIZED PAVING EQUIPMENT, IF APPLICABLE. PROPOSED JOINT LAYOUT PLAN SHALL BE SUBMITTED TO THE ENGINEER OF RECORD 7 DAYS PRIOR TO THE PRE-CONSTRUCTION MEETING. SUBMIT MIX DESIGN FOR APPROVAL PRIOR TO PRECONSTRUCTION MEETING. USE ACI 330R-08 GUIDE FOR DESIGN AND CONSTRUCTION OF CONCRETE PARKING LOTS AS A REFERENCE.
- 1.4 PRE-WORK CONFERENCE REQUIRED. CONTRACTOR, SUB-CONTRACTOR, CONCRETE PRODUCER, ENGINEER OF RECORD, INSPECTORS, GEOTECHNICAL ENGINEER OF RECORD, AND OWNER REPRESENTATIVE ARE REQUIRED TO ATTEND.
- 1.5 CONSTRUCT CONCRETE PAVING IN ACCORDANCE WITH ACI 330.1-03 STANDARD SPECIFICATION FOR PLAIN CONCRETE PARKING LOTS EXCEPT AS MODIFIED BY THESE DOCUMENTS.
- 1.6 CURE ALL CONCRETE IN ACCORDANCE WITH ACI 308 "STANDARD PRACTICE FOR CURING CONCRETE". SUBMIT CURING METHOD AND PLAN TO THE ENGINEER OF RECORD FOR APPROVAL.

2.0 SUBGRADE PREPARATION AND FORMWORK

- 2.1 GENERAL: THE SUBGRADE SHALL BE BROUGHT TO PROPER GRADE AND CROSS SECTION BY MEANS OF PROPER MACHINERY.
- 2.2 SUBGRADE MATERIAL: THE 12 INCHES OF SUBGRADE SHALL BE COMPOSED OF GRANULAR OR GRAVELY SOIL THAT IS PREDOMINANTLY SANDY WITH NO MORE THAN A MODERATE AMOUNT OF SILT OR CLAY. SUBGRADE SHALL BE MOST WITH-OUT FREESTANDING WATER WHEN PLACING CONCRETE (IN AREA OF PERVIOUS PAVING ONLY FREE DRAINING CLEAN SAND TO BE USED).
- 2.3 SUBGRADE SUPPORT: MATERIAL SHALL BE PLACED AND COMPACTED IN LAYERS OF A THICKNESS THAT CAN BE COMPACTED TO A DENSITY OF 98% OF MAXIMUM DENSITY AS DETERMINED BY ASTM D 1557. A LIME ROCK BEARING RATIO (LBR) OF 40 SHALL BE OBTAINED IN THE 12 INCHES OF THE SUBGRADE. PREPARE THE SUBGRADE IN ACCORDANCE WITH THE GEOTECHNICAL ENGINEER'S RECOMMENDATIONS FOR RIGID PAVEMENTS. SUBGRADE SOIL DENSITY TESTING MUST BE COMPLETED AND VERIFIED BY THE GEOTECHNICAL ENGINEER OF RECORD PRIOR TO CONCRETE PLACEMENT.
- 2.4 UTILITY TRENCH BACKFILLING: ALL UTILITY TRENCHES, INLETS AND MANHOLES SHALL BE BACKFILLED AND FINISHED WITH READY-MIXED FLOWABLE FILL OR WITH COMPACTED SOIL SIMILAR TO THAT ADJACENT TO THE TRENCH. SOIL BACKFILL UNDER THE PAVEMENT AND OUT TO A LINE EXTENDING ON A 45 DEGREE ANGLE TO HORIZONTAL FROM THE BACK OF CURB SHALL BE COMPACTED IN 12 IN. MAXIMUM LIFTS TO A DENSITY OF AT LEAST 98% OF THE MAXIMUM DENSITY DETERMINED BY ASTM D 1557.
- 2.5 FORMS: FORMS MAY BE OF WOOD OR STEEL AND SHALL BE THE FULL DEPTH OF THE PAVEMENT. FORMS SHALL BE OF SUFFICIENT STRENGTH AND STABILITY TO SUPPORT MECHANICAL EQUIPMENT WITHOUT DEFORMATION OF PLAN PROFILES FOLLOWING SPREADING, STRIKE-OFF CONSOLIDATION AND FINISHING. INSTEAD OF USING FIXED FORMS, THE CONTRACTOR MAY PLACE CONCRETE IN ONE COMPLETE PASS OF THE MACHINE.

3.0 MATERIALS

- 3.1 GENERAL: LOCALLY AVAILABLE MATERIALS HAVING A RECORD OF SATISFACTORY PERFORMANCE SHALL BE USED.
- 3.2 CEMENT: PORTLAND CEMENT TYPE I - ASTM C 150.
- 3.3 CONCRETE SHALL COMPLY WITH ASTM C94.
- 3.4 CEMENTITIOUS MATERIALS:
  - 3.4.1 FLY ASH: ASTM C 618
  - 3.4.2 GROUND IRON BLAST-FURNACE SLAG: ASTM C 999.
- 3.5 AGGREGATE:
  - 3.5.1 FINE AGGREGATE: ASTM C 33, OR FDOT STANDARD SPECIFICATIONS, SECTION 902.
  - 3.5.2 COARSE AGGREGATE: ASTM C 33 AGGREGATES NOT MEETING THE SIZE GRADINGS OF C 33 MAY BE USED IF THEY COMPLY WITH THE GRADING REQUIREMENTS OF ASTM D 448.
- 3.6 AIR ENTRAINING AGENT: SHALL COMPLY WITH ASTM C 260.
- 3.7 ADMIXTURES: ASTM C 494: TYPE A WATER REDUCING, TYPE D WATER REDUCING AND RETARDING, TYPE E WATER REDUCING AND ACCELERATING, AND TYPE G HIGH RANGE WATER-REDUCING AND RETARDING.
- 3.8 WATER: POTABLE OR SHALL COMPLY WITH FOOT STANDARD SPECIFICATIONS, SECTION 923 OR ASTM C 94, SECTION 4.
- 3.9 FLOWABLE FILL: SHALL COMPLY WITH FOOT STANDARD SPECIFICATIONS, SECTION 121.

- 3.10 JOINT MATERIAL: PROVIDE FULL DEPTH PRE-MOLDED JOINT MATERIAL FOR ISOLATION JOINTS. ASTM D 994-98 AND ASTM D 1751-99.
- 3.11 CURING COMPOUND: CURE CONCRETE IMMEDIATELY AFTER FINISHING OPERATION IS COMPLETED BY APPLYING A WHITE PIGMENTED MEMBRANE FORMING CURING COMPOUND TO ALL EXPOSED SURFACES. APPLY CURING COMPOUND IMMEDIATELY AFTER SURFACE TEXTURE HAS BEEN OBTAINED AND WATER SHEEN HAS DISAPPEARED. CURING COMPOUND TO COMPLY WITH ASTM C 309, TYPE 2, CLASS A.
- 3.12 JOINT SEALANT: WHERE REQUIRED, SHALL BE HOT POURED RUBBER ASPHALT OR JOINT SEALING COMPOUND CONFORMING TO AASHTO M-173 OR FEDERAL SPECIFICATIONS TT-5-0011543A OR TT-5-00230 OR ASTM D 994, D1751 OR ASTM D 1752.

4.0 CONCRETE QUALITY

- 4.1 MIX DESIGNS: SUBMIT FOR APPROVAL RECOMMENDED PROPORTIONS, WHICH WILL PROVIDE THE SPECIFIED COMPRESSIVE STRENGTHS AT 28 DAYS, IN ACCORDANCE WITH ACI 318, CHAPTER 5.
- 4.2 CLASSES OF CONCRETE: CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4,500 PSI AT 28 DAYS. COARSE AGGREGATE SIZE SHALL BE NO. 67 (3/4" IN. TO NO. 4) OR NO. 57 (1 IN. TO NO. 4) OR LARGER. SLUMP SHALL NOT EXCEED 4 INCHES FOR PAVEMENT PLACED BY OTHER THAN SLIPFORM EQUIPMENT OR 1 1/2 INCHES FOR CONCRETE PLACED WITH SLIPFORM EQUIPMENT UNLESS CHEMICAL ADMIXTURES ARE USED TO INCREASE THE SLUMP. WATER MAY BE ADDED ON SITE IN ACCORDANCE WITH ASTM C 94 AT THE OPTION OF THE CONTRACTOR PROVIDED THAT THE SLUMP DOES NOT EXCEED 4 INCHES.
- 4.3 AIR-ENTRAINMENT: SHALL BE PER TABLE 2.1 ACI 330.1-3
- 4.4 CHEMICAL ADMIXTURES: USE IN CONFORMANCE WITH MANUFACTURER'S RECOMMENDATIONS

5.0 MIXING, HAULING AND PLACING

- 5.1 READY-MIXED CONCRETE: BATCH, MIX AND TRANSPORT CONCRETE IN ACCORDANCE WITH ASTM C 94.
- 5.2 PLACING AND FINISHING EQUIPMENT: UNLESS OTHERWISE APPROVED BY THE OWNER/AGENT IN WRITING, THE CONTRACTOR SHALL PROVIDE MECHANICAL EQUIPMENT OF EITHER SLIPFORM OR FORM RIDING TYPE THAT WILL STRIKE-OFF, CONSOLIDATE AND FINISH THE PAVEMENT TO THE REQUIRED CROSS SECTION. WHEN REQUIRED, APPROVED VIBRATORS FOR CONSOLIDATING CONCRETE ALONG THE FACES OF FORMS AND ADJACENT TO JOINTS SHALL BE PROVIDED BY THE CONTRACTOR.
- 5.3 CONCRETE PLACEMENT: DISTURBED GRADE SHALL BE PROPERLY RESHAPED AND RE-COMPACTED PRIOR TO PLACING CONCRETE. IF ANY TRAFFIC IS ALLOWED TO USE THE PREPARED GRADE, THE GRADE SHALL BE CHECKED AND CORRECTED IMMEDIATELY AHEAD OF PLACING THE CONCRETE. DO NOT PLACE CONCRETE AROUND MANHOLES OR OTHER STRUCTURES UNTIL THEY HAVE BEEN BROUGHT TO THE REQUIRED GRADE AND ALIGNMENT. CONCRETE SHALL BE DEPOSITED AND CONSOLIDATED IN SUCH A MANNER AS TO PREVENT DISLOCATION OF JOINT DEVICES. DEPOSIT AND SPREAD CONCRETE IN A CONTINUOUS OPERATION.
- 5.3.1 UNLESS APPROVED BY THE ENGINEER OF RECORD, DO NOT PLACE CONCRETE WHEN AMBIENT TEMPERATURE IS BELOW 35 DEGREES F OR WHEN THE CONCRETE IS LIKELY TO BE SUBJECTED TO FREEZING TEMPERATURES BEFORE IT HAS REACHED 500 PSI STRENGTH.
- 5.3.2 DURING HOT WEATHER, KEEP THE CONCRETE TEMPERATURE AS LOW AS POSSIBLE AND USE AN APPROVED SET-RETARDING ADMIXTURE. DO NOT RE-TEMPER CONCRETE WHICH HAS ATTAINED INITIAL SET. FOLLOW ACI 305 "HOT WEATHER CONCRETING" WHEN APPROPRIATE.
- 5.3.3 IN THE EVENT OF RAIN, TERMINATE PLACING OF THE CONCRETE AS SOON AS PRACTICAL. PROTECT FRESHLY PLACED CONCRETE BY COVERING WITH WATERPROOF MATERIAL. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR DAMAGED CONCRETE DUE TO RAIN, VANDALISM OR ANY OTHER METHOD. REPLACEMENT OF DAMAGED CONCRETE IS AT THE DISCRETION OF THE ENGINEER OF RECORD.

- 5.4 JOINT CONSTRUCTION: CONSTRUCT CONTRACTION (CONTROL), CONSTRUCTION AND ISOLATION JOINTS TRUE TO LINE WITH FACE PERPENDICULAR TO SURFACE OF THE PAVEMENT AS SHOWN ON APPROVED PAVING CONSTRUCTION PLAN. JOINTS SHALL BE PROVIDED IN BOTH THE LONGITUDINAL AND TRANSVERSE DIRECTIONS. MAXIMUM SPACING OF LONGITUDINAL AND TRANSVERSE CONTRACTION JOINTS SHALL BE 10 FT FOR 4" PAVEMENTS, 12 FT FOR 5 IN. PAVEMENTS AND 12 FT FOR PAVEMENTS 6 INCHES AND OVER. ALL EDGES, TOOLED JOINTS, AND ISOLATION JOINTS SHOULD BE ROUNDED TO APPROPRIATE RADIUS (REFER TO ACI 330). KEEP ALL JOINTS CONTINUOUS. PROVIDE FULL DEPTH ISOLATION JOINTS AT ENDS OF DISCONTINUOUS JOINTS.

- 5.4.1 CONTRACTION (CONTROL) JOINTS: PROVIDE CONTRACTION JOINTS FOR A DEPTH NO GREATER THAN 1/3 OR LESS THAN 1/4 OF THE PAVEMENT THICKNESS. CONTRACTION JOINTS MUST BE CONTINUOUS ACROSS THE SLAB UNLESS INTERRUPTED BY A FULL DEPTH ISOLATION JOINT MATERIAL AND MUST EXTEND COMPLETELY THROUGH ANY INTEGRAL CURBS. CONTRACTION JOINT ALIGNMENT MAY BE SKEWED OR WARPED WHERE NECESSARY TO REACH POINTS OF STRESS CONCENTRATION. SHARP OR ACUTE ANGLES OF LESS THAN 45 DEGREES SHOULD BE AVOIDED IN JOINTS AT INTERSECTIONS AND RADIIUSES TO PREVENT CRACKED AND BROKEN CORNERS AND SLIVERS UNDER TRAFFIC.
- 5.4.1.1 SAWED JOINTS: FORM CONTRACTION JOINTS USING AN EARLY-ENTRY DRY-SAW EQUIPPED OR EQUIVALENT WITH SHATTERPROOF ABRASIVE OR DIAMOND RIMMED BLADES. CUT JOINTS INTO CONCRETE PAVEMENTS AS SOON AS THE SURFACE WILL NOT RAVEL OR OTHERWISE DAMAGE BY THE CUTTING ACTION. JOINTS MUST BE COMPLETED BETWEEN 2" AND 8" DEPTH AFTER PAVEMENT HAS BEEN PLACED. SAWCUT JOINTS TO BE 1/2" WIDE AND MIN. 1/4 THE SLAB THICKNESS IN DEPTH.
- 5.4.1.2 HAND-FORMED: CONTRACTION JOINTS MAY BE INSTALLED IN THE CONCRETE PAVEMENT WITH THE USE OF A MASON'S HAND GROOVER OR OTHER APPROVED GROOVING DEVICE WHILE THE CONCRETE IS IN THE PLASTIC STATE. THE BLADE OF THE HAND-GROOVER MUST BE OF SUFFICIENT DEPTH TO LEAVE A FINISHED JOINT GREATER THAN "D/5 AND LESS THAN "D/4. HAND-FORMED JOINTS MUST HAVE A FINISHED RADIUS ALONG THE JOINT EDGE EQUAL TO 1/8 IN.

- 5.4.2 CONSTRUCTION JOINTS: PLACE FULL DEPTH CONSTRUCTION JOINTS AT THE ENDS OF CONCRETE PLACEMENT AND WHERE PAVING IS STOPPED FOR A PERIOD OF THIRTY MINUTES OR MORE. THICKEN EDGE 2" OVER 2" (SEE DETAIL).
- 5.4.3 ISOLATION JOINTS: ISOLATION JOINT SHALL BE COLD JOINTS w/ NO JOINT FILLER OR SEALANT.

- 5.5 FINISHING: FC&PA OR ACI CERTIFIED FINISHERS ARE REQUIRED. PERFORM CONCRETE FINISHING USING MACHINE AND/OR HAND TOOLS AS REQUIRED. ADDING WATER TO THE SURFACE OF THE CONCRETE TO ASSIST IN FINISHING OPERATIONS SHALL NOT BE PERMITTED. A UNIFORM, NON-SLIP FINISH SHALL BE PROVIDED BY BRUSHING THE SURFACE WITH A STIFF-BRISTLED BROOM. DO NOT PERFORM ANY FINISHING OPERATIONS WHILE BLEEDWATER IS ON THE SURFACE.
- 5.6 CURING: CONCRETE SHALL BE CURED TO PROTECT IT AGAINST LOSS OF MOISTURE AND MECHANICAL INJURY FOR AT LEAST 5 DAYS AFTER PLACEMENT. A PIGMENTED LIQUID CURING MEMBRANE SHALL BE APPLIED IMMEDIATELY AFTER THE FINISHING OPERATION.
- 5.7 OPENING TO TRAFFIC: UNLESS AUTHORIZED BY THE ENGINEER OF RECORD IN WRITING, AUTOMOBILE TRAFFIC SHALL NOT BE ALLOWED ON THE PAVEMENT UNTIL THE CONCRETE IS 5 DAYS OLD AND 7 DAYS FOR OTHER TRAFFIC. THIS DOES NOT INCLUDE SAWING AND SEALING EQUIPMENT OR OTHER LIGHT MISCELLANEOUS EQUIPMENT.

- 5.4.2 CONSTRUCTION JOINTS: PLACE FULL DEPTH CONSTRUCTION JOINTS AT THE ENDS OF CONCRETE PLACEMENT AND WHERE PAVING IS STOPPED FOR A PERIOD OF THIRTY MINUTES OR MORE. THICKEN EDGE 2" OVER 2" (SEE DETAIL).
- 5.4.3 ISOLATION JOINTS: ISOLATION JOINT SHALL BE COLD JOINTS w/ NO JOINT FILLER OR SEALANT.

- 5.5 FINISHING: FC&PA OR ACI CERTIFIED FINISHERS ARE REQUIRED. PERFORM CONCRETE FINISHING USING MACHINE AND/OR HAND TOOLS AS REQUIRED. ADDING WATER TO THE SURFACE OF THE CONCRETE TO ASSIST IN FINISHING OPERATIONS SHALL NOT BE PERMITTED. A UNIFORM, NON-SLIP FINISH SHALL BE PROVIDED BY BRUSHING THE SURFACE WITH A STIFF-BRISTLED BROOM. DO NOT PERFORM ANY FINISHING OPERATIONS WHILE BLEEDWATER IS ON THE SURFACE.
- 5.6 CURING: CONCRETE SHALL BE CURED TO PROTECT IT AGAINST LOSS OF MOISTURE AND MECHANICAL INJURY FOR AT LEAST 5 DAYS AFTER PLACEMENT. A PIGMENTED LIQUID CURING MEMBRANE SHALL BE APPLIED IMMEDIATELY AFTER THE FINISHING OPERATION.
- 5.7 OPENING TO TRAFFIC: UNLESS AUTHORIZED BY THE ENGINEER OF RECORD IN WRITING, AUTOMOBILE TRAFFIC SHALL NOT BE ALLOWED ON THE PAVEMENT UNTIL THE CONCRETE IS 5 DAYS OLD AND 7 DAYS FOR OTHER TRAFFIC. THIS DOES NOT INCLUDE SAWING AND SEALING EQUIPMENT OR OTHER LIGHT MISCELLANEOUS EQUIPMENT.

- 5.4.2 CONSTRUCTION JOINTS: PLACE FULL DEPTH CONSTRUCTION JOINTS AT THE ENDS OF CONCRETE PLACEMENT AND WHERE PAVING IS STOPPED FOR A PERIOD OF THIRTY MINUTES OR MORE. THICKEN EDGE 2" OVER 2" (SEE DETAIL).
- 5.4.3 ISOLATION JOINTS: ISOLATION JOINT SHALL BE COLD JOINTS w/ NO JOINT FILLER OR SEALANT.

6.0 EVALUATION AND ACCEPTANCE OF PAVEMENT

- 6.1 TESTING AND INSPECTIONS: SHALL BE PERFORMED BY A TESTING AGENCY CURRENTLY ACCREDITED BY THE CONCRETE MATERIALS ENGINEERING COUNCIL (CMEC), NVLAP OR OTHER ACCREDITED AUTHORITY OF EQUAL STANDING, ON THE BASIS OF ITS COMPLIANCE WITH THE REQUIREMENTS OF ASTM C 1077
- 6.2 SAMPLING AND TESTING CONCRETE: SHALL BE PERFORMED BY ACI CERTIFIED CONCRETE FIELD TECHNICIANS GRADE I OR PERSONNEL WITH EQUIVALENT QUALIFICATIONS.
- 6.3 SAMPLING PROCEDURE: OBTAIN RANDOM SAMPLE IN ACCORDANCE WITH ASTM C 72. "METHOD OF SAMPLING FRESH CONCRETE." RECORD TIME BATCHED AND TIME SAMPLED, WATER ADDITIONS AT THE SITE, STRENGTH CLASS, THE DELIVERY TICKET NUMBER, THE CONCRETE SUPPLIER'S MIX DESIGNATION AND THE LOCATION OF THE CONCRETE IN THE WORK. SLUMP TEST (1) FOR EACH 5,000 SQ. FT. (OR PER PLACEMENT IF LESS THAN 5000 SQ. FT.).CYLINDERS (4) FOR EACH 5,000 SQ. FT.
- 6.4 STRENGTH TESTS: OBTAIN ONE STRENGTH TEST FOR EACH 150 CUBIC YARDS OF CONCRETE PLACED. CYLINDERS/BEAMS SHALL BE CASTED, CURED AND TRANSPORTED IN ACCORDANCE WITH ASTM C 31 "LABORATORY CURED SPECIMENS."
- 6.4.1 PERFORM SLUMP AND AIR TESTS WITH EACH SET OF STRENGTH TEST CYLINDERS CONFORM TO METHOD LISTED IN ASTM C 94 "METHODS OF SAMPLING AND TESTING."
- 6.5 ACCEPTANCE OF CONCRETE STRENGTH: THE STRENGTH LEVEL OF THE CONCRETE SHALL BE CONSIDERED SATISFACTORY IF ALL SETS OF THREE CONSECUTIVE STRENGTH TESTS OF AN INDIVIDUAL CLASS OF CONCRETE EQUAL OR EXCEED THE SPECIFIED STRENGTH AND NO INDIVIDUAL STRENGTH TEST RESULT FALLS BELOW THE SPECIFIED STRENGTH BY MORE THAN 500 PSI.

- 6.5.1 STRENGTH TEST FAILURE: IF AN INDIVIDUAL STRENGTH TEST RESULT FALLS BELOW THE SPECIFIED STRENGTH BY MORE THAN 500 PSI, DETERMINE THE APPROXIMATE LOCATION AND STRENGTH CONCRETE REPRESENTED BY THE TEST BY A METHOD LISTED IN ASTM C 823, SUCH AS PENETRATION RESISTANCE, ASTM C 803, OR REBOUND NUMBER, ASTM C 805. IF PRESENCE OF UNDER-STRENGTH CONCRETE IS CONFIRMED, OBTAIN THREE CORES FROM THE CONCRETE IN QUESTION IN ACCORDANCE WITH ASTM C 42.
- 6.5.2 CORE TESTS AND THEIR EVALUATION: STRENGTH SHALL BE CONSIDERED ADEQUATE, IF THE AVERAGE STRENGTH OF THREE CORES REPRESENTING THE CONCRETE IN QUESTION EQUALS AT LEAST 85% OF THE REQUIRED STRENGTH AND IF NO INDIVIDUAL CORE STRENGTH IS LESS THAN 78% OF THE REQUIRED STRENGTH.

RECOMMENDED MAX. JOINT SPACINGS

PAVEMENT THICKNESS (INCHES)	RECOMMENDED MAXIMUM JOINT SPACING (FEET)
4.0	10
4.5	10
5.0	12
5.5	12
6.0	12

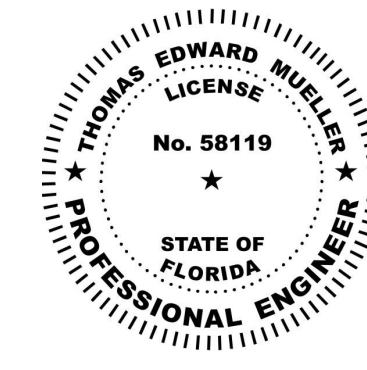
- 6.6 TEST REPORTS: PROMPTLY REPORT ALL CONCRETE TEST RESULTS TO THE OWNER/AGENT, THE CONTRACTOR AND THE CONCRETE SUPPLIER. REPORT SHALL INCLUDE METHOD OF INITIAL CURING AND DATE SPECIMENS ARE RECEIVED AT THE LABORATORY.
- 6.7 TOLERANCE IN PAVEMENT THICKNESS: BEFORE FINAL ACCEPTANCE OF THE PAVEMENT, AT THE OPTION OF THE OWNER, ITS THICKNESS MAY BE DETERMINED BY CORING AT RANDOM LOCATIONS IN EACH PLACED STRIP SO THAT A CORE REPRESENTS AN AREA NOT EXCEEDING 2,500 SQUARE YARDS. THE DEPTH OF EACH CORE SHALL BE DETERMINED BY AVERAGE MEASUREMENTS OF THE CORE IN ACCORDANCE WITH AASHTO T-148. REFER TO ACI 330.1 FOR ACCEPTABLE TOLERANCES.

WATER AND SEWER NOTES

- 6.6 TEST REPORTS: PROMPTLY REPORT ALL CONCRETE TEST RESULTS TO THE OWNER/AGENT, THE CONTRACTOR AND THE CONCRETE SUPPLIER. REPORT SHALL INCLUDE METHOD OF INITIAL CURING AND DATE SPECIMENS ARE RECEIVED AT THE LABORATORY.
- 6.7 TOLERANCE IN PAVEMENT THICKNESS: BEFORE FINAL ACCEPTANCE OF THE PAVEMENT, AT THE OPTION OF THE OWNER, ITS THICKNESS MAY BE DETERMINED BY CORING AT RANDOM LOCATIONS IN EACH PLACED STRIP SO THAT A CORE REPRESENTS AN AREA NOT EXCEEDING 2,500 SQUARE YARDS. THE DEPTH OF EACH CORE SHALL BE DETERMINED BY AVERAGE MEASUREMENTS OF THE CORE IN ACCORDANCE WITH AASHTO T-148. REFER TO ACI 330.1 FOR ACCEPTABLE TOLERANCES.

GENERAL NOTES:

- 1. ALL CONSTRUCTION MATERIALS, INSTALLATION AND TESTING SHALL CONFORM TO THE STANDARD SPECIFICATIONS OF THE FORT PIERCE UTILITIES AUTHORITY.
- 2. THE CONTRACTOR SHALL FURNISH RECORD DRAWINGS INFORMATION TO THE ENGINEER OF INCLUDING LOCATION OF VALVES, FITTINGS, SERVICE CONNECTIONS, BLOWOFFS AND ANY OTHER PERTINENT INFORMATION NECESSARY TO LOCATE ITEMS CONSTRUCTED UNDER THIS PROJECT, AS REQUIRED BY THE UTILITIES ENGINEER.
- 3. THE CONTRACTOR SHALL TAP EXISTING LINES UNDER THE SUPERVISION OF THE FORT PIERCE UTILITIES AUTHORITY ONLY AFTER TESTING AND DISINFECTING HAS BEEN COMPLETED AND APPROVED ON THE TAPPING VALVE AND SLEEVE.
- 4. SERVICE TAPS SHALL BE PLACED APPROXIMATELY TEN FEET AWAY FROM GATE VALVES, AS SHOWN, FOR TESTING, FOLLOWING TESTING AND STERILIZATION OF WATER LINE CONTRACTOR SHALL PLACE A BRASS PLUG IN CORPORATION STOPS AND CURB STOPS SHALL BE REMOVED FROM TESTING LOCATIONS.
- 5. CONTRACTOR SHALL COMPLY WITH FLORIDA TRENCH SAFETY ACT REQUIREMENTS.
- 6. A 1% MINIMUM SLOPE SHALL BE MAINTAINED ON ALL SANITARY SERVICE LATERALS.
- 7. THE CONTRACTOR SHALL FURNISH RECORD DRAWINGS INFORMATION TO THE ENGINEER CONSISTING OF PIPE SIZES, LOCATION OF SERVICE TEE WYES, DIAMETER OF SERVICES AND ANY OTHER PERTINENT INFORMATION NECESSARY TO LOCATE ITEMS CONSTRUCTED UNDER THIS PROJECT.



This item has been digitally signed and sealed by Thomas Mueller, P.E. on the date adjacent to the seal.

Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.



12798 W. Forest Hill Blvd., Suite 201  
Wellington, FL 33414  
CA #7969  
Ph: (561) 792-9000  
Fax: (561) 792-9901  
PROJECT #25-063



2725 Center Place  
Melbourne, FL 32940  
321.799.2571 | www.cebco.com  
Registry 9072

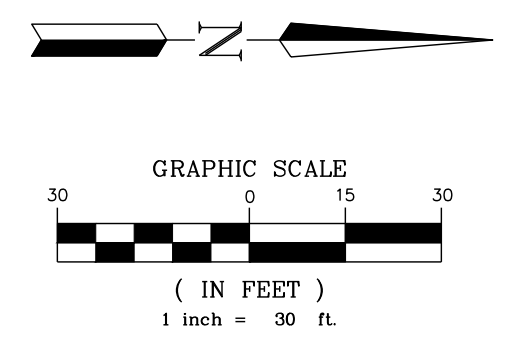
DATE	DESCRIPTION	REV

**COACH FENN PARK**  
N. 23RD ST. AND AVE. K, FORT PIERCE, FL 34947  
CITY OF FORT PIERCE

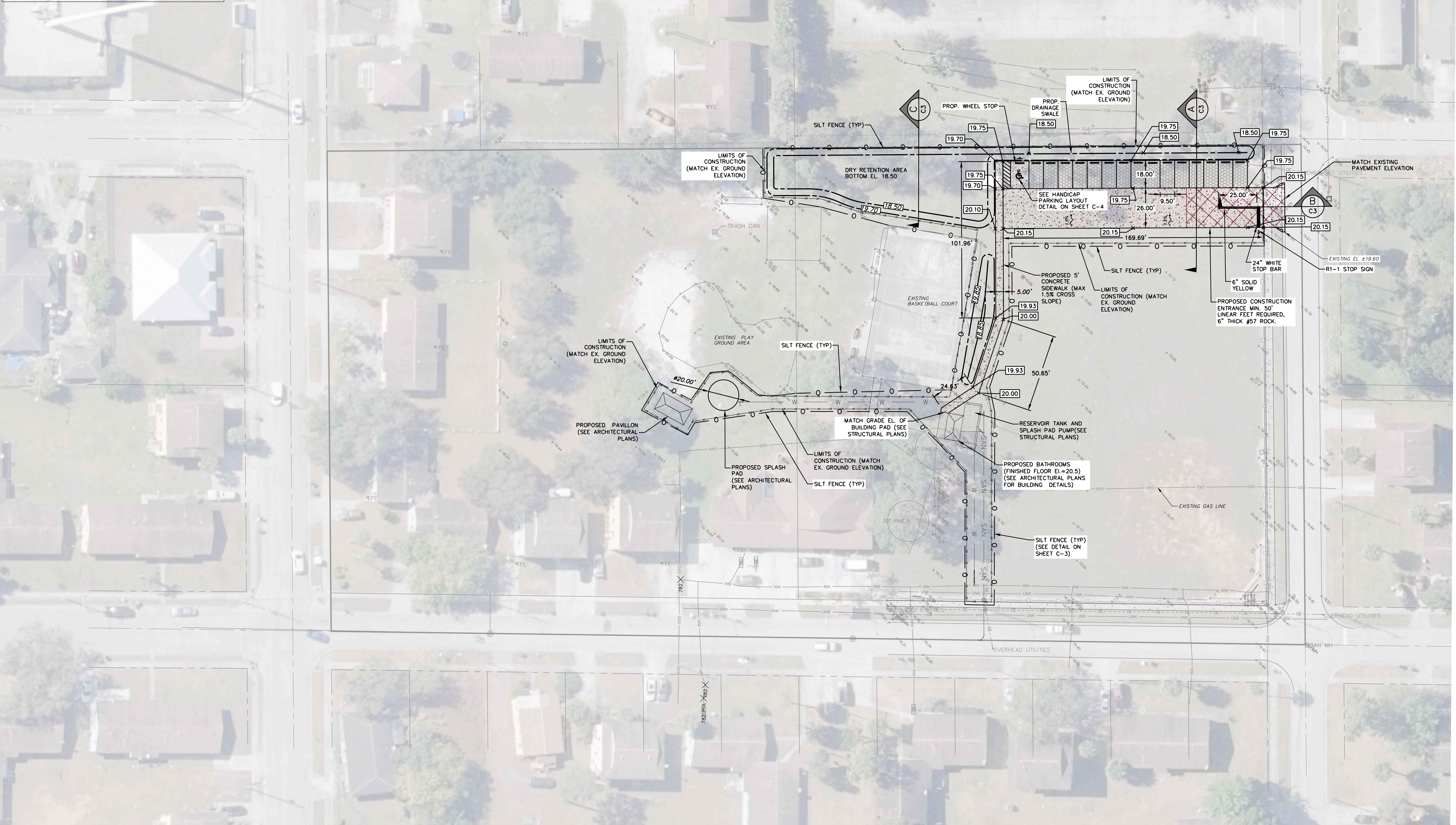
**GENERAL NOTES**

CODE #	160263
DATE	01/16/2026
DRAWN	L. PONCE
DESIGN	T. MUELLER
CHECK	T. MUELLER
FILE	

C1  
SHEET 1 OF 5



LEGEND	
CONCRETE PAVEMENT	
TURF BLOCK	
PROPOSED SILT FENCE	
PROPOSED WATER	
PROPOSED SEWER	



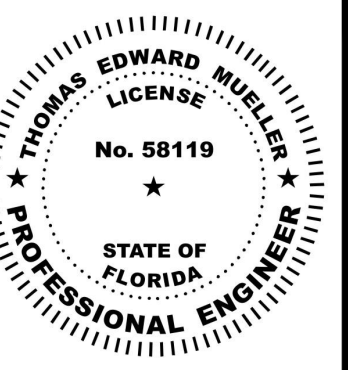
NOTE:  
 1. ELEVATIONS SHOWN ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988, AS ESTABLISHED BY SLC BENCHMARK D-401, HAVING A PUBLISHED ELEVATION OF 23.523'. NAVD'88 = NGVD'29 - 1.493'.  
 2. SIDEWALKS ARE TO BE CONSTRUCTED WITH A MAXIMUM LONGITUDINAL SLOPE OF 5% AND MAXIMUM CROSS-SLOPE OF 1.5%.



12798 W. Forest Hill Blvd., Suite 201  
 Wellington, FL 33414  
 CA #7969  
 Ph.: (561) 792-9000  
 Fax.: (561) 792-9901  
 PROJECT #25-063

REV	DATE	DESCRIPTION

**COACH FENN PARK**  
 N. 23RD ST. AND AVE. K, FORT PIERCE, FL 34947  
 CITY OF FORT PIERCE  
**SITE PLAN**



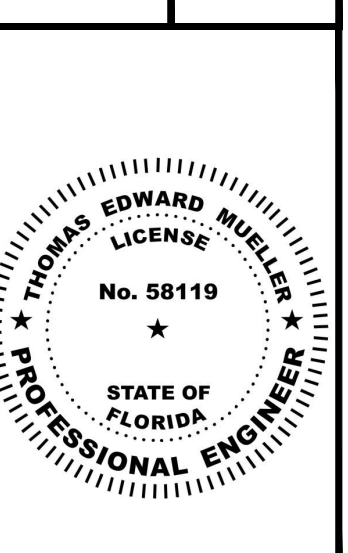
CDE #	60263
DATE	01/16/2026
DRAWN	L. PONCE
DESIGN	T. MUELLER
CHECK	T. MUELLER
FILE	

H:\Drawings\Coach Fenn Park (42765.00)\25-063\09-Wrk-DWG\42765.00\_SITE PLAN.dwg - Wednesday, January 14, 2026 5:48:31 PM

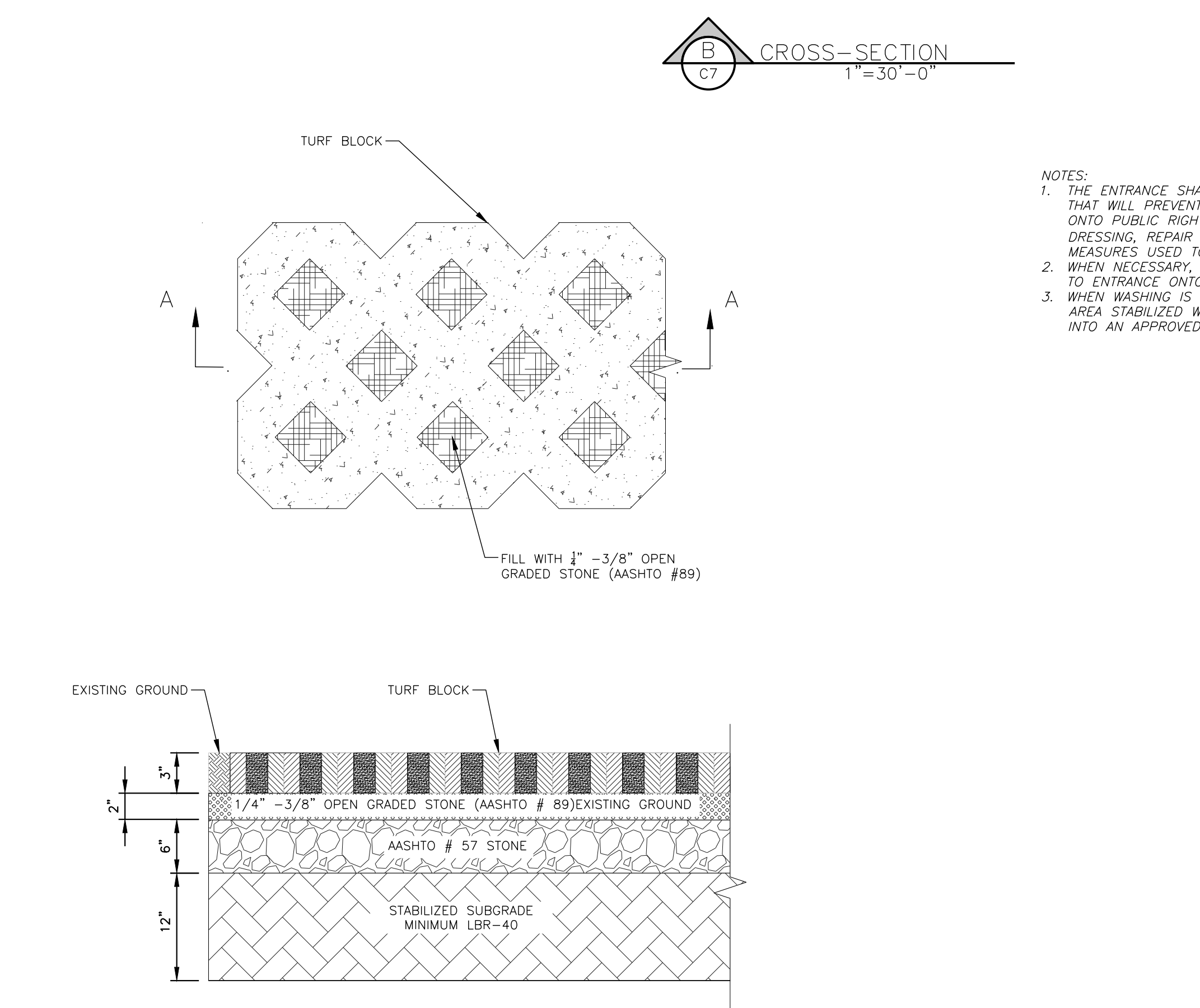
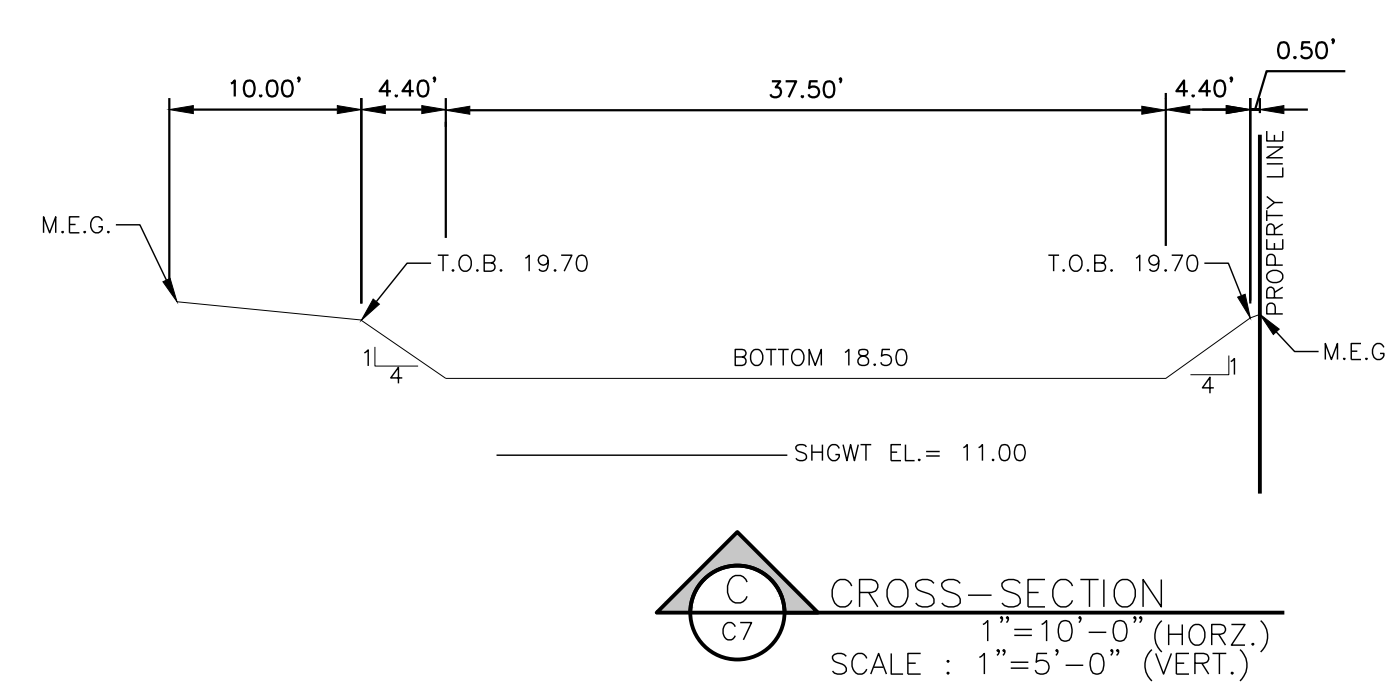
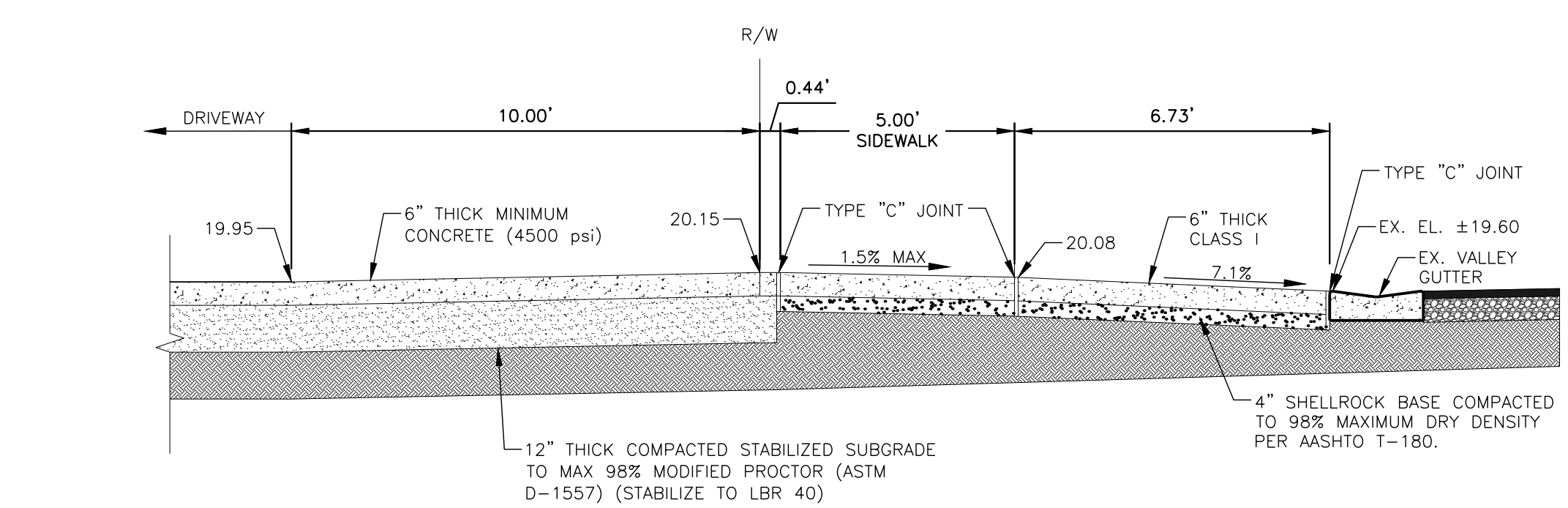
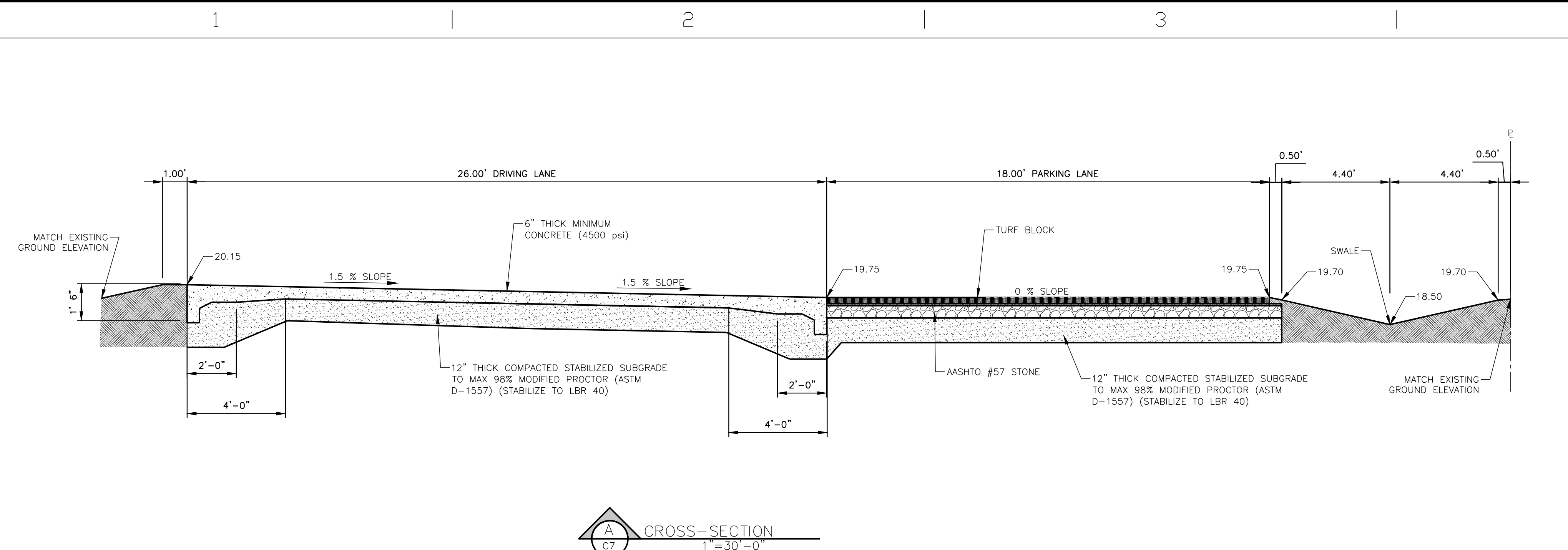
DATE	DESCRIPTION

**COACH FENN PARK**  
 N. 23RD ST. AND AVE. K, FORT PIERCE, FL 34947  
 CITY OF FORT PIERCE

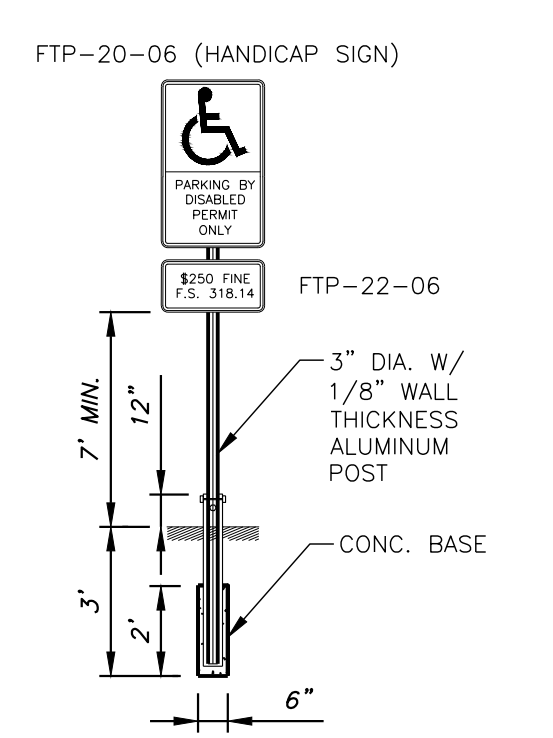
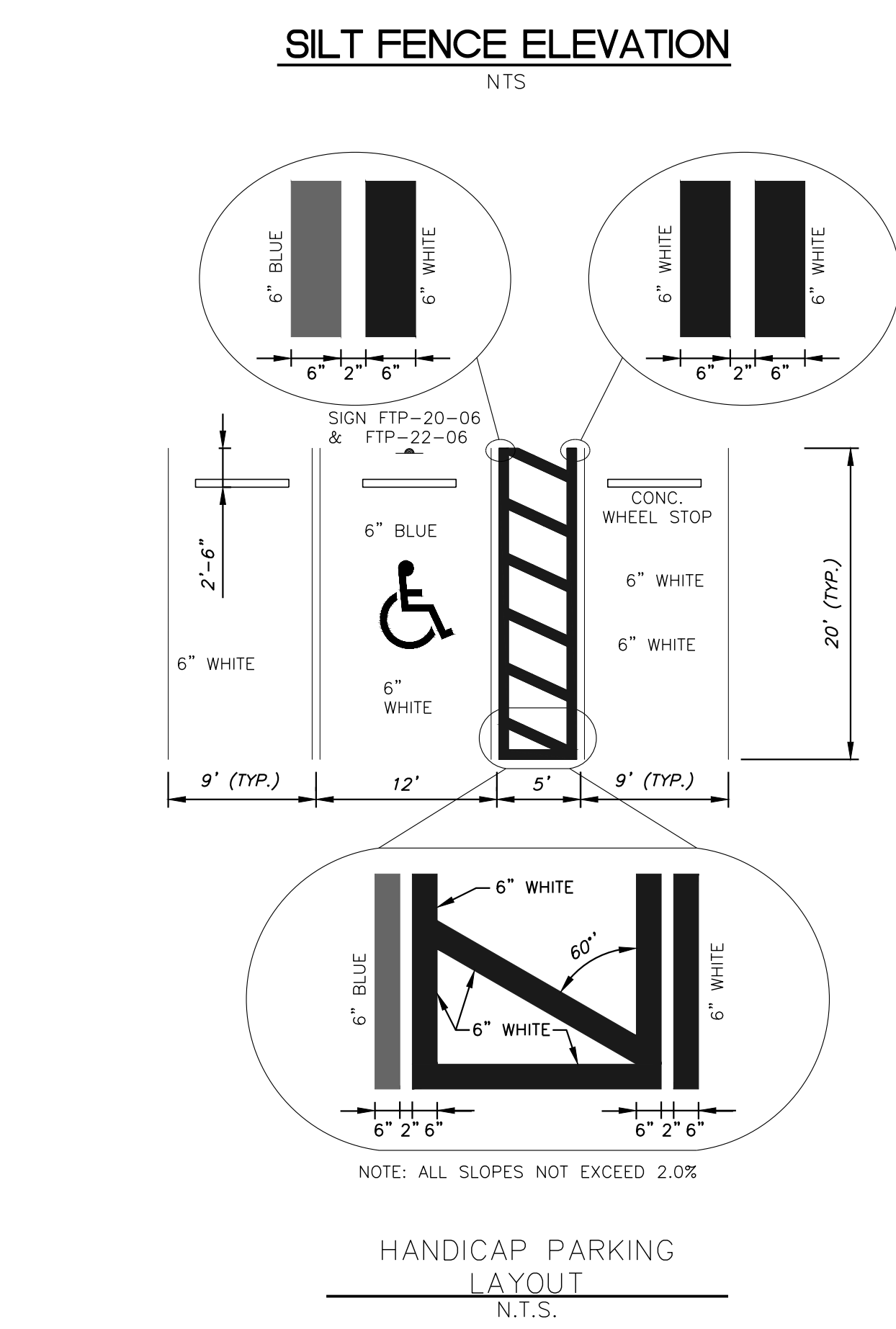
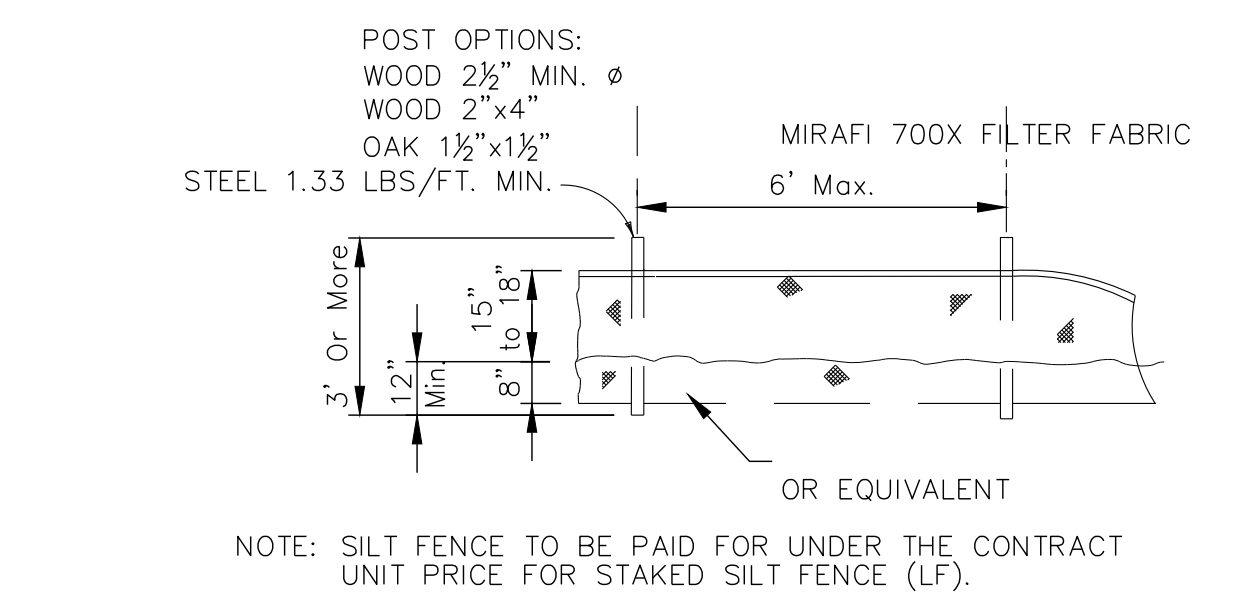
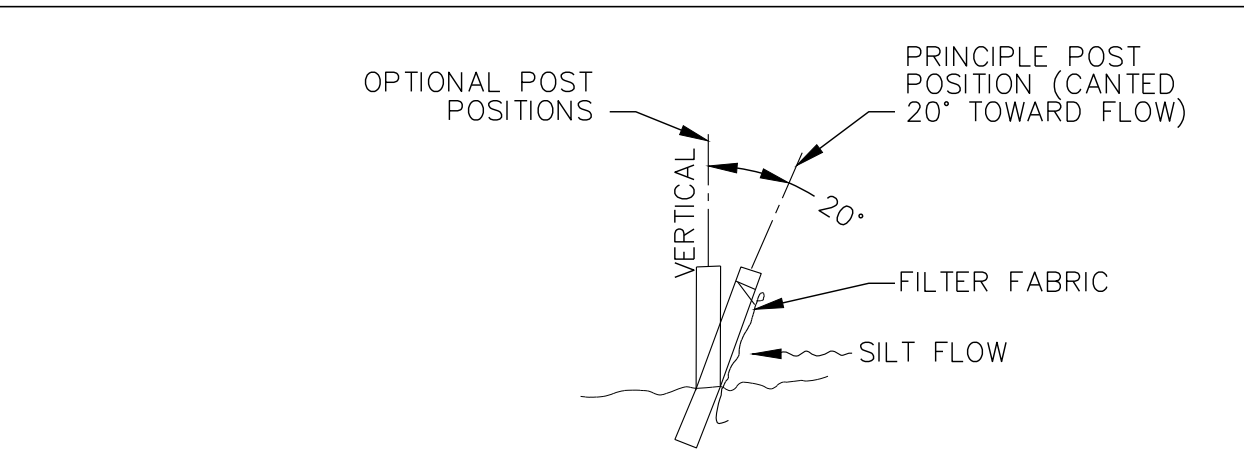
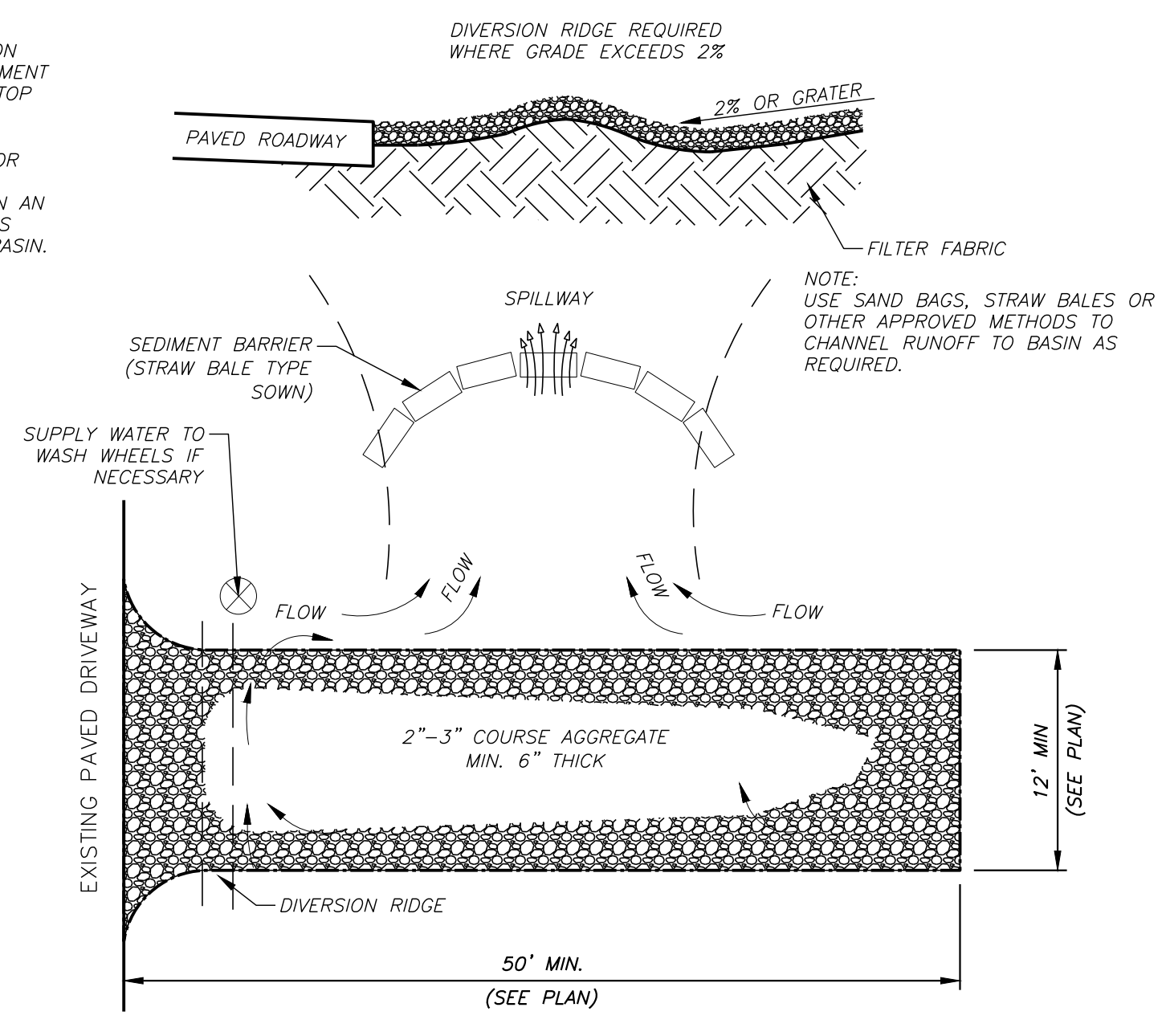
**CROSS SECTIONS AND DETAILS**



CDE # 180263
DATE 01/16/2026
DRAWN L. PONCE
DESIGN T. MUELLER
CHECK T. MUELLER
FILE

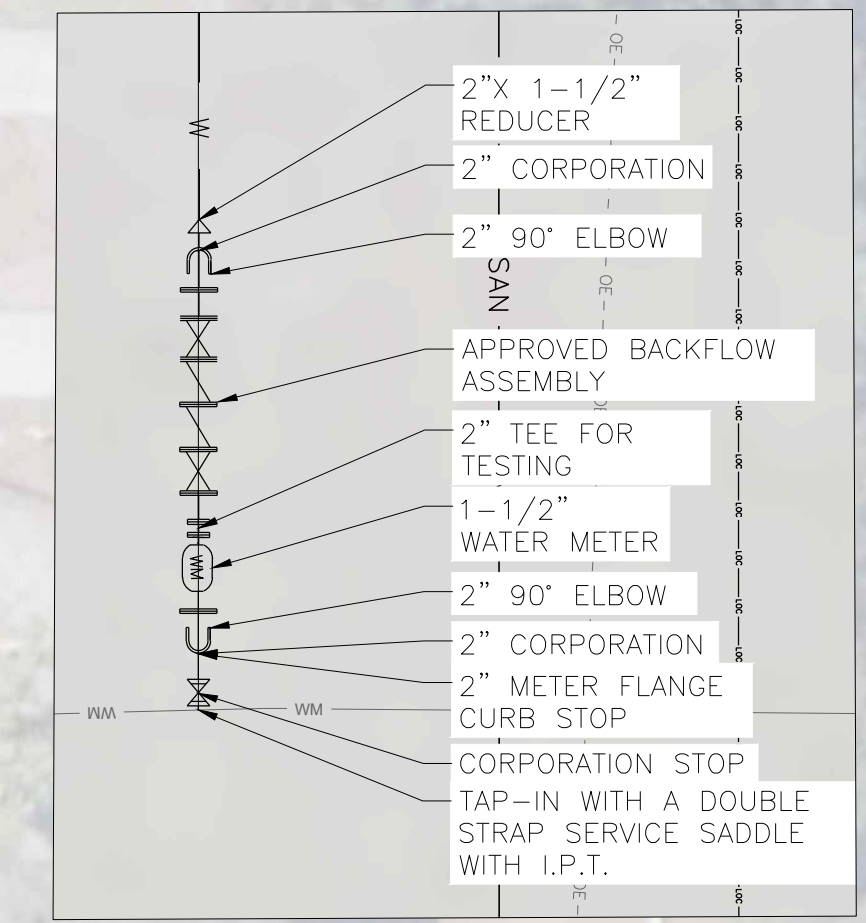
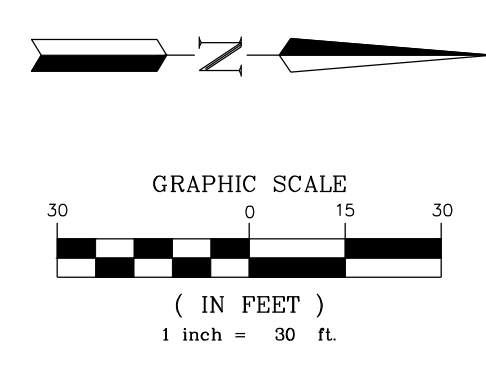


- NOTES:**
1. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.
  2. WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO PUBLIC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



12798 W. Forest Hill Blvd., Suite 201  
 Wellington, FL 33414  
 CA #7969  
 Ph.: (561) 792-9000  
 Fax.: (561) 792-9901  
 PROJECT #25-063

H:\Drawings\Coach Fenn Park (42765.00)\25-063\09-WRK-DWGS\42765.00-GRADING PAVING 1-SECTIONS AND DETAILS.dwg - Wednesday, January 14, 2026 5:48:40 PM



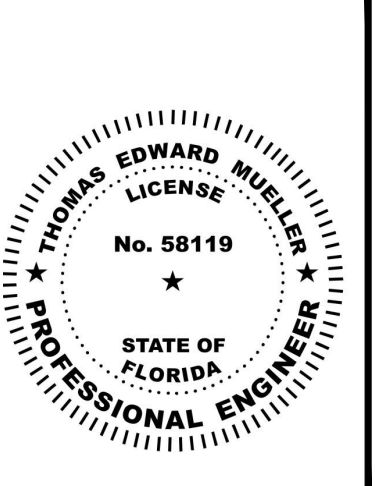
**DETAIL 1**  
NTS



REV	DESCRIPTION	DATE

**COACH FENN PARK**  
N. 23RD ST. AND AVE. K, FORT PIERCE, FL 34947  
CITY OF FORT PIERCE

**WATER AND SEWER PLAN**



CDE #	60263
DATE	01/16/2026
DRAWN	L. PONCE
DESIGN	T. MUELLER
CHECK	T. MUELLER
FILE	

**C4**

SHEET 4 OF 5



12798 W. Forest Hill Blvd., Suite 201  
Wellington, FL 33414  
CA #7969  
Ph.: (561) 792-9000  
Fax.: (561) 792-9901  
PROJECT #25-063

\\Gm2\gms01\logos\Drawings\Coach Fenn Park (42765.00)\WATER AND SEWER PLAN.dwg - Wednesday, January 14, 2026 6:02:42 PM

