NOTES

1. CONTRACTOR IS RESPONSIBLE FOR CHECKING ACTUAL SITE CONDITIONS BEFORE STARTING CONSTRUCTION.
2. ANY DISCREPANCIES ON THE DRAWINGS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER BEFORE COMMENCING WORK.
3. CONTRACTOR SHALL OBTAIN ALL REQUIRED BUILDING PERMITS BEFORE COMMENCING WORK.
4. CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATION OF ALL EXISTING UTILITIES. THE CONTRACTOR SHALL CONTACT ALL CONCERNED UTILITIES AT LEAST 48 HOURS IN ADVANCE FOR CONSTRUCTION OPERATIONS.
5. NO FIELD CHANGES OR DEVIATIONS FROM DESIGN TO BE MADE WITHOUT PRIOR APPROVAL OF THE ENGINEER.
6. ALL CONSTRUCTION SHALL BE COMPLETED IN ACCORDANCE WITH THE APPLICABLE ORDINANCES OF GLADES COUNTY, FLORIDA.
7. CONTRACTOR SHALL SUPPLY DENSITY TESTS TO ENGINEER ON ALL SUB-GRADE AND BASE. TESTS SHALL BE PREPARED PER AASHTO T-180 METHOD.
8. SLOPE GRADES FROM ELEVATIONS SHOWN TO EXISTING GRADE AT PROPERTY LINE.
9. ENGINEER SHALL BE NOTIFIED AT LEAST 48 HOURS IN ADVANCE FOR ANY INSPECTION.
10. ALL TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH M.U.T.C.D. STANDARDS.
11. EROSION AND SEDIMENTATION CONTROL TECHNIQUES SHALL BE INCORPORATED DURING CONSTRUCTION AS FOLLOWS:
    - SILT SCREENS SHALL BE MAINTAINED AT THE PROJECT PERIMETER.
    - NO OFF-SITE DISCHARGES SHALL OCCUR DURING CONSTRUCTION.

    IN THE EVENT DISCHARGE IS REQUIRED, HAY BALES AND/OR TURBIDITY CURTAINS SHALL BE INCORPORATED AT THE DISCHARGE POINT AS NECESSARY TO CONTROL TURBIDITY.
12. KNOX BOX TO BE LOCATED AT GATE ENTRANCE AND MAIN DOOR ENTRANCE TO THE BUILDING. OWNER AND CONTRACTOR TO SPECIFY LOCATION.

EROSION AND SEDIMENTATION CONTROL NOTES

CONSTRUCTION ACTIVITIES CAN RESULT IN THE GENERATION OF SIGNIFICANT AMOUNTS OF POLLUTANTS WHICH MAY REACH SURFACE OR GROUND WATERS. ONE OF THE PRIMARY POLLUTANTS OF SURFACE WATERS IS SEDIMENT DUE TO EROSION. EXCESSIVE QUANTITIES OF SEDIMENT WHICH REACH WATER BODIES OF FLOODPLAINS HAVE BEEN SHOWN TO ADVERSELY AFFECT THEIR PHYSICAL, BIOLOGICAL AND CHEMICAL PROPERTIES. TRANSPORTED SEDIMENT CAN OBSTRUCT STREAM CHANNELS, REDUCE HYDRAULIC CAPACITY OF WATER BODIES OF FLOODPLAINS, REDUCE THE DESIGN CAPACITY OF CULVERTS AND OTHER WORKS, AND ELIMINATE ETHIC INVERTEBRATES AND FISH SPAWNING SUBSTRATES BY SILTATION. EXCESSIVE SUSPENDED SEDIMENTS REDUCE LIGHT PENETRATION AND THEREFORE, REDUCE PRIMARY PRODUCTIVITY.

MINIMUM STANDARDS:

1. SEDIMENT BASIN AND TRAPS, PERIMETER DIKES, SEDIMENT BARRIERS AND OTHER MEASURES INTENDED TO TRAP SEDIMENT SHALL BE CONSTRUCTED AS A FIRST STEP IN ANY LAND-DISTRIBUTING ACTIVITY AND SHALL BE MADE FUNCTIONAL BEFORE UNSLOPE LAND DISTURBANCE TAKES PLACE.
2. ALL SEDIMENT CONTROL MEASURES ARE TO BE ADJUSTED TO MEET FIELD CONDITIONS AT THE TIME OF CONSTRUCTION AND BE CONSTRUCTED PRIOR TO ANY GRADING OR DISTURBANCE OF EXISTING SURFACE MATERIAL ON BALANCE OF SITE. PERIMETER SEDIMENT BARRIERS SHALL BE CONSTRUCTED TO PREVENT SEDIMENT OR TRASH FROM FLOWING OR FLOATING ON TO ADJACENT PROPERTIES.
3. PERMANENT OR TEMPORARY SOIL STABILIZATION SHALL BE APPLIED TO DENUDED AREAS WITHIN SEVEN DAYS AFTER FINAL GRADE IS REACHED ON ANY PORTION OF THE SITE. TEMPORARY SOIL STABILIZATION SHALL BE APPLIED WITHIN SEVEN DAYS TO DENUDED AREAS THAT MAY NOT BE AT FINAL GRADE BUT WILL REMAIN UNDISTURBED FOR LONGER THAN 30 DAYS. PERMANENT STABILIZATION SHALL BE APPLIED TO AREAS THAT ARE TO BE LEFT UNDISTURBED FOR MORE THAN ONE YEAR.
4. DURING CONSTRUCTION OF THE PROJECT, SOIL STOCKPILES SHALL BE STABILIZED OR PROTECTED WITH SEDIMENT TRAPPING MEASURES. THE APPLICANT IS RESPONSIBLE FOR THE TEMPORARY PROTECTION AND PERMANENT STABILIZATION OF ALL SOIL STOCKPILES ON SITE AS WELL AS SOIL INTENTIONALLY TRANSPORTED FROM THE PROJECT SITE.
5. A PERMANENT VEGETATIVE COVER SHALL BE ESTABLISHED ON DENUDED AREAS NOT OTHERWISE PERMANENTLY STABILIZED. PERMANENT VEGETATION SHALL NOT BE CONSIDERED ESTABLISHED UNTIL A GROUND COVER IS ACHIEVED THAT, IN THE OPINION OF THE REVIEWER, IS UNIFORM, MATURE ENOUGH TO SURVIVE AND WILL INHIBIT EROSION.
6. STABILIZATION MEASURES SHALL BE APPLIED TO EARTHEN STRUCTURES SUCH AS DAMS, DIKES AND DIVERSIONS IMMEDIATELY AFTER INSTALLATION.
7. SURFACE RUNOFF FROM DISTURBED AREAS THAT IS COMPRISED OF FLOW FROM DRAINAGE AREAS GREATER THAN OR EQUAL TO THREE ACRES SHALL BE CONTROLLED BY A SEDIMENT BASIN. THE SEDIMENT BASIN SHALL BE DESIGNED AND CONSTRUCTED TO ACCOMMODATE THE ANTICIPATED SEDIMENT LOADING FROM THE LAND-DISTURBING ACTIVITY. THE OUTFALL DEVICE OR SYSTEM DESIGN SHALL TAKE INTO ACCOUNT THE TOTAL DRAINAGE AREA FLOWING THROUGH THE DISTURBED AREA TO BE SERVED BY THE BASIN.
8. AFTER ANY SIGNIFICANT RAINFALL, SEDIMENT CONTROL STRUCTURES WILL BE INSPECTED FOR INTEGRITY. ANY DAMAGED DEVICES SHALL BE CORRECTED IMMEDIATELY.
9. CONCENTRATED RUNOFF SHALL NOT FLOW DOWN CUT OR FILL SLOPES UNLESS CONTAINED WITHIN AN ADEQUATE TEMPORARY OR PERMANENT CHANNEL, FLUME OR SLOPE DRAIN STRUCTURE.
10. WHENEVER WATER SEEPS FROM A SLOPE FACE, ADEQUATE DRAINAGE OR OTHER PROTECTION SHALL BE PROVIDED.
11. SEDIMENT WILL BE PREVENTED FROM ENTERING ANY STORM DRAIN SYSTEM, DITCH OR CHANNEL. ALL STORM SEWER INLETS THAT ARE MADE OPERABLE DURING CONSTRUCTION SHALL BE PROTECTED SO THAT SEDIMENT-LADEN WATER CANNOT ENTER THE CONVEYANCE SYSTEM WITHOUT FIRST BEING FILTERED OR OTHERWISE TREATED TO REMOVE SEDIMENT.
12. BEFORE TEMPORARY OR NEWLY CONSTRUCTED STORMWATER CONVEYANCE CHANNELS ARE MADE OPERATIONAL, ADEQUATE OUTLET PROTECTION AND ANY REQUIRED TEMPORARY OR PERMANENT CHANNEL LINING SHALL BE INSTALLED IN BOTH THE CONVEYANCE CHANNEL AND RECEIVING CHANNEL.
13. WHEN WORK IN A LIVE WATERCOURSE IS PERFORMED, PRECAUTIONS SHALL BE TAKEN TO MINIMIZE ENCROACHMENT, CONTROL SEDIMENT TRANSPORT AND STABILIZE THE WORK AREA TO THE GREATEST EXTENT POSSIBLE DURING CONSTRUCTION. NONERODIBLE MATERIAL SHALL BE USED FOR THE CONSTRUCTION OF CAUSEWAYS AND COFFERDAMS. EARTHEN FILL MAY BE USED FOR THESE STRUCTURES IF ARMORED BY NONERODIBLE COVER MATERIALS.
14. WHEN A LIVE WATERCOURSE MUST BE CROSSED BY CONSTRUCTION VEHICLES, A TEMPORARY STREAM CROSSING CONSTRUCTED OF NONERODIBLE MATERIAL SHALL BE PROVIDED.
15. THE BED AND BANKS OF A WATERCOURSE SHALL BE STABILIZED IMMEDIATELY AFTER WORK IN THE WATERCOURSE IS COMPLETED.
16. PERIODIC INSPECTION AND MAINTENANCE OF ALL SEDIMENT CONTROL STRUCTURES MUST BE PROVIDED TO ENSURE INTENDED PURPOSE IS ACCOMPLISHED. THE DEVELOPER, OWNER AND/OR CONTRACTOR SHALL BE CONTINUALLY RESPONSIBLE FOR ALL SEDIMENT LEAVING THE PROPERTY. SEDIMENT CONTROL MEASURES SHALL BE IN WORKING CONDITION AT THE END OF EACH WORKING DAY.
17. UNDERGROUND UTILITY LINES SHALL BE INSTALLED IN ACCORDANCE WITH THE FOLLOWING STANDARDS IN ADDITION TO OTHER APPLICABLE CRITERIA:
    A. NO MORE THAN 500 LINEAR FEET OF TRENCH MAY BE OPENED AT ONE TIME.
    B. EXCAVATED MATERIAL SHALL BE PLACED ON THE UPHILL SIDE OF TRENCHES.
    C. EFFLUENT FROM DEWATERING OPERATIONS SHALL BE FILTERED OR PASSED THROUGH AN APPROVED SEDIMENT TRAPPING DEVICE, OR BOTH, AND DISCHARGED IN A MANNER THAT DOES NOT ADVERSELY AFFECT FLOWING STREAMS OR OFF-SITE PROPERTY.
    D. RESTABILIZATION SHALL BE ACCOMPLISHED IN ACCORDANCE WITH THESE REGULATIONS.
18. WHERE CONSTRUCTION VEHICLE ACCESS ROUTES INTERSECT PAVED PUBLIC ROADS, PROVISIONS SHALL BE MADE TO MINIMIZE THE TRANSPORT OF SEDIMENT BY TRACKING ONTO THE PAVED SURFACE, WHERE SEDIMENT IS TRANSPORTED ONTO A PUBLIC ROAD SURFACE WITH CURBS AND GUTTERS, THE ROAD SHALL BE CLEANED THOROUGHLY AT THE END OF EACH DAY. SEDIMENT SHALL BE REMOVED FROM THE ROADS BY SHOVELING OR SWEEPING AND TRANSPORTED TO A SEDIMENT CONTROL DISPOSAL AREA. STREET WASHING SHALL BE ALLOWED ONLY AFTER SEDIMENT IS REMOVED IN THIS MANNER. THIS PROVISION SHALL APPLY TO INDIVIDUAL SUBDIVISION LOTS AS WELL AS TO LARGER LAND-DISTRIBUTING ACTIVITIES.
19. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN 30 DAYS AFTER FINAL SITE STABILIZATION OR AFTER THE TEMPORARY MEASURES ARE NO LONGER NEEDED, IN THE OPINION OF THE REVIEWER. DISTURBED SOIL AREAS RESULTING FROM THE DISPOSITION OF TEMPORARY MEASURES SHALL BE PERMANENTLY STABILIZED TO PREVENT FURTHER EROSION AND SEDIMENTATION.
20. PROPERTIES AND WATERWAYS DOWNSTREAM FROM CONSTRUCTION SITE SHALL BE PROTECTED FROM SEDIMENT DISPOSITION AND EROSION.
21. PHASED PROJECTS SHOULD BE CLEARED IN CONJUNCTION WITH CONSTRUCTION OF EACH PHASE.
22. EROSION CONTROL DESIGN AND CONSTRUCTION SHALL FOLLOW THE REQUIREMENTS IN INDEX NOS. 101, 102 AND 103 OF FDOT ROADWAY AND TRAFFIC DESIGN STANDARDS.
23. THE REVIEWER MAY APPROVE MODIFICATIONS OR ALTER PLANS TO THESE EROSION CONTROL CRITERIA DUE TO SITE SPECIFIC CONDITIONS.

EARTHWORK AND DRAINAGE SPECIFICATIONS

1. CLEARING AND GRUBBING: CLEARING AND GRUBBING SHALL BE PERFORMED WITHIN THE LIMITS OF THE PROJECT WORK IN ACCORDANCE WITH SECTION 110, FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) SPECIFICATIONS. THIS ITEM SHALL INCLUDE, BUT IS NOT LIMITED TO, THE COMPLETE REMOVAL AND LEGAL DISPOSAL OF ALL TREES, BRUSH, STUMPS, ROOTS, GRASS, WEEDS, RUBBISH AND OTHER UNDESIRABLE MATERIAL TO A DEPTH OF 18 INCHES BELOW NATURAL GROUND OR PROPOSED FINISHED GRADE, WHICHEVER IS LOWER. THE AREAS TO BE CLEARED GENERALLY CONSIST OF THE ENTIRE SITE WITH THE EXCEPTION OF AREAS SPECIFICALLY NOTED ON THE LANDSCAPE PLANS AS PRESERVE AREAS OR AS AREAS TO REMAIN UN-CLEARED. CARE SHALL BE TAKEN TO INSURE THAT NO PRESERVE AREAS OR WETLAND AREAS ARE IMPACTED BY THE CLEARING OPERATION. PRIOR TO INITIATING THE CLEARING OPERATION, ALL ADJACENT WETLAND AND PRESERVE AREAS SHALL BE MARKED AND FLAGGED IN ACCORDANCE WITH THE ST. LUCIE COUNTY AND SOUTH FLORIDA WATER MANAGEMENT DISTRICT (SFWMD) REQUIREMENTS ALL SUCH AREAS IMMEDIATELY ADJACENT TO THE CLEARING OPERATION SHALL ALSO BE PROTECTED BY THE INSTALLATION OF TEMPORARY SILT BARRIERS IN ACCORDANCE WITH THE REQUIREMENTS OF GLADES COUNTY AND THE SFWMD. FURTHER EROSION CONTROL SHALL BE ACCOMPLISHED BY SEEDING AND MULCHING ALL DISTURBED AREAS AS SOON AS THEY ARE AT FINAL GRADE, PER THE SPECIFICATIONS FOR SEEDING AND MULCHING FOUND ELSEWHERE ON THIS SHEET.

   ALL MATERIAL SHALL BE REMOVED FROM THE SITE AND SHALL BE LEGALLY DISPOSED OF IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL REQUIREMENTS.

2. EARTHWORK AND GRADING: ALL EARTHWORK AND GRADING SHALL BE PERFORMED AS REQUIRED TO ACHIEVE THE FINAL GRADES, TYPICAL SECTIONS AND ELEVATIONS SHOWN ON THE PLANS. IN ALL OTHER RESPECTS, MATERIALS AND CONSTRUCTION METHODS FOR EARTHWORK, EMBANKMENT, EXCAVATION AND GRADING SHALL CONFORM TO THE REQUIREMENTS OF FDOT SPECIFICATIONS, SECTION 120. ANY PLASTIC OR OTHERWISE UNDESIRABLE MATERIAL WITHIN 36 INCHES OF FINISHED ROAD GRADE SHALL BE REMOVED AND REPLACED WITH SUITABLE MATERIAL. THE CONTRACTOR SHALL ALSO REFER TO THE SOILS REPORT, IF AVAILABLE. THE SPECIFICATIONS AND RECOMMENDATIONS INCLUDED IN THAT REPORT SHALL BE CONSIDERED AS A PART OF THESE PLANS AND SPECIFICATIONS. SHOULD THERE BE ANY CONFLICT BETWEEN THAT DOCUMENT AND ANY REQUIREMENTS OF THESE DRAWINGS OR SPECIFICATIONS, THE MOST RESTRICTIVE REQUIREMENT SHALL GOVERN.

3. PAVING IMPROVEMENTS: ALL AREAS PROPOSED FOR PAVING SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE DESIGN GRADES AND TYPICAL SECTIONS SHOWN ON THE DRAWINGS, AND IN CONFORMANCE TO THE REQUIREMENTS OF THE GLADES COUNTY AND FLORIDA DEPARTMENT OF TRANSPORTATION.

   A. ASPHALT: PRIME COAT AND TACK COAT FOR BASE COURSE AND BETWEEN LIFTS OF ASPHALT SHALL CONFORM TO THE REQUIREMENTS OF SECTIONS 300-1 THROUGH 300-7 OF THE FDOT SPECIFICATIONS. PRIME COAT SHALL BE APPLIED AT A RATE OF 0.25 GALLONS PER SQUARE YARD AND TACK COAT AT A RATE OF 0.10 GALLONS PER SQUARE YARD, UNLESS OTHERWISE APPROVED BY THE ENGINEER.

      ASPHALT SURFACE COURSE THICKNESS AND MATERIAL SHALL BE AS SHOWN ON THE TYPICAL SECTIONS AND SHALL IN ALL WAYS CONFORM TO THE REQUIREMENTS OF FDOT.

   B. BASE: LIMEROCK BASE MATERIAL SHALL BE COMPACTED TO 98% OF MAXIMUM DENSITY PER AASHTO T-180. ALL LIMEROCK SHALL MEET THE MINIMUM REQUIREMENTS OF FDOT SECTION 911. AS AN ALTERNATE, CEMENTED COQUINA CONFORMING TO FDOT SECTION 915 MAY BE SUBSTITUTED AND SHALL BE SUBJECT TO THE COMPACTION SPECIFICATIONS DETAILED ABOVE AND INCLUDED IN THE SOILS ENGINEER'S REPORT.

   C. SUB-GRADE: SUB-GRADE SHALL BE COMPACTED TO 98% OF MAXIMUM DENSITY PER AASHTO T-180, AND STABILIZED TO A MINIMUM FBV OF 50PSI. SUB-GRADE SHALL BE THOROUGHLY ROLLED WITH A PNEUMATIC TIRED ROLLER PRIOR TO SCHEDULING ANY SUB-GRADE INSPECTION.

   D. VALLEY GUTTER/ F-CURB/D-CURB/FLUSH CURB: SHALL BE CONSTRUCTED PER THE TYPICAL SECTION BY EXTRUDING MACHINE OR FORMS AS SHOWN ON THE PLANS. MINIMUM CONCRETE COMPRESSIVE STRENGTH SHALL BE 3,000PSI AFTER 28 DAYS. SUB-GRADE SHALL BE MOISTENED AT THE TIME CONCRETE IS PLACED TO INSURE A UNIFORMLY DAMP SURFACE. READY-MIX CONCRETE SHALL HAVE A SLUMP OF BETWEEN 2 AND 4 INCHES. NO WATER SHALL BE ADDED TO INCREASE WORKABILITY. TEST CYLINDERS SHALL BE MADE FOR THE STRENGTH TESTING OF EACH BATCH OF CONCRETE FOR AT LEAST 7 AND 28 DAY TESTING.

   E. SOD: A MINIMUM OF A TWO-FOOT WIDE STRIP OF SOD, OR AS OTHERWISE SHOWN ON THE PLANS, SHALL BE PLACED ALONG THE BACK OF CURB OF ALL CONSTRUCTED PAVEMENT TO AID IN PREVENTION OF EROSION AND SOIL STABILITY. SOD SHALL BE PLACED IN CONFORMANCE TO FDOT SECTION 570, 575 AND 981. GENERALLY, THE SODDING REQUIREMENTS SHALL BE AS SPECIFIED ON THE LANDSCAPE PLANS, PREPARED BY OTHERS.

   F. SEED, FERTILIZE AND MULCH: ALL DISTURBED AREAS SHALL BE STABILIZED WITH SEED, FERTILIZER AND MULCH UPON COMPLETION AND ACCEPTANCE BY ENGINEER OF FINAL GRADING. SEED, FERTILIZER AND MULCH SHALL BE IN CONFORMANCE TO FDOT SECTIONS 570, 575 AND 981. THE CONTRACTOR IS RESPONSIBLE FOR ESTABLISHING A STAND OF GRASS SUFFICIENT TO PREVENT EROSION PRIOR TO REMOVAL OF THE TEMPORARY SILT FENCES. THIS APPLIES ONLY TO THOSE AREAS NOT COVERED BY THE SODDING SPECIFIED IN THE LANDSCAPE PLANS, PREPARED BY OTHERS.

   G. TESTING: THE CONTRACTOR SHALL SECURE THE SERVICES OF AN APPROVED INDEPENDENT TESTING LABORATORY TO CONDUCT ALL REQUIRED TESTING ON SUB-GRADE, BASE, ASPHALT AND CONCRETE. LOCATIONS REQUIRED FOR THESE TESTS SHALL BE AS REQUIRED BY THE GLADES COUNTY, AND/OR IN THE CASE OF THE TURN-LANE IMPROVEMENTS AS REQUIRED BY THE GLADES COUNTY. AT A MINIMUM, TESTING SHALL BE AS RECOMMENDED BY FDOT. SHOULD ANY TESTS FAIL, CONTRACTOR SHALL AT HIS OWN EXPENSE, REPAIR THE DEFICIENCIES AND RETEST THE WORK UNTIL COMPLIANCE WITH THE SPECIFICATIONS IS DEMONSTRATED.

   H. TRAFFIC CONTROL: THE INSTALLATION OF TRAFFIC CONTROL DEVICES SHALL BE IN CONFORMANCE TO THE REQUIREMENTS OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, THE GLADES COUNTY. MAINTENANCE OF TRAFFIC DURING CONSTRUCTION SHALL BE AS REQUIRED BY FDOT.

4. DRAINAGE IMPROVEMENTS: ALL LABOR, MATERIALS AND CONSTRUCTION METHODS SHALL BE IN CONFORMANCE TO THE MINIMUM ENGINEERING AND CONSTRUCTION STANDARDS OF THE GLADES COUNTY AND FDOT SPECIFICATIONS. TRENCH EXCAVATION AND BACK-FILLING OPERATIONS SHALL MEET OR EXCEED THE REQUIREMENTS OF FDOT SPECIFICATIONS, SECTION 125. THE CONTRACTOR SHALL PROVIDE THE NECESSARY BACK-FILL COMPACTION TESTING REQUIRED TO DEMONSTRATE COMPLIANCE WITH THIS SECTION. THE PIPE TRENCH SHALL BE DRY WHEN PIPE IS LAID AND THE PIPE SHALL BE BEDDED PER THE DETAILS AND PER FDOT SPECIFICATIONS.

   THE CONTRACTOR SHALL COMPLY WITH CHAPTER 90-96, LAWS OF FLORIDA, WHICH REQUIRES THE CONTRACTOR PERFORMING TRENCH EXCAVATIONS OVER FIVE FEET IN DEPTH COMPLY WITH ALL APPLICABLE TRENCH SAFETY STANDARDS AND SHORING REQUIREMENTS AS SET FORTH IN THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION'S (OSHA) EXCAVATION AND SAFETY STANDARDS, 29 C.F.R. 19926.650, SUB-PART P AND INCORPORATED AS THE STATE OF FLORIDA STANDARD, AS REVISED AND/OR UPDATED. THE COST OF COMPLIANCE WITH THIS REQUIREMENT SHALL BE INCLUDED AS A SEPARATE LINE ITEM ON THE CONTRACTOR'S BID. OTHERWISE, CONTRACTOR CERTIFIES THAT THE COST OF COMPLIANCE IS INCLUDED IN THE UNIT COST OF ALL ITEMS OF WORK TO WHICH THIS REQUIREMENT APPLIES.

   A. REINFORCED CONCRETE PIPE (RCP): RCP SHALL CONFORM TO THE REQUIREMENTS OF ASTM SPECIFICATIONS C-76, CLASS III, WALL THICKNESS "B", LATEST REVISION. ALL JOINTS SHALL BE SOIL-TIGHT. PIPE GASKET SHALL CONFORM TO FDOT SPECIFICATIONS, SECTION 942.

   B. CORRUGATED METAL PIPE (CMP): ALL CMP SHALL BE STEEL, ROUND, HELICAL-WOUND CORRUGATED PIPE CONFORMING TO AASHTO-M 36 AND FDOT SECTION 943. PIPE ENDS AT JOINTS SHALL BE REFORMED TO A MINIMUM OF 2 ANNULAR CORRUGATIONS FOR THE COMPLETE BAND WIDTH. ALL JOINTS SHALL BE SOIL-TIGHT. ALL CONNECTING BANDS SHALL BE CORRUGATED ANNULAR COUPLING BANDS. A NEOPRENE GASKET OF AT LEAST 7 INCHES WIDE BY 3/8 INCH THICK SHALL BE USED FOR ALL PIPES OF 36-INCH DIAMETER AND SMALLER. LARGER PIPE SIZES REQUIRE GASKETS OF AT LEAST 10-1/2 INCHES IN WIDTH. ALL CMP SHALL BE INSTALLED AT MAXIMUM LENGTHS TO REDUCE THE NUMBER OF JOINTS.

   C. CORRUGATED ALUMINUM PIPE (CAP): ALL CAP SHALL BE ALUMINUM ALLOY, ROUND, HELICAL-WOUND CORRUGATED PIPE CONFORMING TO AASHTO-M 196 AND FDOT SECTION 945. PIPE ENDS AT JOINTS SHALL BE REFORMED TO A MINIMUM OF 2 ANNULAR CORRUGATIONS FOR THE COMPLETE BAND WIDTH. ALL JOINTS SHALL BE SOIL-TIGHT. ALL CONNECTING BANDS SHALL BE CORRUGATED ANNULAR COUPLING BANDS. A NEOPRENE GASKET OF AT LEAST 7 INCHES WIDE BY 3/8 INCH THICK SHALL BE USED FOR ALL PIPES OF 36-INCH DIAMETER AND SMALLER. LARGER PIPE SIZES REQUIRE GASKETS OF AT LEAST 10-1/2 INCHES IN WIDTH. ALL CAP SHALL BE INSTALLED AT MAXIMUM LENGTHS TO REDUCE THE NUMBER OF JOINTS.

   D. CORRUGATED HIGH DENSITY POLYETHYLENE PIPE (HDPE): ALL HDPE PIPE SHALL BE RESIN CONFORMING TO ASTM D3350 MINIMUM CELL CLASSIFICATION 435400C, ROUND, ONLY ANNULAR CORRUGATIONS AND CONFORMING TO FDOT SECTION 948-2.3. ALL JOINTS SHALL BE SOIL-TIGHT. ALL CONNECTING BANDS SHALL BE CORRUGATED ANNULAR COUPLING BANDS. A NEOPRENE GASKET OF AT LEAST 7 INCHES WIDE BY 3/8 INCH THICK SHALL BE USED FOR ALL PIPES OF 36-INCH DIAMETER AND SMALLER. LARGER PIPE SIZES REQUIRE GASKETS OF AT LEAST 10-1/2 INCHES IN WIDTH. ALL HDPE SHALL BE INSTALLED AT MAXIMUM LENGTHS TO REDUCE THE NUMBER OF JOINTS.

   E. CONTECH A-2000 PVC DRAINAGE PIPE (A-2000): ALL A-2000 CORRUGATED PIPE WITH A SMOOTH INTERIOR SHALL CONFORM TO THE REQUIREMENTS OF ASTM DESIGNATION F949 & F794 DUAL WALL CORRUGATED PROFILE (DWCP) PIPE. PIPE AND FITTINGS SHALL BE HOMOGENEOUS THROUGHOUT AND FREE FROM VISIBLE CRACKS, HOLES, FOREIGN INCLUSIONS OR OTHER INJURIOUS DEFECTS. PIPE SHALL BE MANUFACTURED TO 46 PSI STIFFNESS WHEN TESTED IN ACCORDANCE WITH ASTM TEST METHOD D2412. THERE SHALL BE NO EVIDENCE OF SPLITTING, CRACKING OR BREAKING WHEN THE PIPE IS TESTED PER ASTM TEST METHOD D2412 AND F949 SECTION 7.5. THE PIPE SHALL BE MADE OF PVC COMPOUND HAVING A MINIMUM CELL CLASSIFICATION OF 12454B AS DEFINED IN ASTM SPECIFICATION D1784.

   F. PVC DRAINAGE PIPE: PVC DRAINAGE PIPE SHALL BE C-900 WITH PUSH-ON JOINTS (NO GLUED JOINTS) AND SHALL BE AS SPECIFIED FOR SANITARY SEWER CONSTRUCTION, EXCEPT THAT IT SHALL BE WHITE IN COLOR. ANY PORTION OF THE PVC STORM PIPE THAT MAY BE EXPOSED TO SUNLIGHT, SUCH AS ITS OUTLET TO THE DETENTION POND, SHALL BE PAINTED TO PROTECT IT FROM UV LIGHT.

   G. INLETS, MANHOLES, AND JUNCTION BOXES: ALL DRAINAGE INLETS, MANHOLES, AND JUNCTION BOXES SHALL BE PRECAST CONCRETE CONFORMING TO ASTM C-478 AND 64T. ALL CONCRETE SHALL HAVE NOT LESS THAN 4000-PSI COMPRESSIVE STRENGTH AT 28 DAYS. STRUCTURE SECTIONS SHALL BE JOINED WITH A MASTIC SEALING COMPOUND. THE REMAINING SPACE SHALL BE FILLED WITH THE CEMENT MORTAR AND FINISHED SO AS TO PRODUCE A SMOOTH CONTINUOUS SURFACE INSIDE AND OUTSIDE THE WALL SECTIONS. ALL OPENINGS IN PRECAST STRUCTURES SHALL BE CAST AT THE TIME OF MANUFACTURE. HOLES FOR PIPING SHALL BE SIX INCHES LARGER THAN THE OUTSIDE DIAMETER OF THE PROPOSED PIPE. ALL SPACES BETWEEN THE MANHOLE AND THE PIPE SHALL BE COMPLETELY FILLED WITH MORTAR AND FINISHED SMOOTH. MORTAR USED FOR CONCRETE STRUCTURES SHALL CONFORM TO M C-270. MORTAR MATERIAL SHALL BE MIXED ONE PART TYPE 2 PORTLAND CEMENT TO TWO PARTS AGGREGATE BY VOLUME. PORTLAND CEMENT SHALL CONFORM TO ASTM C-144 AND AGGREGATE SHALL CONFORM TO ASTM C-144. THE CONTRACTOR SHALL FURNISH THE ENGINEER WITH SHOP DRAWINGS OF ALL PRECAST STRUCTURES FOR HIS APPROVAL PRIOR TO FABRICATION. SHOP DRAWINGS SHALL SHOW ALL DIMENSION, REINFORCING STEEL AND SPECIFICATIONS. STORM MANHOLES SHALL BE CONSTRUCTED WITH A TRAFFIC BEARING CAST-IRON SLOTTED GRATE.

   H. TRENCH BACKFILL SHALL BE AS SHOWN IN THE DRAINAGE DETAILS. IN ADDITION, TESTING UNDER PAVED AREAS SHALL BE AS FOLLOWS: ONE TEST LOCATION MIDWAY BETWEEN STRUCTURES AND ONE TEST LOCATION ADJACENT TO EACH STRUCTURE. ENGINEER MAY REQUEST ADDITIONAL LOCATIONS. TESTING IN EACH LOCATION SHALL BEGIN IN THE FIRST FOOT ABOVE THE CULVERT WITH TESTS EVERY TWO FEET TO WITHIN TWO FEET OF THE SUB-GRADE. DENSITY SHALL BE TO 100 PERCENT OF MAXIMUM AS DETERMINED BY AASHTO T-99.

   I. CONTROL STRUCTURES: SHALL BE CONSTRUCTED PER THE ABOVE SPECIFICATIONS FOR INLETS, MANHOLES, AND JUNCTION BOXES EXCEPT THAT THE STRUCTURES SHALL INCLUDE THE BLEEDERS AND WEIRS AS SHOWN ON THE DETAIL.

   J. RIP-RAP ENERGY DISSIPATERS: SHALL BE CONSTRUCTED PER THE DETAILS AND AS SHOWN ON THE DRAWINGS AT THE CONTROL STRUCTURES CS-1, CS-2 & CS-3, THE DOWNSTREAM BUBBLE-UP STRUCTURES. THE RUBBLE SHALL BE OF MATERIAL AND PLACED IN ACCORDANCE TO FDOT SECTION 530-2.3 (MATERIAL) AND FDOT SECTION 530-3.3 (CONSTRUCTION METHODS). SHOULD BROKEN CONCRETE BE USED AS THE RUBBLE, IT SHALL BE FREE FROM REINFORCING BARS OR WIRE MESH. THE CONTRACTOR SHALL USE CARE IN THE PLACEMENT OF THE STONE SO THAT IT IS NOT DROPPED ON THEW FABRIC IN SUCH A FASHION THAT TEARS THE FABRIC. THE FABRIC SHALL BE AS SPECIFIED IN FDOT SECTION 985 AND SHALL BE OF THE WOVEN DESIGN AND AS SPECIFIED FOR USE WITH RIPRAP PER TABLE 1 OF THIS SECTION. THE BEDDING STONE SHALL BE OF THE TYPE TYPICALLY USED FOR DRAINFIELD ROCK AND SHALL MEET THE REQUIREMENTS OF FDOT FOR DRAINFIELD ROCK.

ENGINEER OF RECORD INSPECTION REQUIREMENTS

	F.B.V.		DENSITY		L.B.R.		THICKNESS	
	MAX. SPACING		MAX. SPACING		MAX. SPACING		MAX. SPACING	
	LINEAR FEET	SQUARE FEET	LINEAR FEET	SQUARE FEET	LINEAR FEET	SQUARE FEET	LINEAR FEET	SQUARE FEET
COMPACTED OR STABILIZED GRADE	200	5,000	200	5,000	200	5,000	300	10,000
ROCK BASE	----	----	300	10,000	300	10,000	300	10,000
SHELL ROCK	----	----	300	10,000	----	----	300	10,000
ASPHALT	----	----	----	----	----	----	PER INSP.	PER INSP.

ALL TESTING SHALL BE TAKEN IN A STAGGERED SAMPLING PATTERN FROM A POINT 12" INSIDE THE LEFT EDGE OF THE ITEM TESTED, TO THE CENTER, TO A POINT INSIDE OF THE RIGHT EDGE

ENGINEER OF RECORD INSPECTION REQUIREMENTS
CONTRACTOR TO CALL CONTRACT ENGINEER OF RECORD
48 HOURS ADVANCE FOR FOLLOWING INSPECTIONS:
1. PRECONSTRUCTION MEETING
2. DRAINAGE PIPE (UNCOVERED)
3. PAVEMENT SUBGRADE
4. PAVEMENT BASE
5. FINAL

DATE	DESCRIPTION	ENGINEER	CAD
4/20/26	REVISED GRADING PER FDOT MODIFICATIONS	TL	PDC
1/08/26	REVISED PER WWTP SITE	TL	GL
8/29/23	REVISED PER CONTRACTOR COMMENTS	TL	PDC/JQ
8/2/23	REVISED WETLAND GRADIENT AND IMPERMEABLE BARRIERS COMMENTS	TL	PDC
7/5/23	REVISED PER SFWMD LETTER COMMENTS DATED 6/26/23	TL	PDC/CC
4/25/23	REVISED AS PER COUNTY LETTER DATED 4/25/23	SLD	JCS/AA

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GENERAL NOTES

PHASE 1 - COMMERCIAL AREAS
LOCATED IN SECTIONS 34&35, TOWNSHIPS 38&39 SOUTH, RANGE 34 EAST, GLADES COUNTY, FLORIDA

NEWLINES LAND CONSULTANTS

STEVEN L. DOBBS, P.E.

FLORIDA CERTIFICATE OF AUTHORIZATION NO. 00029206 DATE
STEVEN L. DOBBS ENGINEERING, LLC
1062 JAKES WAY OKEECHOBEE, FL 34974, PHONE (863) 824-7644

PROJECT No. 21534
DRAWN BY YB/MB
SCALE NTS
DATE 4/28/2026

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