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LICENSED BUSINESS NUMBER 107

MADEIRA BEACH, PINELLAS COUNTY

FLORIDA

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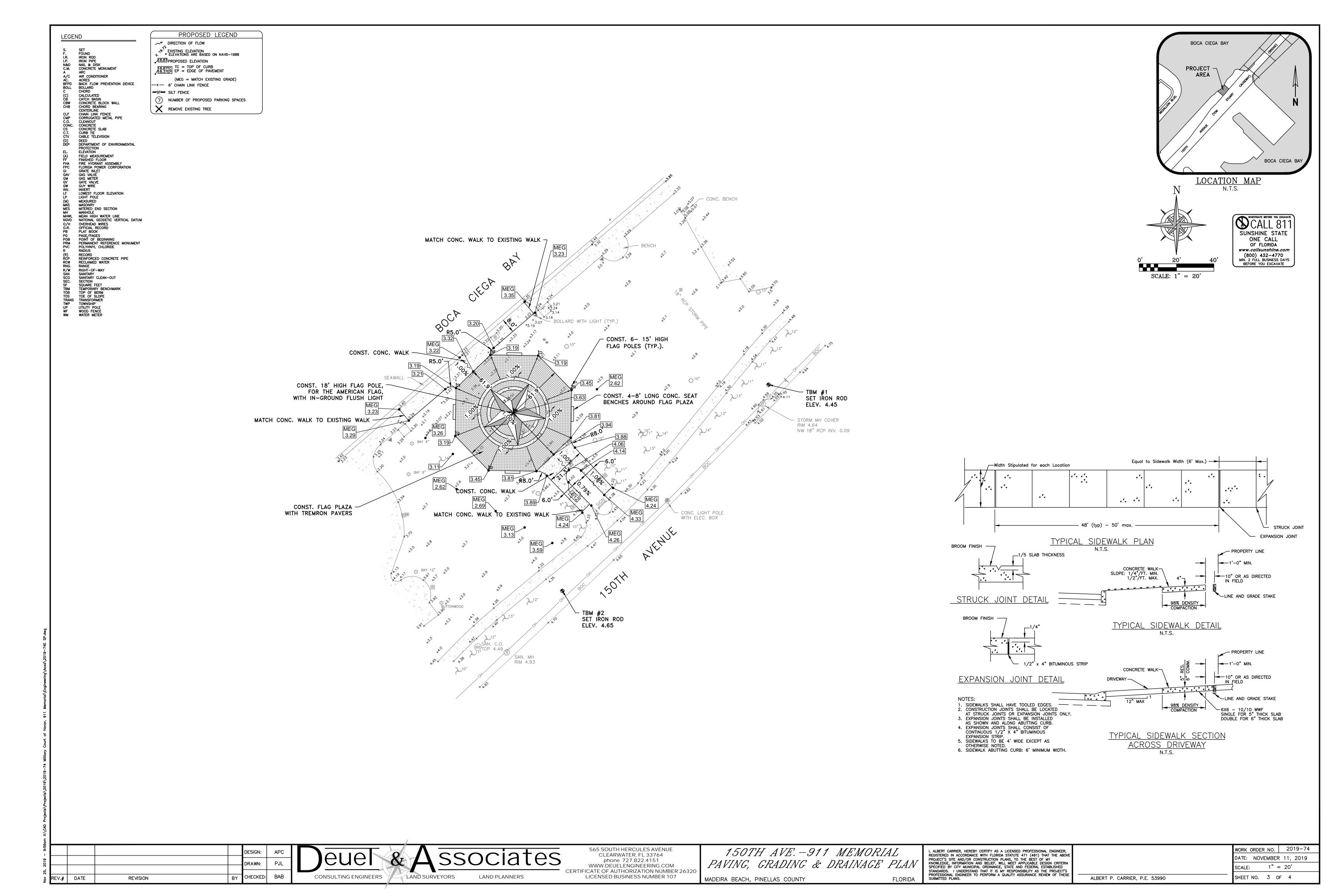
REVISION

CONSULTING ENGINEERS

LAND SURVEYORS

LAND PLANNERS

1" = 20'SHEET NO. 2 OF 4 ALBERT P. CARRIER, P.E. 53990



THIS WORK PRIOR TO CONSTRUCTION.

- ALL RIGHT-OF-WAY INSTALLATIONS WILL BE IN ACCORDANCE WITH PRACTICES REFERENCED IN THE STATE OF FLORIDA UTILITIES ACCOMMODATIONS MANUAL.
- 2. ALL DESIGN AND CONSTRUCTION MUST CONFORM TO THE MINIMUM STANDARDS SET DOWN IN PINELLAS COUNTY LAND DEVELOPMENT, ZONING AND/OR RELATED ORDINANCES, AND MINIMUM
- TESTING FREQUENCY REQUIREMENTS.

  3. LOCATIONS, ELEVATIONS, AND DIMENSIONS OF EXISTING UTILITIES, STRUCTURES, AND OTHER FEATURES ARE SHOWN ACCORDING TO THE BEST INFORMATION AVAILABLE AT THE TIME OF PREPARATION OF THESE PLANS. THE CONTRACTOR SHALL VERIFY THE LOCATIONS, ELEVATIONS, AND DIMENSIONS OF ALL EXISTING UTILITIES, STRUCTURES AND OTHER FEATURES AFFECTING
- 4. THE CONTRACTOR SHALL CHECK THE PLANS FOR CONFLICTS AND DISCREPANCIES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY THE OWNER'S ENGINEER OF ANY CONFLICTS OR DISCREPANCIES BEFORE PERFORMING ANY WORK IN THE AFFECTED AREA.
- 5. THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION IN AREAS OF BURIED UTILITIES, AND SHALL PROVIDE AT LEAST 48 HOURS NOTICE TO THE VARIOUS UTILITY COMPANIES, IN ORDER TO PERMIT MARKING THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES, IN ADVANCE OF CONSTRUCTION, BY CALLING "SUNSHINE" AT 1-800-432-4770. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING ALL UTILITIES NOT INCLUDED IN THE "SUNSHINE" PROGRAM.
- 6. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY DAMAGE TO EXISTING FACILITIES, ABOVE OR BELOW GROUND, THAT MAY OCCUR AS A RESULT OF THE WORK PERFORMED BY THE
- 7. ALL UNDERGROUND UTILITIES MUST BE IN PLACE AND TESTED OR INSPECTED PRIOR TO BASE AND SURFACE CONSTRUCTION.
- 8. IT IS THE CONTRACTOR'S RESPONSIBILITY TO BECOME FAMILIAR WITH THE PERMIT AND INSPECTION REQUIREMENTS OF THE VARIOUS GOVERNMENTAL AGENCIES. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS PRIOR TO CONSTRUCTION, AND SCHEDULE INSPECTIONS
- 9. THE CONTRACTOR SHALL SUBMIT FOR APPROVAL TO THE OWNER'S ENGINEER, SHOP DRAWINGS ON ALL PRECAST AND MANUFACTURED ITEMS WHICH ARE FROM THIS SITE. FAILURE TO OBTAIN APPROVAL BEFORE INSTALLATION MAY RESULT IN REMOVAL AND REPLACEMENT AT THE CONTRACTOR'S EXPENSE. ALL SHOP DRAWINGS ARE TO BE REVIEWED AND APPROVED BY THE CONTRACTOR PRIOR TO SUBMITTAL TO THE OWNER'S ENGINEER.
- 10. AT LEAST THREE (3) WORKING DAYS PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE ENGINEER AND APPROPRIATE AGENCIES, AND SUPPLY THEM WITH ALL REQUIRED SHOP DRAWINGS, THE CONTRACTOR'S NAME, STARTING DATE, PROJECTED SCHEDULE, AND OTHER INFORMATION AS REQUIRED. ANY WORK PERFORMED PRIOR TO NOTIFYING THE ENGINEER, OR WITHOUT AGENCY INSPECTOR PRESENT, MAY BE SUBJECT TO REMOVAL AND REPLACEMENT AT THE CONTRACTOR'S EXPENSE.
- 11. BACKFILL MATERIAL SHALL BE SOLIDLY TAMPED AROUND PIPES IN 6" LAYERS UP TO A LEVEL OF AT LEAST ONE FOOT ABOVE THE TOP OF THE PIPE. IN AREAS TO BE PAVED, BACKFILL SHALL BE COMPACTED TO 100% MAXIMUM DENSITY AS DETERMINED BY AASHTO T-99.
- 12. SITE WORK CONCRETE SHALL HAVE A COMPRESSIVE STRENGTH OF AT LEAST 3,000 P.S.I. IN 28 DAYS, UNLESS OTHERWISE NOTED.
- 13. ALL PRIVATE AND PUBLIC PROPERTY AFFECTED BY THIS WORK SHALL BE RESTORED TO A CONDITION EQUAL TO OR BETTER THAN EXISTING CONDITIONS UNLESS SPECIFICALLY EXEMPTED BY THE PLANS. ADDITIONAL COSTS ARE INCIDENTAL TO OTHER CONSTRUCTION AND NO EXTRA COMPENSATION IS TO BE ALLOWED.
- 14. ALL DISTURBED AREAS WHICH ARE NOT TO BE SODDED, ARE TO BE SEEDED AND MULCHED TO DOT STANDARDS, AND MAINTAINED UNTIL A SATISFACTORY STAND OF GRASS, ACCEPTABLE TO THE REGULATORY AGENCY AND ENGINEER OF RECORD, HAVE BEEN OBTAINED. ANY WASHOUTS, REGRADING, RESEEDING, AND GRASSING WORK, AND OTHER EROSION WORK REQUIRED, WILL BE PERFORMED BY THE CONTRACTOR, UNTIL THE SYSTEM IS ACCEPTED FOR MAINTENANCE, BY THE REGULATORY AGENCY AND ENGINEER OF RECORD.
- 15. THE SOILS ENGINEER IS TO SUPPLY THE ENGINEER WITH A PHOTOCOPY OF ALL COMPACTION TESTS, AND ASPHALT RESULTS. THE SOILS ENGINEER IS TO CERTIFY TO THE ENGINEER OF RECORD, IN WRITING, THAT ALL TESTING REQUIREMENTS, REQUIRED BY THE LOCAL REGULATORY AGENCY, AND THE FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT), FOR THE IMPROVEMENTS, AS REQUIRED BY THE ENGINEERING CONSTRUCTION DRAWINGS, HAVE BEEN SATISFIED.
- 16. THE CONTRACTOR SHALL MAINTAIN A COPY OF THE APPROVED PLANS AND PERMITS AT THE CONSTRUCTION SITE.
- 17. THESE DRAWINGS DO NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR MEANS AND METHODS FOR CONSTRUCTION SITE SAFETY.
- 18. ALL SODDING, SEEDING AND MULCHING SHALL INCLUDE WATERING AND FERTILIZATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THESE AREAS UNTIL THE PROJECT IS COMPLETED AND ACCEPTED BY THE OWNER.
- 19. SAFE PEDESTRIAN TRAFFIC IS TO BE MAINTAINED AT ALL TIMES.
- 20. SIGNS AND BARRICADES SHALL BE IN ACCORDANCE WITH THE US DEPARTMENT OF TRANSPORTATION'S "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" AND THE FLORIDA DEPARTMENT OF TRANSPORTATION'S "DESIGN STANDARDS" INDEXES 600 THROUGH 670 (LATEST EDITIONS).
- 21. ANY SIDEWALK WHICH BECOMES UNDERMINED MUST BE REMOVED AND REPLACED. SIDEWALKS ARE TO BE RECONSTRUCTED WITHIN THREE (3) DAYS AFTER REMOVAL. WHEN EXISTING SIDEWALK IS REMOVED, IT IS TO BE REMOVED TO THE NEAREST JOINT.
- 22. PLACE EXPANSION JOINTS WHERE 4" AND 6" CONCRETE ABUT.

IN PASSABLE CONDITION AT END OF WORK DAY.

LEFT SMALLER THAN 5'.

- 23. PLACE EXPANSION JOINT BETWEEN BACK-OF-CURB AND CONCRETE DRIVEWAY.24. SAW CUT EXISTING EDGE-OF-PAVEMENT PRIOR TO REMOVAL OF CURB AND PLACEMENT OF
- 24. SAW CUT EXISTING EDGE-OF-PAVEMENT PRIOR TO REMOVAL OF CURB AND PLACEMENT (
  ASPHALT.
- 25. COMPACTION FOR PIPE BACKFILL SHALL COMPLY WITH AASHTO T-99 (100 %).

  26. DISTURBED AREA WITHIN THE RIGHT-OF-WAY WILL BE COMPACTED TO 100% OF MAXIMUM
- DENSITY AND SODDED.

  27. DO NOT DISTURB EXISTING UNDERDRAIN OR STORM SYSTEMS. IF FILTRATION BED IS DISTURBED,
- CONTACT THE AREA INSPECTOR WITH THE CITY HIGHWAY DEPARTMENT FOR ASSISTANCE.

  28. COORDINATE THE CUTTING OF DRIVEWAYS WITH OWNER PRIOR TO CUT. ALL DRIVEWAYS WILL BE
- 29. CONCRETE DRIVEWAYS PERMITTED TO BE CUT ARE TO BE RESTORED WITH 6" OF 3000 PSI CONCRETE WITH 6" X 6" 10 GAUGE WRE WELDED FABRIC. PLACE 1/2" EXPANSION JOINT BETWEEN BACK OF CURB AND NEW DRIVE. ANY PORTION OF DRIVEWAY AT OR NEAR CUTS THAT BECOMES UNDERMINED WILL BE REMOVED PRIOR TO CONCRETE BEING PLACED. EXISTING CRACKS IN DRIVEWAYS ARE TO BE DOCUMENTED AS PRE—EXISTING OR THAT SECTION REPLACED AT THE CITY HIGHWAY DEPARTMENT'S OPTION. AREA BENEATH PATCH TO BE MECHANICALLY TAMPED PRIOR TO PLACING CONCRETE. MINIMUM REPAIR WIDTH TO BE 5' WITH NO SECTION
- 30. ASPHALT DRIVES PERMITTED TO BE CUT ARE TO BE RESTORED UTILIZING THE SAME MATERIAL AS EXISTING BASE WITH MINIMUM 6" THICKNESS, COMPACTED AND PRIMED. ASPHALT IS TO MATCH EXISTING THICKNESS WITH A MINIMUM OF 1 1/2" THICKNESS. ASPHALT TO BE PC-3 OR ALTERNATE APPROVED BY THE COUNTY HIGHWAY DEPARTMENT PRIOR TO USE. ASPHALT IS TO BE COMPACTED TO ACHIEVE DENSITY REQUIREMENTS FOR PC-3. RECEIPTS AND DELIVERY TICKETS SHOULD REFLECT SUPPLIER AND HIS CERTIFICATION AS TO TYPE OF ASPHALT SUPPLIED.
- 31. TYPE OF SOD USED TO RESTORE OWNER-MAINTAINED AREA IN RIGHT OF WAY SHALL BE COORDINATED WITH OWNER.
- 32. NO STOCKPILING OF MATERIAL IN ROADWAY OR ON SIDEWALK; ALL DIRT AND DEBRIS WILL BE REMOVED FROM JOB SITE DAILY. ROADS AND SIDEWALK TO BE SWEPT DAILY AS PART OF DAILY CLEAN—UP.
- IN THE OPINION OF THE COUNTY HIGHWAY DEPARTMENT, SHALL BE REPAIRED AT CONTRACTOR EXPENSE IN A MANNER SPECIFIED BY THE COUNTY HIGHWAY DEPARTMENT.

  34. THE PERMITTEE'S ATTENTION IS DIRECTED TO THE PROVISIONS OF THE TRENCH SAFETY ACT

33. ANY PORTION OF THE ROADWAY THAT SUSTAINS EXCESSIVE CONSTRUCTION RELATED DAMAGE.

- 34. THE PERMITTEE'S ATTENTION IS DIRECTED TO THE PROVISIONS OF THE TRENCH SAFETY ACT (FLORIDA STATUTES, SECTION 553.60 ET. SEQ.) AND THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION EXCAVATION SAFETY STANDARDS (29 C.F.R. SECTION 1926.650, SUBPART P) WHICH SHALL APPLY TO CONSTRUCTION, OPERATION AND MAINTENANCE PURSUANT TO THIS PERMIT.
- 35. NOTIFY PROPERTY OWNERS REGARDING SPRINKLER SYSTEM, PLANTS AND MAIL BOXES THAT WILL BE DISTURBED DURING CONSTRUCTION PRIOR TO STARTING WORK.
- 36. PRIOR TO COMMENCEMENT OF WORK AND/OR PRIOR TO START OF RESTORATION, COORDINATE THROUGH A "WALK-THROUGH" WITH THE COUNTY HIGHWAY DEPARTMENT REPRESENTATIVE TO ENSURE MUTUAL AGREEMENT REGARDING SUCH MATTERS AS EXTENT OF ROADWAY TO BE OVERLAID AFTER PATCHING, THE EXTENT OF DRIVEWAY REPLACEMENT ESPECIALLY CONCRETE,
- 37. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN A SAFE AND EASILY ACCESSIBLE PAVED OR UNPAVED PATHWAY FOR PEDESTRIAN TRAFFIC THROUGH THE WORK ZONE FOR THE DURATION OF THE CONSTRUCTION PROJECT. IF THE PATHWAY LIES ALONG A DESIGNATED SCHOOL—WALKING ROUTE THEN THE CONTRACTOR MUST PROVIDE ADEQUATE SUPERVISION AND/OR GUIDANCE TO THE SCHOOL AGED STUDENTS AS THEY TRAVERSE THRU THE WORK

#### GRADING AND DRAINAGE NOTES

- 1. ALL DELETERIOUS SUBSTANCE MATERIAL, (I.E. MUCK, PEAT, BURIED DEBRIS), IS TO BE EXCAVATED IN ACCORDANCE WITH THESE PLANS, OR AS DIRECTED BY THE OWNER'S ENGINEER, OR OWNER'S SOIL TESTING COMPANY. DELETERIOUS MATERIAL IS TO BE STOCKPILED OR REMOVED FROM THE SITE AS DIRECTED BY THE OWNER. EXCAVATED AREAS ARE TO BE BACKFILLED WITH APPROVED MATERIALS AND COMPACTED AS SHOWN ON THESE PLANS.
- 2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING EXCAVATIONS AGAINST COLLAPSE AND WILL PROVIDE BRACING, SHEETING, OR SHORING, AS NECESSARY. TRENCHES SHALL BE KEPT DRY WHILE PIPE AND APPURTENANCES ARE BEING PLACED. DEWATERING SHALL BE USED AS REQUIRED.
- 3. ALL STORM SEWER PIPE SHALL BE REINFORCED CONCRETE CLASS III (ASTM C-76) UNLESS OTHERWISE NOTED ON PLANS.
- 4. PVC STORM PIPE, 12" AND SMALLER SHALL CONFORM TO AWWA C-900, CLASS 150 STANDARDS, UNLESS OTHERWISE NOTED.
- 5. ALL DRAINAGE STRUCTURE GRATES AND COVERS WITHIN TRAFFIC AREAS SHALL BE TRAFFIC RATED FOR H-20 LOADINGS.
- 6. THE CONTRACTOR IS TO SOD THE RETENTION/DETENTION POND AS INDICATED ON PLANS WITHIN ONE WEEK FOLLOWING CONSTRUCTION OF THE POND.
- 7. MATERIALS AND CONSTRUCTION METHODS FOR STREETS AND STORM DRAINAGE CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LOCAL REGULATORY AGENCY.

#### DAVING NOTES

TO BE 4" WIDE PAINTED WHITE STRIPES.

TRAFFIC DESIGN STANDARDS".

- PRIOR TO CONSTRUCTING CONCRETE PAVEMENT, THE CONTRACTOR IS TO SUBMIT A PROPOSED JOINTING PATTERN TO THE OWNER'S ENGINEER FOR APPROVAL.
- 2. THE CONTRACTOR IS TO PROVIDE A 1/2" BITUMINOUS EXPANSION JOINT MATERIAL WITH SEALER, AT ABUTMENT OF CONCRETE AND ANY STRUCTURE.
- 3. ALL PAVEMENT MARKINGS SHALL BE MADE WITH TRAFFIC PAINT IN ACCORDANCE TO FDOT STANDARD SPECIFICATIONS 971-12 OR 971-13. PARKING STALL STRIPING
- 4. THE CONTRACTOR IS TO INSTALL EXTRA BASE MATERIAL WHEN THE DISTANCE BETWEEN THE PAVEMENT ELEVATION AND THE TOP OF THE PIPE OR BELL IS LESS THAN TWELVE (12) INCHES.
- 5. STANDARD INDEXES REFER TO THE LATEST EDITION OF FDOT "ROADWAY AND

## PAVING, GRADING & DRAINAGE TESTING AND INSPECTION REQUIREMENTS

- 1. THE STORM DRAINAGE PIPING AND FILTRATION SYSTEM SHALL BE SUBJECT TO A VISUAL INSPECTION BY THE OWNER'S SOILS ENGINEER PRIOR TO THE PLACEMENT OF
- 2. THE CONTRACTOR SHALL MAINTAIN THE STORM DRAINAGE SYSTEMS UNTIL FINAL ACCEPTANCE OF THE PROJECT.
- 3. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING THE APPLICABLE TESTING WITH THE SOILS ENGINEER. TESTS WILL BE REQUIRED PURSUANT WITH THE TESTING SCHEDULE FOUND IN THE ENGINEERING CONSTRUCTION DRAWINGS. UPON COMPLETION OF THE WORK, THE SOILS ENGINEER MUST SUBMIT CERTIFICATIONS TO THE OWNER'S ENGINEER STATING THAT ALL REQUIREMENTS HAVE BEEN MET.

#### WATER SYSTEM NOTES

- 1. ALL WATER MAINS SHALL HAVE A MINIMUM OF 36 INCHES OF COVER.
- 2. ALL WATER SYSTEM WORK SHALL CONFORM WITH LOCAL REGULATORY STANDARDS AND SPECIFICATIONS.
- 3. ALL DUCTILE IRON PIPE SHALL BE CLASS 52 IN ACCORDANCE WITH ANSI A 21.50 (AWWA C 150) AND ANSI A 21.31 (AWWA C 151) AND PIPE SHALL RECEIVE EXTERIOR BITUMINOUS COATING IN ACCORDANCE WITH ANSI A 21.6, A 21.8 OR A 21.51 AND SHALL BE MORTAR LINED, STANDARD THICKNESS, AND BITUMINOUS SEALED IN ACCORDANCE WITH ANSI A (AWWA C 104-71).
- 4. ALL FITTINGS LARGER THAN 2" SHALL BE DUCTILE IRON CLASS 53 IN ACCORDANCE WITH AWWA C-110 WITH A PRESSURE RATING OF 350 PSI. JOINTS SHALL BE MECHANICAL JOINTS IN ACCORDANCE WITH AWWA C-111. FITTINGS SHALL BE CEMENT MORTAR LINED AND COATED IN ACCORDANCE WITH AWWA C-104.
- 5. ALL PVC WATER MAINS 4" THROUGH 12" SHALL BE IN ACCORDANCE WITH AWWA C-900. PIPE SHALL BE CLASS 150 AND MEET THE REQUIREMENTS OF SDR 18 IN ACCORDANCE WITH ASTM
- 6. WATER MAIN PIPING OF LESS THAN 4" SHALL BE PER PVC SDR26.
- 7. ALL FITTINGS 2" AND SMALLER SHALL BE PVC SDR21 WITH PUSH ON JOINTS.
- 8. ALL GATE VALVES 2" OR LARGER SHALL BE RESILIENT SEAT OR RESILIENT WEDGE MEETING
  THE REQUIREMENTS OF AWWA C509
- 9. ALL FIRE HYDRANTS SHALL MEET THE REQUIREMENTS OF AWWA C502 AND SHALL BE APPROVED BY THE LOCAL UTILITY AND FIRE MARSHAL.
- 10. THE CONTRACTOR IS TO INSTALL TEMPORARY BLOW-OFFS AT THE END OF WATER SERVICE
- LATERALS TO ASSURE ADEQUATE FLUSHING AND DISINFECTION.

  11. THRUST BLOCKING SHALL BE PROVIDED AT ALL FITTINGS AND HYDRANTS AS SHOWN ON
- 12. MATERIALS AND CONSTRUCTION METHODS FOR WATER DISTRIBUTION SYSTEM SHALL BE IN ACCORDANCE WITH THE LOCAL REGULATORY AGENCY CODES.
- 13. THE IRRIGATION SYSTEM SHALL HAVE COLOR CODED PIPING AND LABELING ON THE PIPE TO INSURE DIFFERENTIATION FROM POTABLE WATER PIPING.

# WATER SYSTEM TESTING AND INSPECTION REQUIREMENTS

- THE PERMIT HOLDER SHALL MAKE THE APPLICABLE TESTS PRESCRIBED IN SECTIONS 312.2 THROUGH 312.9 OF THE 2004 FLORIDA BUILDING CODES, AS UPDATED, TO DETERMINE COMPLIANCE WITH THE PROVISIONS OF THIS CODE. THE PERMIT HOLDER SHALL GIVE REASONABLE ADVANCE NOTICE TO THE CODE OFFICIAL WHEN THE PLUMBING WORK IS READY FOR TESTS. THE EQUIPMENT, MATERIAL, POWER AND LABOR NECESSARY FOR THE INSPECTION AND TEST SHALL BE FURNISHED BY THE PERMIT HOLDER, AND THE PERMIT HOLDER SHALL BE RESPONSIBLE FOR DETERMINING THAT THE WORK WILL WITHSTAND THE TEST PRESSURE PRESCRIBED IN THE ABOVE MENTIONED SECTIONS. ALL PLUMBING SYSTEM PIPING SHALL BE TESTED WITH EITHER WATER OR, FOR PIPING SYSTEMS OTHER THAN PLASTIC, BY AIR. AFTER THE PLUMBING FIXTURES HAVE BEEN SET AND THEIR TRAPS FILLED WITH WATER, THE ENTIRE DRAINAGE SYSTEM SHALL BE SUBMITTED TO FINAL TESTS. THE CODE OFFICIAL SHALL REQUIRE THE REMOVAL OF ANY CLEANOUTS IF NECESSARY TO ASCERTAIN WHETHER THE PRESSURE HAS REACHED ALL PARTS OF THE SYSTEM.
- 2. ALL COMPONENTS OF THE WATER SYSTEM, INCLUDING FITTINGS, HYDRANTS, CONNECTIONS, AND VALVES SHALL REMAIN UNCOVERED UNTIL PROPERLY PRESSURE TESTED AND ACCEPTED BY THE OWNER'S ENGINEER AND THE CODE OFFICIAL. CONTRACTOR TO NOTIFY OWNER'S ENGINEER AND CODE OFFICIAL 48 HOURS IN ADVANCE OF PERFORMING TESTS.

HORIZONTAL SEPARATION BETWEEN UNDERGROUND WATER MAINS AND SANITARY OR STORM SEWERS, WASTEWATER OR SEWER FORCE MAINS AND RECLAIMED WATER PIPELINES.

- (A) NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST FIVE FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED STORM SEWER, STORMWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62—610, F.A.C.

  (B) NEW OR RELOCATED LINDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL
- (B) NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST FIVE FEET, AND PREFERABLY TEN FEET, BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED VACUUM—TYPE SANITARY SEWER
- (C) NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST FIVE FEET, AND PREFERABLY TEN FEET, BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED GRAVITY— OR PRESSURE—TYPE SANITARY SEWER, WASTEWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62—610, F.A.C.
- (D) NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST TEN FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND ALL PARTS OF ANY EXISTING OR PROPOSED "ON—SITE SEWAGE TREATMENT AND DISPOSAL SYSTEM" AS DEFINED IN SECTION 381.0065(2), F.S., AND RULE 64E—6.002, F.A.C.

# VERTICAL SEPARATION BETWEEN UNDERGROUND WATER MAINS AND SANITARY OR STORM SEWERS, WASTEWATER OR STORMWATER FORCE MAINS, AND RECLAIMED WATER PIPELINES

- (A) NEW OR RELOCATED, UNDERGROUND WATER MAINS CROSSING ANY EXISTING OR PROPOSED GRAVITY— OR VACUUM—TYPE SANITARY SEWER OR STORM SEWER SHALL BE LAID SO THE OUTSIDE OF THE WATER MAIN IS AT LEAST 12 INCHES, ABOVE OR AT LEAST 12 INCHES BELOW THE OUTSIDE OF THE OTHER PIPELINE. HOWEVER, IT IS PREFERABLE TO LAY THE WATER MAIN ABOVE THE OTHER PIPELINE.
- (B) NEW OR RELOCATED, UNDERGROUND WATER MAINS CROSSING ANY EXISTING OR PROPOSED PRESSURE—TYPE SANITARY SEWER, WASTEWATER OR STORMWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER SHALL BE LAID SO THE OUTSIDE OF THE WATER MAIN IS AT LEAST 12 INCHES ABOVE OR BELOW THE OUTSIDE OF THE OTHER PIPELINE. HOWEVER, IT IS PREFERABLE TO LAY THE WATER MAIN ABOVE THE OTHER PIPELINE.
- (C) AT THE UTILITY CROSSINGS DESCRIBED IN PARAGRAPHS (A) AND (B) ABOVE, ONE FULL LENGTH OF WATER MAIN PIPE SHALL BE CENTERED ABOVE OR BELOW THE OTHER PIPELINE SO THE WATER MAIN JOINTS WILL BE AS FAR AS POSSIBLE FROM THE OTHER PIPELINE. ALTERNATIVELY, AT SUCH CROSSINGS, THE PIPES SHALL BE ARRANGED SO THAT ALL WATER MAIN JOINTS ARE AT LEAST THREE FEET FROM ALL JOINTS IN VACUUM—TYPE SANITARY SEWERS, STORM SEWERS, STORMWATER FORCE MAINS, OR PIPELINES CONVEYING RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62—610, F.A.C., AND AT LEAST SIX FEET FROM ALL JOINTS IN GRAVITY— OR PRESSURE—TYPE SANITARY SEWERS, WASTEWATER FORCE MAINS, OR PIPELINES CONVEYING RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62—610. F.A.C.

## SANITARY SEWER NOTES

- 1. ALL SANITARY SEWER MAINS & LATERALS SHALL HAVE A MINIMUM OF 36 INCHES
- ALL SANITARY SEWER MAINS & SERVICE LATERALS SHALL BE CONSTRUCTED OF POLYVINYL CHLORIDE PIPE, SDR 35 OR AS OTHERWISE INDICATED ON THE CONSTRUCTION DRAWINGS.
- 3. ALL SANITARY SEWER WORK SHALL CONFORM WITH LOCAL REGULATORY STANDARDS AND SPECIFICATIONS.
- 4. PRIOR TO COMMENCING WORK WHICH REQUIRES CONNECTING NEW WORK TO EXISTING LINES OR APPURTENANCES, THE CONTRACTOR SHALL VERIFY LOCATION AND ELEVATION OF EXISTING CONNECTION POINT AND NOTIFY OWNER'S ENGINEER OF ANY CONFLICTS OR DISCREPANCIES.
- 5. PVC PIPE AND FITTINGS SHALL CONFORM TO ASTM SPECIFICATIONS DESIGNATION D-3034-77C, MA SDR 35. INSTALLATION OF SDR 35 PIPE SHALL BE IN STRICT ACCORDANCE WITH THE REQUIREMENTS OF ASTM SPECIFICATION SECTION D2321. ALL SANITARY SEWER PIPELINES SHALL BE SOLID GREEN IN COLOR.
- 6. ALL PVC FORCE MAINS SHALL BE CLASS 200, SDR 21, COLOR GREEN, WITH A GREEN MAGNETIC TAPE A MINIMUM OF 2" WIDE, PLACED 1 FOOT BELOW THE PROPOSED GRADE. THE PRINTING ON THE MAGNETIC TAPE SHOULD READ "FORCEMAIN".
- 7. ALL DUCTILE IRON PIPE SHALL BE CLASS 52 IN ACCORDANCE WITH ANSI A 21.50 (AWWA C 150) AND ANSI A21.51 (AWWA C 151). DUCTILE IRON PIPE SHALL RECEIVE INTERIOR AND EXTERIOR BITUMINOUS COATING IN ACCORDANCE WITH ANSI A 21.6, A 21.8 OR A 21.51
- 8. ALL SANITARY SEWER GRAVITY MAINS OR SANITARY SEWER FORCEMAINS THAT REQUIRE D.I.P. ARE TO BE POLYLINED OR EPOXY LINED.
- 9. ALL SANITARY SEWER COVERS SHALL BE TRAFFIC RATED FOR H-20 LOADING.

# SANITARY SEWER TESTING AND INSPECTION REQUIREMENTS

- ALL GRAVITY SEWER PIPING SHALL BE SUBJECT TO A TELEVISION INSPECTION BY THE OWNER'S CONTRACTOR. CONTRACTOR TO NOTIFY THE ENGINEER 48 HOURS IN ADVANCE TO SCHEDULE INSPECTION.
- 2. THE CONTRACTOR SHALL PERFORM AN EXFILTRATION TEST ON ALL GRAVITY SEWERS INSTALLED IN ACCORDANCE WITH THE REGULATION AGENCY HAVING JURISDICTION.
  MAXIMUM ALLOWABLE LEAKAGE RATE: 200 GPD PER INCH PIPE DIAMETER PER MILE.
  TEST RESULTS ARE TO BE SUBMITTED TO THE REGULATORY AGENCY FOR APPROVAL.
  COORDINATION AND NOTIFICATION OF ALL PARTIES IS THE CONTRACTOR'S RESPONSIBILITY.
- 3. ALL FORCE MAINS SHALL BE SUBJECT TO A HYDROSTATIC PRESSURE TEST IN ACCORDANCE WITH THE REGULATORY AGENCY HAVING JURISDICTION. SAID TESTS ARE TO BE CERTIFIED BY THE ENGINEER OF RECORD AND SUBMITTED TO THE REGULATORY AGENCY FOR APPROVAL. COORDINATION AND NOTIFICATION OF ALL PARTIES IS THE CONTRACTOR'S RESPONSIBILITY.

## S.W.F.W.M.D. / EROSION CONTROL NOTES

- 1. DURING CONSTRUCTION SEDIMENT IS TO REMAIN ON SITE. THE CONTRACTOR IS RESPONSIBLE FOR THE INSTALLATION OF EROSION AND SEDIMENT CONTROL DEVICES PRIOR TO INITIATING AND DURING ALL PHASES OF LAND CLEARING AND CONSTRUCTION TO PREVENT SOIL EROSION AND SILTATION.
- 2. ROUGH EXCAVATE RETENTION AREAS.
- 3. DIRECT ALL SURFACE DRAINAGE TOWARD RETENTION AREA DURING CONSTRUCTION.
- 4. AFTER PAVING, GRADE RETENTION AREAS TO CONTOURS, SHAPE AS SHOWN AND SOD.5. ALL DISTURBED CONDITIONS SHALL BE RESTORED TO NATURAL CONDITIONS OR
- BETTER.

  6. ALL SIDE SLOPES OF RETENTION OR SWALE AREAS SHALL BE STABILIZED BY
- 6. ALL SIDE SLOPES OF RETENTION OR SWALE AREAS SHALL BE STABILIZED BY VEGETATION OR OTHER MATERIALS TO MINIMIZE EROSION AND PROTECT THE STORMWATER BASIN.

NOTE: PLAN CONFLICTS, SHOWN OR UNSHOWN, WITH OTHER EXISTING SITE IMPROVEMENTS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO MAKE ADJUSTMENTS AND PROTECT OR REINSTALL ALL DISTURBED EXISTING UTILITIES, PHONE LINES, POWER LINES, POWER SUPPORT CABLES, SPRINKLER LINES AND CONTROLS, MECHANICAL PIPELINES OR UNDERGROUND POWER CABLES AND RETURN EXISTING CONCRETE WALKS, DUMPSTER PADS, FENCE, HANDRAIL, VALVES, HYDRANTS, GUY WIRES, ELECTRIC BOXES AND PIPELINES WHICH SHALL BE REPAIRED OR REINSTALLED AS INCIDENTAL TO THE COST OF WORK SHOWN HEREUNDER. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RESOLVE ANY CONFLICTS PRIOR TO AWARD OF THE CONTRACT.

NOTE: REQUIRED EROSION CONTROL MEASURES MUST REMAIN INTACT THROUGHOUT CONSTRUCTION. FAILURE TO INSTALL OR PROPERLY MAINTAIN THESE BARRICADES WILL RESULT IN ENFORCEMENT ACTION WHICH MAY INCLUDE CITATIONS, AS PROVIDED BY CHAPTERS 40D-4 & 40D-40 F.A.C. INITIATION OF CIVIL PENALTY PROCEDURES PURSUANT TO SECTION 373.129. F.A.C. CAN RESULT IN A PENALTY NOT TO EXCEED \$10,000 PER OFFENSE WITH EACH DATE DURING WHICH SUCH VIOLATION OCCURS CONSTITUTING A OFFENSE.

MAINTENANCE AND OPERATIONS INSPECTIONS FOR STORMWATER DISCHARGE FACILITY

1. ALL SODDED AREAS SHALL BE MOWED AND MAINTAINED PROPERLY.

- UNDER NO CIRCUMSTANCES SHALL THE RETENTION AREA BE FILLED WITH ANY OTHER SUBSTANCE THAN STORMWATER.
- 3. SWALE AREAS SHALL BE KEPT CLEAN AND FREE OF ANY OBSTRUCTIONS.
- 4. IF DAMAGE TO THE SYSTEM DOES OCCUR, THE SYSTEM SHALL BE RECONSTRUCTED IN ACCORDANCE WITH THE APPROVED PLAN.

# OPERATION & MAINTENANCE OF THE STORMWATER SYSTEM

THE OWNER SHALL PERIODICALLY MONITOR THE STORMWATER SYSTEM (PIPE CONVEYANCE SYSTEM AND RETENTION POND) FOR SILT AND SEDIMENTATION BUILD UP. THE PIPE CONVEYANCE SYSTEM SHALL BE FLUSHED, AS DEEMED NECESSARY NO LESS THAN TWICE A YEAR. ALL MATERIAL SHALL BE COLLECTED DOWNSTREAM AND REMOVED. THE RETENTION POND SHALL BE KEPT MOWED AND THE BOTTOM FREE OF DEBRIS. IF WATER STANDS IN THE POND MORE THAN 48 HOURS THE OWNER SHALL RAKE AND/OR SCARIFY THE POND BOTTOM, AS DEEMED NECESSARY AND NO LESS THAN TWICE A YEAR TO RESTORE THE PERCOLATION CHARACTERISTICS OF THE POND. THE OWNER WILL BE RESPONSIBLE TO MAKE SURE THAT TO THE BEST OF HIS ABILITY NOTHING ENTERS THE SYSTEM BESIDES STORMWATER THAT COULD DETERIORATE THE FUNCTIONING CAPABILITIES OF THE SYSTEM, I.E. GASOLINE, OIL, GREASE, CHEMICALS,

THE POND UNDERDRAIN SYSTEM SHALL BE INSPECTED ANNUALLY AND RETROFITTED AND FLUSHED SEMI—ANNUALLY. CLOGGED OR SPENT FILTER MATERIAL SHALL BE DISPOSED OF IN ALL MANNERS AS WITH THE HANDLING OF HAZARDOUS WASTE. THE SPENT FILTER MATERIAL SHALL BE DISPOSED OF IN A PERMITTED FACILITY.

## NOTICE TO ALL CONTRACTORS AND DEVELOPERS

THE DOMESTIC WATER SYSTEM AND THE STORM DRAIN FILTER SYSTEM FOR THIS PROJECT MUST BE INSPECTED BY OUR OFFICE IN ORDER THAT THEY BE CERTIFIED TO THE APPROPRIATE GOVERNMENTAL AGENCY. IT IS, THEREFORE, IMPERATIVE THAT OUR OFFICE BE NOTIFIED AT LEAST 24 HOURS PRIOR TO BACKFILLING OVER THESE FACILITIES. FAILURE TO DO SO WILL RESULT IN THESE FACILITIES HAVING TO BE UNCOVERED AND INSPECTED BEFORE A CERTIFICATE OF OCCUPANCY IS ISSUED. YOUR CERTIFICATE OF OCCUPANCY WILL BE WITHHELD UNTIL THE MATTER IS

DEUEL & ASSOCIATES (727) 822-4151

### CLEARING AND GRUBBING NOTES

- 1. PRIOR TO ANY SITE CLEARING, ALL TREES SHOWN TO REMAIN ON THE CONSTRUCTION PLANS SHALL BE PROTECTED IN ACCORDANCE WITH THE LOCAL REGULATORY AGENCY'S TREE ORDINANCE AND DETAILS CONTAINED IN THESE PLANS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN THESE TREES IN GOOD CONDITION. NO TREES SHOWN TO REMAIN SHALL BE REMOVED WITHOUT WRITTEN APPROVAL FROM THE
- 2. THE CONTRACTOR IS TO PREPARE THE SITE PRIOR TO BEGINNING ACTUAL CONSTRUCTION IN ACCORDANCE, WITH THE SOILS TESTING REPORT. COPIES OF THE SOILS REPORT ARE AVAILABLE THROUGH THE OWNER OR THE SOILS TESTING COMPANY. QUESTIONS REGARDING SITE PREPARATION REQUIREMENTS DESCRIBED IN THE SOILS REPORT ARE TO BE DIRECTED TO THE SOILS TESTING COMPANY.
- 3. THE CONTRACTOR SHALL CLEAR AND GRUB, ONLY THOSE PORTIONS OF THE SITE, NECESSARY FOR CONSTRUCTION. DISTURBED AREAS WILL BE SEEDED, MULCHED, OR PLANTED WITH OTHER APPROVED LANDSCAPE MATERIAL IMMEDIATELY FOLLOWING
- 4. THE TOP 4" TO 6" OF GROUND REMOVED DURING CLEARING AND GRUBBING SHALL BE STOCKPILED AT A SITE DESIGNATED BY THE OWNER TO BE USED FOR LANDSCAPING PURPOSES, UNLESS OTHERWISE DIRECTED BY THE OWNER.
- 5. ALL CONSTRUCTION DEBRIS AND OTHER WASTE MATERIAL SHALL BE DISPOSED OF OFF-SITE IN ACCORDANCE WITH APPLICABLE REGULATIONS. ONLY "GRADING BY HAND" IS PERMITTED WITHIN THE CANOPY LINE OF TREES THAT ARE TO REMAIN.
- THE CONTRACTOR IS TO OBTAIN ALL NECESSARY PERMITS FOR REMOVING ANY EXISTING STRUCTURES.
- 7. IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY ALL UTILITY COMPANIES TO DISCONNECT OR REMOVE THEIR FACILITIES PRIOR TO REMOVING OR DEMOLISHING
- 8. THE CONTRACTOR WILL BE RESPONSIBLE FOR MAKING A VISUAL INSPECTION OF THE SITE AND WILL BE RESPONSIBLE FOR THE DEMOLITION AND REMOVAL OF ALL UNDERGROUND AND ABOVE GROUND STRUCTURES THAT WILL NOT BE INCORPORATED WITH THE NEW FACILITIES. SHOULD ANY DISCREPANCIES EXIST WITH THE PLANS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR CALLING THE OWNER AND REQUESTING A CLARIFICATION OF THE PLANS PRIOR TO DEMOLITION.
- 9. DURING CONSTRUCTION, ALL STORM SEWER INLETS IN THE VICINITY OF THE PROJECT SHALL BE PROTECTED BY SEDIMENT TRAPS SUCH AS SECURED HAY BALES, SOD, STONE, ETC., WHICH SHALL BE MAINTAINED AND MODIFIED AS REQUIRED BY CONSTRUCTION PROGRESS.
- 10. ALL EROSION AND SILTATION CONTROL METHODS SHALL BE IMPLEMENTED PRIOR TO THE
- START OF CONSTRUCTION AND MAINTAINED UNTIL CONSTRUCTION IS COMPLETE.

  11. WHEN CONSTRUCTION IS COMPLETED, THE RETENTION/DETENTION AREAS WILL BE RESHAPED, CLEANED OF SILT, MUD AND DEBRIS, AND RE—SODDED IN ACCORDANCE TO
- 12. CONTRACTOR IS TO PROVIDE EROSION CONTROL/SEDIMENTATION BARRIER (HAY BALES OR SILTATION CURTAIN) TO PREVENT SILTATION OF ADJACENT PROPERTY, STREETS, STORM SEWERS, WATERWAYS, AND EXISTING WETLANDS.
- 13. THE SILT FENCE WILL NOT BE TRENCHED IN WHERE ADJACENT TO TREES DESIGNATED TO REMAIN. THE SILT FENCE MUST BE SECURED THROUGH THE PLACEMENT OF FILL OVER THE LOWER LIP OF THE BARRICADE.
- PINELLAS COUNTY RIGHT OF WAY NOTES
- 1. ALL PROPOSED WORK MUST COMPLY WITH FDOT INDEX NO.700 (LATEST EDITION).
- ALL R.O.W. INSTALLATIONS WILL BE IN ACCORDANCE WITH PRACTICES REFERENCED IN THE STATE OF FLORIDA UTILITIES ACCOMMODATIONS MANUAL.
- ALL DESIGN AND CONSTRUCTION MUST CONFORM TO THE MINIMUM STANDARDS SET DOWN IN PINELLAS COUNTY LAND DEVELOPMENT, ZONING AND/OR RELATED ORDINANCES, AND MINIMUM TESTING FREQUENCY REQUIREMENTS.
- 4. SIGNS AND BARRICADES SHALL BE IN ACCORDANCE WITH THE U.S. DEPARTMENT OF TRANSPORTATION'S "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" AND THE FLORIDA DEPARTMENT OF TRANSPORTATION'S "DESIGN STANDARDS" INDEXES 600 THROUGH 670 (LATEST EDITIONS).
- 5. INSTALLATIONS INVOLVING CONCRETE AND ASPHALT DRIVEWAY, IN GOOD CONDITION,
- MUST BE ACCOMPLISHED BY JACK AND BORE OR PUSHING. NO JETTING IS ALLOWED.

  6. COMPACTION FOR PIPE BACKFILL SHALL COMPLY WITH AASHTO T-99(100%).
- 7. DISTURBED AREA WITHIN THE R.O.W. WILL BE COMPACTED TO 100% OF MAXIMUM DENSITY AND SODDED.
- 8. ANY PORTION OF THE ROADWAY THAT SUSTAINS EXCESSIVE CONSTRUCTION RELATED DAMAGE, IN THE OPINION OF PINELLAS COUNTY HIGHWAY DEPARTMENT, SHALL BE REPAIRED AT CONTRACTOR EXPENSE IN A MANNER SPECIFIED BY PINELLAS COUNTY HIGHWAY DEPARTMENT.
- 9. SAFE PEDESTRIAN TRAFFIC IS TO BE MAINTAINED AT ALL TIMES.
- 10. ANY SIDEWALK WHICH BECOMES UNDERMINED MUST BE REMOVED AND REPLACED SIDEWALKS ARE TO BE RECONSTRUCTED WITHIN THREE(3) DAYS AFTER REMOVAL WHEN EXISTING SIDEWALK IS REMOVED, IT IS TO BE REMOVED AT THE NEAREST
- 11. NO STOCKPILING OF MATERIAL IN ROADWAY OR ON SIDEWALK; ALL DIRT OR DEBRIS WILL BE REMOVED FROM THE JOB SITE DAILY. ROADS AND SIDEWALKS ARE TO BE SWEPT DAILY AS PART OF DAILY CLEAN—UP.
- 12. PLACE EXPANSION JOINT BETWEEN BACK-OF-CURB AND CONCRETE SIDEWALK.
- 13. PRIOR TO COMMENCEMENT OF WORK AND/OR PRIOR TO START OF RESTORATION, COORDINATE THROUGH A "WALK-THROUGH" WITH PINELLAS COUNTY HIGHWAY DEPARTMENT REPRESENTATIVE TO ENSURE MUTUAL AGREEMENT REGARDING SUCH MATTERS AS EXTENT OF ROADWAY TO BE OVERLAID AFTER PATCHING, THE EXTENT
- OF DRIVEWAY REPLACEMENT —— ESPECIALLY CONCRETE, ETC.

  14. HANDICAP RAMPS SHALL BE INSTALLED ACCORDING TO FDOT IND.#304
- 15. REMOVE & REPLACE ANY EXISTING SIDEWALK WITHIN PINELLAS COUNTY R.O.W. THAT HAS BEEN DAMAGED DUE TO DEMOLITION AND PORTIONS NOT MEETING A.D.A. REQUIREMENTS.
- PERMANENT OBSTACLES ARE ALLOWED IN THIS AREA.

  17. LANE CLOSURES MUST BE SCHEDULED 48 HOURS IN ADVANCE WITH PINELLAS COUNTY PUBLIC WORKS AND SHALL NOT OCCUR DURING PEAK HOURS PERIODS OF

THE SIDEWALK WITH A MAXIMUM SLOPE OF 3/4" PER LINEAR FOOT. NO

16. A MINIMUM REQUIRED SIDEWALK SHOULDER CLEAR ZONE OF 2' FROM THE EDGE OF

## LANDSCAPE NOTES:

- 1. WARNING: ABOVE-GROUND AND/OR UNDERGROUND UTILITIES MAY BE IN THE AREA OF THIS PROJECT. PROCEED WITH CAUTION: CALL 1-800-432-4770 48 HOURS PRIOR TO CONSTRUCTION.
- 2. ALL TRIMMING UNDERTAKEN ON A TREE PROTECTED BY THE PROVISIONS OF THE LAND DEVELOPMENT CODE SHALL BE PRUNED IN ACCORDANCE WITH THE AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI) A-300 PRUNING
- 3. A ONE HUNDRED PERCENT (100%) COVERAGE IRRIGATION SYSTEM SHALL BE INSTALLED FOR ALL LANDSCAPED AREAS. SHALLOW WELLS, OPEN SURFACE WATER BODIES, OR RECLAIMED WATER MUST BE USED AS A SOURCE
- AREAS. SHALLOW WELLS, OPEN SURFACE WATER BODIES, OR RECLAIMED WATER MUST BE USED AS A SOURCE OF IRRIGATION WATER. THE IRRIGATION SYSTEM SHALL NOT BE CONNECTED TO CITY, COUNTY, OR MUNICIPAL WATER SOURCES UNLESS IT CAN BE DEMONSTRATED THAT THESE OTHER SOURCES ARE NOT AVAILABLE.

4. IN THE EVENT THE IRRIGATION SYSTEM IS CONNECTED TO THE PUBLIC POTABLE WATER SUPPLY, THE IRRIGATION

HOSES TO PROVIDE DIRECT APPLICATION AND LOW EVAPORATION. SYSTEMS THAT OVER SPRAY AREAS THAT DO

NOT REQUIRE IRRIGATION, SUCH AS PAVED AREAS WILL NOT BE ACCEPTABLE. HIGH IRRIGATION NEED AREAS

- SYSTEM SHALL INCLUDE AN APPROVED BACK FLOW PREVENTER AT THE SERVICE CONNECTION (POINT OF CONNECTION).

  5. THE IRRIGATION SYSTEM MUST UTILIZE LOW VOLUME DESIGN SUCH AS LOW TRAJECTORY HEADS OR SOAKER
- MUST NOT OVER SPRAY LOW NEED AREAS.

  6. HIGH WATER DEMAND LANDSCAPE AREAS SUCH AS TURF MUST BE SERVED BY A SEPARATE IRRIGATION ZONE THAN LOW WATER NEED AREAS, SUCH AS PLANTER BEDS OR MULCHED AREAS WITH TREES. IN NO CASE SHALL
- 7. THE IRRIGATION SYSTEM MUST BE OPERATED BY AN IRRIGATION CONTROLLER CAPABLE OF DIFFERENTIATING BETWEEN THE SCHEDULES OF HIGH AND LOW WATER DEMAND AREAS. CONTROLLERS MUST HAVE MULTIPLE CYCLE START CAPACITY AND A FLEXIBLE CALENDAR PROGRAM ABLE TO BE SET TO COMPLY WITH LOCAL OR WATER MANAGEMENT DISTRICT IMPOSED RESTRICTIONS.
- 8. THE AUTOMATIC IRRIGATION SYSTEM MUST BE EQUIPPED WITH A RAIN SENSOR DEVICE OR SWITCH WHICH WILL OVERRIDE THE IRRIGATION CYCLE OF THE SPRINKLER SYSTEM WHEN ADEQUATE RAINFALL HAS OCCURRED. GROUND MOISTURE SENSING DEVICES ARE ENCOURAGED WHERE APPROPRIATE.

ANY PLANTED VEGETATION AREA BE MORE THAN 50' FROM A WATER SUPPLY HOSE BIBB.

- 9. UNDERGROUND IRRIGATION SHALL NOT BE INSTALLED WITHIN THE DRIP LINES OF EXISTING TREES UNLESS ROOT PROTECTION MEASURES ARE PROVIDED.
- 10. SOILS WITHIN ALL PLANTING AREAS SHALL BE SUITABLE OR AMENDED FOR PROPOSED PLANTINGS WITH REGARDS TO PH, SOIL TEXTURE, SOIL STRUCTURE, AND SEASONAL HIGH WATER TABLE.
- 11. ALL AREAS DISTURBED DURING CONSTRUCTION OR NOT DESIGNATED FOR TREES AND SHRUBS, SHALL RECEIVE SOD IN ORDER TO STABILIZE SOIL AND CONTROL STORMWATER RUNOFF.12. PER THE NEW FLORIDA BUILDING CODE, ALL IRRIGATION LINES AND HEADS MUST BE MAINTAINED A MINIMUM
- DISTANCE OF ONE FOOT FROM ALL STRUCTURES.

  13. ALL PLANT MATERIAL SHALL BE FLORIDA #1 OR BETTER AS GIVEN IN, "GRADES AND STANDARDS FOR NURSERY
- 14. LOCATION OF PLANTS ON THE PLAN ARE DIAGRAMMATIC. THE PLANT MATERIAL LIST IS PROVIDED FOR THE CONVENIENCE OF THE LANDSCAPE CONTRACTOR; SHOULD THERE BE ANY DISCREPANCY BETWEEN THE PLANT LIST

PLANTS", LATEST EDITION, PUBLISHED BY THE FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES.

AND THE PLAN, THE PLAN SHALL PREVAIL.

15. IT IS THE LANDSCAPE CONTRACTORS RESPONSIBILITY TO INSURE THAT ALL PLANT BED AREAS HAVE PROPER

DRAINAGE FOR OPTIMUM GROWTH OF LANDSCAPE MATERIAL.

- 16. THE CONTRACTOR SHALL INSURE THAT ALL PLANTING ISLANDS AND OTHER AREAS SHALL BE CLEAN OF TRASH, CONSTRUCTION DEBRIS, OR OTHER WASTE MATERIALS TO A DEPTH OF 24" PRIOR TO LANDSCAPE INSTALLATION.
- 17. ALL PLANT BEDS AND TREE RINGS SHALL BE TREATED WITH A PRE-EMERGENT HERBICIDE AND THEN TOP-DRESSED WITH 3" DEEP PINE BARK NUGGETS. TREE RINGS SHALL BE A MINIMUM 24" RADIUS. ALL TREES CLAMED.
- 18. ANY NEW SOD SHALL BE ARGENTINE BAHIA.CONTRACTOR SHALL DETERMINE EXACT QUANTITIES IN THE FIELD. SOD AREAS SHALL BE MAINTAINED BY THE CONTRACTOR FROM THE TIME OF INSTALLATION TO THE TIME OF FINAL ACCEPTANCE.
- 19. TREES SHALL NOT BE TOPPED OR IMPROPERLY PRUNED. THE SHAPING OF TREES TO FORM CIRCLES, OVALS, SQUARES AND OTHER HARD EDGED GEOMETRIC PATTERNS IS PROHIBITED. NOT MORE THAN ONE—THIRD OF THE TREE CANOPY SHALL BE TRIMMED OR PRUNED IN ANY YEAR UNLESS IT IS DEAD.
- 20. TREES, SHRUBS AND GROUND COVER SHALL BE INSTALLED IN PLANT PITS THAT ARE TWICE THE DIAMETER OF THE PLANT ROOT BALL. SOIL BACK FILL SHALL BE AERATED. CONTRACTOR SHALL ADD LOW NITROGEN CONTENT FERTILIZER TABLETS TO EACH PLANT PIT AT TIME OF PLANTING.
- 21. ALL HEDGE MATERIAL MUST BE 24" HIGH AT TIME OF INSTALLATION PLANTED 2½' TO 3' ON CENTER AND MAINTAINED AT A MINIMUM HEIGHT OF 3 FEET.
- 22. ALL LANDSCAPE MATERIALS PLANTED WITHIN THE SITE VISIBILITY TRIANGLES MUST BE MAINTAINED AT A HEIGHT NO GREATER THAN 36".
  23. ALL EXOTIC SPECIES, I.E., BRAZILIAN PEPPER (SCHINUS TEREBINTHIFOLIUS), PUNK TREE (MELALEUCA QUINQUENERVIA), AND CHINESE TALLOW (SAPIUM SEBIFERUM) MUST BE REMOVED AS A CONDITIONS OF SITE DEVELOPMENT. EXOTIC TREES AND SHRUBS SHALL BE CUT FLUSH WITH FINISH GRADE. RESULTING STUMPS SHALL BE REMOVED FROM THE SITE OR TREATED WITH AN APPROVED HERBICIDE. CONTRACTOR SHALL TREAT CUT STUMPS WITH GARLON 3A, TROOPER, OR RODEO HERBICIDE TO THE CAMBIUM LAYER AS PER MANUFACTURER'S INSTRUCTIONS, AT THE RECOMMENDED STRENGTH TO PREVENT RE—GROWTH. APPLY HERBICIDE IMMEDIATELY AFTER TRUNKS ARE CUT TO PREVENT SAP FROM SEALING WOUNDS. WHERE NECESSARY DUE TO

THEIR PROXIMITY TO PROTECTED PLANT MATERIAL, HAND REMOVAL WILL BE REQUIRED. SHOULD THIS REMOVAL

SUITABLE MATERIAL. REMOVE ALL WASTE MATERIALS PRODUCED BY THIS WORK FROM THE SITE AND DISPOSE OF

- THEM IN A LEGAL MANNER.
- 24. ORGANIC MULCH AND/OR DROUGHT TOLERANT GROUND COVERS WILL BE INSTALLED IN ALL INTERIOR LANDSCAPE PLANTER BEDS.
  25. BE ADVISED THAT THE HEALTHY SURVIVAL OF ALL REQUIRED LANDSCAPE MATERIAL IS THE CONTINUING RESPONSIBILITY OF THE PROPERTY OWNER AND IS ENFORCEABLE UNDER SECTION 166-56 OF THE PINELLAS

BE TO A DEGREE THAT A POTENTIAL FOR EROSION IS CREATED, THE AREA MUST BE RESTABILIZED WITH

# DATE REVISION BY CHECKED: APC

# Deuel CONSULTING ENGINEERS

MADEIRA BEACH, PINELLAS COUNTY

7AM TO 9AM AND 4PM TO 6PM.

BRIAN BARKER HERERY CERTIFY AS A LICENSED PROFESSIONAL ENGINEER

COUNTY LAND DEVELOPMENT CODE.

WORK ORDER NO. | 2019-74