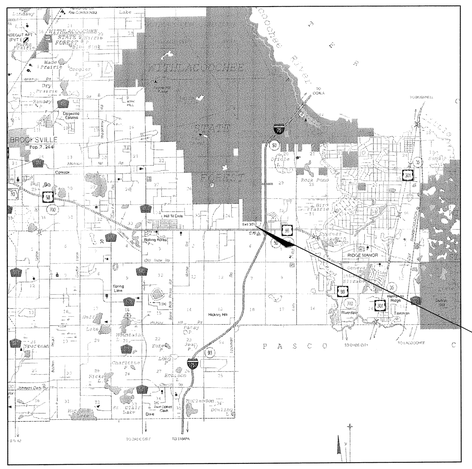
CONSTRUCTION PLANS
for
NATURE COAST CROSSING
EXCAVATION AREA

28.38 ACRES ±

HERNANDO COUNTY, FLORIDA

Project Number 14073



LOCATION MAP
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EB-0000142

TECHNICAL SPECIFICATIONS

THE FOLLOWING ARE INCORPORATED HEREIN BY REFERENCE:

1. FLORIDA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION", EDITION 2015.
2. FLORIDA DEPARTMENT OF TRANSPORTATION "ROADWAY AND TRAFFIC DESIGN STANDARDS", EDITION 2015.
3. MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
4. F.D.O.T. UTILITY ACCOMMODATION GUIDE (2010).
5. HERNANDO COUNTY UTILITIES DEPARTMENT WATER, RECLAIMED WATER AND WASTEWATER CONSTRUCTION SPECIFICATIONS MANUAL, 2013 EDITION.
6. HERNANDO COUNTY DEPARTMENT OF PUBLIC WORKS/ ENGINEERING DIVISION FACILITY DESIGN GUILDELINES, 2008 EDITION.

PLAN REVISIONS

DATE	REVISION NO.	REVISIONS
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AGENCY APPROVALS

AGENCY	PERMIT TYPE	PERMIT NO.	EXP. DATE
HCUD			
HCED			
HCDD			
FDEP			
FDOT			
S.W.F.W.M.D.			

DESIGN ENGINEER : SCOTT D. MCKEE, P.E.

Scott D McKee 7/7/15

PROFESSIONAL ENGINEER FLORIDA REGISTRATION NO. 65654

GENERAL CONSTRUCTION NOTES

1. BENCHMARK DATUM IS NAVD 1988.
2. THE CONTRACTOR SHALL PERFORM ALL CONSTRUCTION IN ACCORDANCE WITH THE LINES AND GRADES SHOWN ON THE PLANS AND TO TOLERANCES STATED HEREIN OR IN THE SPECIFICATIONS. REFER TO THE BOUNDARY AND TOPOGRAPHIC SURVEY FOR ADDITIONAL INFORMATION ON HORIZONTAL AND VERTICAL CONTROL.
3. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL HORIZONTAL AND VERTICAL CONTROL MARKERS AND PROPERTY CORNERS (MONUMENTS, PIPES, ETC.) FOR THE DURATION OF CONSTRUCTION. MARKERS SHALL BE CONTINUOUSLY FLAGGED AND SHALL BE RESET IMMEDIATELY BY A FLORIDA LICENSED LAND SURVEYOR IF ANY SHOULD BECOME DISTURBED.
4. LOCATIONS, ELEVATIONS AND DIMENSIONS OF EXISTING UTILITIES, STRUCTURES AND OTHER FEATURES ARE SHOWN ACCORDING TO THE BEST INFORMATION AVAILABLE AT THE TIME OF THE PREPARATION OF THESE DRAWINGS AND DO NOT PURPORT TO BE ABSOLUTELY CORRECT. THE CONTRACTOR SHALL VERIFY THE LOCATIONS, ELEVATIONS AND DIMENSIONS OF ALL EXISTING UTILITIES, STRUCTURES, ETC. AFFECTING HIS WORK PRIOR TO CONSTRUCTION.
5. THE CONTRACTOR SHALL REPLACE ALL PAVING, STABILIZED EARTH, DRIVEWAYS, SIDEWALKS, RETAINING WALLS, ETC. REMOVED OR DAMAGED DURING CONSTRUCTION AT NO ADDITIONAL COSTS WITH THE SAME MATERIAL REMOVED OR DAMAGED OR AS DIRECTED BY THE ENGINEER.
6. THE CONTRACTOR SHALL SATISFY HIMSELF AS TO POSSIBLE INCIDENTAL CONFLICTS WITH EXISTING STRUCTURES SUCH AS MAIL BOXES, SIGNS, FENCES, BILLBOARDS, ETC. AND SHALL INCLUDE IN HIS OVERALL COSTS THE REMOVAL AND OR REPLACEMENT AND PROTECTION OF SUCH INCIDENTAL ITEMS.
7. THE CONTRACTOR, PRIOR TO BIDDING THIS WORK, SHALL APPRAISE HIMSELF AS TO ALL ABOVE AND BELOW GROUND FEATURES THAT HE MAY ENCOUNTER DURING CONSTRUCTION AND INCLUDE INTO HIS OVERALL BID ALL COSTS FOR SPECIFIC CONSTRUCTION METHODS AND PROCEDURES THAT NEED TO BE TAKEN TO WORK AROUND SUCH APPURTENANCES.
8. THE CONTRACTOR SHALL CONTACT THE ENGINEER PRIOR TO PROCEEDING WITH ANY SITE WORK WITH WHICH A CONFLICT HAS ARISEN DURING CONSTRUCTION OF ANY IMPROVEMENTS SHOWN ON THESE DRAWINGS.
9. CONSTRUCTION SHALL BE CARRIED OUT "IN THE DRY". THE CONTRACTOR SHALL REVIEW SITE CONDITIONS AND DETERMINE METHODS AND EXTENT OF DEWATERING NECESSARY AND SHALL INCLUDE COSTS OF DEWATERING IN THE BID. NO ADDITIONAL COMPENSATION SHALL BE PROVIDED FOR CONTROL OF GROUND OR SURFACE WATER OR FOR ADDITIONAL MATERIALS OR REWORK REQUIRED AS A RESULT OF INADEQUATE OR INSUFFICIENT DEWATERING.
10. ALL WORK TO BE PERFORMED FOR THE COMPLETION OF THIS PROJECT SHALL BE CONSTRUCTED ACCORDING TO THE BEST PRACTICES OF THE INDUSTRY AND IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE, AND/OR COUNTY CODES, ORDINANCES, STANDARDS AND PERMIT CONDITIONS. FLORIDA BUILDING CODE (LATEST EDITION) AS APPLICABLE.

MINIMUM REQUIRED AS-BUILTS

GENERAL

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SUPPLYING A RECORD SURVEY(S) PREPARED AND SUBMITTED BY A FLORIDA LICENSED PROFESSIONAL SURVEYOR AND MAPPER INCLUDING, BUT NOT LIMITED TO, LOCATION AND FINISHED GRADE ELEVATIONS IN PAVED AND NON-PAVED AREAS SUFFICIENT TO DETERMINE DIRECTION OF SITE DRAINAGE AND ELEVATIONS OF RETENTION/DETENTION AREAS, MITIGATION AREAS AND DITCH/CHANNEL CONVEYANCES INCLUDING TOPS OF BANKS, TOES OF SLOPES, POND BOTTOMS AND WATER LEVELS; ELEVATIONS AND DIMENSIONS OF POND CONTROL STRUCTURES, SPILLWAYS AND UNDERDRAINS; DRAINAGE STRUCTURE GRATE/INLET/RIM ELEVATIONS, STORM PIPE SIZES, PIPE MATERIALS, AND PIPE INVERTS, PLUS LOCATIONS, DIMENSIONS AND ELEVATIONS OF ALL OTHER CONSTRUCTION COMPONENTS WHICH VARY FROM THE DESIGN. UTILITY INFORMATION SHALL INCLUDE LOCATION OF WATER LINE CONNECTIONS, VALVES, BENDS, METERS AND ELEVATIONS OF PIPES WHERE DEPTH OF COVER VARIES FROM DESIGN; TIES TO SANITARY SEWER LINES, MANHOLE RIM AND INVERT ELEVATIONS, CLEANOUTS AND SERVICE CONNECTIONS.
2. ALL DIMENSIONS SHALL BE IN FEET DIMENSIONED OFF CENTERLINE OF ROADS OR OTHER PERMANENT STRUCTURES. IF ONLY ONE DIMENSION CAN BE TAKEN OFF THE CENTERLINE OF ROAD, THE SECOND SHALL BE OFF A PERMANENT MARKER OR REFERENCE POINT.
3. FOUR (4) SETS OF 24X36 SIGNED AND SEALED AS-BUILT DRAWINGS, ONE (1)CD WITH AUTOCAD AND ADOBE PDF'S OF ALL SHEETS SHALL BE SUBMITTED TO THE ENGINEER UPON COMPLETION OF THE PROJECT.

TECHNICAL SPECIFICATIONS

ALL SITE AND UTILITY WORK PERFORMED ON THIS PROJECT SHALL BE GOVERNED BY THE APPLICABLE PROVISIONS OF PASCO COUNTY. IN ADDITION, THE FOLLOWING STANDARDS ARE INCORPORATED BY REFERENCE:

1. STANDARD FOR DESIGN AND CONSTRUCTION OF WATER, WASTEWATER, AND RECLAIMED WATER FACILITIES FOR HERNANDO COUNTY, LATEST EDITION.
2. FLORIDA DEPARTMENT OF TRANSPORTATION "ROADWAY AND TRAFFIC DESIGN STANDARDS", LATEST EDITION.
3. FLORIDA DEPT. OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION", LATEST EDITION.
4. MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), LATEST EDITION.
5. HERNANDO COUNTY DEPARTMENT OF PUBLIC WORKS / ENGINEERING FACILITY DESIGN GUIDELINES, LATEST EDITION.

GENERAL UTILITY NOTES

1. ALL UTILITY CONSTRUCTION SHALL MEET OR EXCEED HERNANDO COUNTY STANDARDS FOR WATER AND WASTEWATER CONSTRUCTION.
2. ALL UTILITY LINES SHALL HAVE AN "EARLY WARNING" PROTECTION TAPE INSTALLED CONTINUOUSLY ALONG THE PIPE ALIGNMENT IN ACCORDANCE WITH THE UTILITY HAVING JURISDICTION. THE PROTECTION TAPE SHALL BE INSTALLED DURING BACK FILLING 18" DIRECTLY OVER THE PIPE, OR AS SPECIFIED BY UTILITY OWNER. THE TAPE SHALL HAVE A METAL DETECTABLE STRIP SANDWICHED BETWEEN 2 LAYERS OF POLYETHYLENE. FOR WATER LINES, THE TAPE SHALL BE CONTINUOUSLY MARKED "CAUTION, WATER LINES BELOW". FOR FORCE MAINS, THE TAPE SHALL BE CONTINUOUSLY MARKED "CAUTION, SEWAGE FORCE MAIN BELOW". FOR SANITARY SEWER, THE TAPE SHALL BE CONTINUOUSLY MARKED "CAUTION, SEWER MAIN BELOW". BOTH WATER MAINS AND SANITARY SEWER FORCE MAINS SHALL ALSO HAVE A "LOCATOR DETECTOR WIRE" - UL TYPE AWG #10 SOLID STRAND COPPER WIRE W/60MM PVC WALL INSTALLED ALONG THE ENTIRE LENGTH OF PIPE.
3. THE CONTRACTOR IS CAUTIONED THAT THE LOCATION OF EXISTING UTILITIES, WHEN SHOWN, ARE APPROXIMATE. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN ACTUAL FIELD LOCATIONS FROM THE RESPECTIVE UTILITY COMPANY AND TO COORDINATE WITH AFFECTED UTILITY COMPANY 48 HOURS BEFORE BEGINNING ANY WORK.

AT & T TELEPHONE	*1-800-472-4700*
BRIGHTHOUSE CABLE TV	*1-800-892-3499*
CITY OF DADE CITY PUBLIC UTIL DEPT	*1-352-521-1461*
DUKE ENERGY	*1-352-796-5136*
HERNANDO COUNTY UTILITIES DEPT	*1-352-754-4037*
PASCO COUNTY DPW	*1-727-847-8145*
SUNSHINE 811	*1-800-432-4770*
TECO	*1-813-228-1626*
WITHLACOOCHEE ELECTRIC COOP.	*1-352-567-5133*
VERIZON	*1-800-483-4000*

4. ALL UTILITIES SHALL BE KEPT IN OPERATION EXCEPT WITH THE EXPRESS WRITTEN CONSENT OF THE UTILITY OWNER. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PRESERVE EXISTING UTILITIES. ANY AND ALL DAMAGE TO EXISTING UTILITIES AS A RESULT OF THE CONTRACTOR'S ACTIONS SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
5. WHERE WATER AND SEWER LINE INSTALLATION ARE IN CONFLICT WITH EXISTING UTILITY POLES, GUY WIRES OR SIMILAR STRUCTURES, THE CONTRACTOR SHALL COORDINATE WITH THE UTILITY COMPANY TO DETERMINE WHETHER THE STRUCTURES WILL REQUIRE RESTRAINT. THE FINAL DECISION AS TO WHETHER RESTRAINT IS REQUIRED WHILE EXCAVATION OCCURS SHALL BE THAT OF THE UTILITY OWNER. THE COST FOR THIS COORDINATION AND RESTRAINT SHALL BE INCLUDED IN THE CONTRACTOR'S OVERALL COSTS.

ENVIRONMENTAL PROTECTION NOTES

1. CONSTRUCTION EQUIPMENT SHALL NOT BE OPERATED IN WETLAND AREAS UNLESS SUCH CONSTRUCTION PRACTICES ARE APPROVED IN A PLAN OF OPERATION SUBMITTED TO THE ENGINEER & THE APPROPRIATE REGULATORY AUTHORITIES. WHERE CONSTRUCTION IS NECESSARY ACROSS OR ADJACENT TO WETLAND JURISDICTIONAL AREAS, SILT BARRIERS SHALL BE INSTALLED AS SHOWN ON THE PLANS. SILT BARRIERS SHALL BE CONSIDERED LIMITS OF CONSTRUCTION WITHIN OR ADJACENT TO JURISDICTIONAL AREAS.
2. CONSTRUCTION SHALL PROCEED SUCH THAT ALL STORMWATER FACILITIES WITHIN A WATERSHED AREA ARE IN PLACE AND OPERATIONAL PRIOR TO CONSTRUCTION OF IMPERVIOUS SURFACES WITHIN THAT AREA.
3. STAKED OR FLOATING SILT SCREENS OR SYNTHETIC HAY BALES, AS APPROPRIATE, SHALL BE UTILIZED AS SILT BARRIERS AND PLACED IN LOCATIONS SHOWN ON THE PLANS AND AT OTHER LOCATIONS AS REQUIRED TO KEEP SEDIMENT FROM REACHING WATER BODIES OR WETLAND AREAS. ONCE CONSTRUCTION IS COMPLETE AND FINISH GRADING / STABILIZATION HAS BEEN ACHIEVED, SILT BARRIERS SHALL BE COMPLETELY REMOVED TO THE SATISFACTION OF THE OWNER AND PRIOR TO FINAL ACCEPTANCE.
4. ALL FUGITIVE DUST SHALL BE CONTROLLED ON SITE. ONLY AREAS SCHEDULED FOR IMMEDIATE CONSTRUCTION SHALL BE CLEARED OR STRIPPED OF VEGETATION. WATERING, APPLICATION OF CALCIUM CHLORIDE OR OTHER PRIOR APPROVED MEANS OF DUST CONTROL SHALL BE EMPLOYED TO PREVENT THE EMANATION OF DUST FROM THE SITE. PERMANENT GRASSING, LANDSCAPING AND OTHER SITE WORK SHALL BE INITIATED AS SOON AS POSSIBLE.
5. ALL WATER COLLECTED AND PUMPED DURING TRENCH DEWATERING ACTIVITIES SHALL BE DISPOSED OF IN UPLAND AREAS INTO DOUBLE STAKED HAY BALES. DISCHARGE LOCATIONS SHALL BE A MINIMUM OF 75 FEET FROM THE NEAREST SURFACE WATER BODY OR WETLAND AREA, TO ALLOW FOR MAXIMUM OVERLAND FILTRATION OF SOIL PARTICLES.
6. TEMPORARY STOCKPILES SHALL NOT BE LOCATED ADJACENT TO UNDISTURBED WETLANDS. ADDITIONALLY, STOCKPILES TO REMAIN FOR LONGER THAN 24 HOURS SHALL BE CONFINED BY SILT BARRIERS WHICH PREVENT RUNOFF SEDIMENTATION FROM ENCROACHING UPON WETLAND AREAS OR SURFACE WATER BODIES. STOCKPILES IN PLACE AND UNTOUCHED FOR 7 DAYS OR MORE TO HAVE VEGETATIVE COVER TO PREVENT WIND EROSION AND SEDIMENT DISPERSAL.
7. ALL TRASH AND CONSTRUCTION DEBRIS PRODUCED FROM THIS PROJECT SHALL BE COLLECTED BY THE CONTRACTOR DAILY. THESE MATERIALS SHALL BE STAGED OR CONTAINERIZED AS NECESSARY TO PREVENT ACCIDENTAL RELEASE. DISPOSAL OF SOLID WASTE MATERIALS SHALL BE IN ACCORDANCE WITH APPLICABLE MUNICIPAL, COUNTY AND STATE REGULATIONS.
8. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING AND MAINTAINING PORTABLE SANITARY WASTE UNITS ON-SITE FOR USE BY HIS EMPLOYEES DURING CONSTRUCTION.
9. THE CONTRACTOR SHALL MAINTAIN CONTROL OF ANY HAZARDOUS MATERIALS UTILIZED ON-SITE FOR CONSTRUCTION. STORAGE CONTAINERS, VEHICLES, ETC. WILL BE INSPECTED REGULARLY FOR LEAKAGE. A SPILL PREVENTION PLAN SHALL BE ESTABLISHED WHICH COVERS CLEANUP AND NOTIFICATION OF APPROPRIATE GOVERNMENT AGENCIES.
10. CONTRACTOR SHALL NOT REMOVE TREES WITHOUT APPROVAL OF THE LOCAL GOVERNING JURISDICTION. TREE PROTECTION SHALL BE IN ACCORDANCE WITH LOCAL GOVERNING AUTHORITY.
11. THE CONTRACTOR IS RESPONSIBLE FOR CONTROLLING SITE EROSION AND SHALL NOT UNNECESSARILY REMOVE EXISTING VEGETATION OR ALTER EXISTING TOPOGRAPHY. THE CONTRACTOR SHALL PROVIDE ADDITIONAL SOD, SYNTHETIC HAY BALES, SAND BAGS OR SEED & MULCH, AS NECESSARY, TO ACHIEVE AN EROSION-FREE SITE (FREE FROM RUTTING, ETC.) TO THE LINES AND GRADES SHOWN IN THE PLANS UNTIL FINAL ACCEPTANCE. ALL SWALES AND SURFACES 4:1 OR STEEPER SHALL BE SODDED. ALL OTHER UNPAVED SURFACES WHICH EXPERIENCE UNDUE EROSION THAT CANNOT BE CONTROLLED BY OTHER MEASURES SHALL BE SODDED. ALL SOD SHALL BE ARGENTINE BAHIA UNLESS SPECIFICALLY SHOWN OTHERWISE IN THE CONTRACT DOCUMENTS. ALL SODDED SLOPES OVER 4:1, SHALL BE INSTALLED WITH SOD PEGS.
12. SOIL EROSION AND SEDIMENT CONTROL DEVICES SHALL BE INSTALLED PRIOR TO CONSTRUCTION, MAINTAINED THROUGHOUT CONSTRUCTION AND UNTIL THE SITE IS PERMANENTLY STABILIZED. SEE SWPP / CSWMP NOTES AND DETAIL SHEETS FOR ADDITIONAL INFORMATION.
13. THE REMOVAL OF LITTORAL SHELF VEGETATION (INCLUDING CATTAILS) FROM WET DETENTION PONDS IS PROHIBITED UNLESS OTHERWISE APPROVED BY THE SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT (SWFWMD). REMOVAL INCLUDES DREDGING, THE APPLICATION OF HERBICIDES, CUTTING AND THE INTRODUCTION OF GRASS CARP. ANY QUESTIONS REGARDING AUTHORIZED ACTIVITIES WHITH THE WET DETENTION PONDS SHALL BE ADDRESSED TO THE REGULATION MANAGER OF SWFWMD'S LOCAL OFFICE.
14. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVAL OF TEMPORARY SEDIMENT/EROSION CONTROL DEVICES WHEN NO LONGER NEEDED.

FDOT GENERAL NOTES

ALL WORK PERFORMED IN THE DEPARTMENT'S RIGHT OF WAY SHALL BE DONE IN ACCORDANCE WITH THE MOST CURRENT EDITIONS OF:

a) F.D.O.T. STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
b) F.D.O.T. DESIGN STANDARDS FOR DESIGN, CONSTRUCTION, MAINTENANCE AND UTILITY OPERATIONS ON THE STATE HIGHWAY SYSTEM.
c) F.D.O.T. ROADWAY PLANS PREPARATION MANUAL VOLUME 1, CHAPTER 2 AND/OR 25.
d) F.D.O.T. FLEXIBLE PAVEMENT DESIGN MANUAL FOR NEW CONSTRUCTION AND PAVEMENT REHABILITATION.

1. ALL AREAS IN THE FDOT RIGHT OF WAY DISTURBED DURING CONSTRUCTION SHALL BE RESTORED. COMPACTED, SODDED AND WATERED IN CONFORMANCE WITH THE FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, SECTION 575 AND 981 AND DESIGN STANDARDS INDEX 105.
2. DAYTIME WORK ONLY. THE F.D.O.T. ENGINEER MUST APPROVE NIGHT WORK AND LANE CLOSURES AT LEAST 48 HOURS IN ADVANCE. THE APPLICANT MUST NOTIFY THE FLORIDA DEPARTMENT OF TRANSPORTATION LOCAL MAINTENANCE OFFICE 48 HOURS IN ADVANCE OF STARTING ANY PROPOSED WORK. CALL: BROOKSVILLE MAINTENANCE, JOHN KILKENNY @ 352 797-5700.
3. ALL TRAFFIC STRIPES AND PAVEMENT MARKINGS ARE TO BE LEAD-FREE, NON-SOLVENT BASED THERMOPLASTIC. THE PERMITTEE SHALL FURNISH THE DEPARTMENT WITH THE MANUFACTURER'S CERTIFICATION THAT THE THERMOPLASTIC IS "LEAD FREE". REMOVAL OF EXISTING STRIPING SHALL BE DONE BY MILLING AND RESURFACING OF THE FRICTION/SURFACE COURSE TO OBLITERATE OBSOLETE PAVEMENT MARKINGS.
4. ALL PROPOSED TRAFFIC SIGNS AND PAVEMENT MARKINGS SHALL BE IN CONFORMANCE WITH AND CONSTRUCTED TO THE FDOT DESIGN STANDARDS INDEX SERIES 11000 AND 17000 SERIES. THE PROPERTY OWNER MUST MAINTAIN THE TRAFFIC SIGNS AND MARKINGS FOR THE DRIVEWAY.
5. FOR WORK WITHIN FDOT RIGHT-OF-WAY, THE FDOT REQUIRES DOCUMENTATION FOR SUCCESSFUL COMPLETION OF AN APPROVED WORK ZONE TRAFFIC CONTROL TRAINING COURSE FOR THE AGENCY, UTILITY OR CONTRACTOR EMPLOYEE(S) DESIGNING, INSTALLING, AND/OR MAINTAINING THE APPROVED MAINTENANCE OF TRAFFIC PLAN IN ACCORDANCE WITH DEPARTMENT PROCEDURE, TOPIC NO. 625-010-010.
6. MAINTENANCE OF TRAFFIC PLAN FOR WORK ZONES SHALL BE IN CONFORMANCE WITH ALL APPLICABLE INDICES OF THE FDOT DESIGN STANDARDS INDEX 600 SERIES ACCORDING TO THE TYPE OF ROADWAY AND TYPE OF WORK BEING PERFORMED.
7. SILT FENCE FOR EROSION CONTROL IN CONFORMANCE WITH DESIGN STANDARDS INDEX (DSI) 102 IS REQUIRED FOR ALL AREAS OF CONSTRUCTION WITHIN FDOT R/W; PERPENDICULAR TO AND PARALLEL WITH THE STATE ROAD.
8. FOR WORK WITHIN FDOT RIGHT-OF-WAY, THE CONTRACTOR SHALL PROVIDE A TEMPORARY TRAFFIC CONTROL PLAN PREPARED UNDER THE DIRECTION OF, AND SIGNED AND SEALED BY, A LICENSED FLORIDA PROFESSIONAL ENGINEER WHO IS EXPERIENCED IN PREPARING TRAFFIC CONTROL PLANS AND WHO IS CERTIFIED PER FDOT PROCEDURE, TOPIC NO. 625-010-010.
9. ALL TEMPORARY TRAFFIC CONTROL DEVICES FOR SR 50 SHALL BE DESIGNED AND INSTALLED TO MEET THE EXISTING POSTED SPEED OF 55 MPH.

MAINTENANCE OF TRAFFIC

1. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL MAINTENANCE OF TRAFFIC, INCLUDING SIGNAGE AND BARRICADES AS NEEDED IN ACCORDANCE WITH APPLICABLE PERMITS AND HERNANDO COUNTY DIVISION OF TRAFFIC SERVICES.
2. MOT WITHIN FDOT RIGHT OF WAY AND SURROUNDING COUNTY STREETS SHALL CONFORM TO THE FDOT STANDARD INDEX 600 SERIES AS APPROPRIATE.
3. CONTRACTOR SHALL PROVIDE 24 HOURS NOTICE TO LOCAL EMERGENCY SERVICES DEPARTMENT(S) WHENEVER CONSTRUCTION ACTIVITIES ARE EXPECTED TO IMPEDE NORMAL TRAFFIC FLOW.
4. THE CONTRACTOR SHALL SUBMIT MAINTENANCE OF TRAFFIC PLANS TO APPROPRIATE REGULATORY AGENCIES HAVING JURISDICTION OVER IMPACTED ROADWAYS. CONSTRUCTION SHALL NOT COMMENCE WITHIN ROW UNTIL MOT APPROVALS FOR IMPACTED ROAD ARE RECEIVED.

SPECIAL NOTES TO CONTRACTORS

1. WHERE TREE REMOVAL IS REQUIRED DUE TO CONSTRUCTION, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO REMOVE AND DISPOSE OF THOSE TREES. THE COST FOR THIS REMOVAL AND DISPOSAL SHALL BE INCLUDED IN THE CONTRACTOR'S OVERALL COSTS. TREE REMOVAL AND PROTECTION SHALL COMPLY WITH APPLICABLE CITY AND COUNTY CODES.
2. UNLESS SPECIFIED OTHERWISE, CONTRACTOR SHALL FURNISH AND INSTALL ALL PROPOSED ITEMS SHOWN WITHIN THE CONSTRUCTION PLANS.
3. CONSTRUCTION EQUIPMENT AND MATERIAL TRANSPORT / STAGING IS THE RESPONSIBILITY OF THE CONTRACTOR. BOTH SHALL BE STAGED OUTSIDE THE CLEAR ZONE, AND NOT OBSTRUCT THE SITE DISTANCE OF ANY INTERSECTIONS OR DRIVEWAYS.
4. THE CONTRACTOR SHALL SUBMIT MAINTENENCE OF TRAFFIC PLANS TO APPROPRIATE REGULATORY AGENCIES HAVING JURISDICTION OVER IMPACTED ROADWAYS. CONSTRUCTION SHALL NOT COMMENCE WITHIN ROW UNTIL MOT APPROVALS FOR IMPACTED ROAD(S) ARE RECIEVED. CONTRACTOR SHALL ALSO NOTIFY LOCAL EMERGENCY SERVICES DEPARTMENTS WHENEVER CONSTRUCTION ACTIVITIES WILL IMPEDE NORMAL TRAFFIC FLOW.
5. CONSTRUCTION EQUIPMENT AND MATERIAL TRANSPORT / STAGING IS THE RESPONSIBILITY OF THE CONTRACTOR. UPON REQUEST, THE OWNER WILL PROVIDE ACCESS TO THE CLOSEST OPEN SPACE OWNED AND AVAILABLE FOR THE CONTRACTOR'S USE; HOWEVER, THE SITE MAY NOT BE CONTIGUOUS TO THE PROJECT AREA OR OF SUFFICIENT SIZE TO ACCOMMODATE THE ENTIRE PROJECT INVENTORY OF MATERIALS / EQUIPMENT.
6. ALL EQUIPMENT AND MATERIALS TO BE REMOVED OR DEMOLISHED DURING THE CONSTRUCTION PROCESS, UNLESS NOTED TO BE SALVAGED, SHALL BECOME THE PROPERTY OF THE CONTRACTOR.
7. A NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT IS NOT PART OF THE PERMITTING OBTAINED WITH THIS PLAN SET. THEREFORE, THE CONTRACTOR IS ADVISED THAT AN NPDES CONSTRUCTION PERMIT MAY BE REQUIRED FOR THIS PROJECT AND THAT THE CONTRACTOR IS RESPONSIBLE FOR APPLYING FOR AND ADHERING TO THIS PERMIT. REFER TO SUBSECTION 62-621., F.A.C. FOR ADDITIONAL INFORMATION. THE INFORMATION PROVIDED IN THE SWPPP NOTES AND DETAILS SHEETS ARE FOR COMPLIANCE WITH ENVIRONMENTAL RESOURCE PERMITTING UNDER CHAPTER 62-333, F.A.C. AND MAY BE USED AS A REFERENCE FOR COMPLIANCE WITH NPDES PERMITTING BUT ARE NOT NECESSARILY INCLUSIVE OF ALL NPDES REQUIREMENTS.
8. HERNANDO COUNTY HAS AN NPDES ORDINANCE REQUIRING COMPLIANCE ON ALL CONSTRUCTION SITES. (CH. 28, ARTICLE X, SEC. 28-341 TO 403).
9. SOIL BORINGS INDICATE THE PRESENCE OF CLAY ANOMALIES THROUGHOUT THE EXCAVATION AREA AT VARYING DEPTHS. THE SOIL BORINGS AVAILABLE TO THE ENGINEER AT THE TIME OF THIS DESIGN INDICATE THAT THE CLAY ANOMALIES LIE BELOW THE DESIGN BOTTOM GRADE AS SHOWNONTHESE PLANS. HOWEVER, IT IS POSSIBLE THAT CLAY MAY BE ENCOUNTERED IN AREAS BETWEEN BORING LOCATIONS AT HIGHER ELEVATIONS THAN ANTICIPATED. DURING THE EXCAVATION ACTIVITY, IF CLAY IS ENCOUNTERED IN ANY AREA PRIOR TO EXCAVATION REACHING THE DEPTH OF THE DESIGN GRADE, EXCAVATION SHALL CEASE IN THAT AREA.
10. NO CLAY SHALL BE EXTRACTED FROM THE EXCAVATION AREA. IF CLAY IS ENCOUNTERED AND EXCAVATION CEASES PER NOTE 9 ABOVE, A LAYER OF SAND SHALL BE PLACED AS BACKFILL ON TOP OF THE CLAY TO A MINIMUM DEPTH OF 1-FOOT ABOVE THE TOP OF THE CLAY ANOMALY.
11. NO WORK WITHIN THE F.D.O.T. RIGHT-OF-WAY SHALL BE INITIATED UNTIL PROJECT HAS RECEIVED APPROPRIATE PERMITS.
12. STORMWATER FROM EXCAVATED AREAS SHALL BE PREVENTED FROM LEAVING THE SITE AT ALL STAGES OF EXCAVATION. EVERY ACRE REQUIRES A VOLUME OF APPROXIMATELY 0.75 ACRE-FOOT (1 ACRE x 9-INCHES DEEP) OF STORAGE VOLUME. THIS SHOULD BE CONSIDERED DURING PHASING OF EXCAVATION TO ENSURE ADEQUATE STORAGE VOLUME IS MAINTAINED THROUGH ALL STAGES OF EXCAVATION.

Always call 811 two full business days before you dig
Sunshine811.com

GENERAL NOTES

NATURE COAST CROSSING EXCAVATION AREA

DRAWING INVALID UNLESS SIGNED AND SEALED BY REGISTERED PROFESSIONAL

SCOTT D. MCKEE, P.E. FL REG. NO. 65554

7/7/15

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DATE	REV. BY	REV. NO.	REVISION
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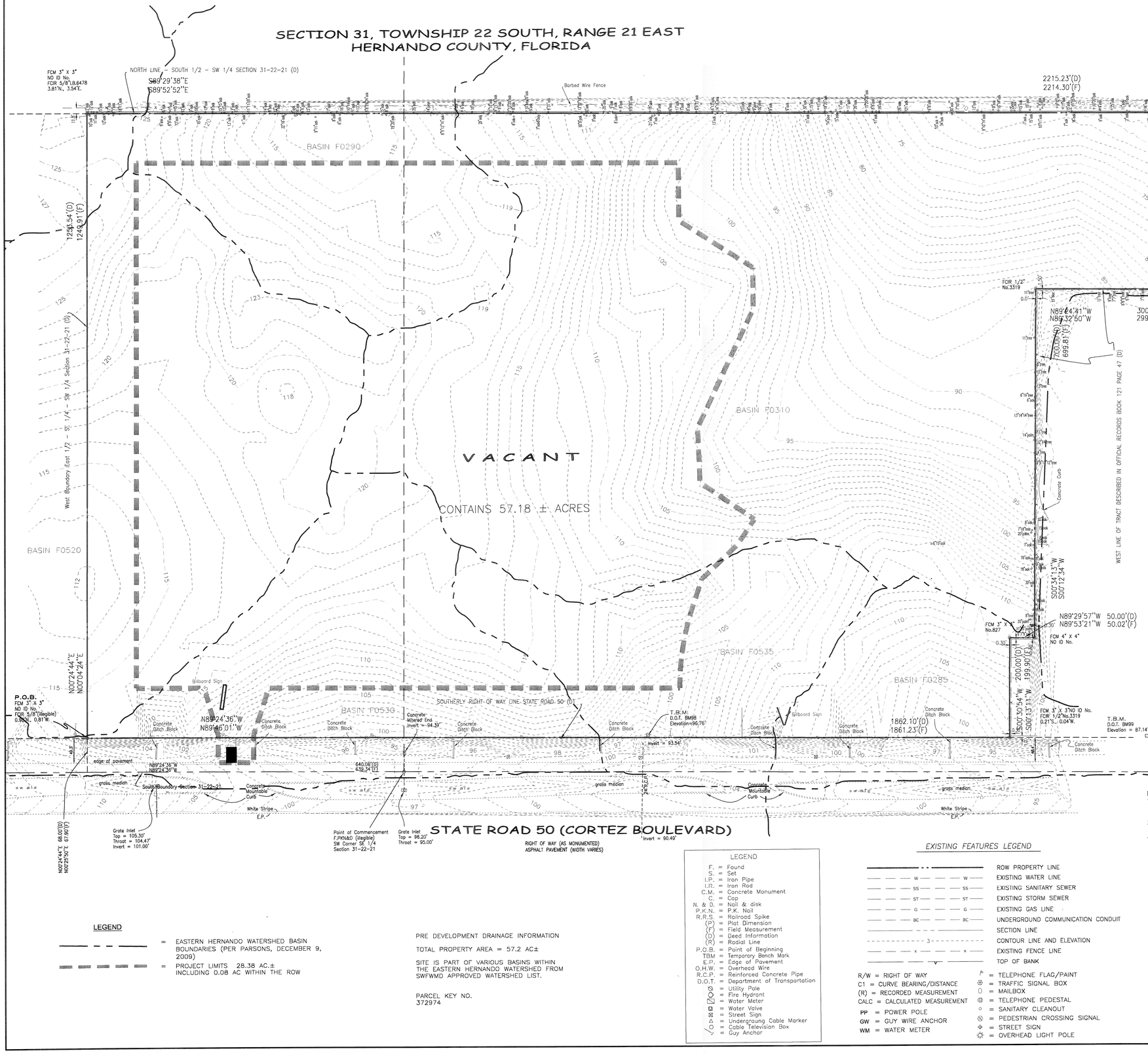
WHEN PRINTED TO SCALE, DRAWING SIZE SHALL BE 22" X 34"

SHEET
2

JOB No.: 14073

SECTION 31, TOWNSHIP 22 SOUTH, RANGE 21 EAST
HERNANDO COUNTY, FLORIDA



0 100

SCALE 1" = 100'

COASTAL ENGINEERING NOTES:

1. ELEVATIONS SHOWN HEREON ARE ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88) AND ORIGINATED FROM NGS CONTROL STATION "HERNCO 18" WHICH HAS A PUBLISHED ELEVATION OF 118.45' (NAVD 88)

2. FIELD BEARINGS AND/OR HORIZONTAL COORDINATES SHOWN HEREON ARE ON THE FLORIDA STATE PLANE COORDINATE SYSTEM, WEST ZONE, NORTH AMERICAN DATUM OF 1983 (NAD 83) 2011 ADJUSTMENT, ORIGINATING FROM NGS CONTROL STATION "HERNCO 18" WITH PUBLISHED COORDINATES OF N 1522994.28 E 576341.01

3. ORIGINAL BOUNDARY AND TOPOGRAPHIC SURVEY PERFORMED BY COPELAND & SONS, INC. DATED 11/17/2005. SURVEY INFORMATION HAS BEEN CONVERTED TO NAVD 88 AND NAD 83 BY COASTAL ENGINEERING ASSOCIATES, INC.

PROPERTY DESCRIPTION:
COMMENCE AT THE SOUTHWEST CORNER OF THE SOUTHEAST 1/4 OF SECTION 31, TOWNSHIP 22 SOUTH, RANGE 21 EAST, HERNANDO COUNTY, FLORIDA, THENCE N89°24'36"W ALONG THE SOUTH LINE OF SAID SECTION 31, 640.06 FEET TO THE WEST LINE OF THE EAST 1/2 OF THE SOUTHEAST 1/4 OF THE SOUTHWEST 1/4 OF SAID SECTION 31, THENCE N00°24'44"E ALONG SAID LINE 68.00 FEET FOR A POINT OF BEGINNING, SAID POINT BEING ON THE NORTHERLY RIGHT OF WAY OF STATE ROAD 50; THENCE CONTINUE N00°24'44"E ALONG SAID LINE, 1253.54 FEET TO THE NORTH LINE OF THE SOUTH 1/2 OF THE SOUTHWEST 1/4 OF SAID SECTION 31; THENCE S89°29'38"E ALONG THE NORTH LINE OF SAID SOUTH 1/2, 2215.23 FEET TO THE WEST LINE OF THAT PARTICULAR TRACT DESCRIBED IN OFFICIAL RECORDS BOOK 121, PAGE 47 OF THE PUBLIC RECORDS OF HERNANDO COUNTY, FLORIDA; THENCE ALONG SAID LINE THE FOLLOWING COURSES AND DISTANCES: S00°33'14"W, 356.25 FEET; N89°24'41"W, 300.00 FEET; S00°34'13"W, 700.00 FEET; N89°29'57"W, 50.00 FEET; S00°30'54"W, 200.00 FEET TO THE NORTH RIGHT OF WAY OF STATE ROAD 50; THENCE N89°24'36"W ALONG SAID RIGHT OF WAY, 1862.10 FEET TO THE POINT OF BEGINNING.

DRAINAGE NOTES:
1) ACCORDING TO HERNANDOO COUNTY SOIL SURVEY, SITE CONSISTS OF #14 & #15 (CANDLER) SOILS.

2) GROUND COVER CONSISTS GRASS (FAIR) CN 49.

3) SITES WATERSHED BOUNDARY WAS BASED ON LIDAR DATA FROM HERNANDO COUNTY AND WAS ALSO USED BY IN BASIN DETERMINATIONS FOR THE WATERSHED STUDY. SEE DRAINAGE PLAN, SHEET B, FOR ONSITE BASINS AND DRAINAGE REPORT FOR LIDAR CONTOUR DATA MAPS.

N O T E S :

1. THIS DRAWING HAS BEEN CREATED USING SURVEY BY COASTAL ENGINEERING ASSOCIATES, INC. FOR ENGINEERING DESIGN, PERMITTING AND CONSTRUCTION AND IS NOT INTENDED FOR ANY OTHER USE.
2. THIS DRAWING DOES NOT REPRESENT A BOUNDARY OR TOPOGRAPHIC SURVEY.
3. PROPERTY LINE INFORMATION IS FROM SURVEY DONE BY COASTAL ENGINEERING ASSOCIATES DATED MAY 5, 2014.
4. CONTOUR DATA SHOWN IS FROM SURVEY BY COASTAL ENGINEERING ASSOCIATES, INC. BASED ON NORTH AMERICAN VERTICAL DATUM 1988 (NAVD88) AND ORIGINATED FROM NGS STATION "HERNCO 18", WITH A PUBLISHED ELEVATION OF 118.45 FEET.
5. BEARINGS SHOWN HEREON ARE BASED ON THE FLORIDA STATE PLANE COORDINATE SYSTEM, WEST ZONE, NAD 83, 2011 ADJUSTMENT.
6. PROJECT SITE LIES WITHIN VARIOUS BASINS IN THE EASTERN HERNANDO WATERSHED.
7. BASED UPON REVIEW OF FEDERAL EMERGENCY MANAGEMENT AGENCY FLOOD INSURANCE RATE (FIRM), MAP NUMBER 12053C0238D EFFECTIVE DATE FEBRUARY 2, 2012; THE SUBJECT PARCEL DOES NOT LIE WITHIN AND FLOOD ZONE AREAS.

LEGEND

= EASTERN HERNANDO WATERSHED BASIN BOUNDARIES (PER PARSONS, DECEMBER 9, 2009)

= PROJECT LIMITS 28.38 AC.± INCLUDING 0.08 AC WITHIN THE ROW

PRE DEVELOPMENT DRAINAGE INFORMATION

TOTAL PROPERTY AREA = 57.2 AC±

SITE IS PART OF VARIOUS BASINS WITHIN THE EASTERN HERNANDO WATERSHED FROM SWFWMD APPROVED WATERSHED LIST.

PARCEL KEY NO.
372974

LEGEND

F. = Found
S. = Set
I.P. = Iron Pipe
I.R. = Iron Rod
C.M. = Concrete Monument
C. = Cap
N. & D. = Nail & disk
P.K.N. = P.K. Nail
R.R.S. = Railroad Spike
(P) = Plat Dimension
(F) = Field Measurement
(O) = Deed Information
(R) = Radial Line
P.O.B. = Point of Beginning
TBM = Temporary Bench Mark
E.P. = Edge of Pavement
O.H.W. = Overhead Wire
R.C.P. = Reinforced Concrete Pipe
D.O.T. = Department of Transportation
= Utility Pole
= Fire Hydrant
= Water Meter
= Water Valve
= Street Sign
= Undergroung Cable Marker
= Cable Television Box
= Guy Anchor

EXISTING FEATURES LEGEND

ROW PROPERTY LINE
W — W — EXISTING WATER LINE
SS — SS — EXISTING SANITARY SEWER
ST — ST — EXISTING STORM SEWER
G — G — EXISTING GAS LINE
BC — BC — UNDERGROUND COMMUNICATION CONDUIT
SECTION LINE
3 CONTOUR LINE AND ELEVATION
x — x — EXISTING FENCE LINE
TOP OF BANK

R/W = RIGHT OF WAY
C1 = CURVE BEARING/DISTANCE
(R) = RECORDED MEASUREMENT
CALC = CALCULATED MEASUREMENT
PP = POWER POLE
GW = GUY WIRE ANCHOR
WM = WATER METER
= TELEPHONE FLAG/PAINT
= TRAFFIC SIGNAL BOX
= MAILBOX
= TELEPHONE PEDESTAL
= SANITARY CLEANOUT
= PEDESTRIAN CROSSING SIGNAL
= STREET SIGN
= OVERHEAD LIGHT POLE

EXISTING CONDITIONS

NATURE COAST CROSSING EXCAVATION AREA

DRAWING INVALID UNLESS SIGNED, DATED & SEALED BY REGISTERED PROFESSIONAL

7/7/15

SCOTT D. MCKEE, P.E.
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DATE	REV. BY	REV. NO.	REVISION
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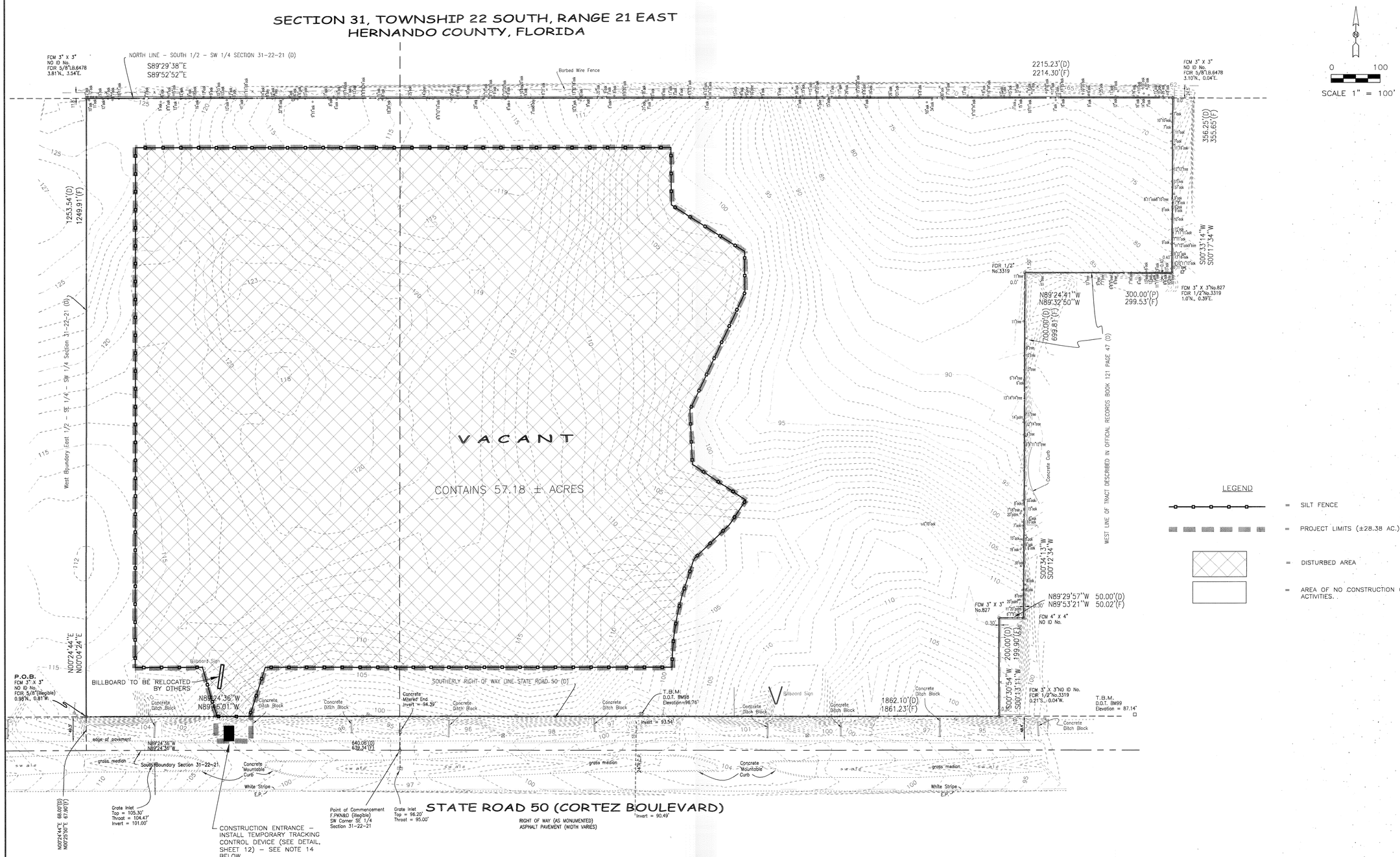
WHEN PRINTED TO SCALE, DRAWING SIZE SHALL BE 22" X 34"

SHEET
3

JOB No.: 14073

SECTION 31, TOWNSHIP 22 SOUTH, RANGE 21 EAST
HERNANDO COUNTY, FLORIDA



NOTES:

1. THE CONTRACTOR IS RESPONSIBLE FOR CONTROLLING SITE EROSION AND SHALL NOT UNNECESSARILY REMOVE EXISTING VEGETATION OR ALTER EXISTING TOPOGRAPHY, THE CONTRACTOR SHALL PROVIDE ADDITIONAL SOD, SYNTHETIC BALES, SAND BAGS OR SEED & MULCH, AS NECESSARY, TO ACHIEVE AN EROSION-FREE SITE (FREE FROM RUTTING, ETC.) TO THE LINES AND GRADES SHOWN IN THE PLANS UNTIL FINAL ACCEPTANCE. ALL SWALES AND SURFACES 4:1 OR STEEPER SHALL BE SODDED. ALL OTHER UNPAVED SURFACES WHICH EXPERIENCE UNDUE EROSION THAT CANNOT BE CONTROLLED BY OTHER MEASURES SHALL BE SODDED. ALL SOD SHALL BE ARGENTINE BAHIA UNLESS SPECIFICALLY SHOWN OTHERWISE IN THE CONTRACT DOCUMENTS.
2. SILT FENCE SHALL BE INSTALLED AT LIMITS OF CONSTRUCTION AREA ALONG EASEMENT LINE, RIGHT-OF-WAY LINE, OR PROPERTY LINE PRIOR TO ANY CLEARING ACTIVITIES TO PREVENT SEDIMENT RUNOFF UNLESS DIRECTED OTHERWISE BY ENGINEER. SEE SHEET 11 FOR DETAILS.
3. STORMWATER MANAGEMENT SYSTEM SHALL BE INSTALLED PRIOR TO BEGINNING OTHER MAJOR CONSTRUCTION.
4. SILT FENCE AND OTHER TEMPORARY CONTROLS SHALL REMAIN IN PLACE UNTIL PROJECT ACCEPTED AS COMPLETE UNLESS APPROVED OTHERWISE BY ENGINEER.
5. TRIMMING OF PRESERVED TREES SHALL BE COMPLETED WITH OVERSIGHT BY CERTIFIED TREE ARBORIST.
6. TREES OUTSIDE THE CLEARING LIMITS SHALL BE PROTECTED UNLESS SPECIFICALLY SHOWN TO BE REMOVED. ANY TREES AT THE PERIPHERY OF FILL LIMITS, AND/OR ALONG PROPERTY LINES, WHICH CAN BE PRESERVED, SHALL BE, UNLESS APPROVED OTHERWISE BY THE OWNER AND ENGINEER.
7. SEE SOIL TRACKING DEVICE SHEET 12 AND SWPP NOTES SHEET 11 FOR REQUIREMENTS CONCERNING CONSTRUCTION TRAFFIC.
8. DEMOLITION MATERIALS SHALL BE PROPERLY DISPOSED OF ACCORDING TO STATE AND LOCAL REGULATIONS. CONTRACTOR TO COORDINATE WITH UTILITY PROVIDERS FOR SHUT OFF AND/OR REMOVAL OF SERVICES.
9. ALL TRASH AND CONSTRUCTION DEBRIS PRODUCED FROM THIS PROJECT SHALL BE COLLECTED BY THE CONTRACTOR DAILY. THESE MATERIALS SHALL BE STAGED OR CONTAINERIZED AS NECESSARY TO PREVENT ACCIDENTAL RELEASE. DISPOSAL OF SOLID WASTE MATERIALS SHALL BE IN ACCORDANCE WITH APPLICABLE MUNICIPAL, COUNTY AND STATE REGULATIONS.
10. NO ON-SITE BURNING WILL BE CONDUCTED WITHOUT FIRST OBTAINING APPROPRIATE PERMITS.
11. CONTOUR DATA FROM SURVEY PROVIDED BY CEA, INC BASED ON NAVD88 VERTICAL DATUM.
12. CONTRACTOR TO LOCATE AND PROTECT ALL UTILITIES. CONTRACTOR TO RELOCATE IF NECESSARY TO MEET COUNTY STANDARDS WITH PRIOR COUNTY AND UTILITY PROVIDER APPROVAL.
13. NO WORK WITHIN F.D.O.T. RIGHT-OF-WAY SHALL BE INITIATED UNTIL PROJECT HAS RECEIVED APPROPRIATE PERMITS.
14. A TEMPORARY TRACKING CONTROL DEVICE IS TO BE INSTALLED WHILE THE INITIAL EXCAVATION IS BEING PERFORMED TO SET ENTRANCE ROAD TO DESIGN ELEVATION. AFTER ENTRANCE ROAD IS BUILT, TRACKING CONTROL DEVICE TO BE INSTALLED AT THE END OF THE ENTRANCE ROAD AND MAINTAINED FOR THE DURATION OF EXCAVATION ACTIVITIES.

DEMOLITION PLAN

NATURE COAST CROSSING
EXCAVATION AREA

DRAWING INVALID UNLESS SIGNED, DATED & SEALED BY REGISTERED PROFESSIONAL

7/7/15

SCOTT D. MCKEE, P.E.
FL. REG. NO. 65654

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DATE	REV. BY	REV. NO.	REVISION
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WHEN PRINTED TO SCALE, DRAWING SIZE SHALL BE 22" X 34"

SHEET
4

JOB No.: 14073

SITE DATA

OWNER: HR HERNANDO LLP

PERMITTEE: HR HERNANDO LLP

ADDRESS: 1101 EAST FLETCHER AVENUE
TAMPA, FL 33612-3666

PHONE: (813) 293-3719

ENGINEER: COASTAL ENGINEERING ASSOC., INC.

SURVEYOR: COASTAL ENGINEERING ASSOC., INC.

ADDRESS: 966 CANDLELIGHT BLVD.
BROOKSVILLE, FLA. 34601

PHONE: (352) 796-9423

PARCEL KEY: 372974

PARCEL ADDRESS: CORTEZ BOULEVARD

EXISTING ZONING: PDP(GC) WITH SPECIFIC C-2 USES ADDED
NORTH - AR
SOUTH - AG
EAST - COMMERCIAL AC
WEST - C1, AC

FEMA FLOOD ZONE: BASED UPON REVIEW OF THE FEDERAL EMERGENCY MANAGEMENT AGENCY FLOOD INSURANCE RATE (FIRM), MAP NUMBER 12053C0238D EFFECTIVE DATE FEBRUARY 2, 2012; THE PROPOSED SITE IS WITHIN ZONE X AND IS NOT LOCATED WITHIN A SPECIAL FLOOD HAZARD AREA.

FOR ADDITIONAL FLOOD INFORMATION SEE THE EASTERN HERNANDO WATERSHED STUDY PREPARED FOR SWFWMD AND HERNANDO COUNTY BY PARSONS, DECEMBER 9, 2009.

PROPERTY AREA: ± 57.3 ACRES

TOTAL PROJECT AREA = 29.15 AC (0.03 AC WITHIN ROW)
EXISTING IMPERVIOUS AREA = 0 SF (0.00 AC)
- EXISTING BUILDING TO REMAIN = 0 SF
- EXISTING CONCRETE TO REMAIN = 0 SF
- EXISTING BLDG TO BE REMOVED = 0 SF
- EXISTING CONCRETE TO BE REMOVED =0 SF
- EXISTING ASPHALT TO BE REMOVED = 0 SF

PROPOSED AREAS:
- IMPERVIOUS ASPHALT AREA = 0 SF
- CONCRETE AREA = 0 SF
- POND = 15.6 AC AT DHW(100)
- PERVIOUS AREAS: = 28.38 AC / 100% OF SITE
  - DISTURBED AND RESTORED = 28.38 AC / 100% OF SITE
  - UNDISTURBED = 0 SF (0 AC / 0% OF SITE)

PARKING COUNTS: NOT APPLICABLE

NO SURFACE WATERS ONSITE.

UTILITIES
A: WATER AND SEWER: NOT APPLICABLE
B: ELECTRIC: NOT APPLICABLE
C: TELEPHONE: NOT APPLICABLE

FIRE PROTECTION: HERNANDO COUNTY

SOIL CLASSIFICATION:
#14 & #15 - CANDLER, HSG A

EXISTING VEGETATION:
GRASS

PROPOSED TREE REMOVAL:
NO SPECIMEN OR MAJESTIC TREES PROPOSED TO BE REMOVED.

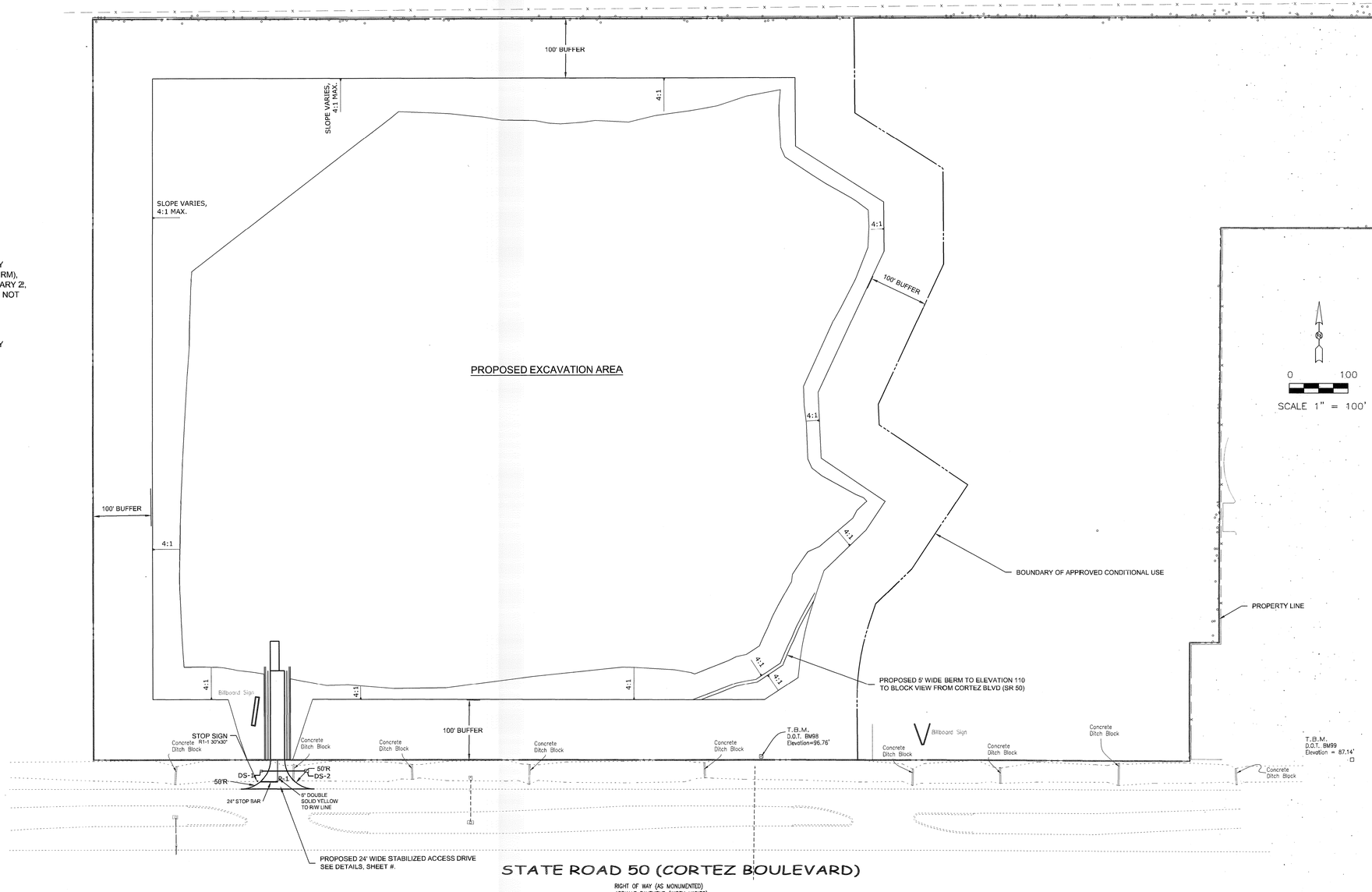
BUILDING SETBACKS: PROJECT SITE IS ZONED PDP(GC)

NORTH PROPERTY LINE:	35'
EAST PROPERTY LINE:	20'
WEST PROPERTY LINE:	20'
SOUTH PROPERTY LINES:	125'
DRIVEWAY SETBACK:	N/A

SETBACKS ARE SET BY MASTER PLAN REVISION 12-03-2014

GENERAL PERMITTING REQUIREMENTS:
ENVIRONMENTAL RESOURCE - INDIVIDUAL
NPDES - CONSTRUCTION SITE > 1 AC
HERNANDO COUNTY - EXCAVATION PERMIT

NOTES:
1. LIGHTING TO BE CONTAINED ONSITE TO PREVENT ANY LIGHT SPILLAGE.
2. THESE PLANS ARE INTENDED ONLY FOR PERMITTING AND CONSTRUCTION OF CIVIL SITE WORKS AND ASSOCIATED DRAINAGE FEATURES.
3. ADDITIONAL SEPARATE PERMITTING WILL BE REQUIRED BY OTHERS FOR FUTURE SITE LIGHTING, SIGNAGE, IRRIGATION, ETC.
4. EXISTING WATER AND SEWER CONNECTIONS, IF ANY, TO REMAIN AND CONTINUE TO BE USED. NO MODIFICATIONS TO SYSTEM IS PROPOSED.



STATE ROAD 50 (CORTEZ BOULEVARD)

RIGHT OF WAY (AS MONUMENTED)
ASPHALT PAVEMENT (WIDTH VARIES)

SITE PLAN

NATURE COAST CROSSING
EXCAVATION AREA

DRAWING INVALID UNLESS SIGNED, DATED & SEALED BY REGISTERED PROFESSIONAL

Scott D. McKee 7/7/15

SCOTT D. MCKEE, P.E. FL. REG. NO. 65654

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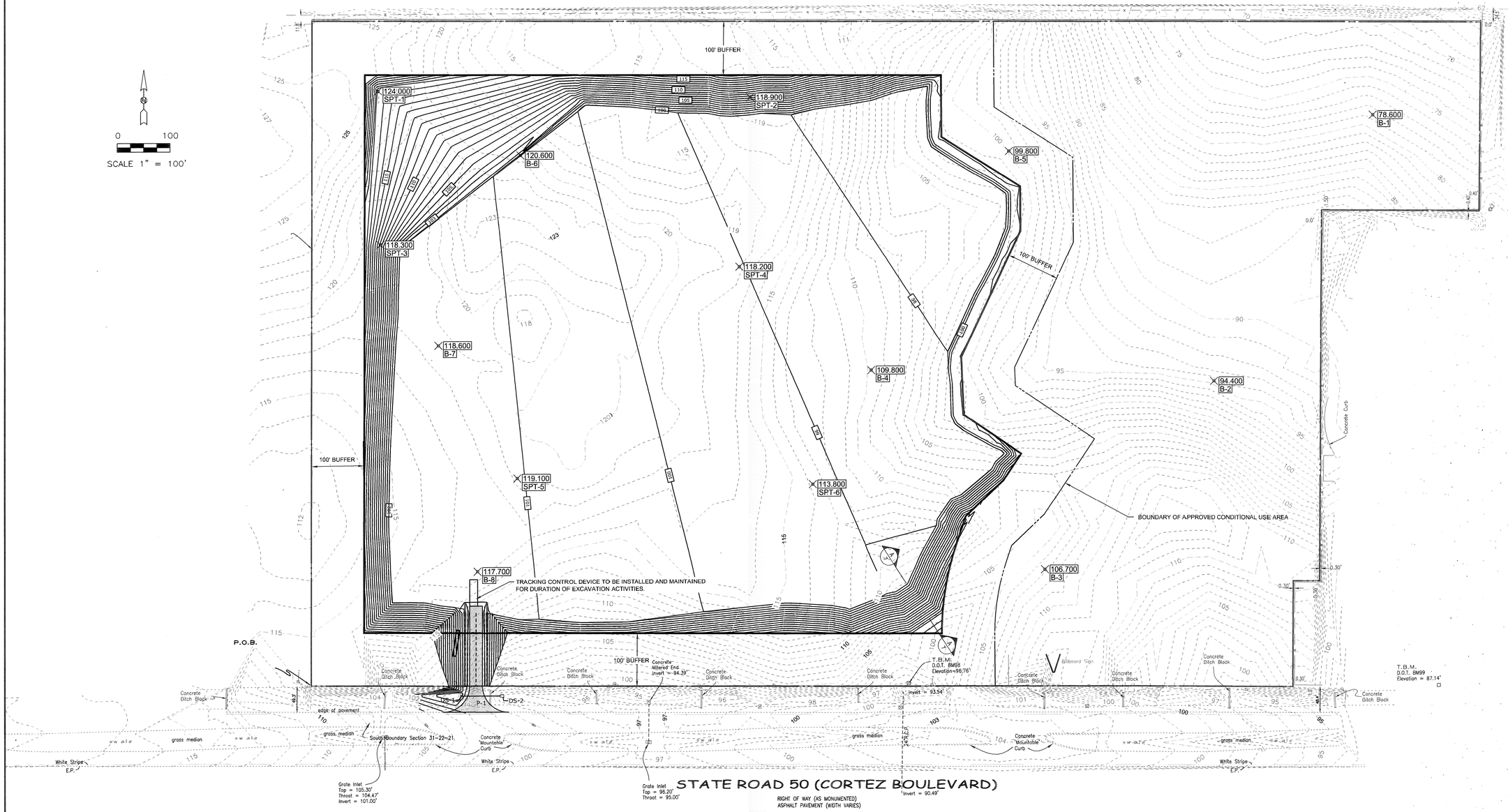
SHEET
5

JOB No.: 14073



SPECIAL NOTES TO CONTRACTORS

1. SOIL BORINGS INDICATE THE PRESENCE OF CLAY ANOMALIES THROUGHOUT THE EXCAVATION AREA AT VARYING DEPTHS. THE SOIL BORINGS AVAILABLE TO THE ENGINEER AT THE TIME OF THIS DESIGN INDICATE THAT THE CLAY ANOMALIES LIE BELOW THE DESIGN BOTTOM GRADE AS SHOWNONTHESE PLANS. HOWEVER, IT IS POSSIBLE THAT CLAY MAY BE ENCOUNTERED IN AREAS BETWEEN BORING LOCATIONS AT HIGHER ELEVATIONS THAN ANTICIPATED. DURING THE EXCAVATION ACTIVITY, IF CLAY IS ENCOUNTERED IN ANY AREA PRIOR TO EXCAVATION REACHING THE DEPTH OF THIE DESIGN GRADE, EXCAVATION SHALL CEASE IN THAT AREA..
2. NO CLAY SHALL BE EXTRACTED FROM THE EXCAVATION AREA. IF CLAY IS ENCOUNTERED AND EXCAVATION CEASES PER NOTE 9 ABOVE, A LAYER OF SAND SHALL BE PLACED AS BACKFILL ON TOP OF THE CLAY TO A MINIMUM DEPTH OF 1-FOOT ABOVE THE TOP OF THE CLAY ANOMALY.
3. STORMWATER FROM EXCAVATED AREAS SHALL BE PREVENTED FROM LEAVING THE SITE AT ALL STAGES OF EXCAVATION. EVERY ACRE REQUIRES A VOLUME OF APPROXIMATELY 0.75 ACRE-FOOT (1 ACRE x 9-INCHES DEEP) OF STORAGE VOLUME. THIS SHOULD BE CONSIDERED DURING PHASING OF EXCAVATION TO ENSURE ADEQUATE STORAGE VOLUME IS MAINTAINED THROUGH ALL STAGES OF EXCAVATION.

GRADING PLAN

NATURE COAST CROSSING EXCAVATION AREA

DRAWING INVALID UNLESS SIGNED AND SEALED BY REGISTERED PROFESSIONAL

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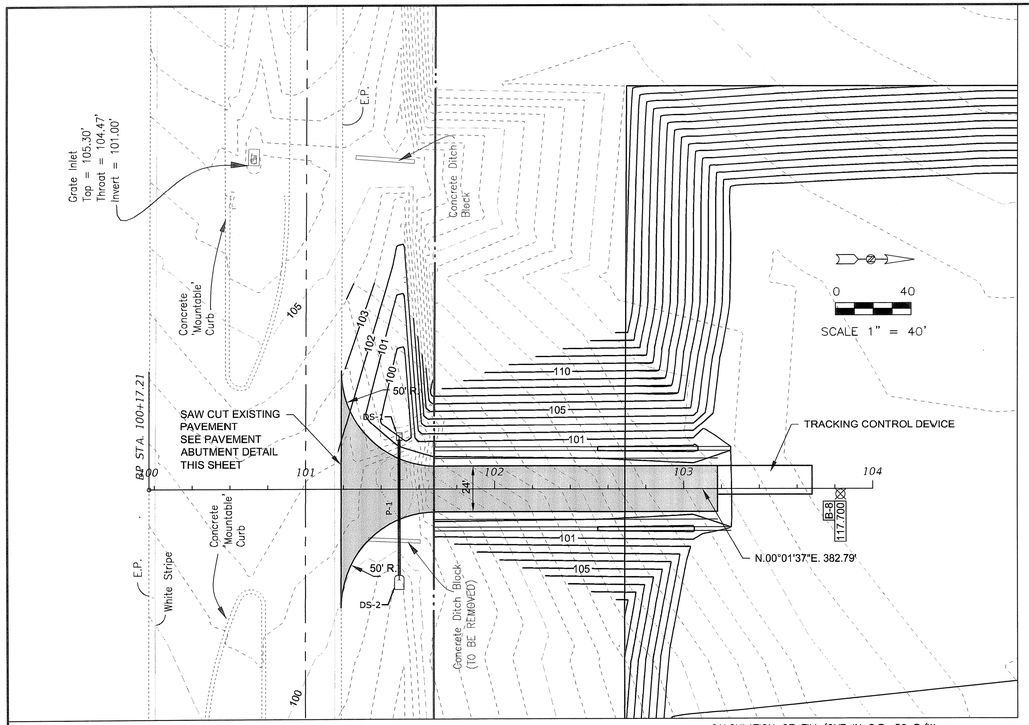
SHEET 6

JOB No.: 14073



ACCESS DRIVE PLAN VIEW

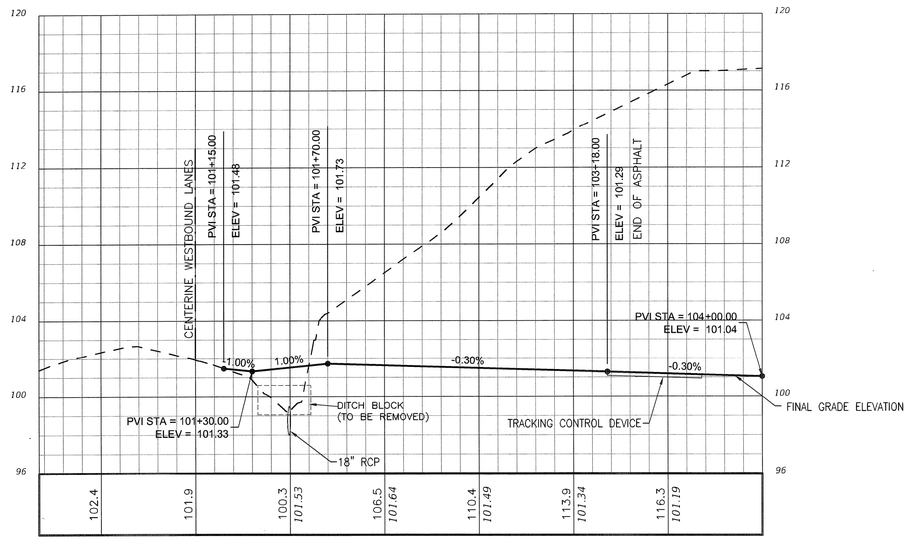
CALCULATION OF FILL/CUT IN S.R. 50 R/W:

FILL FOR ACCESS ROAD – AREA BELOW DITCH BLOCK ELEVATION 100.59:

EL	AREA (SF)	VOLUME (CF)
99	66	–
100	449	258
100.59	1039	439
		697 CF

CUT WEST OF ACCESS ROAD – AREA BELOW ACCESS ROAD SHOULDER ELEVATION 101:

EL	AREA (SF)	VOLUME (CF)
100	488	–
101	1322	**905 CF**

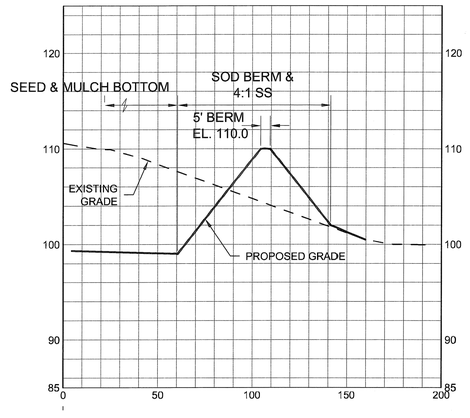


ACCESS DRIVE CENTERLINE PROFILE

SCALE: 1"=40' H, 1"=4' V.

NOTES

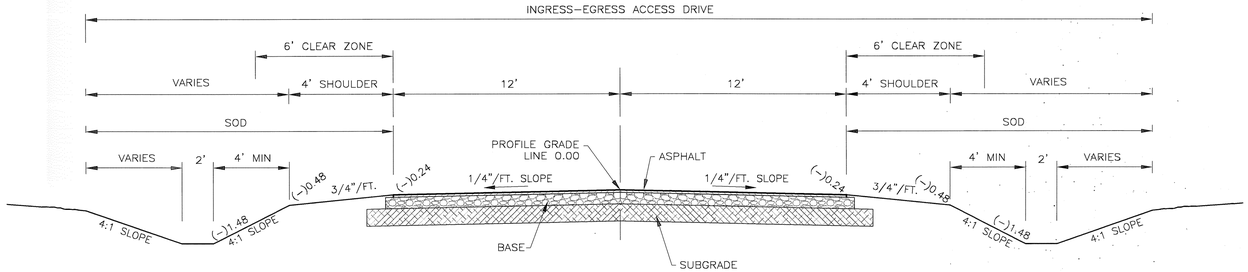
1. NO WORK WITHIN F.D.O.T. RIGHT–OF–WAY SHALL BE INITIATED UNTIL PROJECT HAS RECEIVED APPROPRIATE PERMITS.
2. A TEMPORARY TRACKING CONTROL DEVICE IS TO BE INSTALLED WHILE THE INITIAL EXCAVATION IS BEING PERFORMED TO SET ENTRANCE ROAD TO DESIGN ELEVATION. AFTER ENTRANCE ROAD IS BUILT, TRACKING CONTROL DEVICE TO BE INSTALLED AT THE END OF THE ENTRANCE ROAD AND MAINTAINED FOR THE DURATION OF EXCAVATION ACTIVITIES.
3. SOIL BORINGS INDICATE THE PRESENCE OF CLAY ANOMALIES THROUGHOUT THE EXCAVATION AREA AT VARYING DEPTHS. THE SOIL BORINGS AVAILABLE TO THE ENGINEER AT THE TIME OF THIS DESIGN INDICATE THAT THE CLAY ANOMALIES LIE BELOW THE DESIGN BOTTOM GRADE AS SHOWNONTHESE PLANS. HOWEVER, IT IS POSSIBLE THAT CLAY MAY BE ENCOUNTERED IN AREAS BETWEEN BORING LOCATIONS AT HIGHER ELEVATIONS THAN ANTICIPATED. DURING THE EXCAVATION ACTIVITY, IF CLAY IS ENCOUNTERED IN ANY AREA PRIOR TO EXCAVATION REACHING THE DEPTH OF THE DESIGN GRADE, EXCAVATION SHALL CEASE IN THAT AREA.
4. NO CLAY SHALL BE EXTRACTED FROM THE EXCAVATION AREA. IF CLAY IS ENCOUNTERED AND EXCAVATION CEASES PER NOTE 9 ABOVE, A LAYER OF SAND SHALL BE PLACED AS BACKFILL ON TOP OF THE CLAY TO A MINIMUM DEPTH OF 1–FOOT ABOVE THE TOP OF THE CLAY ANOMALY.



BERM SECTION A-A

SCALE: 1"=40' H, 1"=4' V.

NOTE: BERM FOR RESTRICTING VIEW OF EXCAVATION FROM S.R. 50.



TYPICAL ROAD SECTION

NOT TO SCALE

PAVEMENT REQUIREMENTS

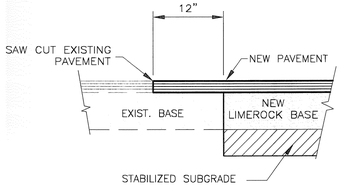
SHOULDER = 6' WIDE SOD OVER 6" OF STABILIZED LBR 40

PAVEMENT = 2" TYPE SP 12.5 TRAFFIC LEVEL C

BASE = 8" LIMEROCK 98% PER AASHTO T–180 LBR 100

SUBGRADE = 12" TYPE "B" STABILIZED LBR 40

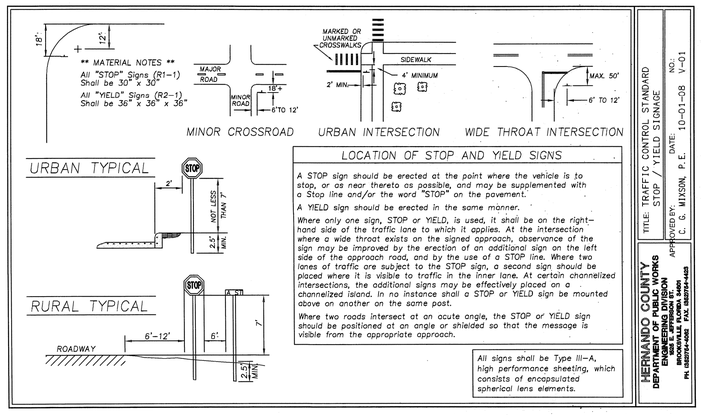
ALTERNATIVE
13.5" LIMEROCK BASE IN 2 LIFTS, NO STABILIZED SUBGRADE.
SUBGRADE SHALL BE COMPACTED TO 98% MAX DENSITY.



NOTE:
CONTRACTOR SHALL MAKE A SMOOTH VERTICAL CUT IN THE EXISTING PAVEMENT AT A DISTANCE NOT LESS THAN 12" FROM THE EXISTING EDGE. THE EXISTING LIMEROCK BASE SHALL BE EXPOSED AND CLEANED TO REMOVE LOOSE PARTICLES. THE EXPOSED LIMEROCK SHALL THEN BE PRIME COATED NOT MORE THAN THREE DAYS PRIOR TO SCHEDULED PAVING.

PAVEMENT ABUTMENT DETAIL

N.T.S.



LOCATION OF STOP AND YIELD SIGNS

A STOP sign should be erected at the point where the vehicle is to stop, or as near thereto as possible, and may be supplemented with a Stop line and/or the word "STOP" on the pavement.

A YIELD sign should be erected in the same manner.

Where only one sign, STOP or YIELD, is used, it shall be on the right–hand side of the traffic lane to which it applies. At the intersection where a wide throat exists on the signed approach, observance of the sign may be improved by the erection of an additional sign on the left side of the approach road, and by the use of a STOP line. Where two lanes of traffic are subject to the STOP sign, a second sign should be placed where it is visible to traffic in the inner lane. At certain channelized intersections, the additional signs may be effectively placed on a channelized island. In no instance shall a STOP or YIELD sign be mounted above on another on the same post.

Where two roads intersect at an acute angle, the STOP or YIELD sign should be positioned at an angle or shielded so that the message is visible from the appropriate approach.

All signs shall be Type III–A, high performance sheeting, which consists of encapsulated spherical lens elements.

HERNANDO COUNTY
DEPARTMENT OF PUBLIC WORKS
1525 E. JEFFERSON ST.
BROOKSVILLE, FLORIDA 34601
PH. (352)754-4088 FAX: (352)754-4429

TITLE: TRAFFIC CONTROL STANDARD STOP / YIELD SIGNAGE
NO. Y-01
APPROVED BY: C. G. MAXSON, P.E. DATE: 10-01-08

DATE	REV. BY	REV. NO.	REVISION
–	–	–	–

WHEN PRINTED TO SCALE, DRAWING SIZE SHALL BE 22" X 34"

ACCESS PLAN PROFILE AND DETAILS

NATURE COAST CROSSING EXCAVATION AREA

DRAWING INVALID UNLESS SIGNED AND SEALED BY REGISTERED PROFESSIONAL

SCOTT D. MCKEE, P.E. FL. REG. NO. 65554

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engineering associates, inc.
966 Candlelight Boulevard - Brooksville - Florida 34601
(352) 796-9423 - Fax (352) 799-8359
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SHEET 7

JOB No.: 14073

DRAINAGE PLAN

NATURE COAST CROSSING EXCAVATION AREA

EP STA. 12+49.91

BP STA. 0+00.00

BP STA. 100+17.21

SCALE 1" = 100'

BASIN 1
28.93 AC

100' BUFFER

BOUNDARY OF APPROVED CONDITIONAL USE

DHW (100) = 100.38 (WITHOUT PERCOLATION)

124.000 SPT-1	118.800 SPT-2
120.600 B-6	99.800 B-5
78.600 B-1	119.200 SPT-3
118.200 SPT-4	118.600 B-7
109.800 B-4	94.400 B-2
119.100 SPT-5	113.800 SPT-6
117.700 B-8	106.700 B-3

DS-1 P-1 DS-2

LEGEND

- EXISTING GROUND CONTOUR
- PROPOSED GROUND CONTOUR
- DIRECTION OF FLOW

Structure Data: Line Stm-1	
Structure Name	Structure Details
DS-1	Index No. 232 - Ditch Bottom Inlet - Type C N=1523072.8613, E=577185.7390 RIM = 100.82 P-1 IE = 98.20
DS-2	Index No. 272 - MES with 1:4 Slope N=1523072.7817, E=577260.7260 RIM = 99.61 P-1 IE = 97.90

Pipe Data: Line Stm-1			
Pipe Name	Size	Length	Slope
P-1	18"	75 LF	0.40%

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7/7/15

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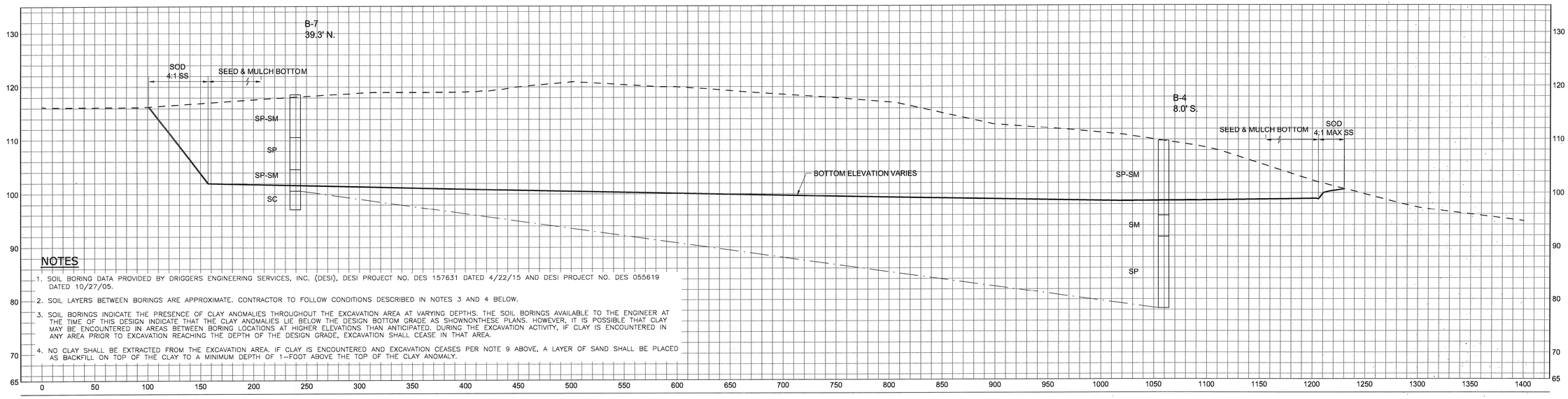
SHEET
8

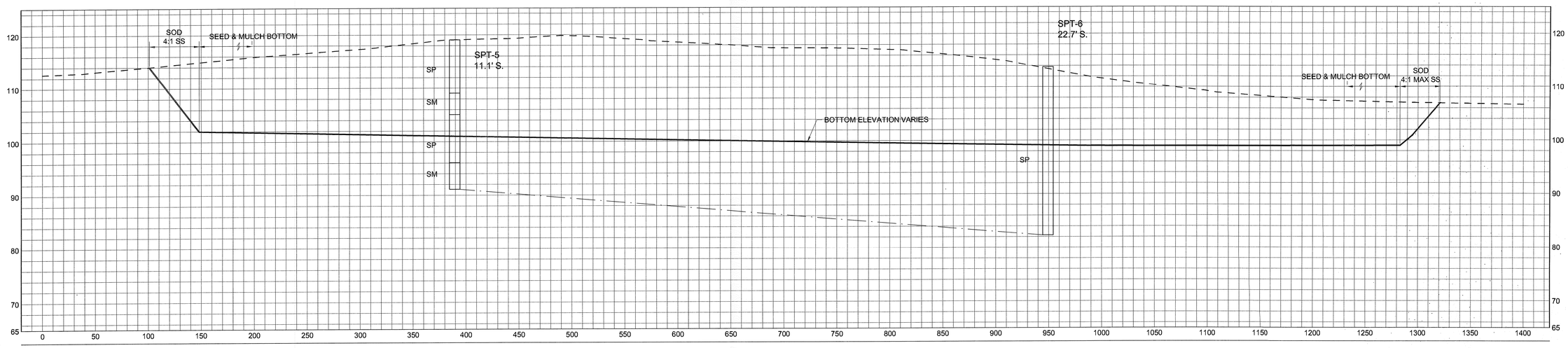
JOB No.: 14073



NOTES

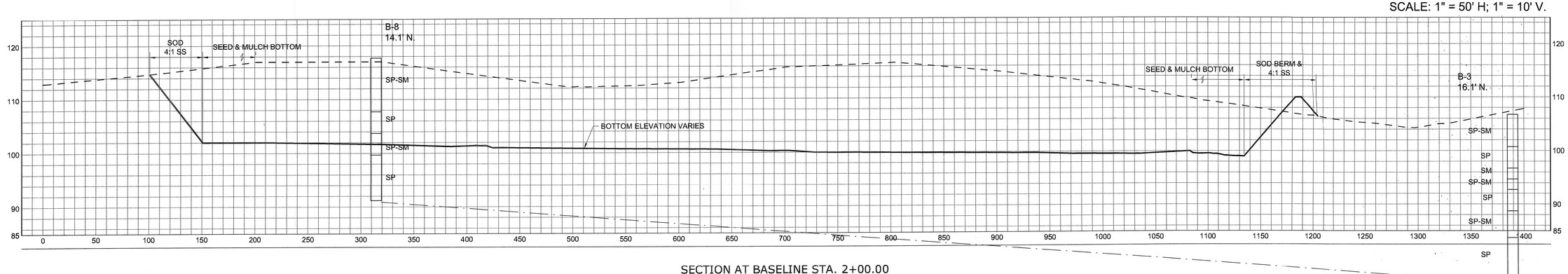
1. SOIL BORING DATA PROVIDED BY DRIGGERS ENGINEERING SERVICES, INC. (DESI), DESI PROJECT NO. DES 157631 DATED 4/22/15 AND DESI PROJECT NO. DES 055619 DATED 10/27/05.
2. SOIL LAYERS BETWEEN BORINGS ARE APPROXIMATE. CONTRACTOR TO FOLLOW CONDITIONS DESCRIBED IN NOTES 3 AND 4 BELOW.
3. SOIL BORINGS INDICATE THE PRESENCE OF CLAY ANOMALIES THROUGHOUT THE EXCAVATION AREA AT VARYING DEPTHS. THE SOIL BORINGS AVAILABLE TO THE ENGINEER AT THE TIME OF THIS DESIGN INDICATE THAT THE CLAY ANOMALIES LIE BELOW THE DESIGN BOTTOM GRADE AS SHOWNONTHESE PLANS. HOWEVER, IT IS POSSIBLE THAT CLAY MAY BE ENCOUNTERED IN AREAS BETWEEN BORING LOCATIONS AT HIGHER ELEVATIONS THAN ANTICIPATED. DURING THE EXCAVATION ACTIVITY, IF CLAY IS ENCOUNTERED IN ANY AREA PRIOR TO EXCAVATION REACHING THE DEPTH OF THE DESIGN GRADE, EXCAVATION SHALL CEASE IN THAT AREA.
4. NO CLAY SHALL BE EXTRACTED FROM THE EXCAVATION AREA. IF CLAY IS ENCOUNTERED AND EXCAVATION CEASES PER NOTE 9 ABOVE, A LAYER OF SAND SHALL BE PLACED AS BACKFILL ON TOP OF THE CLAY TO A MINIMUM DEPTH OF 1-FOOT ABOVE THE TOP OF THE CLAY ANOMALY.

SECTION AT BASELINE STA. 6+00.00



SECTION AT BASELINE STA. 4+00.00

SCALE: 1" = 50' H; 1" = 10' V.



SECTION AT BASELINE STA. 2+00.00

SECTIONS

NATURE COAST CROSSING EXCAVATION AREA

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Scott D. Mckee 7/7/15

SCOTT D. MCKEE, P.E., FL. REG. NO. 53954

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SHEET
9

JOB No.: 14073

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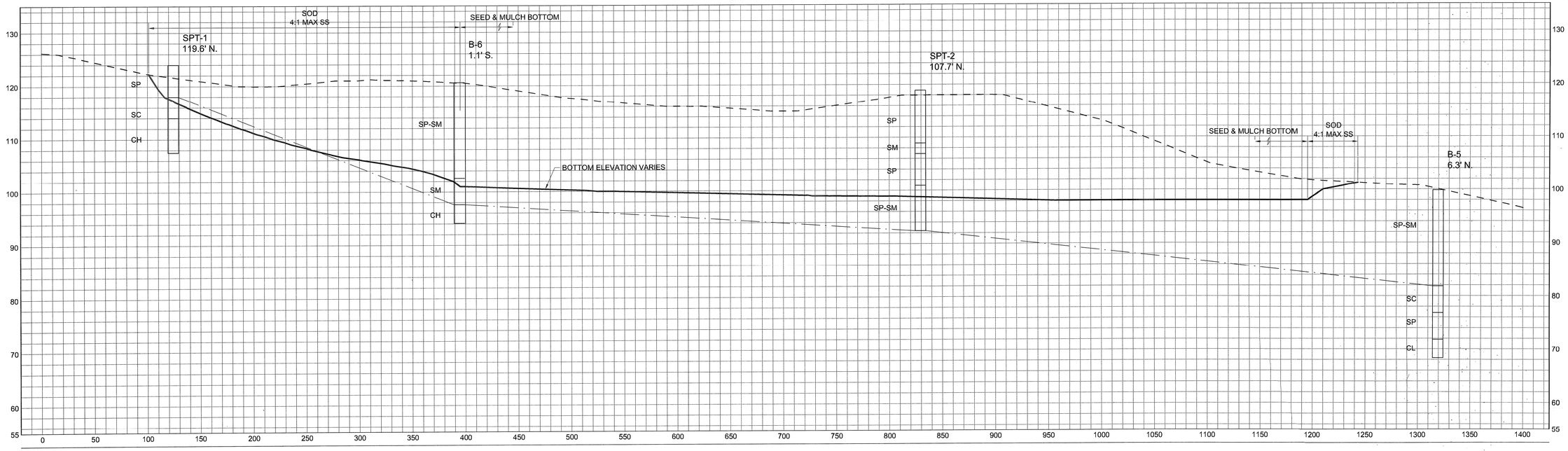
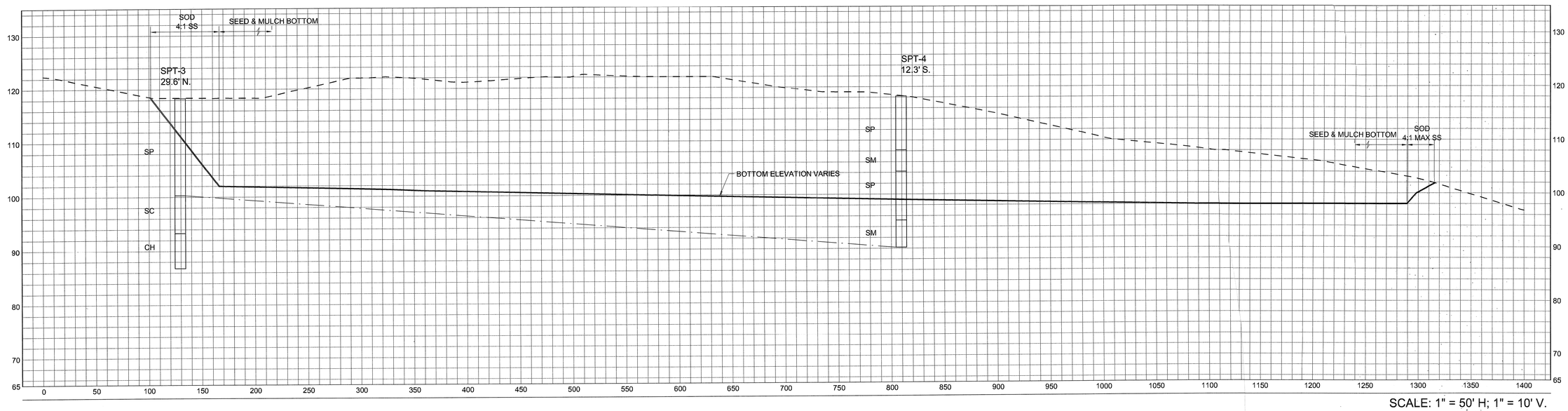


SECTION AT BASELINE STA. 10+00.00



SECTION AT BASELINE STA. 8+00.00

SCALE: 1" = 50' H; 1" = 10' V.

SECTIONS

NATURE COAST CROSSING EXCAVATION AREA

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Scott D McKee 7/7/15

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SHEET
10

JOB No.: 14073

REGULATORY REQUIREMENTS FOR CONSTRUCTION PROJECTS INCLUDE:

ENVIRONMENTAL RESOURCE PERMIT (ERP) CONSTRUCTION SURFACE WATER MANAGEMENT PLAN

PURPOSE:	PREVENT EROSION AND SEDIMENT DEPOSIT IN WETLANDS/SURFACE WATERS OR ADJACENT PROPERTIES. PREVENT OFFSITE FLOODING. PREVENT VIOLATIONS OF STATE WATER QUALITY STANDARDS.
REGULATORY AGENCY:	STATE OF FLORIDA WATER MANAGEMENT DISTRICTS
APPLIES TO:	ALL CONSTRUCTION PROJECTS UNLESS SPECIFICALLY EXEMPT BY RULE.
RESPONSIBLE ENTITY:	ENVIRONMENTAL RESOURCE PERMITTEE SHALL BE RESPONSIBLE FOR ENSURING COMPLIANCE.
REQUIREMENTS:	ALL PERMITTED PROJECTS SHALL PREPARE AND MAINTAIN A CONSTRUCTION SURFACE WATER MANAGEMENT PLAN (CSWMP) IN ACCORDANCE WITH F.A.C. 40D RULES, PART B, BASIS OF REVIEW, SECTION 2.8.

MAJOR COMPONENTS OF THE CSWMP

1) SITE PLAN.
2) TOPOGRAPHY AND HYDROLOGIC DATA
3) CONSTRUCTION DETAILS.
4) PROCEDURES TO CONTROL EROSION AND SEDIMENTATION.
5) PROCEDURES FOR STORMWATER MANAGEMENT.
6) MAINTENANCE PROCEDURES.
7) INSPECTION RECORDS.

SEE "THE FLORIDA STORMWATER EROSION AND SEDIMENTATION CONTROL INSPECTOR'S MANUAL", APRIL 2006 (OR LATEST EDITION) FOR ADDITIONAL INFORMATION. AND

CHAPTER 6, "THE FLORIDA DEVELOPMENT MANUAL: A GUIDE TO SOUND LAND AND WATER MANAGEMENT".(FDEP 1988)
CONSTRUCTION SURFACE WATER MANAGEMENT RESPONSIBLE ENTITY

NOTE TO CONTRACTOR: A NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT IS NOT PART OF THE PERMITTING OBTAINED WITH THIS PLAN SET. THEREFORE, THE CONTRACTOR IS ADVISED THAT AN NPDES CONSTRUCTION PERMIT MAY BE REQUIRED FOR THIS PROJECT AND THAT THE CONTRACTOR IS RESPONSIBLE FOR APPLYING FOR AND ADHERING TO THIS PERMIT. REFER TO SUBSECTION 62-621., F.A.C. FOR ADDITIONAL INFORMATION.

THE INFORMATION PROVIDED IN THE SWPPP NOTES AND DETAILS SHEETS ARE FOR COMPLIANCE WITH ENVIRONMENTAL RESOURCE PERMITTING UNDER CHAPTER 62-333, F.A.C. AND MAY BE USED AS A REFERENCE FOR COMPLIANCE WITH NPDES PERMITTING BUT ARE NOT NECESSARILY INCLUSIVE OF ALL NPDES REQUIREMENTS.

NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (NPDES)

PURPOSE:	PREVENT THE DISCHARGE OF POLLUTANTS ASSOCIATED WITH CONSTRUCTION ACTIVITIES TO SURFACE WATERS OF THE STATE.
REGULATORY AGENCY:	EPA AND STATE OF FLORIDA DEPT. OF ENVIRONMENTAL PROTECTION
APPLIES TO:	ALL CONSTRUCTION PROJECTS DISTURBING ONE (1) OR MORE ACRES OF LAND UNLESS SPECIFICALLY EXEMPT BY RULE.
RESPONSIBLE ENTITY:	THE "OPERATOR" AS DEFINED IN F.A.C. 62-621.300(4)(a) SHALL BE RESPONSIBLE FOR ENSURING COMPLIANCE. TYPICALLY THE CONTRACTOR SHALL BE OPERATOR AND FILE NPDES NOTICE OF INTENT (NOI).
REQUIREMENTS:	ALL NON-EXEMPT PROJECTS SHALL PREPARE AND MAINTAIN A STORM WATER POLLUTION PREVENTION PLAN (SWPPP) IN ACCORDANCE WITH F.A.C. 62-621. THE SWPPP SHALL BE COMPLETED PRIOR TO SUBMITTAL OF THE NOI AND MAINTAINED THROUGH THE LENGTH OF PROJECT.

MAJOR COMPONENTS OF THE SWPPP

1) SITE PLAN.
2) TOPOGRAPHY AND HYDROLOGIC DATA
3) CONSTRUCTION DETAILS.
4) PROCEDURES TO CONTROL EROSION AND SEDIMENTATION.
5) MEASURES TO CONTROL OTHER POLLUTANTS.
6) MAINTENANCE PROCEDURES.
7) INSPECTION RECORDS.
8) OPERATOR CERTIFICATION.

SEE "GENERIC PERMIT FOR STORMWATER DISCHARGE FROM LARGE AND SMALL CONSTRUCTION ACTIVITIES", MAY 2003 (OR LATEST EDITION) FOR ADDITIONAL INFORMATION.

COMPLIANCE WITH NPDES GENERAL PERMIT CONDITIONS FOR CONSTRUCTION SITES SHALL BE THE CONTRACTOR'S RESPONSIBILITY INCLUDING SUBMITTAL OF THE NPDES NOTICES OF INTENT (NOI) AND TERMINATION (NOT) TO FDEP IN ACCORDANCE WITH STATE AND FEDERAL REGULATIONS.

CONTRACTOR IS ADVISED THAT THIS CONSTRUCTION PLAN SET DOES NOT FULFILL ALL REQUIREMENTS OF THE SWPPP. TO ENSURE COMPLIANCE, ADDITIONAL ITEMS TO BE SUPPLIED AND MAINTAINED ON SITE BY THE CONTRACTOR SHALL INCLUDE:

1. Certification Statement.
In accordance with F.A.C. 62-621.305 all documents related to the NPDES Permit, including Contractor's SWPPP, shall contain the following statement "I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations".

2. Subcontractor's Statement.
In accordance with Document 62-621.300(4)(a), any subcontractors responsible for SWPPP activities shall sign a copy of the following statement "I certify under penalty of law that I understand, and shall comply with, the terms and conditions of the State of Florida Generic Permit for Stormwater Discharge from Large and Small Construction Activities and this Stormwater Pollution Prevention Plan prepared thereunder". Certifications are to include name and title of person providing signature, as well as, name, address and telephone number of the contracting firm, and date certification is made.

3. Records.
Contractor's SWPPP shall contain Records of all inspections and maintenance activities as required by permit. A copy of the NOI shall also be kept with the SWPPP. Records are to be maintained for no less than 3 years after final stabilization of the site.

4. Ammendments
Contractor's SWPPP shall include any modifications to the "Plan" as may be required to address such items as specific construction phasing, changes to controls made in the field, or changes in responsible personnel.

The following documents may be consulted for additional guidance:

WWW.DEP.STATE.FL.US/LEGAL/RULES/SHARED/62-621/62-621.PDF

WWW.DEP.STATE.FL.US/WATER/STORMWATER/NPDES/DOCS/SWPPPTRAINING.PDF

OR FDEP CAN BE CONTACTED AT 1-850-245-7522 FOR ANY NPDES PERMIT REQUIREMENTS.

INFORMATION CONTAINED IN THESE CONSTRUCTION PLANS IS INTENDED TO PROVIDE A STARTING POINT FOR THE CSWM AND SWPP PLANS. IN ORDER TO FULLY COMPLY WITH ALL ASPECTS OF CSWMP AND SWPPP REQUIREMENTS, ADDITIONAL ITEMS SHALL BE PROVIDED BY THE RESPONSIBLE ENTITY TO INCLUDE: INSPECTION RECORDS, UPDATES / MODIFICATIONS, AND CERTIFICATIONS.

REFERENCES MADE TO THE "PLAN" IN THE FOLLOWING NOTES REFERS BOTH TO THE CSWMP AND SWPPP AND SHALL BE INTERCHANGEABLE. THE "PLAN" COMPONENTS PROVIDED BY THE ENGINEER INCLUDE SITE DATA, STORMWATER MANAGEMENT EROSION/SEDIMENT CONTROL INSTRUCTIONS, DETAILS, AND NOTES AS PRESENTED THROUGHOUT THIS CONSTRUCTION PLAN SET.

"PLAN" AMENDMENTS

THE PLAN SHALL BE AMENDED WHENEVER THERE IS A CHANGE IN DESIGN, CONSTRUCTION, OPERATION, OR MAINTENANCE, WHICH HAS A SIGNIFICANT EFFECT ON THE POTENTIAL FOR DISCHARGE OF POLLUTANTS TO SURFACE WATERS OF THE STATE OR MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4). THE PLAN ALSO SHALL BE AMENDED IF IT PROVES TO BE INEFFECTIVE OR TO INDICATE ANY NEW CONTRACTOR AND/OR SUBCONTRACTOR IMPLEMENTING CONTROL MEASURES. ALL AMENDMENTS SHALL BE SIGNED, DATED, AND KEPT AS ATTACHMENTS TO THE ORIGINAL PLAN.

SITE DATA

PROJECT NAME: NATURE COAST CROSSING EXCAVATION AREA
PROJECT DESCRIPTION: CONSTRUCT BORROW AREA WITH DRAINAGE SYSTEM.

LOCATION: S 31 T 22S R 21E

PROJECT SIZE: ± 28.38 AC SIZE OF DISTURBED AREA: ± 28.38 AC

SITE MAP: SEE CONSTRUCTION PLANS COVER SHEET
EXISTING TOPOGRAPHY: SEE CONSTRUCTION PLAN SHEET 2

PROPOSED TOPOGRAPHY: SEE CONSTRUCTION PLAN SHEET 4

PREDEVELOPMENT DRAINAGE MAP: SEE SHEET 5 & STORMWATER MANAGEMENT REPORT EXHIBIT E

POST-DEVELOPMENT DRAINAGE MAP: SEE SHEET 6

SCS SOIL DATA:
#14 & #15 CANDLER HSG (A)

ADDITIONAL DATA INCLUDING GEOTECHNICAL STUDY AND STORMWATER MANAGEMENT REPORT ARE AVAILABLE FROM THE ENGINEER.

RUNOFF COEFFICIENTS:
PREDEVELOPMENT C VALUE = 0.2 UNPAVED
POST-DEVELOPMENT C VALUE = 0.2 UNPAVED
= 0.9 PAVED

DISCHARGE POINTS AND RECEIVING WATER OR MS4 (UP TO 100 YR / 24 HR EVENT)
DISCHARGE: NO DISCHARGE
RECEIVING WATER: N/A
DRAINAGE AREA: N/A AC FROM / THROUGH PROJECT AREA

FDOT PRECIPITATION ZONE: ZONE 6

WATER MANAGEMENT DISTRICT RAINFALL DATA:
2.3 YR / 24 HR = 4.7 INCHES
5 YR / 24 HR = 5.6 INCHES
10 YR / 24 HR = 7.5 INCHES
25 YR / 24 HR = 9.5 INCHES
100 YR / 24 HR = 12.8 INCHES

CONSTRUCTION ACTIVITIES

1. Sequence of Major Soil Disturbing Activities
For each construction phase clear and grub as necessary for installation of perimeter controls only. Install perimeter controls before beginning other land disturbing activities. Remove perimeter controls only after all upstream areas are stabilized.

A. Clearing, grubbing and earthwork for ponds (unless approved otherwise).
B. Clearing, grubbing and earthwork for swales.
C. Storm sewer construction. Install storm pipe in the upstream direction.
D. Clearing and grubbing for utility installation.
E. Clearing, grubbing and earthwork associated with pavement and buildings.
F. Complete site work.
G. Remove erosion control measures prior to final demobilization.

2. Areas of Soil Disturbing Activities
Any areas where permanent features are shown to be constructed shall be disturbed.

3. Areas to be Stabilized
All areas disturbed during construction shall be stabilized unless specifically shown otherwise.

CONTROLS

The following discussion defines general guidelines for the use of erosion/sediment controls and stabilization.

1. Temporary and permanent stabilization practices.

A. Temporary Sodding:
Install at the limits of phasing in all locations where construction activities have ceased and the likelihood of erosion is high.

B. Temporary Grassing:
Install at all locations where construction activities has temporarily stopped for a period to exceed 14 days.

C. Permanent planting, sodding and seeding:
All disturbed areas not paved will ultimately receive permanent sodding, seed or mulch unless specifically shown otherwise in plans.

2. Structural Controls.
Intended to divert, store, retain or otherwise limit storm water flow. Structural controls shall be installed prior to any earthwork or construction activity.

A. Silt Fence:
Shall be used
- around the perimeter of project area,
- around wetlands or other surface waters,
- where existing ground slopes away from the project,
- or wherever there is potential for sediment to migrate offsite.
Typical useful life of silt fence is 6 months.
Sheet flow areas may require additional silt fence.

NOTE: Additional silt fence may also be required to designate limits of construction, protect trees, or satisfy local development requirements. Stockpile areas shall include silt fence around the perimeter.

B. Synthetic Hay Bales
May be used as temporary sediment barrier. The useful life of synthetic hay bales depends on exposure to ultra-violet light but is typically 3 months.

C. Rock Bags
May be used as temporary measure for inlet protection. Primary use shall be around curb type inlets.

D. Turbidity Barriers
Shall include staked or floating type, as required, wherever there is a point source discharges from project area to surface water. Typical useful life of staked turbidity barriers is 6 months.

3. Sediment Basins for areas disturbing 10 acres or more.
Sumps or traps are required to provide 3,600 cu ft of storage per acre drained. When discharge is to an Outstanding Florida Waterway, Storage must be sufficient to accommodate the 10 year / 24 hour storm.

Requirement for sediment trap may be satisfied by utilizing the project storm water ponds. If so, Ponds shall be cleaned of excess sediment prior to final acceptance.

4. Permanent storm water management controls.
As individual phases of construction are performed, permanent control structures shall be installed.

5. Other Pollutant Controls.

A. Waste Disposal:
The Contractor shall be responsible for maintaining field records of their SWPPP activities including disposal of construction debris and waste.

The Contractor shall provide litter control and collection within the project boundaries during construction activities. Any fertilizer, hydrocarbon, or other chemical containers shall be disposed of by the contractor according to EPA standard practices as detailed by the manufacturer. No solid materials including building and construction debris shall be placed in, or discharged to, wetlands, surface waters or buried on site.

B. Offsite Vehicle Tracking:
Loaded haul trucks shall be covered by a tarpaulin. In addition, the Contractor shall utilize one or more of the following acceptable methods of control:

1. Excess dirt on paved roads shall be removed daily.
2. Soil Tracking Prevention Device may be used where vehicles leave the project area (or enter nearest paved road).
3. Contractor shall provide pollution control by implementing dust control with water application while dust generating activities are conducted.

C. Herbicides / Pesticides:
Application rates shall conform to applicable local, state and federal regulations.

D. Toxic Substances:
Storage, application, generation, migration of all toxic substances shall conform to applicable local, state ad federal regulations. Containment areas shall be provided whenever potentially hazardous materials are stored on site.

E. Stockpiles:
Stockpiling topsoil shall be stockpiled so that natural drainage is not obstructed and no offsite sedimentation occurs. Soil stockpiles should be protected or adequately covered from stormwater during construction. Simple protection measures can include silt fence or a trench aroung the base of the stockpile. A tarp or temporary seeding may also provide adequate cover for a soil stockpile. Stockpiles should not be placed near the permeter of the site, near a waterbody or storm drain inlet, or within 10 feet of an infiltration/exfiltration system. If a stockpile is to remain for an extended period of time adequate long term stabilization and maintenance is required and at a minimum should include silt fence and permanent seeding with regular monitoring and maintenance.

6. Non-stormwater Discharges.
No non-stormwater discharges to surface waters, wetlands or the MS4 shall be allowed except as specifically approved by applicable permits and regulations.

MAINTENANCE

The Contractor shall be responsible for daily inspection and maintenance of all control devices throughout the construction phase and removal of control devices when no longer necessary.

The following practices shall be used to maintain controls.

1. The Contractor shall maintain rain gages on the project site and keep a record of daily rainfall.

2. The Contractor shall check and ensure proper operation of the controls. If a repair is necessary, it shall be initiated within 24 hours of the inspection.

3. Built-up sediment shall be removed when it has reached 1/3 the height of barrier.

4. Any controls which are not functioning as intended shall be repaired or replaced.

5. Sediment sumps, if designed and installed, should have sediment removed as necessary to allow for efficient removal of suspended particles. They should be re-excavated to the design finish grade elevation, if silted in.

Temporary and permanent seeding shall be inspected for bare spots, washouts, and healthy growth. Soil tracking prevention devices shall be maintained to prevent clogging of rock bedding which may impede usefulness of the structure.

NOTE: The PERMITTEE is responsible for ensuring that all controls are properly maintained during and after construction.

INSPECTION AND DOCUMENTATION PROCEDURES

The Contractor shall be responsible for completing weekly inspection report form and maintaining documentation for 3 years following final stabilization. The Contractor shall submit copies of these reports to the owner prior to final payment for work shown within these construction plans. Additional inspection and documentation must be completed within 24 hours after any significant rainfall event.

NOTE: For NPDES, a significant rainfall shall be 0.5 inches or greater. For ERP, a significant rainfall shall be 0.25 inches or greater. To eliminate confusion, Contractor is advised to carryout inspections after rainfall exceeding 0.25 inches.
For projects with minimal potential for discharge to surface waters, it may be possible to adjust this criteria. Contact the Engineer for details.

Where sites have been permanently stabilized, inspections/reports shall be conducted at least once per month until construction activities have ceased and NOT has been submitted.

Minimum inspection requirements shall include:
- Points of discharge to waters of the State.
- Points of discharge to the MS4 (municipal storm sewer).
- Disturbed areas of the site that have not been stabilized.
- Areas used for storage of materials that may create a pollution source (i.e. stockpiles, fuel drums, construction debris) and are exposed to rainfall.
- Structural Controls
- Storm water Management Controls
- Locations where vehicles enter and exit the site.

The Contractor shall initiate repairs / corrections within 24 hours of any items found to be in non-compliance with the associated permit requirements. If inspections indicate that the installed stabilization and structural practices are not sufficient to minimize erosion, retain sediment, and prevent the discharge of pollutants Contractor shall complete corrective measures as needed. Contact the Engineer prior to modifying any structural controls which are specifically shown in the construction plans.

NOTE: Specific conditions of all permits may require additional activities above and beyond those outlined above. Check all permit conditions as issued by regulatory agencies to ensure compliance.

EROSION CONTROL NOTES

NATURE COAST CROSSING EXCAVATION AREA

DRAWING INVALID UNLESS SIGNED AND SEALED BY REGISTERED PROFESSIONAL

SCOTT D. MCKEE, P.E.
FL. REG. NO. 65854
7/1/15

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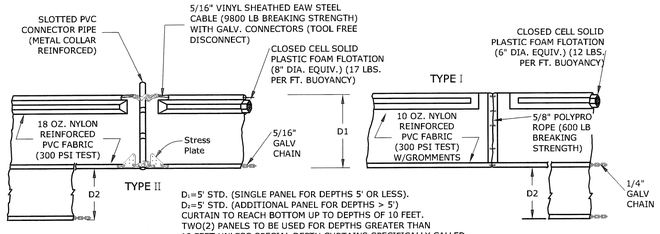
DATE	REV. BY	REV. NO.	REVISION

WHEN PRINTED TO SCALE, DRAWING SIZE SHALL BE 22" X 34"

SHEET
11

JOB No.: 14073

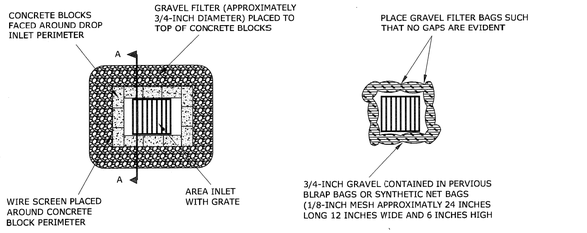


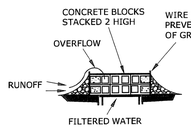
D_1=5' STD. (SINGLE PANEL FOR DEPTHS 5' OR LESS).
D_2=5' STD. (ADDITIONAL PANEL FOR DEPTHS > 5')
CURTAIN TO REACH BOTTOM UP TO DEPTHS OF 10 FEET.
TWO(2) PANELS TO BE USED FOR DEPTHS GREATER THAN 10 FEET UNLESS SPECIAL DEPTH CURTAINS SPECIFICALLY CALLED FOR IN THE PLANS OR AS DETERMINED BY THE ENGINEER.

NOTICE: COMPONENTS OF TYPED I AND II MAY BE SIMILAR OR IDENTICAL TO PROPRIETARY DESIGNS. ANY INFRINGEMENT OF THE PROPRIETARY RIGHTS OF THE DESIGNER SHALL BE THE SOLE RESPONSIBILITY OF THE USER. SUBSTITUTIONS FOR TYPES I AND II SHALL BE AS APPROVED BY THE ENGINEER.

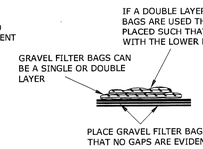
FLOATING TURBIDITY BARRIERS

N. T. S.





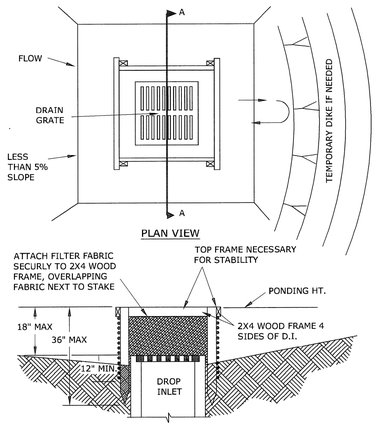
CROSS-SECTION AA



SIDE VIEW

CONCRETE BLOCK FILTER

GRAVEL FILTER BAGS

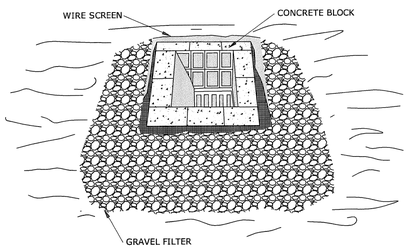


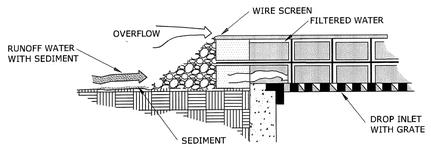
CROSS-SECTION AA

NOTES:
1. DROP INLET SEDIMENT BARRIERS ARE TO BE USED FOR SMALL, NEARLY LEVEL DRAINAGE AREAS. (LESS THAN 5%). THIS METHOD SHALL NOT APPLY TO INLETS RECEIVING CONCENTRATED FLOWS, SUCH AS IN STREET OR HIGHWAY OR MEDIANS.
2. USE 2X4 WOOD OR EQUIVALENT METAL STAKES, (3 FT. MIN LENGTH)
3. INSTALL 2X4 WOOD TOP FRAME TO INSURE STABILITY.
4. THE TOP OF THE FRAME (PONDING HEIGHT) MUST BE WELL BELOW THE GROUND ELEVATION DOWNSLOPE TO PREVENT RUNOFF FROM BY-PASSING THE INLET. A TEMPORARY DIKE MAY BE NECESSARY ON THE DOWNSLOPE SIDE OF THE STRUCTURE.

SILT FENCE DROP INLET SEDIMENT BARRIER

NOTE: GRAVEL FILTERS MAY BE USED ON PAVEMENT OR BARE GROUND.





SPECIFIC APPLICATION

BLOCK AND GRAVEL DROP INLET SEDIMENT FILTER

THIS METHOD OF INLET PROTECTION IS APPLICABLE WHERE HEAVY CONCENTRATED FLOWS ARE EXPECTED, AND WHERE AN OVERFLOW CAPACITY NECESSARY TO PREVENT EXCESSIVE PONDING AROUND THE STRUCTURE.

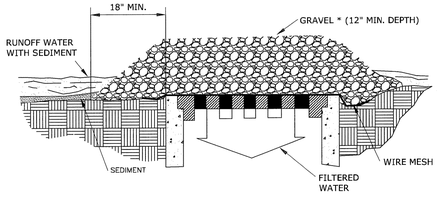
* GRAVEL SHALL BE FODT #3, #357, OR #5 COARSE AGGREGATE.

1. PLACE CONCRETE BLOCKS LENGTHWISE ON THEIR SIDES IN A SINGLE ROW AROUND THE PERIMETER OF THE INLET, WITH THE END OF ADJACENT BLOCKS ABUTTING. THE HEIGHT OF THE BARRIER CAN BE VARIED, DEPENDING ON DESIGN NEEDS, BY STACKING COMBINATION OF 4.8, AND 12 INCH WIDE (10,20, AND 30 CM) BLOCKS. THE BARRIER OF BLOCKS SHALL BE AT LEAST 12 INCHES (30 CM) HIGH AND NO GREATER THAN 24 INCHES (60 CM) HIGH.

2. WIRE MESH SHALL BE PLACED OVER THE OUTSIDE VERTICAL FACE (WEBBING) OF THE CONCRETE BLOCKS TO PREVENT STONE FROM BEING WASHED THROUGH THE HOLES IN THE BLOCKS. HARDWARE CLOTH OR COMPARABLE WIRE MESH WITH 1/2 INCH (13 MM) OPENINGS SHALL BE USED.

3. STONE SHALL BE PILED AGAINST THE WIRE TO THE TOP OF THE BLOCK BARRIER. SUITABLE COARSE AGGREGATE SHALL BE USED.

4. IF THE STONE FILTER BECOMES CLOGGED WITH SEDIMENT SO THAT IT NO LONGER ADEQUATELY PERFORMS ITS FUNCTION, THE STONE MUST BE PULLED AWAY FROM THE BLOCKS, CLEANED AND REPLACED.

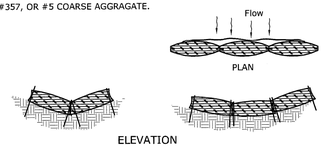


SPECIFIC APPLICATION

GRAVEL AND WIRE MESH DROP INLET SEDIMENT FILTER

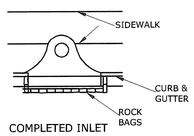
THIS METHOD OF INLET PROTECTION IS APPLICABLE WHERE HEAVY CONCENTRATED FLOWS ARE EXPECTED, BUT NOT WHERE PONDING AROUND THE STRUCTURE MIGHT CAUSE EXCESSIVE INCONVIENCE OR DAMAGE TO ADJACENT STRUCTURES AND UNPROTECTED AREAS.

* GRAVEL SHALL BE FODT #3, #357, OR #5 COARSE AGGRAGATE.



BARRIERS FOR SWALES

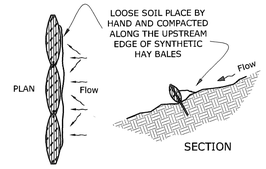
N. T. S.



COMPLETED INLET

BARRIERS FOR INLETS

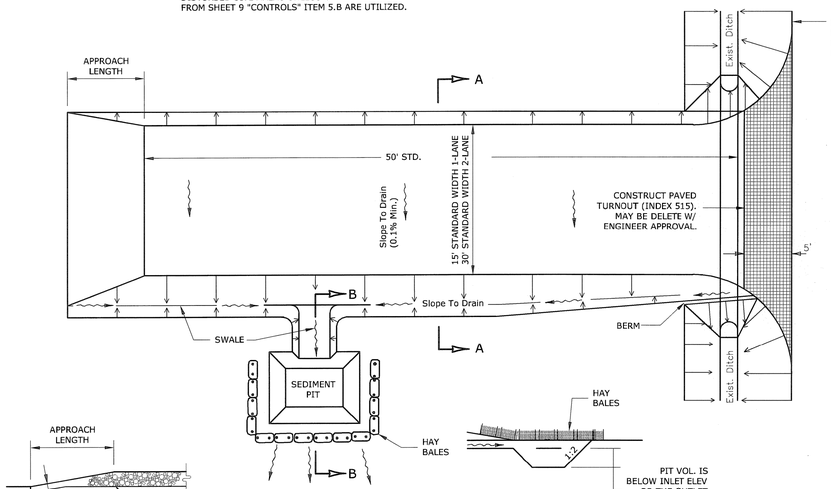
N. T. S.

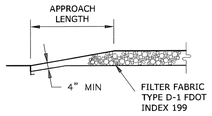


BARRIERS FOR SLOPES

N. T. S.

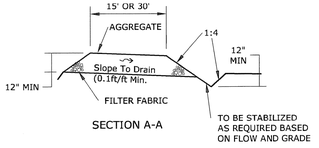
NOTE:
SOIL TRACKING DEVICE SHALL BE INSTALLED WHERE CONSTRUCTION VEHICLES ENTER PUBLIC ROADS FROM DISTURBED SITE AREAS UNLESS OTHER METHODS FROM SHEET 9 "CONTROLS" ITEM 5.B ARE UTILIZED.



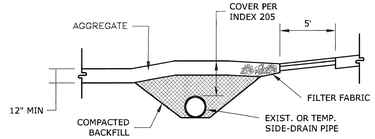


TRANSITION DETAIL

SECTION B-B



SECTION A-A



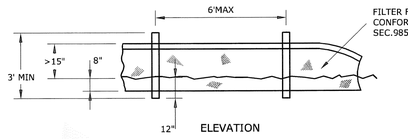
RURAL CONNECTION DETAIL

SOIL TRACKING PREVENTION DEVICE

N. T. S.

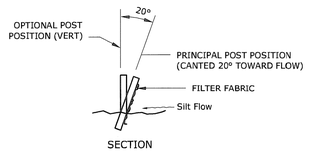
GENERAL NOTES:

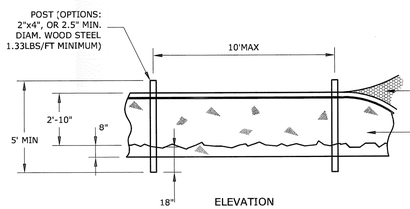
1. PROTECT PROPOSED CURB INLET ON CASE BY CASE DETERMINATION AS NECESSARY TO MINIMIZE DESIMENT ACCUMULATION IN NEW STORM SYSTEMS. WHEN NECESSARY, UTILIZE ROCK BAGS AS PER DETAIL THIS SHEET.
2. PROTECT FUTURE GRATE INLETS WITH HAY BALES (SEE SWPP PLAN SHEET) THESE ARE INLETS PROPOSED IN NON-PAVED AREAS. PROTECT THESE INLETS WITH HAY BALES AS PER DETAIL THIS SHEET.
3. FLOATING TURBIDITY BARRIERS SHALL BE REQUIRED WHEREVER THERE EXISTS THE POTENTIAL FOR POINT DISCHARGE OF SEDIMENT / DEBRIS TO SURFACE WATERS. UNDER CONDITIONS WHERE OTHER MEASURES HAVE BEEN INSTALLED TO PREVENT THIS TYPE OF DISCHARGE, FLOATING BARRIERS MAY BE ELIMINATED. CONSULT WITH THE ENGINEER FOR CASE BY CASE DETERMINATION.
4. SYNTHETIC HAY BALES TO BE SEDIMENT SHIELD (tm), OR EQUIVALENT.
5. SYNTHETIC HAY BALES TO BE INSTALLED PER MANUFACTURES RECOMMENDATIONS.



TYPE III SILT FENCE

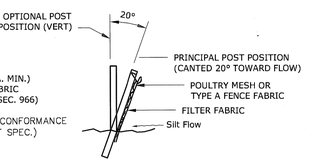
N. T. S.



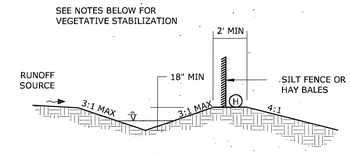


TYPE IV SILT FENCE

N. T. S.



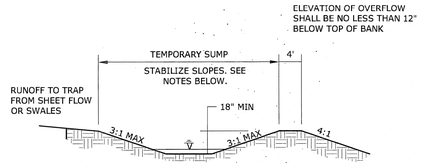
NOTES:
1. FOR ADDITIONAL INFORMATION AND DETAILS, SEE F.D.E.P. BMP STANDARDS.
2. UNLESS SPECIFIED, HAY BARRIERS MAY BE USED IN LIEU OF SILT FENCES.
3. ADDITIONAL POSTS AND RAILS MAY BE NECESSARY TO SECURE AND SUPPORT BARRIERS.
4. ADDITIONAL FENCE LENGTHS MAY BE REQUIRED BY THE ENGINEER OR BY REGULATORY AGENCIES.
5. DO NOT DEPLOY IN A MANNER THAT SILT FENCES WILL ACT AS A DAM ACROSS PERMANENT FLOWING WATERCOURSES. SILT FENCES ARE TO BE USED AT UPLAND LOCATIONS AND TURBIDITY BARRIERS USED AT PERMANENT BODIES OF WATER.



DIVERSION BERM

SECTION

N. T. S.



NOTES:
1) WHEN BERMS, SWALES OR TRAPS SHALL REMAIN IN PLACE FOR MORE THAN 30 DAYS, ALL SLOPES SHALL BE STABILIZED WITH SOD OR SEED/MULCH.

2) VEGETATIVE STABILIZATION SHALL NOT BE REQUIRED FOR THE BOTTOM 6" OF SEDIMENT TRAPS.

3) REMOVE SEDIMENT FROM SWALES AND TRAPS WHEN THE DEPTH REACHES 6".

4) ADDITIONAL INFORMATION MAY BE OBTAINED FROM THE FLORIDA STORMWATER EROSION AND SEDIMENTATION CONTROL INSPECTOR'S MANUAL, JULY 2008.

SEDIMENT TRAP

SECTION

N. T. S.

EROSION CONTROL DETAILS

NATURE COAST CROSSING EXCAVATION AREA

DRAWING INVALID UNLESS SIGNED AND SEALED BY REGISTERED PROFESSIONAL

SCOTT D. MCKEE, P.E. FL. REG. NO. 65654

7/1/15

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DATE	REV. BY	REV. NO.	REVISION
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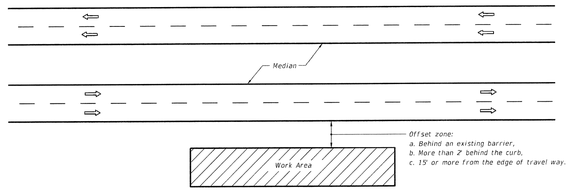
WHEN PRINTED TO SCALE, DRAWING SIZE SHALL BE 22" X 34"

SHEET 12

JOB No.: 14073



GENERAL NOTES

1. If the work operation (excluding establishing and terminating the work area), requires that two or more work vehicles cross the offset zone in any one hour, traffic control will be in accordance with Index No. 612.
2. No special signing is required.
3. This index also applies when work is being performed on a multilane undivided highway.
4. This index also applies to work performed in the median behind an existing barrier or more than 15' from the edge of travel way, both roadways. Work performed in the median behind curb and gutter shall be in accordance with Index No. 612.
5. When a side road intersects the highway within the work area, additional traffic control devices shall be placed in accordance with other applicable TCZ Indexes.
6. When construction activities encroach on a sidewalk, refer to Index No. 660.
7. For general TCZ requirements and additional information, refer to Index No. 600.

SYMBOLS

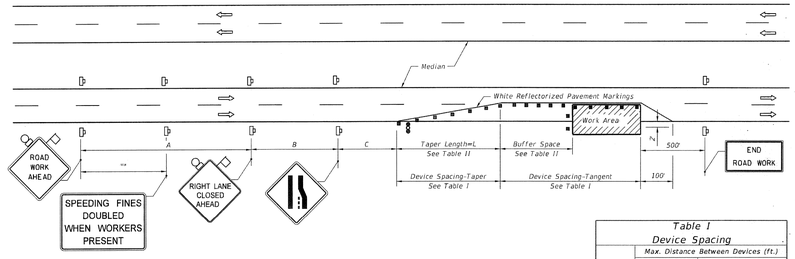
Work Area

Lane Identification + Direction of Traffic

CONDITIONS

WHERE ANY VEHICLE, EQUIPMENT, WORKERS AND THEIR ACTIVITIES ARE BEHIND AN EXISTING BARRIER, MORE THAN 2' BEHIND THE CURB, OR 15' OR MORE FROM THE EDGE OF TRAVEL WAY.

LAST REVISION 07/01/05	REVISION	DESCRIPTION:	FDOT 2015 DESIGN STANDARDS	MULTILANE WORK OUTSIDE SHOULDER	INDEX NO. 611	SHEET NO. 1 of 1



DISTANCE BETWEEN SIGNS

Speed	Spacing (ft.) A	B	C
40 mph or less	200	200	200
45 mph	350	350	350
50 mph	500	500	500
*55 mph or greater	2640	1640	1000

* The ROAD WORK 1 MILE sign may be used as an alternate to the ROAD WORK AHEAD sign and the RIGHT LANE CLOSED ½ MILE sign may be used as an alternate to the RIGHT LANE CLOSED AHEAD sign.

** 500' beyond the ROAD WORK AHEAD sign or midway between signs whichever is less.

GENERAL NOTES

1. Work operations shall be confined to one traffic lane, leaving the adjacent lane open to traffic.
2. On undivided highways the median signs as shown are to be omitted.
3. When work is performed in the median lane on divided highways, the channelizing device plan is inverted and left lane closed and lane ends signs substituted for the right lane closed and lane end signs.

   The same applies to undivided highways with the following exceptions:
   a. Work shall be confined within one median lane.
   b. Additional barricades, cones, or drums shall be placed along the centerline abutting the work area and across the trailing end of the work area.

   When work on undivided highways occurs across the centerline so as to encroach on both median lanes, the inverted plan is applied to the approach of both roadways.
4. Signs and traffic control devices are to be modified in accordance with INTERMITTENT WORK STOPPAGE details (sheet 2 of 2) when no work is being performed and the highway is open to traffic.
5. The two channelizing devices directly in front of the work area may be omitted provided vehicles in the work area have high-intensity rotating, flashing, oscillating, or strobe lights operating.
6. When paved shoulders having a width of 8 ft, or more are closed, channelizing devices shall be used to close the shoulder in advance of the merging taper to direct vehicular traffic to remain within the travel way. See Index No. 612 for shoulder taper formulas.
7. When a side road intersects the highway within the TTC zone, additional TTC devices shall be placed in accordance with other applicable TCZ Indexes.
8. This TCZ plan does not apply when work is being performed in the middle lane(s) of a six or more lane highway. See Index No. 614.
9. For general TCZ requirements and additional information, refer to Index No. 600.

SYMBOLS

Work Area

Sign With 18"x 18" (Min.) Orange Flag And Type B Light

Channelizing Device (See Index No. 600)

Work Zone Sign

Advance Warning Arrow Board

Table I
Device Spacing

Speed (mph)	Max. Distance Between Devices (ft.) Cones or Tubular Markers Taper	Tangent	Type 1 or Type II Barricades or Vertical Panels or Drums Taper	Tangent
25	25	50	25	50
30 to 45	25	50	30	50
50 to 70	25	50	50	100

Table II
Buffer Space and Taper Length

Speed (mph)	Buffer Space Dist. (ft.)	Taper Length (12' Lateral Transition) L (ft.)	Notes (Merge)
25	155	125	L = WS²/60
30	200	180	
35	250	245	
40	305	320	
45	360	540	L = WS
50	425	600	
55	495	660	
60	570	720	
65	645	780	
70	730	840	

When Buffer Space cannot be attained due to geometric constraints, the greatest attainable length shall be used, but not less than 200 ft.

For lateral transitions, other than 12', use Where:

L = Length of taper in feet
W = Width of lateral transition in feet
S = Posted speed limit (mph)

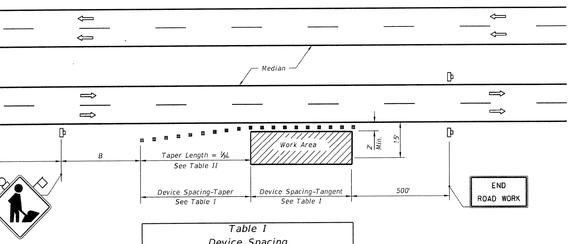
DURATION NOTES

1. Temporary white edgeline may be omitted for work operations less than 3 consecutive calendar days.
2. For work operations up to approximately 15 minutes, signs, channelizing devices, arrow board, and buffer space may be omitted if all of the following conditions are met:
   a. Speed limit is 45 mph or less.
   b. No sight obstructions to vehicles approaching the work area for a distance equal to the buffer space and the taper length combined.
   c. Volume and complexity of the roadway has been considered.
   d. The closed lane is occupied by a class 5 or larger, medium duty truck(s) with a minimum gross weight vehicle rating (GWVR) of 16,001 lb with high-intensity, rotating, flashing, oscillating, or strobe lights mounted above the cab height and operating.
3. For work operations up to 60 minutes, arrow board and buffer space may be omitted if conditions a, b, and c in DURATION NOTE 2 are met, and vehicles in the work area have high-intensity, rotating, flashing, oscillating, or strobe lights operating.

CONDITIONS

WHERE ANY VEHICLE, EQUIPMENT, WORKERS OR THEIR ACTIVITIES ENCROACH ON THE LANE ADJACENT TO EITHER SHOULDER AND THE AREA 2' OUTSIDE THE EDGE OF TRAVEL WAY.

LAST REVISION 07/01/09	REVISION	DESCRIPTION:	FDOT 2015 DESIGN STANDARDS	MULTILANE, WORK WITHIN TRAVEL WAY MEDIAN OR OUTSIDE LANE	INDEX NO. 613	SHEET NO. 1 of 2



DISTANCE BETWEEN SIGNS

Speed	Spacing (ft.) A	B
40 mph or less	200	200
45 mph	350	350
50 mph or greater	500	500

* 500' beyond the ROAD WORK AHEAD sign or midway between signs whichever is less.

Table I
Device Spacing

Speed (mph)	Max. Distance Between Devices (ft.) Cones or Tubular Markers Taper	Tangent	Type 1 or Type II Barricades or Vertical Panels or Drums Taper	Tangent
25	25	50	25	50
30 to 45	25	50	30	50
50 to 70	25	50	50	100

Table II
Taper Length - Shoulder

Speed (mph)	½L (ft.) 8' Shldr.	10' Shldr.	12' Shldr.	Notes
25	28	35	42	L = WS²/60
30	40	50	60	
35	55	68	82	
40	72	90	107	
45	120	150	180	L=WS
50	133	167	200	
55	147	183	220	
60	160	200	240	
65	173	217	260	
70	187	233	280	

8' minimum shoulder width.

½L = Length of shoulder taper in feet

W = Width of total shoulder in feet (combined paved and unpaved width)

S = Posted speed limit (mph)

GENERAL NOTES

1. If the work operation encroaches on the through traffic lanes or when four or more work vehicles enter the through traffic lanes in a one hour period (excluding establishing and terminating the work area), a flagger shall be provided and a FLAGGER sign shall be substituted for the WORKERS sign. The flagger shall be positioned at the point of vehicle entry or departure from the work area.
2. This TCZ plan also applies to work performed in the median more than 2' but less than 15' from the edge of travelway.
3. When work is being performed on a multilane undivided roadway the signs normally mounted in the median (as shown) shall be omitted.
4. WORKERS signs to be removed or fully covered when no work is being performed.
5. SHOULDER WORK sign may be used as an alternate to the WORKER symbol sign.
6. When a side road intersects the highway within the TTC zone, additional TTC devices shall be placed in accordance with other applicable TCZ Indexes.
7. For general TCZ requirements and additional information, refer to Index No. 600.

DURATION NOTES

1. Signs and channelizing devices may be omitted if all of the following conditions are met:
   a. Work operations are 60 minutes or less.
   b. Vehicles in the work area have high-intensity, rotating, flashing, oscillating, or strobe lights operating.

SYMBOLS

Work Area

Sign With 18" X 18" (Min.) Orange Flag And Type B Light

Channelizing Device (See Index No. 600)

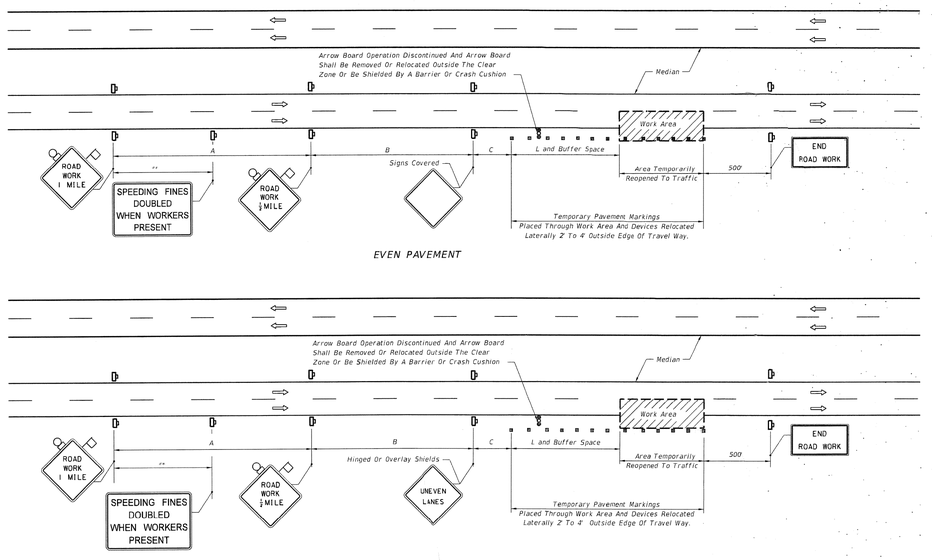
Work Zone Sign

Lane Identification + Direction of Traffic

CONDITIONS

WHERE ANY VEHICLE, EQUIPMENT, WORKERS OR THEIR ACTIVITIES ENCROACH THE AREA CLOSER THAN 15' BUT NOT CLOSER THAN 2' TO THE EDGE OF TRAVEL WAY.

LAST REVISION 07/01/07	REVISION	DESCRIPTION:	FDOT 2015 DESIGN STANDARDS	MULTILANE, WORK ON SHOULDER	INDEX NO. 612	SHEET NO. 1 of 1



INTERMITTENT WORK STOPPAGE - LANE REOPENED TO TRAFFIC

LAST REVISION 07/01/05	REVISION	DESCRIPTION:	FDOT 2015 DESIGN STANDARDS	MULTILANE, WORK WITHIN TRAVEL WAY MEDIAN OR OUTSIDE LANE	INDEX NO. 613	SHEET NO. 2 of 2

MAINTENANCE OF TRAFFIC DETAILS

NATURE COAST CROSSING EXCAVATION AREA

DRAWING INVALID UNLESS SIGNED AND SEALED BY A REGISTERED PROFESSIONAL

Scott D McKee 7/7/15

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DATE	REV. BY	REV. NO.	REVISION

WHEN PRINTED TO SCALE, DRAWING SIZE SHALL BE 22" X 34"

SHEET 13

JOB No.: 14073

7/7/2015 8:55 AM

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