Sample Project #1 – Drainage Project (E Dewey Robbins)

This project shall consist of re-grading the existing drainage easement and placement of 24” x 38” ERCP pipe with concrete mitered ends. The project shall include placement of concrete rubble and the installation of geotextile turf reinforcement. This project includes the removal and replacement of four foot barb wire fencing and installation of five foot galvanized chain link fencing with access gates. All disturbed areas shall be sodded using Bahia sod.

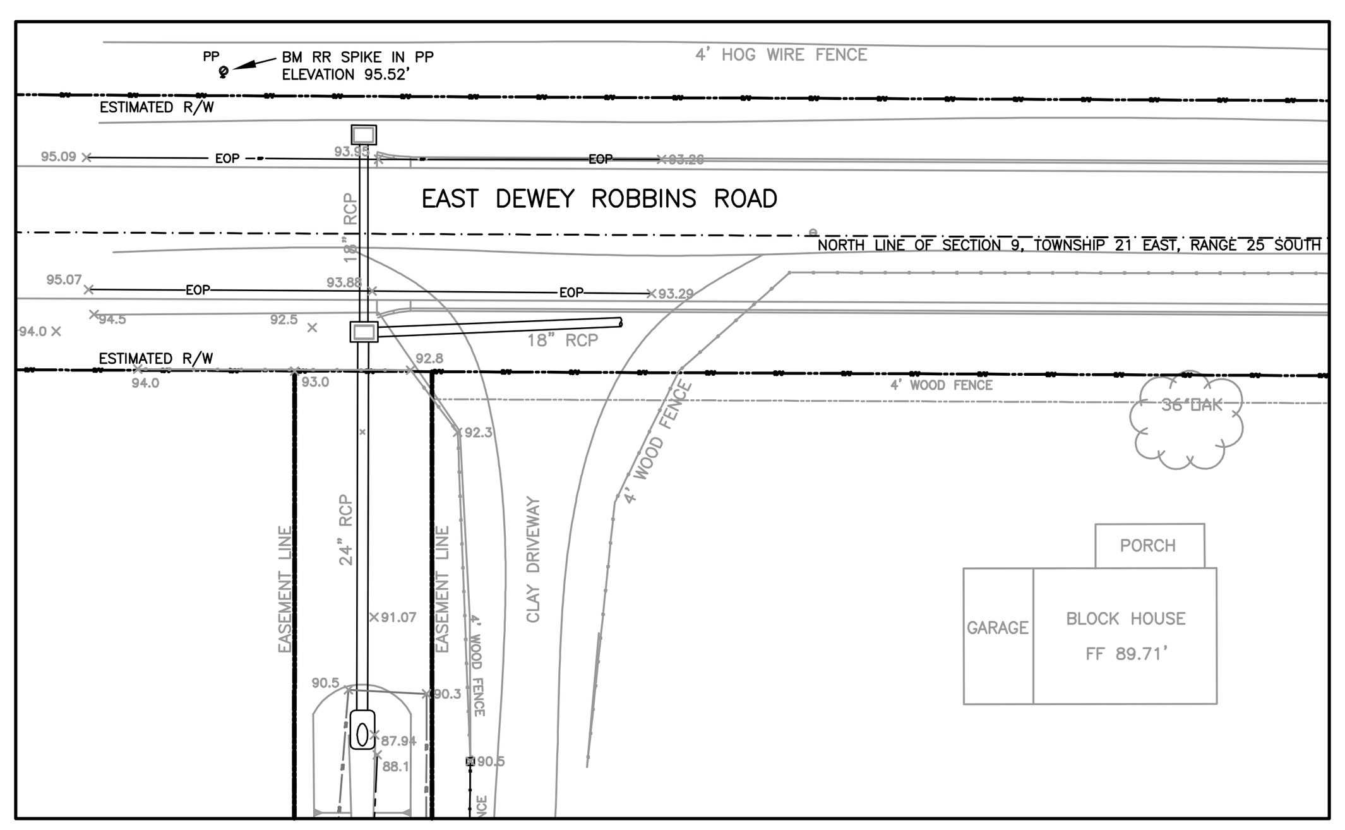
The contracted vendor should assume all private utilities are clear and all required permits have been secured by Lake County. Scope of work shall be within the limits of drainage easement.

The contracted vendor shall be responsible for installation and maintenance of erosion control for duration of project.

All work and materials are to be per plan specifications and latest edition of FDOT Standard Plans for Road and Bridge Construction.

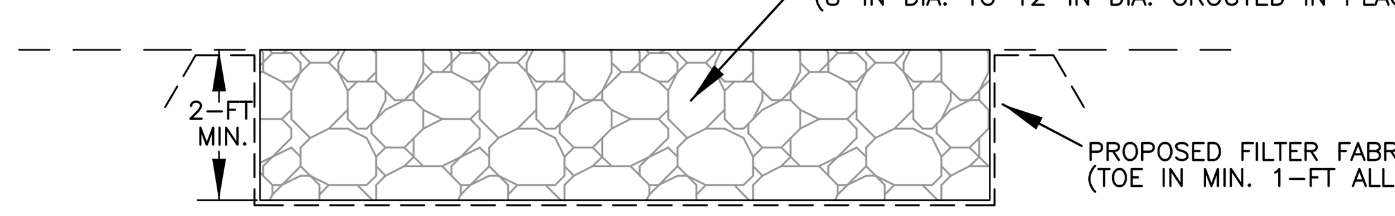
** INSTALL 6-IN DEEP, MAX. 1/2-IN AGGREGRATE BASE OVER GEOTEXTILE AND COMPACT TO MIN 95% DENSITY **
BACKFILL OVER BASE WITH 1-FT OF CLEAN FILL AND COMPACT TO MIN 95% DENSITY

TURF REINFORCEMENT



UPSTREAM PIPE SYSTEM

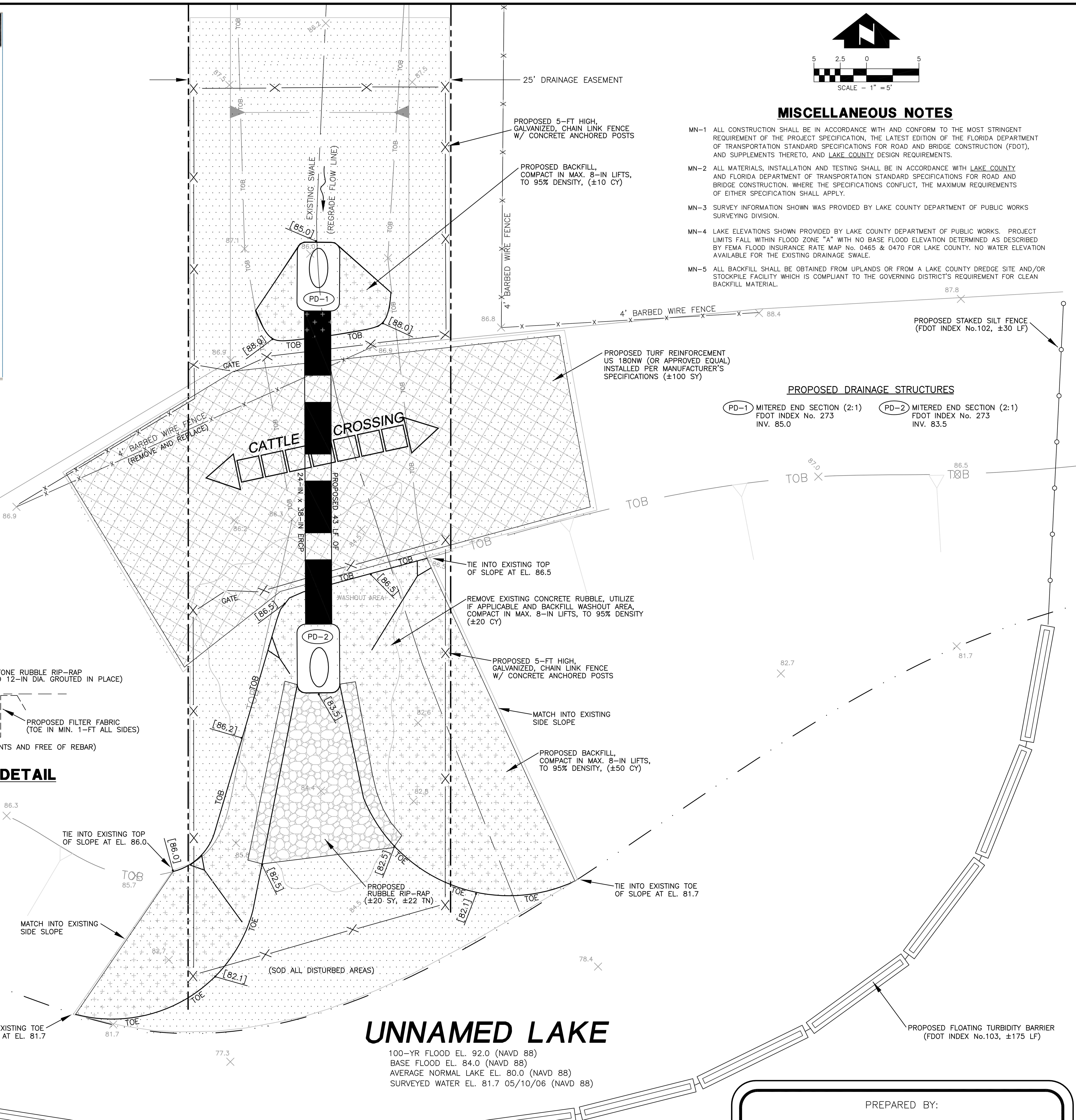
NTS



(BROKEN CONCRETE MAY BE USED IF MEETS SIZE REQUIREMENTS AND FREE OF REBAR)

RIP-RAP INSTALLATION DETAIL

NTS



MISCELLANEOUS NOTES

MN-1 ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH AND CONFORM TO THE MOST STRINGENT REQUIREMENT OF THE PROJECT SPECIFICATION, THE LATEST EDITION OF THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (FDOT), AND SUPPLEMENTS THERETO, AND LAKE COUNTY DESIGN REQUIREMENTS.

MN-2 ALL MATERIALS, INSTALLATION AND TESTING SHALL BE IN ACCORDANCE WITH LAKE COUNTY AND FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION. WHERE THE SPECIFICATIONS CONFLICT, THE MAXIMUM REQUIREMENTS OF EITHER SPECIFICATION SHALL APPLY.

MN-3 SURVEY INFORMATION SHOWN WAS PROVIDED BY LAKE COUNTY DEPARTMENT OF PUBLIC WORKS SURVEYING DIVISION.

MN-4 LAKE ELEVATIONS SHOWN PROVIDED BY LAKE COUNTY DEPARTMENT OF PUBLIC WORKS. PROJECT LIMITS FALL WITHIN FLOOD ZONE "A" WITH NO BASE FLOOD ELEVATION DETERMINED AS DESCRIBED BY FEMA FLOOD INSURANCE RATE MAP No. 0465 & 0470 FOR LAKE COUNTY. NO WATER ELEVATION AVAILABLE FOR THE EXISTING DRAINAGE SWALE.

MN-5 ALL BACKFILL SHALL BE OBTAINED FROM UPLANDS OR FROM A LAKE COUNTY DREDGE SITE AND/OR STOCKPILE FACILITY WHICH IS COMPLIANT TO THE GOVERNING DISTRICT'S REQUIREMENT FOR CLEAN BACKFILL MATERIAL.

PROPOSED DRAINAGE STRUCTURES

PD-1 MITERED END SECTION (2:1)
FDOT INDEX No. 273
INV. 85.0

PD-2 MITERED END SECTION (2:1)
FDOT INDEX No. 273
INV. 83.5

Drainage Easement

A strip of land 25.00 feet wide lying and being in the Northwest 1/4 of the Northeast 1/4 of Section 9, Township 21 South, Range 25 East, Lake County, Florida, being more particularly described as follows:

Commence at the North 1/4 corner of said Section 9 and run South 89°44'30" East, along the North line of the Northeast 1/4 of said Section 9 a distance of 571.34 feet; thence run South 0°15'30" West, a distance of 25.00 feet to a point on the South line of the right-of-way of East Dewey Robbins Road #2-2729, said point being the Point of Beginning of this description; thence continue South 0°15'30" West, 377 feet, more or less, to the waters of a small lake, said point being hereby designated as Point "A"; thence return to the Point of Beginning and run South 89°44'30" East, along said South line of right-of-way, a distance of 25.00 feet; thence run South 0°15'30" West, 381 feet, more or less, to the waters of the aforementioned small lake; thence run Northwesterly along the waters of said lake to Point "A". Containing .22 Acres, more or less.

PREPARED BY:
PEC PROFESSIONAL ENGINEERING CONSULTANTS, INC.
engineers planners surveyors
200 East Robinson Street, Orlando, Florida 32801 407-422-8062
Suite 1560, Eola Park Centre
Engineering Business Number #3556

DAVID W. HAMSTRA, P.E. – FL REG NO. 38652
FEBRUARY 21, 2008

LAKE COUNTY
DEPARTMENT OF PUBLIC WORKS
ROAD OPERATIONS DIVISION
123 N. SINCLAIR AVE. TAVARES, FLORIDA 32778

REVISION:	DATE
PER SJRWMD COMMENTS	4/07
PER SJRWMD COMMENTS	5/07
PER SJRWMD COMMENTS	5/07
PER SJRWMD COMMENTS	5/07
REV5	DATE
REV6	DATE
REV7	DATE

S. - 9 T. - 21S R. - 25E

SURVEYED:		DATE:	
FIELD BOOK:		PAGE:	
DESIGNED:	JTC	DATE:	02/08
DRAWN:	JTC	DATE:	02/08
APPROVED:	DWH	DATE:	02/08

EAST DEWEY ROBBINS ROAD DRAINAGE AND EROSION CONTROL IMPROVEMENTS

SITE PLAN

JOB NO.: LC-089

SHEET: 1 OF 1

Sample Project #2 –Drainage improvement and pavement project (Wygul Rd @ CR439)

The contracted vendor shall remove and replace the existing 24” x 38” ERCP concrete pipe and install a pre-fabricated Type J drainage structure. The existing swale shall be regraded for positive drainage.

The radius shall be constructed and striped per the details shown on the attached plan. This work will require daily inspections of the sub-base, base, structural asphalt, and friction course of asphalt by Lake County Road Inspectors. All pavement markings shall be thermoplastic non-lead based meeting the latest edition of Manual on Uniform Traffic Control Devices for Streets and Highways Reflectivity Standards.

The contracted vendor should assume all private utilities are clear and all required permits have been secured by Lake County. Scope of work shall be within the limits of the drainage easement. For purpose of excavation estimating, contractor shall assume

all existing/old swales have filled to be even with the edge of pavement +/- elevation 83'. Swales will be a minimum of 18" and not to exceed a maximum of 24" depth.

All disturbed areas shall be replaced to match the existing area and sod with Bahia. It shall be the responsibility of the contractor to dispose of all project spoils.

The contracted vendor is responsible maintenance of traffic conforming to FDOT Standard Plan for Road and Bridge Construction Series 102-600, and must maintain one lane open during work operations. All work areas must be made safe for vehicles and pedestrians at close of each work day.

"CONTROL POINT"
SET 1/2" IRON ROD
ELEV 60.26'
N 1674410.1136
E 466251.2315

6" WHITE SOLID STRIPE

R40'

WYGUL ROAD

18" CMP

18" WHITE DIAGONALS
45° ON 10' CENTER

FILL IN AND SOD

POWER POLE

R65'

S-1

REMOVE EXISTING ERCP,
AND MES.
INSTALL 38 LF OF
24"X38" ERCP W/MES
AT INV. 56.60' PER
FDOT INDEX

S-2

REMOVE EXISTING BOX AND
INSTALL MH J7 W/
ALT. B BOTTOM
PER FDOT INDEX
STA. 234+67.00, 30' LT
GRATE EL. 60.28'
55.77 BK, LT
56.27 AH, RT

S-3

REMOVE EXISTING RCP,
AND MES.
INSTALL 38 LF OF
30" RCP W/MES
AT INV. 56.36' PER
FDOT INDEX

30" RCP
INV 56.27'

30" RCP
INV 56.23'

HEADWALL

GUY WIRE

GUY POLE

EOP

CENTERLINE OF COUNTY ROAD - 439

COUNTY ROAD 439

EXISTING R/W

50'

50'

EXISTING R/W

CCR# 0006647

SCALE - 1" = 20'

1" MIN. SP 9.5 ASPHALT OVER
2.5" MIN. TYPE SP 12.5 ASPHALT

12" LIMEROCK, 98% COMPACTION,
AASHTO, T-180 MIN. LBR 40,
PRIME & SAND.

6" COMPACTED SUBGRADE,
98% COMPACTION,
AASHTO T-180.

NEW ASPHALT PAVING

NEW FILL AND SOD.

REVISION:	DATE	SECTION	TOWNSHIP	RANGE
		00	00 S	00 E
		DESIGNED:	DATE:	
		DRAWN:	DATE:	
		APPROVED:	DATE:	

LAKE COUNTY
FLORIDA

DEPARTMENT OF PUBLIC WORKS
ENGINEERING DIVISION
437 ARDICE AVE.
EUSTIS, FLORIDA 32726

COUNTY RD. 439 & WYGUL RD.
GORE STRIPING AREA
PLAN

DRAFT FOR REVIEW

SIGNATURE
DATE
P.E. - FL. REG. NO.

CAD FILE
02014RLS

SHEET #
1

Sample Project #3 – Culvert and Driveway Replacement - CR48 @ Orange Av

The contracted vendor shall remove the existing driveway and 18" CM pipe and replace with 18" HDPE pipe with concrete mitered ends. The concrete driveway shall be constructed with 6 inches of reinforced concrete (4000 PSI) using 10 foot square of 6 inch by 6 inch wire mesh extending a minimum of 10 feet from edge of existing pavement. Swales shall be regraded to allow for positive roadway drainage and sod with Bahia.

Scope of work shall be within the limits of the drainage easement. The contracted vendor is responsible for utility locates and maintenance of traffic. Maintenance of traffic shall conform to FDOT Standard Plan for Road and Bridge Construction Series 102-600, and must maintain one lane open to traffic during work operations. All work areas must be made safe for vehicles and pedestrians at close of each work day.

The existing culvert is 1' below existing driveway. There are no construction plans for this project. All work and materials are to be per specifications and latest edition of FDOT Standard Plans for Road and Bridge Construction. The contracted vendor is responsible for the disposal of all project spoils.