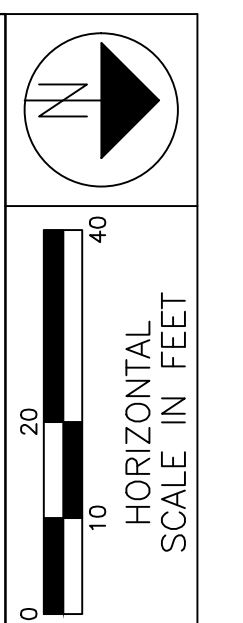


# STR. TO 294-3.87 BOX CULVERT REPLACEMENT PROJECT

## SECTION 15 T5N, R17E, TOWNSEND TOWNSHIP

### SANDUSKY COUNTY, OHIO 2013



DESIGN: C.A.B.  
CHECKED: J.R.M.

SITE PLAN  
STA. 07+00 TO STA. 13+00

TO 294-3.87

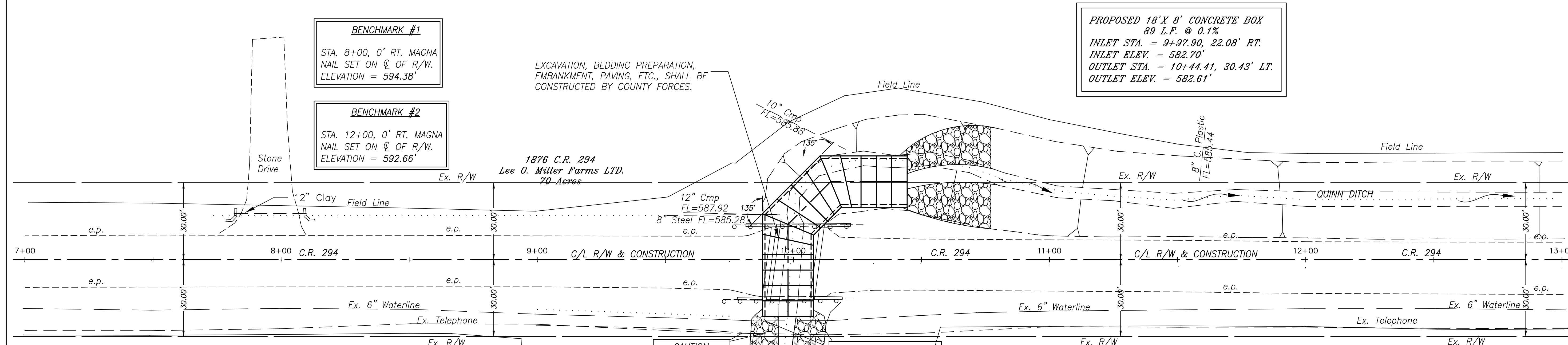
1  
1

**PROPOSED 18' X 8' CONCRETE BOX**  
89 L.F. @ 0.1%  
INLET STA. = 9+97.90, 22.08' RT.  
INLET ELEV. = 582.70'  
OUTLET STA. = 10+44.41, 30.43' LT.  
OUTLET ELEV. = 582.61'

**BENCHMARK #1**  
STA. 8+00, 0' RT. MAGNA  
NAIL SET ON C OF R/W.  
ELEVATION = 594.38'

**BENCHMARK #2**  
STA. 12+00, 0' RT. MAGNA  
NAIL SET ON C OF R/W.  
ELEVATION = 592.66'

EXCAVATION, BEDDING PREPARATION,  
EMBANKMENT, PAVING, ETC., SHALL BE  
CONSTRUCTED BY COUNTY FORCES.



**EXISTING STRUCTURE**  
TO 294-3.87  
PRESTRESS BOX BEAMS  
ON CONCRETE ABUTMENTS  
CLEAR SPAN - 16'-9" F/F ABUT.  
CLEAR HIGHT - 7'-6"  
YEAR BUILT - 1964

18" ROCK CHANNEL PROTECTION  
TYPE "C" WITHOUT FILTER  
EAST SIDE - 70 C.Y.  
WEST SIDE - 55 C.Y.

CAUTION:  
TELEPHONE LINE

CAUTION: 6" WATERLINE  
(TO BE LOWERED BY  
OTHERS)

THE STANDARD SPECIFICATIONS OF THE STATE OF OHIO,  
DEPARTMENT OF TRANSPORTATION, DATED JANUARY 1, 2010  
SHALL GOVERN THE MAKING OF THIS IMPROVEMENT.

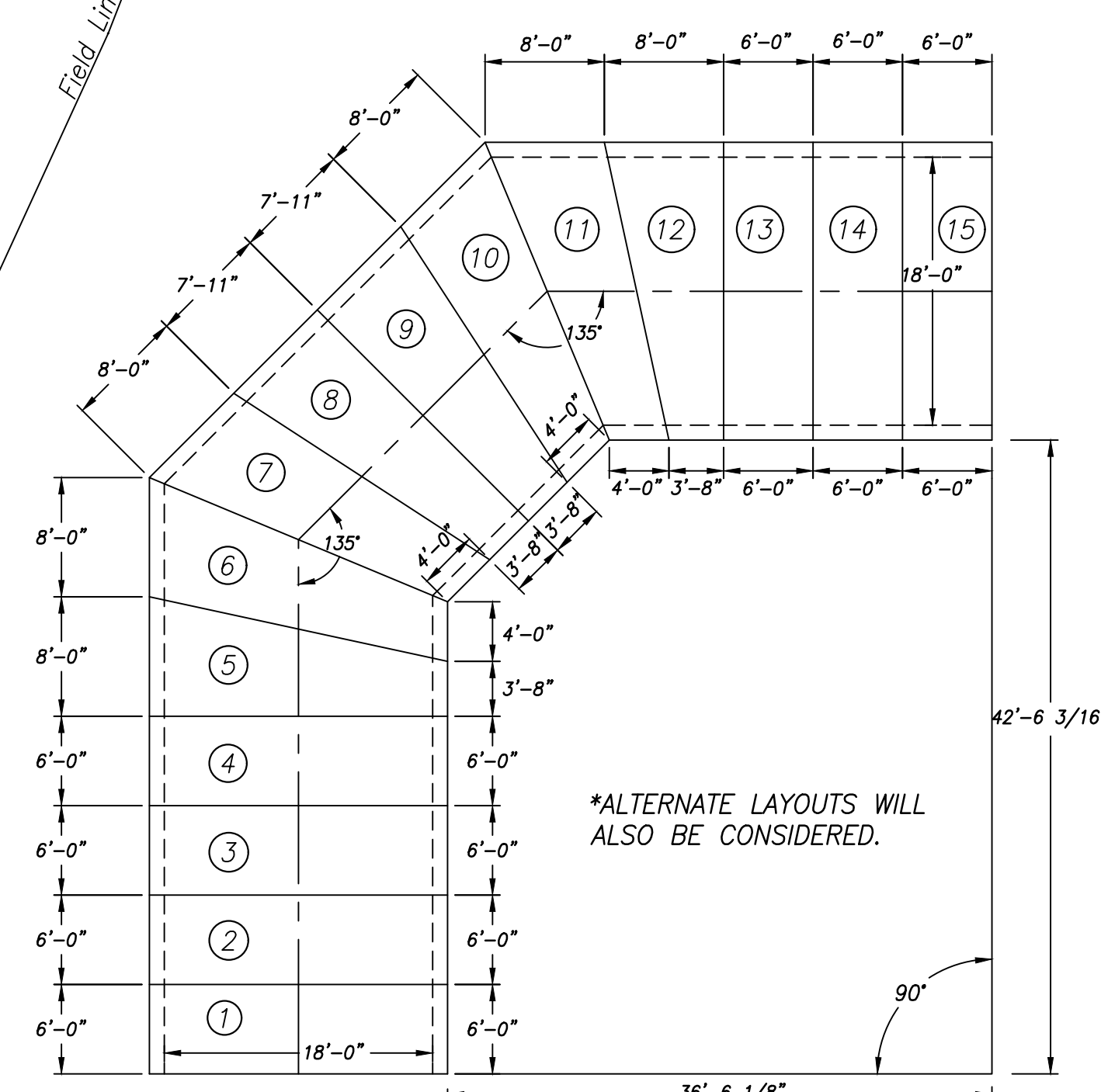
**ITEM 603, 18' X 8' CONDUIT, TYPE A, 706.05,  
AS PER PLAN**

THE PRECAST REINFORCED CONCRETE BOX CULVERT  
PROJECT SHALL CONSIST OF CONSTRUCTING AND ERECTING  
FIFTEEN (15) CONCRETE BOX SECTIONS, AS PER PLAN, IN  
ACCORDANCE WITH ITEM 603 OF THE STATE OF OHIO,  
CONSTRUCTION AND MATERIAL SPECIFICATIONS AND  
CONFORMING TO ASTM C 1577.

THE UNIT PRICE BID FOR "ITEM 603 CONDUIT, TYPE  
A, 706.05, AS PER PLAN", SHALL INCLUDE ALL LABOR AND  
MATERIAL NECESSARY TO CONSTRUCT, STORE, TRANSPORT  
AND ERECT THE CONCRETE BOX CULVERT SECTIONS,  
INCLUDING A SUFFICIENT AMOUNT OF BUTYL RUBBER  
MATERIAL.

**GENERAL DESIGN NOTES**

- LENGTH: 89' FEET END TO END (CENTERLINE)
- BOX DIMENSIONS: 18' WIDE (SPAN), 8' HIGH (RISE)
- ALLOWABLE SOIL BEARING: 3,000 PSI
- WATERPROOFING: A WATERPROOFING SEALANT (HYDROZO ENVIROSEAL 40 OR APPROVED EQUAL) SHALL BE APPLIED BY THE SUPPLIER TO THE TOP & EACH SIDE OF THE STRUCTURE PRIOR TO SHIPMENT.
- CONCRETE: MINIMUM COMPRESSIVE STRENGTH  
F<sub>c</sub>=5,000 PSI
- REINFORCING STEEL: F<sub>y</sub>=60,000 PSI OR F<sub>y</sub>=65,000 PSI  
ASTM A 185 WELDED WIRE MESH.
- DESIGN LOADING: HL-93
- COVER: LESS THAN 2 FFET



**CONCRETE BOX SECTIONS DETAIL**  
Scale: 1" = 10'

PLANS PREPARED BY:  
SANDUSKY COUNTY ENGINEERS OFFICE  
2500 WEST STATE STREET  
FREMONT, OHIO 43420  
PHONE: (419) 334-9731  
FAX: (419) 334-9733

S:\Carlos\Bridges\TO 294-3.87\Plans\TO 294 Design.dwg