BM #12 40d Spike In 8" Tree 260' Right Sta. 1451+60, Elev. 789.37

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.	412	141-1A	OGLE	625		2 SHEETS
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT				

GENERAL NOTES

CLASS X CONCRETE SHALL BE USED THROUGHOUT.

AT LEAST SIX FEET OF BARREL SHALL BE POURED MONOLITHICALLY WITH WINGWALLS.

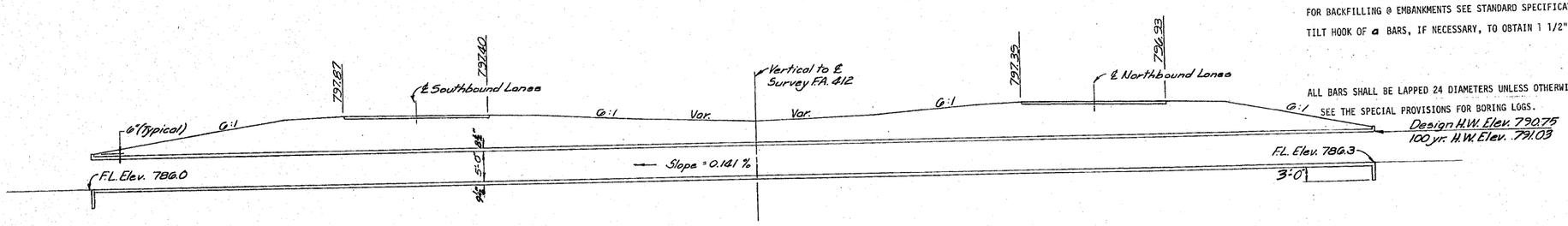
EXPOSED EDGES SHALL BE BEVELED 3/4".

FOR BACKFILLING @ EMBANKMENTS SEE STANDARD SPECIFICATIONS.

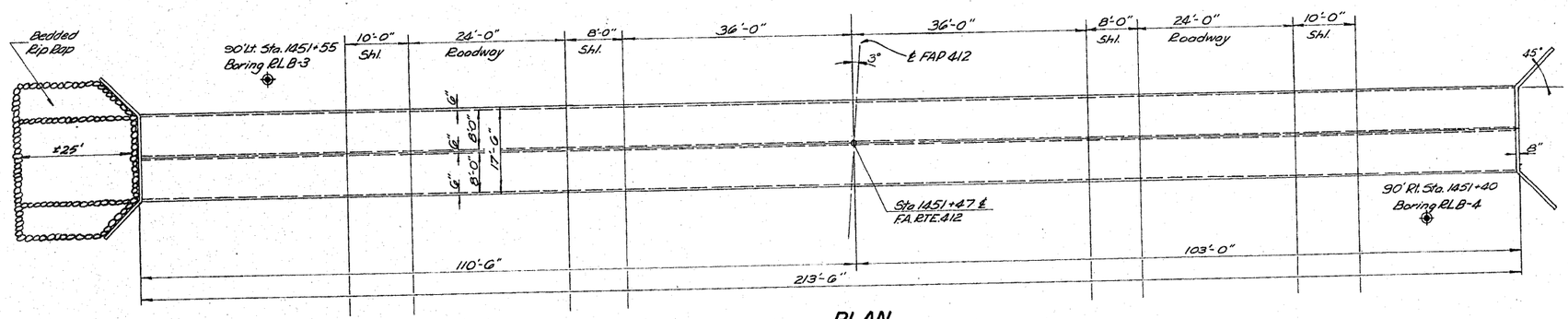
TILT HOOK OF **a** BARS, IF NECESSARY, TO OBTAIN 1 1/2" MINIMUM CLEARANCE AT TOP OF HOOK.

ALL BARS SHALL BE LAPPED 24 DIAMETERS UNLESS OTHERWISE SPECIFIED.

SEE THE SPECIAL PROVISIONS FOR BORING LOGS.

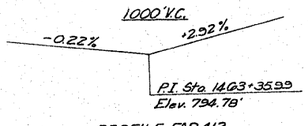


LONGITUDINAL SECTION



PLAN

Double 8'x5' R.C. Box Culvert
3° Skew Right Forward



PROFILE FAP 412

CURVE DATA

Δ = 22°37'48" Rt.
D = 0° 28' 00"
R = 12,277.70'
T = 2456.66'
L = 4849.28'
Se = 0.023 %
Se & Crown Reduced To Zero
Sta. 1451+08.19 To Sta. 1453+48.18

WATERWAY INFORMATION

Drainage Area	573 Acres
Design Q 50	555 C.F.S.
Design Q 100	723 C.F.S.
Required Opening	71 Sq. Ft.
Proposed Opening	80 Sq. Ft.
Design Created Head	1.0 Ft.
100 Year Created Head	1.87 Ft.

DESIGN STRESSES

f_s = 20,000 psi
f_c = 1400 psi Barrel
f_c = 1200 psi Wings
V_c = 30 psi Barrel
n = 10 psi

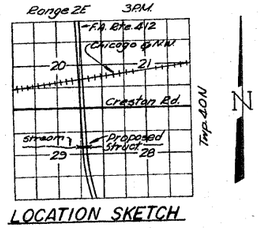
Allow 25 psf For Future W.S.

LOADING HS-20-44

Design Specifications AASHTO 1973
As Applicable

APPROVED
FEDERAL HIGHWAY ADMINISTRATION
Carle Thurman Jr.
Director of Bridge & Traffic Structures

STATE OF ILLINOIS
ROGER M. WALKER
81-3549
FRANKFORT, ILL.
REGISTERED STRUCTURAL ENGINEER



LOCATION SKETCH

FOR INFORMATION ONLY

BILL OF MATERIAL		
ITEM	UNIT	TOTAL
Class 'X' Concrete	Cu. Yds.	275.0
Reinforcement Bars	Lbs.	49,370
Riprap	Sq. Yds.	*

* See Roadway Plans.

DESIGNED	W.A.I.
CHECKED	H.M.W.
DRAWN	W.A.I.
CHECKED	H.M.W.

GENERAL PLAN & ELEVATION
PROJECT FA 412
FA 412 OVER DOUBLE 8x5 CULVERT

OGLE COUNTY
STATION 1451+47.00

Plans Prepared By American Engineering Company