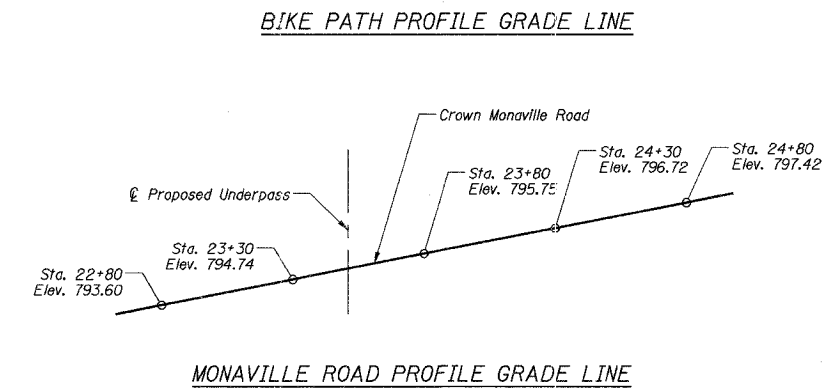
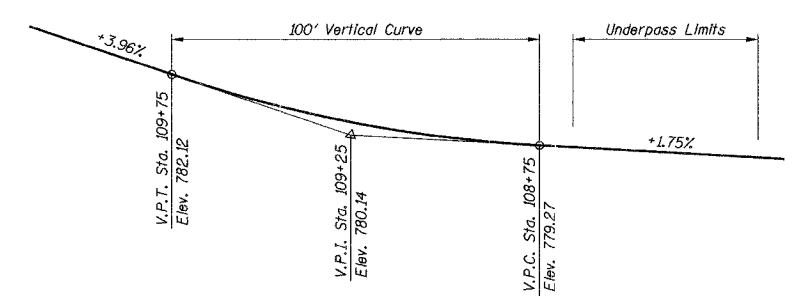
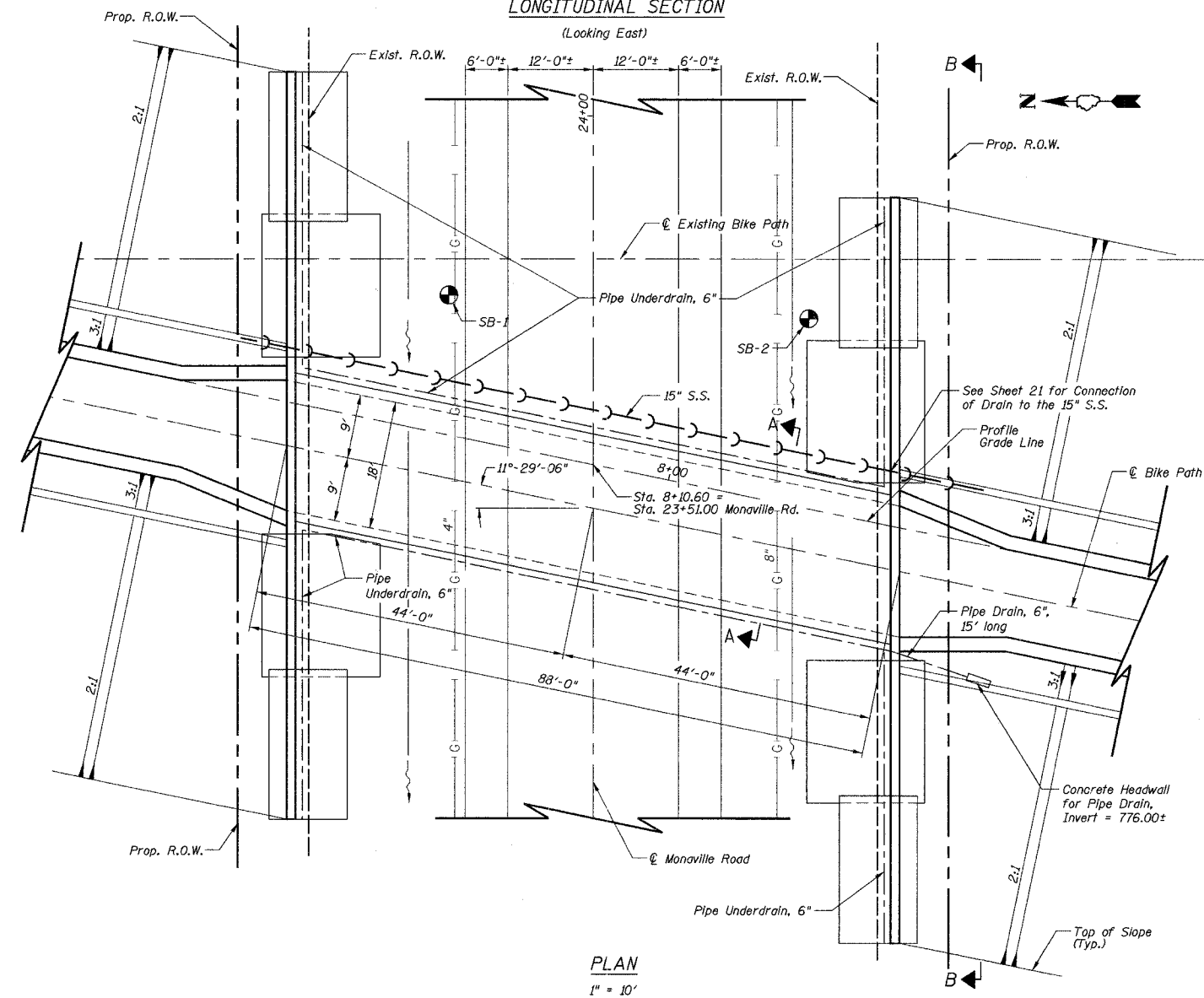
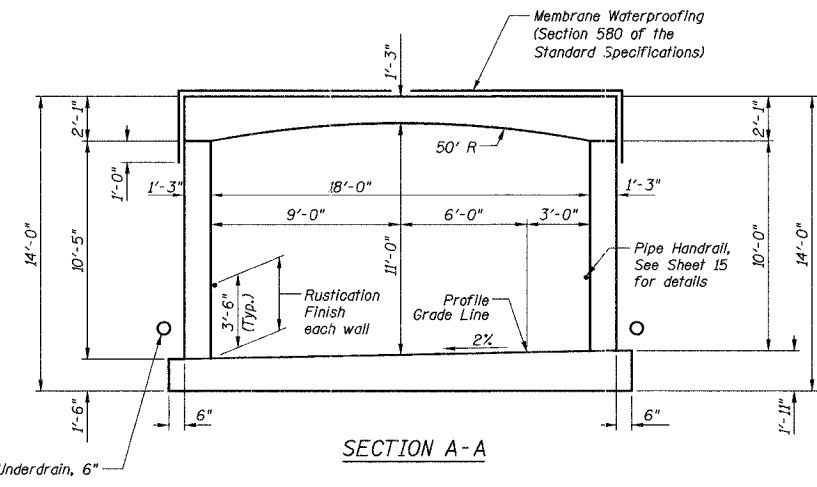
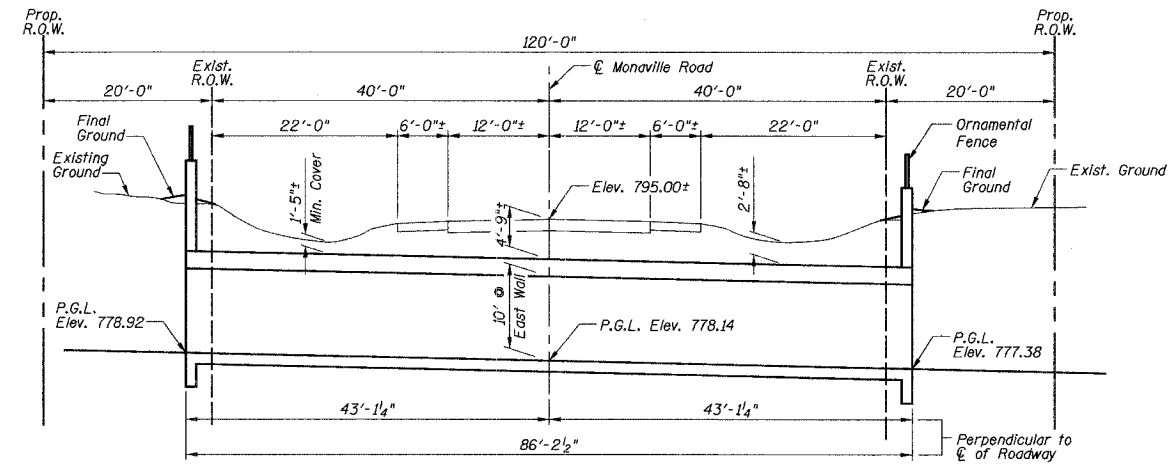


F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0177	01-00168-06-BT	LAKE	38	14
GENERAL PLAN & ELEVATION				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT HD-80031695				

BENCHMARK

BM #1 LCBM Designation 2-35A.
Steel railroad spike in the East face of a wood utility pole located in the Northwestern intersection of Monaville Road and Fairfield Road
Elevation = 799.09



I certify that to the best of my knowledge, information and belief, this underpass is structurally adequate for the design loading shown on the plans. The design is an economical one for the style of structure and complies with requirements of the current "AASHTO Standard Specification for Highway Bridges".



STATION 23+51.00
BUILT BY
LAKE COUNTY
SEC 01-00168-06-BT
S.T.R. NO. LOADING HS20

NAME PLATE
See Std. 515001-02
Attach to roadway side of the Southwest wingwall.

DESIGN SPECIFICATION

AASHTO 2002 Standard Specifications for Highway Bridges

LOADING

Equivalent Soil Fluid Pressure = 40#/ft³
Live Load - HS20-44

DESIGN STRESSES

f_c = 3,500 psi
f_y = 60,000 psi

LEGEND

⊙ Indicates Foundation Boring

Notes:

- Monaville Road will be closed for construction.
- For existing and proposed utilities, see Sheet 10.
- See contract documents for foundation boring logs and foundation report.
- See contract documents for ornamental fence details.
- See Sheet 15 for Elevation B-B.
- All edges shall have standard 3/4" chamfers except as noted.
- Bars indicated thus 3x2-#4 etc. indicate 3 lines of bars with 2 lengths per line.
- Required foundation soil bearing capacity = 4200 psf (wingwalls) = 2000 psf (underpass)
- Reinforcement bars shall conform to the requirements of AASHTO M-31, M-42, or M-53, Grade 60.
- Reinforcement bars designated (E) shall be epoxy coated.
- b.f. = back face
f.f. = front face

BILL OF MATERIAL

Item	Unit	Quantity
Porous Granular Embankment (Special)	Cu. Yd.	616
Structure Excavation	Cu. Yd.	4165
Concrete Structures	Cu. Yd.	612.6'
Reinforcement Bars (Epoxy Coated)	Lb.	101,580
Pipe Underdrain, 6"	Foot	345
Pipe Drain, 6"	Foot	15
Rustication Finish	Sq. Ft.	3382
Ornamental Fence	Foot	217
Membrane Waterproofing	Sq. Ft.	2277
Geocomposite Wall Drain	Sq. Yd.	410
Concrete Headwall for Pipe Drain	Each	1
Pipe Handrail	Foot	176
Rubbed Finish	Sq. Ft.	3776
Name Plate	Each	1

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
MONAVILLE ROAD BIKE PATH UNDERPASS
GENERAL PLAN & ELEVATION
NOT TO SCALE
CHECKED BY: O.J.H.
DATE: 10/18/2006