

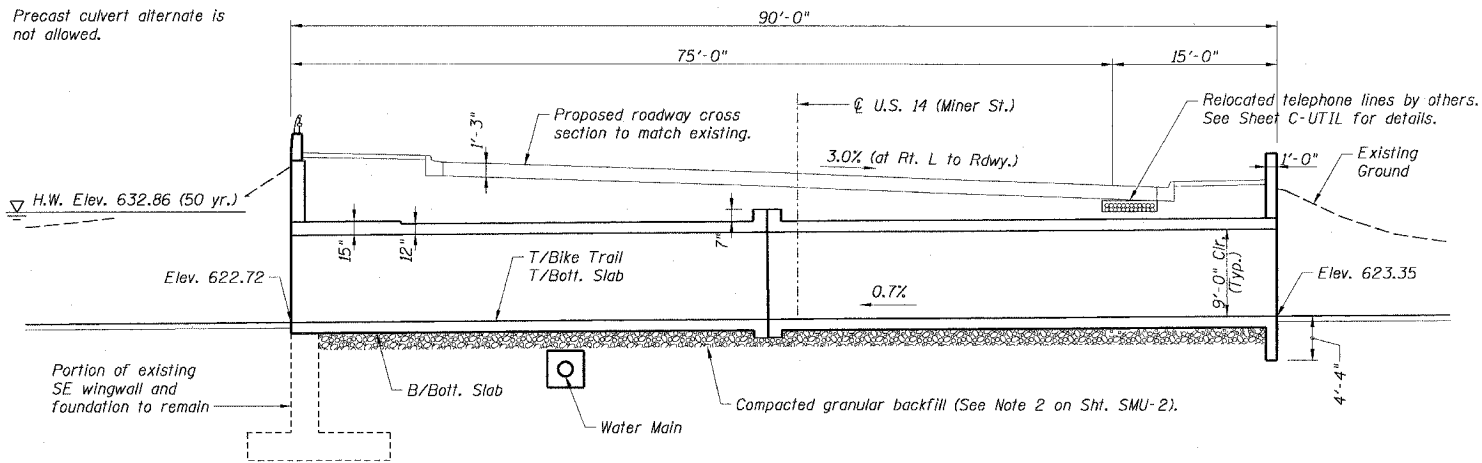
Bench Mark: T.B.M. #1 Chiseled "□" on W. End of E. Upstream Wingwall of Miner/Northwest Hwy. Bridge over Des Plaines River
Elev. 639.04

Existing Structure: Existing SE wingwall and East Approach Pavement of Miner St. bridge will be partially demolished to accommodate culvert.

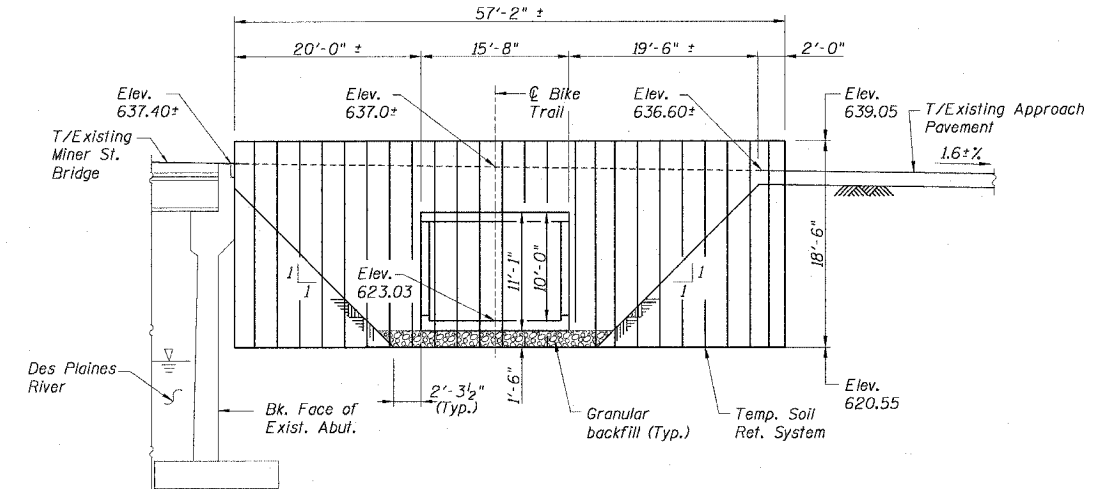
Salvage: Remove and reuse aluminum railing on SE wingwall. Costs of removing and erecting salvaged railing shall be considered incidental to Concrete Superstructure.

Culvert will be constructed in stages.

Precast culvert alternate is not allowed.



LONGITUDINAL SECTION
(Looking West)



TEMPORARY SOIL RETENTION SYSTEM
Dimensions measured along skewed stage line. (Looking North)

CURVE DATA BIKE TRAIL

P.I. Sta. = 12+63.07
Δ = 54°04'31"
D = 159°09'18"
R = 36.00'
T = 18.37'
L = 33.98'
E = 4.42'
P.C. Sta. = 12+44.69
P.T. Sta. = 12+78.67

CURVE DATA MINER ST.

P.I. Sta. = 213+81.55
Δ = 23°56'45"
D = 10°25'03"
R = 550.00'
T = 116.63'
L = 229.86'
E = 12.23'
P.C. Sta. = 212+64.92
P.T. Sta. = 214+94.78
S.E. = 3.0%

DESIGN SPECIFICATIONS

2002 AASHTO "Standard Specifications for Highway Bridges"

LOADING HS20-44

Allow 50 #/sq. ft. for future wearing surface

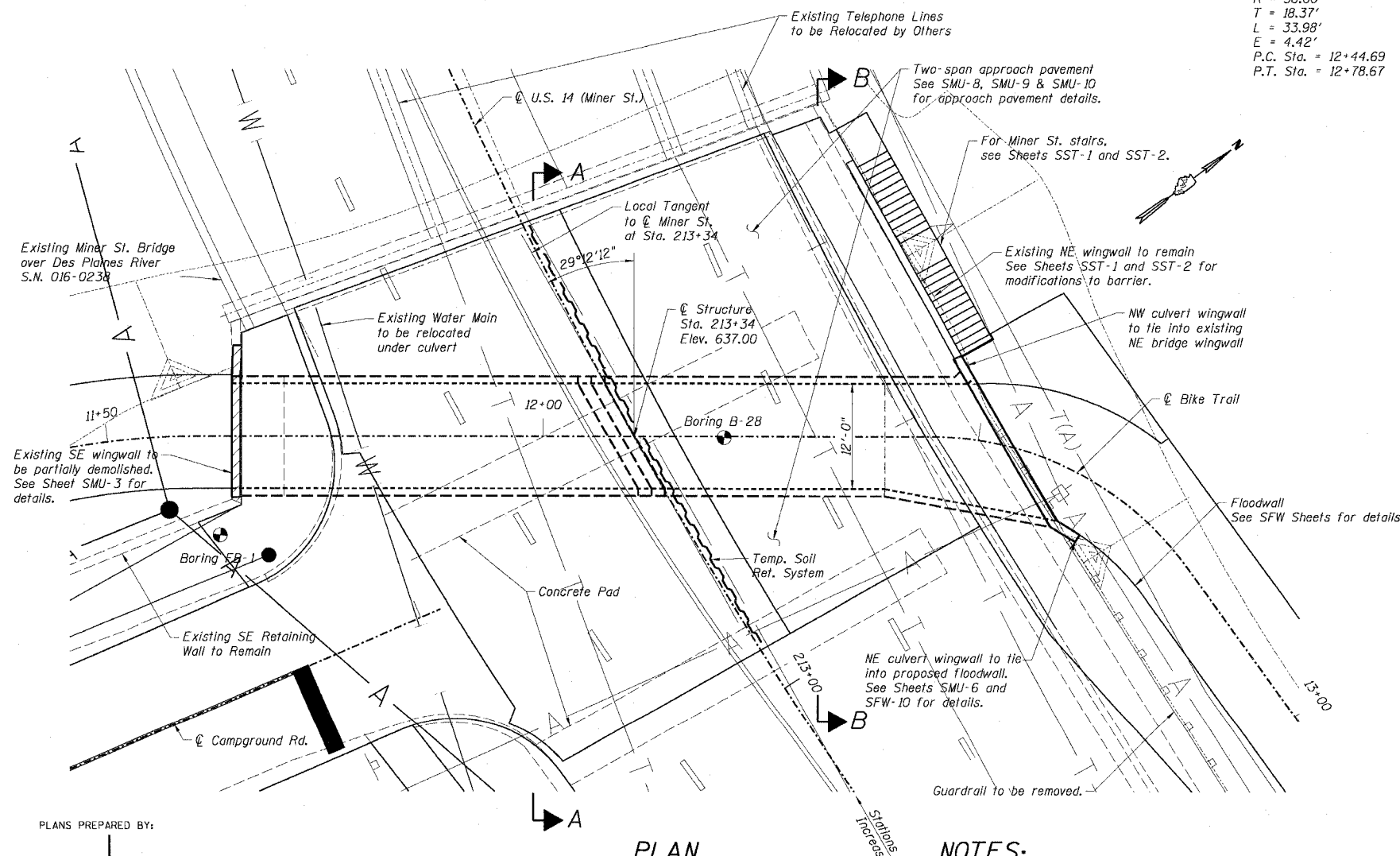
DESIGN STRESSES

FIELD UNITS
f'c = 3,500 psi
f'y = 60,000 psi (Reinforcement)

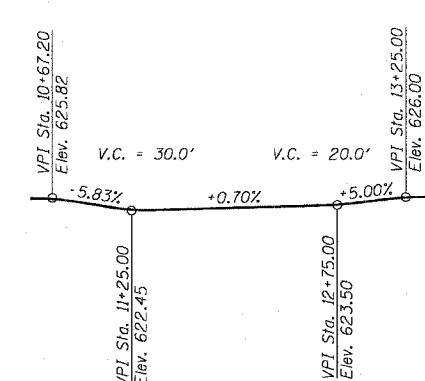
WATERWAY INFORMATION

Drainage Area = 400 sq. mi. Low Grade Elev. = 641.12

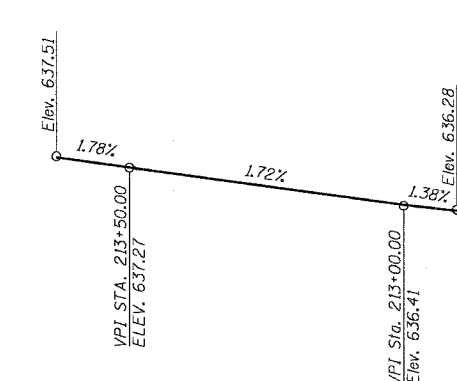
Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft.		Nat. H.W.E.	Head - Ft.		Headwater El.	
			Exist.	Prop.		Exist.	Prop.	Exist.	Prop.
Design	10	4487	1617	1710	631.11	0.00	0.00	631.11	631.11
Base	50	5765	1800	1908	632.86	0.11	0.07	632.97	632.93
Overtopping	100	6223	1800	1908	633.43	0.14	0.10	633.57	633.53
Max. Calc.	<500	7144	1800	1908	634.68	0.21	0.16	634.89	634.84



PLAN



PROFILE GRADE
Along U Bike Trail



PROFILE GRADE
U Miner St.

NOTES:

- See Sheet SMU-10 for Sections A-A and B-B.
- See Sheet C-UTIL for utility coordination.



Brian J. Malone
BRIAN J. MALONE
081-006002

11/30/06
EXPIRES
01/31/06
DATE

REVISION	
DATE	DESCRIPTION

PLANS PREPARED BY:
CTE | AECOM

CTE
303 East Wacker Drive, Suite 600, Chicago, Illinois 60601-5276
T 312.938.0300 F 312.938.1109 www.cte.aecom.com

SCALE: NONE

SMU-1 FR-416

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DESIGNED BY: MMB
DRAWN BY: MMB/RJ
CHECKED BY: BJM
CHECKED BY: BJM