

Benchmark: OSBM 10-1 X-Cut On Southeast Corner Of Walk On Southeast Corner Of Carriage Way Drive Bridge Over Salt Creek. Elev. 699.47

Existing Structure: SN. 016-6060 constructed in 1969. The bridge is a single span structure with a span length of 61'-0" center to center of bearings and 63'-6" back to back of abutments. The bridge has no skew angle. The superstructure consists of ten 27" deep x 36" wide precast prestressed deck beams and a 1'-6" wide cast in place beam for a total out to out width of 31'-6". The cast in place beam is on the inside edge of the east PPC deck fascia beam. The deck provides two 12'-0" lanes of traffic with a 1'-6" wide concrete parapet on the west side and a 5'-0" wide sidewalk with a 1'-0" concrete parapet on the east side. The bridge will be closed during construction and traffic detoured. No stage construction. No Salvage

INDEX OF SHEETS

- S1 General Plan and Elevation
- S2 General Notes
- S3 Deck Plan and Cross Section
- S4 Superstructure Details
- S5 Superstructure Details
- S6 Deck Beam Details
- S7 Deck Beam Details
- S8 Railing Details
- S9 North Abutment
- S10 South Abutment
- S11 Abutment Repairs
- S12 Boring Logs

DESIGN SPECIFICATIONS

2012 AASHTO LRFD Bridge Design Specifications

DESIGN STRESSES

FIELD UNITS (NEW CONSTRUCTION)

$f'_c = 3,500$ psi
 $f_y = 60,000$ psi (Reinforcement)

FIELD UNITS (EXIST. CONSTRUCTION)

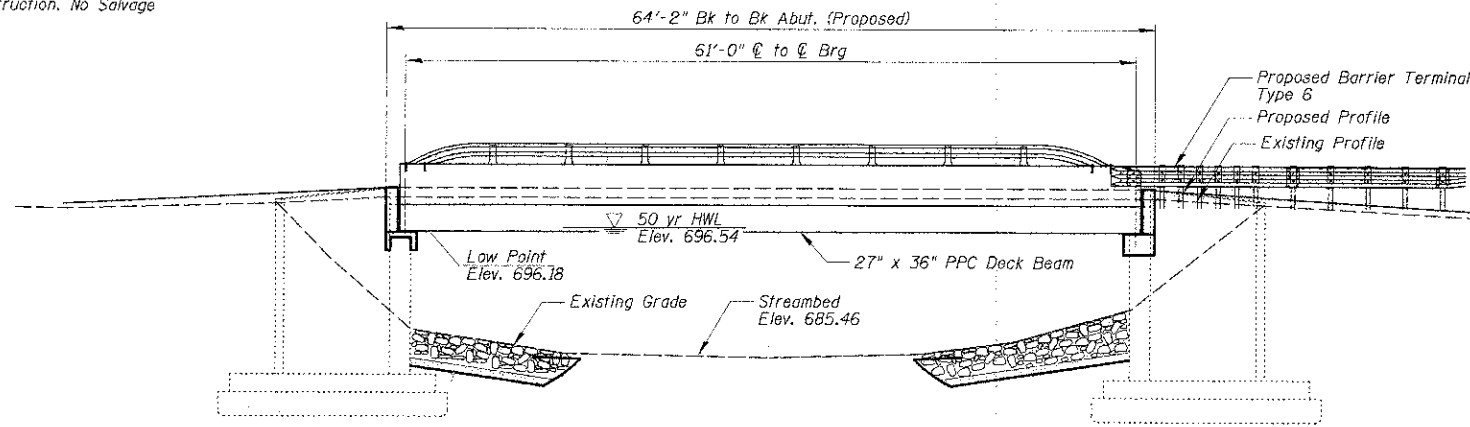
$f'_c = 3,000$ psi
 $f_y = 40,000$ psi (Reinforcement)

LOADING HL-93

Allow 25#/sq. ft. for future wearing surface.

SEISMIC DATA

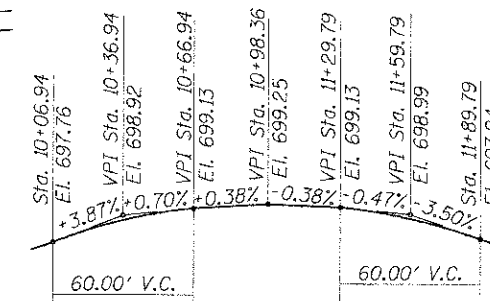
Seismic Performance Zone (SPZ) = 1
 Design Spectral Acceleration at 1.0 sec. (S_{D1}) = 0.139g
 Design Spectral Acceleration at 0.2 sec. (S_{D8}) = 0.269g
 Soil Site Class = D



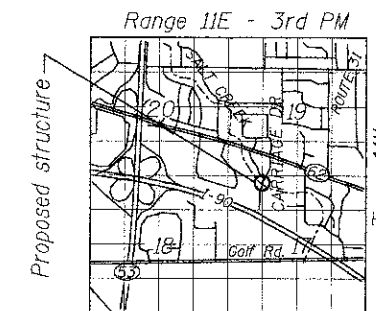
ELEVATION

SALT CREEK
 RE-BUILT 2013 BY
 CITY OF ROLLING MEADOWS
 SEC. 10-00101-00-BR
 STATION 10+98.05
 STR. NO. 016-6060 LOADING HL-93

NAME PLATE
 See Std. 515001



PROFILE GRADE



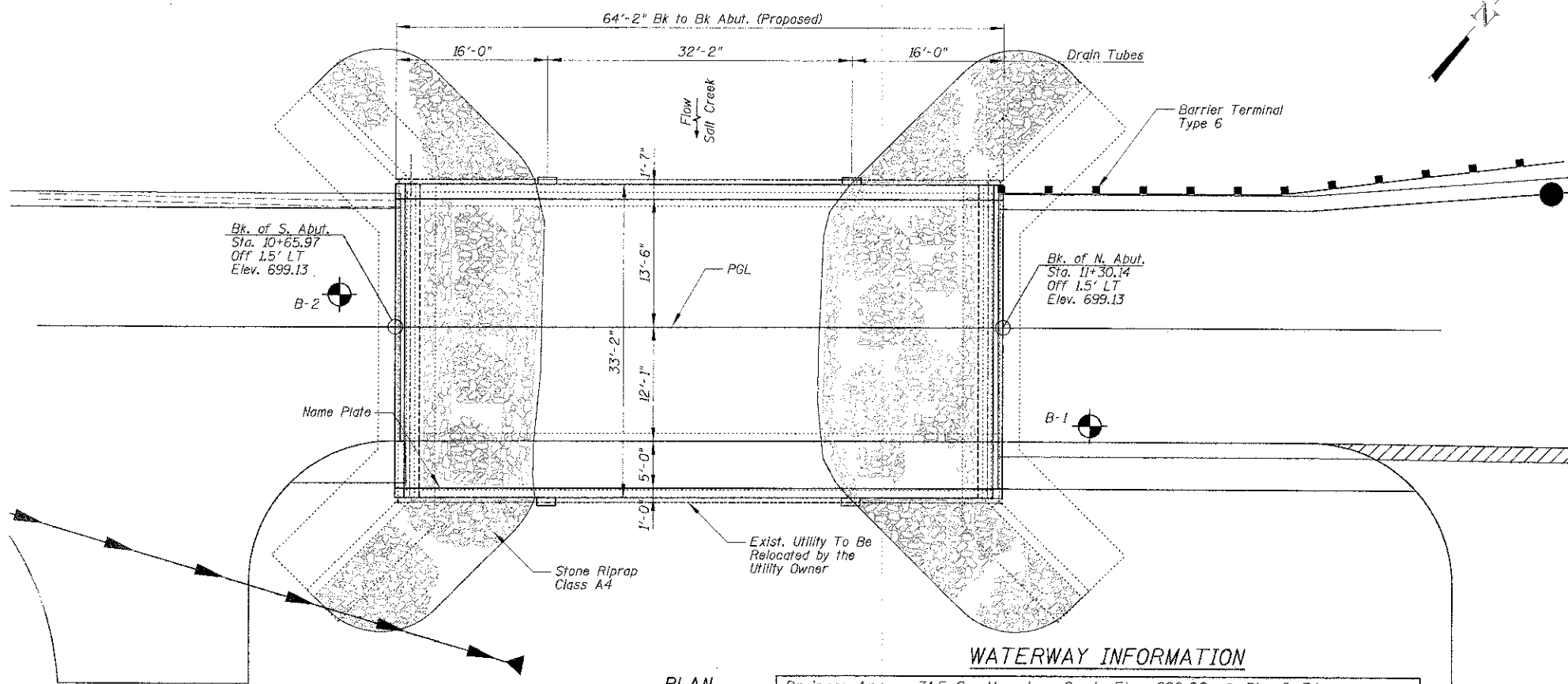
LOCATION SKETCH

I Certify That To The Best Of My Knowledge, Information And Belief, This Bridge Design 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 And Bridges".



Majid Mobasser 2/11/2013
MAJID MOBASSERI
 STRUCTURAL ENGINEER
 ILLINOIS REGISTRATION No. 081-005058
 EXPIRATION DATE: 11/30/14

GENERAL PLAN
 CARRIAGE WAY DRIVE OVER
 SALT CREEK
 SECTION 10-00101-00-BR
 COOK COUNTY
 STA. 10+98.05
 STRUCTURE No. 016-6060



PLAN

WATERWAY INFORMATION

Drainage Area = 31.5 Sq. M Low Grade Elev. 696.28 @ Sta. 9+34

Flood	Freq. Yr.	Q	Opening Sq. Ft.	Nat. H.W.E.	Head - Ft.	Headwater El.
		C.F.S.	Exist. Prop.		Exist. Prop.	Exist. Prop.
Design	10	1094	480.0	480.0	694.41	0.02 0.02 694.43 694.43
	30	1420	555.0	555.0	695.52	0.02 0.02 695.54 695.54
	50	1768	591.0	591.0	696.54	0.10 0.10 696.64 696.64
Base	100	2119	591.0	591.0	697.36	0.10 0.10 697.46 697.46
Max. Calc.	500	2911	591.0	591.0	698.76	0.03 0.03 698.79 698.76

DESIGN SCOUR ELEVATION TABLE

Design Scour Depth (ft.)	N. Abut.	S. Abut.
	3.59	5.72

FILE NAME: W:\ROLLINGMEADOWS\103618128\103618128-01.SHT
 PLOT SCALE =
 PLOT DATE =

DESIGNED -
 CHECKED -
 DRAWN -
 CHECKED -
 REVISED -
 REVISED -
 REVISED -
 REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CARRIAGEWAY DRIVE
GENERAL PLAN AND ELEVATION

SHEET NO. S1 OF S12 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	10-00101-00-BR	COOK	34	18

CONTRACT NO. 63787
 ILLINOIS FED. AID PROJECT