

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2578	532B-1	DUPAGE	117	47
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT				

Bench Mark:

Cut square in SW corner of parapet on existing bridge. El. 690.92

Existing Structure

S.N. 022-0074 was built in 1931 as a single span reinforced concrete slab bridge. The existing structure spans 30 feet, is 46 feet wide and has a 3.5 inch bituminous wearing surface. The existing structure is to be removed and replaced. Traffic is to be maintained utilizing stage construction.

No salvage

WATERWAY INFORMATION

Drainage Area = 12.0 SQ. Miles

Flood	Freq. Yr.	Q (C.F.S.)	Opening (Sq. Ft.)		Nat. H.W.E.		Head (Ft.)		Headwater Elev.	
			Exist.	Prop.	Exist.	Prop.	Exist.	Prop.	Exist.	Prop.
Overtop	10	416	111	166	687.1	1.1	0.0	688.2	687.1	
Design	40	550	130	208	687.8	1.0	0.0	688.8	687.8	
Base	50	597	136	222	688.0	1.0	0.0	689.0	688.0	
Max. Calc.	100	679	142	309	688.3	0.8	0.0	689.1	688.3	
	500	1153	142	309	690.4	0.1	0.6	690.5	691.0	

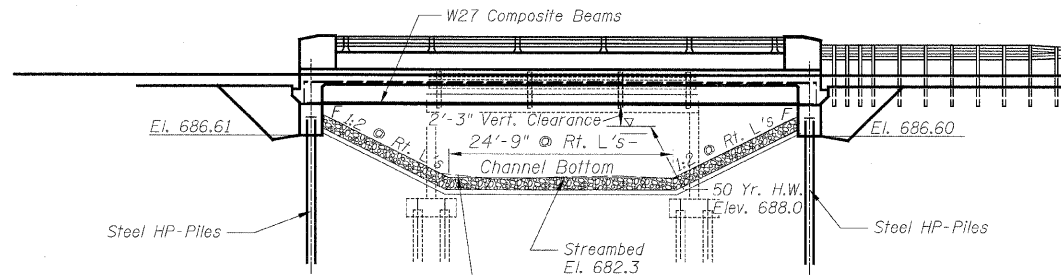
Proposed Low Grade Elev. 691.06 @ Sta. 159+88.53
Existing Low Grade Elev. 688.6 @ Sta. 162+00

DESIGN SCOUR ELEVATION (ft)

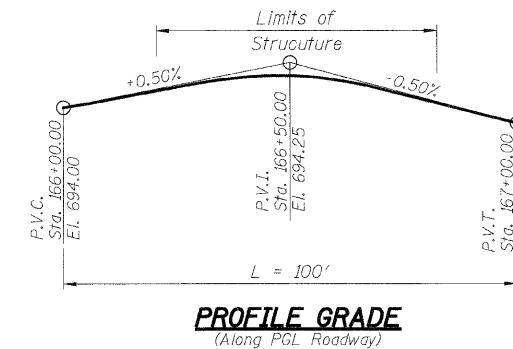
S. Abut.	N. Abut.
686.61	686.60

INDEX OF SHEETS

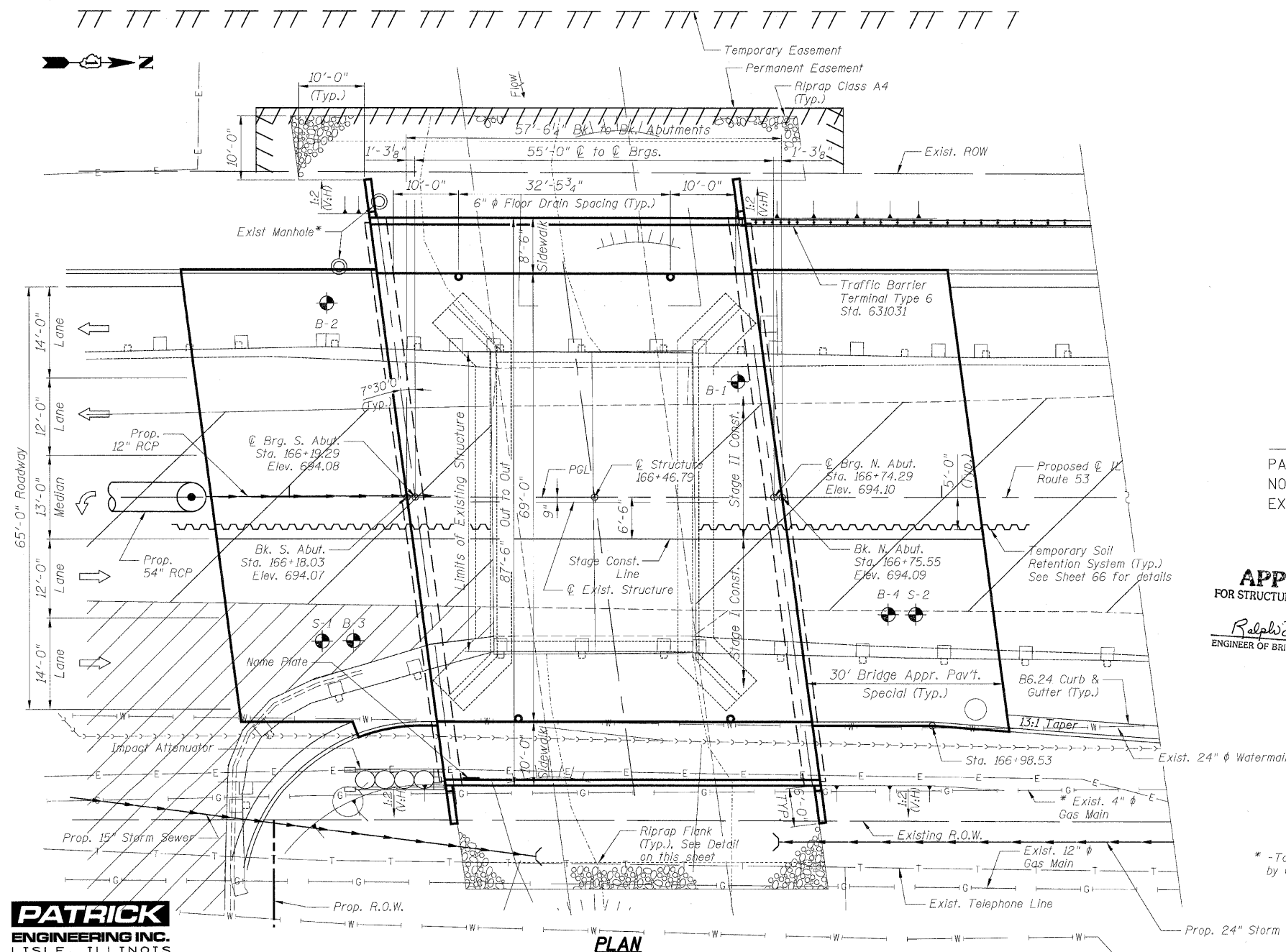
- S1. GENERAL PLAN & ELEVATION
- S2. GENERAL NOTES, TOTAL BILL OF MATERIAL & STAGING DETAILS
- S3. TOP OF SLAB ELEVATIONS I
- S4. TOP OF SLAB ELEVATIONS II
- S4A. TOP OF APPROACH SLAB ELEVATIONS
- S5. DECK PLAN & CROSS SECTION
- S6. SUPERSTRUCTURE DETAILS
- S7. DIAPHRAGM DETAILS
- S8. BRIDGE RAILING DETAILS
- S9. FRAMING PLAN
- S10. BEAM DETAILS
- S11. BLANK SHEET
- S12. SOUTH ABUTMENT
- S13. NORTH ABUTMENT
- S14. TEMPORARY CONCRETE BARRIER
- S15. BAR SPLICER DETAILS
- S16. CANTILEVER FORMING BRACKETS
- S17. SOIL BORING LOGS I
- S18. SOIL BORING LOGS II
- S19. SOIL BORING LOGS III
- S20. SOIL BORING LOGS IV



ELEVATION



PROFILE GRADE
(Along PGL Roadway)



PLAN



Paul M. Lopez
PAUL M. LOPEZ, P.E., S.E.
NO. 081-005231
EXP. DATE: 11/30/10

APPROVED
FOR STRUCTURAL ADEQUACY ONLY

Ralph E. Anderson (TS)
ENGINEER OF BRIDGES AND STRUCTURES

LOADING HS20-44

Allowance for Future Wearing Surface = 50 lb/ft²

DESIGN STRESSES

f'_c = 3500 psi
f_y = 60,000 psi (Reinf.)
f_y = 50,000 psi (W270 Grade 50W)

DESIGN SPECIFICATIONS

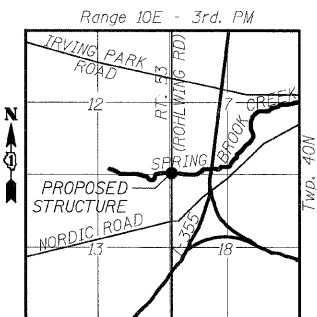
2002 AASHTO Standard Specifications for Highway Bridges

SEISMIC DATA

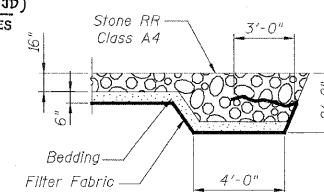
Seismic Performance Category (SPC) = A
Bedrock Acceleration Coefficient (A) = 0.035g
Site Coefficient (S) = 1.0

STATION 166+46.79
BUILT 200_ BY
STATE OF ILLINOIS
F.A.U. 2578 SEC. 532B-1
LOADING HS20
STR. NO. 022-0189

NAME PLATE
See Standard 515001



LOCATION SKETCH



RIPRAP FLANK DETAIL

* - To Be Relocated by Others

PATRICK ENGINEERING INC.
LISLE, ILLINOIS

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
GENERAL PLAN & ELEVATION
ILLINOIS ROUTE 53 OVER
SPRING BROOK CREEK
FAU 2578 SECTION 532B-1
STRUCTURE NO. 022-0189
DUPAGE COUNTY STATION 166+46.79
SCALE: NONE DRAWN BY: E. MROCZEK
DATE: 6/12/09 CHECKED BY: G. HATLESTAD