

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		

CONTRACT NO. 62881

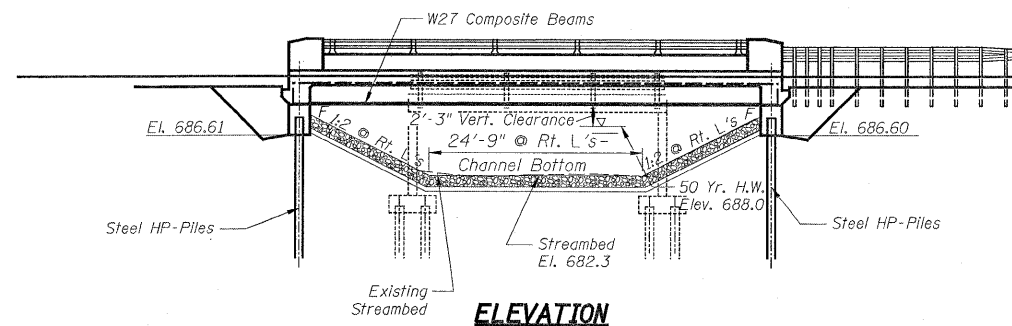
**Bench Mark:**

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



**ELEVATION**

**WATERWAY INFORMATION**

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

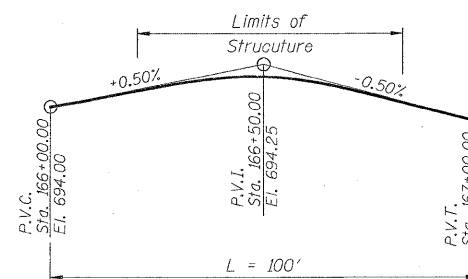
Flood	Freq. Yr.	Q (C.F.S.)	Opening (Sq. Ft.)		Nat. H.W.E.		Head (Ft.)		Headwater Elev.	
			Exist.	Prop.	Exist.	Prop.	Exist.	Prop.	Exist.	Prop.
Overtop	10	416	111	166	687.1	687.1	1.1	0.0	688.2	687.1
Design	40	550	130	208	687.8	687.8	1.0	0.0	688.8	688.8
Base	50	597	136	222	688.0	688.0	1.0	0.0	689.0	688.0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

**DESIGN SCOUR ELEVATION (ft)**

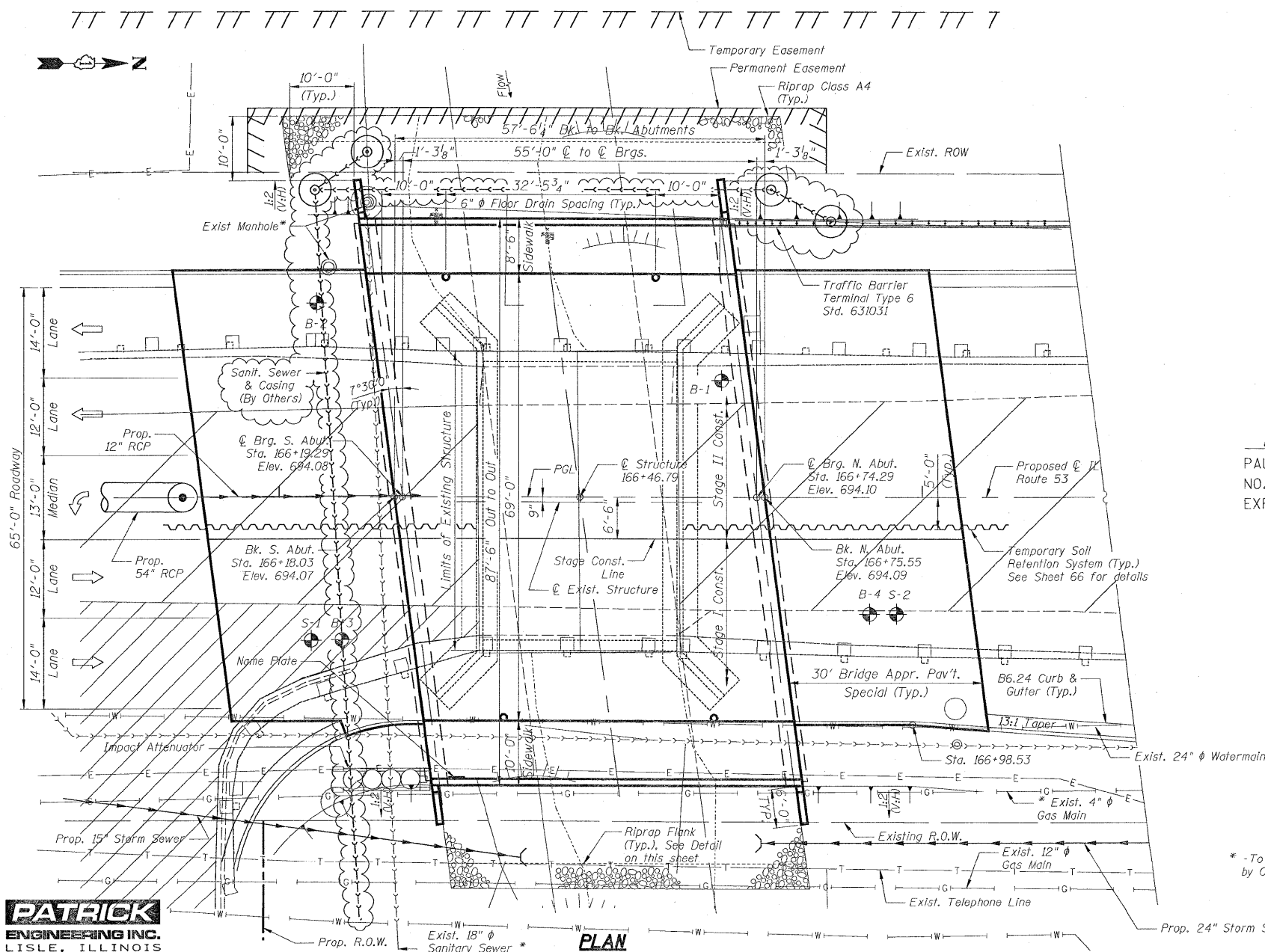
S. Abut	N. Abut
686.61	686.60

**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
- S5. TOP OF APPROACH SLAB ELEVATIONS
- S6. DECK PLAN & CROSS SECTION
- S7. SUPERSTRUCTURE DETAILS
- S8. DIAPHRAGM DETAILS
- S9. BRIDGE RAILING DETAILS
- S10. FRAMING PLAN
- S11. BEAM DETAILS
- S12. BLANK SHEET
- S13. SOUTH ABUTMENT
- S14. NORTH ABUTMENT
- S15. TEMPORARY CONCRETE BARRIER
- S16. BAR SPICER DETAILS
- S17. CANTILEVER FORMING BRACKETS
- S18. SOIL BORING LOGS I
- S19. SOIL BORING LOGS II
- S20. SOIL BORING LOGS III
- S21. SOIL BORING LOGS IV



**PROFILE GRADE**  
(Along PGL Roadway)



**PLAN**



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

**LOADING HS20-44**

Allowance for Future Wearing Surface=50 lb/ft<sup>2</sup>

**DESIGN STRESSES**

f'c=3500 psi  
fy=60,000 psi (Reinf.)  
fy=50,000 psi (M270 Grade 50W)

**DESIGN SPECIFICATIONS**

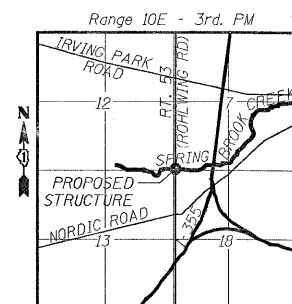
2002 AASHTO Standard Specifications for Highway Bridges

**SEISMIC DATA**

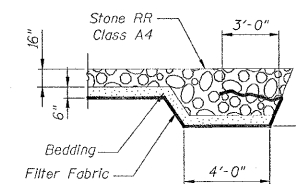
Seismic Performance Category (SPC)=A  
Bedrock Acceleration Coefficient (A)=0.035g  
Site Coefficient (S)=1.0

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**

REVISIONS	
NAME	DATE
R. DiGiulio	10/8/09

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. MROCEK  
DATE: 6/12/09 CHECKED BY: G. HATLESTAD

\* - To Be Relocated by Others

REV. 10-14-09

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