

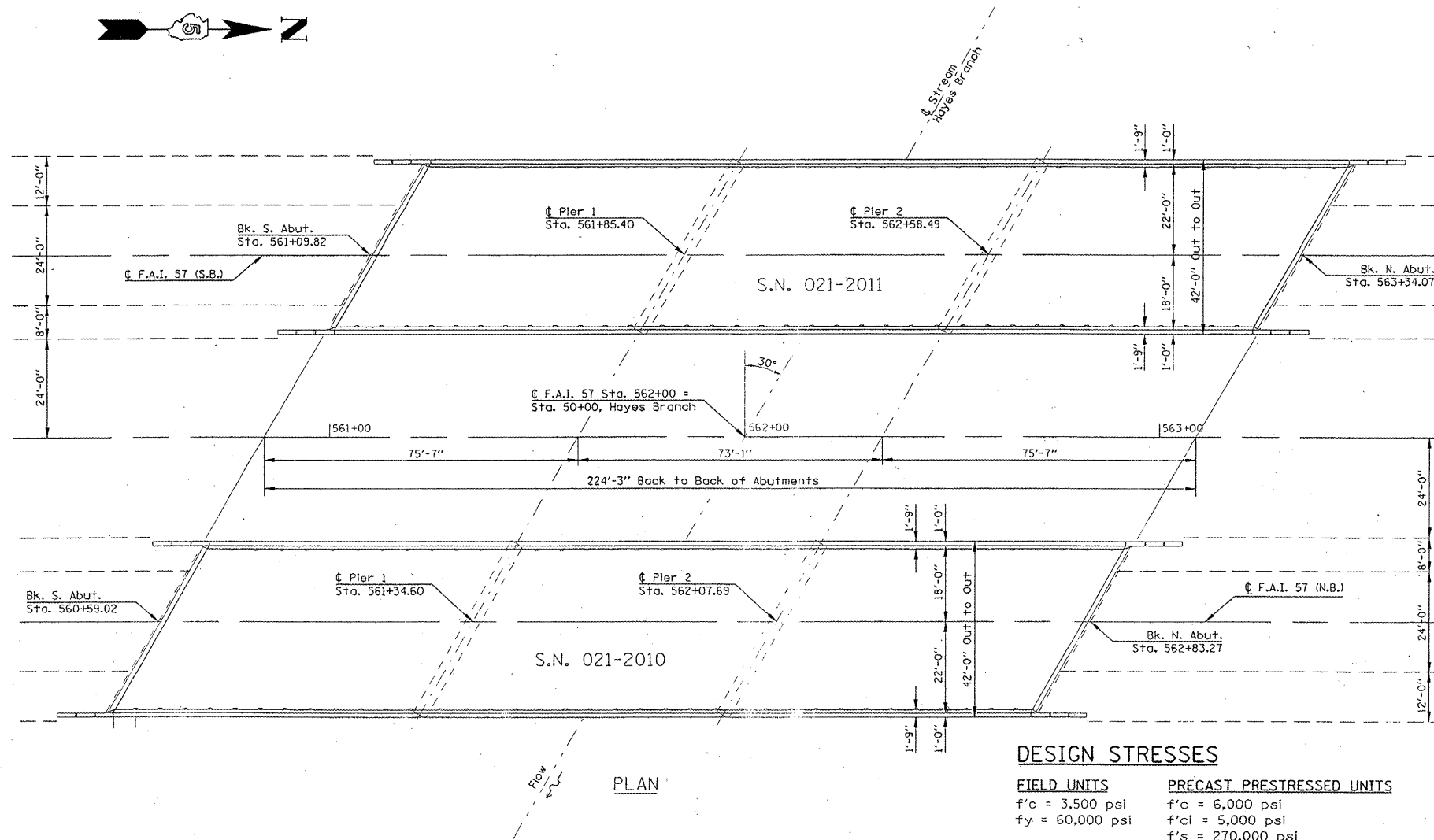
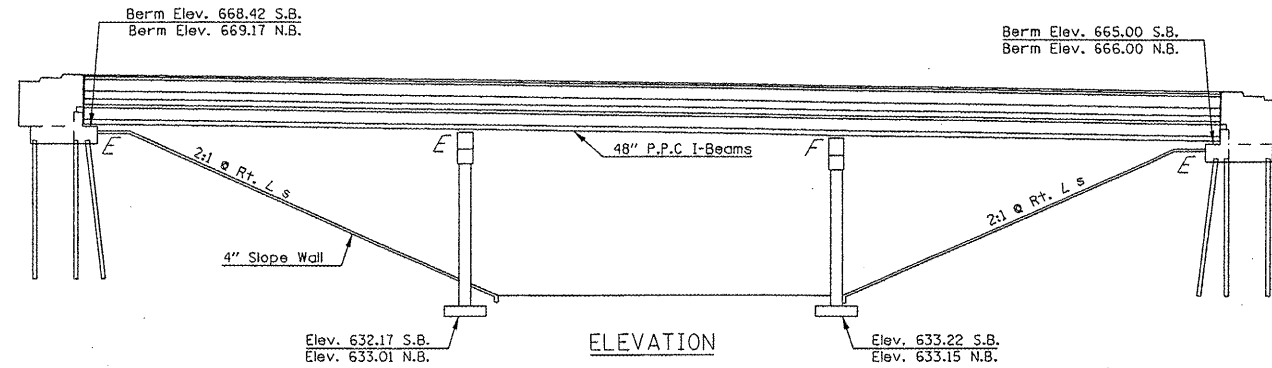
GENERAL PLAN & ELEVATION S.N. 021-2010 & 021-2011

BENCHMARK IS A CHISELED SQUARE IN THE TOP N.E. CORNER OF THE WEST ABUTMENT OF CSX & UP RR BRIDGE, ELEV. 645.96.

THE EXISTING DUAL MAINLINE STRUCTURES WERE BUILT IN 1969 BY THE STATE OF ILLINOIS AS F.A.I. ROUTE 57, SECTION 21-28 B AT STATION 562+00 IN DOUGLAS COUNTY. THE STRUCTURES WERE REHABILITATED WITH FULL-DEPTH PATCHING, HYDRO-SCARIFICATION, A MICROSILICA CONCRETE WEARING SURFACE AND SILICONE JOINT SEALER IN 2003 WITH F.A.I. ROUTE 57, SECTION (21-28B)1.

THE SUPERSTRUCTURE CONSISTS OF A 6 1/2" R.C. SLAB WITH A 2 1/4" MICROSILICA CONCRETE WEARING SURFACE AND SIX 48" P.P.C. I-BEAMS SUPPORTED BY TWO PIERS ON SPREAD FOOTINGS AND SUB ABUTMENTS ON CONCRETE PILES. THE STRUCTURE MEASURES 224'-3" FROM BACK TO BACK OF ABUTMENT. THE DECK HAS A CLEAR WIDTH OF 38'-6" AND AN OUT-TO-OUT WIDTH OF 42'-0".

METHOD OF CONSTRUCTION: STAGE CONSTRUCTION
SEE PROPOSED IMPROVEMENTS ON THIS SHEET.



DESIGN STRESSES

FIELD UNITS	PRECAST PRESTRESSED UNITS
f'c = 3,500 psi	f'c = 6,000 psi
f'y = 60,000 psi	f'cl = 5,000 psi
	f's = 270,000 psi
	f'si = 201,960 psi

PROPOSED WORK

1. REPLACE FASCIA BEAM, WEST SIDE, SOUTH SPAN - S.N. 021-2011.
2. EXTEND FLOOR DRAINS - S.N. 021-2010 & 021-2011.
3. REPLACE SILICONE JOINT SEALER - S.N. 021-2010 & 021-2011.
4. STRUCTURAL REPAIR OF CONCRETE AT SOUTHWEST BACKWALL/WINGWALL - S.N. 021-2011.
5. SLOPE WALL REPAIR, S.N. 021-2011.
6. REMOVE RESEARCH SPECIMEN STORAGE AREA - 021-2011.

TOTAL BILL OF MATERIALS (TWO STRUCTURES)

Item	Unit	Super.	Sub.	Total
REMOVE EXISTING CONCRETE I-BEAM	EACH	1.0	--	1.0
FURNISH & ERECT P.P.C. I-BEAM, 48"	FOOT	73.0	--	73.0
CONCRETE REMOVAL	CU YD	28.0	--	28.0
CONCRETE SUPERSTRUCTURE	CU YD	28.0	--	28.0
BRIDGE DECK GROOVING	SQ YD	49.0	--	49.0
PROTECTIVE COAT	SQ YD	85.0	--	85.0
REINFORCEMENT BARS, EPOXY COATED	POUND	6190.0	--	6190.0
REMOVE & RE-ERECT EXISTING HANDRAIL	FOOT	76.0	--	76.0
MECHANICAL SPLICERS	EACH	245.0	--	245.0
FLOOR DRAINS	EACH	5.0	--	5.0
FLOOR DRAIN EXTENSION	EACH	56.0	--	56.0
POLYMER CONCRETE	CU FT	0.5	--	0.5
SILICONE JOINT SEALER, 1.5"	FOOT	192.0	--	192.0
STRUCTURAL REPAIR OF CONCRETE, DEPTH EQUAL TO OR LESS THAN 5"	SQ FT	103.3	--	103.3
SLOPE WALL REMOVAL	SQ YD	53.3	--	53.3
SLOPE WALL, 4"	SQ YD	53.3	--	53.3
CHAIN LINK FENCE REMOVAL	FOOT	--	56.0	56.0

QUANTITIES FOR TEMPORARY CONCRETE BARRIER ARE INCLUDED IN ROADWAY PLANS.

GENERAL NOTES

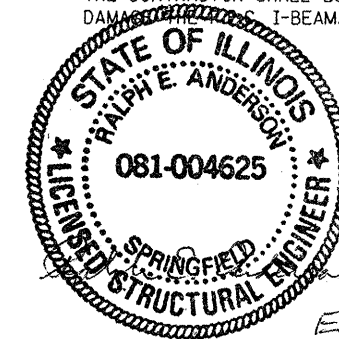
PLAN DIMENSIONS AND DETAILS RELATIVE TO THE EXISTING PLANS ARE SUBJECT TO NOMINAL CONSTRUCTION VARIATIONS. THE CONTRACTOR SHALL FIELD VERIFY EXISTING DIMENSIONS AND DETAILS AFFECTING NEW CONSTRUCTION AND MAKE NECESSARY APPROVED ADJUSTMENTS PRIOR TO CONSTRUCTION OR ORDERING OF MATERIALS. SUCH VARIATIONS SHALL NOT BE CAUSE FOR ADDITIONAL COMPENSATION FOR A CHANGE IN SCOPE OF WORK, HOWEVER, THE CONTRACTOR WILL BE PAID FOR THE QUANTITY ACTUALLY FURNISHED AT THE UNIT PRICE BID FOR THE WORK.

REINFORCEMENT BARS DESIGNATED (E) SHALL BE EPOXY COATED.

REINFORCEMENT BARS SHALL CONFORM TO THE REQUIREMENTS OF ASTM A 706 GR 60. SEE SPECIAL PROVISIONS.

EXISTING REINFORCEMENT BARS EXTENDING INTO THE REMOVAL AREA SHALL BE CLEANED, STRAIGHTENED AND INCORPORATED INTO THE NEW CONSTRUCTION. ANY REINFORCEMENT BARS THAT ARE DAMAGED DURING CONCRETE REMOVAL SHALL BE REPLACED WITH AN APPROVED BAR SPLICER OR ANCHORAGE SYSTEM. COST INCLUDED WITH CONCRETE REMOVAL.

THE CONTRACTOR SHALL USE EXTREME CARE DURING CONCRETE REMOVAL SO AS NOT TO DAMAGE EXISTING I-BEAM.



Expires Nov. 30, 2010

• CHAMPAIGN & DOUGLAS

FILE NAME : es:\pwwork\PMIDOT\SHERERJH\0134546\05	USER NAME : shererjm	DESIGNED : GMS	REVISED :
0251:sh-structures.dgn		DRAWN : GMS	REVISED :
PLDT SCALE = 40,000' / IN.		CHECKED :	REVISED :
PLDT DATE = 12/9/2009		DATE :	REVISED :

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**GENERAL PLAN & ELEVATION
S.N. 021-2010 & 021-2011**

SCALE: SHEET NO. 1 OF 18 SHEETS STA. TO STA.

F.A.I. RTE. 57	SECTION (21-28.21-10-29.10-30)RS-1	COUNTY *	TOTAL SHEETS 115	SHEET NO. 07
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 70251	