

EXISTING GENERAL PLAN AND ELEVATION

S.N. 057-0110

(FOR INFORMATION ONLY)

F.A.S. ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
2484	126 BR	MCLEAN	15	6

ILLINOIS PROJECT

GENERAL NOTES

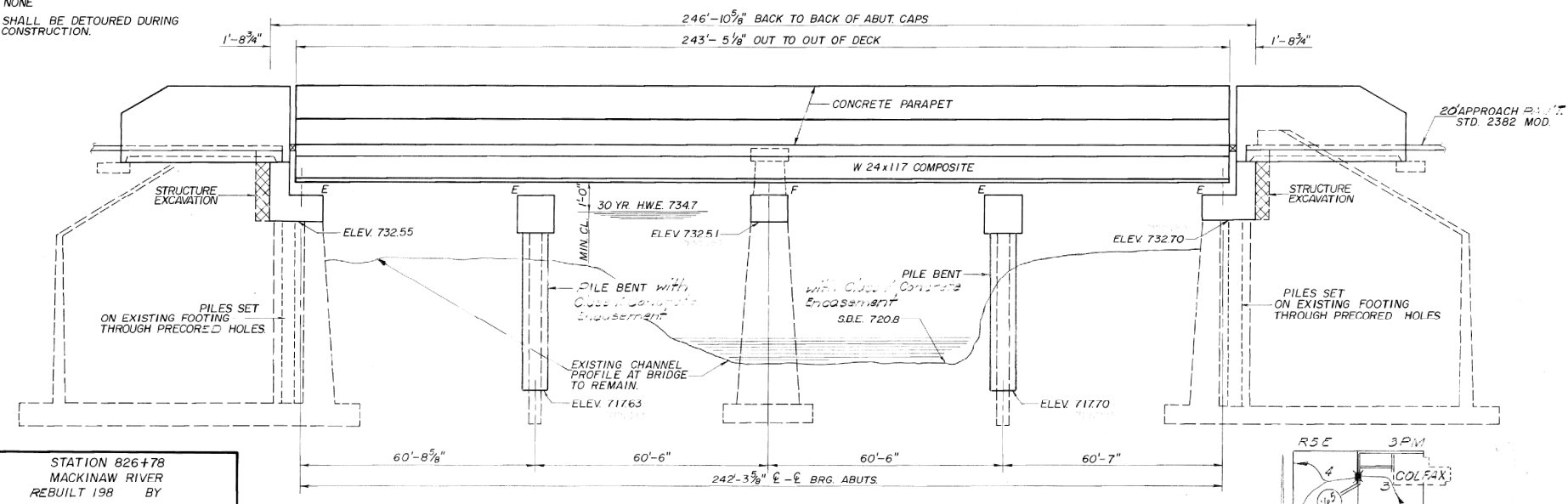
- SEE PROPOSAL FOR BORING DATA.
- CALCULATED WEIGHT OF STRUCTURAL STEEL = 23,946 LBS M183; 152,207 LBS M223 GRADE 50
- THE ZINC-SILICATE & VINYL PAINT SYSTEM SHALL BE USED FOR SHOP AND FIELD PAINTING OF STRUCTURAL STEEL EXCEPT WHERE OTHERWISE NOTED.
- FIELD WELDING OF CONSTRUCTION ACCESSORIES WILL NOT BE PERMITTED TO THE BOTTOM FLANGE OF BEAMS NOR TO THE TOP FLANGE FOR A DISTANCE EQUAL TO ONE-FOURTH THE SPAN LENGTH EACH WAY FROM THE PIER SUPPORTS. FIELD WELDING IN OTHER AREAS WILL BE PERMITTED ONLY WHEN APPROVED BY THE ENGINEER.
- ANCHOR BOLTS SHALL BE SET BEFORE BOLTING DIAPHRAGMS OVER SUPPORTS.
- THE CONTRACTOR SHALL DRIVE 1 - HP 10 x 57 TEST PILE IN A PERMANENT LOCATION AT PIERS #1 & #3 AS DIRECTED BY THE ENGINEER BEFORE ORDERING THE REMAINDER OF PILES.
- PLAN DIMENSIONS AND DETAILS RELATIVE TO EXISTING STRUCTURE HAVE BEEN TAKEN FROM EXISTING PLANS AND ARE SUBJECT TO NOMINAL CONSTRUCTION VARIATIONS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY SUCH DIMENSIONS AND DETAILS IN THE FIELD 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 THE SCOPE OF WORK, HOWEVER, THE CONTRACTOR WILL BE PAID FOR THE QUANTITY ACTUALLY FURNISHED AT THE UNIT PRICE BID FOR THE WORK.
- EXPANSION BOLTS SHALL CONSIST OF APPROVED EXPANSION ANCHORS, PROVIDING MINIMUM CERTIFIED PROOF LOAD = 4,000 POUNDS, AND 3/4" x 12" HOOKED BOLTS.
- BEARING SEAT SURFACES SHALL BE CONSTRUCTED OR ADJUSTED TO THE DESIGNATED ELEVATIONS WITHIN A TOLERANCE OF 1/8" INCH. ADJUSTMENT SHALL BE MADE EITHER BY GRINDING THE SURFACE OR BY SHIMMING THE BEARING. TWO 1/8" ADJUSTING SHIMS, OF THE DIMENSIONS OF THE BOTTOM BEARING PLATE, SHALL BE PROVIDED FOR EACH BEARING IN ADDITION TO ALL OTHER PLATES OR SHIMS.
- THE MAIN LOAD CARRYING MEMBER COMPONENTS SUBJECT TO TENSILE STRESS SHALL CONFORM TO THE SUPPLEMENTAL REQUIREMENTS FOR NOTCH TOUGHNESS ZONE 2. THESE COMPONENTS ARE THE WIDE FLANGE BEAMS AND ALL SPLICE PLATE MATERIAL.
- REINFORCEMENT BARS SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M-31 OR M-53, GRADE 60.
- SHOULDER TRANSITION TO WINGWALL SHALL BE SHAPED WITH BROKEN CONCRETE. COST INCIDENTAL.
- ALL CONTACT SURFACES OF JOINTS FOR THE DIAPHRAGMS SHALL BE FREE OF PAINT OR LACQUER.
- CLASS X CONCRETE SHALL BE USED THROUGHOUT.
- FASTENERS SHALL BE HIGH STRENGTH BOLTS. BOLTS 3/4" #, OPEN HOLES 1/2" #, UNLESS OTHERWISE NOTED.
- STEEL HP #x 36 PILES SHALL BE SET ON TOP OF EXISTING FOOTING THRU HOLES PRECURED IN EXISTING BACK FILL AND AFTER SETTING THE PILES THE HOLES SHALL BE FILLED WITH SAND. COST INCIDENTAL TO FURNISHING STEEL H-PILES.

BENCHMARK: CHISELED SQUARE ON NORTHEAST WINGWALL OF BRIDGE
RT STA. 828+00 ELEV. 738.60

EXISTING STRUCTURE: STATION 826+78 BUILT IN 1928 AS SEC. 126
SBI ROUTE 165, TWO SIMPLE STEEL THROUGH TRUSS
SPANS WITH SOLID REINFORCED CONCRETE ABUTMENTS
AND PIERS, 239'-6" FA-FA ABUTMENTS, EXISTING
DECK REINFORCED CONCRETE ON STEEL STRINGERS,
21'-0" FA-FA CURBS, EXISTING TRUSS AND DECK TO BE
REMOVED, EXISTING SUBSTRUCTURE TO BE WIDENED TO
ACCOMMODATE A NEW SUPERSTRUCTURE, 32'-0"
FACE TO FACE OF PARAPETS, EXIST. SN. 057-0110

SALVAGE: NONE

TRAFFIC: SHALL BE DETOURED DURING
CONSTRUCTION.

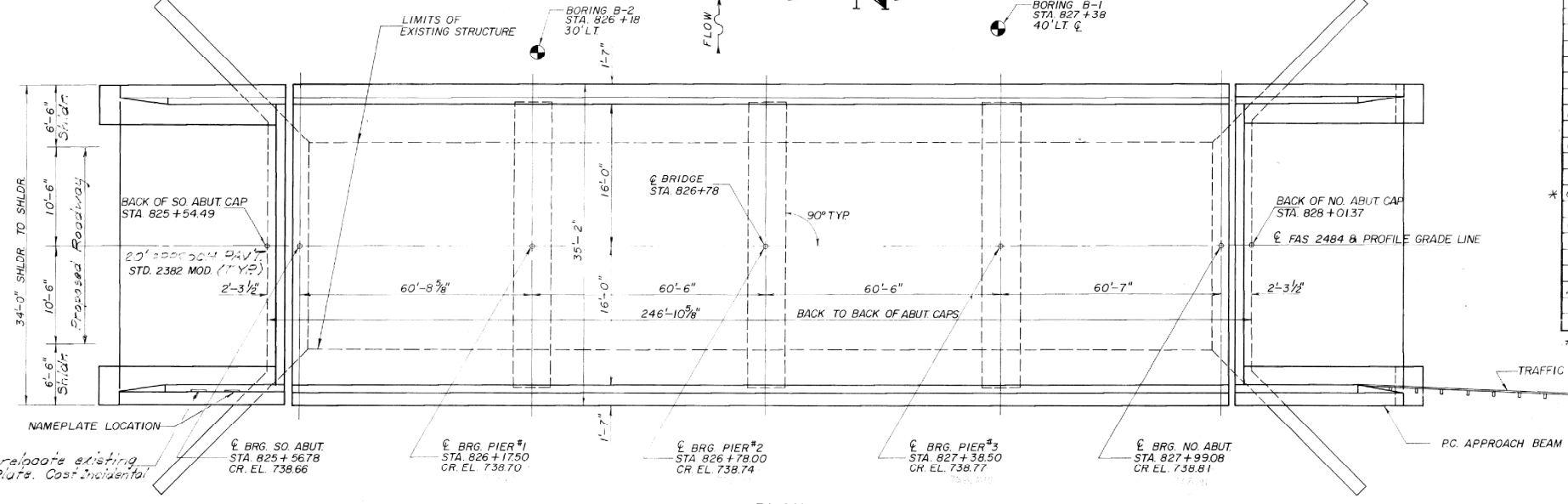


STATION 826+78
MACKINAW RIVER
REBUILT 198 BY
STATE OF ILLINOIS
FAS RTE 2484 SECTION 126 BR
LOADING HS 20
STR. NO. 057-0110

LETTERING FOR NAMEPLATE
SEE STD. 2113

PROJECT BH5-2484(102)

ELEVATION



Clear & regrade existing
Narrow Plots. Cost incidental.

WATERWAY INFORMATION

DRAINAGE AREA = 87.60 SQ. MI. LOW GRADE ELEV = 738.5 at STATION 826+78

FLOOD	FREQ. YR.	Q C.F.S.	OPENING SQ. FT.		NAT. HWE	HEAD - FT.		HEADWATER EL.	
			EXIST.	PROP.		EXIST.	PROP.	EXIST.	PROP.
DESIGN	30	5255	1716	1716	734.7	0.11	0.11	734.81	734.81
BASE	100	6726	1928	1928	735.6	0.13	0.13	735.73	735.73
OVERTOPPING									
MAX CALC.	500	8636	2163	2163	736.6	0.19	0.19	736.79	736.79

DESIGN STRESSES

$f_c = 3500$ PSI
 $f_y = 60,000$ PSI (REINFORCEMENT)
 $f_y = 50,000$ PSI (STRUCTURAL STEEL M223 GRADE 50)
 $f_y = 36,000$ PSI (STRUCTURAL STEEL M183)

PRECAST UNITS

$f_c = 4500$ PSI
 $f_c = 1800$ PSI
 $f_s = 24000$ PSI

DESIGN SPECIFICATIONS

1983 AASHTO, 1984 INTERSTATE

LOADING HS 20-44

ALLOW 25% SQ FT FOR FUTURE WEARING SURFACE

BILL OF MATERIAL - BRIDGE

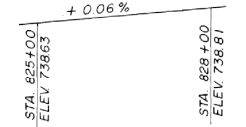
ITEM	UNIT	SUPER	SUB	TOTAL
REMOVAL OF EXISTING SUPERSTRUCTURES	EACH			1
CONCRETE REMOVAL	CU. YD.		46.0	46.0
STRUCTURE EXCAVATION	CU. YD.		22	22
FLOOR DRAINS	EACH	24		24
CHAINAGE SCUPPERS	EACH	8		8
CLASS X CONCRETE	CU. YD.	273.5	68.3	341.8
STRUCTURAL STEEL	LUMP SUM	1		1
REINFORCEMENT BARS	POUND		66.7	66.7
REINFORCEMENT BARS (EPOXY COATED)	POUND	65,220	16,770	81,990
NAME PLATES	EACH			1
PREFORMED JOINT SEAL (4")	LIN. FT.	70		70
PROTECTIVE COAT	SQ. YD.	1248		1248
* CLASS X CONCRETE ENCASUREMENT	CU. YD.		17.5	17.5
EPOXY CRACK SEALING	LIN. FT.		27	27
PRECAST CONCRETE BRIDGE SLAB	SQ. FT.		299	299
STEEL PILES (HP 10 x 57)	LIN. FT.		360	360
TEST PILES, STEEL (HP 10 x 57)	EACH		2	2
STUD SHEAR CONNECTORS	EACH	3540		3540
Furnishing Steel Piles (HP 8 x 36)	LIN. FT.		75	75

* Cost of Excavation is incidental to Class X Concrete Encasement.

APPROVED
James T. Hayburn
Professional Engineer



PROFILE GRADE



GENERAL PLAN & ELEVATION
F.A.S. RTE. 2484
SECTION 126 BR
MCLEAN COUNTY
STA. 826+78.00
STR. NO. 057-0110

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		DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

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S.N. 057-0110

SCALE: SHEET NO. 4 OF 8 SHEETS STA. TO STA.

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2484	(125,126,127)RS-2	MCLEAN	122	42
ILLINOIS FED. AID PROJECT			CONTRACT NO. 70510	