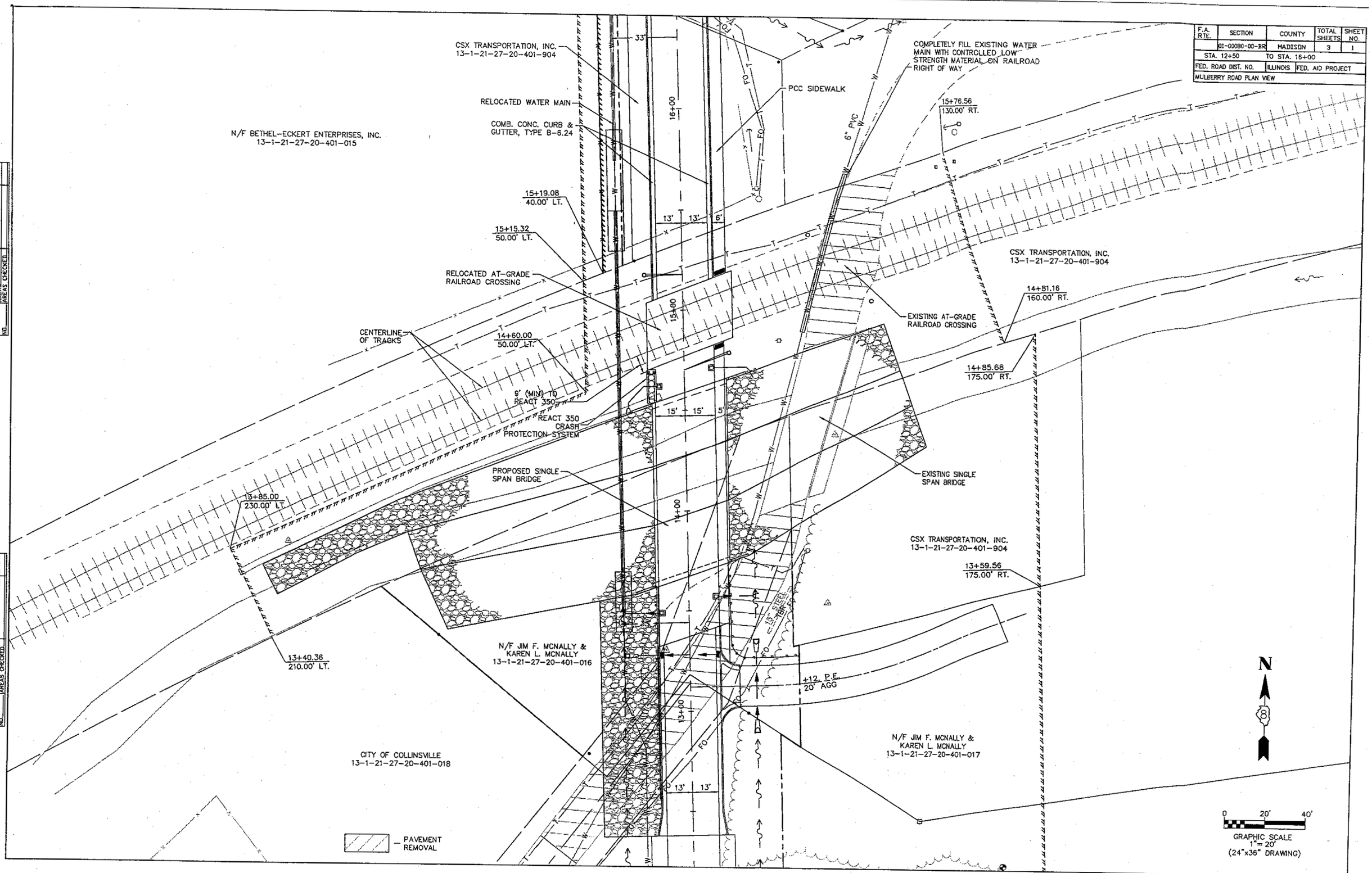
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	01-00080-00-BR	MADISON	3	1
STA. 12+50		TO STA. 16+00		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
MULBERRY ROAD PLAN VIEW				

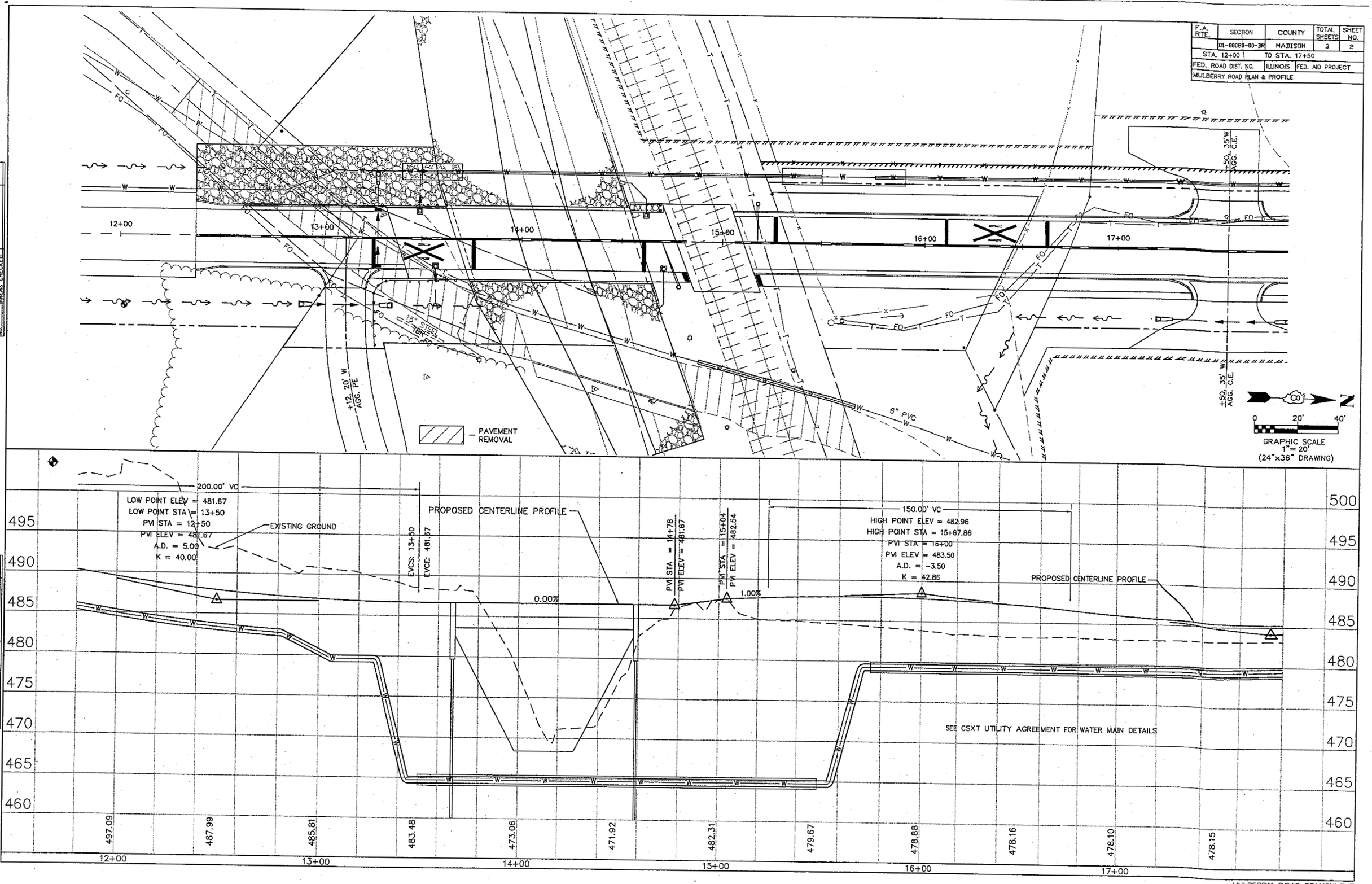


FINAL SURVEY	BY	DATE
SURVEYED		
PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		
NOTE BOOK NO.		

ORIGINAL SURVEY	BY	DATE
SURVEYED		
PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		
NOTE BOOK NO.		

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	01-00080-00-BR	MADISON	3	2
STA. 12+00	TO STA. 17+50			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

MULBERRY ROAD PLAN & PROFILE



FINAL SURVEY	BY	DATE
SURVEYED		
PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		
NOTE BOOK NO.		

ORIGINAL SURVEY	BY	DATE
SURVEYED		
PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		
NOTE BOOK NO.		

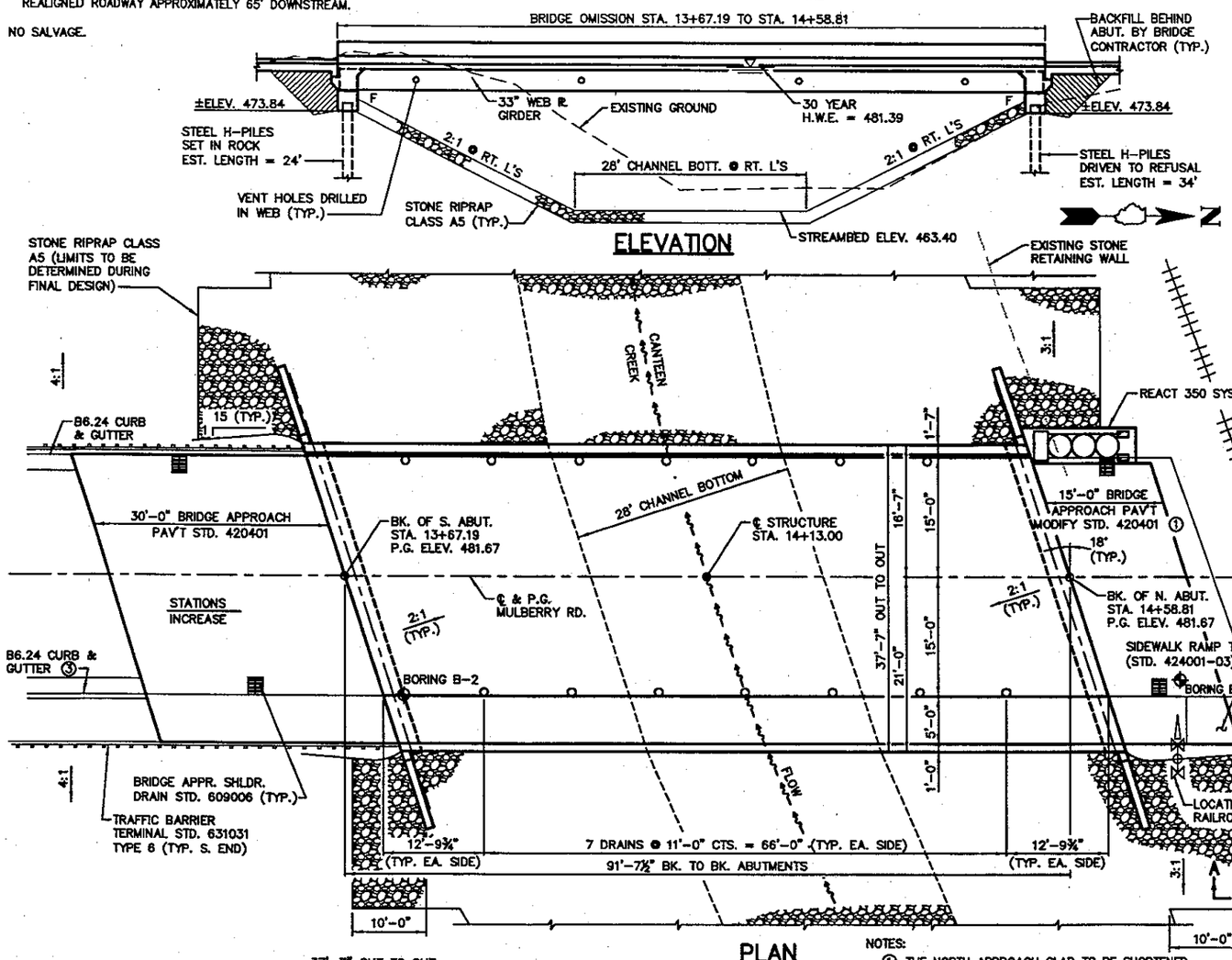
SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
00—00080-00-BR	MADISON	3	3
TSL			

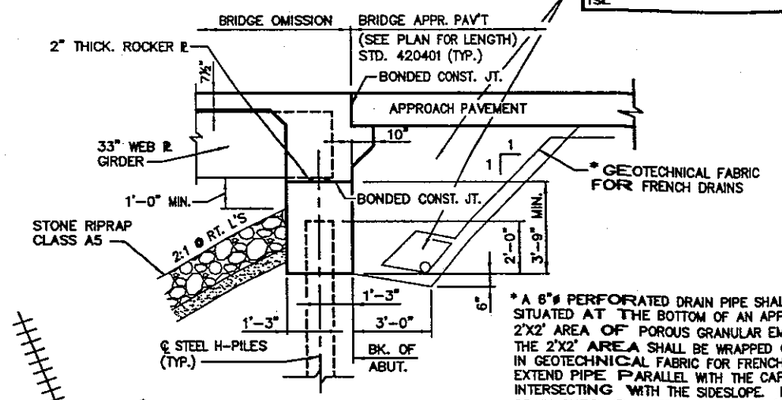
BENCH MARK: IRON BAR ● STA. 19+63.51, O/S 59.85' RT. ELEVATION 482.43.

EXISTING STRUCTURE: S.N. 060-6301 WAS CONSTRUCTED IN 1956 AND WAS REHABILITATED IN 1998. THE EXISTING STRUCTURE CONSISTS OF A SIMPLE SPAN PONY TRUSS WITH A REINFORCED CONCRETE DECK FOR VEHICULAR TRAFFIC AND A WOODEN DECK FOR PEDESTRIAN TRAFFIC. THE SUBSTRUCTURE CONSISTS OF PILE SUPPORTED OPEN ABUTMENTS. THE EXISTING STRUCTURE IS 90'-0" BACK TO BACK OF ABUTMENTS, 20'-7" FACE TO FACE OF CURBS, AND 21'-7" OUT TO OUT OF DECK. THE EXISTING STRUCTURE TO BE REMOVED & REPLACED AT THE REALIGNED ROADWAY APPROXIMATELY 65' DOWNSTREAM.

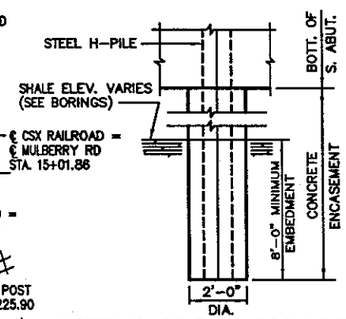
NO SALVAGE.

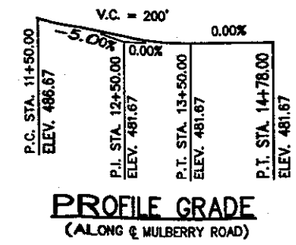
BACKFILL WITH UNCOMPACTED POROUS GRANULAR EMBANKMENT WITH A GRADATION OF CA-5 OR CA-7 BY BRIDGE CONTRACTOR AFTER SUPERSTRUCTURE IS IN PLACE. LIMITS SHALL BE 1'-0" FROM THE END OF EACH WINGWALL. EXCAVATION FOR PLACING POROUS GRANULAR EMBANKMENT IS PAID FOR AS STRUCTURE EXCAVATION.

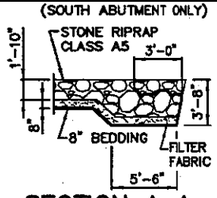




* A 6"ϕ PERFORATED DRAIN PIPE SHALL BE SITUATED AT THE BOTTOM OF AN APPROXIMATE 2'X2' AREA OF POROUS GRANULAR EMBANKMENT. THE 2'X2' AREA SHALL BE WRAPPED COMPLETELY IN GEOTECHNICAL FABRIC FOR FRENCH DRAINS. EXTEND PIPE PARALLEL WITH THE CAP UNTIL INTERSECTING WITH THE SIDESLOPE. PIPES SHALL DRAIN ONTO CONCRETE HEADWALLS (ARTICLE 601.05 OF THE STD. SPECIFICATIONS AND HIGHWAY STD. 601101).







HIGHWAY CLASSIFICATION

MULBERRY ROAD
FUNCTIONAL CLASS: URBAN COLLECTOR
ADT: 800 (2002); 2400 (2024)
ADTT: 92 (2002); 144 (2024)
DESIGN SPEED: 30 MPH
POSTED SPEED: 25 MPH

LOADING HS20-44

ALLOW 50 #/SQ. FT. FOR FUTURE WEARING SURFACE

DESIGN SPECIFICATIONS

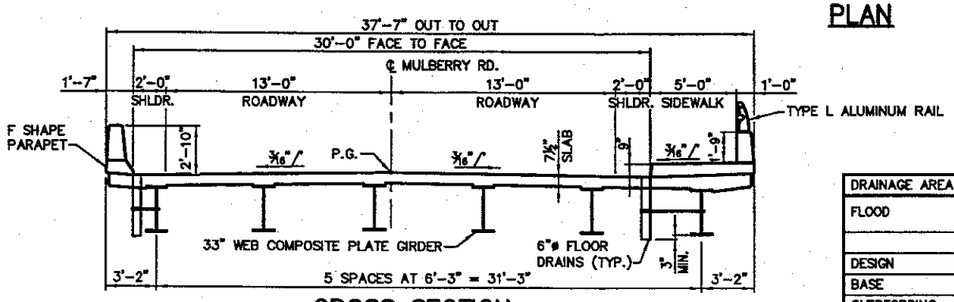
2002 AASHTO

DESIGN STRESSES

FIELD UNITS
f'c = 3,500 psi
fy = 60,000 psi (REINFORCEMENT)
fy = 50,000 psi (M270 GRADE 50) STRUCT. STEEL
fy = 36,000 psi (M270 GRADE 36) STRUCT. STEEL

SEISMIC DATA

SEISMIC PERFORMANCE CATEGORY (SPC) = B
BEDROCK ACCELERATION COEFFICIENT (A) = 0.12
SITE COEFFICIENT (S) = 1.5



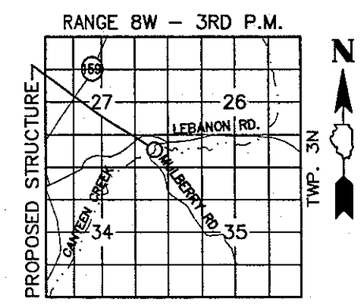
NOTES:

① THE NORTH APPROACH SLAB TO BE SHORTENED TO 15'-0" TO ALLOW FOR THE RAILROAD CROSSING.
② EXISTING STRUCTURE, NOT SHOWN, IS LOCATED APRROX. 65' EAST OF RELOCATED MULBERRY RD.
③ TRANSITION FROM 9" CURB AND SIDEWALK TO 6" CURB AND SIDEWALK ALONG THE APPROACH PAVEMENT.
④ TRANSITION FROM 9" CURB AND SIDEWALK TO 6" CURB AND SIDEWALK FROM THE END OF THE BRIDGE TO THE SIDEWALK RAMP.

WATERWAY INFORMATION

DRAINAGE AREA = 14.16 SQ. MI. LOW GRADE ELEV. 481.67' ● STA. 13+50 TO 14+78

FLOOD	FREQ. YR.	Q C.F.S.	OPENING SQ. FT. EXIST.	OPENING SQ. FT. PROP.	NAT. H.W.E. EXIST.	NAT. H.W.E. PROP.	HEAD - FT. EXIST.	HEAD - FT. PROP.	HEADWATER EL. EXIST.	HEADWATER EL. PROP.
	10	4900	598	860	479.81	479.68	1.40	0.05	481.21	479.73
DESIGN	30	6200	598	860	481.12	480.96	1.45	0.43	482.57	481.39
BASE	100	7800	598	860	482.43	482.24	1.63	0.62	484.06	482.86
OVERTOPPING	50	6900	598	860	481.73	481.55	1.55	0.53	483.28	482.08
MAX. CALC.	500	10300	598	860	485.01	483.88	0.72	0.14	485.73	484.02



GENERAL PLAN
MULBERRY ROAD OVER CANTEEN CREEK
SECTION 01-00080-00-BR
MADISON COUNTY
STATION 14+13.00
S.N. 060-6305