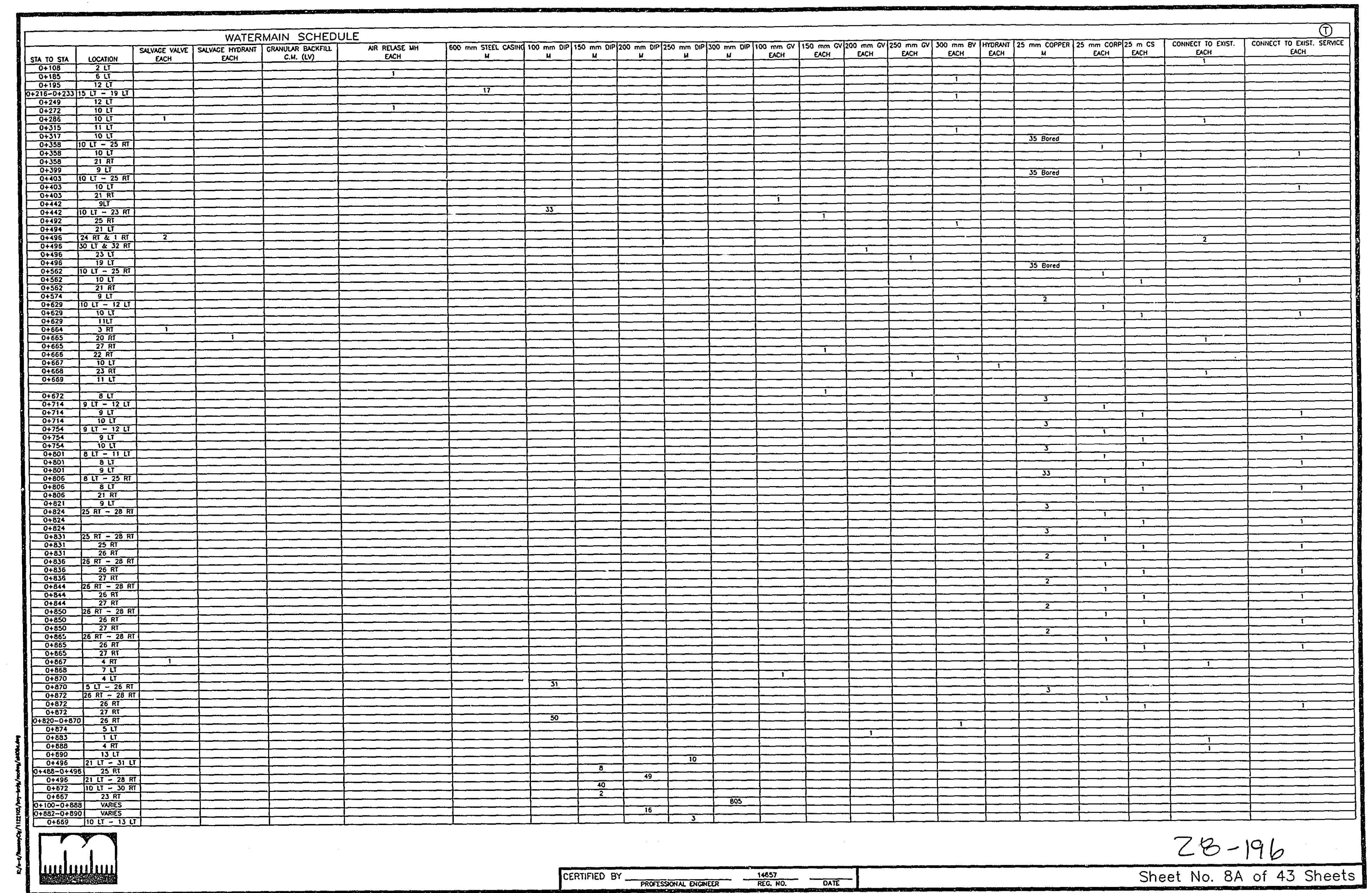
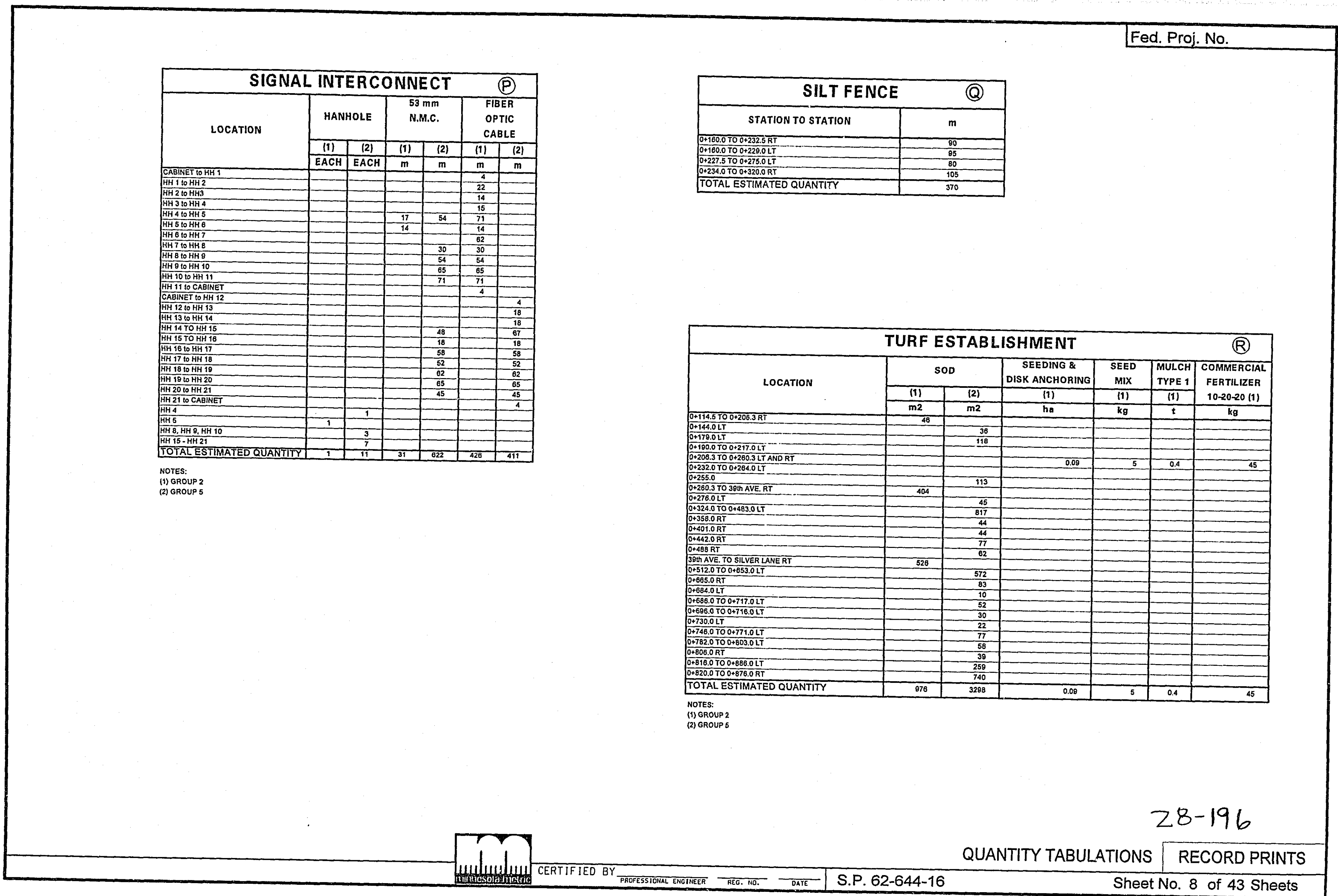




TRAFFIC CONTROL DEVICES (S)					
ITEM	SIGN NO. OR TYPE OF DEVICE	SIZE AND COLOR	QUANTITY (EACH)		
			STAGE 1	STAGE 2	
	R1-2	38" x 36" OR RED ON WHITE	1	1	
	R3-2	24" x 24" BLACK ON WHITE	1		
	R3-X1	30" x 30" BLACK ON WHITE		1	
	R11-2	48" x 30" BLACK ON WHITE	3	4	
	G20-2A	48" x 24" BLACK ON ORANGE	1	1	
	W1-3R	30" x 30" BLACK ON YELLOW	1		
	W1-3L	30" x 30" BLACK ON YELLOW	1		
	W1-6	48" x 24" BLACK ON ORANGE	4	4	
	W12-1	24" x 24" BLACK ON YELLOW		1	
	W13-1	24" x 24" BLACK ON ORANGE	2		
	W20-1	48" x 48" BLACK ON ORANGE	3	3	
	W21-X5R	48" x 48" BLACK ON ORANGE	1	2	
	W21-X5L	48" x 48" BLACK ON ORANGE	1		
	TYPE III BARRICADE	6" OR 8" ORANGE ON WHITE	9	10	
	REFLECTORIZED DRUM	ORANGE OR WHITE	51	74	
	FLASHER TYPE A (LOW INTENSITY)		5	4	
	TUBULAR MARKER		17	13	

TRAFFIC CONTROL DEVICES

RECORD PRINT

Sheet No. 11 of 43 Sheets

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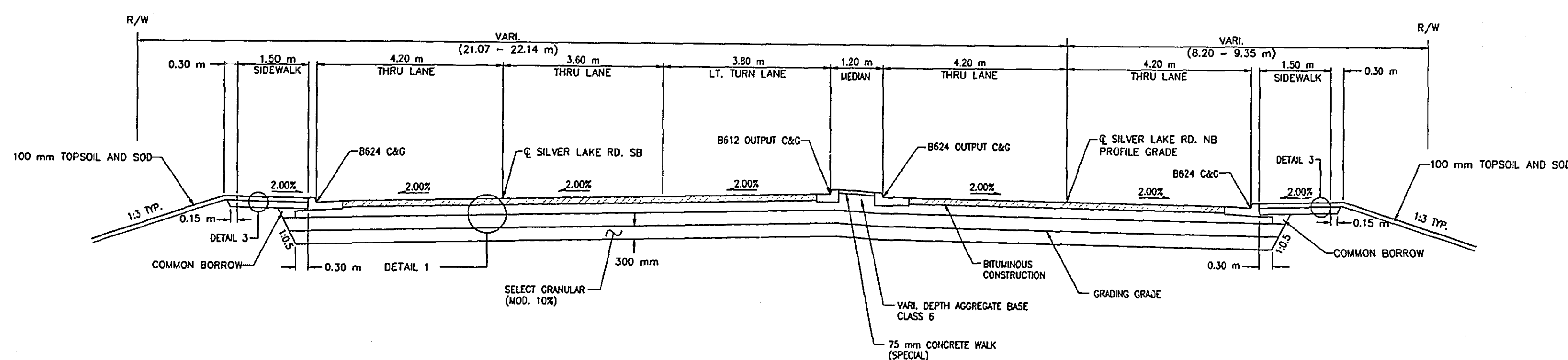
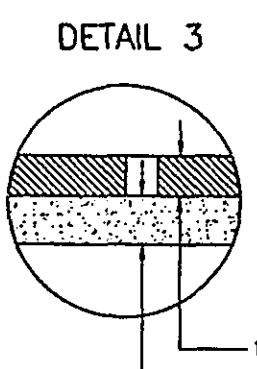
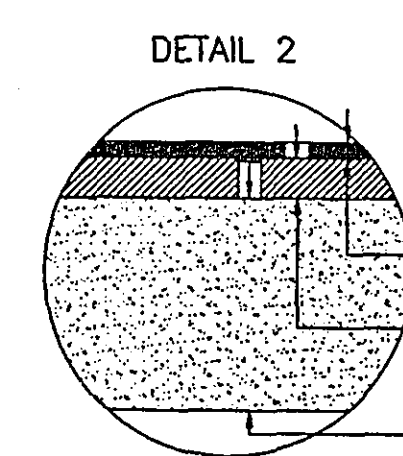
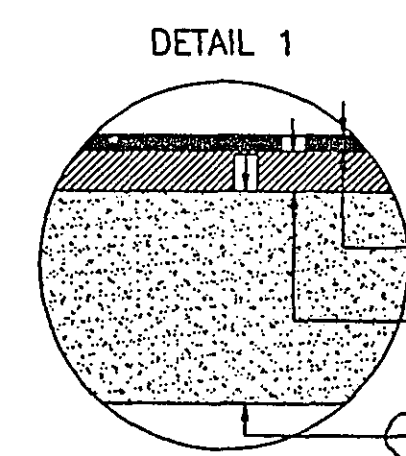
REG. NO.

DATE

S.P. 62-644-16



28-196

TYPICAL SECTION
STA. 0+168.300 TO SOUTH APPROACH PANELNOTE:
FOR PAVEMENT REPLACEMENT DUE TO
WATERMAN INSTALLATION, SEE DETAIL 2.

TYPICAL SECTIONS

RECORD PRINT

Sheet No. 12 of 43 Sheets

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REG. NO.

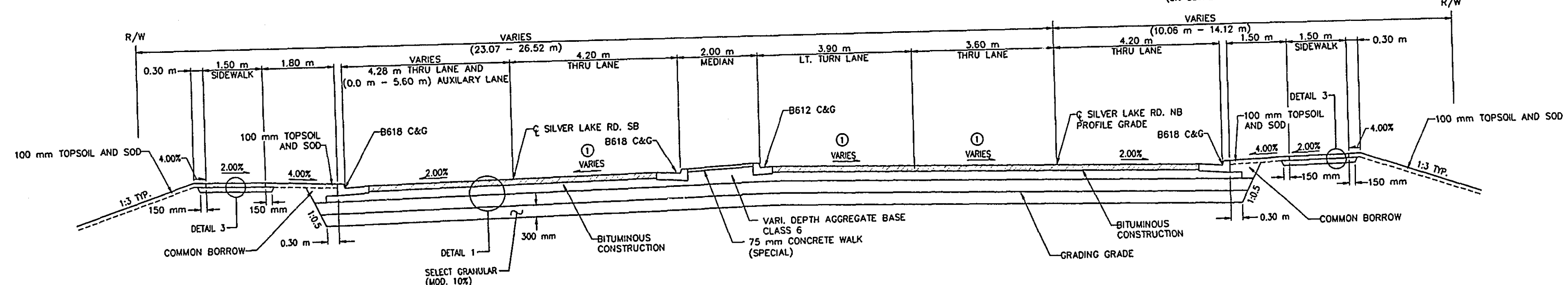
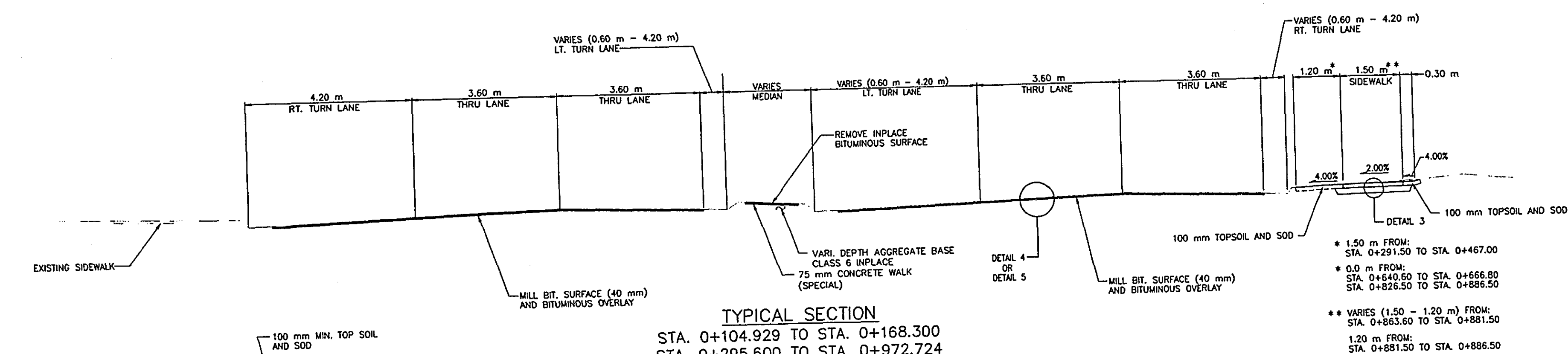
DATE

S.P. 62-644-16



28-196

NOTE:

① TRANSITION CROSS SLOPE BETWEEN NORTH APPROACH PANEL
(2% SLOPE AWAY FROM MEDIAN) AND STA. 0+285.800
(2% SLOPE TOWARD MEDIAN).TYPICAL SECTION
NORTH APPROACH PANEL TO STA. 0+295.600TYPICAL SECTION
STA. 0+104.929 TO STA. 0+168.300
STA. 0+295.600 TO STA. 0+972.724TYPICAL SECTION
STA. 0+295.600 TO 0+972.724

TYPICAL SECTIONS

RECORD PRINT

Sheet No. 13 of 43 Sheets

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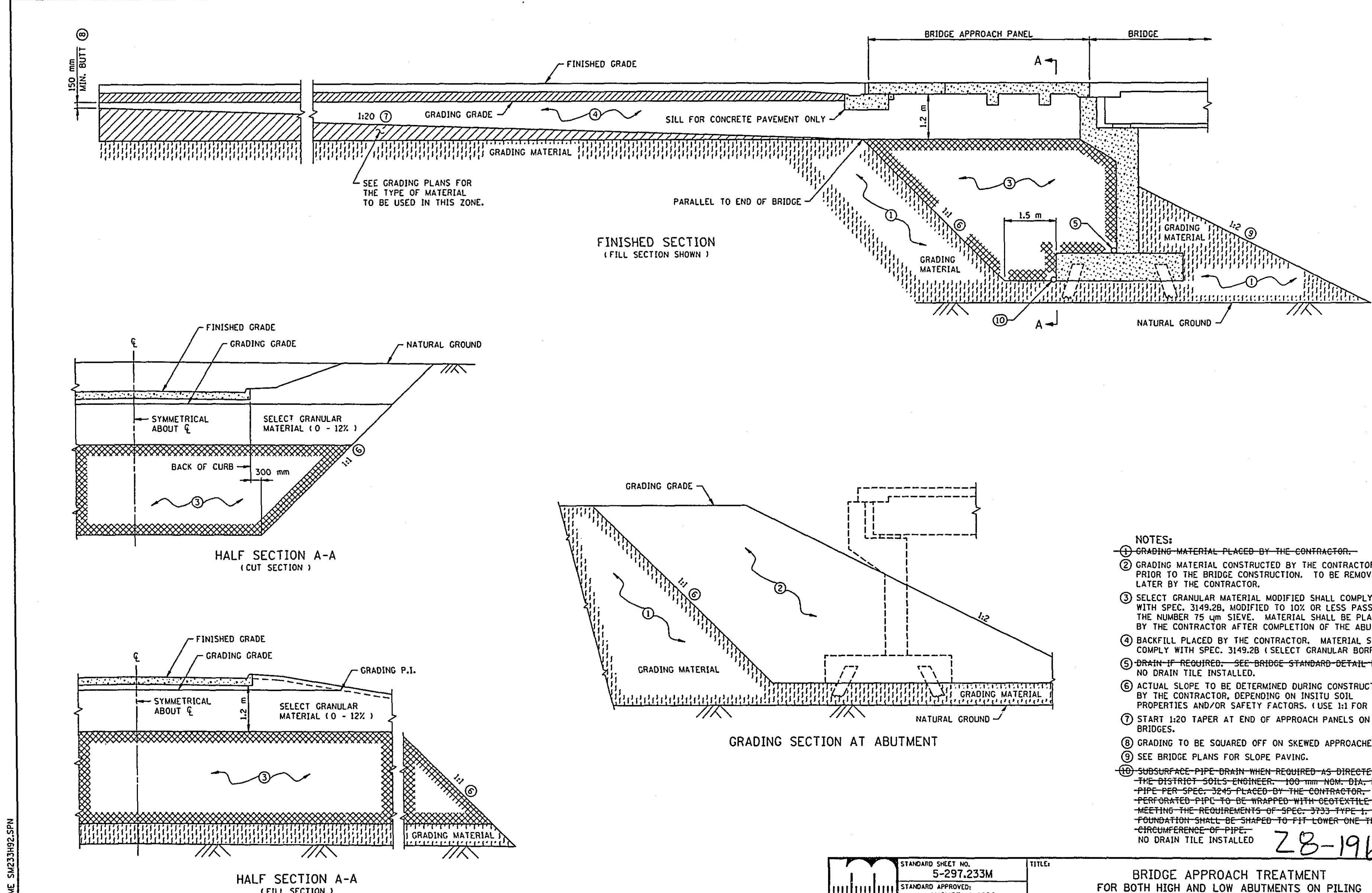
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DATE

S.P. 62-644-16

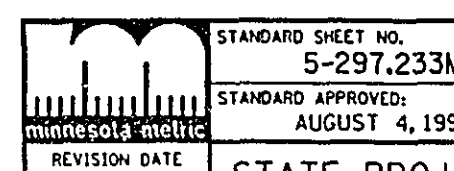


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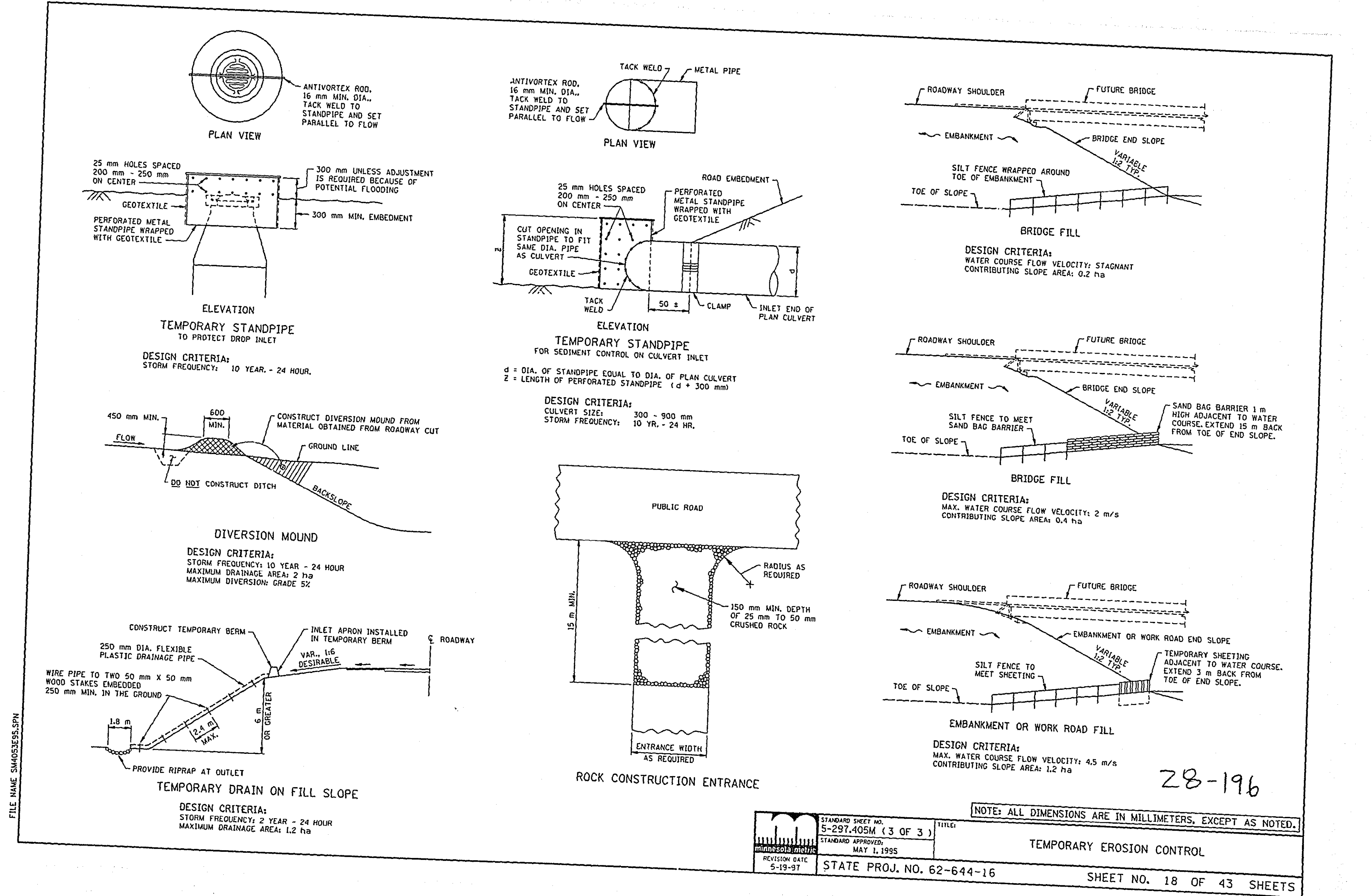
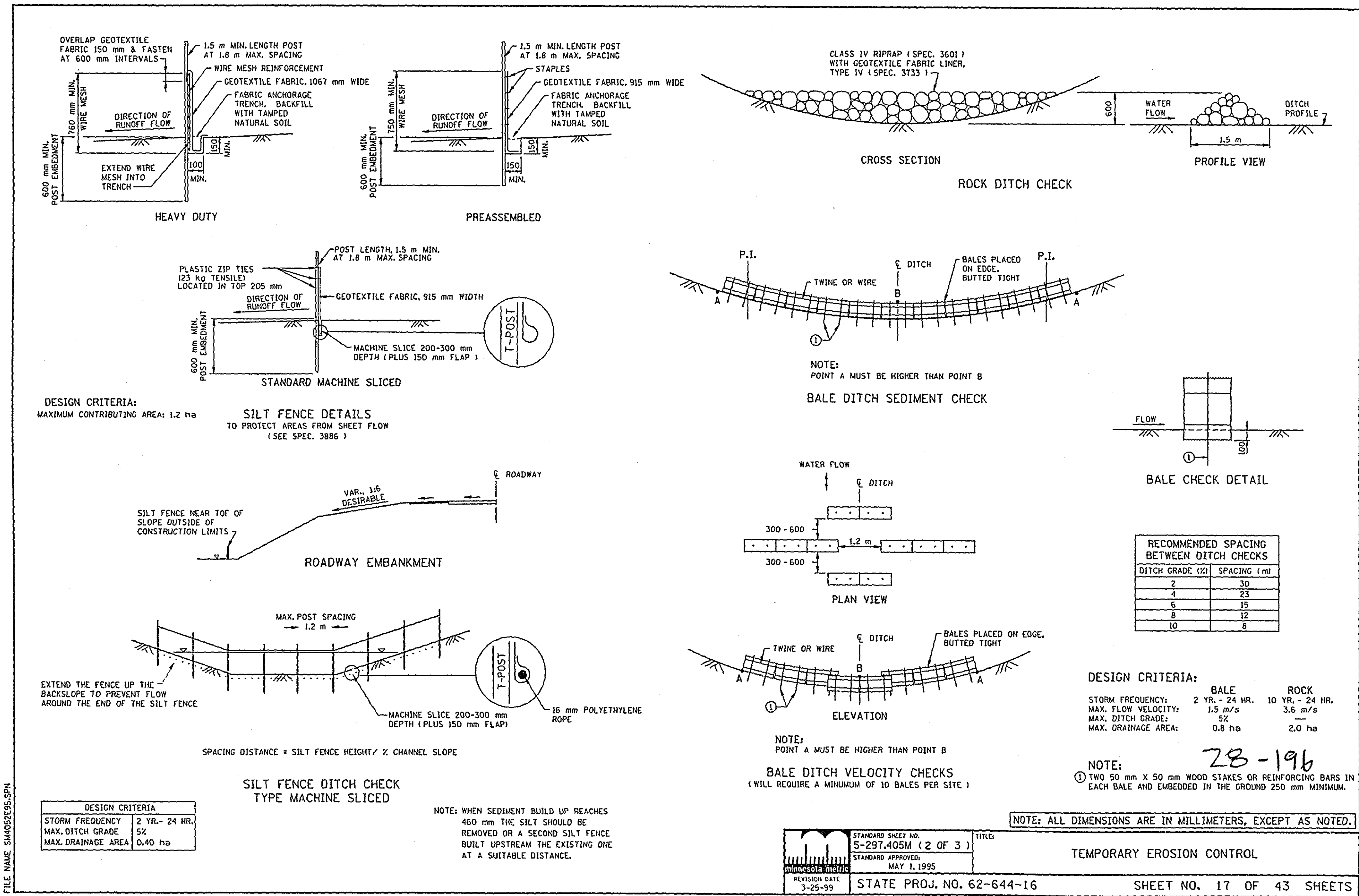
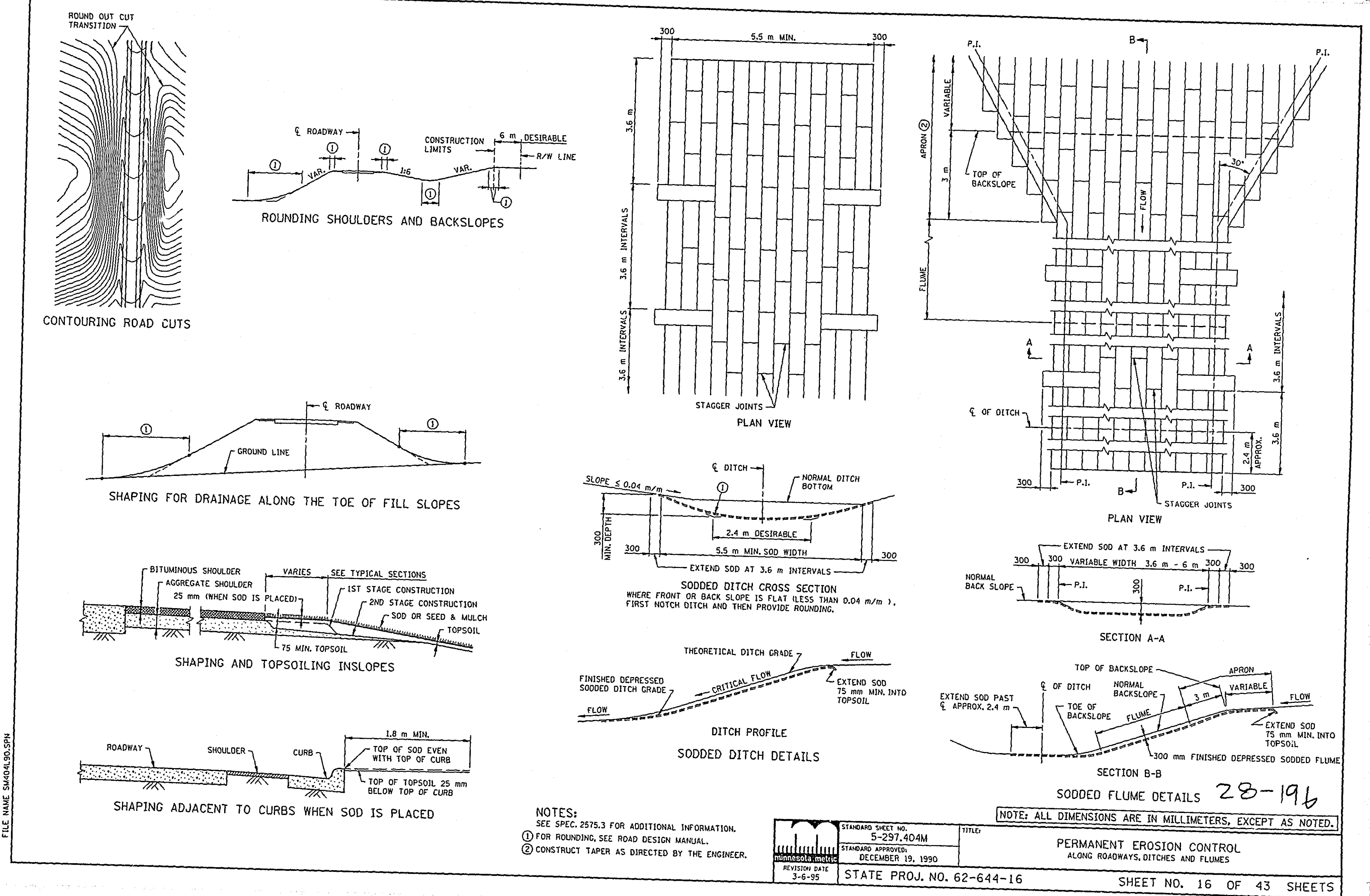
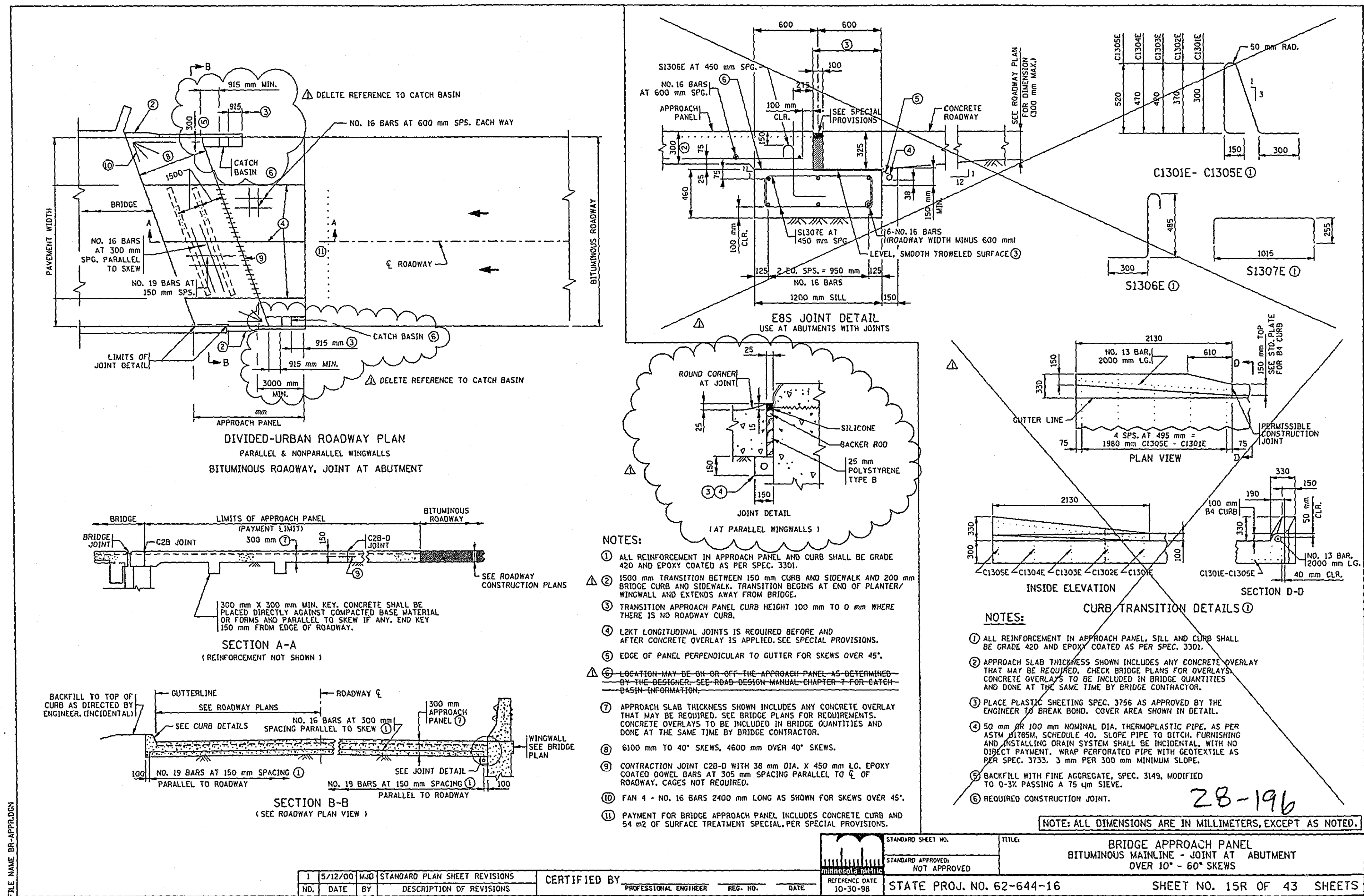


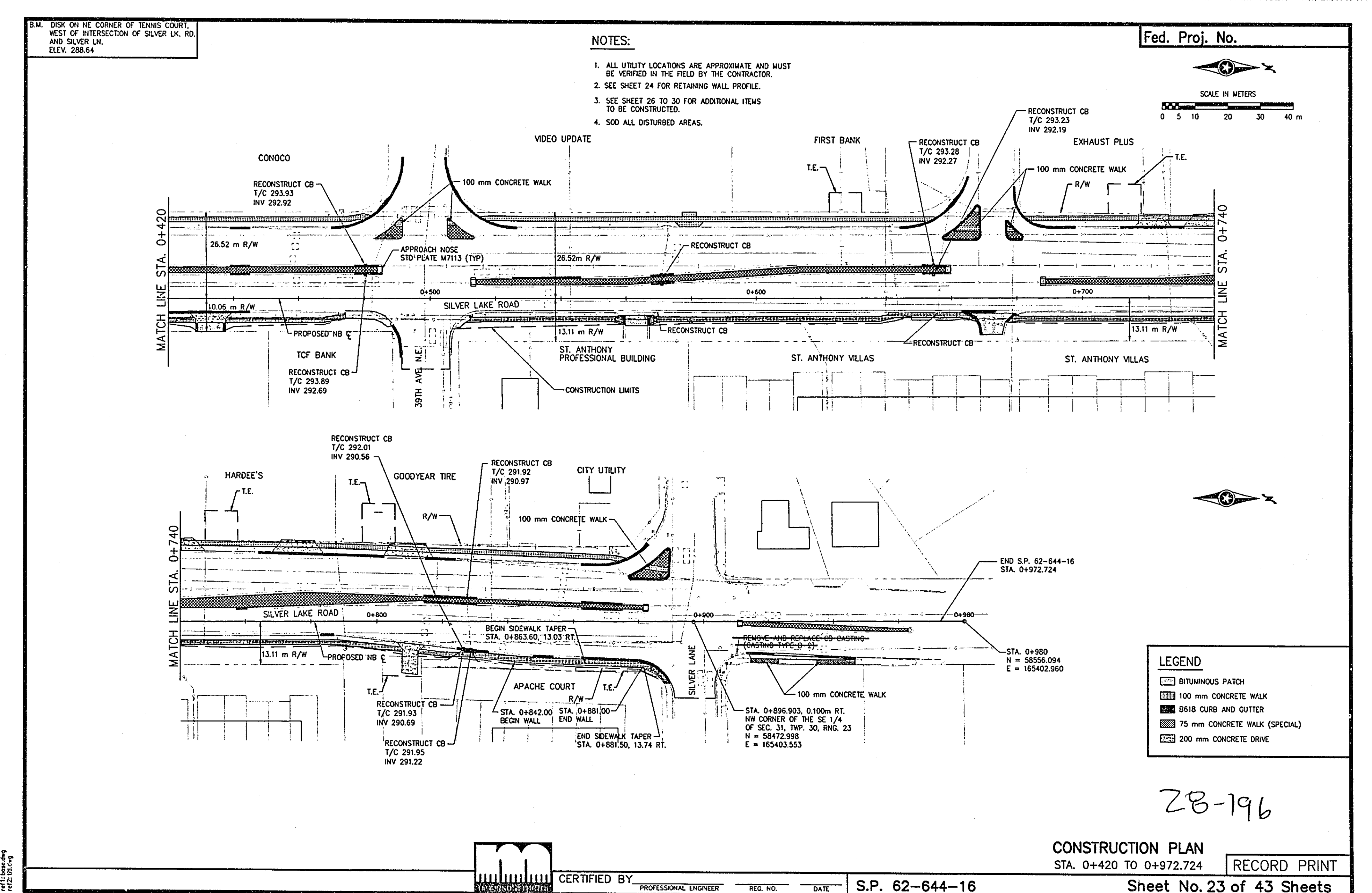
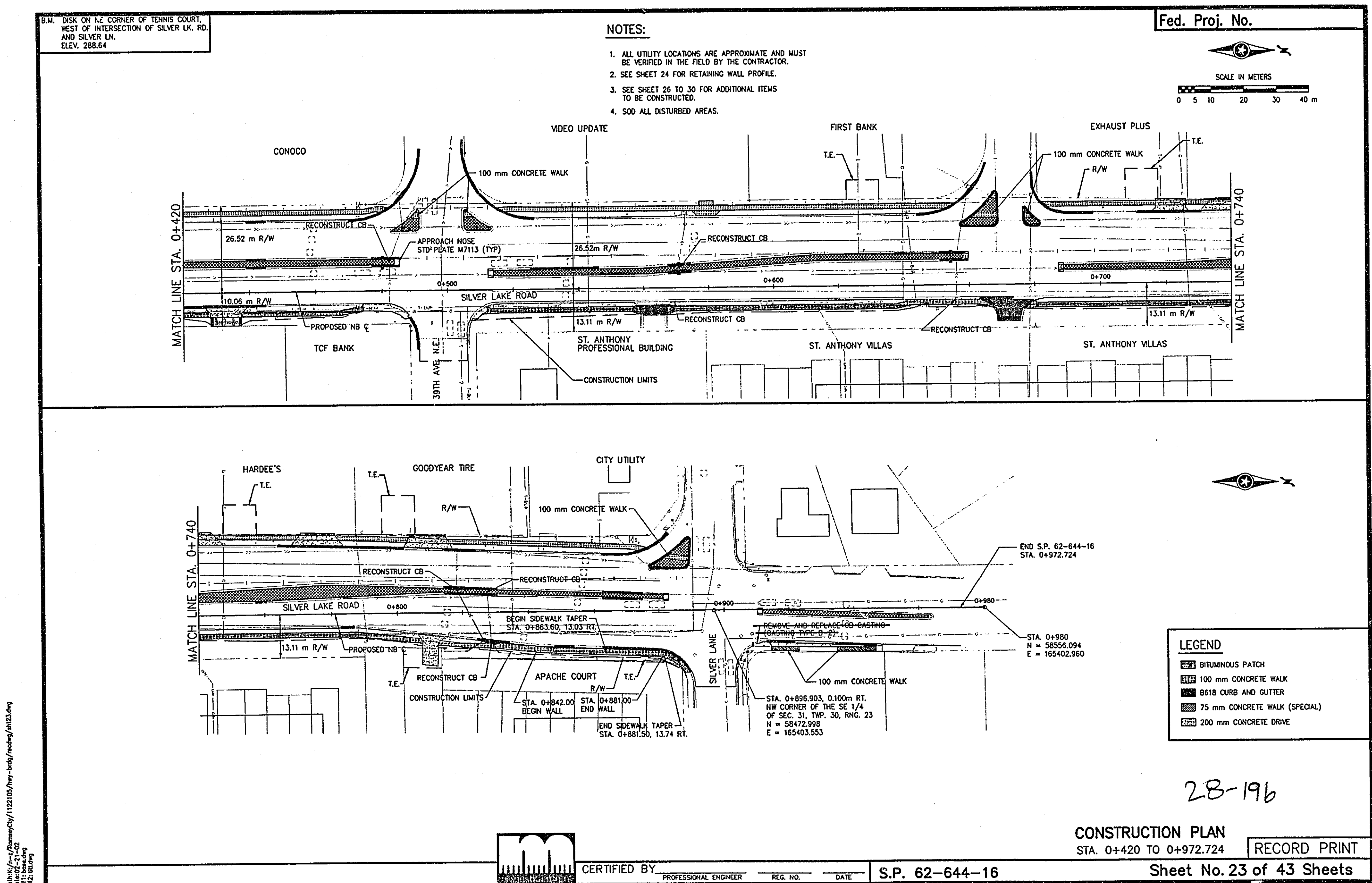
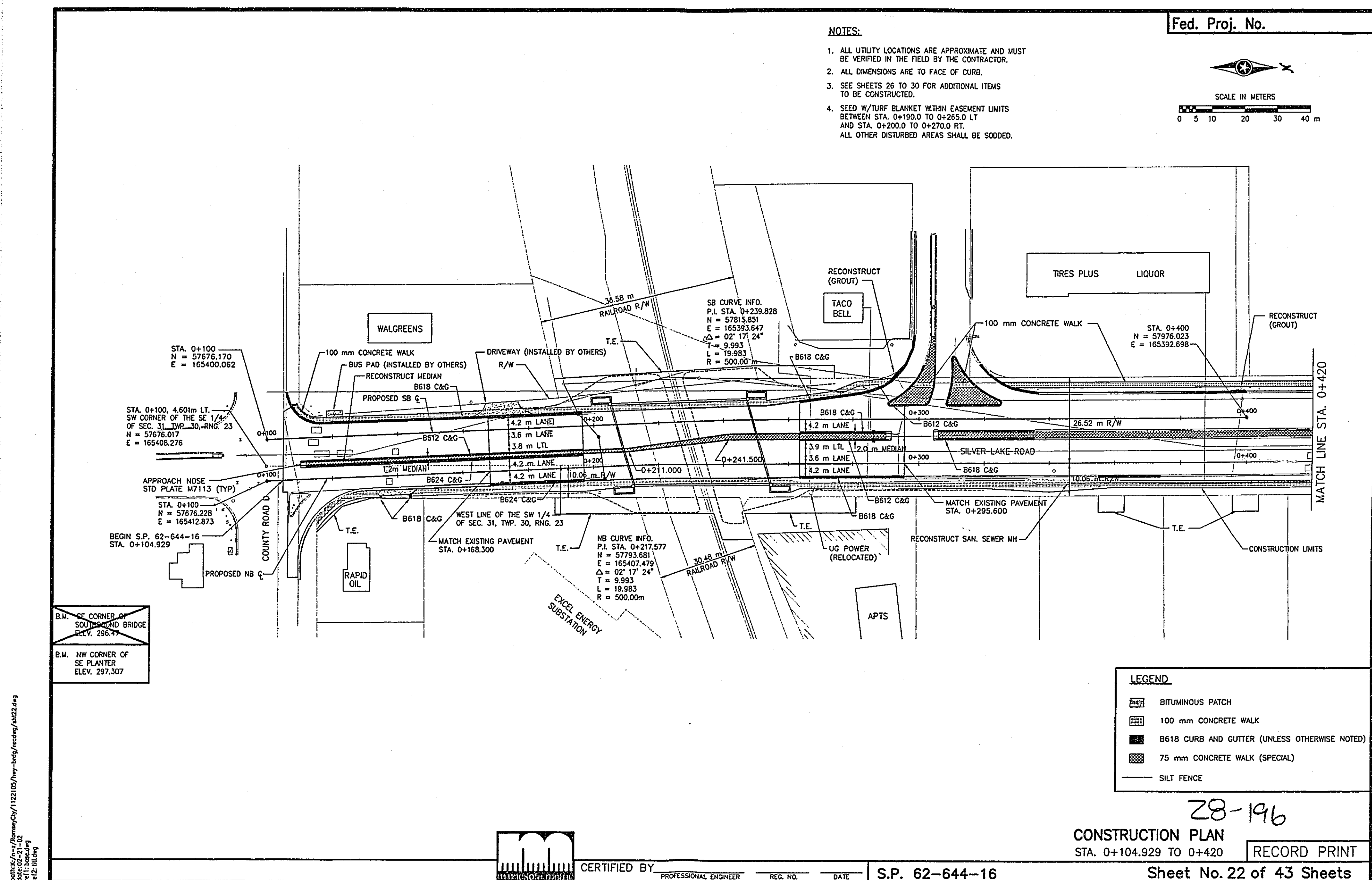
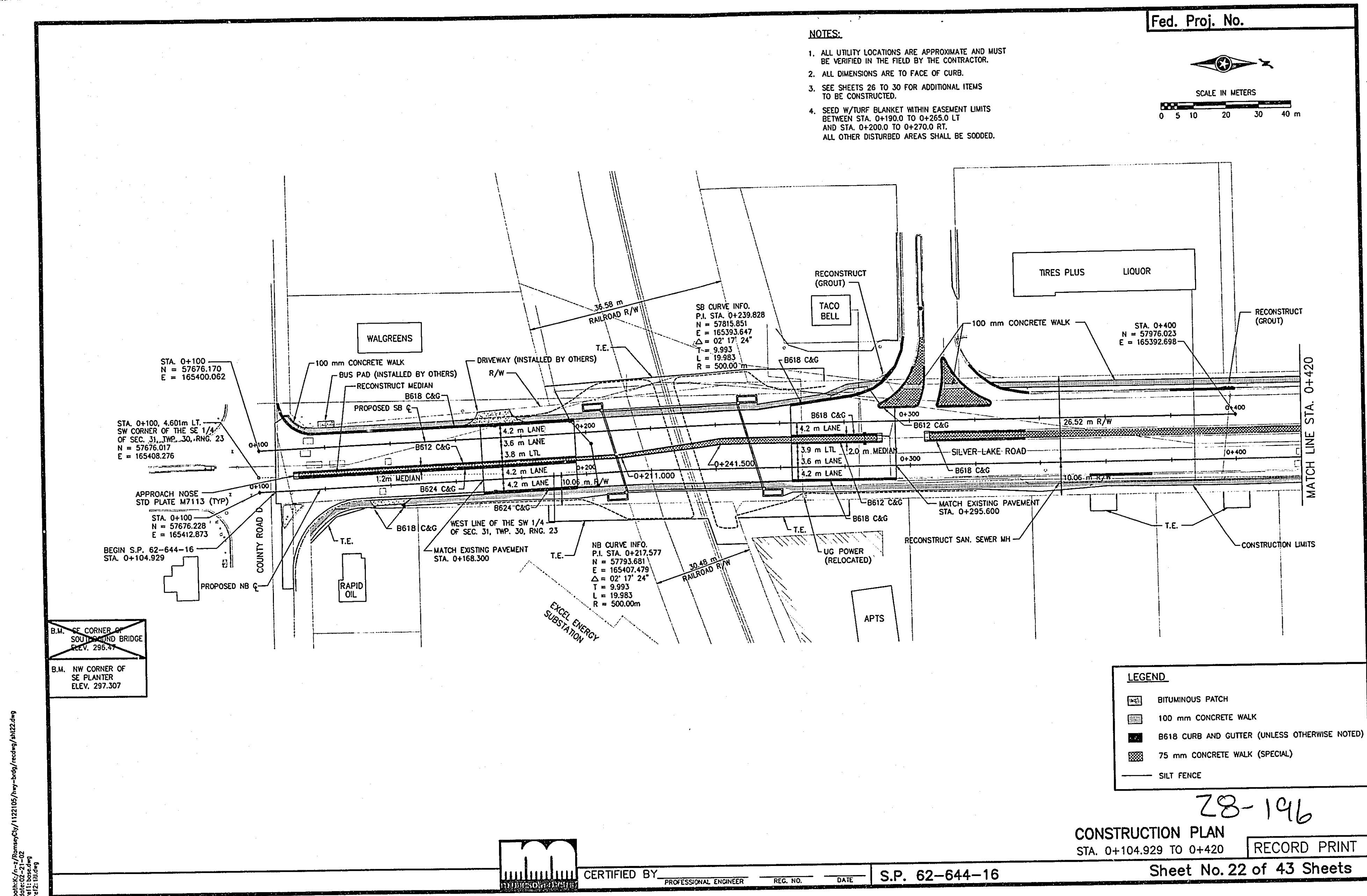
- NOTES:
- ① GRADING MATERIAL PLACED BY THE CONTRACTOR.
 - ② GRADING MATERIAL CONSTRUCTED BY THE CONTRACTOR PRIOR TO THE BRIDGE CONSTRUCTION. TO BE REMOVED LATER BY THE CONTRACTOR.
 - ③ SELECT GRANULAR MATERIAL MODIFIED SHALL COMPLY WITH SPEC. 3149.28, MODIFIED TO 10% OR LESS PASSING THE NUMBER 75 US SIEVE. MATERIAL SHALL BE PLACED BY THE CONTRACTOR AFTER COMPLETION OF THE ABUTMENT.
 - ④ BACKFILL PLACED BY THE CONTRACTOR. MATERIAL SHALL COMPLY WITH SPEC. 3149.28 (SELECT GRANULAR BORROW 1).
 - ⑤ DRAIN-W/ REQUIRED - SEE BRIDGE STANDARD DETAIL-598M - NO DRAIN TILE INSTALLED.
 - ⑥ ACTUAL SLOPE TO BE DETERMINED DURING CONSTRUCTION BY THE CONTRACTOR, DEPENDING ON INST. SOIL PROPERTIES AND/OR SAFETY FACTORS. (USE 1:1 FOR DESIGN)
 - ⑦ START 1:20 TAPER AT END OF APPROACH PANELS ON SKEWED BRIDGES.
 - ⑧ GRADING TO BE SQUARED OFF ON SKEWED APPROACHES.
 - ⑨ SEE BRIDGE PLANS FOR SLOPE PAVING.
 - ⑩ SUBSURFACE PIPE DRAIN WHEN REQUIRED - AS DIRECTED BY THE DISTRICT SOILS ENGINEER - 100 mm (4 in.) DIA. PERFORATED PIPE TO BE WRAPPED WITH GEOTEXTILE - MEETING THE REQUIREMENTS OF SPEC-3303-TYPE 1 - FOUNDATION SHALL BE SHAPED TO FIT LOWER ONE THIRD CIRCUMFERENCE OF PIPE - NO DRAIN TILE INSTALLED

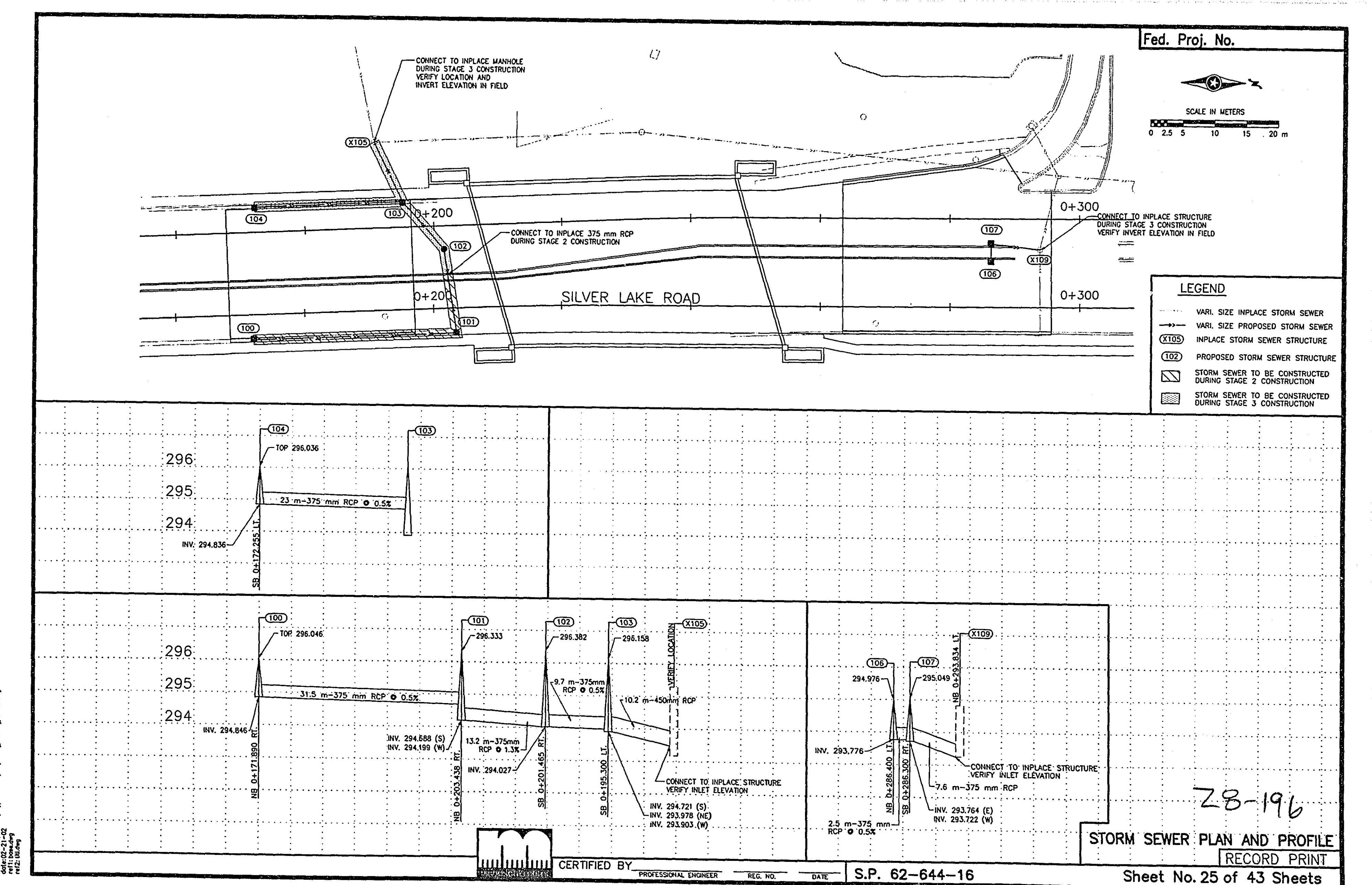
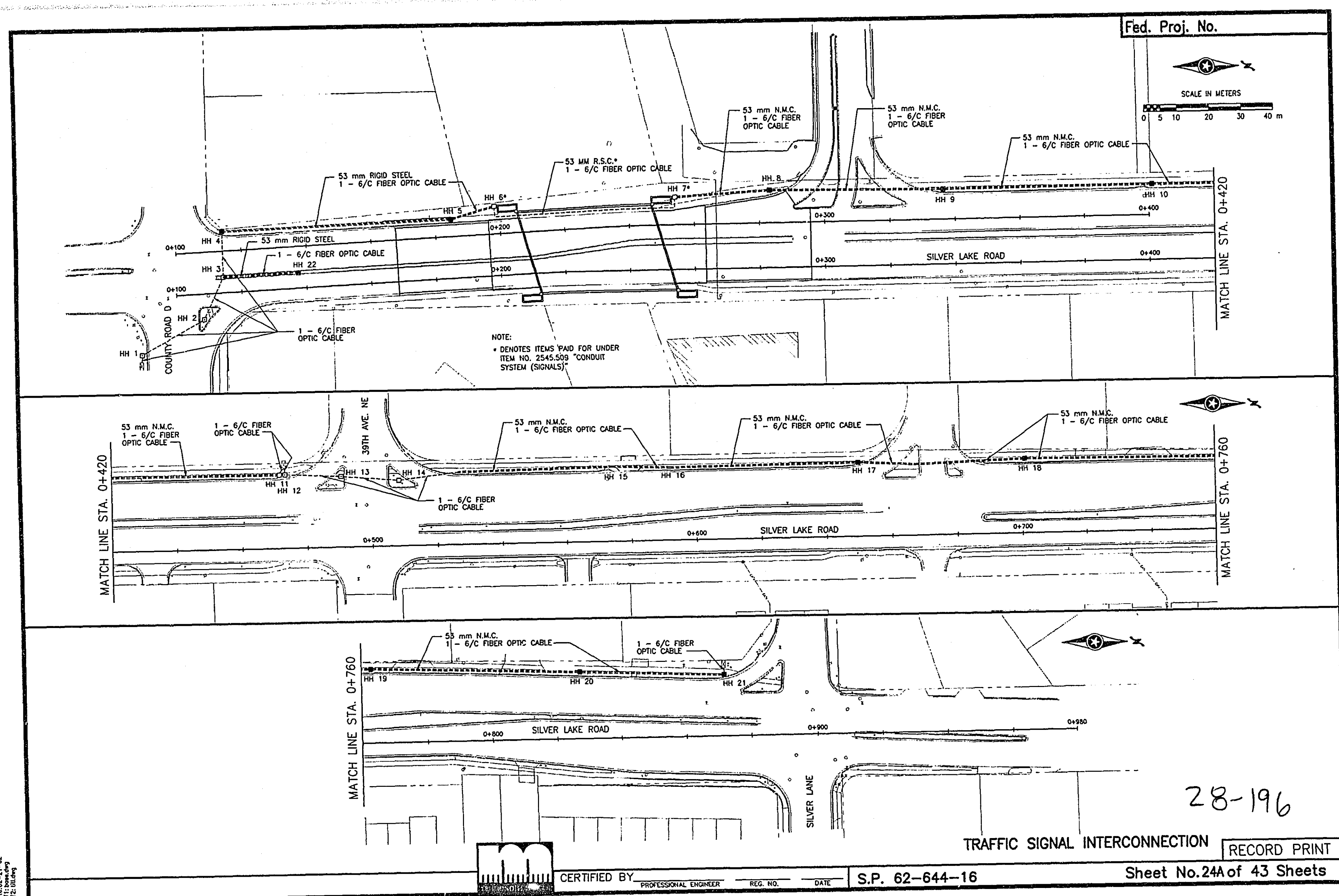
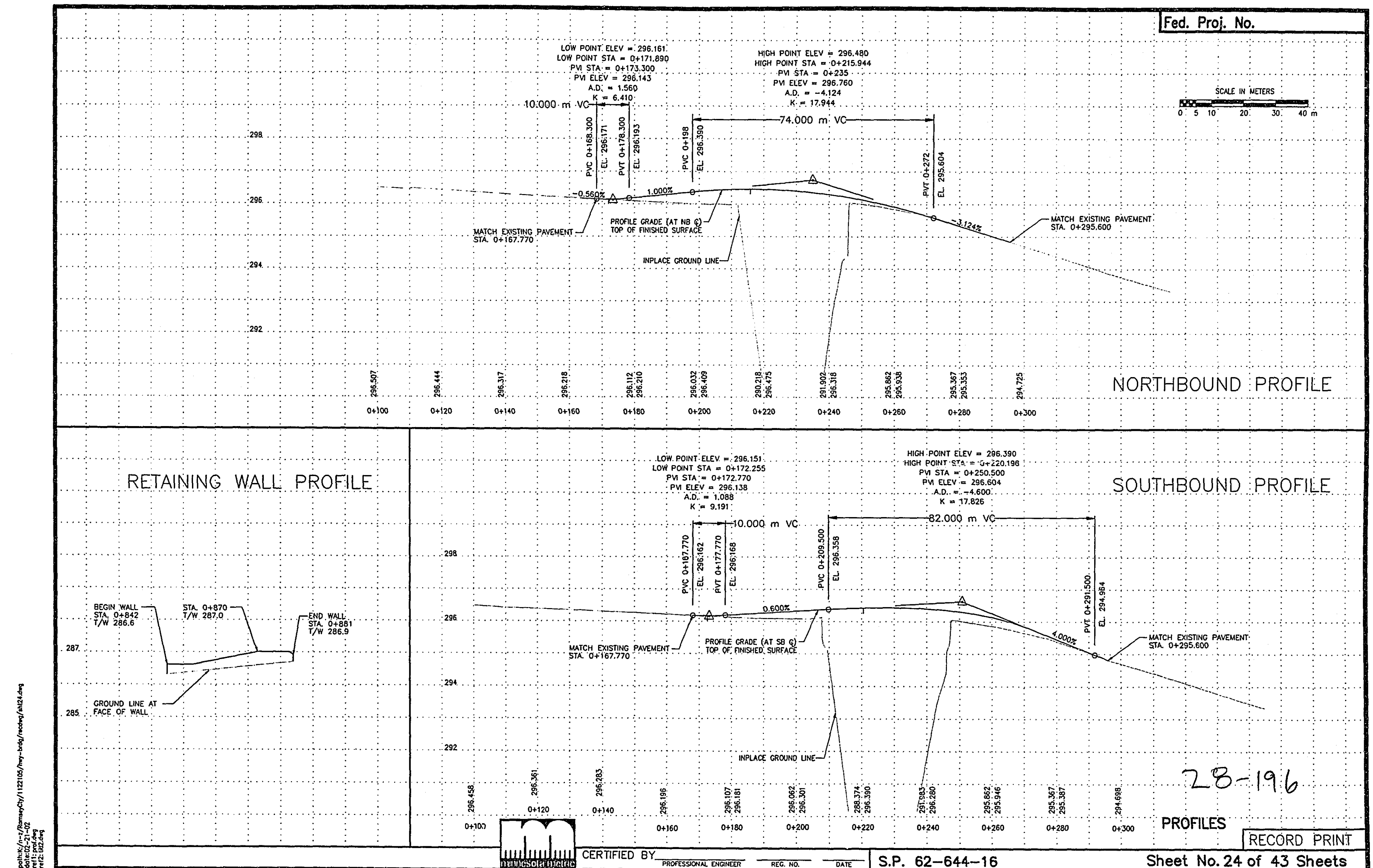
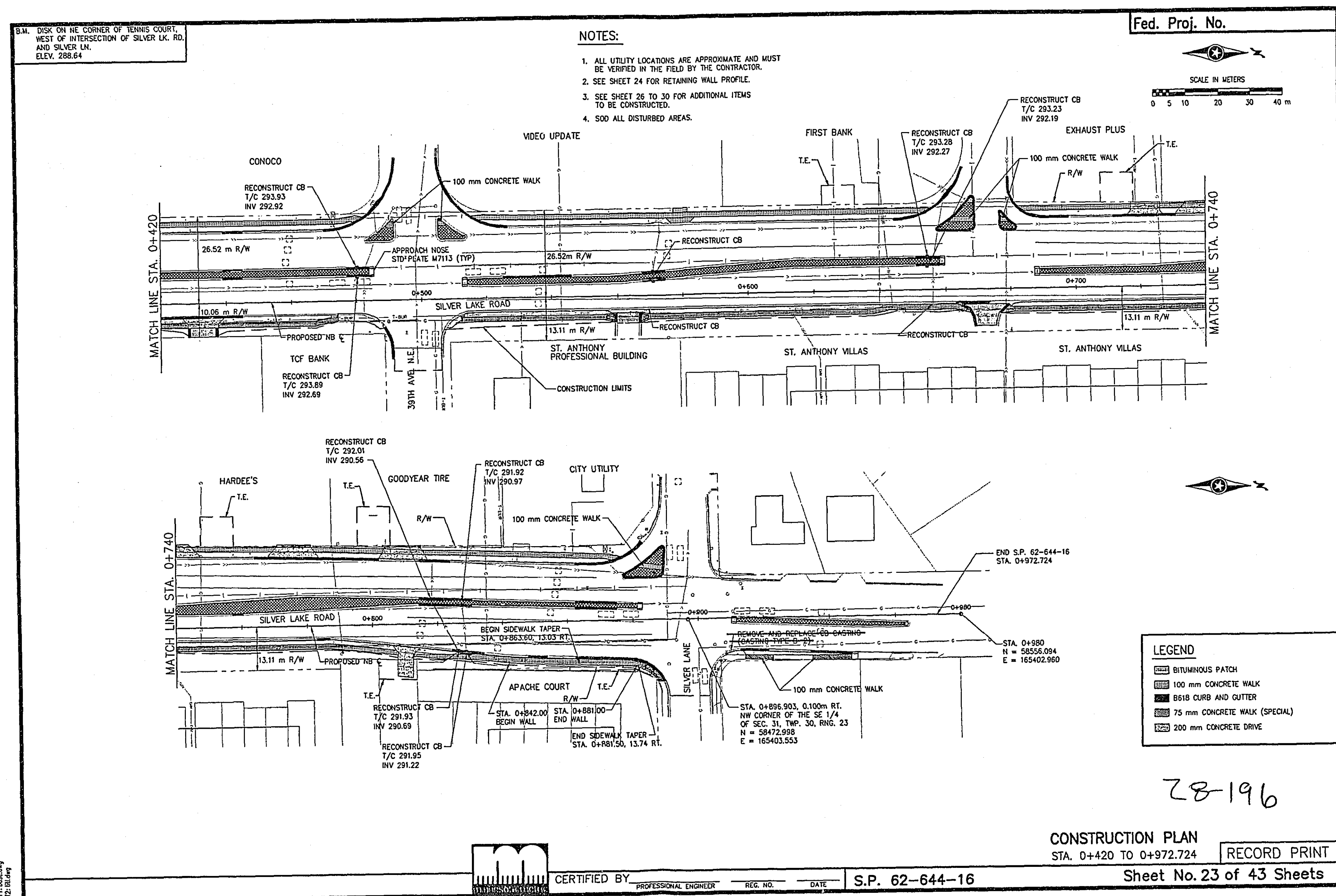
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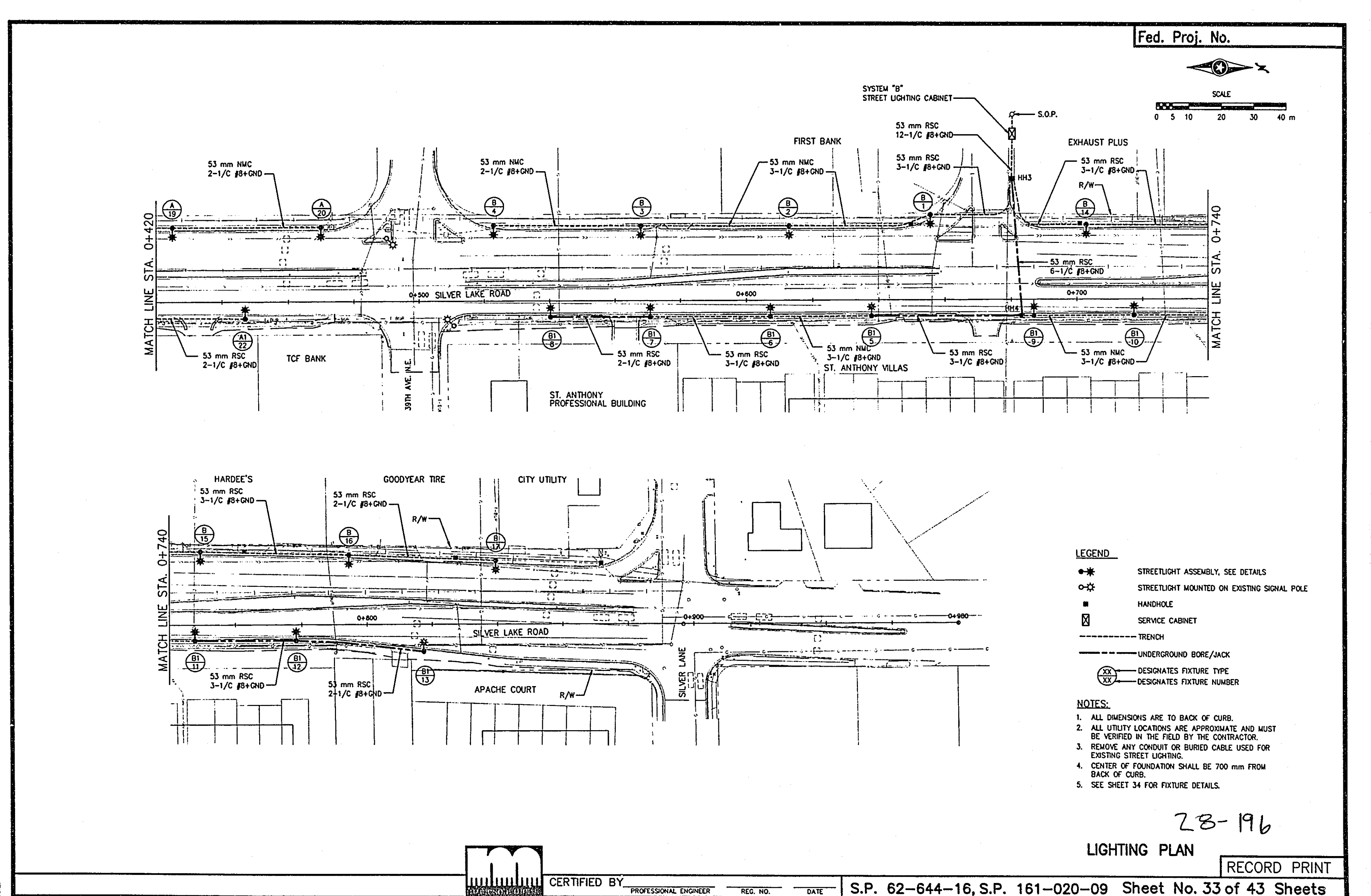
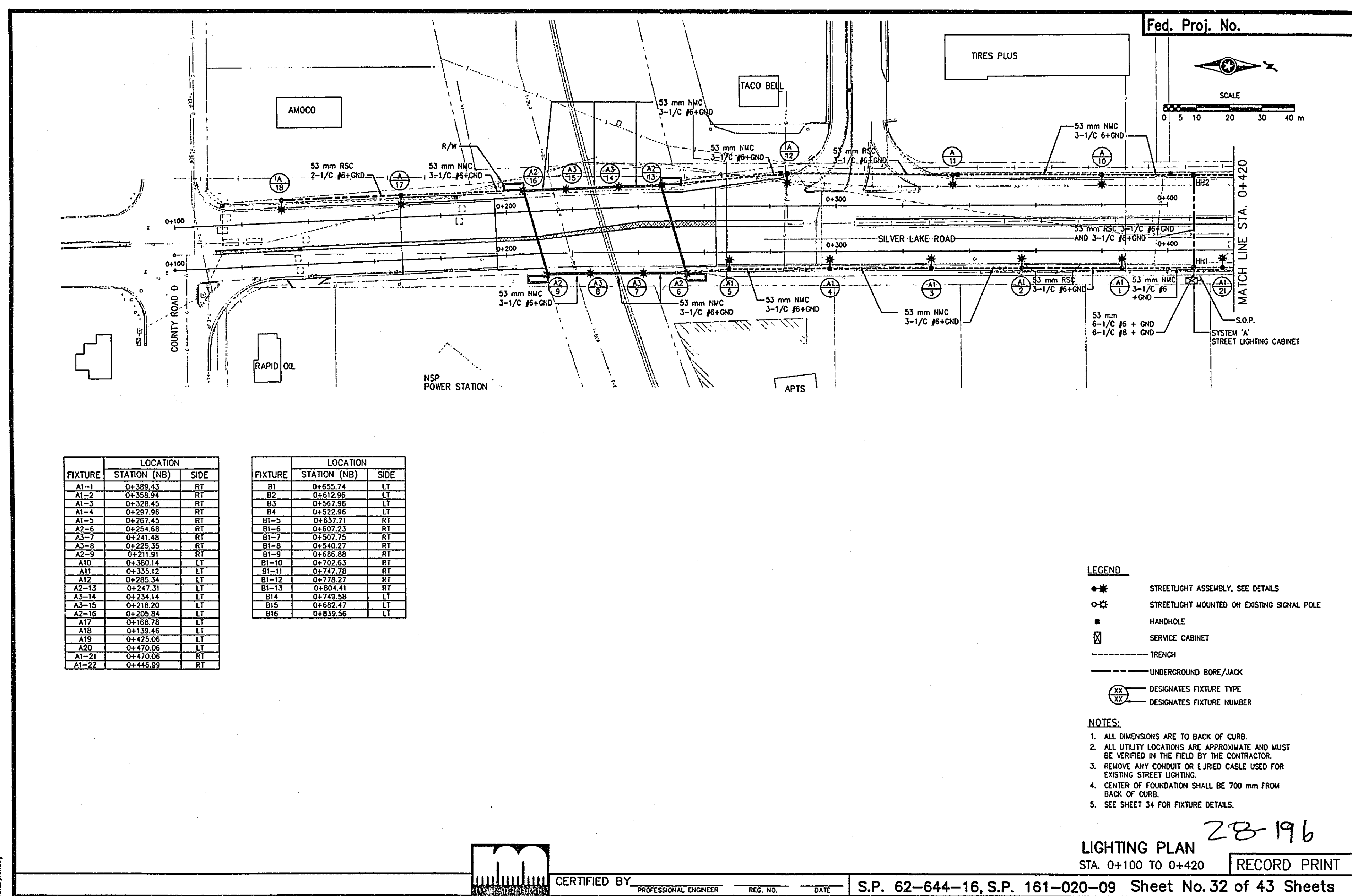
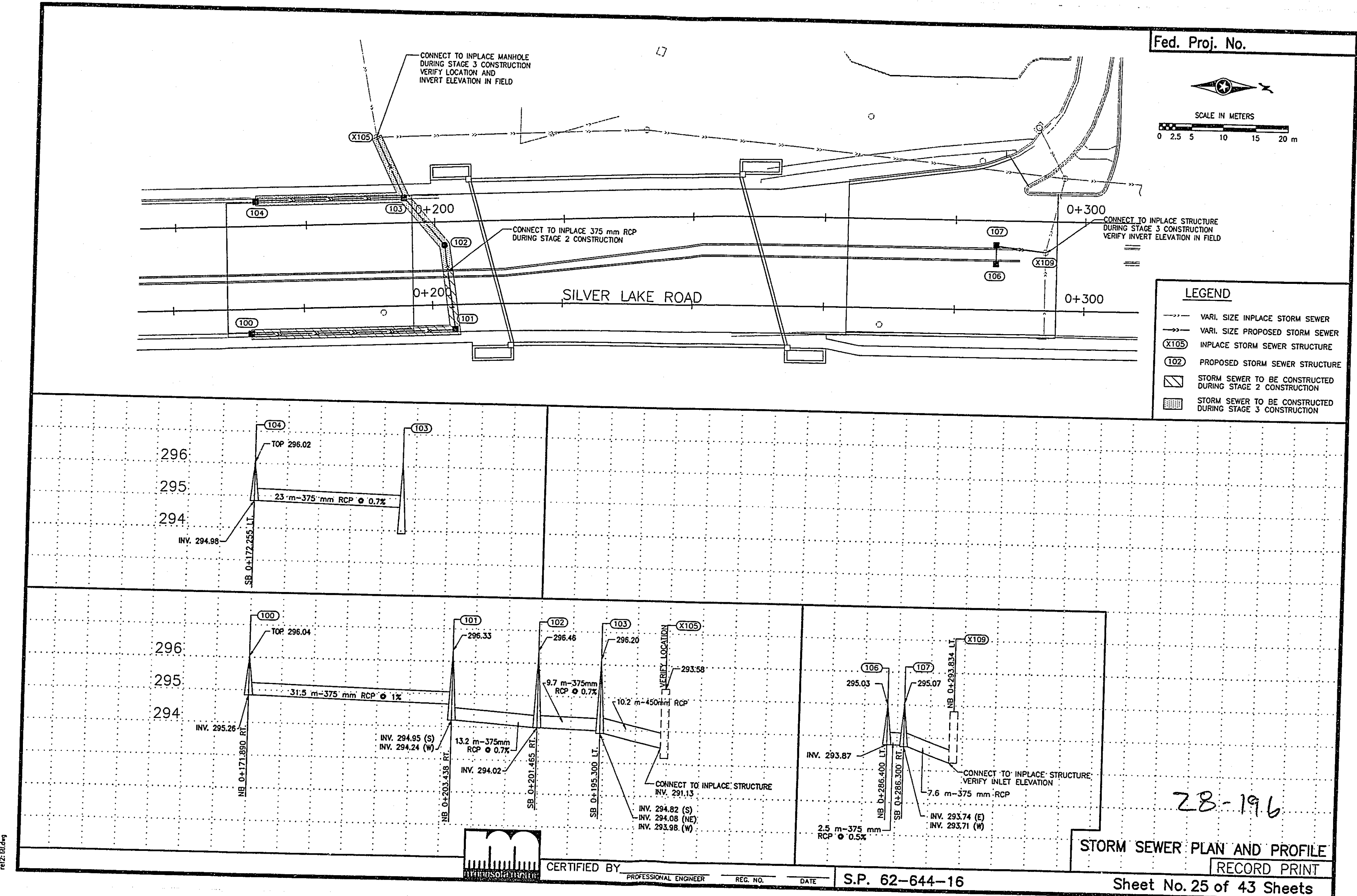
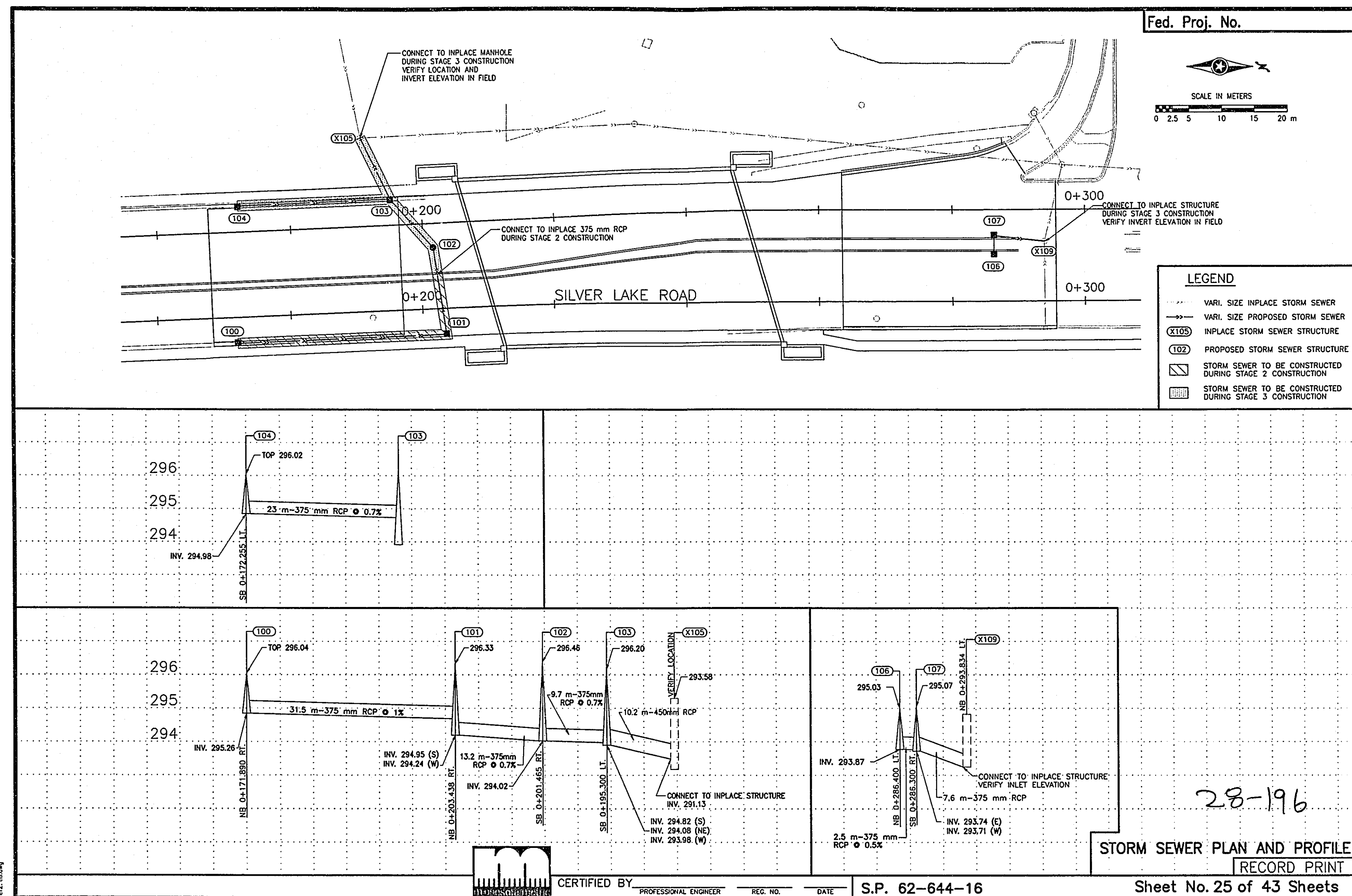
BRIDGE APPROACH TREATMENT
FOR BOTH HIGH AND LOW ABUTMENTS ON PILING

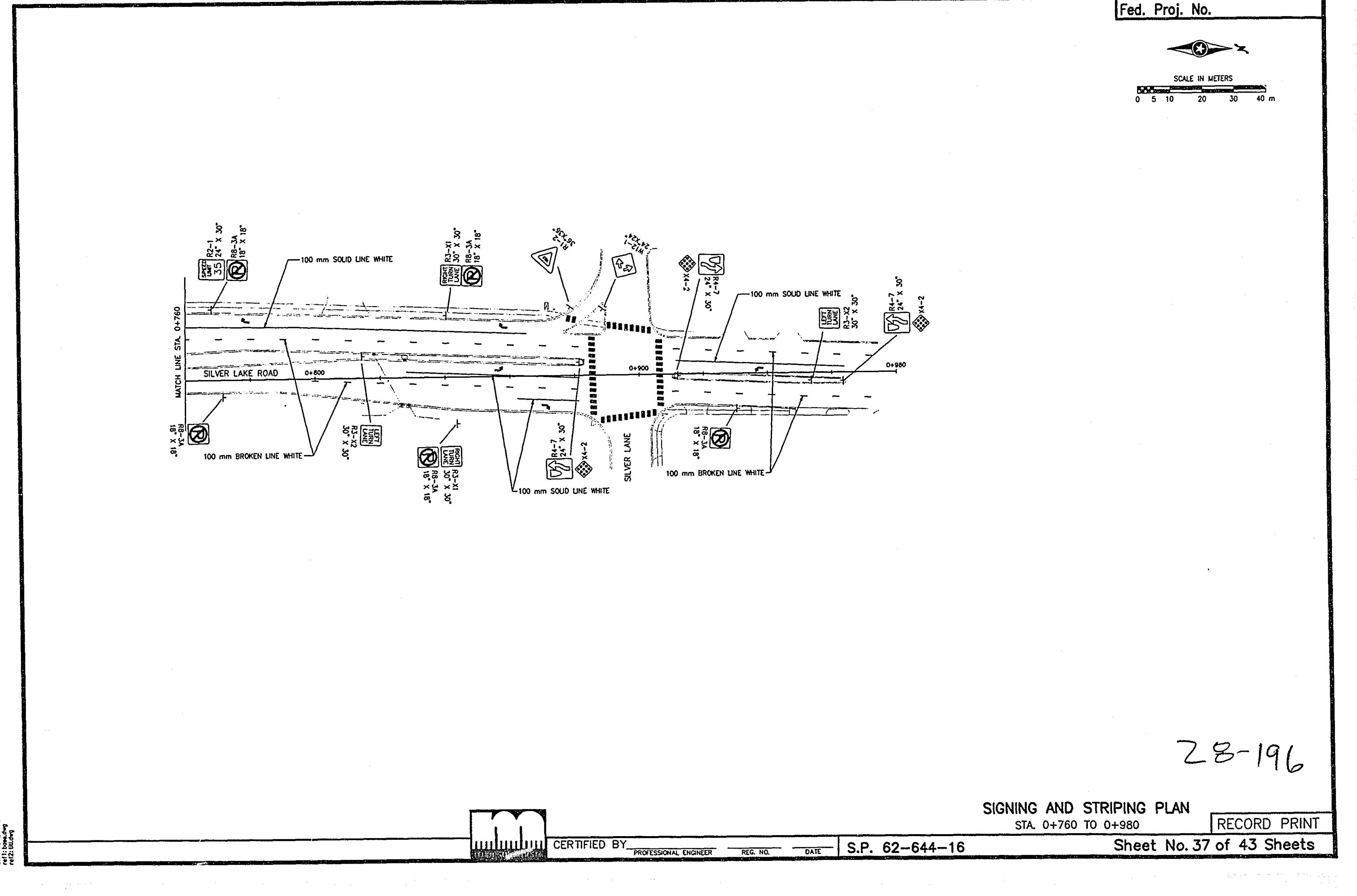
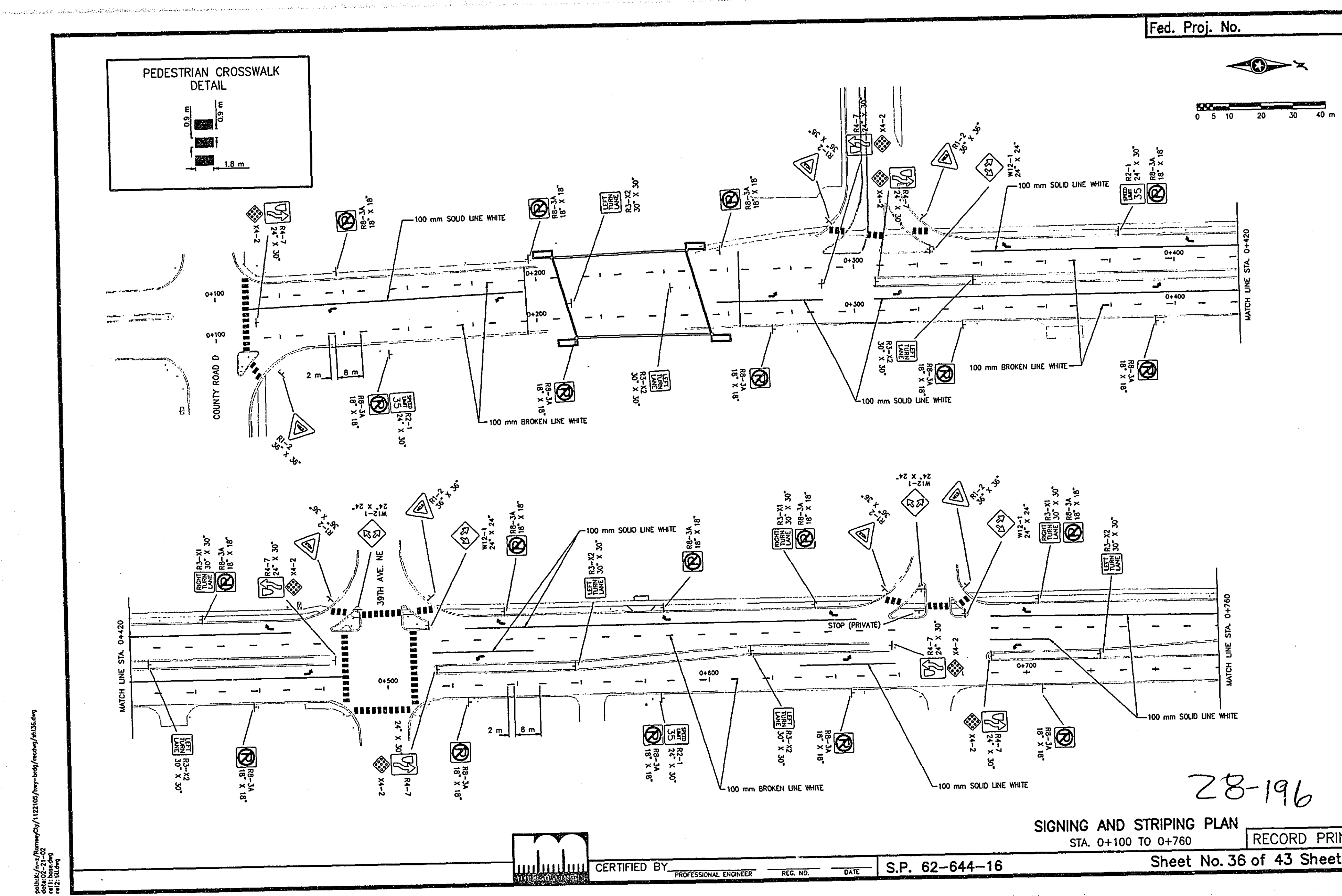
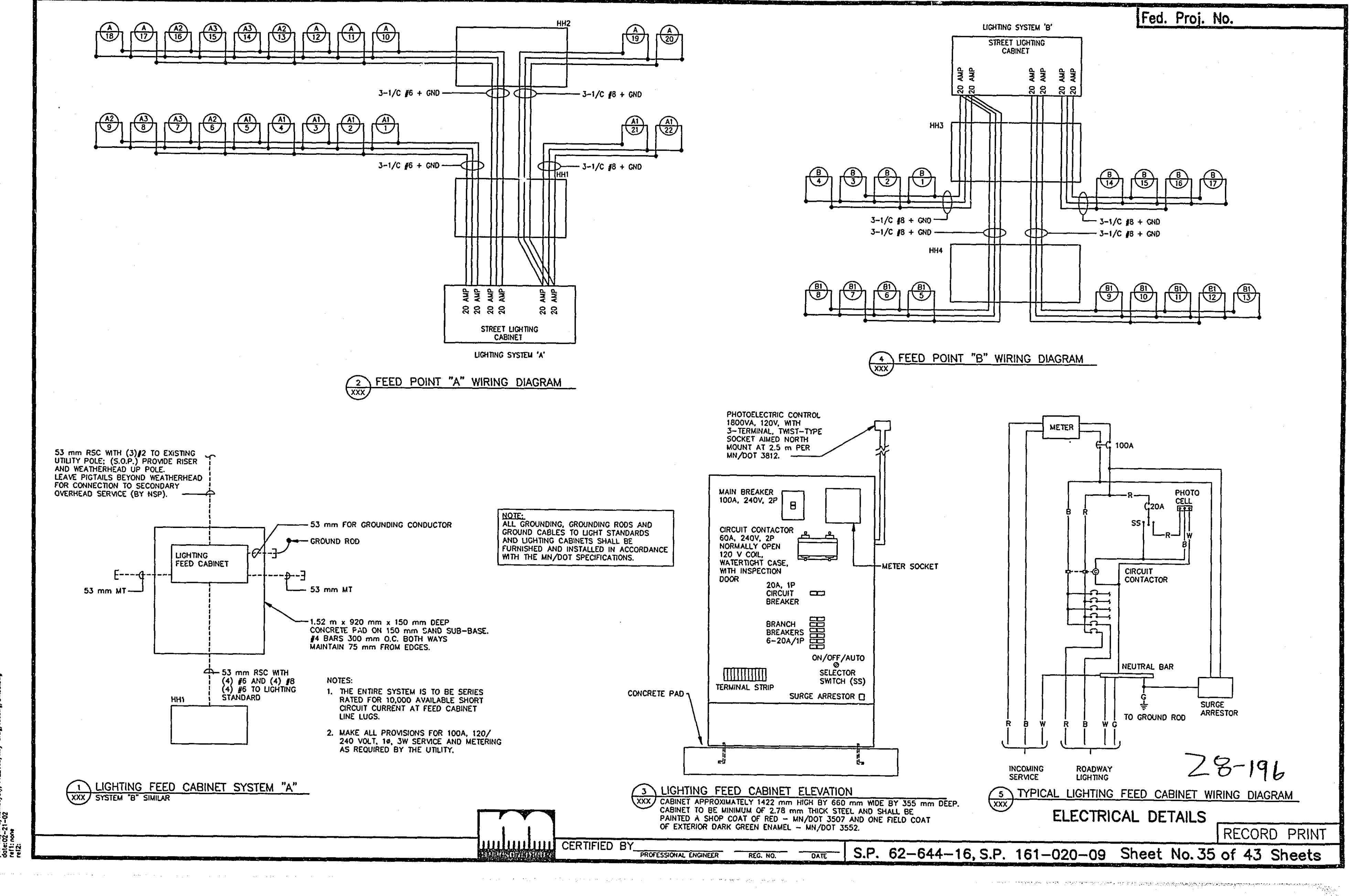
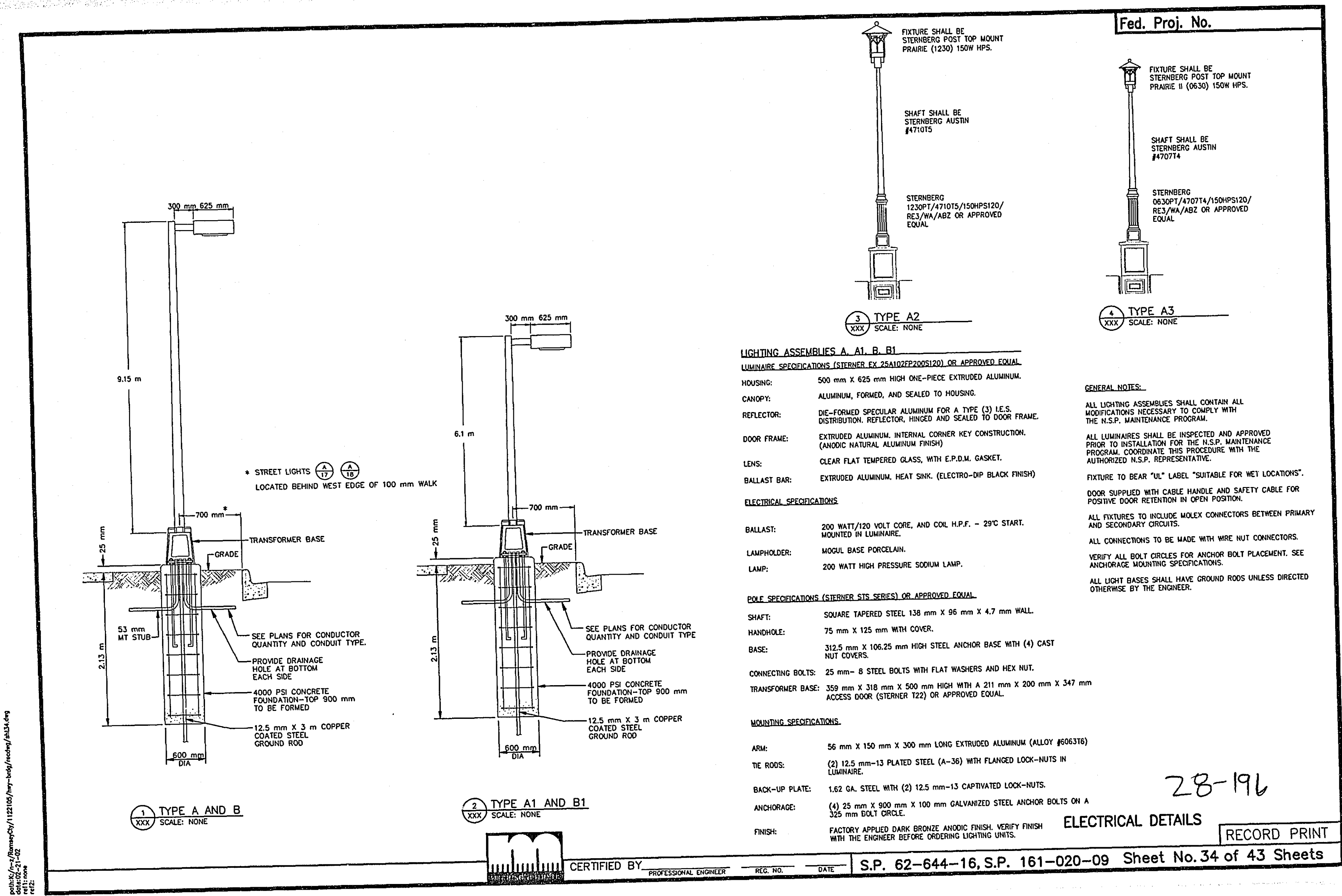
SHEET NO. 14 OF 43 SHEETS

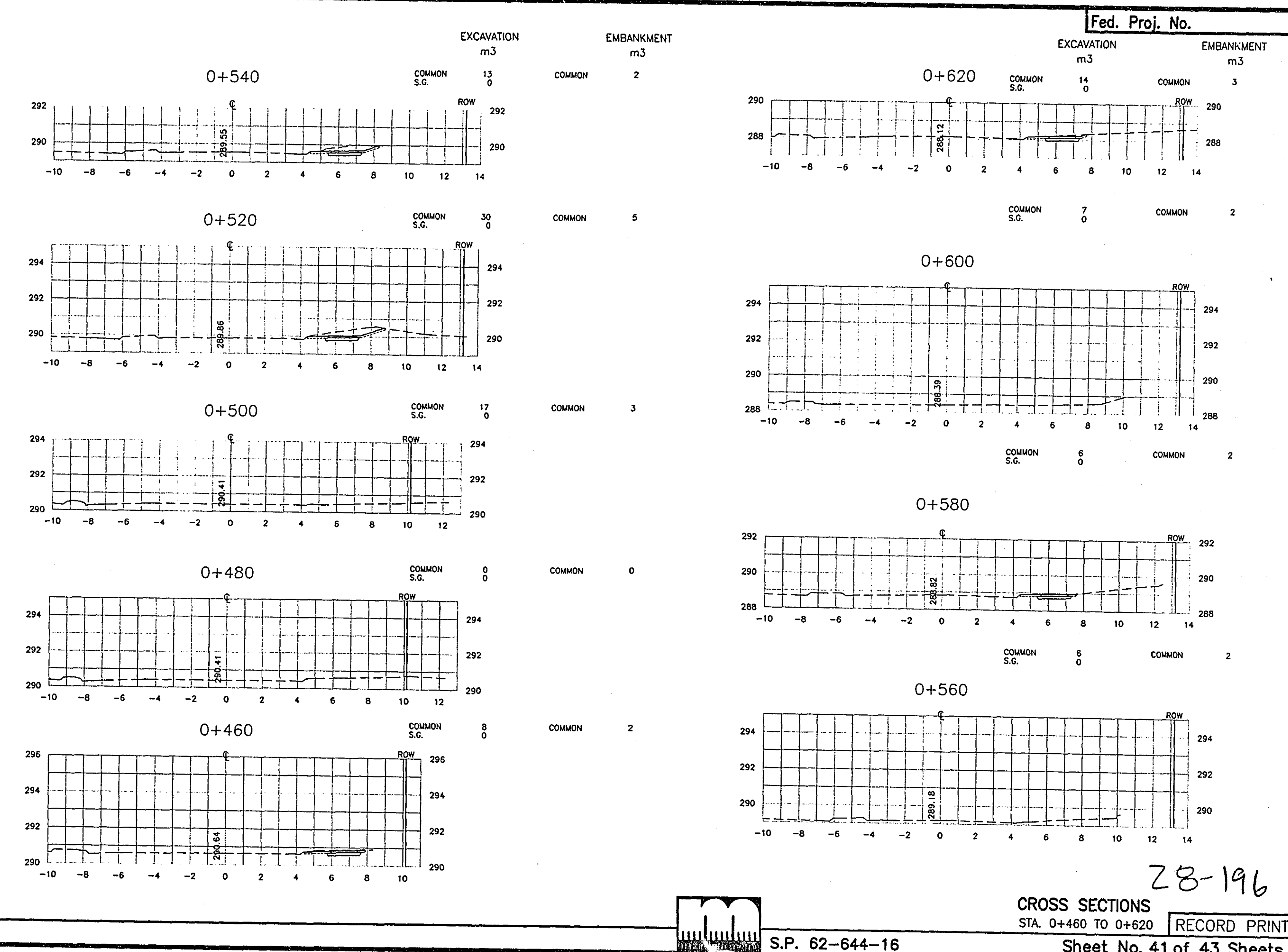
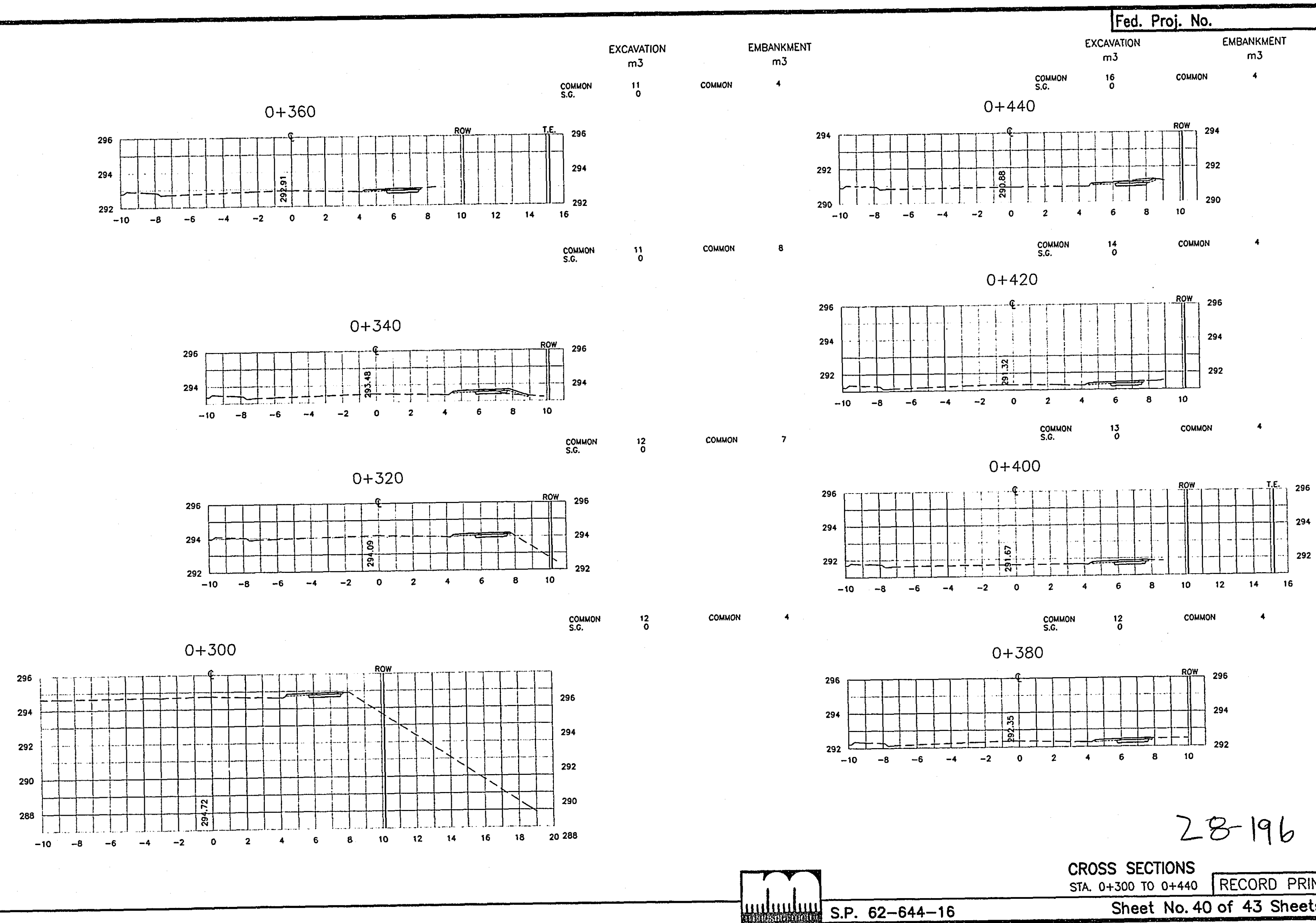
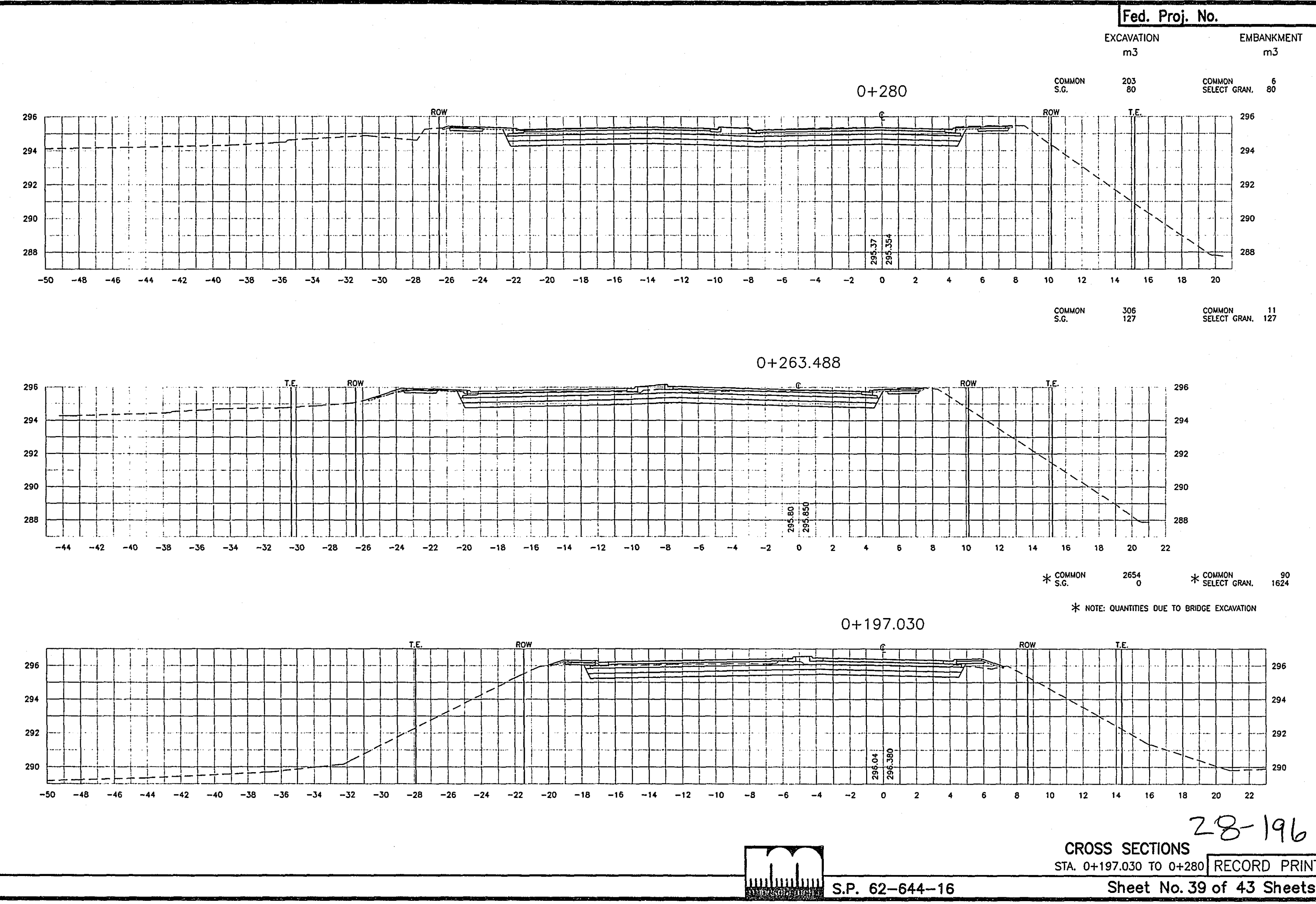
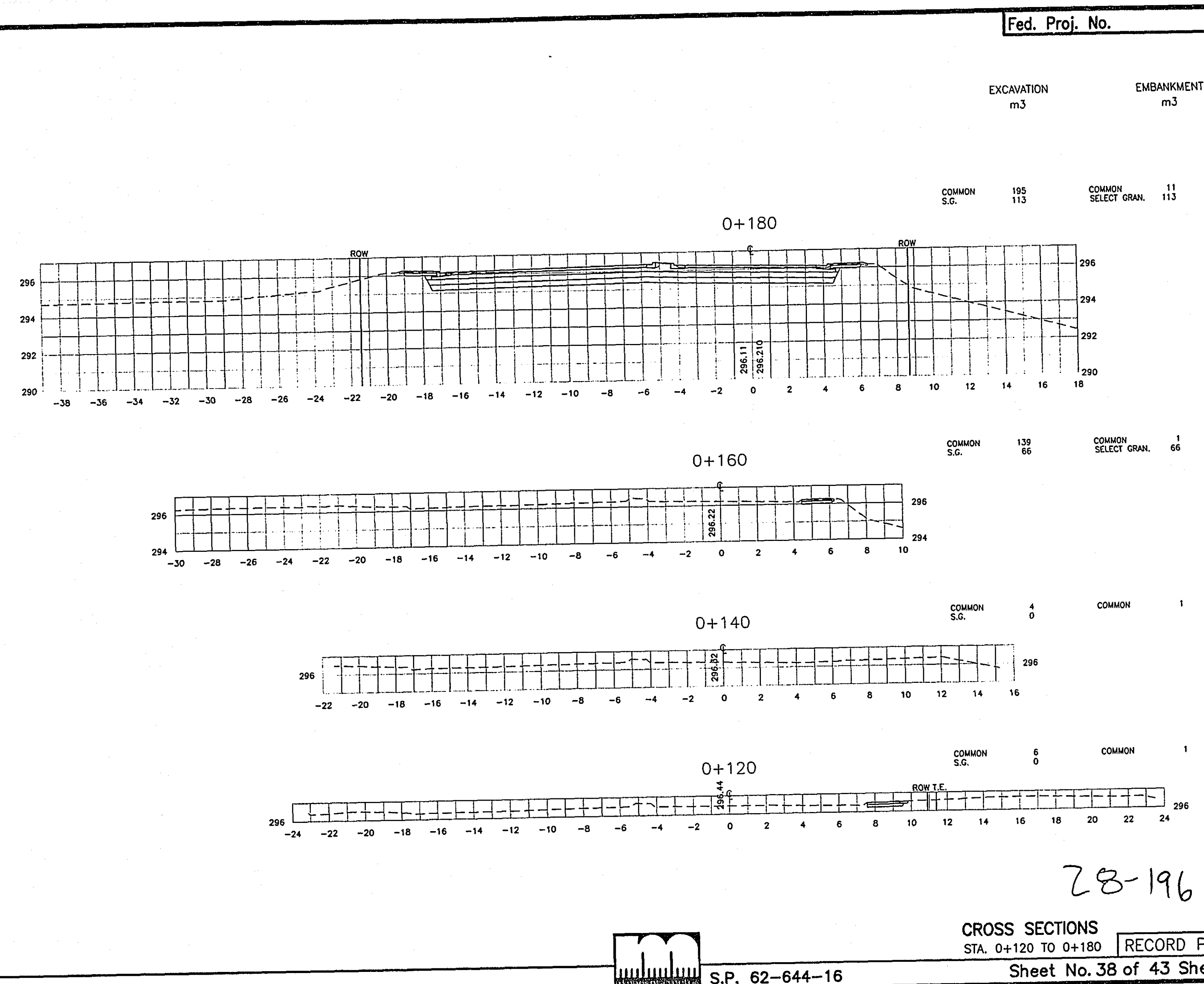


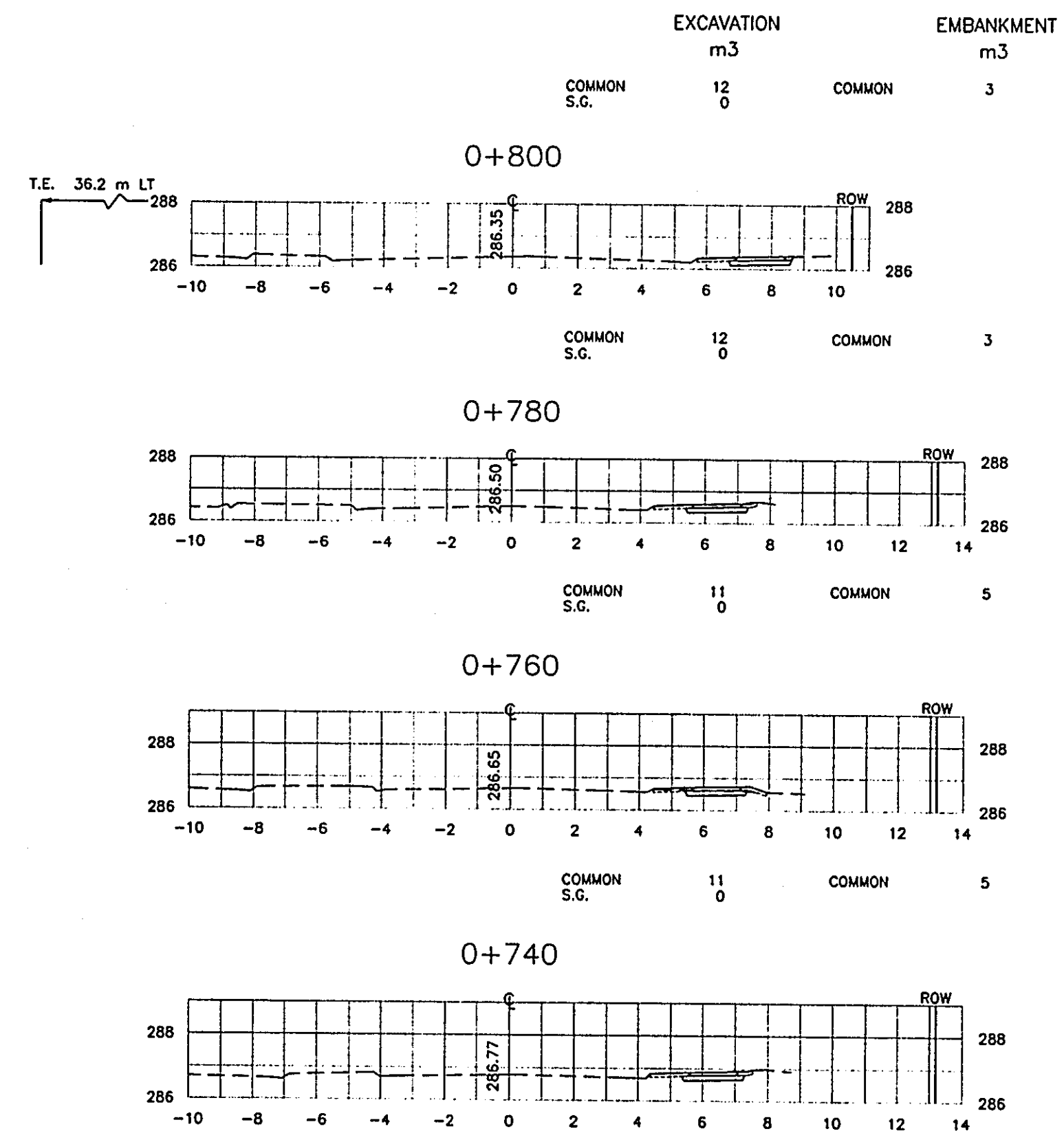
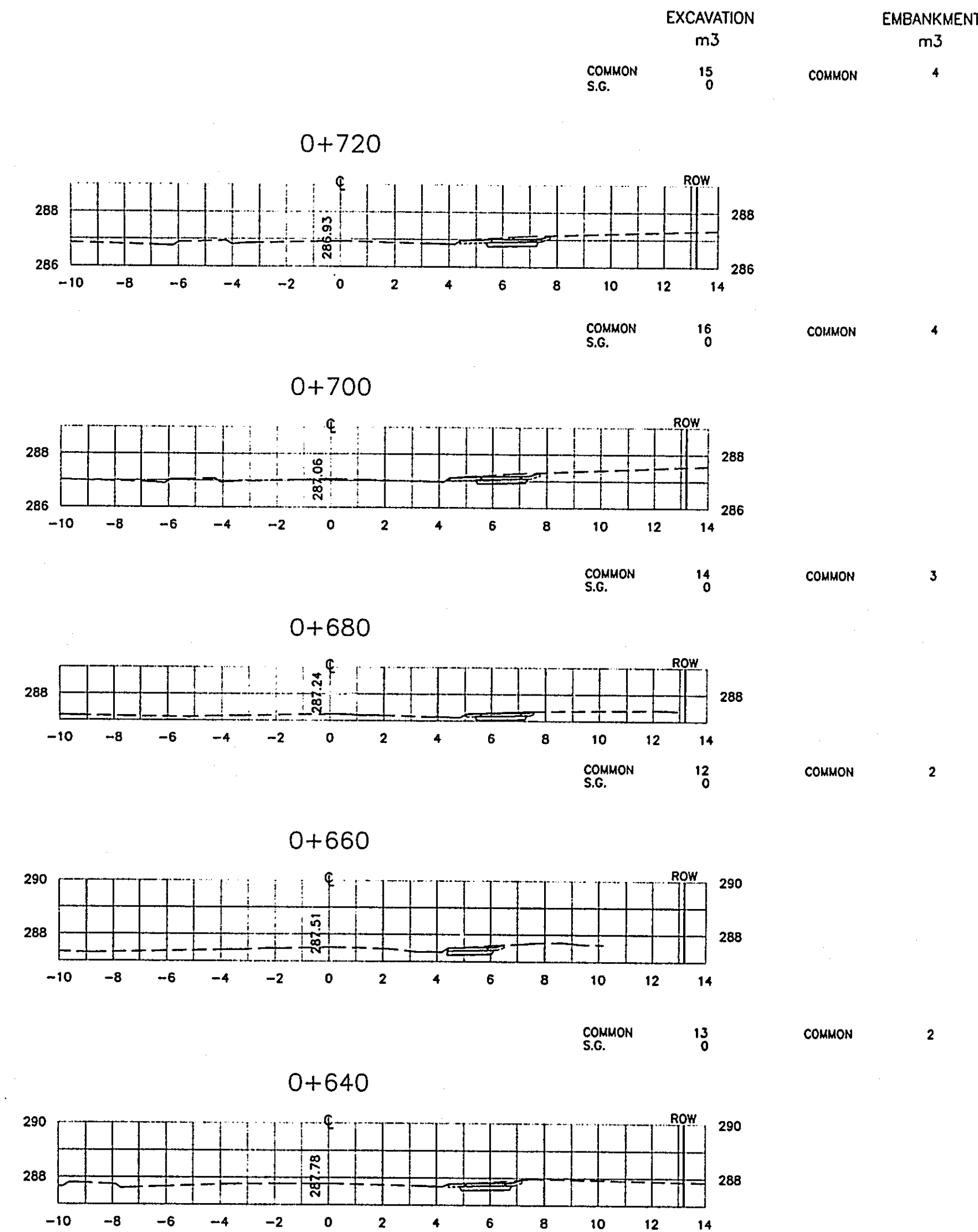








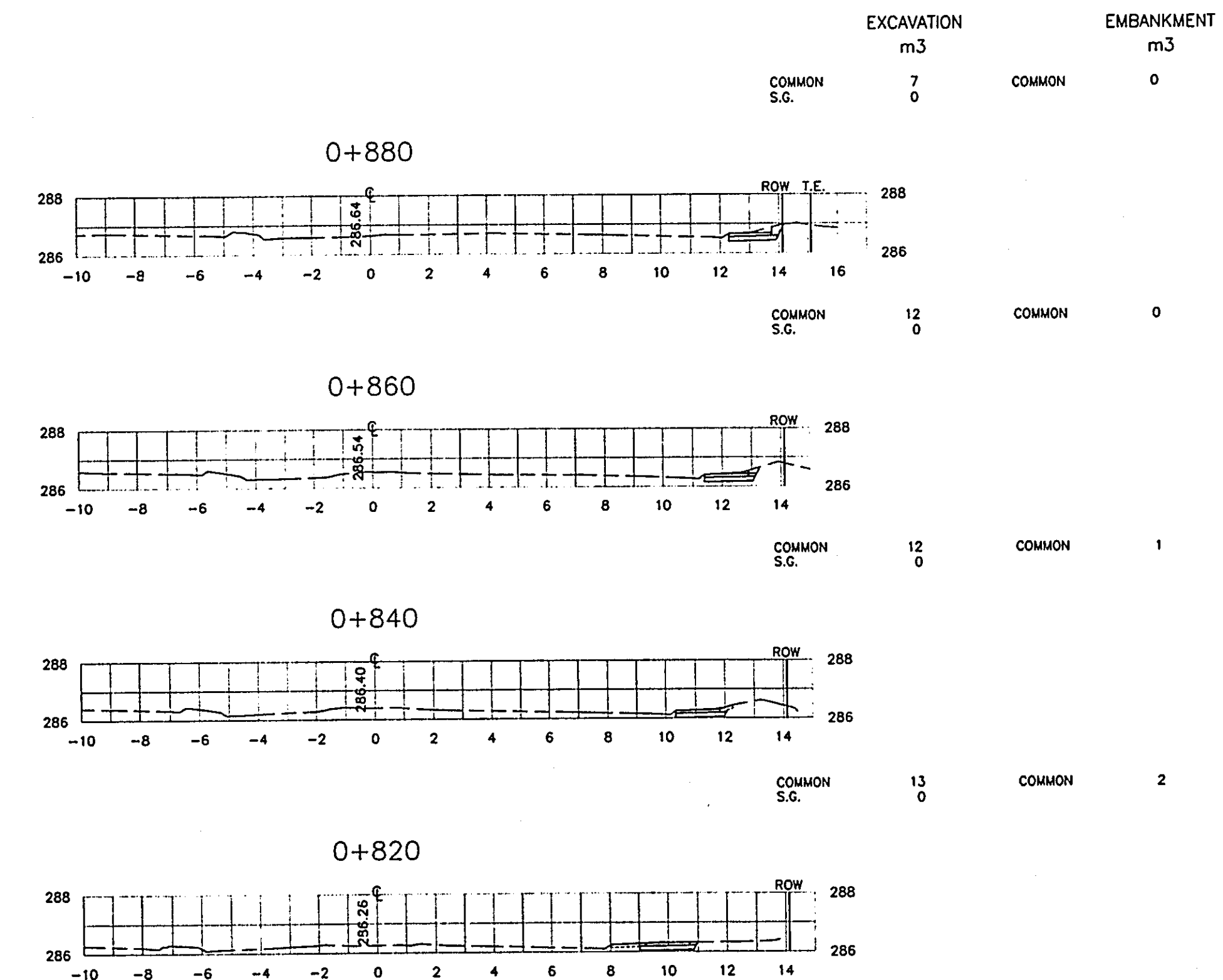




CROSS SECTIONS
STA. 0+640 TO 0+800

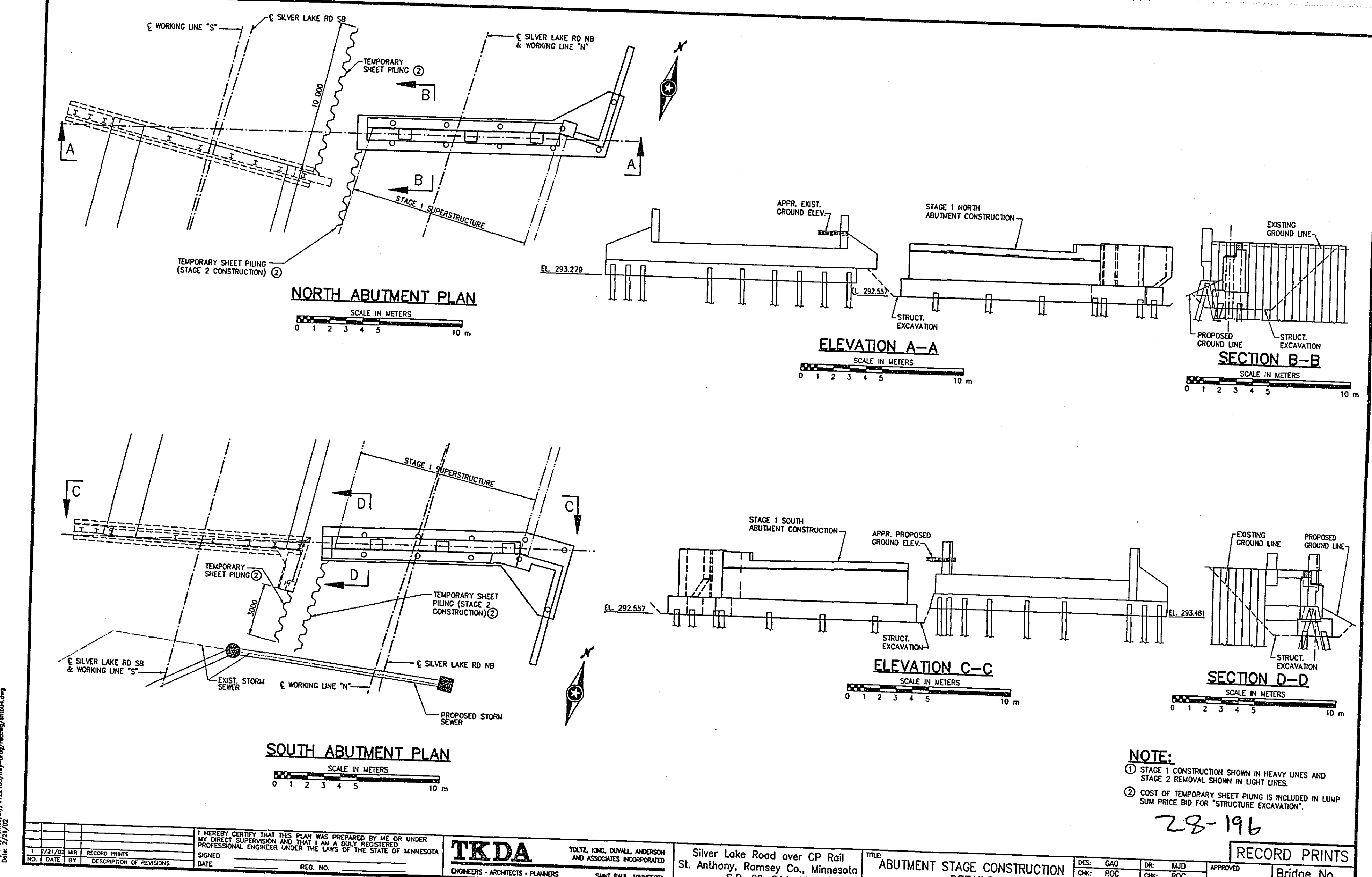
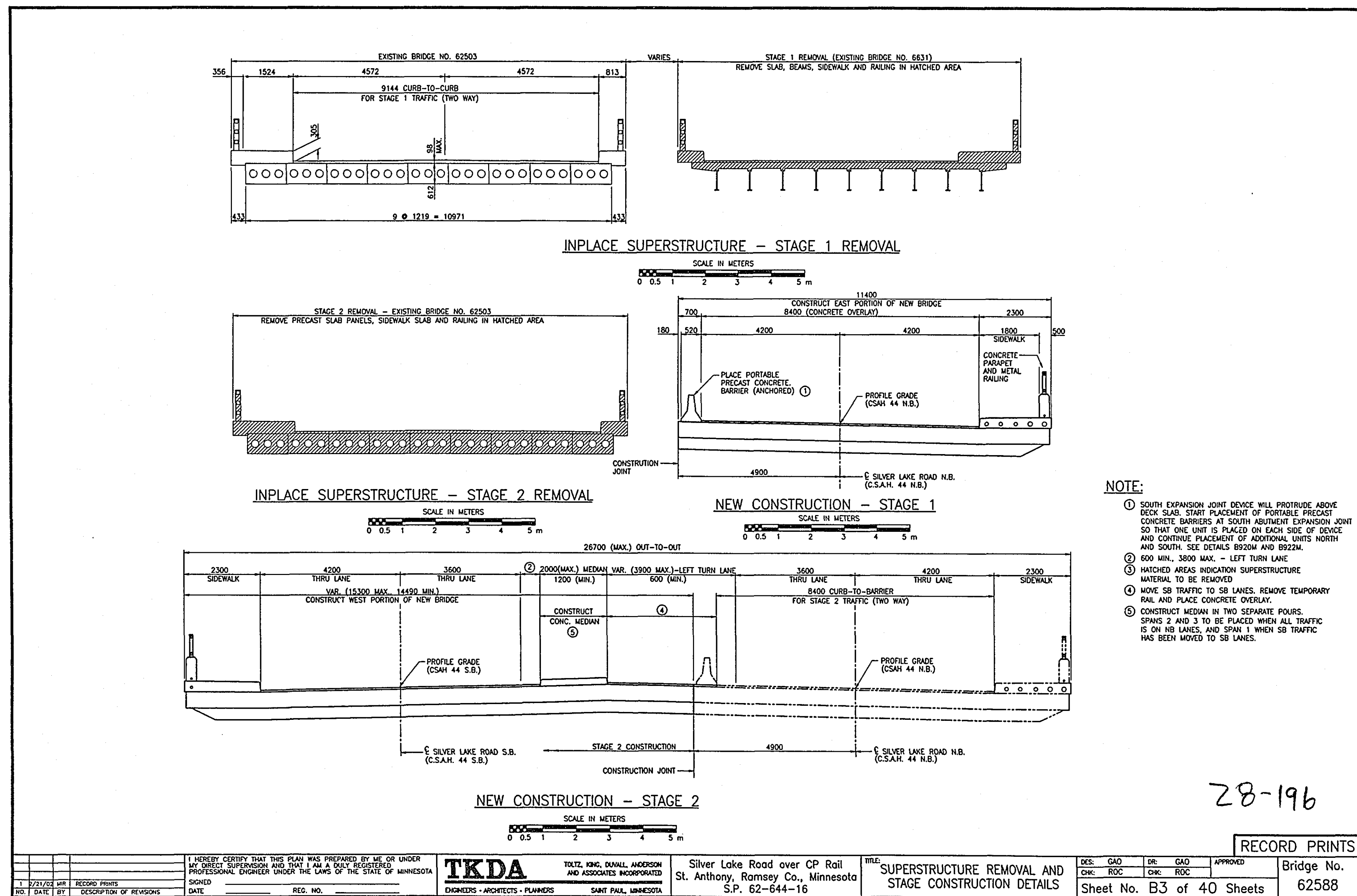
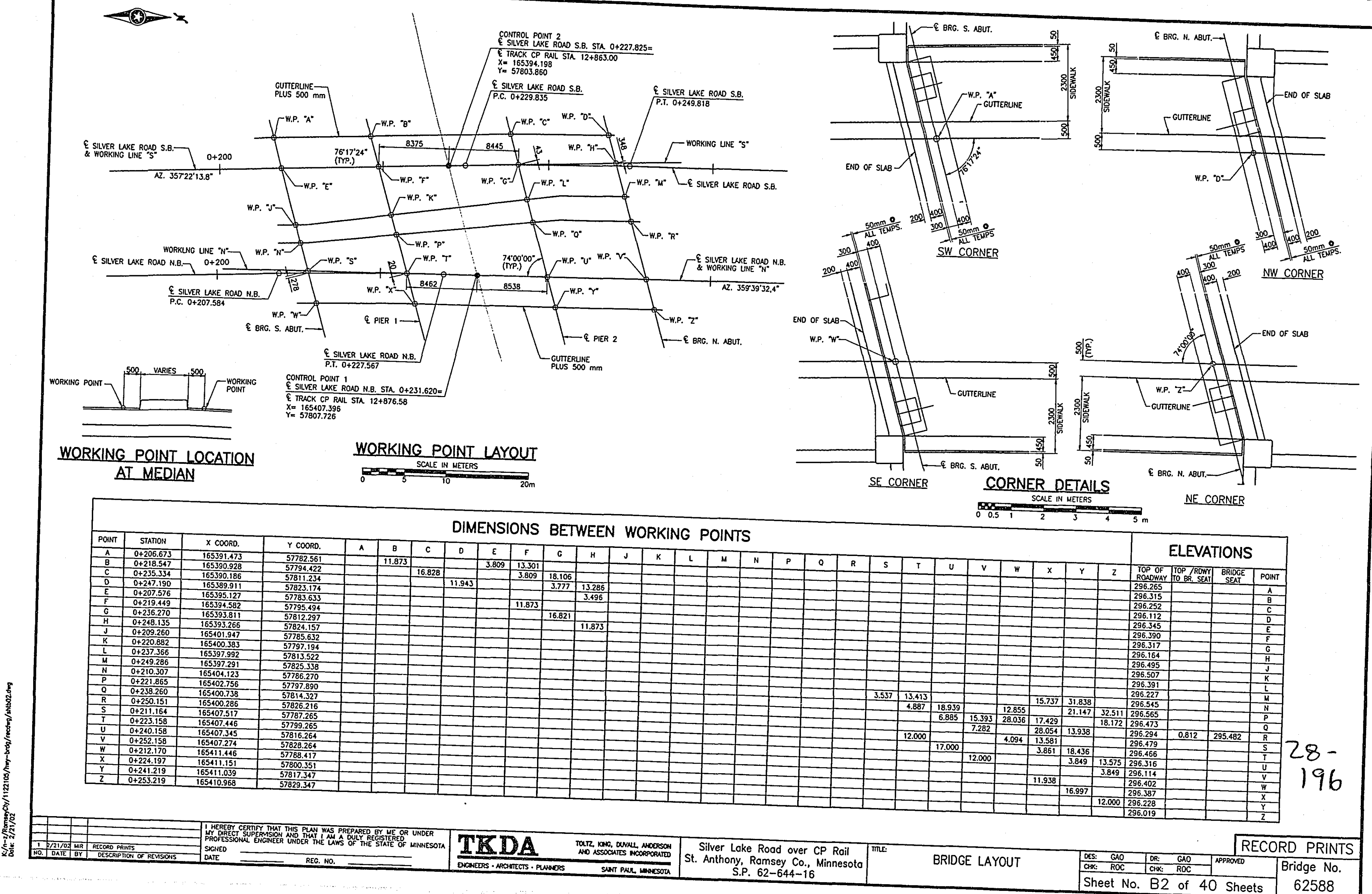
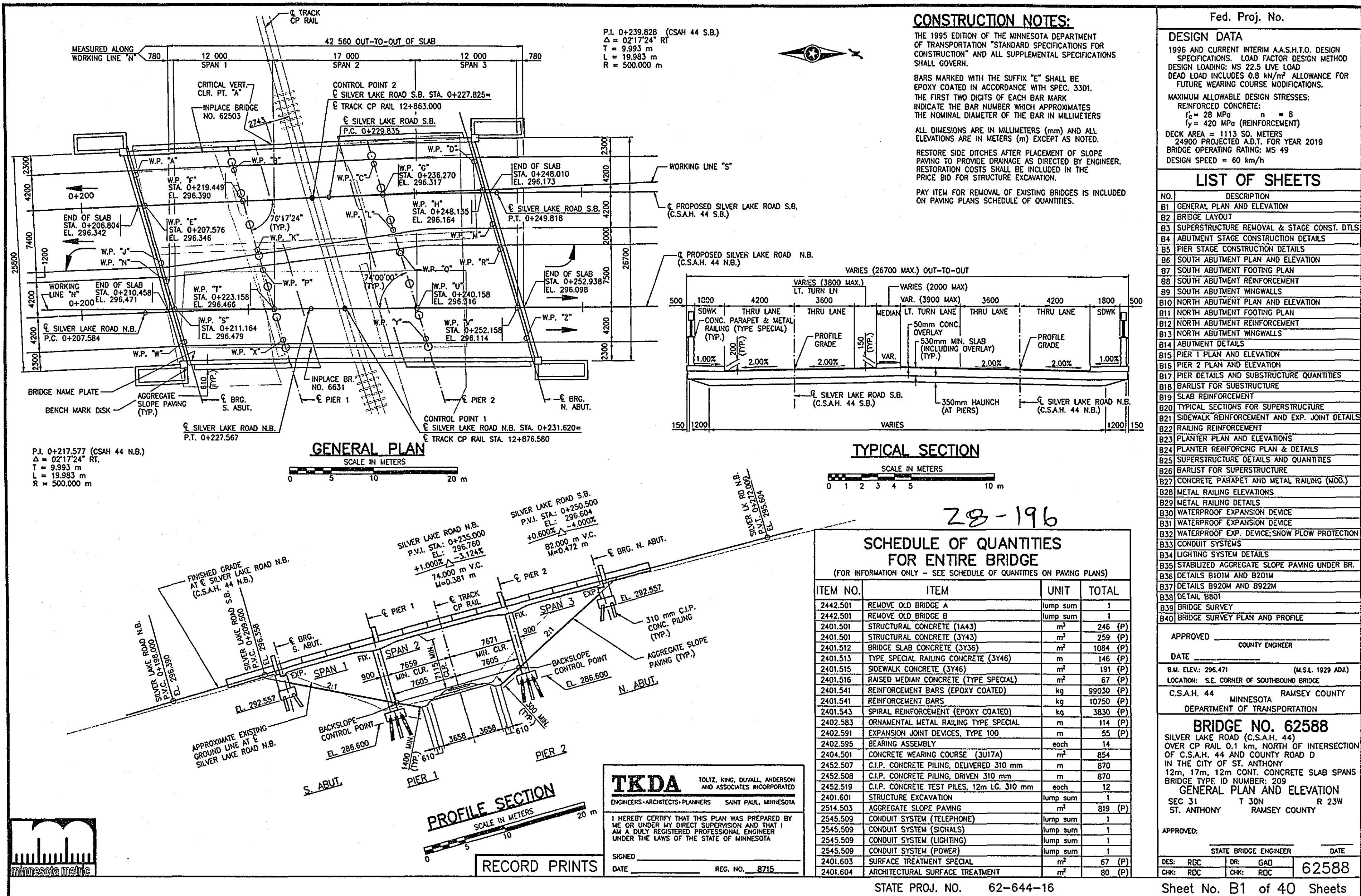
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Sheet No. 42 of 43 Sheets



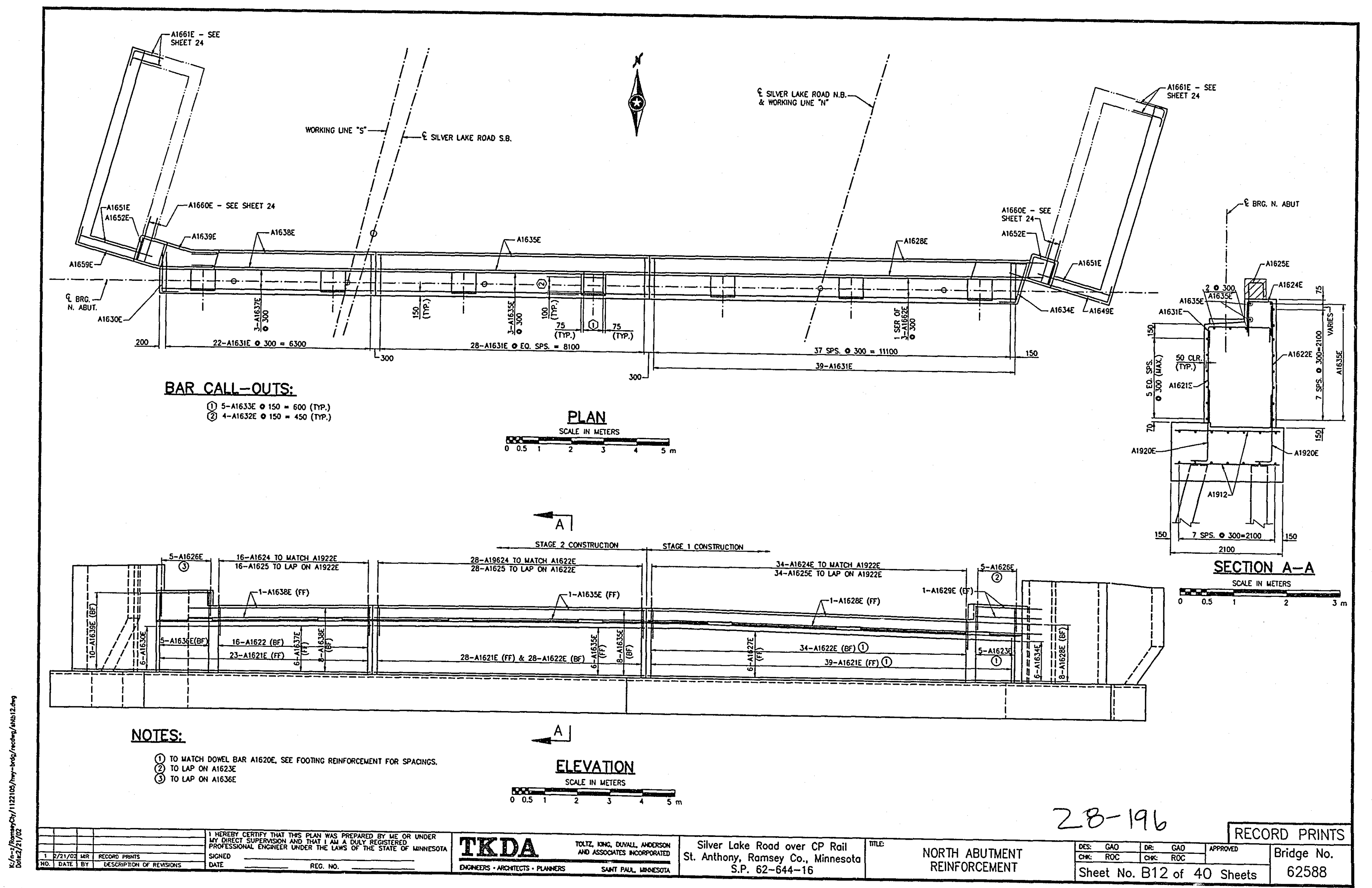
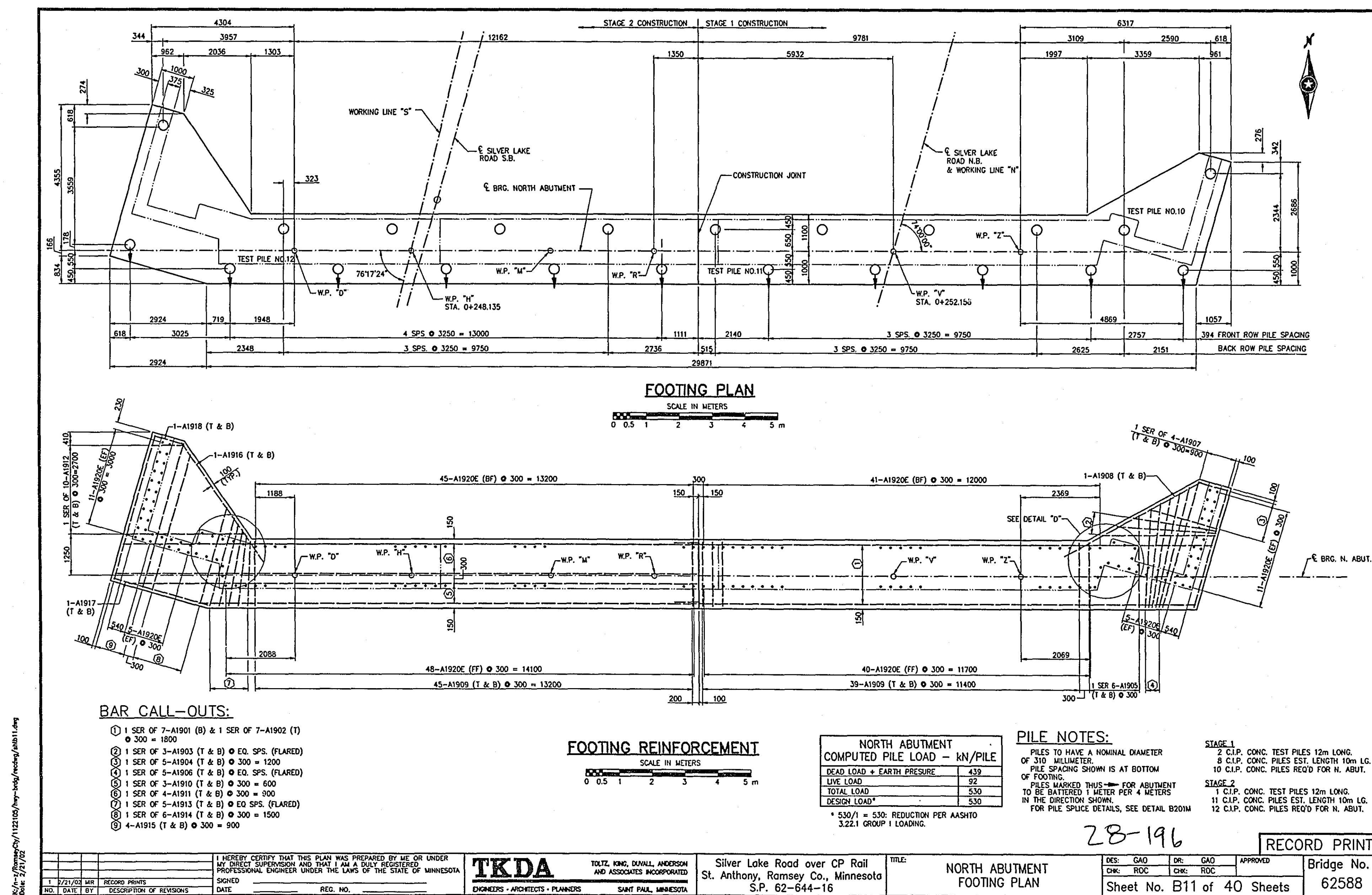
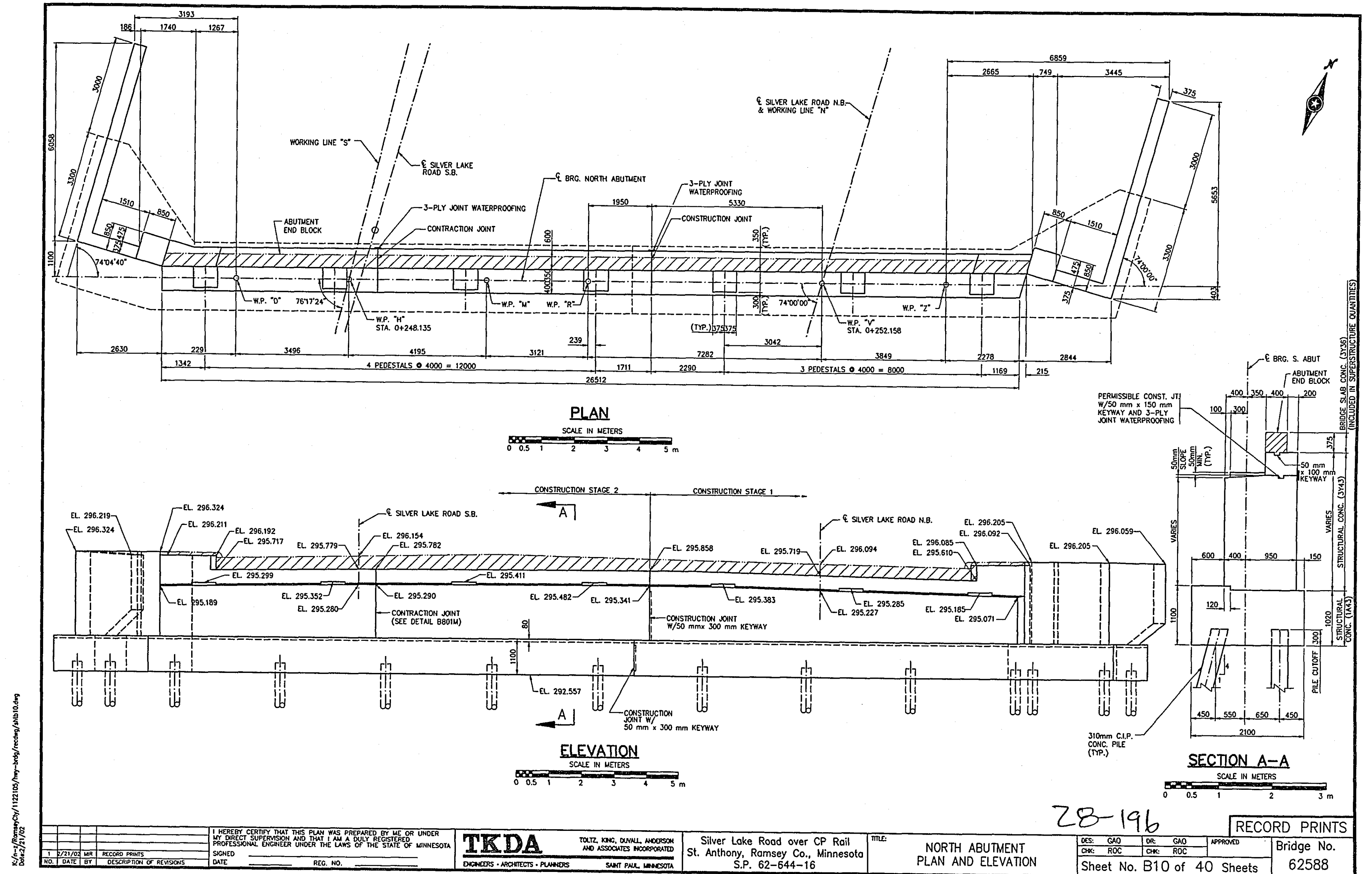
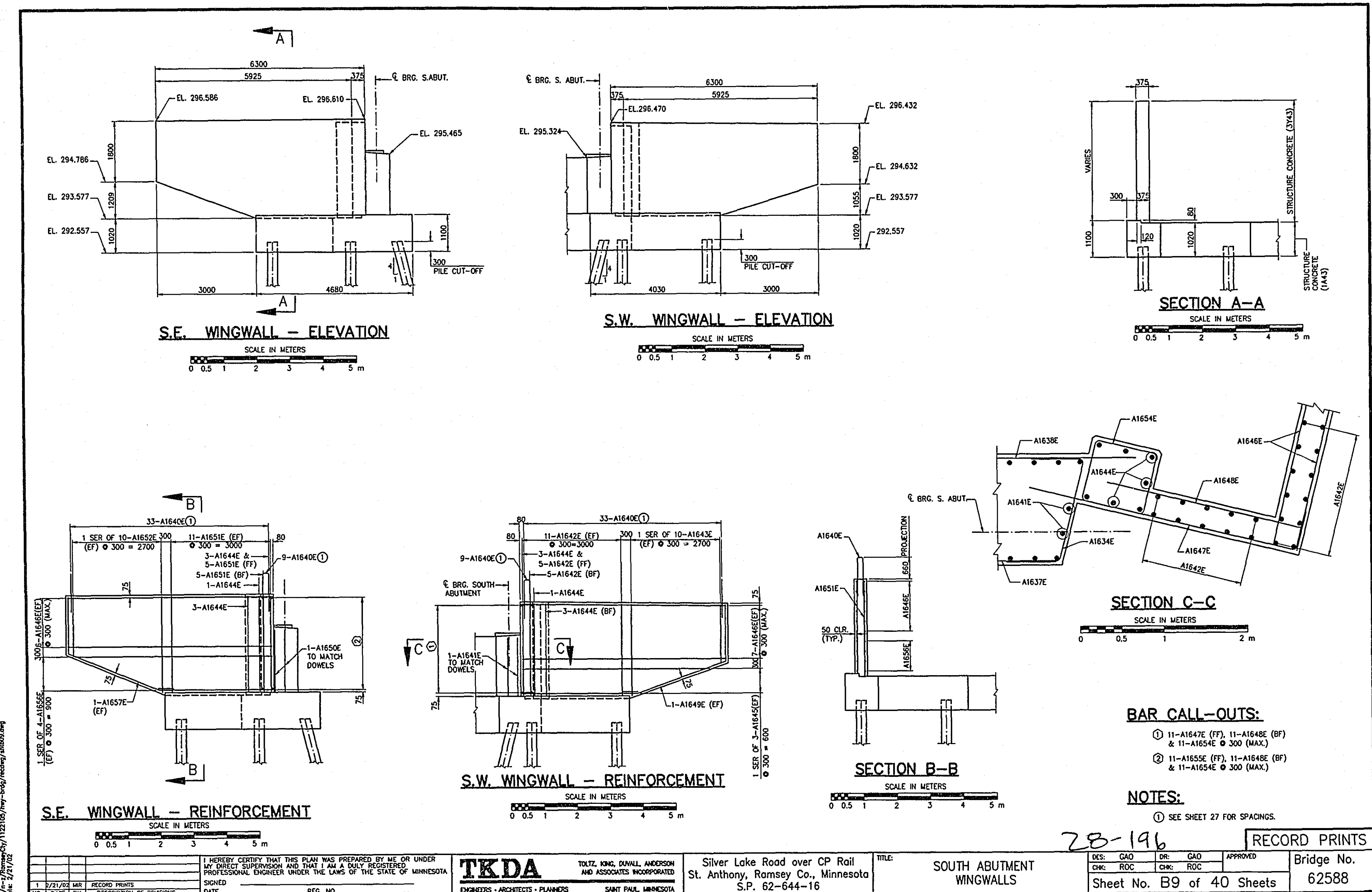
CROSS SECTIONS
STA. 0+820 TO 0+880 **RECORD PRINT**
Sheet No. 43 of 43 Sheets

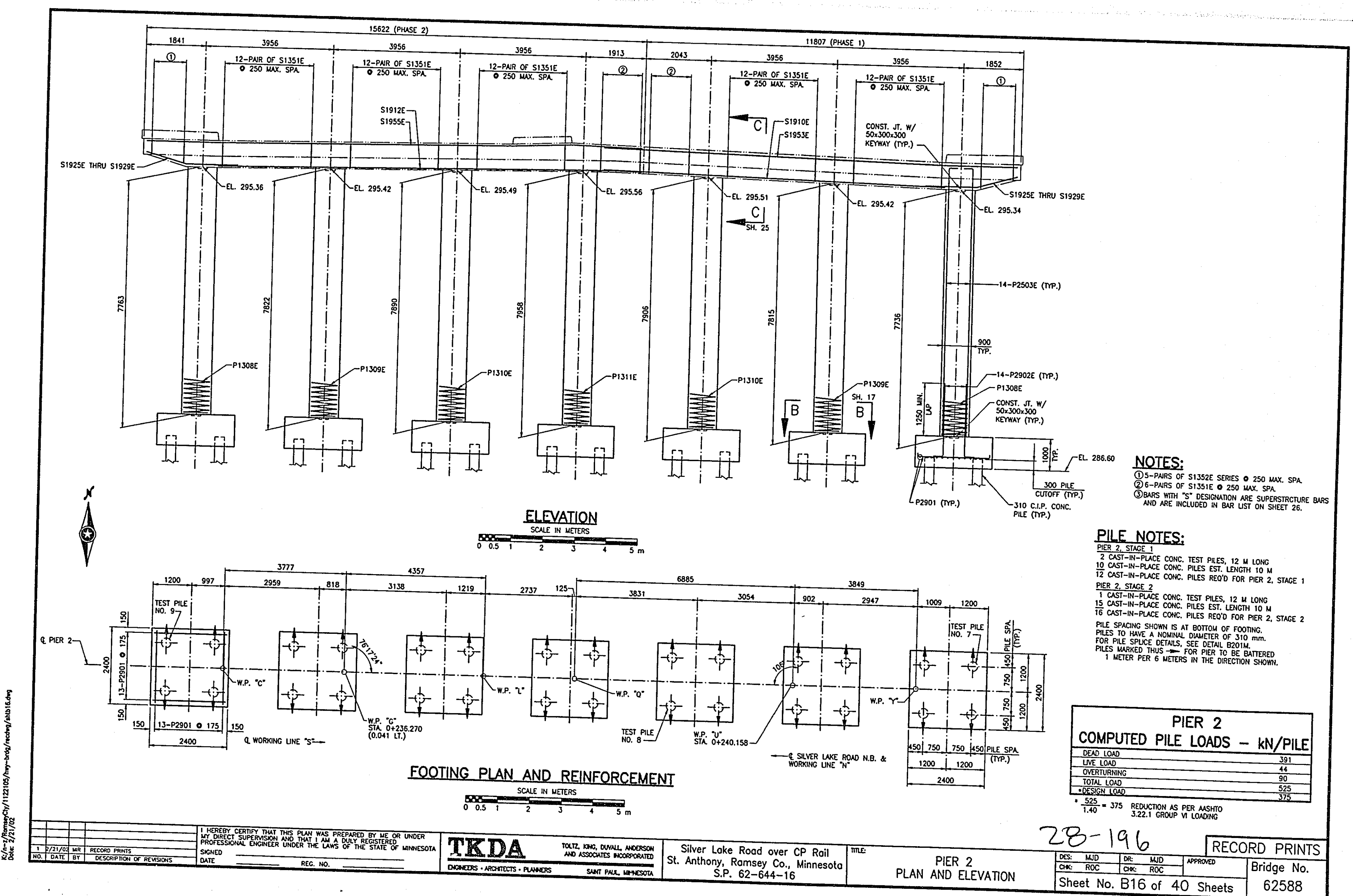
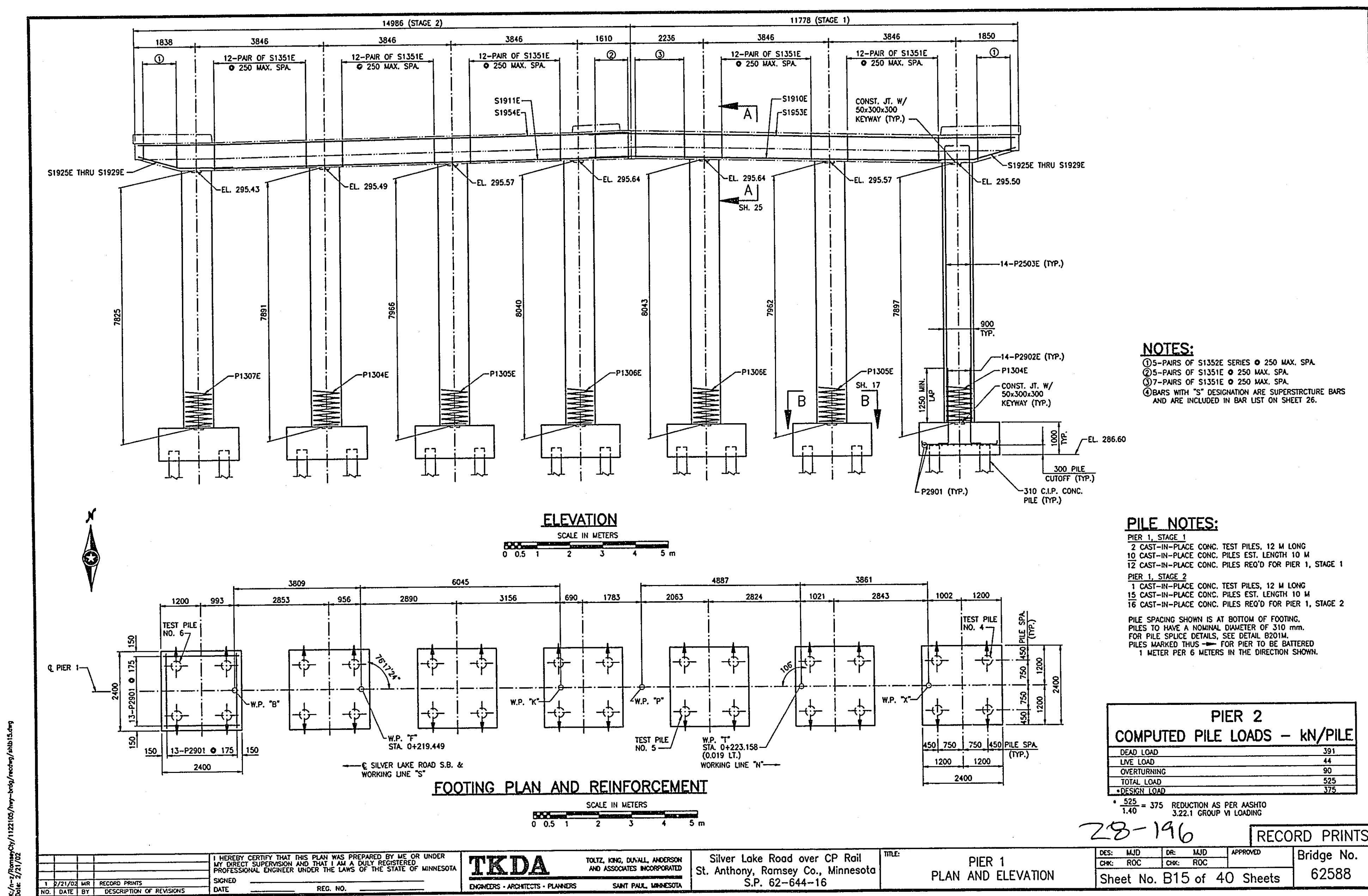
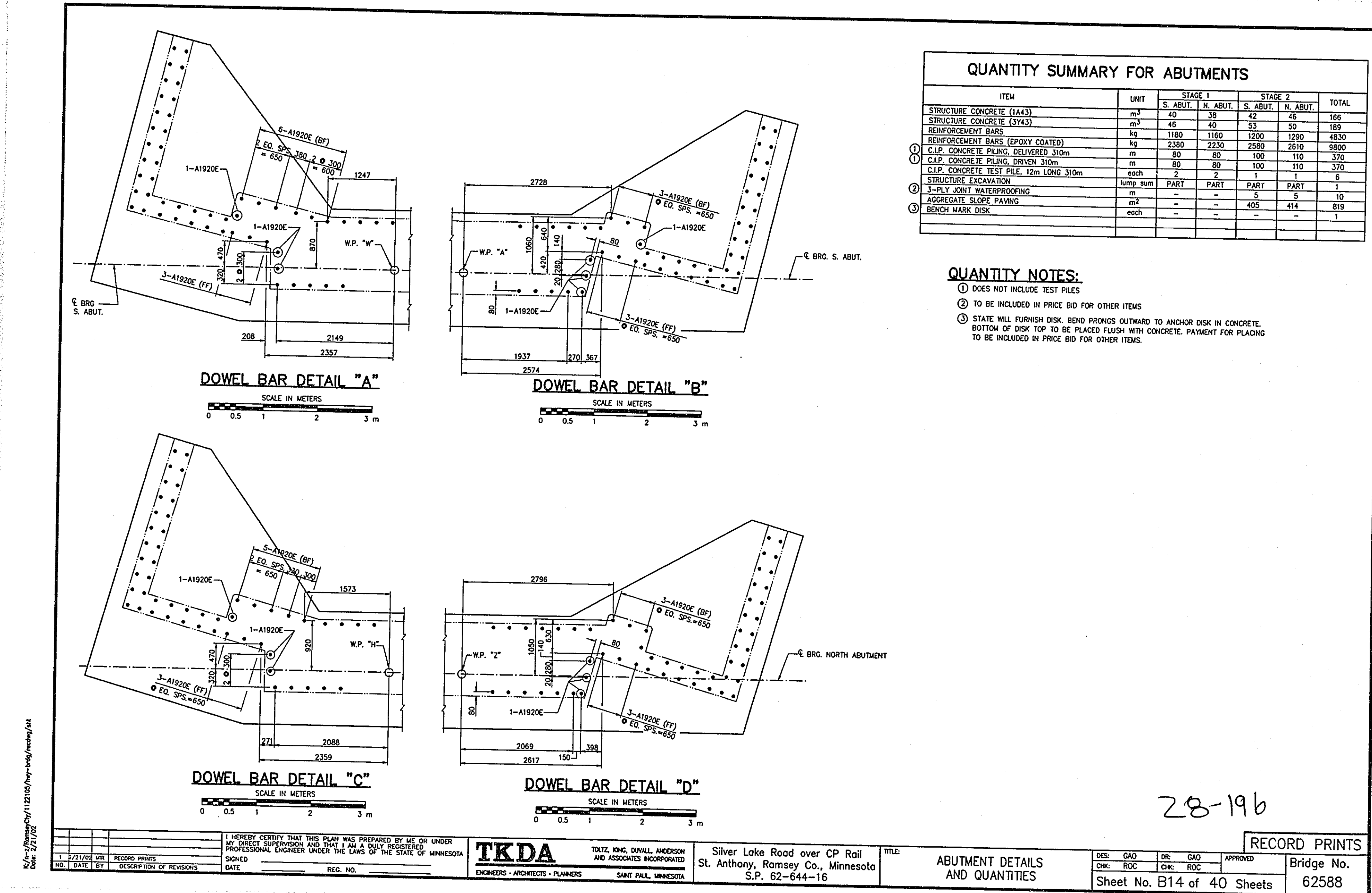
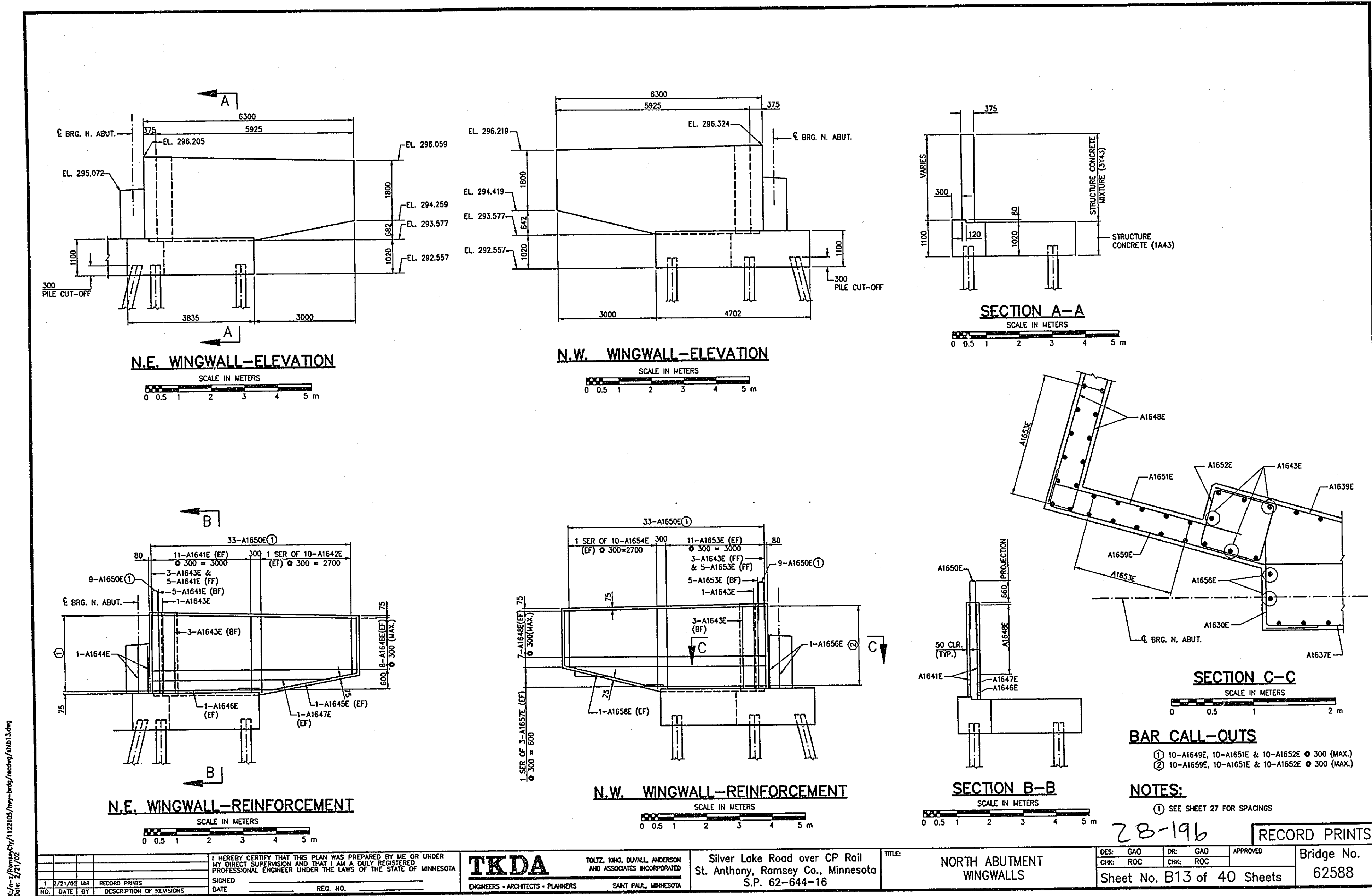
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Scale: 1/8" = 1'-0" (Horizontal) 1/4" = 1'-0" (Vertical)

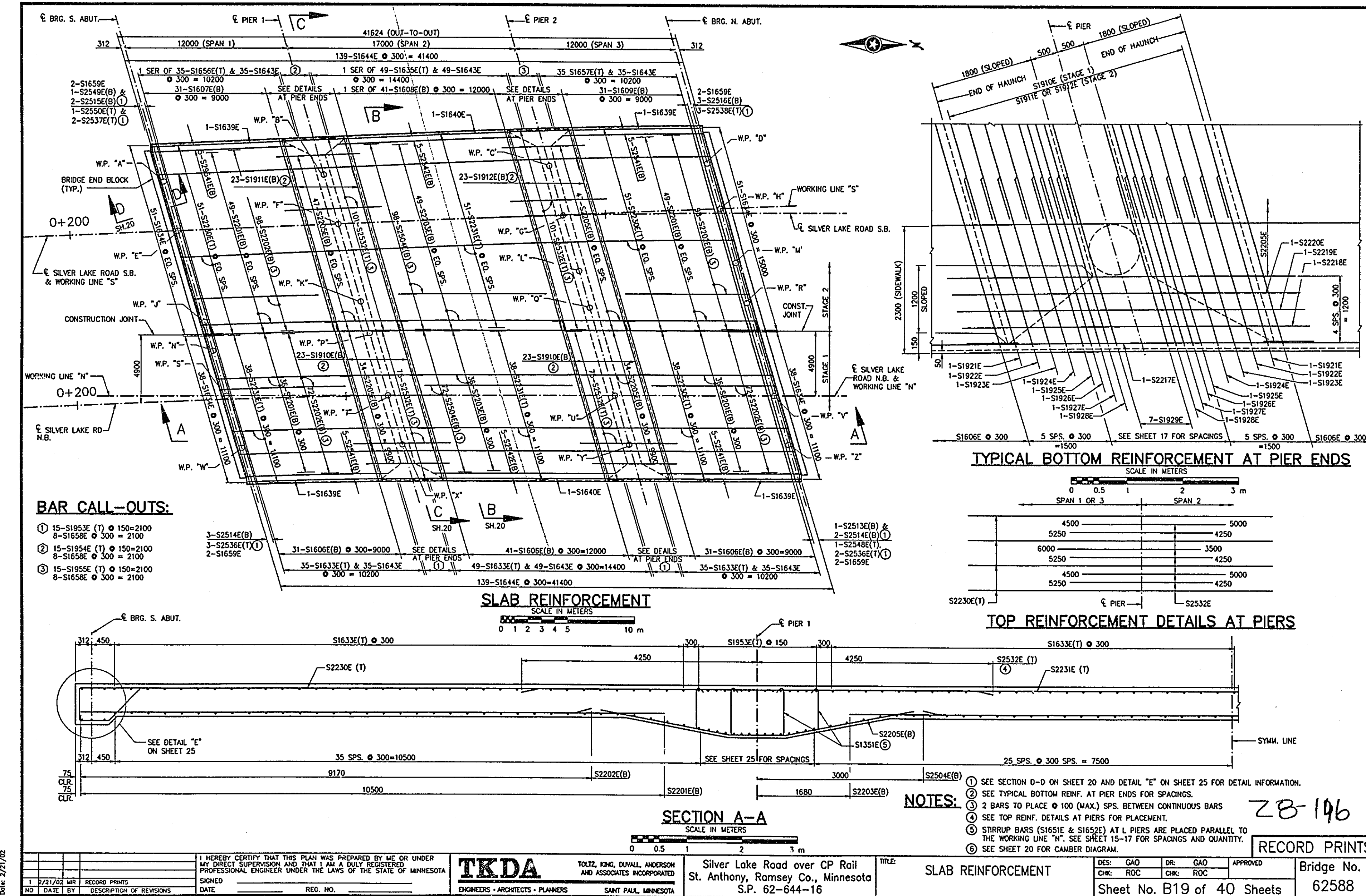
I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

TKDA TOLZ, KANG, DANIEL AND ASSOCIATES INCORPORATED
ENGINEERS - ARCHITECTS - PLANNERS
SANT PAUL, MINNESOTA

Silver Lake Road over CP Rail
St. Anthony, Ramsey Co., Minnesota
S.P. 62-644-16

PIER DETAILS AND
SUBSTRUCTURE QUANTITIES

DES: MJD GAO DR: GAO APPROVED: GAO
CHK: ROC CHK: ROC
Sheet No. B17 of 40 Sheets
Bridge No. 62588



Scale: 1/8" = 1'-0" (Horizontal) 1/4" = 1'-0" (Vertical)

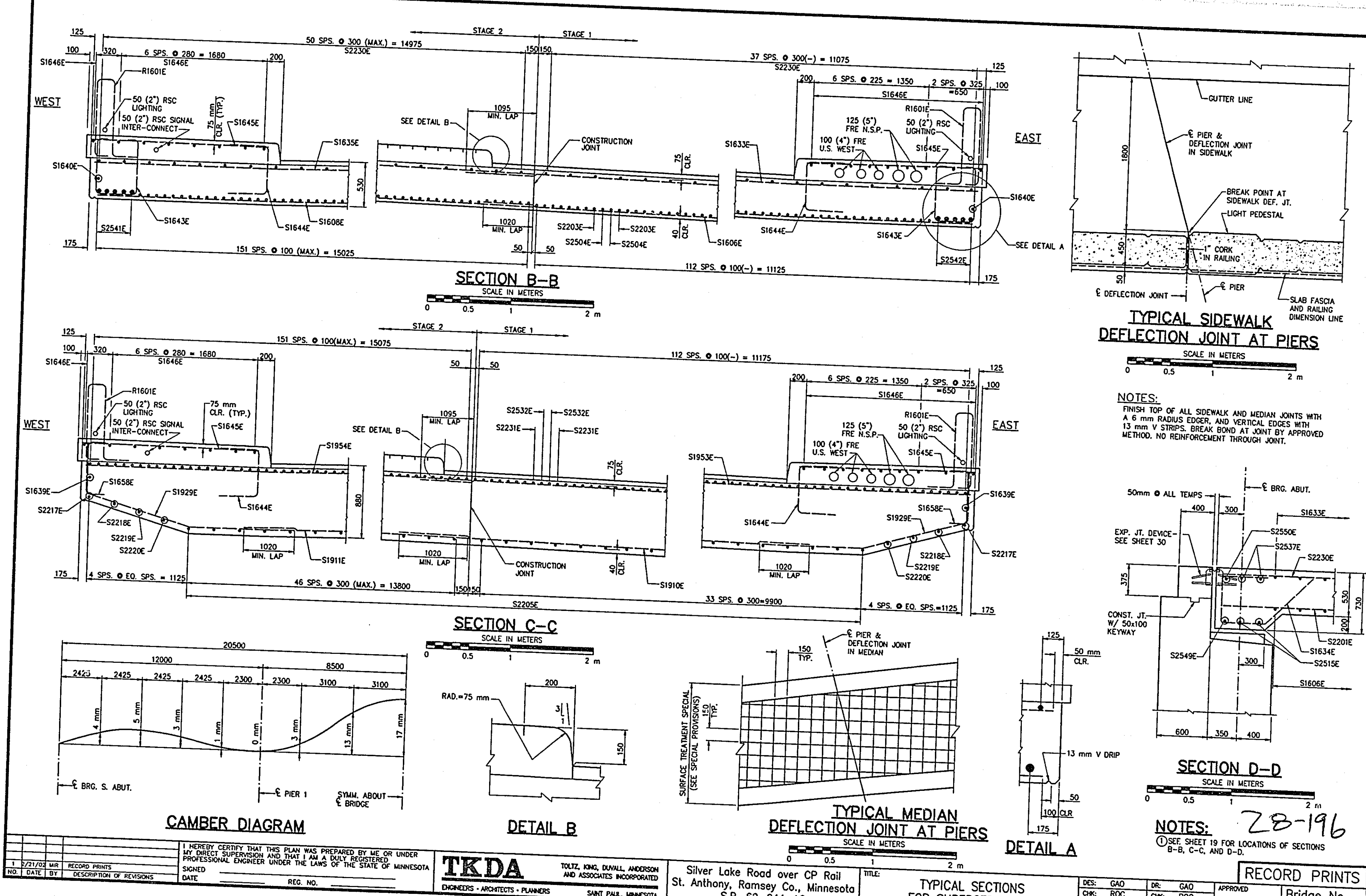
I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

TKDA TOLZ, KANG, DANIEL AND ASSOCIATES INCORPORATED
ENGINEERS - ARCHITECTS - PLANNERS
SANT PAUL, MINNESOTA

Silver Lake Road over CP Rail
St. Anthony, Ramsey Co., Minnesota
S.P. 62-644-16

BARLIST FOR SUBSTRUCTURE

DES: MJD GAO DR: GAO APPROVED: GAO
CHK: ROC CHK: ROC
Sheet No. B18 of 40 Sheets
Bridge No. 62588



Scale: 1/8" = 1'-0" (Horizontal) 1/4" = 1'-0" (Vertical)

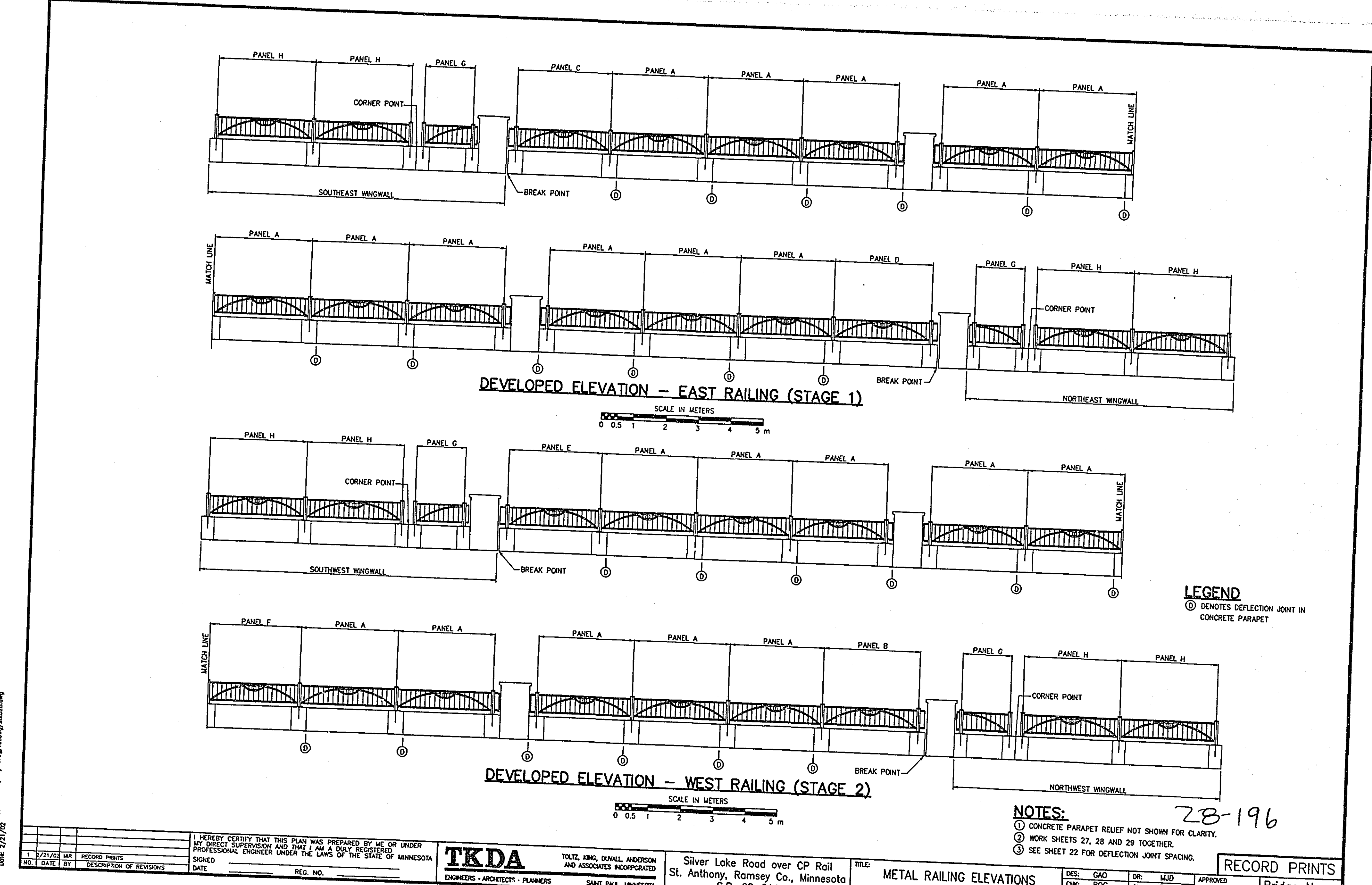
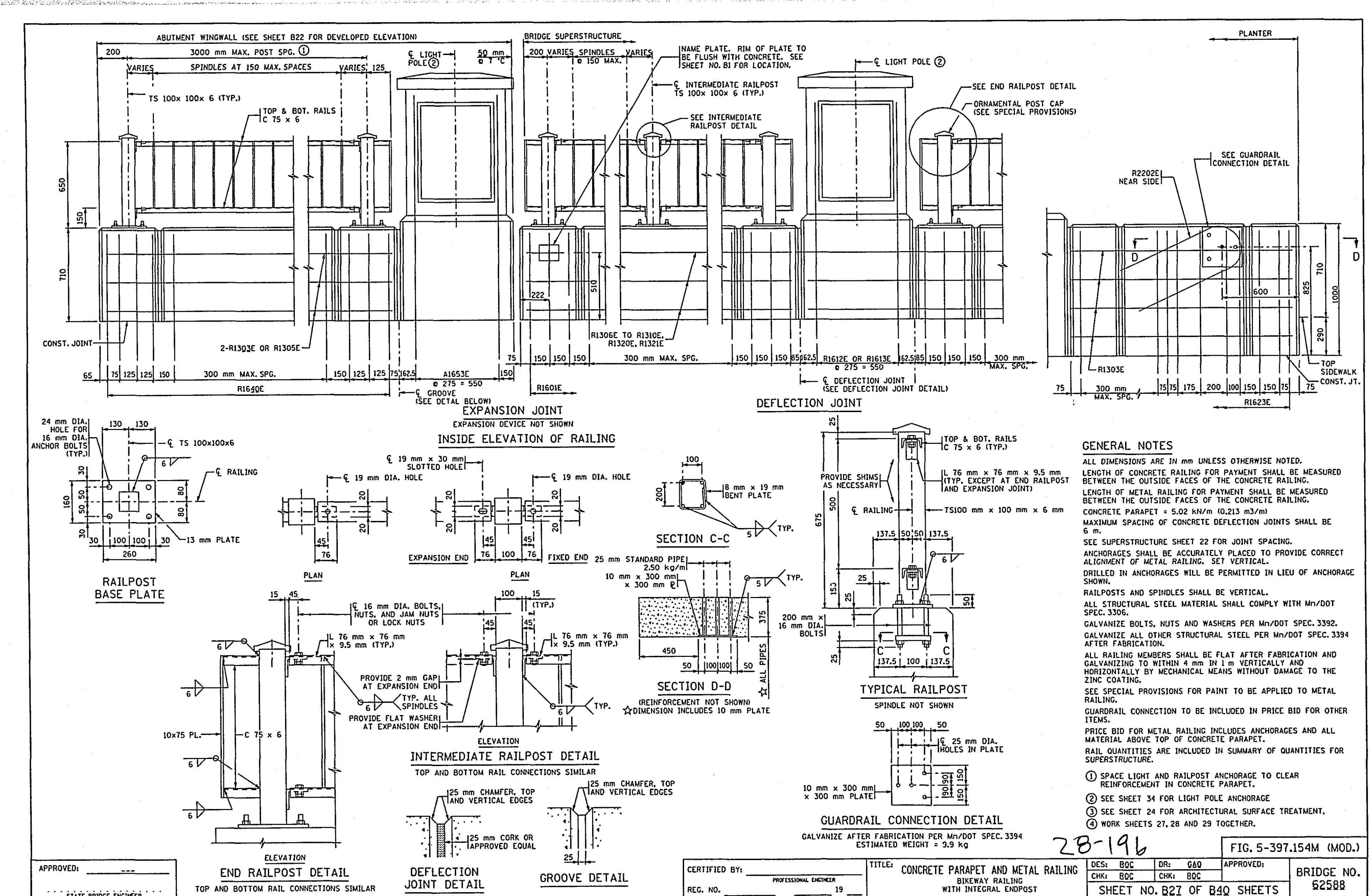
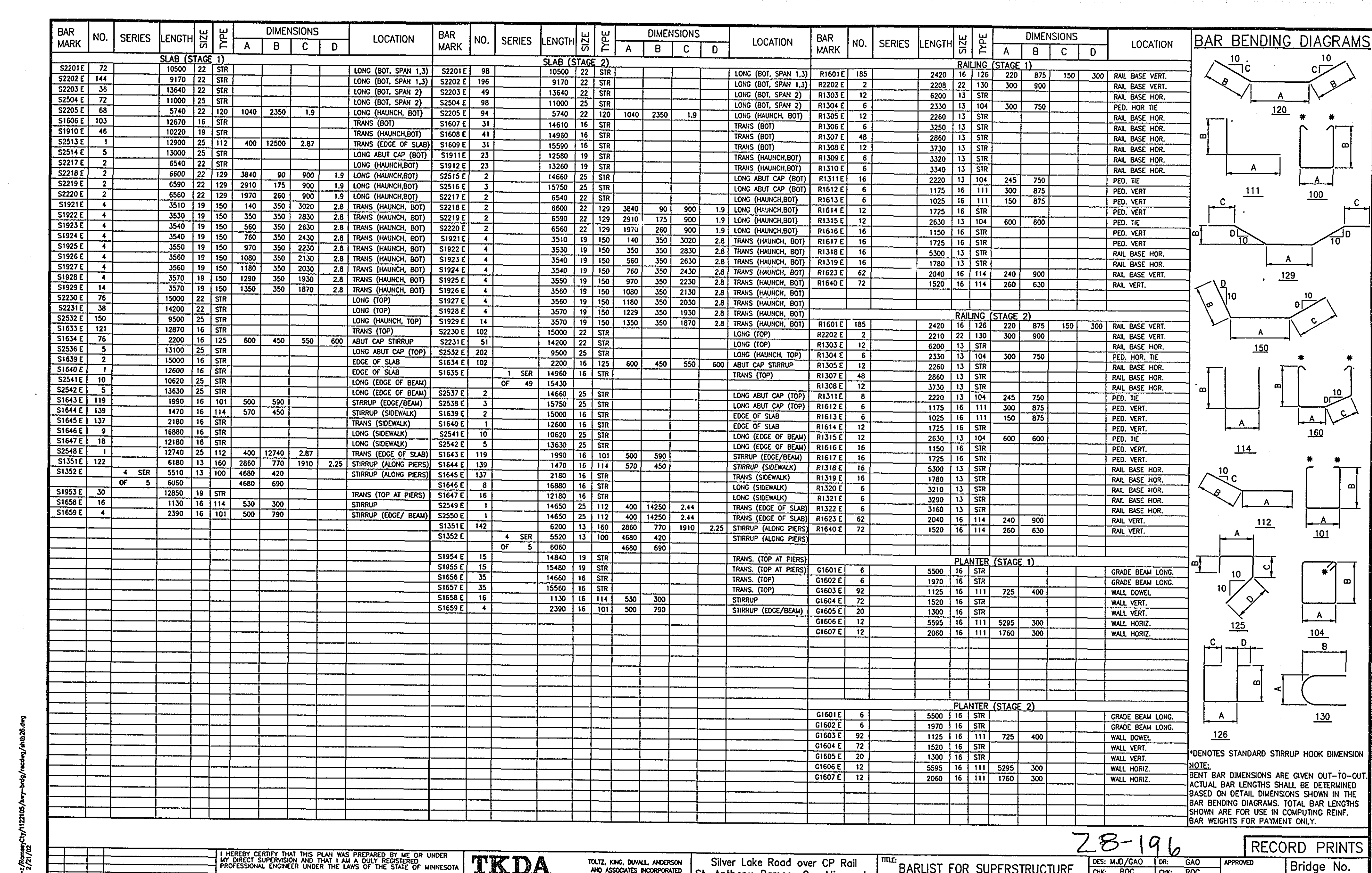
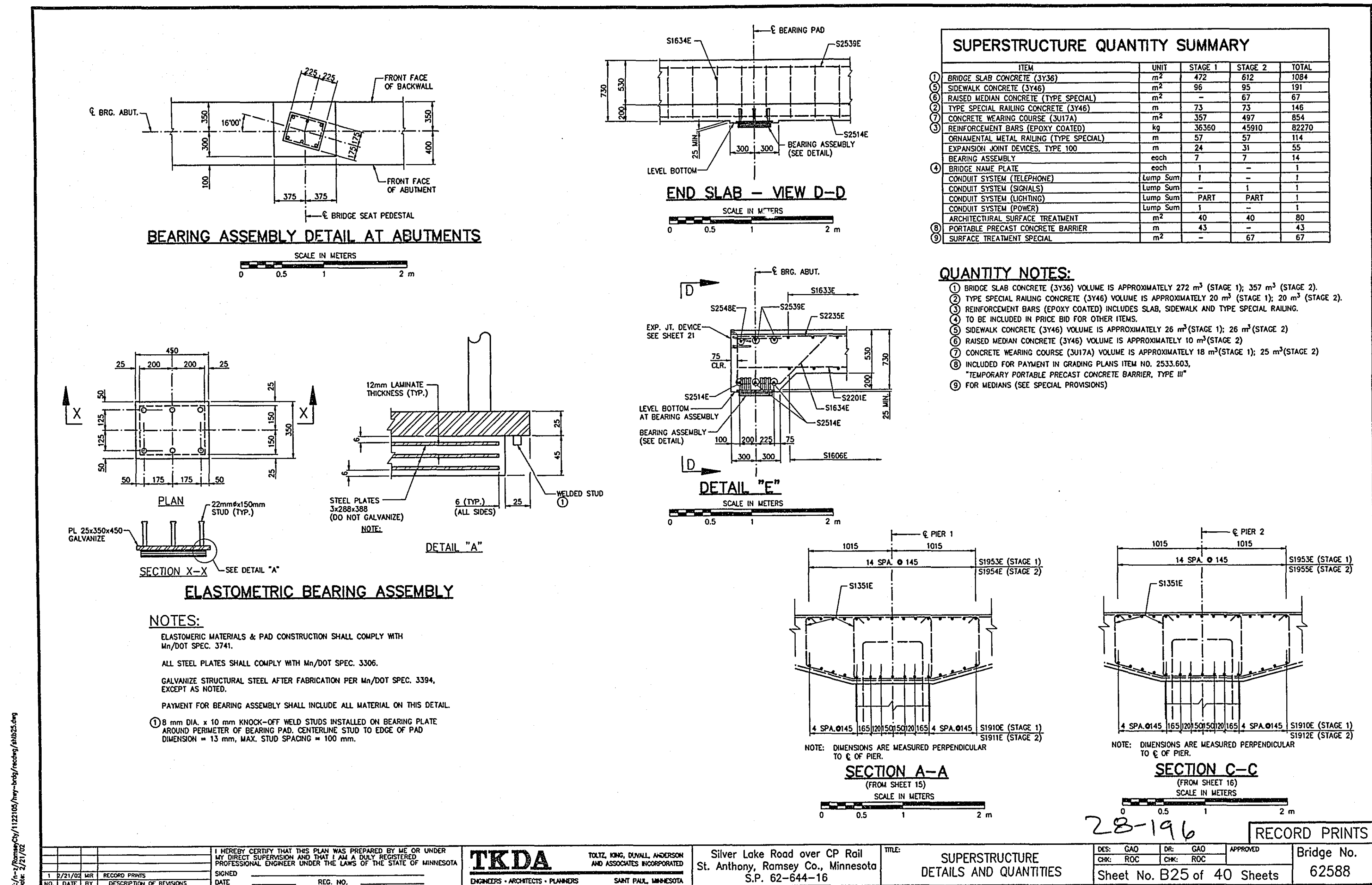
I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

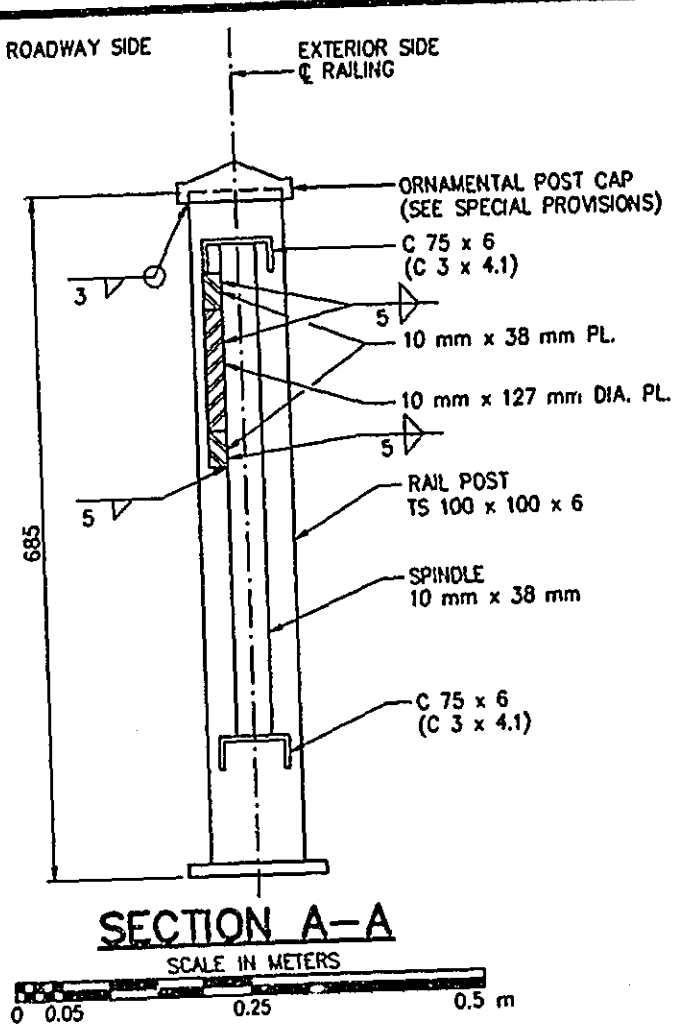
TKDA TOLZ, KANG, DANIEL AND ASSOCIATES INCORPORATED
ENGINEERS - ARCHITECTS - PLANNERS
SANT PAUL, MINNESOTA

Silver Lake Road over CP Rail
St. Anthony, Ramsey Co., Minnesota
S.P. 62-644-16

TYPICAL SECTIONS
FOR SUPERSTRUCTURE

DES: MJD GAO DR: GAO APPROVED: GAO
CHK: ROC CHK: ROC
Sheet No. B20 of 40 Sheets
Bridge No. 62588





NOTES:

- ① RAIL POSTS AND SPINDLES SHALL BE VERTICAL.
- ② SEE "CONCRETE PARAPET AND METAL RAILING" SHEET FOR FURTHER INFORMATION.
- ③ RAIL POST SPACINGS ARE MEASURED ALONG OUTSIDE EDGE OF THE DECK SLAB.

