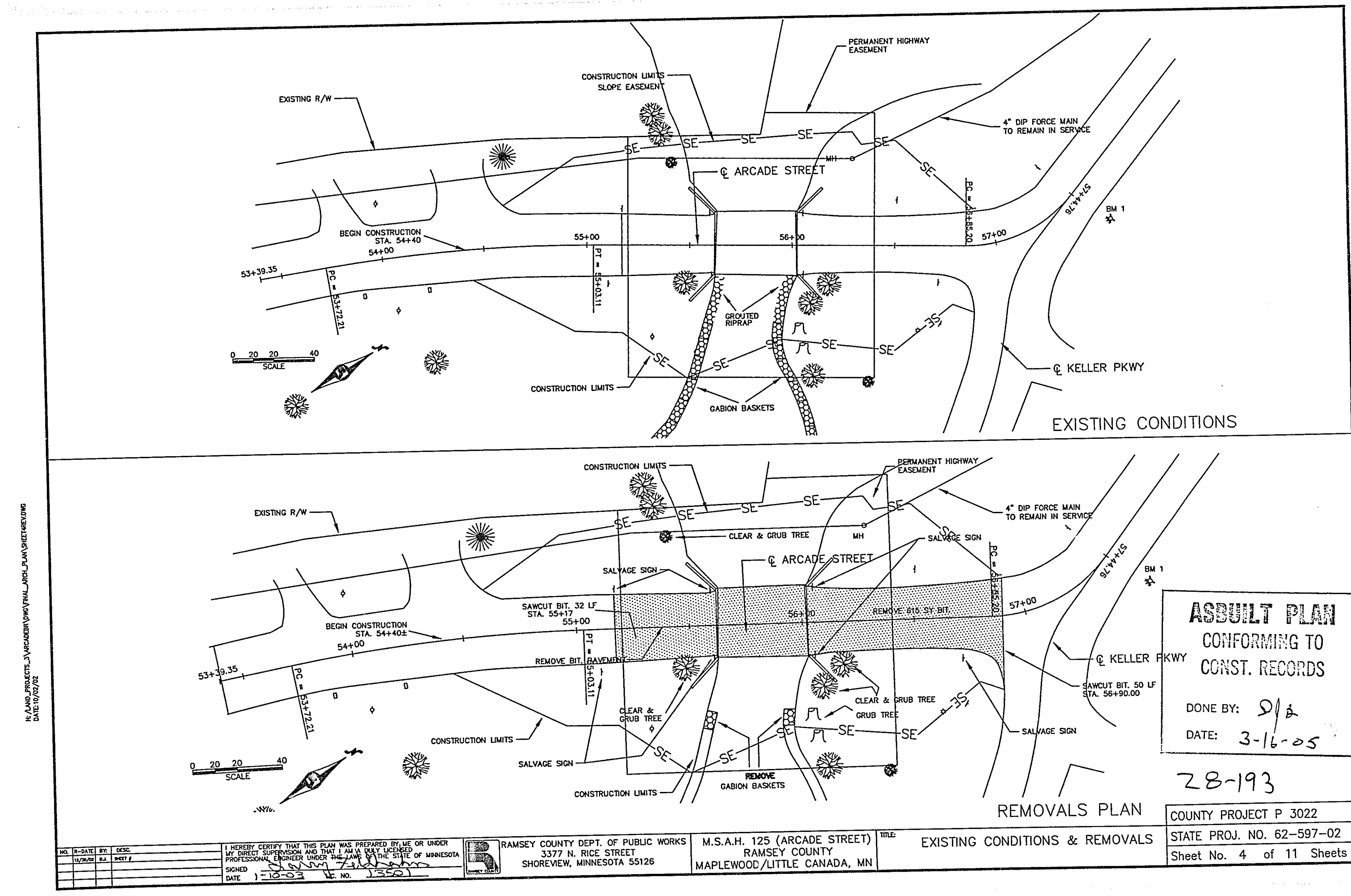
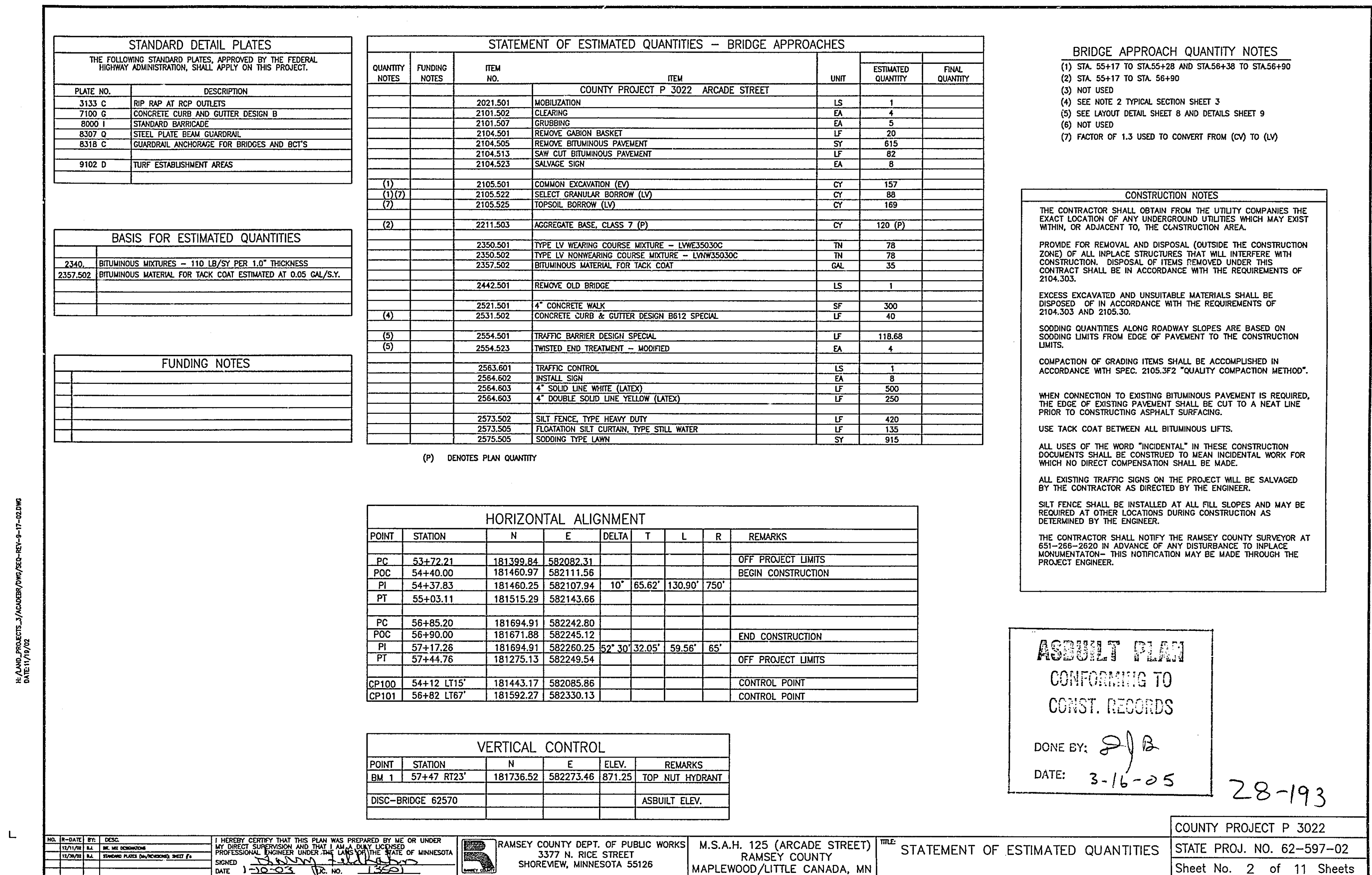
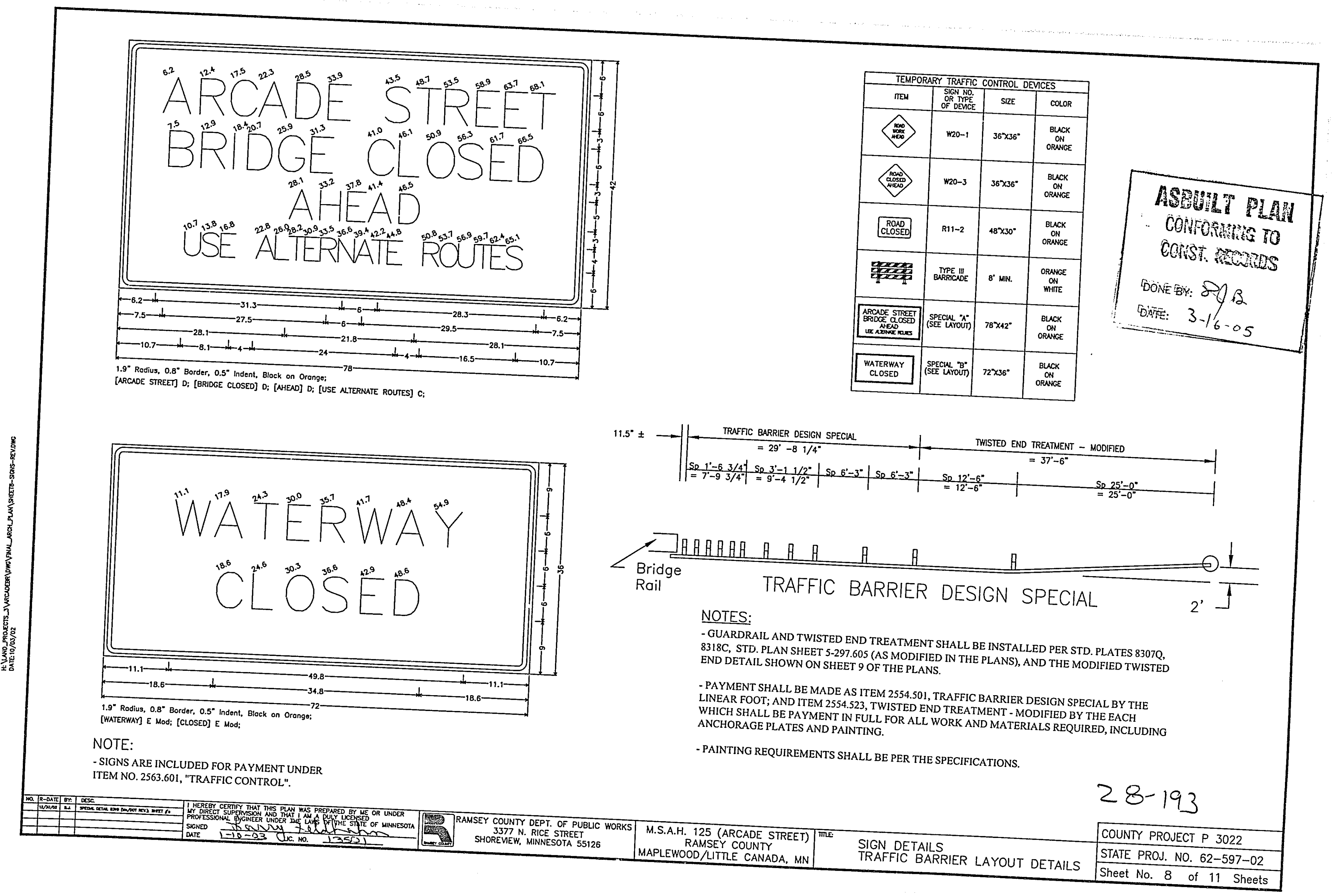
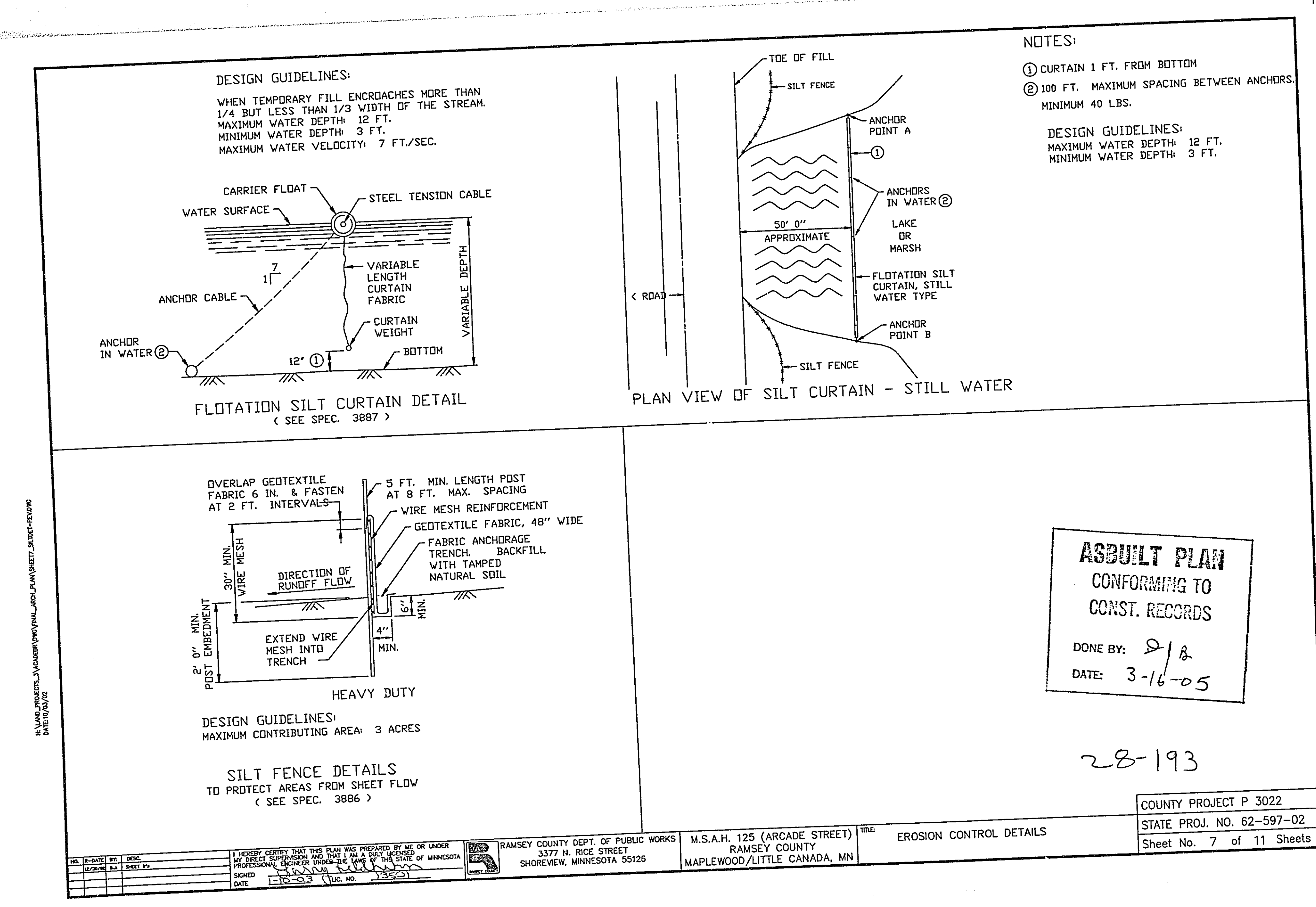
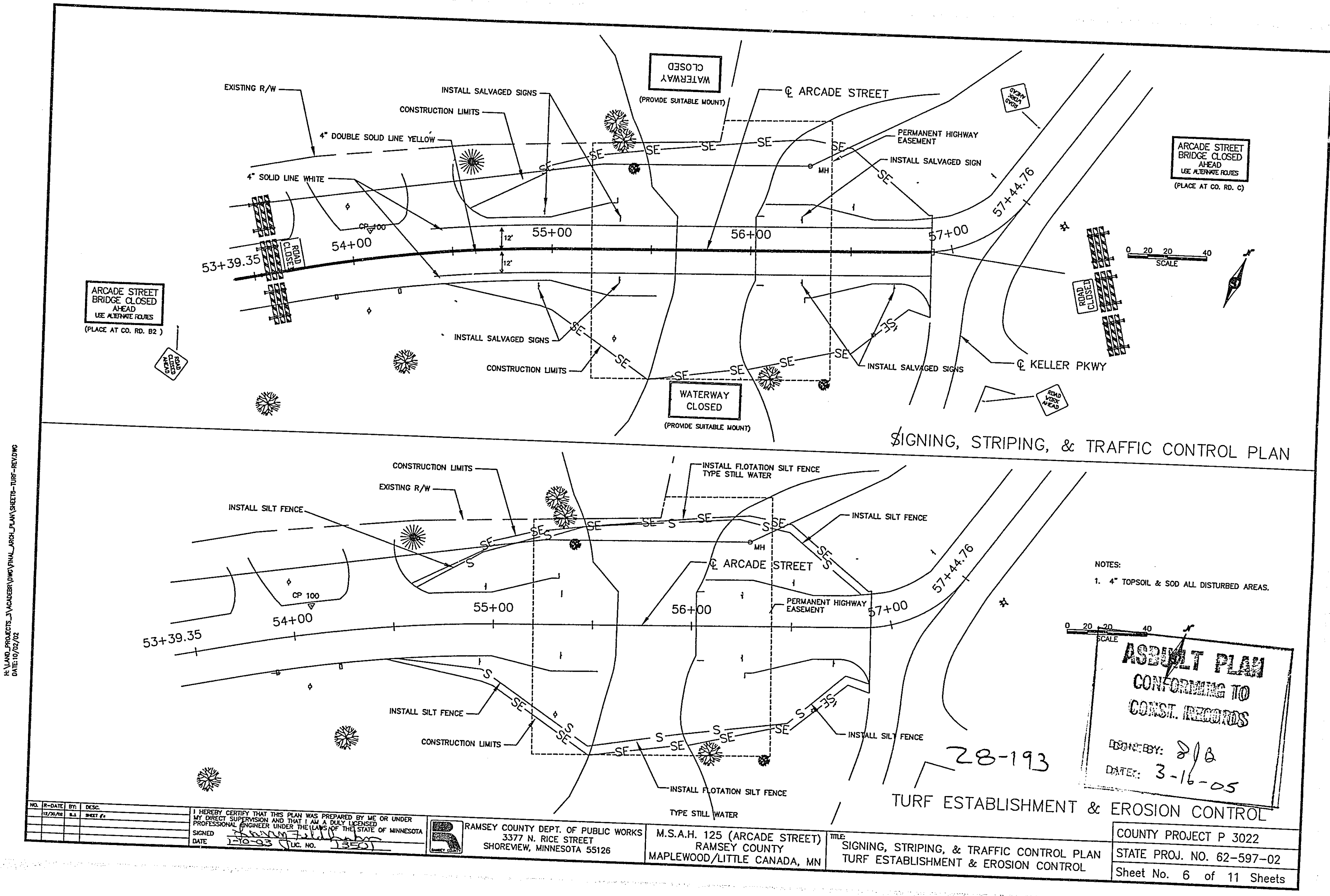
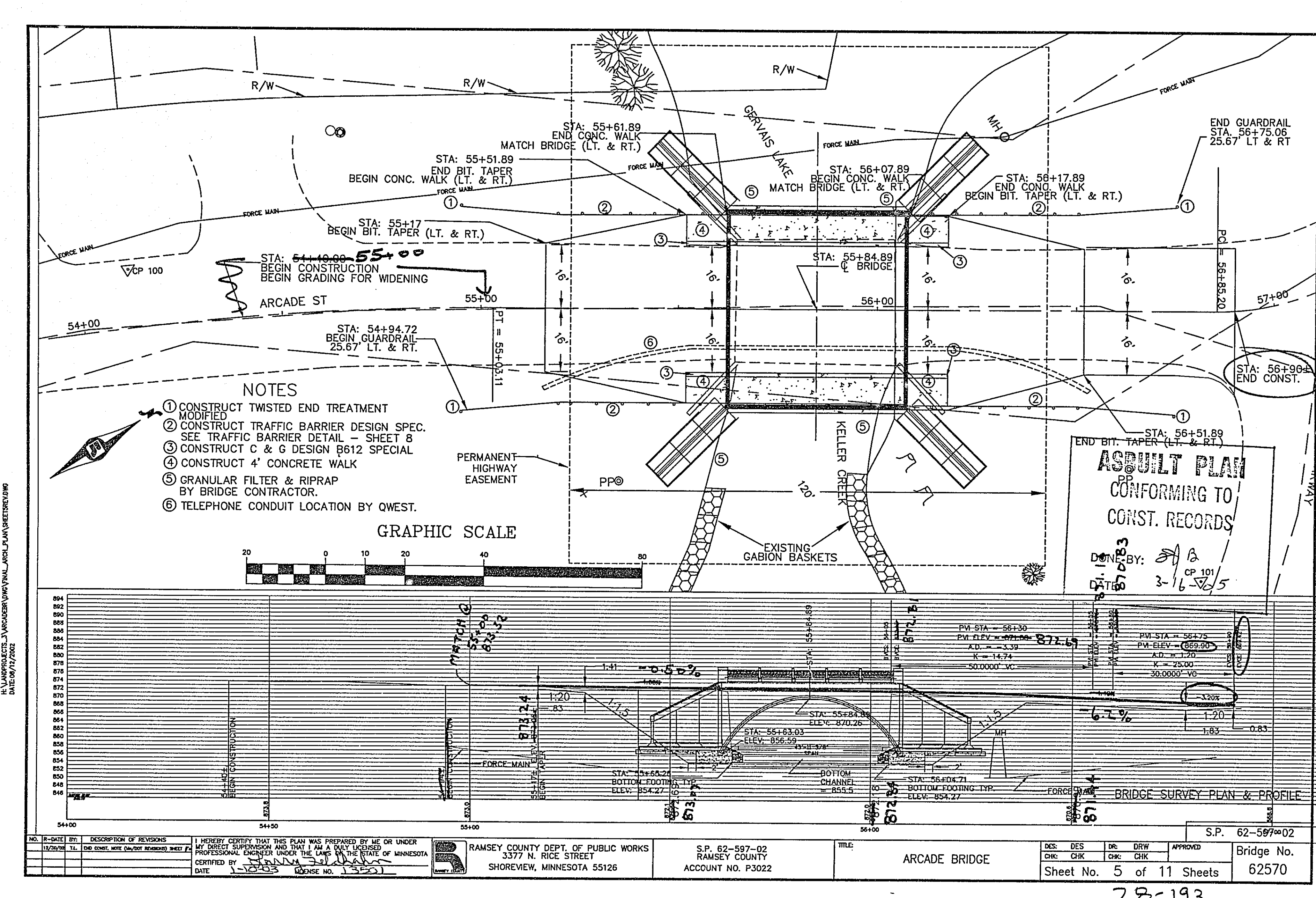






PLAN

Direction of Traffic →

4" max. offset

Offset from face of rail

Anchor Plate
See Standard Plans 8318

6'-1" ±

1'-0" Post

ELEVATION

(Twisted End Treatment Post Item)

2'-2" Tucked down Terminal

12'-8" ±

8'-3" ±

8'-3" ±

Post No. 1

Post No. 2

Post No. 3

Post No. 4

Anchor Block

Rail elements spliced with splice bolts removed.

2'-1" ±

Rail Elements spliced (see sheet 2 of 2)

VERTICAL SECTION

3" max. projection of bolts

3" ±

7/8" dia. high strength galvanized bolts 1 1/2" (ASTM A325)

Leveling Slab

Two nuts for each 7/8" bolt (One for leveling)

No. 4 Deformed Reinforcing Bars

3" ±

3" ±

1'-6" ±

3" ±

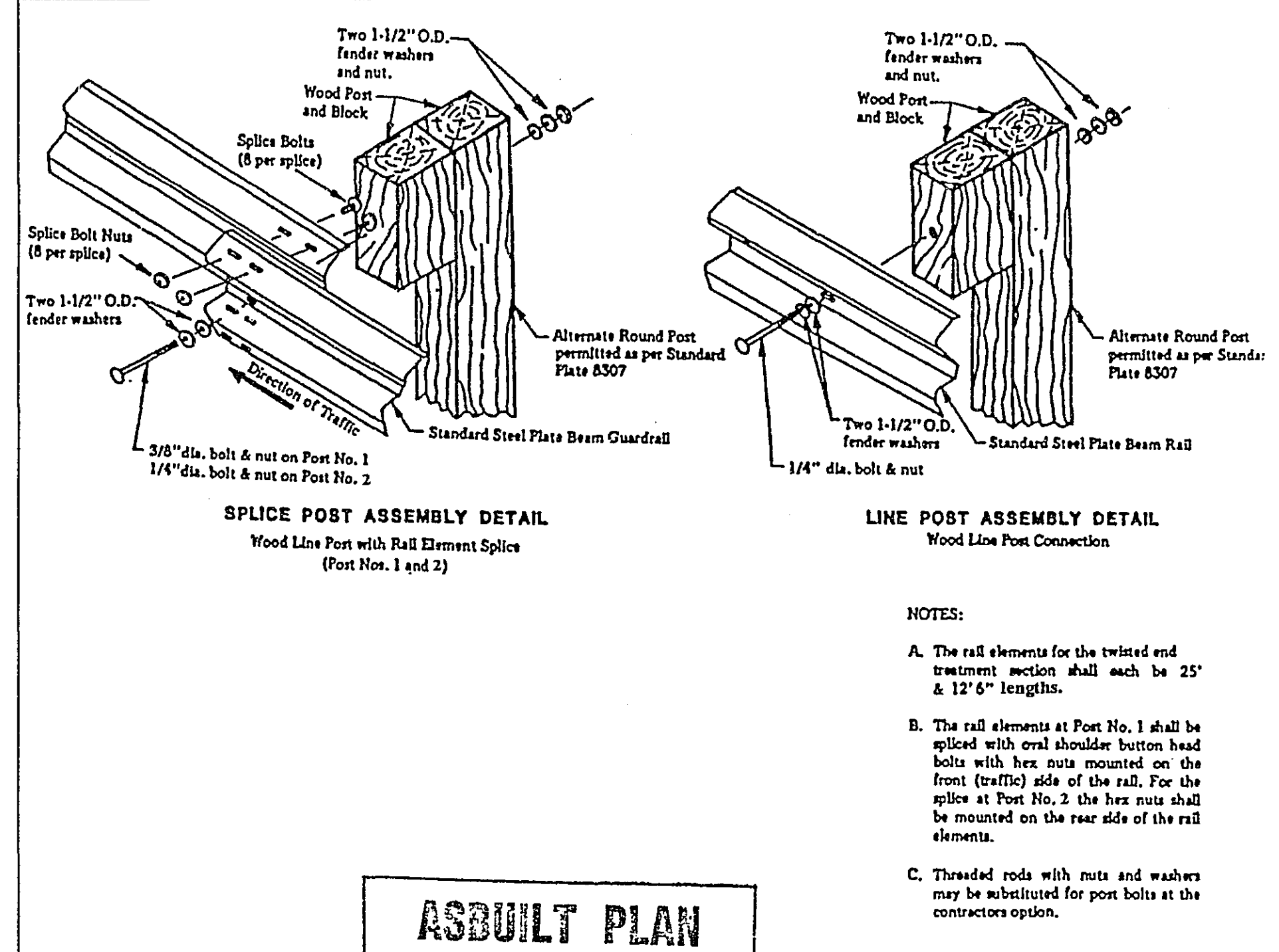
TOP VIEW

Anchor Plate

2'-0" ±

NOTES:

1. All deformed reinforcing bars shall be No. 4. Six (6) vertical bars, 4' 9" in length shall be equally spaced on 1' 0" o.c. deck. Six (6) deformed horizontal bars shall be spaced approximately 11" apart. All vertical and horizontal bars shall be securely lapped together. Equivalent mesh may be used.
2. Concrete Mix No. 3Y43 or equal.
3. A forming tube may be used in forming anchor block.
4. Anchor block may be cast-in-place or precast.
5. Borel top of anchor block to fit slope of anchor plate.
6. See Standard Plans 8307 for steel plate beam details.



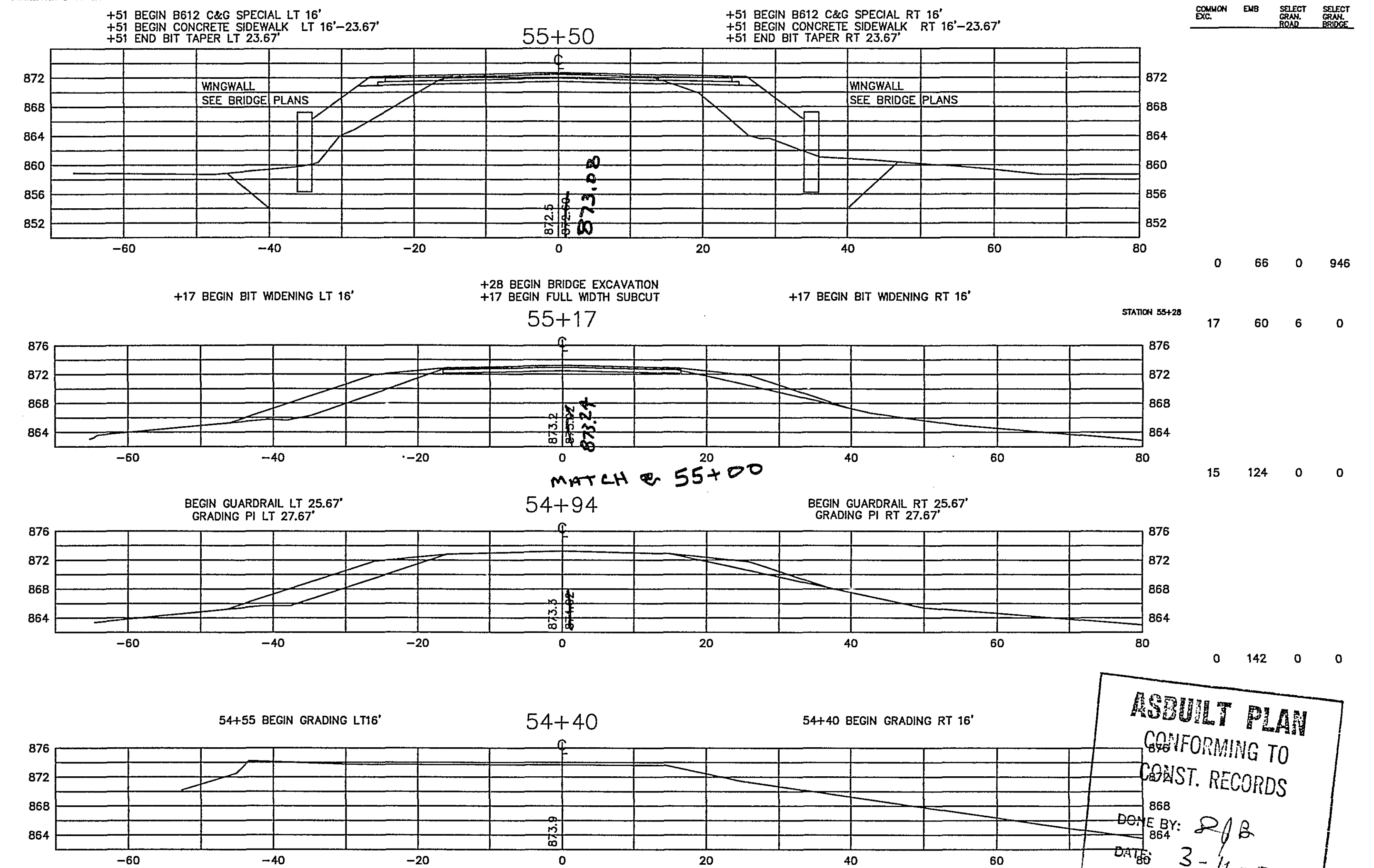
DONE BY: SA B
DATE: 3-16-05

COUNTY PROJECT P 3022
STATE PROJ. NO. 62-597-02
Sheet No. 9 of 11 Sheets

NO.	EXP. DATE	BY:	DESC.	1. 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	 RAMSEY COUNTY DEPT. OF PUBLIC WORKS 3377 N. RICE STREET SHOREVIEW, MINNESOTA 55126
12/15/03	N.A.		SPECIAL DETAIL REPAIR DAMAGED ROOF SHEET # SIGNED <u>[Signature]</u> DATE <u>1-15-03</u> LIC. NO. <u>13501</u>		

M.S.A.H. 125 (ARCADE STREET)
RAMSEY COUNTY
MAPLEWOOD/LITTLE CANADA, MN

MODIFIED TWISTED END TREATMENT



DATE BY: 212
864
DATE: 3-16-05
80

COUNTY PROJECT P 3022
STATE PROJ. NO. 62-597-02
Sheet No. 10 of 11 Sheets

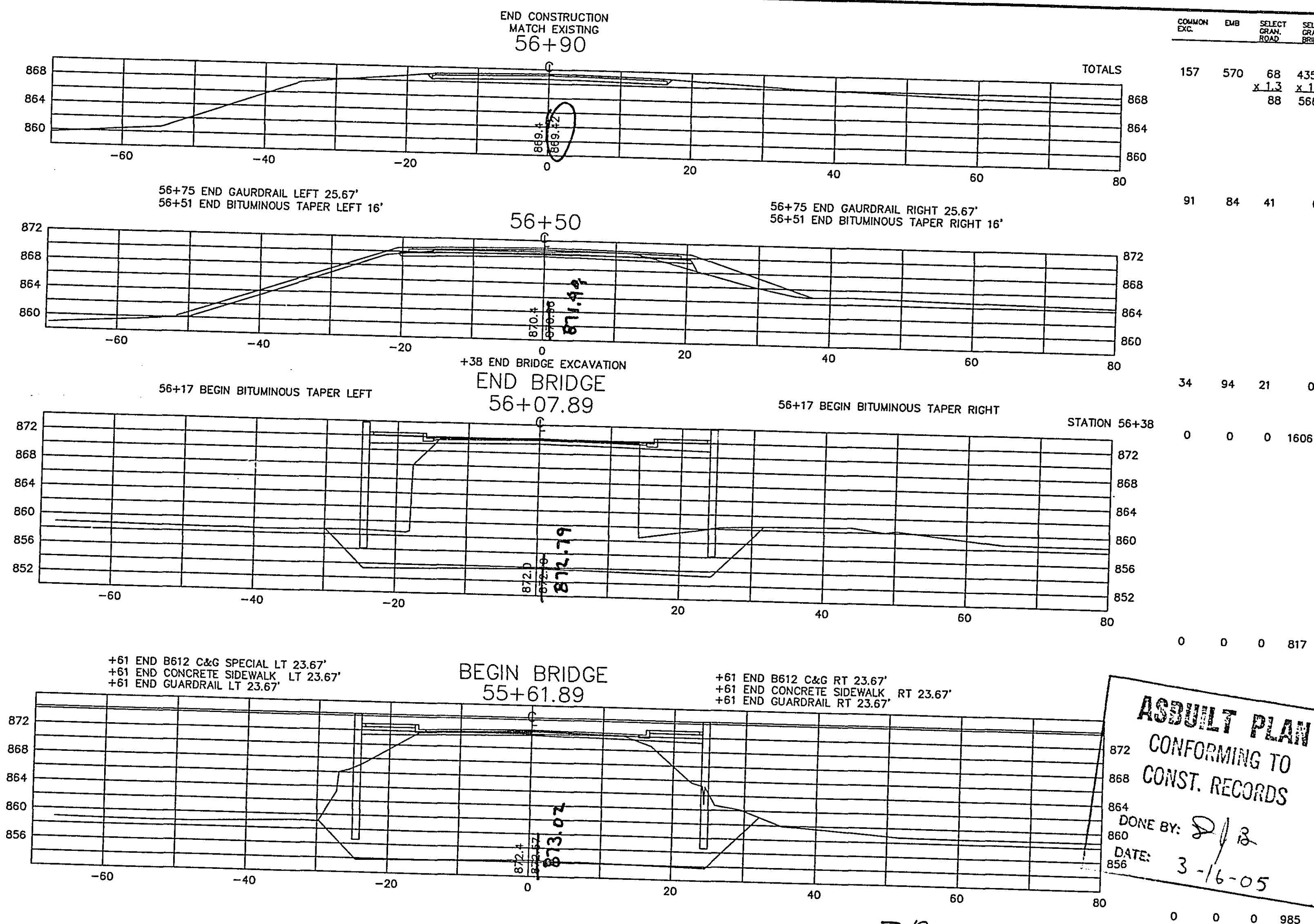
NO.	R-DATE	BY	DESC.
	11/29/00	S.A.	WEEK 7



RAMSEY COUNTY DEPT. OF PUBLIC WORKS
3377 N. RICE STREET
SHOREVIEW, MINNESOTA 55126

M.S.A.S. 125 (ARCADE STREET)
RAMSEY COUNTY
MAPLEWOOD/LITTLE CANADA, MN

CROSS SECTIONS
55+17 TO 55+61.89



864
DONE BY: *D / 12*
860
DATE: *3-16-05*
856

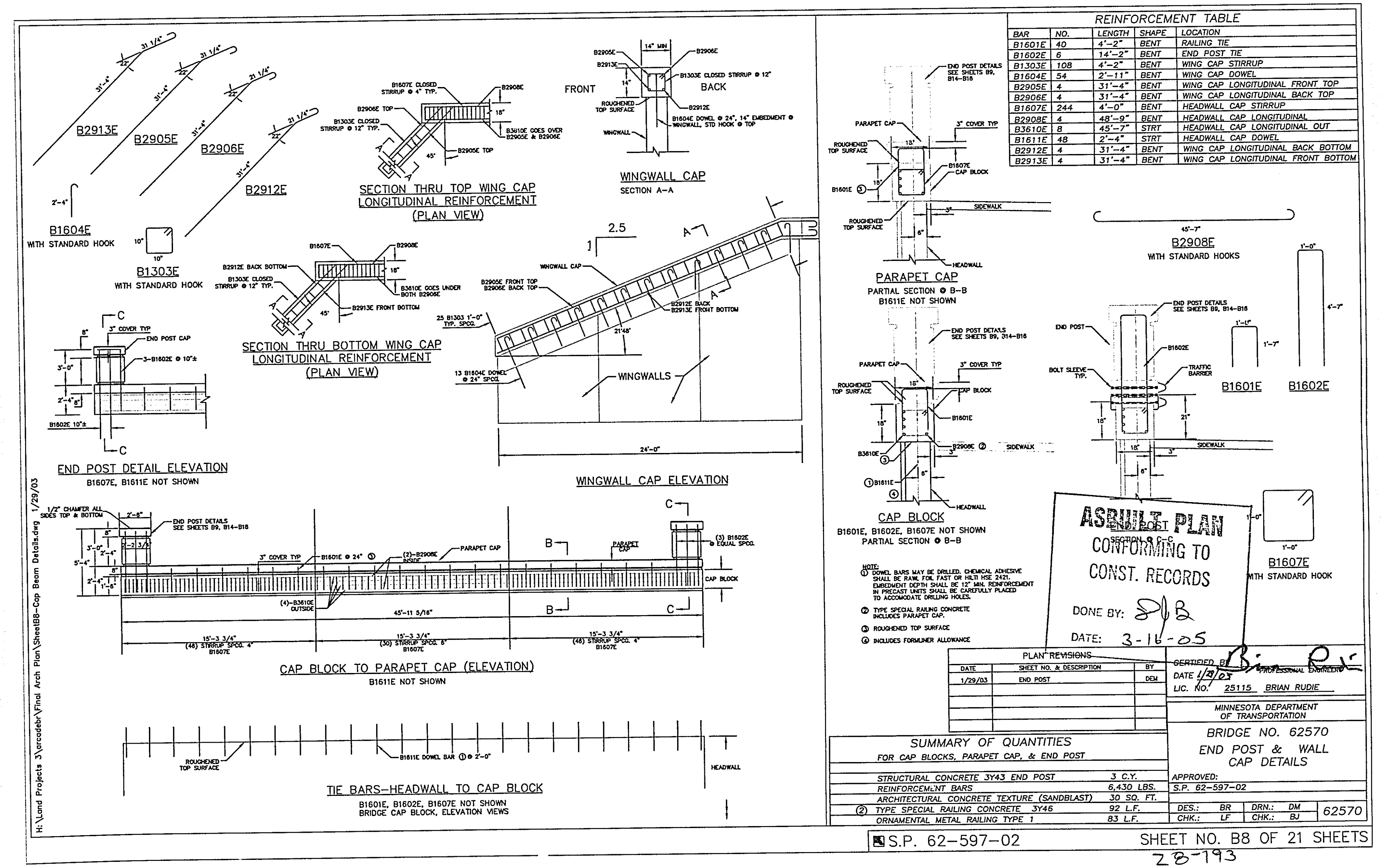
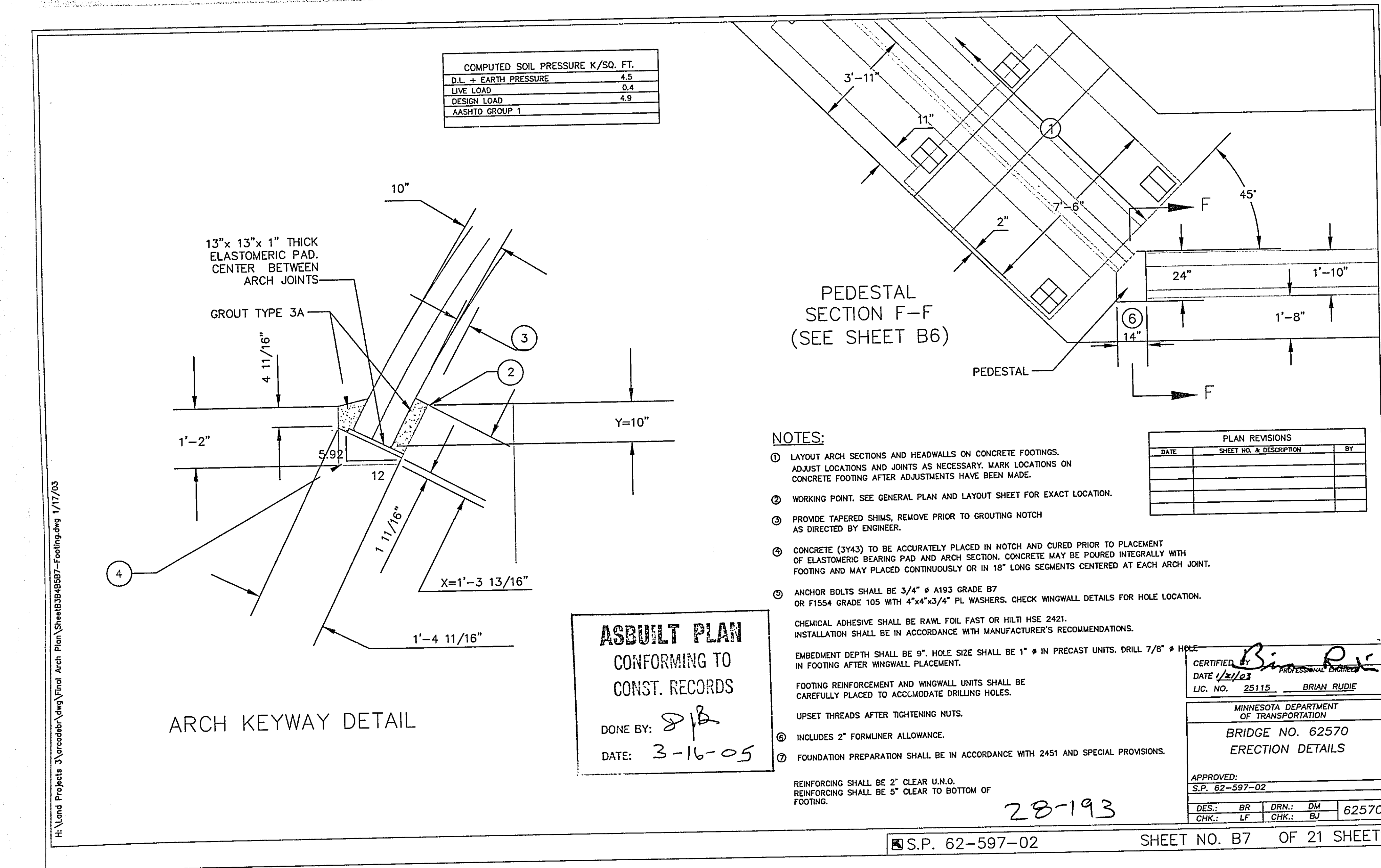
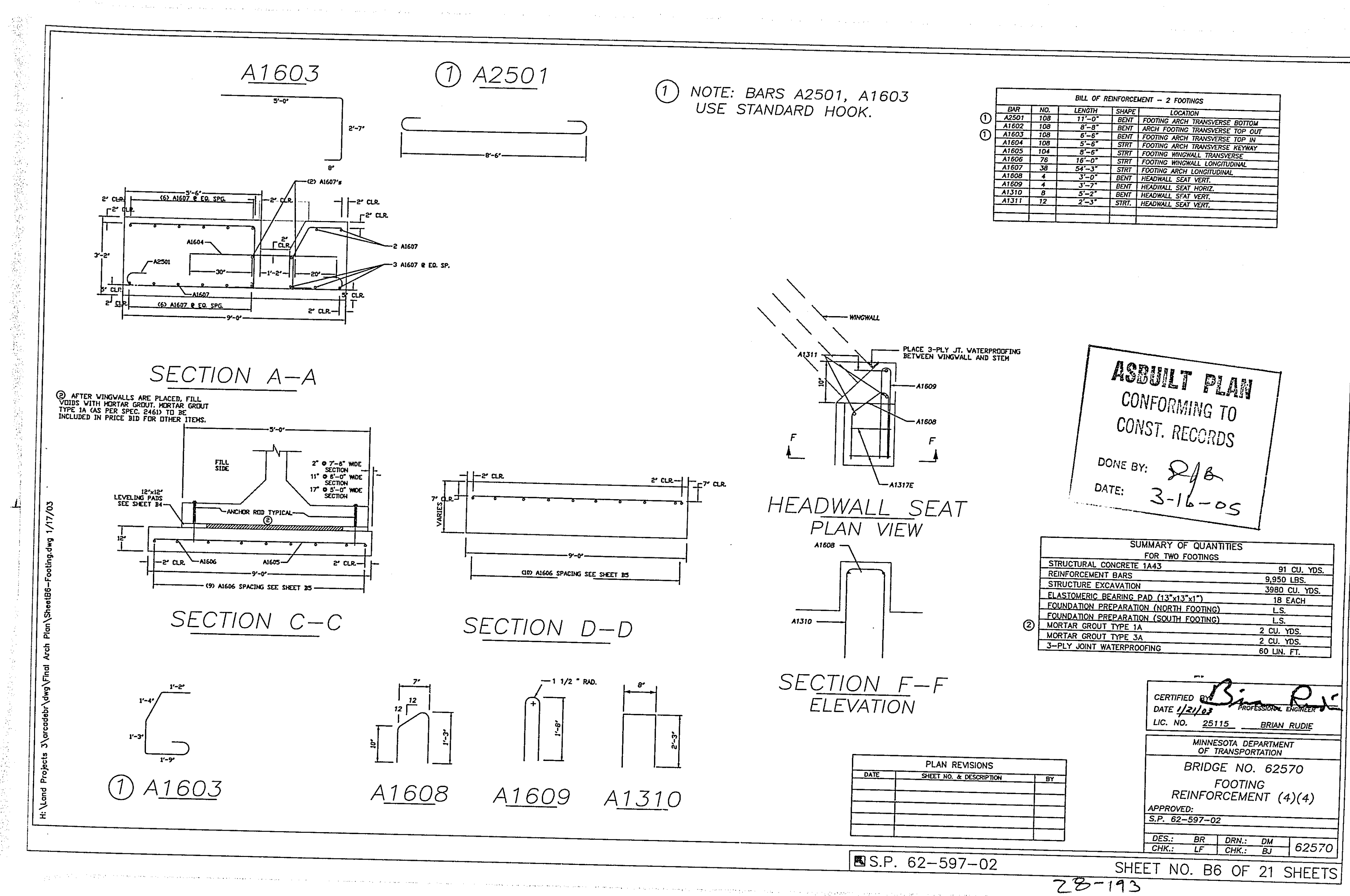
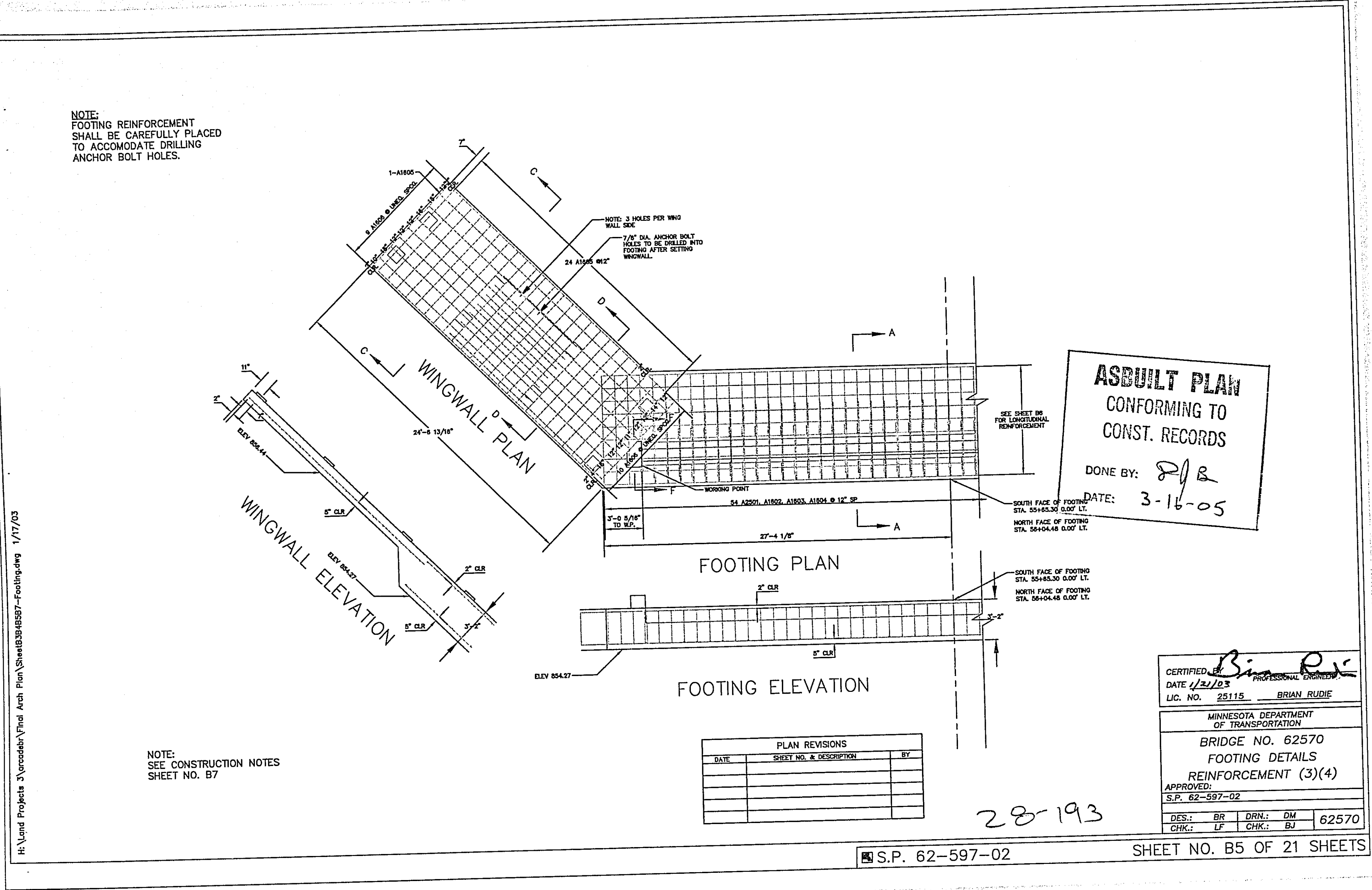
CROSS SECTIONS
56+07.89 TO 56+90

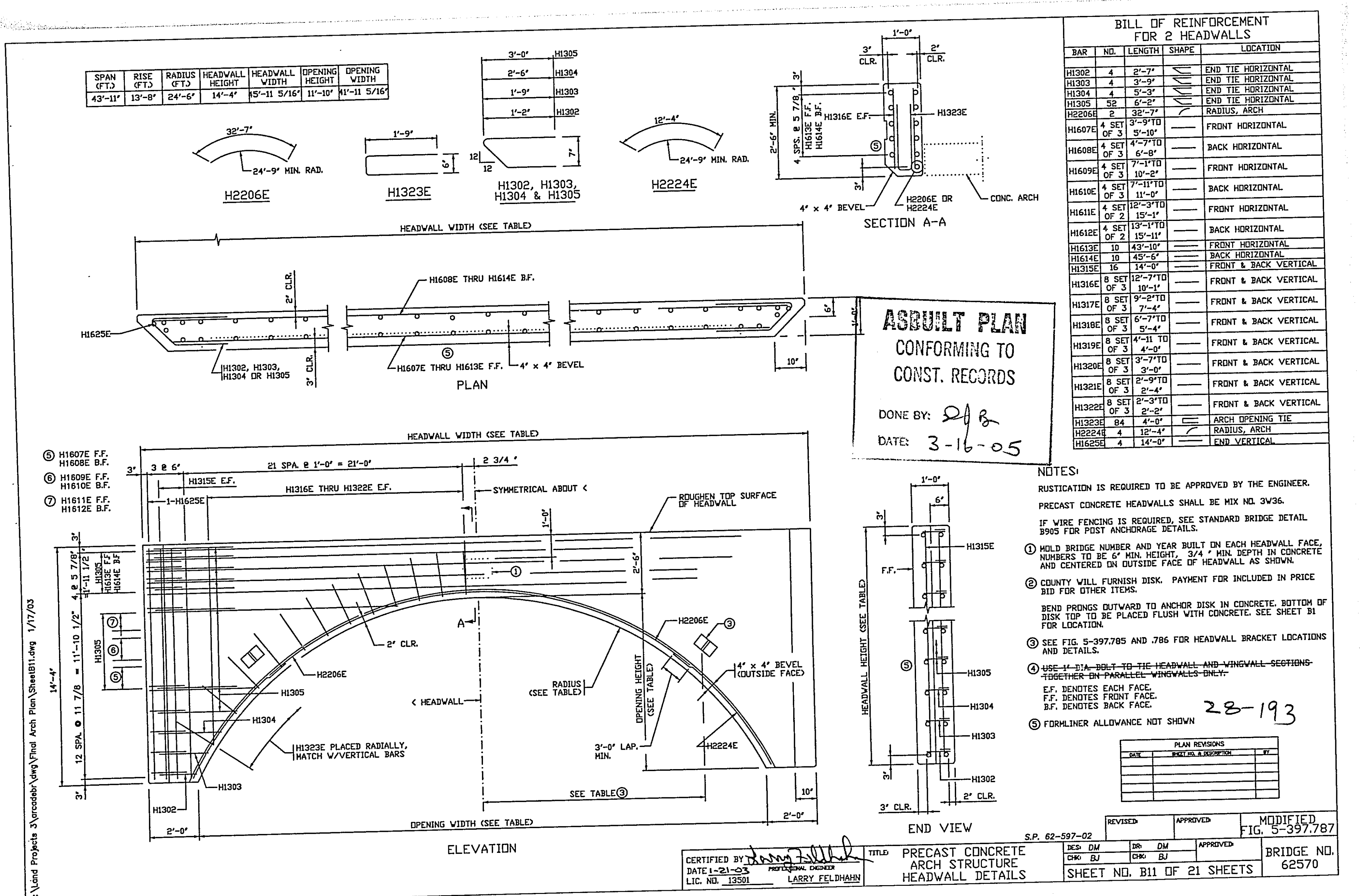
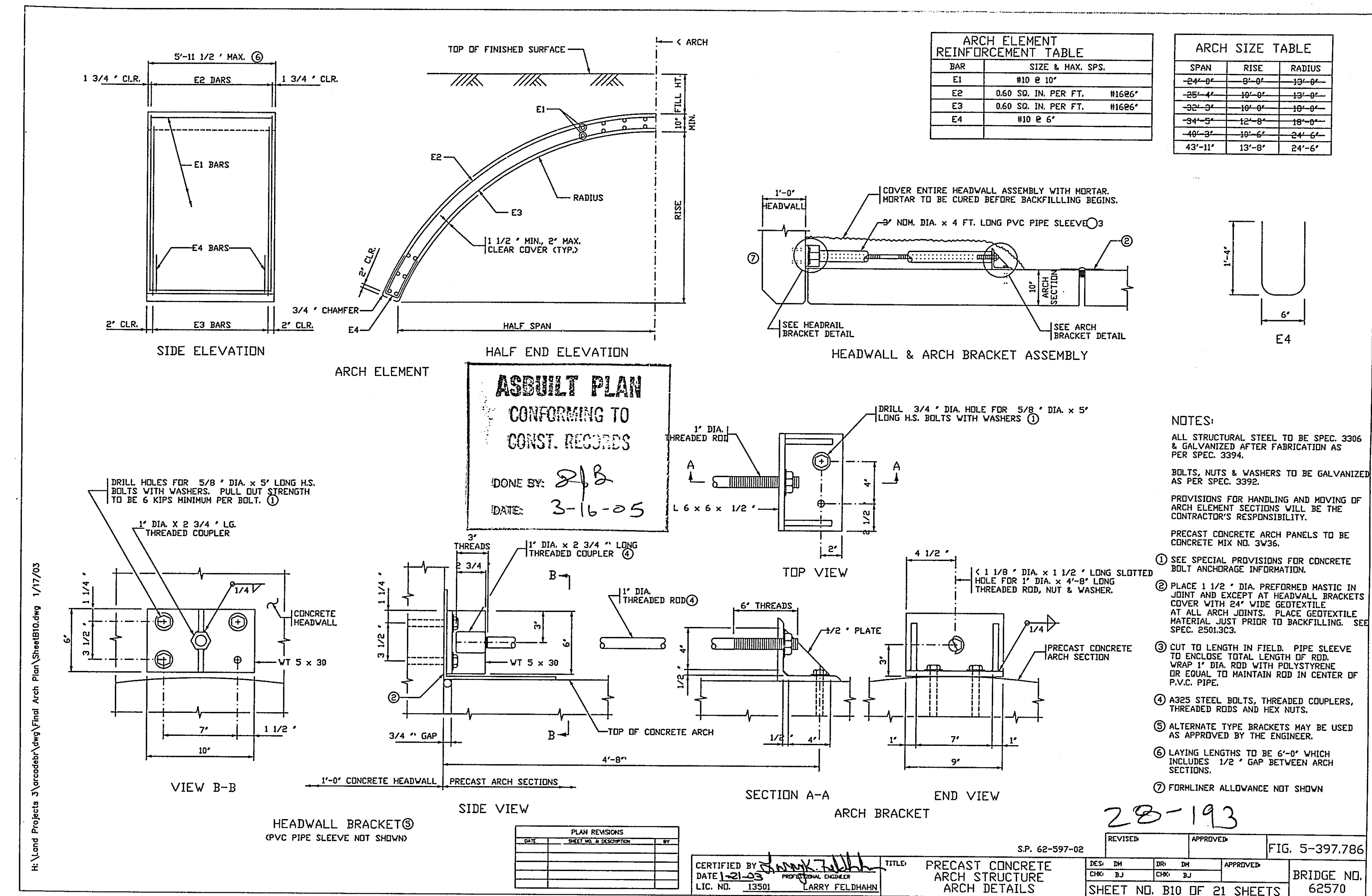
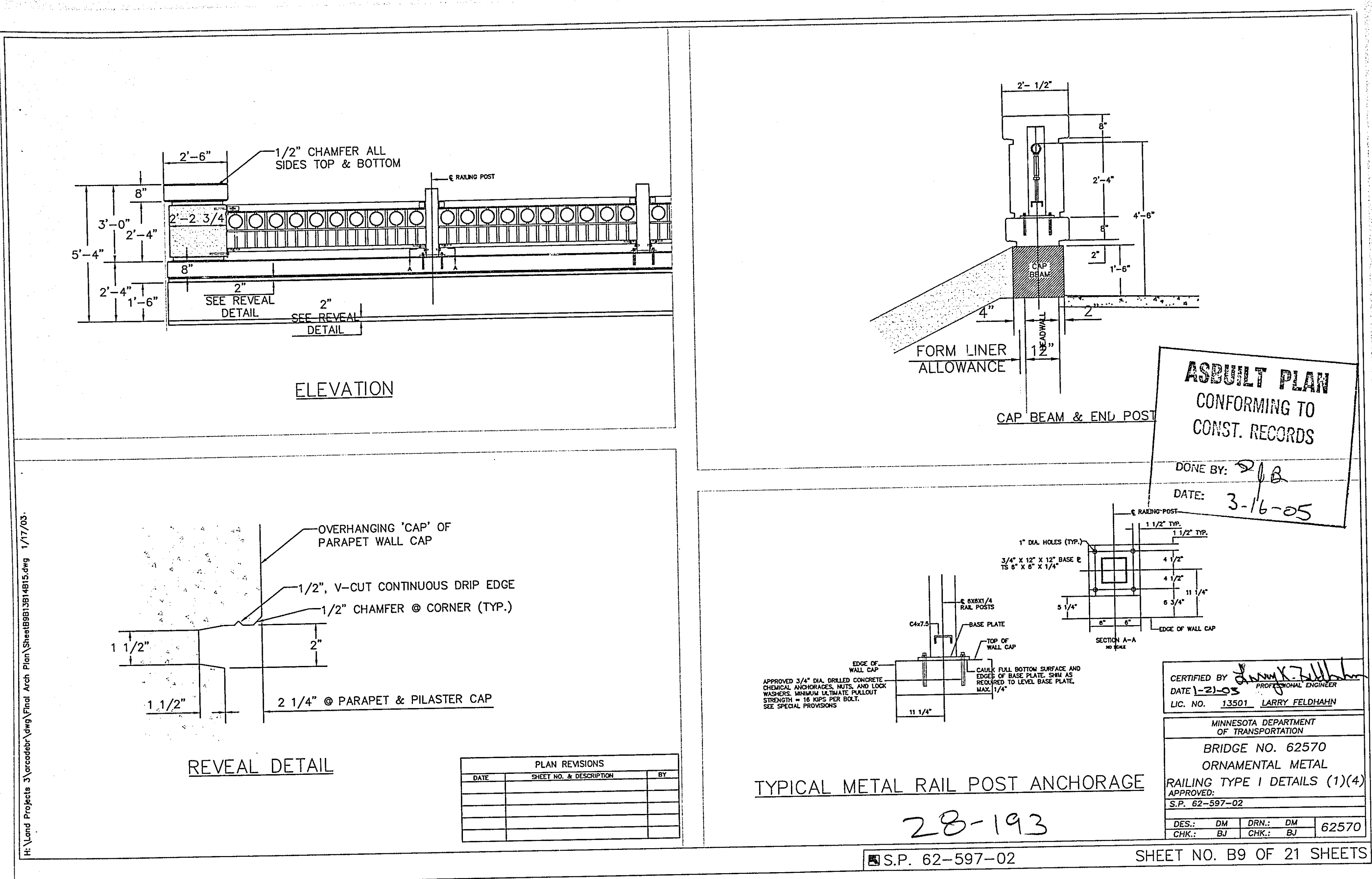
COUNTY PROJECT P 3022
STATE PROJ. NO. 62-597-02
Sheet No. 11 of 11 Sheets

NO.	R-DATE	BY:	DESC.
	11/20/92	A.J.	SHEET #6

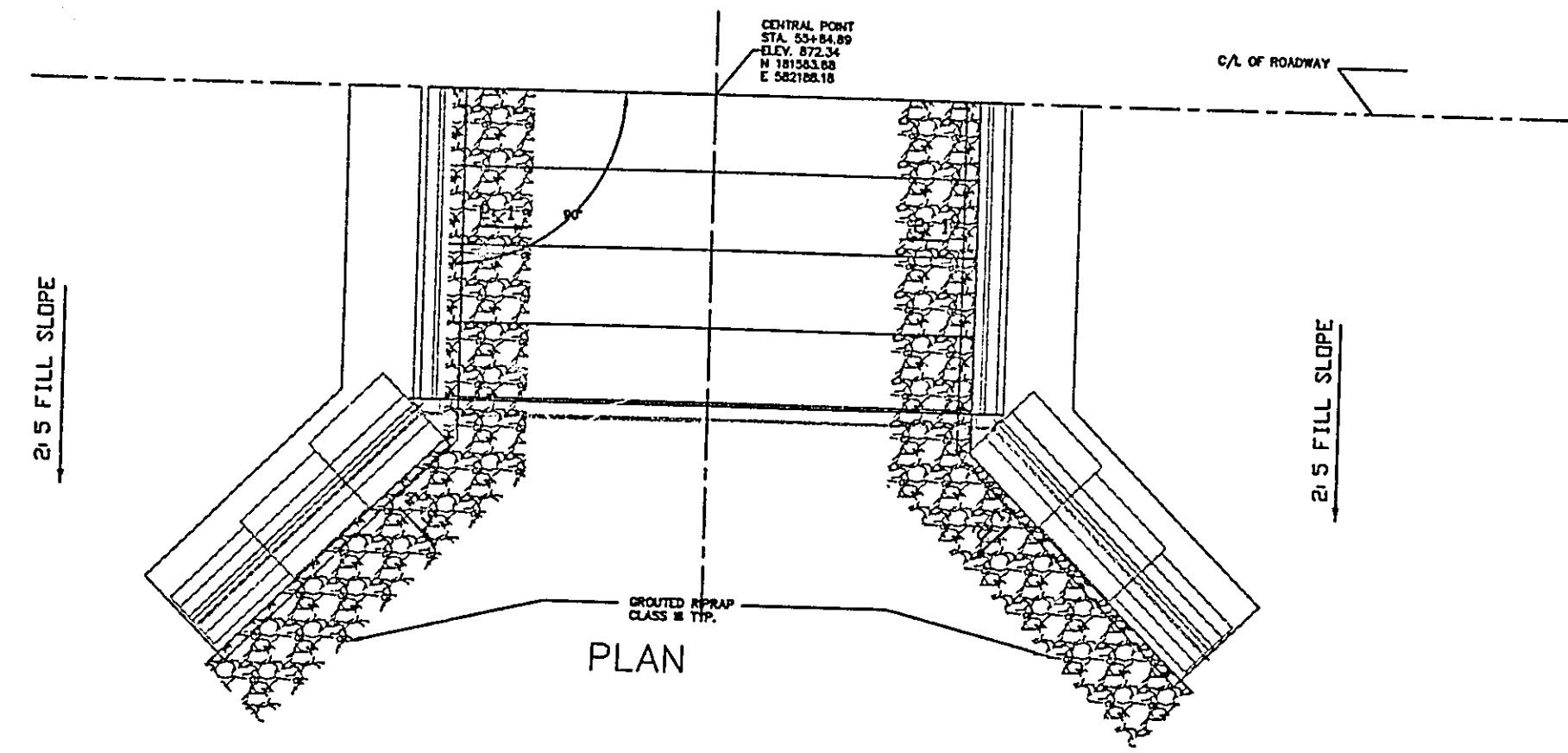
 RAMSEY COUNTY DEPT. OF PUBLIC WORKS
3377 N. RICE STREET
SHOREVIEW, MINNESOTA 55126

M.S.A.S. 125 (ARCADE STREET)
RAMSEY COUNTY
MAPLEWOOD/LITTLE CANADA, MN





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- GENERAL CONSTRUCTION NOTES:
1. TO AVOID EXCESSIVE VIBRATION IN THE ARCH, THE FOLLOWING PRACTICES MUST BE FOLLOWED DURING THE CONSTRUCTION OPERATION:
 - a) ECCENTRIC ROTATING WEIGHTS OF VIBRATING ROLLERS SHALL ROTATE AT LEAST 30 REVOLUTIONS PER SECOND.
 - b) VIBRATING ROLLERS SHALL NOT BE STARTED OR STOPPED WITHIN 6 FEET OF THE STRUCTURE.
 2. EXCAVATE AND STOCKPILE ALL SOILS ENCOUNTERED BELOW PROPOSED EMBANKMENT FINISHING PER MVDOT SPEC. 2105.20 FOR FUTURE USE AS SLOPE DRESSING.
 3. CONSTRUCTION EQUIPMENT LESS THAN 30 TONS TOTAL WEIGHT WILL BE ALLOWED TO CROSS OR BE OPERATED ADJACENT TO PRECAST ELEMENTS ONLY AFTER A MINIMUM OF 2 FEET OF COVER HAS BEEN PLACED AND COMPACTED.
 4. DEWATER AS DIRECTED BY THE ENGINEER UNTIL EXCAVATION, BACKFILL, COMPACTION, CONCRETE FOOTINGS AND GROUT ARE PLACED AND CURED.
 5. GRADE SLOPES ADJACENT TO VINGWALLS TO PREVENT EROSION.

ASBUILT PLAN
CONFORMING TO
CONST. RECORDS

DONE BY: *DLB*
DATE: 3-16-05

DETAIL NOTES:

1. ALL GRANULAR BACKFILL SHALL BE COMPACTED TO NOT LESS THAN 95% MAXIMUM DENSITY AS PER MVDOT SPEC. 2105.3F1 (ASTM D 1557). GRANULAR BACKFILL SHALL MEET OR EXCEED MVDOT SPEC. 3145.20 GRANULAR BACKFILL. ALL MATERIAL SHALL BE PLACED IN 6" COMPACTED LIFTS UNLESS THE CONTRACTOR CAN SHOW HE CAN OBTAIN 95% DENSITY WITH GREATER LIFTS. MVDOT SPEC. 2451.3C AND 2451.3D SHALL APPLY. THE BACKFILL MATERIAL ON BOTH SIDES OF THE STRUCTURE IS TO BE PLACED SO THAT THE DIFFERENCE IN ELEVATION ON ONE SIDE IS NEVER GREATER THAN 2 FEET HIGHER THAN THE OTHER SIDE.
2. HAND COMPACTION EQUIPMENT IS REQUIRED IN THE AREA WITHIN 3 FEET OF THE ARCH ELEMENTS, WALLS AND VINGWALLS.
3. RIPRAP LIMITS SHOWN ARE APPROX. ONLY, EXACT LIMITS TO BE DETERMINED BY THE ENGINEER.
18" INCHES RIPRAP
9" INCHES GRANULAR FILTER

28-193

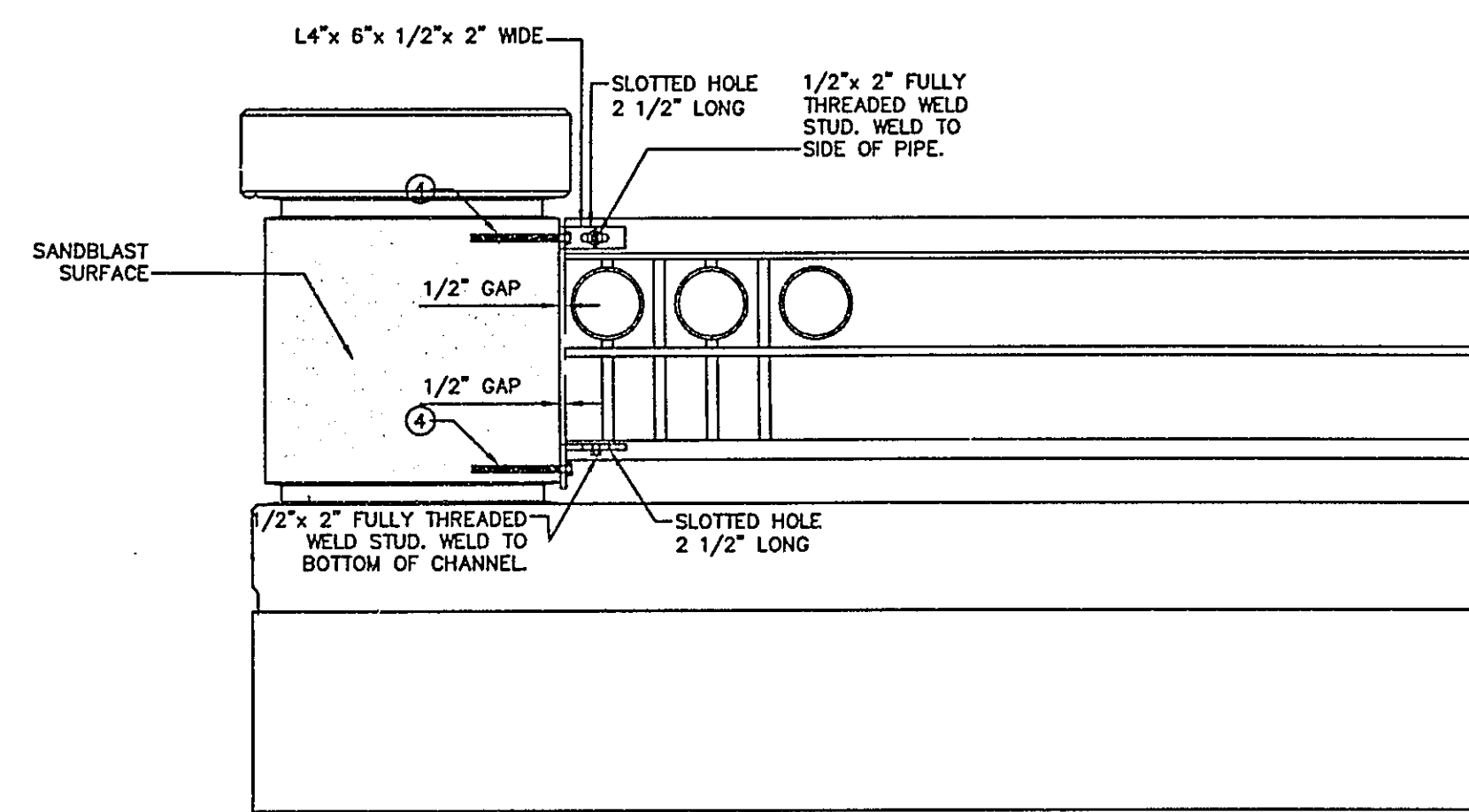
CERTIFIED BY: *Larry Feldhahn*
DATE: 1-21-03
LIC. NO. 13501 LARRY FELDHAHN

TITLE: PRECAST CONCRETE
ARCH STRUCTURE
EXCAVATION & BACKFILL

REVISIONS
REVISED: 14, 1987
APPROVED: *Larry Feldhahn*
S.P. 62-597-02
BRIDGE NO. 62570
SHEET NO. B13 OF 21 SHEETS

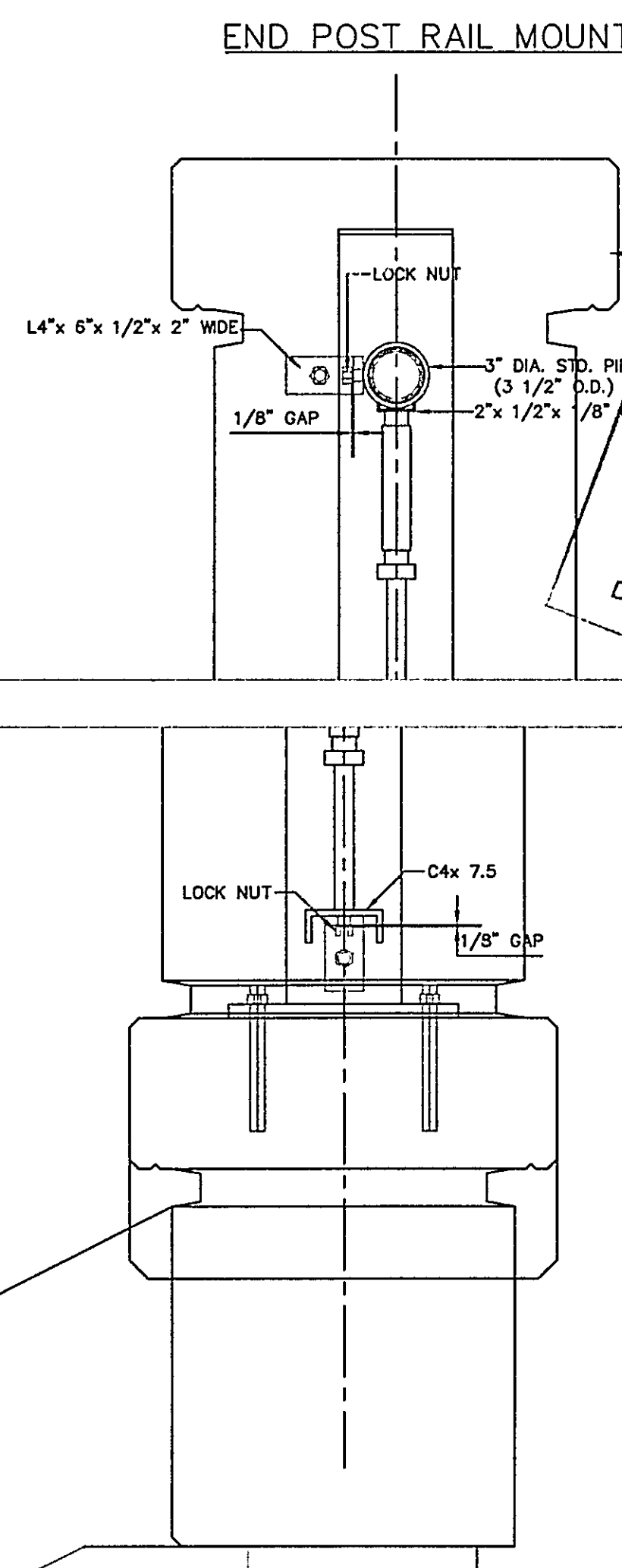
PLAN REVISIONS		
DATE	SHEET NO. & DESCRIPTION	BY

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END POST RAIL MOUNT

PLAN REVISIONS		
DATE	SHEET NO. & DESCRIPTION	BY



END POST RAIL MOUNT

GUARD RAIL ATTACHMENT
NOT SHOWN

28-193

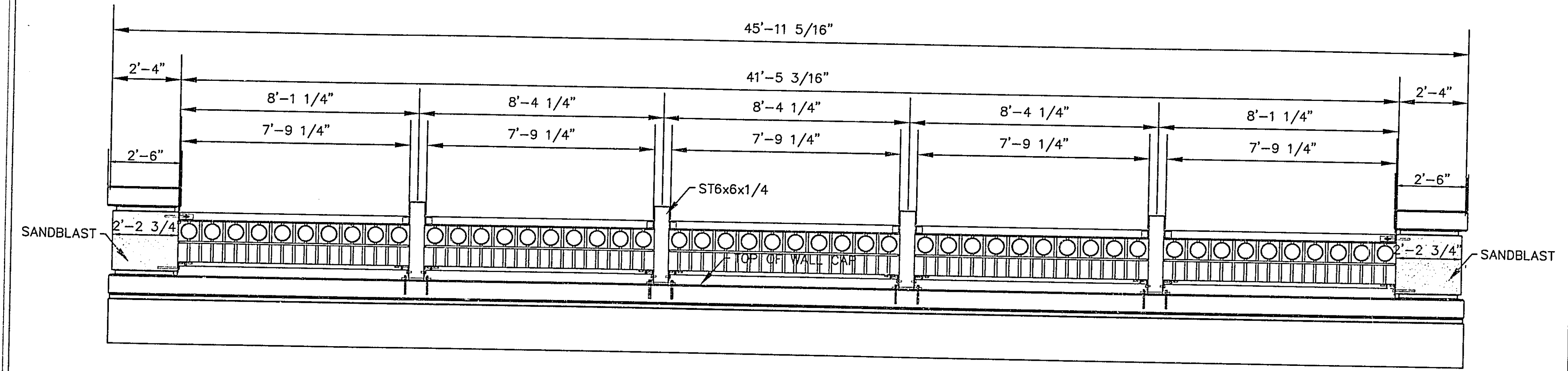
CERTIFIED BY: *Larry Feldhahn*
DATE: 1-21-03
LIC. NO. 13501 LARRY FELDHAHN

MINNESOTA DEPARTMENT
OF TRANSPORTATION
BRIDGE NO. 62570
ORNAMENTAL METAL
RAILING TYPE I DETAILS (3)(4)

APPROVED: *Larry Feldhahn*
S.P. 62-597-02
DES.: DM DRN.: DM
CHK.: BJ CHK.: BJ 62570

S.P. 62-597-02 SHEET NO. B15 OF 21 SHEETS

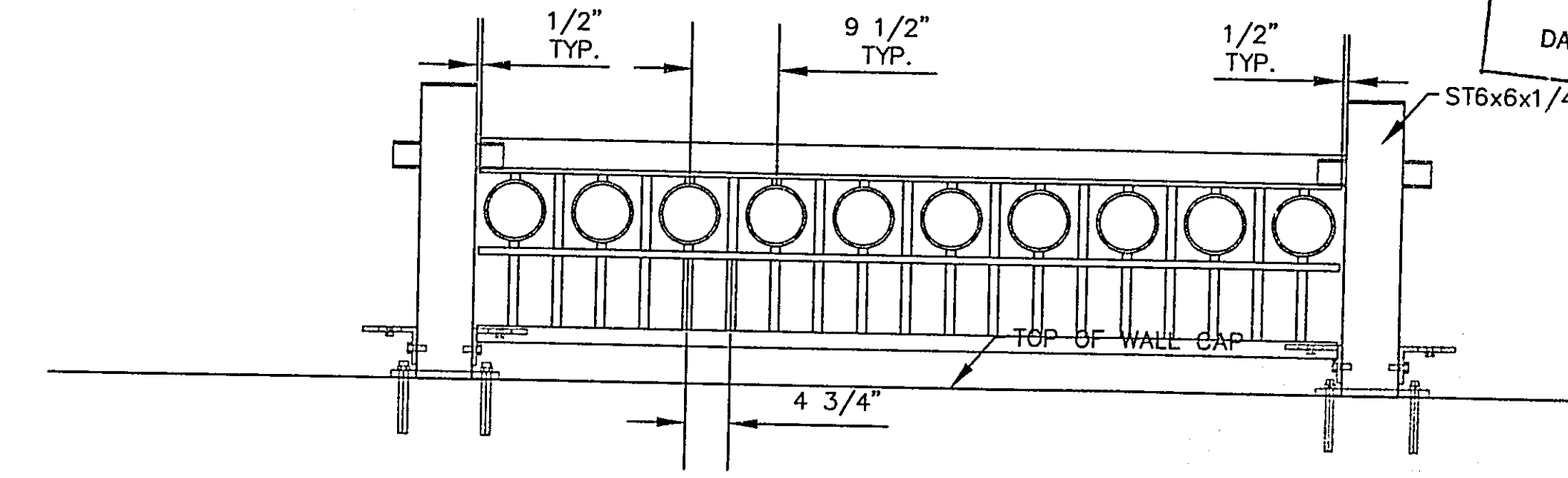
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ELEVATION

ASBUILT PLAN
CONFORMING TO
CONST. RECORDS

DONE BY: *DLB*
DATE: 3-16-05



ELEVATION AT TYPICAL RAIL POST

PLAN REVISIONS		
DATE	SHEET NO. & DESCRIPTION	BY

CERTIFIED BY: *Larry Feldhahn*
DATE: 1-21-03
LIC. NO. 13501 LARRY FELDHAHN

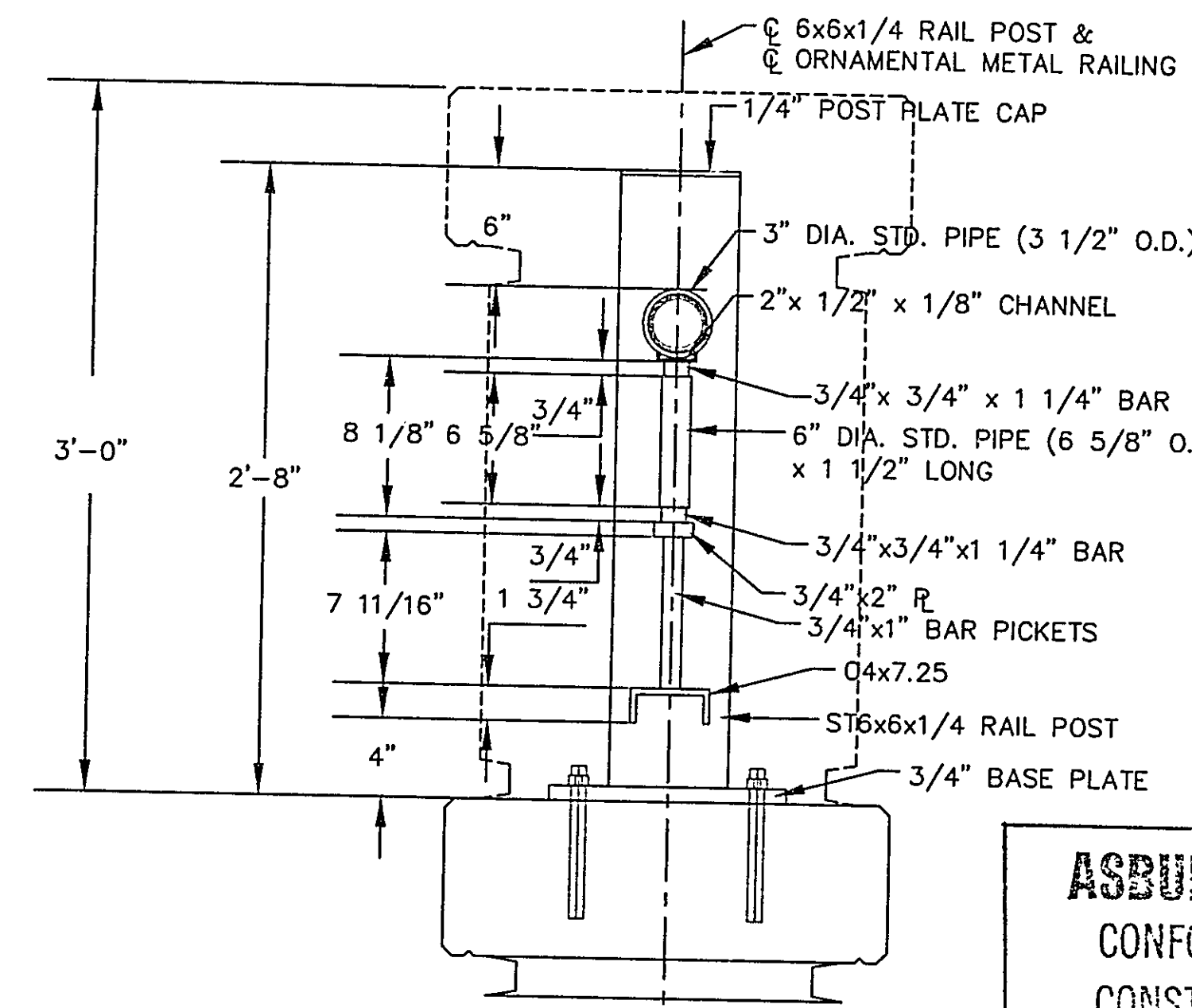
MINNESOTA DEPARTMENT
OF TRANSPORTATION
BRIDGE NO. 62570
ORNAMENTAL METAL
RAILING TYPE I DETAILS (2)(4)

APPROVED: *Larry Feldhahn*
S.P. 62-597-02

DES.: DM DRN.: DM
CHK.: BJ CHK.: BJ 62570

S.P. 62-597-02 SHEET NO. B14 OF 21 SHEETS

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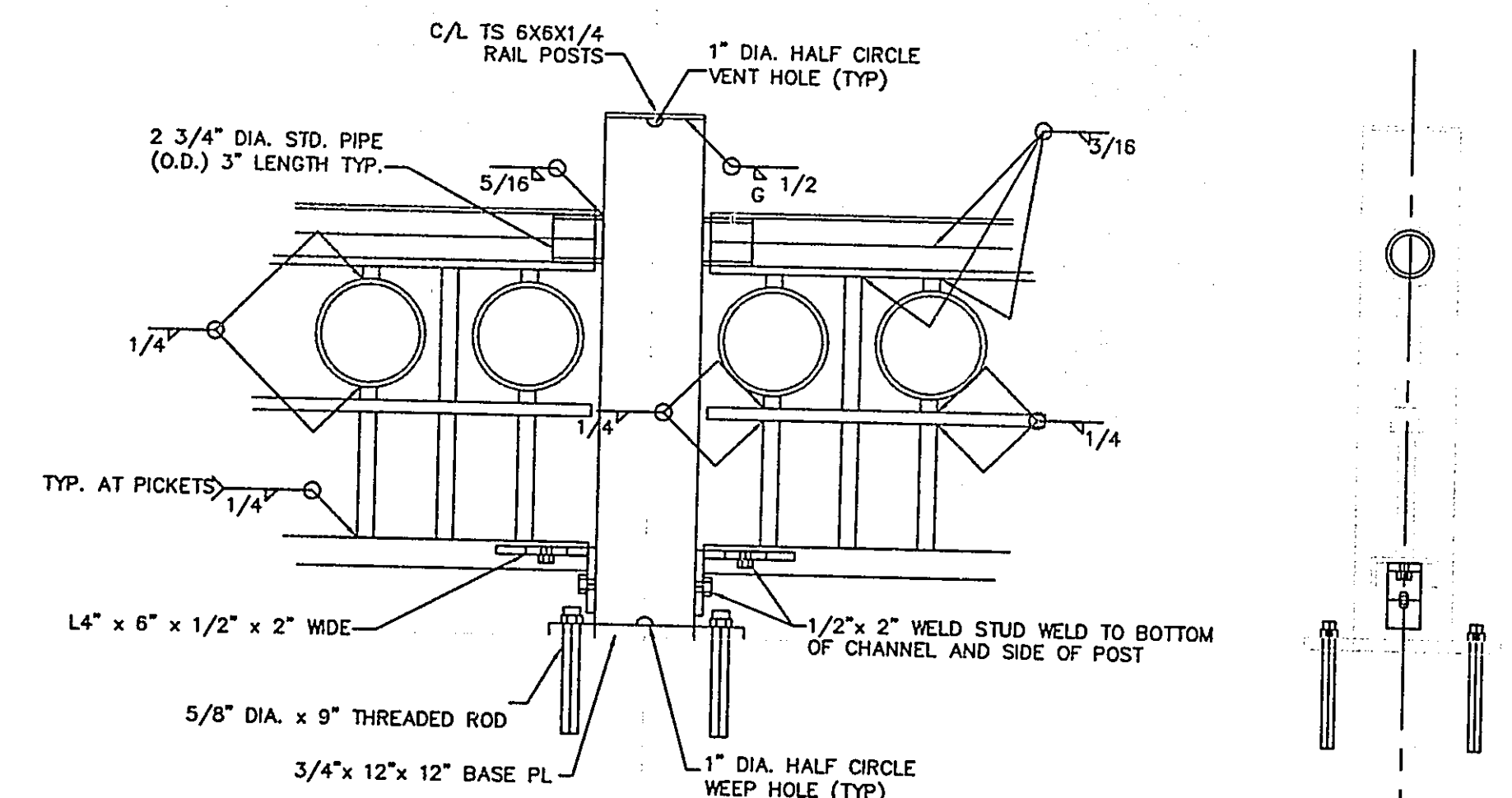


SECTION AT RAIL POST

ASBUILT PLAN
CONFORMING TO
CONST. RECORDS

DONE BY: *DLB*
DATE: 3-16-05

PLAN REVISIONS		
DATE	SHEET NO. & DESCRIPTION	BY



WELD DETAIL

GENERAL NOTES:

- ALL POSTS TO BE VERTICAL.
- PRICE BID FOR "ORNAMENTAL METAL RAILING" INCLUDES ALL STEEL SHOWN ON THIS SHEET INCLUDING ANCHORAGE.
- CONCRETE END POST MATERIALS ARE INCLUDED IN SUPERSTRUCTURE QUANTITIES. SEE CONCRETE POST SHEET.
- RAILPOST SPACING IS MEASURED HORIZONTALLY ALONG TOP OF SIDEWALK.
- FOR RAILPOST SPACING SEE SUPERSTRUCTURE SHEET.
- LENGTH OF ORNAMENTAL METAL RAILING FOR PAYMENT IS MEASURED BETWEEN INSIDE FACES OF CONCRETE POSTS OR INSIDE FACE OF STEEL POSTS.
- GRINDING WILL NOT BE PERMITTED AFTER MATERIAL IS GALVANIZED.

PRICE BID FOR STRUCTURAL TUBE RAILING INCLUDES MATERIALS AND PLACEMENT OF RAILING ANCHORS, POSTS, RAILING, ELECTRICAL GROUNDS, AND ALL OTHER MATERIAL ABOVE TOP OF PARAPET WALL.

GALVANIZE ALL HARDWARE PER SPEC. 3392.

ORNAMENTAL METAL RAILING, GUARDRAIL CONNECTION, AND RAIL POST ANCHORAGE TO BE STRUCTURAL STEEL, SPEC. 3306.

SEE SPECIAL PROVISION FOR PAINTING OF RAILING.

NOTES:

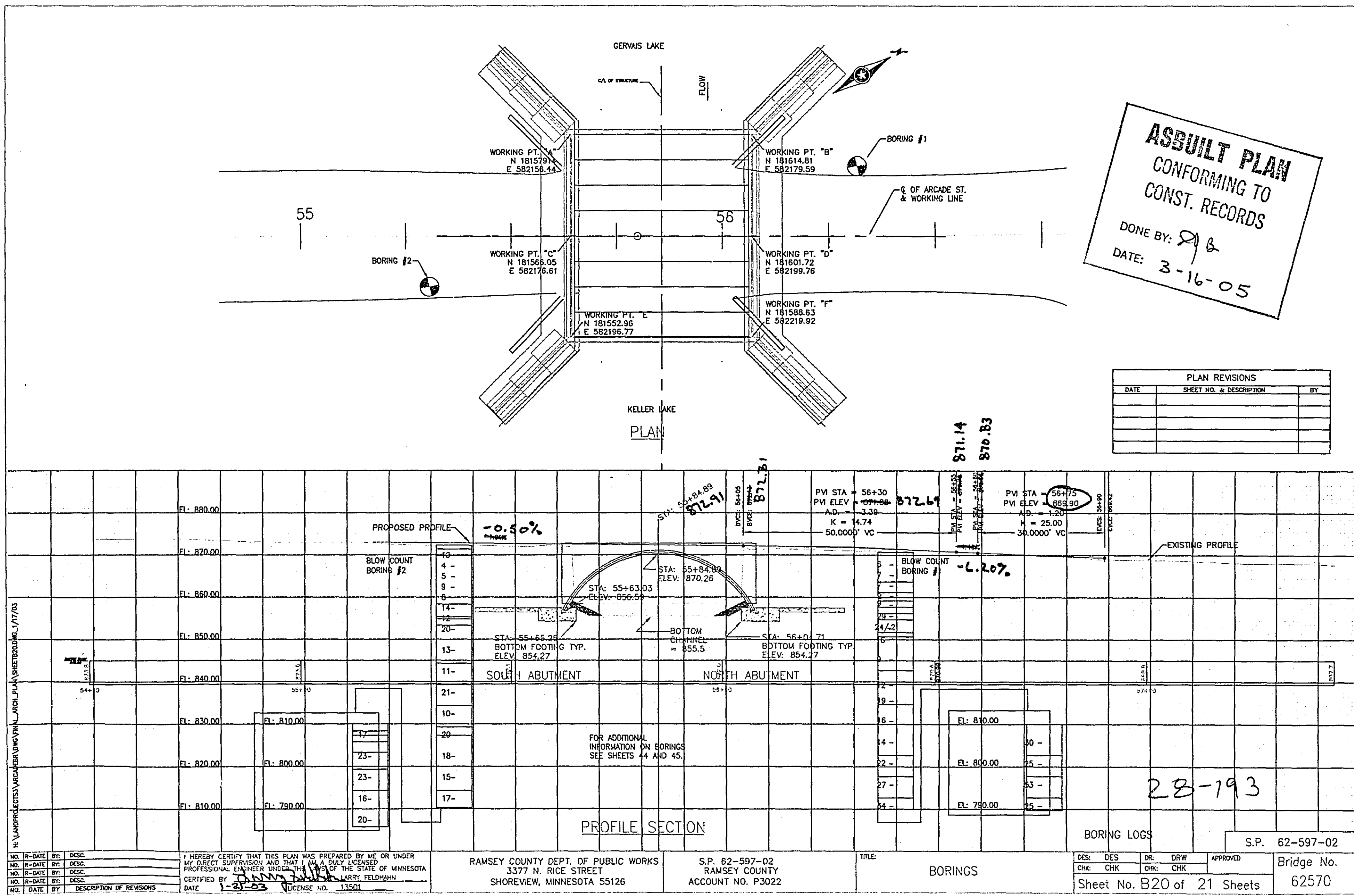
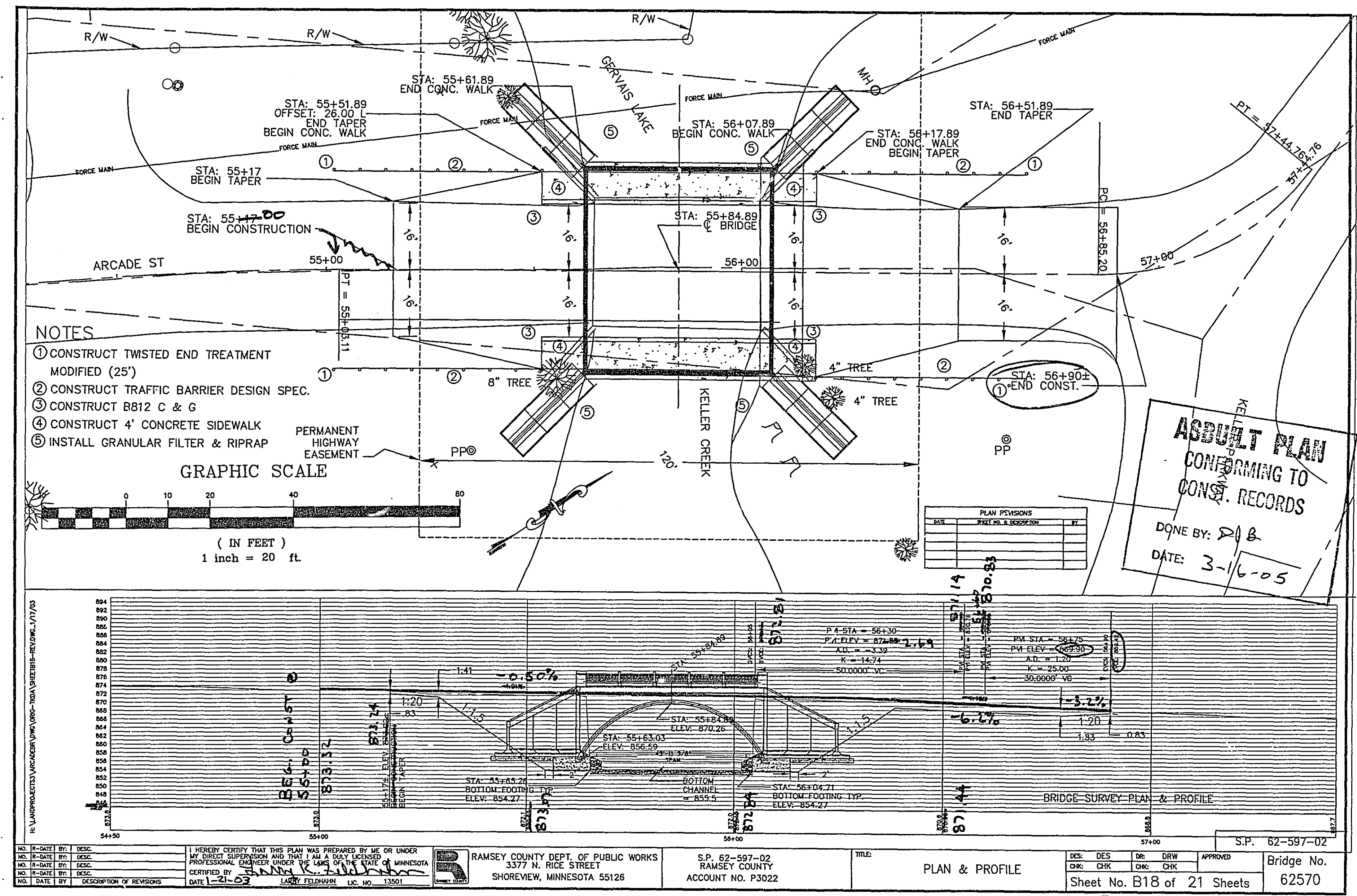
1. ALL DIMENSIONS GIVEN ARE HORIZONTAL. CONTRACTOR SHALL FIELD VERIFY DIMENSIONS AS NEEDED BEFORE FABRICATION. NOTIFY ENGINEER OF ANY DISCREPANCIES.
2. CONTRACTOR MAY USE ANOTHER PANEL TYPE SHOWN, IF APPROVED BY ENGINEER.
3. DIMENSIONS "B", "C", "E" ARE TO C/L OF PICKET.
4. 5/8" DIA. x 9" THREADED ROD WITH CHEMICAL ANCHORAGE PROVIDING 8 KIPS MINIMUM PULL-OUT STRENGTH. SEE SPECIAL PROVISIONS.

CERTIFIED BY: *Larry Feldhahn*
DATE: 1-21-03
LIC. NO. 13501 LARRY FELDHAHN

MINNESOTA DEPARTMENT
OF TRANSPORTATION
BRIDGE NO. 62570
ORNAMENTAL METAL
RAILING TYPE I DETAILS (4)(4)

APPROVED: *Larry Feldhahn*
S.P. 62-597-02
DES.: DM DRN.: DM
CHK.: BJ CHK.: BJ 62570

S.P. 62-597-02 SHEET NO. B16 OF 21 SHEETS



CONCRETE OVERLAY

☐ LOW SLUMP

☒ OTHER BITUMINOUS / TOWER ASPHALT
TYPE OR MANUFACTURER

EXPANSION JOINTS

JOINT MANUFACTURER _____
NAME AND ADDRESS (CITY, STATE)

MANUFACTURER'S IDENTIFICATION _____
MFR'S No. AND/OR LETTER DESIGNATION FOR JOINT USED

GLAND MANUFACTURER _____
NAME AND ADDRESS (CITY, STATE)

SIZE OF GLAND _____

MANUFACTURER'S IDENTIFICATION _____
MFR'S No. AND/OR LETTER DESIGNATION FOR GLAND USED

BEARING PADS

NEOPRENE PAD MANUFACTURER _____
NAME AND ADDRESS (CITY, STATE)

SPECIAL SURFACE TREATMENT

TYPE: MN/DOT B2 5715 COLOR: MULTI COLOR

FINISHING ROADWAY FACES OF BARRIER RAILING

TYPE: _____ COLOR: PEARL

ANTI-GRAFFITI COATING

MANUFACTURER T.I.L. PRODUCTS
NAME AND ADDRESS (CITY, STATE)

PRODUCT NAME: PERMACLEAN LOCATION: _____
1496

PAINT SYSTEM

Mn/DOT CONSTRUCTION SPECIFICATION NUMBER 2478
2476 OR 2478 OR 2479

MANUFACTURER SHERWIN WILLIAMS CO 101 PROSPECT AVENUE
NAME AND ADDRESS (CITY, STATE) CLEVELAND, OHIO
44115

PRIME COAT B67^{AS} RECOATABLE
Mn/DOT MATERIAL SPECIFICATION NUMBER

INTERMEDIATE COAT TINTED FEO 5456
Mn/DOT MATERIAL SPECIFICATION NUMBER

FINISH COAT TINTED FEO 5456 RED OXIDE, TAN, GREY
Mn/DOT MATERIAL SPECIFICATION NUMBER COLOR

PLAN QUALITY

RATE 1 (AGREE), 2 (NEUTRAL), OR 3 (DISAGREE, PLEASE COMMENT BELOW)

DIMENSIONING AND DETAILING ADEQUATELY DESCRIBED REQUIRED CONSTRUCTION _____

BAR LISTS AND QUANTITIES WERE TYPICALLY COMPLETE AND FREE OF ERRORS _____

SCALE OF DRAWINGS AND OVERALL LEGIBILITY OF LINES AND TEXT WAS GOOD _____

(SB) SPECIAL PROVISIONS ADEQUATELY DESCRIBED SPECIAL WORK AND PAYMENT _____

COMMENTS: _____

NUMBER OF BRIDGE SUPPLEMENTAL AGREEMENTS 1 COST: \$ 1,840

LIST SIGNIFICANT ERRORS OR OMISSIONS IN PLAN DETAILS OR PAY QUANTITIES IN THE SPACE PROVIDED AT RIGHT.

OTHER ITEMS ①

① UTILITIES ADDED DURING CONSTRUCTION AND SPECIALTY ITEMS.

FINAL QUANTITIES ENTERED ON SCHEDULE OF QUANTITIES: YES ☒ NO ☐

SUMMARY OF SIGNIFICANT AS-BUILT CHANGES

RAISED PROFILE GRADE OVER BRIDGE

ASBUILT PLAN
CONFORMING TO
CONST. RECORDS

DONE BY: DJB

DATE: 3-16-05

THE AS-BUILT INFORMATION WAS ADDED TO THE PLAN BY:

DAN BODELSON
INSPECTOR(S)

3-16-05
DATE

CHECKED BY: _____ PROJECT ENGINEER / SUPERVISOR DATE

SUBMIT THIS FORM WITH THE PROJECT FINAL, AND SUBMIT A COPY TO THE OFFICE OF BRIDGES AND STRUCTURES - ATTN: REGIONAL CONSTRUCTION ENGINEER (MS610).

REVISION: 05-22-01
APPROVED: _____
STATE BRIDGE ENGINEER



RAMSEY COUNTY DEPT. OF PUBLIC WORKS
3377 N. RICE STREET
SHOREVIEW, MINNESOTA 55126

AS-BUILT DETAILS
(AS NEEDED)

TITLE: AS-BUILT BRIDGE DATA	DES: CHK:	DR: CHK:	APPROVED:	BRIDGE NO. 62570
	SHEET NO. B21 OF 21 SHEETS			

FIG. 5-397.900