

FAI	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
290	2004-003 I	COOK	14	1

CONTRACT NO. 62720

D-91-146-04



STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
**PLANS FOR PROPOSED  
NOISE WALL REPAIR**  
F.A.I. ROUTE: 290 (INTERSTATE 290 - WB)  
TWO LOCATIONS WEST OF WOLF ROAD  
SECTION: 2004-003 I  
COOK COUNTY  
C-91-146-04

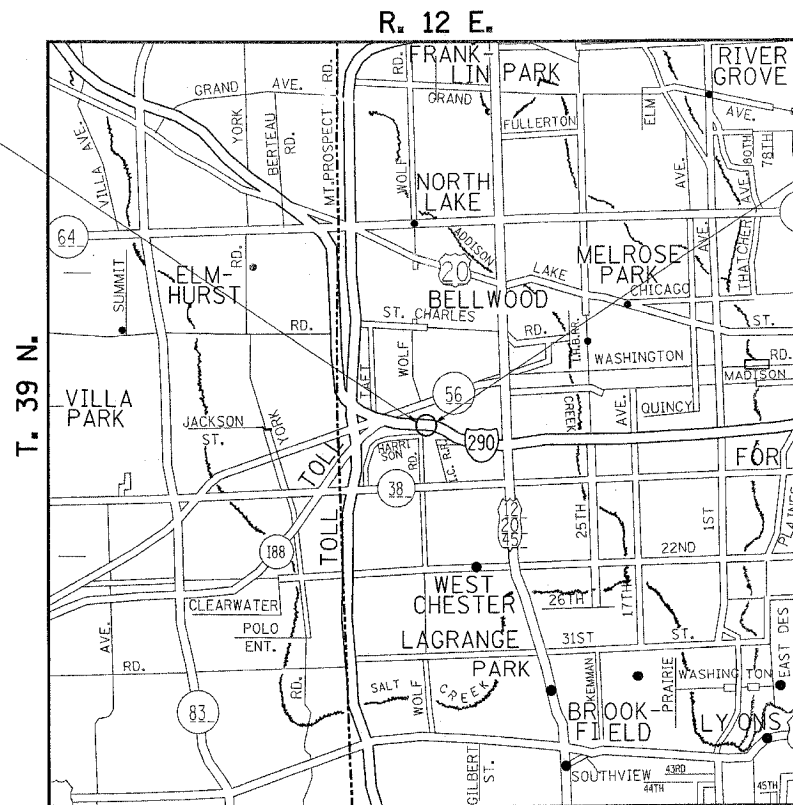
FOR INDEX OF SHEETS, SEE SHEET NO. 2

THE IMPROVEMENT IS LOCATED IN THE VILLAGE OF HILLSIDE

LOCATION 1  
IMPROVEMENT BEGINS  
STA. 311+050.889  
IMPROVEMENT ENDS  
STA. 311+062.889

LOCATION 2  
IMPROVEMENT BEGINS  
STA. 311+090.889  
IMPROVEMENT ENDS  
STA. 311+098.889

**TRAFFIC DATA**  
2002 ADT = 186,800  
POSTED SPEED LIMIT = 55 MPH



PROVISO TOWNSHIP  
LOCATION 1. GROSS LENGTH OF IMPROVEMENT = 40 FEET  
LOCATION 2. GROSS LENGTH OF IMPROVEMENT = 23 FEET  
TOTAL : GROSS LENGTH OF IMPROVEMENT = 63 FEET

J.U.L.I.E.  
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION  
1-800-892-0123

CONTRACT NO. 62720

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

SUBMITTED June 7, 20 05  
Diana O'Keefe  
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

July 1, 20 05  
Mike Hine  
ENGINEER OF DESIGN AND ENVIRONMENT

July 1, 20 05  
Victor Modest  
DIRECTOR, DIVISION OF HIGHWAYS

PRINTED BY THE AUTHORITY  
OF THE STATE OF ILLINOIS

\*REF-  
\*REF-  
\*REF-

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
290	2004-003 I	COOK	14	2
STA.	TO STA.			
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

CONTRACT NO. 62720

**SCOPE OF WORK:**

(NOT IN ORDER OF PREFERENCE)

1. REMOVE THE THREE UNITS (2-LOCATION 1 AND 1-LOCATION 2) OF DAMAGED NOISE WALL PANELS AND THEIR CAPS.
2. CUT AND REMOVE THE UPPER SECTION OF DAMAGED POST, DESIGNATED D-59, (W8 X 31). @ LOCATION 1
3. REMOVE 39'-0" OF THE DAMAGED BARRIER WALL. (AS SHOWN) (16'-0" - LOCATION 1 AND 23'-0" - LOCATION 2)
4. PREPARE THE CUT SECTION OF D-59 FOR SPLICING TO A NEW W8 X 31 SECTION. (LOCATION 1)
5. SPLICE A NEW W8 X 31 SECTION OVER CUT SECTION OF D-59 USING A BUTT WELD AND ASSURING COMPLETE VERTICALITY AND PLUMBNESS OF THE NEW SECTION. (LOCATION 1)
6. STRAIGHTEN POSTS, D-58, D-65 AND D-66. (1-LOCATION 1 AND 2-LOCATION 2)
7. PAINT POSTS D-58, D-59, D-65 AND D-66 IN MATCHING COLORS WITH THE EXISTING POST'S COLOR, AS REQUIRED.
8. INSTALL THREE UNITS OF THE PRECAST NOISE WALL PANELS AND THEIR CAPS. (2-LOCATION 1 AND 1-LOCATION 2)
9. RECONSTRUCT THE 39'-0" SECTION OF BARRIER WALL. (AS SHOWN) (16'-0" LOCATION 1 AND 23'-0" LOCATION 2)
10. CLEAN THE CONSTRUCTION SITE, RESTORING THE SITE TO ITS ORIGINAL CONDITION AS CLOSE AS POSSIBLE.

**INDEX OF SHEETS**

SHEET NUMBER	DESCRIPTION
1	TITLE SHEET
2	INDEX OF SHEETS, SCOPE OF WORK, STATE STANDARDS, AND GENERAL NOTES
3	SUMMARY OF QUANTITIES
4	CURRENT SURVEY DATA
5	NOISE WALL REPAIR DETAIL (DETAILS)
6 - 13	EXISTING NOISE WALL DETAILS (FOR INFORMATION ONLY)
14	TC-17 TRAFFIC CONTROL DETAILS FOR FREEWAY SHOULDER CLOSURES, PARTIAL RAMP CLOSURES

**LIST OF STATE STANDARDS**

STANDARDS	DESCRIPTION
701400-02	APPROACH TO LANE CLOSURE, FREEWAY/EXPRESSWAY
701401-03	LANE CLOSURE, MULTILANE FOR SPEED >= 45 MPH
702001-05	TRAFFIC CONTROL DEVICES

**GENERAL NOTES:**

1. IN EXISTING PLANS CALL OUT W200 X 46 (METRIC) SECTION IS EQUIVALENT TO W8X31 (ENGLISH).
2. PLAN DIMENSIONS AND DETAILS RELATIVE TO THE EXISTING STRUCTURE HAVE BEEN TAKEN FROM THE 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 AND APPROVED ADJUSTMENTS PRIOR TO THE 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.
3. THE CONTRACTOR SHALL USE EXTREME CARE DURING THE NOISE WALL REPAIR SUCH THAT NO DAMAGE OCCURS ON ANY OTHER PART OF THE NOISE WALL. IF ANY DAMAGE OCCURS DURING THE REPAIR THEN THAT SHALL BE CORRECTED AT CONTRACTOR'S EXPENSE.
4. ALL THE REPLACED UNITS, SUCH AS BARRIER WALL, NOISE WALL PANELS, NOISE WALL PANEL CAPS, AND NOISE WALL POSTS, SHALL BE IDENTICAL IN DESIGN, PATTERN AND COLOR TO THE EXISTING UNITS.
5. THE DAMAGED UPPER PORTION OF THE D-59 POST IN LOC. 1 SHALL BE CUT AND REMOVED AFTER LEAVING A LOWER 12" STRAIGHT SECTION OF THE POST. CUTTING, REMOVAL AND DISPOSAL OF STEEL SECTION ARE INCLUDED IN THE COST OF FURNISHING AND ERECTING STRUCTURAL STEEL. THIS STRAIGHT SECTION SHALL BE USED FOR CLAMPING AND SHALL BE GROUND SMOOTH TO ASSURE A GOOD QUALITY BUTT WELD FOR SPLICING THE NEW W8 X 31 SECTION ON THE CUT SECTION OF THE D-59 POST. THE CUT SECTION SHALL RENDER A CUT SURFACE THAT SHALL ENSURE VERTICAL SPLICING OF THE NEW SECTION AND ASSURE THE FULL PLUMBNESS OF THE NEWLY SPLICED SECTION FOR THE INSTALLATION OF THE NEW PRECAST PANELS. PREPARING AND WELDING IS INCLUDED IN THE COST OF FURNISHING AND ERECTING STRUCTURAL STEEL.
6. THE SPLICING OF THE D-59 POST @ LOCATION 1 SHALL CONFORM TO THE RELEVANT REQUIREMENTS OF SECTION 512 OF THE STANDARD SPECIFICATIONS. OTHER TYPES OF SPLICING MAY BE ALLOWED SUBJECT TO THE APPROVAL OF THE ENGINEER. ANY PROPOSAL BY THE CONTRACTOR TO USE AN ALTERNATE SPLICE METHOD MUST INCLUDE ADEQUATE DOCUMENTATION DEMONSTRATING THAT FULL TENSION, SHEAR AND BENDING CAPACITIES WILL BE MET AND IT WILL NOT INTERFERE WITH THE PANEL'S ERECTION. APPROPRIATE WELDER QUALIFICATIONS WILL BE REQUIRED FOR POSITIONS AND PROCESSES USED IN WELD SPLICING THE POST. NONDESTRUCTIVE TESTING OF COMPLETED WELDS WILL BE LIMITED TO VISUAL INSPECTION.
7. THE CONTRACTOR SHALL WORK IN A FASHION SUCH AS TO CAUSE MINIMAL INCONVENIENCE AND DELAYS TO THE MOTORING PATRONS.
8. BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "J.U.L.I.E." AT (800) 892-0123 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE, WATER, CABLE, GAS AND OTHER UTILITIES. (48 HOUR NOTIFICATION IS REQUIRED).
9. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES.
10. THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT.
11. WHEN ARTIFICIAL LIGHTING IS UTILIZED IN NIGHT OPERATIONS, THE CONTRACTOR SHALL EXERCISE THE UTMOST PRECAUTION IN PREVENTING ADVERSE VISIBILITY TO THE MOTORING PUBLIC AND ADJOINING RESIDENTIAL AREAS.
12. ANY DAMAGE TO EXISTING PAVEMENT MARKINGS OUTSIDE THE AREA OF CONCRETE REMOVAL SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
13. THE CONTRACTOR SHALL CONTACT THE DISTRICT ONE TRAFFIC CONTROL SUPERVISOR AT (847) 705-4151 A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING WORK.
14. THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE ACCESS TO ABUTTING PROPERTIES AT ALL TIMES DURING THE CONSTRUCTION OF THIS PROJECT.
15. DO NOT SCALE PLANS FOR CONSTRUCTION DIMENSIONS.

**LEGEND:**

LOC. = LOCATION

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
**INTERSTATE 290**  
**NOISE WALL REPAIR**  
**INDEX OF SHEETS, GENERAL NOTES**  
**& STATE STANDARDS**

SCALE: VERT. \_\_\_\_\_  
 HORIZ. \_\_\_\_\_  
 DATE: MAY, 2005. DRAWN BY: SB/MVT  
 CHECKED BY: RSS

\*REF-  
\*REF-  
\*REF-

F.A.L. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
290	2004-003 I	COOK	14	3
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT	

CONTRACT NO. 62720

SUMMARY OF QUANTITIES

CODE NO.	ITEM DESCRIPTION	UNIT	URBAN TOTAL QUANTITY	LOCATION 1	LOCATION 2
				MCHD No. 678158 CONSTRUCTION TYPE CODE SFTY-2A QUANTITY	MCHD No. 713404 CONSTRUCTION TYPE CODE SFTY-2A QUANTITY
50500405	FURNISHING AND ERECTING STRUCTURAL STEEL	POUND	400	400	
X0301423	NOISE ABATMENT WALL, GROUND MOUNTED	SQ. FT.	711	474	237
X6970910	CONCRETE BARRIER, SINGLE FACE, 32 INCH HEIGHT	FOOT	39	16	23
X7011015	TRAFFIC CONTROL AND PROTECTION (EXPRESSWAYS)	L.SUM	1	0.5	0.5
67100100	MOBILIZATION	L.SUM	1	0.5	0.5
50102400	CONCRETE REMOVAL	CU. YDS.	3.3	1.3	2.0
X7015000	CHANGEABLE MESSAGE SIGN	CAL MO	1	0.5	0.5
X7013820	TRAFFIC CONTROL SURVEILLANCE, EXPRESSWAYS	CAL DA	30	15	15
X0322390	STRAIGHTEN BENT MEMBER	L.SUM	1	0.3	0.7

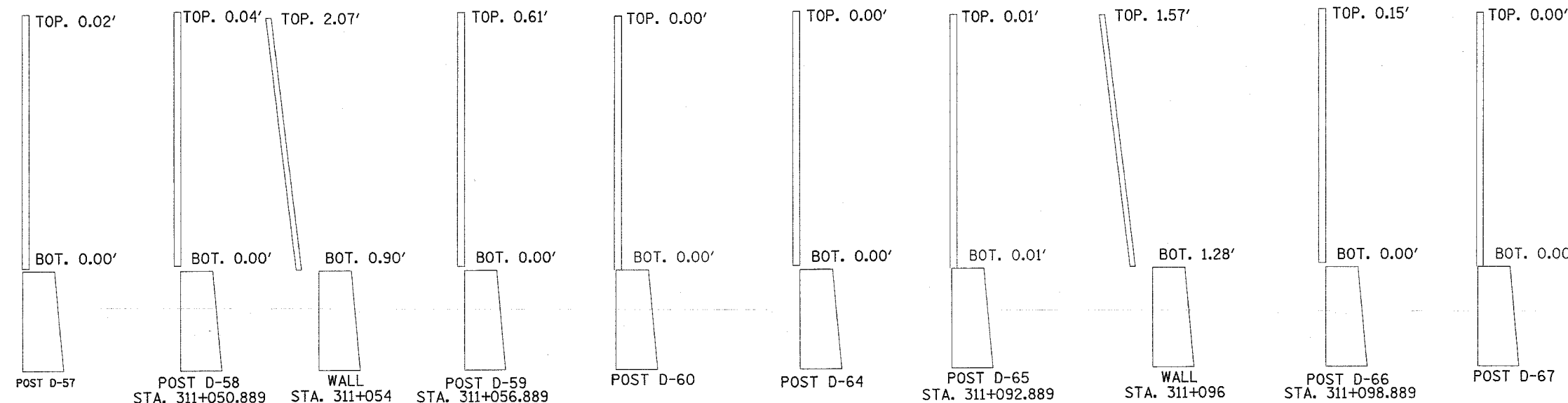
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
**INTERSTATE 290  
 NOISE WALL REPAIR  
 SUMMARY OF QUANTITIES**  
 SCALE: VERT.      DRAWN BY: SB/MVT  
           HORIZ.      CHECKED BY: RSS  
 DATE: APRIL, 2005.

Rev.

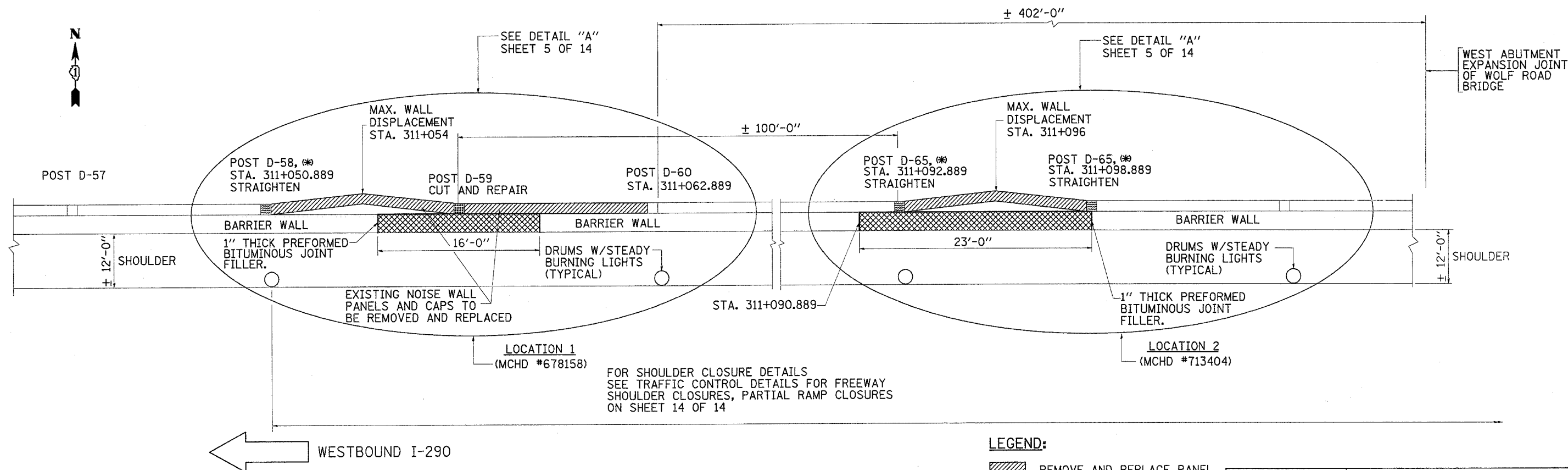
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
290	2004-003 I	COOK	14	4
STA.		TO STA.		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

CONTRACT NO. 62720



**NOTES:**  
 (\*\*\*) DEVIATIONS FROM PLUMB ARE BASED ON THE TOP OF THE BARRIER - WALL AT THE BACK BEING 0.00'  
 (\*) COST OF STRAIGHTENING POSTS D-58, D-65 AND D-66 INCLUDED IN COST OF "STRAIGHTEN BENT MEMBERS"  
 STATIONING OF POSTS ARE METRIC. POSTS ARE SPACED 6 m  $\epsilon$  to  $\epsilon$

DEVIATIONS OF WALL AND POSTS AT IMPACT LOCATIONS (\*\*\*)  
 (WESTBOUND LANE LOOKING EAST)



PLAN OF POSTS, AND DAMAGED NOISE AND BARRIER WALLS

**LEGEND:**

- REMOVE AND REPLACE PANEL
- REPAIR POST
- REMOVE AND REPLACE BARRIER WALL SECTION
- STRAIGHTEN POST

REVISIONS	
NAME	DATE

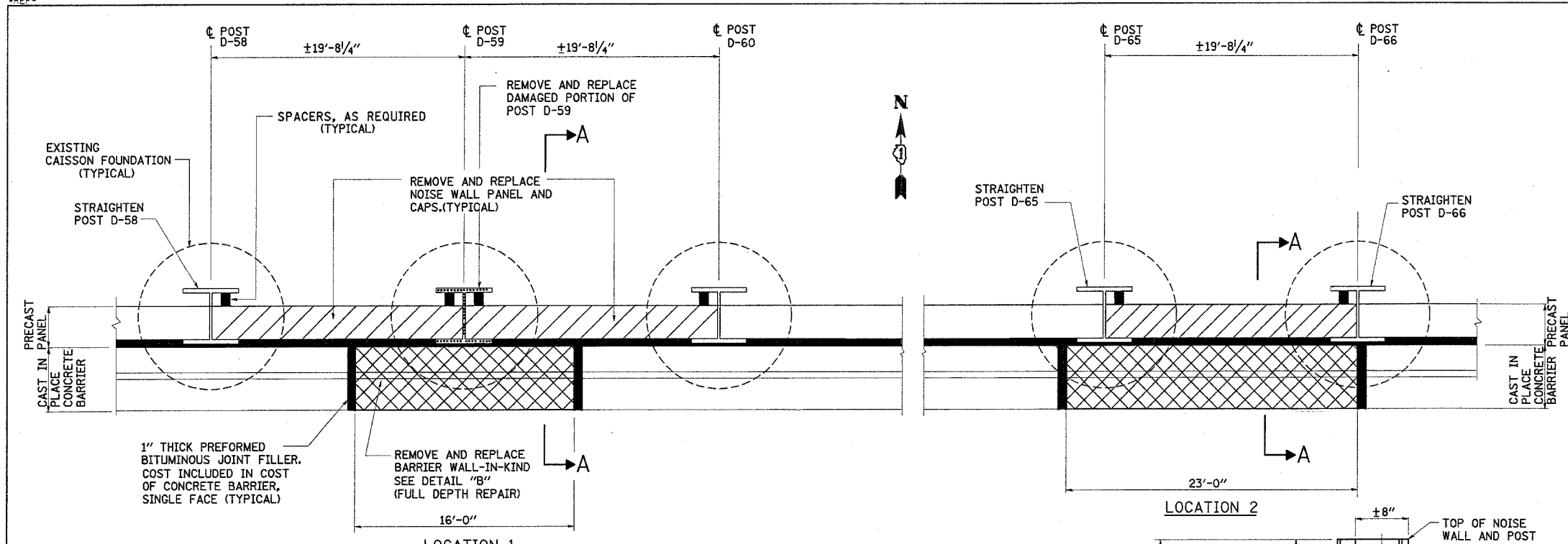
ILLINOIS DEPARTMENT OF TRANSPORTATION  
 INTERSTATE 290  
 NOISE WALL REPAIR  
 CURRENT SURVEY DATA  
 VERT. SCALE:      DRAWN BY: SB/MVT  
 HORIZ. SCALE:      CHECKED BY: RSS  
 DATE: MAY, 2005.

DISTRICT ONE DESIGN PLAN PREPARATION ENGINEER:  
 KEN ENG/ROBERT BORO (847) 705-4178

REF-  
REF-  
REF-

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
290	2004-003 I	COOK	14	5
STA.		TO STA.		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

CONTRACT NO. 62720

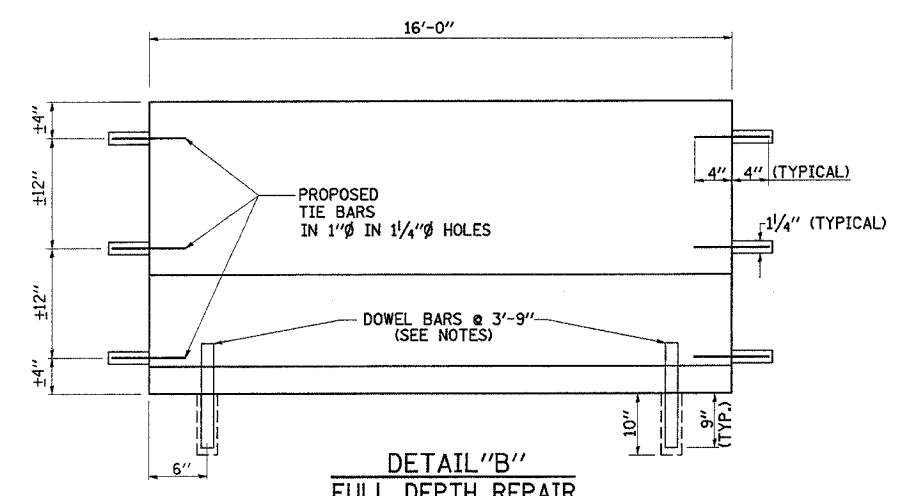


**NOTES:**

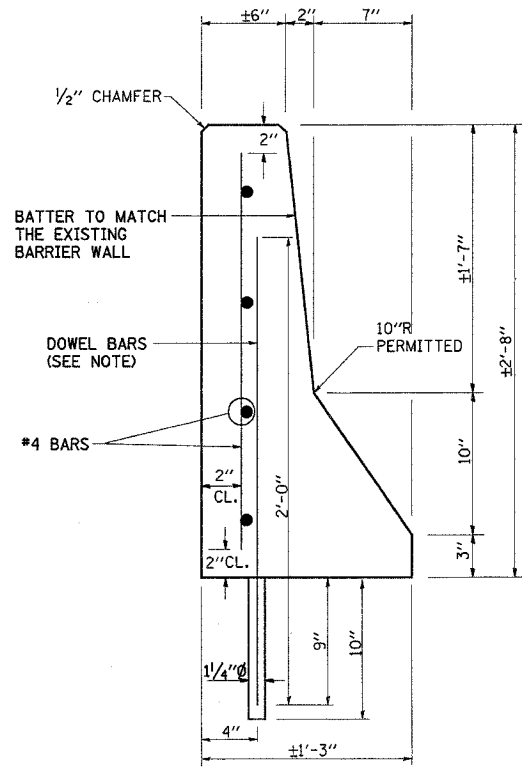
1. THE CONTRACTOR SHALL USE CAST-IN-PLACE BARRIER.
2. BARRIER WALL REINFORCEMENT SHALL CONSIST OF 4-#4 DEFORMED HORIZONTAL REINFORCEMENT BARS ON 9-INCH CENTERS AND #4 DEFORMED VERTICAL REINFORCEMENT BARS ON 2'-7" CENTERS. COST OF REINFORCEMENT INCLUDED IN CONCRETE BARRIER SINGLE FACE.  
  
ALTERNATIVELY, THE CONTRACTOR MAY USE WELDED WIRE FABRIC, 6 x 6 - W4, WEIGHING APPROXIMATELY 58 LBS PER 100 SQ. FT. CONFORMING TO THE REQUIREMENTS OF AASHTO M-55. COST OF WELDED WIRE FABRIC INCLUDED IN COST OF CONCRETE BARRIER SINGLE FACE.
3. DOWEL BARS SHALL BE 1"Ø DEFORMED REINFORCEMENT BARS AND OF A MINIMUM LENGTH AND MINIMUM EMBEDMENT AS SHOWN. DOWEL BARS THAT ARE PLACED IN EXISTING RIGID PAVEMENT OR EXISTING PAVED SHOULDER SURFACE SHALL BE SET EPOXY GROUTED IN DRILLED HOLES TO THE SATISFACTION OF THE ENGINEER.
4. DOWEL BARS SHALL BE ON 3'-9" CENTERS.
5. AT LOCATIONS WHERE CONCRETE BARRIER WALL ABUTS A RIGID OR AN EXISTING STRUCTURE AN 1" THICK PREFORMED BITUMINOUS JOINT FILLER CONFORMING TO THE SHAPE OF THE BARRIER WALL SHALL BE INSTALLED. CONCRETE NAILING OR OTHER SUITABLE METHODS SHALL BE USED TO HOLD THE BITUMINOUS JOINT FILLER IN PLACE.
6. COST OF TIE BARS, DOWEL BARS, DRILLING AND GROUTING FOR TIE BARS AND DOWEL BARS INCLUDED IN THE COST OF CONCRETE BARRIER, SINGLE FACE.
7. REPLACEMENT BARRIER WALLS SHALL BE FORMED UP AS SOON AS THE DAMAGED BARRIER WALLS ARE REMOVED. INSTALL FEW EXTRA TEMPORARY TRAFFIC BARRELS.

**DETAIL "A"**

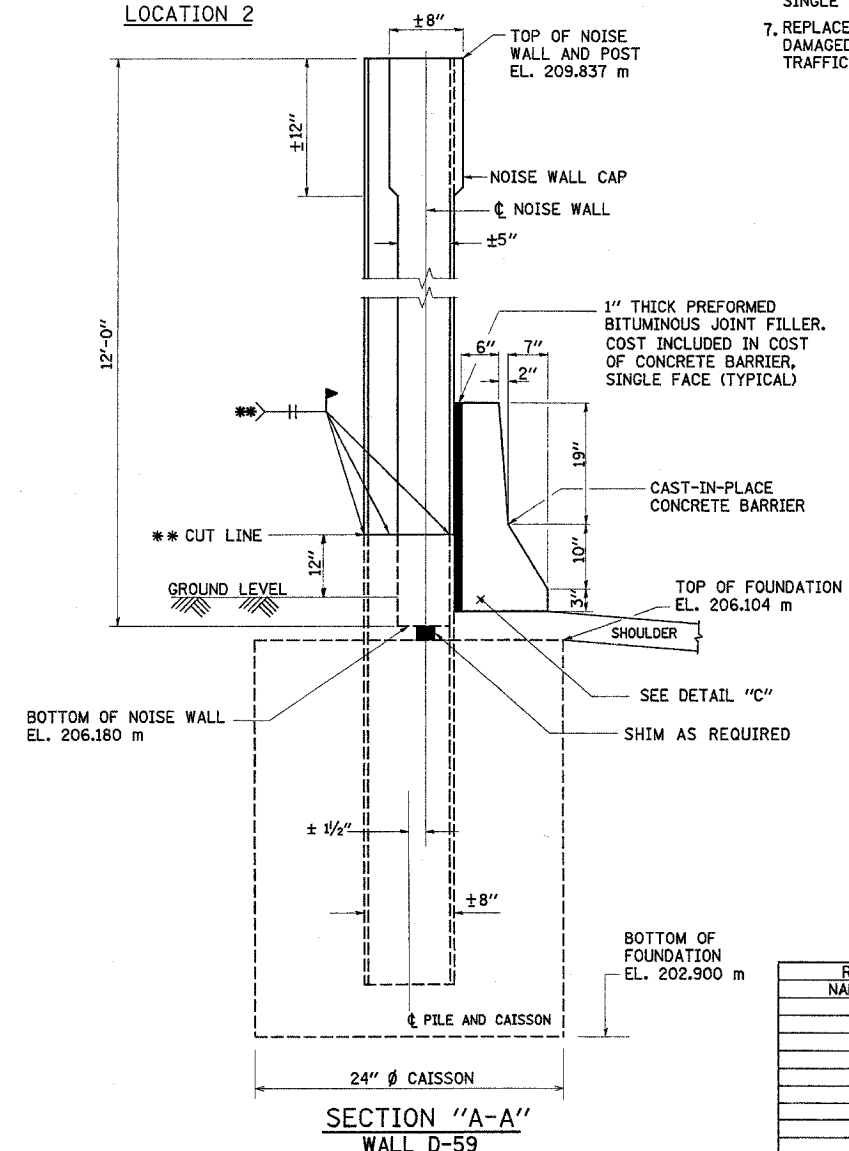
(REPLACEMENT UNITS SHALL MATCH IN DESIGN PATTERN AND COLOR WITH THE EXISTING UNITS).



**DETAIL "B"**  
FULL DEPTH REPAIR



**DETAIL "C"**  
SINGLE FACE BARRIER



**SECTION "A-A"**  
WALL D-59

**NOTE:**

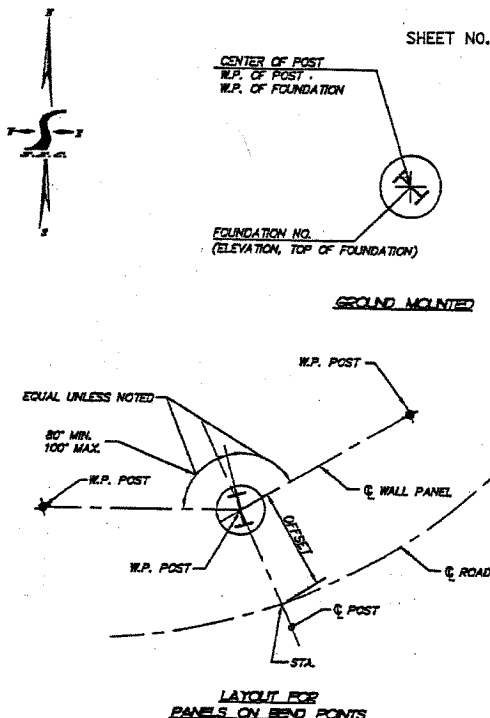
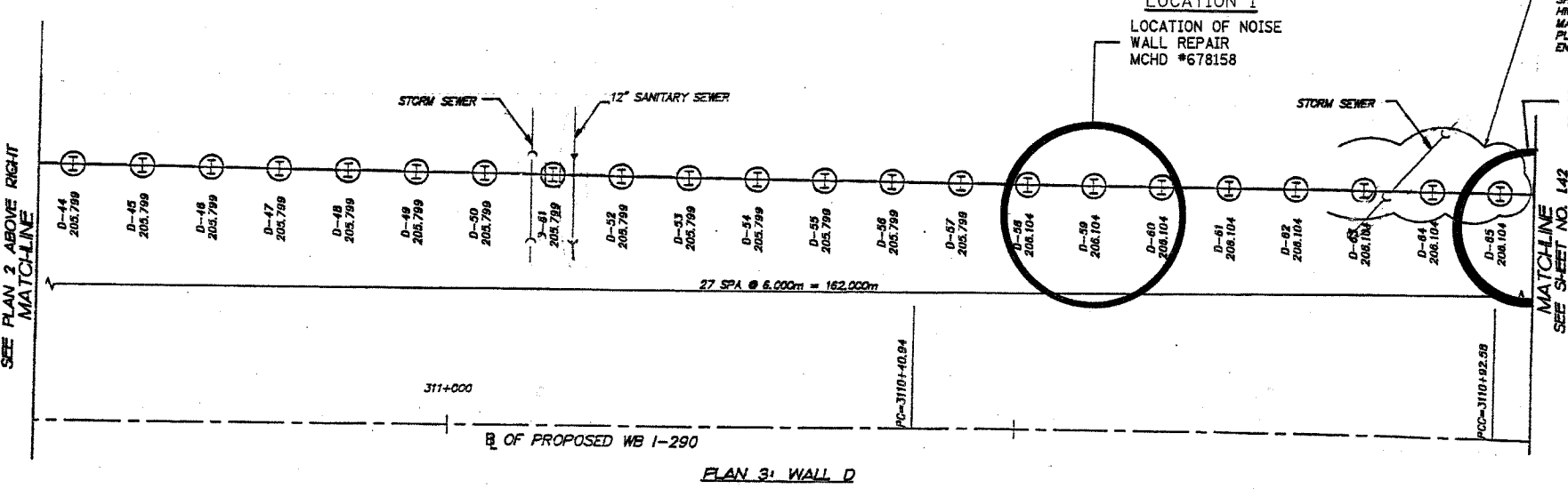
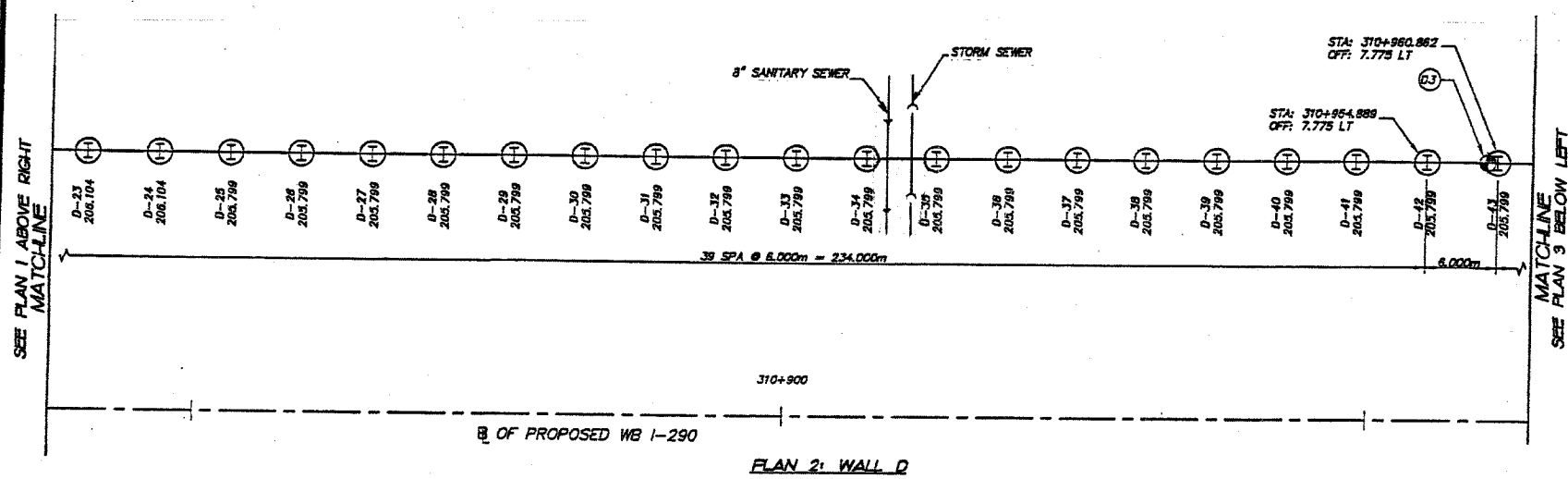
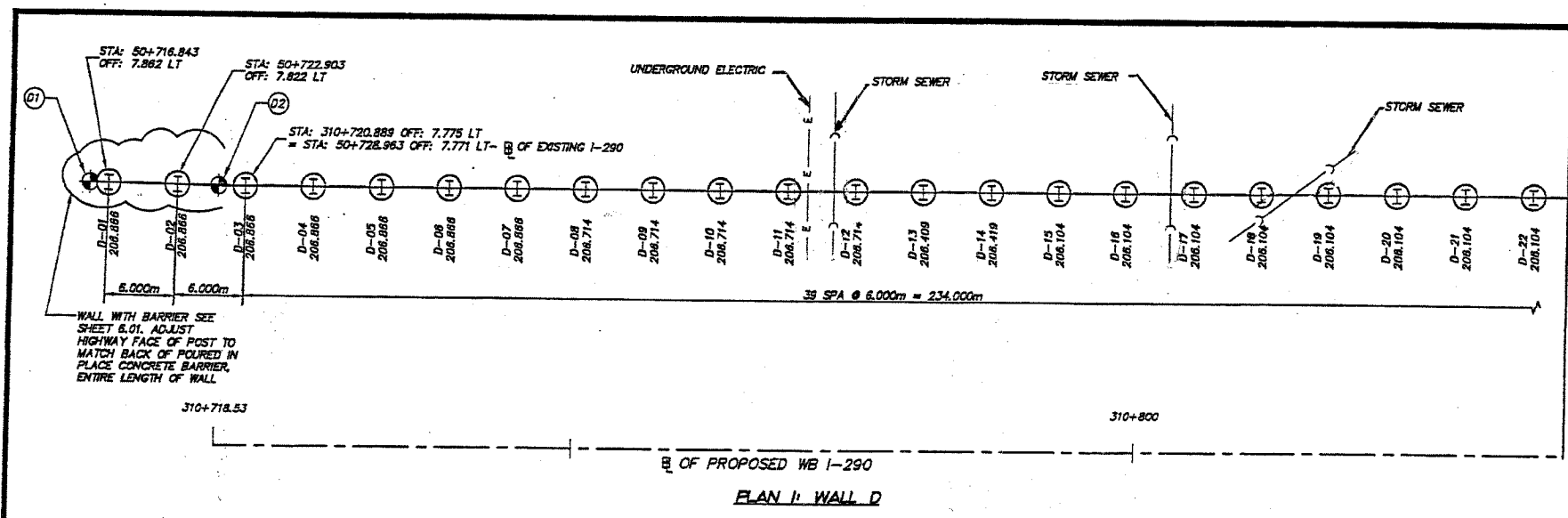
ALL BARRIER WALL REPAIR SHALL BE COMPLETED IN ACCORDANCE WITH SECTION 637 OF THE STANDARD SPECIFICATIONS AND AS SHOWN ON THE PLANS. ALL PROPOSED DOWEL BARS AND TIE BARS SHALL BE DRILLED AND GROUTED IN PLACE. REINFORCEMENT SHALL BE INCLUDED AS SHOWN IN DETAIL "C" AND DESCRIBED IN SECTION 637 OF THE STANDARD SPECIFICATIONS EXCEPT WHEN A REINFORCEMENT CAGE IS ENCOUNTERED. IN SUCH A CASE, THE CONTRACTOR SHALL REMOVE THE DAMAGED PORTIONS OF THE CAGE AND SHALL REPLACE IT WITH BARS OF THE SAME SIZE AND SPACING. THE SCOPE OF REPAIR SHALL BE AS SHOWN ON THE PLANS AND APPROVED BY THE ENGINEER PRIOR TO CONSTRUCTION.

\*\* CUT POST D-59 12" ABOVE GROUND. REMOVE THE UPPER SECTION OF THE POST AND SPLICE A NEW SECTION OF W8 X 31 OVER THE LOWER PORTION OF POST D-59. SPLICING SHALL BE DONE USING A BUTT WELD. THE NEW SECTION OF W8 X 31 WHEN SPLICED SHALL MATCH WITH THE HEIGHT OF THE EXISTING POST D-59. PAINT THE NEW SECTION OF W8 X 31 WITH A MATCHING COLOR.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
  
**INTERSTATE 290  
NOISE WALL REPAIR  
(DETAILS)**  
  
SCALE: VERT.  
HORIZ.  
DATE: MAY, 2005.  
  
DRAWN BY: SB/MVT  
CHECKED BY: RSS

62720



- NOTE:
1. OFFSETS ON THIS SHEET ARE FROM THE  $\pm$  OF ROADWAY.
  2. ALL STATION POINTS ARE LOCATED ALONG THE  $\pm$  OF ROADWAY.
  3. STATIONS AND OFFSETS ARE GIVEN IN METRIC UNITS.
  4. TOP AND BOTTOM OF WALL ELEVATIONS ARE BASED ON THE "GRADING EXHIBITED NOISE ABATEMENT WALL DRAWINGS", SHEET 1 TO 62. (SHEETS 619 TO 880 OF "PLANS FOR PROPOSED HIGHWAY...")
  5. FOR GENERAL NOTES, SPECIFICATIONS AND ERECTION INFORMATION, SEE 6.01.
  6.  $\odot$  INDICATES CONTROL POINTS ON DESIGN DRAWINGS.
  7. FOUNDATION DETAILS ARE SHOWN ON 3.01
  8. POST DETAILS ARE TYPE A (SHEET 3.03) UNLESS NOTED.

**FOR INFORMATION ONLY**

SHEET NO. 6

NO.	DATE	REVISIONS
1	8-18-01	MMH/ROD
2	9-28-01	MMH/ROD
3	9-04-01	MMH/ROD
4		MMH/ROD
5		MMH/ROD
6		MMH/ROD
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97		MMH/ROD
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99		MMH/ROD
100		MMH/ROD

GROUND MOUNTED NOISE ABATEMENT WALL  
PLAN: WALL D

PREPARED BY: PIRESTRESS ENGINEERING CORPORATION  
 DATE: 3-09-2007 SCALE: 1:250  
 DWG. BY: WJY CHK. BY: BGD  
 SEC. PROJECT NO. PRC-020723-1-A  
 SEC. JOB NUMBER: 020723-1-A  
 815-468-4640  
 C-91-279-99  
 CIP 1-99-5900

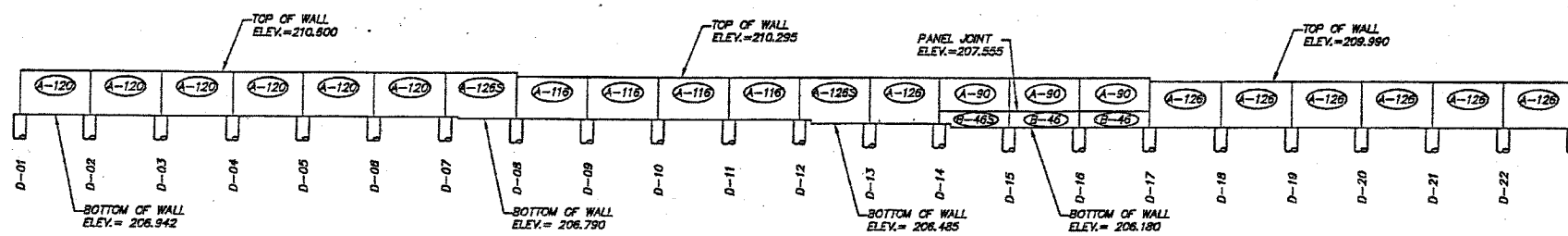
SMITH ENGINEERING CONSULTANTS, INC.  
 1000 W. WASHINGTON ST. SUITE 100  
 CHICAGO, ILLINOIS 60601  
 TEL: 312-467-1100 FAX: 312-467-1101  
 WWW.SMITH-ENG.COM

COMP. NUMBER: 141-5-4-01

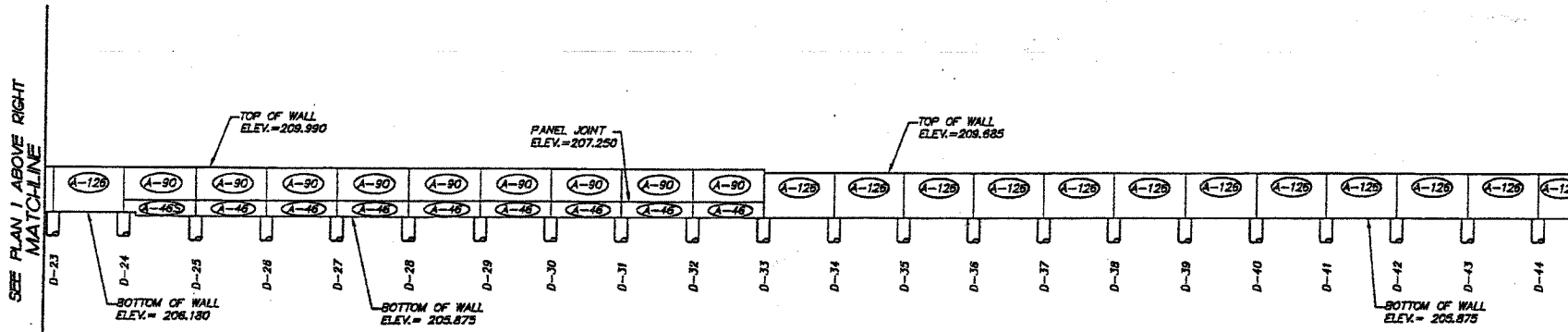


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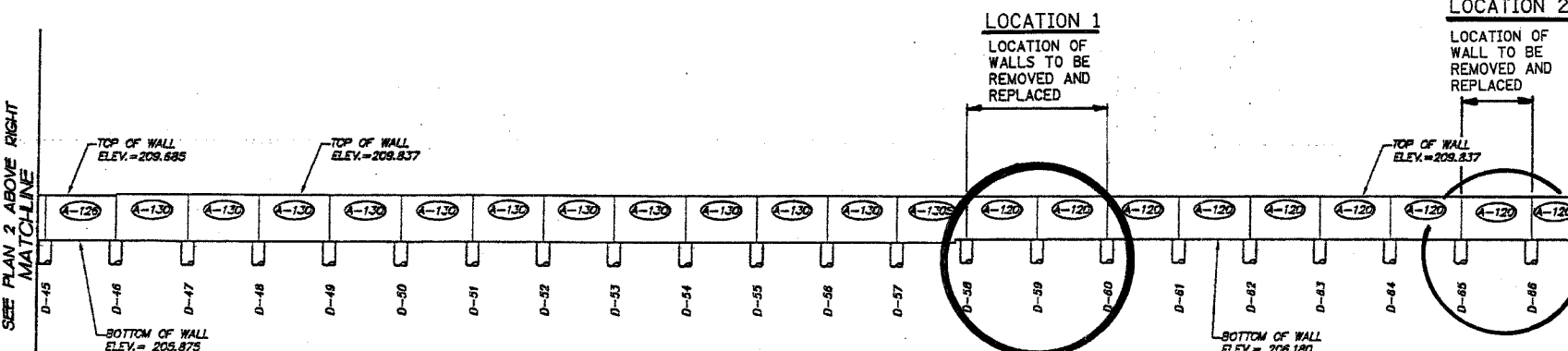
SHEET NO. 8



ELEVATION 1: WALL D



ELEVATION 2: WALL D



ELEVATION 3: WALL D

MATCHLINE  
SEE PLAN 2 BELOW LEFT

MATCHLINE  
SEE PLAN 3 BELOW LEFT

MATCHLINE  
SEE SHEET NO. 142

**FOR INFORMATION ONLY**

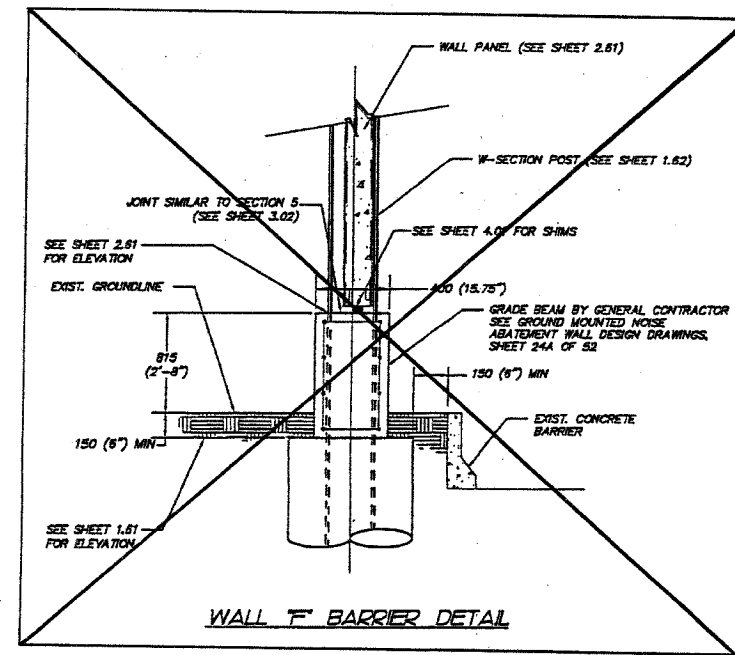
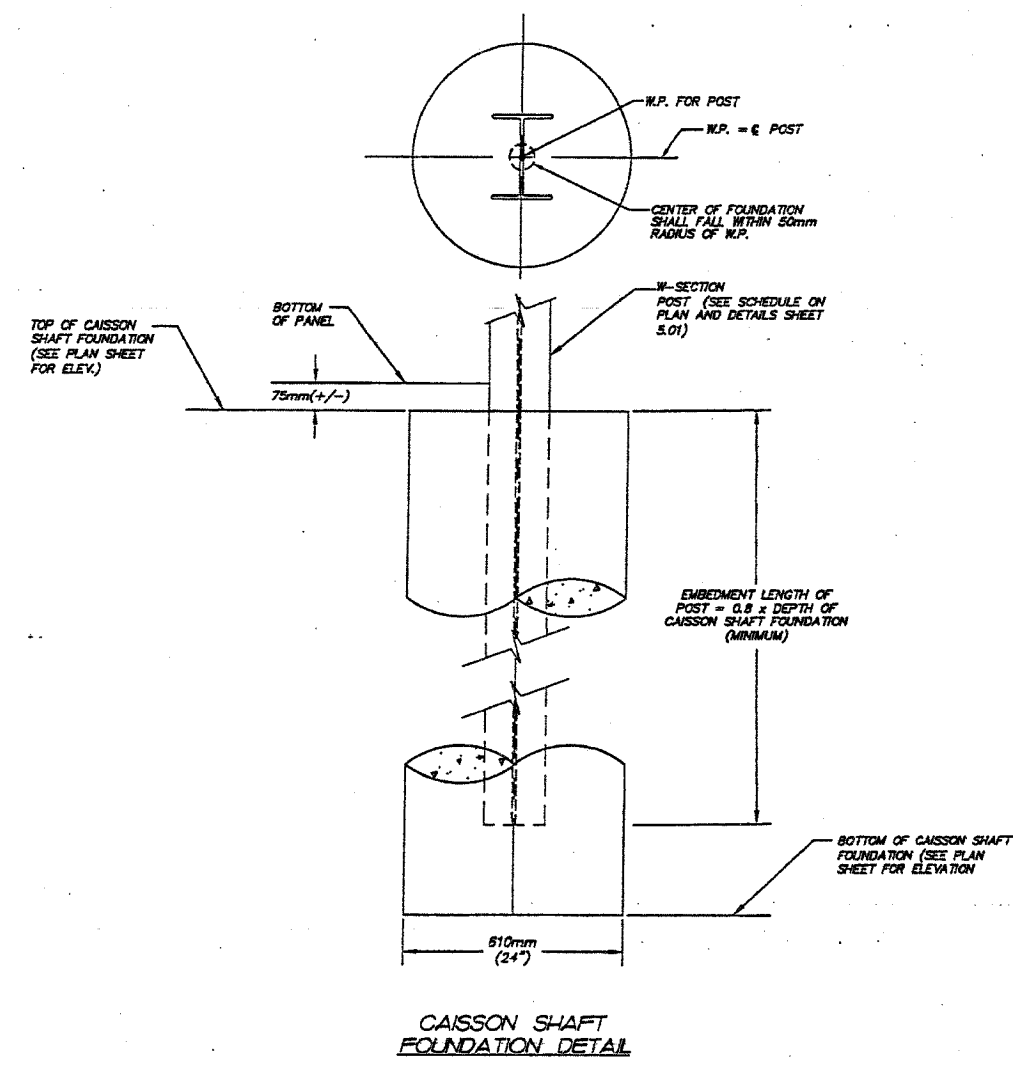
NOTE:  
A-XXX PANELS INCLUDE A CAP.

DATE: 3-08-2001	SCALE: 1/2"=1'-0"	PREPARED BY: PRESTRESS ENGINEERING CORPORATION	SMITH ENGINEERING CONSULTANTS, INC.
DRAWN BY: M.J.	CHECK BY: M.G.	2820 ROUTE 178 PRAIRIE GROVE, IL. 60012	1400 NORTH WASHINGTON, SUITE 101 PLEASANT HILL, IL. 60454
SEC. PROJECT NO. P.E.S.-000703-14	PEC JOB NUMBER: 31025	916-469-6855	815-469-6855
C-91-279-99		GROUND MOUNTED NOISE ABATEMENT WALL	
CIP 1-99-5900		ELEVATION: WALL D	
2.41	COMP. NUMBER: 2.41	DRAWING HISTORY	
6	5	4	3
8-15-01	8-28-01	8-04-01	
MAP	MAP	MAP	MAP
ADD	ADD	ADD	ADD
REVISIONS	DESCRIPTION	DATE	BY
1	REVISED NOTES		
2	DOT REVIEW		
3	USE REVIEW		
4	FOR CONSTRUCTION		



62720

SHEET NO. 9



REVISION NOTE:  
LENGTH AND ELEVATION OF THIS GRADE BEAM ARE NOT CLEARLY SPECIFIED ON BID DRAWINGS. PLEASE COORDINATE

**FOR INFORMATION ONLY**

- NOTE:
1. DIMENSIONS ON THE SHEET ARE IN "mm" FOR MILLIMETERS OR UNLESS NOTED AS "M" FOR METERS OR ( ) FOR ENGLISH UNITS.
  2. ABBREVIATIONS  
 "m" = METERS  
 ( ) = ENGLISH UNITS (ACCEPTABLE ENGLISH SUBSTITUTE)  
 (#) = ENGLISH REBAR SIZE

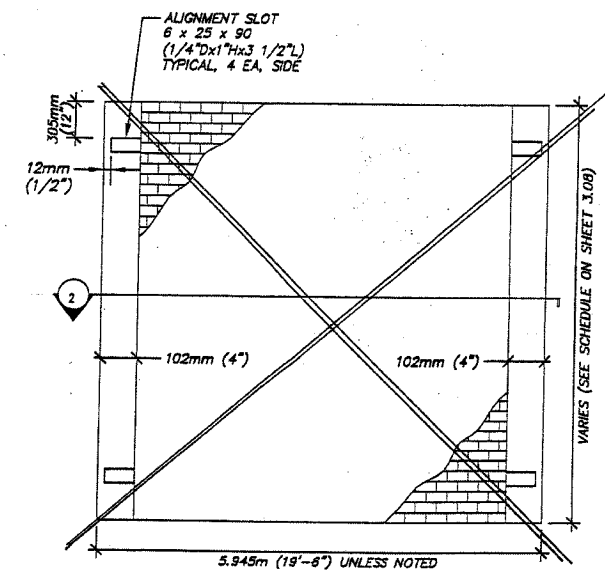
NO.	DATE	DESCRIPTION	BY	CHK	APP
1	05-04-01	REV. APPROVAL-REMOVE REBAR			
2	05-25-01	REVISED NOTES			
3	08-16-01	FOR CONSTRUCTION			
4		DOE REVIEW			
5		DOT REVIEW			
6		DRAWING HISTORY			

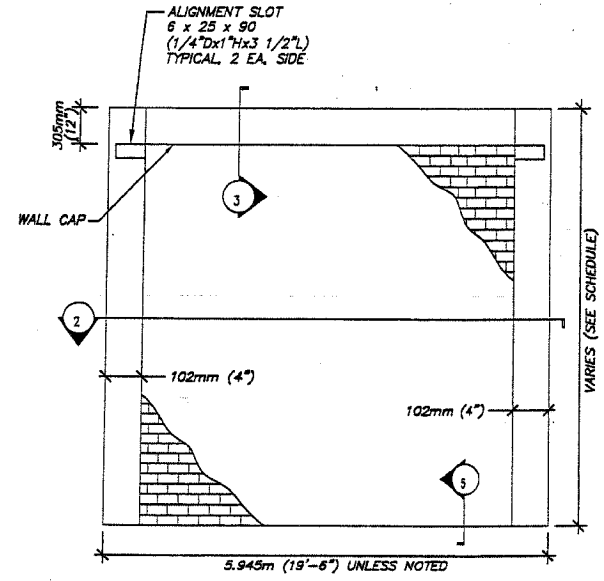
DATE: 5-08-2001	SCALE: 1/2"=1'-0"	PREPARED BY: PRESTRESS ENGINEERING CORPORATION	SMITH ENGINEERING CONSULTANTS, INC.
DRAWN BY: JMF	CHK BY: JAG	2020 BOUTER 176 PRAIRIE GROVE, IL 60012	BUSINESS DEVELOPMENT PLANNING
PROJECT NO.: PRE-00757-14	818-409-4046	FAX 409-8060	www.smitheng.com
REV. NO.: 3/1/05			
C-91-279-99		COLUMN AND FOUNDATION DETAILS	
CIP 1-99-5900		GROUND MOUNTED NOISE ABATEMENT WALL	
		HILLSIDE INTERCHANGE COCK CO. I	
3.01		COMP. NUMBER: 00753.68-3-1-01	

62720

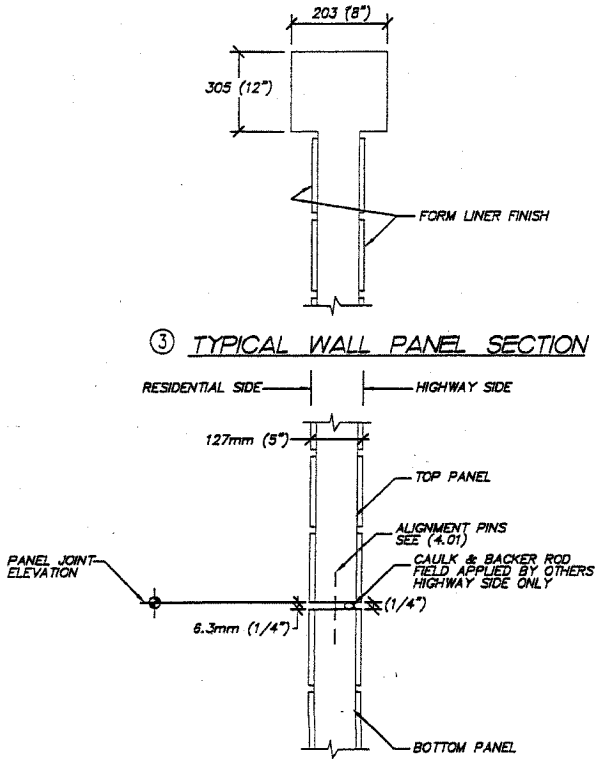
SHEET NO. 10



BOTTOM WALL PANEL ELEVATION

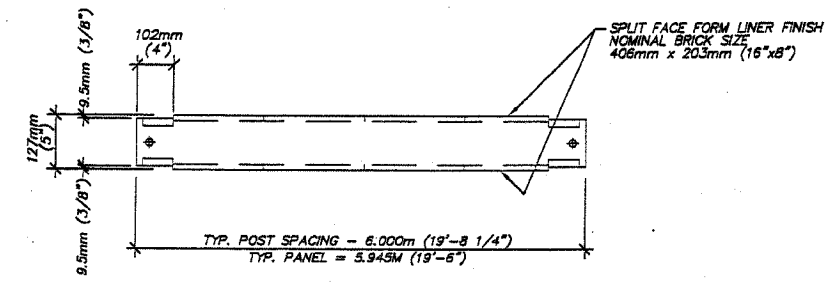


CAPPED WALL PANEL ELEVATION



③ TYPICAL WALL PANEL SECTION

⑤ TYPICAL CAPPED WALL PANEL SECTION



② TYPICAL WALL PANEL SECTION

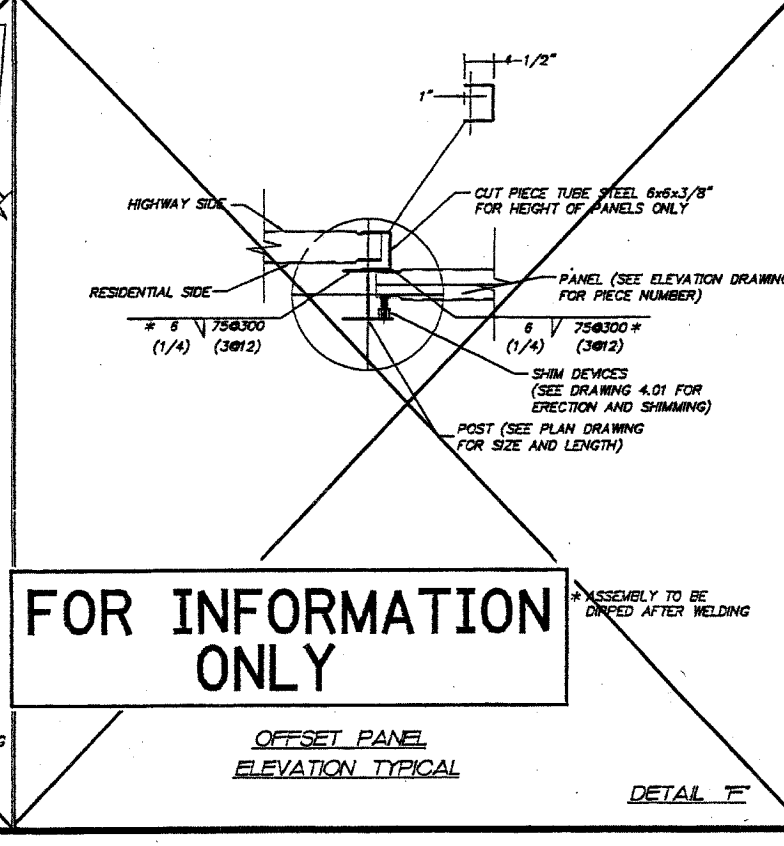
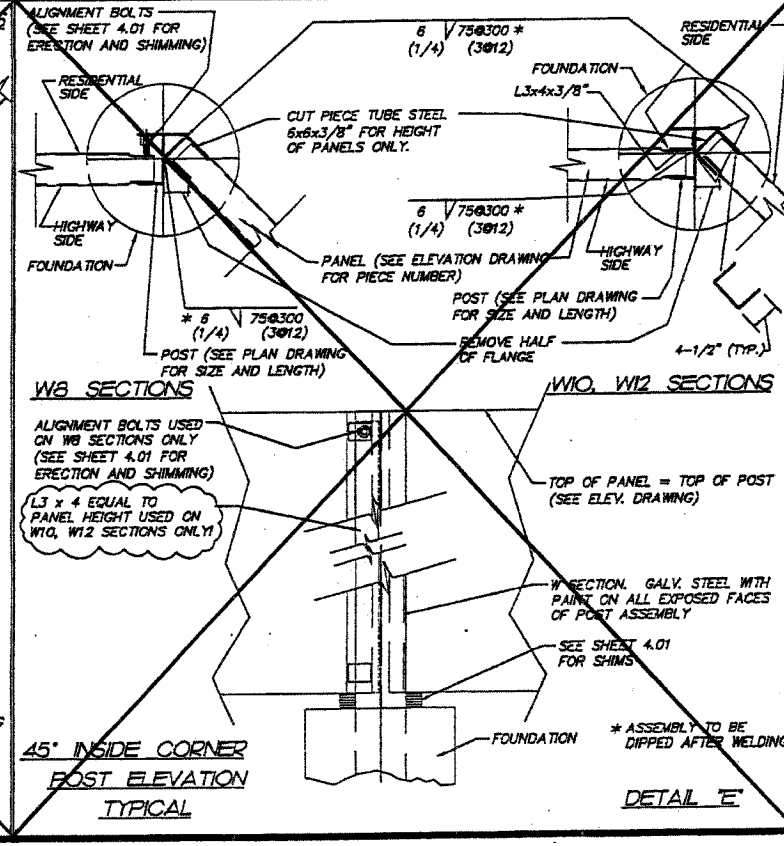
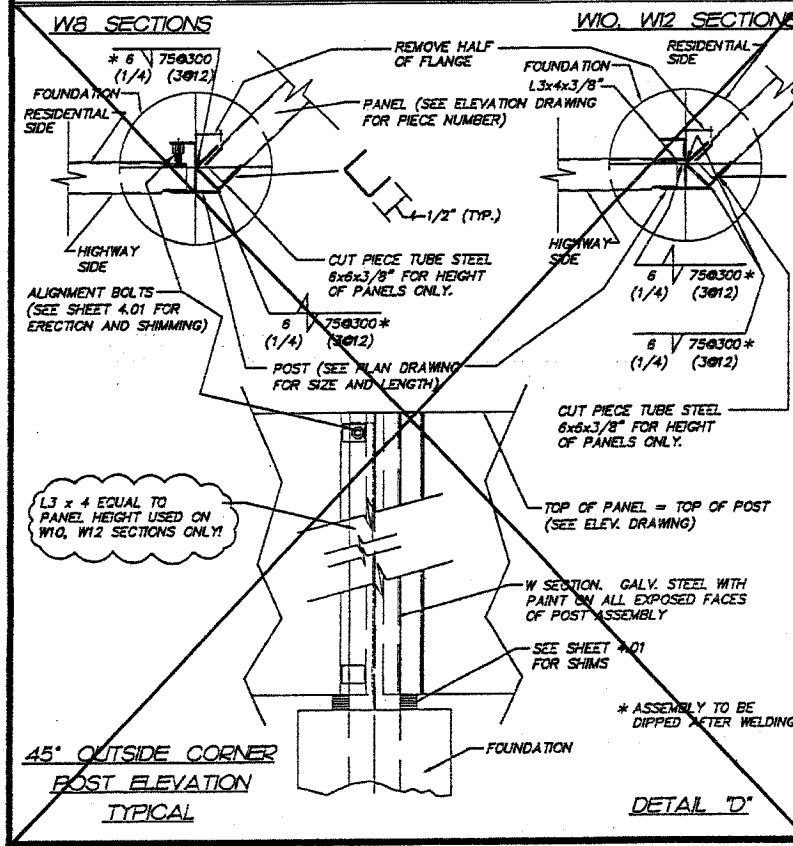
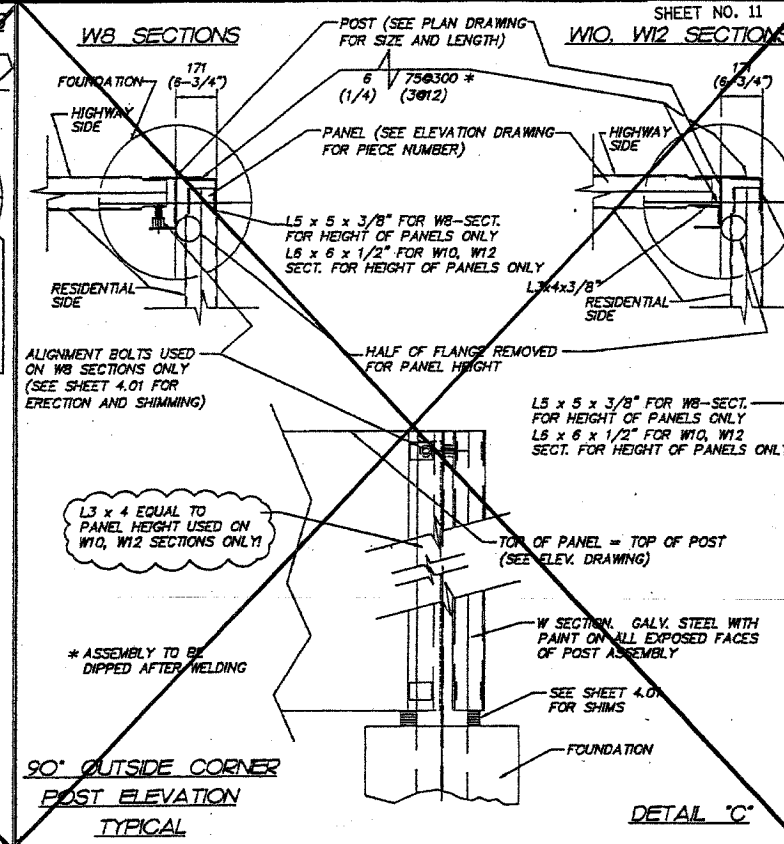
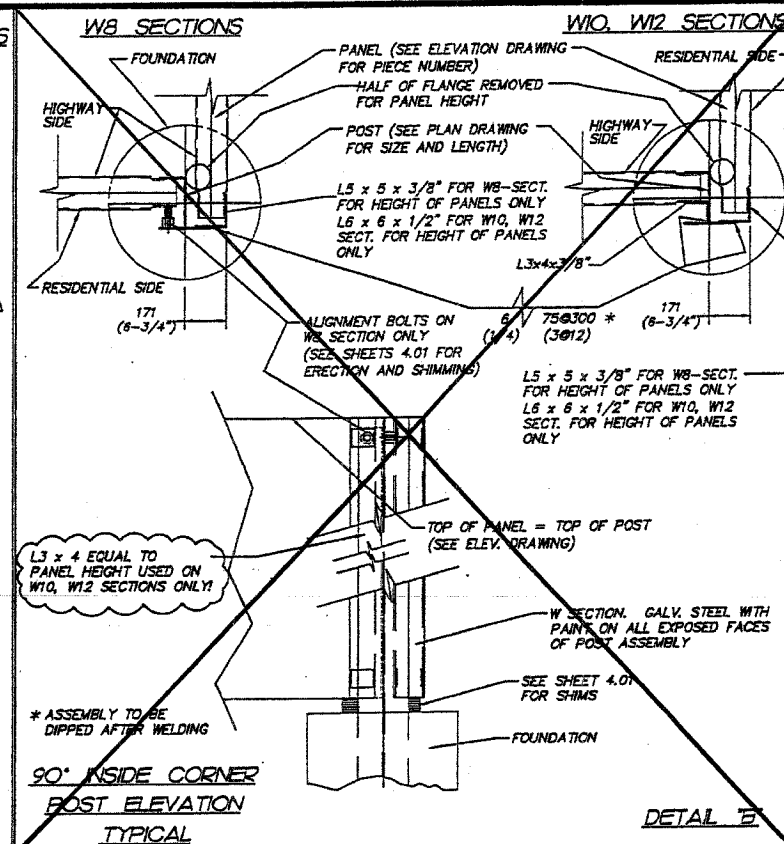
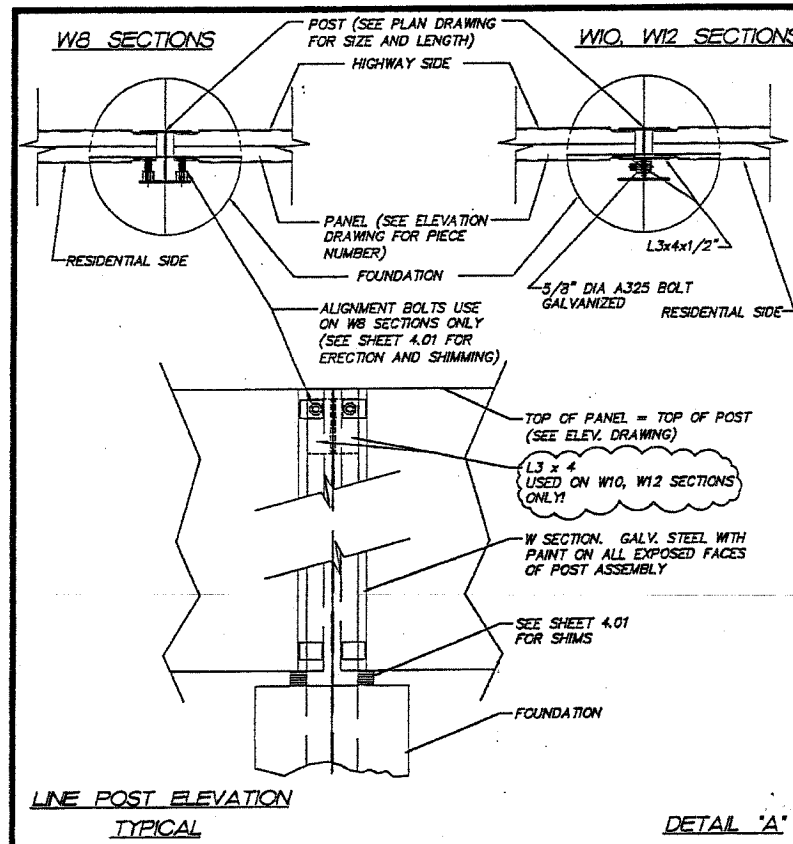
FOR INFORMATION ONLY

APPROVED  
For Main Dimensions and Materials Only  
JUL 06 2001  
*Ralph E. Anderson*  
Engineer of Bridges and Traffic Structures

NOTE:  
1. REINFORCING BAR DESIGNATIONS SHOW THE SMALLEST METRIC AND (SMALLEST ENGLISH) BARS WHICH WILL MEET DESIGN REQUIREMENTS. ENGLISH SIZES NOTED IN (PARENTHESIS).

DATE: 3-09-2001	SCALE: 1"=250'	CHK BY: RGD	6-19-01	MARK	RGD
DWN BY: WAF	SEC PROJECT NO: PRES-000783-14	PEC	5-25-01	MARK	RGD
PEC JOB NUMBER: SW1025			5-04-01	DATE	DMH/CML
				REVISIONS	
				MARK	DESCRIPTION
				1	REVISED NOTES
				2	DOT REVIEW
				3	FOR CONSTRUCTION
				4	
				5	
				6	
SMITH ENGINEERING CONSULTANTS, INC. ENGINEERS SURVEYORS PLANNERS 1000 PINE AVE. SUITE 201 ST. LOUIS, MO 63103 TEL: 314-433-1178 FAX: 314-433-3111 www.smitheng.com					
TYPICAL PANEL DETAILS GROUND MOUNTED NOISE ABATEMENT WALL HILLSIDE INTERCHANGE COOK CO. I.					
PREPARED BY: PRESTRESS ENGINEERING CORPORATION 2220 ROUTE 178 PRAIRIE GROVE, IL 60012 815-459-4545 FAX 459-8856					
C-91-279-99 CIP 1-99-5900					
COMP. NUMBER: 000783-14-5-4-01					

3.02



**FOR INFORMATION ONLY**

SHEET NO. 11

DATE	SCALE	BY	CHECK	BY	DATE	REVISIONS
3-08-2001	1/2" = 1'-0"	PEC	PEC	PEC	3-08-2001	1

PREPARED BY: PRESTRESS ENGINEERING CORPORATION  
 2220 ROUTE 176, PRAIRIE GROVE, ILL. 60121  
 PAX 408-4645

FOR CONSTRUCTION: PER REVIEW, DATE REVIEW, DATE REVIEW, MARK, DESCRIPTION, DRAWING HISTORY

POST DETAILS: GROUND MOUNTED NOISE ABATEMENT WALL, HILLSIDE INTERCHANGE, COOK CO. I.

C-91-279-99  
 CIP 1-99-5900

COMP. NUMBER 0007331-5-4-01

3.03

GROUND MOUNTED PRECAST NOISE WALL  
INSTALLATION PROCEDURES

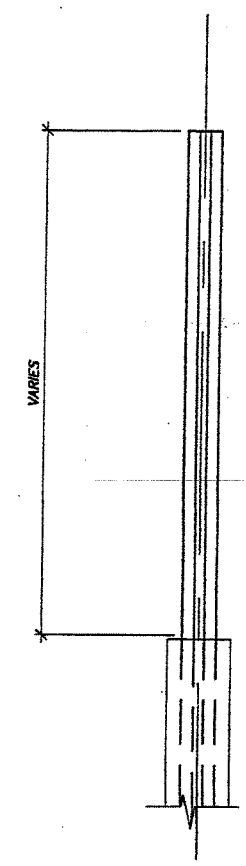
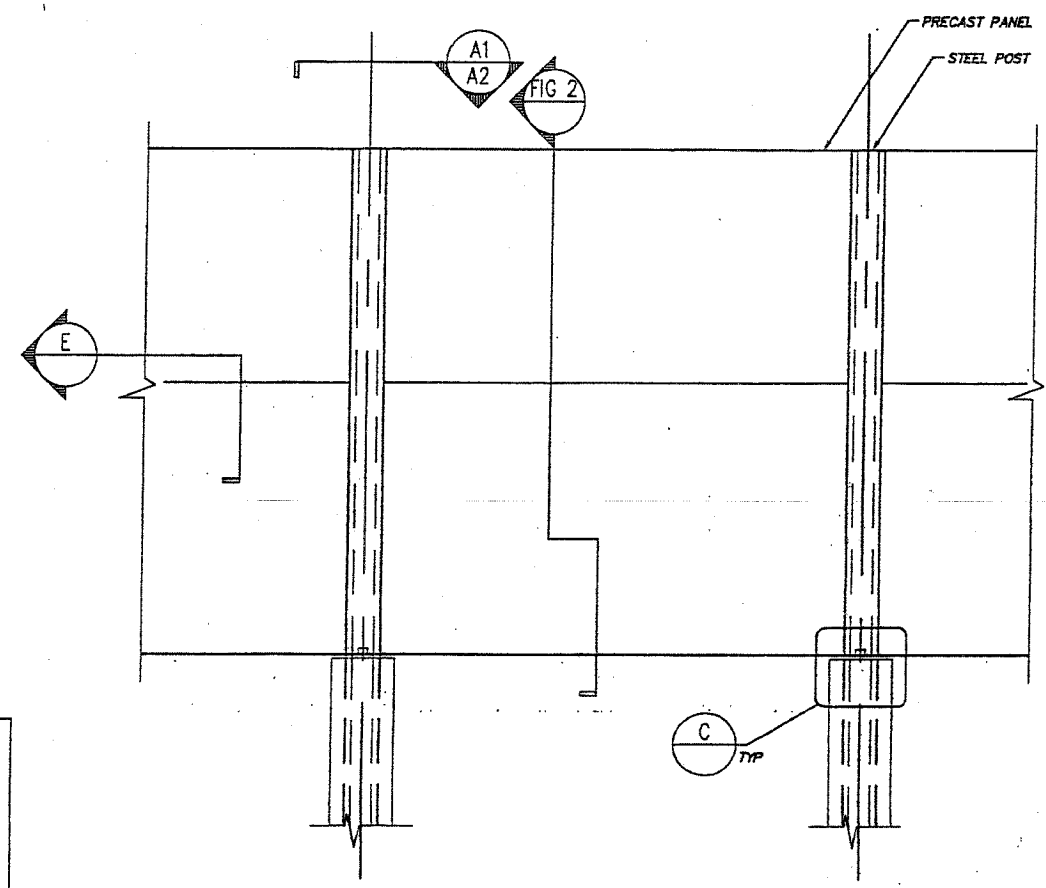
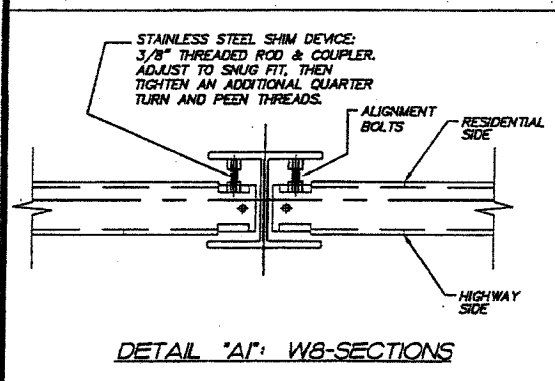


FIG. 1

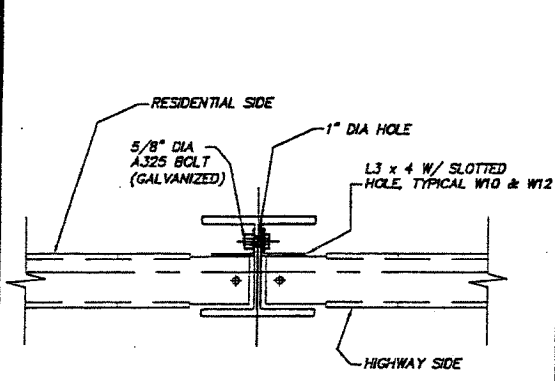
FIG. 2

**FOR INFORMATION ONLY**

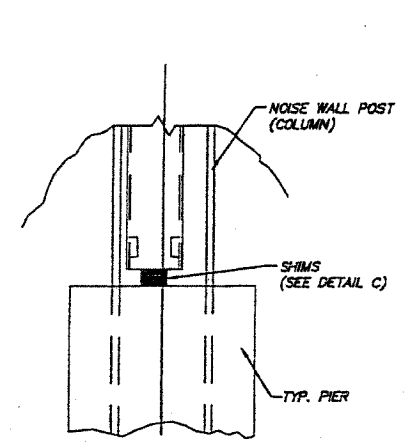
APPROVED  
For Main Dimensions and  
Materials Only  
JUL 06 2001  
*Ralph E. Anderson*  
Director of Bridge and Traffic Structures



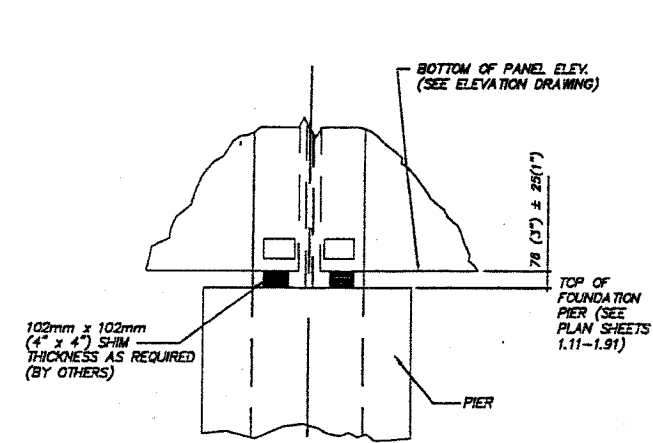
DETAIL "A1": W8-SECTIONS



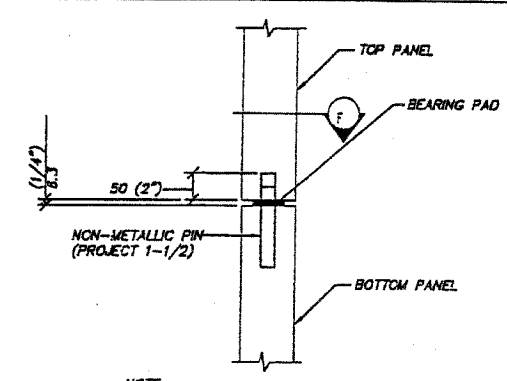
DETAIL "A2": W10, W12-SECTIONS



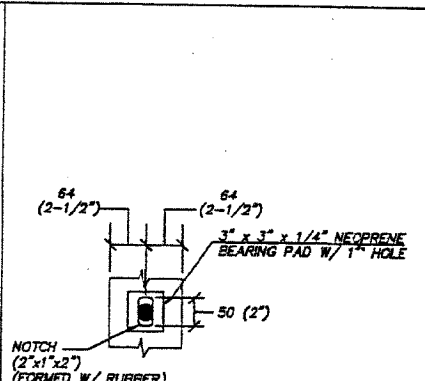
DETAIL "B"



DETAIL "C"



TYPICAL JOINT ALIGNMENT SECTION  
SECTION "E"



SECTION "F"

DATE: 3-09-2001	SCALE: 1"=20'	PREPARED BY: PRESTRESS ENGINEERING CORPORATION	SMITH ENGINEERING CONSULTANTS, INC.
DRAWN BY: HAF	CHECK BY: AGD	2220 ROUTE 178 PRAIRIE GROVE, IL 60012	1000 N. WILSON AVENUE, SUITE 201 PRAIRIE GROVE, IL 60012
SEC PROJECT NO. PWS-000733-14	SEC JOB NUMBER: SW7055	815-459-4545	630-252-2222
C-91-279-99		NOISE BARRIER-HILLSIDE INTERCHANGE COOK CO. I.	
CIP 1-99-5900		DRAWING HISTORY	
COMP. NUMBER 000733/1-5-4-01		1	1
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4.01



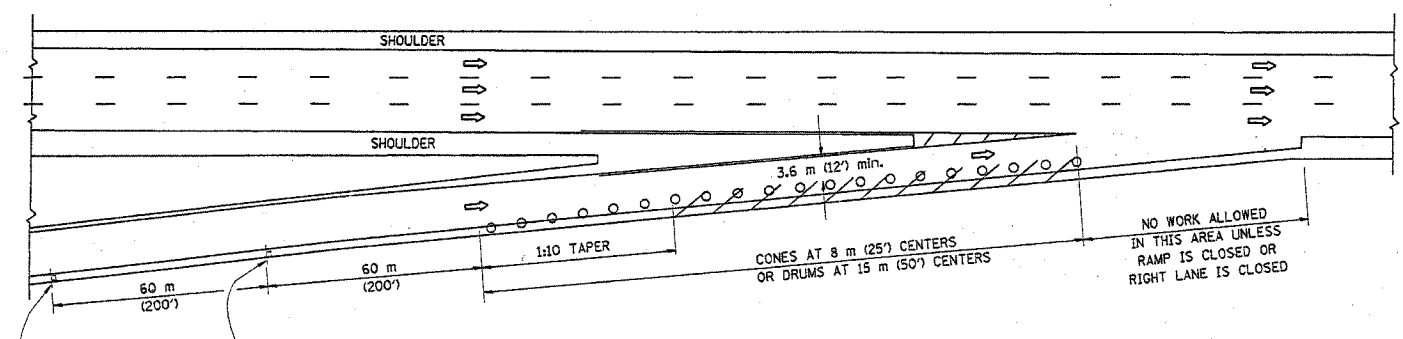
PARTIAL RAMP CLOSURE DETAILS

SHOULDER CLOSURE DETAILS

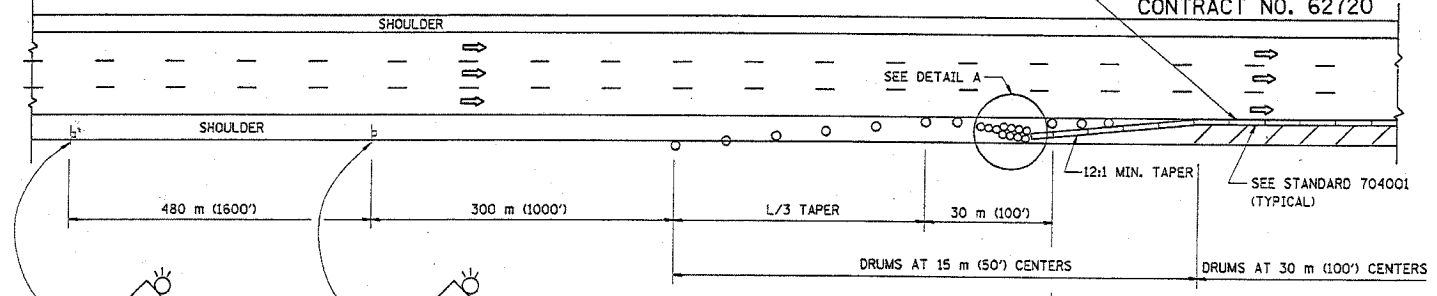
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
290	2004-003	COOK	14	14
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

CONTRACT NO. 62720

REFLECTIVE 150 (6) EDGE LINE ON LOWER SLOPE OF WALL (LEFT EDGE YELLOW, RIGHT EDGE WHITE)

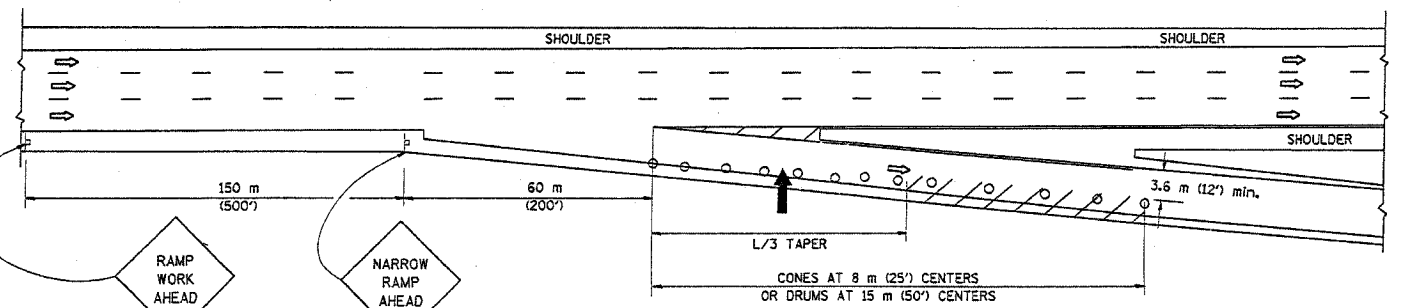


TYPICAL ENTRANCE RAMP

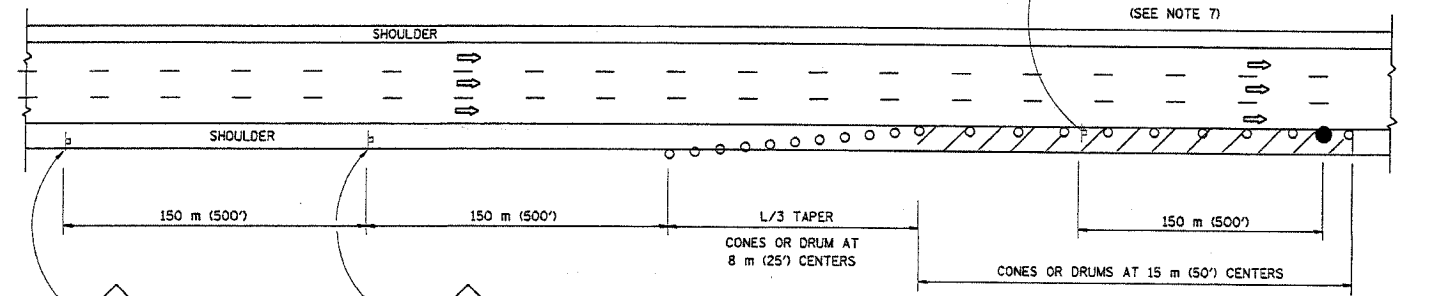


PERMANENT SHOULDER CLOSURE

OR WHEN SPECIFIED INSTALL TEMPORARY CONCRETE BARRIER WALL WITH BARRIER WALL REFLECTORS PER STANDARD 701402, DETAIL A.

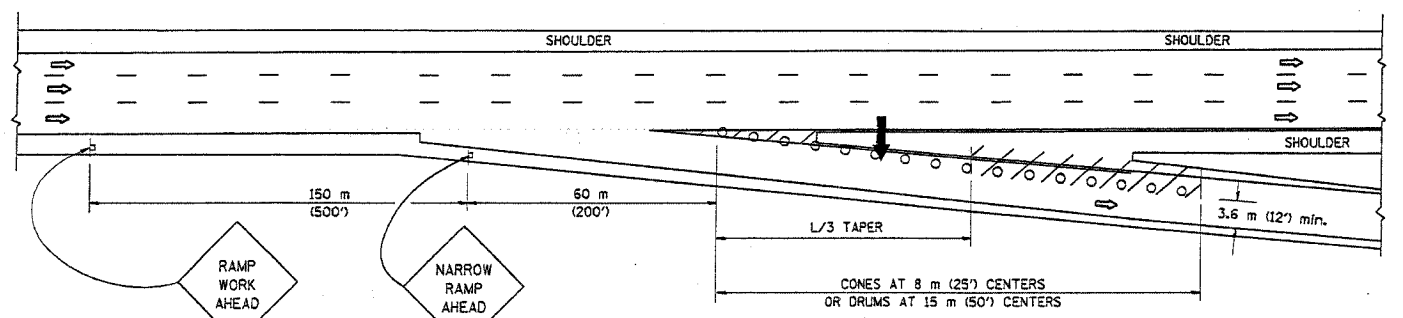


TYPICAL EXIT RAMP

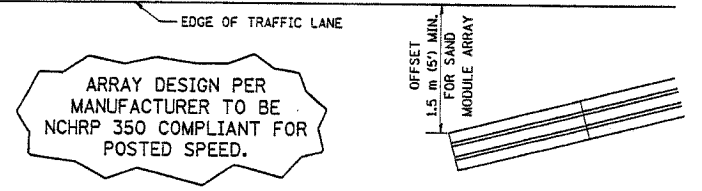


DAYTIME SHOULDER CLOSURE

THIS DETAIL IS USED WHERE:  
1. VEHICLES, EQUIPMENT, WORKERS OR THEIR ACTIVITIES ENCRUCH IN AN AREA CLOSER THAN 4.5 m (15') TO THE EDGE OF PAVEMENT FOR A PERIOD IN EXCESS OF 15 MINUTES.



TYPICAL EXIT RAMP



DETAIL "A" IMPACT ATTENUATOR, TEMPORARY (SEE NOTE 5)

SYMBOLS

- ↑ ARROWBOARD
- ▨ WORK AREA
- ┆ SIGN ON PORTABLE OR PERMANENT SUPPORT
- FLAGGER WITH CONTROL SIGN
- ⊙ DRUM WITH MONO-DIRECTIONAL STEADY BURNING LIGHT
- CONES - 700 (28) IN HEIGHT

GENERAL NOTES

1. THE "L" DISTANCE EQUALS:
 

SPEED LIMIT	FORMULAS
80 km/h (45 mph) OR GREATER:	METRIC: $L=0.65(W)(S)$ ENGLISH: $L=(W)(S)$
	W = WIDTH OF OFFSET IN METERS (FEET)
	S = NORMAL POSTED SPEED KM/H (MPH)
2. PLASTIC DRUMS WITH HIGH PERFORMANCE REFLECTIVE SHEETING AND STEADY BURNING LIGHTS ARE REQUIRED FOR ALL NIGHTTIME CLOSURES.
3. ALL SIGNS SHALL BE POST MOUNTED IF THE CLOSURE TIME EXCEEDS FOUR DAYS.
4. FLASHING LIGHTS SHALL BE USED DURING THE HOURS OF DARKNESS AND SHALL BE INSTALLED ABOVE THE FIRST TWO SETS OF SIGNS.

5. THE IMPACT ATTENUATOR, TEMPORARY IS NOT REQUIRED WHEN THE TEMPORARY CONCRETE BARRIER WALL IS OUTSIDE THE CLEAR ZONE OR IS TIED INTO THE EXISTING GUARDRAIL. IF OFFSET IS LESS THAN 5 FEET USE "TRAFFIC BARRIER TERMINAL, TYPE III, TEMPORARY" DEVICE TO MEET NCHRP350 FOR POSTED SPEED.
6. AUTHORIZATION FROM THE DISTRICT'S BUREAU OF TRAFFIC IS REQUIRED FOR ALL FREEWAY CLOSURES.
7. THE FLAGGER AND FLAGGER SIGN ARE REQUIRED AT THE ABOVE WORK SITES WHEN:
  - a. FOUR OR MORE WORK VEHICLES ENTER THE TRAFFIC LANES IN A ONE HOUR PERIOD.
  - b. THE WORK ACTIVITY REQUIRES FREQUENT ENCRUCHMENT INTO THE LANE OPEN TO TRAFFIC.
 THE FLAGGER SHALL BE STATIONED APPROXIMATELY 30 m (100') TO 60 m (200') IN ADVANCE OF THE WORKERS.

ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE SHOWN.

ILLINOIS DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL DETAILS FOR FREEWAY SHOULDER CLOSURES PARTIAL RAMP CLOSURES

REVISIONS	
NAME	DATE
DWS	11/96
JAF	12/02
NCHRP 350	04/03

SCALE: NONE  
DATE: 2/7/2005  
DRAWN BY: [blank]  
DESIGNED BY: DWS  
CHECKED BY: [blank]