

F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	*	COOK	32	3
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

62997

SUMMARY OF QUANTITIES

URBAN

CODE NO.	ITEM	UNIT	QUANTITY	100% STATE JOOO
20200100	EARTH EXCAVATION	CU YD	323	323
21101615	TOPSOIL FURNISH AND PLACE, 4"	SQ YD	183	183
21101645	TOPSOIL FURNISH AND PLACE, 12"	SQ YD	298	298
25000210	SEEDING, CLASS 2A	ACRE	0.05	0.05
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	18	18
25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	18	18
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	18	18
25001800	SEEDING, CLASS 4 (MODIFIED)	ACRE	0.14	0.14
25100630	EROSION CONTROL BLANKET	SQ YD	961	961
44002300	CURB REMOVAL (PARTIAL)	FOOT	150	150
44004250	PAVED SHOULDER REMOVAL	SQ YD	475	475
50300225	CONCRETE STRUCTURES	CU YD	8.6	8.6
50300255	CONCRETE SUPERSTRUCTURE	CU YD	7.1	7.1
50300300	PROTECTIVE COAT	SQ YD	34	34
50300510	RUSTICATION FINISH	SQ FT	59	59
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	1530	1530
60618324	CONCRETE MEDIAN SURFACE, 6" INCH (SPECIAL)	SQ FT	636	636
66400550	CHAIN LINK FENCE, 4' (SPECIAL)	FOOT	1,434	1,434
67100100	MOBILIZATION	L SUM	1	1
70101800	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	L SUM	1	1
70106800	CHANGEABLE MESSAGE SIGN	CAL MO	6	6
X0322256	TEMPORARY INFORMATION SIGNING	SQ FT	26	26
X0323973	SEDIMENT CONTROL, SILT FENCE	FOOT	1,451	1,451
X0323974	SEDIMENT CONTROL, SILT FENCE MAINTENANCE	FOOT	363	363
X0324640	FLUTED KNEE WALL	FOOT	1,393	1,393
X2500322	SEEDING, CLASS 5A, (MODIFIED)	ACRE	0.14	0.14
X6065740	CONCRETE MEDIAN SURFACE, 5" (MODIFIED)	SQ FT	264	264
Z0013798	CONSTRUCTION LAYOUT	L SUM	1	1
X0325891	IMPACT ATTENUATORS (FULLY REDIRECTIVE, RESETTABLE, TEST LEVEL 2)	EACH	2	2
Z0100110	TREE REMOVAL (6 TO 15 UNITS DIAMETER)	UNIT	49	49

INDEX OF SHEETS

SHEET	DESCRIPTION
1	COVER SHEET
2	GENERAL NOTES AND PROJECT COMMITMENTS
3	SUMMARY OF QUANTITIES / INDEX / HIGHWAY STANDARDS
4	EXISTING AND PROPOSED TYPICAL SECTIONS
5-9	ALIGNMENT PLANS, SURVEY TIES AND CONTROL POINTS
10-14	EXISTING AND PROPOSED KNEE WALL PLANS
15-18	STRUCTURAL DETAILS
19	BD-51 DISTRICT 1, BENCHING DETAIL FOR EMBANKMENT WIDENING
20	TC-10 DISTRICT 1, TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS & DRIVEWAYS
21	TC-17 DISTRICT 1, TRAFFIC CONTROL DETAILS FOR FREEWAY SHOULDER CLOSURES PARTIAL RAMP CLOSURES
22	TC-18 DISTRICT 1, SIGNING FOR FLAGGING OPERATIONS AT WORK ZONE OPENINGS
23	TC-22 DISTRICT 1, ARTERIAL ROAD INFORMATION SIGN
24-32	CROSS SECTIONS

IDOT HIGHWAY STANDARDS

SHEET	DESCRIPTION
000001-05	STANDARD SYMBOLS, ABBREVIATIONS, AND PATTERNS
001001-01	AREAS OF REINFORCEMENT BARS
001006	DECIMAL OF AN INCH AND OF A FOOT
664001-01	CHAIN LINK FENCE
701601-05	URBAN LANE CLOSURE, MULTILANE, 1W OR 2W WITH NONTRAVERSABLE MEDIAN
701701-05	URBAN LANE CLOSURE, MULTILANE INTERSECTION
701801-03	LANE CLOSURE, MULTILANE, 1W OR 2W, CROSSWALK OR SIDEWALK CLOSURE, for speeds < 45 mph
701901	TRAFFIC CONTROL DEVICES
720001	SIGN PANEL MOUNTING DETAILS
720006-01	SIGN PANEL ERECTION DETAILS
728001	TELESCOPING STEEL SIGN SUPPORT
731001	BASE FOR TELESCOPING STEEL SIGN SUPPORT

S00-1

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
SOUTHBOUND KNEE WALLS (ROOT ST TO PERSHING RD)

SUMMARY OF QUANTITIES

SCALE: NONE  
DATE: 04/25/08

DRAWN BY: JDC  
CHECKED BY:

Rev. 7-21-08  
Rev. 7-15-08

BOWMAN, BARRETT & ASSOCIATES INC  
CONSULTING ENGINEERS  
Chicago, Illinois  
312.228.0100  
www.bbainc.com



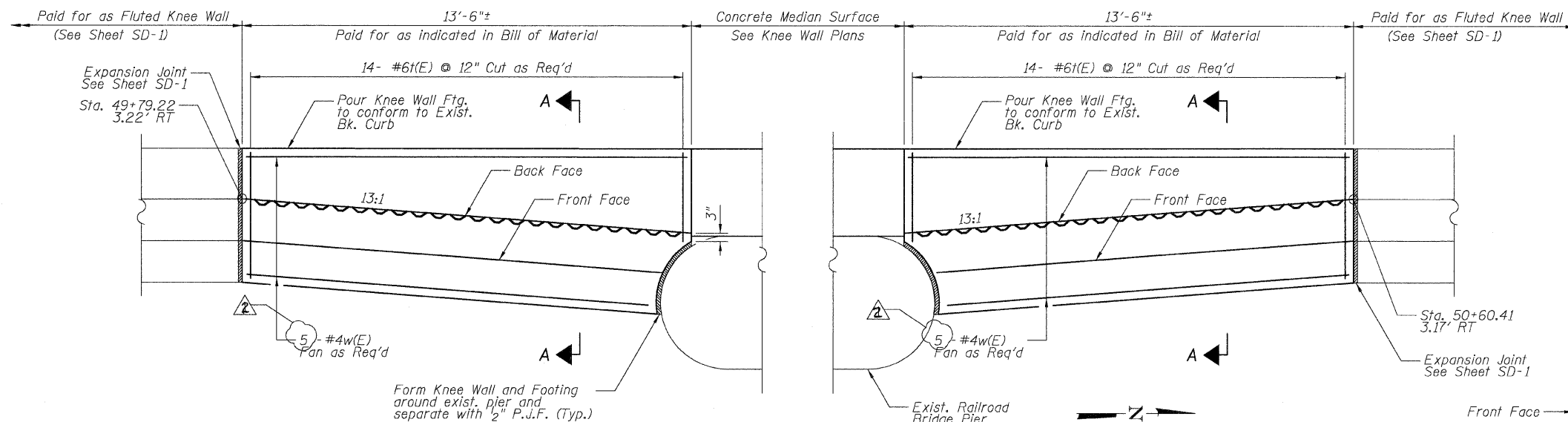
7/24/2008 7:02:56 PM





F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90		COOK	32	16
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62997				

S. WENTWORTH AVE.

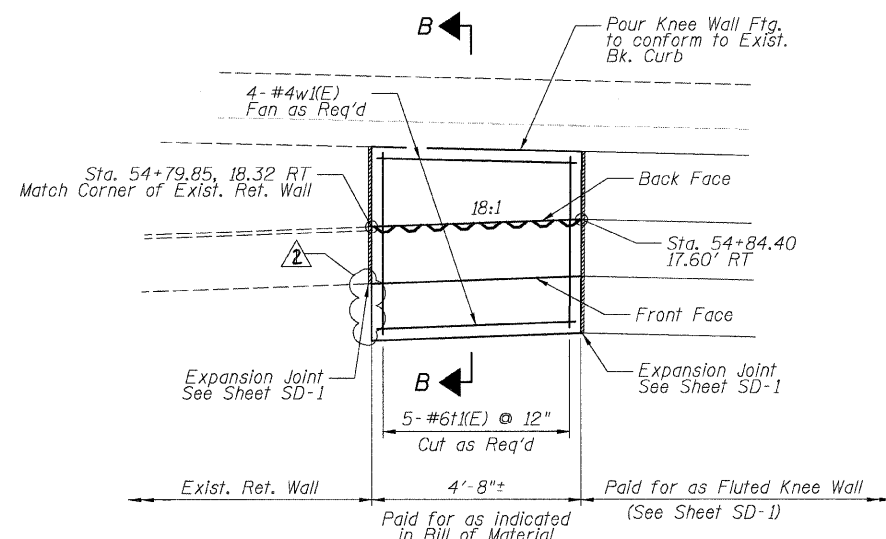


DETAIL A

DETAIL A REINFORCEMENT SCHEDULE AND BILL OF MATERIAL

Bar	No.	Size	Length	Shape
n(E)	16	#4	12'-10"	—
n(E)	28	#6	5'-6"	L
n(E)	28	#5	5'-10"	L
t(E)	28	#6	4'-6"	—
w(E)	10	#4	13'-2"	—
Item	Unit	Qty.		
① Concrete Structures	Cu. Yd.	4.5		
② Concrete Superstructure	Cu. Yd.	3.6		
Reinforcement Bars, Epoxy Coated	Pound	820		
Rustication Finish	Sq. Ft.	50		
Protective Coat	Sq. Yd.	19		

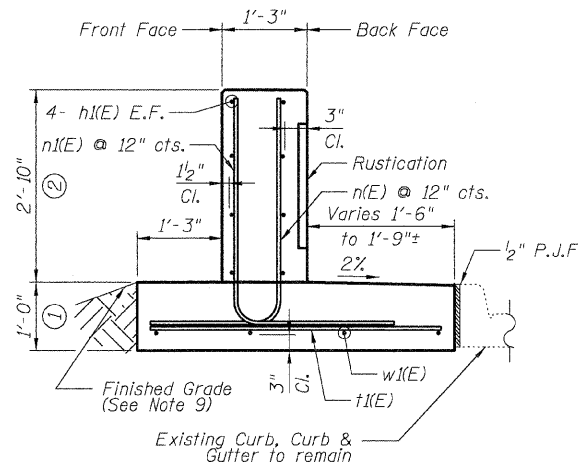
S. WENTWORTH AVE.



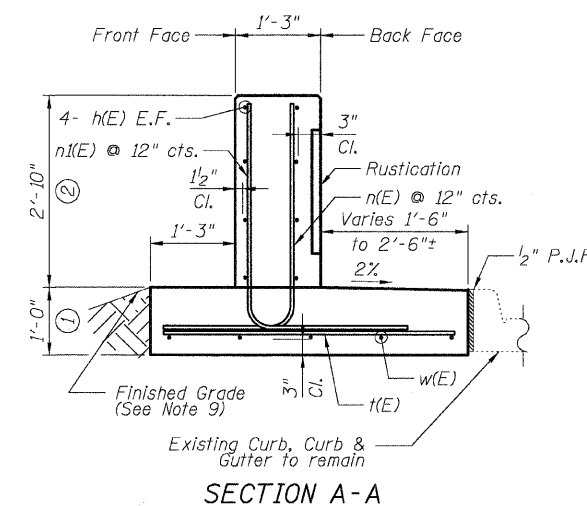
DETAIL B

DETAIL B REINFORCEMENT SCHEDULE AND BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	8	#4	4'-4"	—
n(E)	5	#6	5'-6"	L
n(E)	5	#5	5'-10"	L
t(E)	5	#6	3'-11"	—
w(E)	4	#4	4'-4"	—
Item	Unit	Qty.		
① Concrete Structures	Cu. Yd.	0.8		
② Concrete Superstructure	Cu. Yd.	0.7		
Reinforcement Bars, Epoxy Coated	Pound	140		
Rustication Finish	Sq. Ft.	9		
Protective Coat	Sq. Yd.	3		



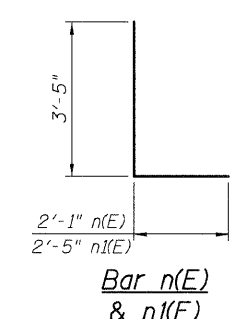
SECTION B-B



SECTION A-A

NOTES:

- All stations and offsets measured from S. Wentworth Ave.  $\bar{C}$ .
- Back Face is face adjacent to Frontage Rd. and Front Face is face adjacent to Expressway.
- Concrete:  $f'c = 3500$  psi
- Provide California Finish on top of foundation between stem and Frontage Road. See Roadway Details.
- At locations where Fluted Knee Wall abuts a rigid Structure, a  $\frac{1}{2}$ " thick Preformed Expansion Joint Filler conforming to the shape of the Structure shall be installed between the Fluted Knee Wall and the Structure.
- Apply Protective Coat to top and back face of stem and top of Frontage Road side of foundation.
- For Fluted Knee Wall standard details, see Sheet SD-1
- B.F. = Back Face (Frontage Road Side)  
F.F. = Front Face (Expressway Side)  
E.F. = Each Face
- Shape finished grade, as required to match existing conditions.
- P.J.F. included in cost of concrete structures.



Bar n(E) & n(E)

REVISIONS	
NAME	DATE
ADDENDUM 1	7-16-08

SHEET SD-2

ILLINOIS DEPARTMENT OF TRANSPORTATION  
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
SOUTHBOUND KNEE WALLS (ROOT ST TO PERSHING RD)

DETAILS A & B

SCALE: NTS  
DATE: 04/25/08

DRAWN BY: TL  
CHECKED BY: BLU

BOWMAN, BARRETT & ASSOCIATES INC.  
CONSULTING ENGINEERS  
Chicago, Illinois  
312.228.0100  
www.bbainc.com

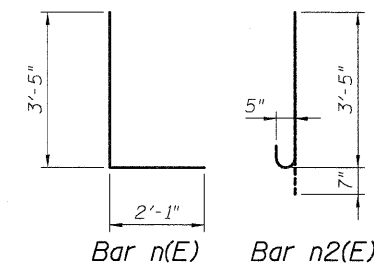
F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	*	COOK	32	17
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62997				

**DETAIL C REINFORCEMENT SCHEDULE AND BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
h(E)	8	#4	20'-9"	—
n(E)	22	#6	5'-6"	L
n2(E)	22	#5	4'-0"	┌
t(E)	22	#6	3'-8"	—
t1(E)	3	#4	4'-0"	—
w(E)	4	#4	20'-8"	—
Item	Unit	Qty.		
① Concrete Structures	Cu. Yd.	3.3		
② Concrete Superstructure	Cu. Yd.	2.8		
Reinforcement Bars, Epoxy Coated	Pound	570		
Protective Coat	Sq. Yd.	12		

**NOTES:**

- All stations and offsets measured from S. Wentworth Ave.  $\perp$ .
- Back Face is face adjacent to Frontage Rd. and Front Face is face adjacent to Expressway.
- Concrete:  $f'c = 3500$  psi
- Provide California Finish on top of foundation between stem and Frontage Road. See Roadway Details.
- At locations where Fluted Knee Wall abuts a rigid Structure, a 2" thick Preformed Expansion Joint Filler conforming to the shape of the Structure shall be installed between the Fluted Knee Wall and the Structure.
- Apply Protective Coat to top and back face of stem and top of Frontage Road side of foundation.
- For Fluted Knee Wall standard details, see Sheet SD-1
- B.F. = Back Face (Frontage Road Side)  
F.F. = Front Face (Expressway Side)  
E.F. = Each Face
- Shape finished grade as required to match existing conditions.
- P.J.F. included in cost of concrete structures.



SHEET SD-3

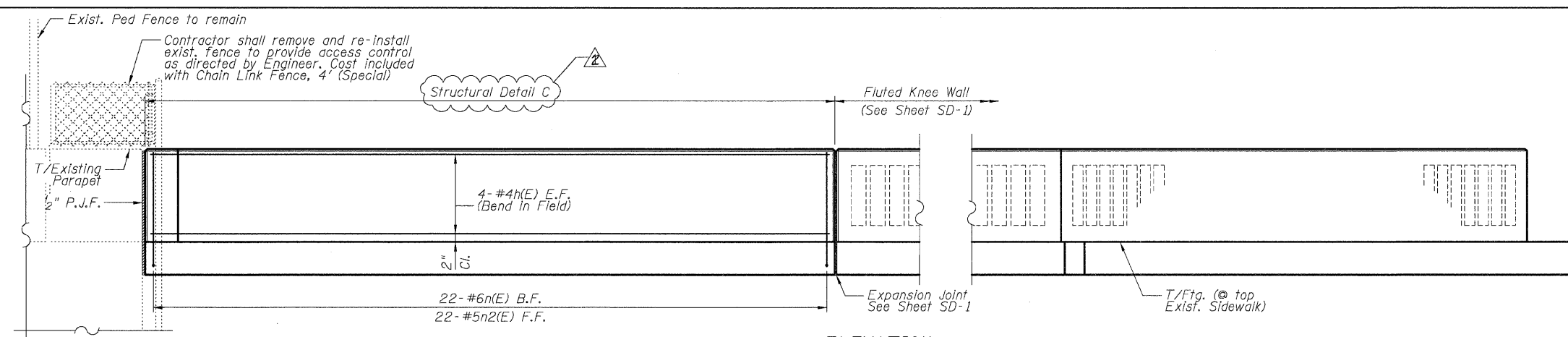
REVISIONS	
NAME	DATE
ADDENDUM I	7-16-08

ILLINOIS DEPARTMENT OF TRANSPORTATION  
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
SOUTHBOUND KNEE WALLS (ROOT ST TO PERSHING RD)

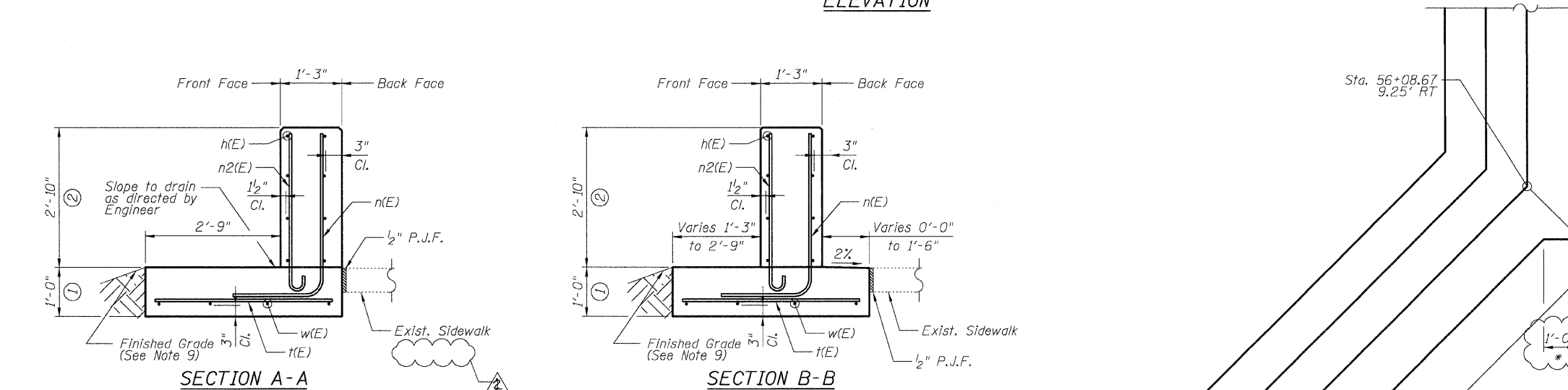
**DETAIL C**

SCALE: NTS  
DATE: 04/25/08

DRAWN BY: TL  
CHECKED BY: BLU

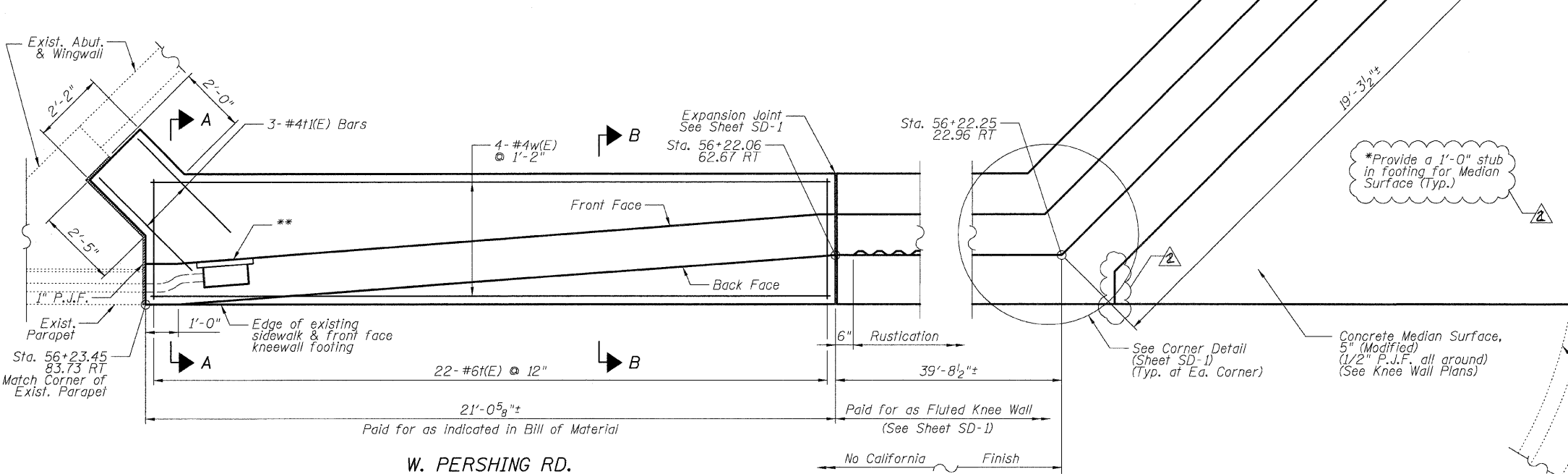


**ELEVATION**



**SECTION A-A**

**SECTION B-B**



**PLAN**

\*\* Contractor shall provide a stainless steel junction box and cover flush with the front face of Knee Wall and extend existing conduit from end of exiting parapet as directed by the Engineer. Cost incidental to Concrete Superstructures

BOWMAN, BARRETT & ASSOCIATES INC.  
CONSULTING ENGINEERS  
Chicago, Illinois  
312.228.0100  
www.bbainc.com

11/16/2008 6:03:48 PM