

SUMMARY OF QUANTITIES

| CODE NO. | ITEM                                      | UNIT   | QUANTITY | URBAN      |
|----------|---|--------|----------|------------|
|          |   |        |          | 100% STATE |
|          |   |        |          | JOOO       |
| 20200100 | EARTH EXCAVATION                          | CU YD  | 335      | 335        |
| 20900410 | SAND BACKFILL                             | CU YD  | 6        | 6          |
| 21101615 | TOPSOIL FURNISH AND PLACE, 4"             | SQ YD  | 44       | 44         |
| 21101645 | TOPSOIL FURNISH AND PLACE, 12"            | SQ YD  | 291      | 291        |
| 25000210 | SEEDING, CLASS 2A                         | ACRE   | 0.06     | 0.06       |
| 25000400 | NITROGEN FERTILIZER NUTRIENT              | POUND  | 16       | 16         |
| 25000500 | PHOSPHORUS FERTILIZER NUTRIENT            | POUND  | 16       | 16         |
| 25000600 | POTASSIUM FERTILIZER NUTRIENT             | POUND  | 16       | 16         |
| 25001800 | SEEDING, CLASS 4 (MODIFIED)               | ACRE   | 0.11     | 0.11       |
| 25100630 | EROSION CONTROL BLANKET                   | SQ YD  | 846      | 846        |
| 44004250 | PAVED SHOULDER REMOVAL                    | SQ YD  | 230      | 230        |
| 50300225 | CONCRETE STRUCTURES                       | CU YD  | 19       | 19         |
| 50300255 | CONCRETE SUPERSTRUCTURE                   | CU YD  | 18       | 18         |
| 50300300 | PROTECTIVE COAT                           | SQ YD  | 90       | 90         |
| 50300510 | RUSTICATION FINISH                        | SQ FT  | 212      | 212        |
| 50800205 | REINFORCEMENT BARS, EPOXY COATED          | POUND  | 3700     | 3700       |
| 60618324 | CONCRETE MEDIAN SURFACE, 6" (SPECIAL)     | SQ FT  | 339      | 339        |
| 63200310 | GUARDRAIL REMOVAL                         | FOOT   | 39       | 39         |
| 66400550 | CHAIN LINK FENCE, 4" (SPECIAL)            | FOOT   | 1,535    | 1,535      |
| 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   | 1,540    | 1,540      |
| X0323974 | SEDIMENT CONTROL, SILT FENCE MAINTENANCE  | FOOT   | 385      | 385        |
| X0324640 | FLUTED KNEE WALL                          | FOOT   | 1,427    | 1,427      |
| X2500322 | SEEDING, CLASS 5A, (MODIFIED)             | ACRE   | 0.11     | 0.11       |
| X6065740 | CONCRETE MEDIAN SURFACE, 5" (MODIFIED)    | SQ FT  | 24       | 24         |
| Z0013798 | CONSTRUCTION LAYOUT                       | L SUM  | 1        | 1          |

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   |
| 10-16 | EXISTING AND PROPOSED KNEE WALL PLANS   |
| 17-21 | STRUCTURAL DETAILS  |
| 22    | BD-51 DISTRICT 1, BENCHING DETAIL FOR EMBANKMENT WIDENING                                     |
| 23    | TC-10 DISTRICT 1, TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS & DRIVEWAYS    |
| 24    | TC-17 DISTRICT 1, TRAFFIC CONTROL DETAILS FOR FREEWAY SHOULDER CLOSURES PARTIAL RAMP CLOSURES |
| 25    | TC-18 DISTRICT 1, SIGNING FOR FLAGGING OPERATIONS AT WORK ZONE OPENINGS                       |
| 26    | TC-22 DISTRICT 1, ARTERIAL ROAD INFORMATION SIGN  |
| 27-41 | 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   |

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ILLINOIS DEPARTMENT OF TRANSPORTATION  
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
SOUTHBOUND KNEE WALLS (47TH ST TO 43RD ST)

SUMMARY OF QUANTITIES

SCALE: NONE  
DATE: 04/25/08

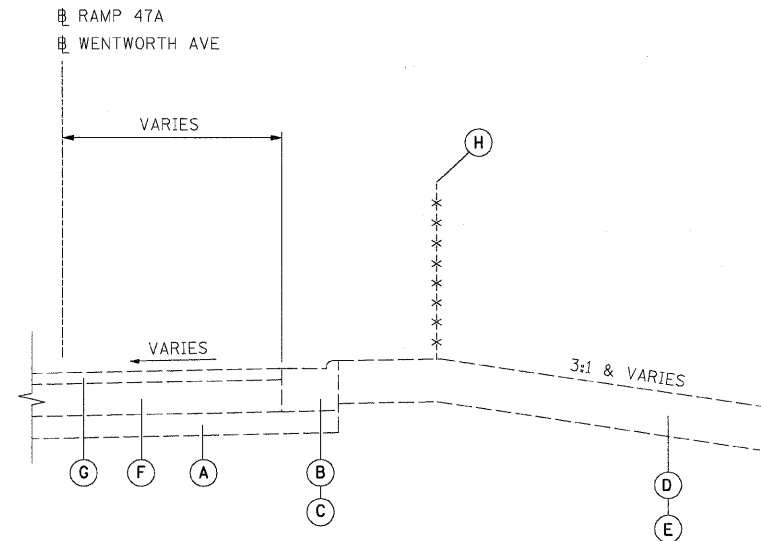
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Rev. 7-18-08

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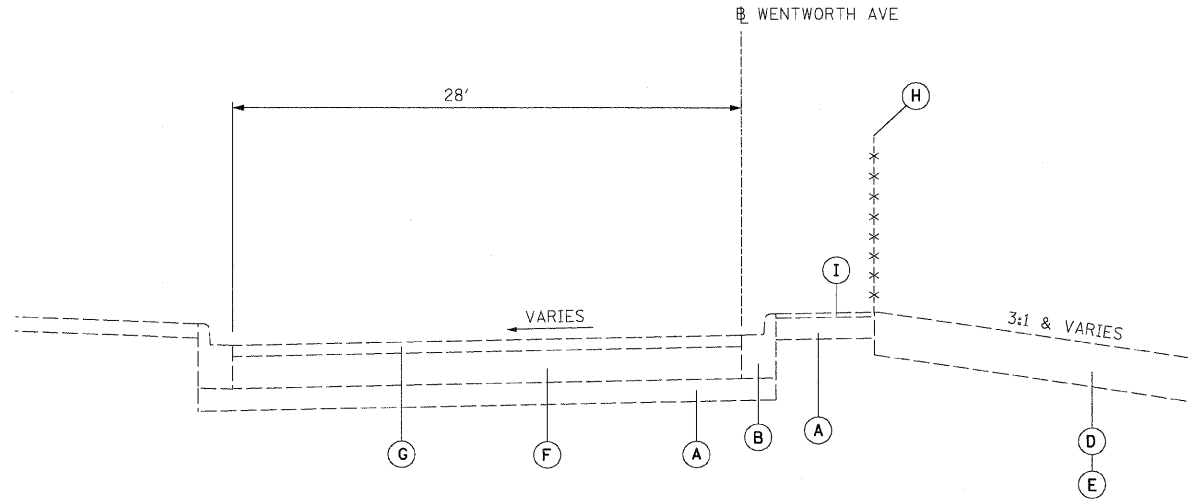
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|---------------------|----------|------------------|--------------|-----------|
| F.A.I.              | SECTION  | COUNTY           | TOTAL SHEETS | SHEET NO. |
| 94/90               |          | COOK             | 41           | 4         |
| STA.                | TO STA.  |                  |              |           |
| FED. ROAD DIST. NO. | ILLINOIS | FED. AID PROJECT |              |           |
| 62995               |          |                  |              |           |



**EXISTING TYPICAL SECTION**

STA. 5074+05.69 to 5070+72.56  
 STA. 24+86 to 27+12.10  
 STA. 7050+94 to 30+02.03

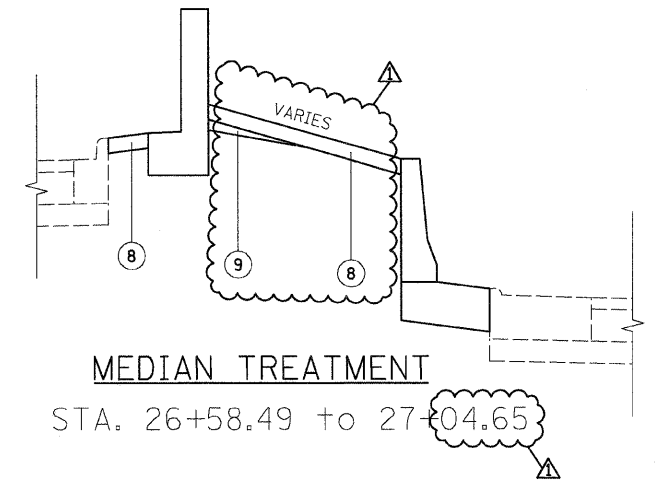


**EXISTING TYPICAL SECTION**

STA. 17+95.24 to 24+86

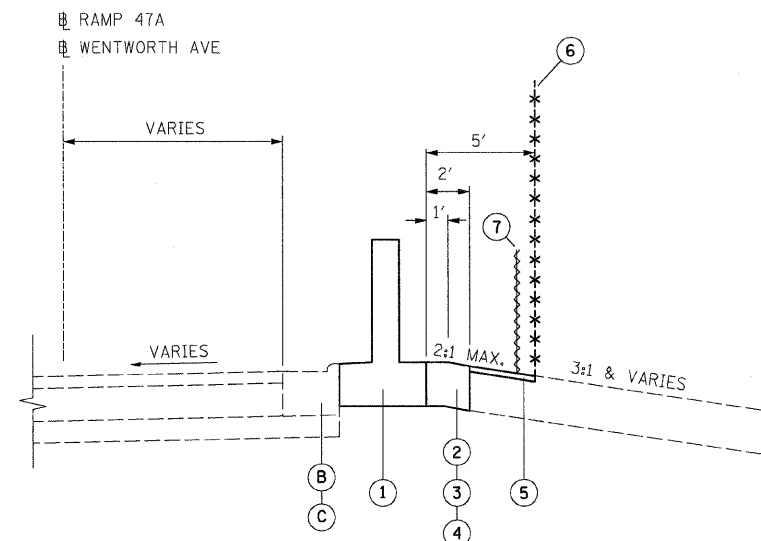
**EXISTING LEGEND**

- (A) GRANULAR MATERIAL, 6"
- (B) COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12
- (C) COMBINATION CONCRETE CURB AND GUTTER, TYPE M-4.24
- (D) TOPSOIL, 4"
- (E) TOPSOIL, 12"
- (F) PORTLAND CEMENT CONCRETE PAVEMENT, 9"
- (G) BITUMINOUS CONCRETE, 3"
- (H) CHAIN LINK FENCE, 4'
- (I) BITUMINOUS MEDIAN SURFACE, 1 1/2"



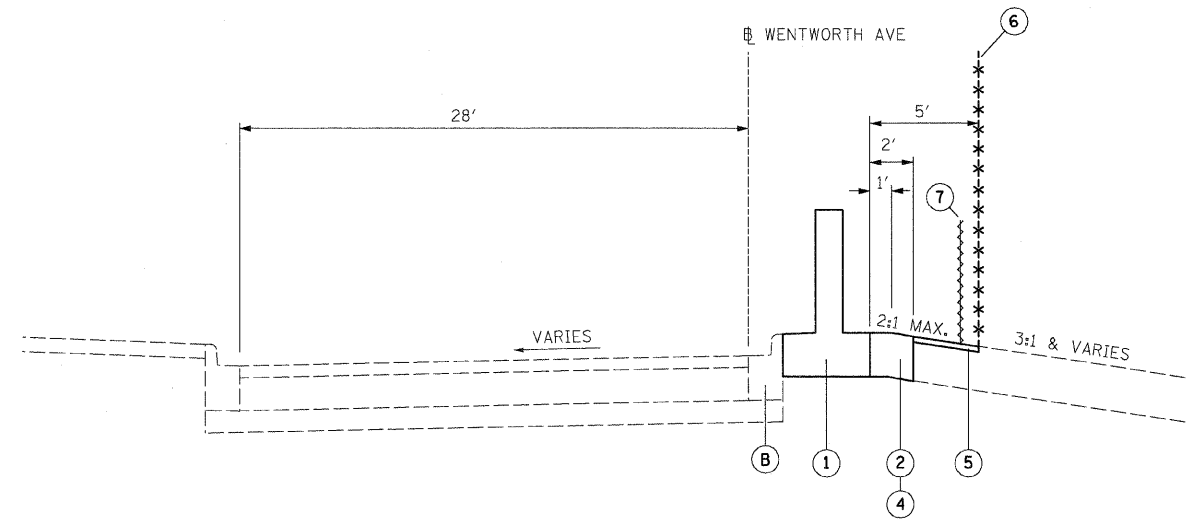
**MEDIAN TREATMENT**

STA. 26+58.49 to 27+04.65



**PROPOSED TYPICAL SECTION**

STA. 5073+93.27 to 5071+00  
 STA. 24+86 to 26+58.49  
 STA. 7050+94 to 29+98.33



**PROPOSED TYPICAL SECTION**

STA. 18+15.10 to 24+86

**PROPOSED LEGEND**

- (1) FLUTED KNEE WALL
- (2) SEEDING, CLASS 2A / TOPSOIL FURNISH AND PLACE, 4" / EROSION CONTROL BLANKET
- (3) SEEDING, CLASS 2A / TOPSOIL FURNISH AND PLACE, 12" / EROSION CONTROL BLANKET
- (4) SEEDING, CLASS 4 (MODIFIED) / SEEDING, CLASS 5A (MODIFIED) / TOPSOIL FURNISH AND PLACE, 12" / EROSION CONTROL BLANKET
- (5) SEEDING, CLASS 2A / SEEDING, CLASS 4 (MODIFIED) / SEEDING CLASS 5A (MODIFIED) / EROSION CONTROL BLANKET
- (6) CHAIN LINK FENCE, 4' (SPECIAL)
- (7) SEDIMENT CONTROL, SILT FENCE (TO BE REMOVED AT PROJECT COMPLETION)
- (8) CONCRETE MEDIAN SURFACE, 6" (SPECIAL)
- (9) SAND BACKFILL

TYP-1

**NOTES:**

1. THICKNESS OF EXISTING PAVEMENT AND GRANULAR MATERIAL ARE TAKEN FROM RECORD DRAWING PLANS.
2. TYPICAL SECTIONS NEED TO BE VERIFIED WITH THE PLANS AS THEY ARE A REPRESENTATION OF THE PLANS. THEY DO NOT SHOW ALL CONFIGURATIONS, JUST THE MOST PREDOMINANT.

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| NAME      | DATE    |
| REVISED   | 7-16-08 |
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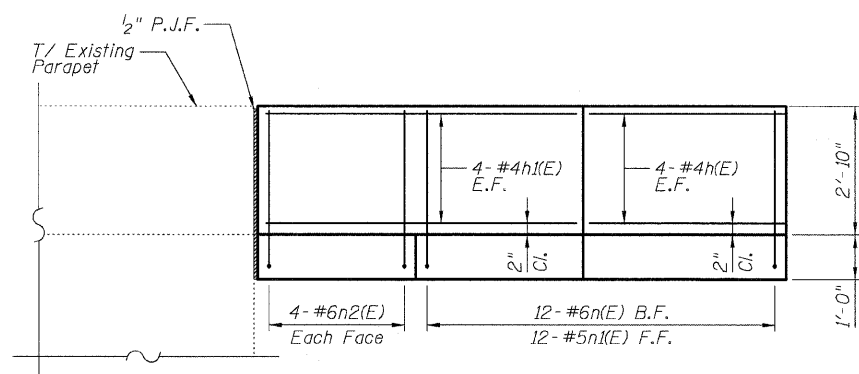
ILLINOIS DEPARTMENT OF TRANSPORTATION  
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
 SOUTHBOUND KNEE WALLS (47TH ST TO 43RD ST)

**TYPICAL SECTIONS**

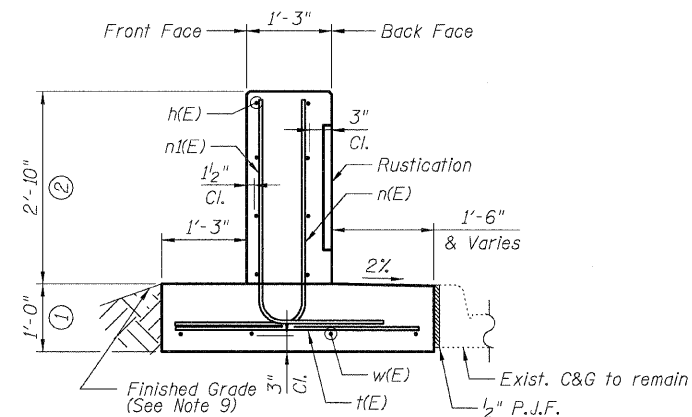
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UNFOLDED FRONT FACE ELEVATION

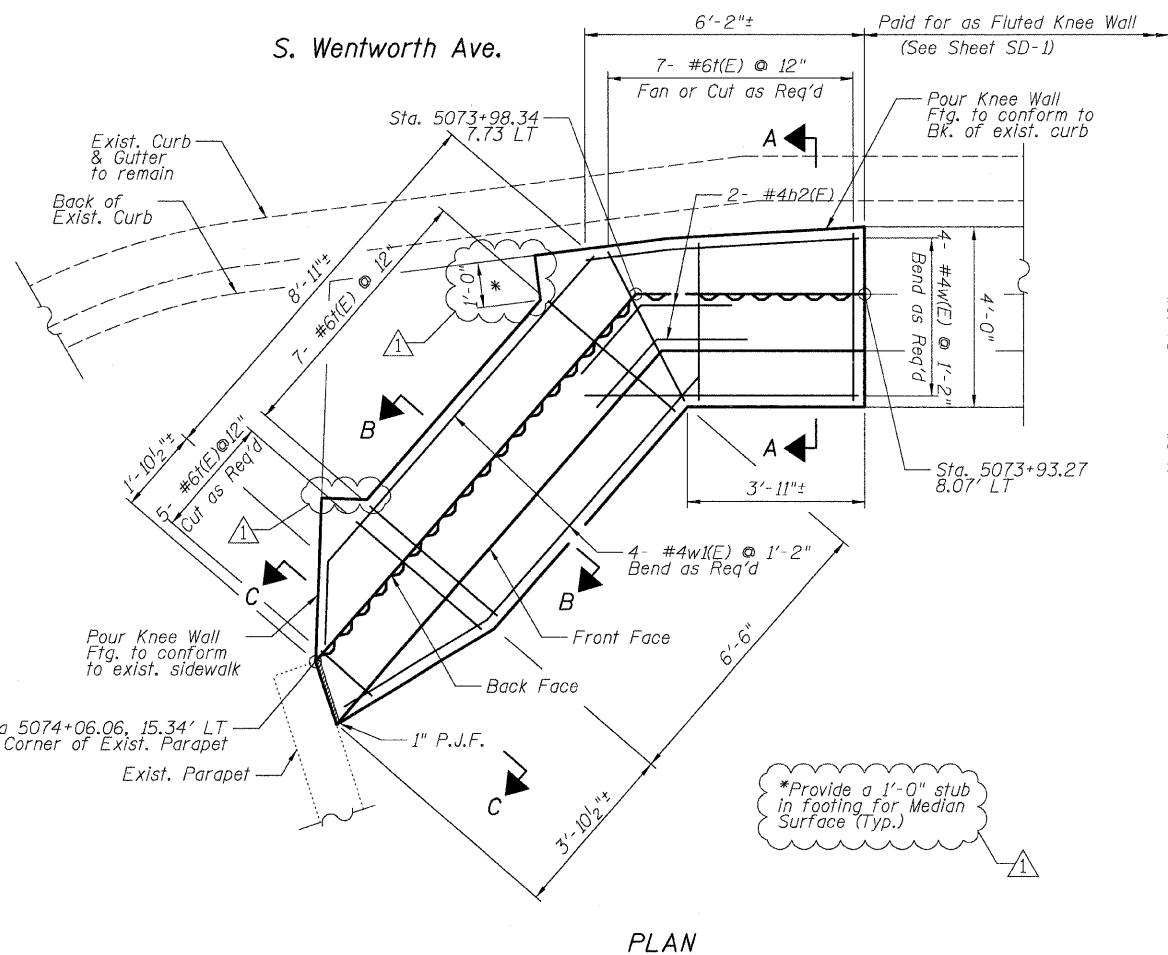


SECTION A-A

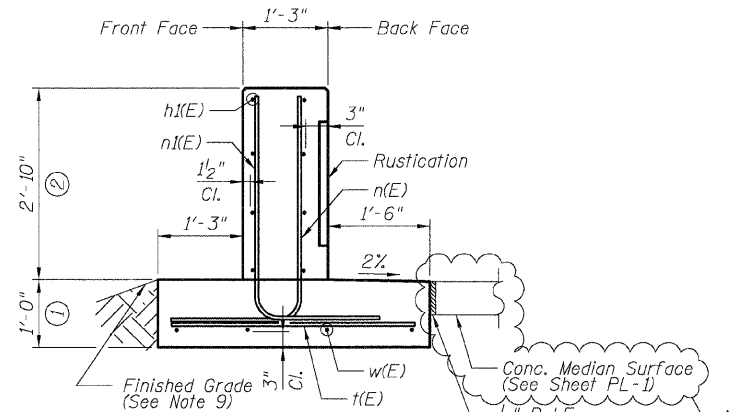
DETAIL A REINFORCEMENT SCHEDULE AND BILL OF MATERIAL

| Bar   | No. | Size | Length | Shape |
|-------|-----|------|--------|-------|
| h(E)  | 8   | #4   | 4'-10" | —     |
| h1(E) | 8   | #4   | 10'-0" | —     |
| h2(E) | 2   | #4   | 4'-0"  | —     |
| n(E)  | 12  | #6   | 5'-6"  | L     |
| n1(E) | 12  | #5   | 5'-10" | L     |
| n2(E) | 8   | #6   | 4'-0"  | U     |
| t(E)  | 19  | #6   | 3'-8"  | —     |
| w(E)  | 4   | #4   | 5'-10" | —     |
| w1(E) | 4   | #4   | 11'-0" | —     |

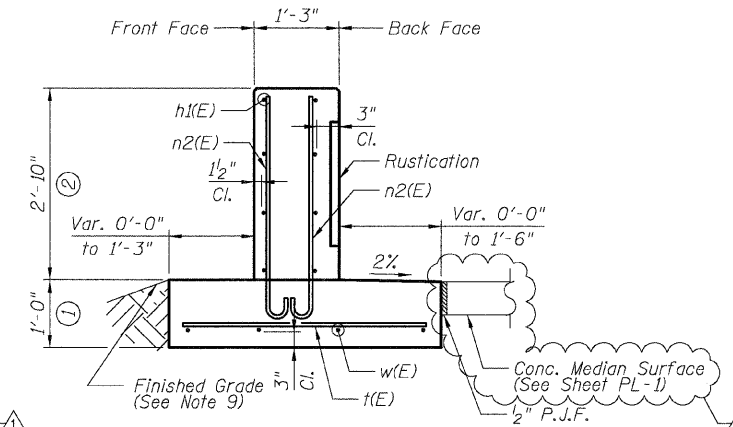
| Item                             | Unit    | Qty. |
|----------------------------------|---------|------|
| Concrete Structures              | Cu. Yd. | 2.4  |
| Concrete Superstructure          | Cu. Yd. | 2.1  |
| Reinforcement Bars, Epoxy Coated | Pound   | 460  |
| Rustication Finish               | Sq. Ft. | 30   |
| Protective Coat                  | Sq. Yd. | 10   |



PLAN



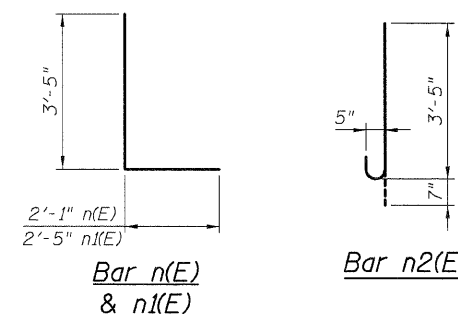
SECTION B-B



SECTION C-C

NOTES:

- All stations and offsets measured from Ramp 47A.
- 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 1/2" thick Preformed Expansion Joint Filler 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) & n1(E)

Bar n2(E)

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| ADDENDUM 1 |      | 7-16-08 |

ILLINOIS DEPARTMENT OF TRANSPORTATION  
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
SOUTHBOUND KNEE WALLS (47TH ST TO 43RD ST)

DETAIL A

SCALE: NTS  
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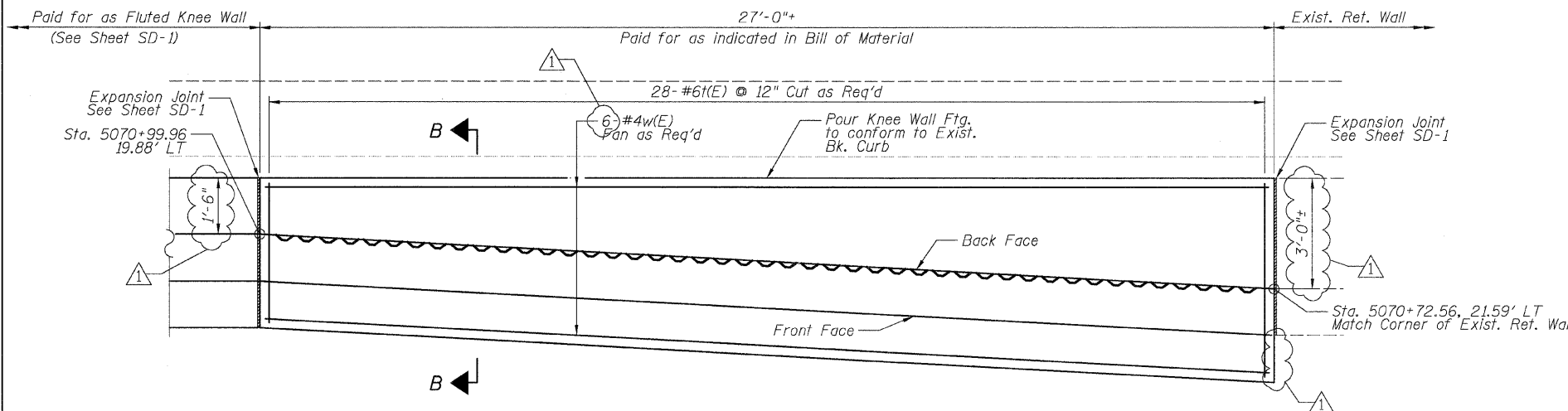
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SHEET SD-2

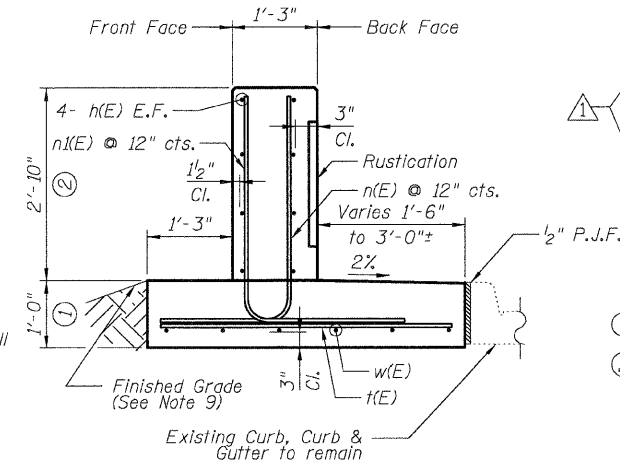
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| F.A.I.              | SECTION  | COUNTY           | TOTAL SHEETS | SHEET NO. |
| 94/90               | *        | COOK             | 41           | 19        |
| STA.                | TO STA.  |                  |              |           |
| FED. ROAD DIST. NO. | ILLINOIS | FED. AID PROJECT |              |           |
| 62995               |          |                  |              |           |

S. WENTWORTH AVE.



DETAIL B

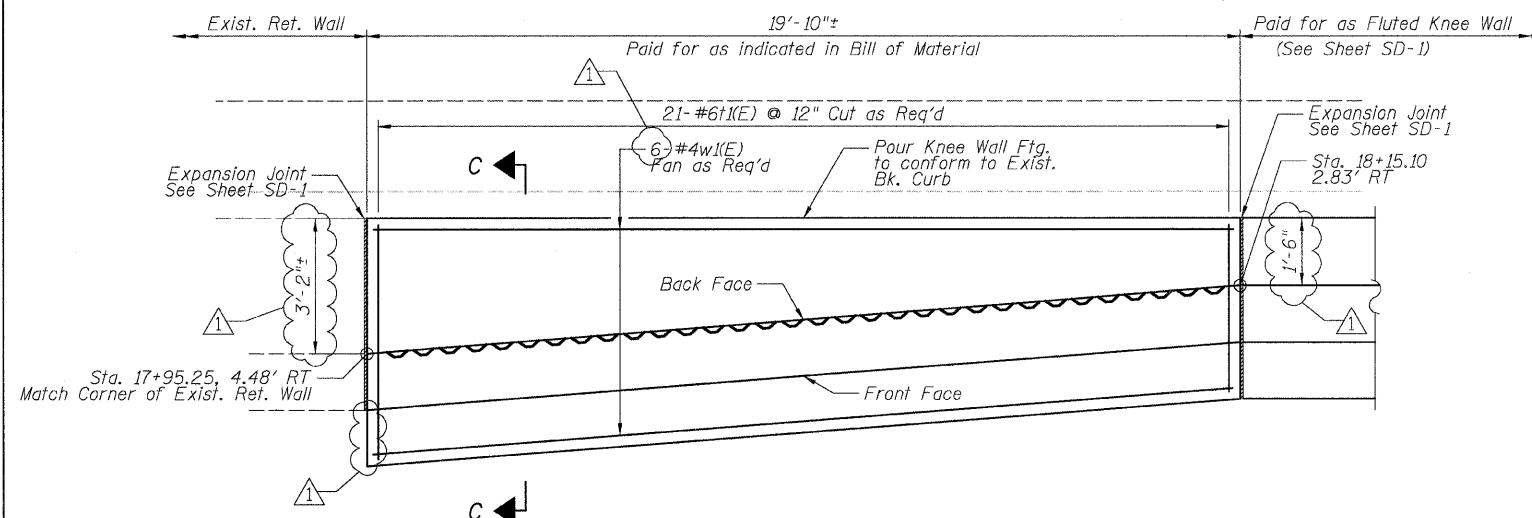


SECTION B-B

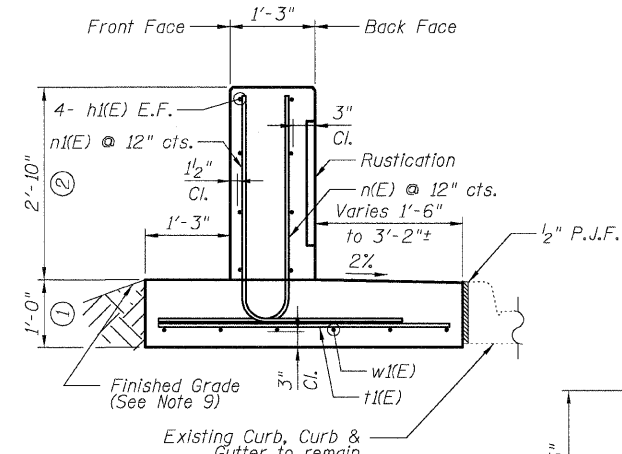
DETAIL B REINFORCEMENT SCHEDULE AND BILL OF MATERIAL

| Bar                              | No.     | Size | Length | Shape |
|----------------------------------|---------|------|--------|-------|
| h(E)                             | 8       | #4   | 26'-6" | —     |
| n(E)                             | 28      | #6   | 5'-6"  | L     |
| n(E)                             | 28      | #5   | 5'-10" | L     |
| h(E)                             | 28      | #6   | 5'-2"  | —     |
| w(E)                             | 6       | #4   | 26'-6" | —     |
| Item                             | Unit    | Qty. |        |       |
| Concrete Structures              | Cu. Yd. | 4.8  |        |       |
| Concrete Superstructure          | Cu. Yd. | 3.6  |        |       |
| Reinforcement Bars, Epoxy Coated | Pound   | 870  |        |       |
| Rustication Finish               | Sq. Ft. | 50   |        |       |
| Protective Coat                  | Sq. Yd. | 19   |        |       |

S. WENTWORTH AVE.



DETAIL C



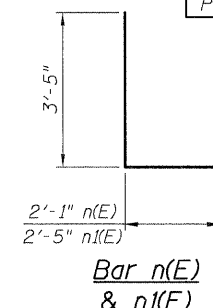
SECTION C-C

DETAIL C REINFORCEMENT SCHEDULE AND BILL OF MATERIAL

| Bar                              | No.     | Size | Length | Shape |
|----------------------------------|---------|------|--------|-------|
| h(E)                             | 8       | #4   | 19'-4" | —     |
| n(E)                             | 21      | #6   | 5'-6"  | L     |
| n(E)                             | 21      | #5   | 5'-10" | L     |
| h(E)                             | 21      | #6   | 5'-4"  | —     |
| w(E)                             | 6       | #4   | 19'-4" | —     |
| Item                             | Unit    | Qty. |        |       |
| Concrete Structures              | Cu. Yd. | 3.6  |        |       |
| Concrete Superstructure          | Cu. Yd. | 2.7  |        |       |
| Reinforcement Bars, Epoxy Coated | Pound   | 660  |        |       |
| Rustication Finish               | Sq. Ft. | 37   |        |       |
| Protective Coat                  | Sq. Yd. | 15   |        |       |

NOTES:

- Stations and offsets measured from Ramp 47A @ for Detail B, and from S. Wentworth Ave. @ for Detail 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 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  |         |
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| NAME       | DATE    |
| ADDENDUM 1 | 7-16-08 |
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SHEET SD-3

ILLINOIS DEPARTMENT OF TRANSPORTATION  
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
SOUTHBOUND KNEE WALLS (47TH ST TO 43RD ST)

DETAILS B & C

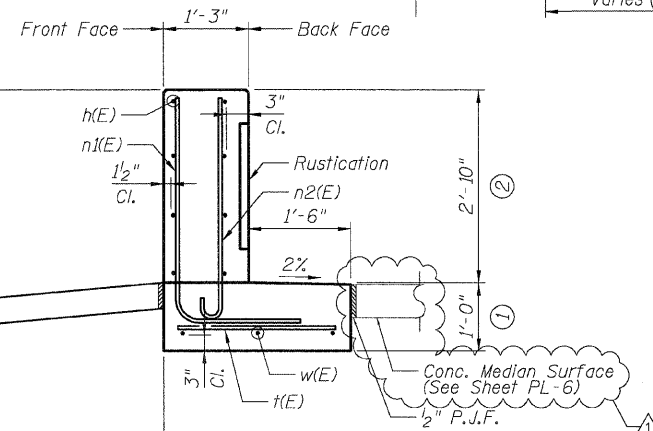
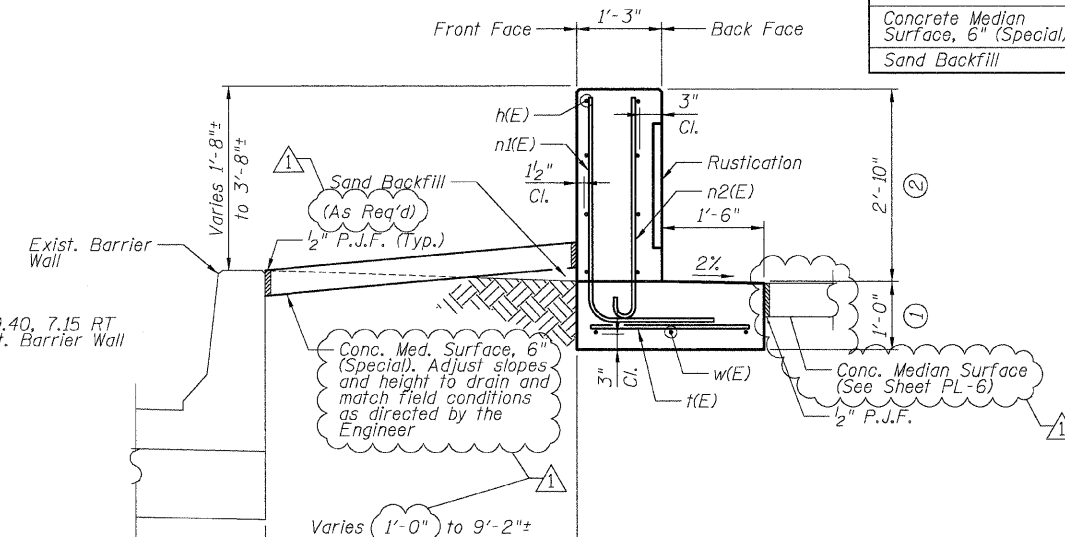
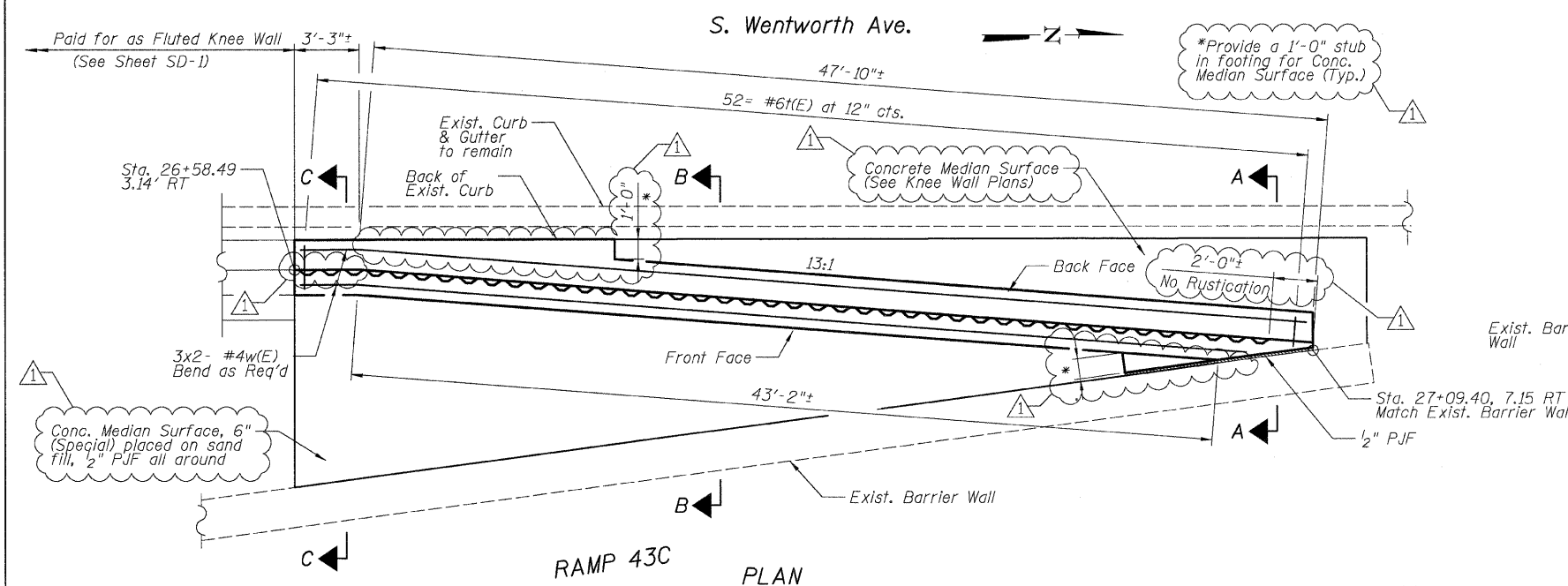
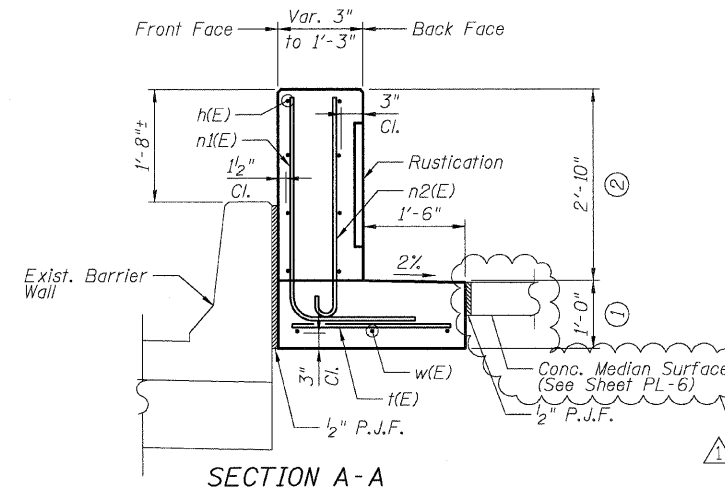
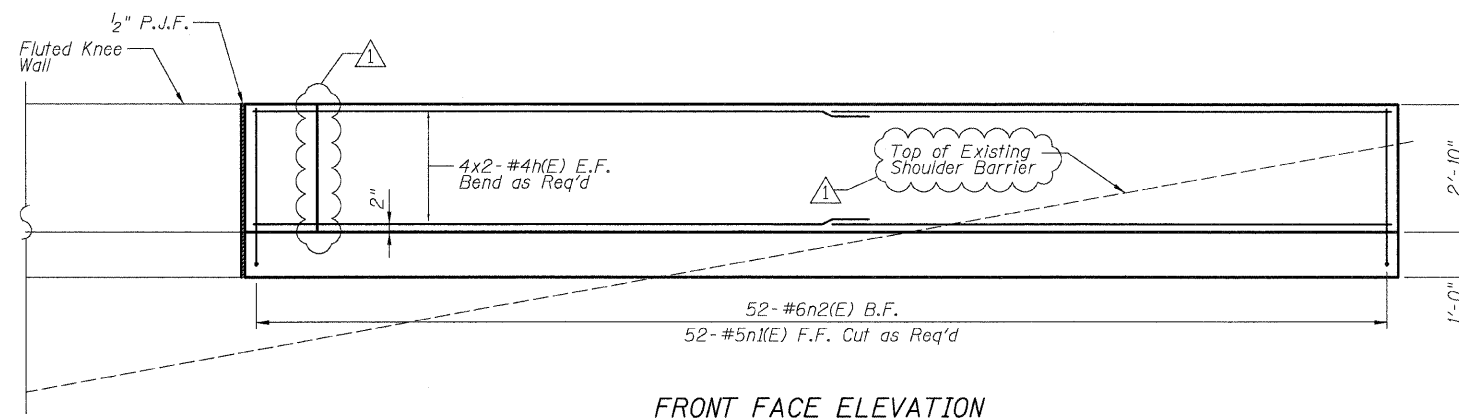
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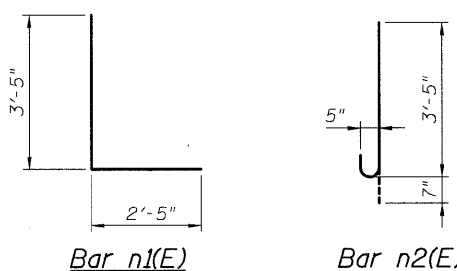
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**DETAIL D REINFORCEMENT  
 SCHEDULE AND  
 BILL OF MATERIAL**

| Bar                                   | No. | Size    | Length | Shape |
|---------------------------------------|-----|---------|--------|-------|
| h(E)                                  | 16  | #4      | 26'-3" | —     |
| n1(E)                                 | 52  | #5      | 5'-10" | L     |
| n2(E)                                 | 52  | #6      | 4'-0"  | —     |
| t(E)                                  | 52  | #6      | 2'-5"  | —     |
| w(E)                                  | 6   | #4      | 26'-3" | —     |
| Item                                  |     | Unit    | Qty.   |       |
| Concrete Structures                   |     | Cu. Yd. | 5.3    |       |
| Concrete Superstructure               |     | Cu. Yd. | 6.7    |       |
| Reinforcement Bars, Epoxy Coated      |     | Pound   | 1210   |       |
| Rustication Finish                    |     | Sq. Ft. | 91     |       |
| Protective Coat                       |     | Sq. Yd. | 32     |       |
| Concrete Median Surface, 6" (Special) |     | Sq. Ft. | 235    |       |
| Sand Backfill                         |     | Cu. Yd. | 6      |       |



**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.



| REVISIONS  |         |
|------------|---------|
| NAME       | DATE    |
| ADDENDUM 1 | 7-16-08 |
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ILLINOIS DEPARTMENT OF TRANSPORTATION  
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
 SOUTHBOUND KNEE WALLS (47TH ST TO 43RD ST)

**DETAIL D**

SCALE: NTS  
 DATE: 04/25/08  
 DRAWN BY: TL  
 CHECKED BY: BLU

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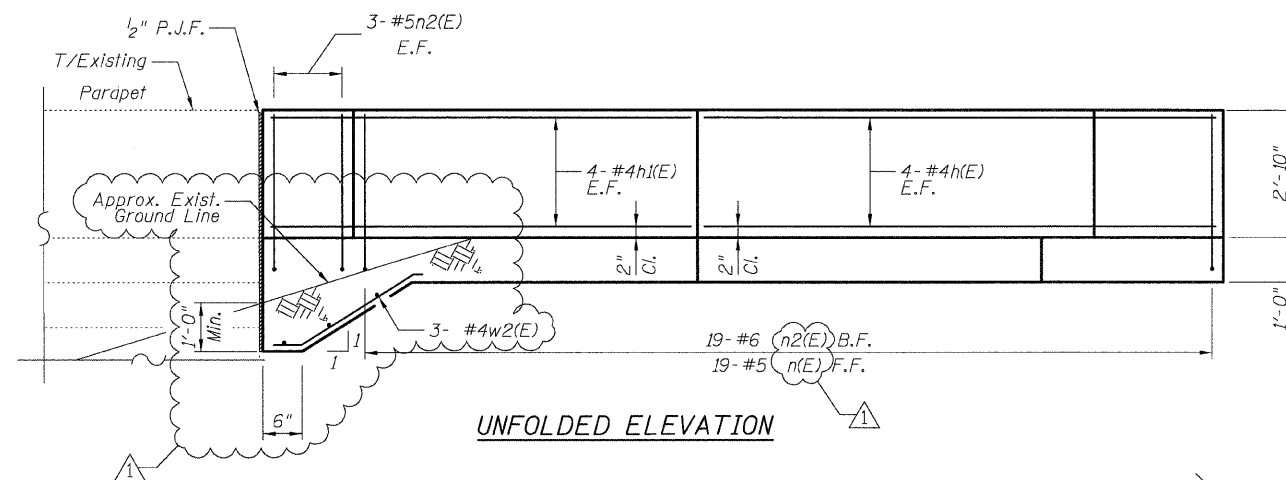
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**DETAIL E REINFORCEMENT SCHEDULE AND BILL OF MATERIAL**

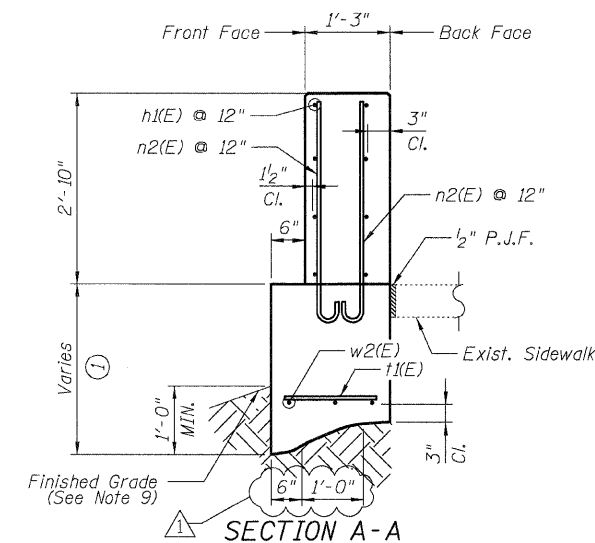
| Bar                              | No.     | Size | Length | Shape |
|----------------------------------|---------|------|--------|-------|
| h(E)                             | 8       | #4   | 9'-10" |       |
| h(E)                             | 8       | #4   | 10'-6" |       |
| h2(E)                            | 2       | #4   | 4'-0"  |       |
| h3(E)                            | 2       | #4   | 3'-8"  |       |
| n(E)                             | 19      | #5   | 5'-6"  | L     |
| n2(E)                            | 25      | #6   | 4'-0"  | C     |
| t(E)                             | 3       | #6   | 3'-8"  |       |
| t(E)                             | 19      | #6   | 1'-5"  |       |
| w(E)                             | 4       | #4   | 3'-1"  |       |
| w(E)                             | 4       | #4   | 16'-5" |       |
| w2(E)                            | 3       | #4   | 3'-0"  |       |
| Item                             | Unit    | Qty. |        |       |
| Concrete Structures              | Cu. Yd. | 2.9  |        |       |
| Concrete Superstructure          | Cu. Yd. | 2.8  |        |       |
| Reinforcement Bars, Epoxy Coated | Pound   | 500  |        |       |
| Rustication Finish               | Sq. Ft. | 4    |        |       |
| Protective Coat                  | Sq. Yd. | 14   |        |       |

**NOTES:**

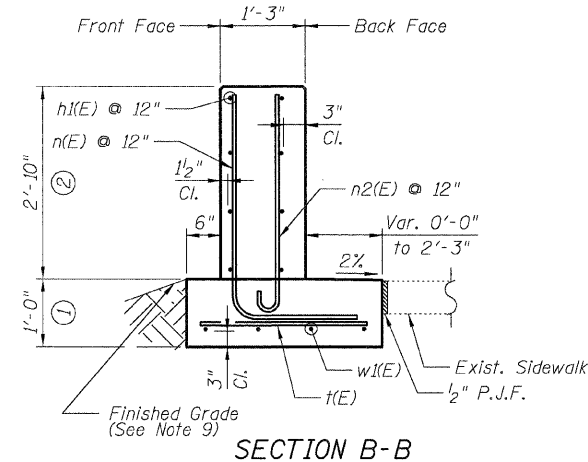
- All stations and offsets measured from S. Wentworth Ave. @.
- Back Face is face adjacent to Frontage Rd. and Front Face is face adjacent to Expressway.
- Concrete:  $f'c = 3500$  psi
- Provide California Finish on top of foundation between stem and Frontage Road. See Roadway Details.
- At locations where Fluted Knee Wall abuts a rigid Structure, a 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.



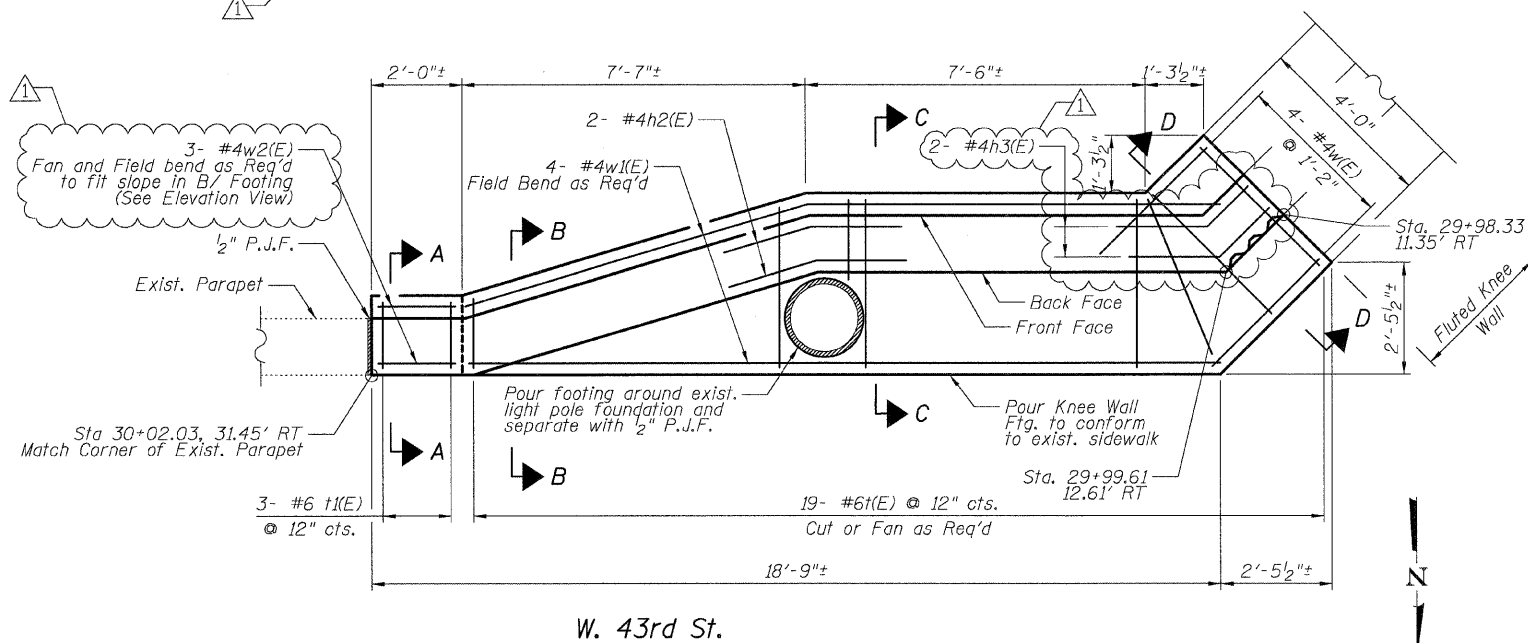
**UNFOLDED ELEVATION**



**SECTION A-A**

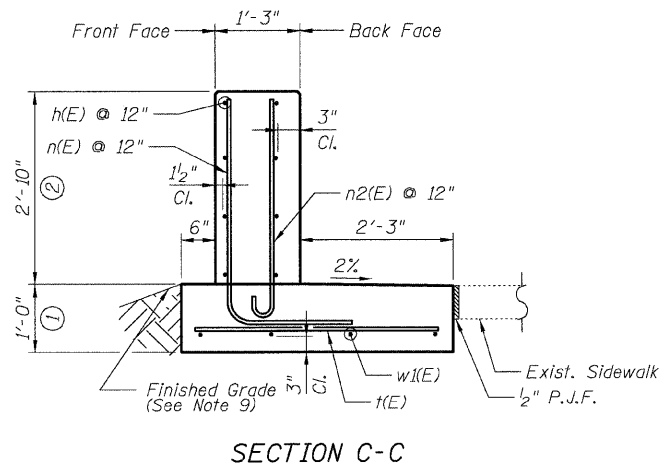


**SECTION B-B**

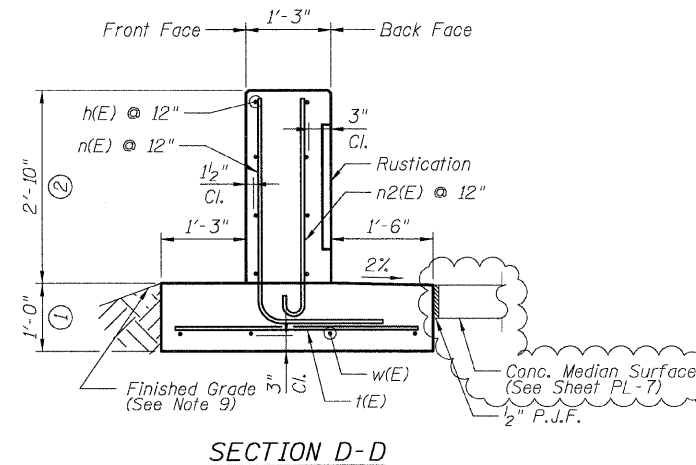


**W. 43rd St.**

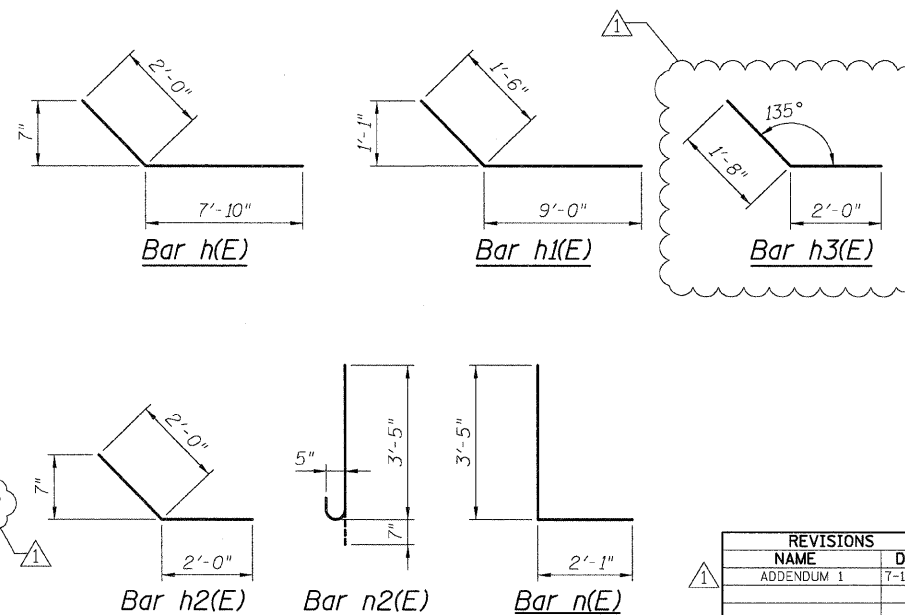
**PLAN**



**SECTION C-C**



**SECTION D-D**



| REVISIONS  |         |
|------------|---------|
| NAME       | DATE    |
| ADDENDUM 1 | 7-16-08 |
|            |         |
|            |         |
|            |         |
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