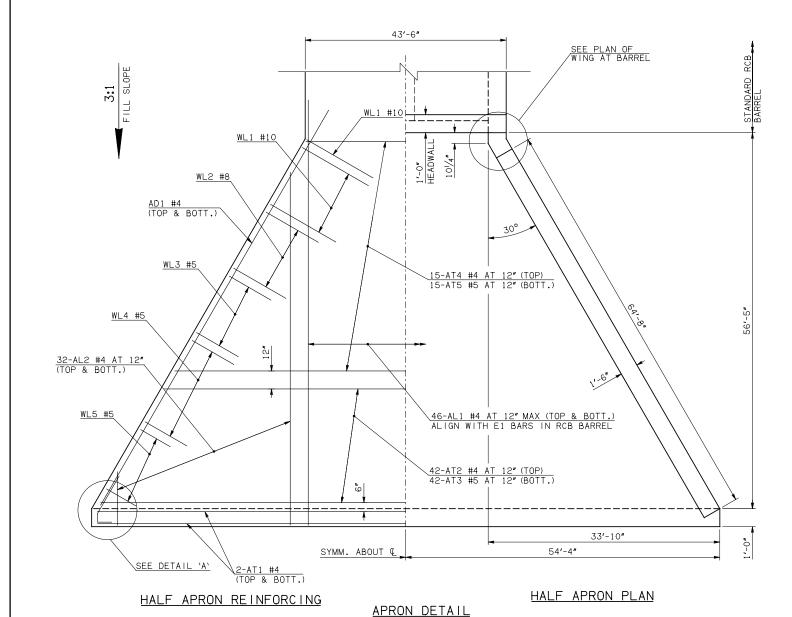


(AT1 #4 (TOP & BOTT.)



AD1 #4
(TOP & BOTT.)

WL5 #5

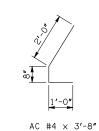
OF AC #4
(TOP & BOTT.)

PLACED AS SHOWN

WY2 WITH WL1 BAR

WY2 WITH WL1 BAR

PLAN OF WING AT BARREL



AL2 #4 (TOP & BOTT.

| WINGWALL BAR LIST |      |      |      |        |  |                   |  |  |  |  |
|-------------------|------|------|------|--------|--|-------------------|--|--|--|--|
|                   |      | C    | NE W | INGWAL | L SHOWN; TWO                             | REQUIRED          |  |  |  |  |
|                   | MARK | SIZE | QTY. | FORM   | LENGTH                                   | REMARKS           |  |  |  |  |
|                   | WD1  | #9   | 36   | BNT    | 8'-4"                                    |                   |  |  |  |  |
|                   | WH1  | #4   | 2    | STR    | 67'-4" ③                                 |                   |  |  |  |  |
|                   | WH2  | #4   | 2    | STR    | 64'-7" ③                                 |                   |  |  |  |  |
| 2                 | WH3  | #4   | 34   | STR    | 30'-101/2" AVG.                          | 3'-2" TO 58'-7"   |  |  |  |  |
|                   | WH4  | #5   | 2    | STR    | 69′-7″ ③                                 |                   |  |  |  |  |
|                   | WL1  | #10  | 18   | BNT    | 21'-10"                                  |                   |  |  |  |  |
|                   | WL2  | #8   | 33   | BNT    | 18'-4"                                   |                   |  |  |  |  |
|                   | WL3  | #5   | 27   | BNT    | 12'-4"                                   |                   |  |  |  |  |
|                   | WL4  | #5   | 15   | BNT    | 6'-10"                                   |                   |  |  |  |  |
|                   | WL5  | #5   | 11   | BNT    | 5'-3" AVG.                               | 3'-10" TO 6'-8"   |  |  |  |  |
|                   | WT1  | #4   | 56   | STR    | 3'-10"                                   |                   |  |  |  |  |
|                   | WT2  | #4   | 2    | STR    | 19'-0"                                   |                   |  |  |  |  |
|                   | WT3  | #4   | 54   | STR    | 11'-2 / <sub>2</sub> " AVG.              | 3'-7" TO 18'-10"  |  |  |  |  |
|                   | WT4  | #4   | 11   | STR    | 3'-3" AVG.                               | 1'-10" TO 4'-8"   |  |  |  |  |
|                   | WV1  | #8   | 2    | STR    | 19'-0"                                   |                   |  |  |  |  |
|                   | WV2  | #8   | 17   | STR    | 17'-8 <sup>1</sup> / <sub>2</sub> " AVG. | 16'-7" TO 18'-10" |  |  |  |  |
|                   | wv3  | #6   | 33   | STR    | 14'-1" AVG.                              | 11'-9" TO 16'-5"  |  |  |  |  |
|                   | WV4  | #5   | 29   | STR    | 7'-7 <sup>1</sup> / <sub>2</sub> " AVG.  | 3'-7" TO 11'-8"   |  |  |  |  |
|                   | U1   | #4   | 1    | BNT    | 4'-8"                                    |                   |  |  |  |  |

DETAIL 'A'

- 1 4-SETS OF 32-AL2 BARS REQUIRED
- 2-SETS OF 17-WH3 BARS REQUIRED
- 3 INCLUDES 2'-6" LAP

|  |   |                                  | APF  | RON A | ND H     | HEADWALL I                               | BAR LIST           |  |  |  |  |
|--|---|----------------------------------|------|-------|----------|--|--------------------|--|--|--|--|
|  |   | ONE APRON AND ONE HEADWALL SHOWN |      |       |          |  |                    |  |  |  |  |
|  |   | MARK                             | SIZE | FORM  | 20' SPAN |  |                    |  |  |  |  |
|  |   | MARK                             | SIZE | FURM  | QTY.     | LENGTH                                   | REMARKS            |  |  |  |  |
|  |   | AC                               | #4   | BNT   | 4        | 3'-8"                                    |                    |  |  |  |  |
|  | 3 | AD1                              | #4   | STR   | 4        | 69'-4"                                   |                    |  |  |  |  |
|  |   | AL1                              | #4   | STR   | 92       | 59'-3"                                   |                    |  |  |  |  |
|  | 1 | AL2                              | #4   | STR   | 128      | 29'-4" AVG.                              | 2'-6" T0 56'-2"    |  |  |  |  |
|  | 3 | AT1                              | #4   | STR   | 4        | 110'-10"                                 |                    |  |  |  |  |
|  | 3 | AT2                              | #4   | STR   | 42       | 86'-7 <sup>1</sup> / <sub>2</sub> " AVG. | 62'-11" TO 110'-4" |  |  |  |  |
|  | 3 | AT3                              | #5   | STR   | 42       | 86'-7 <sup>1</sup> / <sub>2</sub> " AVG. | 62'-11" TO 110'-4" |  |  |  |  |
|  |   | AT4                              | #4   | STR   | 15       | 51'-3" AVG.                              | 43'-2" TO 59'-4"   |  |  |  |  |
|  |   | AT5                              | #5   | STR   | 15       | 51'-3" AVG.                              | 43'-2" TO 59'-4"   |  |  |  |  |
|  |   | СН                               | #4   | STR   | 4        | 43'-2"                                   |                    |  |  |  |  |
|  |   | CL1                              | #4   | BNT   | 46       | 4'-4"                                    |                    |  |  |  |  |
|  |   | CL2                              | #4   | BNT   | 46       | 4'-3"                                    |                    |  |  |  |  |

| QUANTITIES        |      |          |
|-------------------|------|----------|
| ITEM              | UNIT | 20' SPAN |
| CLASS AA CONCRETE | CY   | 344.60   |
| REINFORCING STEEL | LB   | 31170.00 |

NOTE: QUANTITIES ABOVE ARE FOR ONE END SECTION, WHICH IS COMPRISED OF ONE HEADWALL, ONE APRON, AND TWO WINGWALLS.

APPROVED BY BRIDGE ENGINEER Religible J. Musch DATE 4/09/09

OKLAHOMA DEPT. OF TRANSPORTATION
BRIDGE STANDARD (ENGLISH)
RCB CULVERTS - END SECTION DETAILS

DOUBLE CELL - 17'-0" HEIGHT - 0° SHEET NO. 1 OF 2

1999 SPECIFICATIONS

RCB-E2-H17-0-1

00E B-622E