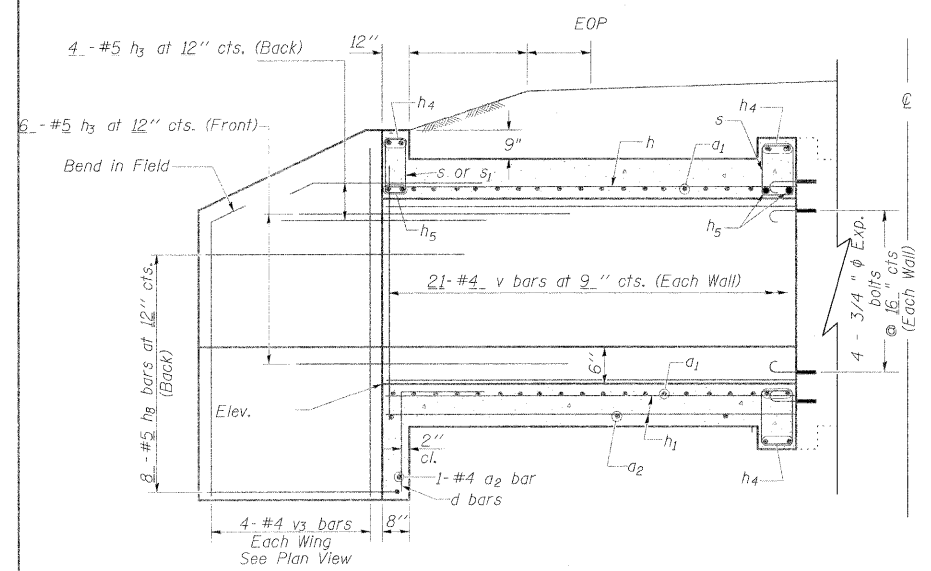
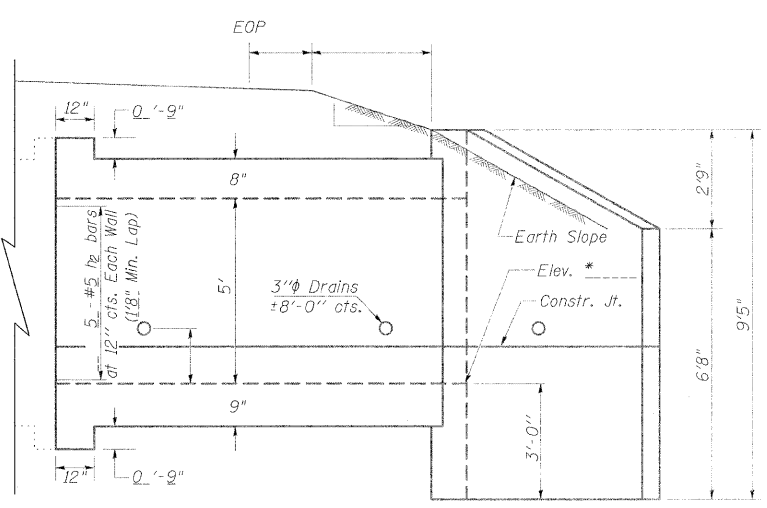


STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

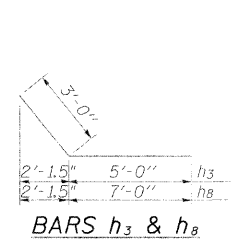


ELEVATION

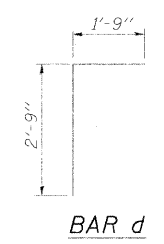
Dimensions at Rt. L's to C Roadway



* DSFL 424.43 (EB IL 13)



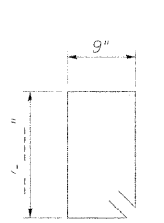
BARS h3 & h8



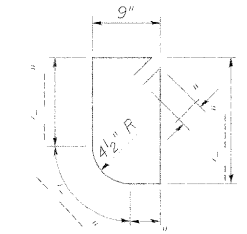
BAR d



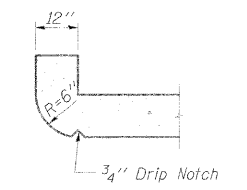
BAR a1



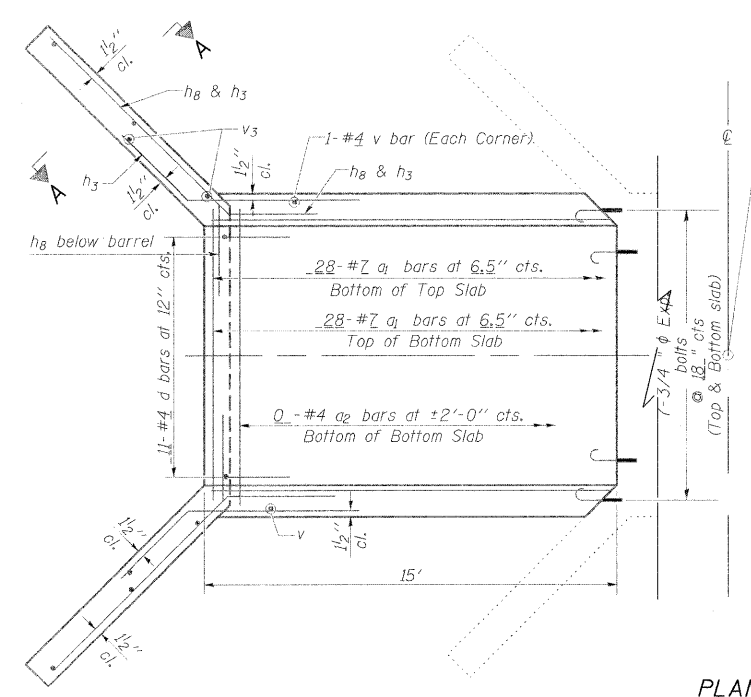
Bar s
(Downstream)



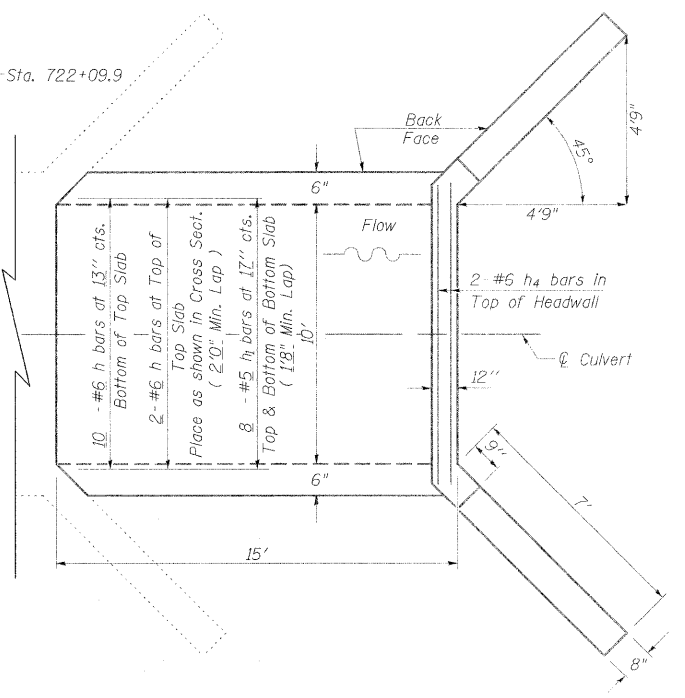
Bar s1
(Upstream)



SECTION THRU HEADWALL
(Up Stream End Only)



PLAN



NOTES

All construction joints shall be bonded.
Expansion bolts shall be 3/4 inch diameter x 12 inch hooked bolts. Hooked bolts shall extend a minimum of 9 inch into new concrete and have a minimum certified proof load of 4,080 lbs.

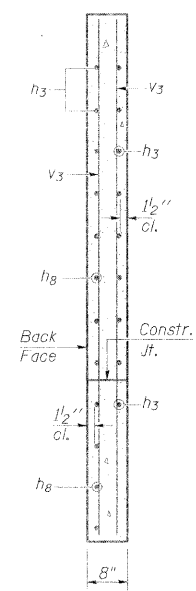
DESIGN STRESSES

fy = 60,000 psi
f'c = 3,500 psi

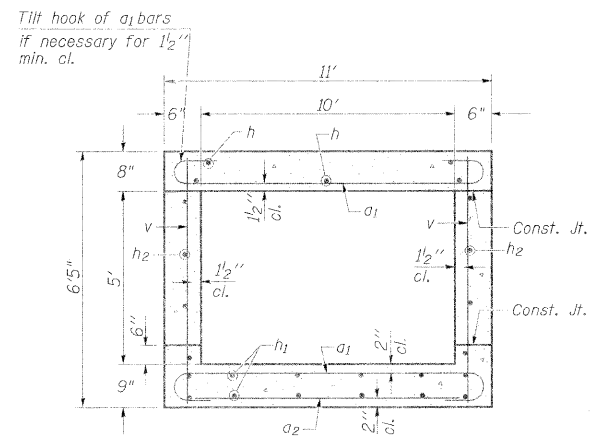
LOADING HS 20-44 & ALT.

BILL OF MATERIAL

| Bar | No. | Size | Length | Shape |
|-----------------------|-----|------|--------|--------------|
| a1 | 56 | #7 | 12'-4" | U |
| a2 | 0 | #4 | | |
| d | 11 | #4 | 4'-6" | L |
| h | 12 | #6 | 14'-9" | — |
| h1 | 16 | #5 | 14'-9" | — |
| h2 | 10 | #5 | 14'-9" | — |
| h3 | 20 | #5 | 8'-0" | — |
| h4 | 6 | #6 | 10'-9" | — |
| h5 | 4 | #7 | 10'-9" | — |
| h8 | 16 | #5 | 10'-0" | — |
| s | 0 | #4 | | |
| s1 | 0 | #4 | | |
| v | 44 | #4 | 6'-1" | — |
| v3 | 8 | #4 | 9'-2" | — |
| Concrete Box Culverts | | | | Cu. Yd. 15.2 |
| Reinforcement Bars | | | | Pound 2860 |
| 3/4" Expansion bolts | | | | Each ?? |



SECTION A-A



SECTION THRU BARREL

REVISIONS

| | |
|---------|---------------|
| DRAWN | 2-04 |
| REVISED | 5-09 SHT CELL |
| REVISED | |
| REVISED | |

Reinforcement Bars shall conform to the requirements of AASHTO M-31, M-42 or M-53, Grade 60.
Bars indicated thus 12 x 4-#5 etc. indicates 12 lines of bars with 4 lengths per line.
A distance of half the length of the wingwall but not less than six feet of the barrel shall be poured monolithically with the wingwalls.