

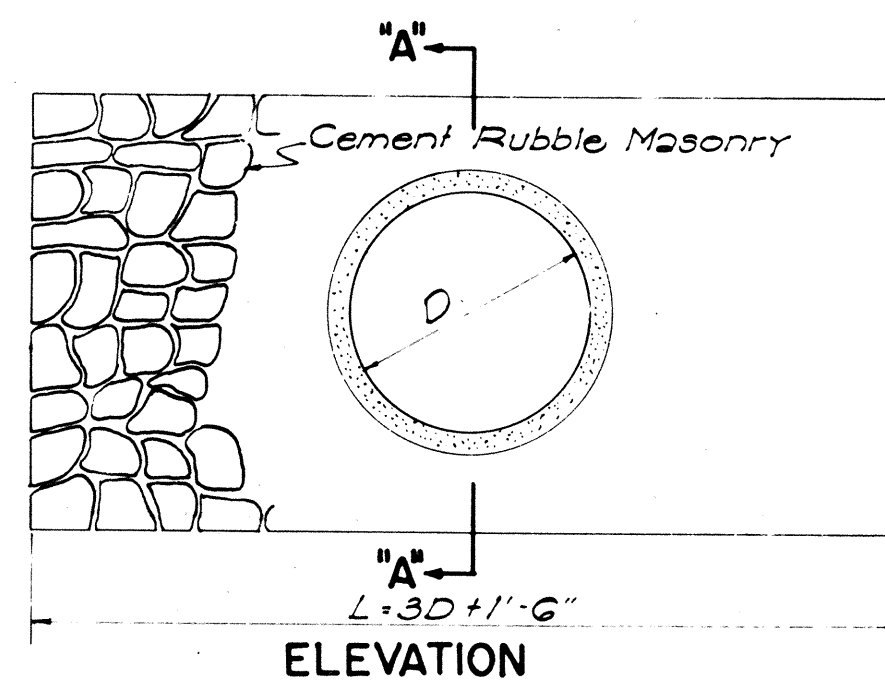
| DATA FOR OUTLET DITCH |     |       |       |       |
|-----------------------|-----|-------|-------|-------|
| D                     | W   | H     | T     | A+H   |
| 18"                   | 24" | 2'-0" | 4'-0" | 4'-0" |
| 24"                   | 30" | 2'-0" | 4'-6" | 4'-6" |
| 30"                   | 30" | 2'-6" | 5'-0" | 5'-0" |
| 36"                   | 36" | 3'-0" | 6'-0" | 6'-0" |

DETAIL OF OUTLET DITCH  
Scale: 1/2" = 1'-0"

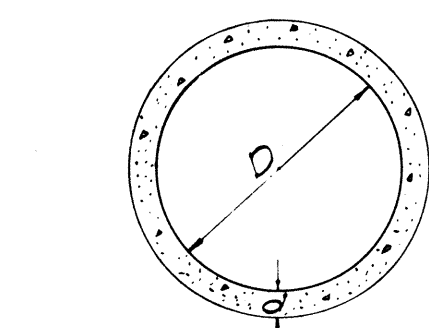
| DATA FOR MASONRY DROP INTAKE |     |           |          |                       |
|------------------------------|-----|-----------|----------|-----------------------|
| D                            | D   | L x D x G | Cu. Yds. | Where Variables Equal |
| 23"                          | 18" | 2'-5"     | 3.02     | 4'-6"                 |
| 30"                          | 24" | 3'-0"     | 3.61     | 5'-0"                 |
| 37"                          | 30" | 3'-7"     | 4.21     | 5'-6"                 |
| 44"                          | 36" | 4'-2"     | 4.85     | 6'-0"                 |

NOTE:  
Dimension "X" is assumed as 2'-4"  
in figuring the above quantities.

| DATA - MASONRY HEADWALL |       |       |        |          |
|-------------------------|-------|-------|--------|----------|
| D                       | H     | B     | L      | Cu. Yds. |
| 18"                     | 3'-6" | 1'-0" | 6'-0"  | 0.85     |
| 24"                     | 4'-0" | 2'-0" | 7'-6"  | 1.28     |
| 30"                     | 4'-6" | 2'-3" | 9'-0"  | 1.83     |
| 36"                     | 5'-0" | 2'-6" | 10'-6" | 2.40     |



DETAIL OF MASONRY HEADWALL  
Scale: 1/2" = 1'-0"



SECTION  
CONC. PIPE CULVERT

NOTE:  
Thickness 'd', reinforcing, and  
concrete used, are to conform  
with the approved design as  
provided by the Specifications.

| DATA - CAST-IN-PLACE CONC. CULVERT |        |        |                  |
|------------------------------------|--------|--------|------------------|
| D                                  | d      | W      | Cu. Yds. per Ft. |
| 18"                                | 4"     | 2'-2"  | 0.11             |
| 24"                                | 4 1/2" | 2'-0"  | 0.14             |
| 30"                                | 5"     | 3'-4"  | 0.19             |
| 36"                                | 5 1/2" | 3'-11" | 0.26             |

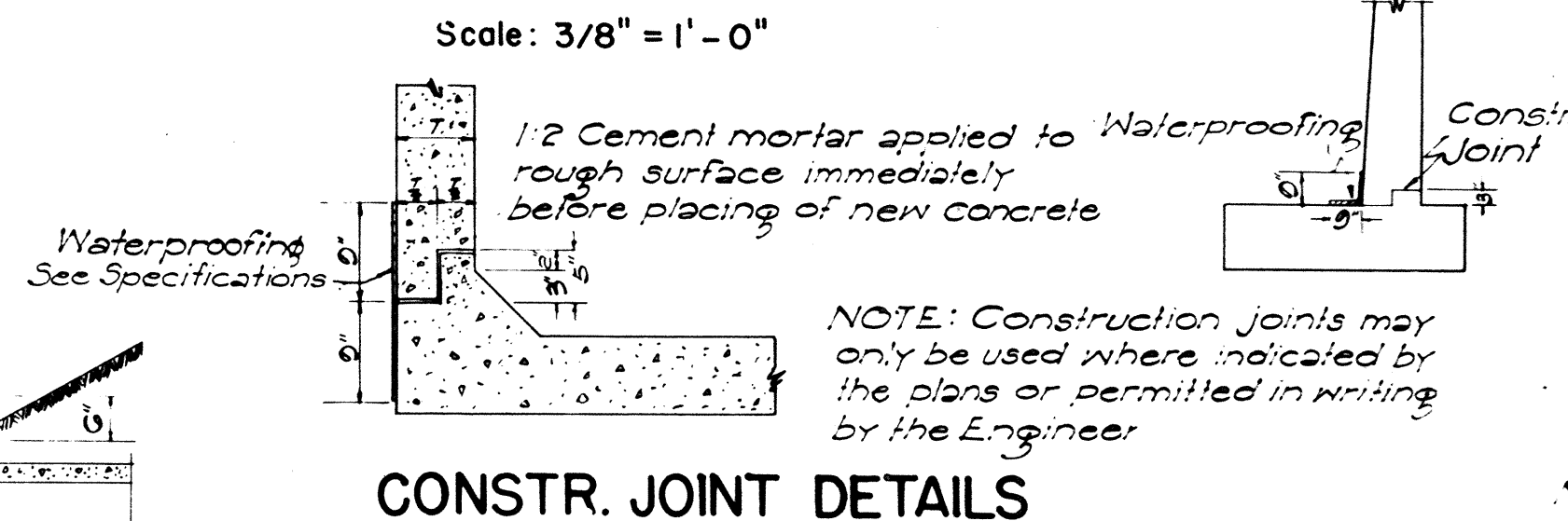
CAST-IN-PLACE  
CONC. CULVERT

| DATA FOR CONC. HEADWALL |       |        |       |          |
|-------------------------|-------|--------|-------|----------|
| D                       | B     | L      | H     | Cu. Yds. |
| 18"                     | 1'-6" | 6'-0"  | 4'-0" | 0.92     |
| 24"                     | 1'-6" | 7'-6"  | 4'-6" | 1.25     |
| 30"                     | 2'-0" | 9'-0"  | 5'-0" | 1.95     |
| 36"                     | 2'-0" | 10'-6" | 5'-6" | 2.74     |
| 42"                     | 2'-6" | 12'-0" | 6'-0" | 3.87     |
| 48"                     | 2'-6" | 13'-6" | 6'-6" | 4.66     |

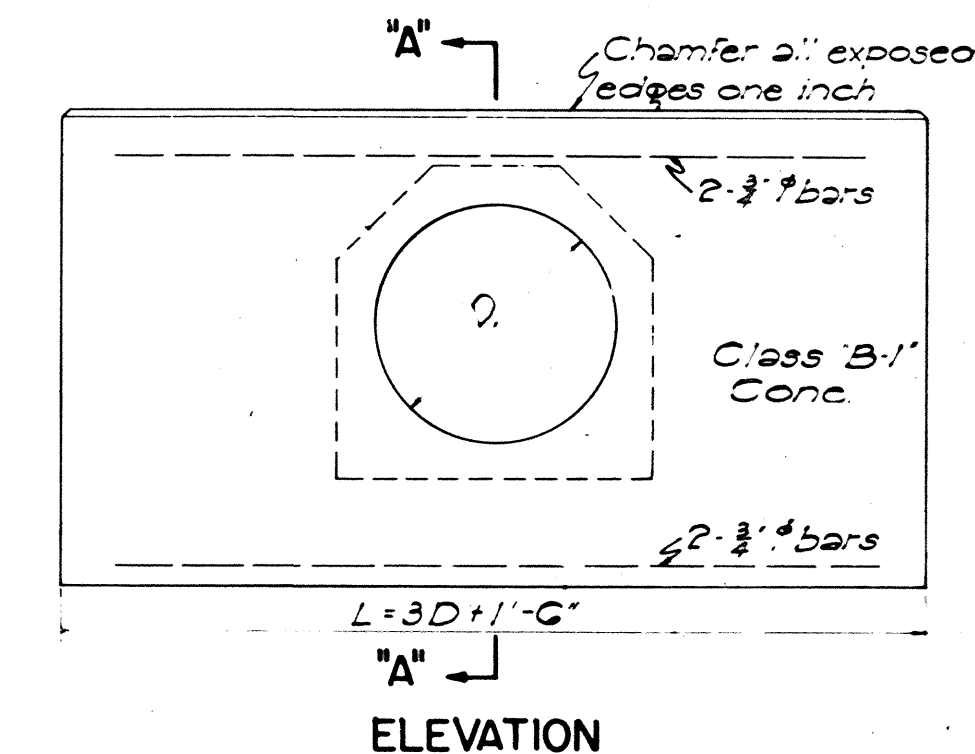
DETAIL OF CONCRETE HEADWALL

Scale: 1/2" = 1'-0"

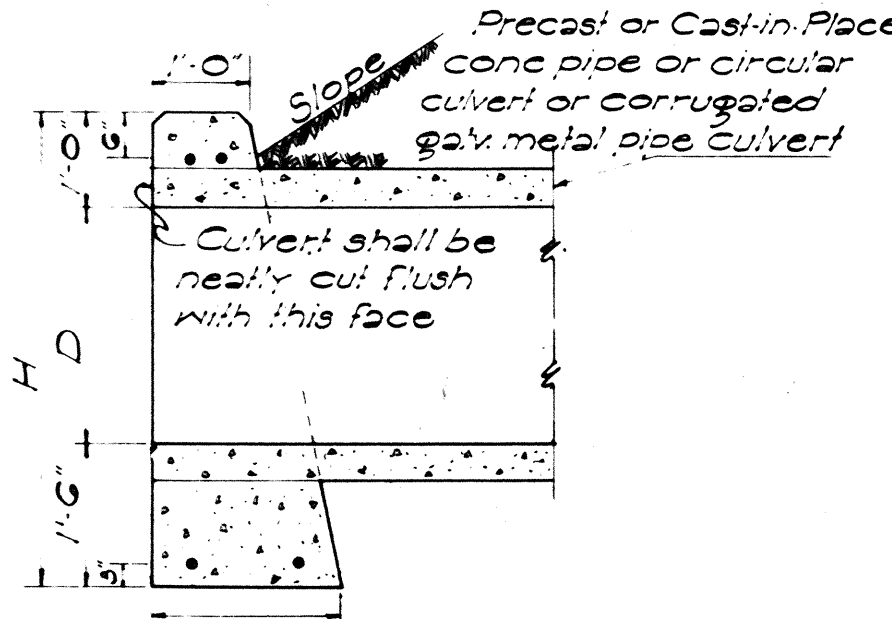
DETAIL OF MASONRY DROP INTAKE  
Scale: 3/8" = 1'-0"



CONSTR. JOINT DETAILS



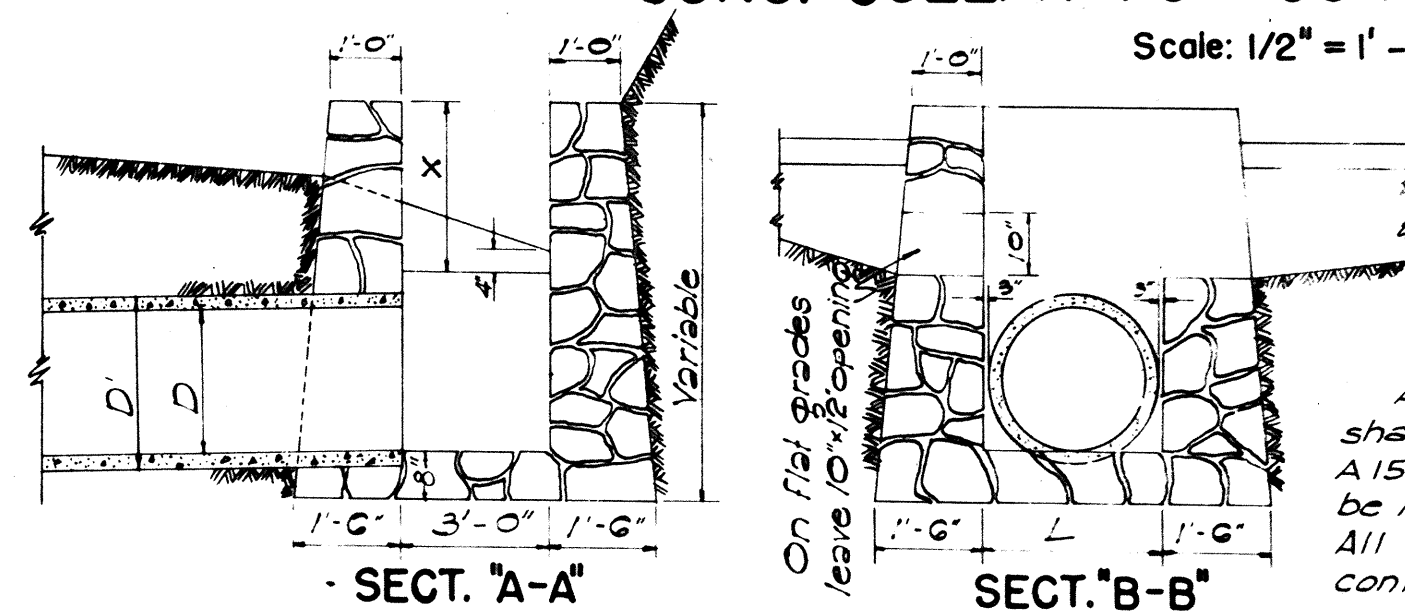
ELEVATION



SECTION "A-A"

SECTION "A-A"  
CONC. COLLAR FOR CONC. BOX CULVERT

Scale: 1/2" = 1'-0"



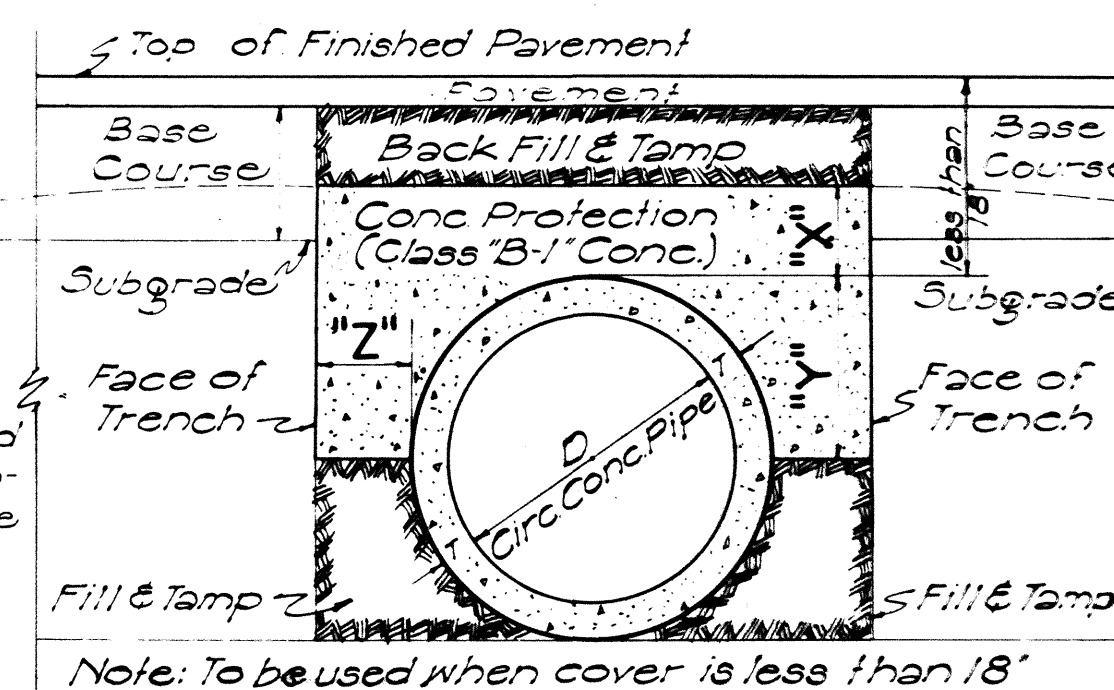
SECT. "A-A"

SECT. "B-B"

REINFORCING BARS

All reinforcing bars for concrete shall be Billet Steel bars, ASTM A15, intermediate grade. Steel shall be made by the open-hearth process. All bars shall be deformed type conforming to ASTM A-305.

SECTION OF HIGH CEMENT  
RUBBLE MASONRY RETAINING  
WALL OR SEAWALL

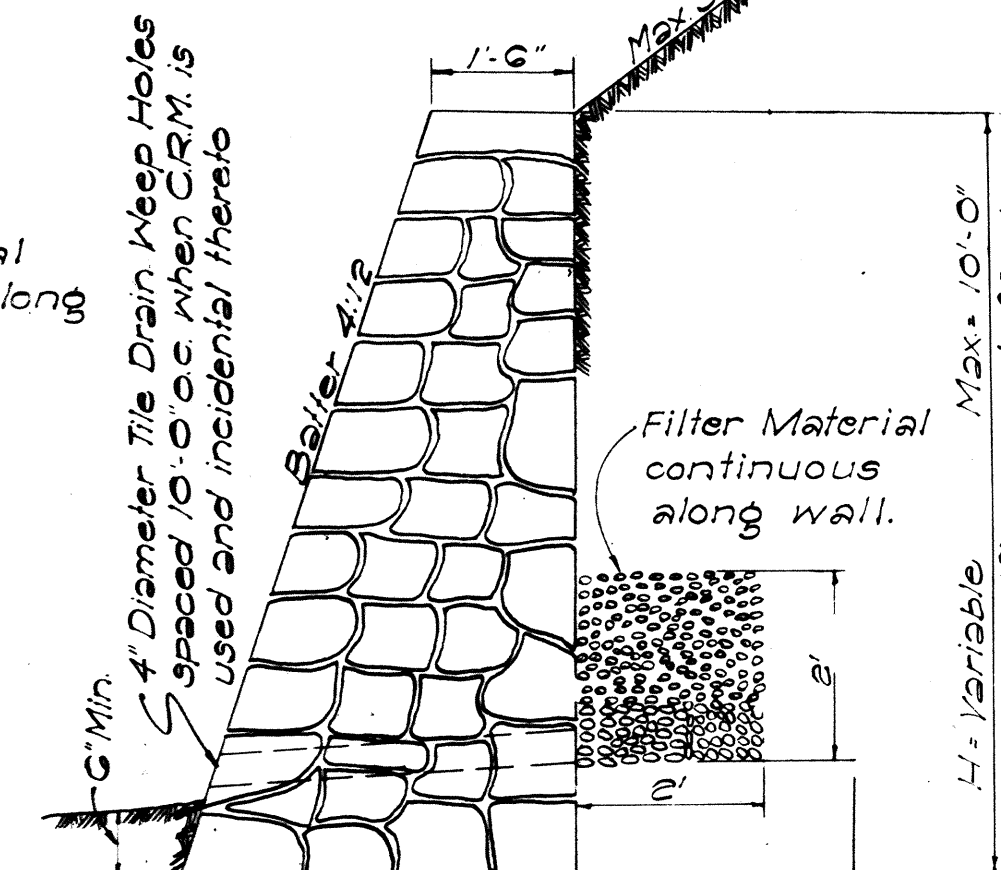


| DATA FOR CONCRETE PROTECTION OVER CULVERTS |   |                                       |
|--------------------------------------------|---|---------------------------------------|
| X                                          | Y | Z                                     |
| 6" for 18" D                               |   | Z must be from pipe to face of trench |
| 7" " 24" D                                 |   |                                       |
| 8" " 30" D                                 |   |                                       |
| 9" " 36" D                                 |   |                                       |
| 10" " 42" D                                |   |                                       |
| 11" " 48" D                                |   |                                       |
| 12" " 54" D                                |   |                                       |

SECT. OF CULVERT WITH CONC. PROTECTION

Scale: 1" = 1'-0"

Note: To Resident Engineer  
1) Consider economy of reinf. conc. for high retaining walls which did not originate on plan layout.  
2) Elevation of weep holes to be determined by Resident Engineer. Holes to be placed as close to the existing ground line as local conditions permit.



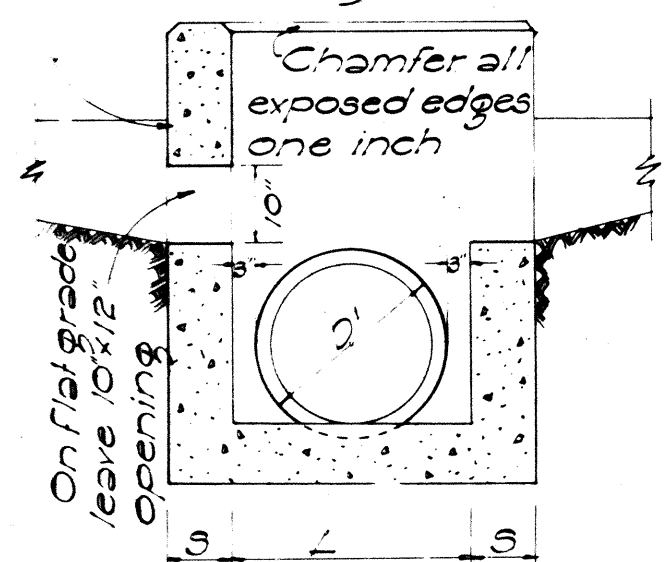
CRM or DRM as required by plans or as ordered

SECTION OF LOW  
MASONRY RETAINING  
WALL OR SEAWALL

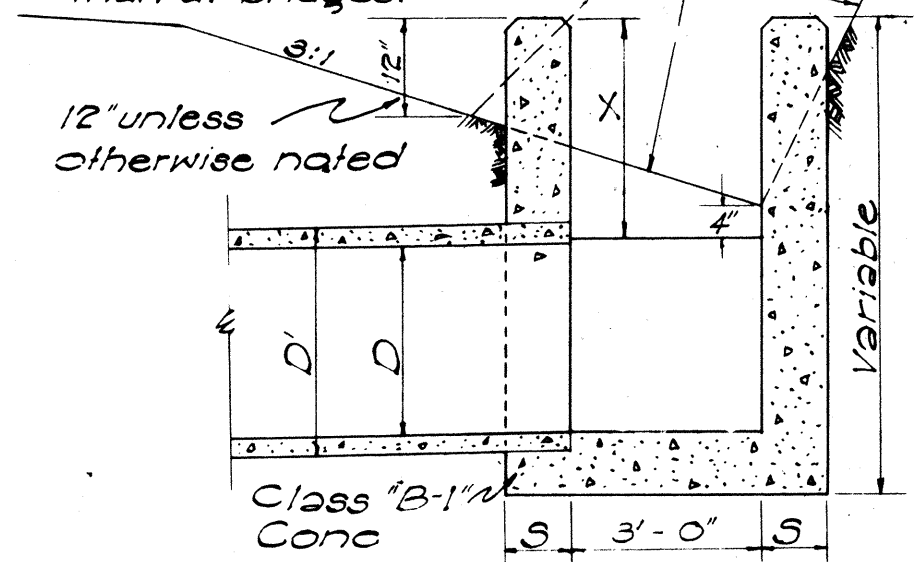
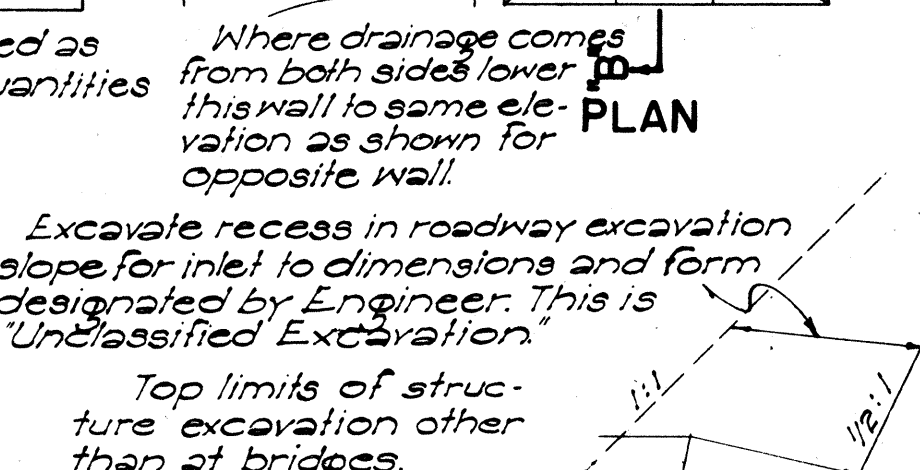
| DATA - CONC. DROP INTAKE |     |           |          |                       |
|--------------------------|-----|-----------|----------|-----------------------|
| D                        | D   | L x D x G | Cu. Yds. | Where Variables Equal |
| 23"                      | 18" | 2'-5"     | 1.41     | 4'-6"                 |
| 30"                      | 24" | 3'-0"     | 1.72     | 5'-0"                 |
| 37"                      | 30" | 3'-7"     | 2.32     | 5'-6"                 |
| 44"                      | 36" | 4'-2"     | 2.73     | 6'-0"                 |
| 51"                      | 42" | 4'-9"     | 3.54     | 6'-6"                 |
| 58"                      | 48" | 5'-4"     | 4.01     | 7'-0"                 |

Note: Dimension "X" is assumed as 2'-4" in figuring the above quantities

Note: This type of structure shall also be used for the Drop Intakes of Siphons connected with Irrigation Ditches or Flumes with appropriate changes to dimensions. In this case all joints must be made water tight.



SECTION "B-B"



SECTION "A-A"

DETAIL OF CONCRETE DROP INTAKE

Scale: 1/2" = 1'-0"