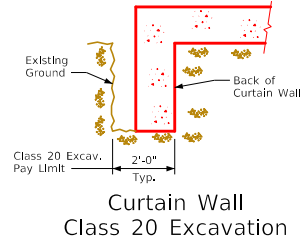
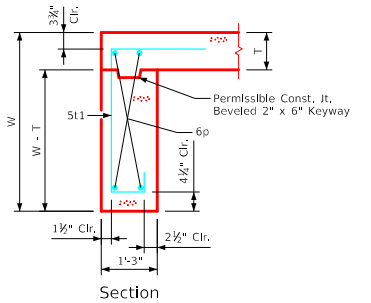
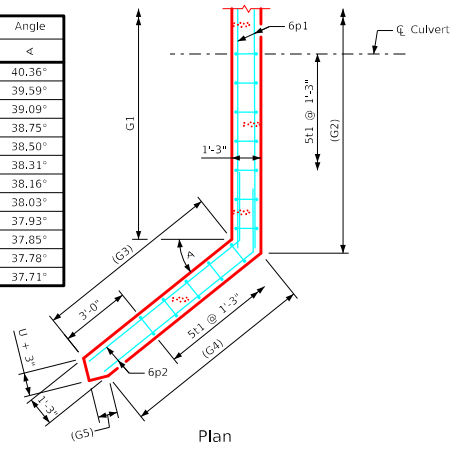


ENGLISH\RFDSIGNEDSINGLECULVERTS\FWH.DGN - FWH 0-3-21 - THIS SHEET ISSUED 02-2021.



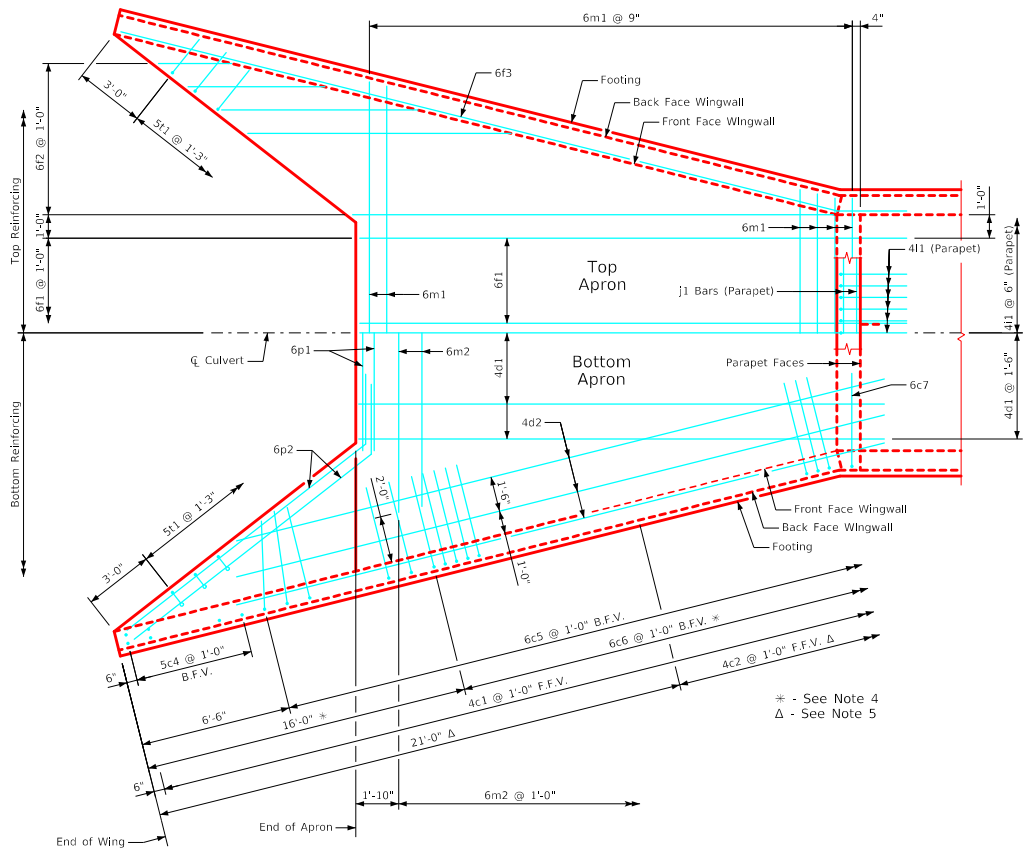
| Culvert Height (H) | Angle  |
|--------------------|--------|
| 3'                 | 40.36° |
| 4'                 | 39.59° |
| 5'                 | 39.09° |
| 6'                 | 38.75° |
| 7'                 | 38.50° |
| 8'                 | 38.31° |
| 9'                 | 38.16° |
| 10'                | 38.03° |
| 11'                | 37.93° |
| 12'                | 37.85° |
| 13'                | 37.78° |
| 14'                | 37.71° |



**Curtain Wall Details**

**Notes:**

1. Bar spacings and positions shown are similar for all sizes of headwalls in this standard.
2. Wingwall bars consistently referenced from end of wing for all headwalls.
3. Top transverse floor bars are referenced approximately 4" from the back of the parapet for all headwalls.
4. There are no 6c6 bars in the 3' thru 6' height headwalls.
5. 4c2 bars used only in the 9' thru 14' height headwalls.
6. For dimension table see Sheet FWH 0-2-21.
7. For reinforcing in curtain wall see Curtain Wall Details this sheet.



**Plan View - Top & Bottom of Apron Reinforcing**

\* - See Note 4  
 Δ - See Note 5

|                      |                             |                                                           |            |
|----------------------|-----------------------------|-----------------------------------------------------------|------------|
| LATEST REVISION DATE | APPROVED BY BRIDGE ENGINEER |                                                           |            |
|                      |                             | Standard Design - Single Reinforced Concrete Box Culverts |            |
|                      |                             | Flared Wing Headwalls                                     |            |
|                      |                             | February, 2021                                            |            |
|                      |                             | Apron & Curtain Wall Details<br>0° Skew                   | FWH 0-3-21 |