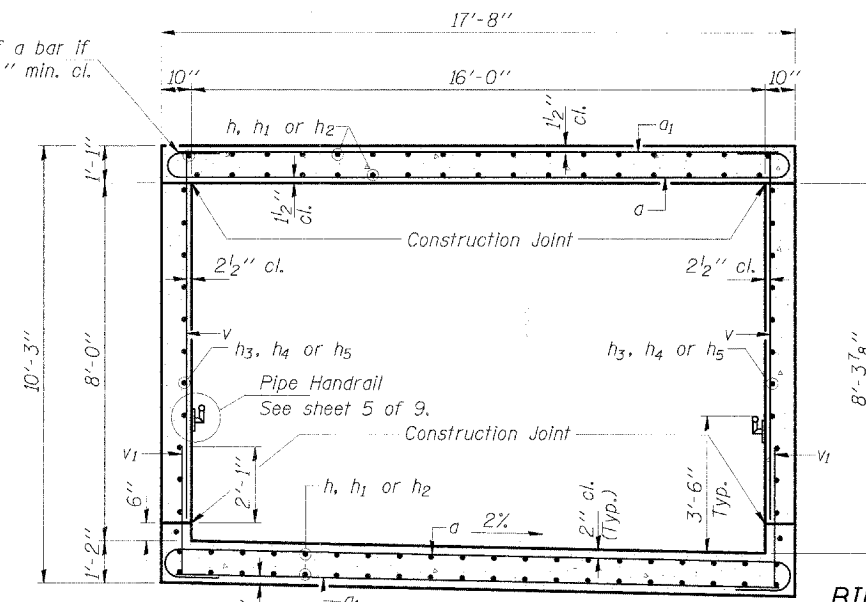


REINF. - BACK FACE

LONGITUDINAL SECTION (Looking North)

REINF. - FRONT FACE

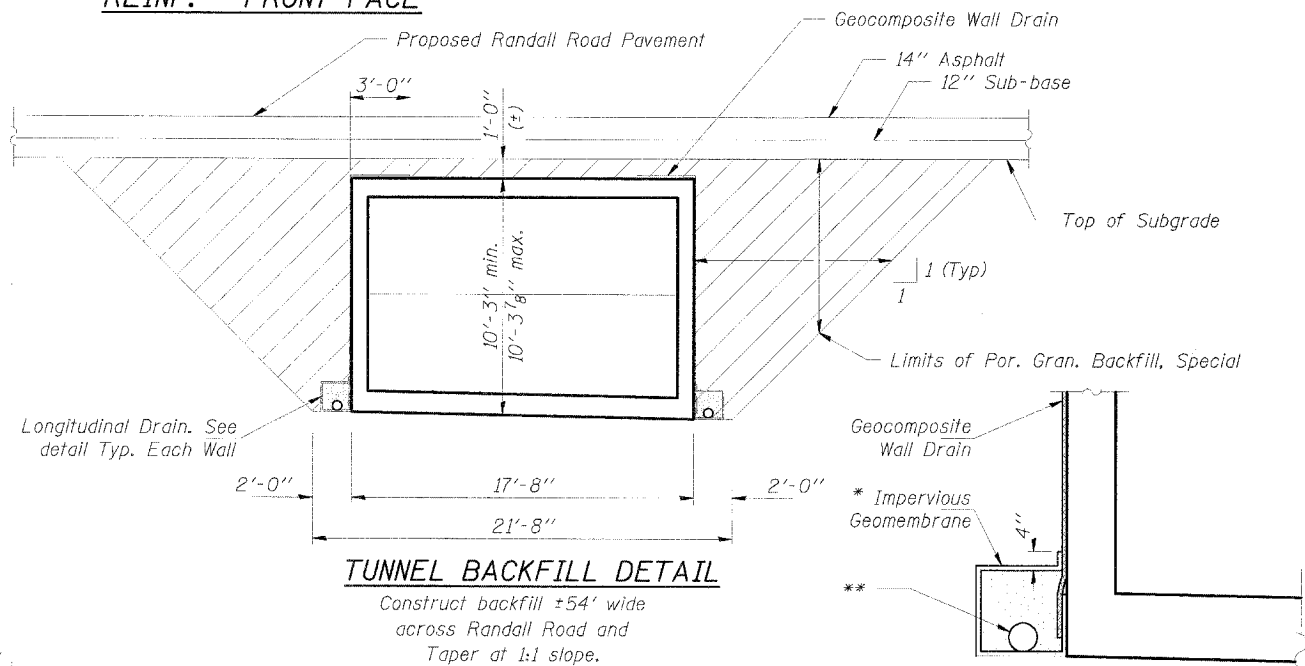


SECTION THRU BARREL (Looking East)

BILL OF MATERIAL

| Bar | No. | Size | Length | Shape |
|---------------------------------------|-----|------|----------|--------|
| a | 242 | #9 | 19'-10" | U |
| a1 | 94 | #4 | 17'-0" | — |
| d | 62 | #4 | 5'-6" | L |
| h | 74 | #5 | 30'-10" | — |
| h1 | 74 | #5 | 21'-8" | — |
| h2 | 74 | #5 | 36'-2" | — |
| h3 | 18 | #6 | 30'-10" | — |
| h4 | 18 | #6 | 21'-8" | — |
| h5 | 18 | #6 | 36'-2" | — |
| h6 | 12 | #6 | 17'-4" | — |
| h7 | 48 | #4 | 14'-10" | — |
| h8 | 20 | #4 | 15'-9" | — |
| n | 80 | #6 | 5'-7" | U |
| n1 | 84 | #5 | 4'-0" | U |
| f | 184 | #4 | 7'-0" | — |
| v | 242 | #6 | 8'-3" | — |
| v1 | 242 | #6 | 3'-11" | — |
| v2 | 84 | #5 | 6'-6" | — |
| v3 | 28 | #4 | 2'-6" | — |
| v4 | 28 | #4 | 5'-0" | — |
| v5 | 28 | #4 | 7'-3" | — |
| v6 | 20 | #4 | 12'-3" | — |
| v7 | 8 | #4 | 13'-6" | — |
| w | 48 | #5 | 14'-11" | — |
| Concrete Box Culverts | | | Cu. Yds. | 254.0 |
| Clear Protective Coating For Concrete | | | Sq Ft | 4,835 |
| Reinforcement Bars, Epoxy Coated | | | Lbs. | 35,680 |
| Porous Granular Backfill, Special | | | Ton | 3,675 |
| Geocomposite Wall Drain | | | Sq Yd | 265 |
| Bar Splicers | | | Each | 298 |
| Pipe Underdrain 6" | | | Foot | 253 |
| Concrete Headwalls For Pipe Drains | | | Ea. | 1 |

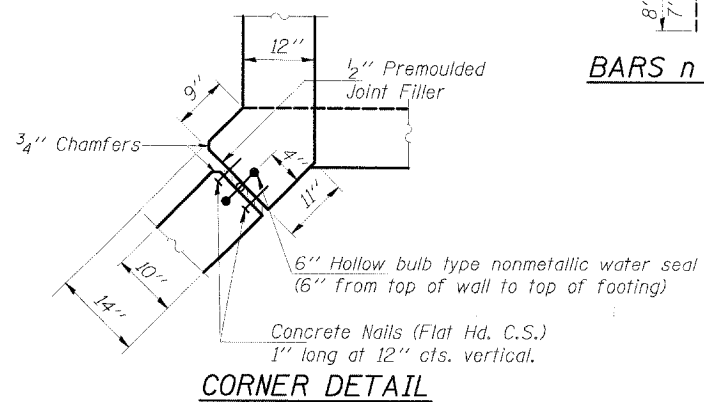
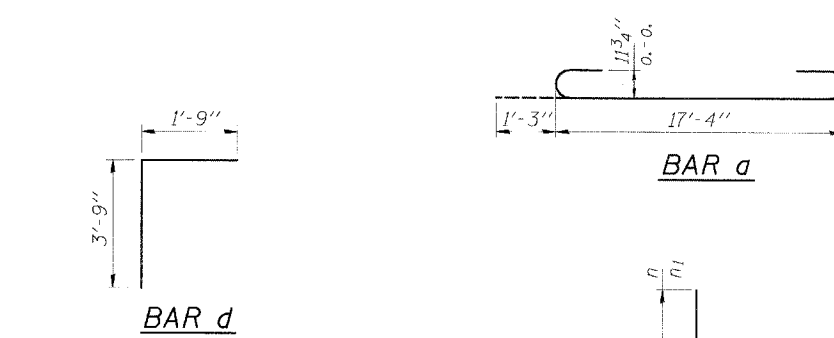
Note: All reinforcement bars shall be epoxy coated.



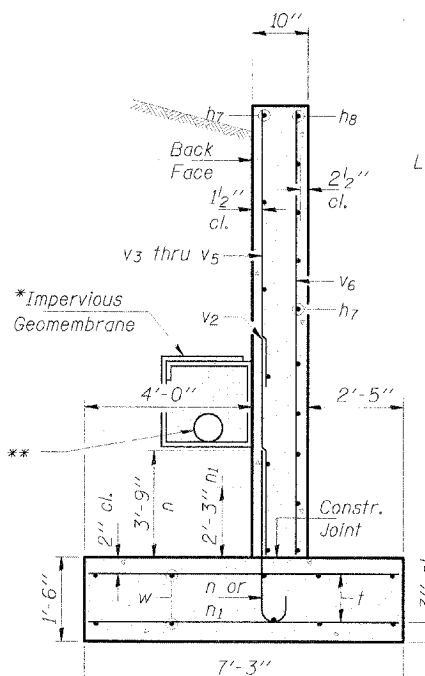
TUNNEL BACKFILL DETAIL

LONGITUDINAL DRAIN

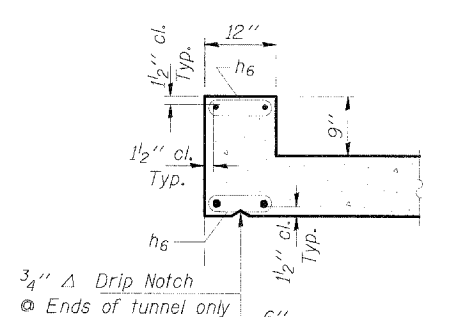
* Cost included with Geocomposite Wall Drain.
 ** Pipe Underdrain 6" according to section 601 of the Standard Specifications encased in 18" of CA-5 or CA-7 course aggregate. Aggregate is to be incidental to Pipe Underdrains. Pipes shall drain into concrete headwalls or directly into drainage structure see sheet 1 of 9 (Article 601.05 of the Std. Specifications).



CORNER DETAIL



SECTION B-B



SECTION THRU HEADWALL

MIN. BAR LAPS
 #5 Bars = 1'-8"
 #6 Bars = 2'-0"

* Cost included with Geocomposite Wall Drain.

Max. Soil Pressure under footing = 2850 psf.

HLR
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 Civil & Structural Engineers
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 Springfield, Illinois 62704
 217-546-3400
 P.O. Box 1036
 DuQuoin, Illinois 62832
 618-790-4637
 Account Number 03-05-0181-1
 Date: 6-03-04
 DESIGNED: P.S.L. CHECKED: J.L.R. DRAWN: D.S.S.

TUNNEL DETAILS I
 SECTION 99-00243-00-PV
 BIKE PATH UNDER RANDALL ROAD
 KANE COUNTY
 STATION 11+25