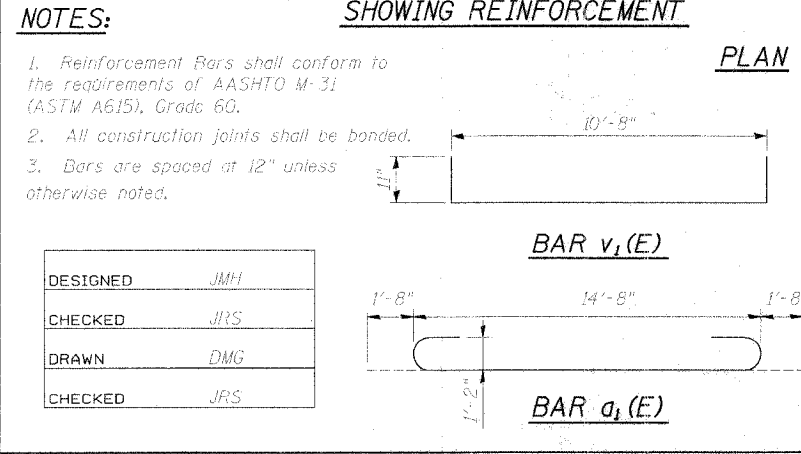
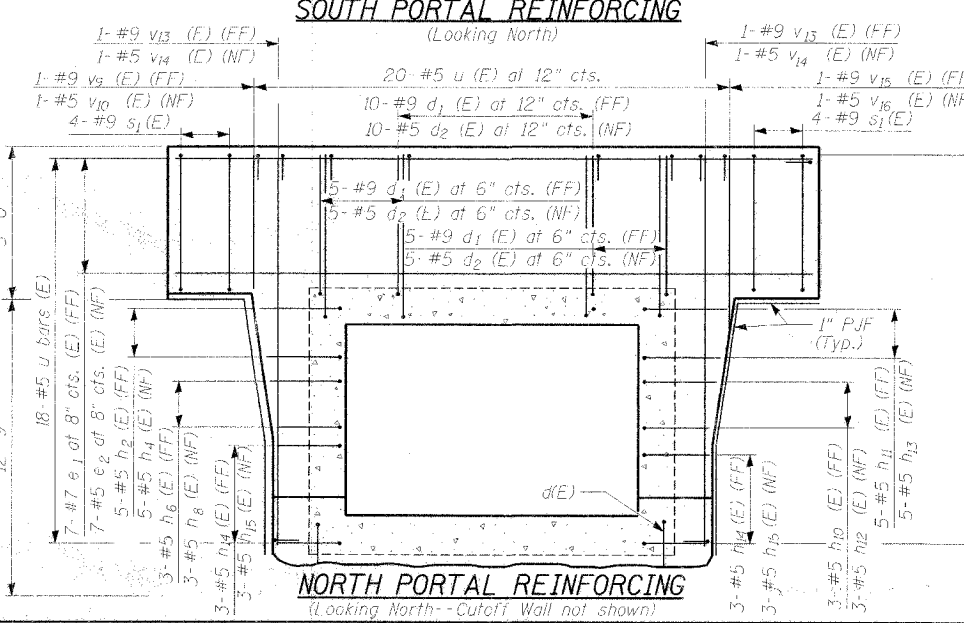
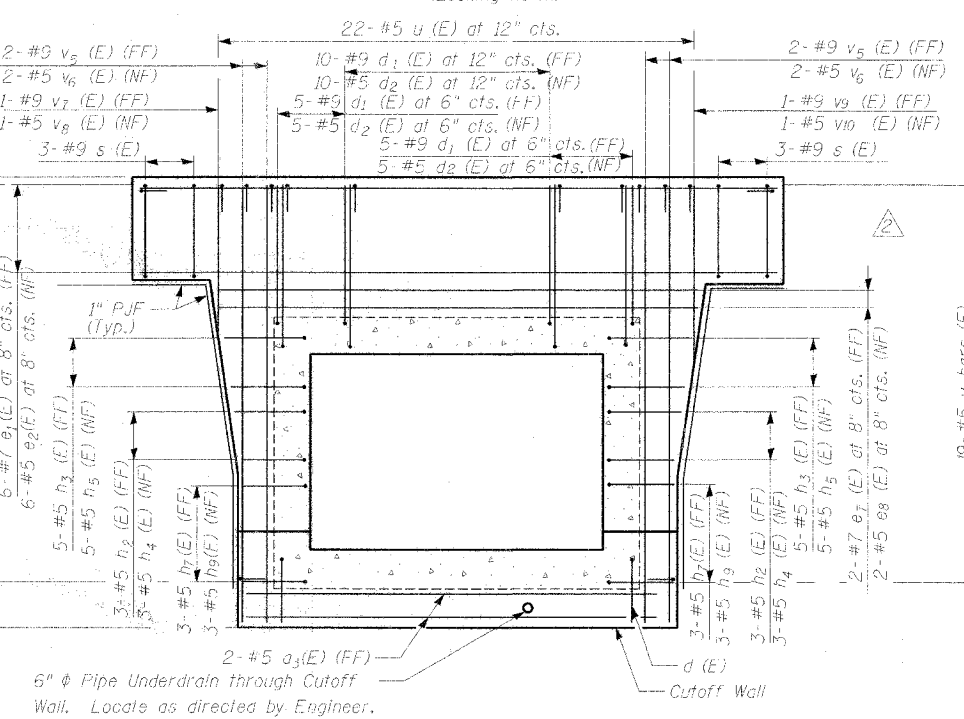
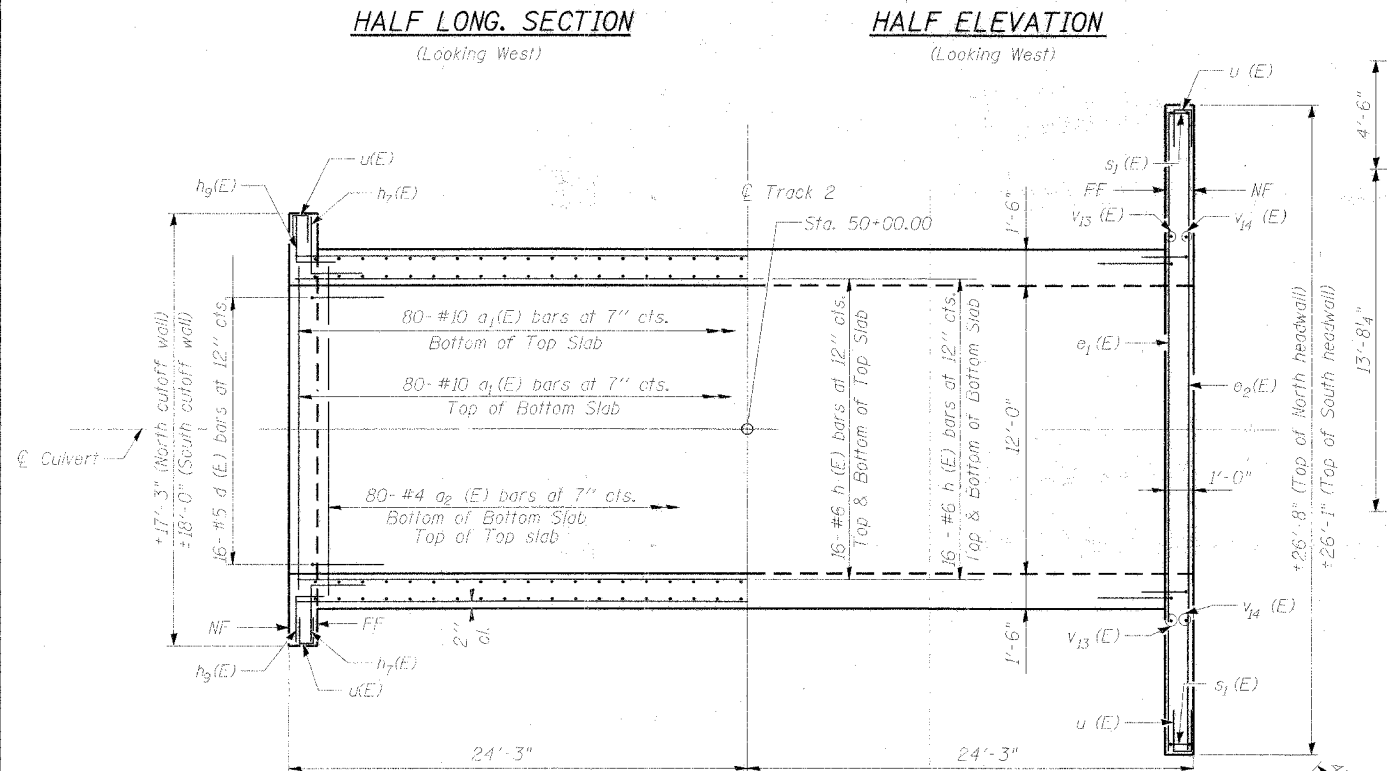


BILL OF BARS

| Bar | No. | Size | Length | Shape |
|---------------------|-----|------|----------|-------|
| a ₁ (E) | 160 | # 10 | 18' - 0" | |
| a ₂ (E) | 160 | # 4 | 14' - 6" | |
| a ₃ (E) | 4 | # 5 | 16' - 6" | |
| d(E) | 32 | # 7 | 3' - 6" | |
| d ₁ (E) | 40 | # 9 | 11' - 8" | |
| d ₂ (E) | 40 | # 5 | 6' - 8" | |
| e ₁ (E) | 13 | # 7 | 26' - 2" | |
| e ₂ (E) | 13 | # 5 | 26' - 2" | |
| e ₇ (E) | 2 | # 7 | 19' - 7" | |
| e ₈ (E) | 2 | # 5 | 19' - 7" | |
| h(E) | 64 | # 6 | 46' - 2" | |
| h ₁ (E) | 36 | # 6 | 46' - 2" | |
| h ₂ (E) | 11 | # 5 | 3' - 6" | |
| h ₃ (E) | 10 | # 5 | 4' - 0" | |
| h ₄ (E) | 11 | # 5 | 3' - 6" | |
| h ₅ (E) | 10 | # 5 | 4' - 0" | |
| h ₆ (E) | 3 | # 5 | 3' - 0" | |
| h ₇ (E) | 6 | # 5 | 3' - 4" | |
| h ₈ (E) | 3 | # 5 | 3' - 0" | |
| h ₉ (E) | 6 | # 5 | 3' - 4" | |
| h ₁₀ (E) | 3 | # 5 | 3' - 3" | |
| h ₁₁ (E) | 5 | # 5 | 3' - 8" | |
| h ₁₂ (E) | 3 | # 5 | 3' - 3" | |
| h ₁₃ (E) | 5 | # 5 | 3' - 8" | |
| h ₁₄ (E) | 6 | # 5 | 2' - 9" | |
| h ₁₅ (E) | 6 | # 5 | 2' - 9" | |
| s(E) | 6 | # 9 | 10' - 0" | |
| s ₁ (E) | 8 | # 9 | 12' - 6" | |
| u(E) | 116 | # 5 | 2' - 8" | |
| v ₁ (E) | 104 | # 7 | 12' - 6" | |
| v ₂ (E) | 104 | # 5 | 10' - 9" | |
| v ₅ (E) | 4 | # 9 | 17' - 9" | |
| v ₆ (E) | 4 | # 5 | 17' - 9" | |
| v ₇ (E) | 1 | # 9 | 6' - 0" | |
| v ₈ (E) | 1 | # 5 | 6' - 0" | |
| v ₉ (E) | 2 | # 9 | 7' - 4" | |
| v ₁₀ (E) | 2 | # 5 | 7' - 4" | |
| v ₁₃ (E) | 2 | # 9 | 17' - 4" | |
| v ₁₄ (E) | 2 | # 5 | 17' - 4" | |
| v ₁₅ (E) | 1 | # 9 | 5' - 3" | |
| v ₁₆ (E) | 1 | # 5 | 5' - 3" | |



| Bar | "A" |
|-----------------|---------|
| h ₂ | 2' - 6" |
| h ₃ | 3' - 0" |
| h ₄ | 1' - 6" |
| h ₅ | 2' - 0" |
| h ₆ | 2' - 0" |
| h ₇ | 2' - 4" |
| h ₈ | 1' - 0" |
| h ₉ | 1' - 4" |
| h ₁₀ | 2' - 3" |
| h ₁₁ | 2' - 8" |
| h ₁₂ | 1' - 3" |
| h ₁₃ | 1' - 8" |
| h ₁₄ | 1' - 9" |
| h ₁₅ | 9" |

BARS s & s₁(E)
BARS d, d₁ & d₂(E)
BARS h₂₋₁₅(E)
BAR u(E)

CULVERT DETAILS

PEDESTRIAN UNDERPASS CULVERT
 UNDER THE UNION PACIFIC RAILROAD
 COOK COUNTY
 M.P. 22.05 - HARVARD SUBDIVISION
 DOT NO. 176922D

1/20/2006 8:03:38 AM g:\cnc03\018\structural\culvert.snt