

TOTAL BILL OF MATERIAL

| Bar | No. | Size | Length | Shape |
|----------------------------------|-----|-------|--------|-------|
| h50(E) | 6 | #15 | 4.32 m | |
| h502(E) | 12 | #15 | 3.30 m | |
| u50(E) | 17 | #15 | 1.17 m | |
| u502(E) | 24 | #15 | 1.12 m | |
| v50(E) | 82 | #15 | 0.74 m | |
| Concrete Structures | | Cu. M | 1.4 | |
| Reinforcement Bars, Epoxy Coated | | kg | 280 | |

DESIGN SPECIFICATIONS

2002 AASHTO Standard Specifications for Highway Bridges, 17th Edition

Illinois Department of Transportation Standard Specifications for Road & Bridge Construction, adopted January 1, 2002 and Supplemental Specifications and Recurring Special Provisions adopted January 1, 2004.

GENERAL NOTES:

1. Reinforcement bars shall conform to the requirements of AASHTO M 31M, M 42M, or M 53M Grade 400.
2. All dimensions are in millimeters (mm) except as noted.
3. Bars designated (E) shall be epoxy coated.
4. All edges shall have standard 20 mm chamfers, except as noted.
5. Drill and grout v50(E) bars into existing headwall and wingwall. Cost included with "Concrete Structures".
6. All construction joints shall be bonded.

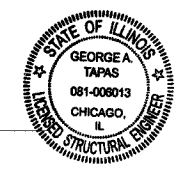
LEGEND

E.F. = Each Face

DESIGN STRESSES

$f'c = 24 \text{ MPa}$

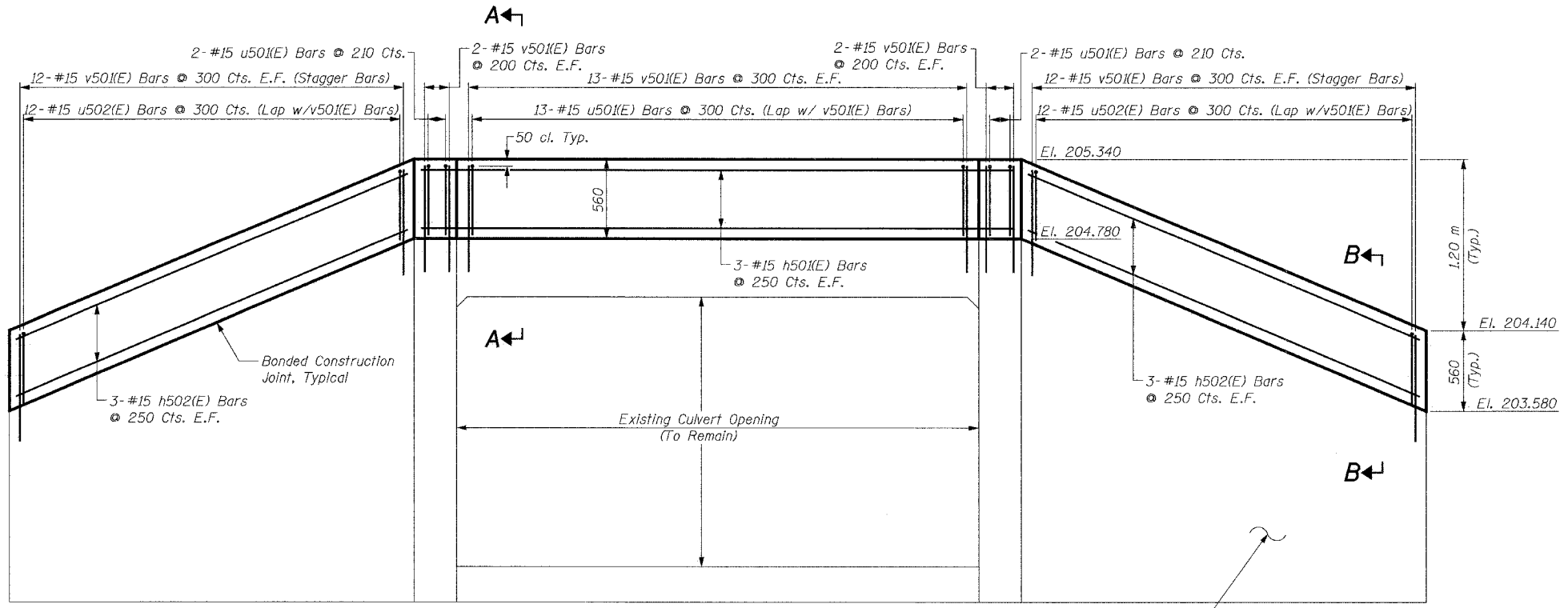
$fy = 400 \text{ MPa (Reinf.)}$



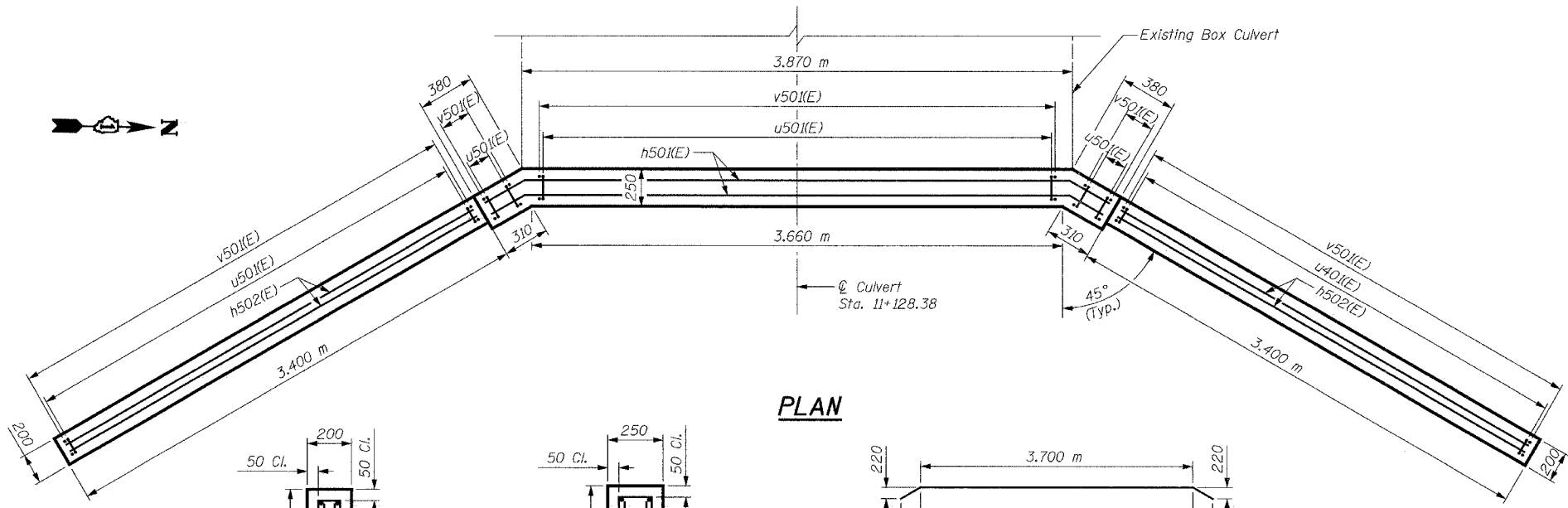
Signature: *[Signature]*
 Current Date: 11/5/04
 License Expires: 11/30/06

"I certify that to the best of my knowledge, information and belief, this culvert design is structurally adequate for the design loading shown on the plans. The design is an economical one for the style of structure and complies with the requirements of the current 'AASHTO Standard Specifications for Highway Bridges'."

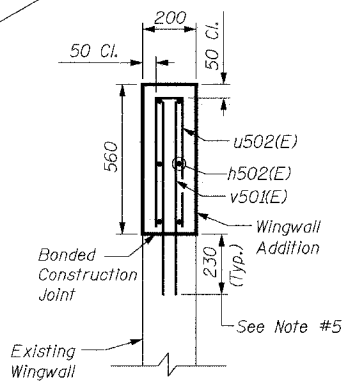
| REVISIONS | | NAME | DATE | URS 1701 GOLF ROAD, SUITE 1000 ROLLING MEADOWS, IL 60008 TEL (847) 228-0707 FAX (847) 228-1115 |
|------------------|-------------|------|------|--|
| NO. | DESCRIPTION | | | |
| | | | | VILLAGE OF ADDISON SALT CREEK GREENWAY TRAIL CULVERT HEADWALL EXT, STA. 11+128.38 PLAN, ELEVATION & DETAILS |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| DATE: 11/03/04 | | | | DRAWN BY: MDS |
| DESIGNED BY: MDS | | | | CHECKED BY: GAT |



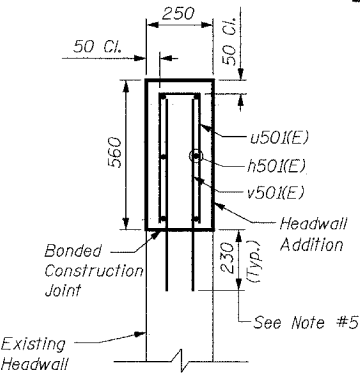
ELEVATION



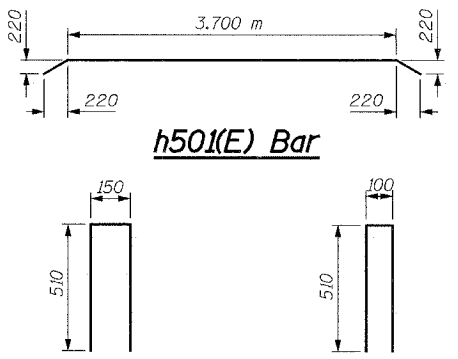
PLAN



SECTION B-B

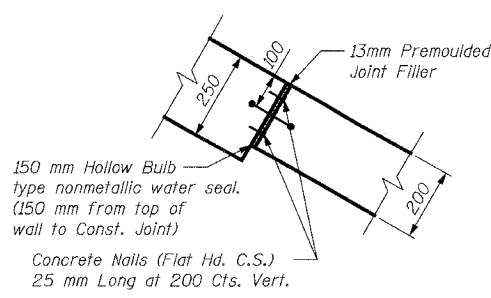


SECTION A-A



u50(E) Bar

u502(E) Bar



CORNER DETAIL