## GENERAL NOTES

Fasteners shall be high strength bolts (AASHTO M 164, Type 3). Bolts $^{7}/_{8}$" ϕ, open holes $^{15}/_{16}$" ϕ, unless otherwise noted.

Calculated weight of Structural Steel = 95,670 Pound

All structural steel shall be AASHTO M 270 Grade 50W.

Structural steel shall only be painted for a distance equal to the depth of embedment into the concrete cap plus 3 in. Those areas shall be primed in the shop with a Department approved zinc rich primer. No field painting shall be required. All structural steel shall be cleaned as specified in Section 506 of the Standard Specifications.

Anchor Bolts shall be set before bolting diaphragms over supports.

No field welding is permitted except as specified in the Contract documents.

Reinforcement bars shall conform to the requirements of ASTM A706 Gr 60. See Special Provisions.

Reinforcement bars designated (E) shall be epoxy coated.

Layout of slope protection system may be varied in the field to suit ground conditions as directed by the Engineer.

The embankment configuration shown shall be the minimum embankment that must be constructed prior to construction of the abutments.

Bearing seat surfaces shall be constructed or adjusted to the designated elevations within a tolerance of $^{1}/_{8}$ inch. Adjustment shall be made either by grinding the surface or by shimming the bearing. Two $^{1}/_{8}$" adjusting shims, of the dimension of the bottom bearing plate, shall be provided for each bearing in addition to all other plates or shims.

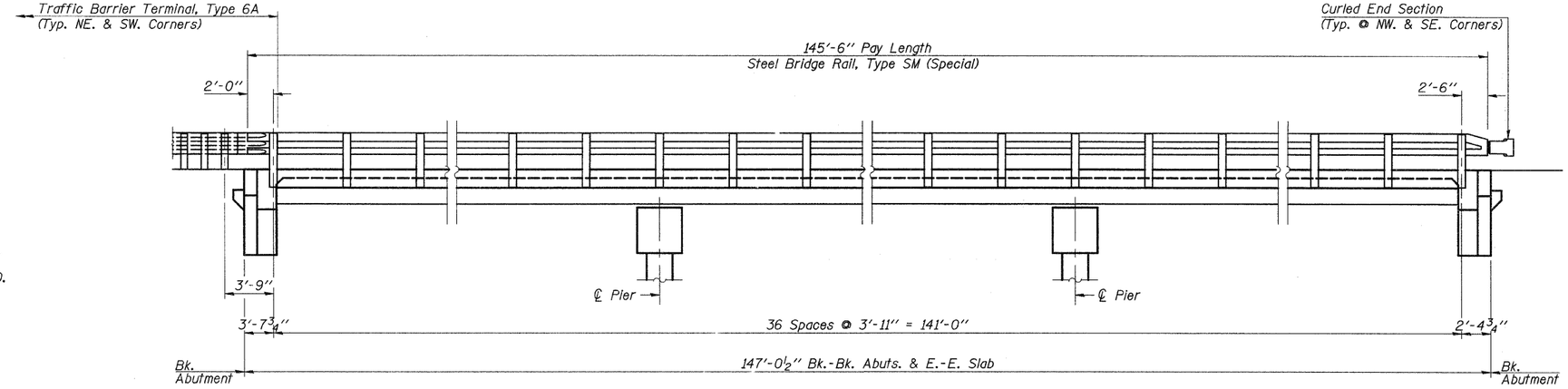
The contractor shall drive one metal shell test pile in a permanent location at the west abutment & one metal shell test pile at pier #2 as directed by the Engineer before ordering the remainder of piles.

The Contractor shall drive test piles to 110 percent of the nominal required bearing specified in production locations at the substructures specified or approved by the Engineer before ordering the remainder of piles.

All exposed portions of abutments, wing walls, and piers shall receive a rubbed finish in accordance with Article 503.15 (b) of the Standard Specifications. Cost to be included in cost of Concrete Structures.

The concrete for bridge decks finished according to Article 503.16(a) of the Standard Specifications shall be placed and compacted parallel to the skew in uniform increments along centerline of bridge. The machine used for finishing shall be set parallel to the skew for striking off and screeding the concrete.

See Sheets 19 & 20 of 21 for Soil Boring Data.




## RAIL POST SPACING

(Looking North at South Rail)
(Looking South at North Rail)

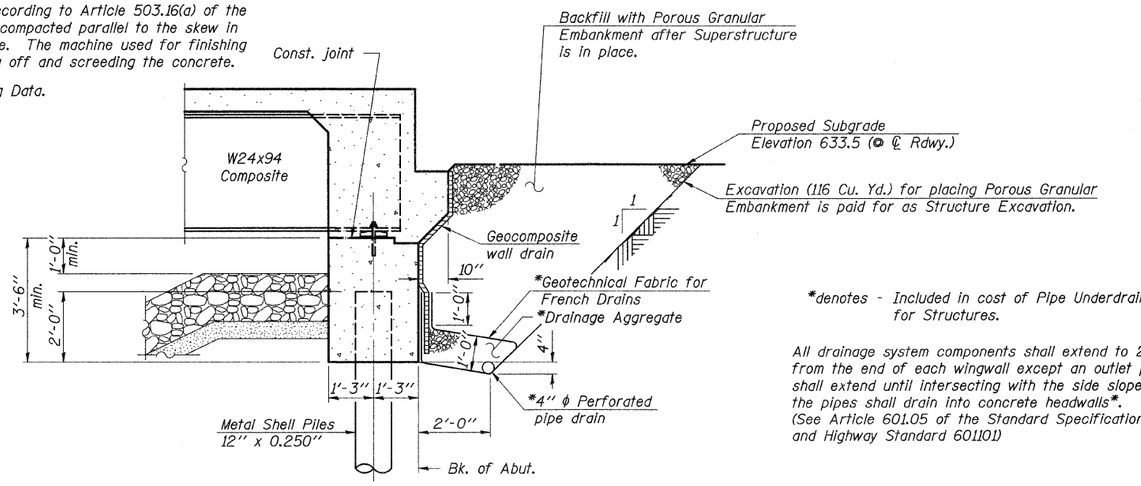
MAIN MARTINTON DITCH NO. 3
BUILT 20__ BY
MARTINTON ROAD DISTRICT
IROQUOIS COUNTY
SEC. 07-16121-00-BR
F.A. PROJ. BROS-075(145)
STR. NO. 038-4558 LOADING HL-93

## LETTERING FOR NAME PLATE

See Std. 515001

## TOTAL BILL OF MATERIAL

| ITEM | UNIT | SUPER | SUB | TOTAL |
|---|---|---|---|---|
| Porous Granular Embankment | Cu. Yd. | | 102 | 102 |
| Stone Riprap, Class A5 | Ton | | 1,335 | 1,335 |
| Stone Dumped Riprap, Class A5 | Ton | | 493 | 493 |
| Filter Fabric | Sq. Yd. | | 1,307 | 1,307 |
| Removal of Existing Structures | Each | | 1 | 1 |
| Structure Excavation | Cu. Yd. | | 116 | 116 |
| Concrete Structures | Cu. Yd. | | 76.4 | 76.4 |
| Concrete Superstructure | Cu. Yd. | 138.4 | | 138.4 |
| Bridge Deck Grooving | Sq. Yd. | 466 | | 466 |
| Protective Coat | Sq. Yd. | 550 | 12 | 562 |
| Furnishing and Erecting Structural Steel | L. Sum | 1 | | 1 |
| Stud Shear Connectors | Each | 2,592 | | 2,592 |
| Reinforcement Bars, Epoxy Coated | Pound | 34,350 | 8,640 | 42,990 |
| Steel Bridge Rail, Type SM (Special) | Foot | 291 | | 291 |
| Furnishing Metal Shell Piles 12" x 0.250" | Foot | | 440 | 440 |
| Furnishing Metal Shell Piles 14" x 0.250" | Foot | | 969 | 969 |
| Driving Piles | Foot | | 1,409 | 1,409 |
| Test Pile Metal Shells | Each | | 2 | 2 |
| Concrete Encasement | Cu. Yd. | | 61.2 | 61.2 |
| Name Plates | Each | | 1 | 1 |
| Pipe Underdrains for Structures 4" | Foot | | 165 | 165 |
| Geocomposite Wall Drain | Sq. Yd. | | 66 | 66 |
| Anchor Bolts 1" | Each | 24 | | 24 |
| Anchor Bolts 1 1/4" | Each | 24 | | 24 |




## SECTION THRU INTEGRAL ABUTMENT

(Horiz. dim. @ Rt. L's)

*denotes - Included in cost of Pipe Underdrains for Structures.

All drainage system components shall extend to 2'-0" from the end of each wingwall except an outlet pipe shall extend until intersecting with the side slopes the pipes shall drain into concrete headwalls*. (See Article 601.05 of the Standard Specifications and Highway Standard 601101)

| | |
|---|---|
| DESIGNED | A.L.S. |
| CHECKED | A.R.K. |
| DRAWN | S.A.P. |
| CHECKED | A.L.S. & A.R.K. |

## GENERAL NOTES, BILL OF MATERIALS & MISCELLANEOUS DETAILS S.N. 038-4558

FEHR-GRAHAM & ASSOCIATES, LLC
ENGINEERING AND SCIENCE CONSULTANTS
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4440 ASH GROVE SPRINGFIELD, IL 62711 (217)-793-8600 www.fehr-graham.com

| TWP. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 55B | 07-16121-00-BR | IROQUOIS | 33 | 6 |
| | | CONTRACT NO. 87487 | | |
| MARTINTON ROAD DIST. | ILLINOIS | F.A. PROJ. BROS-075(145) | | |