### GENERAL NOTES

- Fasteners shall be ASTM A325 Type 1, mechanically galvanized bolts in painted areas and M164 Type 3 in unpainted areas. Bolts <sup>3</sup><sub>4</sub> in. φ, holes <sup>15</sup><sub>16</sub> in. φ, unless otherwise noted.
- 2. Calculated weight of Structural Steel = 63,520 lb. (AASHTO M270 Grade 50W)
- 3. All structural steel shall be AASHTO M 270 Grade 50W.
- 4. No field welding is permitted except as specified in the contract documents.
- 5. Reinforcement bars designated (E) shall be epoxy coated.
- 6. If the Contractor elects to use cantilever forming brackets on the exterior beams, the brackets shall be placed at the same locations as required for the hardwood blocks in Article 503.06(b) of the Standard Specifications. If additional cantilever forming brackets are required, hardwood blocking shall be wedged between the exterior and first interior beam at each of these additional bracket locations.
- 7. Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.
- 8. Bearing seat surfaces shall be constructed or adjusted to the designated elevations within a tolerance of  ${}^{l}_{g}$  inch (0.01 ft.). Adjustment shall be made either by grinding the surface or by shimming the bearings.
- 9. Structural steel shall only be painted for a distance equal to the depth of embedment into the concrete cap plus 3 inches. Painted areas shall be primed in the shop with a Department approved zinc rich primer. Field painting will not required.
- 10. Layout of slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.
- 11. The embankment configuration shown shall be the minimum embankment that must be placed and compacted prior to construction of the abutments.
- 12. 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.
- 13. Excavation behind existing abutment walls shall be performed to balance front and back soil pressure before removing the existing superstructure. The Contractor shall sawcut the upper portion of the existing abutment at the stage removal line before Stage I removal to ensure the remaining portion will not be prematurely damaged.
- 14. Slipforming of parapets is not allowed.

# Approach Pavement 6"6 - 12 ₽ D P 0 W27 Constr. Joint Porous Granular Embankment € Brg. (Special) — 5'-9" Min. Bk of Abut.-Cofferdam



## SECTION THRU CLOSED ABUTMENT



(See Sheet 1 for Plan location)



#### STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

| ITEM                                | UNIT           | SUPER   | SUB    | TOTAL    |
|-------------------------------------|----------------|---------|--------|----------|
| Porous Granular Embankment, Special | Cu. Yd.        |         | 5352   | 5352     |
|                                     |                |         |        |          |
| Stone Riprap, Class A5              | Sq. Yd.        |         | 885    | 885      |
| Ether Estain                        | C VI           |         | 0.05   | 0.05     |
| Fliter Fadric                       | <u>Sq. ra.</u> |         | 885    | 885      |
| Removal of Existing Superstructures | Each           | 2       |        | 2        |
|                                     | 20011          | L       |        | <u> </u> |
| Concrete Removal                    | Cu. Yd.        |         | 87.0   | 87.0     |
|                                     |                |         |        |          |
| Structure Excavation                | Cu. Yd.        | 213     | 2760   | 2973     |
|                                     |                |         | 0.150  | 0.15.0   |
| Cofferdam Excavation                | Cu. Yd.        |         | 2450   | 2450     |
| Coffordam (Type 2) (Location-1)     | Each           |         | 1      | 1        |
|                                     | LUCII          |         | 1      | 1        |
| Cofferdam (Type 2) (Location-2)     | Fach           |         | 1      | 1        |
|                                     | 20011          |         | -      | -        |
| Concrete Structures                 | Cu. Yd.        | 96.5    | 246.6  | 343.1    |
|                                     |                |         |        |          |
| Concrete Superstructure             | Cu, Yd,        | 564.6   |        | 564.6    |
|                                     |                |         |        |          |
| Bridge Deck Grooving                | Sq. Yd.        | 1284    |        | 1284     |
| Protective Coat                     | Sa Vd          | 1462    |        | 1462     |
|                                     | 34. 70.        | 1402    |        | 1402     |
| Eurnishing and Erecting Structural  |                |         |        |          |
| Steel                               | L. Sum         | 1       |        | 1        |
|                                     |                |         |        |          |
| Stud Shear Connectors               | Each           | 4560    |        | 4560     |
|                                     |                |         |        |          |
| Reinforcement Bars, Epoxy Coated    | Pound          | 143,690 | 39,220 | 182,910  |
| Due Culture                         |                | E 70    | 4.4    | 500      |
| Bar Spilcers                        | Each           | 536     | 44     | 580      |
| Temporary Sheet Pilina              | Sa Et          |         | 2896   | 2896     |
|                                     |                |         | 2000   | 2000     |
| Name Plates                         | Each           | 2       |        | 2        |
|                                     |                |         |        |          |
| Anchor Bolts, 1"                    | Each           | 64      |        | 64       |
|                                     |                |         |        |          |
| Geocomposite Wall Drain             | Sq. Yd.        |         | 566    | 566      |
|                                     |                |         |        |          |

## TOTAL BILL OF MATERIAL

## WATERWAY INFORMATION

| Exist. Low Grade Elev. 409.31 @ Sta. 231+50.00                             |         |          |                 |       |        |            |       |               |       |  |
|--|---------|----------|-----------------|-------|--------|------------|-------|---------------|-------|--|
| Drainage Area = 2.87 sq. mi. Prop. Low Grade Elev. 409.64 @ Sta. 231+50.00 |         |          |                 |       |        |            |       |               |       |  |
| Flood  | Freq. Q |          | Opening Sq. Ft. |       | Nat.   | Head - Ft. |       | Headwater El. |       |  |
| 1 1000   | Yr.     | (C.F.S.) | Exist.          | Prop. | H.W.E. | Exist.     | Prop. | Exist.        | Prop. |  |
|  | 10      | 980      | 192.3           | 213.6 | 404.4  | 0.6        | 0.3   | 405.0         | 404.7 |  |
| Design   | 50      | 1470     | 206.9           | 228.2 | 404.9  | 1.7        | 1.3   | 406.6         | 406.2 |  |
| Base   | 100     | 1680     | 212.8           | 234.1 | 405.1  | 2.9        | 1.7   | 408.0         | 406.8 |  |
| Overtopping  | -       | -        | -               | -     | -      | -          | -     | -             | -     |  |
| Max. Calc.   | 500     | 2170     | 221.5           | 242.9 | 405.4  | 3.4        | 3.5   | 408.8         | 408.9 |  |

Exist. 10-Year Velocity Through Bridge=5.0 fps Prop. 10-Year Velocity Through Bridge=4.6 fps

GENERAL DATA F.A.I. RTE. 57 OVER LAKE CREEK BRANCH STATION 228+25.00 STRUCTURE NO. 100-0010 (N.B.) STRUCTURE NO. 100-0011 (S.B.)

|                              | SHEET NO. 2   | F.A.S.<br>RTE. | SECTION        |          |          | COUNTY          | TOTAL<br>SHEETS | SHEET<br>NO. |  |
|------------------------------|---------------|----------------|----------------|----------|----------|-----------------|-----------------|--------------|--|
| TILLY, INC.                  | 0.1221 100. 2 | I-57           | (X1-4-1)       | BR -1    |          | WILLIAMSON      | 202             | 85           |  |
| ST. LOUIS, MO<br>CHICAGO, IL | 29 SHEETS     |                |                |          | CONTRACT | TRACT NO. 78334 |                 |              |  |
| GLD<br>2/10                  |               | FED. RO        | AD DIST. NO. 9 | ILLINOIS | FED. AI  | AID PROJECT     |                 |              |  |