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<tr>
<th>CELL / MODEL NAME</th>
<th>DESCRIPTION</th>
<th>DATE</th>
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<tbody>
<tr>
<td>TSA-SB-TT-LS</td>
<td>2 rows of reinf in top slab; 1 row of reinf in each sidewall; T-Type Wingwalls, Left Skew</td>
<td>2/17/2017</td>
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<tr>
<td>TSA-SB-TT-RS</td>
<td>2 rows of reinf in top slab; 1 row of reinf in each sidewall; T-Type Wingwalls, Right Skew</td>
<td>2/17/2017</td>
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<tr>
<td>TSA-SB-TT-ZS</td>
<td>2 rows of reinf in top slab; 1 row of reinf in each sidewall; T-Type Wingwalls, Zero Skew</td>
<td>2/17/2017</td>
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<td>TSA-SC-TT-LS</td>
<td>2 rows of reinf in top slab; 2 rows of reinf in each sidewall; T-Type Wingwalls, Left Skew</td>
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<td>2 rows of reinf in top slab; 2 rows of reinf in each sidewall; T-Type Wingwalls, Right Skew</td>
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No reduction in quantities shall be made for this substitution.

At the Contractor's option, a longer \( v_1 \) bar may be ordered to replace the \( v \) bar.

Bars indicated thus \( 12 \times 4-#5 \) etc. indicates 12 lines of bars with 4 lengths per line.

Notes:

- Bars indicated thus \( 12 \times 4-#5 \) etc. indicates 12 lines of bars with 4 lengths per line.
- At the Contractor's option, a longer \( v_1 \) bar may be ordered to replace the \( v \) bar.
- No reduction in quantities shall be made for this substitution.

Fields in the document include:

- **DRAWN**: 2-17-2017
- **CHECKED**: 2-17-2017
- **REVISED**: 2-17-2017
- **PLOT DATE**: 2-17-2017
Notes:

Bars indicated thus 12 x 4-#5 etc. indicates 12 lines of bars with 4 lengths per line. 

At the Contractor's option, a longer v1 bar may be ordered to replace the v bar.

No reduction in quantities shall be made for this substitution.

Order bars shown full length. Cut as shown and use remainder of bars in opposite wingwall.

Hollow bulb type 6" bar as necessary for 2" min. cl.

Concrete Nails (Flat Hd. C.S.)

Field Cutting Diagram

Balance of bar to be used in opposite end of cover.
**Bill of Material**

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<tr>
<th>Bar</th>
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**Concrete Box Culverts**

- **Reinforcement Bars:** Epoxy Coated
- **Concrete Nails:** Flat Headed

**Notes:**
- Bars indicated thus 12 x 4-#5 etc. indicates 12 lines of bars with 4 lengths per line.
- At the Contractor's option, a longer v1 bar may be ordered to replace the v bar. No reduction in quantities shall be made for this substitution.

**Designation:**
- **File Name:** TSA-SC-TT-ZS
- **PLOT DATE:** 2-17-2017
- **PLOT SCALE:**
- **PLOT:**
  - **Longitudinal Section**
  - **Plan**
  - **Showing TOWALL**
  - **Showing HEADWALL**

**Section Thru Headwall**

**Corner Detail**

**Field Cutting Diagram**

Order bars shown full length. Cut as shown and use remainder of bars in opposite wingwall.

**Culvert Details**

- **Concrete Box Culverts**
  - **Country:** ILLINOIS
  - **County:**
  - **Struct. No.:**
  - **Contract No.:**
  - **State:** ILLINOIS
  - **Department of Transportation:**

---

**Original Context:**

- Variables indicated thus 12 x 4-#5 etc.
- No reduction in quantities shall be made for this substitution.
- At the Contractor's option, a longer v1 bar may be ordered to replace the v bar.
- Bars indicated thus 12 x 4-#5 etc. indicates 12 lines of bars with 4 lengths per line.

**Drawn Checked:**
- **DATE:** 2-17-2017
- **CHECKED:**
  - **DESIGNED:**
  - **REVISED:**
  - **REMARKS:**
  - **REMARKS:**
  - **REMARKS:**

**Bill of Material**

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At the Contractor's option, a longer v1 bar may be ordered to replace the v bar.
No reduction in quantities shall be made for this substitution.

TSB-SB-TT-LS 2-17-2017

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CULVERT DETAILS
STRUCTURE NO.

BILL OF MATERIAL

FIELD CUTTING DIAGRAM
Order bars shown full length. Cut as shown and use remainder of bars in opposite wingwall.
LONGITUDINAL SECTION

REINF. - BACK FACE

(Dimensions at M.L. to & Roadway)

REINF. - FRONT FACE

SECTION THRU HEADWALL

SECTION A-A

Order bars shown full length. Cut as shown and use remainder of bars in opposite wingwall.

Notes:

1. Bars indicated thus 12 x 4-#5 etc. Indicates 12 lines of bars with 4 lengths per line.
2. At the Contractor's option, a longer v1 bar may be ordered to replace the v bar.
3. Reduction in quantities shall be made for this substitution.

T5B-SB-TT-RS 2-17-2017

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CUVET DETAILS

BILL OF MATERIAL

BILL OF MATERIAL

Reinforcement Bars

Concrete Bars (Flat Ht. C.S.)

Concrete Nails (Flat Hd. C.S.)

Reinforcement Bars, Epoxy Coated

Concrete Box Culverts

Cu. Yd.

Pound

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Cu. Yd.

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Notes:

1. a bars indicated thus 12 x 4-#5 etc. indicates 12 lines of bars with 4 lengths per line.
2. All bars indicated thus 12 x 4-#5 etc. indicates 12 lines of bars with 4 lengths per line.
3. No reduction in quantities shall be made for the substitution.
4. At the Contractor's option, a longer v bar may be ordered to replace the v bar.
5. Bars indicated thus 12 x 4-#5 etc. indicates 12 lines of bars with 4 lengths per line.
6. Balance of bar to be used in opposite end of culvert.
7. Concrete nails (Flat Hd. C.S.)
8. Epoxy Coated Reinforcement Bars,
10. Max. Applied Service Bearing Pressure = ksf
No. Shape = BAR

Notes:
- Bars indicated thus 12 x #5 etc. indicates 12 lines of bars with 4 lengths per line.
- At the Contractor's option, a longer v5 bar may be ordered to replace the v2 bar.
- No reduction in quantities shall be made for this substitution.

BAR n(E)

SECTION THRU BARCHART

FIELD CUTTING DIAGRAM

SHOWING TOEWALL PLAN SHOWING HEADWALL

Notes:
- Bars indicated thus 12 x #4-#5 etc. Indicates 12 lines of bars with 4 lengths per line.
- At the Contractor's option, a longer v2 bar may be ordered to replace the v1 bar.
- No reduction in quantities shall be made for this substitution.

TSB-SC-TT-RS 2-17-2017
**Bill of Material**

<table>
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<tr>
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<th>No.</th>
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**Notes:**

Bars indicated thus 12 x 4 #5 etc. Indicates 12 lines of bars with 4 lengths per line.

At the Contractor's option, a longer v1 bar may be ordered to replace the v bar.

No reduction in quantities shall be made for this substitution.

---

**Culvert Details**

**Concrete Box Culverts**

- **Concrete:** Cubic Yards
- **Reinforcement Bars:** Tons

**Ordering Information:**

- **Type:** Concrete Box Culvert
- **Specifications:**
  - **Reinforcement Bars:** Reinforcement Bars, Grade 60
  - **Concrete:** Cubic Yards
  - **Pound:** Pound

---

**State of Illinois**

**Department of Transportation**

**Contract No.:**

---

**Additional Notes:**

- **Plot Date:**
- **PLOT SCALE:**
- **LONGITUDINAL SECTION:**
- **REINFORCING BARS:**
- **CORNER DETAIL:**

---

**FIELD CUTTING DIAGRAM:**

Order bars shown full length. Cut as shown and use remainder of bars in opposite wingwall.