**PENTAC HEAD BOLT IS RECESSED MINIMUM 3/8" BELOW PLATE SURFACE.**

**GENERAL NOTES**

1. CUSTOMER TO
   a. VERIFY ALL VAULT FEATURES
   b. DO ALL GIRDING & EPOXY OF VAULTS, HOLES & SLAVES
   c. USING NON-SHRINKING CEMENT
   d. SUPPLY & INSTALL ALL PIPING & ELECTRICAL
   e. INSTALL ALL LADDERS
   f. DO ALL PAINTING

**SHIPING WEIGHT**

- 64-2-33 COVER: 1.338 lbs
- 645 CABLE BASE: 4,770 lbs
- TOTAL: 6,108 lbs

---

**PLAN VIEW**

- WSDOT 2-332 SLIPNOT PLATE
- SPRING ASSISTED DOORS 80 STYLE
- MARKED "WSDOT ITS"
(DRAWING: 010-227034-001)

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**VIEW AA**

- 3" GROUND INSERT
- MARKED "WSDOT"
- MARKED "WSDOT ITS"
(DRAWING: 010-227034-001)

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**VIEW BB**

- 645 CABLE BASE - WSDOT
(DRAWING: 010-0090032-001)

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Washington State Department of Transportation
HQ Traffic Operations Office
DATE: July 30, 2012

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**NOTES**

1. CONCRETE: 28 DAY COMPRESSIVE STRENGTH FC = 4000 psi
2. REBAR: ASTM A-615 GRADE 60
3. WASH: ASTM A-615 GRADE 60
4. DESIGN: ACH-1030-05 BUILDING CODE
5. LOADS: STANDARDS DUTY LOADING, 22.25k lbs
6. ASTM C-857 "MINIMUM STRUCTURAL DESIGN LOADING FOR UNDERGROUND PRECAST CONCRETE UTILITY STRUCTURES" 200k IMPACT FOR LESS THAN 1/4" NON-COVER
7. SOIL DENSITY 150 pcf
8. N 90 KIP LATERAL PRESSURE ABOVE WATER TABLE
9. N 90 KIP LATERAL PRESSURE BELOW WATER TABLE
10. LVE LOAD SURCHARGE FOR SOIL COVER > 15'-6"
11. TOP OF VAULT AT FINISHED GRADE
12. INSTALLATION 5'-6" BELOW FINISHED GRADE (ASSUMED)
PLAN VIEW
LAYOUT (SHOWN AS PIRED)

W3 DETAIL

W2 DETAIL

VIEW AA

W1 DETAIL

VIEW BB

PLAN VIEW
REINFORCING (SHOWN AS PIRED)

SECTION CC
W1 & W2 NOT SHOWN

SECTION DD
W2 NOT SHOWN

BILL OF MATERIAL

<table>
<thead>
<tr>
<th>PART</th>
<th>QTY</th>
<th>UN</th>
<th>DESCRIPTION</th>
<th>ITEM #</th>
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<tbody>
<tr>
<td>1</td>
<td>4</td>
<td>ea</td>
<td>Insert Loop F 3/4&quot;</td>
<td>010-500000-000</td>
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<tr>
<td>2</td>
<td>4</td>
<td>ea</td>
<td>Insert Plastic Plug 3/4&quot; 1/2&quot;</td>
<td>010-500050-000</td>
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<tr>
<td>3</td>
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<td>2-352-5A-B0 Frame - WSDOT</td>
<td>010-2270045-000</td>
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<tr>
<td>18.00</td>
<td>ft</td>
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<td>Concrete 3/4&quot; CS-101</td>
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<td>0.24</td>
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<td>Concrete Mix - SCC</td>
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<td>0.60</td>
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<td>Mesh - (Square Feet)</td>
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SHOP NOTES:
1. Use steel form "64" cover
2. Concrete finish: broom finish with machined edges

REINFORCING CUT LIST

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<tr>
<th>PART</th>
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<th>FT</th>
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<tr>
<td>R1</td>
<td>4</td>
<td>HR Rebar</td>
<td>4</td>
<td>3 STR</td>
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<tr>
<td>R2</td>
<td>6</td>
<td>HR Rebar</td>
<td>6</td>
<td>4 STR</td>
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<tr>
<td>R3</td>
<td>2</td>
<td>HR Rebar</td>
<td>12</td>
<td>2 BENT</td>
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<tr>
<td>W1</td>
<td>2</td>
<td>Mesh 4x4 - W2.9 x W2.9</td>
<td></td>
<td>BENT</td>
</tr>
<tr>
<td>W2</td>
<td>2</td>
<td>Mesh 4x4 - W2.9 x W2.9</td>
<td></td>
<td>BENT</td>
</tr>
<tr>
<td>W3</td>
<td>1</td>
<td>Mesh 4x4 - W2.9 x W2.9</td>
<td></td>
<td>BENT</td>
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</table>
SHOP NOTES
1. PLASMA PROGRAM NAMES: 332-NS-SA-80 STAND-250
2. CUT w/SUPORT PATTERN UP

PART No. 15

PART No. 16

0.515" SQUARE HOLE
(2) PLACES

PART No. 23

0.515" HOLE

LAYOUT CUT LIST

<table>
<thead>
<tr>
<th>PART</th>
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<tbody>
<tr>
<td>15</td>
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<td>Stopper Plate 36&quot; x 12&quot; x 3/16&quot;</td>
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<tr>
<td>16</td>
<td>1</td>
<td>Flattener 1/4&quot; x 2&quot;</td>
<td>28&quot;</td>
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<td>23</td>
<td>2</td>
<td>Flattener 1/4&quot; x 5&quot;</td>
<td>36&quot;</td>
</tr>
</tbody>
</table>

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Department of Transportation
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DATE: July 30, 2012

Oldcastle Precast
332-NS-SA-80 "WSDOT ITS"
PLASMA & PART CUT DETAILS
CUSTOMER: STANDARD PRODUCT: 010-2270304-001 L
PLAN VIEW

SECTION AA

SECTION BB

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STRUCTURAL NOTES
1. MATERIAL: ASTM A36/A361 STRUCTURAL STEEL STANDARDS
2. ASSEMBLY: AWS D1.1 WELDING STANDARDS
3. COATING: ASTM A525 HOT-DIP GALVANIZING STANDARDS
4. LOAD: SUITABLE FOR APPROX. H-20 WHEEL LOADING IN OFF-STREET LOCATIONS WHERE NOT SUBJECT TO HIGH-SPEED TRAFFIC

GENERAL NOTES
1. DOORS AVAILABLE TO USE WITH THIS FRAME: 227030H (332-SA-80 "WDOT 11")

NOWCAST Precast
2-332-SA-80 FRAME - WSDOT

CUSTOMER STANDARD PRODUCT
010-2270045-000

REV
DATE
0
2012
PART No. 4
FLAT PATTERN DETAIL

39 3/8"

PART No. 4
BEND DETAIL

3/8" HOLE
(2 PLACES)

SHOP NOTES:
1. PLASMA PROGRAM NAME: WDOT-SA-BDFRAME-P4
2. CUT WITH SLPNPT FINISH SIDE UP

LAYOUT CUT LIST

<table>
<thead>
<tr>
<th>PART</th>
<th>QTY</th>
<th>DESCRIPTION</th>
<th>SIZE</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>2</td>
<td>Smooth Pipe 1/2&quot; x 120&quot; x 3/16&quot;</td>
<td>---</td>
</tr>
</tbody>
</table>

APPROVED
Washington State
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HQ Traffic Operations Office
DATE July 30, 2012

Oldcastle Precast
2-132-SA-BD FRAME - WSDOT
PART CUT & PLASMA DETAILS
CUSTOMER STANDARD PRODUCT

010-2270045-00  H