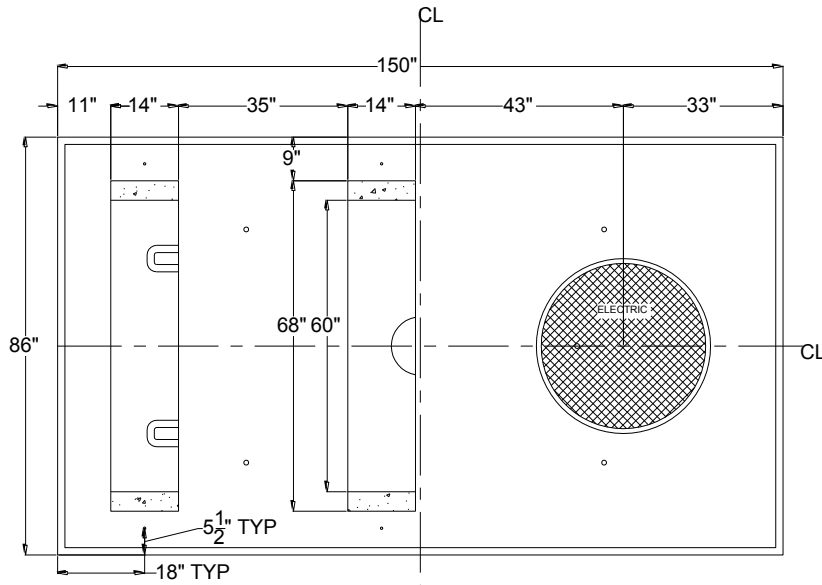


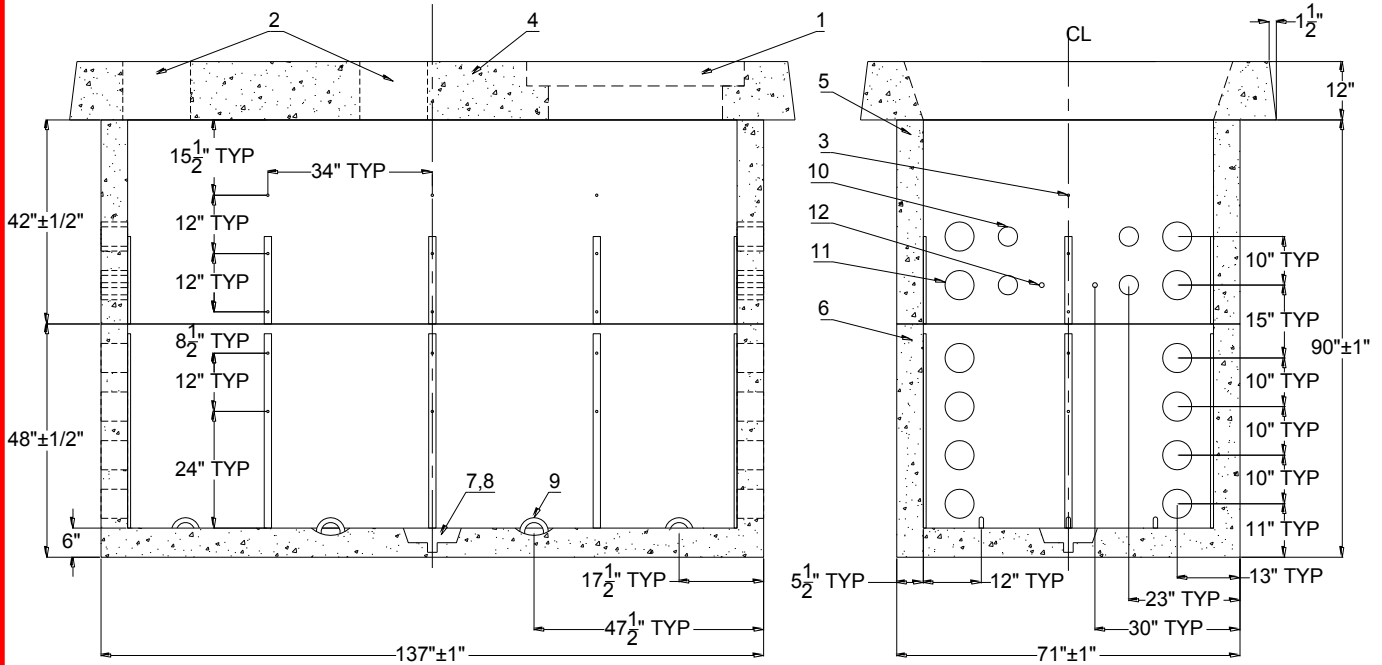
Vaults and Boxes

DESIGN REQUIREMENTS

APPROVED STRUCTURE	
MANUFACTURER	MANHOLE
JENSEN PRECAST	J-RS-97
OLSON PRECAST	O-RS-97



- LEGEND:**
1. TRAFFIC LID & RING
 2. CABLE SLOT
 3. 1/2"-13 UNC GROUNDING INSERTS
 4. TOP SECTION
 5. MIDDLE SECTION
 6. BOTTOM SECTION
 7. MOLDED KNOCKOUT
 8. SUMP PUMP RECESS
 9. PULLING EYE
 10. 4" CONDUIT TERMINATOR
 11. 6" CONDUIT TERMINATOR
 12. 1" PVC GROUND WIRE CONDUIT



RS-97 MANHOLE

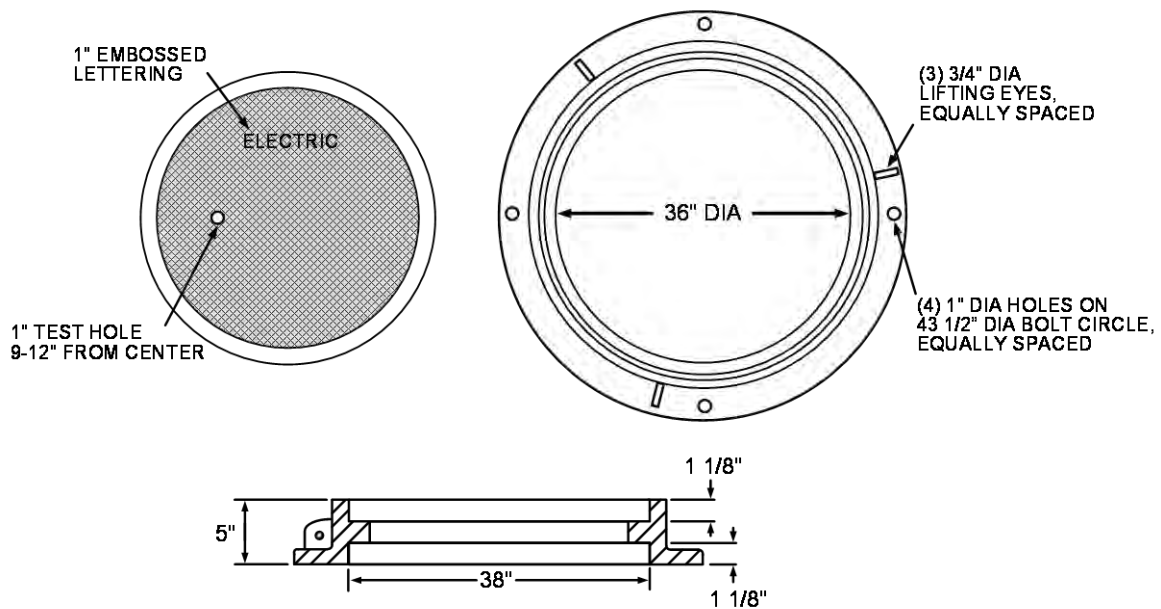
ALL RS-98 TO RS-101, RS116

	Electric Service Requirement			<h2>RS-97</h2>								
	<h3>Manhole: Switch/Fuse Cabinet, 15kV</h3>											
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">Drawn:</td> <td style="width: 25%;">Eng:</td> <td style="width: 25%;">Appr:</td> <td style="width: 25%;">Date:</td> </tr> <tr> <td>KT</td> <td>RD</td> <td>DA</td> <td>10/16</td> </tr> </table>	Drawn:	Eng:	Appr:	Date:	KT	RD	DA	10/16				Revision: 8B Page 1 of 5
Drawn:	Eng:	Appr:	Date:									
KT	RD	DA	10/16									

Vaults and Boxes

1. Ring and Lid

1. All traffic rings and lids require NVE approval.
2. Traffic rings and lids shall be made in USA and meet AASHTO-H20.44 specification. Conform to H-20 wheel loading, ASTM A-48, and class 35B.
3. Lid shall have a 1" diameter lifting hole (through the thickness of the lid), located 9" to 12" from the center of the lid.
4. Lid shall have the word "ELECTRIC" in 1" letters, embossed in the top.
5. Frame to be reversible.
7. Ring and lid to have indexing provisions to assist with bolt-hole alignment.



2. Top Pad Section

1. Two 14" x 68" cable slots.
2. Four 1/2"-13 UNC inserts.
3. Four 1" lifting inserts placed at manufacturer's discretion for safe lifting.
4. 1-1/2" Taper all around top of pad.
3. 36" diameter cast iron traffic frame mounted in the concrete.

3. Middle Section:

1. Nine 1/2" grounding insert nuts in each side wall and three in each end wall, located on the same level.
2. A 1" diameter PVC conduit through the end walls.
3. Four 6" and four 4" diameter PVC conduit terminators through each end wall.
4. 60" (W) x 126" (L) x 42" (H) inside dimensions with tolerances of $\pm 1"$.
5. Three 18" steel racks, Inwesco 10A07 or approved equivalent, installed on each side wall and one on each end wall.

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Vaults and Boxes

4. Bottom Section:

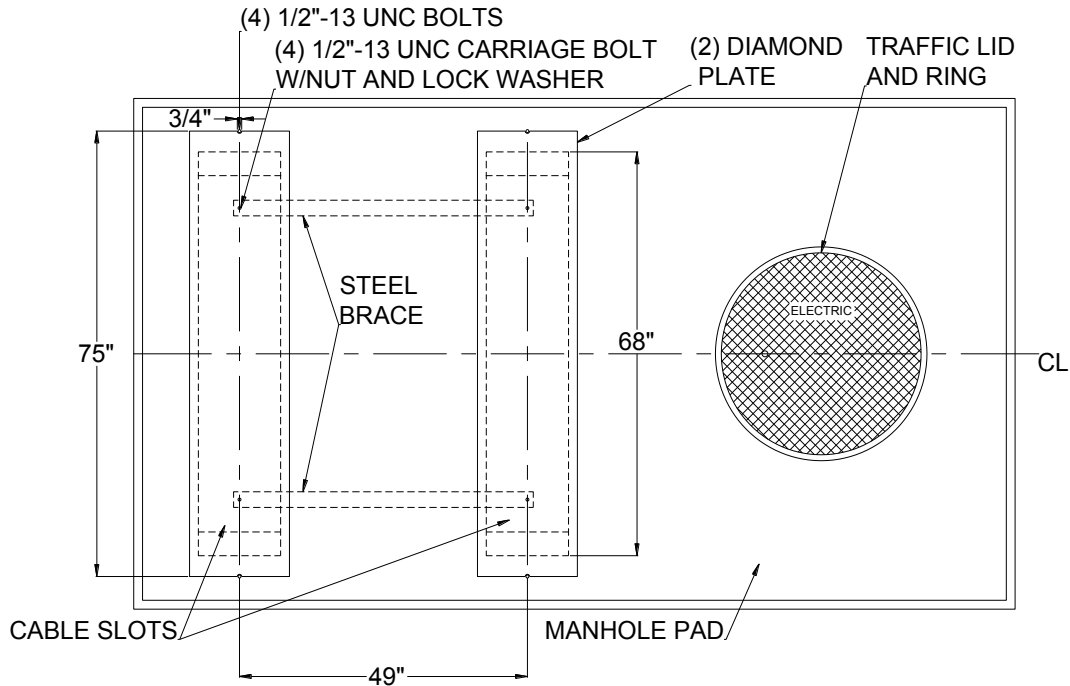
1. Six 1/2" grounding insert nuts in each side wall and two in each end wall, located on two levels per drawing on page 1.
2. Six steel pulling eyes in the floor (hot dip galvanized).
3. A 12" diameter x 3" deep sump pump recess with a 2" diameter knockout in the middle of the floor.
4. Eight 6" diameter PVC conduit terminators through each end wall.
5. 60" (W) x 126" (L) x 42" (H) inside dimensions with tolerances of $\pm 1"$.
6. Three 40" steel racks, Inwesco 10A13 or approved equivalent, installed on each side wall and one on each end wall.

5. Entire Structure:

1. Shall meet RS-G2, RS-G4, and RS-G5.
NOTE: In the case of road expansion, this structure shall not be adapted for placement under the road without NVE T & D Standards approval.
2. Shims of any type are not allowed for the installation of this box.

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Vaults and Boxes



RS-97 MANHOLE

ALL RSI-98 TO RSI-101, RS-116
SAFETY REQUIREMENTS

6. Diamond Plates

1. Every Top Pad shall have both cable slots covered with 1/4" x 17" x 75" steel diamond plates per above drawing. Each plate shall be fastened to the pad with two 1/2" – 13UNC hex head bolts and secured with two steel braces made from angle iron or unistrut on the bottom of the pad. Braces shall be fastened to the plate with 1/2"-13UNC carriage bolts, nuts, and lock washers.
2. Removal of the Steel Diamond Plate without immediate installation of the Cabinet is prohibited.

7. Grounding

Manholes shall have grounding inserts on all walls around the inside perimeter as shown on Page 1. The inserts shall be spaced in accordance with this specification drawing. Inserts to be attached to the internal manhole rebar by spot welding or approved connector. The insert shall accept 1/2" American Standard thread. Continuity between all inserts installed in manhole sections shall be checked and verified prior to shipping by manufacturer/supplier.

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