

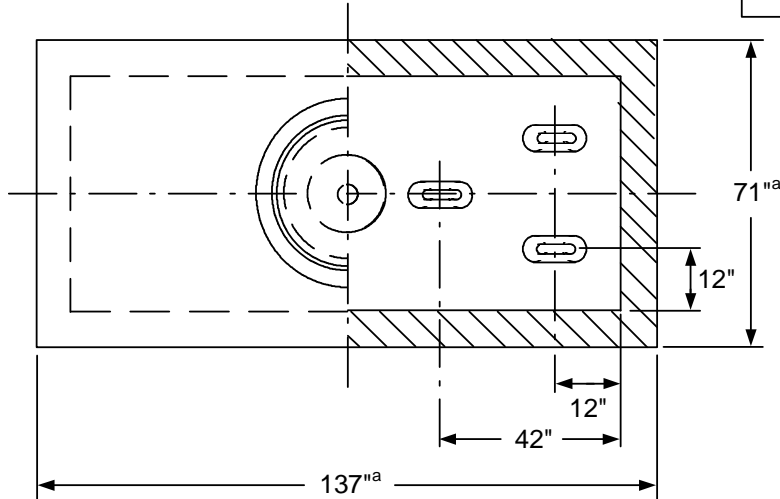
DESIGN REQUIREMENTS

TOLERANCES:

a = +1", -1"

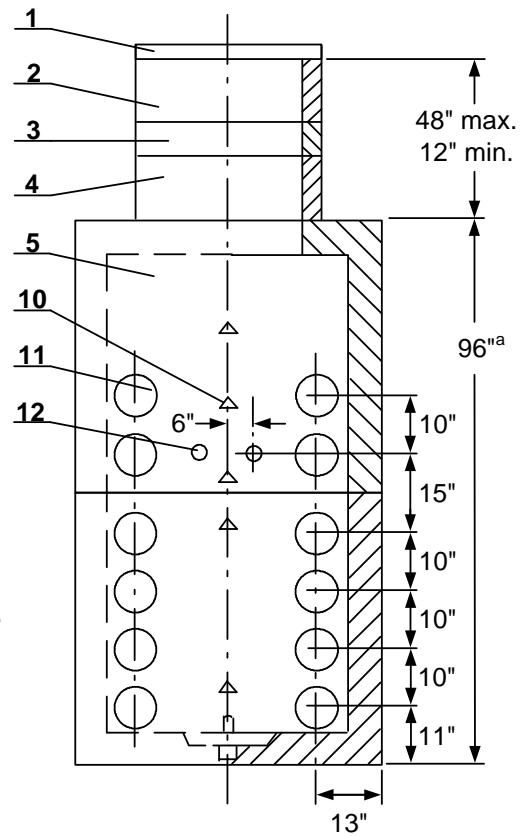
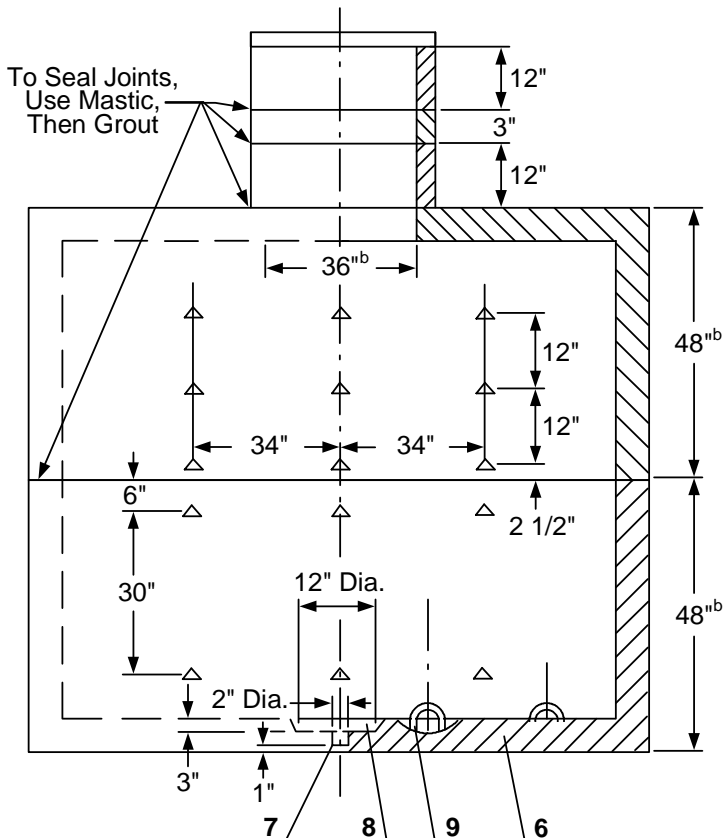
b = +1/2", -1/2"

APPROVED STRUCTURE	
MANUFACTURER	MANHOLE
Jensen Precast	J-RS-94



LEGEND:

1. Traffic lid & ring
2. Top neck
3. Extension neck
4. Bottom neck
5. Top section
6. Bottom section
7. Molded knockout
8. Sump pump recess
9. Pulling eye
10. 1/2"-13 UNC grounding inserts
11. 6" conduit terminator
12. 1" PVC ground wire conduit



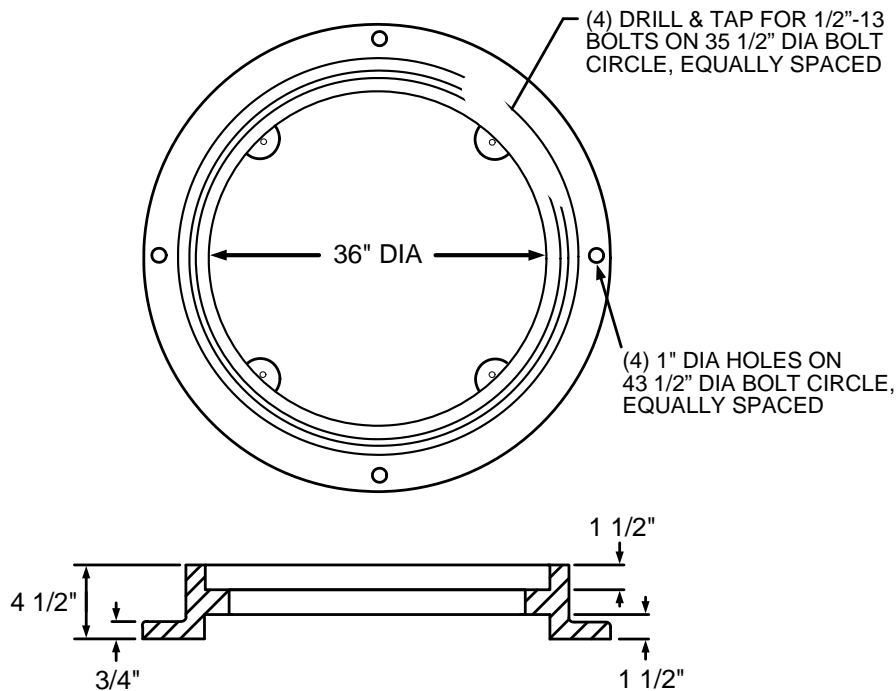
RS-94 MANHOLE

	Electric Service Requirements			<b>RS-94</b>
	<b>Manhole: Feeder Cable Splice</b>			
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# Vaults and Boxes


## 1. The 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. Lid shall be safely fastened to the ring with four 1/2"-13 UNC stainless steel pentahead bolts.
6. Frame to be reversible.
7. Ring and lid to have indexing provisions to assist with bolt-hole alignment.



## 2. Neck Tunnel

1. A 36" diameter cast traffic frame centered and mounted on the top of the 12" high top neck.
2. 3" extension neck.
3. 12" high bottom neck.

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## Vaults and Boxes

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### 3. Top Section

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

### 4. Bottom Section


1. Six 1/2" grounding insert nuts in each side wall and two steel insert nuts in each end wall, located on two levels per drawing on page 1.
2. Six steel pulling eyes in the floor shall be 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 installed on each side wall and one on each end wall.

### 5. Entire Structure

1. Shall meet RS-G2 and RS-G4  
**NOTE:** Only this manhole may be installed directly under street traffic area.
2. Shims of any type are not allowed for the installation of this box.

### 6. Grounding

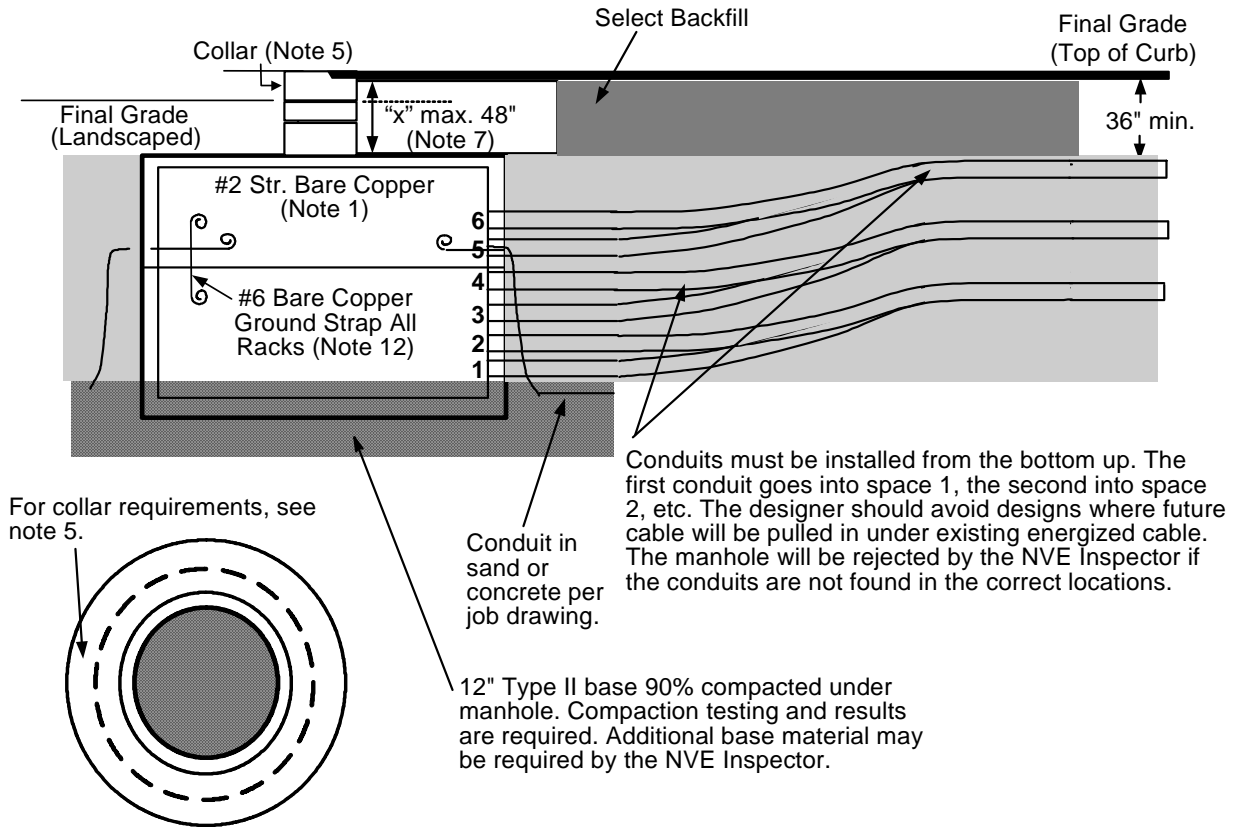
1. Manholes shall have grounding inserts on all walls around the inside perimeter as shown on Page 1. The inserts shall be spaced in accordance with this specification drawing. Inserts to be attached to the internal manhole rebar by spot welding or approved connector. The insert shall accept 1/2"-13 UNC thread. Continuity between all inserts installed in the manhole sections shall be checked and verified prior to shipping by manufacturer/supplier.

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# Vaults and Boxes


## INSTALLATION REQUIREMENTS

APPROVED STRUCTURE	
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### NOTES:

1. Grounding by customer shall be 2-50' #2 stranded bare copper ground wires laid in the bottom of the conduit trench in opposite directions with 2-5' trails left in the box. Ground wires shall be installed through a 1" PVC conduit in the structures end walls and attached to the 2/0 copper grounding bus.
2. The bottom surface of the manhole shall be level.
3. If the ground water level is at least 3' below the bottom of the splice box, the 2" diameter knockout in the sump pump recess shall be removed.
4. If the designer specifies additional conduit openings, the contractor shall core drill the holes as required.
5. Collar Requirements:
  - A. All manholes located in roadways, including bike lanes, shall have a collar 12" in width and 8" in depth surrounding the ring and lid. Additionally, one #4 rebar will be centered in collar per Regional Transportation Commission Uniform Standard Drawing 408.S1.
  - B. All other manholes shall have a collar 8" in width and 6" in depth surrounding ring and lid.

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## Vaults and Boxes

6. Provide minimum cover of no less than 12" native soil or approved backfill.
7. If any final grade adjustment "X" is needed, take the following actions listed in table 1:


**Table 1. Adjustment Requirements**

Adjustment	Action
15" – 48"	The NVE contractor shall order up to 48" high neck sections from the original manufacturer.
Above 48"	Raise the entire box. No neck extensions shall exceed 48".

8. Extensions between the top and bottom sections of the box will not be allowed.
9. This manhole shall be used if installation is required directly under street traffic area.
10. There shall be a minimum 6' clearance from the RS-94 box to the centerline of a fire hydrant.
11. In wet, planter, or grassy areas, final grade to be 6" below the top of entrance to the manhole.
12. NVE lineman shall install #6 bare copper to upper and lower steel racks to bond top and bottom box sections.
13. Shims of any type are not allowed for installation of this box.
14. Top section/grade ring may require a custom pour to meet final grade slope.

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