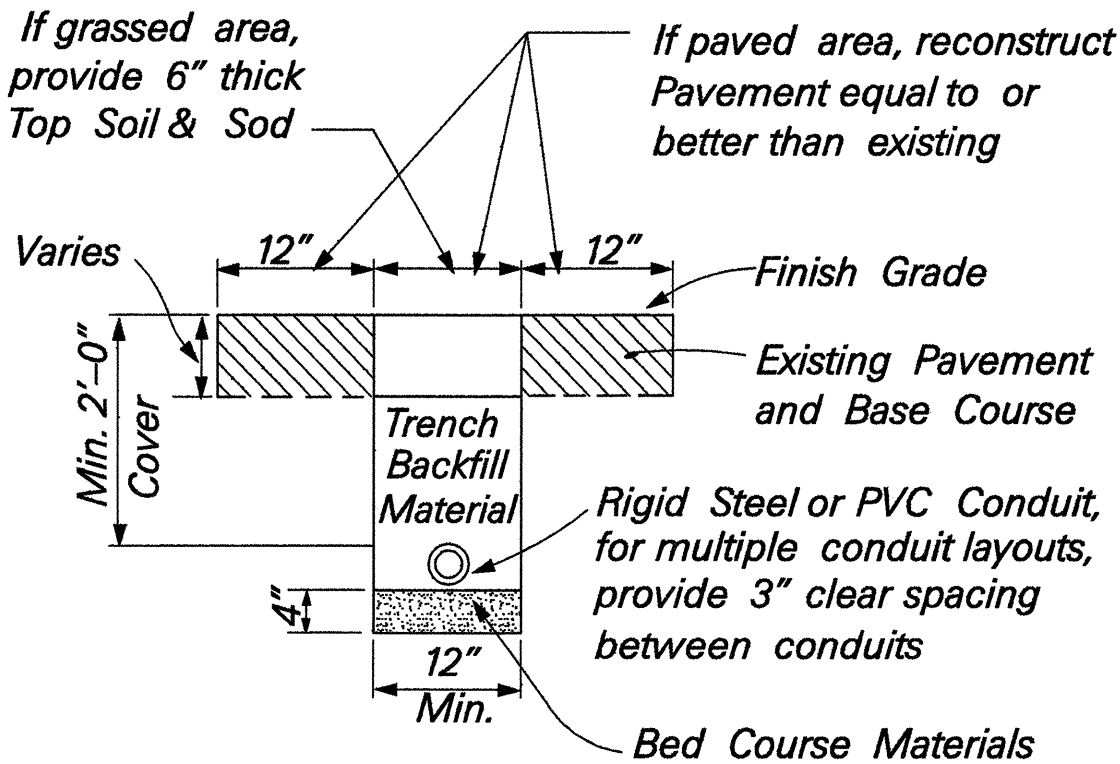
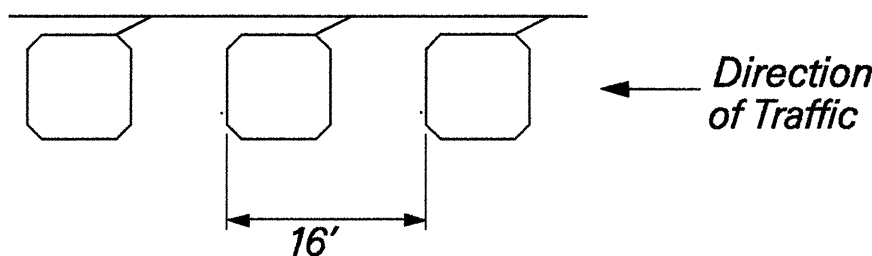


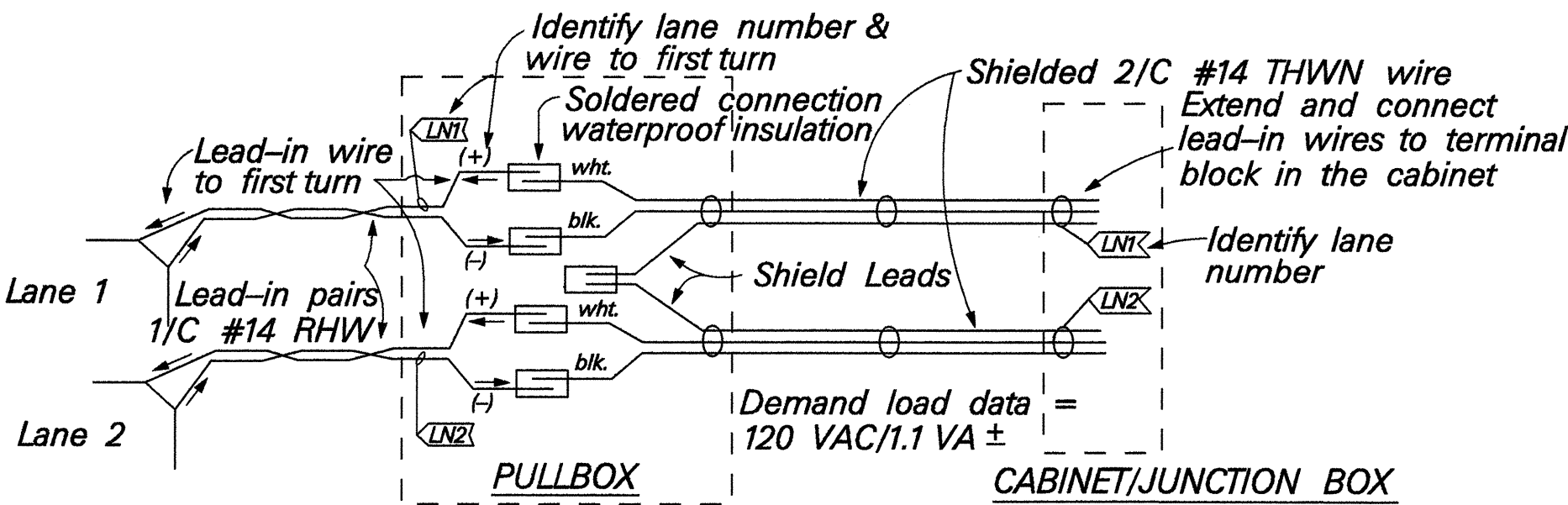
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-063-1(19)	1995	C.O.78S-1	78



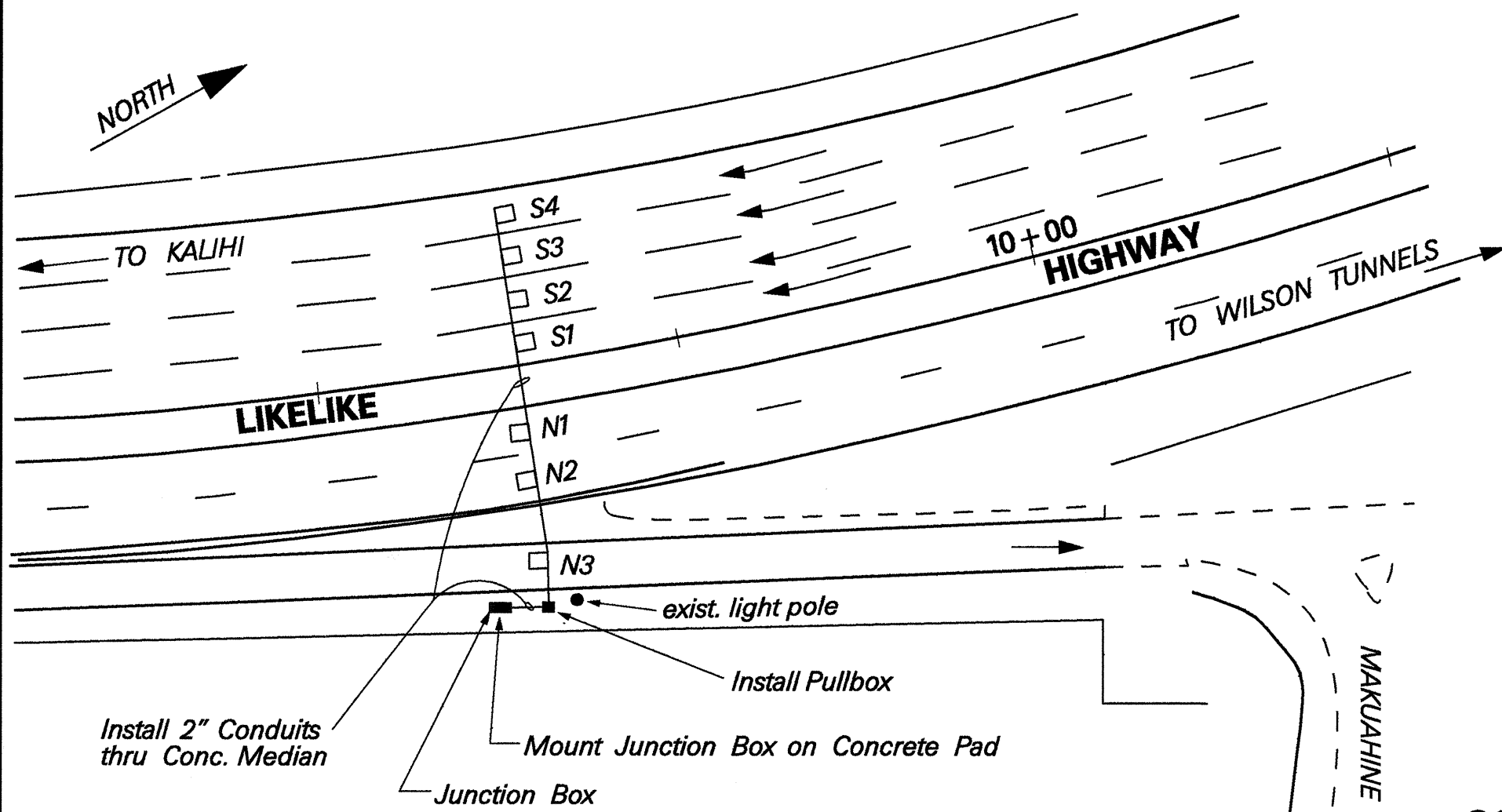
TYPICAL TRENCH SECTION
FOR CONDUIT



TRIPLE LOOP LAYOUT



DETECTOR LOOP LEAD-IN WIRING AND
IDENTIFICATION IN PULLBOX AND CABINET
Not to Scale



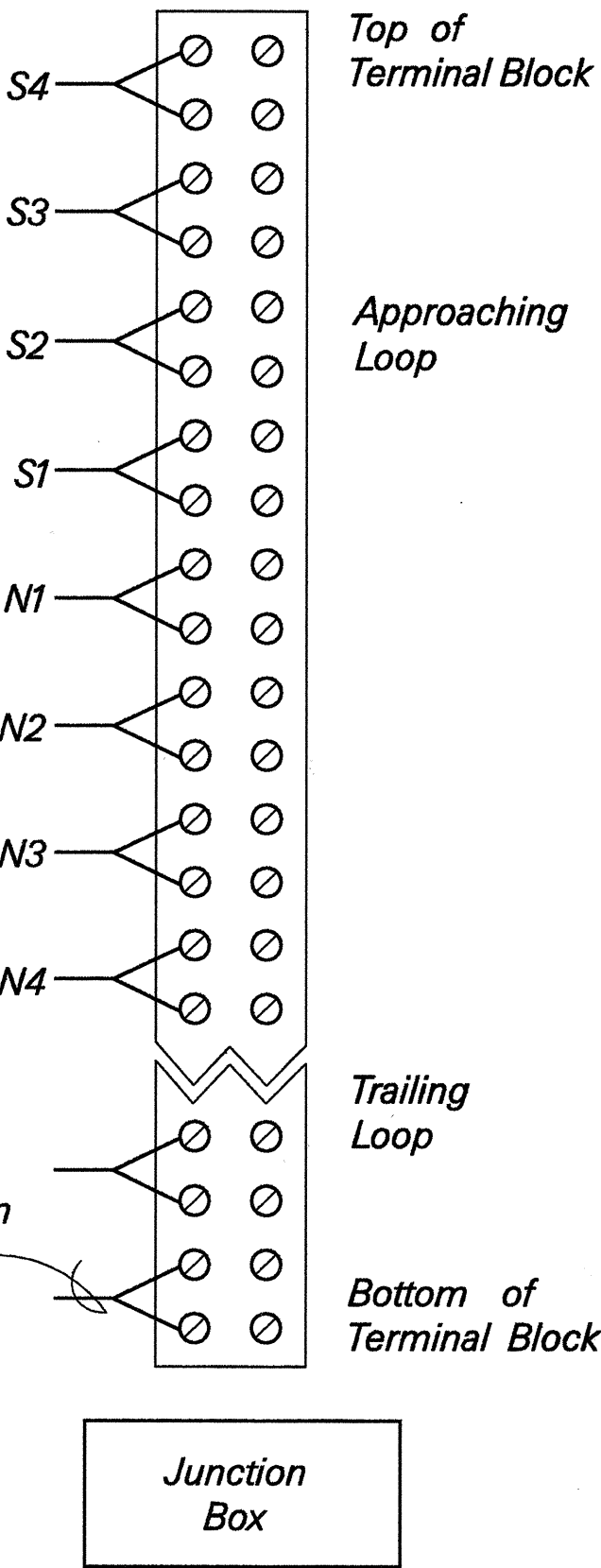
LOOP INSTALLATION AT TRAFFIC COUNT STATION NO. 210
LIKELIKE HIGHWAY, STA. 8+40±
Not to Scale

LOOP LAYOUT NOTES

1. Detector loop shall consist of three turns of 1/C 14 AWG RHW-USE-XLP wire or equivalent embedded in a 3/8" minimum saw cut, except as noted.
2. Loop and lead-in to the first pullbox shall be one continuous wire. Lead-in wires from the same loop shall be twisted in pairs, two turns per foot. DO NOT twist one loop-pairs with another loop-pairs.
3. All lead-in wires shall be crimped with U-shaped solderless connectors, such as Panduit terminals that will fit into the terminal board slots snugly.
4. The Contractor shall connect the inductance wires on each terminal slot. (See "Connecting Layout of Loop Lead-In Wires to Terminal Block" on this sheet.)
5. The left lane in the direction of traffic flow is designated as lane 1, and the lane next to its right as lane 2 and so on as indicated on plans.
6. Clean sawcut thoroughly before filling with appropriate sealant.
7. All loop lead-in wires in all enclosures including pullboxes shall be identified and labeled by direction of traffic flow and lane numbers as shown on plans.
8. All cables and wires terminated within an enclosure shall have a minimum 12" additional slack.

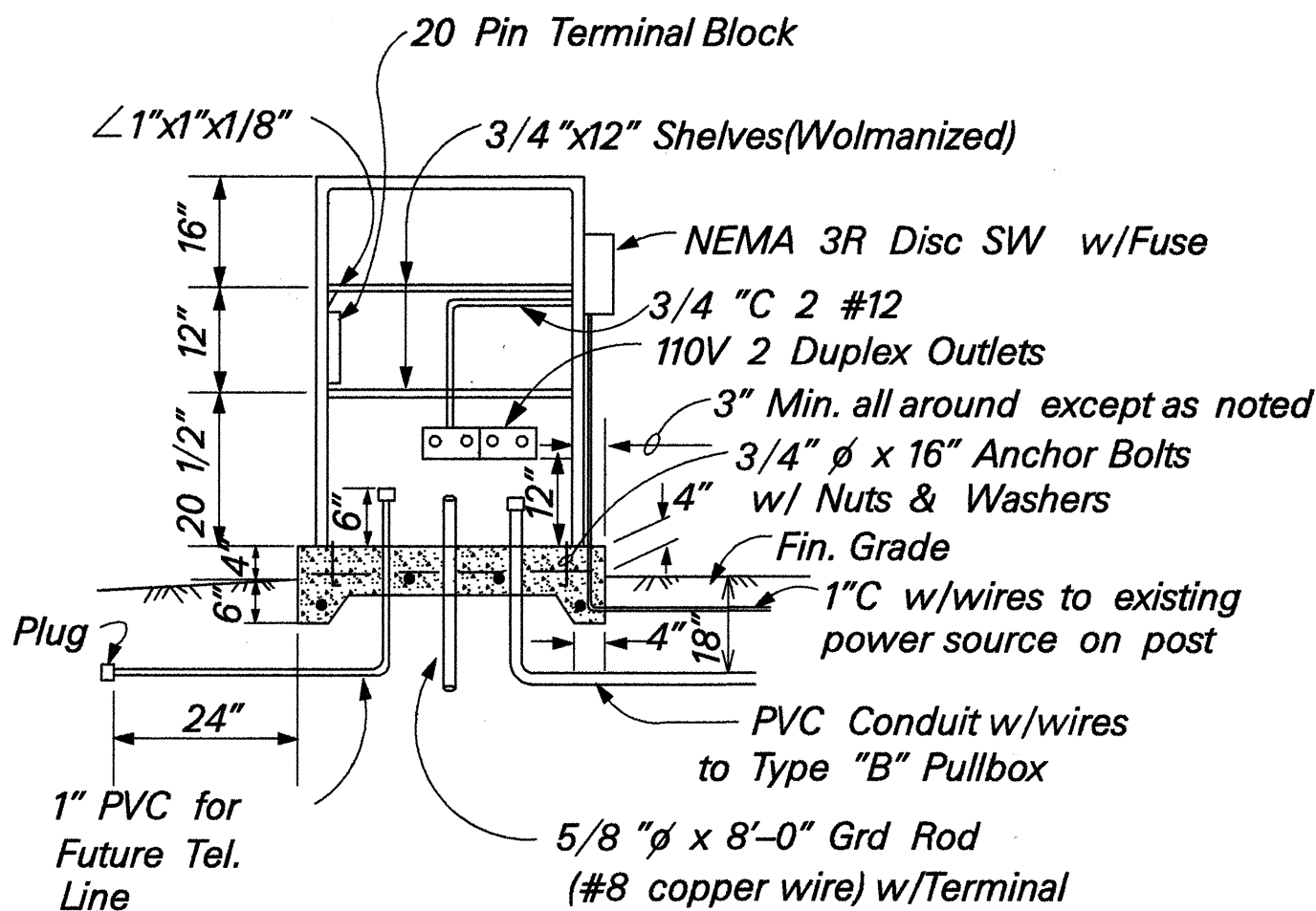
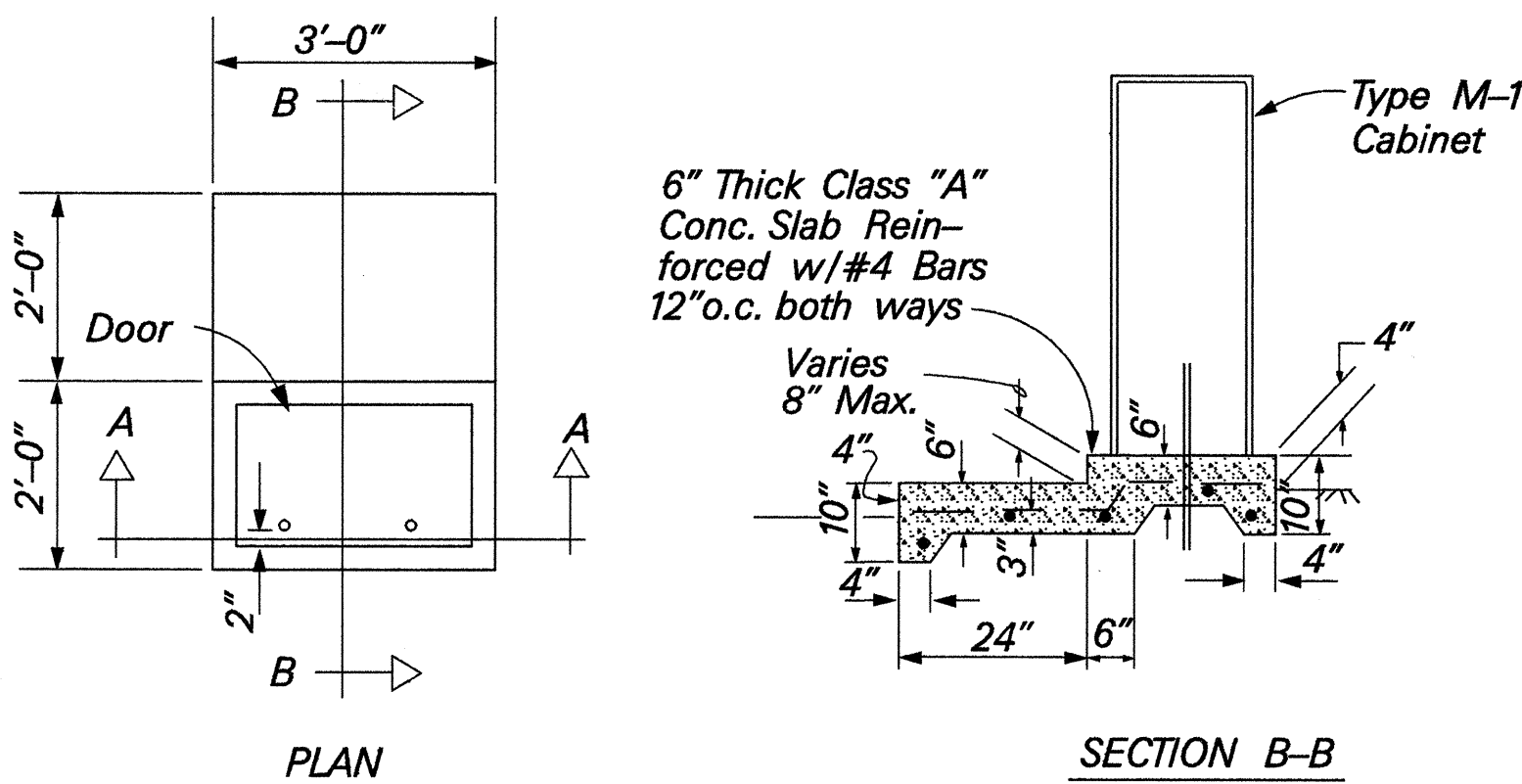
GENERAL NOTES

1. The locations of new inductance loops, pullboxes and cabinets/junction boxes shall be staked out in the field by the Contractor and approved by the Engineer prior to installation.
2. The contractor shall inform the Engineer at least one day prior to pouring of the concrete slab/pad, saw-cutting pavement and installing inductance loops.
3. Continuity of inductance loops and lead-in wires shall be tested and warranted for one year from date of acceptance by the Contractor.
4. The Contractor shall restore all affected areas to their original condition. This item of work shall not be paid for separately, but shall be considered incidental to work of other paid items.
5. The Contractor shall verify the locations of the existing utilities and underground structures whether or not shown on plans.
6. The Contractor shall assume that existing underground utilities not shown on the plans may exist, therefore, he shall contact the different utility companies for information and toning.
7. The Contractor shall be held liable for any damages incurred to the existing utilities and underground structures as a result of his operations. All damaged portions shall be replaced in accordance with the standards and specifications of the affected utility company at no cost to the STATE.
8. Changes to the contract plans and specifications shall not be permitted, unless otherwise authorized by the Engineer upon written justification and request for approval by the Contractor.

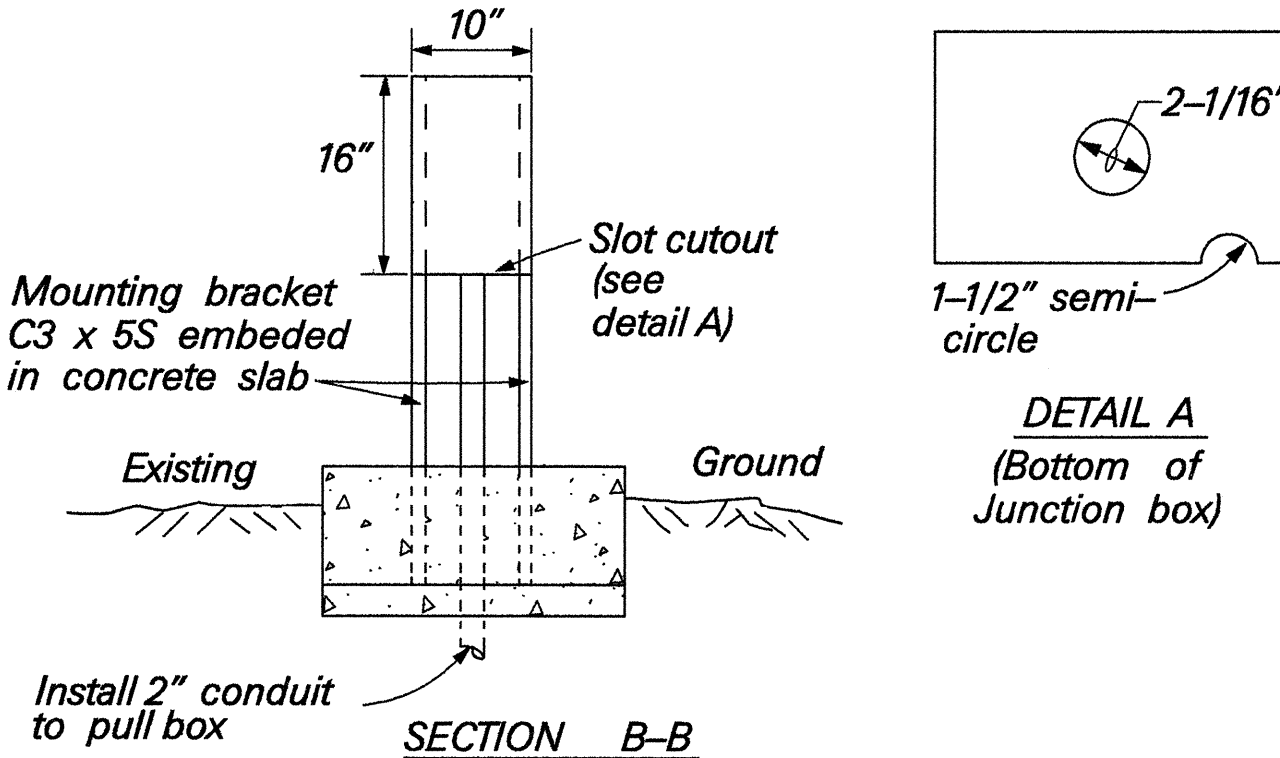
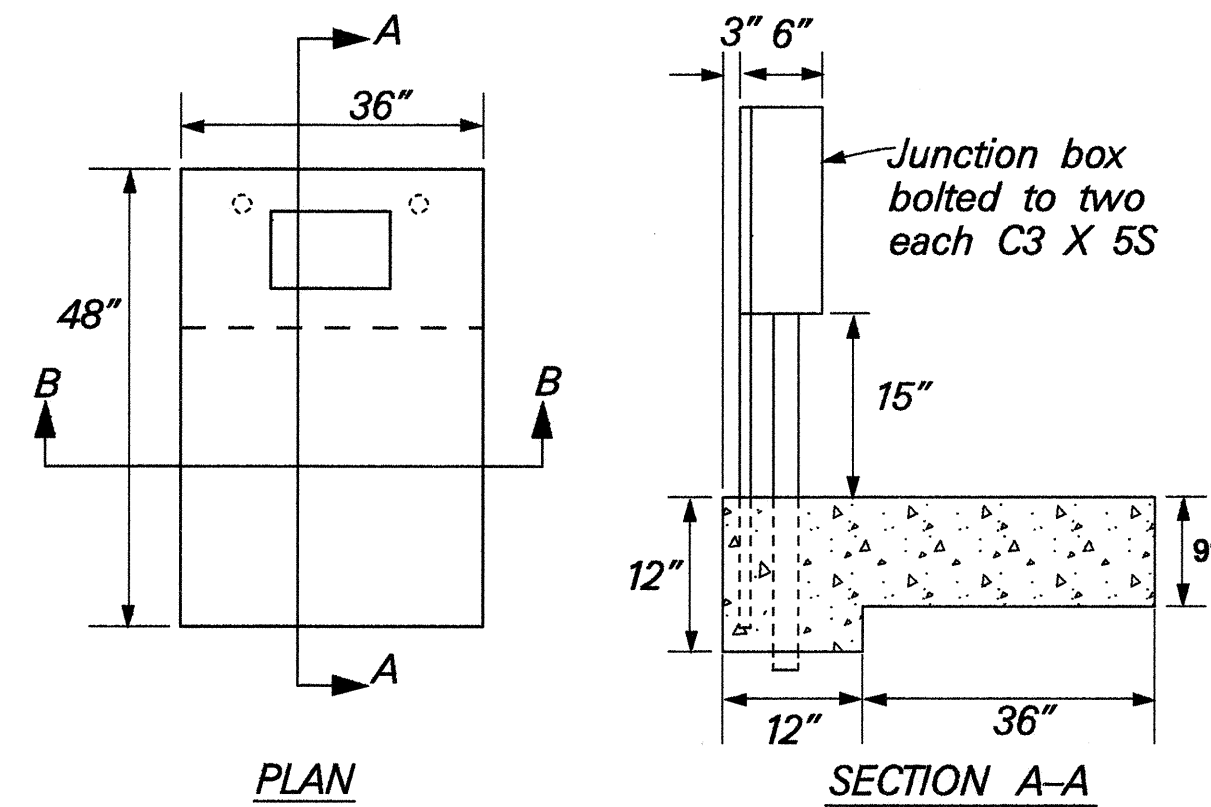


CONNECTING LAYOUT OF LOOP LEAD-IN WIRES
TO TERMINAL BLOCK INSIDE JUNCTION BOX

TRAFFIC COUNT STA. NO. 210
LIKELIKE HWY. NORTH OF SCHOOL ST.
Not to Scale



CONCRETE PAD AND CABINET
Scale: 1/2"=1'-0"



CONCRETE PAD AND JUNCTION BOX
Not to Scale

NOTES

1. Mount a type M-1 cabinet/junction box on concrete slab/pad (36"x48") as shown at each location.
2. Concrete for new or existing slab shall be poured in place.
3. The Contractor shall furnish keys of the cabinets/junction boxes to the STATE.
4. Provide #8 copper wire ground terminal to the cabinets at Location Nos. 11 and 12.
5. Mount one 20-pin terminal board on wall inside the cabinets.
6. All conduits shall be steel or schedule 80 PVC except at Location No. 2.
7. All fastenings shall be secured by screws. Holes for the screws shall be drilled and tapped.
8. All conduits shall be laid a minimum depth of 12" below the surface's finished grade.
9. All pullboxes are type B, meeting DOT requirements. Apply two coats asphaltic base paint to the frames and covers after installation.
10. Completely caulk the bottom of all cabinets to keep out dust, debris and insects.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

INSTALLATION OF VEHICLE DETECTOR LOOPS

LIKELIKE HIGHWAY RESURFACING
School Street To Emmeline Place
Fed. Aid Proj. No. NH-063-1(19)

Scale: As Shown Date: Nov., 1995

SHEET No. 1 OF 1 SHEETS

SURVEY PLOTTED BY	DATE	5-9-96
DRAWN BY		
DESIGNED BY		
QUANTITIES BY		
CHECKED BY		
ORIGINAL PLAN		
NOTE BOOK		
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