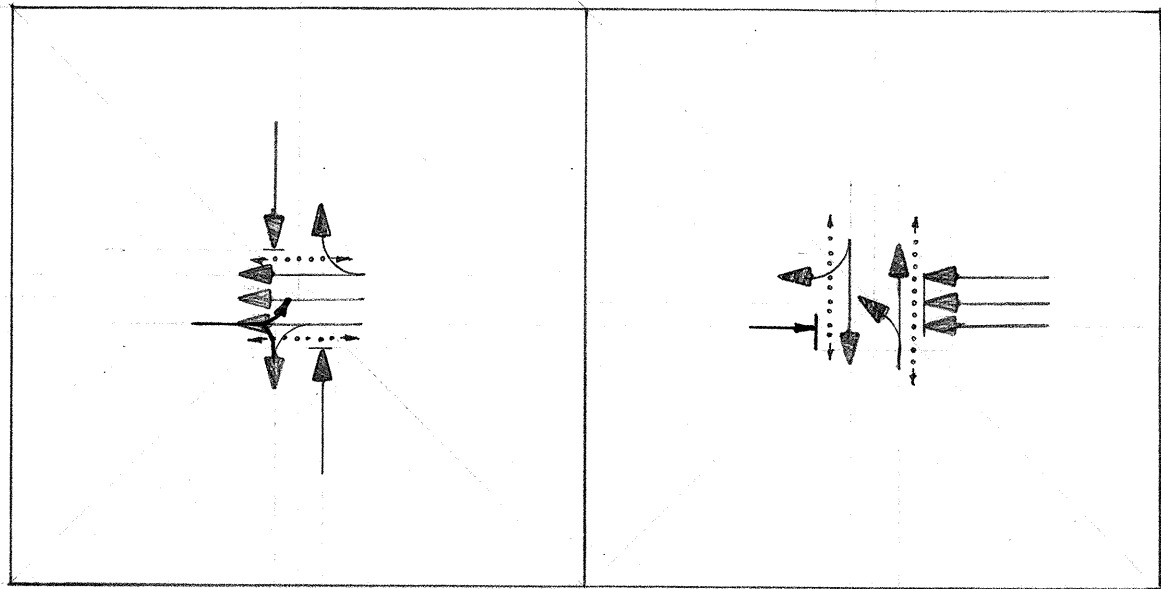
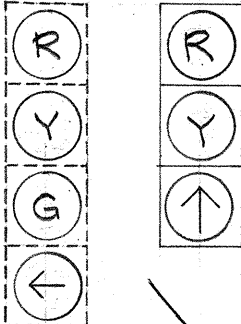


FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	1-HI-1(4)	1963	123	217

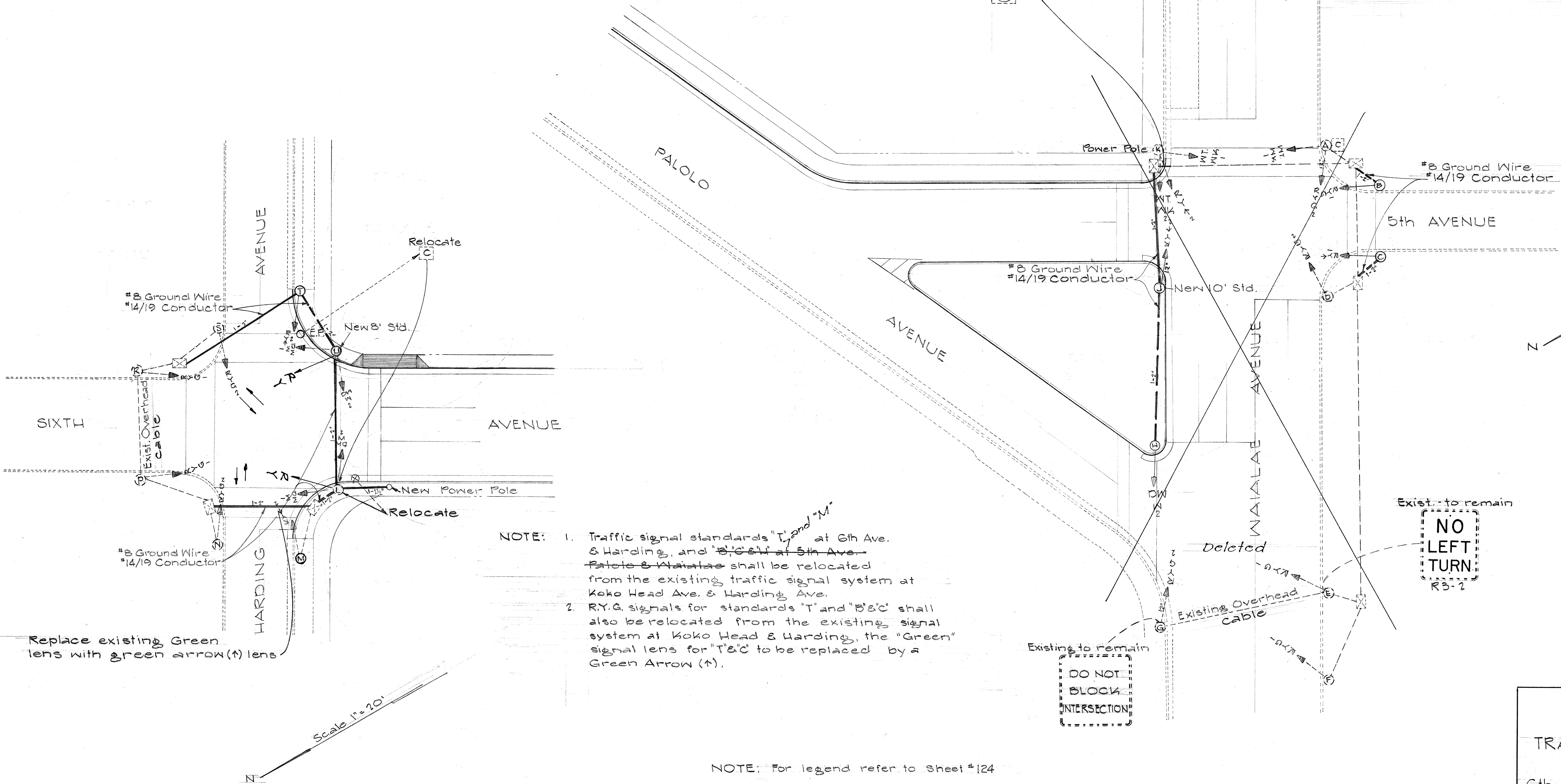
GENERAL NOTES

1. The Contractor shall notify the Department of Traffic, City & County of Honolulu prior to doing any dismantling of the existing traffic signals.
2. Exact locations of the traffic signal standards, pullboxes, and controller shall be determined in the field by the project engineer.
3. Existing underground conduits not used in the new traffic signal system shall be abandoned or removed as directed by the project engineer. (All costs incidental to the item of "Roadway Excavation".)
4. Pavement markings by others.

NOTE: Rearrange existing signal lens.



PHASE 1 PHASE 2



- NOTE:
1. Traffic signal standards "T" and "M" at 6th Ave. & Harding, and "B" & "C" at 5th Ave. & Palolo & Wai'alae shall be relocated from the existing traffic signal system at Koko Head Ave. & Harding Ave.
 2. R.Y.G. signals for standards "T" and "B" & "C" shall also be relocated from the existing signal system at Koko Head & Harding, the "Green" signal lens for "T" & "C" to be replaced by a Green Arrow (↑).

NOTE: For legend refer to Sheet #124

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

TRAFFIC SIGNAL SYSTEM
LAYOUT PLAN
6th AVENUE - HARDING AVENUE
5th AVE., PALOLO AVE. - WAI'ALAE AVE.
LUNALILO FREEWAY PROJ. NO. IHI-1(4)24

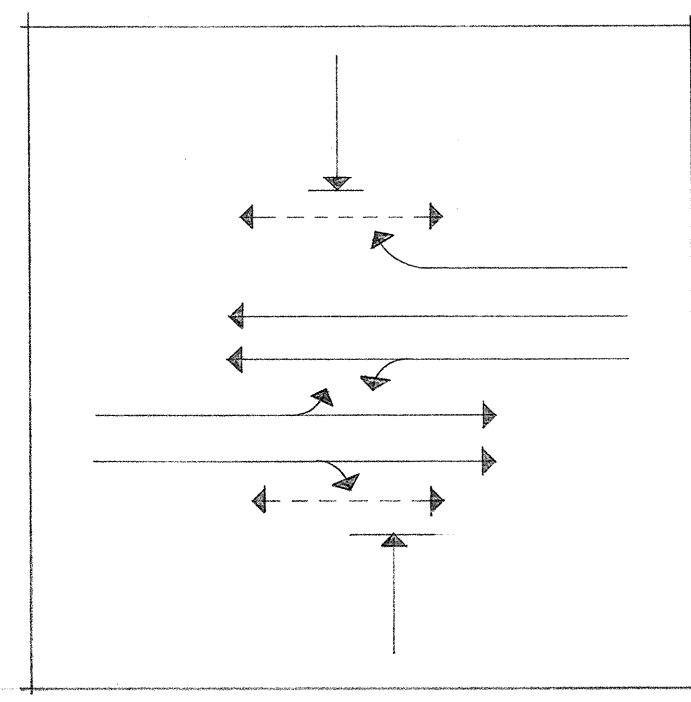
SHEET No. 123 OF 217 SHEETS

ORIGINAL PLAN	DATE
DRAWN BY	
DESIGNED BY	
NOTED BY	
CHECKED BY	

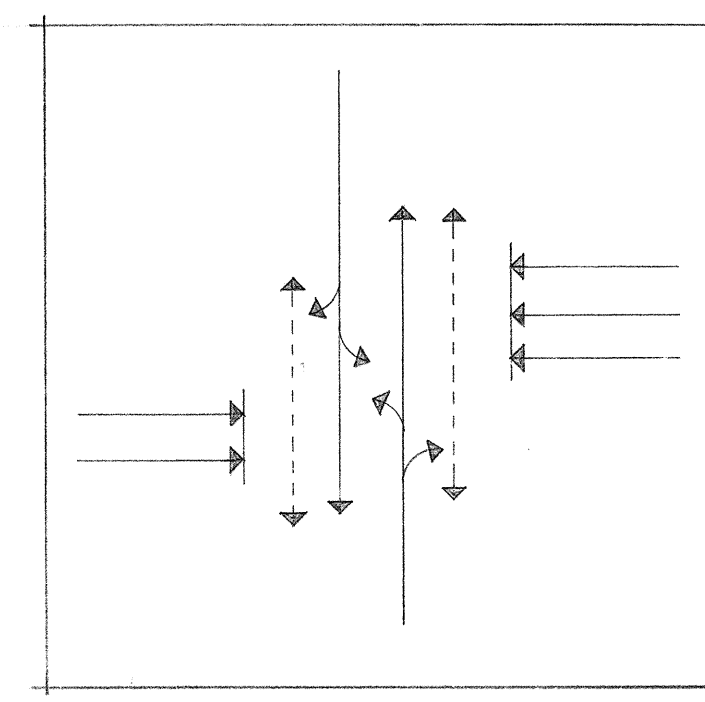
GENERAL NOTES

1. The existing traffic signal system at the intersection of Koko Head Ave. and Harding Ave. shall remain in operation until such time the new traffic signal system can be placed in operation.
2. The Contractor shall notify the Department of Traffic, City & County of Honolulu prior to doing any dismantling of the existing traffic signals.
3. Exact locations of the traffic signal standards, pullboxes, and controller shall be determined in the field by the project engineer.
4. Existing underground conduits not used in the new traffic signal system shall be abandoned or removed as directed by the project engineer. (All costs incidental to the item of 'Roadway Excavation').
5. Pavement markings by others.

KOKO HEAD AVE. - HARDING AVE.

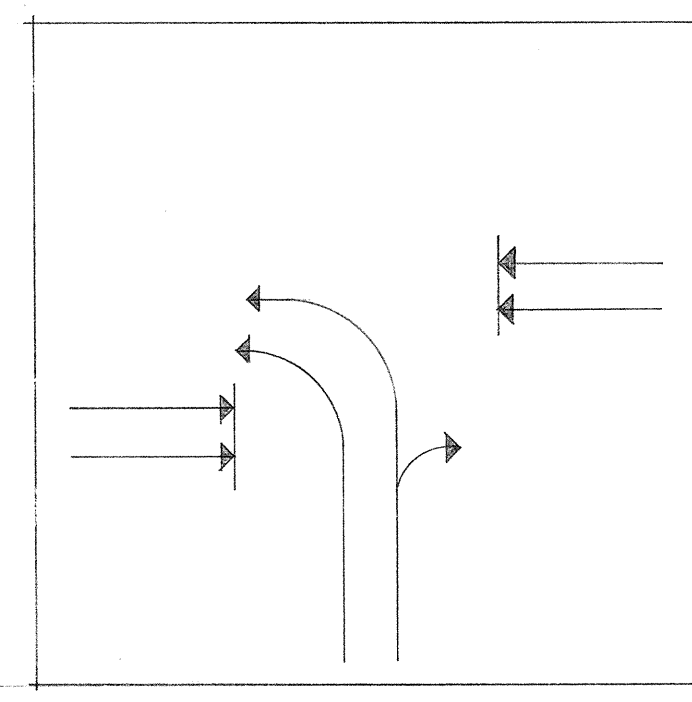


PHASE 1
(Recall)
Clear. 4 sec.

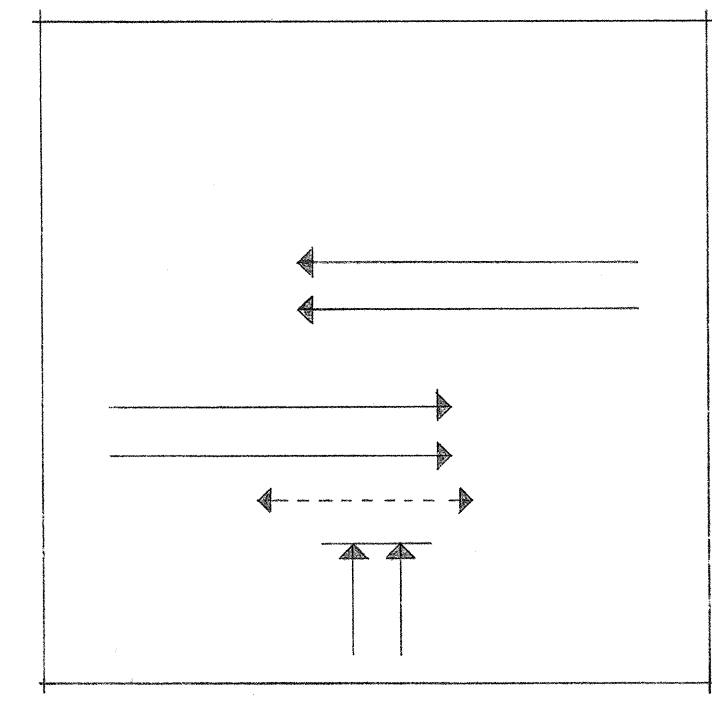


PHASE 2
Min. 10 sec.
Ped. 20 "
Max. 30 "
Veh. 3 "
Clear. 4 "

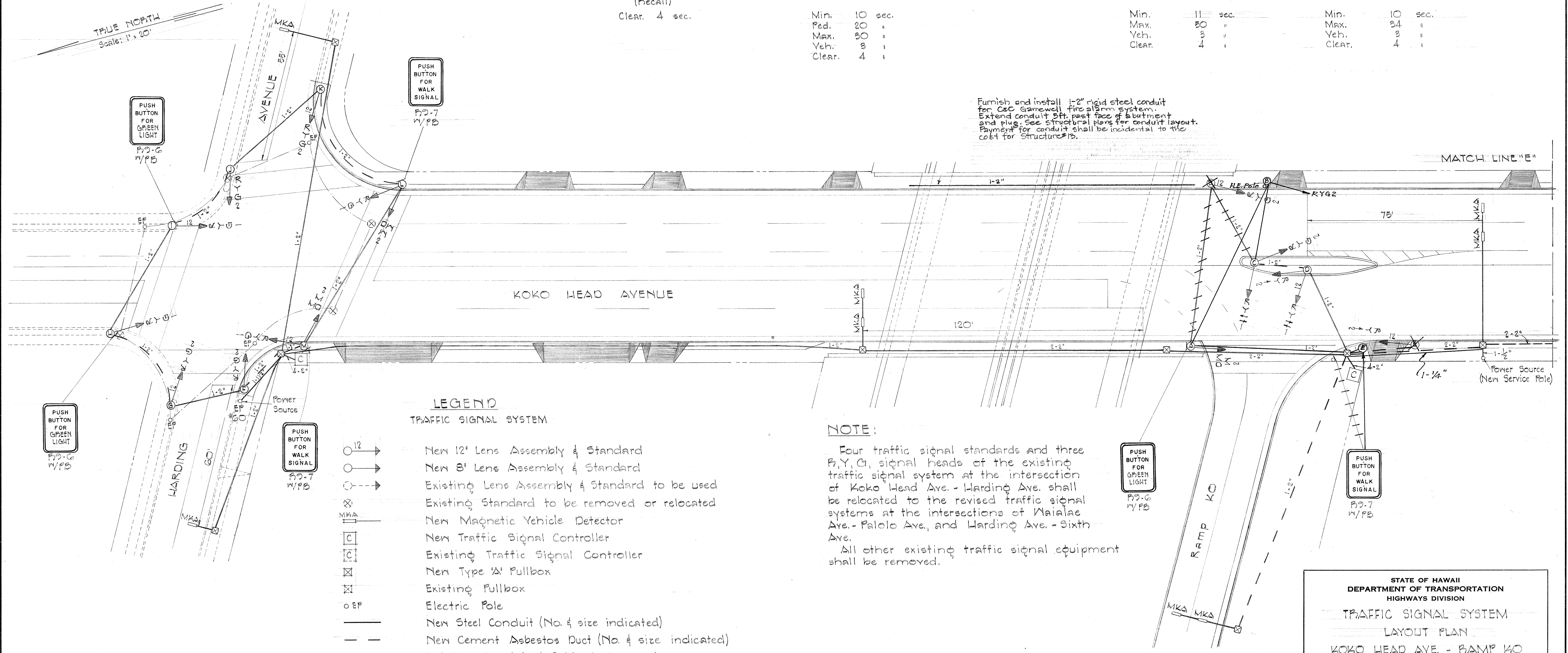
KOKO HEAD AVE. - RAMP KO



PHASE 1
Min. 11 sec.
Max. 30 "
Veh. 3 "
Clear. 4 "



PHASE 2
Min. 10 sec.
Max. 34 "
Veh. 3 "
Clear. 4 "



LEGEND TRAFFIC SIGNAL SYSTEM

- 12" → New 12" Lens Assembly & Standard
- 8" → New 8" Lens Assembly & Standard
- --- → Existing Lens Assembly & Standard to be used
- ⊗ --- → Existing Standard to be removed or relocated
- ⊗ --- → New Magnetic Vehicle Detector
- --- → New Traffic Signal Controller
- --- → Existing Traffic Signal Controller
- ⊗ --- → New Type 'A' Pullbox
- ⊗ --- → Existing Pullbox
- EP --- → Electric Pole
- — — — — → New Steel Conduit (No. & size indicated)
- — — — — → New Cement Asbestos Duct (No. & size indicated)
- --- --- → Existing Conduit & Cable to be used
- --- --- → Existing Conduit to be removed or abandoned

NOTE:

Four traffic signal standards and three R, Y, G, signal heads of the existing traffic signal system at the intersection of Koko Head Ave. - Harding Ave. shall be relocated to the revised traffic signal systems at the intersections of Waialae Ave. - Palolo Ave. and Harding Ave. - Sixth Ave.
All other existing traffic signal equipment shall be removed.

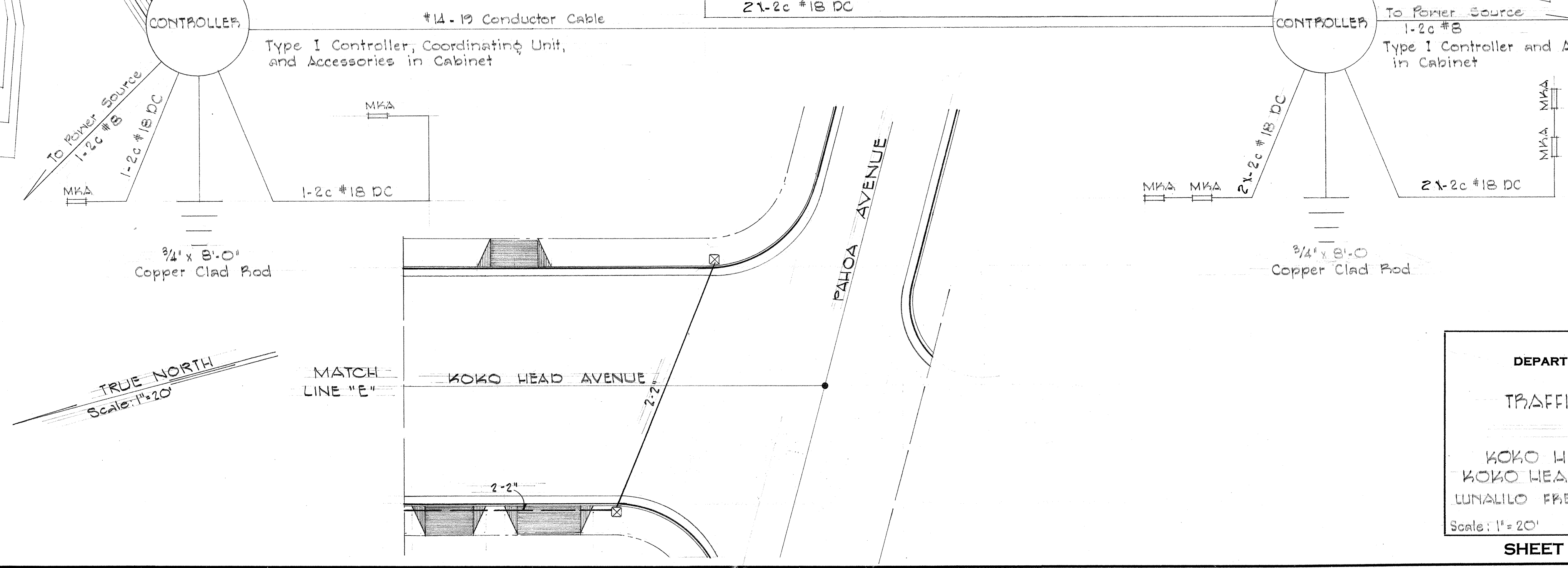
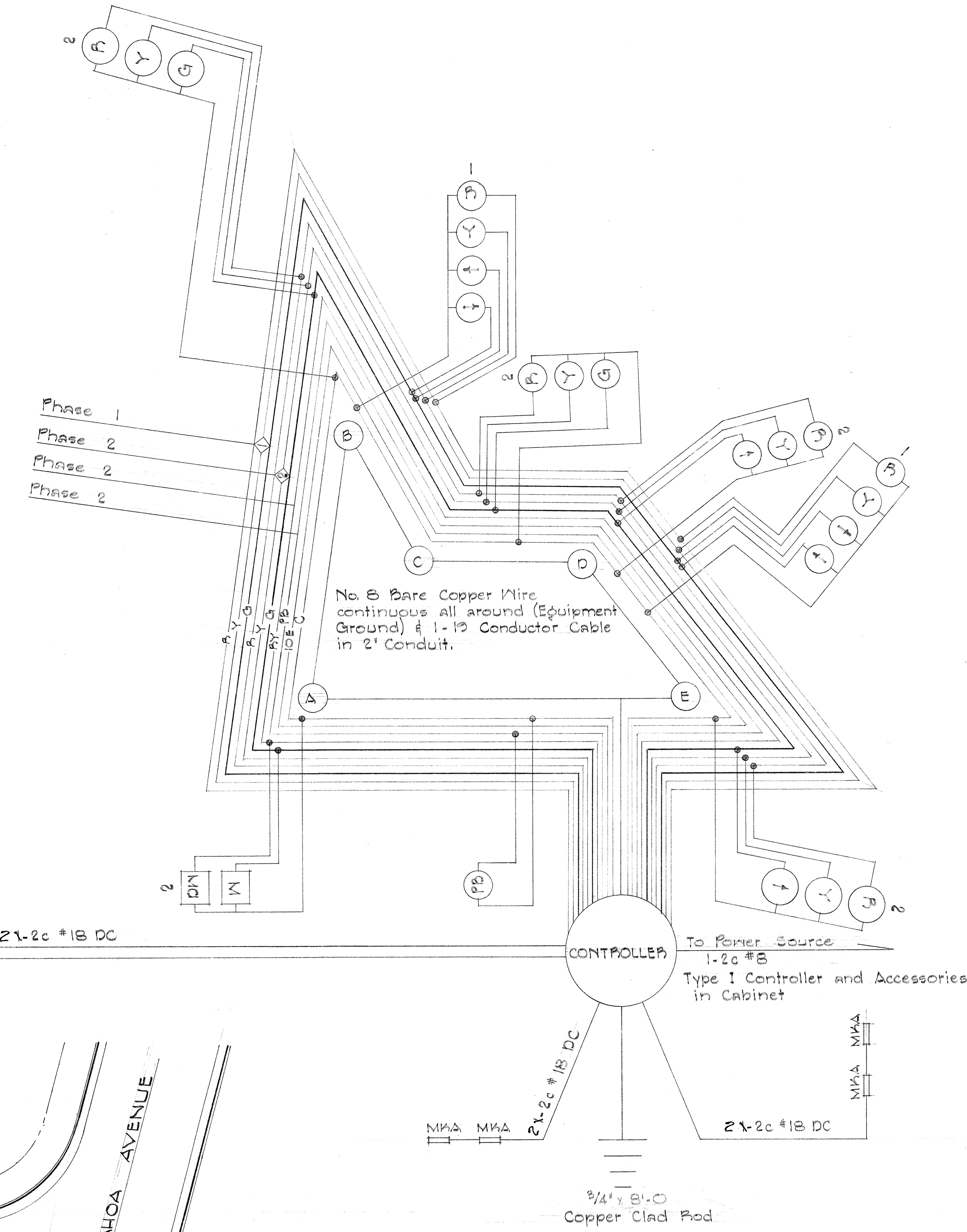
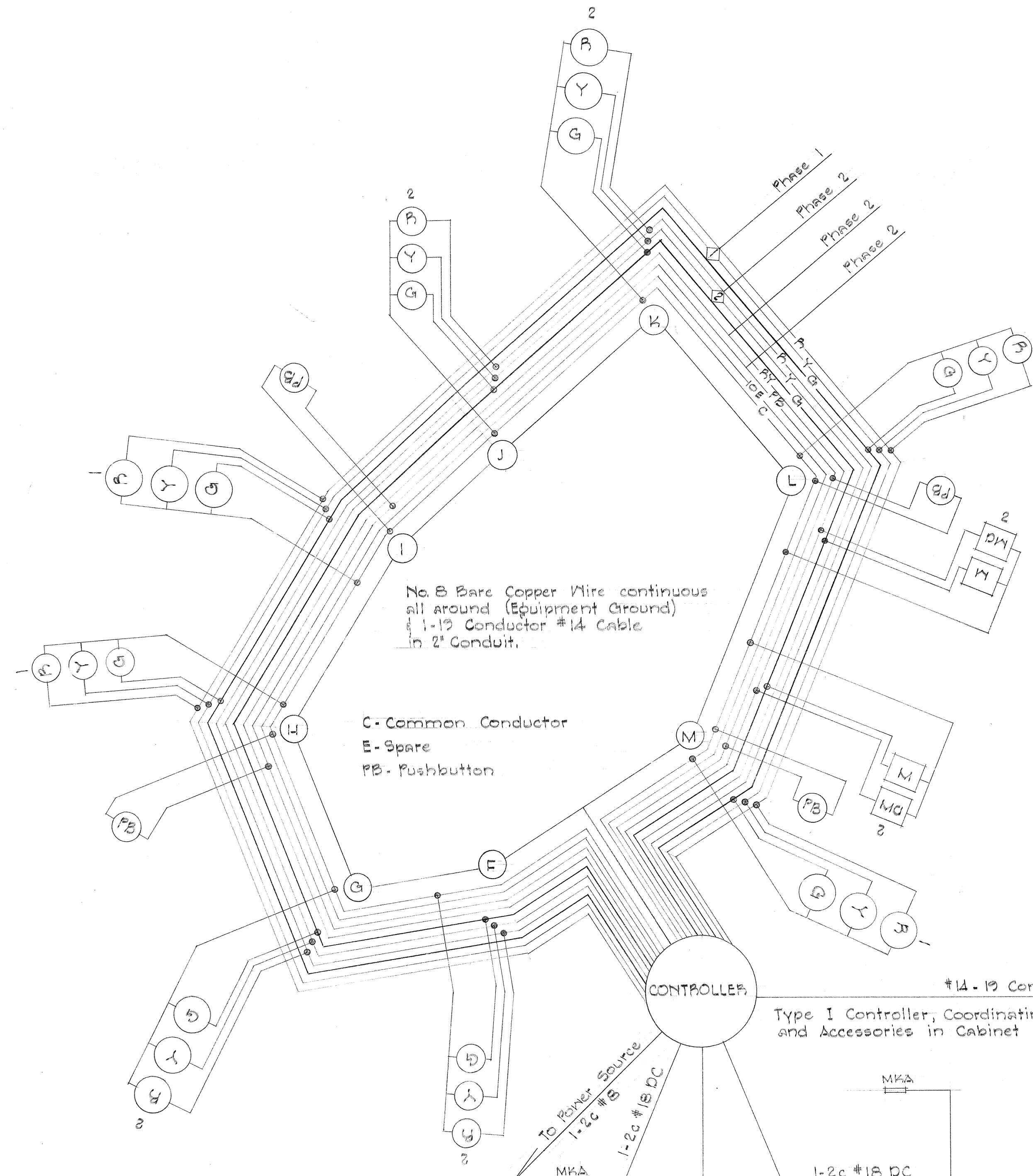
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

TRAFFIC SIGNAL SYSTEM
LAYOUT PLAN

KOKO HEAD AVE. - RAMP KO
KOKO HEAD AVE. - HARDING AVE.
LUNALILO FREEWAY PROJ. NO. 1-H1-1(4)24

Scale: 1" = 20'

SHEET No. 124 OF 217 SHEETS



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

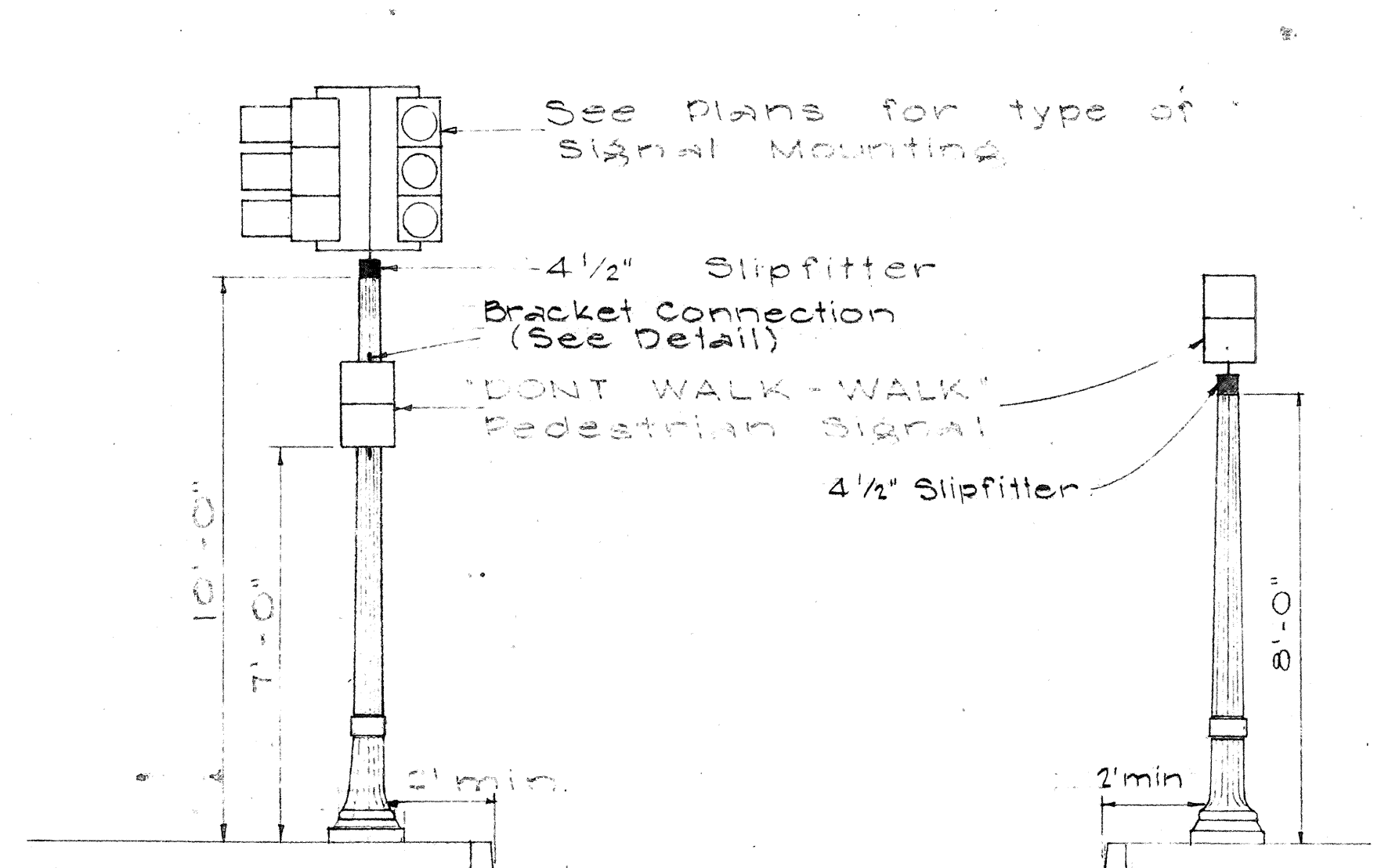
TRAFFIC SIGNAL SYSTEM
LAYOUT PLAN

KOKO HEAD AVE. - RAMP KO
KOKO HEAD AVE. - HAWAII AVE.
LUNALILO FREEWAY PROJ. NO. 1-HI-1(4)-24

Scale: 1" = 20'

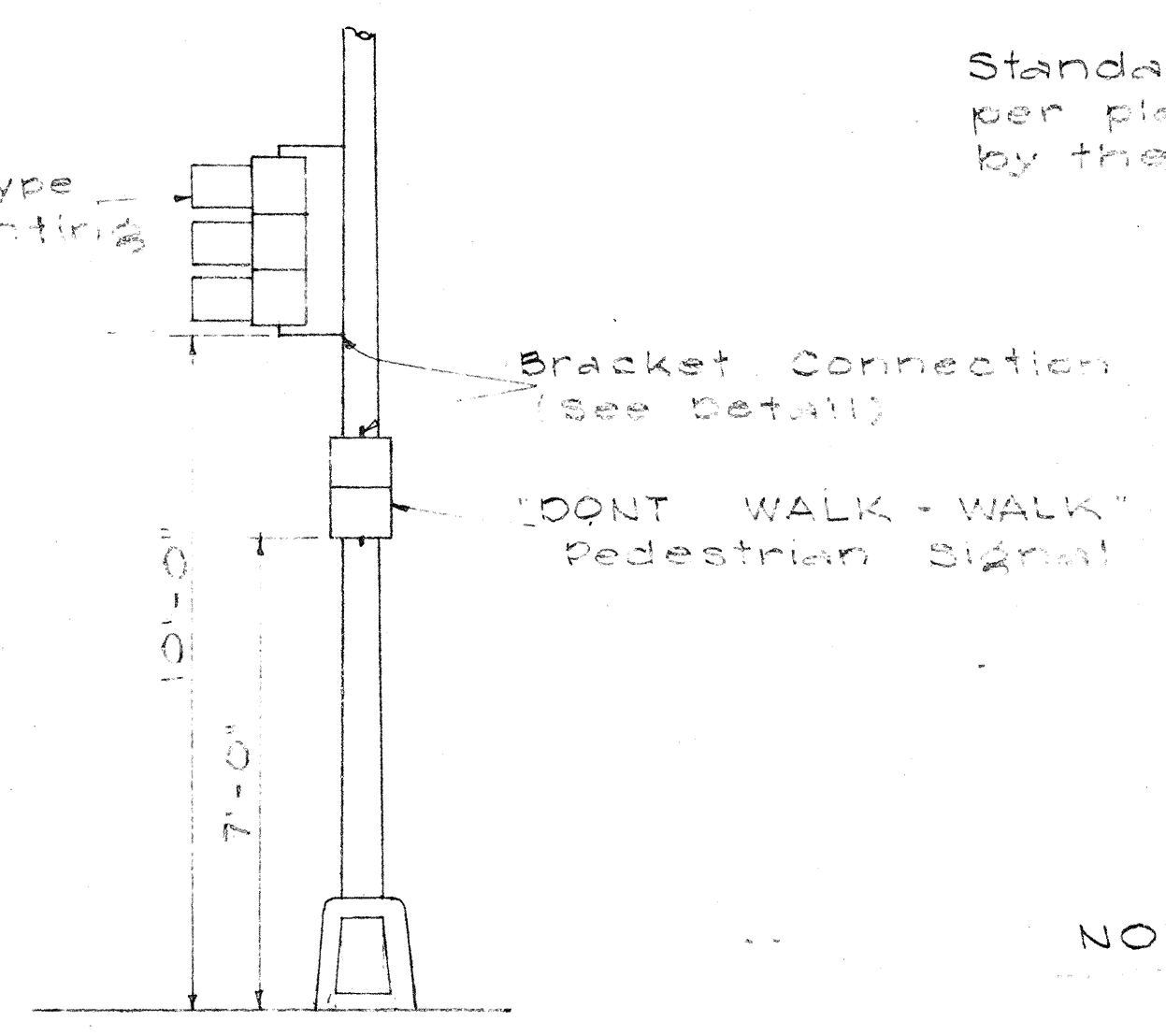
SHEET No. OF SHEETS

ORIGINAL PLAN
DATE
SURVEY PLOTTED BY
DRAWN BY
TRACED BY
NOTE BOOK
QUANTITIES BY
CHECKED BY
No.



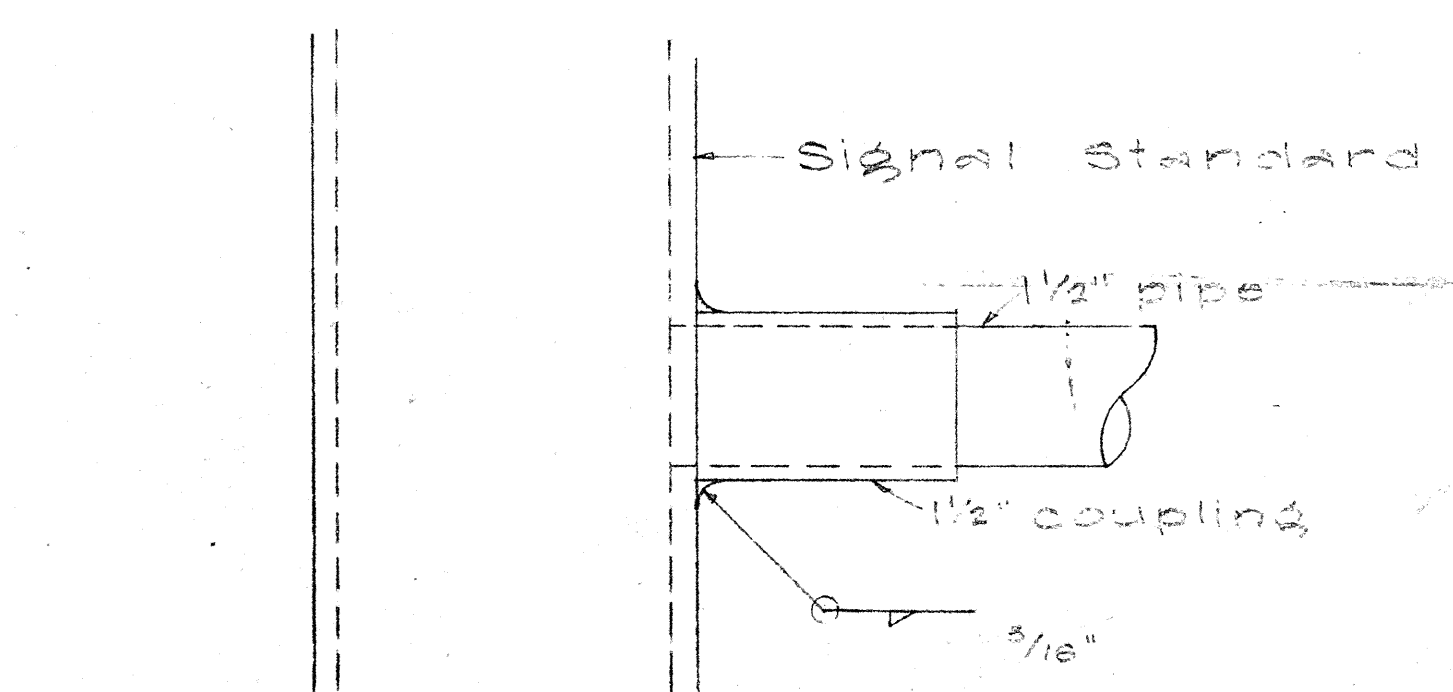
ON 10-FOOT STANDARDS

ON 8-FOOT STANDARDS

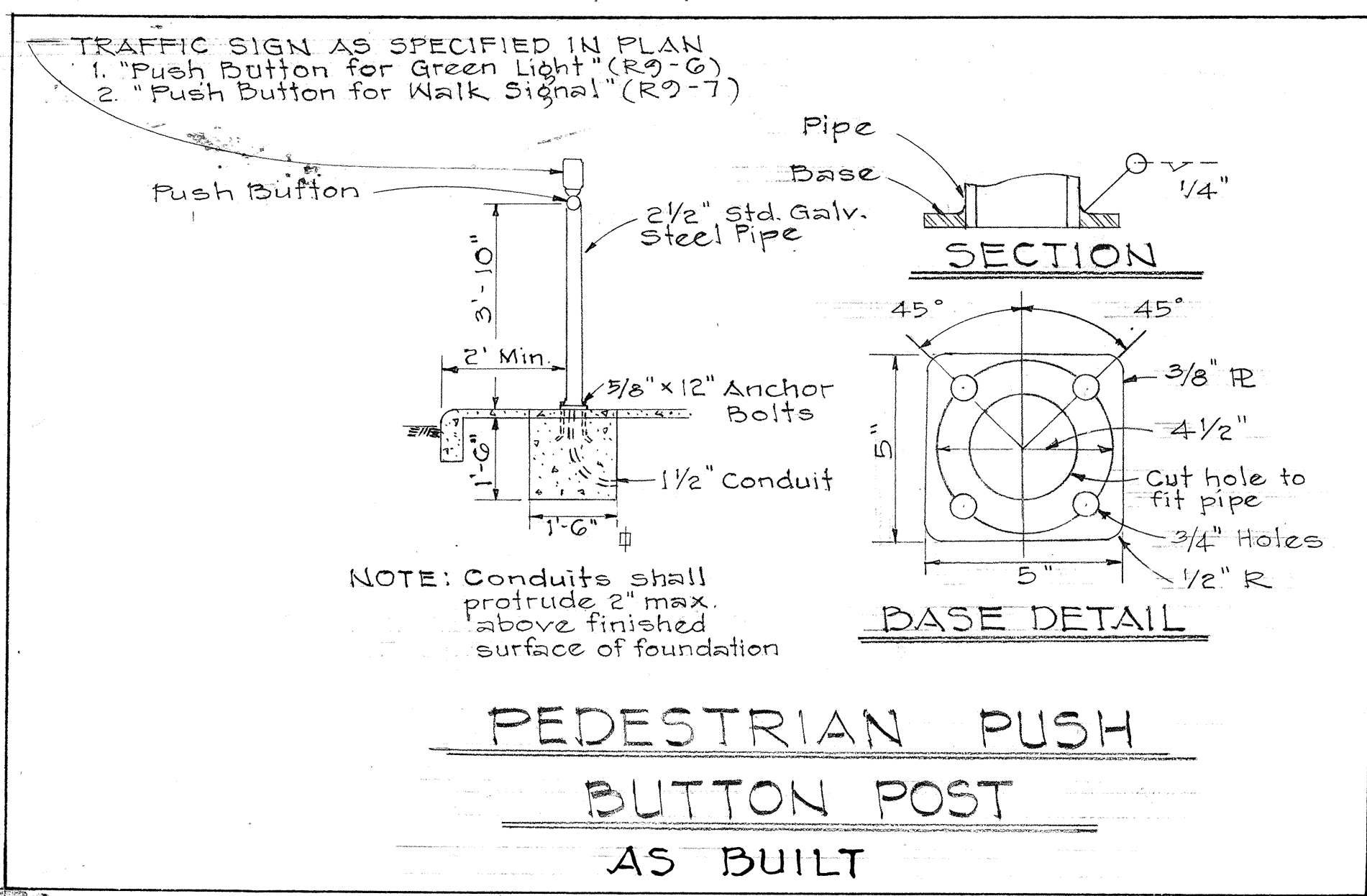


ON MAST-ARM STANDARDS

TYPICAL EQUIPMENT MOUNTING

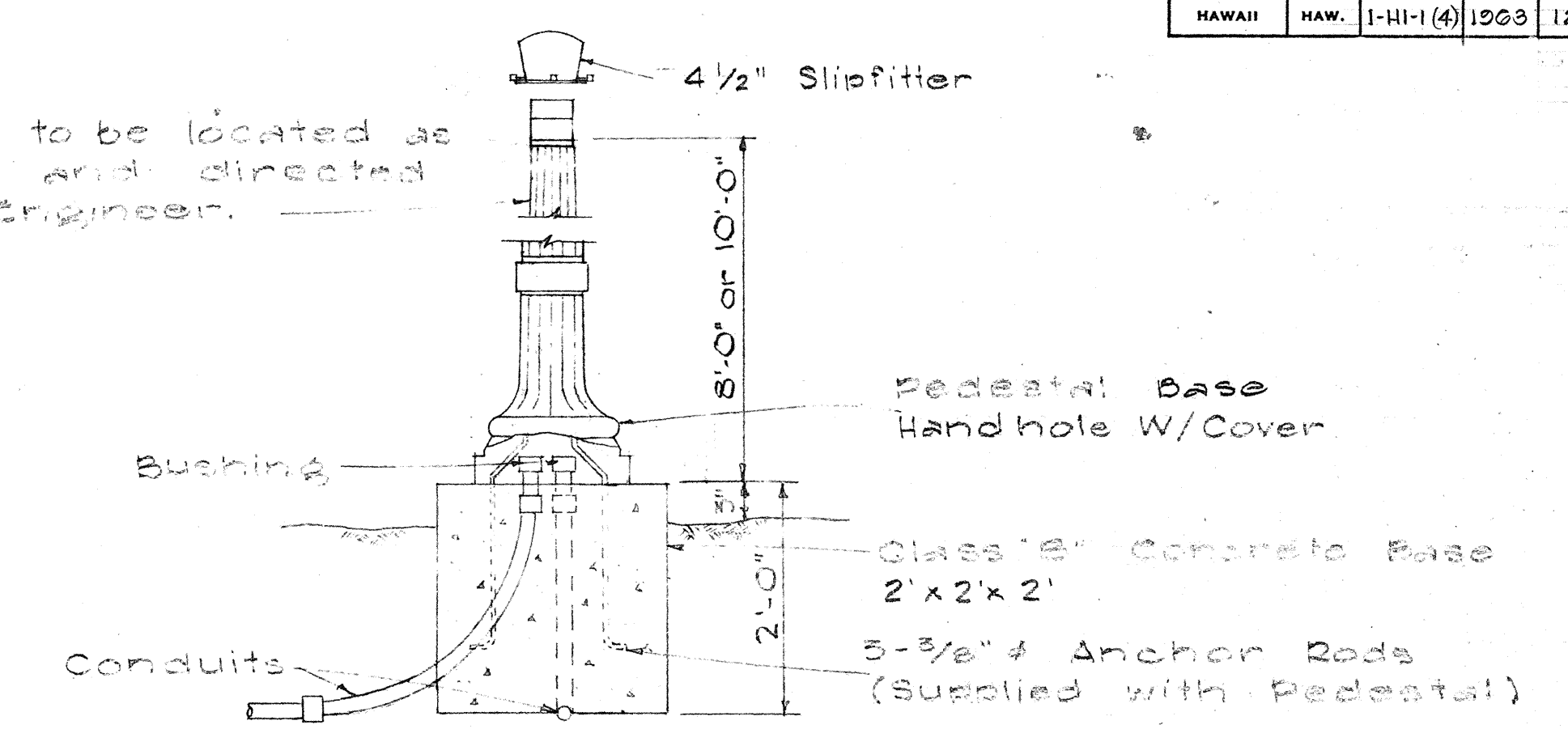


DETAIL OF BRACKET CONNECTION



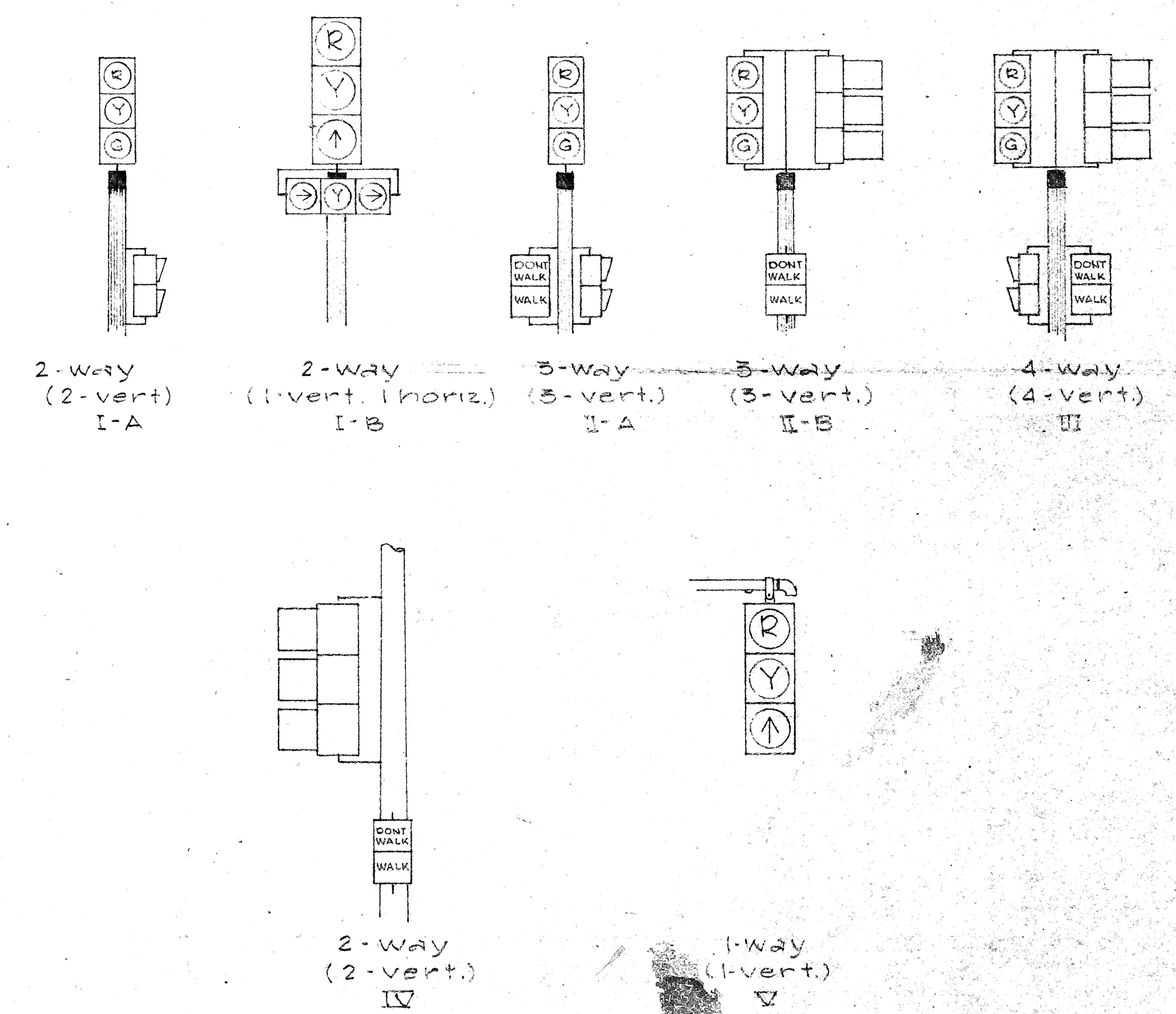
PEDESTRIAN PUSH BUTTON POST AS BUILT

Standard to be located as per plan and directed by the Engineer.

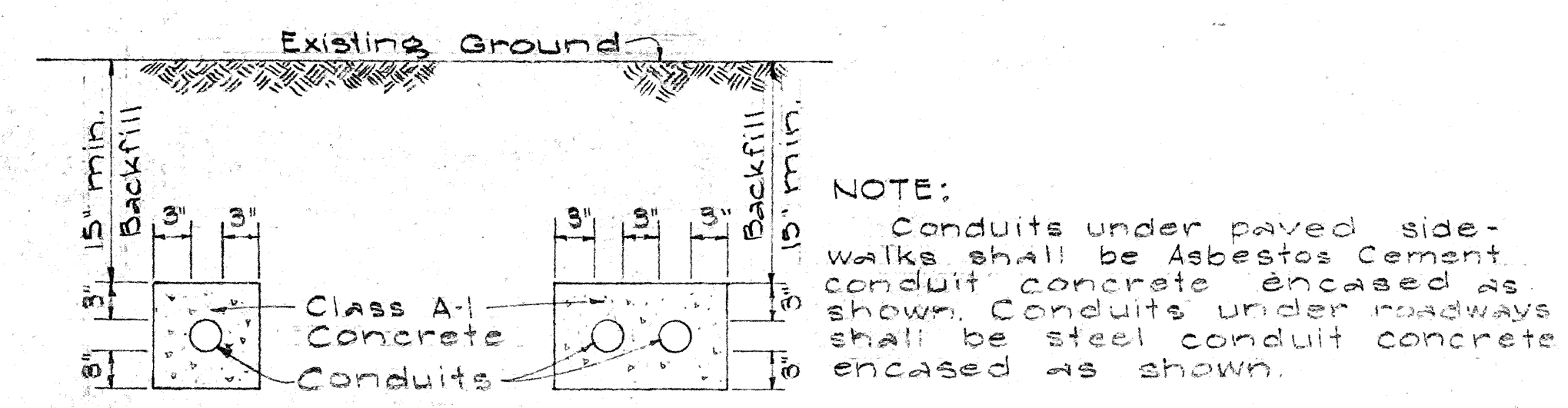


TRAFFIC SIGNAL POLE & BASE

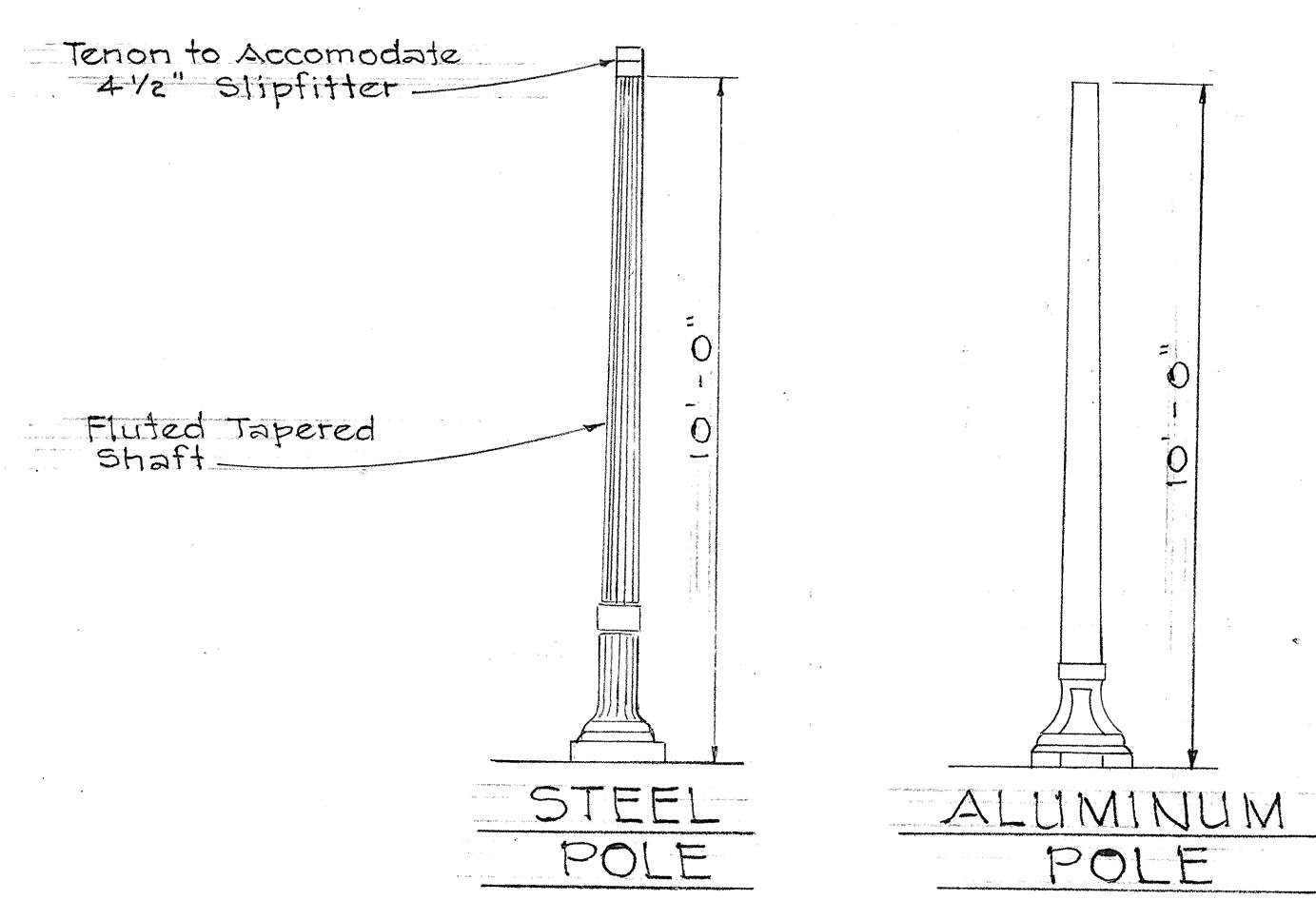
NOTE: Controller pedestal and base shall be as detailed above except the shaft shall be 4 ft. in length.



TYPICAL VEHICULAR AND PEDESTRIAN SIGNAL MOUNTINGS



TYPICAL DETAIL OF STEEL CONDUITS & ASBESTOS CEMENT CONDUITS ENCASED IN CONCRETE



10' STANDARD

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

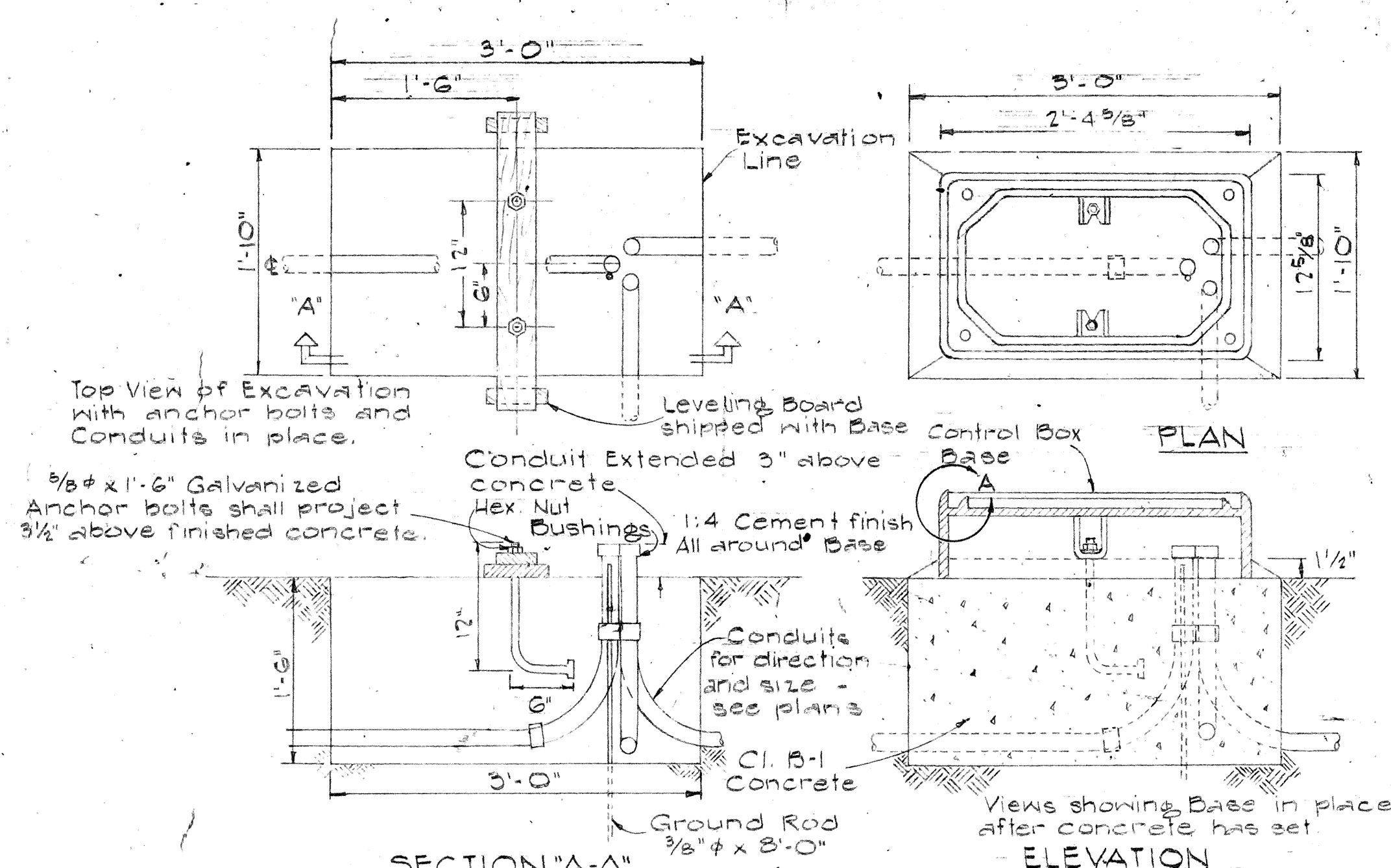
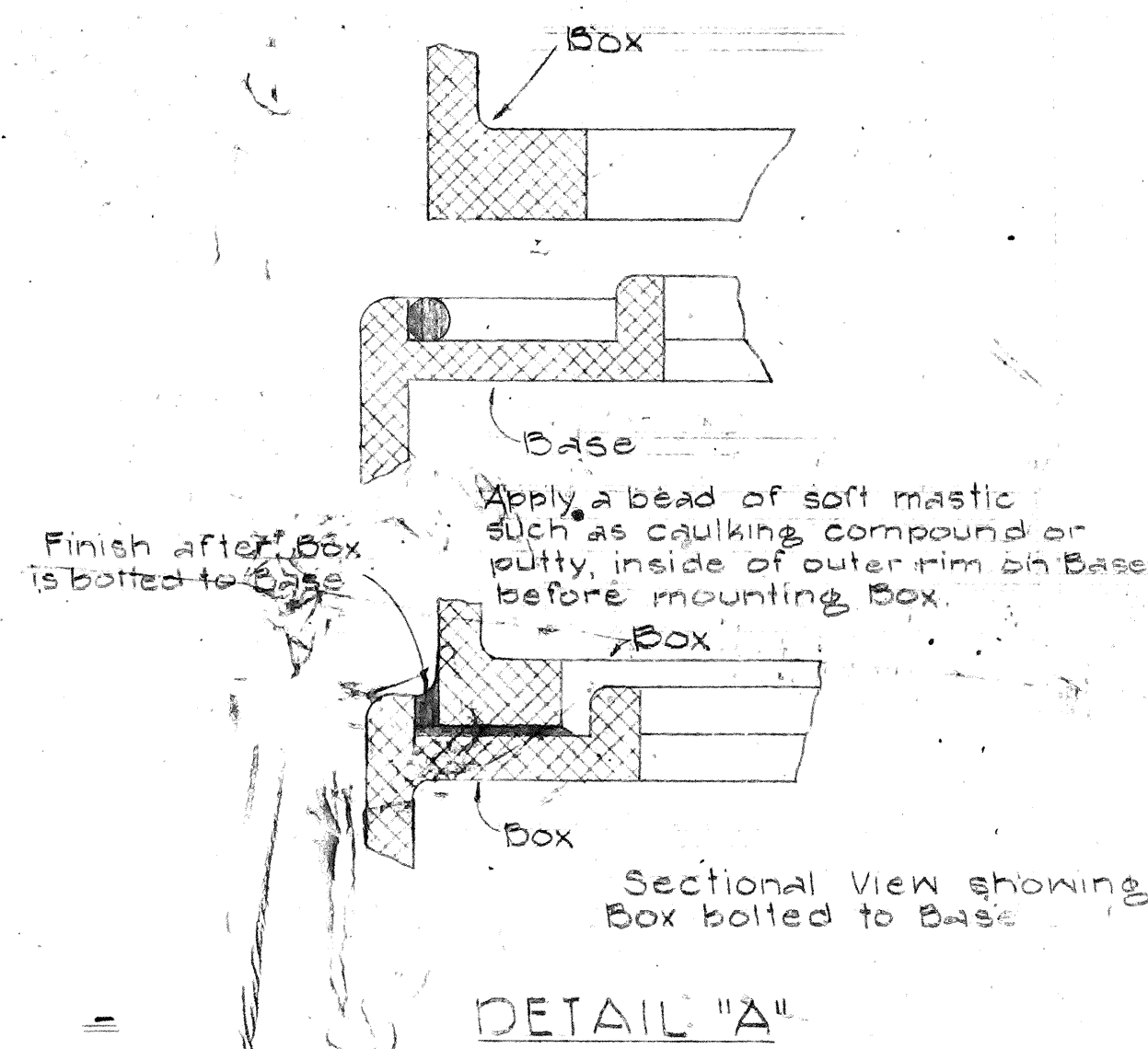
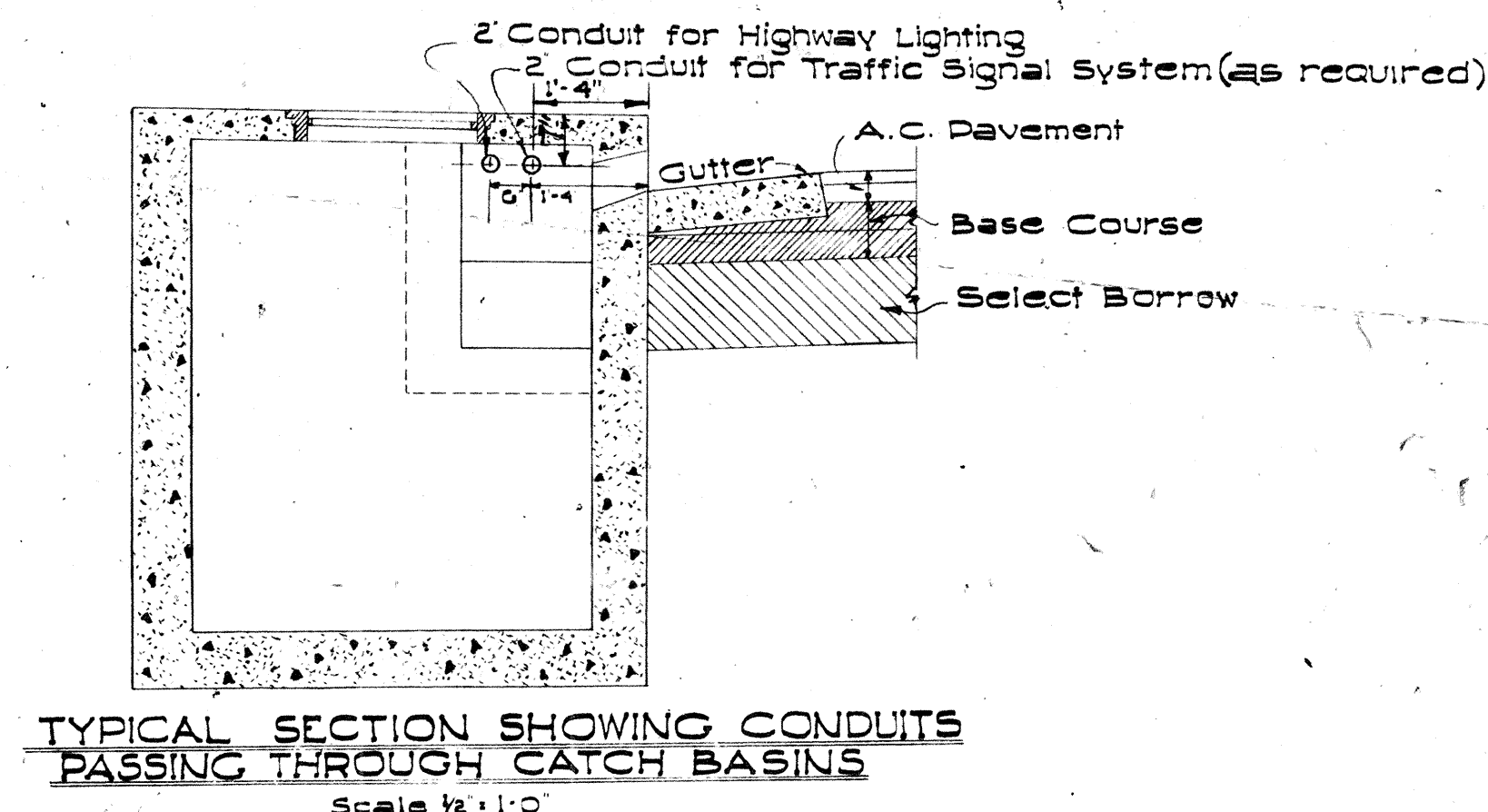
MISCELLANEOUS DETAILS
TRAFFIC SIGNAL SYSTEM

LUNALILO FREEWAY PROJ. NO. I-HI-1(4):24

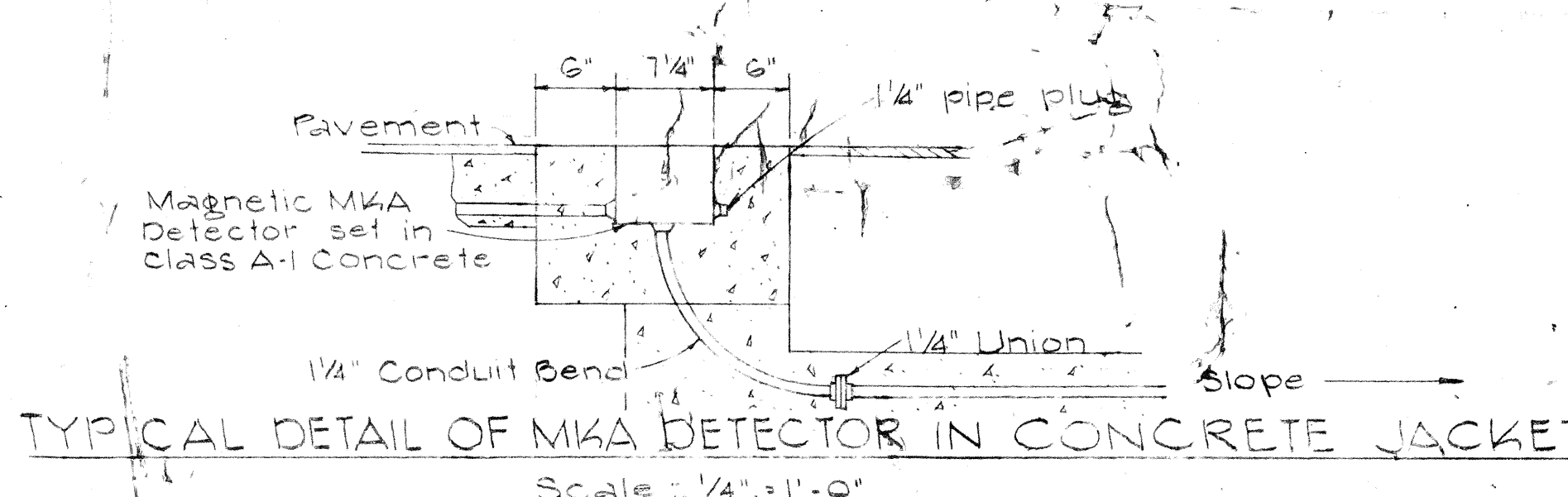
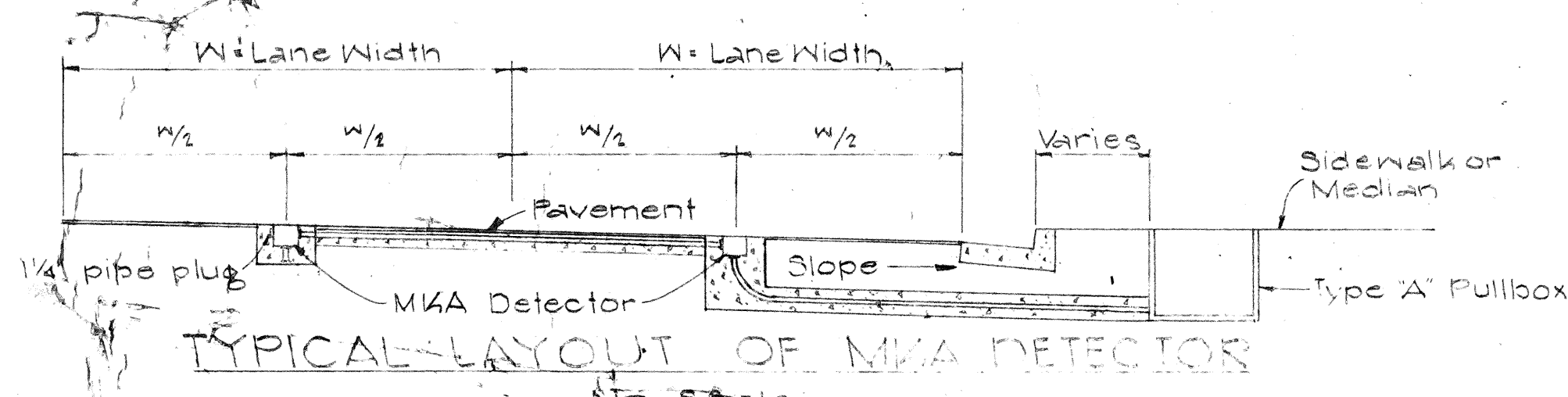
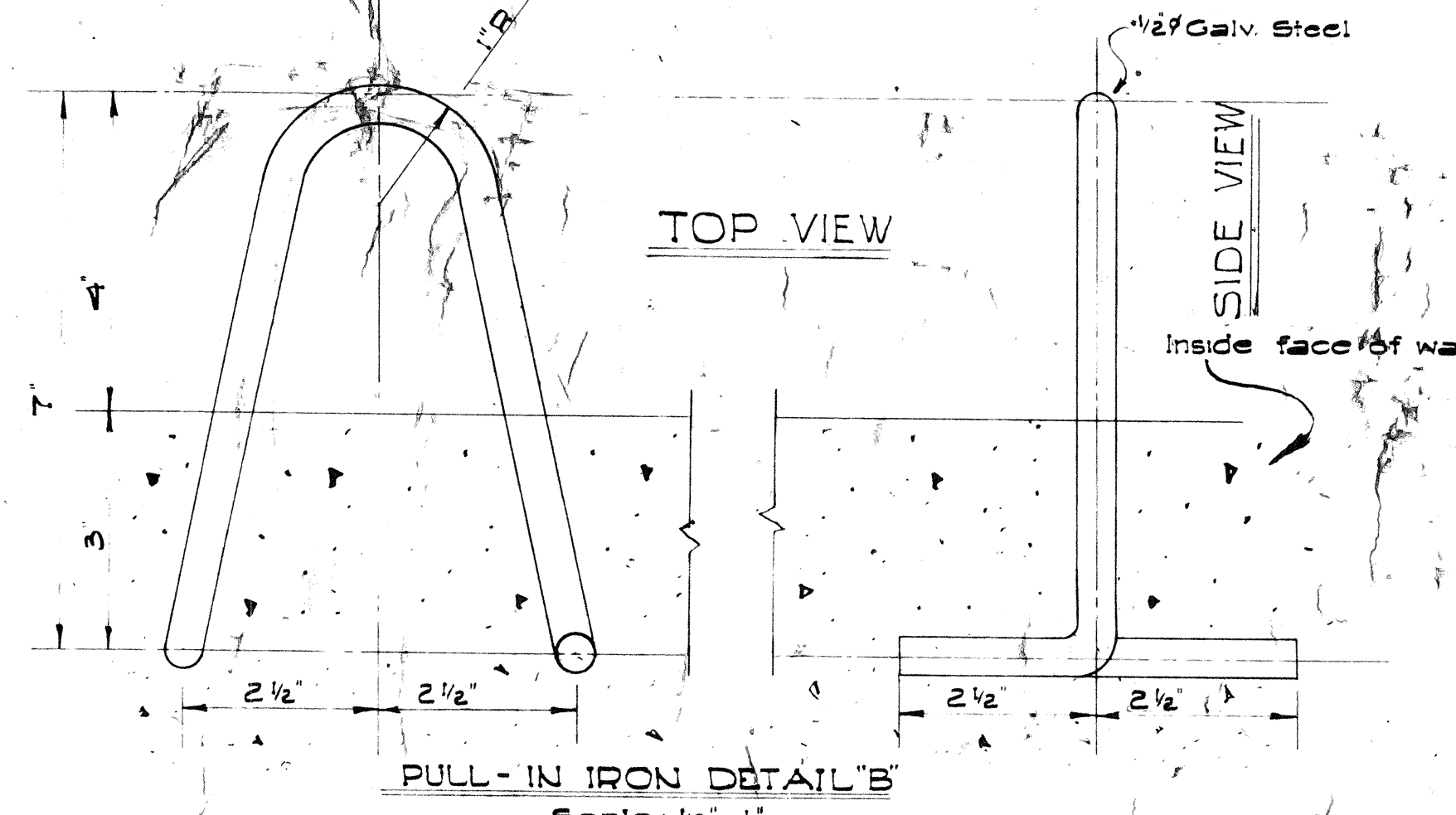
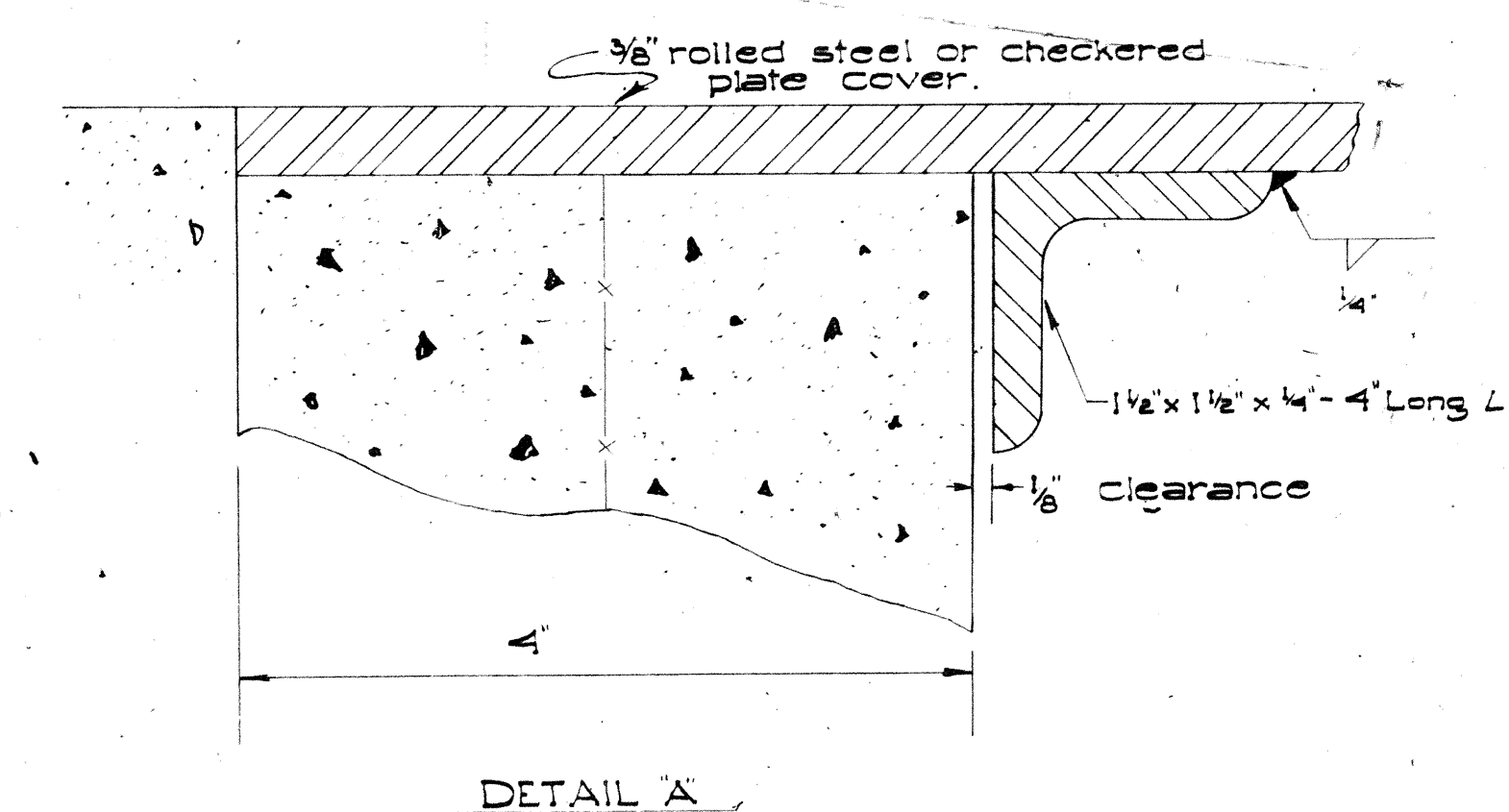
No Scale

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	1-HI-1(4)	1963	127	217

NOTE: Galv. 2" Conduits shall be supported by Band Hangers bolted to the top slab of Catch Basins. Pipe Hangers and bolts shall be incidental to Item No. 49(1) Class A-1 Concrete other than in Bridges.

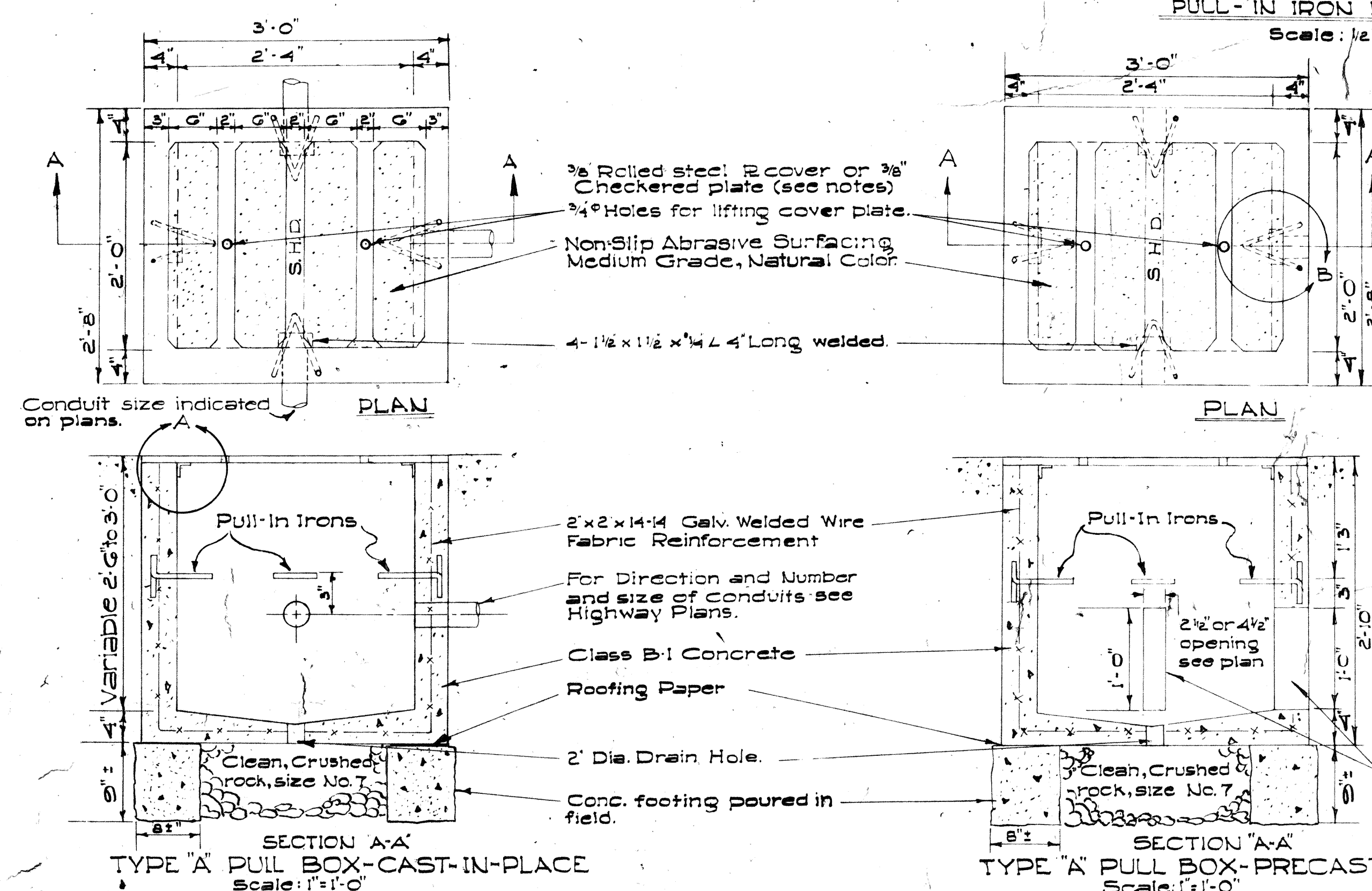


NOTE: Dimensions and details are approximate only. Exact details and dimensions shall be furnished by the manufacturer and as directed by the Engineer.



NOTE:
1. 3/8" Rolled steel Plate Cover with non-slip Abrasive Surfacing Medium Grade, Natural Color shall be used on all Pull Boxes located in median areas and other locations where there are no pedestrians walking.
2. 3/8" Checkered Plate Cover shall be used on all Pull Boxes located in median areas and other locations where there are no pedestrians walking.
3. Pull irons shall be placed opposite each conduit slot.
4. Covers on all pull boxes located in sidewalk areas shall be set flush with the concrete sidewalk.
5. Each Pull Box shall have a pair of pull irons opposite each other for lifting purposes.

For direction and number and size of slots for conduits (see plan)
Grout Conduit Slot with 1:3 Cement Mortar after conduit is placed.



REVISED: April 5, 1963

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
STANDARD DETAILS
TYPE "M" CONTROLLER BASE,
PULLBOX AND
MAGNETIC DETECTORS

SCALE: As Noted

SHEET No. OF SHEETS