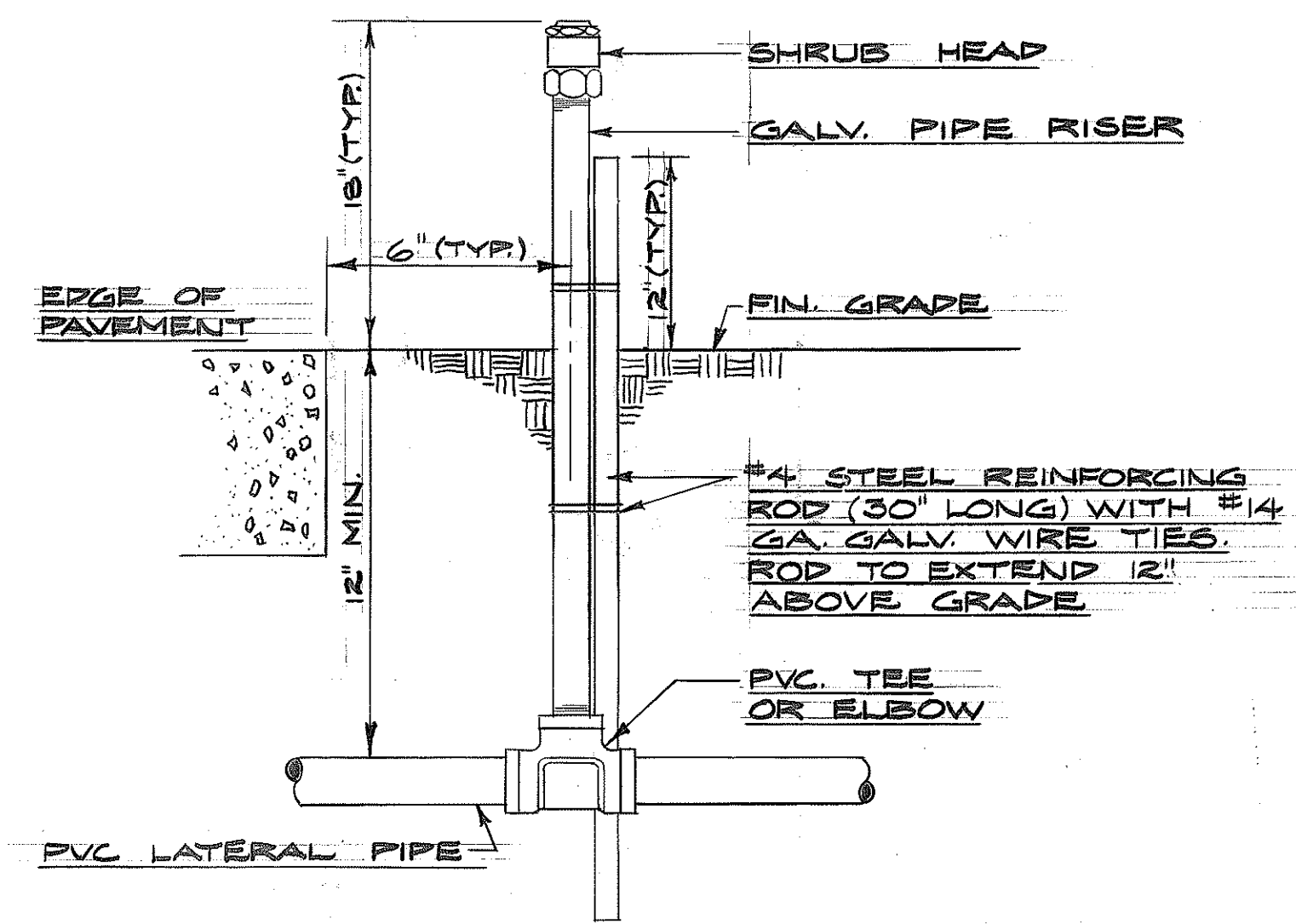




TYPICAL SHRUB HEAD DETAIL  
NO SCALE

| IRRIGATION LEGEND |        |                                                            |                 |              |          |              |
|-------------------|--------|------------------------------------------------------------|-----------------|--------------|----------|--------------|
| SPRINKLER         | SYMBOL | DESCRIPTION                                                | PRESSURE P.S.I. | COVERAGE FT. | FLOW GPM | RISER INCHES |
| S-21              |        | SHRUB SPRAY - QUARTER                                      | 35              | 21' RAD      | .7       | 1/2"         |
| S-21              |        | SHRUB SPRAY - HALF                                         | 35              | 21' RAD      | 1.38     | 1/2"         |
| S-28              |        | SHRUB SPRAY - QUARTER                                      | 35              | 28' RAD      | 1.34     | 1/2"         |
| S-28              |        | SHRUB SPRAY - THIRD                                        | 35              | 28' RAD      | 2.11     | 1/2"         |
| S-28              |        | SHRUB SPRAY - HALF                                         | 35              | 28' RAD      | 2.77     | 1/2"         |
| S-38              |        | SHRUB SPRAY - QUARTER                                      | 35              | 38' RAD      | 1.4      | 1/2"         |
| S-38              |        | SHRUB SPRAY - THIRD                                        | 35              | 38' RAD      | 1.8      | 1/2"         |
| S-38              |        | SHRUB SPRAY - HALF                                         | 35              | 38' RAD      | 2.8      | 1/2"         |
|                   |        | ELECTRIC REMOTE CONTROL VALVE/V.B. 24V WATERPROOF SOLENOID |                 |              |          |              |
|                   |        | TRICKLER VALVE ASSEMBLY UNIT                               |                 |              |          |              |
|                   |        | FLAPPER EMITTER                                            |                 |              |          |              |
|                   |        | HOSE BIB                                                   |                 |              |          |              |
|                   |        | ELECTRIC AUTOMATIC DRIP CONTROLLER - 1 STATION WALL MOUNT  |                 |              |          |              |
|                   |        | EXIST. GATE VALVE                                          |                 |              |          |              |
|                   |        | EXIST. AUTOMATIC CONTROLLER                                |                 |              |          |              |

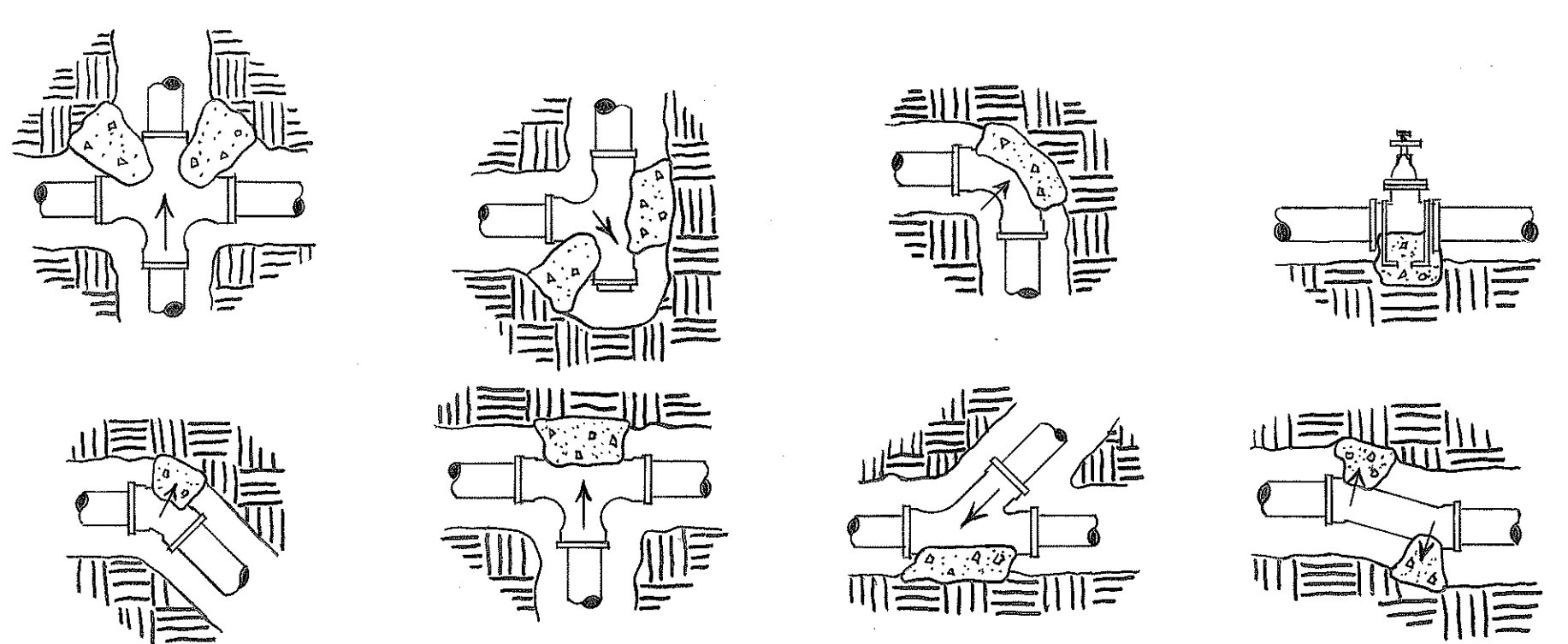
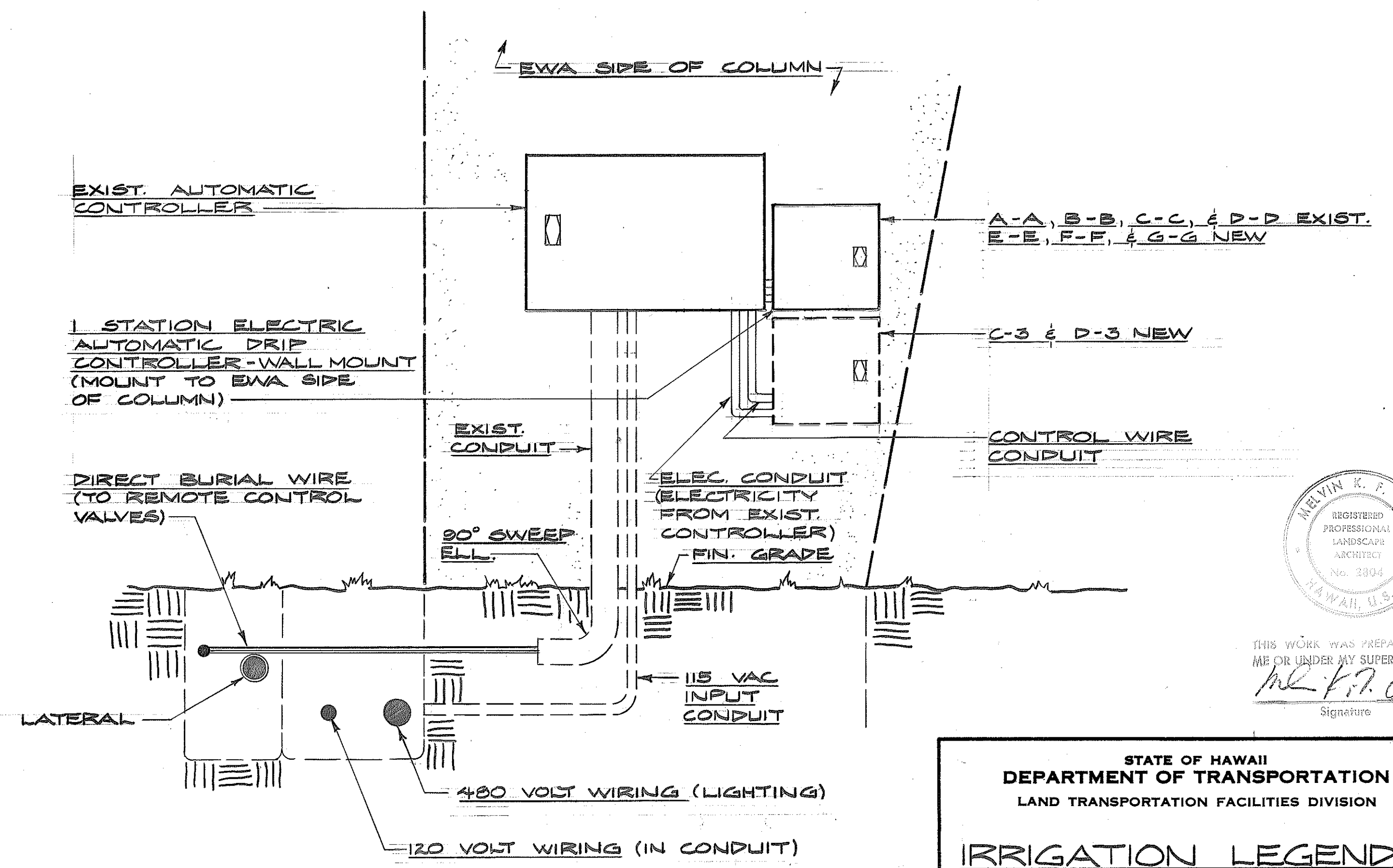


TABLE FOR BEARING AREA OF THRUST BLOCKS (SQ. FT.)

| PIPE SIZE      | 1/4" | 1/2" | 2"   |
|----------------|------|------|------|
| TEES & CROSSES | 0.50 | 0.50 | 0.50 |
| 90° BEND       | 0.50 | 0.50 | 0.50 |
| 45° BEND       | 0.50 | 0.50 | 0.50 |

TYPICAL THRUST BLOCK DETAILS  
NO SCALE



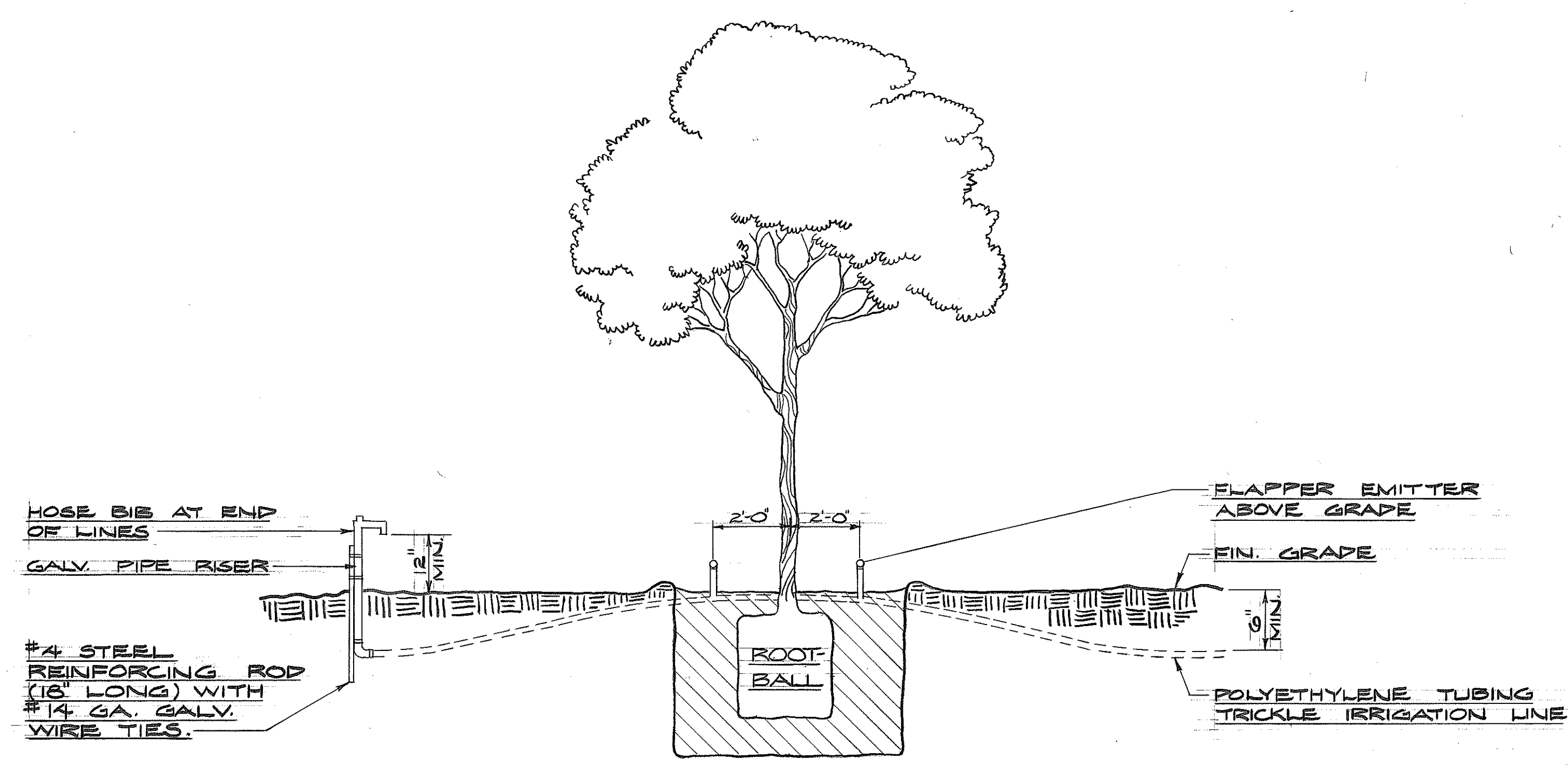
CONTROLLER & TRENCHING DETAIL  
NO SCALE

IRRIGATION LEGEND & DETAILS

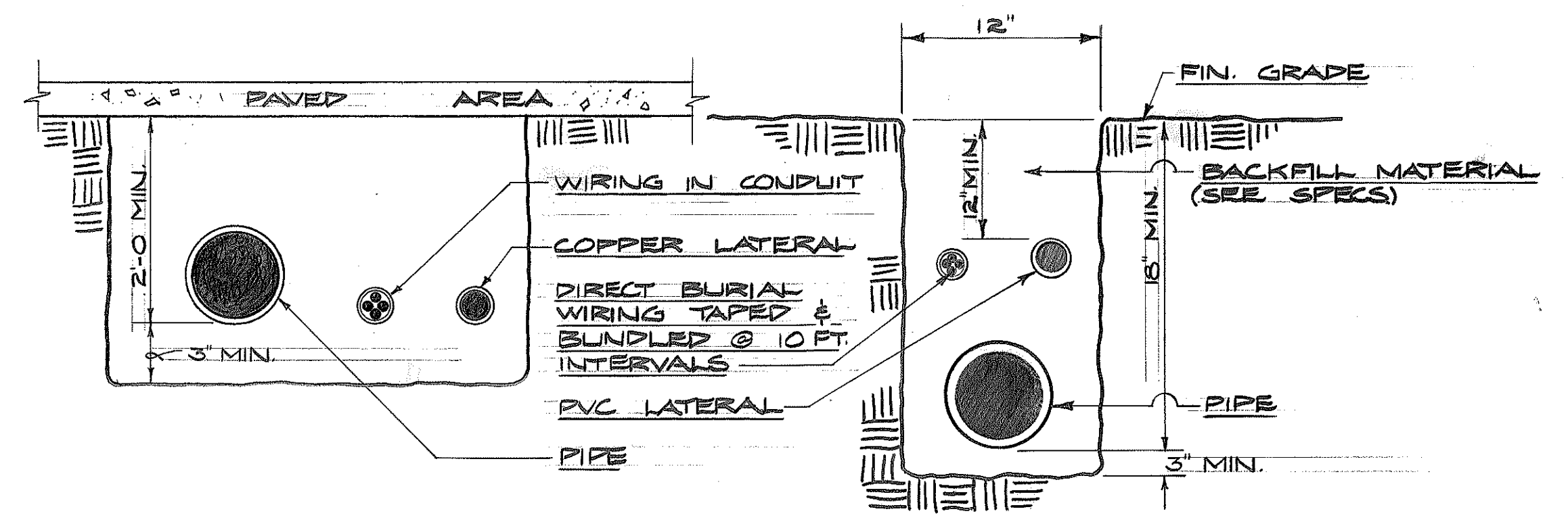
AIRPORT INTERCHANGE  
ROADWAY LANDSCAPING  
F.A.I PROJ. NO. I-HI-1(164):16  
SCALE AS SHOWN DATE:  
SHEET NO. 12 OF 30 SHEETS

SURVEY PLOTTED BY  
DATE  
DRAWN BY  
CHECKED BY  
NOTE BOOK  
No.

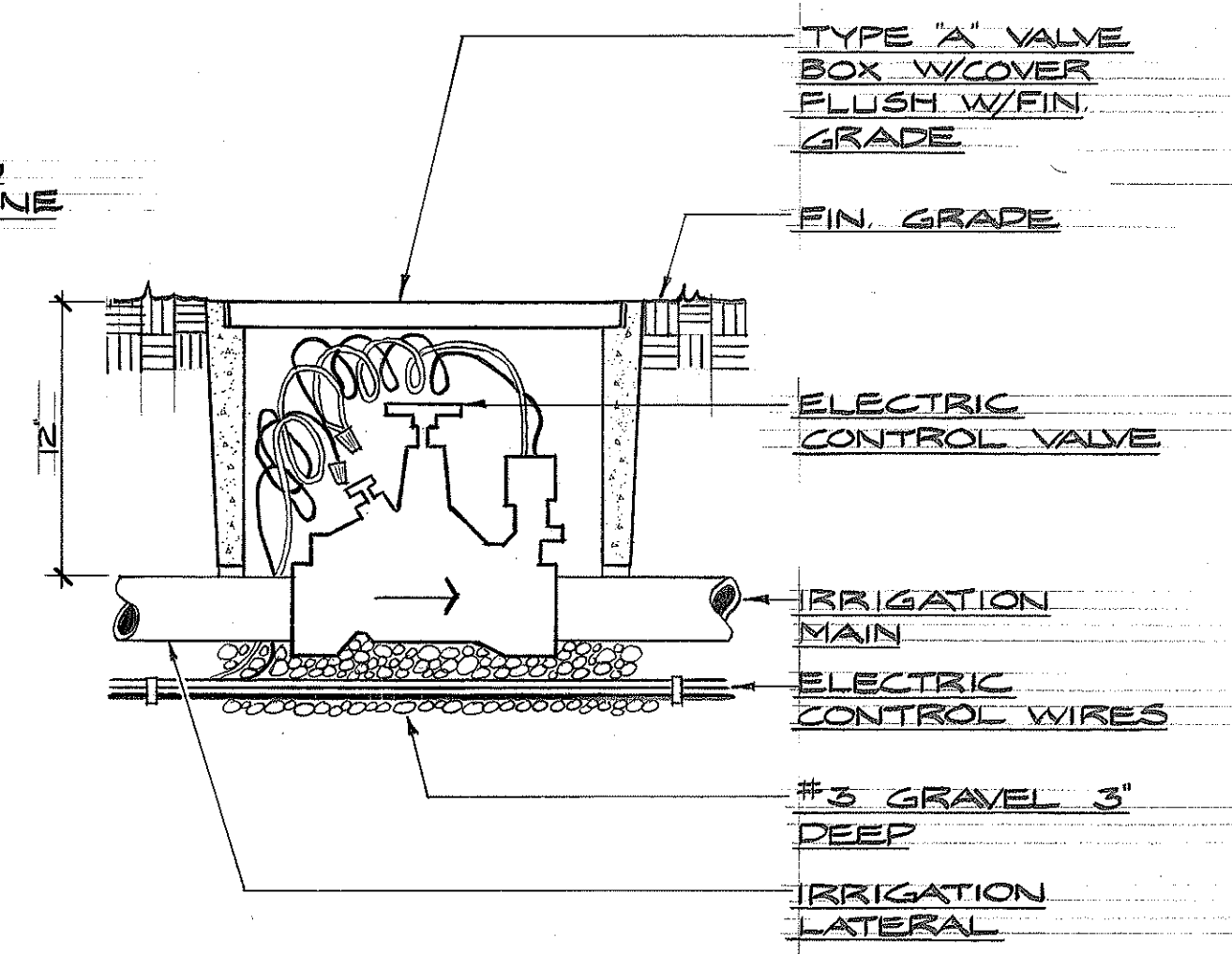
| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|--------------------|-------------|-----------|--------------|
| HAWAII              | HAW.  | I-HI-1(164):16     | 1981        | 13        | 30           |



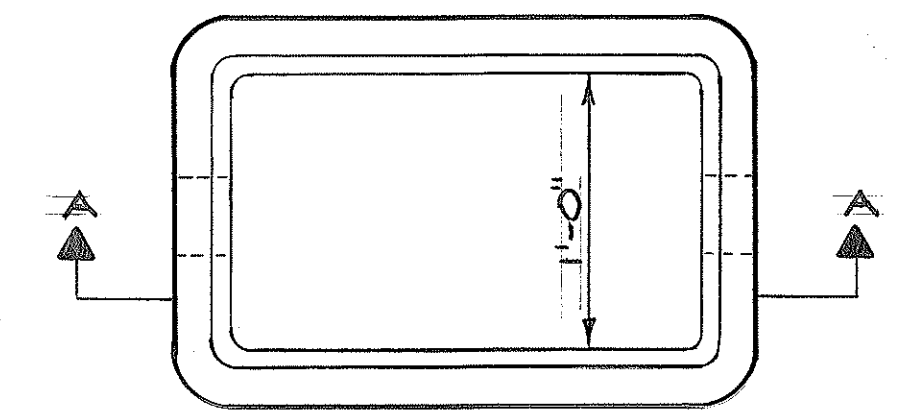
TRICKLE IRRIGATION SYSTEM DETAIL  
NO SCALE



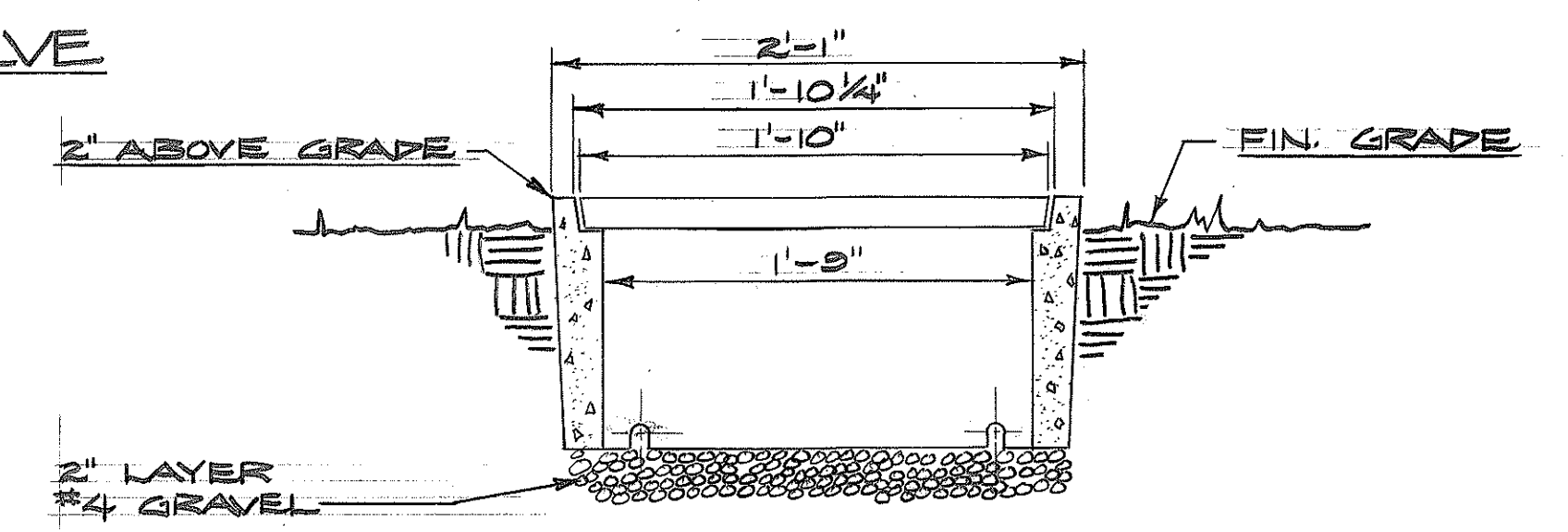
TYPICAL PIPE TRENCH DETAIL  
NO SCALE



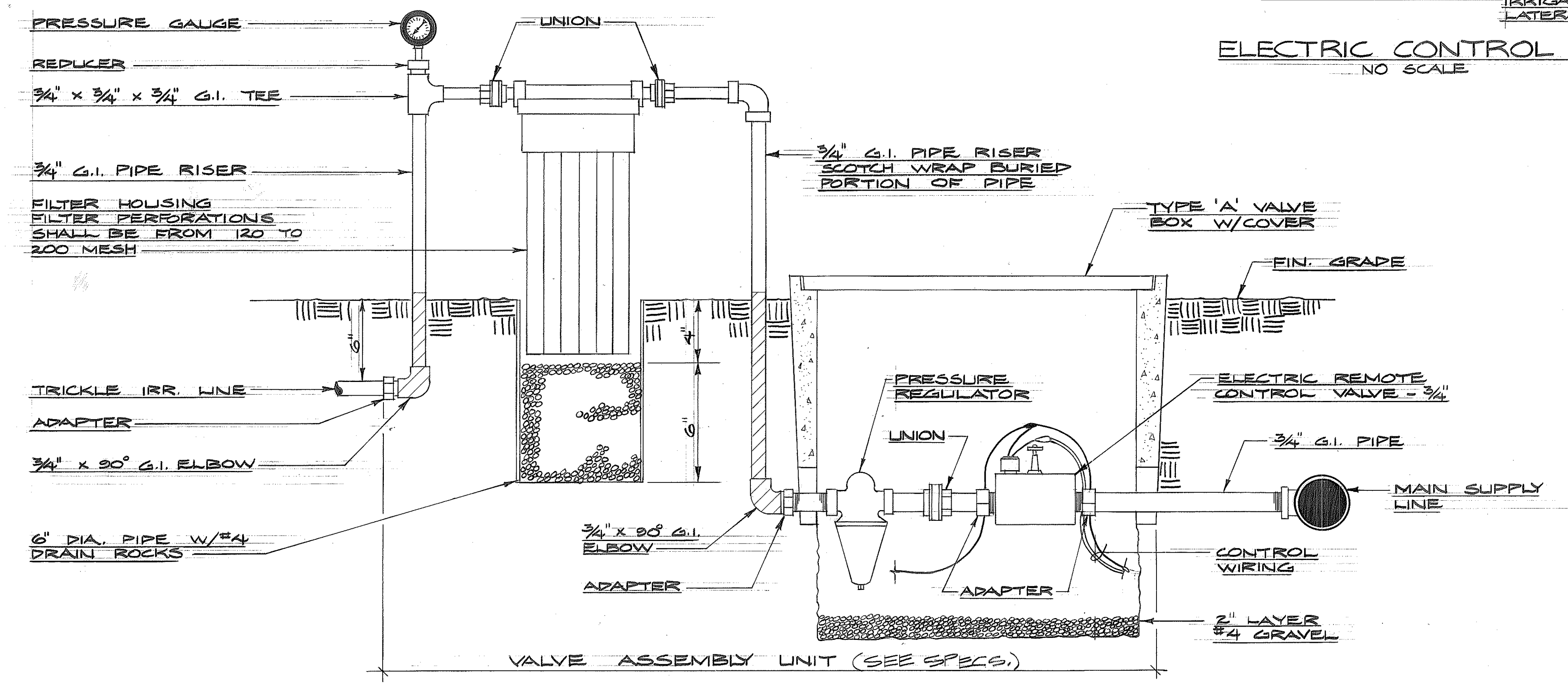
ELECTRIC CONTROL VALVE  
NO SCALE



PLAN



SECTION A-A



VALVE ASSEMBLY UNIT & ELECTRIC REMOTE CONTROL VALVE (TRICKLE SYSTEMS)  
NO SCALE

NOTE:  
TYPE 'A' VALVE BOX IS SIMILAR TO A HONOLULU BOARD OF WATER SUPPLY TYPE 'X' METER BOX. INSTEAD OF THE WORDS 'BOARD OF WATER SUPPLY' AND 'WATER METER' ON THE CAST IRON COVER IMPRINT THE WORDS 'SPRINKLER VALVE'.  
THIS BOX IS TO BE USED AS AN IRRIGATION ELECTRIC PULL BOX WHERE NEEDED.

TYPE 'A' VALVE BOX  
NO SCALE



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.  
Signature: *Melvin K. F. Lau*

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
LAND TRANSPORTATION FACILITIES DIVISION

IRRIGATION DETAILS

AIRPORT INTERCHANGE  
ROADWAY LANDSCAPING  
F.A.I. PROJ. NO. I-HI-1(164):16  
SCALE AS SHOWN DATE:

SHEET NO. 12 OF 30 SHEETS

|                   |      |
|-------------------|------|
| SURVEY PLOTTED BY | DATE |
| DRAWN BY          |      |
| CHECKED BY        |      |
| DESIGNED BY       |      |
| QUANTITIES BY     |      |
| CHECKED BY        |      |
| ORIGINAL PLAN     |      |
| NOTE BOOK         |      |
| No.               |      |