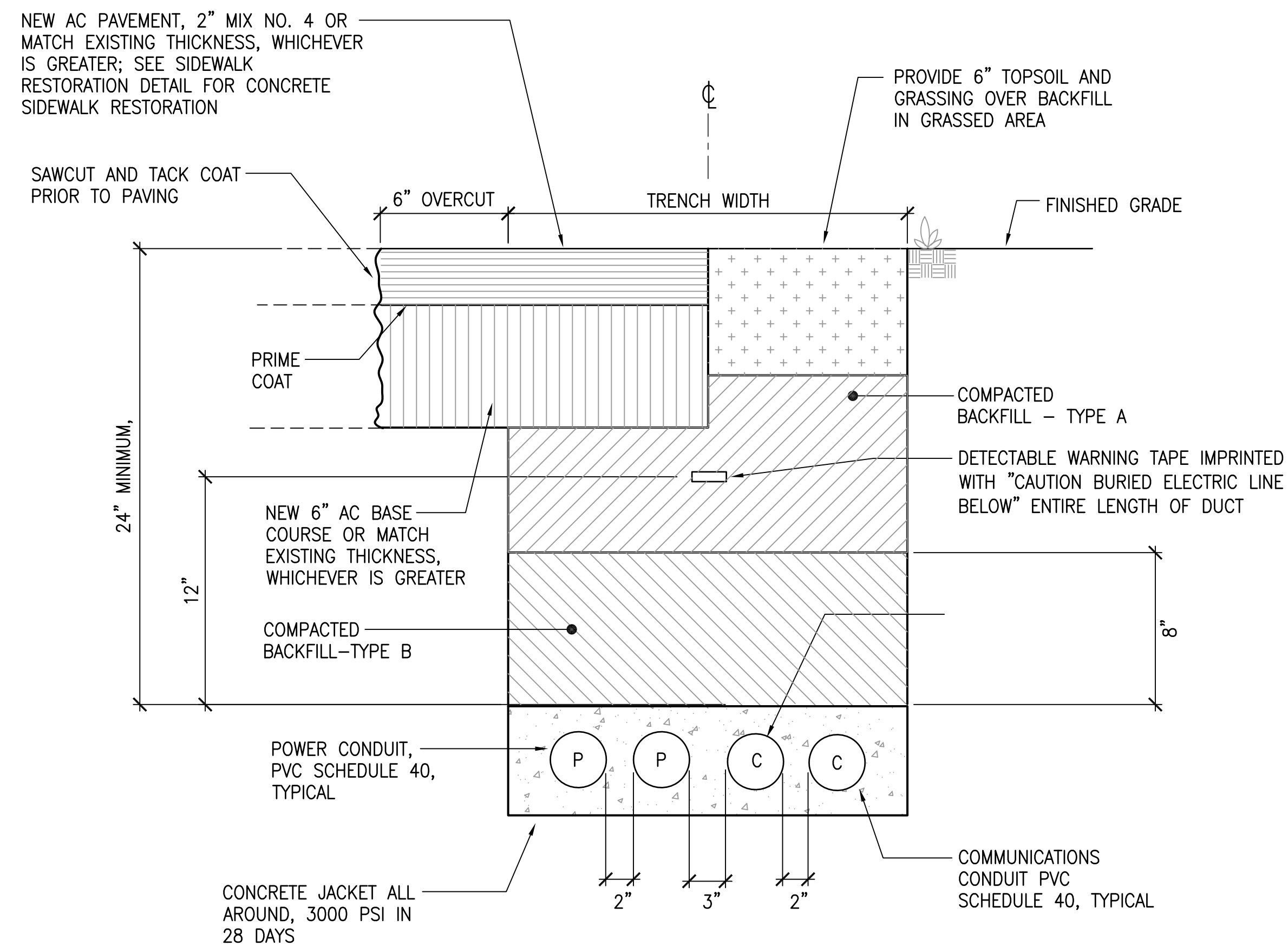
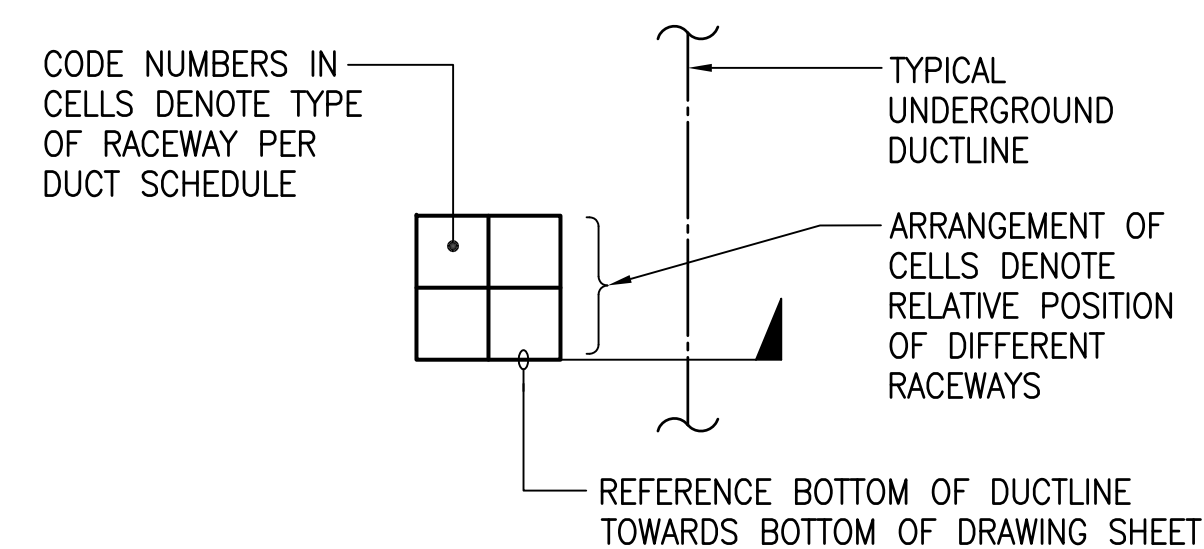


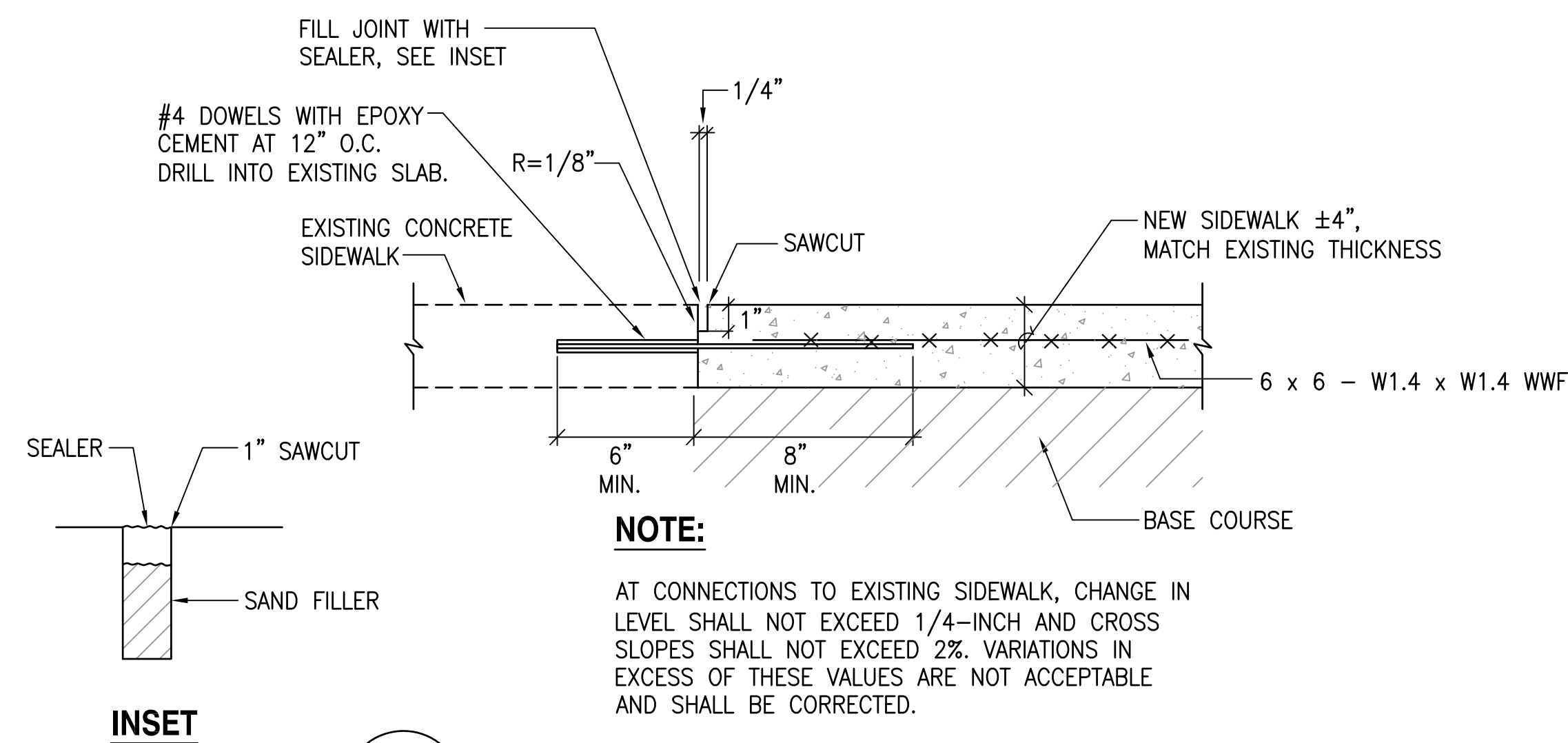
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-M-ART18-01	2022	76	80



1 TYPICAL CONCRETE ENCASED DUCT SECTION

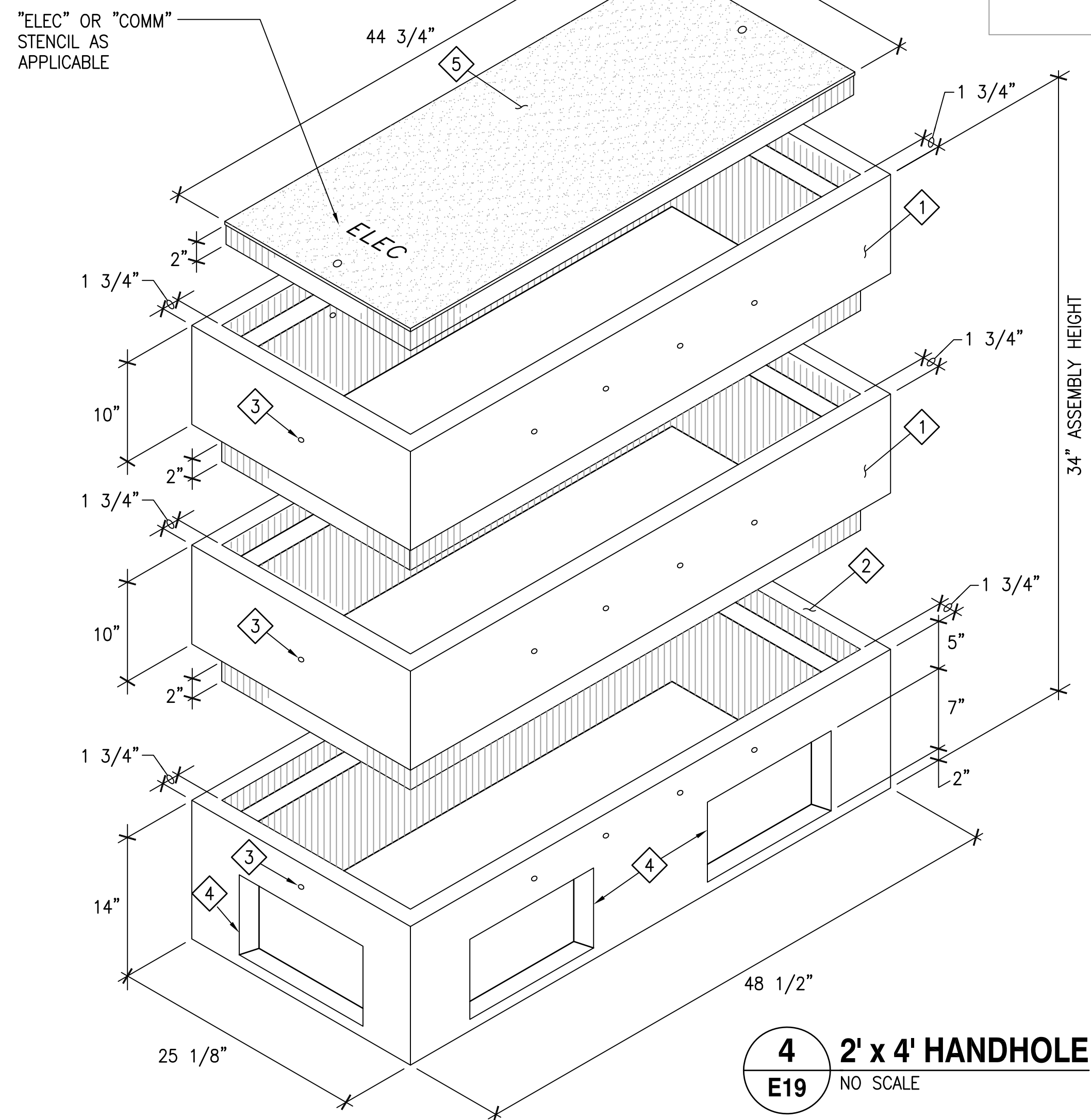


2 DUCT SECTION FLAG CODE
E19 NO SCALE



3 SIDEWALK RESTORATION DETAIL

E19 NO SCALE



4' x 4' HANDHOLE

DUCT SCHEDULE

TYPE	DESCRIPTION	SIZE	CABLES
1	MECO SECONDARY, PVC SCHEDULE 40, CONCRETE ENCASED	4"	SEE ONE LINE DIAGRAM
2	EXIST OFFICE BUILDING SECONDARY FEEDER, PVC SCHEDULE 40, CONCRETE ENCASED	3"	SEE ONE LINE DIAGRAM
3	BUILDING SECONDARY FEEDER, PVC SCHEDULE 40, CONCRETE ENCASED	4"	SEE ONE LINE DIAGRAM
4	BUILDING SECONDARY FEEDER, PVC SCHEDULE 40, CONCRETE ENCASED	3"	SEE ONE LINE DIAGRAM
5	BUILDING SECONDARY FEEDER, PVC SCHEDULE 40, CONCRETE ENCASED	2 1/2"	SEE ONE LINE DIAGRAM
6	BATTERY ENERGY STORAGE SYSTEM AC FEEDER	2"	SEE ONE LINE DIAGRAM
7	PARKING CANOPY PV SYSTEM AC FEEDER	1 1/2"	SEE ONE LINE DIAGRAM
T	TELECOMMUNICATIONS, PVC SCHEDULE 40, CONCRETE ENCASED	2"C	SEE TELECOMMUNICATINS RISER DIAGRAM
T1	TELECOMMUNICATIONS (PV SYSTEM), PVC SCHEDULE 40, CONCRETE ENCASED	1 1/4"C	SEE ONE LINE DIAGRAM

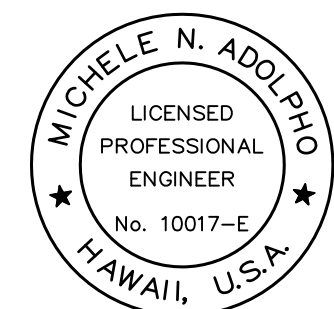
NOTES:

1. HANDHOLE DESIGNED IN ACCORDANCE WITH HECO STANDARDS USING 4,000 PSI COMPRESSIVE STRENGTH CONCRETE AND 60,000 PSI YIELD STRENGTH ASTM A-615 STEEL REINFORCEMENT PER CALCS.
2. ALL CONCRETE AND REINFORCED CONCRETE WORK SHALL BE DONE IN ACCORDANCE WITH APPLICABLE PROVISIONS OF THE AMERICAN CONCRETE INSTITUTE'S BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE (ACI 318-87).
3. HANDHOLE TO BE PLACED ON A 6" BASE OF CRUSHER RUN FOR EASE OF INSTALLATION AND EVEN LOAD DISTRIBUTION.
4. PRODUCT TO BE STENCILED WITH MANUFACTURER NAME AND DATE OF POUR.

MATERIAL SCHEDULE

- 1 TOP SECTION. WT. 400 LBS.
- 2 BOTTOM SECTION W/KNOCKOUTS. WT. 430 LBS.
- 3 1/2"Ø x 4" LIFTING HOLE (CONTR. TO GROUT SOLID AFTER PLACEMENT OF SECTION).
- 4 CONDUIT OPENING KNOCKOUT.
- 5 CONCRETE COVER, REFER TO HECO DWG. NO. 11312.

GENERAL PLAN	SURVEY PLOTTED BY _____	DAYS _____
	DRAWN BY _____	" _____
NOTE BOOK	TRACED BY _____	" _____
	INDEXED BY _____	" _____
	QUALIFIED BY _____	" _____
	CHECKED BY _____	" _____
No. _____		



Michael A. Adams
PROJECT ENGINEER for ECS, Inc.
APRIL 30, 2024
EXPIRATION DATE OF THE LICENSE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

DUCT AND HANDHOLE DETAILS

MAUI DISTRICT BASEYARD
Project No. HWY-M-ART18.01

Scale: AS SHOWN Date: MAY 2022

SHEET No. E19 OF 80 SHEETS