PAVING AROUND MANHOLES

- 1. The Contractor shall first lower manholes more than 4" prior to cold planing. The work shall be considered incidental to the various paving contract items. Upon final paving, the manhole shall be raised and paid under the various contract items pertaining to manhole adjustments.
- 2. The Contractor shall place hot asphalt concrete around manholes and compact properly with a vibrating plate compactor.
- 3. If a plate compactor is not used, the Contractor shall use a pneumatic roller to roll the area around the manhole.
- 4. The Contractor shall fog seal or brush emulsion seal on the material placed as backfill on the area around the manhole that was not compacted by the roller. Black sand shall be used to blot out the area if the fog is too heavy.

HAWAII ONE CALL CENTER

Before conducting any excavation in the public right of way or on private property, the Contractor shall call the Hawaii One Call Center at least five (5) working days before digging. Be sure to give the address and location of the nearest cross street(s) near the digging site.

Call 811 toll-free 24 hours a day. For more information, go to www.callbeforeyoudig.org

2. The Hawaii One Call Center will contact all utility companies to tone, mark, or identify the location of their underground utilities for free. Mark the area to excavate in White and label all of the other utilities as listed below.

Electric power lines, cables, or conduits,

and lighting cables.

YELLOW Gas, oil steam, petroleum or other

hazardous liquid or gaseous materials.

ORANGE Communications, cable TV, alarm or

signal lines, cables, or conduits.

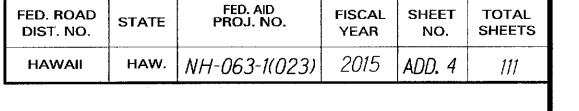
Water, irrigation, and slurry lines.

GREEN Sewers, storm sewer facilities or other

drain lines.

WHITE Proposed excavation

PINK Temporary survey markings.
PURPLE Reclaimed water, irrigation and slurry lines.



LEGEND

	Concrete Areas	<u> </u>	Existing Sewer Line
	11" Reconstruction Areas		New 12" Sewer Line
			Existing Sewer Manhole
	9½" Reconstruction Areas	SMH	Adjusted Sewer MH Frame/Cover
2 ////	11½" Reconstruction Areas	SMH	New Sewer Manhole
		O	Existing 6" Gas Line
2	15½" Reconstruction Areas w/Paving Grid		New 6" Gas Line Existing Gas Valve Box
^		°gv ° GV	Adjusted Gas Valve Box
2	5½" Reconstruction Areas w/Paving Grid	GV °gmħ	Existing Gas Manhole
	25½" Reconstruction Areas	GMH	Adjusted Gas MH Frame/Cover
<u>/2</u>	w/Paving Grid	©mon.	Existing Monument
	29½" Reconstruction Areas	MON.	Adjusted Monument
/2	w/Pavina Crid		Existing 24" Drain Line
	19½" Reconstruction Areas		New 24 " RCP Drain Line
	w/Paving Grid		Existing Storm Drain Manhole
	Resurfacing Limits		Adjusted Storm Drain MH
		JUNIT	Frame/Cover
e	Existing Electrical Line	• SDMH	New Storm Drain Manhole
——E	New Electrical Line	∃ gdi	Existing Grated Drop Inlet
jp	Existing Joint Pole	Cb o	
opp	Existing Power Pole Existing Electric Manhole		Existing Catch Basin Existing Traffic Sign
°emh •=	Adjusted Elec. MH Frame/Cover	Ü	Existing Traffic Sign
EMH	Existing Electric Box	Tal	Existing Highway Lighting Standard
ebox t	Existing Telephone Line		Existing Highway Lighting Pullbox
<i>T</i>	New Telephone Line	U	Existing Traffic Signal Pole
$^{\circ}t_{P}$	Existing Telephone Pole	U	Existing Traffic Signal
°tmh	-	U	New Traffic Signal Pole
∘ TMH	Adjusted Tele. MH Frame/Cover	, -	Existing Traffic Signal Pullbox
	Existing Signal Corps Line	U	Existing Traffic Signal Pullbox
	New Signal Corps Line		Adjusted Traffic Signal Pullbox
	Existing Signal Corps Manhole		New Traffic Signal Pullbox
	Existing TV Cable		Existing Metal Guardrail
	New TV Cable		New Metal Guardrail
	Existing Sandwich Isles Communication Line	X	Existing Chain Link Fence
<u></u> w12	Existing 12" Water Line		New Chain Link Fence
	Existing Water Manhole	wm ⁻	Existing Water Meter
•WMH	Adjusted Water MH Frame/Cove		Adjusted Water Meter
oav	Existing Water Air Valve	fh -6-	Existing Fire Hydrant
AV	Adjusted Water Air Valve	σ	- • • • • • • • • • • • • • • • • • • •
• _{AV}	New Water Air Valve		
°wv	Existing Water Valve Box		STATE OF HAWAII DEPARTMENT OF TRANSPORTATION
• _{WV}	Adjusted Water Valve Box		HIGHWAYS DIVISION
		<u>GE</u>	<u>IERAL NOTES AND LEGEND</u>

DATE

2 11/3/15 Revised Reconstruction Areas.

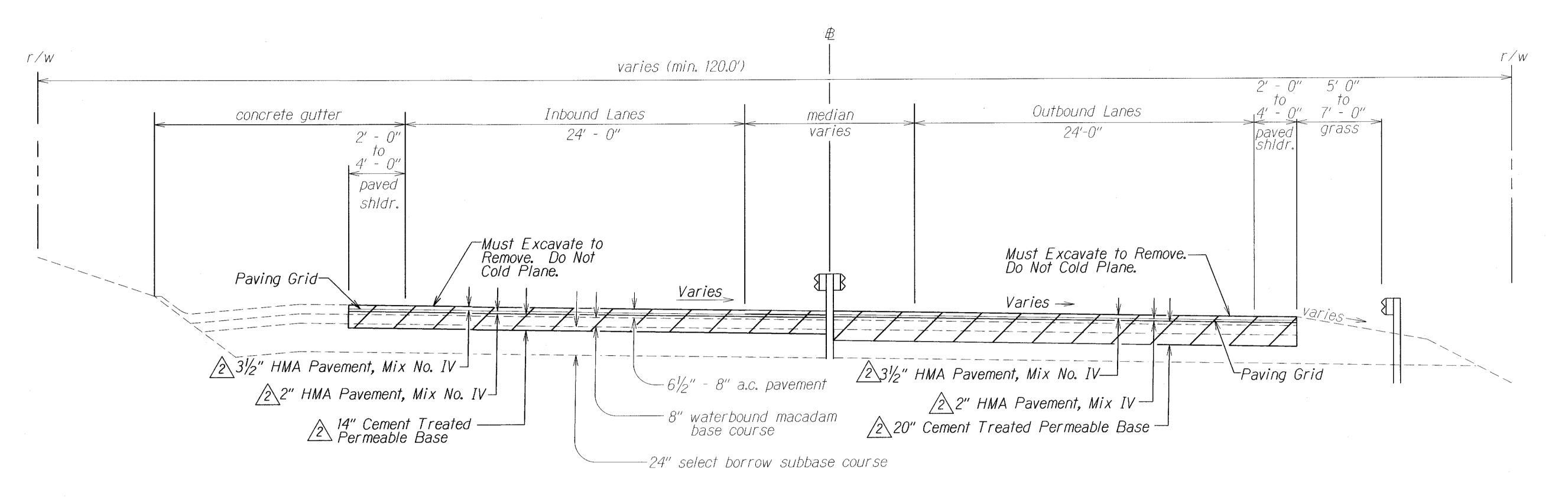
REVISION

LIKELIKE HIGHWAY RESURFACING School Street to Emmeline Place Federal Aid Project No. NH-063-1(023)

> Date: Sept., 2015 SHEET No. 2 OF 2 SHEETS

ADD. 4

FED. ROAD	STATE	FED. AID	FISCAL	SHEET	TOTAL
DIST. NO.		PROJ. NO.	YEAR	NO.	SHEETS
HAWAII	HAW.	NH-063-1(023)	2015	ADD. 14	111



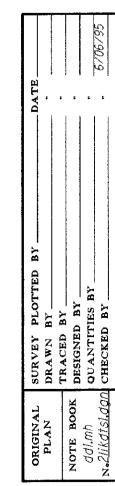
TYPICAL SECTION

B Sta. 79+50± to 图 Sta. 80+50±

Scale: 1/4" = 1'

Notes:

- 1. See Plan Sheets ADD. 16 and ADD. 48 for Additional Pavement Stabilization Information.
- 2. Prior to placement of the permeable base, the exposed subbase or subgrade shall be recompacted to a dense and unyielding condition. The work shall be considered incidental to the Portland Cement Treated Permeable Base.



2 11/3/15 Revised Pavement Reconstruction Area.

DATE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

REVISION

TYPICAL SECTION

LIKELIKE HIGHWAY RESURFACING
School Street to Emmeline Place
Federal Aid Project No. NH-063-1(023)

Scale: As Shown

SHEET No. 7 OF 7 SHEETS

ADD. 14

Date: Sept., 2015

Minimum Taper Drop Off @ Cold - top of exist. pav't. Planed Sections Cold Mix Asphalt Pav't.— ***

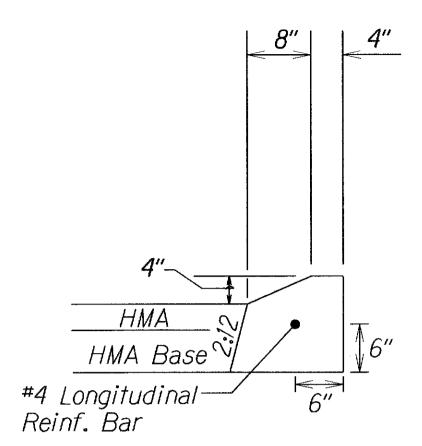
TEMPORARY TRANSITION AT

COLD PLANED AREAS

Not to Scale

Note: Contractor shall construct temporary pavement taper to prevent sharp pavement drop-offs at all cold planed sections. Prior to final Hot Mix Asphalt Pavement, Mix No. IV placement, temporary pavement taper shall be removed.

FISCAL SHEET TOTAL YEAR NO. SHEETS FED. ROAD DIST. NO. 2015 ADD. 16 111 **HAW.** *NH-063-1(023)*

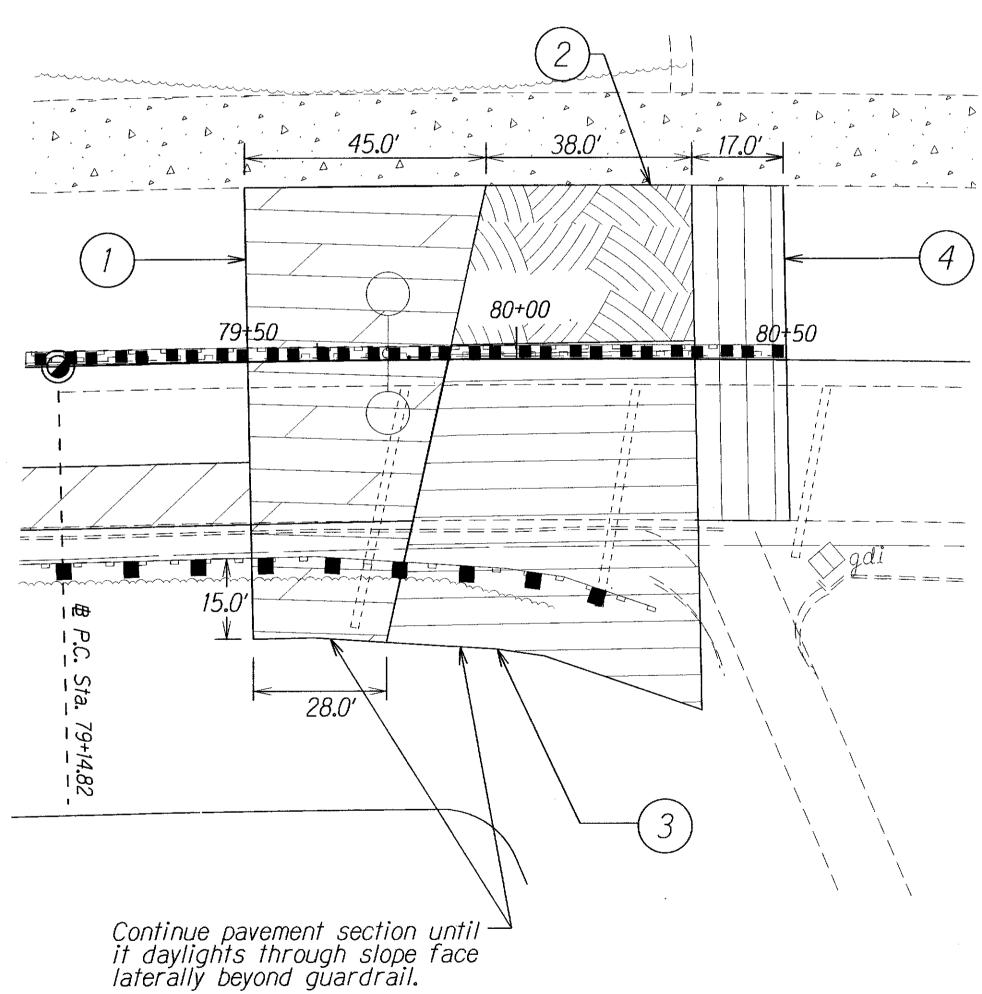


CURB, TYPE 2G Not to Scale

Pavement Stabilization Notes:

- 1. For Pavement Section 1, guardrail posts shall be installed in 21-inch diameter holes and backfilled with CLSM with 28-day compressive strength of no more than 100 psi.
- 2. For Pavement Sections 2 and 3, guardrail posts shall be installed in 21-inch diameter holes and backfilled with ASTM C-33 #57 aggregate, and topped with 5-inch thick one-sack grout fill or CLSM.
- 3. For Pavement Section 2, use geotextile fabric for northern excavation face from 5½" to 19½" below grade. Refer to Standard Specification 716.02.
- 4. For Pavement Section 3, use geotextile fabric for northern excavation face from 5½" to 25½" below grade. Refer to Standard Specification 716.02.
- 5. Cost of geotextile fabric is considered incidental to pavement stabilization work.
- 6. For # Stations 79+50 through 80+50, the 3½" HMA layer and paving grid shall be placed at the same time for each lane. The paving grid shall cover the entire area without any transverse joints.

	Pavement Section			
	1	2	3	4
HMA Pavement, Mix No. IV	3-1/2"	3-1/2"	3-1/2"	3-1/2"
	Paving Grid			
HMA Pavement, Mix No. IV	2"	2"	2"	2"
HMA Base Course (Placed in four 6" lifts)	24"	n/a	n/a	n/a
Portland Cement Treated Permeable Base	n/a	14"	20"	n/a
TOTAL DEPTH	29-1/2"	19-1/2"	25-1/2"	5-1/2"



PAVEMENT STABILIZATION AREA Not to Scale

11/3/15 | Added Pavement Stabilization Notes, Pavement Section and Detail.

DATE

REVISION

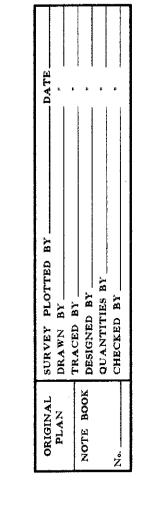
STATE OF HAWAII **DEPARTMENT OF TRANSPORTATION** HIGHWAYS DIVISION

TYPICAL SECTION & DETAILS

LIKELIKE HIGHWAY RESURFACING School Street to Emmeline Place Federal Aid Project No. NH-063-1(023)

Scale: 1" = 1.0'

Date: Sept., 2015 SHEET No. 9 OF 9 SHEETS



ADD. 16

