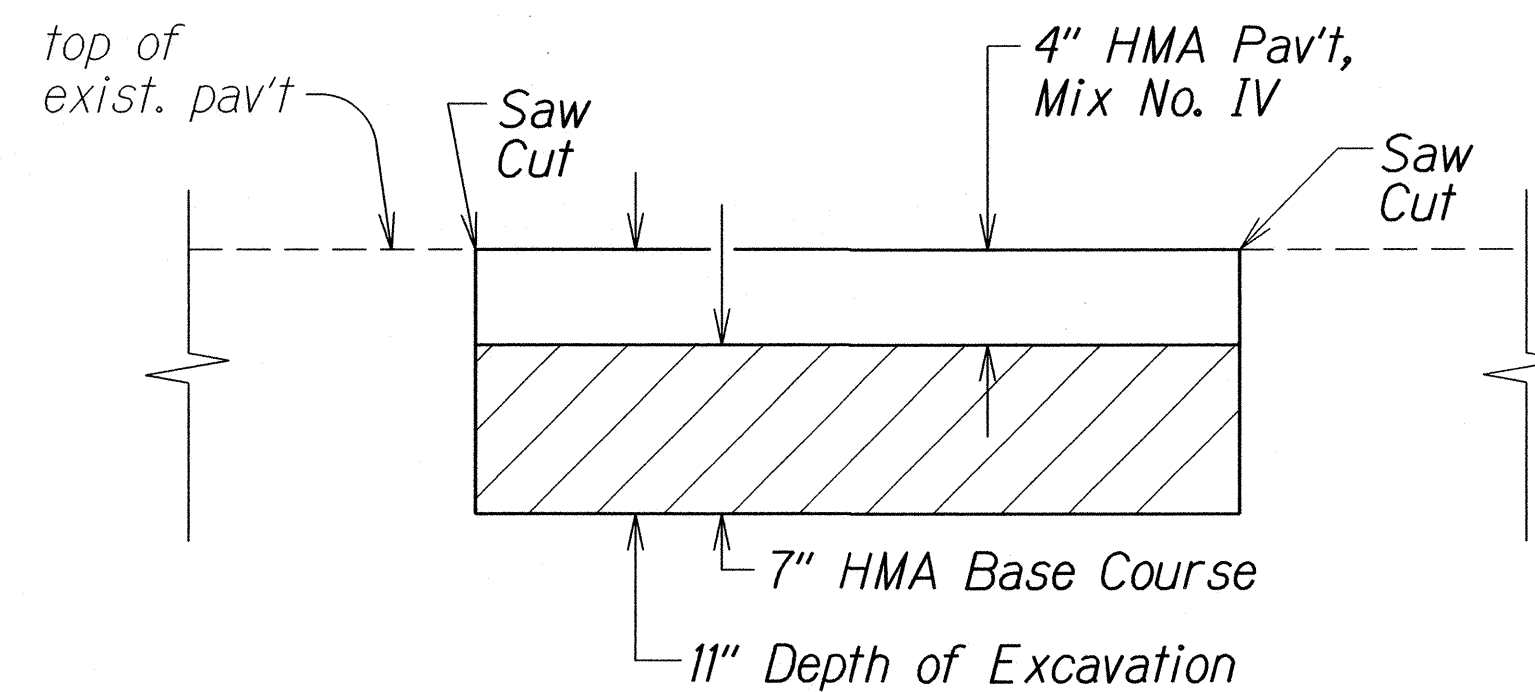


The plan view shows a highway layout with the following dimensions and features:

- Overall Width:**  $r/w$  at both ends.
- Inbound Lanes:**
  - right lane: varies (11'-0" - 12'-0")
  - remaining a.c. lanes: varies (22'-0" - 33'-0")
- Median:** varies
- Outbound Lanes:** 24'-0"
- Curbs and Sidewalks:**
  - 2'-0" Curb
  - 5'-0" New Conc. Sidewalk
  - 4'-0" existing sidewalk
- Build-Up Areas:** Build-Up Area with Borrow Material and Hydro-mulch. at both ends.
- Slopes:** 1.5% slope on the main travel lanes, 2% slope on the sidewalk area.
- Pavement and Subbase Layers:**
  - SS-1 Tack Coat (Incidental to Item No. 401.0400)
  - 4" Cold Plane
  - 4" HMA Pavement Mix No. IV
  - 6 1/2" - 8" a.c. pavement
  - 8" waterbound macadam base course
  - 24" select borrow subbase course
  - 11" Pavement Reconstruction (Where Shown on Plans)

Scale:  $\frac{1}{4}'' = 1'$

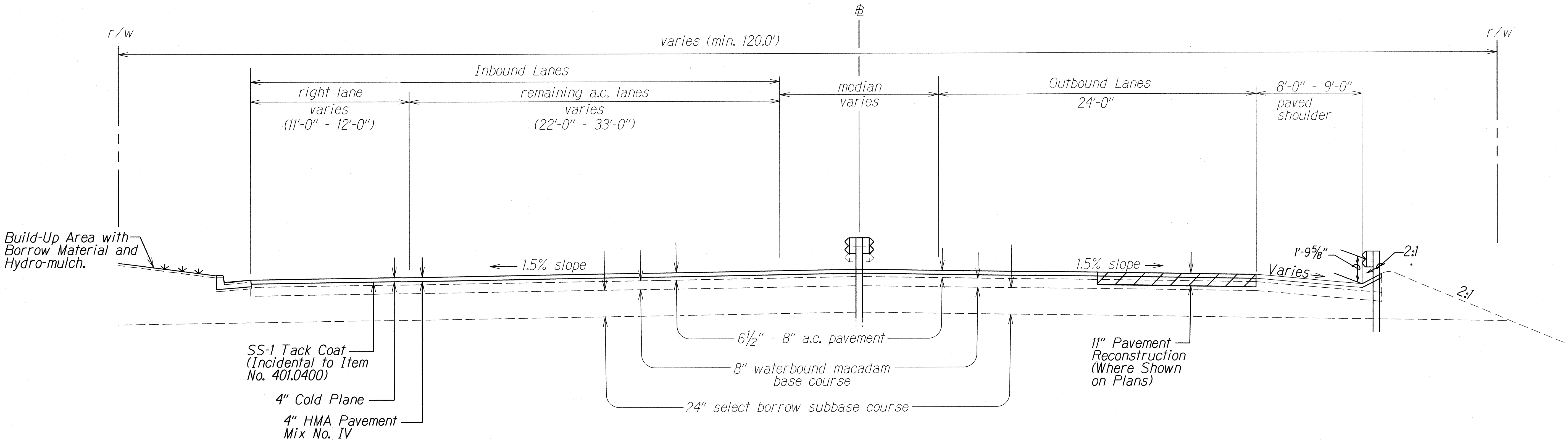


Scale :  $1\frac{1}{2}'' = 1'-0''$

1. Contractor may elect to reconstruct the entire depth of pavement reconstruction with base course in preparation of cold planing as a separate operation, but the State will not pay for the extra base course and excavation.
2. Prior to placement of the asphalt base course, the exposed subbase or subgrade shall be recompact to a dense and unyielding condition. The work shall be considered incidental to the Hot Mix Asphalt Base Course.

STATE OF MAHAW  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION  
**TYPICAL SECTION**  
**LIKELIKE HIGHWAY RESURFACING**  
**School Street to Emmeline Place**  
**Federal Aid Project No. NH-063-1(023)**  
Scale: As Shown Date: Sept., 2015  
SHEET No. 1 OF 10 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-063-1(023)	2015	9	111



**TYPICAL SECTION**  
 # Sta. 33+00± to # Sta. 62+00±  
 Scale: 1/4" = 1'

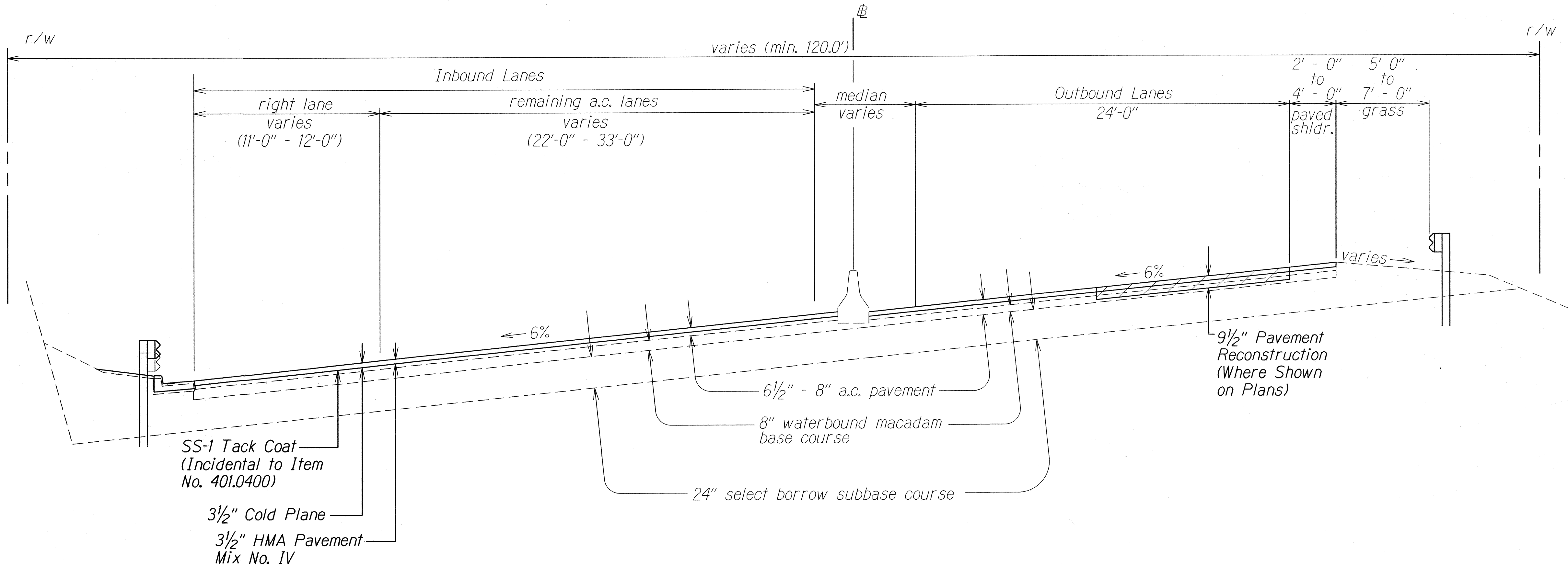
- Notes:
- Contractor may elect to reconstruct the entire depth of pavement reconstruction with base course in preparation of cold planing as a separate operation, but the State will not pay for the extra base course and excavation.
  - Prior to placement of the asphalt base course, the exposed subbase or subgrade shall be recompactd to a dense and unyielding condition. The work shall be considered incidental to the Hot Mix Asphalt Base Course.

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTE BOOK	DRAWN BY	
06/10/15	DESIGNED BY	
06/10/15	QUANTITIES BY	
06/10/15	CHECKED BY	7/06/15

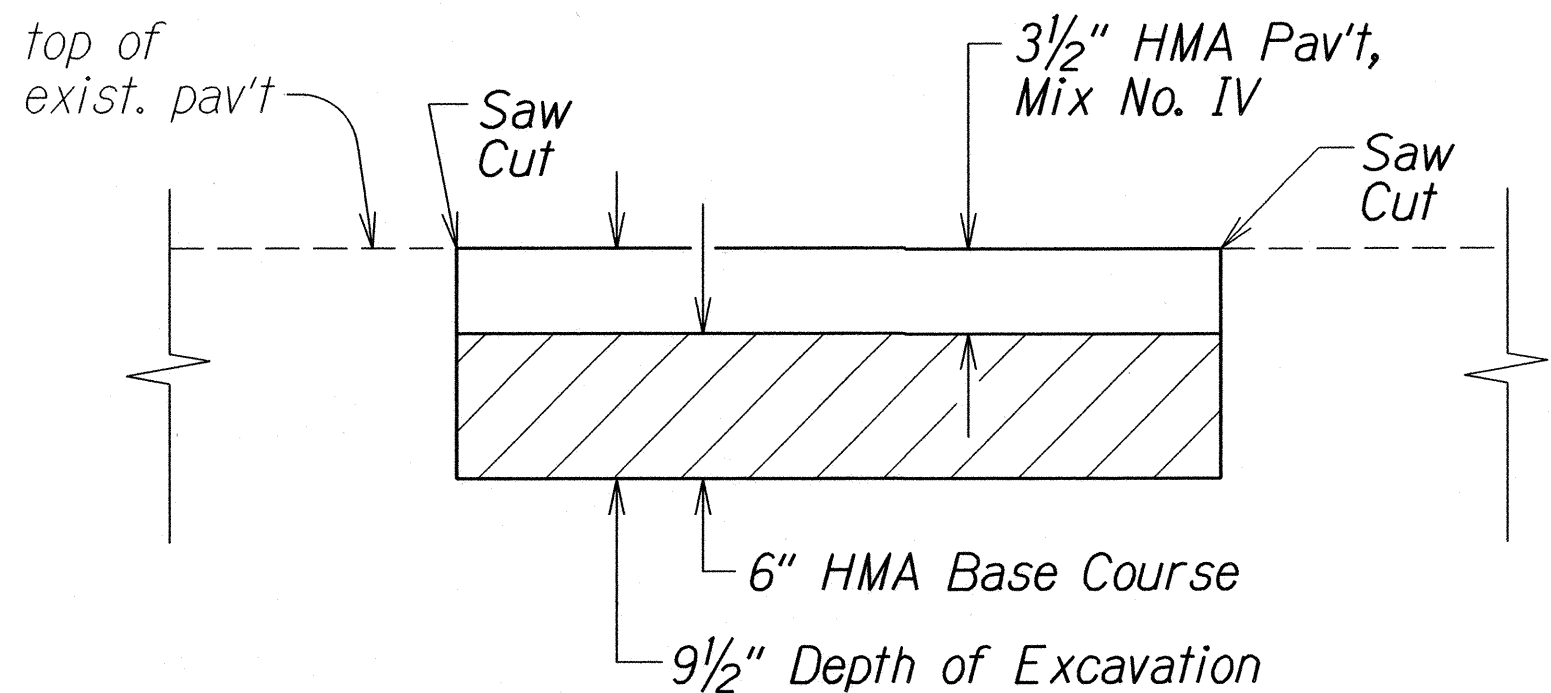
STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

**TYPICAL SECTION**  
**LIKELIKE HIGHWAY RESURFACING**  
**School Street to Emmeline Place**  
**Federal Aid Project No. NH-063-1(023)**  
Scale: As Shown      Date: Sept., 2015  
SHEET No. 2 OF 10 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-063-1(023)	2015	10	111



TYPICAL SECTION  
 @ Sta. 62+00± to @ Sta. 68+50±  
 Scale: 1/4" = 1'



RECONSTRUCTION AREA DETAIL  
 @ Sta. 62+00 to @ Sta. 80+50  
 Scale : 1 1/2" = 1'-0"

- Notes:
- Contractor may elect to reconstruct the entire depth of pavement reconstruction with base course in preparation of cold planing as a separate operation, but the State will not pay for the extra base course and excavation.
  - Prior to placement of the asphalt base course, the exposed subbase or subgrade shall be recompacted to a dense and unyielding condition. The work shall be considered incidental to the Hot Mix Asphalt Base Course.

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTE BOOK	DESIGNED BY	
admm	QUANTITIES BY	
N.210421.dgn	CHECKED BY	6/06/15

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

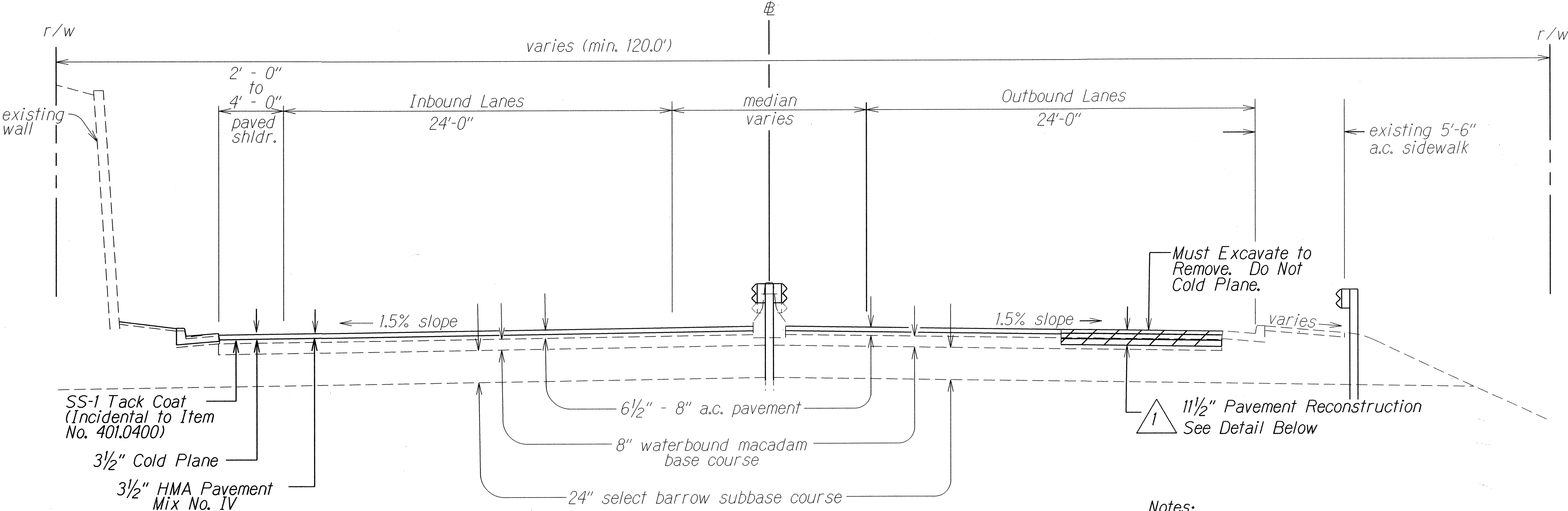
**TYPICAL SECTION**

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

Scale: As Shown      Date: Sept., 2015

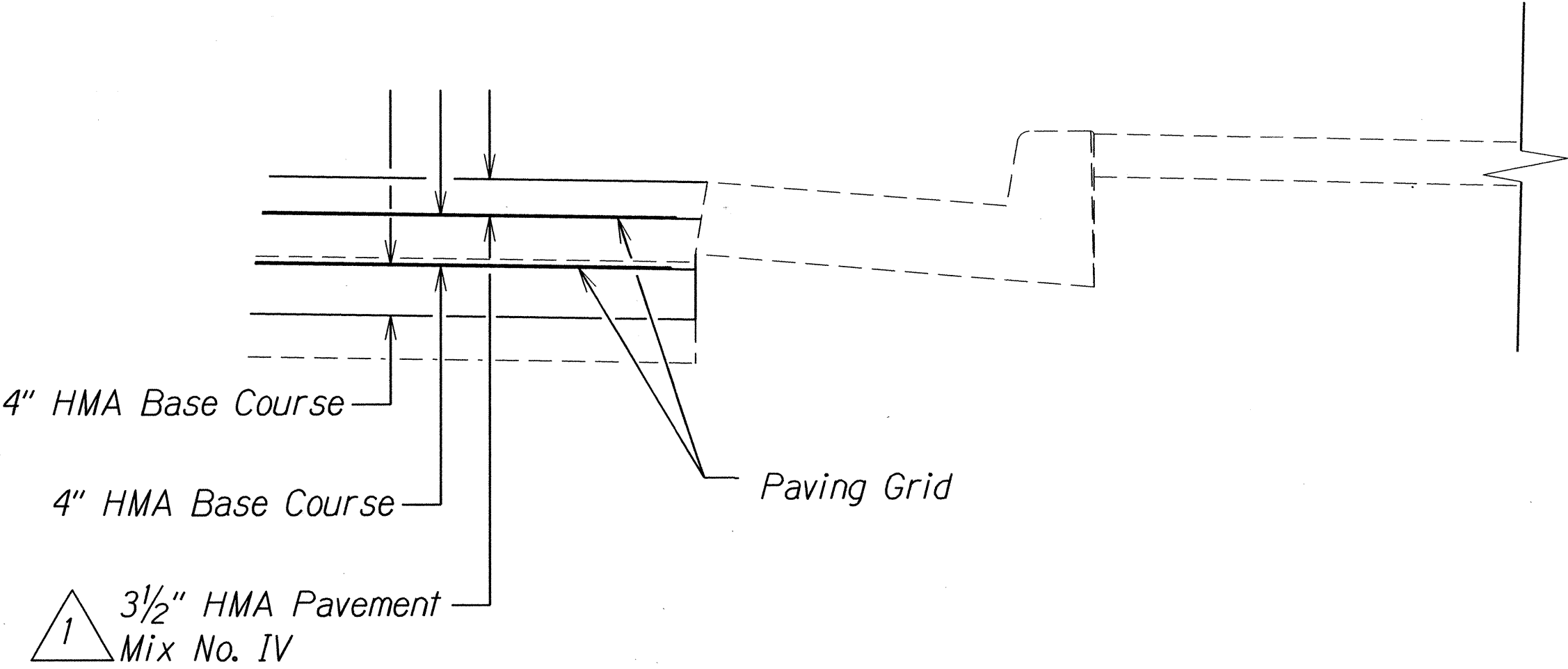
SHEET No. 3 OF 10 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-063-1(023)	2015	ADD. 11	111



**TYPICAL SECTION**  
 # Sta. 68+50± to # Sta. 72+40±  
 Scale: 1/4" = 1'

- Notes:
1. Contractor may elect to reconstruct the entire depth of pavement reconstruction with base course in preparation of cold planing as a separate operation, but the State will not pay for the extra base course and excavation.
  2. Prior to placement of the asphalt base course, the exposed subbase or subgrade shall be recompacted to a dense and unyielding condition. The work shall be considered incidental to the Hot Mix Asphalt Base Course.



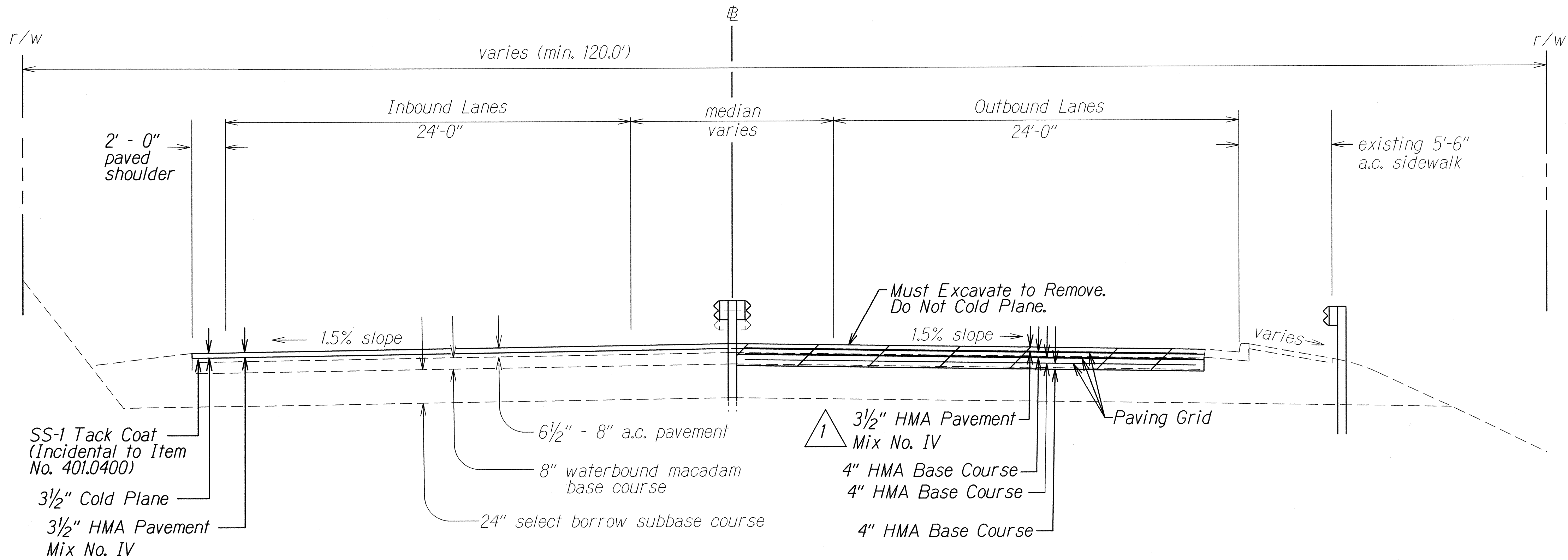
**RIGHT LANE RECONSTRUCTION DETAIL**  
 # Sta. 68+50± to # Sta. 72+40±  
 # Sta. 75+20± to # Sta. 79+50±  
 Not to Scale

1	10/27/15	Revised Pavement Thickness.
DATE	REVISION	
<div>STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION  <u><b>TYPICAL SECTION</b></u>  <u><b>LIKELIKE HIGHWAY RESURFACING</b></u> <u><b>School Street to Emmeline Place</b></u> <u><b>Federal Aid Project No. NH-063-1(023)</b></u>  Scale: As Shown Date: Sept., 2015</div>		
SHEET No. 4 OF 7 SHEETS		

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
TRACED BY	DRAWN BY	
NOTE BOOK	CHECKED BY	
QUANTITIES BY		6/05/95
CHECKED BY		



FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-063-1(023)	2015	ADD. 12	111



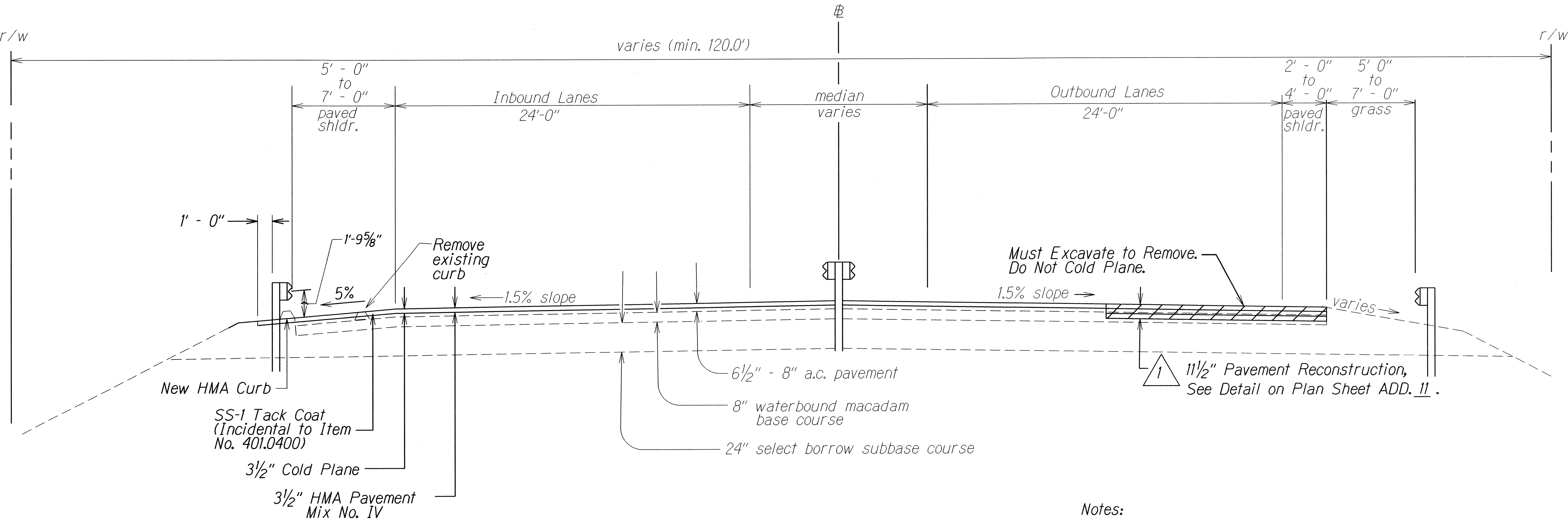
TYPICAL SECTION  
 # Sta. 72+40± to # Sta. 75+20±  
 Scale: 1/4" = 1'

- Notes:
- Contractor may elect to reconstruct the entire depth of pavement reconstruction with base course in preparation of cold planing as a separate operation, but the State will not pay for the extra base course and excavation.
  - Prior to placement of the asphalt base course, the exposed subbase or subgrade shall be recompact to a dense and unyielding condition. The work shall be considered incidental to the Hot Mix Asphalt Base Course.

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
TRACED BY	DRAWN BY	
NOTE BOOK	REVISIONS BY	
ad/m	CHECKED BY	6/26/95
N-2110151.dwg		

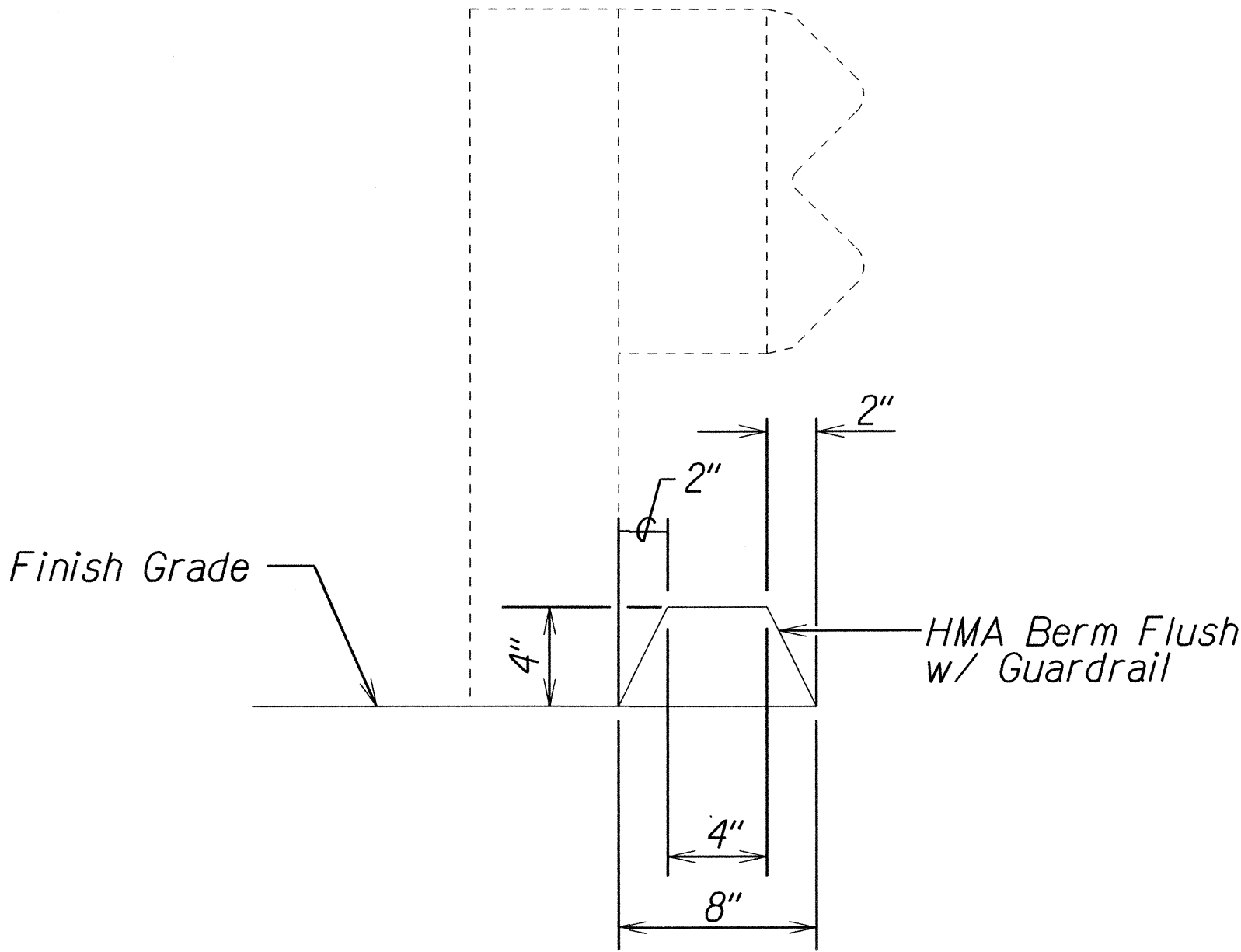
1	10/27/15	Revised Pavement Thickness.
DATE	REVISION	
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION		
<u>TYPICAL SECTION</u>		
<u>LIKELIKE HIGHWAY RESURFACING</u>		
<u>School Street to Emmeline Place</u>		
<u>Federal Aid Project No. NH-063-1(023)</u>		
Scale: As Shown		Date: Sept., 2015
SHEET No. 5 OF 10 SHEETS		

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-063-1(023)	2015	ADD. 13	111



**TYPICAL SECTION**  
 CL Sta. 75+20± to CL Sta. 79+50±  
 Scale: 1/4" = 1'

- Notes:
- Contractor may elect to reconstruct the entire depth of pavement reconstruction with base course in preparation of cold planing as a separate operation, but the State will not pay for the extra base course and excavation.
  - Prior to placement of the asphalt base course, the exposed subbase or subgrade shall be recompacted to a dense and unyielding condition. The work shall be considered incidental to the Hot Mix Asphalt Base Course.

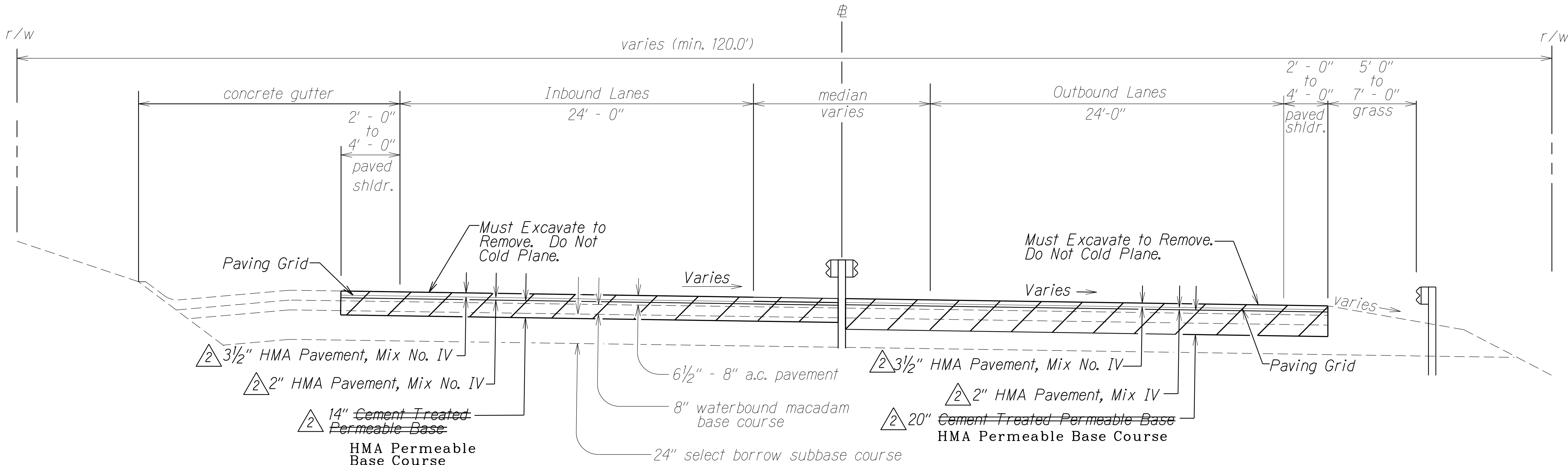


**HMA BERM DETAIL**  
 Scale: Not to Scale

1	10/27/15	Revised Pavement Thickness.
DATE		REVISION
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION  <u><b>TYPICAL SECTION</b></u>  <u><b>LIKELIKE HIGHWAY RESURFACING</b></u> <u><b>School Street to Emmeline Place</b></u> <u><b>Federal Aid Project No. NH-063-1(023)</b></u>  Scale: As Shown                      Date: Sept., 2015  SHEET No. 6 OF 7 SHEETS		

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTE BOOK	DRAWN BY	
DESIGNED BY	DESIGNED BY	
CHECKED BY	CHECKED BY	7/06/95
NH-063-1(023)		

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



TYPICAL SECTION  
Sta. 79+50± to Sta. 80+50±  
Scale: 1/4" = 1'

- Notes:
- See Plan Sheets ADD. 16 and ADD. 48 for Additional Pavement Stabilization Information.
  - 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.
- HMA

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTE BOOK	DRAWN BY	
6/1/15	DESIGNED BY	
N-2116151.dwg	CHECKED BY	6/10/15

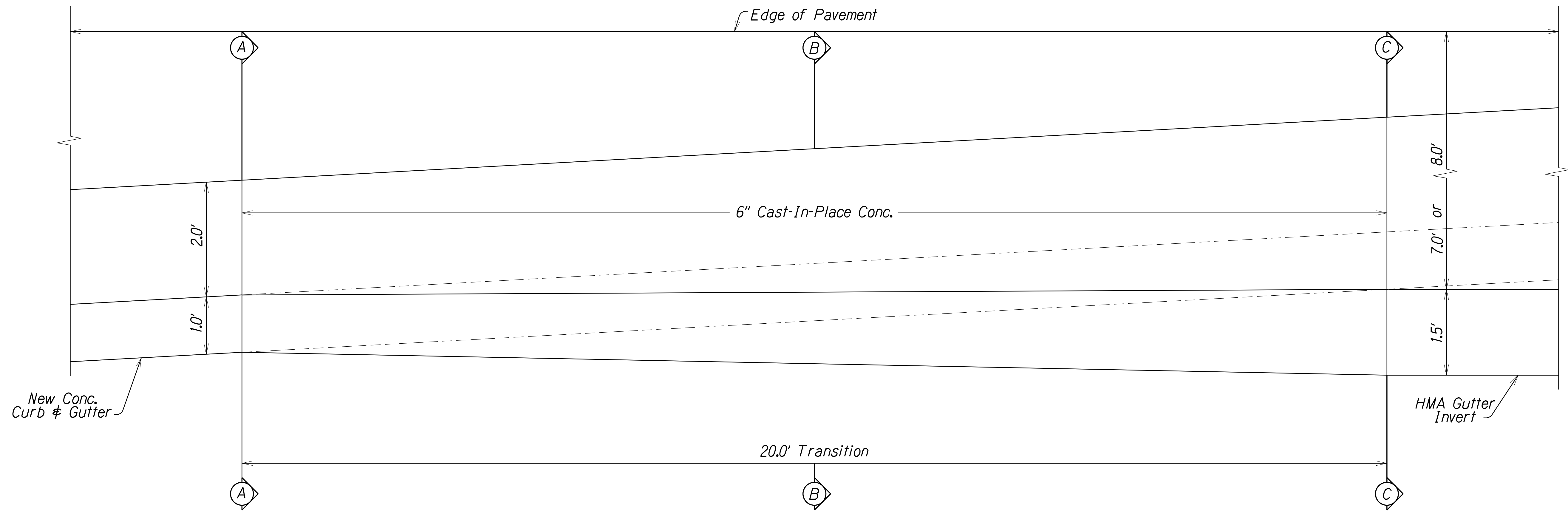
LEGEND FOR AS-BUILT POSTINGS	
	Squiggly line for as-built deletion
	Double line for as-built deletion
Roadway	Text for as-built posting

	11/3/15	Revised Pavement Reconstruction Area.
DATE	REVISION	
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION		
<u>TYPICAL SECTION</u>		
<u>LIKELIKE HIGHWAY RESURFACING</u>		
<u>School Street to Emmeline Place</u>		
<u>Federal Aid Project No. NH-063-1(023)</u>		
Scale: As Shown		Date: Sept., 2015
SHEET No. 7 OF 7 SHEETS		

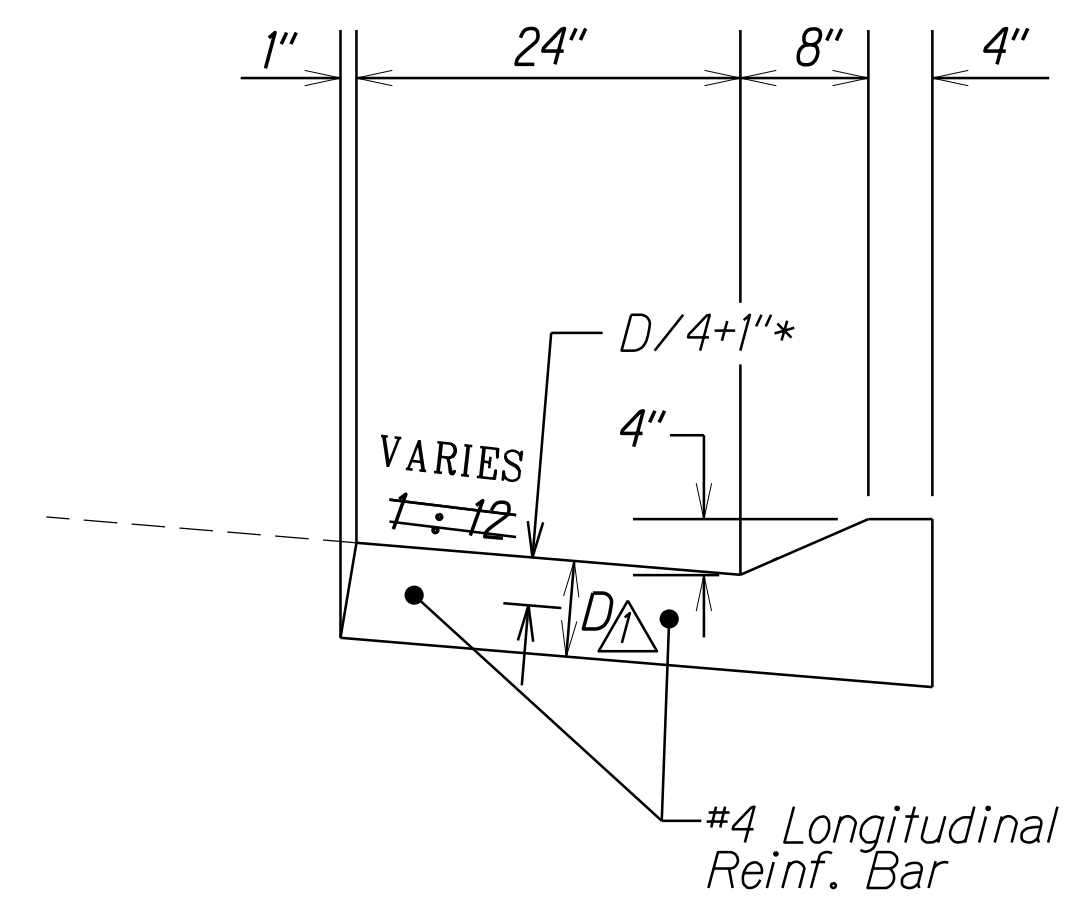
"AS-BUILT"

ADD. 14

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-063-1(023)	2015	ADD. 15	111

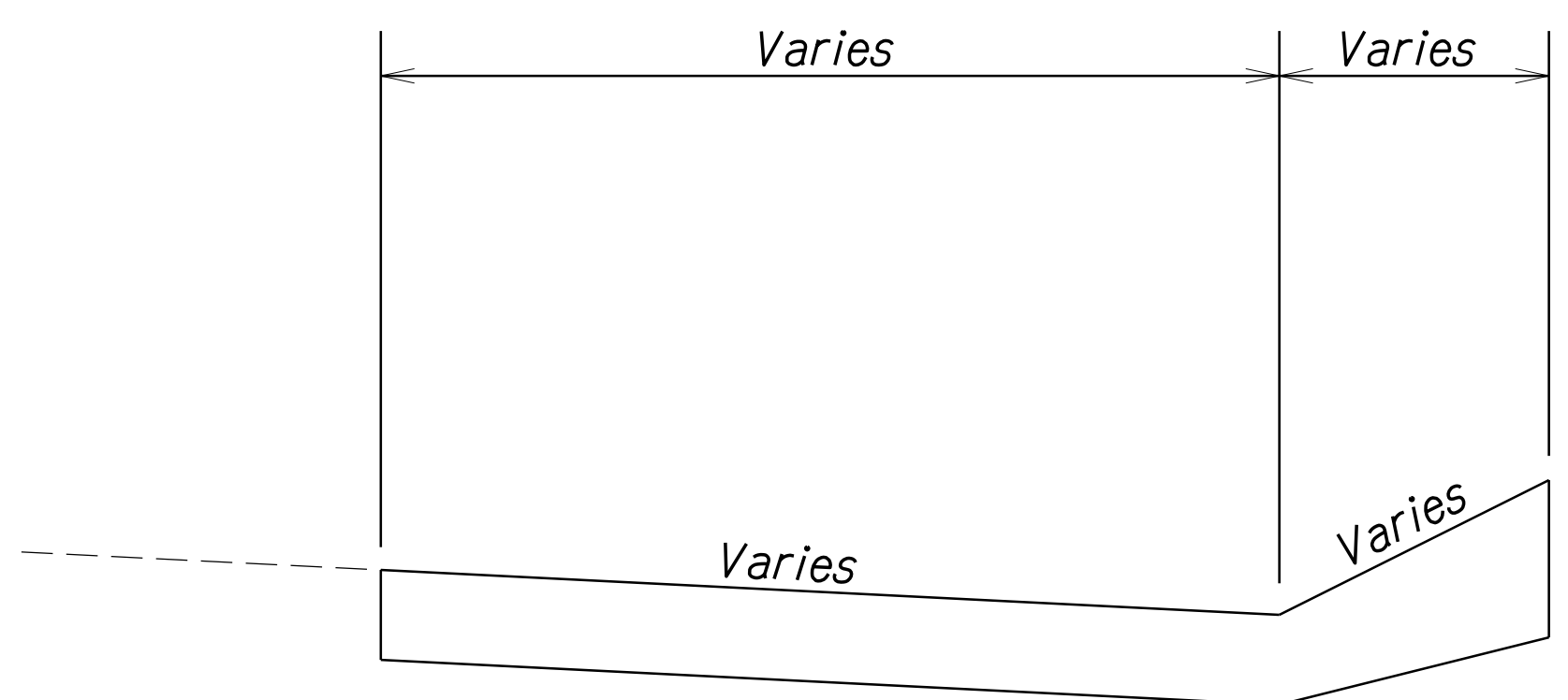


PLAN  
Scale: 1"=1.0'



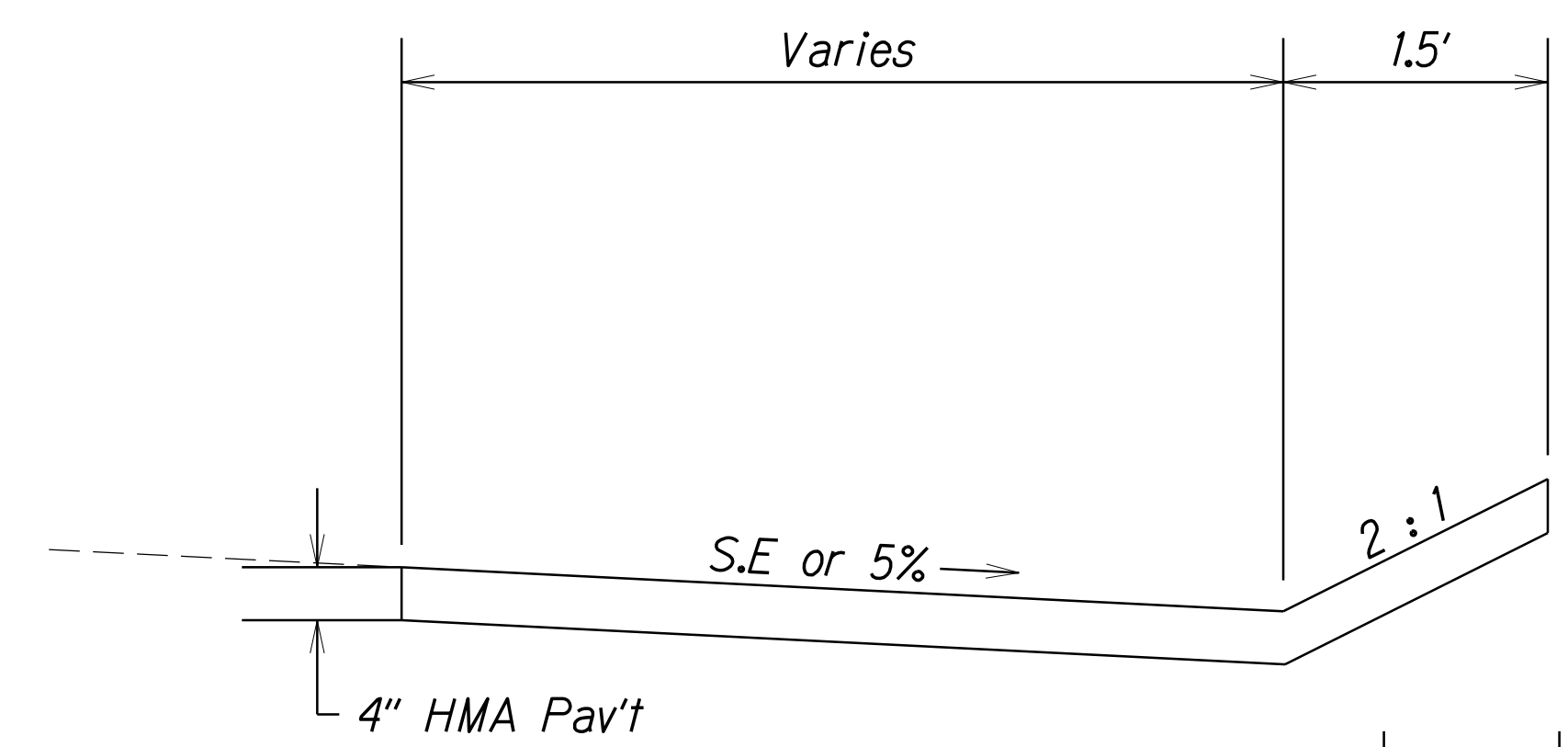
\* D equals thickness of HMA & HMA Base, but not less than 10"

SECTION A-A  
CURB & GUTTER, TYPE 2GG  
Scale: 1"=1.0'



SECTION B-B  
Scale: 1"=1.0'

TYPICAL TRANSITION  
HMA SHOULDER TO CONCRETE CURB & GUTTER  
Scale: 1"=1.0'



SECTION C-C  
Scale: 1"=1.0'

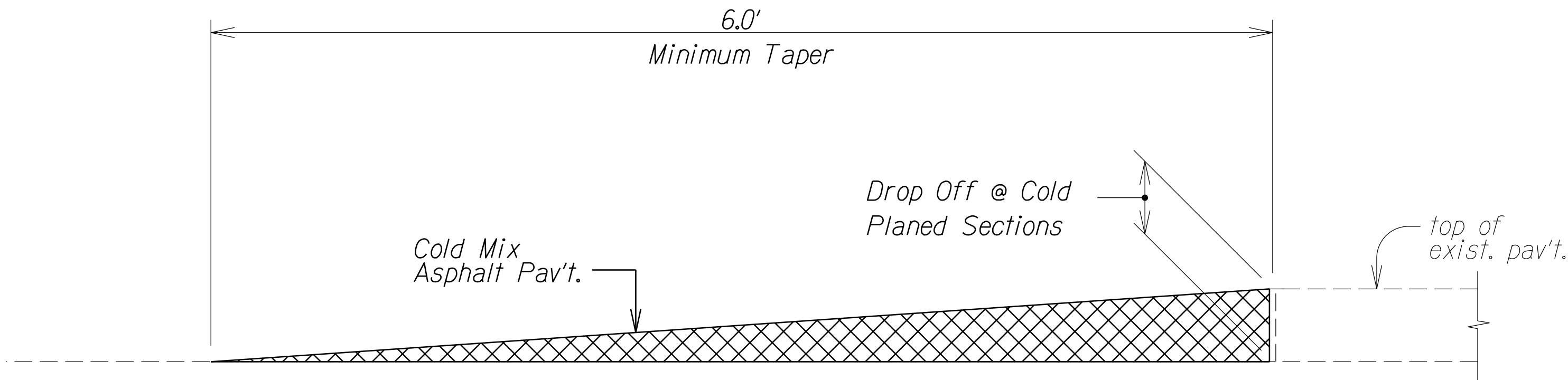
LEGEND FOR AS-BUILT POSTINGS	
	Squiggly line for as-built deletion
	Double line for as-built deletion
Roadway	Text for as-built posting

10/29/15	Revised Gutter Dimensions.
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. 8 OF 8 SHEETS	

SURVEY PLOTTED BY	DATE
DRAWN BY	
DESIGNED BY	
CHECKED BY	
NOTE BOOK	
NO.	

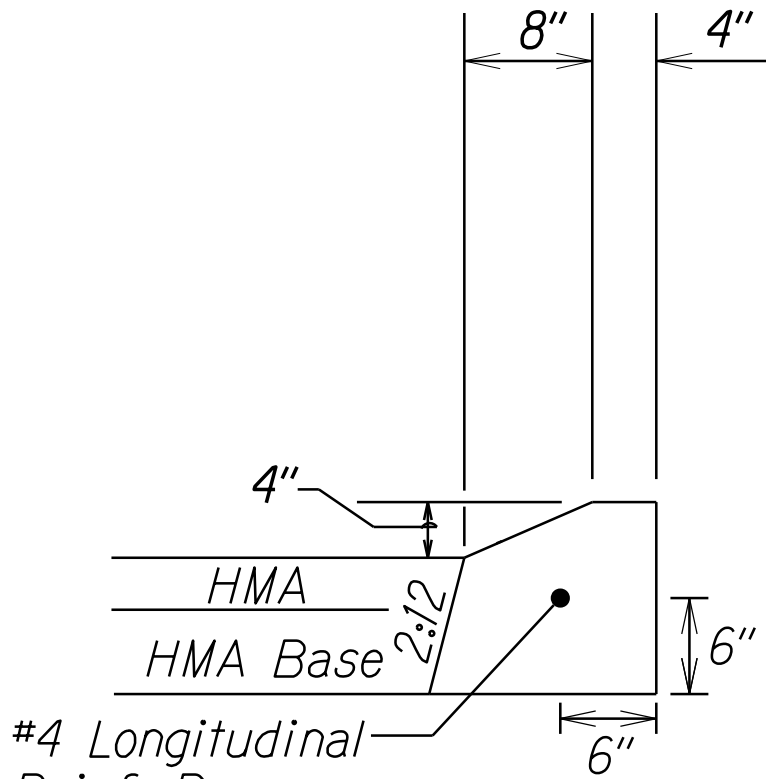


FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-063-1(023)	2015	ADD. 16	111



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.

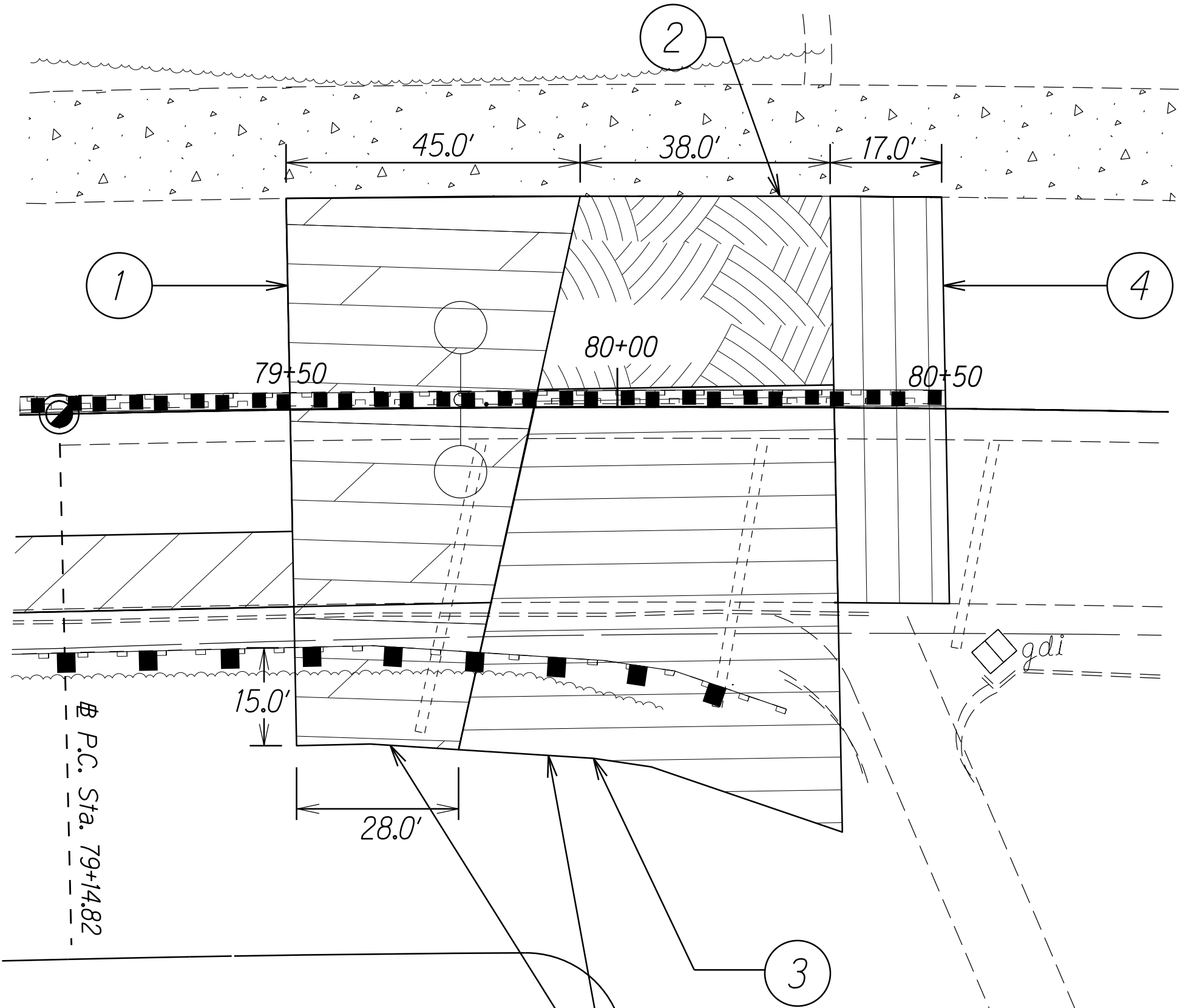
TEMPORARY TRANSITION AT  
COLD PLANED AREAS  
Not to Scale



CURB, TYPE 2G  
Not to Scale

2 Pavement Stabilization Notes:

- 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.
- 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.
- For Pavement Section 2, use geotextile fabric for northern excavation face from 5½" to 19½" below grade. Refer to Standard Specification 716.02.
- For Pavement Section 3, use geotextile fabric for northern excavation face from 5½" to 25½" below grade. Refer to Standard Specification 716.02.
- Cost of geotextile fabric is considered incidental to pavement stabilization work.
- 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.



Continue pavement section until it daylights through slope face laterally beyond guardrail.

2 PAVEMENT STABILIZATION AREA  
Not to Scale

LEGEND FOR AS-BUILT POSTINGS	
	Squiggly line for as-built deletion
	Double line for as-built deletion
Roadway	Text for as-built posting

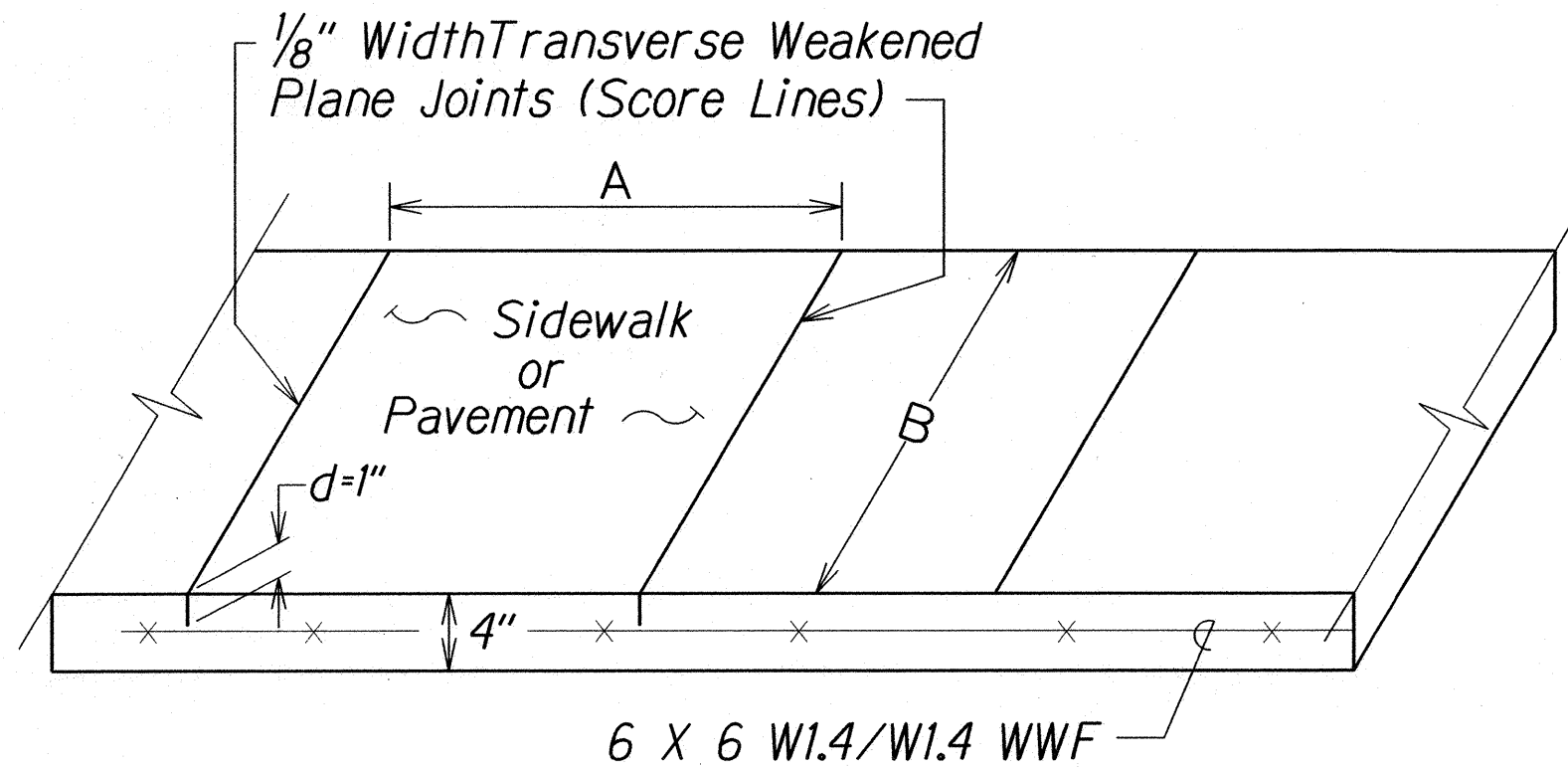
2	11/3/15	Added Pavement Stabilization Notes, Pavement Section and Detail.
DATE		REVISION
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION TYPICAL SECTION & DETAILS LIKELIKE HIGHWAY RESURFACING School Street to Emmeline Place Federal Aid Project No. NH-063-1(023) Scale: 1" = 1.0' Date: Sept., 2015 SHEET No. 9 OF 9 SHEETS		

SURVEY PLOTTED BY	DATE
DRAWN BY	
TRACED BY	
DESIGNED BY	
CHECKED BY	
ORIGINAL PLAN	
NOTE BOOK	
NO.	

2

	Pavement Section			
	1	2	3	4
HMA Pavement, Mix No. IV	3½"	3½"	3½"	3½"
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	n/a	14"	20"	n/a
HMA Permeable Base				
TOTAL DEPTH	29½"	19½"	25½"	5½"

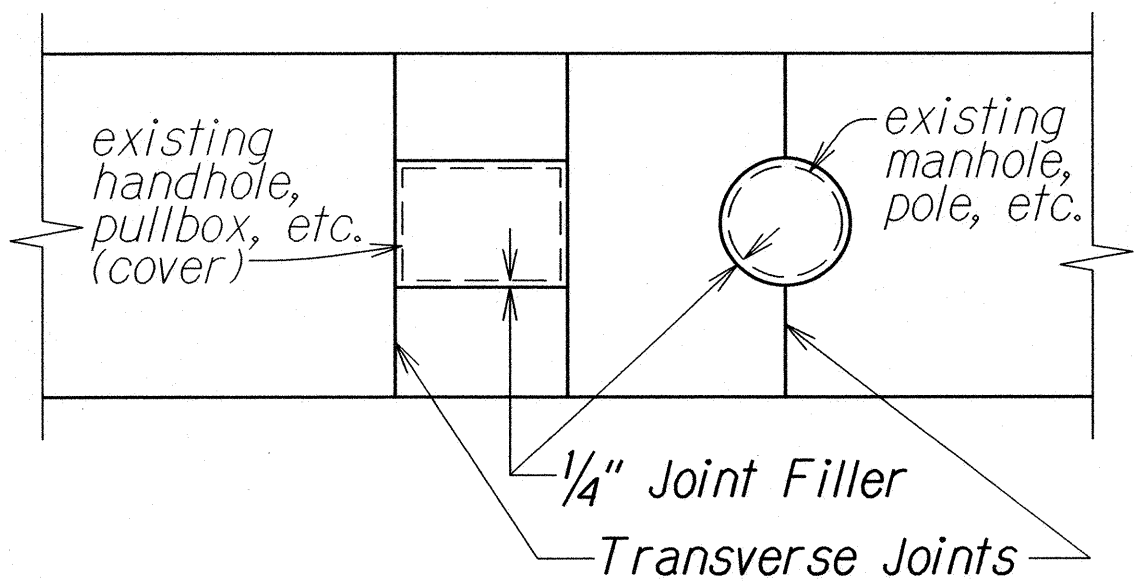
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-063-1(023)	2015	17	111



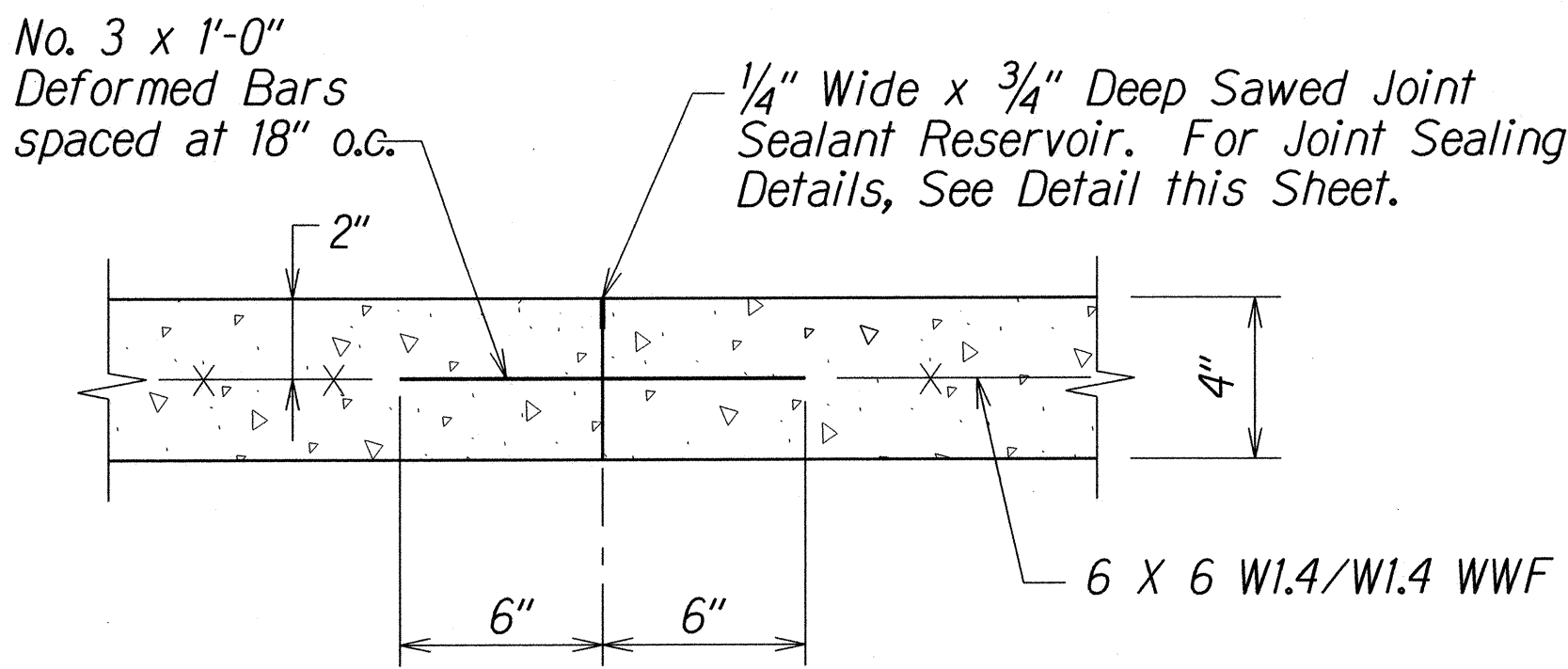
Note:

1. A = 5' if B < 7' or (B/A or A/B) < 1.25 and (A or B) not to exceed 7'0

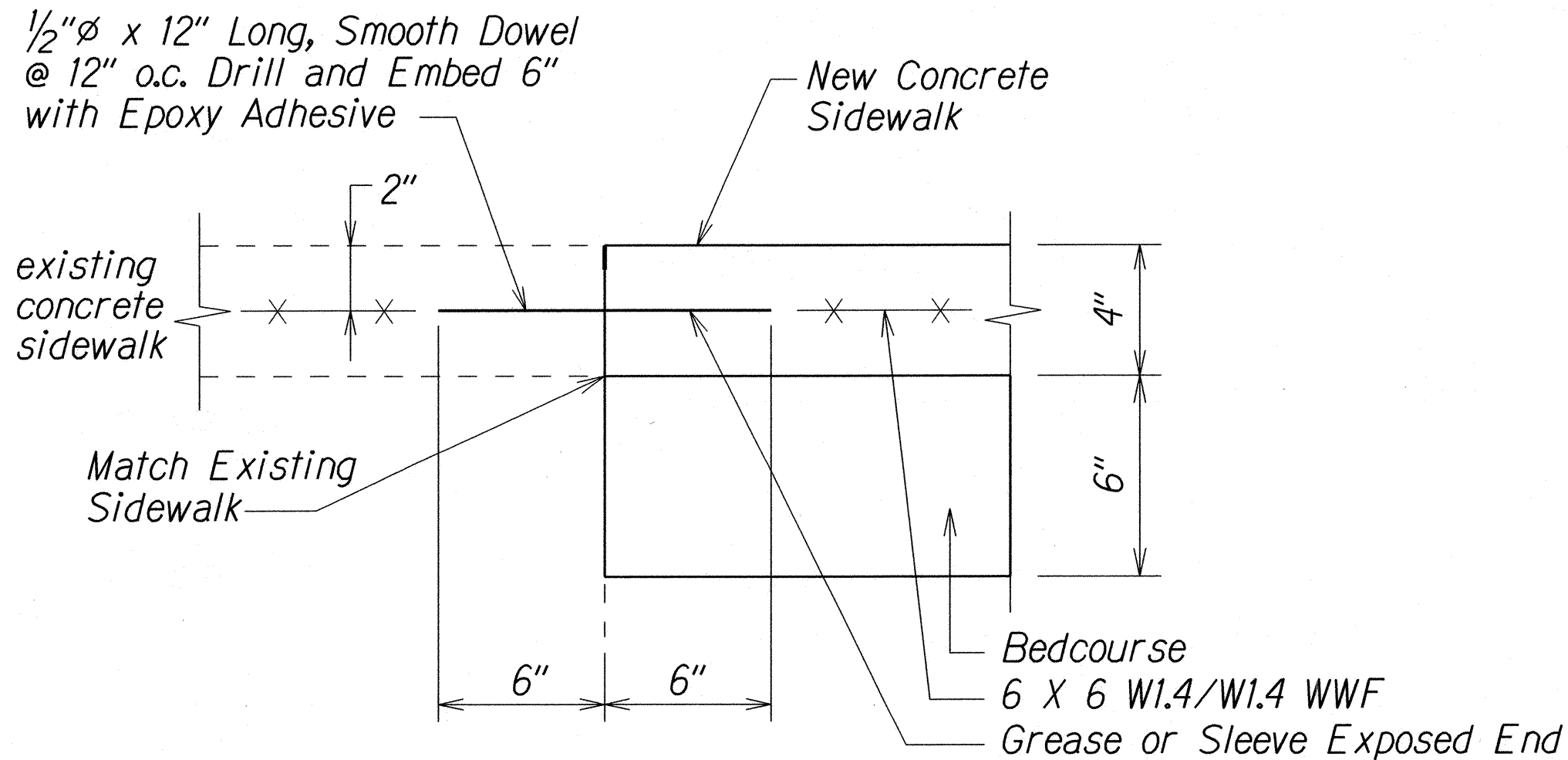
**SIDEWALK SCORE LINE DETAIL**  
Not To Scale



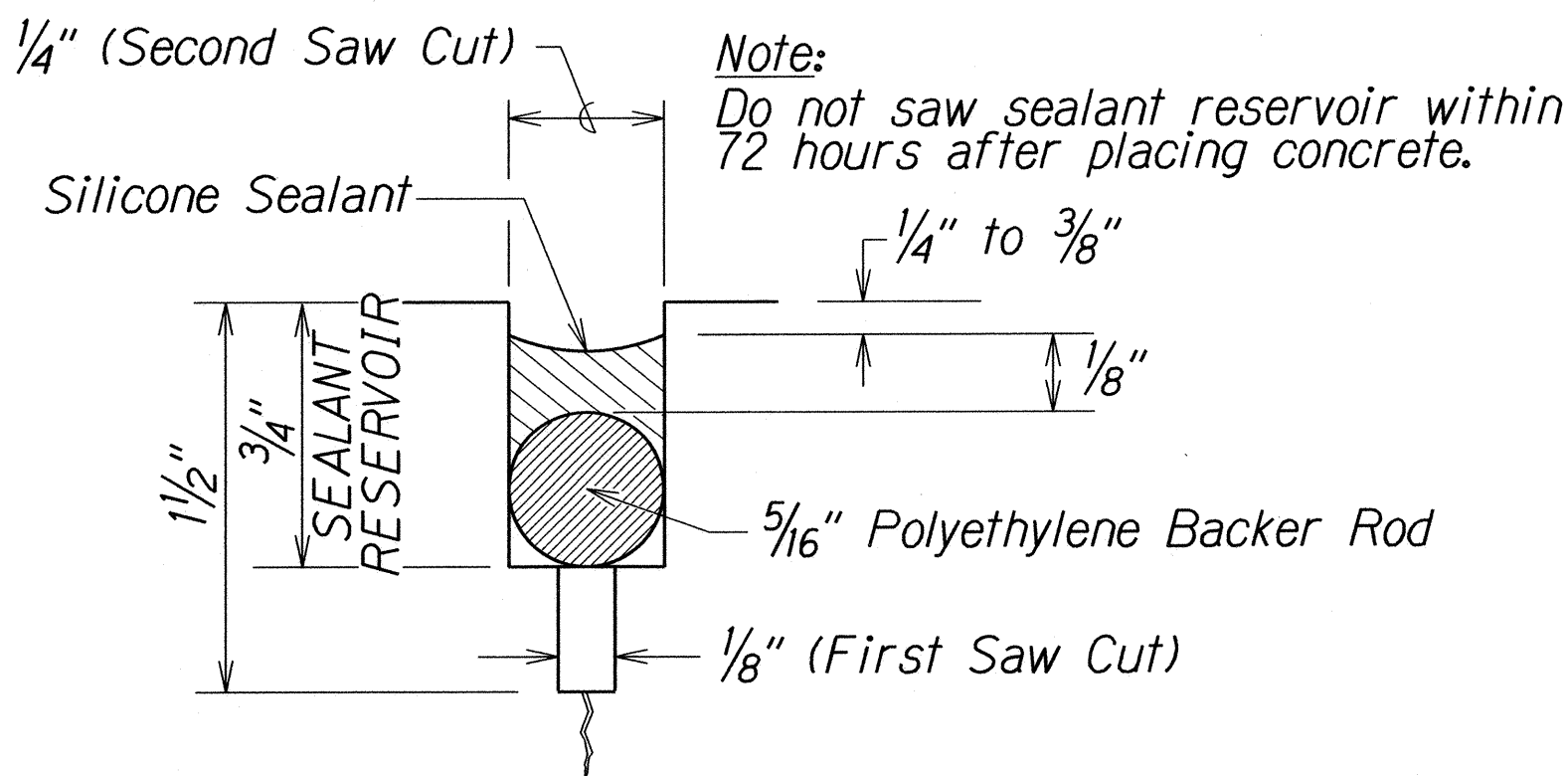
**SIDEWALK ISOLATION JOINT DETAIL**  
Not To Scale



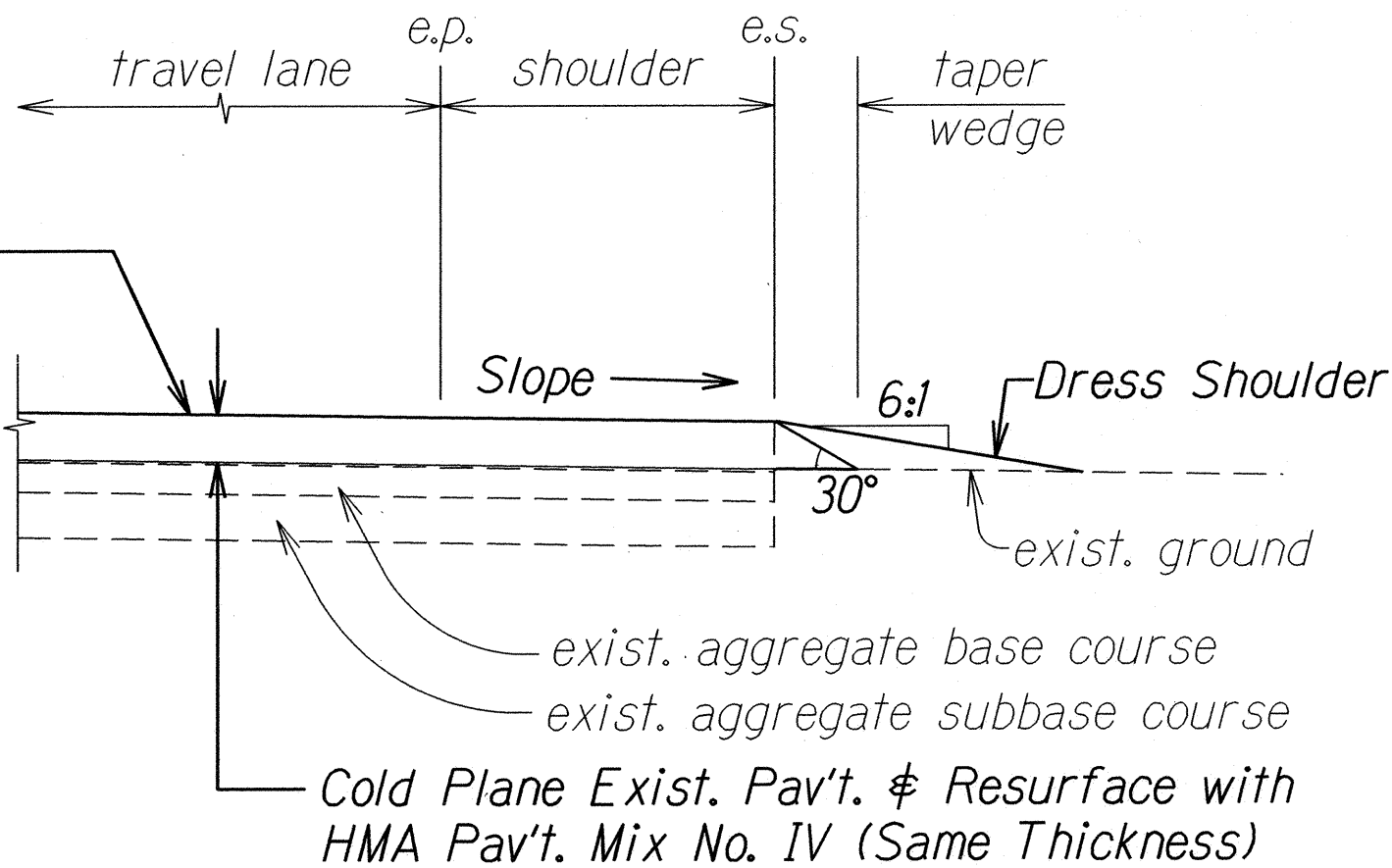
**TRANSVERSE CONSTRUCTION JOINT DETAIL**  
Not to Scale



**TRANSVERSE JOINT AT EXISTING SIDEWALK**  
Not to Scale



**JOINT SEAL DETAIL**  
Not to Scale



**TYPICAL PAVEMENT EDGE DETAIL (FOR COLD PLANING PROJECT)**  
Not to Scale

Note: Contractor shall mount a device directly on the paver screed extension to provide a 30° beveled shoulder edge.

Notes:

1. Dressing of sidewalk shall consist of clearing, grubbing, grading, reshaping and compacting the area adjacent to the improvement with suitable material as shown on the plans and/or as directed by the Engineer.
2. Transverse and longitudinal weakened plane joints for sidewalk shall be considered incidental to the P.C.C. sidewalk contract item.
3. Installation of dowels and tie bars including drilling, and epoxy grout shall be considered incidental to the P.C.C. sidewalk contract item.
4. Existing concrete sidewalk shall be saw cut at scorelines prior to reconstructing the sidewalk. Actual location of the scoreline shall be determined in the field. Saw cutting shall be considered incidental to the sidewalk contract item.
5. Provide smooth transition where new sidewalk construction meets the existing grade or sidewalk. Transition shall not be steeper than 2% cross and longitudinal slopes and not less that 6.0 feet long. This work shall be considered incidental to the P.C.C. sidewalk contract item.

ORIGINAL PLAN	DATE
DESIGNED BY	
NOTED BY	
CHECKED BY	
QUANTITIES BY	
DESIGNED BY	
NOTED BY	
CHECKED BY	
QUANTITIES BY	

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

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

Scale: NTS  
Date: Sept., 2015

SHEET No. 10 OF 10 SHEETS