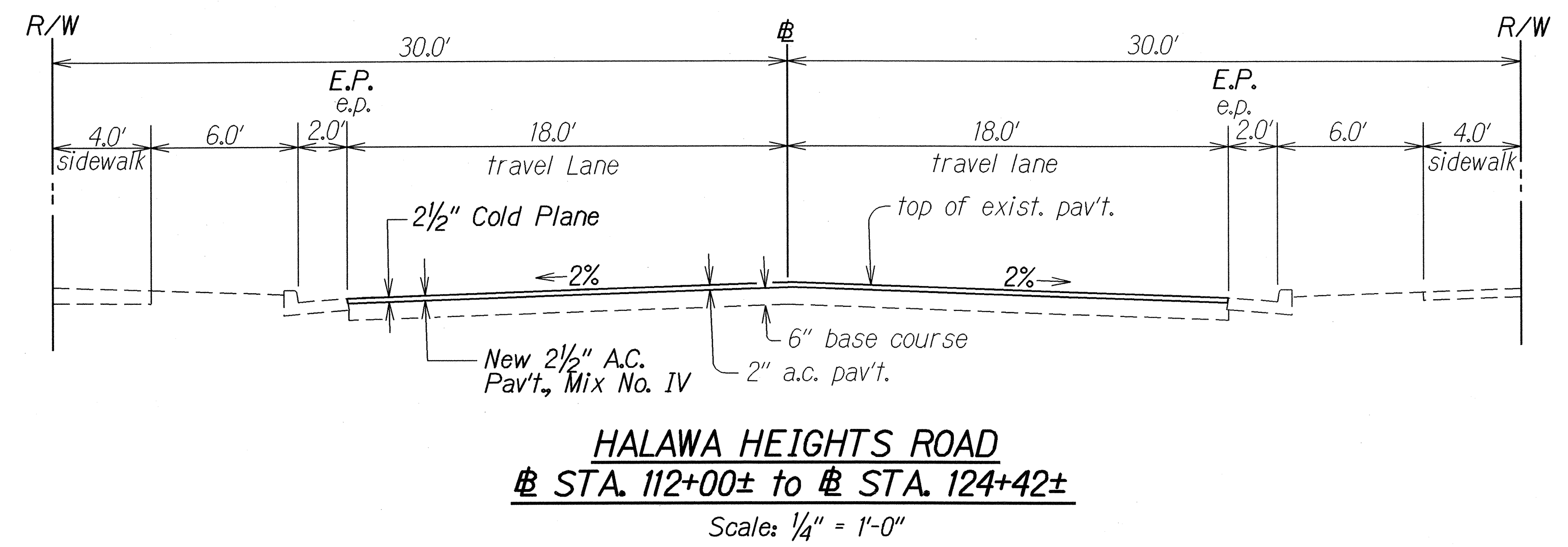
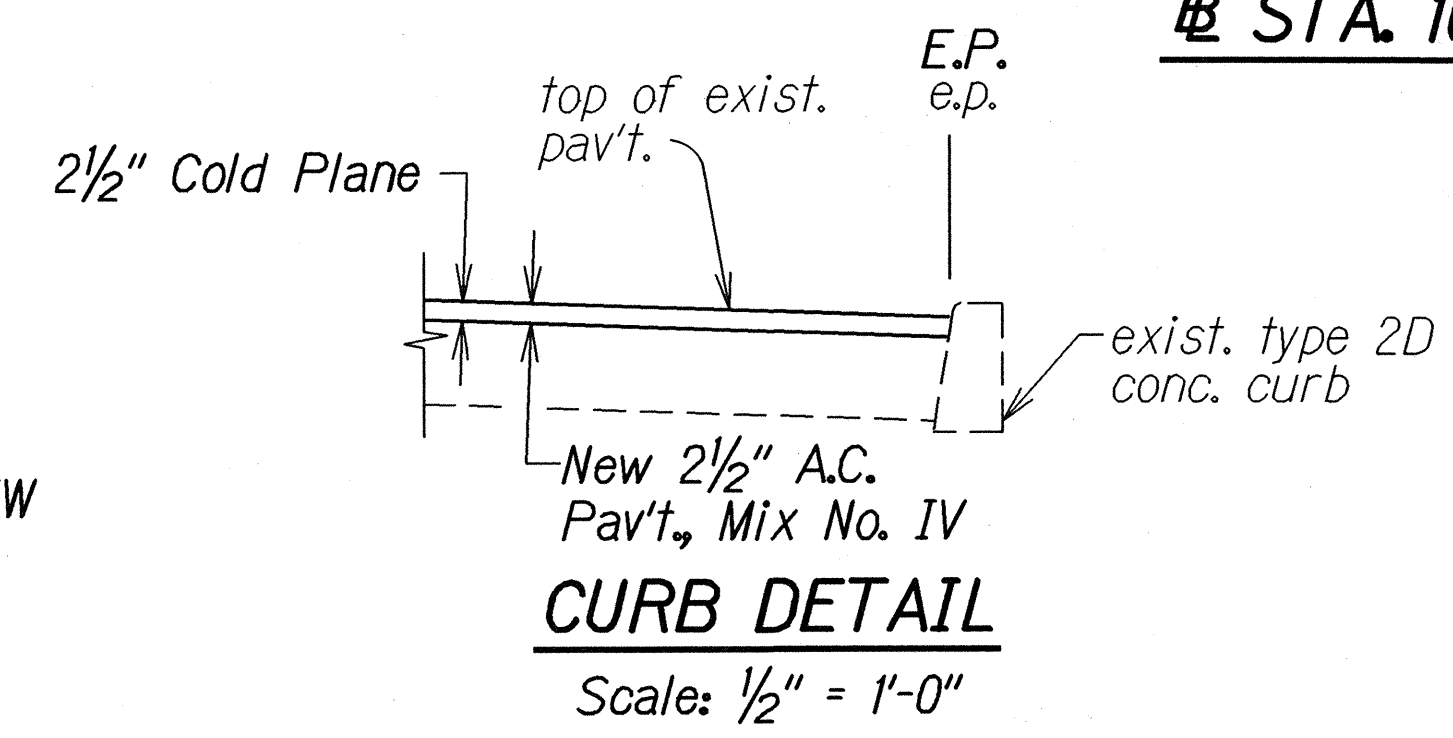
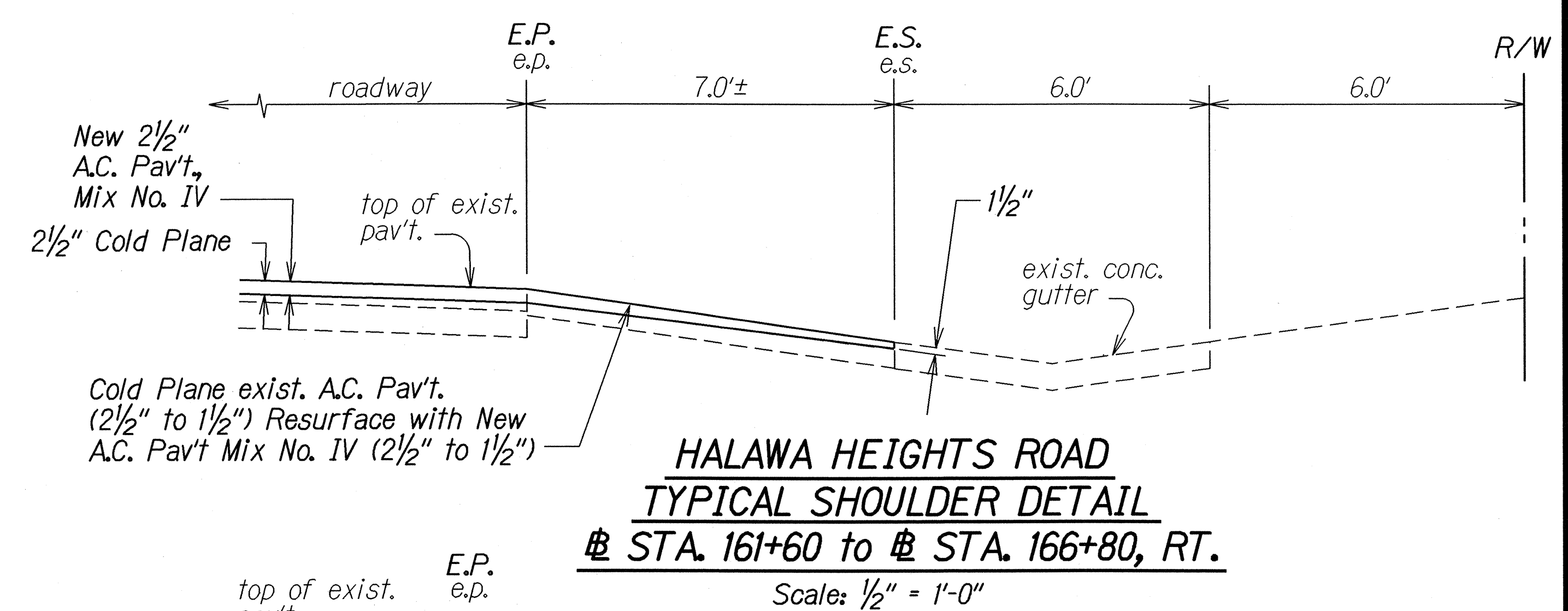
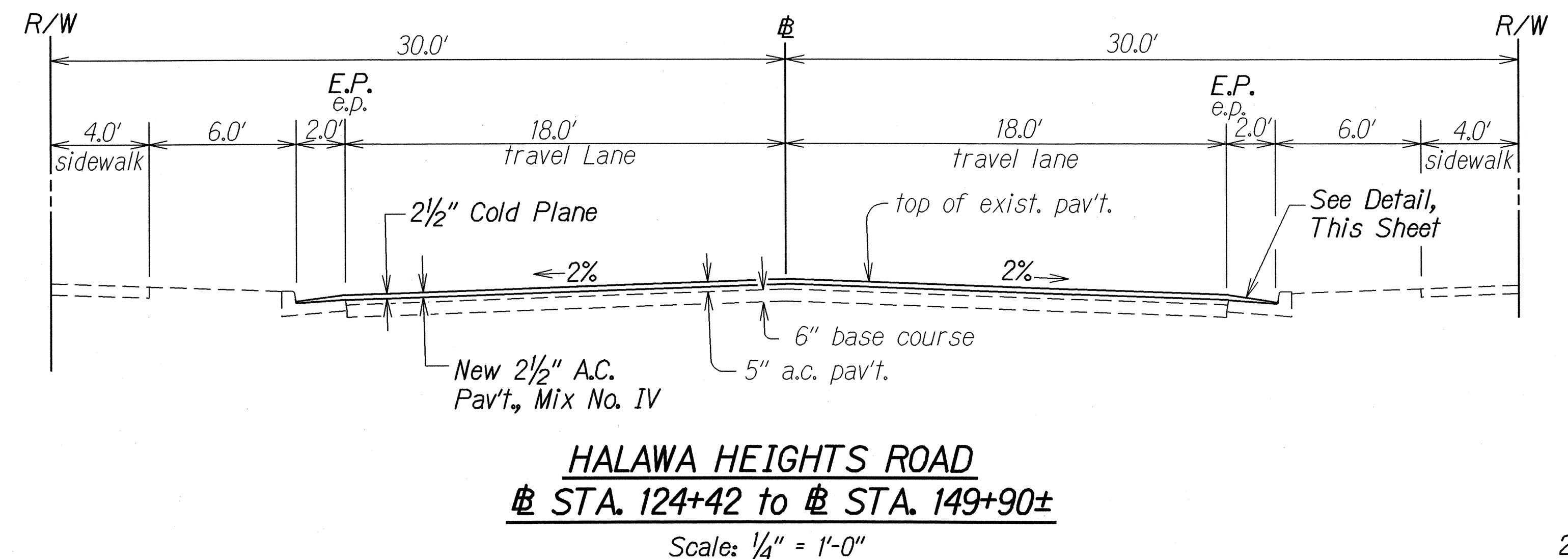
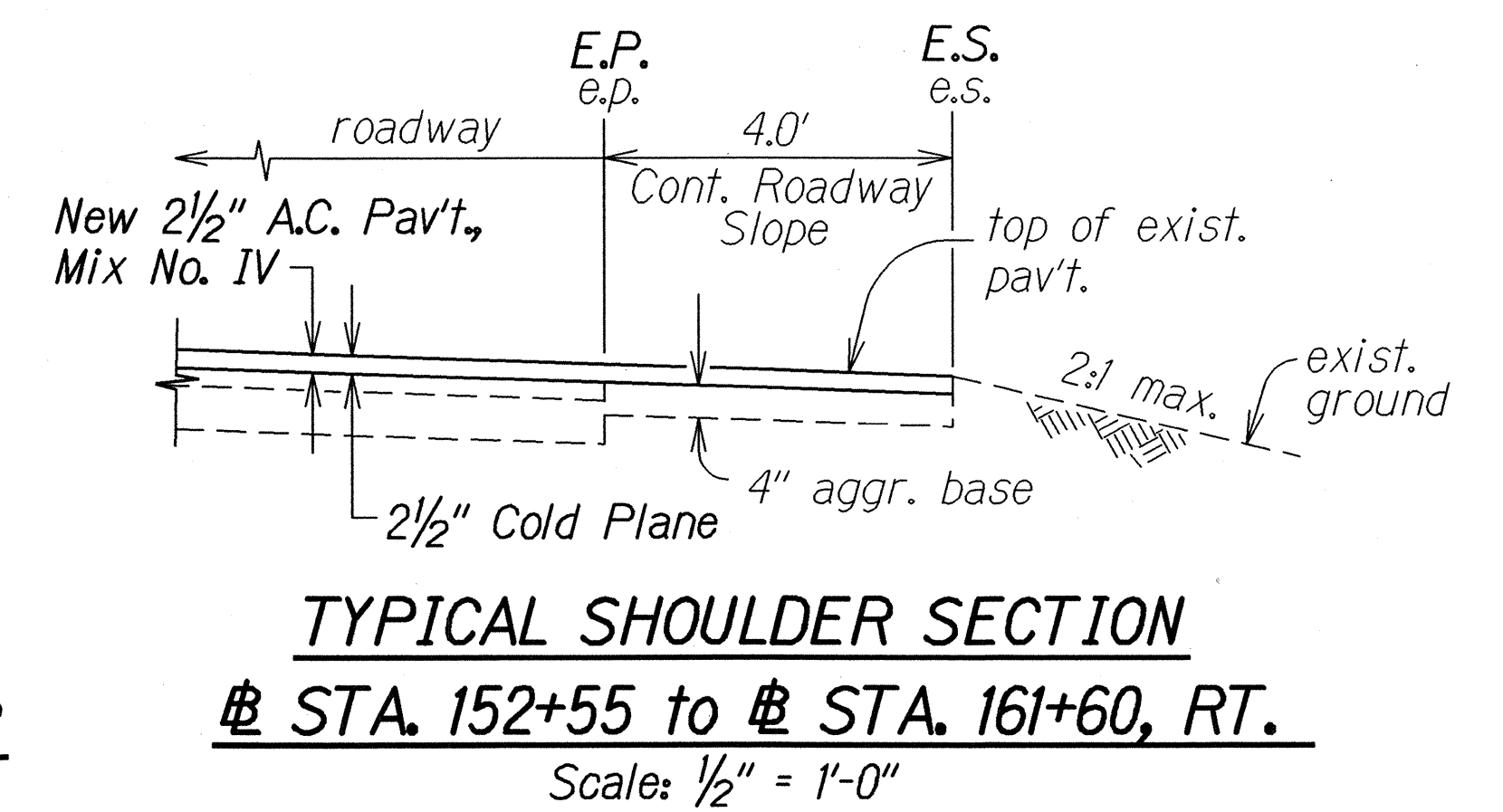
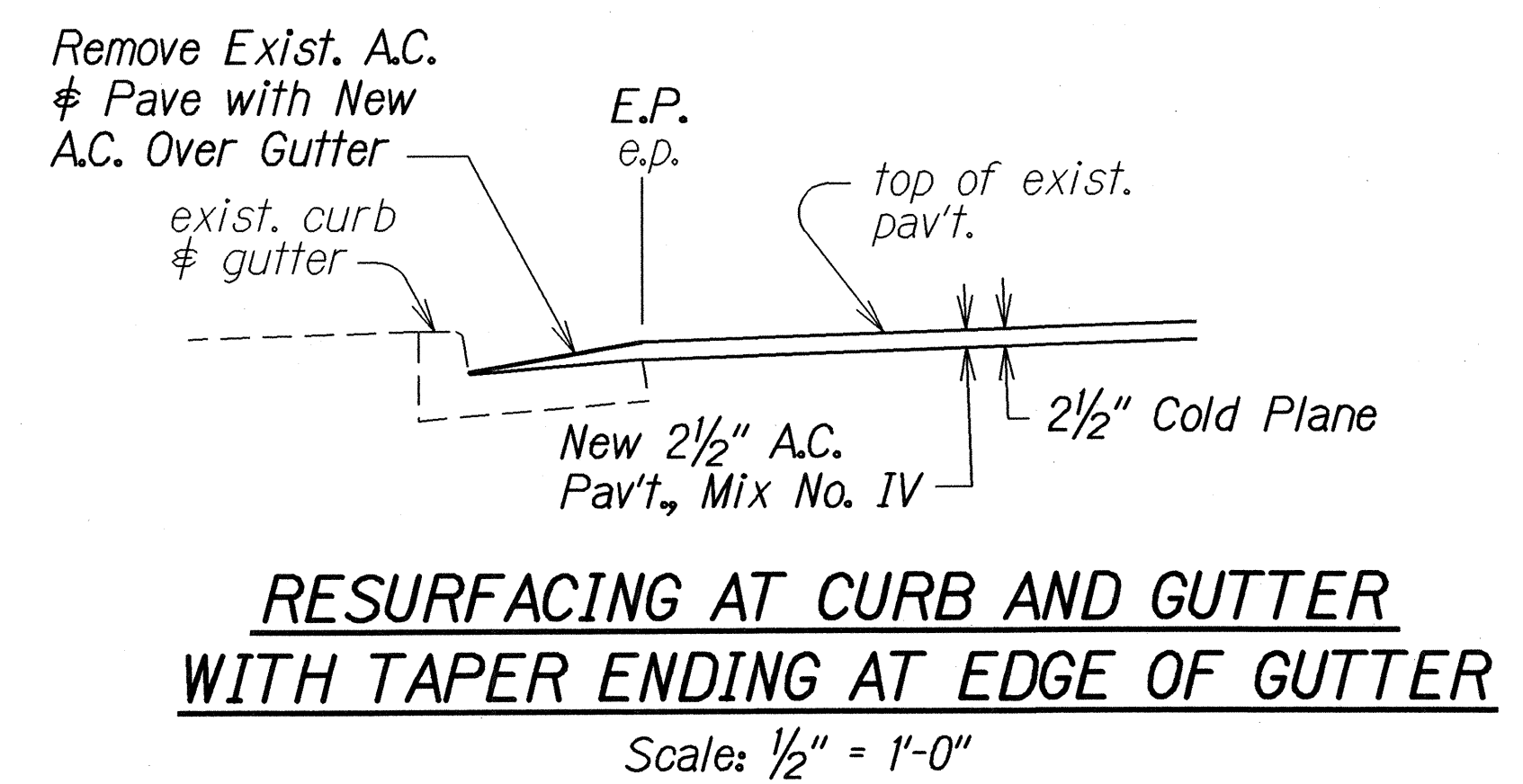
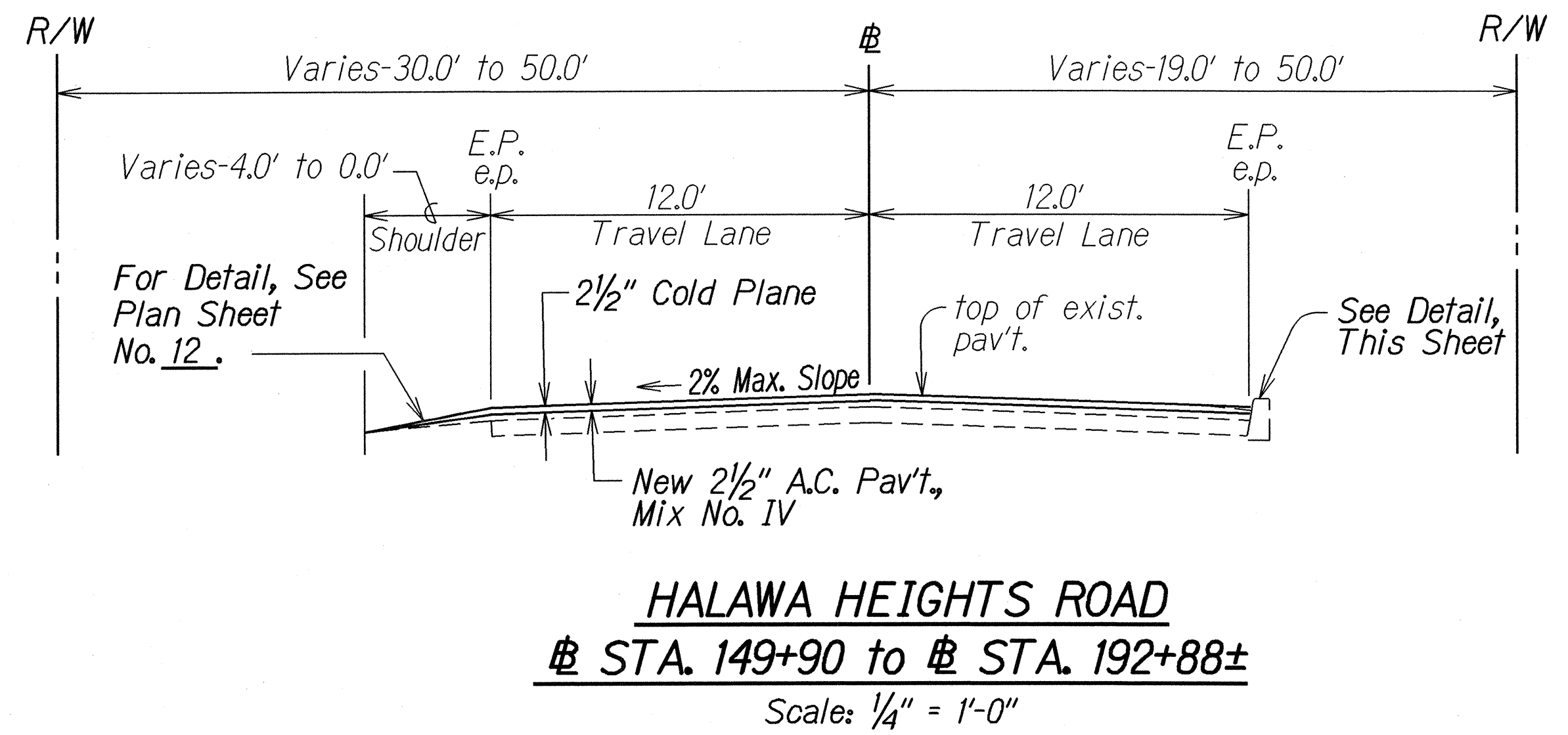


| FED. ROAD DIST. NO. | STATE | PROJ. NO.    | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|--------------|-------------|-----------|--------------|
| HAWAII              | HAW.  | HWY-0-06-03M | 2004        | 4         | 51           |

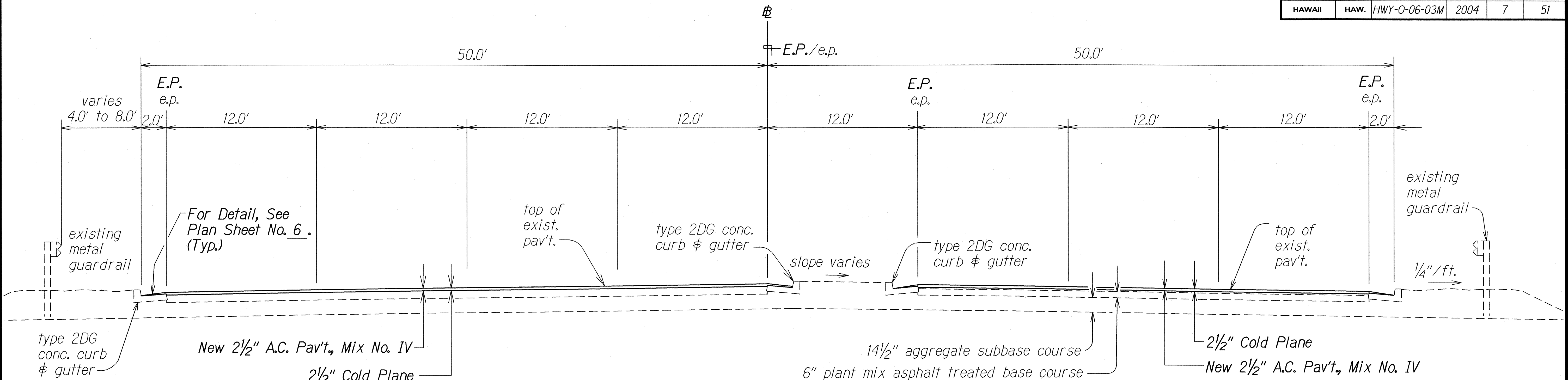


|                   |         |
|-------------------|---------|
| ORIGINAL PLAN     | DATE    |
| SURVEY PLOTTED BY | 4/21/03 |
| DRAWN BY          |         |
| DESIGNED BY       |         |
| QUANTITIES BY     |         |
| CHECKED BY        |         |

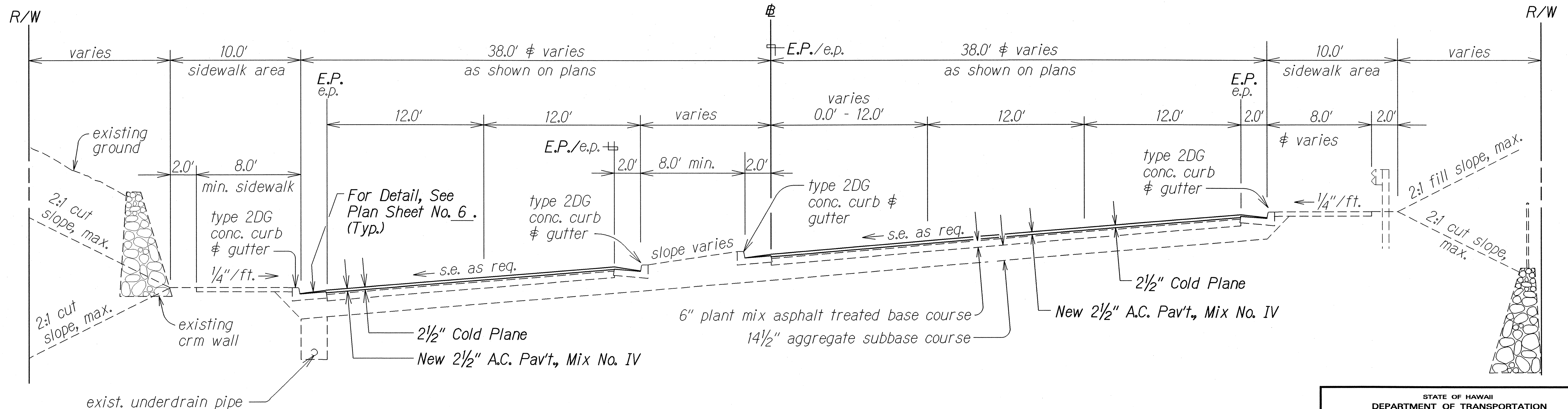
STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

**TYPICAL SECTIONS AND DETAILS**  
**HALAWA HEIGHTS ROAD REHABILITATION**  
**Kikania Street to Fernridge Place and**  
**Kahuapaani Interchange, Moanalua Freeway, H201**  
**Project No. HWY-0-06-03M**  
Scale: As Noted      Date: April, 2004  
SHEET No. 1 OF 7 SHEETS

| FED. ROAD DIST. NO. | STATE | PROJ. NO.    | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|--------------|-------------|-----------|--------------|
| HAWAII              | HAW.  | HWY-0-06-03M | 2004        | 7         | 51           |



**KAHUAPAANI STREET**  
**± STA. 18+00 to ± STA. 19+80±**  
 Scale: 1/4" = 1'-0"



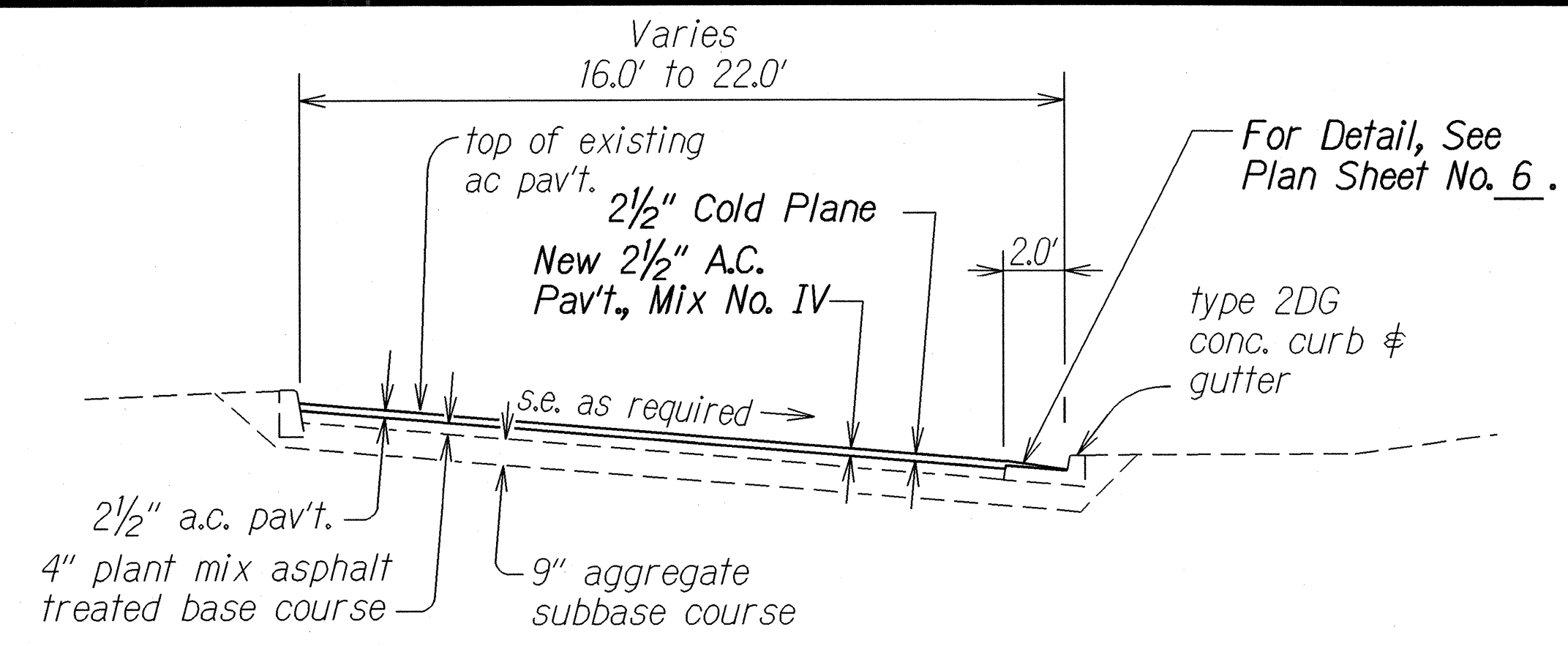
**KAHUAPAANI STREET**  
**± STA. 10+00 to ± STA. 18+00**  
 Scale: 1/4" = 1'-0"

|             |                     |
|-------------|---------------------|
| DATE        | 1/1/04              |
| DESIGNED BY | W. J. B. / J. S. B. |
| DRAWN BY    | W. J. B. / J. S. B. |
| CHECKED BY  | W. J. B. / J. S. B. |
| APPROVED BY | W. J. B. / J. S. B. |

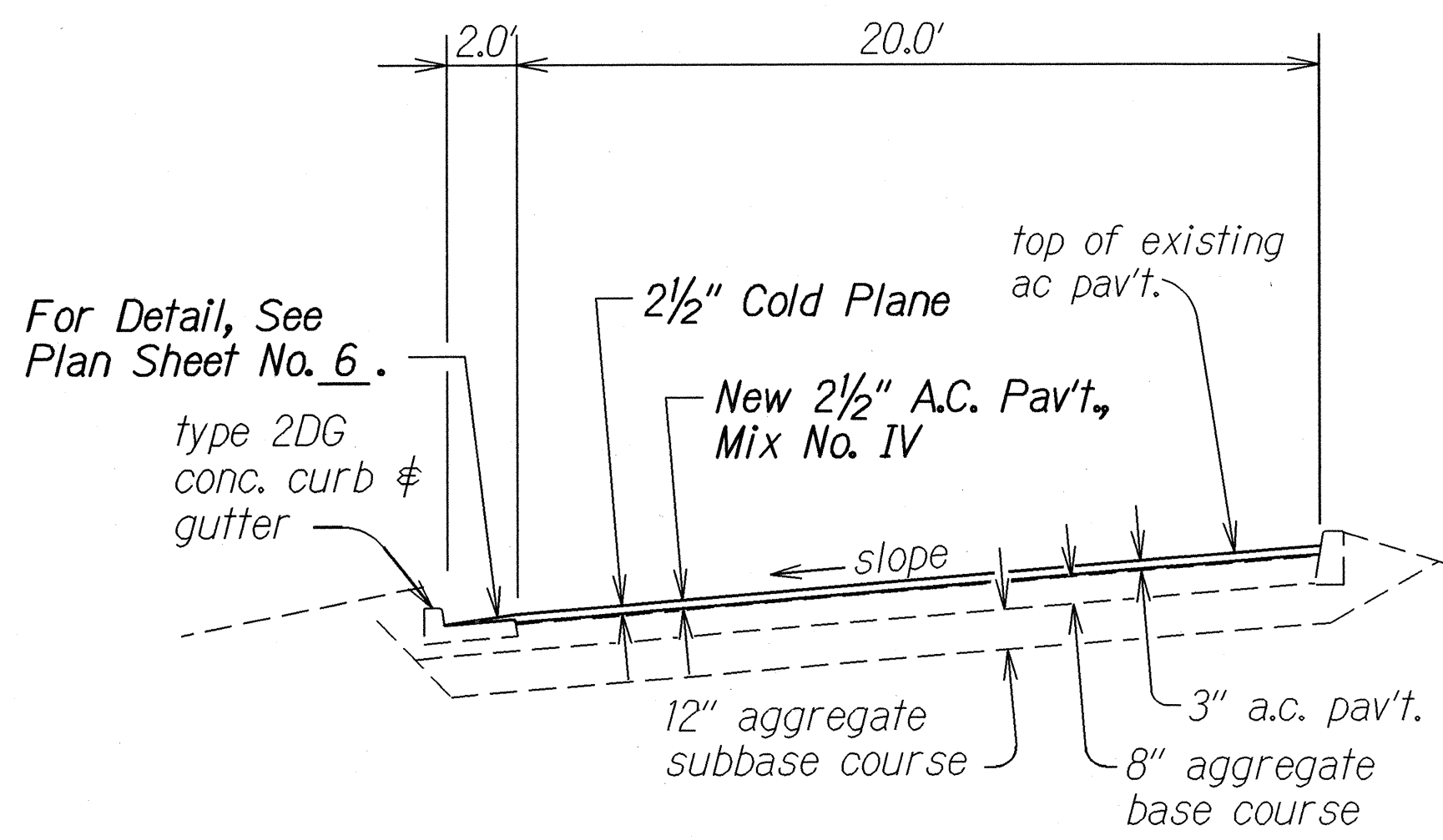
STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

**TYPICAL SECTIONS**  
**HALAWA HEIGHTS ROAD REHABILITATION**  
**Kikania Street to Fernridge Place and**  
**Kahuapaani Interchange, Moanalua Freeway, H201**  
**Project No. HWY-0-06-03M**  
Scale: As Noted  
Date: April, 2004

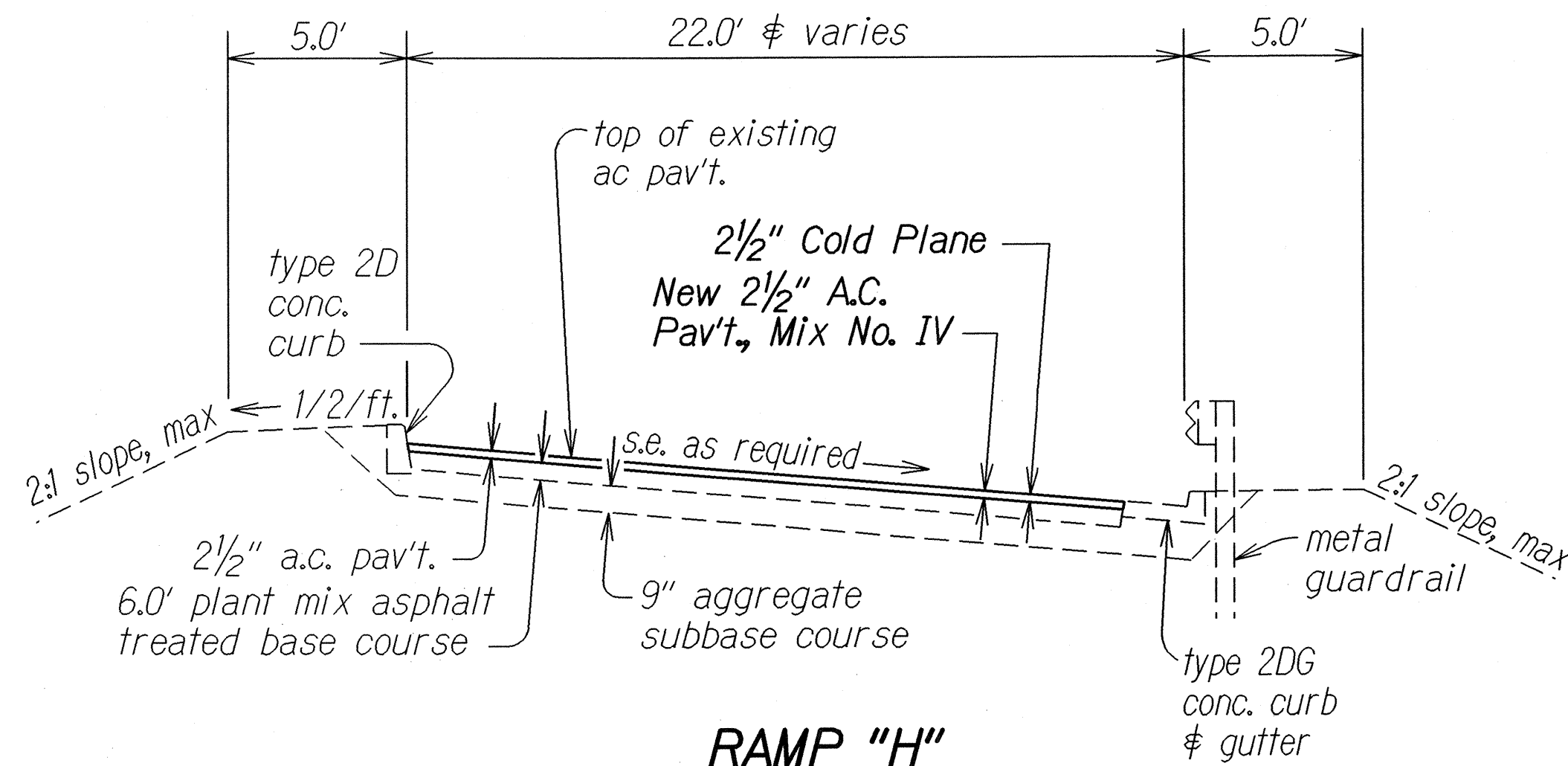
| FED. ROAD DIST. NO. | STATE | PROJ. NO.    | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|--------------|-------------|-----------|--------------|
| HAWAII              | HAW.  | HWY-0-06-03M | 2004        | 8         | 51           |



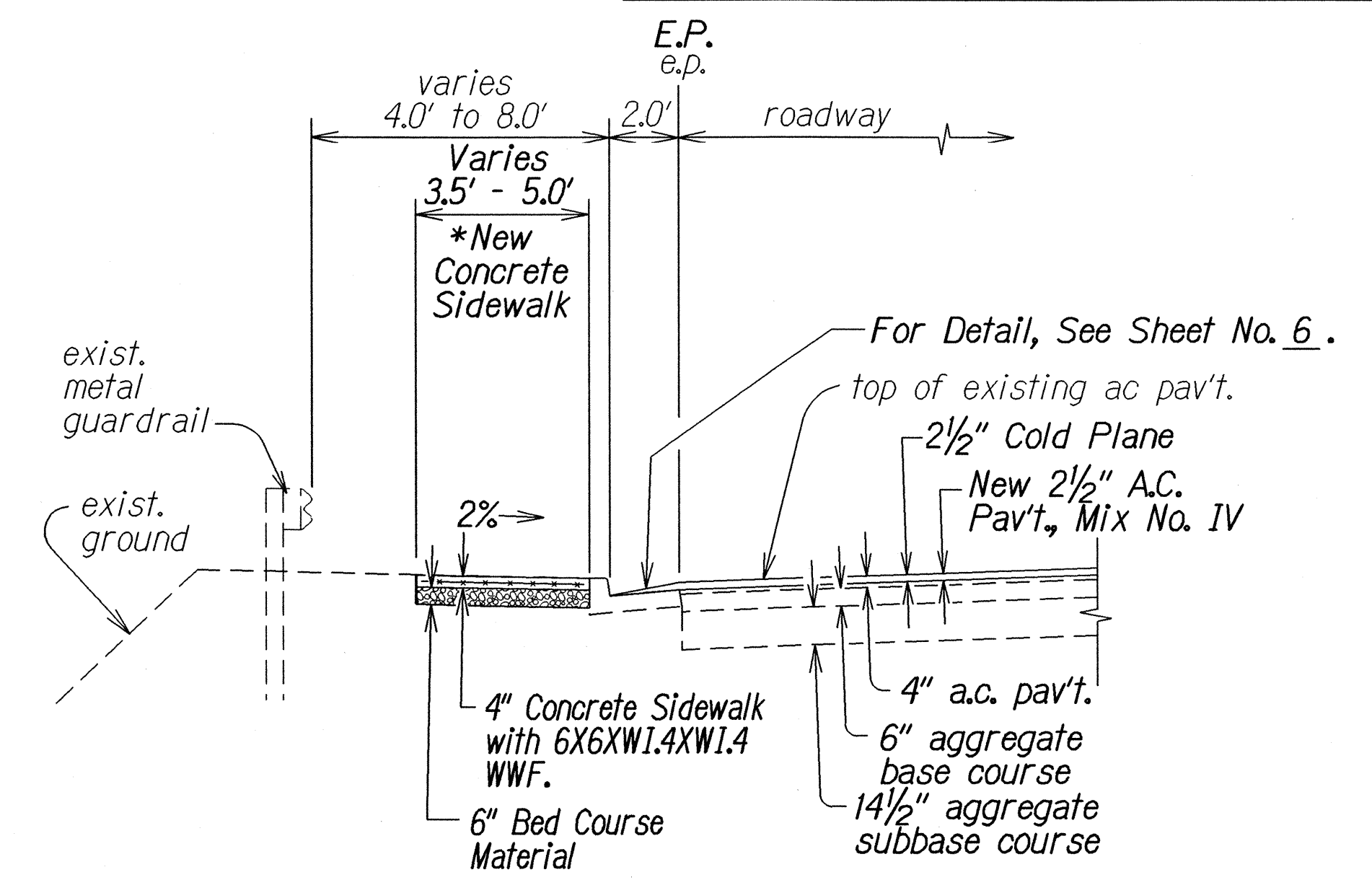
**RAMP "G"**  
**TYPICAL SECTION**  
Scale: 1/4" = 1'-0"



**SERVICE ROAD**  
**TYPICAL SECTION**  
Scale: 1/4" = 1'-0"

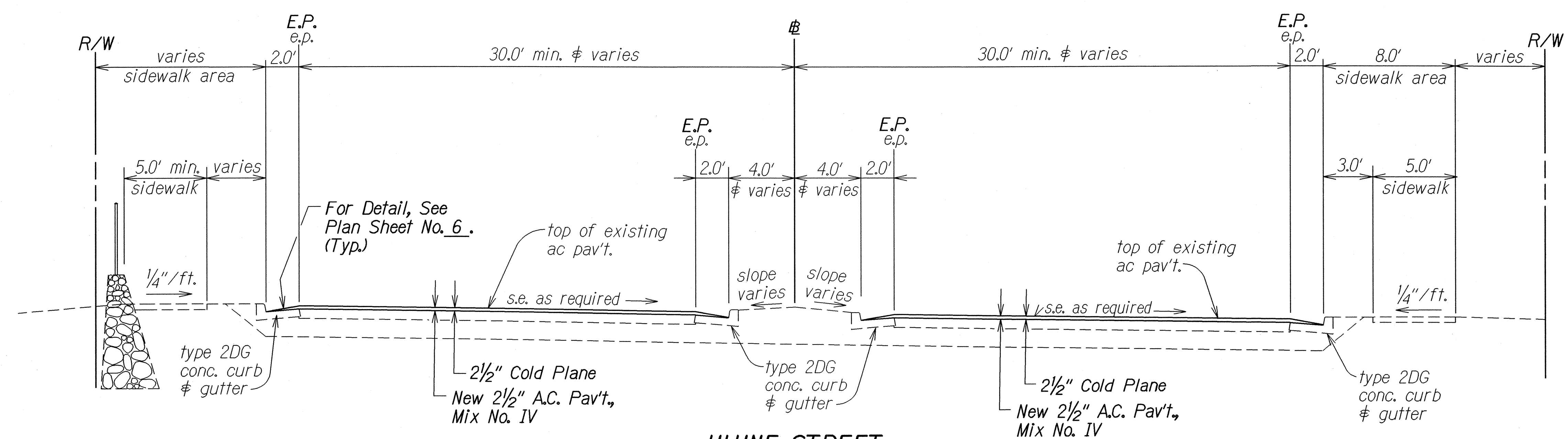


**RAMP "H"**  
**TYPICAL SECTION**  
Scale: 1/4" = 1'-0"



\*Note: For Sidewalk Details, See Plan Sheet No. 11.

**PARTIAL TYPICAL SECTION**  
**± STA. 18+54± to ± STA. 19+63±, Lt.**  
Scale: 1/4" = 1'-0"



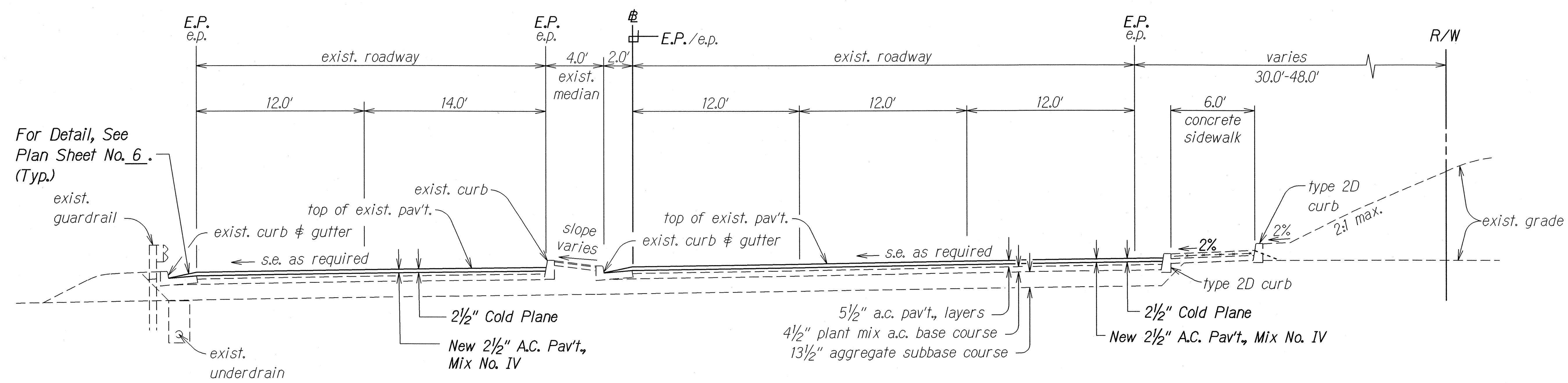
**ULUNE STREET**  
**± STA. 48+40± to ± STA. 46+49±**  
Scale: 1/4" = 1'-0"

|               |          |
|---------------|----------|
| ORIGINAL PLAN | DATE     |
| DESIGNED BY   | 11/20/03 |
| DRAWN BY      |          |
| CHECKED BY    |          |
| APPROVED BY   |          |

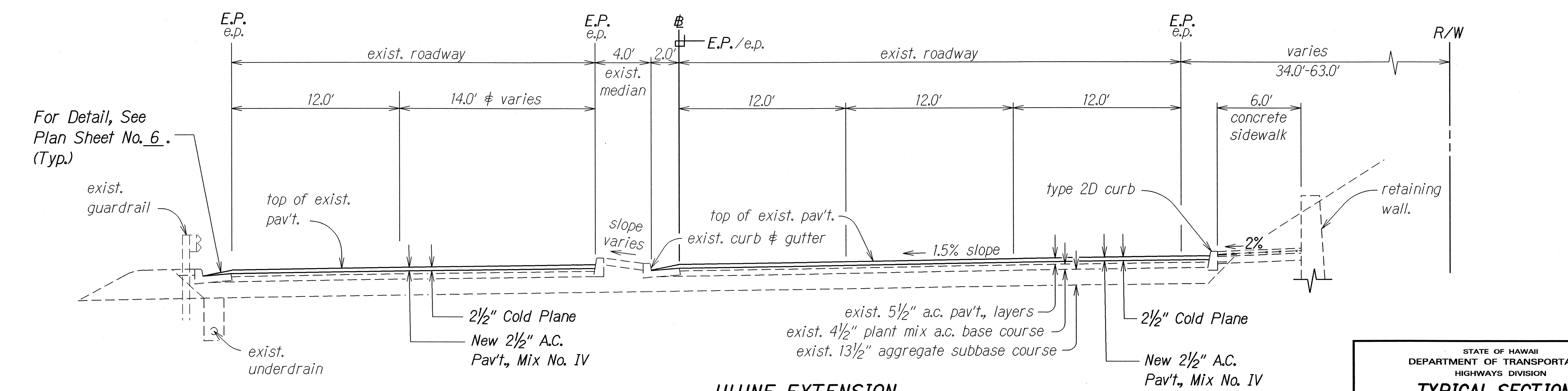
STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

**TYPICAL SECTIONS**  
HALAWA HEIGHTS ROAD REHABILITATION  
Kikania Street to Fernridge Place and  
Kahuapaani Interchange, Moanalua Freeway, H201  
Project No. HWY-0-06-03M  
Scale: As Noted Date: April, 2004  
SHEET No. 3 OF 7 SHEETS

| FED. ROAD DIST. NO. | STATE | PROJ. NO.    | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|--------------|-------------|-----------|--------------|
| HAWAII              | HAW.  | HWY-0-06-03M | 2004        | 9         | 51           |



**ULUNE EXTENSION**  
**± STA. 42+00± to ± STA. 43+95±**  
 Scale: 1/4" = 1'-0"



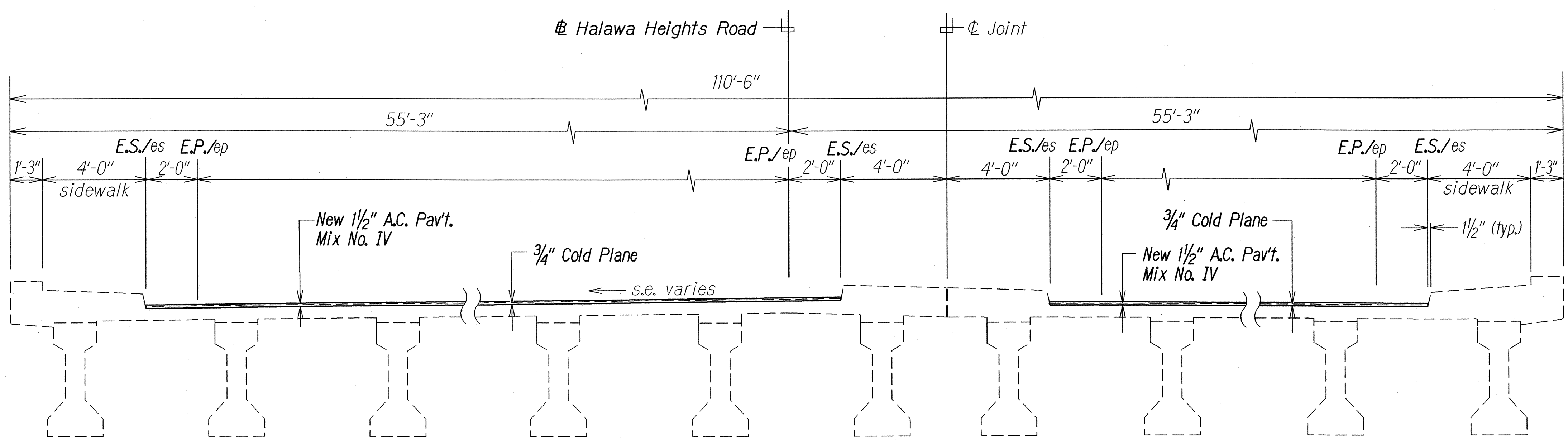
**ULUNE EXTENSION**  
**± STA. 38+61± to ± STA. 42+00±**  
 Scale: 1/4" = 1'-0"

|             |     |
|-------------|-----|
| DATE        | BY  |
| DESIGNED BY | ... |
| CHECKED BY  | ... |
| APPROVED BY | ... |

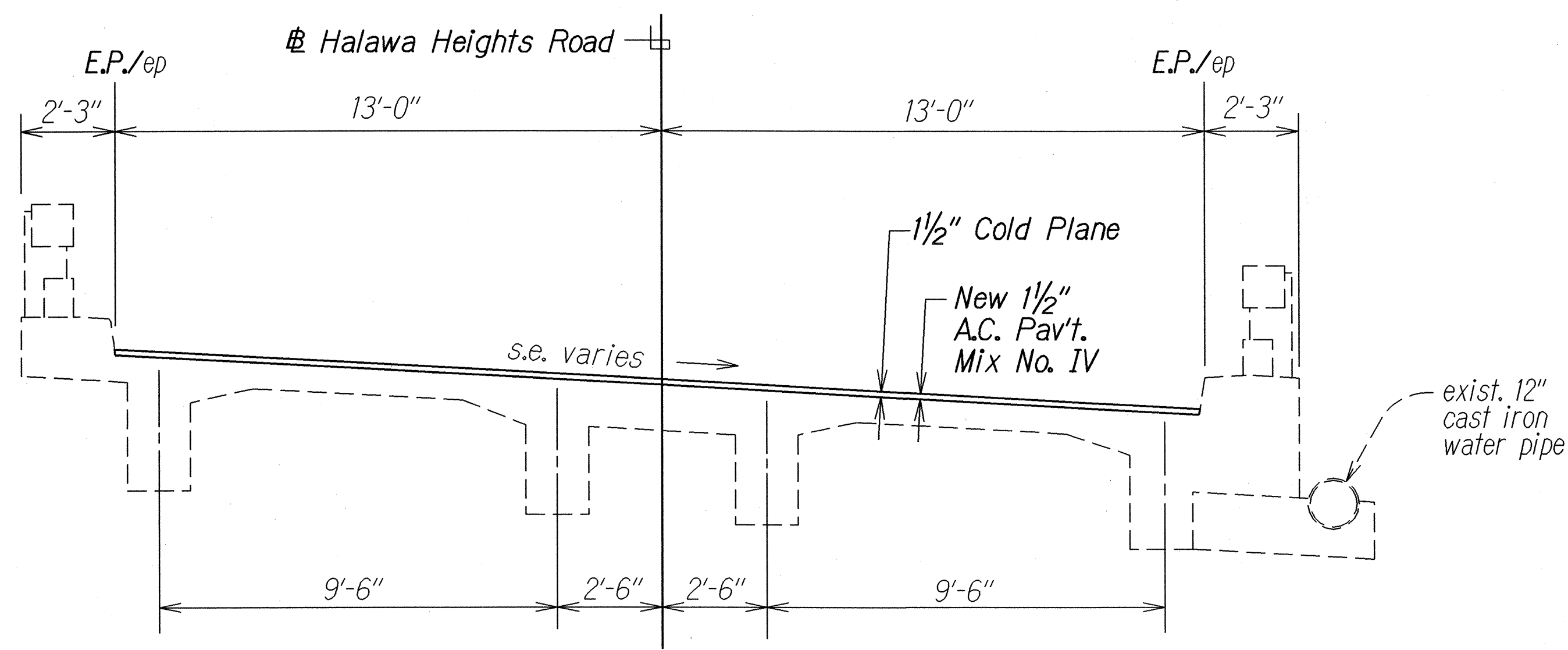
STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

**TYPICAL SECTIONS**  
**HALAWA HEIGHTS ROAD REHABILITATION**  
**Kikania Street to Fernridge Place and**  
**Kahuapaani Interchange, Moanalua Freeway, H201**  
**Project No. HWY-0-06-03M**  
Scale: As Noted      Date: April, 2004  
SHEET No. 4 OF 7 SHEETS

| FED. ROAD DIST. NO. | STATE | PROJ. NO.    | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|--------------|-------------|-----------|--------------|
| HAWAII              | HAW.  | HWY-0-06-03M | 2004        | ADD.10    | 51           |



**NORMAL SECTION-STRUCTURE NO. 10**  
 Scale: 3/8"=1'-0"

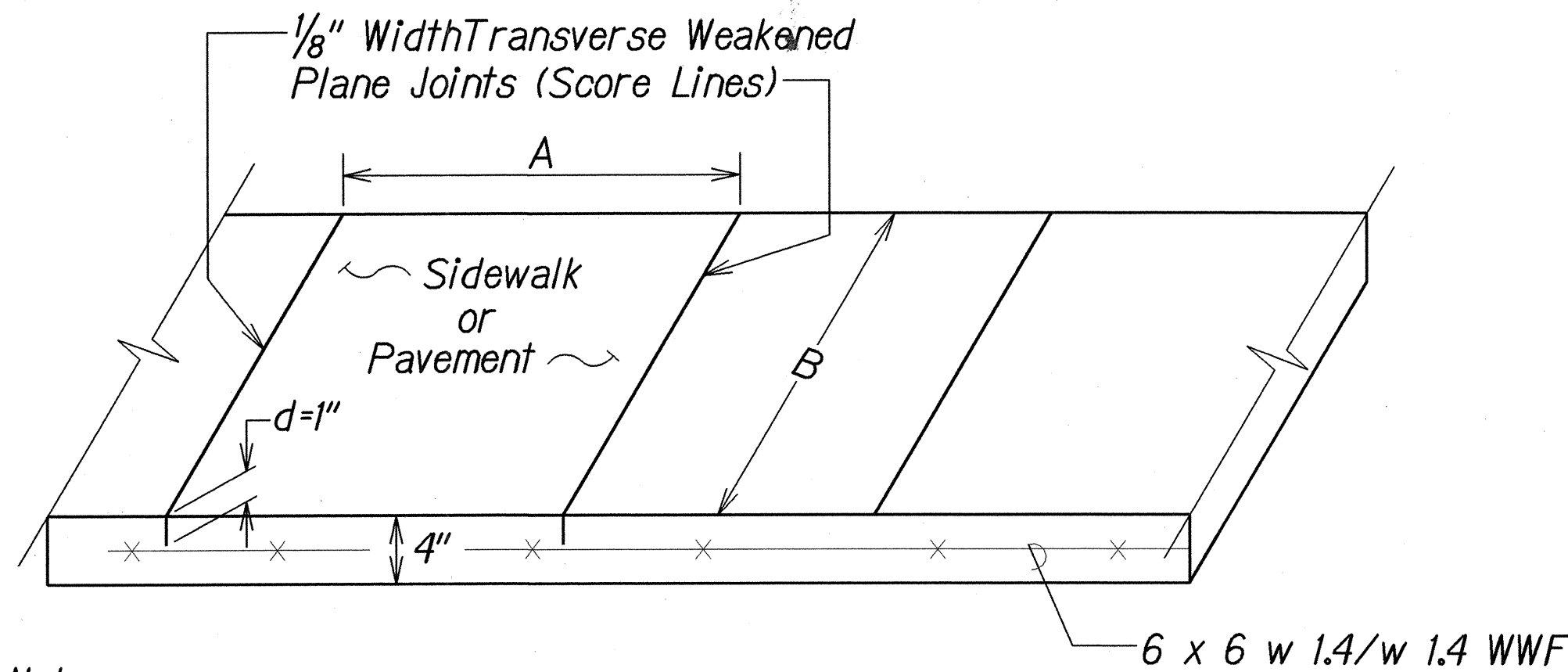


**NORMAL SECTION-HALAWA HEIGHTS OVERPASS**  
 Scale: 3/8"=1'-0"

|            |      |          |
|------------|------|----------|
| ORIGINAL   | DATE | 11/20/02 |
| SURVEY     | BY   |          |
| PLAN       | BY   |          |
| DESIGNED   | BY   |          |
| QUANTITIES | BY   |          |
| CHECKED    | BY   |          |

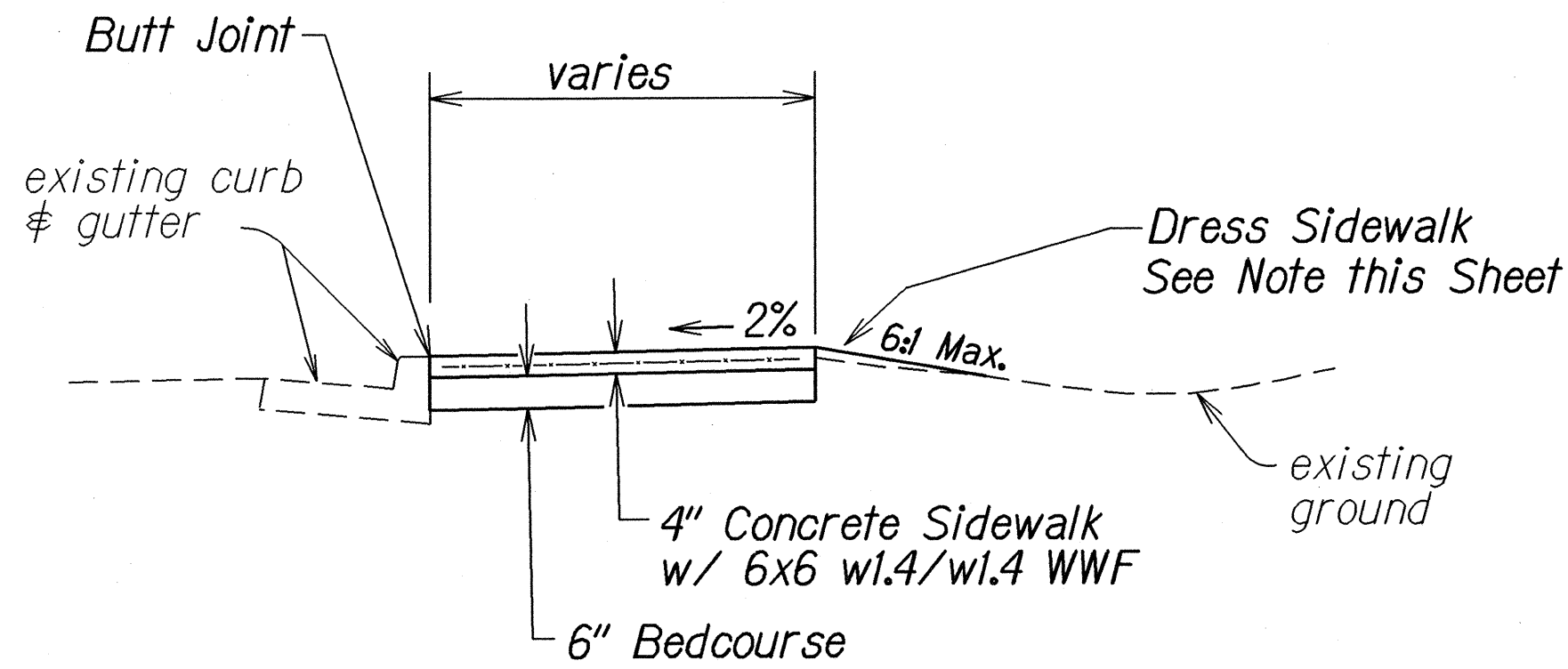
| 6/14/04                                                                                                                                                                                                                                                                                                                                                              | Revise Normal Section Structure No. 10 per Addendum No. 1. |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------|
| DATE                                                                                                                                                                                                                                                                                                                                                                 | REVISION                                                   |
| STATE OF HAWAII<br>DEPARTMENT OF TRANSPORTATION<br>HIGHWAYS DIVISION<br><b>TYPICAL SECTIONS AND DETAILS</b><br><b>HALAWA HEIGHTS ROAD REHABILITATION</b><br><b>Kikania Street to Fernridge Place and</b><br><b>Kahuapaani Interchange, Moanalua Freeway, H201</b><br><b>Project No. HWY-0-06-03M</b><br>Scale: As shown Date: April, 2004<br>SHEET No. 5 OF 7 SHEETS |                                                            |

| FED. ROAD DIST. NO. | STATE | PROJ. NO.    | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|--------------|-------------|-----------|--------------|
| HAWAII              | HAW.  | HWY-0-06-03M | 2004        | 11        | 51           |

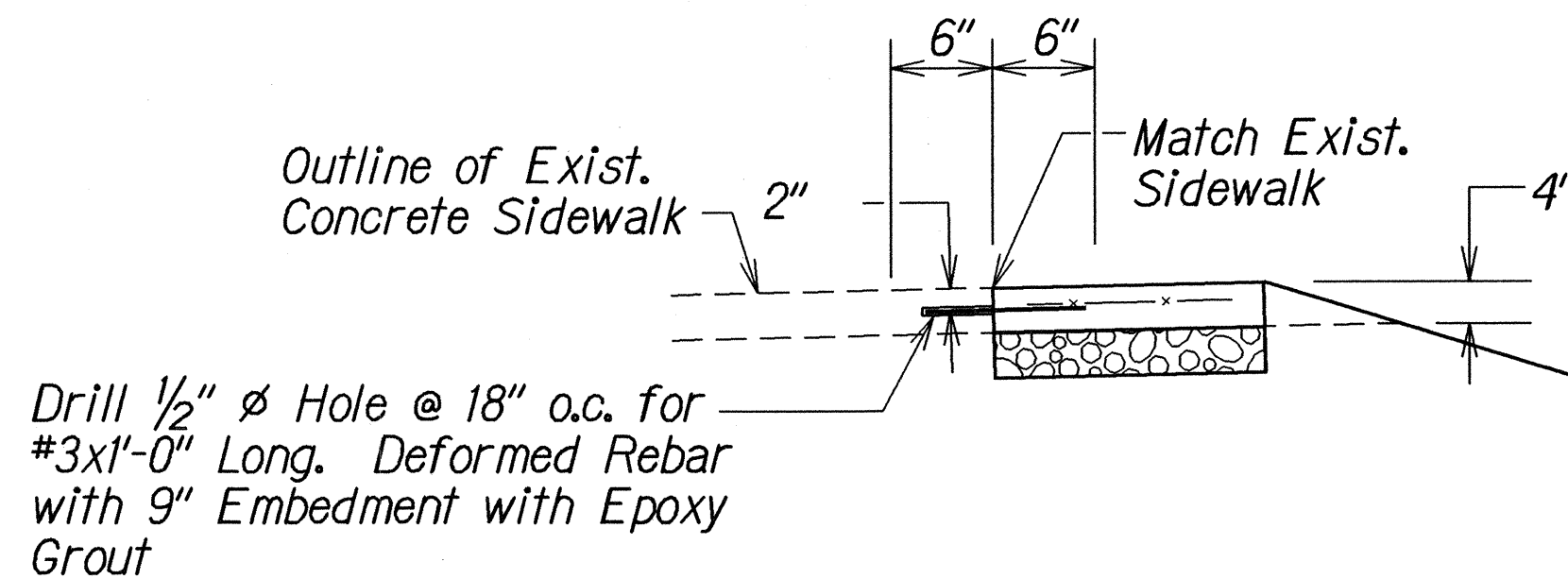


- Note:
1. Joint dimension ratios (B/A or A/B) < 1.25 and (A or B) not to exceed 7'
  1. Longitudinal weakened plane joints similar to transverse weakened plane joints.

TYPICAL SIDEWALK DETAIL  
Not To Scale



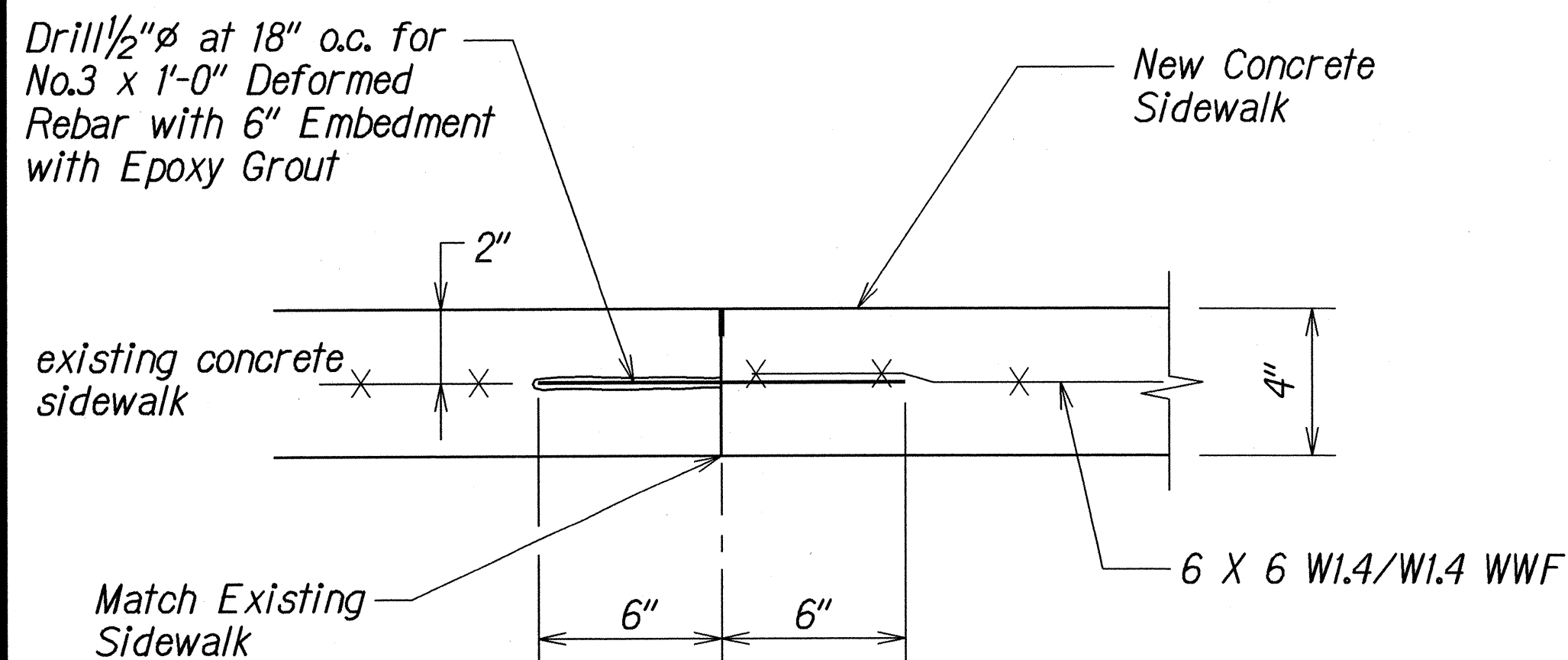
SIDEWALK DETAIL  
Not to Scale



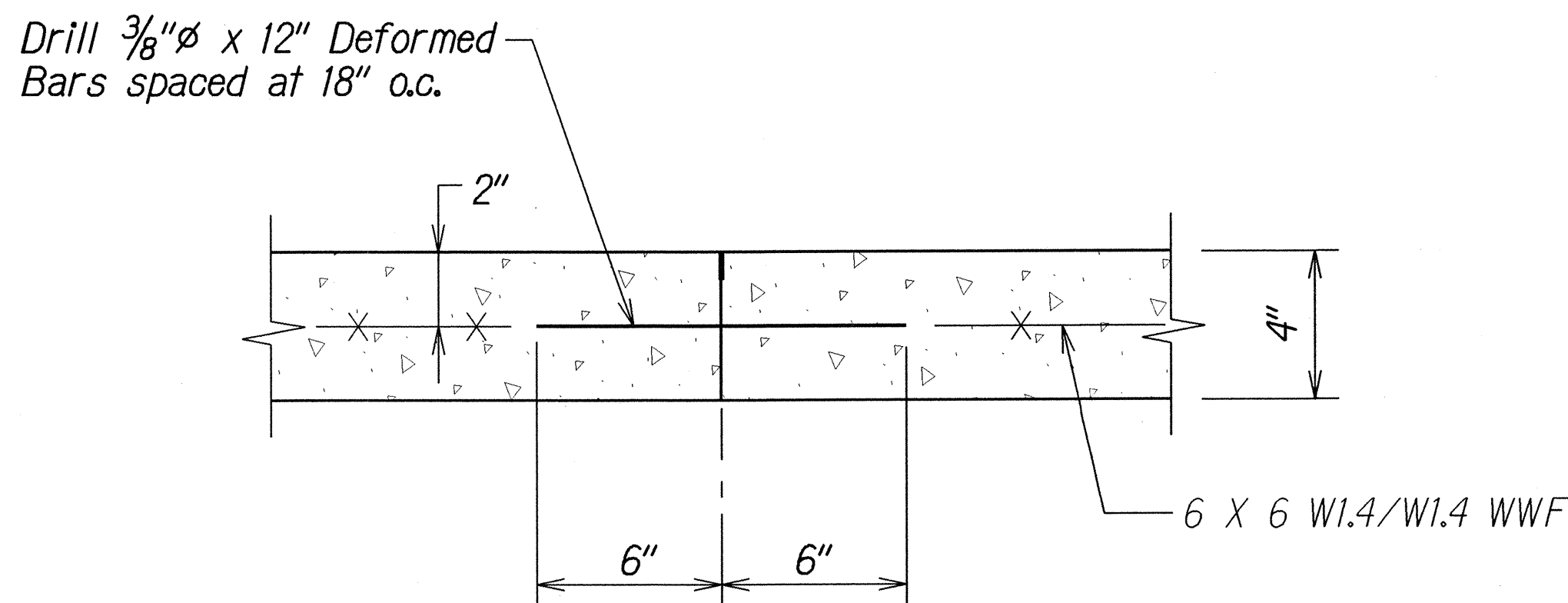
- Note:
1. Do not install rebars within 4" of any planned transverse weakened plane joint or transverse construction joint.

LONGITUDINAL JOINT  
AT EXISTING SIDEWALK  
Not to Scale

- 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. If existing ground is asphalt or concrete surface, dress sidewalk with A.C. pavement, Mix No. V. This work shall be considered incidental to the new sidewalk.
  2. Transverse and longitudinal weakened Plane Joints for sidewalk shall be considered incidental to the New Sidewalk.
  3. Installation of tie bars including drilling, and epoxy grout shall be incidental to Sidewalk.



TRANSVERSE JOINT AT EXISTING SIDEWALK  
Not to Scale



TRANSVERSE CONSTRUCTION JOINT DETAIL  
Not to Scale

STATE OF HAWAII

DEPARTMENT OF TRANSPORTATION

HIGHWAYS DIVISION

**TYPICAL DETAILS**

HALAWA HEIGHTS ROAD REHABILITATION

Kikania Street to Fernridge Place and

Kahuapaani Interchange, Moanalua Freeway, H201

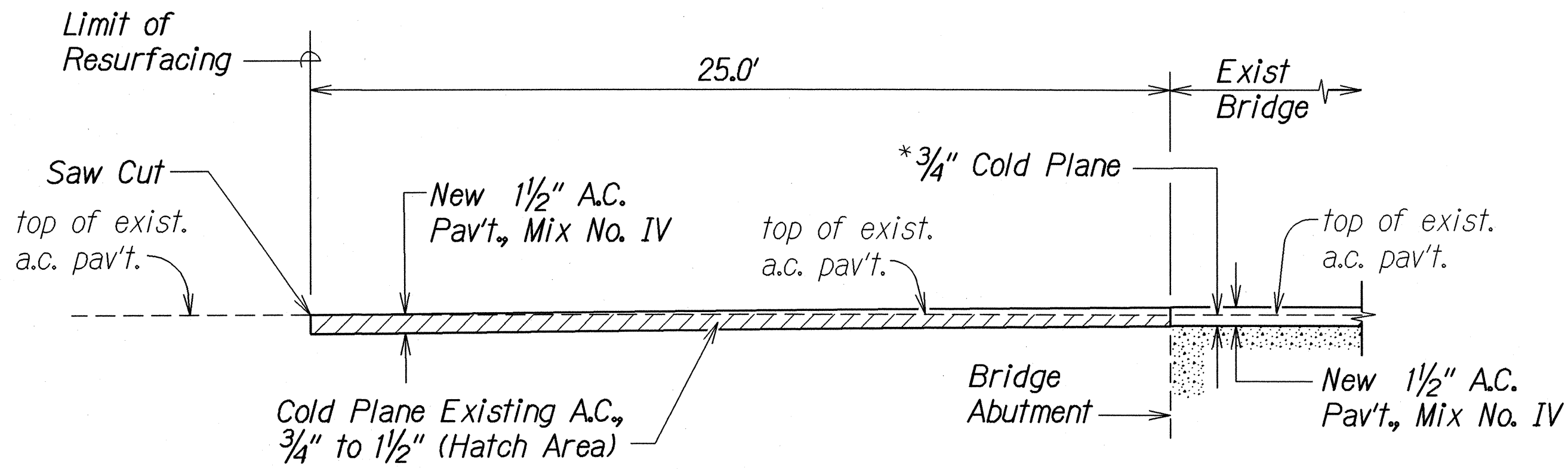
Project No. HWY-0-06-03M

Scale: As Noted Date: April, 2004

SHEET No. 6 OF 7 SHEETS

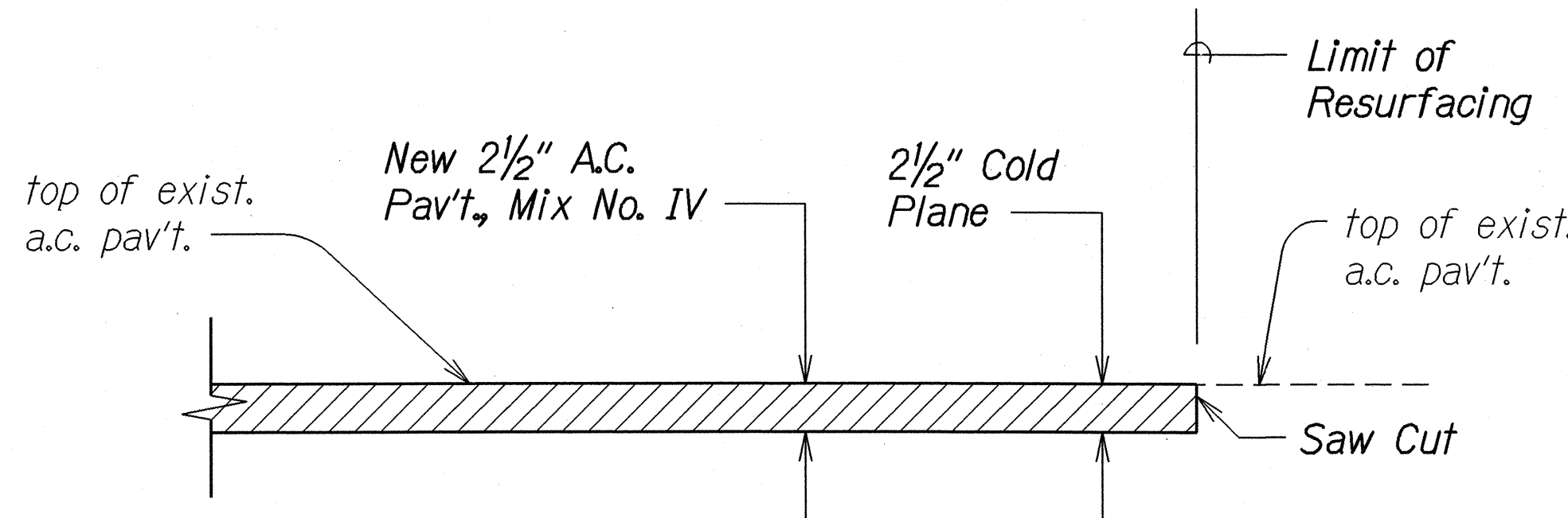
|                   |      |
|-------------------|------|
| SURVEY PLOTTED BY | DATE |
| DRAWN BY          |      |
| DESIGNED BY       |      |
| QUANTITIES BY     |      |
| CHECKED BY        |      |
| ORIGINAL PLAN     |      |
| NOTE BOOK         |      |
| NO.               |      |

| FED. ROAD DIST. NO. | STATE | PROJ. NO.    | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|--------------|-------------|-----------|--------------|
| HAWAII              | HAW.  | HWY-0-06-03M | 2004        | ADD.12    | 51           |

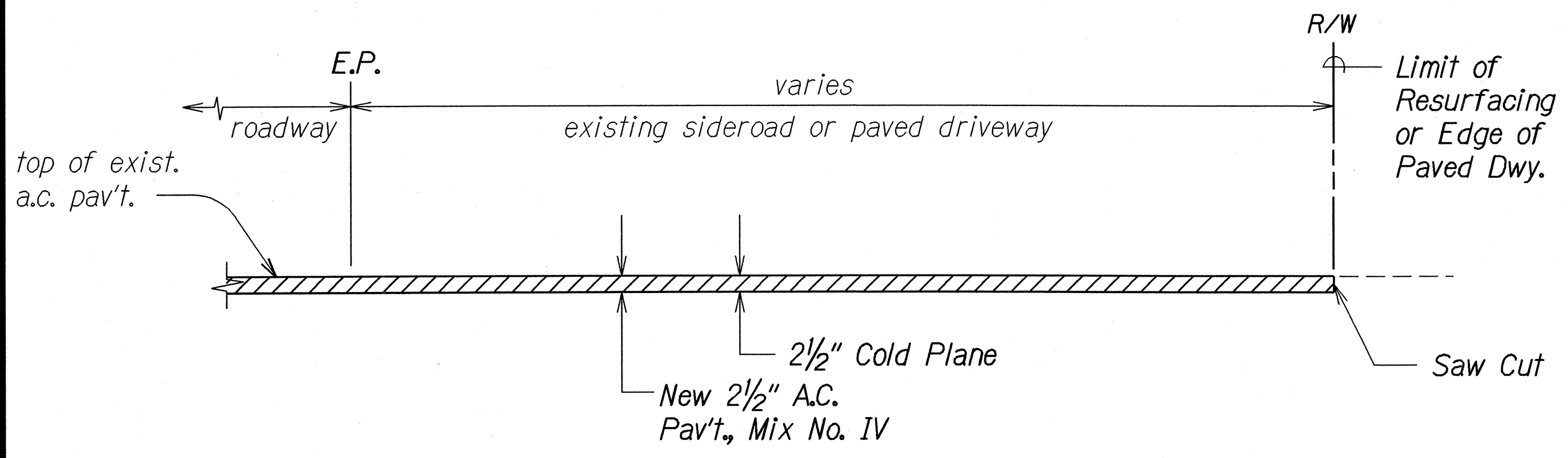


**RESURFACING AT STRUCTURE NO. 10 DETAIL**  
Not to Scale

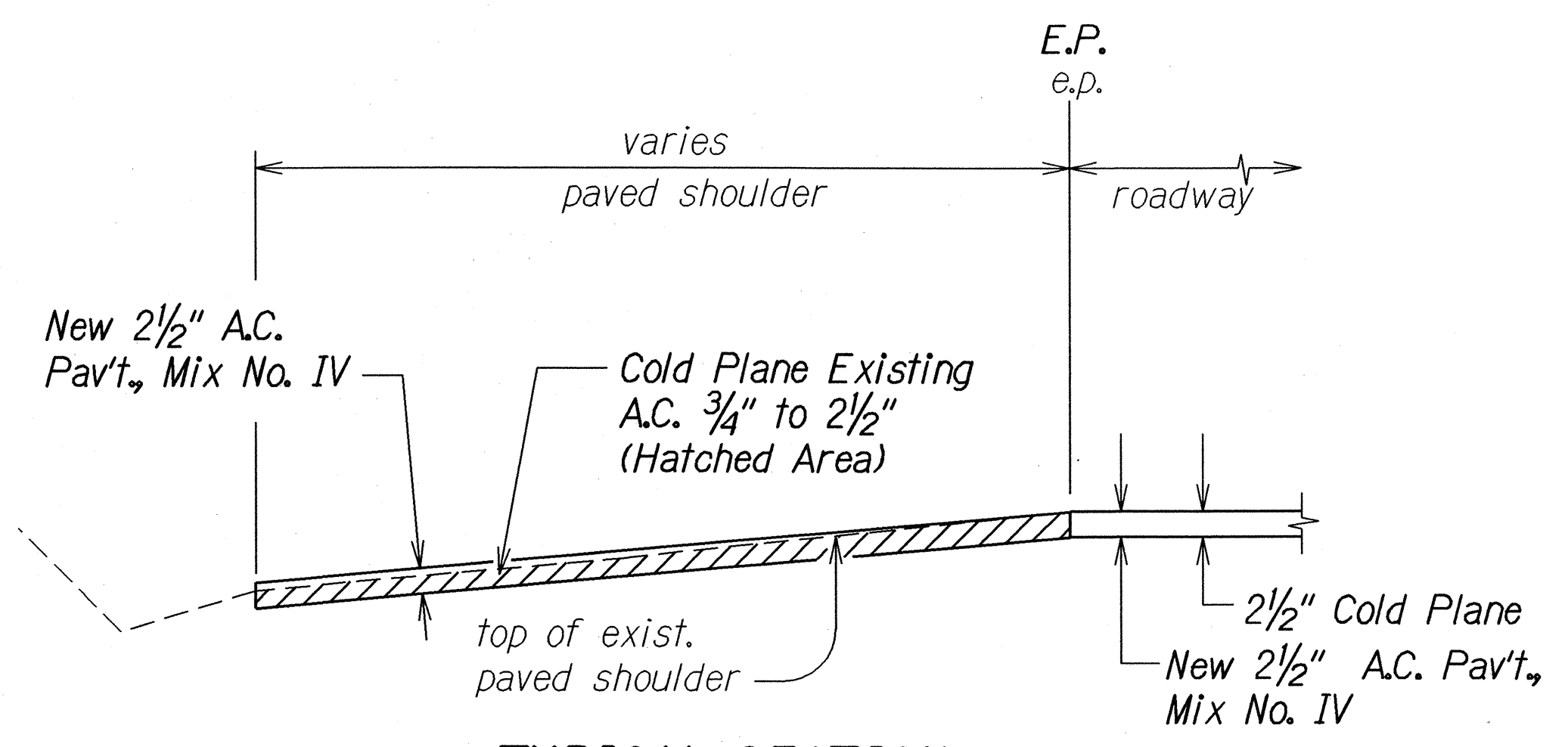
*\*Note: In cold planing the pavement over the structure the Contractor shall exercise care not to damage any portion of the structure, especially the slab, joints, drainage pipes or reinforcement. Any damage to the structure during the cold planing operations shall be repaired by the Contractor at his expense. Repair work shall be directed by the Engineer. The Contractor shall verify the thickness of the pavement by taking several measurements throughout the structure.*



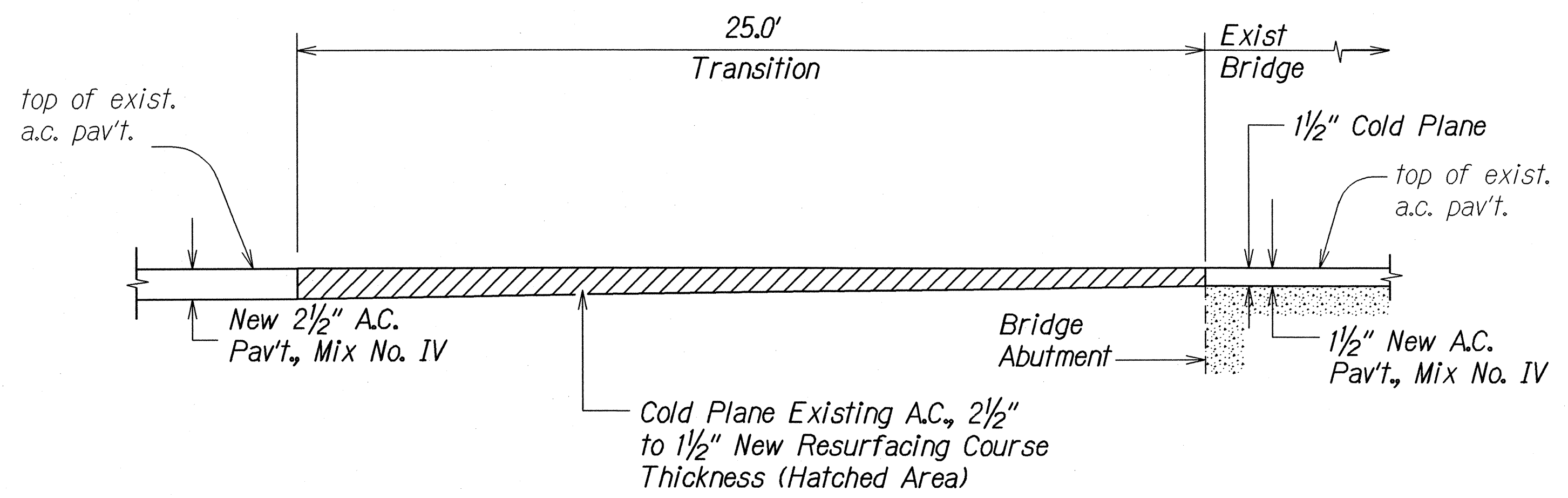
**COLD PLANING TRANSITION TO EXISTING PAVEMENT DETAIL**  
Not to Scale



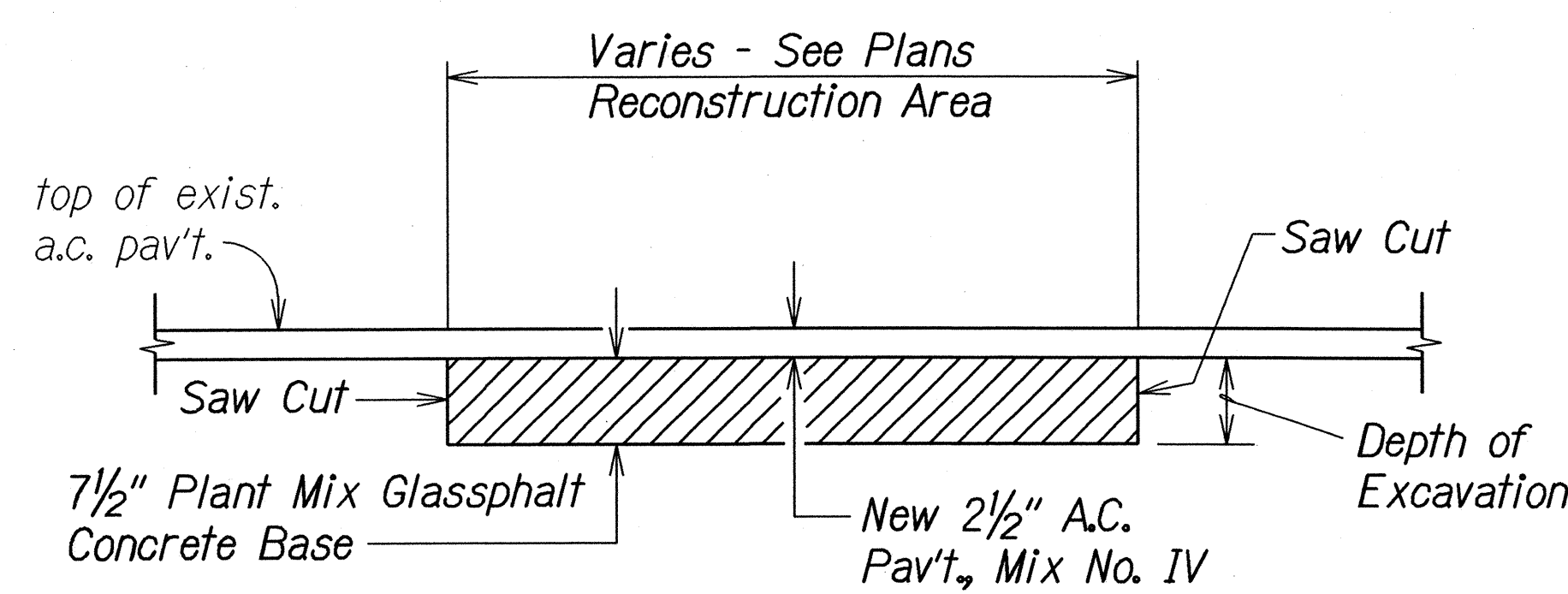
**RESURFACING AT PAVED SIDEROAD OR PAVED DRIVEWAY DETAIL**  
Not to Scale



**TYPICAL SECTION AT PAVED SHOULDER**  
Not to Scale



**RESURFACING AT HALAWA HEIGHTS OVERPASS DETAIL**  
Not to Scale



**PAVEMENT RECONSTRUCTION DETAIL**  
Not to Scale

| 6/14/04                                                                                                                                                                                                                                                                                                                    | Revise Resurfacing at Structure No. 10 and Pavement Reconstruction Details per Addendum No. 1. |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|
| DATE                                                                                                                                                                                                                                                                                                                       | REVISION                                                                                       |
| STATE OF HAWAII<br>DEPARTMENT OF TRANSPORTATION<br>HIGHWAYS DIVISION<br><b>TYPICAL DETAILS</b><br><b>HALAWA HEIGHTS ROAD REHABILITATION</b><br><b>Kikania Street to Fernridge Place and</b><br><b>Kuhuaapaani Interchange, Moanalua Freeway, H201</b><br><b>Project No. HWY-0-06-03M</b><br>Not to Scale Date: April, 2004 |                                                                                                |
| SHEET No. 7 OF 7 SHEETS                                                                                                                                                                                                                                                                                                    |                                                                                                |