



COMMUNITY DEVELOPMENT AGENCY

TRANSPORTATION DIVISION

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DATE: May 7, 2015

TO: All Prospective Bidders

SUBJECT: Addendum No. 2
Gold Hill Overlay Project
Contract No. PW 14-31086, Project No. 72119

Submit proposals for this work with the understanding and full consideration of this addendum. The revisions declared in this addendum are essential parts of the Contract.

ITEM NO.	LOCATION, PAGE, OR DRAWING NO.	DESCRIPTION OF CHANGE
2.01	Special Provision §10-4	<p>Bidders are instructed to add the following new section to Section 10 of the Special Provisions:</p> <p style="text-align: center;">Replace section 10-4 with:</p> <p style="text-align: center;">10-4 WATER USAGE</p> <p>Section 10-4 includes general specifications for your use of water for construction activities.</p> <p>The Department encourages you to conserve water in all construction activities.</p> <p>The Engineer notifies you of any (1) water shortage or (2) mandate from a local water authority to ration water. Within 10 days of the notification, submit a water conservation plan. The plan must include:</p> <ol style="list-style-type: none"> 1. List of construction activities that require water 2. Measures you will implement for each activity to conserve water 3. Method for curing concrete other than the water method if included in the work 4. Dust palliative you will use for dust control

ITEM NO.	LOCATION, PAGE, OR DRAWING NO.	DESCRIPTION OF CHANGE
		<p>Any unavailability of water that delays a controlling activity is a material shortage.</p> <p>Contractor is advised there is currently a Stage 2 water warning in the El Dorado Irrigation District Service Area. Contractor is advised there is currently a Stage 3 water warning in the Georgetown Divide Public Utility District Service Area. Contractor is responsible for contacting the local water authorities to determine any impacts the water warnings will have on various items of work.</p> <p>Payment for any water conservation plan is included in the payment for the various items of work.</p>
2.02	SP-27	<p>Bidders are instructed to replace the 2nd sentence of the 1st paragraph of Section 12-5.04 of the special provisions with:</p> <p style="text-align: center;">“Flagging costs are paid for as specified in Section 12-1.03 of the Special Provisions.”</p>
2.03	SP-28	<p>Bidders are instructed to revise the 1st sentence of the 1st paragraph of Section 12-8.02B Temporary Lane Line and Centerline Delineation of the special provisions as follows:</p> <p style="text-align: center;">“Temporary pavement markers must be the same color as the lane line, centerline, or edge line markers being replaced.”</p>
2.04	SP-28	<p>Bidders are instructed to add the following to the number 1 bullet point of the list in the 1st paragraph of Section 12-8.02C Temporary Edge Line Delineation of the special provisions:</p> <p style="text-align: center;">“or (4) temporary pavement markers placed longitudinally at intervals not exceeding 6 feet”</p>
2.05	Addendum 1	<p>Bidders' are instructed to replace pages SP-37 rev through SP-97 rev of Addendum No. 1 with the attached SP-37 REV through SP-72 REV. This removes the superpave requirements and requires use of the method construction process for paving.</p>

Indicate receipt of this addendum by filling in the number of this addendum in the space provided on the signature page of the proposal.

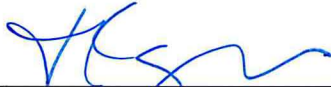
Holders who have already mailed their proposal can contact Jennifer Rimoldi at 530-621-7592 (email: Jennifer.Rimoldi@edcgov.us) to arrange return of their proposal.

Inform all suppliers and subcontractors as necessary.

The Community Development Agency, Transportation Division is only sending this addendum by posting on QuestCDN's website at: <https://www.questcdn.com/>.


If you are not a Contract Documents Holder, but request a set of documents to bid on this project, you must comply with the requirements of this addendum when submitting your bid.

End of Addendum No. 2



Recommended by:
John Kahling
Deputy Director, Headington Engineering Unit

05/07/15
Date



Approved by:
Steven M. Pedretti
Community Development Agency Director

5/8/15
Date

39 HOT MIX ASPHALT

39-1 GENERAL

39-1.01 GENERAL

39-1.01A Summary

Section 39-1 includes specifications for producing and placing HMA by mixing aggregate and asphalt binder at a mixing plant and spreading and compacting the HMA mixture.

Produce and place Type A HMA under the method construction process.

39-1.01B Definitions

coarse aggregate: Aggregate retained on a no. 4 sieve.

fine aggregate: Aggregate passing the no. 4 sieve.

supplemental fine aggregate: Aggregate passing the no. 30 sieve, including hydrated lime, portland cement, and fines from dust collectors.

processed RAP: RAP that has been fractionated.

substitution rate: Amount of RAP aggregate substituted for virgin aggregate in percent.

binder replacement: Amount of RAP binder in OBC in percent.

surface course: Upper 0.2 feet of HMA exclusive of OGFC.

39-1.02 MATERIALS

39-1.02A Geosynthetic Pavement Interlayer

Reserved

39-1.02B Tack Coat

Tack coat must comply with the specifications for asphaltic emulsion or asphalts. Choose the type and grade.

Notify the Engineer if you dilute asphaltic emulsion with water. The weight ratio of added water to asphaltic emulsion must not exceed 1 to 1.

Measure added water either by weight or volume in compliance with section 9-1.02 or you may use water meters from water districts, cities, or counties. If you measure water by volume, apply a conversion factor to determine the correct weight.

With each dilution, submit:

1. Weight ratio of water to bituminous material in the original asphaltic emulsion
2. Weight of asphaltic emulsion before diluting
3. Weight of added water
4. Final dilution weight ratio of water to asphaltic emulsion

39-1.02C Asphalt Binder

Asphalt binder in HMA must comply with the specifications for asphalts.

The grade of asphalt binder for Type A HMA must be PG-64-16.

39-1.02D Asphalt Rubber Binder

Reserved

39-1.02E Aggregate

Aggregate used in HMA Type A must comply with 1/2-inch HMA Type A aggregate gradation, except for HMA dike which may use either 3/8-inch or 1/2-inch HMA Type A aggregate gradations. Aggregate must be clean and free from deleterious substances.

The specified aggregate gradation must be determined before the addition of asphalt binder and includes supplemental fine aggregate. The Department tests for aggregate grading under California Test 202, modified by California Test 105 if there is a difference in specific gravity of 0.2 or more between the coarse and fine parts of different aggregate blends.

Choose sieve size TV within each TV limit presented in the aggregate gradation tables.

The proposed aggregate gradation must be within the TV limits for the specified sieve sizes shown in the following tables:

**Aggregate Gradation
(Percentage Passing)
HMA Types A**

1/2-inch HMA Type
A

Sieve sizes	TV limits	Allowable tolerance
3/4"	100	—
1/2"	95–99	TV ± 6
3/8"	75–95	TV ± 6
No. 4	55–66	TV ± 7
No. 8	38–49	TV ± 5
No. 30	15–27	TV ± 4
No. 200	2.0–8.0	TV ± 2

3/8-inch HMA Type
A

Sieve sizes	TV limits	Allowable tolerance
1/2"	100	--
3/8"	95–100	TV ± 6
No. 4	58–72	TV ± 7
No. 8	34–48	TV ± 6
No. 30	18–32	TV ± 5
No. 200	2.0–9.0	TV ± 2

Before the addition of asphalt binder and lime treatment, aggregate must have the values for the quality characteristics shown in the following table:

Aggregate Quality

Quality characteristic	Test method	HMA type			
		A	B	RHMA-G	OGFC
Percent of crushed particles	California Test 205				
Coarse aggregate (% min.)					
One fractured face		90	25	--	90
Two fractured faces	75	--	90	75	
Fine aggregate (% min.) (Passing no. 4 sieve and retained on no. 8 sieve.)					
One fractured face	70	20	70	90	
Los Angeles Rattler (% max.)	California Test 211				
Loss at 100 rev.		12	--	12	12
Loss at 500 rev.		45	50	40	40
Sand equivalent (min.) ^a	California Test 217	47	42	47	--
Fine aggregate angularity (% min.) ^b	California Test 234	45	45	45	--
Flat and elongated particles (% max. by weight @ 5:1)	California Test 235	10	10	10	10

^a Reported value must be the average of 3 tests from a single sample.

^b The Engineer waives this specification if HMA contains 10 percent or less of nonmanufactured sand by weight of total aggregate. Manufactured sand is fine aggregate produced by crushing rock or gravel.

39-1.02F Reclaimed Asphalt Pavement

39-1.02F(1) General

You may produce HMA Type A using RAP. HMA produced using RAP must comply with the specifications for HMA, except aggregate quality specifications do not apply to RAP. You may substitute RAP at a substitution rate not exceeding 25 percent of the aggregate blend.

Assign the substitution rate of RAP aggregate for virgin aggregate with the JMF submittal. The JMF must include the percent of RAP used.

Provide enough space for meeting RAP handling requirements at your facility. Provide a clean, graded, well-drained area for stockpiles. Prevent material contamination and segregation.

If RAP is from multiple sources, blend the RAP thoroughly and completely. RAP stockpiles must be homogeneous.

Isolate the processed RAP stockpiles from other materials. Store processed RAP in conical or longitudinal stockpiles. Processed RAP must not be agglomerated or be allowed to congeal in large stockpiles.

AASHTO T 324 (Modified) is AASHTO T 324, "Hamburg Wheel-Track Testing of Compacted Hot Mix Asphalt (HMA)," with the following parameters:

1. Target air voids must equal 7 ± 1 percent
2. Specimen height must be $60 \text{ mm} \pm 1 \text{ mm}$
3. Number of test specimens must be 4
4. Test specimen must be a 150mm gyratory compacted specimen
5. Test temperature must be set at:
 - 5.1. 122 ± 2 degrees F for PG 58
 - 5.2. 131 ± 2 degrees F for PG 64

- 5.3. 140 ± 2 degrees F for PG 70 and above
6. Measurements for impression must be taken at every 100 passes
7. Inflection point defined as the number of wheel passes at the intersection of the creep slope and the stripping slope
8. Testing shut off must be set at 25,000 passes

39-1.02F(2) Substitution Rate of 15 Percent or Less

For a RAP substitution rate of 15 percent or less, you may stockpile RAP during the entire project.

39-1.02F(3) Substitution Rate Greater than 15 Percent

For a RAP substitution rate greater than 15 percent, fractionate RAP into 2 sizes, a coarse fraction RAP retained on 3/8-inch screen and a fine fraction RAP passing 3/8-inch screen.

Sample and test processed RAP at a minimum frequency of 1 sample per 1000 tons with a minimum of 6 samples for each processed RAP stockpile. If a processed RAP stockpile is augmented, sample and test processed RAP quality characteristics at a minimum frequency of 1 sample per 500 tons of augmented RAP.

When tested under California Test 202 with a total mechanical shaking time of 10 minutes ±15 seconds, the processed RAP must meet the grading requirements shown in the following table:

**Processed RAP Gradation
(Percentage Passing)**

Sieve sizes	TV limits	Allowable tolerance
1/2"	100	--
3/8"	97	TV + 3

The processed RAP asphalt binder content must be within ± 2.0 percent of the average processed RAP stockpile asphalt binder content when tested under ASTM D 2172, Method B. If a new processed RAP stockpile is required, the average binder content of the new processed RAP stockpile must be within ± 2.0 percent of the average binder content of the original processed RAP stockpile.

The maximum specific gravity for processed RAP must be within ± 0.06 when tested under California Test 309 of the average maximum specific gravity reported on page 4 of your *Contractor Hot Mix Asphalt Design Data* form.

39-1.03 HOT MIX ASPHALT MIX DESIGN REQUIREMENTS

39-1.03A General

The mix design process consists of performing California Test 367 and laboratory procedures on combinations of aggregate gradations and asphalt binder contents to determine the OBC and HMA mixture qualities. The results become the proposed JMF.

Use the Caltrans *Contractor Hot Mix Asphalt Design Data* form to record aggregate quality and mix design data. Use the Caltrans *Contractor Job Mix Formula Proposal* form to present the JMF.

Laboratories testing aggregate qualities and preparing the mix design and JMF must be qualified under the Caltrans's Independent Assurance Program. Take samples under California Test 125.

The Engineer reviews the aggregate qualities, mix design, and verifies the JMF.

You may change the JMF during production. Do not use the changed JMF until it is authorized. Perform a new mix design and submit a new JMF submittal if you change any of the following:

1. Target asphalt binder percentage
2. Asphalt binder supplier
3. Asphalt rubber binder supplier
4. Component materials used in asphalt rubber binder or percentage of any component materials
5. Combined aggregate gradation
6. Aggregate sources
7. Substitution rate by more than 5 percent if your assigned RAP substitution rate is 15 percent or less
8. Substitution rate by more than 3 percent if your assigned RAP substitution rate is greater than 15 percent
9. Average binder content by more than 2 percent from the average binder content of the original processed RAP stockpile used in the mix design
10. Maximum specific gravity of processed RAP by more than ± 0.060 from the average maximum specific gravity of processed RAP reported on page 4 of your *Contractor Hot Mix Asphalt Design Data* form
11. Any material in the JMF

39-1.03B Hot Mix Asphalt Mix Design

Perform a mix design that produces HMA with the values for the quality characteristics shown in the following table:

HMA Mix Design Requirements

Quality characteristic	Test method	HMA type		
		A	B	RHMA-G
Air void content (%)	California Test 367	4.0	4.0	Section 39-1.03B
Voids in mineral aggregate (% min.)	California Test 367			--
No. 4 grading		17.0	17.0	-- 18.0--
3/8" grading		15.0	15.0	23.0 ^a
1/2" grading		14.0	14.0	18.0--23.0 ^a
3/4" grading	13.0	13.0		
Voids filled with asphalt (%)	California Test 367			Note a
No. 4 grading		65.0--75.0	65.0--75.0	
3/8" grading		65.0--75.0	65.0--75.0	
1/2" grading		65.0--75.0	65.0--75.0	
3/4" grading	65.0--75.0	65.0--75.0		
Dust proportion	California Test 367			Note a
No. 4 and 3/8" gradings		0.6--1.2	0.6--1.2	
1/2" and 3/4" gradings		0.6--1.2	0.6--1.2	
Stabilometer value (min.) ^b	California Test 366			--
No. 4 and 3/8" gradings		30	30	23
1/2" and 3/4" gradings		37	35	

^a Report this value in the JMF submittal.

For RAP substitution rate greater than 15 percent, the mix design must comply with the additional quality characteristics shown in the following table:

**Additional HMA Mix Design Requirements
for RAP Substitution Rate Greater Than 15 Percent**

Quality characteristic	Test method	HMA type		
		A	B	RHMA-G
Hamburg wheel track (minimum number of passes at 0.5 inch average rut depth)	AASHTO T 324 (Modified) ^a			
PG-58		10,000	10,000	--
PG-64		15,000	15,000	
PG-70		20,000	20,000	
PG-76 or higher		25,000	25,000	
Hamburg wheel track (inflection point minimum number of passes)	AASHTO T 324 (Modified) ^a			
PG-58		10,000	10,000	--
PG-64		10,000	10,000	
PG-70		12,500	12,500	
PG-76 or higher		15000	15000	
Moisture susceptibility (minimum dry strength, psi)	California Test 371 ^a	120	120	--
Moisture susceptibility (tensile strength ration, %)	California Test 371 ^a	70	70	--

^aTest plant produced HMA.

For HMA with RAP, the maximum binder replacement must be 25.0 percent of OBC.

For HMA with a binder replacement less than or equal to 25 percent of OBC, you may request that the PG asphalt binder grade with upper and lower temperature classifications be reduced by 6 degrees C from the specified grade.

Report the average of 3 tests. If the range of stability for the 3 briquettes is more than 8 points, prepare new briquettes and test again. The average air void content may vary from the specified air void content by ± 0.5 percent.

39-1.03C Job Mix Formula Submittal

Each JMF submittal must consist of:

1. Proposed JMF on a Caltrans *Contractor Job Mix Formula Proposal* form
2. Mix design records on a Caltrans *Contractor Hot Mix Asphalt Design Data* form dated within 12 months of submittal
3. JMF verification on a *Caltrans Hot Mix Asphalt Verification* form
4. MSDS for the following:
 - 4.1. Asphalt binder
 - 4.2. Base asphalt binder used in asphalt rubber binder
 - 4.3. Supplemental fine aggregate except fines from dust collectors
 - 4.4. Antistrip additives

If the Engineer requests, sample the following materials in the presence of the Engineer and place in labeled containers weighing no more than 50 lb each:

1. Coarse, fine, and supplemental fine aggregate from stockpiles, cold feed belts, or hot bins. Samples must be at least 120 lb for each coarse aggregate, 80 lb for each fine aggregate, and 10 lb for each type of supplemental fines. The Department combines these aggregate samples to comply with the JMF TVs submitted on a Caltrans *Contractor Job Mix Formula Proposal* form.
2. RAP from stockpiles or RAP system. Samples must be at least 60 lb.
3. Asphalt binder from the binder supplier. Samples must be in two 1-quart cylindrical-shaped cans with open top and friction lids.
4. Asphalt rubber binder with the components blended in the proportions to be used. Samples must be in four 1-quart cylindrical-shaped cans with open top and friction lids.

Notify the Engineer at least 2 business days before sampling materials. For aggregate and RAP, split the samples into at least 4 parts. Submit 3 parts to the Engineer and use 1 part for your testing.

For RAP substitution rate greater than 15 percent, submit with the JMF submittal:

1. California Test 371 tensile strength ratio and minimum dry strength test results
2. AASHTO T 324 (Modified) test results

For RAP substitution rate greater than 15 percent, submit California Test 371 and AASHTO T 324 (Modified) test results to the Engineer.

39-1.03D Job Mix Formula Review

The Engineer reviews each mix design and proposed JMF within 5 business days from the complete JMF submittal. The review consists of reviewing the mix design procedures and comparing the proposed JMF with the specifications.

The Engineer may verify aggregate quality characteristics during this review period.

39-1.03E Job Mix Formula Verification

You must submit a Caltrans-verified JMF on a *Caltrans Hot Mix Asphalt Verification* form dated within 12 months before HMA production.

39-1.03F Job Mix Formula Renewal

Reserved

39-1.03G Job Mix Formula Acceptance

You may start HMA production if:

1. Engineer's review of the JMF shows compliance with the specifications
2. Caltrans has verified the JMF within 12 months before HMA production
3. Engineer authorizes the verified JMF

39-1.04 CONTRACTOR QUALITY CONTROL

39-1.04A General

Reserved

39-1.04B Prepaving Conference

Hold a prepaving conference with the Engineer at a mutually agreed time and place. Discuss methods of performing the production and paving work.

39-1.04C Asphalt Rubber Binder

Reserved

39-1.04D Aggregate

Determine the aggregate moisture content and RAP moisture content in continuous mixing plants at least twice a day during production and adjust the plant controller. Determine the RAP moisture content in batch mixing plants at least twice a day during production and adjust the plant controller.

39-1.04E Reclaimed Asphalt Pavement

Perform RAP quality control testing each day.

For RAP substitution rate of 15 percent or less, sample RAP once daily.

For RAP substitution rate of greater than 15 percent, sample processed RAP twice daily.

Perform QC testing for processed RAP aggregate gradation under California Test 367, appendix B, and submit the results with the combined aggregate gradation.

39-1.04F Density Cores

Reserved

39-1.04G Briquettes

Prepare 3 briquettes for each stability and air void content determination. Report the average of 3 tests. Prepare new briquettes and test again when the range of stability for the 3 briquettes is more than 8 points.

You may use the same briquettes used for stability testing to determine bulk specific gravity under California Test 308. If you use these briquettes and tests using bulk specific gravity fail, you may prepare 3 new briquettes and determine a new bulk specific gravity.

39-1.05 ACCEPTANCE CRITERIA

HMA acceptance is specified in the sections for each HMA construction process.

The Department samples materials for testing under California Test 125 and the applicable test method, except samples may be taken:

1. At the plant from a truck or an automatic sampling device
2. From the mat behind the paver

Sampling must be independent of Contractor quality control, statistically based, and random. If you request, the Department splits samples and provides you with a part.

HMA acceptance is based on:

1. Authorized JMF
2. Compliance with the HMA acceptance tables
3. Visual inspection

The Department prepares 3 briquettes for each stability and air void content determination. The average of 3 tests is reported. If the range of stability for the 3 briquettes is more than 8 points, new briquettes are prepared and tested.

The Department may use the briquettes used for stability testing to determine bulk specific gravity under California Test 308. If the Engineer uses the same briquettes and the tests using that bulk specific gravity fail, the Engineer prepares 3 new briquettes and determines a new bulk specific gravity.

39-1.06 DISPUTE RESOLUTION

Work with the Engineer to avoid potential conflicts and to resolve disputes regarding test result discrepancies. Notify the Engineer within 5 business days of receiving a test result if you dispute the test result.

If you or the Engineer dispute each other's test results, submit quality control test results and copies of paperwork including worksheets used to determine the disputed test results. An independent third party performs referee testing. Before the independent third party participates in a dispute resolution, the party must be accredited under Caltrans Independent Assurance Program. The independent third party must be independent of the project. By mutual agreement, the independent third party is chosen from:

1. Caltrans laboratory
2. Caltrans laboratory in a district or region not in the district or region the project is located
3. Transportation Laboratory
4. Laboratory not currently employed by you or your HMA producer

If split quality control or acceptance samples are not available, the independent third party uses any available material representing the disputed HMA for evaluation.

39-1.07 PRODUCTION START-UP EVALUATION

The Engineer evaluates HMA production and placement at production start-up.

Within the first 750 tons produced on the 1st day of HMA production, in the Engineer's presence and from the same production run, take samples of:

1. Aggregate
2. Asphalt binder
3. RAP
4. HMA

Sample aggregate from cold feed belts or hot bins. Take RAP samples from the RAP system. Sample HMA under California Test 125, except if you request and if authorized, you may sample HMA from any of the following locations:

1. Plant
2. Truck
3. Windrow
4. Paver hopper
5. Mat behind the paver

For aggregate, RAP, and HMA, split the samples into at least 4 parts and label their containers. Submit 3 split parts and keep 1 part.

39-1.08 PRODUCTION

39-1.08A General

Produce HMA in a batch mixing plant or a continuous mixing plant. Proportion aggregate by hot or cold feed control.

HMA plants must be Caltrans qualified. Before production, the HMA plant must have current qualification under the Caltrans Materials Plant Quality Program.

During production, you may adjust hot or cold feed proportion controls for virgin aggregate and RAP.

During production, asphalt binder set point for HMA Type A must be the OBC shown in *Contractor Hot Mix Asphalt Design Data* form. If RAP is used, asphalt binder set point for HMA must be:

$$\text{Asphalt Binder Set Point} = \frac{\frac{BC_{OBC}}{\left(1 - \frac{BC_{OBC}}{100}\right)} - R_{RAP} \left[\frac{BC_{RAP}}{\left(1 - \frac{BC_{RAP}}{100}\right)} \right]}{100 + \frac{BC_{OBC}}{\left(1 - \frac{BC_{OBC}}{100}\right)}}$$

Where:

BC_{OBC} = optimum asphalt binder content, percent based on total weight of mix

R_{RAP} = RAP ratio by weight of aggregate

BC_{RAP} = asphalt binder content of RAP, percent based on total weight of RAP mix

For RAP substitution rate of 15 percent or less, you may adjust the RAP by -5 percent.

For RAP substitution greater than 15, you may adjust the RAP by -3 percent.

You must request adjustments to the plant asphalt binder set point based on new RAP stockpiles average asphalt binder content. Do not adjust the HMA plant asphalt binder set point until authorized.

39-1.08B Mixing

Mix HMA ingredients into a homogeneous mixture of coated aggregates. Asphalt binder must be from 275 to 375 degrees F when mixed with aggregate.

When mixed with asphalt binder, aggregate must not be more than 325 degrees F. These aggregate temperature specifications do not apply if you use RAP.

HMA with or without RAP must not be more than 325 degrees F.

39-1.08C Asphalt Rubber Binder

Reserved

39-1.09 SUBGRADE, TACK COAT, AND GEOSYNTHETIC PAVEMENT INTERLAYER

39-1.09A General

Apply tack coat to surfaces receiving HMA.

39-1.09B Subgrade

Existing pavement to receive HMA must be free of loose and extraneous materials, including but not limited to paving particles and dirt. If the existing base/subgrade is exposed in order to meet specified conform depth requirements, the surface must be free of loose and extraneous materials prior to receiving HMA.

39-1.09C Tack Coat

Apply tack coat:

- 1. To existing pavement, including planed surfaces
- 2. Between HMA layers
- 3. To vertical surfaces of:
 - 3.1. Curbs
 - 3.2. Gutters
 - 3.3. Construction joints

Before placing HMA, apply tack coat in 1 application. The application rate must be the minimum residual rate specified for the underlying surface conditions shown in the following table:

Tack Coat Application Rates for HMA Type A

HMA overlay over:	Minimum residual rates (gal/sq yd)		
	CSS1/CSS1h, SS1/SS1h and QS1h/CQS1h asphaltic emulsion	CRS1/CRS2, RS1/RS2 and QS1/CQS1 asphaltic emulsion	Asphalt binder and PMRS2/PMCRS2 and PMRS2h/PMCRS2h asphaltic emulsion
New HMA (between layers)	0.02	0.03	0.02
PCC and existing HMA (AC) surfaces	0.03	0.04	0.03
Planed PCC and HMA (AC) surfaces	0.05	0.06	0.04

If you dilute asphaltic emulsion, mix until homogeneous before application.

For vertical surfaces, apply a residual tack coat rate that will thoroughly coat the vertical face without running off.

If you request and if authorized, you may:

- 1. Change tack coat rates
- 2. Omit tack coat between layers of new HMA during the same work shift if:
 - 2.1. No dust, dirt, or extraneous material is present
 - 2.2. Surface is at least 140 degrees F

Immediately in advance of placing HMA, apply additional tack coat to damaged areas or where loose or extraneous material is removed.

Close areas receiving tack coat to traffic. Do not track tack coat onto pavement surfaces beyond the job site.

Asphalt binder tack coat must be from 285 to 350 degrees F when applied.

39-1.09D Geosynthetic Pavement Interlayer

Reserved

39-1.10 SPREADING AND COMPACTING EQUIPMENT

Paving equipment for spreading must be:

1. Self-propelled
2. Mechanical
3. Equipped with a screed or strike-off assembly that can distribute HMA the full width of a traffic lane
4. Equipped with a full-width compacting device
5. Equipped with automatic screed controls and sensing devices that control the thickness, longitudinal grade, and transverse screed slope

Install and maintain grade and slope references.

The screed must produce a uniform HMA surface texture without tearing, shoving, or gouging.

The paver must not leave marks such as ridges and indentations, unless you can eliminate them by rolling.

Rollers must be equipped with a system that prevents HMA from sticking to the wheels. You may use a parting agent that does not damage the HMA or impede the bonding of layers.

In areas inaccessible to spreading and compacting equipment:

1. Spread the HMA by any means to obtain the specified lines, grades, and cross sections.
2. Use a pneumatic tamper, plate compactor, or equivalent to achieve thorough compaction.

39-1.11 CONSTRUCTION

39-1.11A General

Do not place HMA on wet pavement or a frozen surface.

You may deposit HMA in a windrow and load it in the paver if:

1. Paver is equipped with a hopper that automatically feeds the screed
2. Loading equipment can pick up the windrowed material and deposit it in the paver hopper without damaging base material
3. Activities for deposit, pickup, loading, and paving are continuous
4. HMA temperature in the windrow does not fall below 260 degrees F

You may place HMA in 1 or more layers on areas less than 5 feet wide and outside the traveled way, including shoulders. You may use mechanical equipment other than a paver for these areas. The equipment must produce uniform smoothness and texture.

HMA handled, spread, or windrowed must not stain the finished surface of any improvement, including pavement.

Do not use petroleum products such as kerosene or diesel fuel to release HMA from trucks, spreaders, or compactors.

HMA must be free of:

1. Segregation
2. Coarse or fine aggregate pockets
3. Hardened lumps

39-1.11B Longitudinal Joints

39-1.11B(1) General

Longitudinal joints in the top layer must match lane edges.

A vertical longitudinal joint of more than 0.15 ft is not allowed at any time between adjacent lanes open to traffic.

For HMA thickness of 0.15 ft or less, the distance between the ends of the adjacent surfaced lanes at the end of each day's work must not be greater than can be completed in the following day of normal paving.

For HMA thickness greater than 0.15 ft, you must place HMA on adjacent traveled way lanes so that at the end of each work shift the distance between the ends of HMA layers on adjacent lanes is from 5 to 10 feet. Place additional HMA along the transverse edge at each lane's end and along the exposed longitudinal edges between adjacent lanes. Hand rake and compact the additional HMA to form temporary conforms. You may place Kraft paper or another authorized bond breaker under the conform tapers to facilitate the taper removal when paving operations resume.

39-1.11B(2) Tapered Notched Wedge

The tapered notched wedge must retain its shape while exposed to traffic. Pave the adjacent lane within 1 day.

Construct the tapered portion of the tapered notched wedge with an authorized strike-off device. The strike-off device must provide a uniform slope and must not restrict the main screed of the paver.

You may use a device attached to the screed to construct longitudinal joints that will form a tapered notched wedge in a single pass. The tapered notched wedge must be compacted to a minimum of 91 percent compaction.

39-1.11C Widening Existing Pavement

Reserved

39-1.11D Shoulders, Medians, and Other Road Connections

Until the adjoining through lane's top layer has been paved, do not pave the top layer of:

1. Shoulders
2. Tapers
3. Transitions
4. Road connections
5. Driveways

39-1.11E Leveling

Reserved

39-1.11F Compaction

Rolling must leave the completed surface compacted and smooth without tearing, cracking, or shoving. Complete finish rolling activities before the pavement surface temperature is:

1. Below 150 degrees F for HMA with unmodified binder
2. Below 140 degrees F for HMA with modified binder

If a vibratory roller is used as a finish roller, turn the vibrator off.

Spread and compact HMA under sections 39-3.03 and 39-3.04.

Do not open new HMA pavement to public traffic until its mid-depth temperature is below 160 degrees F.

If you request and if authorized, you may cool HMA Type A with water when rolling activities are complete. Apply water under section 17-3.

39-1.12 SMOOTHNESS

39-1.12A General

Determine HMA smoothness with a straightedge.

39-1.12B Straightedge

The top layer of HMA pavement must not vary from the lower edge of a 12-foot straightedge:

1. More than 0.01 foot when the straightedge is laid parallel with the centerline
2. More than 0.02 foot when the straightedge is laid perpendicular to the centerline and extends from edge to edge of a traffic lane
3. More than 0.02 foot when the straightedge is laid within 24 feet of a pavement conform

39-1.12C Profilograph

Reserved

39-1.12D Smoothness Correction

If the top layer of HMA Type A pavement does not comply with the smoothness specifications, grind the pavement to within specified tolerances, remove and replace it, or place an overlay of HMA. Do not start corrective work until your choice of methods is authorized.

Corrected HMA pavement areas must be uniform rectangles with edges:

1. Parallel to the nearest HMA pavement edge or lane line
2. Perpendicular to the pavement centerline

Measure the corrected HMA pavement surface with a 12-foot straightedge and correct the pavement to within specified tolerances. If a must-grind area or straightedged pavement cannot be corrected to within specified tolerances, remove and replace the pavement.

39-1.13 HOT MIX ASPHALT ON BRIDGE DECKS

Reserved

39-1.14 MISCELLANEOUS AREAS AND DIKES

The following specifications in section 39 do not apply to miscellaneous areas and dikes:

1. HMA construction process
2. HMA mix design requirements

3. Contractor quality control
4. Production start-up evaluation

Miscellaneous areas are outside the traveled way and include:

1. Median areas not including inside shoulders
2. Island areas
3. Sidewalks
4. Gutters
5. Gutter flares
6. Ditches
7. Overside drains
8. Aprons at the ends of drainage structures

Spread miscellaneous areas in 1 layer and compact to the specified lines and grades. For miscellaneous areas and dikes:

1. Do not submit a JMF.
2. Choose the 3/8-inch or 1/2-inch HMA Type A aggregate gradations.
3. Minimum asphalt binder content must be 6.4 percent for 3/8-inch aggregate and 5.7 percent for 1/2- inch aggregate. If you request and if authorized, you may reduce the minimum asphalt binder content.
4. Choose asphalt binder Grade PG 70-10 or the same grade specified for HMA.

Prepare the area to receive HMA for dikes as needed.

39-1.15 MINOR HOT MIX ASPHALT

Reserved

39-1.16 RUMBLE STRIPS

Reserved

39-1.17 DATA CORES

Reserved

39-1.18 HOT MIX ASPHALT AGGREGATE LIME TREATMENT—DRY LIME METHOD

Reserved

39-1.19 HOT MIX ASPHALT AGGREGATE LIME TREATMENT—SLURRY METHOD

Reserved

39-1.20 LIQUID ANTISTRIP TREATMENT

Reserved

39-1.21 REPLACE ASPHALT CONCRETE SURFACING

Reserved

39-1.22 LIQUID ASPHALT PRIME COAT

Reserved

39-1.23 HOT MIX ASPHALT TYPE C

Reserved

39-1.24 BONDED WEARING COURSE—GAP GRADED

Reserved

39-1.25 RUBBERIZED BONDED WEARING COURSE—GAP GRADED

Reserved

39-1.26 RUBBERIZED BONDED WEARING COURSE—OPEN GRADED

Reserved

39-1.27 BONDED WEARING COURSE—OPEN GRADED

Reserved

39-1.28 ROADSIDE PAVING

Reserved

39-1.29 SOIL TREATMENT

Reserved

39-1.30 EDGE TREATMENT

Construct safety edges on the HMA pavement.

Use Case A, Case B, or Case C Safety Edge for all pavement edge treatments, per Revised Standard Plans P74 and P75.

Use the same type of HMA used for the adjacent lane or shoulder.

The edge of roadway where the safety edge treatment is to be placed must have a solid base, free of debris such as loose material, grass, weeds, or mud. Grade areas to receive the safety edge as required.

The safety edge treatment must be placed monolithic with the adjacent lane or shoulder and shaped and compacted with a device attached to the paver.

The device must be capable of shaping and compacting HMA to the required cross section as shown. Compaction must be by constraining the HMA to reduce the cross sectional area by 10 to 15 percent. The device must produce a uniform surface texture without tearing, shoving, or gouging and must not leave marks such as ridges and indentations. The device must be capable of transition to cross roads, driveways, and obstructions.

For safety edge treatment, the angle of the slope must not deviate by more than ±5 degrees from the angle shown. Measure the angle from the plane of the adjacent finished pavement surface.

If paving is done in multiple lifts, the safety edge treatment must be placed with each lift.

Short sections of hand work are allowed to construct transitions for safety edge treatment.

39-1.40 HOT MIX ASPHALT (TYPE A) DRIVEWAY CONFORM DEEP LIFT HMA

39-1.40A General

Section 39-1.40 includes specifications for reconstructing portions of existing paved driveways to conform to the overlay.

The work in this section includes sawcutting as shown in the Driveway Conform Exhibit, cold

planing, removal and placement of asphalt concrete dike as shown in the Driveway Conform Exhibit, removal of pavement as shown in the Driveway Conform Exhibit, and HMA outside of the roadway limits. The Driveway Conform Exhibit is included in these special provisions at the end of section 39.

For each driveway, provide written notification to the property owner(s) at least 72 hours prior and no more than 7 days before perform the conform work.

39-1.40B Materials

Use the same type of HMA used for the overlay.

39-1.40C Construction

The purpose of the driveway conform is to provide a smooth transition from existing pavement surface to the new overlay surface.

Each driveway conform's approximate location and details are shown in the "Driveway Conform Exhibit" that is included at the end section 39.

Cold planing must comply with section 15-2.02B(3). For each driveway conform requiring cold planing, cold plane to a depth of 0.20 feet at the shown conform point and taper to a depth of zero feet at the edge of the overlay such that a minimum uniform HMA thickness of 0.20 feet can be placed at the indicated slope within the conform limits as shown.

For Hot Mix Asphalt (Type A) Driveway Conform Deep Lift HMA (6502 Gold Hill Road) there exists both potholes and patched potholes within the conform limits as shown. Remove all material within the limits of the conform such that a uniform HMA deep lift thickness of 0.50 feet can be placed at the indicated slope within the conform limits as shown. Place HMA deep lift on native material if full depth pavement removal is required to meet these specifications.

Removal of pavement must comply with section 15-2.02B(5)..

Removal of asphalt concrete dike where shown must comply with section 15-2.02F.

Roadway excavation must comply with section 19-2.

Placement of asphalt concrete dike where shown must comply with section 39-1.14.

Place replacement HMA or place new HMA under section 39-3.

If asphalt concrete cold planing is beyond the limits shown, replace these areas with HMA. The Department does not pay for HMA placed beyond the conform limits shown.

39-1.40D Payment

Payment for each hot mix asphalt (type A) driveway conform deep lift and all associated work, including but not limited to cold planing, is included in its respective bid item.

39-1.41 HOT MIX ASPHALT (TYPE A) DRIVEWAY TAPERS DEEP LIFT HMA

39-1.41A General

Section 39-1.41 includes specifications for constructing tapered wedges to conform existing driveways to the overlay.

The work in this section includes removing loose and organic materials, and HMA outside of the roadway limits.

The driveways requiring HMA tapers are as follows:

1. 1st driveway east of Cold Springs Rd at 6000 Gold Hill Road
2. Serenity Valley Lane
3. 6431 Gold Hill Road

For each driveway, provide written notification to the property owners(s) at least 72 hours prior and no more than 7 days before performing the work.

39-1.41B Materials

Use the same type of HMA used for the overlay.

39-91.41C Construction

The purpose of the driveway conform is to provide a transition from the existing driveway surface to the new overlay surface.

For each driveway specified:

1. Remove all organic material within the taper area.
2. Remove all loose material, up to a maximum depth of 0.20 feet below the existing surface, within the taper area
3. Construct the taper with a 4 foot width extended from the edge of pavement of the overlay.

The location and exact dimensions of each driveway taper will be marked in the field by the Engineer. The approximate dimensions of the tapers for each driveway are provided the following table:

Approximate driveway conform taper dimensions

Driveway	Taper width (feet)	Taper length (feet)
6000 Gold Hill Road (1 st driveway east of Cold Springs Rd.)	4	20
Serenity Valley Lane	4	70
6431 Gold Hill Road	4	20

Removal of pavement must comply with section 15-2.02B(5).

Roadway excavation must comply with section 19-2.

Place replacement HMA or place new HMA under section 39-3.

39-1.41D Payment

Not Used

39-2 STANDARD CONSTRUCTION PROCESS

NOT USED

39-3 METHOD CONSTRUCTION PROCESS

39-3.01 GENERAL

Section 39-3 includes specifications for HMA produced and constructed under the Method construction process.

39-3.02 ACCEPTANCE CRITERIA

39-3.02A Testing

The Department samples for acceptance testing and tests for the quality characteristics shown in the following table:

HMA Acceptance—Method Construction Process

Quality characteristic	Test method	HMA type			
		A	B	RHMA-G	OGFC
Aggregate gradation ^a	California Test 202	JMF ± tolerance ^b	JMF ± tolerance ^b	JMF ± tolerance ^b	JMF ± tolerance ^b
Sand equivalent (min) ^c	California Test 217	47	42	47	--
Asphalt binder content (%)	California Test 379 or 382	JMF±0.40	JMF±0.40	JMF ± 0.40	JMF ± 0.40
HMA moisture content (% max)	California Test 226 or 370	1.0	1.0	1.0	1.0
Stabilometer value (min) ^c No. 4 and 3/8" gradings 1/2" and 3/4" gradings	California Test 366	30 37	30 35	-- 23	-- --
Percent of crushed particles Coarse aggregate (% min) One fractured face Two fractured faces Fine aggregate (% min) (Passing no. 4 sieve and retained on no. 8 sieve.) One fractured face	California Test 205	90 75 70	25 -- 20	-- 90 70	90 75 90
Los Angeles Rattler (% max) Loss at 100 rev. Loss at 500 rev.	California Test 211	12 45	-- 50	12 40	12 40
Air void content (%) ^{c,d}	California Test 367	4 ± 2	4 ± 2	TV ± 2	--
Fine aggregate angularity (% min) ^e	California Test 234	45	45	45	--
Flat and elongated particles (% max by weight @ 5:1)	California Test 235	Report only	Report only	Report only	Report only
Voids filled with asphalt (%) ^f No. 4 grading 3/8" grading 1/2" grading 3/4" grading	California Test 367	65.0–75.0 65.0–75.0 65.0–75.0 65.0–75.0	65.0–75.0 65.0–75.0 65.0–75.0 65.0–75.0	Report only	--
Voids in mineral aggregate (% min) ^f No. 4 grading 3/8" grading 1/2" grading 3/4" grading	California Test 367	17.0 15.0 14.0 13.0	17.0 15.0 14.0 13.0	-- -- 18.0–23.0 18.0–23.0	--
Dust proportion ^g No. 4 and 3/8" gradings 1/2" and 3/4" gradings	California Test 367	0.6–1.2 0.6–1.2	0.6–1.2 0.6–1.2	Report only	--
Hamburg wheel track (minimum number of passes at	AASHTO T 324			--	--

0.5 inch average rut depth) ^g PG-58 PG-64 PG-70 PG-76 or higher	(Modified)	10,000 15,000 20,000 25,000	10,000 15,000 20,000 25,000		
Hamburg wheel track (inflection point minimum number of passes) ^g PG-58 PG-64 PG-70 PG-76 or higher	AASHTO T 324 (Modified)	10,000 10,000 12,500 15000	10,000 10,000 12,500 15000	--	--
Moisture susceptibility (minimum dry strength, psi) ^g	California Test 371	120	120	--	--
Moisture susceptibility (tensile strength ration, %) ^g	California Test 371	70	70	--	--
Smoothness	Section 39-1.12	12-foot straight- edge and must-grind	12-foot straight- edge and must-grind	12-foot straight- edge and must-grind	12-foot straight- edge and must-grind
Asphalt binder	Various	Section 92	Section 92	Section 92	Section 92
Asphalt rubber binder	Various	--	--	Section 92- 1.01D(2) and section 39-1.02D	Section 92- 1.01D(2) and section 39-1.02D
Asphalt modifier	Various	--	--	Section 39-1.02D	Section 39-1.02D
CRM	Various	--	--	Section 39-1.02D	Section 39-1.02D

^a The Engineer determines combined aggregate gradations containing RAP under California Test 367.

^b The tolerances must comply with the allowable tolerances in section 39-1.02E.

^c The Engineer reports the average of 3 tests from a single split sample.

^d The Engineer determines the bulk specific gravity of each lab-compacted briquette under California Test 308, Method A, and theoretical maximum specific gravity under California Test 309.

^e The Engineer waives this specification if HMA contains 10 percent or less of nonmanufactured sand by weight of total aggregate. Manufactured sand is fine aggregate produced by crushing rock or gravel.

^f Report only.

^g Applies to RAP substitution rate greater than 15 percent.

No single test result may represent more than 750 tons or 1 day's production, whichever is less.

For any single quality characteristic except smoothness, if 2 consecutive acceptance test results do not comply with the specifications:

1. Stop production.
2. Take corrective action.
3. Take samples and split each sample into 4 parts in the Engineer's presence. Test 1 part for compliance with the specifications and submit 3 parts to the Engineer. The Department tests 1 part for compliance with the specifications and reserves and stores 2 parts.

4. Demonstrate compliance with the specifications before resuming production and placement.

39-3.03 SPREADING AND COMPACTING EQUIPMENT

Each paver spreading HMA Type A must be followed by 3 rollers as follows:

1. One vibratory roller specifically designed to compact HMA. The roller must be capable of at least 2,500 vibrations per minute and must be equipped with amplitude and frequency controls. The roller's gross static weight must be at least 7.5 tons.
2. One oscillating type pneumatic-tired roller at least 4 feet wide. Pneumatic tires must be of equal size, diameter, type, and ply. The tires must be inflated to 60 psi minimum and maintained so that the air pressure does not vary more than 5 psi.
3. One steel-tired, 2-axle tandem roller. The roller's gross static weight must be at least 7.5 tons.

Each roller must have a separate operator. Rollers must be self-propelled and reversible.

39-3.04 TRANSPORTING, SPREADING, AND COMPACTING

Pave HMA in a 0.20-foot thick compacted layer.

If the surface to be paved is both in sunlight and shade, pavement surface temperatures must be taken in the shade.

Spread HMA Type A at the atmospheric and surface temperatures shown in the following table:

Minimum Atmospheric and Surface Temperatures

Compacted layer thickness, feet	Atmospheric, °F		Surface, °F	
	Unmodified asphalt binder	Modified asphalt binder ^a	Unmodified asphalt binder	Modified asphalt binder ^a
	< 0.15	55	50	60
0.15–0.25	45	45	50	50

^a Except asphalt rubber binder.

If the asphalt binder for HMA Type A is unmodified asphalt binder, complete:

1. First coverage of breakdown compaction before the surface temperature drops below 250 degrees F
2. Breakdown and intermediate compaction before the surface temperature drops below 200 degrees F
3. Finish compaction before the surface temperature drops below 150 degrees F

If the asphalt binder for HMA Type A is modified asphalt binder, complete:

1. First coverage of breakdown compaction before the surface temperature drops below 240 degrees F
2. Breakdown and intermediate compaction before the surface temperature drops below 180 degrees F
3. Finish compaction before the surface temperature drops below 140 degrees F

HMA compaction coverage is the number of passes needed to cover the paving width. A pass is 1 roller's movement parallel to the paving in either direction. Overlapping passes are part of the coverage being made and are not a subsequent coverage. Do not start a coverage until completing the prior coverage.

Start rolling at the lower edge and progress toward the highest part.

Perform breakdown compaction of each layer of HMA Type A with 3 coverages using a vibratory roller. The speed of the vibratory roller in miles per hour must not exceed the vibrations per minute divided by 1,000. If the thickness of the HMA layer is less than 0.08 foot, turn the vibrator off. The Engineer

may order fewer coverages if the thickness of the HMA layer is less than 0.15 foot.

Perform intermediate compaction of each layer of HMA Type A with 3 coverages using a pneumatic-tired roller at a speed not exceeding 5 mph.

Perform finish compaction of HMA Type A with 1 coverage using a steel-tired roller.

39-4 QUALITY CONTROL/QUALITY ASSURANCE CONSTRUCTION PROCESS

NOT USED

39-5 RESERVED

39-6 PAYMENT

Section 39-6 includes specifications for HMA payment. The weight of each HMA mixture designated in the Bid Item List must be the combined mixture weight.

If recorded batch weights are printed automatically, the bid item for HMA is measured by using the printed batch weights, provided:

1. Total aggregate and supplemental fine aggregate weight per batch is printed. If supplemental fine aggregate is weighed cumulatively with the aggregate, the total aggregate batch weight must include the supplemental fine aggregate weight.
2. Total asphalt binder weight per batch is printed.
3. Each truckload's zero tolerance weight is printed before weighing the 1st batch and after weighing the last batch.
4. Time, date, mix number, load number, and truck identification is correlated with a load slip.
5. Copy of the recorded batch weights is certified by a licensed weighmaster and submitted to the Engineer.

Place hot mix asphalt dike of the type specified is measured along the completed length.

Payment for HMA dike is included in the lump sum item for "Hot Mix Asphalt (Type A) Conform Deep Lift HMA (Fire Station)".

Payment for tack coat is included in payment for hot mix asphalt or the bid item that requires minor HMA.

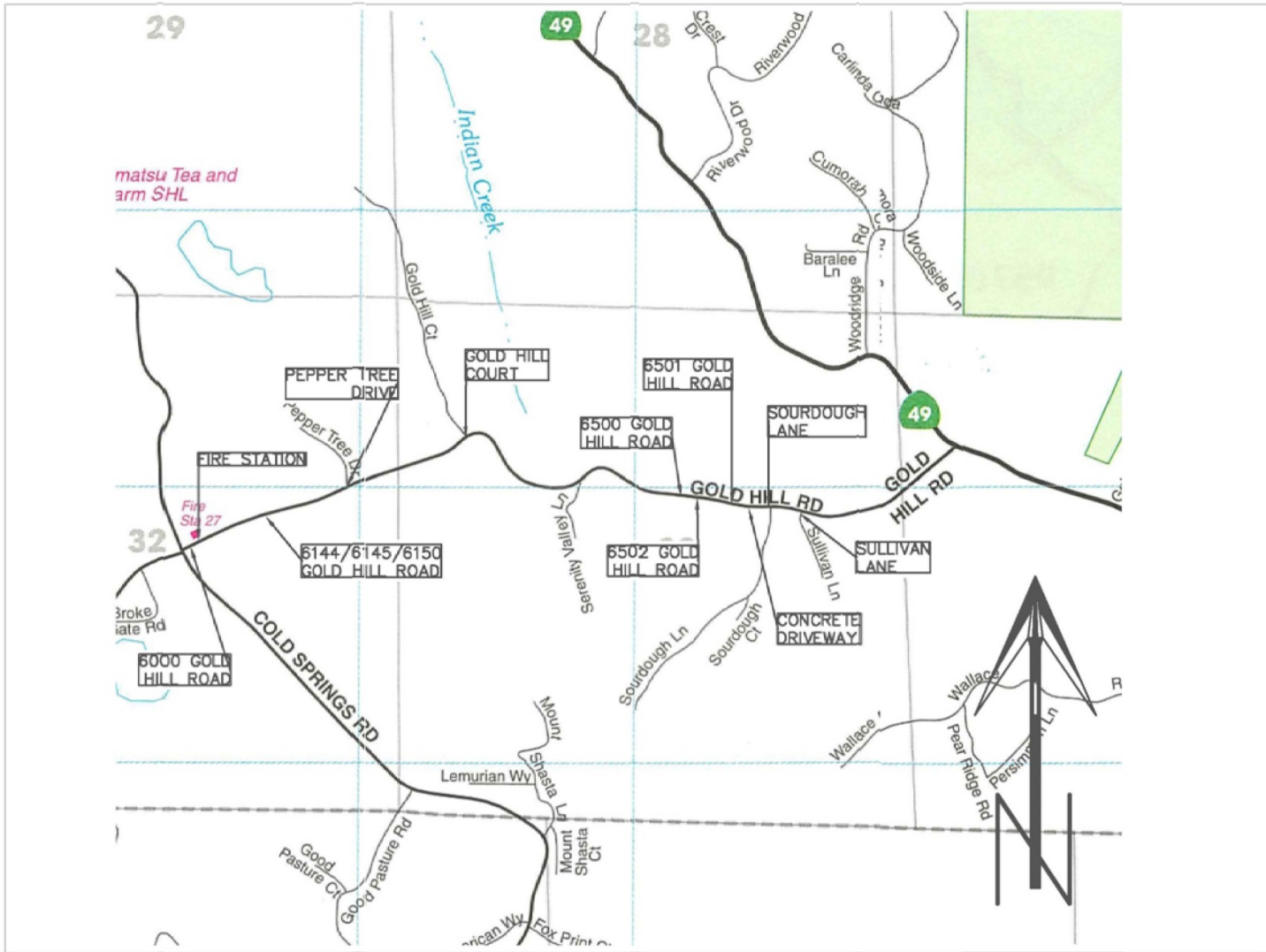
HMA safety edge treatment is paid for by weight of hot mix asphalt.

Payment for each hot mix asphalt (type A) driveway conform deep lift and all associated work, including but not limited to cold planing, is included in its respective bid item.

Hot mix asphalt (Type A) driveway tapers deep lift HMA is paid for by weight of hot mix asphalt.

If the dispute resolution independent third party determines the Department's test results are correct, the Engineer deducts the independent third party's testing costs from payments. If the independent third party determines your test results are correct, the Department pays the independent third party's testing costs

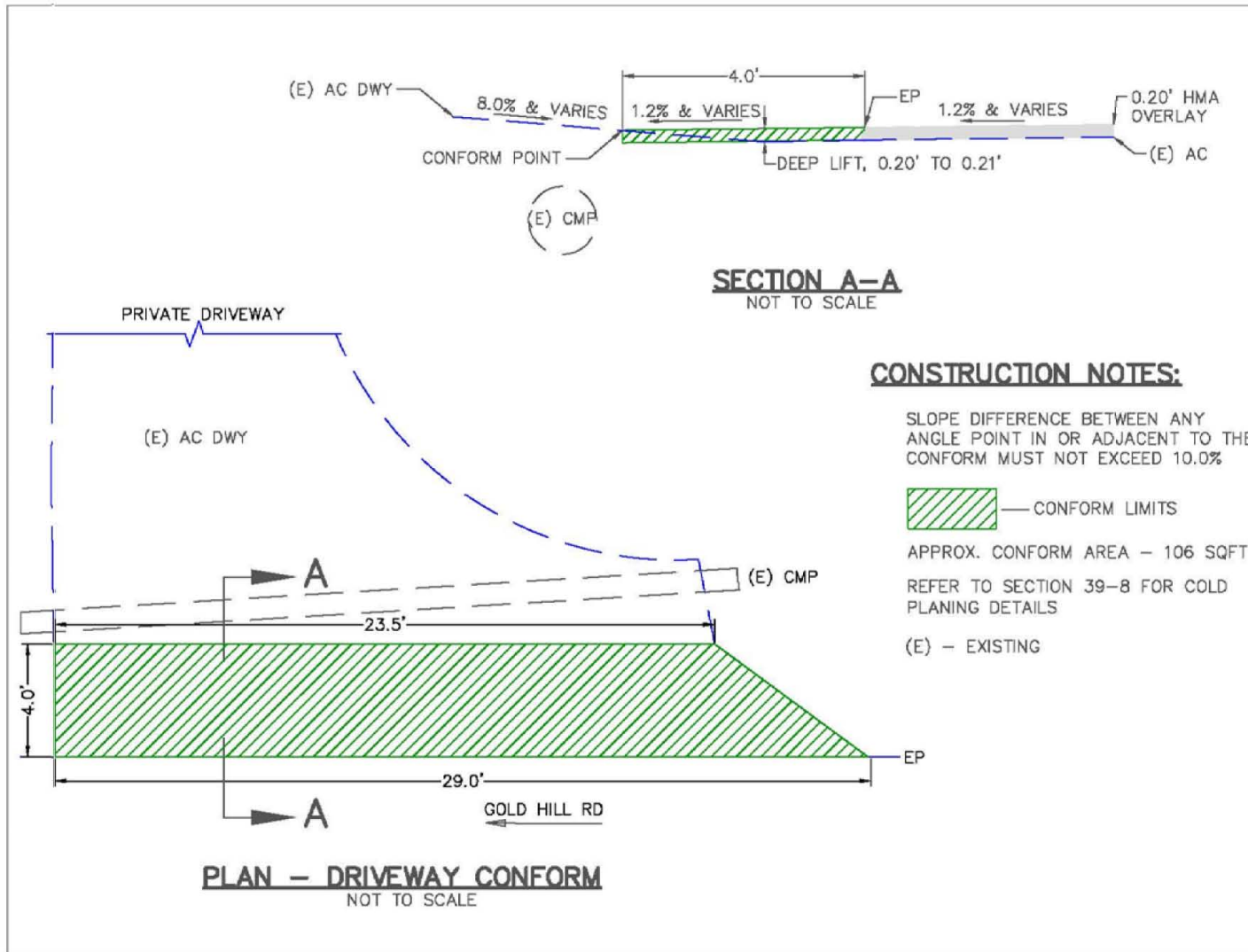
Driveway Conform Exhibit



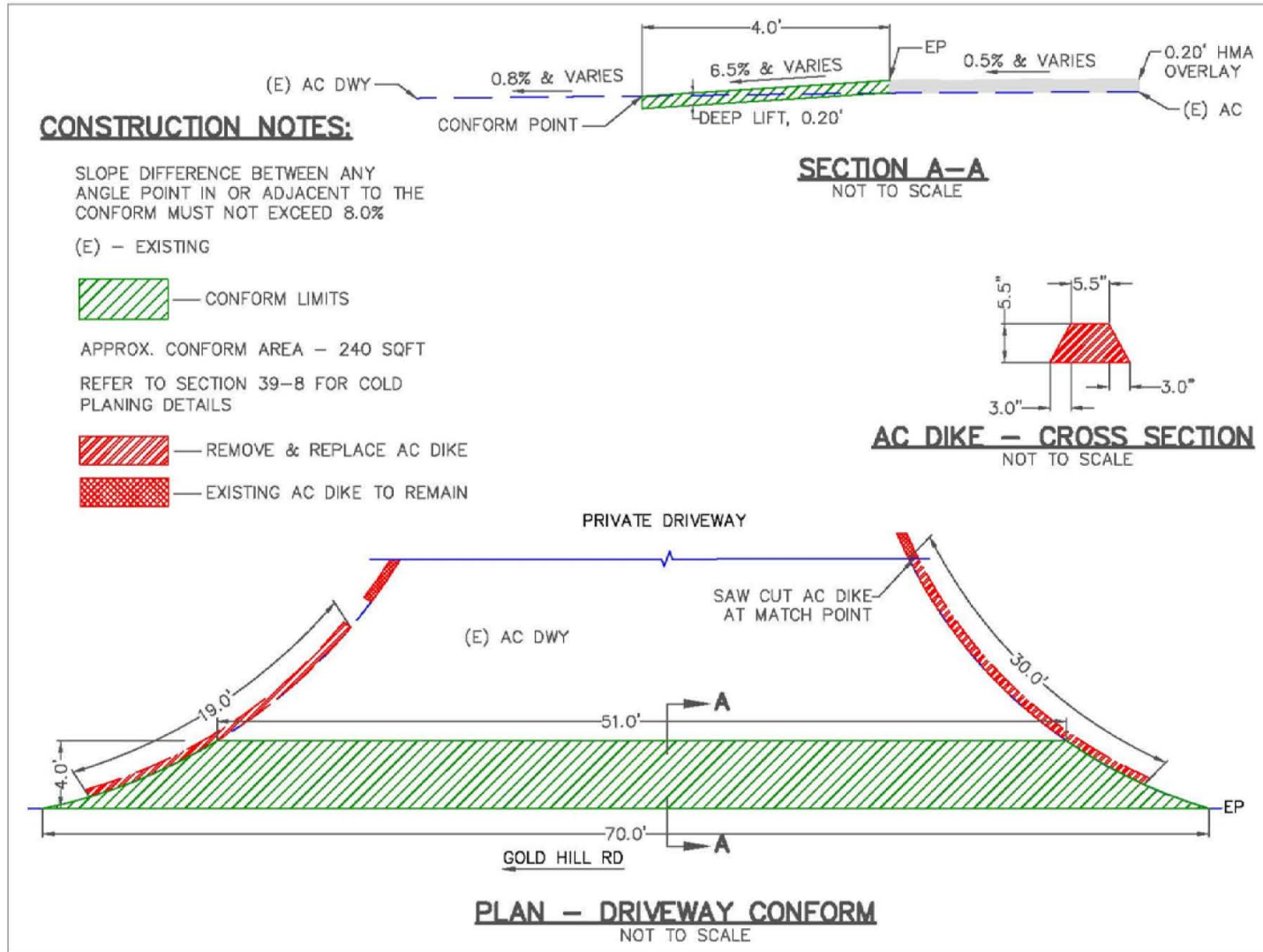
HOT MIX ASPHALT (TYPE A) DRIVEWAY CONFORM DEEP LIFT HMA
 APPROXIMATE CONFORM LOCATIONS
 NOT TO SCALE

GOLD HILL OVERLAY PROJECT
 Contract No. PW 14-31086, CIP No. 72119
 April 14, 2015 (Addendum No. 2)

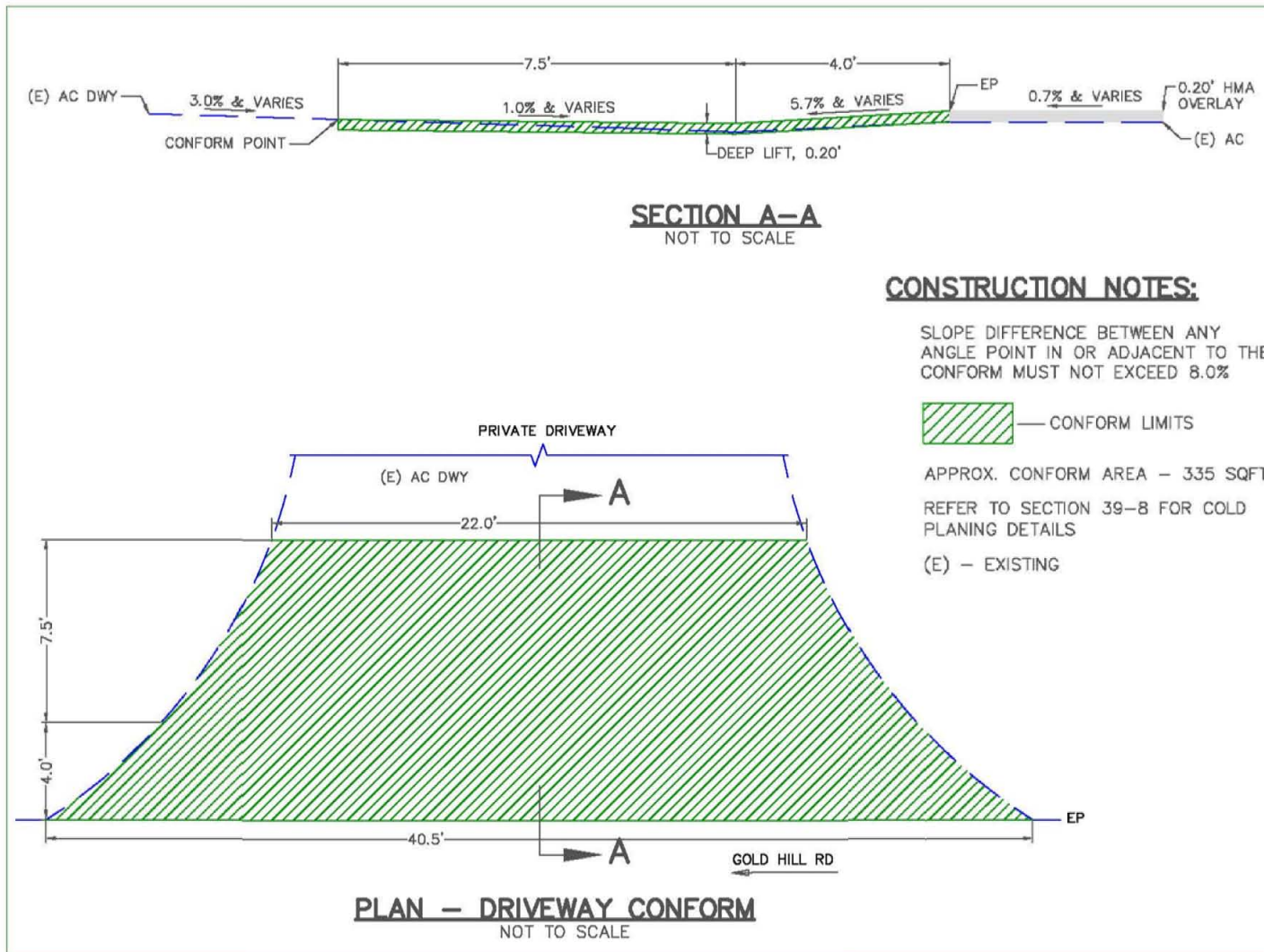
COUNTY OF EL DORADO
 Special Provisions
 Page SP-60 REV



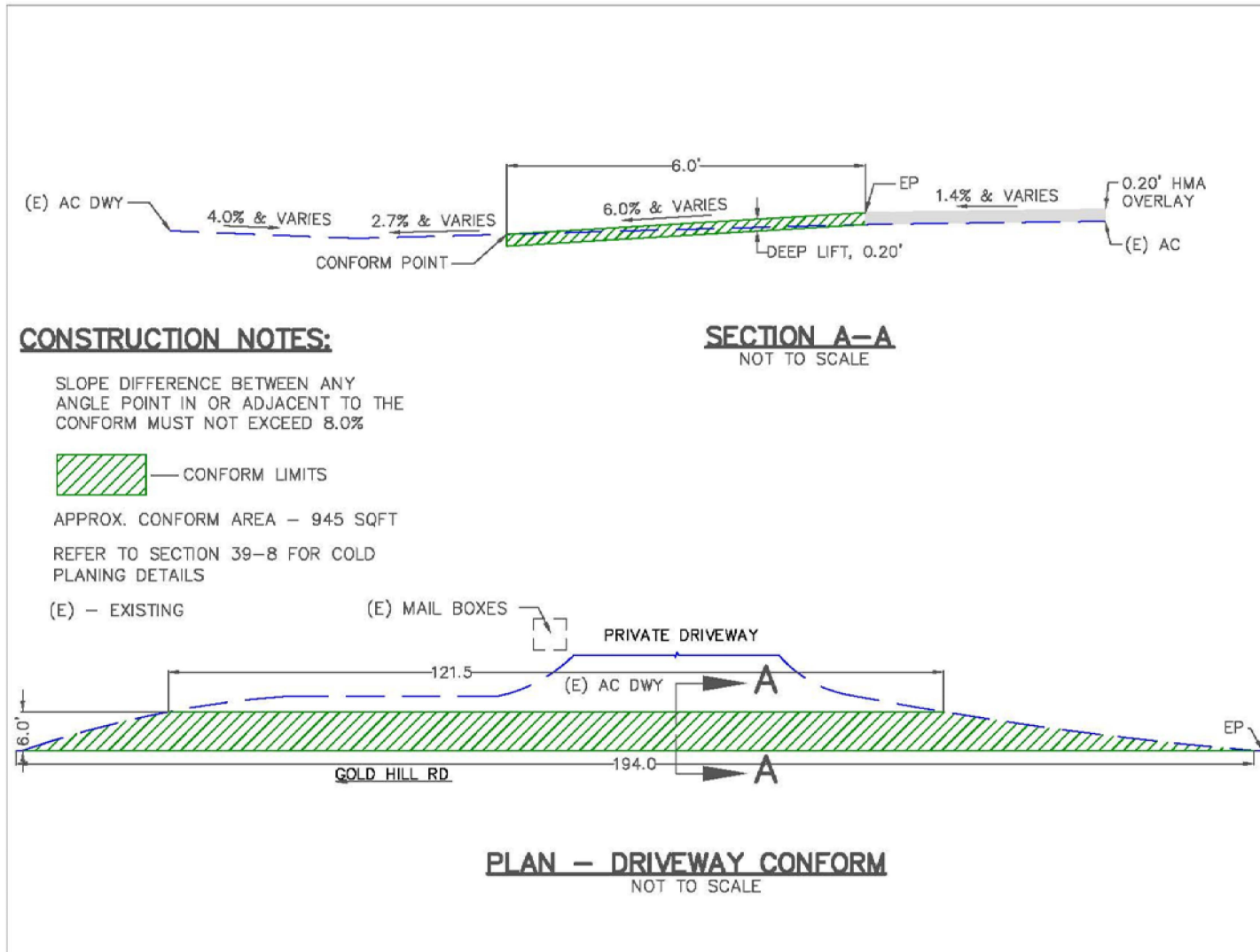
HOT MIX ASPHALT (TYPE A) DRIVEWAY CONFORM DEEP LIFT HMA
(6000 GOLD HILL ROAD)



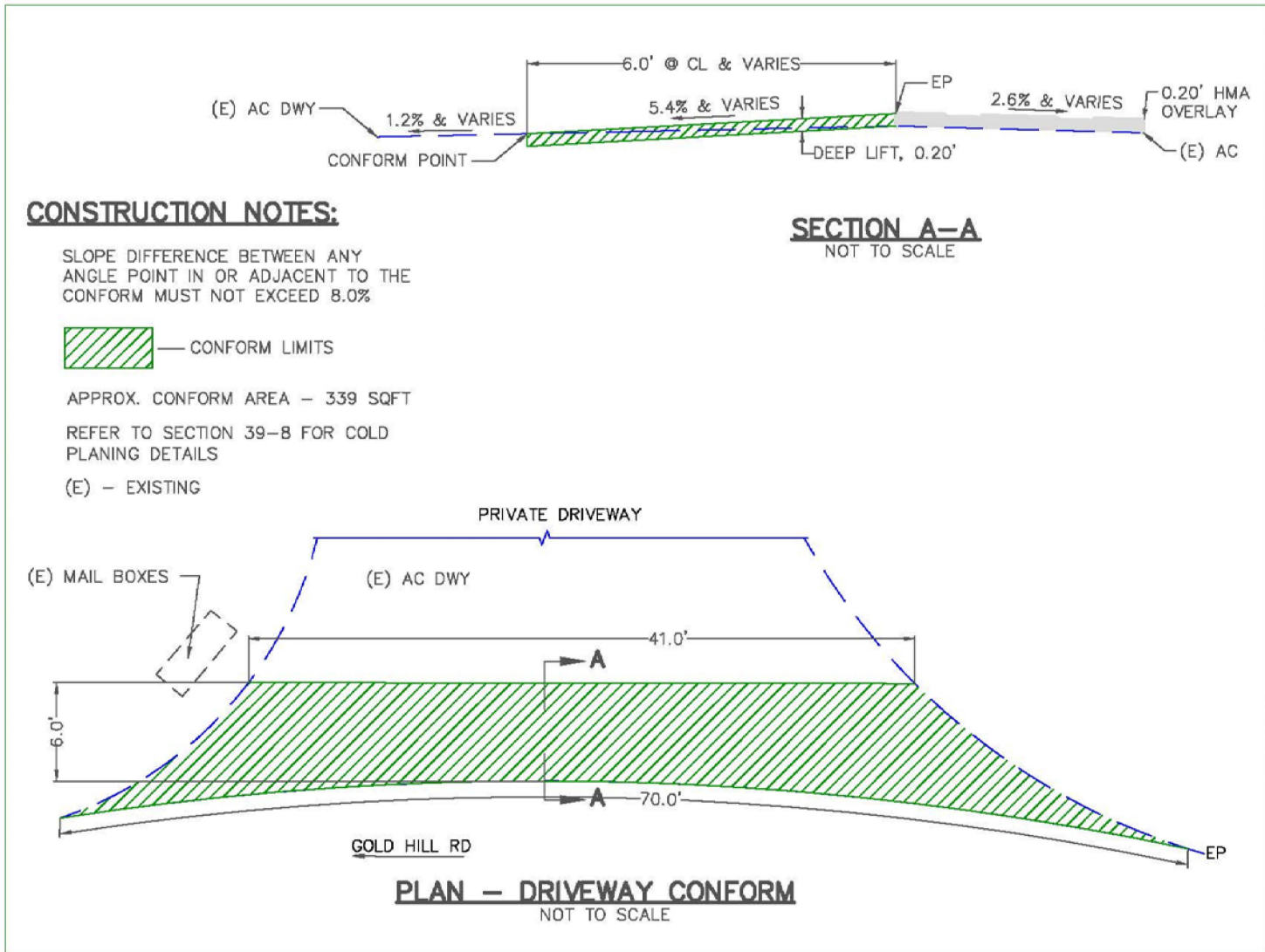
HOT MIX ASPHALT (TYPE A) DRIVEWAY CONFORM DEEP LIFT HMA (FIRE STATION)



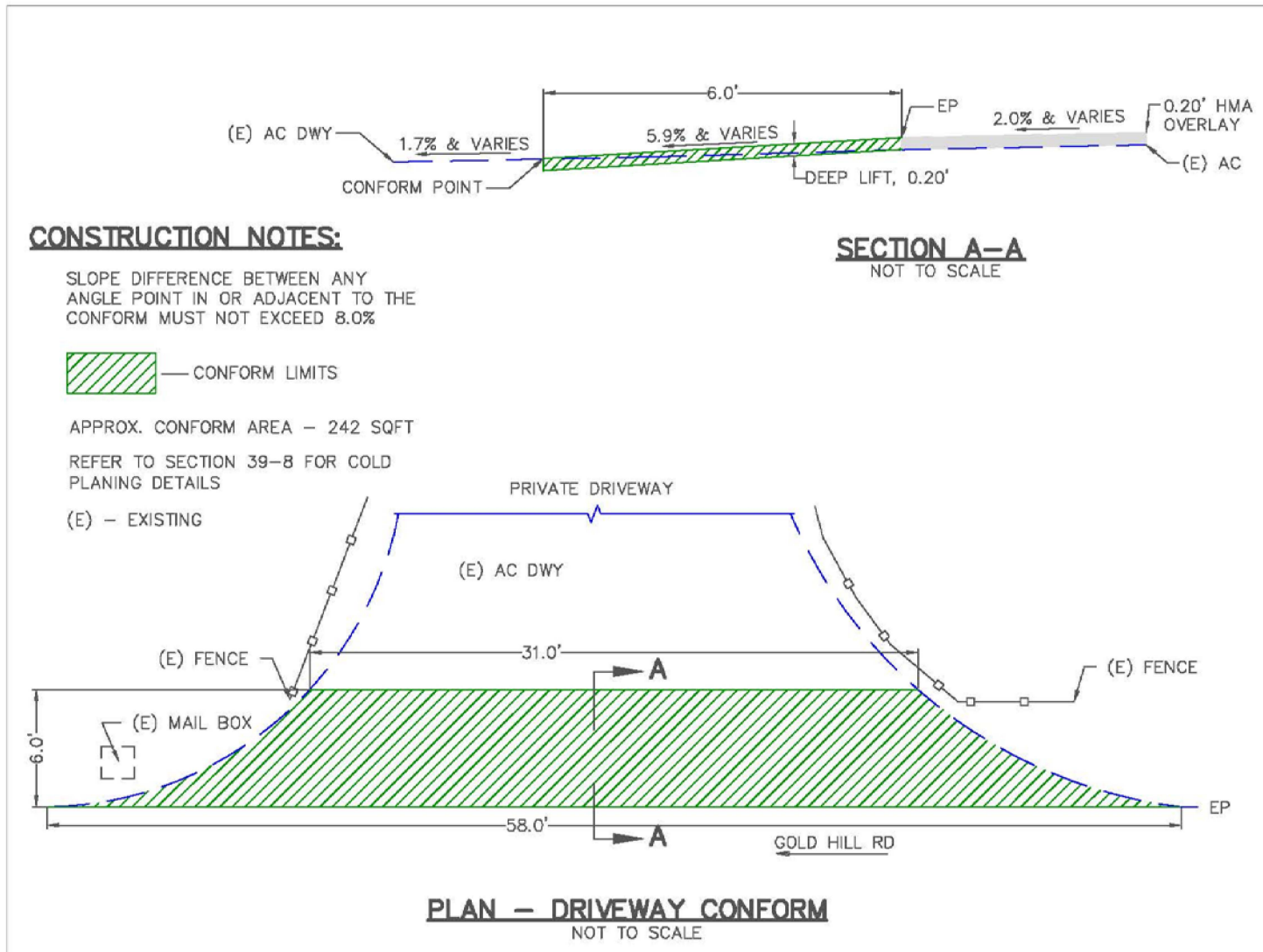
HOT MIX ASPHALT (TYPE A) DRIVEWAY CONFORM DEEP LIFT HMA
(6144/6140/6150 GOLD HILL ROAD)



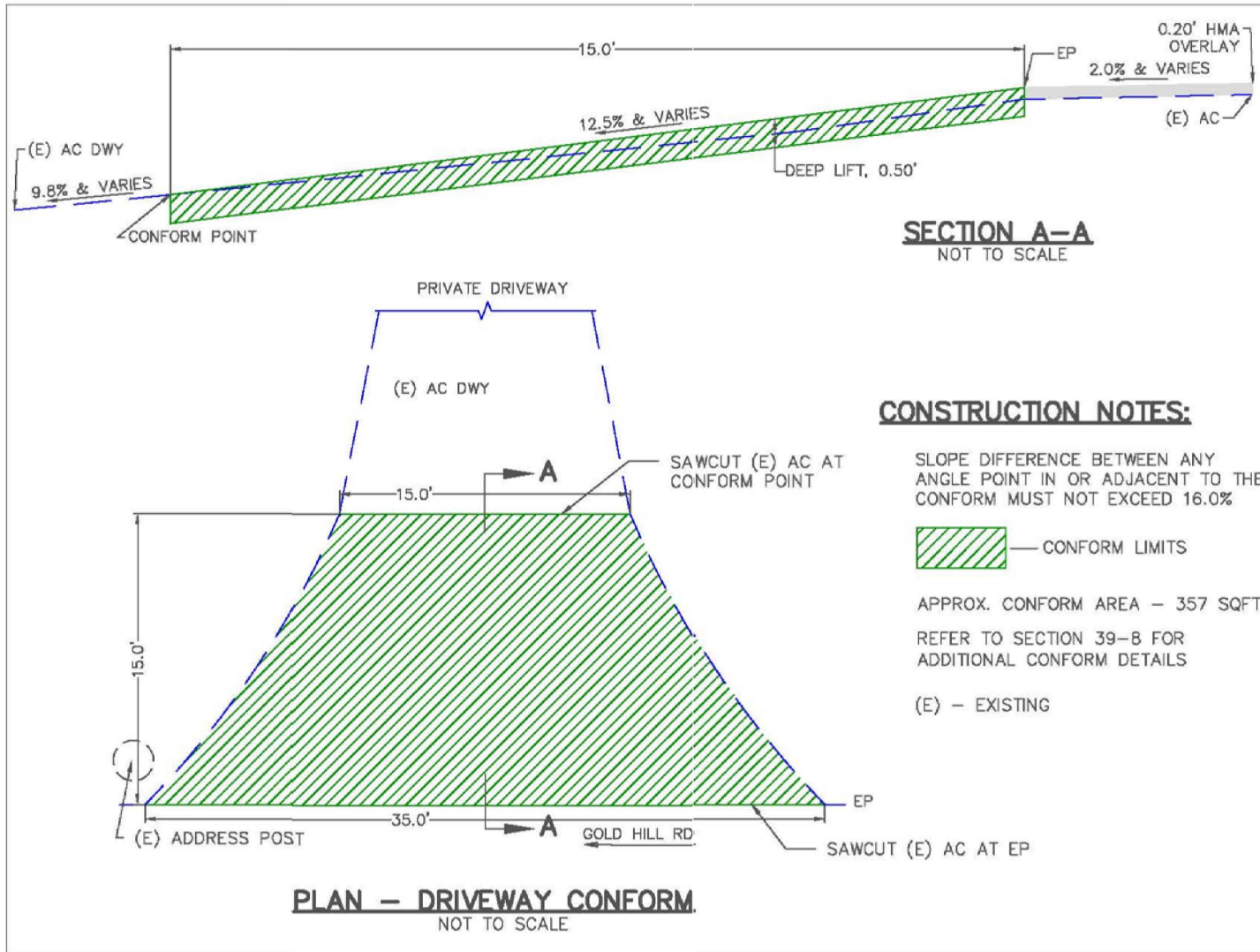
**HOT MIX ASPHALT (TYPE A) DRIVEWAY CONFORM DEEP LIFT HMA
(PEPPER TREE LANE)**



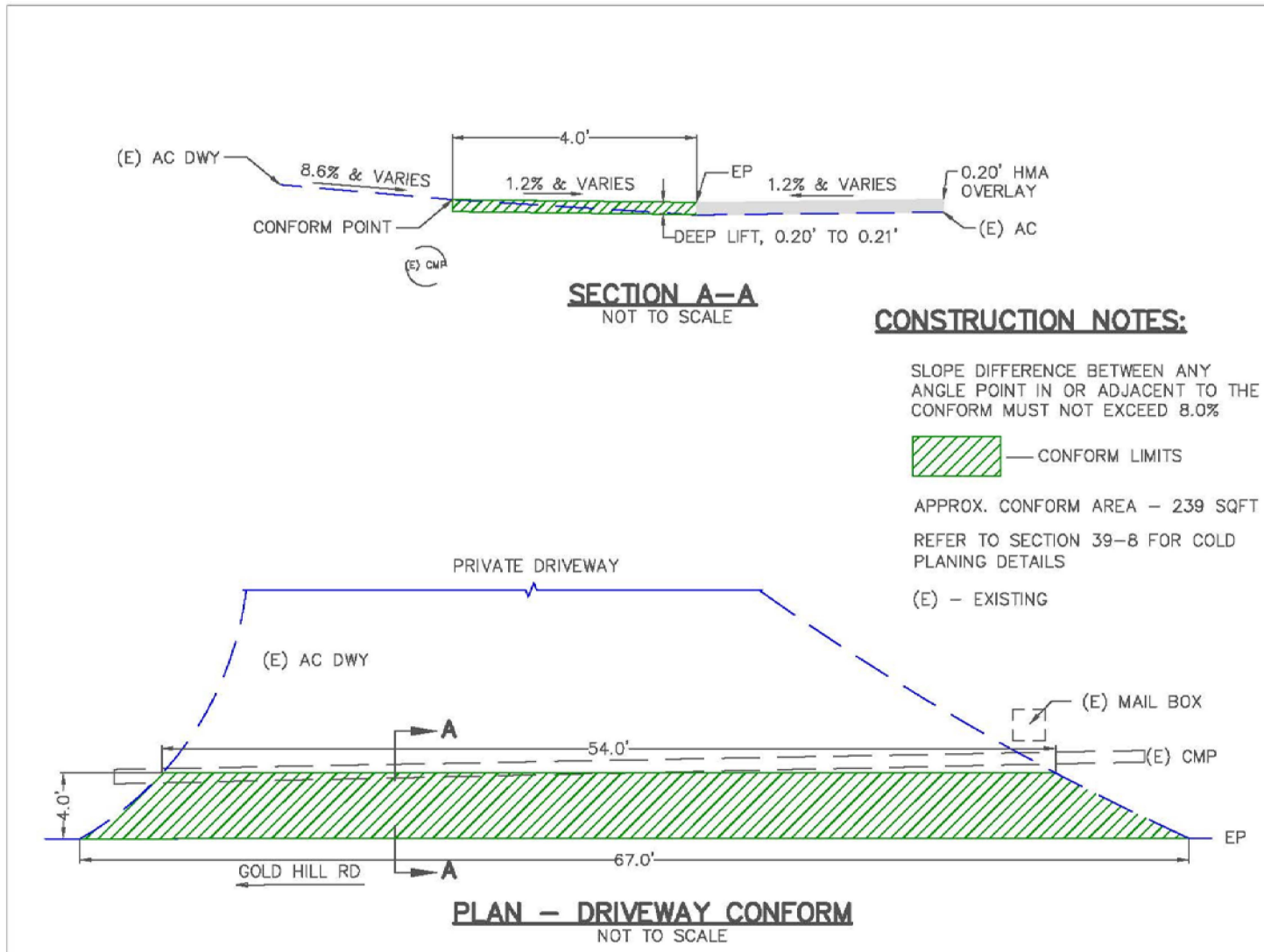
HOT MIX ASPHALT (TYPE A) DRIVEWAY CONFORM DEEP LIFT HMA (GOLD HILL COURT)



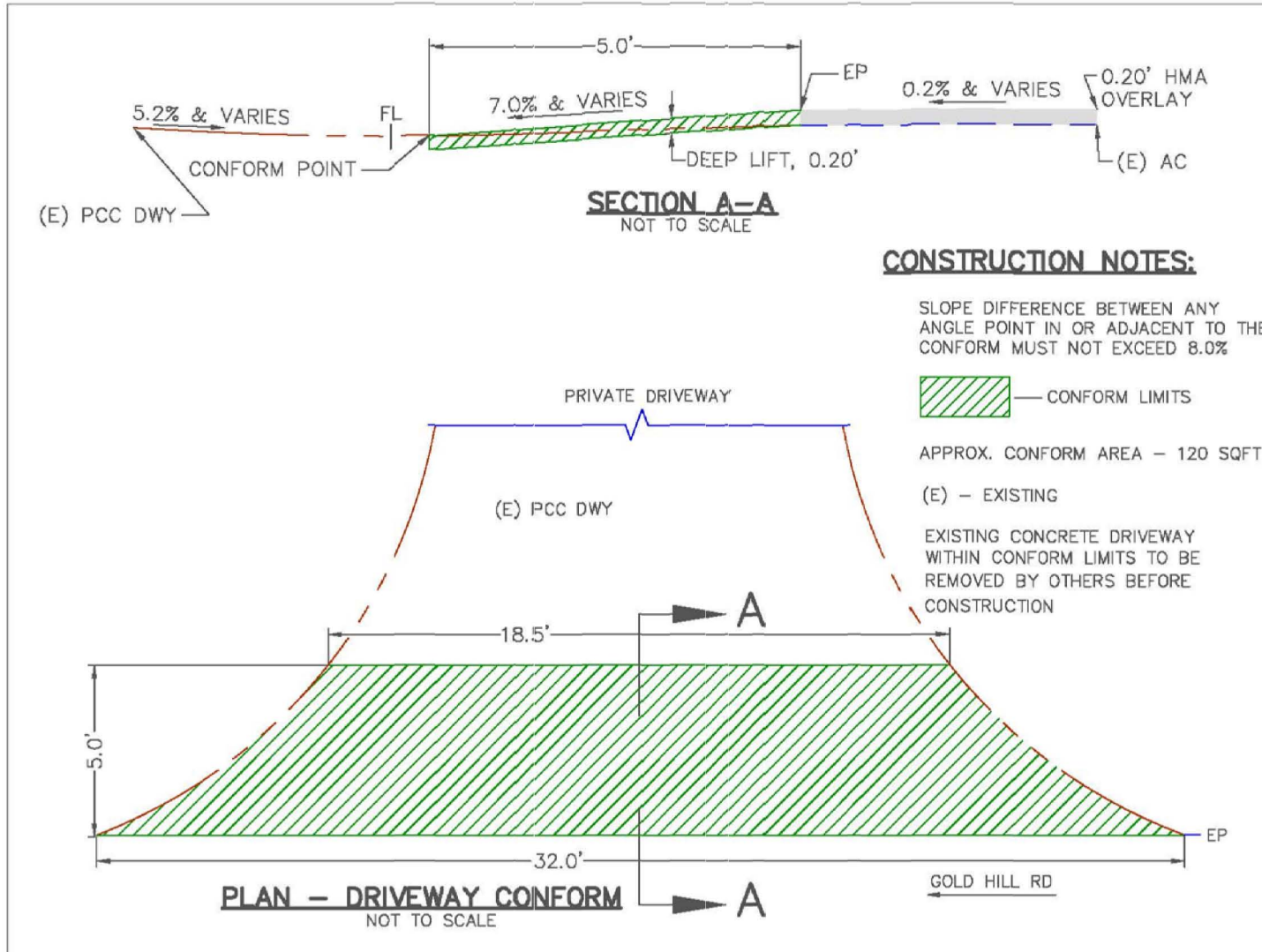
HOT MIX ASPHALT (TYPE A) DRIVEWAY CONFORM DEEP LIFT HMA
(6500 GOLD HILL ROAD)



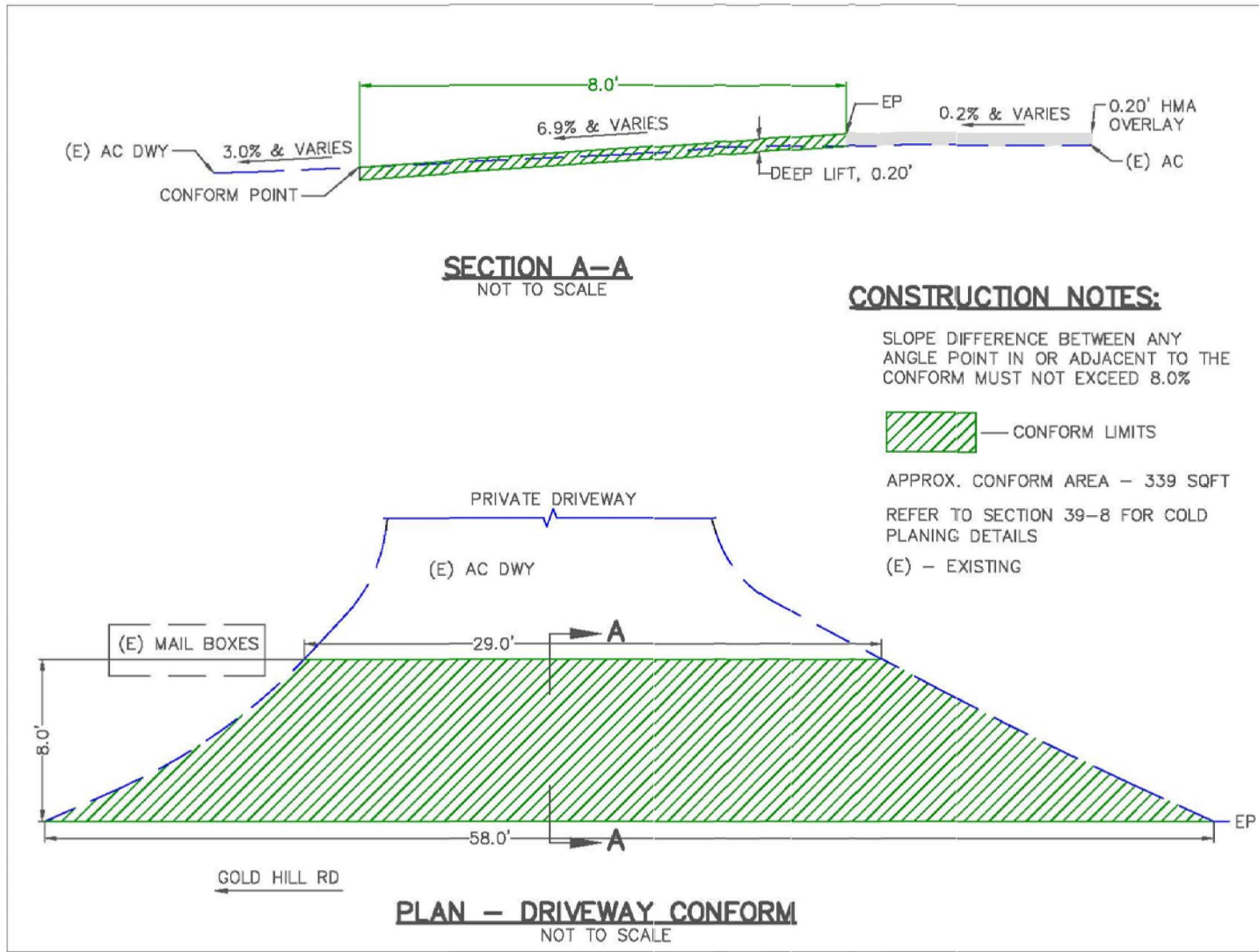
HOT MIX ASPHALT (TYPE A) DRIVEWAY CONFORM DEEP LIFT HMA
 (6502 GOLD HILL ROAD)



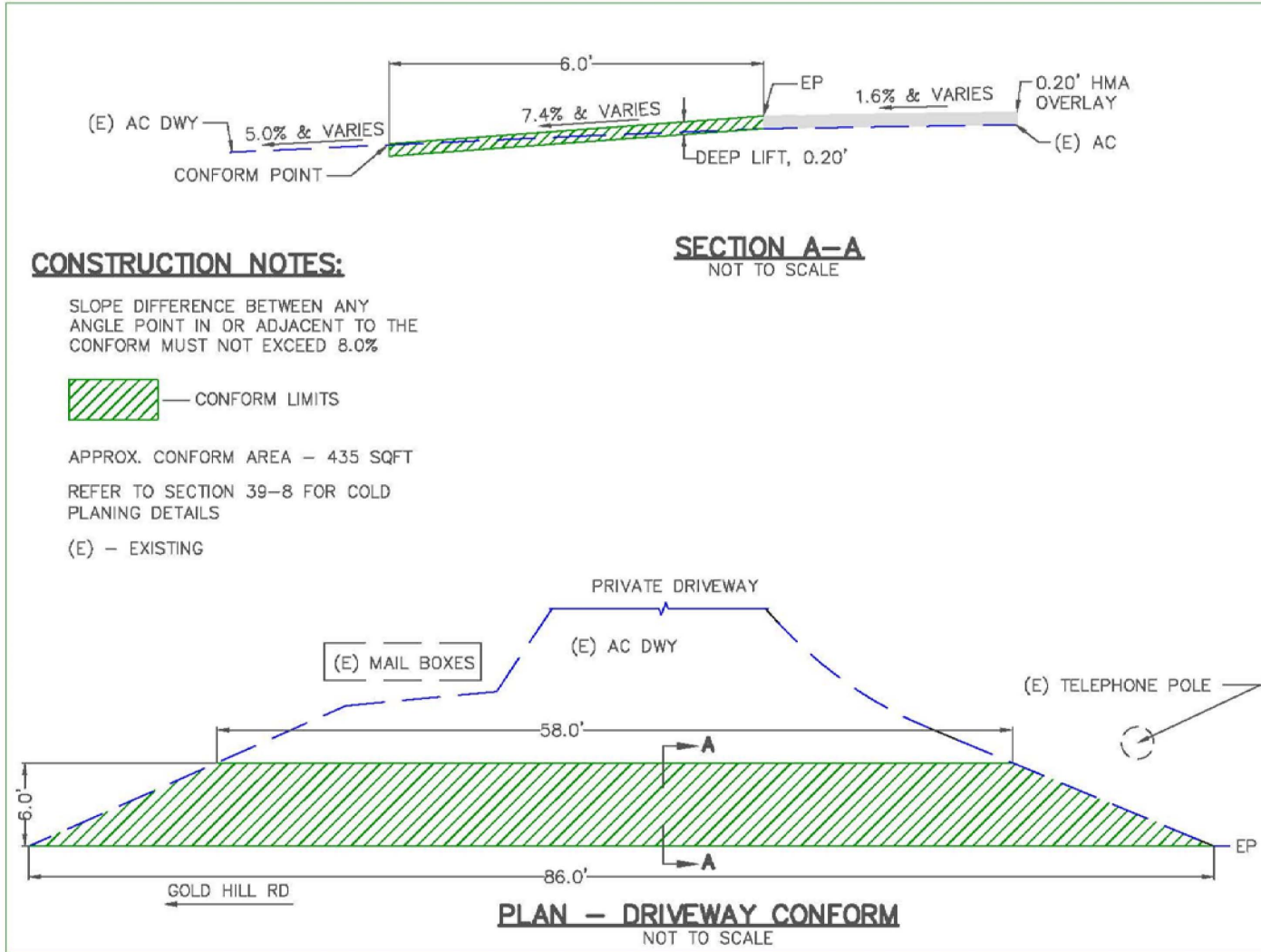
**HOT MIX ASPHALT (TYPE A) DRIVEWAY CONFORM DEEP LIFT HMA
(6501 GOLD HILL ROAD)**



HOT MIX ASPHALT (TYPE A) DRIVEWAY CONFORM DEEP LIFT HMA
 (CONCRETE DRIVEWAY)



HOT MIX ASPHALT (TYPE A) DRIVEWAY CONFORM DEEP LIFT HMA (SOURDOUGH LANE)



HOT MIX ASPHALT (TYPE A) DRIVEWAY CONFORM DEEP LIFT HMA (SULLIVAN LANE)

