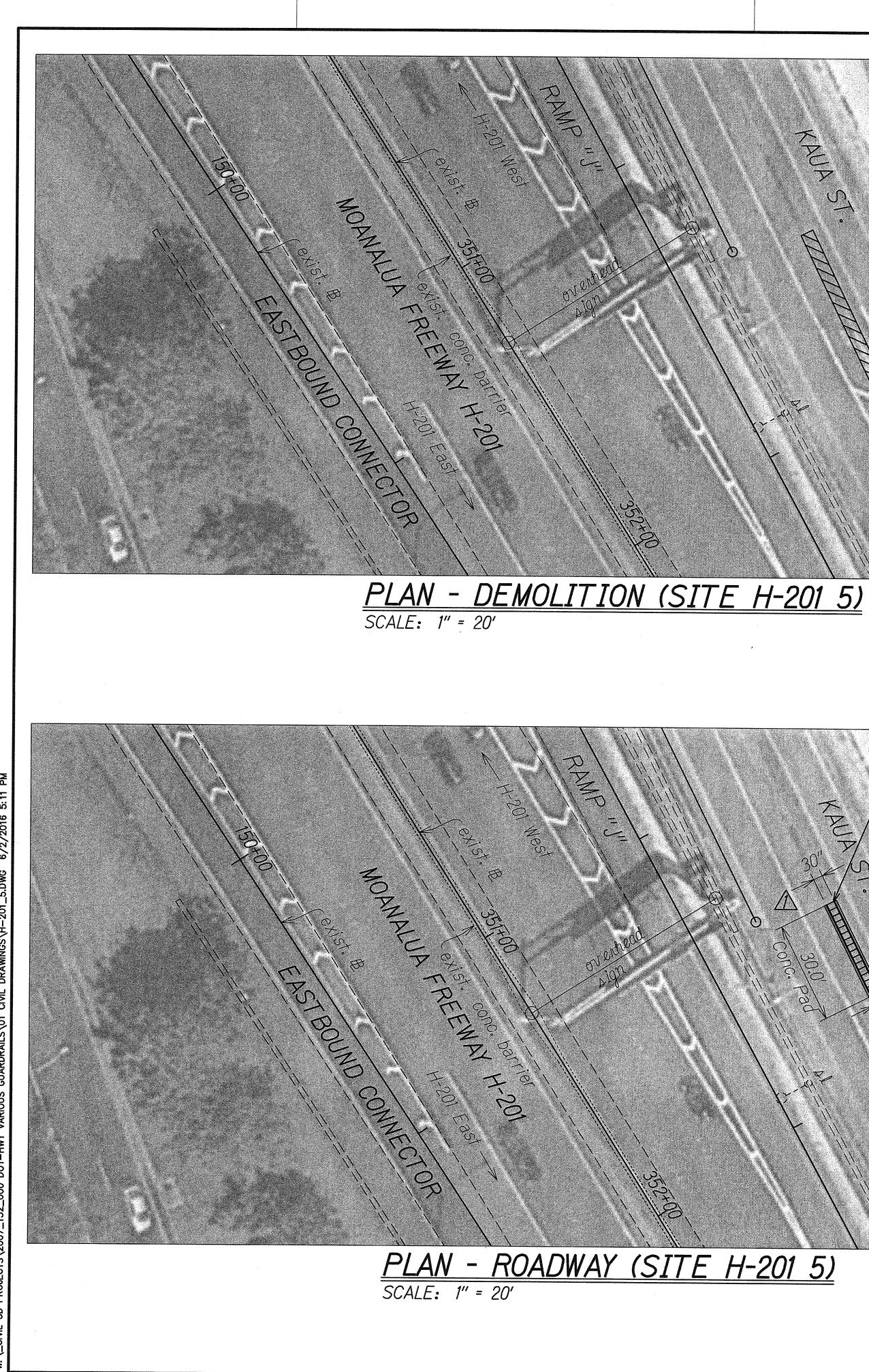
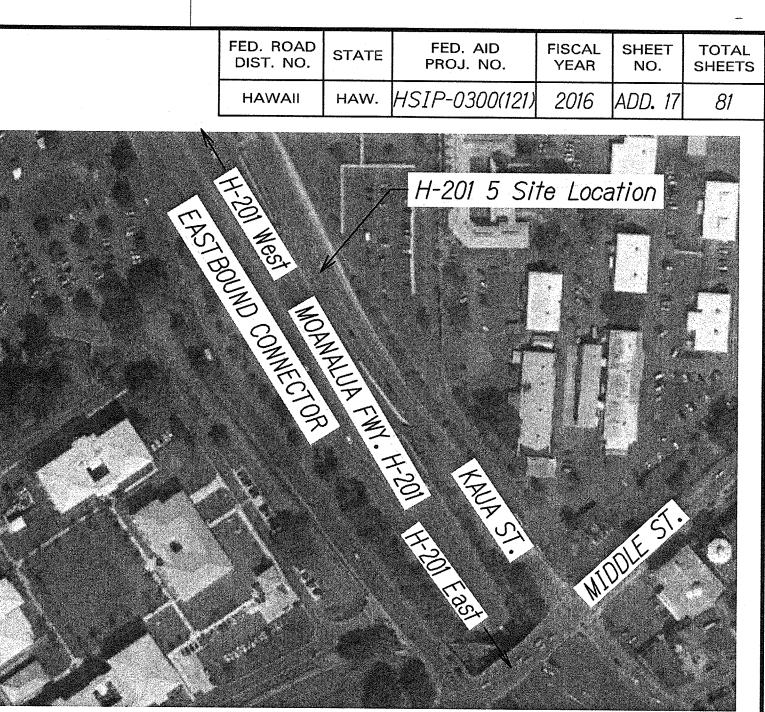


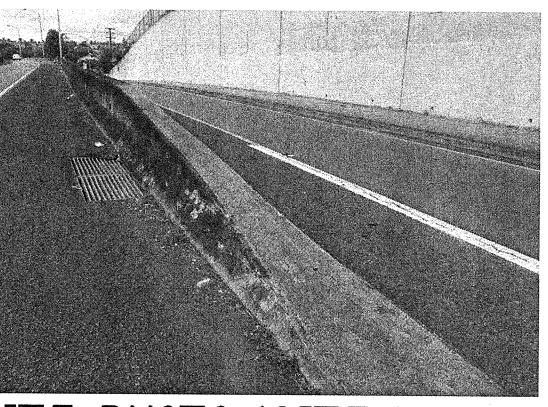
OF THE LICENSE SHEET No. 3 OF 5 SHEETS ADD. 16



KRUP J Remove Approx. 54' of Existing Concrete Down Section Barrier AC Pavement ₿ Sta. 351+71.96 o/s 99.05' Lt. to End of Concrete Barrier SOURCE: Site Location Photograph From Google Earth ● Sta. 351+46.5 o/s 94.0' Lt. Connect to Existing Concrete KRU Barrier TRUE -Install Quadguard or TAU-II NOTES: Terminal Impact Attenuator (TL-3 System) or Approved Equal, (See Note 4) with reference to drawing 78 of the Construction Plan set. Existing DI <u>GRAPHICAL</u> SCALE: SIGNATURE Scale: 1" = 20'



LOCATION (SITE H-201 5) SCALE: N.T.S.



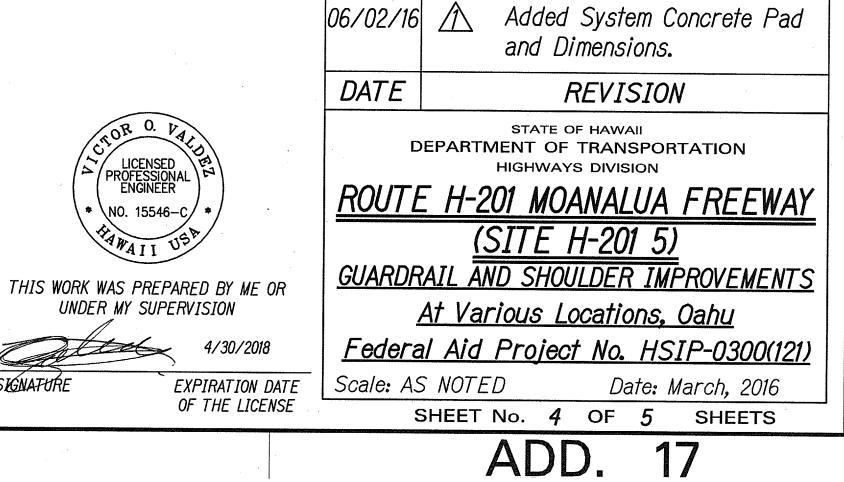
SITE PHOTO (SITE H-201 5) SCALE: N.T.S. (Facing West)

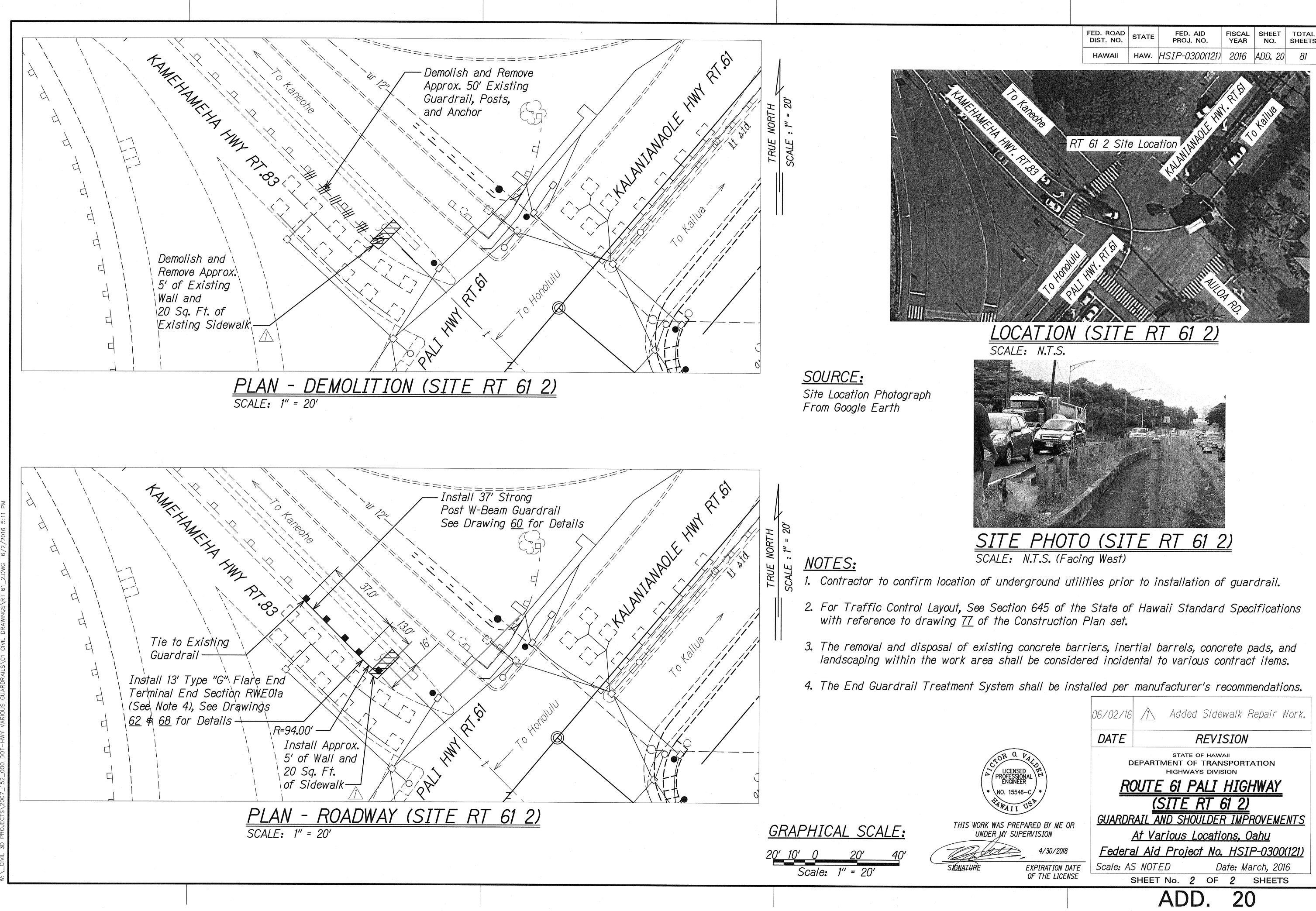
1. Contractor to confirm location of underground utilities prior to installation of guardrail.

2. For Traffic Control Layout, See Section 645 of the State of Hawaii Standard Specifications

3. The removal and disposal of existing concrete barriers, inertial barrels, concrete pads, and landscaping within the work area shall be considered incidental to various contract items.

4. The Terminal Impact Attenuator System shall be installed per manufacturer's recommendations.

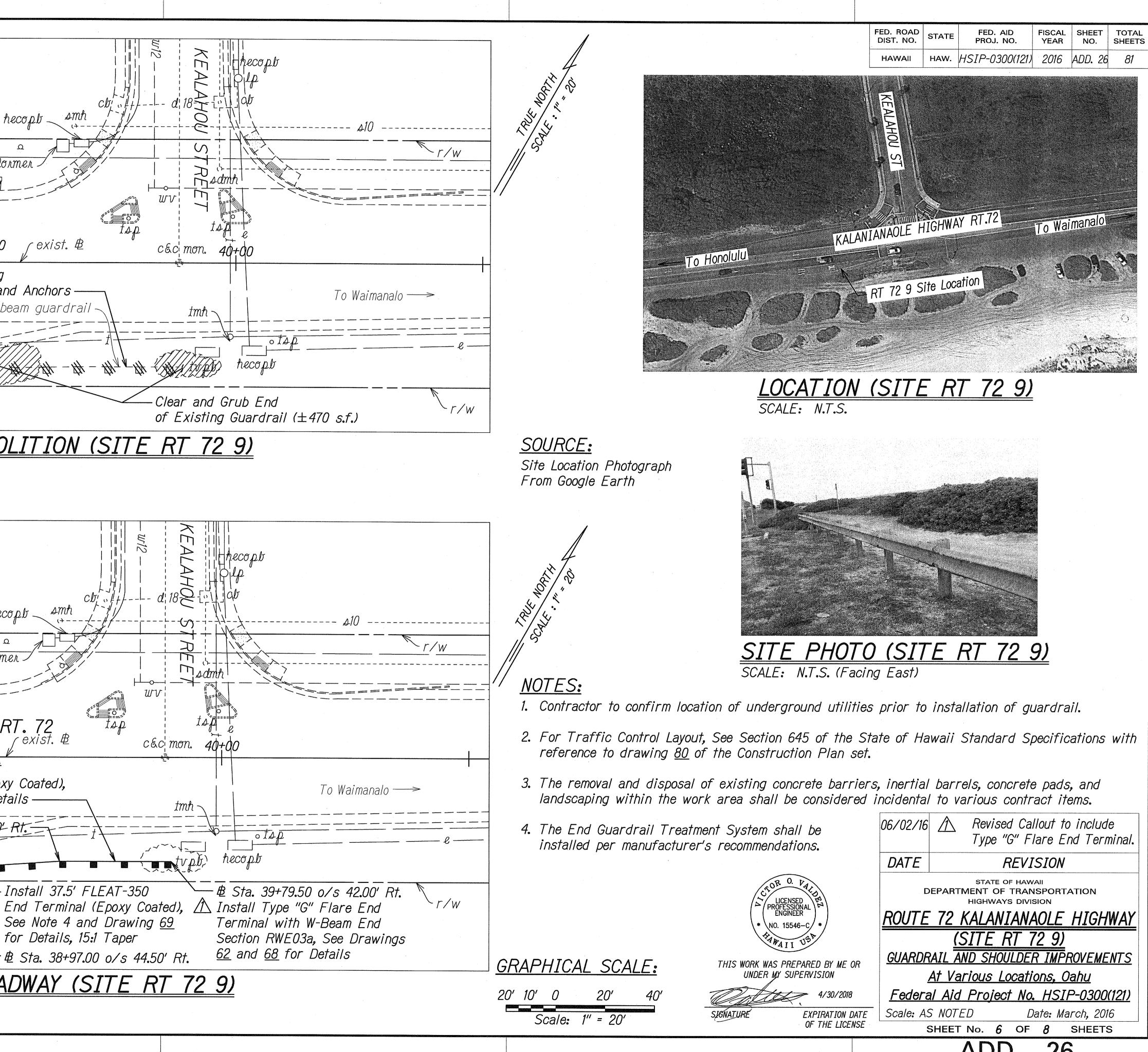




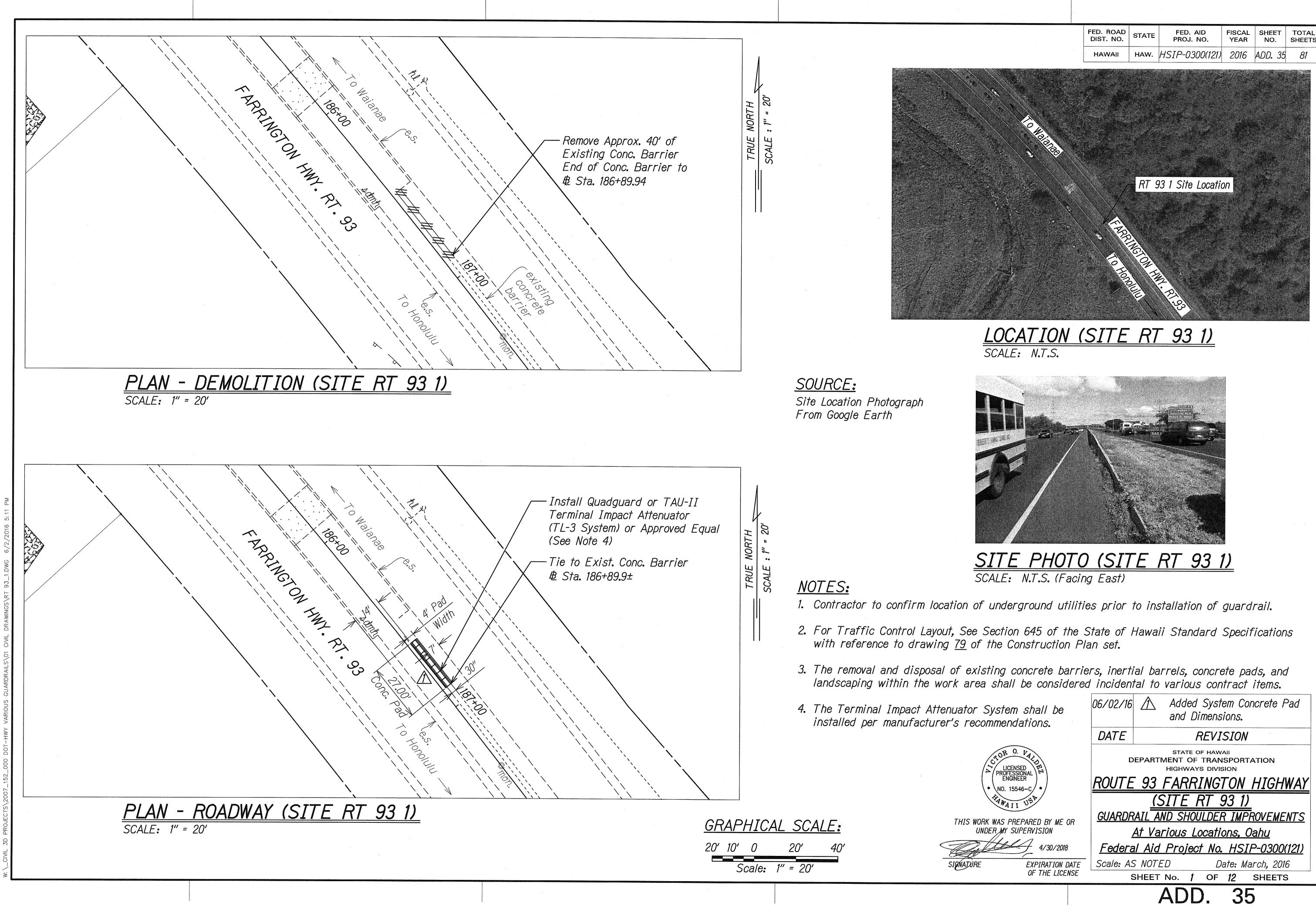
FED. ROAD DIST. NO.		FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HSIP-0300(121)	2016	ADD. 20	81

	06/02/16	6 🛆 Added Sidewalk Repair Work.				
	DATE	REVISION				
LICENSED PROFESSIONAL ENGINEER * NO. 15546-C *	STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION ROUTE 61 PALI HIGHWAY					
HAWAII USP	<u>(SITE RT 61 2)</u>					
K WAS PREPARED BY ME OR	GUARDRAIL AND SHOULDER IMPROVEMENTS					
DER MY SUPERVISION	4	<u>At Various Locations, Oahu</u>				
4/30/2018	<u>Federa</u>	al Aid Project No. HSIP-0300(121)				
EXPIRATION DATE	Scale: AS	S NOTED Date: March, 2016				
OF THE LICENSE	Ę	SHEET No. 2 OF 2 SHEETS				

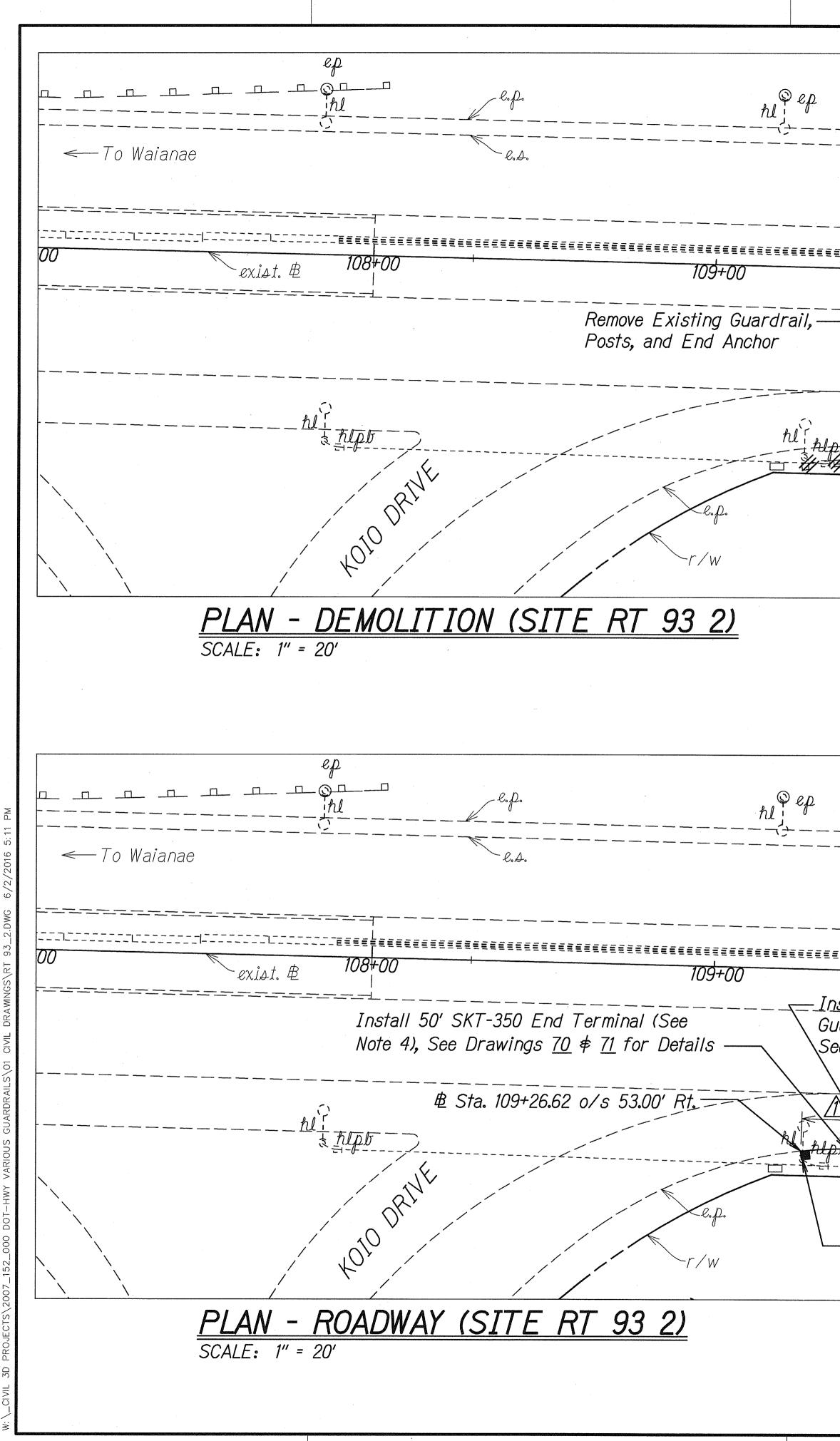
AM hecopb - r/w o AIgn transformer tspo controller tan <--- To Honolulu ſ exist. ₿ 39+00 38+00 Remove All Existing Guardrails, Posts and Anchors -KALANIANAOLE HIGHWAY RT. 72 existing w-beam guardrail PLAN - DEMOLITION (SITE RT 72 9) SCALE: 1" = 20' smh hecopb_ rr/w o Dign transformer. tspo controller TAP KALANIANAOLE HIGHWAY RT. 72 <--- To Honolulu r exist. ₿ 39+00 38+00 Install 45' Strong Post W-Beam Guardrail (Epoxy Coated), See Drawing 60 for Details -₿ Sta. 39+34.50 o/s 42.00- Rt. – Install 37.5' FLEAT-350 See Note 4 and Drawing 69 for Details, 15:1 Taper - ₱ Sta. 38+97.00 o/s 44.50' Rt. <u>PLAN - ROADWAY (SITE RT 72 9)</u> SCALE: 1" = 20'



em shall be mendations.	06/02/16 \land Revised Callout to include Type "G" Flare End Terminal.					
	DATE	DATE REVISION				
CTOR O. VALDER LICENSED PROFESSIONAL	STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION					
* NO. 15546-C *	ROUTE 72 KALANIANAOLE HIGHWAY					
HAWAII USP	<u>(SITE RT 72 9)</u>					
K WAS PREPARED BY ME OR	GUARDRAIL AND SHOULDER IMPROVEMENTS					
DER MY SUPERVISION	<u>At Various Locations, Oahu</u>					
4/30/2018	Federal Aid Project No. HSIP-0300(121)					
EXPIRATION DATE	Scale: AS	S NOTED Date: March, 2016				
OF THE LICENSE	Ś	SHEET No. 6 OF 8 SHEETS				
		ADD. 26				



					,	
	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	HAWAII	HAW.	HSIP-0300(121)	2016	ADD. 35	81
Тонатаза						
			93 1 Site Locatio	on		
	To House	THETON HIM	M			

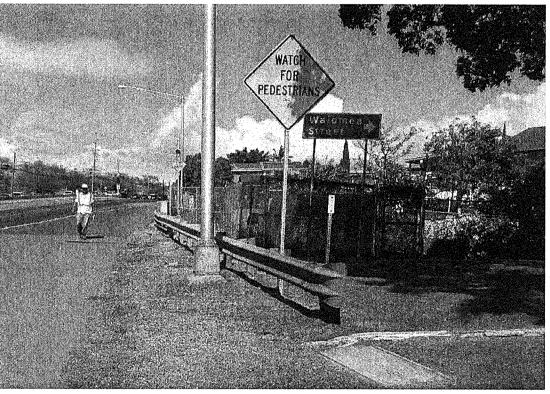


To Waiana 110+00 FARRINGTON HWY. RT.93 To Honolulu -> the the the the the SOURCE: Site Location Photograph From Google Earth <u>NOTES:</u> RUE 110+00 <u>- Install 37.5' Strong Post W-Beam</u> with reference to drawing 79 of the Construction Plan set. Guardrail (without Rubrail), FARRINGTON HWY. RT.93 To Honolulu -> 50.00 - Tie to Existing Gaurdrail ₿ Sta. 109+39.09 o/s 52.04' Lt. Approx Location of Street Light. Guardrail to Shield Street Light THIS WORK **GRAPHICAL SCALE:** 20' 10' 0 20' SIGNADURE Scale: 1" = 20'

	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	HAWAII	HAW.	HSIP-0300(121)	2016	ADD. 36	81
						and the second
ae	A restances (M) Ext					
F	ARRINGTON	HWY. F	RT.93 To Ho	nolulu	-	(C)
					0	



SCALE: N.T.S.



SITE PHOTO (SITE RT 93 2) SCALE: N.T.S. (Facing East)

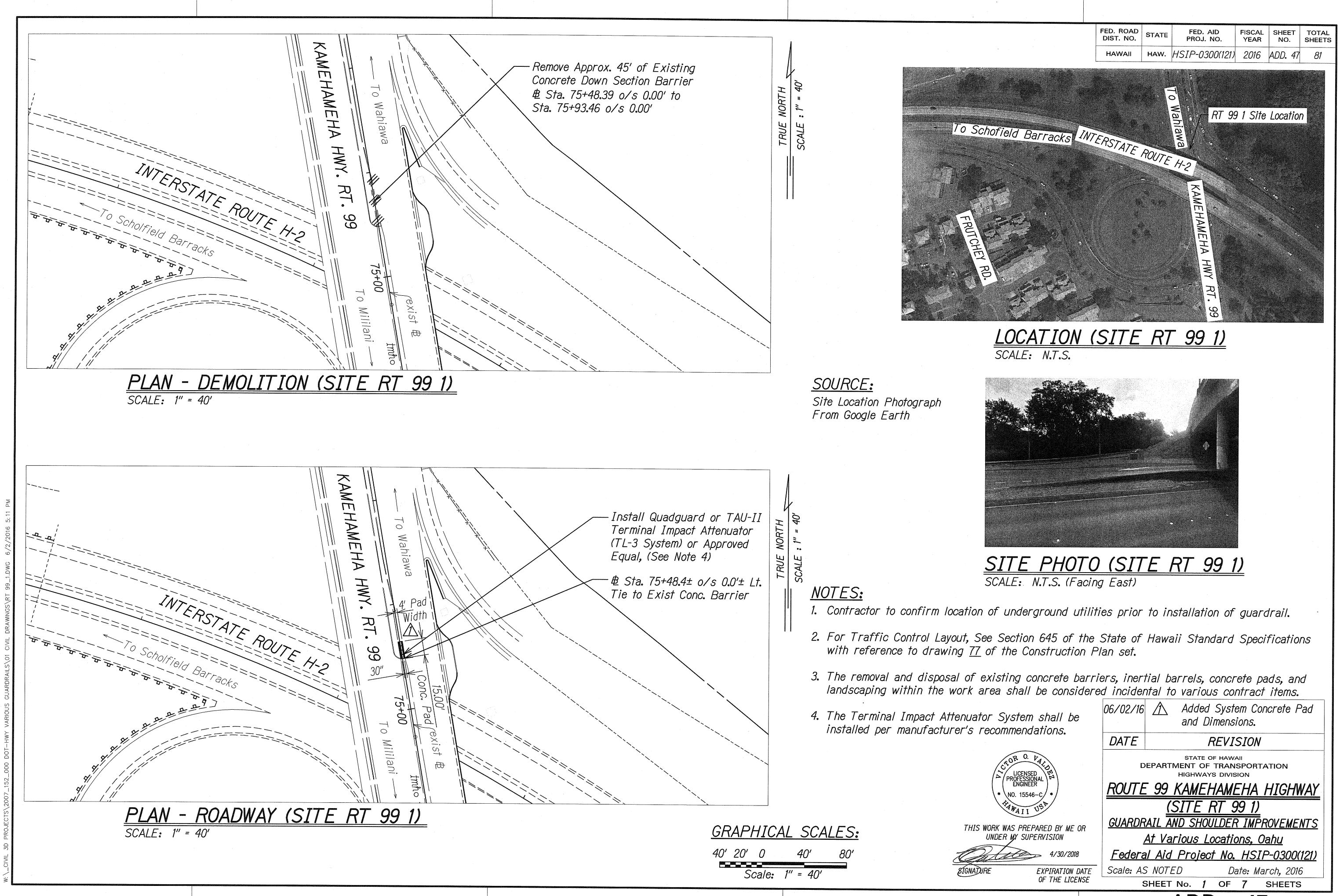
§ 1. Contractor to confirm location of underground utilities prior to installation of guardrail.

2. For Traffic Control Layout, See Section 645 of the State of Hawaii Standard Specifications

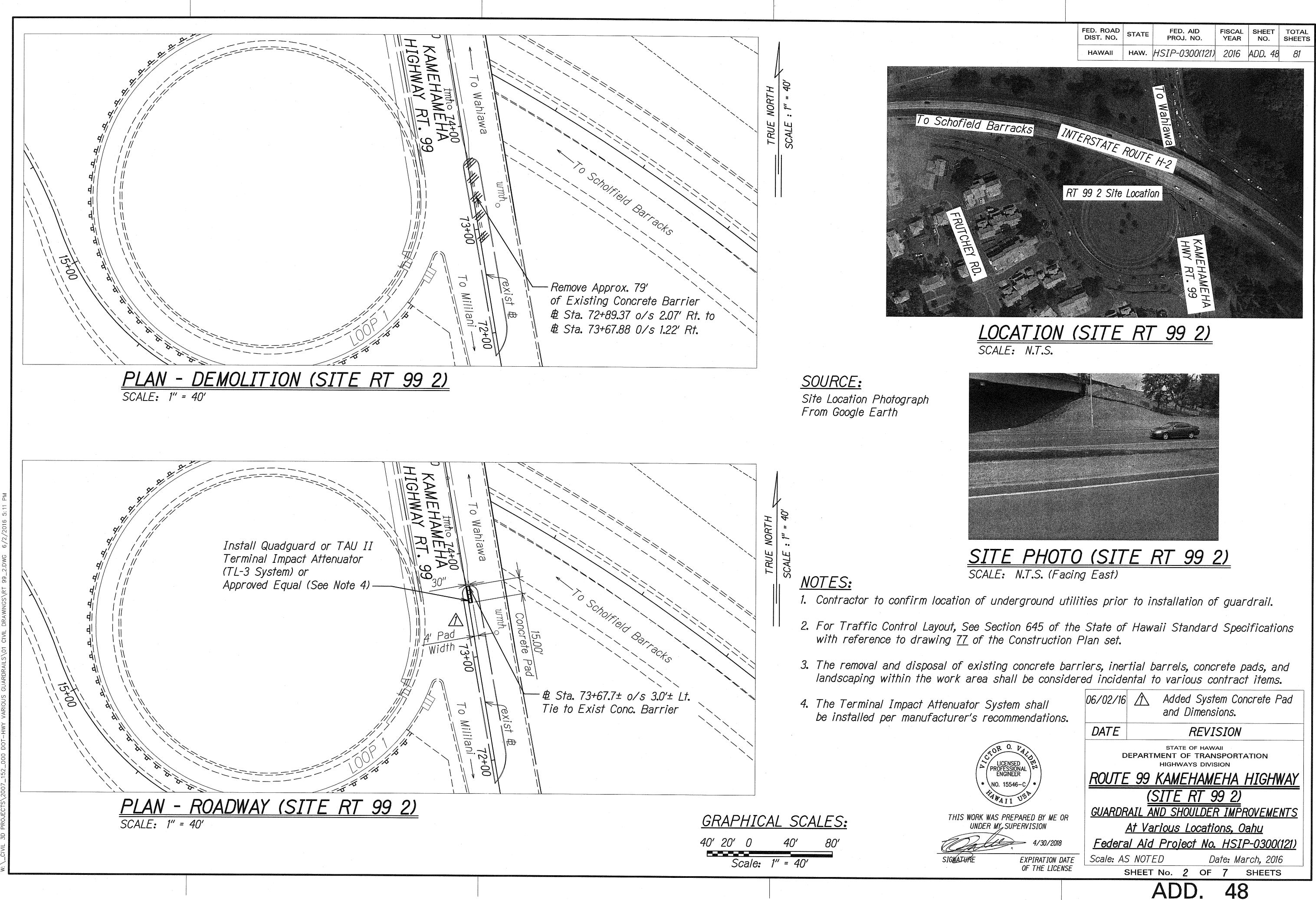
3. The removal and disposal of existing concrete barriers, inertial barrels, concrete pads, and landscaping within the work area shall be considered incidental to various contract items.

4. The End Guardrail Treatment System shall be installed per manufacturer's recommendations.

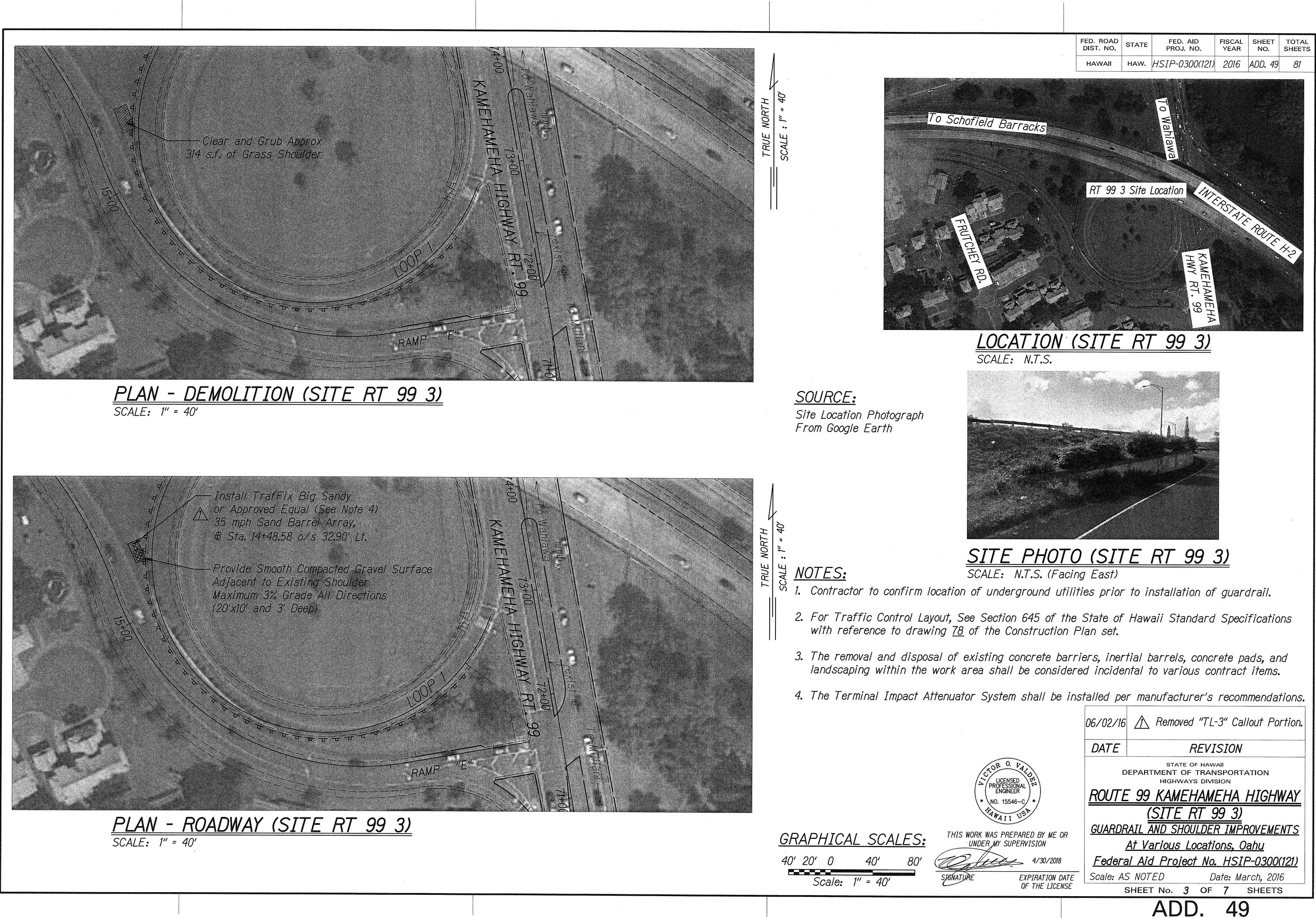
	06/02/16	\land Rev	vised SKT-3	50 Alignment.			
	DATE		REVISIC	N			
LICENSED PROFESSIONAL	D	STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION					
* NO. 15546-C *	<u>ROUTE</u>	ROUTE 93 FARRINGTON HIGHWAY					
HAWAII USA	<u>(SITE RT 93 2)</u>						
K WAS PREPARED BY ME OR	<u>GUARDF</u>	RAIL AND SI	HOULDER IN	IPROVEMENTS			
DER MY SUPERVISION	-	<u>At Various</u>	<u>S Locations,</u>	<u>Oahu</u>			
4/30/2018	Federa	al Aid Pro	<u>ject No. Hs</u>	<u>SIP-0300(121)</u>			
EXPIRATION DATE	Scale: AS	S NOTED	Date:	March, 2016			
OF THE LICENSE	Ç	SHEET No.	2 OF 12	SHEETS			
		AC)D. 3	36			



		ADD.	47			
OF THE LICENSE	E	HEET No. 1 OF	7 SHEETS			
EXPIRATION DATE	Scale: AS	NOTED Da	nte: March, 2016			
4/30/2018	<u>Federa</u>	Aid Project No.	<u>HSIP-0300(121)</u>			
ER MY SUPERVISION	4	<u>t Various Locatic</u>	ons, Oahu			
WAS PREPARED BY ME OR	GUARDRAIL AND SHOULDER IMPROVEMENT					
HAWAII USP	<u>(SITE RT 99 1)</u>					
* NO. 15546-C/ *	ROUTE	ROUTE 99 KAMEHAMEHA HIGHWAY				
LICENSED PROFESSIONAL ENGINEER		HIGHWAYS DIVISION				
CTOR O. VALDE	STATE OF HAWAII DEPARTMENT OF TRANSPORTATION					
	DATE	REVIS	SION			
System shall be ommendations.	06/02/16	Added System and Dimensi	em Concrete Pad ons.			

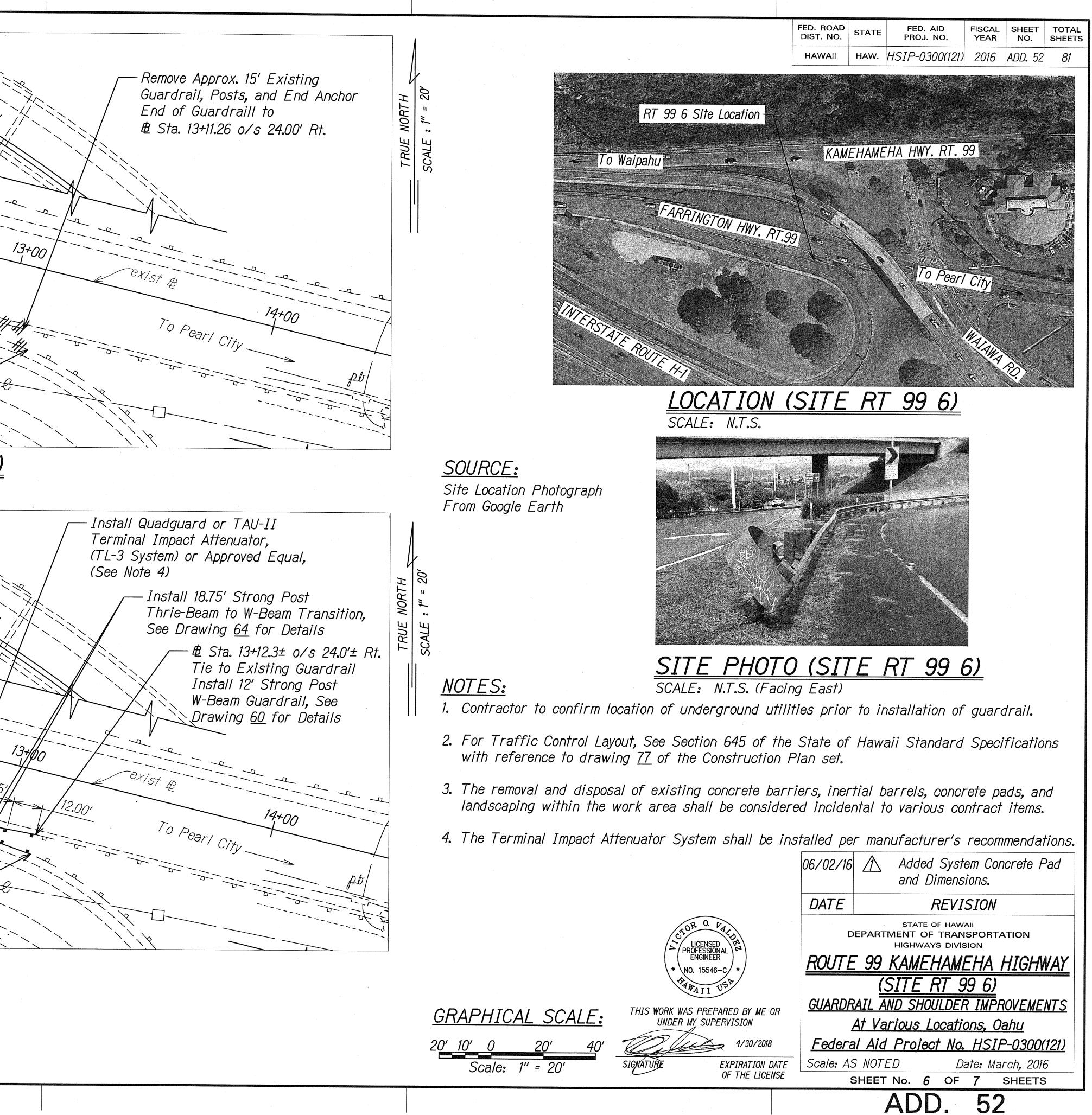


OF THE LICENSE	3	SHEET No. 2 OF 7 SHEETS				
EXPIRATION DATE	Scale: AS	S NOTED Date: March, 2016				
4/30/2018	<u>Federa</u>	al Aid Project No. HSIP-0300(121)				
DER MY SUPERVISION	<u>At Various Locations, Oahu</u>					
K WAS PREPARED BY ME OR	GUARDRAIL AND SHOULDER IMPROVEMENTS					
HAWAII USP	<u>(SITE RT 99 2)</u>					
* NO. 15546-C/ */	<u>ROUTE 99 KAMEHAMEHA HIGHWA</u>					
LICENSED PROFESSIONAL ENGINEER	HIGHWAYS DIVISION					
CTOR O. VALDE	STATE OF HAWAII DEPARTMENT OF TRANSPORTATION					
	DATE	REVISION				
System shall recommendations.	06/02/16	Added System Concrete Pad and Dimensions.				

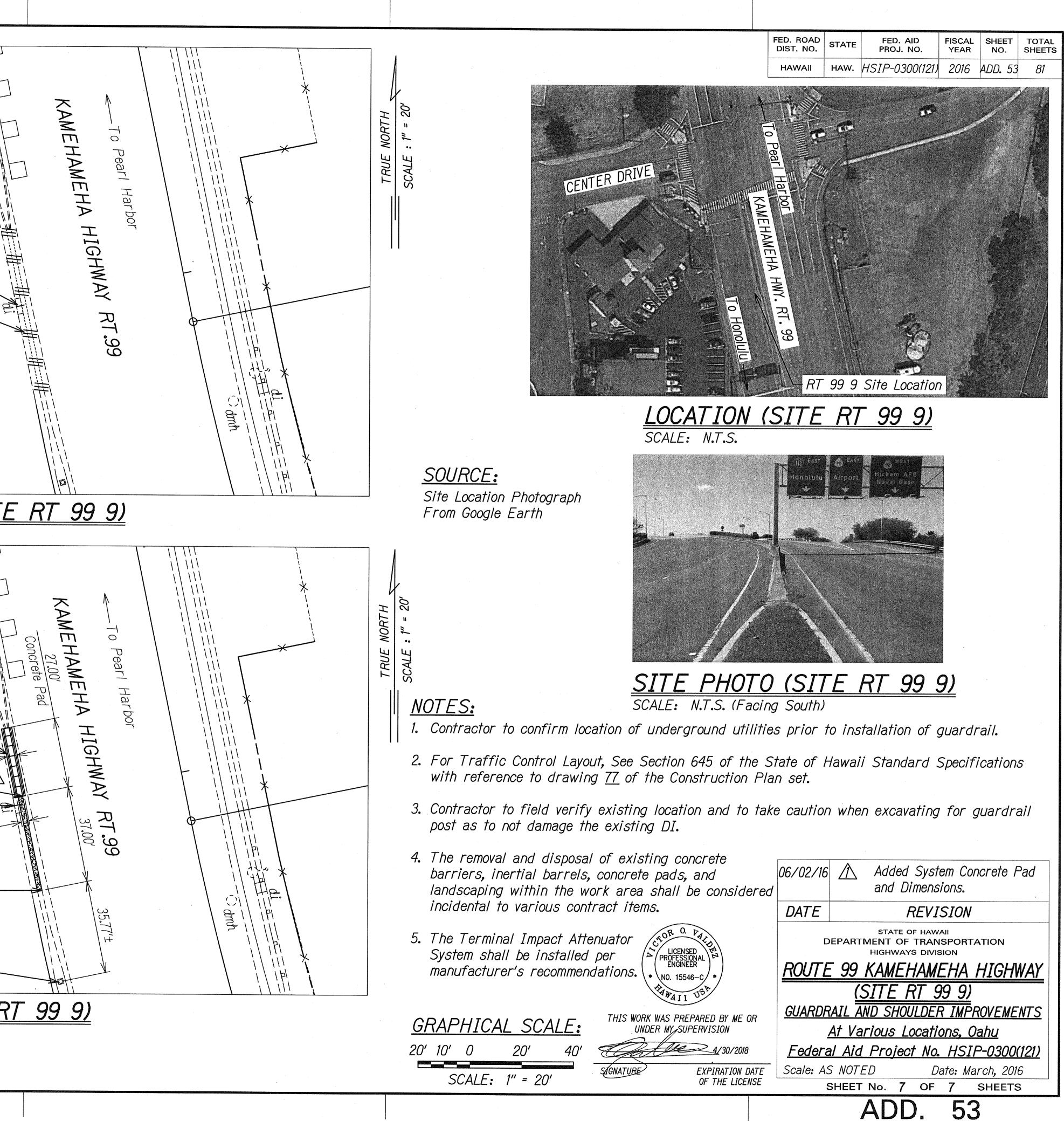


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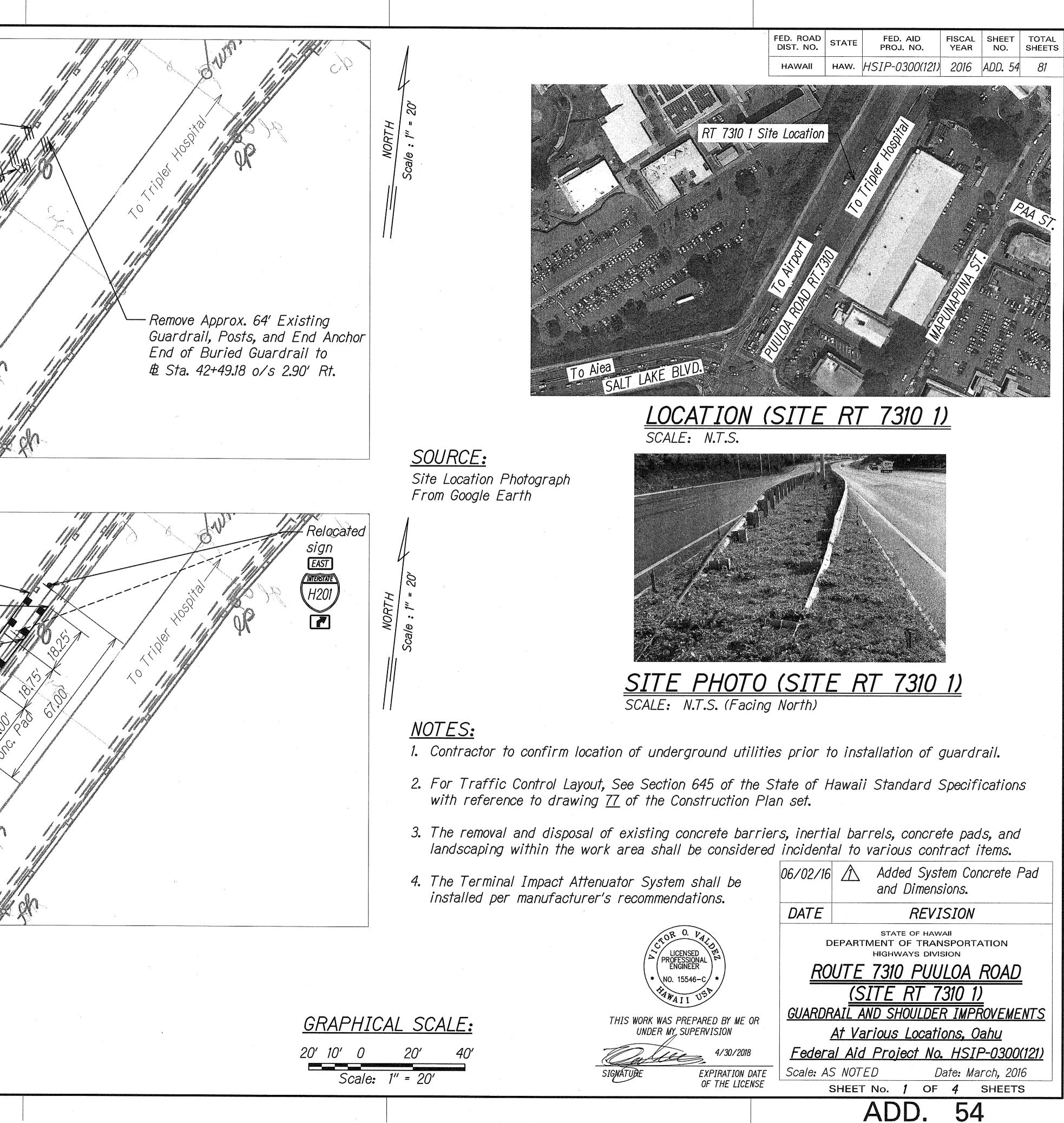
Clear and Level Exist. Grass Mound (Approx. 170 s.f.) FARRINGTON HIGHWAY ROUTE 99 · O H-2 North ALDE LOOP "#3" Remove Approx. 45' Existing Guardrail, Posts, and End Anchor End of Guardrail to ● Sta. 13+10.65 o/s 31.45' Rt. <u>PLAN - DEMOLITION (SITE RT 99 6)</u> SCALE: 1" = 20' FARRINGTON HIGHWAY ROUTE 99 A TO H-2 North = LOOP "#3" 围 Sta. 13+12.3± o/s 31.8'± Rt. Tie to Existing Guardrail Install 12' Strong Post W-Beam Guardrail, See Drawing 60 for Details -<u>PLAN - ROADWAY (SITE RT 99 6)</u> SCALE: 1" = 20'



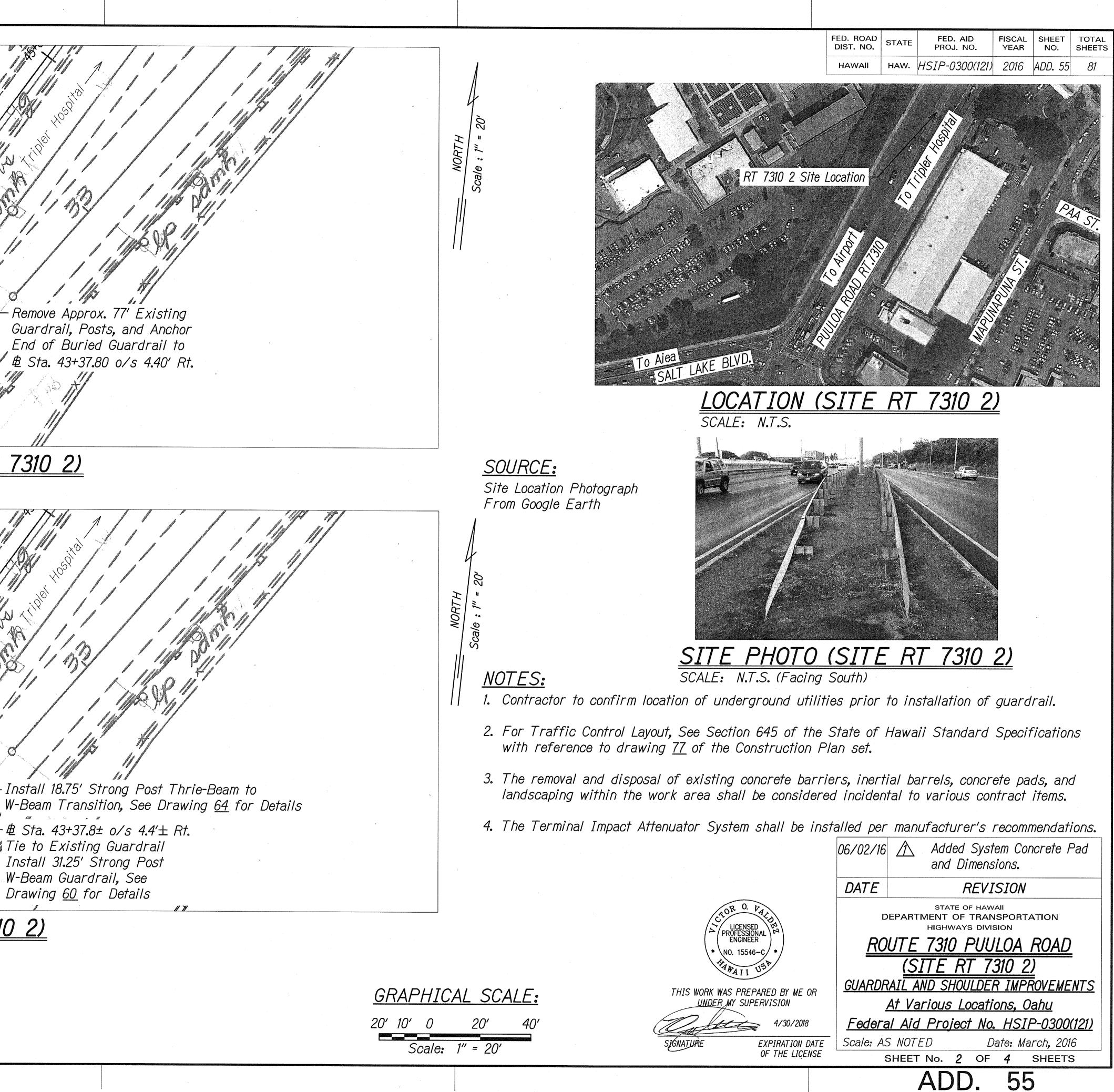
Existing D.I. to Remain Remove Aprox. 65' of -Existing Conc. Barrier PLAN - DEMOLITION (SITE RT 99 9) SCALE: 1" = 20' Install Quadguard or TAU-II \circ Honolulu Terminal Impact Attenuator (TL-3 System) or Approved Equal, (See Note 5) — 11 Construct Concrete Barrier ""| (Type 4A HDOT Standard ::/ Drawing TE-41) -11 Width / Existing DI to remain (See Note 3) -30' ₿ Sta. 6+33.2± o/s 61.9'± Rt. Tie into Existing Barrier, See Standard Drawing TE-44 H Expansion Joint Detail at Existing Structure -Existing HWY Sign Pole PLAN - ROADWAY (SITE RT 99 9) SCALE: 1" = 20'



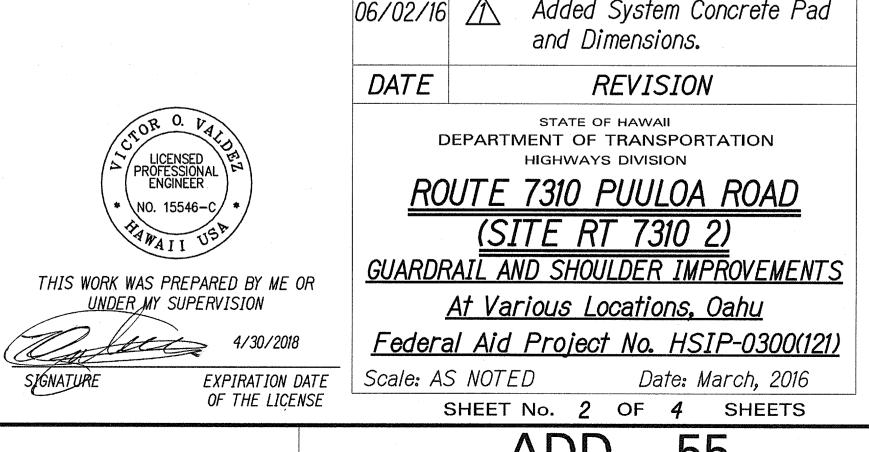
Remove Approx. 64' Existing Guardrail, Posts, and End Anchor End of Buried Guardrail to B Sta. 42+49.18 o/s 6.00' L ate Exist. Sign PLAN - DEMOLITION (SITE RT 7310 1) SCALE: 1" = 20' ₿ Sta. 42+49.2± o/s 6.0/± Lt.-Tie to Existing Guardrail Install 18.25' Strong Post W-Beam Guardrail, See Drawing <u>60</u> for Details ₿ Sta. 42+49.2±,0/s 2.9'± Rt.-Tie to Existing Guardrail Install 18.25' Strong Post W-Beam Guardrail, See Drawing <u>60</u> for Details Instal#18.75' Strong Post Thrie-Beam to W-Beam Transition, See Drawing <u>64</u> for Details 🛆 Install 7.5' or 8' Wide Quadguard II 🦑 System or *(R-NG-PR) Universal TAU Terminal Impact Attenuator (TL-3 System) or Approved Equal (See Note 4) * R-NG-PR - Redirective, Non-Gating Crash Cushion Partially Reusable <u>PLAN - ROADWAY (SITE RT 7310 1)</u> SCALE: 1" = 20'



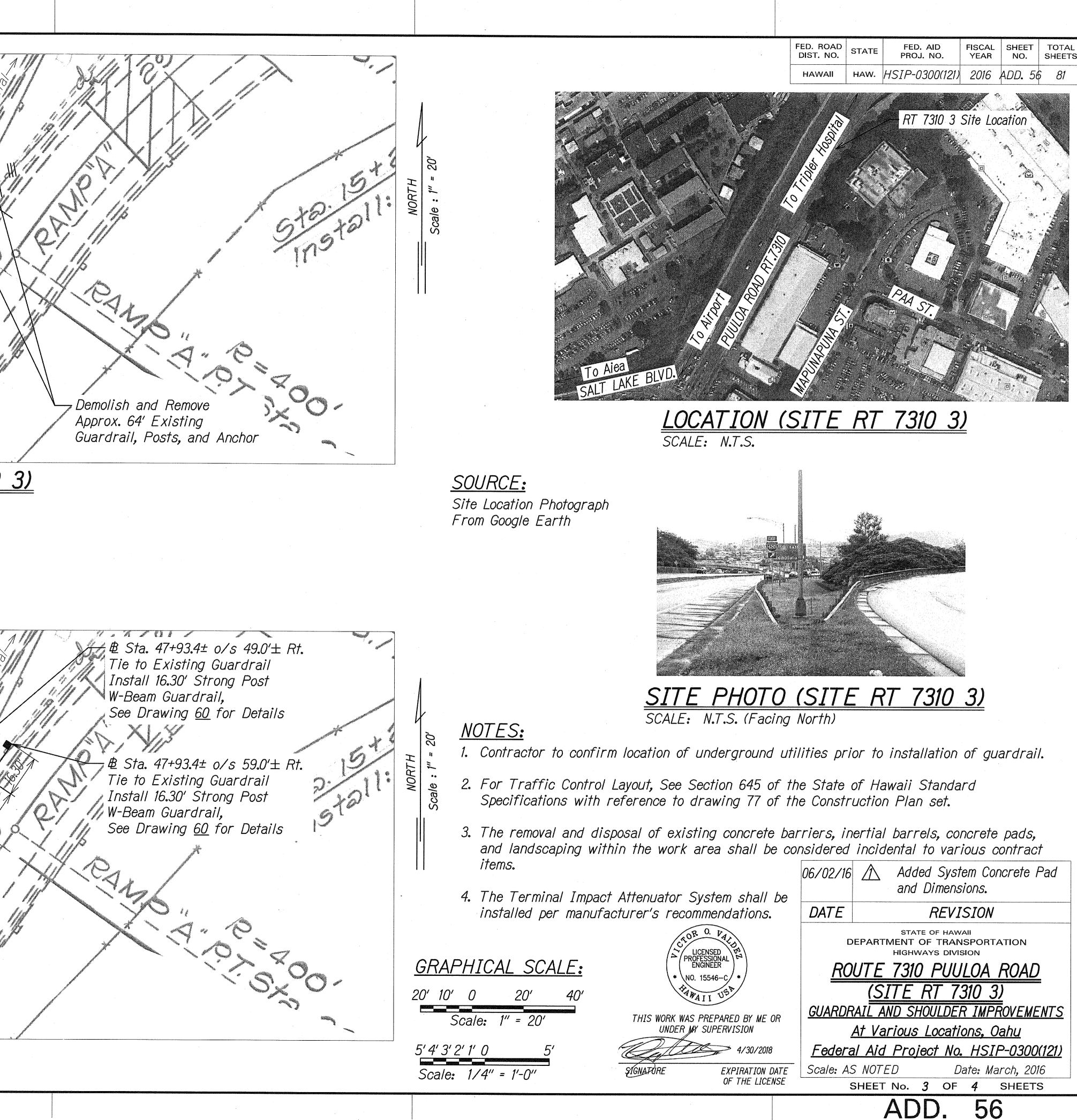
Remove Approx. 77' Existing -Guardrail, Posts, and Anchor End of Buried Guardrail to ₿ Sta. 43+37.85 o/s 5.30' Lt PLAN - DEMOLITION (SITE RT 7310 2) SCALE: 1" = 20' A Install 7.5' or 8' Wide Quadguard II -System or *(R-NG-PR) Universal TAU-II Terminal Impact Attenuator (TL-3 System) or Approved Equal, (See Note 4) * R-NG-PR - Redirective, Non-Gating Crash Cushion, 9°,41 Partially Reusable ₿ Sta. 43+37.8± o/s 5.3'± Lt ---Tie to Existing Guardrail Install 31.25' Strong Post W-Beam Guardrail, See Drawing <u>60</u> for Details Tie to Existing Guardrail W-Beam Guardrail, See Drawing 60 for Details PLAN - ROADWAY (SITE RT 7310 2) SCALE: 1" = 20'



<u>G</u> F	<u> RAF</u>	<u>PHIC</u>	<u>`AL</u>	SCA	<u>LE</u>
20′	10'	0	Ź	20'	40
	S	cale:	1'' =	= 20′	



PLAN - DEMOLITION (SITE RT 7310 3) SCALE: 1" = 20' S V & 151 11 11 11 11 Install 18.75' Strong Post Thrie-Beam to W-Beam Transition, See Drawing 64 for Details -. MAT AInstall 7.5' or 8' Wide Quadguard II System or *(R-NG-PR) Universal TAU-II Terminal Impact Attenuator (TL-3 System) or Approved Equal, (See Note 4)-* R-NG-PR - Redirective, Non-Gating Crash Cushion, Partially Reusable III.s MA 6.11 PLAN - ROADWAY (SITE RT 7310 3) SCALE: 1" = 20'



	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	HAWAII	HAW.	HSIP-0300(121)	2016	ADD. 56	5 81
D. ENTROLINATION OF CONTRACT	A CONTRACTOR OF		RT 7310 3	Site Loc	cation	

