Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	Tuo	108	58.8	3	24

REGISTERED CIVIL ENGINEER 7/20/11 DATE

10-17-11
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER NHAN CAO No. 76454 Exp. 12/31/12 CIVIL STATE OF CALIFORNIA

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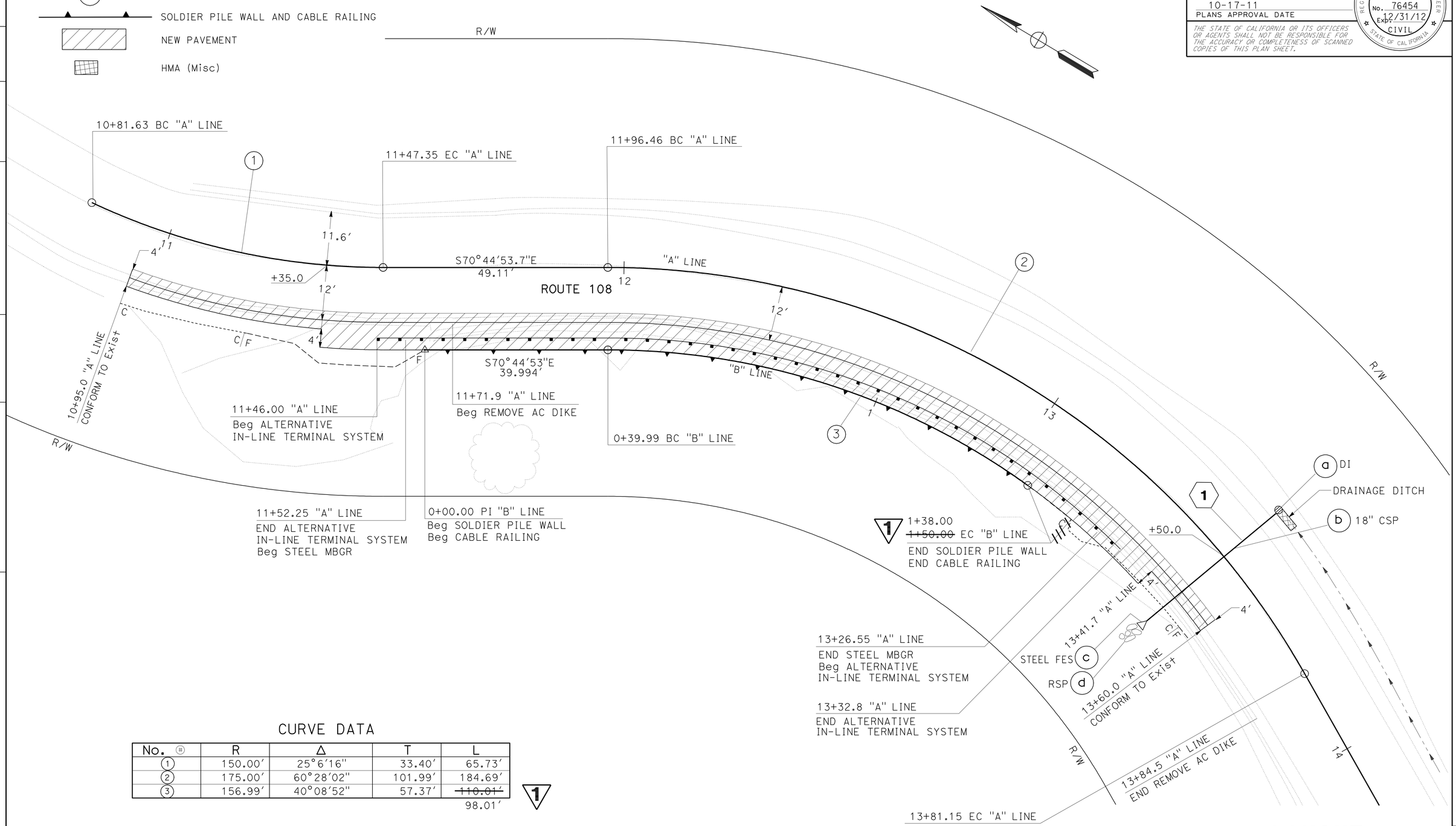
LEGEND

- DRAINAGE SYSTEM No.
- DRAINAGE UNIT
- SOLDIER PILE WALL AND CABLE RAILING
- NEW PAVEMENT
- HMA (Misc)

NOTE:

FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.



CURVE DATA

No. (#)	R	Δ	T	L
1	150.00′	25°6′16"	33.40′	65.73′
2	175.00′	60°28′02"	101.99′	184.69′
3	156.99′	40°08′52"	57.37′	~~110.01′~~ 98.01′

1

1 REVISED PER ADDENDUM No. 1 DATED JANUARY 11, 2012

LAYOUT

SCALE: 1" = 10′ **L-1**

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans® DESIGN

FUNCTIONAL SUPERVISOR: CAROLINE REYES
CALCULATED-DESIGNED BY: NHAN CAO
CHECKED BY: EVERGLEEN CARA
REVISED BY: NC
DATE REVISED: 7/07/11

LAST REVISION 00-00-00
DATE PLOTTED => 10-JAN-2012
TIME PLOTTED => 15:46

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	Tuo	108	58.8	16	24

REGISTERED CIVIL ENGINEER 03-23-11 DATE

10-17-11
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER Ramon Reyes No. C63767 Exp. 09-30-12 CIVIL STATE OF CALIFORNIA

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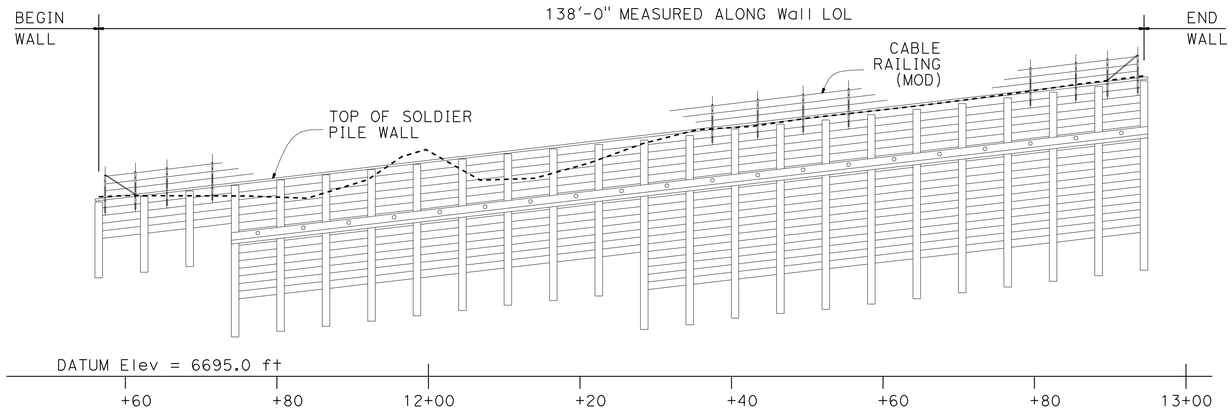
STANDARD PLANS DATED MAY 2006

A10A ACRONYMS AND ABBREVIATIONS (SHEET 1 OF 2)
A10B ACRONYMS AND ABBREVIATIONS (SHEET 2 OF 2)
B11-47 CABLE RAILING

INDEX TO PLANS

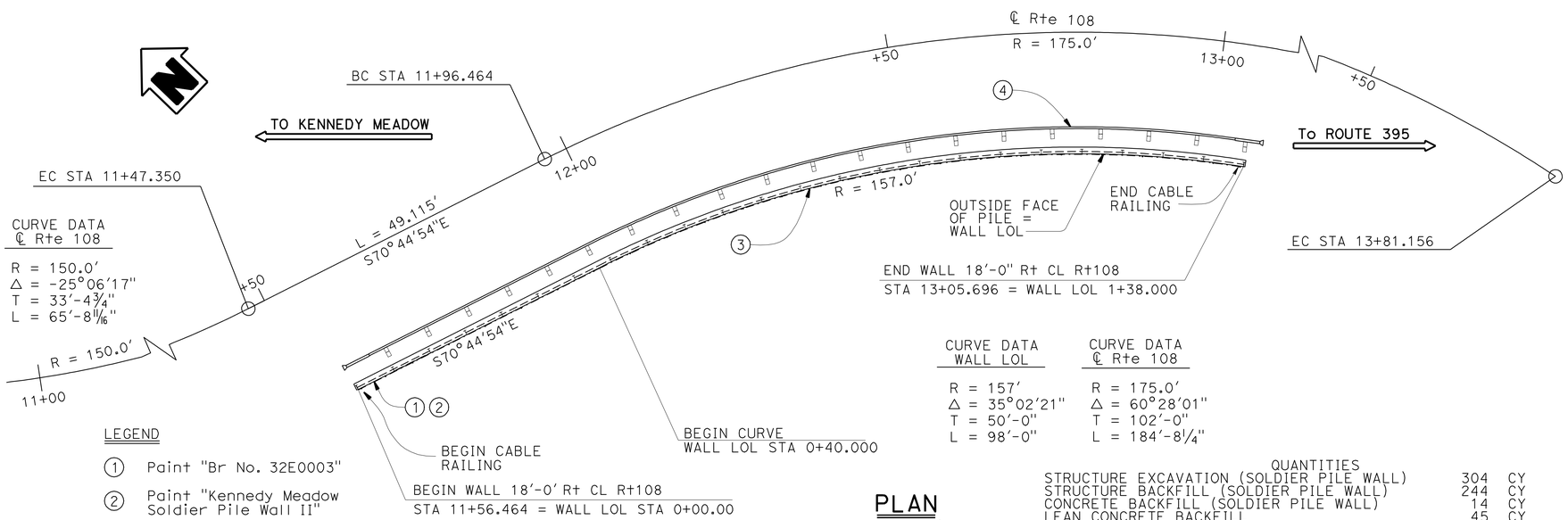
Standard Plan sheet number
Detail number

Sheet No.	Title
1.	GENERAL PLAN
2.	STRUCTURE PLAN
3.	FOUNDATION PLAN
4.	DETAILS NO. 1
5.	DETAILS NO. 2
6.	DETAILS NO. 3
7.	DETAILS NO. 4
8.	LOG OF TEST BORINGS (SHEET 1of2)
9.	LOG OF TEST BORINGS (SHEET 2of2)



DEVELOPED ELEVATION

1" = 10'



CURVE DATA WALL LOL	CURVE DATA ℄ Rte 108
R = 157'	R = 175.0'
Δ = 35°02'21"	Δ = 60°28'01"
T = 50'-0"	T = 102'-0"
L = 98'-0"	L = 184'-8¼"

LEGEND

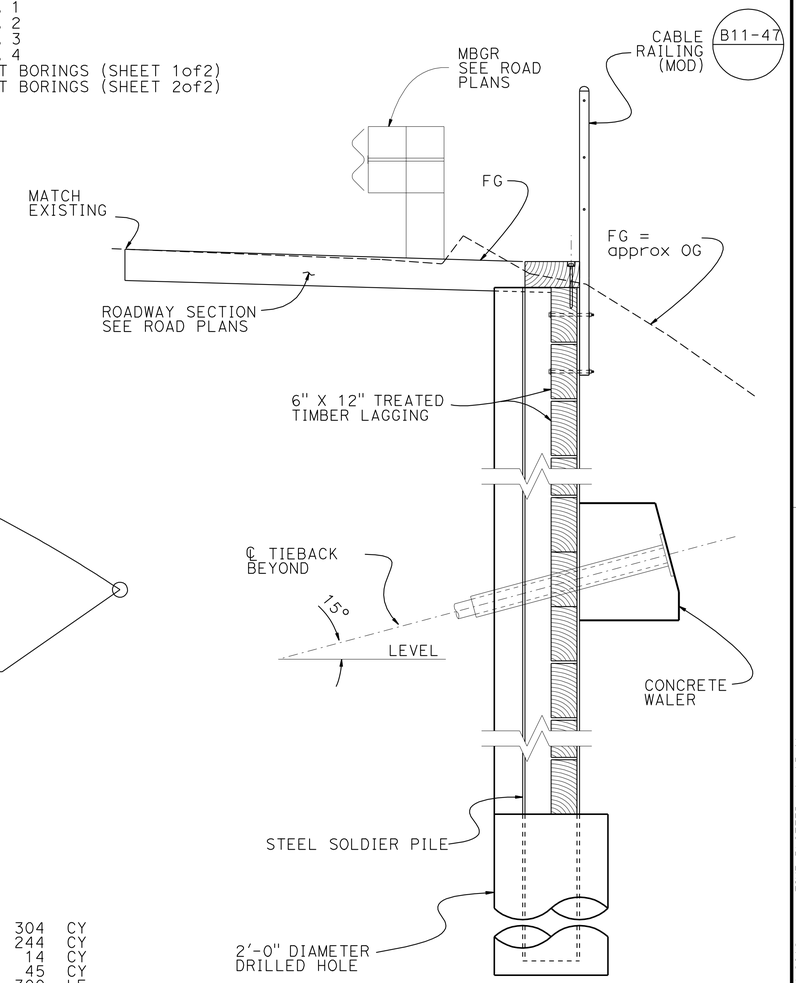
1. Paint "Br No. 32E0003"
2. Paint "Kennedy Meadow Soldier Pile Wall II"
3. Cable Railing (Modified)
4. Metal Beam Guard Rail see "Road Plans"

PLAN

1" = 10'

1

QUANTITIES		
STRUCTURE EXCAVATION (SOLDIER PILE WALL)	304	CY
STRUCTURE BACKFILL (SOLDIER PILE WALL)	244	CY
CONCRETE BACKFILL (SOLDIER PILE WALL)	14	CY
LEAN CONCRETE BACKFILL	45	CY
STEEL SOLDIER PILE (W 12 X 136)	300	LF
STEEL SOLDIER PILE ~~(W 12 X 84)~~ (HP 12 X 84)	210	LF
24" DRILLED HOLE	510	LF
TIEBACK ANCHOR	20	EA
STRUCTURAL CONCRETE, WALER	16	CY
BAR REINFORCING STEEL (RETAINING WALL)	4,022	LB
TIMBER LAGGING	14	MFBM
CLEAN AND PAINT STEEL SOLDIER PILING	LUMP SUM	
CABLE RAILING (MODIFIED)	139	LF



SECTION

¾" = 1-0'

1 **REVISED PER ADDENDUM No. 1 DATED JANUARY 11, 2012**

KENNEDY MEADOW SLOPE REPAIR
SOLDIER PILE WALL II
GENERAL PLAN

DESIGN	BY Ramon Reyes	CHECKED Ruperd Wilson	LOAD & RESISTANCE FACTOR DESIGN	LIVE LOADING: HL93 W/"LOW-BOY": PERMIT DESIGN VEHICLE
DETAILS	BY Craig Schellenger	CHECKED Ramon Reyes	LAYOUT BY Ramon Reyes	CHECKED Craig Schellenger
QUANTITIES	BY Craig Schellenger	CHECKED Ramon Reyes	SPECIFICATIONS BY John Jiang	PLANS AND SPECS COMPARED Ramon Reyes

X
DESIGN ENGINEER

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 17

BRIDGE NO. 32E0003
POST MILE 58.8

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT: 10
PROJECT NUMBER & PHASE: 100000235 1
CONTRACT NO.: 10-0S2401

DISREGARD PRINTS BEARING EARLIER REVISION DATES

REVISION DATES 3-23-11

SHEET 1 OF 9

STRUCTURES DESIGN GENERAL PLAN SHEET (ENGLISH) (REV.09-01-10)

FILE => 32e0003-a-gp01.dgn

USERNAME => s124936 DATE PLOTTED => 10-JAN-2012 TIME PLOTTED => 15:41

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	Tuo	108	58.8	17	24

REGISTERED CIVIL ENGINEER 03-23-11 DATE

10-17-11
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER Ramon Reyes No. C63767 Exp. 09-30-12 CIVIL STATE OF CALIFORNIA

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GENERAL NOTES
WORKING STRESS DESIGN

DESIGN: AASHTO LRFD Design specifications, 4th Edition with California amendments, December 2008

DEAD LOAD: Includes 35 PSF for future wearing surface

LIVE LOAD: Includes 2-ft level surcharge

REINFORCED CONCRETE: f_y = 60,000 psi (Compressive strength at 28 days)
f'_c = 4,000 psi (Yield strength of reinforcement)

STRUCTURAL STEEL: Steel piles: ASTM A709/A709M, Grade 50 or 50W
fy = 50 ksi

STRUCTURAL TIMBER: Treated Douglas Fir, Grade No. 1 or better.
Timber to be full sawn.

PRESTRESSING STEEL: T = Design force on ground anchor = 124 kips

f_{pu} = Min tensile strength of prestressing steel = 270 ksi.

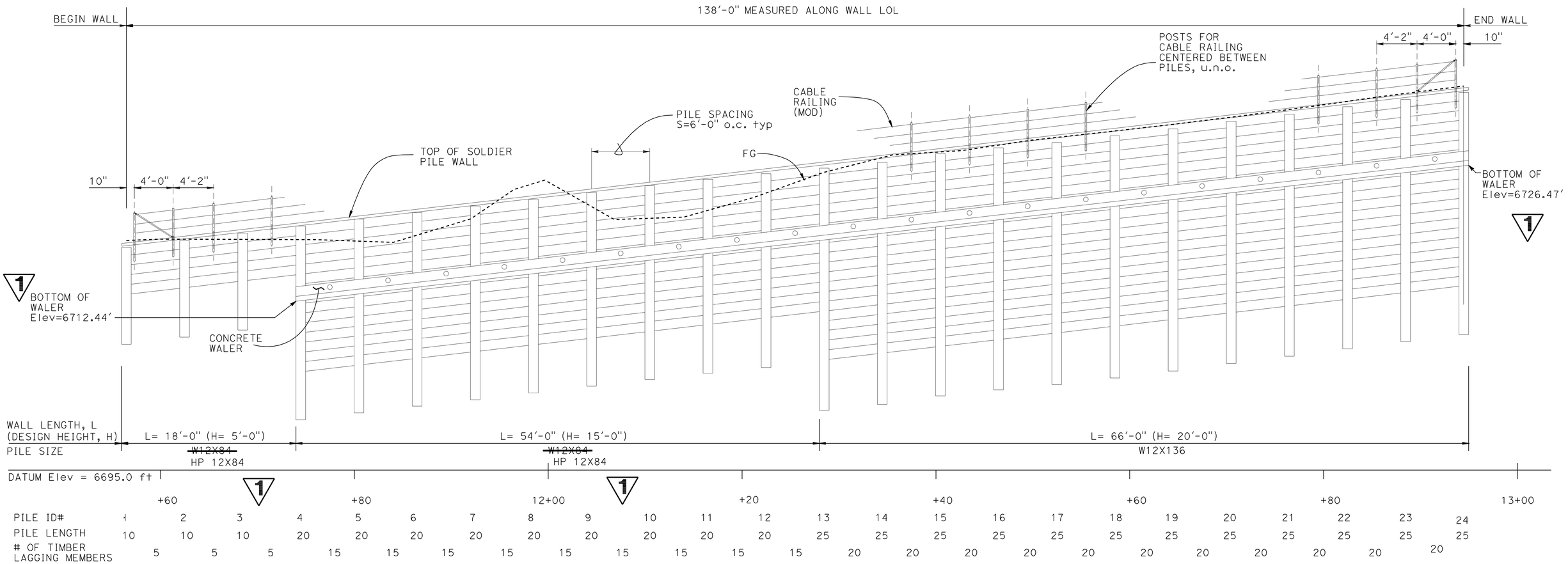
A_s (min) = Min cross sectional area of prestressing steel in ground anchor (in^2)

Steel = ASTM designation: A416 (Strands)

$$A_s \text{ (min)} = \frac{1.5\ T}{0.75\ f_{pu}}$$

SOIL PARAMETERS: $\phi = 25°$ γ = 130 pcf fill, c = 0
γ = 125 pcf rock

WALL STATION	TOP OF WALL ELEVATION
0+00	6718.3
0+04	6718.7
0+12	6719.7
0+20	6720.7
0+28	6721.6
0+36	6722.5
0+40	6723.0
0+43	6723.4
0+50	6724.2
0+58	6725.1
0+65	6725.8
0+72	6726.5
0+79	6727.2
0+86	6728.3
0+93	6728.8
1+01	6729.6
1+08	6730.5
1+15	6731.4
1+22	6732.3
1+29	6733.2
1+38	6734.3



PILE ID#	PILE LENGTH	# OF TIMBER LAGGING MEMBERS
1	10	5
2	10	5
3	10	5
4	20	15
5	20	15
6	20	15
7	20	15
8	20	15
9	20	15
10	20	15
11	20	15
12	20	15
13	25	15
14	25	20
15	25	20
16	25	20
17	25	20
18	25	20
19	25	20
20	25	20
21	25	20
22	25	20
23	25	20
24	25	20

DEVELOPED ELEVATION

1" = 5'

1 REVISED PER ADDENDUM No. 1 DATED JANUARY 11, 2012

	BY	CHECKED
DESIGN	Ramon Reyes	Ruperd Wilson
DETAILS	Craig Schellenger	Ramon Reyes
QUANTITIES	Craig Schellenger	Ramon Reyes

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 17

BRIDGE NO. 32E0003
POST MILE 58.8

KENNEDY MEADOW SLOPE REPAIR
SOLDIER PILE WALL II
STRUCTURE PLAN

STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10)

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT: 10
PROJECT NUMBER & PHASE: 1000000235 1
CONTRACT NO.: 10-0S2401

DISREGARD PRINTS BEARING EARLIER REVISION DATES

REVISION DATES

SHEET 2 OF 9

FILE => 32e0003-c-sp01.dgn

USERNAME => s127614 DATE PLOTTED => 11-JAN-2012 TIME PLOTTED => 11:04