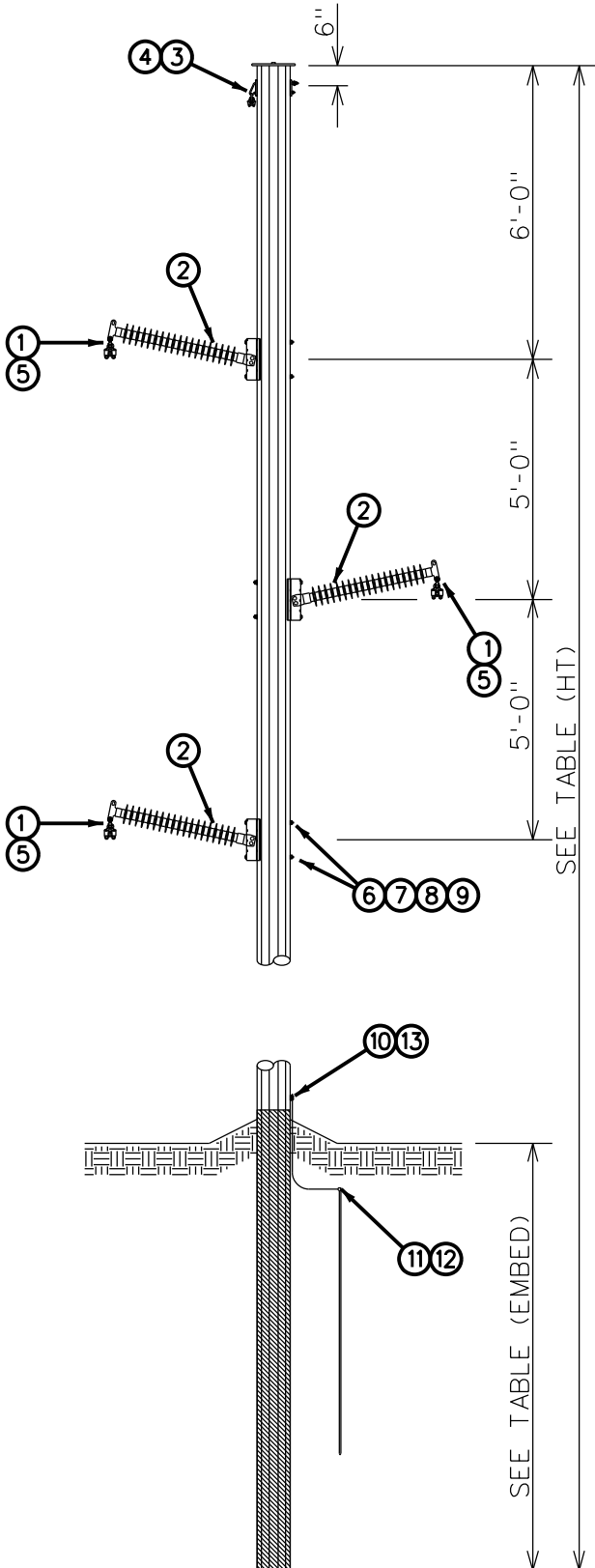


LIST OF MATERIALS

ITEM	QTY.	DESCRIPTION	STOCK NUMBER
1	3	SUSPENSION GRIP SHOE (ACSR)	PLP CGS-1096
2	3	69kV POLYMER POST INSULATOR	HPS P250024S9020
3	1	STATIC WIRE BRACKET	HPS 5433
4	1	SUSPENSION GRIP SHOE (OHGW)	PLP CGS-1095
5	3	Y-CLEVIS, EYE	PLP YC-5212
6	6	7/8" BOLT, MACH., BY REQ'D LENGTH	MACL J906_
7	6	WASHER, FLAT 4X4X1/4 SQ	MACL J1082
8	6	LOCK WASHER, TYP.	HPS PSC2050496
9	6	7/8" NUT	MACL J8564-1/2
10	1	POLE GROUNDING LUG	HPS GTCL34A
11	1	GROUND ROD CLAMP	ERC CP58
12	1	8' GROUND ROD	ERC 615880
13	-	BONDING WIRE, 4AWG, THEFT DETERRENT	

STR NO.	CLASS	HT.	EMBED
10/7	H2	50'	7'-0"
8/7, 8/8, 8/9, 8/10, 8/11, 9/3, 9/7, 9/8, 10/3	H2	55'	7'-6"
4/8, 4/12, 5/9, 5/14, 5/15, 5/16, 6/4, 6/12, 7/12, 7/14, 8/1, 8/5, 9/2	H2	60'	8'-0"
4/13, 6/8, 6/11, 6/13, 9/1	H2	65'	8'-6"
5/3, 6/9, 7/12A, 7/13, 8/2, 9/9, 10/1	H2	70'	9'-0"
9/14	H2	75'	9'-6"
6/1, 6/2, 6/5, 8/3	H2	85'	10'-6"
6/10	H3	50'	7'-0"
4/11, 4/14, 6/3	H3	60'	8'-0"
6/14, 7/1	H3	65'	8'-6"
4/16A, 5/10, 5/11, 5/12, 5/13, 6/6	H3	75'	9'-6"
4/15	H3	80'	10'-0"
9/13	H4	65'	8'-6"



NOTES:

1. SPACING IS FOR 69kV INSTALLATION.
2. THE FOLLOWING MATERIALS ARE TO BE SPECIFIED ON THE PLAN AND PROFILE DRAWINGS:  
POLES AND ANY ADDITIONAL GROUNDING OR FOUNDATION UNITS.

Eng. by:	Date:	RECORDS OF ISSUE	
Design by: TC(CEC)	Date:		
Drawn by: TC(CEC)	Date:		
Checked by: JRB(CEC)	Date:		
Approved by:	Date:		
Approved by:	Date:	REV	DATE



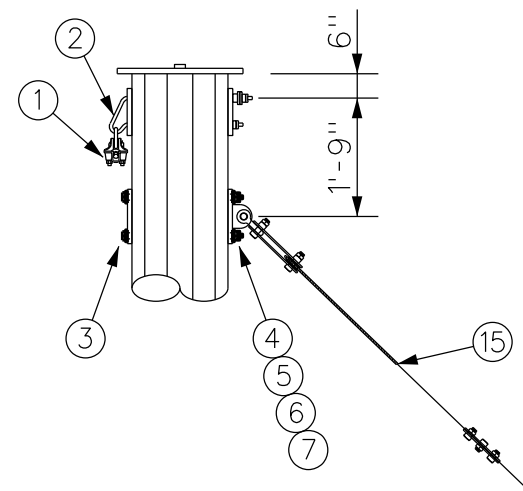
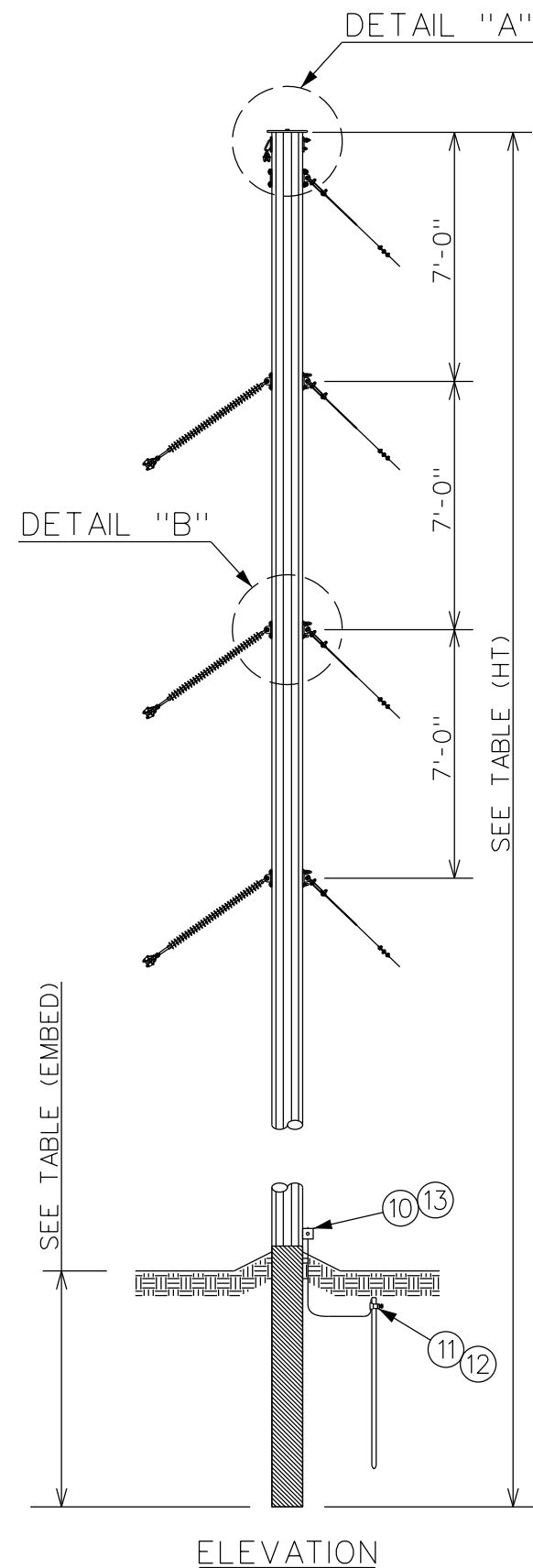
PROJECT:	WAYNOKA 24kV/69kV RELOCATION
TITLE:	TANGENT HORIZONTAL LINE POST (STEEL)
SHEET:	TPS-69G



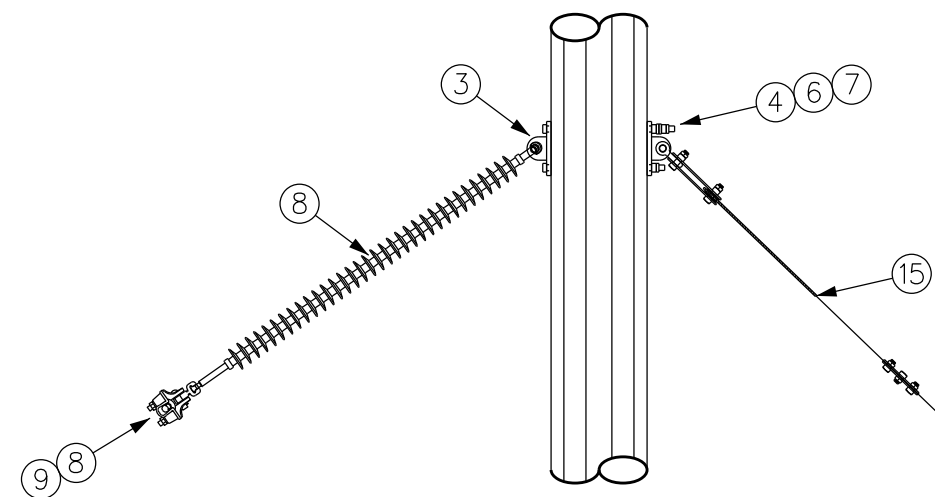
LIST OF MATERIALS

ITEM	QTY.	DESCRIPTION	CODE No.
1	1	SUSPENSION GRIP SHOE (OHGW)	PLP CGS-1095
2	1	STATIC WIRE BRACKET	HPS 5433
3	7	DEADEND TEE	HPS PSC2030529
4	8	7/8" BOLT, MACH., BY REQ'D LENGTH	MACL J906_
5	2	WASHER, FLAT 4X4X1/4 SQ	MACL J1082
6	8	LOCK WASHER, TYP.	HPS PSC2050496
7	8	7/8" NUT	MACL J8564-1/2
8	3	69kV SUSPENSION POLYMER INSULATOR	HPS S025027S2010
9	3	SOCKET EYE	PLP SE-5154
10	3	SUSPENSION GRIP SHOE (ACSR)	PLP CGS-1096
11	1	POLE GROUNDING LUG	HPS GTCL34A
12	1	GROUND ROD CLAMP	ERC CP58
13	1	8' GROUND ROD	ERC 615880
14	-	BONDING WIRE, 4AWG, THEFT DETERRENT	----
15	4	GUYING ASSEMBLY	TG-21B
16	-	7/16" 7 STRAND EHS GUY WIRE	----

STR. NO.	HT.	CLASS	EMBED
6/15	65'	H2	8'-6"
5/8	75'	H2	9'-6"
9/15	80'	H2	10'-0"
8/4	85'	H2	10'-6"
4/16	95'	H2	11'-6"



DETAIL "A"  
SHIELD WIRE  
ATTACHMENT



DETAIL "B"  
CONDUCTOR  
ATTACHMENT

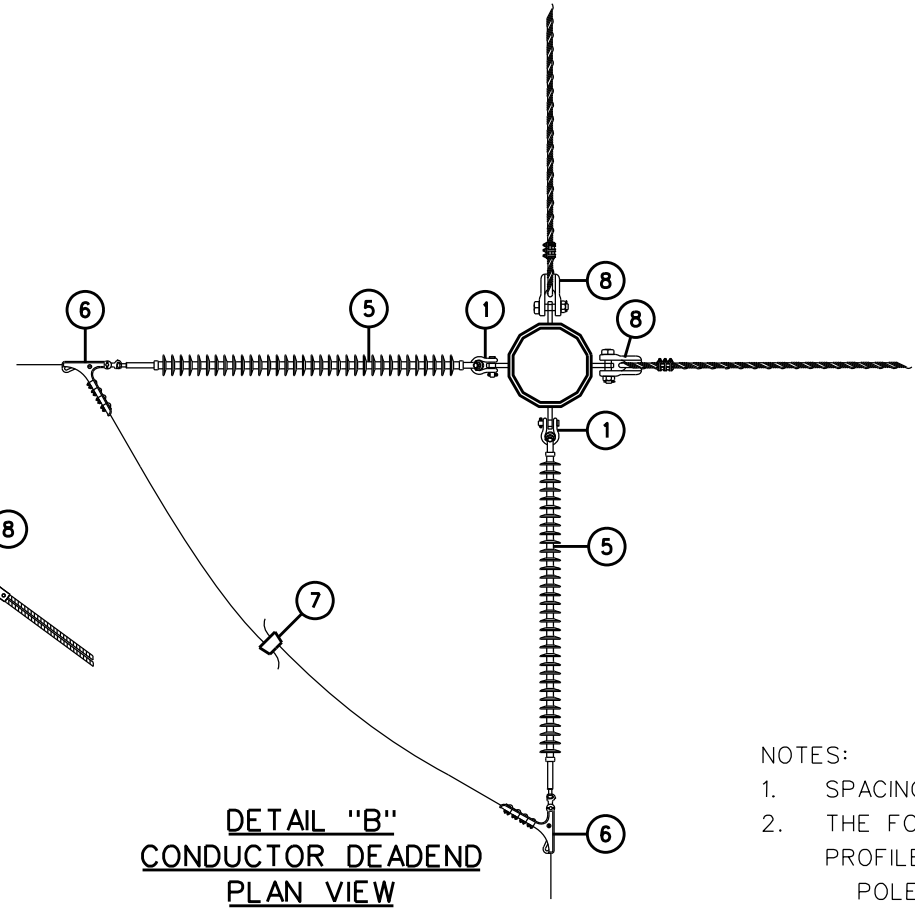
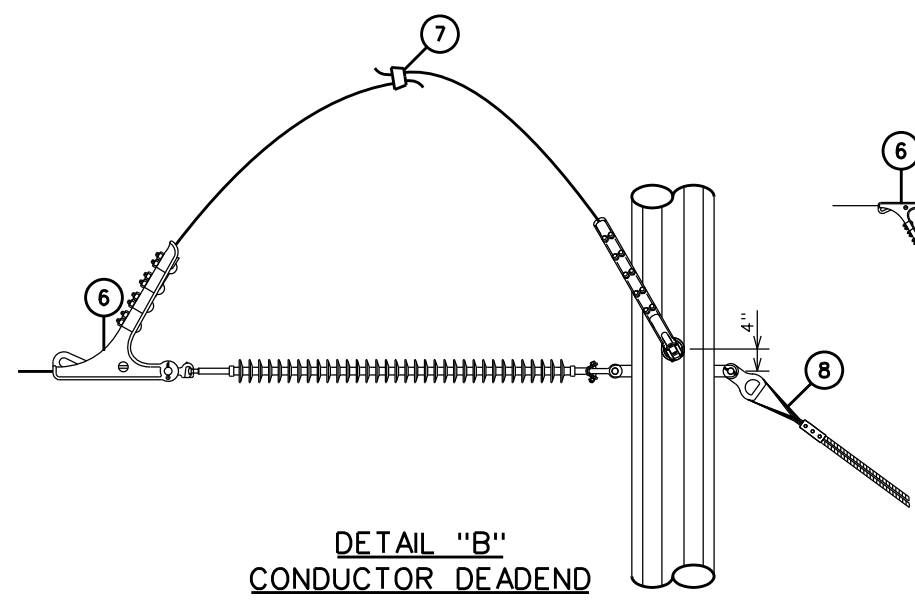
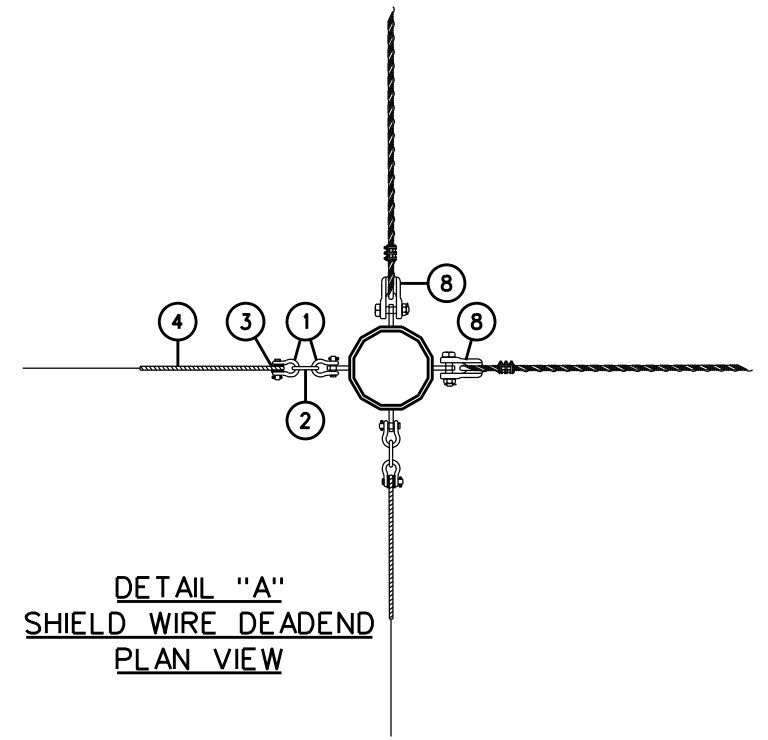
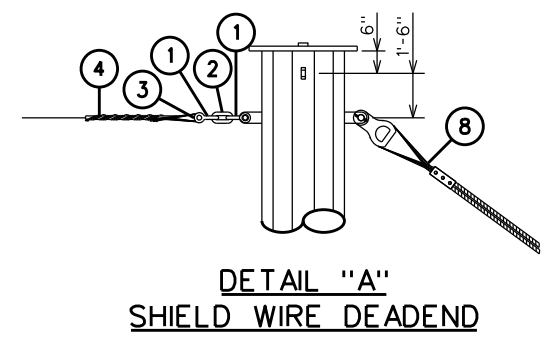
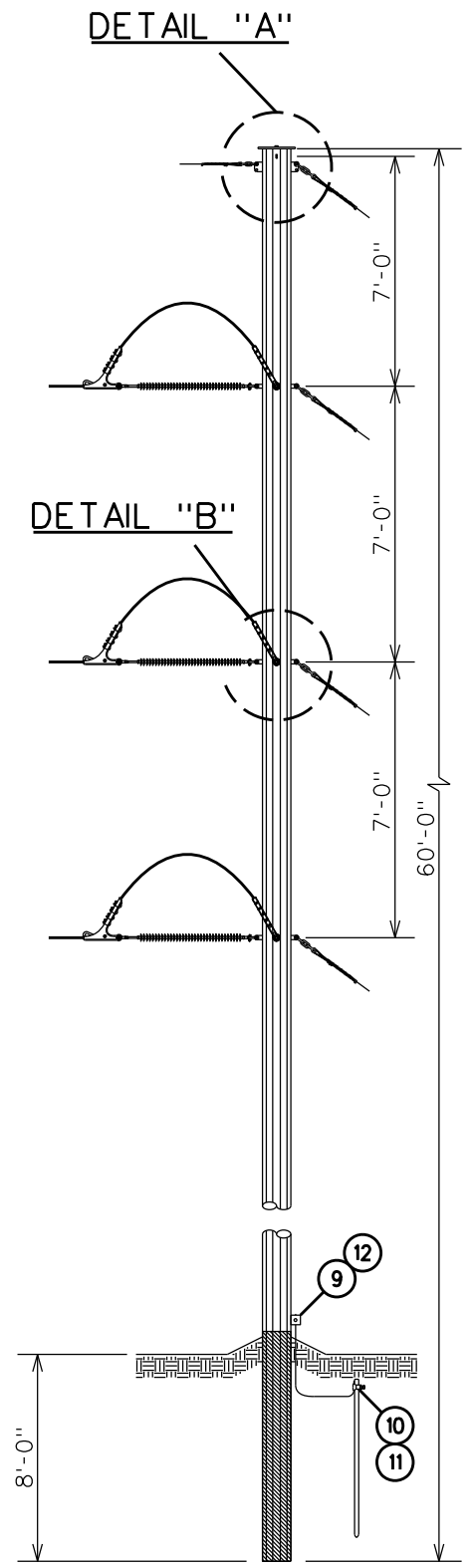
NOTES:

- SPACING IS FOR 69kV INSTALLATION.
- THE FOLLOWING MATERIALS ARE TO BE SPECIFIED ON THE PLAN AND PROFILE DRAWINGS:  
POLES, ANCHORS, AND ANY ADDITIONAL GROUNDING OR FOUNDATION UNITS.

	DESIGN	TC(CEC)	PROJECT:	WAYNOKA 24kV/69kV RELOCATION
	DRAWN	TC(CEC)	TITLE:	TSS-4G
	CHECKED	JRB(CEC)	SHEET NO.:	1 OF 1

LIST OF MATERIALS			
ITEM	QUAN.	DESCRIPTION	STK #
1	10	Anchor Shackle, 30K	PLP AS-30BNK
2	2	Chain Link, 30K	PLP CL-30
3	2	2 3/8" Roller Eye	MACL R-24-6
4	2	6M Guy Grip	PLP BG-2146
5	6	69kV Composite, Susp/DE Insulator	HBL S025056S2010
6	6	DE Strain Clamp for 266.8 ACSR, Socket Fitting (SA07)	HBL SD86S
7	3	Parallel Connector, AL	BRDY CP30A30A
8	8	GUYING ASSEMBLY	TG-21B
9	1	POLE GROUNDING LUG	HPS GTCL34A
10	1	GROUND ROD CLAMP	ERC CP58
11	1	8' GROUND ROD	ERC 615880
12	-	BONDING WIRE, 4AWG, THEFT DETERRENT	----

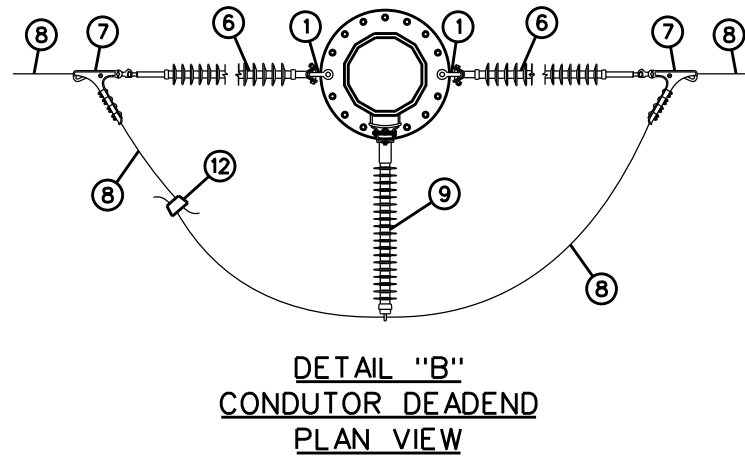
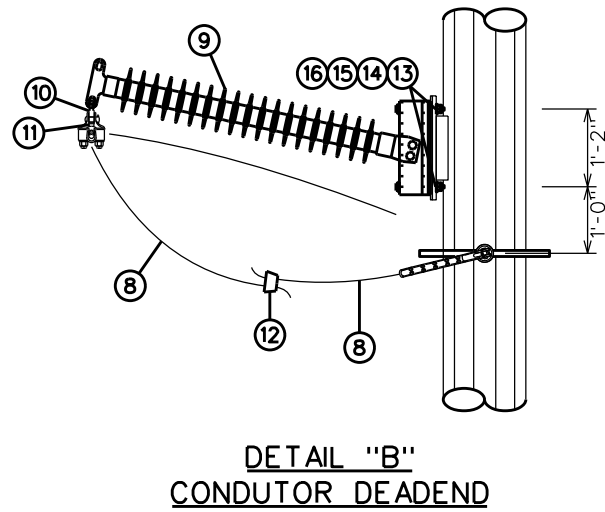
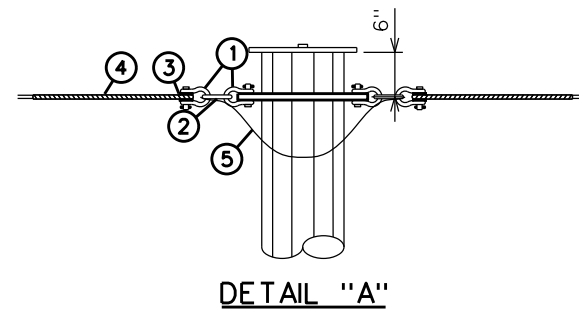
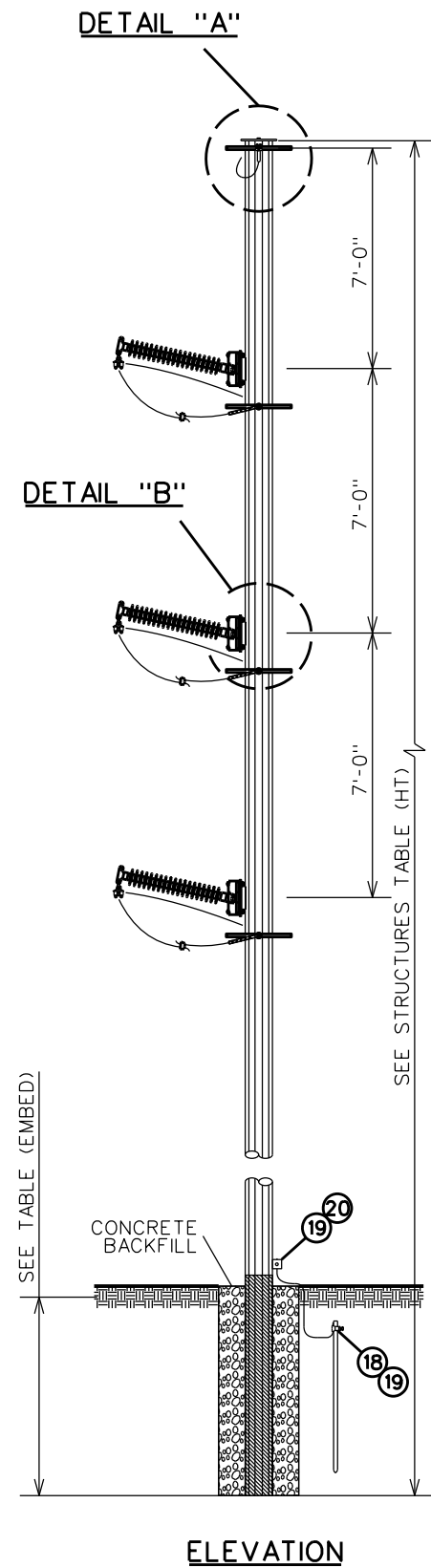
STR. NO.	HT.	CLASS	ANGLE
4/9	60'	H2	80.34°
4/10	60'	H2	-85.65°



NOTES:

1. SPACING IS FOR 69kV INSTALLATION.
2. THE FOLLOWING MATERIALS ARE TO BE SPECIFIED ON THE PLAN AND PROFILE DRAWINGS:  
POLES, ANCHORS, AND ANY ADDITIONAL GROUNDING OR FOUNDATION UNITS.

	DESIGN	TC(CEC)	PROJECT:	WAYNOKA 24kV/69kV RELOCATE
	DRAWN	TC(CEC)	TITLE:	TSS-5G 80° - 90°
	CHECKED	JRB(CEC)	SHEET NO.:	1 OF 1



LIST OF MATERIALS

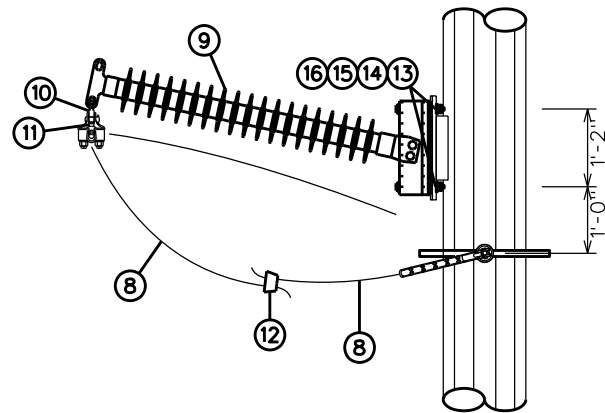
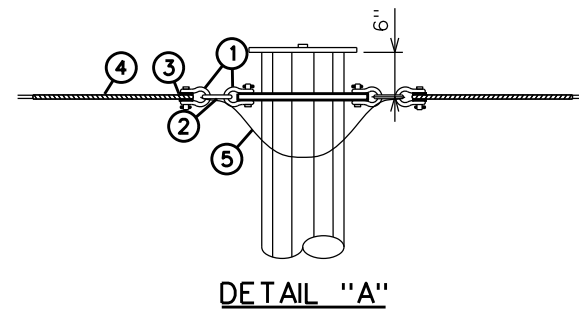
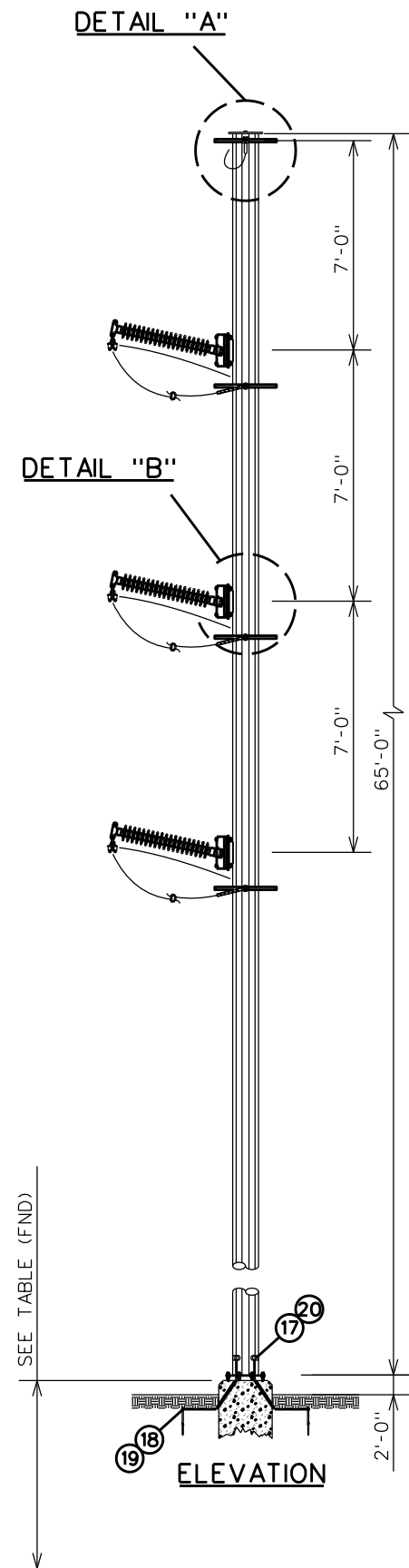
ITEM	QUAN.	STK #	DESCRIPTION
1	10	PLP AS-30BNK	Anchor Shackle, 30K
2	2	PLP CL-30	Chain Link, 30K
3	2	MACL R-24-6	2 3/8" Roller Eye
4	2	PLP BG-2146	6M Guy Grip
5	-	----	5/16" (7) EHS Shield Wire
6	6	HPS S025027S2010	69kV Composite, Susp/DE Insulator
7	6	HPS SD86S	DE Strain Clamp for 266.8 ACSR, Socket Fitting (SA07)
8	-	----	266.8 Partridge ACSR Conductor
9	3	HPS P250024S9020	69kV Polymer Post Insulator
10	3	PLP YC-5212	Y-Clevis Eye, 25K
11	3	PLP CGS-1096	Suspension Grip Shoe (ACSR)
12	3	BRDY CP30A30A	Parallel Connector, AL
13	6	MACL J906_	7/8" Bolt, Mach., By Req'd Length
14	6	MACL J1082	Washer, Flat 4x4x1/4
15	6	HPS PSC2050496	Washer, Lock
16	6	MACL J8564-1/2	7/8" Nut
17	1	HPS GTCL34A	Pole Grounding Lug
18	1	ERC CP58	Ground Rod Clamp
19	1	ERC 615880	8' Ground Rod
20	-	----	Bonding Wire, 4AWG, Theft Deterrent

STR #	HT	EMBED	Class	Angle
5/7	65'	20'-0"	CUST	13.71°
7/11	80'	20'-0"	CUST	2.42°
8/6	75'	25'-0"	CUST	11.49°
8/12	80'	25'-0"	CUST	0.37°
10/2	80'	25'-0"	CUST	6.25°

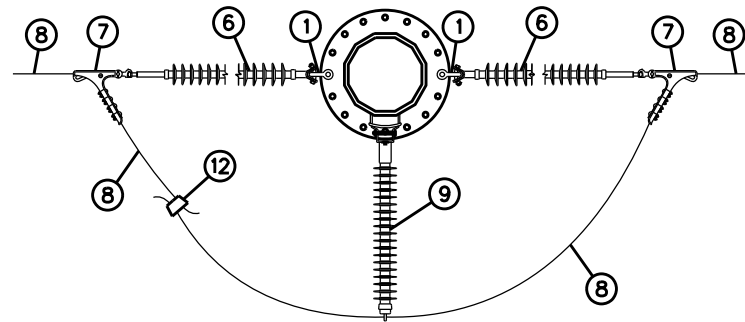
NOTES:

- SPACING IS FOR 69kV INSTALLATION.
- THE FOLLOWING MATERIALS ARE TO BE SPECIFIED ON THE PLAN AND PROFILE DRAWINGS:  
POLES, ANCHORS, AND ANY ADDITIONAL GROUNDING OR FOUNDATION UNITS.
- HORIZONTAL LINE POSTS TO BE ATTACHED VIA MANUFACTURED BRACKET.

	DESIGN	TC(CEC)	PROJECT:	WAYNOKA 24kV/69kV RELOCATE
	DRAWN	TC(CEC)	TITLE:	TSS-5GA
	CHECKED	JRB(CEC)	SHEET NO.	1 OF 1



DETAIL "B"  
CONDUCTOR DEADEND



DETAIL "B"  
CONDUCTOR DEADEND  
PLAN VIEW

LIST OF MATERIALS

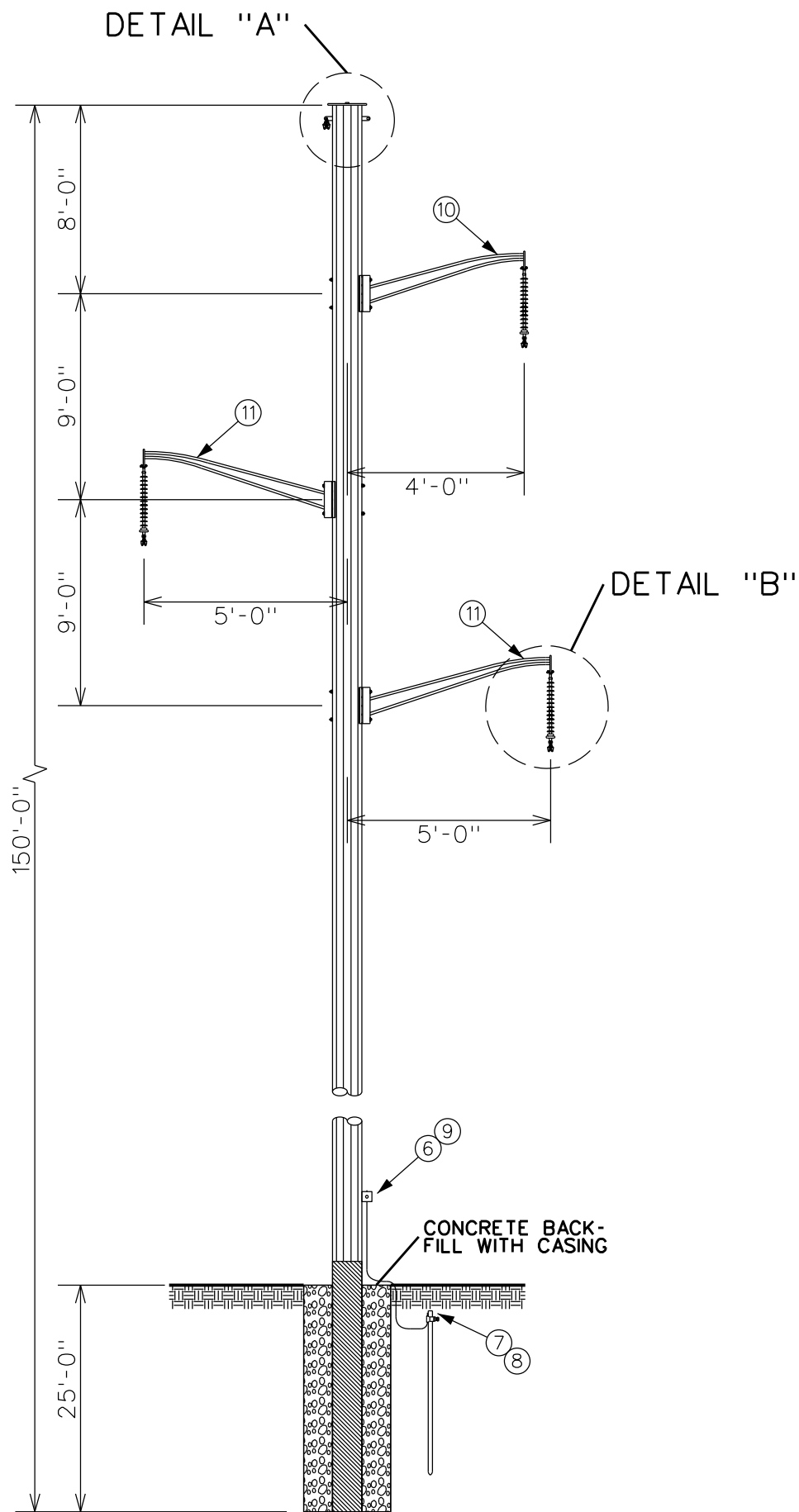
ITEM	QUAN.	STK #	DESCRIPTION
1	10	PLP AS-30BNK	Anchor Shackle, 30K
2	2	PLP CL-30	Chain Link, 30K
3	2	MACL R-24-6	2 3/8" Roller Eye
4	2	PLP BG-2146	6M Guy Grip
5	-	----	5/16" (7) EHS Shield Wire
6	6	HPS S025027S2010	69kV Composite, Susp/DE Insulator
7	6	HPS SD86S	DE Strain Clamp for 266.8 ACSR, Socket Fitting (SA07)
8	-	----	266.8 Partridge ACSR Conductor
9	3	HPS P250024S9020	69kV Polymer Post Insulator
10	3	PLP YC-5212	Y-Clevis Eye, 25K
11	3	PLP CGS-1096	Suspension Grip Shoe (ACSR)
12	3	BRDY CP30A30A	Parallel Connector, AL
13	6	MACL J906_	7/8" Bolt, Mach., By Req'd Length
14	6	MACL J1082	Washer, Flat 4x4x1/4
15	6	HPS PSC2050496	Washer, Lock
16	6	MACL J8564-1/2	7/8" Nut
17	2	HPS GTCL34A	Pole Grounding Lug
18	2	ERC CP58	Ground Rod Clamp
19	2	ERC 615880	8' Ground Rod
20	-	----	Bonding Wire, 4AWG, Theft Deterrent

STR #	HT	FND	Class	Angle
10/8	65'	32'-0"	CUST	0.52°
10/11	65'	32'-0"	CUST	-0.39°

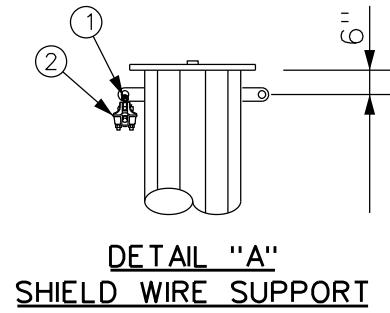
NOTES:

- SPACING IS FOR 69kV INSTALLATION.
- THE FOLLOWING MATERIALS ARE TO BE SPECIFIED ON THE PLAN AND PROFILE DRAWINGS:  
POLES, ANCHORS, AND ANY ADDITIONAL GROUNDING OR FOUNDATION UNITS.
- HORIZONTAL LINE POSTS TO BE ATTACHED VIA MANUFACTURED BRACKET.

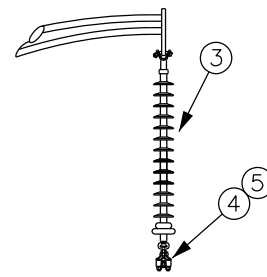
	DESIGN	TC(CEC)	PROJECT:	WAYNOKA 24kV/69kV RELOCATE
	DRAWN	TC(CEC)	TITLE:	TSS-5GA (FOUNDATION)
	CHECKED	JRB(CEC)	SHEET NO.	1 OF 1



**ELEVATION**



**DETAIL "A"  
SHIELD WIRE SUPPORT**



**DETAIL "B"  
CONDUCTOR SUPPORT**

**LIST OF MATERIALS**

ITEM	QUAN.	STK #	DESCRIPTION
1	1	PLP YC 5212	Y-CLEVIS EYE
2	1	PLP CGS 1095	SUSPENSION GRIP SHOE (OHGW)
3	3	HPS S025027S2010	69kV SUSPENSION POLYMER INSULATOR
4	3	PLP CGS 1096	SUSPENSION GRIP SHOE (ACSR)
5	3	PLP SE-5156	SOCKET EYE
6	1	HPS GTCL34A	POLE GROUNDING LUG
7	1	ERC CP58	GROUND ROD CLAMP
8	1	ERC 615880	8' GROUND ROD
9	-	----	BONDING WIRE, 4 AWG, THEFT DETERRENT
10	1	MSCG40	MLD DAVIT ARM, 4' MEDIUM DUTY, GALV, W/ GAIN BASE
11	2	MSCG50	MLD DAVIT ARM, 5' MEDIUM DUTY, GALV, W/ GAIN BASE

**NOTES:**

1. SPACING IS FOR CUSTOM POLE INSTALLATION.
2. THE FOLLOWING MATERIALS ARE TO BE SPECIFIED ON THE PLAN AND PROFILE DRAWINGS:  
POLES, ANCHORS, AND ANY ADDITIONAL GROUNDING OR FOUNDATION UNITS.

	DESIGN	TC(CEC)	PROJECT:	WAYNOKA 24kV/69kV RELOCATE
	DRAWN	TC(CEC)	TITLE:	TUS-1 (STR. 10/9 & 10/10)
	CHECKED	JRB(CEC)	SHEET NO.	1 OF 1