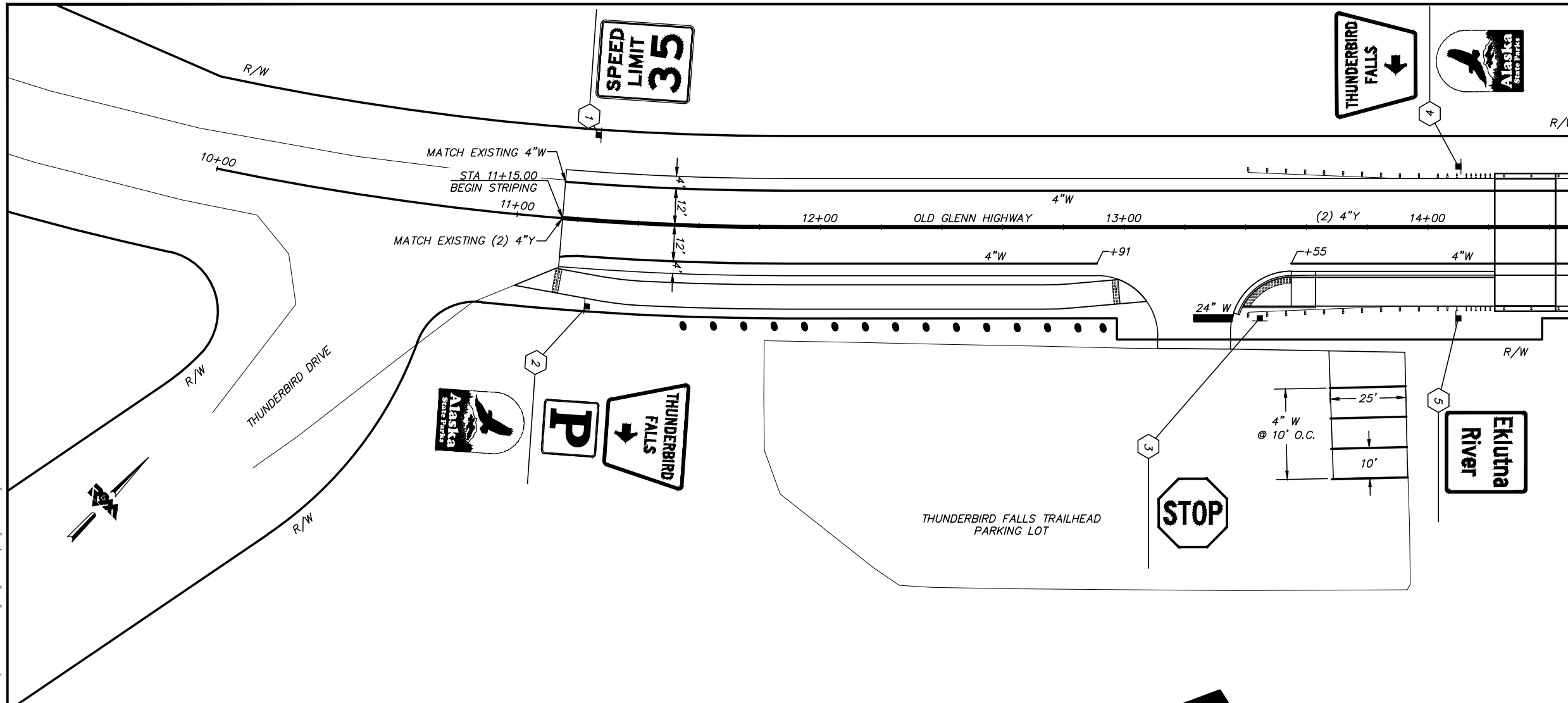


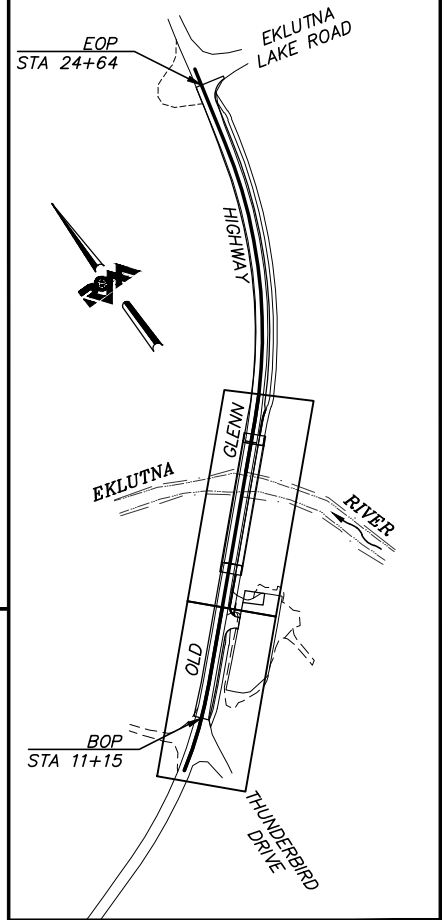
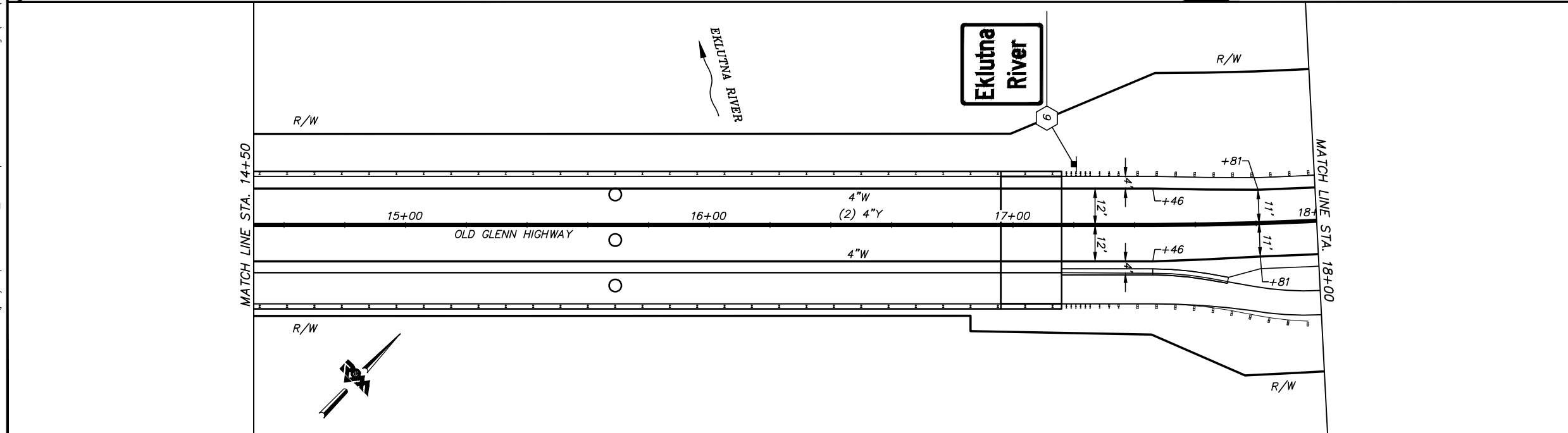
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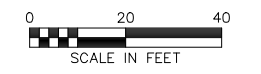


**BEFORE YOU DIG CALL FOR FREE UNDERGROUND LOCATION**

LOCATE CALL CENTER OF ALASKA STATEWIDE ..... 800-478-3121 WILL NOTIFY SUBSCRIBED UTILITIES ONLY. OTHER UTILITIES NEED TO BE CONTACTED INDIVIDUALLY.



**65% DESIGN  
JUNE 2014**



FIELD BOOKS	BM NO.	LOCATION	ELEV.	DATA	DRAWN BY	CHECKED BY	DATA	DRAWN BY	CHECKED BY	REV	DATE	DESCRIPTION	BY	REV	DATE	DESCRIPTION	BY
DESIGN				BASE			TELEPHONE										
STAKING				TOPOGRAPHY			ELECTRIC										
ASBUILT				PROFILE			CABLE TV										
CONTRACTOR				SANITARY SEWER			DESIGN										
INSPECTOR				STORM SEWER			QUANTITIES										
CONSTRUCTION RECORD				WATER			MUN. FINAL CHK.										
				GAS													

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12-40 EKLUTNA RIVER BRIDGE REPLACEMENT AT OLD GLENN HWY THUNDERBIRD DRIVE TO EKLUTNA LAKE ROAD

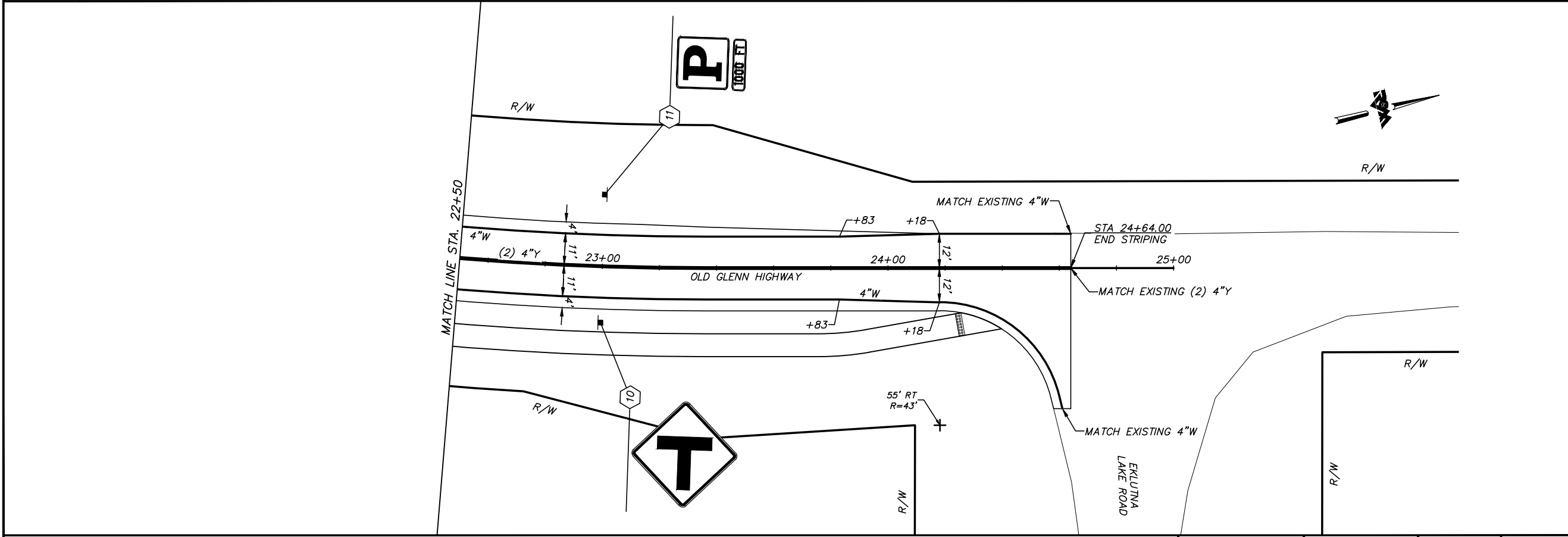
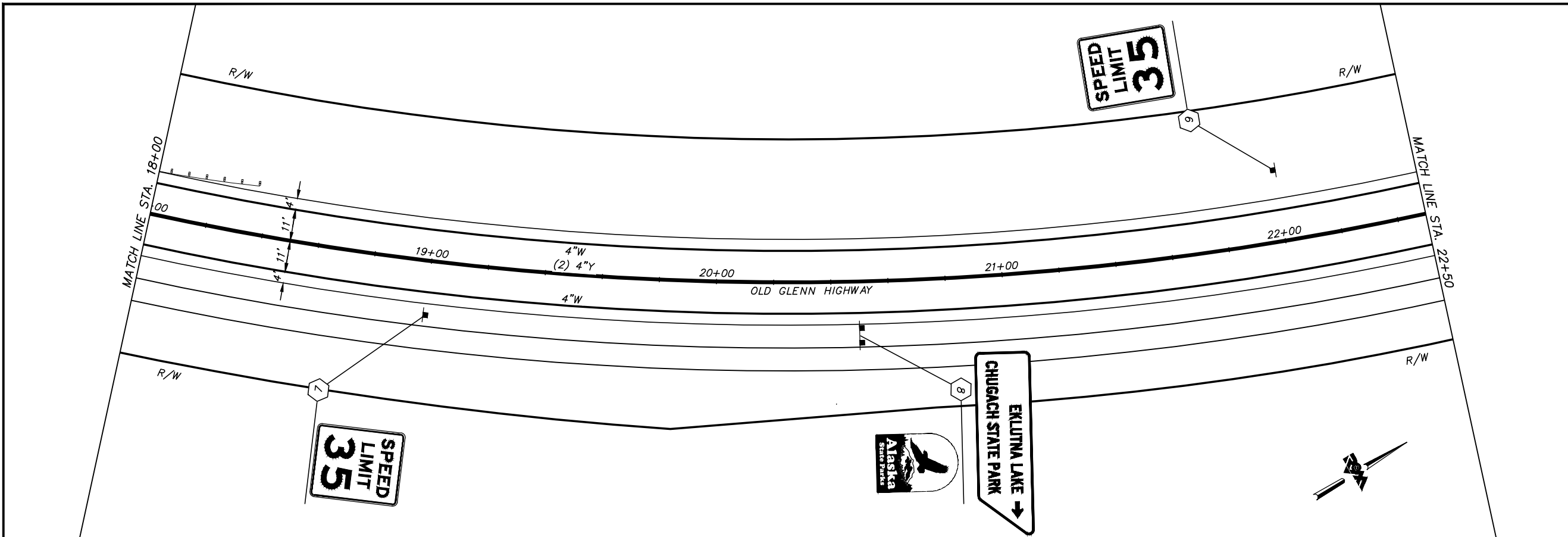
**SIGNING & STRIPING PLAN**

BOP TO STA 18+00

SCALE H: 1:20 DATE 6/6/14 GRID NW1965 SHEET 17 of 44  
V: 1:10 ACCT. NO.

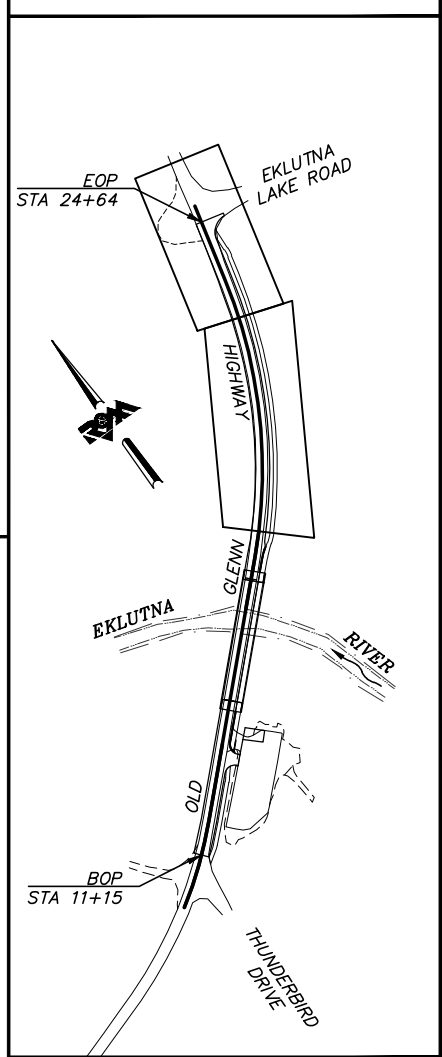
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Plotted: 6/6/2014 10:40 AM



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**KEYMAP**

**65% DESIGN  
JUNE 2014**

SCALE IN FEET

FIELD BOOKS	BM NO.	LOCATION	ELEV.	DATA	DRAWN BY	CHECKED BY	DATA	DRAWN BY	CHECKED BY	REV	DATE	DESCRIPTION	BY	REV	DATE	DESCRIPTION	BY
DESIGN				BASE			TELEPHONE										
STAKING				TOPOGRAPHY			ELECTRIC										
ASBULT				PROFILE			CABLE TV										
CONTRACTOR				SANITARY SEWER			DESIGN										
INSPECTOR				STORM SEWER			QUANTITIES										
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				GAS													
CONSTRUCTION RECORD				PLAN CHECK													
				REVISIONS													

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12-40  
EKLUTNA RIVER BRIDGE REPLACEMENT AT OLD GLENN HWY  
THUNDERBIRD DRIVE TO EKLUTNA LAKE ROAD

**SIGNING & STRIPING PLAN**

STA 18+00 TO EOP

SCALE H: 1:20 DATE 6/6/14 GRID NW1965 SHEET 18 of 44  
V: 1:10 ACCT. NO.

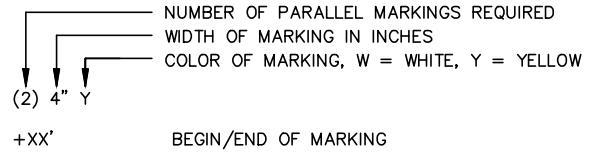
File Location: Z:\project\2001.01 MOA\_PME Replacement of Eklutna Bridge\Civil\ACAD\2001.01-H-Signing & Striping Plan.dwg

SIGN NO.	PROPOSED STATION	TYPE	LEGEND	DESCRIPTION	DIMENSION (IN) (W/H)	AREA (SF)	THICKNESS (IN)	# OF POSTS	POST TYPE	DIRECTION FACING	REMARKS
1	11+25 LT	R2-1_35		SPEED LIMIT 35	30x36	7.5	0.125	1	2.5"x2.5" PT	NE	
2	11+25 RT	D7-105_RT		THUNDERBIRD FALLS	48x36	12	0.125	1	2.5"x2.5" PT	SW	
		D7-RA-80		PARKING	24x24	4	0.125			SW	
				ALASKA STATE PARKS	18x24	3	0.125			SW	
3	13+45 RT	R1-1		STOP	30x30	6.25	0.125	1	2.5"x2.5" PT	SE	
4	14+10 LT	D7-105_LT		THUNDERBIRD FALLS	48x36	12	0.125	1	2.5"x2.5" PT	NE	
				ALASKA STATE PARKS	18x24	3	0.125			NE	
5	14+10 RT	I-3		EKLUTNA RIVER	36x36	9	0.125	1	2.5"x2.5" PT	SW	
6	17+20 LT	I-3		EKLUTNA RIVER	36x36	9	0.125	1	2.5"x2.5" PT	NE	
7	19+00 RT	R2-1_35		SPEED LIMIT 35	30x36	7.5	0.125	1	2.5"x2.5" PT	SW	
8	20+50 RT	D7-2_RT		EKLUTNA LAKE CHUGACH STATE PARK	98x30	20.42	0.125	2	2.5"x2.5" PT	SW	BRACED
				ALASKA STATE PARKS	18x24	3	0.125			SW	
9	22+00 LT	R2-1_35		SPEED LIMIT 35	30x36	7.5	0.125	1	2.5"x2.5" PT	N	
10	23+00 RT	W2-2		SIDE ROAD (90 DEGREE)	36x36	9	0.125	1	2.5"x2.5" PT	S	
11	23+00 LT	D7-RA-80		PARKING	24x24	4	0.125	1	2.5"x2.5" PT	N	
		D9-304		1000 FEET	24x6	1	0.125			N	
						SIGN AREA TOTAL (SF)	118.17				

**SIGNING NOTES:**

- ALL STATION LOCATIONS FOR SIGN INSTALLATION ARE APPROXIMATE. INSTALL SIGNS AT LOCATIONS AS DIRECTED BY THE ENGINEER.
- USE THE FOLLOWING DEFINITIONS TO DECIPHER THE ABBREVIATED SIGN POST TYPES IN THE SIGN SUMMARY SHEETS.  
A. PT MEANS A PERFORATED STEEL TUBE.
- FOR SIGNS SUPPORTED BY MULTIPLE POSTS, FABRICATE THE POSTS WITH THEIR TOPS LEVEL WITH ONE ANOTHER.
- FOR PERFORATED STEEL TUBE SIGNPOSTS, INSTALL THE CONCRETE FOUNDATION SHOWN ON MASS STD DTL 70-31. TRIM EACH PT POST TO LIMIT THE LENGTH INSERTED INTO THE FOUNDATION TO 12 INCHES.
- FABRICATE GUIDE SIGNS ACCORDING TO THE SHOP DRAWINGS INCLUDED IN THE APPENDICES OF PART 4, CONTRACT PROVISIONS AND SPECIAL PROVISIONS. TRIM THE CORNERS OF ALL SIGNS TO THE RADIUS SHOWN ON EACH SHOP DRAWING.
- ERECT NEW SIGNS BEFORE REMOVAL OF EXISTING SIGNS WITH SIMILAR MESSAGE. NOTIFY THE ENGINEER A MINIMUM OF 14 DAYS PRIOR TO BEGINNING SIGN REMOVAL AND SALVAGE OR DISPOSAL ACTIVITIES.
- FOR SIGNS SUPPORTED BY MULTIPLE TUBES OR PIPES, LOCATE THE OUTER POSTS ON MAXIMUM SIX FEET CENTERS. INSTALL ADJACENT WIDE FLANGE POSTS ON MINIMUM EIGHT FEET CENTERS.
- FOR ALL FINAL PAVEMENT MARKINGS USE METHYLMETHACRYLATE MATERIALS INLAID AT 90 MILS.
- DIMENSIONS REFER TO THE CENTER OF STRIPE AND THE EDGE OF PAVEMENT OR FACE OF CURB WHEN PRESENT.
- IF THE NEW AND EXISTING PAVEMENT MARKINGS ARE NOT ALIGNED AT MATCH LINE, TRANSITION BETWEEN THE TWO USING A 100:1 TAPER ON THE NEW PAVEMENT.

**MARKING LABELS:**



**SIGN LABELS:**



**65% DESIGN  
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STAKING				TOPOGRAPHY			ELECTRIC										
ASBUILT				PROFILE			CABLE TV										
CONTRACTOR				SANITARY SEWER			DESIGN										
INSPECTOR				STORM SEWER			QUANTITIES										
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CONSTRUCTION RECORD				VERTICAL DATUM				PLAN CHECK				REVISIONS					

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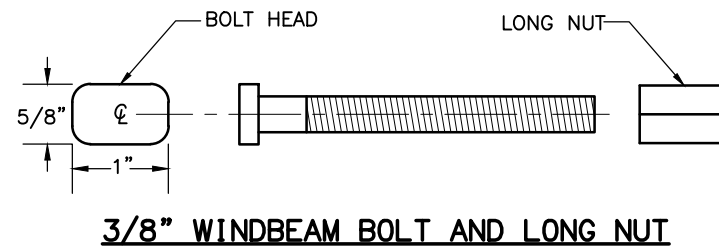
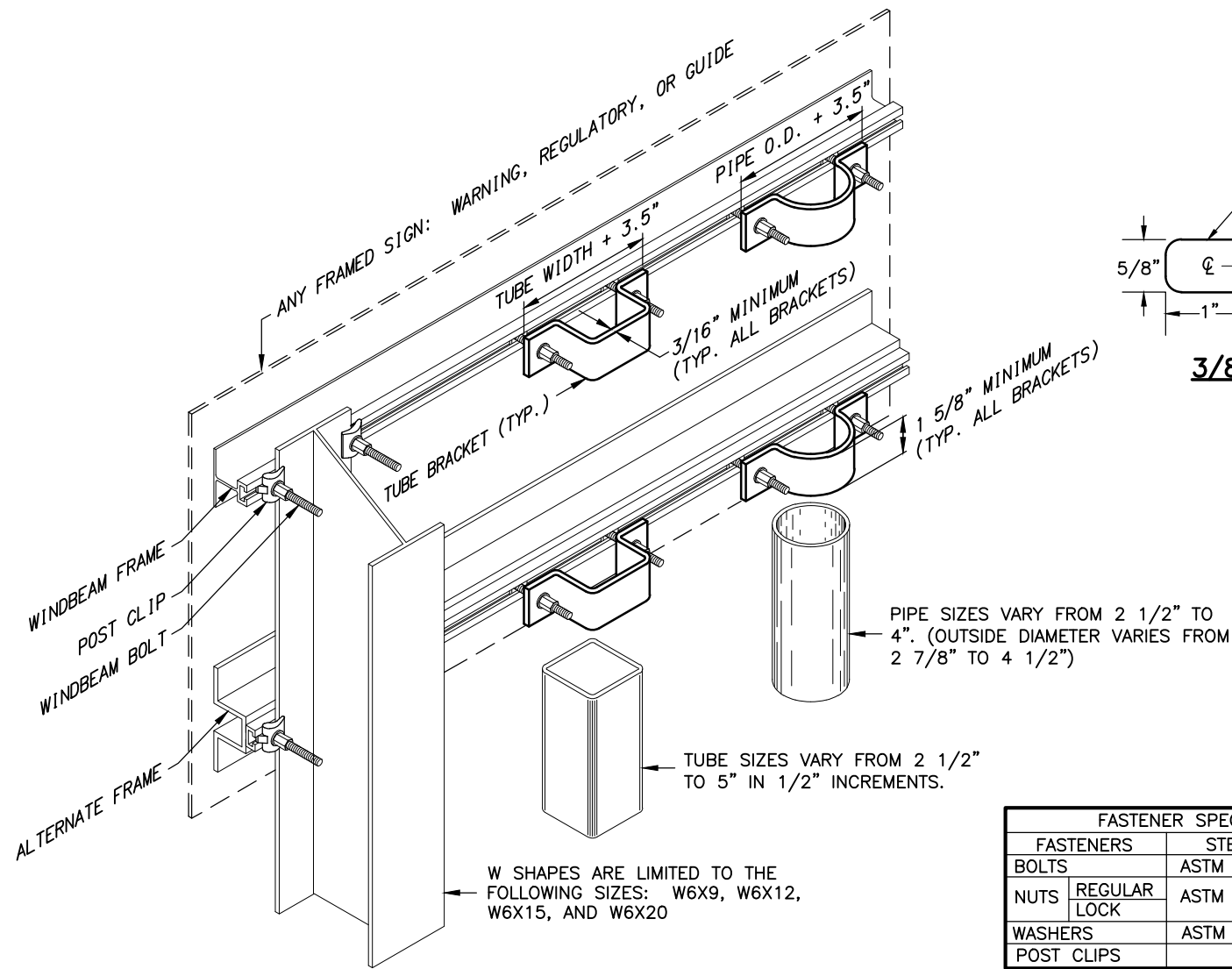
12-40  
EKLUTNA RIVER BRIDGE REPLACEMENT AT OLD GLENN HWY  
THUNDERBIRD DRIVE TO EKLUTNA LAKE ROAD

**SIGNING & STRIPING DETAILS**

SCALE \_\_\_\_\_ DATE 6/6/14 GRID NW1965 SHEET 19 of 44  
ACCT. NO. \_\_\_\_\_

File Location: z:\project\2001.01 MOA\_PME Replacement of Eklutna Bridge\Civil\ACAD\2001.01-H-Signing & Striping Plan.dwg

Plotted: 6/6/2014 10:40 AM



**3/8" WINDBEAM BOLT AND LONG NUT**

FASTENER SPECIFICATION TABLE			
FASTENERS		STEEL	STAINLESS STEEL
BOLTS		ASTM A 307	ASTM F 593
NUTS	REGULAR	ASTM A 563	ASTM F 594
	LOCK		
WASHERS		ASTM A 36	ASTM A 480
POST CLIPS			

**NOTES:**

1. ONLY USE TUBES TO SUPPORT SIGNS MOUNTED ON ONE POST.
2. ATTACH SIGNS, FRAMED AND UNFRAMED TO THEIR SUPPORTS WITH ZINC PLATED 3/8" BOLTS, EXCEPT ATTACH UNFRAMED SIGNS TO PERFORATED TUBES WITH ACCESSORY DRIVE RIVETS AND TO SADDLES WITH 5/16" BOLTS.
3. BOLT UNFRAMED SIGNS DIRECTLY TO TUBES.
4. ATTACH FRAMED SIGNS TO POSTS WHEREVER THE FRAMES CROSS THE POSTS. AT EACH CROSSING, ATTACH THE SIGN USING TWO POST CLIPS ON W-SHAPE POSTS, A U-SHAPED BRACKET ON PIPES, AND A BRACKET WITH SQUARE CORNERS ON TUBES.
5. THE TUBE BRACKETS USED ON EVEN INCH SIZE TUBES MAY ALSO BE USED ON TUBES 1/2" SMALLER IN SIZE.
6. ONLY USE THE SPECIAL WINDBEAM BOLTS TO ATTACH SIGNS FRAMED WITH THE WINDBEAM FRAMING MATERIAL.
7. ATTACH FRAMED SIGNS TO POLES AND MAST ARMS USING POLE PLATES INSTALLED ACCORDING TO DOT STANDARD DRAWING S-23.00.
8. FOR ROUTE MARKER TREES, CUT PERFORATED TUBES TO ENSURE TIGHT FITTING JOINTS. ASSEMBLE THE PIECES WITH ACCESSORY ELL-SHAPED ANGLE BRACKETS.
9. INSTALL THE TOP EDGE OF SIGNS 1" ABOVE THE TOPS OF POSTS.
10. INSTALL THE TOP EDGE OF SIGNS 3" BELOW THE TOP OF POST, WHENEVER THEY ARE MOUNTED BELOW SIGNS SECURED BY POST TOP MOUNTING BRACKETS.
11. THE BRACKET DETAILS SHOWN INDICATE GENERAL DESIGNS ONLY. DESIGNS MAY VARY BY MANUFACTURER.
12. INSTALL WEATHER TIGHT CAPS ON ALL PIPE AND TUBE POSTS, EXCEPT PERFORATED TUBING.

**FRAMED SIGN ATTACHMENT BRACKETS**

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**SIGNING & STRIPING DETAILS**

SCALE: DATE 6/6/14 GRID NW1965 SHEET 20 of 44  
ACCT. NO.