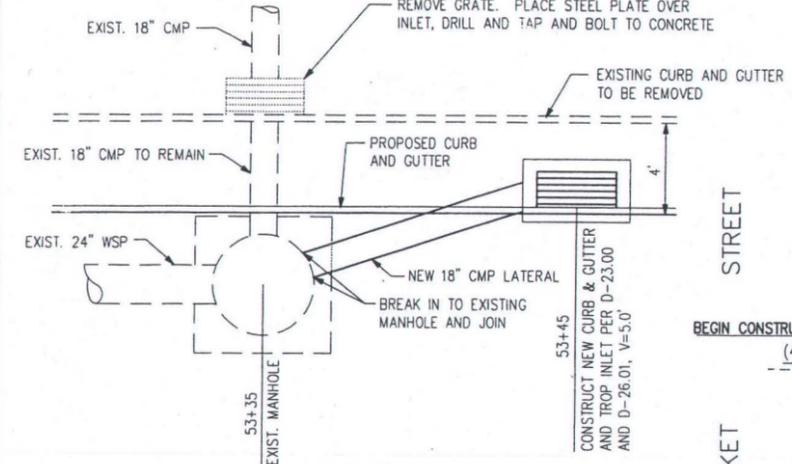
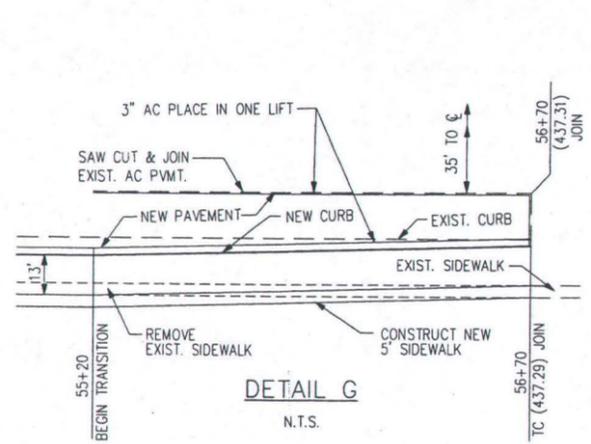
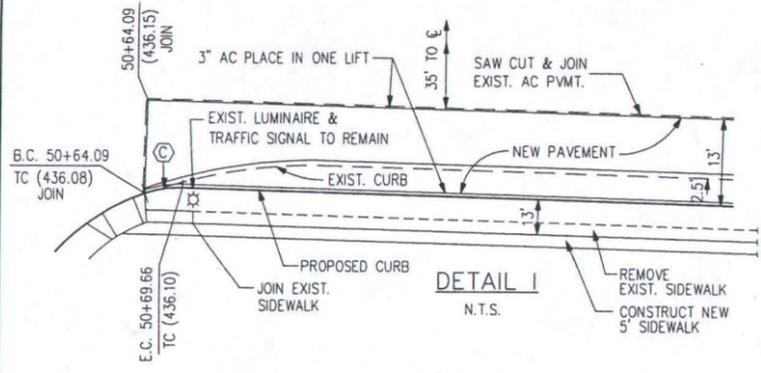
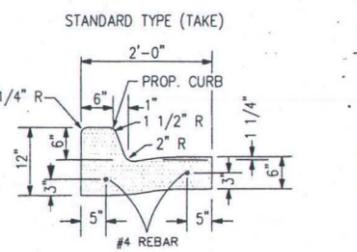
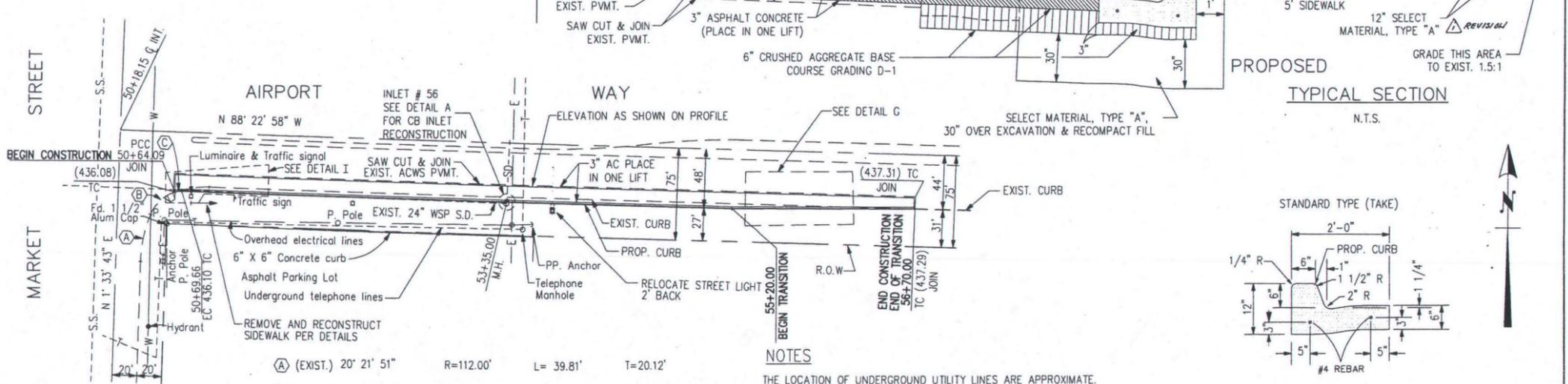


STATE	PROJECT DESIGNATION	YEAR	SHEET No.	TOTAL SHEETS
ALASKA		1993	2	14



DETAIL A (N.T.S.)
RECONSTRUCTION DROP INLET #56
AND 18" CMP LATERAL

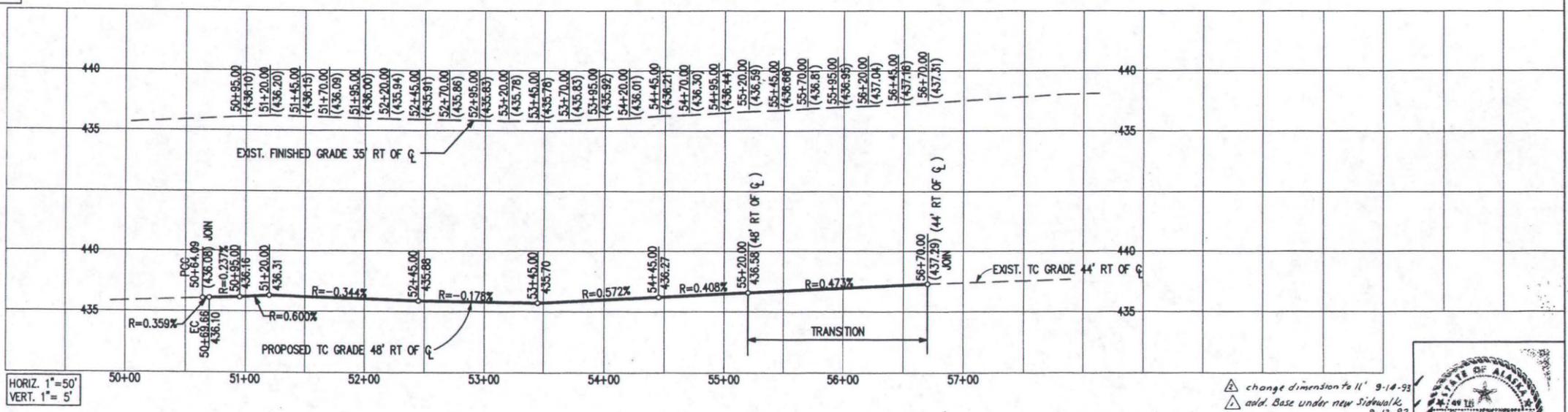


BENCH MARK: USGS C-60 ELEV. 435.70'
FROM THE INTERSECTION OF AIRPORT WAY AND UNIVERSITY AVENUE, FAIRBANK, ALASKA, THENCE WEST 900 FEET ALONG AIRPORT WAY AND ON THE SOUTH R.O.W. LINE THEREOF, 69.7 FEET SOUTHEAST OF A STREET LIGHT, 13.8 FEET SOUTH OF THE SIDEWALK, 10.0 FEET NORTH OF A POWER POLE, 2 FEET NORTH OF A 2 X 4 WITNESS POST, A STANDARD DISC, FIXED TO A 3/4 INCH BY 12 FOOT ALUMINUM ALLOY ROD DRIVEN TO REFUSAL, SET WITHIN A 4 INCH ABS SLEEVE, FLUSH WITH THE GROUND, ABOUT 1 1/2 FEET BELOW THE SIDEWALK ELEVATION.

(A) (EXIST.) 20' 21' 51"	R=112.00'	L= 39.81'	T=20.12'
(B) (EXIST.) 49' 19' 37"	R=32.00'	L=27.55'	T=14.69'
(C) 20' 21' 51"	R=16.00'	L=5.69'	T=2.87'

NOTES
THE LOCATION OF UNDERGROUND UTILITY LINES ARE APPROXIMATE. TAKEN FROM A CITY OF FAIRBANKS AS-BUILT DRAWINGS. CALL F.M.U.S. 459-6447 PRIOR TO ANY EXCAVATION, AND NOTIFY UTILITIES PRIOR TO COMMENSING WORK PER SPECIFICATIONS.

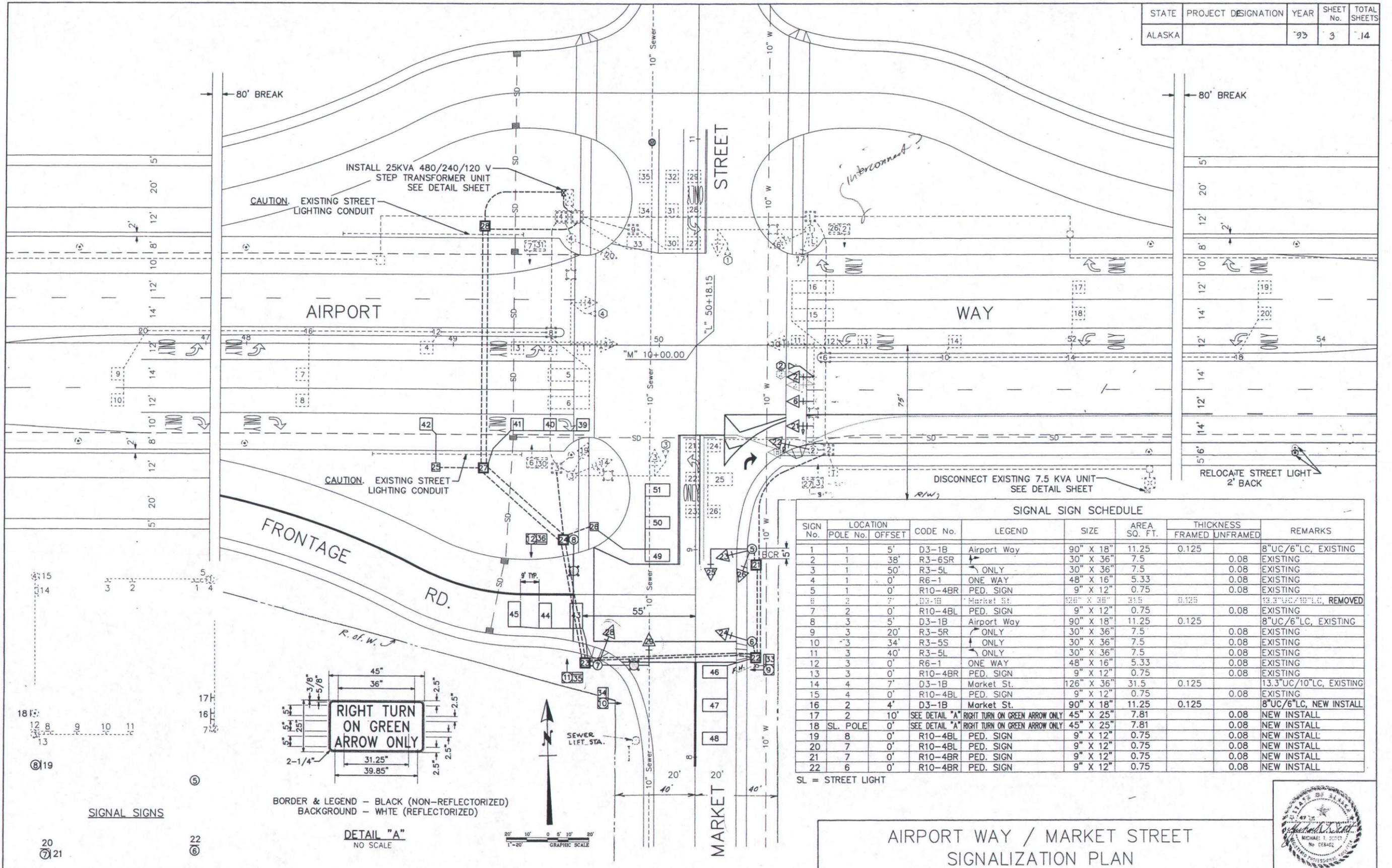
- CONSTRUCTION NOTES:
- NO THROUGH OR LEFT TURN LANE CLOSURES WILL BE ALLOWED ON AIRPORT WAY BETWEEN THE HOURS OF 7:30 A.M. AND 8:00 P.M.
 - PEDESTRIAN AND BICYCLE TRAFFIC SHALL BE MAINTAINED WHILE THE SIDEWALK ADJACENT TO ALASKA INDUSTRIAL HARDWARE IS BEING RELOCATED.
 - PLACE MINIMUM OF 12 INCHES COMPACTED SELECTED MATERIAL, TYPE "A" BELOW NEW 4 INCH THICK CONCRETE SIDEWALK.
 - RELOCATE FENCE 2' FEET FROM THE EDGE OF MOTOR TRAFFIC SIDE OF NEW SIDEWALK.



change dimension to 11' 9-18-93
add. Base under new Sidewalk 9-13-93



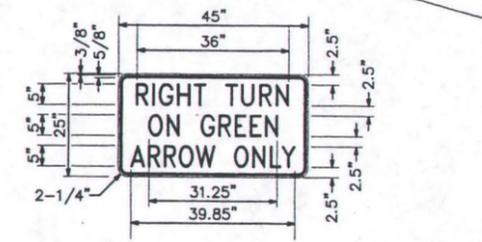
AIRPORT WAY / MARKET STREET



SIGNAL SIGN SCHEDULE

SIGN No.	LOCATION POLE No.	OFFSET	CODE No.	LEGEND	SIZE	AREA SQ. FT.	THICKNESS		REMARKS
							FRAMED	UNFRAMED	
1	1	5'	D3-1B	Airport Way	90" X 18"	11.25	0.125		8"UC/6"LC, EXISTING
2	1	38'	R3-6SR	↩ ONLY	30" X 36"	7.5	0.08		EXISTING
3	1	50'	R3-5L	↩ ONLY	30" X 36"	7.5	0.08		EXISTING
4	1	0'	R6-1	ONE WAY	48" X 16"	5.33	0.08		EXISTING
5	1	0'	R10-4BR	PED. SIGN	9" X 12"	0.75	0.08		EXISTING
6	2	7'	D3-1B	Market St.	126" X 36"	31.5	0.125		13.3"UC/10"LC, REMOVED
7	2	0'	R10-4BL	PED. SIGN	9" X 12"	0.75	0.08		EXISTING
8	3	5'	D3-1B	Airport Way	90" X 18"	11.25	0.125		8"UC/6"LC, EXISTING
9	3	20'	R3-5R	↩ ONLY	30" X 36"	7.5	0.08		EXISTING
10	3	34'	R3-5S	↩ ONLY	30" X 36"	7.5	0.08		EXISTING
11	3	40'	R3-5L	↩ ONLY	30" X 36"	7.5	0.08		EXISTING
12	3	0'	R6-1	ONE WAY	48" X 16"	5.33	0.08		EXISTING
13	3	0'	R10-4BR	PED. SIGN	9" X 12"	0.75	0.08		EXISTING
14	4	7'	D3-1B	Market St.	126" X 36"	31.5	0.125		13.3"UC/10"LC, EXISTING
15	4	0'	R10-4BL	PED. SIGN	9" X 12"	0.75	0.08		EXISTING
16	2	4'	D3-1B	Market St.	90" X 18"	11.25	0.125		8"UC/6"LC, NEW INSTALL
17	2	10'	SEE DETAIL "A" RIGHT TURN ON GREEN ARROW ONLY		45" X 25"	7.81	0.08		NEW INSTALL
18	SL. POLE	0'	SEE DETAIL "A" RIGHT TURN ON GREEN ARROW ONLY		45" X 25"	7.81	0.08		NEW INSTALL
19	8	0'	R10-4BL	PED. SIGN	9" X 12"	0.75	0.08		NEW INSTALL
20	7	0'	R10-4BL	PED. SIGN	9" X 12"	0.75	0.08		NEW INSTALL
21	7	0'	R10-4BR	PED. SIGN	9" X 12"	0.75	0.08		NEW INSTALL
22	6	0'	R10-4BR	PED. SIGN	9" X 12"	0.75	0.08		NEW INSTALL

SL = STREET LIGHT



BORDER & LEGEND - BLACK (NON-REFLECTORIZED)
BACKGROUND - WHITE (REFLECTORIZED)

DETAIL "A"
NO SCALE

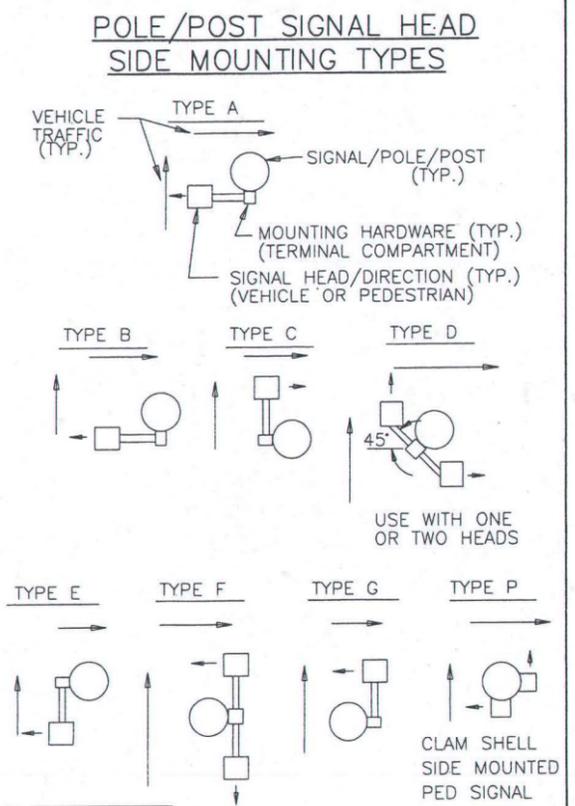


AIRPORT WAY / MARKET STREET
SIGNALIZATION PLAN



DETECTOR SCHEDULE														
DETECTOR No.	LOCATION	EXISTING OR NEW (INSTALL)	ASSIGNMENT				PHASE CALLS DURING (D=DELAY, E=EXTENSION)			INSTALLATION			REMARKS	
			CHAN. No.	PHASE	CABLE No.	ASC 8000	GREEN	YELLOW	RED	DIMENSIONS L	W	No. TURNS		CONNECT IN SERIES WITH
1	"L" 49+73	EXISTING		5			5	5D	5D	6	6	3	2,3	
2	"L" 49+58	EXISTING		5			5	5D	5D	6	6	3	1,3	
3	"L" 49+43	EXISTING		5			5	5D	5D	6	6	3	1,2	
4	"L" 48+99	EXISTING		5			5E			6	6	3		
5	"L" 49+73	EXISTING		2					2D	20	6	2	6	
6	"L" 49+73	EXISTING		2					2D	20	6	2	5	
7	"L" 48+32	EXISTING		2			2			6	6	3	8	
8	"L" 48+32	EXISTING		2			2			6	6	3	7	
9	"L" 46+67	EXISTING		2			2	2D	2	6	6	3	10	
10	"L" 46+67	EXISTING		2			2	2D	2	6	6	3	9	
11	"L" 50+59	EXISTING		1			1	1D	1D	6	6	3	12,13	
12	"L" 50+74	EXISTING		1			1	1D	1D	6	6	3	11,13	
13	"L" 50+89	EXISTING		1			1	1D	1D	6	6	3	11,12	
14	"L" 51+33	EXISTING		1			1E			6	6	3		
15	"L" 50+59	EXISTING		6					6D	20	6	2	16	
16	"L" 50+59	EXISTING		6					6D	20	6	2	15	
17	"L" 52+00	EXISTING		6			6			6	6	3	18	
18	"L" 52+00	EXISTING		6			6			6	6	3	17	
19	"L" 53+65	EXISTING		6			6	6	6	6	6	3	20	
20	"L" 53+65	EXISTING		6			6	6	6	6	6	3	19	
21	"M" 9+55	EXISTING		4			4	4D	4D	6	6	3	22,23	
22	"M" 9+40	EXISTING		4			4	4D	4D	6	6	3	21,23	
23	"M" 9+25	EXISTING		4			4	4D	4D	6	6	3	21,22	
24	"M" 9+55	EXISTING		4			4	4D	4D	6	6	3	25,26	
25	"M" 9+40	EXISTING		4			4	4D	4D	6	12	2	24,26	
26	"M" 10+47	EXISTING		4			4	4D	4D	6	6	3	24,25	
27	"M" 10+47	EXISTING		8			8	8D	8D	6	6	3	28,29	
28	"M" 10+62	EXISTING		8			8	8D	8D	6	6	3	27,29	
29	"M" 10+77	EXISTING		8			8	8D	8D	6	6	3	27,28	
30	"M" 10+47	EXISTING		8			8	8D	8D	6	6	3	31,32	
31	"M" 10+62	EXISTING		8			8	8D	8D	6	6	3	30,32	
32	"M" 10+77	EXISTING		8			8	8D	8D	6	6	3	30,31	
33	"M" 10+47	EXISTING		8			8	8D	8D	6	12	2	34,35	
34	"M" 10+62	EXISTING		8			8	8D	8D	6	6	3	33,35	
35	"M" 10+77	EXISTING		8			8	8D	8D	6	6	3	33,34	
39	"L" 49+65	NEW INSTALL	1	5	1	5	5	5D	5D	6	6	3	40,41	
40	"L" 49+50	NEW INSTALL	1	5	1	5	5	5D	5D	6	6	3	39,41	
41	"L" 49+35	NEW INSTALL	1	5	1	5	5	5D	5D	6	6	3	39,40	
42	"L" 48+91	NEW INSTALL	2	5	1	5	5E			6	6	3		
43	AS SHOWN	NEW INSTALL	3	2	2	2	2	2D	2D	6	12	2	44,45	
44	AS SHOWN	NEW INSTALL	3	2	2	2	2	2D	2D	6	12	2	43,45	
45	AS SHOWN	NEW INSTALL	3	2	2	2	2	2D	2D	6	12	2	43,44	
46	"M" 8+45	NEW INSTALL	4	4	3	4	4	4D	4D	6	12	2	47,48	
47	"M" 8+30	NEW INSTALL	4	4	3	4	4	4D	4D	6	12	2	46,48	
48	"M" 8+15	NEW INSTALL	4	4	3	4	4	4D	4D	6	12	2	46,47	
49	"M" 8+95	NEW INSTALL	5	8	4	8	8	8D	8D	6	12	2	50,51	
50	"M" 9+10	NEW INSTALL	5	8	4	8	8	8D	8D	6	12	2	49,51	
51	"M" 9+25	NEW INSTALL	5	8	4	8	8	8D	8D	6	12	2	49,50	

VEHICULAR SIGNAL HEAD SCHEDULE													
POLE/POST No.	FACE No.	INDICATIONS					MOUNTING					REMARKS	
		12" BALL	12" ARROW	8" BALL	PROG. VISIB.	MAST LOC. OFFSET	ARM ELEV. PLUMB.	SIDE MOUNTING TYPE	TOP OF POST				
1	16	X	X	X	X					44'			EXISTING
1	17	X	X	X	X					0'	G		EXISTING
2	10	X	X	X	X					38'			RELOCATED
2	18	X	X	X	X					51'			EXISTING
2	6	X	X	X	X					25'			REMOVED
2	21	X	X	X	X					14'			NEW INSTALL
2	22	X	X	X	X					0'	G		NEW INSTALL, RT. TURN ARROWS
3	3	X	X	X	X					40'			EXISTING
3	14	X	X	X	X					0'	G		EXISTING
3	19	X	X	X	X					0'	G		EXISTING
4	4	X	X	X	X					31'			EXISTING
4	12	X	X	X	X					51'			EXISTING
4	20	X	X	X	X					0'	G		EXISTING
5	23	X	X	X	X					0'	F		NEW INSTALL
5	26	X	X	X	X					0'	F		NEW INSTALL
5	25	X	X	X	X					19'			NEW INSTALL
5	24	X	X	X	X					0'			NEW INSTALL
6	28	X	X	X	X					0'	G		NEW INSTALL
6	29	X	X	X	X					25'			NEW INSTALL



JUNCTION BOX SUMMARY

JUNCTION BOX NO.	STATION	LOCATION		TYPE	CIRCUITS	REMARKS
		LT	RT			
1	EXISTING					EXISTING
2	EXISTING					EXISTING
3	EXISTING					EXISTING
4	EXISTING					EXISTING
6	EXISTING					EXISTING
8	EXISTING					EXISTING
9	EXISTING					EXISTING
10	EXISTING					EXISTING
12	EXISTING					EXISTING
14	EXISTING					EXISTING
16	EXISTING					EXISTING
18	EXISTING					EXISTING
20	EXISTING					EXISTING
T	EXISTING					EXISTING
21	"M" 8+93			II		NEW INSTALL
22	"M" 8+48			II		NEW INSTALL
23	"M" 8+48			II		NEW INSTALL
24	"M" 9+12			II		NEW INSTALL
25	"L" 49+00			1A		NEW INSTALL
26	"M" 9+12			1A		NEW INSTALL
27	"L" 49+15			II		NEW INSTALL
28	"L" 49+15			II		NEW INSTALL

OPTICOM DETECTOR SCHEDULE

LOCATION	DETECTOR No.	PHASE CALL	FACING DIRECTION	PREEMPTOR PRIORITY
ON TOP OF SIGNAL #1	①	ø4	S	
ON TOP OF SIGNAL #2 (R)	② (R)	ø2	W	
ON TOP OF SIGNAL #3	③	ø8	N	
ON TOP OF SIGNAL #4	④	ø1 & ø6	E	

ALL EQUIPMENT EXISTING EXCEPT WHERE SHOWN: (N)=NEW; (R)=RELOCATED

FLASH PROGRAM COLOR

PHASE	1	2	3	4	5	6	7	8	OLA	OLB	OLC	OLD
COLOR	R	Y	R	R	R	Y	*	R	R	Y	*	*

* = FUTURE

PEDESTRIAN DETECTOR SCHEDULE

POLE No.	PUSH BUTTON	PHASE	REMARKS
1	2	4	EXISTING
2	3	4	EXISTING
3	6	8	EXISTING
4	7	8	EXISTING
6	9	2	NEW INSTALL
7	10	2	NEW INSTALL
7	11	8	NEW INSTALL
8	12	8	NEW INSTALL

PEDESTRIAN SIGNAL HEAD SCHEDULE

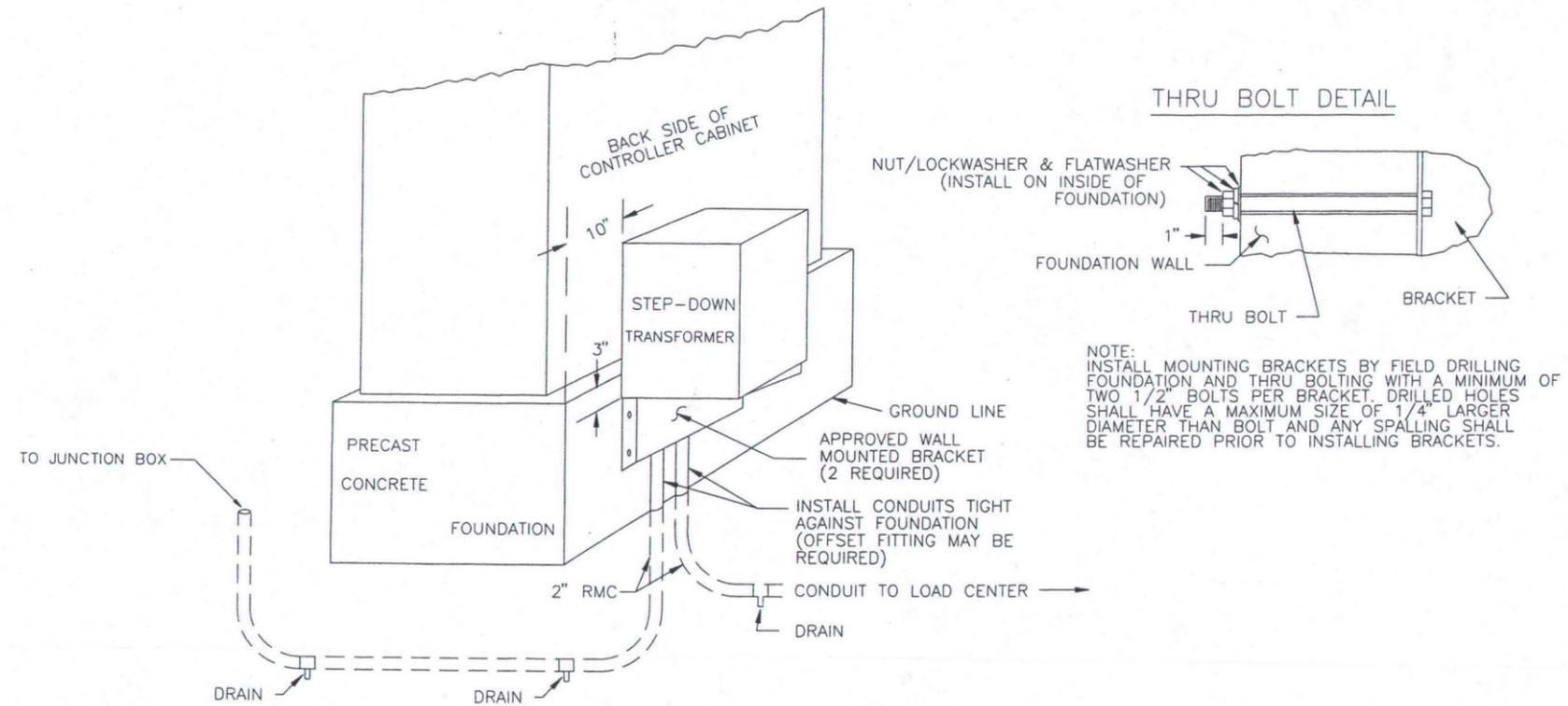
POLE No.	FACE No.	MOUNTING TYPE	PHASE	REMARKS
1	26	G	4	EXISTING
2	27	G	4	EXISTING
3	30	G	8	EXISTING
4	31	G	8	EXISTING
6	33	P	2	NEW INSTALL
7	34	P	2	NEW INSTALL
7	35	P	8	NEW INSTALL
8	36	P	8	NEW INSTALL



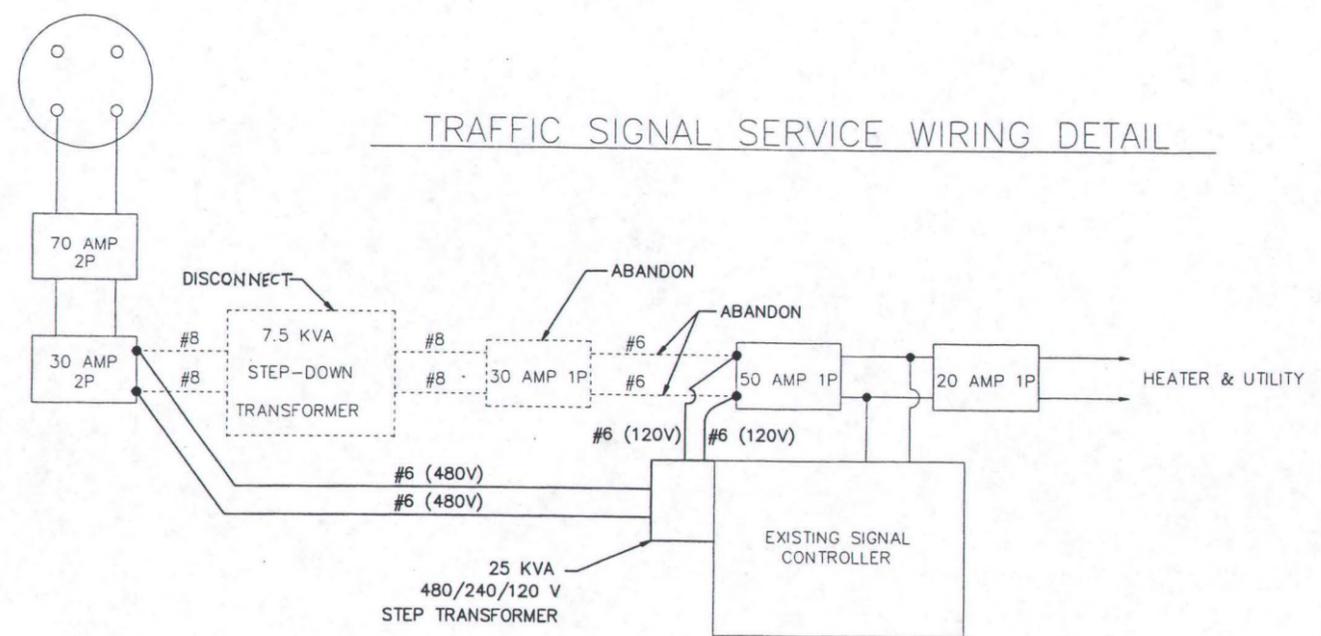
STATE	PROJECT DESIGNATION	YEAR	SHEET No.	TOTAL SHEETS
ALASKA		'93	.6	14

See also sheet 6A for drawings that were attached to this sheet prior to scan on to CD

CONTROLLER CABINET MOUNTED TRANSFORMER DETAIL



TRAFFIC SIGNAL SERVICE WIRING DETAIL



AIRPORT WAY / MARKET STREET
TRAFFIC SIGNAL SERVICE WIRING DETAILS



STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA		1993	6A	14

See also sheet 6. These drawings were attached to sheet 6 prior to scan on to CD

L-30.02 SHEET 1 of 1

GENERAL NOTES:

- All footings shall be cast in place.
- Change of footing, Type B or Type M, shall be at the discretion of the Contractor unless otherwise indicated on the plans or specifications.
- All exposed, concrete edges shall be chamfered 3/4".
- The bottom of drilled hole footings shall be formed by a formed base on the rock.
- The Contractor may use bent or steel pipe anchor bolts of his option unless otherwise indicated on the plans or in the specifications. Anchor bolts shall be 2" diameter length for Type L and Type F footings and 4" diameter length for Type M footings.
- Cast footings shall be cast in drilled holes with the P.C.C. placed in direct contact with the undisturbed surface of the hole. No grout or sealant shall be placed in the hole. The top of the foundation may be formed.

STRUCTURAL NOTES:

- Concrete shall conform to Class "A" concrete.
- Reinforcing steel shall be deformed bars of solid clear conforming to ASTM A-615, Grade 60.
- Each spiral rebar used within each footing shall have 3/8" bars at the radius of each end of the end.
- Anchor bolts, nuts and washers shall be high strength steel and shall conform to ASTM A-307. Dimensions of anchor bolts, nuts and washers shall conform to ASTM A-307.
- Steel shall be A-36 steel used in 1/2" galvanized. Steel shall meet the requirements of the specifications for this project. The grant shall contain only enough steel to provide shading and painting.
- Steel Anchor Plates shall conform to ASTM A-36.

FOOTING FOR LIGHTING STANDARDS

Design Approved: [Signature]

Checked: [Signature]

Date: 8/2/93

MAST ARM DATA

LENGTH K	BOLT CIRCLE
10' to 14'	11-1/2"
16' to 20'	12-1/2"
22' to 26'	13-1/2"
28' to 32'	14-1/2"
34' to 38'	15"
40' to 44'	15-1/2"

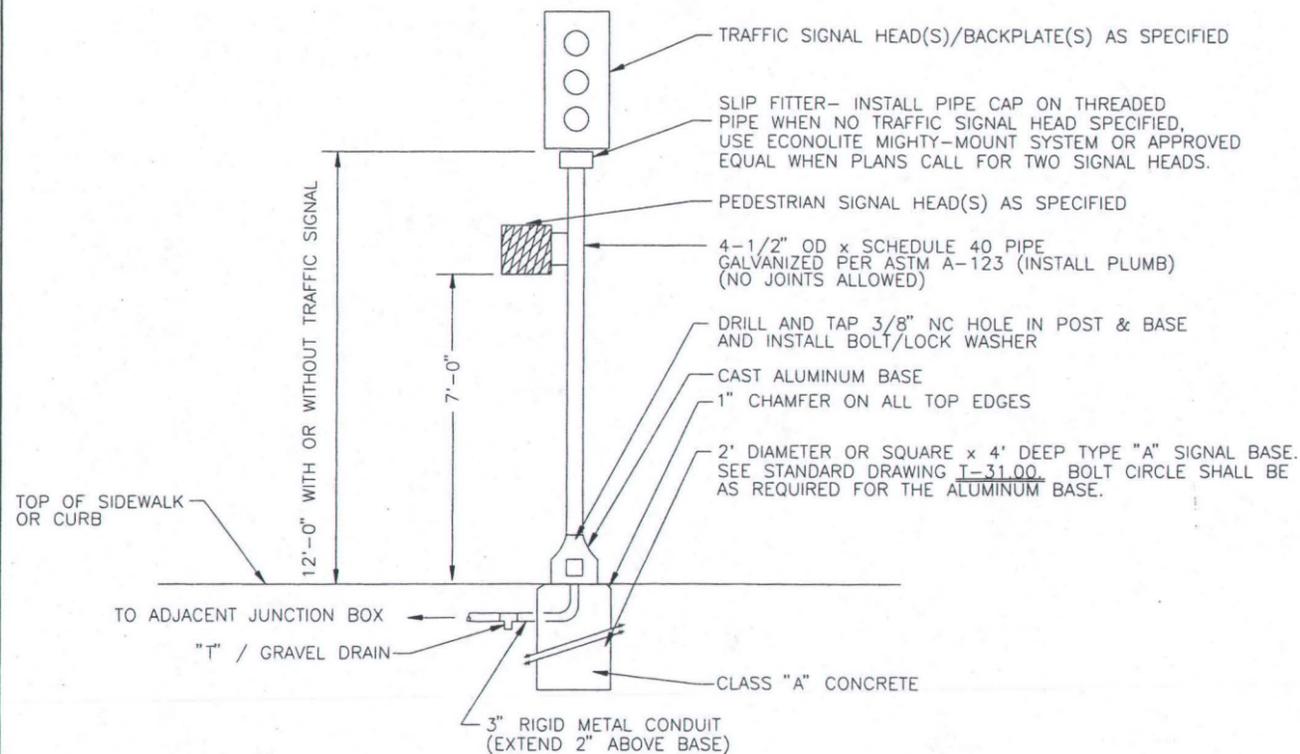
GENERAL NOTES:

- FABRICATION AND INSTALLATION OF STRUCTURAL SUPPORT SYSTEMS FOR TRAFFIC SIGNALS AND/OR LUMINAIRES SHALL CONFORM TO THE LATEST AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS (1975) EXCEPT AS NOTED ON THIS DRAWING.
- POLES AND ARMS SHALL BE ROUND STEEL TUBES CONFORMING TO SECTION 4 - STEEL DESIGN OF AASHTO SPECIFICATION IN NOTE 1.
- GROUP LOADS SHALL BE GROUP (DEAD LOAD + WIND) OF SECTION 2 - LOADS OF AASHTO SPECIFICATION IN NOTE 1.
- WIND LOADS SHALL BE SPECIFIED ON PLANS.
- SIGNAL MAST ARM AND POLE LENGTH SHALL BE SPECIFIED ON PLANS.
- POLES AND ARMS SHALL HAVE UNIFORM TAPER.
- HANDHOLE DETAILS ARE TO INDICATE GENERAL DESIGN ONLY AND MAY BE ALTERED TO CONFORM WITH MANUFACTURERS FABRICATION DESIGN.
- CAST IN DRILL HOLE FOOTING SHALL BE CAST IN DIRECT CONTACT WITH THE UNDISTURBED SURFACE OF THE HOLE. NO GROUT OR SEALANT WILL BE PERMITTED EXCEPT IN THE TOP FOOT OF THE FOUNDATION MAY BE FORMED.
- ANCHOR BOLTS, NUTS AND WASHERS SHALL CONFORM TO ASTM A307. THEY SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A133.

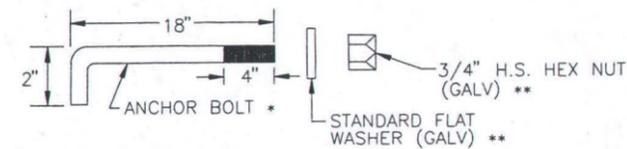
Foundation detail For use on EMMOT Project.

STATE	PROJECT DESIGNATION	YEAR	SHEET No.	TOTAL SHEETS
ALASKA		93	7	14

SIGNAL POST DETAIL



ANCHOR BOLTS



- * MEETS ASTM A-572 GALVANIZED PER ASTM A-153
- ** MEETS ASTM A-325 GALVANIZED PER ASTM A-153

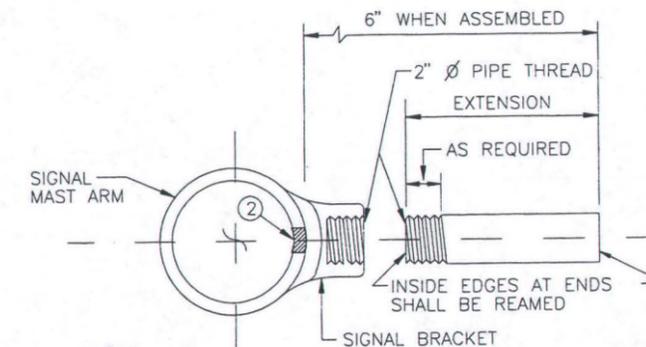
MATERIAL LIST *

- | |
|---|
| 1 TWO FOOT DIAMETER OR SQUARE x 4' BASE & 4 ANCHOR BOLTS, AND ONE 3" CONDUIT |
| 1- POST TOP SLIP FITTER.
(SEE STANDARD DRAWING T-30.00) |
| 1- POST & BREAKAWAY CAST ALUMINUM BASE;
VE PED CATALOG #0-SE-5030 OR APPROVED EQUAL. |

MATERIAL LISTED ARE FOR ONE INSTALLATION AND DOES NOT INCLUDE SIGNAL HEADS AND MOUNTING HARDWARE.

PLUMBIZER SIGNAL MOUNTING DETAIL

(REQUIRED FOR ALL NEW OR RELOCATED PLUMBIZER [MAST ARM] MOUNTED SIGNALS)



NOTES

- ① THESE DETAILS MODIFY SHEET No. "SIGNAL POLE DETAIL" PER PROJECT DOCUMENTS ✓
- ② FIELD DRILL WIRING ACCESS HOLE AS REQUIRED. REAM INSIDE & OUTSIDE AND PAINT WITH SPELTER REPAIR MATERIAL.
- ③ ONE 2" GALVANIZED SCHEDULE 40 RIGID METAL CONDUIT EXTENSION SHALL BE FURNISHED WITH EACH SIGNAL BRACKET.
- ④ SIGNAL BRACKETS SHALL BE ASTRO-BRAC AB-300BAK OR APPROVED EQUAL AND SHALL BE INSTALLED AS RECOMMENDED BY THE MANUFACTURER. THE ACTUAL LOCATION OF BRACKETS ON EACH ARM SHALL BE DETERMINED BY THE ENGINEER AFTER THE POLES AND ARMS HAVE BEEN INSTALLED.

SIGNAL NOTES

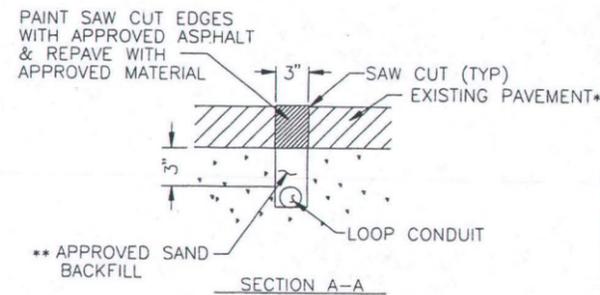
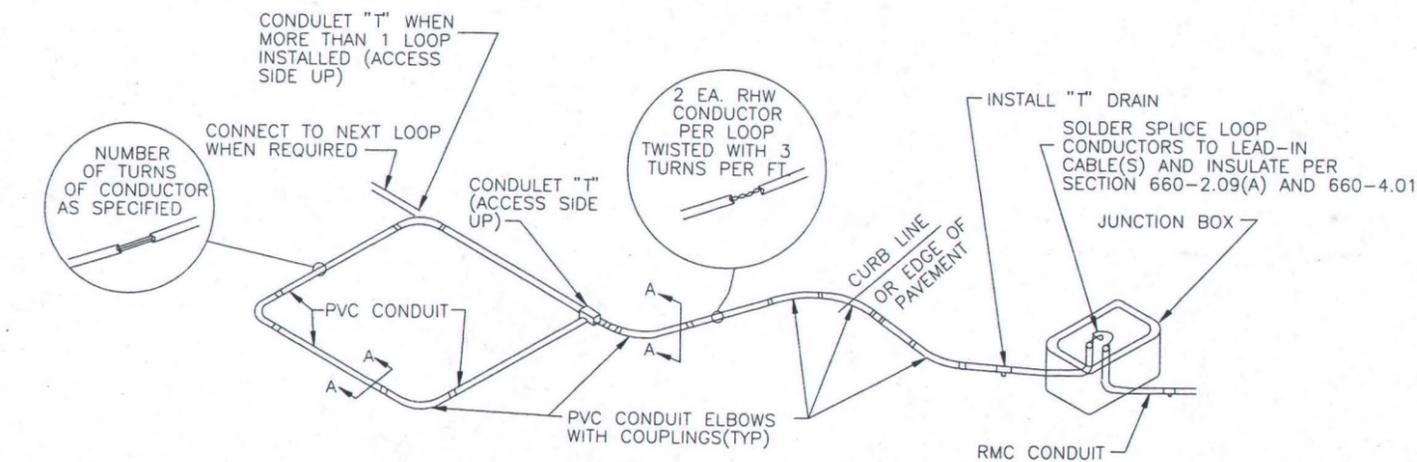
1. SIGNAL POLE ANCHOR BOLTS AND NUTS SHALL BE ASTM A-449 WITH THE TOP 12 INCH OF THE BOLT THREADED AND GALVANIZED IN ACCORDANCE WITH ASTM A-153.
2. ACCESS HANDHOLES WITH COVERS SHALL BE FURNISHED ON THE BACK OF SIGNAL MAST ARM ATTACHMENT AND SHALL BE 4" X 6-1/2" HIGH OR AS APPROVED BY THE ENGINEER.
3. ALL CONDUITS, J-BOXES, AND FOUNDATIONS TO BE INSTALLED IN AREAS OF PAVING, SIDEWALKS OR CURB AND GUTTER SHALL BE INSTALLED PRIOR TO PAVING OR POURING OF CONCRETE.
4. PRIOR TO DRILLING HOLES OR INSTALLING POLE/POST MOUNTED PEDESTRIAN OR TRAFFIC SIGNALS THE CONTRACTOR, WITH THE ENGINEER, SHALL CHECK FOR VISIBILITY PROBLEMS AND REVISE MOUNTING AS APPROVED BY THE REGIONAL TRAFFIC SAFETY ENGINEER. THIS WORK AND MATERIAL SHALL BE CONSIDERED A SUBSIDIARY OBLIGATION.
5. GROUT MIXES SHALL BE AS APPROVED BY THE ENGINEER.
6. AREAS OF PAVEMENT, SIDEWALK, AND CURB AND GUTTER SHALL REQUIRE REMOVAL AND REPLACEMENT TO ALLOW FOR INSTALLATION OF DETECTION LOOPS CONDUITS, J-BOXES, AND FOUNDATIONS. LOCATIONS REQUIRING REMOVAL SHALL HAVE FULL DEPTH SAW CUTS WHERE THERE ARE NO CONSTRUCTION JOINTS. THE SIDEWALK AND/OR CURB AND GUTTER SHALL BE REMOVED FULL WIDTH AND TO THE NEAREST CONSTRUCTION OR CONTRACTION JOINT UNLESS OTHERWISE APPROVED BY THE ENGINEER. (SEE SECTION 606-2.02) THIS WORK SHALL BE INCIDENTAL TO SECTION 660 BID SCHEDULE PAY ITEMS.
7. SIGNAL POLE/POST FOUNDATIONS SHALL BE POURED PRIOR TO CONSTRUCTION THE ADJACENT SIDEWALK (CURB RAMPS) AND SHALL BE LEVEL WITH THE TOP AND BACK ADJACENT SIDEWALK (CURB RAMPS) GRADES. JUNCTION BOXES AND CONDUIT LOCATED IN AREAS OF NEW SIDEWALK (CURB RAMP) SHALL BE INSTALLED AND SET TO GRADE PRIOR TO POURING NEW SIDEWALK (CURB RAMP). NEW SIDEWALK ALIGNMENT SHALL BE STAKED PRIOR TO INSTALLING JUNCTION BOXES OR POLE/POST FOUNDATION.
8. ALL EXISTING FOUNDATIONS, CONDUIT RUNS, AND JUNCTION BOXES NOTED FOR REMOVAL SHALL BE EXCAVATED FULL-DEPTH AND COMPLETELY REMOVED. THE RESULTING HOLES AND TRENCHES SHALL BE BACKFILLED WITH MATERIAL EQUIVALENT TO AND COMPACTED TO THE DENSITY OF THE SURROUNDING GROUND.
9. ALL INDUCTIVE LOOP DETECTORS SHALL BE TWO CHANNEL UNITS WITH DELAY AND EXTENSION TIMING FEATURES.
10. ALL WORK AND MATERIALS REQUIRED TO INSTALL THE OPTICOM SYSTEM SHALL BE CONSIDERED A SUBSIDIARY OBLIGATION.
11. ALL OPTICOM DETECTORS SHALL BE MOUNTED AND AIMED SO AS TO PROVIDE MAXIMUM EMERGENCY VEHICLE RECOGNITION. OPTICOM DETECTOR LOCATIONS AS SHOWN ON THE PLANS ARE APPROXIMATE AND SUBJECT TO CHANGE AS DIRECTED BY THE ENGINEER.
12. OPTICOM DETECTORS SHALL BE MOUNTED AS APPROVED BY THE ENGINEER.
13. BOTH OPTICOM DETECTOR SCOPES SHALL BE AIMED AT THE APPROPRIATE LANES. OPTICOMS MOUNTED ABOVE SIGNAL HEADS SHALL BE INSTALLED IN A MANNER WHICH DOES NOT REQUIRE MODIFICATION TO THE SIGNAL BACKPLATES OR HEADS.

AIRPORT WAY / MARKET STREET
SIGNAL POST AND SYSTEM DETAILS



SIGNAL SYSTEM DETECTION LOOP DETAILS

WINDING DETAILS



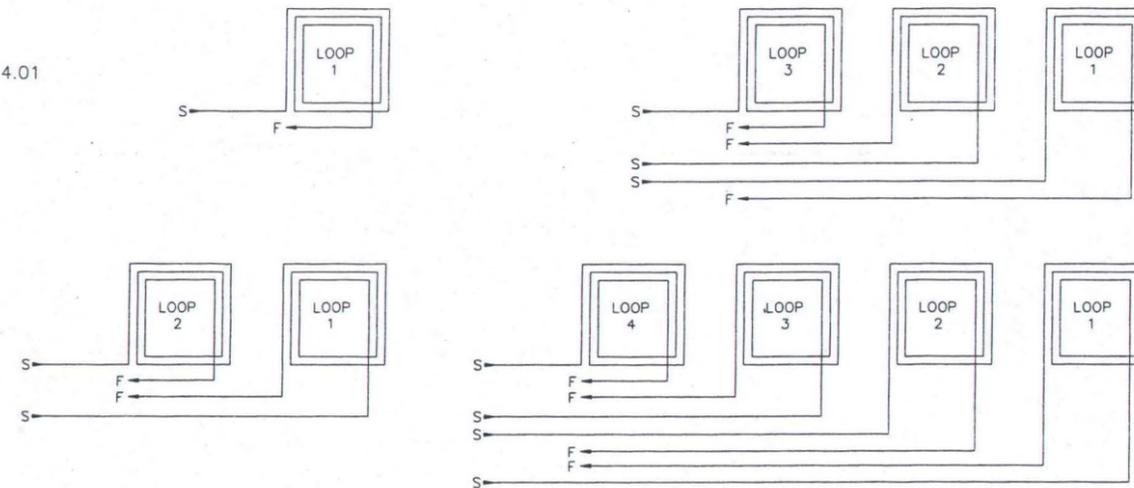
RMC = RIGID METAL CONDUIT
PVC = POLYVINYLCHLORIDE (SCH.40)

TYPE LOOP	CONDUIT SIZE-TYPE	WIRE SIZE	NUMBER OF TURNS	LOOP SIZE
SIGNAL SYSTEM	1" PVC	#12	①	①

① SEE DETECTION SCHEDULE (SUMMARY)

*LOOPS TO BE INSTALLED BENEATH NEW PAVING SHALL BE INSTALLED PRIOR TO PAVING.
** REQUIRED WITH NEW AND EXISTING PAVEMENT CONDITIONS.

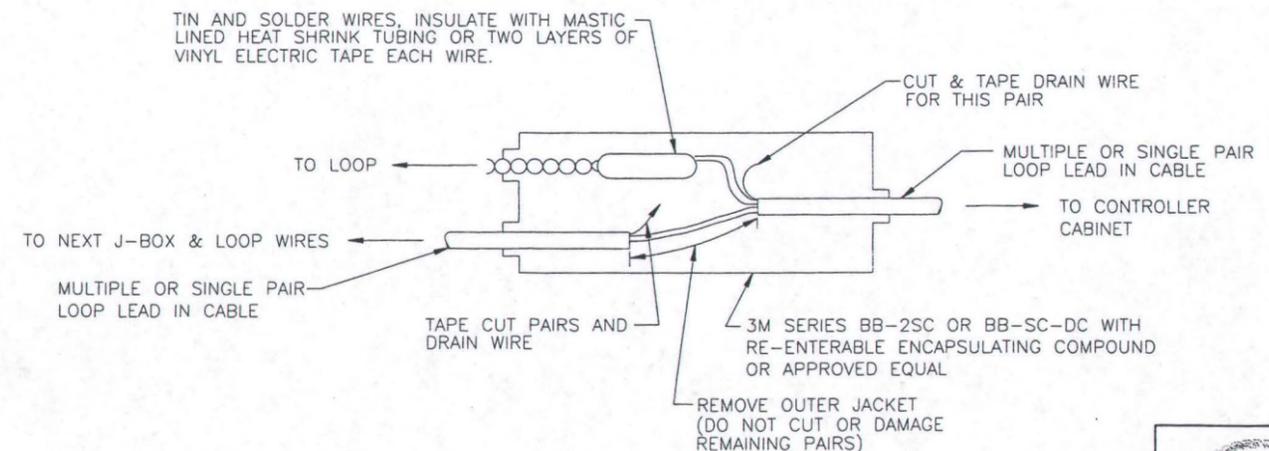
- ALL NEW LOOP CONDUIT & FITTINGS SHALL BE RIGID PVC WITH SOLVENT WELDED CONNECTIONS.
- EACH PAIR OF CONDUCTORS FROM LOOPS TO JUNCTION BOXES SHALL HAVE IDENTIFICATION BANDS PER SECTION 660-2.09(A) AND 660-4.01. ALL EXISTING LEAD-IN CABLES SHALL ALSO BE Banded AT THE CONTROLLER WITH NEW LOOP NUMBERS.
- SEE SECTION 660-4.01 FOR ADDITIONAL INFORMATION.
- THE DETECTOR HARNESS SHALL BE LABELED WITH THE APPROPRIATE LOOP DETECTOR NUMBERS AND SIGNAL PHASE NUMBERS.
- LOOPS SHALL BE SPLICED TOGETHER IN THE JUNCTION BOXES OR CONTROLLER CABINETS, IN PARALLEL OR SERIES COMBINATIONS AS SHOWN ON THE INTERSECTION DETAILS, NOTES, AND SCHEDULES (SUMMARIES).
- WHEN STATIONS ARE LISTED IN A LOOP DETECTOR SUMMARY THEY ARE TO THE FRONT EDGE OF THE LOOP NEAREST THE INTERSECTION. ALL LOOPS SHALL BE CENTERED IN THE LANE UNLESS NOTED OR DETAILED OTHERWISE.
- ALL EXISTING DETECTION SHALL REMAIN FUNCTIONAL UNTIL APPROVED OTHERWISE BY THE ENGINEER.
- BEFORE ANY EXISTING LOOP IS DISCONNECTED, THE ENGINEER SHALL BE NOTIFIED 48 HOURS IN ADVANCE TO ALLOW FOR EQUIPMENT ADJUSTMENT.



NOTES:

- NUMBER 1 LOOP IS CLOSEST TO THE CROSSWALK
- ADJACENT LOOPS ON THE SAME SENSOR UNIT CHANNEL SHALL BE WOUND IN OPPOSITE DIRECTIONS

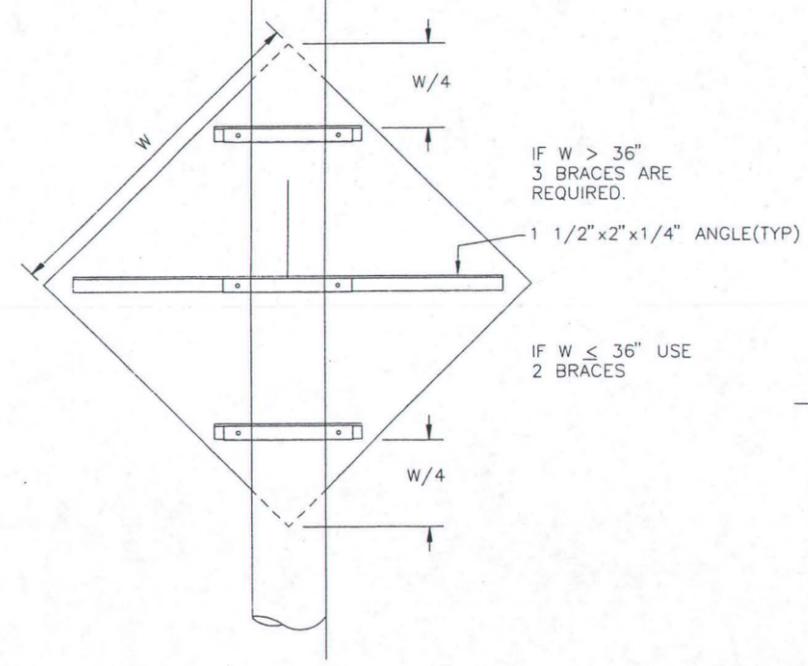
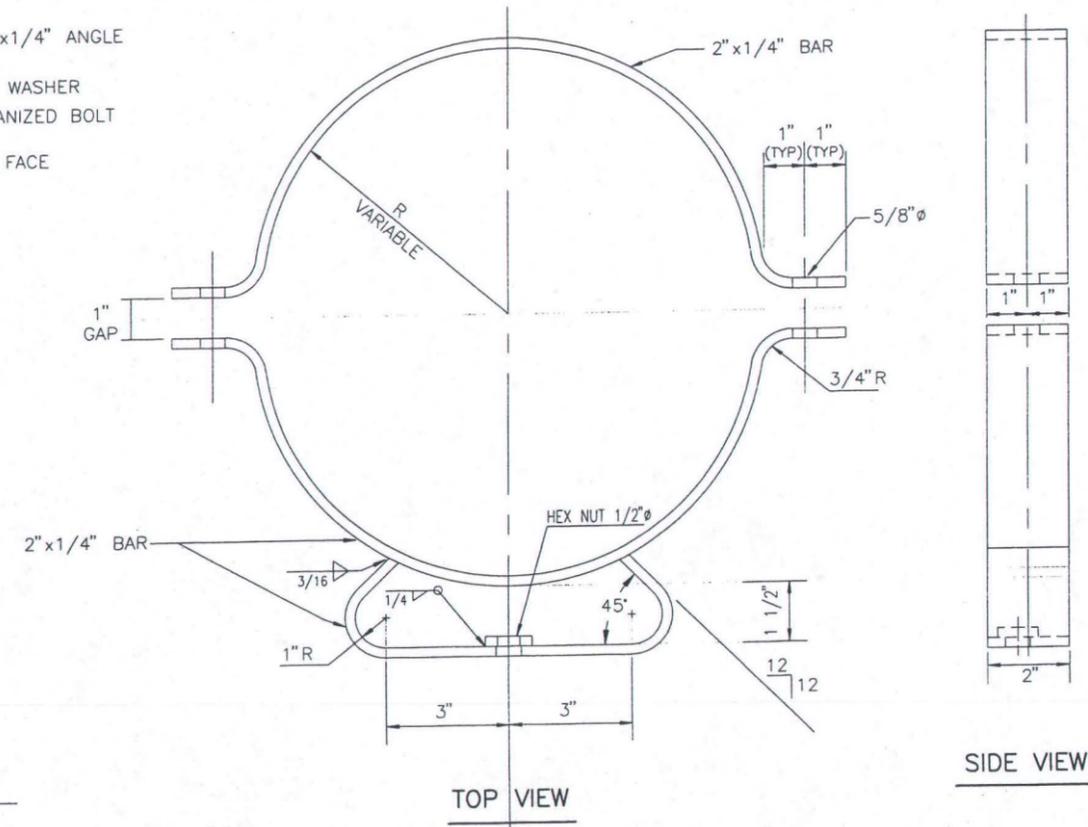
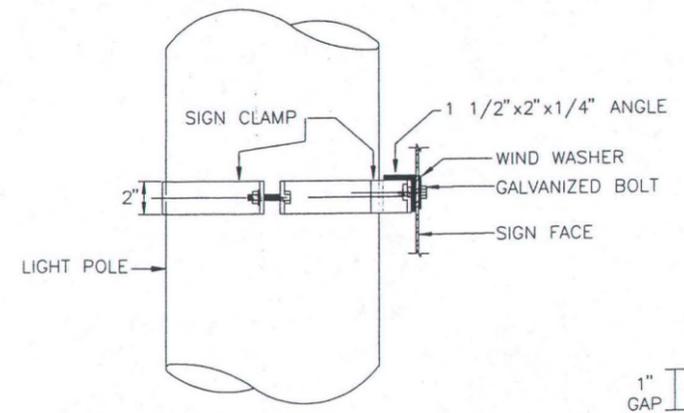
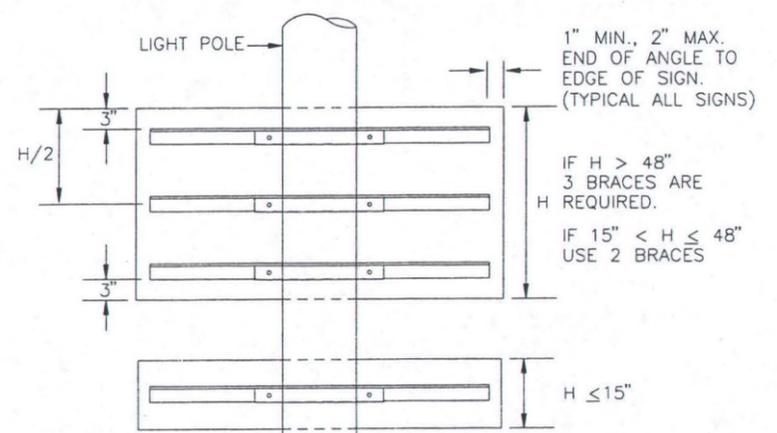
LOOP SPLICE DETAIL



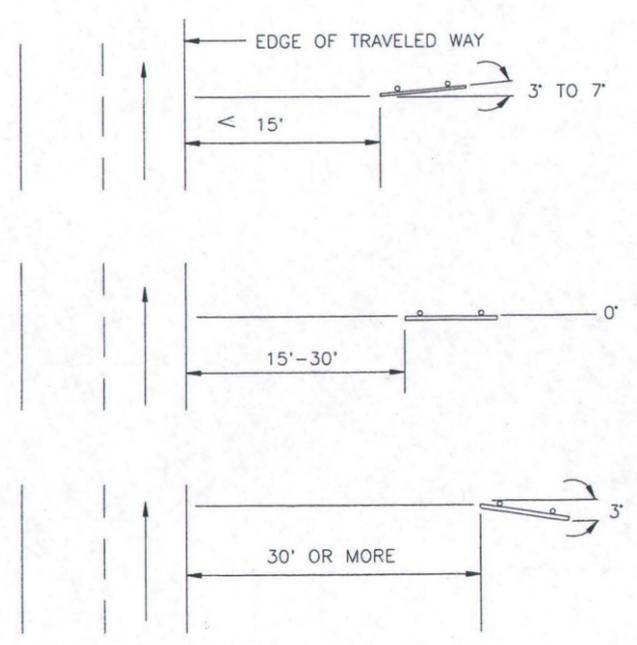
AIRPORT WAY / MARKET STREET
DETECTOR LOOP DETAILS



STATE	PROJECT DESIGNATION	YEAR	SHEET No.	TOTAL SHEETS
ALASKA		93	9	14



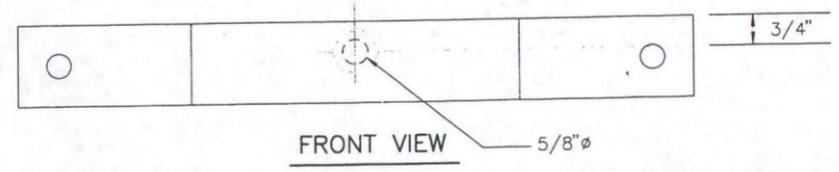
SIGN INSTALLATION ANGLES



LIGHT POLE SIGNS DETAIL

NOTES:

1. ATTACH SIGN TO ANGLE BAR WITH 3/16" RIVETS AT 4" STAGGERED SPACING.
2. ADJUST LOCATION OF BRACING SO THAT BOLTS AND WASHERS WILL MISS LEGEND.



LIGHT POLE MOUNTED SIGN CLAMP

NOTES:

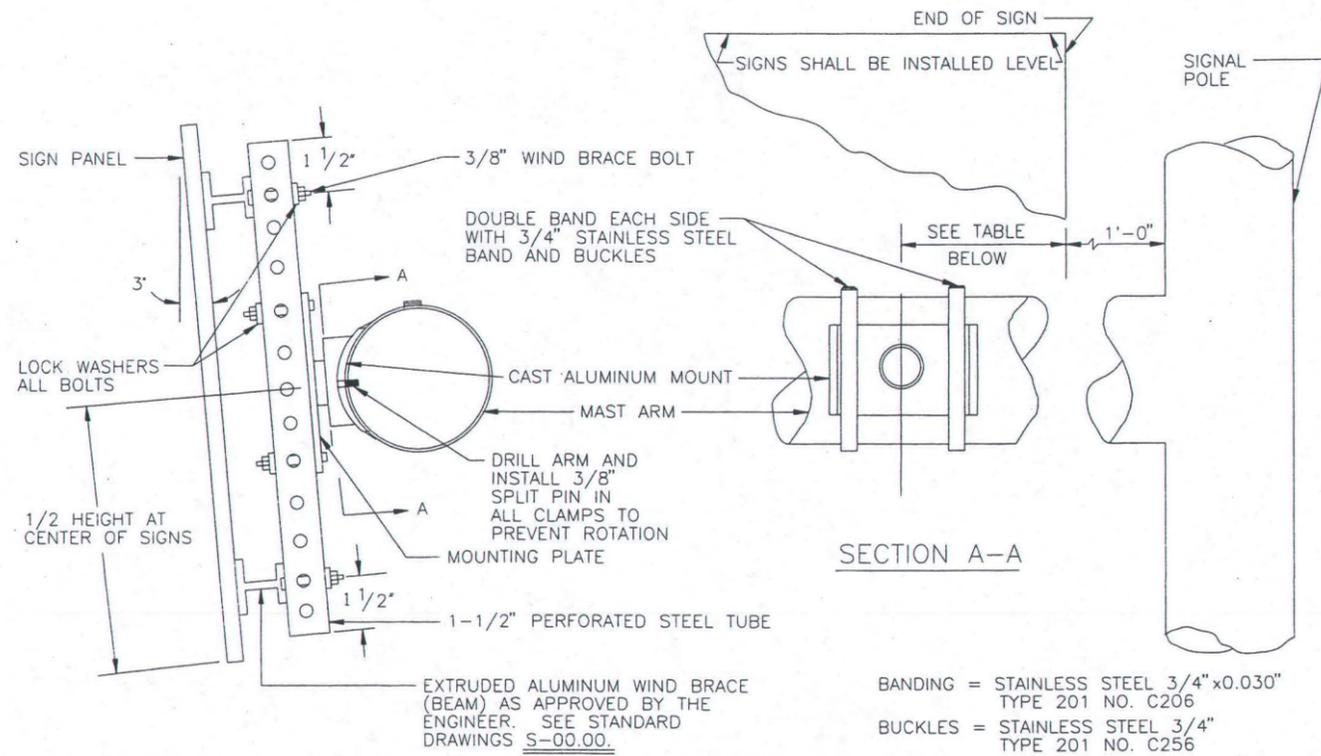
1. ALL STEEL A36.
2. HOT DIP GALVANIZED AFTER FABRICATION.
3. RADIUS OF THE SIGN CLAMP VARIES WITH THE RADIUS OF THE LIGHT POLE AT THE MOUNTING HEIGHT OF THE SIGN.
4. USE 1/2" x 2" THREADED BOLTS, NUT AND WASHER TO FASTEN ENDS OF CLAMP.

AIRPORT WAY / MARKET STREET
SIGNING DETAILS 1/2



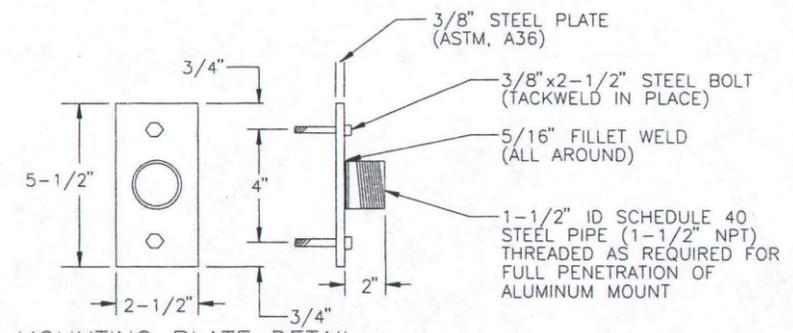
STATE	PROJECT DESIGNATION	YEAR	SHEET No.	TOTAL SHEETS
ALASKA		93	10	14

SIGNAL MAST ARM MOUNTED SIGNS (NOT FOR "R" SERIES SIGNS)



BANDING = STAINLESS STEEL 3/4" x 0.030" TYPE 201 NO. C206
 BUCKLES = STAINLESS STEEL 3/4" TYPE 201 NO. C256
 ALUMINUM MOUNT (SIGNAL) = 1-1/2" NPT NO. D040
 PIN = NO. D042

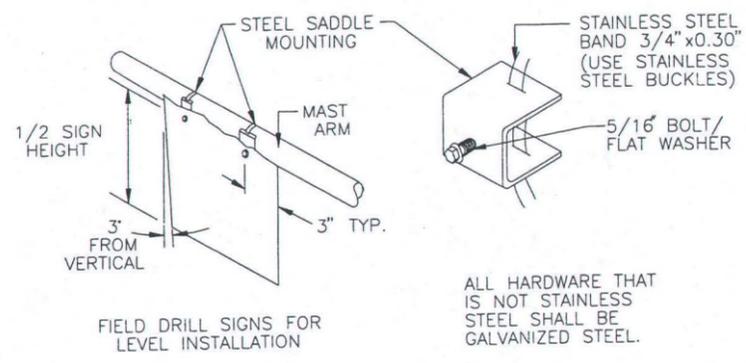
SIGN WIDTH(W)	NO. OF CLAMPS	CLAMP SPACING		
		OVERHANG	BETWEEN CLAMPS	OVERHANG
0-12 1/2'	2	0.2W	1 SPACE AT 0.6W	0.2W
13' TO 21'	3	0.15W	2 SPACES AT 0.35W	0.15W



MOUNTING PLATE DETAIL

- CAST ALUMINUM MOUNTS AND BANDING MATERIALS SHALL BE "BAND-IT" OR APPROVED EQUAL.
- MOUNTING PLATE SHALL BE GALVANIZED AFTER FABRICATION IN ACCORDANCE WITH ASTM A123.
- ALL WELDING SHALL MEET AMERICAN WELDING SOCIETY SPECS.
- BOLTS, NUTS AND WASHERS SHALL MEET THE REQUIREMENTS OF STANDARD DRAWING S-20.00.

MAST ARM MOUNTING FOR "R" SERIES SIGNS

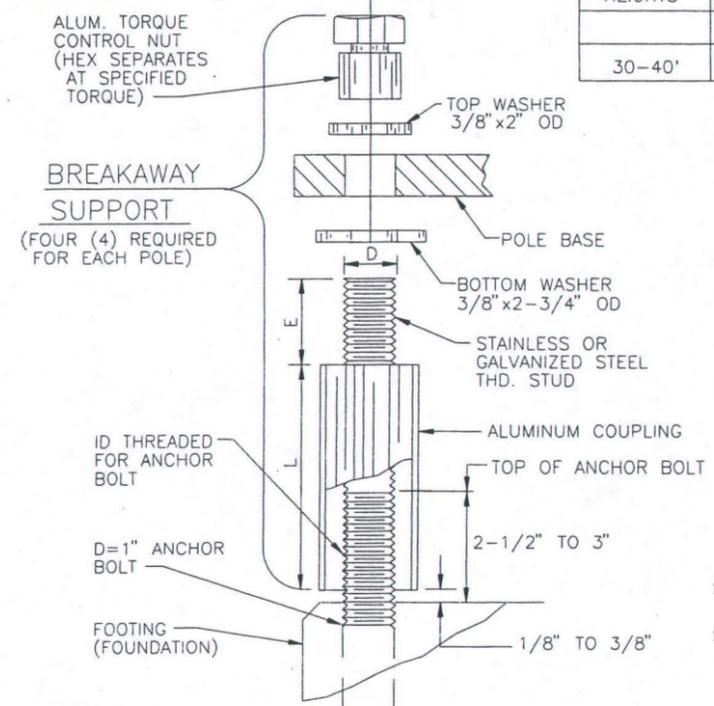


AIRPORT WAY / MARKET STREET
 SIGNING DETAILS 2/2

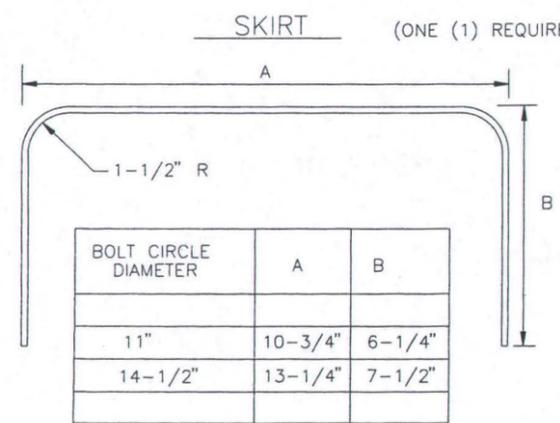


LIGHT POLE BREAKAWAY SUPPORT DETAILS

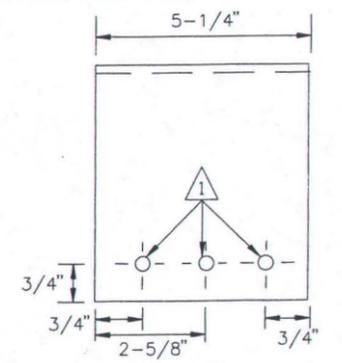
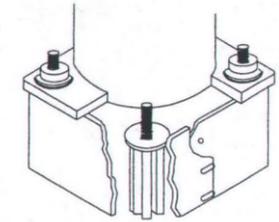
NOTE:
TORQUE NUT, FLAT WASHER I.D.,
STUD SIZE "D", AND TAPPED HOLE
IN COUPLING ALL TO FIT ANCHOR
BOLT SIZE "D".



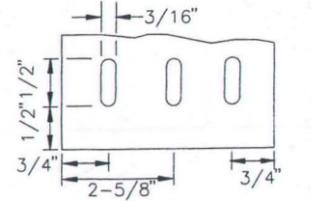
MOUNTING HEIGHTS	DIMENSION TABLE			
	D	THD	E	L
30-40'	1"	8NC	3-5/16" ± 1/16"	4-3/4"



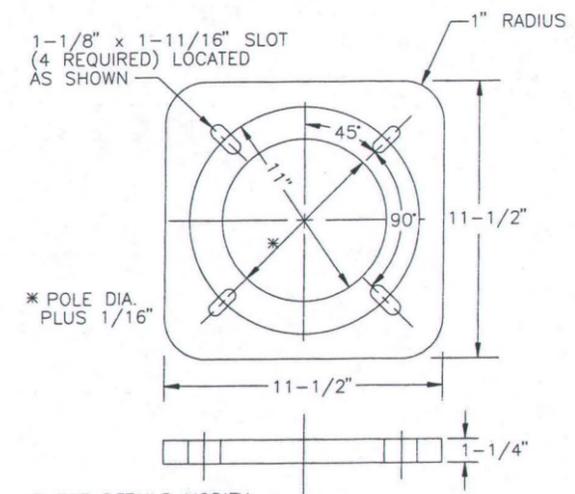
SKIRT MATERIAL: 3003 H-14 ALUMINUM 1/16" THICK
(2 PIECES PER SKIRT)
SCREWS: #10 x 5/8" STAINLESS STEEL SELF-TAPPING SLOTTED SHEET METAL SCREWS OR POP RIVETS (6 REQUIRED PER POLE)



△ = .157 DIA. (PUNCH FOR NO. 10 SCREW)



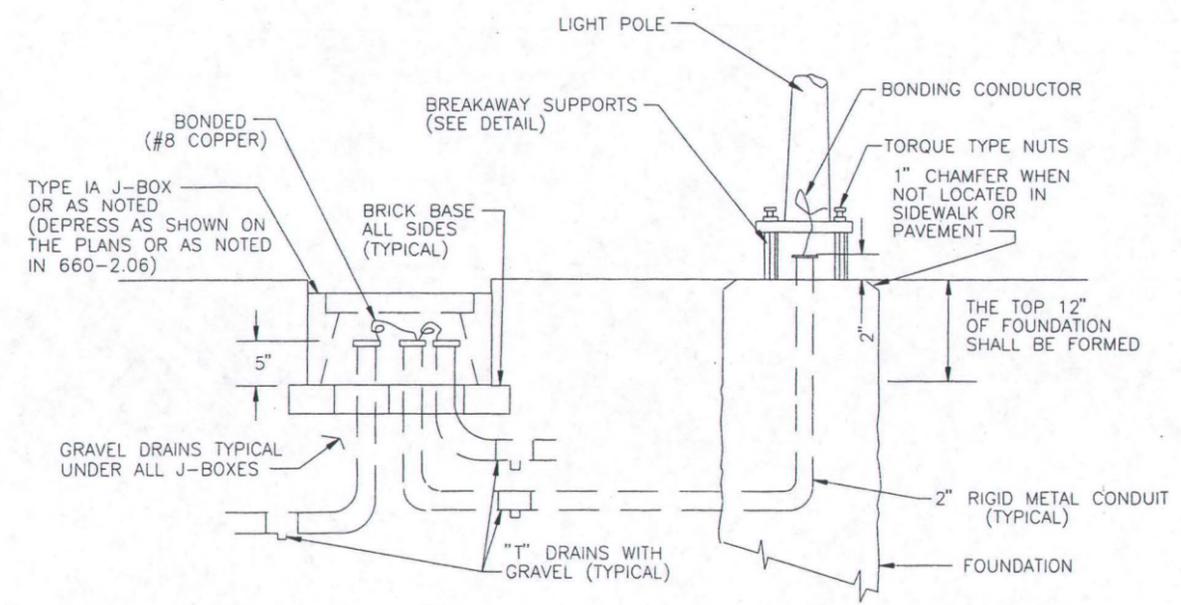
30' LIGHT POLE BASE FLANGE DETAIL



THESE DETAILS MODIFY STANDARD DRAWINGS L-03.02 & L-30.02

NOTE:
THE BREAKAWAY SUPPORTS (LONGITUDINALLY GROOVED) SHALL CONFORM TO AASHTO STANDARDS FOR BREAKAWAY SUPPORTS FOR LIGHT POLES AND SHALL BE APPROVED FOR FHWA PARTICIPATION, AND SHALL BE AS MANUFACTURED BY TRANSPRO-SAFETY, INC., NEW ROCHELLE, NY 10801 OR PRECISION FORM, INC., LANCASTER, PA 17061.

LIGHTING FOUNDATION - J-BOX - CONDUIT DETAILS



AIRPORT WAY / MARKET STREET
LIGHTING SYSTEM DETAILS 1/2

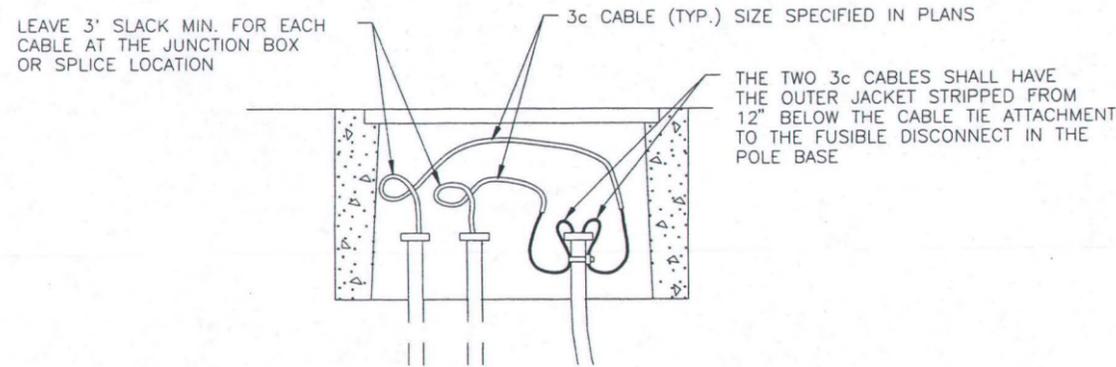
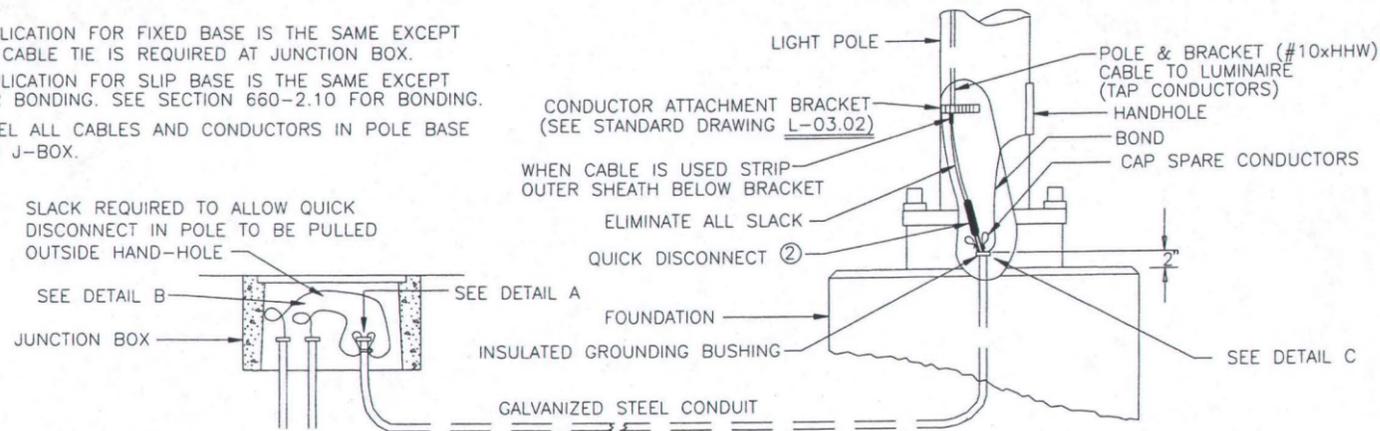


STATE	PROJECT DESIGNATION	YEAR	SHEET No.	TOTAL SHEETS
ALASKA		99	12	14

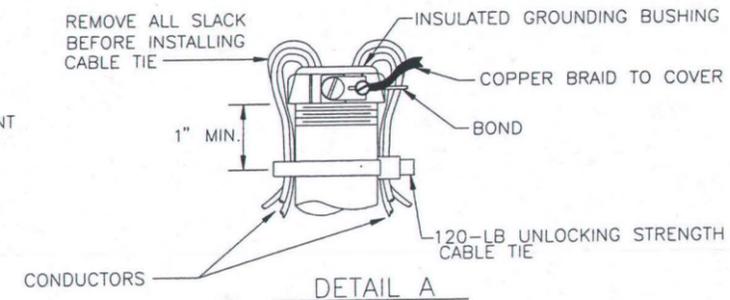
LIGHTING SYSTEM POLE AND J-BOX WIRING DETAILS

NOTES:

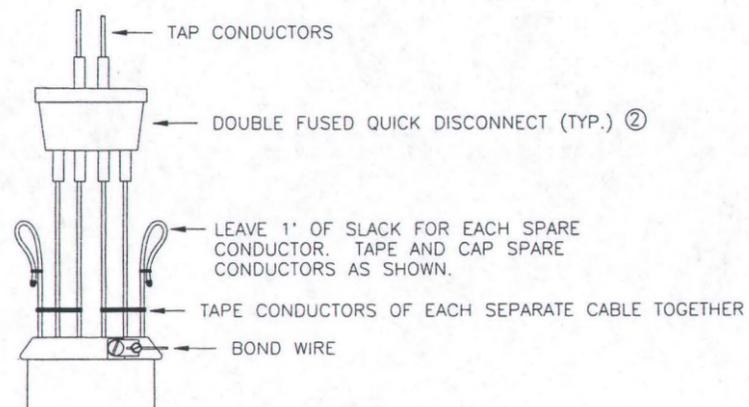
- (1) APPLICATION FOR FIXED BASE IS THE SAME EXCEPT NO CABLE TIE IS REQUIRED AT JUNCTION BOX.
- (2) APPLICATION FOR SLIP BASE IS THE SAME EXCEPT FOR BONDING. SEE SECTION 660-2.10 FOR BONDING.
- (3) LABEL ALL CABLES AND CONDUCTORS IN POLE BASE AND J-BOX.



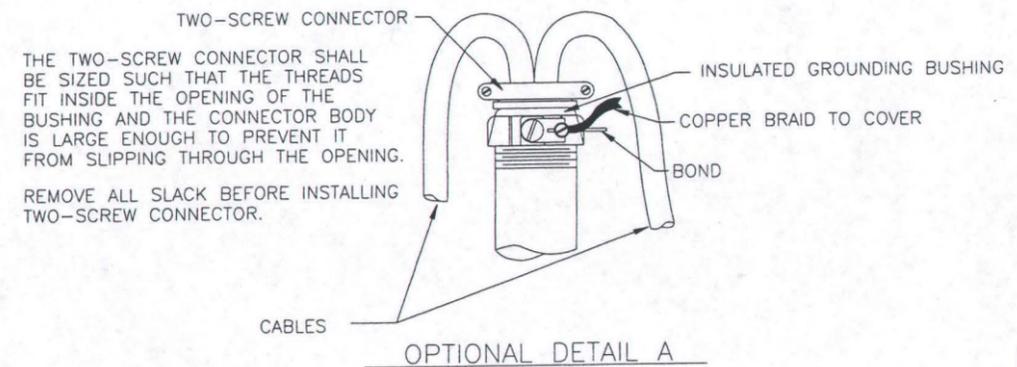
DETAIL B



- ② AN ADDITIONAL SINGLE FUSED QUICK DISCONNECT (NOT SHOWN) IS REQUIRED FOR THE PHOTOCELL WIRES ON POLES NEAREST THE LOAD CENTER



DETAIL C



AIRPORT WAY / MARKET STREET
LIGHTING SYSTEM DETAILS 2/2



SYMBOLS & CODING

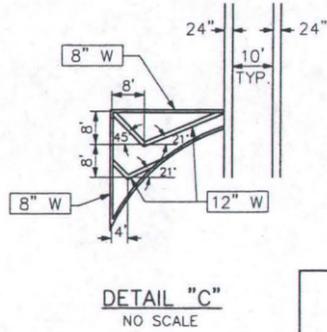
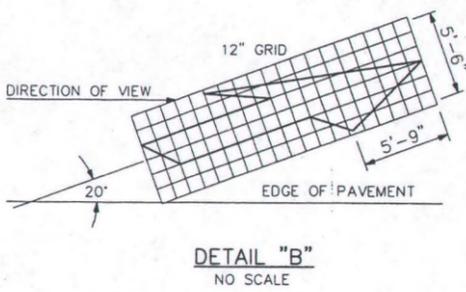
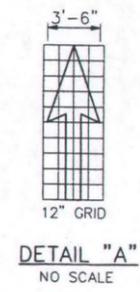
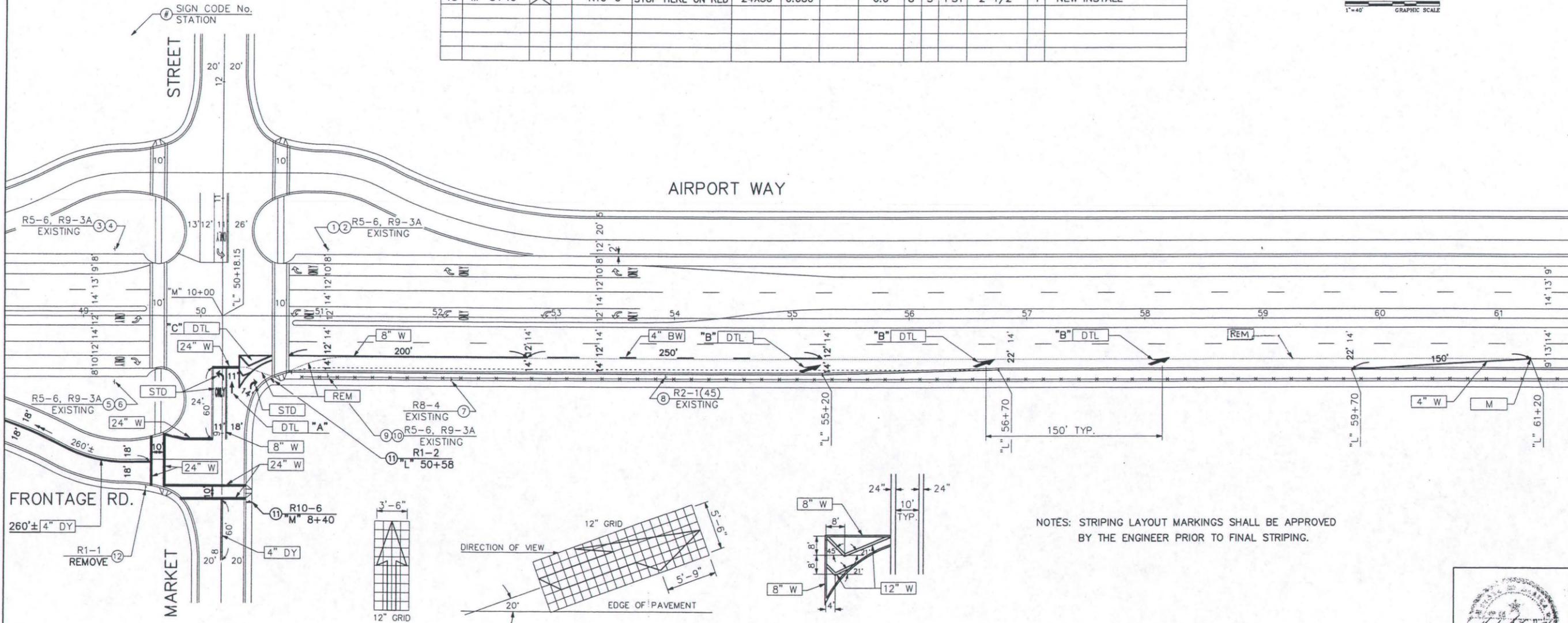
TRAFFIC MARKING

- 4" W 4" SOLID WHITE STRIPE
- 8" W 8" SOLID WHITE STRIPE
- 12" W 12" SOLID WHITE STRIPE
- 24" W 24" SOLID WHITE STRIPE
- 4" BW 4" BROKEN WHITE STRIPE
- 4" DY 4" SOLID DOUBLE YELLOW STRIPE
- REM REMOVE EXISTING STRIPING
- STD SEE STANDARD DRAWINGS T-22.01
- DTL SEE DETAIL BELOW
- M MATCH EXISTING STRIPING

SIGNING SUMMARY

STATE	PROJECT DESIGNATION	YEAR	SHEET No.	TOTAL SHEETS
ALASKA		93	13	14

LOCATION NUMBER	STATION	LOCATION		CODE NO.	LEGEND	SIZE	THICKNESS (INCHES)		AREA (SQ FT)	MOUNTING HEIGHT	DIRECTION	POSTS			REMARKS
		LT.	RT.				UNFRAMED	FRAMED				TYPE	SIZE	NO.	
1	EXISTING			R5-6	NO BIKE SYMBOL	30X30	0.080		6.25		W				MOUNTED ABOVE SIGN 2
2	EXISTING			R9-3A	NO PED. SYMBOL	30X30	0.080		6.25	7'	W	PST	2-1/2	1	
3	EXISTING			R5-6	NO BIKE SYMBOL	30X30	0.080		6.25		E				MOUNTED ABOVE SIGN 4
4	EXISTING			R9-3A	NO PED. SYMBOL	30X30	0.080		6.25	7'	E	PST	2-1/2	1	
5	EXISTING			R5-6	NO BIKE SYMBOL	30X30	0.080		6.25		E				MOUNTED ABOVE SIGN 6
6	EXISTING			R9-3A	NO PED. SYMBOL	30X30	0.080		6.25	7'	E	PST	2-1/2	1	
7	EXISTING			R8-4	EMERGENCY PARKING ONLY	30X24	0.080		5.0	7'	W				MOUNTED ON EXIST. LT. POLE
8	EXISTING			R2-1	SPEED LIMIT 45	30X36	0.080		7.5	7'	W				MOUNTED ON EXIST. LT. POLE
9	EXISTING			R5-6	NO BIKE SYMBOL	30X30	0.080		6.25		W				MOUNTED ABOVE SIGN 2
10	EXISTING			R9-3A	NO PED. SYMBOL	30X30	0.080		6.25	7'	W	PST	2-1/2	1	
11	"L" 50+55		X	R2-1	YIELD	36X36X36	0.080		4.5	8'	SW	PST	2-1/2	1	NEW INSTALL
12	EXISTING			R1-1	STOP										REMOVE
13	"M" 8+40		X	R10-6	STOP HERE ON RED	24X36	0.080		6.0	8'	S	PST	2-1/2	1	NEW INSTALL

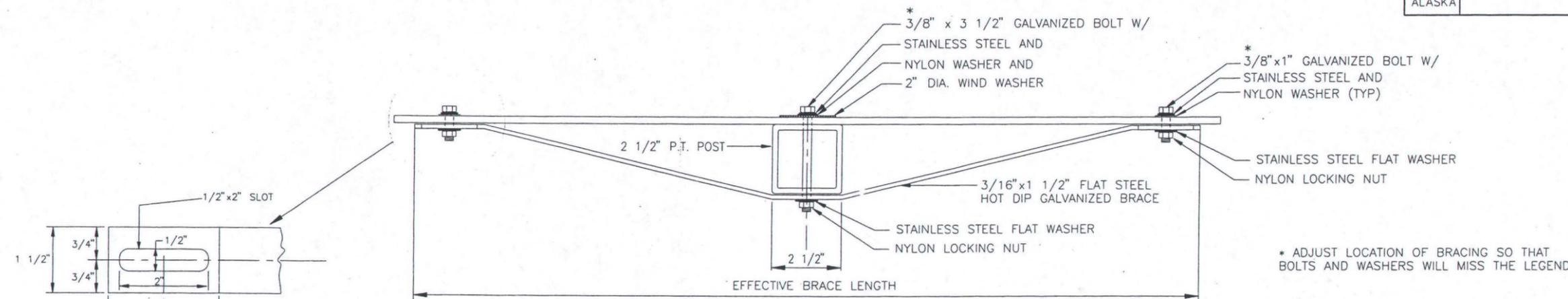


NOTES: STRIPING LAYOUT MARKINGS SHALL BE APPROVED BY THE ENGINEER PRIOR TO FINAL STRIPING.

AIRPORT WAY / MARKET STREET SIGNING AND STRIPING PLAN



STATE	PROJECT DESIGNATION	YEAR	SHEET No.	TOTAL SHEETS
ALASKA		93	14	14



PERFORATED TUBE POST SIGN BRACING
PLAN VIEW

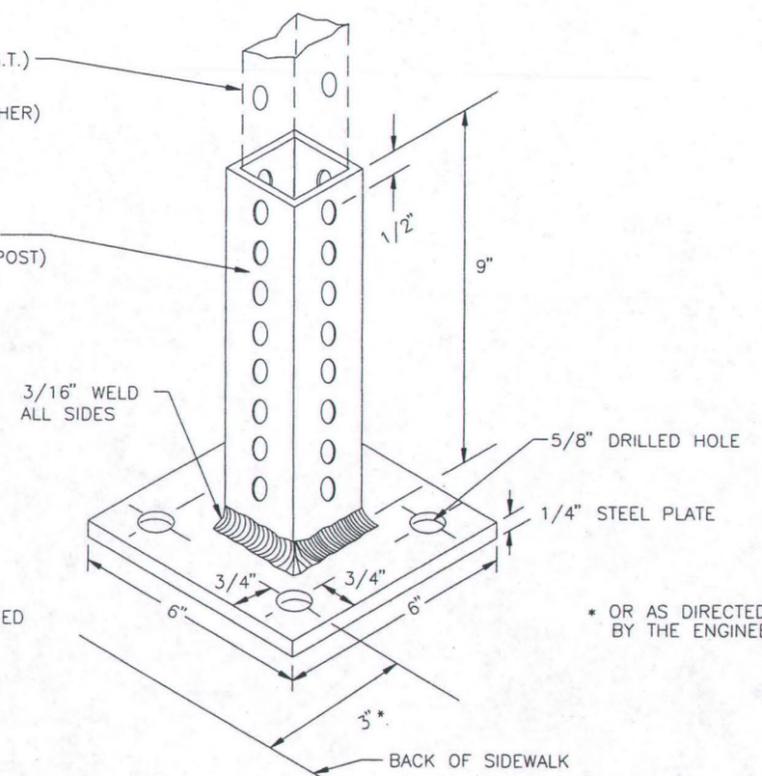
DETAIL OF BRACE SLOT
ELEVATION VIEW

SIGN WIDTH(W)	EFFECTIVE BRACE LENGTH		
	WARNING	YIELD	OTHER
30"	36"	24"	24"
36"	42"	30"	30"
42"	48"	-	36"
48"	USE TWO POSTS	36"	42"

SIDEWALK MOUNTING STUB FOR SIGN POSTS

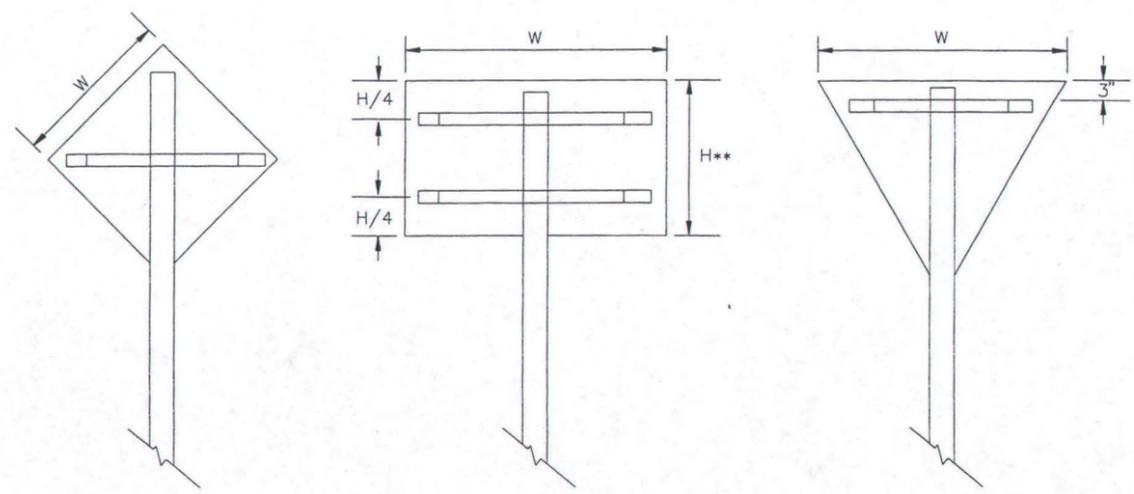
POST- PERFORATED STEEL TUBE (P.S.T.)
(INSTALL POST 7" INTO STUB)
(SECURE POST WITH 5/16" GALVANIZED BOLT, NUT, & LOCK WASHER)

P.S.T. STUB
2-1/4" OD FOR 2" POST
2" OD FOR 1-3/4" POST
(GALVANIZED-0.105 WALL THICKNESS)
(HOLES AND SPACING SAME AS SIGN POST)
(CENTER STUB ON STEEL PLATE)



INSTALLATION NOTES

1. DRILL FOUR (4) 1/2" HOLES IN SIDEWALK USING PLATE AS TEMPLATE. (DEPTH AS REQUIRED)
2. INSTALL STUB AND PLATE WITH FOUR (4) HILTI EXPANSION ANCHORS CAT. NO. HDI 3/8" OR APPROVED EQUAL. USE FOUR (4) 3/8" GALVANIZED BOLTS AND FLAT WASHERS.
3. DO NOT SHIM BASE, PLUMB STUB BY HEATING AT PLATE.
4. PAINT STUB AND BASE WITH APPROVED MATERIAL AFTER INSTALLATION.
5. INSTALL STUBS FOR NO PARKING SIGNS AT 45' FACING TRAFFIC.



AIRPORT WAY / MARKET STREET
SIGN POST & MOUNTING DETAILS

