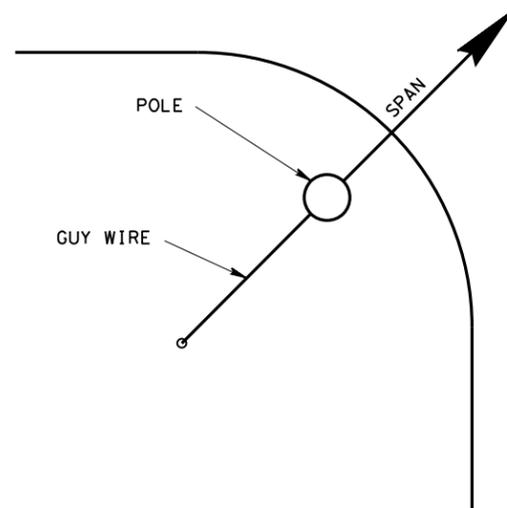


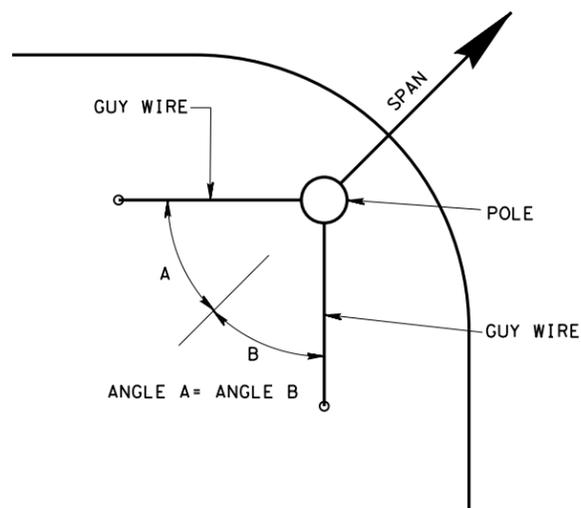
**TIMBER POLE INSTALLATION DETAILS
FLASHING BEACONS**

- NOTES:**
1. 5/16" MESSENGER CABLE SHALL BE USED FOR SPANS.
 2. ALL LOOSE ENDS OF MESSENGER CABLE SHALL BE SERVED WITH SERVISLEEVE.
 3. SIGNAL CABLE SHALL BE ATTACHED TO MESSENGER (SPAN) CABLE WITH LASHING WIRE USING THE CABLE SPINNING METHOD WITH A MINIMUM OF ONE TURN PER FOOT.
 4. 3/8" MESSENGER CABLE SHALL BE USED FOR DOWN GUYS.
 5. LUMINAIRES SHALL BE ATTACHED TO THE SIGNAL POLE AS APPROVED BY THE ENGINEER.
 6. DETERMINE THE MOUNTING HEIGHT OF THE SIGNAL SPAN AND THE PLACEMENT OF THE WEATHER HEADS.
 7. ALL SLACK CABLE COILS SHALL BE A MINIMUM OF 6" IN DIAMETER AND SHALL HAVE A MINIMUM OF TWO TURNS.
 8. THE SIDEWALK GUY METHOD IS NORMALLY USED WHERE SPACE IS LIMITED AND AN ACCEPTABLE ANGLE CANNOT BE OBTAINED ON THE STANDARD TYPE GUY.
 9. INSTALL ANCHOR ROD A MAXIMUM OF 6" ABOVE GRADE.
 10. STAKE THE TRAFFIC SIGNAL POLE LOCATIONS FOR VERIFICATION BY THE ENGINEER.

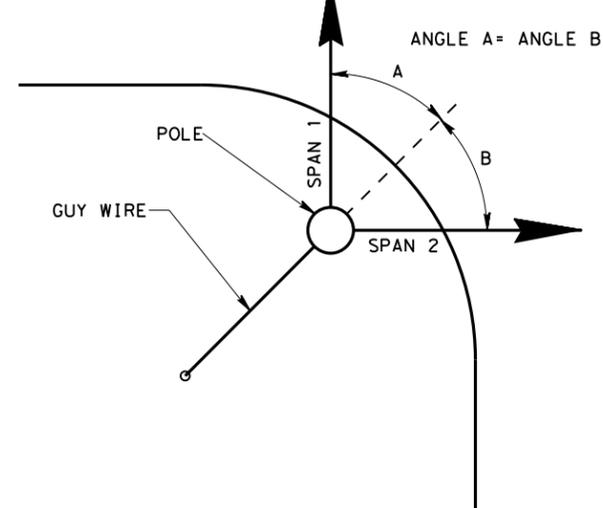
SINGLE SPAN-SINGLE GUY



SINGLE SPAN-DOUBLE GUY



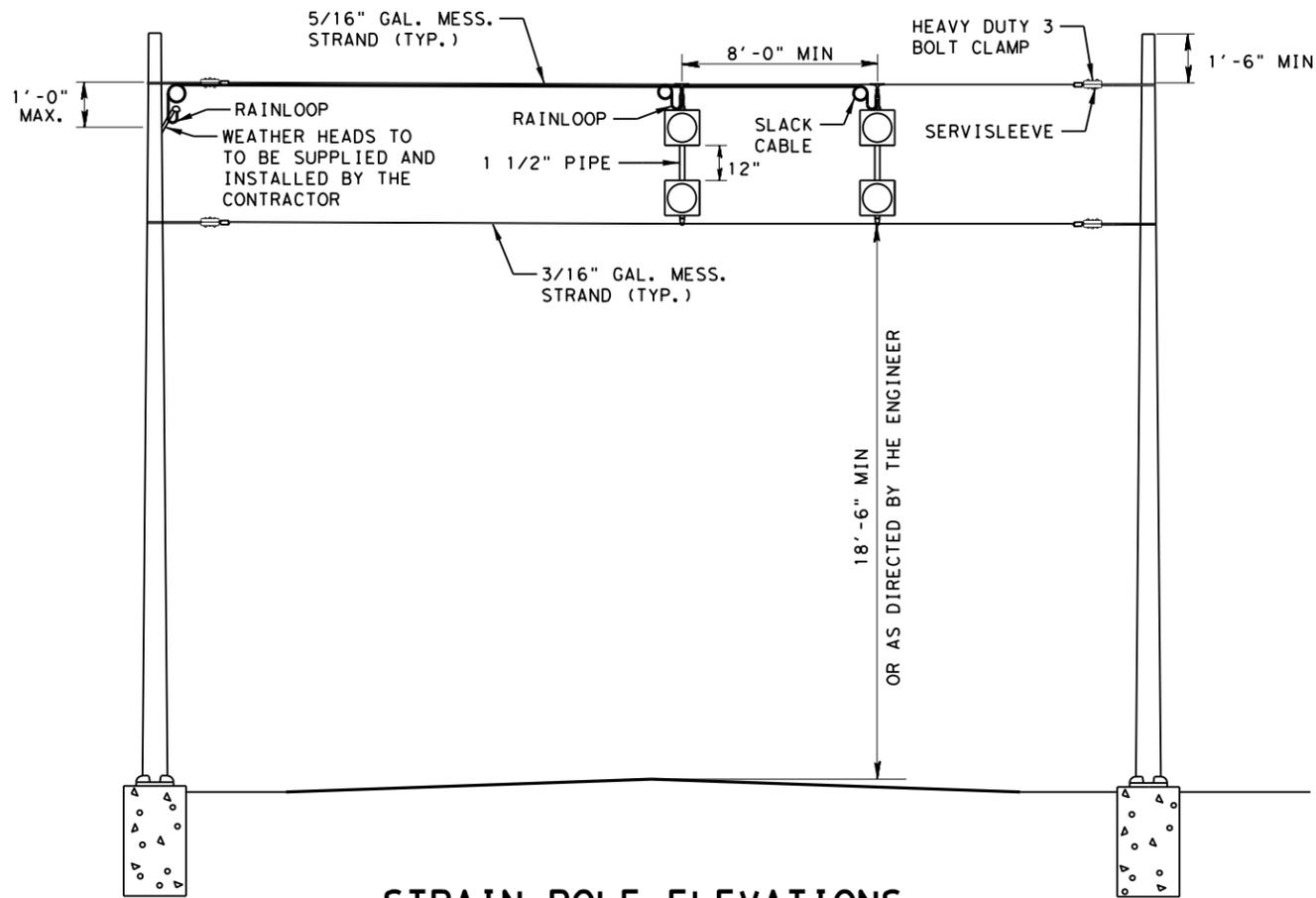
DOUBLE SPANS-SINGLE GUY



TYPICAL GUY ALIGNMENT

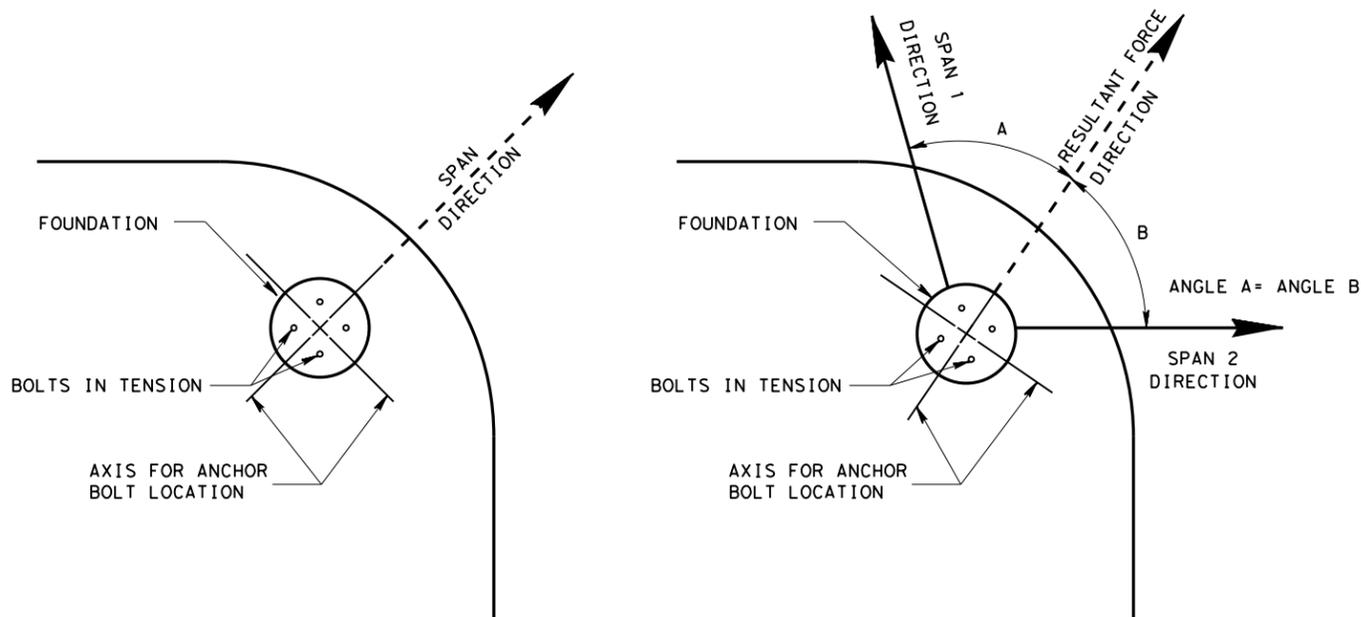
LEVELS DISPLAYED
 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
 ACC: 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32
 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48
 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63

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San Antonio District Standard FLASHING BEACON TIMBER POLE INSTALLATION DETAILS			
SCALE: NS FBTP-18			
REVISIONS	FED. RD. DIV. NO.	FEDERAL AID PROJECT NO.	SHEET NO.
FEB 2006			
OCT 2006	STATE	DIST.	COUNTY
MAY 2018			
CONT.	SECT.	JOB	HIGHWAY NO.



**STRAIN POLE ELEVATIONS
FLASHING BEACONS**

- NOTES:
1. 5/16" AND 3/16" MESSENGER CABLE SHALL BE USED FOR SPANS.
 2. ALL LOOSE ENDS OF MESSENGER CABLE SHALL BE SERVED WITH SERVISLEEVE.
 3. SIGNAL CABLE AND DETECTOR CABLE SHALL BE ATTACHED TO MESSENGER (SPAN) CABLE WITH LASHING WIRE USING THE CABLE SPINNING METHOD WITH A MINIMUM OF ONE TURN PER FOOT.
 4. DETERMINE THE MOUNTING HEIGHT OF THE SIGNAL SPAN AND THE PLACEMENT OF THE WEATHER HEADS.
 5. ALL SLACK CABLE COILS SHALL BE A MINIMUM OF 6" IN DIAMETER AND SHALL HAVE A MINIMUM OF TWO TURNS.
 6. WEATHER HEADS INSTALLED ON THE STRAIN POLE SHALL EQUAL THE SIZE AND NUMBER OF CONDUIT INSTALLED IN THE SIGNAL POLE FOUNDATION.



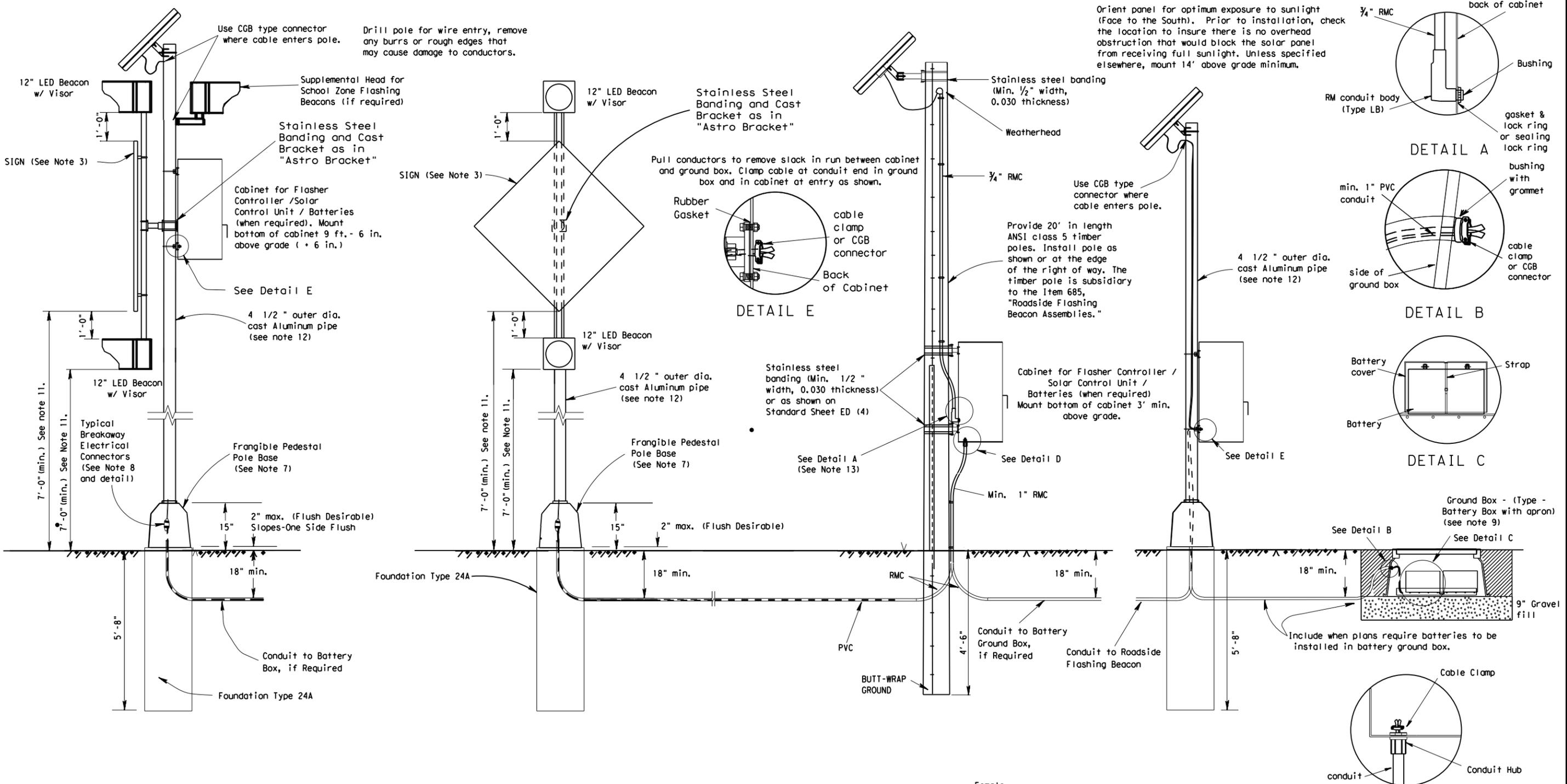
TYPICAL ANCHOR BOLT ALIGNMENT

LEVELS DISPLAYED
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 ACC: 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32
 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48
 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63

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 San Antonio District Standard
**FLASHING BEACON STEEL STRAIN POLE
 INSTALLATION DETAILS**

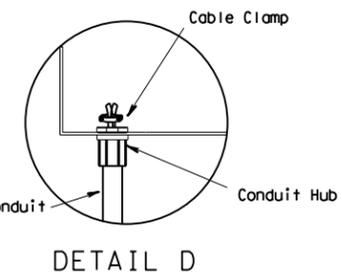
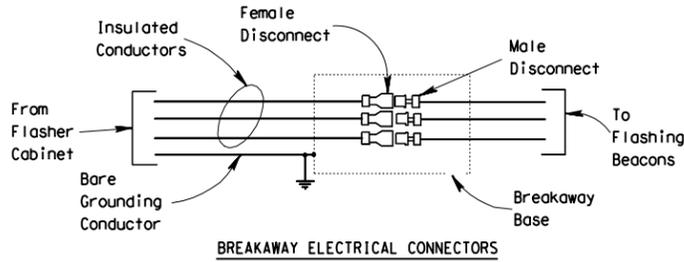
SCALE: NS **FBSP-18**

REVISIONS	FED. RD. DIV. NO.	FEDERAL AID PROJECT NO.	SHEET NO.
FEB 2006			
OCT 2006	STATE	DIST.	COUNTY
MAY 2018	CONT.	SECT.	JOB HIGHWAY NO.



Orient panel for optimum exposure to sunlight (Face to the South). Prior to installation, check the location to insure there is no overhead obstruction that would block the solar panel from receiving full sunlight. Unless specified elsewhere, mount 14' above grade minimum.

- NOTES:**
1. Details show a typical warning sign with two flashing beacon heads, other arrangements are possible. When only one beacon is required, install the upper beacon.
 2. See Item 685, "Roadside Flashing Beacon Assemblies" for further requirements.
 3. See SMD standard sheets for lateral and vertical clearances and sign mounting details. Install signs as shown on the sign layout sheets.
 4. Use materials specifically designed for attaching cabinets, beacon heads, solar panels, etc., to poles.
 5. Install beacon heads as shown here, as shown elsewhere on the plans, or as directed. Use hardware specifically design for mounting beacon heads on poles.
 6. Conduit in foundation and within 6 in. of foundation is subsidiary to the Item 685, "Roadside Flashing Beacon Assemblies."
 7. Per manufacturer's recommendations, engage all threads on the pedestal pole base and pipe unless the pipe is fully seated into base. In high winds, use a pole and base collar assembly to add strength and prevent loosening on connection.
 8. Provide non-fused watertight breakaway electrical connectors for breakaway poles. (Bussmann HET, Littelfuse LET, Ferraz-Shawmut FEBN, or approved equal).
 9. Install the batteries in a Battery Box. Place the batteries on a 3/16" thick plastic sheet and connect together. Place a plastic cover (Battery Bell Jar) over the top of each battery and secure the battery bell jar to the battery with a strap. The batteries, bell jars, straps and 3/16" plastic sheet are subsidiary to the Item 685, "Roadside Flashing Beacon Assemblies." When required, install batteries in the flasher cabinet. Provide the number of batteries as required on the plans. Wire batteries according to manufacturers recommendations.
 10. See standard sheet ED (13) for battery box details.
 11. Provide clearance as shown above the sidewalk or pavement grade at the edge of the road. When a bottom beacon is not used, mount the sign at least 7 ft. above the sidewalk or pavement grade at the edge of the road.
 12. Unless otherwise shown on the plans, pole shaft shall be one piece, schedule 40 Aluminum pipe, ASTM B429 or B221 (Alloy 6061-T6 only). Aluminum conduit will not develop the necessary strength and will not be allowed.
 13. Locate the Type LB conduit body attachment in the bottom third of the back of the cabinet.
 14. See Standard Sheets ED(1)- ED(4) and ED(13) for additional requirements regarding the installation of conduit, cabinets, battery ground boxes, and wood poles.



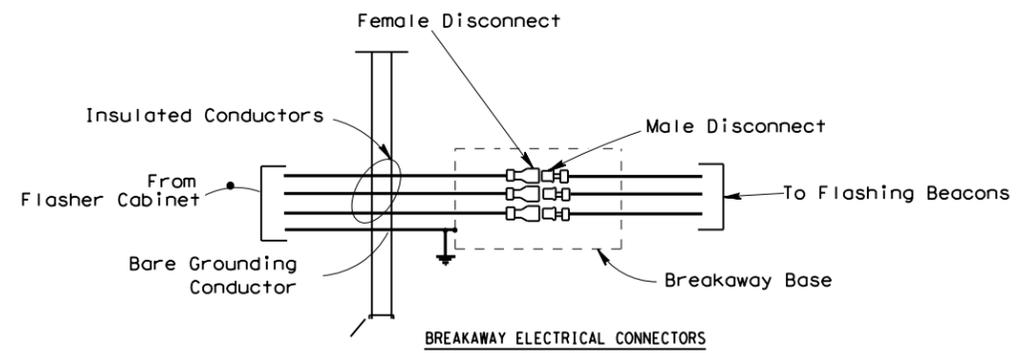
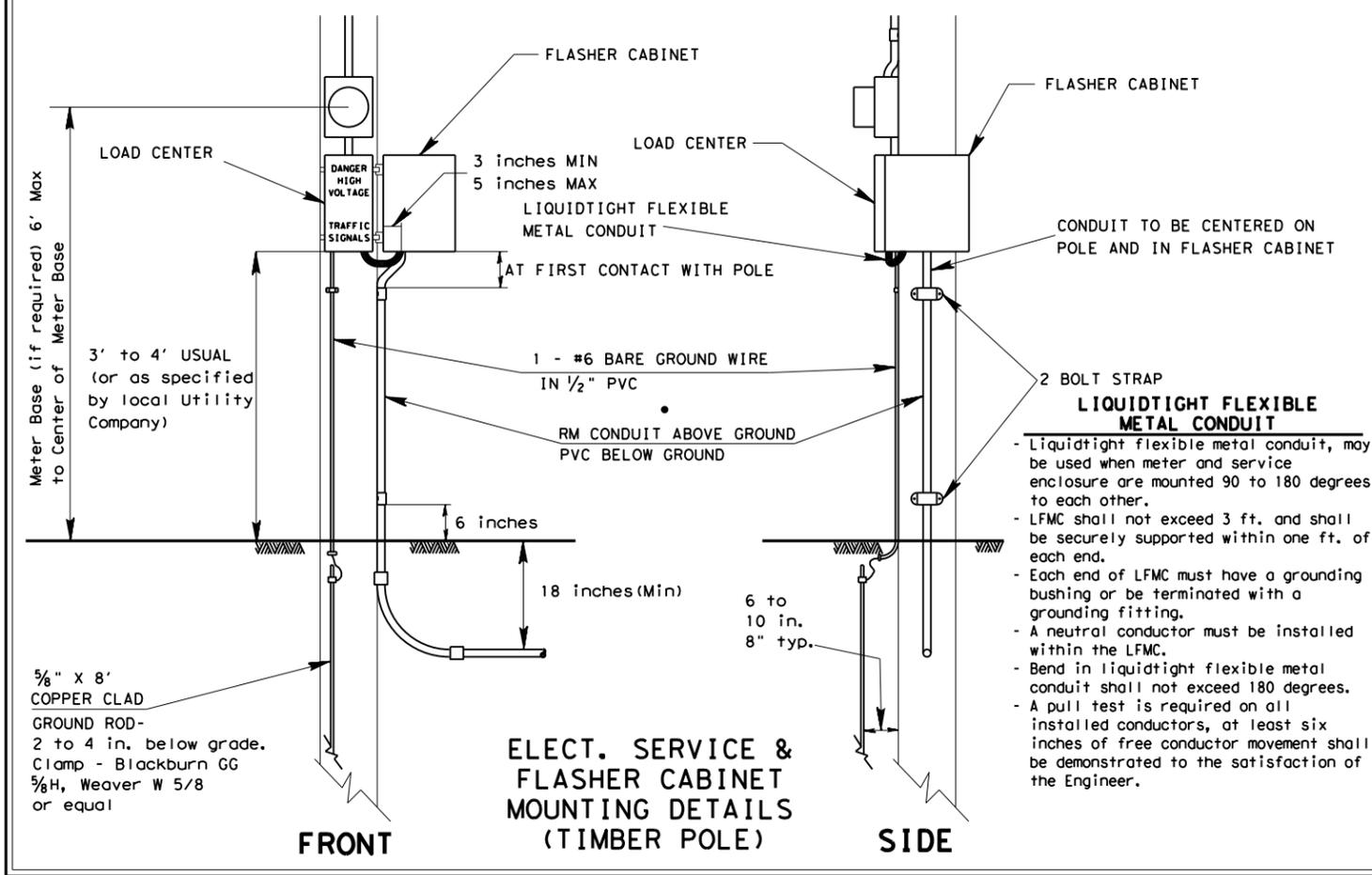
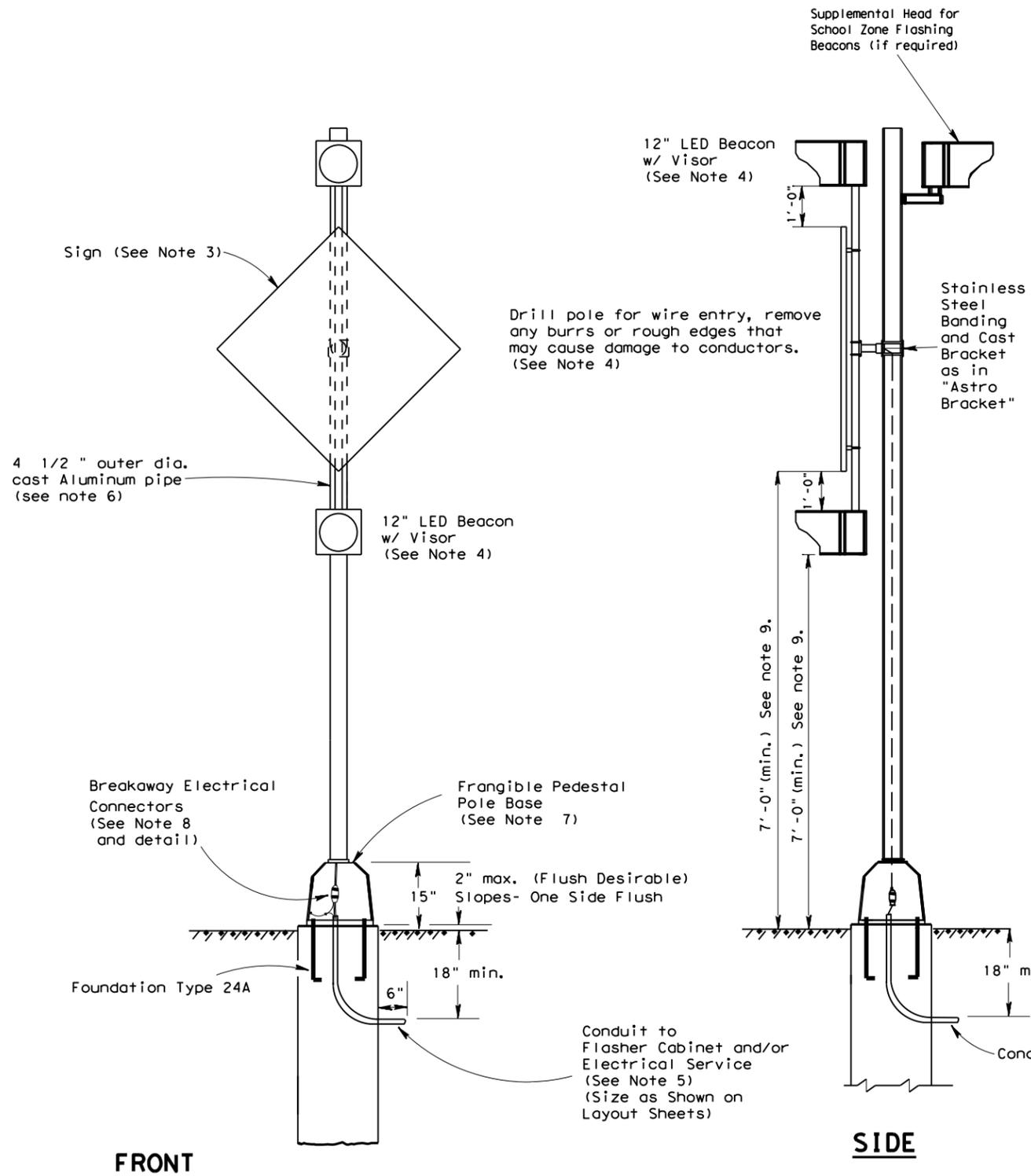
Texas Department of Transportation
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**San Antonio District Standard
SOLAR POWERED ROADSIDE FLASHING
BEACON ASSEMBLY DETAILS**

SCALE: NS **SPRFB-07**

REVISIONS	FED. RD. DIV. NO.	FEDERAL AID PROJECT NO.	SHEET NO.
FEB 2006			
OCT 2007			
	STATE	DIST.	COUNTY
	CONT.	SECT.	JOB
			HIGHWAY NO.

LEVELS DISPLAYED
 ACC: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63



- NOTES:**
1. Details show a typical warning sign with two flashing beacon heads, other arrangements are possible. When only one beacon is required, install the upper beacon.
 2. See Item 685, "Roadside Flashing Beacon Assemblies" for further requirements.
 3. See SMD standard sheets for lateral and vertical clearances and sign mounting details.
 4. Install beacon heads as shown here, as shown elsewhere on the plans, or as directed. Use hardware specifically designed for mounting beacon heads on poles.
 5. Conduit in foundation and within 6 in. of foundation is subsidiary to the Item 685, "Roadside Flashing Beacon Assemblies."
 6. Pole shaft shall be one piece, schedule 40 Aluminum pipe, ASTM B429 or B221 (Alloy 6061-T6 only). Aluminum conduit will not develop the necessary strength and will not be allowed.
 7. Per manufacturer's recommendations, engage all threads on the pedestal pole base and pipe unless the pipe is fully seated into base. In high winds, use a pole and base collar assembly to add strength and prevent loosening of connection.
 8. Provide non-fused watertight breakaway electrical connectors for breakaway poles. (Bussmann HET, Littelfuse LET, Ferraz-Shawmut FE2N, or approved equal).
 9. Provide clearance as shown above the sidewalk or pavement grade at the edge of the road. When a bottom beacon is not used, mount the sign at least 7 ft. above the sidewalk or pavement grade at the edge of the road.

ACC: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
 LEVELS DISPLAYED 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32
 \$TIMES \$DATES \$FILES

Texas Department of Transportation

San Antonio District Standard
ROADSIDE FLASHING BEACON ASSEMBLY

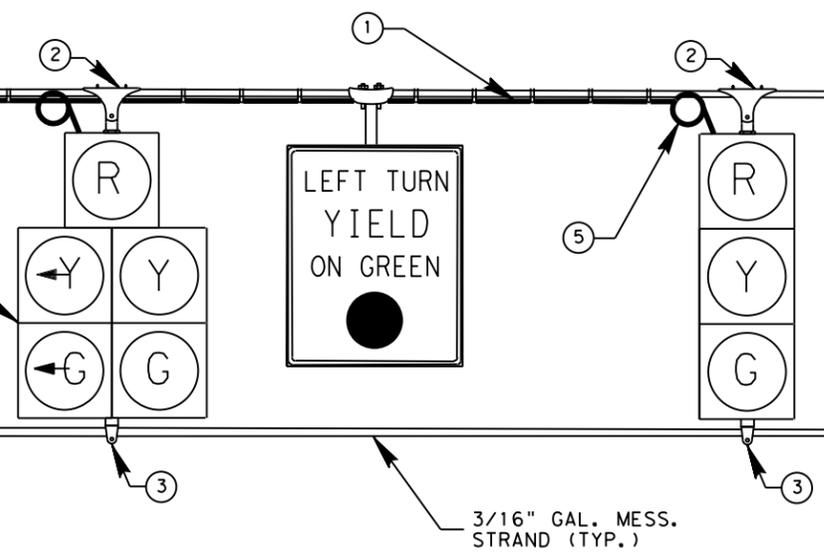
RFBA-06

REVISIONS		FED. RD. DIV. NO.	FEDERAL AID PROJECT NO.		SHEET NO.
FEB 2006					
STATE	DIST.	COUNTY			
CONT.	SECT.	JOB	HIGHWAY NO.		

SCALE: NS

5/16" GAL. MESS. STRAND (TYP.)

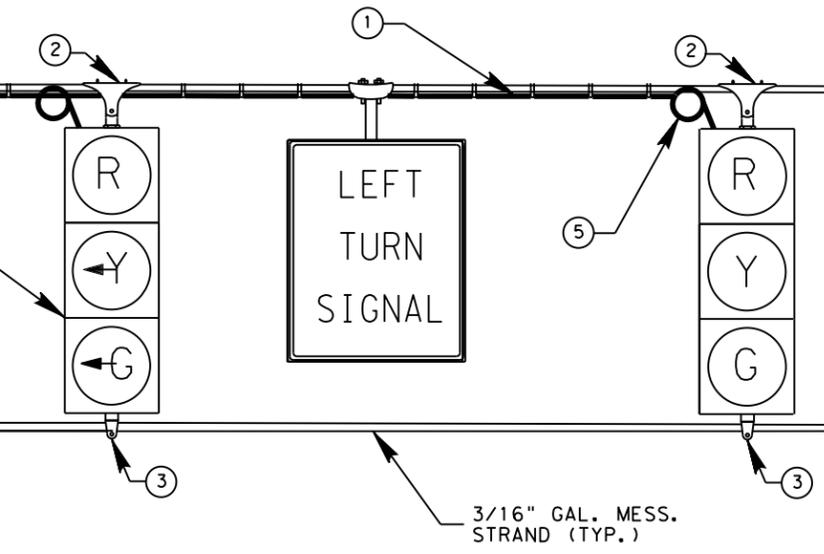
POLYCARBONATE SIGNAL HEAD



3/16" GAL. MESS. STRAND (TYP.)

5/16" GAL. MESS. STRAND (TYP.)

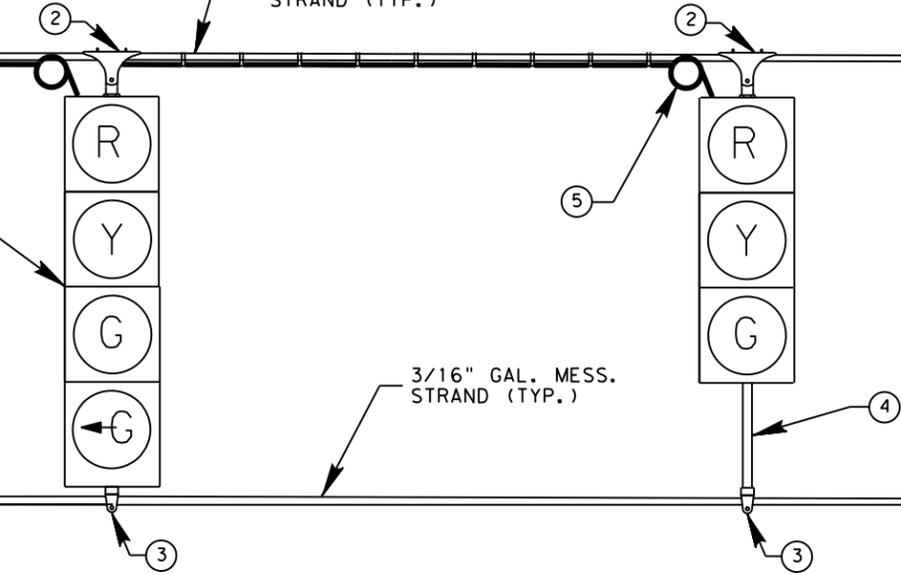
POLYCARBONATE SIGNAL HEAD



3/16" GAL. MESS. STRAND (TYP.)

5/16" GAL. MESS. STRAND (TYP.)

POLYCARBONATE SIGNAL HEAD



3/16" GAL. MESS. STRAND (TYP.)

- ① LEAD - IN CABLE FROM CONTROLLER TO SIGNAL HEAD.
- ② CAST ALUMINUM SPAN WIRE CLAMP AND CLEVIS ADAPTER. SECURE CLEVIS PIN WITH A WASHER (BOTH ENDS) AND HUMP BACK COTTER PIN. DRILL CLEVIS PIN OPENINGS AND FIT WITH A SPLIT BUSHING. CLEVIS PIN, WASHER, COTTER PIN, AND SPLIT BUSHING TO BE STAINLESS STEEL.
- ③ BREAKAWAY TETHER ASSEMBLY.
- ④ 1 1/2 ALUM. PIPE (TYP.).
- ⑤ ALL SLACK CABLE COILS SHALL BE A MINIMUM OF 6" IN DIAMETER AND SHALL HAVE A MINIMUM OF TWO TURNS.

NOTE: BACKPLATES OMITTED FOR CLARITY.
 SETSCREWS SHALL BE INSTALLED IN ALL PIPE FITTINGS.
 SIGNAL CABLE AND DETECTOR CABLE SHALL BE ATTACHED TO MESSENGER (SPAN) CABLE WITH LASHING WIRE USING THE CABLE SPINNING METHOD WITH A MINIMUM OF ONE TURN PER FOOT.
 SEE FLASHING BEACON STRAIN POLE OR TIMBER POLE INSTALLATION DETAILS FOR ADDITIONAL INFORMATION.

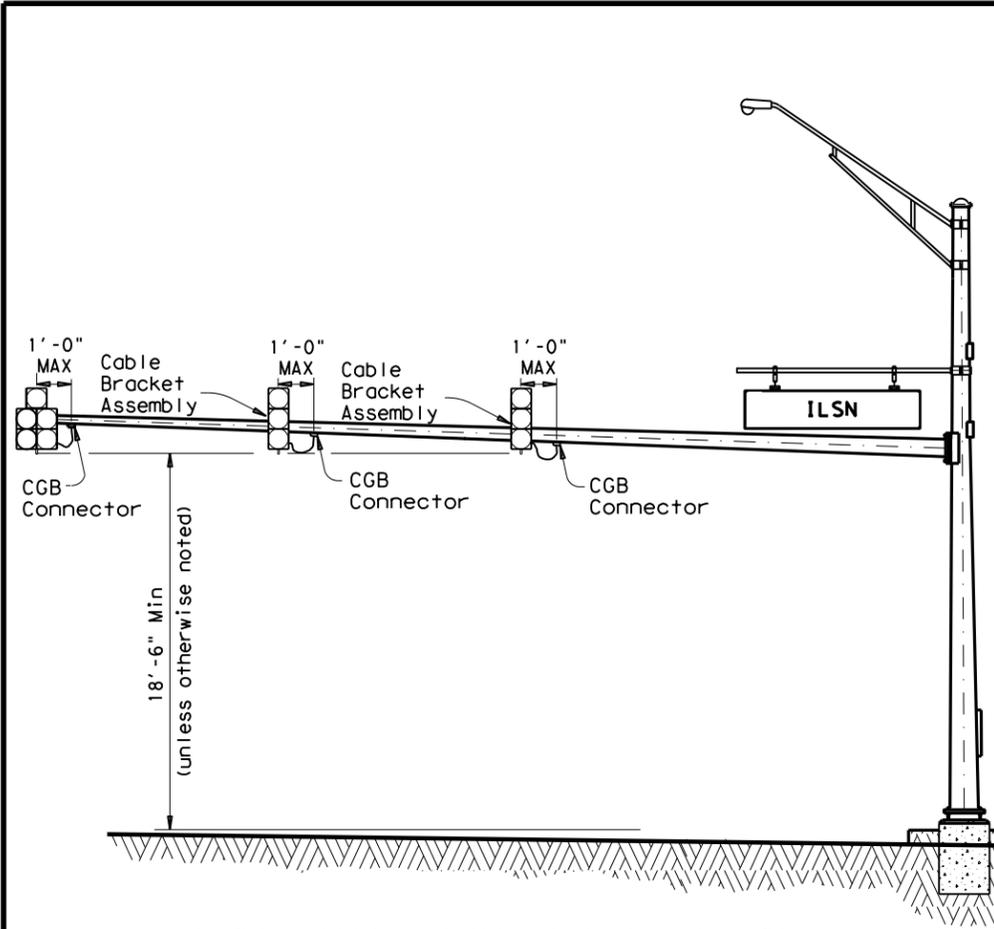
STIMES
 SPATLES
 SF FILE
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SIGNAL HEAD SPAN WIRE MOUNT DETAILS

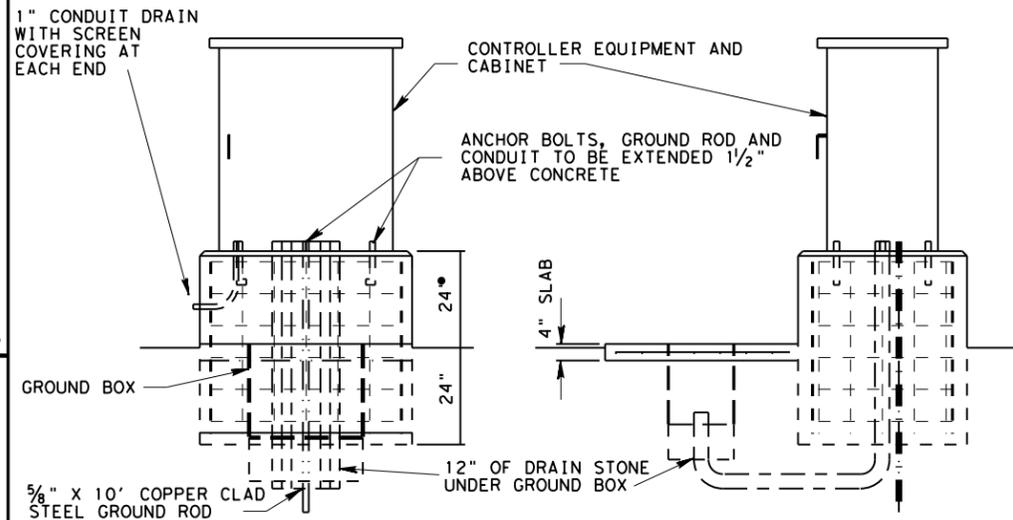
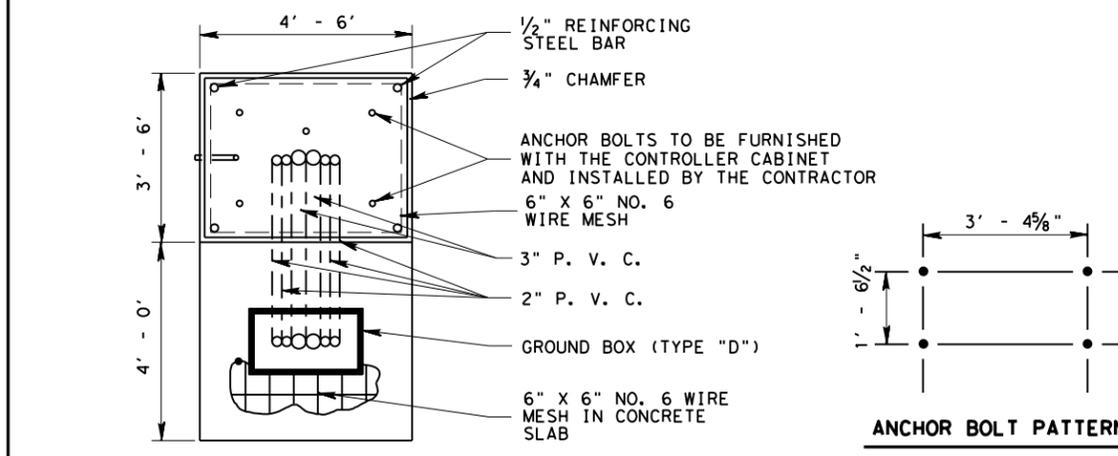
SCALE: NS **SHS(1)-07**

REVISIONS	FED. RD. DIV. NO.	FEDERAL AID PROJECT NO.		SHEET NO.
FEB 2006				
OCT 2006		STATE	DIST.	COUNTY
OCT 2007		CONT.	SECT.	JOB HIGHWAY NO.



TYPICAL MAST ARM INSTALLATION

BACKPLATES ARE NOT SHOWN FOR CLARITY



CONTROLLER MOUNT NOTES :

ALL WIRING TERMINATING IN THE CONTROLLER SHALL BE LABELED IN A MANNER THAT CAN BE IDENTIFIED WHEN THE CONTROLLER IS INSTALLED THE CONTRACTOR SHALL CONNECT THE FIELD WIRING TO THE CONTROLLER

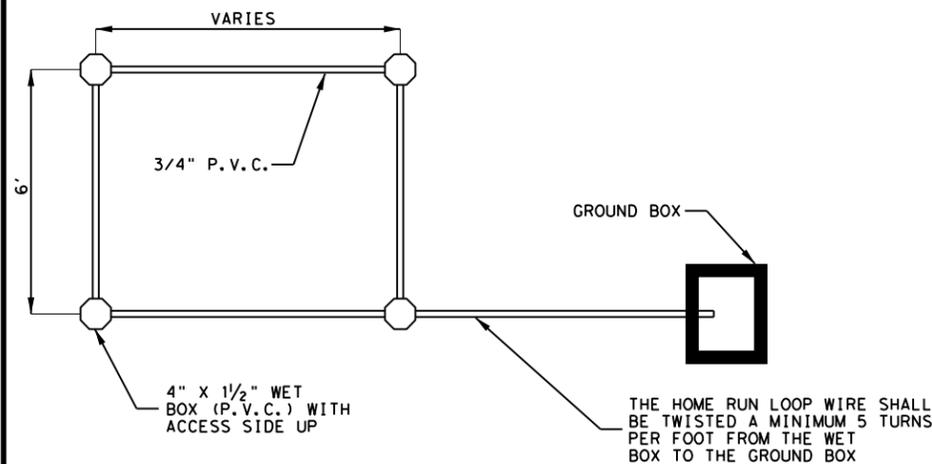
ONE 2" PVC SHALL REMAIN EMPTY FOR FUTURE USE

CONCRETE SHALL BE TESTED AS MISCELLANEOUS CONCRETE

ALL MATERIALS SHOWN AND LABOR TO INSTALL THE CONTROLLER FOUNDATION SHALL BE CONSIDERED SUBSIDIARY TO PERTINENT ITEMS

CONTROLLER FOUNDATION SHALL BE AS SHOWN ON THE PLANS, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

TYPICAL CONTROLLER MOUNT DETAILS



NOTES:

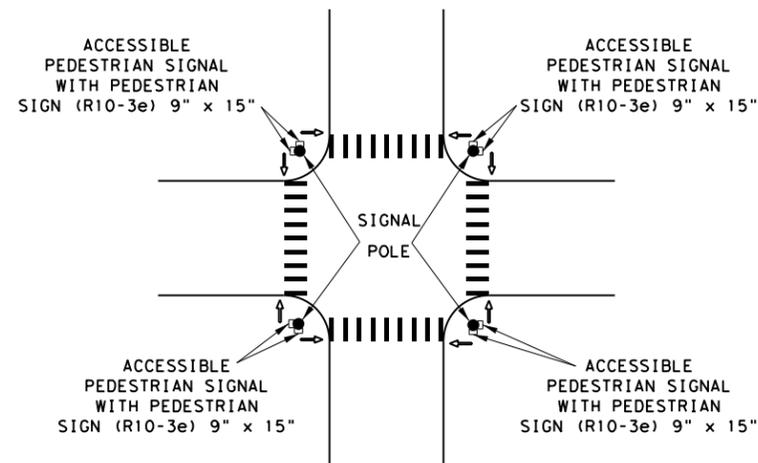
SHALL INSTALL CONDUIT ENCASED LOOPS AT THE LOCATIONS SHOWN ON THE PLANS USING 3/4" DIAMETER PVC SCHEDULE 40 OR AT NO ADDITIONAL COST 1" DIAMETER PVC SCHEDULE 80.

LOOP LOCATIONS MAY BE STAGGERED SLIGHTLY (6") TO ACCOMMODATE HOME RUN PLACEMENT.

INDIVIDUAL HOME RUN CONDUITS SHALL BE EXTENDED TO THE GROUND BOX SHOWN ON THE PLANS FOR EACH LOOP INSTALLED.

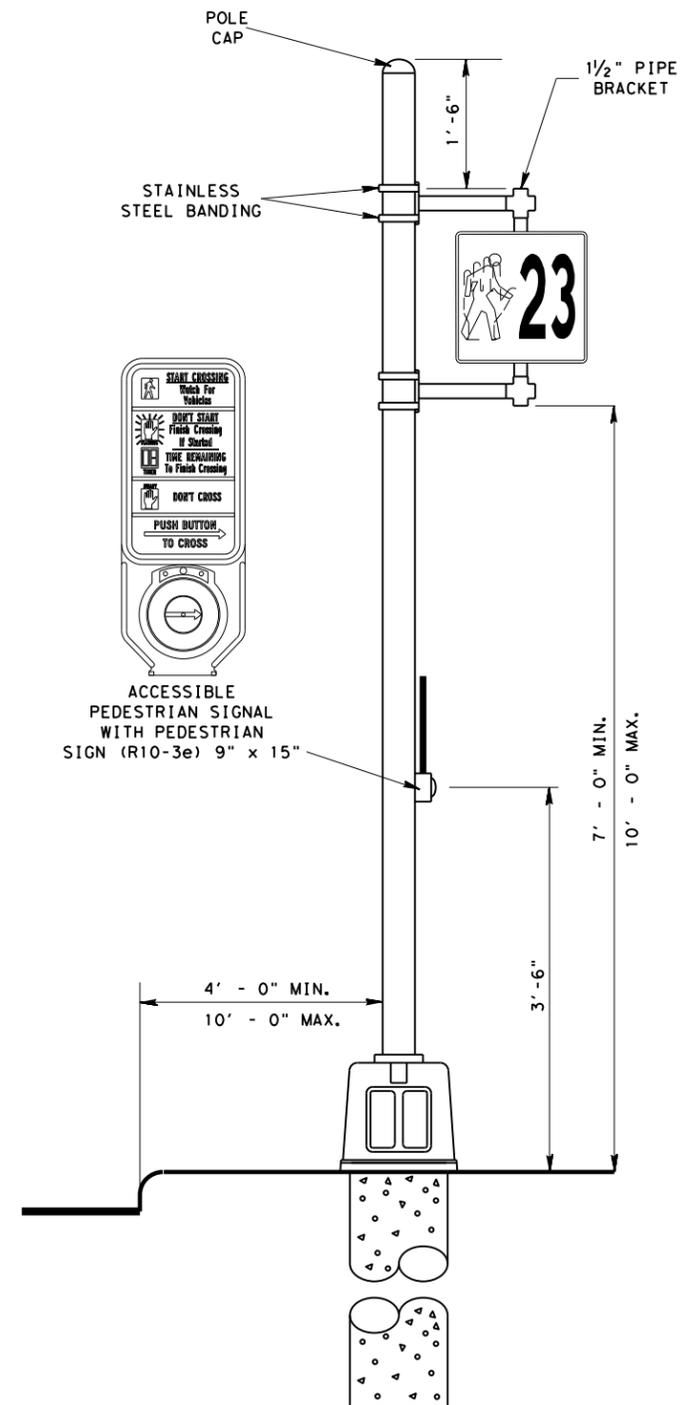
THE NUMBER OF LOOP WIRE TURNS SHALL BE AS SHOWN ON THE TYPICAL LOOP DETECTOR DETAILS.

CONDUIT ENCASED LOOPS



TYPICAL PED PUSH BUTTON LOCATION

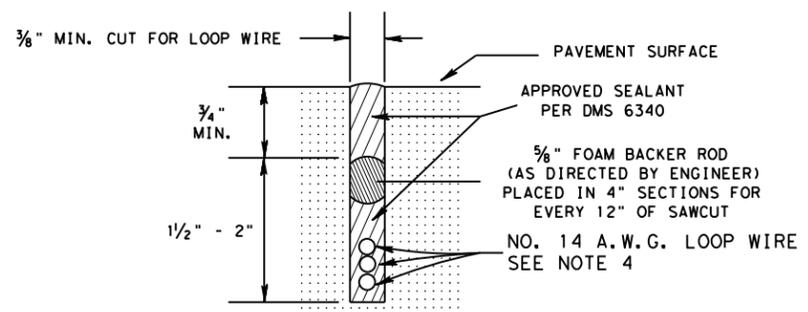
THE ENGINEER SHALL VERIFY ALL PEDESTRIAN SIGNAL AND PEDESTRIAN PUSH BUTTON LOCATIONS PRIOR TO INSTALLATION.



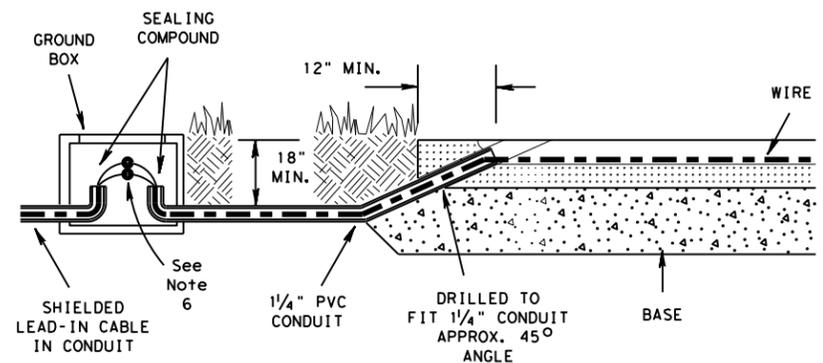
TYPICAL PEDESTAL POLE ASSEMBLY

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 \$ TIMES \$ DATES \$ FILES

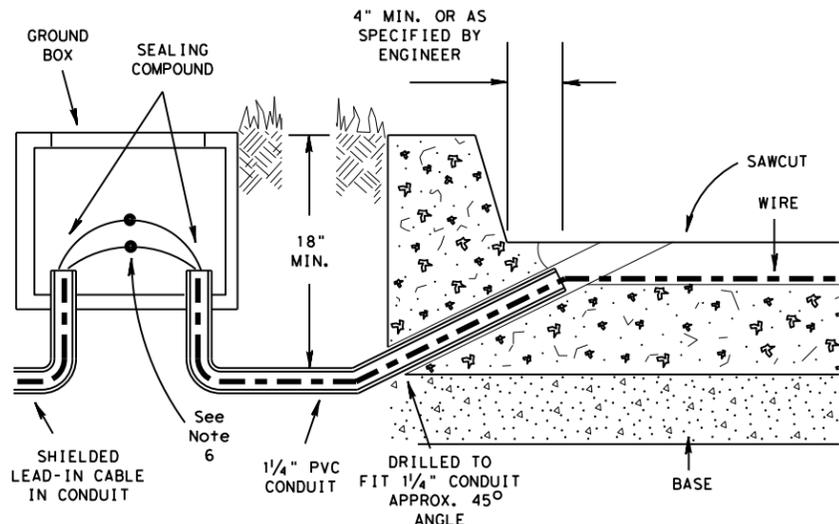
San Antonio District Standard MISCELLANEOUS TRAFFIC SIGNAL DETAILS			
SCALE: NS		MTS-18	
REVISIONS	FED. RD. DIV. NO.	FEDERAL AID PROJECT NO.	
FEB 2006			
OCT 2007			
MAR 2017			
MAY 2018			
STATE	DIST.	COUNTY	
CONT.	SECT.	JOB	HIGHWAY NO.



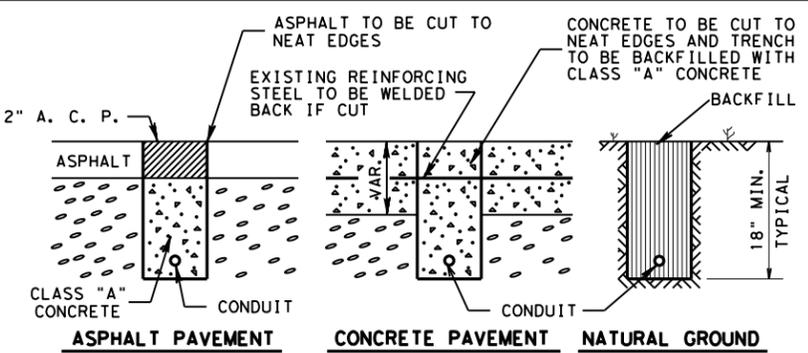
LOOP SAW CUT CROSS-SECTION



TYPICAL LEAD IN CONFIGURATION (WITHOUT CURBING)



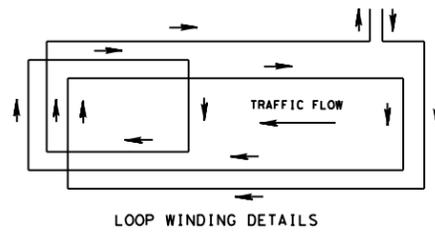
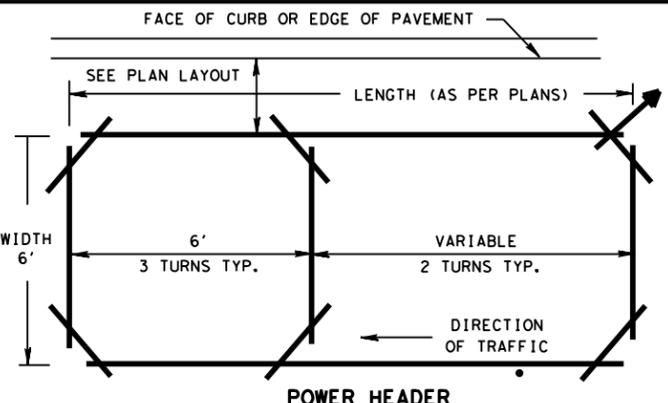
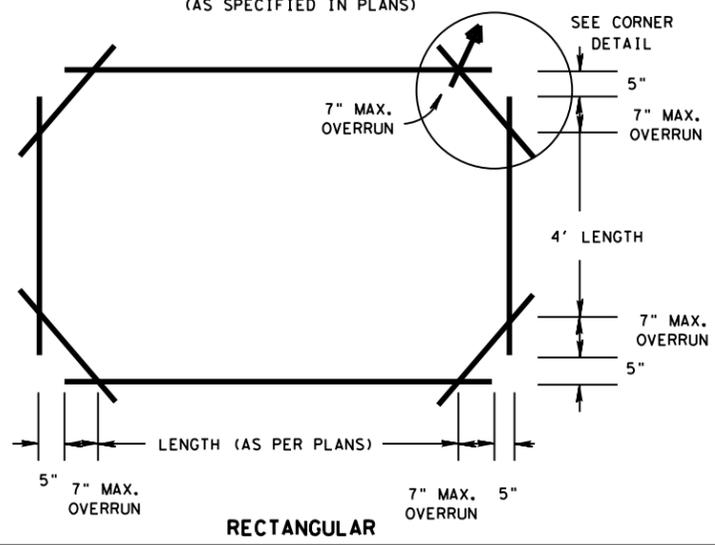
TYPICAL LEAD IN CONFIGURATION (WITH CURBING)



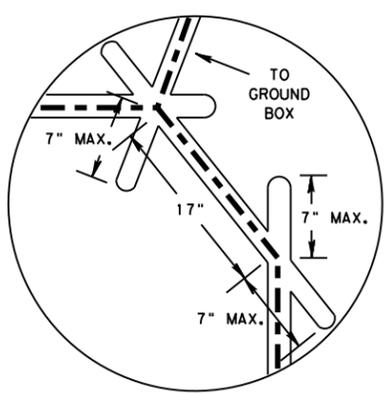
TRENCH DETAILS

CONCRETE TO BE TESTED AS MISCELLANEOUS CONCRETE
WIDTH OF TRENCH SHALL BE WIDE ENOUGH TO ACCOMMODATE CONDUIT

TYPICAL LOOP DETECTOR LAYOUTS (AS SPECIFIED IN PLANS)



TYPICAL CORNER DETAILS



SAWCUT CORNER DETAIL

7" OVERRUN BASED ON 24" DIAMETER SAW BLADE

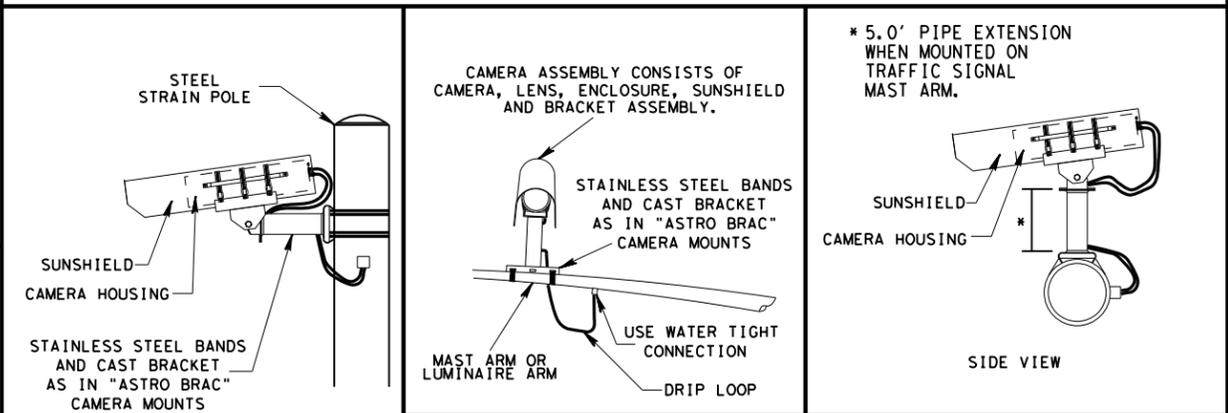
LOOP DETECTOR NOTES :

1. THE PAVEMENT CUT IS TO BE MADE WITH ANY EQUIPMENT THAT WILL PRODUCE A NEAT STRAIGHT LINE OF THE SIZE INDICATED. ALL LOOSE MATERIAL SHALL BE REMOVED. THE CUT SHALL BE CLEAN AND DRY WHEN THE WIRE AND THE SEALANT IS PLACED
2. WHERE MORE THAN ONE LOOP IS PLACED ON AN INTERSECTION APPROACH, THE WIRE FROM LOOP TO GROUND BOX SHALL NOT BE PLACED IN A SAW CUT WITH WIRE FROM OTHER LOOPS UNLESS OTHERWISE SHOWN IN THE PLANS
3. THE LOOP WIRE SHALL BE TWISTED A MINIMUM OF FIVE TURNS PER FOOT FROM THE EDGE OF THE ROAD TO THE GROUND BOX AND NO SPLICES SHALL BE PERMITTED IN THE LOOP OR IN THE RUN TO THE PULL BOX
4. THE 1/C#14 LOOP WIRE SHALL BE SINGLE CONDUCTOR CROSSLINKED POLYETHYLENE (0.045) INSULATED WIRE, TYPE: USE, RHH, RHW, 14 AWG STRANDED COPPER RATED AT 600 VOLTS
5. THE 2/C#14 LOOP CABLE SHALL BE TWO CONDUCTOR SHIELDED CABLE, 14 AWG, 19 X 27 STRANDED, 600 VOLT TINNED COPPER, POLYETHYLENE INSULATED, TWISTED PAIR, TWISTED A MINIMUM OF FIVE TWISTS PER FOOT, ALUMINUM-POLYESTER SHIELD, 16 AWG STRANDED TINNED COPPER DRAIN WIRE, CHROME VINYL JACKET, 100% SHIELD COVERAGE THE LOOP CABLE SHALL BE CONTINUOUS WITHOUT SPLICES
6. THE LOOP WIRE SHALL BE SPLICED TO THE LOOP CABLE BY SOLDERING CONDUCTORS, SECURING WITH A WIRE NUT AND FULLY ENCAPSULATING INTO A WATER TIGHT COMMERCIAL SPLICING KIT
7. ALL LOOP WIRE PLACED IN A SAW CUT SHALL BE SEALED BY FULLY ENCAPSULATING IT WITH LOOP WIRE SEALANT
8. ALL LOOP WIRE AND LOOP CABLE SHALL BE TESTED. WIRE AND CABLE TESTING LESS THAN 50 MEGAOHMS INSULATION RESISTANCE AT 500 VOLTS SHALL BE REPLACED BY THE CONTRACTOR AT HIS EXPENSE. THIS TEST SHOULD BE MADE BEFORE, DURING AND AFTER EACH COMPLETE LOOP DETECTOR INSTALLATION
9. UPON COMPLETION OF THE COMPLETE LOOP DETECTOR SYSTEM, THE FINAL TEST WILL BE MADE AT ITS TERMINATION AT THE CONTROLLER BY THE ENGINEER. ANY LOOP DETECTOR NOT MEETING THE REQUIREMENTS OF NOTE 8 SHALL BE REPLACED. THE FINAL TEST SHALL BE MADE PRIOR TO THE FINAL MAT OF A.C.P.
10. THE LOOP LOCATION, CONFIGURATION AND THE NUMBER OF TURNS SHALL BE AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

RECOMMENDED NUMBER OF TURNS FOR LOOP DETECTORS

LOOP PERIMETER SIZE (FT.)	NUMBER OF TURNS	APPROXIMATE LOOP SIZES INCLUDED
24' or Less	3 or 4	5' x 5', 6' x 6'
25' - 110'	2 or 3	6' x 10', 6' x 45'
110' or More	1 or 2	6' x 50' or Longer

TYPICAL VIVDS DETAILS



POLE MOUNT

MAST ARM OR LUMINAIRE ARM

VIDEO DETECTION NOTES

1. VIDEO DETECTION PROCESSOR UNIT SHALL BE INSTALLED INSIDE CONTROLLER CABINET.
2. VIDEO DETECTION CAMERA & BRACKET SHALL BE INSTALLED AS DETAILED OR AS DIRECTED BY THE ENGINEER.
3. CAMERAS SHALL BE MOUNTED AS FAR OVER THE ROADWAY AS POSSIBLE.
4. STAINLESS STEEL BANDS AND CAST BRACKETS AS IN "ASTRO-BRAC" SHALL BE USED TO INSTALL THE CAMERAS.
5. WHEN AIMING CAMERA, HORIZON SHALL NOT BE VISIBLE IN THE FIELD OF VIEW.
6. CAMERA ENCLOSURE ASSEMBLY SHALL BE ROTATABLE AFTER INSTALLATION TO PROVIDE PROPER ALIGNMENT.
7. ALL CABLE ENTRY AND EXIT POINTS IN THE MAST ARM AND/OR POLES SHALL BE WATER TIGHT.
8. APPLY SILICON DIELECTRIC COMPOUND INTO CONNECTORS AS APPROVED



San Antonio District Standard
VEHICLE DETECTOR
INSTALLATION DETAILS

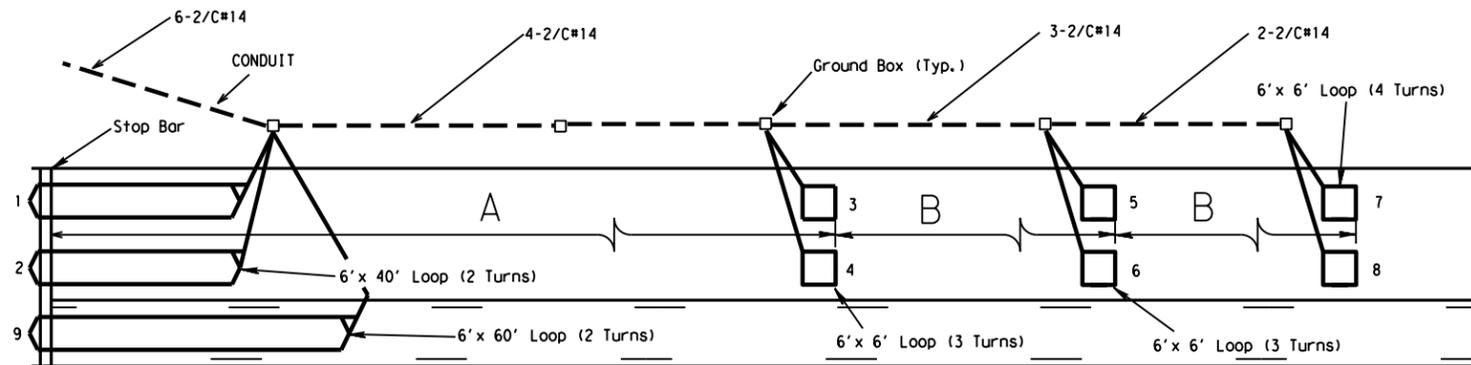
SCALE: NS

VD(1)-06

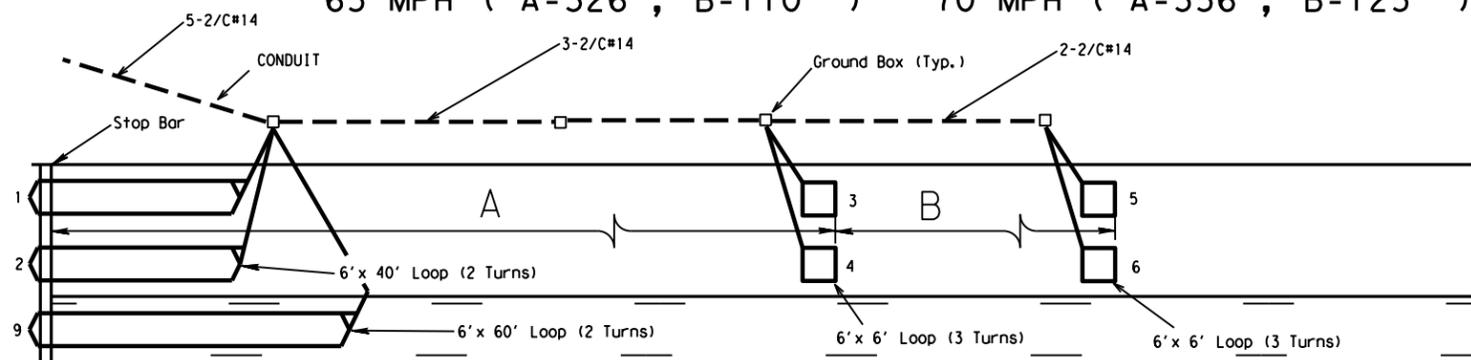
REVISIONS	FED. RD. DIV. NO.	FEDERAL AID PROJECT NO.	SHEET NO.
FEB 2006			
OCT 2006			
	STATE	DIST.	COUNTY
	CONT.	SECT.	JOB
			HIGHWAY NO.

TIMES DISPLAYED
 ACC: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100
 LEVELS DISPLAYED

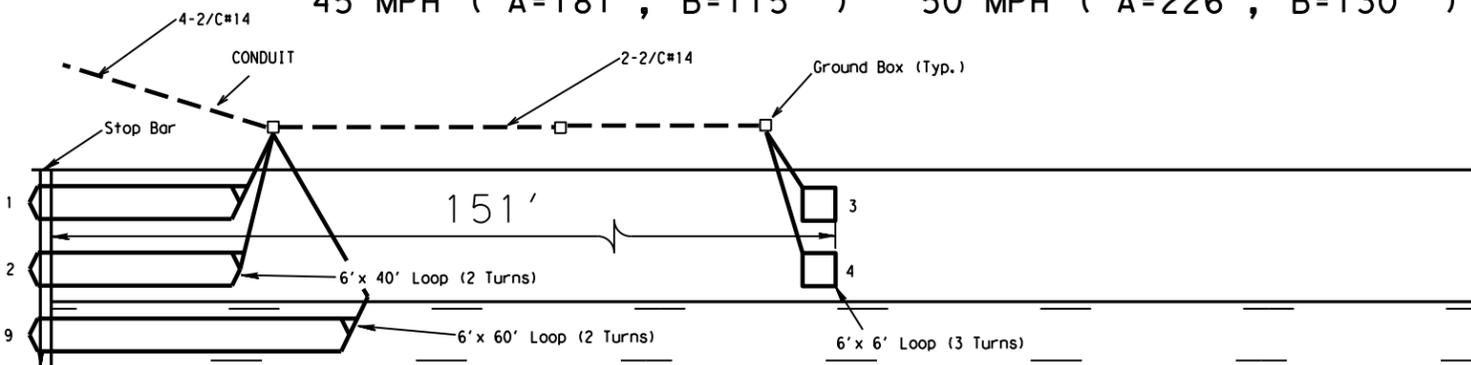
LOOP DETECTOR PLACEMENT DETAILS



55 MPH (A=231', B=95') 60 MPH (A=281', B=100')
 65 MPH (A=326', B=110') 70 MPH (A=356', B=125')

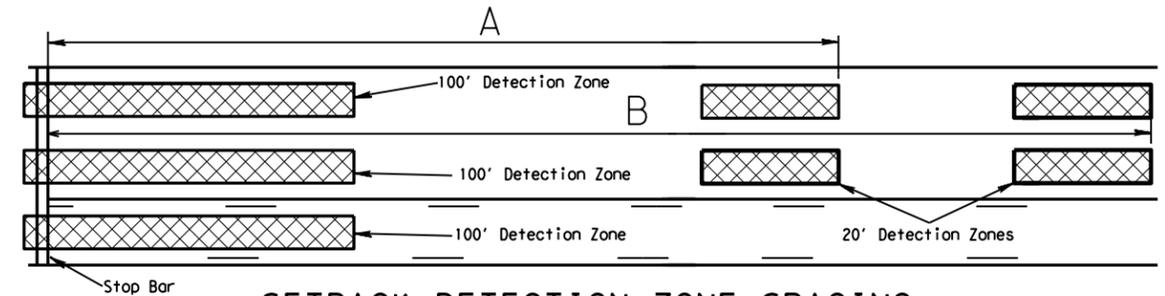


35 MPH (A=96', B=100') 40 MPH (A=116', B=130')
 45 MPH (A=181', B=115') 50 MPH (A=226', B=130')



30 MPH

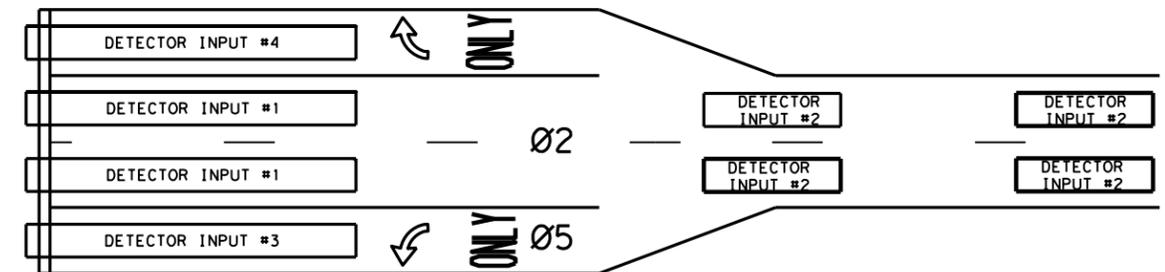
VIDEO DETECTION PLACEMENT DETAILS



SETBACK DETECTION ZONE SPACING
 (SPEEDS GREATER THAN OR EQUAL TO 45 MPH)

45 MPH (A=210', B=350')	50 MPH (A=235', B=390')
55 MPH (A=255', B=430')	60 MPH (A=280', B=470')
65 MPH (A=305', B=510')	70 MPH (A=330', B=550')

NOTE: SPEEDS EQUAL OR GREATER THAN 45 MPH WILL REQUIRE THE USE OF TWO VIVDS CAMERAS.
 UTILIZATION OF CAMERA ONE FOR STOP BAR DETECTION AND CAMERA TWO FOR SET BACK DETECTION ZONES.
 STOP BAR DETECTION ZONES SHALL BE PROVIDED FOR EACH LANE OF EACH APPROACH.
 STOP BAR DETECTION AND SET BACK DETECTION SHOULD DRIVE A SEPARATE DETECTOR INPUT INTO THE CONTROLLER. IN ADDITION, DETECTORS IN EXCLUSIVE TURN LANES SHOULD DRIVE A SEPARATE DETECTOR INPUT INTO THE CONTROLLER. SEE TYPICAL LAYOUT BELOW.



DETECTOR INPUT #	PHASE
1	Ø2 STOP BAR
2	Ø2 SET BACK
3	Ø5 STOP BAR
4	Ø2 RT LANE

NOTE:
 ALL DETECTOR PLACEMENTS
 ARE BASED ON THE POSTED
 SPEED LIMIT

LOOP DETECTOR GENERAL NOTES (55 MPH TO 70 MPH):
 Loops 1 and 2 shall be connected to the controller cabinet by means of the same loop lead-in (2/C #14 AWG).
 Loops 3 and 4 shall be connected to the controller cabinet by means of the same loop lead-in (2/C #14 AWG).
 Loops 5 and 6 shall be connected to the controller cabinet by means of the same loop lead-in (2/C #14 AWG).
 Loops 7 and 8 shall be connected to the controller cabinet by means of individual loop lead-in (2/C #14 AWG).
 Loop 9 shall be connected to the controller cabinet by means of a loop lead-in (2/C #14 AWG). Loop 9 shall be placed only when a left turn lane exists.

LOOP DETECTOR GENERAL NOTES (35 MPH TO 50 MPH):
 Loops 1 and 2 shall be connected to the controller cabinet by means of the same loop lead-in (2/C #14 AWG).
 Loops 3 and 4 shall be connected to the controller cabinet by means of the same loop lead-in (2/C #14 AWG).
 Loops 5 and 6 shall be connected to the controller cabinet by means of individual loop lead-in (2/C #14 AWG).
 Loop 9 shall be connected to the controller cabinet by means of a loop lead-in (2/C #14 AWG). Loop 9 shall be placed only when a left turn lane exists.

LOOP DETECTOR GENERAL NOTES (30 MPH):
 Loops 1 and 2 shall be connected to the controller cabinet by means of the same loop lead-in (2/C #14 AWG).
 Loops 3 and 4 shall be connected to the controller cabinet by means of individual loop lead-in (2/C #14 AWG).
 Loop 9 shall be connected to the controller cabinet by means of a loop lead-in (2/C #14 AWG). Loop 9 shall be placed only when a left turn lane exists.

ACC: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
 LEVELS DISPLAYED: 1 7 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32
 STAGES: 3 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48
 SHEETS: 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63



San Antonio District Standard
**VEHICLE DETECTOR
 PLACEMENT DETAILS**

SCALE: NS **VD(2)-06**

REVISIONS	FED. RD. DIV. NO.	FEDERAL AID PROJECT NO.	SHEET NO.
FEB 2006			
STATE	DIST.	COUNTY	
CONT.	SECT.	JOB	HIGHWAY NO.