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MAJOR EQUIPMENT

The flasher controller shall be two-circuit, solid state in a weatherproof aluminum cabinet with a radio interference filter.

The flashing beacons(s) shall be one section, adjustable, polycarbonate, vertical bracket mounted, with a 12-inch yellow or red lens.

The traffic signal lamp(s) shall be 150 Watt, 120 Volt, A21 clear lamp(s) of 6000 hour (min.) life rating guaranteed by the manufacturer.

The conductor shall be no. 14 AWG, 3/c traffic signal cable for operation at 600 Volt maximum, and suitable for use at conductor temperatures not exceeding 75 degrees Celsius. Insulation shall consist of 20 mil Polyethylene insulation with a 10 mil Polyvinyl Chloride (PVC) insulation covering and an overall jacket of PVC.

The metallic conduit shall be rigid steel conduit meeting the requirements of ASTM C-80-1.

The non-metallic conduit shall be rigid Polyvinyl Chloride (PVC) meeting the requirements of the latest edition of Federal specifications L-P-1036A.

Junction boxes shall be concrete or fiberglass reinforced polymer concrete, 12" deep and having approximately 144 sq. inch opening.

GENERAL NOTES

Alternate methods of mounting the beacons may be used with prior approval of the Engineer.

The flasher device shall be capable of causing the beacon to flash at a rate of not less than 50 nor more than 60 times per minute.

The illuminated period of each flasher shall be approximately equal to the non-illuminated period.

The illuminated elements, lens, reflector, and visor shall each be of such design as to render the lens, when illuminated, clearly visible from 10 to 1000 feet under all atmospheric conditions except dense fog, both day and night.

Beacon visors and doors shall be dull black. Beacon housing shall be traffic yellow. The lenses shall have a visible diameter of 12 inches.

Power supply at controller terminals shall be 120 Volts, single phase, 60 cycle AC.

The controller and each sign / beacon assembly shall be grounded by running a #6 AWG bare copper wire from the equipment to a 3/4" * 10' ground rod. The wires shall be attached to the ground rod using an approved ground rod clamp.

The beacons shall be centered on the centerline of the sign and flash in an alternating pattern.

Special brackets or holes will be required for the advisory speed plate (W13-1). The advisory speed plate shall be located not less than 4 feet above the pavement edge.

Trenching for conduit will not be permitted through existing pavement. Jacking will not be permitted in District One unless approved by the Engineer

On multi-lane divided facilities, beacons shall be mounted on both the right and left sides of the roadway and shall be flashed at alternate intervals.

Beacons shall be mounted on the traffic side of the signs.

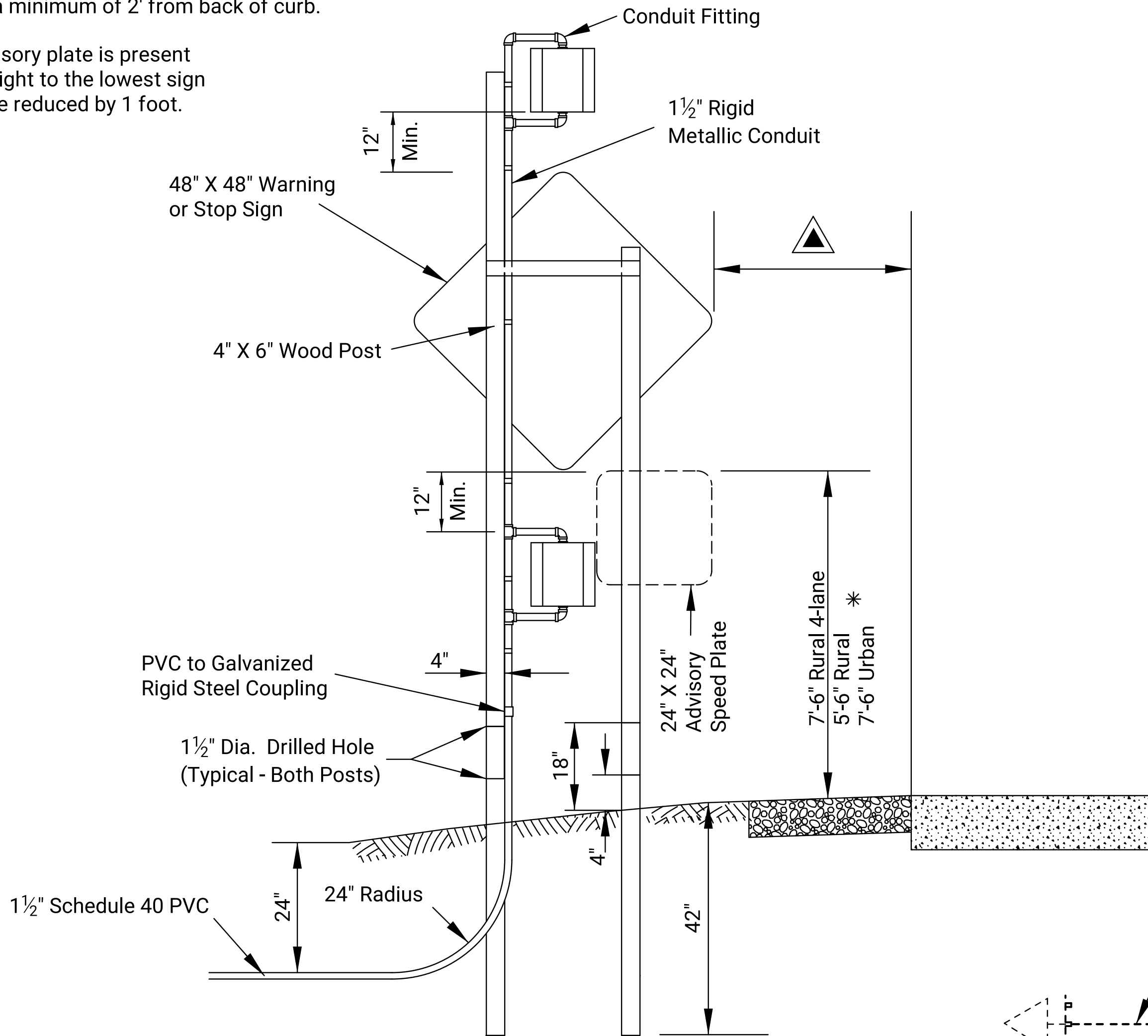
Power hook-up shall be coordinated with the power company. The contact person is _____, phone no. _____. The hook-up fees of \$ _____ per power drop will be the responsibility of the contractor.



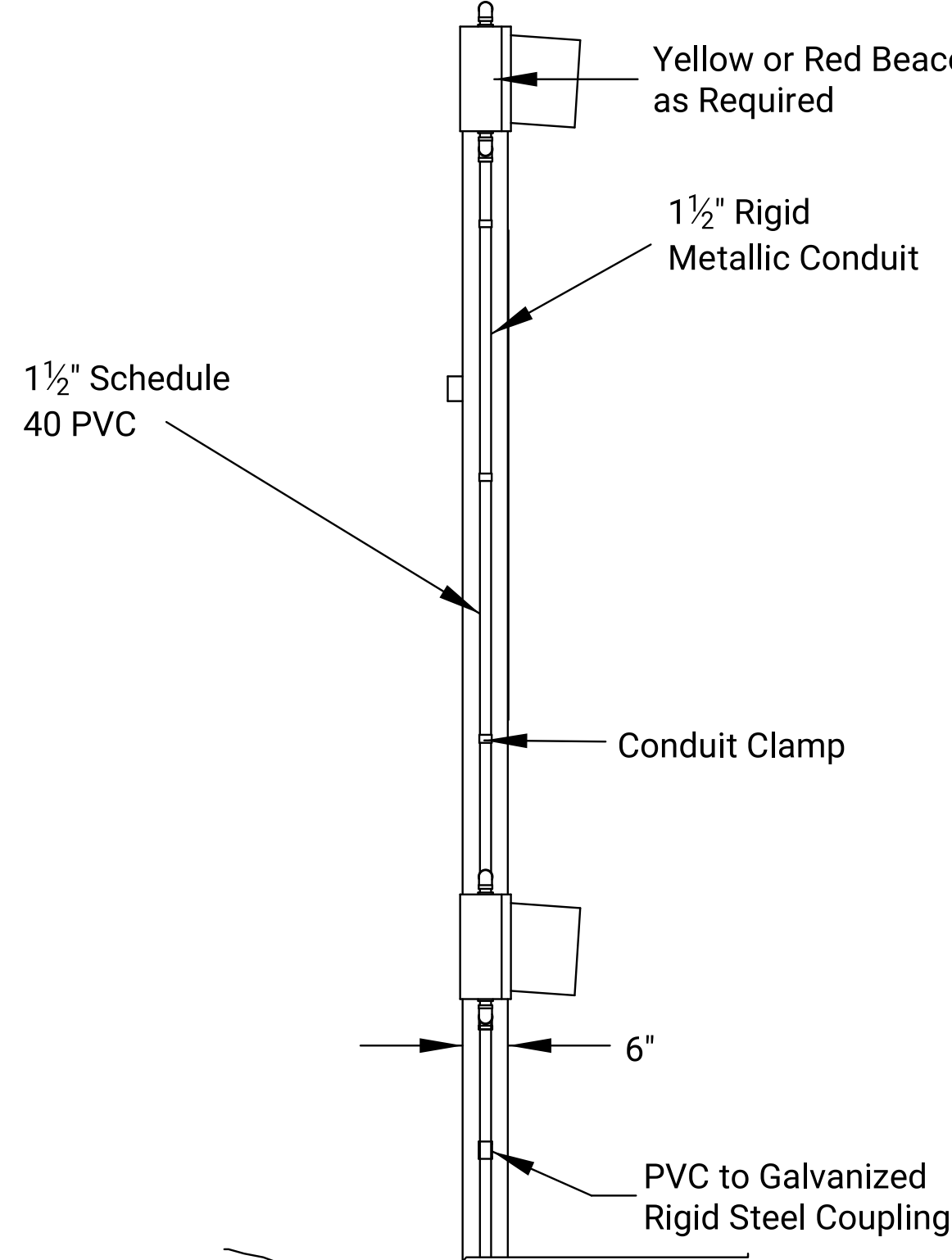
Minimum of 12' from edge of shoulder, or edge of traveled way. If curb & gutter exist, a minimum of 2' from back of curb.



If advisory plate is present the height to the lowest sign may be reduced by 1 foot.



BACK VIEW

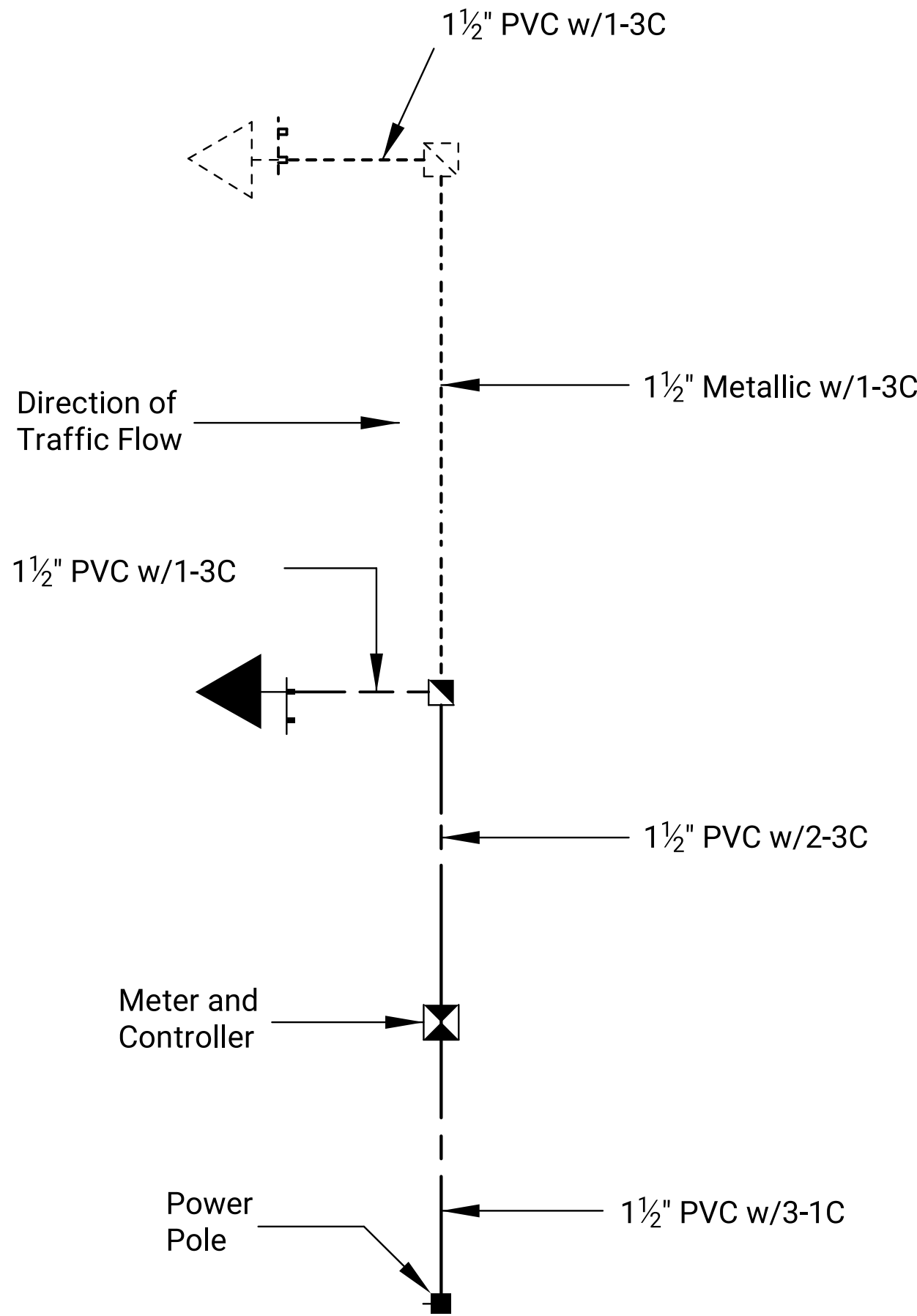


SIDE VIEW

BILL OF MATERIALS

12" One-way Flashing Beacon
Controller & Cabinet
150 Watt Traffic Signal Lamp
1 1/2" Metallic Conduit
1 1/2" PVC Conduit
Conduit Fittings
1 1/2" Conduit Clamp
Mounting Hardware
#6 AWG Copper Ground Wire
#6 AWG Lead-in Wire 1/c
Multi-Conductor Cable 3/c
Meter Base
Junction Box
20 Amp Circuit Breaker
Ground Rod and Clamp
Wood Post (4" X 6")
Sign

Each
Each
Each
Lin Ft
Meter
As Req'd
As Req'd
As Req'd
Lin Ft
Lin Ft
Lin Ft
Each
Each
Each
Each
Lin Ft
Each



PLAN VIEW

STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS		0	0	

KANSAS DEPARTMENT OF TRANSPORTATION				
BEACON INSTALLATION DETAIL SHEET				
TE181				
FHWA APPROVAL 04-29-03 APPD. Linda G. Voss				
DESIGNED L.G.V.	DETAILED J.F.F.	QUANTITIES	TRACED	
DESIGN CK. G.J.O.	DETAIL CK. G.J.O.	QUAN. CK.	TRACE CK.	