

KFW Field Codes

Measurement Guide

Survey / Geospatial

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Introduction

This document contains information about the feature codes used in the data collection process in our firm - more specifically in the collection of offices formally known as KFW. Below definitions will help elaborate the last 4 columns in the feature code list below.

Attributes - This field means whether additional information have to be entered in when making the field measurement in the form of an attribute in the data collector.

DTM Feature - This field means that the feature will be used as part of the DTM surface - the digital model of the surface of the ground in the project area. Keep this in mind. If you measure a DTM feature with a bad elevation, you must make this known to the office.

Line - indicates whether the feature is a line feature. If not, it is a point only feature.

Breakline - Breaklines are abrupt bends in the digital surface model built that results from the field measurements. If a feature is a breakline, you can imagine that feature line as creating a fold in a sheet of paper. Breaklines are useful to capture sharp changing in slope (think curb, gutter, bottom of slope, top of slope, etc.)

Code List

Pg/No.	Category	Code Name	Short Description	Full Description	Attributes?	DTM feature?	Is Line?	Is Breakline?
1	Topo / Imprvmts	AC	AIR COND	Air Conditioner Unit on building or structure	No	No	Yes	No
2	Topo / Imprvmts	BH	BUILDING HYDRANT	Hydrant used for fire fighting attached to building	No	Yes	No	N/A
3	Topo / Imprvmts	BLD	BLD COR	Building Corner - ground level, unless otherwise specified	No	Yes	Yes	Yes
4	Topo / Imprvmts	BO	BLOW OFF	Pressure release valve in pipelines	Yes	Yes	No	N/A
5	Topo / Imprvmts	BOL	BOLLARD	Short post used to direct or prevent traffic	Yes	Yes	No	N/A
6	Topo / Imprvmts	BORE	BORE	Drilled hole for water or geological exploration	No	Yes	No	N/A
7	Topo / Imprvmts	BTANK	BOTTOM TANK	Lower part of a storage tank or containment	No	Yes	Yes	No
8	Topo / Imprvmts	BTW	BOTTOM OF WALL	Lowest part of a wall	No	Yes	Yes	No
9	Topo / Imprvmts	CATV	CABLE TV	Television cable line or connection point	No	Yes	No	N/A
10	Topo / Imprvmts	CI	CURB INLET	Storm drain at the curb for water runoff	No	Yes	Yes	Yes
11	Topo / Imprvmts	CMP	CORRUGATED METAL	Corrugated metal pipe culvert	Yes	Yes	No	N/A
12	Topo / Imprvmts	CO	CLEAN OUT	Access point for cleaning plumbing lines	No	Yes	No	N/A
13	Topo / Imprvmts	COL	COLUMN	Structural support pillar or column	No	Yes	Yes	No
14	Topo / Imprvmts	CPATH	CL PATH DIRT OR GRAVEL	Centerline of dirt or gravel path	No	Yes	Yes	No
15	Topo / Imprvmts	CRB	BACK OF CURB	Rear edge of a curb, opposite the street side	No	Yes	Yes	Yes
16	Topo / Imprvmts	CRBS	CURB STOP	Concrete barrier for tire to hit and stop at the end of a parking space	No	Yes	Yes	Yes
17	Topo / Imprvmts	CSTEP	OUT LINE ONLY	Outline of concrete steps	Yes	Yes	Yes	No
18	Topo / Imprvmts	CWALK	CATWALK OUTLINE	Outline of a narrow walkway	Yes	Yes	Yes	No
19	Topo / Imprvmts	DT	DRONE TARGET CTL	Control point for drone mapping	Yes	Yes	No	N/A
20	Topo / Imprvmts	EBOX	ELEC BOX	Electrical box point, housing for electrical connections	No	No	No	N/A
21	Topo / Imprvmts	EBXL	EBOX LINE	Electrical box outline	No	Yes	Yes	No
22	Topo / Imprvmts	EC	EDGE CONC	Edge of concrete surface	No	Yes	Yes	Yes
23	Topo / Imprvmts	EG	EDGE GRAVEL	Edge of gravel	No	Yes	Yes	Yes
24	Topo / Imprvmts	EM	ELEC METER	Electricity meter, measures electrical consumption	No	No	No	N/A
25	Topo / Imprvmts	EMH	ELEC MH	Electric manhole, access to underground electrical utilities	No	No	No	N/A
26	Topo / Imprvmts	EOW	EDGE WALL	Boundary or edge of a wall	No	Yes	Yes	No
27	Topo / Imprvmts	EP	EDGE PAVEMENT	Edge of a paved surface	No	Yes	Yes	Yes
28	Topo / Imprvmts	EPS	SHOULDER ASPHALT	Asphalt road shoulder, edge of the roadway	No	Yes	Yes	Yes
29	Topo / Imprvmts	EST	EDGE OF SPOIL TANK	Edge of a containment tank for waste or spoil	No	Yes	Yes	No
30	Topo / Imprvmts	FBW	BARB WIRE	Barbed wire, type of fencing wire with sharp edges	No	Yes	Yes	No
31	Topo / Imprvmts	FCL	CHAIN LINK	Chain link fencing, a type of woven fence	No	Yes	Yes	No
32	Topo / Imprvmts	FF	FINISHED FLOOR	Top elevation of a poured concrete floor of a building.	No	Yes	No	N/A
33	Topo / Imprvmts	FH	FIRE HYDRANT	Hydrant for firefighting, connected to a water source	No	No	No	N/A
34	Topo / Imprvmts	FHB	BUILDING FH	Fire hydrant connected to a building	No	No	No	N/A
35	Topo / Imprvmts	FL	FLOW LINE	Directional line showing the path of a pipeline	No	Yes	No	N/A
36	Topo / Imprvmts	FLAG	FLAG POLE	Pole for displaying flags	No	Yes	No	N/A
37	Topo / Imprvmts	FLT	FLOOD LIGHT	High-intensity light for illumination over large areas	No	Yes	No	N/A

Code List

Pg/No.	Category	Code Name	Short Description	Full Description	Attributes?	DTM feature?	Is Line?	Is Breakline?
38	Topo / Imprvnts	FOR	ORNAMENTAL	Decorative fence	No	Yes	Yes	No
39	Topo / Imprvnts	FRW	ROCK FENCE	Fence constructed from stones or rocks	No	Yes	Yes	No
40	Topo / Imprvnts	FWD	WOOD FENCE	Fence made of wood	No	Yes	Yes	No
41	Topo / Imprvnts	GATE	GATE	Opening in a fence or wall for entry or exit	No	No	No	N/A
42	Topo / Imprvnts	GB	GRADE BREAK	Sharp break in surface, like a fold in a sheet of paper	No	Yes	Yes	Yes
43	Topo / Imprvnts	GI	GRATE INLET	Storm drain with a grate	No	No	Yes	No
44	Topo / Imprvnts	GM	GAS METER	Device measuring gas consumption	No	Yes	No	N/A
45	Topo / Imprvnts	GP	GUARD POST	Posts used to construct guard rails	Yes	Yes	No	N/A
46	Topo / Imprvnts	GR	GAURD RAIL	Barrier for safety along roads	No	Yes	Yes	No
47	Topo / Imprvnts	GUT	GUTTER	Bottom edge of a concrete curb	No	Yes	Yes	Yes
48	Topo / Imprvnts	GUY	GUY WIRE	Cable used to stabilize structures like poles	Yes	No	No	N/A
49	Topo / Imprvnts	GV	GAS VALVE	Valve to control gas flow in a pipeline	No	No	No	N/A
50	Topo / Imprvnts	GWV	GATE VALVE	Valve that opens by lifting a gate out of the path of the fluid	No	Yes	No	N/A
51	Topo / Imprvnts	HCR	WHEEL CHAIR RAMP	Slope designed for wheelchair access	No	Yes	Yes	No
52	Topo / Imprvnts	HDW	HEADWALL	Structural feature at the outlet of a drainage pipe	No	Yes	Yes	Yes
53	Topo / Imprvnts	HR	HAND RAIL	Railing to provide support or safety	No	No	Yes	No
54	Topo / Imprvnts	IRV	IRRIGATION VALVE	Valve to control water in an irrigation system	No	No	No	N/A
55	Topo / Imprvnts	JB	JUNCTION BOX	Enclosure for electrical connections	No	Yes	Yes	No
56	Topo / Imprvnts	JBPED	EBOX-JBOX ON PEDESTAL	Elevated junction box for electrical or electronic equipment	Yes	Yes	No	N/A
57	Topo / Imprvnts	JPT	JOIN TO PT	Instructions to the drafter to join a feature to a point	Yes	Yes	No	N/A
58	Topo / Imprvnts	LINE	MISC LINE	Miscellaneous linear features not elsewhere classified	No	Yes	Yes	No
59	Topo / Imprvnts	LP	LIGHT POLE	Pole supporting a light	No	No	No	N/A
60	Topo / Imprvnts	LPIPE	PIPE LINE	Piping system for transportation of fluids	No	No	Yes	No
61	Topo / Imprvnts	MB	MAIL BOX	Box for receiving mail	No	Yes	No	N/A
62	Topo / Imprvnts	MH	MISC MANHOLE	Miscellaneous access point to underground utilities	No	Yes	No	N/A
63	Topo / Imprvnts	MISCPT	MISC POINT	Miscellaneous point of interest not elsewhere classified	Yes	Yes	No	N/A
64	Topo / Imprvnts	MP	MARKER POST	Post used to indicate existence of underground utility, typically gas	Yes	Yes	No	N/A
65	Topo / Imprvnts	MW	MONITORING WELL	Well used for environmental monitoring	No	Yes	No	N/A
66	Topo / Imprvnts	NG	GROUND SHOT	Elevation point of the natural "soft surface" ground	No	Yes	No	N/A
67	Topo / Imprvnts	OH	OVERHANG	Projection of a structure beyond its base. e.g. the roof overhang / awning	No	No	Yes	No
68	Topo / Imprvnts	OHE	OVERHEAD ELEC	Electrical lines located overhead, going from pole to pole or other connection point	No	No	Yes	No
69	Topo / Imprvnts	PAV	PAVERS	Surface made of stones, blocks, or bricks fitted together	No	Yes	Yes	Yes
70	Topo / Imprvnts	PCLV	BOX CULVERT	Rectangular concrete structure for channeling water	Yes	Yes	No	N/A
71	Topo / Imprvnts	PED	PEDESTAL	Base supporting a statue, column, or structure	Yes	Yes	Yes	No
72	Topo / Imprvnts	PIPE	PIPE	Cylindrical conduit for transporting fluids or gases	Yes	Yes	No	N/A
73	Topo / Imprvnts	POST	POST	Upright support or marker, often wood or metal	Yes	No	No	N/A
74	Topo / Imprvnts	PP	POWER POLE	Pole that supports power lines or other related infrastructure	Yes	No	No	N/A
75	Topo / Imprvnts	PPS	METAL PP	Metal power pole	Yes	No	No	N/A
76	Topo / Imprvnts	PPX	PP-W-TRANSFORMER	Power pole with transformer attached. Specify number of transformers	Yes	No	No	N/A
77	Topo / Imprvnts	PS	PAINT STRIPE	Line of paint on a surface for marking	No	Yes	Yes	No
78	Topo / Imprvnts	PSDW	DASHED STR WHITE	White dashed stripe, typically on roads	No	Yes	Yes	No
79	Topo / Imprvnts	PSDY	YELLOW DASHED	Yellow dashed stripe, typically on roads	No	Yes	Yes	No
80	Topo / Imprvnts	PSR	PAINT RED	Red paint, typically used to designate a fire lane	No	Yes	Yes	No
81	Topo / Imprvnts	PSW	PAINT WHITE	White line, often for traffic markings on roads / parking lots	No	Yes	Yes	No
82	Topo / Imprvnts	PSY	PAINT YELLOW	Yellow line, often for traffic markings on roads / parking lots	No	Yes	Yes	No
83	Topo / Imprvnts	PUMP	ELEC PUMP	Electrically powered pump	Yes	Yes	No	N/A
84	Topo / Imprvnts	PVC	PLASTIC PIPE	PVC pipe culvert or invert. Specify size	Yes	Yes	No	N/A
85	Topo / Imprvnts	RCP	REINFORCED CONC	Concrete culvert pipe. Specify size	Yes	Yes	No	N/A
86	Topo / Imprvnts	RFD	ROOF DRAIN	Drainage system on roofs to channel away rainwater	No	Yes	No	N/A
87	Topo / Imprvnts	RWV	RECYCLED WTR VALVE	Valve for controlling flow of recycled water	No	Yes	No	N/A
88	Topo / Imprvnts	SE	HARD SURFACE SHT	Ground elevation measurement on hard surface	No	Yes	No	N/A
89	Topo / Imprvnts	SGN	SIGN	Road sign, parking sign, or any other sign	No	No	No	N/A
90	Topo / Imprvnts	SGNHC	HANDICAP SIGN	Sign indicating accessibility for handicapped individuals	No	No	No	N/A
91	Topo / Imprvnts	SGNL	SIGN LINE	Used to capture sign length, location, and direction of sign	No	No	Yes	No
92	Topo / Imprvnts	SLPB	BOTTOM SLOPE	Bottom edge / breakline of a sloped surface. Where the slope changes abruptly	No	Yes	Yes	Yes
93	Topo / Imprvnts	SLPT	TOP SLOPE	Top edge / breakline of a sloped surface. Where the slope changes abruptly	No	Yes	Yes	Yes
94	Topo / Imprvnts	SSMH	SANITARY SEWER	Underground system for transporting sewage	No	No	No	N/A
95	Topo / Imprvnts	STCB	SAW TOOTH CURB	Curb with cut away sections for better water drainage	No	Yes	Yes	No
96	Topo / Imprvnts	STGT	SAW TOOTH GT	Gutter of curb with cut away sections for better water drainage	No	Yes	Yes	No
97	Topo / Imprvnts	STMH	STORM	Storm manhole	No	No	No	N/A
98	Topo / Imprvnts	SUC	UNDER GRND CABLE	Unknown underground cable	No	No	Yes	No
99	Topo / Imprvnts	SUE	UNDERGROUND ELEC	Underground electric cable	No	No	Yes	No
100	Topo / Imprvnts	SUFO	BURIED FIBER OPT	Underground fiber cable, used for transferring data	No	No	Yes	No
101	Topo / Imprvnts	SUG	BURIED GAS	Underground pipelines for natural gas	No	No	Yes	No
102	Topo / Imprvnts	SURW	RECYCLED WTR	Underground recycled water infrastructure	No	No	Yes	No
103	Topo / Imprvnts	SUSS	SANITARY SEWER	Underground network of sewer pipes	No	No	Yes	No
104	Topo / Imprvnts	SUT	BURIED TELE	Underground telephone cables	No	No	Yes	No
105	Topo / Imprvnts	SUW	BURIED WATER LN	Underground water line	No	No	Yes	No
106	Topo / Imprvnts	SWB	SWITCH BOX	Enclosure for electrical switches and controls	Yes	Yes	No	N/A
107	Topo / Imprvnts	TAL	TURN ARROW LFT	Pavement marking indicating a left turn	No	Yes	No	N/A

Code List

Pg/No.	Category	Code Name	Short Description	Full Description	Attributes?	DTM feature?	Is Line?	Is Breakline?
108	Topo / Imprvnts	TAR	TURN ARROW RT	Pavement marking indicating a right turn	No	Yes	No	N/A
109	Topo / Imprvnts	TAS	TURN ARROW STRAIGHT	Pavement marking indicating to go straight ahead	No	Yes	No	N/A
110	Topo / Imprvnts	TMH	TELE MH	Manhole access point to access underground telephone line infrastructure	No	Yes	No	N/A
111	Topo / Imprvnts	TPED	TELE PEDESTAL	Pedestal housing telecommunications equipment, typically plastic	No	Yes	No	N/A
112	Topo / Imprvnts	TSP	TRAFFIC SIGNAL	Light signal used to direct traffic AKA a stop light	No	Yes	No	N/A
113	Topo / Imprvnts	TTANK	TOP TANK	Upper part of a storage tank, often for water or chemicals	No	Yes	Yes	No
114	Topo / Imprvnts	UKV	UNKNOWN VALVE	Valve whose function or type is not specified	No	No	No	N/A
115	Topo / Imprvnts	UKVAULT	VAULT UNKNOWN	Underground enclosure with unspecified purpose	No	No	Yes	No
116	Topo / Imprvnts	WE	WATERS EDGE	Edge of a body of water	No	Yes	Yes	Yes
117	Topo / Imprvnts	WELL	WELL HEAD	Above ground pipeline infrastructure for pressure and flow in oil & gas wells	No	Yes	No	N/A
118	Topo / Imprvnts	WFN	WIRE FENCE	Fencing made from wire	No	Yes	Yes	No
119	Topo / Imprvnts	WLCL	WALL CENTER LINE	Centerline of the wall. Should specify width of wall if not otherwise measured	No	Yes	Yes	Yes
120	Topo / Imprvnts	WM	WATER METER	Device measuring water usage	No	No	No	N/A
121	Topo / Imprvnts	WMH	WATER MH	Water manhole for access to water utilities	No	No	No	N/A
122	Topo / Imprvnts	WV	WATER VALVE	Valve to control water flow in pipelines	No	No	No	N/A
123	Topo / Imprvnts	WVAULT	WATER VAULT	Enclosed space housing water control equipment	No	No	Yes	No
124	Topo / Imprvnts	XFR	TRANSFORMER	Device to change voltage in electrical systems	No	No	No	N/A
125	Monuments	CHK	CHECK PT	Check shot on previously known coordinate to verify equipment is working well	Yes	No	No	N/A
126	Monuments	F60D	FND 60D	Found 60D nail, possibly a boundark marker	No	Yes	No	N/A
127	Monuments	F6C	FND 60 CAP	Found 60D nail with plastic cap. Provide detail about cap	No	Yes	No	N/A
128	Monuments	FBM	BM	Benchmark for elevation reference	No	Yes	No	N/A
129	Monuments	FCS	FND COT SPIN	Found cotton spindle used as control point marker or boundary marker	No	Yes	No	N/A
130	Monuments	FIP	PIPE	Found iron pipe survey marker, specify size	Yes	Yes	No	N/A
131	Monuments	FIR	FND IR	Found iron rod / rebar survey marker, specify size	No	No	No	N/A
132	Monuments	FIXX	IR CAP	Found iron rod / rebar survey marker with plastic cap	Yes	No	No	N/A
133	Monuments	FMN	FOUND MAG NAIL	Found MAGNAIL survey marker, no washer available	No	Yes	No	N/A
134	Monuments	FMX	FOUND MAG NAIL WASHER	Found MAGNAIL survey marker, specify washer details	Yes	Yes	No	N/A
135	Monuments	FNA	FND CONC NAIL	Found concrete nail survey marker	No	Yes	No	N/A
136	Monuments	FXC	X ON CONC	Found cut X on concrete	No	Yes	No	N/A
137	Monuments	MON1	CONC	TxDOT Type 1 monument - concrete pillar	No	No	No	N/A
138	Monuments	MON2	DISC	TxDOT Type 2 monument - Brass / metal cap	No	No	No	N/A
139	Monuments	RESEC	RESCT PT	Occupied point, calculated by resection	No	Yes	No	N/A
140	Monuments	S60D	60D NAIL SET	Set 60D nail survey marker	No	Yes	No	N/A
141	Monuments	S60DCP	60D CAP TEMP	Set 60D nail survey marker - temporary location, will be removed	No	Yes	No	N/A
142	Monuments	S6C	60D CAP CNST	Set 60D nail survey marker - for construction staking	No	Yes	No	N/A
143	Monuments	SBM	KFW BM	Set benchmark survey marker. Specify type	No	Yes	No	N/A
144	Monuments	SCS	SET COT SPIN	Set cotton spindle survey marker	No	Yes	No	N/A
145	Monuments	SIR	SET IR KFW CAP	Set rebar with CED cap "COLLIERS PROP CORNER" unless otherwise specified	No	No	No	N/A
146	Monuments	SIRCP	IR CTRL KFW	Set rebar with CED cap as control point - not boundary marker	No	No	No	N/A
147	Monuments	SMCP	SET MAG NAIL WASHER CP	Set MAGNAIL with CED washer as control point - not boundary marker	No	Yes	No	N/A
148	Monuments	SMW	SET MAG NAIL WASHER KFW	Set MAGNAIL with CED washer "COLLIERS PROP CORNER" unless otherwise specified	No	Yes	No	N/A
149	Monuments	SXC	X CTRL	Set cut X in concrete as survey marker	No	Yes	No	N/A
150	Trees	ASH	ASH	Ash tree species	Yes	No	No	N/A
151	Trees	BC	BALD CYPRESS	Bald cypress tree species	Yes	Yes	No	N/A
152	Trees	CB	CHINA BERRY	China berry tree species	Yes	No	No	N/A
153	Trees	CDR	CEDAR	Cedar tree species	Yes	Yes	No	N/A
154	Trees	CHT	CHINESE TALO	Chinese talo tree species	Yes	Yes	No	N/A
155	Trees	CND	CONDALIA	Condalia tree species	Yes	Yes	No	N/A
156	Trees	COT	COTTONWOOD	Cottonwood tree species	Yes	Yes	No	N/A
157	Trees	DRIP	DRIP LINE	Outermost circumference of tree branches in area with multiple trees	Yes	Yes	Yes	No
158	Trees	ELM	ELM	Elm tree species	Yes	Yes	No	N/A
159	Trees	HK	HACKBERRY	Hackberry tree species	Yes	No	No	N/A
160	Trees	HUI	HUISACHI	Huisachi tree species	Yes	No	No	N/A
161	Trees	LEAN	TREE LEAN	Directional lean of a tree	Yes	Yes	No	N/A
162	Trees	LIG	LIGUSTRUM	Ligustrum tree species	Yes	Yes	No	N/A
163	Trees	LO	LIVE OAK	Live oak tree species	Yes	No	No	N/A
164	Trees	ML	MOUNTAIN LAUREL	Mountain laurel tree species	Yes	No	No	N/A
165	Trees	MSQ	MESQUITE	Mesquite tree species	Yes	No	No	N/A
166	Trees	MUL	MULBERRY	Mulberry tree species	Yes	Yes	No	N/A
167	Trees	MYT	CRAPE MYRTLE	Crape myrtle tree species	Yes	Yes	No	N/A
168	Trees	PALM	PALM	Palm tree species	Yes	Yes	No	N/A
169	Trees	PCN	PECAN	Pecan tree species	Yes	Yes	No	N/A
170	Trees	PER	PERSIMMON	Persimmon tree species	Yes	Yes	No	N/A
171	Trees	RO	RED OAK	Red oak tree species	Yes	No	No	N/A
172	Trees	SOK	SPANISH OAK	Spanish oak tree species	Yes	Yes	No	N/A
173	Trees	SYC	SYCAMORE	Sycamore tree species	Yes	Yes	No	N/A
174	Trees	TREE	UNKNOWN TREE	Unidentified tree species	Yes	Yes	No	N/A
175	Trees	WILLOW	WILLOW	Willow tree species	Yes	Yes	No	N/A
176	Trees	WOK	WHITE OAK	White oak tree species	Yes	Yes	No	N/A

Category:

Topo & Improvement Codes

Has Attributes?

No

DTM Feature?

No

Is Line?

Yes

Is Breakline?

No

Air Conditioner Unit on building or structure

AC - AIR COND

Note that elevation does not matter.



Figure 1 - Image showing preferred way of measuring AIR COND

Category:

Topo & Improvement Codes

Has Attributes?

No

DTM Feature?

Yes

Is Line?

No

Is Breakline?

N/A

Hydrant used for fire fighting attached to building

BH - BUILDING HYDRANT

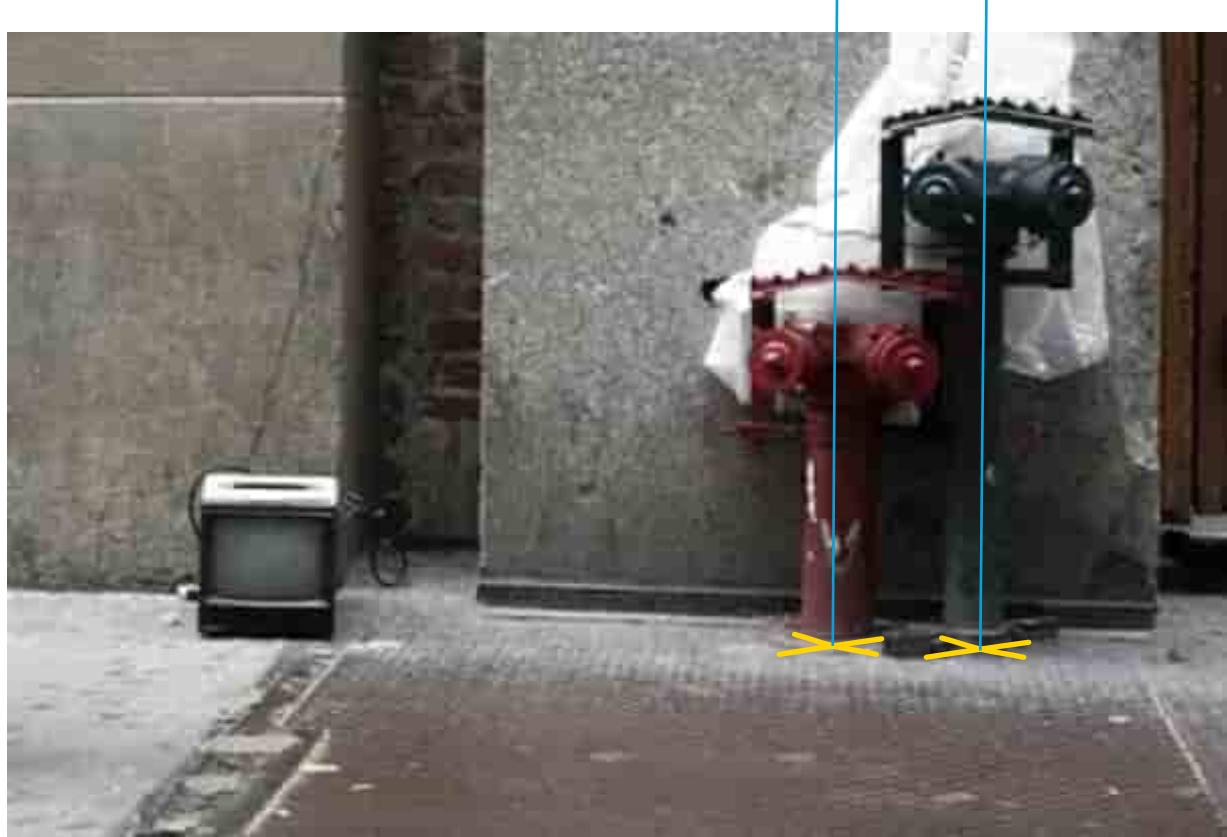


Figure 1 - Image showing preferred way of measuring BUILDING HYDRANT

Category:**Topo & Improvement Codes**

Has Attributes?

No

DTM Feature?

Yes

Is Line?

Yes

Is Breakline?

Yes

Building Corner - ground level, unless otherwise specified

BLD - BLD COR

**Points are not DTM features, but lines are breaklines.
If not shooting with correct elevation, it must be noted.**

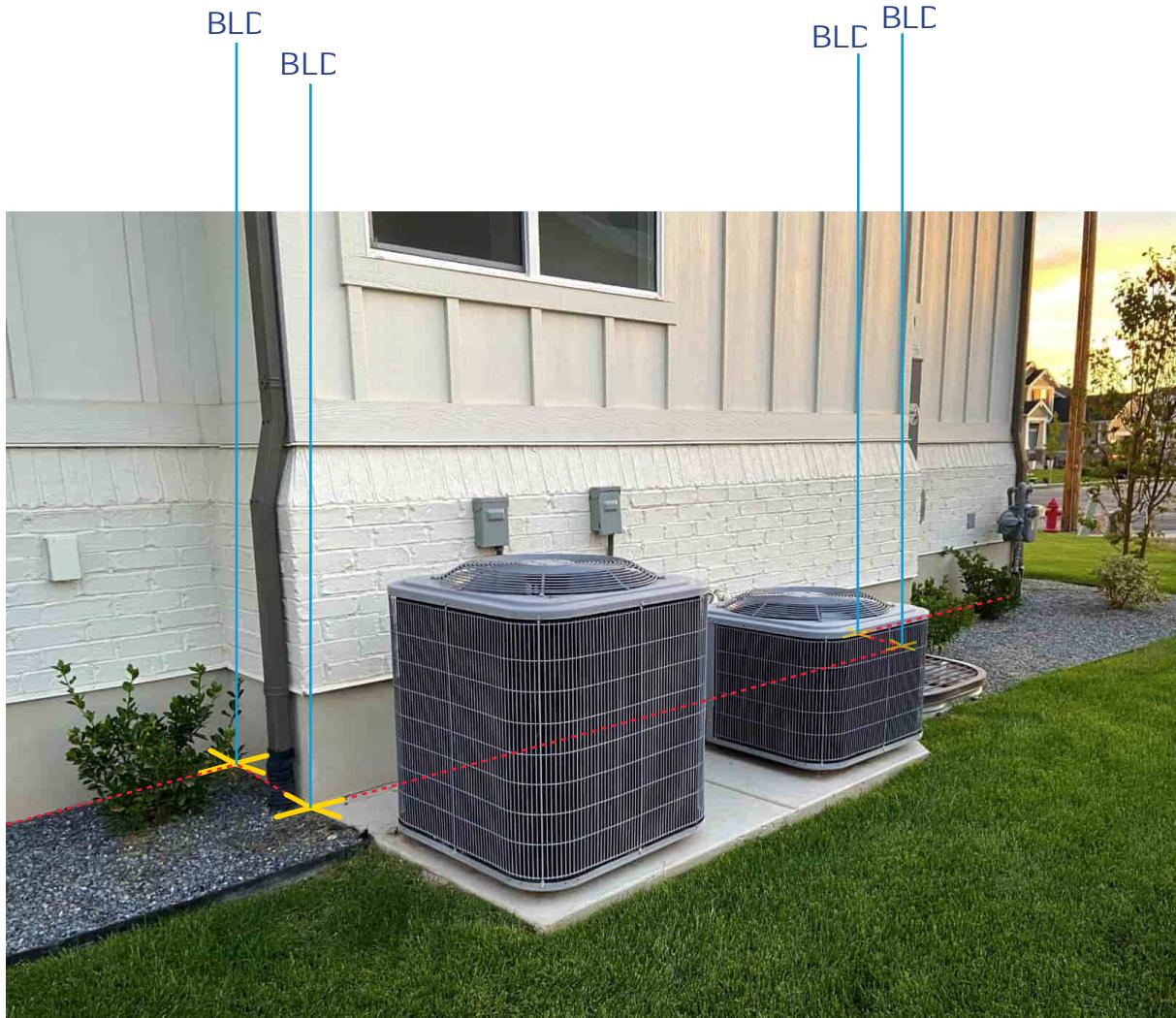


Figure 1 - Image showing preferred way of measuring BLD COR

**Category:**

Has Attributes?

Topo & Improvement Codes

Yes

DTM Feature?

Yes

Is Line?

No

Is Breakline?

N/A

Pressure release valve in pipelines**BO - BLOW OFF**

Image Missing

Will be added.

Figure 1 - Image showing preferred way of measuring BLOW OFF

Category:

Has Attributes?

Topo & Improvement Codes

Yes

DTM Feature?

Yes

Is Line?

No

Is Breakline?

N/A

Short post used to direct or prevent traffic

BOL - BOLLARD

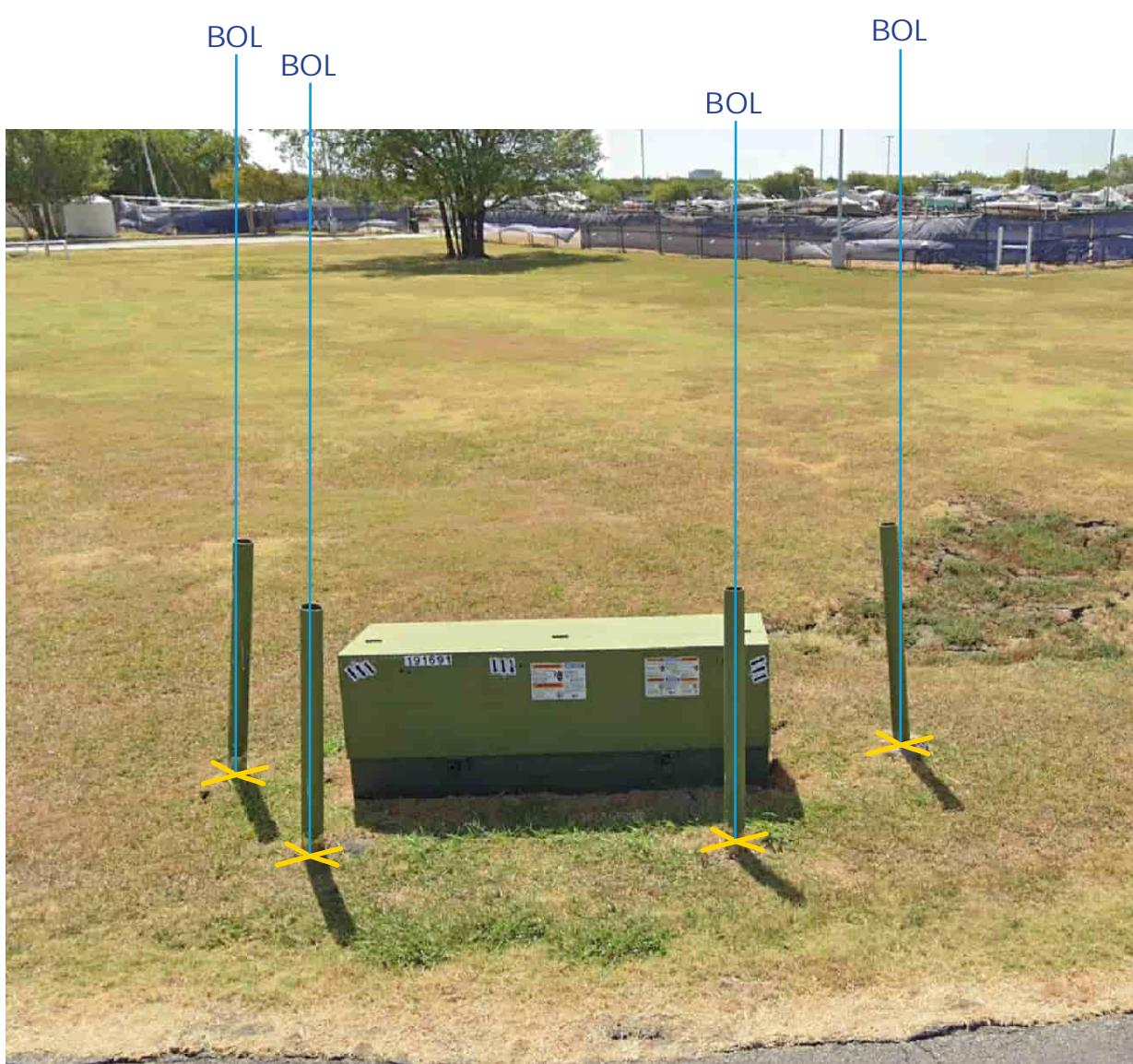


Figure 1 - Image showing preferred way of measuring BOLLARD

Category:

Has Attributes?

DTM Feature?

Is Line?

Is Breakline?

Topo & Improvement Codes

No

Yes

No

N/A

Drilled hole for water or geological exploration

BORE - BORE

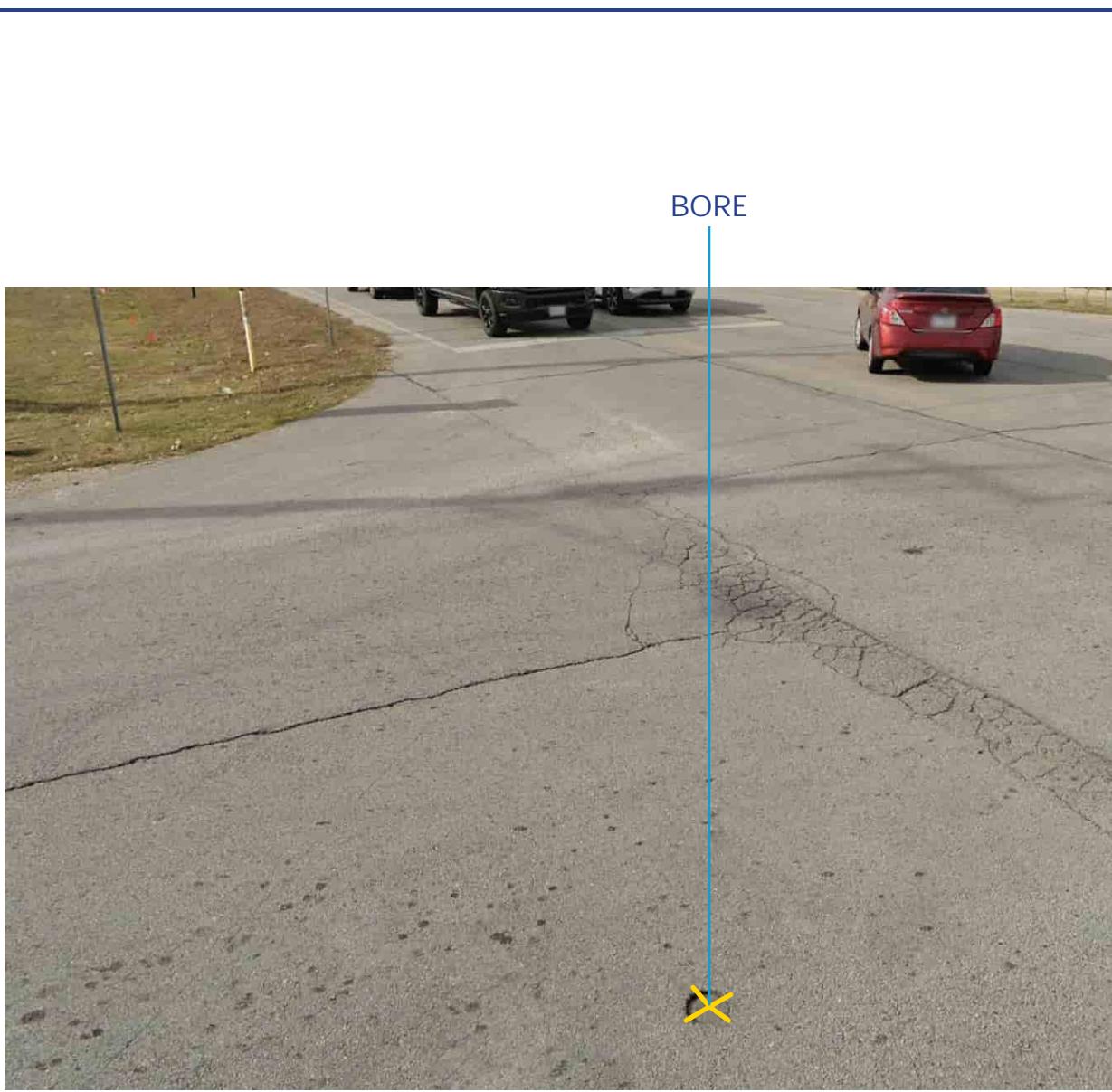


Figure 1 - Image showing preferred way of measuring BORE

Category:

Has Attributes?

DTM Feature?

Is Line?

Is Breakline?

Topo & Improvement Codes

No

Yes

Yes

No

Lower part of a storage tank or containment

BTANK - BOTTOM TANK

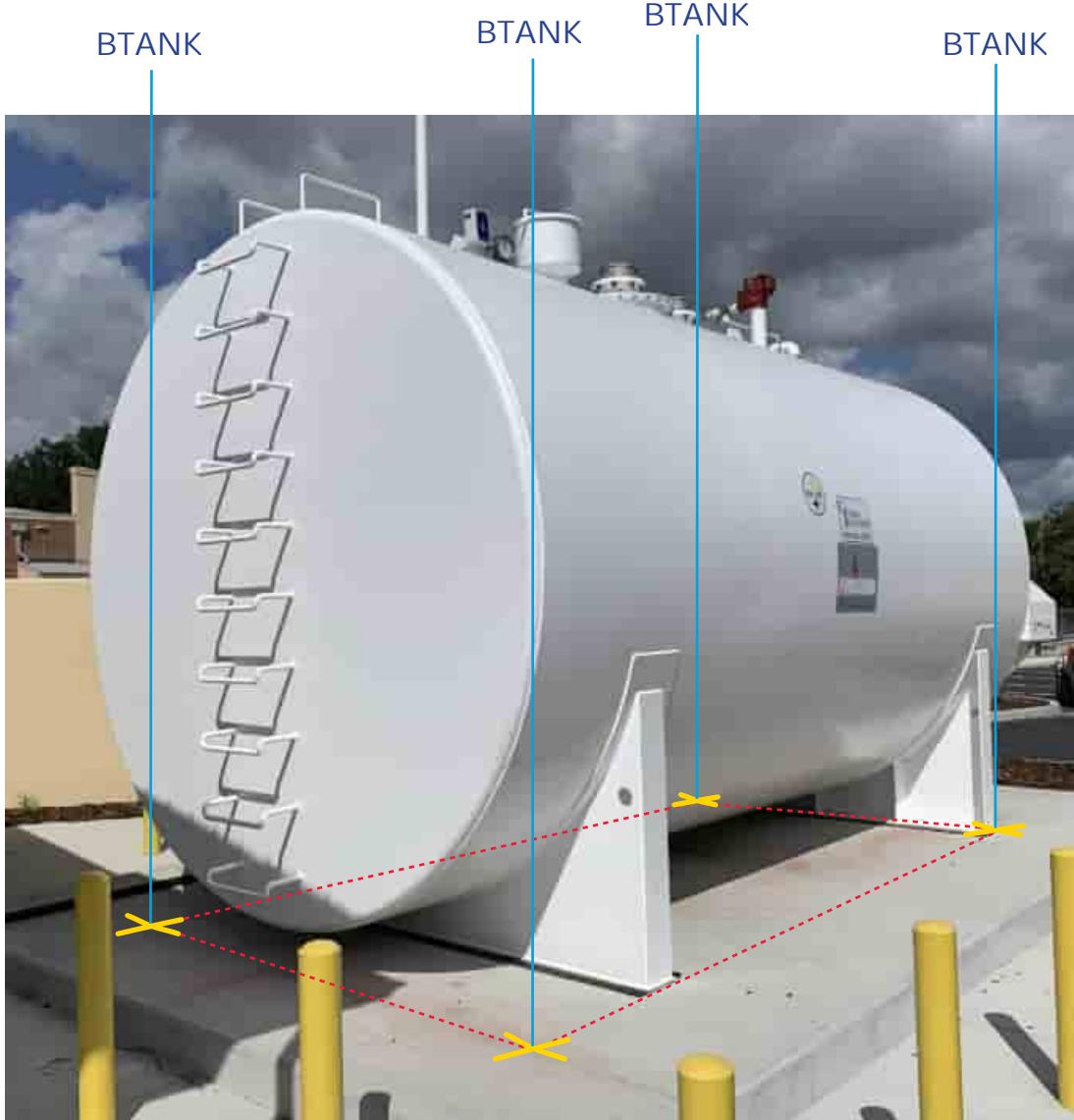


Figure 1 - Image showing preferred way of measuring BOTTOM TANK

Category:

Topo & Improvement Codes

Has Attributes?

No

DTM Feature?

Yes

Is Line?

Yes

Is Breakline?

No

Lowest part of a wall

BTW - BOTTOM OF WALL

Capture footprint of wall at ground level

Measure wall height and thickness.

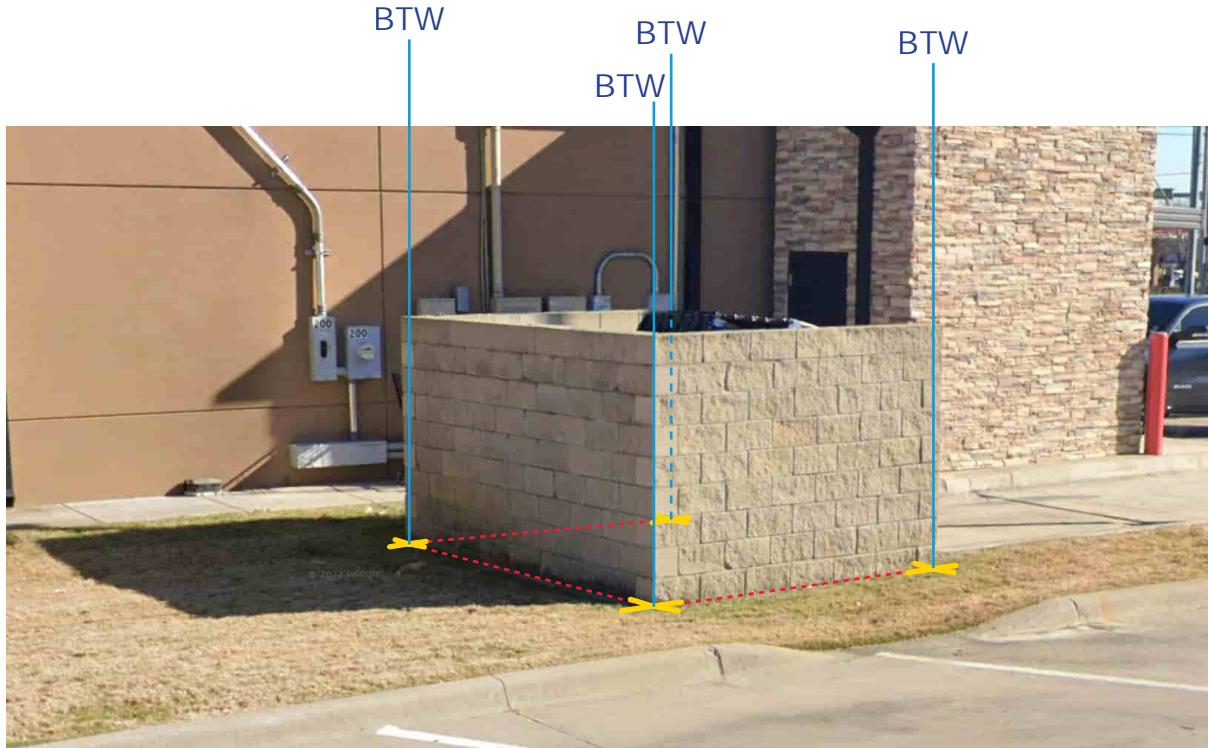


Figure 1 - Image showing preferred way of measuring BOTTOM OF WALL

Category:

Has Attributes?

Topo & Improvement Codes

No

DTM Feature?

Yes

Is Line?

No

Is Breakline?

N/A

Television cable line or connection point

CATV - CABLE TV

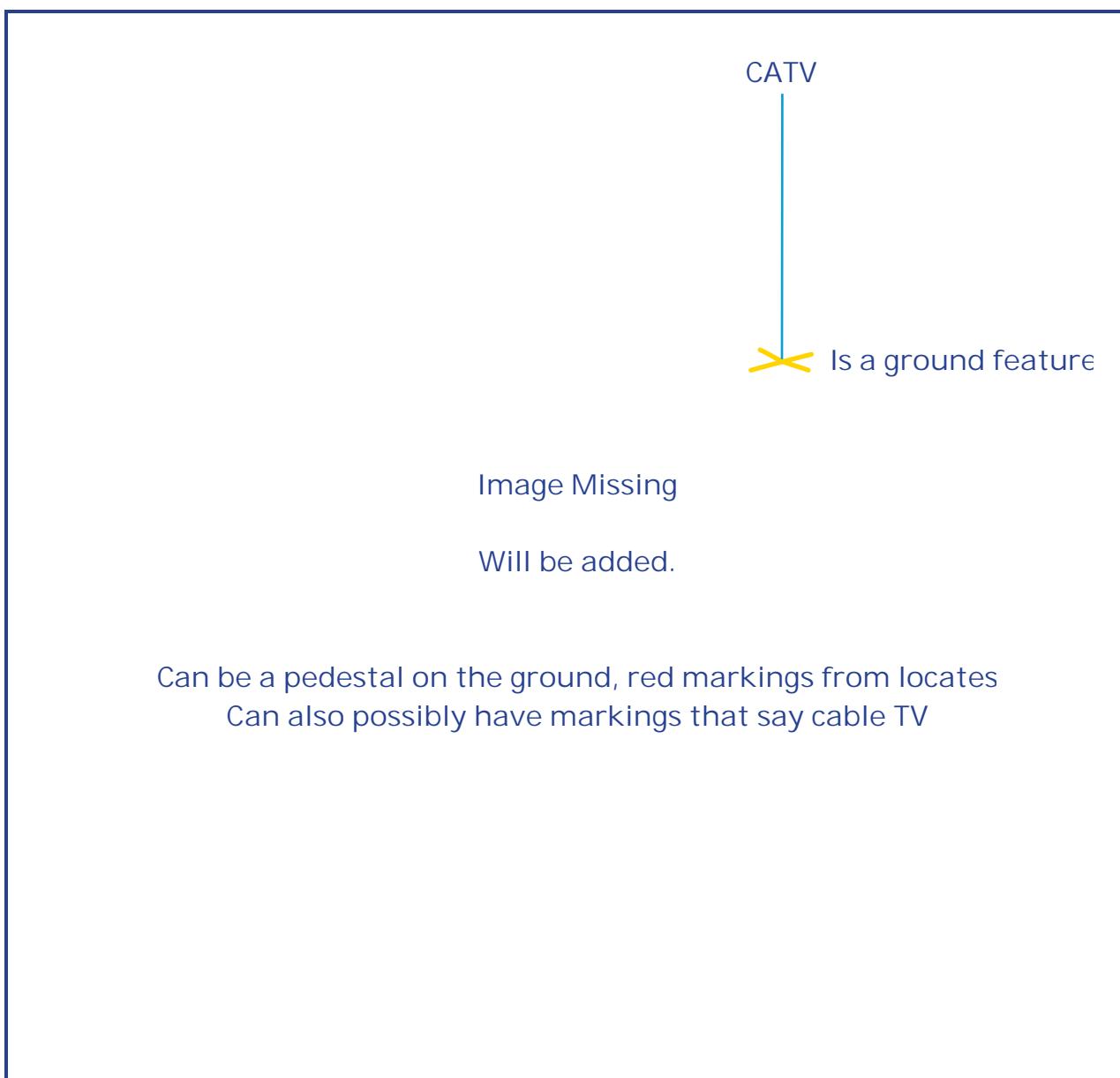


Figure 1 - Image showing preferred way of measuring CABLE TV

Category:

Has Attributes?

Topo & Improvement Codes

No

DTM Feature?

Yes

Is Line?

Yes

Is Breakline?

Yes

Storm drain at the curb for water runoff

CI - CURB INLET

Show break in the middle of the CI using a short GUT line

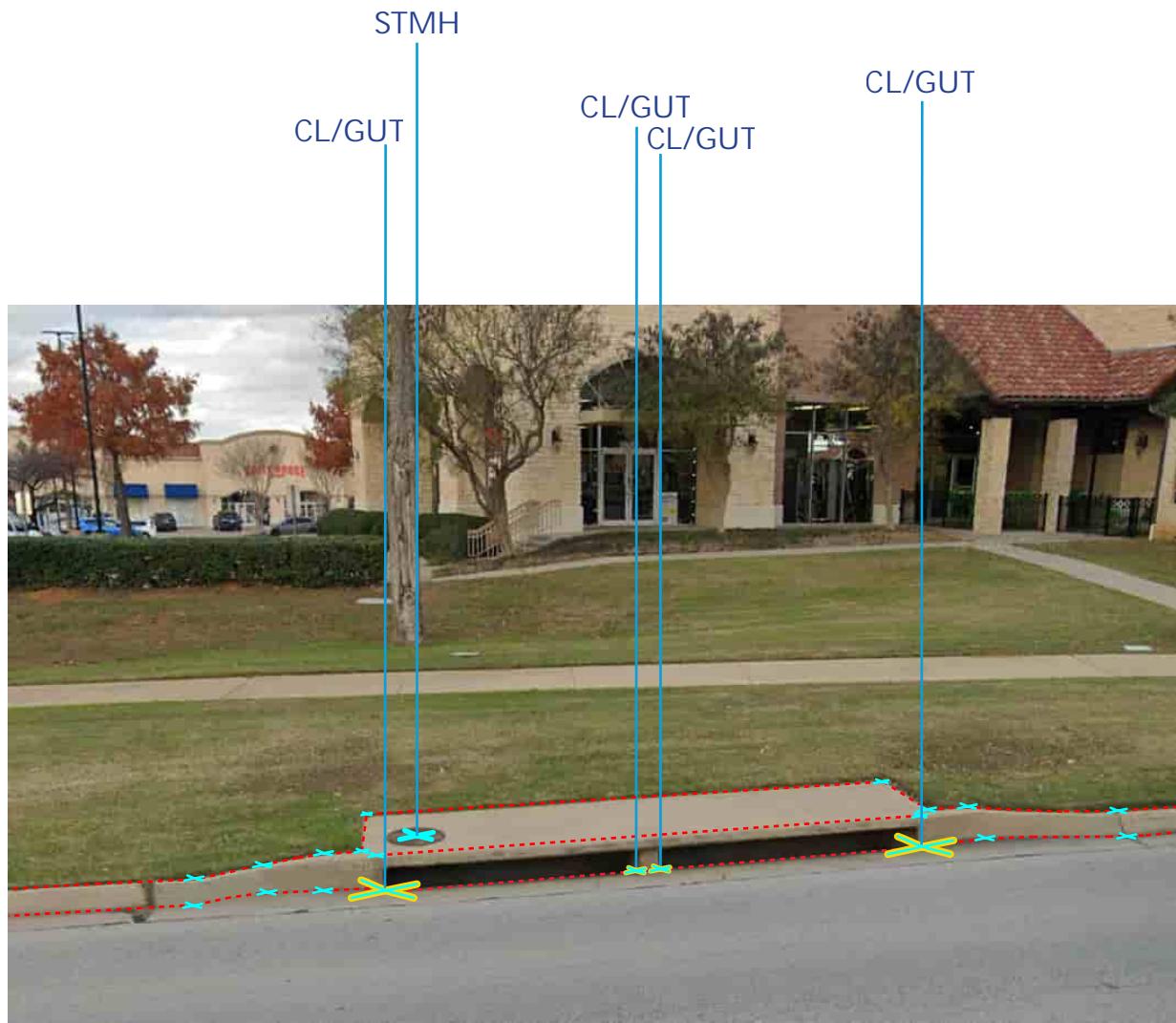


Figure 1 - Image showing preferred way of measuring CURB INLET

Category:

Has Attributes?

Topo & Improvement Codes

Yes

DTM Feature?

Yes

Is Line?

No

Is Breakline?

N/A

Corrugated metal pipe culvert

CMP - CORRUGATED METAL

Capture ditch completely, and capture area around culvert with break lines

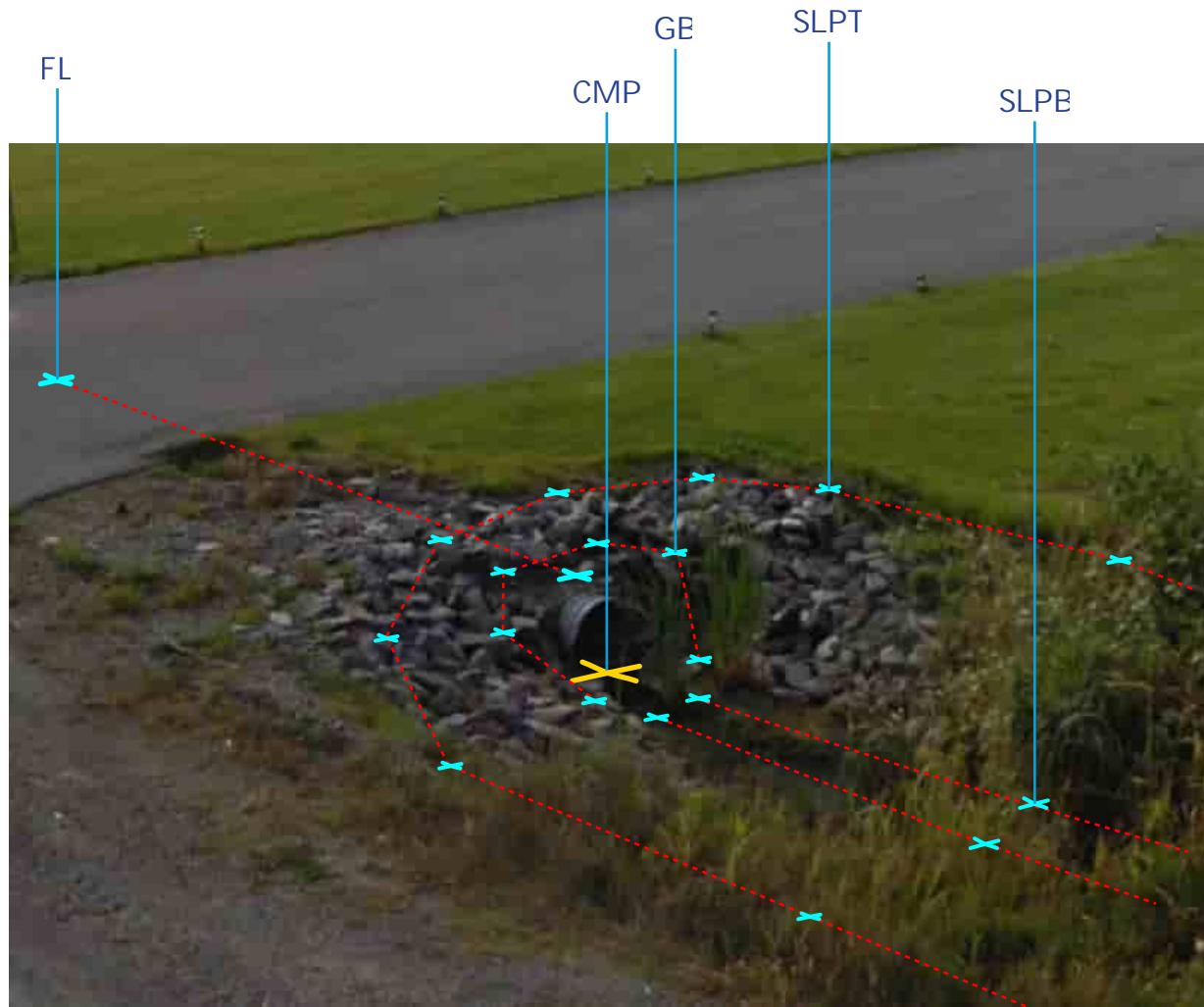


Figure 1 - Image showing preferred way of measuring CORRUGATED METAL

Category:

Topo & Improvement Codes

Has Attributes?

No

DTM Feature?

Yes

Is Line?

No

Is Breakline?

N/A

Access point for cleaning plumbing lines

CO - CLEAN OUT



Figure 1 - Image showing preferred way of measuring CLEAN OUT

Category:

Has Attributes?

DTM Feature?

Is Line?

Is Breakline?

Topo & Improvement Codes

No

Yes

Yes

No

Structural support pillar or column

COL - COLUMN

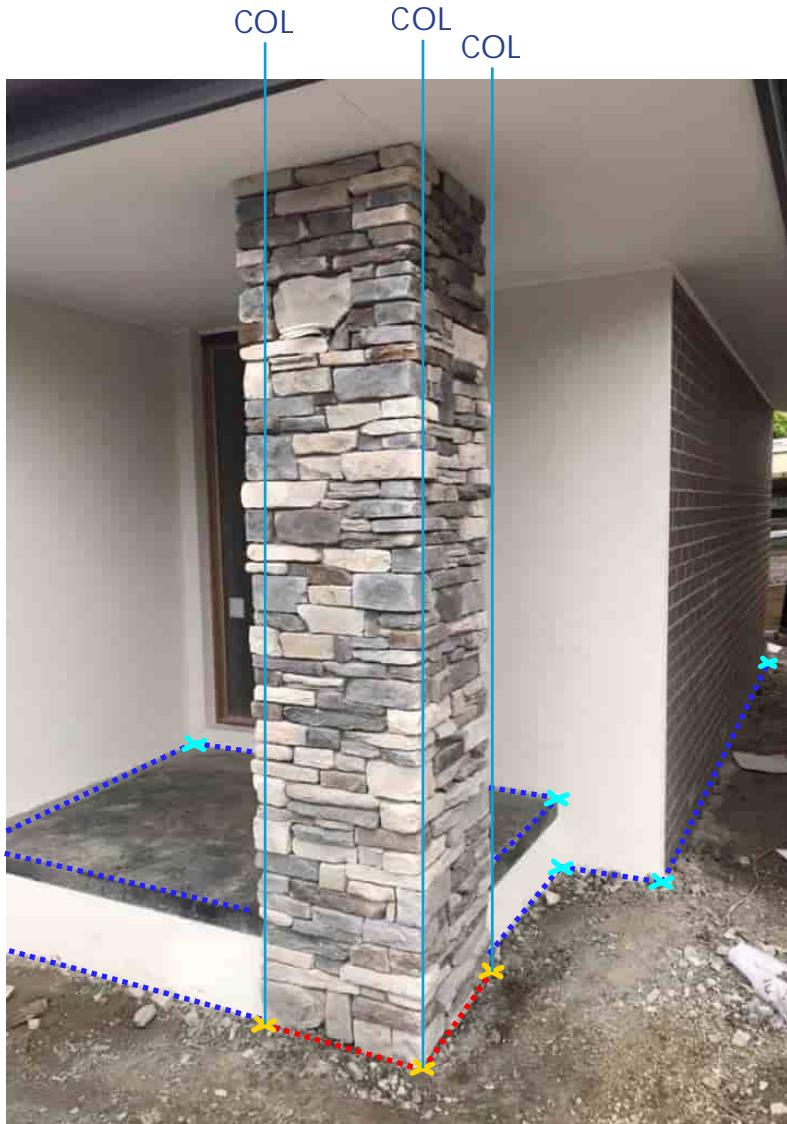


Figure 1 - Image showing preferred way of measuring COLUMN

Category:

Has Attributes?

Topo & Improvement Codes

No

DTM Feature?

Yes

Is Line?

Yes

Is Breakline?

No

Centerline of dirt or gravel path

CPATH - CL PATH DIRT OR GRAVEL

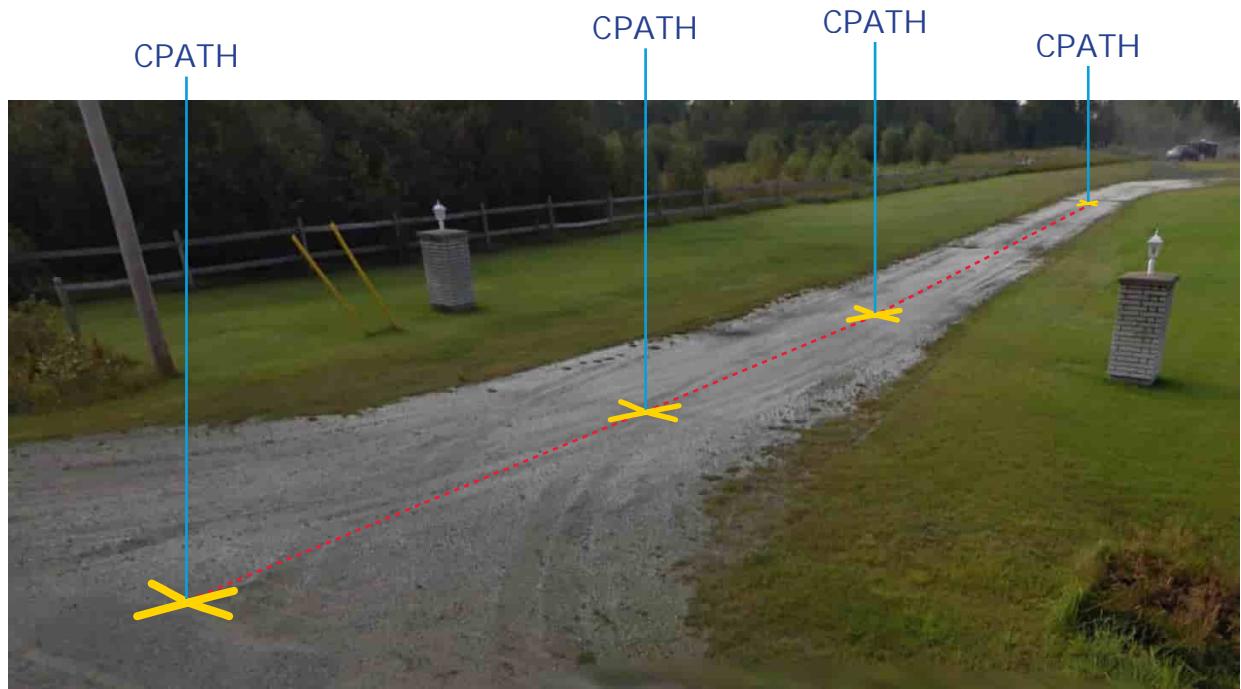


Figure 1 - Image showing preferred way of measuring CL PATH DIRT OR GRAVEL

Category:

Topo & Improvement Codes

Has Attributes?

No

DTM Feature?

Yes

Is Line?

Yes

Is Breakline?

Yes

Rear edge of a curb, opposite the street side

CRB - BACK OF CURB

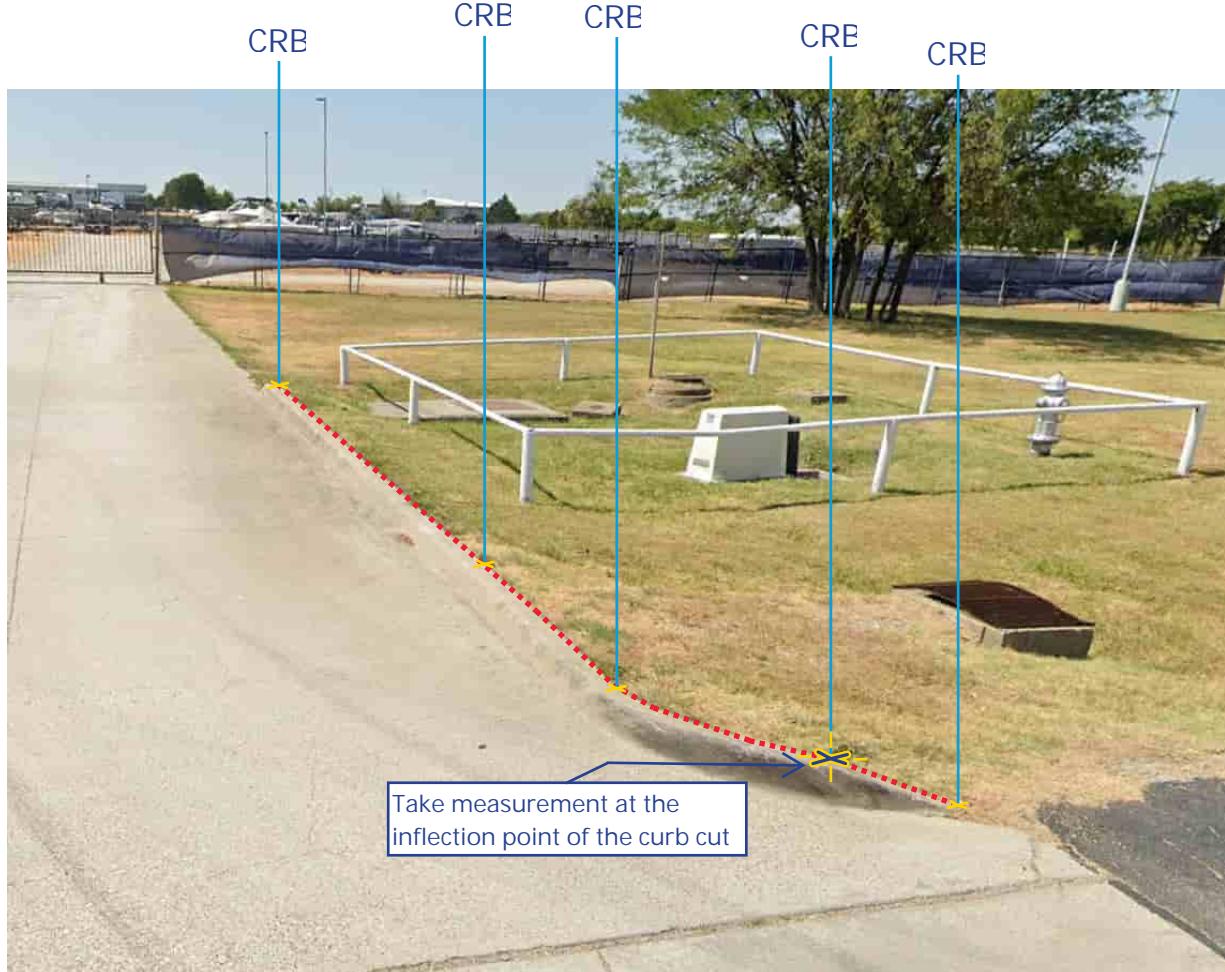


Figure 1 - Image showing preferred way of measuring BACK OF CURB

Category:

Topo & Improvement Codes

Has Attributes?

No

DTM Feature?

Yes

Is Line?

Yes

Is Breakline?

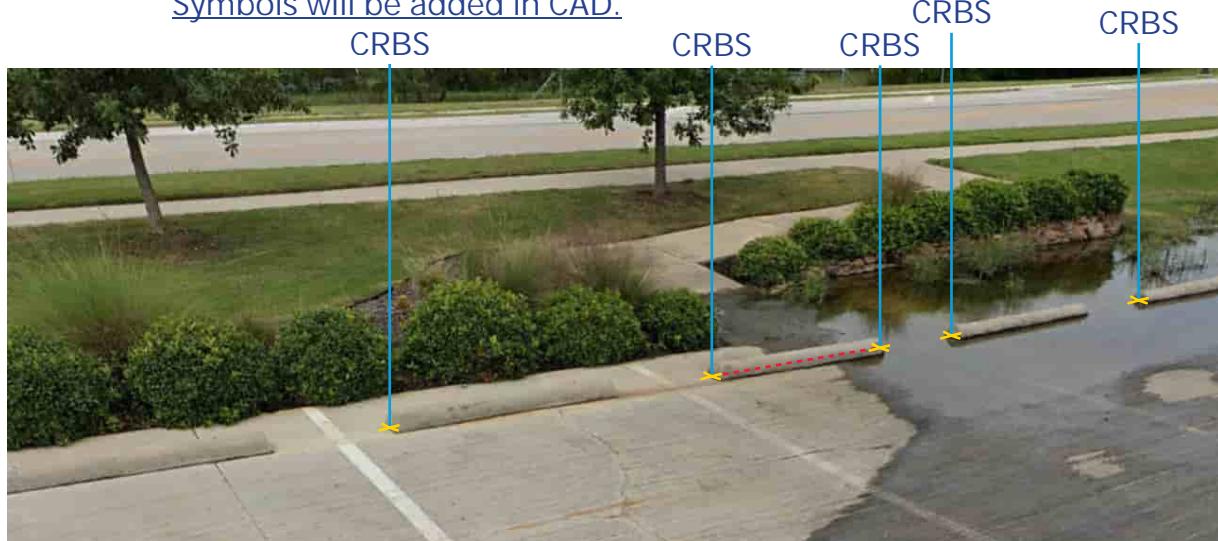
Yes

Concrete barrier for tire to hit and stop at the end of a parking space

CRBS - CURB STOP

Method 1 - Capture one curb stop fully, and for the rest, capture only one side.

Symbols will be added in CAD.



Method 2

capture both ends

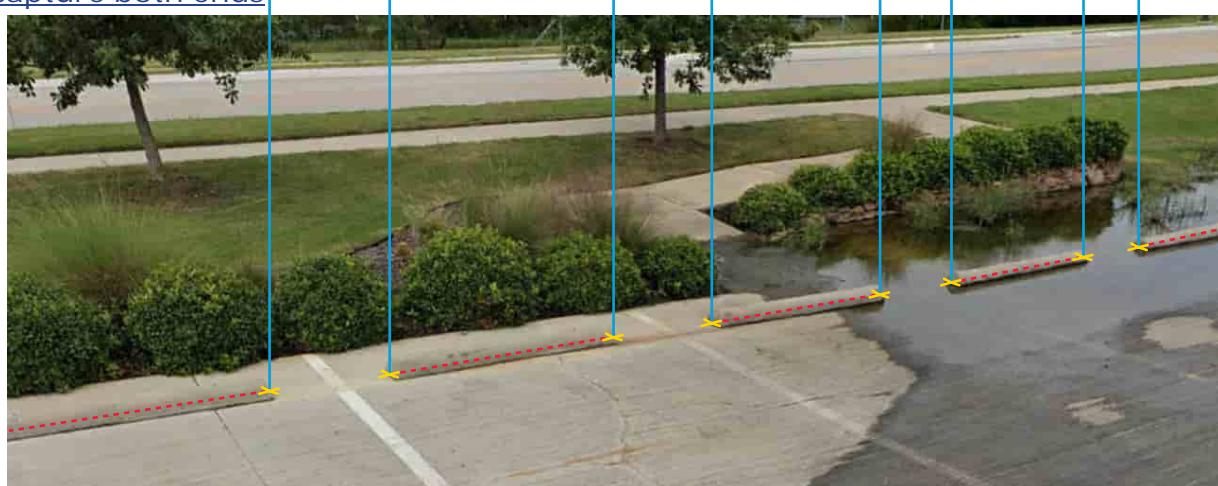


Figure 1 - Image showing preferred way of measuring CURB STOP

**Category:**

Has Attributes?

Topo & Improvement Codes

Yes

DTM Feature?

Yes

Is Line?

Yes

Is Breakline?

No

Outline of concrete steps

CSTEP - OUT LINE ONLY

Image Missing

Will be added.

Typically, EC (edge of concrete) is used instead of this code to capture concrete steps

Figure 1 - Image showing preferred way of measuring OUT LINE ONLY



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Category:

Topo & Improvement Codes

Has Attributes?

Yes

DTM Feature?

Yes

Is Line?

Yes

Is Breakline?

No

Outline of a narrow walkway

CWALK - CATWALK OUTLINE

Image Missing

Will be added.

Figure 1 - Image showing preferred way of measuring CATWALK OUTLINE

Category:

Has Attributes?

Topo & Improvement Codes

Yes

DTM Feature?

Yes

Is Line?

No

Is Breakline?

N/A

Control point for drone mapping

DT - DRONE TARGET CTL

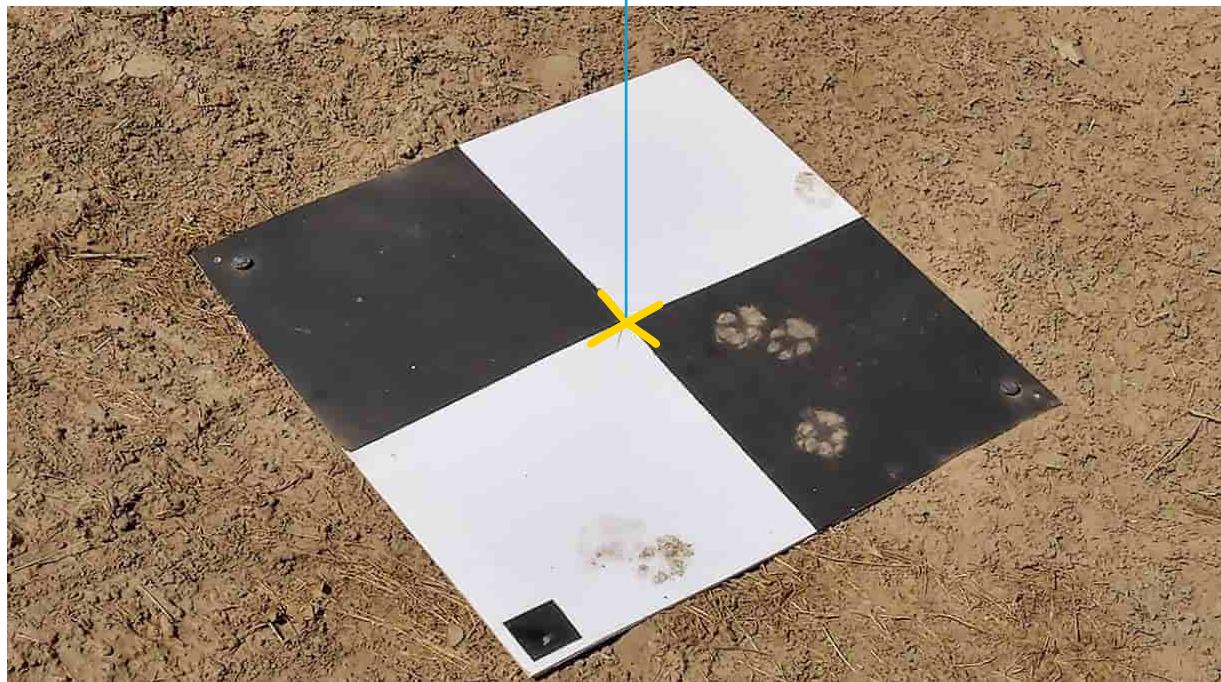


Figure 1 - Image showing preferred way of measuring DRONE TARGET CTL

Category:

Has Attributes?

DTM Feature?

Is Line?

Is Breakline?

Topo & Improvement Codes

No

No

No

N/A

Electrical box point, housing for electrical connections

EBOX - ELEC BOX

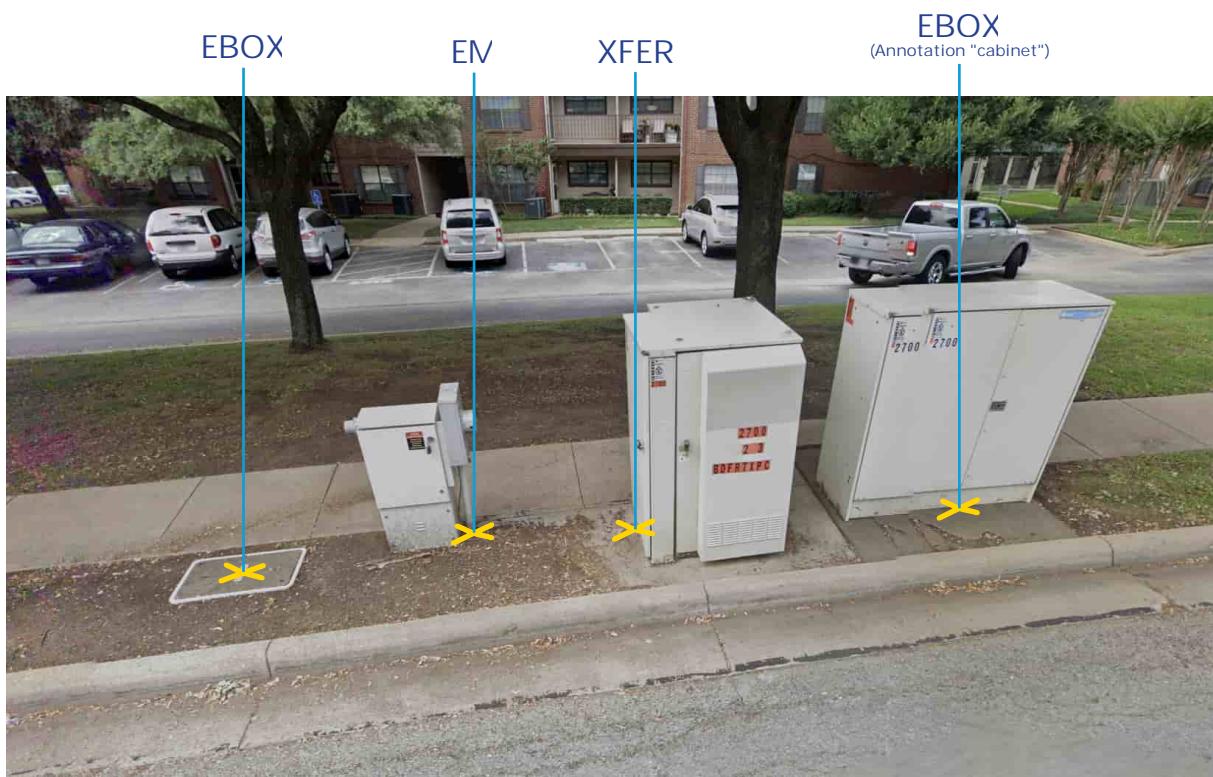


Figure 1 - Image showing preferred way of measuring ELEC BOX



Category:
Has Attributes?
DTM Feature?
Is Line?
Is Breakline?

Topo & Improvement Codes

No
Yes
Yes
No

Electrical box outline

EBXL - EBOX LINE

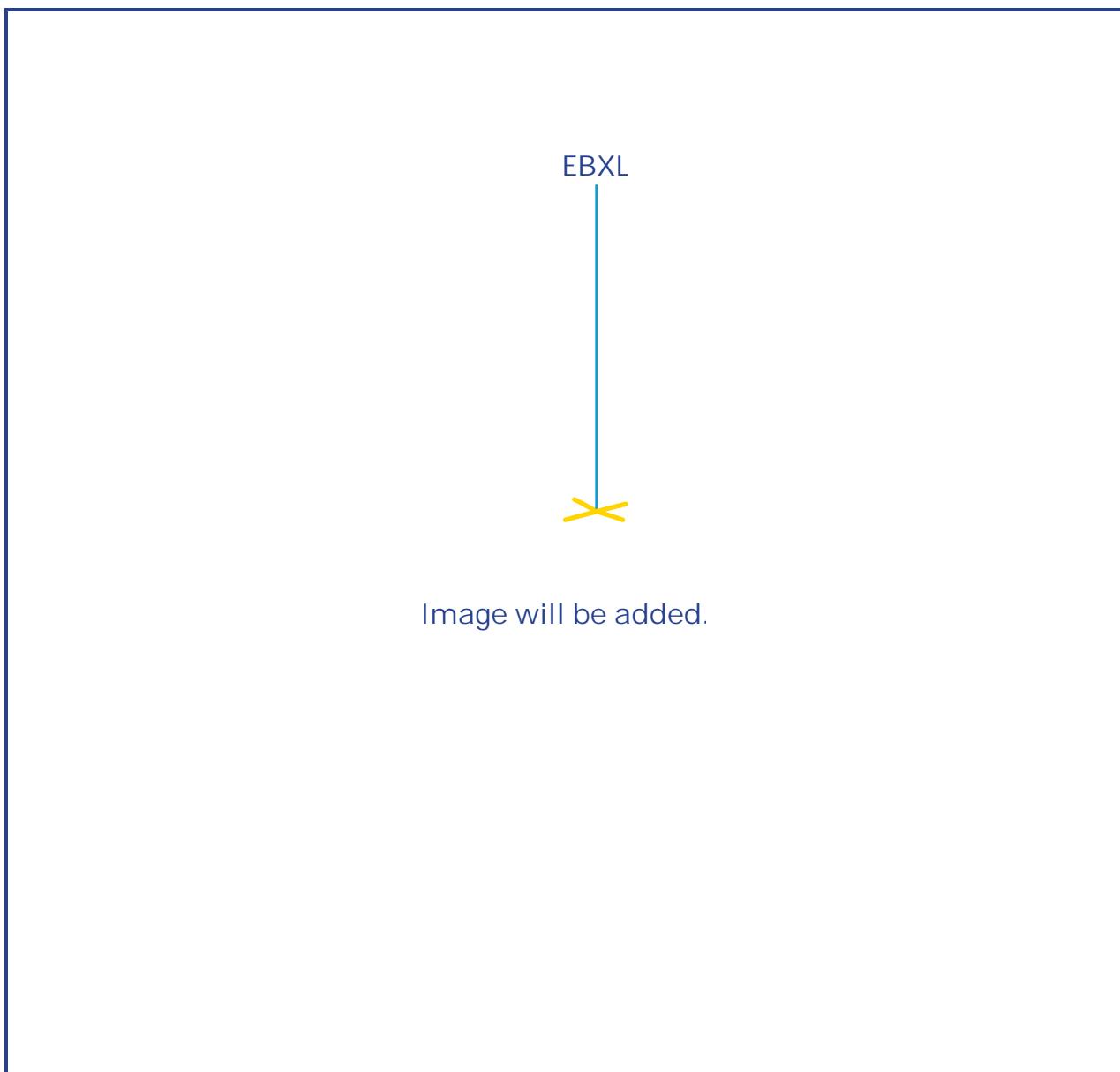


Figure 1 - Image showing preferred way of measuring EBOX LINE

Category:

Topo & Improvement Codes

Has Attributes?

No

DTM Feature?

Yes

Is Line?

Yes

Is Breakline?

Yes

Edge of concrete surface

EC - EDGE CONC

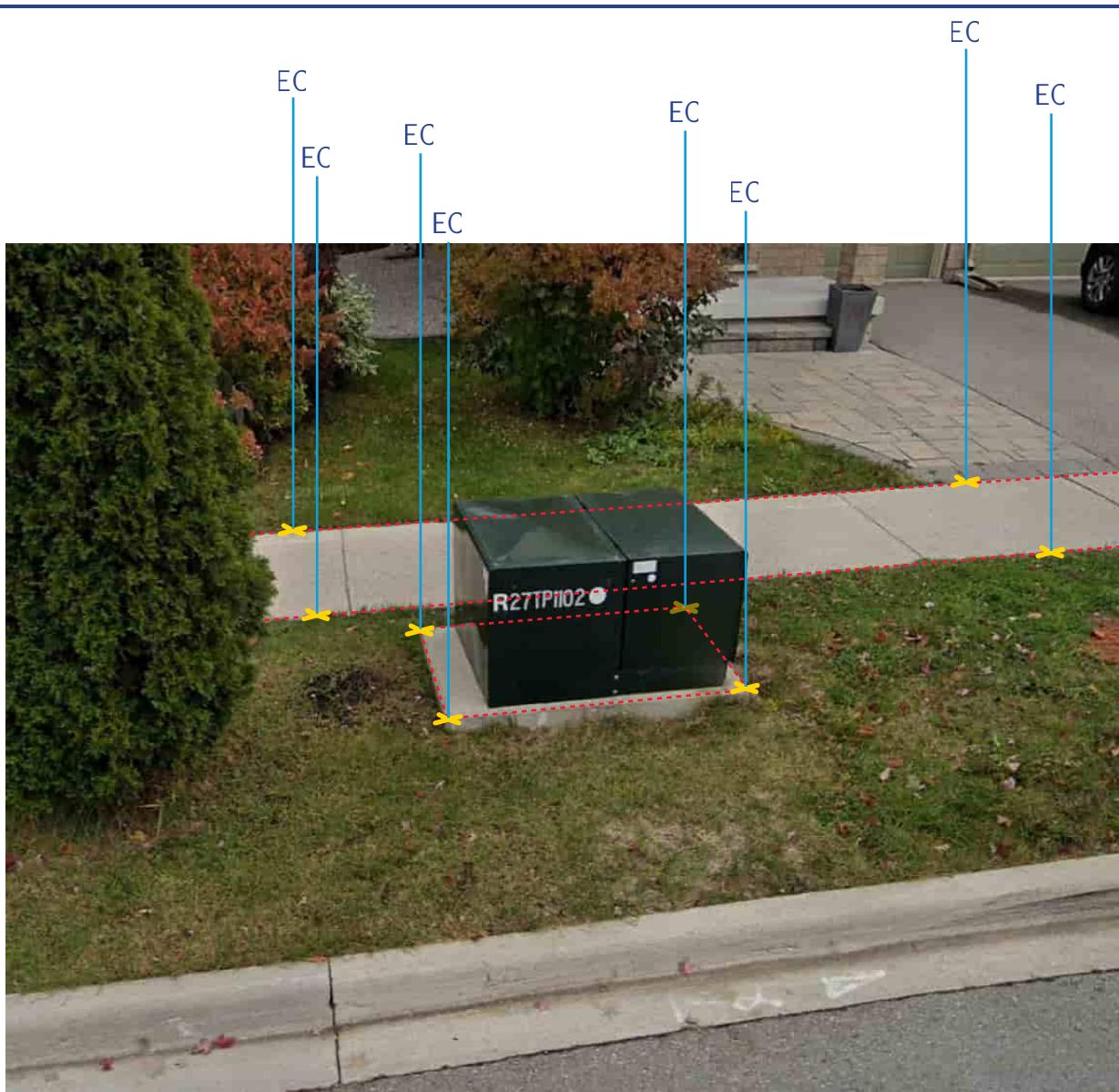


Figure 1 - Image showing preferred way of measuring EDGE CONC

Category:

Has Attributes?

Topo & Improvement Codes

No

DTM Feature?

Yes

Is Line?

Yes

Is Breakline?

Yes

Edge of gravel

EG - EDGE GRAVEL



Figure 1 - Image showing preferred way of measuring EDGE GRAVEL

Category:

Topo & Improvement Codes

Has Attributes?

No

DTM Feature?

No

Is Line?

No

Is Breakline?

N/A

Electricity meter, measures electrical consumption

EM - ELEC METER

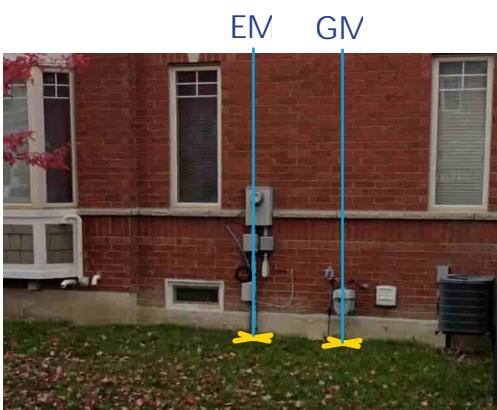
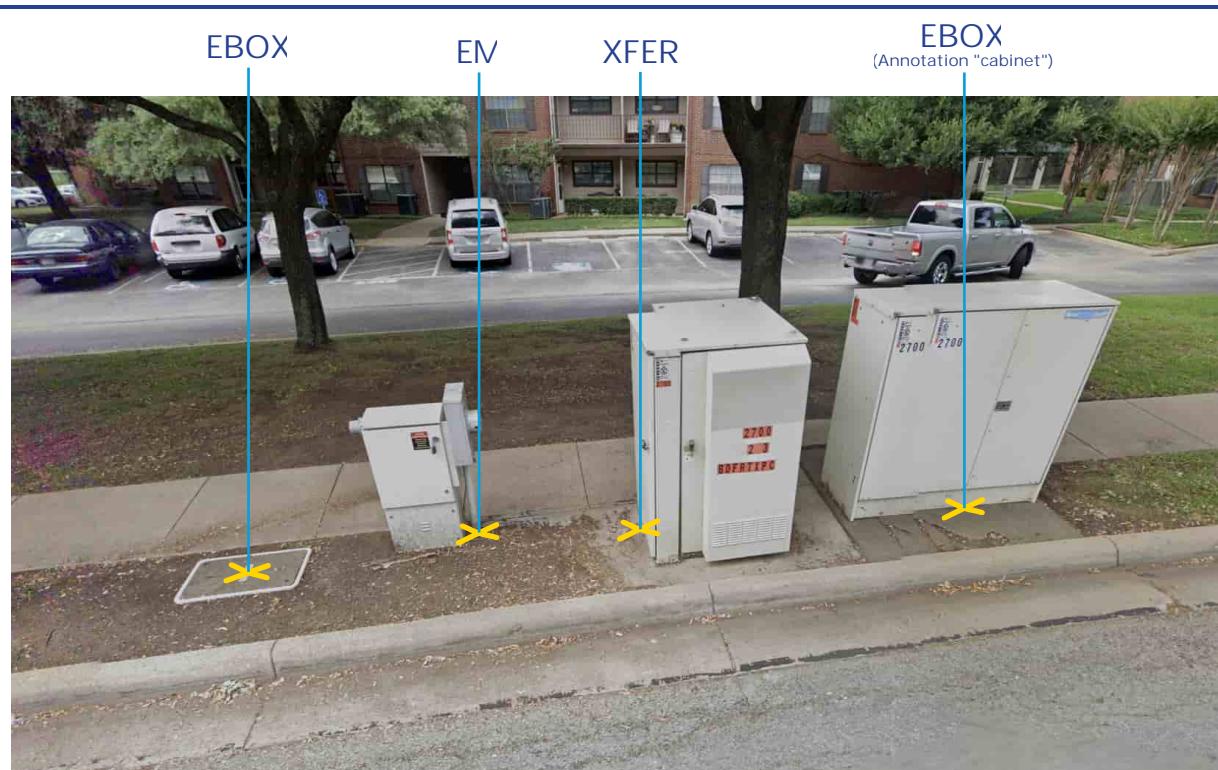


Figure 1 - Image showing preferred way of measuring ELEC METER

Category:

Has Attributes?

DTM Feature?

Is Line?

Is Breakline?

Topo & Improvement Codes

No

No

No

N/A

Electric manhole, access to underground electrical utilities

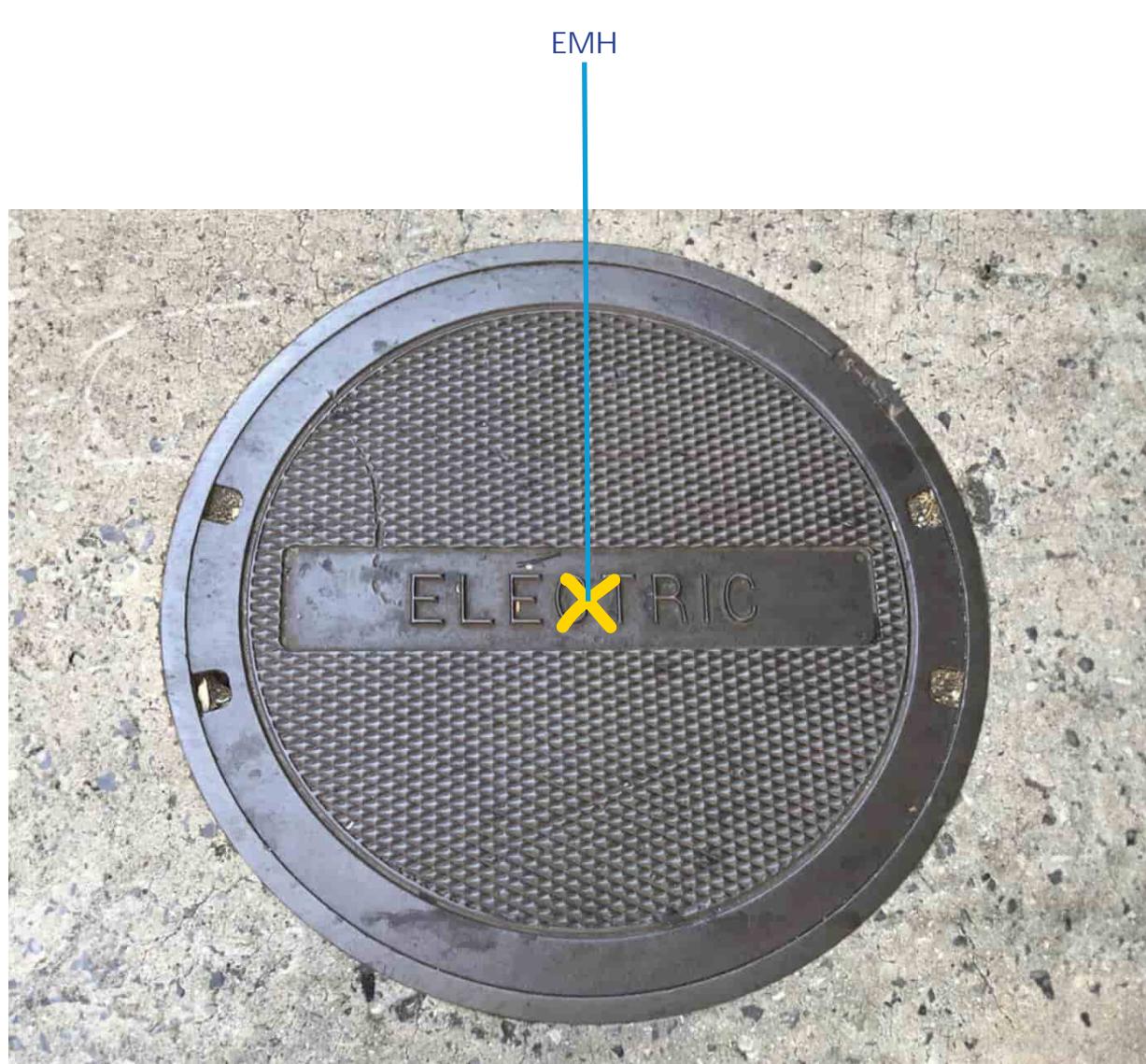
EMH - ELEC MH

Figure 1 - Image showing preferred way of measuring ELEC MH

Category:
Has Attributes?
DTM Feature?
Is Line?
Is Breakline?

Topo & Improvement Codes

No
Yes
Yes
No

Boundary or edge of a wall

EOW - EDGE WALL

EOW is the top edge of the wall. Not always practice to capture this shot. Alternatively, measure wall height (from BTW shot). Also measure wall thickness.

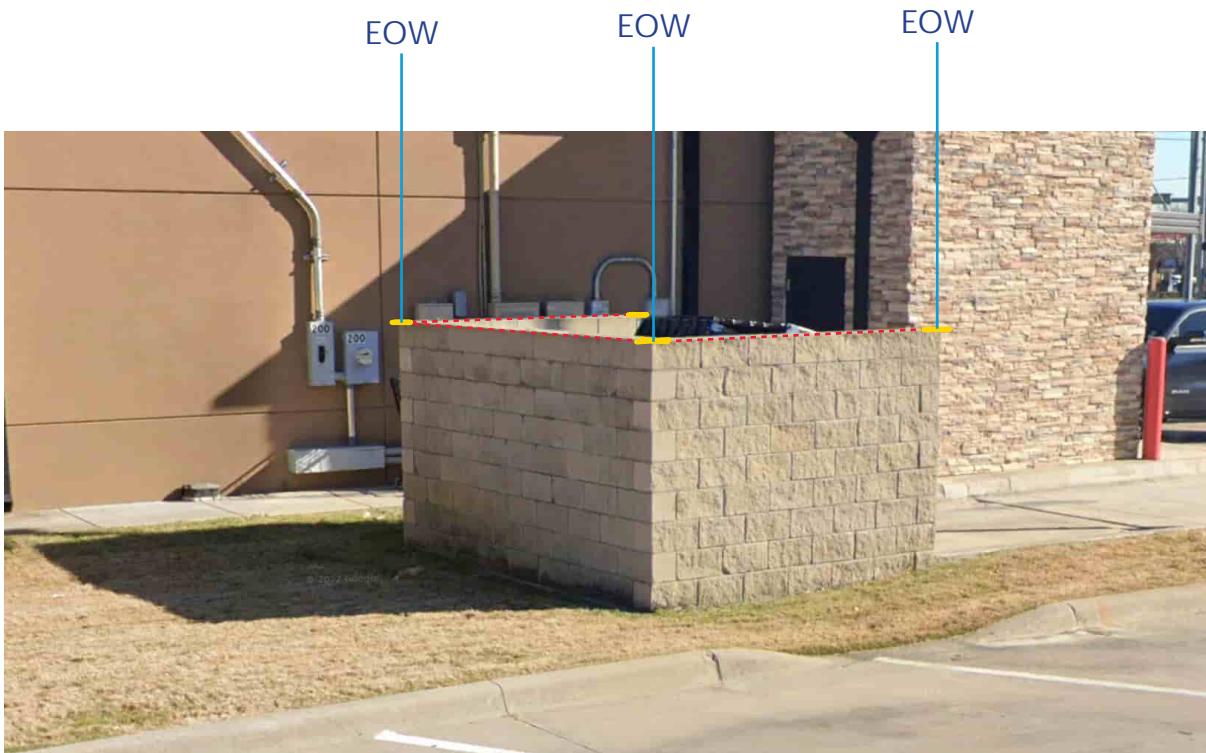


Figure 1 - Image showing preferred way of measuring EDGE WALL

Category:

Topo & Improvement Codes

Has Attributes?

No

DTM Feature?

Yes

Is Line?

Yes

Is Breakline?

Yes

Edge of a paved surface

EP - EDGE PAVEMENT

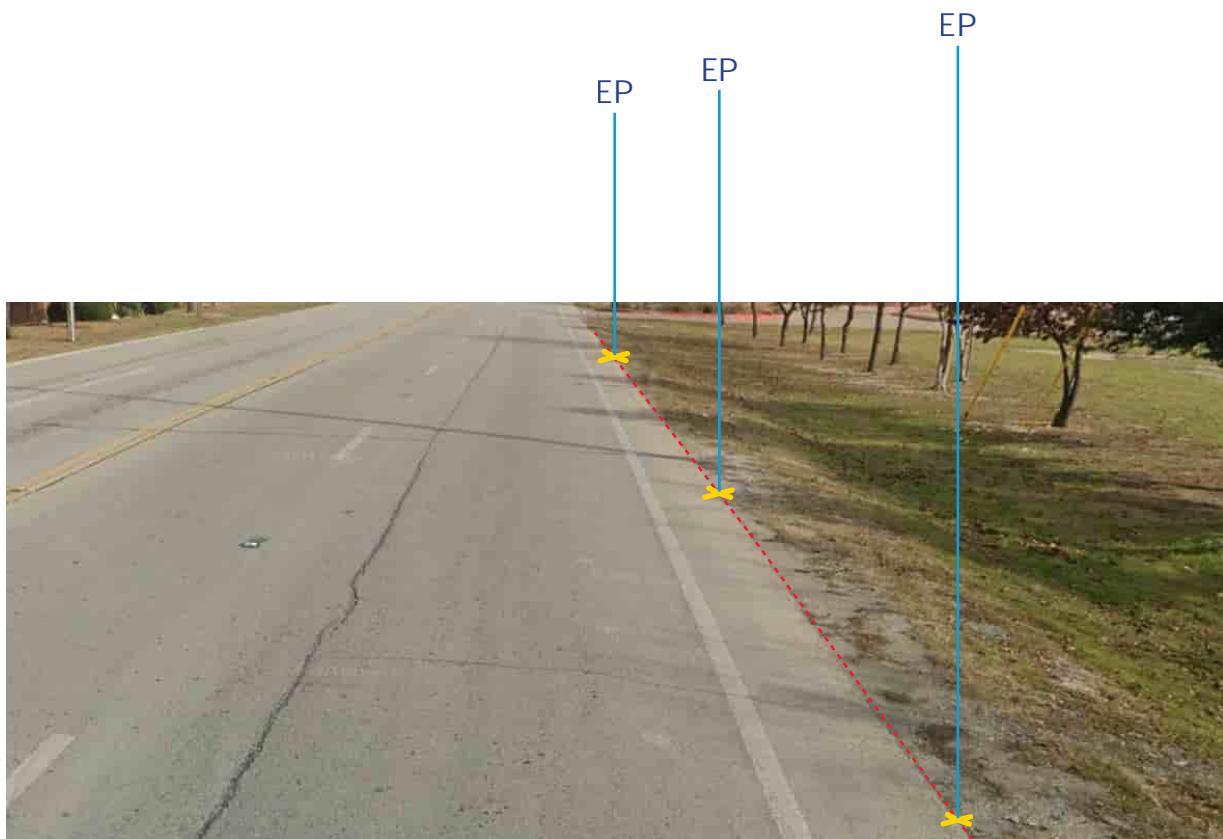


Figure 1 - Image showing preferred way of measuring EDGE PAVEMENT

Category:

Has Attributes?

Topo & Improvement Codes

No

DTM Feature?

Yes

Is Line?

Yes

Is Breakline?

Yes

Asphalt road shoulder, edge of the roadway

EPS - SHOULDER ASPHALT

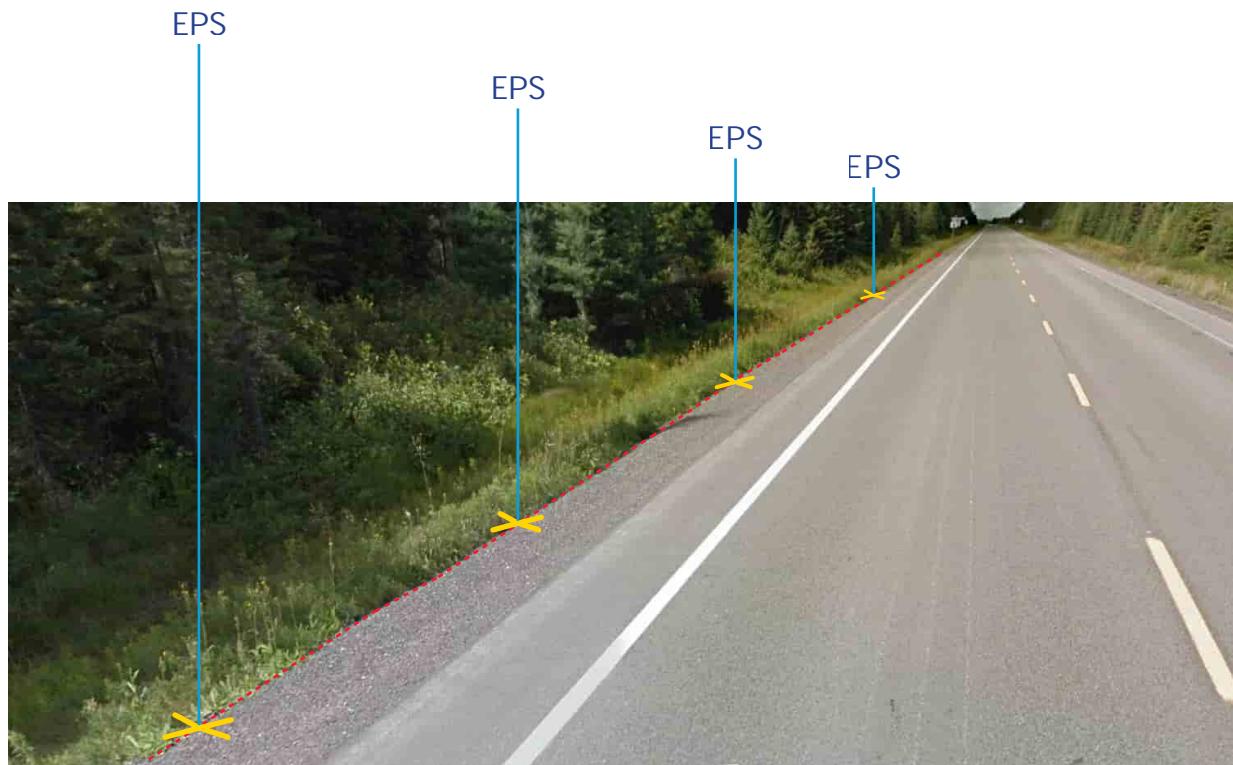


Figure 1 - Image showing preferred way of measuring SHOULDER ASPHALT



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Category:

Topo & Improvement Codes

Has Attributes?

No

DTM Feature?

Yes

Is Line?

Yes

Is Breakline?

No

Edge of a containment tank for waste or spoil

EST - EDGE OF SPOIL TANK

Image Missing

Will be added.

Figure 1 - Image showing preferred way of measuring EDGE OF SPOIL TANK

Category:

Has Attributes?

Topo & Improvement Codes

No

DTM Feature?

Yes

Is Line?

Yes

Is Breakline?

No

Barbed wire, type of fencing wire with sharp edges

FBW - BARB WIRE

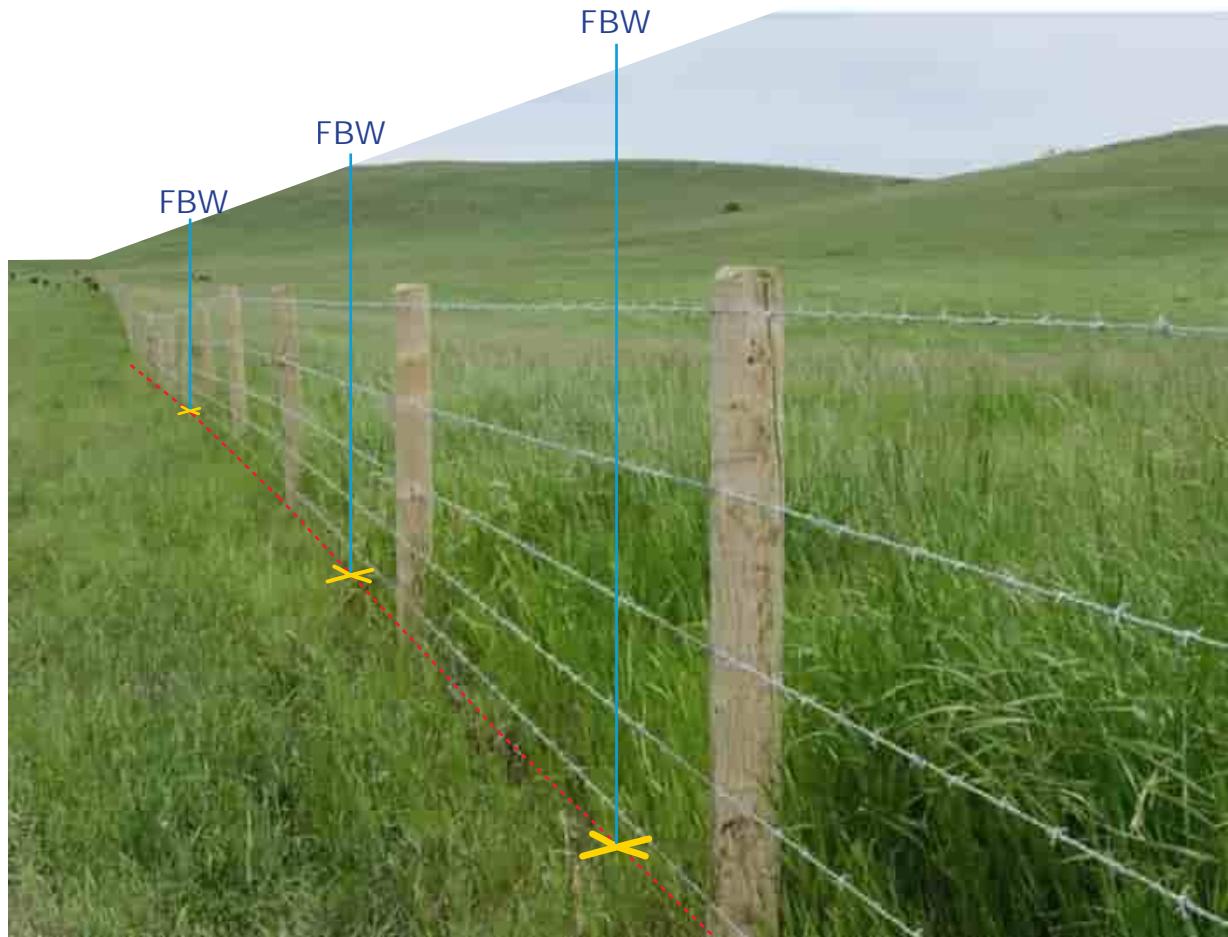


Figure 1 - Image showing preferred way of measuring BARB WIRE

Category:

Has Attributes?

Topo & Improvement Codes

No

DTM Feature?

Yes

Is Line?

Yes

Is Breakline?

No

Chain link fencing, a type of woven fence

FCL - CHAIN LINK



Figure 1 - Image showing preferred way of measuring CHAIN LINK

Category:

Has Attributes?

DTM Feature?

Is Line?

Is Breakline?

Topo & Improvement Codes

No

Yes

No

N/A

Top elevation of a poured concrete floor of a building.

FF - FINISHED FLOOR



Figure 1 - Image showing preferred way of measuring FINISHED FLOOR

Category:

Topo & Improvement Codes

Has Attributes?

No

DTM Feature?

No

Is Line?

No

Is Breakline?

N/A

Hydrant for firefighting, connected to a water source

FH - FIRE HYDRANT

Elevation does not matter

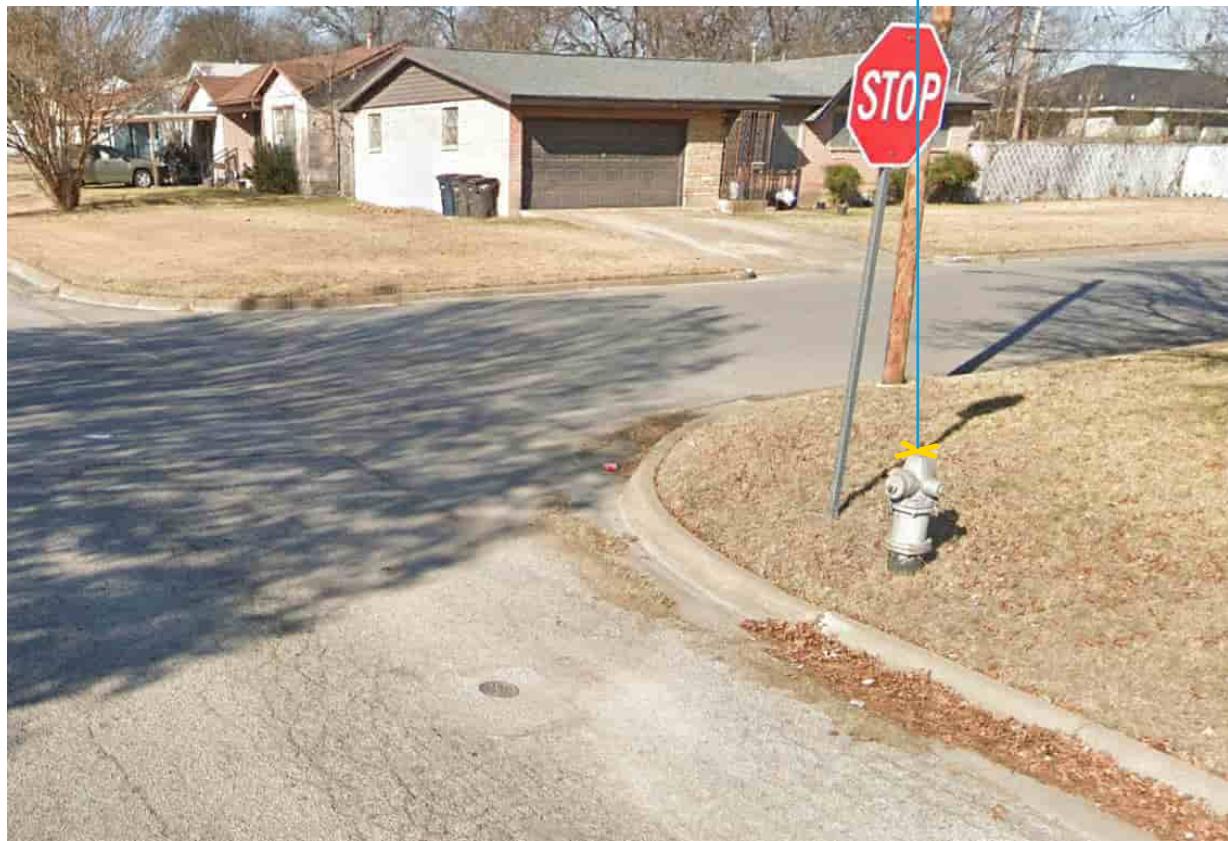


Figure 1 - Image showing preferred way of measuring FIRE HYDRANT

Category:

Topo & Improvement Codes

Has Attributes?

No

DTM Feature?

No

Is Line?

No

Is Breakline?

N/A

Fire hydrant connected to a building

FHB - BUILDING FH

Elevation does not matter.



Figure 1 - Image showing preferred way of measuring BUILDING FH

Category:

Has Attributes?

Topo & Improvement Codes

No

DTM Feature?

Yes

Is Line?

No

Is Breakline?

N/A

Directional line showing the path of a pipeline

FL - FLOW LINE

Used to capture direction of pipe or culvert.

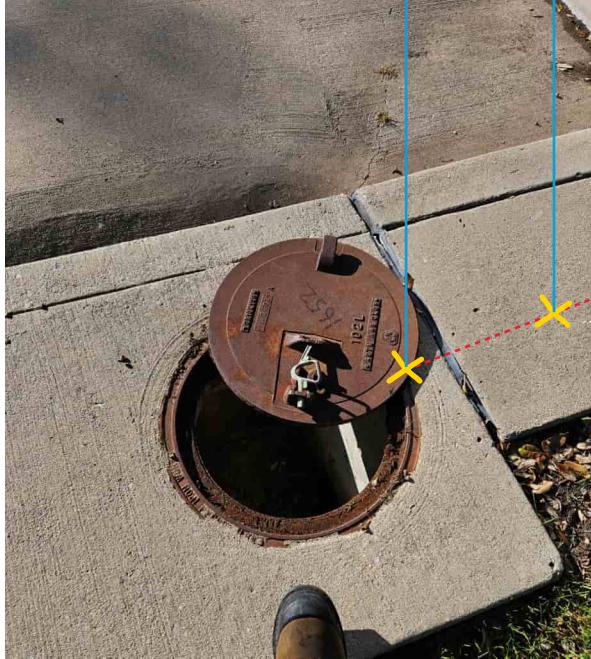


Figure 1 - Image showing preferred way of measuring FLOW LINE

Category:

Has Attributes?

Topo & Improvement Codes

No

DTM Feature?

Yes

Is Line?

No

Is Breakline?

N/A

Pole for displaying flags

FLAG - FLAG POLE

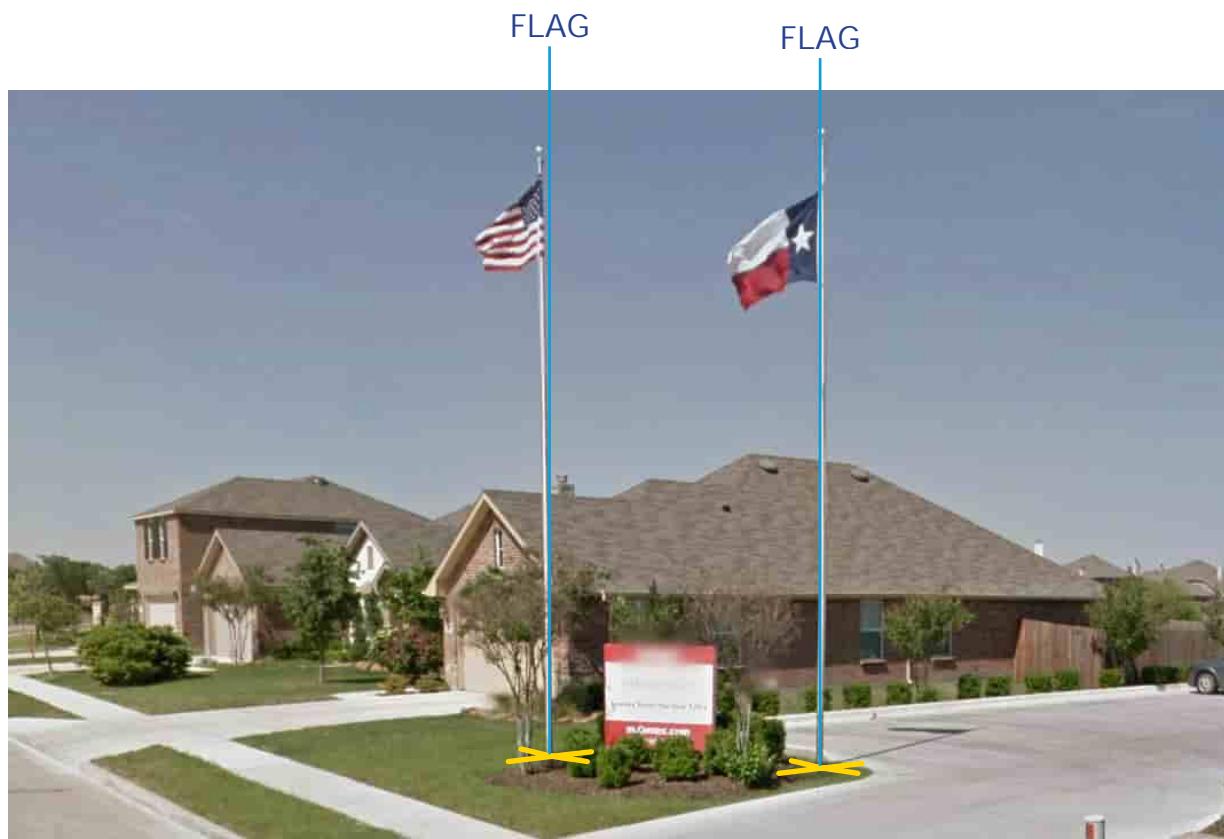


Figure 1 - Image showing preferred way of measuring FLAG POLE

Category:

Has Attributes?

Topo & Improvement Codes

No

DTM Feature?

Yes

Is Line?

No

Is Breakline?

N/A

High-intensity light for illumination over large areas

FLT - FLOOD LIGHT

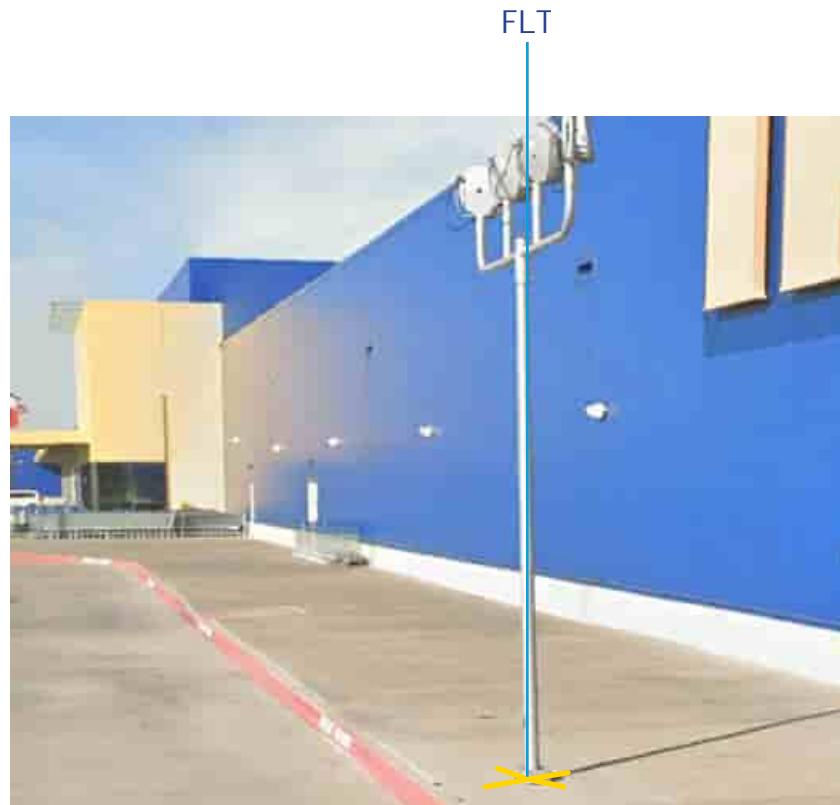


Figure 1 - Image showing preferred way of measuring FLOOD LIGHT

Category:

Topo & Improvement Codes

Has Attributes?

No

DTM Feature?

Yes

Is Line?

Yes

Is Breakline?

No

Decorative fence

FOR - ORNAMENTAL

Method 1 - Stop fence at gate, double code gate.



Method 2 - Capture fence through gate. Overlay gate line on top.

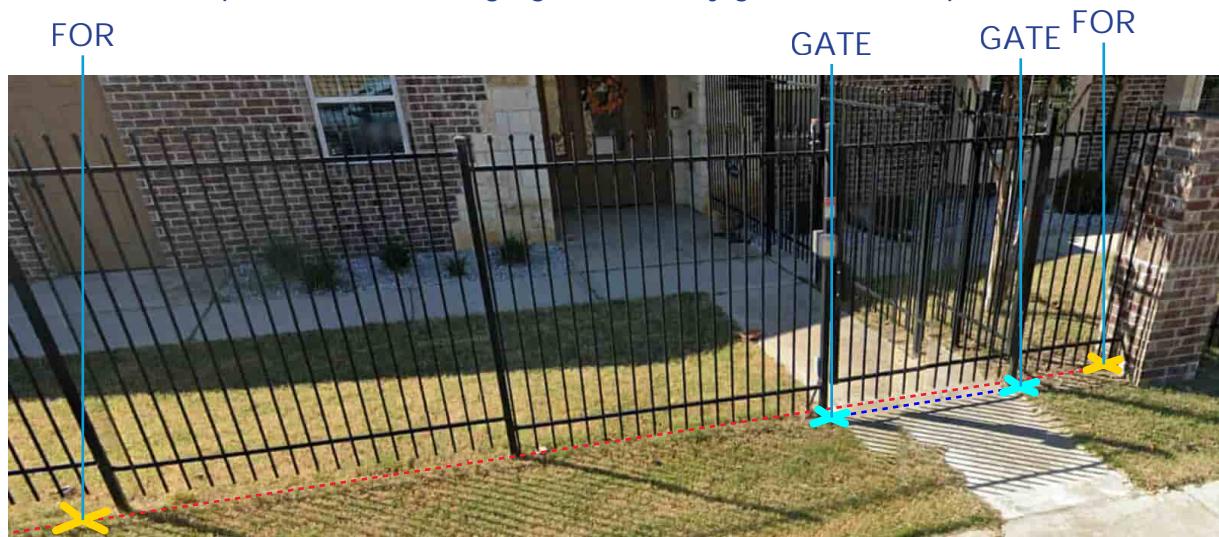


Figure 1 - Image showing preferred way of measuring ORNAMENTAL

Category:

Has Attributes?

DTM Feature?

Is Line?

Is Breakline?

Topo & Improvement Codes

No

Yes

Yes

No

Fence constructed from stones or rocks

FRW - ROCK FENCE

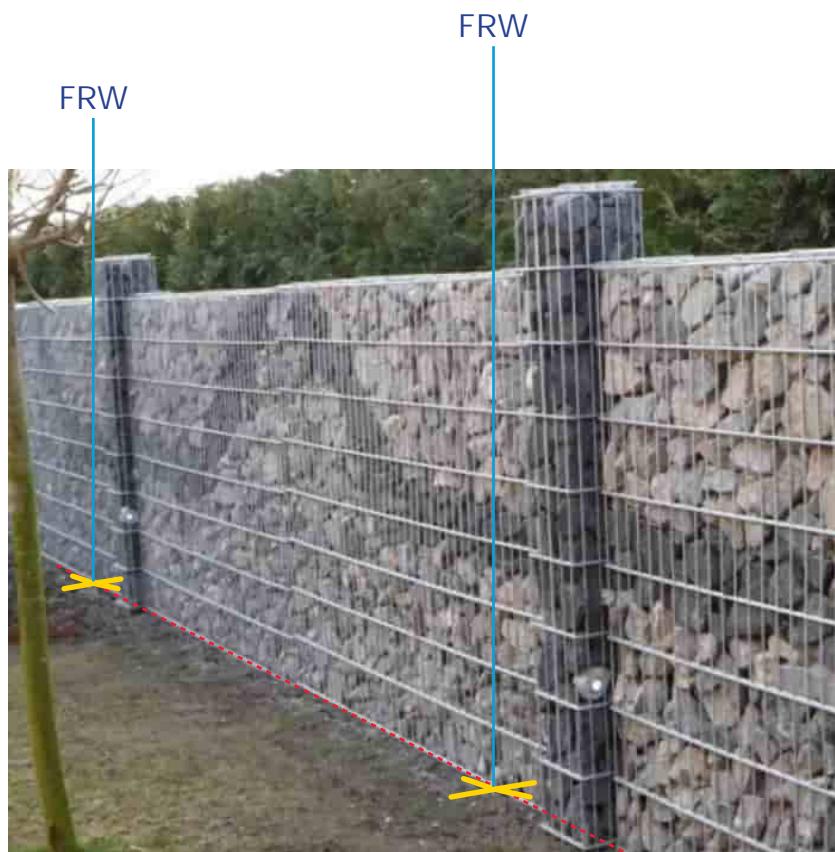


Figure 1 - Image showing preferred way of measuring ROCK FENCE

Category:

Has Attributes?

Topo & Improvement Codes

No

DTM Feature?

Yes

Is Line?

Yes

Is Breakline?

No

Fence made of wood

FWD - WOOD FENCE



Figure 1 - Image showing preferred way of measuring WOOD FENCE

Category:

Has Attributes?

DTM Feature?

Is Line?

Is Breakline?

Topo & Improvement Codes

No

No

No

N/A

Opening in a fence or wall for entry or exit

GATE - GATE

Double code with connecting fence shot, or run over-top of continuous fence line running through the gate.



Figure 1 - Image showing preferred way of measuring GATE

Category:

Topo & Improvement Codes

Has Attributes?

No

DTM Feature?

Yes

Is Line?

Yes

Is Breakline?

Yes

Sharp break in surface, like a fold in a sheet of paper

GB - GRADE BREAK

Used as a fold line to capture abrupt slope changes on the ground.
If the ground surface was a sheet of paper, the grade break is a fold.

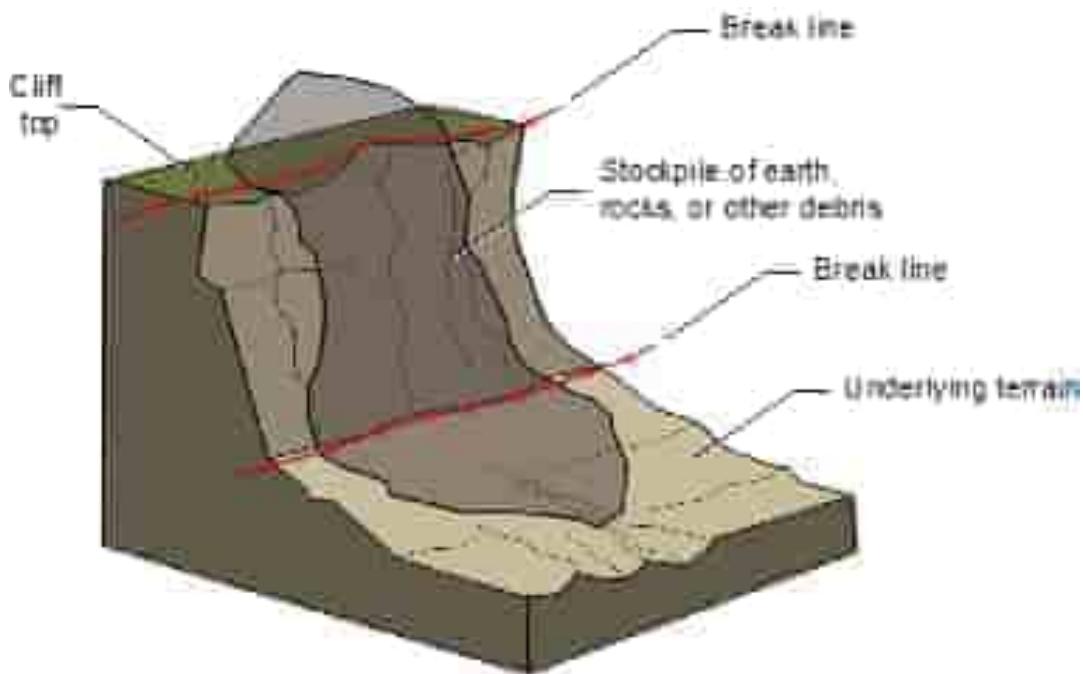


Figure 1 - Image showing preferred way of measuring GRADE BREAK

Category:

Has Attributes?

Topo & Improvement Codes

No

DTM Feature?

No

Is Line?

Yes

Is Breakline?

No

Storm drain with a grate

GI - GRATE INLET

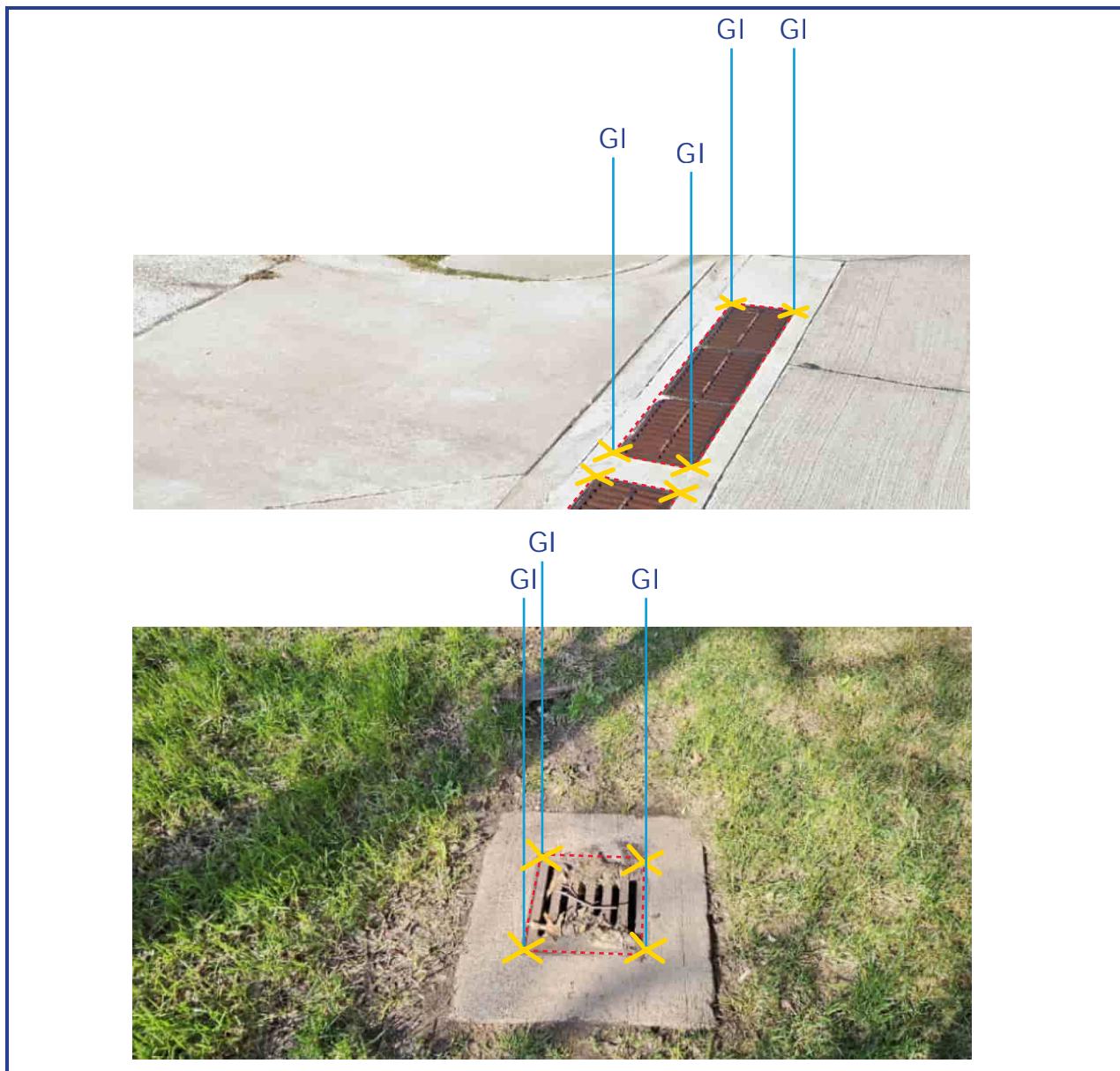


Figure 1 - Image showing preferred way of measuring GRATE INLET

Category:

Has Attributes?

Topo & Improvement Codes

No

DTM Feature?

Yes

Is Line?

No

Is Breakline?

N/A

Device measuring gas consumption

GM - GAS METER

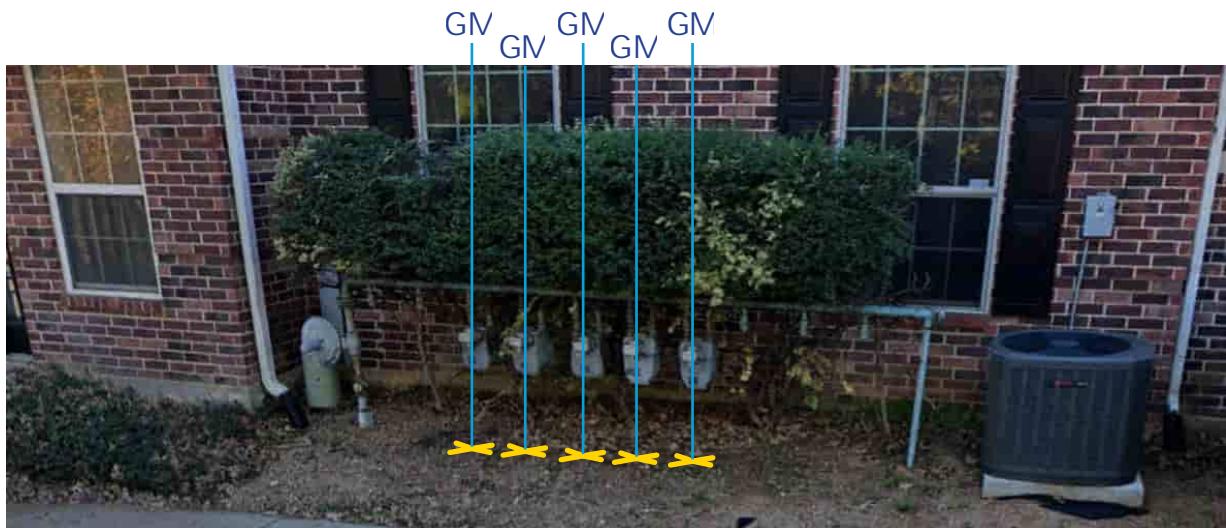
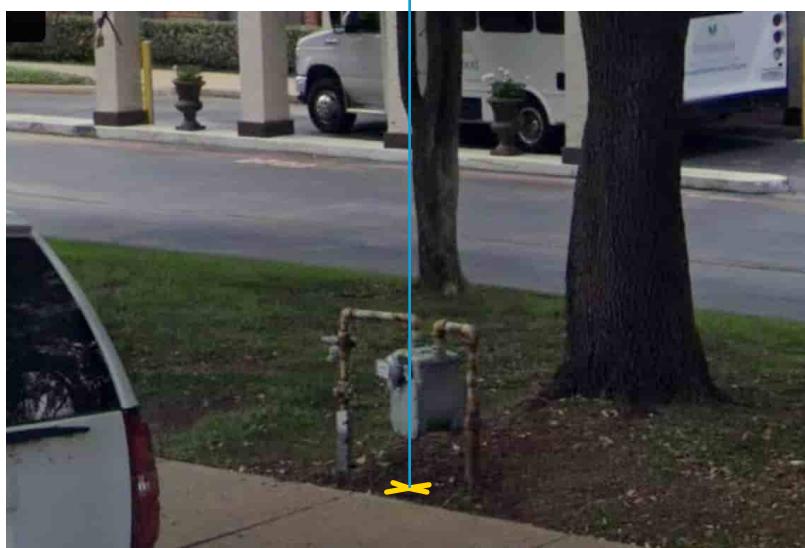


Figure 1 - Image showing preferred way of measuring GAS METER

Category:

Has Attributes?

Topo & Improvement Codes

Yes

DTM Feature?

Yes

Is Line?

No

Is Breakline?

N/A

Posts used to construct guard rails

GP - GUARD POST

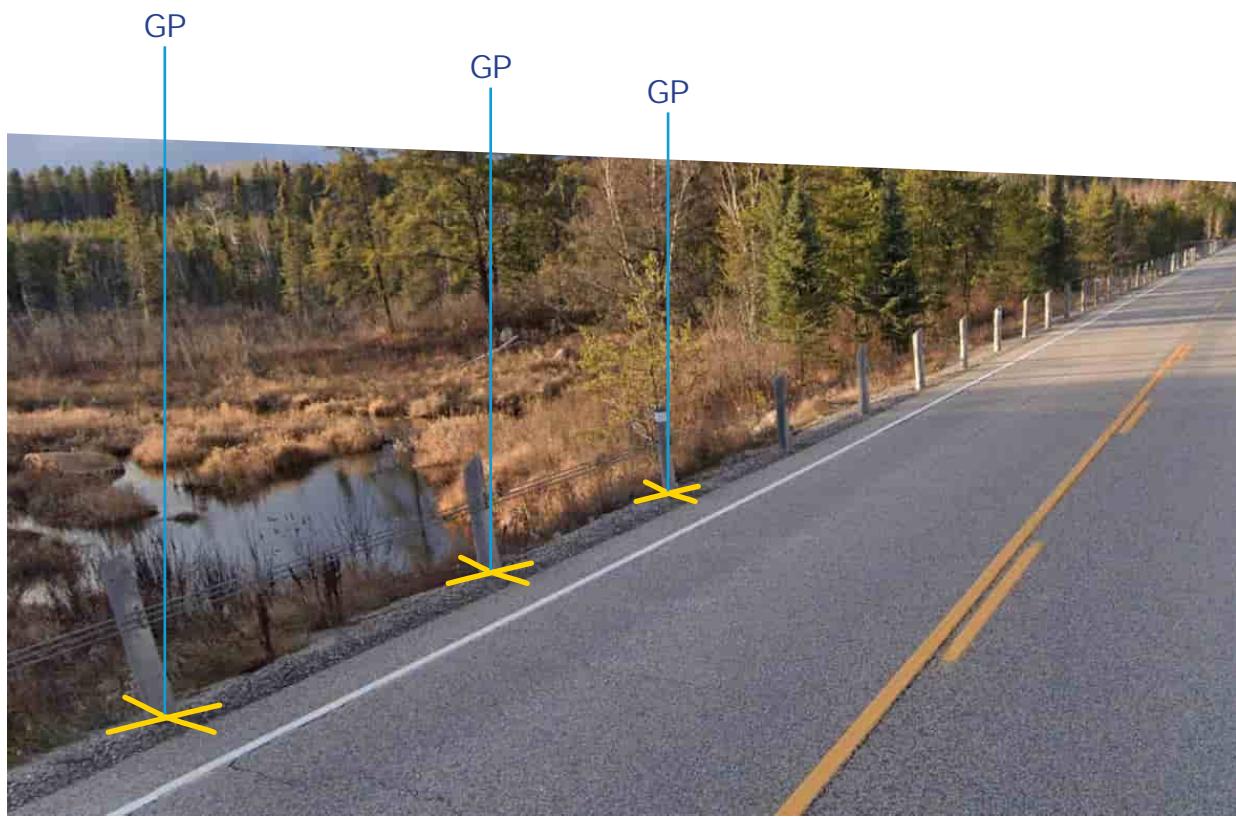


Figure 1 - Image showing preferred way of measuring GUARD POST

Category:

Topo & Improvement Codes

Has Attributes?

No

DTM Feature?

Yes

Is Line?

Yes

Is Breakline?

No

Barrier for safety along roads

GR - GAURD RAIL



Figure 1 - Image showing preferred way of measuring GAURD RAIL

Category:

Has Attributes?

Topo & Improvement Codes

No

DTM Feature?

Yes

Is Line?

Yes

Is Breakline?

Yes

Bottom edge of a concrete curb

GUT - GUTTER

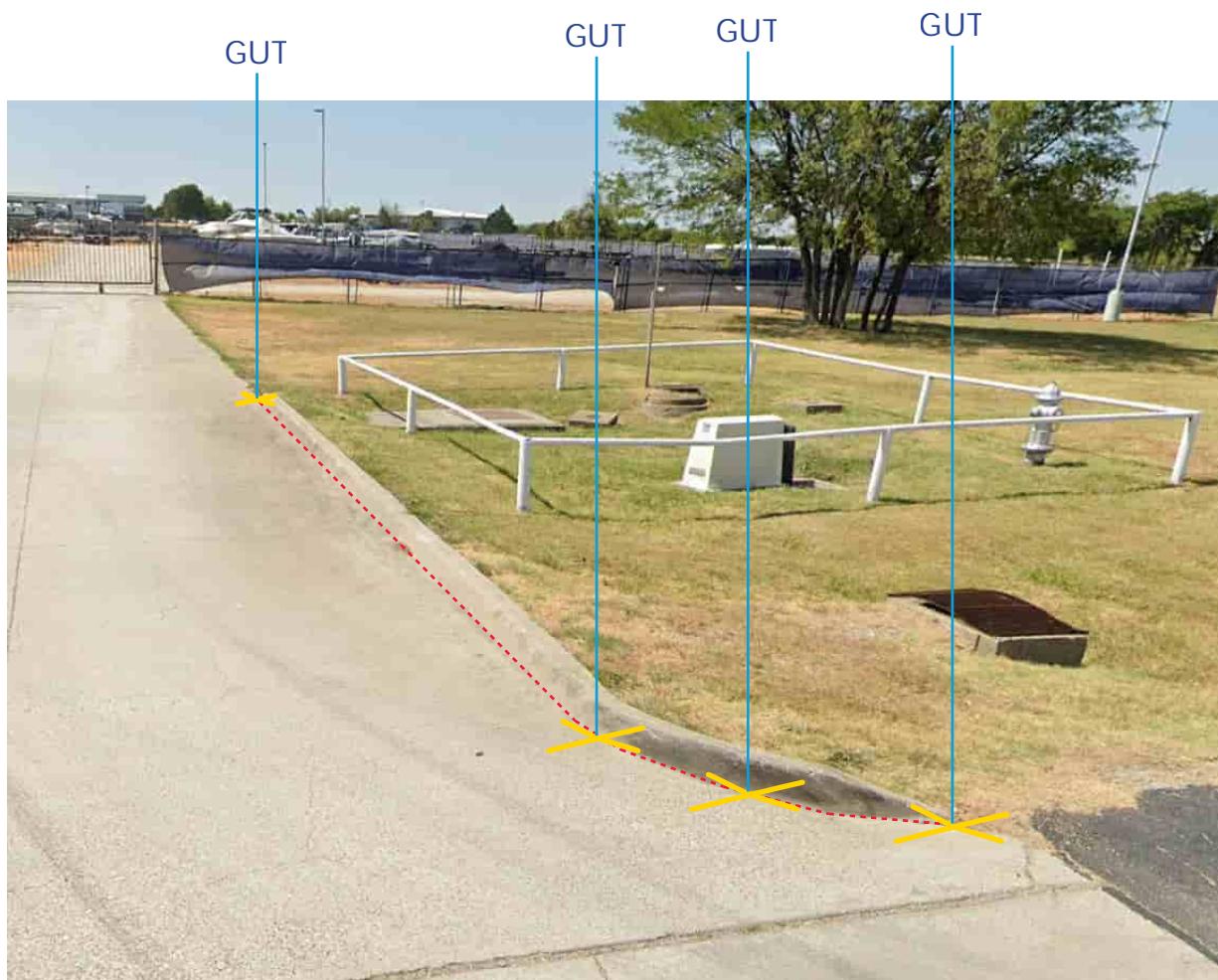


Figure 1 - Image showing preferred way of measuring GUTTER

Category:

Has Attributes?

Topo & Improvement Codes

Yes

DTM Feature?

No

Is Line?

No

Is Breakline?

N/A

Cable used to stabilize structures like poles

GUY - GUY WIRE

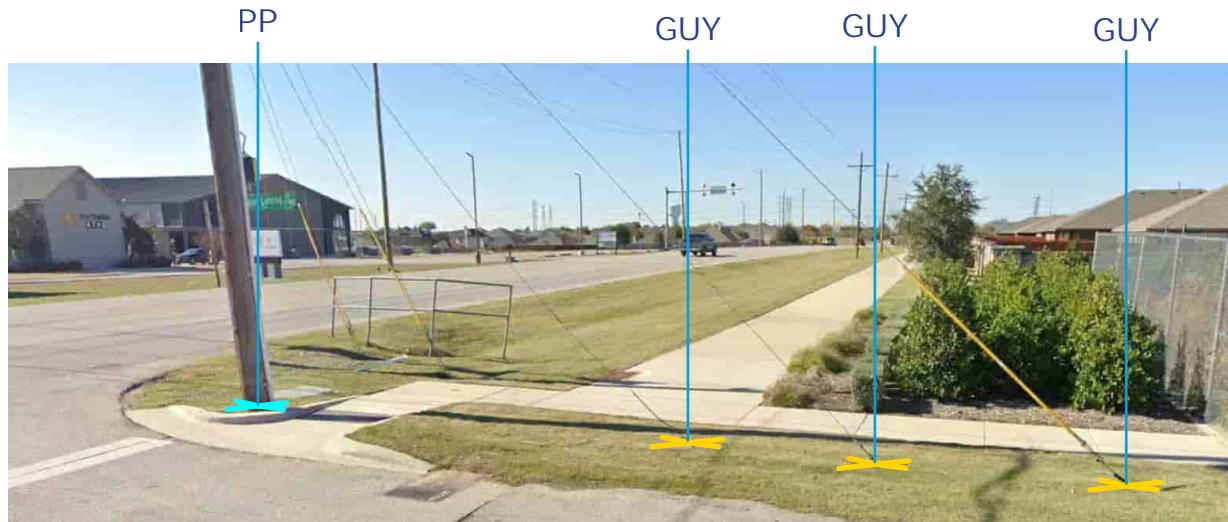
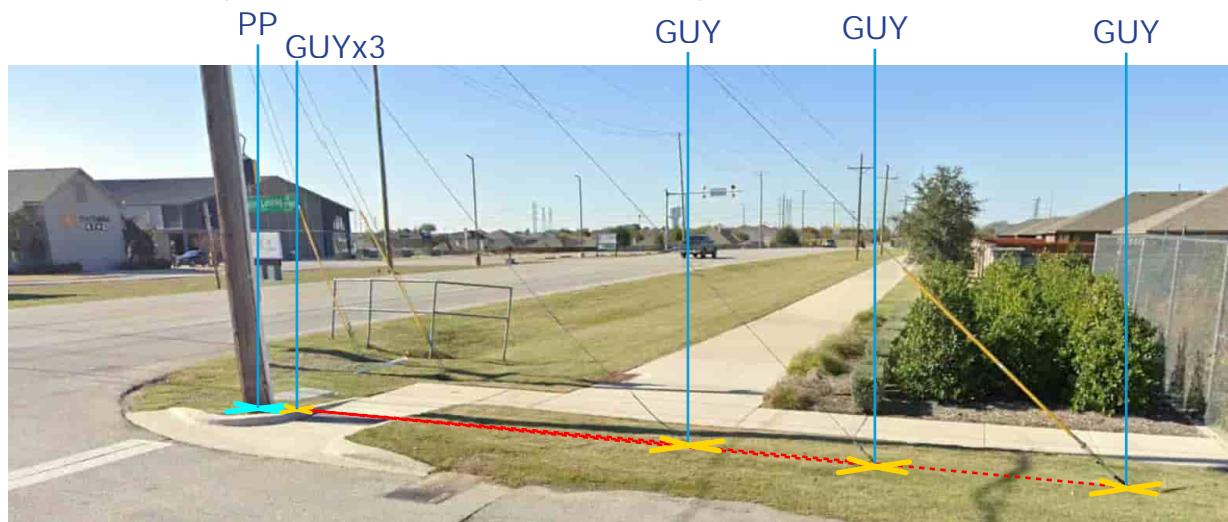
Method 2 - Put the PP point number in the annotation of the GUY measurementsMethod 2 - Capture GUY lines from anchor to pole.

Figure 1 - Image showing preferred way of measuring GUY WIRE



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Category:

Topo & Improvement Codes

Has Attributes?

No

DTM Feature?

No

Is Line?

No

Is Breakline?

N/A

Valve to control gas flow in a pipeline

GV - GAS VALVE

Image Missing

Yellow valve to control flow of gas.

Figure 1 - Image showing preferred way of measuring GAS VALVE

**Category:**

Has Attributes?

Topo & Improvement Codes

No

DTM Feature?

Yes

Is Line?

No

Is Breakline?

N/A

Valve that opens by lifting a gate out of the path of the fluid

GWV - GATE VALVE

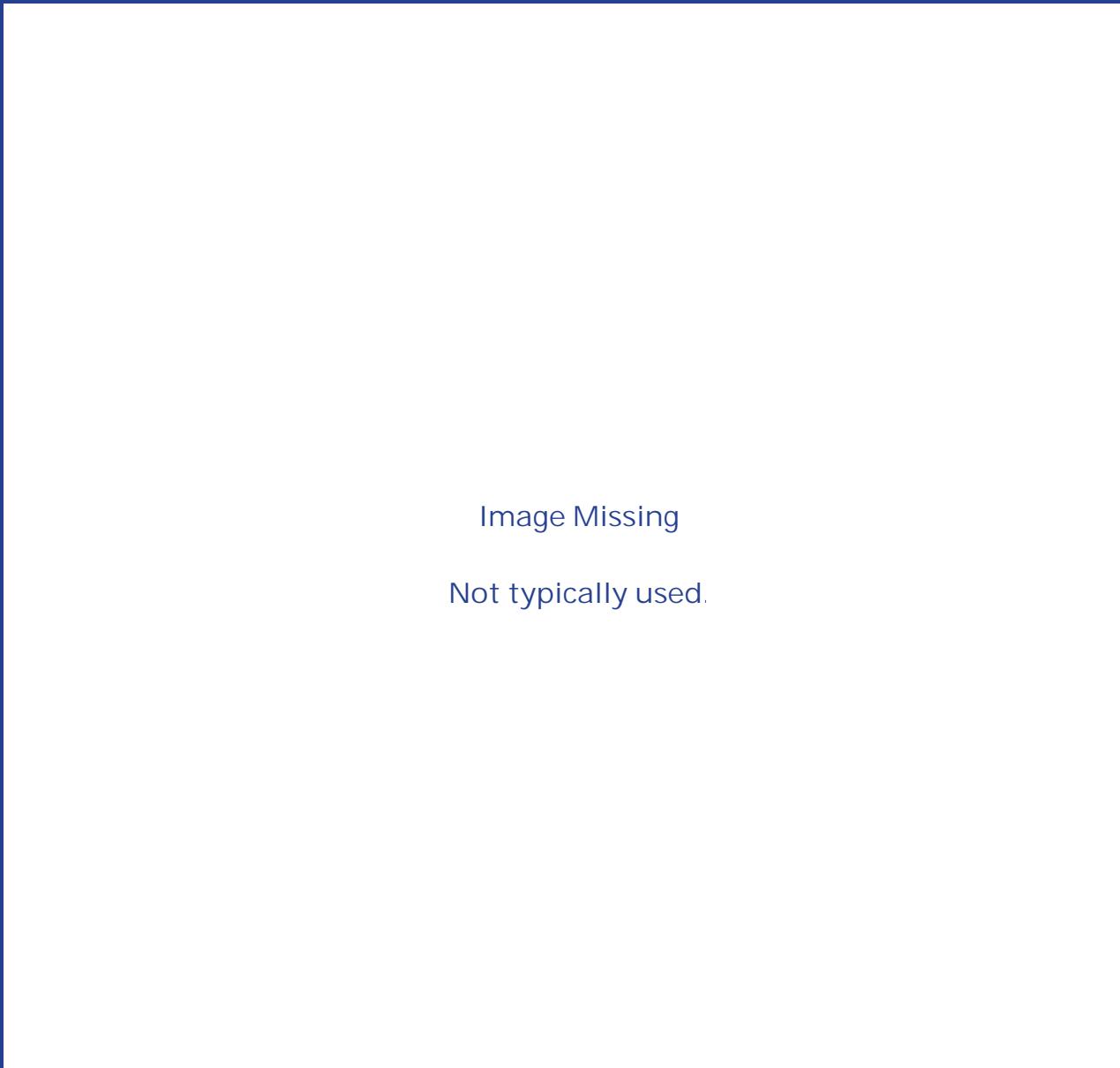

Image Missing**Not typically used.**

Figure 1 - Image showing preferred way of measuring GATE VALVE

Category:

Has Attributes?

Topo & Improvement Codes

No

DTM Feature?

Yes

Is Line?

Yes

Is Breakline?

No

Slope designed for wheelchair access

HCR - WHEEL CHAIR RAMP

Capture sufficient detail to describe slope and elevation of ramp accurately. This may be important for ADA purposes.

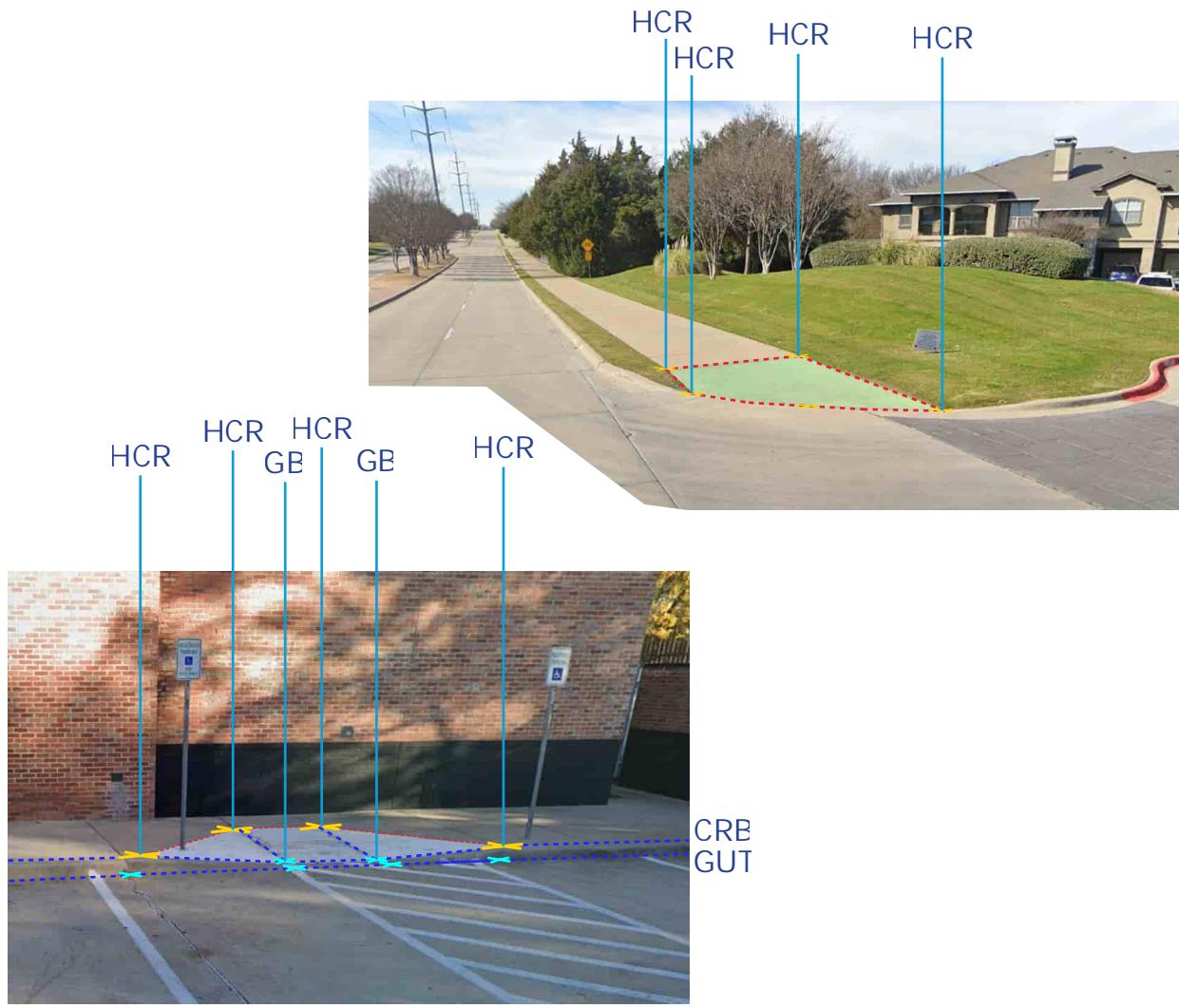


Figure 1 - Image showing preferred way of measuring WHEEL CHAIR RAMP

Category:

Has Attributes?

DTM Feature?

Is Line?

Is Breakline?

Topo & Improvement Codes

No

Yes

Yes

Yes

Structural feature at the outlet of a drainage pipe

HDW - HEADWALL

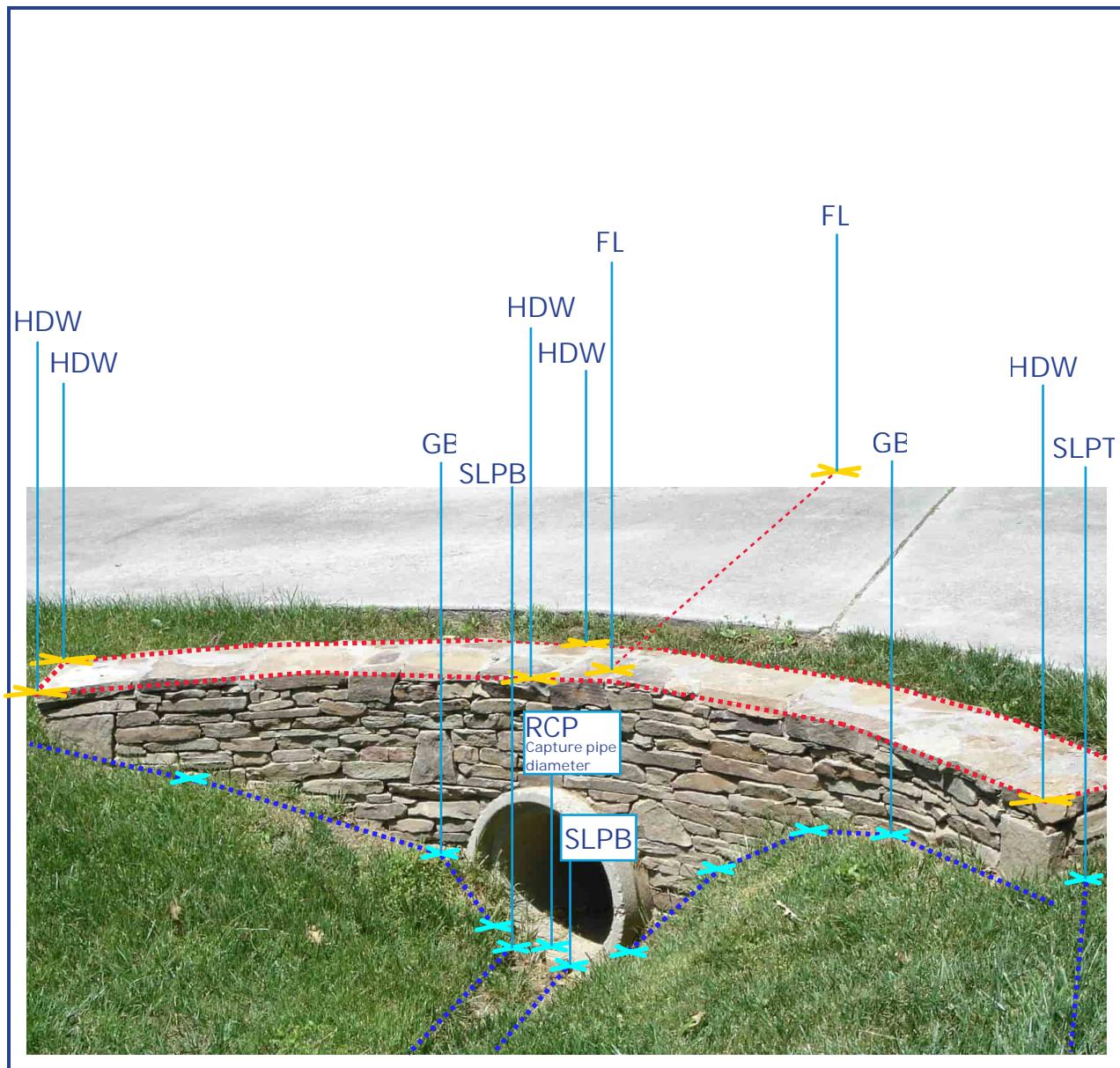


Figure 1 - Image showing preferred way of measuring HEADWALL

Category:

Has Attributes?

Topo & Improvement Codes

No

DTM Feature?

No

Is Line?

Yes

Is Breakline?

No

Railing to provide support or safety

HR - HAND RAIL

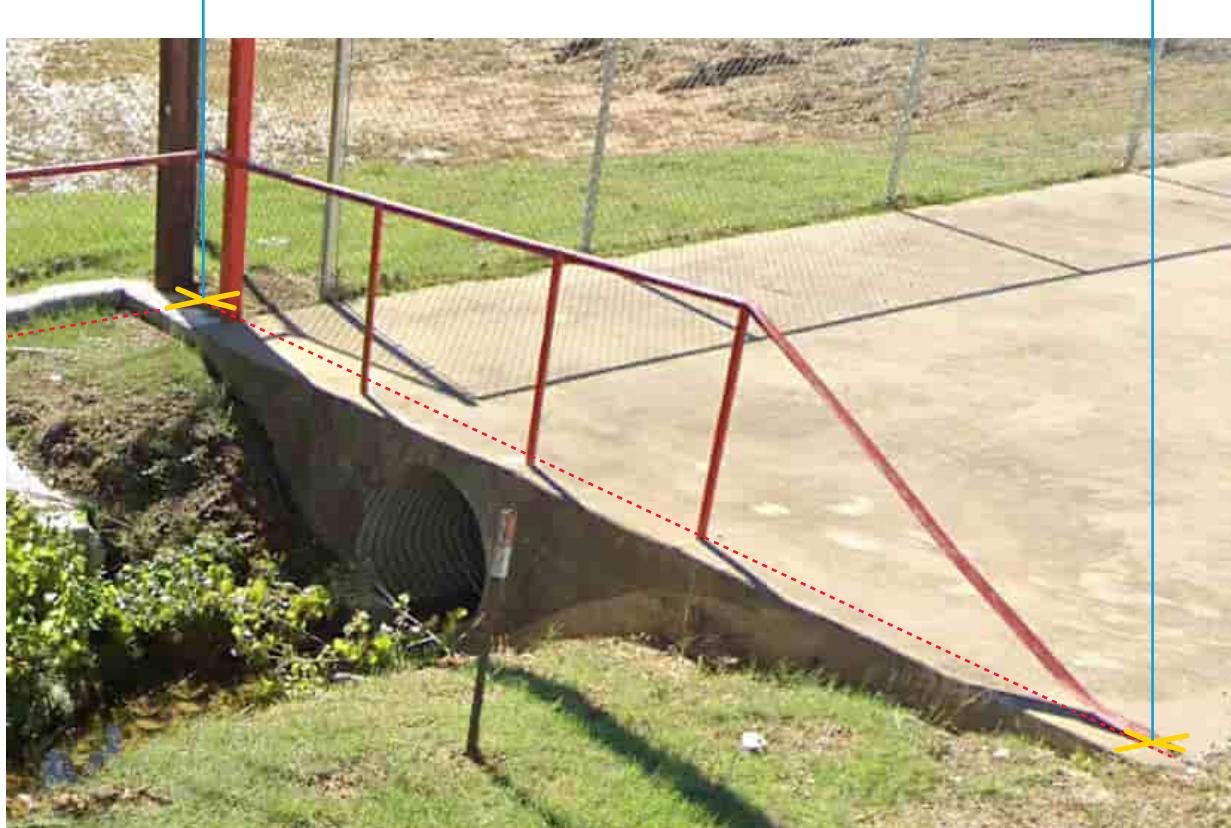


Figure 1 - Image showing preferred way of measuring HAND RAIL

**Category:**

Has Attributes?

DTM Feature?

Is Line?

Is Breakline?

Topo & Improvement Codes

No

No

No

N/A

Valve to control water in an irrigation system

IRV - IRRIGATION VALVE

Image Missing

Looks like a water or gas valve, or a green plastic valve

Figure 1 - Image showing preferred way of measuring IRRIGATION VALVE

Category:

Has Attributes?

Topo & Improvement Codes

No

DTM Feature?

Yes

Is Line?

Yes

Is Breakline?

No

Enclosure for electrical connections

JB - JUNCTION BOX

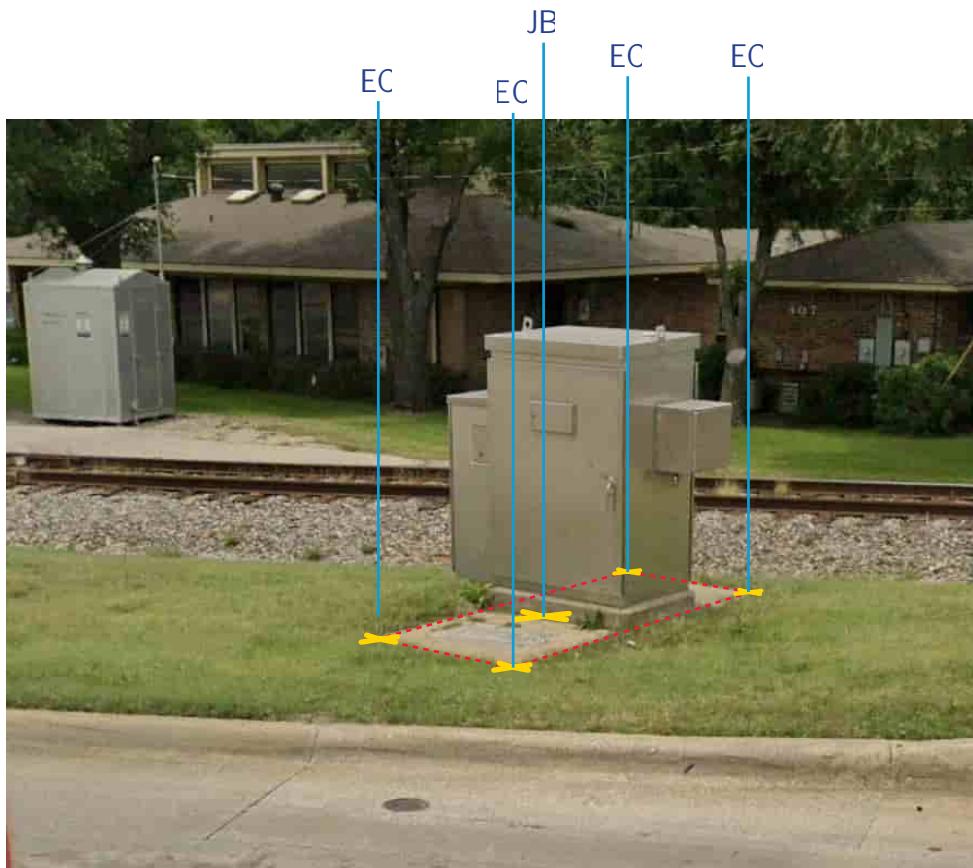


Figure 1 - Image showing preferred way of measuring JUNCTION BOX

Category:

Has Attributes?

DTM Feature?

Is Line?

Is Breakline?

Topo & Improvement Codes

Yes

Yes

No

N/A

Elevated junction box for electrical or electronic equipment

JBPED - EBOX-JBOX ON PEDESTAL



Figure 1 - Image showing preferred way of measuring EBOX-JBOX ON PEDESTAL



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Category:
Has Attributes?
DTM Feature?
Is Line?
Is Breakline?

Topo & Improvement Codes
Yes
Yes
No
N/A

Instructions to the drafter to join a feature to a point

JPT - JOIN TO PT

Image Missing

Not typically used

Figure 1 - Image showing preferred way of measuring JOIN TO PT



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Category:

Topo & Improvement Codes

Has Attributes?

No

DTM Feature?

Yes

Is Line?

Yes

Is Breakline?

No

Miscellaneous linear features not elsewhere classified

LINE - MISC LINE

If you do not know what to call a line feature

If point MISCPT

Figure 1 - Image showing preferred way of measuring MISC LINE

Category:

Has Attributes?

Topo & Improvement Codes

No

DTM Feature?

No

Is Line?

No

Is Breakline?

N/A

Pole supporting a light

LP - LIGHT POLE

Elevation does not matter.



Figure 1 - Image showing preferred way of measuring LIGHT POLE

Category:

Topo & Improvement Codes

Has Attributes?

No

DTM Feature?

No

Is Line?

Yes

Is Breakline?

No

Piping system for transportation of fluids

LPIPE - PIPE LINE

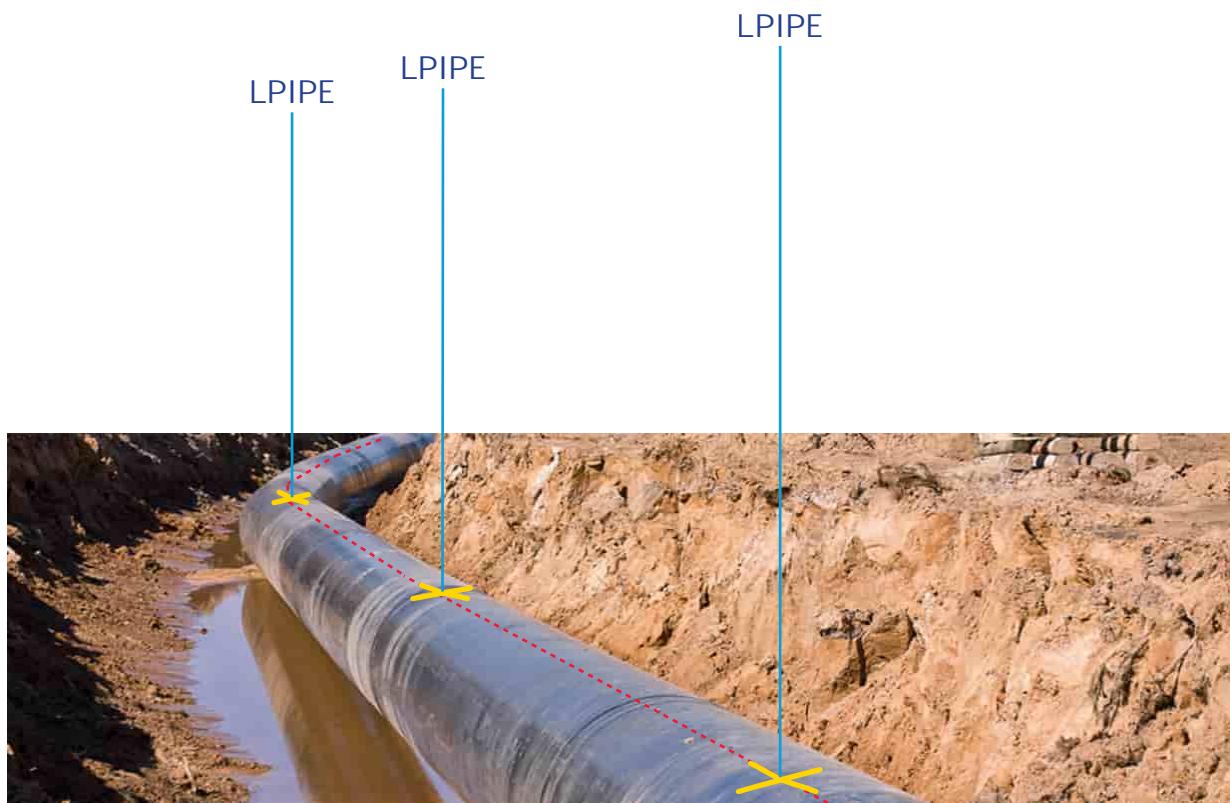


Figure 1 - Image showing preferred way of measuring PIPE LINE

Category:**Topo & Improvement Codes**

Has Attributes?

No

DTM Feature?

Yes

Is Line?

No

Is Breakline?

N/A

Box for receiving mail

MB - MAIL BOX

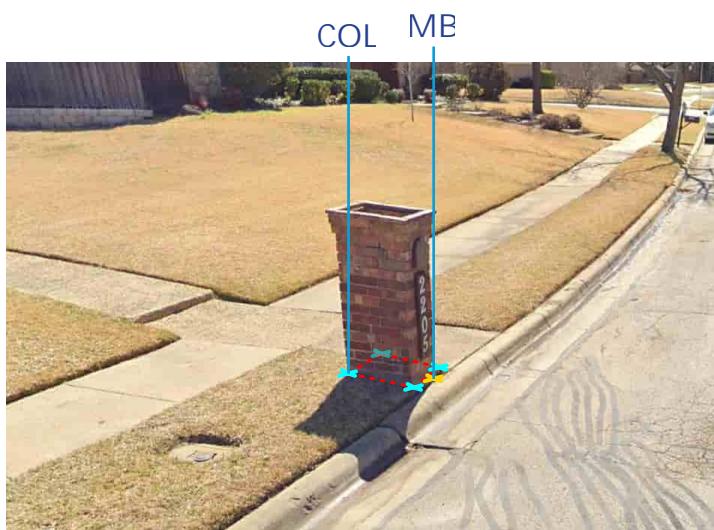


Figure 1 - Image showing preferred way of measuring MAIL BOX

Category:

Topo & Improvement Codes

Has Attributes?

No

DTM Feature?

Yes

Is Line?

No

Is Breakline?

N/A

Miscellaneous access point to underground utilities

MH - MISC MANHOLE



Figure 1 - Image showing preferred way of measuring MISC MANHOLE

**Category:**

Has Attributes?

Topo & Improvement Codes

Yes

DTM Feature?

Yes

Is Line?

No

Is Breakline?

N/A

Miscellaneous point of interest not elsewhere classified

MISCPT - MISC POINT

Used for feature that does not already have a feature code associated with it.

Please describe it in the annotation / take a photo of it.

Figure 1 - Image showing preferred way of measuring MISC POINT

Category:

Has Attributes?

Topo & Improvement Codes

Yes

DTM Feature?

Yes

Is Line?

No

Is Breakline?

N/A

Post used to indicate existence of underground utility, typically gas

MP - MARKER POST

Specify what type in attribute

MP

MP



Figure 1 - Image showing preferred way of measuring MARKER POST

Category:

Has Attributes?

Topo & Improvement Codes

No

DTM Feature?

Yes

Is Line?

No

Is Breakline?

N/A

Well used for environmental monitoring

MW - MONITORING WELL

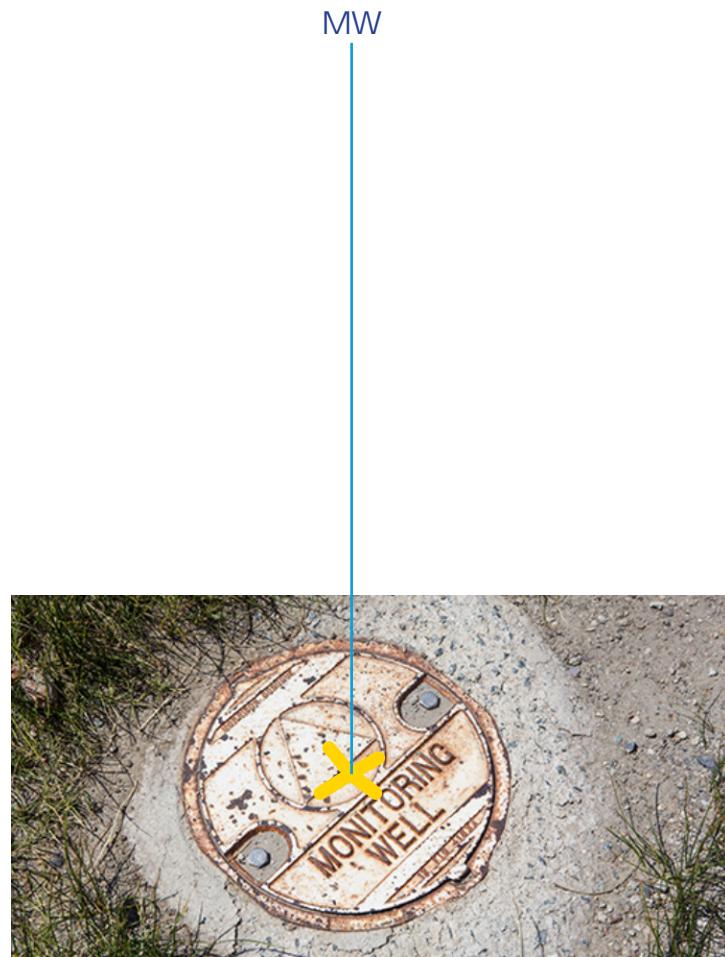


Figure 1 - Image showing preferred way of measuring MONITORING WELL

Category:

Has Attributes?

Topo & Improvement Codes

No

DTM Feature?

Yes

Is Line?

No

Is Breakline?

N/A

Elevation point of the natural "soft surface" ground

NG - GROUND SHOT

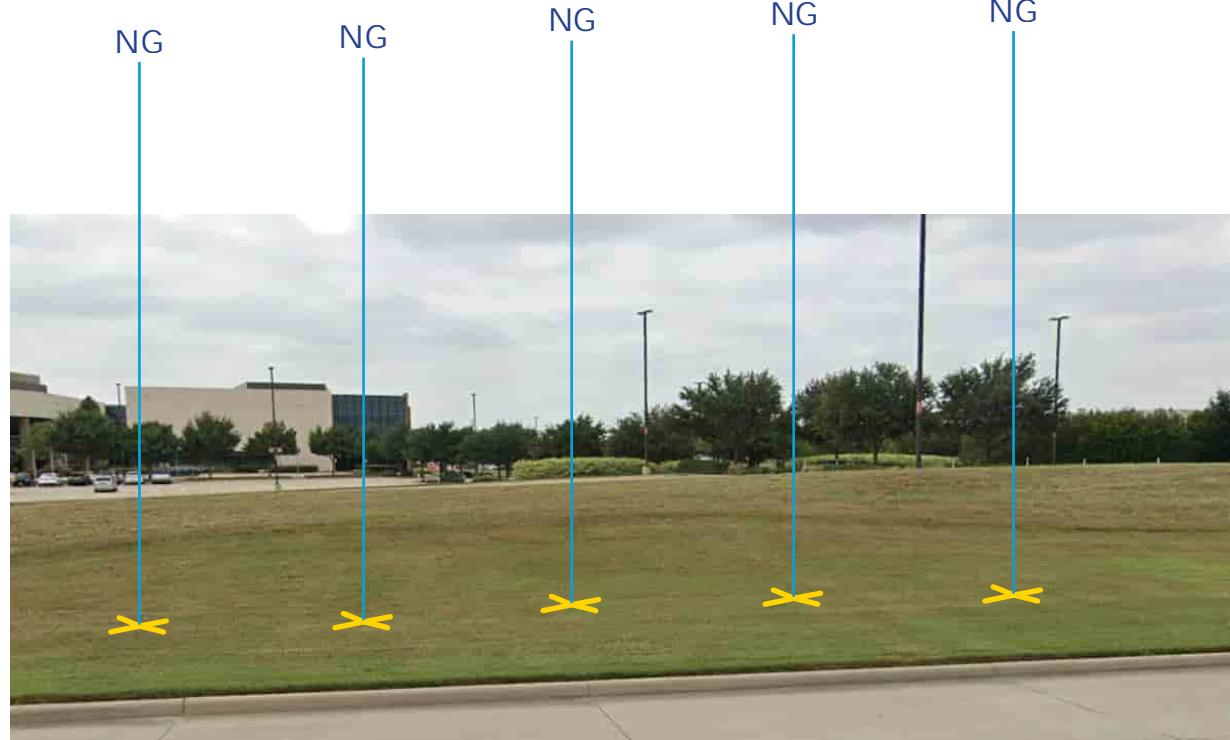


Figure 1 - Image showing preferred way of measuring GROUND SHOT

Category:

Topo & Improvement Codes

Has Attributes?

No

DTM Feature?

No

Is Line?

Yes

Is Breakline?

No

Projection of a structure beyond its base. e.g. the roof overhang / awning

OH - OVERHANG



Figure 1 - Image showing preferred way of measuring OVERHANG

Category:

Has Attributes?

Topo & Improvement Codes

No

DTM Feature?

No

Is Line?

Yes

Is Breakline?

No

Electrical lines located overhead, going from pole to pole or other connection point

OHE - OVERHEAD ELEC

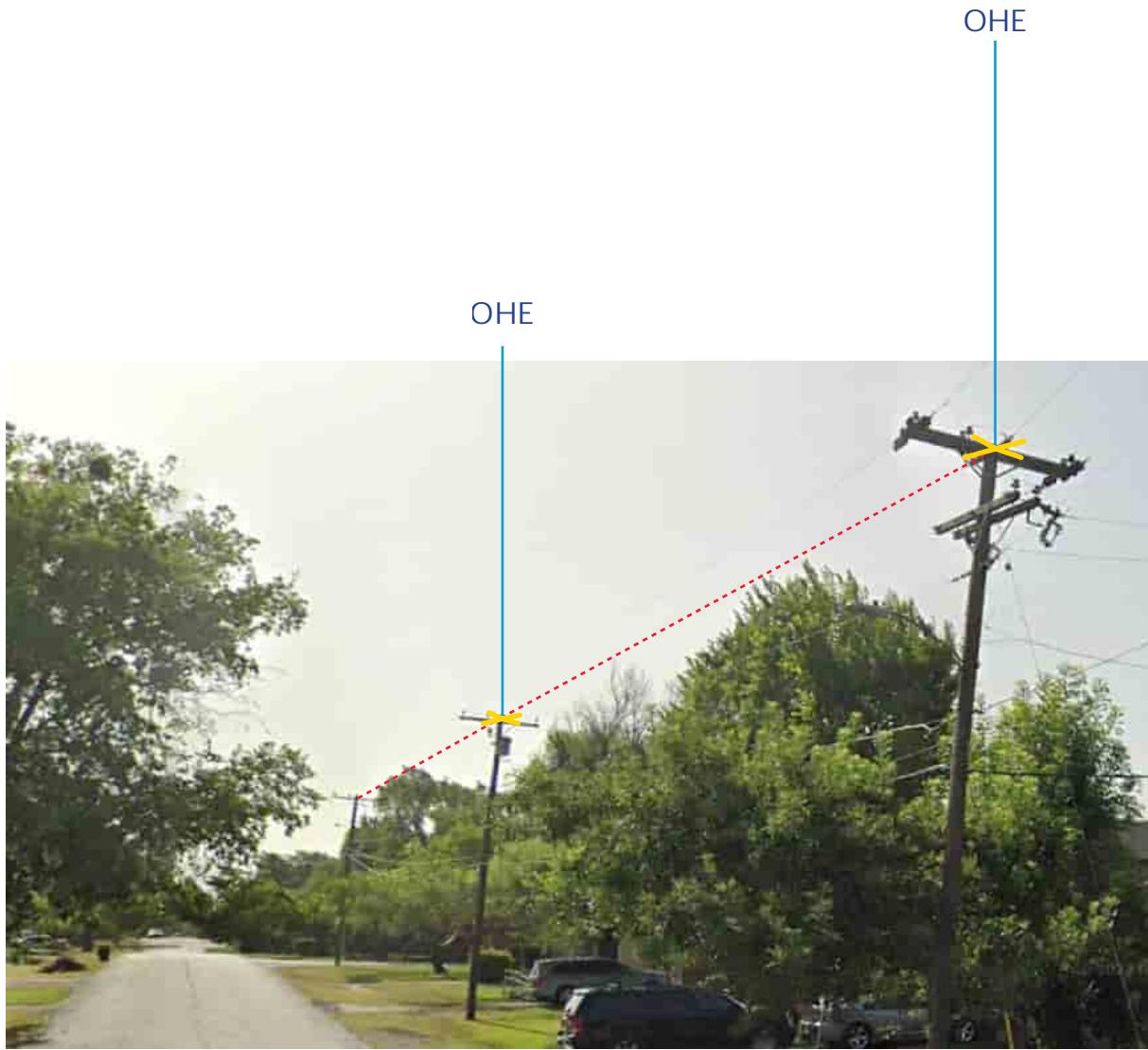


Figure 1 - Image showing preferred way of measuring OVERHEAD ELEC

Category:

Has Attributes?

DTM Feature?

Is Line?

Is Breakline?

Topo & Improvement Codes

No

Yes

Yes

Yes

Surface made of stones, blocks, or bricks fitted together

PAV - PAVERS

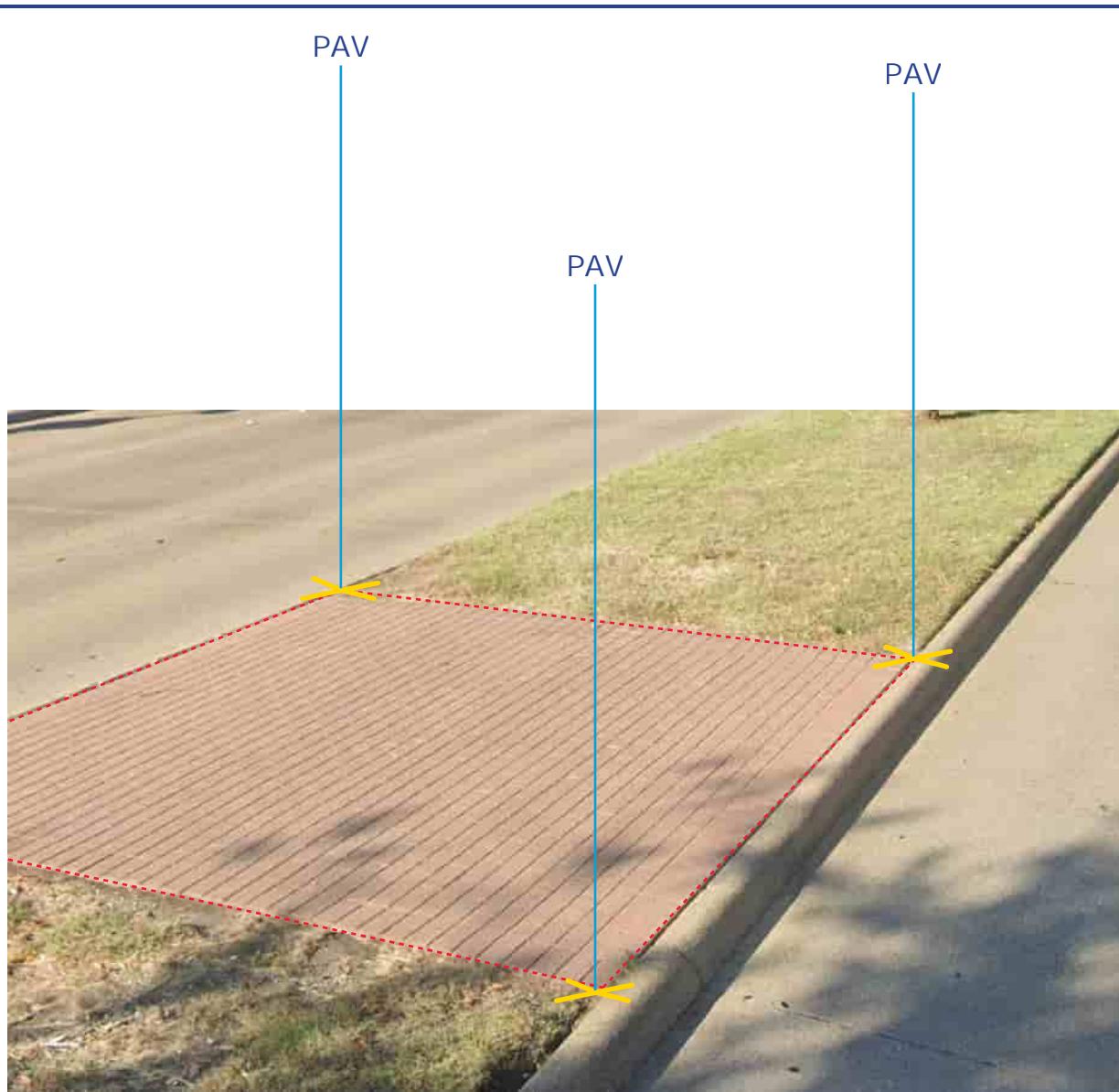


Figure 1 - Image showing preferred way of measuring PAVERS

Category:

Has Attributes?

Topo & Improvement Codes

Yes

DTM Feature?

Yes

Is Line?

No

Is Breakline?

N/A

Rectangular concrete structure for channeling water

PCLV - BOX CULVERT

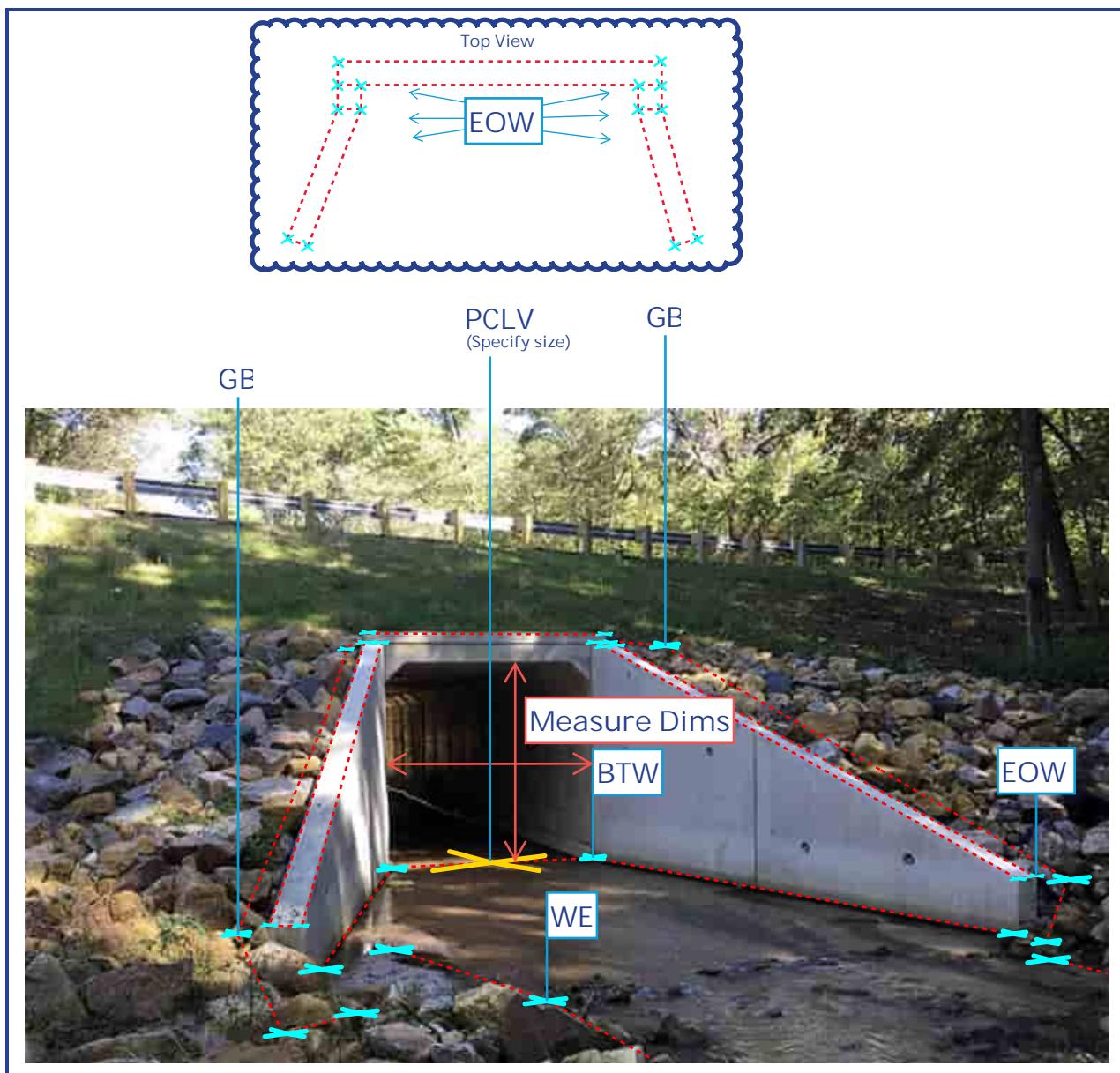


Figure 1 - Image showing preferred way of measuring BOX CULVERT

Category:

Has Attributes?

Topo & Improvement Codes

Yes

DTM Feature?

Yes

Is Line?

Yes

Is Breakline?

No

Base supporting a statue, column, or structure

PED - PEDESTAL



Figure 1 - Image showing preferred way of measuring PEDESTAL

Category:

Has Attributes?

DTM Feature?

Is Line?

Is Breakline?

Topo & Improvement Codes

Yes

Yes

No

N/A

Cylindrical conduit for transporting fluids or gases

PIPE - PIPE



Figure 1 - Image showing preferred way of measuring PIPE

Category:

Has Attributes?

Topo & Improvement Codes

Yes

DTM Feature?

No

Is Line?

No

Is Breakline?

N/A

Upright support or marker, often wood or metal

POST - POST



Figure 1 - Image showing preferred way of measuring POST

Category:

Has Attributes?

Topo & Improvement Codes

Yes

DTM Feature?

No

Is Line?

No

Is Breakline?

N/A

Pole that supports power lines or other related infrastructure

PP - POWER POLE

Elevation does not matter.

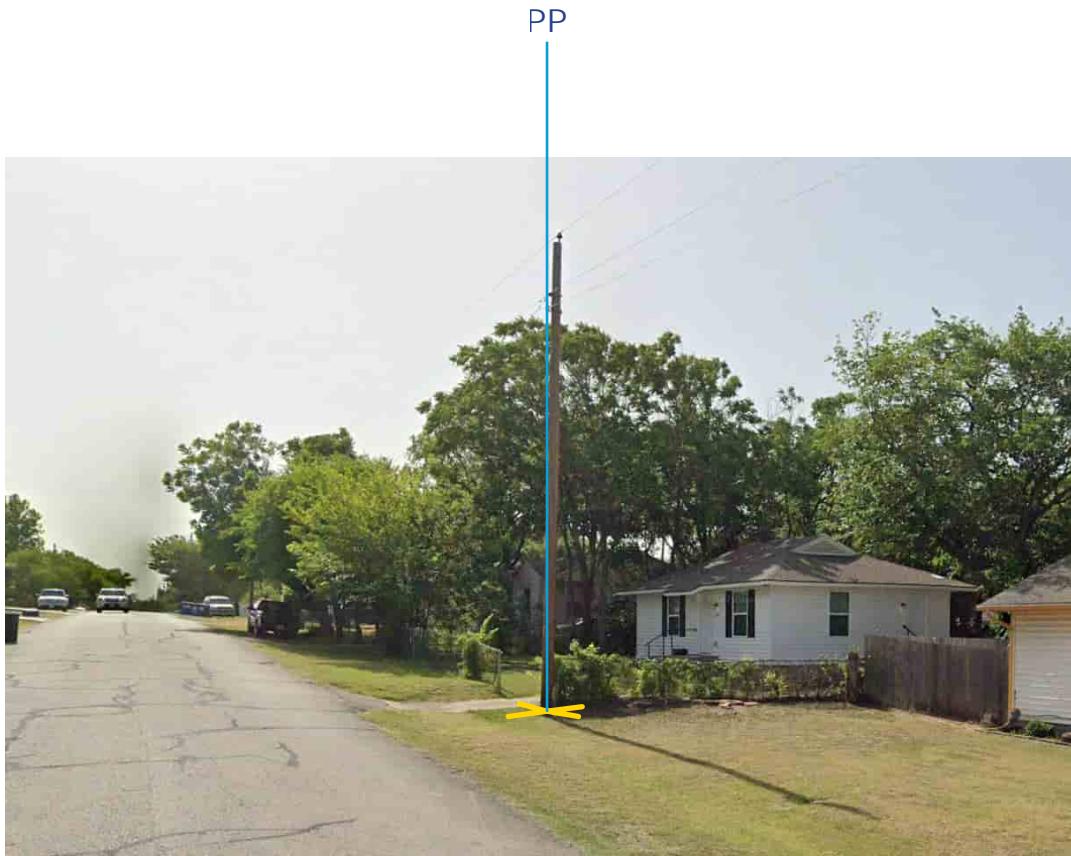


Figure 1 - Image showing preferred way of measuring POWER POLE

Category:**Topo & Improvement Codes**

Has Attributes?

Yes

DTM Feature?

No

Is Line?

No

Is Breakline?

N/A

Metal power pole

PPS - METAL PP

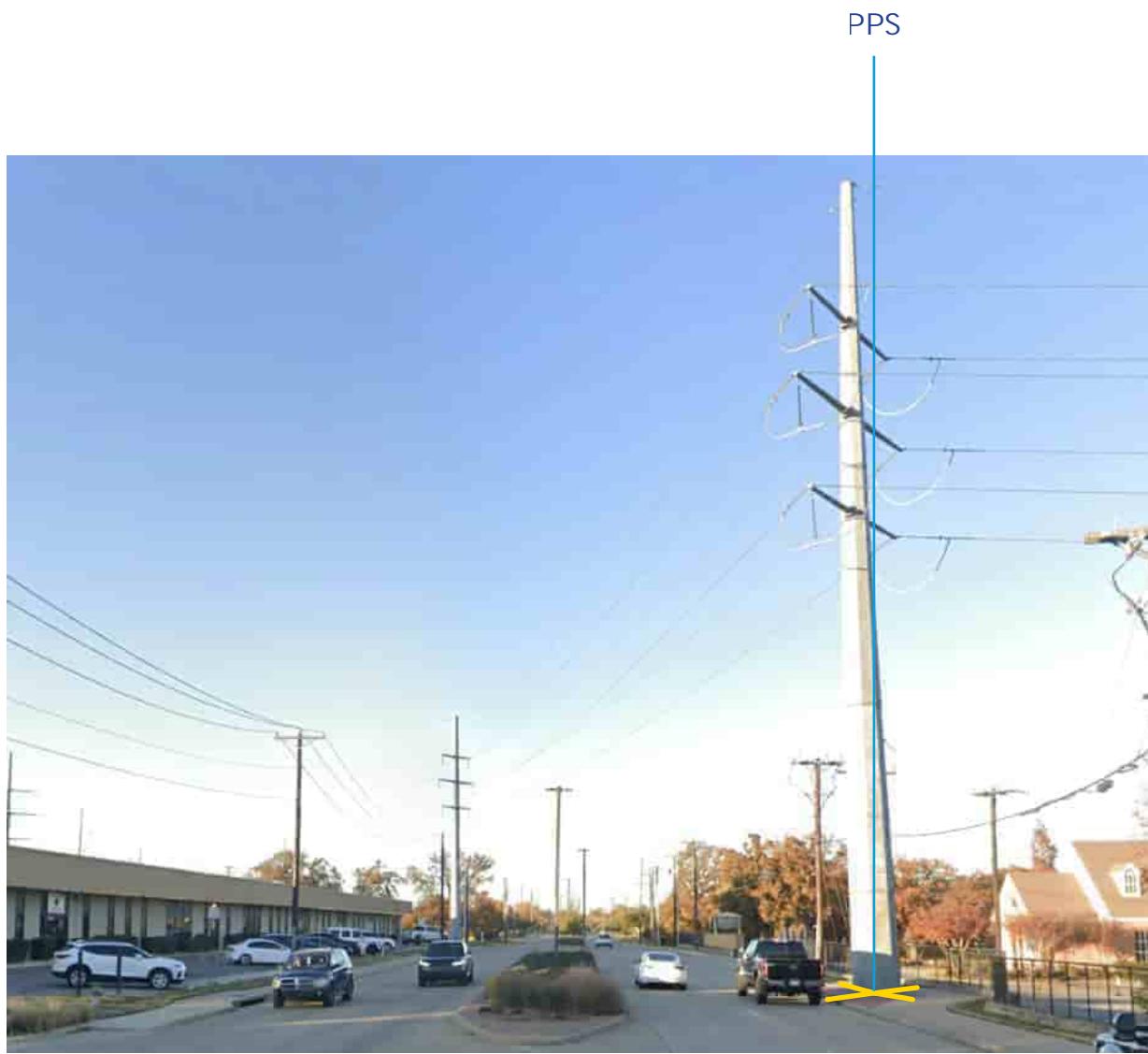
Elevation does not matter.

Figure 1 - Image showing preferred way of measuring METAL PP

Category:

Topo & Improvement Codes

Has Attributes?

Yes

DTM Feature?

No

Is Line?

No

Is Breakline?

N/A

Power pole with transformer attached. Specify number of
transformers

PPX - PP-W-TRANSFORMER

Note the number of transformers in the attribute.
Elevation does not matter.

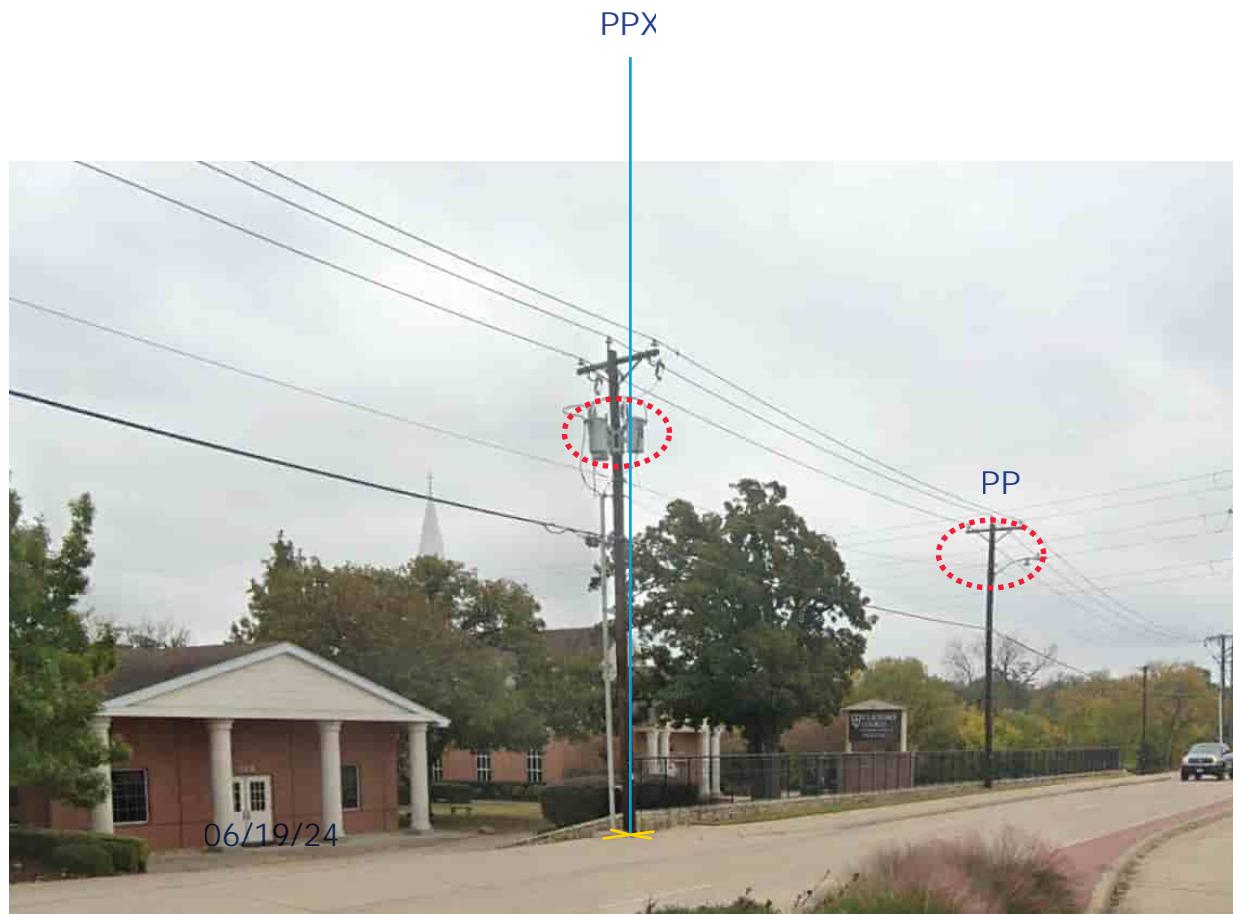


Figure 1 - Image showing preferred way of measuring PP-W-TRANSFORMER

Category:

Topo & Improvement Codes

Has Attributes?

No

DTM Feature?

Yes

Is Line?

Yes

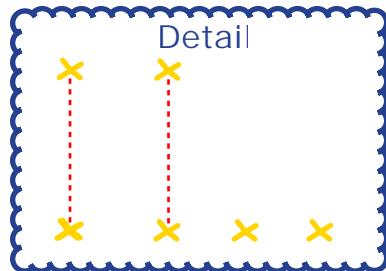
Is Breakline?

No

Line of paint on a surface for marking

PS - PAINT STRIPE

Can get one full spot's line detail and only collect one point per line for all the other spots.



PS

PS

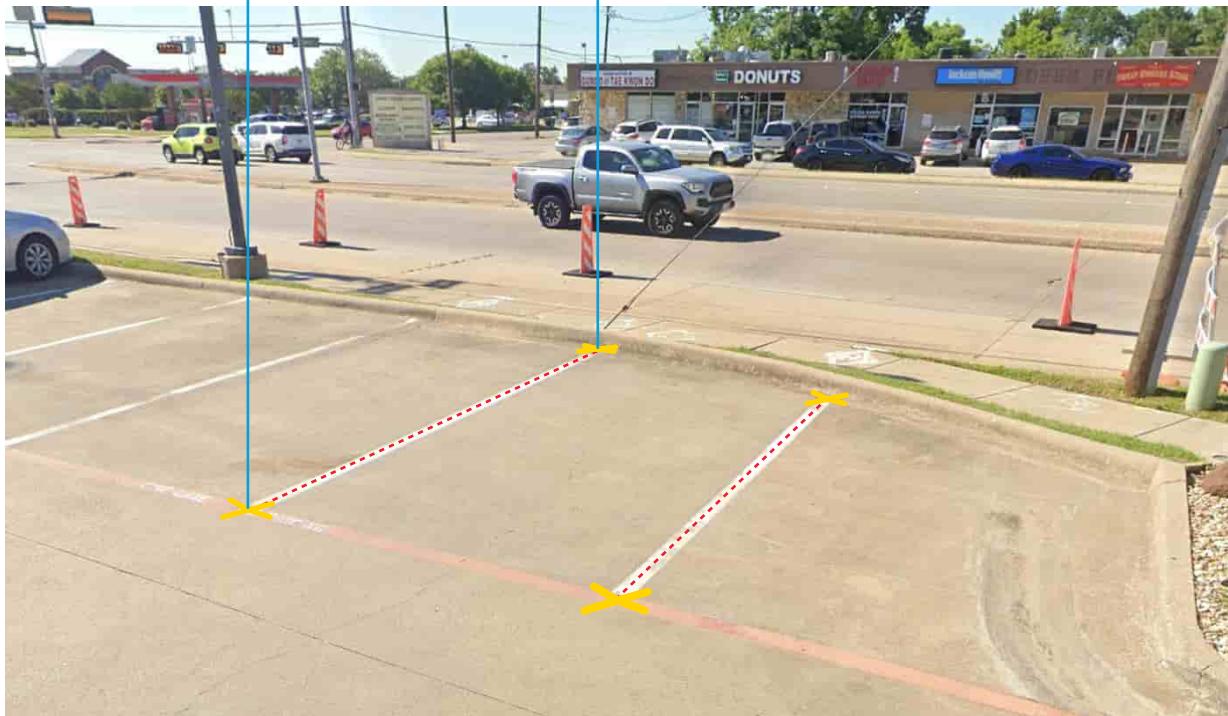


Figure 1 - Image showing preferred way of measuring PAINT STRIPE

Category:

Topo & Improvement Codes

Has Attributes?

No

DTM Feature?

Yes

Is Line?

Yes

Is Breakline?

No

White dashed stripe, typically on roads

PSDW - DASHED STR WHITE

Image strictly shown as example. You are not to survey actively roadway without traffic protection.

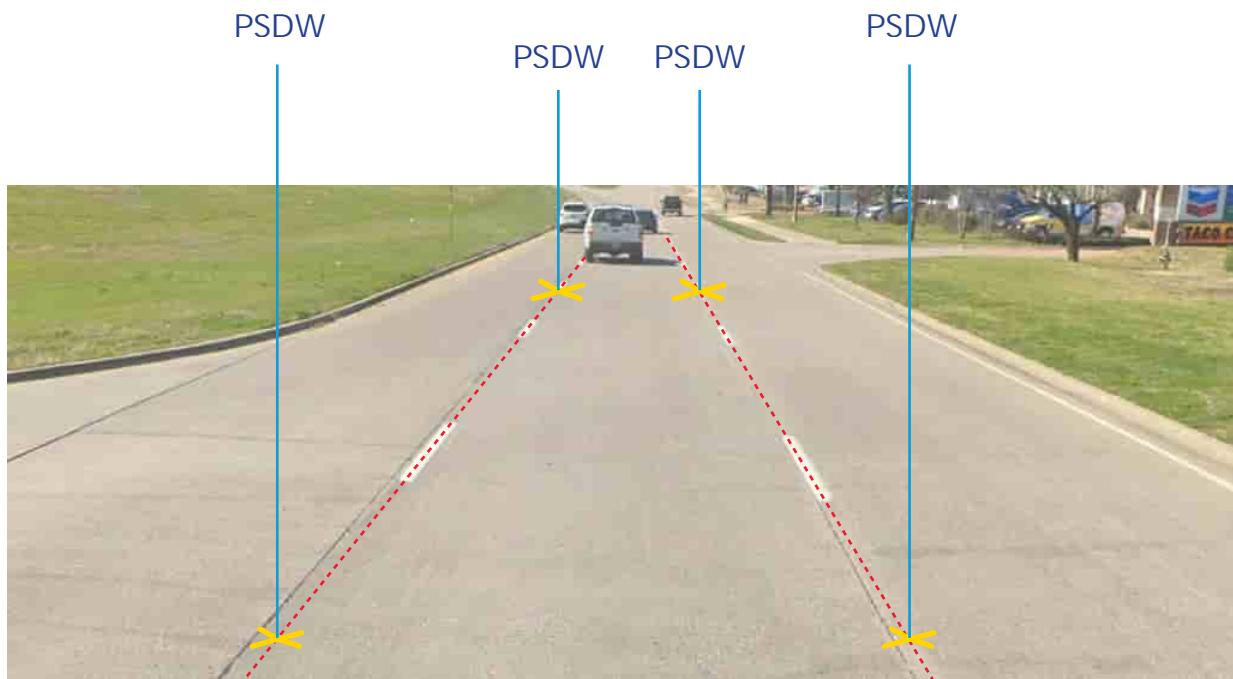


Figure 1 - Image showing preferred way of measuring DASHED STR WHITE

Category:

Has Attributes?

DTM Feature?

Is Line?

Is Breakline?

Topo & Improvement Codes

No

Yes

Yes

No

Yellow dashed stripe, typically on roads

PSDY - YELLOW DASHED

Image strictly shown as example. You are not to survey actively roadway without traffic protection.

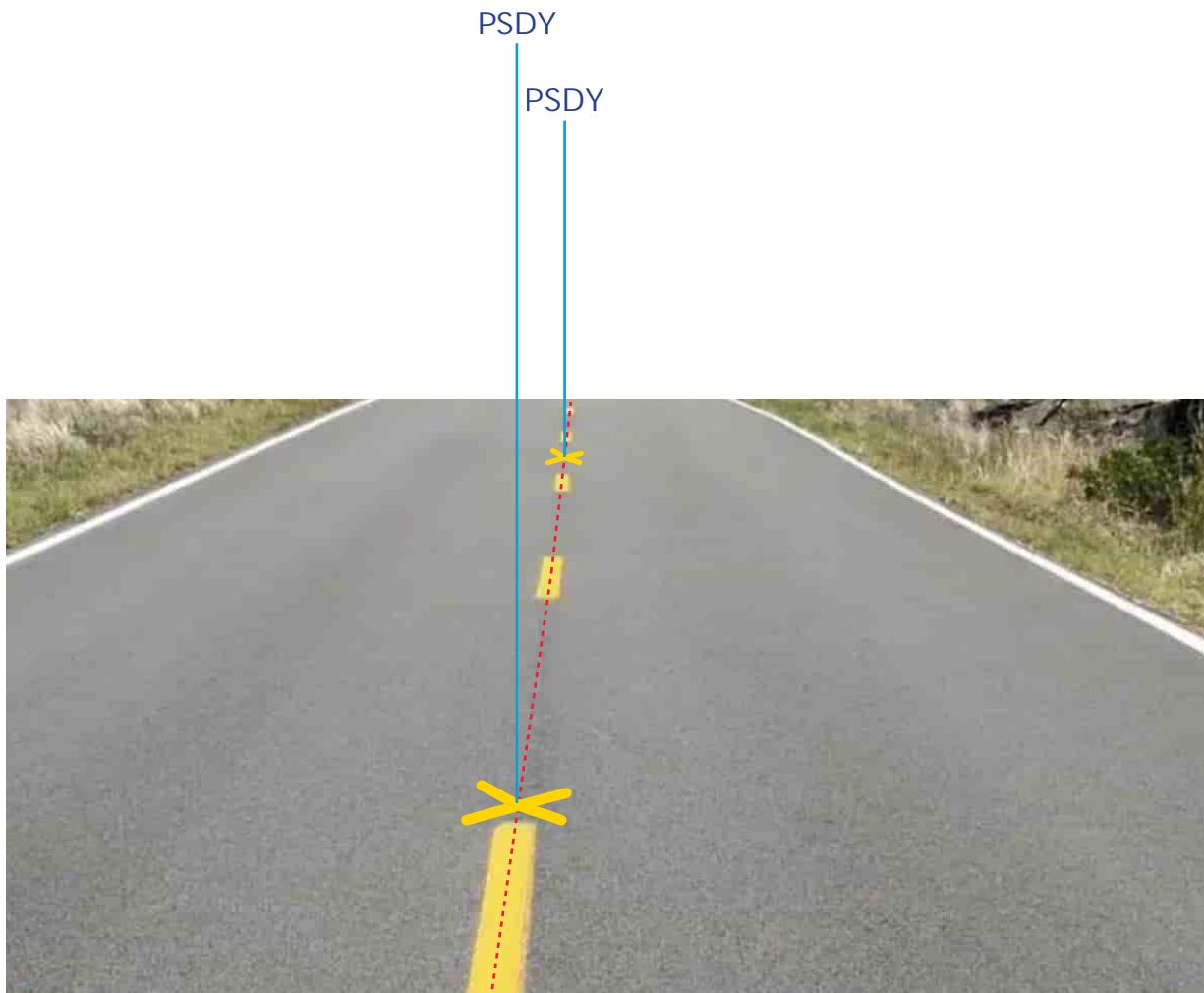


Figure 1 - Image showing preferred way of measuring YELLOW DASHED

Category:

Topo & Improvement Codes

Has Attributes?

No

DTM Feature?

Yes

Is Line?

Yes

Is Breakline?

No

Red paint, typically used to designate a fire lane

PSR - PAINT RED

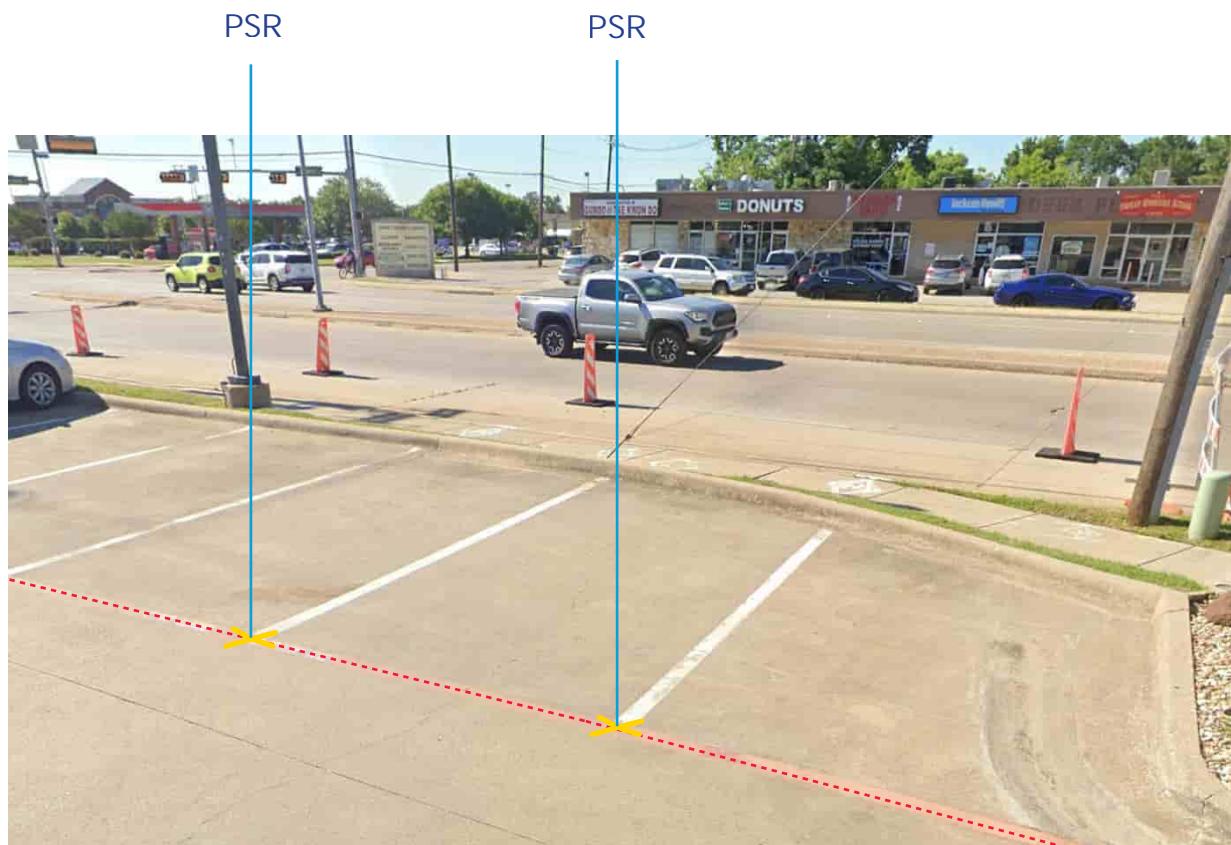


Figure 1 - Image showing preferred way of measuring PAINT RED

Category:

Has Attributes?

DTM Feature?

Is Line?

Is Breakline?

Topo & Improvement Codes

No

Yes

Yes

No

White line, often for traffic markings on roads / parking lots

PSW - PAINT WHITE

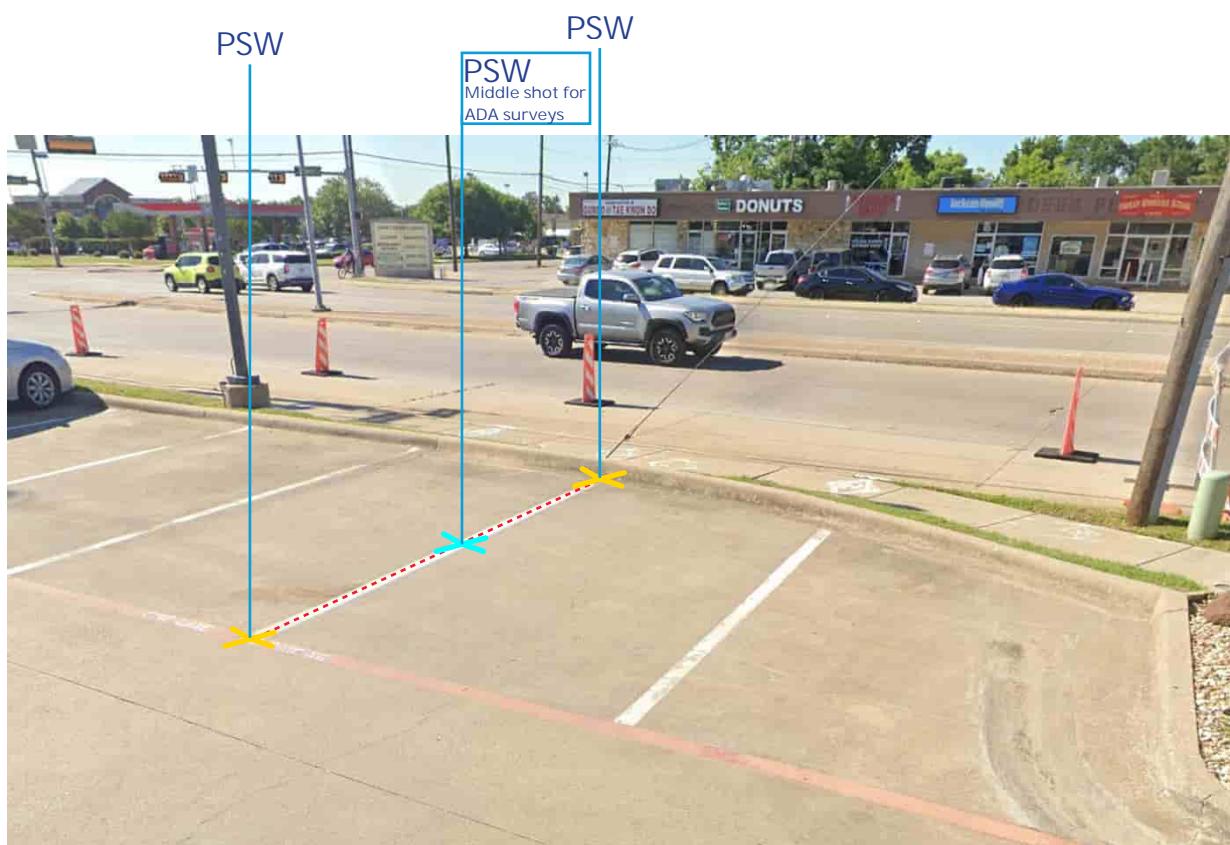


Figure 1 - Image showing preferred way of measuring PAINT WHITE

Category:

Topo & Improvement Codes

Has Attributes?

No

DTM Feature?

Yes

Is Line?

Yes

Is Breakline?

No

Yellow line, often for traffic markings on roads / parking lots

PSY - PAINT YELLOW

Two full lines and then single shots

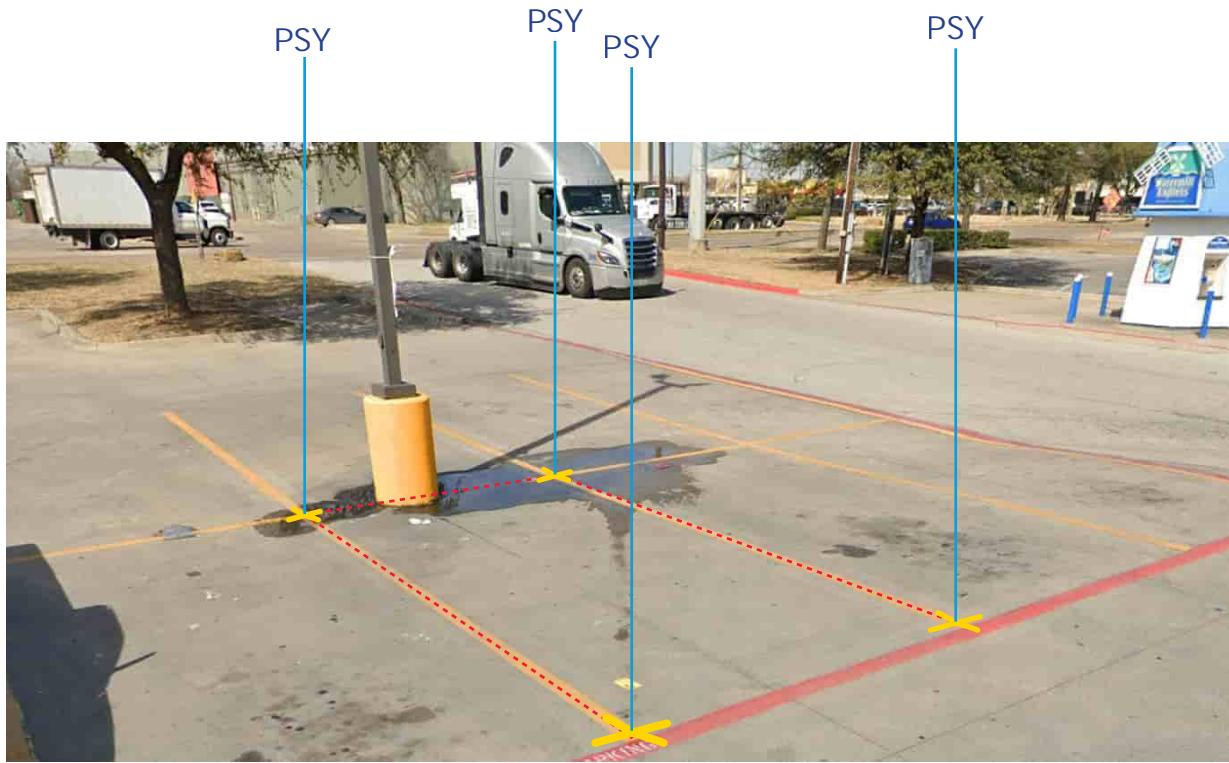


Figure 1 - Image showing preferred way of measuring PAINT YELLOW



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Category:

Has Attributes?

Topo & Improvement Codes

Yes

DTM Feature?

Yes

Is Line?

No

Is Breakline?

N/A

Electrically powered pump

PUMP - ELEC PUMP

Image Missing

Will be added.

Figure 1 - Image showing preferred way of measuring ELEC PUMP

**Category:**

Has Attributes?

Topo & Improvement Codes

Yes

DTM Feature?

Yes

Is Line?

No

Is Breakline?

N/A

PVC pipe culvert or invert. Specify size

PVC - PLASTIC PIPE

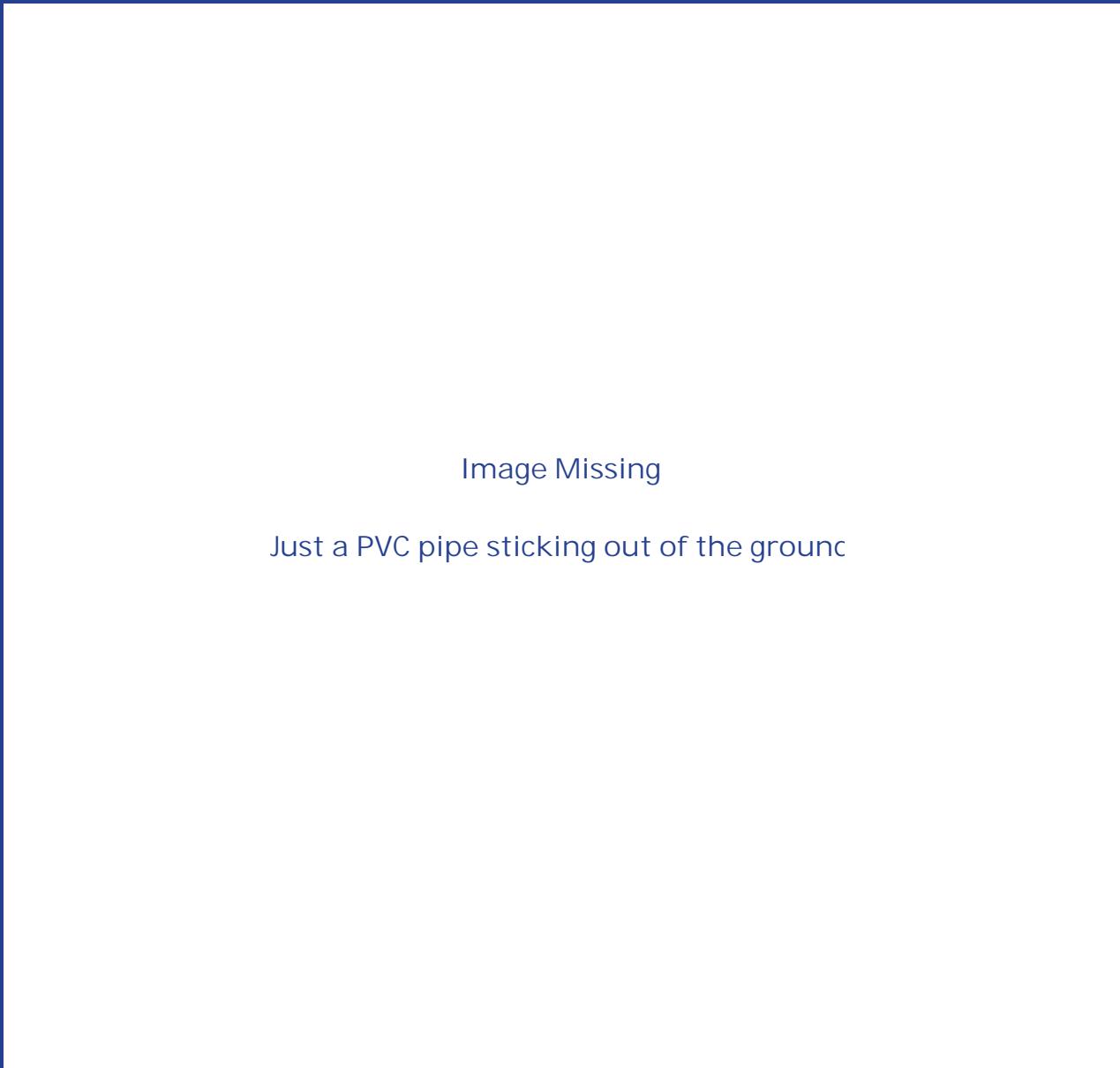

Image Missing**Just a PVC pipe sticking out of the ground**

Figure 1 - Image showing preferred way of measuring PLASTIC PIPE

Category:

Has Attributes?

Topo & Improvement Codes

Yes

DTM Feature?

Yes

Is Line?

No

Is Breakline?

N/A

Concrete culvert pipe. Specify size

RCP - REINFORCED CONC

Also capture pipe diameter and flowline

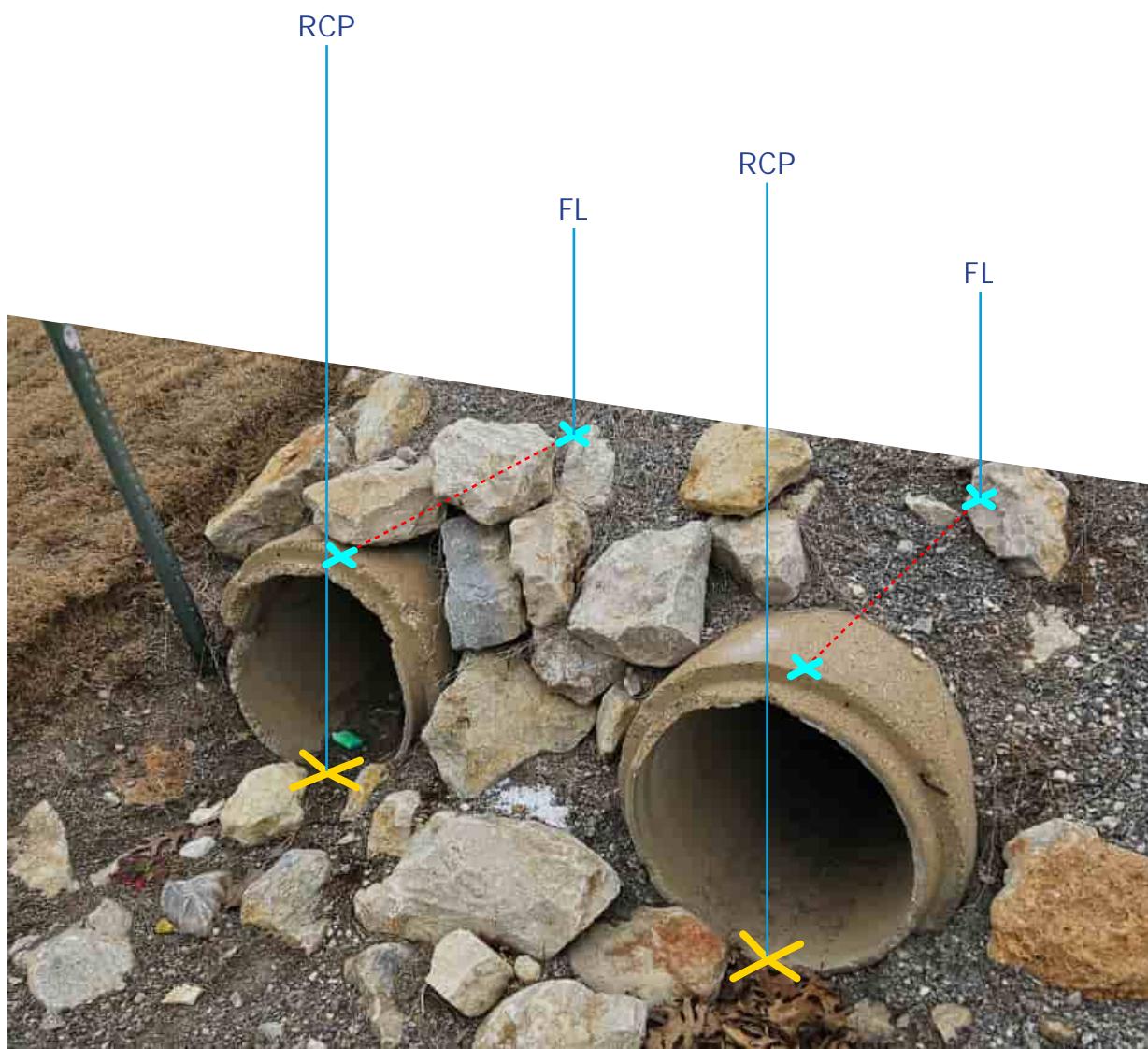


Figure 1 - Image showing preferred way of measuring REINFORCED CONC

Category:

Topo & Improvement Codes

Has Attributes?

No

DTM Feature?

Yes

Is Line?

No

Is Breakline?

N/A

Drainage system on roofs to channel away rainwater

RFD - ROOF DRAIN

Not always required in topo.
Confirm that it is a requirement prior to capturing.



Figure 1 - Image showing preferred way of measuring ROOF DRAIN



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Category:

Topo & Improvement Codes

Has Attributes?

No

DTM Feature?

Yes

Is Line?

No

Is Breakline?

N/A

Valve for controlling flow of recycled water

RWV - RECYCLED WTR VALVE

Image Missing

Will be added.

Regular valve that will have text
showing "Recycled water"

Figure 1 - Image showing preferred way of measuring RECYCLED WTR VALVE

Category:

Has Attributes?

Topo & Improvement Codes

No

DTM Feature?

Yes

Is Line?

No

Is Breakline?

N/A

Ground elevation measurement on hard surface

SE - HARD SURFACE SHT

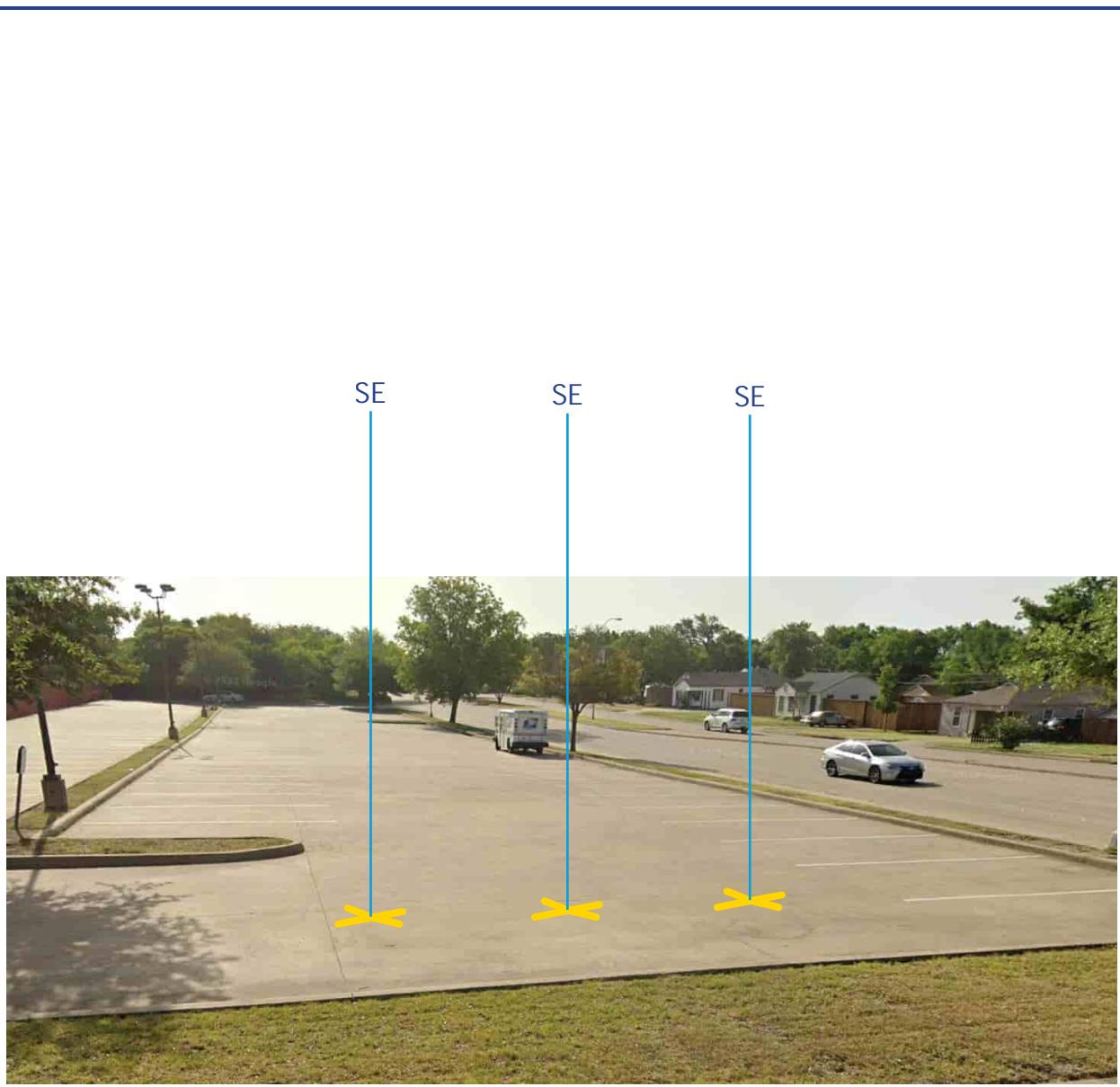


Figure 1 - Image showing preferred way of measuring HARD SURFACE SHT

Category:**Topo & Improvement Codes**

Has Attributes?

No

DTM Feature?

No

Is Line?

No

Is Breakline?

N/A

Road sign, parking sign, or any other sign

SGN - SIGN

Take a photo of the sign.
Capture type in annotation.



Figure 1 - Image showing preferred way of measuring SGN

Category:

Has Attributes?

DTM Feature?

Is Line?

Is Breakline?

Topo & Improvement Codes

No

No

No

N/A

Sign indicating accessibility for handicapped individuals

SGNHC - HANDICAP SIGN

SGNHC is for the blue paint

SGN HC is for handicap sign

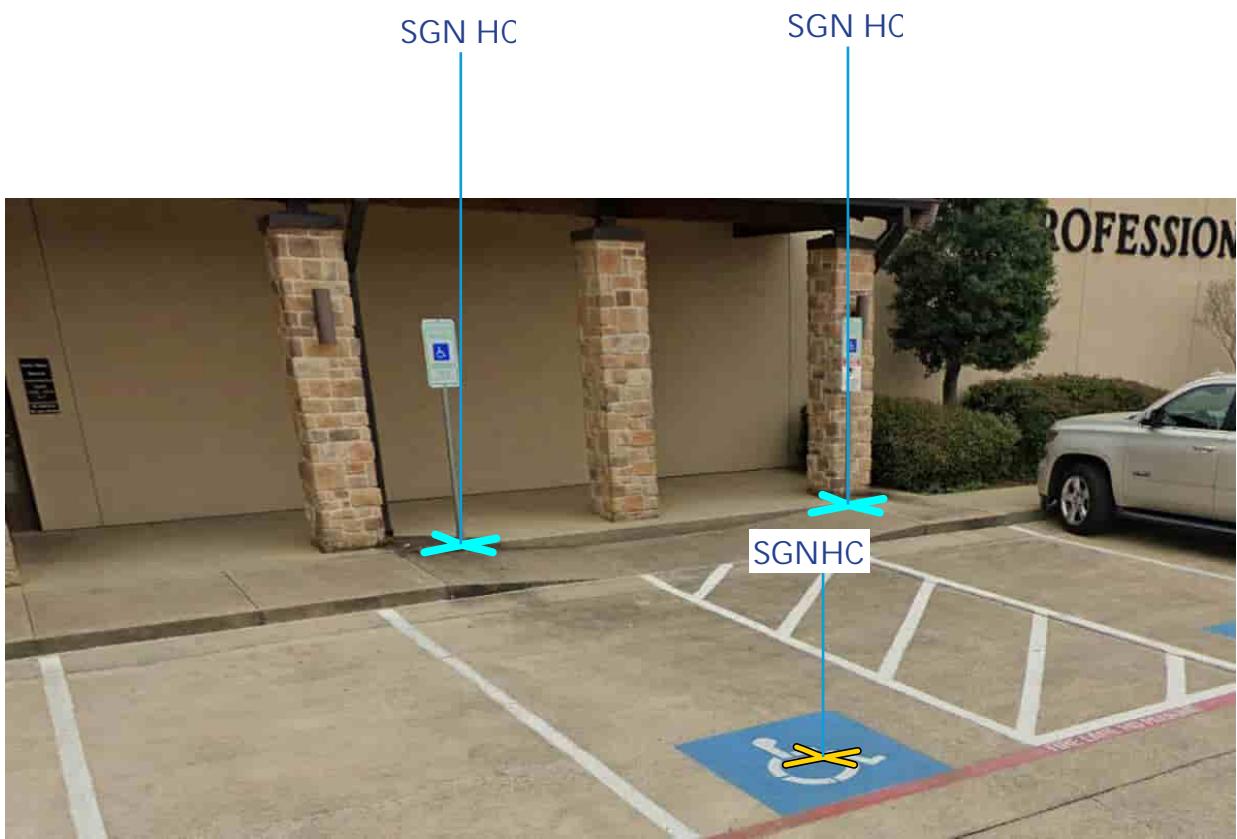


Figure 1 - Image showing preferred way of measuring HANDICAP SIGN

Category:

Has Attributes?

Topo & Improvement Codes

No

DTM Feature?

No

Is Line?

Yes

Is Breakline?

No

Used to capture sign length, location, and direction of sign

SGNL - SIGN LINE



Figure 1 - Image showing preferred way of measuring SIGN LINE

Category:

Topo & Improvement Codes

Has Attributes?

No

DTM Feature?

Yes

Is Line?

Yes

Is Breakline?

Yes

Bottom edge / breakline of a sloped surface. Where the slope changes abruptly

SLPB - BOTTOM SLOPE

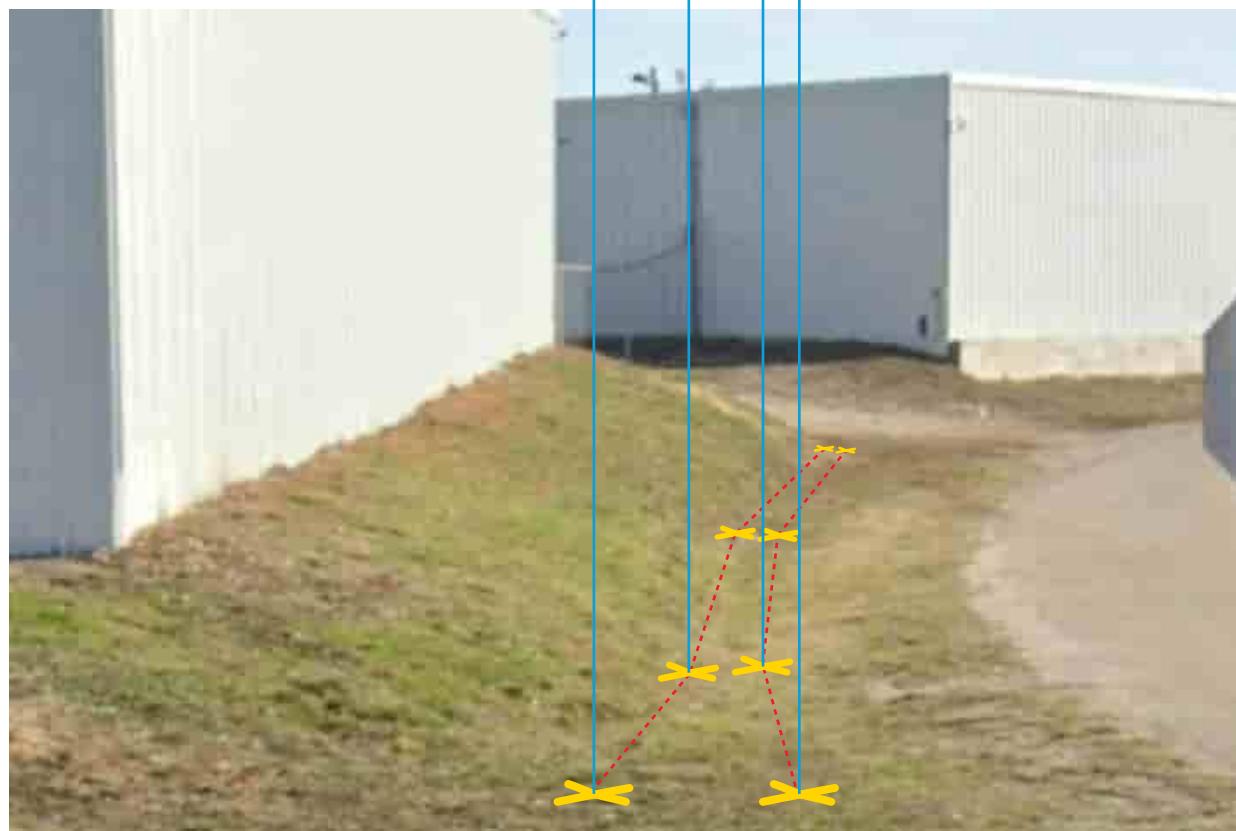


Figure 1 - Image showing preferred way of measuring BOTTOM SLOPE

Category:

Has Attributes?

DTM Feature?

Is Line?

Is Breakline?

Topo & Improvement Codes

No

Yes

Yes

Yes

Top edge / breakline of a sloped surface. Where the slope changes abruptly

SLPT - TOP SLOPE

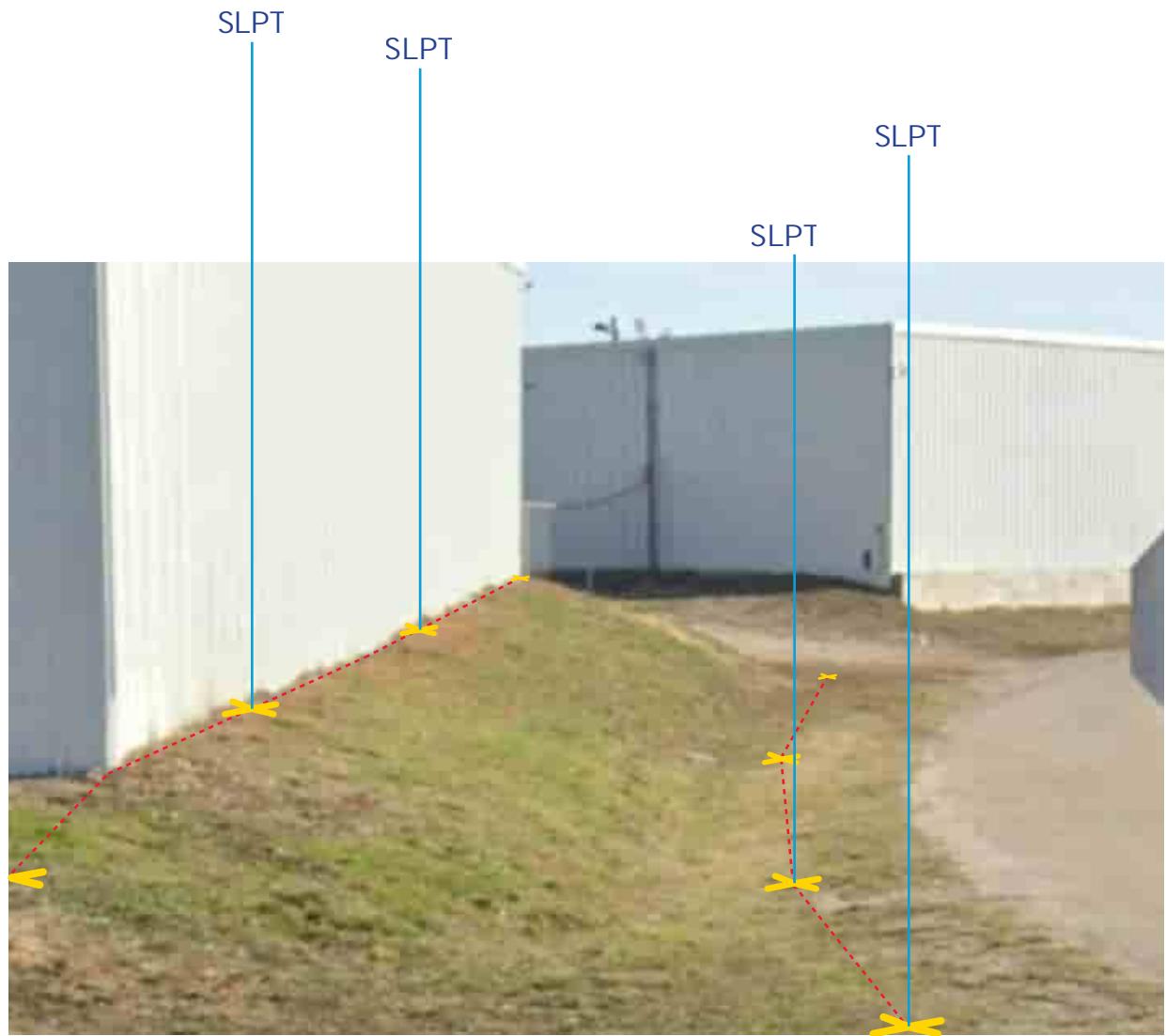


Figure 1 - Image showing preferred way of measuring TOP SLOPE

Category:

Has Attributes?

DTM Feature?

Is Line?

Is Breakline?

Topo & Improvement Codes

No

No

No

N/A

Underground system for transporting sewage

SSMH - SANITARY SEWER



Figure 1 - Image showing preferred way of measuring SANITARY SEWER

Category:

Has Attributes?

DTM Feature?

Is Line?

Is Breakline?

Topo & Improvement Codes

No

Yes

Yes

No

Curb with cut away sections for better water drainage

STCB - SAW TOOTH CURB

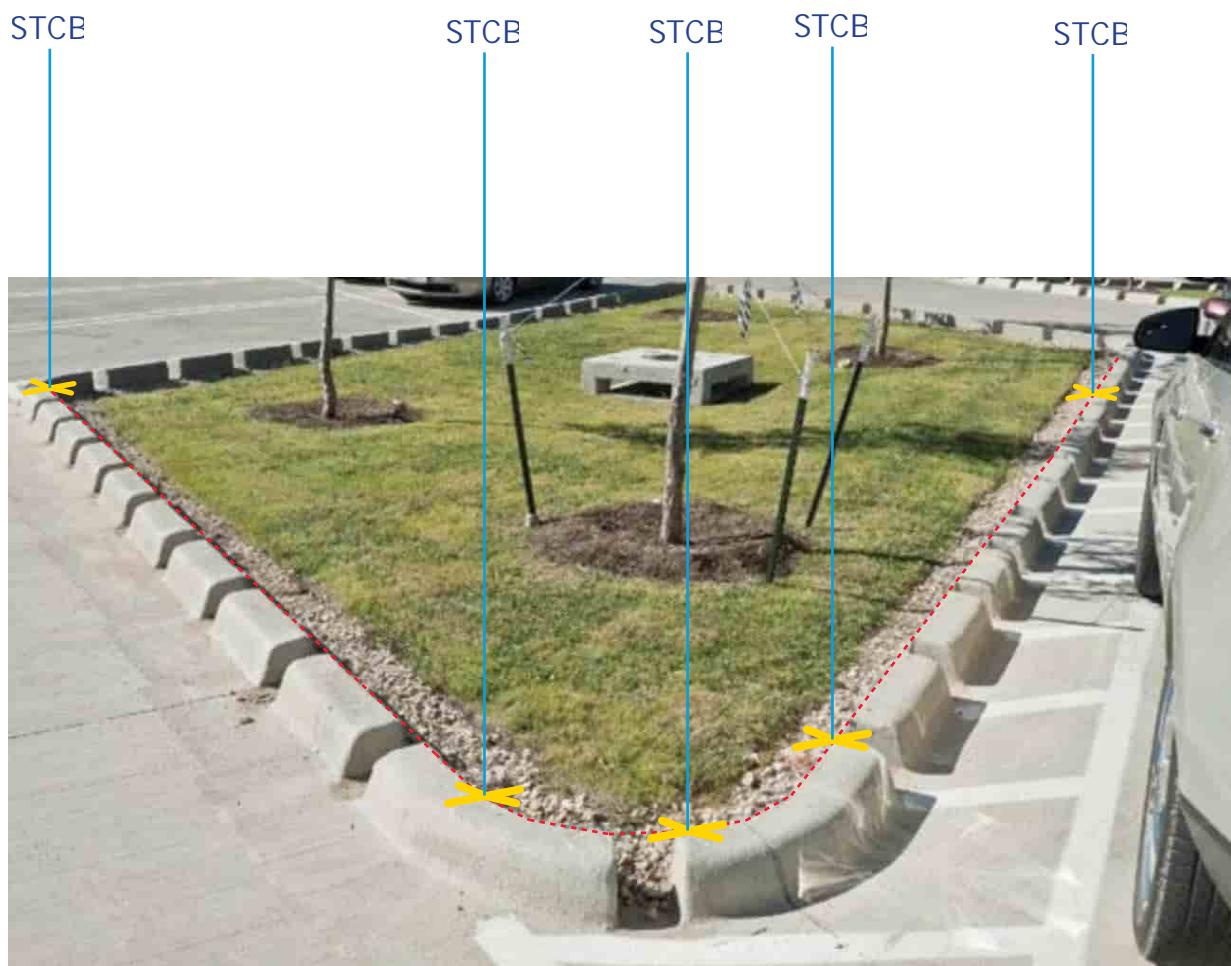


Figure 1 - Image showing preferred way of measuring SAW TOOTH CURB

Category:

Has Attributes?

Topo & Improvement Codes

No

DTM Feature?

Yes

Is Line?

Yes

Is Breakline?

No

Gutter of curb with cut away sections for better water drainage

STGT - SAW TOOTH GT

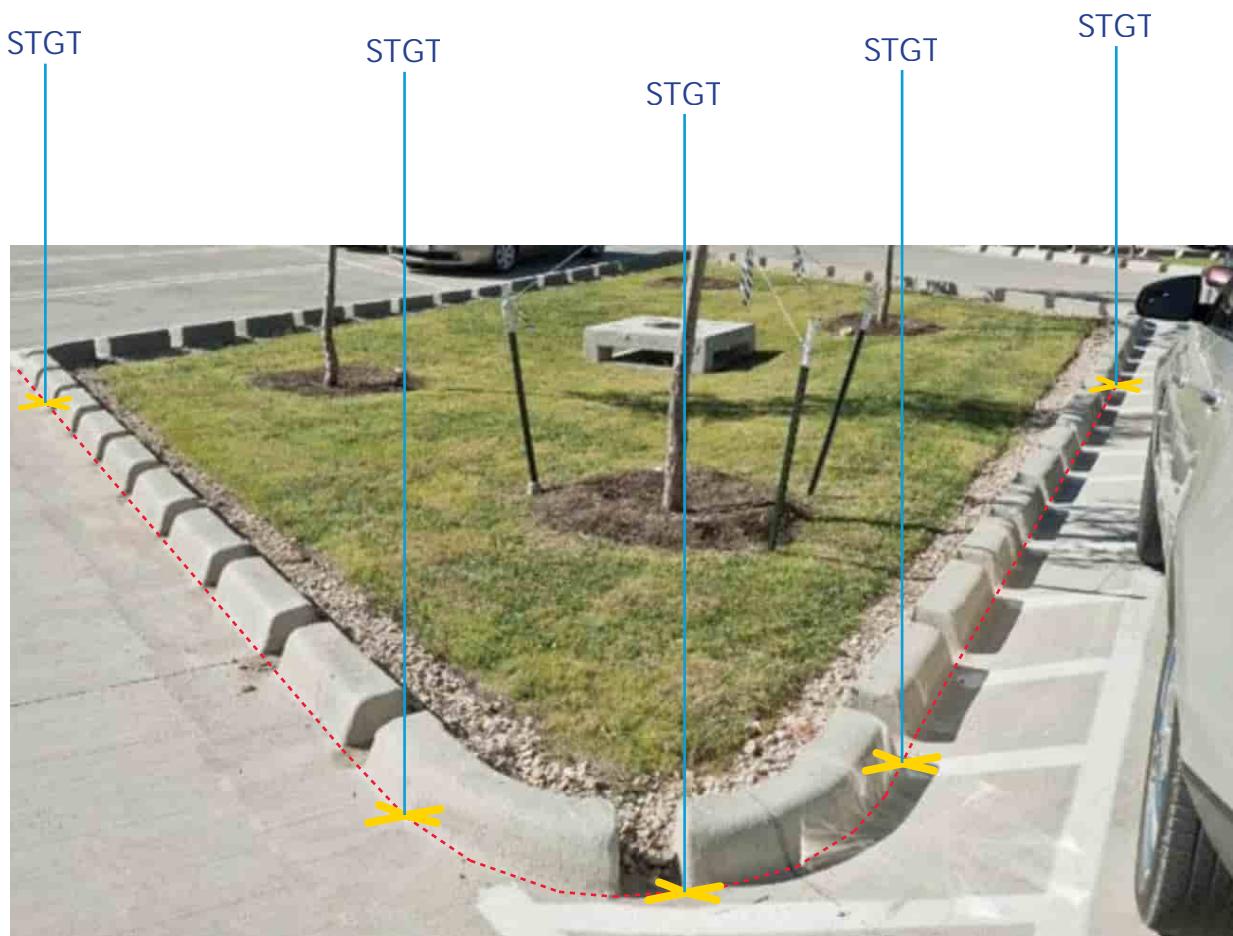


Figure 1 - Image showing preferred way of measuring SAW TOOTH GT

Category:

Has Attributes?

Topo & Improvement Codes

No

DTM Feature?

No

Is Line?

No

Is Breakline?

N/A

Storm manhole

STMH - STORM

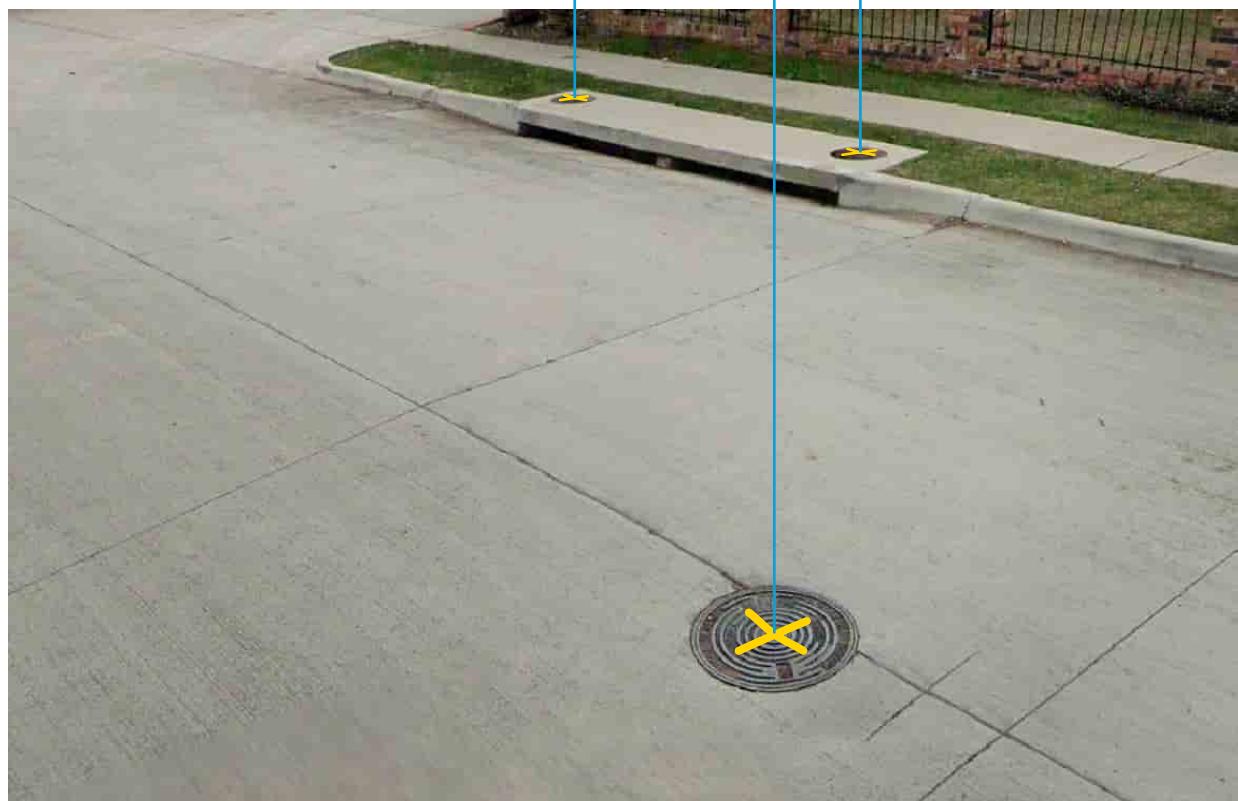


Figure 1 - Image showing preferred way of measuring STORM

Category:
Has Attributes?
DTM Feature?
Is Line?
Is Breakline?

Topo & Improvement Codes

No
No
Yes
No

Unknown underground cable

SUC - UNDER GRND CABLE

Same code is used for pole dropdown conduits.

orange - fiber
red - cable / phone
yellow - gas
pink - misc
blue - water / storm
green - sewer

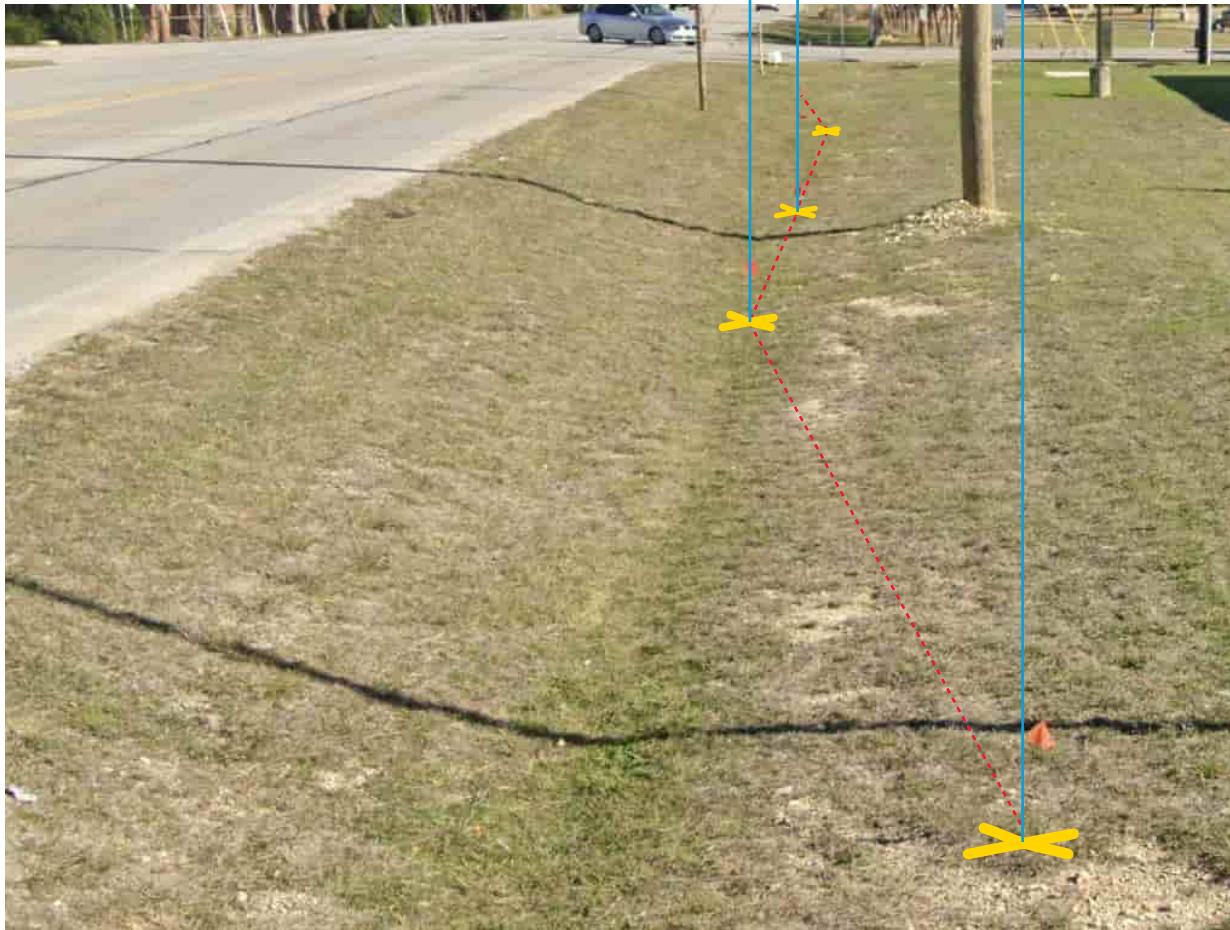


Figure 1 - Image showing preferred way of measuring UNDER GRND CABLE

Category:**Topo & Improvement Codes**

Has Attributes?

No

DTM Feature?

No

Is Line?

Yes

Is Breakline?

No

Underground electric cable

SUE - UNDERGROUND ELEC

Same code is used for pole dropdown conduits.

orange - fiber
red - cable / phone
yellow - gas
pink - misc
blue - water / storm
green - sewer

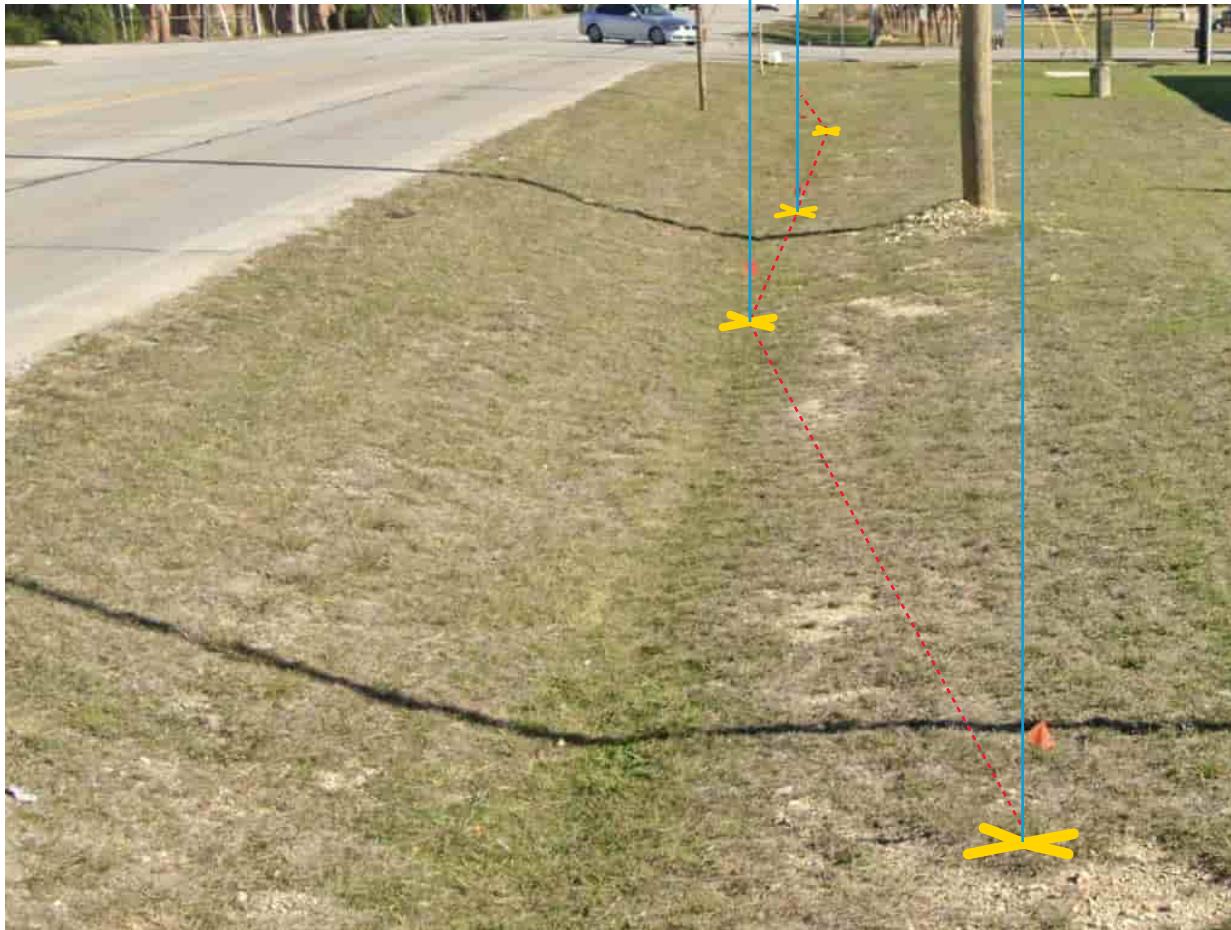


Figure 1 - Image showing preferred way of measuring UNDERGROUND ELEC

Category:

Topo & Improvement Codes

Has Attributes?

No

DTM Feature?

No

Is Line?

Yes

Is Breakline?

No

Underground fiber cable, used for transferring data

SUFO - BURIED FIBER OPT

Same code is used for pole dropdown conduits.

orange - fiber
red - cable / phone
yellow - gas
pink - misc
blue - water / storm
green - sewer

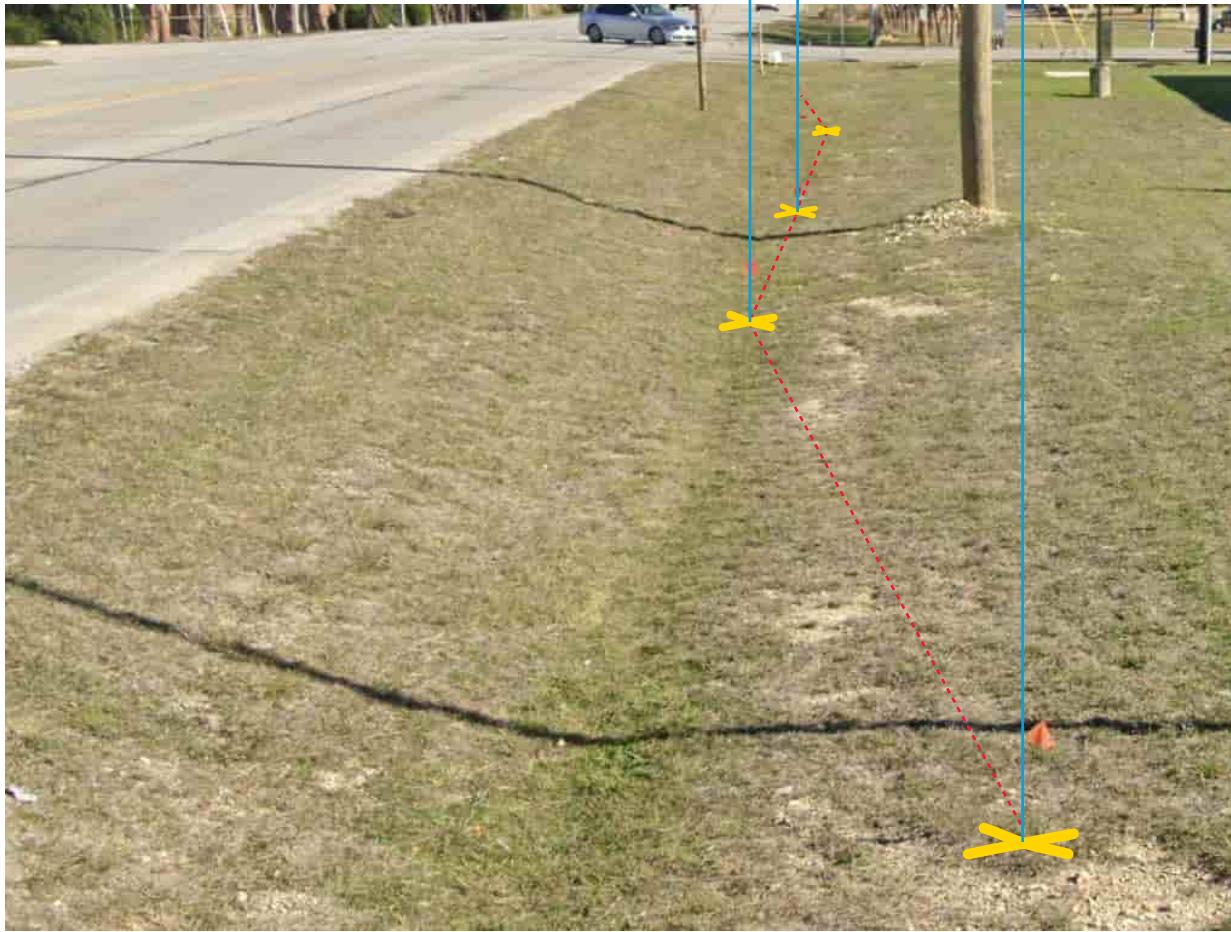


Figure 1 - Image showing preferred way of measuring BURIED FIBER OPT

Category:

Has Attributes?

DTM Feature?

Is Line?

Is Breakline?

Topo & Improvement Codes

No

No

Yes

No

Underground pipelines for natural gas

SUG - BURIED GAS

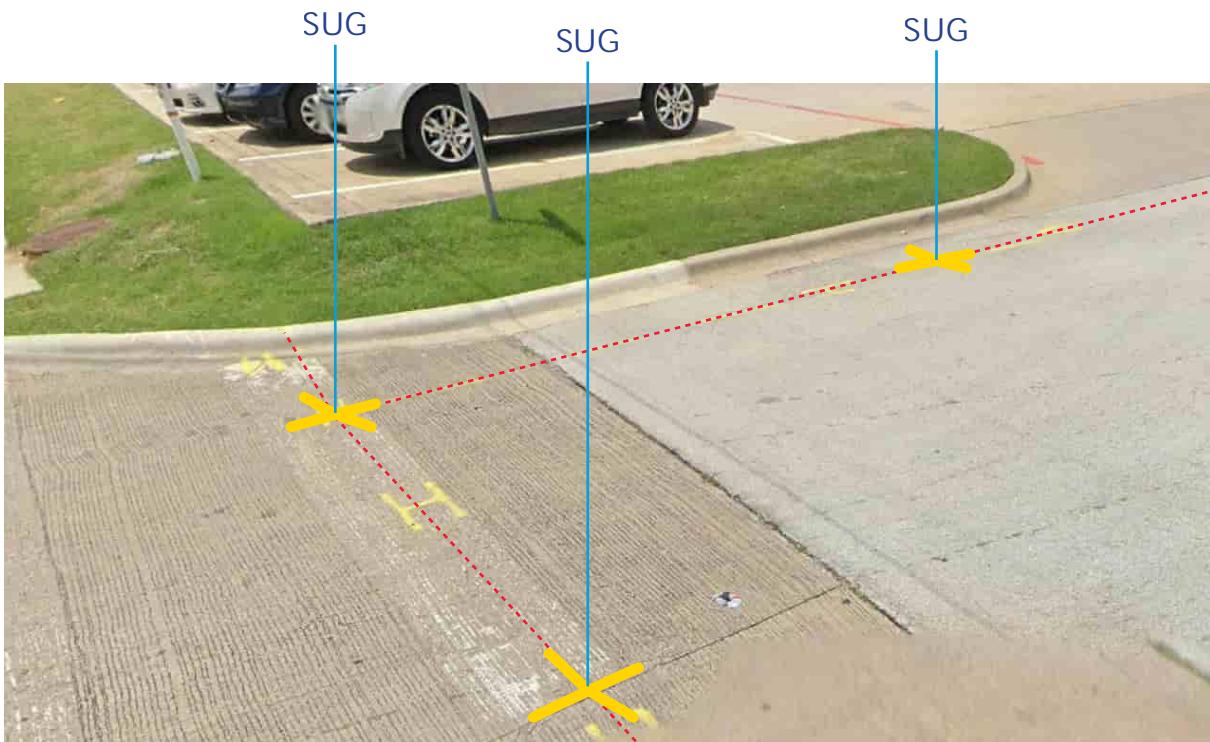
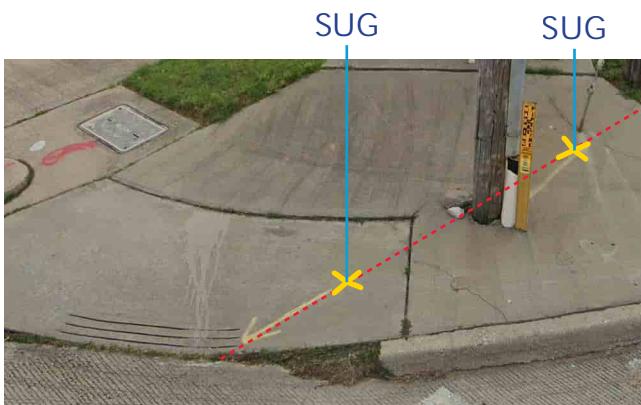


Figure 1 - Image showing preferred way of measuring BURIED GAS



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Category:

Topo & Improvement Codes

Has Attributes?

No

DTM Feature?

No

Is Line?

Yes

Is Breakline?

No

Underground recycled water infrastructure

SURW - RECYCLED WTR

Image Missing

Will be added.

Regular manhole with "recycled water" text on it.

Figure 1 - Image showing preferred way of measuring RECYCLED WTR

Category:

Topo & Improvement Codes

Has Attributes?

No

DTM Feature?

No

Is Line?

Yes

Is Breakline?

No

Underground network of sewer pipes

SUSS - SANITARY SEWER



We just get manholes and invert, we do not necessarily create the linework.

If it's marked, pick it up.

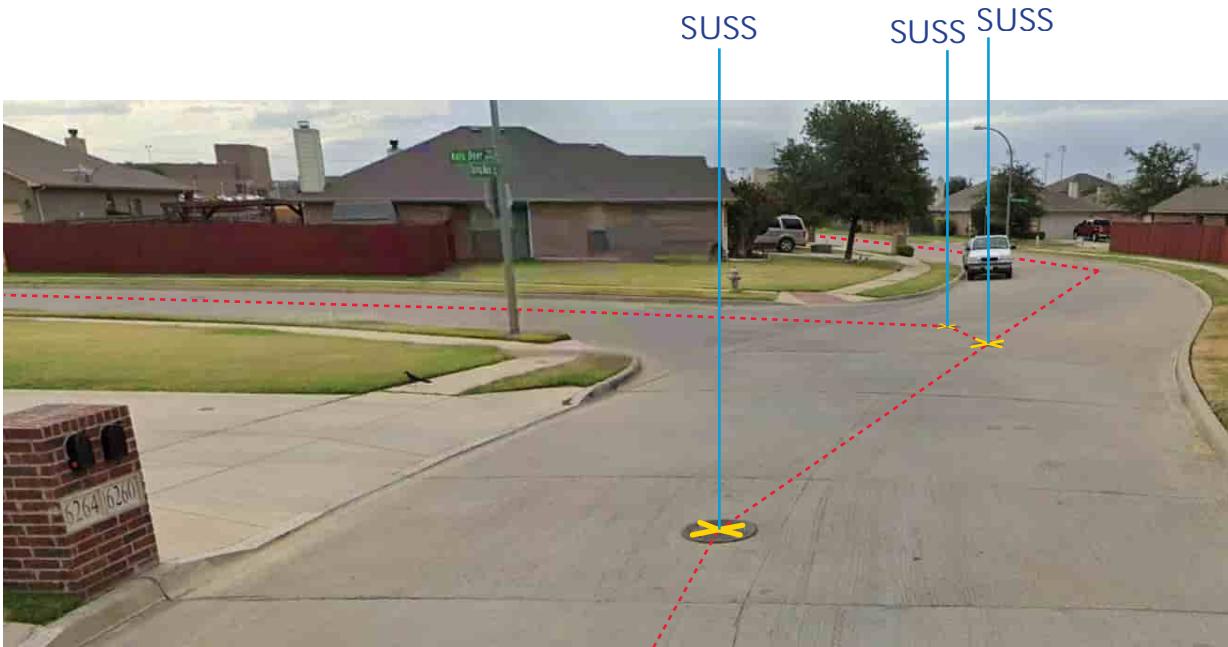


Figure 1 - Image showing preferred way of measuring SANITARY SEWER

Category:
Has Attributes?
DTM Feature?
Is Line?
Is Breakline?

Topo & Improvement Codes

No
No
Yes
No

Underground telephone cables

SUT - BURIED TELE

Same code is used for pole dropdown conduits.

orange - fiber
red - cable / phone
yellow - gas
pink - misc
blue - water / storm
green - sewer

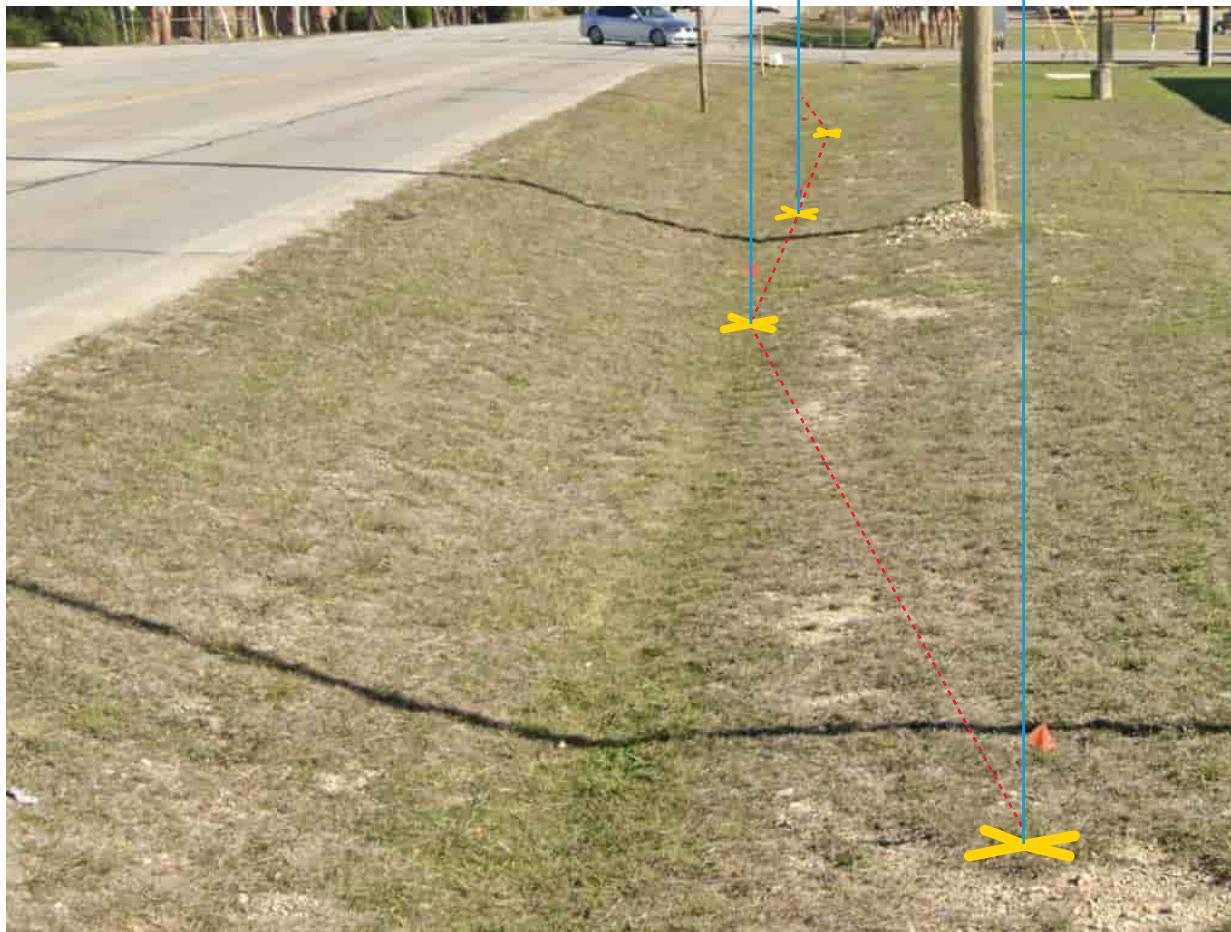


Figure 1 - Image showing preferred way of measuring BURIED TELE

Category:

Topo & Improvement Codes

Has Attributes?

No

DTM Feature?

No

Is Line?

Yes

Is Breakline?

No

Underground water line

SUW - BURIED WATER LN

Same code is used for pole dropdown conduits.

- orange - fiber
- red - cable / phone
- yellow - gas
- pink - misc
- blue - water / storm
- green - sewer

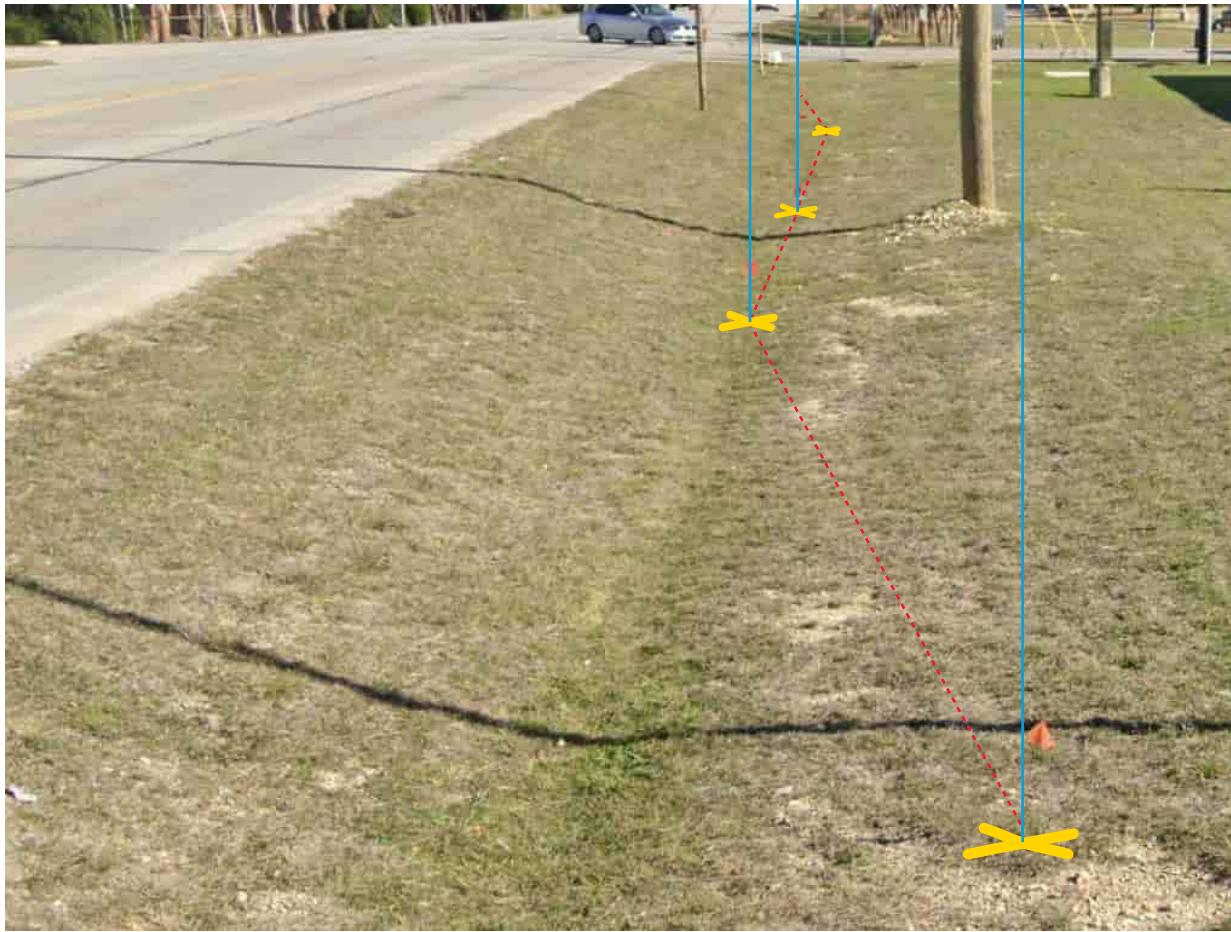


Figure 1 - Image showing preferred way of measuring BURIED WATER LN



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Category:

Has Attributes?

Topo & Improvement Codes

Yes

DTM Feature?

Yes

Is Line?

No

Is Breakline?

N/A

Enclosure for electrical switches and controls

SWB - SWITCH BOX

Image Missing

Will be added.

Figure 1 - Image showing preferred way of measuring SWITCH BOX

Category:

Has Attributes?

DTM Feature?

Is Line?

Is Breakline?

Topo & Improvement Codes

No

Yes

No

N/A

Pavement marking indicating a left turn

TAL - TURN ARROW LFT

Image strictly shown as example. You are not to survey actively roadway without traffic protection.

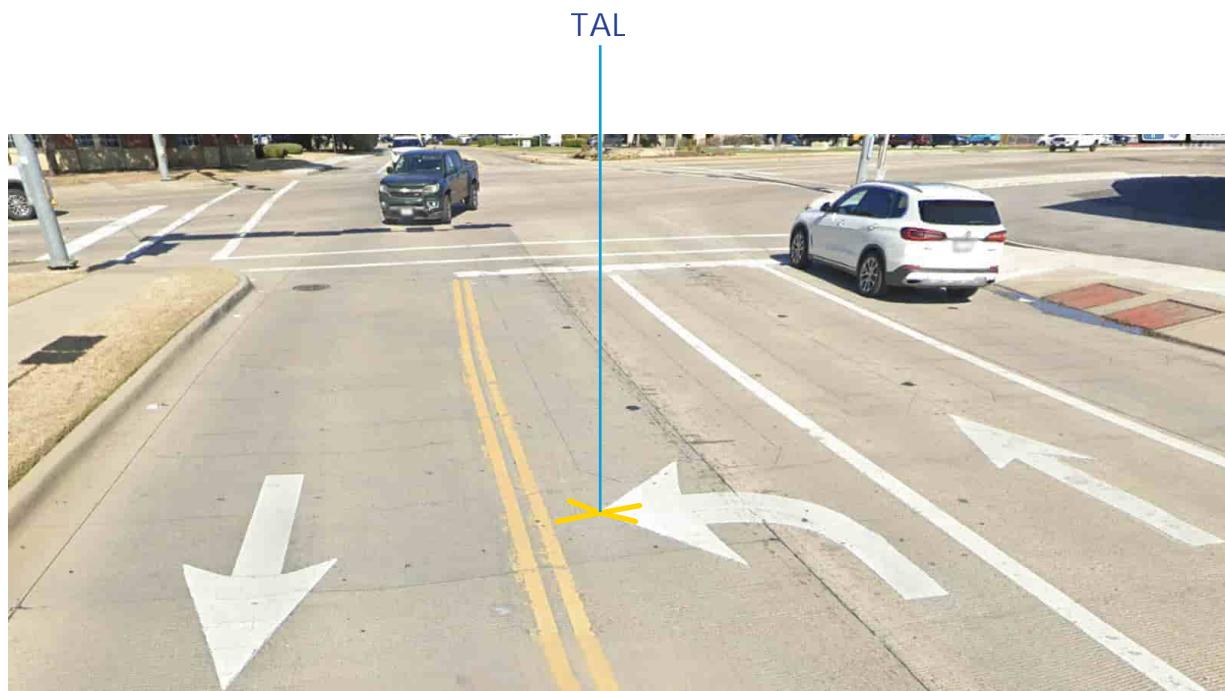


Figure 1 - Image showing preferred way of measuring TURN ARROW LFT

Category:

Has Attributes?

DTM Feature?

Is Line?

Is Breakline?

Topo & Improvement Codes

No

Yes

No

N/A

Pavement marking indicating a right turn

TAR - TURN ARROW RT

Image strictly shown as example. You are not to survey actively roadway without traffic protection.



Figure 1 - Image showing preferred way of measuring TURN ARROW RT

Category:

Has Attributes?

Topo & Improvement Codes

No

DTM Feature?

Yes

Is Line?

No

Is Breakline?

N/A

Pavement marking indicating to go straight ahead

TAS - TURN ARROW STRAIGHT

Image strictly shown as example. You are not to survey actively roadway without traffic protection.

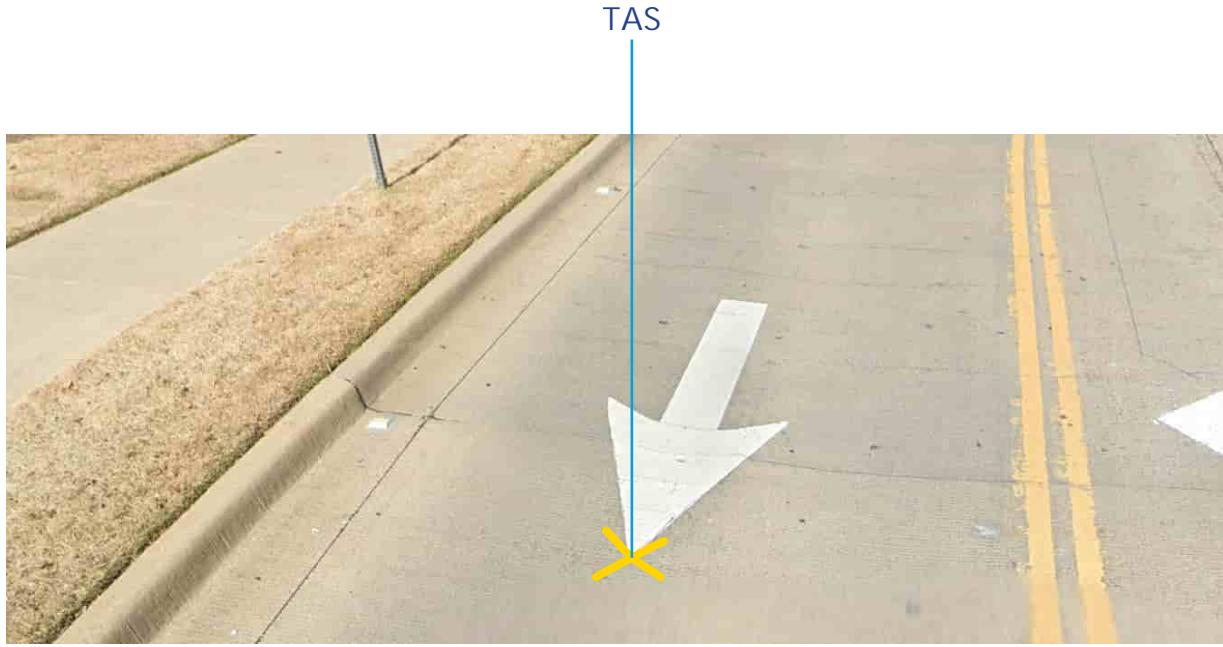


Figure 1 - Image showing preferred way of measuring TURN ARROW STRAIGHT



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Category:
Has Attributes?
DTM Feature?
Is Line?
Is Breakline?

Topo & Improvement Codes

No
Yes
No
N/A

Manhole access point to access underground telephone line infrastructure

TMH - TELE MH

Image Missing

Will be added.

Regular manhole with text showing "telephone" or a bell emblem on it.

Figure 1 - Image showing preferred way of measuring TELE MH

Category:

Has Attributes?

Topo & Improvement Codes

No

DTM Feature?

Yes

Is Line?

No

Is Breakline?

N/A

Pedestal housing telecommunications equipment, typically plastic

TPED - TELE PEDESTAL



Figure 1 - Image showing preferred way of measuring TELE PEDESTAL

Category:

Topo & Improvement Codes

Has Attributes?

No

DTM Feature?

Yes

Is Line?

No

Is Breakline?

N/A

Light signal used to direct traffic AKA a stop light

TSP - TRAFFIC SIGNAL



Figure 1 - Image showing preferred way of measuring TRAFFIC SIGNAL



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Category:

Topo & Improvement Codes

Has Attributes?

No

DTM Feature?

Yes

Is Line?

Yes

Is Breakline?

No

Upper part of a storage tank, often for water or chemicals

TTANK - TOP TANK

Image Missing

Will be added.

Figure 1 - Image showing preferred way of measuring TOP TANK



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Category:

Has Attributes?

Topo & Improvement Codes

No

DTM Feature?

No

Is Line?

No

Is Breakline?

N/A

Valve whose function or type is not specified

UKV - UNKNOWN VALVE

Image Missing

Will be added.

Anytime a valve cannot be identified.

Figure 1 - Image showing preferred way of measuring UNKNOWN VALVE

Category:

Has Attributes?

Topo & Improvement Codes

No

DTM Feature?

No

Is Line?

Yes

Is Breakline?

No

Underground enclosure with unspecified purpose

UKVAULT - VAULT UNKNOWN

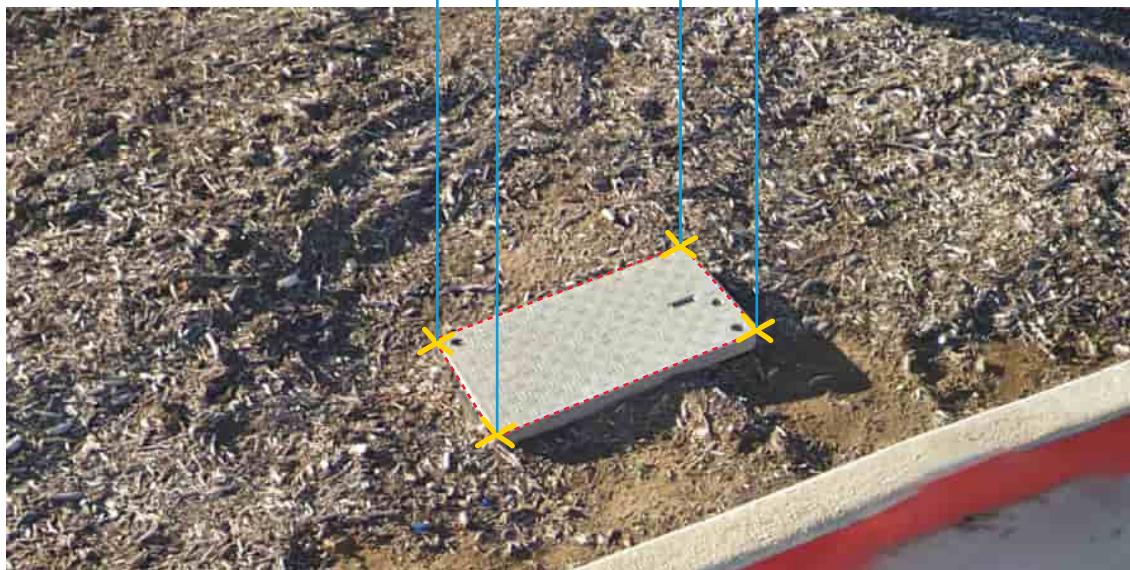


Figure 1 - Image showing preferred way of measuring VAULT UNKNOWN

Category:

Has Attributes?

Topo & Improvement Codes

No

DTM Feature?

Yes

Is Line?

Yes

Is Breakline?

Yes

Edge of a body of water

WE - WATERS EDGE



Figure 1 - Image showing preferred way of measuring WATERS EDGE

Category:

Has Attributes?

DTM Feature?

Is Line?

Is Breakline?

Topo & Improvement Codes

No

Yes

No

N/A

Above ground pipeline infrastructure for pressure and flow in oil & gas wells

WELL - WELL HEAD

Consult with PM for shot location.



Figure 1 - Image showing preferred way of measuring WELL HEAD

Category:

Has Attributes?

Topo & Improvement Codes

No

DTM Feature?

Yes

Is Line?

Yes

Is Breakline?

No

Fencing made from wire

WFN - WIRE FENCE

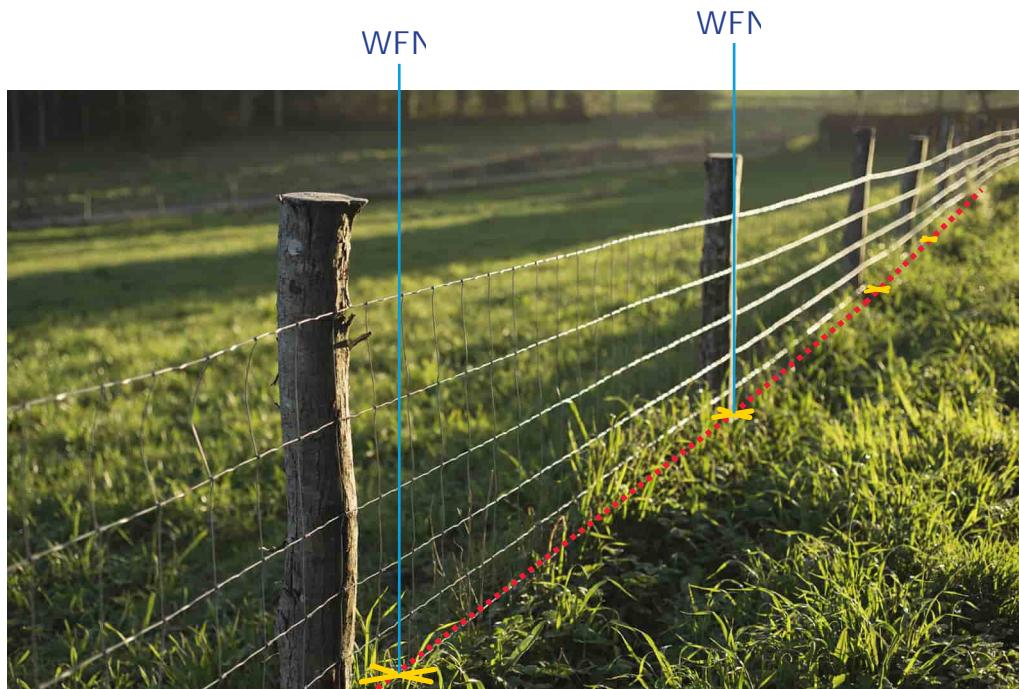


Figure 1 - Image showing preferred way of measuring WIRE FENCE

**Category:**

Has Attributes?

Topo & Improvement Codes

No

DTM Feature?

Yes

Is Line?

Yes

Is Breakline?

Yes

Centerline of the wall. Should specify width of wall if not otherwise measured

WLCL - WALL CENTER LINE

Image Missing

Not typically used

Figure 1 - Image showing preferred way of measuring WALL CENTER LINE

Category:

Has Attributes?

DTM Feature?

Is Line?

Is Breakline?

Topo & Improvement Codes

No

No

No

N/A

Device measuring water usage

WM - WATER METER



Figure 1 - Image showing preferred way of measuring WATER METER

Category:

Has Attributes?

Topo & Improvement Codes

No

DTM Feature?

No

Is Line?

No

Is Breakline?

N/A

Water manhole for access to water utilities

WMH - WATER MH

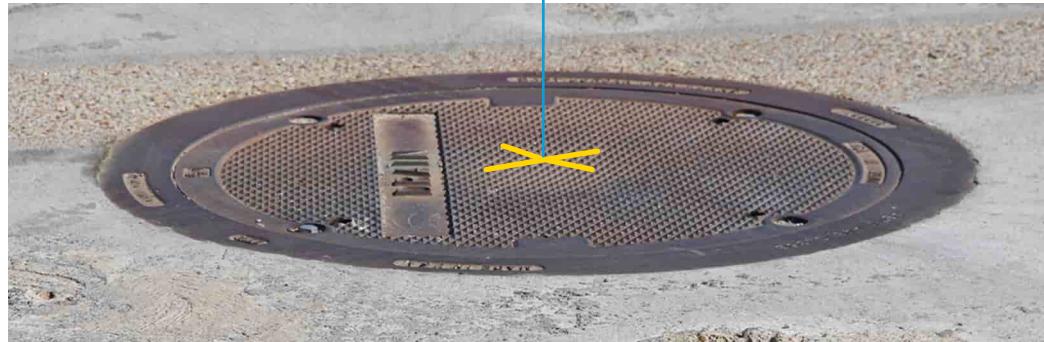


Figure 1 - Image showing preferred way of measuring WATER MH

Category:

Has Attributes?

Topo & Improvement Codes

No

DTM Feature?

No

Is Line?

No

Is Breakline?

N/A

Valve to control water flow in pipelines

WV - WATER VALVE

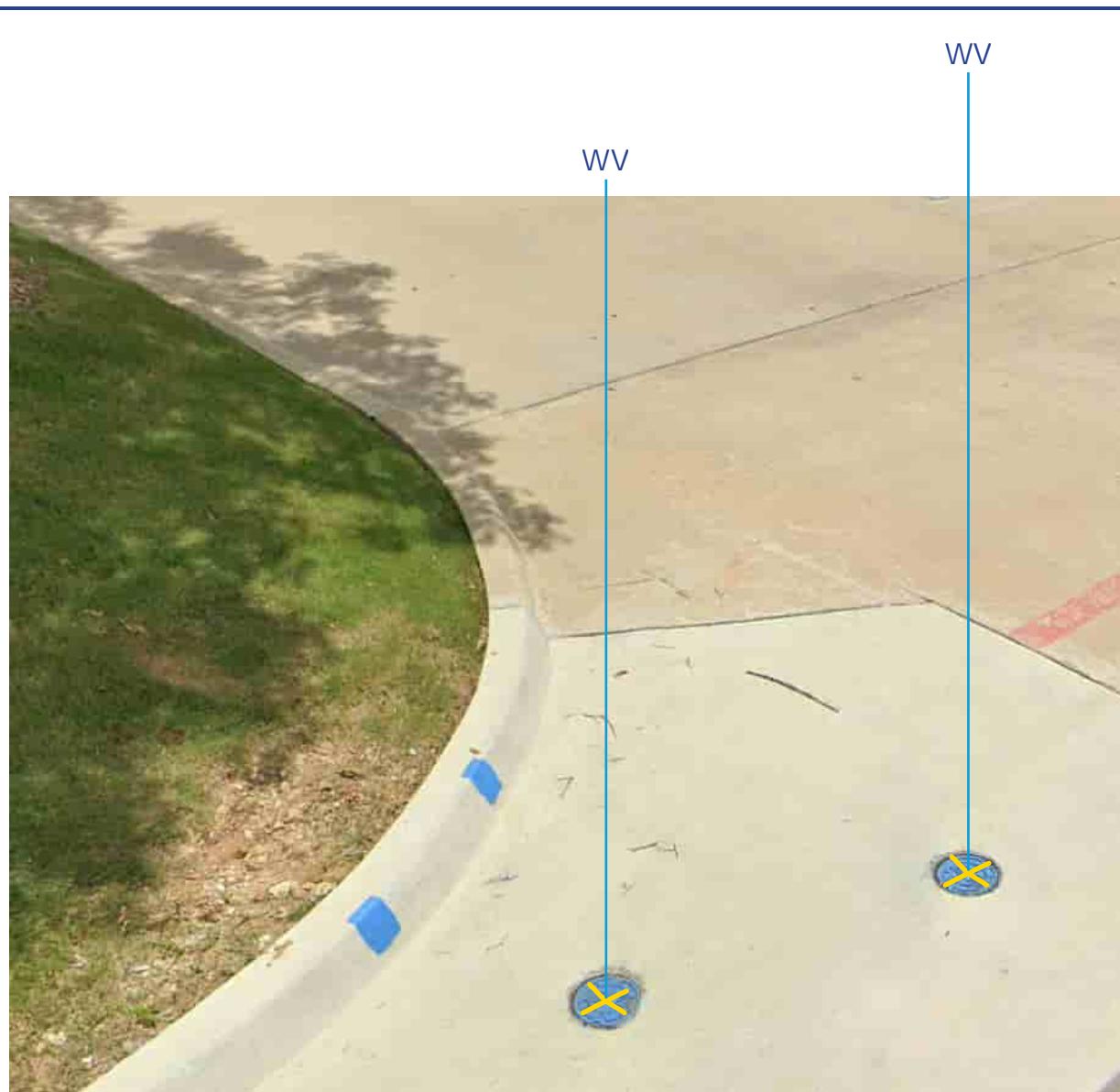


Figure 1 - Image showing preferred way of measuring WATER VALVE

Category:

Has Attributes?

DTM Feature?

Is Line?

Is Breakline?

Topo & Improvement Codes

No

No

Yes

No

Enclosed space housing water control equipment

WVAULT - WATER VAULT



Figure 1 - Image showing preferred way of measuring WATER VAULT

Category:

Topo & Improvement Codes

Has Attributes?

No

DTM Feature?

No

Is Line?

No

Is Breakline?

N/A

Device to change voltage in electrical systems

XFR - TRANSFORMER



Figure 1 - Image showing preferred way of measuring TRANSFORMER

Category:

Has Attributes?

Monument Codes

Yes

DTM Feature?

No

Is Line?

No

Is Breakline?

N/A

Check shot on previously known coordinate to verify equipment is working well

CHK - CHECK PT

Used to measure previously known point to verify equipment is operating correctly.



Figure 1 - Image showing preferred way of measuring CHECK PT



Engineering
& Design



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Category:

Has Attributes?

Monument Codes

No

DTM Feature?

Yes

Is Line?

No

Is Breakline?

N/A

Found 60D nail, possibly a boundark marker

F60D - FND 60D

Image Missing

Will be added.

Figure 1 - Image showing preferred way of measuring FND 60D



Engineering
& Design



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Category:

Has Attributes?

Monument Codes

No

DTM Feature?

Yes

Is Line?

No

Is Breakline?

N/A

Found 60D nail with plastic cap. Provide detail about cap

F6C - FND 60 CAP

Image Missing

Will be added.

Figure 1 - Image showing preferred way of measuring FND 60 CAP

**Category:**

Has Attributes?

Monument Codes

No

DTM Feature?

Yes

Is Line?

No

Is Breakline?

N/A

Benchmark for elevation reference**FBM - BM**

Image Missing

Will be added.

BM is a control point with accurate elevation.

Figure 1 - Image showing preferred way of measuring BM

**Category:**

Has Attributes?

Monument Codes

No

DTM Feature?

Yes

Found cotton spindle used as control point marker or boundary marker

Is Line?

No

Is Breakline?

N/A

FCS - FND COT SPIN

Figure 1 - Image showing preferred way of measuring FND COT SPIN

**Category:**

Has Attributes?

Monument Codes

Yes

DTM Feature?

Yes

Is Line?

No

Is Breakline?

N/A

Found iron pipe survey marker, specify size

FIP - PIPE

Image Missing

Will be added.

Figure 1 - Image showing preferred way of measuring PIPE



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Category:

Has Attributes?

Monument Codes

No

DTM Feature?

No

Is Line?

No

Is Breakline?

N/A

Found iron rod / rebar survey marker, specify size

FIR - FND IR

Image Missing

Will be added.

Figure 1 - Image showing preferred way of measuring FND IR



Engineering
& Design



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Category:

Has Attributes?

Monument Codes

Yes

DTM Feature?

No

Is Line?

No

Is Breakline?

N/A

Found iron rod / rebar survey marker with plastic cap

FIXX - IR CAP

Image Missing

Will be added.

Figure 1 - Image showing preferred way of measuring IR CAP



Engineering
& Design



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Category:

Has Attributes?

Monument Codes

No

DTM Feature?

Yes

Is Line?

No

Is Breakline?

N/A

Found MAGNAIL survey marker, no washer available

FMN - FOUND MAG NAIL



Figure 1 - Image showing preferred way of measuring FOUND MAG NAIL

**Category:**

Has Attributes?

Monument Codes

Yes

DTM Feature?

Yes

Is Line?

No

Is Breakline?

N/A

Found MAGNAIL survey marker, specify washer details

FMX - FOUND MAG NAIL WASHER



Figure 1 - Image showing preferred way of measuring FOUND MAG NAIL WASHER



Engineering
& Design



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Category:

Has Attributes?

Monument Codes

No

DTM Feature?

Yes

Is Line?

No

Is Breakline?

N/A

Found concrete nail survey marker

FNA - FND CONC NAIL

Image Missing

Will be added.

Figure 1 - Image showing preferred way of measuring FND CONC NAIL

Category:

Has Attributes?

Monument Codes

No

DTM Feature?

Yes

Is Line?

No

Is Breakline?

N/A

Found cut X on concrete

FXC - X ON CONC

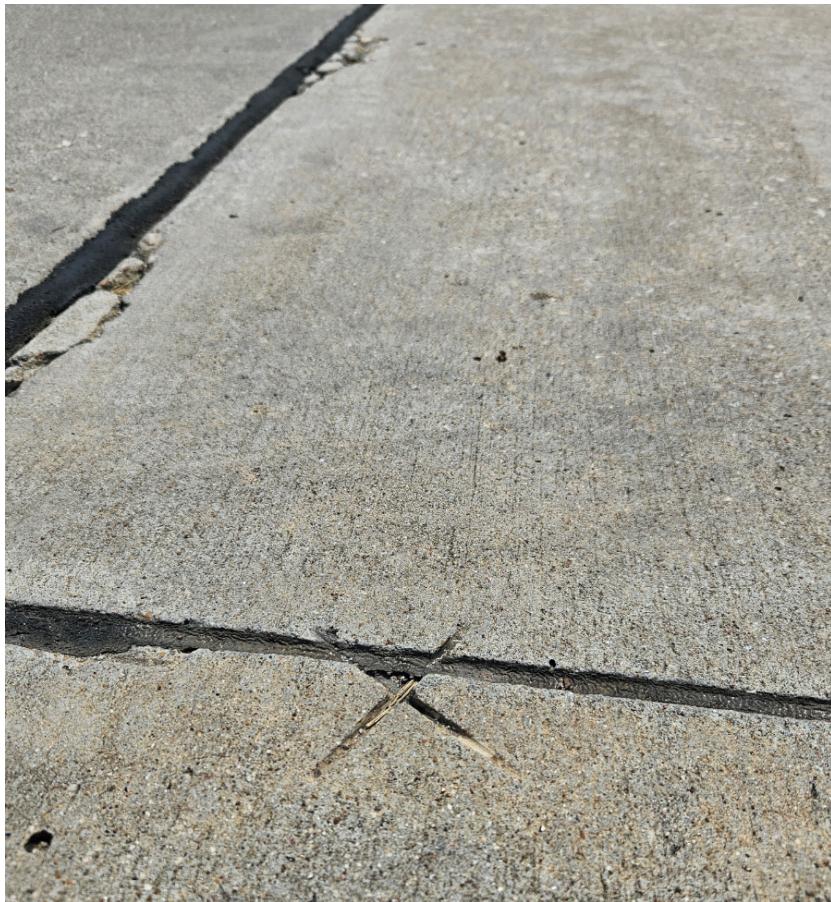


Figure 1 - Image showing preferred way of measuring X ON CONC

Category:

Has Attributes?

Monument Codes

No

DTM Feature?

No

Is Line?

No

Is Breakline?

N/A

TxDOT Type 1 monument - concrete pillar

MON1 - CONC



Figure 1 - Image showing preferred way of measuring CONC

Category:

Has Attributes?

Monument Codes

No

DTM Feature?

No

Is Line?

No

Is Breakline?

N/A

TxDOT Type 2 monument - Brass / metal cap

MON2 - DISC



Figure 1 - Image showing preferred way of measuring DISC



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Category:

Has Attributes?

Monument Codes

No

DTM Feature?

Yes

Is Line?

No

Is Breakline?

N/A

Occupied point, calculated by resection

RESEC - **RESCT PT**...

Not used any longer.

Figure 1 - Image showing preferred way of measuring RESCT PT



Engineering
& Design



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Category:

Has Attributes?

Monument Codes

No

DTM Feature?

Yes

Is Line?

No

Is Breakline?

N/A

Set 60D nail survey marker

S60D - 60D NAIL SET

Image Missing

Will be added.

Figure 1 - Image showing preferred way of measuring 60D NAIL SET

**Category:**

Has Attributes?

Monument Codes

No

DTM Feature?

Yes

Is Line?

No

Is Breakline?

N/A

Set 60D nail survey marker - temporary location, will be removed

S60DCP - 60D CAP TEMP

Image Missing

Will be added.

Figure 1 - Image showing preferred way of measuring 60D CAP TEMP



Engineering
& Design



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Category:

Has Attributes?

Monument Codes

No

DTM Feature?

Yes

Is Line?

No

Is Breakline?

N/A

Set 60D nail survey marker - for construction staking

S6C - 60D CAP CNST

Image Missing

Will be added.

Figure 1 - Image showing preferred way of measuring 60D CAP CNST



Engineering
& Design



KFW
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Category:

Has Attributes?

Monument Codes

No

DTM Feature?

Yes

Is Line?

No

Is Breakline?

N/A

Set benchmark survey marker. Specify type

SBM - KFW BM

Image Missing

Will be added.

Figure 1 - Image showing preferred way of measuring KFW BM

Category:

Has Attributes?

Monument Codes

No

DTM Feature?

Yes

Is Line?

No

Is Breakline?

N/A

Set cotton spindle survey marker

SCS - SET COT SPIN



Figure 1 - Image showing preferred way of measuring SET COT SPIN

**Category:**

Has Attributes?

Monument Codes

No

Set rebar with CED cap "COLLIERS PROP CORNER" unless otherwise specified

DTM Feature?

No

Is Line?

No

Is Breakline?

N/A

SIR - SET IR KFW CAP

Figure 1 - Image showing preferred way of measuring SET IR KFW CAP



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Category:

Has Attributes?

Monument Codes

No

DTM Feature?

No

Is Line?

No

Is Breakline?

N/A

Set rebar with CED cap as control point - not boundary marker

SIRCP - IR CTRL KFW

Image Missing

Will be added.

Figure 1 - Image showing preferred way of measuring IR CTRL KFW

Category:

Monument Codes

Has Attributes?

No

DTM Feature?

Yes

Is Line?

No

Is Breakline?

N/A

Set MAGNAIL with CED washer as control point - not boundary marker

SMCP - SET MAG NAIL WASHER CP



CED CONROL



Figure 1 - Image showing preferred way of measuring SET MAG NAIL WASHER CP

Category:

Has Attributes?

Monument Codes

No

DTM Feature?

Yes

Set MAGNAIL with CED washer "COLLIERS PROP CORNER" unless
otherwise specified

Is Line?

No

Is Breakline?

N/A

SMW - SET MAG NAIL WASHER KFW

**COLLIERS PROP
CORNER***Figure 1 - Image showing preferred way of measuring SET MAG NAIL WASHER KFW*

Category:

Has Attributes?

Monument Codes

No

DTM Feature?

Yes

Is Line?

No

Is Breakline?

N/A

Set cut X in concrete as survey marker

SXC - X CTRL

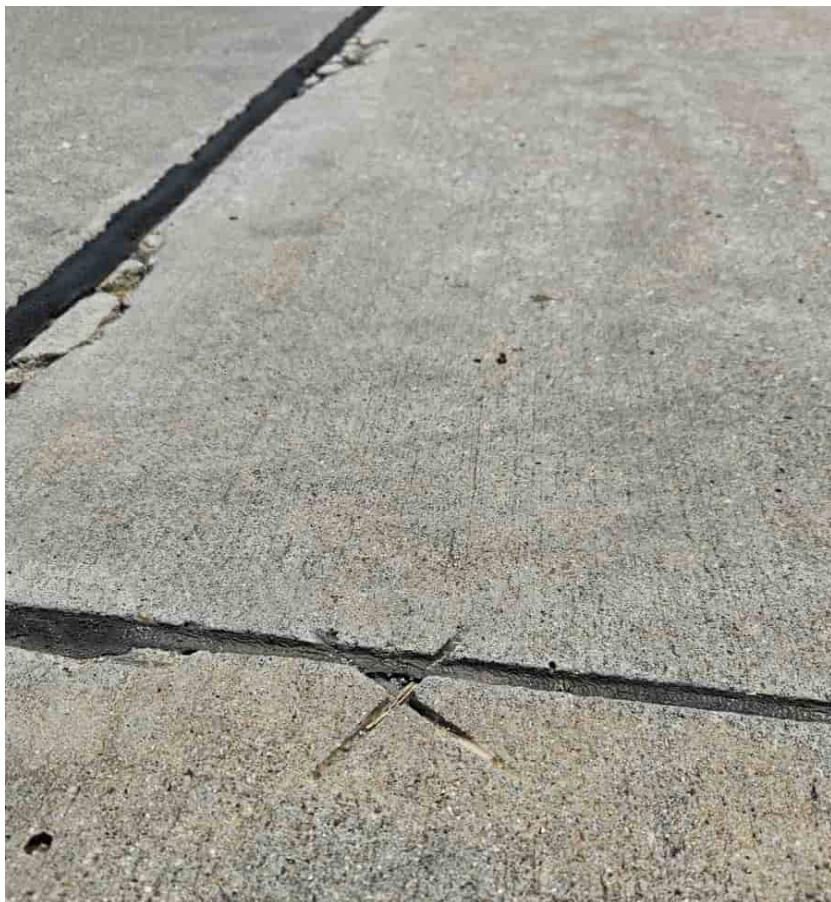


Figure 1 - Image showing preferred way of measuring X CTRL

Category:

Has Attributes?

Tree Codes

Yes

DTM Feature?

No

Is Line?

No

Is Breakline?

N/A

Ash tree species

ASH - ASH

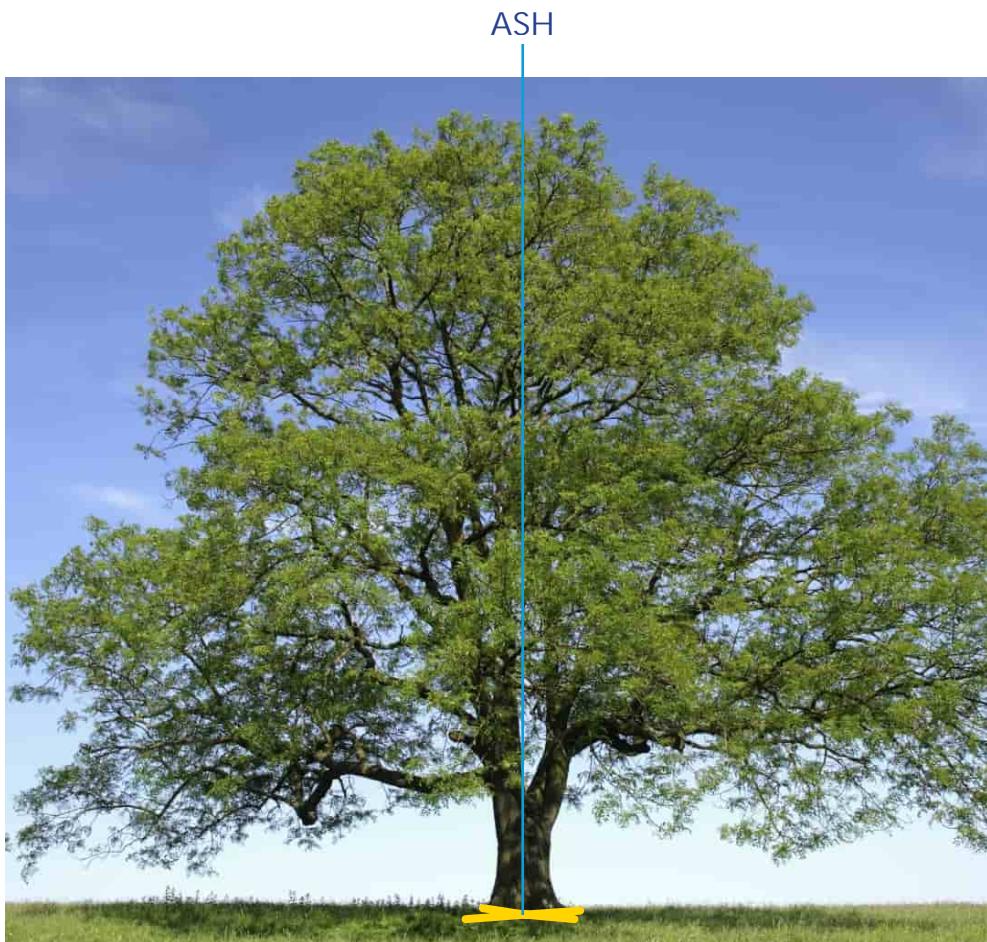


Figure 1 - Image showing preferred way of measuring ASH

Category:

Has Attributes?

Tree Codes

Yes

DTM Feature?

Yes

Is Line?

No

Is Breakline?

N/A

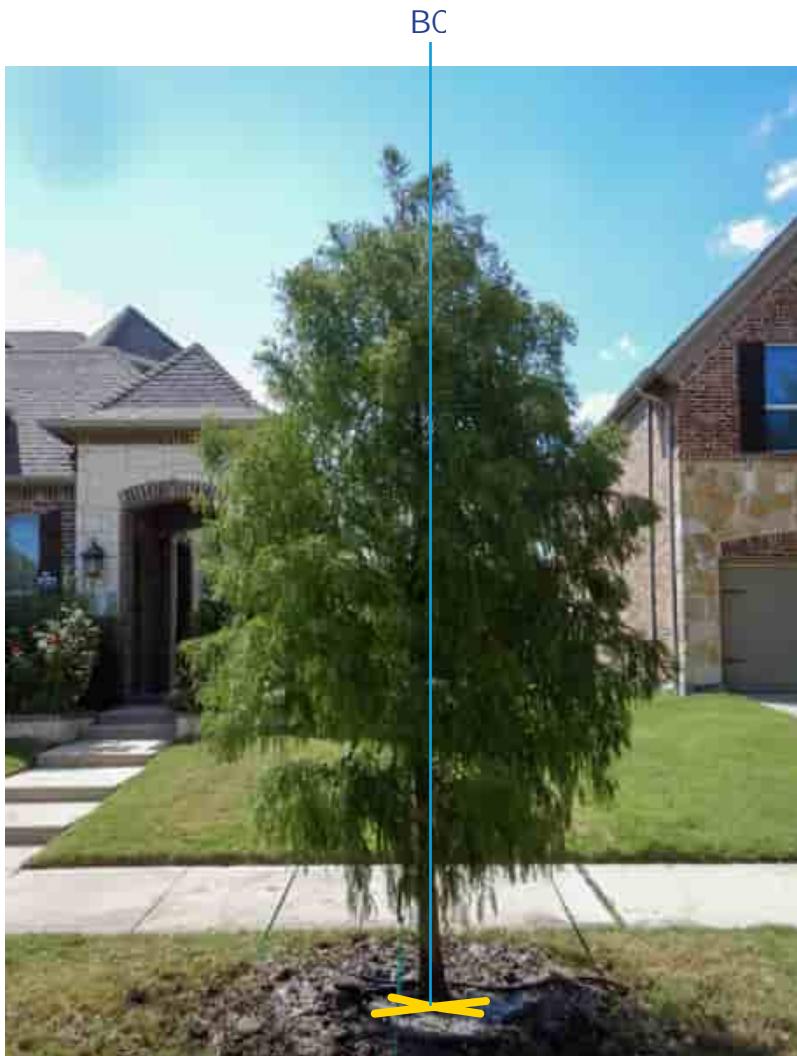
Bald cypress tree species**BC - BALD CYPRESS**

Figure 1 - Image showing preferred way of measuring BALD CYPRESS

Category:

Has Attributes?

Tree Codes

Yes

DTM Feature?

No

Is Line?

No

Is Breakline?

N/A

China berry tree species

CB - CHINA BERRY



Figure 1 - Image showing preferred way of measuring CHINA BERRY

Category:

Has Attributes?

Tree Codes

Yes

DTM Feature?

Yes

Is Line?

No

Is Breakline?

N/A

Cedar tree species**CDR - CEDAR**

Figure 1 - Image showing preferred way of measuring CEDAR

Category:

Has Attributes?

DTM Feature?

Is Line?

Is Breakline?

Tree Codes

Yes

Yes

No

N/A

Chinese talo tree species

CHT - CHINESE TALO

CHT

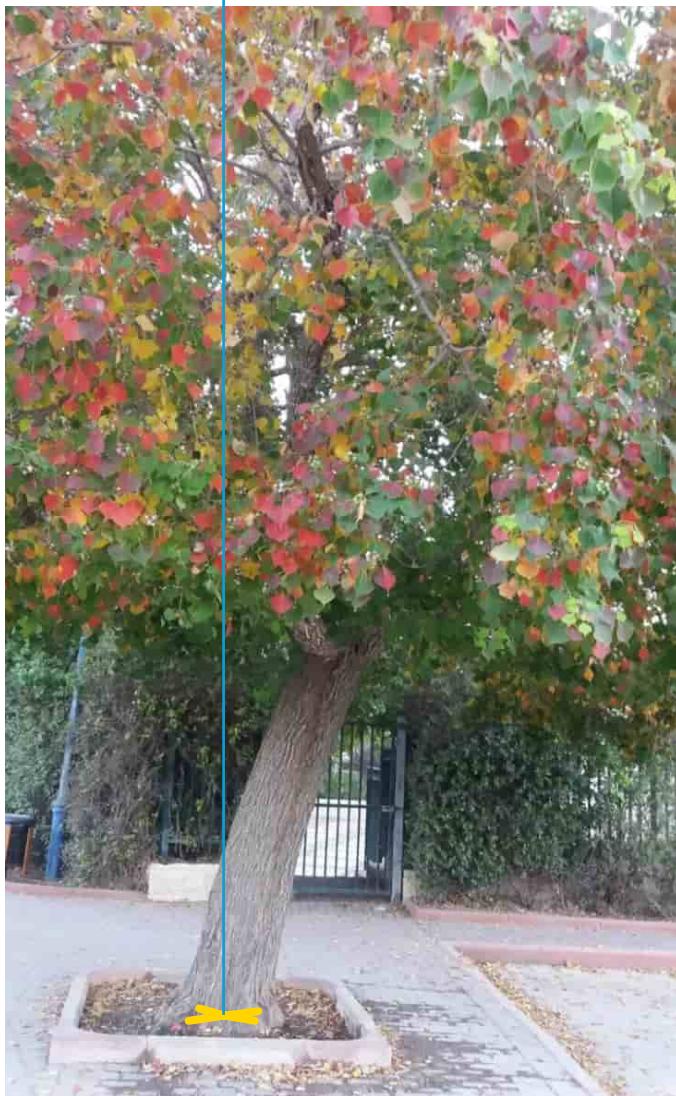


Figure 1 - Image showing preferred way of measuring CHINESE TALO

Category:

Has Attributes?

Tree Codes

Yes

DTM Feature?

Yes

Is Line?

No

Is Breakline?

N/A

Condalia tree species

CND - CONDALIA



Figure 1 - Image showing preferred way of measuring CONDALIA

Category:

Has Attributes?

Tree Codes

Yes

DTM Feature?

Yes

Is Line?

No

Is Breakline?

N/A

Cottonwood tree species**COT - COTTONWOOD**

Figure 1 - Image showing preferred way of measuring COTTONWOOD

Category:

Has Attributes?

Tree Codes

Yes

DTM Feature?

Yes

Is Line?

Yes

Is Breakline?

No

Outermost circumference of tree branches in area with multiple trees

DRIP - DRIP LINE

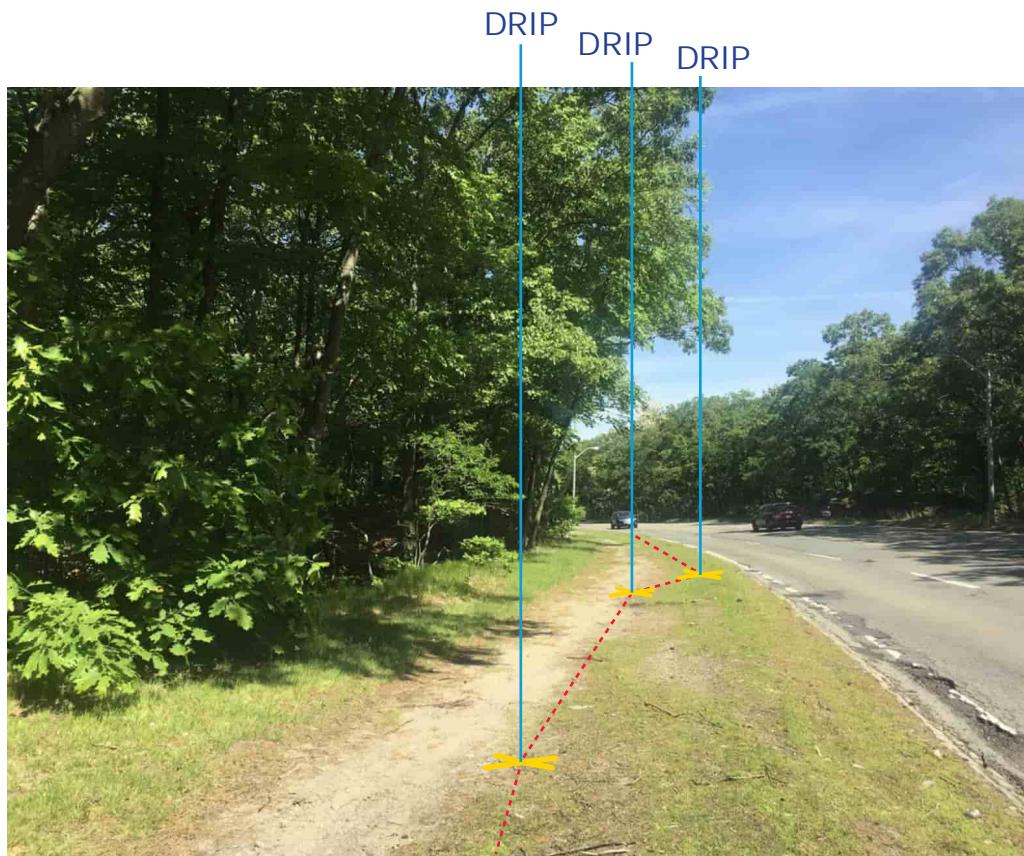


Figure 1 - Image showing preferred way of measuring DRIP LINE

Category:

Has Attributes?

Tree Codes

Yes

DTM Feature?

Yes

Is Line?

No

Is Breakline?

N/A

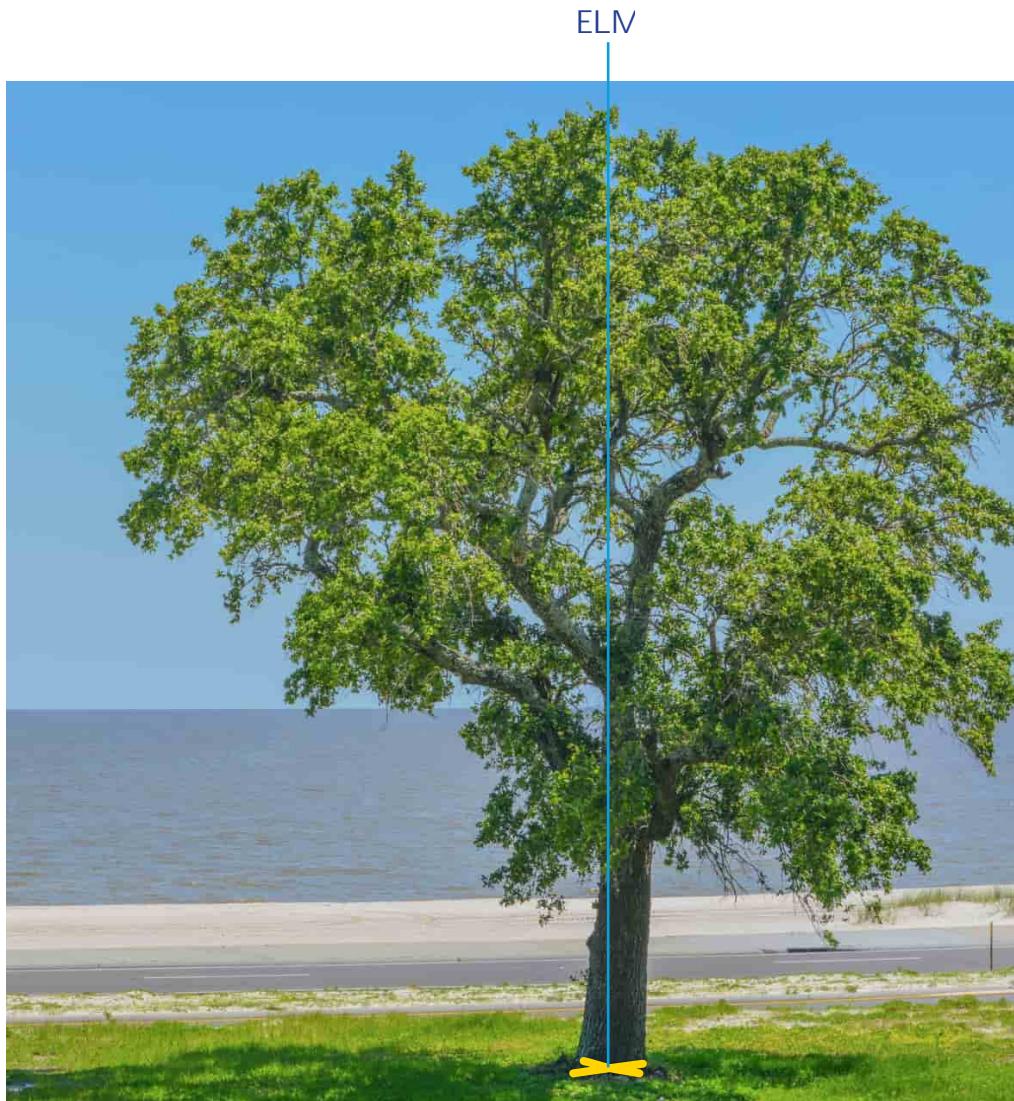
Elm tree species**ELM - ELM**

Figure 1 - Image showing preferred way of measuring ELM

Category:

Has Attributes?

Tree Codes

Yes

DTM Feature?

No

Is Line?

No

Is Breakline?

N/A

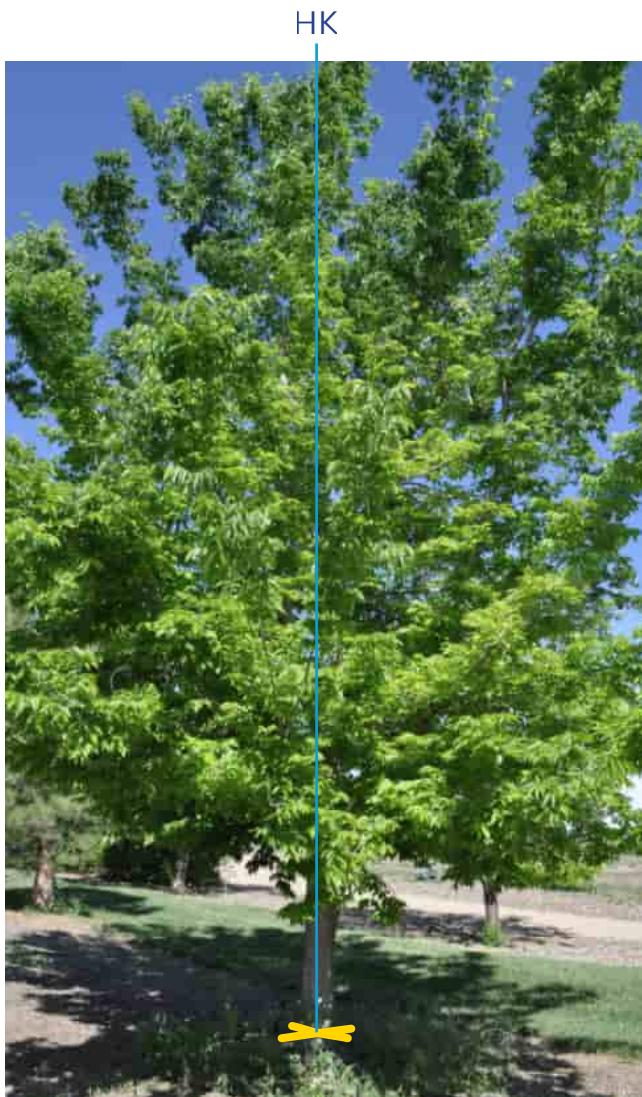
Hackberry tree species**HK - HACKBERRY**

Figure 1 - Image showing preferred way of measuring HACKBERRY

Category:

Has Attributes?

Tree Codes

Yes

DTM Feature?

No

Is Line?

No

Is Breakline?

N/A

Huisachi tree species

HUI - HUISACHI

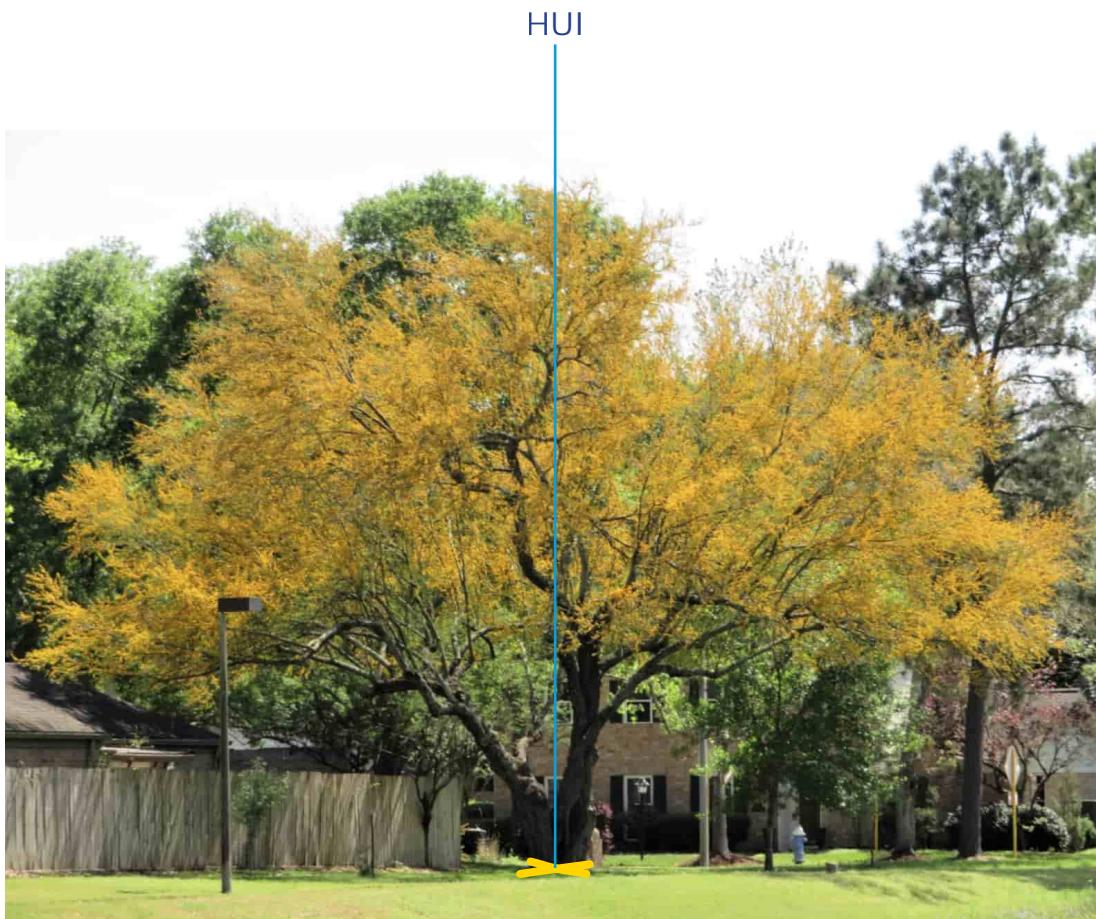


Figure 1 - Image showing preferred way of measuring HUISACHI

Category:

Has Attributes?

Tree Codes

Yes

DTM Feature?

Yes

Is Line?

No

Is Breakline?

N/A

Directional lean of a tree

LEAN - TREE LEAN

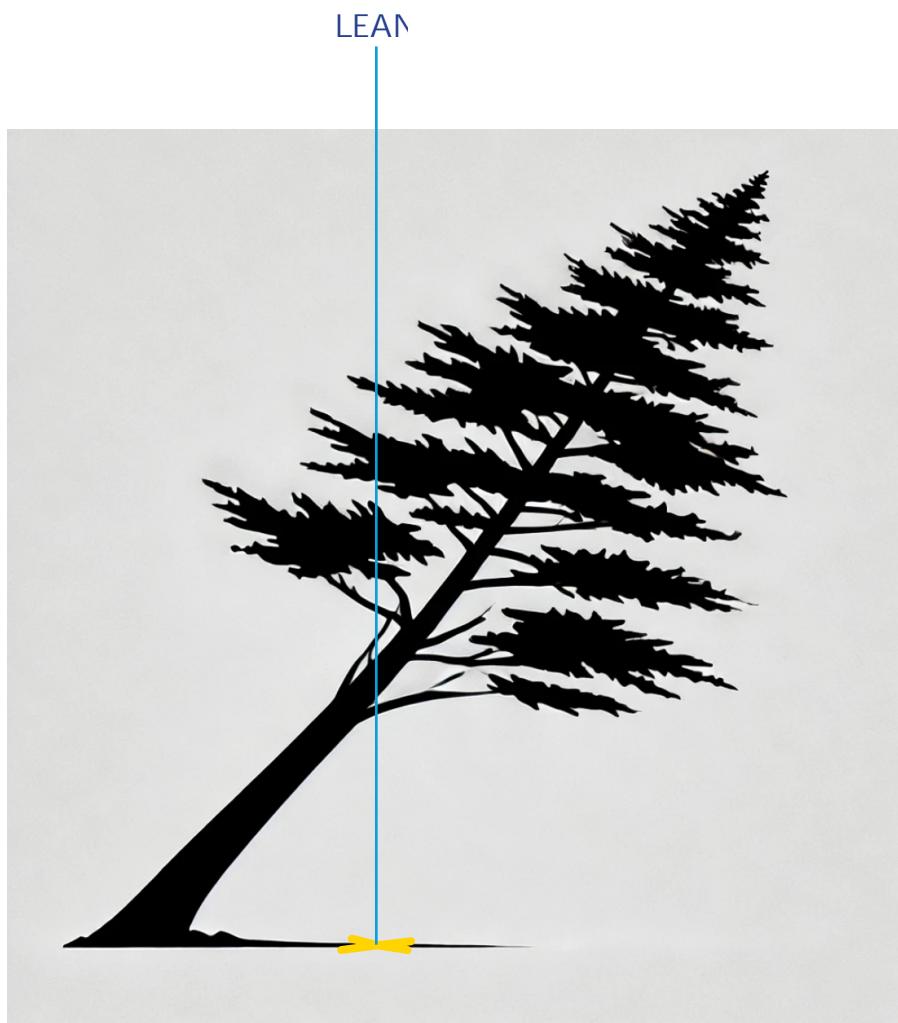


Figure 1 - Image showing preferred way of measuring TREE LEAN

Category:

Has Attributes?

Tree Codes

Yes

DTM Feature?

Yes

Is Line?

No

Is Breakline?

N/A

Ligustrum tree species**LIG - LIGUSTRUM**

Figure 1 - Image showing preferred way of measuring LIGUSTRUM

Category:

Has Attributes?

Tree Codes

Yes

DTM Feature?

No

Is Line?

No

Is Breakline?

N/A

Live oak tree species**LO - LIVE OAK**

Figure 1 - Image showing preferred way of measuring LIVE OAK

Category:

Tree Codes

Has Attributes?

Yes

DTM Feature?

No

Is Line?

No

Is Breakline?

N/A

Mountain laurel tree species

ML - MOUNTAIN LAUREL



Figure 1 - Image showing preferred way of measuring MOUNTAIN LAUREL

Category:

Has Attributes?

Tree Codes

Yes

DTM Feature?

No

Is Line?

No

Is Breakline?

N/A

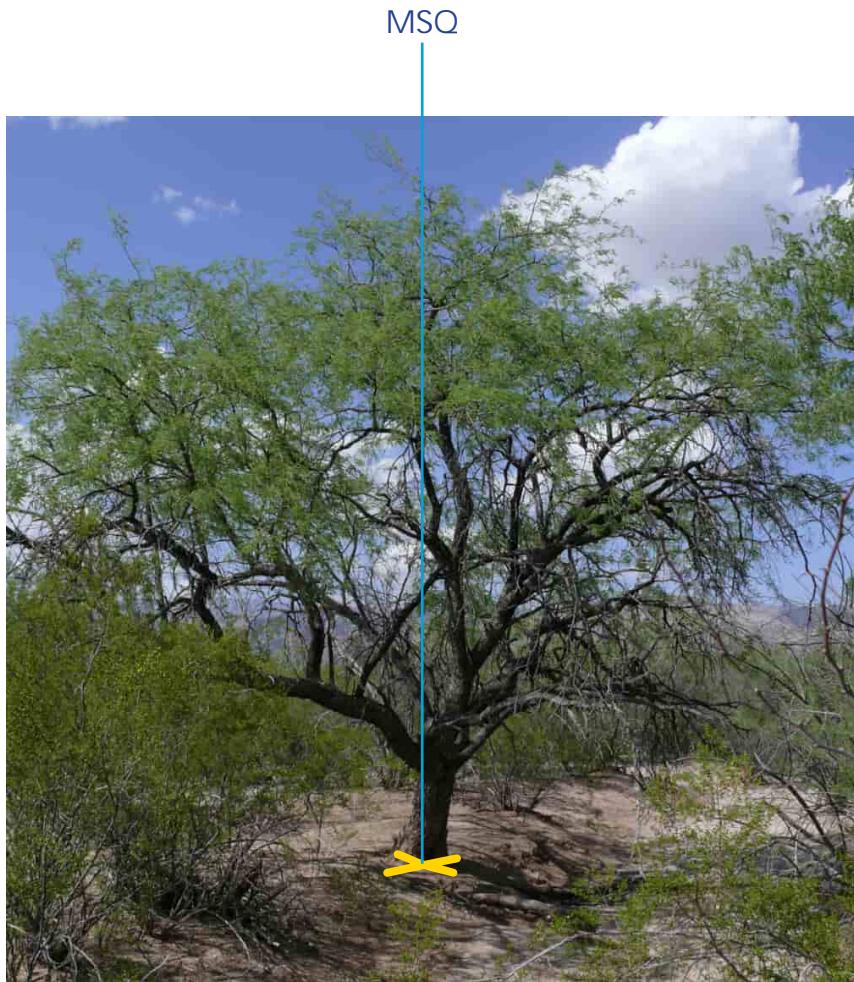
Mesquite tree species**MSQ - MESQUITE**

Figure 1 - Image showing preferred way of measuring MESQUITE

Category:

Has Attributes?

Tree Codes

Yes

DTM Feature?

Yes

Is Line?

No

Is Breakline?

N/A

Mulberry tree species**MUL - MULBERRY**

Figure 1 - Image showing preferred way of measuring MULBERRY

Category:

Has Attributes?

Tree Codes

Yes

DTM Feature?

Yes

Is Line?

No

Is Breakline?

N/A

Crape myrtle tree species

MYT - CRAPE MYRTLE

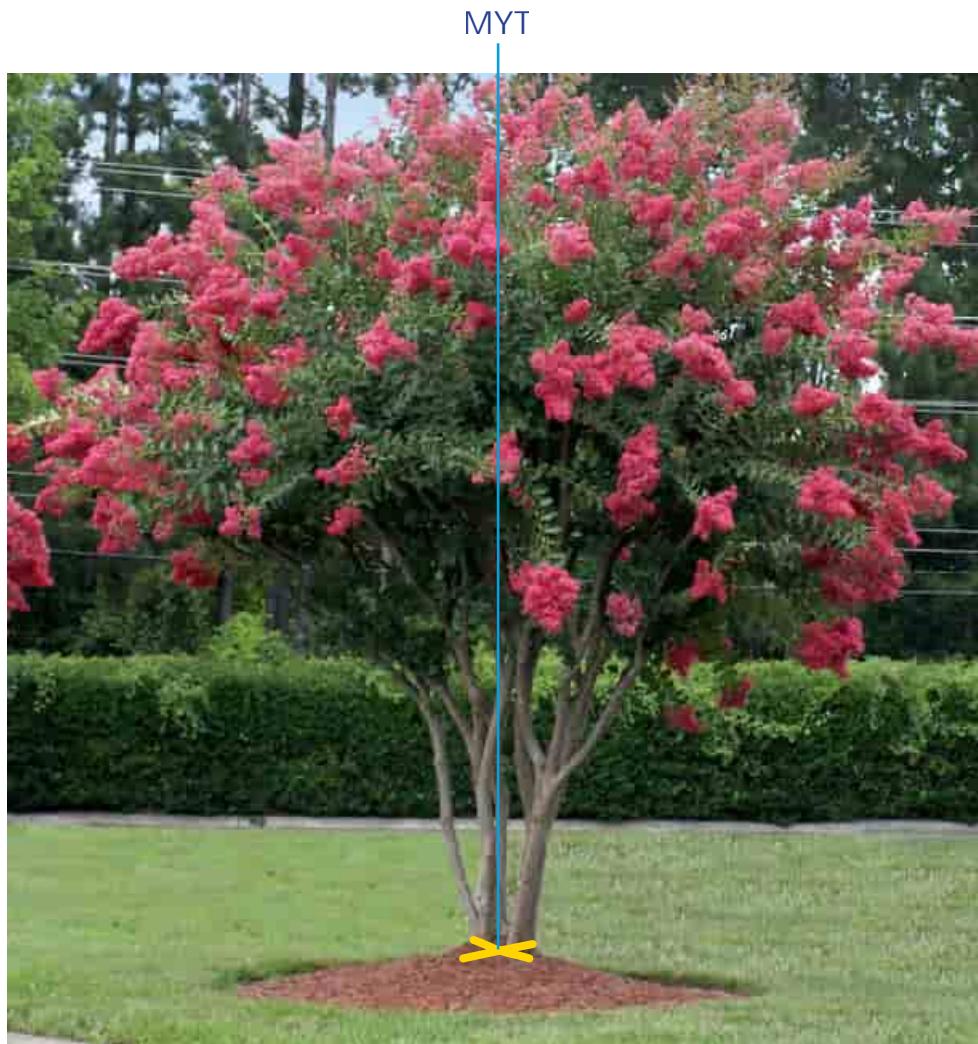


Figure 1 - Image showing preferred way of measuring CRAPE MYRTLE

Category:

Has Attributes?

Tree Codes

Yes

DTM Feature?

Yes

Is Line?

No

Is Breakline?

N/A

Palm tree species

PALM - PALM

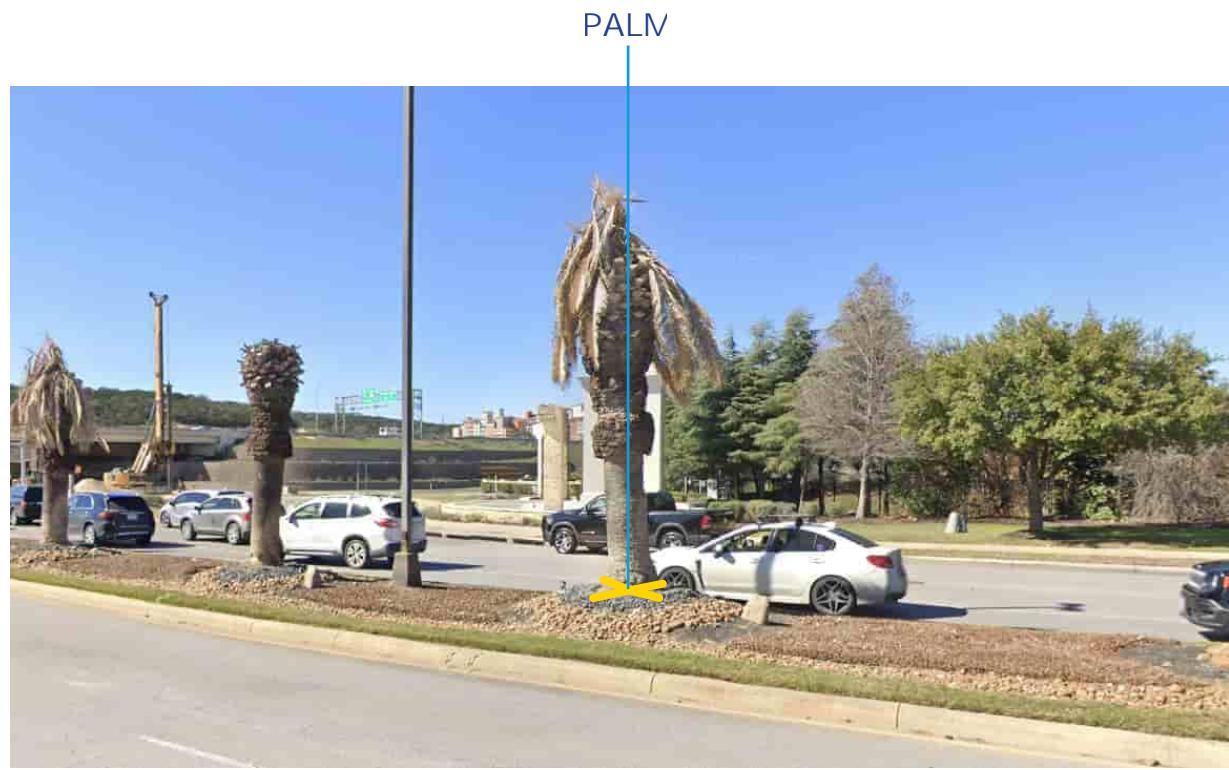


Figure 1 - Image showing preferred way of measuring PALM

Category:

Has Attributes?

Tree Codes

Yes

DTM Feature?

Yes

Is Line?

No

Is Breakline?

N/A

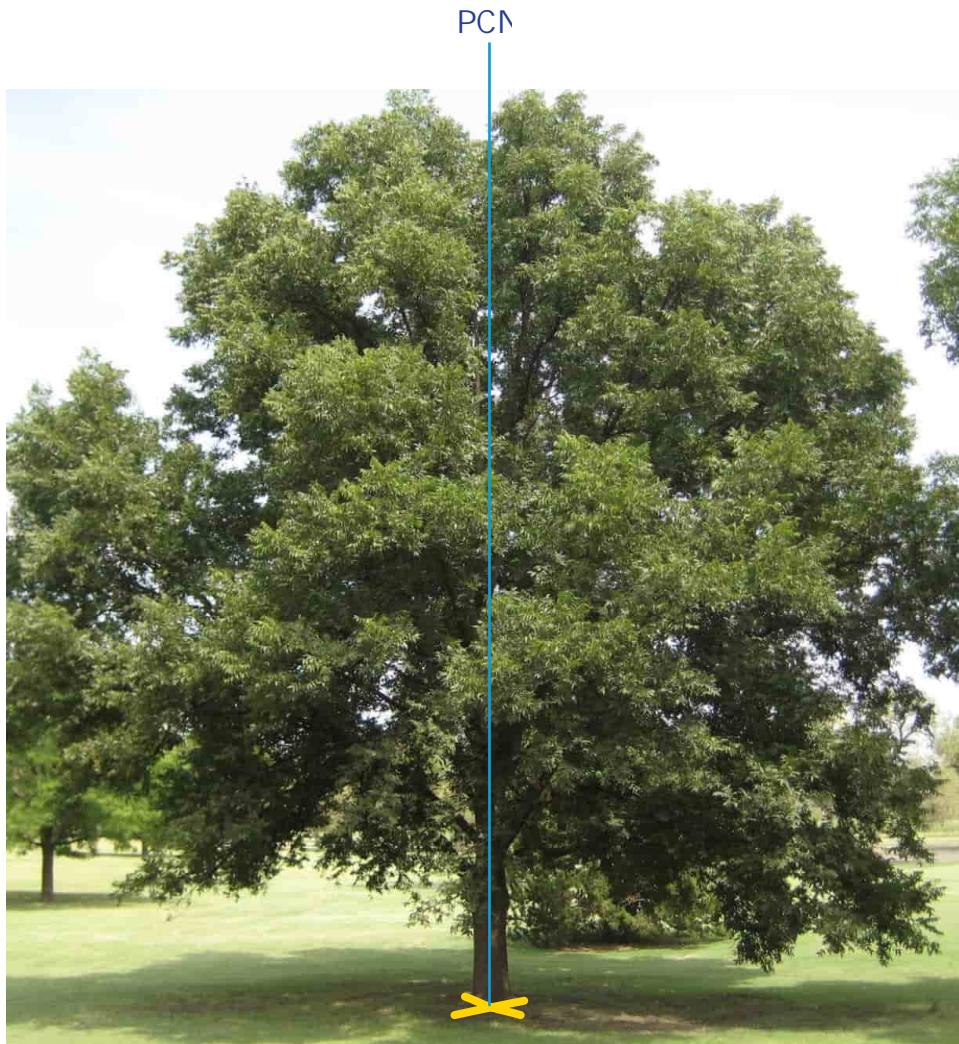
Pecan tree species**PCN - PECAN**

Figure 1 - Image showing preferred way of measuring PECAN

Category:

Has Attributes?

Tree Codes

Yes

DTM Feature?

Yes

Is Line?

No

Is Breakline?

N/A

Persimmon tree species

PER - PERSIMMON



Figure 1 - Image showing preferred way of measuring PERSIMMON

Category:

Has Attributes?

Tree Codes

Yes

DTM Feature?

No

Is Line?

No

Is Breakline?

N/A

Red oak tree species**RO - RED OAK**

Figure 1 - Image showing preferred way of measuring RED OAK

Category:

Has Attributes?

Tree Codes

Yes

DTM Feature?

Yes

Is Line?

No

Is Breakline?

N/A

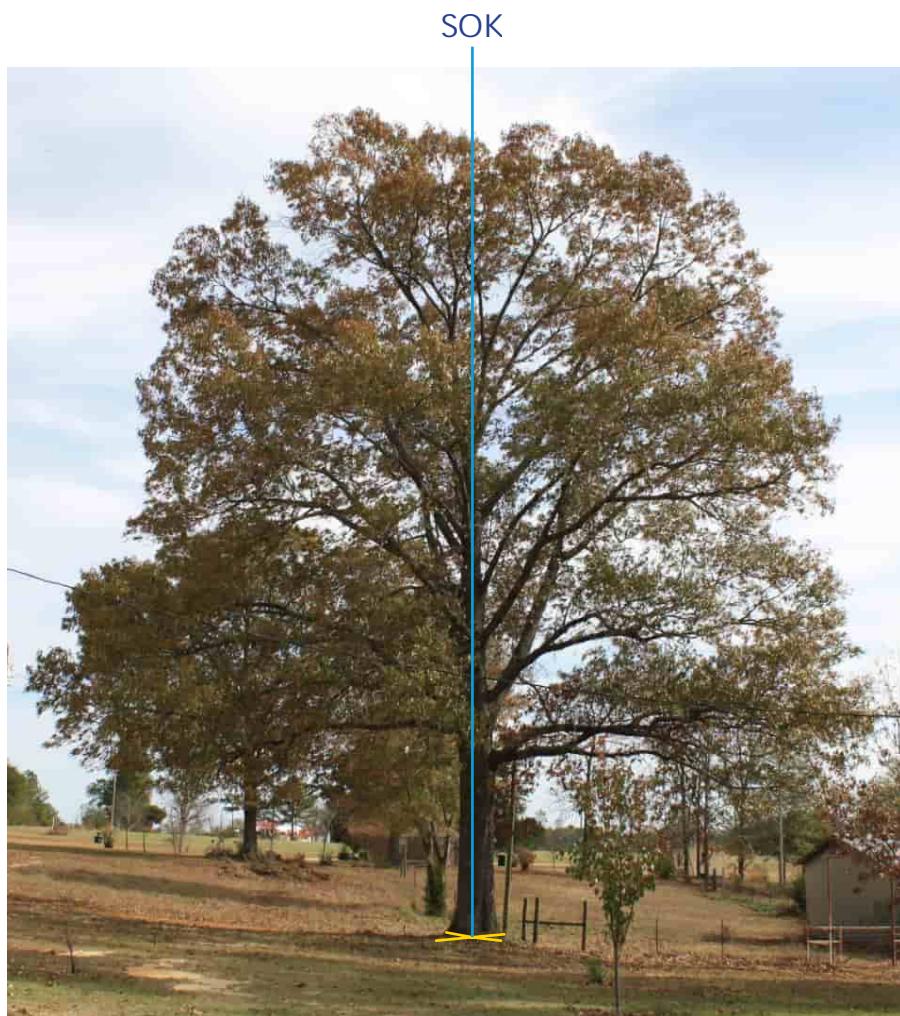
Spanish oak tree species**SOK - SPANISH OAK**

Figure 1 - Image showing preferred way of measuring SPANISH OAK

Category:

Has Attributes?

Tree Codes

Yes

DTM Feature?

Yes

Is Line?

No

Is Breakline?

N/A

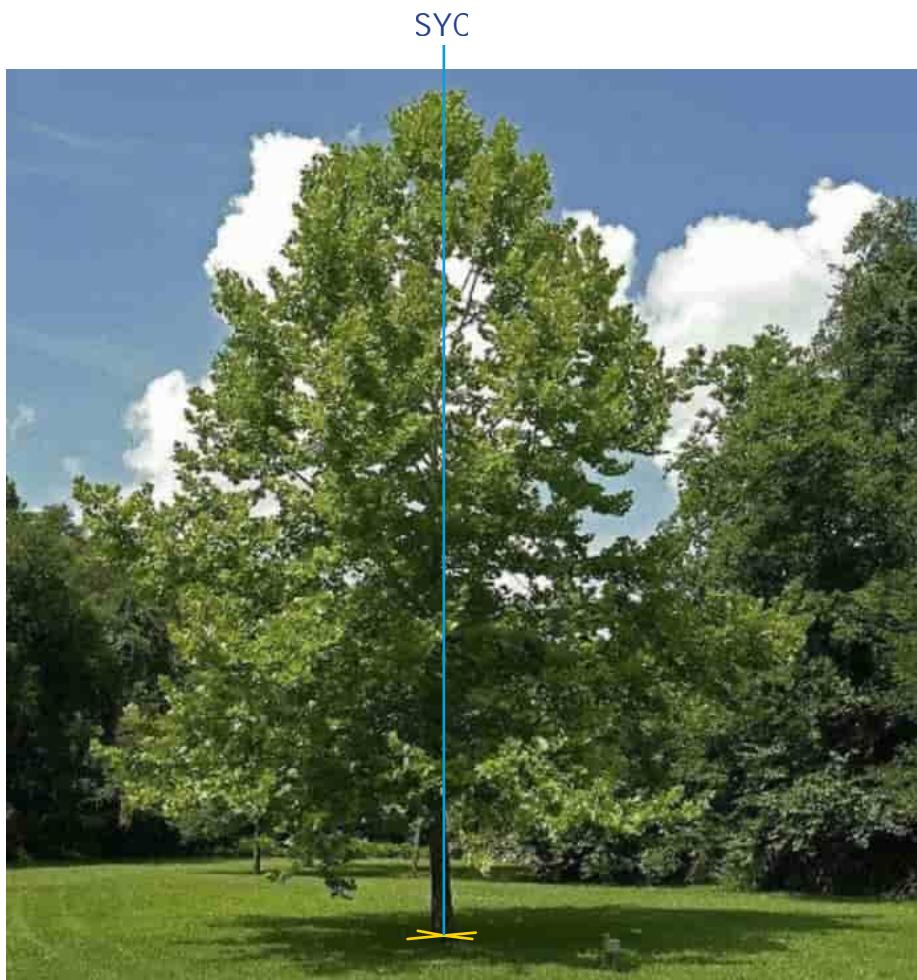
Sycamore tree species**SYC - SYCAMORE**

Figure 1 - Image showing preferred way of measuring SYCAMORE

Category:

Has Attributes?

Tree Codes

Yes

DTM Feature?

Yes

Is Line?

No

Is Breakline?

N/A

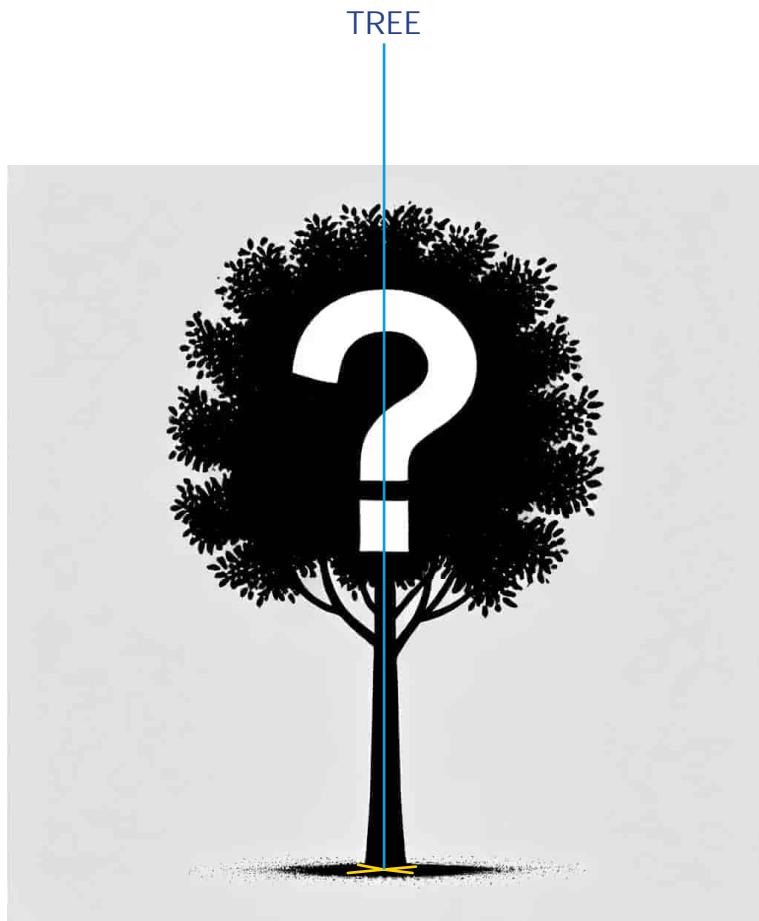
Unidentified tree species**TREE - UNKNOWN TREE**

Figure 1 - Image showing preferred way of measuring UNKNOWN TREE

Category:

Has Attributes?

Tree Codes

Yes

DTM Feature?

Yes

Is Line?

No

Is Breakline?

N/A

Willow tree species

WILLOW - WILLOW



Figure 1 - Image showing preferred way of measuring WILLOW

Category:

Has Attributes?

Tree Codes

Yes

DTM Feature?

Yes

Is Line?

No

Is Breakline?

N/A

White oak tree species

WOK - WHITE OAK

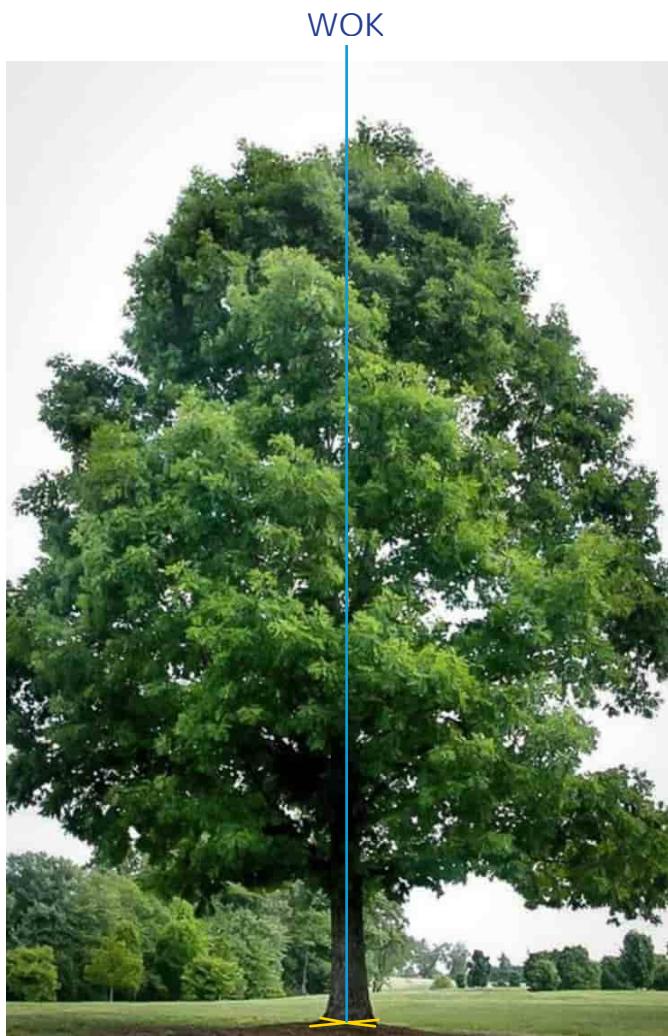


Figure 1 - Image showing preferred way of measuring WHITE OAK