

Δ	total central angle	M.L.	main line
Δc	curve central angle	M.P.	mile post
\emptyset	diameter	m ²	square meter
θs	spiral central angle	m ³	cubic meter
abut.	abutment	matl.	material
ADT	average daily traffic	max.	maximum
AH	ahead	min.	minimum
appr.	approach	mon.	monument
BK	back	N	north
b.f.	back face	NC	normal crown
BM	bench mark	o.c.	on center
BP	balance point	o. to o.	out to out
br.	bridge	OD	outside diameter
brg.	bearing	OG	original ground
btwn	between	OHWM	ordinary high water mark
cc or c. to c.	center to center	PC	point of curve
ϵ	centerline	PCC	point of compound curve
clr.	clear	PCCS	point of curve to spiral
CMP	corrugated metal pipe	PI	point of intersection
col.	column	pl.	plate
conc.	concrete	POC	point on curve
conn.	connection	POS	point on spiral
constr. jt.	construction joint	POT	point on tangent
cont.	continuous	PS	point of tangent to spiral
CS	point of curve to spiral	PSC	point of spiral to curve
ctrs.	centers	PST	point of spiral to tangent
culv.	culvert	PT	point of tangent
D	diameter	pvmt.	pavement
DHV	design hourly volume	R	radius
dia.	diameter	R.	range
diaph.	diaphragm	R/W	right-of-way
dist.	distance	rdwy.	roadway
drwg(s).	drawing(s)	reinf.	reinforcement
E	east	reqd.	required
e	superelevation rate	rt. or RT	right
e.f.	each face	rte.	route
El. 94.016	elevation in meters	S	south
elev.	elevation	SADT	seasonal average daily traffic
emb.	embankment	SC	point of spiral to curve
EOP	edge of pavement	sect.	section
EQ or eq.	equation	shldr.	shoulder
EW	edge of water	SLRY	slurry unit
exc.	excavation	spa.	spacing, spaces or spaced
exp. jt.	expansion joint	SRS	point of spiral to reverse spiral
f.f.	front face	SS	point of spiral to spiral (no curve)
fin.	finish	ST	point of spiral to tangent
flg.	flange	STA, Sta.	station
ftg.	footing	std.	standard
ga.	gage (gauge)	stgr.	stringer
galv.	galvanized	stiff.	stiffener
ID	inside diameter	struc.	structural
IE	invert elevation	STS	point of spiral to tangent spiral
jt.	joint	T	tangent distance
K.P.	kilometer post	T.	township
L	length of curve	TBM	temporary bench mark
lat.	latitude	thd.	thread
long.	longitudinal	TS	point of tangent to spiral
LPSM	lump sum	Ts	tangent distance (spiraled curve)
Ls	length of spiral	typ.	typical
lt. or LT	left	V	design speed (velocity)
LW	low water	vph	vehicles per hour
		VPI	vertical point of intersection
		W	west

National Boundary	
State Boundary	
County Boundary	
City Boundary	
Township or Range Line	
Section Line	
Section Corner (Found, Projected)	
1/4 Section Line	
1/4 Section Corner (Found, Projected)	
1/16 Section Line	
1/16 Section Corner (Found, Projected)	
Property Line	
Parcel Number	
National Park Boundary	
National Forest Boundary	
National Wildlife Refuge Boundary	
BLM Lands Boundary	
Indian Reservation Boundary	
Existing Roadway (Paved, Gravel)	
Railroad	
Trail	
Fiber Roll	
Silt Fence	
Sandbag	
Intermittent Drainage or Small Creek	
Large Creek or River	
Lake, Pond or Reservoir; Marshland	
Spring or Seep	
Treeline; Individual Trees	
Material Source; Bore Hole; Test Pit	
Spot Elevation; Coordinate Grid Tick	
Above Ground Tank; Underground Tank	
Boulder; Well; Antenna; Grave	
Cooking Grate; Garbage Can; Picnic Table	
Flagpole; Fire Hydrant	
Gas & Water Meter; Gas & Water Valve	
Control Point (Terrestrial and GPS)	

North Arrow		EXISTING	PROPOSED
Slope Stake Limits	Top of Cut Toe of Fill		
Construction Limits	- no symbol -		
Bottom of Ditch			
Fence			
Gate with Fence			
Cattleguard			
Guardrail			
Concrete Barrier and Guard Wall			
Retaining Wall	wall face		
Signs (single, double post; portable)			
Delineators			
Pipe Culvert (arrow shows flow)			
Pipe Culvert with End Section			
Pipe Culvert with Headwall			
Pipe Culvert with Drop Inlet			
Box Culvert			
Underdrain			
Overhead/Above Ground Utilities			
Underground Utilities			
FM = force main, FO = fiber optic, G = gas, IRR = irrigation, O = oil, P = power, SA = sanitary sewer, SD = storm drain, SS = storm sewer, STEAM = steam, T = telephone, TV = CATV, W = water			
Poles (Power, Telephone, Joint Use, Light, Support w/Anchor)			
Miscellaneous Utility Features			
EM = electric meter, TP = telephone pedestal, TV = CATV pedestal, UP = transformer or junction box, WF = water fountain			
Building			
Right-of-Way Line			
Permanent Easement			
Construction Easement	- no symbol -		
Riprap			
	Section A-A		

NO SCALE

NOTE:

- Other symbols used in the plans will be shown in a legend on the appropriate plan sheet.
- Dimensions in this plan set are in millimeters unless otherwise noted.

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
OFFICE OF FEDERAL LANDS HIGHWAY

WFLHD METRIC DETAIL

PLAN SYMBOLS AND ABBREVIATIONS

DETAIL APPROVED FOR USE 11/2001	DETAIL
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