

Δ	total central angle
Δc	curve central angle
\emptyset	diameter
θ_s	spiral central angle
abut.	abutment
ADT	average daily traffic
AH	ahead
appr.	approach
BK	back
BM	bench mark
BP	balance point
br.	bridge
brg.	bearing
cc or c. to c.	center to center
ξ	centerline
clr.	clear
CMP	corrugated metal pipe
col.	column
conc.	concrete
conn.	connection
constr. jt.	construction joint
cont.	continuous
CS	point of curve to spiral
ctrs.	centers
culv.	culvert
D	diameter
DHV	design hourly volume
dia.	diameter
diag.	diagonal
diaph.	diaphragm
dist.	distance
drwg(s).	drawing(s)
E	east
e	superelevation rate
El. 94.061 m	elevation with number
elev.	elevation
emb.	embankment
EP	edge of pavement
EQ or eq.	equation
ER	edge of road
EW	edge of water
exc.	excavation
exp. jt.	expansion joint
fin.	finish
fig.	flange
ftg.	footing
ga.	gage (gauge)
galv.	galvanized
hdwl.	headwall
hex.	hexagon
HW	high water
ID	inside diameter
jt.	joint
K.P.	kilometer post
L	length of curve
lam.	lamination
lat.	latitude
long.	longitudinal
LPSM	lump sum
Ls	length of spiral
lt. or LT	left
LW	low water

M.L.	main line
M.P.	mile post
m2	square meter
m3	cubic meter
matl.	material
max.	maximum
min.	minimum
mon.	monument
N	north
NC	normal crown
o. c.	on center
o. to o.	out to out
OD	outside diameter
OG	original ground
PC	point of curve
PCC	point of compound curve
PCS	point of curve to spiral
PI	point of intersection
pl.	plate
POC	point on curve
POS	point on spiral
POT	point on tangent
PS	point of tangent to spiral
PSC	point of spiral to curve
PST	point of spiral to tangent
PT	point of tangent
pvmt.	pavement
R	radius
R.	range
R/W	right-of-way
rdwy.	roadway
reinf.	reinforcement
reqd.	required
rt. or RT	right
rte.	route
S	south
SADT	seasonal average daily traffic
SC	point of spiral to curve
sec.	section
shldr.	shoulder
slry	slurry unit
spa.	spacing, spaces or spaced
SRS	point of spiral to reverse spiral
SS	point of spiral to spiral (no curve)
ST	point of spiral to tangent
Sta.	station
std.	standard
stgr.	stringer
stiff.	stiffener
struc.	structural
STS	point of spiral to tangent spiral
sym.	symmetrical
T	tangent distance
T.	township
TBM	temporary bench mark
thd.	thread
TS	point of tangent to spiral
Ts	tangent distance (spiraled curve)
typ.	typical
V	design speed
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	
1/4 SECTION LINE	
1/16 SECTION LINE	
NATIONAL PARK or FOREST BOUNDARY	
PROPERTY LINE	
RIGHT-OF-WAY LINE	EXISTING PROPOSED
RIGHT-OF-WAY LINE with MONUMENT	EXISTING PROPOSED
EASEMENT (Permanent; Non-Permanent)	
SLOPE STAKE	TOP OF CUT TOE OF FILL TRANSITION
ROADWAY, EXISTING	
RAILROAD	SINGLE TRACK MULTIPLE TRACK
WATTLE	
SILT FENCE	
TRAIL	
INTERMITTENT DRAINAGE and SMALL CREEK	
LARGE CREEK/RIVER	
LAKE, POND or RESERVOIR; MARSHLAND	
SPRING	
TREELINE; TREE	
MATERIAL SOURCE	
SECTION CORNER	FOUND PROJECTED
1/4 SECTION CORNER	FOUND PROJECTED
1/16 SECTION or PROPERTY CORNER	FOUND PROJECTED
PROPERTY CORNER	FOUND PROJECTED
PARCEL NUMBER	FOUND PROJECTED

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.

NORTH ARROW	
FENCE	EXISTING PROPOSED
GATE with FENCE	EXISTING PROPOSED
CATTLEGUARD	EXISTING PROPOSED
GUARDRAIL	EXISTING PROPOSED
SIGNS	Post mounted, single Post mounted, double Portable No Symbol
RETAINING WALL	EXISTING PROPOSED wall face
POWER POLE UTILITIES	P=power, T=telephone EXISTING PROPOSED
UNDERGROUND UTILITIES	G=gas, O=oil, P=power, SA=sanitary sewer, SS=storm sewer, T=telephone, W=water EXISTING PROPOSED
SUPPORT POLE with ANCHOR	EXISTING PROPOSED
TELEPHONE BOOTH or PEDESTAL	TB or TP TB or TP
STREET LIGHT	EXISTING PROPOSED
BRIDGE	EXISTING PROPOSED
PIPE CULVERT (arrow shows flow)	EXISTING PROPOSED
PIPE CULVERT with END SECTION	EXISTING PROPOSED
PIPE CULVERT with HEADWALL	EXISTING PROPOSED
BOX CULVERT	EXISTING PROPOSED
CULVERT with DROP INLET	EXISTING PROPOSED
UNDERDRAIN	EXISTING PROPOSED
CONTROL POINT	CP 12345 No Symbol
SURVEY MONUMENT	 No Symbol
HUB & TACK	 No Symbol
SPOT ELEVATION	EL. 1234.56 ft X No Symbol
COORDINATE GRID TICK	 No Symbol
BUILDING	 No Symbol
BORING LOCATION	 No Symbol
RIPRAP	No Symbol

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
WESTERN FEDERAL LANDS HIGHWAY DIVISION

METRIC DETAIL
PLAN SYMBOLS AND ABBREVIATIONS

DETAIL APPROVED FOR USE 11/2001
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DETAIL
WM101-1A