

ABBREVIATIONS

$\ell$	centerline
$\Delta$	curve delta
$\emptyset$	diameter
<b>A</b> abut.	abutment
ADT	average daily traffic
aggr.	aggregate
AH	ahead
alt.	alternate
appr.	approach
asph.	asphalt
<b>B</b> b.f.	both faces
beg.	beginning, begin
BK	back
BM	bench mark
BP	balance point
br.	bridge
brg.	bearing
<b>C</b> CBC	concrete box culvert
c-c	center to center
clr.	clear
CMP	corrugated metal pipe
Co.	county
col.	column
conc.	concrete
constr.	construction
constr. jt.	construction joint
cont.	continuous
corr.	corrugated
cr.	creek
CS	point of curve to spiral
ctrs.	centers
CTSM	contingent sum
culv.	culvert
<b>D</b> decr.	decrement
DHV	design hour volume
DI	drop inlet
dia. or D	diameter
diag.	diagonal
diaph.	diaphragm
dist.	distance
Dist.	district
DLC	donation land claim
dwg(s).	drawing(s)
<b>E</b> E	east
e	superelevation rate
El. 94.066	elevation with number
elev.	elevation
emb.	embankment
enrg(s).	Engineer(s)
EOP	edge of pavement
EQ or eq.	equation
ER	edge of road
et al	and others
et ux	and wife
EW	edge of water
exc.	excavation
exp. jt.	expansion joint
ext.	exterior
<b>F</b> f.f.	fill face
Fed.	federal
FES	flared end section
fin.	finish
ftg.	footing
<b>G</b> ga.	gage (gauge)
galv.	galvanized
gdr.	girder
<b>H</b> hdwl.	headwall
HES	homestead entry survey
hex.	hexagon
horiz.	horizontal
HW	high water
hwy.	highway
<b>I</b> ID	inside diameter
incl.	inclusive, including
incr.	increment
int.	interior
<b>J</b> jt.	joint

<b>L</b> L	length of curve
lam.	lamination
lat.	latitude
long.	longitudinal
LPSM	lump sum
Lt. or LT	left
LW	low water
<b>M</b> mag.	magnetic
maint.	maintenance
matl.	material
max.	maximum
min.	minimum
mon.	monument
mtn(s).	mountain(s)
<b>N</b> N	north
NC	normal crown
neg.	negative
no. or #	number
<b>O</b> o.c.	on centers
o.f.	other face
OD	outside diameter
<b>P</b> PC	point of curve
PCC	point of compound curve
perf.	perforate
PI	point of intersection
pl.	plate
POC	point on curve
POS	point on spiral
POT	point on tangent
proj.	project
psi	pounds per square inch
PT	point of tangent
pvm.	pavement
quant., Qty	quantities
<b>R</b> R	radius
R.	range
R/W	right-of-way
rd.	road
rdwy.	roadway
reconst.	reconstruction
reinf.	reinforcement
reqd.	required
res.	reservoir
Res.	Reservation
ret. wall	retaining wall
RH	reference hub
Rt. or RT	right
rte.	route
<b>S</b> S	south
SADT	seasonal average daily traffic
SC	point of spiral to curve
sec.	section
shldr.	shoulder
spa.	spacing, Spaces or Spaced
spec.	specification
st.	street
ST	point of spiral to tangent
sta.	station
std.	standard
stiff.	stiffener
str.	straight
struc.	structural
sym.	symmetrical
<b>T</b> T	tangent length
T.	township
TBM	tangent
TCE	temporary bench mark
transv.	temporary construction easement
TS	transverse
typ.	point of tangent to spiral
<b>V</b> V	typical
vert.	design speed
vph	vertical
VPI	vehicles per hour
<b>W</b> W	vertical point of intersection
	west

DRAINAGE SYMBOLS

Ditch (Existing, Proposed)

Flow Arrow

Drainage or Small Creek

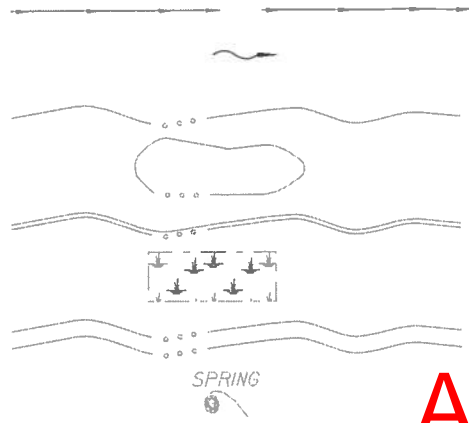
Lake, Pond or Reservoir

Large Creek

Wetland

River

Spring



Bridge (Existing, Proposed)

Box Culvert (Existing, Proposed)

Pipe Culvert (Existing, Proposed)

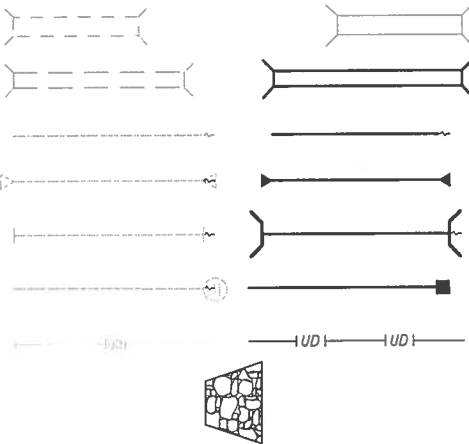
With End Sections (Existing, Proposed)

With Headwalls (Existing, Proposed)

With Drop Inlet (Existing, Proposed)

Underdrain (Existing, Proposed)

Riprap Apron (Proposed)



EROSION & SEDIMENT CONTROL SYMBOLS

Bonded Fiber Matrix Mulching

Check Dam

Diversion Berm

Rolled Erosion Control Product

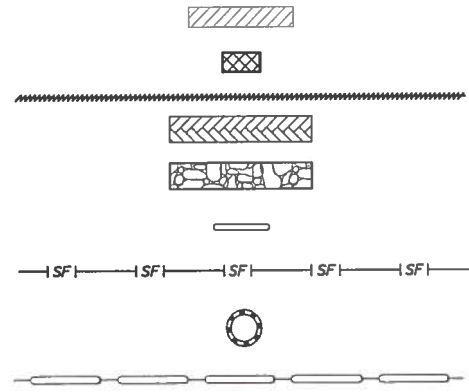
Riprap

Fiber Roll (Ditch and/or Cut Slope)

Silt Fence

Temporary Inlet Protection

Fiber Roll (Slope Protection)



FENCE & CATTLEGUARD SYMBOLS

Fence (Existing, Proposed)

Fence w/ Gate (Existing, Proposed)

Cattleguard (Existing, Proposed)



GEOLOGIC SYMBOLS

Boring Location (Existing, Proposed)

Material Source



AS-BUILT DRAWINGS

Note: Work was constructed as designed unless otherwise noted.



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Signature: *Aaron A. Swafford* 4/30/18  
Expiration Date of the License

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

U.S. CUSTOMARY

CONVENTIONAL PLAN  
SYMBOLS AND ABBREVIATIONS

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LANDSCAPING & VEGETATION SYMBOLS

Tree

Treeline

**MAPPING SYMBOLS**

Building (Existing, Proposed)

Coordinate Grid Tick

North Arrow

Railroad  
Single Track

Double Track

Spot Elevation  
999.9

Trail

Survey Control Point

RIGHT-OF-WAY SYMBOLS

Boundaries

National

State

County

City

Township or Range Line

Section

1/4 Section

1/16 Section

Bureau of Indian Affairs

Bureau of Land Management

National Forest

National Park

National Wildlife Refuge

Easements

Permanent (Existing)

Permanent (Proposed)

Temporary (Proposed)

Monument (As described)

Parcel Number  
400

Property Line

Right-of-Way Line (Existing)

Right-of-Way Line (Proposed)

Section Corner (Found, Projected)

1/4 Section Corner (Found, Projected)

1/16 Section Corner (Found)

GUARDRAIL, BARRIER & WALL SYMBOLS

Guardrail (Existing, Proposed)

Guardwall (Existing, Proposed)

Median & Side Barrier (Existing, Proposed)

Retaining Wall (Existing, Proposed)

ROADWAY SYMBOLS

Clearing/Construction Limits

Slope Stake Limits

Top of Cut

Transition

Toe of Fill

Edge of Roadway

Existing

Proposed

Roadway Centerline (With Station ticks)

Roadway Obliteration

SIGN SYMBOLS

Signs

Commercial (Existing, Proposed)

Delineator (Existing, Proposed)

Portable (Proposed)

Post Mounted (Existing, Proposed)

UTILITY SYMBOLS

Irrigation Ditch

Underground (Existing, Proposed)

Surface (Existing, Proposed)

Support Pole (Existing, Proposed)

Support Pole Anchor (Existing, Proposed)

Street Light (Existing, Proposed)

Telephone Booth (Existing, Proposed)

Telephone Pedestal (Existing, Proposed)

Underground Utility (Existing, Proposed)

CATV

Fiber Optic

Gas

Oil

Power

Sanitary Sewer

Telephone

Water

Overhead Utility Line (Existing, Proposed)

CATV

Fiber Optic

Power

Telephone

PROJECT SPECIFIC SYMBOLS

ROADWAY SYMBOLS

Existing Centerline  
(With Station and Station ticks)

Sawcut

ABBREVIATIONS

&	and	N	N.	northing
@	at	N/A	N/A	not applicable
±	baseline	NF	NF	near face
±	plus or minus	NIC	NIC	not in contract
AB	anchor bolt	NTS	NTS	not to scale
AC	asphaltic concrete	O	OB	outbound
add.	added	OHWM	OHWM	Ordinary High Water Mark
alt	alternate	opng	opng	opening
approx.	approximate	P	PCF	pounds per cubic foot
Az.	azimuth	PE	PE	permanent easements
B	bottom	R	ref.	reference
bal.	balance	RF	RF	rear face
BF	back face	S	SE	super elevation
BFE	bottom of footing elevation	SF	SF	square feet
bm.	beam	sht.	sht.	sheet
BOF	bottom of footing	SIC	SIC	Sandwich Isles Communications
BW	both ways	sim.	sim.	similar
CF	cubic feet	sl.	sl.	slope
CFCW	continuous flashing compound waterproofing	SS	SS	stainless steel
CIP	cast-in-place	stagg.	stagg.	staggered
CJ	control joint	stirr.	stirr.	stirrup
CO	Contracting Officer	stl.	stl.	steel
CP	construction parcel	SY	SY	square yard
D	detail	T	T&B	top and bottom
E	easting	TP	TP	top
EF	each face	temp.	temp.	temporary
EJ	expansion joint	thk.	thk.	thick
egl.	equal	TFE	TFE	top of footing elevation
EW	each way	TOF	TOF	top of footing
ex.	existing	tot.	tot.	total
F	fixed	TOW	TOW	top of wall
f c	specified strength of concrete	U	UNO	unless noted otherwise
FF	far face	V	var.	varies
fin. gr.	finish grade	VESLMC	VESLMC	very early strength latex modified concrete
FRP	fiber reinforced plastic	W	W/W	with
ft	foot, feet	W/C	W/C	water/cement ratio
G	GFRP			
gr.	grade			
H	hinge			
ht.	height			
I	inbound			
IF	inside face			
in.	inch			
inv.	Invert			
K	kips			
KF	kip foot			
KIPS	kips per linear foot			
KSF	kips per square foot			
KSI	kips per square inch			
L	Length			
len.	Length			
lb(s).	pound(s)			
M	mile(s)			
MPH	miles per hour			

AS-BUILT DRAWINGS

Note: Work was constructed as designed unless otherwise noted.

STATE	PROJECT	SHEET NO.
HI	HI STP SR50(2)	A3

1+00 2+00 3+00

**CONVENTIONAL PLAN SYMBOLS AND ABBREVIATIONS**

Sheet 2 of 2

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**CONVENTIONAL PLAN SYMBOLS AND ABBREVIATIONS**

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