

A Area or Amperes  
AAA American Automobile Association  
AASHO American Association Of State Highway Officials  
AASHTO American Association Of State Highway And Transportation Officials  
ABC Asphalt Base Course  
Abd. Abandoned  
ABS Acrylonitrile-Butadiene-Styrene Pipe  
AC, Ac. Acre  
AC or Asph. Conc. Asphaltic Concrete  
Accel. Acceleration  
Act. Actuated  
ADA The Americans With Disabilities Act  
Adh. Adhesive  
Adj. Adjust  
ADT Average Daily Traffic  
AADT Annual Average Daily Traffic  
Agg. Aggregate  
Ah. Ahead  
AISC American Institute Of Steel Construction  
Alt. Alternate  
Al. Aluminum  
AM 12:00 Midnight Until 11:59 Noon  
ANSI American National Standards Institute  
AOS Apparent Opening Size  
Appl. Applied, Application  
Apprh. Approach  
Approx. Approximate  
ARTBA American Road & Transportation Builders Association  
Artf. Artificial  
Asph. Asphalt  
Assem. Assembly  
Assn. Association  
Assoc. Associate, Association  
ASTM American Society For Testing Materials  
Attn. Attention  
Attnuatr. Attenuator  
Aux. or Auxil. Auxiliary  
Ave. Avenue  
AWG American Wire Gauge  
AWS American Welding Society  
AZ Azimuth

B to B Back to Back  
Basc. Bascule  
Bbl. Barrel  
Bd. or Bnd. Bond or Bonded  
BC Bottle Cap or Bolt Circle  
B/C, B.C. Back Of Curb  
BCCMP Bituminous Coated Corrugated Metal Pipe Culvert  
BCPA Bituminous Coated Pipe Arch Culvert  
BCPCMP Bituminous Coated And Paved Corrugated Metal Pipe Culvert  
BCPPA Bituminous Coated And Paved Pipe Arch Culvert  
BCT Breakaway Cable Terminal  
BE Buried Electric  
Beg. Begin  
Bit. Bituminous  
Bk. Back  
BL, BLC Base Line, Base Line Control  
Bldg. Building  
Bkhd. Bulkhead  
Blvd. Boulevard  
BM Bench Mark  
Bndry. Boundary  
Bdr. Border  
Bot. Bottom  
BP Borrow Pit  
Bq. Bequerel  
Br. Bridge  
Brg. Bearing  
Brkwy. Breakaway  
BT Buried Telephone Cable or Duct  
Btfly. Butterfly  
BW Barbed Wire, Bottom Width or Both Ways  
BO Basin Outlet

C Cantilever Length, Cut, Colorless, Coulomb or Cycle Length  
°C Degree Celsius  
C & G Curb And Gutter  
CA Coarse Aggregate  
Cap. Capacity  
CAP Corrugated Aluminum Pipe  
Caps. Capital Letters  
CASP Corrugated Aluminized Steel Pipe  
CATV Cable Television  
CB Catch Basin  
CBC Concrete Box Culvert  
CBS Concrete Box Structure  
CC, C/C, or C to C Center to Center  
CCEW Center to Center Each Way  
CD Cross Drain  
cd Candela  
Cem. Cement or Cemetery  
Cem'd. Cemented  
CFS Cubic Feet Per Second  
Ch. Channel  
Chchg. Channel Change  
Chg. Changeable  
CI Cast Iron  
CIP Cast Iron Pipe  
CIPL Cast In Place  
cir. or circ. Circle or Circular  
circ. Circumference

Ckt. Circuit  
Cl. or Clear Clearance  
CL, C/L or £ Center Line  
CM Concrete Monument  
CMB Concrete Median Barrier  
CMP Corrugated Metal Pipe  
CMPA Corrugated Metal Pipe Arch  
Co. County or Company  
Col. Column  
Com. Commercial or Common  
COMM Committee or By Committee  
Comp. Composite  
Con. Connect or Connection  
Conc. Concrete  
Const. Construct or Construction  
Contrl. Controller  
Cont. Continuation  
Contr. Contractor  
Coord. Coordinate  
Cor. Corner  
Corr. Corrugated  
CP Concrete Pipe  
CPE Corrugated Polyethylene Pipe  
CR Control Radius or County Road  
CRA Clear Recovery Area  
Crs. or Cse. Course  
CS Curve To Spiral  
CSP Corrugated Steel Pipe  
CT Clear Trunk  
Ctivr. Cantilever  
Ctr. Center  
CU or Cu Copper  
Culv. Culvert  
Cwt. Hundredweight  
CY Cubic Yard  
Cyl. Cylindrical  
CZ Clear Zone

D Degree Of Curvature, Depth, Density, Distance, Diameter or Directional Distribution  
DA Drainage Area or Deflection Angle  
DBH Diameter At Breast Height  
DBI Ditch Bottom Inlet  
Dbl. Double  
DCS Degree Of Curvature (Spiral)  
DD Dry Density  
DDHV Directional Design Hour Traffic  
Decel. Deceleration  
Deg. Degree  
Delin. Delineators  
Demobl. Demobilization  
Dept. Department  
Det. Detour, Detection, Detectable  
DGN or Dgn. Design  
DHV Design Hourly Volume  
DHW Design High Water  
DT Ditch  
DI Drop Inlet  
Dia. or D Diameter  
Dim. Dimension  
Dist. Distance  
Disp. Disposal  
DLS District Location Surveyor  
DMM Domestic Mail Manual  
DOT Department Of Transportation  
DPI Ditch Point Intersection  
Dr. or DR. Drain, Drive or Design Review  
DR Design Review  
Driv. Driven  
Drwy. Driveway  
DS Design Speed  
DSL Design Service Life  
Dwg. Drawing

E East or External Distance  
e Rate Of Superelevation  
E to E End to End  
EA or Ea. Each  
EB Eastbound  
El. or Elev. Elevation  
Elast. Elastomeric  
Elec. Electric  
Ellip. Elliptical  
Embk. Embankment  
Emul. Emulsified  
Encl. Enclosure  
Engr. Engineer  
EOS End Of Survey or Equivalent Opening Size  
Eq. Equation or Equal  
Equip. Equipment  
Esmf. Easement  
Est. or Estm. Estimate  
Est. Establish or Established  
Etc. or etc. Et Cetera (And So Forth)  
EW Endwall  
Ex. Except, Example  
Exc. or Excov. Excavation  
Exist. Existing  
Exp. Expansion  
Ext. Extension  
Exwy. Expressway

F Fill, Farad  
F or Final Final Quantity  
F & I Furnish & Install  
F to F Face to Face  
FA Federal Aid or Fine Aggregate  
FAC Florida Administrative Code  
FAP Federal Aid Project  
FC Friction Course  
FD French Drain  
Fdn. Foundation  
FDOT Florida Department Of Transportation  
FE Floor Elevation  
Fed. Federal  
Fert. Fertilizer  
FES Flared End Section  
FETS Flared End Terminal Section  
FH Fire Hydrant  
FHWA Federal Highway Administration  
Fig. Figure  
Fin. Finish  
F.L. Flow Line  
FL, Fl. or Fla. Florida  
Flex. Flexible  
FNQ Fuse (Type Slow Burn)  
FOC Fiber Optics Cable  
FPM or fpm Feet Per Minute  
FRP Fiber Reinforced Pipe  
FPS or fps Feet Per Second  
FR or Fr. Frame  
Frang. Frangible  
Freq. Frequency  
FS Far Side  
Ft. Foot or Feet  
FTB Floating Turbidity Barrier  
FTBA Florida Transportation Builder Association  
Furn. Furnish  
Fut. Future

G Giga or Gauss  
g Gram or Gravity  
Galv. Galvanized  
Ga. Gauge or Gage  
Ga. or Gal. Gallon  
Gar. Garage  
GD Gutter Drain  
GIP Galvanized Iron Pipe  
GM Gas Main  
GP Grade Point  
Gr. Grade, Guardrail or Grate  
Gr. or Gro. Gross  
GRC Galvanized Rigid Steel Conduit  
Grd. Ground  
gross km Gross Kilometer  
Gr. Wt. or gr. wt. Gross Weight  
Gtrr. Gutter  
Gy Gray

H Henry  
h Hour or Hecto  
ha Hectare  
HAR Highway Advisory Radio  
HB Hay Bales  
HC Horizontal Clearance  
HD High Density or Heavy Duty  
HD or Hd. Head  
Hdwl. Headwall  
HH Heavy Hex  
Hndrl Handrail  
HOA Hand/Off/Automatic  
Horiz. or Hor. Horizontal  
HP High Pressure or Horsepower  
Hr. Hour  
HS High Strength  
Hse. House  
Ht. Height  
HW High Water or Hot Water  
Hwy. Highway  
Hyd. Hydrant or Hydraulic  
Hz Hertz

I External Angle (Delta), Interstate  
Intchg. or Ichg. Interchange  
IES Illuminating Engineering Society  
ID Inside Diameter or Identification  
IMC Intermediate Metal Conduit  
In. Inch  
Inc. Incorporated or Including  
Incl. or Inc. Included  
Ind. Industry or Industrial  
IP Iron Pipe  
Install. Installed  
Isect. Intersection  
Isl. Island  
ITE Institute Of Transportation Engineers

J Joule  
JB Junction Box  
Jct. Junction  
Jt. Joint


K Design Hour Factor or Kelvin  
k Kilo (prefix)  
kg Kilogram  
kg/m Kilogram Per Meter  
kg/m<sup>2</sup> Kilogram Per Square Meter  
kg/m<sup>3</sup> Kilogram Per Cubic Meter  
Kilo One Thousand  
Kip 1000 Pounds  
km Kilometer  
km/h Kilometer Per Hour  
kn Knot  
kPa Kilopascal  
ksi Kips Per Square Inch  
kV Kilovolt  
kVA Kilovolt Ampere  
kWh Kilowatt-hour

L Length, Length Of Curve, Liter, Left  
2-L Two-Lane  
2LW Two-Lane One-Way  
2L2W Two-Lane Two-Way  
LA or L/A Limited Access  
lane km Lane Kilometer  
Lat. Lateral or Latitude  
Lb. Pound  
lb/sy Pounds Per Square Yard  
LBR Limerock Bearing Ratio  
LC Long Chord  
LEO Law Enforcement With Flashing Lights And Radar  
Lgth. Length  
Ln. Linear  
lm Lumen  
Lmrk. Limerock  
Loc., LO Location  
LS Length Of Spiral  
LT Left Turn  
Lt. Left  
Ltd. Lighted or Limited  
Lum. Luminaire  
L/W Lightweight  
Lux Lux

M Mass, Middle Ordinate Length or Mega  
m Meter or Milli  
m<sup>2</sup> Square Meter or Meter Square  
m<sup>3</sup> Cubic Meter or Meter Cubed  
m<sup>3</sup>/m Cubic Meter Per Meter  
m/s Meters Per Second  
Mach. Machine  
Maint. Maintenance  
Matl. Material  
Max. Maximum  
MB Median Barrier  
MBM Thousand (Feet) Board Measure  
Med. Median  
Mega One Million  
Memb. Member  
MES Mitered End Section  
Mess. Message  
Mfg. Manufactured or Manufacturer  
MG 1000 Gallons  
MH Manhole  
MHW Mean High Water  
µ Micro  
Mi. Mile  
Micro One-Millionth  
Mid. Middle  
Mil One-Thousandth Of An Inch  
MIL Military  
Milli One-Thousandth  
Min. Minimum or Minute  
Misc. Miscellaneous  
mL Milliliter  
MLW Mean Low Water  
mm Millimeter  
Mobl. Mobilization  
Mod. Modify or Modified  
Mol Mole  
Mon. Monument  
MOT Maintenance Of Traffic  
MP Mile Post

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION

**STANDARD ABBREVIATIONS**

Names	Dates	Approved By		
Designed By		 State Roadway Design Engineer		
Drawn By				
Checked By		Revision	Sheet No.	Index No.
		02	1 of 2	001

# UNITS OF MEASURE

## US MEASUREMENT

AC	Acre
AS	Assembly
BU	Bushel
CF	Cubic Foot
CO	Cleanout
CY	Cubic Yard
EA	Each
ED	Each Day
GA	Gallon
GM	Gross Mile
LB	Pound
LF	Linear Foot
LM	Lane Mile
LO	Per Location
LS	Lump Sum
LU	Luminaire
MB	Thousand Board Measure
MG	Thousand Gallons
MH	Man Hour
NM	Net Mile
PA	Per Analysis
PB	Per Building
PE	Pile
PI	Per Intersection
PL	Plant
PM	Per Mile
PS	Per Set
PW	Per Well
SF	Square Foot
SY	Square Yard
TN	Ton

## METRIC MEASUREMENT

AS	Assembly
CO	Cleanout
DA	Day
EA	Each
ED	Each Day
GK	Gross Kilometer
HA	Hectare
HR	Hour
KG	Kilogram
KL	Kiloliter
KM	Kilometer
LI	Liter
LK	Lane Kilometer
LO	Per Location
LS	Lump Sum
LS/AS	Lump Sum Per Assembly
LS/DA	Lump Sum Per Day
LS/EA	Lump Sum Per Each
LS/HA	Lump Sum Per Hectare
LS/KG	Lump Sum Per Kilogram
LS/LS	Lump Sum Per Lump Sum
LS/MT	Lump Sum Per Metric Ton
LS/MI	Lump Sum Per Linear Meter
LS/M2	Lump Sum Per Square Meter
LU	Luminaire
MH	Man Hour
MO	Month
MT	Metric Ton
MI	Meter
M2	Square Meter
M3	Cubic Meter
NK	Net Kilometer
PA	Per Analysis
PB	Per Building
PI	Per Intersection
PL	Plant
PW	Per Well

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION

# STANDARD ABBREVIATIONS

Names	Dates	Approved By
Designed By		<i>Jim Blumhail</i> State Roadway Design Engineer
Drawn By		Revision Sheet No. Index No.
Checked By		02 2 of 2 001

MPa Megapascal  
MPH or mph Miles Per Hour  
MSL Mean Sea Level  
Mtd. Mounted  
MUTCD Manual On Uniform Traffic Control Device  
MUTS Manual On Uniform Traffic Studies

N North or Newton  
N/m Newtons Per Meter  
N/m<sup>2</sup> Newtons Per Square Meter  
N/m<sup>3</sup> Newtons Per Cubic Meter  
N/mm<sup>2</sup> Newtons Per Square Millimeter  
NA or N/A Not Available or Not Applicable  
N & C Nail & Cap  
NB Northbound  
NC National Coarse  
NDCBU Neighborhood Delivery And Collection Box Unit  
NE Northeast  
net km Net Kilometer  
NEMA National Electrical Manufacturers Association  
NGVD National Geodetic Vertical Datum of 1929  
NGS National Geodetic Survey  
NHW Normal High Water  
NIC Not In Contract  
NJ New Jersey  
N-m Newton Meter  
No. Number  
Nom. Nominal  
Norm. Normal  
NS Non Stress, Not Suitable or Near Side  
NT, N&T Non Traffic, Nail & Tin  
NTS Not To Scale  
NW Northwest

Opass Overpass  
O to O or o to o Out to Out  
OA Overall  
O.B.G. Optional Base Group  
OC On Center  
OD Outside Diameter  
OE Overhead Electric  
OH, OHD or Ohd. Overhead  
Opt. Option, Optional or Optically  
OT Overhead Telephone  
Oz. Ounce  
Ω Ohm

P Passenger Car & Light Delivery Truck  
P or Plan Plan Quantity  
Pa Pascal  
Par. Parallel  
Pa\*s Pascal Second  
Part. Participation or Partition  
Pavt. Pavement  
PC Point Of Curvature  
PCBC Precast Concrete Box Culvert  
PCC Point Of Compound Curvature or Plain Cement Concrete  
PCE Permanent Construction Easement  
PE Professional Engineer  
Ped Pedestrian or Pedestal  
Pen. Penetration  
PG Profile Grade  
PGL Profile Grade Line  
Ph. Phase  
pH Measure Of Acidity or Alkalinity  
PI Point Of Intersection  
Pkg. Parking  
Pkwy. Parkway  
PL or Pl Property Line or Plate  
PM 12:00 Noon Until 11:59 Midnight  
POC Point On Curve  
POST Point On Semi-Tangent  
POT Point On Tangent  
PP Power Pole  
Pr. Pair  
PRC Point Of Reverse Curvature  
Prcast Precast  
Prest. Prestressed  
Prob. Probability  
Prod. Product, Production, Producer or Produced  
Prog. Program or Progression  
Proj. Project or Projection  
PRM Permanent Reference Monument  
Prov. Provisions  
PRS Portable Regulatory Sign  
PS & E Plans, Specifications And Estimates  
PSF or psf Pounds Per Square Foot  
PSI or psi Pounds Per Square Inch  
PT Point Of Tangency or Pressure Treated  
PVC Polyvinyl Chloride  
PW Pressure Water

Q Peak Discharge or Flow Volume

Pr. Pair  
PRC Point Of Reverse Curvature  
Prcast Precast  
Prest. Prestressed  
Prob. Probability  
Prod. Product, Production, Producer or Produced  
Prog. Program or Progression  
Proj. Project or Projection  
PRM Permanent Reference Monument  
Prov. Provisions  
PS & E Plans, Specifications And Estimates  
PSF or psf Pounds Per Square Foot  
PSI or psi Pounds Per Square Inch  
PT Point Of Tangency or Pressure Treated  
PVC Polyvinyl Chloride  
PW Pressure Water

Q Peak Discharge or Flow Volume

R or Rad. Radius  
R or Rng. Range  
rad Radian  
rad/s Radian Per Second  
RBAC Rock Base Asphaltic Concrete  
RBST Rock Base Surface Treatment  
RCP Reinforced Concrete Pipe  
RCPA Reinforced Concrete Pipe Arch  
Rd. Road or Round  
Rdsd. Roadside  
Rdwy. Roadway  
Rec. Recovery  
Rect. Rectiline or Rectangular  
Ref. Reference  
Ref. Reflective  
Reg. Region, Regular, Registered or Regulation  
Reinf. Reinforced or Reinforcing  
Rejuv. Rejuvenation  
Reloc. Relocated  
Rem. Removal  
Repl. Replace  
Req. or Reqd. Required  
Res. Residence or Residential  
RHW Insulation (Moisture & Heat Resistant Rubber)  
RM Reference Monument  
r/min Revolution Per Minute  
RP Reference Point  
rpm Revolution Per Minute  
RPM Raised Reflective Pavement Markers  
r/s Revolution Per Second  
RR Railroad  
RSDU Radar Speed Display Unit  
Rsf. Resurface  
Rt. Right  
R/W, ROW Right Of Way

S or s Speed, South, Seimens, Or Second  
SAHM Sand-Asphalt Hot Mix  
SAN or San. Sanitary  
SB Southbound  
SBAC Shell Base Asphaltic Concrete  
SBRM Sand Bituminous Road Mix  
SBST Shell Base Surface Treatment  
SC Seal Coat or Spiral To Curve  
Sch. Schedule  
SCST Sand-Clay Surface Treatment  
SD Side Drain, Storm Drain  
SE Southeast  
Sec. Second  
Sect. Section  
Sed. Sediment  
Sep. Separator  
Seq. Sequential  
Serv. Service  
SF Adjustment Factor In Percent, Slit Fence  
SG Subgrade  
SG or Sp.Gr. Specific Gravity  
Sheet Sheet  
Shldr. Shoulder  
SHW Seasonal High Water  
Spa. Space  
Spag. or Sp. Spacing  
Spec. Specification  
Sq. Ft. or SF Square Foot  
Sq. In. Square Inch  
Sq. Yd. or SY Square Yard  
SR or S.R. State Road  
SRAP Spiral Rib Aluminum Pipe  
SRASP Spiral Rib Aluminized Steel Pipe  
SRSP Spiral Rib Steel Pipe  
SS Sanitary Sewer  
SSMD Solid State Modular Design  
ST Surface Treatment or Spiral To Tangent  
St. or ST. Street  
Sta. Station  
Stab. Stability or Stabilization  
STB Staked Turbidity Barrier  
Std. Standard

Stg. Storage  
Stl. Steel  
Str. Structure  
Sty. Story  
SU Single Unit Trucks  
Sub. or Subs. Subsoil  
Sub. or Subst. Substitute  
Subgr. Subgrade  
Suppts. Supports  
SUR or Sur. Survey  
Surf. Surface  
SW Southwest  
SW or Swk. Sidewalk  
Sys. or Syst. System  
Sv. Sievert

T Tangent, Length Of Curve, Percent Trucks, Tesla,  
T, TWP or Twp. Township  
t Metric Ton  
tan. Tangent  
TBM Temporary Bench Mark  
TC Tangent To Curve  
TCB Temporary Concrete Barrier  
TCE Temporary Construction Easement  
TCP Terra Cotta Pipe  
TCZ Traffic Control Zone  
Tel. Telephone  
Temp. Temperature or Temporary  
Traf. Traffic  
Theo. Theoretical  
THRMPSTC Thermoplastic  
THW or THWN Insulation (Flame Retardant, Moisture And Heat Resistant Thermoplastic)  
Thick. Thickness  
TK Thick, Thickness or Truck  
Tn. Ton  
Trans. Transition, Transverse, Translate or Transportation  
Treat. Treatment  
TS Tangent To Spiral  
TSC Length Of Tangent (Spiral Curve)  
Typ. Typical

Upass. Underpass  
UG Underground  
UL Underwriters Laboratories  
Ult. Ultimate  
Uhd. Unlimited  
Unddr. Underdrains  
Undrdwy. Underroadway  
UNL or Unld. Unloaded  
Untr. Untreated  
USC & GS US Coast and Geodetic Survey (now National Geodetic Survey)  
USGS US Geological Survey  
USPS United States Postal Service  
Util. Utilities  
UV Ultraviolet

V Volt, Velocity, Volume or Hourly Volume  
Var. Varies, Variable or Variance  
VC Vertical Curve  
VCP Vitriified Clay Pipe  
VECP Value Engineering Change Proposal  
Veh. Vehicle  
Vert. Vertical  
VF Vertical Foot  
Vh Verified Horizontal Location  
VMS Variable Message Sign  
Vol. Volume  
VP Vertical Panel  
VPD or Vpd. Vehicles Per Day  
VPH or Vph. Vehicles Per Hour  
VPHPL or Vphpl. Vehicles Per Hour Per Lane  
VRMS Volts Root Mean Square  
Vv Verified Vertical Elevation  
Vvh Verified Vertical Elevation And Horizontal Location  
VW Variable Width

W Width, Wide, West or Watt  
W/C Water-Cement Ratio  
WB Westbound  
Wb. Weber  
WB40 Intermediate Semi Trailer  
WB50 Large Semi Trailer  
WB60 Tandem Semi Trailer  
WM Water Main  
W.P.I. Work Program Item  
WT Water Table Or Weight  
WWF Welded Wire Fabric

X Coordinate Value (East-West Direction) or Extra  
X Rd. Cross Road  
Xing. Crossing  
Xsec. Cross Section

Y Coordinate Value (North-South Direction)  
Yr. Year