


| <u>Abbreviation</u> | <u>Meaning</u> |
|---------------------|--|
| °C | Celsius (degree) |
| μ | Micro |
| 2-L | Two-Lane |
| 2L1W | Two-Lane One-Way |
| 2L2W | Two-Lane Two-Way |
| ----- | |
| A | |
| A | Area or Amperes |
| AAA | American Automobile Association |
| AADT | Annual Average Daily Traffic |
| 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 or Asph. Conc. | Asphaltic Concrete |
| AC, Ac. | Acre |
| Accel. | Acceleration |
| ACI | American Concrete Institute |
| Act. | Actuated |
| ADA | Americans With Disabilities Act, The |
| Adh. | Adhesive |
| Adj. | Adjust |
| ADT | Average Daily Traffic |
| AFAD | Automated Flagger Assistance Device |
| Agg. | Aggregate |
| Ah. | Ahead |
| AISC | American Institute Of Steel Construction |
| AISI | American Iron and Steel Institute |
| Alt. | Alternate |
| Alum., Al. | Aluminum |
| AM | 12:00 Midnight Until 11:59 Noon |
| ANSI | American National Standards Institute |
| AOS | Apparent Opening Size |
| APL | Approved Products List |
| 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 And Materials |
| ATPB | Asphalt Treated Permeable Base |
| Attn. | Attention |
| Attnuatr. | Attenuator |
| Aux. or Auxil. | Auxiliary |
| Ave. | Avenue |
| AWG | American Wire Gauge |
| AWS | American Welding Society |
| Az | Azimuth |
| ----- | |
| B | |
| B to B | Back to Back |
| B/C, B.C. | Back Of Curb |
| Basc. | Bascule |
| BC | Bottle Cap or Bolt Circle |
| 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 |
| BCWE | Base Clearance Water Elevation |

| <u>Abbreviation</u> | <u>Meaning</u> |
|----------------------|--|
| Bd. or Bnd. | Bond or Bonded |
| Bdr. | Border |
| BE | Buried Electric |
| Beg. | Begin |
| Bit. | Bituminous |
| Bk. | Back |
| BL or \bar{B} | Base Line |
| BLC | Base Line Control |
| Bldg. | Building |
| Blkhd. | Bulkhead |
| BLON | Begin Length Of Need |
| Bldv. | Boulevard |
| BM | Bench Mark |
| Bndry. | Boundary |
| BO | Basin Outlet |
| BOS | Beginning Of Survey |
| Bot. | Bottom |
| BP | Borrow Pit |
| Bq. | Becquerel |
| Br. | Bridge |
| Brg. | Bearing |
| Brkwy. | Breakaway |
| BT | Buried Telephone Cable or Duct |
| Btfly. | Butterfly |
| Btwn., B/W | Between |
| BW | Barbed Wire, Bottom Width or Both Ways |
| ----- | |
| C | |
| C | Cantilever Length, Cut, Colorless, Coulomb or Cycle Length |
| C & G | Curb And Gutter |
| C.C. | Crash Cushion |
| C.I.P., C-I-P | Cast In Place |
| CA | Coarse Aggregate |
| CAP | Corrugated Aluminum Pipe |
| Cap. | Capacity |
| 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 |
| CCTV | Closed-Circuit Television |
| cd | Candela |
| CD | Cross Drain, Cross Direction (Geotextiles) |
| Cem. | Cement or Cemetery |
| Cem'd. | Cemented |
| CF, C.F. | Cubic Foot |
| CFR | Code of Federal Regulations |
| CFRP | Carbon Fiber Reinforced Polymer |
| CFS | Cubic Feet Per Second |
| Ch. | Channel |
| Chchg. | Channel Change |
| Chg. | Changeable |
| CI | Cast Iron |
| CIP | Cast Iron Pipe |
| circ. | Circumference |
| CJP | Complete Joint Penetration weld |
| Ckt. | Circuit |
| CL, C/L or \bar{C} | Center Line |
| Cl. or Clear | Clearance |
| CM | Concrete Monument |
| CMB | Concrete Median Barrier |
| CMP | Corrugated Metal Pipe |
| CMPA | Corrugated Metal Pipe Arch |
| CO | Clean Out |
| Co. | County or Company |

| <u>Abbreviation</u> | <u>Meaning</u> |
|------------------------|---|
| Col. | Column |
| Com. | Commercial or Common |
| COMM | Committee or By Committee |
| Comp. | Composite |
| Con. | Connect or Connection |
| Conc. | Concrete |
| Const. | Construct or Construction |
| Cont. | Continuation |
| Contr. | Contractor |
| Contrl. | Controller |
| Coord. | Coordinate |
| Cor. | Corner |
| Corr. | Corrugated |
| Cov. | Cover |
| CP | Concrete Pipe |
| CPE | Corrugated Polyethylene Pipe |
| CPT | Cone Penetration Test |
| CR | Control Radius or County Road |
| CRA | Clear Recovery Area |
| Crs. or Cse. | Course |
| CS | Curve To Spiral |
| CSIP | Cost Savings Initiative Proposal |
| CSL | Cross-hole Sonic Logging |
| CSP | Corrugated Steel Pipe |
| CT | Clear Trunk |
| Ctlvr. | Cantilever |
| CTPB | Cement Treated Permeable Base |
| Ctr., Ctrs. | Center |
| CU or Cu | Copper |
| Cu. Yd., CY, or C.Y. | Cubic Yard |
| Culv. | Culvert |
| Cwt. | Hundredweight |
| Cyl. | Cylindrical |
| ----- | |
| D | |
| D | Degree Of Curvature, Depth, Density, Distance, Diameter or Directional Distribution |
| D, Dia. or \emptyset | Diameter |
| DA | Drainage Area or Deflection Angle |
| DBH | Diameter At Breast Height |
| DBI | Ditch Bottom Inlet |
| DbI. | 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 |
| DFE | Design Flood Elevation |
| DGN or Dgn. | Design |
| DHV | Design Hourly Volume |
| DHW | Design High Water |
| DHWE | Design High Water Elevation |
| DI | Drop Inlet |
| Dim. | Dimension |
| Disp. | Disposal |
| Dist. | Distance |
| DLS | District Location Surveyor |
| DMM | Domestic Mail Manual |
| DOT | Department Of Transportation |
| DPI or D.P.I. | Ditch Point Intersection |
| DR | Design Review |
| Dr. | Drain, Drive |
| Driv. | Driven |

12/01/2015 6:28:52 AM

| | | | | | | |
|----------------------------------|----------|--------------|---|-------------------------------|-------------------------|----------------------------|
| LAST REVISION 07/01/15 | REVISION | DESCRIPTION: |  FY 2016-17 DESIGN STANDARDS | STANDARD ABBREVIATIONS | INDEX NO. 001 | SHEET NO. 1 of 4 |
|----------------------------------|----------|--------------|---|-------------------------------|-------------------------|----------------------------|

| <u>Abbreviation</u> | <u>Meaning</u> |
|----------------------------|--|
| Drwy. | Driveway |
| DS | Design Speed |
| DSL | Design Service Life |
| DT | Ditch |
| DTOE | District Traffic Operations Engineer |
| Dwg. | Drawing |
| ----- E ----- | |
| E | East or External Distance |
| e | Superelevation rate |
| E to E | End to End |
| E.P. or EOP | Edge Of Pavement |
| EA or Ea. | Each |
| EB | Eastbound |
| ED | Each Day |
| EIA | Electronic Industries Alliance |
| El. or Elev. | Elevation |
| Elast. | Elastomeric |
| Elec. | Electric |
| Ellip. | Elliptical |
| Embed. | Embedment |
| Embk. | Embankment |
| Emul. | Emulsified |
| Encl. | Enclosure |
| Engr. | Engineer |
| EOS | End Of Survey or Equivalent Opening Size |
| EPDM | Ethylene Propylene Diene Monomer |
| Eq. | Equation or Equal |
| Equip. | Equipment |
| Esmt. | Easement |
| Est. | Establish or Established |
| Est. or Estm. | Estimate |
| Etc. or etc. | Et Cetera (And So Forth) |
| ETP | Electronic Tough Pitch |
| EW | Endwall |
| Ex. | Except, Example |
| Exc. or Excav. | Excavation |
| Exist. | Existing |
| Exp. | Expansion |
| Ext. | Extension |
| Exwy. | Expressway |
| ----- F ----- | |
| F | Fill, Farad |
| F & I | Furnish & Install |
| F or Final | Final Quantity |
| F to F | Face to Face |
| F.L., FL or \overline{f} | Flow Line |
| F.S. | Florida Statutes |
| FA | Federal Aid or Fine Aggregate |
| FAC | Florida Administrative Code |
| FAP | Federal Aid Project |
| FBT | Florida Bulb Tee |
| 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 |
| FIB | Florida I Beam |
| Fig. | Figure |
| Fin. | Finish |
| FL, Fl. or Fla. | Florida |
| Flex. | Flexible |
| FNQ | Fuse (Type Slow Burn) |

| <u>Abbreviation</u> | <u>Meaning</u> |
|---------------------|--|
| FOC | Fiber Optics Cable |
| FPID | Financial Project Identification Number |
| FPM or fpm | Feet Per Minute |
| 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 |
| FTP | Florida Traffic Plans |
| Furn. | Furnish |
| ----- G ----- | |
| G | Giga, Gauss or Shear Modulus |
| g | Gram or Gravity |
| Ga. | Gauge or Gage |
| Ga. or Gal. | Gallon |
| Galv. | Galvanized |
| Gar. | Garage |
| GD | Gutter Drain |
| GFI | Ground Fault Interrupter |
| GIP | Galvanized Iron Pipe |
| GM | Gas Main |
| GP | Grade Point |
| Gr. | Grade, Guardrail or Grate |
| Gr. or Gro. | Gross |
| Gr. Wt. or gr. wt. | Gross Weight |
| GRC | Galvanized Rigid Steel Conduit |
| Grd. | Ground |
| GRI | Geosynthetic Research Institute |
| gross km | Gross Kilometer |
| Gttr. | Gutter |
| ----- H ----- | |
| h | Hecto |
| H | Henry |
| H.S., HS | High Strength |
| ha | Hectare |
| HAR | Highway Advisory Radio |
| HB | Hay Bales |
| HC | Horizontal Clearance |
| HD | High Density or Heavy Duty |
| Hd. | Head |
| HDPE | High Density Polyethylene |
| Hdwl. | Headwall |
| HH | Heavy Hex |
| Hndrl. | Handrail |
| HOA | Hand/Off/Automatic |
| Horiz. or Hor. | Horizontal |
| HOT | High Occupancy Tolls |
| HOV | High Occupancy Vehicle |
| HP | High Pressure or Horsepower |
| Hr. | Hour |
| Hse. | House |
| HSHV | High Strength Horizontal Vertical |
| Ht. | Height |
| HW or H.W. | High Water or Hot Water |
| Hwy. | Highway |
| Hyd. | Hydraulic |
| Hz | Hertz |
| ----- I ----- | |
| I | External Angle (Delta), Interstate |
| ID, I.D. | Inside Diameter or Identification |
| IES | Illuminating Engineering Society |
| IMC | Intermediate Metal Conduit |
| in. | Inch(es) |
| Inc. | Incorporated or Including |

| <u>Abbreviation</u> | <u>Meaning</u> |
|---------------------|---|
| Incl. or Inc. | Included |
| Ind. | Industry or Industrial |
| Install. | Installed |
| Int. | Interior |
| Intchg. or Ichg. | Interchange |
| Inter. | Intermediate |
| Inv. | Invert |
| IP | Iron Pipe |
| IR | Iron Rod |
| Isect. | Intersection |
| Isl. | Island |
| ITE | Institute Of Transportation Engineers |
| ITS | Intelligent Transportation Systems |
| ----- J ----- | |
| J | Joule |
| JB | Junction Box |
| Jct. | Junction |
| Jt. | Joint |
| ----- K ----- | |
| K | Design Hour Factor |
| K | Kelvin |
| k | Kilo (prefix) |
| kg | Kilogram |
| kg/m | Kilogram Per Meter |
| kg/m ² | Kilogram Per Square Meter |
| kg/m ³ | Kilogram Per Cubic Meter |
| Kilo | One Thousand |
| Kip | 1000 Pounds |
| km | Kilometer |
| km/h | Kilometer Per Hour |
| kN | Kilonewton |
| kn | Knot |
| kPa | Kilopascal |
| ksi | Kips Per Square Inch |
| kV | Kilovolt |
| kVA | Kilovolt Ampere |
| kWh | Kilowatt-hour |
| ----- L ----- | |
| L | Length, Length Of Curve, Liter, Left or Taper Length, Buffer Length or Taper Length plus Buffer Space |
| L/W | Lightweight |
| LA or L/A | Limited Access |
| Lat. | Lateral or Latitude |
| lb | Pound(s) |
| lb/sy | Pounds Per Square Yard |
| lbf | Pound force |
| LBR | Lime rock Bearing Ratio |
| LC | Long Chord |
| LCD | Longitudinal Channelizing Device |
| LEO | Law Enforcement With Flashing Lights And Radar |
| LF | Linear Foot (Feet) |
| LFD | Load Factor Design |
| Lgth. | Length |
| Lin. | Linear |
| LM | Lane Mile |
| lm | Lumen |
| Lmrk. | Lime rock |
| Loc. | Location |
| Long. | Longitude |
| LOS | Limit Of Clear Sight |
| LRFD | Load Resistance Factor Design |
| LRS | Low-Relaxation |
| LS | Length Of Spiral |
| LS | Lump Sum |
| LT | Left Turn |

12/01/2015 6:28:52 AM

| <u>Abbreviation</u> | <u>Meaning</u> |
|---------------------|---|
| Lt. | Left |
| Ltd. | Lighted or Limited |
| LU, Lum. | Luminaire |
| Ix | Lux |
| ----- M ----- | |
| M | Mass, Middle Ordinate Length or Mega |
| m | Meter or Milli |
| m ² | Meter Square |
| m/s | Meters Per Second |
| m ³ | Meter Cubed or Cubic Meter |
| m ³ /m | Meter Cubed Per Meter |
| Mach. | Machine |
| Maint. | Maintenance |
| MAS | Motorist Awareness System |
| MASH | Manual for Assessing Safety Hardware (AASHTO) |
| Matl. | Material |
| Max. | Maximum |
| MB | Median Barrier |
| MBM | Thousand (Feet) Board Measure |
| MD | Machine Direction (Geotextiles) |
| Med. | Median |
| Mega | One Million |
| Memb. | Member |
| MES | Mitered End Section |
| Mess. | Message |
| Mfg. | Manufactured or Manufacturer |
| MG | 1000 Gallons |
| MH, M.H. | Manhole or Mounting Height |
| MHW | Mean High Water |
| 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 |
| MOTC | Maintenance Of Traffic Committee |
| MP | Mile Post |
| MPa | Megapascal |
| MPH or mph | Miles Per Hour |
| MSL | Mean Sea Level |
| Mtd. | Mounted |
| MUTCD | Manual On Uniform Traffic Control Devices |
| MUTS | Manual On Uniform Traffic Studies |
| ----- N ----- | |
| N | North or Newton |
| N & C | Nail & Cap |
| N & D | Nail & Disk |
| N.P. | Non Plastic |
| N/m | Newtons Per Meter |
| N/m ² | Newtons Per Square Meter |
| N/mm ² | Newtons Per Square Millimeter |
| N/m ³ | Newtons Per Cubic Meter |
| NA or N/A | Not Available or Not Applicable |
| NAVD | National American Vertical Datum |
| NB | Northbound |
| NC | National Coarse or Normal Crown |

| <u>Abbreviation</u> | <u>Meaning</u> |
|------------------------|--|
| NCHRP | National Cooperative Highway Research Program |
| NDCBU | Neighborhood Delivery And Collection Box Unit |
| NE | Northeast |
| NEMA | National Electrical Manufacturers Association |
| net km | Net Kilometer |
| NGS | National Geodetic Survey |
| NGVD | National Geodetic Vertical Datum of 1929 |
| NHS | National Highway System |
| NHW | Normal High Water |
| NIC | Not In Contract |
| NJ | New Jersey |
| NM | Net Mile |
| Nm | Newton Meter |
| No. | Number |
| Nom. | Nominal |
| Norm. | Normal |
| NPS | Nominal Pipe Size |
| NPT | National Pipe Thread |
| NRCP | Non-Reinforced Concrete Pipe |
| NRTL | Nationally Recognized Testing Laboratory |
| NS | Non Stress, Not Suitable or Near Side |
| NT, N&T | Non Traffic, Nail & Tin |
| NTS | Not To Scale |
| NW | Northwest |
| ----- O ----- | |
| 0 to 0, o to o or O.O. | Out to Out |
| O.B.G. | Optional Base Group |
| OA | Overall |
| OC or O.C. | On Center |
| OD or O.D. | Outside Diameter |
| OE | Overhead Electric |
| OH, OHD or Ohd. | Overhead |
| Opass | Overpass |
| Opt. | Option, Optional or Optically |
| OT | Overhead Telephone |
| Oz. | Ounce |
| ----- P ----- | |
| P | Passenger Car & Light Delivery Truck |
| P or Plan | Plan Quantity |
| Pa | Pascal |
| Pa.s | Pascal Second |
| Par. | Parallel |
| 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 |
| PCF, pcf | Pounds per Cubic Foot |
| PCMS | Portable Changeable Message Sign |
| P.E. or PE | Professional Engineer |
| Ped | Pedestrian or Pedestal |
| Pen. | Penetration |
| PG | Profile Grade |
| PGL | Profile Grade Line |
| pH | Measure Of Acidity or Alkalinity |
| Ph. | Phase |
| PI | Point Of Intersection |
| Pkg. | Parking |
| Pkwy. | Parkway |
| PL or \overline{P} | Property Line or Plate |
| PM | 12:00 Noon Until 11:59 Midnight |
| POC | Point On Curve |

| <u>Abbreviation</u> | <u>Meaning</u> |
|---------------------|---|
| POST | Point On Semi-Tangent |
| POT | Point On Tangent |
| PP | Power Pole |
| PPB | Pier Protection Barrier |
| PPP | Polypropylene pipe |
| Pr. | Pair |
| PRC | Point Of Reverse Curvature |
| Prcst. | Precast |
| Prest. | Prestressed |
| PRM | Permanent Reference Monument |
| Prob. | Probability |
| Prod. | Product, Production, Producer or Produced |
| Prog. | Program or Progression |
| Proj. | Project or Projection |
| Prop. | Proposed |
| 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 |
| PSU | Prestressed Slab Unit |
| PT | Point Of Tangency or Pressure Treated |
| PTFE | Polytetrafluoroethylene |
| PVC | Polyvinyl Chloride |
| PW | Pressure Water |
| ----- Q ----- | |
| Q | Peak Discharge or Flow Volume |
| ----- R ----- | |
| R or Rad. | Radius |
| R or Rng. | Range |
| R, Rt. | Right |
| r/s | Revolution Per Second |
| R/W, ROW | Right Of Way |
| rad | Radian |
| rad/s | Radian Per Second |
| RBAC | Rock Base Asphaltic Concrete |
| RBST | Rock Base Surface Treatment |
| RC | Reverse Crown |
| RCP | Reinforced Concrete Pipe |
| RCPA | Reinforced Concrete Pipe Arch |
| Rd. | Road or Round |
| Rdsd. | Roadside |
| Rdwy. | Roadway |
| Rec. | Recovery |
| Rect. | Reticuline or Rectangular |
| Ref. | Reference |
| Refl. | 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 |
| RGS | Rigid Galvanized Steel |
| RHW | Insulation (Moisture & Heat Resistant Rubber) |
| RM | Reference Monument |
| RP | Reference Point |
| RPM | Raised Reflective Pavement Markers |
| rpm or r/min | Revolution Per Minute |
| RR | Railroad |
| RSDU | Radar Speed Display Unit |
| Rsf. | Resurface |
| RU | Rack Unit |
| RX | Receive |

12/01/2015 6:28:53 AM

| <u>Abbreviation</u> | <u>Meaning</u> |
|----------------------|--|
| S | |
| S or s | Speed, South, Siemens, Or Second |
| SAHM | Sand-Asphalt Hot Mix |
| San. | Sanitary |
| SB | Southbound |
| SBAC | Shell Base Asphaltic Concrete |
| SBRM | Sand Bituminous Road Mix |
| SBST | Shell Base Surface Treatment |
| SC | Seal Coat |
| SC | Spiral To Curve |
| Sch. | Schedule |
| SCST | Sand-Clay Surface Treatment |
| SD | Side Drain, Storm Drain |
| SD | Storm Drain |
| SE | Southeast |
| Sec. | Second |
| Sect. | Section |
| Sed. | Sediment |
| Sep. | Separator |
| Seq. | Sequential |
| Serv. | Service |
| SF | Adjustment Factor In Percent, Silt Fence |
| SG | Specific Gravity |
| SG, Subgr. | Subgrade |
| Sh. or Sht. | Sheet |
| Shldr. | Shoulder |
| SHW | Seasonal High Water |
| SIP | Stay In Place |
| SLEO | Speed and Law Enforcement Officer |
| SP | Superpave |
| Spa., Spcg. or Sp. | Space(ing)(s) |
| Spec. | Specification |
| SPT | Standard Penetration Test |
| sq | Square |
| Sq. Ft., SF, or S.F. | Square Foot |
| sq. in. | Square Inch |
| Sq. Yd., SY or S.Y. | Square Yard |
| SR or S.R. | State Road |
| SRAP | Spiral Rib Aluminum Pipe |
| SRASP | Spiral Rib Aluminized Steel Pipe |
| SRCP | Steel Reinforced Concrete Pipe |
| SRD | State Road Department |
| SRSP | Spiral Rib Steel Pipe |
| SS | Sanitary Sewer, Stainless Steel |
| 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. | Strong |
| Stge. | Storage |
| Stl. | Steel |
| Str. | Structure |
| Sty. | Story |
| SU | Single Unit Trucks |
| Sub. or Subs. | Subsoil |
| Sub. or Subst. | Substitute |
| Suppts. | Supports |
| Sur. | Survey |
| Surf. | Surface |
| Sv | Sievert |
| SW | Southwest |
| SW or Swk. | Sidewalk |
| Sym. | Symmetrical |
| Sys. or Syst. | System |

| <u>Abbreviation</u> | <u>Meaning</u> |
|---------------------|---|
| T | |
| t | Metric Ton |
| T | Tangent, Length Of Curve, Percent Trucks, Tesla |
| T, TWP or Twp. | Township |
| tan. | Tangent |
| TBM | Temporary Bench Mark |
| TC | Tangent To Curve |
| TCB | Temporary Concrete Barrier |
| TCE | Temporary Construction Easement |
| TCP | Terra Cotta Pipe |
| TCP | Traffic Control Plan(s) |
| TCZ | Traffic Control Zone |
| TDLC | Transportation Design For Livable Communities |
| Tel. | Telephone |
| Temp. | Temperature or Temporary |
| Theo. | Theoretical |
| THRMPLSTC | Thermoplastic |
| THW or THWN | Insulation (Flame Retardant, Moisture And Heat Resistant Thermoplastic) |
| Tk | Truck |
| Tk or Thick. | Thickness |
| TMA | Truck/Trailer Mounted Attenuator |
| Tn. | Ton |
| Traf. | Traffic |
| Trans. | Transition, Transverse, Translate or Transportation |
| Treat. | Treatment |
| TS | Tangent To Spiral |
| TSC | Length Of Tangent (Spiral Curve) |
| TTC | Temporary Traffic Control |
| TVSS | Transient Voltage Surge Suppression |
| TX | Transmit |
| Typ. | Typical |
| U | |
| UG | Underground |
| UL | Underwriters Laboratories |
| Ult. | Ultimate |
| Uld. | Unlimited |
| Unddr. | Underdrain(s) |
| Undrdwy. | Under roadway |
| unld. | Unloaded |
| Untr. | Untreated |
| Upass. | Underpass |
| UPS | Uninterruptible Power Supply |
| 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 | |
| V | Volt, Velocity, Volume or Hourly Volume |
| Var. | Varies, Variable or Variance |
| VC | Vertical Curve |
| VCP | Vitrified Clay Pipe |
| Veh. | Vehicle |
| Vert. | Vertical |
| VF | Vertical Foot |
| Vh | Verified Horizontal Location |
| 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 |

| <u>Abbreviation</u> | <u>Meaning</u> |
|---------------------|---|
| W | |
| W | Width, Wide, West or Watt |
| W.P.I. | Work Program Item |
| W/C | Water-Cement Ratio |
| WB | Westbound |
| Wb. | Weber |
| WB40 | Semi Trailer, Intermediate |
| WB50 | Semi Trailer, Large |
| WB62 | Semi Trailer, Interstate |
| WB67D | Semi Trailer, Tandem |
| WM | Water Main |
| WT | Water Table Or Weight |
| WWF | Welded Wire Fabric |
| WWR | Welded Wire Reinforcing |
| X | |
| X | Coordinate Value (East-West Direction) or Extra |
| X Rd. | Cross Road |
| Xing. | Crossing |
| Xsec. | Cross Section |
| Y | |
| Y | Coordinate Value (North-South Direction) |
| Yd. | Yard |
| Yr. | Year |
| Ω | Ohm |

12/01/2015 6:28:54 AM

STANDARD SYMBOLS FOR KEY MAP

| | | | | | | | |
|--|--|--|---------------------------------------|--|---|--|---------------------------------------|
| | Highway With Full Control of Access | | Free Ferry | | Residential Area Under Development | | Agricultural Inspection Station |
| | Highway With Frontage Roads | | Toll Ferry | | Lighthouse | | Farmers Market |
| | Highway Interchange | | Canal Or Drainage Ditch | | State Capital | | Game Preserve |
| | Proposed Controlled Access Highway | | Intracoastal Waterway | | County Seat | | Game Checking Station |
| | Divided Highway | | Narrow Stream | | Other City Or Village | | Bird Sanctuary |
| | Hard Surfaced Road | | Wide Stream | | Seminole Indian Village | | Fire Control Headquarters |
| | Soil, Gravel Or Shell Surfaced Road | | Dam | | Welcome Station | | Lookout Tower |
| | Graded And Drained Road | | Dam Or Spillway With Lock | | Wayside Park Or Small Park | | Fire Station |
| | Unimproved Road | | Dam With Road | | Park With Boat Ramp | | Patrol Or Police Station |
| | Primitive Road | | Flood Control Structure | | Boat Ramp | | Correctional Institution Or Road Camp |
| | Private Road | | Lake, Reservoir Or Pond | | Museum | | Department of Transportation Facility |
| | Streets In Inset Or Delimited Areas | | Intermittent Pond | | Recreational Area Or Historic Site | | Coast Guard Station |
| | Extension Of Local Roads Within Cities | | Meandered Lake | | Scenic Site | | Armory |
| | Federal Aid Interstate Highway | | Marsh Or Swamp | | Post Office | | Junkyard |
| | Federal Aid Urban Highway | | Mangroves | | School | | Sanitary Fill |
| | Federal Aid Primary Highway | | Levee Or Dike | | Church | | Sewage Disposal Plant |
| | Federal Aid Secondary Highway | | Levee Or Dike With Road | | Cemetery | | Incinerator |
| | National Forest Road | | Highway Bridge | | Church And Cemetery | | Power Plant |
| | State Forest Road | | Small Bridges Closely Spaced | | Hospital, Health Center Or Rest Home | | Power Substation |
| | State Park Road | | Drawbridge | | Toll House, Port Of Entry Or Weight Station | | Communications Facility |
| | Interstate Highway | | Highway Grade Separation | | Fair Grounds, Race Course Or Rodeo Arena | | Locked Gate Or Fence |
| | US Numbered Highway | | Tunnel | | Mine Or Strip Mine | | Triangulation Station |
| | State Highway | | State Boundary Line | | Governmental Research Station | | |
| | County Road | | County Boundary Line | | | | |
| | Railroad | | Civil Township Boundary | | | | |
| | Double Track Railroad | | Extended Township Line | | | | |
| | Abandoned Railroad | | Land Grant Line | | | | |
| | Railroad Station | | Land Section Line | | | | |
| | Grade Crossing | | State Survey Section Line | | | | |
| | Railroad Above | | Survey By Others | | | | |
| | Railroad Below | | Location Of Inset Boundary Within Map | | | | |
| | Military Field | | Military Reservation Boundary | | | | |
| | Commercial Or Municipal Airport | | College Or University Boundary | | | | |
| | Landing Area Or Strip | | Corporate Limits | | | | |
| | Runways | | Delimited Area, Population Est. | | | | |
| | | | Reservation, Forest Or Park Boundary | | | | |
| | | | Wildlife Refuge Boundary | | | | |

GENERAL NOTE

1. Symbols on this Index are intended for use on all Roadway, Signing And Marking, Signalization, and Lighting projects. For work zone traffic control symbols refer to Index 600. When additional or similar symbols are used, legends or notations may be required for clarity.

STANDARD SYMBOLS FOR PLAN SHEETS

GENERAL SYMBOLS

| | | | |
|--|---|--|--|
| | State Line | | Curb |
| | County Line | | Curb And Gutter |
| | Township Line | | Water Well, Spring |
| | Section Line | | Levee |
| | Base Or Survey Line | | Railroad Mile Post |
| | Right-Of-Way | | Railroad Signal With Gate |
| | Easement Line | | Railroad Switch |
| | Limited Access Line | | Gate |
| | Fence Line | | Pump Island |
| | National Or State Park Or Forest | | Storage Tank (Surface) |
| | Grant Line | | Storage Tank (Underground) |
| | Railroad (Drainage Maps) | | Mine Or Quarry |
| | Railroad (Detail Plans) | | Borrow Pit |
| | Fence (Limited Access) | | Church |
| | Box Culvert | | Store |
| | Bridge | | Residence |
| | Pipe Culvert-Mitered End Section | | Barn |
| | Pipe Culvert-Straight Endwall | | School |
| | Pipe Culvert-U-Type Endwall | | Sediment Barrier |
| | Pipe Culvert-Median Drain | | Floating Turbidity Barrier |
| | Pipe Culvert-Other End Treatments | | Staked Turbidity Barrier |
| | Storm Drain (Proposed) | | Stream |
| | Storm Drain (Existing) | | Shore Line |
| | Inlet | | Marsh |
| | Manhole | | Wetland Boundary (Proposed) |
| | Tied Longitudinal Joint | | Wetland Boundary (Existing) |
| | Keyed Longitudinal Joint | | Hedge |
| | Doweled Transverse Expansion Joint | | Trees |
| | Doweled Transverse Contraction Joint | | Edge Of Wooded Area |
| | Transverse Contraction Joint Without Dowels | | Shrubbery |
| | Survey Reference Point | | Grove Or Orchard |
| | Triangulation Station | | Definition Of Skew For Cross Drains And Barrels Of Concrete Box Culverts |
| | Bench Mark | | Concrete |
| | Point Of Intersection | | Wood |
| | North Arrow | | |
| | Edges Of Existing Pavement And Sidewalk | | |
| | Guardrail | | |
| | Crash Cushion | | |
| | Piling Pier Column | | |
| | Concrete Monument | | |
| | Base Line | | |
| | Centerline | | |
| | Rate Of Superelevation | | |
| | Property Line | | |
| | Delta Angle | | |
| | Approximate | | |
| | Round Or Diameter | | |
| | Flow Line | | |

UTILITY ADJUSTMENT SYMBOLS

| EXISTING | | PROPOSED | |
|----------|---|----------|-------------------------------|
| | QUALITY LEVEL A (VISUAL ONLY WILL NOT PLOT) | | VALVE COVER SANITARY SEWER |
| | QUALITY LEVEL B (VISUAL ONLY WILL NOT PLOT) | | VALVE COVER GAS |
| | QUALITY LEVEL C (VISUAL ONLY WILL NOT PLOT) | | VALVE COVER WATER NON POTABLE |
| | QUALITY LEVEL D (VISUAL ONLY WILL NOT PLOT) | | VALVE COVER WATER |
| | END OF ELECTRONIC INFORMATION | | VALVE BACK FLOW PREVENTER |
| | TEST HOLE QUALITY LEVEL A | | VENT UNKNOWN |
| | QUALITY LEVEL DELINEATION CHANGE | | VENT GAS |
| | MANHOLE COVER UNKNOWN | | VENT SANITARY SEWER |
| | MANHOLE COVER CABLE TV | | POWER POLE |
| | MANHOLE COVER STORM WATER | | POWER POLE WITH TRANSFORMER |
| | MANHOLE COVER ELECTRIC | | SHARED POLE |
| | MANHOLE COVER GAS | | SHARED POLE WITH TRANSFORMER |
| | MANHOLE COVER SANITARY SEWER | | TELEPHONE POLE |
| | MANHOLE COVER TELEPHONE | | GUY ANCHOR |
| | MANHOLE COVER WATER | | GUY POLE |
| | FIRE HYDRANT | | SERVICE CABINET CABLE TV |
| | METER UNKNOWN | | SERVICE CABINET TELEPHONE |
| | METER ELECTRIC | | GAS REGULATOR |
| | METER GAS | | TELEPHONE BOOTH |
| | METER WATER | | TRANSFORMER POWER |
| | VALVE GAS | | ELECTRICAL OUTLET |
| | VALVE UNKNOWN | | SANITARY DUMP STATION |
| | VALVE SANITARY SEWER | | SANITARY CLEAN OUT |
| | VALVE WATER | | PUMP NON PETROLEUM |
| | VALVE BOX UNKNOWN | | PUMP PETROLEUM/FUEL |
| | VALVE BOX GAS | | PUMP STATION SANITARY SEWER |
| | VALVE BOX WATER | | WATER FAUCET |
| | VALVE BOX SANITARY SEWER | | SPRINKLER |
| | VALVE COVER UNKNOWN | | WELL |
| | | | GAUGES (DESCRIBED) |

See General Notes, Sheet 1

12/01/2015 6:32:12 AM

| | | | | | | |
|----------------------------------|----------|--------------|--|-------------------------|-------------------------|----------------------------|
| LAST REVISION 07/01/13 | REVISION | DESCRIPTION: | FY 2016-17 DESIGN STANDARDS | STANDARD SYMBOLS | INDEX NO. 002 | SHEET NO. 2 of 4 |
|----------------------------------|----------|--------------|--|-------------------------|-------------------------|----------------------------|

STANDARD SYMBOLS FOR PLAN SHEETS

UTILITY ADJUSTMENT SYMBOLS

EXISTING

- - - - OTV - - - - OVERHEAD CABLE TELEVISION
 - - -BTV(B)- - - BURIED CABLE TELEVISION (B)
 - - -BTV(C)- - - BURIED CABLE TELEVISION (C)
 - - -BTV(D)- - - BURIED CABLE TELEVISION (D)
 - - -OFOC - - - OVERHEAD FIBER OPTIC CABLE TELEVISION
 - -BFOC(B)- - - BURIED FIBER OPTIC CABLE TELEVISION (B)
 - -BFOC(C)- - - BURIED FIBER OPTIC CABLE TELEVISION (C)
 - -BFOC(D)- - - BURIED FIBER OPTIC CABLE TELEVISION (D)
 - - -BTV(B)- - - BURIED CABLE TV CONDUIT SYSTEM (B)
 - - -BTV(C)- - - BURIED CABLE TV CONDUIT SYSTEM (C)
 - - -BTV(D)- - - BURIED CABLE TV CONDUIT SYSTEM (D)
 - - -CAS(B)- - - BURIED CONDUIT (B)
 - - -CAS(C)- - - BURIED CONDUIT (C)
 - - -CAS(D)- - - BURIED CONDUIT (D)
 - - - - OE - - - - OVERHEAD ELECTRIC
 - - -BE(B)- - - BURIED ELECTRIC (B)
 - - -BE(C)- - - BURIED ELECTRIC (C)
 - - -BE(D)- - - BURIED ELECTRIC (D)
 - - -OFOE - - - OVERHEAD FIBER OPTIC ELECTRIC
 - -BFOE(B)- - - BURIED FIBER OPTIC ELECTRIC (B)
 - -BFOE(C)- - - BURIED FIBER OPTIC ELECTRIC (C)
 - -BFOE(D)- - - BURIED FIBER OPTIC ELECTRIC (D)
 - - -G(B)- - - BURIED GAS (B)
 - - -G(C)- - - BURIED GAS (C)
 - - -G(D)- - - BURIED GAS (D)
 - - -PET(B)- - - BURIED PETROLEUM (B)
 - - -PET(C)- - - BURIED PETROLEUM (C)
 - - -PET(D)- - - BURIED PETROLEUM (D)
 - - -CAS(B)- - - BURIED PIPE ENCASEMENT (B)
 - - -CAS(C)- - - BURIED PIPE ENCASEMENT (C)
 - - -CAS(D)- - - BURIED PIPE ENCASEMENT (D)

EXISTING


- - -S(B)- - - BURIED SANITARY SEWER (B)
 - - -S(C)- - - BURIED SANITARY SEWER (C)
 - - -S(D)- - - BURIED SANITARY SEWER (D)
 - - -S(B)- - - BURIED SANITARY FORCE MAIN (B)
 - - -S(C)- - - BURIED SANITARY FORCE MAIN (C)
 - - -S(D)- - - BURIED SANITARY FORCE MAIN (D)
 - - -STM(B)- - - BURIED STEAM LINE (B)
 - - -STM(C)- - - BURIED STEAM LINE (C)
 - - -STM(D)- - - BURIED STEAM LINE (D)
 - - - - OT - - - - OVERHEAD TELEPHONE
 - - -BT(B)- - - BURIED TELEPHONE (B)
 - - -BT(C)- - - BURIED TELEPHONE (C)
 - - -BT(D)- - - BURIED TELEPHONE (D)
 - - -OFOOT - - - OVERHEAD FIBER OPTIC TELEPHONE
 - -BFOT(B)- - - BURIED FIBER OPTIC TELEPHONE (B)
 - -BFOT(C)- - - BURIED FIBER OPTIC TELEPHONE (C)
 - -BFOT(D)- - - BURIED FIBER OPTIC TELEPHONE (D)
 - - -BT(B)- - - BURIED TELEPHONE DUCT (B)
 - - -BT(C)- - - BURIED TELEPHONE DUCT (C)
 - - -BT(D)- - - BURIED TELEPHONE DUCT (D)
 - - -BT(B)- - - BURIED TELEPHONE TOLL (B)
 - - -BT(C)- - - BURIED TELEPHONE TOLL (C)
 - - -BT(D)- - - BURIED TELEPHONE TOLL (D)
 - - -W(B)- - - BURIED WATER LINE (B)
 - - -W(C)- - - BURIED WATER LINE (C)
 - - -W(D)- - - BURIED WATER LINE (D)
 - - -NPW(B)- - - BURIED NON-POTABLE WATER LINE (B)
 - - -NPW(C)- - - BURIED NON-POTABLE WATER LINE (C)
 - - -NPW(D)- - - BURIED NON-POTABLE WATER LINE (D)

PROPOSED

OTV OTV OTV OVERHEAD CABLE TELEVISION
 OFOC OFOC OVERHEAD FIBER OPTIC CABLE TELEVISION
 BTV BTV BTV BURIED CABLE TELEVISION
 BFOC BFOC BURIED FIBER OPTIC CABLE TELEVISION
 CAS CAS CAS BURIED CASING
 DT DT DT DT BURIED DUCT
 OE OE OE OE OVERHEAD ELECTRIC
 OFOE OFOE OVERHEAD FIBER OPTIC ELECTRIC
 BE BE BE BE BURIED ELECTRIC
 BFOE BFOE BURIED FIBER OPTIC ELECTRIC
 G G G G G G G BURIED GAS
 PET PET PET BURIED PETROLEUM
 S S S S S S S BURIED SANITARY SEWER
 S S S S S S S BURIED SANITARY FORCED MAIN
 STM STM STM BURIED STEAM
 OT OT OT OT OVERHEAD TELEPHONE
 OFOT OFOT OVERHEAD FIBER OPTIC TELEPHONE
 BT BT BT BT BURIED TELEPHONE
 BFOT BFOT BURIED FIBER OPTIC TELEPHONE
 WWWWWWWW BURIED WATER
 NPW NPW NPW BURIED NON-POTABLE WATER

See General Notes, Sheet 1

12/01/2015 6:32:13 AM

| | | | | | | |
|---------------------------|----------|--------------|--|-------------------------|------------------|---------------------|
| LAST REVISION 01/01/16 | REVISION | DESCRIPTION: |  FY 2016-17 DESIGN STANDARDS | STANDARD SYMBOLS | INDEX NO. 002 | SHEET NO. 3 of 4 |
|---------------------------|----------|--------------|--|-------------------------|------------------|---------------------|

STANDARD SYMBOLS FOR PLAN SHEETS

TRAFFIC SIGNALS SYMBOLS

LIGHTING SYMBOLS

SIGNING AND PAVEMENT MARKING SYMBOLS

| EXISTING | PROPOSED | |
|----------|----------|---|
| | | Traffic Signal Head (Span Wire Mounted) |
| | | Traffic Signal Head (Pedestal Mounted) |
| | | Traffic Signal Head (Mast Arm Mounted) |
| | | Traffic Signal Pole (Concrete, Wood, Metal) |
| | | Vehicle Detector (Loop) |
| | | Signal Cable (On Messenger Wire) |
| | | Conduit |
| | | Vehicle Detector (Points) |
| | | Pedestrian Detector |
| | | Pedestrian Signal Head (Pole Or Pedestal Mounted) |
| | | Controller Cabinet (Base Mounted) |
| | | Controller Cabinet (Pole Mounted) |
| | | W - D W Walk - Dont Walk |
| | | FDW Flashing Dont Walk |
| | | 5 Signal Face Number |
| | | □ Signal Lens |
| | | P Programmed Signal Head |
| | | --- Messenger Wire |
| | | 3 Pole Tabulation Cross Reference |
| | | *3 Pole Tabulation Cross Reference (Joint Use Pole) |
| | | ∅ Signal Phase |

| EXISTING | PROPOSED | |
|----------|----------|--|
| | | Pole & Luminaire |
| | | Existing Pole & Luminaire To Be Removed |
| | | Final Position Of Relocated Or Adjusted Pole & Luminaire |
| | | High Mast Lighting Tower |
| | | City Or Utility Owned Luminaire & Pole |
| | | PVC (Polyvinyl Chloride) Lighting Conduit And Conductors |
| | | Rigid Galvanized Lighting Conduit And Conductors |
| | | Lighting Pull-Box |
| | | Light Distribution Point |
| | | Joint Use Pole |
| | | Pier Cap Underdeck Luminaire |
| | | Pendant Hung Underdeck Luminaire |

| | |
|--|-----------------------------|
| | Pavement Arrow |
| | Single Solid Line |
| | Double Solid Line |
| | Skip Line |
| | Stop Bar |
| | Traffic Sign (Post Mounted) |
| | Traffic Sign (Overhead) |
| | 13 Sign Number |
| | 700-83 Sign Item Number |
| | Traffic Flow Arrow |

See General Notes, Sheet 1

12/8/2015 6:32:14 AM

| | | | | | | |
|---------------------------|----------|--------------|--|-------------------------|-------------------------|----------------------------|
| LAST REVISION 07/01/13 | REVISION | DESCRIPTION: | FY 2016-17 DESIGN STANDARDS | STANDARD SYMBOLS | INDEX NO. 002 | SHEET NO. 4 of 4 |
|---------------------------|----------|--------------|--|-------------------------|-------------------------|----------------------------|