

List of Abbreviations

AASHTO	American Association of State Highway and Transportation Officials
ABMA	American Bearing Manufacturers Association
ABS	Acrylonitrile Butadiene Styrene
AC	Alternating Current
ACI	American Concrete Institute
ACP	Asbestos Cement Pipe
ACPPA	American Concrete Pressure Pipe Association
ADA	Americans with Disabilities Act
ADD	Average Daily Demand
ADF	Average Daily Flow
ADU	Accessory Dwelling Unit
AIS	American Iron and Steel
AISC	American Institute of Steel Construction
AMI	Advanced Metering Infrastructure
AMPP	Association for Materials Protection and Performance
ANSI	American National Standards Institute
ARV	Air Release Valve
ASME	American Society of Mechanical Engineers
ASSE	American Society of Sanitary Engineering
ASTM	American Society for Testing and Materials
ATS	Automatic Transfer Switch
AVV	Air Vacuum Valve
AWG	Average Wire Gauge
AWM	Appliance Wiring Material
AWS	American Welding Society
AWWA	American Water Works Association
BEP	Best Efficiency Point
BFP	Backflow Preventer
BFV	Butterfly Valve
BMP	Best Management Practice
BOC	Back of Curb
BOM	Bill of Material
BWP	Bar Wrapped Steel Cylinder Pipe
CAP	Capacity Assurance Program
CBD	Central Business District

CCTV	Closed Circuit Television
CDOT	Charlotte Department of Transportation
cfs	Cubic Feet per Second
CI	Cast Iron
CIP	Capital Investment Plan, Cast Iron Pipe
CIPP	Cured-In-Place Pipe
City	City of Charlotte
CLDSM	Charlotte Land Development Standards Manual
CLSM	Controlled Low Strength Material, i.e. Flowable Fill
CLTW	Charlotte Water
CMCSI	Charlotte-Mecklenburg Certified Site Inspector
CP	Cathodic Protection
CPU	Central Processing Unit
CPVC	Chlorinated Polyvinyl Chloride
CTS	Copper Tubing Size
CY	Cubic Yard
DC	Direct Current
DI	Ductile Iron
DIP	Ductile Iron Pipe
DIPRA	Ductile Iron Pipe Research Association
DIPS	Ductile Iron Pipe Size
DR	Dimension Ratio
ECP	Embedded Cylinder Pipe
ENR	Engineering News Record
EOR	Engineer of Record
EPDM	Ethylene Propylene Diene Monomer Rubber
EPP	Expanded Polypropylene
ERT	Electronic Radio Transmitter, Encoder/Receiver/Transmitter
ETL	Electrical Testing Laboratories
FEMA	Federal Emergency Management Agency
FIT	Flow Indicator Transmitter
FLA	Full Load Amperes
FLG	Flange Joint
FLU	Future Land Use
FM	Force Main, Factory Mutual
FMCT	Combined Fire and Domestic Service Meter

FNPT	Female National Pipe Thread
fps or ft/s	Feet per Second
FRPMP	Fiberglass Reinforced Polymer Mortar Pipe
ft	Feet
FTSE	Flow Tracking/Acceptance for Sewer Extension Applications
Fu	Tensile Strength
FVNR	Full Voltage Non-Reversing
Fy	Yield Strength
GFI/GFCI	Ground Fault Circuit Interrupter
GPH	Gallons per Hour
GPM	Gallons per Minute
GPS	Global Positioning System
GSM	Grams per Square Meter
HDCL	High Density Cross Laminated Polyethylene
HDPE	High Density Polyethylene
HMWPE	High Molecular Weight Polyethylene
Hp/HP	Horsepower
Hz	Hertz
IAPMO	International Association of Plumbing and Mechanical Officials
IBC	International Building Code
ICBO	International Conference of Building Officials
ICC	International Code Council
ICCP	Impressed Current Cathodic Protection
ID	Internal Diameter (Pipe)
IEEE	Institute of Electrical and Electronics Engineers
in	Inch
INF	Interference Test Station
INV	Invert
IPS	Iron Pipe Size
ISO	International Organization for Standardization
ITP	Inspection and Test Program
Ksi	Kips per Square Inch
kW	Kilowatt
LCP	Lined Cylinder Pipe
LED	Light Emitting Diode
LPSS	Low Pressure Sanitary Sewer

M	Meter
Max	Maximum
MCC	Motor Control Center
MDD	Maximum Day Demand
MH	Manhole
MIJ	Monolithic Insulating Joint
Min	Minimum
MJ	Mechanical Joint
MGD	Million Gallons per Day
mm	Millimeter
mph	Miles per Hour
MTW	Machine Tool Wire
NAD	North American Datum
NASSCO	National Association of Sewer Service Companies
NAVD	North American Vertical Datum
NBR	Nitrile Rubber
NCAC	North Carolina Administrative Code
NCBEES	North Carolina Board of Examiners for Engineers and Surveyors
NCDEQ	North Carolina Department of Environmental Quality
NCDOT	North Carolina Department of Transportation
NCGS	North Carolina Geodetic Survey
NCSBC	North Carolina State Building Code
NEC	National Electric Code
NEMA	National Electrical Manufacturer's Association
NFPA	National Fire Protection Association
NGS	National Geodetic Survey
NPSH	Net Positive Suction Head
NPT	National Pipe Thread
NPW	Non-Potable Water
NSF	National Sanitation Foundation
NTU	Nephelometric Turbidity Unit
OD	Outside Diameter (Pipe)
O&M	Operations and Maintenance
OSHA	Occupational Safety and Health Act/Administration
OS&Y	Outside Screw and Yoke
PC	Pressure Class

PCCP	Prestressed Concrete Cylinder Pipe
PCF	Pounds per Cubic Foot
PE	Professional Engineer, Plain End, Polyethylene
PET	Polyethylene Terephthalate
PF	Peaking Factor
PHD	Peak Hour Demand
PLC	Programmable Logic Controller
PLS	Professional Land Surveyor
PPI	Plastic Pipe Institute
ppm	Parts Per Million
PRV	Pressure Reducing Valve
psi	Pounds per Square Inch
PSV	Pressure Sewer Valve
PVC	Polyvinyl Chloride
RAB	Registration Accreditation Board
RCP	Reinforced Concrete Pipe
RGS	Rigid Galvanized Steel
RJ	Restrained Joint
RJIB	Restrained Joint in Bell
ROW	Right-of-Way
RP	Reduced Pressure
RPM	Rotations per Minute
RPPA	Reduced Pressure Principle Assembly
RPZ	Reduced Pressure Zone Device
SBR	Styrene Butadiene Rubber
SCADA	Supervisory Control and Data Acquisition
SCM	Stormwater Control Measure
SCR	Silicon Control Rectifier
SDR	Standard Dimension Ratio
SDWA	Safe Drinking Water Act
SF	Square Feet, Safety Factor
SS	Sanitary Sewer
SSPC	Society of Protective Coatings
STEP	Septic Tank Effluent Pump
SWIM	Surface Water Improvement and Management
TBM	Temporary Benchmark

TDH	Total Dynamic Head
THHW	Thermoplastic High Heat and Water-Resistant
THWN	Thermoplastic Heat and Water-Resistant Nylon
TOD	Transit Oriented Development
TPR	Thermoplastic Rubber
UDO	Unified Development Ordinance
UL	Underwriters Laboratory
UPS	Uninterruptible Power Supply
USFCCHR	University of Southern California Foundation for Cross Connection Control and Hydraulic Research
UV	Ultraviolet
V	Volt
VAC	Volts Alternating Current
VDC	Volts Direct Current
VOC	Volatile Organic Compounds
VCP	Vitrified Clay Pipe
WATCH	Work Area Traffic Control Handbook
WM	Water Main
XHHW	Cross-Linked Polyethylene High Heat Resistant and Water-Resistant
XLPE	Cross Linked Polyethylene