

GENERAL NOTES

THE LOCATION OF EXISTING UTILITIES, INCLUDING UNDERGROUND UTILITIES, IS INDICATED ON THE DRAWINGS IN SO FAR AS THEIR EXISTENCE AND LOCATION WERE KNOWN AT THE TIME OF PREPARATION OF THESE DRAWINGS, HOWEVER, NOTHING IN THESE CONTRACT DOCUMENTS SHALL BE CONSTRUED AS A GUARANTEE THAT SUCH UTILITIES ARE IN THE LOCATION INDICATED OR THAT THEY ACTUALLY EXIST OR THAT OTHER UTILITIES ARE NOT WITHIN THE AREA OF OPERATIONS. THE CONTRACTOR SHALL MAKE ALL NECESSARY INVESTIGATIONS TO DETERMINE THE EXISTENCE AND LOCATIONS OF SUCH UTILITIES. THE CONTRACTOR SHALL PAY FOR ANY DAMAGE TO AND FOR MAINTENANCE AND PROTECTION OF EXISTING UTILITIES AND STRUCTURES.

EXISTING WATER LINE LOCATIONS BOTH HORIZONTAL AND VERTICAL ARE APPROXIMATE. THE LOCATION IS NOT THE RESULT OF A FIELD SURVEY.

THE CONTRACTOR IS DIRECTED TO DIG AND LOCATE ALL UTILITIES IN ADVANCE OF PIPELAYING TO ALLOW FOR ADJUSTMENTS DUE TO CONFLICTS WITH EXISTING UTILITIES. SHOULD A CONFLICT ARISE THE ENGINEER IS TO BE NOTIFIED IMMEDIATELY.

THE CONTRACTOR IS REQUIRED TO NOTIFY "MISS UTILITY" AT 1-800-552-7001 AT LEAST TWO, BUT NOT MORE THAN TEN, WORKING DAYS IN ADVANCE OF CONSTRUCTION.

ABBREVIATIONS

ABAN	ABANDON, ABANDONED
ABUT	ABUTMENT
ADJ	ADJACENT
AGGR	AGGREGATE
ANC	ANCHOR
APCO	APPALACHIAN POWER COMPANY
APPROX	APPROXIMATE
BIT	BITUMINOUS
BJ	BELL JOINT
BL	BASE LINE
BEG	BEGIN, BEGINNING
BLDG	BUILDING
BM	BENCH MARK
BSP	BLACK STEEL PIPE
BV	BUTTERFLY VALVE
BVCE	BEGIN VERTICAL CURVE ELEVATION
BVCS	BEGIN VERTICAL CURVE STATION
C & G	CURB AND GUTTER
CI	CAST IRON
CL	CENTER LINE
CMP	CORRUGATED METAL PIPE
CMU	CONCRETE MASONRY UNITS
CND	CONDUIT
CO	CLEANOUT
COMB	COMBINATION
CONC	CONCRETE (PORTLAND CEMENT)
CONN	CONNECT, CONNECTION
CONT	CONTINUATION
CONST	CONSTRUCTION
CONTR	CONTRACTOR
CONV	CONVEYOR
COR	CORNER
CPP	PRESTRESSED CONCRETE PIPE
CR STONE	CRUSHED STONE
CTR	CENTER
CULV	CULVERT
D	DEPTH OR DEGREE OF CURVE
DE	DRAINAGE EASEMENT
DI	DROP INLET, DUCTILE IRON
DIA	DIAMETER
DIM	DIMENSION
DISC	DISCONNECT
DMH	DROP MANHOLE
DN	DOWN
DTL	DETAIL
DW, D/W	DRIVEWAY
DWL	DWELLING
DWG	DRAWING
EA	EACH
E.B.L.	EASTBOUND LANE
EL. ELEV	ELEVATION
ELEC	ELECTRICAL
ENCAS	ENCASEMENT
ENGR	ENGINEER
ENTR	ENTRANCE
EOL	END OF LINE
EP	EDGE OF PAVEMENT
EQT	EQUAL
EVCE	EQUIPMENT
EVCE	END VERTICAL CURVE ELEVATION
EVCS	END VERTICAL CURVE STATION
EW	EACH WAY, ENDWALL
EXST. EXIST	EXISTING
FES	FLARED END SECTION
FF	FINISH FLOOR
FFE	FINISHED FLOOR ELEVATION
FIG	FIGURE
FL	FLOOR
FLEX	FLEXIBLE
FLG	FLANGE
FT	FOOT
FTG	FOOTING
FUT	FUTURE
G	GAS
GAL	GALLON
GALV	GALVANIZED
GAR	GARAGE
GND	GROUND
GR	GRAVEL
GOVT	GOVERNMENT
GPM	GALLONS PER MINUTE
GRTG	GRATING
GV	GATE VALVE
H&T	HUB AND TAC
HORIZ	HORIZONTAL
HPT	HIGH POINT
HYD	HYDRANT
ID	INSIDE DIAMETER
IN	INCH
INSUL	INSULATION
INV	INVERT
IP	IRON PIN (FOUND OR SET NOTED)
KV	KILOVOLT
L	LENGTH, LONG
LF	LINEAL FOOT
LG	LONG
LP	LIGHT POLE
LR	LONG RADIUS
MAS	MASONRY OF HIGHWAYS MATL MATERIAL
MAX	MAXIMUM
MB	MAIL BOX
MBL	MINIMUM BUILDING LINE

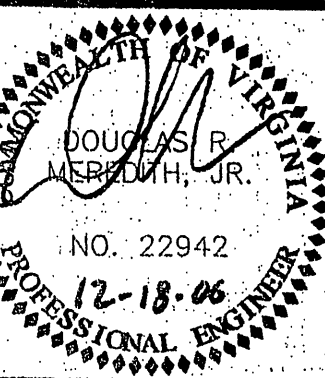
MECH	MECHANICAL
MFR	MANUFACTURER
MH	MANHOLE
MIN	MINIMUM
MJ	MECHANICAL JOINT
MON	MONUMENT
MTL	METAL
N & C	NAIL AND CAP
NIC	NOT IN CONTRACT
NO	NUMBER
NPW	NON POTABLE WATER
NTS	NOT TO SCALE
O.H.E.	OVERHEAD ELECTRICAL
O.H.E.&T.	OVERHEAD ELECTRICAL AND TELEPHONE
OC	ON CENTERS
OD	OUTSIDE DIAMETER
PWMT	PAVEMENT
PC	POINT OF CURVE
PCC	POINT OF COMPOUND CURVE
PER	PERIMETER
PERF	PERFORATED
PERP	PERPENDICULAR
PI	POINT OF INTERSECTION
PL	PLATE, PROPERTY LINE
PLST	PLASTER
POL	POINT ON LINE
PT	POINT OF TANGENCY
POT	POINT ON TANGENT
PP	POWER POLE
PRC	POINT OF REVERSE CURVE
PSI	POUNDS PER SQUARE INCH
PT	POINT OF TANGENT
PVC	POLYVINYL CHLORIDE
PVI	POINT OF VERTICAL INTERSECTION
PUE	PUBLIC UTILITY EASEMENT
R	RADIUS, RISER
R/R	RAILROAD
RCP	REINFORCED CONCRETE PIPE
RD	ROAD
RDCR	REDUCER
REINF	REINFORCE, REINFORCEMENT
REF	REFERENCE
REL	RELOCATED
REQD	REQUIRED
REV	REVISION
RTE	ROUTE
RT	RIGHT
R/W	RIGHT OF WAY
S	SEWER
SS	SANITARY SEWER
SAN	SANITARY
S/W	SIDEWALK
SD	STORM DRAIN
SE	SLOPE EASEMENT
SECT	SECTION
SER	SERVICE
SH	SHEET
SPEC	SPECIFICATION
SPECS	SPECIFICATIONS
SQ	SQUARE
SSLT	STAINLESS STEEL
STR	STREET
STA	STATION
STD	STANDARD
STL	STEEL
STRUCT	STRUCTURAL
SUR	SURVEY
T & B	TOP AND BOTTOM
TBM	TEMPORARY BENCH MARK
TELE	TELEPHONE
TEMP	TEMPORARY
THK	THICK
TP	TELEPHONE POLE
TRTD	TREATED
TV	TELEVISION
TW	TOP OF WALL
TYP	TYPICAL
U	UTILITY
UG	UNDERGROUND
UON	UNLESS OTHERWISE NOTED
USACOE	U.S. ARMY CORPS OF ENGINEERS
U.S.C.&G.S	UNITED STATES COAST AND GEODETIC SURVEY
UT	UNDERGROUND TELEPHONE
V.VAL	VALVE, VENT
VAR	VARIABLE
VC	VERTICAL CURVE
VERT	VERTICAL
VESCR	VIRGINIA EROSION AND SEDIMENT CONTROL REGULATIONS
VOL	VOLUME
VDOT	VIRGINIA DEPARTMENT OF TRANSPORTATION
V.S.D.	VERTICAL SIGHT DISTANCE
W.B.L.	WESTBOUND LANE
W	WIDE FLANGE, WIDE, WASTE, WATER
W/	WITH
WL	WATER LINE
W/O	WITHOUT
WS	WATER SURFACE
WT	WATERTIGHT, WEIGHT
WWA	WESTERN VIRGINIA WATER AUTHORITY
WVDH	WEST VIRGINIA DEPARTMENT OF HIGHWAYS

ENGINEERING LEGEND / SYMBOLS

EXISTING	NEW	DESCRIPTION
		CONCRETE CURB
		CONCRETE CURB & GUTTER
		CONCRETE PAVEMENT
		BARRIER
		FENCE (EXISTING OR PROPOSED NOTED)
		EDGE OF RIVER
		STORM DRAIN
		DRAINAGE MANHOLE
		DRAINAGE MANHOLE
		SEWER LINE SEWER
		SANITARY SEWER
		SANITARY SEWER
		SANITARY SEWER SERVICE CONNECT
		GAS LINE
		WATER LINE
		OVERHEAD ELECTRICAL LINE
		UNDERGROUND ELECTRICAL LINE
		UNDERGROUND TELEPHONE LINE
		UNDERGROUND TV CABLE
		UNDERGROUND 69 KILOVOLT ELECTRIC LINE
		R/W PROPERTY LINE
		FIRE HYDRANT
		UTILITY POLE
		CITY LIGHT POLE
		WATER MANHOLE WITH GATE VALVE
		AEP LIGHT POLE
		MANHOLE
		MANHOLE TO BE ADJUSTED
		MANHOLE TO BE REMOVED
		WATER MANHOLE
		RAILROAD TRACK
		STEEL ENCASEMENT
		CONCRETE ENCASEMENT/CAP AS NOTED
		CONCRETE ENCASEMENT
		ABANDON OR REMOVE
		BENCH CUT LIMITS BY USACOE
		TRAIL BY USACOE

ROANOKE RIVER FLOOD REDUCTION UTILITY
RELOCATION PROJECT
RIVERVIEW BOULEVARD SANITARY SEWER
CITY OF ROANOKE, VIRGINIA

GENERAL NOTES,
ABBREVIATIONS
AND LEGENDS



Designed By	DRM
Drawn By	MCP
Checked By	DRM
Approved By	DRM
Submitted By	DRM
Drawing	3161 U3 SS.dwg
Date	12/19/05
Scale	NONE
Commission No.	3161

102 Albemarle Ave
Roanoke, VA 24013
www.imwpc.com
ph: 540.345.0675
fax: 540.342.4466
Imweng@imwpc.com

