

# ABBREVIATIONS

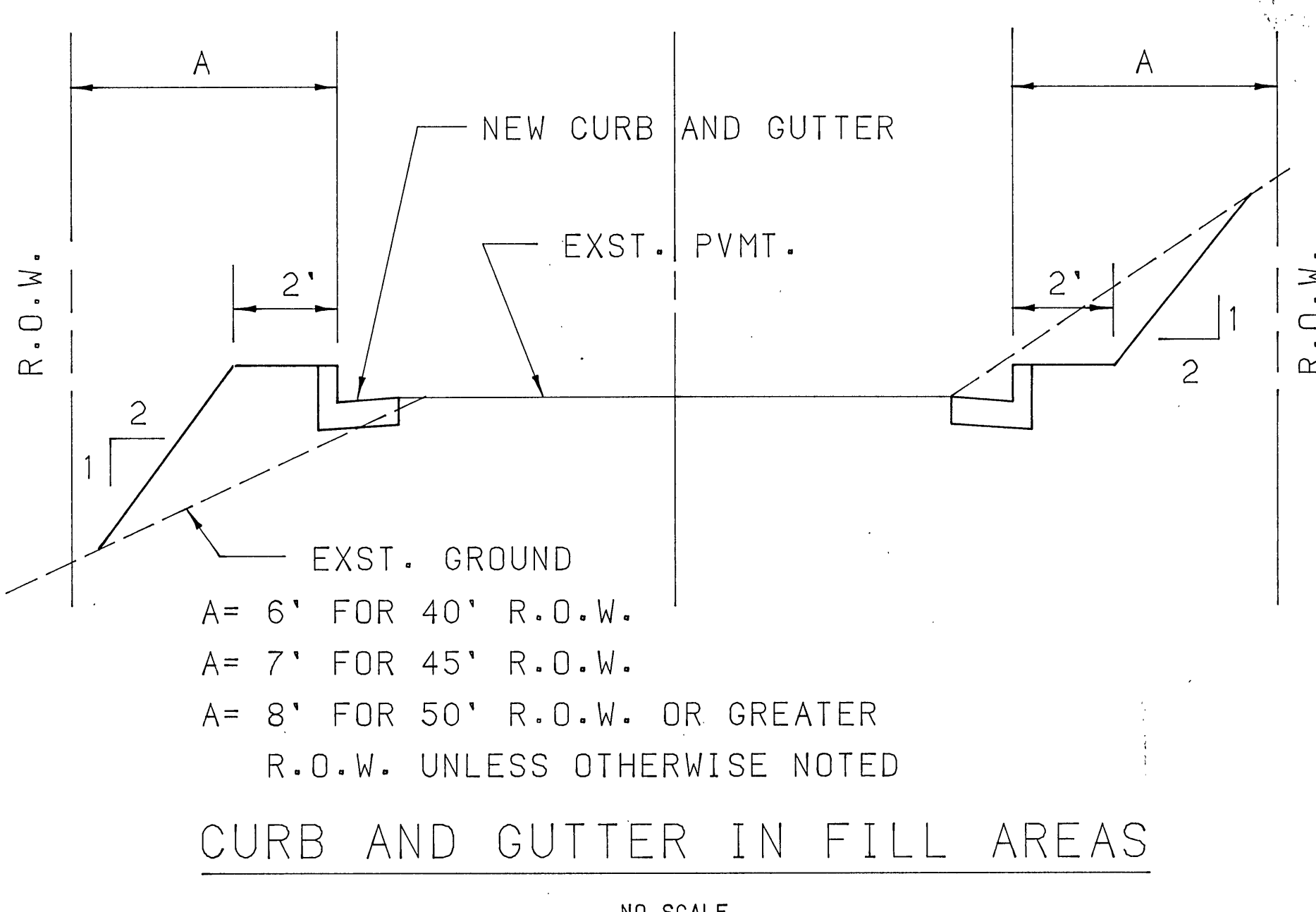
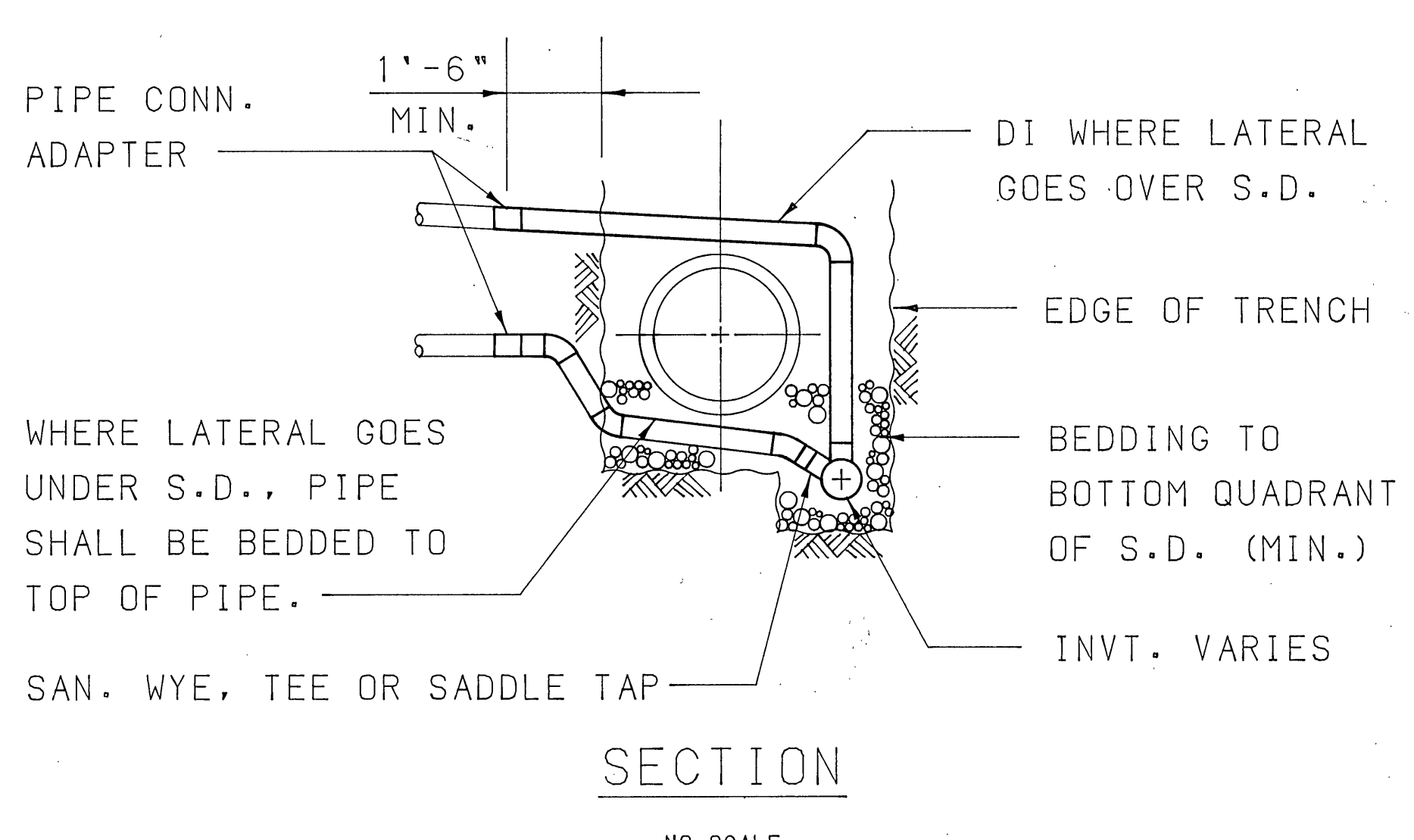
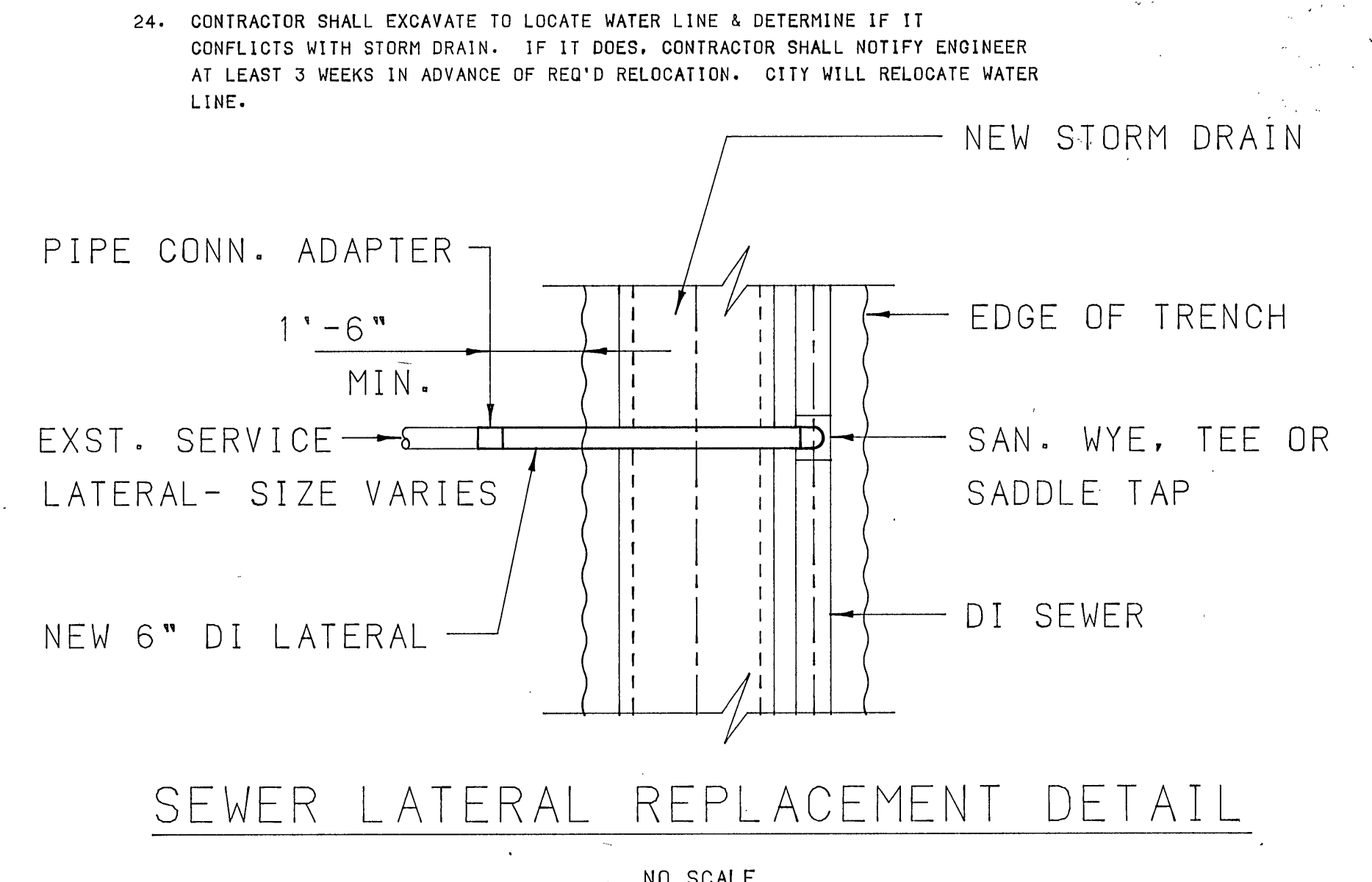
ABUT	ABUTMENT	PIV	POST INDICATOR VALVE
ABV	ABOVE	PL	PLATE, PROPERTY LINE
AFB	ABOVE FINISH FLOOR	PLYMD	PLYWOOD
ADD	ADDITIONAL	POT	POINT ON TANGENT
ADJ	ADJACENT	PERF	PERFORATED
AGGR	AGGREGATE	POL	POINT ON LINE
ARR	ANCHOR	PRC	POINT OF REVERSE CURVE
ARC	ANCHOR	PSI	POUNDS PER SQ INCH
ALUM	ALUMINUM	PT	POINT OF TANGENT
ALT	ALTERNATE	PVC	POINT OF VERTICAL CURVE
APPROX	APPROXIMATE	PVC	POLYVINYL CHLORIDE
AWWA	AMERICAN WATER WORKS ASSOCIATION	PVI	POINT OF VERTICAL INTERSECTION
BIT	BITUMINOUS	PVT	POINT OF VERTICAL TANGENT
BL	BASE LINE	R	RADIUS
BLDG	BUILDING	RT	RIGHT
BLDG	BLOCKING	R/W	RIGHT OF WAY
BM	BENCH MARK, BEAM	RD	ROAD DRAIN, ROAD
BOTT	BOTTOM	RDR	REDUCER
B	BRICK	REINF	REINFORCE, REINFORCEMENT
BRG	BRACING	REDO	REQUIRED
BSHT	BASEMENT	REV	REVISION
C TO C C/C	CENTER TO CENTER	S	SANITARY SEWER, SOUTH, STORY
C & O	CURB & GUTTER	SAN	SANITARY
CAP	CAPACITY	SOH	SCHEDULE
CF	CUBIC FEET	SD	STORM DRAIN
CY	CUBIC YARD	SGT	SECTION
CI	CAST IRON	SHT	SHEET
DIRC	DIRECTION	SHTG	SHEETING
CL	CENTER LINE	SLM	SIMILAR
CLR	CLEAR	SPEC	SPECIFICATION
CMP	CORRUGATED METAL PIPE	SPECS	SPECIFICATIONS
CND	CONDUIT	SQ	SQUARE
CO	CLEAN OUT	SST	STAINLESS STEEL
COL	COLUMN	ST	STREET
CONC	CONCRETE	STA	STATION
CMU	CONCRETE MASONRY UNITS	STD	STANDARD
CONR	CONNECT, CONNECTION	STL	STEEL
CONTR	CONTRACTOR	SURF	SURFACE
CR	CORNER	SUR	SURVEY
CR- STONE	CORNERED STONE	SYMS	SYMMETRICAL
CULV	CULVERT	TDC	TURNED DOWN CURB
D	DEPTH DEGREE OF CURVE	TELE	TELEPHONE
DEPT	DEPARTMENT	TEMP	TEMPORARY
DTL	DETAIL	THK	THICK
DI	DROP INLET, DUCTILE IRON	TV	TELEVISION
DIA	DIAMETER	TV	TOP OF WALL
DIM	DIMENSION	TWD	TREATED
DISG	DISCONNECT	TYP	TYPICAL
DMH	DROP MANHOLE	UG	UNDERGROUND
DN	DOWN	V	VALVE
DS	DOWN SPOUT	VAP. BAR.	VAPOR BARRIER
DR	DRIVE	VERT	VERTICAL CURVE
DWL	DRILLING	VERT	VERTICAL
DWG	DRAWING	VOL	VOLUME
E	EAST	VOL	VIRGINIA DEPT. OF HIGHWAYS AND TRANSPORTATION
EA	EACH	W	WITH
EJ	EACH FACE	W/O	WITHOUT
ELEV	ELEVATION	W	WOOD
ELEC	ELECTRIC, ELECTRICAL	W/L	WATER LINE
ENGR	ENGINEER	W/S	WATER SURFACE
ENR	ENTRANCE	WT	WATERTIGHT
EDL	END OF LINE	WVF	WELDED WIRE FABRIC
EP	EDGE OF PAVEMENT	WV	WEST VIRGINIA DEPT. OF HIGHWAYS
EQ	EQUAL	LOC.	LOCATION
EQUIP	EQUIPMENT	B.C.	BOTTOM OF CURB
EW	EACH WAY, ENDWALL	T.C.	TOP OF CURB
EXST	EXISTING	CONSTR.	CONSTRUCTION
EXT	EXTENSION	PERM.	PERMANENT
F	FRAME	CVR	COVER
FD	FLOOR DRAIN	ULP	UTILITY POLE W/LIGHT
FDN	FOUNDATION	UP	UTILITY POLE
FL	FLARED END SECTION	L/P	LIGHT POLE
FIG	FIGURE	P/P	POWER POLE
FIN	FINISH	SF	SQUARE FEET
FL	FLOOR	FR	FRAME
FLEX	FLEXIBLE		
FLG	FLANGE		
FT	FOOT		
FTG	FOOTING		
FUT	FUTURE		
OAL	GALLON		
OALV	GALVANIZED		
GND	GROUND		
GOVT	GOVERNMENT		
OPH	GALLONS PER MINUTE		
OV	GATE VALVE		
HM	HOLLOW METAL		
HB	HOSE RIBB		
HOR	HORIZONTAL		
HP	HORSEPOWER, HIGH PRESSURE		
HPT	HIGH POINT		
HYD	HYDRANT		
ID	INSIDE DIAMETER		
IN	INCH		
INSUL	INSULATION		
INVT	INVERT		
IT	JOINT		
JB	JUNCTION BOX		
L	LENGTH		
LF	LINEAL FOOT		
LP	LOW POINT		
LT	LEFT		
MAS	MASONRY		
MATL	MATERIAL		
MAN	MANHOLE		
MAN	MANUFACTURER		
MH	MANHOLE		
MIM	MISCELLANEOUS		
MISC	MISCELLANEOUS		
MON	MONUMENT		
N & C	NAIL & CAP		
NTC	NOT IN CONTRACT		
NO	NUMBER		
NTS	NOT TO SCALE		
OC	ON CENTER		
OD	OUTSIDE DIAMETER		
OPNG	OPENING		
OPP	OPPOSITE		
PER	PERIMETER		
PERP	PERPENDICULAR		
PC	POINT OF CURVE		
PCC	POINT OF COMPOUND		
PI	POINT OF INTERSECTION		

# LEGEND

EXISTING	NEW	DESCRIPTION
		BUILDING WITH PORCH OR STOOP
		FOUNDATION ONLY
		CONTOUR, CONTOUR WITH ELEVATION
		SPOT ELEVATION
		CONCRETE CURB
		CONCRETE CURB & GUTTER
		CONCRETE WALK OR SLAB
		PAVEMENT
		UNPAVED OR GRAVEL ROAD
		TREE LINE
		TREE OR SHRUB
		FENCE AND GATE
		CENTERLINE OF DITCH OR SWALE
		PROPERTY LINE
		CENTERLINE OR BASELINE
		LIGHT OF WORK LINE
		FIELD SURVEY TRAVERSE POINT
		P.C. OR P.T.
		GEOLOGIC BORE HOLE
		STORM DRAIN AND ENDWALL
		SANITARY SEWER
		GAS MAIN OR SERVICE LINE
		WATER MAIN OR SERVICE LINE
		ELECTRICAL LINE
		PIPE FITTINGS AND REACTION BLOCKING
		FIRE HYDRANT
		GATE VALVE
		CLEANOUT
		MANHOLE
		DROP INLET (CURB AND GRATING TYPES)
		G.M. - GAS METER, W.H. - WATER METER
		TELEPHONE LINE
		TELEPHONE POLE, UTILITY POLE, GUY AND ANCHOR
		POWER POLE, GUY AND ANCHOR
		TELEPHONE PEDESTAL
		BURIED TELEPHONE VAULT
		ABANDON OR REMOVE
		PAVED DITCH
		DRIVEWAY CULVERT
		CULVERT WITH FLARED END SECTION
		IRON PIN OR PINCH PIPE
		EROSION CONTROL STONE
		STRAW BALES AND SILT TRAP
		STORM DRAIN INLET PROTECTION
		TEMPORARY DIVERSION DIKE
		TEMPORARY SEDIMENT TRAP
		TEMPORARY GRAVEL CONSTRUCTION ENTRANCE
		STRAW BALE BARRIER
		RIPRAP
		FORCE MAIN

# GENERAL NOTES

- GENERAL NOTES:
- EXISTING TOPOGRAPHIC INFORMATION IS TAKEN FROM:
    - AERIAL PHOTOGRAPHY TAKEN BY AERIAL DATA REDUCTION ASSOCIATES.
    - FIELD SURVEYS PERFORMED BY MATTERN & CRAIG IN APRIL, 1987.
  - ELEVATIONS ARE USGS DATUM, UNLESS OTHERWISE INDICATED.
  - GRID CO-ORDINATES SHOWN ARE VIRGINIA STATE PLANE CO-ORDINATE SYSTEM.
  - BEARINGS ARE FROM TRUE NORTH.
  - CONTRACTOR SHALL CONFIRM THE LOCATION OF EXISTING HORIZONTAL AND VERTICAL CONTROL POINTS AND SHALL ESTABLISH ANY ADDITIONAL CONTROL POINTS REQUIRED FOR CONSTRUCTION.
  - THE LOCATION OF EXISTING UTILITIES, INCLUDING UNDERGROUND UTILITIES, IS INDICATED ON THE DRAWINGS INsofar AS THEIR EXISTENCE AND LOCATION WERE KNOWN AT THE TIME OF PREPARATION OF THE 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. PARTICULAR CARE SHALL BE TAKEN IN WORKING AROUND THE LARGE, HIGH PRESSURE GAS MAINS AND THE LARGE DIAMETER WATER PIPES.
  - THE CONTRACTOR IS DIRECTED TO DIG AND LOCATE ALL UTILITIES, IN ADVANCE OF THE PIPELAYING, TO ALLOW FOR ADJUSTMENTS, DUE TO CONFLICTS WITH THE UTILITIES, IN THE HORIZONTAL AND VERTICAL LOCATION OF THE PIPE LINE.
  - ALL EXISTING AND NEW MANHOLE, HAND HOLE AND VALVE BOX TOPS SHALL BE ADJUSTED TO FINISH GRADE PRIOR TO PLACING PAVEMENT SURFACE COURSE.
  - ALL CURB AND GUTTER IS VDOT STANDARD CO-6 UNLESS OTHERWISE NOTED. TRANSITION OF NEW CURB AND GUTTER TO EXISTING SHALL MATCH EXISTING EITHER CITY OF ROANOKE STANDARD OR VDOT STANDARD CO-6.
  - BENCH MARK: USGAS DISC STAMPED GLADE AZ1. DISC IS ON WILLIAMSON ROAD 58 YARDS NORTH OF CENTERLINE OF SYCAMORE AVENUE AT NORTH EDGE OF SERVICE STATION DRIVE, 57 YARDS SOUTH OF CENTERLINE OF THURSTON AVENUE LEADING WEST IN TOP 10-INCH CONCRETE WALL, AND 7 FEET WEST OF EAST END OF WALL, 10 INCHES ABOVE SIDE WALK.
  - THE CONTRACTOR SHALL TAKE PARTICULAR NOTE OF THE SPECIAL CONDITIONS OF THE SPECIFICATIONS REGARDING WORK IN THE ORANGE AVENUE RIGHT-OF-WAY.
  - THE CONTRACTOR SHALL NOTE THE REQUIREMENTS AT SEVERAL LOCATIONS IN THE PLANS FOR ADVANCE DIGGING TO LOCATE EXISTING UNDERGROUND UTILITIES.
  - NOTE THE SEQUENCE FOR CONSTRUCTION AND RESTORATION REQUIREMENTS IN THE SPECIFICATIONS.
  - NOTE THE STANDARD DETAILS IN THE SPECIFICATIONS.
  - CONTRACTOR SHALL ARRANGE FOR UTILITY POLE RELOCATIONS AS HIS SCHEDULE REQUIRES.
  - FACE OF ALL NEW CURB AND GUTTER AND CURB INLETS SHALL BE SET 8' (EIGHT FEET) FROM RIGHT OF WAY LINE UNLESS OTHERWISE NOTED.
  - ALL CONCRETE PIPE SHALL BE CLASS III UNLESS OTHERWISE NOTED.
  - CONTRACTOR SHALL REPLACE PAVEMENT OVER TRENCHES AND SHALL OVERLAY OR RECONSTRUCT STREETS ONLY WHERE INDICATED.
  - CONTRACTOR SHALL PROVIDE REQUIRED FILL MATERIAL BEHIND CURB TO TRANSITION TO PRIVATE PROPERTY, AND SHALL PROVIDE ADDITIONAL PAVEMENT AND FILL TO TRANSITION NEW ENTRANCES TO EXISTING DRIVEWAYS. SEE DETAIL BELOW.
  - SANITARY SEWER LATERALS, WATER SERVICE LATERALS, AND GAS SERVICE LATERALS ARE GENERALLY NOT SHOWN; HOWEVER, CONTRACTOR IS REQUIRED TO MAINTAIN THESE SERVICES. SANITARY SEWER LATERALS CROSSING THE TRENCH SHALL BE REPLACED WITH DUCTILE IRON PIPE.
  - CONTRACTOR SHALL PROVIDE A HANDICAP RAMP WHETHER INDICATED OR NOT AT ALL CORNERS OF ALL INTERSECTIONS WHERE NEW SIDEWALK IS INDICATED.
  - PRIOR TO SHULING OR ABANDONING EXISTING SEWERS, THE CONTRACTOR SHALL CONNECT ALL EXISTING SEWER LATERALS TO THE NEW SEWER LINES SO THAT SERVICE IS MAINTAINED TO EXISTING CONNECTIONS ASSOCIATED WITH THIS WORK. THE CONTRACTOR'S ATTENTION IS SPECIFICALLY CALLED TO THE FACT THAT EXISTING SEWER LINES ARE OLD AND RECORD DRAWINGS OF SEWER CONNECTIONS ARE INCOMPLETE. THE CONTRACTOR SHALL USE EXCAVATION, T.V. INSPECTION, DYE TESTING AND OTHER TECHNIQUES AS REQUIRED TO LOCATE ALL EXISTING SEWER LATERALS. CITY OF ROANOKE SHALL PROVIDE CONTRACTOR WITH ONE (1) COPY OF THE EXISTING SEWER MAPS OF THE PROJECT AREA.
  - THE PLANS AND SUPPLEMENTARY DRAWINGS SHALL NOT BE SCALED, AND CONTRACTOR MUST VERIFY ALL DIMENSIONS AND ELEVATIONS AT THE SITE PRIOR TO PROCEEDING WITH THE WORK.



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DESIGNED: ARB  
CHECKED: SWH  
APPROVED:

REVISION	DATE	DESCRIPTION	BY	APP.
Δ	DEC. 1989	RECORD DRAWING	JLJ	SMH

DATE: JULY 1987  
COMM. 580/581

**WILLIAMSON ROAD STORM DRAIN- PHASE 2**  
**CONTRACT II-A**  
ROANOKE, VIRGINIA

ABBREVIATIONS, LEGEND AND GENERAL NOTES

SHEET 3