

# STANDARD CITY OF ROANOKE CONSTRUCTION PROCEDURE REQUIREMENTS

**NOTICE: ALL LANDOWNERS, DEVELOPERS AND CONTRACTORS:**  
FAILURE TO COMPLY WITH THE CONSTRUCTION PROCEDURE REQUIREMENTS LISTED BELOW MAY RESULT IN THE COSTLY REMOVAL OF STRUCTURES, TIME DELAYS OR THE ISSUANCE OF A STOP WORK ORDER.

**CITY INSPECTIONS** - TO INSURE THE COORDINATION OF TIMELY AND PROPER INSPECTIONS, A PRE-CONSTRUCTION CONFERENCE SHALL BE INITIATED BY THE APPLICANT, GENERAL CONTRACTOR, ETC, WITH THE DEVELOPMENT INSPECTOR. CALL (540) 853-1227 TO ARRANGE A CONFERENCE AT LEAST THREE (3) DAYS PRIOR TO ANTICIPATED CONSTRUCTION.

**RIGHT-OF-WAY EXCAVATION PERMIT** - PRIOR TO THE COMMENCEMENT OF ANY DIGGING, ALTERATION OR CONSTRUCTION WITHIN THE PUBLIC RIGHT-OF-WAY (STREETS, ALLEYS, PUBLIC EASEMENTS), A RIGHT-OF-WAY EXCAVATION PERMIT SHALL BE APPLIED FOR AND OBTAINED BY THE CONTRACTOR FROM THE CITY OF ROANOKE.

**LAND DISTURBANCE PERMIT** - AN APPROVED EROSION AND SEDIMENT CONTROL PLAN FOR ANY BORROW/FILL SITES ASSOCIATED WITH THE PROJECT MUST BE SUBMITTED PRIOR TO THE ISSUANCE OF A LAND DISTURBANCE PERMIT

**PLANS AND PERMITS** - A COPY OF THE PLANS AS APPROVED BY THE CITY (SIGNED BY THE PROPER CITY OFFICIALS) AND ALL PERMITS ISSUED BY THE CITY SHALL BE AVAILABLE AT THE CONSTRUCTION SITE AT ALL TIMES OF ONGOING CONSTRUCTION.

**LOCATION OF UTILITIES** - THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL EXISTING UTILITIES PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION.

**CONSTRUCTION ENTRANCE** - THE CONTRACTOR SHALL INSTALL AN ADEQUATE CONSTRUCTION ENTRANCE FOR ALL RELATED EGRESS FROM THE SITE. SIZE AND COMPOSITION OF CONSTRUCTION ENTRANCE SHALL BE AS SHOWN ON THE PLANS.

**STREETS TO REMAIN CLEAN** - IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO INSURE THAT THE PUBLIC STREET ADJACENT TO THE CONSTRUCTION ENTRANCE REMAINS FREE OF MUD, DIRT, DUST, AND/OR ANY TYPE OF CONSTRUCTION MATERIALS OR LITTER AT ALL TIMES.

**BARRICADES/DITCHES** - THE CONTRACTOR SHALL MAINTAIN THE INTEGRITY OF ALL EXCAVATED DITCHES AND SHALL FURNISH AND ENSURE THAT ALL BARRICADES PROPER AND NECESSARY FOR THE SAFETY OF THE PUBLIC ARE IN PLACE.

**SEWER AND PAVEMENT REPLACEMENT** - CONSTRUCTION OF SANITARY SEWERS AND THE REPLACEMENT OF PAVEMENT SHALL BE IN ACCORDANCE WITH APPROVED STANDARDS AND SPECIFICATIONS OF THE CITY OF ROANOKE AND THE WESTERN VIRGINIA WATER AUTHORITY.

**APPROVED PLANS/CONSTRUCTION CHANGES** - ANY CHANGES OR VARIATION FROM CONSTRUCTION DESIGN AS SHOWN ON THE OFFICIALLY APPROVED PLANS SHALL BE APPROVED BY THE EROSION AND SEDIMENT CONTROL AGENT PRIOR TO SAID CHANGES OR VARIATION IN CONSTRUCTION BEING MADE.

**FINAL ACCEPTANCE/CITY** - THE OWNER OR DEVELOPER SHALL FURNISH THE WESTERN VA. WATER AUTHORITY WITH A FINAL CORRECT SET OF AS-BUILT PLANS PRIOR TO FINAL ACCEPTANCE BY THE AUTHORITY.

## PROJECT NOTES

- 1) LOCATION OF SANITARY SEWER LATERALS INDICATED HEREON ARE TAKEN FROM LOGS OF CAMERA WORK PERFORMED BY THE WESTERN VA. WATER AUTHORITY. THERE MAY BE ADDITIONAL LATERALS ENCOUNTERED DURING CONSTRUCTION WHICH ARE NOT INDICATED. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL MATERIALS, FITTINGS, ETC. TO EFFECT CONNECTIONS OF ALL EXISTING SANITARY SEWER LATERALS ENCOUNTERED TO NEW SANITARY MAIN AND TO INSTALL A NEW SANITARY SEWER CLEAN-OUT AT THE EASEMENT/RIGHT-OF-WAY LINE.
- 2) ALL EXCAVATION AND RESTORATION WITHIN THE STREET RIGHT-OF-WAYS SHALL BE PERFORMED IN ACCORDANCE WITH THE CITY OF ROANOKE RIGHT-OF-WAY EXCAVATION AND RESTORATION STANDARDS.
- 3) UNLESS OTHERWISE INDICATED ALL TREES/SHRUBS WITHIN THE LIMITS OF CONSTRUCTION SHALL BE PROTECTED DURING CONSTRUCTION. THE CONTRACTOR MAY COORDINATE FOR THE REMOVAL OF OTHER TREES/SHRUBS WITH THE WVWA AS NECESSARY DURING CONSTRUCTION.
- 4) CONSTRUCTION ENTRANCE(S) IN ACCORDANCE W/ THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK MAY BE REQUIRED BY THE CITY OF ROANOKE AS FIELD CONDITIONS DICTATE. (REFERENCE DETAIL SHEET C-7).
- 5) BYPASS PUMPING OF EXISTING SEWER IS BE REQUIRED ON THIS PROJECT. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL CONSTRUCTION ACTIVITIES WITH THE WESTERN VIRGINIA WATER AUTHORITY AND THE CITY OF ROANOKE.
- 6) CONTRACTOR SHALL CONTACT JACKSON WOODSON, ROANOKE CITY TRANSPORTATION ENGINEERING (853-2625), TO COORDINATE STREET CLOSING AT LEAST TWO WEEKS PRIOR TO WORK IN RIGHT-OF-WAY BEING PERFORMED. FOR LANE CLOSURE PERMITTING WITHIN THE CITY OF ROANOKE CONTACT GARY BOWMAN AT 853-5293.
- 7) UNREPAIRED ROADWAYS OPEN TO TRAFFIC SHALL HAVE AT A MINIMUM, COMPACTED AGGREGATE (21 A/B) FLUSH WITH THE ADJACENT ROADWAY SURFACE AND SHALL BE INSPECTED AND REPAIRED ON A DAILY BASIS. AS AN ALTERNATIVE, THE CONTRACTOR MAY USE STEEL PLATE WHICH COMPLETELY COVERS THE UNREPAIRED AREA(S).

## ENGINEER'S NOTES

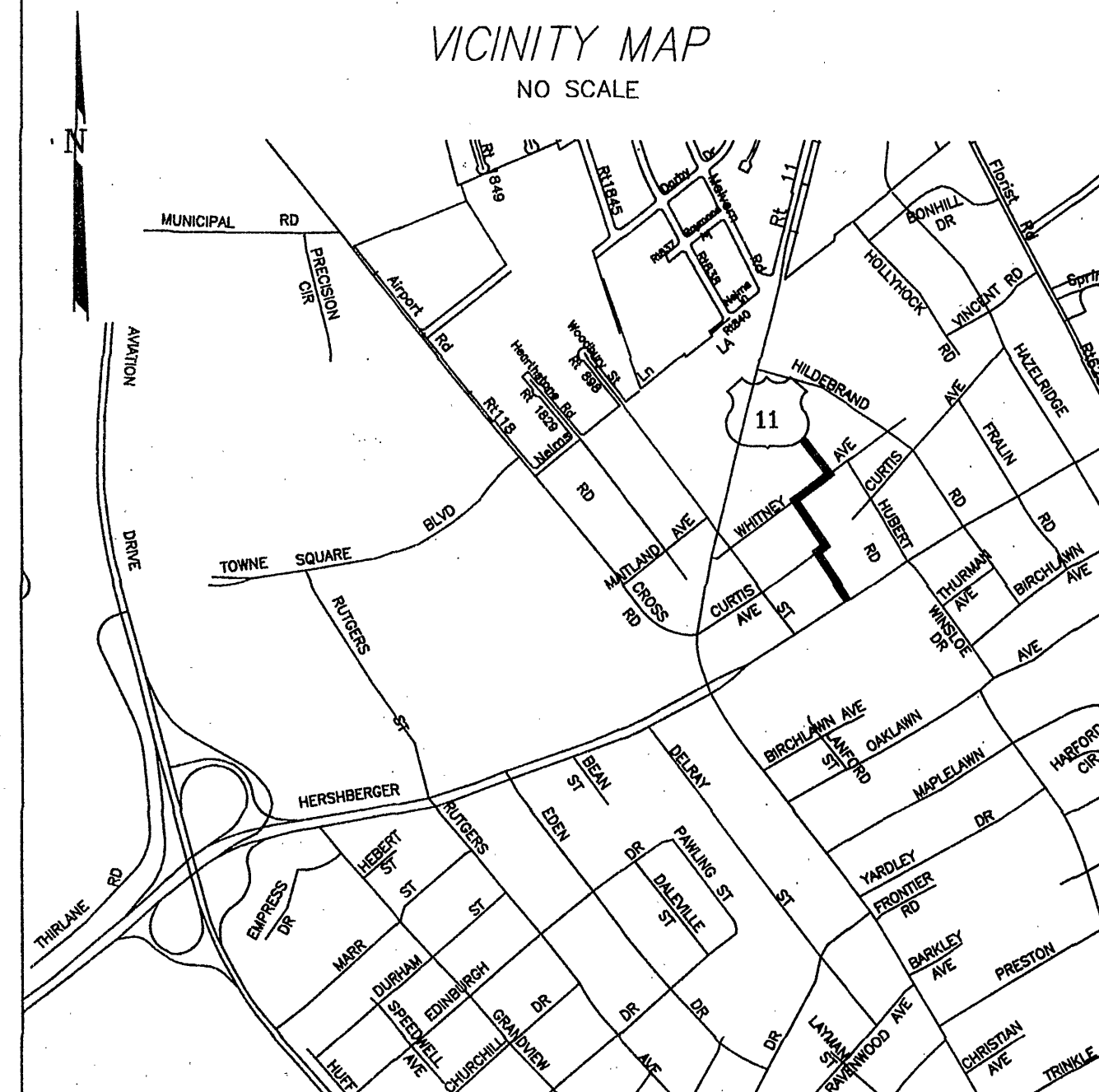
CALDWELL WHITE ASSOCIATES ASSUMES NO RESPONSIBILITY FOR ADEQUACY OF PLANS OR FOR INFORMATION ON PLANS UNTIL SUCH PLANS HAVE BEEN APPROVED BY THE REQUIRED PUBLIC AGENCIES.

ANY WORK COMMENCED ON A PROJECT PRIOR TO PLAN APPROVAL IS AT SOLE RISK OF THE CONTRACTOR.

CALDWELL WHITE ASSOCIATES DOES NOT GUARANTEE THE COMPLETION OR QUALITY OF PERFORMANCE OF THE CONTRACTS BY CONTRACTORS OR OTHER THIRD PARTIES.

SOURCE OF TOPOGRAPHIC MAPPING IS FIELD SURVEY BY CALDWELL WHITE ASSOCIATES DATED MARCH 15, 2005.

A BOUNDARY SURVEY HAS NOT BEEN PERFORMED.



## SANITARY SEWER NOTES

ALL SEWER CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE WESTERN VIRGINIA WATER AUTHORITY DESIGN AND CONSTRUCTION STANDARDS.

THE SLOPE OF ALL NEW SANITARY SEWER PIPE SHALL BE UNIFORM BETWEEN MANHOLES/CLEAN-OUTS.

ALL CONNECTIONS TO EXISTING SANITARY SEWER LINES & MANHOLES SHALL BE PERFORMED BY THE WESTERN VIRGINIA WATER AUTHORITY. THE CONTRACTOR SHALL EXCAVATE TO THE BASE OF THE EXISTING MANHOLE, SHORE PER OSHA REQUIREMENTS AND PROVIDE A CENTER MARK ON THE SIDE OF THE MANHOLE FOR THE TAP. CONTRACTOR SHALL NOTIFY UTILITY LINE SERVICES AT 853-2792 AT LEAST SEVENTY-TWO (72) HOURS PRIOR TO CONNECTION.

EXCAVATION AND RESTORATION OF ALL WORK PERFORMED WITHIN THE RIGHT-OF-WAY SHALL COMPLY WITH CITY OF ROANOKE EXCAVATION & RESTORATION STANDARDS.

ALL SANITARY SEWER LATERALS SHALL HAVE A MINIMUM SLOPE OF 2.08%.

SEE SANITARY SEWER PLAN & PROFILE SHEETS FOR INDIVIDUAL PIPE LENGTHS AND SLOPES.

PIPE MATERIAL: NEW SANITARY SEWER PIPE, CLEANOUTS, FITTINGS ETC. SHALL BE SDR-35 UNPLASTICIZED POLYVINYL CHLORIDE. MATERIALS AND INSTALLATION SHALL BE IN ACCORDANCE WITH THE WATER AND SEWER REGULATIONS OF THE WESTERN VIRGINIA WATER AUTHORITY STANDARDS.

## EROSION AND SEDIMENT CONTROL NOTES

RESTORATION PERMANENT SEEDING SHALL BE ACCOMPLISHED ALONG THE LENGTH OF THE PROJECT AS CONSTRUCTION AND BACKFILLING OF TRENCH IS ACCOMPLISHED. UNLESS OTHERWISE INDICATED FINAL GRADES SHALL BE THE SAME AS EXISTING GRADES.

ALL SOIL EROSION & SEDIMENT CONTROL MEASURES SHALL BE ACCOMPLISHED IN STRICT ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS CONTAINED IN THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK, LATEST EDITION.

THE APPROVING AUTHORITY MAY ADD TO, DELETE, RELOCATE, CHANGE, OR OTHERWISE MODIFY CERTAIN EROSION AND SEDIMENT CONTROL MEASURES WHERE FIELD CONDITIONS ARE ENCOUNTERED THAT WARRANT SUCH MODIFICATIONS.

ALL SOIL EROSION AND SEDIMENT CONTROL MEASURES AS SHOWN ON THE PLAN SHALL BE PLACED IN ADVANCE OF THE WORK BEING PERFORMED.

IN NO CASE DURING CONSTRUCTION SHALL WATER RUNOFF BE DIVERTED OR ALLOWED TO FLOW TO LOCATIONS WHERE ADEQUATE PROTECTION HAS NOT BEEN PROVIDED.

IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO LEAVE THE SITE ADEQUATELY PROTECTED AGAINST EROSION, SEDIMENTATION, OR ANY DAMAGE TO ANY ADJACENT PROPERTY AT THE END OF EACH DAY'S WORK.

FOR THE EROSION CONTROL KEY SYMBOLS SHOWN ON THE PLANS, REFER TO THE VIRGINIA UNIFORM CODING SYSTEM FOR EROSION AND SEDIMENT CONTROL PRACTICES CONTAINED IN THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK, LATEST EDITION.

## GENERAL NOTES

ALL CONSTRUCTION METHODS AND MATERIALS SHALL CONFORM TO THE CONSTRUCTION STANDARDS AND SPECIFICATIONS OF THE WESTERN VIRGINIA WATER AUTHORITY AND THE CITY OF ROANOKE.

THE CONTRACTOR IS REQUIRED TO NOTIFY THE WESTERN VA. WATER AUTHORITY IN WRITING AT LEAST THREE (3) DAYS PRIOR TO ANY CONSTRUCTION, INCLUDING BUT NOT LIMITED TO THE FOLLOWING:

- A. INSTALLATION OF APPROVED EROSION CONTROL DEVICES.
- B. CLEARING AND GRUBBING.
- C. INSTALLING SANITARY SEWER LINES.

A PRECONSTRUCTION CONFERENCE SHOULD BE SCHEDULED WITH THE WESTERN VIRGINIA WATER AUTHORITY, TO BE HELD AT LEAST ONE DAY PRIOR TO ANY CONSTRUCTION.

MEASURES TO CONTROL EROSION AND SILTATION MUST BE PROVIDED FOR PRIOR TO PLAN APPROVAL. PLAN APPROVAL IN NO WAY RELIEVES THE CONTRACTOR OF THE RESPONSIBILITIES CONTAINED IN EROSION AND SILTATION CONTROL POLICIES.

AN APPROVED SET OF PLANS AND ALL PERMITS MUST BE AVAILABLE AT THE CONSTRUCTION SITE.

CONTRACTOR SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AT THE JOB SITE.

CONSTRUCTION DEBRIS SHALL BE CONTAINED IN ACCORDANCE WITH THE VIRGINIA LITTER CONTROL ACT. NO LESS THAN ONE LITTER RECEPTACLE SHALL BE PROVIDED ON-SITE.

THE CONTRACTOR SHALL PROVIDE ADEQUATE MEANS OF CLEANING MUD FROM TRUCKS AND/OR OTHER EQUIPMENT PRIOR TO ENTERING PUBLIC STREETS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO INSURE THAT THE STREETS ARE IN A CLEAN, MUD AND DUST FREE CONDITION AT ALL TIMES.

THE CONTRACTOR SHALL SUPPLY ALL UTILITY COMPANIES WITH COPIES OF APPROVED PLANS, ADVISING THEM THAT ALL GRADING AND INSTALLATION SHALL CONFORM TO APPROVED PLANS.

CONTRACTORS SHALL NOTIFY UTILITIES OF PROPOSED CONSTRUCTION AT LEAST TWO, BUT NOT MORE THAN TEN WORKING DAYS IN ADVANCE. AREA PUBLIC UTILITIES MAY BE NOTIFIED THROUGH MISS UTILITY AT (800) 552-7001.

ALL WORK SHALL BE SUBJECT TO INSPECTION BY THE CITY OF ROANOKE INSPECTORS AND/OR WESTERN VIRGINIA WATER AUTHORITY INSPECTORS.

FIELD CORRECTIONS SHALL BE APPROVED BY THE WESTERN VIRGINIA WATER AUTHORITY PRIOR TO SUCH CONSTRUCTION.

GRADE STAKES SHALL BE SET FOR ALL CURB AND GUTTER, CULVERT, SANITARY SEWER, AND STORM SEWER.

LOCATION OF UNDERGROUND UTILITIES IS BASED ON FIELD SURVEYS, AND AS SHOWN BY AVAILABLE RECORDS. CONTRACTOR SHALL VERIFY LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION.

THE SITE WORK CONTRACTOR SHALL COMPLY WITH LOCAL CODES IN OBSERVING EROSION CONTROL MEASURES, BOTH ON AND OFF THE SITE. REFER TO THE VIRGINIA UNIFORM CODING SYSTEM CONTAINED IN THE VIRGINIA SOIL EROSION AND SEDIMENT CONTROL HANDBOOK, LATEST EDITION, FOR DETAILS AND SPECIFICATIONS OF EROSION CONTROL ITEMS SHOWN ON THESE PLANS.

CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING AN EROSION AND SEDIMENT CONTROL PERMIT FROM THE CITY OF ROANOKE PRIOR TO BEGINNING CONSTRUCTION.

THE WESTERN VIRGINIA WATER AUTHORITY WILL PROVIDE INITIAL CONSTRUCTION STAKEOUT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING THE STAKEOUT AND SHALL BE RESPONSIBLE FOR COSTS OF ANY ADDITIONAL STAKEOUT.

CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING A CORRECT SET OF 'AS-BUILT' DRAWINGS TO THE WVWA PRIOR TO SUBSTANTIAL COMPLETION.

## EROSION CONTROL COST ESTIMATE

(FOR BONDING PURPOSES ONLY)

DESCRIPTION	UNIT	QUANTITY	UNIT COST	TOTAL COST
SILT FENCE	L.F.	425	\$ 4.00	\$ 1,700.00
PERMANENT SEEDING	ACRE	0.10	\$ 1,500.00	\$ 150.00
TEMPORARY SEEDING	ACRE	0.10	\$ 500.00	\$ 50.00
SUB-TOTAL				\$ 1,900.00
10% CONTINGENCY				\$ 190.00
TOTAL ESTIMATED PROJECT COST				\$ 2,090.00

## REVISIONS

No.	Date	Remarks	By

Designed: JWK

Drawn: JWC/JWK

Date: JAN. 17, 2007

W.O. # 06-0008

N.B. # WVWA

## SHEET INDEX

TITLE

COVER SHEET

SANITARY SEWER PLAN & PROFILE STA. 0+00 TO 2+87.1

SANITARY SEWER PLAN & PROFILE STA. 2+87.1 TO 5+17.08

SANITARY SEWER PLAN & PROFILE STA. 5+17.08 TO 7+98.38

SANITARY SEWER PLAN & PROFILE STA. 7+98.38 TO 10+22.50

SANITARY SEWER PLAN & PROFILE STA. 10+22.50 TO 11+84.34

CONSTRUCTION, E&S DETAILS  
AND STREET CLOSURE SIGNAGE PLAN

## LEGEND

### ABBREVIATIONS

AHFH	ARROW HEAD TOP OF FIRE HYDRANT
APPROX	APPROXIMATE
ASPH	ASPHALT
BC	BOTTOM OF CURB
BIT	BITUMINOUS
BLDG	BUILDING
BLK	BLOCK
BM	BENCHMARK
BW	BOTTOM OF WALL
CB	CINDER BLOCK
C&G	CURB & GUTTER
CMP	CORRUGATED METAL PIPE
CONC	CONCRETE
COB	CORNER
DBL	DOUBLE
DEFL	DEFLECTION
DI	DROP INLET
DIA	DIAMETER
DE	DRAINAGE EASEMENT
EBL	EAST BOUND LINE
ELEC	ELECTRIC
ELEV	ELEVATION
ENTR	ENTRANCE
EP	EDGE OF PAVEMENT
EW	ENDWALL
EXIST	EXISTING
FDN	FOUNDATION
FF	FINISHED FLOOR
FG	FINISH GRADE
FM	FORCE MAIN
HPT	HIGH POINT
INV	INVERT
IP	IRON PIN
LT	LEFT
MBL	MINIMUM BUILDING LINE
MBH	MANHOLE

### SYMBOLS

EXISTING	NEW	SPOT ELEVATION
100.5	100.5	SPOT ELEVATION
100	100	CONTOURS
8"SS	8"SS	SANITARY SEWER LINE
4"W	4"W	WATERLINE
8"SD	8"SD	STORM DRAIN
2"G	2"G	GAS LINE
E	E	OVERHEAD ELECTRIC LINE
T	T	OVERHEAD TELEPHONE LINE
CATV	CATV	OVERHEAD CABLE TELEVISION LINE
UE	UE	UNDERGROUND TEL OR ELEC LINE
W	W	WATER OR GAS METER
V	V	VALVE
F.H.	F.H.	FIRE HYDRANT
C.O.	C.O.	MANHOLE
C.O.	C.O.	CLEANOUT
C.O.	C.O.	DROP INLET (CURB OR GRATE)
UT	UT	UTILITY POLE, GUY & ANCHOR
D	D	DITCH OR SWALE
CL	CL	CENTERLINE OR BASELINE
P	P	PROPERTY LINE
TA	TA	SURVEY TRAVERSE POINT
DA	DA	DEFLECTION ANGLE
DA	DA	DIRECT ANGLE
Y.L.	Y.L.	YARD LIGHTING
Y.H.	Y.H.	YARD HYDRANT
W	W	WELL
B	B	BENCHMARK
F	F	FENCE
T	T	TREE LINE
R	R	RAILROAD
H	H	HANDICAPPED SPACE

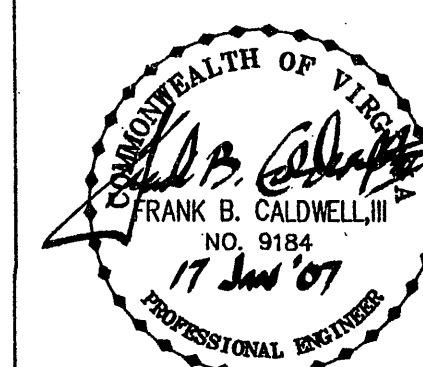
NAME OF DEVELOPMENT 900 BLOCK WHITNEY AVENUE  
SEWER REPLACEMENT

LOCATION: HERSHBERGER ROAD, CURTIS & WHITNEY AVENUES  
CITY OF ROANOKE, VIRGINIA

OWNER: WESTERN VIRGINIA  
WATER AUTHORITY

DEVELOPER: WESTERN VIRGINIA  
WATER AUTHORITY

TAX MAP #(S) AS SHOWN ON PLANS



CALDWELL WHITE ASSOCIATES

ENGINEERS / SURVEYORS / PLANNERS

4203 MELROSE AVENUE, N.W.  
P.O. BOX 8280  
ROANOKE, VIRGINIA 24017-0280  
(540) 368-3400  
FAX: (540) 368-8702