#### GENERAL NOTES - PAVING AND STORM SEWERS

I. PAVING AND STORM SEWERS SHALL BE CONSTRUCTED IN ACCORDANCE WITH PLANS AND "STANDARD SPECIFICATIONS CONSTRUCTION OF ROADS AND BRIDGES". VIRGINIA DEPARTMENT OF TRANSPORTATION, CURRENT EDITION.

2. CONTRACTOR SHALL VERIFY LOCATION OF ALL EXISTING UTILITIES BEFORE CONSTRUCTION.

3, PROVIDE CONTRACTION JOINTS AT 15' CTRS. MAXIMUM IN P.C.C. PAVEMENT PROVIDE EXPANSION JOINTS AT ALL RADIUS POINTS IN P.C.C. CURB AND GUTTER AND AS SHOWN ON THE DETAILS OR AS DIRECTED BY THE OWNER'S CONSTRUCTION MANAGER.

4. PCC SIDEWALK SHALL BE OF THE WIDTH AS INDICATED ON THE PLANS AND 4" THICK UNLESS OTHERWISE NOTED. SIDEWALK RAMPS AND SIDEWALK ALONG ACCESSIBLE PARKING SPACES SHALL BE 6" THICK. CROSS SLOPES SHALL BE 1/4" PER FOOT. INSTALL 3/4" PJF EXPANSION JOINTS AT THE SIDEWALK-CURB JOINT AND AT MAXIMUM 50 FOOT CENTERS. SCOUR JOINTS ARE TO BE HAND TOOLED AT 1/2" NOMINAL DEPTH AND AT 5'0" ON CENTER.

5. ALL PIPE SHALL BE BEDDED IN 4" SAND OR GRAVEL BEDDING. BEDDING MATERIALS SHALL EXTEND TO UNDISTURBED EARTH, OR AS SHOWN ON THE PLANS.

6. ALL EXCESS TRENCHING MATERIAL SHALL BE INCORPORATED IN THE EMBANKMENT ON SITE AS DIRECTED BY THE OWNER'S REPRESENTATIVE. ALL TRENCHING OPERATIONS WITHIN A PREPARED SUBGRADE SHALL BE BACKFILLED IN SUCH A MANNER THAT THE SUBGRADE WILL REMAIN IN THE CONDITION EXISTING BEFORE CONSTRUCTION OPERATIONS BEGAN. THE CONTRACTOR WILL BE HELD LIABLE FOR THE COST OF ANY GRADING OPERATIONS NECESSARY. TO CORRECT FAULTY BACKFILLING OR CLEANUP PROCEDURES.

7. 12 INCH STORM SEWERS AND LARGER SHALL BE RCP IN ACCORDANCE WITH SECTION 843 OF THE STANDARD SPECIFICATIONS, UNLESS OTHERWISE NOTED.

8. STORM DRAINS SMALLER THAN 12" SHALL BE POLYVINYL CHLORIDE (PVC) SEWER PIPE CONFORMING TO ASTM D-3034. MINIMUM WALL THICKNESS SHALL BE STANDARD DIMENSION RATIO (SDR) 35. PIPE JOINTS FOR PVC PIPE SHALL BE FLEXIBLE ELASTOMERIC SEALS PER ASTM D-3212. WHERE PVC SEWER PIPE IS USED. BEDDING AND HAUNCHING AND INITIAL BACKFILL (TO 12" OVER THE TOP OF THE PIPE) SHALL BE IN ACCORDANCE WITH STANDARD SPECIFICATIONS AND ASTM D-2321. CLASS I MATERIAL SHALL ALSO BE USED FOR HAUNCHING AND FOR THE INITIAL BACKFILL TO 12" OVER THE PIPE.

9. SUBSTITUTIONS FOR DOT CASTINGS INDICATED ON THE PLANS MUST BE APPROVED IN ADVANCE BY THE OWNER'S REPRESENTATIVE. AND THE CITY ENGINEERING DEPARTMENT

IO. PVC CONDUIT, SCHEDULE 40, ELECTRICAL GRADE SHALL BE INSTALLED AT LOCATIONS SHOWN ON THE PLANS AT 24"-30" DEPTH BELOW SUBGRADE FOR FUTURE UTILITY INSTALLATION. CONDUITS SHALL BE TRENCH BACKFILLED. LENGTH OF THE CONDUIT SHALL EXTEND TO 2 FEET BEYOND THE CURB AND GUTTER OR SIDEWALK UNLESS OTHERWISE INDICATED ON THE PLANS AND ENDS TAPED W/ DUCT TAPE. A PULL STRING ON WIRE SHALL BE INSTALLED IN THE CONDUIT. THE CONTRACTOR SHALL MARK LOCATIONS OF BURIED CONDUIT BY A SCORE LINE IN THE TOP OF THE CURB DURING PAVING OPERATIONS.

II. ALL DIMENSIONS AND LENGTHS FOR STORM SEWERS ARE TO THE CENTER OF THE STRUCTURES.

12. RIM ELEVATIONS ON CURB CASTINGS ARE TO TOP OF GRATE.
13. BUILDING PAD BACKFILL WILL BE PROVIDED WHEN THE INNER EDGE OF TRENCH OR MANHOLE EXCAVATION IS WITHIN 2 FEET OF ANY PROPOSED OR EXISTING PAVEMENT, CURB, OR SIDEWALK, NO EXTRA COMPENSATION WILL BE ALLOWED FOR THIS WORK.

# GENERAL NOTES - GRADING AND EROSION CONTROL

I. EARTHWORK SHALL BE IN ACCORDANCE WITH THE PLANS AND "STANDARD SPECIFICATIONS CONSTRUCTION OF ROADS AND BRIDGES " VIRGINIA DEPARTMENT OF TRANSPORTATION, CURRENT EDITION.

2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR GRADING INCLUDING EXCAVATION, EMBANKMENT, AND BACKFILLING AS NECESSARY TO CONSTRUCT ALL PAVEMENT AND SIDEWALKS TO THE ELEVATIONS SHOWN ON THE PLANS.

3. THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ANY DAMAGE DONE TO EXISTING STORM OR SANITARY MANHOLES OR OTHER EXISTING UTILITIES DURING GRADING.

4. EXISTING VEGETATION AND TOPSOIL SHALL BE REMOVED AS SHOWN ON THE PLANS AND AS DIRECTED BY THE OWNER'S REPRESENTATIVE. REMOVAL SHALL BE TO A DEPTH AS NEEDED TO REMOVE ALL ORGANIC MATERIAL.

5. EMBANKMENT WITHIN THE PROPOSED PAVEMENT AND BUILDING SITE AREAS SHALL BE COMPACTED TO NOT LESS THAN 95% OF THE STANDARD LABORATORY DENSITY IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.

6. NOT USED

7. LANDSCAPED AREAS SHALL RECEIVE A MINIMUM OF 6 INCHES OF TOPSOIL IN EMBANKMENT AREAS. EXCAVATION AREAS SHALL BE UNDERCUT 6" IN LANDSCAPED AREAS TO ACCOMMODATE 6" OF TOPSOIL TO FINISH GRADE.

8. LANDSCAPING SHALL TAKE PLACE AS SOON AS FINISH GRADING OPERATIONS ARE COMPLETE, UNLESS DIRECTED OTHERWISE BY THE OWNER.

### GENERAL NOTES - ADA

I, THE CONTRACTOR IS RESPONSIBLE FOR INSURING THAT ALL ACCESSIBLE AREAS ARE BUILT IN ACCORDANCE WITH THE PLANS AND THE AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES (ADAAG). THE SITE WILL BE INSPECTED BY THE CITY OF ROANOKE PERSONNEL FOR COMPLIANCE WITH ADAAG.

2. ALL ADA ACCESSIBLE PARKING STALLS SHALL MEET ADA REQUIREMENTS PER THE ADAAG SECTION 4.6. ALL ADA ACCESSIBLE PARKING SHALL BE CONSTRUCTED WITH A MAXIMUM SLOPE OF 2% IN ANY DIRECTION.

3. ALL ADA ACCESSIBLE ROUTES SHALL MEET ADA REQUIREMENTS PER THE ADAAG SECTION 4.3, ALL ADA ACCESSIBLE ROUTES SHALL BE CONSTRUCTED WITH A MAXIMUM CROSS SLOPE OF 2% AND A MAXIMUM LONGITUDINAL SLOPE OF 5%.

4, ALL ADA MANEUVERING AREAS AT DOORS SHALL MEET ADA REQUIREMENTS PER THE ADAAG SECTION 4.13.6. ALL ADA MANEUVERING AREAS SHALL BE CONSTRUCTED WITH A MAXIMUM SLOPE OF 2% IN ANY DIRECTION.

5. NO ADA ACCESSIBLE RAMPS ARE PROPOSED FOR THIS PROJECT. EXISTING RAMPS ARE NOTED ON PLANS. CONTRACTOR TO VERIFY ALL EXISTING RAMPS MEET THE ADA REQUIREMENTS PER ADAAG SECTION 4.7 & 4.8.

## GENERAL NOTES - SANITARY SEWERS

I. WATER AND SEWER MAIN CONSTRUCTION SHALL COMPLY WITH THE VIRGINIA DEPARTMENT OF ENVIRONMENTAL HEALTH AND THE WESTERN VIRGINIA WATER AUTHORITY STANDARDS AND SPECIFICATIONS. MATERIALS SHALL COMPLY WITH WWWA STANDARD SPECIFICATIONS, CURRENT EDITION

2. 6" SANITARY SERVICE SEWERS SHALL BE SLOPED A MINIMUM OF 1/8" PER FOOT. PIPE MATERIAL FOR 6 INCH SERVICE SEWERS SHALL BE:

POLYVINYL CHLORIDE (PVC) SEWER PIPE CONFORMING TO ASTM D-3034. MINIMUM WALL THICKNESS SHALL BE STANDARD DIMENSION RATIO (SDR) 35. PIPE JOINTS FOR PVC PIPE SHALL BE FLEXIBLE ELASTOMERIC SEALS PER ASTM D-3212. WHERE PVC SEWER PIPE IS USED. BEDDING AND HAUNCHING AND INITIAL BACKFILL (TO 12" OVER THE TOP OF THE PIPE) SHALL BE IN ACCORDANCE WITH STANDARD SPECIFICATIONS AND ASTM D-2321. CLASS I MATERIAL SHALL ALSO BE USED FOR HAUNCHING AND FOR THE INITIAL BACKFILL TO 12" OVER THE PIPE.

2.A DOMESTIC WATER SERVICE LINES SHALL BE TYPE K SOFT COPPER. FIRE SERVICE WATER LINES SHALL BE DUCTILE IRON PIPE.

3. THE JOINTING OF DISSIMILAR PIPES SHALL BE ACCOMPLISHED BY USING APPROVED FABRICATED COUPLINGS AND CONCRETE ENCASEMENT 12" EITHER SIDE OF JOINT.

4. THE INVERT OF ANY SERVICE CONNECTION MADE IN MANHOLES SHALL ENTER THE MANHOLE AT A POINT WHICH IS BETWEEN THE CENTERLINE AND THE TOP OF THE MAIN SEWER LINE IN THE MANHOLE AND SHALL BE FILLETED TO MEET THE INVERT OF THE MAIN SEWER LINE.

5. ALL EXCESS MATERIAL SHALL BE INCORPORATED IN THE EMBANKMENT ON THE SITE AS DIRECTED BY THE OWNER'S REPRESENTATIVE. ALL TRENCHING OPERATIONS WITHIN A PREPARED STREET SUBGRADE SHALL BE BACKFILLED IN SUCH A MANNER THAT THE SUBGRADE WILL REMAIN IN THE CONDITION EXISTING BEFORE CONSTRUCTION OPERATIONS BEGAN. THE CONTRACTOR WILL BE HELD LIABLE FOR THE COST OF ANY GRADING OPERATIONS NECESSARY TO CORRECT FAULTY BACKFILLING OR CLEANUP PROCEDURES.

6. PROVIDE BUILDING PAD BACKFILL WHEN INNER EDGE OF TRENCH OR MANHOLE EXCAVATION IS WITHIN 2 FEET OF ANY PROPOSED OR EXISTING PAVEMENT, CURB, OR SIDEWALK.

### GENERAL NOTES - TRAFFIC CONTROL

1. WHENEVER CONSTRUCTION OPERATIONS ENCROACH ON THE RIGHT-OF-WAY OF ADJACENT ROADWAYS, TRAFFIC CONTROL SHALL BE PROVIDED IN ACCORDANCE WITH LOCAL AND STATE STANDARDS.

2. NO MATERIALS OR EQUIPMENT SHALL BE STORED OR STOCKPILED WITHIN THE RIGHT-OF-WAY OF ADJACENT ROADWAYS.

## GENERAL NOTES - AUTHORITY AND RESPONSIBILITY

I. THE ENGINEER, AS REPRESENTATIVE OF THE OWNER, SHALL NOT GUARANTEE THE WORK OF ANY CONTRACTOR OR SUBCONTRACTOR, SHALL HAVE NO AUTHORITY TO STOP WORK, SHALL HAVE NO SUPERVISION OR CONTROL AS TO THE WORK OR PERSONS DOING THE WORK, SHALL NOT HAVE CHARGE OF THE WORK, SHALL NOT BE RESPONSIBLE FOR SAFETY IN, ON, OR ABOUT THE JOB SITE OR HAVE ANY CONTROL OF THE SAFETY OR ADEQUACY OF ANY EQUIPMENT, BUILDING COMPONENT, SCAFFOLDING, SUPPORTS, FORMS, OR OTHER WORK AIDS, AND SHALL HAVE NO DUTIES OR RESPONSIBILITIES IMPOSED BY THE STRUCTURAL WORK ACT.

# NOTES - COOPERATION BETWEEN CONTRACTORS

I. LOCATED ADJACENT TO OR IN THE GENERAL VICINITY OF THE LIMITS OF THE PROJECT, ADDITIONAL PROJECTS MAY BE UNDER CONTRACT DURING THE TIME THIS CONTRACT IS IN FORCE. THE CONTRACTOR FOR THIS PROJECT SHALL COOPERATE WITH THE CONTRACTORS OF THIS PROJECT AND OTHER PROJECTS AS PROVIDED IN THE DOT "STANDARD SPECIFICATIONS FOR ROADS AND BRIDGES", CURRENT EDITION. SPECIFIC COORDINATION ITEMS BY OTHERS INCLUDE BUT ARE NOT LIMITED TO:

- A. CONSTRUCTION OF ANY PUBLIC IMPROVEMENTS ALONG ADJACENT RIGHT-OF-WAYS.
- B. CONSTRUCTION OF PAVING, STORM SEWERS, AND APPURTENANCES FOR ADJACENT LOT DEVELOPMENT.
- C. CONSTRUCTION OF UTILITIES ON AND OFF SITE INCLUDING GAS.
- D. PLANTING AND MAINTENANCE OF LANDSCAPE ITEMS.

WATER, ELECTRIC, TELEPHONE, AND CABLEVISION.

2. THESE ITEMS OF WORK MAY OR MAY NOT BE IN PLACE AT THE TIME OF CONSTRUCTION OF THIS PROJECT. WHEN ADJACENT WORK IS FOUND IN PLACE THE CONTRACTOR SHALL MAKE THE NECESSARY CONNECTION IN A MANNER APPROVED BY THE OWNER'S REPRESENTATIVE. WHEN ADJACENT WORK ITEMS ARE NOT YET CONSTRUCTED, THE CONTRACTOR SHALL CONSTRUCT THE NECESSARY JOINTS, STUBS, OR PLUGS FOR FUTURE CONNECTIONS AS DIRECTED BY THE OWNER'S REPRESENTATIVE.

·	DOMESTIC WATER SERVICE					
ITEMS	ITEMS UTILITY SERVICE PROVIDER GENERAL CONTRACTOR LANDLORD					
2" TAP & VALVE	(INSTALL	PROVIDE	N/A			
2" SERVICE LINE TO METER		PROVIDE AND INSTALL	N/A			
2" DOMESTIC METER	PROVIDE	INSTALL	N/A			
2" DOUBLE CHECK ASSEMBLY		PROVIDE AND INSTALL	N/A			
2" DOMESTIC SERVICE FROM RPZ TO BUILDING		PROVIDE AND INSTALL	N/A			
FIRE SPRINKLER SERVICE						
ITEMS	UTILITY SERVICE PROVIDER	GENERAL CONTRACTOR	LANDLORD			
(8") TAPPING SLEEVE AND VALVE	(INSTALL	PROVIDE )	N/A			
SPRINKLER WATER SERVICE		PROVIDE AND INSTALL	N/A			
(8°) DD CHECK VALVE		PROVIDE AND INSTALL	N/A			
FIRE SERVICE TO BUILDING		PROVIDE AND INSTALL	N/A			

	IRRIGATION WATER SERVICE		
ITEMS	UTILITY SERVICE PROVIDER	GENERAL CONTRACTOR	LANDLORD
TAP & VALVE	INSTALL	PROVIDE	N/A
(SERVICE LINE TO METER		PROVIDE AND INSTALL	N/A
J' METER	PROVIDE	INSTALL	N/A
(I')DOUBLE CHECK ASSEMBLY		PROVIDE AND INSTALL	N/A

FIRE DEPARTMENT CONNECTION

PROVIDE AND INSTALL

N/A

	SANITARY SEWER SERVICE		
ITEMS	UTILITY SERVICE PROVIDER	GENERAL CONTRACTOR	LANDLORD
6" SANITARY SEWER		PROVIDE AND INSTALL	N/A
6" SERVICE FROM INTERFACE TO BUILDING		PROVIDE AND INSTALL	N/A

ITEMS	UTILITY SERV	ICE PROVIDER	GENERAL CONTRACTOR	LANDLORD
PRIMARY SERVICE TO TRANSFORMER	PROVIDE A	AND INSTALL		N/A
CONDUIT FOR PRIMARY TO TRANSFORMER			PROVIDE AND INSTALL	N/A
SECONDARY SERVICE FROM TRANS TO BUILDING			PROVIDE AND INSTALL	N/A
TRANSFORMER PAD	PROVIDE A	AND INSTALL		N/A
TRANSFORMER	PROVIDE A	AND INSTALL		N/A
CONDUIT TO GROUND SIGN			PROVIDE AND INSTALL	N/A
SITE LIGHTING SYSTEM			PROVIDE AND INSTALL	N/A
SITE LIGHTING CONTROLS			PROVIDE AND INSTALL	N/A

	GAS SERVICE		
ITEMS	UTILITY SERVICE PROVIDER	GENERAL CONTRACTOR	LANDLORD
METER	PROVIDE AND INSTALL	COORDINATION	N/A
SERVICE FROM MAIN TO BUILDING	PROVIDE AND INSTALL	COORDINATION	N/A

	·	TELEPHONE SERVICE		
ITEMS		UTILITY SERVICE PROVIDER	GENERAL CONTRACTOR	LANDLORD
SERVICE FROM POINT	OF CONNECTION TO BLDG	SERVICE IN CONDUIT	TRENCHING AND CONDUIT	N/A
		CABLE TELEVISION SERVICE		
		CABLE TELEVISION SERVICE		
	ITEMS	UTILITY SERVICE PROVIDER	GENERAL CONTRACTOR	LANDLORD
SERVICE EROM POINT	OF CONNECTION TO BLDG	FUTURE	TRENCHING AND CONDUIT	N/A

APPROVED
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DRAWN
JTN
CHECKED
JDC
DATE
II/25/09
SCALE
NONE

COO2