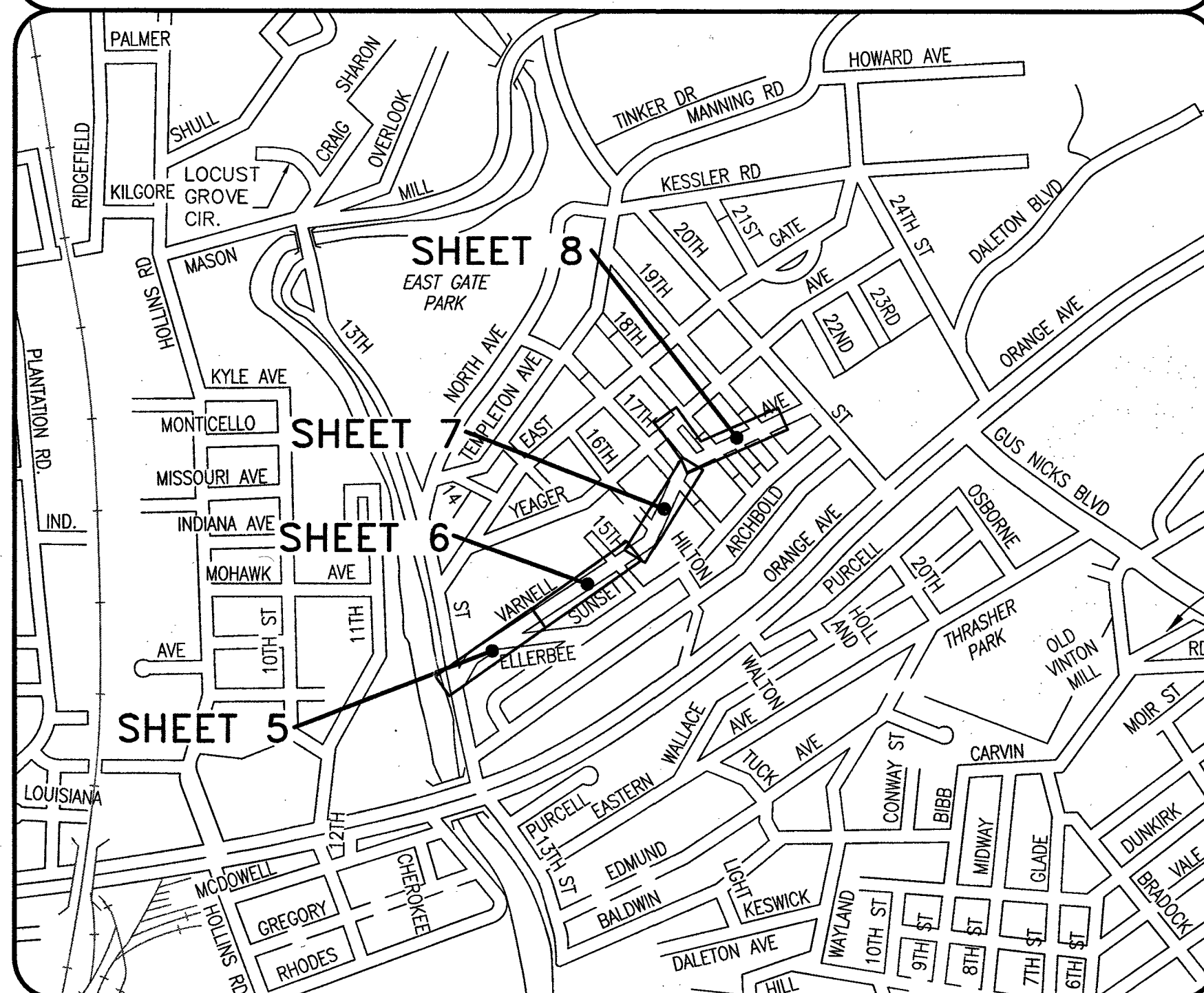
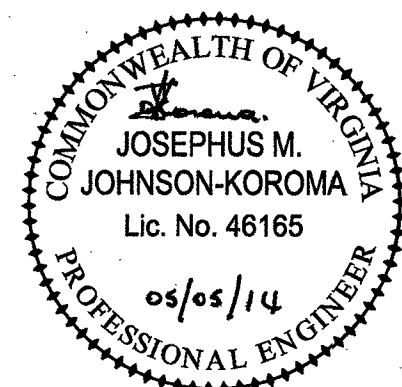


PROJECT LOCATION MAP



ABBREVIATIONS

CL = CENTERLINE	PVC = POLYVINYL CHLORIDE
ELEV = ELEVATION	HDPE = HIGH DENSITY POLYETHYLENE
EL = ELEVATION	BLDG = BUILDING
FG = FINISHED GRADE	CRNR = CORNER
EG = EXISTING GROUND	PROP = PROPOSED
RCP = REINFORCED CONCRETE PIPE	CO = CLEANOUT
CI = CAST IRON	SCO = STORM CLEANOUT
CMP = CORRUGATED METAL PIPE	SSCO = SANITARY SEWER CLEANOUT
INV IN = INVERT IN	WSE = WATER SURFACE ELEVATION
INV OUT = INVERT OUT	HP = HIGH POINT
FFE = FINISHED FLOOR ELEVATION	TYP = TYPICAL
PUE = PUBLIC UTILITY EASEMENT	MH = MANHOLE
CONC = CONCRETE	SD = STORM DRAIN
MIN = MINIMUM	MAX = MAXIMUM
CB = CATCH BASIN	EXST = EXISTING
DI = DROP INLET	EXIST = EXISTING
DIA = DIAMETER	PVMT = PAVEMENT
ID = INNER DIAMETER	LF = LINEAR FEET
W/ = WITH	APPROX = APPROXIMATELY
RR = RAILROAD	SDMH = STORM DRAIN MANHOLE
ROW = RIGHT OF WAY	SSMH = SANITARY SEWER MANHOLE
Ø = DIAMETER	LW = LIMIT OF WORK
WVWA = WESTERN VIRGINIA WATER AUTHORITY	MECH = MECHANICAL
VDOT = VIRGINIA DEPARTMENT OF TRANSPORTATION	N = NORTHING
DCR = VIRGINIA DEPARTMENT OF CONSERVATION	E = EASTING
AND RECREATION	TOC = TOP OF CURB ELEVATION
TW = TOP OF WALL ELEVATION	BOC = BOTTOM OF CURB ELEVATION
BW = BOTTOM OF WALL ELEVATION	FH = FIRE HYDRANT
HT = HEIGHT	PSI = POUNDS PER SQUARE INCH
RD = ROOF DRAIN	PSF = POUNDS PER SQUARE FOOT
TK = THICK	GPM = GALLONS PER MINUTE
L = LENGTH	FT = FOOT, FEET
NO. = NUMBER	IN = INCH, INCHES
R = RADIUS	OC = ON CENTER
AC. = ACRE(S)	SAN = SANITARY SEWER
SF = SQUARE FOOT (FEET)	N = NORTHING
PERF = PERFORATED	E = EASTING
HORIZ = HORIZONTAL	WWF = WELDED WIRE FABRIC
VERT = VERTICAL	RHS = RAINWATER HARVESTING SYSTEM
MDD = MAXIMUM DRY DENSITY	EXP JT = EXPANSION JOINT
SWM = STORM WATER MANAGEMENT	CC JT = CRACK CONTROL JOINT
OAE = OR APPROVED EQUAL	CONN = CONNECTION
NIC = NOT IN CONTRACT	ENT = ENTRANCE
H.E.S. = HIGH EARLY STRENGTH	KSI = KIPS PER SQUARE INCH



OFFICE OF THE CITY ENGINEER
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PROJECT NAME

VARNELL AVENUE DRAINAGE
IMPROVEMENTS PROJECT

CITY OF ROANOKE
ROW # - 9999998

CITY ENGINEERING PLAN NUMBER: 6758

CITY PLAN REVIEW NUMBER: CP130056

LEGEND

	TREE		UGT	UNDERGROUND TELEPHONE
	GAS LINE		PROPERTY LINE	PROPERTY LINE
	UNDERGROUND POWER		SANITARY MANHOLE	SANITARY MANHOLE
	UNDERGROUND CABLE		UTILITY POLE	UTILITY POLE
	WATER LINE		GUY WIRE	GUY WIRE
	STORM PIPE		FENCE	FENCE
	SANITARY SEWER		EDGE OF PAVEMENT	EDGE OF PAVEMENT
	LEVEL THREE COMM.		EXISTING SURVEY NAIL	EXISTING SURVEY NAIL
	UNDERGROUND TELEPHONE		GAS VALVE	GAS VALVE
	NEW CONTOUR LINE		SMALL WATER METER/VALVE	SMALL WATER METER/VALVE
	CONTOUR LINE		WATERLINE MANHOLE	WATERLINE MANHOLE
	SANITARY MANHOLE		TELEPHONE MANHOLE	TELEPHONE MANHOLE
	STORM MANHOLE		ASPHALT MILL AND OVERLAY AREA	ASPHALT MILL AND OVERLAY AREA
	CLEANOUT		PERMANENT SEEDING	PERMANENT SEEDING
	ELECTRIC MANHOLE		TEMPORARY SEEDING	TEMPORARY SEEDING
	FIRE HYDRANT		MULCH	MULCH
	DROP INLET PROTECTION			
	CURB INLET PROTECTION			
	LIMITS OF DISTURBANCE			

INDEX OF SHEETS

- COVERSHEET
- EROSION AND SEDIMENT CONTROL NOTES
- EROSION AND SEDIMENT CONTROL PLAN
- EROSION AND SEDIMENT CONTROL PLAN, NOTES, AND DETAILS
- PLAN AND PROFILE 1
- PLAN AND PROFILE 2
- PLAN AND PROFILE 3
- PLAN AND PROFILE 4
- CROSS DRAIN PROFILES
- MISCELLANEOUS DETAILS

City Construction Notes to be Included on Plans:

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.

Construction Procedure Requirements:

1. 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.

2. 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.

3. 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.

4. Location of Utilities - The contractor shall verify the location of all existing utilities prior to the commencement of any construction.

5. Construction Entrance - The contractor shall install an adequate construction entrance for all construction related egress from the site. Size and composition of construction entrance shall be as shown on the plans.

6. 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.

7. 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.

8. 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.

9. Approved Plans/Construction Changes - Any change 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.

10. Final Acceptance/City - The owner or developer shall furnish the City of Roanoke's Planning Building and Development Department with a field surveyed final correct set of as-built plans of the newly constructed storm drain and/or stormwater management facilities prior to final acceptance and issuance of a certificate of occupancy by the City. As-built plans shall be provided in the State Plane Virginia South Coordinate System, NAD 1983, FIPS 4502 Feet, US Survey Feet, Datum NA 83, in the form of 1 paper copy and 1 digital AUTOCAD file.

City of Roanoke
Planning Building and Development
APPROVED

George R. Wuergle 8/1/14
Development Reviewer Date

APPROVED FOR CONSTRUCTION

Philip J. Tamm
ROANOKE CITY ENGINEER

5/07/2014
DATE

Robert K. Bampton
DIRECTOR OF PUBLIC WORKS

5/12/14
DATE

Shannon M. Steward
ASSISTANT CITY MANAGER - OPERATIONS

5/7/14
DATE

SHEET NUMBER: 1 OF 10