## **GENERAL NOTES**

PRE-CONSTRUCTION MEETING AND CONSTRUCTION COMMENCEMENT

I. All construction methods and materials shall conform to the Construction Standards and Specifications of Roanoke County, the Western Virginia Water Authority, and the Virginia Department of Transportation.

2. Stormwater Management Agreements with an attached 8 1/2" x 11" or 8 1/2" x 14" plat must be approved and recorded prior to the pre-construction meeting.

3. Once all required items are submitted to the County of Roanoke, the developer must contact the Development Review Coordinator to indicate that a pre-construction meeting needs to be scheduled. The pre-construction meeting will be scheduled with the owner/developer two (2) working days later.

4. Please note the 2001 General Assembly revisions to Va Erosion and Sediment Control Law. Effective July 1, 2001, all land disturbing projects that require approval of an erosion and sediment control plan, grading or clearing permit shall require that the applicant provide the name of an individual who will be responsible for land disturbing activities and that this individual hold a Responsible Land Disturber (RLD) Certificate from the Department of Conservation and Recreation. The Responsible Land Disturber can be anyone from the Project team that is certified by the State of Virginia to be in charge of carrying out the land disturbing activity for the project.

5. It is the responsibility of the owner/developer to notify the certified Responsible Land Disturber and the Utility Contractor to attend the pre-construction meeting.

6. The Development Review Coordinator will schedule the pre-construction meeting with the County Review Engineer, the County Inspector, and the Western Virginia Water Authority and the Town of Vinton Public Works Department if applicable.

7. An approved set of plans and all permits <u>must be available</u> at the construction site at all times.

8. The developer and/or contractor shall supply all utility companies with copies of approved plans, advising them that all grading and installation shall conform to approved plans.

9. The project engineer will inform the owner/developer verbally and in writing of the County's obligation to perform inspections on site. Everyone in the meeting will be required to sign a pre-construction checklist indicating their knowledge of Roanoke County's obligation to perform inspections on site.

10. The Erosion Control Permit is given to the developer at this pre-construction meeting.

11. The developer MUST contact the project inspector 24 hours before beginning any

grading or construction on the property.

12. The project inspector will visit the site within 48 hours of the developer's call to ensure that all necessary erosion and sediment control measures are properly installed according to the approved plan.

13. All work shall be subject to inspection by Roanoke County, the Western Virginia Water Authority and the Virginia Department of Transportation Inspectors.

14. Contractors shall notify utilities of proposed construction at least two (2), but not more than ten (10) working days in advance. Area public utilities may be notified thru "Miss Utility": 1-800-552-7001.

15. 100 year Floodway and Floodplain information shall be shown where applicable. FIRM Index Date shall be shown on the plans. The 100 year Floodway shall be staked prior to any construction.

16. Grade stakes shall be set for all curb and gutter, culvert, sanitary sewer and storm sewer at all times of construction.

17. The Department of Community Development shall be notified when a spring is encountered during construction.

18. Construction debris shall be containerized in accordance with the Virginia Litter Control Act. No less than one litter receptacle shall be provided on site.

19. The contractor shall provide adequate means of cleaning mud from trucks and/c other equipment prior to entering public streets or rights of ways. It is the contriors

20. Plan approval in no way relieves the developer or contractors of the responsibilities contained within the erosion and sediment control policies.

21. Field construction shall honor proposed drainage divides as shown on plans.

22. Field corrections shall be approved by the Roanoke County Engineering Division and/or the Western Virginia Water Authority and the Professional of Record. prior to such construction.

23. The developer or contractor shall supply the County and the Western Virginia Water Authority with correct As-Built plans before final acceptance.

VIRGINIA DEPARTMENT OF TRANSPOF

24. Plan approval by Roanoke County does not guarante once of any permits ່ານງ he Virginia Department of Transpaon 🥄

25. A permit m be obtained from the Virginia Department of Transportation, Salem Resncy Office prior to construction in the highway right-of-way.

26. The prelimity pavement designs should be based on a predicted sub-grade OR value of 7.0 and with a Resiliency Factor (RF) of 2.0 as shown in pendix I of the 2000 Virginia Department of Transportation Pavemen pesign Guide for Subdivision and Secondary Roads. The sub-grade soil is to t tested by an independent laboratory and the results submitted to the Virginia Department of Transportation prior to base construction. Should the sub-grade CBR value and/or the RF value be less than the predicted values, additional base material will be required in accordance with Departmental specifications. Refer to the same manual as the number and locations of the required soil samples to be tested. All pavement designs shall be submitted to the Department for review and approval. The sub-grade shall be approved by the Virginia Department of Transportation prior to placement of the base. Base shall be approved by the Virginia Department of Transportation for depth, template, and compaction before the surface is applied.

27. Standard guardrail with safety end sections may be required on fills or in areas where hazards exist as deemed necessary. After completion of rough grading operations, the County Engineer and Virginia Department of Transportation shall be contacted to schedule a field review. Where guard rail is warranted, the standard shoulder width shall be provided and the guard rail shall be installed in accordance with the 2001 VDOT Road and Bridge Standards as part of this development.

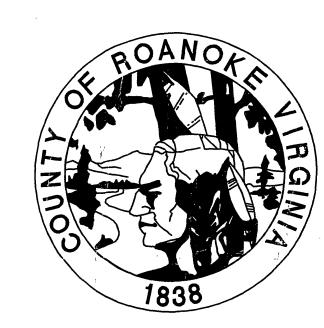
28. Standard street and traffic control signs shall be erected at each intersection by the developer prior to final street acceptance.

29. All traffic devices shall be in accordance with current edition of the manual:

"Uniform Traffic Control Devices (MUTCD)"

30. All unsuitable material shall be removed from the construction limits of the roadway before placing embankment.

The Project Engineer shall provide electronic copies of the approved plans to the Development Review Coordinator within 5 working days of the pre-construction meeting. No additional notes may be added to this cover sheet.



# County of Roanoke, Va

NAME OF DEVELOPMENT  CLEARBROOK VILLAGE LANE SHOPPING CENTER  MAGISTERIAL DISTRICT(S)  CAYE SPRING	AM AWARE OF THE SITE DESIGN REQUIREMENTS IMPOSED BY DEVELOPMENT PLAN AND OTHER APPLICABLE ROANOKE COUN I HEREBY CERTIFY THAT I AGREE TO COMPLY WITH THESE REQUIREMENTS AND THE THIRTY (30) POINTS SHOWN ON THIS COVER SHEET UIMODIFIED IN ACCORDANCE WITH LOCAL LAW.	TY CODES. UIREMENTS
OWNER (name, address, telephone)		
DEVELOPER (name, address, telephone) WAL-MART REAL ESTATE BUSINESS TRUST 2001 S.E. 10TH STREET, BENTONVILLE, AR 72716-0	2550. PHONE: 479-273-8483	
THE APPLITECT OF SUPVEYOR (normal radius at the 1		
ENGINEER, ARCHITECT OR SURVEYOR (name, address, telephone)  WOLVERTON & ASSOCIATES 6745 SUGARLOAF PARKWAY SUITE 100 DULUTH, GEORGIA 30097 P	HONE: 770-447-8999	

### WATER NOTES

All wer facilities shall be installed according to the Western Virda Water Authority (WVWA) Design and Construction Standards/ (1 ast Edition).

A himum cover of three (3) feet is required over proposed lines. Catractor shall be responsible for locating and uncovering valve after paving and adjustment to final grade if necessary.

Wexisting utilities may not be shown in their exact location. The contractor shall comply with the (State Water Works Regulations, Section 12.05.03, where lines cross,

All trenches in existing or future highway right-of-ways shall be compacted according to Virginia Department of Transportation standards.

Lines shall be staked prior to construction.

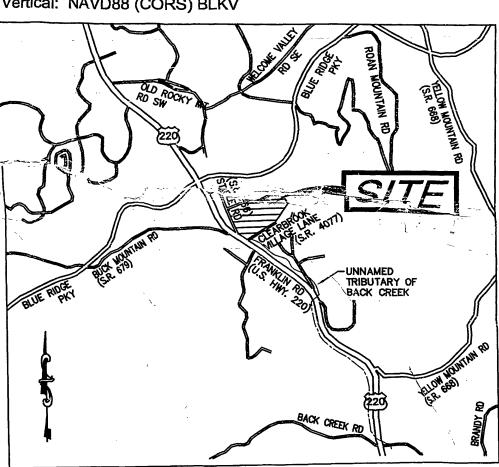
Water main shall be minimum Class 350 Ductile Iron in accordance to AWWA C151 or DR-14 PVC in accordance with AWWA C-900.

Ductile Iron Pipe in accordance with the Western Virginia Water Authority Design and Construction Standards shall be required for all pipe with a working pressure equal to or greater than 100 p.s.i. All water connections to existing lines shall be coordinated with and

Western Virginia Water Authority Availability letter number: 09-239

## SURVEY NOTES

Horizontal and vertical control was established by GPS observations on July 28, 2006, responsibility to insure that the streets are in a clean, mud and dust free condition at atimes. using National Geodetic Survey Continuously Operation Reference Stations (CORS). Virginia State Plane Grid Coordinates (South Zone) US Survey Feet. Horizontal: NAD83 (CORS) BLKV, HILB, CORB Vertical: NAVD88 (CORS) BLKV



# Vicinity Map

## LEGEND

-----UGE----- ELETRICAL CONDUIT TELEPHONE CONDUIT SECURITY CAMERA CONDUIT 8"SS SANITARY SEWER PIPE WATER MAIN PIPE 12"W WATER MAIN PIPE \_\_\_\_\_3"W\_\_\_\_\_ DOMESTIC WATER PIPING ----2"W----- IRRIGATION WATER PIPING GAS PIPE

TS—TAMPER SWITCH CONDUIT

STORM SEWER PIPING

IRRIGATION CONTROLLER CONDUIT

FDC FIRE DEPARTMENT CONNECTION

## SEWER NOTES

Western Virginia Water Authority Design (WVWA) and Construction Standards. (Latest Edition).

A minimum cover of three (3) feet is required over proposed lines. Contractor shall be responsible for locating and uncovering all manholes after paving. Manhole tops shall be adjusted to grade

All existing utilities may not be shown in their exact location. The contractor shall comply with (State Water Works Regulations, Section 12.05.03, where lines cross.) All trenches in existing or future rights-of-way shall be compacted according to Virginia Department of Transportation standards.

All water connections to existing lines shall be coordinated with and performed by WVWA.

building related storm drains shall be designed and installed per the current edition of the Virginia Uniform Statewide Building Code. Design and installation requirements issued by the Western Virginia Water Authority that meet or exceed the USBC requirements are acceptable for private utilities. All private utilities are to be permitted through and inspected by the Roanoke County Inspections Office. Vaults, valves and other devices installed by or under the control of the Western Virginia Water Authority may not substituted for the code required devices.

	Page Num.	Description	Issued	Latest Revision	Comment
1		ROANOKE COUNTY COVER SHEET	3/30/09	10/27/09	PER VDOT/COUNTY
2	C-0	COVER SHEET	9/21/09	10/27/09	PER VDOT/COUNTY
3		BOUNDARY AND TOPOGRAPHIC SURVEY	9/21/09	8/03/09	DEWBERRY DAVIS ADDENDUM 5
4-G	DE-1, 1A, 1B	DEMOLITION PLAN	9/21/09		ADDENDOMS
7-9	ES-1, 1A, 1B	PHASE I EROSION, SEDIMENTATION AND	9/21/09		
	, ,	POLLUTION CONTROL PLAN	9/2 1/09		
10-12	ES-2, 2A, 2B	PHASE II EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN	9/21/09		
13-15	ES-3, 3A, 3B	PHASE III EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN	9/21/09		
16-18	ES-4, 4A, 4B	PHASE IV EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN	. 9/21/09		
19	ES-5	NOTES EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN	9/21/09	. <del>.</del>	
20	CP-1	PEDESTRIAN PLAN (100 SCALE)	9/21/09		
21-23.	C-1, 1A, 1B	SITE PLAN	9/21/09	10/27/09	PER VDOT/COUNTY
24-26	C-2, 2A, 2B	GRADING PLAN	9/21/09	10/27/09	PER VDOT/COUNTY
27-29	C-3, 3A, 3B	UTILITY PLAN	9/21/09	10/27/09	PER VDOT/COUNTY
.30	SS-1	SANITARY SEWER PROFILES	9/21/09	-	
31-34	ST-1,2,3,4	STORM SEWER PROFILES	9/21/09	10/27/09	PER VDOT/COUNTY (ST-1)
25-36	DT-1, DT-2	CONCRETE DITCH PLAN AND PROFILES	9/21/09		
37-40	VVL	WATERLINE PROFILES	9/21/09	10/14/09	ADDENDUM 5
41-44	D-1A, B, C, D	STREET DETAILS	S/21/09	10/14/09	ADDENDUM 5
45-49	D-2A, B, C, D,E	GRADING PLAN WETAILS	9/21/09	·	<del></del>
50-52	D-3A, B, C	UTILITY PLAN DETAILS	9/21/09	10/14/09	ADDENDUM 5 (SHEET 3A, 30
53-55	D-4A, B, C	EROSION, SEDIMENTATION AND POLLUTION CONTROL DETAILS	9/21/09	10/27/09	PER VDOT/COUNTY (SHEET
56	LO-83548-4	PHOTOMETRIC PLAN	01/24/07	09/15/09	LSI INDUSTRIES
57-65	L100-L108	LANDSCAPE PLANS	1/30/09	10/20/09	HILL STUDIO'S CCD 1 (L-101, 103, 107)
66-72	IR-1 - IR-7	IRRIGATION PLANS		08/24/09	CCD 1 (L-101, 103, 107) CNL ADDENDUM 5
73-75	RW1-RW3	RETAINING WALL PLANS	3/24/09 9/21/09	001Z-1103	ADDENDUM 5
70-80	5-01 - 5-05	ROADWAY - TTTOM SECTIONS		40/07/00	THE PARTY COURT
81-90	13-01 - 13-10	ROADWAY - ROADWAY PLANS	9/21/09	10/27/09	PER VDOT - CCD 1
91-95	15-01 - 15-05	ROADWAY - ROADWAY PROFILES	9/21/09	. 10/14/09	CCD 1 (SH 13-02, 03, 04)
96	17-01	ROADWAY - DRIVEWAY PROFILES	9/21/09		·
97-104	19-01 - 19-08	ROADWAY - STAGING PLANS	9/21/09		CCD 4
105-108	21-01 - 22-03	ROADWAY - DRAINAGE PROFILES	9/21/09	10/2709 10/14/09	CCD 1 (SH: 19-01, 07)
	23-01 - 23-13	ROADWAY - CROSS SECTIONS	9/21/09	7 - 5	ADDENDUM 5 (SHEET 22-02)
122-131		ROADWAY - UTILITY PLANS	9/21/09	10/27/09	CCD 1 (SHEET 23-01)
				10/14/09	ADDENDUM 5 (SH 24-03 & 07)
132-141		ROADWAY - SIGNING AND MARKING PLAN	9/21/09	10/27/09	CCD 1 (SH 26-01 & 04)
142-144	<del></del>	ROADWAY - TRUCK TURNING PLANS	9/21/09		
145-154		ROADWAY - EROSION CONTROL PLANS	9/21/09	10/14/09	ADDENDUM 5 (SH 54-03 & 07)
155-157	<del></del>	CULVERT EXTENSION	8/10/09	10/14/09	ADDENDÚM 5
158-160	SIG1 - SIG3	SIGNAL PLANS	9/08/09	10/19/09	RAMEY KEMP ASS. CCD 1

## **SURVEY INFORMATION**

Horizontal and vertical control surveys were performed in year: 2009 By: DEWBERRY AND DAVIS

Source of topographic mapping is dated <u>LAST REVISED 08/03/2009</u>

The professional seal and signature certifies the boundary survey and topographic mapping to

All sanitary sewer facilities shall be installed according to the

Lines shall be staked prior to construction.

## PRIVATE UTILITIES

Underground utilities installed on private property or in private utility easements and

## Index

All vertical elevations must be referenced to the National Geodetic Vertical Datum of 1929 or 1988. All horizontal elevations must be referenced to the North American Datum of 1927 or 1983.

Boundary was performed by <u>DEWBERRY & DAVIS</u> dated: <u>August 2009</u>

Benchmark Information: RAIL SPIKE IN UTILITY POLE AEP 2-65-T 35041-31 ELEV. 1147.73

be accurate and correct.

QUANTITIES LISTED ARE FOR PERMITTING PURPOSES. CONTRACTOR IS RESPONSIBLE FOR PERFORMING QUANTITY TAKEOFF UTILIZING

TEMPORARY SITE PREPERATIONS

**DEMOLITION, ASBESTOS ABATEMENT** 

CLEARING AND GRUBBING.

## QUANTITY & COST ESTIMATE

COST

\$168,750

\$165,000

\$182,958

\$168,750

\$5,000

\$182,953

ACRES

LUMP SUM

BONDABLE

\$168,750

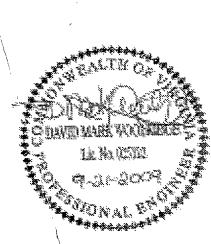
\$165,000

\$182,958

	<del></del>	LUIVIP SUIVI	\$102,958	\$182,958	\$182,95
EARTHWORK - 300,000 cy (includes staking, layout, and undercut)	1	LUMP SUM	\$859,947	\$859,947	\$859,94
			/	``	
CURB INLET DI-	22	EACH	\$4,000	\$88,000	\$88,00
GRATE INLET DI-	-7	EACH	\$3,500	\$24,500	\$24,50
AREA INLET DI-	3	EACH	\$4,000	\$12,000	\$12,00
MANHOLE MH-	10	EACH	\$3,500	\$35,000	\$35,00
HEADWALLS-	7	EACH	\$2,500	\$17,500	\$17,50
			Ψ2,000	\$17,500	\$17,500
18-IN. PIPE	1216				
24-IN. PIPE	<del> </del>	LIN. FT.	\$39	\$47,424	\$47,424
	623	LIN. FT.	\$49	\$30,527	\$30,52
30-IN. PIPE	997	LIN. FT.	\$63	\$62,811	\$62,81°
36-IN. PIPE	1658	LIN. FT.	\$79	\$130,982	\$130,98
42-IN. PIPE	84	LIN. FT.	\$85	\$7,140	\$7,140
48-IN. PIPE	1734	LIN. FT.	\$100	\$173,400	\$173,40
DOWNSPOUT COLLECTOR SYSTEM	1	LUMP SUM	\$45,000	\$45,000	\$45,000
PAVED DITCH	5,394	LIN. FT.	\$4	\$21,576	\$21,576
			,		- 421,010
CURB & GUTTER TYPE "A"	13,511	LIALET	\$12.50	\$160,000	<b>\$100.00</b>
	<del> </del>	LIN. FT.		\$168,888	\$168,88
CURB & GUTTER TYPE (OTHER)	498	LIN. FT.	\$16.00	\$7,968	\$7,968
SIDEWALK	992	LIN. FT.	\$9.00	\$8,928	\$8,928
STANDARD DUTY ASPHALT	45,171	S.Y.	\$20.00	\$903,420	\$903,42
HEAVY DUTY ASPHALT	14,487	S.Y.	\$26.00	\$376,662	\$376,66
STANDARD DUTY CONCRETE	120	S.Y.	\$36.00	\$4,320	\$4,320
HEAVY DUTY CONCRETE	- 4,483	C.Y.	\$40.00	\$179,320	\$179,32
		1		, ,	15,02
STRIPING, TRUCK ALIGNMENT	44,747	LIN. FT.	<b>\$3.50</b>	\$26.040	
FIRE LANE	1,931	<del> </del>	\$5.00	\$26,848	
	<del> </del>	LIN. FT.		\$9,655	
PEDESTRIAN CROSSING	10	EACH	\$1,250	\$12,500	
ACCESSIBLE SYMBOLS	25	EACH	\$150	\$3,750	
DIRECTIONAL ARROWS	45	EACH	\$75	\$3,375	) .
MISC. PAVEMENT MARKINGS (STOP BARS, YIELD, ETC.)	35	EACH	\$250	\$8,750	
DIRECTIONAL SIGNAGE	74	EACH	\$250	\$18,500	`
ARKING LOT LIGHTING	91	EACH	- <b>ຈ</b> ີບີ,ວົບບ	\$318,500	3.5 500
ART CORRALS	18	EACH	\$250	\$4,500	
OLLARDS	32	EACH	\$500	\$16,000	
HAIN LINK FENCING	1,715		\$21	<del> </del>	\$36,015
		LIN. FT.		\$36,015	7
BUIDE RAILS	1,415	LIN. FT.	\$24.50	\$34,668	017.440
ETAINING WALLS	436	S.F. FACE	\$40 	\$17,440	\$17,440
CREEN WALLS	1	LUMP SUM	\$15,000	\$15,000	\$15,000
2" WATER LINE	2,889	LIN. FT.	\$48.50	\$140,117	\$140,117
WATER LINE	1,509	LIN. FT.	\$35	\$52,815	\$52,815
WATERLINE	126	LIN. FT.	\$30	\$3,780	\$3,780
WATER LINE	147	LIN. FT.	\$16	\$2,352	\$2,352
RE HYDRANT ASSEMBLIES	7	EACH	\$3,250	\$22,750	\$22,750
2-IN. GATE VALVES, W/VAULT, FRAME & COVER	3	EACH	\$1,750	\$5,250	\$5,250
IN. GATE VALVES, W/VAULT, FRAME & COVER	6	EACH	\$1,000	\$6,000	\$6,000
IN. GATE VALVES, W/VAULT, FRAME & COVER	2	EACH	\$800	\$1,600	
IN. GATE VALVES, W/VAULT, FRAME & COVER	1	EACH			\$1,600
ACKFLOW PREVENTER, VAULT, INSTALLATION	1		\$650	\$650	\$650
	·	EACH	\$20,000	\$20,000	\$20,000
EES	5	EACH	\$225	\$1,125	\$1,125
BOWS, REDUCERS	17	EACH	\$150	\$2,550	\$2,550
HRUST BLOCKS	19	EACH	\$300	\$5,700	\$5,700
ESTING, DISINFECTION	1	EACH	\$10,000	\$10,000	\$10,000
SANITARY SEWER	580	LIN. FT.	\$32.50	\$18,850	\$18,850
SANITARY SEWER	1,245	LIN. FT.	\$37.50	\$46,688	\$46,688
LEANOUTS	8	LIN. FT.	\$650		
REASE TRAPS	1	LIN. FT.		\$5,200	\$5,200
TANDARD MANHOLE W/FRAME & COVER	7		\$2,500	\$2,500	\$2,500
AMPLING MANHOLE/PORT		EACH	\$4,000	\$28,000	\$28,000
Januario Lario Citi	1	EACH	\$30,000	\$30,000	\$30,000
ANDSCAPING					
- DOCAPING	1	LUMP SUM	\$427,408	\$427,408	\$427,408
FORMWATER MANAGEMENT TOTAL (SEE SHEET D-4C)					\$46,300
					<del> </del>
Table Rd Adjustment					\$167,635
	Į.	· -			\$4,988,611
Table Rd Adjustment JB TOTAL		1	r		\$1,247,153
Table Rd Adjustment  JB TOTAL  SW CONTINGENCY					
Table Rd Adjustment  JB TOTAL  5% CONTINGENCY  TE BOND TOTAL					\$6,235,764
Table Rd Adjustment  JB TOTAL  5% CONTINGENCY					\$6,235,764 \$263,288
Table Rd Adjustment  JB TOTAL  5% CONTINGENCY  TE BOND TOTAL					<del> </del>
Table Rd Adjustment  JB TOTAL  5% CONTINGENCY  TE BOND TOTAL  ROSION BOND TOTAL (SEE SHEET D-4C)  STIMATED TOTAL					
Table Rd Adjustment JB TOTAL  W CONTINGENCY TE BOND TOTAL  ROSION BOND TOTAL (SEE SHEET D-4C)				1	<del> </del>

DATE: 10/27/09 SHEET 1 OF 160





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Ro

CO

5,156,246

1,289,062

6,445,308 268,788