GENERAL NOTES

PRE-CONSTRUCTION MEETING AND CONSTRUCTION COMMENCEMENT

- 1. 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 must be available 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
- 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/or other equipment prior to entering public streets or rights of ways. It is the contractors responsibility to insure that the streets are in a clean, mud and dust free condition at all times.
- 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 TRANSPORTATION:

- 24. Plan approval by Roanoke County does not guarantee issuance of any permits by the Virginia Department of Transportation.
- 25. A permit must be obtained from the Virginia Department of Transportation, Salem Residency Office prior to construction in the highway right-of-way.
- 26. The preliminary pavement designs should be based on a predicted sub-grade CDR value of 7.0 and with a Resiliency Factor (RF) of 2.0 as shown in Appendix I of the 2000 Virginia Department of Transportation Pavement Design Guide for Subdivision and Secondary Roads. The sub-grade soil is to be 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
- 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.

depth, template, and compaction before the surface is applied.

- 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. This sheet may not be modified.



County of Roanoke, VA

DEMOLITION

SODDED SWALE

NAME OF DEVELOPMENT	GREEN RIDO	GREEN RIDGE COURT		I,OWNER/DEVELOPER, AM AWARE OF THE SITE DESIGN REQUIREMENTS IMPOSED BY THIS SITE DEVELOPMENT PLAN AND OTHER APPLICABLE ROANOKE COUNTY CODES.
MAGISTERIAL DISTRICT(S)	Catawba			I HEREBY CERTIFY THAT I AGREE TO COMPLY WITH THESE REQUIREMENTS AND THE THIRTY (30) POINTS SHOWN ON THIS COVER SHEET UNLESS MODIFIED IN ACCORDANCE WITH LOCAL LAW.
OWNER (name, address, telephone)	FOREST EDGE DEVELOPMENT 112 KIRK AVENUE ROANOKE, VA 24011	NT COMPANY ATTN: DANNY DEWITT, ([540] 342–227	72
DEVELOPER (name, address, telephone)		RAL CONTRACTORS, INC. ATTN: DANNY DEWITT, ([540) 342–227	72 ·
ENGINEER, ARCHITECT OR SURVEYOR	R (name, address, telephone)	BALZER AND ASSOCIATES 1208 CORPORATE CIRCLI ROANOKE, VA 24018 (\$	É	30
TAX MAP NO(S)	036.08-02-02.00-0000,	036.08-02-03.00-000	00 & 036.08	-02-04.00-0000

WATER NOTES

All water facilities shall be installed according to the Western Virginia Water Authority Design and Construction Standards/

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

All existing 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.

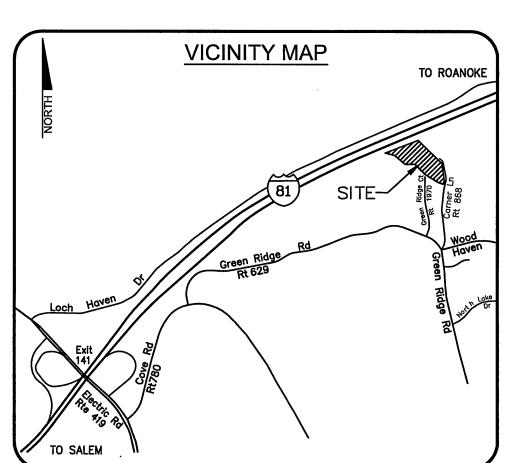
Lines shall be staked prior to construction.

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.

Western Virginia Water Authority

Availability letter number: _____ 09-241(A)



LECEND

<u>L</u>	<u>EGEND</u>
operty Line	
ght-of-way	
enterline	
nimum Building Line	— — — — — MBL — — — — —
kisting Storm Sewer	==========
sisting Sanitary Sewer	— 8" ss — — — —
xisting Water Main	
sisting Contour	— — — — — — — — — — — — — — — — — — —
oposed Contour	<u> </u>
oposed Drainage Divide	
oposed Limits of Clearing	
oposed Storm Sewer	Flow Direction
oposed Sanitary Sewer	8" SS
consord Water Main	

SEWER NOTES

All sanitary sewer facilities shall be installed according to the Western Virginia Water Authority Design and Construction Standards.

Contractor shall be responsible for locating and uncovering all manholes after paving. Manhole tops shall be adjusted to grade if necessary.

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.

Lines shall be staked prior to construction.

Underground utilities installed on private property or in private utility easements and Virginia Uniform Statewide Building Code. Design and installation requirements issued 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.

	SHEET INDEX
C-1	COVER SHEET
C-1A	PLAT COVER SHEET
C-1B	PLAT
C-1C	PLAT
C-2	DIMENSIONAL PLAN
C-3	GRADING PLAN
C-4	CONSTRUCTION NOTES
C-5	ROAD & UTILITY PROFILES
C-6	PHASE 1 E&SC PLAN
C-7	PHASE 2 E&SC PLAN
C-8	E&SC NOTES & CULVERT DETAILS
C-9	EROSION & SEDIMENT CONTROL DETAILS
C-10	EROSION & SEDIMENT CONTROL DETAILS
C-11	W.V.W.A. DETAILS
C-12	W.V.W.A. DETAILS
S1.1	CULVERT DETAILS

Ву: .	BALZER	AND	ASSOCIATES	, INC.		
			referenced to the e referenced to t			

Benchmark Information: P.K. Nail set in existing concrete gutter pan, along Green
Ridge Court, Elev.=1132.36; "EX" Manhole rim — Elev.= 1134.80

(Latest Edition).

A minimum cover of three (3) feet is required over proposed lines.

All existing utilities may not be shown in their exact location.

PRIVATE UTILITIES

building related storm drains shall be designed and installed per the current edition of the by the Western Virginia Water Authority that meet or exceed the USBC requirements are

	SHEET INDEX
C-1	COVER SHEET
C-1A	PLAT COVER SHEET
C-1B	PLAT
C-1C	PLAT
C-2	DIMENSIONAL PLAN
C-3	GRADING PLAN
C-4	CONSTRUCTION NOTES
C-5	ROAD & UTILITY PROFILES
C-6	PHASE 1 E&SC PLAN
C-7	PHASE 2 E&SC PLAN
C-8	E&SC NOTES & CULVERT DETAILS
C-9	EROSION & SEDIMENT CONTROL DETAILS
C-10	EROSION & SEDIMENT CONTROL DETAILS
C-11	W.V.W.A. DETAILS
C-12	W.V.W.A. DETAILS
S1.1	CULVERT DETAILS

:	BALZER AND ASSOCIATES, INC.
	tical elevations are referenced to the National Geodetic Vertical Datum of 1988. izontal distances are referenced to the North American Datum of 1983.

Source of topographic mapping is: BALZER AND ASSOCIATES, INC. dated: 2007

to be accurate and correct.

\$ 1,000.00 CLEARING AND GRUBBING 1.5 ACRES 4000 \$ 5.00 **GRADING - ROADWAYS ONLY** C.Y. LUMP SUM

		1		
CURB INLET DI-3A SERIES	1	EACH	\$ 1,000.00	\$ 1,000.00
CURB INLET DI-3B SERIES	3	EACH	\$ 2,000.00	\$ 6,000.00
CURB INLET DI-3C SERIES	2	EACH	\$ 2,000.00	\$ 4,000.00
MANHOLE MH-2 SERIES	4	EACH	\$ 1,500.00	\$ 6,000.00
MANHOLE MH-		EACH		
6 -IN. HDPE PIPE	249	LIN. FT.	\$ 10.00	\$ 2,490.00
8 -IN. HDPE PIPE	338	LIN. FT.	\$ 12.00	\$ 4,056.00
15 -IN. HDPE PIPE	587	LIN. FT.	\$ 20.00	 \$ 11,740.00
18 -IN. HDPE PIPE	138	LIN. FT.	\$ 25.00	\$ 3,450.00
HDPE CLEANOUTS	7	EACH	\$ 100.00	\$ 700.00
60-IN. C.M. CULVERT	64	LIN. FT.	\$ 100.00	\$ 6,400.00

QUANTITY & COST ESTIMATE

UNIT

COST

BONDABLE

\$ 1,500.00

\$ 20,000.00

\$ 1,950.00

\$ 2,000.0

\$ 2,500.0

\$ 22,625.00

\$ 1,500.0

\$ 2,000.00

\$ 1,000.0

\$ 1,000.0

\$ 1,500.00

\$ 2,400.0

\$ 9,000.00

\$ 1,600.00

\$ 21,525.00

\$ 8,400.00

\$ 8,000.00

\$ 2,500.00

\$ 2,500.00

\$ 5,000.0

\$ 5,925.00

\$ 1,000.0

\$ 1,500.0

\$ 2,000.00

\$ 272,172.00

\$ 68,043,00

\$ 340,215.00

\$ 1,000.00

\$ 200.00

\$ 400.00

\$ 2,000.00

\$ 2,500.00

15.00

Wiray

\$ 500.00

LIN. FT. | \$ 35.00

LUMP SUM \$ 2,500.00

LUMP SUM \$ 5,000.00

LUMP SUM \$ 1,500.00

LUMP SUM \$ 2,000.00

EACH

EACH

EACH

LUMP SUM

LIN. FT.

\$5,000.00 | VDOT BOND

UNIT PRICE

\$ 6,400.00 -IN. C.M. CULVERT LIN. FT. BOX CULVERT LUMP SUM

PAVED DITCH LIN, FT. RIPRAP - CLASS I \$ 100.00 \$ 700.0 C.Y. RIPRAP - CLASS II 16 C.Y. \$ 150.00 \$ 2,400.00

60 -IN. CONCRETE ENDWALL 'SPECIAL DESIGN" 2 EACH \$15,000.00 \$ 30,000.00 18 -IN. END SECTION ES-1 \$ 500.00 \$ 500.00

S.Y.

HEADER CURB & GUTTER CG LIN. FT. \$ 20,215.00 CURB & GUTTER CG-6 1123 LIN. FT. | \$ 18.00 \$ 9,000.00 VDOT STD. CG-9D ENTRANCES 18 EACH \$ 500.00 STD. PAVEMENT SECTION 2216 S.Y. \$ 15.00 \$ 33,240.00 DRIVEWAY EXTENSIONS 113 s.y. **\$ 12.00** \$ 1,356.00

9

8

615

395

I HEREBY CERTIFY THAT THE FOREGOING ESTIMATE REFLECTS THE CURRENT IMPROVEMENT COSTS OF THIS PROJECT.

\$ 5.00 STONE PAVERS SF SURFACE TREATMENT S.Y. -IN. BIT. CONC.: TYPE B-S.Y. -IN. BIT. CONC.: TYPE S-S.Y. -IN. BASE MATERIAL C.Y. -IN. SUBBASE MATERIAL C.Y.

\$ 2,000.00 6 -IN. WET TAP EACH 8 -IN. DRY CONNECTION \$ 2,500.00 EACH 8 -IN. WATERLINE 905 LIN. FT. \$ 25.00 AIR RELEASE VALVE EACH \$ 1,500.00 \$ 2,000.00 FIRE HYDRANT ASSEMBLY EACH **BLOW OFF ASSEMBLY** \$ 1,000.00 6 -IN. GATE VALVE, W/ VAULT, FRAME & COVER \$ 1,000.00 EACH 8 -IN, GATE VALVE, W/ VAULT, FRAME & COVER EACH \$ 1,500.00 SINGLE WATER METTER SETTERS W/ PRV \$ 600.00

6 -IN. RESIDENTIAL DOUBLE LATERALS

S.S. RESIDENTIAL PUMP & FORCEMAIN

PRIVATE PIPE SYSTEM (LOTS 1 THRU 9)

AS-BUILT PLANS (STORM SEWER SYSTEMS)

AS-BUILT PLANS (STORMWATER MANAGEMENT)

CONVERSION OF SEDIMENT TRAP TO SWM FACILITY

ANDSCAPING

SWM FENCING

DOUBLE GATE

SUB-TOTAL

25% CONTINGENCY

ESTIMATED TOTAL

STANDARD MANHOLE W/ FRAME & COVER

DOUBLE WATER METTER SETTERS W/ PRV MAJOR FITTINGS 8 -IN. SANITARY SEWERLINE 4 -IN. RESIDENTIAL LATERALS

SURVEY INFORMATION

Horizontal and vertical control surveys were performed in year:_

Boundary was performed by: BALZER AND ASSOCIATES, INC. dated: 2007

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

REFLECTING TOMORROW www.balzer.cc PLANNERS • ARCHITECTS

1208 Corporate Circle Roanoke, Virginia 24018

Phone: 540/772-9580

FAX: 540/772-8050

ENGINEERS • SURVEYORS

15871 City View Drive Suite 200 Midlothian, Virginia 23113 Phone: 804/794-0571

880 Technology Park Drive Suite 200 Glen Allen, Virginia 23059 Phone: 804/553-0132 FAX: 804/553-0133

FAX: 804/794-2635

448 Peppers Ferry Road Christiansburg, Virginia 24073 Phone: 540/381-4290 FAX: 540/381-4291

Suite 401 FAX: 540/248-3221 Pprov Ridge

1561 Commerce Road Verona, Virginia 24482 Phone: 540/248-3220

S

DRAWN BY: AJS DESIGNED BY: AJS CHECKED BY: SMH 10/16/2008

REVISIONS: 1st - 07/23/2009 per County/VDOT Reviews 2nd - 09/08/2009 per County/VDOT Reviews

3rd - 10/21/2009

As-Built 06/11/2010

I AM CERTIFIED BY THE STATE OF VIRGINIA AS A "RESPONSIBLE LAND DISTURBER." I SHALL BE RESPONSIBLE FOR THE IMPLEMENTATION OF TEROSION AND SEDIMENT CONTROL PLAN AS SIGNATURE: Jakevill PRINTED NAME: TE ALACSEZL CERTIFICATE DATE: 12532 TELEPHONE NUMBER: SYO 342 2272 112 WKIKKDUE fank ra

REGISTERED LAND DISTURBER

SHEET No.:

JOB No.: R0700118.0