### GENERAL NOTES

- ABOVE AND VERIFY BEFORE CONSTRUCTION.
- 2. ALL GRADE STAKES DESTROYED BY THE CONTRACTOR, SHALL BE REPLACED AT HIS EXPENSE.
- 3. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PRESERVE THE EXISTING RIGHT OF WAY STONES. ANY MARKERS DAMAGED SHALL BE REPLACED AT HIS EXPENSE.
- 4. CLEARING AND GRUBBING SHALL BE COMPLETE WITHIN THE RIGHT OF WAYS AS INDICATED ON LAYOUT PLAN.
- 5. ALL DRAINAGE EASEMENTS TO BE CLEARED, GRUBBED, AND GRADED TO CONTAIN WATER FROM PIPE CULVERTS AND TO EXTEND TO A NATURAL WATERCOURSE.
- 6. EXCESS EXCAVATION TO BE DISPOSED OF AS DIRECTED BY THE OWNER.
- 7. ALL FILLETS AT INTERSECTIONS TO HAVE 35' RADII UNLESS OTHERWISE NOTED.
- 8. GRADE LINES ON PROFILES DENOTE FINISHED GRADE OF CENTER LINE OF ROAD.
- ▲ 9. BASE MUST BE APPROVED BY VDOT FOR DEPTH, TEMPLATE, AND COMPACTION BEFORE SURFACE TREATMENT IS APPLIED.
- 10. PERMIT TO TIE INTO EXISTING ROADS, SHALL BE OBTAINED FROM RESIDENT ENGINEER PRIOR TO ROAD CONSTRUCTION.
- 11. ALL UTILITIES TO BE IN PLACE PRIOR TO LAYING BASE MATERIAL.

#### SEWER AND WATER NOTES

- ALL MATERIALS FOR SEWER AND WATER SYSTEMS SHOWN SHALL BE SUPPLIED AND INSTALLED IN ACCORDANCE WITH THE LATEST APPLICABLE SPECIFICATION OF PRINCE GEORGE COUNTY.
- BE RESPONSIBLE FOR NOTIFICATION OF APPROPRIATE COUNTY OFFICIALS 48 HOURS PRIOR TO START OF WORK.
- . MINIMUM CLEAR COVER FOR ALL WATER PIPE SHALL BE 3.5 FEET.
- . THE UTILITY OWNER IS RESPONSIBLE FOR OBTAINING ANY HIGHWAY PERMITS AND FOR SENDING A COPY TO THE COUNTY PRIOR TO START OF CONSTRUCTION.
- . ANY LOT WITH LESS THAN 50 FEET OF FRONTAGE SHALL HAVE FRONT CORNERS OR END OF 6' CONNECTION STAKED PRIOR TO CONSTRUCTION OF A 6' SEWER SERVICE.
- SEWER PIPE SHALL BE PVC. ALL SEWER JOINTS SHALL BE CLASS A. BEDDING SHALL BE CLASS B MINIMUM; BEDDING SHALL BE AS SHOWN IN DETAIL ON SHEET 2.
- . SEWER GRADES ARE BASED ON ARIAL PHOTOGRAPHY BY LOUISA AERIAL SURVEYS USING NAVD88 DATUM
- L CONTRACTOR SHALL INSTALL 6" SEWER SERVICE CONNECTIONS TO ALL LOTS (R/W LINE OR EDGE OF EASEMENT)
- 9. ALL WATER SERVICES ARE TO BE PVC ROLL PLASTIC, CTS.
- O. THE CONTRACTOR WILL INSTALL ALL WATER CONNECTIONS AND METER BOXES.
- FIRE HYDRANT PUMPER CONNECTIONS SHALL FACE IN THE DIRECTION OF THE ARROW.
- THE EXACT MANHOLE TOP SHALL BE ON THE SAME GRADE AS THE FINISHED ROAD GRADE AND AS NOTED ON SEWER CUT SHEETS. THE USE OF HEIGHT ADJUSTMENT RINGS IS PROHIBITED
- . BACKFILL FOR ALL UTILITIES WITHIN PROPOSED SUBDIVISION STREETS SHALL BE PLACED GENERALLY IN ACCORDANCE WITH PRINCE GEORGE COUNTY SPECIFICATIONS, AND THE FOLLOWING CRITERIA: (1.) NO TRENCH SHALL BE BACKFILLED UNTIL AUTHORIZED BY THE COUNTY. MATERIALS USED FOR BACKFILL FROM THE BOTTOM OF THE TRENCH TO 12" (TWELVE INCHES) ABOVE THE PIPE SHALL BE SELECT MATERIAL, FREE FROM FROST, LARGE ACCEPTABLE TO THE ROAD ENGINEER, IF THE MATERIAL IS TAKEN FROM THE DITCH IS NOT SUITABLE FOR BACKFILLING IT SHALL BE REMOVED AND ACCEPTABLE MATERIAL USED FOR BACKFILLING THE TRENCH.
- 4. THE ENGINEER WILL CERTIFY THAT THE ROADS ARE WITHIN 6" OF SUBGRADE BEFORE WATERLINE CONSTRUCTION CAN BEGIN.
- 5. FOR SEWER AND WATER INSTALLATION WITHIN EXISTING VOOT R/W; UTILITY CONTRACTORS SHALL NOTIFY VOOT 48 HOURS IN ADVANCE WHEN INSTALLATION BEGINS SO THAT DENSITY CAN BE TESTED (95% @ OPTIMUM MOISTURE +20%) IS DIFFERENT FROM THAT SHOWN ON THE PLAN, OR IF: THERE APPEARS TO BE A CONFLICT, AND UPON DISCOVERY OF ANY UTILITY NOT SHOWN ON THE PLAN. TO MISS THE UTILITY CALL "MISS UTILITY" OF CENTRAL VIRGINIA: 1-800-552-7001 (TOLL FREE).
- THE INSTALLATION OF BACK FLOW DEVICE IS REQUIRED IN ALL HOUSES WHERE THE FINISHED FLOOR ELEVATION IS LOWER THAN UPGRADE MANHOLES. THIS DEVICE WILL BE INSPECTED BY THE COUNTY BUILDING INSPECTOR.
- 18. INDIVIDUAL WATER SERVICES TO BE 3/4".
- 19. ALL WATERLINE VALVES MUST BE LOCATED ON THE TEE OR CROSS WHEN APPLICABLE.
- 20. ALL MANHOLES IN UTILITY EASEMENTS ARE TO HAVE THE CONCRETE SECTION EXTENDED ONE FOOT ABOVE THE GROUND. . A SMOOTH TRANSITION OF DROP MANHOLE MUST BE PROVIDED FOR EACH LATERAL OR SANITARY SEWER ENTERING
- 22. ALL FIRE HYDRANTS SHALL BE O.S.H.A. RED IN COLOR.

24. FIRE HYDRANTS ARE TO BE MUELLER TYPE BE INSTALLED USING TEES.

- 23. METER BOXES PROVIDED SHALL BE CAST IRON 12"x18"x24" HIGH WITH CAST IRON LIDS. THE METER ASSEMBLIES ARE TO BE SUPPLIED WITH NEPTUNE PROREAD ENCODERS AND R9001 PIT MIU (RF) ATTACHED TO THE LID. METERS ARE TO BE COMPATIBLE WITH THE PROPOSED SYSTEM. A WAND TYPE VISUAL READER COMPATIBLE WITH THE PROREAD SYSTEM WILL BE SUPPLIED TO THE UTILITY DEPARTMENT WITH THE WATER METERS.
- 25. ALL SANITARY LATERALS THAT ARE LOCATED OUTSIDE OF THE RIGHT OF WAY ARE TO HAVE THE CLEANOUT INSTALLED TO THE EDGE OF THE EASEMENT. A CARSONITE MARKER SHALL ALSO BE INSTALLED TO INDICATE
- 26. ALL HYDRANTS SHALL BE EQUIPPED WITH A MUELLER HYDRANT DEFENDER, SECURING THE OPERATING NUT AND IT SHALL BE SUPPLIED WITH 4 CODED KEYS THAT WILL WORK WITH THEALL NOZZLE CAPS. THE CODED LOCK/KEY COMBINATION. KEYS SHALL BE SENT DIRECTLY TO THE COUNTY ENGINEER AT PRINCE GEORGE COUNTY 27. ALL HYDRANTS AND BENDS SHALL BE EQUIPPED WITH MEGA LUGS, KICKERS AND THRUST BLOCKS.
- 28. PRESSURE REDUCING VALVES SHALL BE USED ON LOTS WHERE THE STATIC PRESSURE IN THE SYSTEM EXCEEDS 80 PSI. FOR SECTION TWO, LOTS 17-29 AND 35-44 WILL NEED PRESSURE REDUCING VALVES.
- 29. CLEANOUTS SHALL BE INSTALLED ON ALL SANITARY LATERALS IN ACCORDANCE WITH PRINCE GEORGE COUNTY
- SPECIFICATIONS. THESE CLEANOUTS SHOULD BE INSTALLED AT THE EDGE OF THE RIGHT OF WAY. 30. 2" AND 3" FORCE MAIN PIPING TO BE HDPE SDR II PRESSURE CLASS 160 WITH FUSED CONNECTIONS.
- SANITARY SEWER SERVICE FOR LOTS 14-15, 26-37, AND 42-48 SHALL BE PROVIDED BY CONNECTIONS INTO THE EXISTING 6" FORCE MAIN
- 32. LOTS 4-9 AND 14-48 ARE TO HAVE INDIVIDUAL GRINDER PUMPS FOR EACH HOUSE AND A FORCE MAIN HOUSE
- CONNECTION PROVIDED AS DETAILED ON SHEET C1.2.

40. ALL WATER LINE VALVES LOCATED OUTSIDE THE PAVEMENT NEED TO BE ENCLOSED IN A 12"X12"X6" CONCRETE

- 33. UTILITY INSPECTOR SHALL BE CONTACTED BEFORE INDIVIDUAL SERVICE CONNECTIONS ARE COVERED.
- 34. ALL MANHOLES WITHIN 1,000 FT OF A FORCE MAIN DISCHARGE SHALL BE COATED AS MANUFACTURED BY RAVEN. 35. ALL INDIVIDUAL WATER SERVICES AND SEWER CONNECTIONS SHALL BE MADE USING DOUBLE BANDED EPOXY COATED
- 6. A 'W' AND 'S' SHALL BE STAMPED INTO THE CURB WHILE THE CONCRETE IS STILL WET. THESE MARKS SHALL INDICATE THE ACTUAL LOCATION OF THE WATER AND SEWER CONNECTIONS FOR EACH LOT.
- . ALL MANHOLES SHALL BE SEALED AT THE JOINTS WITH AN EXTERNAL RUBBER SLEEVE SIMILAR TO INFI—SHIELD SEAL WRAP AS MANUFACTURED BY SEALING SYSTEMS, INC. THE SEAL SHALL BE MADE OF EPDM (ETHYLENE PROPYLENE DIENE MONOMER) RUBBER WITH A MINIMUM THICKNESS OF 65 MILS. EACH UNIT SHALL HAVE A 2—INCH WIDE MASTIC STRIP ON
- WITH A MINIMUM THICKNESS OF 125 MILS. 38. THE BOXES FOR THE SEWER CONNECTIONS MUST BE MARKED AS SEWER CONNECTIONS RATHER THAN WATER METER. 39. ALL INDIVIDUAL GRINDER PUMPS SHALL BE EONE PUMPS OF LIKE TYPE AND HORSEPOWER. PUMPS MUST BE CAPABLE OF A MINIMUM OF LIGPM AT 150' OF HEAD.

# BAILEY'S RIDGE SEWERLINE

## BLAND DISTRICT PRINCE GEORGE COUNTY, VA

P.G. HOUSING, L.P.

Owner & Developer

JULY 31, 2007

### VIRGINIA DEPARTMENT OF TRANSPORTATION

PETERSBURG RESIDENCY SUBDIVISION AND SITE CONSTRUCTION PLAN GENERAL NOTES

- ALL MATERIALS AND CONSTRUCTION WITHIN THE PUBLIC RIGHT OF WAY SHALL BE IN ACCORDANCE WITH CURRENT VIRGINIA
- DEPARTMENT OF TRANSPORTATION'S SPECIFICATIONS AND STANDARDS. LAND USE PERMITS (LUP-A) MUST BE OBTAINED FROM THE VIRGINIA DEPARTMENT OF TRANSPORTATION PRIOR TO BEGINNING ANY
- CONSTRUCTION WITHIN THE EXISTING STATE MAINTAINED RIGHT OF WAY (INCLUDING ACCESS).
- VDOT IS TO RECEIVE WRITTEN NOTIFICATION 48 HOURS PRIOR TO COMMENCING WITH INITIAL CONSTRUCTION ACTIVITIES. . PRIOR TO ANY CONSTRUCTION, THE CONTRACTOR SHALL CONSULT THE ENGINEER AND VERIFY THE APPROVAL OF THE PLANS BY A FEDERAL STATE AND LOCAL AGENCIES.
- PRELIMINARY DESIGN OF THE PAVEMENT STRUCTURE FOR ALL SUBDIVISION STREETS SHALL BE IN ACCORDANCE WITH THE CURRENT EDITION OF THE PAVEMENT DESIGN GUIDE FOR SUBDIVISION AND SECONDARY ROADS IN VIRGINIA. THE COMPLETED DESIGN WORKSHEET APPENDIX IV SHALL BE INCLUDED WITH THE INITIAL PLAN SUBMITTAL FOR EACH PROPOSED PAVEMENT SECTION
- UTILIZING THE PREDICTED SOIL SUPPORT VALUE SHOWN IN APPENDIX I OF THE PAVEMENT DESIGN GUIDE. THE CONTRACTOR SHALL VERIFY THE ELEVATIONS OF ALL POINTS OF CONNECTION OR PROPOSED WORK TO EXISTING CURBS. SANITARY LINES, WATER LINES, ETC., PRIOR TO CONSTRUCTION.
- UPON DISCOVERY OF SOILS THAT ARE UNSUITABLE FOR FOUNDATIONS, SUB GRADES, OR OTHER ROADWAY CONSTRUCTION PURPOSES, THE CONTRACTOR SHALL IMMEDIATELY CONTACT A GEOTECHNICAL ENGINEER AND VDOT. THESE AREAS SHALL BE EXCAVATED BELOW PLAN GRADE AS DIRECTED BY THE GEOTECHNICAL ENGINEER, BACKFILLED WITH SUITABLE MATERIAL AND COMPACTED IN ACCORDANCE WITH CURRENT VDOT SPECIFICATIONS.
- ALL STORM SEWER PIPES SHALL BE REINFORCED TONGUE AND GROOVE CONCRETE PIPE IN ACCORDANCE WITH ASTM-C-76. PIPE WITHIN THE RIGHT OF WAY SHALL BE A MINIMUM CL-III OR GREATER IN ACCORDANCE WITH CURRENT VDOT STANDARDS AND SPECIFICATIONS
- 10. IF PRE-CAST UNITS ARE TO BE USED, VDOT SHALL BE NOTIFIED AND THE MANUFACTURER SHALL SUBMIT DRAWING DETAILS FOR REVIEW. CERTIFICATION AND VDOT STAMP WILL BE REQUIRED ON ALL UNITS. . ALL CONCRETE SHALL BE CLASS A3-AE (AIR ENTRAINED 3,000 PSI).
- . ALL ENTRANCES ARE TO BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH CURRENT VIOT STANDARDS. RESIDENTIAL LOT ACCESS SHALL BE PROVIDED PER THE FOLLOWING CRITERIA: (a) VDOT ROLLTOP ENTRANCES SHALL BE INSTALLED WHEN LOCATED ALONG ROLLTOP CURB AND GUTTER. THE CONTRACTOR

ALL STORM SEWER DESIGN AND CONSTRUCTION TO BE IN ACCORDANCE WITH THE CURRENT VOOT HM & D.

- IS TO LOCATE THE ENTRANCE FOR INSPECTION FOR INSPECTION BY VDOT 48 HOURS PRIOR TO ENTRANCE INSTALLATION. (b) VPOT STANDARD CG-9D ENTRANCES SHALL BE INSTALLED WHEN LOCATED ALONG CG-6 CURB AND GUITER. THE SAW-CUTTING REMOVAL OF THE STANDING CURB IS UNACCEPTABLE WHEN INSTALLING AN ENTRANCE ON EXISTING CURB AND GUTTER.
- CONTACT VDOT FOR INSPECTION 48 HOURS PRIOR TO ENTRANCE INSTALLATION. 3. THE DEVELOPER IS RESPONSIBLE FOR FURNISHING AND INSTALLING ALL TRAFFIC CONTROL SIGNS WITHIN THE DEVELOPMENT AS DIRECTED BY VDOT.
- 4. DESIGN CHANGES SPECIFYING MATERIALS CHANGES AND/OR FIELD CHANGES FROM THE APPROVED PLANS SHALL BE RESUBMITTED " VDOT PRIOR TO PROCEEDING WITH THE WORK. A LETTER OF EXPLANATION SHALL ACCOMPANY THE REVISED PLANS AND/OR DRAINAGE COMPUTATIONS, AND SHALL BE SUBMITTED, TO VDOT FOR REVIEW AND APPROVAL BY THE RESIDENT ENGINEER.
- 15. CONTRACTOR SHALL VERIFY LOCATION AND ELEVATION OF ALL UNDERGROUND UTILITIES SHOWN ON PLANS IN AREAS OF CONSTRUCTION PRIOR TO STARTING WORK. CONTACT ENGINEER IMMEDIATELY IF LOCATION OR ELEVATION IS DIFFERENT FROM THAT SHOWN ON PLAN. IF THERE APPEARS TO BE A CONFLICT, AND/OR UPON DISCOVERY OF ANY UTILITY NOT SHOWN ON THIS PLAN, CALL MISS UTILITY OF CENTRAL VIRGINIA AT 1-800-552-7001. THE DEVELOPER SHALL BE RESPONSIBLE FOR THE RELOCATION OF ANY UTILITY WITHIN EXISTING AND/OR PROPOSED RIGHT OF WAY REQUIRED BY THE DEVELOPMENT.

- 16. ALL STREETLIGHTS SHALL BE LOCATED A MINIMUM OF 9.5' FROM THE EDGE OF PAVEMENT ON CURB AND GUTTER STREETS AND/OR LOCATED A MINIMUM OF 5.5' BEHIND THE DITCH LINE ON OPEN DITCH STREETS

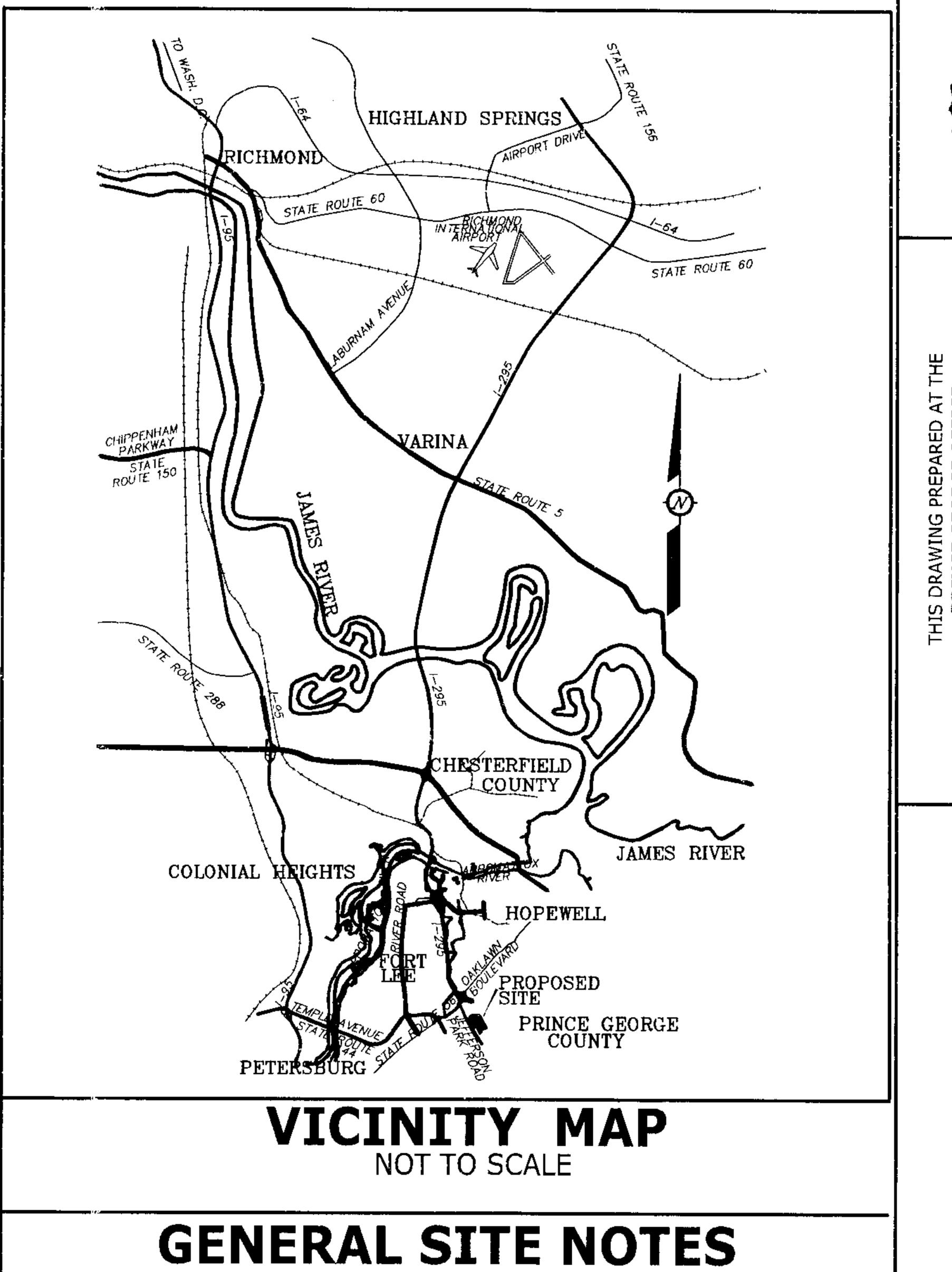
- PLACEMENT OF AGGREGATE BASE COURSE. 19. ALL ROADSIDE DITCHES SHOWN AS PAVED ON PLANS ARE TO BE PAVED IN ACCORDANCE WITH THE STANDARD TYPICAL SECTION AS
- SHOWN ON THE PLANS. GENERALLY, ALL DITCHES WITH SLOPES EXCEEDING 5% OR LESS THAN 0.75% SHALL BE PAVED UNLESS OTHERWISE DIRECTED BY THE RESIDENT ENGINEER.
- 20. VDOT APPROVAL OF THESE PLANS WILL EXPIRE THREE (3) YEARS FROM THE DATE OF APPROVAL

TO BE PERFORMED AT EACH INTERSECTION WITH AN EXISTING ROAD AND EVERY 500'.

- . VDOT SHAIL HAVE PERFORMED THE REQUIRED FIELD INSPECTION (PROOF ROLL) PRIOR TO PLACEMENT OF THE AGGREGATE BASE CONTACT VDOT FOR SUBGRADE INSPECTION 48 HOURS PRIOR TO SCHEDULING PLACEMENT OF AGGREGATE BASE
- 27. THE SCHEDULING OF AGGREGATE BASE INSTALLATION AND SUBSEQUENT PAVING ACTIVITIES SHALL ACCOMMODATE FORECAST WEATHER CONDITIONS PER SECTION 315 OF THE ROAD AND BRIDGE SPECIFICATIONS. 23. VDOT SHALL HAVE APPROVED THE AGGREGATE BASE COURSE(S) FOR DEPTH, TEMPLATE AND PERFORMED THE REQUIRED FIELD INSPECTION (PROOF RCLL) PRIOR TO PLACEMENT OF ANY SURFACE COURSE(S). CONTACT VDOT FOR INSPECTION OF THE AGGREGATE
- BASE COURSE(S) 48 HOURS PRIOR TO APPLICATION OF THE SURFACE COURSE(S). . AN ACTUAL COPY OF THE COMPLETE CBR REPORT, INCLUDING THE CBR TEST LOCATIONS, SHALL BE SUBMITTED TO VDOT IN CONJUNCTION WITH FINAL PAVEMENT DESIGNS. ALL PAVEMENT DESIGN RECOMMENDATIONS SHALL BE PERFORMED IN ACCORDANCE WITH THE CURRENT EDITION OF THE PAVEMENT DESIGN GUIDE FOR SUBDIVISION AND SECONDARY ROADS IN VIRGINIA. CBR TESTS SHALL BE PERFORMED / ARE TO BE PERFORMED INCLUDING ONE AT EACH INTERSECTION WITH AN EXISTING ROAD AND FOR STREETS LONGER THEN 500' A TEST IS
- A GEOTECHNICAL ENGINEER IS TO ASCERTAIN CAUSE AND CERTIFY RECOMMENDED METHOD OF REPAIR FOR ALL PAVEMENT STRUCTURAL FAILURES PRIOR TO STATE ACCEPTANCE. 26 ALL VEGETATION AND ORGANIC MATERIAL IS TO BE REMOVED FROM THE RIGHT OF WAY LIMITS PRIOR TO CONDITIONING OF THE
- 27. CERTIFICATION AND SOURCE OF MATERIALS SHALL BE SUBMITTED TO VDOT FOR ALL MATERIALS AND BE IN ACCORDANCE WITH THE
- ROAD AND BRIDGE SPECIFICATIONS AND ROAD AND BRIDGE STANDARDS.
- 28. THE NECESSITY AND LOCATIONS FOR ADDITIONAL VOOT STANDARD UNDERDRAINS TO BE DETERMINED AT TIME OF SUBGRADE INSPECTION BY THE RESIDENT ENGINEER.
- 29. APPROVAL OF A DETAILED CONSTRUCTION SEQUENCING/MAINTENANCE OF TRAFFIC NARRATIVE FOR THE WORK ZONE IS A PREREQUISITE FOR ISSUANCE OF A LAND USE PERMIT ALLOWING ACCESS TO AND CONSTRUCTION WITHIN VOOT MAINTAINED RIGHT-OF-WAY.

AFTER THE CONSTRUCTION IS COMPLETE. ANY AREAS THAT ARE ERODING SHALL BE STABILIZED AS DIRECTED BY VDOT.

- 30. VDOT SHALL BE PROVIDED DOCUMENTATION THAT ALL IN-PLACE PAVEMENTS MEET OR EXCEED THE APPROVAL PAVEMENT DESIGN THICKNESS PRIOR TO STATE ACCEPTANCE. ALL PLANS FOR PROPOSED NON-STANDARD IMPROVEMENTS THAT ARE TO BE INSTALLED WITHIN THE ULTIMATE VOOT RIGHT OF WAY;
- IE., SIDEWALK, PAVEMENT SECTIONS, LANDSCAPING, IRRIGATION SYSTEMS, LIGHTING, BOLLARDS, SIGNAGE, ETC., MUST BE SUBMITTED FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION. 32. DITCHES AND STORM SEWER OUTFALLS WITHIN THE RIGHT OF WAY SHOWN AS NOT REQUIRING PROTECTION SHALL BE INSPECTED BY VDOT



1. OWN R AND DEVELOPER:

2. ENGINEER:

CONTACT: KENNETH OWENS
2717 WILLARD ROAD
RICHMOND, VIRGINIA 23294-3631 (804) 672-7104, EXT. 10 DIRECT LINE

TIMMONS GROUP ENGINEER: DERRICK JOHNSON, P.E. 4260 CROSSINGS BOULEVARD, SUITE 1 PRINCE GEORGE, VIRGINIA 23875 (804) 541-6600 OFFICE (804) 541-6602 DIRECT LINE (804) 751-0798 FAX

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REVISIONS

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DATE RECEIVED

CCVER & NOTES SHEET

UTILITY PLAN

PRINCE GEORGE COUNTY, VA 

DEVELOPMENT PLAN APPROVAL

*7-31-2007* DRAWN BY

M.STEWART DESIGNED BY D.JOHNSON CHECKED BY

D.JOHNSON SCALE

JOB NO.

SHEET NO.