BRANCHESTER LAKES

SECTION 1 & PHASE I UTILITIES

BLAND DISTRICT
PRINCE GEORGE COUNTY, VIRGINIA

ZONING: R-1 and R-2

DATE: JANUARY 4, 1987

GENERAL NOTES

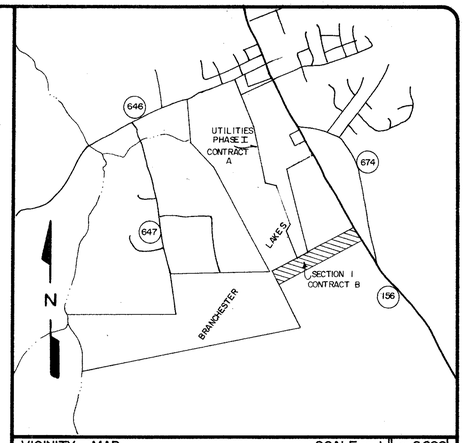
1. THE MOST CURRENT EDITION OF THE ROAD AND BRIDGE SPECIFICATIONS AND THE MOST CURRENT EDITION OF THE ROAD DESIGNS AND STANDARDS OF THE VIRGINIA DEPARTMENT OF HIGHWAYS AND TRANSPORTATION SHALL GOVERN THE FOLLOWING:
   A. POURING, CURING, FORMS, WORKMANSHIP, ETC. OF ALL CONCRETE USED ON THIS PROJECT.
   B. STABILIZED BASE COARSE MATERIAL AND SURFACE TREATMENT OR BITUMINOUS SURFACE.
   C. MATERIALS AND INSTALLING OF ALL PIPE CULVERTS.
2. ALL CURB AND GUTTER FILLETS AT INTERSECTIONS ARE TO HAVE 30' RADII UNLESS OTHERWISE NOTED.

   ALL EARTH DITCH FILLETS AT INTERSECTIONS ARE TO HAVE 35' RADII UNLESS OTHERWISE NOTED.
3. BACKFILL FOR ALL UTILITIES WITHIN PROPOSED SUBDIVISION STREETS SHALL BE PLACED GENERALLY IN ACCORDANCE WITH CHESTERFIELD COUNTY SPECIFICATIONS AND THE FOLLOWING CRITERIA:
   A. NO TRENCH SHALL BE BACKFILLED UNTIL AUTHORIZED BY THE COUNTY. MATERIALS USED FOR BACKFILL FROM THE BOTTOM OF THE TRENCH TO TWELVE (12") INCHES ABOVE THE PIPE SHALL BE SELECT MATERIAL FREE FROM FROST; LARGE CLODS, STONES AND DEBRIS. IT SHALL BE THOROUGHLY AND CAREFULLY COMPACTED TO INSURE A SOUND BACKFILL AROUND AND OVER THE PIPE.
   B. BACKFILL SHALL BE COMPACTED BY MECHANICAL TAMPING THROUGHOUT THE DEPTH OF THE TRENCH TO OBTAIN 95% DENSITY AT OPTIMUM MOISTURE +2%. THIS IS TO INSURE A SUITABLE SUBBASE, ACCEPTABLE TO THE ROAD ENGINEER FOR THE PROPOSED ROADS.
   C. IF IN THE OPINION OF THE COUNTY OR ROAD ENGINEER, THE MATERIAL TAKEN FROM THE DITCH IS NOT SUITABLE FOR BACKFILLING, IT SHALL BE REMOVED AND ACCEPTABLE MATERIAL USED FOR BACKFILLING AND TRENCH.
4. TOP ELEVATIONS OF SEWER MANHOLES TO BE SET TO COINCIDE WITH THE PAVEMENT GRADE.
5. ALL UTILITIES TO BE IN PLACE BEFORE LAYING BASE MATERIAL (AGGREGATE, TYPE 21-A).
6. CLEARING AND GRUBBING SHALL BE COMPLETE WITHIN THE ENTIRE RIGHT OF WAY UNLESS OTHERWISE APPROVED BY THE ROAD ENGINEER.
7. THE LOCATION OF ALL DRAINAGE STRUCTURES ON THESE PLANS IS APPROXIMATE. FINAL FIELD LOCATION MAY BE MADE BY THE ENGINEER TO MEET FIELD CONDITIONS.
8. GRADE LINES ON PROFILES DENOTE FINISHED GRADE AT CENTER LINE OF ROAD.
9. ALL VEGETATION AND OVERBURDEN TO BE REMOVED FROM SHOULDER TO SHOULDER PRIOR TO THE CONSTRUCTION OF THE SUBGRADE.
10. ALL DRAINAGE EASEMENTS TO BE CLEARED AND GRUBBED AND GRADED TO CONTAIN WATER FROM PIPE CULVERTS.
11. LENGTH OF ALL PIPE CULVERTS SHOWN ON THESE PLANS IS APPROXIMATE ONLY.
12. CONCRETE FROM CURB AND GUTTER SHALL BE CLASS A-3 PER CURRENT SPECIFICATIONS OF THE VIRGINIA DEPARTMENT OF HIGHWAYS AND TRANSPORTATION.
13. THE VIRGINIA DEPARTMENT OF HIGHWAYS AND TRANSPORTATION APPROVAL OF THESE PLANS WILL EXPIRE THREE (3) YEARS FROM THE DATE OF APPROVAL.
14. THE CONTRACTOR WILL SEED ALL SLOPES AS SOON AS POSSIBLE TO ELIMINATE UNNECESSARY EROSION. NO DISTURBED SURFACE WILL BE LEFT UNSEEDED. WHERE REQUIRED, ALL ROADS DITCHES ARE TO BE PAVED IN ACCORDANCE WITH STANDARD PG-2A-1 (MODIFIED TO FIT TYPICAL SECTION) WITH MINIMUM DEPTH TO CONTAIN TEN YEAR STORM, UNLESS OTHERWISE DIRECTED BY THE ENGINEER IN WRITING.
15. VIRGINIA DEPARTMENT OF HIGHWAYS AND TRANSPORTATION APPROVAL OF SUBDIVISION ROAD PLANS DOES NOT PRECLUDE THE RIGHT TO ADD ADDITIONAL FACILITIES, SUCH AS SEEDING, PAVING, SILT DAMS, SILT BASINS, ETC., AS MAY BE DEEMED NECESSARY BY THE DEPARTMENT PRIOR TO THE ACCEPTANCE OF SUCH ROADS IN ORDER TO LIMIT SILTATION AND POLLUTION OF NEARBY LAKES, PONDS, STREAMS AND ADJACENT PROPERTY.
16. ALL DRAINAGE EASEMENTS ARE TO EXTEND TO A NATURAL WATER COURSE.
17. SLOPE EASEMENTS FOR FILL SLOPES ARE REQUIRED WHERE SLOPES EXCEED PROPOSED RIGHT OF WAY LIMITS.
18. PERMIT TO TIE INTO EXISTING ROAD SHALL BE OBTAINED FROM RESIDENT ENGINEER PRIOR TO ROAD CONSTRUCTION.
19. THE CONTRACTOR WILL SEED ALL SLOPES AND EASMENTS WITHIN AT LEASY A TEMPORARY SEEDING WITHIN FIFTEEN (15) DAYS AFTER THE COMPLETION OF STREET GRADING OR STORM SEWER PLACEMENT TO ELIMINATE UNNECESSARY EROSION. NO DISTURBED AREA WILL BE ALLOWED PRIOR TO THE ACCEPTANCE OF THE ROAD INTO THE STATE SYSTEM.
20. ALL PRIVATE ENTRANCE CULVERTS ARE TO BE CLASS III CONCRETE PIPE AND 20 FEET IN LENGTH, UNLESS OTHERWISE NOTED. DIAMETER 15"
21. EXISTING CUL-DE-SACS TO BE REMOVED WHEN PROPOSED ROADS ARE CONSTRUCTED.
22. ALL SUBGRADE MATERIAL SHALL HAVE A MINIMUM CBR VALUE OF TEN (10).
23. PAVEMENT DESIGN SHALL BE SPECIFIED ON PLANS, AS WELL AS ROADWAY CATEGORY.
24. ROAD ENGINEER MUST BE NOTIFIED PRIOR TO ANY CONSTRUCTION OF SUBDIVISION STREETS.
25. CUL-DE-SACS SHALL BE CONSTRUCTED AT THE ENDS OF ALL DEAD END ROADS UNLESS AUTHORIZED BY THE ROAD ENGINEER (ELIMINATE STUBS IF POSSIBLE).
26. THE BASE MATERIAL FOR ALL STREETS MUST BE APPROVED BY THE ROAD ENGINEER PRIOR TO THE PLACEMENT OF THE SURFACE COURSE. IF UNSUITABLE MATERIAL FOR THE SUBGRADE IS ENCOUNTERED THEN THE ROAD ENGINEER MUST BE NOTIFIED PRIOR TO THE PLACEMENT OF THE BASE MATERIAL.
27. BASE MUST BE APPROVED BY VDH & T FOR DEPTH, TEMPLATE AND COMPACTION BEFORE SURFACE IS APPLIED.
28. THE LOCATION OF EXISTING UTILITIES, STORM SEWERS, SANITARY SEWER, GAS LINES, WATER LINES, ELECTRICAL LINES AND TELEPHONE LINES EITHER UNDERGROUND AND/OR OVERHEAD ACROSS OR ALONG THE LINE OF PROPOSED WORK ARE NOT NECESSARILY SHOWN ON THE PLANS AND WHERE SHOWN ARE APPROXIMATE ONLY. THE CONTRACTOR SHALL ON HIS OWN INITIATIVE AND AT NO EXTRA COST, LOCATE ALL UNDERGROUND LINES AND STRUCTURES AS NECESSARY. NO CLAIMS FOR DAMAGES OR EXTRA COMPENSATION SHALL ACCRUE TO THE CONTRACTOR FROM THE PRESENCE OF SUCH PIPES OR OTHER OBSTRUCTIONS OR FROM ANY DELAY DUE TO THE REMOVAL OR REARRANGEMENT OF SAME.
29. ALL CUT AND FILL SLOPES AND CHANNELSIDE SLOPES WHICH ARE NOT PAVED SHALL BE SEEDED UNTIL A GOOD STAND OF GRASS IS OBTAINED IS ACCORDANCE WITH THE VIRGINIA EROSION & SEDIMENT CONTROL HANDBOOK AND THE FOLLOWING TABLE:
   A. 100 LB. PER 1000 SQ. FT. GROUND LIMESTONE OR EQUIVALENT. NO SOIL TEST REQUIRED FOR INITIAL ESTABLISHMENT.
   B. 25 LB. OF 5-20-10 FERTILIZER OR EQUIVALENT PER 1000 SQ. FT.
   C. VARIETIES TO BE SEEDED:
      1. SPRING SEEDING - MARCH 1 THRU MAY 31 MIXTURE B5 AT 1 LB. PER 1000 SQ. FT.
      2. SUMMER SEEDING - MAY 1 THRU AUGUST 15 MIXTURE K9 AT 1½ LBS. PER 1000 SQ. FT.
      3. AUTUMN SEEDING - AUGUST 1 THRU OCTOBER 15 MIXTURE B5 AT 1 LB. PER 1000 SQ. FT.
      4. MULCH 80 LB. STRAW PER 1000 SQ. FT. OR ASPHALT MULCH 30 GAL. PER 1000 SQ. FT.
      5. ALL SEEDING MUST BE MULCHED.
30. AUTHORIZED LOCAL OFFICIALS SHALL BE NOTIFIED 24 HOURS IN ADVANCE OF THE WORK TO BE STARTED SO AN AUTHORIZED REPRESENTATIVE MAY BE ASSIGNED TO MAKE ANY AND ALL NECESSARY INSPECTIONS OF THE WORK PERFORMED.
31. CONTRACTOR SHALL CALL FOR COUNTY INSPECTION OF ALL PIPE LINE INSTALLATION PRIOR TO PLACING BACKFILL.
32. WHEN ALL IMPROVEMENTS ARE COMPLETED, ALL DRAINAGE AND SANITARY SEWER LINES ARE FLUSHED AND CLEANED OF FOREIGN MATTER AND ALL CURBS AND GUTTERS AND STREETS ARE CLEANED AND FREE OF DIRT AND DEBRIS, THE SUBDIVIDER SHALL NOTIFY THE APPROPRIATE LOCAL OFFICIAL TO MAKE FINAL INSPECTION, A REPRESENTATIVE OF THE SUBDIVIDER SHALL BE PRESENT AT THE FINAL INSPECTION.
33. THE CONTRACTOR SHALL NOTIFY THE LOCAL INSPECTOR AT LEAST 24 HOURS BEFORE PLACING BASE STONE SO THE SUBGRADE MAY BE INSPECTED AND 24 HOURS BEFORE PLACING SURFACE COURSE SO THE LOCAL INSPECTOR WILL BE ON SITE.
34. WHERE SPRINGS ARE ENCOUNTERED WITHIN THE RIGHT OF WAY, STANDARD SPRING BOXES SHALL BE PROVIDED AND PIPED TO THE NEAREST DRAINAGE OUTLET.
35. WHERE DITCHES ARE DEEMPED TO ACCOMMODATE CULVERTS, THE SLOPE FROM THE SHOULDER TO THE DITCH SHALL BE MAINTAINED 2.7 :1, THEREBY MOVING THE DITCH PROFILE FURTHER FROM CENTERLINE.
36. CONTRACTOR SHALL NOTIFY "MISS UTILITY" BEFORE BEGINNING ANY EXCAVATION (1-800-552-7001)
37. ALL CONCENTRATED DRAINAGE BEING CONVEYED FROM ROADSIDE DITCHES IN CUT SECTIONS INTO FILL SECTIONS SHOULD BE CONFINED ALONG SUCH AREAS BY TOE DITCHES WHERE ADJACENT PROPERTY SLOPES AWAY FROM ROADWAY, TO PREVENT CONCENTRATED DRAINAGE FROM BEING TURNED ONTO ADJACENT LOTS.
38. ALL ROADSIDE DITCHES SHOWN AS PAVED ON PLANS ARE TO BE PAVED IN ACCORDANCE WITH THE STANDARD TYPICAL SECTION OR SPECIAL SECTION AS SHOWN ON PLANS, UNLESS OTHERWISE DIRECTED BY THE RESIDENT ENGINEER, IN WRITING. ANY ADDITIONAL PAVINGS OF THE DITCHES, OTHER THAN THOSE SHOWN ON THE ROAD PLANS, WILL BE DETERMINED PRIOR TO ACCEPTANCE OF THE ROADS INTO THE VDH & T SECONDARY ROAD SYSTEM.
39. EXCESS EXCAVATION TO BE DISPOSED OF AS DIRECTED BY THE ENGINEER.
40. THE REQUIREMENT TO PUDMILL AGGREGATE BASE WILL BE WAIVED IN THE EVENT THAT THE SURFACE COURSE IS APPLIED AFTER A MINIMUM 60 DAY WAITING PERIOD BEGINNING AT THE COMPLETION OF THE INSTALLATION OF THE AGGREGATE BASE. IN THE EVENT THAT THE SURFACE COURSE IS APPLIED PRIOR TO 60 DAYS, THE PUDMILL REQUIREMENT WILL APPLY.
41. WATER AND SEWER CONTRACTORS MUST NOTIFY VDH & T IN WRITING WHEN INSTALLATION BEGINS SO THAT DENSITY CAN BE TESTED (95% @ ± 2% OPTIMUM MOISTURE).
42. THE CONSTRUCTION OF ALL UTILITIES ON THIS PROJECT SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS FOR THE CONSTRUCTION OF UTILITIES IN THE COUNTY OF PRINCE GEORGE, VIRGINIA.

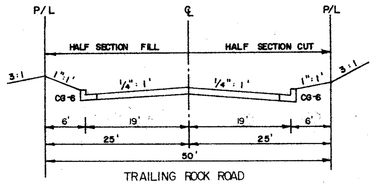
SEWER

1. DATUM FOR ALL ELEVATIONS IS M.S.L. (U.S.C. & G.S.)
2. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE CURRENT SANITARY SEWER AND WATER SPECIFICATIONS OF PRINCE GEORGE COUNTY. ALL WORK SHALL BE SUBJECT TO INSPECTION BY PRINCE GEORGE COUNTY INSPECTORS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE PROPER COUNTY OFFICIALS 48 HOURS PRIOR TO START OF WORK. A PRE-CONSTRUCTION MEETING BETWEEN CONTRACTOR AND ENGINEER WILL BE MANDATORY.
3. GRADE STAKES WILL BE SET BY CHARLES C. TOWNES & ASSOCIATES, P.C. COPIES OF CUT SHEETS WILL BE SENT TO PRINCE GEORGE COUNTY.
4. PIPE STRENGTHS TO BE AS FOLLOWS: 1. CONCRETE ASTM C-76, CLASS III OR ASTM C-14, CLASS III 2. PVC ASTM D3034, SDR-35 3. ABS ASTM D2751, SDR-23.5 EXCEPT AS SHOWN ON PROFILE.
5. ALL MANHOLES SHALL BE PRECAST CONCRETE.
6. JOB SHALL BE BID ON A UNIT PRICE BASIS. ALL EXCAVATION SHALL BE UNCLASSIFIED.
7. EXISTING UTILITIES, WHERE SHOWN, ARE APPROXIMATE ONLY. CONTRACTOR SHALL VERIFY ALL SUCH LOCATIONS BEFORE START OF WORK.
8. ALL PIPE BEDDING TO CLASS B EXCEPT AS SHOWN FOR PLASTIC PIPE.
9. ALL SANITARY SEWER LINES WITH LESS THAN 5' COVER WILL BE MADE OF DUCTILE IRON PIPE.
10. BEFORE BEGINNING WORK, CONTRACTOR SHALL CONTACT "MISS UTILITY" 1-800-552-7001

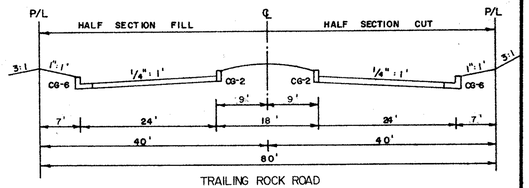
OWNERS / DEVELOPERS
BRANCHESTER ASSOCIATES
P.O. BOX 1402
HOPEWELL, VIRGINIA 23860
PHONE: (804) 458-1512



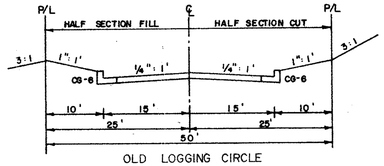
VICINITY MAP SCALE : 1" = 2000'



TRAILING ROCK ROAD
3+8963 TO END
(CATEGORY III)



TRAILING ROCK ROAD
BEGINNING TO 2+71.53
(CATEGORY III)



OLD LOGGING CIRCLE
ROXSHIRE COURT
FOX DEN COURT
& FARMCREST CIRCLE
(CATEGORY I)

SUMMARY OF TOTAL PROJECT

A.	SINGLE FAMILY DWELLINGS	370	UNITS
B.	CLUSTERED DWELLINGS	100	UNITS
C.	CONDOMINIUM DWELLINGS	250	UNITS
D.	APARTMENTS	248	UNITS
E.	CONGREGATE CARE	200	UNITS
F.	CONVALESCENT HOME	100	BEDS
G.	MOBILE HOMES	96	UNITS
H.	PROFESSIONAL OFFICES	50,000	sq. ft.
I.	COMMERCIAL SHOPPING	100,000	sq. ft.
J.	SWIM & RACQUETTE CLUB	2,500	sq. ft.

SECTION I - 61 SINGLE FAMILY UNITS
2 BUSINESS

These plans were approved by the State Health Department: however they were never constructed. See Section 1 approved May 28,

and Section 1-A approved July 9 for proper utility layout

ALL WORK SUBJECT TO INSPECTION BY COUNTY ENGINEER

FINAL

RELEASED FOR CONSTRUCTION
S. McBride 1987
10/5

CHARLES C. TOWNES & ASSOCIATES
Engineers, Planners, Land Surveyors
110 Norfolk Ave., P.O. Box 97
Colonial Heights, Va. 23834
804-526-6766

COMMONWEALTH OF VIRGINIA
CHARLES C. TOWNES
CERTIFICATE No. # 10478
PROFESSIONAL ENGINEER

REVISIONS	
DATE	ITEM

DATE
SCALE
DRAWN BY
CHECKED BY
F.B. #
SHEET # 1 of 10