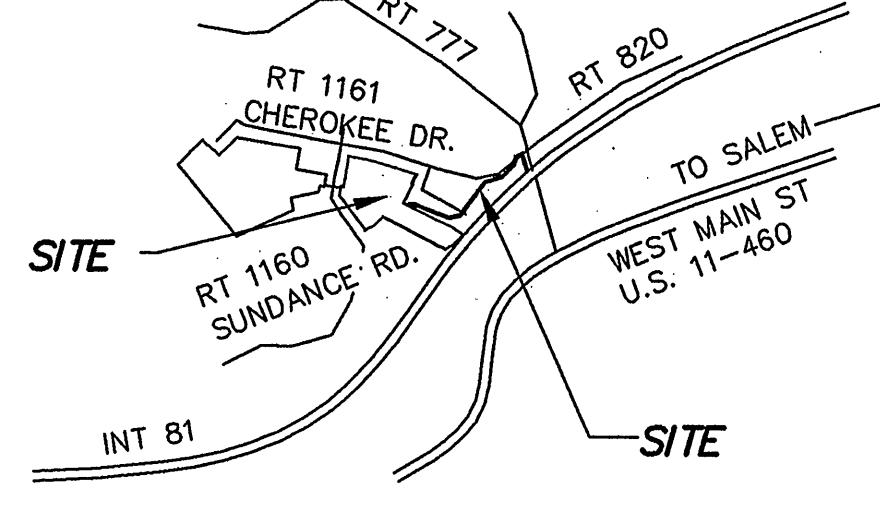


QUANTITY AND COST ESTIMATE				
Item	Quantity	Unit	Unit Price	Bondable Cost
CLEARING AND GRUBBING	0	ACRES	500.00	0.00
PAVEMENT SAW CUT	50	LF	2.00	100.00
PAVEMENT REMOVAL / RECONSTRUCTION	225	SY	22.00	4,950.00
CURB INLET-BASE VARIES W/ DI-3BB, L=20' MAX	13	EA	3,000.00	39,000.00
GRATE INLET - DI-7, TYPE III GRATE TOP	6	EA	2,750.00	16,500.00
DRAINAGE MANHOLE	3	EA	2,000.00	6,000.00
15-IN HDPE DRAINAGE PIPE	360	LF	30.00	10,800.00
18-IN HDPE DRAINAGE PIPE	143	LF	40.00	5,720.00
24-IN HDPE DRAINAGE PIPE	400	LF	50.00	20,000.00
30-IN HDPE DRAINAGE PIPE	460	LF	60.00	27,600.00
36-IN HDPE DRAINAGE PIPE	1493	LF	70.00	104,510.00
15-IN EW-1, ENDWALL AS ENERGY DISSIPATOR	1	EA	300.00	300.00
18-IN ES-1, HDPE FLARED END SECTION	1	EA	300.00	300.00
30-IN EW-1, ENDWALL W/ 22.5-IN ORIFICE PLATE	1	EA	500.00	500.00
36-IN EW-1, ENDWALL	1	EA	500.00	500.00
VDOT STD CG-6, CURB & GUTTER	2,780	LF	16.00	44,480.00
BITUMINOUS PAVEMENT SECTION	4,075	SY	13.00	52,975.00
12' WIDE PAVED ACCESS ROAD TO POND	200	SY	13.00	2,600.00
12' WIDE STONE ACCESS ROAD TO POND	1,175	SY	11.00	12,925.00
STREET SIGNS	2	EA	250.00	500.00
8 -IN. WATERLINE	2,020	LF	22.00	44,440.00
FIRE HYDRANT ASSEMBLIES	3	EA	1,500.00	4,500.00
BLOW-OFFS w/VAULT, FRAME & COVER	1	EA	800.00	800.00
AUTO AIR RELEASE ASSEMBLIES	2	EA	800.00	1,600.00
8-IN. GATE VALVES w/VAULT, FRAME & COVER	15	EA	500.00	7,500.00
8-IN TEES, BENDS, FITTINGS	23	EA	500.00	11,500.00
SERVICE CONNECTIONS - DOUBLE	11	EA	500.00	5,500.00
SERVICE CONNECTIONS - SINGLE	9	EA	400.00	3,600.00
12-IN. WATERLINE	50	LF	22.00	1,100.00
12-IN. GATE VALVES w/VAULT, FRAME & COVER	1	EA	500.00	500.00
8-IN. SANITARY SEWER (SDR-21) OR (HDPE)	1,635	LF	26.00	42,510.00
STANDARD SEWER MANHOLE	12	EA	2,000.00	24,000.00
SERVICE CONNECTIONS W/ CLEANOUTS	29	EA	500.00	14,500.00
STONE BEDDING	3,500	TONS	20.00	70,000.00
SUBTOTAL				\$ 582,310.00
10% CONTINGENCY				\$ 58,231.00
ESTIMATED TOTAL				\$ 640,451.00
I hereby certify that the foregoing estimate reflects the current improvements of this project. SIGNED: DATE:				
SEWER NOTES				
THE CONTRACTOR SHALL CONTACT THE WESTERN VIRGINIA WATER AUTHORITY (WVWA) AT 853-5700 AT LEAST TWO (2) DAYS PRIOR TO REQUIRING ACTUAL CONNECTIONS.				
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 IF NECESSARY.				
ALL EXISTING UTILITIES MAY NOT BE SHOWN, OR MAY NOT BE SHOWN IN THE EXACT LOCATION. THE CONTRACTOR SHALL COMPLY WITH STATE WATER WORKS REGULATIONS, SECTION 12.05.03, WHERE LINES CROSS.				
ALL SANITARY SEWER CONNECTIONS TO EXISTING LINES SHALL BE COORDINATED WITH AND PERFORMED BY THE WVWA.				
HOUSE CONNECTIONS ARE TO BE MADE WITH 4" PIPE INSTALLED ON A MINIMUM GRADE OF 1/4 INCH TO 1 FOOT IN THE RIGHT OF WAY.				
LATERALS FROM MANHOLES SHALL BE P.V.C. OR DUCTILE IRON OF SUFFICIENT LENGTH TO PROVIDE TWO (2) FEET OF BEARING ON NATURAL GROUND. THE TRANSITION FROM DUCTILE IRON TO CONCRETE PIPE SHALL BE MADE WITH AN ADAPTER COUPLING IN THE RIGHT OF WAY.				
ALL TRENCHES IN EXISTING OR FUTURE HIGHWAY RIGHT OF WAYS SHALL BE COMPACTED ACCORDING TO VDOT STANDARDS.				
LINES SHALL BE STAKED PRIOR TO CONSTRUCTION.				
ALL CONSTRUCTION AND FACILITIES SHALL BE INSTALLED IN ACCORDANCE WITH THE WVWA DESIGN AND CONSTRUCTION STANDARDS AND DETAILS, FIRST EDITION, DATED JULY 2004.				
WATER NOTES				
THE CONTRACTOR SHALL CONTACT THE WESTERN VIRGINIA WATER AUTHORITY (WVWA) AT 853-5700 AT LEAST TWO (2) DAYS PRIOR TO REQUIRING ACTUAL CONNECTIONS.				
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, OR MAY NOT BE SHOWN IN THE EXACT LOCATION. THE CONTRACTOR SHALL COMPLY WITH 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 VDOT STANDARDS.				
LINES SHALL BE STAKED PRIOR TO CONSTRUCTION.				
WATER MAIN SHALL BE MINIMUM CLASS 52 DUCTILE IRON IN ACCORDANCE TO AWWA C151.				
APPLICATION FOR UTILITIES TO SERVE DEVELOPMENT REFERENCE WVWA.				
ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE WVWA WATER AND SEWER STANDARDS.				

VDOT NOTES	
THIS SET OF PLANS IS DESIGNED BASED UPON THE JANUARY 1, 2005 SUBDIVISION STREET DESIGN GUIDE AND THE 2005 SUBDIVISION STREET REQUIREMENTS HANDBOOK.	
STREETS TO BE GRADED, PAVED, AND ALL STRUCTURAL COMPONENTS ERECTED IN ACCORDANCE WITH THE VIRGINIA DEPARTMENT OF TRANSPORTATION ROAD AND BRIDGE SPECIFICATIONS AND TESTED IN ACCORDANCE WITH STANDARD POLICIES. THE DEVELOPER MUST CONTACT THE OFFICE OF THE RESIDENT ENGINEER PRIOR TO BEGINNING ANY CONSTRUCTION, AT WHICH TIME AN INSPECTION AND TESTING PROCEDURE POLICY WILL BE DRAWN. THE DEVELOPER MAY PRODUCE TEST REPORTS FROM APPROVED INDEPENDENT LABORATORIES OR SOLICIT TESTING BY VDOT. IN EITHER EVENT, IT SHALL BE AT THE DEVELOPER'S EXPENSE.	
THE PAVEMENT DESIGNS SHOWN ARE BASED ON A SUBGRADE RATING OF CBR 10 OR GREATER. THE SUBGRADE SOIL IS TO BE TESTED BY AN INDEPENDENT LABORATORY AND THE RESULTS SUBMITTED TO THE VIRGINIA DEPARTMENT OF TRANSPORTATION PRIOR TO PAVEMENT CONSTRUCTION. SHOULD THE SUBGRADE CBR VALUES BE LESS THAN CBR 10, THEN ADDITIONAL BASE MATERIAL SHALL BE REQUIRED.	
ALL NECESSARY UTILITY LATERALS WILL BE PLACED PRIOR TO PAVEMENT SURFACING, OR CONDUIT PROVISIONS BE MADE FOR THE SAME (I.e. WATER, SEWER, GAS AND TELEPHONE.)	
GAS OR PETROLEUM TRANSMISSION LINES WILL NOT BE PERMITTED WITHIN THE PAVEMENT (4' BACK OF CURB TO BACK OF CURB EITHER SIDE) OR THE SHOULDER ELEMENT OF THIS DEVELOPMENT. SERVICE LATERAL CROSSING, AND PIPE LINES LOCATED OUTSIDE THE PAVEMENT, BUT INSIDE THE RIGHT OF WAY WILL BE CONSTRUCTED IN CONFORMITY WITH ASA B-31.8 SPECIFICATIONS AND SAFETY REGULATIONS. DISTRIBUTION LINES WITH PRESSURES LESS THAN 120 LBS. ARE UNAFFECTED BY THE ABOVE.	
PERMITS WILL BE REQUIRED FOR ALL UTILITIES WITHIN STREET RIGHT OF WAY PRIOR TO ACCEPTANCE INTO THE SECONDARY HIGHWAY SYSTEM.	
STANDARD CG-9D GUTTER WILL BE PROVIDED AT ALL ENTRANCES TO PRIVATE LOTS WHERE STANDARD CG-6 CURB AND GUTTER IS APPROVED FOR USE.	
PERMITS WILL BE REQUIRED FOR ALL PRIVATE ENTRANCES CONSTRUCTED ON STREET RIGHT OF WAYS PRIOR TO ACCEPTANCE INTO THE SECONDARY HIGHWAY SYSTEM.	
CARE MUST BE TAKEN DURING CONSTRUCTION TO PREVENT EROSION, DUST, AND MUD FROM DAMAGING ADJACENT PROPERTY, CLOGGING DITCHES, TRACKING PUBLIC STREETS, AND OTHERWISE CREATING A PUBLIC OR PRIVATE NUISANCE TO SURROUNDING AREAS.	
THE ENTIRE CONSTRUCTION AREA BACK OF CURBS, AND/OR PAVEMENT IS TO BE BACK-FILLED AND SEEDED TOGETHER WITH DITCHES AND CHANNELS, AT THE EARLIEST POSSIBLE TIME FOLLOWING FINAL GRADING.	
DRAINAGE EASEMENTS MUST BE DEFINED BY EXCAVATED DITCHES OR CHANNELS FOR THEIR FULL LENGTH TO WELL-DEFINED NATURAL WATERCOURSES.	
THIS ROAD WILL BE REVIEWED DURING CONSTRUCTION FOR THE NEED AND LIMITS OF PAVED DITCHES.	
IF EROSION IS ENCOUNTERED IN ANY DRAINAGE EASEMENT, IT WILL BE THE RESPONSIBILITY OF THE DEVELOPER TO SOD, RIP-RAP, GROUT, PAVE, OR TO DO WHATEVER IS NECESSARY TO CORRECT THE PROBLEM.	
MINIMUM PAVEMENT RADIUS 25 FEET REQUIRED AT ALL STREET INTERSECTIONS	
WHILE THESE PLANS HAVE BEEN APPROVED, SUCH APPROVAL DOES NOT EXEMPT CONNECTIONS WITH EXISTING STATE MAINTAINED ROADS FROM CRITICAL REVIEW AT THE TIME PERMIT APPLICATIONS ARE MADE. THIS IS NECESSARY IN ORDER THAT THE PREVAILING CONDITIONS ARE TAKEN INTO CONSIDERATION REGARDING SAFETY REQUIREMENTS. ADDITIONAL SAFETY ACCOMPANIMENTS SUCH AS TURNING LANES MAY OR MAY NOT BE REQUIRED.	
VDOT APPROVAL OF SUBDIVISION ROAD PLANS DOES NOT PRECLUDE THE RIGHT TO ADD ADDITIONAL FACILITIES SUCH AS SEEDING, PAVING, SEDIMENT CONTROL ITEMS, etc., AS MAY BE DEEMED NECESSARY BY THE DEPARTMENT PRIOR TO THE ACCEPTANCE OF SUCH CONDITIONS IN ORDER TO LIMIT SILTATION AND POLLUTION OF NEARBY LAKES, PONDS, STREAMS, AND ADJACENT PROPERTY.	
THE DEPARTMENT'S APPROVAL OF THESE PLANS EXPIRES THREE (3) YEARS FROM DATA APPROVAL.	
ANY APPROVAL FROM THE VIRGINIA DEPARTMENT OF TRANSPORTATION IS FOR SECTION 4 DEVELOPMENT ONLY.	
ENGINEER'S NOTES	
T.P. PARKER & SON ASSUMES NO RESPONSIBILITY FOR ADEQUACY OF PLANS OR FOR INFORMATION ON PLANS UNTIL SUCH PLANS HAVE BEEN APPROVED BY THE REQUIRED PUBLIC AGENCIES.	
ANY WORK COMMENCED ON A PROJECT PRIOR TO PLAN APPROVAL IS AT SOLE RISK OF THE DEVELOPER.	
T.P. PARKER & SON DOES NOT GUARANTEE THE COMPLETION OR QUALITY OF PERFORMANCE OF THE CONTRACTS OR THE COMPLETION OR QUALITY OF PERFORMANCE OF CONTRACTS BY SUBCONTRACTORS OR OTHER THIRD PARTIES.	
SOURCE OF TOPOGRAPHIC MAPPING IS ROANOKE COUNTY AERIAL MAPPING AND FIELD SURVEY BY TPP&S DATED 2004. THE BENCHMARKS ARE SHOWN ON A PROJECT BASED UPON THE ROANOKE COUNTY AERIAL TOPOGRAPHY CONTOURS. TO CONVERT TO THE FLOOD INSURANCE DATUM (NGVD'29) SUBTRACT 1.0 FEET.	
BOUNDARY SURVEY WAS PERFORMED BY T.P. PARKER & SON DATED AUGUST 20, 2004.	
 VICINITY MAP NO SCALE	

GENERAL NOTES	
ALL CONSTRUCTION METHODS AND MATERIALS SHALL CONFORM TO THE CONSTRUCTION STANDARDS AND SPECIFICATIONS OF ROANOKE COUNTY, THE WESTERN VIRGINIA WATER AUTHORITY (WVWA) AND/OR THE VIRGINIA DEPARTMENT OF TRANSPORTATION (VDOT).	
THE CONTRACTOR OR DEVELOPER IS REQUIRED TO NOTIFY THE ROANOKE COUNTY ENGINEERING DIVISION AND THE WESTERN VIRGINIA WATER AUTHORITY IN WRITING AT LEAST THREE (3) DAYS PRIOR TO ANY CONSTRUCTION, INCLUDING BUT NOT LIMITED TO THE FOLLOWING: (N/A = NOT APPLICABLE FOR THIS PROJECT) A. INSTALLATION OF APPROVED EROSION CONTROL DEVICES. B. CLEARING AND GRUBBING (GRUBBING N/A). C. SUBGRADE EXCAVATION. D. INSTALLING STORM SEWERS OR CULVERTS. E. INSTALLING CURB AND GUTTER FORMS. F. PLACING CURB AND GUTTER. G. PLACING OTHER CONCRETE. H. PLACING GRAVEL BASE. I. PLACING ANY ROADWAY SURFACE. J. INSTALLING WATER LINES. K. INSTALLING SANITARY SEWER LINES.	
A PRE CONSTRUCTION CONFERENCE SHOULD BE SCHEDULED WITH THE ROANOKE COUNTY ENGINEERING DIVISION AND THE WESTERN VIRGINIA WATER AUTHORITY, TO BE HELD AT LEAST ONE DAY PRIOR TO ANY CONSTRUCTION.	
MEASURES TO CONTROL EROSION AND SILTATION MUST BE PROVIDED FOR PRIOR TO PLAN APPROVAL. PLAN APPROVAL IN NO WAY RELIEVES THE DEVELOPER OR CONTRACTOR OF THE RESPONSIBILITIES CONTAINED IN EROSION AND SILTATION CONTROL POLICIES.	
A PERMIT MUST BE OBTAINED FROM THE VDOT RESIDENCY OFFICE IN SALEM PRIOR TO CONSTRUCTION IN THE HIGHWAY RIGHT OF WAY.	
PLAN APPROVAL DOES NOT GUARANTEE THE ISSUANCE OF ANY PERMITS BY VDOT.	
AN APPROVED SET OF PLANS AND ALL PERMITS MUST BE AVAILABLE AT THE CONSTRUCTION SITE.	
FIELD CONSTRUCTION SHALL HONOR PROPOSED DRAINAGE DIVIDES AS SHOWN ON PLANS.	
ALL UNSUITABLE MATERIAL SHALL BE REMOVED FROM THE CONSTRUCTION LIMITS OF THE ROADWAY BEFORE PLACING EMBANKMENT.	
PAVEMENT SECTIONS ON APPROVED PLANS ARE BASED ON A MINIMUM CBR OF 10. CBR TESTS ARE TO BE ACQUIRED BY THE OWNER AND SUBMITTED TO THE VDOT AND TO THE ROANOKE COUNTY ENGINEERING DIVISION PRIOR TO PLACEMENT. CBR VALUES LESS THAN 10 WILL REQUIRE REVISION PAVEMENT SECTIONS.	
CONTRACTOR SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AT THE JOB SITE.	
N/A VDOT STD.. HR-1 HANDRAIL IS REQUIRED ON ALL WALLS EXCEEDING 4.0' IN HEIGHT.	
N/A LOCATION OF GUARD RAILS SHALL BE DETERMINED AT A JOINT FIELD INSPECTION BY THE COUNTY AND THE VDOT.	
ALL SPRINGS SHALL BE CAPPED AND PIPED TO THE NEAREST STORM SEWER OR NATURAL WATERCOURSE. THE PIPE SHALL BE MINIMUM OF 6" DIAMETER AND CONFORM TO VDOT STANDARD SB-1.	
STANDARD STREET AND TRAFFIC CONTROL SIGNS SHALL BE ERECTED AT EACH INTERSECTION BY THE DEVELOPER PRIOR TO FINAL STREET ACCEPTANCE.	
CONSTRUCTION DEBRIS SHALL BE CONTAINED IN ACCORDANCE WITH THE VIRGINIA LITTER CONTROL ACT. NO LESS THAN ONE LITTER RECEPTACLE SHALL BE PROVIDED ON-SITE.	
THE CONTRACTOR SHALL PROVIDE ADEQUATE MEANS OF CLEANING MUD FROM TRUCKS AND/OR OTHER EQUIPMENT PRIOR TO ENTERING PUBLIC STREETS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO INSURE THAT THE STREETS ARE IN A CLEAN, MUD AND DUST FREE CONDITION AT ALL TIMES.	
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.	
CONTRACTORS SHALL NOTIFY UTILITIES OF PROPOSED CONSTRUCTION AT LEAST TWO, BUT NOT MORE THAN TEN WORKING DAYS IN ADVANCE. AREA PUBLIC UTILITIES MAY BE NOTIFIED THROUGH MISS UTILITY AT (800) 552-7001.	
THE DEVELOPER OR CONTRACTOR SHALL PROVIDE THE COUNTY OF ROANOKE AND THE WVWA WITH CORRECT AS-BUILT PLANS BEFORE FINAL ACCEPTANCE.	
ALL WORK SHALL BE SUBJECT TO INSPECTION BY ROANOKE COUNTY, THE WVWA, AND/OR VDOT INSPECTORS.	
FIELD CORRECTIONS SHALL BE APPROVED BY THE COUNTY OF ROANOKE ENGINEERING DIVISION AND THE WVWA PRIOR TO SUCH CONSTRUCTION.	
GRADE STAKES SHALL BE SET FOR ALL CURB AND GUTTER, CULVERT, SANITARY SEWER, AND STORM SEWER.	
LOCATION OF UNDERGROUND UTILITIES IS BASED ON FIELD SURVEYS, AND AS SHOWN BY AVAILABLE RECORDS. CONTRACTOR SHALL VERIFY LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION.	
THE SITE WORK AND LANDSCAPING CONTRACTOR(S) SHALL COMPLY WITH LOCAL CODES IN OBSERVING EROSION CONTROL MEASURES, BOTH ON AND OFF THE SITE. REFER TO THE VIRGINIA UNIFORM CODING SYSTEM CONTAINED IN THE VIRGINIA SOIL EROSION AND SEDIMENT CONTROL HANDBOOK, LATEST EDITION, FOR DETAILS AND SPECIFICATIONS OF EROSION CONTROL ITEMS SHOWN ON THESE PLANS.	
ALL STORM DRAIN CONSTRUCTION SHALL BE IN CONFORMANCE WITH THE VIRGINIA DEPARTMENT OF TRANSPORTATION STANDARDS AND SPECIFICATIONS.	
THE COUNTY OF ROANOKE RESERVES THE RIGHT TO ADD TO, DELETE, OR OTHERWISE CHANGE EROSION CONTROL DEVICES AS MAY BE DEEMED NECESSARY BY WRITTEN NOTIFICATION TO THE CONTRACTOR.	
Designed By: <u>PJB</u>	REVISIONS
Drawn By: <u>JUB/PJB</u>	No. Date Remarks By
Date: <u>FEB. 16, 2005</u>	
W.O. # <u>04-0071</u>	
N.B. # <u>JR-246</u>	

SHEET INDEX	
SHEET #	TITLE
C1	COUNTY OF ROANOKE COVER SHEET
C2	SUBDIVISION PLAT - INFORMATION PURPOSES ONLY
C3	SUBDIVISION PLAT - INFORMATION PURPOSES ONLY
C4	OVERALL EROSION & SEDIMENT CONTROL PLAN - PREVIOUSLY APPROVED
C5	DIMENSION & UTILITY PLAN - ARROWHEAD TRAIL
C6	DIMENSION & UTILITY PLAN - STORMWATER MANAGEMENT AREA
C7	DIMENSION & UTILITY PLAN - FUTURE WARRIOR DRIVE & SUNDANCE INTERSECTION
C8	GRADING & EROSION CONTROL PLAN - ARROWHEAD TRAIL
C9	GRADING & EROSION CONTROL PLAN - STORMWATER MANAGEMENT AREA
C10	GRADING & EROSION CONTROL PLAN - FUTURE WARRIOR DRIVE
C11	EROSION & SEDIMENT CONTROL NARRATIVE & DETAILS
C12	PROFILES - ARROWHEAD TRAIL
C13	PROFILES - STORMWATER MANAGEMENT AREA
C14	OFFSITE WATERLINE PROFILE & FUTURE ROADWAY LAYOUT - SECTION 5
C15	SITE PROFILES - WATERLINE & INTERSECTION OF SUNDANCE ROAD
C16	WVWA - GENERAL DETAILS
C17	WVWA - SEWER DETAILS
C18	WVWA - SEWER DETAILS
C19	WVWA - WATER DETAILS
C20	WVWA - WATER DETAILS
LEGEND	
ABBREVIATIONS	SYMBOLS
AHFI ARROW HEAD TOP OF FIRE HYDRANT APPROX APPROXIMATE ASPHALT ASPHALT BC BOTTOM OF CURB BLDG BUILDING BLK BLOCK BM BENCHMARK BW BOTTOM OF WALL CB CHIMNEY BLOCK CDS CUL-DE-SAC C&G CURB & GUTTER CMP CORRUGATED METAL PIPE CONC CONCRETE COR CORNER DBL DOUBLE DFL DEFLECTION DI DROP INLET DIA DIAMETER DE DRAINAGE EASEMENT DW DOMESTIC WATER EBL EAST BOUND LINE ELEC ELECTRIC ELEV ELEVATION ENTR ENTRANCE EW ENDWALL EXIST EXISTING FDN FOUNDATION FF FINISHED FLOOR FP FIRE PROTECTION WATER HPT HIGH POINT INV INVERT IRN IRON PIN LT LEFT MBL MINIMUM BUILDING LINE MH MANHOLE	MINIMUM MONUMENT NORTH BOUND LINE PROPOSED PUBLIC UTILITY EASEMENT PMT PAVEMENT R RIGHT RT RIGHT OF WAY REQD REQUIRED RR RAILROAD RYS REAR YARD SETBACK SAN SANITARY SBL SOUTH BOUND LINE SD STORM DRAIN SECT SECTION SLOPE EASEMENT SS SANITARY SEWER SSE SANITARY SEWER EASEMENT STA STATION STD STANDARD STO STORAGE SYS SIDE YARD SETBACK TBM TEMPORARY BENCHMARK TC TOP OF CURB TEL TELEPHONE TRANS TRANSFORMER TW TOP OF WALL TYP TYPICAL VDOT VIRGINIA DEPARTMENT OF TRANSPORTATION VERT VERTICAL WBL WEST BOUND LINE YD YARD
7/06/05 - 3RD SUBMITTAL OF SUBDIVISION PLANS - VDOT COMMENTS ADDRESSED 5/23/05 - 2ND SUBMITTAL OF SUBDIVISION PLANS 2/16/05 - 1ST SUBMITTAL OF SUBDIVISION PLANS 12/17/04 - ESC SUBMITTAL TO INCLUDE NECESSARY GRADING 12/03/04 - OFF-SITE SANITARY SEWER PLANS APPROVED BY WVWA 11/03/04 - OFF-SITE SANITARY SEWER SUBMITTAL 10/21/04 - REVISED ESC SUBMITTAL FOR STUMP REMOVAL ONLY - APPROVED 10/13/04 - ORIGINAL ESC SUBMITTAL FOR STUMP REMOVAL ONLY	EXISTING 100.5 E NEW 100.5 E SPOT ELEVATION CONTOURS SANITARY SEWER LINE WATERLINE STORM DRAIN GAS LINE OVERHEAD ELECTRIC LINE OVERHEAD TELEPHONE LINE OVERHEAD CABLE TELEVISION LINE UNDERGROUND TEL OR ELEC LINE WATER OR GAS METER VALVE FIRE HYDRANT MANHOLE CLEANOUT DROP INLET (CURB OR GRATE) UTILITY POLE, GUY & ANCHOR DITCH OR SWALE CENTERLINE OR BASELINE PROPERTY LINE SURVEY TRAVERSE POINT DEFLECTION ANGLE DIRECT ANGLE YARD LIGHTING YARD HYDRANT WELL BENCHMARK FENCE TREE LINE RAILROAD HANDICAPPED SPACE
NAME OF DEVELOPMENT "AS-BUILT" SECTION 4 CHEROKEE HILLS	
LOCATION	SITUATE ALONG SUNDANCE ROAD, OFF WARRIOR DRIVE AND OFF ARROWHEAD TRAIL CATAWBA MAGISTERIAL DISTRICT ROANOKE COUNTY, VIRGINIA
OWNER	TOWNSIDE CONSTRUCTION CO., INC 117 E. BURWELL ST. SALEM, VA 24153 PHONE: (540) 444-0555
DEVELOPER	TOWNSIDE CONSTRUCTION CO., INC.
TAX MAP #(S) 54.04 BLOCK #(S) 05 PARCEL #(S) 01	
REV: APRIL 12, 2006 & APRIL 25, 2006: AS-BUILT PLANS FOR WATER AND SANITARY SEWER ONLY. MANHOLE TOPS WERE LOCATED. INVERT INFORMATION WAS PROVIDED BY THE CONTRACTOR. WATERLINE INFORMATION WAS BASED ON CONTRACTOR MARK UPS.	
COMMONWEALTH OF VIRGINIA PAUL J. BROWN CERTIFICATE NO. 036149 4/25/06 PROFESSIONAL ENGINEER	
T. P. PARKER & SON 816 Boulevard Post Office Box 39 Salem, Virginia 24153 Telephone: 540-387-1153 FAX: 540-389-5767	
0071-DESIGN-5-CVR.DWG	