

QUANTITY & COST ESTIMATE

GENERAL NOTES

All construction methods and materials shall conform to the Construction Standards and Specifications of Roanoke County and/or the Virginia Department of Transportation.

The contractor or developer is required to notify the Roanoke County Engineering Division in writing at least three (3) days prior to any construction, including, but not limited to the following:

- Installation of approved erosion control devices
- Clearing and grubbing
- Subgrade excavation
- Installing storm sewers or culverts
- Setting curb and gutter forms
- Placing curb and gutter
- Placing other concrete
- Placing gravel base
- Placing any roadway surface
- Installing water lines
- Installing sanitary sewer lines

A pre-construction conference should be scheduled with the Roanoke County Engineering Division, to be held at least one (1) day prior to any construction.

Measures to control erosion and siltation must be provided prior to plan approval. Plan approval in no way relieves the developer or contractor of the responsibilities contained within the erosion and siltation control policies.

A permit must be obtained from the V.D.O.T. Residency Office, Roanoke County, prior to construction in the highway right-of-way.

Plan approval does not guarantee issuance of any permits by V.D.O.T.

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 performed by the engineer and submitted to V.D.O.T. and to the Roanoke County Engineering Division prior to placement. CBR values < 10 will require revised pavement sections.

All roadside ditches or grades of more than 5 percent shall be paved with cement concrete to the limits as indicated on the plans and as required at the field inspection.

Location of guard rails shall be determined at a joint field inspection by the County and V.D.O.T.

All springs shall be capped and piped to the nearest storm sewer or natural watercourse. The pipe shall be 6 inch minimum diameter and conform to V.D.O.T. 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 containerized 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 (2), but not more than ten (10) working days in advance. Area public utilities may be notified thru "Miss Utility", 1-800-552-7001.

The developer or contractor shall supply the county with correct As-Built plans before final acceptance.

All work shall be subject to inspection by Roanoke County and/or V.D.O.T. inspectors.

Field corrections shall be approved by the Roanoke County Engineering Division prior to such construction.

100 year floodway and floodplain information shall be shown where applicable.

Grade stakes shall be set for all curb and gutter, culver, sanitary sewer and storm sewer.

Plans are in compliance with ordinance 042799-10, Exhibit A entitled "Roanoke County Center for Research and Technology dated March 24, 1998, Application to Rezone the Property from R-1 to PTD."

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SEWER NOTES

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.

House connections are to be made with 4" pipe installed at a minimum grade of 1/4 inch to 1 foot in R/W.

Laterals from manholes shall be PVC or Ductile Iron of sufficient length to provide two (2) feet of bearing on natural ground. The transition from ductile iron to asbestos cement or concrete pipe shall be made with an adapter coupling in R/W.

All trenches in existing or future rights-of-way shall be compacted according to V.D.O.T. standards.

Lines shall be staked prior to construction.

WATER NOTES

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 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 V.D.O.T. standards.

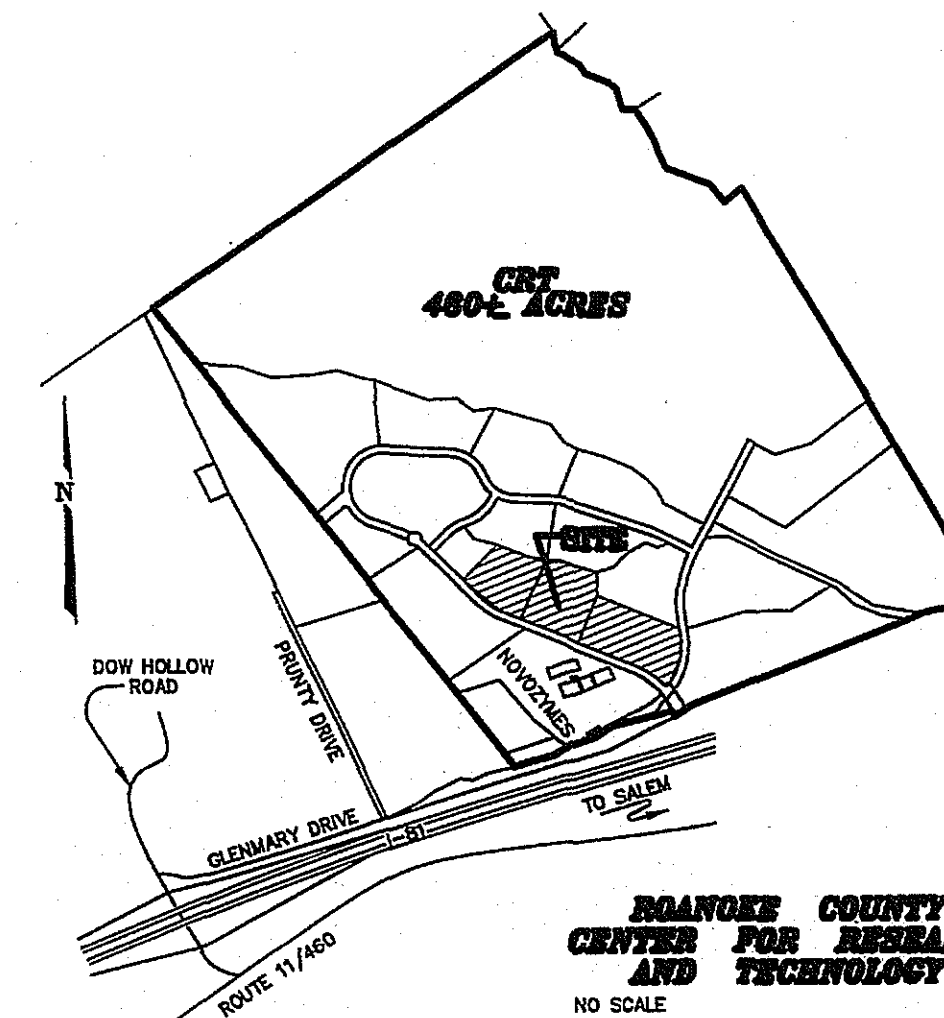
Lines shall be staked prior to construction.

Water main shall be minimum Class 52 Ductile Iron in accordance to AWWA C151 or DR-14 PVC in accordance with AWWA C-900.

Availability number: 05-326.D

LEGEND

Property Line	—R—
Right-of-way	—R/W—
Centerline	—C—
Minimum Building Line	—M.B.L.—
Existing Storm Sewer	—18" S.D.—18" S.D.—
Existing Sanitary Sewer	—8" SAN—8" SAN—
Existing Water Main	—4" W—4" W—
Existing Contour	—1045—
Proposed Contour	—1045—
Proposed Drainage Divide	—<—<—
Proposed Limits of Clearing	—24" S.D.—
Proposed Storm Sewer	—8" M.H.—
Proposed Sanitary Sewer	—8" M.H.—
Proposed Water Main	—HYDRANT—VALVE—BLOWOFF—



VICINITY MAP

SURVEY INFORMATION

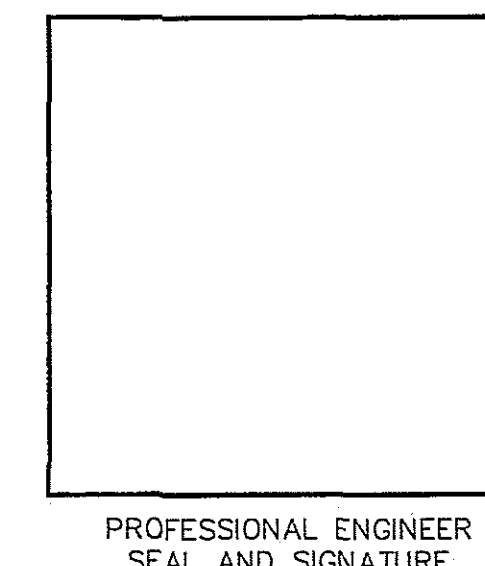
Horizontal and vertical control surveys were performed in (year) 2005 by CALDWELL WHITE ASSOCIATES

All elevations must be referenced to the National Geodetic Vertical Datum of 1929.

Source of topographic mapping is CALDWELL WHITE ASSOCIATES dated 2005

Boundary was performed by CALDWELL WHITE ASSOCIATES dated 2005

The professional seal and signature below certifies the boundary survey and topographic mapping to be accurate and correct.



COUNTY OF ROANOKE

NAME OF DEVELOPMENT ROANOKE COUNTY CENTER FOR RESEARCH AND TECHNOLOGY

MAGISTERIAL DISTRICT(S) CATAWA

OWNER (name, address, telephone) TECTON PRODUCTS LLC, 4401 15TH AVE NW, FARGO, ND 58108-2712 (701)277-0209

DEVELOPER (name, address, telephone) BRANCH & ASSOCIATES INC., 3902 FRANKLIN ROAD, ROANOKE VA 24014, (540)989-3487

ENGINEER, ARCHITECT OR SURVEYOR (name, address, telephone) HSMM, 1315 FRANKLIN ROAD, ROANOKE VA 24034, (540)857-3100

TAX MAP NO(S) 054.00-01-02.1 BLOCK NO(S) PARCEL NO(S)

I, *[Signature]* OWNER/DEVELOPER, AM AWARE OF THE SITE DESIGN REQUIREMENTS IMPOSED BY THIS SITE DEVELOPMENT PLAN AND OTHER APPLICABLE COUNTY CODES. I HEREBY CERTIFY THAT I AGREE TO COMPLY WITH THESE REQUIREMENTS, UNLESS MODIFIED IN ACCORDANCE WITH LOCAL LAW.

ZONING TABULATION		
SITE ZONING	I-1, PTD	
PROPOSED USE	INDUSTRIAL	
LOT SIZE	20.00 AC	
SETBACKS		
FRONT (FT)	30	
SIDE (FT)	10	
REAR (FT)	15	
COVERAGE AND PARKING		
	REQUIREMENT	PROVIDED
MAXIMUM LOT COVERAGE ALLOWED (%)	90/75 (I-1/PTD)	36.5(1)
MAXIMUM BUILDING COVERAGE ALLOWED (%)	50 (I-1)	18.5(1)
MAXIMUM BUILDING HEIGHT ALLOWED (FT)	45	22
TOTAL PARKING REQUIRED (SPACES)	82	76(2)
ACCESSIBLE PARKING REQUIRED (SPACES)	4	4
PARKING SUMMARY		
PHASE 1		
OFFICE AREA (1 SPACE PER 300 SF)	10,900 SF	36 SPACES
WAREHOUSE AREA (1 SPACE PER 5,000 SF)	19,600 SF	4 SPACES
MANUFACTURING AREA (1 SPACE PER 1,000 SF)	42,000 SF	42 SPACES
SUBTOTAL	72,500 SF	82 SPACES
PHASE 2		
MANUFACTURING AREA (1 SPACE PER 1,000 SF)	42,000 SF	42 SPACES
PHASE 3		
MANUFACTURING AREA (1 SPACE PER 1,000 SF)	42,000 SF	42 SPACES
TOTAL	156,500 SF	166 SPACES

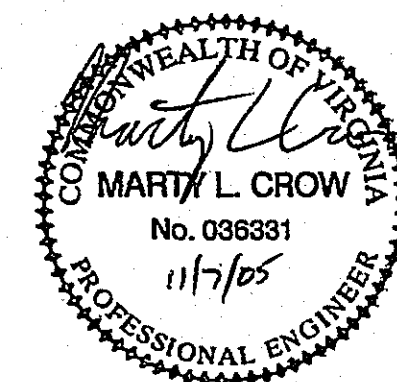
- Actual lot and building coverage percentages include ultimate buildout of Phase 3.
- Provided parking spaces meets owner requirements for Phase 1. Owner's requirements are based on historical plant data. Future Phase 2 parking provides a total of 189 spaces and exceeds County parking requirements for Phases 2 and 3.

HSMM

ARCHITECTS ENGINEERS PLANNER

HAYES, SEAY, MATTERN & MATTERN, INC.
1315 FRANKLIN ROAD
ROANOKE, VA 24016
(540) 857-3100 WWW.HSMM.COM

SEALS



CONSULTANT

CONSULTANT



TECTON
PRODUCTS, LLC
MANUFACTURING
FACILITY

ROANOKE COUNTY, VIRGINIA

REV	DATE	DESCRIPTION	APP

COMM NO: 50298
ISSUE DATE: OCTOBER 28, 2005
DESIGNED BY: TJG/ DRAWN BY: TJG
CHECKED BY: MLC/ SUBMITTED BY:
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2005. ALL RIGHTS RESERVED.

GENERAL

ROANOKE COUNTY
COVER SHEET

WWW.IDP.BVORG

C001

SHEET ____ OF ____