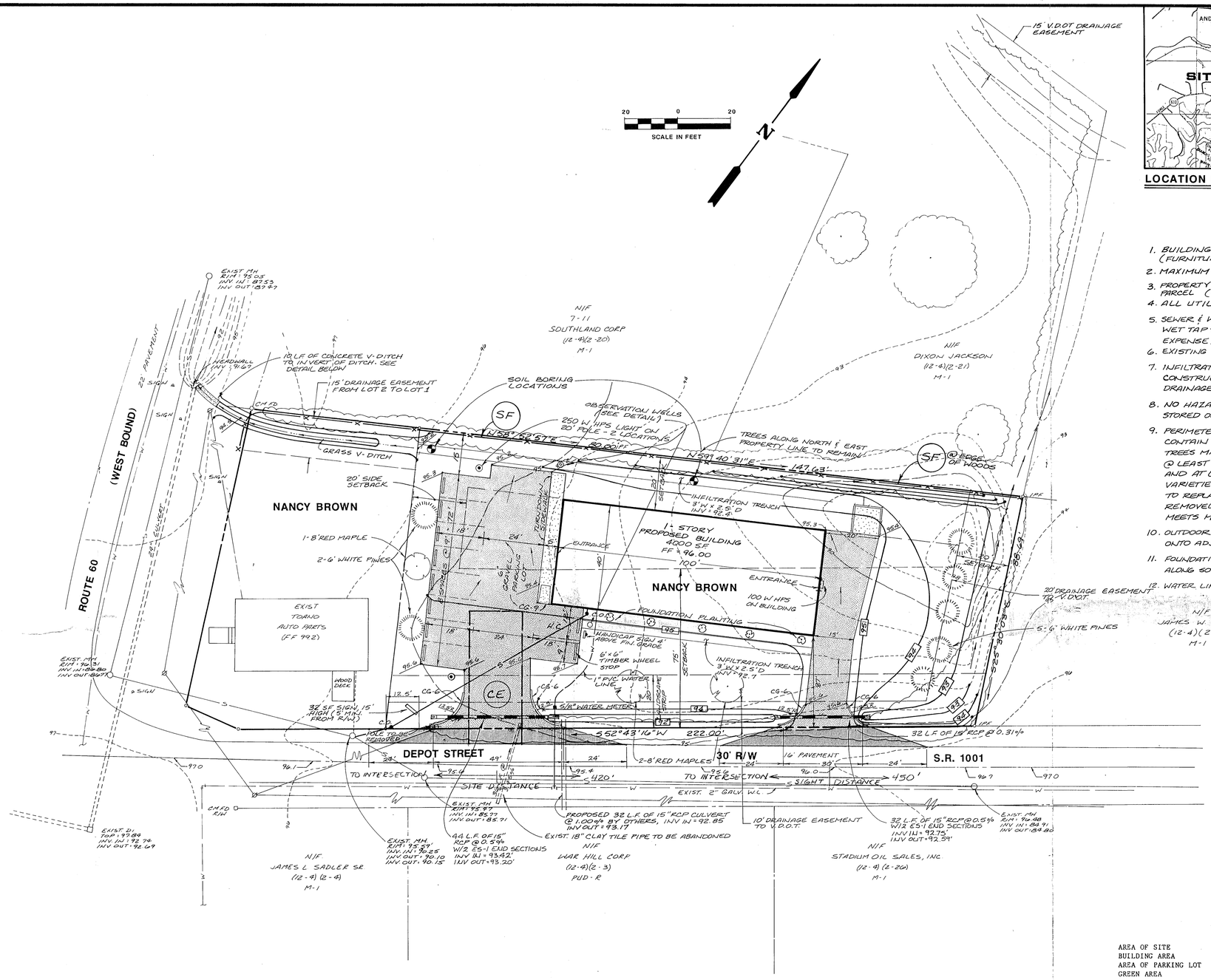

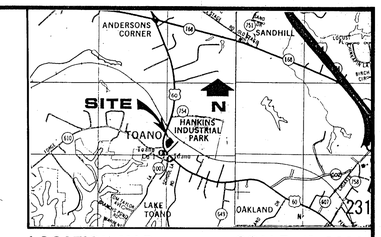

LOCATION MAP **SCALE: 1"=2000'**

1. BUILDING TYPE - 2C, USE - MERCANTILE (FURNITURE SALES)
2. MAXIMUM BUILDING HEIGHT IS 20'
3. PROPERTY IS LOCATED ON TAX MAP 12-4, PARCEL (1-2)
4. ALL UTILITIES TO BE UNDERGROUND
5. SEWER & WATER CONNECTION TO BE WET TAP TYPES BY OWNER @ OWNERS EXPENSE.
6. EXISTING TREES ARE 4" - 10" HARDWOODS.
7. INFILTRATION TRENCH WILL NOT BE CONSTRUCTED UNTIL CONTRIBUTING DRAINAGE AREAS HAVE BEEN STABILIZED.
8. NO HAZARDOUS SUBSTANCES WILL BE STORED ON SITE.
9. PERIMETER LANDSCAPE STRIP SHALL CONTAIN 1 TREE EVERY 50 FEET. THESE TREES MAY BE EXISTING AND MUST BE @ LEAST 6' TALL FOR EVERGREEN VARIETIES AND AT LEAST 8' TALL FOR DECIDUOUS VARIETIES. OWNER/DEVELOPER AGREES TO REPLACE EACH REQUIRED TREE THAT IS REMOVED OR DAMAGED WITH ONE THAT MEETS MINIMUM HEIGHT REQUIREMENTS.
10. OUTDOOR LIGHTING SHALL NOT GLARE ONTO ADJACENT PROPERTIES.
11. FOUNDATION PLANTING TO BE PROVIDED ALONG SOUTH SIDE OF BUILDING.
12. WATER LINE TO BE JACKED UNDER ROAD.

COUNTY OF JAMES CITY
FINAL SITE PLAN

Received .....

APPROVALS	DATE
Fire Dept.	
Health Dept.	
Highway Dept.	
Plan. Comm.	
Pub. Wks. Dept.	
Zoning Adm.	
JCSA	
Other	
Other	

LAND USE SUMMARY

AREA OF SITE	22,616 SF	0.52 AC	100%
BUILDING AREA	4,000 SF	0.09 AC	17.69%
AREA OF PARKING LOT	5,200 SF	0.12 AC	22.99%
GREEN AREA	13,416 SF	0.31 AC	59.32%

ZONING - M-1
SETBACKS - 50' FRONT, 20' SIDE
75' FROM CENTERLINE ROAD ON SIDE,
20' REAR

PARKING REQUIRED - 10 SPACES

PARKING PROVIDED - 9 STANDARD
1 HANDICAPPED
10 - TOTAL

LOADING REQUIRED - 1
LOADING PROVIDED - 1

DITCH AT TOE OF FILL OR TOP OF CUT

TYPE E	12"	2'-3"	2'-3"	0.500

K-115

CONCRETE V-DITCH

MAR 1988
RECEIVED
PLANNING DEPARTMENT

SP-5-88
C.C.

No.	DATE	REVISION / COMMENT / NOTE	BY
4	3/14/88	ADDED SIGHT DISTANCE	RAC
3	1/22/88	REVISED PER V.D.O.T.	RMS
2	12/87	REVISED PER J.C.C. & V.D.O.T.	RMS
1	11/2/87	REVISED PER OWNER	RAC

COMMONWEALTH OF VIRGINIA
RICHARD A. CASTELLO
CERTIFICATE NO. 013250
CERTIFIED PROFESSIONAL ENGINEER

AES, a professional corporation
1761 Jamestown Road
Williamsburg, Virginia 23185
804-253-0040
Engineering, Planning, Surveying

SITE PLAN
DEPOT STREET BUILDING
OWNER/DEVELOPER: NANCY BROWN
TOANO JAMES CITY COUNTY VIRGINIA

Designed	Drawn
RAC	RMS
Scale 1"=20'	Date OCT., 1987
Project No. 6355	
Drawing No. 1 of 2	

EROSION & SEDIMENT CONTROL MEASURES

ALL EROSION & SEDIMENT CONTROL MEASURES SHALL BE IN ACCORDANCE WITH THE "VIRGINIA EROSION & SEDIMENT CONTROL HANDBOOK." THE CONTRACTOR SHALL THOROUGHLY FAMILIARIZE HIMSELF WITH ALL ADDITIONAL MEASURES CONTAINED THEREIN WHICH MAY BE PERTINENT TO THIS PROJECT.

THE PURPOSE OF SUCH MEASURES INCLUDING (BUT NOT LIMITED TO) THOSE SHOWN ON THIS PLAN SHALL BE TO PRECLUDE THE TRANSPORT OF ALL WATERBORNE SEDIMENTS RESULTING FROM CONSTRUCTION ACTIVITIES FROM ENTERING ONTO ADJACENT PROPERTIES OR INTO STATE WATERS. ALL SEDIMENTS MUST BE CONFINED TO THE PROJECT SITE AT THE LOCATIONS SHOWN ON THIS PLAN OR AS DIRECTED BY THE AES PROJECT REPRESENTATIVE.

THE FOLLOWING SEQUENCE OF EVENTS AND EROSION CONTROL MEASURES SHALL BE INCORPORATED INTO THE CONSTRUCTION SCHEDULE FOR THIS PROJECT AND SHALL APPLY TO ALL CONSTRUCTION ACTIVITIES WITHIN THE PROJECT LIMITS:

1. LAND CLEARING & GRUBBING (IF REQUIRED) SHALL BE LIMITED TO AREAS OF WORKABLE SIZE.
2. TEMPORARY SEDIMENT BASINS, DIKES, EROSION CONTROL STONE, STRAW BALE BARRIERS, ETC., SHALL BE PLACED DURING CLEARING, GRUBBING, EARTH MOVING AND ROUGH GRADING ACTIVITIES. ALL TEMPORARY STRUCTURES SHALL BE CHECKED PERIODICALLY AND CLEANED AS NECESSARY.
3. THE CONTRACTOR SHALL STOCKPILE CLEARING & GRUBBING DEBRIS AT THE LOCATION(S) INDICATED ON THIS PLAN OR AS DIRECTED BY THE AES PROJECT REPRESENTATIVE. COLLECTED DEBRIS SHALL BE HAULED AWAY, BURIED ON SITE, OR OTHERWISE SUITABLY REMOVED PROMPTLY BY THE CONTRACTOR.
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5. THE CONTRACTOR SHALL COMPLETE DRAINAGE FACILITIES WITHIN 15 DAYS FOLLOWING COMPLETION OF ROUGH GRADING AT ANY POINT WITHIN THE PROJECT.
6. ALL TEMPORARY EROSION CONTROL MEASURES (SEDIMENT BASINS, STRAW BALE BARRIERS, DIKES, ETC.) SHALL BE INSTALLED PRIOR TO INITIATION OF CLEARING, GRUBBING AND/OR ROUGH GRADING ACTIVITIES.
7. TEMPORARY VEGETATIVE COVER SHALL BE PROVIDED IN ALL DISTURBED AREAS WHICH ARE NOT DESIGNATED FOR PAVING, UNDERGROUND UTILITIES OR STRUCTURAL USES. SUCH AREAS SHALL NOT BE EXPOSED FOR PERIODS EXCEEDING 15 DAYS. TEMPORARY VEGETAL COVER SHALL CONSIST OF SEEDING WITH RYE GRASS AT 40#/ACRE AND MULCHING. TEMPORARY VEGETAL COVER MAY BE ELIMINATED IN FAVOR OF FINAL VEGETAL COVER IF CONSTRUCTION CONDITIONS PERMIT AND THE CONTRACTOR IS SO DIRECTED BY THE AES PROJECT REPRESENTATIVE. APPLY FERTILIZER, LIME AND MULCH IN ACCORDANCE WITH NOTE 12.
8. ALL AREAS DESIGNATED FOR PAVING, UNDERGROUND UTILITIES, AND STRUCTURAL USE SHALL BE STABILIZED AS SOON AS POSSIBLE BUT NOT EXCEEDING 15 DAYS FOLLOWING INSTALLATION. NO MORE THAN 300' OF SANITARY SEWER, STORM SEWER OR WATER LINES ARE TO BE OPEN AT ANY ONE TIME. BASE COURSE MATERIAL SHALL BE PLACED IN ALL STREET AREAS WITHIN 30 DAYS OF FINAL GRADING.
9. ALL STORM MANAGEMENT FACILITIES, INCLUDING EROSION CONTROL STONE, ARE TO BE INSTALLED AND MADE OPERATIONAL WITHIN 15 DAYS FOLLOWING THE START OF CONSTRUCTION AND APPROVED SEDIMENT BASINS. THE INSTALLATION OF DRAINAGE FACILITIES SHALL TAKE PRECEDENCE OVER ALL OTHER UNDERGROUND UTILITIES.
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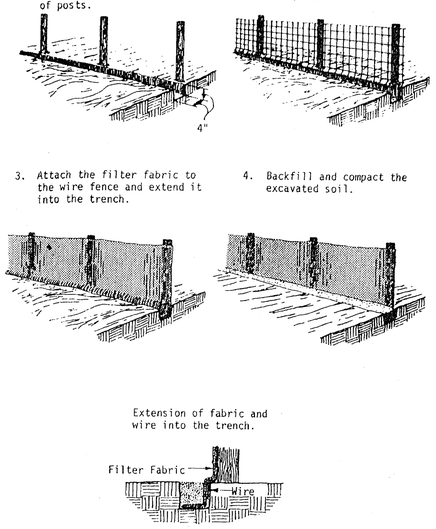
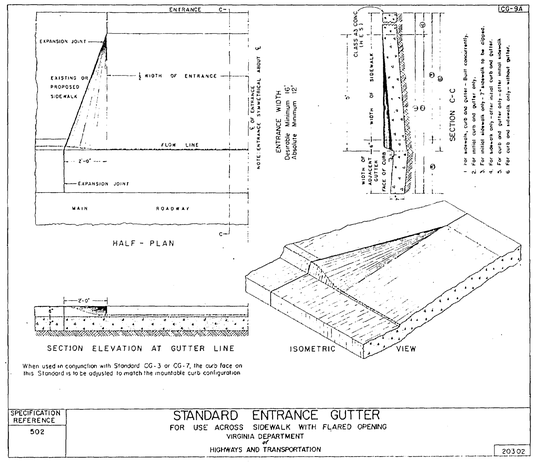
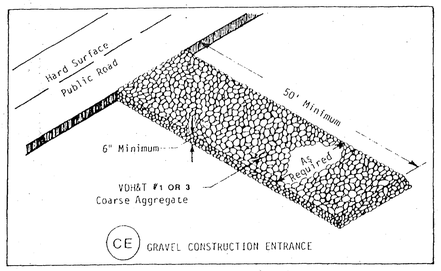
    - TOPSOIL: AT LEAST 2" THICKNESS OBTAINED FROM STOCKPILES ON SITE, OR OFFSITE SOURCE APPROVED BY THE AES PROJECT REPRESENTATIVE, FREE OF LARGE DEBRIS;
    - LIME: 4000 #/ACRE (90#/1000 SF);
    - SEED: KENTUCKY 31 TALL FESCUE 250#/ACRE (6#/1000 SF);
    - FERTILIZER: 10/20/10 MIX, 1000 #/ACRE (25#/1000 SF);
    - MULCH: STRAW OR HAY (LOCALLY OBTAINED) 4000 #/ ACRE (90#/1000 SF);
13. PAVED DITCHES WILL BE REQUIRED WHEREVER EROSION IS EVIDENT. PARTICULAR HEED SHOULD BE PAID TO THOSE AREAS WHERE GRADES EXCEED 3%.
14. THE OWNER/DEVELOPER AND CONTRACTOR SHALL KEEP ALL PAVED ROADS FREE AND CLEAR OF SEDIMENT OR OTHER DEBRIS. A STABILIZED CONSTRUCTION ENTRANCE SHALL BE PROVIDED AND ANY SEDIMENT TRACKED ONTO PUBLIC ROADS SHALL BE REMOVED DAILY BY SHOVELING OR SWEEPING.
15. IT IS THE RESPONSIBILITY OF THE OWNER/DEVELOPER TO INSPECT AND MAINTAIN ALL TEMPORARY AND PERMANENT DRAINAGE, EROSION AND SEDIMENT CONTROL STRUCTURES.

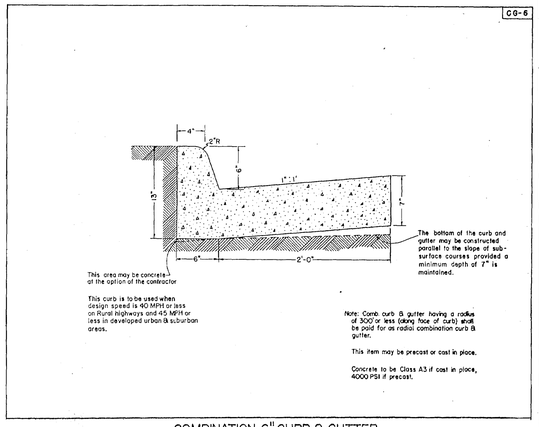


(SF) CONSTRUCTION OF A SILT FENCE

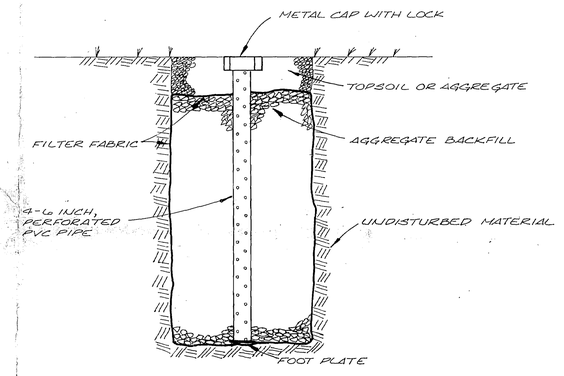




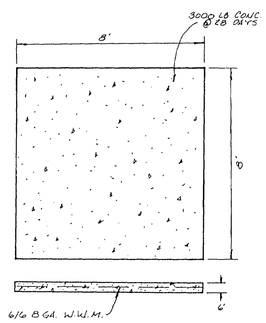
(CE) GRAVEL CONSTRUCTION ENTRANCE



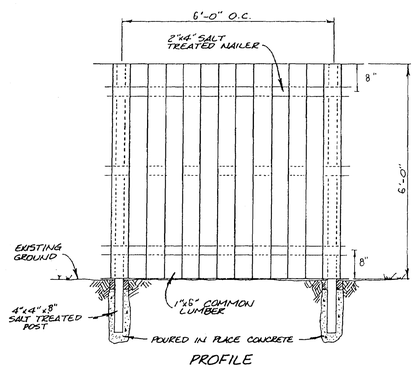
COMBINATION 6" CURB & GUTTER



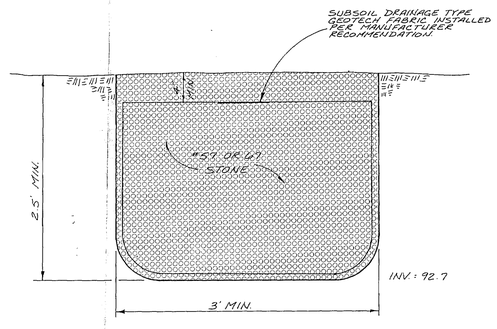
OBSERVATION WELL DETAIL



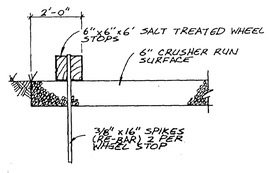
DRY DUMPSTER
N.T.S.



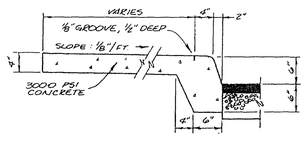
6' WOOD FENCE DETAIL



INFILTRATION TRENCH



TIMBER WHEEL-STOP DETAIL
NOT TO SCALE



HORIZONTAL CRACK CONTROL JOINTS SHALL BE 5' ± C-C UNLESS OTHERWISE NOTED

TURNDOWN SIDEWALK DETAIL
SCALE: 3/4" = 1'-0"

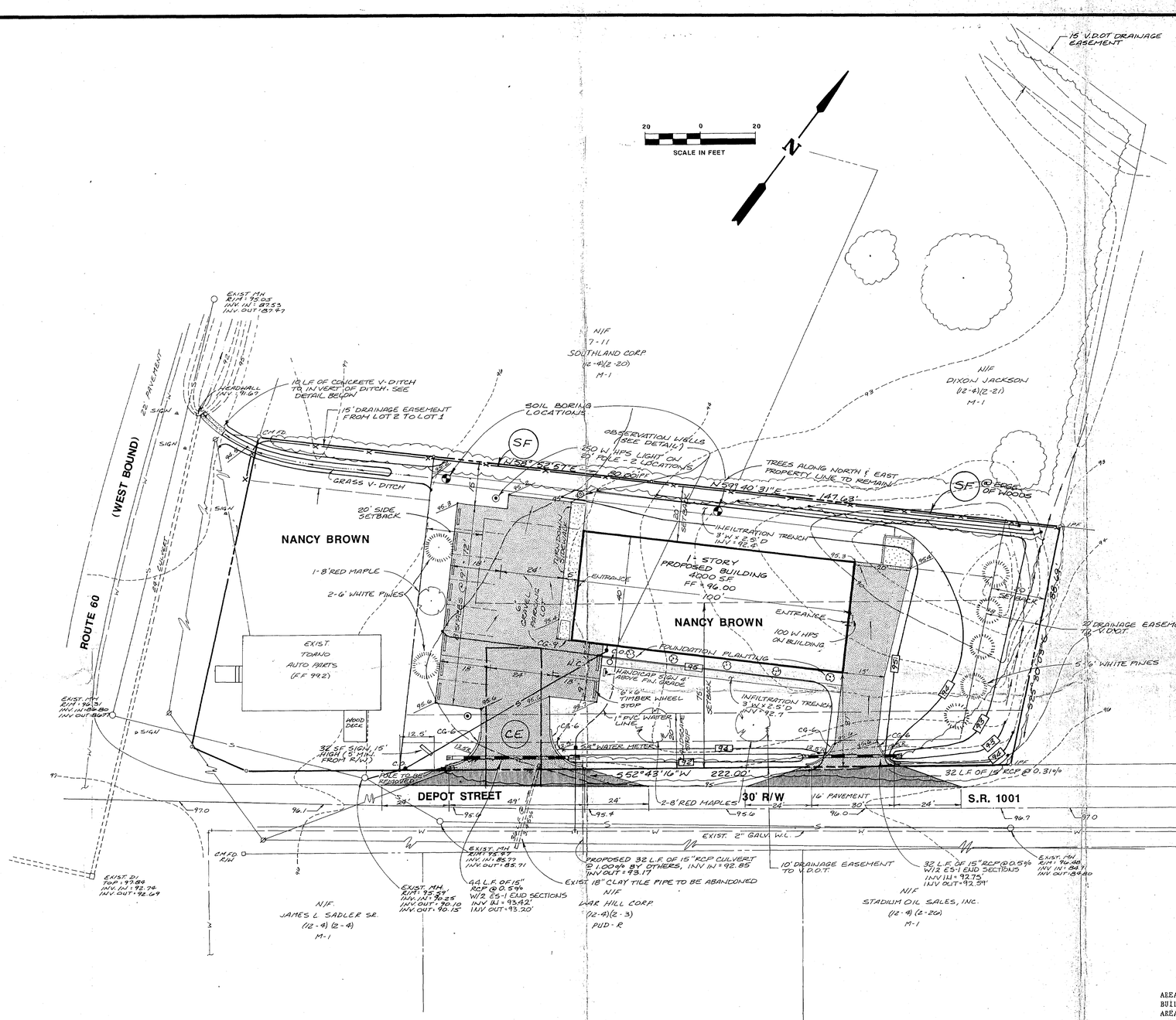
No.	DATE	REVISION / COMMENT / NOTE	BY

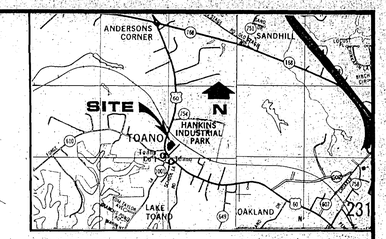
COMMONWEALTH OF VIRGINIA
RICHARD A. COSTELLO
CERTIFICATE NO. 012250
PROFESSIONAL ENGINEER

AES, a professional corporation
1761 Jamestown Road
Williamsburg, Virginia 23185
804-253-0040
Engineering, Planning, Surveying

NOTES AND DETAILS
DEPOT STREET BUILDING
OWNER/DEVELOPER: NANCY BROWN
JAMES CITY COUNTY, VIRGINIA
TOANO

Designed RAC	Drawn
Scale 1"=20'	Date
Project No. 6355	
Drawing No. 2 of 2	





LOCATION MAP **SCALE: 1"=2000'**

1. BUILDING TYPE - 2C, USE - MERCANTILE (FURNITURE SALES)
2. MAXIMUM BUILDING HEIGHT IS 20'
3. PROPERTY IS LOCATED ON TAX MAP 12-4, PARCEL (1-2)
4. ALL UTILITIES TO BE UNDERGROUND
5. SEWER & WATER CONNECTION TO BE WET TAP TYPES BY OWNER @ OWNERS EXPENSE.
6. EXISTING TREES ARE 4" - 10" HARDWOODS.
7. INFILTRATION TRENCH WILL NOT BE CONSTRUCTED UNTIL CONTRIBUTING DRAINAGE AREAS HAVE BEEN STABILIZED.
8. NO HAZARDOUS SUBSTANCES WILL BE STORED ON SITE.
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10. OUTDOOR LIGHTING SHALL NOT GLARE ONTO ADJACENT PROPERTIES.
11. FOUNDATION PLANTING TO BE PROVIDED ALONG SOUTH SIDE OF BUILDING.
12. WATER LINE TO BE JACKED UNDER ROAD.

No.	DATE	REVISION / COMMENT / NOTE	BY
3	1/22/88	REVISED PER V.D.O.T.	RAC
2	12/8/87	REVISED PER J.C.C. & V.D.O.T.	RAC
1	11/2/87	REVISED PER OWNER	RAC

COMMONWEALTH OF VIRGINIA
EDWARD A. CASTELLO
LICENSE NO. 011236
CERTIFIED PROFESSIONAL ENGINEER

AES, a professional corporation
1761 Jamestown Road
Williamsburg, Virginia 23185
804-253-0040
Engineering, Planning, Surveying

SITE PLAN
DEPOT STREET BUILDING
OWNER/DEVELOPER: NANCY BROWN
TOANO JAMES CITY COUNTY VIRGINIA

Designed RAC	Drawn RMB
Scale 1"=20'	Date OCT., 1987
Project No. 6355	
Drawn No. 1 of 2	

LAND USE SUMMARY

AREA OF SITE	22,616 SF	0.52 AC	100%
BUILDING AREA	4,000 SF	0.09 AC	17.69%
AREA OF PARKING LOT	5,200 SF	0.12 AC	22.99%
GREEN AREA	13,416 SF	0.31 AC	59.32%

ZONING - M-1
SETBACKS - 50' FRONT, 20' SIDE
75' FROM CENTERLINE ROAD ON SIDE,
20' REAR

PARKING REQUIRED - 10 SPACES

PARKING PROVIDED - 9 STANDARD
1 HANDICAPPED
10 - TOTAL

LOADING REQUIRED - 1
LOADING PROVIDED - 1

DITCH AT TOE OF FILL OR TOP OF CUT

TYPE E	12"	2'-3"	2'-3"	0.500

K-115

CONCRETE V-DITCH

COUNTY OF JAMES CITY
FINAL SITE PLAN

APPROVALS	DATE
Fire Dept.	
Health Dept.	
Highway Dept.	
Plan. Comm.	
Pub. Wks. Dept.	
Zoning Adm.	
JCSA	
Other	
Other	

FEB 1988
RECEIVED
PLANNING DEPARTMENT

SP-5-87
Code Compliance

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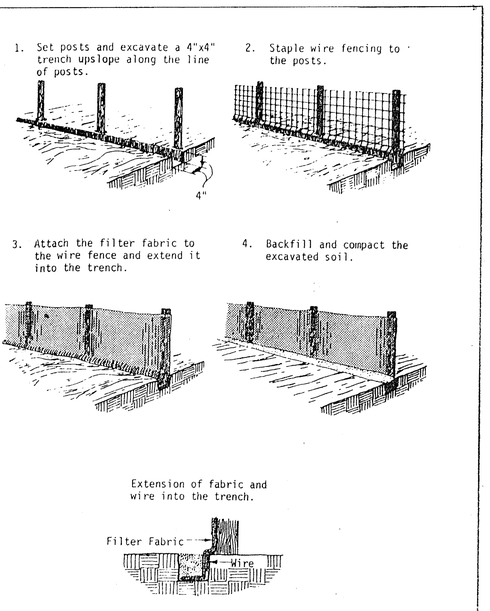
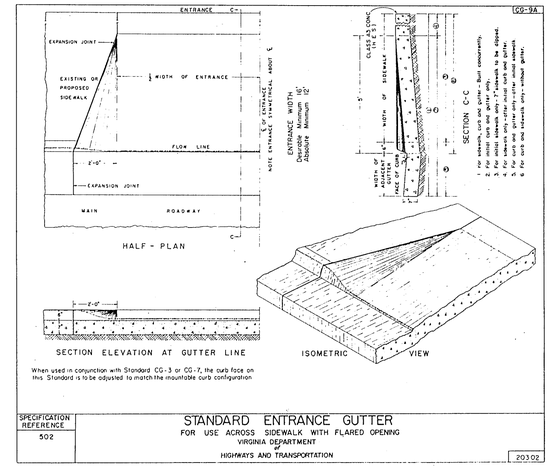
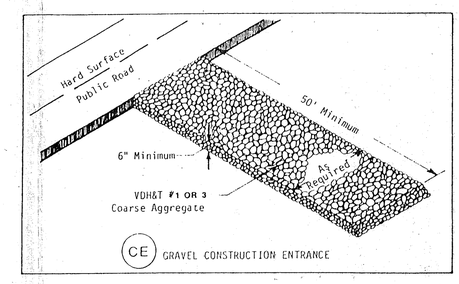
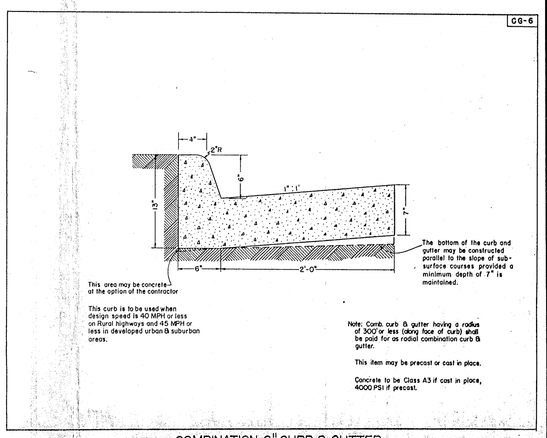


(SF) CONSTRUCTION OF A SILT FENCE

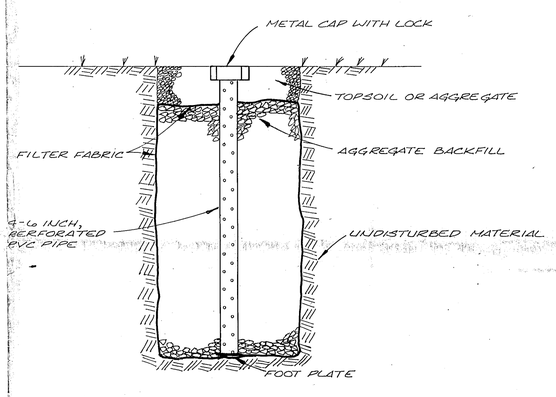




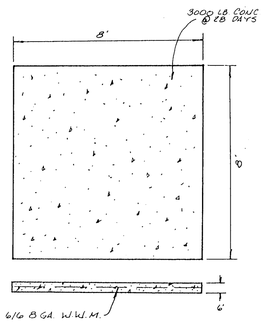
(CE) GRAVEL CONSTRUCTION ENTRANCE



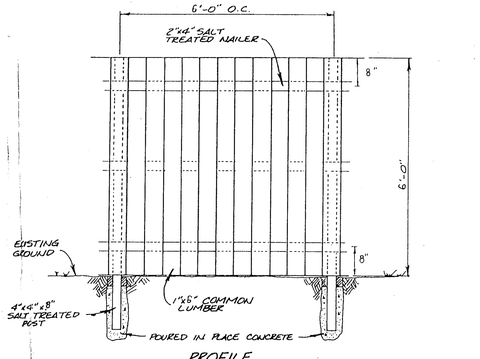
COMBINATION 6" CURB & GUTTER



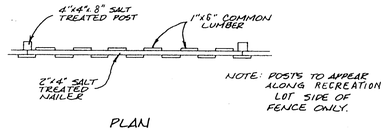
OBSERVATION WELL DETAIL



DRY DUMPSTER
N.T.S.

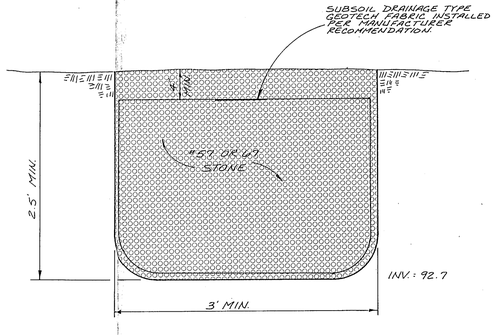


PROFILE

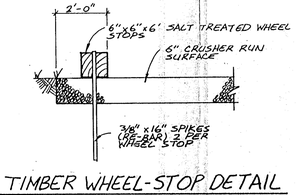


PLAN

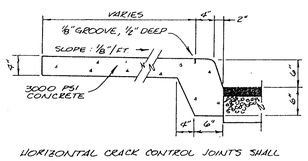
6' WOOD FENCE DETAIL



INFILTRATION TRENCH



TIMBER WHEEL-STOP DETAIL
NOT TO SCALE



HORIZONTAL CRACK CONTROL JOINTS SHALL BE 5' ± C-C UNLESS OTHERWISE NOTED

TURNDOWN SIDEWALK DETAIL
SCALE: 3/4" = 1'-0"

No.	DATE	REVISION / COMMENT / NOTE	BY

STATE OF VIRGINIA
RICHARD A. CASTILLO
CERTIFICATE NO. 012630
COMMONWEALTH OF VIRGINIA CERTIFIED PROFESSIONAL ENGINEER

AES, a professional corporation
1761 Jamestown Road
Williamsburg, Virginia 23185
804-253-0040
Engineering, Planning, Surveying

NOTES AND DETAILS
DEPOT STREET BUILDING
OWNER/DEVELOPER: NANCY BROWN
JAMES CITY COUNTY VIRGINIA
TOANO

Designed RAC	Drawn
Scale 1"=20'	Date
Project No. 6355	
Drawing No. 2 of 2	

Depot Street Building Site - Never Built

Vicinity Map [redacted]

POOR QUALITY

ORIGINAL(S) FOLLOW

THIS IS THE BEST COPY AVAILABLE

VCE DOCUMENT CONVERSION

ENGINEERING SURVEYING PLANNING

a professional corporation

Paul C. Small, PE, PLS
Richard A. Costello, PE

February 9, 1987

James City County
Department of Planning
P. O. Box JC
Williamsburg, Virginia 23187

FEB 1987
RECEIVED
PLANNING DEPARTMENT

Attention: Richard P. Kania
Planner

RE: Site Plan
Depot Street Building
AES Project No. 6355

Gentlemen:

This letter is written in reference to unresolved drainage problems on the above referenced site plan. We met with the VDOT last week concerning the cross culvert on Depot Street which appears to drain across this property without a drainage easement to a low area in the rear where the water then stands.

The local residency wants to forward the plans to Suffolk and field inspect the site prior to making any decision on what should be done with the drainage. We concur because there appears no obvious solution to the problem short of redirecting the drainage on Depot street. The Burnt Ordinary development needs to be reviewed since they may have already resolved this problem.

If you have any problems with this, please contact us immediately.

Very truly yours,

AES, a professional corporation

Richard A. Costello

Richard A. Costello, P.E.

RAC:keh:36(86)

1761 Jamestown Road, Williamsburg, Va. 23185 804-253-0040

E+S Tec - 1d.

TRANSMITTAL

RECEIVED 12-23-87

DATE: December 22, 1987

TO:
Public Works
VDOT*

FROM:
Rick Kania

SUBJECT: **Case Number** SP-5-87

Title Depot Street Builidng

ITEMS ATTACHED:

Revised site plan
*includes two copies

INSTRUCTIONS: Please review and comment

Return required by December 29, 1987

AGENCY'S COMMENTS:

1. A Land Disturbing Permit and Siltation Agreement, with surety, are required for this project.
2. A copy of the recorded drainage easement for the project to Richmond Road must be provided prior to final site plan approval.
3. The Inspection/Maintenance Agreement for the runoff control facilities must be executed prior to final site plan approval.

M E M O R A N D U M

DATE: 2/17/87

TO: Wayland N. Bass, Director of Public Works

FROM: Darryl E. Cook, Engineer

SUBJECT: DEPOT ST. BLDG

The subject project has the following issues that must be addressed during the plan review process:

- Water Planning
- Sewer Planning
- Container Site
- ✓ Reservoir Protection Overlay District
- Reservoir Taking
- ✓ Erosion and Sediment Control
- Stormwater Management
- None of the above

DEC/bh
2002c

Engineering And Surveying
1761 Jamestown Road
WILLIAMSBURG, VIRGINIA 23185

(804) 253-0040

LETTER OF TRANSMITTAL

DATE	JOB NO.
12/16/87	6355

ATTENTION Darryl Cook

RE: Depot Street Bldg
SUP 3-87

TO James City County
Dept of Code Compliance
Williamsburg Va 23185

RECEIVED 1-7-88

WE ARE SENDING YOU ☒ Attached ☐ Under separate cover via _____ the following items:

☐ Shop drawings ☐ Prints ☐ Plans ☐ Samples ☐ Specifications

☐ Copy of letter ☐ Change order ☐ _____

COPIES	DATE	NO.	DESCRIPTION
1	11/10/87	2 Pg	REPORT ON SOIL @ ABOVE SITE
1			BILL FOR REPORT

THESE ARE TRANSMITTED as checked below:

☐ For approval ☐ Approved as submitted ☐ Resubmit _____ copies for approval

☐ For your use ☐ Approved as noted ☐ Submit _____ copies for distribution

☐ As requested ☐ Returned for corrections ☐ Return _____ corrected prints

☐ For review and comment ☐ _____

☐ FOR BIDS DUE _____ 19____ ☐ PRINTS RETURNED AFTER LOAN TO US

REMARKS Bill included so you aware of additional costs for work (You have asked previously for estimated costs)

COPY TO _____ SIGNED: Richard N Costello

If enclosures are not as noted, kindly notify us at once.

a professional corporation

ENGINEERING SURVEYING PLANNING

Paul C. Small, PE, PLS
Richard A. Costello, PE

December 21, 1987

James City County
Department of Planning
P. O. Box JC
Williamsburg, VA 23187

Attn: Richard R. Kania, Planner

RE: Depot Street Building - SP-5-87
AES Job No. 6355

Dear Rick:

Enclosed are nine sets of plans for the above referenced project. These plans have been revised with respect to your letter December 16, 1987. The revisions are as follows:

PUBLIC WORKS

1. & 2. A Land Disturbing Permit and Siltation Agreement forms and applications have been sent to the owner with copy of this letter for him to process.

3. Included is a soils study from our consultant, Larry Madison - Soil Scientist, for the soils at this site in the vicinity of the infiltration trench.

4. We acknowledge that a Inspection-Maintenance Agreement for the runoff control facilities must be executed prior to final site plan approval. We have included the documents with the owner's copy for him to process and submit to the County.

5. We acknowledge that the runoff analysis submitted will be adequate for the current project.

6. We acknowledge that a copy of the recorded drainage easement for the project to Richmond Road must be provided prior to final site plan approval.

1761 Jamestown Road, Williamsburg, Va. 23185 804-253-0040

VIRGINIA DEPARTMENT OF TRANSPORTATION

1. We have added the route number for Depot Street.

2. Site distance has been documented on the plans. The road is only 850' in length, therefore 35 mph is probably the maximum speed that can be achieved from either end.

3. We do not understand why we need to comply with the Highway Department's request to provide a standard curb section and 25 foot radius for this project. Because of the narrowness of the right-of-way and lack of depth of the site, none of the entrance is on highway right-of-way. It is contained entirely on private property and if we use the 25' radius, we would use 1/3 of the depth of the site to provide entrances to the project. We request that the Highway Department approve the entrances as shown, since none of the entrance is on the highway right-of-way.

4. Ownership of the drainage easement will be shown on the plan.

5. We assume the Highway Department will be installing the 32 linear feet of 15" RCP crossdrain. The existing crossdrain across the road is very old (tile pipe) and does not function because the end is 2' below grade. The water presently just drains across the highway after the side ditch completely fills. This is an existing problem that this project is not affecting, therefore it would not seem to be the responsibility of our client to correct.

PLANNING DEPARTMENT

1. We acknowledge that final site plan approval is contingent upon the approval of the special use permit required because of the reservoir protection district.

2. We have added the property parcel number to the general notes.

3. We have added two additional trees along the southeast property line.

If there are any questions or you or any of the agencies want to discuss the comments contained in my letter, please call.

Sincerely,
AES, a professional corporation

Richard A. Costello

Richard A. Costello, P.E.

Enclosures
cc: Charles Brown

RAC/BLS
36(87)

AES, A PROFESSIONAL CORPORATION
Engineering And Surveying
1761 Jamestown Road
WILLIAMSBURG, VIRGINIA 23185

(804) 253-0040

LETTER OF TRANSMITTAL

File - Depot Street Bldg

DATE	JOB NO.
12/16/87	6355

ATTENTION: Darryl Cook

RE: Depot Street Bldg
SDP-3-87

TO James City County
Dept of Code Compliance
Williamsburg Va 23185

WE ARE SENDING YOU ☒ Attached ☐ Under separate cover via _____ the following items:

☐ Shop drawings ☐ Prints ☐ Plans ☐ Samples ☐ Specifications

☐ Copy of letter ☐ Change order ☐ _____

COPIES	DATE	NO.	DESCRIPTION
1	12/10/87	2 Pg	REPORT ON SOIL @ ABOVE SITE
1			BILL FOR REPORT

THESE ARE TRANSMITTED as checked below:

☐ For approval ☐ Approved as submitted ☐ Resubmit _____ copies for approval

☐ For your use ☐ Approved as noted ☐ Submit _____ copies for distribution

☐ As requested ☐ Returned for corrections ☐ Return _____ corrected prints

☐ For review and comment ☐ _____

☐ FOR BIDS DUE _____ 19____ ☐ PRINTS RETURNED AFTER LOAN TO US

REMARKS Bill included so you aware of additional costs for work (You have asked previously for estimated costs)

COPY TO _____ SIGNED: Richard A Costello

If enclosures are not as noted, kindly notify us at once.

Larry W. Madison, Sr.
Certified Professional Soil Scientist
P.O. Box 791
Chester, Virginia 23831
Phone 796-3911

November 10. 1987

Mr. Arch Marston
A.E.S.
1761 Jamestown Rd.
Williamsburg, VA 23186

Re: Depot Street Building

Dear Arch:

Enclosed please find soil profile description of the above mentioned tract of land.

This boring was made where you prescribed on your site plan. It is my opinion that the soil permeability at 24 inches is 30 minutes per inch.

Should you have any questions, please do not hesitate to contact me.

Sincerely,

Larry W. Madison Sr.

Larry W. Madison, Sr.
Soil Scientist

LWM/mds
Enclosure

Larry W. Madison, Sr.
Certified Professional Soil Scientist
P.O. Box 791
Chester, Virginia 23831
Phone 796-3911

November 10, 1987

SOIL PROFILE DESCRIPTION

Hole #	Horizon	Depth (inches)	Description of, color, texture, etc.
P-1	A	0-8	Light yellowish-brown & pale brown; loamy sand.
	B	8-34	Brownish-yellow to yellowish-brown; sandy loam.
	B	34-38	Brownish-yellow mottled with pale yellow & gray. Light clay loam.
	B	38-44	Brownish-yellow; sandy clay loam.
	C	44-52	Brownish-yellow mottled with yellowish-brown; sandy loam.

Larry W. Madison, Sr.
Certified Professional Soil Scientist
P.O. Box 791
Chester, Virginia 23831
Phone 796-3911

Date: November 10, 1987

Client: A.E.S.
1761 Jamestown Rd.
Williamsburg, VA 23186

Date	Description of work	Charge	Payment/ Credits	Balance Due
11/10/87	Soil Study Depot Street Bldg.	$ 120.00		$120.00

Finance Charge is computed by a periodic rate of 1.5% per month which is an annual percentage rate of 18% applied to the past due balance.

DEC

RECEIVED 2-11-87

TRANSMITTAL

DATE: February 10, 1987

TO:

VDOT*	Public Works*
Fire Department	Health Department
Service Authority*	Real Estate Assessments (2)
Soil Conservation Service*	Police Department

FROM: Rick Kania, Planning

SUBJECT: Case Number SP-5-87

Title Depot Street Building

ITEMS ATTACHED:

Site plan for review and comments.
*Runoff analysis

INSTRUCTIONS:

Please review and provide comments.
If approved, please sign the plan and return.

Return required by February 17, 1987

AGENCY'S COMMENTS:

1. A Land Disturbing Permit application shall be filled out + returned.
2. A Siltation Agreement, with $3500 security, shall be executed prior to issuance of a Land Disturbing Permit.
3. Provide evidence (soil test) that the soils have the ~~#~~ infiltration rate stated in the Runoff Analysis.
4. Provide a note that states the infiltration trench will not constructed until contributing drainage areas have been stabilized.

E+S Fee - Pd.

TRANSMITTAL

RECEIVED 1-26-88

DATE: January 25, 1988

TO: VDOT
Code Compliance

FROM: Rick Kania, Planner

SUBJECT: **Case Number** SP-5-87

Title Depot Street Building

ITEMS ATTACHED:

Revised site plan

INSTRUCTIONS:

Please review and comment.

Return required by February 1, 1988

AGENCY'S COMMENTS:

1. A Land Disturbing Permit and Siltation Agreement, with surety are required for this project.
2. A copy of the recorded drainage easement for the project to Richmond Road must be provided prior to final site plan approval.
3. The Inspection/Maintenance Agreement for the runoff control facilities must be executed prior to final site plan approval.

BOND COMPUTATIONS

NAME OF SUBDIVISION: Depot St. Bldg

SECTION: _____

OWNER/DEVELOPER: Nancy Brown

ENGINEER: AES

SUBDIVISION BOND AMOUNT: $_____

ESTIMATES (September 1987)

1. Street Construction and Sidewalks $ _____

2. Drainage _____

3. Utilities:

   a. Electrical Service _____
   b. Water _____
   c. Sewer _____

4. Streetlights _____

5. Street Signs _____

Total Subdivision Bond $ _____

EROSION AND SEDIMENT CONTROL BOND AMOUNT $ 3500

EROSION AND SEDIMENT CONTROL BOND ESTIMATE

No.	Item	Unit	Unit Cost	Estimated Quantity	Estimated Cost
1.	a. Construction Entrance	EA	$ 500.00	1	$ 500
	b. Road Stabilization	Inch/SY	.75		
2.	Straw Bale Barrier	LF	7.00		
3.	Silt Fence	LF	7.00	x 300	2100
4.	Storm Drain Inlet Protection				
	a. Straw Bale Filter	Inlet	53.00		
	b. Filter Fabric & Mesh Wire	Inlet	37.00		
	c. Gravel & Filter Fabric	Inlet	37.00		
	d. Block & Gravel	Inlet	31.00		
	e. Excavated Drop Inlet	CY	4.70		
	f. Gravel Curb Inlet	Inlet	25.00		
	g. Block & Gravel Curb Inlet	Inlet	25.00		
5.	Temporary Diversion Dike	LF	2.35		
6.	Temporary Fill Diversion	LF	.47		
7.	Temporary Right-of-Way Diversion				
	a. Stone	LF	2.35		
	b. Earthen	LF	2.35		
8.	Diversion	LF	11.70		
9.	Temporary Sediment Trap				
	a. No Excavation Required	LF	11.70		
	b. Excavation Required	CY	7.00		
	c. Stone filter	LF	10.00		
10.	Temporary Sediment Basin				
	a. Earthwork	CY	7.00		
	b. Outlet Structure (18" Barrel/24" Riser)	EA	1,265.00		

Page Total $ 2600

No.	Item	Unit	Unit Cost	Estimated Quantity	Estimated Cost
11.	Temporary Slope Drain	LF	$ 5.25		$
12.	Paved Flume	LF	20.00		
13.	Stormwater Conveyance Channel				
	a. Grass lined - Seeded	SY	5.85		
	b. Grass lined - Sodded	SY	11.70		
	c. Riprap	SY	41.00		
	d. Concrete/Bit. Concrete	SY	35.10		
	e. Filter Fabric	SY	10.00		
14.	Outlet Protection				
	a. Non-Grouted Riprap	SY	41.00		
	b. Grouted Riprap	SY	52.65		
	c. Concrete	SY	35.10		
15.	Rock Check Dams				
	a. No. 1 Stone	CY	27.00		
	b. Riprap	CY	75.00		
16.	Structural Protection				
	a. Gabions	CY	70.20		
	b. Grid Pavers	SY	52.65		
17.	Temporary Stream Crossing				
	a. 12-24" Pipe Diameter	LF	31.60		
	b. 29-48" Pipe Diameter	LF	63.20		
	c. 48-72" Pipe Diameter	LF	105.30		
	d. 72-96" Pipe Diameter	LF	147.40		
18.	Surface Stabilization				
	a. Temporary Mulching	Acre	1,000.00		
	b. Permanent topsoil, seed, fertilizer, lime and mulch	Acre	5,000.00	.25	1250
	c. Crimping/tacking	Acre	1,200.00		
	d. Hydroseeding	Acre	2,000.00		

Total $ 1250

Page 6 Total 2600

Grand Total $ 3850

RE/bkh
3360c

WNB

RECEIVED 11-6-87

TRANSMITTAL

DATE: November 5, 1987

TO: Real Estate Assessments
VDOT
Service Authority
~~Health Department~~
Public Works

FROM: Rick Kania, Planning

SUBJECT: Case Number SP-5-87

Title Depot Street Building

ITEMS ATTACHED:

Site plan

INSTRUCTIONS:

If approved, please sign the plan and return.
If not approved, please provide comments.

Return required by November 12, 1987

AGENCY'S COMMENTS:

1. A Land Disturbing Permit and Siltation Agreement, with surety, are required for this project.
2. Provide results of a soils test that verifies that the soils ~~have the~~ ~~are~~ ~~suitable for~~ have the infiltration rate stated in the Runoff Analysis.
3. Project has been reduced in scope resulting in less impact on the Ware Creek Reservoir. Therefore, the Runoff Analysis will not have to be revised.

TRANSMITTAL

DATE: March 22, 1988

TO: Code Compliance (Darryl Cook)

FROM: Rick Kania, Planner

SUBJECT: **Case Number** SP-5-87

Title Depot Street Building

ITEMS ATTACHED:

Revised site plan

INSTRUCTIONS:

Please review.

Rick -
Be sure to include the date of the SUP expiration in your letter to the applic.
DEC

Return required by March 25, 1988

AGENCY'S COMMENTS:

A Land Disturbing Permit + SILTATION Agreement, with surety, are required for this project.

A copy of the recorded drainage easement for the project to Richmond Road must be provided prior to final site plan approval.

An Inspection/Maintenance Agreement for the runoff control facility must be executed prior to final site plan approval

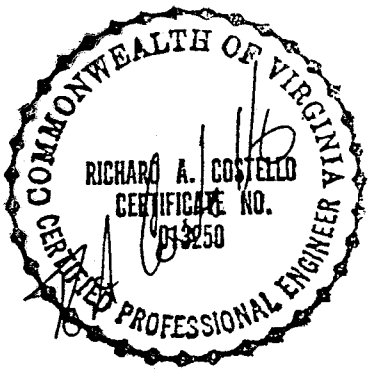
RESERVOIR PROTECTION OVERLAY DISTRICT

RUNOFF ANALYSIS FOR

DEPOT STREET BUILDING
AES PROJECT NO. 6355

PREPARED BY

AES, a professional corporation
1761 Jamestown Road
Williamsburg, Virginia 23185



FEBRUARY, 1987

Location and Impact of Project

This project is located at the western edge of the reservoir protection district some 1,500 feet away from streams feeding the reservoir and 64 feet above the anticipated elevation of the proposed reservoir(s). The previous use of the land was a single family residential lot. The impervious drainage area created by this project is 0.30 acre or 13,016 square feet. The remaining 0.31 acres is an existing 1375 sf building or lawn. The existing topography of the site is 1.5% to 10% slopes; however, it will be graded at flatter slope as necessary to meet the retention requirements of the reservoir protection district ordinance.

Present and Proposed Runoff Quantity and Qualities

The rear two-thirds of the site (Lot 2) was a single family residence and was mostly yard. The development scheme is to place a 4000 square foot building on fill in the lawn area and to maintain all the trees except those in the highway ditch along Depot Street. The area to be developed is approximately 13,016 square feet (.30 acre). Characteristics of site runoff pollutants for such a small site are difficult to precisely determine but are estimated as follows: sediment loading 109 pounds (0.62 cubic foot per year) and 0.36 pounds of phosphorous per year. These are less than quantities produced if the land was in cropland but are greater than previous use. Oils and litter, etc. from the parking lot will also be containments. However, the quantity of the above containments on such small site are not predictable. Runoff quantities for the 0.30 acre of project area:

	BEFORE DEVELOPMENT	AFTER DEVELOPMENT
Q_2	0.77 cfs	1.37 cfs
Q_{10}	0.91 cfs	1.79 cfs

The rational method was used for above calculations (USDA TR-55 design data not useable for areas below one acre).

Runoff Control Measure

Because of the small nature of the site and all runoff is from either the building or gravel parking lot, infiltration trenches were designed to retain the first inch of runoff and infiltrate it to the soils.

To retain the first inch of runoff (1,084 cubic feet), an infiltration trench using VDH&T #57 will need to be 2,711 cubic feet in size. The permeability of the existing soil is 10-12 inches per hour for the soils from 6"-18" and 6"-8" per hour for the soils from 18"-72".

The trenches will be provided at the edges of the structure at the dripline and at the edge of the parking lot to collect the runoff. Each has been sized for its particular drainage area.

Summary and Hazardous Material Storage

The infiltration trenches will provide adequate protection to the reservoir because of the compact nature of the impervious areas of the project. The effectiveness of this infiltration facility to remove suspended solids and phosphorous is estimated between 75-90%.

The owner does not intend to store hazardous substances at the project, therefore this report does not address this matter.

Larry W. Madison, Sr.
Certified Professional Soil Scientist
P.O. Box 791
Chester, Virginia 23831
Phone 796-3911

Date: November 10, 1987

Client: A.E.S.
1761 Jamestown Rd.
Williamsburg, VA 23186

Date	Description of work	Charge	Payment/ Credits	Balance Due
11/10/87	Soil Study Depot Street Bldg.	$ 120.00		$120.00

Finance Charge is computed by a periodic rate of 1.5% per month which is an annual percentage rate of 18% applied to the past due balance.

Larry W. Madison, Sr.
Certified Professional Soil Scientist
P.O. Box 791
Chester, Virginia 23831
Phone 796-3911

November 10. 1987

Mr. Arch Marston
A.E.S.
1761 Jamestown Rd.
Williamsburg, VA 23186

Re: Depot Street Building

Dear Arch:

Enclosed please find soil profile description of the above mentioned tract of land.

This boring was made where you prescribed on your site plan. It is my opinion that the soil permeability at 24 inches is 30 minutes per inch.

Should you have any questions, please do not hesitate to contact me.

Sincerely,

Larry W. Madison Sr.

Larry W. Madison, Sr.
Soil Scientist

LWM/mds
Enclosure

Larry W. Madison, Sr.
Certified Professional Soil Scientist
P.O. Box 791
Chester, Virginia 23831
Phone 796-3911

November 10, 1987

SOIL PROFILE DESCRIPTION

Hole #	Horizon	Depth (inches)	Description of, color, texture, etc.
P-1	A	0-8	Light yellowish-brown & pale brown; loamy sand.
	B	8-34	Brownish-yellow to yellowish-brown; sandy loam.
	B	34-38	Brownish-yellow mottled with pale yellow & gray. Light clay loam.
	B	38-44	Brownish-yellow; sandy clay loam.
	C	44-52	Brownish-yellow mottled with yellowish-brown; sandy loam.

TO: DAWN NEELEY, PLANNER
FROM: DARRYL E. COOK, ENGINEER
SUBJECT: RUNOFF ANALYSIS, DEPOT STREET BLDG, SUP -

1. Impact of Proposed Project on the Water Supply Reservoir

This project involves the construction of a 4000 square foot building and 9016 square feet of pavement on the corner of Depot Street and Richmond ~~Rd~~ Road in Tosno. The site also contains an existing 1375 SF building that ~~[illegible]~~ was a residence but currently serves as the location for the Tosno Auto Parts store. The project will increase the amount of impervious area by 13,016 square feet. Without runoff controls, the sediment and phosphorus loadings would both increase by approximately fifty (50) percent to 114 ~~#~~ pounds per year and 0.43 ~~lbs~~ pounds per year, respectively. With the proposed runoff controls (infiltration trenches) future loadings will be ~~a~~ reduced by approximately 80 percent. This will have the effect of reducing pollutant loadings by approximately 60% ~~g~~ below existing levels. Therefore, the project will be beneficial to the water supply reservoir.

2, 3, 4 - See attached sheet.

1. Impact of proposed project on the water supply reservoir.

~~Tower School is a proposed group home located on a 5.8 acre parcel of land~~ on the southeast side of Fire Tower Road, approximately 600 feet east of Old Stage Road. The project consists of the conversion of an existing residence to office space and the construction of a 3,000 square foot building, 2,300 square feet of parking area, construction of a water works system, and other minor site improvements. The site improvements will increase the impervious area by approximately 5,500 square feet. Without runoff controls the sediment and phosphorus loadings would both increase by approximately thirty percent to 325 pounds per year and 1.3 pounds per year, respectively. With the proposed runoff controls (infiltration trenches), future loadings will be reduced by approximately 80 percent. This will have the effect of reducing pollutant loadings below existing levels by approximately 45 percent for sediment and 25 percent for phosphorus. Therefore, the project will be beneficial to the water supply reservoir.

2. Adequacy of performance criteria specified in the study, including ability to monitor.

The project, with the proposed runoff control structures, meets the runoff analysis criteria as specified in Section 20-534 of the James City County Zoning Ordinance. The developer is required to execute an inspection and maintenance agreement with the Director of Public Works. Such an agreement is to provide for a periodic inspection and maintenance and to grant authority for the Director to require further repair/alterations as necessary to insure the control measures meet the stated performance criteria.

3. Recommendations for additional control measures if required, including monitoring.

Assurance must be provided that the performance of the proposed infiltration trench is not impaired due to construction activities. This will be accomplished by delaying construction of the trench until disturbed areas draining to the trench are stabilized. Also, a soil test must be provided to ensure that the soils are suitable for use with infiltration trenches.

4. Final recommendations regarding proposed project.

The first recommendation of Item No. 3 shall be accomplished by adding a note to the plan relating to delaying construction of the infiltration trench. The soil test shall be provided prior to final site plan approval.

DEC/bh
2831c

Pre $(.6) \times .71 = .42$ lb/ac/yr phos.

$.08$ tons/ac/yr $\times .71 = 113$ lbs.

Post $.16$ tons/ac/yr $\times .71 = 227$ lb/~~yr~~

phos. $1.2 \times .71 = .85$ lb/~~ac~~ yr.

inc. 114 lbs $\longrightarrow$ ~~.08~~ .45 lbs

inc. .43 lbs. $\longrightarrow$ ~~.08~~ .17 lbs.

reduce.

Pre $.6 \times .52 = .37$ lb/~~ac/yr~~ Phos.

$.08 \times .52 = 83$ lbs. Seed.

Post $.16 \times .52 = 166$ lbs

$1.2 \times .52 = .62$ lb Phos. $\times .2 = .12$