



TRANSMITTAL SHEET
ENGINEERING & RESOURCE PROTECTION → STORMWATER

Project: Oinkers Bar-B-Que (Swale only)

County Plan No. SP-0099-2010

99160

Assigned BMP No.:

BMP Type: Information Enclosed:

- Record Drawings (Asbuilts)
- Construction Certification
- Computations
- Other:

Note:

Name: Gregory B. Johnson

Date: April 22, 2013

Signature:  _____

Contents for Stormwater Management Facilities As-built Files

Each File is to contain:

- 1. Maintenance Agreement
- 2. Construction certification
- 3. As-Built plan
- 4. Design Calculations
- 6. Correspondence
- 7. Inspection records
- 8. Miscellaneous



**James City County Environmental Division
Stormwater Management/BMP Record Drawing and
Construction Certification Review Tracking Form**

Project Name: Dinker's Bar-B-Que
 County Plan No.: SP-0099-2010
 Stormwater Management Facility: NONE - SWDCE
 BMP Phase #: I II III
 Information Package Received. Date/By: 4/16/2013
 Completeness Check:
 Record Drawing Date/By: 4/15/2013 Matt Connolly
 Construction Certification Date/By: 4/15/2013 Matt Connolly
 RD/CC Standard Forms (Required for all BMPs after Feb 1st 2001 Only)
 Insp/Maint Agreement # / Date: NO NUMBER 4/25/2011
 BMP Maintenance Plan Location: NA
 Other:
 Standard E&SC Note on Approved Plan Requiring RD/CC or County comment in plan review
 Yes No Location: Not on plan
 Assign County BMP ID Code #: Code: NA
 Preliminary Input/Log into Division's "As-Built Tracking Log"
 Add Location to GIS Map. Obtain basic site information (GPIN, Owner, Address, etc.)
 Preliminary Log into Access Database (BMP ID #, Plan No., GPIN, Project Name, etc.)
 Active Project File Review (correspondence, H&H, design computations, etc.)
 Initial As-Built File setup (File label, folder, copy plan/details/design information, etc.)
 Inspector Check of RD/CC (forward to Inspector using transmittal for cursory review).
 Pre-Inspection Drawing Review of Approved Plan (Quick look prior to Field Inspection).
 Final Inspection (FI) Performed Date: 4/15/2013
 Record Drawing (RD) Review Date: 4/16/2013
 Construction Certification (CC) Review Date: 4/16/2013
 Actions:
 No comments.
 Comments. Letter Forwarded. Date: _____
 Record Drawing (RD)
 Construction Certification (CC)
 Construction-Related (CR)
 Site Issues (SI)
 Other : _____
 Second Submission: _____
 Reinspection (if necessary): _____
 Acceptable for SWM Purposes (RD/CC/CR/Other). Ok to proceed with bond release.
 Complete "Surety Request Form".
 Check/Clean active file of any remaining material and finish "As-Built" file.
 Add to County BMP Inventory/Inspection schedule (Phase I, II or III).
 Copy Final Inspection Report into County BMP Inspection Program file.
 Obtain Digital Photographs of BMP and save into County BMP Inventory.
 Request mylar/reproducible from As-Built plan preparer.
 Complete "As-built Tracking Log".
 Last check of BMP Access Database (County BMP Inventory).
 Add BMP to JCC Hydrology & Hydraulic database (optional).
 Add BMP to Municipal BMP list (if a County-owned facility)
 Add BMP to PRIDE BMP ratings database.

Final Sign-Off

Inspector: [Signature] Date: 4/18/2013
 Chief Engineer: [Signature] Date: _____

*** See separate checklist, if needed.



Environmental Division

APR 16 2013

James City County, Virginia
Environmental Division

RECEIVED

Stormwater Management / BMP Facilities Record Drawing and Construction Certification Forms

(Note: In accordance with the requirements of the Chesapeake Bay Preservation Ordinance, Chapter 23, Section 23-10(4), BMP's shall be designed and constructed in accordance with the manual entitled James City County Guidelines for Design and Construction of Stormwater Management BMP's. Erosion and sediment control policy and approved plans generally require that at the completion of the project and prior to release of surety, an "as-built" plan prepared by a registered Professional Engineer or Certified Land Surveyor must be provided for the drainage system for the project, including any Best Management Practice (BMP) facilities. In addition, for BMP facilities involving the construction of an impounding structure or dam embankment, certification is required by a Professional Engineer who has inspected the structure during its construction. Currently there are over 20 water quality type BMP's accepted by the County.)

Section 1 - Site Information:

Project Name: Oinkers Bar-B-Que
Structure/BMP Name: Asphalt Swale in Parking Lot
Project Location: 8953 Pocahontas Trail
BMP Location: Parking Lot
County Plan No.: SP - 0099 - 2010

Project Type: Residential Business Commercial Office Institutional Industrial Public Roadway Other
Tax Map/Parcel No.: 59201000019
BMP ID Code (if known): NA
Zoning District: B1 w/ Proffers
Land Use: Drive-thru Restaurant
Site Area (sf or acres): 43,664 SF

Brief Description of Stormwater Management/BMP Facility: The facility is a swale in the asphalt to transfer the stormwater runoff from the front of the site to the rear of the site. There is no BMP, the new site plan had a 100% impervious area reduction from the existing conditions

Nearest Visible Landmark to SWM/BMP Facility: Restaurant Building

Nearest Vertical Ground Control (if known):
 NCC Geodetic Ground Control USGS Temporary Arbitrary Other
Station Number or Name: 326
Datum or Reference Elevation: 14.64
Control Description: 3/4" Concrete Disk
Control Location from Subject Facility: East side of State Route 1305 (Badische Entrance Road) 0.1 mile south of US Rt 600 (Pocahontas Trail)

Section 2 - Stormwater Management / BMP Facility Construction Information:

PreConstruction Meeting Held for Construction of SWM/BMP Facility: Yes No Unknown
Approx. Construction Start Date for SWM/BMP Facility: Spring 2011
Facility Monitored by County Representative during Construction: Yes No Unknown
Name of Site Work Contractor Who Constructed Facility: John Rogers
Name of Professional Firm Who Routinely Monitored Construction: Unknown
Date of Completion for SWM/BMP Facility: Fall 2011
Date of Record Drawing/Construction Certification Submittal: 4/15/13

(Note: Record Drawing and Construction Certifications are required within thirty (30) days of the completion of Stormwater Management and/or BMP facility construction. Record Drawings and Construction Certifications must be reviewed and approved by the James City County Environmental Division prior to final inspection, acceptance and bond or surety release.)

Section 3 - Owner / Designer / Contractor Information:

Owner/Developer: *(Note: Site Owner or Applicant responsible for development of the project.)*

Name: John Rogers
Mailing Address: 130 Maxton Lane
Williamsburg, Va. 23188
Business Phone: 345-9970 Fax: _____
Contact Person: John Rogers Title: President

Design Professional: *(Note: Professional Engineer or Certified Land Surveyor responsible for the design and preparation of plans and specifications for the Stormwater Management / BMP facility.)*

Firm Name: LandTech Resources, Inc.
Mailing Address: 205-E Bulfaux Blvd
Williamsburg, Va. 23188
Business Phone: 565-1677
Fax: 565-0782
Responsible Plan Preparer: Matthew H. Connolly
Title: President
Plan Name: Site Plan of Oinkers Bar-B-Que
Firm's Project No. 10-055
Plan Date: 10/13/10
Sheet No.'s Applicable to SWM/BMP Facility: C4 / ___ / ___ / ___ / ___

BMP Contractor: *(Note: Site Work Contractor directly responsible for construction of the Stormwater Management / BMP facility.)*

Name: John Rogers
Mailing Address: 130 Maxton Lane
Williamsburg, Va. 23188
Business Phone: 345-9970
Fax: _____
Contact Person: _____
Site Foreman/Supervisor: _____
Specialty Subcontractors & Purpose (for BMP Construction Only): _____

Section 4 - Professional Certifications:

Certifying Professionals: (Note: A Registered Professional Engineer or Certified Land Surveyor is responsible for preparation of a Record Drawing, sometimes referred to as an As-Built plan, for the drainage system for the project including any Stormwater Management/BMP Facilities. A Registered Professional Engineer is responsible for the inspection, monitoring and certification of Stormwater Management / BMP facilities during its construction.)

Record Drawing and Construction Certifications for Stormwater Management / BMP Facilities

Record Drawing Certification

Firm Name: LandTech Resources, Inc
Mailing Address: 205-E Bulfinch Blvd
Williamsburg, Va. 23188
Business Phone: 565-1677
Fax: 565-0782
Name: Matthew Connolly
Title: President
Signature: [Signature]
Date: 4/15/2013

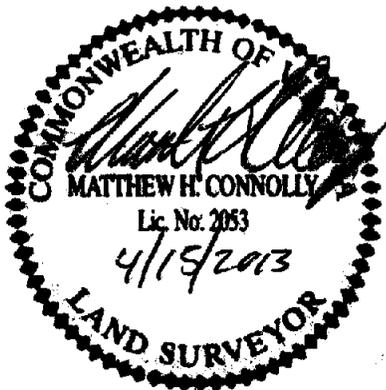
Construction Certification

Firm Name: LandTech Resources, Inc
Mailing Address: 205-E Bulfinch Blvd
Williamsburg, Va. 23188
Business Phone: 565-1677
Fax: 565-0782
Name: Matthew Connolly
Title: President
Signature: [Signature]
Date: 4/15/2013

I hereby certify to the best of my knowledge and belief that this record drawing represents the actual condition of the Stormwater Management / BMP facility. The facility appears to conform with the provisions of the approved design plan, specifications and stormwater management plan, except as specifically noted.

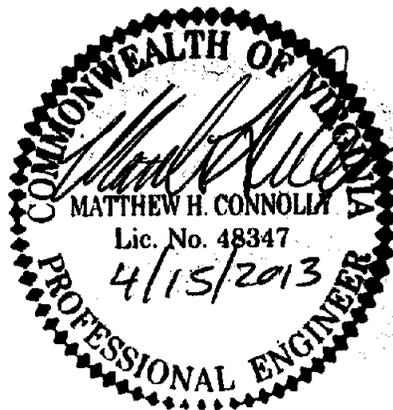
I hereby certify to the best of my knowledge and belief that this Stormwater Management/BMP facility was monitored and constructed in accordance with the provisions of the approved design plan, specifications and stormwater management plan, except as specifically noted.

See attached EXHIBIT A



(Seal)

Virginia Registered Professional Engineer
or Certified Land Surveyor



(Seal)

Virginia Registered
Professional Engineer

LandTech Resources, Inc.

205-E Bulifants Blvd., Williamsburg, VA 23188

Phone: 757- 565-1677

Fax: 757- 565-0782

EXHIBIT A

April 15, 2013

William Cain, P.E.
Chief Civil Engineer
Engineering and Resource Protection
James City County Development Management

Re: Oinkers Bar-B-Que Swale Record Drawing
JCC SP-0099-2010

Dear Mr. Cain,

The following letter is an amendment to the county "Construction Certification" for the above referenced. LandTech Resources, Inc. did not monitor the site during construction, therefore this is a post-construction certification. The asphalt swale located in the parking lot appears to have been constructed in accordance with the approved plans and is functioning as designed.

If there are any further questions or concerns regarding the information contained hereon please do not hesitate to contact my office at the above contact information.

Sincerely,



Matthew H. Connolly, L.S., P.E.
President



Section 5 - Record Drawing and Construction Certification Requirements and Instructions:

- PreConstruction Meeting - Provides an opportunity to review SWM / BMP facility construction, maintenance and operation plans and address any questions regarding construction and/or monitoring of the structure. The design engineer, certifying professionals (if different), Owner/Applicant, Contractor and County representative(s) are encouraged to attend the preconstruction meeting. Advanced notice to the Environmental Division is requested. Usually, this requirement can be met simultaneously with Erosion and Sediment Control preconstruction meetings held for the project.
- A fully completed ***STORMWATER MANAGEMENT / BMP FACILITIES, RECORD DRAWING and CONSTRUCTION CERTIFICATION FORM and RECORD DRAWING CHECKLIST***. All applicable sections shall be completed in their entirety and certification statements signed and sealed by the registered professional responsible for individual record drawing and/or construction certification.
- The Record Drawing shall be prepared by a Registered Professional Engineer or Certified Land Surveyor for the drainage system of the project including any Best Management Practices.
- Construction Certification. Construction of Stormwater Management / BMP facilities which contain impoundments, embankments and related engineered appurtenances including subgrade preparation, compacted soils, structural fills, liners, geosynthetics, filters, seepage controls, cutoffs, toe drains, hydraulic flow control structures, etc. shall be visually observed and monitored by a Registered Professional Engineer or his/her authorized representative. The Engineer must certify that the structure, embankment and associated appurtenances were built in accordance with the approved design plan, specifications and stormwater management plan and standard accepted construction practice and shall submit a written certification and/or drawings to the Environmental Division as required. Soil and compaction test reports, concrete test reports, inspection reports, logs and other required construction material or installation documentation may be required by the Environmental Division to substantiate the certification, if specifically requested. The Engineer shall have the authority and responsibility to make minor changes to the approved plan, in coordination with the assigned County inspector, in order to compensate for unsafe or unusual conditions encountered during construction such as those related to bedrock, soils, groundwater, topography, etc. as long as changes do not adversely affect the integrity of the structure(s). Major changes to the approved design plan or structure must be reviewed and approved by the original design professional and the James City County Environmental Division.
- Record Drawing and Construction Certifications are required within **thirty (30) days** of the completion of Stormwater Management / BMP facility construction. Submittals must be reviewed and accepted by James City County Environmental Division prior to final inspection, acceptance and bond/surety release.

Dual Purpose Facilities - Completion of construction also includes an interim stage for Stormwater Management / BMP facilities which serve dual purpose as temporary sediment basins during construction and as permanent stormwater management / BMP facilities following construction, once development and stabilization are substantially complete. For these dual purpose facilities, construction certification is required once the temporary sediment basin phase of construction is complete. Final record drawing and construction certification of additional permanent components is required once permanent facility construction is complete.

Interim Construction Certification is required for those dual purpose embankment-type facilities that are generally ten (10) feet or greater in dam height (*) and may not be converted, modified or begin function as a permanent SWM / BMP structure for a period generally ranging from six (6) to eighteen (18) months or more from issuance of a Land Disturbance permit for construction.

Interim or final record drawing and construction certifications are not required for temporary sediment basins which are designed and constructed in accordance with current minimum standards and specifications for temporary sediment basins per the Virginia Erosion and Sediment Control Handbook (VESCH); have a temporary service life of less than eighteen (18) months; and will be removed completely once associated disturbed areas are stabilized, unless a distinct hazard to the public's health, safety and welfare is determined by the Environmental Division due to the size or presence of the structure or due to evidence of improper construction.

(*Note: Dam Height as referenced above is generally defined as the vertical distance from the natural bed of the stream or waterway at the downstream toe of the embankment to the top of the embankment structure in accordance with 4VAC50-20-30, Virginia Impoundment Structure Regulations and the Virginia Dam Safety Program.)

- Record Drawings shall provide, at a minimum, all information as shown within these requirements and the attached **RECORD DRAWING CHECKLIST** specific to the type of SWM/BMP facility being constructed. Other additional record data may be formally requested by the James City County Environmental Division. *(Note: Refer to the current edition of the James City County Guidelines for Design and Construction of Stormwater Management BMP's manual for a complete list of acceptable BMP's. Currently there are over 20 acceptable water quality type BMP's accepted by the County.)*
- Record Drawings shall consist of blue/black line prints and a reproducible (mylar, sepia, diazo, etc.) set of the approved stormwater management plan including applicable plan views, profiles, sections, details, maintenance plans, etc. as related to the subject SWM / BMP facility. The set shall indicate "**RECORD DRAWING**" in large text in the lower right hand corner of each sheet with record elevations, dimensions and data drawn in a clearly annotated format and/or boxed beside design values. Approved design plan values, dimensions and data shall not be removed or erased. Drawing sheet revision blocks shall be modified as required to indicate record drawing status. Elevations to the nearest 0.1' are sufficiently accurate except where higher accuracy is needed to show positive drainage. Certification statements as shown in Section 4 of the Record Drawing and Construction Certification Form, *or similar forms thereof*, and professional signatures and seals, with dates matching that of the record drawing status in the revision or title block, are also required on all associated record drawing plans, prints or reproducibles.
- Submission Requirements. Initial and subsequent submissions for review shall consist of a minimum of one (1) blue/black line set for record drawings and one copy of the construction certification documents with appropriate transmittal. Under certain circumstances, it is understood that the record drawing and construction certification submissions may be performed by different professional firms. Therefore, record drawing submission may be in advance of construction certification or vice versa. Upon approval and prior to release of bond/surety, final submission shall include one (1) reproducible set of the record drawings, one (1) blue/black line set of the record drawings and one (1) copy of the construction certification. Also for current and/or future incorporation into the County BMP database and GIS system, it is requested that the record drawings also be submitted to the Environmental Division on a diskette or CD-ROM in an acceptable electronic file format such as *.dxf, *.dwg, etc. or in a standard scanned and readable format. The electronic file requirement can be discussed and coordinated with Environmental Division staff at the time of final submission.

**STORMWATER MANAGEMENT / BMP FACILITIES
RECORD DRAWING CHECKLIST**

(Key for Checklist is as follows: XX Acceptable N/A Not Applicable Inc Incomplete)

I. Methods and Presentation: (Required for all Stormwater Management / BMP facilities.)

- XX 1. All constructed facilities meet approved design plans, unless otherwise shown. Record information or deviations from approved design plan shown in clearly annotated format and/or boxed beside design values.
- XX 2. Elevations to the nearest 0.1' unless higher accuracy is needed to show positive drainage.
- XX 3. All plan sheets labeled with "RECORD DRAWING" in large text in lower right hand corner (Approved County Plan Number and BMP ID Code can be included if known).
- XX 4. All plan sheet revision blocks modified to indicate date and record drawing status.
- XX 5. All plan sheets have certification statements and certifying professional's signature and seal.

II. Minimum Standards: (Required for all Stormwater Management / BMP facilities, as applicable.)

- XX 1. All requirements of Section I (Methods and Presentation) apply to this section.
- XX 2. Plan Views: Show general location, arrangement and dimensions. Location and alignment shall generally match approved design plans.
- NA 3. Profile or elevations along top or berm of the facility. At a minimum, elevations are required at each end, at intervals not to exceed 50 feet and where low spots may be present. Top of embankment or berm elevations must be no less than design elevation plus any settlement allowances.
- NA 4. Top widths, berm widths and embankment side slopes.
- XX 5. Show length, width and depth of facility or grading, contours or spot elevations as required to verify permanent pool and design storage volumes were met or were reasonably close to the approved design. Evaluation of as-built grading, contours, spot elevations, or cross-sections, may be necessary by the professional to ensure approved design configurations, depths and volumes were closely maintained. If grading or elevations are significantly different from the approved plan, the Environmental Division shall be contacted immediately to determine whether the variation is acceptable or whether further evidence will be required. Facilities which do not closely resemble approved plan grades, elevations or configurations may require regrading by the Contractor; check volumetric computations; and/or a check hydraulic routing to ensure approved design water surface elevations, discharges or freeboard were closely maintained.
- NA 6. Cross-section of the embankment through the principal spillway or outlet barrel. Must extend at least 100 ft. downstream of the pipe outlet or to recorded site property line, whichever is closer. Proper correlation is required between principal spillway (control structure) crest, emergency spillway crest, orifice and weirs and the top of the dam or facility. All elevations and dimensions must reasonably match the design plan or be sequentially relative to each other and the facility must reflect the required design storage volume(s) and/or design depth.
- NA 7. Profile or elevations along the entire centerline of the emergency spillway. Emergency spillway may be steeper, but no flatter or narrower than design.
- NA 8. Elevation of the principal spillway crest or outlet crest of the structure.

- NA 9. Primary control structure (riser) diameter or dimensions, height, type of material and base size. Indicate provisions for access that are present such as steps, ladders, etc.
- NA 10. Dimensions, locations and elevations of outlet orifices, weirs, slots and drains.
- NA 11. Type and size of anti-vortex and trash rack device. Height, diameter, dimensions, bar spacings (if applicable) and elevations relative to the principal spillway crest. Indicate if lockable hatch is present or not.
- NA 12. Type, location, size and number of anti-seep collars or documentation of other methods utilized for seepage control. **May need to obtain this information during construction.**
- NA 13. Top of impervious core embankment, core trench limits and elevation of cut-off trench bottom. **May need to obtain this information during construction.**
- NA 14. Elevation of the principal spillway barrel (outlet pipe) inlet and outlet invert.
- NA 15. Outlet barrel diameter, length, slope, type and thickness class of material and type of flared end sections, headwall or endwall.
- NA 16. Outfall protection dimension, type and depth of rock and if underlain filter fabric is present.
- NA 17. BMP interior and periphery landscaping zones conform with arrangements and requirements of the approved design plan.
- NA 18. Maintenance plan taken from approved design plan transposed onto record drawing set.
- NA 19. Fencing location and type, if applicable to facility.
- NA 20. BMP vicinity properly cleaned of stockpiles and construction debris.
- XX 21. No visual signs of erosion or channel degradation immediately downstream of facility.
- XX 22. Any other information formally requested by the Environmental Division specific to the constructed SWM/BMP facility.

**STORMWATER MANAGEMENT / BMP FACILITIES
RECORD DRAWING CHECKLIST**

(Key for Checklist is as follows: **XX** Acceptable **N/A** Not Applicable **Inc** Incomplete)

X. Storm Drainage Systems (Associated with BMP's Only)

(Includes all incidental stormwater drainage conveyance systems associated with SWM/BMP facilities such as onsite or offsite storm drains, open channels, inlets, manholes, junctions, outlet protections, deflectors, etc. These facilities are external to the treatment function of, but are directly associated with drainage to and/or from a constructed SWM/BMP facility. The intent of this portion of the certification is to accurately identify the type and quantity of inflow or outflow points associated with the facility for future reference. The Professional may use his/her own discretion to determine inclusive facilities to meet the intent of this section. As a general rule, storm drainage systems would include incidental facilities to the nearest access structure upslope or downslope from the normal physical limits of the facility or 800 feet of storm drainage conveyance system length, whichever is less.)

- XX** SD1. All requirements of Section II, Minimum Standards, apply to Storm Drainage Systems.
- XX** SD2. Horizontal location of all pipe and structures relative to the SWM/BMP facility.
- NA** SD3. Type, top elevation and invert elevation of all access type structures (inlets, manholes, etc.).
- NA** SD4. Material type, size or diameter, class, invert elevations, lengths and slopes for all pipe segments.
- NA** SD5. Class, length, width and depth of riprap and outlet protections or dimensions of special energy dissipation structures.

XII. Other Systems

(Includes any non-typical, specialty, manufactured or innovative stormwater management/BMP practices or systems generally accepted for use as or in conjunction with other acceptable stormwater management / BMP practices. Requires evidence of prior satisfactory industry use and prior Environmental Division approval, waiver or exception .)

- XX** O1. All requirements of Section II, Minimum Standards, apply to this section.
- XX** O2. Certification criteria to be determined on a case-by-case basis by the Environmental Division specific to the proposed SWM/BMP facility.

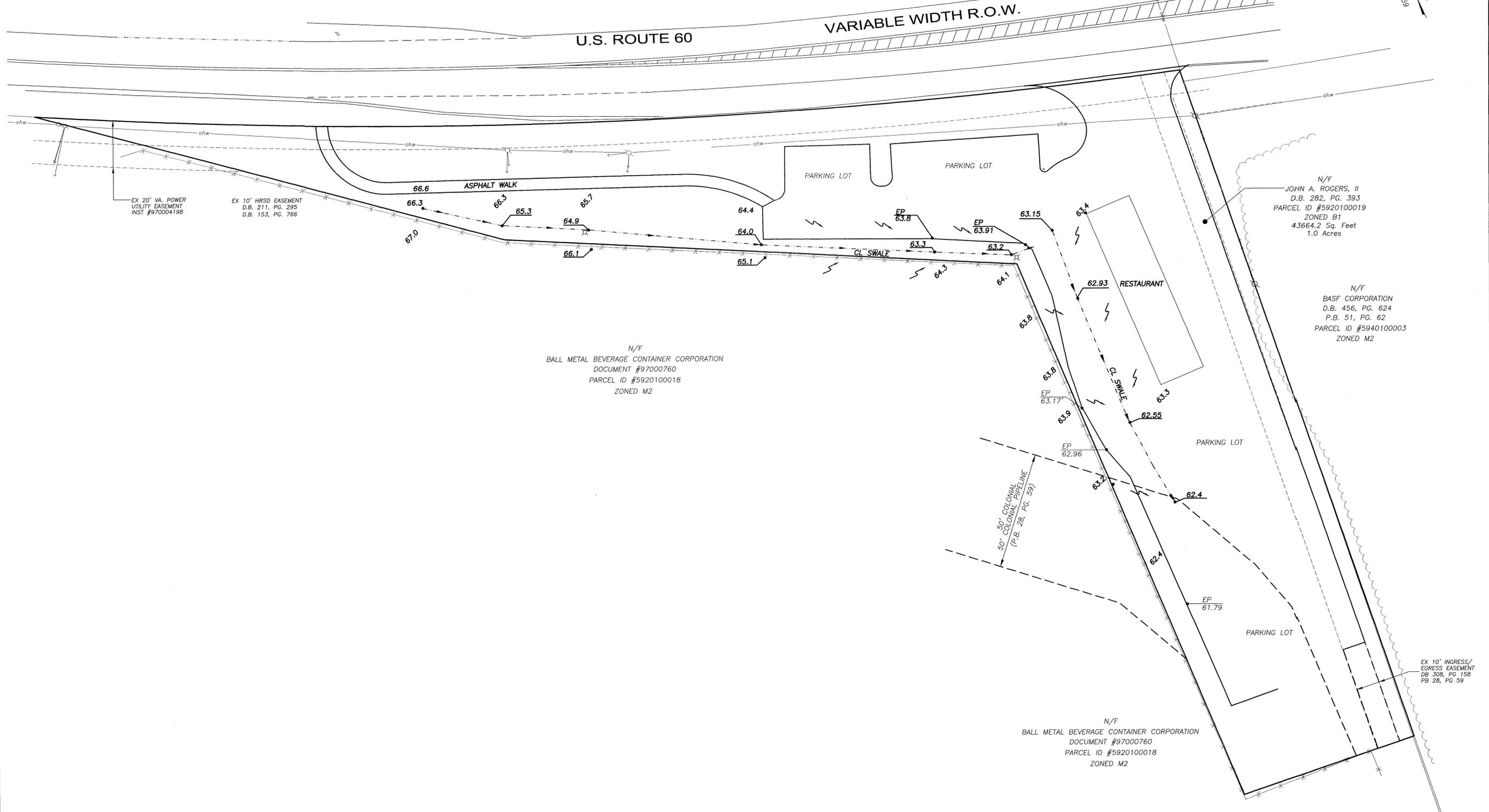
I HEREBY CERTIFY TO THE BEST OF MY KNOWLEDGE AND BELIEF THAT THIS RECORD DRAWING REPRESENTS THE ACTUAL CONDITION OF THE STORMWATER MANAGEMENT/BMP FACILITY. THE FACILITY APPEARS TO CONFORM WITH THE PROVISIONS OF THE APPROVED DESIGN PLAN, SPECIFICATIONS AND STORMWATER MANAGEMENT PLAN, EXCEPT AS SPECIFICALLY NOTED.



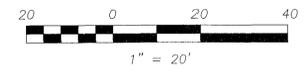
Matthew H. Connolly

4/15/2013

Environmental Division
 APR 16 2013
 RECEIVED
 RECORD MERIDIAN
 P.B. 87, PG. 59



SP-0099-2010



RECORD DRAWING

NO.	DATE	REVISION / COMMENT / NOTE

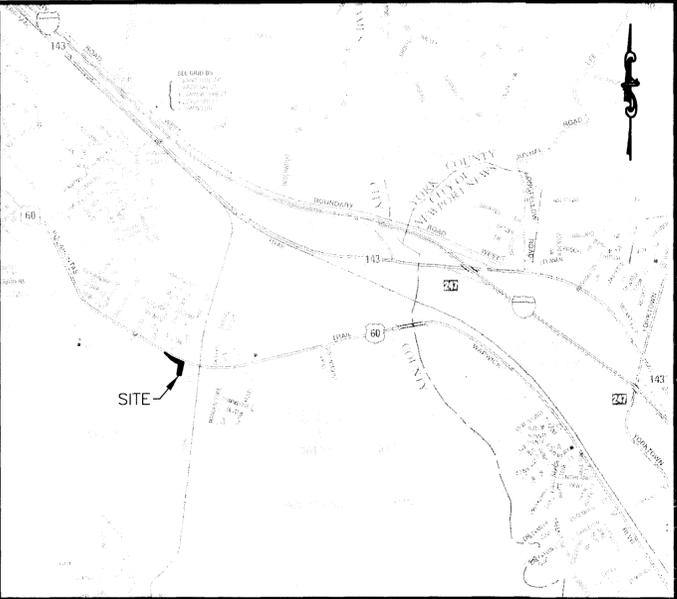


LandTech Resources, Inc.
 Surveying • GPS • Engineering
 205 Bullfontis Blvd., Ste. E, Williamsburg, VA 23188
 Phone: (757) 565-1677 Fax: (757) 565-0782
 web: landtechresources.com

SCALE: 1" = 20'
 DATE: 3/21/2013
 JOB: 10-055
 DRAWN BY: MHC
 SHEET: 1 OF 1

SWALE RECORD DRAWING
"ONK"ERS BAR-B-QUE
GRADING/EROSION & SEDIMENT CONTROL

JAMES CITY COUNTY
 VIRGINIA



VICINITY MAP
SCALE: 1"=2000'

ADC PERMITTED USE NUMBER 21001208

SITE PLAN OF "OINK"ERS BAR-B-QUE 8953 POCAHONTAS TRAIL

**ROBERT'S MAGISTERIAL DISTRICT, JAMES CITY COUNTY, VIRGINIA
JAMES CITY COUNTY CASE NUMBER Z-0001-2010**

TABLE OF CONTENTS

SHEET NO.	SHEET TITLE
C1	COVER SHEET
C2	EXISTING CONDITIONS
C3	LAYOUT PLAN
C4	GRADING PLAN/EROSION & SEDIMENT CONTROL PLAN
C5	LIGHTING PLAN
C6	DETAIL SHEET
L1	LANDSCAPE PLAN
L2	LANDSCAPE NOTES

COUNTY OF JAMES CITY FINAL SITE PLAN	
APPROVALS	DATE
Fire Dept. <i>JBL/sp</i>	11-3-10
Health Dept.	
WVGT <i>RCJ/sp</i>	1-2-11
Planning <i>DMS</i>	11/2/11
Environ <i>SST/sp</i>	11-9-10
Zoning <i>WVGT</i>	11-2-11
JCSA <i>DW/sp</i>	11-24-10 12-19-10
County Eng. <i>DGC/sp</i>	11-9-10
Landscaping <i>SpL/sp</i>	11-9-10
Other <i>Paul/Edna/Chp</i>	11-30-10

STATISTICAL INFORMATION

ZONE	B1 WITH PROFFERS
PARCEL ADDRESS	8953 POCAHONTAS TRAIL
PARCEL ID NO.	5920100019
PROPOSED USE	RESTAURANT DRIVE-THRU
WATER	NNWW-INSIDE PSA
SEWER	JCSA-INSIDE PSA
SITE AREA	43,664 S.F./1.0 ACRE
DISTURBED AREA	20,564 S.F./0.47± AC.
BUILDING FLOOR AREA	1,600 SF
BUILDING HEIGHT	±18'
PROPOSED IMPERVIOUS AREA	25,124 S.F. (57%) - 10% REDUCTION FROM EXISTING CONDITION
PARKING SPACES PROVIDED:	20
H/C PROVIDED:	1
TOTAL GREEN AREA	18,540 S.F.. (43%)

NOTES:

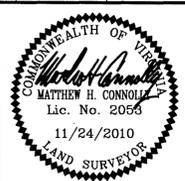
- PER FEMA COMMUNITY MAP NUMBER 51095C0230C DATED 9/28/07 THE SITE APPEARS TO BE IN FLOOD ZONE "X".
- TOPOGRAPHIC SURVEY SHOWN HEREON IS BASED ON A FIELD SURVEY PERFORMED BY LANDTECH RESOURCES, INC. - MARCH 2010.
- BOUNDARY INFORMATION SHOWN ON THIS PLAN ARE FROM THE PLATS AND DEEDS AS REFERENCED ON THE EXISTING CONDITION PLAN ON SHEET C2
- THE EXISTENCE AND LOCATION (HORIZONTAL AND VERTICAL) OF EXISTING UTILITIES ARE NOT GUARANTEED AND SHALL BE FIELD VERIFIED BY THE CONTRACTOR.
- THE PROFESSIONAL SURVEYOR WHOSE SEAL IS AFFIXED HEREON SHALL ACT AS THE "RESPONSIBLE LAND DISTURBER" FOR THE PLAN REVIEW PHASE OF THIS PROJECT. ONCE THE PLANS ARE APPROVED BY THE COUNTY THE OWNER/DEVELOPER SHALL PROVIDE THE COUNTY WITH THE NAME OF THE "RESPONSIBLE LAND DISTURBER" FOR THE CONSTRUCTION PHASE OF THE PROJECT.
- THE OWNER WILL BE REQUIRED TO OBTAIN A VSMP PERMIT FROM THE VIRGINIA DEPARTMENT OF CONSERVATION & RECREATION IF THE DISTURBED AREA IS GREATER THAN 2,500 SF. THIS PERMIT WILL REQUIRE A STORMWATER POLLUTION PREVENTION PLAN.
- A LAND DISTURBING PERMIT AND SILTATION AGREEMENT, WITH SURETY ARE REQUIRED FOR THIS PROJECT.
- VERTICAL DATUM BASED ON JCC GEODETIC GROUND CONTROL NETWORK.
- ALL OBJECTIONABLE AND DELETERIOUS MATERIAL IS TO BE REMOVED FROM THE SITE AND DISPOSED OF IN A STATE APPROVED FACILITY MEETING THE REQUIREMENTS OF ALL APPLICABLE LOCAL, STATE, AND FEDERAL REGULATIONS.
- THERE ARE NO ANTICIPATED OFFSITE LAND DISTURBING AREAS ANTICIPATED FOR THIS PROJECT.
- THIS PROJECT IS LOCATED IN THE SKIFFES CREEK WATERSHED OF JAMES CITY COUNTY.

NO.	DATE	REVISION / COMMENT / NOTE
1	11/24/10	JCC LETTER DATED 11/9/2010

OWNER/DEVELOPER

JOHN A. ROGERS, II
130 MAXTON LANE
WILLIAMSBURG, VIRGINIA 23188
PHONE: 757-345-9970

LandTech Resources, Inc.
Surveying • GPS • Engineering
205 Bulfinch Blvd., Ste. E, Williamsburg, VA 23188
Phone: (757) 565-1677 Fax: (757) 565-0782
web: landtechresources.com

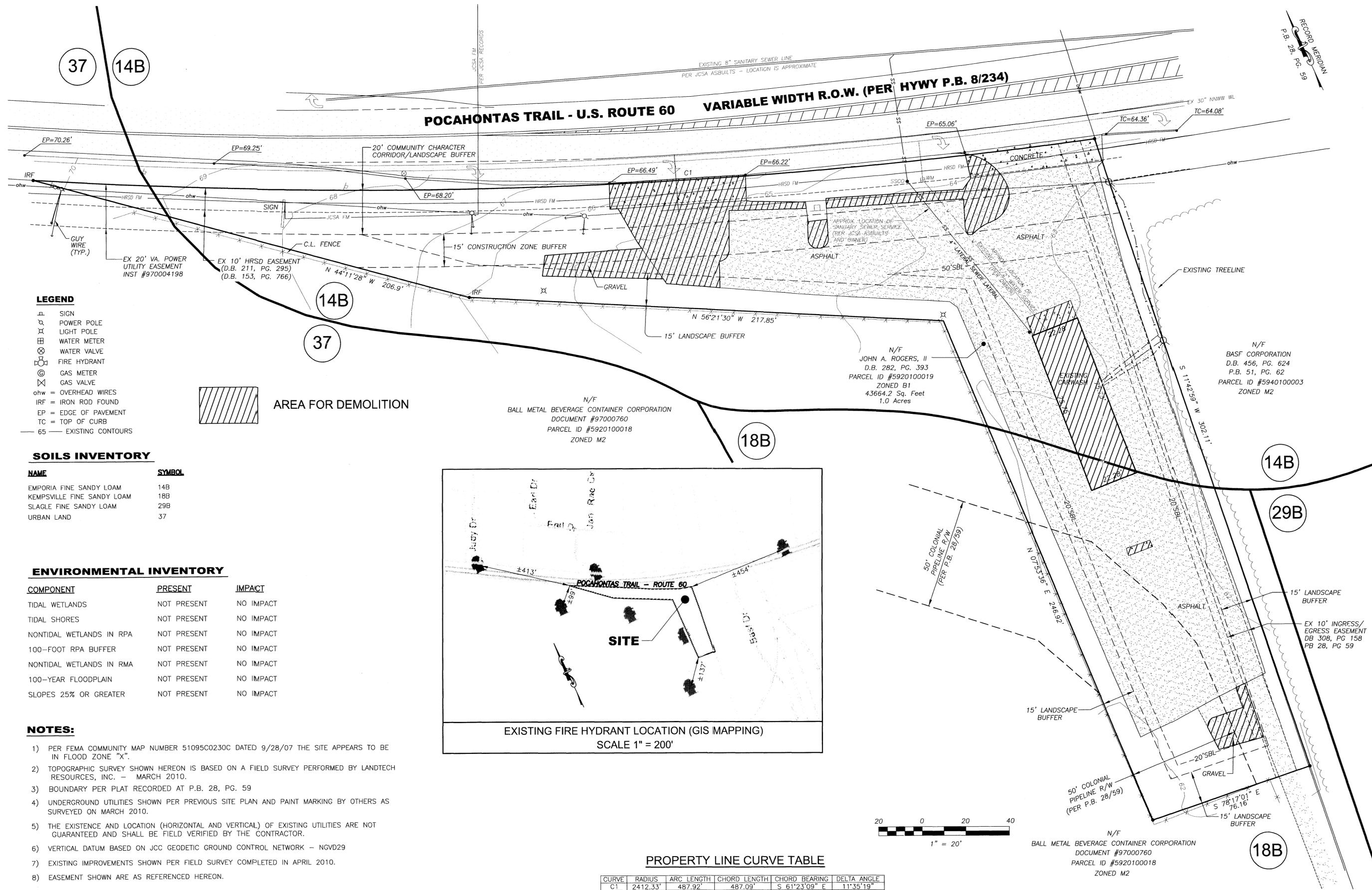


JOB: 10-055
DWG NO: 10-055CS
DATE: 10/13/2010
DRAWN BY: DMS
SHEET: C1 OF 8

BEFORE DIGGING CALL "MISS UTILITY" OF VIRGINIA AT 1 - 800 - 552 - 7001

SITE PLAN
"OINKERS BAR-B-QUE"
EXISTING CONDITION/DEMOLITION PLAN

JAMES CITY COUNTY VIRGINIA



- LEGEND**
- SIGN
 - POWER POLE
 - LIGHT POLE
 - ⊗ WATER METER
 - ⊗ WATER VALVE
 - ⊗ FIRE HYDRANT
 - ⊗ GAS METER
 - ⊗ GAS VALVE
 - ohw = OVERHEAD WIRES
 - IRF = IRON ROD FOUND
 - EP = EDGE OF PAVEMENT
 - TC = TOP OF CURB
 - 65 — EXISTING CONTOURS

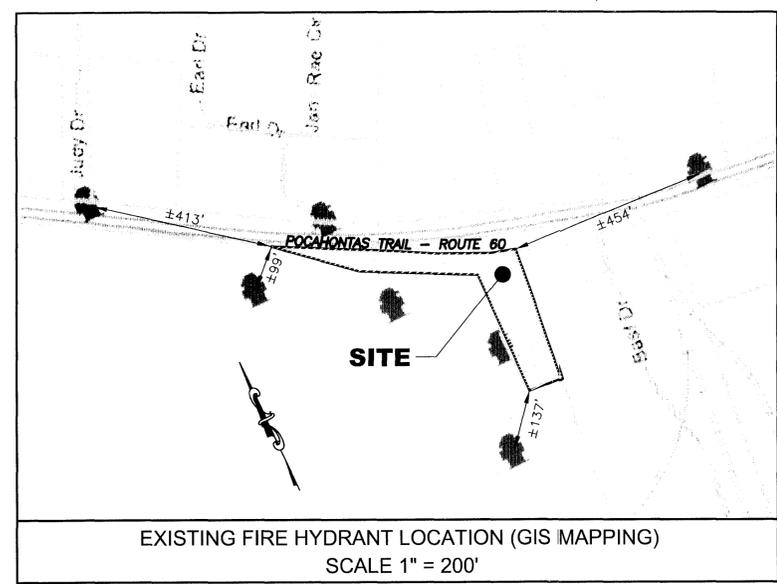
SOILS INVENTORY

NAME	SYMBOL
EMPORIA FINE SANDY LOAM	14B
KEMPSVILLE FINE SANDY LOAM	18B
SLAGLE FINE SANDY LOAM	29B
URBAN LAND	37

ENVIRONMENTAL INVENTORY

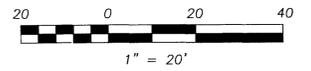
COMPONENT	PRESENT	IMPACT
TIDAL WETLANDS	NOT PRESENT	NO IMPACT
TIDAL SHORES	NOT PRESENT	NO IMPACT
NONTIDAL WETLANDS IN RPA	NOT PRESENT	NO IMPACT
100-FOOT RPA BUFFER	NOT PRESENT	NO IMPACT
NONTIDAL WETLANDS IN RMA	NOT PRESENT	NO IMPACT
100-YEAR FLOODPLAIN	NOT PRESENT	NO IMPACT
SLOPES 25% OR GREATER	NOT PRESENT	NO IMPACT

- NOTES:**
- PER FEMA COMMUNITY MAP NUMBER 51095C0230C DATED 9/28/07 THE SITE APPEARS TO BE IN FLOOD ZONE "X".
 - TOPOGRAPHIC SURVEY SHOWN HEREON IS BASED ON A FIELD SURVEY PERFORMED BY LANDTECH RESOURCES, INC. - MARCH 2010.
 - BOUNDARY PER PLAT RECORDED AT P.B. 28, PG. 59
 - UNDERGROUND UTILITIES SHOWN PER PREVIOUS SITE PLAN AND PAINT MARKING BY OTHERS AS SURVEYED ON MARCH 2010.
 - THE EXISTENCE AND LOCATION (HORIZONTAL AND VERTICAL) OF EXISTING UTILITIES ARE NOT GUARANTEED AND SHALL BE FIELD VERIFIED BY THE CONTRACTOR.
 - VERTICAL DATUM BASED ON JCC GEODETIC GROUND CONTROL NETWORK - NGVD29
 - EXISTING IMPROVEMENTS SHOWN PER FIELD SURVEY COMPLETED IN APRIL 2010.
 - EASEMENT SHOWN ARE AS REFERENCED HEREON.



PROPERTY LINE CURVE TABLE

CURVE	RADIUS	ARC LENGTH	CHORD LENGTH	CHORD BEARING	DELTA ANGLE
C1	2412.33'	487.92'	487.09'	S 61°23'09" E	11°35'19"



NO.	DATE	REVISION / COMMENT / NOTE
1	11-24-10	JCC LETTER DATED 11-09-2010



LandTech Resources, Inc.
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 Phone: (757) 568-1677 Fax: (757) 568-0782
 web: landtechresources.com

SCALE: 1" = 20'
DATE: 10/12/2010
JOB: 10-055
DRAWN BY: DMS
SHEET: C2 OF 8

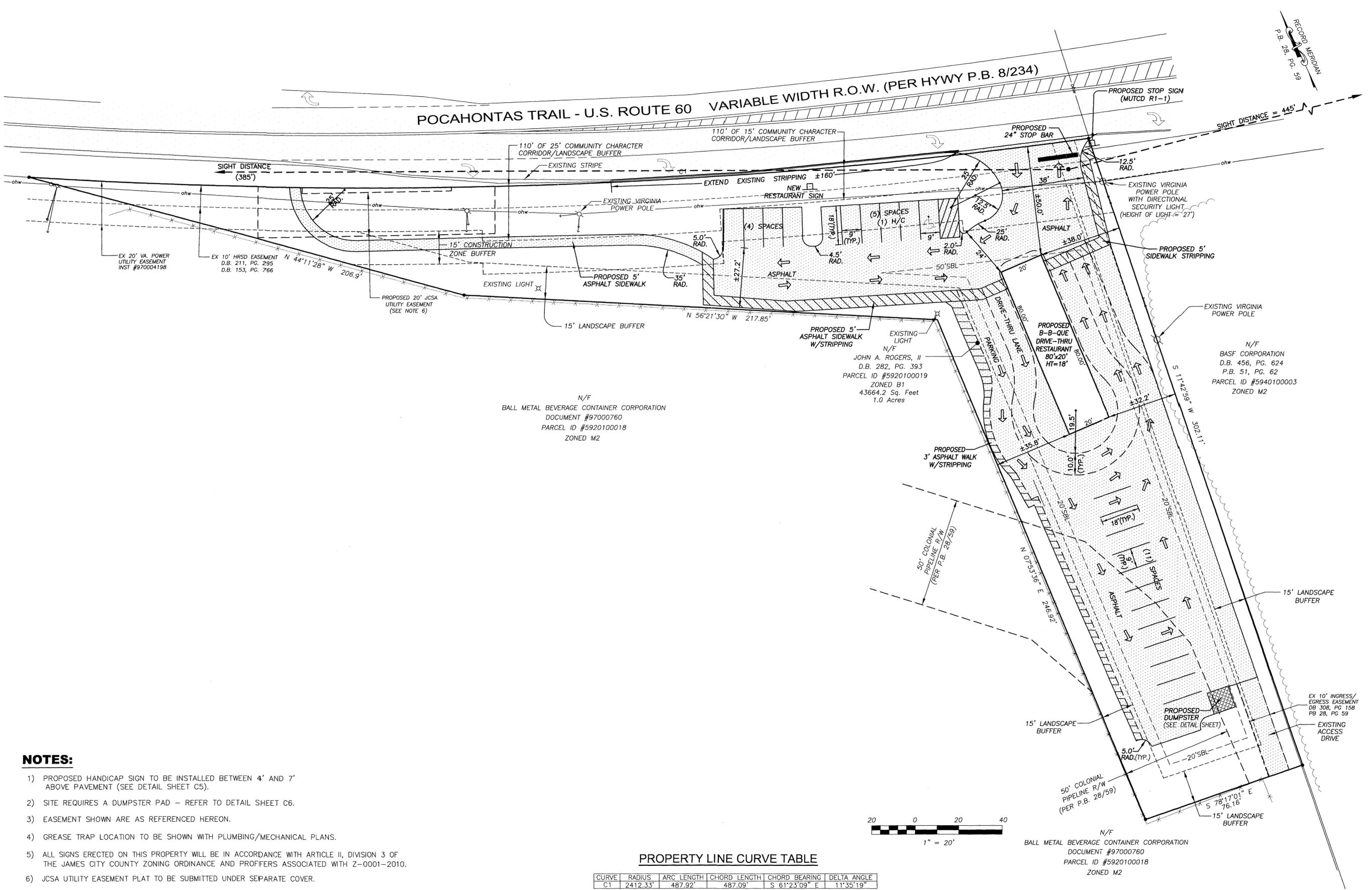
BEFORE DIGGING CALL "MISS UTILITY"
 OF VIRGINIA AT 1 - 800 - 552 - 7001

**SITE PLAN
"OINK"ERS BAR-B-QUE
LAYOUT PLAN**

JAMES CITY COUNTY

VIRGINIA

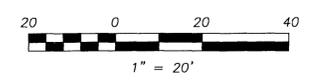
POCAHONTAS TRAIL - U.S. ROUTE 60 VARIABLE WIDTH R.O.W. (PER HYWY P.B. 8/234)



- NOTES:**
- 1) PROPOSED HANDICAP SIGN TO BE INSTALLED BETWEEN 4' AND 7' ABOVE PAVEMENT (SEE DETAIL SHEET C5).
 - 2) SITE REQUIRES A DUMPSTER PAD - REFER TO DETAIL SHEET C6.
 - 3) EASEMENT SHOWN ARE AS REFERENCED HEREON.
 - 4) GREASE TRAP LOCATION TO BE SHOWN WITH PLUMBING/MECHANICAL PLANS.
 - 5) ALL SIGNS ERCTED ON THIS PROPERTY WILL BE IN ACCORDANCE WITH ARTICLE II, DIVISION 3 OF THE JAMES CITY COUNTY ZONING ORDINANCE AND PROFFERS ASSOCIATED WITH Z-0001-2010.
 - 6) JCSA UTILITY EASEMENT PLAT TO BE SUBMITTED UNDER SEPARATE COVER.

PROPERTY LINE CURVE TABLE

CURVE	RADIUS	ARC LENGTH	CHORD LENGTH	CHORD BEARING	DELTA ANGLE
C1	2412.33'	487.92'	487.09'	S 61°23'09" E	11°35'19"



BEFORE DIGGING CALL "MISS UTILITY" OF VIRGINIA AT 1 - 800 - 552 - 7001

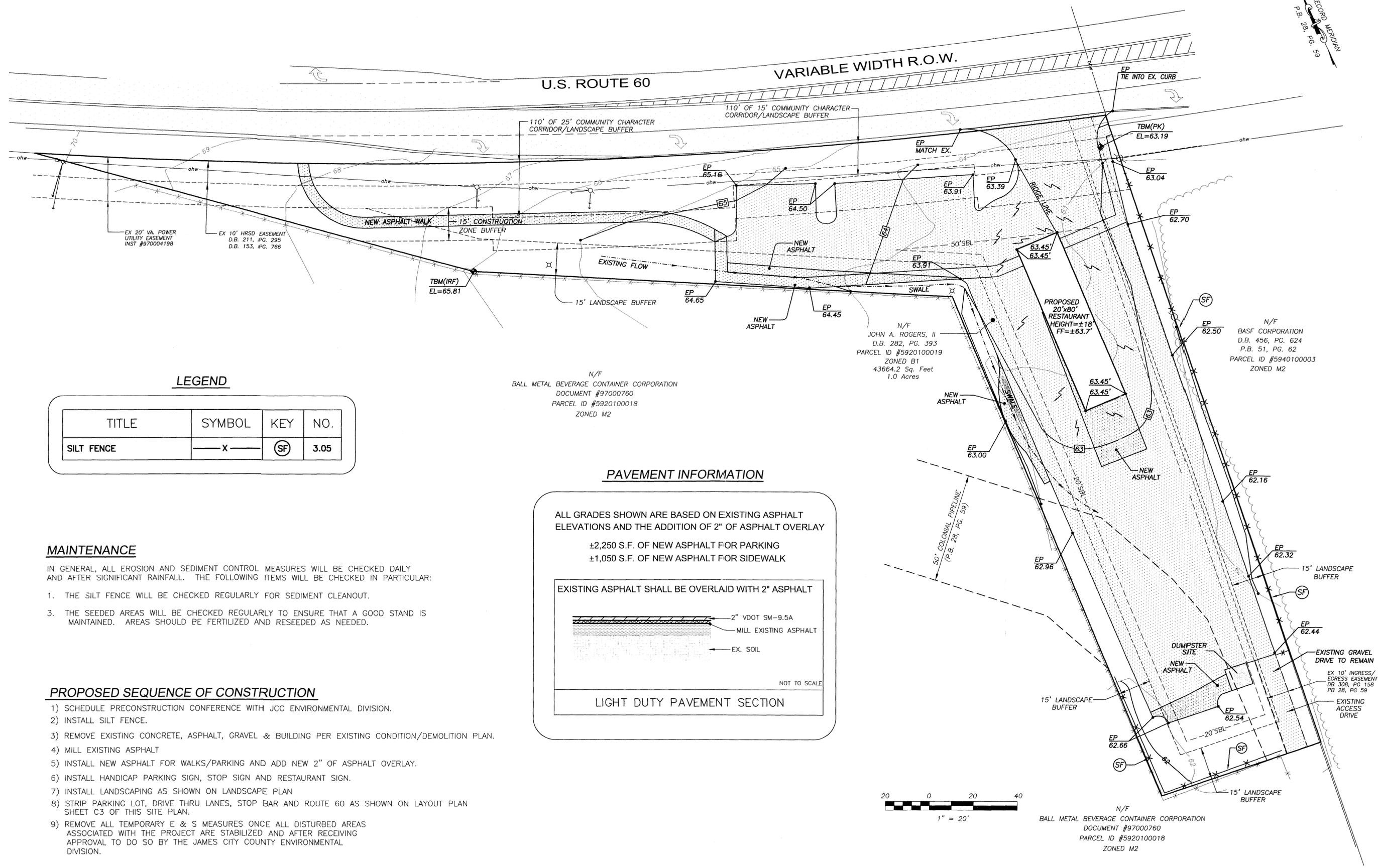
NO.	DATE	REVISION / COMMENT / NOTE
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RECORD MERIDIAN
P.B. 28, PG. 59

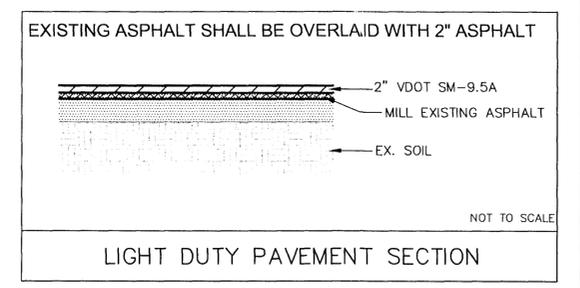


LEGEND

TITLE	SYMBOL	KEY	NO.
SILT FENCE	—X—	(SF)	3.05

PAVEMENT INFORMATION

ALL GRADES SHOWN ARE BASED ON EXISTING ASPHALT ELEVATIONS AND THE ADDITION OF 2" OF ASPHALT OVERLAY
±2,250 S.F. OF NEW ASPHALT FOR PARKING
±1,050 S.F. OF NEW ASPHALT FOR SIDEWALK



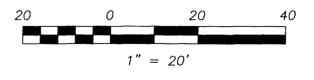
MAINTENANCE

IN GENERAL, ALL EROSION AND SEDIMENT CONTROL MEASURES WILL BE CHECKED DAILY AND AFTER SIGNIFICANT RAINFALL. THE FOLLOWING ITEMS WILL BE CHECKED IN PARTICULAR:

1. THE SILT FENCE WILL BE CHECKED REGULARLY FOR SEDIMENT CLEANOUT.
3. THE SEEDED AREAS WILL BE CHECKED REGULARLY TO ENSURE THAT A GOOD STAND IS MAINTAINED. AREAS SHOULD BE FERTILIZED AND RESEEDED AS NEEDED.

PROPOSED SEQUENCE OF CONSTRUCTION

- 1) SCHEDULE PRECONSTRUCTION CONFERENCE WITH JCC ENVIRONMENTAL DIVISION.
- 2) INSTALL SILT FENCE.
- 3) REMOVE EXISTING CONCRETE, ASPHALT, GRAVEL & BUILDING PER EXISTING CONDITION/DEMOLITION PLAN.
- 4) MILL EXISTING ASPHALT
- 5) INSTALL NEW ASPHALT FOR WALKS/PARKING AND ADD NEW 2" OF ASPHALT OVERLAY.
- 6) INSTALL HANDICAP PARKING SIGN, STOP SIGN AND RESTAURANT SIGN.
- 7) INSTALL LANDSCAPING AS SHOWN ON LANDSCAPE PLAN
- 8) STRIP PARKING LOT, DRIVE THRU LANES, STOP BAR AND ROUTE 60 AS SHOWN ON LAYOUT PLAN SHEET C3 OF THIS SITE PLAN.
- 9) REMOVE ALL TEMPORARY E & S MEASURES ONCE ALL DISTURBED AREAS ASSOCIATED WITH THE PROJECT ARE STABILIZED AND AFTER RECEIVING APPROVAL TO DO SO BY THE JAMES CITY COUNTY ENVIRONMENTAL DIVISION.



NO.	DATE	REVISION / COMMENT / NOTE



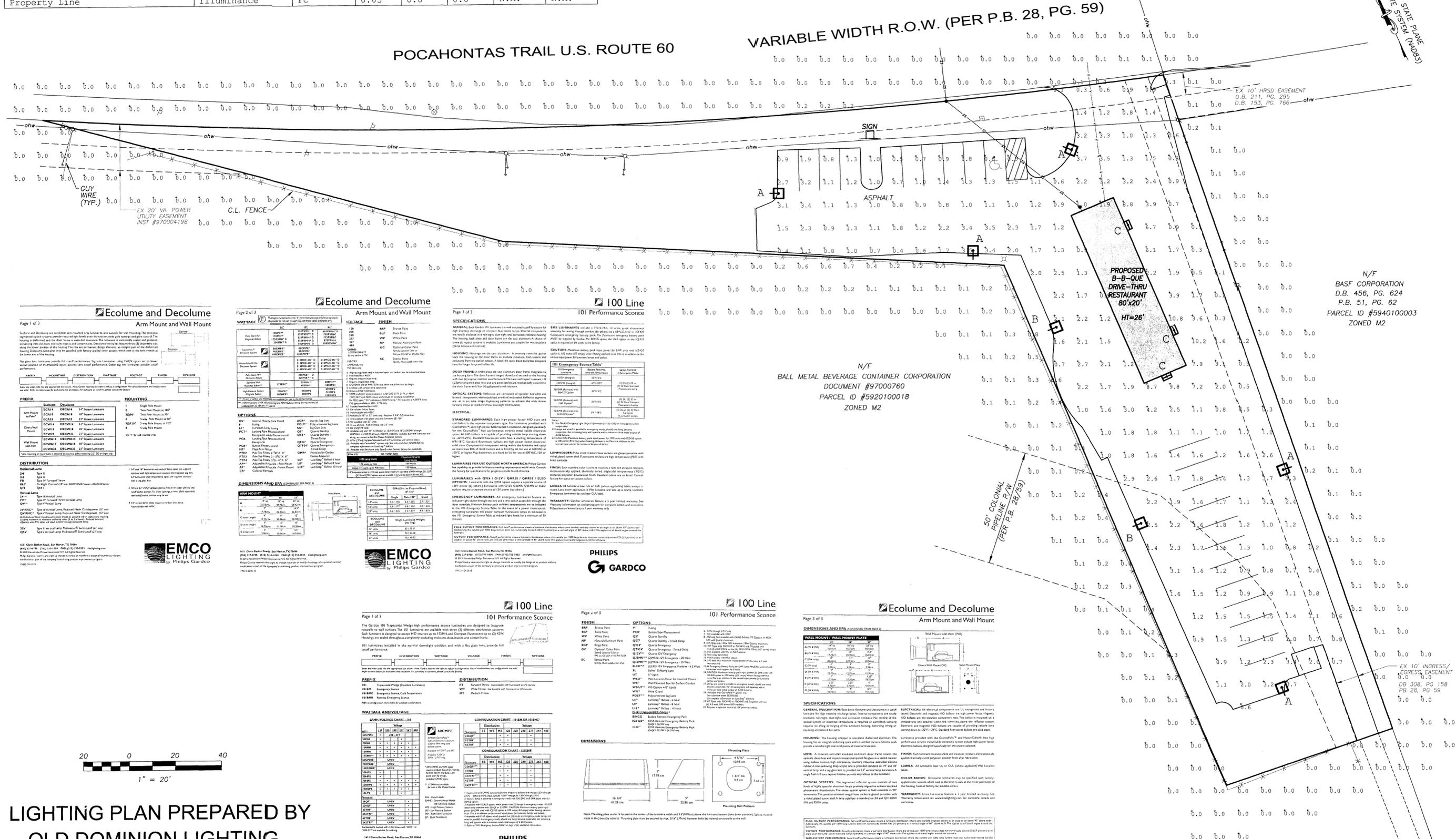
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SHEET: C4 OF 8

BEFORE DIGGING CALL "MISS UTILITY" OF VIRGINIA AT 1 - 800 - 552 - 7001

Symbol	Qty	Label	Arrangement	Total Lamp Lumens	LLF	Description	Mfr.	Mtg. Ht.	Wattage	Source	Tilt
□	5	A	SINGLE	20000	0.720	ECA18-BLC-250PSMH	Emco	20' **	250w MH	Metal Halide	0 Deg.
□	2	B	SINGLE	20000	0.720	ECA18-3H-250PSMH-HS	Emco	20' **	250w MH	Metal Halide	0 Deg.
□	3	C	SINGLE	12500	0.720	101-WT-150PSMH	Gardco	9.5' Wall	150w MH	Metal Halide	0 Deg.

Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
Parking Area	Illuminance	Fc	1.80	10.8	0.1	18.00	108.00
Property Line	Illuminance	Fc	0.05	0.8	0.0	N.A.	N.A.



Ecolume and Decolume

Arm Mount and Wall Mount

Page 1 of 3

WATTAGE

WATTAGE	FINISH	OPTIONS
100	Black Paint	None
150	Black Paint	None
200	Black Paint	None
250	Black Paint	None
300	Black Paint	None
350	Black Paint	None
400	Black Paint	None
450	Black Paint	None
500	Black Paint	None
550	Black Paint	None
600	Black Paint	None
650	Black Paint	None
700	Black Paint	None
750	Black Paint	None
800	Black Paint	None
850	Black Paint	None
900	Black Paint	None
950	Black Paint	None
1000	Black Paint	None

FINISH

OPTIONS

PREFIX

DISTRIBUTION

WATTAGE AND VOLTAGE

CONFIGURATION CHART - 18" BAY SPACING

CONFIGURATION CHART - 24" BAY SPACING

PHILIPS GARDCO

Ecolume and Decolume

Arm Mount and Wall Mount

Page 2 of 3

WATTAGE

WATTAGE	FINISH	OPTIONS
100	Black Paint	None
150	Black Paint	None
200	Black Paint	None
250	Black Paint	None
300	Black Paint	None
350	Black Paint	None
400	Black Paint	None
450	Black Paint	None
500	Black Paint	None
550	Black Paint	None
600	Black Paint	None
650	Black Paint	None
700	Black Paint	None
750	Black Paint	None
800	Black Paint	None
850	Black Paint	None
900	Black Paint	None
950	Black Paint	None
1000	Black Paint	None

FINISH

OPTIONS

PREFIX

DISTRIBUTION

WATTAGE AND VOLTAGE

CONFIGURATION CHART - 18" BAY SPACING

CONFIGURATION CHART - 24" BAY SPACING

PHILIPS GARDCO

100 Line

101 Performance Score

Page 3 of 3

WATTAGE

WATTAGE	FINISH	OPTIONS
100	Black Paint	None
150	Black Paint	None
200	Black Paint	None
250	Black Paint	None
300	Black Paint	None
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400	Black Paint	None
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500	Black Paint	None
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600	Black Paint	None
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750	Black Paint	None
800	Black Paint	None
850	Black Paint	None
900	Black Paint	None
950	Black Paint	None
1000	Black Paint	None

FINISH

OPTIONS

PREFIX

DISTRIBUTION

WATTAGE AND VOLTAGE

CONFIGURATION CHART - 18" BAY SPACING

CONFIGURATION CHART - 24" BAY SPACING

PHILIPS GARDCO

100 Line

101 Performance Score

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650	Black Paint	None
700	Black Paint	None
750	Black Paint	None
800	Black Paint	None
850	Black Paint	None
900	Black Paint	None
950	Black Paint	None
1000	Black Paint	None

FINISH

OPTIONS

PREFIX

DISTRIBUTION

WATTAGE AND VOLTAGE

CONFIGURATION CHART - 18" BAY SPACING

CONFIGURATION CHART - 24" BAY SPACING

PHILIPS GARDCO

Ecolume and Decolume

Arm Mount and Wall Mount

Page 3 of 3

WATTAGE

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600	Black Paint	None
650	Black Paint	None
700	Black Paint	None
750	Black Paint	None
800	Black Paint	None
850	Black Paint	None
900	Black Paint	None
950	Black Paint	None
1000	Black Paint	None

FINISH

OPTIONS

PREFIX

DISTRIBUTION

WATTAGE AND VOLTAGE

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PHILIPS GARDCO

Ecolume and Decolume

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Page 1 of 3

WATTAGE

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650	Black Paint	None
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750	Black Paint	None
800	Black Paint	None
850	Black Paint	None
900	Black Paint	None
950	Black Paint	None
1000	Black Paint	None

FINISH

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WATTAGE AND VOLTAGE

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PHILIPS GARDCO

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Page 2 of 3

WATTAGE

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500	Black Paint	None
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600	Black Paint	None
650	Black Paint	None
700	Black Paint	None
750	Black Paint	None
800	Black Paint	None
850	Black Paint	None
900	Black Paint	None
950	Black Paint	None
1000	Black Paint	None

FINISH

OPTIONS

PREFIX

DISTRIBUTION

WATTAGE AND VOLTAGE

CONFIGURATION CHART - 18" BAY SPACING

CONFIGURATION CHART - 24" BAY SPACING

PHILIPS GARDCO

100 Line

101 Performance Score

Page 3 of 3

WATTAGE

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650	Black Paint	None
700	Black Paint	None
750	Black Paint	None
800	Black Paint	None
850	Black Paint	None
900	Black Paint	None
950	Black Paint	None
1000	Black Paint	None

FINISH

OPTIONS

PREFIX

DISTRIBUTION

WATTAGE AND VOLTAGE

CONFIGURATION CHART - 18" BAY SPACING

CONFIGURATION CHART - 24" BAY SPACING

PHILIPS GARDCO

REVISION / COMMENT / NOTE

1. 11-24-10 JCC LETTER DATED 11/9/2010

DATE

1. 11-24-10

NO.

1

SCALE: 1" = 20'

DATE: 10-18-2010

JOB: 10-055

DRAWN BY:

SHEET: C5 OF 8

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GENERAL EROSION AND SEDIMENT CONTROL NOTES

JAMES CITY COUNTY ENVIRONMENTAL DIVISION

REVISED 7/6/01

THE PURPOSE OF THE EROSION CONTROL MEASURES SHOWN ON THESE PLANS SHALL BE TO PRECLUDE THE TRANSPORT OF ALL WATERBORNE SEDIMENTS RESULTING FROM CONSTRUCTION ACTIVITIES FROM ENTERING ONTO ADJACENT PROPERTIES OR STATE WATERS. IF FIELD INSPECTION REVEALS THE INADEQUACY OF THE PLAN TO CONFINE SEDIMENTS TO THE PROJECT SITE ALL APPROPRIATE MODIFICATIONS WILL BE MADE TO CORRECT ANY PLAN DEFICIENCIES. IN ADDITION TO THESE NOTES, ALL PROVISIONS OF THE VIRGINIA EROSION AND SEDIMENT CONTROL REGULATIONS WILL APPLY TO THIS PROJECT.

1. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK, 3RD EDITION, 1992. THE CONTRACTOR SHALL BE THOROUGHLY FAMILIAR WITH ALL APPLICABLE MEASURES CONTAINED THEREIN THAT MAY BE PERTINENT TO THIS PROJECT, INCLUDING MINIMUM STANDARDS 1 THROUGH 19. IF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN IS FOUND TO BE INADEQUATE IN THE FIELD, THE MINIMUM STANDARDS WILL APPLY IN ADDITION TO THE PROVISIONS OF THE APPROVED PLAN.

2. AS A PREREQUISITE TO APPROVAL OF AN EROSION AND SEDIMENT CONTROL PLAN FOR LAND ACTIVITIES, THE NAME OF A RESPONSIBLE LAND-DISTURBER SHALL BE PROVIDED. THE RESPONSIBLE LAND-DISTURBER SHALL BE AN INDIVIDUAL WHO HOLDS A VALID CERTIFICATE OF COMPETENCE ISSUED BY THE VIRGINIA DEPARTMENT OF CONSERVATION AND IS DEFINED AS THE PERSON IN CHARGE OF AND RESPONSIBLE FOR CARRYING OUT THE LAND-DISTURBING ACTIVITY. PERMITS OR PLANS WITHOUT THIS INFORMATION ARE DEEMED INCOMPLETE AND WILL NOT BE APPROVED UNTIL PROPER NOTIFICATION IS RECEIVED. ALSO, IF THE PERSON DESIGNATED AS RESPONSIBLE LAND-DISTURBER CHANGES BETWEEN THE TIME OF PLAN APPROVAL AND THE SCHEDULED PRE CONSTRUCTION MEETING, THE ENVIRONMENTAL DIVISION SHALL BE INFORMED OF THE CHANGE, IN WRITING, 24 HOURS IN ADVANCE OF THE RECONSTRUCTION MEETING.

3. A PRE CONSTRUCTION MEETING SHALL BE HELD ON-SITE BETWEEN THE COUNTY, THE DEVELOPER, THE PROJECT ENGINEER, THE RESPONSIBLE LAND-DISTURBER AND THE CONTRACTOR PRIOR TO ISSUANCE OF THE LAND DISTURBING PERMIT. THE CONTRACTOR SHALL SUBMIT A SEQUENCE OF CONSTRUCTION TO THE COUNTY FOR APPROVAL PRIOR TO THE PRE CONSTRUCTION MEETING. THE DESIGNATED RESPONSIBLE LAND-DISTURBER IS REQUIRED TO ATTEND THE RECONSTRUCTION MEETING FOR THE PROJECT.

4. ALL POINTS OF CONSTRUCTION INGRESS AND EGRESS SHALL BE PROTECTED BY A TEMPORARY CONSTRUCTION ENTRANCE TO PREVENT TRACKING OF MUD ONTO PUBLIC RIGHT-OF-WAY. AN ENTRANCE PERMIT FROM VDOT IS REQUIRED PRIOR TO ANY CONSTRUCTION ACTIVITIES WITHIN STATE RIGHT-OF-WAYS. WHERE SEDIMENT IS TRANSPORTED ONTO A PUBLIC ROAD SURFACE, THE ROAD SHALL BE THOROUGHLY CLEANED AT THE END OF EACH DAY (STD. & SPEC. 3.02).

5. SEDIMENT BASINS AND TRAPS (STD. & SPEC. 3.13 AND 3.14), PERIMETER DIKES (STD. & SPEC. 3.09 AND 3.12), SEDIMENT FILTER BARRIERS (STD. & SPEC. 3.05) AND OTHER MEASURES INTENDED TO TRAP SEDIMENT ON-SITE MUST BE CONSTRUCTED AS A FIRST STEP IN GRADING AND MUST BE MADE FUNCTIONAL PRIOR TO ANY UPSLOPE LAND DISTURBANCE TAKING PLACE. EARTHEN STRUCTURES SUCH AS DAMS, DIKES AND DIVERSIONS MUST BE SEEDED AND MULCHED IMMEDIATELY AFTER INSTALLATION. PERIODIC INSPECTIONS OF THE EROSION CONTROL MEASURES BY THE OWNER OR OWNER'S REPRESENTATIVE SHALL BE MADE TO ASSESS THEIR CONDITIONS. ANY NECESSARY MAINTENANCE OF THE MEASURES SHALL BE ACCOMPLISHED IMMEDIATELY AND SHALL INCLUDE THE REPAIR OF MEASURES DAMAGED BY ANY SUBCONTRACTOR INCLUDING THOSE OF THE PUBLIC UTILITY.

6. SURFACE FLOWS OVER CUT AND FILL SLOPES SHALL BE CONTROLLED BY EITHER REDIRECTING FLOWS FROM TRANSVERSING THE SLOPES OF BY INSTALLING MECHANICAL DEVICES TO SAFELY LOWER WATER DOWNSLOPE WITHOUT CAUSING EROSION. A TEMPORARY FILL DIVERSION (STD. & SPEC. 3.10) AND SLOPE DRAIN (STD. & SPEC. 3.15) SHALL BE INSTALLED PRIOR TO THE END OF EACH WORKING DAY.

7. SEDIMENT CONTROL MEASURES MAY REQUIRE MINOR FIELD ADJUSTMENTS AT TIME OF CONSTRUCTION TO ENSURE THEIR INTENDED PURPOSE IS ACCOMPLISHED. ENVIRONMENTAL DIVISION APPROVAL WILL BE REQUIRED FOR OTHER DEVIATIONS FROM THE APPROVED PLAN.

8. THE CONTRACTOR SHALL PLACE SOIL STOCKPILES AT THE LOCATIONS SHOWN ON THE PLAN. SOIL STOCKPILES SHALL BE STABILIZED OR PROTECTED WITH SEDIMENT TRAPPING MEASURES. OFF-SITE WASTE OR BORROW AREAS SHALL BE APPROVED BY THE ENVIRONMENTAL DIVISION PRIOR TO THE IMPORT OF ANY BORROW OR EXPORT OF ANY WASTE TO OR FROM THE PROJECT SITE.

9. THE CONTRACTOR SHALL COMPLETE DRAINAGE FACILITIES WITHIN 30 DAYS FOLLOWING COMPLETION OF ROUGH GRADING AT ANY POINT WITHIN THE PROJECT. THE INSTALLATION OF DRAINAGE FACILITIES SHALL TAKE PRECEDENCE OVER ALL UNDERGROUND UTILITIES. OUTFALL DITCHES FROM DRAINAGE STRUCTURES SHALL BE STABILIZED IMMEDIATELY AFTER CONSTRUCTION OF THE SAME (STD. & SPEC. 3.18). THIS INCLUDES INSTALLATION OF EROSION CONTROL STONE OR PAVED DITCHES WHERE REQUIRED. ANY DRAINAGE OUTFALLS REQUIRED FOR A STREET MUST BE COMPLETED BEFORE STREET GRADING OR UTILITY INSTALLATION BEGINS.

10. PERMANENT OR TEMPORARY SOIL STABILIZATION SHALL BE APPLIED TO DENUDED AREAS WITHIN SEVEN DAYS AFTER FINAL GRADE IS REACHED ON ANY PORTION OF THE SITE. TEMPORARY SOIL STABILIZATION SHALL BE APPLIED WITHIN SEVEN DAYS TO DENUDED AREAS THAT MAY NOT BE AT FINAL GRADE BUT WILL REMAIN DORMANT FOR LONGER THAN 30 DAYS. PERMANENT STABILIZATION SHALL BE APPLIED TO AREAS THAT ARE TO BE LEFT DORMANT FOR MORE THAN ONE YEAR.

11. NO MORE THAN 300 FEET OF SANITARY SEWER, STORM DRAIN, WATER OR UNDERGROUND UTILITY LINES ARE TO BE OPEN AT ONE TIME. FOLLOWING INSTALLATION OF ANY PORTION OF THESE ITEMS, ALL DISTURBED AREAS ARE TO BE IMMEDIATELY STABILIZED (I.E., THE SAME DAY).

12. IF DISTURBED AREA STABILIZATION IS TO BE ACCOMPLISHED DURING THE MONTHS OF DECEMBER, JANUARY OR FEBRUARY, STABILIZATION SHALL CONSIST OF MULCHING (STD. & SPEC. 3.35). SEEDING WILL THEN TAKE PLACE AS SOON AS THE SEASON PERMITS.

13. THE TERM SEEDING, FINAL VEGETATIVE COVER OR STABILIZATION ON THIS PLAN SHALL MEAN THE SUCCESSFUL GERMINATION AND ESTABLISHMENT OF A STABLE GRASS COVER FROM A PROPERLY PREPARED SEEDBED CONTAINING THE SPECIFIED AMOUNTS OF SEED, LIME AND FERTILIZER (STD. & SPEC. 3.32). IRRIGATION SHALL BE REQUIRED AS NECESSARY TO ENSURE ESTABLISHMENT OF GRASS COVER.

14. ALL SLOPES STEEPER THAN 3H:1V SHALL REQUIRE THE USE OF EROSION CONTROL BLANKETS AND MATTINGS TO AID IN THE ESTABLISHMENT OF A VEGETATIVE COVER. INSTALLATION SHALL BE IN ACCORDANCE WITH STD. & SPEC. 3.35, MULCHING; STD. & SPEC. 3.36, SOIL STABILIZATION BLANKETS; AND MATTING AND MANUFACTURERS INSTRUCTIONS. NO SLOPES SHALL BE CREATED STEEPER THAN 2H:1V.

15. INLET PROTECTION (STD. & SPEC. 3.07 AND 3.08) SHALL BE PROVIDED FOR ALL STORM DRAIN AND CULVERT INLETS FOLLOWING CONSTRUCTION OF THE SAME.

16. TEMPORARY LINERS, SUCH AS POLYETHYLENE SHEETS, SHALL BE PROVIDED FOR ALL PAVED DITCHES UNTIL THE PERMANENT CONCRETE LINER IS INSTALLED.

17. PAVED DITCHES SHALL BE REQUIRED WHEREVER ACCELERATED EROSION IS EVIDENT. PARTICULAR ATTENTION SHALL BE PAID TO THOSE AREAS WHERE GRADES EXCEED 3 PERCENT.

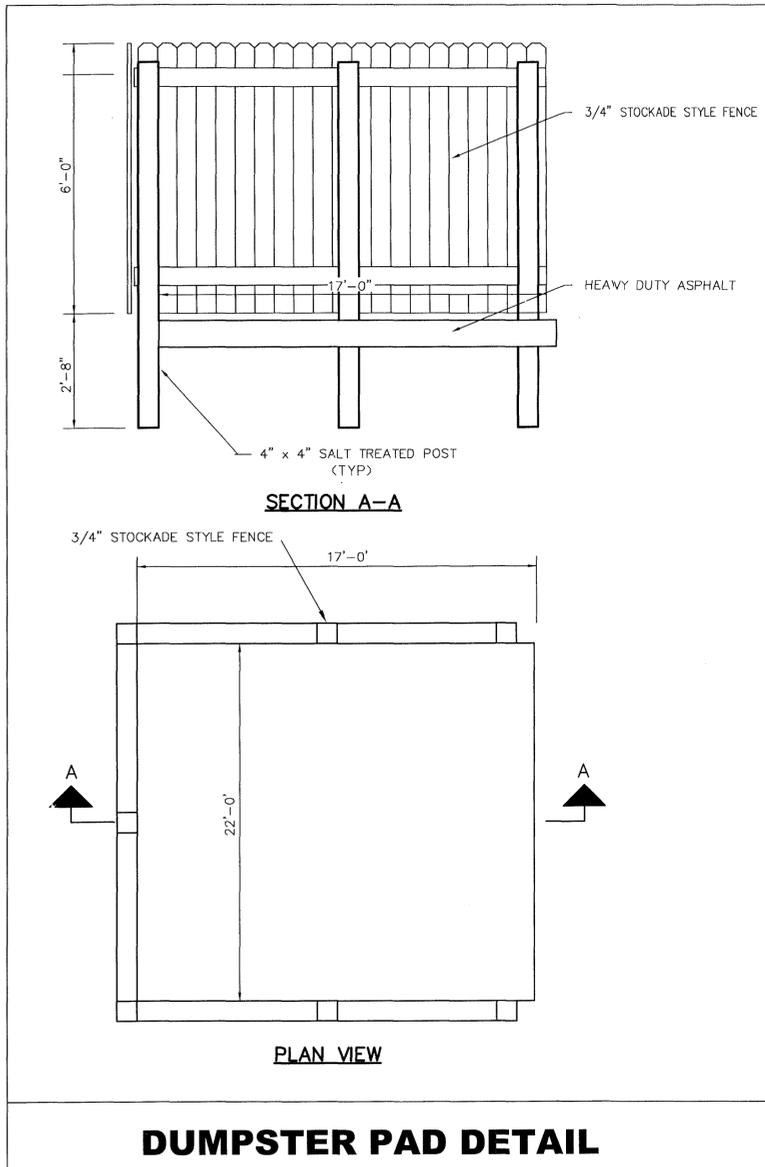
18. TEMPORARY EROSION CONTROL MEASURES SUCH AS SILT FENCE ARE NOT TO BE REMOVED UNTIL ALL DISTURBED AREAS ARE STABILIZED. TRAPPED SEDIMENT SHALL BE SPREAD, SEEDED AND MULCHED. AFTER THE PROJECT AND STABILIZATION ARE COMPLETE, ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN 30 DAYS.

**TABLE 3.32-D
SITE SPECIFIC SEEDING MIXTURES FOR COASTAL PLAIN AREA**

	TOTAL LBS. PER ACRE
MINIMUM CARE LAWN - COMMERCIAL OR RESIDENTIAL - KENTUCKY 31 OR TURF-TYPE TALL FESCUE OR - COMMON BERMUDAGRASS **	125-200 LBS. 75 LBS.
HIGH-MAINTENANCE LAWN - KENTUCKY 31 OR TURF-TYPE TALL FESCUE OR - HYBRID BERMUDAGRASS (SEED) **	40 LBS. (UNHAULED) 30 LBS. (HAULED)
GENERAL SLOPE (3:1 OR LESS) - KENTUCKY 31 FESCUE - RED TOP GRASS - SEASONAL NURSE CROP *	128 LBS. 2 LBS. 20 LBS. 150 LBS.
LOW MAINTENANCE SLOPE (STEEPER THAN 3:1) - KENTUCKY 31 TALL FESCUE - COMMON BERMUDAGRASS ** - RED TOP GRASS - SEASONAL NURSE CROP * - SERICEA LESPEDEZA **	93-108 LBS. 0-15 LBS. 2 LBS. 20 LBS. 20 LBS. 150 LBS.

* USE SEASONAL NURSE CROP IN ACCORDANCE WITH SEEDING DATES AS STATED BELOW:
FEBRUARY, MARCH THROUGH APRIL ANNUAL RYE
MAY 1ST THROUGH AUGUST FOXTAIL MILLET
SEPTEMBER, OCTOBER THROUGH NOVEMBER 15TH ANNUAL RYE
NOVEMBER 16TH THROUGH JANUARY WINTER RYE

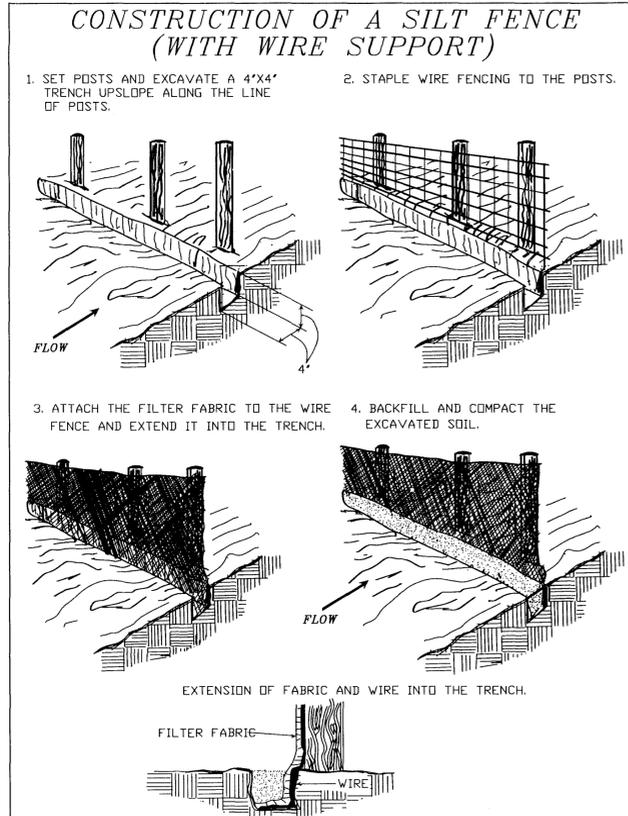
** MAY THROUGH OCTOBER, USE HULLED SEED. ALL OTHER SEEDING PERIODS, USE UNHAULED SEED. WEEPING LOVEGRASS MAY BE ADDED TO ANY SLOPE OR LOW-MAINTENANCE MIX DURING WARM SEEDING PERIODS; ADD 10-20 LBS./ACRE IN MIXES.



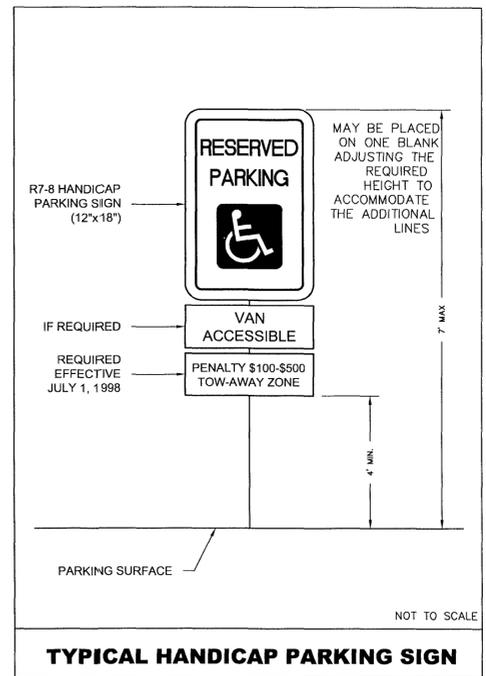
DUMPSTER PAD DETAIL

GENERAL NOTES

- ALL CONSTRUCTION SHALL CONFORM TO CURRENT COUNTY AND/OR VDOT STANDARDS AND SPECIFICATIONS UNLESS OTHERWISE SPECIFIED.
- CONTRACTOR SHALL SECURE THE LATEST EDITION OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK AND COMPLY WITH ALL COUNTY REQUIREMENTS FOR EROSION AND SEDIMENT CONTROL.
- ALL CUTS, VEGETATION AND DELETERIOUS MATERIAL ENCOUNTERED SHALL BE REMOVED AND DISPOSED OF OFF SITE.
- SELECT MATERIAL IS REQUIRED FOR FILL AND BACKFILL UNDER PARKING LOT, FOOTINGS, AND STRUCTURES. IT SHALL BE PLACED IN LAYERS NOT TO EXCEED EIGHT INCHES (8") IN THICKNESS AND COMPACTED TO 95% OF MAXIMUM DENSITY AS DETERMINED BY ASTM D-698.
- ALL GREEN AREA, WITHIN LIMITS OF CONSTRUCTION, TO BE TOPSOILED, FERTILIZED, SEEDED, AND MULCHED.
- CONTRACTOR SHALL OBTAIN AT HIS OWN EXPENSE, ANY PERMIT OR BOND IF REQUIRED BY ANY GOVERNMENT AGENCY.
- CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING, PROTECTING, AND RESOLVING ANY CONFLICTS WITH EXISTING UTILITIES AND SHALL REPAIR, AT HIS OWN EXPENSE, ALL UTILITIES TO BE RELOCATED OR DAMAGED BY CONSTRUCTION.
- ANY ERRORS OR DISCREPANCIES SHALL BE REPORTED TO THE ARCHITECT/ENGINEER OR THE SURVEYOR BEFORE PROCEEDING WITH THE WORK.
- DEWATERING OR EXCAVATION, IF NEEDED, IS PART OF THIS CONTRACT.
- BEFORE DIGGING CALL "MISS UTILITY" OF VIRGINIA 1-800-552-7001.
- CONTRACTOR SHALL OBTAIN PERMITS FROM THE STATE HIGHWAY DEPARTMENT PRIOR TO ANY WORK IN THE STATE'S RIGHT-OF-WAY. THE CONTRACTOR SHALL RESTORE AND CLEAN UP THE SITE TO THE SATISFACTION OF THE HIGHWAY DEPARTMENT.
- CONTRACTOR MUST OBTAIN ALL NECESSARY BUILDING PERMITS PRIOR TO CONSTRUCTION.



SOURCE: Adapted from Installation of Straw and Fabric Filter Barriers for Sediment Control, Sherwood & Ryan. PLATE 3.05-1



TYPICAL HANDICAP PARKING SIGN

"OINK"ERS BAR-B-QUE
DETAIL SHEET

JAMES CITY COUNTY
VIRGINIA

NO.	DATE	REVISION / COMMENT / NOTE



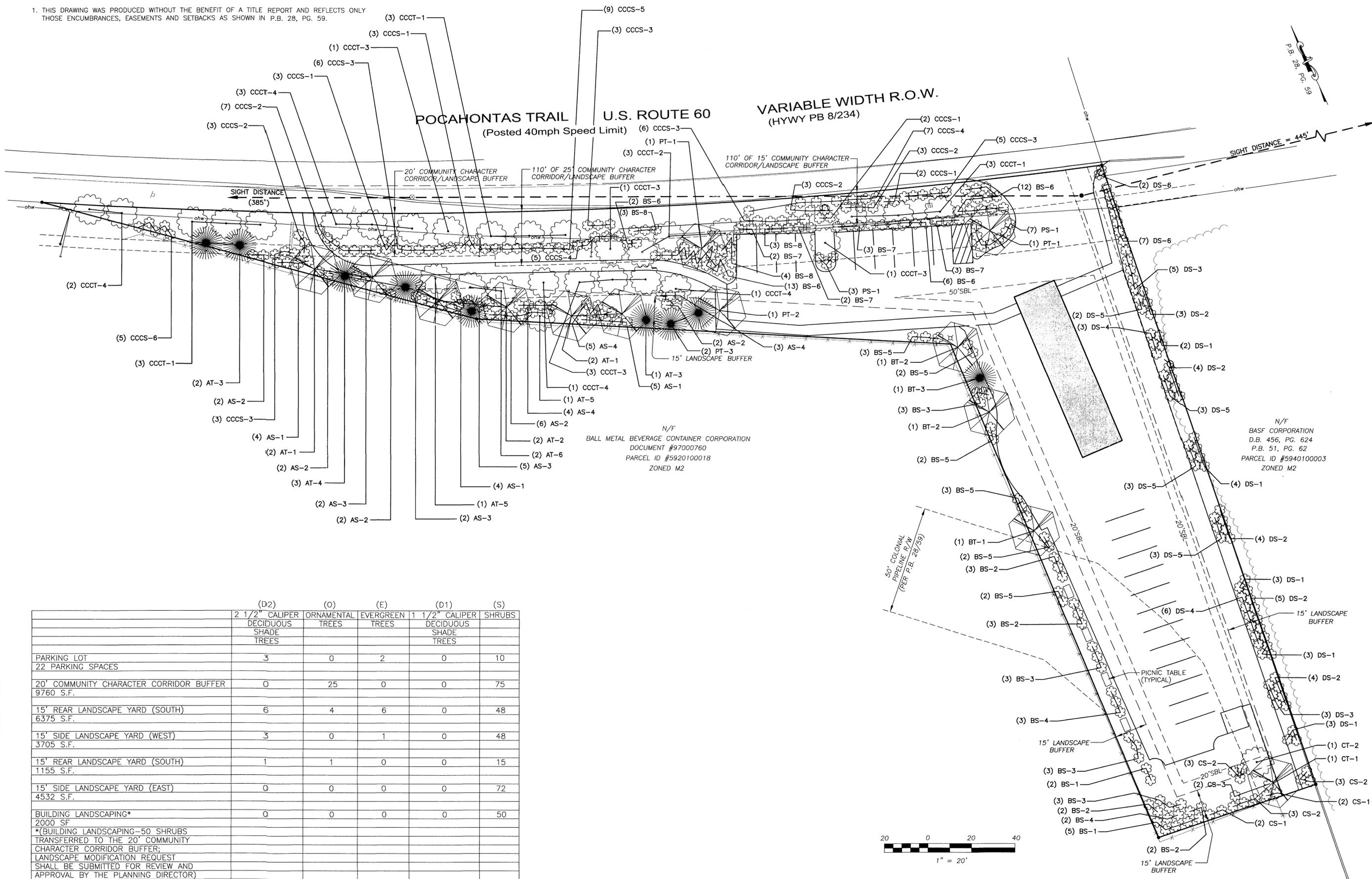
LandTech Resources, Inc.
Surveying • GPS • Engineering
205 Bullfants Blvd., Ste. E, Williamsburg, VA 23188
Phone: (757) 565-1677 • Fax: (757) 565-0782
web: landtechresources.com

SCALE: 1" = N/A
DATE: 10/13/2010
JOB: 10-055
DRAWN BY: DMS
SHEET: C6 OF 8

BEFORE DIGGING CALL "MISS UTILITY" OF VIRGINIA AT 1 - 800 - 552 - 7001

NOTES:

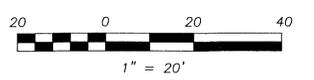
1. THIS DRAWING WAS PRODUCED WITHOUT THE BENEFIT OF A TITLE REPORT AND REFLECTS ONLY THOSE ENCUMBRANCES, EASEMENTS AND SETBACKS AS SHOWN IN P.B. 28, PG. 59.



N/F
BALL METAL BEVERAGE CONTAINER CORPORATION
DOCUMENT #97000760
PARCEL ID #5920100018
ZONED M2

N/F
BASF CORPORATION
D.B. 456, PG. 624
P.B. 51, PG. 62
PARCEL ID #5940100003
ZONED M2

	(D2)	(O)	(E)	(D1)	(S)
	2 1/2" CALIPER DECIDUOUS SHADE TREES	ORNAMENTAL TREES	EVERGREEN TREES	1 1/2" CALIPER DECIDUOUS SHADE TREES	SHRUBS
PARKING LOT 22 PARKING SPACES	3	0	2	0	10
20' COMMUNITY CHARACTER CORRIDOR BUFFER 9760 S.F.	0	25	0	0	75
15' REAR LANDSCAPE YARD (SOUTH) 6375 S.F.	6	4	6	0	48
15' SIDE LANDSCAPE YARD (WEST) 3705 S.F.	3	0	1	0	48
15' REAR LANDSCAPE YARD (SOUTH) 1155 S.F.	1	1	0	0	15
15' SIDE LANDSCAPE YARD (EAST) 4532 S.F.	0	0	0	0	72
BUILDING LANDSCAPING* 2000 SF *(BUILDING LANDSCAPING-50 SHRUBS TRANSFERRED TO THE 20' COMMUNITY CHARACTER CORRIDOR BUFFER; LANDSCAPE MODIFICATION REQUEST SHALL BE SUBMITTED FOR REVIEW AND APPROVAL BY THE PLANNING DIRECTOR)	0	0	0	0	50



VIRGINIA
JAMES CITY COUNTY

SITE PLAN
"OINK"ERS BAR-B-QUE
LANDSCAPE PLAN/SCREENING

NO.	DATE	REVISION / COMMENT / NOTE
1	11/24/10	JCC LETTER DATED 11/9/10

LandTech Resources, Inc.
 Surveying • GPS • Engineering
 205 Bullfants Blvd., Ste. E, Williamsburg, VA 23188
 Phone: (757) 565-1677 Fax: (757) 565-0782
 web: landtechresources.com

SCALE: 1" = 20'
 DATE: 10/12/2010
 JOB: 10-055
 DRAWN BY: DMS
 SHEET: L1 OF 8



TRANSMISSION RIGHT-OF-WAY
NON-TRANSMISSION USE
ENCROACHMENT REQUEST REQUIREMENTS

For Transmission Encroachment request consideration, please submit a brief letter and plans addressing the following:

- 1. Describe what the encroachment is and why you need it
2. Provide site plans, profiles, landscape plans, drainage plans, etc. that are applicable to transmission right-of-way
3. Identify all transmission lines and structures to scale on the various plan sheets (line and structure numbers are on yellow/black tags on the structures)
4. State the requestor's name, title, business name, address, telephone number and contact person (usually the consulting firm)
5. State the property owner's name, address, telephone number and contact person (if applicable)
6. State name, address and title of person who has authority to sign and return the Letter of Consent (usually property owner/developer)
7. Include vicinity map of or directions to site

If you have any questions, please feel free to contact the Manager - Transmission Right-of-Ways at 1-800-215-8032, Option 1.

07/07/09

Table with columns: PARKING LOT ABBREV., QUANTITY, BOTANICAL NAME, COMMON NAME, SIZE. Includes sections for DECIDUOUS SHADE TREES, EVERGREEN TREES, SHRUBS, 20' COMMUNITY CHARACTER CORRIDOR BUFFER, 15' REAR LANDSCAPE YARD (SOUTH), 15' SIDE LANDSCAPE YARD (WEST), 15' SIDE LANDSCAPE YARD (SOUTH), 15' SIDE LANDSCAPE YARD (EAST), and BUILDING LANDSCAPING.

GENERAL PLANTING NOTES

- 1. THE LANDSCAPE CONTRACTOR AND OWNER ARE RESPONSIBLE FOR ADHERENCE TO ALL REQUIREMENTS OF THE JAMES CITY COUNTY ZONING ORDINANCE.
2. THE LANDSCAPE CONTRACTOR AND OWNER ARE RESPONSIBLE FOR COORDINATING THE ACCURATE LOCATION AND MARKING OF ALL PRIVATE AND PUBLIC UNDERGROUND UTILITIES PRIOR TO THE COMMENCEMENT OF ANY LAND DISTURBANCE WITHIN THE PROJECT LIMITS.
3. SEE PLANT SCHEDULES FOR SPECIFIC PROPOSED PLANT SPECIES. IF THERE IS A DISCREPANCY BETWEEN THE LANDSCAPE PLAN VIEW AND THE PLANT SCHEDULE, THE PLANT SCHEDULE INFORMATION GOVERNS.
4. LANDSCAPE CONTRACTOR SHALL REFER TO THE STANDARDIZED LANDSCAPE SPECIFICATIONS FOR THE STATE OF VIRGINIA, LATEST EDITION, FOR ADDITIONAL SPECIFICATIONS PERTAINING TO PLANTING.
5. LANDSCAPE CONTRACTOR SHALL PROVIDE COPIES OF THE LANDSCAPE BID(S) TO THE ENGINEER AND THE LANDSCAPE ARCHITECT PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
6. REFER TO CIVIL DRAWINGS FOR ALL DETAILED SITE INFORMATION.
7. LANDSCAPE CONTRACTOR SHALL COORDINATE LANDSCAPE WORK WITH ALL OTHER TRADES.
8. ROUGH GRADING SHALL BE COMPLETED BY THE GENERAL SITE CONTRACTOR. THE LANDSCAPE CONTRACTOR SHALL COMPLETE THE FINE GRADING AND SITE STABILIZATION.
9. LANDSCAPE CONTRACTOR SHALL COORDINATE WITH THE OWNER IN ORDER TO CONFIRM THE TYPE OF SEED OR SOD TO BE PROVIDED AND INSTALLED WITHIN ALL DISTURBED AREAS WITHIN THE PROJECT LIMITS.
10. MINOR FIELD ADJUSTMENTS MAY BE NECESSARY DUE TO EXISTING SITE CONDITIONS AND/OR PROPOSED SITE IMPROVEMENTS.
11. OWNER RESERVES THE RIGHT TO SUBSTITUTE PLANT MATERIAL TYPE, SIZE AND/OR QUANTITY.
12. PROPOSED PLANT MATERIAL MAY BE PLANTED AS LONG AS THE SOIL IS NOT FROZEN.
13. ALL PLANT MATERIAL SHALL BE FREE OF DISEASE OR INSECT INFESTATION.
14. PLANT MATERIAL SHALL BE KEPT MOIST AT ALL TIMES, COVERED DURING TRANSPORT TO THE SITE, AND STORED ON-SITE IN A PROTECTED, SHADED AREA UNTIL PLANTING IS COMPLETED.
15. PLANT MATERIAL SHALL BE INSTALLED WITHIN AN EXCAVATED PLANTING PIT, WITH A WIDTH APPROXIMATELY TWO (2) TO THREE (3) TIMES THE PLANT MATERIAL BALL DIAMETER.
16. LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL WATERING AND MAINTENANCE OF INSTALLED PLANT MATERIAL UNTIL THE FINAL REVIEW AND ACCEPTANCE OF THE INSTALLED PLANT MATERIAL BY THE OWNER.
17. LANDSCAPE CONTRACTOR SHALL PROVIDE THE OWNER WITH A ONE (1) YEAR SURVIVAL WARRANTY FOR ALL PROPOSED PLANT MATERIAL INSTALLED.
18. LANDSCAPE CONTRACTOR SHALL NOT BE RESPONSIBLE FOR THE LOSS OF PLANT MATERIAL THAT HAS BEEN DAMAGED BY VANDALISM, FIRE, OR OTHER ACTIVITIES BEYOND THE LANDSCAPE CONTRACTOR'S CONTROL.
19. THE OWNER IS RESPONSIBLE FOR THE PERPETUAL MAINTENANCE OF ALL LANDSCAPING WITHIN THE PROJECT LIMITS IN ACCORDANCE WITH THE REQUIREMENTS OF THE JAMES CITY COUNTY ZONING ORDINANCE.

SITE PLAN
"OINK"ERS BAR-B-QUE
LANDSCAPE PLAN/SCREENING

REVISION / COMMENT / NOTE
DATE
NO.



LandTech Resources, Inc.
Surveying • GPS • Engineering
205 Buifants Blvd., Ste. E, Williamsburg, VA 23188
Phone: (757) 568-1677 Fax: (757) 568-0782
web: landtechresources.com

SCALE: 1" = 20'
DATE: 10/12/2010
JOB: 10-055
DRAWN BY: DMS
SHEET: L2 OF 3

BEFORE DIGGING CALL "MISS UTILITY" OF VIRGINIA AT 1-800-552-7001

Mr. John Rogers,

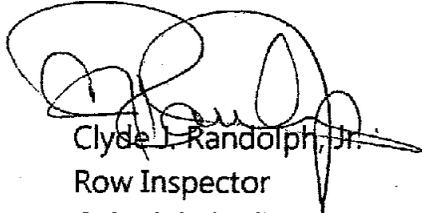
1 Dec 2010

Colonial Pipeline Company has reviewed and accessed Mr. Rogers plan for improvements to the property listed below and has no problem with this improvement. Colonial Pipeline request that Mr. Rogers give prior notice before doing any work over or in Colonial's Right of Way, so a Colonial Inspector may be present to observe, protect and provide guidance around Colonial's pipeline.

8953 Pocahontas Trl

James City, VA

Thank You,



Clyde J. Randolph, Jr.

Row Inspector

Colonial Pipeline Co.

Office: 804-233-4335

Cell: 804-614-6857



110009117

COUNTY OF JAMES CITY, VIRGINIA

COPY

DECLARATION OF COVENANTS
INSPECTION/MAINTENANCE OF DRAINAGE SYSTEM

Please type or print legibly in black ink. Covenantor(s) should submit this form to the JCC Environmental Division, 101-E Mounts Bay Road, Williamsburg, VA 23185.

THIS DECLARATION OF COVENANTS, made this 11 day of April, 20 11, between John A. Rogers II, and all successors in interest, ("COVENANTOR(S)", owner(s) of the following property:

Parcel Identification Number(s): 5920100019
Legal Description(s): PT POPLAR HALL- Property address: 8953 Pocahontas Trail
Williamsburg, VA 23185

Project or Subdivision Name: "Oink"ers Bar-B-Que
Document/Instrument No(s): _____
or Deed Book 282, Page No. 393,
and the County of James City, Virginia ("COUNTY.")

WITNESSETH:

I (We), the COVENANTOR(S), with full authority to execute deeds, mortgages, other covenants, and all rights, titles and interests in the property described above, do hereby covenant with the COUNTY as follows:

1. The COVENANTOR(S) shall provide maintenance for the drainage system including any runoff control facilities, conveyance systems and associated easements, hereinafter referred to as the "SYSTEM," located on and serving the above-described property to ensure that the SYSTEM is and remains in proper working condition in accordance with approved design standards, and with the law and applicable executive regulations. The SYSTEM shall not include any elements located within any Virginia Department of Transportation rights-of-way.

2. If necessary, the COVENANTOR(S) shall levy regular or special assessments against all present or subsequent owners of property served by the SYSTEM to ensure that the SYSTEM is properly maintained.

3. The COVENANTOR(S) shall provide and maintain perpetual access from public right-of-ways to the SYSTEM for the COUNTY, its agent and its contractor.

4. The COVENANTOR(S) shall grant the COUNTY, its agent and its contractor a right of entry to the SYSTEM for the purpose of inspecting, monitoring, operating, installing, constructing, reconstructing, maintaining or repairing the SYSTEM.

5. If, after reasonable notice by the COUNTY, the COVENANTOR(S) shall fail to maintain the SYSTEM in accordance with the approved design standards and with the law and applicable executive regulations, the COUNTY may perform all necessary repair or maintenance work, and the COUNTY may assess the COVENANTOR(S) and/or all property served by the SYSTEM for the cost of the work and any applicable penalties.

Prepared by (Name, Address & Phone):
John A. Rogers II
8953 Pocahontas Trail
Williamsburg, VA 23185
757-345-9970

✓ **Return to:**
JCC Attorney's Office
101-C Mount's Bay Road
Williamsburg, VA 23185
(757) 253-6612

Recorded on April 25, 2011

6. The COVENANTOR(S) shall indemnify and save the COUNTY harmless from any and all claims for damages to persons or property arising from the installation, construction, maintenance, repair, operation or use of the SYSTEM.

7. The COVENANTOR(s) shall promptly notify the COUNTY when the COVENANTOR(S) legally transfers any of the COVENANTOR(S) responsibilities for the SYSTEM. The COVENANTOR(S) shall supply the COUNTY with a copy of any document of transfer, executed by both parties.

8. The covenants contained herein shall run with the land and shall bind the COVENANTOR(S) and the COVENANTOR(S)' heirs, executors, administrators, successors and assignees, and shall bind all present and subsequent owners of property served by the SYSTEM.

9. This COVENANT shall be recorded in the County Land Records.

IN WITNESS WHEREOF, the COVENANTOR(S) has executed this DECLARATION OF COVENANTS as of the date first above written.

COVENANTOR(S)

[Handwritten Signature]
Signature

John A. Rogers II, Owner
Print Name and Title

ACKNOWLEDGMENT

COMMONWEALTH OF VIRGINIA
CITY/COUNTY OF James City, to wit:

I hereby certify that on this 11 day of April, 20 11, before the subscribed, a Notary Public for the Commonwealth of Virginia, personally appeared John A. Rogers II and did acknowledge the foregoing instrument to be his/her Act.

IN WITNESS WHEREOF, I have hereunto set my hand and official seal this 11th day of April, 20 11.



[Handwritten Signature]
Notary Public

Notary Registration Number: 7014335

My Commission expires: 12/31/14

Approved as to form:
[Handwritten Signature]
County Attorney

Environmental Division

NOV 2 2010

RECEIVED

**Erosion and Sediment
Control Narrative**

for

"OINK"ERS BAR-B-QUE

October 22, 2010

**SP-99-10
FINAL**

Project Number 10-055

RECEIVED
NOV 2010
011213141516

LandTech Resources, Inc.
205 Bulifants Blvd., Ste E, Williamsburg, VA
Phone 757-565-1677 Fax 757-565-0782

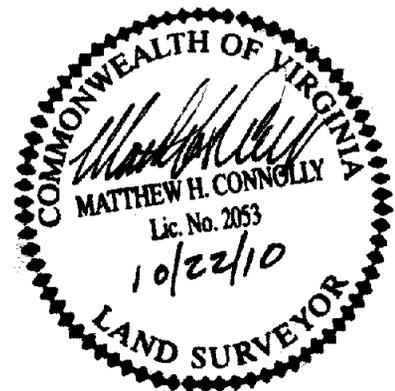
**Erosion and Sediment
Control Narrative**

for

“OINK”ERS BAR-B-QUE

October 22, 2010

Project Number 10-055



LandTech Resources, Inc.
205 Bulifants Blvd., Ste E, Williamsburg, VA
Phone 757-565-1677 Fax 757-565-0782

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 Kempsville Fine Sandy Loam (18B)

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EROSION AND SEDIMENT CONTROL MEASURES

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 Permanent Seeding – 3.32

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STORMWATER CALCULATIONS

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 Permanent Seeding – 3.32

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PROJECT DESCRIPTION

The project consists of removing portions of existing gravel, asphalt and concrete. The new improvements will consist of the construction of 2,250 S.F. of new asphalt for in the parking, drive-thru areas with pavement stripping and 1,050 S.F. of new sidewalk. The installation of extensive landscaping is also incorporated as shown on the landscape plan. The existing site is located at 8953 Pocahontas Trail in James City County, Virginia. The existing property is 1.0 acres and contains 27,916 S.F. of impervious cover. After construction is complete the site will contain a total of 25,124 S.F. of impervious cover netting a 10% decrease in impervious area.

EXISTING CONDITIONS

Currently the site contains an abandoned car wash facility and an asphalt parking lot area. The site is open and slopes from the west toward the east.

ADJACENT AREAS

The site is bounded on north by Pocahontas Road (Route 60), on the south and west by Ball Metal (zoned M2) and on the east by BASF Corporation (zoned M2)

OFF-SITE AREA

There are no off-site areas proposed to be disturbed in association with this project. However, if it becomes necessary to disturb off-site areas, a revised erosion and sediment control plan will be prepared and submitted to the county for review and approval.

SOILS

Emporia fine sandy loam (14B)

This soil is deep, gently sloping, and well drained. It is on medium and broad upland ridges. Slopes are smooth, commonly convex, and 150 to 800 feet long. Areas of this soil commonly area elongated or irregularly oval. They range from 3 to 40 acres.

Typically, the surface layer of this soil is dark grayish brown fine sandy loam about 4 inches thick. The subsurface layer is pale brown loam 9 inches thick. The subsoil extends to a depth of 58 inches. It is yellowish brown loam with mostly strong brown mottles in the upper part; yellowish brown, firm sandy clay loam with strong brown and grey mottles in the middle part; and mottled gray and brown, firm sandy clay loam in the lower part. The substratum is variegated gray, brown, and red, firm sandy clay loam to a depth of at least 75 inches.

Kempsville fine sandy loam (18B)

This soil is deep, gently sloping, and well drained. It is on broad uplands and side slopes. Slopes commonly are 200 to 600 feet long. Areas of this soil area elongated, irregularly rectangular, or oval. They range from about 3 to 60 acres.

Typically, the surface layer of this soil is dark grayish brown fine sandy loam about 4 inches thick. The subsurface layer is light yellowish brown fine sandy loam 10 inches thick. The subsoil extends to a depth 55 inches. It is a yellowish brown and strong brown fine sandy loam and sandy clay loam to a depth of 32 inches; and below that depth, it is mottle fine sandy loam that is somewhat firm and compacted over yellowish brown sandy clay loam. The substratum is yellowish brown fine sandy loam to a depth of at least 68 inches.

CRITICAL EROSION AREAS

The critical erosion area associated with this site is at the eastern side of the project adjacent to the BASF property. The majority of the runoff from the project drains to this area. To prevent sediment from leaving the site to this area, it is imperative that the contractor install all erosion and sediment control measures shown on these plans before any land disturbing activities commence. Regular inspection and maintenance is also required for all erosion and sediment control measures to keep them functioning as designed.

EROSION AND SEDIMENT CONTROL MEASURES

Unless otherwise indicated, all structural and vegetative erosion and sediment control practices shall be constructed and maintained according to minimum standards and specifications of the latest edition of Virginia Erosion and Sediment Control Handbook (VESCH). The minimum standards shall be adhered to unless otherwise waived or approved by variance.

STRUCTURAL PRACTICES

Silt Fence – 3.05

Silt fence shall be placed around the limits of clearing to intercept and detain small amounts of sediment from disturbed areas during construction operations.

VEGETATIVE PRACTICES

Permanent Seeding – 3.32

All denuded areas, which will be left dormant for extended periods of time, shall be seeded with permanent vegetation immediately following grading. Selection of the seed mixture will depend on the time of year it is applied.

MANAGEMENT STRATEGIES

- Sediment trapping measures will be installed as the first step in grading and will be seeded and mulched immediately following installation.
- Temporary seeding or other stabilization will follow immediate after grading.
- The contractor shall be responsible for the installation and maintenance of all erosion and sediment control practices depicted on the Plans.
- After achieving adequate stabilization, the temporary controls will be cleaned and removed. Any areas disturbed in the removal process shall be graded, top soiled, and seeded accordingly.

PERMANENT STABILIZATION

All areas disturbed by construction shall be stabilized with permanent seeding immediately following finish grading. Seeding shall be accomplished with Kentucky 31 Tall Fescue according to Standards and Specifications 3.32, Permanent Seeding of the VESCH. Soil stabilization blankets will be installed over slopes, which have been brought to final grade and have been seeded to protect the slopes from rill and gully erosion and to allow seed to germinate properly. Mulch (straw or fiber) will be used on relatively flat areas. In all seeding operations, seed, fertilizer and lime will be applied prior to mulching.

STORMWATER MANAGEMENT

This project will reduce the amount of impervious area from 27,916 square feet to 25,124 square feet. The stormwater quantity requirements of Minimum Standard 19 of the Virginia Stormwater Management Handbook are met with the reduction in the impervious area. The 2-year pre-development storm runoff rate of 1.57 cfs is reduced to 1.39 cfs. The 10-year pre-development storm runoff rate of 3.05 cfs is reduced to 2.79 cfs and the 100-year pre-development storm runoff rate of 4.41 cfs is reduced to 4.07 cfs. To meet the stormwater quality requirements of the James City County the project has a 10% reduction in impervious surface area. The reduction in impervious surface area decreased the yearly phosphorous load by 0.12 pounds/year.

CALCULATIONS

Appendix A contains stormwater quantity/quality calculations.

MAINTENANCE

In general, all erosion and sediment control measures will be checked daily and after each significant rainfall. The following items will be checked in particular:

Silt Fence – 3.05

Silt fences shall be inspected immediately after each rainfall and at least daily during prolonged rainfall. Any required repairs shall be made immediately.

Close attention shall be paid to the repair of damaged silt fence resulting from end runs and undercutting.

Should the fabric on a silt fence decompose or become ineffective prior to the end of the expected usable life and the barrier still be necessary, the fabric shall be replaced promptly.

Sediment deposits should be removed after each storm event. They must be removed when deposits reach approximately one-half the height of the barrier.

Any sediment deposits remaining in place after the silt fence is no longer required shall be dressed to conform to the existing grade, prepared and seeded.

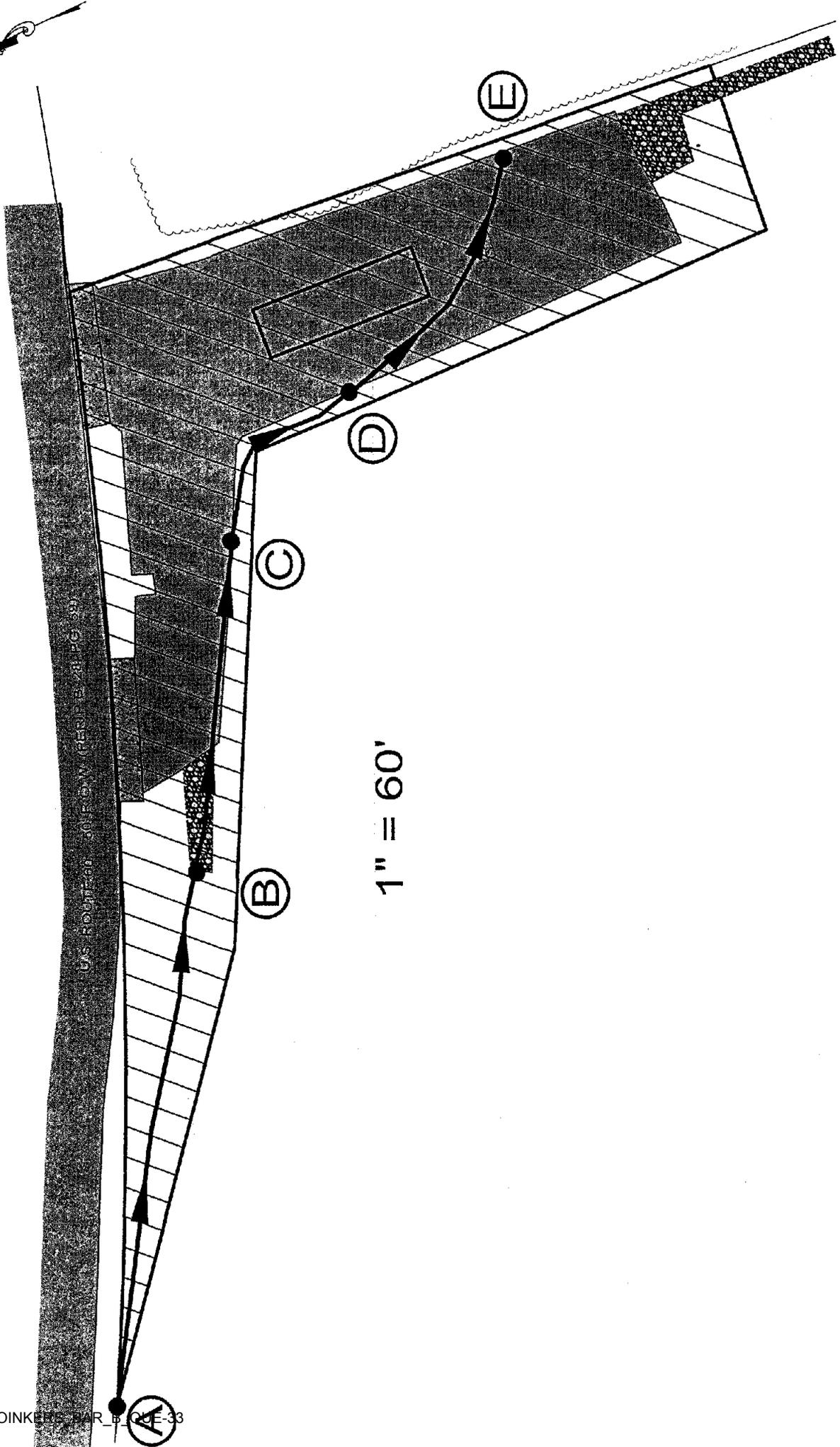
Permanent Seeding – 3.32

The seeded/mulched areas should be checked regularly to ensure that a good stand is established and maintained. Areas should be fertilized, mulched and re-seeded as needed. When it is clear that plants have not germinated on an area or have died, these areas must be re-seeded immediately to prevent erosion damage. However, it is extremely important to determine for what reason germination did not take place and make any corrective action necessary prior to re-seeding the area.

- Fertilizer shall be applied using approved fertilization methods and equipment.
- Formulations and application rates shall conform to the guidelines given in VESCH.
- Maintain a ground cover or organic mulch around trees that is adequate to prevent erosion, protect roots, and hold water.

APPENDIX A

PRE-DEVELOPMENT



LandTech Resources, Inc.

Surveying • Engineering • GPS

201 Bulifants Blvd., Suite A, Williamsburg, VA 23188

Phone: (757) 565-1677 Fax: (757) 565-0782

web: landtechresources.com

PROJECT NAME OINKERS
PROJECT NO. 10-055
SHEET NO. _____ OF _____
CALCULATED BY MHC DATE 10/19/10
SCALE N/A

TR55 CALCS DA & SEGMENT ID

* EXISTING IMP. = 27,916 S.F.

* NEW IMP. = 25,124 S.F.

EXISTING - SEGMENT ID

A-B	235	GRASS	0.019 FT/FT
B-C	136	PAVE/GRVL	0.011 FT/FT
C-D	96	GRASS	0.013 FT/FT
D-E	131	PAVE	0.011 FT/FT

PROPOSED - SEGMENT ID

A-B	313	GRASS	0.017 FT/FT
B-C	104	PAVE	0.011 FT/FT
C-D	55	GRASS	0.012 FT/FT
D-E	131	PAVE	0.011 FT/FT

Worksheet 2: Runoff curve number and runoff

Project OINKERS 10-055	By MHC	Date 10/13/10
Location JAMES CITY COUNTY	Checked	Date

Check one: Present Developed

1. Runoff curve number

Soil name and hydrologic group (appendix A)	Cover description (cover type, treatment, and hydrologic condition; percent impervious; unconnected/connected impervious area ratio)	CN ^{1/}			Area <input checked="" type="checkbox"/> acres <input type="checkbox"/> mi ² <input type="checkbox"/> %	Product of CN x area
		Table 2-2	Figure 2-3	Figure 2-4		
EMPORIA (C) KEMPSVILLE (C)	ROOF/ASPH/GRAVEL	98			0.04	62.72
" "	OPEN SPACE - GRASS (GOOD CONDITION)	74			0.36	26.64

^{1/} Use only one CN source per line Totals ➡ 1.00 89.36

$$CN \text{ (weighted)} = \frac{\text{total product}}{\text{total area}} = \frac{89.36}{1.00} = 89.36 ; \quad \text{Use CN } \boxed{89}$$

2. Runoff

	Storm #1	Storm #2	Storm #3
Frequency yr	2	10	100
Rainfall, P (24-hour) in	3.5	5.8	8.0
Runoff, Q in	2.5	4.8	6.9

(Use P and CN with table 2-1, figure 2-1, or equations 2-3 and 2-4)

Worksheet 3: Time of Concentration (T_C) or travel time (T_t)

Project OINKERS 10-055	By MHC	Date 10/13/10
Location JAMES CITY COUNTY	Checked	Date

Check one: Present Developed

Check one: T_C T_t through subarea

Notes: Space for as many as two segments per flow type can be used for each worksheet.
Include a map, schematic, or description of flow segments.

Shallow concentrated flow

	Segment ID	A-B & C-D	BC & D-E	
1. Surface description (table 3-1)		GRASS	PAVEMENT	
2. Manning's roughness coefficient, n (table 3-1)		0.24	0.011	
3. Flow length, L (total L \geq 300 ft) ft		331	267	
4. Two-year 24-hour rainfall, P_2 in		3.5	3.5	
5. Land slope, s ft/ft		0.016	0.011	
6. $T_t = \frac{0.007 (nL)^{0.8}}{P_2^{0.5} s^{0.4}}$ Compute T_t hr		0.65	0.05	= 0.70

Shallow concentrated flow

	Segment ID			
7. Surface description (paved or unpaved)				
8. Flow length, L ft				
9. Watercourse slope, s ft/ft				
10. Average velocity, V (figure 3-1) ft/s				
11. $T_t = \frac{L}{3600 V}$ Compute T_t hr				=

Channel flow

	Segment ID			
12. Cross sectional flow area, a ft ²				
13. Wetted perimeter, p_w ft				
14. Hydraulic radius, $r = \frac{a}{p_w}$ Compute r ft				
15. Channel slope, s ft/ft				
16. Manning's roughness coefficient, n				
17. $V = \frac{1.49 r^{2/3} s^{1/2}}{n}$ Compute V ft/s				
18. Flow length, L ft				
19. $T_t = \frac{L}{3600 V}$ Compute T_t hr				=
20. Watershed or subarea T_C or T_t (add T_t in steps 6, 11, and 19) Hr				0.70

Worksheet 5b: Basic watershed data

Project OWNERS 10-055		Location JAMES CITY COUNTY			By MHC		Date 10/13/10												
Check one: <input checked="" type="checkbox"/> Present <input type="checkbox"/> Developed		Frequency (yr)			Checked		Date												
Subarea name	Basic watershed data used ^{1/}				Select and enter hydrograph times in hours from exhibit 5-II ^{2/}														
	Subarea T_c (hr)	ΣT_t to outlet (hr)	I_a/P	$A_m Q$ (mi ² -in)	Discharges at selected hydrograph times ^{3/} (cfs)														
STORM																			
2	0.70		0.070	0.0037						12.6									
10	0.70		0.043	0.0072						1.57									
100	0.70		0.031	0.0104						3.05									
Composite hydrograph at outlet																			

1/ Worksheet 5a. Rounded as needed for use with exhibit 5.
 2/ Enter rainfall distribution type used.
 3/ Hydrograph discharge for selected times is $A_m Q$ multiplied by tabular discharge from appropriate exhibit 5.

POST-DEVELOPMENT

U.S. ROUTE 60 50' R.O.W. (PER P.B. 28, PG. 59)

(A)

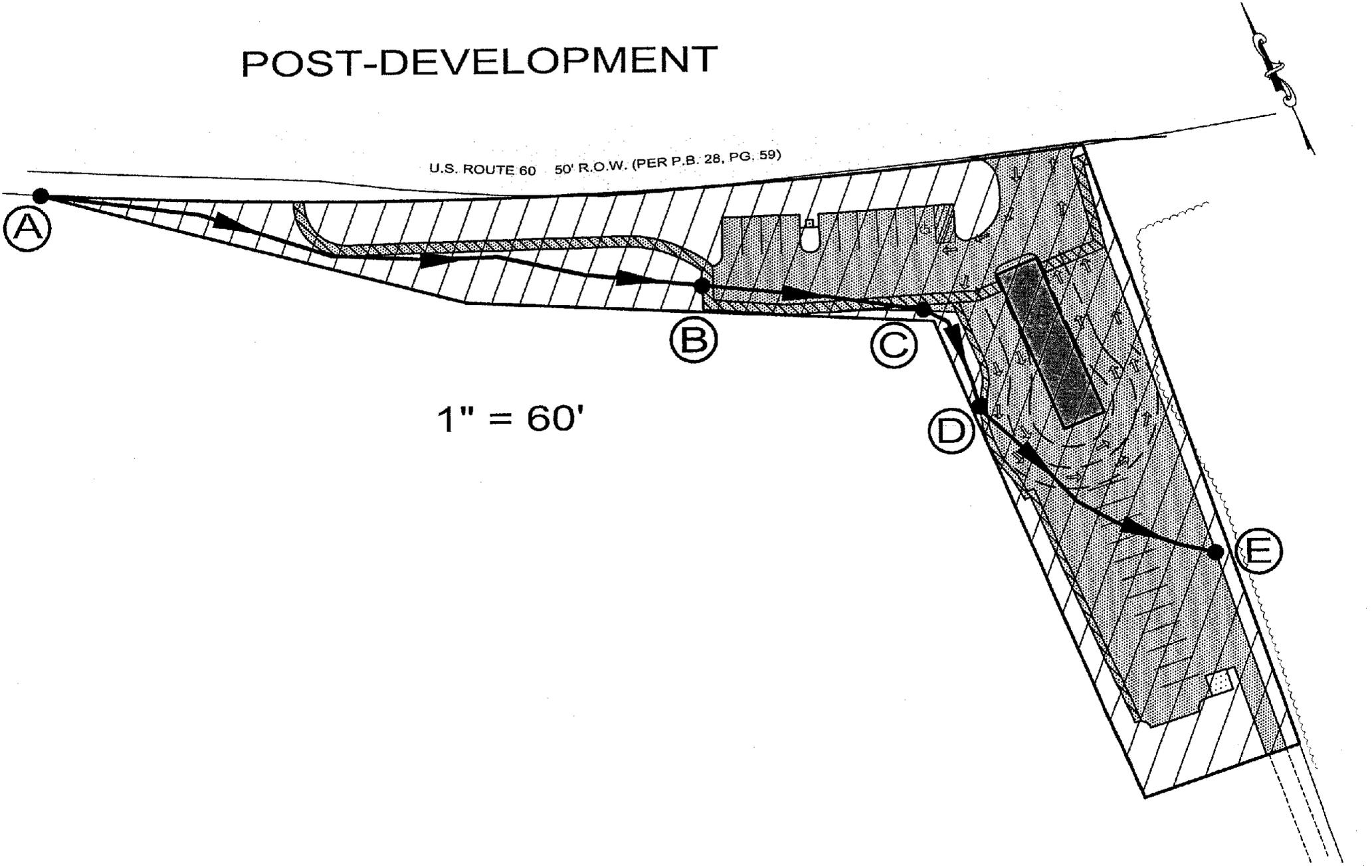
(B)

(C)

(D)

(E)

1" = 60'



Worksheet 3: Time of Concentration (T_C) or travel time (T_t)

Project OINKERS 10-055	By MHC	Date 10/13/10
Location JAMES CITY COUNTY	Checked	Date

Check one: Present Developed

Check one: T_C T_t through subarea

Notes: Space for as many as two segments per flow type can be used for each worksheet.
Include a map, schematic, or description of flow segments.

Shallow concentrated flow (Applicable to P₂)

	Segment ID	A-B C-D	B-C D-E	
1. Surface description (table 3-1)		GRASS	PAVEMENT	
2. Manning's roughness coefficient, n (table 3-1)		0.24	0.011	
3. Flow length, L (total L + 300 ft) ft		368	235	
4. Two-year 24-hour rainfall, P ₂ in		3.5	3.5	
5. Land slope, s ft/ft		0.014	0.011	
6. $T_t = \frac{0.007 (nL)^{0.8}}{P_2^{0.5} s^{0.4}}$ Compute T _t hr		0.74	0.05	= 0.79

Shallow concentrated flow

	Segment ID			
7. Surface description (paved or unpaved)				
8. Flow length, L ft				
9. Watercourse slope, s ft/ft				
10. Average velocity, V (figure 3-1) ft/s				
11. $T_t = \frac{L}{3600 V}$ Compute T _t hr				=

Channel flow

	Segment ID			
12. Cross sectional flow area, a ft ²				
13. Wetted perimeter, p _w				
14. Hydraulic radius, $r = \frac{a}{p_w}$ Compute r				
15. Channel slope, s ft/ft				
16. Manning's roughness coefficient, n				
17. $V = \frac{1.49 r^{2/3} s^{1/2}}{n}$ Compute V ft/s				
18. Flow length, L ft				
19. $T_t = \frac{L}{3600 V}$ Compute T _t hr				=
20. Watershed or subarea T _C or T _t (add T _t in steps 6, 11, and 19) Hr				0.79

Worksheet 5a: Basic watershed data

Project OINKERS 10-055				Location JAMES CITY COUNTY				By MHC		Date 10/13/10	
Check one: <input type="checkbox"/> Present <input checked="" type="checkbox"/> Developed				Frequency (yr)				Checked		Date	
Subarea name	Drainage area	Time of concentration	Travel time through subarea	Downstream subarea names	Travel time summation to outlet	24-hr rainfall	Runoff curve number	Runoff	$A_m Q$	Initial abstraction	I_a/P
STORM	A_m (mi ²)	T_c (hr)	T_t (hr)		ΣT_t (hr)	P (in)	CN	Q (in)	$(mi^2 \cdot in)$	I_a (in)	I_a/P
2	0.0015	0.79				3.5	88	2.2	0.0033	0.273	0.078
10	0.0015	0.79				5.8	88	4.4	0.0066	0.273	0.047
100	0.0015	0.79				8.0	88	6.4	0.0096	0.273	0.034

From worksheet 3

From worksheet 2

From table 5-1

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Worksheet 5b: Basic watershed data

Project DINKERS 10-055		Location JAMES CITY COUNTY			By MHC		Date 10/13/10	
Check one: <input type="checkbox"/> Present <input checked="" type="checkbox"/> Developed		Frequency (yr)			Checked		Date	
Subarea name	Basic watershed data used ^{1/}				Select and enter hydrograph times in hours from exhibit 5-11 ^{2/}			
	Subarea T_c (hr)	ΣT_t to outlet (hr)	I_a/P	$A_m Q$ (mi ² -in)				
STORM					Discharges at selected hydrograph times ^{3/} (cfs)			
2	0.79		0.063	0.0033			12.6	
10	0.79		0.038	0.0066			1.39	
100	0.79		0.028	0.0096			2.79	
							4.07	
Composite hydrograph at outlet								

1/ Worksheet 5a. Rounded as needed for use with exhibit 5.

2/ Enter rainfall distribution type used.

3/ Hydrograph discharge for selected times is $A_m Q$ multiplied by tabular discharge from appropriate exhibit 5.

Worksheet 1

Page 1 of 3

STEP 1 Determine the applicable area (A) and the post-developed impervious cover (I_{post}).

Applicable area (A)* = 1.00 acres

Post-development impervious cover:

structures = 0.037 acres

parking lot = 0.540 acres

roadway = 0 acres

other:

_____ = _____ acres

_____ = _____ acres

Total = 0.577 acres

$$I_{\text{post}} = (\text{total post-development impervious cover} \div A) \times 100 = \underline{57.7\%}$$

* The area subject to the criteria may vary from locality to locality. Therefore, consult the locality for proper determination of this value.

STEP 2 Determine the average land cover condition ($I_{\text{watershed}}$) or the existing impervious cover (I_{existing}).

Average land cover condition ($I_{\text{watershed}}$):

If the locality has determined land cover conditions for individual watersheds within its jurisdiction, use the watershed specific value determined by the locality as $I_{\text{watershed}}$.

$I_{\text{watershed}} =$ _____ %

Otherwise, use the Chesapeake Bay default value:

$I_{\text{watershed}} = 16\%$

Worksheet 1

Page 2 of 3

Existing impervious cover ($I_{existing}$):

Determine the existing impervious cover of the development site if present.

Existing impervious cover:

structures = 0.037 acres

parking lot = 0.604 acres

roadway = 0 acres

other:

_____ = _____ acres

_____ = _____ acres

Total = 0.641 acres

$$I_{existing} = (\text{total existing impervious cover} \div A^*) \times 100 = \underline{64.1} \%$$

* The area should be the same as used in STEP 1.

STEP 3 Determine the appropriate development situation.

The site information determined in STEP 1 and STEP 2 provide enough information to determine the appropriate development situation under which the performance criteria will apply. Check (✓) the appropriate development situation as follows:

_____ **Situation 1:** This consists of land development where the existing percent impervious cover ($I_{existing}$) is less than or equal to the average land cover condition ($I_{watershed}$) and the proposed improvements will create a total percent impervious cover (I_{post}) which is less than or equal to the average land cover condition ($I_{watershed}$).

$$I_{post} \text{ _____ } \% \leq I_{watershed} \text{ _____ } \%$$

Worksheet 1

Page 3 of 3

_____ **Situation 2:** This consists of land development where the existing percent impervious cover (I_{existing}) is less than or equal to the average land cover condition ($I_{\text{watershed}}$) and the proposed improvements will create a total percent impervious cover (I_{post}) which is greater than the average land cover condition ($I_{\text{watershed}}$).

$$I_{\text{existing}} \text{ ______ \% } \leq I_{\text{watershed}} \text{ ______ \% }; \text{ and}$$

$$I_{\text{post}} \text{ ______ \% } > I_{\text{watershed}} \text{ ______ \% }$$

✓ _____ **Situation 3:** This consists of land development where the existing percent impervious cover (I_{existing}) is greater than the average land cover condition ($I_{\text{watershed}}$).

$$I_{\text{existing}} \text{ \underline{64.1} \% } > I_{\text{watershed}} \text{ \underline{16} \% }$$

_____ **Situation 4:** This consists of land development where the existing percent impervious cover (I_{existing}) is served by an existing stormwater management BMP(s) that addresses water quality.

If the proposed development meets the criteria for development Situation 1, then the low density development is considered to be the BMP and no pollutant removal is required. The calculation procedure for Situation 1 stops here. If the proposed development meets the criteria for development Situations 2, 3, or 4, then proceed to **STEP 4** on the appropriate worksheet.

Worksheet 3 : Situation 3

Page 1 of 5

Summary of Situation 3 criteria: from calculation procedure STEP 1 thru STEP 3, Worksheet 1:

Applicable area (A)* = 1.00 acres

$I_{\text{post}} = (\text{total post-development impervious cover} \div A) \times 100 = \underline{57.7\%}$

$I_{\text{watershed}} = \underline{\hspace{2cm}}\%$ or $I_{\text{watershed}} = 16\%$

$I_{\text{existing}} = (\text{total existing impervious cover} \div A^*) \times 100 = \underline{64.1\%}$

$I_{\text{existing}} \underline{64.1\%} > I_{\text{watershed}} \underline{16\%}$

STEP 4 Determine the relative pre-development pollutant load (L_{pre}).

1. Pre-development pollutant load based on the existing impervious cover:

$L_{\text{pre(existing)}} = [0.05 + (0.009 \times I_{\text{existing}})] \times A \times 2.28$ (Equation 5-17)

where: $L_{\text{pre(existing)}}$ = relative pre-development total phosphorous load (pounds per year)
 I_{existing} = existing site impervious cover (percent expressed in whole numbers)
 A = applicable area (acres)

$L_{\text{pre(existing)}} = [0.05 + (0.009 \times \underline{64})] \times \underline{1.00} \times 2.28$
 $= \underline{1.427}$ pounds per year

Worksheet 3 : Situation 3

Page 2 of 5

2. Pre-development pollutant load based on the average land cover condition:

$$L_{\text{pre(watershed)}} = [0.05 + (0.009 \times I_{\text{watershed}})] \times A \times 2.28 \quad (\text{Equation 5-16})$$

where: $L_{\text{pre(watershed)}}$ = relative pre-development total phosphorous load (pounds per year)
 $I_{\text{watershed}}$ = average land cover condition for specific watershed or locality or the Chesapeake Bay default value of 16% (percent expressed in whole numbers)
 A = applicable area (acres)

$$L_{\text{pre(watershed)}} = [0.05 + (0.009 \times \underline{16})] \times \underline{1.00} \times 2.28$$

$$= \underline{0.442} \text{ pounds per year}$$

STEP 5 Determine the relative post-development pollutant load (L_{post}).

$$L_{\text{post}} = [0.05 + (0.009 \times I_{\text{post}})] \times A \times 2.28 \quad (\text{Equation 5-21})$$

where: L_{post} = relative post-development total phosphorous load (pounds per year)
 I_{post} = post-development percent impervious cover (percent expressed in whole numbers)
 A = applicable area (acres)

$$L_{\text{post}} = [0.05 + (0.009 \times \underline{58})] \times \underline{1.00} \times 2.28$$

$$= \underline{1.304} \text{ pounds per year}$$

STEP 6 Determine the relative pollutant removal requirement (RR).

$$RR = L_{\text{post}} \cdot (0.9 \times L_{\text{pre(existing)}})$$

$$= \underline{\hspace{2cm}} \cdot (0.9 \times \underline{\hspace{2cm}}) = \underline{\hspace{2cm}} \text{ pounds per year}$$

or

$$RR = L_{\text{post}} \cdot L_{\text{pre(watershed)}}$$

$$= \underline{\hspace{2cm}} \cdot \underline{\hspace{2cm}} = \underline{\hspace{2cm}} \text{ pounds per year}$$

THE 10% REDUCTION IN IMPERVIOUS SURFACES HAS DECREASED THE PHOSPHOROUS LOAD FOR THIS SITE BY 0.123#/YEAR