FOR REVISION

COVER SHEET

GENERAL NOTES

GRADING PLAN

UTILITY PROFILES

LIGHTING PLAN

LANDSCAPE PLAN

BUILDING ELEVATIONS

BUILDING FOOTPRINT

SOIL BORING PLAN

28 SWM Drainage Area Map

SITE DETAILS

|FLOOR AREA: CHICK-FIL-A =

PARKING SPACES REQUIRED: 105 SPACES

41-GRID-22-PARCEL 425, 5TH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND" BY MILLDENBERG, MAXIMUM NUMBER OF EMPLOYEES: 12 (RESTAURANT): 14 (OFFICE/RETAIL BUILDING)

UTILITY PLAN

MD REG. NO. 21257, EXPIRATION DATE: 06-16-15



FOR REVISION

2 ONLY

SHEET INDEX

EXISTING CONDITIONS AND DEMOLITION PLAN

EROSION AND SEDIMENT CONTROL PLAN

EROSION AND SEDIMENT CONTROL DETAILS

STORMWATER MANAGEMENT NOTES AND DETAILS

SITE ANALYSIS DATA CHART

AND A GENERAL OFFICE/RETAIL BUILDING

PARKING SPACES PROVIDED: 119 SPACES (INCLUDING 7 HANDICAP SPACES)

GENERAL OFFICE/ RETAIL BUILDING = 8,391 S.F. (2 FLOORS @ 4,196 ST)

UTILITY CONTACT INFORMATION:

COLUMBIA, MD 21045

LICENSES & PERMITS

3430 COURTHOUS DRIVE

ELLICOTT CITY, MD 21043

PHONE: (410) 313-2455

PLANNING AND ZONING

HOWARD COUNTY PLANNING

AND ZONING DEPARTMENT

3430 COURTHOUSE DRIVE

FLLICOTT CITY, MD 21043

PHONE: (410) 313-2350

PHONE: (410) 313-4910

EROSION AND SEDIMENT CONTROL

DEPARTMENT OF INSPECTIONS,

PROJECT AREA: PARCEL 425 = 3.59 ACRES (TOTAL SITE) OR 3.56,380 S.F.

PRESENT ZONING: B-2 (GENERAL BUSINESS DISTRICT)

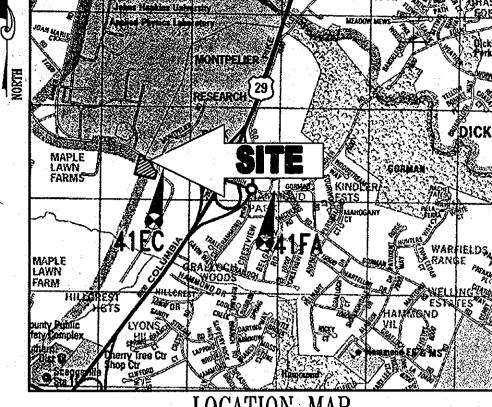
PROPOSED USE: CHICK-FIL-A RESTAURANT WITH DRIVE-THRUE

THERE WILL BE NO BUSINESS OWNED VEHICLES PARKED ONSITE.

BUILDING COVERAGE OF SITE: 0.36 ACRES (10% OF GROSS AREA)

LANDSCAPE NOTES AND DETAILS

STORMDRAIN DRAINAGE AREA MAPS



ELEV. = 430.38

ELEV. = 407.60

HO. CO. #41EC (NAD 83) N 543,588,804 E 1,342,628.780

HO. CO. #41FA (NAD 83) N 543,109.935 E 1,344,797.520

## BENCHMARK INFORMATION

USCGS TRIANGULATION DISK STAMPED "HOPKINS 1966" IN A CONCRETE MONUMENT 0.4' BELOW THE SURFACE." LOCATED IN FRONT OF JOHNS HOPKINS APPLIED. PHYSICS LABORATORY, 600'± NORTH OF JOHN HOPKINS ROAD. ELEVATION 445.50

## AS-BUILT



1 FOR REVISION 1 ONLY

APPROVED: DEPARTMENT OF PLANNING AND ZONING

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS.

Briton for Pette Beilevon HOWARD COUNTY HEALTH DEPARTMENT MON

HOPKINS STATION GENERAL PARTNERSHIP CHICK-FIL-A C/O BRANTLY DEVELOPMENT GROUP 5200 BUFFINGTON ROAD ATLANTA, GA 30349-2998

8835 COLUMBIA 100 PARKWAY, SUITE F C/O SCOTT PATHAN COLUMBIA, MD 21045 PHONE: (404) 684-8660 PHONE: (410) 730-0810

CHICK-FIL-A RESTAURANT & GENERAL OFFICE/RETAIL BUILDING PART OF LOT 1, HOPKINS STATION (FORMER PRICE FARMS, LOT JOHNS HOPKINS ROAD

LAUREL, HOWARD COUNTY, MARYLAND

AREA 3.59 AC. TAX MAP 41 GRID 22 ZONED L.2 PARCEL 425 L. 3,095, F. 39 & L. 7004, S. 003 5TH ELECTION DISTRICT, HOWARD COUNTY, MASYLAND

**COVER SHEET** 

NGINEERING, P.C

\*\*RUFESSIONAL ENGINEERING SERVICES\*

\*810 GLENEAGLES, COURT, SUITE 300, TOWSON, MD 21286\*

\*(410) 621-7800 FAI; (410) 621-7987 1 MD@bohlareng.com REVISED: DESIGNED BY: JD DRAWN BY: PROJECT NO.: MD056502.

MATTHEW T. ALLEN PROFESSIONAL ENGINEER NO. 28567

SCALE: AS SHOWN Drawing no. 1 of 2

GENERAL OFFICE/RETAIL BUILDING 10985 JOHNS HÓPKINS ROAD TAX MAP 41, GRID 22, PARCEL 425 LAUREL, HOWARD COUNTY, MARYLAND

GENERAL NOTES (CONTINUED)

24. THERE ARE NO KNOWN BURIAL GROUNDS LOCATES ON-SITE.

27. THIS PLAN IS SUBJEC' TO THE AMENDED 5TH EDITION OF THE

TREES, 29 EVERGREEN TREES, AND 110 SHRUBS.

SUBDIVISION REGULATIONS AND THE 2004 ZONING REGULATIONS.

NO. 9252, J-4171-2 (PLAT OF SURPLUS LAND), SDP-05-138 (BANK)

29 FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING IS REQUIRED AS PART OF

30. NO GRADING, REMOVAL OF VEGETATIVE COVER OR TREES, PAVING AND NEW

16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL.

BOENDER & ASSOCIATES, INC. DATED JANUARY 2006, SDP #05-138.

(INTEGRATED WITH THE FIRE ALARM SYSTEM NFPA-1 10.12.1)

WILL HAVE AN AUTOMATIC FIRE PROTECTION SPRINKLER SYSTEM.

AND PAGE 039 DATED JUNE 5, 1995.

STRUCTURES SHALL BE PERMITTED WITHIN THE REQUIRED WETLANDS, STREAMS

THE DPW DEVELOPER'S AGREEMENT IN THE AMOUNT OF \$15,450 FOR 26 SHADE

HOURS PROR TO ANY EXCAVATION WORK.

26. THERE ARE NO WETLANDS ON THIS SITE.

OF ANY ASPHALT.

21. THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48

22. TRAFFIC CONTROL DEVICES, MARKINGS, AND SIGNAGE SHALL BE IN ACCORDANCE WITH

25. THE COORDINATES SHOWN HEREON ARE BASED UPON THE HOWARD COUNTY GEODETIC

28. RELATED FILE APPLICATIONS: GP-06-46, SDP-05-138, SDP-79-40, SDP-90-113,

24-3040-D, WP-91-146, ZB-812M, F-90-132, F-79-18, BOA-945-C, VP-78-94, PLAT

OR THEIR BUFFERS, FOREST CONSERVATION EASEMENT AREAS AND 100 YEAR FLOODPLAIN.

32. THE FOREST CONSERVATION REQUIREMENTS FOR THIS PROJECT HAVE BEEN ADDRESSED WITH A

33. A KNOX BOX (FIRE DEPARTMENT ACCESS BOX) IS REQUIRED TO BE PLACED ON THE FRONT OF

4-5' IN HEIGHT AND NO MORE THEN 6' LATERALLY FROM THE DOOR. THE BOX SHALL BE

34. THE GENERAL OFFICE/RETAIL BUILDING '2' AND THE CHICK-FIL-A RESTAURANT BUILDING '3'

35. PER AN E-MAIL SENT FROM DANNY DAVIS OF BALTIMCRE GAS AND ELECTRIC (BGE) TO JUSTIN

DUNN OF BOHLER ENGINEERING, P.C. ON DEC. 15, 20 3, BGE HAS APPROVED THE PLANS

BASED ON HOWARD COUNTY CHECKLIST REQUIREMENTS THE CONTRACTOR TO ENSURE TREES

BETWEEN WASHINGTON/BALTIMORE CELLULAR LIMITED PARTNERSHIP AND WIRELESS PCS, INC. THE

LEASE PERTAINS TO THE PROPERTY IMPROVEMENTS FROM HOPKINS STATIONS GENERAL PARTNERSHIP

AND DESCRIBED AS ELECTION DISTRICT 5, LOT 1, PLATBOOK 9252 RECORDED IN DEED BOOK 3095

MISS UTILITY

PROTECT YOURSELF, GIVE TWO WORKING DAYS NOTICE

THIS DRAWING DOES NOT INCLUDE NECESSARY

MPONENTS FOR CONSTRUCTION SAFETY. A

istruction must be done in compliance

I THE OCCUPATIONAL SAFETY AND HEALTH

ACT OF 1970 AND ALL RULES AND

REGULATIONS THERETO APPURTENANT.

THE COMPRACTOR TO CALL MISS UTILITY TO

HAVE ALL EXISTING UTILITIES WARKED 48

THE BUILDING. IT SHALL BE PLACED TO THE RIGHT OF THE MAIN ENTRANCE AT A RANGE OF

FEE-IN LIEU PAYMENT OF \$10,890.00 FOR 0.5 ACRES OF AFFORESTATION PER APPROVED SITE

31. THISE PLAM: JAVE BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION

DEVELOPMENT PLANS TITLED "HOPKINS STATION, (PRICE FARMS, LOT 1), TAX MAP

ELECTRONICALLY SUPERVISED TO NOTIFY THE OWNER THAT IT IS BEING ACCESSED.

CONTROL WHICH IS BASED UPON THE MARYLAND STATE PLAN COORDINATE SYSTEM.

HOWARD COUNTY MONUMENT NOS. 41EC AND 41EA WERE USED FOR THIS PROJECT.

23. ALL PLAN DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.

THE LATEST EDITION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD)

ALL STREET AND REGULATORY SIGNS SHALL BE IN PLACE PRIOR TO THE PLACEMENT

. THIS PLAN REFERENCES A SURVEY BY CONTROL POINT ASSOCIATES: STERLING, VIRGINIA 20164 ENTITLED "ALTA/ACSM LAND TITLE SURVEY, CHICK-FIL-A, INC. #10985, JOHNS HOPKINS ROAD, 5TH ELECTION DISTRICT. HOWARD COUNTY. MARYLAND"

PROJECT NO.: S065615.SR . THE EXISTING TOPOGRAPHY IS TAKEN FROM A FIELD RUN SURVEY WITH ONE FOO CONTOUR INTERVALS PREPARED BY CONTROL POINT ASSOCIATES DATED 7/21/06 AND EX. TOPOGRAPHY OF THE SWALE SHOWN IN 2 FOOT INTERVALS ARE FROM PLANS BY MILDENBERG, BOENDER AND ASSOCIATES, INC. TITLED "SITE DEVELOPMENT PLAN, HOPKINS STATION (PRICE FARMS, LOT 1) FIFTH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND" DATED JANUARY 2006, SDP-05-138.

3. EXISTING UTILITIES ARE BASED ON A SURVEY BY CONTROL POINT ASSOCIATES, INC. DATED 7/21/06. 4. THE TRAFFIC STUDY FOR THIS PROJECT TITLED: "TRAFFIC IMPACT ANAYLSIS. CHICK-FIL-A JOHN'S HOPKINS ROAD, HOWARD COUNTY, MARY AND." PREPARED BY TRAFFIC GROUP

DATED AUGUST 24, 2006, PROJECT NO. 2006-0545 APPROVED ON NOVEMBER 2, 2006

BY HOWARD COUNTY DEVELOPMENT ENGINEERING DIVISION. 5. THE SUBJECT PROPERTY IS ZONED B-2 PER THE FEBRUARY 2, 2004 COMPREHENSIVE ZONING PLAN AND THE COMPREHENSIVE LITE ZONING REGULATIONS EFFECTIVE

6. EXISTING USE: VACANT LOT WITH A BANK CURRENTLY BEING CONSTRUCTED ON A LEASE 13. ALL HOWARD LUTTY STORM WATER QUALITY REQUIREMENTS

PROPOSED USE: CHICK-FIL-A RESTAURANT AND GENERAL OFFICE/RETAIL BUILDING (THE GENERAL OFFICE/RUTAIL BUILDING WILL NOT BE USED FOR RESTAURANTS, CARRYCUTS, OR CONVENIENCE STORES UNLESS APPROVED BY HOWARD COUNTY)

7. BUILDING HEIGHT: CHICK-FIL-A 25'-0"±, RETAIL BUILDING 25'-0"±

MAXIMUM HEIGHT ALLOWED: 40'-0" 8. PARKING: REQUIRED -

FIVE SPACES/1,000 S F. OF FLOOR AREA  $5 \times (3,000 \text{ S.F.}/1,000 \text{ S.F.}) = 15 \text{ SPACES}$ 

FAST FOOD RESTAURANT: 14 SPACES/1,000 S.F.

14 x (3,92 f S.F./1,000 S.F.) = 55 SPACES GENERAL OFFICE/RETAIL BUILDING: (2 FLOORS @ 4,196 S.F. EACH) RETAIL (1ST FLOOR)

5 SPACES/1,000 S.F.  $5 \times (4.196 \text{ S.F.}/1,000 \text{ S.F.}) = 21 \text{ SPACES}$ 

GENERAL OFFICE (2ND FLOOR) 3.3 SPACES/1,000 S.F.  $3.3 \times (4.196 \text{ S.F.}/1,000 \text{ S.F.}) = 14 \text{ SPACES}$ 

TOTAL PARKING SPACES REQUIRED = 105 SPACES TOTAL PARKING SPACES PROVIDED = 119 SPACES (INCLUDING 7 HANDICAP SPACES) \*THERE WILL BE NO BUSINESS OWNED VEHICLES PARKED ONSITE.

REQUIRED PROPOSED RESTAURANT PROPOSED (OFFICE/RETAIL BUILDING) 9. SETBACKS: JOHNS HOPKINS ROAD: USE & STRUCTURE SETBACK 185.63 PARKING SETBACK OLD COLUMBIA ROAD: 55.53 219.78 USE & STRUCTURE SETBACK PARKING SETBACK 30.40 N/A WEST SIDE: 239.61 USE & STRUCTURE SETBACK PARKING SETBACK 31.00 95.43 USE & STRUCTURE SETBACK PARKING SETBACK 31.00

## GENERAL NOTES (CONTINUED)

10. REFUSE SHALL BE DISPOSED OF DAILY IN TRASH RECEPTACLES.

AND SHALL NOT FRODUCE GLARE WHICH WOULD CAUSE A HAZARD FOR MOTOR VEHICLS OPERATIONS IN THE VICINITY OF THE SITE, LIGHTING SHALL COMPLY WITH SECTION 134 OF THE ZONING REGULATIONS.

12. UTILITIES:

WATER, PUBLIC - EXISTING 8" WATER LINE (CONTRACT #24-4311-D) IS LOCATED ON THE WEST SIDE OF OLD COLUMBIA ROAD AND SERVICES THE SITE. SEWER, PUBLIC - AN 8" SANITARY SEWER LINE (CONTRACT #24-4311-D) IS

STORM DRAIN – THERE IS NO STORMDRAIN CURRENTLY O'ISITE STORMWATER MANAGEMENT FOR THE SITE WILL BE HANDLED BY A STORMDRAIN SYSTEM WITH A STORMFILTER FOR WOV. A RECHARGE FACILITY FOR REV AND UNDERGROUND STORAGE PIPE FOR CPV AND OVERBANK FLOOD PROTECTION MAINTENANCE FOR THE STORMWATER MANAGEMENT SYSTEM WILL BE PROVIDED BY THE OWNER, HOPKINS STATION GENERA

SHALL BE MET. A PROPTE UNDERGROUND STORMFILTER SYSTEM WILL BE UTILIZED FOR QUALITY REQUIREMENTS. TOWNER IS RESPONSIBLE FOR ALL MAINTENANCE OF THE SYSTEM TO ENSURE THE PROPER FUNCTION OF THE STORMFILTER RECHARGE FOR THE SUBJECT SITE WILL BE MET BY UTILIZING AN UNDERGROUND RECHARGE FACILITY. CHANNEL PROTECTION AND QUALITY MANAGEMENT WILL BE MET BY USE OF UNDERGROUND STORAGE PIPES.

14. ELECTION DISTRICT: 5

15. DEED REFERENCE:

PART OF LOT 1 REVISION PLAT FOR PRICE FARMS LIBER 3095, FOLIO 39 & LIBER 7004, FOLIO 653

16. TAX MAP: 41, GRIE 22, PARCEL: 425

17. PROPERTY IS LOCALTO IN LAUREL.

18. THERE IS NO 100-YEAR FLOOD PLAIN LOCATED ON SITE PER FEMA FIRM

MAP 240044 0038 E DATED 12/4/86

19. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY AND MSHA STANDARDS AND SPECIFICATIONS,

20. THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/BUREAU OF ENGINEERING/CONSTRUCTION INSPECTION DIVISION AT (410) 313-1880 AT LEAST FIVE (5) WORKING DAYS PRIOR TO THE START OF WORK.

PREPARED BY:

# BOHLER ENGINEERING, P.C.

810 GLENEAGLES COURT, SUITE 300 TOWSON, MARYLAND 21286 (410) 821-7900

ATTN: MATTHEW T ALLEN, P.E.

#### GREATER THAN 40' SHALL NOT BE PLANTED WITHIN 45' OF THE UTILITY POLE LINE AND HALL HAVE THE SAME BERM LIMITATIONS NOTED ABOVE. FINALLY, THE RECORDED PLAT/DRAWING AND ASSOCIATED FOREST CONSERVATION EASEMENT DOCUMENTS RECORDED IN THE LAND RECORDS OF HOWARD COUNTY SHALL NOTE THAT TREES RETAINED OR PLANTED TO COMPLY WITH FCA REQUIREMENTS SHALL MEET THE CONDITIONS PRESCRIBED ABOVE FOR MATURE TREE HEIGHTS AND PLANTING DISTANCES FROM THE LINES. 36. A LICENSE AGREEMENT FOR THE CELLULAR TOWER HAS BEEN MADE ON FEBRUARY 13TH, 1998

NATURAL GAS AND ELECTRIC WATER AND SANITARY SEWER WITH MATURE HEIGHTS GREATER THAN 25' SHALL NOT "E PLANTED WITHIN 20' OF EITHER SIDE BALTIMORE GAS AND ELECTRIC HOWARD COUNTY PUBLIC WORKS BUREAU OF THE UTILITY POLE LINE. ADDITIONALLY, IF THESE TREES ARE TO BE PLANTED ON BERMS 7317 PARKWAY DRIVE OF UTILITIES THE MATURE TREE HEIGHTS SHALL BE REDUCED BY T'VE HEIGHT OF THE BERM AS MEASURED SOUTH HANOVER, MD 21076 8250 OLD MONTGOMERY ROAD ABOVE MEAN GROUND ELEVATION OF THE UTILITY POLE LINE. TREES WITH MATURE HEIGHTS PHONE: (410) 859-9383

APPLICABLE DPZ FILE REFERENCES: (SEE NOTE 28)

TELEPHONE VERIZON 7133 RUTHERFORD ROAD

BALTIMORE, MD 21244 PHONE: (410) 224-5286

STORMWATER MANAGEMENT HOWARD COUNTY PLANNING AND ZONING DEPARTMENT 3430 COURTHOUSE DRIVE ELLICOTT CITY, MD 21043 PHONE: (410) 313-2350

ADDRESS CHART LOT/FARCEL # STREET ADDRESS 10975 JOHNS HOPKINS ROAD, LAUREL, HOWARD COUNTY, MD 20723 425 (CHICK-FI! - A RESTAURANT)

10981 JOHNS HOPKINS ROAD, LAUTEL, HOWARD COUNTY, MC 20723

420			(GENERAL	OFFICE/h.E.?."	BUILDIN	IC)
Č.	· · ·	PERMI	T INFORMATIO	N CHART		
PROJECT NAME HOPKI	NS STATICH		SECTION/AREA	N/A		LOT/PARCEL NO 425
PLAT RECORDATION 9252	BLOCK <sub>i</sub>	ZONING B-2	TAX MAP NO. 41	ELECT. D 5TH		CENSUS TRACT 605102
WATER CODE	F21		SEWER CODE	769	ροσο	

FOR CONSTRUCTION, SHOULD THE CONTRACTOR FIND A CONFLICT WITH THE DOCUMENTS RELATIVE TO THE SPECIFICATIONS OR APPLICABLE CODES, IT IS THE CONTRACTORS RESPONSIBILITY TO NOTIFY BOHLER ENGINEERING, P.C. IN WRITING PRIOR TO THE START OF CONSTRUCTION. FAILURE BY THE CONTRACTOR TO NOTICY BOHLER ENGINEERING P.C. SHALL CONSTITUTE ACCEPTANCE OF FULL RESPONSIBILITY BY THE CONTRACTOR TO COMPLETE THE SCOPE OF THE WORK AS DEFINED BY THE DRAWINGS AND IN FULL CONFORMANCE WITH LOCAL REGULATIONS AND CODES.

LEGEND

FOR ENTIRE PLAN SET (NOT TO SCALE)

ONSITE PROPERTY LINE / R.O.W. LINE

ASEMENT LINE

SETBACK LINE

CONCRETE CURB & GUITER

SANITARY SEWER MAIN SANITARY SEWER LATERAL

UG WATER LINE

UG ELECTRIC LINE

UG GAS LINE

OVERHEAD WIRE

UG TELEPHONE LINE

UG CABLE LINE

SPOT ELEVATIONS

CONTOUR LINE

HYDRANT

SANITARY MANHOLE

STORM MANHOLE

WATER METER

WATER VALVE

GAS VALVE

GAS METER

TYPICAL END SECTION

HEADWA'L OR ENDWALL

YARD INLET

CURB INLET

CLEAN OUT

SANITARY LABEL

STORM LABEL

TYPICAL LIGHT

ACORN LIGHT

TRAFFIC LIGHT

UTILITY FOLE

TYPICAL SIGN

TYPICAL NOTE TEXT

PARKING COUNTS

**ELECTRIC MANHOLE** 

TELEPHONE MANHOLE

ELECTRIC BOX

**ELECTRIC PEDESTAL** 

MONITORING WELL

TEST PIT

BENCHMARK

BORING

UTILITY POLE W/LIGHT

POLE LIGHT

**EASEMENT** 

TC 516.00

TC 516.00 BC 515.55

PROPOSED NOTE

STORM SEWER

GHBORING PROPERTY LINE / INTERIOR PARCEL

EXISTING

\_\_\_\_ \_ w \_\_ \_ w <del>\_\_\_</del>

---- OH- - - OH- ----

----- -- T -- -- T -- ----

-516\_/

EXISTING NOTE

THIS DOCUMENT IS NOT ISSUED BY BOHLER ENGINEERING, P.C. FOR CONSTRUCTION WITHOUT (3) SIGNATURES

<u>ISSUED FOR CONSTRUCTION</u>

HOURS PRIOR TO ANY CONSTRUCTION.

12/15/08

9/28/06

- 2. BOHLER ENGINEERING, P.C. IS NOT RESPONSIBLE FOR JOB SITE SAFETY OR SUPERVISION.
- 3. ALL DEMOLITION ACTIVITIES ARE TO BE PERFORMED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS AS WELL AS ALL FEDERAL, STATE AND LOCAL REGULATIONS. ANY DISCREPANCIES OR DEVIATIONS SHALL BE IDENTIFIED BY THE CONTRACTOR TO BOHLER ENGINEERING, P.C. IN WRITING FOR RESOLUTION PRIOR TO INITIATION OF SITE ACTIVITY.
- 4. PRIOR TO STARTING ANY DEMOLITION CONTRACTOR IS RESPONSIBLE FOR/TO:
  - A. ENSURING THAT COPIES OF ALL APPLICABLE PERMITS AND APPROVALS ARE MAINTAINED ON SITE AND AVAILABLE FOR REVIEW.
  - B. INSTALLING THE REQUIRED SOIL EROSION AND SEDIMENT CONTROL AND/OR TREE PROTECTION MEASURES PRIOR TO SITE DISTURBANCE.
  - C. LOCATING (VERTICALLY AND HORIZONTALLY) ALL UTILITIES AND SERVICES, INCLUDING, BUT NOT LIMITED TO GAS, WATER, ELECTRIC, SANITARY AND STORM SEWER, TELEPHONE, CABLE, FIBER OPTIC CABLE, ETC. WITHIN THE LIMITS OF DISTURBANCE. THE CONTRACTOR SHALL USE AND COMPLY WITH THE REQUIREMENTS OF THE APPLICABLE UTILITY NOTIFICATION SYSTEM TO LOCATE ALL THE UNDERGROUND UTILITIES.
  - D. PROTECTING AND MAINTAINING IN OPERATION, ALL ACTIVE SYSTEM THAT ARE NOT BEING REMOVED DURING ALL DEMOLITION ACTIVITIES.
  - E. FAMILIARIZING THEMSELVES WITH THE APPLICABLE UTILITY SERVICE PROVIDER AND IS RESPONSIBLE FOR ALL COORDINATION REGARDING UTILITY DEMOLITION REQUIRED FOR THE PROJECT. THE CONTRACTOR SHALL PROVIDE THE OWNER WRITTEN NOTIFICATION THAT THE EXISTING UTILITIES AND SERVICES HAVE BEEN TERMINATED AND ABANDONED IN ACCORDANCE WITH JURISDICTION AND UTILITY COMPANY REQUIREMENTS.
  - F. COORDINATION WITH UTILITY COMPANIES REGARDING WORKING "OFF-PEAK" HOURS OR ON WEEKENDS AS MAY BE REQUIRED TO MINIMIZE THE IMPACT ON THE AFFECTED PARTIES.
  - G. A COMPLETE INSPECTION FOR CONTAMINANTS BY A LICENSED ENVIRONMENTAL TESTING AGENCY, OF ALL BUILDINGS AND/OR STRUCTURES TO BE REMOVED. SAME SHALL BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE, AND FEDERAL ENVIRONMENTAL REGULATIONS. ANY/ALL CONTAMINANTS SHALL BE REMOVED AND DISPOSED OF BY A FEDERALLY LICENSED CONTRACTOR IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL REGULATIONS. ALL ENVIRONMENTAL WORK INCLUDING HAZARDOUS MATERIAL, SOILS, ASBESTOS, OR OTHER REFERENCED OR IMPLIED HEREIN IS THE SOLE RESPONSIBILITY OF THE OWNER'S ENVIRONMENTAL
- 5. POHLER ENGINEERING, P.C. IS NOT RESPONSIBLE FOR JOB SITE SAFETY OR SUPERVISION. CONTRACTOR IS TG PROCEED WITH THE DEMOLITION IN A SYSTEMATIC AND SAFE MANNER, FOLLOWING ALL THE OSHA REQUIREMENTS, TO ENSURE PUBLIC AND CONTRACTOR SAFETY.
- 6. THE CONTRACTOR SHALL PROVIDE ALL THE "MEANS AND METHODS" NECESSARY TO PREVENT MOVEMENT, SETTLEMENT, OR COLLAPSE OF EXISTING STRUCTURES, AND ANY OTHER IMPROVEMENTS THAT ARE REMAINING ON OR OFF SITE. THE DEMOLITION CONTRACTOR IS RESPONSIBLE FOR ALL REPAIRS OF DAMAGE TO ALL ITEMS THAT ARE TO REMAIN AS A RESULT OF HIS ACTIVITIES. ALL REPAIRS SHALL USE NEW MATERIAL. THE REPAIRS SHALL RESTORE THE ITEM TO THE PRE-DEMOLITION CONDITION.
- 7. IN THE ABSENCE OF SPECIFICATIONS, THE CONTRACTOR SHALL PERFORM EARTH MOVEMENT ACTIVITIES, DEMOLITION AND REMOVAL OF ALL FOUNDATION WALLS, FOOTINGS, AND OTHER MATERIALS WITHIN THE LIMITS OF DISTURBANCE IN ACCORDANCE WITH DIRECTION BY OWNER'S STRUCTURAL OR GEOTECHNICAL ENGINEER.
- 8. CXPLOSIVES SHALL NOT BE USED WITHOUT PRIOR WRITTEN CONSENT OF BOTH THE OWNER AND APPLICABLE GOVERNMENTAL AUTHORITIES. ALL THE REQUIRED PERMITS AND EXPLOSIVE CONTROL MEASURES THAT ARE REQUIRED BY THE FEDERAL. STATE. AND LOCAL GOVERNMENTS SHALL BE IN PLACE PRIOR TO STARTING AN EXPLOSIVE PROGRAM. THE CONTRACTOR IS ALSO RESPONSIBLE FOR ALL INSPECTION AND SEISMIC VIBRATION TESTING THAT IS REQUIRED TO MONITOR THE EFFECTS ON ALL LOCAL STRUCTURES.
- 9. CONTRACTOR SHALL PROVIDE TRAFFIC CONTROL AND GENERALLY ACCEPTED SAFE PRACTICES IN CONFORMANCE WITH: THE "MANUAL ON UNIFORM TRAFFIC CONTROL," AS WELL AS FEDERAL, STATE, AND LOCAL REGULATIONS WHEN DEMOLITION RELATED ACTIVITIES IMPACT ROADWAYS OR ROADWAY RIGHTS - OF - WAY.
- 10. CONDUCT DEMOLITION ACTIVITIES IN SUCH A MANNER TO ENSURE MINIMUM INTERFERENCE WITH ROADS, STREETS, SIDEWALKS, WALKWAYS, AND OTHER ADJACENT FACILITIES. STREET CLOSURE PERMITS MUST BE RECEIVED FROM THE APPROPRIATE GOVERNMENTAL AUTHORITY.
- 11. DEMOLITION ACTIVITIES AND EQUIPMENT SHALL NOT USE AREAS OUTSIDE THE DEFINED PROPERTY LINE WITHOUT WRITTEN PERMISSION OF THE APPLICABLE PROPERTY OWNER, AND/OR APPROPRIATE GOVERNMENT AGENCY.
- 12. USE DUST CONTROL MEASURES TO LIMIT AIRBORNE DUST AND DIRT RISING AND SCATTERING IN THE AIR IN ACCORDANCE WITH FEDERAL, STATE, AND/OR LOCAL STANDARDS. AFTER THE DEMOLITION IS COMPLETE, ADJACENT STRUCTURES AND IMPROVEMENTS SHALL BE CLEANED OF ALL DUST AND DEBRIS CAUSED BY THE DEMOLITION OPERATIONS.
- 13. THE CONTRACTOR IS RESPONSIBLE FOR RETURNING ALL ADJACENT AREAS TO THEIR "PRE-DEMOLITION" CONDITION. CONTRACTOR IS RESPONSIBLE TO SAFEGUARD SITE AS NECESSARY TO PERFORM THE DEMOLITION IN SUCH A MANNER AS TO PREVENT THE ENTRY OF UNAUTHORIZED PERSONS AT ANY TIME.
- 4. THIS DEMOLITION PLAN IS INTENDED TO IDENTIFY THOSE EXISTING ITEMS/CONDITIONS WHICH ARE TO BE REMOVED. IT IS NOT INTENDED TO PROVIDE DIRECTION OTHER THAN THAT ALL METHODS AND MEANS ARE TO BE IN ACCORDANCE WITH STATE, FEDERAL, LOCAL, AND JURISDICTIONAL REQUIREMENTS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL OSHA AND OTHER SAFETY PRECAUTIONS NECESSARY TO PROVIDE A SAFE WORK SITE.
- 15. DEBRIS SHALL NOT BE BURIED ON THE SUBJECT SITE. ALL DEMOLITION WASTES AND DEBRIS (SOLID WASTE) SHALL BE DISPOSED OF IN ACCORDANCE WITH ALL TOWN, COUNTY, STATE, AND FEDERAL LAWS AND APPLICABLE CODES.
- 16. LOCATION OF ALL UNDERGROUND UTILITIES ARE APPROXIMATE. ALL LOCATIONS AND SIZES ARE BASED ON UTILITY MARK OUTS, ABOVE GROUND STRUCTURES THAT WERE VISIBLE AND ACCESSIBLE IN THE FIELD. AND THE MAPS AS LISTED IN THE REFERENCES AVAILABLE AT THE TIME OF THE SURVEY. AVAILABLE ASBUILT PLANS AND UTILITY MARK OUTS DO NOT ENSURE MAPPING OF ALL UNDERGROUND UTILITIES AND STRUCTURES. BEFORE ANY EXCAVATIONS ARE TO BEGIN. ALL UNDERGROUND UTILITIES SHOULD BE VERIFIED AS TO THEIR LOCATIONS, SIZE AND TYPE BY THE PROPER UTILITY COMPANY AND OR CONTRACTOR.
- 17. THE COORDINATES SHOWN HEREON ARE BASED UPON THE HOWARD COUNTY GEODETIC CONTROL WHICH IS BASED UPON THE MARYLAND STATE PLAN COORDINATE SYSTEM. HOWARD COUNTY MONUMENT NOS. 41EC AND 41EA WERE USED FOR THIS PROJECT.
- 18. THERE IS NO 100-YEAR FLOOD PLAIN LOCATED ON SITE PER FEMA FIRM MAP 240044 .0038 B DATED 12/4/86.
- 19. CONTRACTOR IS NOT TO REMOVE TREES FROM THE WOODED AREA THAT DO NOT RESIDE ON THE SUBJECT PROPERTY.

SITE PLAN GENERAL NOTES

1. THIS PLAN IS BASED ON A SURVEY PREPARED BY: 22630 DAVIS DRIVE, SUITE 200 STERLING, VIRGINIA 20164 ENTITLED "ALTA/ACSM LAND TITLE SURVEY, CHICK-FIL-A, INC. #10985, JOHNS HOPKINS ROAD, 5TH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND" DATED: 7/21/06 PROJECT NO.: S065615.SR

2. ALL FLEVATIONS SHOWN ARE BASED ON THE SURVEYOR'S BENCHMARK, AS REFERENCED IN THE SURVEY, AND MUST BE VERIFIED BY THE GENERAL CONTRACTOR PRIOR TO GROUNDBREAK. CONTRACTOR IS RESPONSIBLE FOR OBTAINING THESE DOCUMENTS AND FAMILIARIZING HIMSELF WITH SAME FOR APPLICATION BOTH PRIOR TO AND DURING CONSTRUCTION.

3. APPLICANT: CHICK-FIL-A 5200 BUFFINGTON ROAD ATLANTA, GA 30349-2998 C/O SCOTT PATMAN

PHONE: (404) 684-8660

THERE IS NO "AS BUILT" INFORMATION PROVIDED ON THIS SHEET

AS-BUILT CERTIFICATION

5/15/2013

HOPKINS STATION GENERAL PARTNERSHIP C/O BRANTLY DEVELOPMENT GROUP MICHAELD. ADCOCK, PROFESSIONALLAND SURVEYOR 8835 COLUMBIA, 100 PARKWAY, SUITE P MD REG. NO. 21287, EXPIRATION DATE: 06-16-15 COLUMBIA, MD 21045

PHONE: (410) 730-0810 5. PARCEL DATA: TAX MAP: 41

PARCEL: 425 6. BULK REQUIREMENTS:

GRID: 22

4. OWNER:

OLK REQUIREMENTS:			
SETBACKS:	REQUIRED	PROPOSED RESTAURANT	PROPOSED (OFFICE/RETAIL B
JOHNS HOPKINS ROAD: USE & STRUCTURE SETBACK PARKING SETBACK	30'	N/A	262.29'
	10'	N/A	185.63'
OLD COLUMBIA ROAD: USE & STRUCTURE SETBACK PARKING SETBACK	30'	5 <b>5.53</b> ′	219.78
	30'	30.40′	N/A
WEST SIDE: USE & STRUCTURE SETBACK PARKING SETBACK	30' 30'	239.61° 31.29	31.29' 31.29'
REAR: USE & STRUCTURE SETBACK PARKING SETBACK	30'	31.00°	95.43°
	30'	31.00°	31.00°

ZONE: B-2 (BUSINESS GENERAL)

7. PARKING REQUIREMENTS: REQUIRED:

> FIVE SPACES/1,000 S.F. OF FLOOR AREA  $5 \times (3,000 \text{ S.F.}/1,000 \text{ S.F.}) = 15 \text{ SPACES}$

FAST FOOD RESTAURANT:

14 SPACES/1.000 S.F.  $14 \times (4,227 \text{ S.F.}/1,000 \text{ S.F.}) = \text{SPACES}$ 

GENERAL OFFICE/RETAIL BUILDING: (2 FLOORS @ 4,196 S.F. EACH) RETAIL (1ST FLOOR)

5 SPACES/1,000 S.F.

 $5 \times (4)96 \text{ S.F.}/1,000 \text{ S.F.}) = 21 \text{ SPACES}$ 

GENERAL OFFICE (2ND FLOOR) 3.3 SPACES/1.000 S.F.

3.3 X (4,196 S.F./1,000 S.F.) = 14 SPACES

TOTAL PARKING SPACES REQUIRED = 1 SPACES TOTAL PARKING SPACES PROVIDED = 119 SPACES (INCLUDING 7 HANDICAP SPACES) \*THERE WILL BE NO BUSINESS OWNED VEHICLES PARKED ONSITE.

- 8. PRIOR TO STARTING CONSTRUCTION. THE CONTRACTOR SHALL ENSURE THAT ALL REQUIRED PERMITS AND APPROVALS HAVE BEEN OBTAINED. NO CONSTRUCTION OR FABRICATION SHALL BEGIN UNTIL THE CONTRACTOR HAS RECEIVED AND THOROUGHLY REVIEWED ALL PLANS AND OTHER DOCUMENTS BY ALL OF THE PERMITTING AUTHORITIES.
- S. THE OWNER/CONTRACTOR SHALL BE FAMILIAR WITH AND RESPONSIBLE FOR ANY/ALL CERTIFICATIONS, INSPECTIONS, ETC. REQUIRED BY ALL GOVERNING JURISDICTIONAL AGENCIES DURING AND AFTER CONSTRUCTION FOR SIGN-OFF AND CERTIFICATE OF OCCUPANCY ISSUANCE, INCLUDING BUT NOT LIMITED TO PROCUREMENT OF SERVICES, SCHEDULING OF FIELD OBSERVATIONS AND COORDINATION WITH REPRESENTATIVES OF THE APPROPRIATE PARTIES.
- 10. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS AND THE REQUIREMENTS AND STANDARDS OF THE LOCAL GOVERNING AUTHORITY.
- 11. THE GEOTECHNICAL REPORT AND RECOMMENDATIONS SET FORTH THEREIN ARE A PART OF THE REQUIRED CONSTRUCTION DOCUMENTS AND IN CASE OF CONFLICT SHALL TAKE PRECEDENCE UNLESS SPECIFICALLY NOTED OTHERWISE ON THE PLANS. THE CONTRACTOR SHALL NOTIFY BOHLER ENGINEERING, P.C. IN WRITING OF ANY SUCH DISCREPANCY BETWEEN GEOTECHNICAL REPORT AND PLANS, ETC.
- 12. THE PROPERTY SURVEY SHALL BE CONSIDERED A PART OF THESE PLANS.
- 13. THESE PLANS ARE BASED ON INFORMATION PROVIDED TO BOHLER ENGINEERING, P.C. AT THE TIME OF PLAN PREPARATION. CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS AND NOTIFY BOHLER ENGINEERING, P.C. IF ACTUAL SITE CONDITIONS DIFFER FROM THOSE SHOWN ON THE PLAN, OR IF THE PROPOSED WORK WOULD BE INHIBITED BY ANY OTHER SITE FEATURES. ALL DIMENSIONS SHOWN ON THE PLANS SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. CONTRACTOR SHALL
- NOTIFY BOHLER ENGINEERING, P.C. IN WRITING IF ANY DISCREPANCIES EXIST PRIOR TO PROCEEDING WITH CONSTRUCTION. NO EXTRA COMPENSATION SHALL BE PAID TO THE CONTRACTOR FOR WORK HAVING TO BE REDONE DUE TO DIMENSIONS OR GRADES SHOWN INCORRECTLY ON THESE PLANS IF SUCH NOTIFICATION HAS NOT BEEN GIVEN.
- 15. CONTRACTOR SHALL REFER TO THE ARCHITECTURAL/BUILDING PLANS FOR EXACT LOCATIONS AND DIMENSIONS OF ENTRY/EXIT POINTS, ELEVATIONS, PRECISE BUILDING DIMENSIONS, EXACT BUILDING UTILITY LOCATIONS.
- 16. DEBRIS SHALL NOT BE BURIED ON THE SUBJECT SITE AND ALL UNSUITABLE EXCAVATED MATERIAL AND DEBRIS (SOLID WASTE) SHALL BE DISPOSED OF IN ACCORDANCE WITH ALL TOWN, COUNTY, STATE AND FEDERAL LAWS AND APPLICABLE CODES.
- 17. CONTRACTOR IS RESPONSIBLE FOR ALL SHORING REQUIRED DURING EXCAVATION (TO BE PERFORMED IN ACCORDANCE WITH CURRENT OSHA STANDARDS) AND ANY ADDITIONAL PROVISIONS TO ASSURE STABILITY OF CONTIGUOUS STRUCTURES, AS FIELD CONDITIONS DICTATE.
- 18. CONTRACTOR IS TO EXERCISE EXTREME CARE WHEN PERFORMING ANY WORK ACTIVITIES ADJACENT TO PAVEMENT. STRUCTURES, ETC. TO REMAIN. CONTRACTOR SHALL BE RESPONSIBLE FOR TAKING THE APPROPRIATE MEASURES AS NECESSARY TO ENSURE THE STRUCTURAL STABILITY OF PAVEMENT, STRUCTURES, ETC. TO REMAIN, AND TO PROVIDE A SAFE WORK AREA.
- 19. CONTRACTOR IS RESPONSIBLE FOR DOCUMENTING ALL EXISTING DAMAGE AND FOR NOTIFYING CONSTRUCTION MANAGER PRIOR TO START OF CONSTRUCTION. CONTRACTOR IS RESPONSIBLE FOR REPAIRING THE DAMAGE DONE TO ANY EXISTING ITEM DURING CONSTRUCTION SUCH AS BUT NOT LIMITED TO DRAINAGE, UTILITIES, PAVEMENT, STRIPING, CURB, ETC. THE CONTRACTOR SHALL BE RESPONSIBLE FOR AND SHALL REPLACE ALL SIGNAL INTERCONNECT CABLE, CONDUITS, AND ANY UNDERGPOUND ACCESSORY EQUIPMENT DAMAGED DURING CONSTRUCTION. REPAIR SHALL BE EQUAL TO OR BETTER THAN EXISTING CONDITIONS.
- 20. ALL CONCRETE SHALL HAVE THE MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS AS INDICATED IN SPECIFICATIONS UNLESS OTHERWISE NOTED ON THE PLANS, DETAILS AND/OR GEOTECHNICAL REPORT.
- 21. BOHLER ENGINEERING, P.C. IS NOT RESPONSIBLE FOR CONSTRUCTION METHODS/MEANS FOR COMPLETION OF THE WORK DEPICTED ON THESE PLANS NOR ANY CONFLICTS/SCOPE REVISIONS WHICH RESULT FROM SAME. CONTRACTOR IS RESPONSIBLE FOR DETERMINING METHODS/MEANS FOR COMPLETION OF THE WORK PRIOR TO THE COMMENCEMENT OF CONSTRUCTION AND NOTIFICATION OF OWNER AND BOHLER ENGINEERING, P.C. WHEN A CONFLICT IS IDENTIFIED.
- 22. BOHLER ENGINEERING, P.C. IS NOT RESPONSIBLE FOR JOB SITE SAFETY NOR HAVE THEY BEEN RETAINED FOR SUCH PURPOSES.

SITE PLAN GENERAL NOTES (CONTINUED)

- 23. ALL CONTRACTORS MUST CARRY STATUTORY WORKER'S COMPENSATION INSURANCE, EMPLOYER'S LIABILITY INSURANCE AND APPROPRIATE LIMITS OF COMMERCIAL GENERAL LIABILITY INSURANCE (CGL). ALL CONTRACTORS MUST HAVE THEIR CGL POLICIES ENDORSED TO NAME BOHLER ENGINEERING, P.C., AND ITS SUBCONSULTANTS AS ADDITIONAL INSURED AND TO PROVIDE OF CONSTRUCTION. IN ADDITION, ALL CONTRACTORS WILL, TO THE FULLEST EXTENT PERMITTED BY LAW, INDEMNIFY AND HOLD CONTRACTORS. ALL CONTRACTORS MUST FURNISH BOHLER ENGINEERING, P.C. WITH CERTIFICATIONS OF INSURANCE AS EVIDENCE OF THE REQUIRED INSURANCE PRIOR TO COMMENCING WORK AND UPON RENEWAL OF EACH POLICY DURING THE ENTIRE PERIOD CONTRACTUAL LIABILITY COVERAGE SUFFICIENT TO INSURE THE HOLD HARMLESS AND INDEMNITY OBLIGATIONS ASSUMED BY THE HARMLESS BOHLER ENGINEERING, P.C. AND ITS SUBCONSULTANTS FROM AND AGAINST ANY DAMAGES. LIABILITIES OR COSTS. INCLUDING REASONABLE ATTORNEYS' FEES AND DEFENSE COSTS. ARISING OUT OF OR IN ANY WAY CONNECTED WITH THE PROJECT, INCLUDING ALL CLAIMS BY EMPLOYEES OF THE CONTRACTORS.
- 24. NEITHER THE PROFESSIONAL ACTIVITIES OF BOHLER ENGINEERING, P.C., NOR THE PRESENCE OF BOHLER ENGINEERING, P.C. OR ITS EMPLOYEES AND SUBCONSULTANTS AT A CONSTRUCTION/PROJECT SITE, SHALL RELIEVE THE GENERAL CONTRACTOR OF ITS OBLIGATIONS. DUTIES AND RESPONSIBILITIES INCLUDING, BUT NOT LIMITED TO, CONSTRUCTION MEANS, METHODS, SEQUENCE, TECHNIQUES OR PROCEDURES NECESSARY FOR PERFORMING, SUPERINTENDING AND COORDINATING THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND ANY HEALTH OR SAFETY PRECAUTIONS REQUIRED BY ANY REGULATORY AGENCIES. BOHLER ENGINEERING, P.C. AND ITS PERSONNEL HAVE NO AUTHORITY TO EXERCISE ANY CONTROL OVER ANY CONSTRUCTION CONTRACTOR®OR ITS EMPLOYEES IN CONNECTION WITH THEIR WORK OR ANY HEALTH OR SAFETY PROGRAMS OR PROCEDURES. THE GENERAL CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR JOBSITE SAFETY. BOHLER ENGINEERING, P.C. SHALL BE INDEMNIFIED BY THE GENERAL CONTRACTOR AND SHALL BE MADE ADDITIONAL INSURED UNDER THE GENERAL CONTRACTOR'S POLICIES OF GENERAL LIABILITY INSURANCE.
- 25. BOHLER ENGINEERING, P.C. SHALL REVIEW AND APPROVE OR TAKE OTHER APPROPRIATE ACTION ON THE CONTRACTOR SUBMITTALS, SUCH AS SHOP DRAWINGS, PRODUCT DATA, SAMPLES, AND OTHER DATA, WHICH THE CONTRACTOR IS REQUIRED TO SUBMIT, BUT ONLY FOR THE LIMITED PURPOSE OF CHECKING FOR CONFORMANCE WITH THE DESIGN CONCEPT AND THE INFORMATION SHOWN IN THE CONSTRUCTION MEANS OR METHODS, COORDINATION OF THE WORK WITH OTHER TRADES, OR CONSTRUCTION SAFETY PRECAUTIONS, ALL OF WHICH ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. BOHLER ENGINEERING'S REVIEW SHALL BE CONDUCTED WITH REASONABLE PROMPTNESS WHILE ALLOWING SUFFICIENT TIME TO PERMIT ADEQUATE REVIEW. REVIEW OF A SPECIFIC ITEM SHALL NOT INDICATE THAT BOHLER ENGINEERING, P.C. HAS REVIEWED THE ENTIRE ASSEMBLY OF WHICH THE ITEM IS A COMPONENT. BOHLER ENGINEERING, P.C. SHALL NOT BE RESPONSIBLE FOR ANY DEVIATIONS FROM THE CONSTRUCTION DOCUMENTS NOT BROUGHT TO THE ATTENTION OF BOHLER ENGINEERING, P.C. IN WRITING BY THE CONTRACTOR, BOHLER ENGINEERING, P.C. SHALL NOT BE REQUIRED TO REVIEW PARTIAL SUBMISSIONS OR THOSE FOR WHICH SUBMISSIONS OF CORRELATED ITEMS HAVE NOT BEEN RECEIVED.
- 26. IN AN EFFORT TO RESOLVE ANY CONFLICTS THAT ARISE DURING THE DESIGN AND CONSTRUCTION OF THE PROJECT OR FOLLOWING THE COMPLETION OF THE PROJECT, BOHLLR ENGINEERING, P.C. AND THE CONTRACTOR MUST AGREE THAT ALL DISPUTES BETWEEN THEM ARISING OUT OF OR RELATING TO THIS AGREEMENT OR THE PROJECT SHALL BE SUBMITTED TO NONBINDING MEDIATION UNLESS THE PARTIES MUTUALLY AGREE OTHERWISE.
- 27. THE CONTRACTOR MUST INCLUDE A MEDIATION PROVISION IN ALL AGREEMENTS WITH INDEPENDENT SUBCONTRACTORS AND CONSULTANTS RETAINED FOR THE PROJECT AND TO REQUIRE ALL INDEPENDENT CONTRACTORS AND CONSULTANTS ALSO TO INCLUDE A SIMILAR MEDIATION PROVISION IN ALL AGREEMENTS WITH THEIR SUBCONTRACTORS, SUBCONSULTANTS, SUPPLIERS AND FABRICATORS, THEREBY PROVIDING FOR MEDIATION AS THE PRIMARY METHOD FOR DISPUTE RESOLUTION BETWEEN THE PARTIES TO ALL THOSE AGREEMENTS.
- 28. IF THE CONTRACTOR DEVIATES FROM THE PLANS AND SPECIFICATIONS, INCLUDING THE NOTES CONTAINED THEREON, WITHOUT FIRST OBTAINING PRIOR WRITTEN AUTHORIZATION FOR SUCH DEVIATIONS FROM THE OWNER AND ENGINEER, IT SHALL BE RESPONSIBLE FOR THE PAYMENT OF ALL COSTS TO CORRECT ANY WORK DONE, ALL FINES OR PENALTIES ASSESSED WITH RESPECT THERETO AND ALL COMPENSATORY OR PUNITIVE DAMAGES RESULTING THEREFROM. THE CONTRACTOR SHALL INDEMNIFY AND HOLD THE OWNER AND ENGINEER HARMLESS FROM ALL SUCH COSTS TO CORRECT ANY SUCH WORK AND FROM ALL SUCH FINES AND PENALTIES, COMPENSATION AND PUNITIVE DAMAGES AND COSTS OF ANY NATURE RESULTING THEREFROM.

- 1. LOCATION OF ALL EXISTING AND PROPOSED SERVICES ARE APPROXIMATE AND MUST BE CONFIRMED INDEPENDENTLY WITH LOCAL UTILITY COMPANIES PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION OR EXCAVATION. SANITARY SEWER. AND ALL OTHER UTILITY SERVICE CONNECTION POINTS SHALL BE CONFIRMED INDEPENDENTLY BY THE CONTRACTOR IN FIELD PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. ALL DISCREPANCIES SHALL BE REPORTED IMMEDIATELY IN WRITING TO BOHLER ENGINEERING, P.C., CONSTRUCTION SHALL COMMENCE BEGINNING AT THE LOWEST INVERT (POINT OF CONNECTION) AND PROGRESS UP GRADIENT. ALL PROPOSED INTERFACE POINTS (CROSSINGS) WITH EXISTING UNDERGROUND UTILITIES SHALL BE FIELD VERIFIED BY TEST PIT PRIOR TO COMMENCEMENT OF CONSTRUCTION.
- 2. ALL UTILITIES AND SERVICES INCLUDING BUT NOT LIMITED TO GAS, WATER, ELECTRIC, SANITARY AND STORM SEWER, TELEPHONE, CABLE, FIBER OPTIC CABLE, ETC. WITHIN THE LIMITS OF DISTURBANCE SHALL BE VERTICALLY AND HORIZONTALLY LOCATED. THE CONTRACTOR SHALL USE AND COMPLY WITH THE REQUIREMENTS OF THE APPLICABLE UTILITY NOTIFICATION SYSTEM TO LOCATE ALL THE UNDERGROUND UTILITIES. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRS OF DAMAGE TO ANY
- 3. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO REVIEW ALL OF THE DRAWINGS AND SPECIFICATIONS ASSOCIATED WITH THE PROJECT WORK SCOPE PRIOR TO THE INITIATION OF CONSTRUCTION. SHOULD THE CONTRACTOR FIND A CONFLICT WITH THE DOCUMENTS RELATIVE TO THE SPECIFICATIONS OR THE RELATIVE CODES, IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY BOHLER ENGINEERING, P.C. OF RECURD IN WRITING PRIOR TO THE START OF CONSTRUCTION. FAILURE BY THE CONTRACTOR TO NOTIFY POHLER ENGINEERING, P.C. SHALL CONSTITUTE ACCEPTANCE OF FULL RESPONSIBILITY BY THE CONTRACTOR TO COMPLETE THE SCOPE OF WORK AS DEFINED BY THE DRAWINGS AND IN FULL COMPLIANCE WITH LOCAL REGULATIONS AND
- 4. DEFINE AND LOCATE VERTICALLY AND HORIZONTALLY ALL ACTIVE UTILITY AND/OR SERVICE SYSTEMS THAT ARE TO BE REMOVED. THE CONTRACTOR IS RESPONSIBLE TO PROTECT AND MAINTAIN ALL ACTIVE SYSTEMS THAT ARE NOT, BEING REMOVED/RELOCATED DURING SITE ACTIVITY.
- 5. THE CONTRACTOR SHALL FAMILIARIZE THEMSELVES WITH THE APPLICABLE UTILITY SERVICE PROVIDER REQUIREMENTS AND IS RESPONSIBLE FOR ALL COORDINATION REGARDING UTILITY DEMOLITION AS IDENTIFIED OR REQUIRED FOR PROJECT. THE CONTRACTOR SHALL PROVIDE THE OWNER WRITTEN NOTIFICATION THAT THE EXISTING UTILITIES AND SERVICES HAVE BEEN TERMINATED AND ABANDONED IN ACCORDANCE WITH JURISDICTION AND UTILITY COMPANY REQUIREMENTS.
- 6. CONTRACTOR IS RESPONSIBLE FOR COORDINATION OF SITE PLAN DOCUMENTS AND ARCHITECTURAL DESIGN FOR EXACT BUILDING UTILITY CONNECTION LOCATIONS, GREASE TRAP REQUIREMENTS/DETAILS, DOOR ACCESS, AND EXTERIOR GRADING. THE UTILITY SERVICE SIZES ARE TO BE DETERMINED BY THE ARCHITECT. THE CONTRACTOR SHALL COORDINATE INSTALLATION OF UTILITIES/SERVICES WITH THE INDIVIDUAL COMPANIES, TO AVOID CONFLICTS AND ENSURE PROPER DEPTHS ARE ACHIEVED. THE JURISDICTION UTILITY REQUIREMENTS SHALL ALSO BE MET, AS WELL AS COORDINATING THE UTILITY TIE-INS/CONNECTIONS PRIOR TO CONNECTING TO THE EXISTING UTILITY/SERVICE. WHERE CONFLICTS EXIST WITH THESE SITE PLANS, ENGINEER IS TO BE NOTIFIED PRIOR TO CONSTRUCTION TO RESOLVE SAME.
- 7. WATER SERVICE MATERIALS, BURIAL DEPTH, AND COVER REQUIREMENTS SHALL BE SPECIFIED BY THE LOCAL UTILITY COMPANY. CONTRACTOR'S PRICE FOR WATER SERVICE SHALL INCLUDE ALL FEES AND APPURTENANCES REQUIRED BY THE UTILITY TO PROVIDE A COMPLETE WORKING SERVICE.
- 8. ALL NEW UTILITIES/SERVICES, INCLUDING ELECTRIC, TELEPHONE, CABLE TV, ETC. ARE TO BE INSTALLED UNDERGROUND. ALL NEW UTILITIES/SERVICES SHALL BE INSTALLED IN ACCORDANCE WITH THE UTILITY/SERVICE PROVIDER INSTALLATION SPECIFICATIONS AND STANDARDS.

### UTILITY NOTES

- 1. MAINTENANCE OF ALL STORMWATER MANAGEMENT FACILITIES NOT LOCATED WITHIN PUBLIC RIGHT-OF-WAY SHALL BE THE RESPONSIBILITY OF THE LOT OWNER. STORMWATER MANAGEMENT FACILITIES SHALL BE MAINTAINED IN DESIGN CONDITION AND FREE OF FILL AND OBSTRUCTIONS.
- 2. A MINIMUM VERTICAL SEPARATION OF 12" SHALL BE MAINTAINED BETWEEN SANITARY SEWER LINES AND STORM LINES OR WATER LINES. IF THIS MINIMUM CLEARANCE CANNOT BE MAINTAINED. A CONCRETE ENCASEMENT SHALL BE PROVIDED.
- 3. EXISTING UTILITIES HAVE BEEN SHOWN IN ACCORDANCE WITH THE BEST AVAILABLE INFORMATION, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY AND ALLOW FOR THEIR LOCATION. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND MAINTAIN UNINTERRUPTED SERVICE. ANY DAMAGE DONE DUE TO HIS NEGLIGENCE SHALL BE IMMEDIATELY AND COMPLETELY REPAIRED AT HIS EXPENSE.
- 4. ALL EXCAVATIONS THAT ARE DEEPER THAN 5 FEET SHOULD BE PROPERLY SLOPED OR OTHERWISE STRUCTURALLY RETAINED TO PROVIDED STABLE AND SAFE WORKING CONDITIONS, OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) REQUIREMENTS CALL FOR MINIMUM SLOPES OF 1H:1V. OSHA REQUIREMENTS MUST BE FOLLOWED AND ADEQUATE PROTECTION PROVIDED FOR WORKERS.

- 9. SITE GRADING SHALL BE PERFORMED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS AND THE RECOMMENDATIONS SET FORTH IN THE GEOTECHNICAL REPORT COMPLETED BY GILES ENGINEERING ASSCOCIATES. INC., ENTITLED "PROPOSED CHICK-FIL-A RESTAURANT 10985 JOHNS HOPKINS ROAD. COLUMBIA, MARYLAND", PROJECT #3G-0608004, DATED 9/13/06. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING AND REPLACING WITH SUITABLE MATERIALS AS SPECIFIED IN THE GEOTECHNICAL REPORT. ALL EXCAVATED OR FILLED AREAS SHALL BE COMPACTED AS OUTLINED IN THE GEOTECHNICAL REPORT. MOISTURE CONTENT AT TIME OF PLACEMENT SHALL BE SUBMITTED IN COMPACTION REPORT PREPARED BY A QUALIFIED GEOTECHNICAL ENGINEER, REGISTERED WITH THE STATE WHER THE WORK IS PERFORMED. VERIFYING THAT ALL FILLED AREAS AND SUBGRADE AREAS WITHIN THE BUILDING PAD AREA AND AREAS TO BE PAVED HAVE BEEN COMPACTED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS AND THE RECOMMENDATIONS SET FORTH II THE GEOTECHNICAL REPORT SUBBASE MATERIAL FOR SIDEWALKS, CURB. OR ASPHALT SHALL BE FREE OF ORGANICS AND OTHER UNSUITABLE MATERIALS. SHOULD SUBBASE BE DEEMED UNSUITABLE BY OWNER OR OWNER'S REPRESENTATIVE, SUBBASE IS TO BE REMOVED AND FILLED WITH APPROVED FILL MATERIAL COMPACTED AS DIRECTED BY THE GEOTECHNICAL REPORT.
- 10. ALL FILL. COMPACTION, AND BACKFILL MATERIALS REQUIRED FOR UTILITY INSTALLATION SHALL BE AS PER THE RECOMMENDATIONS PROVIDED IN THE GEOTECHNICAL REPORT AND SHALL BE COORDINATED WITH THE APPLICABLE UTILITY COMPANY SPECIFICATIONS.
- 11. THE CONTRACTOR SHALL COMPLY TO THE FULLEST EXTENT WITH THE LATEST OSHA STANDARDS AND REGULATIONS, OR ANY OTHER AGENCY HAVING JURISDICTION FOR EXCAVATION AND TRENCHING PROCEDURES. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE "MEANS AND METHODS" REQUIRED TO MEET THE INTENT AND PERFORMANCE CRITERIA OF OSHA. AS WELL AS ANY OTHER ENTITY THAT HAS JURISDICTION FOR EXCAVATION AND/OR TRENCHING PROCEDURES.
- 12. PAVEMENT SHALL BE SAW CUT IN STRAIGHT LINES TO THE FULL DEPTH OF THE EXISTING PAVEMENT. ALL DEBRIS FROM REMOVAL OPERATIONS SHALL BE REMOVED FROM THE SITE AT THE TIME OF EXCAVATION. STOCKPILING OF DEBRIS WILL NOT BE PERMITTED. % GUTTER GRADE ALONG CURB FACE, ENGINEER TO APPROVE FINAL
- 13. THE TOPS OF EXISTING MANHOLES, INLET STRUCTURES, AND SANITARY CLEANOUT TOPS SHALL BE ADJUSTED, IF REQUIRED, TO MATCH PROPOSED GRADES IN ACCORDANCE WITH ALL APPLICABLE STANDARDS.
- 14. THE CONTRACTOR IS RESPONSIBLE FOR VERIFICATION OF EXISTING TOPOGRAPHIC INFORMATION AND UTILITY INVERT ELEVATIONS PRIOR I COMMENCEMENT OF ANY CONSTRUCTION. CONTRACTOR TO ENSURE 0.75 % MINIMUM SLOPE ALONG ALL ISLANDS, GUTTERS, AND CURBS 1.0 % ON ALL CONCRETE SURFACES; AND 1.5 % MINIMUM ON ASPHALT, TO PREVENT PONDING. ANY DISCREPANCIES THAT MAY AFFECT THE PUBLIC SAFETY OR PROJECT COST MUST BE IDENTIFIED TO BOHLER ENGINEERING, P.C. IN WRITING IMMEDIATELY. PROCEEDING WITH CONSTRUCTION WITHOUT NOTIFICATION IS DONE SO AT THE CONTRACTOR'S OWN RISK.
- 15. PROPOSED TOP OF CURB ELEVATIONS ARE GENERALLY 6" ABOVE EXISTING LOCAL ASPHALT GRADE UNLESS OTHERWISE NOTED. FIELD ADJUST TO CREATE A MINIMUM OF 0.75 CURBING CUT SHEETS PRIOR TO INSTALLATION.
- 16. REFER TO SITE PLAN FOR ADDITIONAL NOTES.

GRADING NOTES (CONTINUED)

- 17. IN CASE OF DISCREPANCIES BETWEEN PLANS OR RELATIVE TO OTHER PLANS, THE SITE PLAN WILL TAKE PRECEDENCE. IMMEDIATELY NOTIFY BOHLER ENGINEERING, P.C. IN WRITING OF ANY CONFLICTS.
- 18. CONTRACTOR SHALL BE REQUIRED TO SECURE ALL NECESSARY PERMITS AND APPROVALS FOR ALL OFF-SITE MATERIAL SOURCES AND DISPOSAL FACILITIES. CONTRACTOR SHALL SUPPLY A COPY OF APPROVALS TO ENGINEER AND OWNER PRIOR T INITIATING WORK.
- 19. A KNOX BOX (FIRE DEPARTMENT ACCESS BOX) IS REQUIRED TO BE PLACED ON THE FRONT OF THE BUILDING. IT SHALL BE PLACED TO THE RIGHT OF THE MAIN ENTRANCE AT A RANGE OF 4-5' IN HEIGHT AND NO MORE THEN 6' LATERALLY FROM THE DOOR. THE BOX SHALL BE ELECTRONICALLY SUPERVISED TO NOTIFY THE OWNER THAT IT IS BEING ACCESSED (INTEGRATED WITH THE FIRE ALARM SYSTEM NFPA-1 10.12.1)



/i/ FOR REVISION 1 ONLY

3 FOR REVISION

UTILITY NOTES (CONTINUED)

SPECIFICATIONS FOR UTILITY CONSTRUCTION.

THREADED. AND CONTAIN COUNTERSUNK PLUGS.

ARE NOTED ON THE PLAN.

CONTRACTOR.

ANY SEDIMENT CONTROL MEASURES REMOVED FOR THE PURPOSE OF UTILITY

CONSTRUCTION SHALL BE REPLACED AT THE END OF THE DAY BY THE UTILITY

6. ALL STORM DRAIN, WATER, SEWER AND PRODUCT PIPING UTILITIES SHALL BE INSTALLED IN

ACCORDANCE WITH THE LATEST EDITION OF THE HOWARD COUNTY STANDARDS AND

7. SANITARY CLEANOUT TOPS TO BE ADJUSTED TO MATCH CROSS-PITCH AND SLOPE OF

PROPOSED GRADES. CLEANOUT TOPS TO BEFIDENTIFIED AS SANITARY CLEANOUTS,

9. WATER SERVICE SHALL BE TYPE "K" COPPER TUBING. SANITARY SEWER PIPE SHALL BE

10. WATER AND SEWER SERVICES SHALL BE COORDINATED WITH THE BUILDING CONTRACTOR

FOR HORIZONTAL AND VERTICAL ALIGNMENT AND CONNECTIONS.

SDR 35 PVC. CERTAIN SECTIONS OF THE SERVICES REQUIRE SPECIAL PIPE TYPES WHICH

8. WATER SERVICES SHALL HAVE A MINIMUM 3.5 FOOT COVER OVER CROWN OF PIPE.

THIS DRAWING DOES NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY. ALL WITH THE OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970 AND ALL RULES AND RECULATIONS THERETO APPURTENANT. THE CONTRACTOR TO CALL MISS UTILITY TO HAVE ALL EXISTING UTILITIES MARKED 48 HOURS PRIOR TO ANY CONSTRUCTION.

APPROVED: DEPARTMENT OF PLANNING AND ZONING emun CHIEF-DEVELOPMENT ENGINEERING DIVISION APPROVED: FOR PUBLIC WATER AND PUBLIC

04/07/08 SIZE & AREA REVISED FOR CFA BUNDO DATE RETAIL BLDG. AREA ON NOTES

SEWERAGE SYSTEMS.

HOPKINS STATION GENERAL PARTNERSHIP CHICK-FIL-A C/O BRANTLY DEVELOPMENT GROUP 5200 BUFFINGTON ROAD 8835 COLUMBIA ATLANTA, GA 30349-2998 100 PARKWAY, SUITE F C/O SCOTT PATHAN COLUMBIA, MD 21045 PHONE: (404) 684-8660 PHONE: (410) 730-0810

CHICK-FIL-A RESTAURANT & GENERAL OFFICE/RETAIL BUILDING PART OF LOT 1, HOPKINS STATION (FORMER PRICE FARMS, LOT1) JOHNS HOPKINS ROAD LAUREL, HOWARD COUNTY, MARYLAND

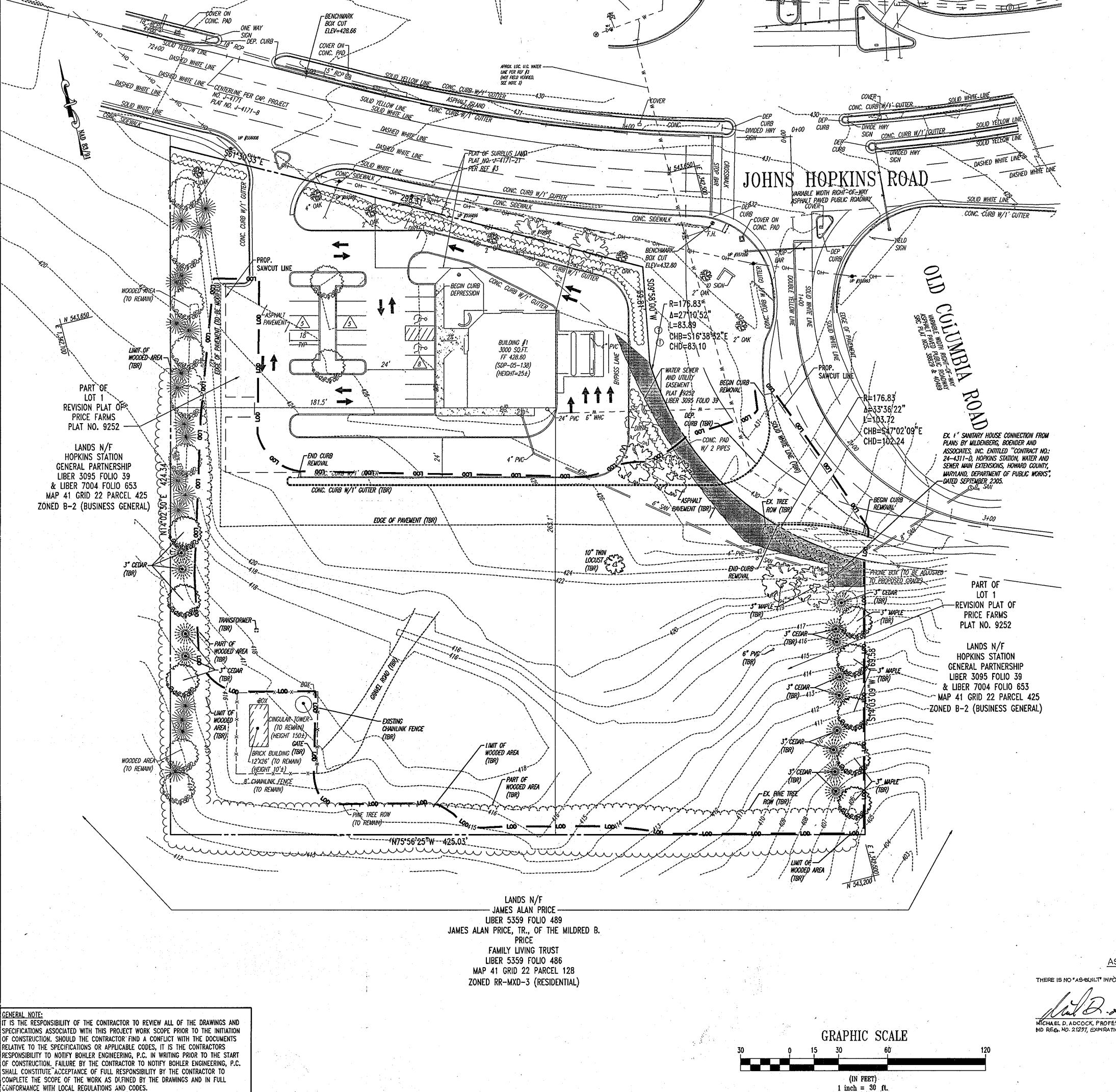
AREA 3.59 AC. TAX MAP 41 GRID 22 ZONED B-2 PARCEL 425 L. 3,095, F. 39 & L. 7004, F. 653

5TH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND GENERAL NOTES

REVISED: DRAWN BY:

12/15/0 DESIGNED BY: JD PROJECT NO.: MD056502. DATE: 9/28/06 SCALE: AS SHOWN MATTHEW T: VALLEN PROFESSIONAL ENGINEER NO. 28567 DRAWING NO. 2 OF 28

T IS THE RESPONSIBILITY OF THE CONTRACTOR TO REVIEW ALL OF THE DRAWINGS AND SPECIFICATIONS ASSOCIATED WITH THIS PROJECT WORK SCOPE PRIOR TO THE INITIATION F CONSTRUCTION, SHOULD THE CONTRACTOR FIND A CONFLICT WITH THE DOCUMENTS RELATIVE TO THE SPECIFICATIONS OR APPLICABLE CODES, IT IS THE CONTRACTORS RESPONSIFILITY TO NOTIFY BOHLER ENGINEERING, P.C. IN WRITING PRIOR TO THE START OF CONSTRUCTION. FAILURE BY THE CONTRACTOR TO NOTIFY BOHLER ENGINEERING, P.C. SHALL CONSTITUTE ACCEPTANCE OF FULL RESPONSIBILITY BY THE CONTRACTOR TO COMPLETE THE SCOPE OF THE WORK AS DEFINED BY THE DRAWINGS AND IN FULL CONFORMANCE WITH LOCAL REGULATIONS AND CODES.



- PROPERTY IS KNOWN AS LOT 1, "REVISION PLAT OF PRICE FARMS" AS RECORDED ON PLAT NUMBER 9252, ALSO KNOWN AS THE LANDS OF HOPKINS STATION GENERAL PARTNERSHIP, AS RECORDED IN LIBER 3095 FOLIO 39, AND IN LIBER 7004 FOLIO 653 AMONG THE LAND RECORDS OF HOWARD COUNTY, MARYLAND AND HAVING A TAX MAP NUMBER OF 41-22-425.
- 2. TOTAL SITE AREA 156,380 SQUARE FEET OR 3.59 ACRES±.
- 3. LOCATION OF ALL UNDERGROUND UTILITIES ARE APPROXIMATE.
- 4. ALL LOCATIONS AND SIZES ARE BASED ON UNLITY MARK-OUTS, ABOVE GROUND STRUCTURES THAT WERE VISIBLE & ACCESSIBLE IN THE FIELD, AND THE MAPS AS LISTED IN THE REFERENCES AVAILABLE AT THE TIME OF THE SURVEY. AVAILABLE ASBUILT PLANS AND UTILITY MARK-OUT DOES NOT ENSURE MAPPING OF ALL UNDERGROUND UTILITIES AND STRUCTURES. BEFORE ANY EXCAVATION IS TO BEGIN, ALL UNDERGROUND UTILITIES SHOULD BE VERIFIED AS TO THEIR LOCATION, SIZE AND TYPE BY THE PROPER UTILITY COMPANIES.
- 5. THIS PLAN IS BASED ON INFORMATION PROVIDED BY A SURVEY PREPARED IN THE FIELD BY CONTROL POINT ASSOCIATES, INC. AND OTHER REFERENCE MATERIAL AS LISTED HEREON.
- 6. THIS SURVEY IS PREPARED WITH REFERENCE TO A TITLE COMMITMENT REPORT PREPARED BY CHICAGO TITLE INSURANCE COMPANY, COMMITMENT NUMBER 4505-44213, EFFECTIVE DATE OCTOBER 23, 2005, AND REVISED DECEMBER 7, 2005. OUR OFFICE HAS REVIEWED THE FOLLOWING SURVEY RELATED EXCEPTIONS IN SCHEDULE B, SECTION II:
- 7. THE EXISTENCE OF UNDERGROUND STORAGE TANKS, IF ANY, WAS NOT KNOWN AT THE TIME OF THE FIELD SURVEY.
- 8. ELEVATIONS ARE BASED ON NGVD29 AS REFERENCED TO WSSC STATION 19790 WITH A PUBLISHED ELEVATION OF 445.5 FEET. EXISTING TOPOGRAPHY OF THE SWALE SHOWN IN 2 FOOT INTERVALS ARE FROM PLANS BY MILDENBERG, BOENDER AND ASSOCIATES, INC. TITLED "SITE DEVELOPMENT PLAN, HOPKINS STATION (PRICE FARMS, LOT 1) FIFTH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND" DATED JANUARY 2006, SDP-05-138..
- 9. THE PROPERTY IS LOCATED IN ZONE C (AREAS OF MINIMAL FLOODING) PER PLAN REFERENCE #2.
- 10. WATER UTILITIES ARE SHOWN PER FIELD LOCATION OF ABOVE GROUND STRUCTURES AND PLANS RECEIVED FROM UTILITY COMPANIES AND LOCAL GOVERNMENT OFFICES.
- 11. ALL MATTERS SHOWN ON LEGIBLE RECORDED PLATS THAT ARE WITHIN THE LIMITS OF THIS SURVEY ARE SHOWN.

- 1. THE MARYLAND DEPARTMENT OF ASSESSMENTS AND TAXATION RECORDS FOR HOWARD COUNTY, MARYLAND, MAP NUMBER 41.
- 2. MAP ENTITLED "FIRM, FLOOD INSURANCE RATE MAP, HOWARD COUNTY, MARYLAND, PANEL 38 OF 45", COMMUNITY-PANEL NUMBER 240044 0038 B, MAP EFFECTIVE DATE DECEMBER 4, 1986.
- 3. MAP ENTITLED "HOPKINS STATION, 5TH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND." DATED SEPTEMBER 2005, PREPARED BY MILDENBERG, BOENDER AND ASSOCIATES, INC.
- 4. MAP ENTITLED "REVISION PLAT OF PRICE FARMS, LOT 1" DATED FEBRUARY 12, 1990, PREPARED BY TRACY, SCHULTE & ASSOCIATES, INC.
- 5. REPORT ENTITLED "DEVELOPMENT INVESTIGATION REPORT FOR CHICK-FIL-A" PREPARED BY BOHLER ENGINEERING, P.C. DATED NOVEMBER 2005.

SEE SHEET 2 FOR ADDITIONAL NOTES

AS-BUILT APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS.

REVISION DESCRIPTION HOPKINS STATION GENERAL PARTNERSHIP
C/O BRANTLY DEVELOPMENT GROUP
8835 COLUMBIA
CHICK-FIL-A
5200 BUFFINGTON ROAD
ATLANTA. GA 30349-299 100 PARKWAY, SUITE

ATLANTA, GA 30349-2998 C/O SCOTT PATHAN COLUMBIA, MD 21045 PHONE: (410) 730-0810 PHONE: (404) 684-8660

CHICK-FIL-A RESTAURANT & GENERAL OFFICE/RETAIL BUILDING PART OF LOT 1, HOPKINS STATION (FORMER PRICE FARMS, LOT1) JOHNS HOPKINS ROAD AUREL, HOWARD COUNTY, MARYLAND

AREA 3.59 AC. TAX MAP 41 GRID 22 ZONED 8-2 PARCEL 425 L. 3,095, F. 39 & L. 7004, F. 653 5TH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND

EXISTING CONDITIONS AND DEMOLITION PLAN

BOHLER \*PROFESSIONAL ENGINEERING SERVICES\*
\*810 GLENBAGLES COURT, SUITE 300, TOWSON, MD 21288\*
\*(410) 821-7900 FAX: (410) 821-7967 | MD@boblereng.com\*

THIS DRAWING DOES NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY, ALL CONSTRUCTION MUST BE DONE IN COMPLIANCE with the occupational safety and health ACT OF 1970 AND ALL RULES AND REGULATIONS THERETO APPURIENANT. THE CONTRACTOR TO CALL MISS UTILITY TO

MISS UTILITY

BEFORE YOU DIG CALL PROTECT YOURSELF, GIVE TWO WORKING DAYS NOTICE

HAVE ALL EXISTING UTILITIES MARKED 48

HOURS PRIOR TO ANY CONSTRUCTION.

12/15/06 DESIGNED BY: JD DRAWN BY: RLB PROJECT NO.: MD056502.1 DATE: 9/28/06 SCALE: 1"=30' PROFESSIONAL ENGINEER NO. 28567 DRAWING NO. 3 OF 28

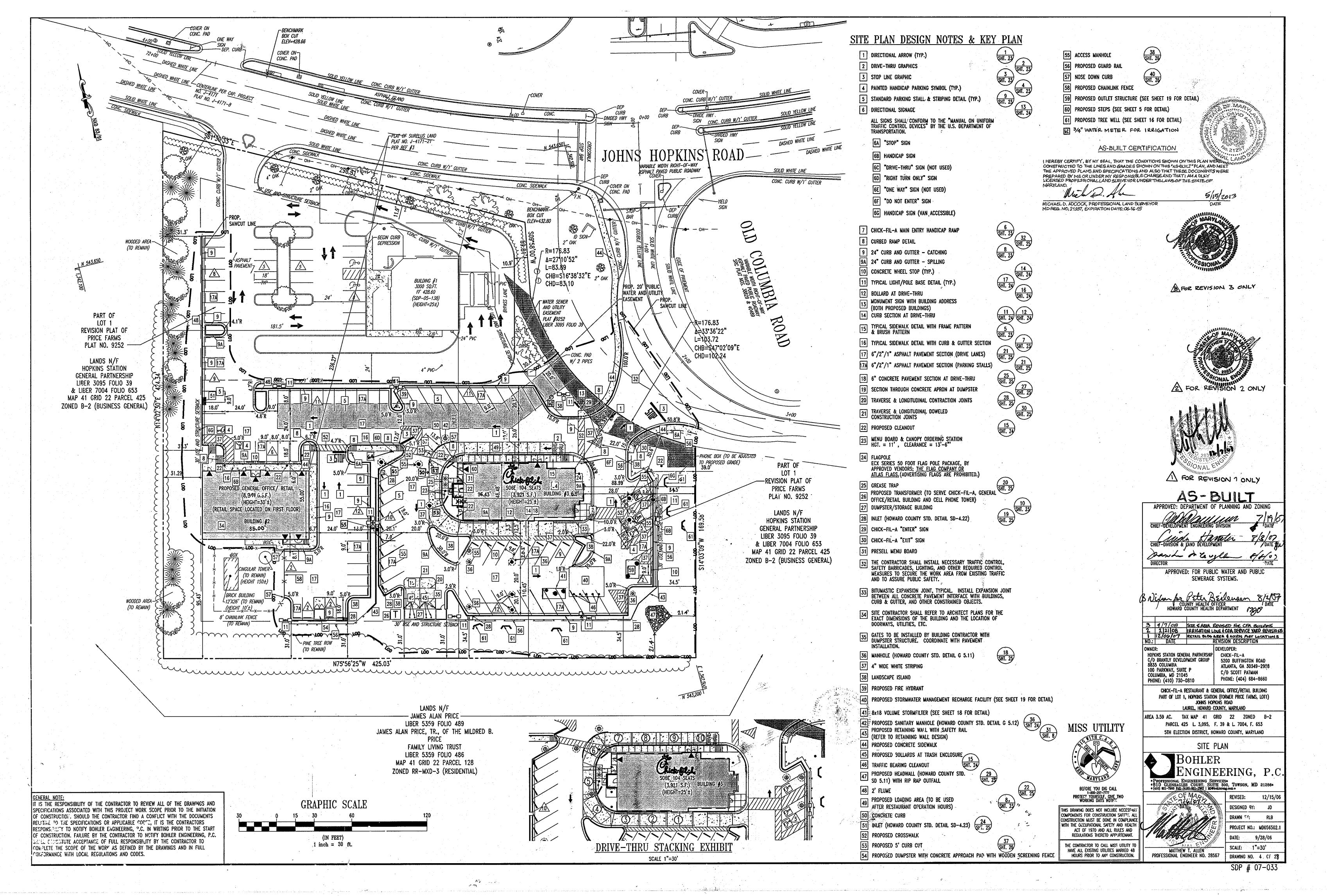
REVISED:

AS-BUILT CERTIFICATION THERE IS NO "AS-BUILT" INFORMATION PROVIDED ON THIS SHEET

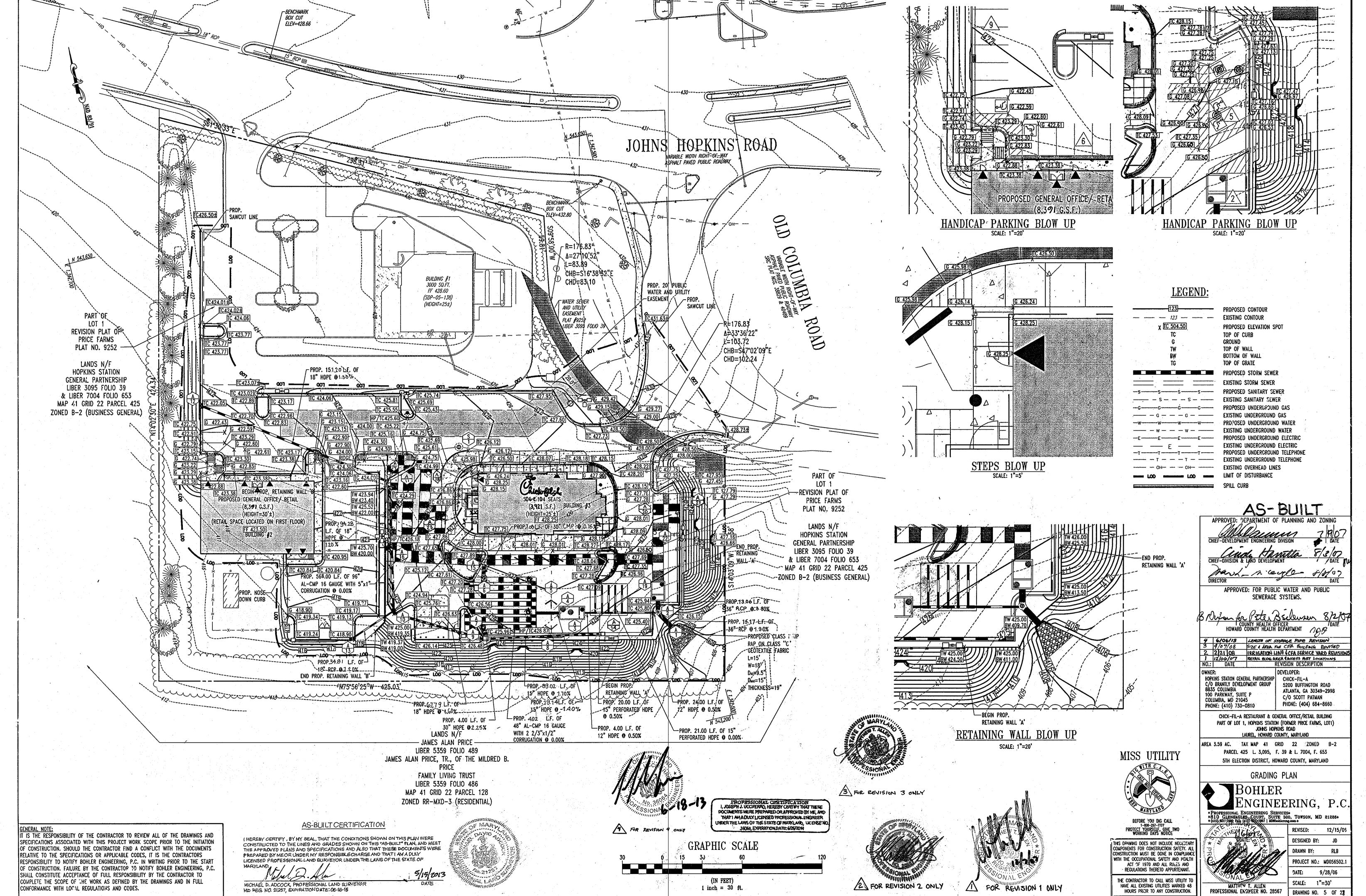
DATE

MICHAEL D. ADCOCK, PROFESSIONAL LAND SURVEYOR MD REG. NO. 21257, EXPIRATION DATE: 06-16-15

CONFORMANCE WITH LOCAL REGULATIONS AND CODES.

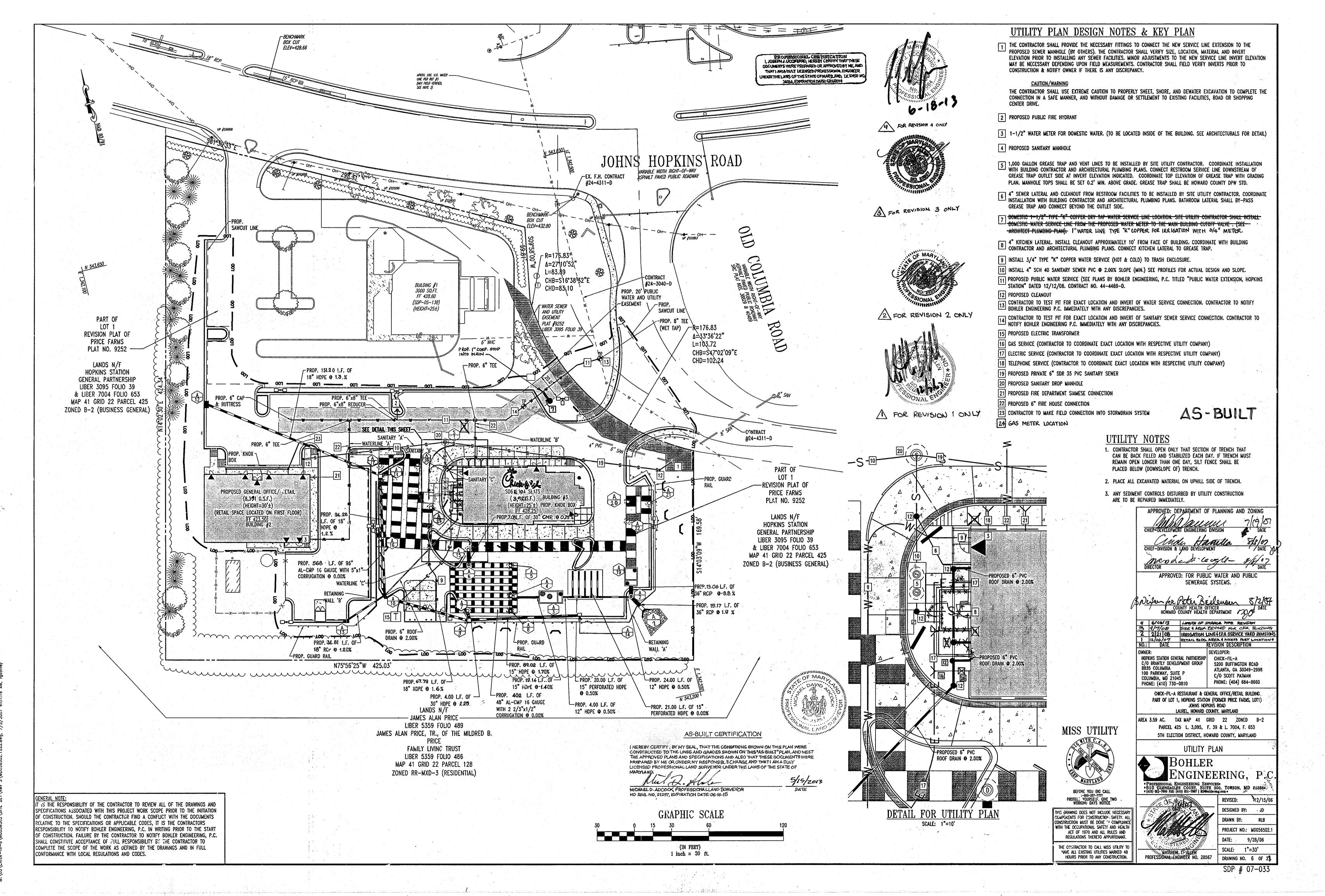


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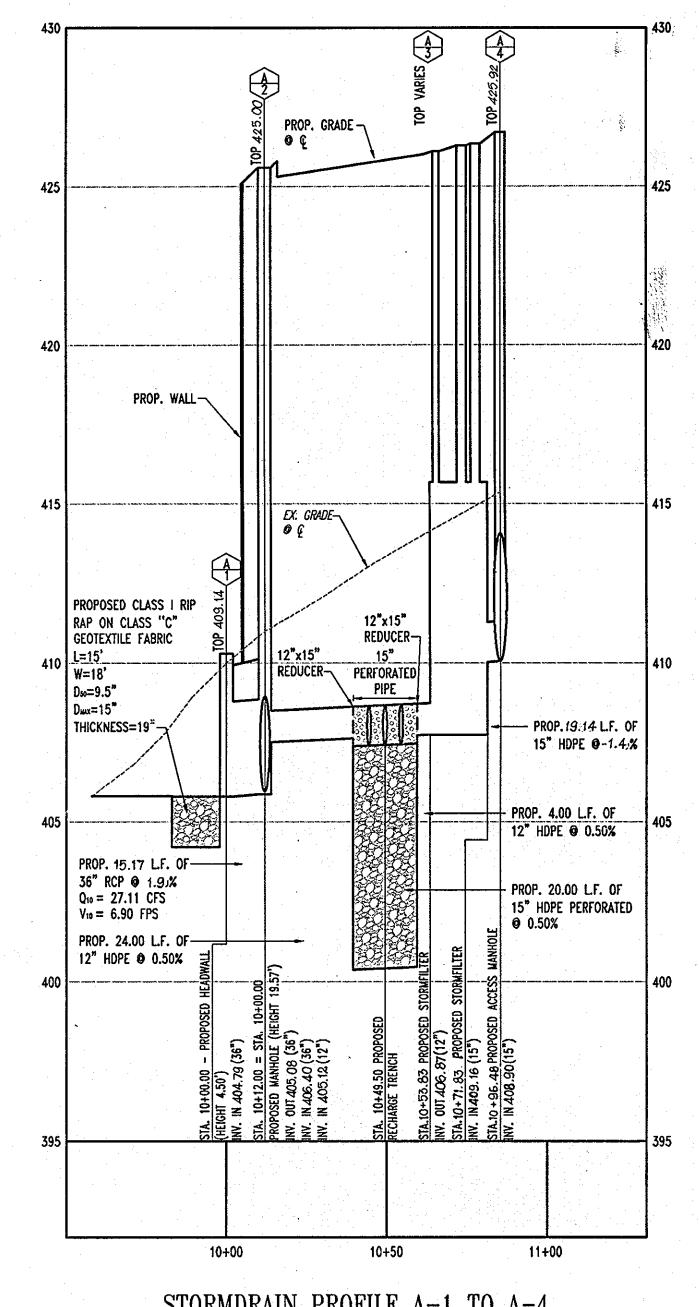


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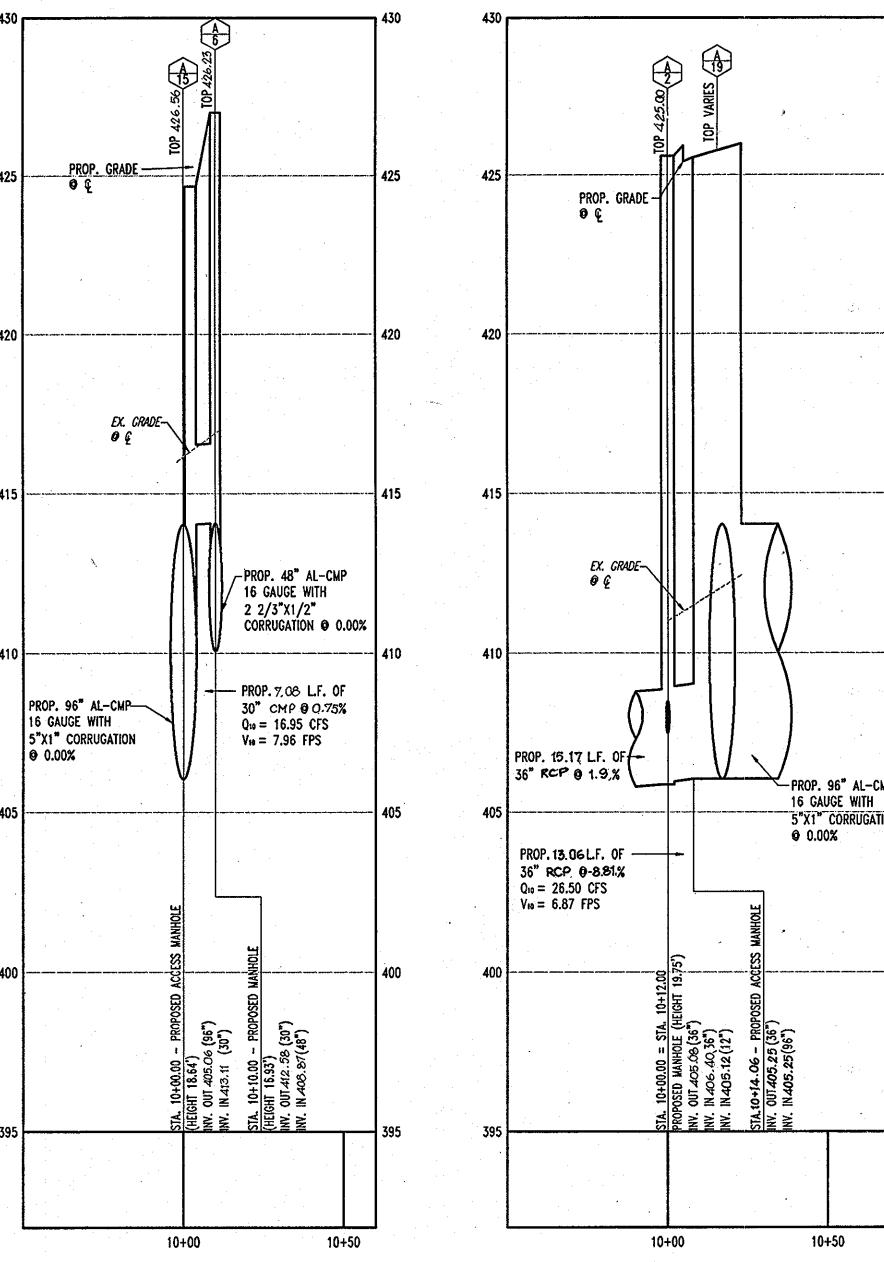
SDP # 07-033



The second contract of the second contract of



STORMDRAIN PROFILE A-1 TO A-4 VERT. 1"=3'



STORMDRAIN PROFILE A-15 TO A-6 SCALE: HORZ. 1"=30' VERT. 1"=3'

-PROP. 96" AL-CMP 5"X1" CORRUGATION 405 STORMDRAIN PROFILE A-2 TO A-19 SCALE: HORZ. 1"=30' VERT. 1"=3'

--- 420 °

EX. GRADE-**ଡ**଼ ହ PROP. 67.79 L.F. OF-18" HDPE @ 1.6 % Q10 = 11.24 CFS  $V_{10} = 6.99 \text{ FPS}$ PROP. 34.81 LF. OF 18" RCP 0 1.2 % Q10 = 1.11 CFS  $V_{10} = 3.07 \text{ FPS}$ 10+00 10+50

PROP. 4.0 LF. OF -30" HDPE @ 2.25%  $Q_{10} = 11.24 \text{ CFS}$ 

V10 = 6.66 FPS PROP. 89.02 LF. OF 15" HDPE @ 1.7% Q10 = 11.24 CFS V10 = 6.66 FPS 10+00 10+50 11+00 11+50 SCALE: HORZ. 1"=30' VERT. 1"=3'

STORMDRAIN PROFILE A-10 TO A-13 SCALE: HORZ. 1"=30' VERT. 1"=3'

AS-BUILT CERTIFICATION

I HEREBY CERTIFY , BY MY SEAL, THAT THE CONDITIONS SHOWN ON THIS PLAN WERE CONSTRUCTED TO THE LINES AND GRADES SHOWN ON THIS "AS-BUILT" PLAN, AND MEET THE APPROVED PLANS AND SPECIFICATIONS AND ALSO THAT THESE DOCUMENTS WERE PREPARED BY ME OR UNDER MY RESPONSIBLE CHARGE AND THAT I AM A DULY LICENSED PROFESSIONAL LAND SURVEYOR UNDER THE LAWS OF THE STATE OF

MARYLAND, Int Hithe MICHAEL D. ADCOCK, PROFESSIONAL LAND SURVEYOR MD REG. NO. 21257, EXPIRATION DATE: 06-16-15



	- ,		
•	INV. IN	INV. OUT	
		421.37 (15")	M.R.
	413.11 (30")	405.06 (96")	
:	405,28 (96")	405.28 (96")	
	405.29 (96")	405. 29 (96")	O. No. S
	405.61 (96°)	405.61 (96*)	6-18-1
	405.25 (96")	405.25 (36")	FOR REVISION 4
	405.69 (96")	405.69 (96")	PROPESSIONAL CERTLE  I, JOSEPH L UCCHERRO, HEREBY CE  DOCUMENTS WERE PREPARED OR AP  THAT I AM A DULY LICENSED PROFE

PICATION CERTIFY THAT THESE APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNIOER THE LAWS OF THE STATE OF MARYLAND, LICENSE IX 36064, EXPIRATION DATE: 6/26/2014



THIS DRAWING DOES NOT INCLUDE NECESSARY THE CONTRACTOR TO CALL MISS UTILITY TO

HAVE ALL EXISTING UTILITIES MARKED 48 HOURS PRIOR TO ANY CONSTRUCTION.

12/15/06 DESIGNED BY: JD DRAWN BY: RLB PROJECT NO.: MD056502.1 9/28/06 SCALE: AS SHOWN

PROP. COMPACTED
SUBGRADE PER

#3G-0608004

GEOTECHNICAL EVALUATION PREPARED BY: GILES ENGINEERING ASSOCIATES,

DATED 9/13/06, PROJECT

	PIPE SCHEDULE	,
SIZE	DESCRIPTION	LENGTH
6"	D.I.P.	105 LF.
1-1/2"	COPPER TYPE 'K'	105 LF.
3/4"	COPPER TYPE 'K'	145 L.F.
6 <b>"</b>	PVC	126 L.F.
4*	PVC	205 L.F.

ENERAL NOTE:	
IS THE RESPONSIBILITY OF THE CONTRACTOR TO REVIEW ALL OF THE DRAWINGS AND	
PECIFICATIONS ASSOCIATED WITH THIS PROJECT WORK SCOPE PRIOR TO THE INITIATION	
F CONSTRUCTION. SHOULD THE CONTRACTOR FIND A CONFLICT WITH THE DOCUMENTS	
ELATIVE TO THE SPECIFICATIONS OR APPLICABLE CODES, IT IS THE CONTRACTORS	
ESPONSIBILITY TO NOTIFY BOHLER ENGINEERING, P.C. IN WRITING PRIOR TO THE START	
F CONSTRUCTION. FAILURE BY THE CONTRACTOR TO NOTIFY BOHLER ENGINEERING, P.C.	
HALL CONSTITUTE ACCEPTANCE OF FULL RESPONSIBILITY BY THE CONTRACTOR TO	
OMPLETE THE SCOPE OF THE WORK AS DEFINED BY THE DRAWINGS AND IN FULL	
ONFORMANCE WITH LOCAL REGULATIONS AND CODES.	

PIPE SCHEDULE			STORM STUCTURE SCHEDULE				
	LILE SCHEDOFE		STRUCTURE#	DESCRIPTION	RIM/GRATE	INV. IN	INV. OUT
SIZE	DESCRIPTION	LENGTH	$\bigoplus$	TYPE 'A' HEADWALL (HOWARD COUNTY STD. SD-5.11)	409.14	404.79 (36*)	***
96*	AL-CMP	568 ĹF.	<b>(</b>	PROP. MANHOLE (HOWARD COUNTY STD. G-5.11)	425.50	405.12 (12") 406.40 (36")	405.08 (36")
			$\bigcirc$	PRECAST 8'x18' STORMFILTER	VARIES	409.16 (15*)	406.87 (12")
48"	AL-CMP	402 L.F.	<b>A</b>	PROP. MANHOLE (HOWARD COUNTY STD. G-5.11)	425.92	408.90 (48*)	408.90 (15")
<b>3</b> 0"	СМР	7 ĹF.	\$	PROP. MANHOLE (HOWARD COUNTY STD. G-5.11)	426.70	409.00 (48*)	409.00 (48")
30"	HDPE	4 L.F.	<b>(A)</b>	PROP. MANHOLE (HOWARD COUNTY STD. G-5.11)	426.23	408.87 (48*)	412.85 (30")
: '			<b>(A)</b>	PROP. MANHOLE (HOWARD COUNTY STD. G-5.11)	425.03	412.87 (30°)	409.05 (48") 409.05 (48")
12"	HDPE	29 L.F.		PROP. MANHOLE (HOWARD COUNTY STD. G-5.11)	425.59	408.83 (48")	408.83 (48")
18"	HDPE	313 L.F.	9	PROP. INLET TYPE 'S' (HOWARD COUNTY STD. SD-4.22)	425.41	413. 11 (18") 419. 88 (15")	412.94 (30")
18"	RCP	35 L.F.		PROP. INLET TYPE 'S' (HOWARD COUNTY STD. SD-4.22)	423.79	414.60 (18") 415.39 (18") 419.10 (6")	414.20 (18")
15"	PERFORATED HDPE	107 L.F.		PROP. INLET TYPE 'S' (HOWARD COUNTY STD. SD-4.22)	424.82	416.65 (18")	416.61 (18")
15"	НОРЕ	108 L.F.	<u>^</u>	PROP. DOUBLE INLET TYPE 'S' (HOWARD COUNTY STD. SD-4.23)	421.16		417.12 (18")
10	NUTE	IVO LIF.	<b>(</b> 3)	PROP. INLET TYPE 'S' (HOWARD COUNTY STD. SD-4.22)	417.69		A15.02 (15")
36"	RCP	28 L.F.	<u></u>				·

STORM STUCTURE SCHEDULE (CONTINUED) STRUCTURE# RIM/GRATE DESCRIPTION PROP. INLET TYPE 'S' 424.64 (HOWARD COUNTY STD. SD-4.22) 426.56 PROP. 36" ACCESS MANHOLE 425.05 PROP. 36" ACCESS MANHOLE 424.48 PROP. 36" ACCESS MANHOLE 425.48 PROP. 36" ACCESS MANHOLE VARIES PROP. OUTLET STRUCTURE 426.37 PROP. 36" ACCESS MANHOLE 406.09 (96") . 406.09 (36") PROP. 36" ACCESS MANHOLE 405.55 (96") 405.55 (96") PROP. 36" ACCESS MANHOLE 426.37 405.35 (96") 405.35 (96") PROP. 36" ACCESS MANHOLE

A FOR REVISION 1 ONLY

COMPONENTS FOR CONSTRUCTION SAFETY, ALL CONSTRUCTION MUST BE DONE IN COMPLIANCE WITH THE OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970 AND ALL RULES AND REGULATIONS THERETO APPURTENANT.

DRAWING NO. 7 OF 28

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS.

HOPKINS STATION GENERAL PARTNERSHIP
C/O BRANTLY DEVELOPMENT GROUP
BB35 COLUMBIA
CHICK-FIL-A
5200 BUFFINGTON ROAD
ATLANTA, GA 30349-2998

CHICK-FIL-A RESTAURANT & GENERAL OFFICE/RETAIL BUILDING

PART OF LOT 1, HOPKINS STATION (FORMER PRICE FARMS, LOT1) JOHNS HOPKINS ROAD

PARCEL 425 L. 3,095, F. 39 & L. 7004, F. 653 5TH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND

UTILITY PROFILES

AREA 3.59 AC. TAX NAP 41 GRID 22 ZONED B-2

100 PARKWAY, SUITE P

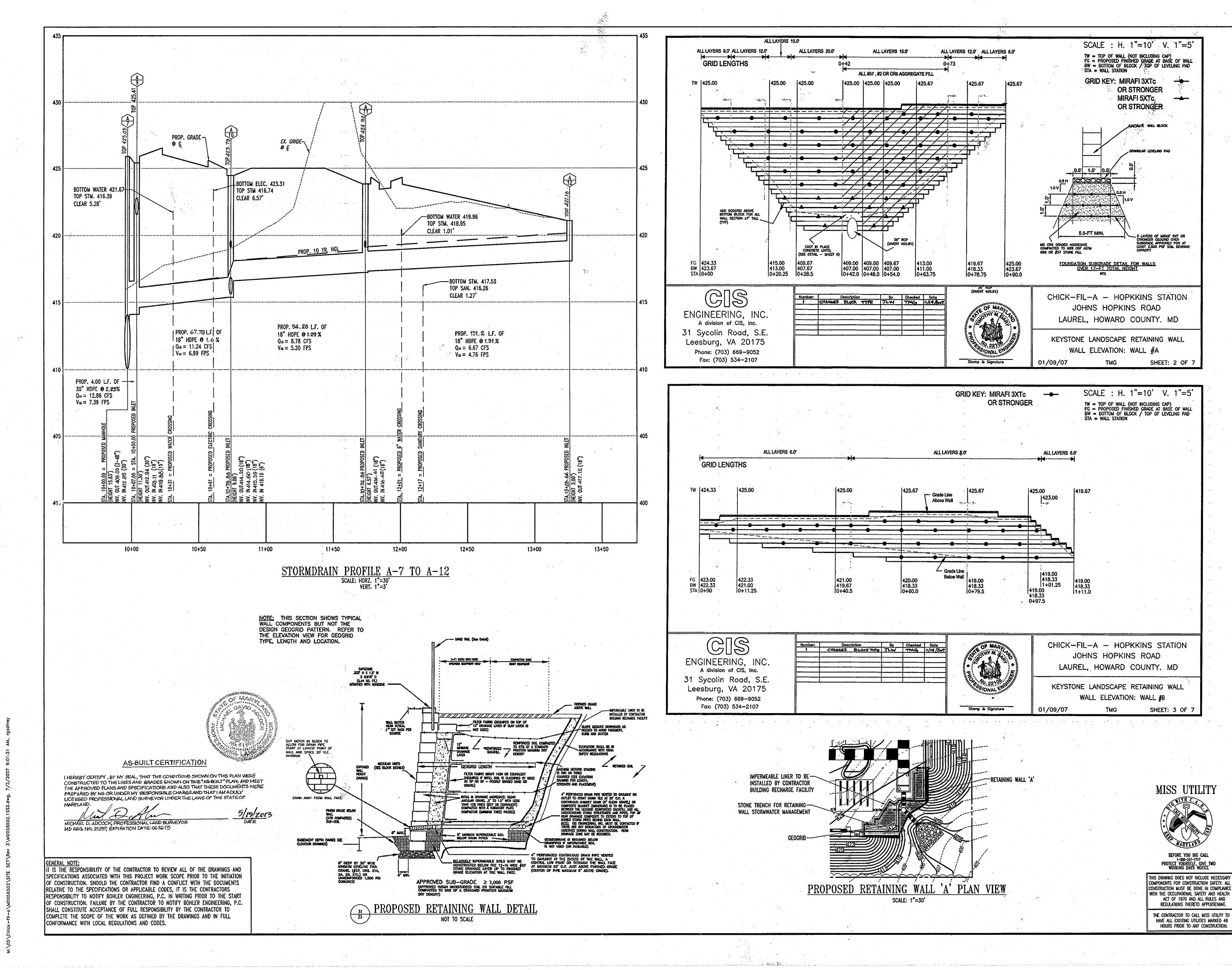
COLUMBIA, MD 21045

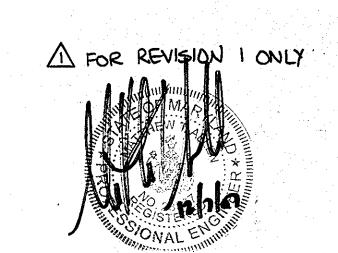
PHONE: (410) 730-0810

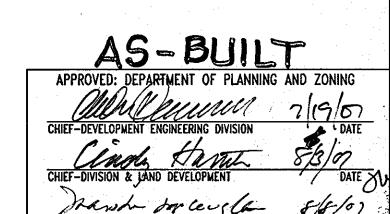
ATLANTA, GA 30349-2998

PHONE: (404) 684-8660

C/O SCOTT PATMAN







APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS.

Bryon In Pater Balenson 8/
HOWARD COUNTY HEALTH OFFICER
HOWARD COUNTY HEALTH DEPARTMENT 1900

I 12/06/07 REVISED RET. WALL BLOCK MATERIAL

NO.: DATE REVISION DESCRIPTION

OWNER: DEVELOPER: CHICK-FIL-A

5200 BUFFINGTON ROAD

HOPKINS STATION GENERAL PARTNERSHIP
C/O BRANTLY DEVELOPMENT GROUP
8835 COLUMBIA
100 PARKWAY, SUITE P
COLUMBIA, MD 21045
PHONE: (410) 730-0810

CHICK-FIL-A
5200 BUFFINGTON ROAD
ATLANTA, GA 30349-2998
C/O SCOTT PATMAN
PHONE: (404) 684-8660

CHICK-FIL-A RESTAURANT & GENERAL OFFICE/RETAIL BUILDING
PART OF LOT 1, HOPKINS STATION (FORMER PRICE FARMS, LOT!)
JOHNS HOPKINS ROAD
LAUREL, HOWARD COUNTY, MARYLAND

AREA 3.59 AC. TAX MAP 41 GRID 22 ZONED B-2 PARCEL 425 L. 3,095, F. 39 & L. 7004, F. 653

PARCEL 425 L. 3,095, F. 39 & L. 7004, F. 653 5TH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND

UTILITY PROFILES BOHLER

ENGINEERING, P.C

PROFESSIONAL ENGINEERING SERVICES\*

810 GLENRAGLES COURT, SUITE 300, TOWSON, MD 21286\*

(410) 821-7900 FAE (410) 821-7987 | MD0-bohlereng.com +



REVISED: 12/15/06

DESIGNED BY: JD

DRAWN BY: RLB

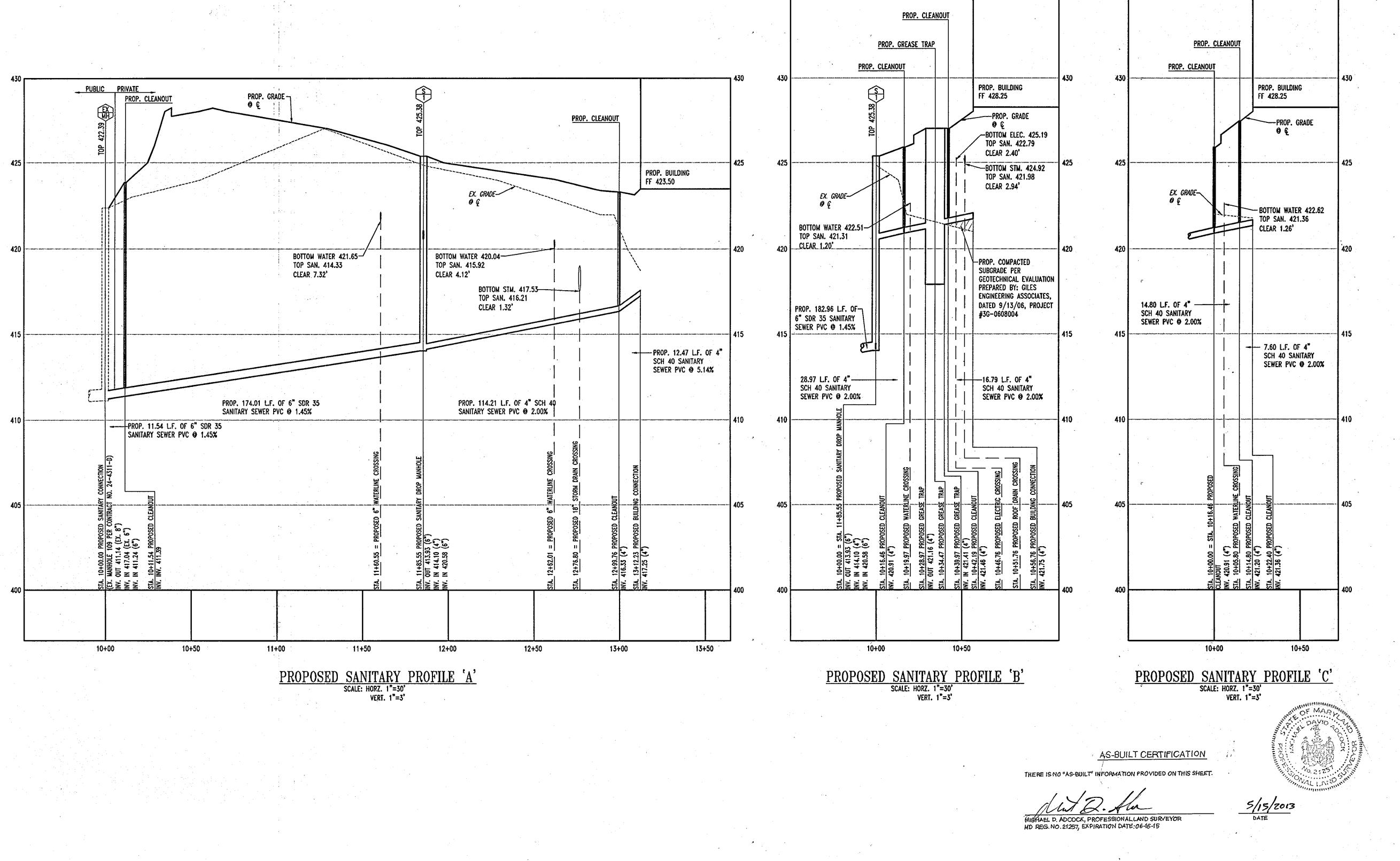
PROJECT NO.: MD056502.1

DATE: 9/28/06

SCALE: AS SHOWN

DRAWING NO. 8 OF 28

SDP # 07-033



GENERAL NOTE:
IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO REVIEW ALL OF THE DRAWINGS AND COMPLETE THE SCOPE OF THE WORK AS DEFINED BY THE DRAWINGS AND IN FULL CONFORMANCE WITH LOCAL REGULATIONS AND CODES.

AS-BUILT APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS. DEVELOPER: HOPKINS STATION GENERAL PARTNERSHIP
C/O BRANTLY DEVELOPMENT GROUP
8835 COLUMBIA
100 PARKWAY, SUITE P
COLUMBIA, MD 21045
PHONE: (410) 730-0810

DEVELOPER:
CHICK-FIL-A
5200 BUFFINGTON ROAD
ATLANTA, GA 30349-2998
C/O SCOTT PATMAN
PHONE: (404) 684-8660 CHICK-FIL-A RESTAURANT & GENERAL OFFICE/RETAIL BUILDING PART OF LOT 1, HOPKINS STATION (FORMER PRICE FARMS, LOT1)
JOHNS HOPKINS ROAD
LAUREL, HOWARD COUNTY, MARYLAND

AREA 3.59 AC. TAX MAP 41 GRID 22 ZONED B-2 MISS UTILITY

5TH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND UTILITY PROFILES

THIS DRAWING DOES NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY, ALL CONSTRUCTION MUST BE DONE IN COMPLIANCE WITH THE OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970 AND ALL RULES AND REGULATIONS THERETO APPURTENANT. THE CONTRACTOR TO CALL MISS UTILITY TO HAVE ALL EXISTING UTILITIES MARKED 48 HOURS PRIOR TO ANY CONSTRUCTION.

DESIGNED BY: JD PROJECT NO.: MD056502.1 DATE: 9/28/06 DRAWING NO. 9 OF 27

SDP # 07-033

PROP. GRADE PROP. COMPACTED SUBGRADE PER GEOTECHNICAL EVALUATION PROP. BUILDING FF 423.50 PREPARED BY: GILES ENGINEERING ASSOCIATES, DATED 9/13/06, PROJECT -#3G-0608004 BOTTOM WATER 419.96-TOP STM. 418.95 CLEAR 1.01' BOTTOM WATER 420.04 TOP SAN. 415.92 415 CLEAR 4.12' PROP. 6" D.I.P. — WATERLINE 10+50 11+50 10+00 WATERLINE PROFILE 'A'

PROP. BUILDING FF 428.25 PROP. GRADE -EX. GRADE-— PROP. 6" D.I.P. WATERLINE -BOTTOM WATER 422.15 TOP SAN. 414.83 CLEAR 7.32' 10+00 10+50 WATERLINE PROFILE 'B'

SCALE: HORZ. 1"=30' VERT. 1"=3'

PROP. BUILDING FF 428.25 -BOTTOM STM. 423.85 TOP WATER 422.25 CLEAR 1.25' -BOTTOM ELEC. 424.20 TOP WATER 422.60 BOTTON WATER 422.51 TOP SAN. 421.31 CLEAR 1.60' CLEAR 1.20' PROP. COMPACTED SUBGRADE PER
GEOTECHNICAL EVALUATION
PREPARED BY: GILES
ENGINEERING ASSOCIATES, BOTTOM WATER 422.62 — TOP SAN. 421.36 CLEAR 1.26' DATED 9/13/06, PROJECT #3G-0608004 -PROP. 3/4" COPPER BOTTOM WATER 422.09 TYPE 'K' WATERLINE TOP STM. 416.39 \_-CLEAR 5.70' BOTTOM WATER 422.01 TOP STM. 414.03 CLEAR 7.98' BOTTOM WATER 422.54 -TOP STM. 414.03 CLEAR 8.51 10+00 10+50 11+00 11+50

WATERLINE PROFILE 'C'

SCALE: HORZ. 1"=30'
VERI. 1"=3'

AS-BUILT CERTIFICATION There is no "As-Built" information provided on this sheet. MICHAEL D. ADCOCK, PROFESSIONAL LAND SURVEYOR MD REG. NO. 21257, EXPIRATION DATE: 0616-15

MISS UTILITY

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HOPKINS STATION GENERAL PARTNERSHIP
C/O BRANTLY DEVELOPMENT GROUP
8835 COLUMBIA
100 PARKWAY, SUITE P
COLUMBIA, MD 21045
PHONE: (410) 730-0810

DEVELOPER:
CHICK-FIL-A
5200 BUFFINGTON ROAD
ATLANTA, GA 30349-2998
C/O SCOTT PATMAN
PHONE: (404) 684-8660 CHICK-FIL-A RESTAURANT & GENERAL OFFICE/RETAIL BUILDING PART OF LOT 1, HOPKINS STATION (FORMER PRICE FARMS, LOT1)
JOHNS HOPKINS ROAD PARCEL 425 L. 3,095, F. 39 & L. 7004, F. 653 5TH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND UTILITY PROFILES DESIGNED BY: JD PROJECT NO.: MD056502.1

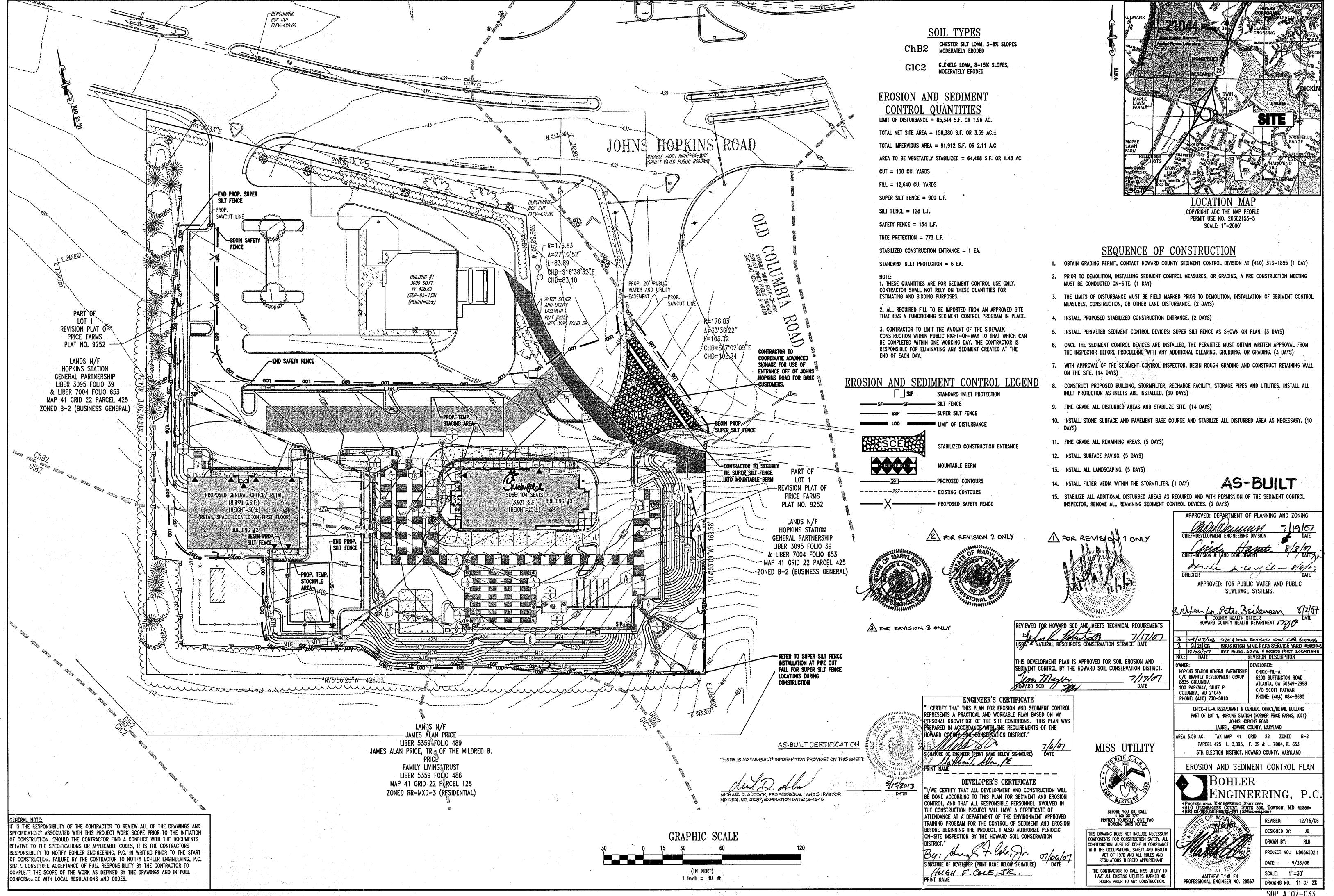
APPROVED: DEPARTMENT OF PLANNING AND ZONING

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS.

DEVELOPER:

DATE: 9/28/06 PROFESSIONAL ENGINEER NO. 28567 SCALE: AS SHOWN
DRAWING NO. 10 OF 28

IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO REVIEW ALL OF THE DRAWINGS AND SPECIFICATIONS ASSOCIATED WITH THIS PROJECT WORK SCOPE PRIOR TO THE INITIATION OF CONSTRUCTION. SHOULD THE CONTRACTOR FIND A CONFLICT WITH THE DOCUMENTS RELATIVE TO THE SPECIFICATIONS OR APPLICABLE CODES, IT IS THE CONTRACTORS RESPONSIBILITY TO NOTIFY BOHLER ENGINEERING, P.C. IN WRITING PRIOR TO THE START F CONSTRUCTION. FAILURE BY THE CONTRACTOR TO NOTIFY BOHLER ENGINEERING, P.C. SHALL CONSTITUTE ACCEPTANCE OF FULL RESPONSIBILITY BY THE CONTRACTOR TO COMPLETE THE SCOPE OF THE WORK AS DEFINED BY THE DRAWINGS AND IN FULL CONFORMANCE WITH LOCAL REGULATIONS AND CODES.



SDP # 07-033

- SPECIFICATIONS:
- 1. CLASS OF TURFGRASS SOD SHALL BE MARYLAND STATE CERTIFIED, OR MARYLAND STATE APPROVED SOD.
- 2. SOD SHALL BE MACHINE CUT AT A UNIFORM SOIL THICKNESS OF 3/4 INCH PLUS OR MINUS 1/4 INCH. AT THE TIME OF CUTTING. MEASUREMENT FOR THICKNESS SHALL EXCLUDE TOP GROWTH AND
- 3. STANDARD SIZE SECTIONS OF SOD SHALL BE STRONG ENOUGH TO SUPPORT THEIR OWN WEIGHT AND RETAIN THEIR SHAPE WHEN SUSPENDED VERTICALLY WITH A FIRM GRASP ON THE UPPER 10 PERCENT OF THE
- 4. INDIVIDUAL PIECES OF SOD SHALL BE CUT TO THE SUPPLIERS WIDTH AND LENGTH. MAXIMUM ALLOWABLE DEVIATION FROM STANDARD WIDTHS AND LENGTHS SHALL BE 5 PERCENT. BROKEN PADS AND TORN OR
- UNEVEN ENDS WILL NOT BE ACCEPTABLE. 5. SOD SHALL NOT BE HARVESTED OR TRANSPLANTED WHEN MOISTURE CONTENT (EXCESSIVELY DRY OR WET) MAY ADVERSELY AFFECT
- 6. SOD SHALL BE HARVESTED, DELIVERED AND INSTALLED WITHIN A PERIOD OF 36 HOURS. SOD NOT TRANSPLANTED WITHIN THIS PERIOD SHALL BE INSPECTED AND APPROVED PRIOR TO INSTALLATION.

ITS SURVIVAL.

- FERTILIZER AND LIME APPLICATION RATES SHALL BE DETERMINED BY SOIL TEST. UNDER UNUSUAL CIRCUMSTANCES WHERE THERE IS INSUFFICIENT TIME FOR A COMPLETE SOIL TEST, FERTILIZER AND LIME MATERIALS MAY BE APPLIED IN AMOUNTS SHOWN UNDER B, BELOW.
- A. PRIOR TO SODDING, THE SURFACE SHALLBE CLEARED OF ALL TRASH, DEBRIS AND OF ALL ROOTS, BRUSH, WIRE, GRADE STAKES AND OTHER OBJECTS THAT WOULD INTERFERE WITH PLANTING, FERTILIZING OR MAINTENANCE OPERATIONS.
- B. WHERE THE SOIL IS ACID OR COMPOSED OF HEAVY CLAYS, GROUND LIMESTONE SHALL BE SPREAD AT THE RATE OF 2 TONS PER ACRE (100 LBS./1000 SQ. FT.) IN ALL SOILS 1.000 POUNDS PER ACRE OR 25 POUNDS PER 1,000 SQUARE FEET OF 10-10-10 FERTILIZER OR EQUIVALENT SHALL BE UNIFORMLY APPLIED AND MIXED INTO THE TOP 3 INCHES OF SOIL WITH THE REQUIRED LIME.
- C. ALL AREAS RECEIVING SOD SHALL BE UNIFORMLY FINE GRADED. HARD PACKED EARTH SHALL BE SCARIFIED PRIOR TO PLACEMENT OF SOD. SOD INSTALLATION:
- A. DURING PERIODS OF EXCESSIVELY HIGH TEMPERATURE THE SOIL SHALL BE LIGHTLY IRRIGATED IMMEDIATELY PRIOR TO LAYING
- B. THE FIRST ROW OF SOD SHALL BE LAID IN A STRAIGHT LINE WITH SUBSEQUENT ROWS PLACED PARALLEL TO AND TIGHTLY WEDGED AGAINST EACH OTHER. LATERAL JOINTS SHALL BE STAGGERED TO PROMOTE MORE UNIFORM GROWTH AND STRENGTH. INSURE THAT SOD IS NOT STRETCHED OR OVERLAPPED ANT THAT ALL JOINTS ARE BUTTED TIGHT IN ORDER TO PREVENT VOIDS WHICH COULD CAUSE AIR DRYING OF THE ROOTS.
- C. ON SLOPING AREAS WHERE EROSION MAY BE A PROBLEM, SOD SHALL BE LAID WITH THE LONG EDGES PARALLEL TO THE CONTOUR AND WITH STAGGERED JOINTS. SECURE THE SOD BY TAMPING AND PEGGING OR OTHER APPROVED METHODS.
- D. AS SODDING IS COMPLETED IN ANY ONE SECTION, THE ENTIRE AREA SHALL BE ROLLED OR TAMPED TO INSURE SOLID CONTACT OF ROOTS WITH THE SOIL SURFACE. SOD SHALL BE WATERED IMMEDIATELY AFTER ROLLING AND TAMPING UNTIL THE UNDERSIDE OF THE NEW SOD PAD AND SOIL SURFACE BELOW THE SOD AREA THOROUGHLY WET. THE OPERATIONS OF LAYING, TAMPING AND IRRIGATING FOR ANY PIECE OF SOD SHALL BE COMPLETED WITHIN EIGHT HOURS.

### SOD MAINTENANCE:

- A. IN THE ABSENCE OF ADEQUATE RAINFALL, WATERING SHALL BE PERFORMED DAILY OR AS OFTEN AS NECESSARY DURING THE FIRST WEEK AND IN SUFFICIENT QUANTITIES TO MAINTAIN MOIST SOIL TO A DEPTH OF 4 INCHES. WATERING SHOULD BE DONE DURING THE HEAT OF THE DAY TO PREVENT WILTING.
- B. AFTER THE FIRST WEEK, SOD SHALL BE WATERED AS NECESSARY TO MAINTAIN ADEQUATE MOISTURE AND INSURE ESTABLISHMENT.
- C. FIRST MOWING SHOULD NOT BE ATTEMPTED UNTIL SOD IS FIRMLY ROOTED. NO MORE THAN 1/3 OF THE GRASS LEAF SHALL BE REMOVED BY THE INITIAL CUTTING OR SUBSEQUENT CUTTINGS. GRASS HEIGHT SHALL BE MAINTAINED BETWEEN 2 AND 3 INCHES UNLESS OTHERWISE SPECIFIED.

AS-BUILT CERTIFICATION

THERE IS NO "AS-BUILT" INFORMATION PROVIDED ON THIS SHEET

MICHAEL D. ADCOCK, PROFESSIONAL LAND SURVEYOR MD REG. NO. 21257, EXPIRATION DATE: 06-16-15

### HOWARD SOIL CONSERVATION DISTRICT STANDARD SEDIMENT CONTROL NOTES

- 1. A MINIMUM OF 48 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY DEPARTMENT OF INSPECTIONS, LICENSES AND PERMITS. SEDIMENT CONTROL DIVISION, PRIOR TO THE START OF ANY CONSTRUCTION. (313-2231)
- 2. ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE "1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL", AND REVISIONS THERETO.
- 3. FOLLOWING INITIAL SOIL DISTURBANCE OR REDISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN: A) 7 CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DIKES, PERIMETER SLOPES AND ALL SLOPES STEEPER THAN 3:1, B) 14 DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.
- 4. ALL SEDIMENT TRAPS/BASINS SHOWN MUST BE FENCED AND WARNING SIGNS POSTED AROUND THE PERIMETER IN ACCORDANCE WITH VOL. 1, CHAPTER 7 OF "HOWARD COUNTY DESIGN MANUAL", STORM DRAINAGE.
- 5. ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD SPECIFIED ABOVE IN ACCORDANCE WITH THE "1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL\* FOR PERMANENT SEEDING, SOD, TEMPORARY SEEDING, AND MULCHING (SEC. G) TEMPORARY STABILIZATION WITH MULCH ALONE SHALL ONLY BE DONE WHEN RECOMMENDED SEEDING DATES DO NOT ALLOW FOR PROPER GERMINATION AND ESTABLISHMENT OF GRASSES.
- 6. ALL SEDIMENT CONTROL STRUCTURES ARE TO REMAIN IN PLACE AND ARE TO BE MAINTAINED IN OPERATIVE CONDITION UNTIL PERMISSION FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.

### 7. SITE ANALYSIS:

- TOTAL SITE AREA 156,380 S.F. OR 3.59 AC. AREA DISTURBED - 86,001 S.F. OR 1.97 AC. TOTAL CUT - 130 CU. YDS. TOTAL FILL - 12.640 CU. YDS. OFFSITE WASTE/BORROW LOCATION - TO BE RELOCATED BY THE DEVELOPER TO AN APPROVED LOCATION WITH AN APPROVED PERMIT AND SEDIMENT CONTROL PLAN
- 8. ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF DISTURBANCE
- 9. ADDITIONAL SEDIMENT CONTROL MUST BE PROVIDED, IF DEEMED NECESSARY BY THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
- 10. ON ALL SITES WITH DISTURBED AREAS EXCESS OF 2 ACRES. APPROVAL OF THE INSPECTION AGENCY SHALL BE REQUESTED UPON COMPLETION OF INSTALLATION OF PERIMETER EROSION AND SEDIMENT CONTROLS, BUT BEFORE PROCEEDING WITH ANY OTHER EARTH DISTURBANCE OR GRADING. OTHER BUILDING OR GRADING INSPECTION APPROVALS MAY NOT BE AUTHORIZED UNTIL INITIAL APPROVAL BY THE INSPECTION AGENCY IS MADE.
- 11. TRENCHES FOR THE CONSTRUCTION OF UTILITIES IS LIMITED TO THREE PIPE LENGTHS OR THAT WHICH SHALL BE BACK FILLED AND STABILIZED WITHIN ONE WORKING DAY, WHICHEVER IS SHORTER.

### TOPSOIL CONSTRUCTION AND MATERIAL SPECIFICATIONS

I. TOPSOIL SALVAGED FROM THE EXISTING SITE MAY BE USED PROVIDED THAT IT MEETS THE STANDARDS AS SET FORTH IN THESE SPECIFICATIONS. TYPICALLY, THE DEPTH OF TOPSOIL TO BE SALVAGED FOR A GIVEN SOIL TYPE CAN BE FOUND IN THE REPRESENTATIVE SOIL PROFILE SECTION IN THE SOIL SURVEY PUBLISHED BY USDA-SCS IN COOPERATION WITH MARYLAND AGRICULTURAL EXPERIMENTAL STATION.

II. TOPSOIL SPECIFICATIONS - SOIL TO BE USED AS TOPSOIL MUST MEET THE FOLLOWING:

- i. TOPSOIL SHALL BE LOAM, SANDY LOAM, CLAY LOAM, SILT LOAM, SANDY CLAY LOAM, LOAMY SAND. OTHER SOILS MAY BE USED IF RECOMMENDED BY AN AGRONOMIST OR SOIL SCIENTIST AND APPROVED BY THE APPROPRIATE APPROVAL AUTHORITY. REGARDLESS. TOPSOIL SHALL NOT BE A MIXTURE OF CONTRASTING TEXTURED SUBSOILS AND SHALL CONTAIN LESS THAN 5% BY VOLUME OF CINDERS, STONES, SLAG. COARSE FRAGMENTS. GRAVEL. STICKS. ROOTS, TRASH, OR OTHER MATERIALS LARGER THAN 1 1/2' IN
- ii. TOPSOIL MUST BE FREE OF PLANTS OR PLANT PARTS SUCH AS BERMUDA GRASS, QUACKGRASS, JOHNSON GRASS, NUTSEDGE, POISON IVY, THISTLE, OR OTHERS AS SPECIFIED, IN THE 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION & SEDIMENTATION CONTROL.
- iii. WHERE THE SUBSOIL IS EITHER HIGHLY ACIDIC OR COMPOSED OF HEAVY CLAYS, GROUND LIMESTONE SHALL BE SPREAD AT THE RATE OF 4-8 TONS PER ACRE (200-400 LBS./1000 SQ. FT.) PRIOR TO PLACEMENT OF TOPSOIL. LIME SHALL BE DISTURBED UNIFORMLY OVER DESIGNATED AREAS AND WORKED INTO THE SOIL IN CONDUCTION WITH TILLAGE OPERATIONS AS DESCRIBED IN THE FOLLOWING PROCEDURES.

#### III. FOR SITES HAVING DISTURBED AREAS UNDER 5 ACRES:

i. PLACE TOPSOIL (IF REQUIRED) AND APPLY SOIL AMENDMENTS AS SPECIFIED IN 20.0 VEGETATIVE STABILIZATION - SECTION 1 -VEGETATIVE STABILIZATION METHODS AND MATERIALS.

#### IV. TOPSOIL APPLICATION

- i. WHEN TOPSOILING, MAINTAIN NEEDED EROSION AND SEDIMENT CONTROL PRACTICES SUCH AS DIVERSIONS, GRADE STABILIZATION STRUCTURES, EARTH DIKES, SLOPE SILT FENCE AND SEDIMENT TRAPS AND BASINS.
- ii. GRADES ON THE AREAS TO BE TOPSOILED, WHICH HAVE BEEN PREVIOUSLY ESTABLISHED, SHALL BE MAINTAINED, ALBEIT 4" - 8" HIGHER IN ELEVATION.
- iii. TOPSOIL SHALL BE UNIFORMLY DISTRIBUTED IN A 4" 8" LAYER AND LIGHTLY COMPACTED TO A MINIMUM THICKNESS OF 4". SPREADING SHALL BE PERFORMED IN SUCH A MANNER THAT SODDING OR SEEDING CAN PROCEED WITH A MINIMUM OF ADDITIONAL SOIL PREPARATION AND TILLAGE. ANY IRREGULARITIES IN THE SURFACE RESULTING FROM TOPSOILING OR OTHER OPERATIONS SHALL BE CORRECTED IN ORDER TO PREVENT THE FORMATION OF DEPRESSIONS OR WATER POCKETS.
- V. THESE TOPSOIL SPECIFICATIONS HAVE BEEN EDITED FROM THE 1994 EROSION AND SEDIMENT CONTROL STANDARDS TO FIT THIS PROJECT. IT IS STILL THE INTENTION TO FOLLOW THE REFERENCED 1994 EROSION AND SEDIMENT CONTROLS STANDARDS IN THEIR ENTIRETY.

#### TEMPORARY SEEDING NOTES APPLY TO GRADED OR CLEARED AREA LIKELY TO BE REDISTURBED WHERE A SHORT-TERM VEGETATIVE COVER IS NEEDED.

SEEDBED PREPARATION: LOOSEN UPPER 3 INCHES OF SOIL BY RAKING, DISCING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING (UNLESS PREVIOUSLY LOOSENED).

SOILS AMENDMENTS: APPLY 600 LBS. PER ACRE 10-10-10 FERTILIZER (14 LBS./1000 SQ. FT.)

SEEDING: FOR PERIODS MARCH 1 THROUGH APRIL 30 AND FROM AUGUST 15 THROUGH NOVEMBER 15, SEED WITH 2 1/3 BU. PER ACRE OF ANNUAL RYE (3.2 LBS./1000 SQ. FT.). FOR THE PERIOD MAY 1 THROUGH AUGUST 14, SEED WITH 3 LBS. PER ACRE OF WEEPING LOVEGRASS (.07 LBS./1000 SQ. FT.). FOR THE PERIOD NOVEMBER 16 THROUGH FEBRUARY 28. PROTECT SITE BY APPLYING 2 TONS PER ACRE OF WELL ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING, OR USE SOD.

MULCHING: APPLY 1 1/2 TO 2 TONS PER ACRE (70-90 LBS./1000 SQ. FT.) OF UNROTTED SMALL GRAIN STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TOOL OR 218 GALLONS PER ACRE (5 GALS./1000 SQ. FT.) OF EMULSIFIED ASPHALT ON FLAT AREAS. ON SLOPES, 8 FT. OR HIGHER, USE 348 GALLONS PER ACRE (8 GALS./1000 SQ. FT.) FOR ANCHORING.

### SILT FENCE

SILT FENCE DESIGN CRITERIA

	(HUHIXAM)	(MAXIMUM)
SLOPE STEEPHESS	SLOPE LENGTH	SILT FENCE LENGTH
FLATTER THAN 50:1	ОЗПИШКО	UNLIMITED
50:1 TO 10:1	125 FEET	1,000 FEET
10:1 TO 5:1	100 FEET	750 FEET
5:1 TO <b>3:1</b>	60 FEET	500 FEET
5:1 TO 2:1	40 FEET	250 FEET
2:1 AND STEEPER	20 FEET	125 FEET

NOTE: IN AREAS OF LESS THAN 2% SLOPE AND SANDY SOILS (USDA GENERAL CLASSIFICATION SYSTEM, SOIL CLASS A) MAXIMUM SLOPE LENGTH AND SILT FENCE LENGTH WILL BE UNLIMITED, IN THESE AREAS A SILT FENCE MAY BE THE ONLY PERIMETER CONTROL

MARYLAND DEPARTMENT OF ENVIRONMENT SOIL CONSERVATION SERVICE E - 15 - 3A WATER MANAGEMENT ADMINISTRATION

## PERMANENT SEEDING NOTES

APPLY TO GRADED OR CLEARED AREA NOT SUBJECT TO IMMEDIATE FURTHER DISTURBANCE WHERE A PERMANENT LONG-LIVED VEGETATIVE COVER IS NEEDED. SEEDBED PREPARATION: LOOSEN UPPER 3 INCHES OF SOIL BY RAKING, DISCING OR

· OTHER ACCEPTABLE MEANS BEFORE SEEDING (UNLESS PREVIOUSLY LOOSENED). SOIL AMENDMENTS: IN LIEU OF SOIL TEST RECOMMENDATIONS, USE ONE OF THE

1. PREFERRED - APPLY 2 TONS PER ACRE DOLOMITIC LIMESTONE (92 LBS./1000 SQ. FT.) AND 600 LBS. PER ACRE 10-10-10 FERTILIZER (14 LBS./1000 SQ. FT.) BEFORE SEEDING. HARROW OR DISC INTO UPPER THREE INCHES OF SOIL, AT TIME OF SEEDING, APPLY 400 LBS. PER ACRE 30-0-0 AREAFORM FERTILIZER (9 LBS./1000 SQ. FT.)

FOLLOWING SCHEDULES:

2. ACCEPTABLE - APPLY 2 TONS PER ACRE DOLOMITIC LIMESTONE (92 LBS./1000 SQ. FT.) AND 1000 LBS. PER ACRE 10-10-10 FERTILIZER (23 LBS./1000 SQ. FT.) BEFORE SEEDING. HARROW OR DISC INTO UPPER THREE INCHES OF SOILS.

SEEDING: FOR THE PERIODS MARCH 1 THROUGH APRIL 30, AND AUGUST 1 THROUGH OCTOBER 15, SEED WITH 60 LBS. PER ACRE (1.4 LBS./1000 SQ. FT.) OF KENTUCKY 31 TALL FESCUE PER ACRE AND 2 LBS. PER ACRE (.05 LBS./1000 SQ. FT.) OF WEEPING LOVEGRASS. DURING THE PERIOD OF OCTOBER 16 THROUGH FEBRUARY 28, PROTECT SITE BY: OPTION (1) 2 TONS PER ACRE OF WELL ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING. OPTION (2) USE SOD. OPTION (3) SEED WITH 60 LBS,/ACRE KENTUCKY 31 TALL FESCUE AND MULCH WITH 2 TONS/ACRE WELL ANCHORED STRAW.

MULCHING: APPLY 1 1/2 TO 2 TONS PER ACRE (70 TO 90 LBS./1000 SQ. FT.) OF UNROTTED SMALL GRAIN STRAW IMMEDIATELY AFTER SEEDING, ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TOOL OR 218 GALLONS PER ACRE (5 GALS./1000 SQ. FT.) OF EMULSIFIED ASPHALT ON FALT AREA. ON SLOPES 8 FEET OR HIGHER, USE 348 GALLONS PER ACRE (8 GALS./1000 SQ. FT.) FOR ANCHORING.

MAINTENANCE: INSPECT ALL SEEDED AREAS AND MAKE NEEDED REPAIRS, REPLACEMENTS AND RESEEDINGS.

## -INITIAL LOCATION OF SUPER SILT FENCE (AS SHOWN ON PLAN) -relocated to ultimate location (ABOVE OUTFALL)

DETAIL 22 - SILT FENCE

36" MINIMUM FENCE

FILTER

CLOTH-

POST LENGTH

TINTIN TINTING TO

EMBED GEOTEXTILE CLASS F

CONSTRUCTION SPECIFICATIONS

1. FENCE POSTS SHALL BE A MINIMUM OF 36" LONG DRIVEN 16" MINIMUM INTO THE

GROUND. WOOD POSTS SHALL BE 11/2" X 11/2" SQUARE (MINIMUM) CUT, OR 13/4" DIAMETER

(MINIMUM) ROUND AND SHALL BE OF SOUND QUALITY HARDWOOD. STEEL POSTS WILL BE STANDARD T OR U SECTION WEIGHTING NOT LESS THAN 1.00 POND PER LINEAR FOOT.

2. GEOTEXTILE SHALL BE FASTENED SECURELY TO EACH FENCE POST WITH WIRE TIES

OR STAPLES AT TOP AND MID-SECTION AND SHALL MEET THE FOLLOWING REQUIREMENTS

50 LBS/IN (MIN.)

20 LBS/IN (MIN.)

3. WHERE ENDS OF GEOTEXTILE FABRIC COME TOGETHER, THEY SHALL BE OVERLAPPED,

4. SILT FENCE SHALL BE INSPECTED AFTER EACH RAINFALL EVENT AND MAINTAINED WHEN

BULGES OCCUR OR WHEN SEDIMENT ACCUMULATION REACHED 50% OF THE FABRIC HEIGHT.

INTO THE GROUND

SECTION E

A MINIMUM OF 8" VERTICALLY

36" MINIMUM LENGTH FENCE POST,"

16" MINIMUM HEIGHT OF

GEOTEXTILE CLASS F

8" MINIMUM DEPTH I

FENCE POST SECTION MINIMUM 20" ABOVE

- FENCE POST DRIVEN A

STANDARD SYMBOL

THE GROUND

TEST: MSMT 509

TEST: MSMT 509

MARYLAND DEPARTMENT OF ENVIRONMENT

WATER MANAGEMENT ADMINISTRATION

CROSS SECTION

0.3 GAL FT / MINUTE (MAX.) TEST: MSMT 322

MINIMUM OF 16" INTO

DRIVEN A MINIMUM OF 16" INTO

TYPICAL SUPER SILT FENCE INSTALLATION AT PIPE OUTFALL NOT TO SCALE

10' MAXIMUM CENTER TO

--- CENTER ....

PERSPECTIVE VIEW

TOP VIEW

POSTS 7

STAPLE!

FOR GEOTEXTILE CLASS F:

FLOW RATE

TENSILE STRENGTH

FILTÉRING EFFICIENCY 75% (MIN.)

FOLDED AND STAPLED TO PREVENT SEDIMENT BYPASS.

TENSILE MODULUS

U.S. DEPARTMENT OF AGRICULTURE

SOIL CONSERVATION SERVICE

JOINING TWO ADJACENT SILT

FENCE SECTIONS

SECTION A

## STANDARD AND SPECIFICATIONS FOR TOPSOIL

#### <u>DEFINITION</u>

placement of topsoil over a prepared subsoil prior to establishment of permanent vegetation.

TO PROVIDE A SUITABLE SOIL MEDIUM FOR VEGETATION GROWTH. SOILS OF CONCERN HAVE LOW MOISTURE CONTENT, LOW NUTRIENT LEVELS, LOW PH, MATERIALS TOXIC TO PLANTS, AND/OR UNACCEPTABLE SOIL GRADATION.

### CONDITIONS WHERE PRACTICE APPLIES

- 1. THIS PRACTICE IS LIMITED TO AREAS HAVING 2:1 OR FLATTER SLOPES WHERE: A. THE TEXTURE OF THE EXPOSED SUBSOIL/PARENT MATERIAL IS NOT ADEQUATE TO PRODUCE VEGETATIVE GROWTH.
- B. THE SOIL MATERIAL IS SO SHALLOW THAT THE ROOTING ZONE IS NOT DEEP ENOUGH TO SUPPORT PLANTS OR FURNISH CONTINUING SUPPLIES OF MOISTURE AND PLANT NUTRIENTS.
- C. THE ORIGINAL SOIL TO BE VEGETATED CONTAINS MATERIAL TOXIC TO PLANT GROWTH. D. THE SOIL IS SO ACIDIC THAT TREATMENT WITH LIMESTONE IS NOT FEASIBLE.
- 2. FOR THE PURPOSE OF THESE STANDARDS AND SPECIFICATIONS, AREAS HAVING SLOPES STEEPER THAN 2:1 REQUIRE SPECIAL CONSIDERATION AND DESIGN FOR ADEQUATE STABILIZATION THAN 2:1 SHALL HAVE THE APPROPRIATE STABILIZATION SHOWN ON THE PLANS.

### CONSTRUCTION AND MATERIAL SPECIFICATIONS

- 1. TOPSOIL SALVAGED FROM THE EXISTING SITE MAY BE USED PROVIDED THAT IT MEETS THE STANDARDS AS SPECIFIED. TYPICALLY, THE DEPTH OF TOPSOIL TO BE SALVAGED FOR A GIVEN SET FORTH IN THE REPRESENTATIVE SOIL PROFILE SECTION IN THE SOIL SURVEY PUBLISHED BY USDA-SCS IN COOPERATION WITH MARYLAND AGRICULTURAL EXPERIMENTAL STATION.
- 2. TOPSOIL SPECIFICATIONS— SOIL TO BE USED AS TOPSOIL MUST MEET THE FOLLOWING:
- A. TOPSOIL SHALL BE A LOAM, SANDY LOAM, CLAY LOAM, SILT LOAM, SANDY CLAY LOAM, LOAMY SAND. OTHER SOILS MAY BE USED IF RECOMMENDED BY AN AGRONOMIST OR SOIL SCIENTIST AND APPROVED BY THE APPROPRIATE APPROVAL AUTHORITY. REGARDLESS, TOPSOIL SHALL NOT BE A MIXTURE OF CONTRASTING TEXTURED SUBSOIL'S AND SHALL CONTAIN LESS THAN 5 % BY VOLUME OF CINDERS, STONES, SLAG, COARSE FRAGMENTS, GRAVEL, STICKS, ROOTS, TRASH, OR OTHER MATERIALS LARGER THAN 1 1/2" IN
- B. TOPSOIL MUST BE FREE OF PLANTS OR PLANT PARTS SUCH AS BERMUDA GRASS, JOHNSON GRASS, NUT SEDGE, POISON IVY, THISTLE, OR OTHERS AS SPECIFIED.
- C. WHERE THE SUBSOIL IS EITHER HIGHLY ACIDIC OR COMPOSED OF HEAVY CLAYS, GROUNDLIMESTONE SHALL BE SPREAD AT THE RATE OF 4-8 TONS/ACRE (200-400 POUNDS PER 1,000 SQUARE FEET) PRIOR TO THE PLACEMENT OF TOPSOIL, LIME SHALL BE DISTRIBUTED UNIFORMLY OVER DESIGNATED AREAS AND WORKED INTO THE SOIL IN CONJUNCTION WITH TILLAGE OPERATIONS AS DESCRIBED IN THE FOLLOWING PROCEDURES.
- 3. FOR SITES HAVING DISTURBED AREAS UNDER 5 ACRES.
- A. PLACE TOPSOIL (IF REQUIRED) AND APPLY SOIL AMENDMENTS AS SPECIFIED IN 20.0 VEGETATIVE STABILIZATION SECTION I-VEGEATIVE STABILIZATION METHODS AND MATERIALS.

#### 4. FOR SITES HAVING DISTURBED AREAS OVER 5 ACRES:

- A. ON SOIL MEETING TOPSOIL SPECIFICATIONS, OBTAIN TEST RESULTS DICTATING FERTILIZER AND LIME AMENDMENTS REQUIRED TO BRING THE SOIL INTO COMPLIANCE WITH THE FOLLOWING:
- A.1. PH FOR TOPSOIL SHALL BE BETWEEN 6.0 THAN 7.5. IF THE TESTED SOIL DEMONSTRATES A PH OF LESS THAN 6.0, SUFFICIENT LIME SHALL BE PRESCRIBED TO RAISE THE PH TO
- 6.5 OR HIGHER. A.2. ORGANIC CONTENT OF TOPSOIL SHALL BE NOT LESS THAN 1.5 PERCENT BY WEIGHT.
- A.3. TOPSOIL HAVING SOLUBLE SALT CONTENT GREATER THAN 500 PARTS PER MILLION SHALL NOT BE USED.
- A.4. NO SOD OR SEED SHALL BE PLACED ON SOIL WHICH HAS BEEN TREATED WITH SOIL STERILANTS OR CHEMICALS USED FOR WEED CONTROL UNTIL SUFFICIENT TIME HAS ELAPSED (14 DAYS MIN.) TO PERMIT DISSIPATION OF PHYTO-TOXIC MATERIALS.
- NOTE: TOPSOIL SUBSTITUTES OR AMENDMENTS, AS RECOMMENDED BY A QUALIFIED AGRONOMIST OR SOIL SCIENTIST AND APPROVED BY THE APPROPRIATE APPROVAL AUTHORITY, MAY BE USED IN LIEU OF NATURAL TOPSOIL.
- B. PLACE TOPSOIL (IF REQUIRED) AND APPLY SOIL AMENDMENTS AS SPECIFIED IN 20.0 VEGETATIVE STABILIZATION - SECTION I - VEGETATIVE STABILIZATION METHODS AND MATERIALS.

#### 5. TOPSOIL APPLICATION

- A. WHEN TOP SOILING, MAINTAIN NEEDED EROSION AND SEDIMENT CONTROL PRACTICES SUCH AS DIVERSIONS.
- GRADE STABILIZATION STRUCTURES, EARTH DIKES, SLOPE SILT FENCE AND SEDIMENT TRAPS AND BASINS. B. GRADES ON THE AREAS TO BE TOP SOILED. WHICH HAVE BEEN PREVIOUSLY ESTABLISHED. SHALL
- BE MAINTAINED, ALBEIT 4" 8" HIGHER IN ELEVATION. C. TOPSOIL SHALL BE UNIFORMLY DISTRIBUTED IN A 4"-8" LAYER AND LIGHTLY COMPACTED TO A MINIMUM THICKNESS OF 4". SPREADING SHALL BE PERFORMED IN SUCH A MANNER THAT SODDING OR SEEDING CAN PROCEED WITH A MINIMUM OF ADDITIONAL SOIL PREPARATION AND TILLAGE. ANY IRREGULARITIES IN THE RESULTING FROM SURFACE TOP SOILING OR OTHER OPERATIONS SHALL BE CORRECTED IN ORDER
- TO PREVENT THE FORMATION OF DEPRESSIONS OR WATER POCKETS. D. TOPSOIL SHALL NOT BE PLACED WHILE THE TOPSOIL OR SUBSOIL IS IN A FROZEN OR MUDDY CONDITION, WHEN THE SUBSOIL IS EXCESSIVELY WET OR IN A CONDITION THAT MAY OTHERWISE BE DETRIMENTAL TO PROPER GRADING AND SEEDBED PREPARATION.
- 6. ALTERNATIVE FOR PERMANENT SEEDING INSTEAD OF APPLYING THE FULL AMOUNTS OF LIME AND COMMERCIAL FERTILIZER, COMPOSTED SLUDGE AND AMENDMENTS COMMERCIAL BELOW:
- A. COMPOSTED SLUDGE MATERIAL FOR USE AS A SOIL CONDITIONER FOR SITES HAVING DISTURBED AREAS OVER 5 ACRES SHALL BE TESTED TO PRESCRIBE AMENDMENTS AND FOR SITES HAVING DISTURBED AREAS UNDER 5 ACRES SHALL CONFORM TO THE FOLLOWING REQUIREMENTS:
- A.1. COMPOSTED SLUDGE SHALL BE SUPPLIED BY. OR ORIGINATE FROM. A PERSON OR PERSONS THAT ARE PERMITTED (AT THE TIME OF ACQUISITION OF THE COMPOST) BY THE MARYLAND DEPARTMENT OF THE ENVIRONMENT UNDER COMAR 26.04.06.
- A.2. COMPOSTED SLUDGE SHALL CONTAIN AT LEAST 1 PERCENT NITROGEN. 1.5 PERCENT PHOSPHORUS. AND 0.2 PERCENT POTASSIUM AND HAVE A PH OF 7.0 TO 8.0. IF COMPOST DOES NOT MEET THESE REQUIREMENTS, THE APPROPRIATE CONSTITUENTS MUST BE ADDED TO MEET THE REQUIREMENTS
- A.3. COMPOSTED SLUDGE SHALL BE APPLIED AT A RATE OF 1 TON/1,000 SQUARE FEET.
- B. COMPOSTED SLUDGE SHALL BE AMENDED WITH A POTASSIUM FERTILIZER APPLIED AT THE RATE OF 4LB/1,000 SQUARE FEET, AND 1/3 THE NORMAL LIME APPLICATION RATE.

AS-BUILT

USBA - NATURAL RESOURCES CONSTENTION SERVICE DATE

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND

APPROVED: DEPARTMENT OF PLANNING AND ZONING

APPROVED: FOR PUBLIC WATER AND PUBLIC

SEWERAGE SYSTEMS.

COUNTY HEALTH OFFICER
HOWARD COUNTY HEALTH DEPARTMENT (700)

CHICK-FIL-A RESTAURANT & GENERAL OFFICE/RETAIL BUILDING

PART OF LOT 1. HOPKINS STATION (FORMER PRICE FARMS, LOT1)

JOHNS HOPKINS ROAD

<u>Laurel, Howard County, Maryland</u>

PARCEL 425 L. 3,095, F. 39 & L. 7004, F. 653

5TH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND

EROSION AND SEDIMENT CONTROL DETAIL

AREA 3.59 AC. TAX MAP 41 GRID 22 'ZONED B-2

HOPKINS STATION GENERAL PARTNERSHIP
C/O BRANTLY DEVELOPMENT GROUP
5200 BUFFING

8835 COLUMBIA

100 PARKWAY, SUITE

COLUMBIA, MD 21045

PHONE: (410) 730-0810

DEVELOPER:

5200 BUFFINGTON ROAD

C/O SCOTT PATMAN

ATLANTA, GA 30349-2998

PHONE: (404) 684-8660

Mumm

7/17/01

Jim Muser

REFERENCES: GUIDELINE SPECIFICATIONS, SOIL PREPARATION AND SODDING. MD-VA, PUB. #1, COOPERATIVE EXTENSION SERVICE, UNIVERSITY OF MARYLAND AND VIRGINIA POLYTECHNIC INSTITUTE, REVISED 1973.

## PERMANENT SEEDING SUMMARY

SEED MIXTURE (HARDINESS ZONE 6B) FROM TABLE 25					RTILIZER RAT (10–20–20)	E	LIME	
NO.	SPECIES	APPLICATION RATE (LB/AC)	*SEEDING DATES	SEEDING DEPTHS	N	P <sub>2</sub> 0 5	K <sub>2</sub> 0	RATE
	TALL FESCUE (86%)	120 LBS./AC. 2.9 LBS./1,000 S.F.	A W	1"				
9	PGA TRIVIALIS (7%)	10 LBS./AC. .23 LBS./1,000 S.F.	3/1 - 5/15 8/15 - 10/15	4.	90 LB/AC (2.0 LB/ 1000 SF)	175 LB/AC (4: LB/ 1000 SF)	175, LB/AC (4 LB/ 1000 SF)	2 TONS/AC (100LB/ 1000 SF)
2	BIRDSFOOT TREEFOIL (7%)	10 LBS./AC. .23 LBS./1,000 S.F.		1*				

NOTES FOR STANDARD AND SPECIFICATION FOR VEGETATIVE STABILIZATION, SEE SECTION G - "VEGETATIVE PRACTICES" IN THE "1994" MARYLAND STANDARD AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL."

### TEMPORARY SEFTING STIMMARY

1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	,		IEMPURA	KI SEEDI	MA DO	JMMAKI.	
, ***		SEED MIXTURE (HARDINESS ZONE 6B) FROM TABLE 26				FERTILIZER RATE	LIME RATE
	NO.	SPECIES	APPLICATION RATE (LB/AC)	SEEDING DATES	SEEDING DEPTHS	(10-10-10)	LIME RAIL
	1	BARLEY	122 LBS./AC. 2.5 BU./1,000 S.F	3/1 - 4/30 . 8/15 - 10/15	1"-2"		
	2	ANNUAL RYEGRASS	50 LBS./AC. 1.15 BU./1,000 S.	3/1 - 4/30 F.8/15 - 11/1	1/4"-1/2"	(15 LB/	2 TONS/AC (100 LB/
	3	TALL FESCUE	120 LBS./AC.	3/1 - 5/15	1"	1000 SF)	1000 SF)

NOTE: SOD IS TO BE USED ON ALL STABILIZATION WITHIN THE PROPERTY BOUNDARY

ENGINEER'S CERTIFICATE "I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD COUNTY SOIL CONSERVATION DISTRICT." PE OF ENGINEED (PRINT NAME BELOW SIGNATURE) **=========** 

DEVELOPER'S CERTIFICATE "I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL

BE DONE ACCORDING TO THIS PLAN FOR SEDIMENT AND EROSION CONTROL, AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION

F. COLE, Je

BEFORE YOU DIG CALL

MISS UTILITY

PROTECT YOURSELF, GIVE TWO WORKING DAYS NOTICE

THIS DRAWING DOES NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY. ALL CONSTRUCTION MUST BE DONE IN COMPLIANCE

WITH THE OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970 AND ALL RULES AND REGULATIONS THERETO APPURTENANT. THE CONTRACTOR TO CALL MISS UTILITY TO have all existing utilities marked 48

HOURS PRIOR TO ANY CONSTRUCTION.

BOHLER Enginèering, p.c \*Professional Engineering Services\*
\*810 Gleneagles Court, Suite 300, Towson, MD 21288\*
\*(410) 821-7900 FAX: (410) 821-7987 | MOScholereag.com\* 12/15/06 REVISED: DESIGNED BY: JD DRAWN BY: RLB PROJECT NO.: MD056502.1 DATE: 9/28/06

PROFESSIONAL ENGINEER NO. 28567

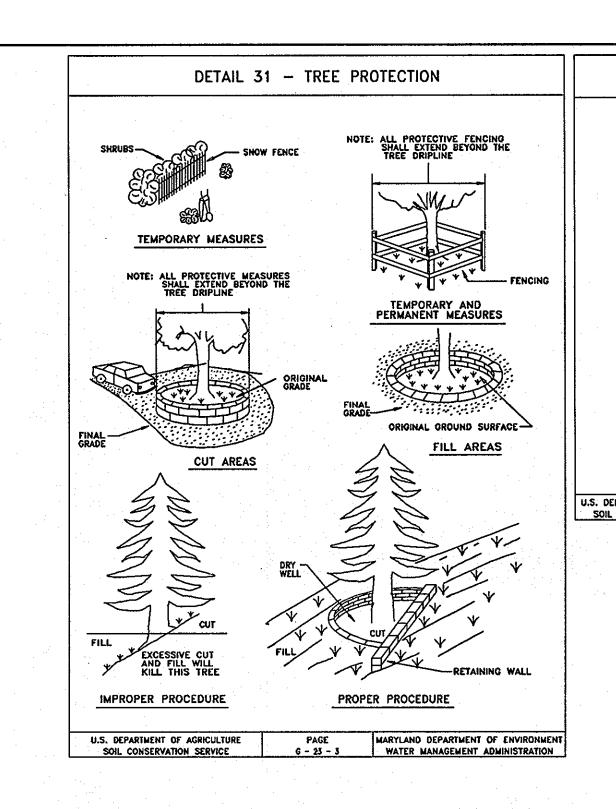
SCALE: AS SHOWN DRAWING NO. 12 OF 28

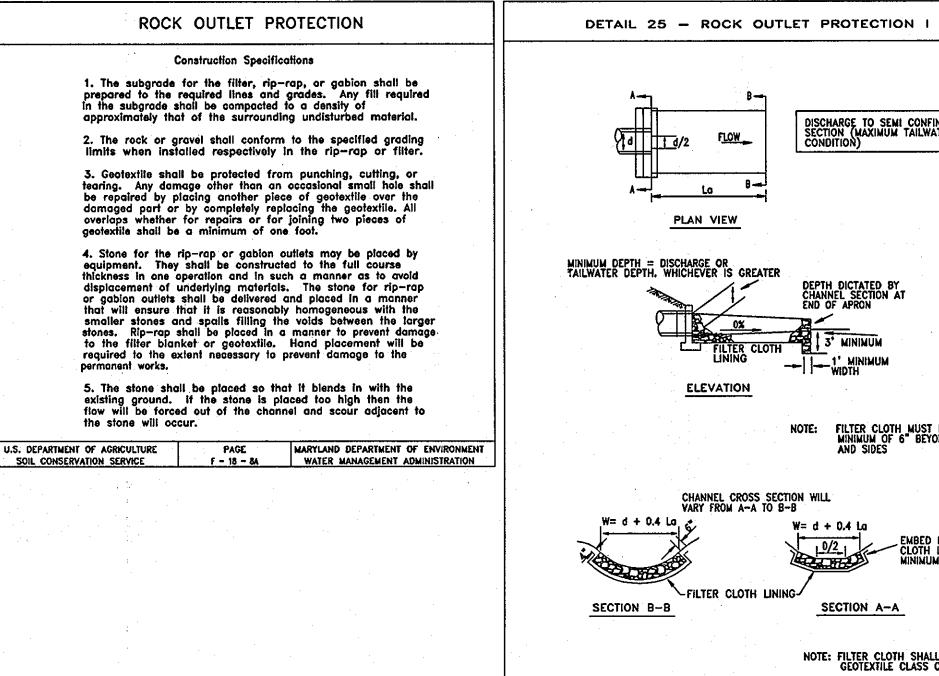
SDP # 07-033

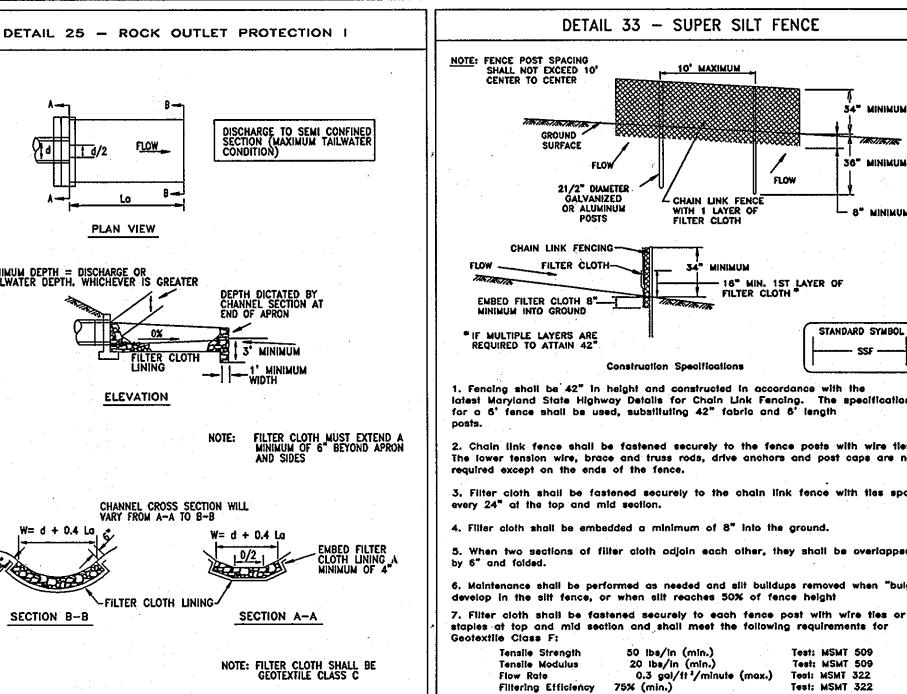
OF CONSTRUCTION. SHOULD THE CONTRACTOR FIND A CONFLICT WITH THE DOCUMENTS RELATIVE TO THE SPECIFICATIONS OR APPLICABLE CODES. IT IS THE CONTRACTORS RESPONSIBILITY TO NOTIFY BOHLER ENGINEERING. P.C. IN WRITING PRIOR TO THE START OF CONSTRUCTION. FAILURE BY THE CONTRACTOR TO NOTIFY BOHLER ENGINEERING. P.C. SHALL CONSTITUTE ACCEPTANCE OF FULL RESPONSIBILITY BY THE CONTRACTOR TO COMPLETE THE SCOPE OF THE WORK AS DEFINED BY THE DRAWINGS AND IN FULL CONFORMANCE WITH LOCAL REGULATIONS AND CODES.

IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO REVIEW ALL OF THE DRAWINGS AND

SPECIFICATIONS ASSOCIATED WITH THIS PROJECT WORK SCOPE PRIOR TO THE INITIATION

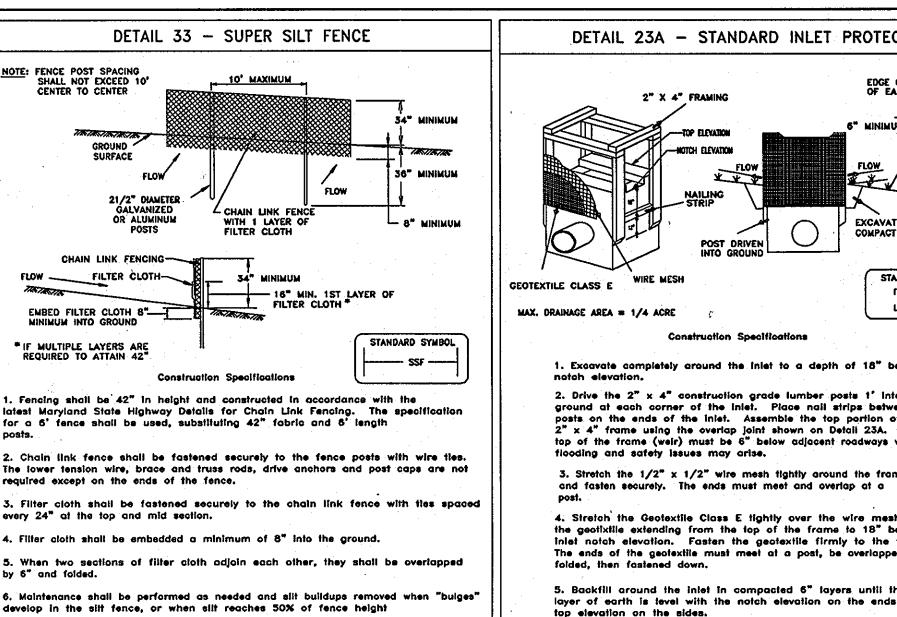




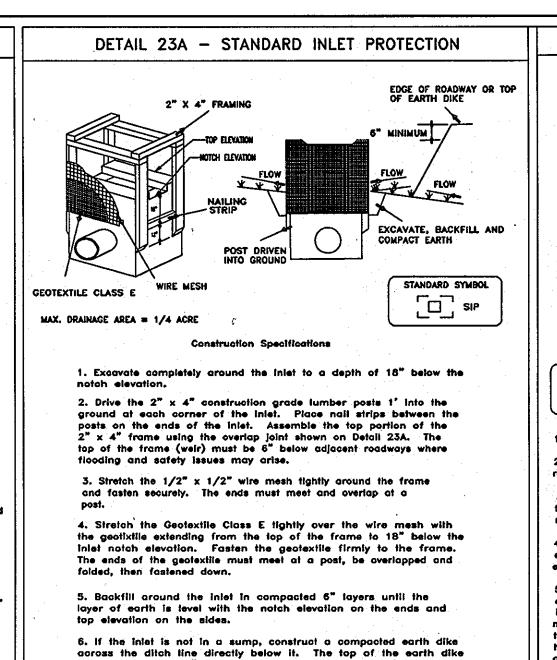


SOIL CONSERVATION SERVICE

WATER MANAGEMENT ADMINISTRATION



MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION



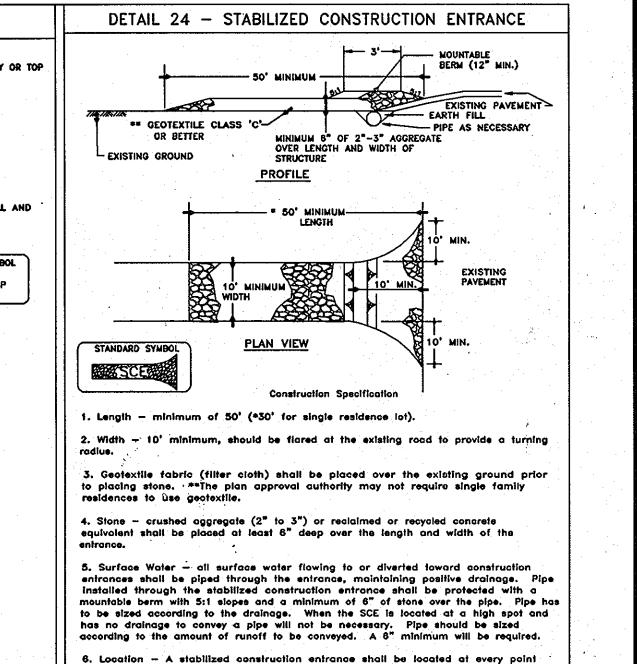
should be at least 6" higher than the top of the frame.

rain and the geotextile replaced when it becomes alogged.

U.S. DEPARTMENT OF AGRICULTURE PAGE MARYLAND DEPARTMENT OF ENVIRONMENT SOIL CONSERVATION SERVICE E - 16 - 5 WATER MANAGEMENT ADMINISTRATION

SUPER SILT FENCE

Design Criteria



where construction traffic enters or leaves a construction site. Vehicles leaving

the site must travel over the entire length of the stabilized construction entrance

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE

2 ONLY

PAGE MARYLAND DEPARTMENT OF ENVIRONMENT
F - 17 - 3 WATER MANAGEMENT ADMINISTRATION

A FOR REVISION 1 ONLY

USBA - NATURAL RESOURCES SOMSERVATION SERVICE

ARD SCD

REVIEWED FOR HOWARD SCD AND MEETS TECHNICAL REQUIREMENTS

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT

APPROVED: DEPARTMENT OF PLANNING AND ZONING

APPROVED: FOR PUBLIC WATER AND PUBLIC

SEWERAGE SYSTEMS.

HOWARD COUNTY HEALTH DEPARTMENT MORE

3 4/7/08 SIZE FAREA ZEVISED FOR CFA BUILDING
2 2/21/08 IRRIGATION LINE & CFA SERVICE YARD REVISION

NO.: DATE REVISION DESCRIPTION

5200 BUFFINGTON ROAD

C/O SCOTT PATMAN

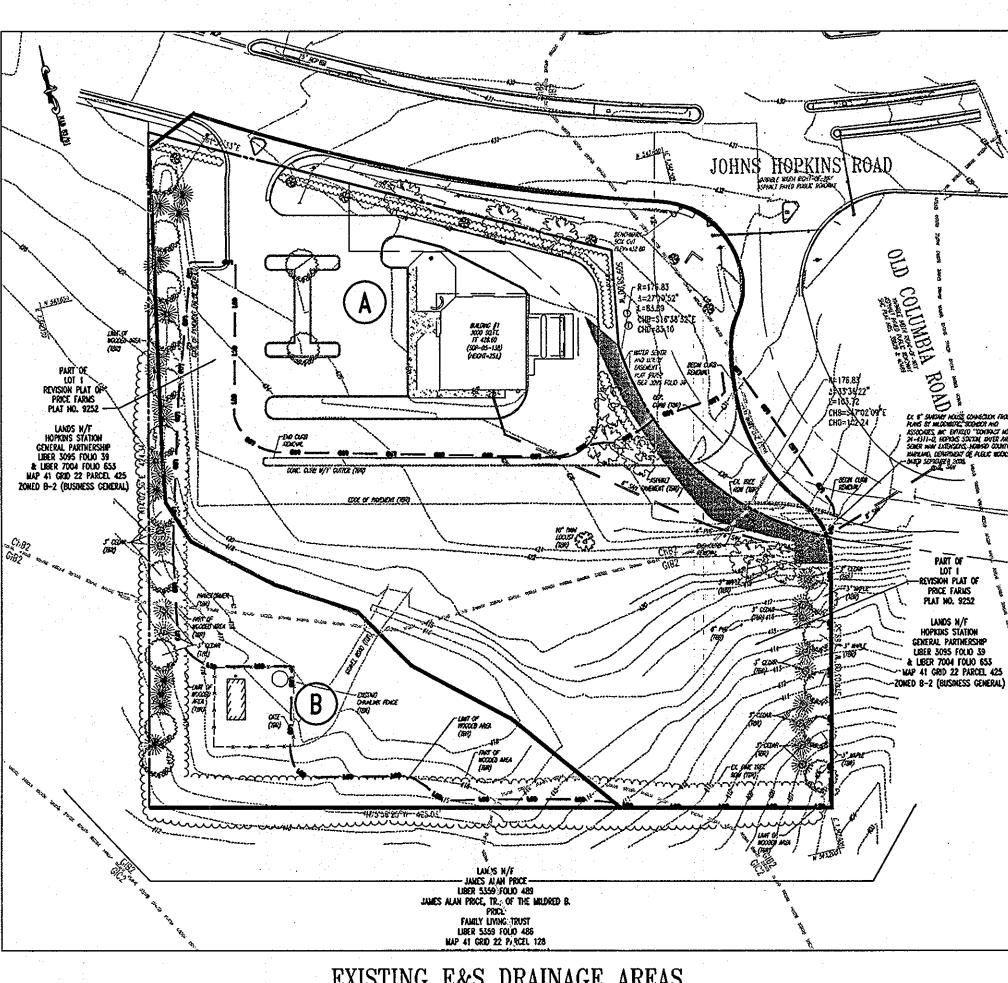
ATLANTA, GA 30349-2998

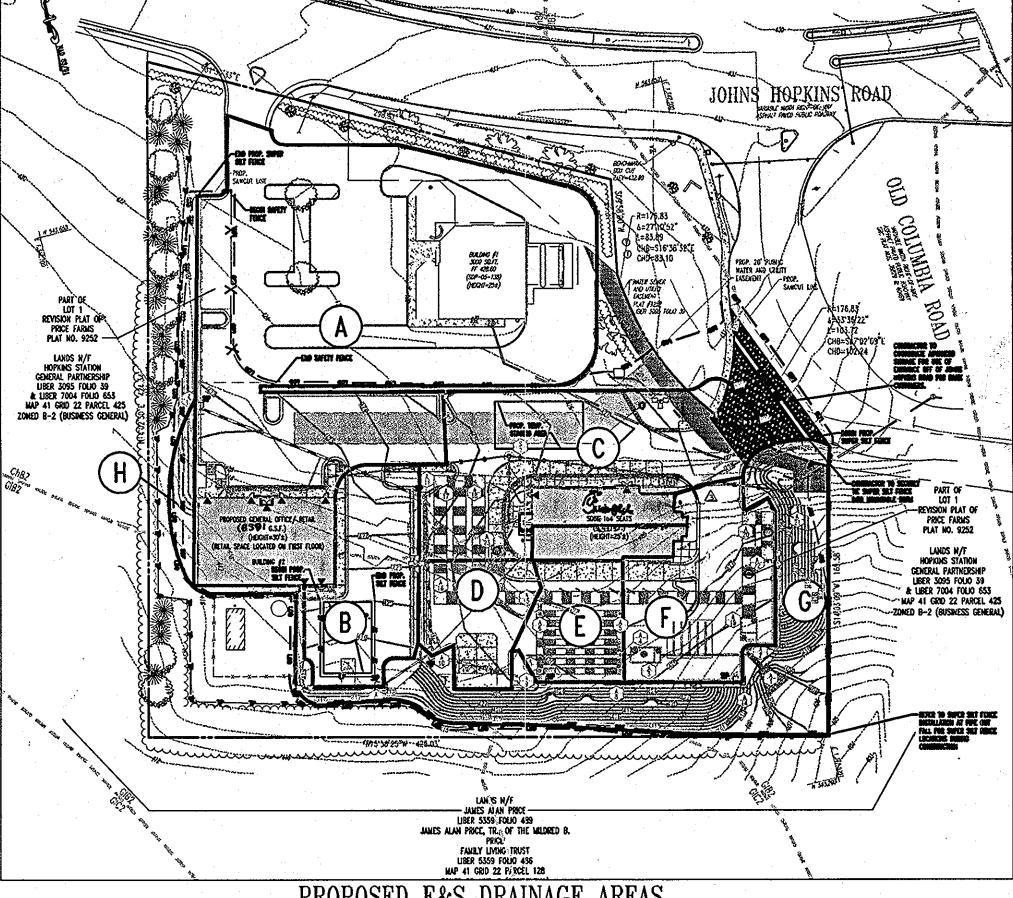
HOPKINS STATION GENERAL PARTNERSHIP
C/O BRANTLY DEVELOPMENT GROUP
5200 BUFFING

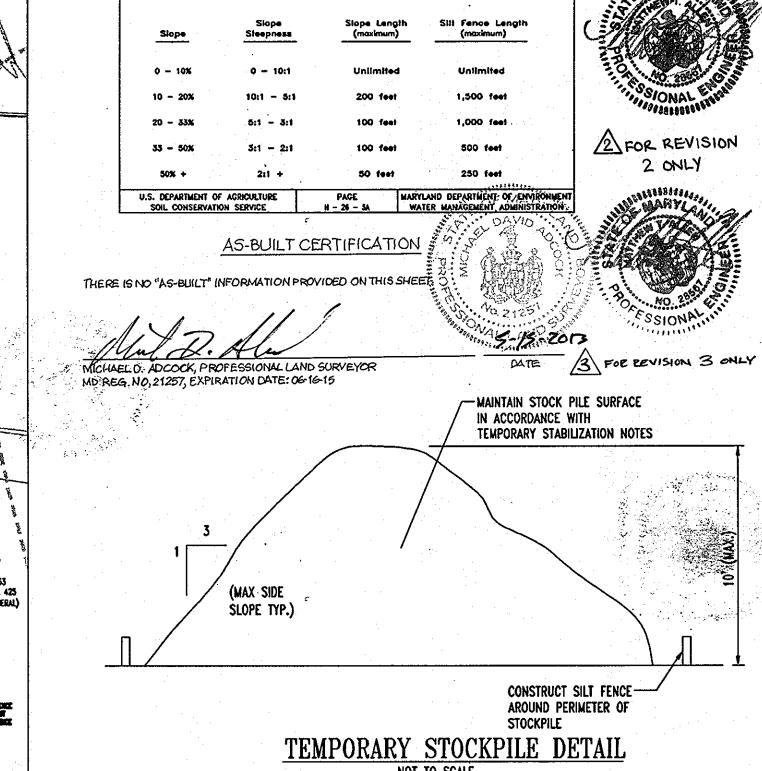
8835 COLUMBIA

100 PARKWAY, SUITE P

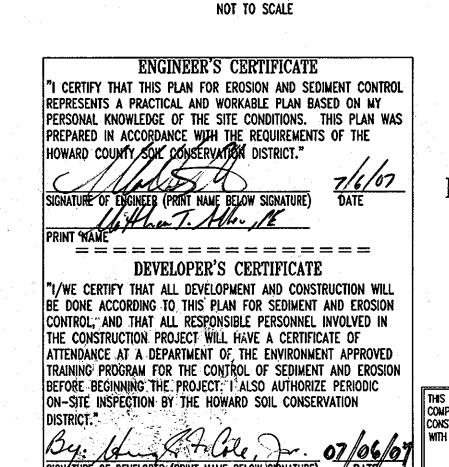
7/17/01







CONSTRUCT SILT FENCE-AROUND PERIMETER OF



HUGH F. COLE, JR



BEFORE YOU DIG CALL 1-800-257-7777 PROTECT YOURSELF, GIVE TWO WORKING DAYS NOTICE

THIS DRAWING DOES NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY. ALL ONSTRUCTION MUST BE DONE IN COMPLIANCE WITH THE OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970 AND ALL RULES AND REGULATIONS THERETO APPURTENANT. THE CONTRACTOR TO CALL MISS UTILITY TO

have all existing utilities marked 48

HOURS PRIOR TO ANY CONSTRUCTION.

COLUMBIA, MD 21045 PHONE: (404) 684-8660 PHONE: (410) 730-0810 CHICK-FIL-A RESTAURANT & GENERAL OFFICE/RETAIL BUILDING PART OF LOT 1, HOPKINS STATION (FORMER PRICE FARMS, LOT1) JOHNS HOPKINS ROAD LAUREL, HOWARD COUNTY, MARYLAND AREA 3.59 AC. TAX MAP 41 GRID 22 ZONED B-2 PARCEL 425 L. 3,095, F. 39 & L. 7004, F. 653 5TH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND EROSION AND SEDIMENT CONTROL DETAIL BOHLER Engineering, p.c 12/15/06 REVISED: DESIGNED BY: JD

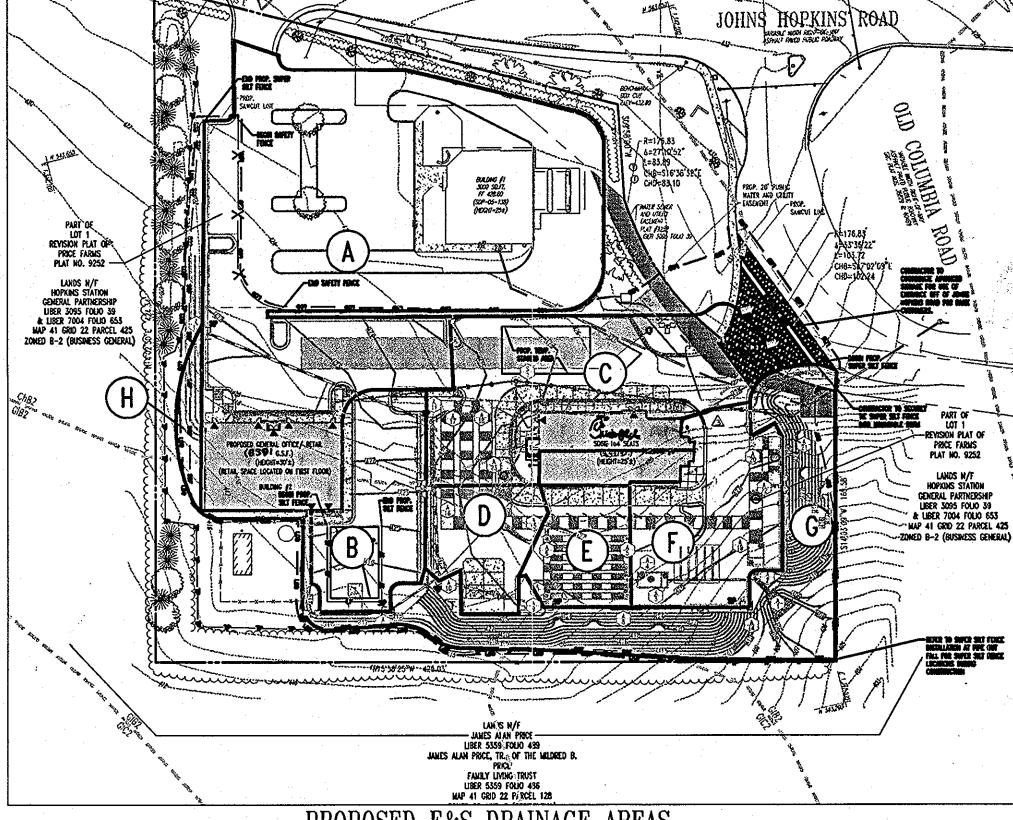
DRAWN BY: RLB PROJECT NO.: MD056502.1 DATE: 9/28/06 SCALE: AS SHOWN PROFESSIONAL ENGINEER NO. 28567 DRAWING NO. 13 OF 28

EXISTING E&S DRAINAGE AREAS SCALE: 1"=60'

IMPERVIOUS AREA = 39,325 S.F. OR .90 AC. PERVIOUS AREA = 88,862 S.F. OF 2.04 AC. TOTAL AREA = 128,187 S.F. OR 2.94 AC. "C" VALUE = 33 TO 157 L.F. OF SSF

IMPERVIOUS AREA = 625 S.F. OR 0.01 AC. PERVIOUS AREA = 27,878 S.F. OF 0.64 AC. TOTAL AREA = 28,503 S.F. OR 0.65 AC. 'C" VALUE = 16 TO 450 L.F. OF SSF

T IS THE RESPONSIBILITY OF THE CONTRACTOR TO REVIEW ALL OF THE DRAWINGS AND SPECIFICATIONS ASSOCIATED WITH THIS PROJECT WORK SCOPE PRIOR TO THE INITIATION F CONSTRUCTION. SHOULD THE CONTRACTOR FIND A CONFLICT WITH THE DOCUMENTS ELATIVE TO THE SPECIFICATIONS OR APPLICABLE CODES, IT IS THE CONTRACTORS RESPONSIBILITY TO NOTIFY BOHLER ENGINEERING, P.C. IN WRITING PRIOR TO THE START F CONSTRUCTION, FAILURE BY THE CONTRACTOR TO NOTIFY BOHLER ENGINEERING, P.C. SHALL CONSTITUTE ACCEPTANCE OF FULL RESPONSIBILITY BY THE CONTRACTOR TO COMPLETE THE SCOPE OF THE WORK AS DEFINED BY THE DRAWINGS AND IN FULL CONFORMANCE WITH LOCAL REGULATIONS AND CODES.



PROPOSED E&S DRAINAGE AREAS

SCALE: 1"=60' IMPERVIOUS AREA = 41,880 S.F. OR 0.96 AC. PERVIOUS AREA = 26,720 S.F. OF 0.61 AC. TOTAL AREA = 68,600 S.F. OR 1.57 AC. "C" VALUE = 50 TO 195 L.F. OF SSF

IMPERVIOUS AREA = 6,902 S.F. OR 0.18 AC. PERVIOUS AREA = 608 S.F. OF 0.01 AC. TOTAL AREA = 7,510 S.F. OF 0.19 AC. "C" VALUE = 69

IMPERVIOUS AREA = 14,696 S.F. OR 0.33 AC. PERVIOUS AREA = 3,320 S.F. OF 0.07 AC. TOTAL AREA = 18,016 S.F. OR 0.40 AC. "C" VALUE = 62

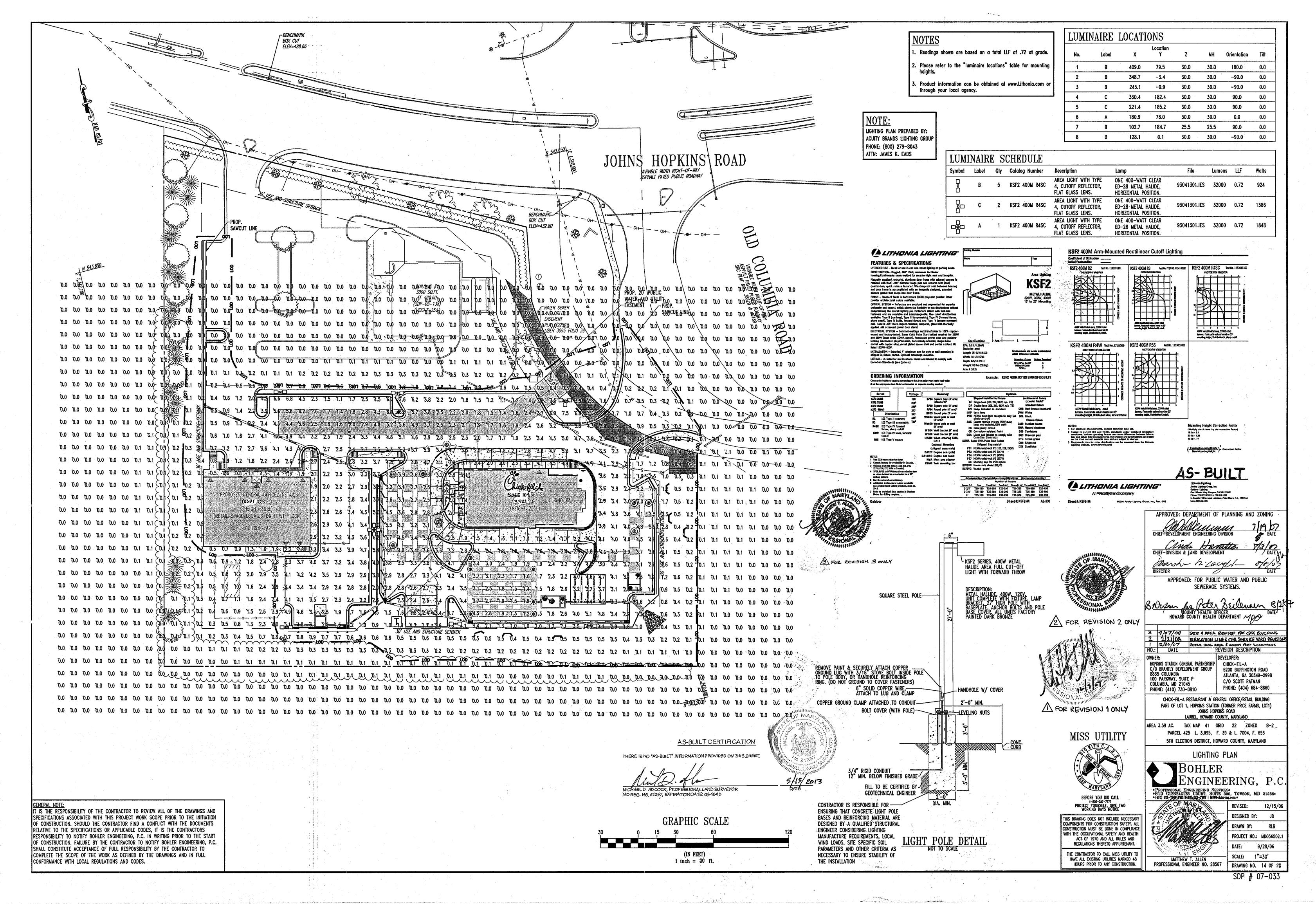
IMPERVIOUS AREA = 9,040 S.F. OR 0.21 AC. PERVIOUS AREA = 480 S.F. OR 0.01 AC. TOTAL AREA = 9,520 S.F. OR 0.22 AC. "C" VALUE = 69 TO SIP

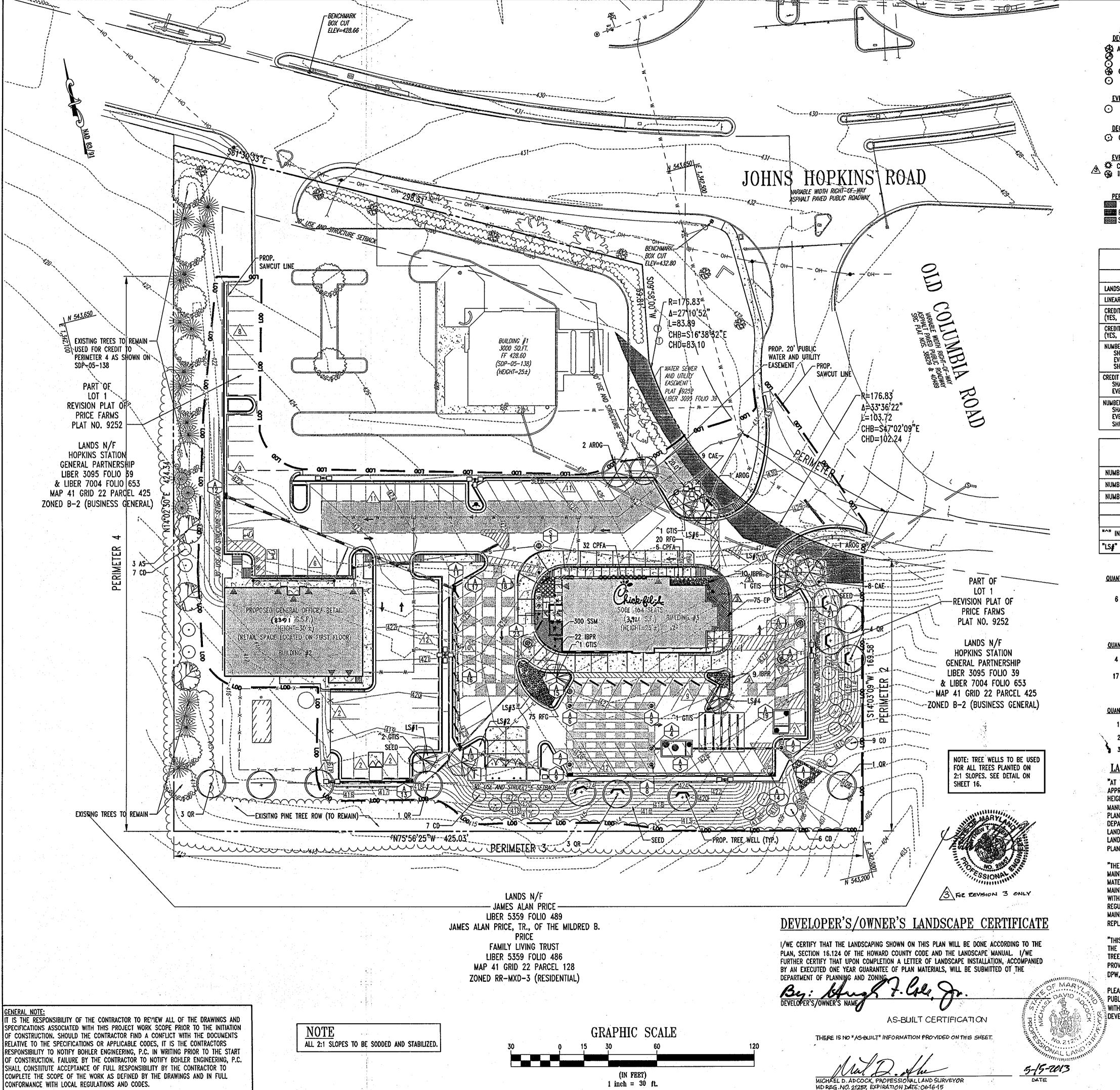
IMPERVIOUS AREA = 3,120 S.F. OR 0.07 AC. PERVIOUS AREA = 0 S.F. OR 0.00 AC. TOTAL AREA = 3,120 S.F. OR 0.07 AC. "C" VALUE = 72

IMPERVIOUS AREA = 8.310 S.F. OR 0.19 AC. PERVIOUS AREA = 810 S.F. OR 0.02 AC. TOTAL AREA = 9,120 S.F. OR 0.21 AC. "C" VALUE = 65

IMPERVIOUS AREA = 0 S.F. OR 0.00 AC. PERVIOUS AREA = 14.876 S.F. OR 0.34 AC. TOTAL AREA = 14,876 S.F. OR 0.34 AC. "C" VALUE = 20 TO 590 L.F. OF SSF

IMPERVIOUS AREA = 0 S.F. OR 0.00 AC. PERVIOUS AREA = 1.630 S.F. OR 0.04 AC. TOTAL AREA = 1.530 S.F. OR 0.04 AC. "C" VALUE = 20 TO 181 L.F. OF SSF





TOTAL PLANTING SCHEDULE <u>BOTANICAL NAME</u> COMMON NAME DECIDUOUS TREE(S) ACER RUBRUM 'OCTOBER GLORY' OCTOBER GLORY RED MAPLE 1/2-3" CAL. 1/2-3" CAL. ACER SACCARUM SUGAR MAPLE RED OAK **QUERCUS RUBRA ∰** CTIS GLEDITSIA TRIACANTHOS VAR. INTERMIS 'SHADEMASTER' SHADEMASTER HONEYLOCUST 2 1/2-3" CAL. **BETULA NIGRA** multi stem river birch 12-14 **EVERGREEN TREE(S** ⊙ CD 29 CEDRUS DEODARA **DEODOR CEDAR** ☼ CAE 17 CORNUS ALBA 'ELEGANTISSIMA' VARIEGATED RED TWIG DOGWOOD 2-3' EVERGREEN SHRUB(S GOLD THREAD CYPRESS BLUE PRINCESS HOLLY ☼ CPFA CHAMAECYPARIS PISIFERA 'FILIFERA AUREA' #3 CAN #5 CAN ILEX X MESERVEAE 'BLUE PRINCESS' CONTAINER ECHINACEA PURPUREA PURPLE CONE FLOWER RUDBECKIA FULGIDA 'GOLDSTURM' GOLDSTURM CONTAINER 2 GAL. CONTAINER SALVIA SUPERBA 'MAYNIGHT' MAYNIGHT MEADOW SAGE 2 GAL. IF ANY DISCREPANCIES OCCUR BETWEEN AMOUNTS SHOWN IN THE PLAN AND THE PLANT LIST, THE PLAN SHALL DICTATE.

CATEGORY ADJACENT TO PERIMETER PROPERTIES					
LANDSCAPE TYPE	E (PERIMETER 1)	C (PERIMETER 2)	C (PERIMETER 3)	C (PERIMETER 4)	TOTAL
LINEAR FEET OF PERIMETER	68 LF	169.54 LF	425.03 LF	345 LF	
CREDIT FOR EXISTING VEGETATION (YES, NO, LINEAR FEET)	NO	NO	YES 170 LF	YES 185 LF	
CREDIT FOR WALL, FENCE, OR BERM (YES, NO, LINEAR FEET)	NO	NO 3	NO	NO	
NUMBER OF PLANTS REQUIRED SHADE TREES EVERGREEN TREES SHRUBS	2 SHADE TREES 0 EVERGREEN TREES 17 SHRUBS	5 SHADE TREES 9 EVERGREEN TREES 0 SHRUBS	7 SHADE TREES 13 EVERGREEN TREES 0 SHRUBS	4 SHADE TREES 8 EVERGREEN TREES 0 SHRUBS	18 SHADE TREES 39 EVERGREEN TREES 17 SHRUBS
CREDIT FOR EXISTING VEGETATION SHADE TREES EVERGREEN TREES	N/A	N/A	170 LF OF EXISITING PINE TREE ROW	6 SHADE TREES* 11 EVERGREEN TREES* 0 SHRUBS	6 SHADE TREES 11 EVERGREEN TREES 0 SHRUBS
NUMBER OF PLANTS PROVIDED SHADE TREES EVERGREEN TREES SHRUBS	2 SHADE TREES 0 EVERGREEN TREES 17 SHRUBS	5 SHADE TREE 9 EVERGREEN TREES 0 SHRUBS	7 SHADE TREES 13 EVERGREEN TREES 0 SHRUBS	3 SHADE TREES 7 EVERGREEN TREES 0 SHRUBS	23 SHADE TREES 40 EVERGREEN TREES 17 SHRUBS

PARKING LOT INTERNAL PLANTING	
TARRING LOT INTERNAL I LANTING	
NUMBER OF PARKING SPACES:	119
NUMBER OF LANDSCAPE ISLANDS AND TREES REQUIRED (1 PER 20 PARKING SPACES):	. (
NUMBER OF LANDSCAPE ISLANDS AND TREES PROVIDED:	
SHADE TREES:	6 TREES
'^" INDICATES PLANT MATERIAL UTILIZED TO FULFILL REQUIREMENT	

PARKING LOT PLANTING SCHEDULE GLEDITSIA TRIACANTHOS SHADEMASTER HONEYLOCUST 2 1/2-3" CAL.

VAR. INTERMIS 'SHADEMASTER'

STREET TREE PLANTING SCHEDULE

QUANTITY	SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE
4		ACER RUBRUM 'OCTOBER GLORY'	OCTOBER GLORY RED MAPLE	2 1/2-3" CAL
17	5.3	CORNUS ALBA 'ELEGANTISSIMA'	VARIEGATED RED TWIG DOGWOOD	2-3'

PERIMETER PLANTING SCHEDULE

JANTITY	SYMBOL	BOTANICAL NAME	COMMON NAME	<u>size</u>
16	$\odot$	QUERCUS RUBRA	RED OAK	2 1/2-3" CAL
29	Õ	CEDRUS DEODARA	DEODAR CEDAR	6' - 8' HT.
3	(Z)	ACER SACCHARUM	SUGAR MAPLE	2 1/2-3" CAL

LANDSCAPE NOTES

"AT THE TIME OF PLANT INSTALLATION, ALL SHRUBS AND TREES LISTED AND APPROVED ON THE LANDSCAPE PLAN, SHALL COMPLY WITH THE PROPER HEIGHT REQUIREMENTS IN ACCORDANCE WITH THE HOWARD COUNTY LANDSCAPE MANUAL. IN ADDITION, NO SUBSTITUTIONS OR RELOCATION'S OF THE REQUIRED PLANTINGS MAY BE MADE WITHOUT PRIOR REVIEW AND APPROVAL FROM THE DEPARTMENT OF PLANNING AND ZONING. ANY DEVIATION FROM THE APPROVED LANDSCAPE PLAN MAY RESULTING IN DENIAL OR DELAY IN THE RELEASE OF LANDSCAPE SURETY UNTIL SUCH TIME AS ALL REQUIRED MATERIALS ARE PLANTED AND/OR REVISIONS ARE MADE TO THE APPLICABLE PLANS\*.

"THE OWNER, TENANTS AND/OR THEIR AGENTS SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE REQUIRED LANDSCAPING INCLUDING BOTH PLANT MATERIALS AND BEAMS, FENCES AND WALLS. ALL PLANT MATERIALS SHALL BE MAINTAINED IN GOOD GROWING CONDITION, AND WHEN NECESSARY REPLACED WITH NEW MATERIALS TO ENSURE CONTINUED COMPLIANCE WITH APPLICABLE REGULATIONS. ALL OTHER REQUIRED LANDSCAPING SHALL BE PERMANENTLY MAINTAINED IN GOOD CONDITION, AND WHEN NECESSARY, REPAIRED OR REPLACED."

"THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL WITH 29 SHADE TREES, O ORNAMENTAL TREES, 29 EVERGREEN TREES AND 110 SHRUBS PROVIDE WITH LANDSCAPE SURETY IN THE AMOUNT OF \$16,350 WITH THE DPW, DEVELOPER'S AGREEMENT".

PLEASE BE ADVISED THE THE LANDSCAPING CANNOT BE LOCATED WITHIN ANY PUBLIC EASEMENTS FOR WATER, SEWER OR STORM DRAINS IN ACCORDANCE WITH SECTION 16.124 (B) (1) (III) OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS.

\*AS APPROVED ON SDP-05-138

CHESTER SILT LOAM, 3-8% SLOPES MODERATELY ERODED

GLENELG LOAM, 8-15% SLOPES,

MODERATELY ERODED A FOR REVISION AND LY

APPROVED: DEPARTMENT OF PLANNING AND ZONING Much to lought

> APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS.

SIZE & AREA EGYISGO THE CFA BUILDING 2 2/21/08 IRRIGATION LINE + CFA SERVICE YARD REVISIONS
1 12/06/07 RETAIL GUDG, AREA & ACCESS FORT LOCATIONS

HOPKINS STATION GENERAL PARTNERSHIP CHICK-FIL-A C/O BRANTLY DEVELOPMENT GROUP 8835 COLUMBIA 100 PARKWAY, SUITE P COLUMBIA, ND 21045

/2\ FOR REVISION 2 ONLY

MISS UTILITY

BEFORE YOU DIG CALL

WITH THE OCCUPATIONAL SAFETY AND HEALTH

ACT OF 1970 AND ALL RULES AND

REGULATIONS THERETO APPURTENANT.

THE CONTRACTOR TO CALL MISS UTILITY TO

have all existing utilities marked 48

HOURS PRIOR TO ANY CONSTRUCTION.

5200 BUFFINGTON ROAD ATLANTA, GA 30349-2998 C/O SCOTT PATMAN PHONE: (404) 684-8660 PHONE: (410) 730-0810

CHICK-FIL-A RESTAURANT & GENERAL OFFICE/RETAIL BUILDING PART OF LOT 1, HOPKINS STATION (FORMER PRICE FARMS, LOT1) JOHNS HOPKINS ROAD LAUREL, HOWARD COUNTY, MARYLAND

AREA 3.59 AC. TAX MAP 41 GRID 22 ZONED B-2 PARCEL 425 L. 3,095, F. 39 & L. 7004, F. 653 5TH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND

LANDSCAPE PLAN



MATTHEW'T."ALLEN

821 7900 PAY (610) 62177967   MO0bobler	*25°00077
PENEW RES OF	REVISED: 12
A ME	DESIGNED BY:
MXX62M	DRAWN BY:
	PROJECT NO.: MDO
ONAL ENGINE	DATE: 9/28/
1100 ONAL EMILIA	a section in the late

PROFESSIONAL ENGINEER NO. 28567 DRAWING NO. 15 OF 28

GENERAL NOTES: THIS DETAIL IS FOR REFERENCE PURPOSES ONLY. CONTRACTOR IS

AND SPECIFICATIONS PRIOR TO CONSTRUCTION.

TO CONSTRUCTION.

2. FINAL COLOR AND MATERIALS TO BE REVIEWED AND APPROVED BY THE ARCHITECT PRIOR

RESPONSIBLE FOR INSTALLATION OF WALL & RELATED IMPROVEMENTS

IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS. MANUFACTURER

OF WALL MATERIALS IS RESPONSIBLE FOR FINAL DESIGN OF WALL DETAILS

## LANDSCAPE SPECIFICATIONS

 SCOPE OF WORK; THE LANDSCAPE CONTRACTOR SHALL BE REQUIRED TO PERFORM ALL CLEARING, FINISHED GRADING, SOIL PREPARATION PERMANENT SEEDING OR SODDING, PLANTING AND MULCHING INCLUDING ALL LABOR, MATERIALS, TOOLS AND EQUIPMENT NECESSARY FOR THE COMPLETION OF THIS PROJECT, UNLESS OTHERWISE CONTRACTED BY THE GENERAL CONTRACTOR.

A. GENERAL - ALL HARDSCAPE MATERIALS SHALL MEET OR EXCEED SPECIFICATIONS AS OUTLINED IN THE STATE. DEPARTMENT OF TRANSPORTATION'S SPECIFICATIONS.

B. TOPSOIL -- NATURAL, FRIABLE, LOAMY SILT SOIL HAVING AN ORGANIC CONTENT NOT LESS THAN 5%, A PH RANGE BETWEEN 4.5-7.0. IT SHALL BE FREE OF DEBRIS, ROCKS LARGER THAN ONE INCH (1"), WOOD, ROOTS, VEGETABLE MATTER AND CLAY CLODS.

C. LAWN - ALL DISTURBED AREAS ARE TO BE TREATED WITH A MINIMUM SIX INCH (6") THICK LAYER OF TOPSOIL, OR AS DIRECTED BY THE LOCAL ORDINANCE OR CLIENT, AND SEEDED OR SODDED IN ACCORDANCE WITH THE PERMANENT STABILIZATION METHODS INDICATED WITHIN THE SOIL EROSION AND SEDIMENT CONTROL NOTES. 1. LAWN SEED MIXTURE SHALL BE FRESH, CLEAN NEW CROP SEED. II. SOD SHALL BE STRONGLY ROOTED, WEED AND DISEASE/PEST FREE WITH A UNIFORM

HOLD SOD IN PLACE. D. MULCH - ALL PLANTING BEDS SHALL BE MULCHED WITH A 3" THICK LAYER OF DOUBLE SHREDDED HARDWOOD BARK MULCH, UNLESS OTHERWISE STATED ON THE LANDSCAPE PLAN.

I. FERTILIZER SHALL BE DELIVERED TO THE SITE MIXED AS SPECIFIED IN THE ORIGINAL UNOPENED STANDARD BAGS SHOWING WEIGHT, ANALYSIS AND NAME OF MANUFACTURER. FERTILIZER SHALL BE STORED IN A WEATHERPROOF PLACE SO THAT IT CAN BE KEPT

THICKNESS. SOD INSTALLED ON SLOPES GREATER THAN 4:1 SHALL BE PEGGED TO

II. FOR THE PURPOSE OF BIDDING, ASSUME THAT FERTILIZER SHALL BE 10% NITROGEN, 6% PHOSPHORUS AND 4% POTASSIUM BY WEIGHT. A FERTILIZER SHOULD NOT BE SELECTED WITHOUT A SOIL TEST PERFORMED BY A CERTIFIED SOIL LABORATORY.

. PLANT MATERIAL I. ALL PLANTS SHALL IN ALL CASES CONFORM TO THE REQUIREMENTS OF THE "AMERICAN STANDARD FOR NURSERY STOCK" (ANSI Z60.1), LATEST EDITION, AS PUBLISHED BY THE AMERICAN NURSERY & LANDSCAPE ASSOCIATION II. IN ALL CASES, BOTANICAL NAMES SHALL TAKE PRECEDENCE OVER COMMON NAMES

FOR ANY AND ALL PLANT MATERIAL. III. PLANTS SHALL BE LEGIBLY TAGGED WITH THE PROPER NAME AND SIZE. TAGS ARE TO REMAIN ON AT LEAST ONE PLANT OF EACH SPECIES FOR VERIFICATION PURPOSES DURING THE FINAL INSPECTION.

IV. TREES WITH ABRASION OF THE BARK, SUN SCALDS, DISFIGURATION OR FRESH CUTS OF LINBS OVER 11/4", WHICH HAVE NOT BEEN COMPLETELY CALLUSED, SHALL BE REJECTED. PLANTS SHALL NOT BE BOUND WITH WIRE OR ROPE AT ANY TIME SO AS TO DAMAGE THE BARK OR BREAK BRANCHES.

V. ALL PLANTS SHALL BE TYPICAL OF THEIR SPECIES OR VARIETY AND SHALL HAVE A NORMAL HABIT OF GROWTH: WELL DEVELOPED BRANCHES, DENSELY FOLIATED, VIGOROUS ROOT SYSTEMS AND BE FREE OF DISEASE, INSECTS, PESTS, EGGS OR LARVAE. VI. CALIPER MEASUREMENTS OF NURSERY GROWN TREES SHALL BE TAKEN AT A POINT ON THE TRUNK SIX INCHES (6") ABOVE THE NATURAL GRADE FOR TREES UP TO AND INCLUDING A FOUR INCH (4") CALIPER SIZE. IF THE CALIPER AT SIX INCHES (6") ABOVE THE GROUND EXCEEDS FOUR INCHES (4") IN CALIPER, THE CALIPER SHOULD BE MEASURED AT A POINT

12" ABOVE THE NATURAL GRADE. VII. SHRUBS SHALL BE MEASURED TO THE AVERAGE HEIGHT OR SPREAD OF THE SHRUB, AND

NOT TO THE LONGEST BRANCH. VIII. TREES AND SHRUBS SHALL BE HANDLED WITH CARE BY THE ROOT BALL.

A. CONTRACTOR TO UTILIZE WORKMANLIKE INDUSTRY STANDARDS IN PERFORMING ALL LANDSCAPE CONSTRUCTION. THE SITE IS TO BE LEFT IN A CLEAN STATE AT THE END OF EACH WORKDAY. ALL DEBRIS, MATERIALS AND TOOLS SHALL BE PROPERLY STORED, STOCKPILED OR DISPOSED OF.

B. WASTE MATERIALS AND DEBRIS SHALL BE COMPLETELY DISPOSED OF AT THE CONTRACTOR'S EXPENSE. DEBRIS SHALL NOT BE BURIED, INCLUDING ORGANIC MATERIALS, BUT SHALL BE REMOVED COMPLETELY FROM THE SITE.

A. BEFORE AND DURING PRELIMINARY GRADING AND FINISHED GRADING, ALL WEEDS AND GRASSES SHALL BE DUG OUT BY THE ROOTS AND DISPOSED OF IN ACCORDANCE WITH GENERAL WORK PROCEDURES OUTLINED HEREIN.

B. ALL EXISTING TREES TO REMAIN SHALL BE PRUNED TO REMOVE ANY DAMAGED BRANCHES. THE ENTIRE LIMB OF ANY DAMAGED BRANCH SHALL BE CUT OFF AT THE TRUNK. CONTRACTOR SHALL ENSURE THAT CUTS ARE SMOOTH AND STRAIGHT. ANY EXPOSED ROOTS SHALL BE CUT BACK WITH CLEAN, SHARP TOOLS AND TOPSOIL SHALL BE PLACED AROUND THE REMAINDER OF THE ROOTS. EXISTING TREES SHALL BE MONITORED ON A REGULAR BASIS FOR ADDITIONAL ROOT OR BRANCH DAMAGE AS A RESULT OF CONSTRUCTION. ROOTS SHALL NOT BE LEFT EXPOSED FOR MORE THAN ONE (1) DAY. CONTRACTOR SHALL WATER EXISTING TREES AS NEEDED TO PREVENT SHOCK OR DECLINE.

C. CONTRACTOR SHALL ARRANGE TO HAVE A UTILITY STAKE-OUT TO LOCATE ALL UNDERGROUND UTILITIES PRIOR TO INSTALLATION OF ANY LANDSCAPE MATERIAL. UTILITY COMPANIES SHALL BE CONTACTED THREE (3) DAYS PRIOR TO THE BEGINNING OF WORK.

A. CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING TREES TO REMAIN. A TREE PROTECTION ZONE SHALL BE ESTABLISHED AT THE DRIP LINE OR 15 FEET FROM THE TRUNK OR AT THE LIMIT OF CONSTRUCTION DISTURBANCE, WHICHEVER IS GREATER. LOCAL STANDARDS THAT MAY REQUIRE A MORE STRICT TREE PROTECTION ZONE

B. A FORTY-EIGHT INCH (48") HIGH WOODEN SNOW FENCE OR ORANGE COLORED HIGH-DENSITY 'VISI-FENCE', OR APPROVED EQUAL, MOUNTED ON STEEL POSTS SHALL BE PLACED ALONG THE BOUNDARY OF THE TREE PROTECTION ZONE. POSTS SHALL BE LOCATED AT A MAXIMUM OF EIGHT FEET (8') ON CENTER OR AS INDICATED WITHIN THE TREE PROTECTION DETAIL.

PROTECTION ZONE SHALL BE REGULARLY INSPECTED BY THE LANDSCAPE CONTRACTOR AND MAINTAINED UNTIL ALL CONSTRUCTION ACTIVITY HAS BEEN COMPLETED.

C. WHEN THE TREE PROTECTION FENCING HAS BEEN INSTALLED, IT SHALL BE INSPECTED BY THE APPROVING AGENCY PRIOR TO DEMOLITION, GRADING, TREE CLEARING OR ANY OTHER CONSTRUCTION. THE FENCING ALONG THE TREE

D. AT NO TIME SHALL MACHINERY, DEBRIS, FALLEN TREES OR OTHER MATERIALS BE PLACED, STOCKPILED OR LEFT STANDING IN THE TREE PROTECTION ZONE.

A. CONTRACTOR SHALL ATTAIN A SOIL TEST FOR ALL AREAS OF THE SITE PRIOR TO CONDUCTING ANY PLANTING. SOIL TESTS SHALL BE PERFORMED BY A CERTIFIED SOIL LABORATORY.

3, LANDSCAPE CONTRACTOR SHALL REPORT ANY SOIL OR DRAINAGE CONDITIONS CONSIDERED DETRIMENTAL TO THE GROWTH OF PLANT MATERIAL. SOIL MODIFICATIONS, AS SPECIFIED HEREIN, MAY NEED TO BE CONDUCTED BY THE LANDSCAPE CONTRACTOR DEPENDING ON SITE CONDITIONS.

C. THE FOLLOWING AMENDMENTS AND QUANTITIES ARE APPROXIMATE AND ARE FOR BIDDING PURPOSES ONLY. COMPOSITION OF AMENDMENTS SHOULD BE REVISED DEPENDING ON THE OUTCOME OF A TOPSOIL ANALYSIS PERFORMED BY A CERTIFIED SOIL LABORATORY. I, TO INCREASE A SANDY SOIL'S ABILITY TO RETAIN WATER AND NUTRIENTS, THOROUGHLY TILL

ORGANIC MATTER INTO THE TOP 6-12". USE COMPOSTED BARK, COMPOSTED LEAF MULCH OR PEAT MOSS. ALL PRODUCTS SHOULD BE COMPOSTED TO A DARK COLOR AND BE FREE OF PIECES WITH IDENTIFIABLE LEAF OR WOOD STRUCTURE. AVOID MATERIAL WITH A PH HIGHER THAN 7.5. II. TO INCREASE DRAINAGE, MODIFY HEAVY CLAY OR SILT (MORE THAN 40% CLAY OR SILT) BY ADDING COMPOSTED PINE BARK (UP TO 30% BY VOLUME) AND/OR AGRICULTURAL GYPSUM.

COARSE SAND MAY BE USED IF ENOUGH IS ADDED TO BRING THE SAND CONTENT TO MORE THAN 60% OF THE TOTAL MIX. SUBSURFACE DRAINAGE LINES MAY NEED TO BE ADDED TO III. MODIFY EXTREMELY SANDY SOILS (MORE THAN 85%) BY ADDING ORGANIC MATTER AND/OR

DRY, SHREDDED CLAY LOAM UP TO 30% OF THE TOTAL MIX.

A. UNLESS OTHERWISE CONTRACTED, THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION OF TOPSOIL AND THE ESTABLISHMENT OF FINE-GRADING WITHIN THE DISTURBANCE AREA OF THE SITE.

B. LANDSCAPE CONTRACTOR SHALL VERIFY THAT SUBGRADE FOR INSTALLATION OF TOPSOIL HAS BEEN ESTABLISHED. THE SUBGRADE OF THE SITE MUST MEET THE FINISHED GRADE LESS THE REQUIRED TOPSOIL THICKNESS (1"±).

C. ALL LAWN AND PLANTING AREAS SHALL BE GRADED TO A SMOOTH, EVEN AND UNIFORM PLANE WITH NO ABRUPT CHANGE OF SURFACE AS DEPICTED WITHIN THIS SET OF CONSTRUCTION PLANS, UNLESS OTHERWISE DIRECTED BY THE PROJECT ENGINEER OR LANDSCAPE ARCHITECT.

D. ALL PLANTING AREAS SHALL BE GRADED AND MAINTAINED TO ALLOW FREE FLOW OF SURFACE WATER IN AND AROUND THE PLANTING BEDS. STANDING WATER SHALL NOT BE PERMITTED IN PLANTING BEDS.

-UNDISTURBED SOILS

RETAINED BACKFILL

3/4" CLEANSTONE

DRAIN FIELD

TREE WELL DETAIL

NOT TO SCALE

A. CONTRACTOR SHALL PROVIDE A SIX INCH (6") THICK MINIMUM LAYER OF TOPSOIL, OR AS DIRECTED BY THE LOCAL ORDINANCE OR CLIENT. IN ALL PLANTING AREAS. TOPSOIL SHOULD BE SPREAD OVER A PREPARED SURFACE IN A UNIFORM LAYER TO ACHIEVE THE DESIRED COMPACTED THICKNESS.

B. ON-SITE TOPSOIL MAY BE USED TO SUPPLEMENT THE TOTAL AMOUNT REQUIRED. TOPSOIL FROM THE SITE MAY BE REJECTED IF IT HAS NOT BEEN PROPERLY REMOVED, STORED AND PROTECTED PRIOR TO CONSTRUCTION.

C. CONTRACTOR SHALL FURNISH TO THE APPROVING AGENCY AN ANALYSIS OF BOTH IMPORTED AND ON-SITE TOPSOIL TO BE UTILIZED IN ALL PLANTING AREAS. THE PH AND NUTRIENT LEVELS MAY NEED TO BE ADJUSTED THROUGH SOIL MODIFICATIONS AS NEEDED TO ACHIEVE THE REQUIRED LEVELS AS SPECIFIED IN THE MATERIALS SECTION ABOVE.

d. all planting and lawn areas are to be cultivated to a depth of six inches (6"). all debris exposed from EXCAVATION AND CULTIVATION SHALL BE DISPOSED OF IN ACCORDANCE WITH GENERAL WORK PROCEDURES SECTION ABOVE. THE FOLLOWING SHALL BE TILLED INTO THE TOP FOUR INCHES (4") IN TWO DIRECTIONS (QUANTITIES BASED ON A 1,000 SQUARE FOOT AREA):

I. 20 POUNDS 'GROW POWER' OR APPROVED EQUAL II. 20 POUNDS NITRO-FORM (COURSE) 38-0-0 BLUE CHIP

E. THE SPREADING OF TOPSOIL SHALL NOT BE CONDUCTED UNDER MUDDY OR FROZEN CONDITIONS

a. Insofar that it is feasible, plant material shall be planted on the day of delivery. In the event that this is NOT POSSIBLE, LANDSCAPE CONTRACTOR SHALL PROTECT UNINSTALLED PLANT MATERIAL. PLANTS SHALL NOT REMAIN UNPLANTED FOR LONGER THAN A THREE DAY PERIOD AFTER DELIVERY. PLANTS THAT WILL NOT BE PLANTED FOR A PERIOD OF TIME GREATER THAN THREE DAYS SHALL BE HEALED IN WITH TOPSOIL OR MULCH TO HELP PRESERVE ROOT MOISTURE.

B. PLANTING OPERATIONS SHALL BE PERFORMED DURING PERIODS WITHIN THE PLANTING SEASON WHEN WEATHER AND SOIL CONDITIONS ARE SUITABLE AND IN ACCORDANCE WITH ACCEPTED LOCAL PRACTICE. PLANTS SHALL NOT BE INSTALLED IN TOPSOIL THAT IS IN A MUDDY OR FROZEN CONDITION.

C. ANY INJURED ROOTS OR BRANCHES SHALL BE PRUNED TO MAKE CLEAN—CUT ENDS PRIOR TO PLANTING UTILIZING CLEAN, SHARP TOOLS. ONLY INJURED OR DISEASED BRANCHING SHALL BE REMOVED.

D. ALL PLANTING CONTAINERS, BASKETS AND NON-BIODEGRADABLE MATERIALS SHALL BE REMOVED FROM ROOT BALLS DURING PLANTING. NATURAL FIBER BURLAP MUST BE CUT FROM AROUND THE TRUNK OF THE TREE AND FOLDED DOWN AGAINST THE ROOT BALL PRIOR TO BACKFILLING.

e. Position trees and shrubs at their intended locations as per the plans and secure the approval of the LANDSCAPE ARCHITECT PRIOR TO EXCAVATING PITS, MAKING NECESSARY ADJUSTMENTS AS DIRECTED.

F. PRIOR TO THE ISSUANCE OF ANY CERTIFICATE OF OCCUPANCY, THE PROPOSED LANDSCAPE, AS SHOWN ON THE APPROVED LANDSCAPE PLAN, MUST BE INSTALLED, INSPECTED AND APPROVED BY THE APPROVING AGENCY. THE APPROVING AGENCY SHALL TAKE INTO ACCOUNT SEASONAL CONSIDERATIONS IN THIS REGARD AS FOLLOWS. THE PLANTING OF TREES, SHRUBS, VINES OR GROUND COVER SHALL OCCUR ONLY DURING THE FOLLOWING PLANTING SEASONS:

1. PLANTS: MARCH 15 TO DECEMBER 15 II. LAWN: MARCH 15 TO JUNE 15 OR SEPT. 1 TO DECEMBER

PLANTINGS REQUIRED FOR A CERTIFICATE OF OCCUPANCY SHALL BE PROVIDED DURING THE NEXT APPROPRIATE SEASON AT THE MUNICIPALITY'S DISCRETION. CONTRACTOR SHOULD CONTACT APPROVING AGENCY FOR POTENTIAL SUBSTITUTIONS.

G. FURTHERMORE, THE FOLLOWING TREE VARIETIES ARE UNUSUALLY SUSCEPTIBLE TO WINTER DAMAGE. WITH TRANSPLANT SHOCK AND THE SEASONAL LACK OF NITROGEN AVAILABILITY, THE RISK OF PLANT DEATH IS GREATLY INCREASED. IT IS NOT RECOMMENDED THAT THESE SPECIES BE PLANTED DURING THE FALL PLANTING SEASON:

ACER RUBRUM PLATANUS X ACERIFOLIA BETULA VARIETIES POPULOUS VARIETIES CARPINUS VARIETIES PRUNUS VARIETIES CRATAEGUS VARIETIES PYRUS VARIETIES KOELREUTERIA QUERCUS VARIETIES

LIQUIDAMBER STYRACIFLUA TILIA TOMENTOSA LIRIODENDRON TULIPIFERA ZELKOVA VARIETIES

H. PLANTING PITS SHALL BE DUG WITH LEVEL BOTTOMS, WITH THE WIDTH TWICE THE DIAMETER OF ROOT BALL. THE ROOT BALL SHALL REST ON UNDISTURBED GRADE. EACH PLANT PIT SHALL BE BACKFILLED IN LAYERS WITH THE FOLLOWING PREPARED SOIL MIXED THOROUGHLY:

THERE IS NO "AS-BUILT" INFORMATION PROVIDED ON THIS SHEET.

IICHAEL D. ADCOCK, PROFESSIONAL LAND SURVEYOR

MD REG. NO. 21257, EXPIRATION DATE: 06-16-15

AS-BUILT CERTIFICATION

I, 1 PART PEAT MOSS II. 1 PART COMPOSTED COW MANURE BY VOLUME III. 3 PARTS TOPSOIL BY VOLUME

IV. 21 GRAMS 'AGRIFORM' PLANTING TABLETS (OR APPROVED EQUAL) AS FOLLOWS: A) 2 TABLETS PER 1 GALLON PLANT

B) 3 TABLETS PER 5 GALLON PLANT C) 4 TABLETS PER 15 GALLON PLANT

D) LARGER PLANTS: 2 TABLETS PER 1/2" CALIPER OF TRUNK

1. FILL PREPARED SOIL AROUND BALL OF PLANT HALF-WAY AND INSERT PLANT TABLETS. COMPLETE BACKFILL AND WATER

J. ALL PLANTS SHALL BE PLANTED SO THAT THE TOP OF THE ROOT BALL, THE POINT AT WHICH THE ROOT FLARE BEGINS, IS SET AT GROUND LEVEL AND IN THE CENTER OF THE PIT. NO SOIL IS TO BE PLACED DIRECTLY ON TOP OF THE ROOT BALL. K. ALL PROPOSED TREES DIRECTLY ADJACENT TO WALKWAYS OR DRIVEWAYS SHALL BE PRUNED AND MAINTAINED TO A MINIMUM BRANCHING HEIGHT OF 7' FROM GRADE.

L. Ground cover areas shall receive a 1/4" layer of humus raked into the top 1" of prepared soil prior to PLANTING. ALL GROUND COVER AREAS SHALL BE WEEDED AND TREATED WITH A PRE-EMERGENT CHEMICAL AS PER MANUFACTURER'S RECOMMENDATION.

M. NO PLANT, EXCEPT GROUND COVERS, GRASSES OR VINES, SHALL BE PLANTED LESS THAN TWO FEET (2') FROM EXISTING

N. ALL PLANTING AREAS AND PLANTING PITS SHALL BE MULCHED AS SPECIFIED HEREIN TO FILL THE ENTIRE BED AREA OR SAUCER. NO MULCH IS TO TOUCH THE TRUNK OF THE TREE OR SHRUB.

O. ALL PLANTING AREAS SHALL BE WATERED IMMEDIATELY UPON INSTALLATION IN ACCORDANCE WITH THE WATERING SPECIFICATIONS AS LISTED HEREIN.

10. TRANSPLANTING (WHEN REQUIRED)

A. ALL TRANSPLANTS SHALL BE DUG WITH INTACT ROOT BALLS CAPABLE OF SUSTAINING THE PLANT. B. IF PLANTS ARE TO BE STOCKPILED BEFORE REPLANTING, THEY SHALL BE HEALED IN WITH MULCH OR SOIL, ADEQUATELY

WATERED AND PROTECTED FROM EXTREME HEAT, SUN AND WIND.

C. PLANTS SHALL NOT BE DUG FOR TRANSPLANTING BETWEEN APRIL 10 AND JUNE 30.

D. UPON REPLANTING, BACKFILL SOIL SHALL BE AMENDED WITH FERTILIZER AND ROOT GROWTH HORMONE.

E. TRANSPLANTS SHALL BE GUARANTEED FOR THE LENGTH OF THE GUARANTEE PERIOD SPECIFIED HEREIN.

F. IF TRANSPLANTS DIE. SHRUBS AND TREES LESS THAN SIX INCHES (6") DBH SHALL BE REPLACED IN KIND. TREES GREATER THAN SIX INCHES (6") DBH MAY BE REQUIRED TO BE REPLACED IN ACCORDANCE WITH THE MUNICIPALITY'S TREE REPLACEMENT

A. NEW PLANTINGS OR LAWN AREAS SHALL BE ADEQUATELY IRRIGATED BEGINNING IMMEDIATELY AFTER PLANTING. WATER SHALL BE APPLIED TO EACH TREE AND SHRUB IN SUCH MANNER AS NOT TO DISTURB BACKFILL AND TO THE EXTENT THAT ALL MATERIALS IN THE PLANTING HOLE ARE THOROUGHLY SATURATED. WATERING SHALL CONTINUE AT LEAST UNTIL PLANTS ARE

B. SITE OWNER SHALL PROVIDE WATER IF AVAILABLE ON SITE AT TIME OF PLANTING. IF WATER IS NOT AVAILABLE ON SITE, CONTRACTOR SHALL SUPPLY ALL NECESSARY WATER. THE USE OF WATERING BAGS IS RECOMMENDED FOR ALL NEWLY PLANTED

C. IF AN IRRIGATION SYSTEM HAS BEEN INSTALLED ON THE SITE, IT SHALL BE USED TO WATER PROPOSED PLANT MATERIAL, BUT ANY FAILURE OF THE SYSTEM DOES NOT ELIMINATE THE CONTRACTOR'S RESPONSIBILITY OF MAINTAINING THE DESIRED MOISTURE LEVEL FOR VIGOROUS, HEALTHY GROWTH.

A. THE LANDSCAPE CONTRACTOR SHALL GUARANTEE ALL PLANTS FOR A PERIOD OF ONE (1) YEAR FROM APPROVAL OF LANDSCAPE INSTALLATION BY THE APPROVING AGENCY. CONTRACTOR SHALL SUPPLY THE OWNER WITH A MAINTENANCE BOND FOR TEN PERCENT (10%) OF THE VALUE OF THE LANDSCAPE INSTALLATION WHICH WILL BE RELEASED AT THE CONCLUSION OF

THE GUARANTEE PERIOD AND WHEN A FINAL INSPECTION HAS BEEN COMPLETED AND APPROVED BY THE OWNER OR AUTHORIZED B. ANY DEAD OR DYING PLANT MATERIAL SHALL BE REPLACED FOR THE LENGTH OF THE GUARANTEE PERIOD. REPLACEMENT OF PLANT MATERIAL SHALL BE CONDUCTED AT THE FIRST SUCCEEDING PLANTING SEASON. ANY DEBRIS SHALL BE DISPOSED OF

C. TREES AND SHRUBS SHALL BE MAINTAINED BY THE CONTRACTOR DURING CONSTRUCTION AND THROUGHOUT THE 90 DAY MAINTENANCE PERIOD AS SPECIFIED HEREIN. CULTIVATION, WEEDING, WATERING AND THE PREVENTATIVE TREATMENTS SHALL BE PERFORMED AS NECESSARY TO KEEP PLANT MATERIAL IN GOOD CONDITION AND FREE OF INSECTS AND DISEASE.

D. LAWNS SHALL BE MAINTAINED THROUGH WATERING, FERTILIZING, WEEDING, MOWING, TRIMMING AND OTHER OPERATIONS SUCH AS ROLLING, REGARDING AND REPLANTING AS REQUIRED TO ESTABLISH A SMOOTH, ACCEPTABLE LAWN, FREE OF ERODED OR

A. UPON THE COMPLETION OF ALL LANDSCAPE INSTALLATION AND BEFORE THE FINAL ACCEPTANCE, THE CONTRACTOR SHALL REMOVE ALL UNUSED MATERIALS, EQUIPMENT AND DEBRIS FROM THE SITE. ALL PAVED AREAS ARE TO BE CLEANED.

8. THE SITE SHALL BE CLEANED AND LEFT IN A NEAT AND ACCEPTABLE CONDITION AS APPROVED BY THE OWNER OR AUTHORIZED REPRESENTATIVE.

14. MAINTENANCE (ALTERNATIVE BID):

OFF-SITE, WITHOUT EXCEPTION.

A 90 DAY MAINTENANCE PERIOD SHALL COMMENCE AT THE END OF ALL LANDSCAPE INSTALLATION OPERATIONS. THE 90 DAY MAINTENANCE PERIOD ENSURES TO THE OWNER/OPERATOR THAT THE NEWLY INSTALLED LANDSCAPING HAS BEEN MAINTAINED AS SPECIFIED ON THE APPROVED LANDSCAPE PLAN. ONCE THE INITIAL 90 DAY MAINTENANCE PERIOD HAS EXPIRED, THE OWNER/OPERATOR MAY REQUEST THAT BIDDERS SUBMIT AN ALTERNATE MAINTENANCE BID FOR A MONTHLY MAINTENANCE CONTRACT. THE ALTERNATE MAINTENANCE CONTRACT WILL ENCOMPASS ANY WORK THAT IS CONSIDERED APPROPRIATE TO ENSURE THAT PLANT AND LAWN AREAS ARE HEALTHY AND MANICURED TO THE APPROVAL OF THE OWNER/OPERATOR.

THE CONTRACTOR TO CALL MISS UTILITY TO HAVE ALL EXISTING UTILITIES MARKED 48 HOURS PRIOR TO ANY CONSTRUCTION. APPROVED: DEPARTMENT OF PLANNING AND ZONING APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS.

THIS DRAWING DOES NOT INCLUDE NECESSARY

COMPONENTS FOR CONSTRUCTION SAFETY, ALL

WITH THE OCCUPATIONAL SAFETY AND HEALTH

ACT OF 1970 AND ALL RULES AND

REGULATIONS THERETO APPURTENANT.

REVISION DESCRIPTION DEVELOPER: HOPKINS STATION GENERAL PARTNERSHIP CHICK-FIL-A C/O BRANTLY DEVELOPMENT GROUP 5200 BUFFINGTON ROAD 8835 COLUMBIA ATLANTA, GA 30349-2998 100 PARKWAY, SUITE F C/O SCOTT PATMAN COLUMBIA, MD 21045 PHONE: (404) 684-8660 PHONE: (410) 730-0810

CHICK-FIL-A RESTAURANT & GENERAL OFFICE/RETAIL BUILDING PART OF LOT 1, HOPKINS STATION (FORMER PRICE FARMS, LOT1) JOHNS HOPKINS ROAD NUREL, HOWARD COUNTY, MARYLAND

AREA 3.59 AC. TAX MAP 41 GRID 22 ZONED B-2 PARCEL 425 L. 3,095, F. 39 & L. 7004, F. 653 5TH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND

LANDSCAPE NOTES AND DETAILS



DESIGNED BY: JD DRAWN BY: PROJECT NO.: MD056502. DATE: 9/28/06 SCALE: 1"=30'

12/15/06

TO IRRIGATE SEEDED AREA UNTIL AN ACCEPTABLE STAND OF COVER IS ESTABLISHED BY OWNER.

IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO REVIEW ALL OF THE DRAWINGS AND SPECIFICATIONS ASSOCIATED WITH THIS PROJECT WORK SCOPE PRIOR TO THE INITIATION OF CONSTRUCTION, SHOULD THE CONTRACTOR FIND A CONFLICT WITH THE DOCUMENTS RELATIVE TO THE SPECIFICATIONS OR APPLICABLE CODES, IT IS THE CONTRACTORS RESPONSIBILITY TO NOTIFY BOHLER ENGINEERING, P.C. IN WRITING PRIOR TO THE START

SPREADING FESCUE

FERTILIZER (20:10:10)

CONFORMANCE WITH LOCAL REGULATIONS AND CODES.

1 1/2 LBS/1,000 SQ FT

14 LBS/1,000 SQ FT

90 LBS/1,000 SQ FT

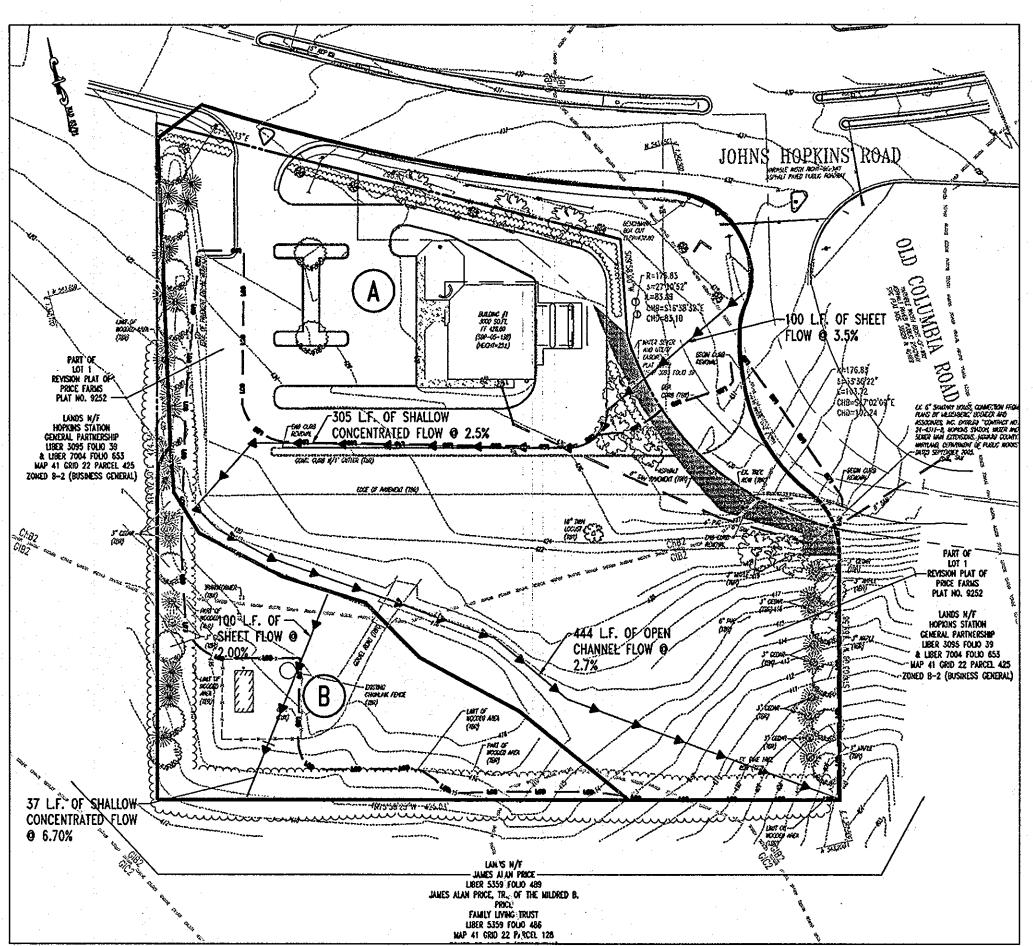
GERMINATION RATES WILL VARY AS TO TIME OF YEAR FOR SOWING. CONTRACTOR

OF CONSTRUCTION. FAILURE BY THE CONTRACTOR TO NOTIFY BOHLER ENGINEERING, P.C.

SHALL CONSTITUTE ACCEPTANCE OF FULL RESPONSIBILITY BY THE CONTRACTOR TO

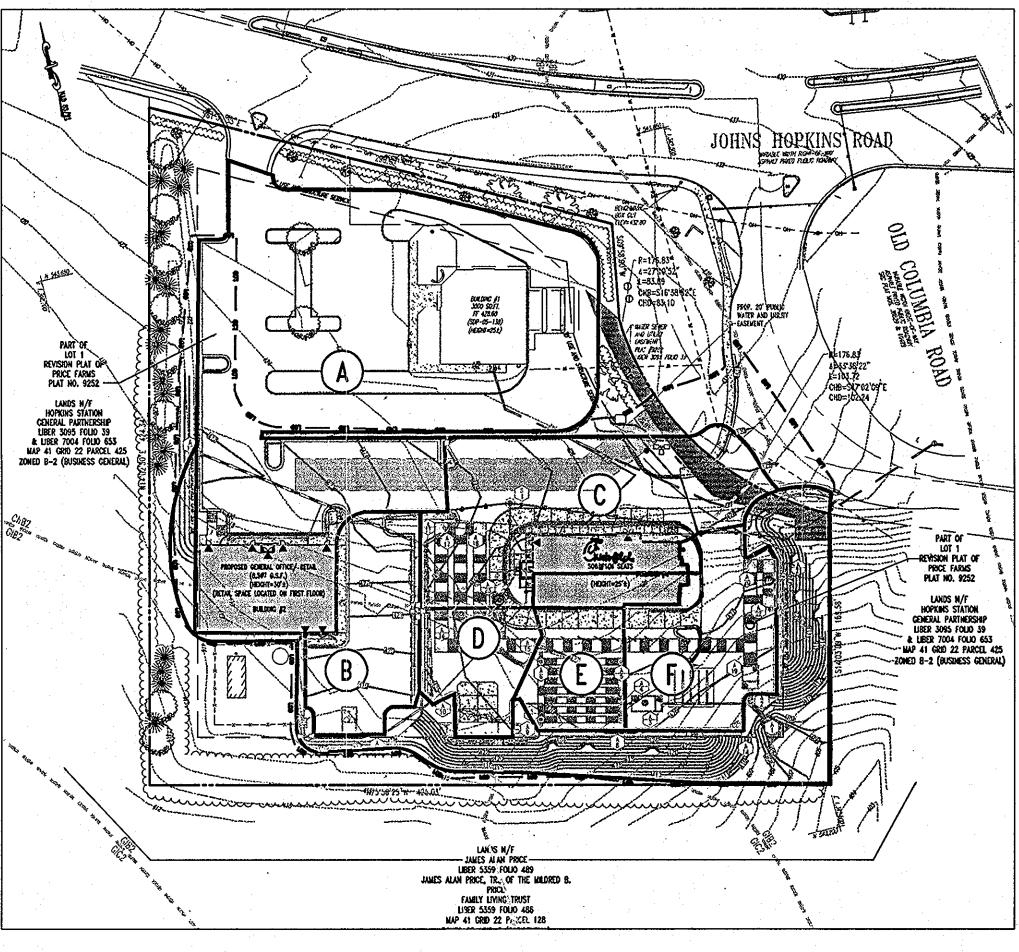
COMPLETE THE SCOPE OF THE WORK AS DEFINED BY THE DRAWINGS AND IN FULL

PROFESSIONAL ENGINEER NO. 28567 DRAWING NO. 16 OF 298



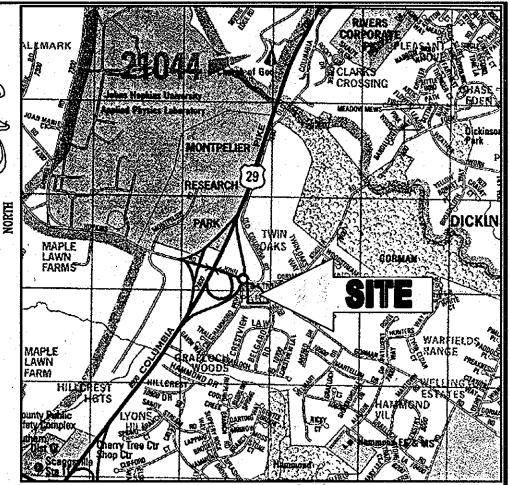
EXISTING STORMDRAIN DRAINAGE AREA SCALE: 1"=60"

- IMPERVIOUS AREA = 39,325 S.F. OR .90 AC. PERVIOUS AREA = 88,862 S.F. OF 2.04 AC. TOTAL AREA = 128,187 S.F. OR 2.94 AC. "C" VALUE = 33 TO 157 L.F. OF SSF
- IMPERVIOUS AREA = 625 S.F. OR 0.01 AC. PERVIOUS AREA = 27,878 S.F. OF 0.64 AC. TOTAL AREA = 28,503 S.F. OR 0.65 AC. "C" VALUE = 16 TO 450 L.F. OF SSF



#### PROPOSED STORMDRAIN DRAINAGE AREA SCALE: 1"=60'

- IMPERVIOUS AREA = 41.880 S.F. OR 0.96 AC. PERVIOUS AREA = 26.720 S.F. OF 0.61 AC. TOTAL AREA = 68,600 S.F. OR 1.57 AC. "C" VALUE = 50
- IMPERVIOUS AREA = 6,902 S.F. OR 0.18 AC. PERVIOUS AREA = 608 S.F. OF 0.01 AC. TOTAL AREA = 7,510 S.F. OF 0.19 AC. "C" VALUE = 69
- IMPERVIOUS AREA = 14,696 S.F. OR 0.33 AC. PERVIOUS AREA = 3,320 S.F. OF 0.07 AC. TOTAL AREA = 18,016 S.F. OR 0.40 AC. "C" VALUE = 62
- IMPERVIOUS AREA = 9,040 S.F. OR 0.21 AC. PERVIOUS AREA = 480 S.F. OR 0.01 AC. TOTAL AREA = 9,520 S.F. OR 0.22 AC. "C" VALUE = 69
- IMPERVIOUS AREA = 3,120 S.F. OR 0.07 AC. PERVIOUS AREA = 0 S.F. OR 0.00 AC. TOTAL AREA = 3,120 S.F. OR 0.07 AC. "C" VALUE = 72
- IMPERVIOUS AREA = 8,310 S.F. OR 0.19 AC. PERVIOUS AREA = 810 S.F. OR 0.02 AC. TOTAL AREA = 9,120 S.F. OR 0.21 AC. "C" VALUE = 66

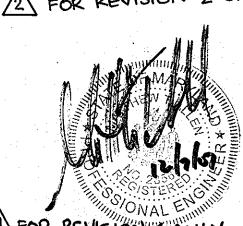


COPYRIGHT ADC THE MAP PEOPLE PERMIT USE NO. 20602153-5 SCALE: 1"=2000'

AS-BUILT



2 FOR REVISION 2 ONLY



1 FOR REVISION TONLY

REVIEWED FOR HOWARD SCD AND MEETS TECHNICAL REQUIREMENTS

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.

HOWARD SCD APPROVED: DEPARTMENT OF PLANNING AND ZONING

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS.

BNUS for Peter Bellinger & COUNTY HEALTH OFFICER HOWARD COUNTY HEALTH DEPARTMENT MODEL

3 4/07/08 SIZE 4 AREA REVISED FOR CFA BUILDING
1 2/06/07 RETAIL BLOC. AREA 4 ACCESS FORT LOCATIONS
NO.: DATE REVISION DESCRIPTION DEVELOPER:

100 PARKWAY, SUITE P COLUMBIA, MD 21045

HOPKINS STATION GENERAL PARTNERSHIP
C/O BRANTLY DEVELOPMENT GROUP
8835 COLUMBIA
C/O BRANTLY DEVELOPMENT GROUP
ATLANTA, GA 30349-2998 ATLANTA, GA 30349-2998 C/O SCOTT PATHAN PHONE: (404) 684-8660 PHONE: (410) 730-0810

CHICK-FIL-A RESTAURANT & GENERAL OFFICE/RETAIL BUILDING PART OF LOT 1, HOPKINS STATION (FORMER PRICE FARMS, LOT1) JOHNS HOPKINS ROAD LAUREL, HOWARD COUNTY, MARYLAND

AREA 3.59 AC. TAX MAP 41 GRID 22 ZONED B-2 PARCEL 425 L. 3,095, F. 39 & L. 7004, F. 653 5TH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND

STORMDRAIN DRAINAGE AREA MAPS

BOHLER

PROJECT NO.: MD056502.

SCALE: AS SHOWN

DRAWING NO. 17 OF 28

SDP # 07-033

9/28/06

DATE:

ENGINEERING, P.C. DESIGNED BY: JD

MATTHEW'T."XLLEN PROFESSIONAL ENGINEER NO. 28567

BE DONE ACCORDING TO THIS PLAN FOR SEDIMENT AND EROSION CONTROL, AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN

3 FOR REVISION 3 ONLY

CHESTER SILT LOAM, 3-8% SLOPES MODERATELY ERODED

GLENELG LOAM, 8-15% SLOPES, MODERATELY ERODED

DRAINAGE AREA LABEL

TC PATH

AS-BUILT CERTIFICATION

THERE IS NO "AS-BUILT" INFORMATION PROVIDED ON THIS SHEET

MICHAEL D. ADCOCK, PROFESSIONAL LAND SURVEYOR MD REG. NO. 21257, EXPIRATION DATE: 06-16-15

ENGINEER'S CERTIFICATE

I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL

REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY

PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE

SIGNATURE OF ENGINEER (PRINT NAME BELOW SIGNATURE)

HOWARD COUNTY SOIL CONSERVATION DISTRICT."

PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN WAS

DEVELOPER'S CERTIFICATE

"I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL:

ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION

THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF

BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION

MISS UTILITY

BEFORE YOU DIG CALL 1-800-257-7777 PROTECT YOURSELF, GIVE TWO WORKING DAYS NOTICE

THIS DRAWING DOES NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY. ALL CONSTRUCTION MUST BE DONE IN COMPLIANCE WITH THE OCCUPATIONAL SAFETY AND HEALTH act of 1970 and all rules and REGULATIONS THERETO APPURTENANT.

THE CONTRACTOR TO CALL MISS UTILITY TO

HAVE ALL EXISTING UTILITIES MARKED 48 HOURS PRIOR TO ANY CONSTRUCTION.

IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO REVIEW ALL OF THE DRAWINGS AND SPECIFICATIONS ASSOCIATED WITH THIS PROJECT WORK SCOPE PRIOR TO THE INITIATION OF CONSTRUCTION. SHOULD THE CONTRACTOR FIND A CONFLICT WITH THE DOCUMENTS RELATIVE TO THE SPECIFICATIONS OR APPLICABLE CODES, IT IS THE CONTRACTORS RESPONSIBILITY TO NOTIFY BOHLER ENGINEERING, P.C. IN WRITING PRIOR TO THE START OF CONSTRUCTION. FAILURE BY THE CONTRACTOR TO NOTIFY BOHLER ENGINEERING, P.C. SHALL CONSTITUTE ACCEPTANCE OF FULL RESPONSIBILITY BY THE CONTRACTOR TO COMPLETE THE SCOPE OF THE WORK AS DEFINED BY THE DRAWINGS AND IN FULL CONFORMANCE WITH LOCAL REGULATIONS AND CODES.

#### PART 1 GENERAL

#### 1.1 Description

The Contractor shall furnish and Install the StormFilter stormwater treatment system, complete and operable as shown and as specified herein, in accordance with the requirements of the plans and contract documents.

StormFilter stormwater treatment system shall consist of an underground Pre-Cast or Cast-In-Place structure that houses passive siphon-actuated, radial-flow media-filled filter cartridges.

The radial-flow filter cartridges shall be rechargeable, and shall incorporate a self actuated surface cleaning mechanism to increase the effective life of the filter media and to reduce the accumulation of material on the cartridge interface.

Each radial-flow filter cartridge shall operate at a predetermined flow rate through the use of an integrated flow control orifice located within each filter cartridge.

#### 1.2. Manufacturer

The StormFilter stormwater treatment system shall be of a type that has been Installed and in use successfully for a minimum of five (5) or more years. StormFilter stormwater treatment system shall be supplied by Stormwater Management, Inc. (SMI), 12021-B NE Airport Way, Portland, OR 97220 (800/548-4667), without

#### 1.3 Related Sections

#### 1.4 Submittals

- Submit shop drawings for StormFilter stormwater treatment system vault, filter media cartridges and accessory equipment including principal dimensions, filter placement, location of ploing and unit foundation.
- Submit StormFilter stormwater treatment system Operation and Maintenance Manual upon request.

#### PART 2 PRODUCTS

#### 2.1 Internal Components

All internal components including ABS and PVC manifold piping, filter cartridge(s). filter media (as specified on the plans in the StormFilter data block or by the Engineer), flow spreaders, and energy dissipaters shall be provided by Stormwater Management, Inc.

- A. PVC manifold pipe and fittings shall meet ASTM D1785. ABS manifold pipe and fittings shall meet ASTM F-628.
- B. Filter cartridge bottom pan, inner ring, and hood shall be constructed from spun linear low-density polyethylene (LLDPE). Filter cartridge screen shall consist of galvanized 1" x 1/2" welded wire fabric (16 gauge minimum) with a bonded PVC coating. Internal parts shall consist of PVC or ABS pipe and fittings. Siphon-priming float shall be constructed from linear low-density polyethylene. Outer filter fabric shall be 10 x 8.5 clear fiberglass mesh. Inner filter fabric shall be 10 x 8.5 clear fiberglass mesh over Enkamat 7210 or woven polyethylene with a US Standard Sieve #20 opening size. All miscellaneous nuts, bolts, screws, and other fasteners shall be stainless steel.

An orifice plate shall be supplied with each cartridge to restrict flow rate to a maximum of between 5-15 GPM per specific design requirements.

- C. Filter media shall be provided by SMI or approved alternate source. Filter media shall consist of one or more of the following, as specified in the StormFilter data block, or by the Engineer:
- 1. Perlite Media: Perlite media shall be made of natural siliceous volcanto rock free of any debris or foreign matter. The perlite media shall have a bulk density ranging from 6.5 to 8.5 lb/ft3 and particle sizes ranging \_\_\_\_from 0.06 to 0.50 inches.

2. CSF Leaf Media: CSF leaf media shall be made exclusively of fallen deciduous leaves with less than 5% by dry weight of woody or green yard debris materials. Filter media shall be granular and shall contain less than 0.5% foreign material such as glass or plastic contaminants. Media shall be dry at the time of installation.

T IS THE RESPONSIBILITY OF THE CONTRACTOR TO REVIEW ALL OF THE DRAWINGS AND

PECIFICATIONS ASSOCIATED WITH THIS PROJECT WORK SCOPE PRIOR TO THE INITIATION

ESPONSIBILITY TO NOTIFY BOHLER ENGINEERING, P.C. IN WRITING PRIOR TO THE START

F CONSTRUCTION, FAILURE BY THE CONTRACTOR TO NOTIFY BOHLER ENGINEERING, P.C.

SHALL CONSTITUTE ACCEPTANCE OF FULL RESPONSIBILITY BY THE CONTRACTOR TO

COMPLETE THE SCOPE OF THE WORK AS DEFINED BY THE DRAWINGS AND IN FULL

CONFORMANCE WITH LOCAL REGULATIONS AND CODES.

The CSF leaf media shall have a bulk density ranging from 40 to 50 lb/ft3 and particle sizes ranging from 0.05 to 0.625 inches for at least 90% of particles. Maximum level of dust for filter media shall be defined as: media passing through a US Standard Sieve #4 shall have no more than 10% (by mass of dry media) passing a US Standard Sieve #45.

- 3. XECSF Leaf Media: CSF leaf media shall be made exclusively of fallen deciduous leaves with less than 5% by dry weight of woody or green yard debris materials. Filter media shall be granular and shall contain less than 0.5% foreign material such as glass or plastic contaminants. Media shall be dry at the time of installation.
- The XFCSF leaf media shall have a bulk density ranging from 45 to 65 lb/ft3. Particle size range is dependent upon manufacturing conditions at the time of production. Media produced fer [this project] shall have a particle size between 0.05 and 9.25 inches for 90% of particles. Maximum level of dust for filter media shall be defined as: media passing through a US Standard Sleve #4 shall have no more than 10%
- 4. Zeolite Media: Zeolite media shall be made of naturally occurring clinoptilolite, which has a geological structure of potassium calcium

(by mass of dry media) passing a US Standard Sieve #45.

capacity ranging from 1.0 to 2.2 meq/g.

- sodium aluminosilicate. The zeolite media shall have a bulk density ranging from 44 to 50 lb/ft³, particle-eizes ranging from 0.125 to 0.25 inches, and a cation exchange
- 5. Iron-Infused Media: Iron-infused media shall be made from phenolic resin mixed with iron particles and polymerized to form open cellular foam. The stock materials must be free of debris with the iron particles being non-reactive and non-greaced.
- The iron-infused media shall have a bulk density ranging from 20 to 30 \_\_\_\_\_\_15/ft<sup>3</sup> and particle sizes ranging from 0.0 to 0.5 inches.
- 6. Granular Activated Carbon: Granular activated carbon (GAC) shall be made of lignite coal that has been steam activated. The GAC media shall have a bulk density ranging from 24 to 26 lb/ft3 and particle sizes \_\_\_\_ranging from 0.07 to 0.19 inches.
- 7. Zeolite Perlite Granular Activated Carbon (ZPG): ZPG is a mixed media that shall be composed of a 1.4 ft3 outer layer of 100% Perlite (see above) and an inner layer consisting of a 1 ft3 mixture of 90% Zeolite (see above) and 10% Granular Activated Carbon (see above).
- 8. CSF Leaf Granular Activated Carbon : CSF/GAC is a mixed media that shall be composed of a 1.4 ft3 outer layer of 100% CSF Leaf media (see above) and an inner-layer consisting of 1 ft3 of 100% Granular Activated Carbon (see above).
- D. Flow spreader shall be constructed of spun LLDPE.
- E. Energy dissipater shall be constructed of polyolefins.

#### 2.2 Precast Concrete Vault Components

- A. Precast concrete vault shall be provided according to ASTM C478.
- B. Vault joint sealant shall be Conseal CS-101 or Engineer approved.
- C. Frames and covers shall be gray cast iron and shall meet AASHTO H-20 loading requirements, and shall be provided according to ASTM A48.
- D. Steps shall be constructed of copolymer polypropylene conforming to ASTM D-4101. Steps shall be driven into preformed or drilled holes once concrete is cured. Steps shall meet the requirements of ASTM C-478 and AASHTO M-199. The 1/2" Grade 60 deformed reinforcing bar shall meet ASTM A-615.
- E. Ladders shall be constructed of aluminum and steel reinforced copolymer polypropylene conforming to ASTM D-4101. Ladder shall bolt in place and may be equipped with a pull-up ladder extender that shall extend a minimum of 24 inches above the top rung of ladder. Ladder shall meet all ASTM C-497
- Doors shall have hot-dipped galvanized frame and covers. Covers shall have diamond plate finish. Each door to be equipped with a recessed lift handle and a locking latch with 3/8" pentahead hold-down bolts. Pentahead wrench to be provided for each set of doors, upon request. Doors shall meet H-20 loading requirements for incidental traffic minimum.

#### All contractor-provided components shall meet the requirements of this section, the plans specifications and contract documents. In the case of conflict, the more stringent specification shall apply.

- A. Crushed rock base material shall be six-inch minimum layer of %-inch minus rock. Compact undisturbed sub-grade materials to 95% of maximum density at +/-2% of optimum moisture content. Unsultable material below sub-grade shall be replaced to engineer's approval.
- Concrete shall have an unconfined compressive strength at 28 days of at least 3000 psi, with %-inch round rock, a 4-inch slump maximum, and be placed within 90 minutes of initial mixing.
- Silicone Sealant shall be pure RTV silicone conforming to Federal Specification Number TT S001543A or TT S00230C or Engineer approved.
- Grout shall be non-shrink grout meeting the requirements of Corps of Engineers CRD-C588. Specimens molded, cured and tested in accordance with ASTM C-109 shall have minimum compressive strength of 6,200 psi. Grout shall not exhibit visible bleeding.
- Backfill material shall be %-inch minus crushed rock, or approved equal.

#### 3.1 Precast Concrete Vault

Place precast manhole on crushed rock base material that has been placed in maximum 12-inch lifts, loose thickness, and compact to at least 95-percent of the maximum dry density as determined by the standard Proctor compaction test, ASTM D698, at moisture content from Q- to 2-percent above optimum

Inlet and outlet pipes shall be stubbed in and connected to precast concrete

- Contractor to grout all inlet and outlet pipes flush with manhole interior wall.
- manhole according to Engineer's requirements and specifications. 3.2 When required, ballast shall be to the dimensions specified by the engineer and noted on the data block. Ballast shall not encase the inlet and/or outlet piping.

Provide 12\* clearance from outside diameter of pipe.

- - Remove all excess materials, rocks, roots, or foreign material, leaving the site in a clean, complete condition approved by the engineer. All filter components shall be free of any foreign materials including concrete and excess sealant.

#### 3.4 Filter Cartridges

- Construction site runoff shall be directed around the StormFilter unit. Filter cartridges shall not be placed online until the project site is clean and stabilized. The project site includes any surface that contributes storm drainage to the StormFilter™. All Impermeable surfaces shall be clean and free of dirt and debris. All catch basins, manholes and pipes shall be free of dirt and sediments.
- SMI will deliver filter cartridges complete with filter media preinstalled into vaults. Plugs will be provided for all manifold fittings not equipped with a filter
- C. Contractor shall prevent construction runoff from entering the StormFilter

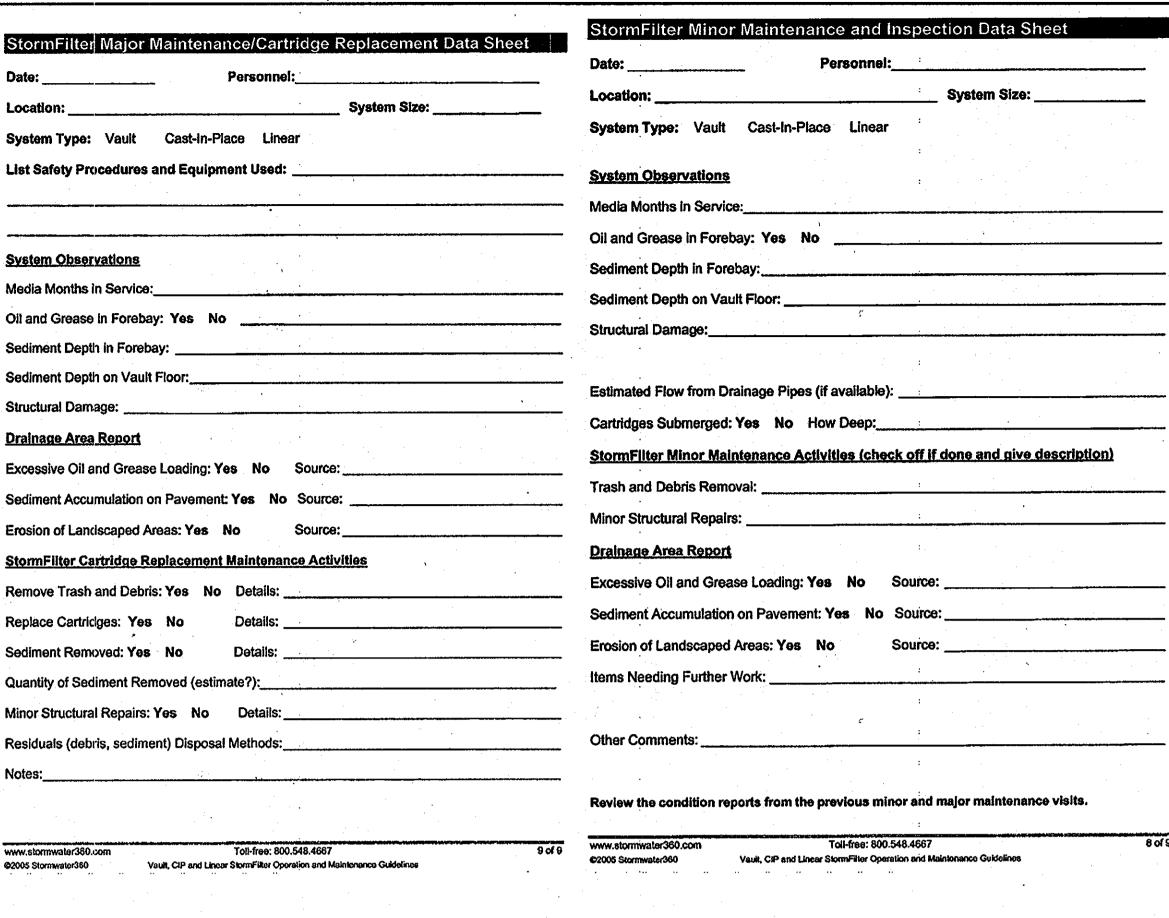
(SEE NOTE 8)

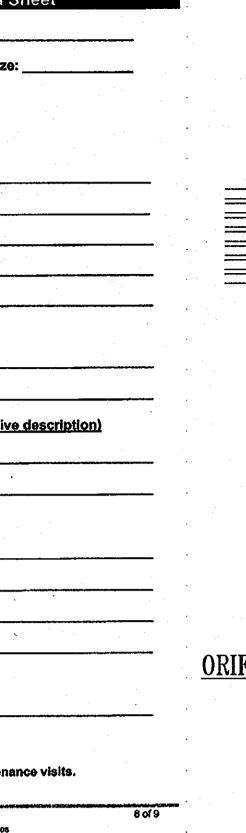
AND COVER (SEE NOTE 4

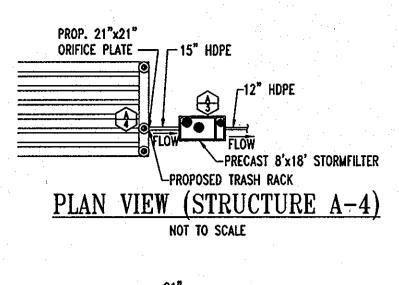
9" MAX FOR 24" # F&C

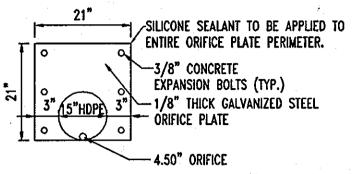
COUPLING (TYP) (I CONTRACTOR)

(SEE NOTES 5&6)









1/8" STEEL THICK ORIFICE PLATE TO BE BOLTED TO THE UPSTREAM END OF THE 15" PIPE AND LOCATED INSIDE STRUCTURE A-4 ORIFICE PLATE DETAIL FOR STRUCTURE A-4

> ALL PIPE CONNECTIONS WILL REQUIRE RUBBER GASKETS TO PROVIDE A WATERTIGHT JOINT

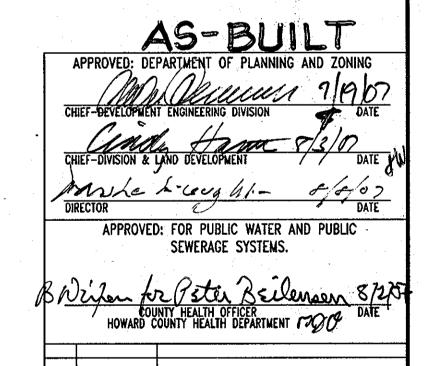
NOT TO SCALE

AS-BUILT CERTIFICATION

I HEREBY CERTIFY, BY MY SEAL, THAT THE CONDITIONS SHOWN ON THIS PLAN WERE CONSTRUCTED TO THE LINES AND GRADES SHOWN ON THIS "AS-BUILT" PLAN. AND MEET THE APPROVED PLANS AND SPECIFICATIONS AND ALSO THAT THESE DOCUMENTS WERE PREPARED BY ME OR UNDER MY RESPONSIBLE CHARGE AND THAT I AM A DULY LICENSED PROFESSIONAL LAND SURVEYOR UNDER THE LAWS OF THE STATE OFFI

MARYLAND. Mul Q. La MICHAEL D. ADOOCK, PROFESSIONAL LAND SURVEYOR MD REG. NO. 21257, EXPIRATION DATE: 06-16-15

> NOTE: ALL DEBRIS IS TO BE KEPT OUT OF FACILITY DURING AND AFTER CONSTRUCTION



REVISION DESCRIPTION DEVELOPER: HOPKINS STATION GENERAL PARTNERSHIP
C/O BRANTLY DEVELOPMENT GROUP
5200 BUFFING 5200 BUFFINGTON ROAD ATLANTA, GA 30349-2998 100 PARKWAY, SUITE P C/O SCOTT PATMAN COLUMBIA, MD 21045 PHONE: (404) 684-8660

PHONE: (410) 730-0810 CHICK-FIL-A RESTAURANT & GENERAL OFFICE/RETAIL BUILDING PART OF LOT 1, HOPKINS STATION (FORMER PRICE FARMS, LOT1) JOHNS HOPKINS ROAD <u>rel, howard county, maryland</u>

AREA 3.59 AC. TAX MAP 41 GRID 22 ZONED B-2 PARCEL 425 L. 3,095, F. 39 & L. 7004, F. 653 5TH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND

STORMWATER MANAGEMENT NOTES AND DETAILS

Bohler NGINEERING, P.C

BEFORE YOU DIG CALL 1-800-257-7777 PROTECT YOURSELF, GIVE TWO WORKING DAYS NOTICE THIS DRAWING DOES NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY. ALL CONSTRUCTION MUST BE DONE IN COMPLIANCE WITH THE OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970 AND ALL RULES AND RECULATIONS THERETO APPURTENANT. THE CONTRACTOR TO CALL MISS UTILITY TO

MISS UTILITY

HAVE ALL EXISTING UTILITIES WARKED 48

HOURS PRIOR TO ANY CONSTRUCTION.

12/15/06 REVISED: DESIGNED BY: JD DRAWN BY: PROJECT NO.: MD056502. DATE: 9/28/06 SCALE: as shown DRAWING NO. 18 OF 25

-PROP. 29 L.F. OF 15" PERFORATED HDPE @ 0.00% ─ PROP. 23.90 L.F. OF 12" HDPE @ 0.50% PROP.19.14 L.F. OF PROP. 4 L.F. OF 15" HDPE @ 14 0% 15" PERFORATED 12" HDPE @ 0.50% HDPE @ 0.50% STORM DRAIN SYSTEM PLAN VIEW NOT TO SCALE

### STORMFILTER MAINTENANCE NOTES

- ALL STORMFILTERS REQUIRE REGULAR MAINTENANCE. MAINTENANCE FREQUENCY IS DEPENDENT UPON SITE CHARACTERISTICS AND POLLUTANT LOADING. TYPICAL MAINTENANCE INTERVAL IS 12 TO 18 MONTHS.
- 2. STORMFILTER MAINTENANCE INVOLVES REMOVAL AND REPLACEMENT OF FILTER CARTRIDGES, REMOVAL OF ACCUMULATED SEDIMENT, AND VAULT INSPECTION.
- FULL MAINTENANCE SERVICES MAY BE PROVIDED BY STORMWATER MANAGEMENT, INC. REPLACEMENT CARTRIDGES ARE ALSO AVAILABLE FROM STORMWATER MANAGEMENT ON AN EXCHANGE BASIS TO FACILITATE OWNER-PROVIDED MAINTENANCE ACTIVITY.
- SPENT FILTER MEDIA AND/OR SEDIMENT REMOVED DURING MAINTENANCE SHOULD BE DISPOSED OF IN ACCORDANCE WITH ALL APPLICABLE WASTE DISPOSAL REGULATIONS.
- REFER TO STORMFILTER OPERATION & MAINTENANCE GUIDELINES FOR MORE DETAILED INFORMATION OR CONTACT STORWWATER MANAGEMENT AT 800.548.4667.

NOTES/SPECIAL REQUIREMENTS:

STORMWATER MANAGEMENTINC 13861-6 N.C. AMPORT VEST + POPTR,NO., GR 977230 (1802) 548-4867 + FACL (1002) 361-1271

SOLUTIONS

©2006 CONTECH Stormwater Solutions

8' x 18' PRECAST VOLUME STORMFILTER PLAN AND SECTION VIEWS STANDARD DETAIL DRAWN: MAN CHECKED: ARG FILE NAME: SF818-PC-DTL DATE: 09/29/05 SCALE: NONE

4 . 4

8' x 18' VOLUME STORMFILTER - PLAN VIEW 1

<u>8' x 18' volume stormfilter – Section view (A</u>

2006 CONTECH Stormwater Solutions SOLUTIONS

8' x 18' PRECAST VOLUME STORMFILTER STANDARD DETAIL

GENERAL NOTES

) YOLUME STORMFILTER BY CONTECH STORMWATER SOLUTIONS, PORTLAND, OREGON (800) 548-4667.

6) BILET AND OUTLET PIPING TO BE SPECIFIED BY ENGINEER AND PROVIDED BY CONTRACTOR. PRECAST CAST-IN BOOT CONNECTIONS AT INLET AND OUTLET LOCATIONS FOR WATER-TIGHT CONNECTIONS.

) STRUCTURE AND ACCESS COVERS TO MEET AASHTO H-20 LOAD RATING.

STORMWATER SOLUTIONS.

BAFFLE WALL

(SEE NOTES 5&6)

SOLUTIONS FOR OTHER OPTIONS.

LENGTH OF BOTH SIDES OF THE STRUCTURE.

CARTRIDGES. ACTUAL NUMBER REQUIRED TO BE SPECIFIED ON SITE PLANS OR IN DATA TABLE BELOW

ACTUAL DIMENSIONS AND CONFIGURATION OF STRUCTURE WILL BE SHOWN ON PRODUCTION SHOP DRAWING.

2) FILTER CARTRIDGE(S) TO BE SIPHON-ACTUATED AND SELF-CLEANING. STANDARD DETAIL DRAWING SHOWS MAXIMUM NUMBER O

5) VOLUME STORMFILTER REQUIRES 2.0 FEET OF DROP FROM INLET TO OUTLET. IF LESS DROP IS AVAILABLE, CONTACT CONTECH

PROVIDE MINIMUM CLEARANCE FOR MAINTENANCE ACCESS. IF A SHALLOWER SYSTEM IS REQUIRED, CONTACT CONTECH STORMWATE

9) ALL STORMFHITERS REQUIRE REQUIRE MAINTENANCE, REFER TO OPERATION AND MAINTENANCE CUIDELINES FOR MORE INFORMATION

8' x 18' VOLUME STORMFILTER - SECTION VIEW B

8' x 18' VOLUME STORMFILTER - TOP VIEW (1

8) ANTI-FLOTATION BALLAST TO BE SPECIFIED BY ENGINEER AND PROVIDED BY CONTRACTOR, IF REQUIRED. BALLAST TO BE SET ALONG ENTIRE

) PRECAST VAULT TO BE CONSTRUCTED IN ACCORDANCE WITH ASTM C857 AND C858. DETAIL DRAWING REFLECTS DESIGN INTENT ONLY.

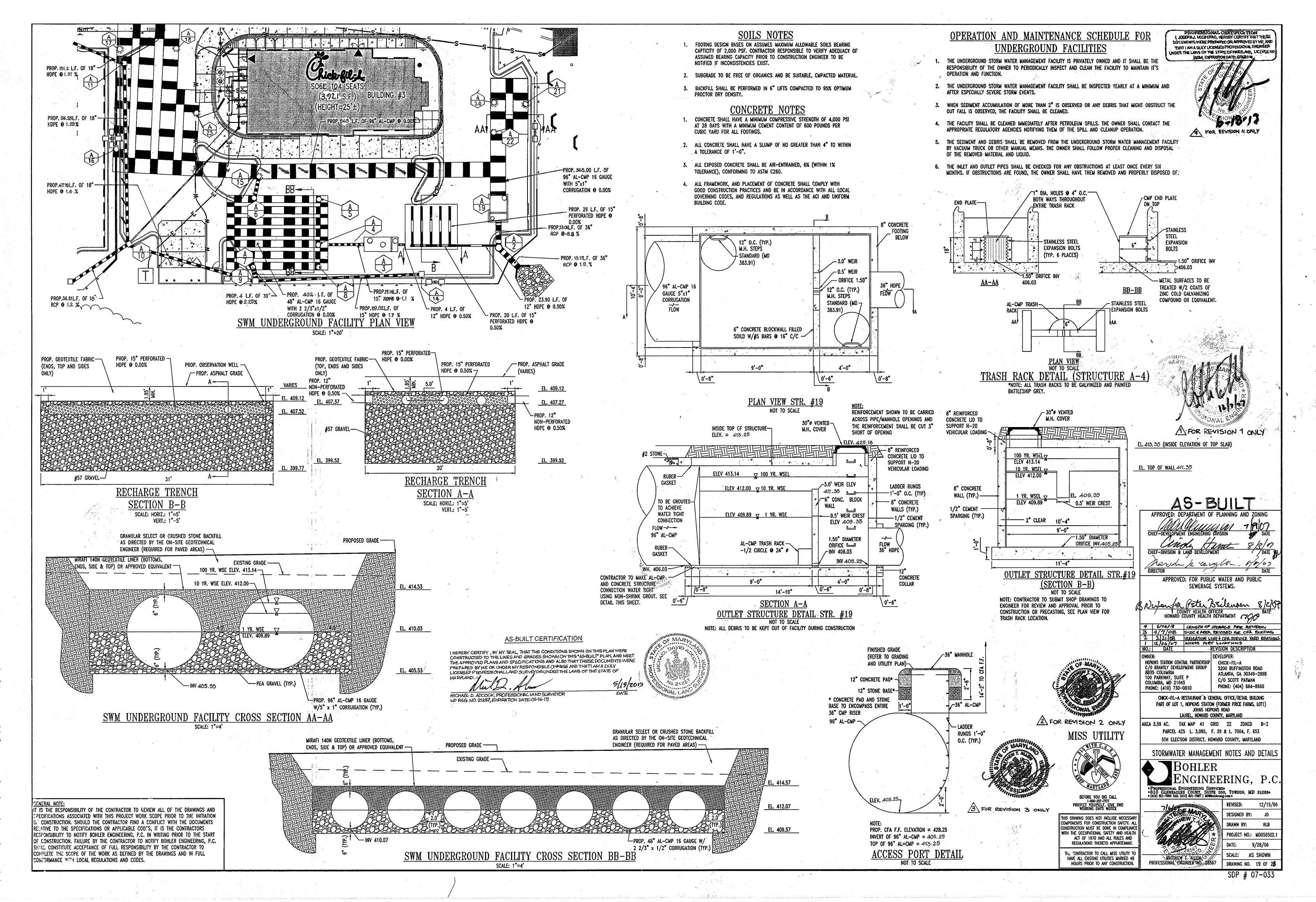
TOP AND SECTION VIEWS, NOTES AND DATA FILE NAME: SF818-PC-DTL DRAWN: MJW CHECKED: ARG

8' x 18' PRECAST **VOLUME STORMFILTER DATA** 

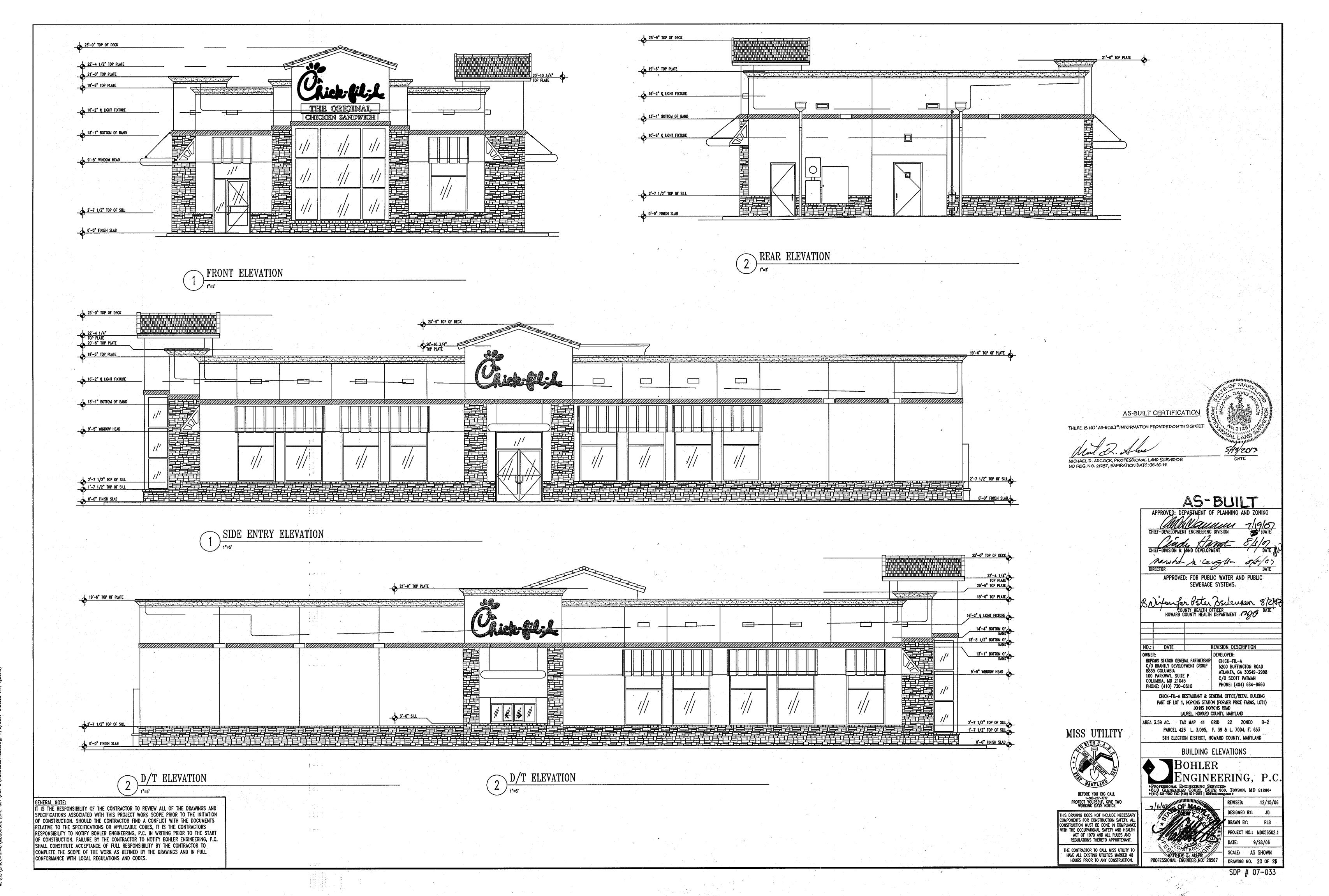
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THE STORWATER MANAGEMEN STORMFHINT ?
U.S. PATENT No. 5,322,629, No. 5,707,527, No. 8,027,639
No. 6,649,043, No. 5,524,576, AND OTHER U.S. AND FOREIGN AUTHORS AND AUTHORS DESIGN AUTHORS DESIGN AUTHORS DESIGN AUTHORS DESIGN

SDP # 07-033

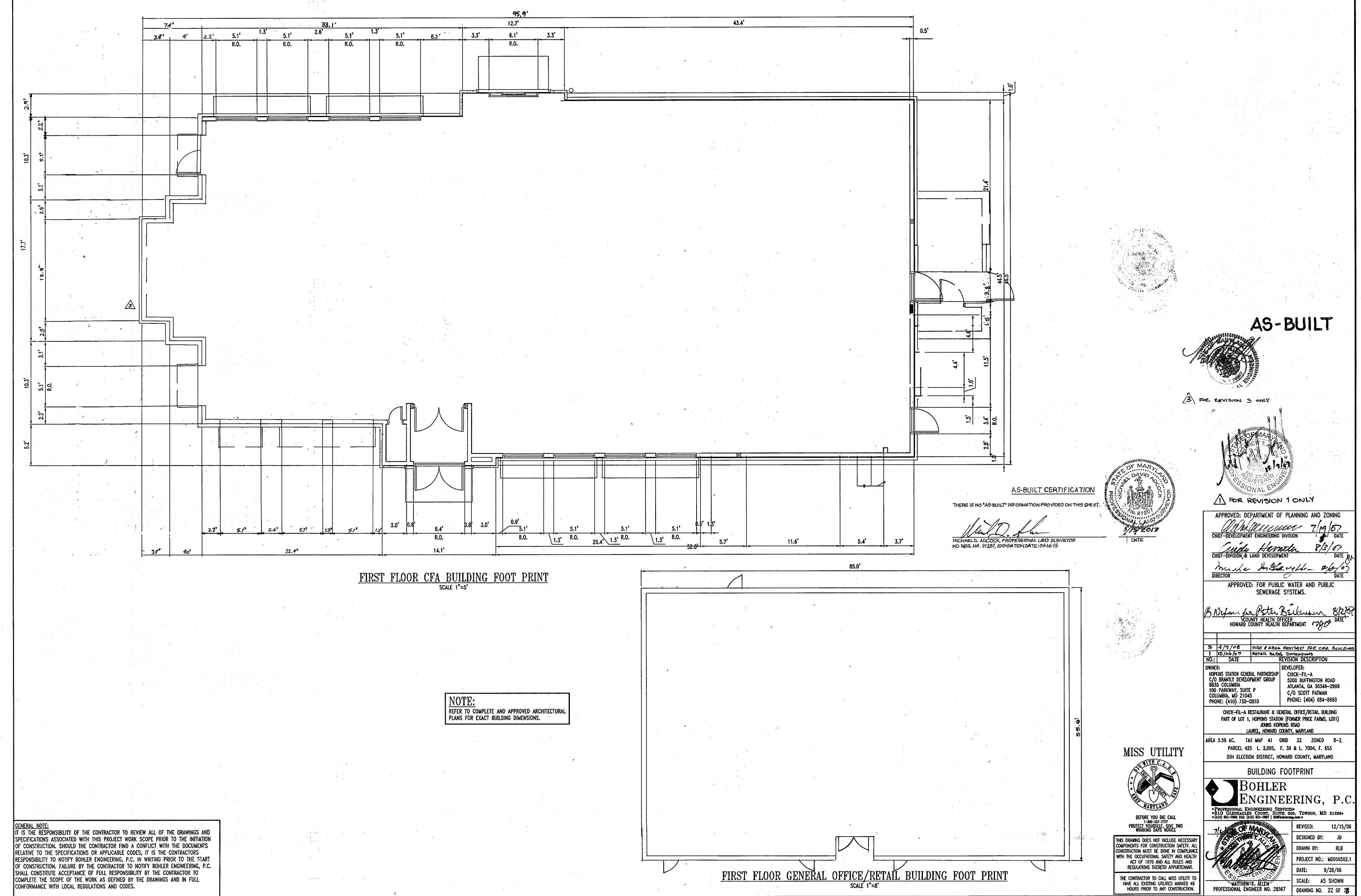


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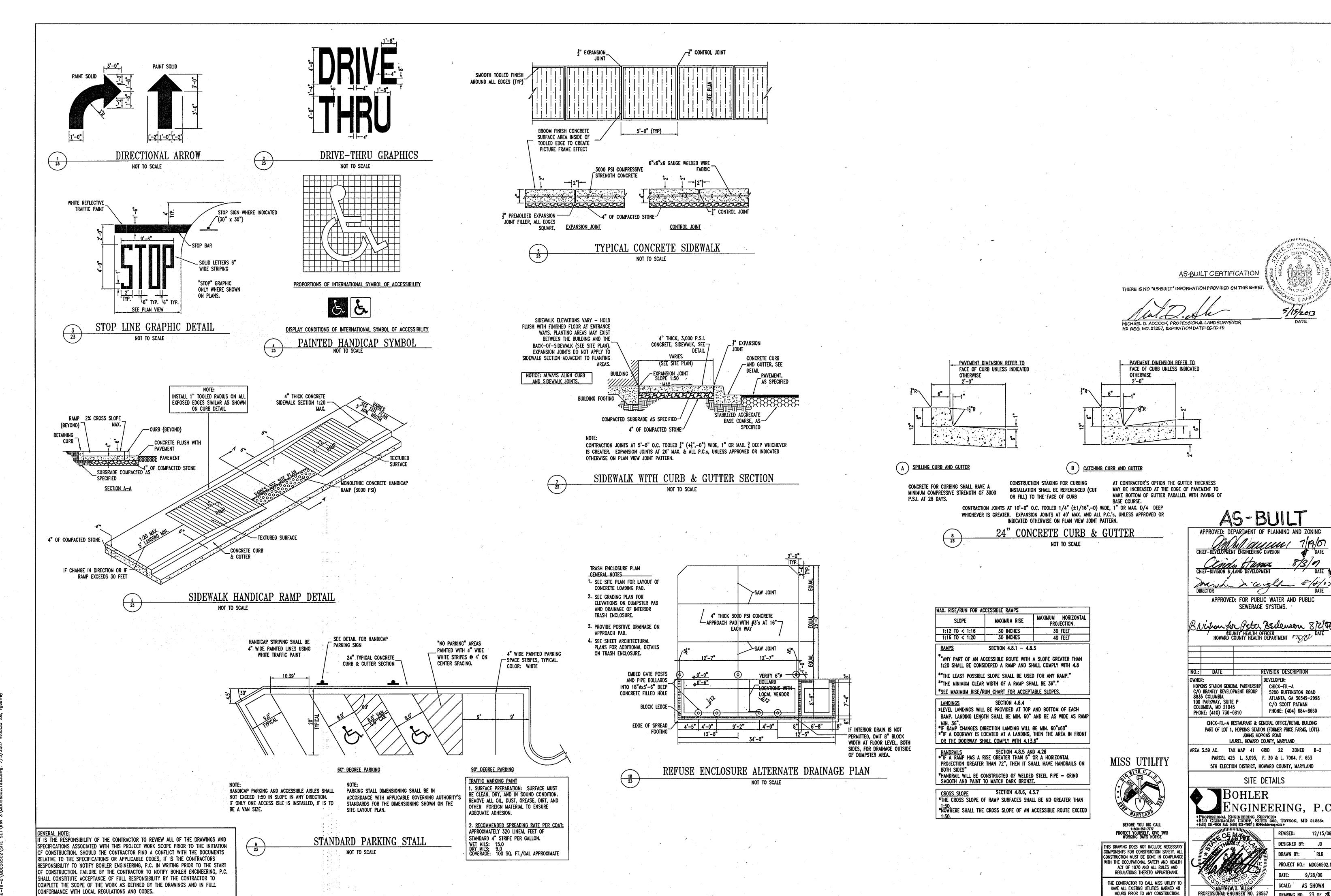
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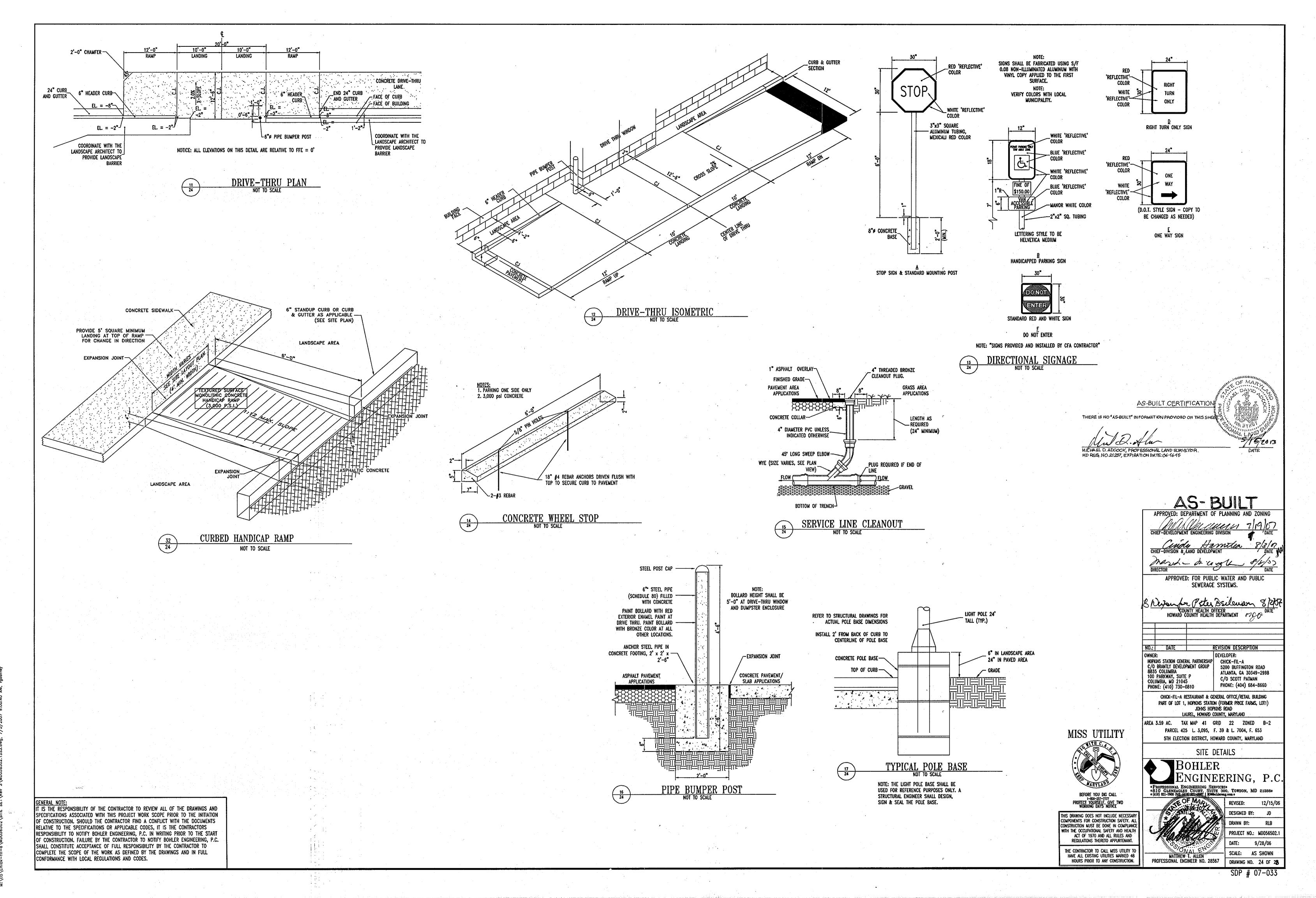


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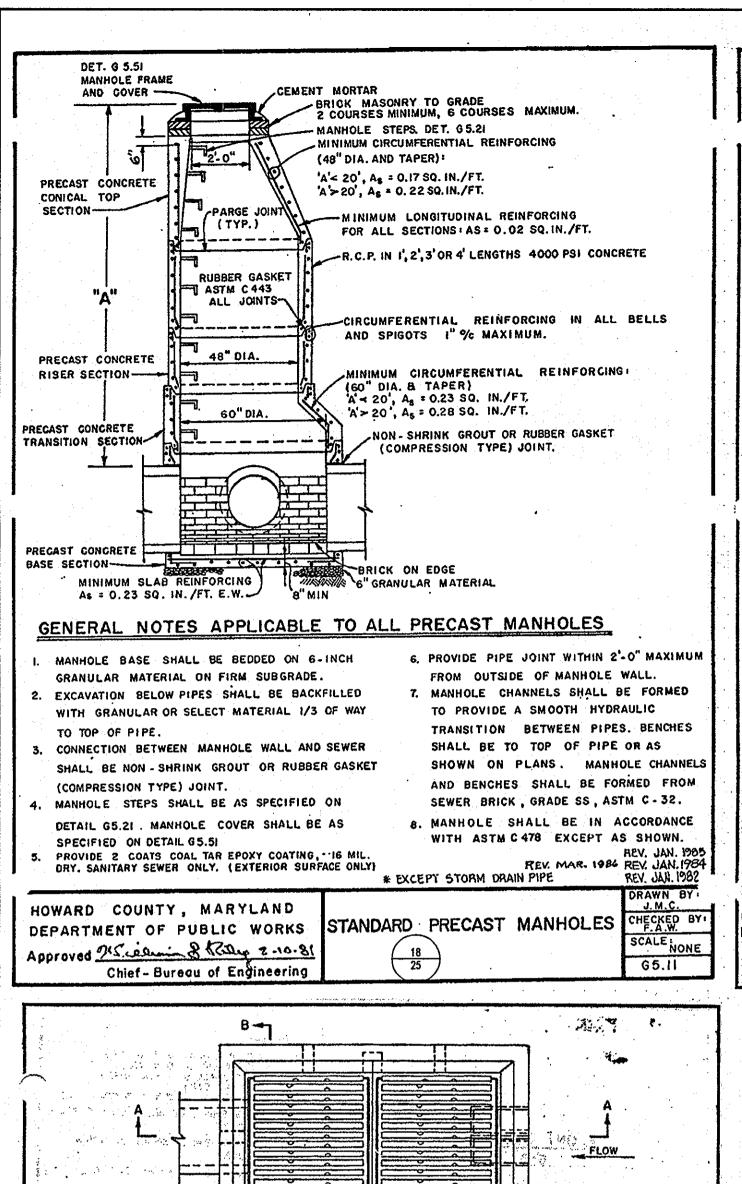
DRAWING NO. 23 OF 28

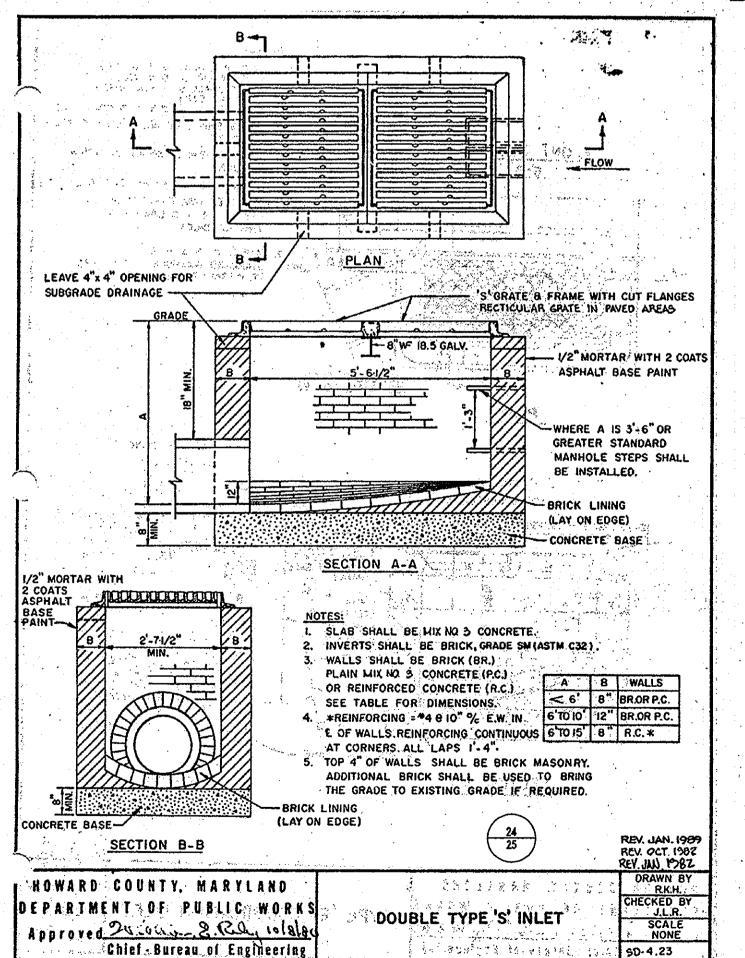
PROFESSIONAL ENGINEER NO. 28567

12/15/06



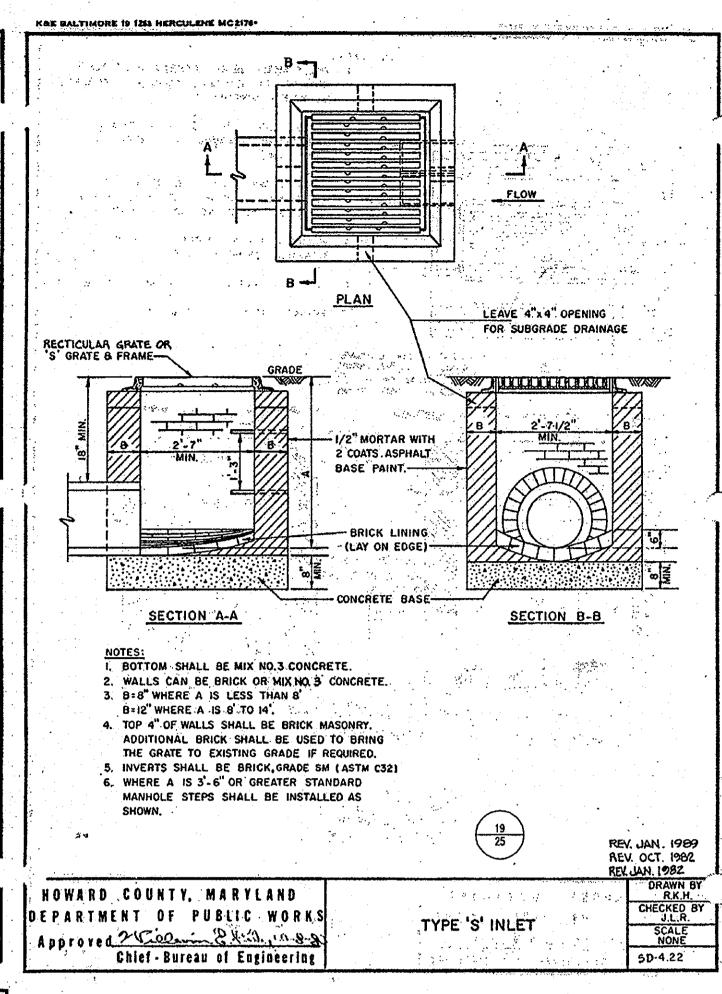
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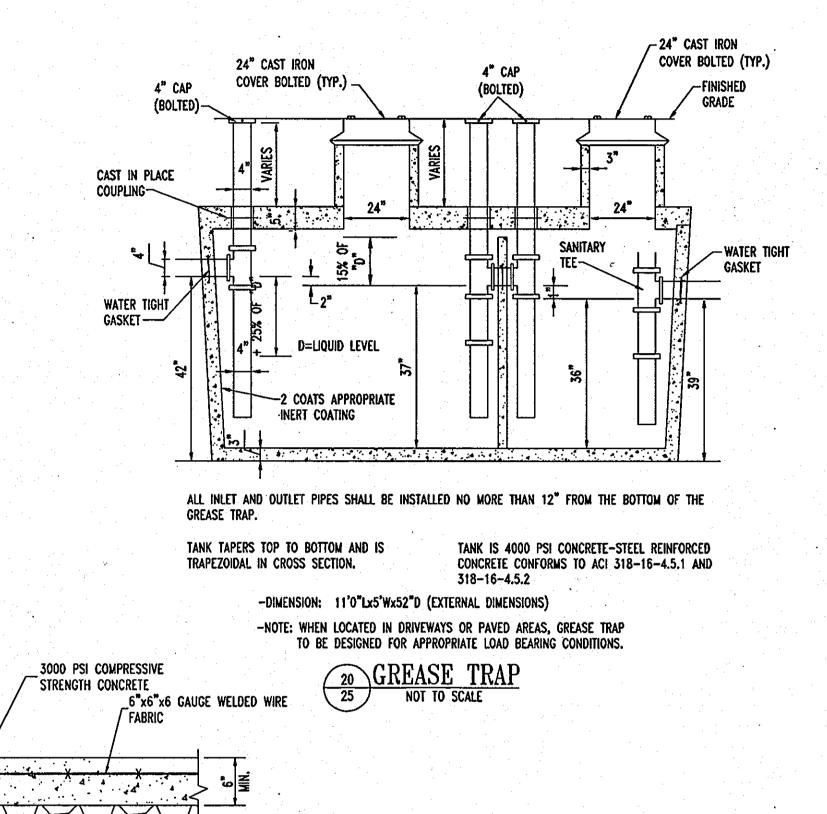




4-18" % T88

T IS THE RESPONSIBILITY OF THE CONTRACTOR TO REVIEW ALL OF THE DRAWINGS AND SPECIFICATIONS ASSOCIATED WITH THIS PROJECT WORK SCOPE PRIOR TO THE INITIATION OF CONSTRUCTION, FAILURE BY THE CONTRACTOR TO NOTIFY BOHLER ENGINEERING, P.C SHALL CONSTITUTE ACCEPTANCE OF FULL RESPONSIBILITY BY THE CONTRACTOR TO COMPLETE THE SCOPE OF THE WORK AS DEFINED BY THE DRAWINGS AND IN FULL CONFORMANCE WITH LOCAL REGULATIONS AND CODES.





TRANSVERSE AND LONGITUDINAL DOWELED CONSTRUCTION JOINT



DESIGN PAVEMENT THICKNESS

SPEC., LATEST EDITION.

APPLY PRIME COAT AS SPECIFIED IN APPLICABLE

DOT SPECIFICATION, AT AN APPLICATION RATE OF -

STABILIZED AGGREGATE BASE COURSE, AS SPECIFIED IN

APPLICABLE DOT STANDARD SPEC., LATEST EDITION,

COMPACTED TO 98% MAXIMUM DRY DENSITY (MODIFIED

PARKING AREAS & DRIVE AISLES 1"

ASPHALT

SURFACE BASE

ASPHALTIC CONCRETE SURFACE COURSE, AS

- SPECIFIED IN APPLICABLE DOT STANDARD

0.25 - 0.28 GAL./SYD.

COURSE

S.A.B.C.

PAVEMENT SECTION SHOWN BASED ON A PROJECTED CBR OF 5 AS RECOMMENDED BY GEOTECHNICAL INVESTIGATION PREPARED BY GILES ENGINEERING, PROJECT NO. 3G-0608004, DATED 9/13/06. FINAL PAVEMENT DESIGN TO BE BASED ON ACTUAL CBR TEST RESULTS.

TYPICAL PAVEMENT SECTION

2.0'

EXTEND BASE 6" BEYOND FOR

APPLICATIONS WITHOUT CURB &

GUTTER, SIDEWALKS, BUILDINGS

ASPHALTIC CONCRETE BINDER

COURSE, AS SPECIFIED IN

APPLICABLE DOT STANDARD

GEOTECHNICAL REPORT.

PROP. GRADE

AS-BUILT

APPROVED: FOR PUBLIC WATER AND PUBLIC

SEWERAGE SYSTEMS.

REVISION DESCRIPTION

5200 BUFFINGTON ROAD

C/O SCOTT PATMAN

ATLANTA, GA 30349-2998

PHONE: (404) 684-8660

DEVELOPER:

CHICK-FIL-A RESTAURANT & GENERAL OFFICE/RETAIL BUILDING

PART OF LOT 1, HOPKINS STATION (FORMER PRICE FARMS, LOT1)

JOHNS HOPKINS ROAD

AUREL, HOWARD COUNTY, MARYLAND

PARCEL 425 L. 3,095, F. 39 & L. 7004, F. 653

5TH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND

SITE DETAILS

AREA 3.59 AC. TAX MAP 41 GRID 22 ZONED B-2

COUNTY HEALTH OFFICER
HOWARD COUNTY HEALTH DEPARTMENT 190

HOPKINS STATION GENERAL PARTNERSHIP
C/O BRANTLY DEVELOPMENT GROUP
8835 COLUMBIA
CHICK-FIL-A
5200 BUFFING
ATLANTA. GA

100 PARKWAY, SUITE F

COLUMBIA, MD 21045

PHONE: (410) 730-0810

AS-BUILT CERTIFICATION

DENSITY (MODIFIED PROCTOR).

SPEC., LATEST EDITION.

REMOVAL & REPLACEMENT OF UNSUITABLE

SUBGRADE MATERIAL AS SPECIFIED IN THE

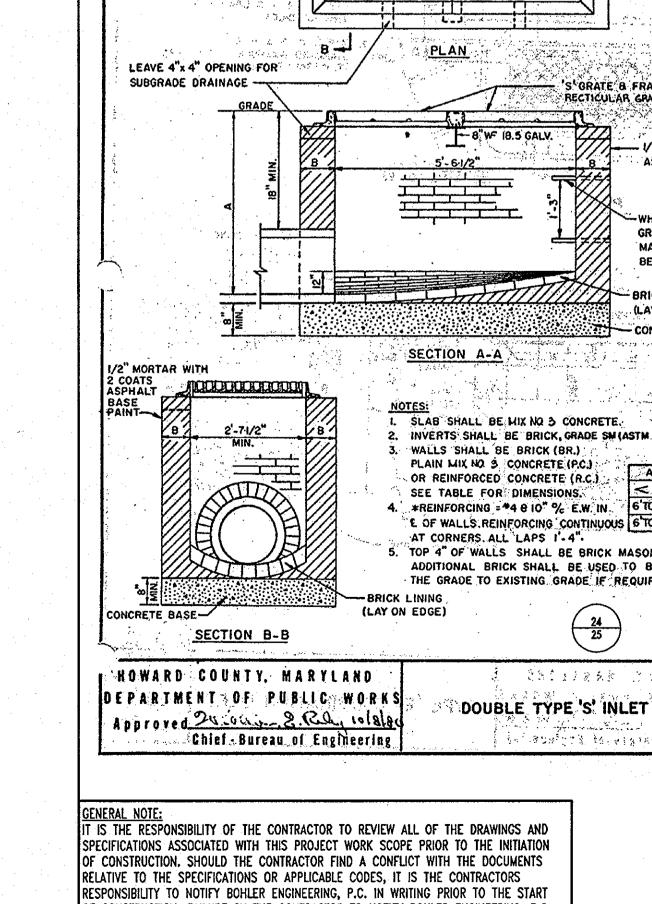
SUBGRADE COMPACTED TO 95% MAXIMUM DRY

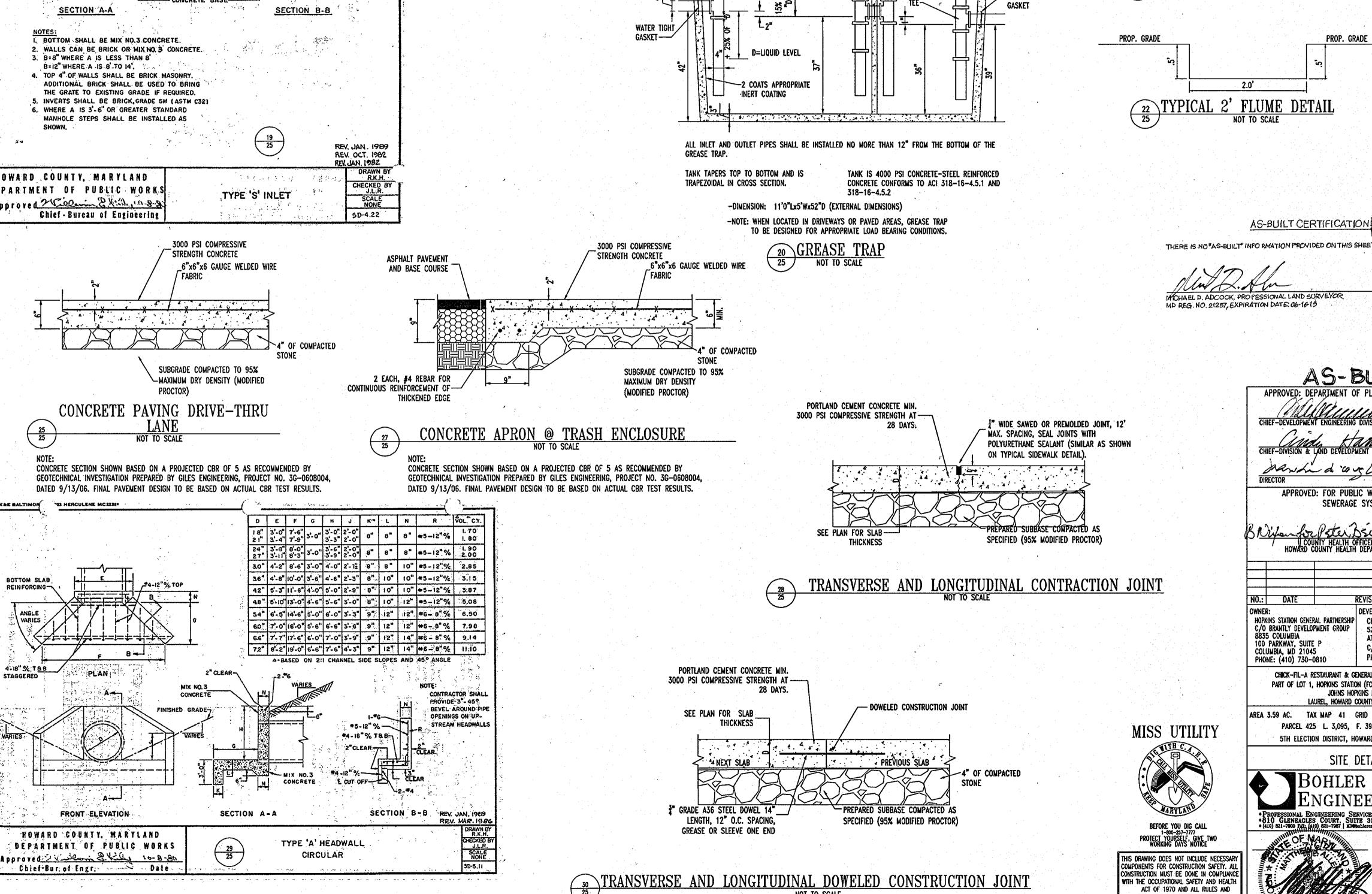
OR OTHER STRUCTURES.

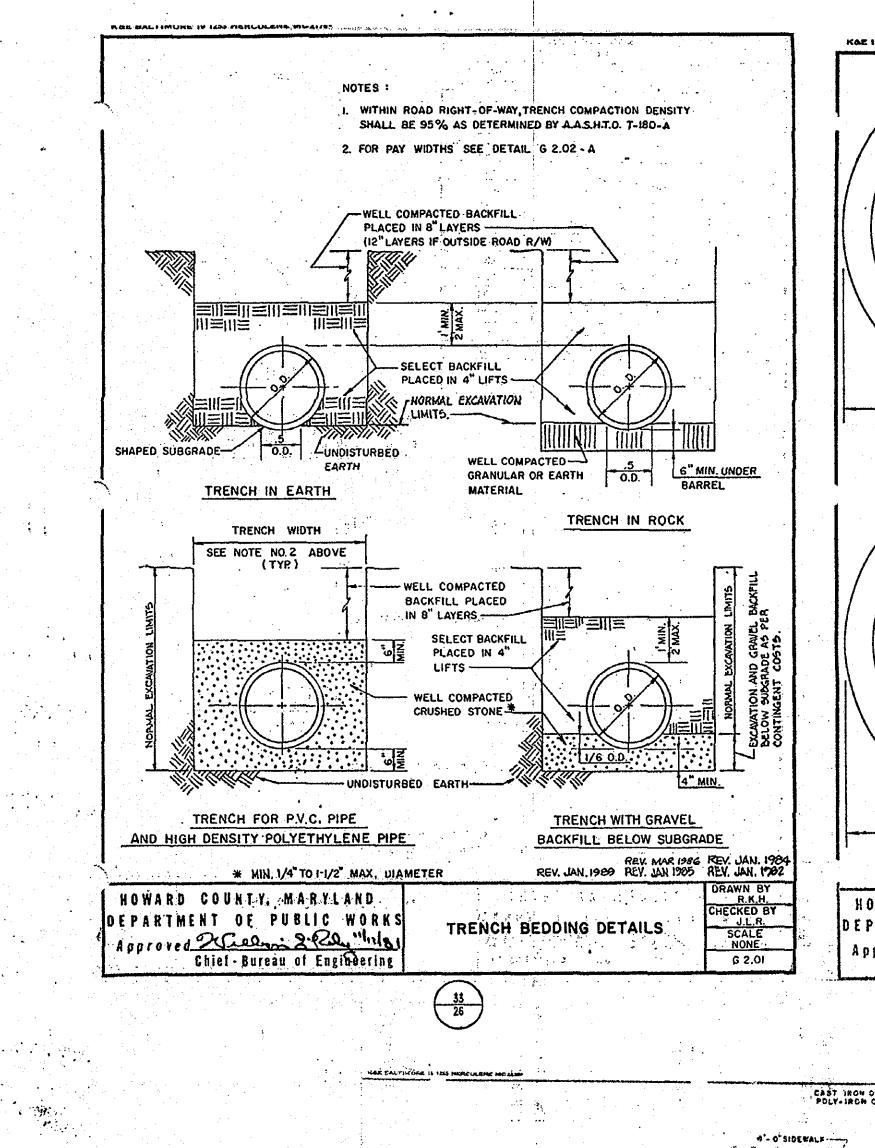
THIS DRAWING DOES NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY. ALL CONSTRUCTION MUST BE DONE IN COMPLIANCE ITH THE OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970 AND ALL RULES AND REGULATIONS THERETO APPURTENANT. THE CONTRACTOR TO CALL MISS UTILITY TO HAVE ALL EXISTING UTILITIES MARKED 48

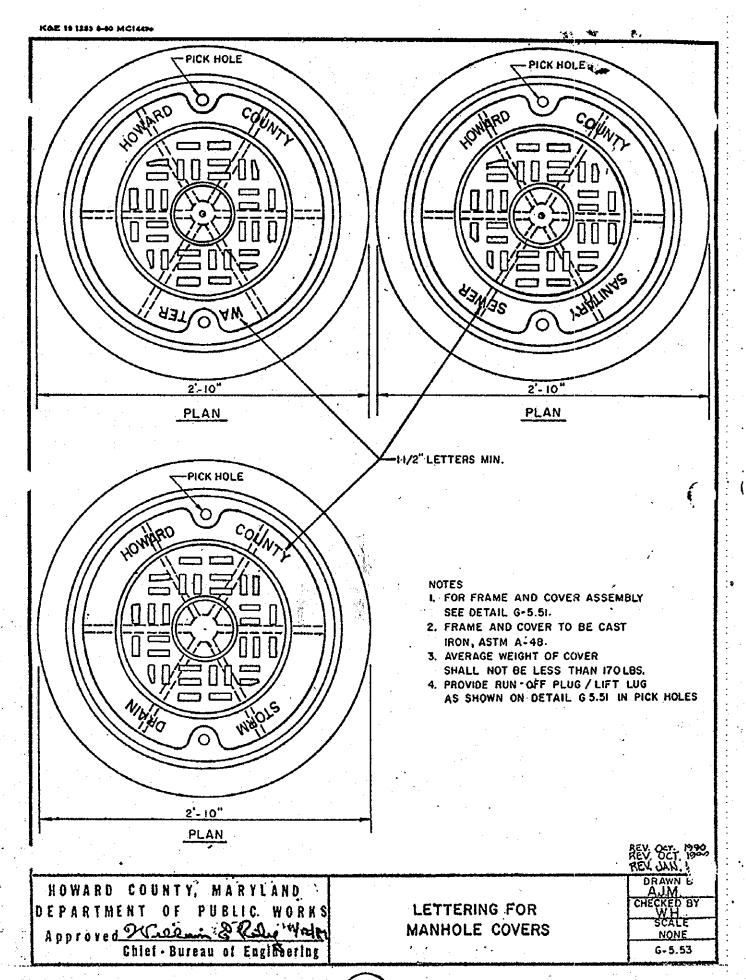
HOURS PRIOR TO ANY CONSTRUCTION.

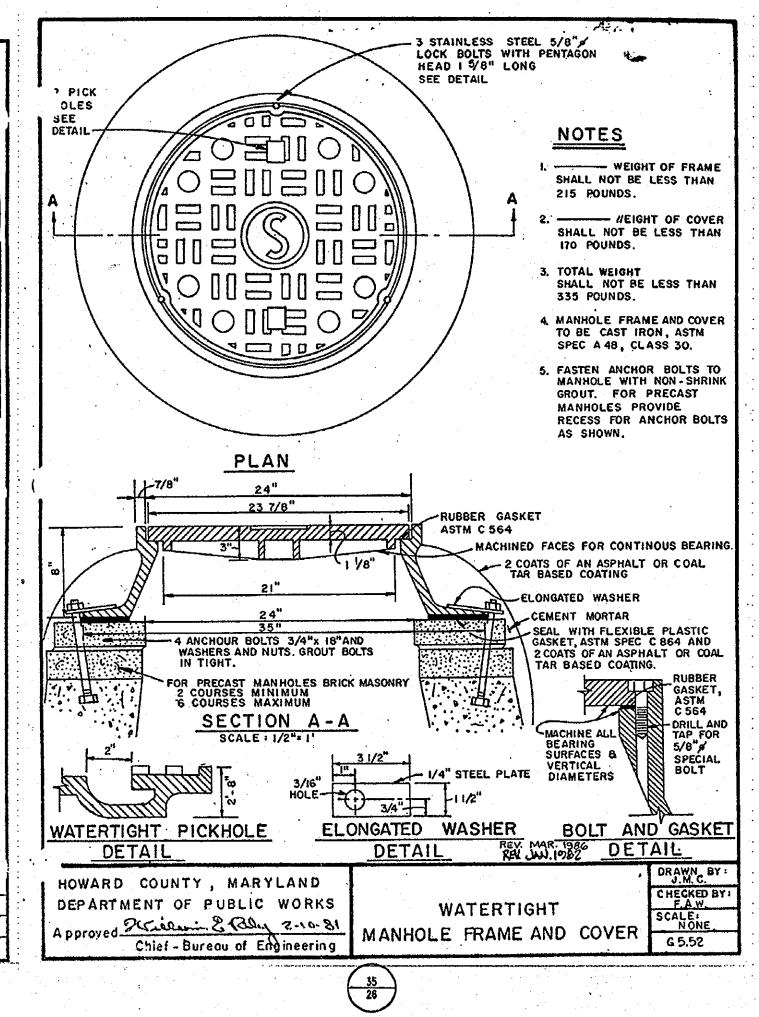
REVISED: 12/15/06 DESIGNED BY: JD DRAWN BY: PROJECT NO.: MD056502. 9/28/06 SCALE: AS SHOWN PROFESSIONAL ENGINEER NO. 28567 DRAWING NO. 25 OF 28

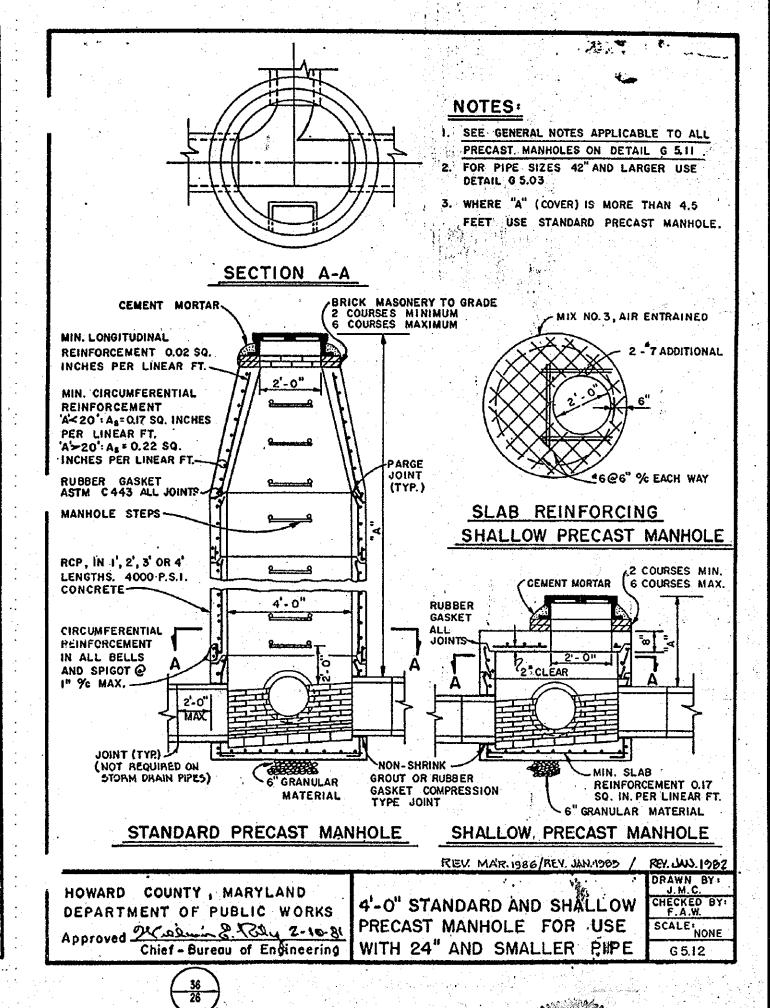


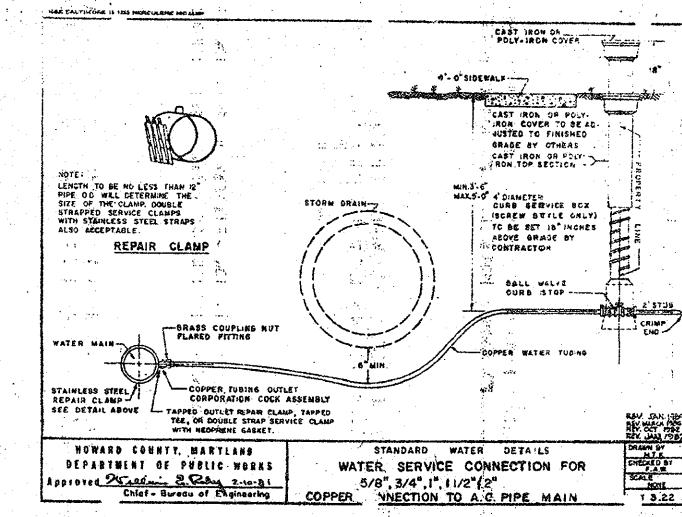


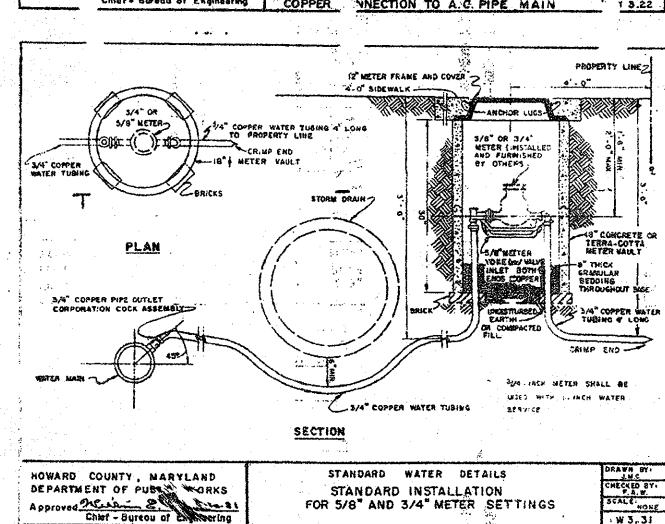


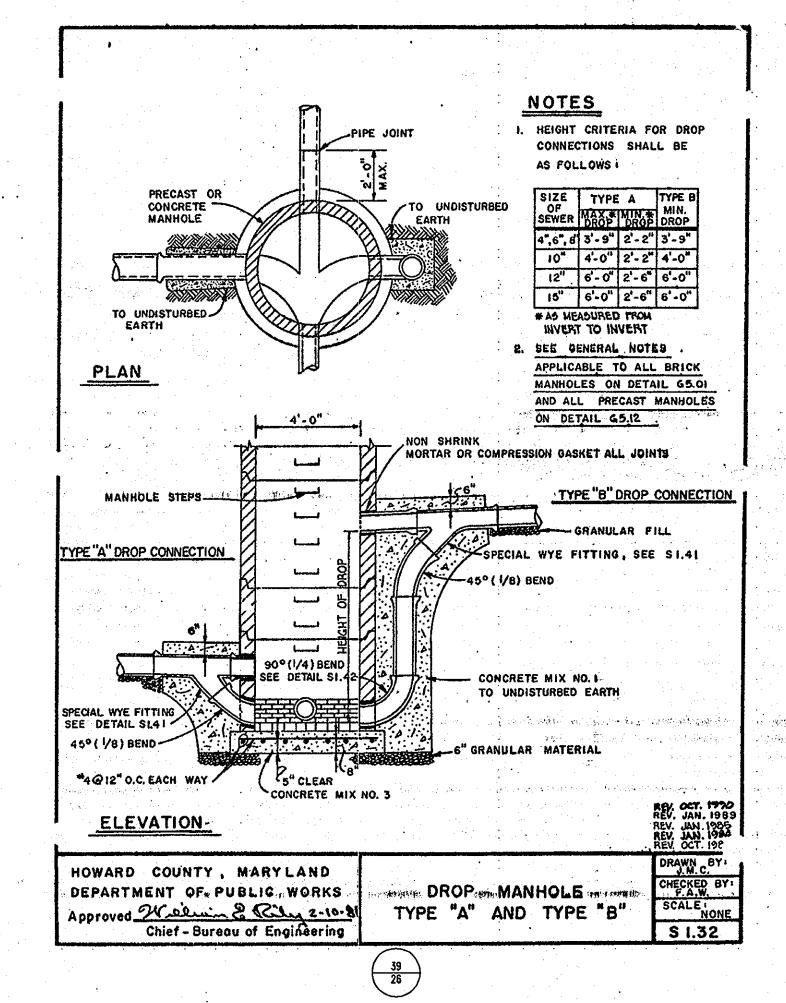


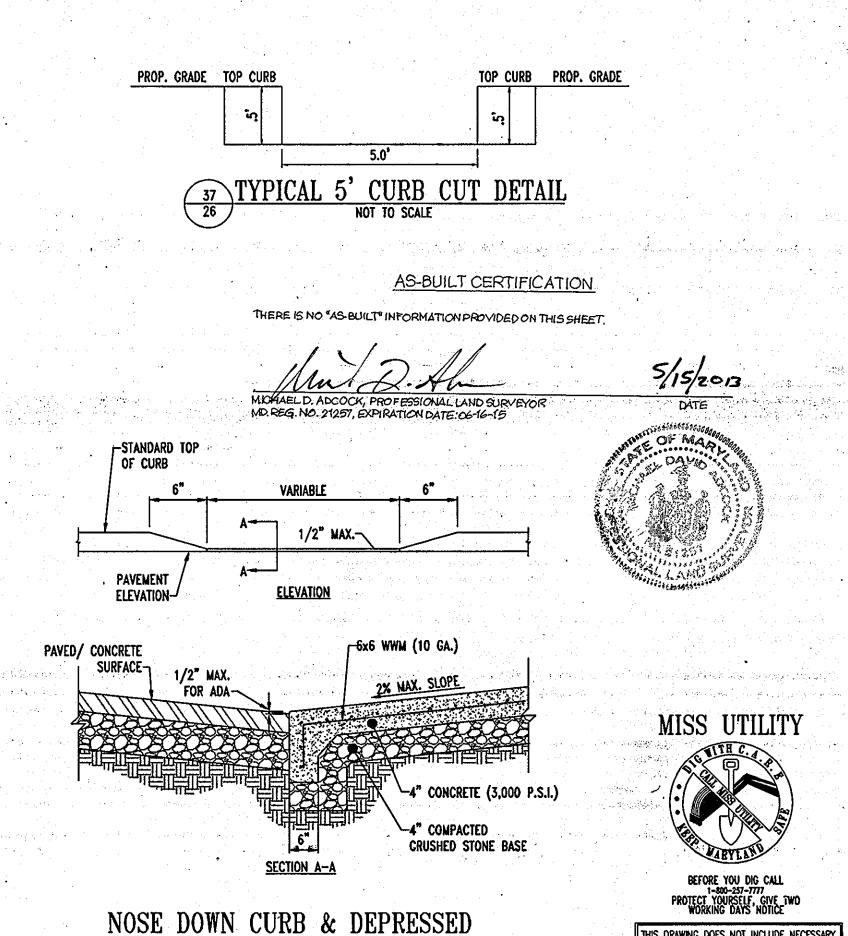






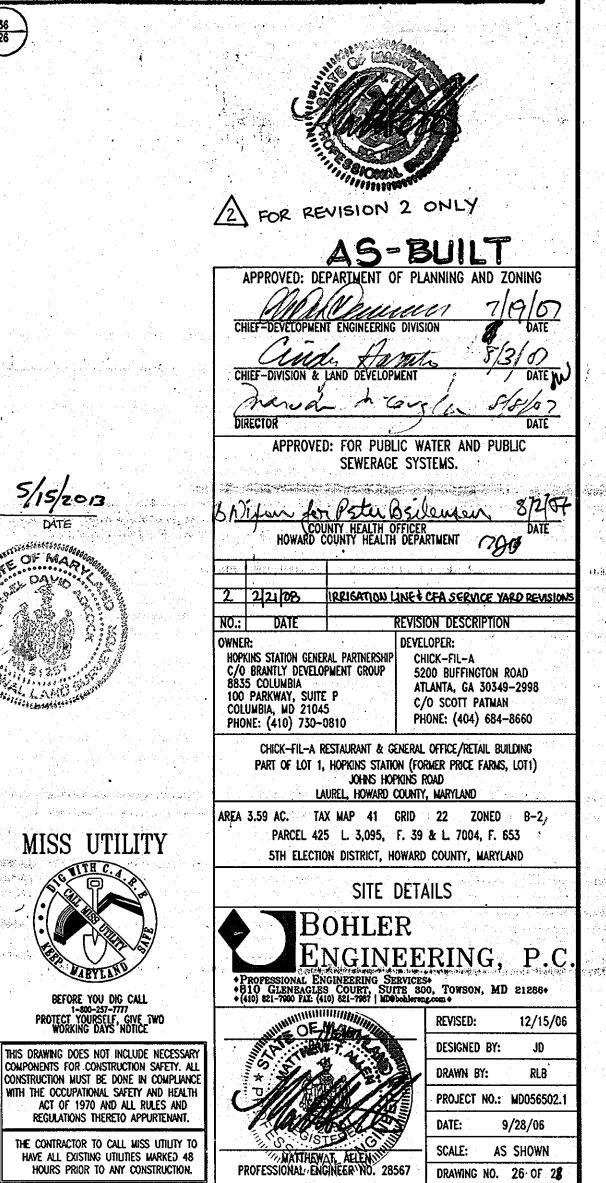






CURB/ADA ACCESS DETAIL

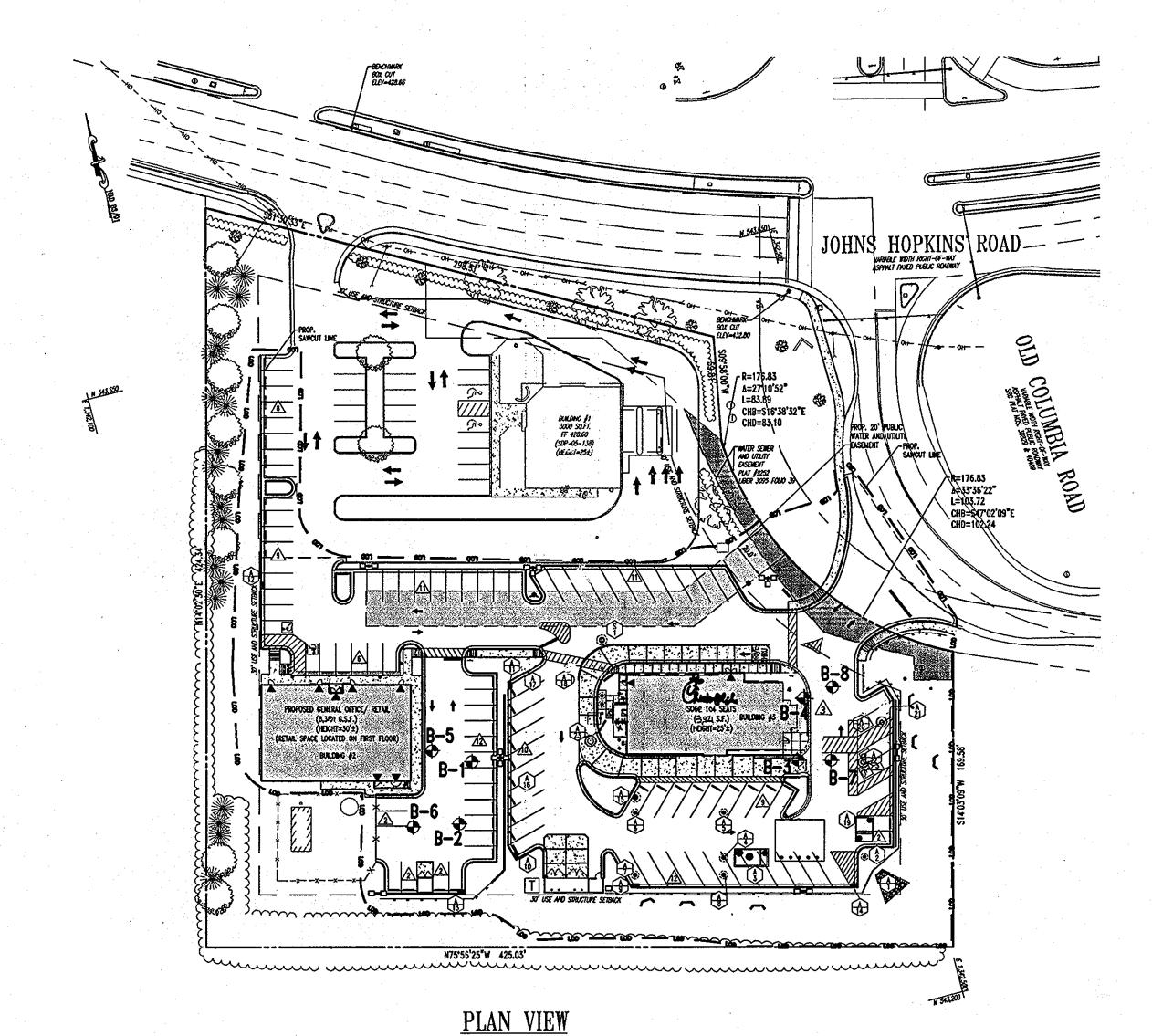
NOT TO SCALE

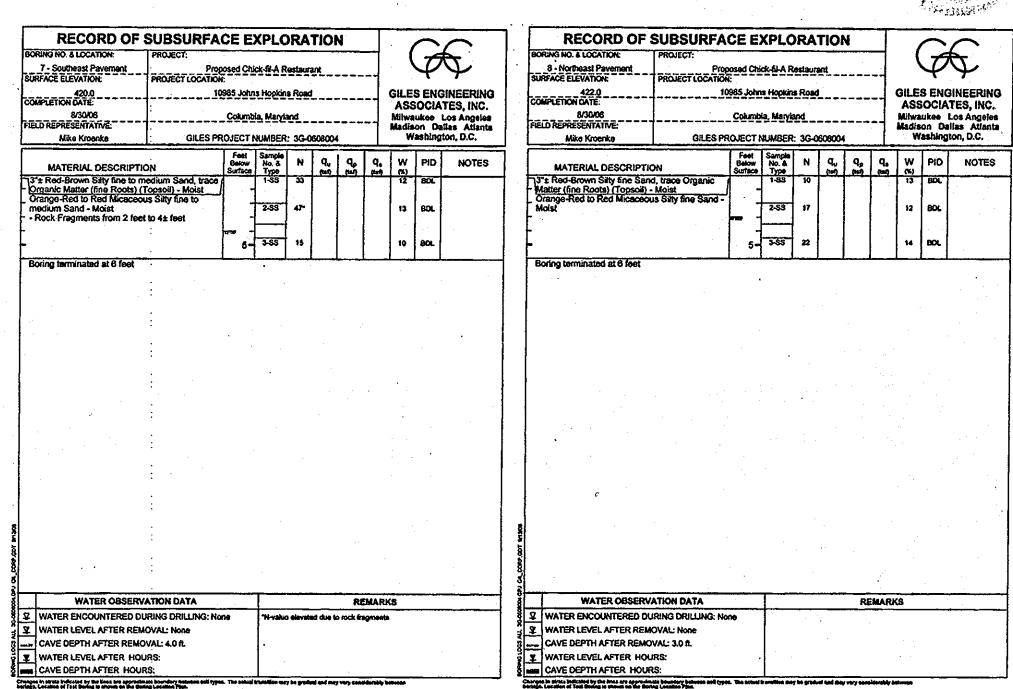


IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO REVIEW ALL OF THE DRAWINGS AND SPECIFICATIONS ASSOCIATED WITH THIS PROJECT WORK SCOPE PRIOR TO THE INITIATION OF CONSTRUCTION. SHOULD THE CONTRACTOR FIND A CONFLICT WITH THE DOCUMENTS RELATIVE TO THE SPECIFICATIONS OR APPLICABLE CODES, IT IS THE CONTRACTORS RESPONSIBILITY TO NOTIFY BOHLER ENGINEERING, P.C. IN WRITING PRIOR TO THE START OF CONSTRUCTION. FAILURE BY THE CONTRACTOR TO NOTIFY BOHLER ENGINEERING, P.C. SHALL CONSTITUTE ACCEPTANCE OF FULL RESPONSIBILITY BY THE CONTRACTOR TO COMPLETE THE SCOPE OF THE WORK AS DEFINED BY THE DRAWINGS AND IN FULL CONFORMANCE WITH LOCAL REGULATIONS AND CODES.

WING NO. P#

CORD OF SUBSURFACE EX		RECORD OF SUBS	SURFACE EXPLORATION		RECORD OF SUBS	SURFACE EXPLORATION	N OO	RECORD OF SUBS	IRFACE EXPLORATION		RECORD OF SUE	SURFACE EXPLORATION			SUBSURFACE EXPLO	RATION	
LOCATION: PROJECT:  1 Building Corner Proposed Chick PROJECT LOCATION:	SI-A Restaurant	BORING NO. & LOCATION: PROJEC	эт:		BORING NO. & LOCATION: PROJECT	CT:		BORING NO. & LOCATION: PROJECT 4 - Northeast Building Corner	Proposed Chick-fil-A Restaurant		BORING NO. & LOCATION: PRO	ECT:		BORING NO. 8 LOCATION: 6 - Southwest Pavement	PROJECT: Proposed Chick-fil-A	(estaurant	(A)
		2 - Southwest Building Corner SURFACE ELEVATION: PROJECT		1 1		Proposed Chick-fil-A Restaurant GT LOCATION:	T	( )				Proposed Chick-fil-A Restaurant ECT LOCATION: 10995 Johns Hookins Road	GILES ENGINEERING		Proposed Chick-fil-A R PROJECT LOCATION: 10985 Johns Honkin	1	SILES ENGIN
124.0 10985 Johns 1 NTE:			10985 Johns Hopkins Road	11000001.00  11101	, ,	10985 Johns Hopkins Road			10985 Johns Hopkins Road	1 (1000001100)11101	l #	10985 Johns Hopkins Road	ASSOCIATES, INC.		10985 Johns Hopkin		<b>ASSOCIATES</b>
231/08 Columbia ENTATIVE: Kroenke GILES PROJECT NU		6/31/06 FIELD REPRESENTATIVE:	GILES PROJECT NUMBER: 3G-0608004	Milwaukee Los Angeles Madison Dallas Atlanta Washington, D.C.	FIELD REPRESENTATIVE:	Columbia, Maryland	Madison Dallas Atlanta	8/30/06 FIELD REPRESENTATIVE: Mike Kroenke	GILES PROJECT NUMBER: 3G-0608004	Milwaukee Los Angeles Madison Dallas Atlanta Washington, D.C.	FIELO REPRESENTATIVE: Mike Kroenke	Columbia, Maryland  GILES PROJECT NUMBER: 3G-0808004	Milwaukee Los Angeles Medison Dallas Atlanta Washington, D.C.	FIELD REPRESENTATIVE:	Columbia, Maryl		Milwaukee Los Madison Dallas Washington,
100000		Mike Kroenke			Mike Kroenke	GILES PROJECT NUMBER: 3G-0608004				q, W PID NOTES	MANG 1/4/00/8/0			MAKE NIDELKE			
L DESCRIPTION Surface Stript line Sand, trace Organic	Semple	MATERIAL DESCRIPTION	Feet Sample N Qu Qp Surface Type (set)	Q <sub>s</sub> W PID NOTES	MATERIAL DESCRIPTION	Feet Sample Bolow No. & N Qu Surface Type (ten)	Q Q W PID NOTES	MATERIAL DESCRIPTION  12"± Red-Brown Silty fine Sand, trace O	Surface Type (nut) (nut)	(tot) (K) NOTES	MATERIAL DESCRIPTION  3's Red-Brown Silty fine to mediun	Feet Sample No. 8 N Qu Surface Type (mr)	Q <sub>p</sub> Q <sub>a</sub> W PID NOTES	MATERIAL DESCRIPTION  3"2 Red-Brown Sitty fine to me	edium Sand trace 6 1-59	N Q, Q, Q, Q, 200	(%) PID
) (Topsoil) - Moist ed Micaceous Silty fine Sand -		2": Red-Brown Sity fine Sand, trace Matter (fine Roots) (Topsoil) - Moist Orange-Red to Red Micaceous Sity f	ne to		3": Red-Brown Sitty fine Sand, trace ( Matter (fine Roots) (Topsoil) - Molst Orange-Red to Red Sitty fine to mediu	um Sand	"   ***	Matter (fine Roots) (Topsoil) - Moist Orange-Red to Red Micaceous Silty fin			Organic Matter (fine Roots) (Topso Orange-Red to Red Micaceous Silt	i) - Moist - Vine to		Organic Matter (fine Roots) (To Orange-Red to Red Micaceous	opsoil) - Moist	, "	" "
	2-53 22 13 BOL 9200 = 23%	medium Sand - Moist	2-33 31	13 BOL	Moist	2-\$5 22	10 BOL P200 = 21%	nredium Sand - Moist	2-93 41	8 BOL	medium Sand - Moist	2-83 30	16 BOL	medium Sand - Moist - Cobbles/Boulders from 2 feet	1 2-55	57*	12 BOL
from 4 feet to 6± feet	3-SS 29+50/5+ 17 BOL	ţ	3-83 19	15 804		5 356 22	15 BOL	<u> </u>	5-555 22	15 BOL .		s 3-88 32	15 BOL	, <u>†</u>	5-3-55	(34	14 BDL
°7-			"] "		Back Comments from 6 feet to 441 fe	"]					Boring terminated at 6 feet	[		Boring terminated at 6 feet			
	455 17 13 80L		4-58 14	13 BOL	- Rock Fragments from 8 feet to 11± fo	4-SS 39+50/3*	12 BOL	<u> </u>	4-55 30	13 80L	and the same and the same			Management of the 1991			
om 8 feet to 10± feet		<b>_</b>	1 1		<u> </u>			<u> </u>									
10-	5-SS 67" 14 BOL	<u>+</u>	10- 5-53 21	10 BDL		5-SS 25	14 BOL	<b>                                     </b>	10- 6-53 32	12 80L							
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		·														•	
15-	10 S	<b>†</b>		14 800	Light Brown, Red Micaceous Silty fine medium Sand (Possible Weathered Bo	edrock) -	1	†	45 45	10 SDL					•		
	5-SS 30 15 80L		15- 655 20	14   80.	Hrost	15- 6-88 47-50/3	16 BOL	Boring terminated at 16 feet	159 000 101		:						
k 16 feet		Boring terminated at 16 feet			Bonng terminated at 18 feet		·	Boring terminated at 10 feet	•	1		•					
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· · · · · · · · · · · · · · · · · · ·	*N-value elevated due to rock fragments P200 = Porcent Passing No. 200 Siove	WATER ENCOUNTERED DURING DI			WATER ENCOUNTERED DURING OF		- 1	WATER ENCOUNTERED DURING DRI		· .	WATER ENCOUNTERED DURING WATER LEVEL AFTER REMOVAL:		,	WATER ENCOUNTERED DUR		e elevated due to rock fragments	
TER REMOVAL: 10.0 ft.		CAVE DEPTH AFTER REMOVAL: 10.			CAVE DEPTH AFTER REMOVAL: 10.0		I NO. 240 SIRM	CAVE DEPTH AFTER REMOVAL: 11.0		· ]	CAVE DEPTH AFTER REMOVAL:			CAVE DEPTH AFTER REMOVA	VAL 40f		
AFTER HOURS:		WATER LEVEL AFTER HOURS:			WATER LEVEL AFTER HOURS:			WATER LEVEL AFTER HOURS:			WATER LEVEL AFTER HOURS:			WATER LEVEL AFTER HOUR	<b>₹\$:</b>		
TER HOURS:	milion sky do ground and sky very considerably behaven	CAVE DEPTH AFTER HOURS:	Definition coll types. The actual transition may be gradual and may vary or No.	Antido with the ann	CAVE DEPTH AFTER HOURS:  Changes in strats independ by the days are approximate boundary.  Strange, it scales of fast Saring is shown as the Baring Location.	Entreses sell types. The school transition may be gradest and me	all and comparably populate	Signal CAVE DEP 177 AP LER POUND:  Chaops to strike indicated by the least are appreciable boundary to bounds, section of feet Burden in about no little denies a section 74.	mean and types. The actual transition thay be gradual and they very ten	Minshy believe		ary between and types. The actual transition may be gradual and may ver in Float.	y continuents between	CAVE DEPTH AFTER HOURS	All bear stay between and types. The setual bearsion or	) be graded and may very considerably bea-	nga a san
nerm on wie zonog Locazon File.			•		Batunder Entremen de statt Bound 16 autom an and Eletted Focusion S.												
			•	4										2 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	TO THE STATE OF TH		







3 FOR EEVISION 3 ONLY

MISS UTILITY

THIS DRAWING DOES NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY. ALL CONSTRUCTION MUST BE DONE IN COMPLIANCE WITH THE OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970 AND ALL RULES AND SECULATIONS THEORY ADDITIONAL

REGULATIONS THERETO APPURTEMENT.

THE CONTRACTOR TO CALL MISS UTILITY TO HAVE ALL EXISTING UTILITIES MARKED 48 HOURS PRIOR TO ANY CONSTRUCTION.

OWNER:
HOPKINS STATION GENERAL PARTNERSHIP
C/O BRANTLY DEVELOPMENT GROUP
8835 COLUMBIA
100 PARKWAY, SUITE P
COLUMBIA, MD 21045
PHONE: (410) 730-0810

DEVELOPER:
CHICK-FIL-A
5200 BUFFINGTON ROAD
ATLANTA, GA 30349-2998
C/O SCOTT PATMAN
PHONE: (404) 684-8660 CHICK-FIL-A RESTAURANT & GENERAL OFFICE/RETAIL BUILDING PART OF LOT 1, HOPKINS STATION (FORMER PRICE FARMS, LOT1) JOHNS HOPKINS ROAD LAUREL, HOWARD COUNTY, MARYLAND

AREA 3.59 AC. TAX MAP 41 GRID 22 ZONED B-2 PARCEL 425 L. 3,095, F. 39 & L. 7004, F. 653

A FOR REVISION 1 ONLY

APPROVED: DEPARTMENT OF PLANNING AND ZONING

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS.

3 4/7/08 SIZE 4 AZEA REVISED FOR CSA BUNDANG,
2 2/21/08 IRRIGATION LINE CFA SERVICE YARD REVISIONS
1 12/06/07 ESTAN AUGG ASSA 1 ACCORDING

5TH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND

SOIL BORING PLAN

BOHLER

DESIGNED BY: JD DRAWN, BY: RLB PROJECT NO.: MD056502.1 DATE: 9/28/06 SCALE: AS SHOWN PROFESSIONAL ENGINEER NO. 28567 DRAWING NO. 27 OF 28

MICHAEL D. ADCOCK, PROFESSIONAL LAND SURVEYOR MD, REG. NO. 21257, EXPIRATION DATE: 06-16-19

AS-BUILT CERTIFICATION

IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO REVIEW ALL OF THE DRAWINGS AND SPECIFICATIONS ASSOCIATED WITH THIS PROJECT WORK SCOPE PRIOR TO THE INITIATION OF CONSTRUCTION. SHOULD THE CONTRACTOR FIND A CONFLICT WITH THE DOCUMENTS RELATIVE TO THE SPECIFICATIONS OR APPLICABLE CODES, IT IS THE CONTRACTORS RESPONSIBILITY TO NOTIFY BOHLER ENGINEERING, P.C. IN WRITING PRIOR TO THE START COMPLETE THE SCOPE OF THE WORK AS DEFINED BY THE DRAWINGS AND IN FULL CONFORMANCE WITH LOCAL REGULATIONS AND CODES.

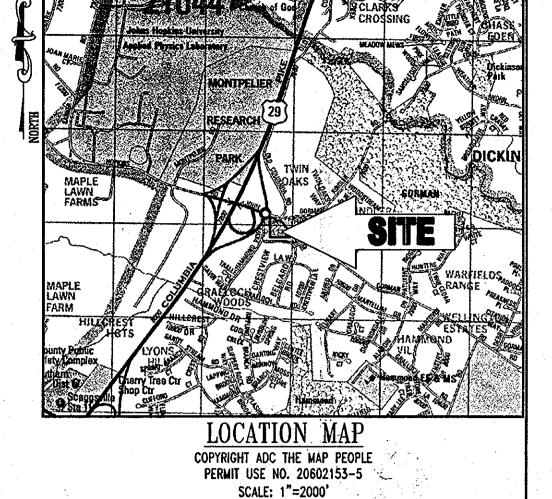
EXISTING STORM WATER MANAGEMENT DRAINAGE AREA

SCALE: 1"=60"

- IMPERVIOUS AREA = 39,325 S.F. OR .90 AC. PERVIOUS AREA = 88,862 S.F. OF 2.04 AC. TOTAL AREA = 128,187 S.F. OR 2.94 AC. WEIGHTED CURVE NUMBER = 72 TC PATH = 0.42 HOURS
- IMPERVIOUS AREA = 625 S.F. OR 0.01 AC. PERVIOUS AREA = 27,878 S.F. OF 0.64 AC. TOTAL AREA = 28,503 S.F. OR 0.65 AC. WEIGHTED CURVE NUMBER = 62 TC PATH = 0.24 HOURS

- PROPOSED STORM WATER MANAGEMENT DRAINAGE AREA
  - IMPERVIOUS AREA = 105,981 S.F. OR 2.433 AC. PERVIOUS AREA = 28,184 S.F. OF 0.647 AC. TOTAL AREA = 134,165 5.F. OR 3.08 AC. WEIGHTED CURVE NUMBER = 86 TC PATH = 0.10 HOURS (MIN.)
  - IMPERVIOUS AREA = 436 S.F. OR 0.01 AC. PERVIOUS AREA = 21,780 S.F. OF 0.50 AC. TOTAL AREA = 22,216 S.F. OR 0.51 AC. WEIGHTED CURVE NUMBER = 62 TC PATH = 0.10 HOURS (MIN.)

MD, REG. NO. 21257, EXPIRATION DATE: 06-16-15





3 FOR REVISION 3 ONLY



2 FOR REVISION 2 ONLY

/ FOR REVISION 1 ONLY

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND

APPROVED: DEPARTMENT OF PLANNING AND ZONING

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS.

HOWARD COUNTY HEALTH DEPARTMENT COOP

4 6/06/13 LEVETH OF STORAGE PIPE REVISION
3 4/7/08 SIZE & AREA CEVISED FOR CITA BOILDING
1 2/21/08 IRRIGATION LINE & CHA SERVICE YARD REVISIONS
1 12/06/07 RETAIL GLOG. AREA & ACCESS FORT LOCATIONS
NO.: DATE REVISION DESCRIPTION

CHICK-FIL-A RESTAURANT & GENERAL OFFICE/RETAIL BUILDING

PART OF LOT 1, HOPKINS STATION (FORMER PRICE FARMS, LOT!)

JOHNS HOPKINS ROAD

JUREL, HOWARD COUNTY, MARYLAND

PARCEL 425 L. 3,095, F. 39 & L. 7004, F. 653

5TH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND

AREA 3.59 AC. TAX MAP 41 GRID 22 ZONED B-2

ATLANTA, GA 30349-2998

12/15/06

C/O SCOTT PATMAN PHONE: (404) 684-8660

HOPKINS STATION GENERAL PARTNERSHIP
C/O BRANTLY DEVELOPMENT GROUP
8835 COLUMBIA

ATLANTA. GA 30349-2998

CHIEF-DIVISION & LAND DEVELOPMENT

park play

MODERATELY ERODED

AS-BUILT



FOR REVISION 4 ONLY

PROFESSIONAL CERTIFICATION

1, 10 SEPH J. UCCFFERRO, HEREBY CERTIFY THAT THESE

DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNIDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 36064, EXPIRATION DATE: 6/26/2014

ENGINEER'S CERTIFICATE I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE SIGNATURE OF ENGINEER (FRINT NAME BELOW SIGNATURE)

DEBAT NAME

DE DEVELOPER'S CERTIFICATE "I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BÉ DONE ACCORDING TO THIS PLAN FOR SEDIMENT AND EROSION CONTROL, AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED

ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION

TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION

BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC



THIS DRAWING DOES NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY. ALL CONSTRUCTION MUST BE DONE IN COMPLIANCE WITH THE OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970 AND ALL RULES AND REGULATIONS THERETO APPURTENANT.

THE CONTRACTOR TO CALL MISS UTILITY TO

HAVE ALL EXISTING UTILITIES MARKED 48
40000 PRIOR TO ANY CONSTRUCTION.

SWM DRAINAGE AREA MAP Engineering, p.c

100 PARKWAY, SUITE P COLUMBIA, MD 21045 PHONE: (410) 730-0810

REVISED: DESIGNED BY: JD PROJECT NO.: MD056502.1 DATE: 9/28/06 SCALE: AS SHOWN PROFESSIONAL ENSINEER NO. 23567 DRAWING NO. 25 OF 25.

AS-BUILT CERTIFICATION THERE IS NO "AS-BUILT" INFORMATION PROVIDED ON THIS SHEET. MICHAEL D. ADOOCK, PROFESSIONAL LAND SURVEYOR

GENERAL NOTE:
IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO REVIEW ALL OF THE DRAWINGS AND SPECIFICATIONS ASSOCIATED WITH THIS PROJECT FORK SCOPE PRIOR TO THE INITIATION OF CONSTRUCTION. SHOULD THE CONTRACTOR FIND A CONFLICT WITH THE DOCUMENTS RELATIVE TO THE SPECIFICATIONS OR APPLICABLE CODES, IT IS THE CONTRACTORS RESPONSIBILITY TO NOTIFY BOHLER ENGINEERING, P.C. IN WRITING PRIOR TO THE START OF CONSTRUCTION. FAILURE BY THE CONTRACTOR TO NOTIFY BOHLER ENGINEERING, P.C.

SHALL CONSTITUTE ACCEPTANCE OF FULL RESPONSIBILITY BY THE CONTRACTOR TO

COMPLETE THE SCOPE OF THE WORK AS DEFINED BY THE DRAWINGS AND IN FULL

CONFORMANCE WITH LOCAL REGULATIONS AND CODES.