SITE DEVELOPMENT PLANS
COASTAL SUNBELT PRODUCE

TAX MAP No.: 50 GRID No: 4,5,10,11
PARCEL No.: 375
SIXTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

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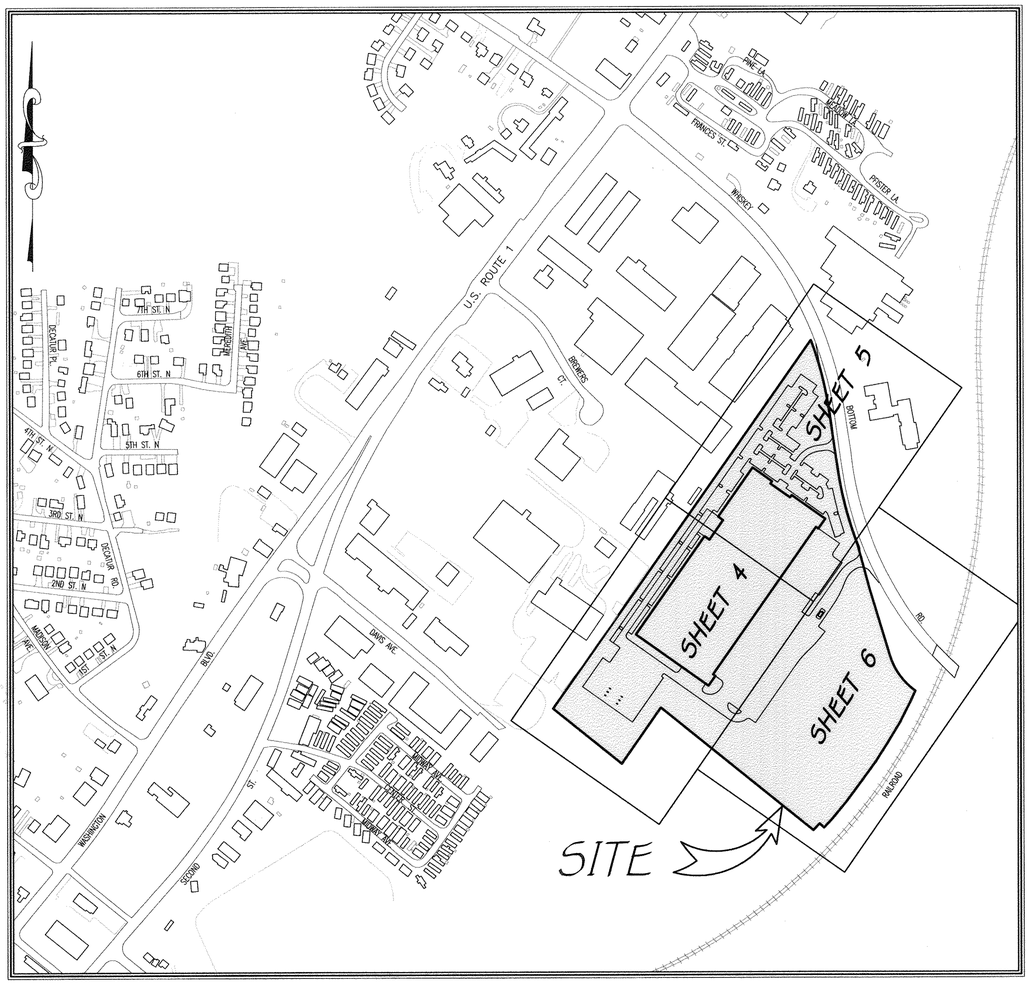
LEGEND

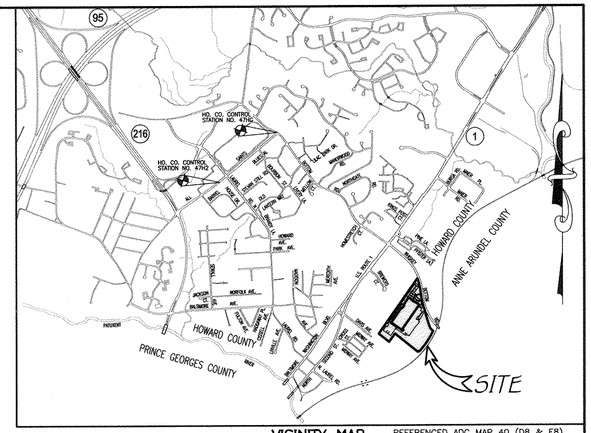
SYMBOL	DESCRIPTION
108	EXISTING CONTOUR 2' INTERVAL
110	EXISTING CONTOUR 10' INTERVAL
s	EXISTING SAN. SEWER LINE
s	EXISTING STORM DRAIN LINE
w	EXISTING WATER LINE
oh	EXISTING OVERHEAD ELECTRIC LINE
e	EXISTING UNDERGROUND ELECTRIC LINE
g	EXISTING GAS LINE
X	EXISTING FENCE
108	PROPOSED CONTOUR 2' INTERVAL
110	PROPOSED CONTOUR 10' INTERVAL
+ 116.30	SPOT ELEVATION
	EXISTING TREES
	EXISTING TREELINE
	PROPOSED TREELINE
L.O.D.	LIMIT OF DISTURBANCE
24" RCCP	PROPOSED STORMDRAIN
	SOILS DELINEATION
SSF	SUPER SILT FENCE
TP	TREE PROTECTION/SNOW FENCE
x x x	PROPOSED CHAINLINK FENCE

CONTRACTOR NOTE:
DURING CONSTRUCTION ACTIVITIES THE LIMITS OF DISTURBANCE (L.O.D.) SHALL NOT EXCEED 20 ACRES.



LOCATION MAP
SCALE: 1" = 300'

0' 300' 600' 900'
SCALE: 1" = 300'



VICINITY MAP
SCALE: 1" = 2000'

REFERENCED ADC MAP 40 (D8 & E8)
REFERENCED ADC MAP 42 (D1 & E1)

SITE ANALYSIS DATA

1. Area Tabulation:
   A. Total project area: 33.71 Ac±
   B. Total area of R/W dedication: 0 Ac.±
   C. Total area of site: 33.71 Ac.±
   D. Building coverage: 7.0 Ac.± (21%)
      Office space = 10,116 sf + Mezzanine 27,179 sf
      Warehouse space = 294,459 sf
   E. Total area of wetlands: 2.5 Ac.±
   F. Total area of wetlands buffer: 2.1 Ac.±
   G. There is no floodplain on this site.
   H. Total area of forest: 6.8 Ac±
   I. Total area of slopes 15%-25%: 0 Ac±
   J. There are no erodible soils on this site.
   K. Limit of disturbance: 27.0 Ac±
   L. Proposed use of site or structure: OFFICE/WAREHOUSE
   M. Zoned: TOD
2. Parking Space Data:
   A. Total number of 18' standard parking spaces required:
      Office: 3.3 spaces per 1000 sf
         Office: 10,116 sf + Mezzanine: 27,179 sf = Total: 37,295 sf
         Office spaces required = 123 spaces
      Warehouse; 0.75 spaces per 1000 sf
         Warehouse: 294,459 sf
         Warehouse spaces required = 221 spaces
         Total spaces required: 344 spaces
   B. Total number of 18' standard parking spaces provided = 365 (Including 9 handicapped spaces)
   C. Total number of 35' truck parking spaces provided = 191
   D. Total number of 55' trailer parking spaces provided = 15
   E. Total number of 60' loading dock spaces provided = 51

NOTE: THIS PLAN IS SUBJECT TO WAIVER PETITION WP-14-103. THE DIRECTOR OF THE DEPARTMENT OF PLANNING AND ZONING ON APRIL 4, 2014 GRANTED APPROVAL TO WAIVE SECTION 16.155(a)(1)(i) OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS, WHICH STATES THAT A SITE DEVELOPMENT PLAN IS REQUIRED FOR NON-RESIDENTIAL DEVELOPMENT, SECTION 16.1205(a)(7)&(10) WHICH REQUIRES THE RETENTION OF STATE CHAMPION TREES, TREES 75% OF THE DIAMETER OF STATE CHAMPION TREES, AND TREES 30" IN DIAMETER OR LARGER, AND SECTION 16.1202(a) WHICH STATES THAT A FOREST CONSERVATION PLAN IS REQUIRED FOR DEVELOPMENT PLANS.

APPROVAL IS SUBJECT TO THE FOLLOWING CONDITIONS:

1. IN COMPLIANCE WITH THE DPZ, DEVELOPMENT ENGINEERING DIVISION (DED) COMMENTS DATED MARCH 27, 2014; THIS WAIVER REQUEST IS TO ALLOW MASS GRADING AND THE INSTALLATION OF TEMPORARY SEDIMENT CONTROL MEASURES. THIS WAIVER DOES NOT APPROVE THE INSTALLATION OF ANY PERMANENT STRUCTURES. AS A CONDITION OF APPROVAL, DED REQUESTS A COPY OF THE APPROVED MASS GRADING PLAN.
2. APPROVAL FROM THE HOWARD SOIL CONSERVATION DISTRICT AND THE DEPARTMENT OF INSPECTIONS, LICENSES AND PERMITS IS REQUIRED FOR THE ASSOCIATED GRADING PLAN PRIOR TO THE ISSUANCE OF ANY REQUIRED PERMITS. THE LIMIT OF DISTURBANCE AND GRADING LIMIT SHALL NOT EXCEED THE LIMITS AS SHOWN ON THE WAIVER PLAN EXHIBIT.
3. THE GRADING SHOWN ON THE EXHIBIT IS TEMPORARY AND SHALL BE STABILIZED IN ACCORDANCE WITH THE LATEST SEDIMENT AND EROSION CONTROL STANDARDS AND SPECIFICATIONS. FINAL GRADING ADN DEVELOPMENT SHALL BE APPROVED IN ACCORDANCE WITH A SITE DEVELOPMENT PLAN, WHICH WILL DESIGN THE FINAL STORMWATER MANAGEMENT REQUIREMENTS FOR THE OVERALL SITE DESIGN.
4. APPROVAL OF SECTION 16.1202(a) IS ONLY TO ALLOW TEMPORARY DEFERRAL TO THE FOREST CONSERVATION PLAN OBLIGATION AND REQUIREMENT UNTIL THE SITE DEVELOPMENT PLAN FOR THE OVERALL SITE DESIGN IS SUBMITTED TO THE DEPARTMENT OF PLANNING AND ZONING. IF THE OVERALL DEVELOPMENT OF THE SITE CEASES FOR ANY REASON, OR IS NOT COMPLETED IN A TIMELY MANNER, THE PETITIONER WILL BE REQUIRED TO ADDRESS THE FOREST CONSERVATION OBLIGATION REQUIREMENT FOR THE LIMIT OF DISTURBANCE AS INDICATED ON THE WAIVER PETITON EXHIBIT IN ACCORDANCE WITH THE HOWARD COUNTY CODE AND FOREST CONSERVATION MANUAL.
5. IN ACCORDANCE WITH THE HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS, NO GRADING, REMOVAL OF VEGETATIVE COVER OR TREES, PAVING AND NEW STRUCTURE SHALL BE PERMITTED WITHIN THE REQUIRED WETLANDS, STREAMS OR THEIR ASSOCIATED BUFFERS, AND 100-YEAR FLOODPLAIN.
6. APPROVAL OF SECTION 16.1205(a)(7)&(10) IS FOR THE REMOVAL OF SEVEN SPECIMEN TREES, IDENTIFIED AS SPECIMEN TREES#1-7 ON THE WAIVER PETITION EXHIBIT. NO OTHER SPECIMEN TREES MAY BE REMOVED. REMOVAL OF THE SEVEN SPECIMEN TREES WILL REQUIRE MITIGATION OF SEVEN 3"-4" CALIPER TREES. THE MITIGATED TREES SHALL BE OF SIMILAR SPECIES AS THE REMOVED TREES, BE SHOWN AS PART OF THE LANDSCAPE PLAN WITH THE SITE DEVELOPMENT PLAN, AND SHALL BE BONDED WITH THE LANDSCAPING OBLIGATION.

GENERAL NOTES

1. ALL CONSTRUCTION SHALL BE ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY PLUS MSHA STANDARDS AND SPECIFICATIONS IF APPLICABLE.
2. THE CONTRACTOR SHALL NOTIFY THE BUREAU OF ENGINEERING/CONSTRUCTION INSPECTION DIVISION AT 410-313-1880 AT LEAST FIVE WORKING DAYS PRIOR TO START OF WORK.
3. THE CONTRACTOR SHALL NOTIFY MISS UTILITY AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY DIGGING AND EXCAVATION WORK.
4. PROJECT BACKGROUND:
   TAX MAP 50, GRID 4,5,10,11
   PARCEL NO. 375
   ZONING: THIS PROJECT IS ZONED TOD PER THE COMPREHENSIVE ZONING PLAN DATED OCTOBER 6, 2013.
   ELECTION DISTRICT: SIXTH
   SECTION/AREA: N/A
   SITE AREA: 33.19 AC.±
5. TRAFFIC CONTROL DEVICES, MARKINGS AND SIGNING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). ALL STREET AND REGULATORY SIGNS SHALL BE IN PLACE PRIOR TO PLACEMENT OF ANY ASPHALT.
6. ALL PLAN DIMENSIONS ARE TO THE FACE OF CURB OR FACE OF BUILDING UNLESS OTHERWISE NOTED. DIMENSIONS ARE MEASURED PERPENDICULAR OR RADIAL BETWEEN ITEMS UNLESS OTHERWISE NOTED.
7. THE EXISTING TOPOGRAPHY IS BASED ON AERIAL SURVEY PERFORMED BY HARFORD AERIAL SURVEYS, INC. DATED NOV. 2013 AND SUPPLEMENTED WITH TOPOGRAPHY TAKEN FROM FIELD RUN SURVEY WITH MAXIMUM TWO FOOT CONTOUR INTERVALS PREPARED BY FISHER, COLLINS AND CARTER INC. DATED DEC. 2013.
8. COORDINATES ARE BASED ON NAD 83 MARYLAND COORDINATES SYSTEM AS PROJECTED BY HOWARD COUNTY GEODETIC CONTROL STATIONS.

STA 47H2	STA 47HG
N 529,706.4221	N 531,084.970
E 1,355,445.3364	E 1, 357,060.351
ELEV. 256.068	ELEV. 294.472

9. THE EXISTING WATER AND SEWER SYSTEMS SERVING THIS PROJECT ARE CONTRACT NO. 561-W&S, 112-S & 44-3624-D.
10. ALL ON-SITE STORM DRAINS UNDER THIS SITE DEVELOPMENT PLAN ARE PRIVATE.
11. THE EXISTING UTILITIES SHOWN HEREON WERE DERIVED FROM AVAILABLE PUBLIC RECORDS. THE CONTRACTOR MUST DIG TEST PITS BY HAND AT ALL UTILITY CROSSINGS AND CONNECTION POINTS TO VERIFY THE EXACT LOCATION.
12. ALL PROPOSED RAMPS SHALL BE IN ACCORDANCE WITH CURRENT A.D.A. STANDARDS ACCESSIBILITY GUIDELINES. MAXIMUM SIDEWALK CROSS SLOPE SHALL BE TWO PERCENT. PROVIDE A (5'X5') FIVE FOOT BY FIVE FOOT LEVEL LANDING (MAX. SLOPE 2%) AT THE TOP AND BOTTOM OF ALL RAMPS AND BUILDING ENTRANCES AND EXITS. HANDRAILS SHALL BE PROVIDED ON ALL RAMPS IN ACCORDANCE WITH SECTION 505 OF THE A.D.A STANDARDS ACCESSIBILITY GUIDELINES.
13. NO GRADING OR REMOVAL OF VEGETATIVE COVER, PAVING AND NEW STRUCTURES ARE PERMITTED WITHIN THE LIMITS OF WETLANDS, STREAMS, THEIR BUFFERS, OR FOREST CONSERVATION EASEMENTS. TREE PROTECTION FENCE WILL BE INSTALLED AT THE WETLAND BUFFER AS SHOWN AS "TP".
14. ANY DAMAGE TO COUNTY AND OR STATE OWNED RIGHT-OF-WAY TO BE CORRECTED AT THE CONTRACTOR'S EXPENSE.
15. TRENCH BEDDING FOR STORM DRAINS STRUCTURES SHALL BE IN ACCORDANCE WITH HOWARD COUNTY STANDARD G2.11 & G2.12 CLASS C BEDDING UNLESS OTHERWISE NOTED.
16. GUTTER PAN OF CURBS SHALL BE PITCHED TO CONFORM TO THE ADJACENT DRAINAGE PATTERNS OF THE ADJOINING PAVING FOR VEHICULAR USE.
17. FOR DETAILS OF PARKING, ROAD SECTION, HANDICAP, CURB AND GUTTER SEE DETAIL SHEET 20.
18. THERE ARE NO KNOWN GRAVE SITES OR CEMETERIES ON THIS SITE BASED ON A VISUAL SITE VISIT AND BASED ON AN EXAMINATION OF THE HOWARD COUNTY CEMETERY INVENTORY MRP.
19. THIS PROPERTY IS RECORDED AMONG THE LAND RECORDS IN HOWARD COUNTY, MARYLAND AS LIBER 15591 AT FOLIO 247. AND PLAT NOS. 23437 AND 23439.
20. ALL OUTSIDE LIGHTING SHALL COMPLY WITH ZONING REGULATIONS SECTION 134.0 WHICH REQUIRES LIGHTS TO BE INSTALLED TO DIRECT/REFLECT LIGHT DOWNWARDS AND INWARDS ON THE SITE AND AWAY FROM ALL PUBLIC STREETS AND RESIDENTIAL AREAS. "LIGHT TRESPASS LIMITS SHALL NOT APPLY TO LAND WITHIN A PUBLIC STREET RIGHT OF WAY OR DEVELOPED FOR NON-RESIDENTIAL USES; HOWEVER LIGHT TRESPASS ONTO A PROPERTY ZONED FOR RESIDETIAL PURPOSES SHALL BE LIMITED 0.5 FOOT CANDLES."
21. PREVIOUS DPZ FILE NUMBERS: ZRA CASE 147, WP-14-103, SP-14-58, ECP-14-090. F-15-074
22. ALL SIGN POSTS USED FOR TRAFFIC CONTROL SIGNS INSTALLED IN THE COUNTY RIGHT-OF-WAY SHALL BE MOUNTED ON A 2" GALVANIZED STEEL PERFORATED, ("QUICK PUNCH" TYPE), SQUARE TUBE POST (14 GAUGE) INSERTED INTO A 2-1/2" GALVANIZED STEEL PERFORATED, SQUARE TUBE SLEEVE (12 GAUGE) - 3' LONG, THE ANCHOR SHALL NOT EXTEND MORE THAN TWO ("QUICK PUNCH") HOLES ABOVE GROUND LEVEL. A GALVANIZED STEEL POLE CAP SHALL BE MOUNTED ON TOP OF EACH POST.
23. THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH SECTION 16.124 OF THE HOWARD COUNTY CODE AND LANDSCAPE MANUAL. FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING TREES (72 SHADE TREES, 13 EVERGREEN TREES, 50 ORNAMENTAL TREES & 255 SHRUBS) SHALL BE POSTED AS PART OF THE DEVELOPER'S AGREEMENT WITH THIS SDP IN THE AMOUNT OF $38,700.00.
24. STREET LIGHT PLACEMENT AND THE TYPE OF FIXTURE AND POLE SHALL BE IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL, VOLUME III (1993) AND AS MODIFIED BY "GUIDELINES FOR STREET LIGHTS IN RESIDENTIAL DEVELOPMENTS (JUNE 1993)." A MINIMUM SPACING OF 20' SHALL BE MAINTAINED BETWEEN ANY STREETLIGHT AND ANY TREE.
25. THERE ARE NO STEEP SLOPES OR FLOODPLAIN ON THIS SITE.
26. THE SPEED STUDY WAS PREPARED BY THE TRAFFIC GROUP DATED OCTOBER 11, 2013.
27. WETLANDS STUDY AND FOREST STAND DELINEATION REPORT FOR THIS PROJECT WAS PREPARED BY ECO-SCIENCE PROFESSIONAL, INC. DATED MARCH 13, 2014.
28. WATER QUALITY MANAGEMENT WILL CONSIST OF 2 SURFACE SAND FILTER FACILITIES TO CAPTURE AS MUCH IMPERVIOUS AREAS AS PRACTICABLE WHILE THE REMAINING IMPERVIOUS AREAS WILL BE TREATED IN A SUBMERGED GRAVEL WETLAND FACILITY. THE S.G.W. POND WILL PROVIDE 100 YEAR QUANTITY MANAGEMENT. IN ADDITION, A TYPE F-3 PERIMETER SAND FILTER WILL PROVIDE "HOT SPOT" TREATMENT.
29. THE WATER METER WILL BE INSTALLED INSIDE THE BUILDING. THE BUILDING SHALL BE EQUIPPED WITH AN AUTOMATIC FIRE PREVENTION SPRINKLER SYSTEM.
30. TRAFFIC STUDY WAS PREPARED BY THE TRAFFIC GROUP DATED NOVEMBER 7, 2014 AND UPDATED ON APRIL 17, 2015. A FEE-IN-LIEU FROM THE DEVELOPER WILL BE PROVIDED FOR CAPITAL PROJECT J4229 ROAD IMPROVEMENTS ALONG WHISKEY BOTTOM ROAD AND US 1 INTERSECTION.
31. THERE ARE HISTORIC BUILDINGS ON THIS SITE, BUT THEY ARE SEVERELY DETERIORATED. NOAT DATES THE MAIN STRUCTURE TO 1860.
32. DESIGN ADVISORY PANEL (DAP) MEETING WAS HELD FOR COASTAL SUNBELT PRODUCE #14-12 ON MAY 28, 2014.
33. THE FOREST CONSERVATION EASEMENTS HAVE BEEN ESTABLISHED TO FULFILL THE REQUIREMENTS OF SECTION 16.1200 OF THE HOWARD COUNTY CODE AND FOREST ACT. NO CLEARING, GRADING OR CONSTRUCTION IS PERMITTED WITHIN THE FOREST CONSERVATION EASEMENT; HOWEVER FOREST MANAGEMENT PRACTICES AS DEFINED IN THE DEED OF FOREST CONSERVATION EASEMENT ARE ALLOWED. THE FOREST CONSERVATION OBLIGATION OF 6.0 ACRES HAS BEEN FULFILLED BY THE RETENTION OF 6.664 ACRES. SURETY FOR FOREST RETENTION IS NOT REQUIRED.
34. THE ROUTE 1 ALTERNATIVE COMPLIANCE REQUEST WAS APPROVED ON MARCH 13, 2015. THE REQUEST WAS FOR APPROVAL TO REDUCE THE AMENITY AREA REQUIREMENT FROM 10% TO 4.8%, AND TO DISREGARD THE 0.25 ACRE MINIMUM REQUIREMENT AND THE CIVIC AREA REQUIREMENT. THE BASIS FOR APPROVAL WAS DUE TO THE LIGHT INDUSTRIAL USE OF THE SITE RATHER THEN A MULTI-USE DEVELOPMENT. PLEASE SEE SHEET #19 FOR THE AMENITY AREA CHART INFORMATION.

HEALTH DEPARTMENT APPROVAL OF THIS SITE DEVELOPMENT PLAN (SDP) DOES NOT ENSURE APPROVAL OF BUILDING PERMIT APPLICATIONS ASSOCIATED WITH THIS PLAN. PERMIT PLANS FOR CERTAIN FACILITIES TO BE CONSTRUCTED WITHIN THE LIMITS DESCRIBED BY THIS SDP WILL REQUIRE REVIEW AND APPROVAL BY THE HEALTH DEPARTMENT. SUCH FACILITIES MAY INCLUDE, BUT ARE NOT LIMITED TO, THOSE WHICH HAVE SWIMMING POOLS, OR THAT SELL PREPARED OR PACKAGE FOODS, OR THAT MAY HAVE EQUIPMENT THAT EMITS RADIATION.

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
ELLICOTT CITY, MARYLAND 21042
(410) 461 - 2855

OWNER
9001 WBR, LLC
1029 HARRISON DRIVE
LAUREL, MARYLAND
20707-3827
PH# 410-423-0460

DEVELOPER
WHISKEY SPEAK LLC
2330 WEST JOPPA ROAD
SUITE 190
LUTHERVILLE, MARYLAND
21093-4614
PH# 410-296-3800

"PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 13204, EXPIRATION DATE: NOVEMBER 13, 2016.

CHARLES J. CROVO, SR., P.E. — 7/15/15 DATE

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS. HOWARD COUNTY HEALTH DEPARTMENT.

FOR HOWARD COUNTY HEALTH OFFICER — 7/16/15 DATE

DATE	DESCRIPTION
	REVISION BLOCK

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Director - Department of Planning and Zoning — 8-7-15 Date

Chief, Division of Land Development — 8-06-15 Date

Chief, Development Engineering Division — 8/6/15 Date

STATE OF MARYLAND — CHARLES J. CROVO — No. 13204 — PROFESSIONAL ENGINEER

ADDRESS CHART	
BUILDING NO.	STREET ADDRESS
OFFICE/WAREHOUSE	9001 WHISKEY BOTTOM ROAD
GUARD HOUSE	9003 WHISKEY BOTTOM ROAD
FUTURE GARAGE	9005 WHISKEY BOTTOM ROAD
	LAUREL, MARYLAND 20723

PERMIT INFORMATION CHART

SUBDIVISION NAME		SECTION/AREA		LOT/PARCEL NO.
COASTAL SUNBELT PRODUCE		N/A		P. 375
PLAT# OR L/F	GRID#	ZONING	TAX MAP#	ELECT. DISTR.	CENSUS TRACT
23437-23439	4,5 10,11	TOD	50	SIXTH	6069.07

TITLE SHEET

COASTAL SUNBELT PRODUCE
WAREHOUSE DISTRIBUTION CENTER
PARCEL 'A'

ZONED TOD — TAX MAP No.: 50
GRID No.: 4,5,10,11 — PARCEL No.: 375
SIXTH ELECTION DISTRICT — HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN — DATE: JULY 6, 2015

SHEET 1 OF 58

SDP-14-080

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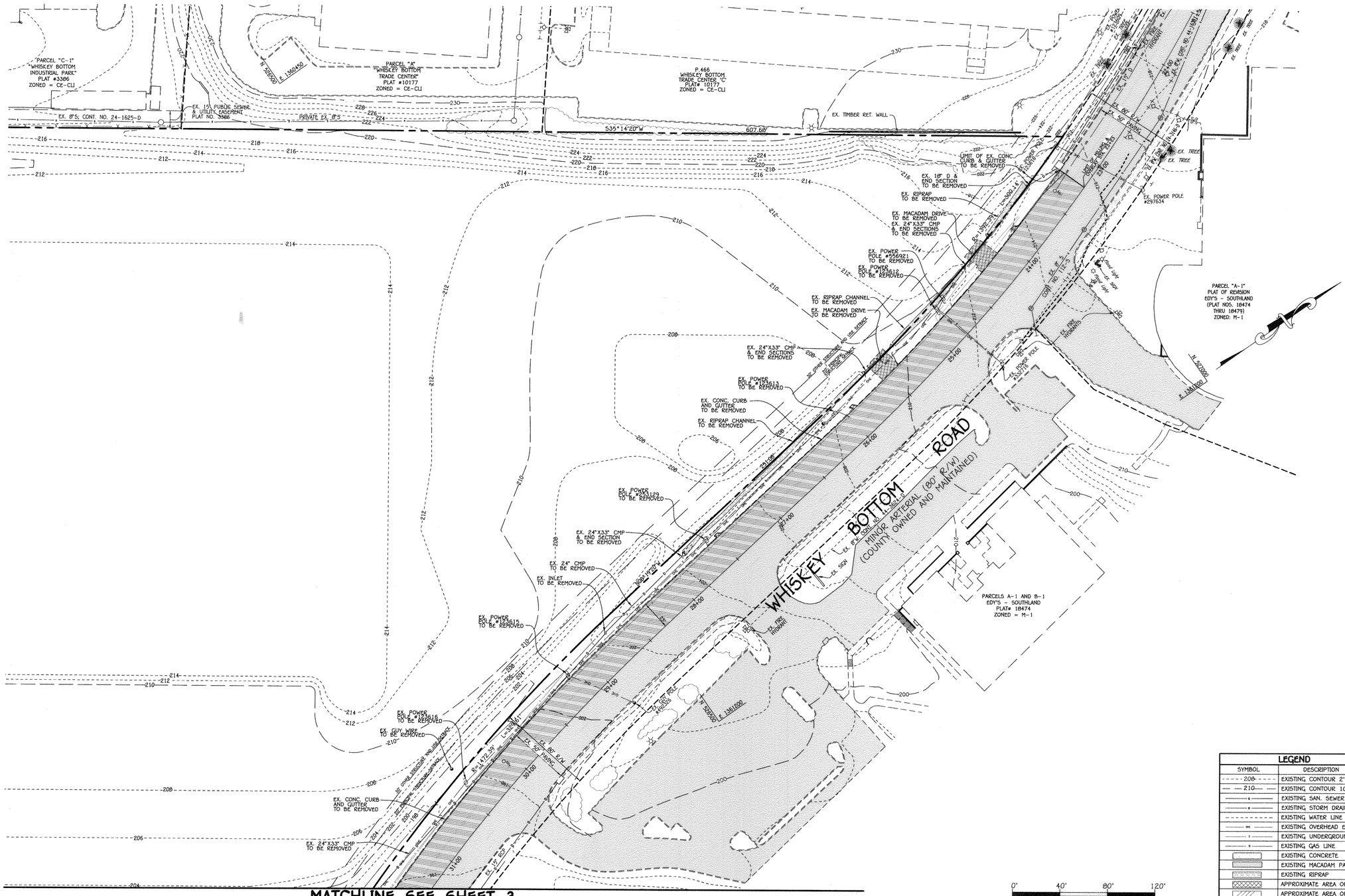

0' 40' 80' 120'
SCALE: 1" = 40'

LEGEND	
SYMBOL	DESCRIPTION
208	EXISTING CONTOUR 2' INTERVAL
210	EXISTING CONTOUR 10' INTERVAL
	EXISTING SAN. SEWER LINE
	EXISTING STORM DRAIN LINE
	EXISTING WATER LINE
	EXISTING OVERHEAD ELECTRIC LINE
	EXISTING UNDERGROUND ELECTRIC LINE
	EXISTING GAS LINE
	EXISTING CONCRETE
	EXISTING MACADAM PAVING
	EXISTING RIPRAP
	APPROXIMATE AREA OF DEMOLITION
	APPROXIMATE AREA OF MILLING
	EXISTING TREES
	EXISTING TREELINE

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CHARLES J. CROVO, SR., P.E. — 7/15/16 DATE

DATE	DESCRIPTION
	REVISION BLOCK

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Director - Department of Planning and Zoning — 8-7-16 Date

Chief, Division of Land Development — 8-05-15 Date

Chief, Development Engineering Division — 7/6/15 Date

STATE OF MARYLAND — CHARLES J. CROVO, SR. — 13204 — PROFESSIONAL ENGINEER

ADDRESS CHART	
BUILDING NO.	STREET ADDRESS
OFFICE/WAREHOUSE	9001 WHISKEY BOTTOM ROAD
GUARD HOUSE	9003 WHISKEY BOTTOM ROAD
FUTURE GARAGE	9005 WHISKEY BOTTOM ROAD
	LAUREL, MARYLAND 20723

PERMIT INFORMATION CHART

SUBDIVISION NAME		SECTION/AREA		LOT/PARCEL NO.	
COASTAL SUNBELT PRODUCE		N/A		P. 375	
PLAT# OR L/F	GRID#	ZONING	TAX MAP#	ELECT. DISTR.	CENSUS TRACT
20437-20439	4,5 10,11	TOD	50	SIXTH	6069.07

DEMOLITION PLAN

COASTAL SUNBELT PRODUCE
WAREHOUSE DISTRIBUTION CENTER
PARCEL 'A'

ZONED TOD — TAX MAP No.: 50
GRID No.: 4,5,10,11 — PARCEL No.: 375
SIXTH ELECTION DISTRICT — HOWARD COUNTY, MARYLAND
SCALE: 1" = 40' — DATE: JULY 6, 2015

SHEET 2 OF 58

SDP-14-080

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MATCHLINE SEE SHEET 2

PARCEL #304
MI DEVELOPMENTS, INC.
c/o TSG DEVELOPMENTS MARYLAND
DEED: LIBER 10518 / FOLIO 157
ZONED = TOD

EX. SEDIMENT BASIN
GP-14-58

EX. 24"X33" CMP
END SECTION
TO BE REMOVED

EX. POWER
POLE #37529
TO BE REMOVED

EX. CONC. CURB
AND GUTTER
TO BE REMOVED

EX. SPECIMAN TREE #2
(TULIP POPLAR)
TO REMAIN

WHISKEY BOTTOM ROAD
(MINOR ARTERIAL (80' R/W)
(COUNTY OWNED AND MAINTAINED)

EX. RIPRAP CHANNEL

EX. CONC.
HEADWALL
N 250080
E 1361400

EX. 50' PAVING

EX. CONC. FLUME

EX. GUARDRAIL

EX. CHAIN RAIL
TO REMAIN

EX. STREAM

EX. WETLANDS

LIMITS OF EX. WETLANDS

25' WETLAND BUFFER

50' STREAM BUFFER

30' CRITICAL STRUCTURE AND ROAD SETBACK

30' PARKING STRUCTURE SETBACK

EX. RAILROAD

EX. HEADWALL

EX. BRIDGE ABUTMENT

EX. BRIDGE OVERPASS

CSX RAIL ROAD

THE BALTIMORE AND OHIO RAILROAD
COMPANY
(AKA: CSX RAILROAD)
AREA CONVEYED TO B & O RAILROAD BY
DEED GW LIBER 89 / FOLIO 210
(VAL MAP #V-181-6)
N 250350
E 1361400

HOWARD COUNTY PROPERTY
PLAT 8992

EX. 36" RCP

EX. 24" RCP

EX. 18" RCP

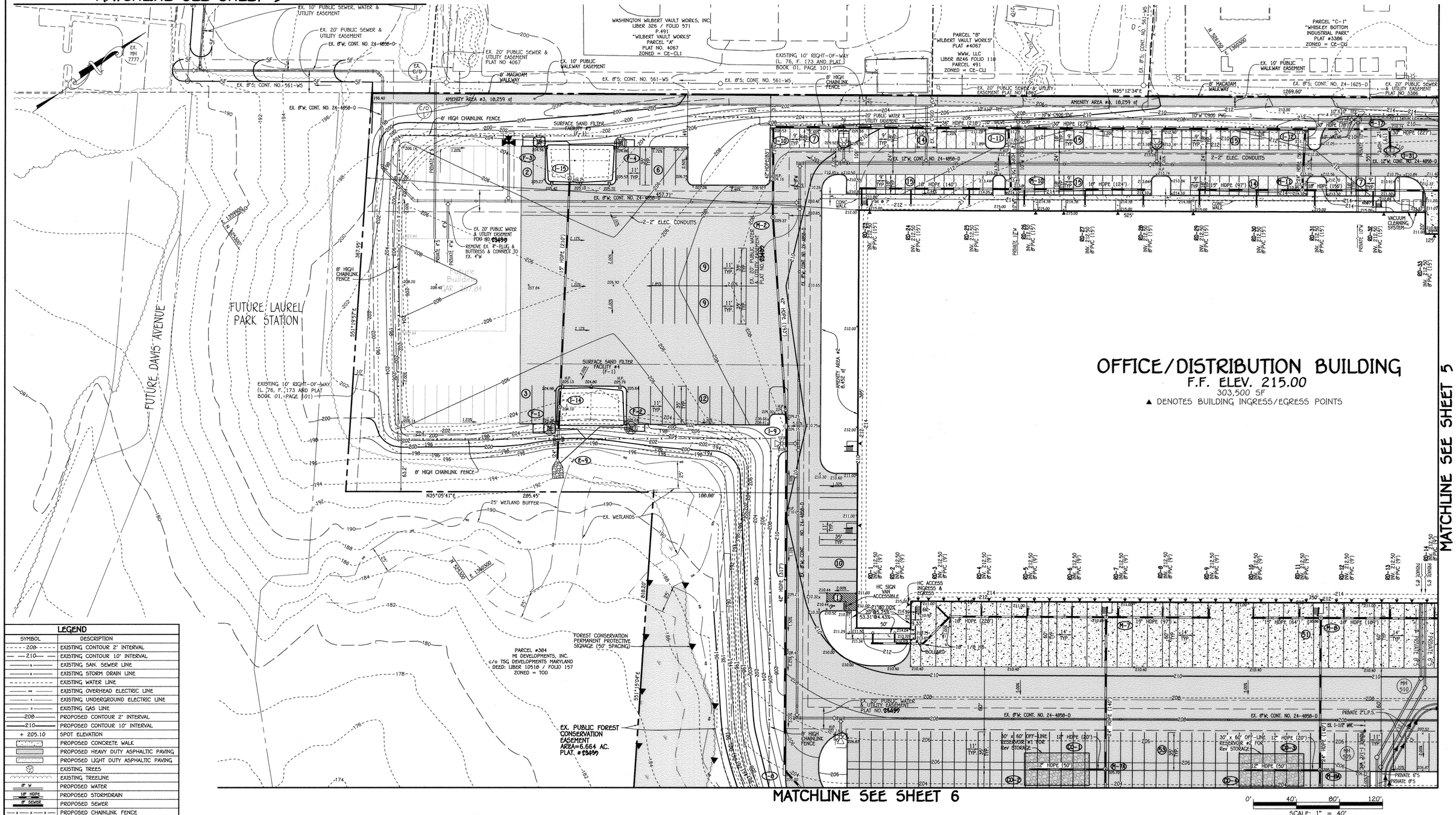
EX. 6" WATER

EX. 8" SAN

EX. 8" GAS

EX. 12" WATER

MATCHLINE SEE SHEET 5



OFFICE/DISTRIBUTION BUILDING

F.F. ELEV. 215.00

303,500 SF

▲ DENOTES BUILDING INGRESS/EGRESS POINTS

SCALE: 1" = 40'

LEGEND	
SYMBOL	DESCRIPTION
208	EXISTING CONTOUR 2' INTERVAL
210	EXISTING CONTOUR 10' INTERVAL
S	EXISTING SAN. SEWER LINE
D	EXISTING STORM DRAIN LINE
W	EXISTING WATER LINE
OHP	EXISTING OVERHEAD ELECTRIC LINE
E	EXISTING UNDERGROUND ELECTRIC LINE
G	EXISTING GAS LINE
208	PROPOSED CONTOUR 2' INTERVAL
210	PROPOSED CONTOUR 10' INTERVAL
+ 205.10	SPOT ELEVATION
	PROPOSED CONCRETE WALK
	PROPOSED HEAVY DUTY ASPHALTIC PAVING
	PROPOSED LIGHT DUTY ASPHALTIC PAVING
	EXISTING TREES
	EXISTING TREELINE
8" W	PROPOSED WATER
18" HDPE	PROPOSED STORMDRAIN
8" SEWER	PROPOSED SEWER
x x x	PROPOSED CHAINLINK FENCE

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
ELLICOTT CITY, MARYLAND 21042
(410) 461 - 2855

OWNER
9001 WBR, LLC
1029 HARRISON DRIVE
LAUREL, MARYLAND
20707-3827
PH# 410-423-0460

DEVELOPER
WHISKEY SPEAK, LLC
2330 WEST JOPPA ROAD
SUITE 190
LUTHERVILLE, MARYLAND
21093-4614
PH# 410-296-3800

"PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 13204, EXPIRATION DATE: NOVEMBER 9, 2016."

CHARLES J. CROVO, SR., P.E. — 7/15/15 DATE

DATE	DESCRIPTION
	REVISION BLOCK

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Director - Department of Planning and Zoning — 8-7-15 Date

Chief, Division of Land Development — 8-6-15 Date

Chief, Development Engineering Division — 7/15/15 Date

STATE OF MARYLAND — CHARLES J. CROVO — No. 13204 — PROFESSIONAL ENGINEER

ADDRESS CHART	
BUILDING NO.	STREET ADDRESS
OFFICE/WAREHOUSE	9001 WHISKEY BOTTOM ROAD
GUARD HOUSE	9003 WHISKEY BOTTOM ROAD
FUTURE GARAGE	9005 WHISKEY BOTTOM ROAD
	LAUREL, MARYLAND 20723

PERMIT INFORMATION CHART

SUBDIVISION NAME		SECTION/AREA		LOT/PARCEL NO.	
COASTAL SUNBELT PRODUCE		N/A		P. 375	
PLAT# OR L/F	GRID#	ZONING	TAX MAP#	ELECT. DISTR.	CENSUS TRACT
23497-23499	4,5 10,11	TOD	50	SIXTH	6069.07

SITE DEVELOPMENT PLAN

COASTAL SUNBELT PRODUCE
WAREHOUSE DISTRIBUTION CENTER
PARCEL 'A'

ZONED TOD — TAX MAP No.: 50
GRID No.: 4,5,10,11 — PARCEL No.: 375
SIXTH ELECTION DISTRICT — HOWARD COUNTY, MARYLAND
SCALE: 1" = 40' — DATE: JULY 6, 2015

SHEET 4 OF 50

SDP-14-080

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MATCHLINE SEE SHEET 4

MATCHLINE SEE SHEET 6

MATCHLINE SEE THIS SHEET

MATCHLINE SEE THIS SHEET

MATCHLINE SEE SHEET 4

OFFICE/DISTRIBUTION BLDG
F.F. ELEV. 215.00
303,500 SF
▲ DENOTES BUILDING INGRESS/EGRESS POINTS

WHISKEY BOTTOM ROAD
(MINOR ARTERIAL (80' R/W)
(COUNTY OWNED AND MAINTAINED)

DAVIS AVENUE
EX. PRIVATE ACCESS STREET

SCALE: 1" = 40'

LEGEND	
SYMBOL	DESCRIPTION
208	EXISTING CONTOUR 2' INTERVAL
210	EXISTING CONTOUR 10' INTERVAL
s	EXISTING SAN. SEWER LINE
d	EXISTING STORM DRAIN LINE
w	EXISTING WATER LINE
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208	PROPOSED CONTOUR 2' INTERVAL
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	PROPOSED HEAVY DUTY ASPHALTIC PAVING
	PROPOSED LIGHT DUTY ASPHALTIC PAVING
	EXISTING TREES
	EXISTING TREELINE
8" W	PROPOSED WATER
10" HDPE	PROPOSED STORMDRAIN
8" SEWER	PROPOSED SEWER
x — x — x	PROPOSED CHAINLINK FENCE

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
ELLICOTT CITY, MARYLAND 21042
(410) 461 - 2855

OWNER
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1029 HARRISON DRIVE
LAUREL, MARYLAND
20707-3827
PH# 410-423-0460

DEVELOPER
WHISKEY SPEAK LLC
2330 WEST JOPPA ROAD
SUITE 190
LUTHERVILLE, MARYLAND
21093-4614
PH# 410-296-3800

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CHARLES J. CROVO, SR., P.E. — 7/15/15 DATE

DATE	DESCRIPTION
9/2/15 ⚠1	REVISE 10"W & 8"W TO WAREHOUSE DISTRIBUTION BUILDING

REVISION BLOCK

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Director - Department of Planning and Zoning — Date 8-7-15

Chief, Division of Land Development — Date 9-24-15

Chief, Development Engineering Division — Date 9/24/15

STATE OF MARYLAND — CHARLES J. CROVO — No. 13204 — PROFESSIONAL ENGINEER

ADDRESS CHART	
BUILDING NO.	STREET ADDRESS
OFFICE/WAREHOUSE	9001 WHISKEY BOTTOM ROAD
GUARD HOUSE	9003 WHISKEY BOTTOM ROAD
FUTURE GARAGE	9005 WHISKEY BOTTOM ROAD
	LAUREL, MARYLAND 20723

PERMIT INFORMATION CHART					
SUBDIVISION NAME		SECTION/AREA		LOT/PARCEL NO.	
COASTAL SUNBELT PRODUCE		N/A		P. 375	
PLAT# OR L/F	GRID#	ZONING	TAX MAP#	ELECT. DISTR.	CENSUS TRACT
23437 - 23439	4,5 10,11	TOD	50	SIXTH	6069.07

SITE DEVELOPMENT PLAN

COASTAL SUNBELT PRODUCE
WAREHOUSE DISTRIBUTION CENTER
PARCEL 'A'

ZONED TOD — TAX MAP No.: 50
GRID No.: 4,5,10,11 — PARCEL No.: 375
SIXTH ELECTION DISTRICT — HOWARD COUNTY, MARYLAND
SCALE: 1" = 40' — DATE: JULY 6, 2015

SHEET 5 OF 58

SDP-14-080

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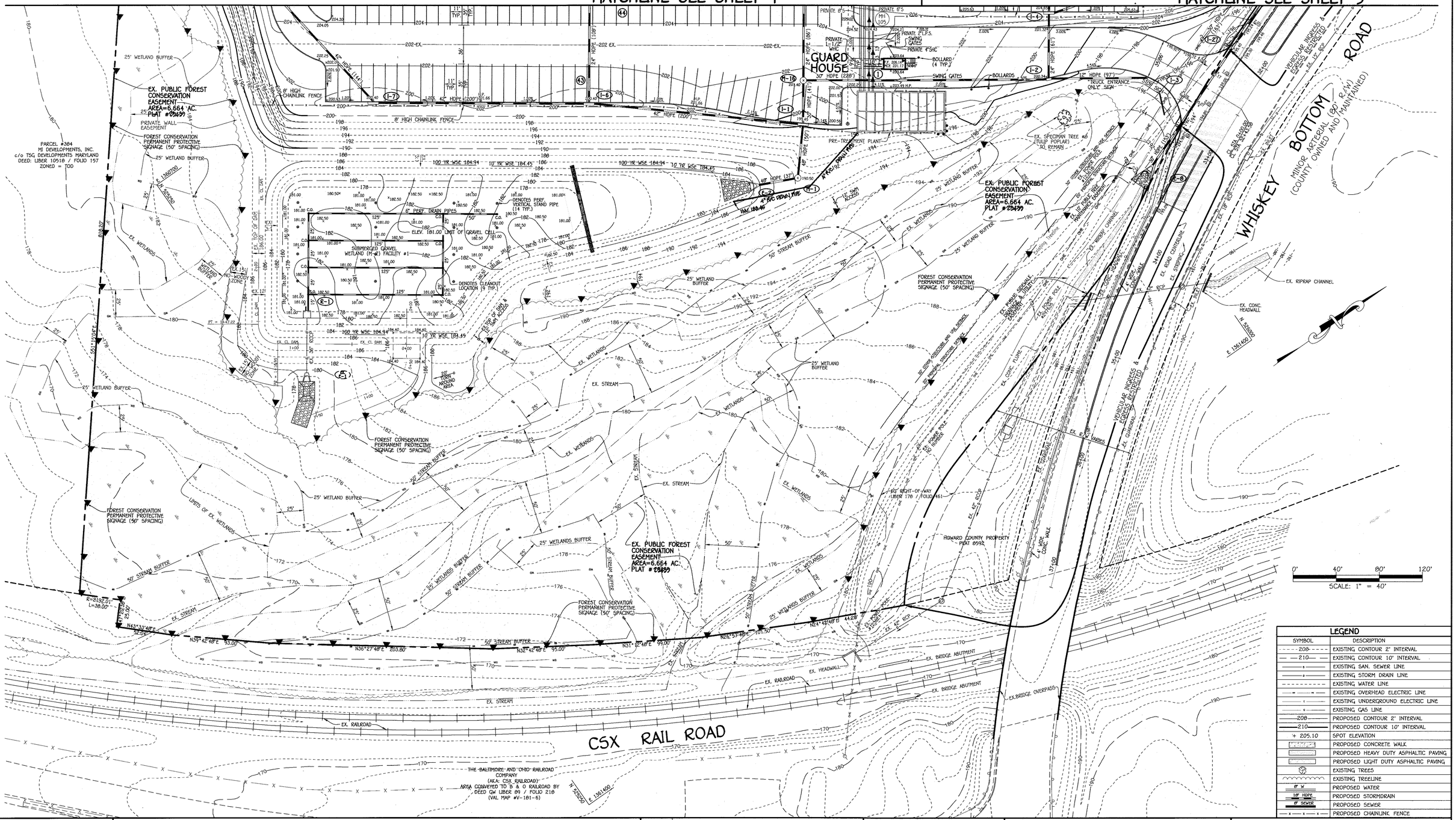
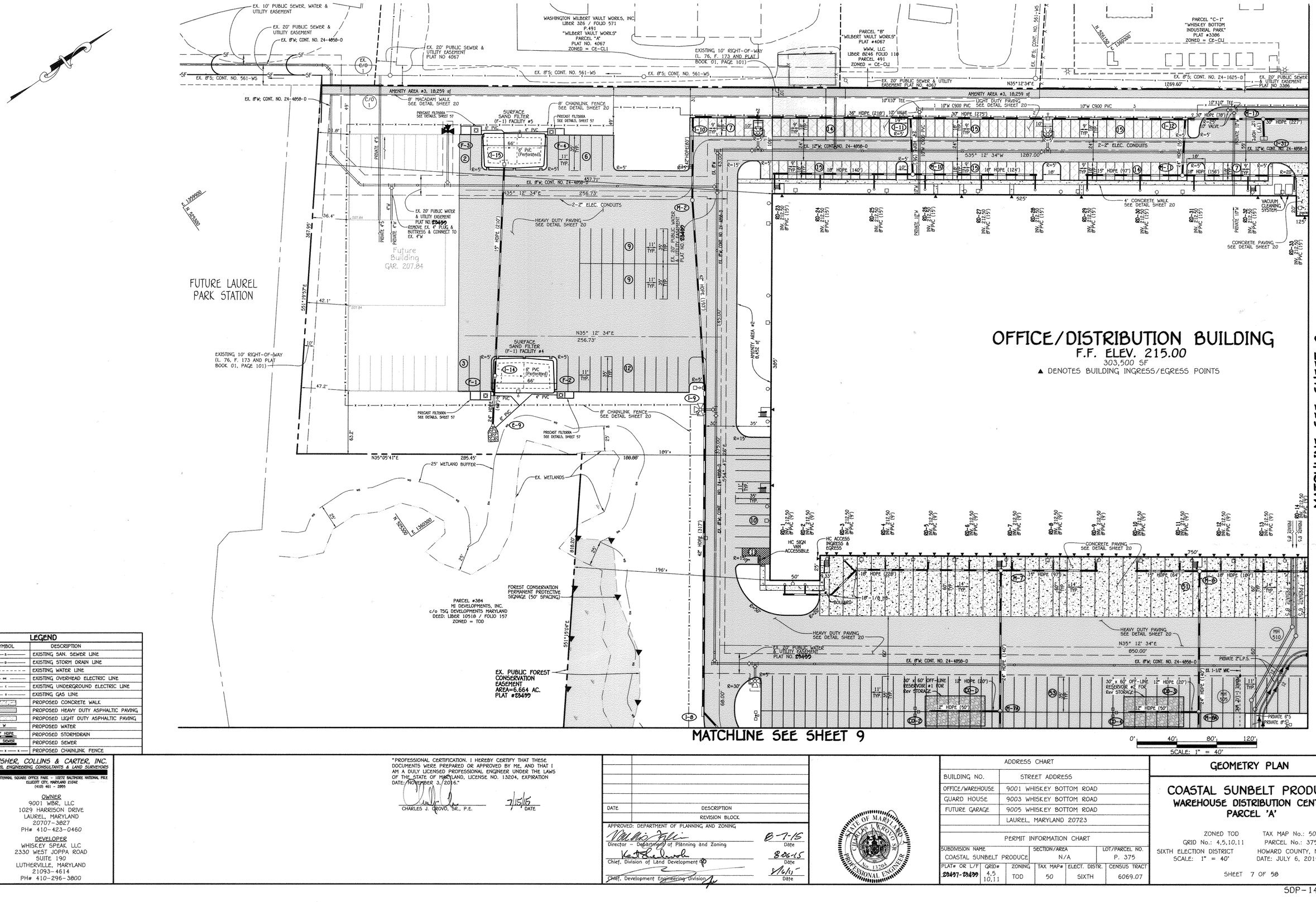
MATCHLINE SEE SHEET 4

MATCHLINE SEE SHEET 5


WHISKEY BOTTOM ROAD
(MINOR ARTERIAL (80' R/W) (COUNTY OWNED AND MAINTAINED)
GUARD HOUSE
PARCEL #384
MI DEVELOPMENTS, INC.
c/o TSG DEVELOPMENTS MARYLAND
DEED: LIBER 10918 / FOLIO 197
ZONED = TOD
EX. PUBLIC FOREST CONSERVATION EASEMENT AREA=6.664 AC. PLAT #23439
EX. PUBLIC FOREST CONSERVATION EASEMENT AREA=6.664 AC. PLAT #23439
FOREST CONSERVATION PERMANENT PROTECTIVE SIGNAGE (50' SPACING)
PRIVATE WALL EASEMENT
25' WETLAND BUFFER
50' STREAM BUFFER
EX. WETLANDS
EX. STREAM
EX. WETLANDS BUFFER
8' HIGH CHAINLINK FENCE
PRE-TREATMENT PLANT
EX. SPECIMAN TREE #5 (TULIP POPLAR) TO REMAIN
SUBMERGED GRAVEL WETLAND (N-#2) FACILITY #1
ELEV. 181.00 LIMIT OF GRAVEL CELL
6" PERF. DRAIN PIPES
DENOTES PERF. VERTICAL STAND PIPE (14 TYP.)
DENOTES CLEANOUT LOCATION (9 TYP.)
100 YR WSE 184.94
10 YR WSE 184.45
EX. TOP OF DAM
EX. CL DAM
EX. WETLANDS BUFFER
NO-MOWED ZONE
EX. 12" WMP
EX. 8" WMP
EX. 8" WATER
EX. 12" WATER
EX. 8" SAN
EX. 12" SAN
EX. 8" SAN MANHOLE
EX. 12" SAN MANHOLE
EX. 8" SAN CLEANOUT
EX. 8" SAN MANHOLE & 12" DRAIN MANHOLE
EX. 12" SAN MANHOLE & 12" DRAIN MANHOLE
EX. 12" DRAIN MANHOLE
EX. 12" DRAIN CLEANOUT
EX. 12" DRAIN
EX. 8" DRAIN
EX. 6" DRAIN
EX. 4" DRAIN
EX. 4" DRAIN CLEANOUT
EX. 4" DRAIN MANHOLE
EX. 4" DRAIN & 12" DRAIN MANHOLE
EX. 4" DRAIN & 8" DRAIN MANHOLE
EX. 4" DRAIN & 6" DRAIN MANHOLE
EX. 6" DRAIN & 12" DRAIN MANHOLE
EX. 6" DRAIN & 8" DRAIN MANHOLE
EX. 6" DRAIN & 6" DRAIN MANHOLE
EX. 8" DRAIN & 12" DRAIN MANHOLE
EX. 8" DRAIN & 8" DRAIN MANHOLE
EX. 8" DRAIN & 6" DRAIN MANHOLE
EX. 12" DRAIN & 12" DRAIN MANHOLE
EX. 12" DRAIN & 8" DRAIN MANHOLE
EX. 12" DRAIN & 6


EX. 10' PUBLIC SEWER, WATER & UTILITY EASEMENT
EX. 20' PUBLIC SEWER & UTILITY EASEMENT
EX. 8"W; CONT. NO. 24-4058-D
EX. 8"S; CONT. NO. 561-WS
EX. 20' PUBLIC SEWER & UTILITY EASEMENT PLAT NO 4067
WASHINGTON WILBERT VAULT WORKS, INC.
LIBER 326 / FOLIO 571
P-491
"WILBERT VAULT WORKS"
PARCEL "A"
PLAT NO. 4067
ZONED = CE-CLI
EXISTING 10' RIGHT-OF-WAY (L. 76, F. 173 AND PLAT BOOK 01, PAGE 101)
PARCEL "B"
"WILBERT VAULT WORKS"
PLAT #4067
WWW, LLC
LIBER 8246 FOLIO 118
PARCEL 491
ZONED = CE-CLI
PARCEL "C-1"
"WHISKEY BOTTOM INDUSTRIAL PARK"
PLAT #3386
ZONED = CE-CLI
N 258,150 E 1360500
EX. 8"S; CONT. NO. 24-1625-D
EX. 20' PUBLIC SEWER & UTILITY EASEMENT PLAT NO. 3386
N35°12'34"E
1269.60'
AMENITY AREA #3, 18,259 sf
8' MACADAM WALK SEE DETAIL SHEET 20
8' CHAINLINK FENCE SEE DETAIL SHEET 20
SURFACE SAND FILTER (F-1) FACILITY #5
PRECAST FILTERRA SEE DETAILS, SHEET 57
6" PVC
4" PVC
66'
6" PVC (Perforated)
F-3
F-4
I-15
I-14
F-1
F-2
SURFACE SAND FILTER (F-1) FACILITY #4
EX. 8"W; CONT. NO. 24-4058-D
427.71'
N35° 12' 34"E
256.73'
2-2" ELEC. CONDUITS
HEAVY DUTY PAVING SEE DETAIL SHEET 20
EX. 20' PUBLIC WATER & UTILITY EASEMENT PLAT NO. 23499
REMOVE EX. 4" PLUG & BUTTRESS & CONNECT TO EX. 4"W
Future Building GAR. 207.84
FUTURE LAUREL PARK STATION
EXISTING 10' RIGHT-OF-WAY (L. 76, F. 173 AND PLAT BOOK 01, PAGE 101)
S51°19'57"E
367.91'
42.1'
47.2'
63.2'
N35°05'41"E
205.45'
25' WETLAND BUFFER
EX. WETLANDS
N 722500 E 1360000
818.20'
196'±
FOREST CONSERVATION PERMANENT PROTECTIVE SIGNAGE (50' SPACING)
PARCEL #384
MI DEVELOPMENTS, INC.
c/o TSG DEVELOPMENTS MARYLAND
DEED: LIBER 10518 / FOLIO 157
ZONED = TOD
S51°19'04"E
EX. PUBLIC FOREST CONSERVATION EASEMENT AREA=6,664 AC. PLAT #23499
EX. 8"W; CONT. NO. 24-4058-D
EX. 12"W; CONT. NO. 24-4058-D
10"X10" TEE
10"W C900 PVC SEE DETAIL SHEET 20
LIGHT DUTY PAVING SEE DETAIL SHEET 20
10"W C900 PVC
36" HDPE (218') 10" VALVE
30" HDPE (275')
30" HDPE (78')
30" HDPE (227')
10" VALVE
2-2" ELEC. CONDUITS
535° 12' 34"W
1287.00'
18" HDPE (140')
16" HDPE (124')
15" HDPE (97')
18" HDPE (156')
525'
4' CONCRETE WALK SEE DETAIL SHEET 20
VACUUM CLEANING SYSTEM
CONCRETE PAVING SEE DETAIL SHEET 20
I-1
I-2
I-3
I-4
I-5
I-6
I-7
I-8
I-9
I-10
I-11
I-12
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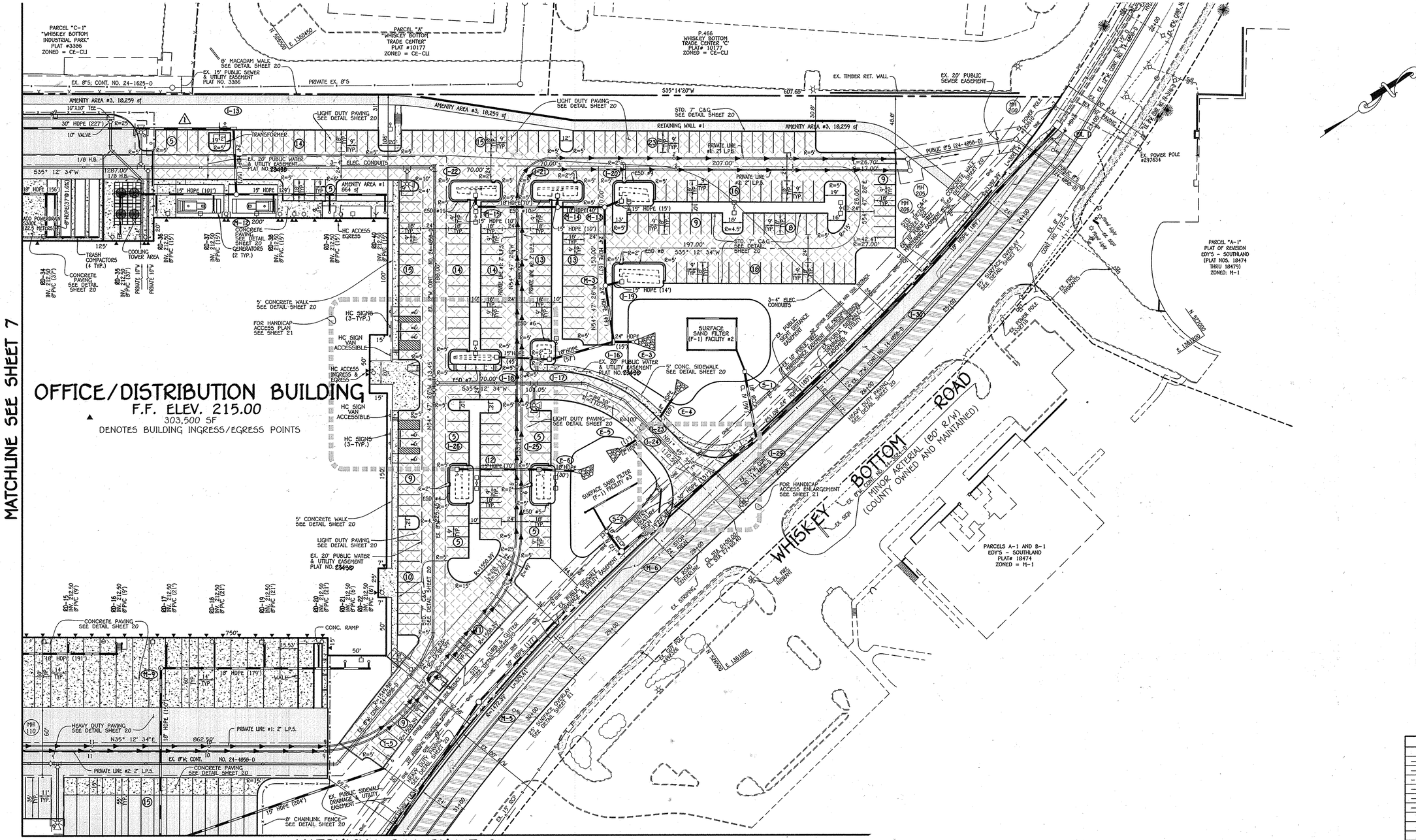
I-37
I-38
I-39
I-40



LEGEND	
SYMBOL	DESCRIPTION
s	EXISTING SAN. SEWER LINE
d	EXISTING STORM DRAIN LINE
w	EXISTING WATER LINE
oe	EXISTING OVERHEAD ELECTRIC LINE
e	EXISTING UNDERGROUND ELECTRIC LINE
g	EXISTING GAS LINE
	PROPOSED CONCRETE WALK
	PROPOSED HEAVY DUTY ASPHALTIC PAVING
	PROPOSED LIGHT DUTY ASPHALTIC PAVING
8" W	PROPOSED WATER
18" HDPE	PROPOSED STORMDRAIN
8" SEWER	PROPOSED SEWER
x x x	PROPOSED CHAINLINK FENCE

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
ELLICOTT CITY, MARYLAND 21042
(410) 461 - 2855

OWNER
9001 WBR, LLC
1029 HARRISON DRIVE
LAUREL, MARYLAND
20707-3827
PH# 410-423-0460

DEVELOPER
WHISKEY SPEAK LLC
2330 WEST JOPPA ROAD
SUITE 190
LUTHERVILLE, MARYLAND
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CHARLES J. CROVO, SR., P.E. — 7/15/15 DATE

DATE	DESCRIPTION
9/3/15	⚠1 REVISE 10"W & 8"W TO WAREHOUSE DISTRIBUTION BUILDING
DATE	REVISION BLOCK

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Director - Department of Planning and Zoning — Date 8-7-15

Chief, Division of Land Development — Date 8.06.15

Chief, Development Engineering Division — Date 8/6/15

STATE OF MARYLAND — CHARLES J. CROVO — No. 13204 — PROFESSIONAL ENGINEER

ADDRESS CHART	
BUILDING NO.	STREET ADDRESS
OFFICE/WAREHOUSE	9001 WHISKEY BOTTOM ROAD
GUARD HOUSE	9003 WHISKEY BOTTOM ROAD
FUTURE GARAGE	9005 WHISKEY BOTTOM ROAD
	LAUREL, MARYLAND 20723

PERMIT INFORMATION CHART

SUBDIVISION NAME		SECTION/AREA		LOT/PARCEL NO.
COASTAL SUNBELT PRODUCE		N/A		P. 375
PLAT# OR L/F	GRID#	ZONING	TAX MAP#	ELECT. DISTR.	CENSUS TRACT
23437-23439	4,5 10,11	TOD	50	SIXTH	6069.07

GEOMETRY PLAN

COASTAL SUNBELT PRODUCE
WAREHOUSE DISTRIBUTION CENTER
PARCEL 'A'

ZONED TOD — TAX MAP No.: 50
GRID No.: 4,5,10,11 — PARCEL No.: 375
SIXTH ELECTION DISTRICT — HOWARD COUNTY, MARYLAND
SCALE: 1" = 40' — DATE: JULY 6, 2015

SHEET 8 OF 50

SDP-14-080

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MATCHLINE SEE SHEET 7

MATCHLINE SEE SHEET 8

WHISKEY BOTTOM ROAD
MINOR ARTERIAL (80' R/W)
(COUNTY OWNED AND MAINTAINED)

CSX RAIL ROAD

GUARD HOUSE

SUBMERGED GRAVEL WETLAND (M-2) FACILITY #1

EX. PUBLIC FOREST CONSERVATION EASEMENT AREA=6.664 AC. PLAT #23439

PARCEL #384
MI DEVELOPMENTS, INC.
c/o TSQ DEVELOPMENTS MARYLAND
DEED: LIBER 10518 / FOLIO 157
ZONED = TOD

THE BALTIMORE AND OHIO RAILROAD COMPANY
(AKA: CSX RAILROAD)
AREA CONVEYED TO B & O RAILROAD BY DEED GW LIBER 89 / FOLIO 218
(VAL MAP #V-181-6)

0' 40' 80' 120'
SCALE: 1" = 40'

LEGEND

SYMBOL	DESCRIPTION
S	EXISTING SAN. SEWER LINE
D	EXISTING STORM DRAIN LINE
W	EXISTING WATER LINE
OHW	EXISTING OVERHEAD ELECTRIC LINE
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	PROPOSED CONCRETE WALK
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	PROPOSED LIGHT DUTY ASPHALTIC PAVING
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18" HDPE	PROPOSED STORMDRAIN
8" SEWER	PROPOSED SEWER
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FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
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ELLICOTT CITY, MARYLAND 21042
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CHARLES J. CROVO, SR., P.E. — 7/15/15 DATE

DATE	DESCRIPTION
	REVISION BLOCK

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Director - Department of Planning and Zoning — Date 8-7-15

Chief, Division of Land Development — Date 8-06-15

Chief, Development Engineering Division — Date 8/6/15

STATE OF MARYLAND — CHARLES J. CROVO — No. 13204 — PROFESSIONAL ENGINEER

ADDRESS CHART	
BUILDING NO.	STREET ADDRESS
OFFICE/WAREHOUSE	9001 WHISKEY BOTTOM ROAD
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	LAUREL, MARYLAND 20723

PERMIT INFORMATION CHART

SUBDIVISION NAME		SECTION/AREA		LOT/PARCEL NO.
COASTAL SUNBELT PRODUCE		N/A		P. 375
PLAT# OR L/F	GRID#	ZONING	TAX MAP#	ELECT. DISTR.	CENSUS TRACT
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GEOMETRY PLAN

COASTAL SUNBELT PRODUCE
WAREHOUSE DISTRIBUTION CENTER
PARCEL 'A'

ZONED TOD — TAX MAP No.: 50
GRID No.: 4,5,10,11 — PARCEL No.: 375
SIXTH ELECTION DISTRICT — HOWARD COUNTY, MARYLAND
SCALE: 1" = 40' — DATE: JULY 6, 2015

SHEET 9 OF 50

SDP-14-080

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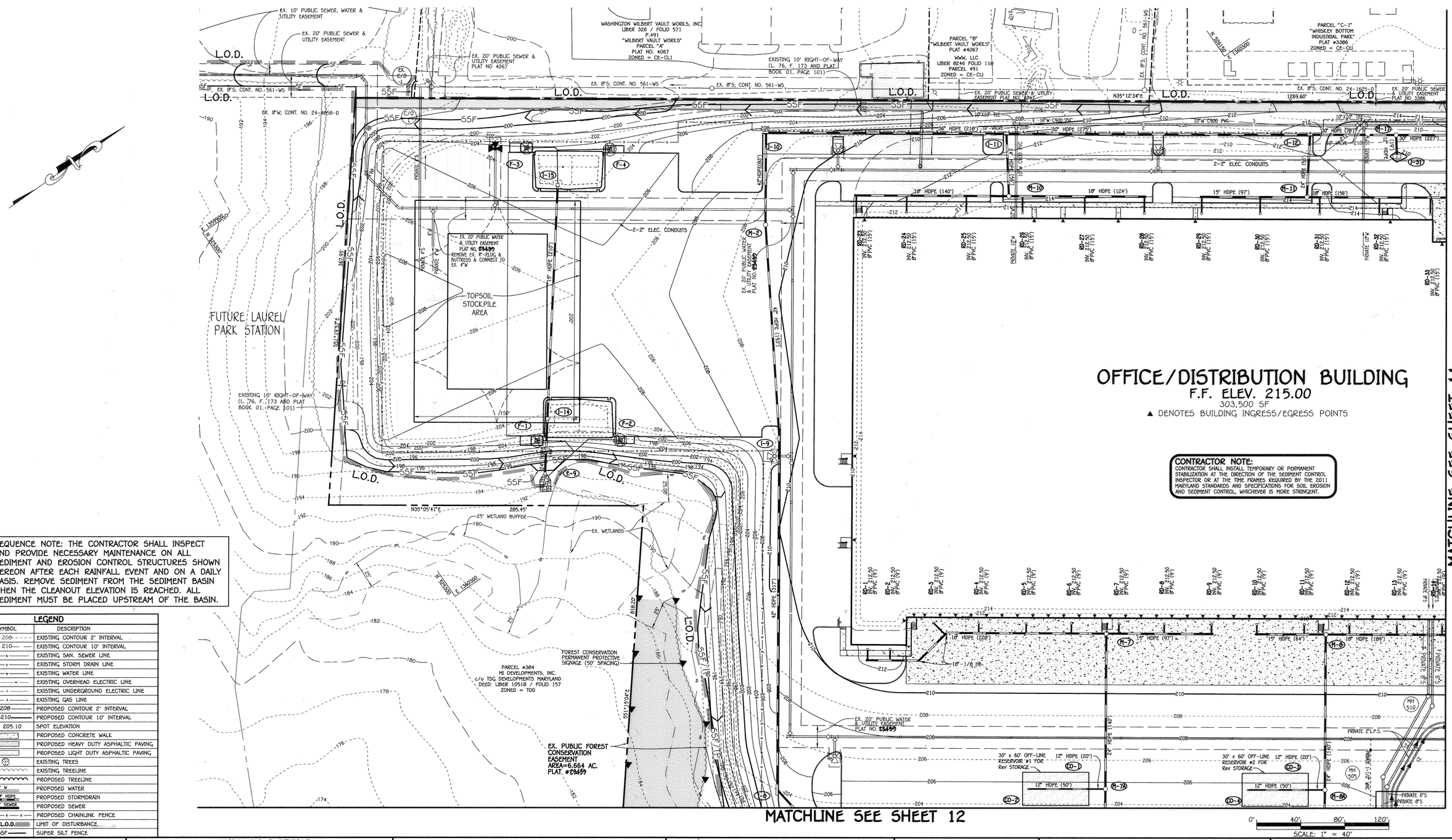

OFFICE/DISTRIBUTION BUILDING

F.F. ELEV. 215.00

303,500 SF

▲ DENOTES BUILDING INGRESS/EGRESS POINTS

CONTRACTOR NOTE:
CONTRACTOR SHALL INSTALL TEMPORARY OR PERMANENT STABILIZATION AT THE DIRECTION OF THE SEDIMENT CONTROL INSPECTOR OR AT THE TIME FRAMES REQUIRED BY THE 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, WHICHEVER IS MORE STRINGENT.

SEQUENCE NOTE: THE CONTRACTOR SHALL INSPECT AND PROVIDE NECESSARY MAINTENANCE ON ALL SEDIMENT AND EROSION CONTROL STRUCTURES SHOWN HEREON AFTER EACH RAINFALL EVENT AND ON A DAILY BASIS. REMOVE SEDIMENT FROM THE SEDIMENT BASIN WHEN THE CLEANOUT ELEVATION IS REACHED. ALL SEDIMENT MUST BE PLACED UPSTREAM OF THE BASIN.

LEGEND

SYMBOL	DESCRIPTION
208	EXISTING CONTOUR 2' INTERVAL
210	EXISTING CONTOUR 10' INTERVAL
S	EXISTING SAN. SEWER LINE
D	EXISTING STORM DRAIN LINE
W	EXISTING WATER LINE
OHW	EXISTING OVERHEAD ELECTRIC LINE
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G	EXISTING GAS LINE
208	PROPOSED CONTOUR 2' INTERVAL
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+ 205.10	SPOT ELEVATION
	PROPOSED CONCRETE WALK
	PROPOSED HEAVY DUTY ASPHALTIC PAVING
	PROPOSED LIGHT DUTY ASPHALTIC PAVING
	EXISTING TREES
	EXISTING TREELINE
	PROPOSED TREELINE
8" W	PROPOSED WATER
18" HDPE	PROPOSED STORMDRAIN
8" SEWER	PROPOSED SEWER
x x x	PROPOSED CHAINLINK FENCE
L.O.D.	LIMIT OF DISTURBANCE
SSF	SUPER SILT FENCE

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
ELLICOTT CITY, MARYLAND 21042
(410) 461 - 2855

OWNER
9001 WBR, LLC
1029 HARRISON DRIVE
LAUREL, MARYLAND
20707-3827
PH# 410-423-0460

DEVELOPER
WHISKEY SPEAK, LLC
2330 WEST JOPPA ROAD
SUITE 190
LUTHERVILLE, MARYLAND
21093-4614
PH# 410-296-3800

ENGINEER'S CERTIFICATE

"I CERTIFY THAT THIS PLAN FOR SEDIMENT AND EROSION CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT."

SIGNATURE OF ENGINEER — DATE 6/16/15

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 DISTRICT."

SIGNATURE OF DEVELOPER — DATE

"PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 13204, EXPIRATION DATE: NOVEMBER 3, 2016."

CHARLES J. PROVO, SR., P.E. — 6/16/15

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

HOWARD SCD — 6/16/15

DATE	DESCRIPTION
	REVISION BLOCK

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Director - Department of Planning and Zoning — 8-7-15

Chief, Division of Land Development — 8.06.15

Chief, Development Engineering Division — 8/6/15

STATE OF MARYLAND — CHARLES J. PROVO — No. 13204 — PROFESSIONAL ENGINEER

ADDRESS CHART	
BUILDING NO.	STREET ADDRESS
OFFICE/WAREHOUSE	9001 WHISKEY BOTTOM ROAD
GUARD HOUSE	9003 WHISKEY BOTTOM ROAD
FUTURE GARAGE	9005 WHISKEY BOTTOM ROAD
	LAUREL, MARYLAND 20723

PERMIT INFORMATION CHART

SUBDIVISION NAME	SECTION/AREA	LOT/PARCEL NO.
COASTAL SUNBELT PRODUCE	N/A	P. 375

PLAT# OR L/F	GRID#	ZONING	TAX MAP#	ELECT. DISTR.	CENSUS TRACT
23437-23439	4,5 10,11	TOD	50	SIXTH	6069.07

SEDIMENT AND EROSION CONTROL PLAN

COASTAL SUNBELT PRODUCE
WAREHOUSE DISTRIBUTION CENTER
PARCEL 'A'

ZONED TOD — TAX MAP No.: 50
GRID No.: 4,5,10,11 — PARCEL No.: 375
SIXTH ELECTION DISTRICT — HOWARD COUNTY, MARYLAND
SCALE: 1" = 40' — DATE: APRIL 20, 2015

SHEET 10 OF 50

SCALE: 1" = 40'

SDP-14-080

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MATCHLINE SEE SHEET 10

MATCHLINE SEE SHEET 12

CONTRACTOR NOTE:
CONTRACTOR SHALL INSTALL TEMPORARY OR PERMANENT STABILIZATION AT THE DIRECTION OF THE SEDIMENT CONTROL INSPECTOR OR AT THE TIME FRAMES REQUIRED BY THE 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, WHICHEVER IS MORE STRINGENT.

SEQUENCE NOTE: THE CONTRACTOR SHALL INSPECT AND PROVIDE NECESSARY MAINTENANCE ON ALL SEDIMENT AND EROSION CONTROL STRUCTURES SHOWN HEREON AFTER EACH RAINFALL EVENT AND ON A DAILY BASIS. REMOVE SEDIMENT FROM THE SEDIMENT BASIN WHEN THE CLEANOUT ELEVATION IS REACHED. ALL SEDIMENT MUST BE PLACED UPSTREAM OF THE BASIN.

0' 40' 80' 120'
SCALE: 1" = 40'

LEGEND

SYMBOL	DESCRIPTION
208	EXISTING CONTOUR 2' INTERVAL
210	EXISTING CONTOUR 10' INTERVAL
s	EXISTING SAN. SEWER LINE
d	EXISTING STORM DRAIN LINE
w	EXISTING WATER LINE
h	EXISTING OVERHEAD ELECTRIC LINE
e	EXISTING UNDERGROUND ELECTRIC LINE
g	EXISTING GAS LINE
208	PROPOSED CONTOUR 2' INTERVAL
210	PROPOSED CONTOUR 10' INTERVAL
+ 205.10	SPOT ELEVATION
	PROPOSED CONCRETE WALK
	PROPOSED HEAVY DUTY ASPHALTIC PAVING
	PROPOSED LIGHT DUTY ASPHALTIC PAVING
	EXISTING TREES
	EXISTING TREELINE
	PROPOSED TREELINE
8" W	PROPOSED WATER
18" HDPE	PROPOSED STORMDRAIN
8" SEWER	PROPOSED SEWER
x x x	PROPOSED CHAINLINK FENCE
L.O.D.	LIMIT OF DISTURBANCE
SSF	SUPER SILT FENCE
TP	TREE PROTECTION

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTERPARK SQUARE-SUITE 310 - 10272 BALTIMORE NATIONAL PIKE
ELLICOTT CITY, MARYLAND 21042
(410) 461 - 2855

OWNER
9001 WBC, LLC
1029 HARRISON DRIVE
LAUREL, MARYLAND
20707-3827
PH# 410-423-0460

DEVELOPER
WHISKEY SPEAK, LLC
2330 WEST JOPPA ROAD
SUITE 190
LUTHERVILLE, MARYLAND
21093-4614
PH# 410-296-3800

ENGINEER'S CERTIFICATE

"I CERTIFY THAT THIS PLAN FOR SEDIMENT AND EROSION CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT."

SIGNATURE OF ENGINEER — DATE 6/16/15

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 DISTRICT."

SIGNATURE OF DEVELOPER — DATE 6/12/15

"PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 13204, EXPIRATION DATE: NOVEMBER 3, 2016."

CHARLES J. CROVO, SR., P.E. — DATE 6/16/15

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

HOWARD SCD — DATE 6/16/15

DATE	DESCRIPTION
9/9/15	⚠ REMOVE 10"W & 8"W TO WAREHOUSE DISTRIBUTION BUILDING
DATE	REVISION BLOCK

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Director - Department of Planning and Zoning — Date 8-7-15

Chief, Division of Land Development — Date 8-06-15

Chief, Development Engineering Division — Date 8/6/15

STATE OF MARYLAND — CHARLES J. CROVO — No. 13204 — PROFESSIONAL ENGINEER

ADDRESS CHART	
BUILDING NO.	STREET ADDRESS
OFFICE/WAREHOUSE	9001 WHISKEY BOTTOM ROAD
GUARD HOUSE	9003 WHISKEY BOTTOM ROAD
FUTURE GARAGE	9005 WHISKEY BOTTOM ROAD
	LAUREL, MARYLAND 20723

PERMIT INFORMATION CHART

SUBDIVISION NAME		SECTION/AREA		LOT/PARCEL NO.
COASTAL SUNBELT PRODUCE		N/A		P. 375
PLAT# OR L/F	GRID#	ZONING	TAX MAP#	ELECT. DISTR.	CENSUS TRACT
23437-23439	4,5 10,11	TOD	50	SIXTH	6069.07

SEDIMENT AND EROSION CONTROL PLAN

COASTAL SUNBELT PRODUCE
WAREHOUSE DISTRIBUTION CENTER
PARCEL 'A'

ZONED TOD — TAX MAP No.: 50
GRID No.: 4,5,10,11 — PARCEL No.: 375
SIXTH ELECTION DISTRICT — HOWARD COUNTY, MARYLAND
SCALE: 1" = 40' — DATE: APRIL 20, 2015

SHEET 11 OF 50

SDP-14-080

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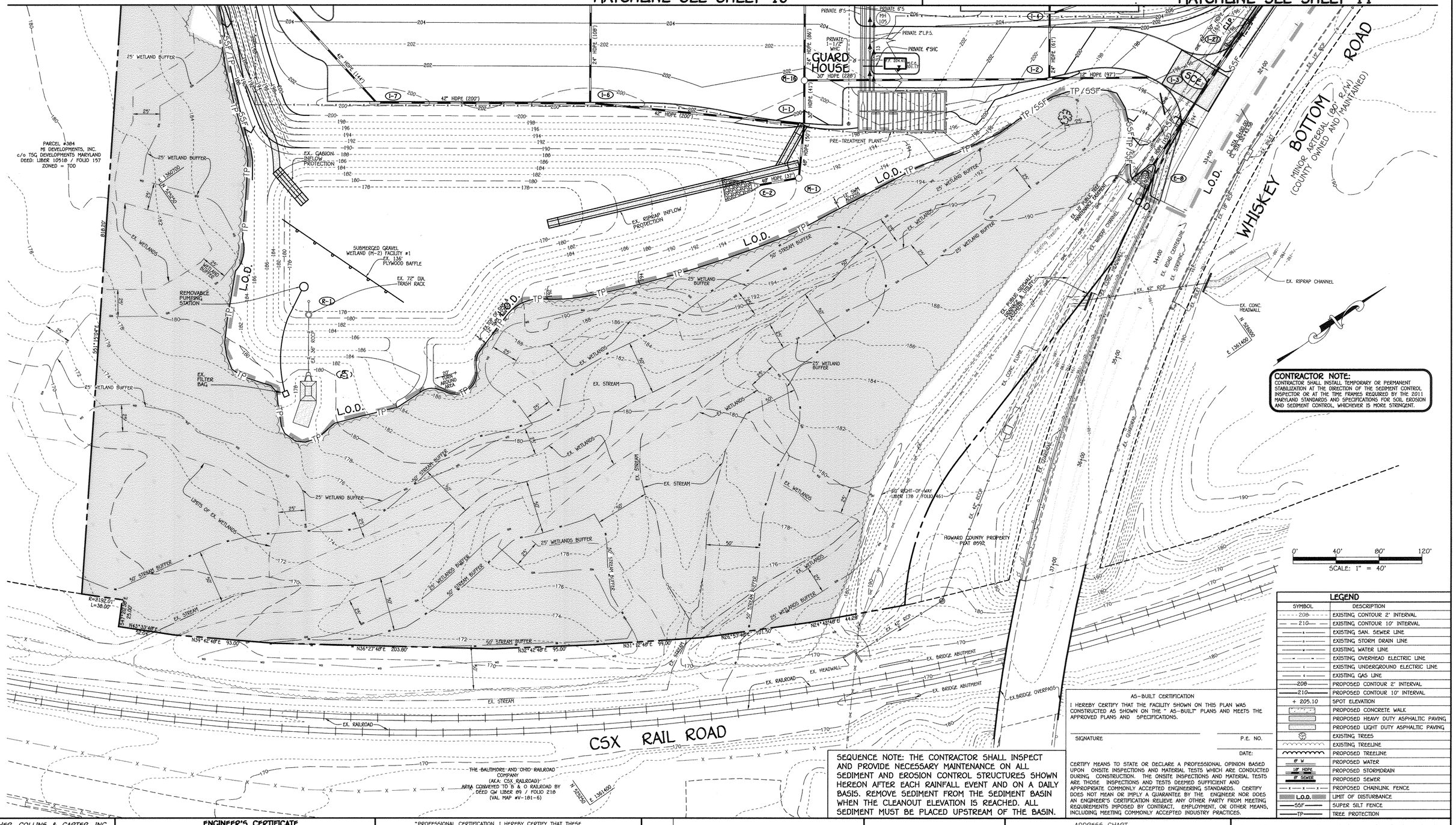
MATCHLINE SEE SHEET 10

MATCHLINE SEE SHEET 11


PARCEL #304
MI DEVELOPMENTS, INC.
c/o TSG DEVELOPMENTS MARYLAND
DEED: LIBER 10518 / FOLIO 157
ZONED = TOD
GUARD HOUSE
PRE-TREATMENT PLANT
PRIVATE 8"S
PRIVATE 2"L.P.S.
PRIVATE 4"SHC
PRIVATE 1-1/2" WHC
42" HDPE (144')
42" HDPE (200')
24" HDPE (109')
30" HDPE (228')
24" HDPE (61')
12" HDPE (97')
30" HDPE (41')
48" HDPE (97')
48" HDPE (37')
SUBMERGED GRAVEL WETLAND (M-2) FACILITY #1
EX. 136' PLYWOOD BAFFLE
EX. 72" DIA. TRASH RACK
REMOVABLE PUMPING STATION
EX. RIPRAP INFLOW PROTECTION
EX. GABION INFLOW PROTECTION
EX. FILTER BAG
20' TURN-AROUND AREA
L.O.D.
TP
55F
25' WETLAND BUFFER
50' STREAM BUFFER
EX. WETLANDS
EX. STREAM
LIMITS OF EX. WETLANDS
WHISKEY BOTTOM ROAD
(MINOR ARTERIAL (80' R/W)
(COUNTY OWNED AND MAINTAINED)
EX. RIPRAP CHANNEL
EX. CONC. HEADWALL
EX. CONC. FLUME
EX. RIPRAP CHANNEL
EX. CONC. TRICKLE
EX. RIPRAP VERTICAL DOWNDRAIN
EX. ROAD CENTERLINE
EX. STRIPING
EX. 42" RCP
EX. 45" RCP
EX. QUADRAIL
60' RIGHT-OF-WAY
LIBER 178 / FOLIO 461
HOWARD COUNTY PROPERTY
PLAT 8992
CSX RAIL ROAD
THE BALTIMORE AND OHIO RAILROAD COMPANY
(AKA. CSX RAILROAD)
AREA CONVEYED TO B & O RAILROAD BY
DEED GM LIBER 89 / FOLIO 218
(VAL MAP #V-181-6)
EX. RAILROAD
EX. HEADWALL
EX. BRIDGE ABUTMENT
EX. BRIDGE OVERPASS
EX. STREAM
EX. WETLANDS
EX. 12" SWM
EX. 24" RCP
EX. 36" RCP
EX. 48" RCP
EX. 18" CABLE
EX. 12" WATER
EX. 8" SEWER
EX. 8" WATER
EX. 6" GAS
EX. 8" SEWER
EX. 12" WAT

SOILS LEGEND

SOIL	NAME	GROUP
EbB	ELIOAK SILT LOAM, 3% – 8% SLOPES	C
EbC	EVESBORO LOAMY SAND, 2% – 10% SLOPES	A
Fa	FALLSINGTON SANDY LOAM, 0% – 2% SLOPES	D
RtC	RUSSETT–ALLOWAY–HAMBROOK COMPLEX, 5% – 10% SLOPES	C
RuB	RUSSETT AND BELTSVILLE SOILS, 2% – 5% SLOPES	C
SrC	SASSAFRAS AND CROOM SOILS, 5% – 10% SLOPES	B
UtD	URBAN LAND–UDORTHENTS COMPLEX, 0% – 15% SLOPES	B

DRAINAGE AREA DATA

DRAINAGE AREA	STRUCTURE NO.	AREA (AC.)	'C'	% IMP.
A	I-1	1.17	0.83	95
B	I-2	0.20	0.70	76
C	I-3	0.16	0.68	69
D	I-4	1.07	0.83	94
E	I-5	0.35	0.71	77
F	I-6	1.24	0.85	99
G	I-7	1.11	0.82	94
H	I-8	0.24	0.78	87
I	I-9	0.36	0.84	96
J	I-10	0.37	0.74	80
K	I-11	0.26	0.74	81
L	I-12	0.64	0.70	73
M	I-13	0.79	0.61	61
N	I-14	1.26	0.84	97
O	I-15	1.39	0.84	97
P	I-16	0.13	0.71	72
Q	I-17	0.13	0.75	82
R	I-18	0.14	0.75	84
S	I-19	0.47	0.73	79
T	I-20	0.55	0.47	37
U	I-21	0.41	0.54	48
V	I-22	0.22	0.68	70
W	I-23	0.10	0.78	89
X	I-24	0.10	0.73	81
Y	I-25	0.22	0.74	81
Z	I-26	0.24	0.76	84
CC	I-29	0.42	0.73	78
DD	I-30	0.62	0.54	49
EE	RD1-5	0.90	0.86	100
FF	RD6-8	0.44	0.86	100
GG	RD9-11	0.46	0.86	100
HH	RD12-16	0.74	0.86	100
II	RD17-22	0.87	0.86	100
JJ	RD23-26	0.62	0.86	100
KK	RD27-30	0.60	0.86	100
LL	RD31-33	0.46	0.86	100
MM	RD34-38	0.73	0.86	100
NN	RD39-42	0.59	0.86	100
OO	RD43-45	0.54	0.86	100

LEGEND

SYMBOL	DESCRIPTION
208	EXISTING CONTOUR 2' INTERVAL
210	EXISTING CONTOUR 10' INTERVAL
S	EXISTING SAN. SEWER LINE
D	EXISTING STORM DRAIN LINE
W	EXISTING WATER LINE
OHE	EXISTING OVERHEAD ELECTRIC LINE
E	EXISTING UNDERGROUND ELECTRIC LINE
G	EXISTING GAS LINE
208	PROPOSED CONTOUR 2' INTERVAL
210	PROPOSED CONTOUR 10' INTERVAL
+ 205.10	SPOT ELEVATION
	PROPOSED CONCRETE WALK
	PROPOSED HEAVY DUTY ASPHALTIC PAVING
	PROPOSED LIGHT DUTY ASPHALTIC PAVING
	EXISTING TREES
	EXISTING TREELINE
	PROPOSED TREELINE
8" W	PROPOSED WATER
18" HDPE	PROPOSED STORMDRAIN
8" SEWER	PROPOSED SEWER
x x x	PROPOSED CHAINLINK FENCE
	SOILS DELINEATION
	DRAINAGE AREAS

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTENNIAL SQUARE OFFICE PARK – 10272 BALTIMORE NATIONAL PIKE
ELLICOTT CITY, MARYLAND 21042
(410) 461 – 2855

OWNER
9001 WBR, LLC
1029 HARRISON DRIVE
LAUREL, MARYLAND
20707-3827
PH# 410-423-0460

DEVELOPER
WHISKEY SPEAK, LLC
2330 WEST JOPPA ROAD
SUITE 190
LUTHERVILLE, MARYLAND
21093-4614
PH# 410-296-3800

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CHARLES J. CROVO, SR., P.E. — 7/15/15 DATE

DATE	DESCRIPTION
	REVISION BLOCK

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Director – Department of Planning and Zoning — 8-7-15 Date

Chief, Division of Land Development — 8-06-15 Date

Chief, Development Engineering Division — 8/6/15 Date

STATE OF MARYLAND — CHARLES J. CROVO — No. 13204 — PROFESSIONAL ENGINEER

ADDRESS CHART	
BUILDING NO.	STREET ADDRESS
OFFICE/WAREHOUSE	9001 WHISKEY BOTTOM ROAD
GUARD HOUSE	9003 WHISKEY BOTTOM ROAD
FUTURE GARAGE	9005 WHISKEY BOTTOM ROAD
	LAUREL, MARYLAND 20723

PERMIT INFORMATION CHART

SUBDIVISION NAME	SECTION/AREA	LOT/PARCEL NO.
COASTAL SUNBELT PRODUCE	N/A	P. 375

PLAT# OR L/F	GRID#	ZONING	TAX MAP#	ELECT. DISTR.	CENSUS TRACT
22487-22489	4,5 10,11	TOD	50	SIXTH	6069.07

SOILS AND DRAINAGE AREA MAP

COASTAL SUNBELT PRODUCE
WAREHOUSE DISTRIBUTION CENTER
PARCEL 'A'

ZONED TOD — TAX MAP No.: 50
GRID No.: 4,5,10,11 — PARCEL No.: 375
SIXTH ELECTION DISTRICT — HOWARD COUNTY, MARYLAND
SCALE: 1" = 40' — DATE: JULY 6, 2015

SHEET 13 OF 50

SDP-14-080

MATCHLINE SEE SHEET 14

MATCHLINE SEE SHEET 15

SCALE: 1" = 40'

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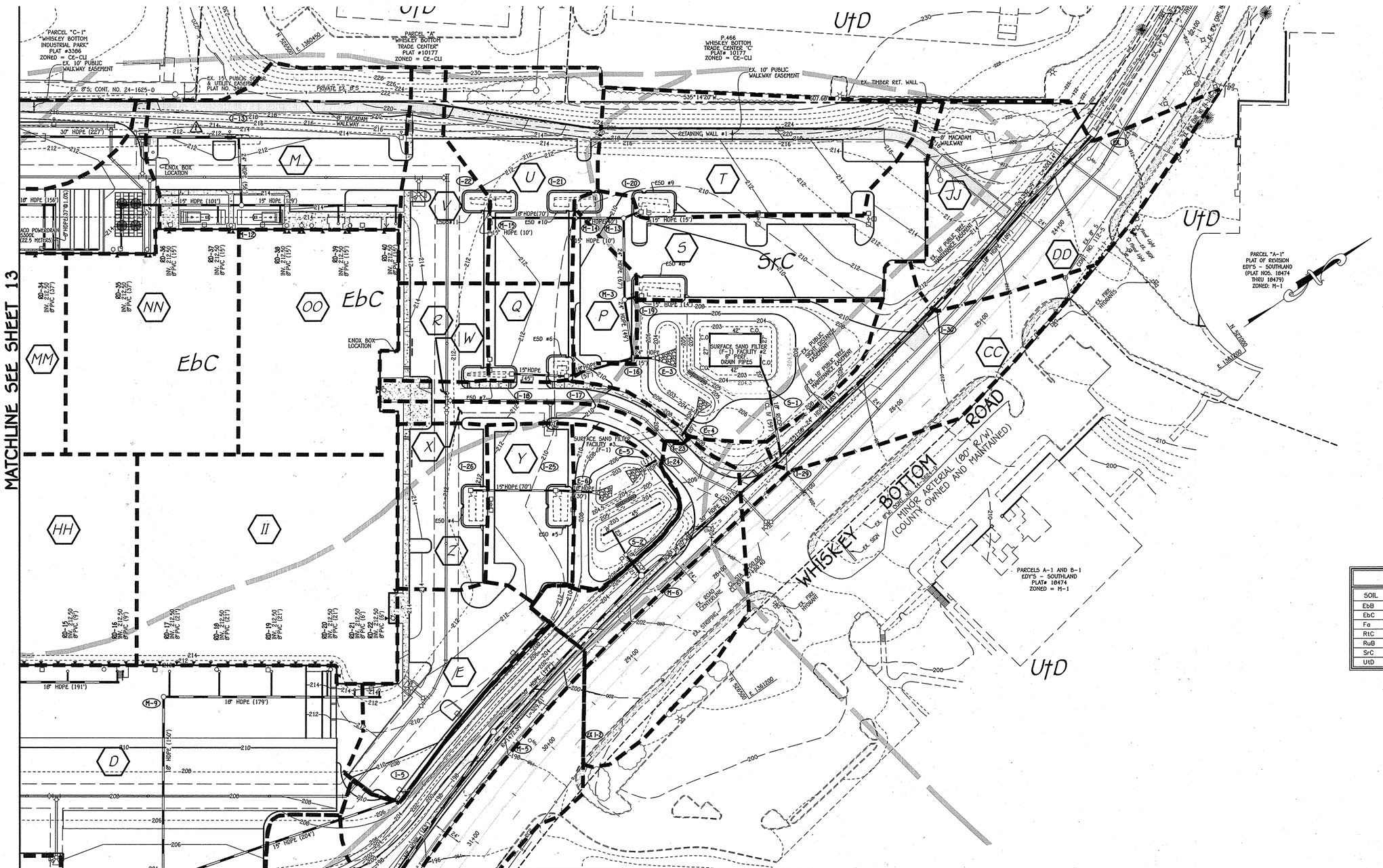

SOILS LEGEND

SOIL	NAME	GROUP
EbB	ELIOAK SILT LOAM, 3% – 8% SLOPES	C
EbC	EVESBORO LOAMY SAND, 2% – 10% SLOPES	A
Fa	FALLSINGTON SANDY LOAM, 0% – 2% SLOPES	D
RtC	RUSSETT–ALLOWAY–HAMBROOK COMPLEX, 5% – 10% SLOPES	C
RuB	RUSSETT AND BELTSVILLE SOILS, 2% – 5% SLOPES	C
SrC	SASSAFRAS AND CROOM SOILS, 5% – 10% SLOPES	B
UfD	URBAN LAND–UDORTHENTS COMPLEX, 0% – 15% SLOPES	D

LEGEND

SYMBOL	DESCRIPTION
208	EXISTING CONTOUR 2' INTERVAL
210	EXISTING CONTOUR 10' INTERVAL
S	EXISTING SAN. SEWER LINE
ST	EXISTING STORM DRAIN LINE
W	EXISTING WATER LINE
OH	EXISTING OVERHEAD ELECTRIC LINE
UG	EXISTING UNDERGROUND ELECTRIC LINE
G	EXISTING GAS LINE
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	PROPOSED CONCRETE WALK
	PROPOSED HEAVY DUTY ASPHALTIC PAVING
	PROPOSED LIGHT DUTY ASPHALTIC PAVING
	EXISTING TREES
	EXISTING TREELINE
	PROPOSED TREELINE
8" W	PROPOSED WATER
18" HDPE	PROPOSED STORMDRAIN
8" SEWER	PROPOSED SEWER
x x x	PROPOSED CHAINLINK FENCE
	SOILS DELINEATION
	DRAINAGE AREAS

FISHER, COLLINS & CARTER, INC.
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CHARLES J. CROVO, SR., P.E. — 7/15/15 DATE

DATE	DESCRIPTION
9/9/15	REVISE 10"W & 8"W TO WAREHOUSE DISTRIBUTION BUILDING

REVISION BLOCK

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Director - Department of Planning and Zoning — Date 8-7-15

Chief, Division of Land Development — Date 8-26-15

Chief, Development Engineering Division — Date 8/6/15

STATE OF MARYLAND — CHARLES J. CROVO — No. 13204 — PROFESSIONAL ENGINEER

ADDRESS CHART

BUILDING NO.	STREET ADDRESS
OFFICE/WAREHOUSE	9001 WHISKEY BOTTOM ROAD
GUARD HOUSE	9003 WHISKEY BOTTOM ROAD
FUTURE GARAGE	9005 WHISKEY BOTTOM ROAD
	LAUREL, MARYLAND 20723

PERMIT INFORMATION CHART

SUBDIVISION NAME			SECTION/AREA		LOT/PARCEL NO.
COASTAL SUNBELT PRODUCE			N/A		P. 375
PLAT# OR L/F	GRID#	ZONING	TAX MAP#	ELECT. DISTR.	CENSUS TRACT
23437 - 23439	4,5 10,11	TOD	50	SIXTH	6069.07

SOILS AND DRAINAGE AREA MAP

COASTAL SUNBELT PRODUCE
WAREHOUSE DISTRIBUTION CENTER
PARCEL 'A'

ZONED TOD — TAX MAP No.: 50
GRID No.: 4,5,10,11 — PARCEL No.: 375
SIXTH ELECTION DISTRICT — HOWARD COUNTY, MARYLAND
SCALE: 1" = 40' — DATE: JULY 6, 2015

SHEET 14 OF 50

SDP-14-080

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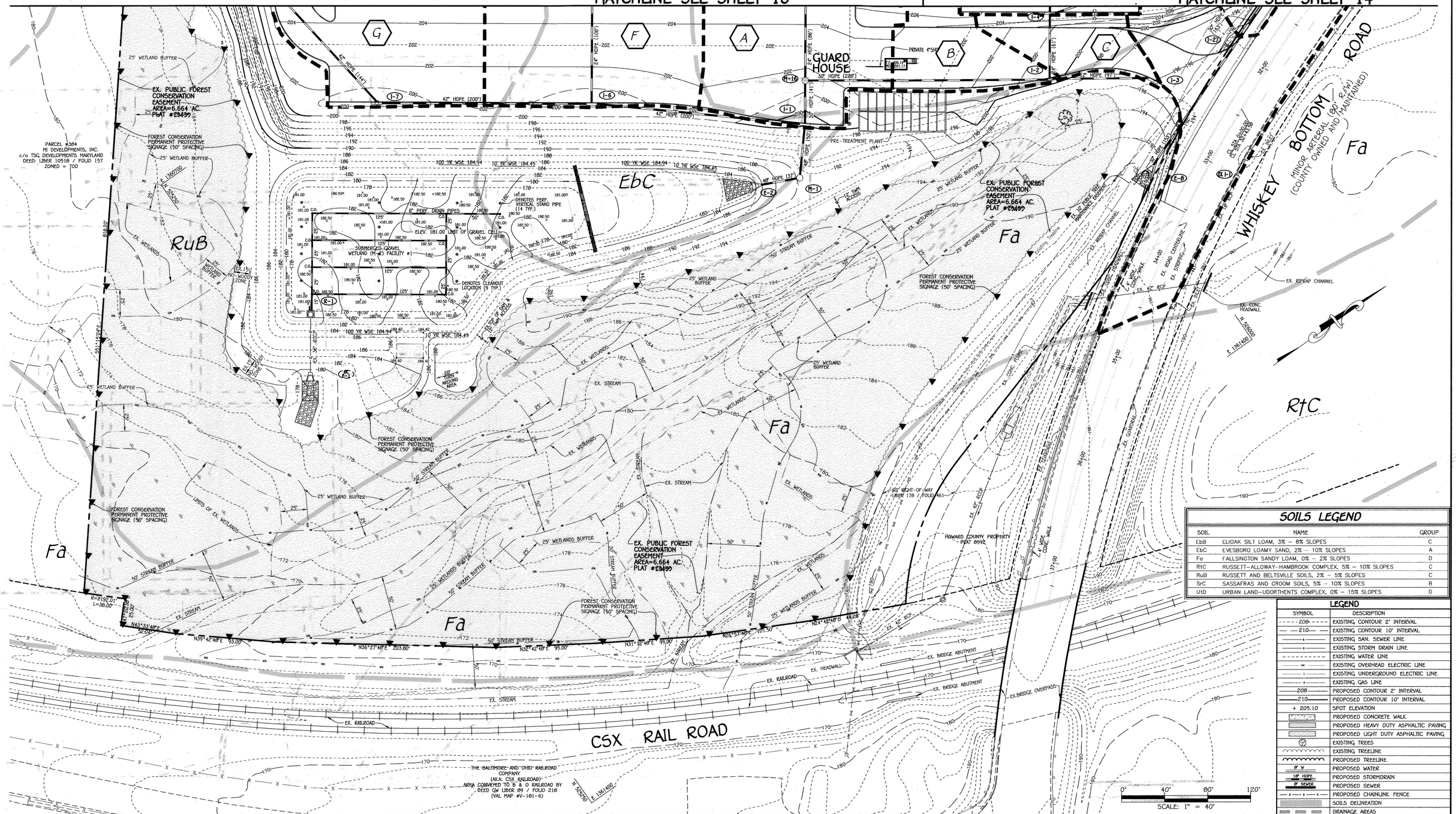
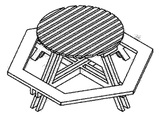
MATCHLINE SEE SHEET 14


WHISKEY BOTTOM ROAD
(MINOR ARTERIAL (80' R/W) (COUNTY OWNED AND MAINTAINED)
GUARD HOUSE
30" HDPE (228')
PRE-TREATMENT PLANT
42" HDPE (200')
42" HDPE (144')
24" HDPE (109')
24" HDPE (86')
24" HDPE (61')
48" HDPE (137')
48" HDPE (107')
EX. PUBLIC FOREST CONSERVATION EASEMENT AREA=6.664 AC. PLAT #23439
PARCEL #384
MI DEVELOPMENTS, INC.
c/o TSG DEVELOPMENTS MARYLAND
DEED: LIBER 10518 / FOLIO 157
ZONED = TOD
100 YR WSE 184.94
10 YR WSE 184.45
SUBMERGED GRAVEL WETLAND (M-2) FACILITY #1
ELEV. 181.00 LIMIT OF GRAVEL CELL
6" PERF. DRAIN PIPES
DENOTES PERF. VERTICAL STAND PIPE (14 TYP.)
DENOTES CLEANOUT LOCATION (9 TYP.)
EX. WETLANDS
EX. STREAM
25' WETLAND BUFFER
50' STREAM BUFFER
FOREST CONSERVATION PERMANENT PROTECTIVE SIGNAGE (50' SPACING)
LIMITS OF EX. WETLANDS
EX. PUBLIC FOREST CONSERVATION EASEMENT AREA=6.664 AC. PLAT #23439
EX. RIPRAP CHANNEL
EX. CONC. HEADWALL
EX. CONC. FLUME
EX. 42" RCP
EX. ROAD CENTERLINE
EX. STRIPING
EX. 4' CONC. WALK
EX. 6' CONC. WALK
EX. 4" CONC. WALK
EX. 12" WATER
EX. 8" SEWER
EX. 8" GAS
EX. 6" SEWER
EX. 8" WATER
EX. 6" WATER
EX. 12" PUBLIC PIPE MAINTENANCE EASEMENT
EX. PUBLIC PIPE MAINTENANCE EASEMENT
EX. 12" PUBLIC WATER MAINTENANCE EASEMENT
EX. 8" PUBLIC SEWER MAINTENANCE EASEMENT
EX. 6" PUBLIC SEWER MAINTENANCE EASEMENT
EX. 8" PUBLIC WATER MAINTENANCE EASEMENT
EX. 6" PUBLIC WATER

"AT THE TIME OF PLANT INSTALLATION, ALL TREES LISTED AND APPROVED ON THE LANDSCAPE PLAN, SHALL COMPLY WITH THE PROPER HEIGHT REQUIREMENT IN ACCORDANCE WITH THE HOWARD COUNTY LANDSCAPE MANUAL. IN ADDITION, NO SUBSTITUTIONS OR RELOCATIONS OF THE REQUIRED PLANTINGS MAY BE MADE WITHOUT PRIOR REVIEW AND APPROVAL FROM THE DEPARTMENT OF PLANNING AND ZONING. ANY DEVIATIONS FROM THE APPROVED LANDSCAPE PLAN MAY RESULT 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 ROAD DRAWING PLANS".

"THE OWNER, TENANTS AND/OR THEIR AGENTS SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE REQUIRED PERIMETER LANDSCAPING. 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 THE OTHER REQUIRED LANDSCAPING SHALL BE PERMANENTLY MAINTAINED IN GOOD CONDITION, AND WHEN NECESSARY, REPAIRED OR REPLACED".



PICNIC TABLE DETAIL

PLANTING LEGEND

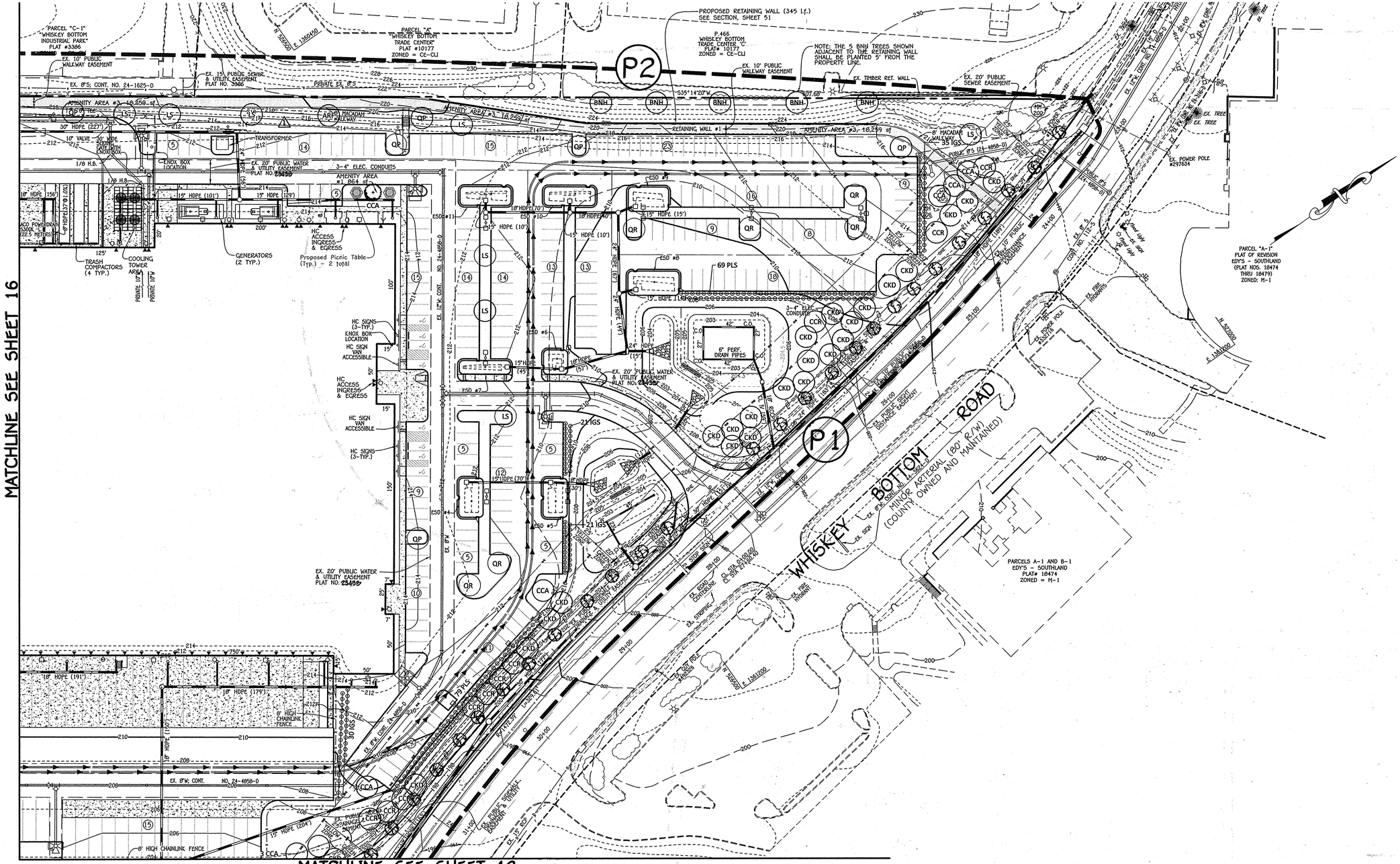
SHADE/DECIDUOUS TREE

EVERGREEN TREE

SHRUB

LEGEND	
SYMBOL	DESCRIPTION
208	EXISTING CONTOUR 2' INTERVAL
210	EXISTING CONTOUR 10' INTERVAL
S	EXISTING SAN. SEWER LINE
D	EXISTING STORM DRAIN LINE
W	EXISTING WATER LINE
OH	EXISTING OVERHEAD ELECTRIC LINE
UG	EXISTING UNDERGROUND ELECTRIC LINE
G	EXISTING GAS LINE
208	PROPOSED CONTOUR 2' INTERVAL
210	PROPOSED CONTOUR 10' INTERVAL
	PROPOSED CONCRETE WALK
	PROPOSED HEAVY DUTY ASPHALTIC PAVING
	PROPOSED LIGHT DUTY ASPHALTIC PAVING
	EXISTING TREES
	EXISTING TREELINE
	PROPOSED TREELINE
8" W	PROPOSED WATER
18" HDPE	PROPOSED STORMDRAIN
8" SEWER	PROPOSED SEWER
x x x	PROPOSED CHAINLINK FENCE

EX. 10' PUBLIC SEWER, WATER & UTILITY EASEMENT
EX. 20' PUBLIC SEWER & UTILITY EASEMENT
EX. 8"W; CONT. NO. 24-4058-D
EX. 8"S; CONT. NO. 561-WS
WASHINGTON WILBERT VAULT WORKS, INC. LIBER 326 / FOLIO 571 P.491 "WILBERT VAULT WORKS" PARCEL "A" PLAT NO. 4067 ZONED = CE-CLI
EX. 20' PUBLIC SEWER & UTILITY EASEMENT PLAT NO 4067
EX. 10' PUBLIC WALKWAY EASEMENT
8' MACADAM WALKWAY
EXISTING 10' RIGHT-OF-WAY (L. 76, F. 173 AND PLAT BOOK 01, PAGE 101)
8' HIGH CHAINLINK FENCE
PARCEL "B" WILBERT VAULT WORKS" PLAT #4067 WWW, LLC LIBER 8245 FOLIO 118 ZONED = CE-CLI
EX. 20' PUBLIC SEWER & UTILITY EASEMENT PLAT NO. 4067
PARCEL "C-1" "WHISKEY BOTTOM INDUSTRIAL PARK" PLAT #3386 ZONED = CE-CLI
EX. 20' PUBLIC SEWER & UTILITY EASEMENT PLAT NO 3386
AMENITY AREA #3, 18,259 sf
SURFACE SAND FILTER FACILITY #3 (F-1)
SURFACE SAND FILTER FACILITY #4 (F-1)
2-2" ELEC. CONDUITS
EX. 20' PUBLIC WATER & UTILITY EASEMENT PLAT NO. 23439
REMOVE EX. 4"-ELL & BUTTRESS & CONNECT TO EX. 4"W
EX. 6"W CONT. NO. 24-4058-D
EX. 12"W, CONT. NO. 24-4058-D
PROPOSED PICNIC TABLE (TYP.) - 10 TOTAL
AMENITY AREA #2 8,452 sf
FUTURE LAUREL PARK STATION
Future Building GAR: 507.84
EX. 20' PUBLIC WATER & UTILITY EASEMENT PLAT NO. 23439
EX. 6"W CONT. NO. 24-4058-D
EX. 8"W, CONT. NO. 24-4058-D
EX. 8"S, CONT. NO. 24-1625-D
EX. 8"S; CONT. NO. 561-WS
EX. 10' PUBLIC WALKWAY EASEMENT
8' MACADAM WALKWAY
EX. 20' PUBLIC SEWER & UTILITY EASEMENT PLAT NO. 3386
EX. 12"W, CONT. NO. 24-4058-D
EX. 8"W, CONT. NO. 24-4058-D
EX. 6"W, CONT. NO. 24-4058-D
EX. 8"W, CONT. NO. 24-4058-D
EX. 8"S, CONT. NO. 24-4058-D
EX. 8"S, CONT. NO. 561-WS
EX. 8"S, CONT. NO. 561-WS
EX. 8"S, CONT. NO. 561-WS


MATCHLINE SEE SHEET 16
MATCHLINE SEE SHEET 18
WHISKEY BOTTOM ROAD
MINOR ARTERIAL (80' R/W)
(COUNTY OWNED AND MAINTAINED)
PROPOSED RETAINING WALL (345 l.f.)
SEE SECTION, SHEET 51
NOTE: THE 5 BNH TREES SHOWN ADJACENT TO THE RETAINING WALL SHALL BE PLANTED 5' FROM THE PROPERTY LINE.
"PARCEL "C-1" WHISKEY BOTTOM INDUSTRIAL PARK" PLAT #3386
PARCEL "A" "WHISKEY BOTTOM TRADE CENTER" PLAT #10177 ZONED = CE-CLI
P.466 WHISKEY BOTTOM TRADE CENTER "C" PLAT# 10177 ZONED = CE-CLI
PARCEL "A-1" PLAT OF REVISION EDY'S - SOUTHLAND (PLAT NOS. 18474 THRU 18479) ZONED: M-1
PARCELS A-1 AND B-1 EDY'S - SOUTHLAND PLAT# 18474 ZONED = M-1
AMENITY AREA #3 - 16,259 sf
AMENITY AREA #3 - 16,240 sf
AMENITY AREA #3 - 18,249 sf
AMENITY AREA #1 864 sf
RETAINING WALL #1
TRANSFORMER
KNOX BOX LOCATION
TRASH COMPACTORS (4 TYP.)
COOLING TOWER AREA
GENERATORS (2 TYP.)
Proposed Picnic Table (Typ.) - 2 total
HC ACCESS INGRESS & EGRESS
HC SIGNS (3-TYP.)
HC SIGN VAN ACCESSIBLE
69 PLS
70 PLS
21 IGS
30 IGS
6" PERF. DRAIN PIPES
6' HIGH CHAINLINK FENCE
8' HIGH CHAINLINK FENCE
EX. 20' PUBLIC WATER & UTILITY EASEMENT PLAT NO. 23438
EX. 15' PUBLIC SEWER & UTILITY EASEMENT PLAT NO. 3386
EX. 20' PUBLIC SEWER EASEMENT
EX. 10' PUBLIC WALKWAY EASEMENT
EX. TIMBER RET. WALL
EX. 8"S; CONT. NO. 24-1625-D
EX. 8"W; CONT. NO. 24-4958-D
EX. 12"W CONT. NO. 24-4958-D
EX. 8"W CONT. NO. 24-4958-D
EX. POWER POLE #297634
EX. TREE
EX. FIRE HYDRANTS
EX. STORM DRAIN & INLET
EX. 15" RCP
EX. 8" SAN. MANHOLE
EX. 12" SAN. MANHOLE
EX. 8" SAN. MANHOLE
EX. 8" SAN. CLEANOUT
EX. SIGN
EX. STRIPING
EX. CONTOUR
N 200800 E 1361200
N 200800 E 1361000
N 200600 E 1361200
N 200600 E 1361000
N 200400 E 1361000
N 200400 E 1361200
N 200200 E 1361200
N 200200 E 1361000
N 200000 E 1361000
N 199800 E 1361200
N 199800 E 1361000
N 199600 E 1361200
N 199600 E 1361000
N 199400 E 1361200
N 199400 E 1361000
N 199200 E 1361200
N 199200 E 1361000
N 199000 E 1361200
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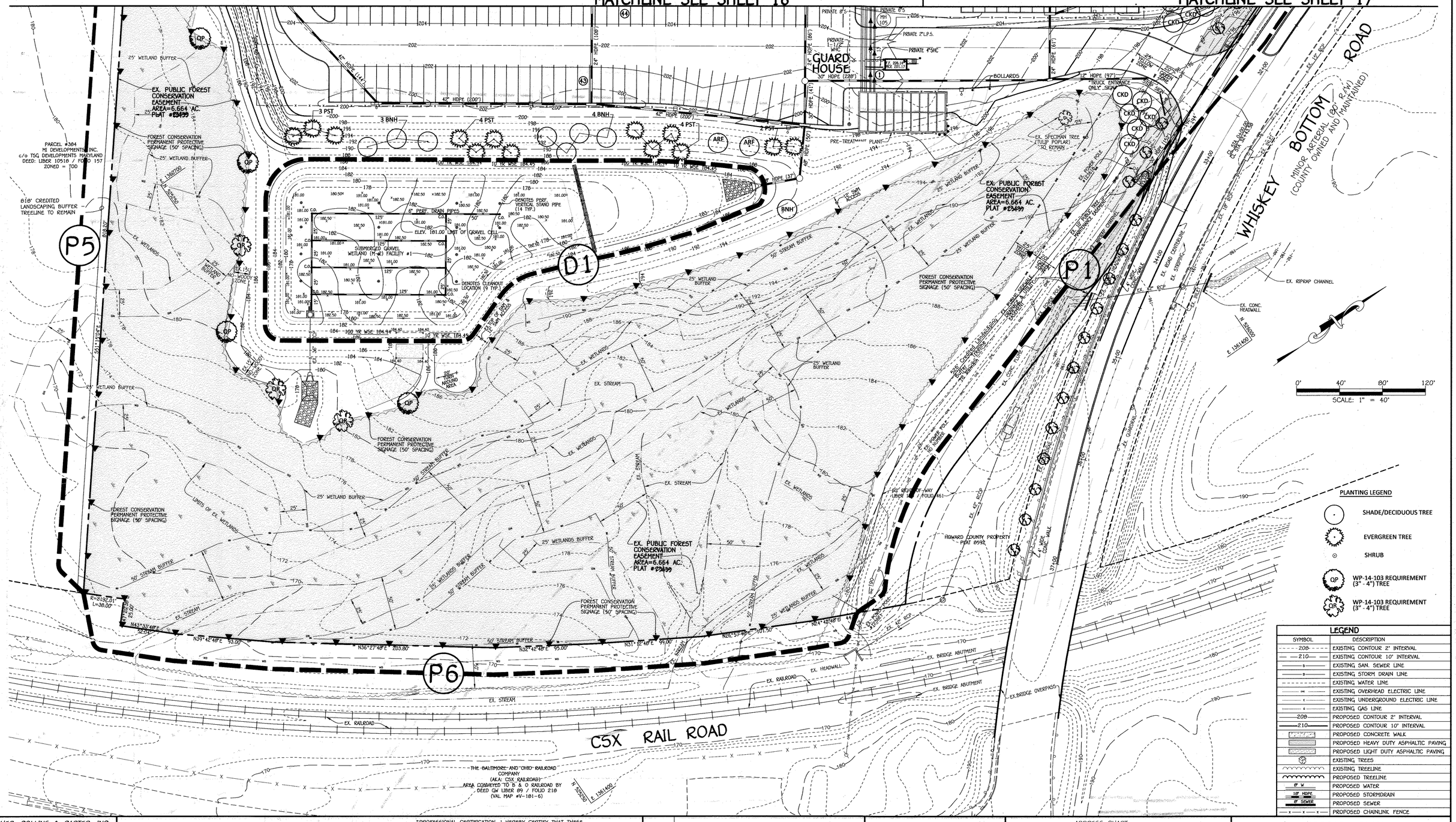
MATCHLINE SEE SHEET 16

MATCHLINE SEE SHEET 17



PLANTING LEGEND

- SHADE/DECIDUOUS TREE
- EVERGREEN TREE
- SHRUB
- QP — WP-14-103 REQUIREMENT (3" - 4") TREE
- QR — WP-14-103 REQUIREMENT (3" - 4") TREE

LEGEND

SYMBOL	DESCRIPTION
208	EXISTING CONTOUR 2' INTERVAL
210	EXISTING CONTOUR 10' INTERVAL
S	EXISTING SAN. SEWER LINE
D	EXISTING STORM DRAIN LINE
W	EXISTING WATER LINE
OHE	EXISTING OVERHEAD ELECTRIC LINE
E	EXISTING UNDERGROUND ELECTRIC LINE
G	EXISTING GAS LINE
208	PROPOSED CONTOUR 2' INTERVAL
210	PROPOSED CONTOUR 10' INTERVAL
	PROPOSED CONCRETE WALK
	PROPOSED HEAVY DUTY ASPHALTIC PAVING
	PROPOSED LIGHT DUTY ASPHALTIC PAVING
	EXISTING TREES
	EXISTING TREELINE
	PROPOSED TREELINE
8" W	PROPOSED WATER
18" HDPE	PROPOSED STORMDRAIN
8" SEWER	PROPOSED SEWER
x — x — x	PROPOSED CHAINLINK FENCE

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
ELLICOTT CITY, MARYLAND 21042
(410) 461 - 2855

OWNER
9001 WBE, LLC
1029 HARRISON DRIVE
LAUREL, MARYLAND
20707-3827
PH# 410-423-0460

DEVELOPER
WHISKEY SPEAK LLC
2330 WEST JOPPA ROAD
SUITE 190
LUTHERVILLE, MARYLAND
21093-4614
PH# 410-296-3800

DEVELOPER'S / BUILDER'S CERTIFICATE

I/WE CERTIFY THAT THE LANDSCAPING SHOWN ON THIS PLAN WILL BE DONE ACCORDING TO THE PLAN, SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE HOWARD COUNTY LANDSCAPE MANUAL. I/WE FURTHER CERTIFY THAT UPON COMPLETION, A LETTER OF LANDSCAPE INSTALLATION ACCOMPANIED BY AN EXECUTED ONE YEAR GUARANTEE OF PLANT MATERIALS WILL BE SUBMITTED TO THE DEPARTMENT OF PLANNING AND ZONING.

NAME — DATE 7/15/15

"PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 13204, EXPIRATION DATE: NOVEMBER 3, 2016."

CHARLES J. CROVO, SR., P.E. — DATE 7/15/15

DATE	DESCRIPTION
10/20/16	EXTEND CMBION FOREBAY - FACILITY NO.1
DATE	DESCRIPTION
	REVISION BLOCK

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Director - Department of Planning and Zoning — Date 8-7-16

Chief, Division of Land Development — Date 8-04-16

Chief, Development Engineering Division — Date 7/15/15

STATE OF MARYLAND — CHARLES J. CROVO — No. 13204 — PROFESSIONAL ENGINEER

ADDRESS CHART	
BUILDING NO.	STREET ADDRESS
OFFICE/WAREHOUSE	9001 WHISKEY BOTTOM ROAD
GUARD HOUSE	9003 WHISKEY BOTTOM ROAD
FUTURE GARAGE	9005 WHISKEY BOTTOM ROAD
	LAUREL, MARYLAND 20723

PERMIT INFORMATION CHART

SUBDIVISION NAME		SECTION/AREA		LOT/PARCEL NO.
COASTAL SUNBELT PRODUCE		N/A		P. 375
PLAT# OR L/F	GRID#	ZONING	TAX MAP#	ELECT. DISTR.	CENSUS TRACT
23437 - 23439	4,5 10,11	TOD	50	SIXTH	6069.07

LANDSCAPE PLAN

COASTAL SUNBELT PRODUCE
WAREHOUSE DISTRIBUTION CENTER
PARCEL 'A'

ZONED TOD
GRID No.: 4,5,10,11
SIXTH ELECTION DISTRICT
SCALE: 1" = 40'

TAX MAP No.: 50
PARCEL No.: 375
HOWARD COUNTY, MARYLAND
DATE: JULY 6, 2015

SHEET 18 OF 58

SDP-14-080

I:\2013\13033\Engineering\Dwgs\13033-3001 SDP 16-19 LAND.dwg LAND SHEET 18, 7/2/2015 9:31:59 AM, 1:1

STREET TREE SCHEDULE

QTY.	SYMBOL	BOTANICAL AND COMMON NAME	SIZE	COMMENTS
1300'/30= 43 TREES		ACER BUERGERIANUM TRIDENT MAPLE	2 1/2-3" CAL.	30' APART ON PUBLIC R/W

NOTE: STREET TREE TYPE IS ONLY A RECOMMENDATION AND MAY BE SUBSTITUTED WITH A COUNTY ACCEPTED EQUIVALENT FROM THE HOWARD COUNTY LANDSCAPE MANUAL AND AN APPROVED GREEN ZONE TREE TYPE FROM THE B.G.&E. TREE PLANTING GUIDE. STREET TREES MAY NOT BE PLANTED WITHIN 5 FEET OF A DRAIN INLET STRUCTURE, 5 FEET OF AN OPEN ACCESS STRIP OR 10 FEET OF A DRIVEWAY.

SCHEDULE A PERIMETER LANDSCAPE EDGE (P-#)

PERIMETER	P1	P2	P3	P4	P5	P6
CATEGORY	Buffer - Parking Adj. to Roadway	Non-Res. Adjacent to Non-Res.	Non-Res. Adjacent to Non-Res.	Non-Res. Adjacent to Non-Res.	Non-Res. Adjacent to Non-Res.	Non-Res. Adjacent to Non-Res.
LANDSCAPE TYPE	E	A	A	A	A	A
LINEAR FEET OF PERIMETER	1544'	1877'	360'	286'	818'	726'
CREDIT FOR EXISTING VEGETATION (YES, NO, LINEAR FEET) (DESCRIBE BELOW IF NEEDED)	YES (526')	NO	YES (40')	YES (286')	YES (818')	YES (726')
CREDIT FOR WALL, FENCE OR BERM (YES, NO, LINEAR FEET) (DESCRIBE IF NEEDED)	NO	NO	NO	NO	NO	NO
NUMBER OF PLANTS REQUIRED						
SHADE TREES	25	31	6	-	-	-
ORNAMENTAL TREES	-	-	-	-	-	-
EVERGREEN TREES	-	-	-	-	-	-
SHRUBS	255	-	-	-	-	-
NUMBER OF PLANTS PROVIDED						
SHADE TREES	-	31	6	-	-	-
ORNAMENTAL TREES AS 2:1 CREDIT	50	-	-	-	-	-
EVERGREEN TREES	-	-	-	-	-	-
SHRUBS (SUBSTITUTION)	255	-	-	-	-	-

AMENITY AREA CHART

UNIT	AREA/NO.OF UNIT	CREDIT PER UNIT	TOTAL
AMENITY AREA #1 LAND AREA PICNIC TABLE	864 SQ. FT. 2 TABLES	1:1 LAND AREA 500 SQ. FT./TABLE	1864 SQ. FT.
AMENITY AREA #2 LAND AREA PICNIC TABLE	8457 SQ. FT. 10 TABLES	1:1 LAND AREA 500 SQ. FT./TABLE	13457 SQ. FT.
AMENITY AREA #3 ASPHALT PATHWAY	18,259 SQ. FT.	3 SQ. FT./1 SQ. FT. OF PATHWAY	54,777 SQ. FT.
		TOTAL	70,098 SQ. FT.

NOTE: THE ROUTE 1 ALTERNATIVE COMPLIANCE REQUEST WAS APPROVED ON MARCH 13, 2015 THE REQUEST WAS FOR APPROVAL TO REDUCE THE AMENITY AREA REQUIREMENT FROM 10% TO 4.8%, AND TO DISREGARD THE 0.25 ACRE MINIMUM REQUIREMENT AND THE CIVIC AREA REQUIREMENT. THE BASIS FOR APPROVAL WAS DUE TO THE LIGHT INDUSTRIAL USE OF THE SITE RATHER THAN A MULTI-USE DEVELOPMENT.

SCHEDULE D (D-1) STORMWATER MANAGEMENT AREA LANDSCAPING

LINEAR FEET OF PERIMETER	1135'
LANDSCAPE TYPE	B
CREDIT FOR EXISTING VEGETATION (NO, YES AND LINEAR FEET)	YES, 635'
NUMBER OF TREES REQUIRED	
SHADE TREES	10
EVERGREEN TREES	13
NUMBER OF TREES PROVIDED	
SHADE TREES	10
EVERGREEN TREES	13
SHRUBS (10:1 SUBSTITUTION)	-

SCHEDULE B PARKING LOT INTERNAL LANDSCAPING

NUMBER OF PARKING SPACES	364
NUMBER OF TREES REQUIRED (1/20 SP)	18
NUMBER OF TREES PROVIDED	
SHADE TREES	18
OTHER TREES (2:1 SUBSTITUTION)	-

PLANT LIST

QTY.	KEY	BOTANICAL NAME COMMON NAME	SIZE	CONT.	REMARKS
TREES - DECIDUOUS SHADE					
18	ARF	Acer Rubrum 'Autumn Flame' Autumn Flame Red Maple	2-1/2" - 3" cal.	B & B	Seedless
13	BNH	Betula nigra 'Heritage' River Birch	10-12' ht. min.	B & B	Multistem/3 trunks min.
14	QP	Quercus Phellos Willow Oak	2-1/2" -3" cal.	B & B	
9	LS	Liquidambar styraciflua American Sweetgum	2-1/2" - 3" cal.	B & B	Only Seedless Cultivars
3	PAB	Platanus x acerifolia 'Bloodgood' Bloodgood London Plane	2-1/2" - 3" cal.	B & B	
8	QR	Quercus Rubra Northern Red Oak	2-1/2" - 3" cal.	B & B	
TREES - EVERGREEN					
13	PST	Pinus strobus Eastern White Pine	10'-12'Ht.	B & B	unsheared
SHRUBS					
107	IGS	Ilex glabra 'Shamrock' Inkberry Holly Sweetspire	30"-36" Ht.	Cont./B&B	40" o.c./Male Only
148	PLS	Prunus laurocerasus 'Schipkaensis' Cherrylaurel	30"-36" Ht.	Cont.	36" o.c.
TREES - ORNAMENTAL					
** 14	CCA	Carpinus carolina American Hornbeam	1-1/2" - 2" cal.	B & B	
10	CCR	Cercis Canadensis Eastern Redbud	1 1/2" - 2" Cal.	B & B	
32	CKD	Cornus Kousa Kousa Dogwood	8'-10' Ht	B & B	
WP-14-103 REQUIRED TREES					
* 4	QP	Quercus Phellos Willow Oak	3" - 4" cal.	B & B	
* 3	QR	Quercus Rubra Northern Red Oak	3" - 4" cal.	B & B	

* - DENOTES REQUIRED TREES AS MITIGATION FOR THE REMOVAL OF SEVEN SPECIMEN TREES PER WP-14-103. (LOCATED WITHIN THE FOREST CONSERVATION EASEMENT)

** - INCLUDES THE SIX (6) AMENITY AREA TREES

NOTE: TREE TYPES 'CCR' AND 'CKD' ARE APPROVED GREEN ZONE TREE TYPES PER THE B.G.&E. TREE PLANTING GUIDE.

NOTE: "THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL."

FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING TREES (72 SHADE TREES, 13 EVERGREEN TREES, 50 ORNAMENTAL TREES & 255 SHRUBS) SHALL BE POSTED AS PART OF THE DEVELOPER'S AGREEMENT WITH THIS SDP IN THE AMOUNT OF $38,700.00

NO SURETY WILL BE REQUIRED FOR THE SIX AMENITY AREA TREES SINCE THEY ARE NOT A REQUIREMENT PER THE LANDSCAPE MANUAL OR CONDITION OF APPROVAL OF THE WP.

PLANTING NOTES:

1. THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH SECTION 16.124 OF HOWARD COUNTY CODE AND LANDSCAPE MANUAL AND IS TO BE USED FOR PLANTING ONLY. LANDSCAPING SHALL BE PROVIDED AS SHOWN ON THIS PLAN SHEET. A SURETY IS REQUIRED FOR THIS PROJECT AND SHOWN UNDER THE PLANT LIST ON THIS SHEET

2. CONTRACTOR SHALL NOTIFY ALL UTILITIES AT LEAST FIVE (5) DAYS BEFORE STARTING WORK. ALL GENERAL NOTES FROM SHEET 1, SHALL APPLY.

3. FIELD VERIFY UNDERGROUND UTILITY LOCATIONS AND EXISTING CONDITIONS BEFORE STARTING PLANTING WORK, EVEN WHERE PLANT LOCATIONS ARE DIMENSIONED. CONTACT CONSTRUCTION MANAGER IF ANY RELOCATION ARE REQUIRED.

4. PLANT QUANTITIES SHOWN ON PLANT LIST ARE PROVIDED FOR THE CONVENIENCE OF THE CONTRACTOR ONLY. IF DISCREPANCIES EXIST BETWEEN QUANTITIES SHOWN ON THE PLAN AND THOSE SHOWN ON THE PLANT LIST, THE QUANTITIES ON THE PLAN SHALL TAKE PERCEDENCE.

5. ALL PLANT MATERIALS SHALL BE FULL AND HEAVY, BE WELL FORMED AND SYMMETRICAL, CONFORM TO THE A.A.N. SPECIFICATIONS, AND BE INSTALLED IN ACCORDANCE WITH PROJECT SPECIFICATIONS.

6. ALL AREAS DISTURBED BY CONSTRUCTION ACTIVITIES BUT NOT OTHERWISE PLANTED, PAVED OR MULCHED SHALL BE SEEDED IN ACCORDANCE WITH PROJECT SPECIFICATIONS.

7. ALL EXPOSED EARTH WITHIN THE LIMITS OF THE PLANTING BEDS SHALL BE MULCHED WITH SHREDDED HARDWOOD MULCH PER PLANTING DETAILS.

8. THE CONTRACTOR SHALL NOTIFY THE OWNER IN WRITING IF SOIL OR DRAINAGE CONDITIONS ARE ENCOUNTERED WHICH MAY BE DETRIMENTAL TO THE GROWTH OF PLANTS.

9. NO SUBSTITUTION SHALL BE MADE WITHOUT WRITTEN CONSENT OF THE OWNER OR HIS REPRESENTATIVE. ALL PLANT SUBSTITUTIONS MUST BE REVIEWED BY DPZ PRIOR TO THE SUBSTITUTION BEING MADE.

10. REFER TO OTHER SITE DWGS. FOR ADDITIONAL SEEDING REQUIREMENTS.

11. NO TREES ARE TO BE PLANTED WITHIN A PUBLIC WATER AND SEWER EASEMENT.

12. ANY SHRUBBERY REMOVED OR DAMAGED WITHIN A PUBLIC WATER AND SEWER EASEMENT DURING NORMAL MAINTENANCE ACTIVITIES BY DPW IS NOT THE RESPONSIBILITY OF AND SHALL NOT BE REPLACED BY DPW.

13. THE OWNER, TENANT, AND/OR THEIR AGENTS SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE REQUIRED LANDSCAPING, INCLUDING BOTH PLANT MATERIALS AND BERMS, FENCES AND WALLS. ALL PLANT MATERIAL 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.

14. AT THE TIME INSTALLMENT, ALL SHRUBS AND OTHER PLANTINGS HEREWITH LISTED AND APPROVED FOR THIS SITE SHALL BE OF THE PROPER HEIGHT REQUIREMENTS IN ACCORDANCE WITH THE HOWARD COUNTY LANDSCAPE MANUAL. ANY DEVIATION FROM THIS APPROVED LANDSCAPE PLAN MAY RESULT IN DENIAL OR DELAY IN THE RELEASE OF LANDSCAPE SURETY UNTIL SUCH TIME AS ALL REQUIRED MATERIALS AND/OR REVISIONS ARE MADE TO APPLICABLE PLANS AND CERTIFICATES.

15. SHOULD ANY TREE DESIGNATED FOR PRESERVATION, FOR WHICH LANDSCAPE CREDIT IS GIVEN, DIE PRIOR TO RELEASE OF BONDS, THE OWNER WILL BE REQUIRED TO REPLACE THE TREE WITH THE EQUIVALENT SPECIES OR WITH A TREE WHICH WILL OBTAIN THE SAME HEIGHT, SPREAD, AND GROWTH CHARACTERISTICS. THE REPLACEMENT TREE MUST MEET SIZE AND INSTALLATION REQUIREMENTS AS SPECIFIED IN THE LANDSCAPE MANUAL.

PLANTING SPECIFICATIONS

PLANTS, RELATED MATERIAL, AND OPERATIONS SHALL MEET THE DETAILED DESCRIPTION AS GIVEN ON THE PLANS AND AS DESCRIBED HEREIN.

ALL PLANT MATERIAL, UNLESS OTHERWISE SPECIFIED, SHALL BE NURSERY GROWN, UNIFORMLY BRANCHED, HAVE A VIGOROUS ROOT SYSTEM, AND SHALL CONFORM TO THE SPECIES, SIZE, ROOT AND SHAPE SHOWN ON THE PLANT LIST AND THE AMERICAN ASSOCIATION OF NURSERYMEN (AAN) STANDARDS. PLANT MATERIAL SHALL BE HEALTHY, VIGOROUS, FREE FROM DEFECTS, DECAY, DISFIGURING ROOTS, SUN SCALD INJURIES, ABRASIONS OF THE BARK, PLANT DISEASE, INSECT PEST EGGS, BORERS AND ALL FORMS OF INSECT INFESTATIONS OR OBJECTIONABLE DISFIGUREMENTS. PLANT MATERIAL THAT IS WEAK OR WHICH HAS BEEN CUT BACK FROM LARGER GRADES TO MEET SPECIFIED REQUIREMENTS WILL BE REJECTED. TREES WITH FORKED LEADERS WILL NOT BE ACCEPTED. ALL PLANTS SHALL BE FRESHLY DUG, NO HEALED-IN PLANTS FROM COLD STORAGE WILL BE ACCEPTED.

UNLESS OTHERWISE SPECIFIED, ALL GENERAL CONDITIONS, PLANTING OPERATIONS, DETAILS AND PLANTING SPECIFICATION SHALL CONFORM TO "LANDSCAPE SPECIFICATION GUIDELINES FOR BALTIMORE-WASHINGTON METROPOLITAN AREAS", (HEREINAFTER "LANDSCAPE GUIDELINES") APPROVED BY THE LANDSCAPE CONTRACTORS ASSOCIATION OF METROPOLITAN WASHINGTON AND THE POTOMAC CHAPTER OF THE AMERICAN SOCIETY OF LANDSCAPE ARCHITECT, LATEST EDITION, INCLUDING ALL AGENDA.

CONTRACTOR SHALL BE REQUIRED TO GUARANTEE ALL PLANT MATERIAL FOR A PERIOD OF ONE YEAR AFTER DATE OF ACCEPTANCE IN ACCORDANCE WITH THE APPROPRIATE SECTION OF THE LANDSCAPE GUIDELINES. CONTRACTOR'S ATTENTION IS DIRECTED TO THE MAINTENANCE REQUIREMENTS FOUND WITHIN THE ONE YEAR SPECIFICATIONS INCLUDING WATERING AND REPLACEMENT OF SPECIFIED PLANT MATERIAL.

BID SHALL BE BASE ON ACTUAL SITE CONDITIONS. NO EXTRA PAYMENT SHALL BE MADE FOR WORK ARISING FROM SITE CONDITIONS DIFFERING FROM THOSE INDICATED ON DRAWINGS AND SPECIFICATIONS

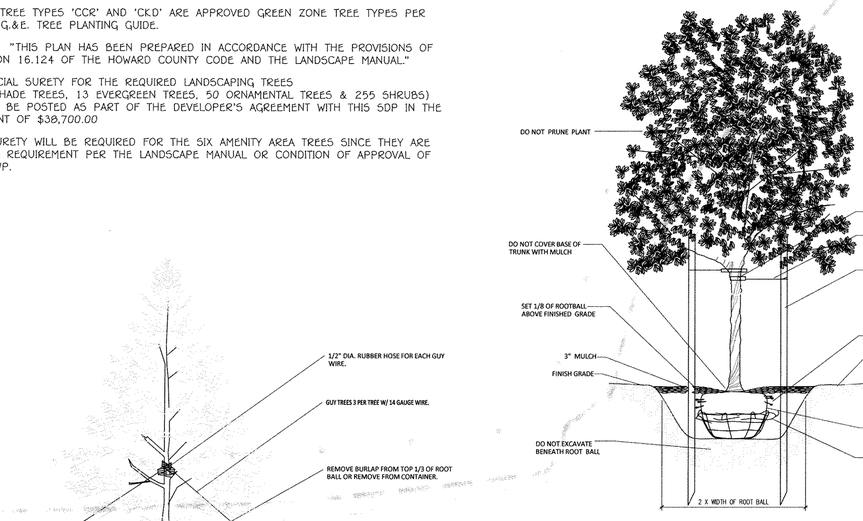
ALL SHRUBS SHALL BE PLANTED IN CONTINUOUS TRENCHES OR PREPARED PLANTING BEDS AND MULCHED WITH COMPOSTED HARDWOOD MULCH AS DETAILS AND SPECIFIED EXCEPT WHERE NOTED ON PLANS.

POSITIVE DRAINAGE SHALL BE MAINTAINED IN PLANTING BEDS 2 PERCENT SLOPE).

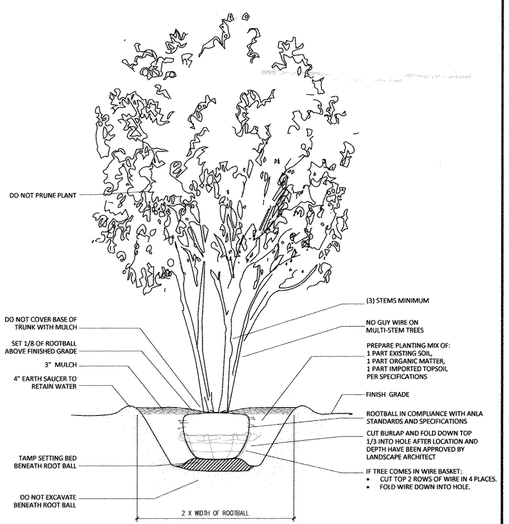
PLANTING MIX SHALL BE AS FOLLOWS: DECIDUOUS PLANTS - TWO PARTS TOPSOIL, ONE PART WELL-ROTTED COW OR HORSE MANURE. ADD 3 LBS. OF STANDARD FERTILIZER PER CUBIC YARD OF PLANTING MIX. EVERGREEN PLANTS - TWO PARTS TOPSOIL, ONE PART HUMUS OR OTHER APPROVED ORGANIC MATERIAL. ADD 3 LBS. OF EVERGREEN (ACIDIC) FERTILIZER PER CUBIC YARD OF PLANTING MIX. TOPSOIL SHALL CONFORM TO THE LANDSCAPE GUIDELINES.

WEED CONTROL: INCORPORATE A PRE-EMERGENT HERBICIDE INTO THE PLANTING BED FOLLOWING RECOMMENDED RATES ON THE LABEL. CAUTION: BE SURE TO CAREFULLY CHECK THE CHEMICAL USED TO ASSURE ITS ADAPTABILITY TO THE SPECIFIC GROUND COVER TO BE TREATED.

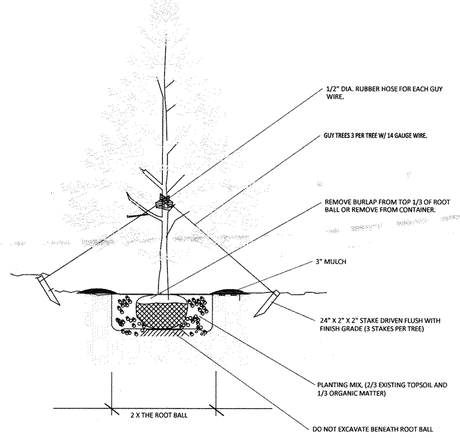
ALL AREAS WITHIN CONTRACT LIMITS DISTURBED DURING OR PRIOR TO CONSTRUCTION NOT DESIGNATED TO RECEIVE PLANTS AND MULCH SHALL BE FINE GRADED AND SEEDED.



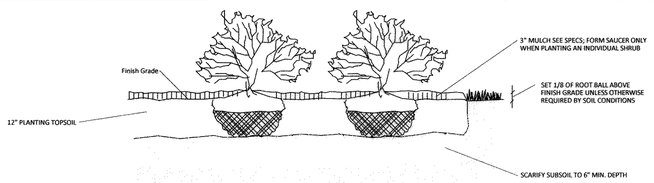
DECIDUOUS TREE - TYPICAL PLANTING DETAIL



MULTISTEM TREE - TYPICAL PLANTING DETAIL



EVERGREEN TREE - TYPICAL PLANTING DETAIL



SHRUB AND HEDGEROW - TYPICAL PLANTING DETAIL

0' 40' 80' 120'
SCALE: 1" = 40'

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
ELLICOTT CITY, MARYLAND 21042
(410) 461 - 2855

OWNER
9001 WBR, LLC
1029 HARRISON DRIVE
LAUREL, MARYLAND
20707-3827
PH# 410-423-0460

DEVELOPER
WHISKEY SPEAK, LLC
2330 WEST JOPPA ROAD
SUITE 190
LUTHERVILLE, MARYLAND
21093-4614
PH# 410-296-3800

DEVELOPER'S / BUILDER'S CERTIFICATE

I/WE CERTIFY THAT THE LANDSCAPING SHOWN ON THIS PLAN WILL BE DONE ACCORDING TO THE PLAN, SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE HOWARD COUNTY LANDSCAPE MANUAL. I/WE FURTHER CERTIFY THAT UPON COMPLETION, A LETTER OF LANDSCAPE INSTALLATION ACCOMPANIED BY AN EXECUTED ONE YEAR GUARANTEE OF PLANT MATERIALS WILL BE SUBMITTED TO THE DEPARTMENT OF PLANNING AND ZONING.

NAME — DATE 7/15/16

"PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 13204, EXPIRATION DATE: NOVEMBER 20, 2016."

CHARLES J. CROVO, SR., P.E. — DATE 7/15/16

DATE	DESCRIPTION
	REVISION BLOCK

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Director - Department of Planning and Zoning — Date 8-7-16

Chief, Division of Land Development — Date 8.08.16

Chief, Development Engineering Division — Date 7/15/16

STATE OF MARYLAND — CHARLES J. CROVO — No. 13204 — PROFESSIONAL ENGINEER

ADDRESS CHART	
BUILDING NO.	STREET ADDRESS
OFFICE/WAREHOUSE	9001 WHISKEY BOTTOM ROAD
GUARD HOUSE	9003 WHISKEY BOTTOM ROAD
FUTURE GARAGE	9005 WHISKEY BOTTOM ROAD
	LAUREL, MARYLAND 20723

PERMIT INFORMATION CHART

SUBDIVISION NAME	SECTION/AREA	LOT/PARCEL NO.
COASTAL SUNBELT PRODUCE	N/A	P. 375

PLAT# OR L/F	GRID#	ZONING	TAX MAP#	ELECT. DISTR.	CENSUS TRACT
22497-22499	4,5 10,11	TOD	50	SIXTH	6069.07

LANDSCAPE NOTES, DETAILS AND SCHEDULE

COASTAL SUNBELT PRODUCE
WAREHOUSE DISTRIBUTION CENTER
PARCEL 'A'

ZONED TOD — TAX MAP No.: 50
GRID No.: 4,5,10,11 — PARCEL No.: 375
SIXTH ELECTION DISTRICT — HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN — DATE: JULY 6, 2015

SHEET 19 OF 50

SDP-14-080

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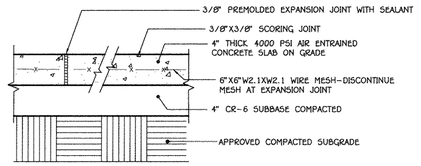
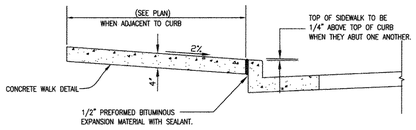


NOTE: INSTALL EXPANSION JOINTS AT MAX. 15'-0" O.C. AND INSTALL SCORING JOINTS AT MAX. 5'-0" O.C.

SLOPE ACROSS SIDEWALK SHALL BE MIN. 1/8"/FT.

CONCRETE WALK DETAIL

NO SCALE

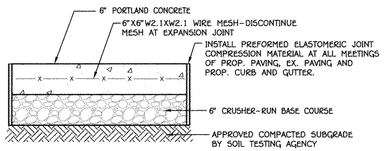


NOTES:

1. SIDEWALK TO BE SCRIBED IN EQUALLY 5'-0" MAXIMUM SQUARES.
2. EXPANSION JOINTS ACROSS THE SIDEWALK NOT TO MORE THAN 15' APART.
3. 1/2" PREFORMED BITUMINOUS EXPANSION MATERIAL IN EXPANSION JOINTS TO BE KEPT 1/4" BELOW SURFACE OF SIDEWALK. FILL WITH SEALANT.
4. 4000 PSI AIR ENTRAINED CONCRETE SHALL BE USED.
5. WHEN SIDEWALK ABUTS CURB, WALK SHALL BE 1/4" ABOVE CURB WITH 1/2" PREFORMED BITUMINOUS EXPANSION MATERIAL BETWEEN SIDEWALK AND CURB.
6. ON LONGITUDINAL SIDEWALK GRADES OF 5% OR GREATER, A CONCRETE HEADER, 6" THICK AND 6" DEEP BELOW THE NORMAL 4" SIDEWLAK THICKNESS SHALL BE CONSTRUCTED FOR THE FULL WIDTH OF THE SIDEWALK AT INTERVALS OF 48 FEET. THE HEADERS SHALL BE PLACED AT EXPANSION JOINT LOCATIONS AND SHALL BE MONOLITHIC WITH THE SIDEWALK.
7. SIDEWALK WIDTH ADJACENT TO CURB SHALL BE 5'-0" MIN.
8. SIDEWALK LOCATED 2' OR MORE FROM CURB MAY BE 4'-0" IN WIDTH WITH A 5' X 5' PAVED SECTION PLACED 200' APART.
9. PROVIDE 1/2" EXPANSION JOINT WHERE WALKS ABUT EXISTING CONCRETE SURFACES TO REMAIN.

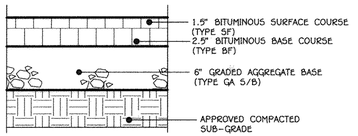
CONCRETE SIDEWALK DETAIL

NO SCALE



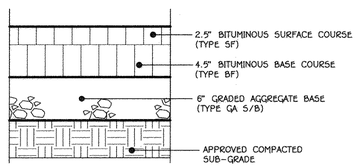
CONCRETE PAVING SECTION

NO SCALE



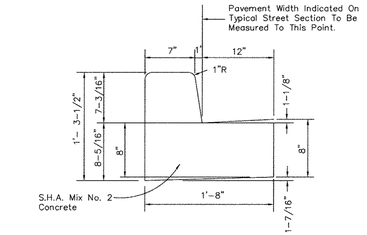
LIGHT DUTY ASPHALTIC PAVING DETAIL

NO SCALE



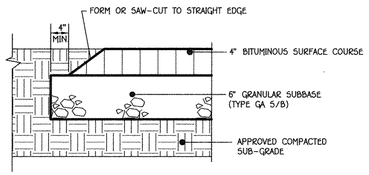
HEAVY DUTY ASPHALTIC PAVING DETAIL

NO SCALE



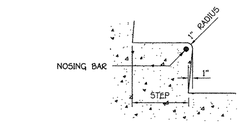
STANDARD 7" COMB. CONC. CURB AND GUTTER

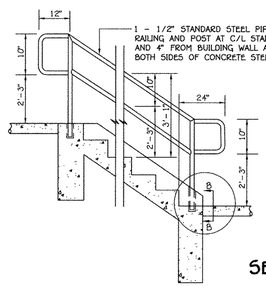
NO SCALE



MACADAM WALKWAY

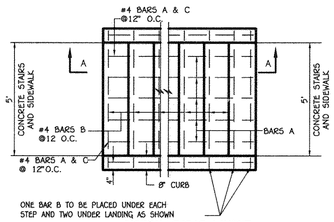
NO SCALE



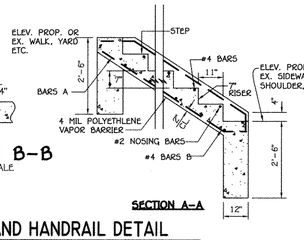


SECTION B-B

NO SCALE



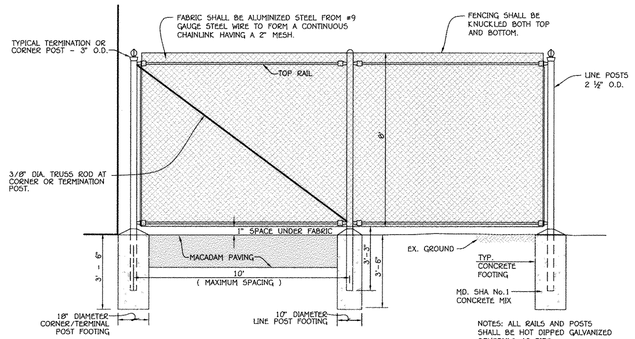
TYPICAL REBAR LAYOUT



SECTION A-A

CONCRETE STEPS AND HANDRAIL DETAIL

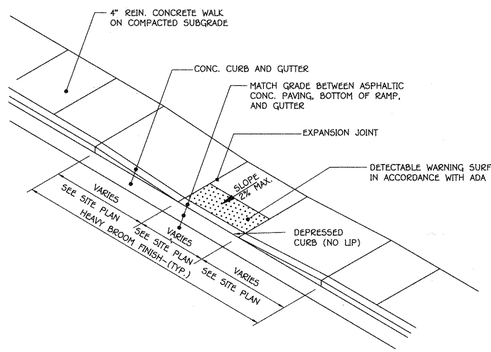
NO SCALE



CHAIN LINK FENCE DETAIL

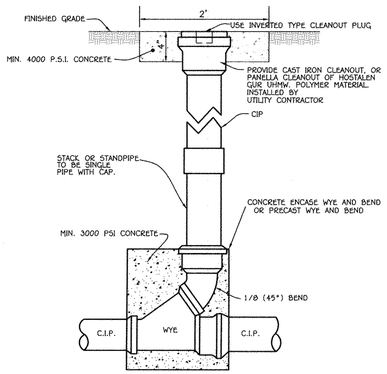
HOWARD COUNTY STANDARD DETAIL G-7.21

NO SCALE



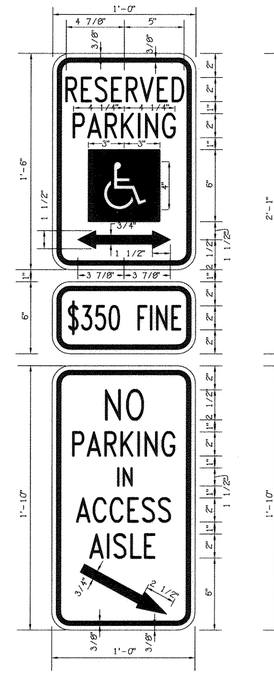
HANDICAP CURB RAMP DETAIL

NO SCALE



TYPICAL ROOF LEADER CLEAN-OUT

NO SCALE

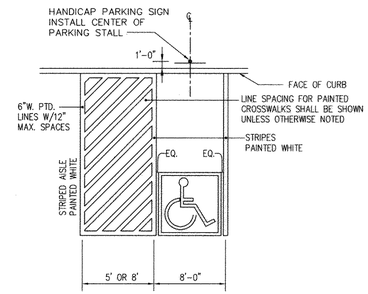


GENERAL NOTES:

1. SIGNS SHALL MEET DESIGN STANDARDS OF THE FEDERAL HIGHWAY ADMINISTRATION AND CONFORM TO THE STATE OF MARYLAND STANDARD HIGHWAY SIGN BOOKLET DETAIL R7-8.
2. ONE SIGN IS REQUIRED PER SPACE PLACED AS SHOWN ON SITE IMPROVEMENT PLAN.
3. SIGNS SHALL BE POLE MOUNTED WITH HOT DIPPED GALVANIZED COUNTY APPROVED PERFORATED CHANNEL POSTS W/TOP OF SIGNS 9'-1" ABOVE FINISHED GRADE OR AS INDICATED ON SITE DRAWINGS.
4. SIGN SHALL BE ATTACHED TO FLANGED SIDE OF POST. POST SHALL EXTEND INTO GROUND 2'-6" MIN.
5. COLORS: LEGEND AND BORDER-GREEN SYMBOL-WHITE ON BLUE BACKGROUND BACKGROUND-WHITE
6. CONTRACTOR SHALL COORDINATE ARROW DIRECTION WITH LOCATION OF ADJACENT AISLE.
7. SPACES INDICATED ON SITE DEVELOPMENT PLANS AS "VAN ACCESSIBLE" SHALL BE SIGNED ACCORDINGLY.

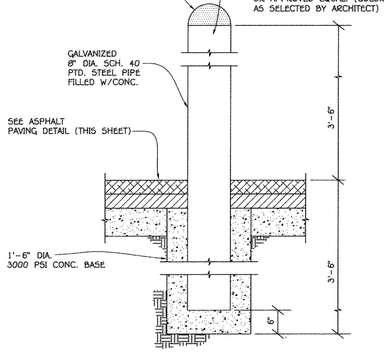
HANDICAP PARKING SIGN DETAIL

NOT TO SCALE



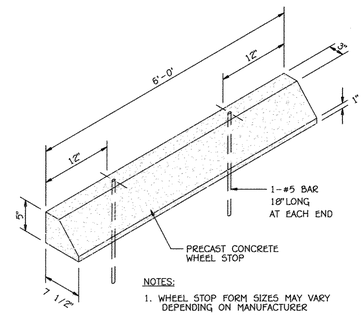
ACCESSIBLE SPACE LAYOUT

NO SCALE



BOLLARD DETAIL

NO SCALE

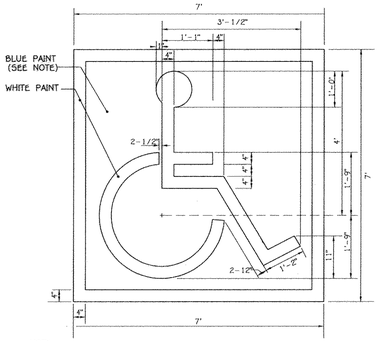


NOTES:

1. WHEEL STOP FORM SIZES MAY VARY DEPENDING ON MANUFACTURER
2. CONCRETE STRENGTH SHALL BE 4,000 P.S.I. AIR ENTRAINED

WHEEL STOP DETAIL

NO SCALE



NOTE:
SYMBOL IS REQUIRED TO CONTRAST WITH BACKGROUND (WHITE ON BLUE: COLOR NO. 105090 IN FED. STANDARD 5952-DOUBLE COAT TYP.)

HANDICAP SPACE STENCIL LAYOUT

SCALE: 1" = 20'

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
ELLICOTT CITY, MARYLAND 21042
(410) 461 - 2855

OWNER
9001 WBR, LLC
1029 HARRISON DRIVE
LAUREL, MARYLAND
20707-3927
PH# 410-423-0460

DEVELOPER
WHISKEY SPEAK LLC
2330 WEST JOPPA ROAD
SUITE 190
LUTHERVILLE, MARYLAND
21093-4614
PH# 410-296-3800

"PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 13204, EXPIRATION DATE- NOVEMBER 3, 2016."

CHARLES J. CROVO, SR., P.E. — 7/15/16 DATE

DATE	DESCRIPTION
	REVISION BLOCK

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Director - Department of Planning and Zoning — 8-7-15 Date

Chief, Division of Land Development — 8-06-15 Date

Chief, Development Engineering Division — 8/6/15 Date

STATE OF MARYLAND — CHARLES J. CROVO — No. 13204 — PROFESSIONAL ENGINEER

ADDRESS CHART	
BUILDING NO.	STREET ADDRESS
OFFICE/WAREHOUSE	9001 WHISKEY BOTTOM ROAD
GUARD HOUSE	9003 WHISKEY BOTTOM ROAD
FUTURE GARAGE	9005 WHISKEY BOTTOM ROAD
	LAUREL, MARYLAND 20723

PERMIT INFORMATION CHART

SUBDIVISION NAME		SECTION/AREA		LOT/PARCEL NO.
COASTAL SUNBELT PRODUCE		N/A		P. 375
PLAT# OR L/F	GRID#	ZONING	TAX MAP#	ELECT. DISTR.	CENSUS TRACT
22487-23479	4,5 10,11	TOD	50	SIXTH	6069.07

DETAIL SHEET

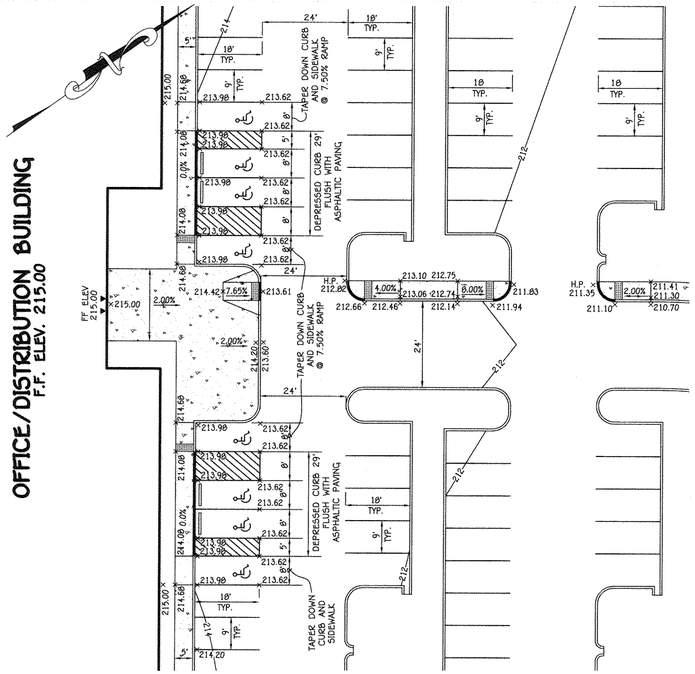
COASTAL SUNBELT PRODUCE
WAREHOUSE DISTRIBUTION CENTER
PARCEL 'A'

ZONED TOD — TAX MAP No.: 50
GRID No.: 4,5,10,11 — PARCEL No.: 375
SIXTH ELECTION DISTRICT — HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN — DATE: JULY 6, 2015

SHEET 20 OF 58

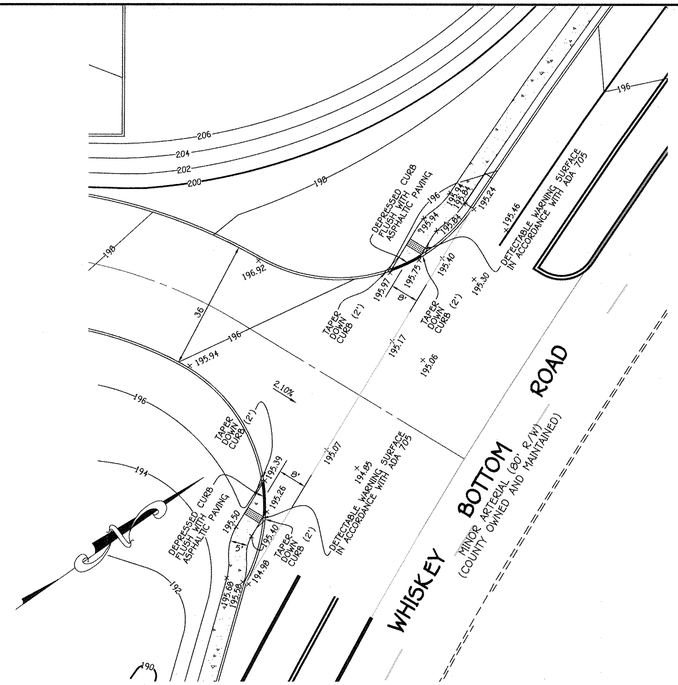
SDP-14-080

I:\2015\13033\Engineering\Dwgs\13033-3001 SDP 20-21 DETAILS.dwg, DETAIL SHEET 20, 7/2/2015 9:40:56 AM, 1:1



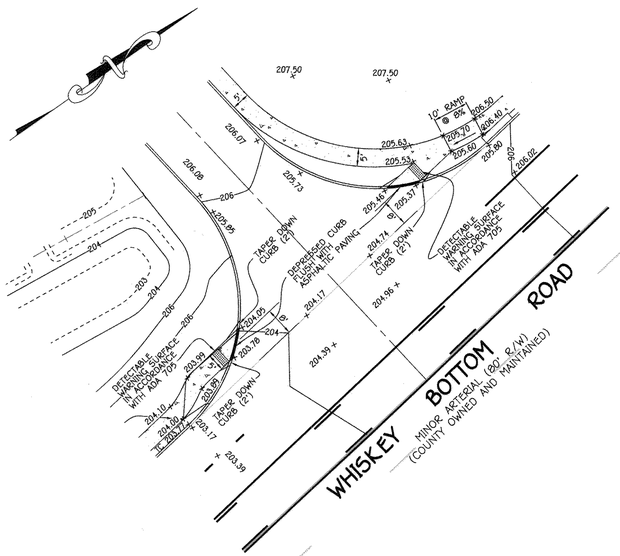
HANDICAP ACCESS PLAN

SCALE: 1" = 20'



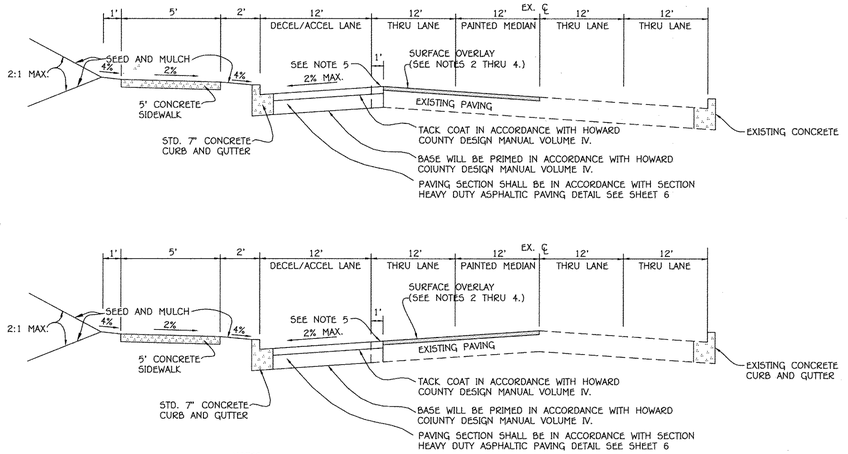
HANDICAP ACCESS PLAN
TRUCK ENTRANCE

SCALE: 1" = 20'



HANDICAP ACCESS PLAN
EMPLOYEE ENTRANCE

SCALE: 1" = 20'



TYPICAL ROADWAY SECTION

HOWARD COUNTY STANDARD DETAIL R-1.08

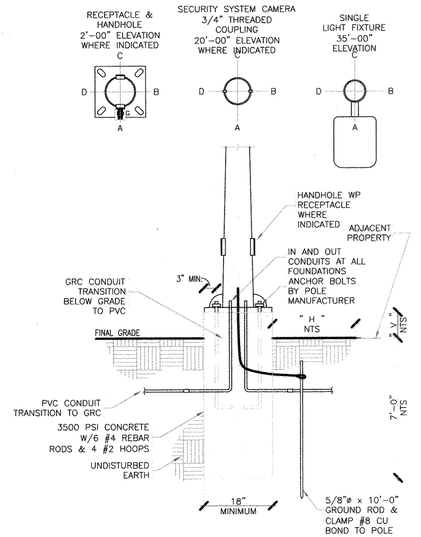
NO SCALE

NOTES:

1. ALL MATERIALS AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH HOWARD COUNTY DESIGN MANUAL VOLUME IV, STANDARD SPECIFICATION AND DETAILS FOR CONSTRUCTION.
2. THE EXISTING PAVEMENT TO BE RESURFACED SHALL BE MILLED AT DEPTH OF 1 1/2" (MINIMUM).
3. THE RESURFACING SHALL BE PLACED TO THE CENTERLINE OF THE ROADWAY.
4. RESURFACING COURSE TO BE EQUAL TO THE SURFACE COURSE OF THE TYPICAL PAVEMENT SECTION.
5. CONTRACTOR TO NEATLY SAWCUT AND REMOVE 1 FOOT OF THE EXISTING PAVING FOR THE ENTIRE LENGTH OF WIDENING.

SE-1 ELECTRICAL LIGHTING FIXTURE SCHEDULE

SYMBOL	DESCRIPTION
SL1	DUAL LED AREA POLE LIGHT – LITHONIA # CSX2 LED-120C-1000-40K-T4M-MVOLT-BS-DDBXD SINGLE PIECE DIE-CAST ALUMINUM HOUSING, POWDER COAT DARK BRONZE FINISH, PRECISION MOLDED ACRYLIC LENS OPTICS, MULTI-VOLTAGE 1000MA ELECTRONIC DRIVER FOR 120 4000K LEDS AND BIRD DETERRENT SPIKES. PROVIDE ROUND TAPERED FIBERGLASS DIRECT BURIAL POLE # RTFDB-41-118X-DM28, DARK BRONZE FINISH, DUAL ARM DRILL MOUNTING POSITIONS A AND C.
SL2	DUAL LED AREA POLE LIGHT – LITHONIA # CSX2 LED-120C-1000-40K-T4M-MVOLT-BS-DDBXD SINGLE PIECE DIE-CAST ALUMINUM HOUSING, POWDER COAT DARK BRONZE FINISH, PRECISION MOLDED ACRYLIC LENS OPTICS, MULTI-VOLTAGE 1000MA ELECTRONIC DRIVER FOR 120 4000K LEDS AND BIRD DETERRENT SPIKES. PROVIDE ROUND TAPERED FIBERGLASS DIRECT BURIAL POLE # RTFDB-41-118X-DM29, DARK BRONZE FINISH, DUAL ARM DRILL MOUNTING POSITIONS A AND B.
SL3	SINGLE LED AREA POLE LIGHT – LITHONIA # CSX2 LED-120C-1000-40K-T4M-MVOLT-BS-DDBXD SINGLE PIECE DIE-CAST ALUMINUM HOUSING, POWDER COAT DARK BRONZE FINISH, PRECISION MOLDED ACRYLIC LENS OPTICS, MULTI-VOLTAGE 1000MA ELECTRONIC DRIVER FOR 120 4000K LEDS AND BIRD DETERRENT SPIKES. PROVIDE ROUND TAPERED FIBERGLASS DIRECT BURIAL POLE # RTFDB-41-118X-DM19, DARK BRONZE FINISH, SINGLE ARM DRILL MOUNTING POSITION A.
SL4	SINGLE LED AREA POLE LIGHT – LITHONIA # CSX2 LED-120C-1000-40K-TFTM-MVOLT-BS-DDBXD SINGLE PIECE DIE-CAST ALUMINUM HOUSING, POWDER COAT DARK BRONZE FINISH, PRECISION MOLDED ACRYLIC LENS OPTICS, MULTI-VOLTAGE 1000MA ELECTRONIC DRIVER FOR 120 4000K LEDS AND BIRD DETERRENT SPIKES. PROVIDE ROUND TAPERED FIBERGLASS DIRECT BURIAL POLE # RTFDB-41-118X-DM19, DARK BRONZE FINISH, SINGLE ARM DRILL MOUNTING POSITION A.
SL5	THREE LED AREA POLE LIGHT – LITHONIA # CSX2 LED-120C-1000-40K-TFTM-MVOLT-BS-DDBXD SINGLE PIECE DIE-CAST ALUMINUM HOUSING, POWDER COAT DARK BRONZE FINISH, PRECISION MOLDED ACRYLIC LENS OPTICS, MULTI-VOLTAGE 1000MA ELECTRONIC DRIVER FOR 120 4000K LEDS AND BIRD DETERRENT SPIKES. PROVIDE ROUND TAPERED FIBERGLASS DIRECT BURIAL POLE # RTFDB-41-118X-DM39, DARK BRONZE FINISH, TRIPLE ARM DRILL MOUNTING POSITIONS A AND C AND D OR B (VERIFY WITH LAYOUT ON PLANS).
SL6	THREE LED AREA POLE LIGHT – LITHONIA # CSX2 LED-120C-1000-40K-T4M-MVOLT-BS-DDBXD SINGLE PIECE DIE-CAST ALUMINUM HOUSING, POWDER COAT DARK BRONZE FINISH, PRECISION MOLDED ACRYLIC LENS OPTICS, MULTI-VOLTAGE 1000MA ELECTRONIC DRIVER FOR 120 4000K LEDS AND BIRD DETERRENT SPIKES. PROVIDE SQUARE TAPERED STEEL POLE # STS-35-64B-DM39-FBC, POWDER COAT DARK BRONZE FINISH, TRIPLE ARM DRILL MOUNTING POSITIONS A AND C AND D OR B (VERIFY WITH LAYOUT ON PLANS), ANCHOR BOLTS, FULL BASE COVER.
SL7	DUAL LED AREA POLE LIGHT – LITHONIA # (A) CSX2 LED-120C-1000-40K-TFTM-MVOLT-BS-DDBXD AND (B) CSX2 LED-120C-1000-40K-T3M-MVOLT-HS-BS-DDBXD SINGLE PIECE DIE-CAST ALUMINUM HOUSING, POWDER COAT DARK BRONZE FINISH, PRECISION MOLDED ACRYLIC LENS OPTICS, MULTI-VOLTAGE 1000MA ELECTRONIC DRIVER FOR 120 4000K LEDS AND BIRD DETERRENT SPIKES. PROVIDE ROUND TAPERED FIBERGLASS DIRECT BURIAL POLE # RTFDB-41-118X-DM28, DARK BRONZE FINISH, DUAL ARM DRILL MOUNTING POSITIONS A AND C.
SL8	SINGLE LED AREA POLE LIGHT – LITHONIA # CSX2 LED-120C-1000-40K-T3M-MVOLT-HS-BS-DDBXD SINGLE PIECE DIE-CAST ALUMINUM HOUSING, POWDER COAT DARK BRONZE FINISH, PRECISION MOLDED ACRYLIC LENS OPTICS, MULTI-VOLTAGE 1000MA ELECTRONIC DRIVER FOR 120 4000K LEDS AND BIRD DETERRENT SPIKES. PROVIDE ROUND TAPERED FIBERGLASS DIRECT BURIAL POLE # RTFDB-41-118X-DM19, DARK BRONZE FINISH, SINGLE ARM DRILL MOUNTING POSITION A.
SL9	DUAL LED AREA POLE LIGHT – LITHONIA # (A) CSX2 LED-120C-1000-40K-TFTM-MVOLT-BS-DDBXD AND (B) CSX2 LED-120C-1000-40K-T4M-MVOLT-BS-DDBXD SINGLE PIECE DIE-CAST ALUMINUM HOUSING, POWDER COAT DARK BRONZE FINISH, PRECISION MOLDED ACRYLIC LENS OPTICS, MULTI-VOLTAGE 1000MA ELECTRONIC DRIVER FOR 120 4000K LEDS AND BIRD DETERRENT SPIKES. PROVIDE ROUND TAPERED FIBERGLASS DIRECT BURIAL POLE # RTFDB-41-118X-DM29, DARK BRONZE FINISH, DUAL ARM DRILL MOUNTING POSITIONS A AND B.
SL10	DUAL LED AREA POLE LIGHT – LITHONIA # CSX2 LED-120C-1000-40K-TFTM-MVOLT-BS-DDBXD SINGLE PIECE DIE-CAST ALUMINUM HOUSING, POWDER COAT DARK BRONZE FINISH, PRECISION MOLDED ACRYLIC LENS OPTICS, MULTI-VOLTAGE 1000MA ELECTRONIC DRIVER FOR 120 4000K LEDS AND BIRD DETERRENT SPIKES. PROVIDE ROUND TAPERED FIBERGLASS DIRECT BURIAL POLE # RTFDB-41-118X-DM28, DARK BRONZE FINISH, DUAL ARM DRILL MOUNTING POSITIONS A AND C.
SL11	METAL HALIDE CANOPY LIGHT – LITHONIA # KACM-150M-FP-277-SCWA DIE-CAST ALUMINUM HOUSING WITH FULLY GASKETED HINGED DOOR FRAME. FLAT PRISMATIC LENS. 150 WATT METAL HALIDE SURFACE MOUNT LIGHT, 277 VOLT HIGH POWER FACTOR AUTO-REGULATOR BALLAST FOR 1-150 WATT METAL HALIDE LAMP. PROVIDE PHOTOCELL FOR CONTROLLING ALL TYPE "S11" FIXTURES ON ONE CIRCUIT.
SL12	METAL HALIDE WALL LIGHT – LITHONIA # TWH-250M-277-SCWA, CORROSION RESISTANT, DIE-CAST ALUMINUM HOUSING WITH DARK BRONZE FINISH, 250 WATT METAL HALIDE WALL LIGHT WITH QUARTZ RESTRIKE, 277 VOLT HIGH POWER FACTOR AUTO-REGULATOR BALLAST FOR 1-250 WATT METAL HALIDE LAMP AND 1-150 WATT QUARTZ LAMP. PROVIDE PHOTOCELL FOR CONTROLLING ALL TYPE "SL12" FIXTURES ON ONE CIRCUIT.
SL13	METAL HALIDE WALL LIGHT – LITHONIA # TWH-150M-277-SCWA, CORROSION RESISTANT, DIE-CAST ALUMINUM HOUSING WITH DARK BRONZE FINISH, 150 WATT METAL HALIDE WALL LIGHT WITH QUARTZ RESTRIKE, 277 VOLT HIGH POWER FACTOR AUTO-REGULATOR BALLAST FOR 1-150 WATT METAL HALIDE LAMP AND 1-100 WATT QUARTZ LAMP. PROVIDE PHOTOCELL FOR CONTROLLING ALL TYPE "SL13" FIXTURES ON ONE CIRCUIT.
SL14	LED WALL LIGHT – LITHONIA # CSXW LED-30C-1000-40K-T4M-277-PE-DDBXD, CORROSION RESISTANT, DIE-CAST ALUMINUM HOUSING WITH DARK BRONZE FINISH, INTEGRAL PHOTOCELL, AND 30 LED POWERED BY ELECTRONIC DRIVER WITH POWER FACTOR > 90%, OR APPROVED EQUAL.
SL15	DUAL LED AREA POLE LIGHT – LITHONIA # CSX2 LED-120C-1000-40K-T4M-MVOLT-BS-DDBXD SINGLE PIECE DIE-CAST ALUMINUM HOUSING, POWDER COAT DARK BRONZE FINISH, PRECISION MOLDED ACRYLIC LENS OPTICS, MULTI-VOLTAGE 1000MA ELECTRONIC DRIVER FOR 120 4000K LEDS AND BIRD DETERRENT SPIKES. PROVIDE SQUARE TAPERED STEEL POLE # STS-35-64B-DM28-FBC, POWDER COAT DARK BRONZE FINISH, DUAL ARM DRILL MOUNTING POSITIONS A AND C.



NOTES :
V = VERTICAL ABOVE FINISHED GRADE, 1'-00" IN ALL LOCATIONS.

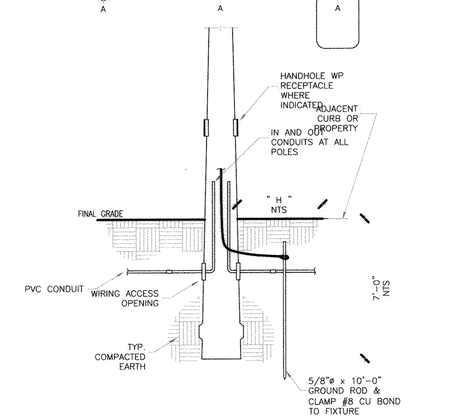
H = HORIZONTAL FROM ADJACENT CURB OR PAVING 3'-00".

DUAL HEAD LIGHT FIXTURE, NOT SHOWN, WHERE SPECIFIED IS TO BE PROVIDED AT POSITION B, C OR D (VERIFY WITH LAYOUT ON PLANS).

TRIPLE HEAD LIGHT FIXTURE, NOT SHOWN, WHERE SPECIFIED IS TO BE PROVIDED AT POSITION A AND C AND B OR D (VERIFY WITH LAYOUT ON PLANS).

2 SC-1 **SITE LIGHTING POLE FOUNDATION DETAIL**

SCALE: N.T.S.



NOTES :
H = HORIZONTAL FROM ADJACENT CURB OR PAVING 3'-00".

DUAL HEAD LIGHT FIXTURE, NOT SHOWN, WHERE SPECIFIED IS TO BE PROVIDED AT POSITION B, C OR D (VERIFY WITH LAYOUT ON PLANS).

TRIPLE HEAD LIGHT FIXTURE, NOT SHOWN, WHERE SPECIFIED IS TO BE PROVIDED AT POSITION A AND C AND B OR D (VERIFY WITH LAYOUT ON PLANS).

3 SE-1 **SITE LIGHTING POLE FOUNDATION DETAIL**

SCALE: N.T.S.

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTENNIAL SQUARE OFFICE PARK – 10272 BALTIMORE NATIONAL PIKE
ELLICOTT CITY, MARYLAND 21042
(410) 461 – 2855

OWNER
9001 WBK, LLC
1029 HARRISON DRIVE
LAUREL, MARYLAND
20707-3827
PH# 410-423-0460

DEVELOPER
WHISKEY SPEAK, LLC
2330 WEST JOPPA ROAD
SUITE 190
LUTHERVILLE, MARYLAND
21093-4614
PH# 410-296-3800

"PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 13204, EXPIRATION DATE: NOVEMBER 3, 2016."

CHARLES J. CROVO, SR., P.E. — 7/15/15 DATE

DATE	DESCRIPTION
	REVISION BLOCK

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Director - Department of Planning and Zoning — 8-7-15 Date

Chief, Division of Land Development — 8.06.15 Date

Chief, Development Engineering Division — 7/16/15 Date

STATE OF MARYLAND — CHARLES J. CROVO — No. 13204 — PROFESSIONAL ENGINEER

ADDRESS CHART

BUILDING NO.	STREET ADDRESS
OFFICE/WAREHOUSE	9001 WHISKEY BOTTOM ROAD
GUARD HOUSE	9003 WHISKEY BOTTOM ROAD
FUTURE GARAGE	9005 WHISKEY BOTTOM ROAD
	LAUREL, MARYLAND 20723

PERMIT INFORMATION CHART

SUBDIVISION NAME	SECTION/AREA	LOT/PARCEL NO.
COASTAL SUNBELT PRODUCE	N/A	P. 375

PLAT# OR L/F	GRID#	ZONING	TAX MAP#	ELECT. DISTR.	CENSUS TRACT
22437-22439	4,5 10,11	TOD	50	SIXTH	6069.07

HANDICAP ACCESS PLAN AND DETAIL SHEET

COASTAL SUNBELT PRODUCE
WAREHOUSE DISTRIBUTION CENTER
PARCEL 'A'

ZONED TOD — TAX MAP No.: 50
GRID No.: 4,5,10,11 — PARCEL No.: 375
SIXTH ELECTION DISTRICT — HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN — DATE: JULY 6, 2015

SHEET 21 OF 50

SDP-14-080

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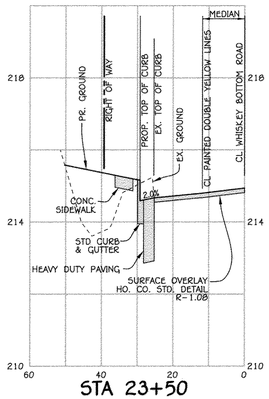

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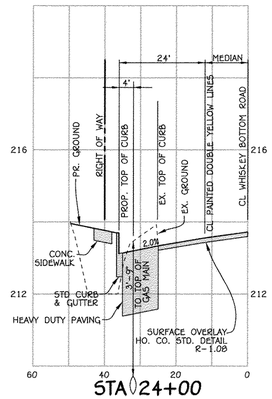

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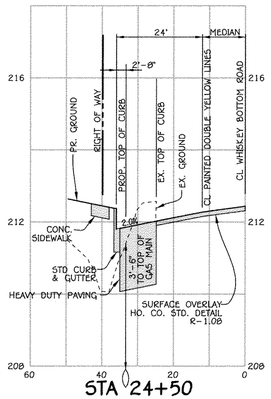

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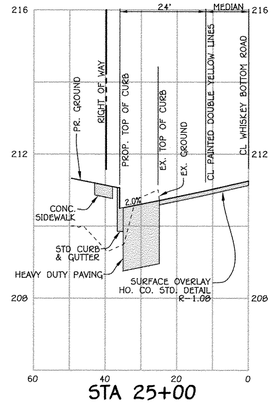

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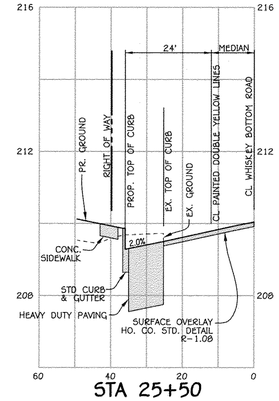

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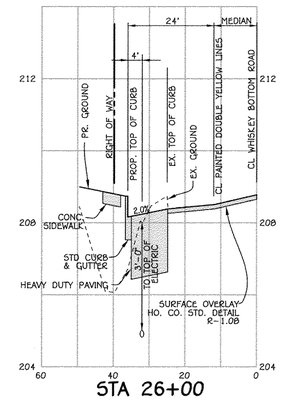

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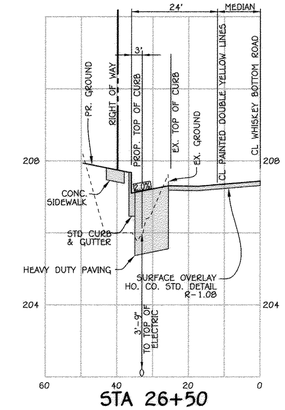

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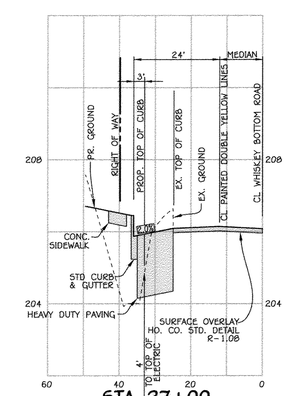

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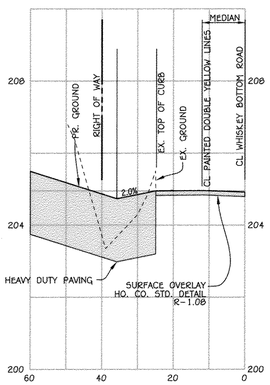

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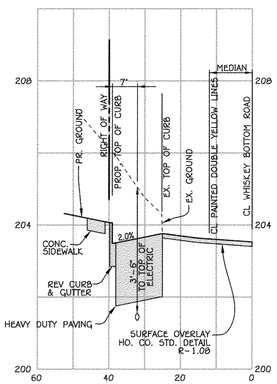

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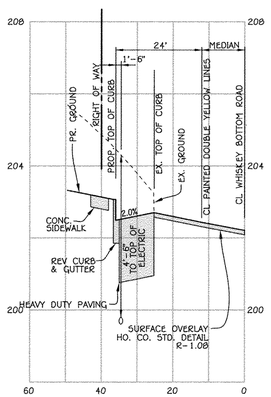

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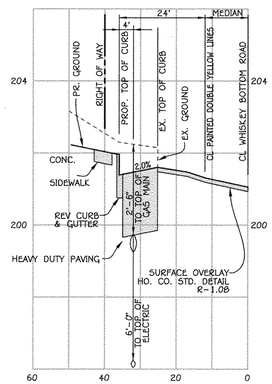

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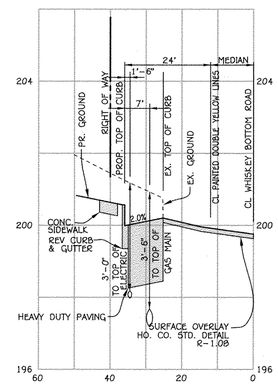

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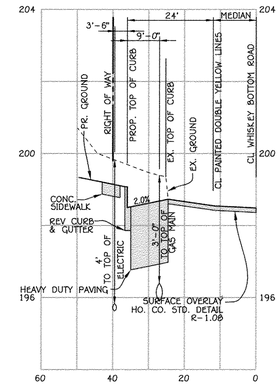

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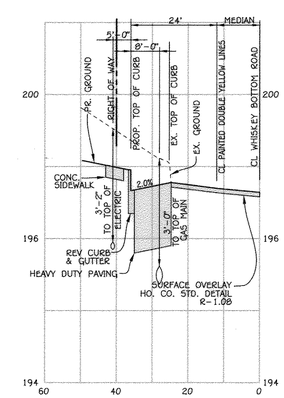

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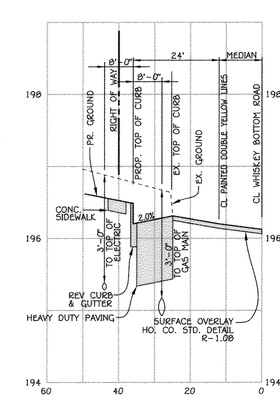

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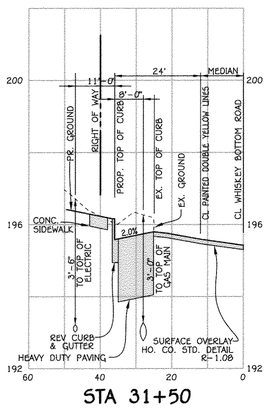

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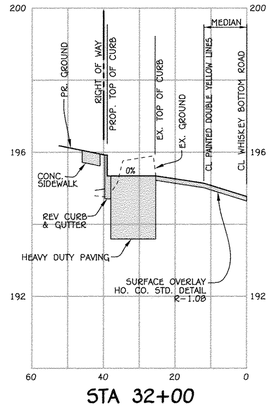

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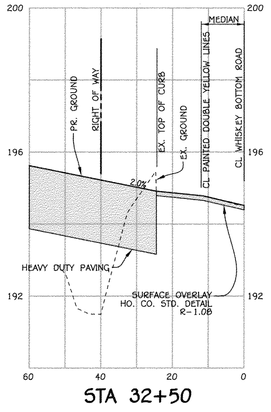

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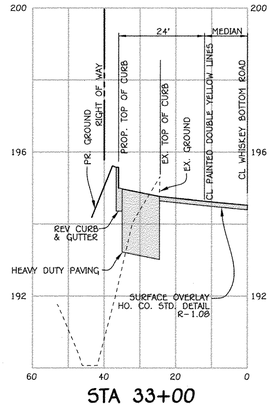


STA 33+00

WHISKEY BOTTOM ROAD IMPROVEMENTS
CROSS-SECTIONS

SCALE: HOR. : 1" = 20'
VER. : 1" = 2'

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
ELLICOTT CITY, MARYLAND 21042
(410) 461 - 2855

OWNER
9001 WBR, LLC
1029 HARRISON DRIVE
LAUREL, MARYLAND
20707-3827
PH# 410-423-0460

DEVELOPER
WHISKEY SPEAK, LLC
2330 WEST JOPPA ROAD
SUITE 190
LUTHERVILLE, MARYLAND
21093-4614
PH# 410-296-3800

"PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 13204, EXPIRATION DATE: NOVEMBER 3, 2016."

CHARLES J. CROVO, SR., P.E. — 7/15/15 DATE

DATE	DESCRIPTION
	REVISION BLOCK

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Director - Department of Planning and Zoning — 8-7-15 Date

Chief, Division of Land Development — 8-06-15 Date

Chief, Development Engineering Division — 8/6/15 Date

CHARLES J. CROVO, SR. STATE OF MARYLAND 13204 PROFESSIONAL ENGINEER

ADDRESS CHART	
BUILDING NO.	STREET ADDRESS
OFFICE/WAREHOUSE	9001 WHISKEY BOTTOM ROAD
GUARD HOUSE	9003 WHISKEY BOTTOM ROAD
FUTURE GARAGE	9005 WHISKEY BOTTOM ROAD
	LAUREL, MARYLAND 20723

PERMIT INFORMATION CHART

SUBDIVISION NAME		SECTION/AREA		LOT/PARCEL NO.
COASTAL SUNBELT PRODUCE		N/A		P. 375
PLAT# OR L/F	GRID#	ZONING	TAX MAP#	ELECT. DISTR.	CENSUS TRACT
22437-22439	4,5 10,11	TOD	50	SIXTH	6069.07

ROAD SECTIONS

COASTAL SUNBELT PRODUCE
WAREHOUSE DISTRIBUTION CENTER
PARCEL 'A'

ZONED TOD — TAX MAP No.: 50
GRID No.: 4,5,10,11 — PARCEL No.: 375
SIXTH ELECTION DISTRICT — HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN — DATE: JULY 6, 2015

SHEET 22 OF 58

SDP-14-080

I:\2013\13033\Engineering\Dwgs\13033-3001 SDP 22 ROAD SECTIONS.dwg, ROAD SECTIONS, 7/15/2015 3:34:38 PM, 1:1

B-4-3 STANDARDS AND SPECIFICATIONS

FOR

SEEDING AND MULCHING

Definition

The application of seed and mulch to establish vegetative cover.

Purpose

To protect disturbed soils from erosion during and at the end of construction.

Conditions Where Practice Applies

To the surface of all perimeter controls, slopes, and any disturbed area not under active grading.

Criteria

A. Seeding

1. Specifications

a. All seed must meet the requirements of the Maryland State Seed Law. All seed must be subject to re-testing by a recognized seed laboratory. All seed used must have been tested within the 6 months immediately preceding the date of sowing such material on any project. Refer to Table B.4 regarding the quality of seed. Seed tags must be available upon request to the inspector to verify type of seed and seeding rate.

b. Mulch alone may be applied between the fall and spring seeding dates only if the ground is frozen. The appropriate seeding mixture must be applied when the ground thaws.

c. Inoculants: The inoculant for treating legume seed in the seed mixtures must be a pure culture of nitrogen fixing bacteria prepared specifically for the species. Inoculants must not be used later than the date inoculated on the container. Add fresh inoculants as directed on the package. Use four times the recommended rate when hydroseeding. Note: It is very important to keep inoculant as cool as possible until used. Temperatures above 75 to 80 degrees Fahrenheit can weaken bacteria and make the inoculant less effective.

d. Sod or seed must not 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.

2. Application

a. Dry Seeding: This includes use of conventional drop or broadcast spreaders.

i. Incorporate seed into the subsoil at the rates prescribed on Temporary Seeding Table B.1, Permanent Seeding Table B.3, or site-specific seeding summaries.

ii. Apply seed in two directions, perpendicular to each other. Apply half the seeding rate in each direction. Roll the seeded area with a weighted roller to provide good seed to soil contact.

b. Drill or Cultipacker Seeding: Mechanized seeders that apply and cover seed with soil.

i. Cultipacking seeders are required to bury the seed in such a fashion as to provide at least 1/4 inch of soil covering. Seedbed must be firm after planting.

ii. Apply seed in two directions, perpendicular to each other. Apply half the seeding rate in each direction.

c. Hydroseeding: Apply seed uniformly with hydroseeder (slurry includes seed and fertilizer).

i. If fertilizer is being applied at the time of seeding, the application rates should not exceed the following: nitrogen, 100 pounds per acre total of soluble nitrogen; P_2O_5 (phosphorous), 200 pounds per acre; K_2O (potassium), 200 pounds per acre.

ii. Lime: Use only ground agricultural limestone (up to 3 tons per acre may be applied by hydroseeding). Normally, not more than 2 tons are applied by hydroseeding at any one time. Do not use burnt or hydrated lime when hydroseeding.

iii. Mix seed and fertilizer on site and seed immediately and without interruption.

iv. When hydroseeding do not incorporate seed into the soil.

B. Mulching

1. Mulch Materials (in order of preference)

a. Straw consisting of thoroughly threshed wheat, rye, oat, or barley and reasonably bright in color. Straw is to be free of noxious weed seeds as specified in the Maryland Seed Law and not musty, moldy, caked, decayed, or excessively dusty. **Note: Use only sterile straw mulch in areas where one species of grass is desired.**

b. Wood Cellulose Fiber Mulch (WCFM) consisting of specially prepared wood cellulose processed into a uniform fibrous physical state.

i. WCFM is to be dyed green or contain a green dye in the package that will provide an appropriate color to facilitate visual inspection of the uniformly spread slurry.

ii. WCFM, including dye, must contain no germination or growth inhibiting factors.

iii. WCFM materials are to be manufactured and processed in such a manner that the wood cellulose fiber mulch will remain in uniform suspension in water under agitation and will blend with seed, fertilizer and other additives to form a homogeneous slurry. The mulch material must form a blotter-like ground cover, on application, having moisture absorption and percolation properties and must cover and hold grass seed in contact with the soil without inhibiting the growth of the grass seedlings.

iv. WCFM material must not contain elements or compounds at concentration levels that will be phyto-toxic.

v. WCFM must conform to the following physical requirements: fiber length of approximately 10 millimeters, diameter approximately 1 millimeter, pH range of 4.0 to 8.5, ash content of 1.6 percent maximum and water holding capacity of 90 percent minimum.

2. Application

a. Apply mulch to all seeded areas immediately after seeding.

b. When straw mulch is used, spread it over all seeded areas at the rate of 2 tons per acre to a uniform loose depth of 1 to 2 inches. Apply mulch to achieve a uniform distribution and depth so that the soil surface is not exposed. When using a mulch anchoring tool, increase the application rate to 2.5 tons per acre.

c. Wood cellulose fiber used as mulch must be applied at a net dry weight of 1500 pounds per acre. Mix the wood cellulose fiber with water to attain a mixture with a maximum of 50 pounds of wood cellulose fiber per 100 gallons of water.

3. Anchoring

a. Perform mulch anchoring immediately following application of mulch to minimize loss by wind or water. This may be done by one of the following methods (listed by preference), depending upon the size of the area and erosion hazard:

i. A mulch anchoring tool is a tractor drawn implement designed to punch and anchor mulch into the soil surface a minimum of 2 inches. This practice is most effective on large areas, but is limited to flatter slopes where equipment can operate safely. If used on sloping land, this practice should follow the contour.

ii. Wood cellulose fiber may be used for anchoring straw. Apply the fiber binder at a net dry weight of 750 pounds per acre. Mix the wood cellulose fiber with water at a maximum of 50 pounds of wood cellulose fiber per 100 gallons of water.

iii. Synthetic binders such as Acrylic DER (Agro-Tack), DCA-70, Petrotset, Terra Tax II, Terra Tack AR, or other approved equal may be used. Follow application rates as specified by the manufacturer. Application of liquid binders needs to be heavier at the edges where wind catches mulch, such as in valleys and on crests of banks. **Use of asphalt binders is strictly prohibited.**

iv. Lightweight plastic netting may be stapled over the mulch according to manufacturer recommendations. Netting is usually available in rolls 4 to 15 feet wide and 300 to 3,000 feet long.

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 (410-313-1855).
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 MOST CURRENT MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL AND REVISIONS THERETO.
3) FOLLOWING INITIAL SOIL DISTURBANCE OR RE-DISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN: a) 3 CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DIKES, PERIMETER SLOPES AND ALL SLOPES GREATER THAN 3:1, b) 7 DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.
4) ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD SPECIFIED ABOVE IN ACCORDANCE WITH THE 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR PERMANENT SEEDING (SEC. B-4-5), TEMPORARY SEEDING (SEC. B-4-4) AND MULCHING (SEC. B-4-3). TEMPORARY STABILIZATION WITH MULCH ALONE CAN ONLY BE DONE WHEN RECOMMENDED SEEDING DATES DO NOT ALLOW FOR PROPER GERMINATION AND ESTABLISHMENT OF GRASSES.
5) 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.
6) SITE ANALYSIS:

TOTAL AREA OF SITE	33.19 ACRES
AREA DISTURBED	27.0 ACRES
AREA TO BE ROOFED OR PAVED	19.5 ACRES
AREA TO BE VEGETATIVELY STABILIZED	7.5 ACRES
TOTAL CUT	1,000 CU.YDS.
TOTAL FILL	1,000 CU.YDS.
OFFSITE WASTE/BORROW AREA LOCATION	N/A

7) ANY SEDIMENT CONTROL PRACTICE THAT IS DISTURBED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF DISTURBANCE.
8) ADDITIONAL SEDIMENT CONTROL MUST BE PROVIDED, IF DEEMED NECESSARY BY THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
9) ON ALL SITES WITH DISTURBED AREAS IN 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 THIS INITIAL APPROVAL BY THE INSPECTION AGENCY IS MADE.
10) TRENCHES FOR THE CONSTRUCTION OF UTILITIES IS LIMITED TO THREE PIPE LENGTHS OR THAT WHICH SHALL BE BACK-FILLED AND STABILIZED BY THE END OF EACH WORKDAY, WHICHEVER IS SHORTER.
11) ANY CHANGES OR REVISIONS TO THE SEQUENCE OF CONSTRUCTION MUST BE REVIEWED AND APPROVED BY THE PLAN APPROVAL AUTHORITY PRIOR TO PROCEEDING WITH CONSTRUCTION.
12) A PROJECT IS TO BE SEQUENCED SO THAT GRADING ACTIVITIES BEGIN ON ONE GRADING UNIT (MAXIMUM ACREAGE OF 20 ACRE PER GRADING UNIT) AT A TIME. WORK MAY PROCEED TO A SUBSEQUENT GRADING UNIT WHEN AT LEAST 50 PERCENT OF THE DISTURBED AREA IN THE PROCEEDING GRADING UNIT HAS BEEN STABILIZED AND APPROVED BY THE ENFORCEMENT AUTHORITY. UNLESS OTHERWISE SPECIFIED AND APPROVED BY THE APPROVAL AUTHORITY, NO MORE THAN 30 ACRES CUMULATIVELY MAY BE DISTURBED AT A GIVEN TIME.

DUST CONTROL

DEFINITION
CONTROLLING DUST BLOWING AND MOVEMENT ON CONSTRUCTION SITES AND ROADS.

PURPOSE
TO PREVENT BLOWING AND MOVEMENT OF DUST FROM EXPOSED SOIL SURFACES, REDUCE ON AND OFF-SITE DAMAGE, HEALTH HAZARDS AND IMPROVE TRAFFIC SAFETY.

CONDITIONS WHERE PRACTICE APPLIES
THIS PRACTICE IS APPLICABLE TO AREAS SUBJECT TO DUST BLOWING AND MOVEMENT WHERE ON AND OFF-SITE DAMAGE IS LIKELY WITHOUT TREATMENT.

SPECIFICATIONS
TEMPORARY METHODS
1. MULCHES - SEE STANDARDS FOR VEGETATIVE STABILIZATION WITH MULCHES ONLY. MULCH SHOULD BE CRIMPED OR TACKED TO PREVENT BLOWING.
2. VEGETATIVE COVER - SEE STANDARDS FOR TEMPORARY VEGETATIVE COVER.
3. TILLAGE - TO ROUGHEN SURFACE AND BRING CLODS TO THE SURFACE. THIS IS AN EMERGENCY MEASURE WHICH SHOULD BE USED BEFORE SOIL BLOWING STARTS. BEGIN PLOWING ON WINDWARD SIDE OF THE SITE. CHISEL-TYPE PLOWS SPACED ABOUT 12" APART, SPRING-TOOTHED HARROWS AND SIMILAR PLOWS ARE EXAMPLES OF EQUIPMENT WHICH MAY PRODUCE THE DESIRED EFFECT.
4. IRRIGATION - THIS IS GENERALLY DONE AS AN EMERGENCY TREATMENT. SITE IS SPRINKLED WITH WATER UNTIL THE SURFACE IS MOIST. REPEAT AS NEEDED. AT NO TIME SHOULD THE SITE BE IRRIGATED TO THE POINT THAT RUNOFF BEGINS TO FLOW.
5. BARRIERS - SOLID BOARD FENCES, SILT FENCES, SNOW FENCES, BURLAP FENCES, STRAW BALE DIKES AND SIMILAR MATERIAL CAN BE USED TO CONTROL AIR CURRENTS AND SOIL BLOWING. BARRIERS PLACED AT RIGHT ANGLES TO PREVAILING CURRENTS AT INTERVALS OF ABOUT 10 TIMES THEIR HEIGHT ARE EFFECTIVE IN CONTROLLING SOIL BLOWING.
6. CALCIUM CHLORIDE - APPLY AT RATES THAT WILL KEEP SURFACE MOIST. MAY NEED RETREATMENT.

PERMANENT METHODS
1. PERMANENT VEGETATION - SEE STANDARDS FOR PERMANENT VEGETATIVE COVER AND PERMANENT STABILIZATION WITH SOD. EXISTING TREES OR LARGE SHRUBS MAY AFFORD VALUABLE PROTECTION IF LEFT IN PLACE.
2. TOPSOILING - COVERING WITH LESS ERODIBLE SOIL MATERIALS. SEE STANDARDS FOR TOPSOILING.
3. STONE - COVER SURFACE WITH CRUSHED STONE OR COARSE GRAVEL.

SEQUENCE OF CONSTRUCTION

1. OBTAIN GRADING PERMIT. (1 DAY)
2. NOTIFY MISS UTILITY (1-800-257-7777) 48 HOURS BEFORE STARTING WORK. NOTIFY THE HOWARD COUNTY CONSTRUCTION INSPECTION DIVISION (410-313-1855) 24 HOURS BEFORE STARTING WORK. (1 WEEK)
3. CLEAR AND GRUB FOR INSTALLATION OF PERIMETER CONTROLS. (3 DAYS)
4. INSTALL SUPER SILT FENCE. CONTRACTOR SHALL INSPECT ALL SEDIMENT CONTROL DEVICES INSTALLED UNDER GP-14-58 AND MAKE ANY NECESSARY REPAIRS. (2 WEEK)
5. WITH PERMISSION OF THE SEC INSPECTOR, BEGIN SITE EARTHWORK. MAINTAIN POSITIVE DRAINAGE TO THE SEDIMENT BASIN. (2 WEEKS)
6. BEGIN BUILDING CONSTRUCTION. (10 MONTHS)
7. INSTALL STORM DRAINS, CURB & GUTTER WITH INLET PROTECTION. (4 WEEKS)
8. CONSTRUCT WATER, SEWER AND OTHER UTILITIES. (4 WEEKS)
9. PAVE PARKING LOT AND LOADING AREAS. (2 WEEKS)
10. WIDEN WHISKEY BOTTOM ROAD. (3 WEEKS)
11. COMPLETE BUILDING CONSTRUCTION. (1 MONTH)
12. FINE GRADE; INSTALL SIDEWALKS, LIGHTING, AND LANDSCAPING INCLUDING ROUGH GRADING BIORETENTION FACILITIES BMP5 #1 AND #2 AND OUTFALL PIPES. DO NOT INSTALL PERFORATED UNDERDRAIN AND PLANTING SOIL AT THIS TIME. (4 WEEKS)
13. STABILIZE ALL DISTURBED AREAS WITH SEED & MULCH IN ACCORDANCE WITH THE PERMANENT SEEDING SPECIFICATIONS. (1 WEEK)
14. THOROUGHLY CLEAN (FLUSH) THE STORM DRAIN SYSTEM - NO SEDIMENT SHALL REMAIN IN THE PIPES DRAINING TO THE FUTURE SWM FACILITIES BASIN. (1 DAY)
15. WITH APPROVAL FROM THE SEDIMENT CONTROL INSPECTOR, CONVERT THE SEDIMENT BASIN INTO THE PERMANENT SWM FACILITY. THIS WORK INCLUDES, REMOVING SEDIMENT, RE-GRADING TO DESIGN ELEVATIONS, REPLACING DEWATERING DEVICE WITH PERMANENT LOW FLOW OUTFALL, INSTALLING FOREBAY AND GABION WEIR, AND POND DRAIN. STABILIZE POND WITH PERMANENT SEEDING AND INSTALL POND LANDSCAPING. (2 WEEKS)
16. SIMULTANEOUSLY WITH STEP #15, COMPLETE BIORETENTION FACILITIES INSTALLING AND CONNECTING UNDERDRAINS TO THE OUTFALLS. IMMEDIATELY STABILIZE DISTURBED AREAS AROUND THE BMP5. (2 WEEKS)
17. FOLLOWING SUCCESSFUL STABILIZATION (I.E., FULLY-ESTABLISHED VEGETATION OR PAVING) OF ALL DISTURBED AREAS, OBTAIN PERMISSION FROM THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR TO REMOVE ALL REMAINING SEDIMENT & EROSION CONTROL DEVICES AND THEN STABILIZE THOSE AREAS DISTURBED BY THIS PROCESS WITH PERMANENT SEEDING. (1 WEEK)

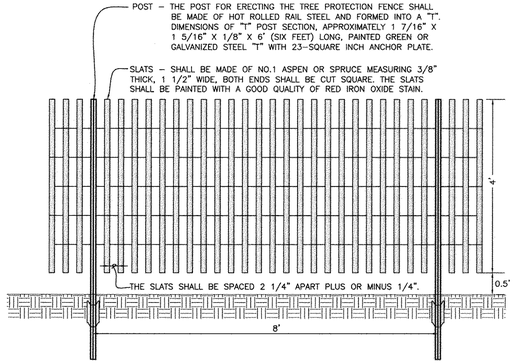
SEQUENCE NOTE: THE CONTRACTOR SHALL INSPECT AND PROVIDE NECESSARY MAINTENANCE ON ALL SEDIMENT AND EROSION CONTROL STRUCTURES SHOWN HEREON AFTER EACH RAINFALL EVENT AND ON A DAILY BASIS. REMOVE SEDIMENT FROM THE SEDIMENT BASIN WHEN THE CLEANOUT ELEVATION IS REACHED. ALL SEDIMENT MUST BE PLACED UPSTREAM OF THE BASIN.

STANDARD STABILIZATION NOTE

FOLLOWING INITIAL SOIL DISTURBANCE OR RE-DISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION MUST BE COMPLETED WITHIN:

A.) THREE (3) CALENDAR DAYS AS TO THE SURFACE OF ALL PERIMETER DIKES, SWALES, DITCHES, PERIMETER SLOPES, AND ALL SLOPES STEEPER THAN 3 HORIZONTAL TO 1 VERTICAL (3:1); AND

B.) SEVEN (7) CALENDAR DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE NOT UNDER ACTIVE GRADING.



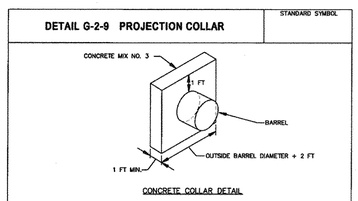
TREE PROTECTION FENCING SHALL CONSIST OF WOOD SLATS WOVEN TOGETHER WITH FIVE 2-WIRE STRANDS OF 13 STEEL WIRE GAUGE GALVANIZED WIRE. NOT LESS THAN (2) THREE HUNDRED AND SIXTY (360) DEGREE TWISTS OF THE WIRE IN THE WEAVE BETWEEN THE SLATS.

TREE PROTECTION FENCE DETAIL

NOT TO SCALE

DETAIL G-2-9 PROJECTION COLLAR

STANDARD SYMBOL



CONSTRUCTION SPECIFICATIONS

1. CAST 1 FOOT THICK CONCRETE COLLAR TO OUTLET STRUCTURE WITH FOUR #4 U-SHAPED REBARS.

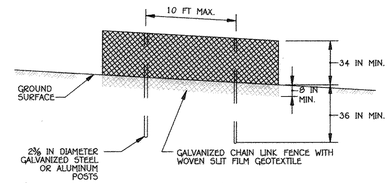
MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL		
U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	2011	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

G.S1

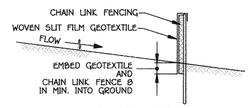
0" 1" 2" 3"
SCALE: 1" = 1"

DETAIL E-3 SUPER SILT FENCE

STANDARD SYMBOL 55F



ELEVATION



CROSS SECTION

CONSTRUCTION SPECIFICATIONS

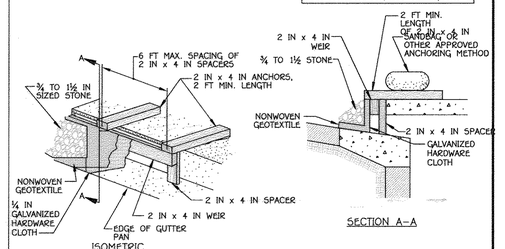
1. INSTALL 2⅜ INCH DIAMETER GALVANIZED STEEL POSTS OF 0.095 INCH WALL THICKNESS AND SIX FOOT LENGTH SPACED NO FURTHER THAN 10 FEET APART. DRIVE THE POSTS A MINIMUM OF 36 INCHES INTO THE GROUND.
2. FASTEN 9 GAUGE OR HEAVIER GALVANIZED CHAIN LINK FENCE (2⅜ INCH MAXIMUM OPENING) 42 INCHES IN HEIGHT SECURELY TO THE FENCE POSTS WITH WIRE TIES OR HOG RINGS.
3. FASTEN WOVEN SLIT FILM GEOTEXTILE AS SPECIFIED IN SECTION H-1 MATERIALS, SECURELY TO THE UPSLOPE SIDE OF CHAIN LINK FENCE WITH TIES SPACED EVERY 24 INCHES AT THE TOP AND MID SECTION. EMBED GEOTEXTILE AND CHAIN LINK FENCE A MINIMUM OF 8 INCHES INTO THE GROUND.
4. WHERE ENDS OF THE GEOTEXTILE COME TOGETHER, THE ENDS SHALL BE OVERLAPPED BY 6 INCHES, FOLDED, AND STAPLED TO PREVENT SEDIMENT BY PASS.
5. EXTEND BOTH ENDS OF THE SUPER SILT FENCE A MINIMUM OF FIVE HORIZONTAL FEET UPSLOPE AT 45 DEGREES TO THE MAIN FENCE ALIGNMENT TO PREVENT RUNOFF FROM GOING AROUND THE ENDS OF THE SUPER SILT FENCE.
6. PROVIDE MANUFACTURER CERTIFICATION TO THE INSPECTION/ENFORCEMENT AUTHORITY SHOWING THAT GEOTEXTILE USED MEETS THE REQUIREMENTS IN SECTION H-1 MATERIALS.
7. REMOVE ACCUMULATED SEDIMENT AND DEBRIS WHEN BULGES DEVELOP IN FENCE OR WHEN SEDIMENT REACHES 25% OF FENCE HEIGHT. REPLACE GEOTEXTILE IF TORN. IF UNDERMINING OCCURS, REINSTALL CHAIN LINK FENCING AND GEOTEXTILE.

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL		
U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	2011	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL E-9-3 CURB INLET PROTECTION

STANDARD SYMBOL CIP

MAXIMUM DRAINAGE AREA = ¼ ACRE



CONSTRUCTION SPECIFICATIONS

1. USE NOMINAL 2 INCH x 4 INCH LUMBER
2. USE NONWOVEN GEOTEXTILE AS SPECIFIED IN SECTION H-1 MATERIALS.
3. NAIL THE 2x4 WEIR TO 9 INCH LONG VERTICAL SPACERS (MAXIMUM 6 FEET APART).
4. ATTACH A CONTINUOUS PIECE OF ¼ INCH GALVANIZED HARDWARE CLOTH, WITH A MINIMUM WIDTH OF 30 INCHES AND A MINIMUM LENGTH OF 4 FEET LONGER THAN THE THROAT OPENING, TO THE 2x4 WEIR, EXTENDING IT 2 FEET BEYOND THROAT ON EACH SIDE.
5. PLACE A CONTINUOUS PIECE OF NONWOVEN GEOTEXTILE OF THE SAME DIMENSIONS AS THE HARDWARE CLOTH OVER THE HARDWARE CLOTH AND SECURELY ATTACH TO THE 2x4 WEIR.
6. PLACE THE ASSEMBLY AGAINST THE INLET THROAT AND NAIL TO 2x4 ANCHORS (MINIMUM 2 FEET LENGTH). EXTEND THE ANCHORS ACROSS THE INLET TOP AND HOLD IN PLACE BY SANDBAGS OR OTHER APPROVED ANCHORING METHOD.
7. INSTALL END SPACERS A MINIMUM OF 1 FOOT BEYOND THE ENDS OF THE THROAT OPENING.
8. FORM THE HARDWARE CLOTH AND THE GEOTEXTILE TO THE CONCRETE GUTTER AND FACE OF CURB TO SPAN THE INLET OPENING. COVER THE HARDWARE CLOTH AND GEOTEXTILE WITH CLEAN ¾ TO 1½ INCH STONE OR EQUIVALENT RECYCLED CONCRETE.
9. AT NON-SUMP LOCATIONS, INSTALL A TEMPORARY SANDBAG OR ASPHALT BERM TO PREVENT INLET BYPASS.
10. STORM DRAIN INLET PROTECTION REQUIRES FREQUENT MAINTENANCE. REMOVE ACCUMULATED SEDIMENT AFTER EACH RAIN EVENT TO MAINTAIN FUNCTION AND AVOID PREMATURE CLOGGING. IF INLET PROTECTION DOES NOT COMPLETELY DRAIN WITHIN 24 HOURS AFTER A STORM EVENT, IT IS CLOGGED. WHEN THIS OCCURS, REMOVE ACCUMULATED SEDIMENT AND CLEAN, OR REPLACE GEOTEXTILE AND STONE.

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL		
U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	2011	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
ELLICOTT CITY, MARYLAND 21042
(410) 461 - 2855

OWNER
9001 WBR, LLC
1029 HARRISON DRIVE
LAUREL, MARYLAND
20707-3827
PH# 410-423-0460

DEVELOPER
WHISKEY SPEAK, LLC
2330 WEST JOPPA ROAD
SUITE 190
LUTHERVILLE, MARYLAND
21093-4614
PH# 410-296-3800

ENGINEER'S CERTIFICATE

"I CERTIFY THAT THIS PLAN FOR SEDIMENT AND EROSION CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT."

SIGNATURE OF ENGINEER — DATE 6/16/15

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 DISTRICT."

SIGNATURE OF DEVELOPER — DATE 6/17/15

"PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 13204, EXPIRATION DATE: NOVEMBER 3, 2016."

CHARLES J. CROVO, SR., P.E. — DATE 6/16/15

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

HOWARD SCD — DATE 6/16/15

DATE	DESCRIPTION
	REVISION BLOCK

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Director - Department of Planning and Zoning — Date 8-7-15
Chief, Division of Land Development — Date 8-06-15
Chief, Development Engineering Division — Date 6/4/15

STATE OF MARYLAND — CHARLES J. CROVO, SR. — No. 13204 — PROFESSIONAL ENGINEER

ADDRESS CHART	
BUILDING NO.	STREET ADDRESS
OFFICE/WAREHOUSE	9001 WHISKEY BOTTOM ROAD
GUARD HOUSE	9003 WHISKEY BOTTOM ROAD
FUTURE GARAGE	9005 WHISKEY BOTTOM ROAD
	LAUREL, MARYLAND 20723

PERMIT INFORMATION CHART

SUBDIVISION NAME	SECTION/AREA	LOT/PARCEL NO.
COASTAL SUNBELT PRODUCE	N/A	P. 375

PLAT# OR L/F	GRID#	ZONING	TAX MAP#	ELECT. DISTR.	CENSUS TRACT
22437-22439	4,5 10,11	TOD	50	SIXTH	6069.07

SEDIMENT AND EROSION CONTROL NOTES AND DETAILS

COASTAL SUNBELT PRODUCE
WAREHOUSE DISTRIBUTION CENTER
PARCEL 'A'

ZONED TOD — TAX MAP No.: 50
GRID No.: 4,5,10,11 — PARCEL No.: 375
SIXTH ELECTION DISTRICT — HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN — DATE: APRIL 20, 2015

SHEET 23 OF 50

SDP-14-080

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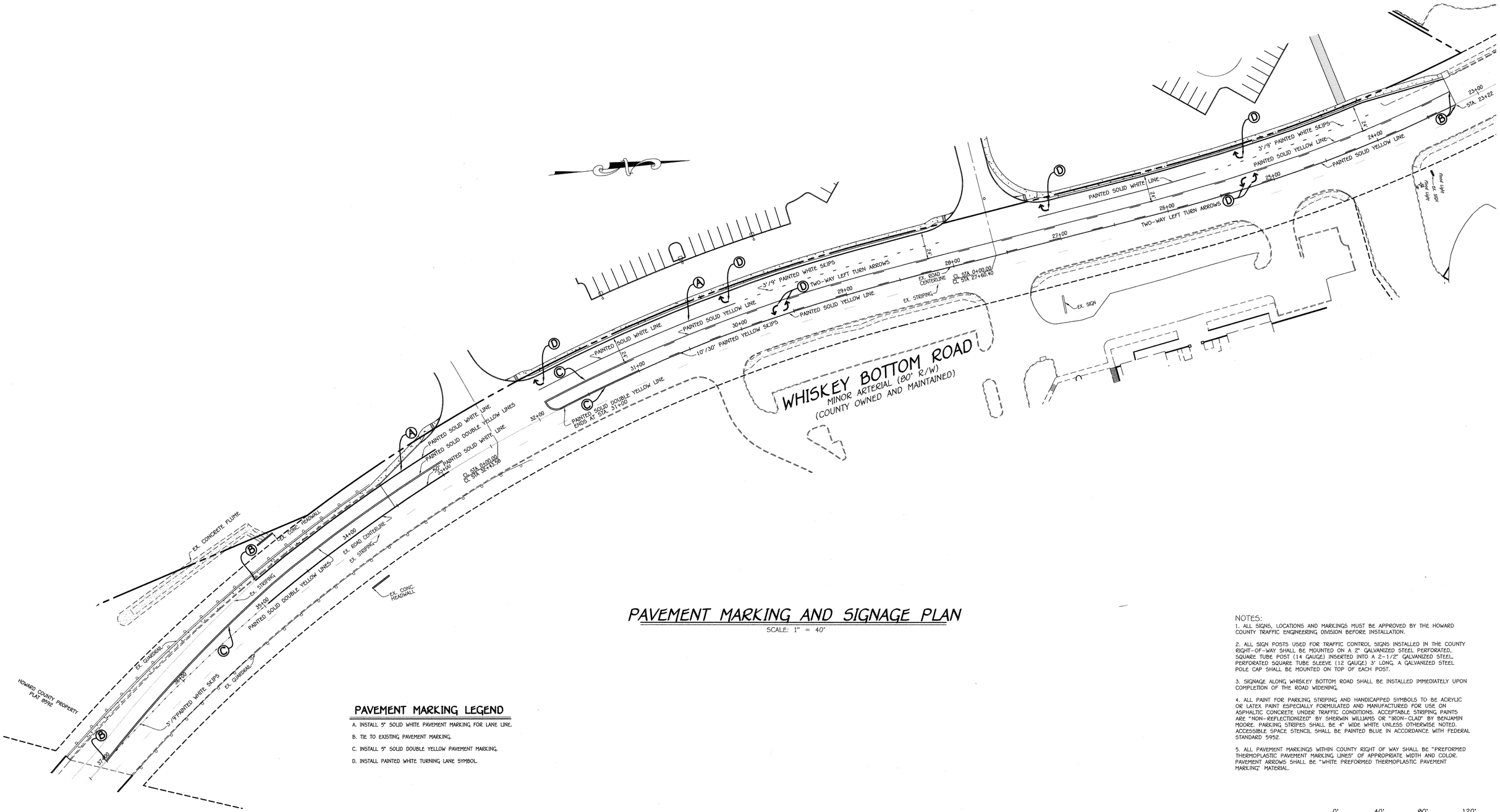

PAVEMENT MARKING LEGEND

A. INSTALL 5" SOLID WHITE PAVEMENT MARKING FOR LANE LINE.

B. TIE TO EXISTING PAVEMENT MARKING.

C. INSTALL 5" SOLID DOUBLE YELLOW PAVEMENT MARKING.

D. INSTALL PAINTED WHITE TURNING LANE SYMBOL.

PAVEMENT MARKING AND SIGNAGE PLAN

SCALE: 1" = 40'

NOTES:

1. ALL SIGNS, LOCATIONS AND MARKINGS MUST BE APPROVED BY THE HOWARD COUNTY TRAFFIC ENGINEERING DIVISION BEFORE INSTALLATION.

2. ALL SIGN POSTS USED FOR TRAFFIC CONTROL SIGNS INSTALLED IN THE COUNTY RIGHT-OF-WAY SHALL BE MOUNTED ON A 2" GALVANIZED STEEL PERFORATED, SQUARE TUBE POST (14 GAUGE) INSERTED INTO A 2-1/2" GALVANIZED STEEL, PERFORATED SQUARE TUBE SLEEVE (12 GAUGE) 3' LONG. A GALVANIZED STEEL POLE CAP SHALL BE MOUNTED ON TOP OF EACH POST.

3. SIGNAGE ALONG WHISKEY BOTTOM ROAD SHALL BE INSTALLED IMMEDIATELY UPON COMPLETION OF THE ROAD WIDENING.

4. ALL PAINT FOR PARKING STRIPING AND HANDICAPPED SYMBOLS TO BE ACRYLIC OR LATEX PAINT ESPECIALLY FORMULATED AND MANUFACTURED FOR USE ON ASPHALTIC CONCRETE UNDER TRAFFIC CONDITIONS. ACCEPTABLE STRIPING PAINTS ARE "NON-REFLECTIONIZED" BY SHERWIN WILLIAMS OR "IRON-CLAD" BY BENJAMIN MOORE. PARKING STRIPES SHALL BE 4" WIDE WHITE UNLESS OTHERWISE NOTED. ACCESSIBLE SPACE STENCIL SHALL BE PAINTED BLUE IN ACCORDANCE WITH FEDERAL STANDARD 5952.

5. ALL PAVEMENT MARKINGS WITHIN COUNTY RIGHT OF WAY SHALL BE "PREFORMED THERMOPLASTIC PAVEMENT MARKING LINES" OF APPROPRIATE WIDTH AND COLOR. PAVEMENT ARROWS SHALL BE "WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING" MATERIAL.

0' 40' 80' 120'

SCALE: 1" = 40'

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CHARLES J. CROVO, SR., P.E. — 7/15/15 DATE

DATE	DESCRIPTION
	REVISION BLOCK

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Director - Department of Planning and Zoning — 8-7-15 Date

Chief, Division of Land Development — 8-06-15 Date

Chief, Development Engineering Division — 8/6/15 Date

STATE OF MARYLAND — CHARLES J. CROVO — No. 13204 — PROFESSIONAL ENGINEER

ADDRESS CHART	
BUILDING NO.	STREET ADDRESS
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PERMIT INFORMATION CHART

SUBDIVISION NAME			SECTION/AREA		LOT/PARCEL NO.
COASTAL SUNBELT PRODUCE			N/A		P. 375
PLAT# OR L/F	GRID#	ZONING	TAX MAP#	ELECT. DISTR.	CENSUS TRACT
23497-23499	4,5 10,11	TOD	50	SIXTH	6069.07

PAVEMENT MARKING AND SIGNAGE PLAN

COASTAL SUNBELT PRODUCE
WAREHOUSE DISTRIBUTION CENTER
PARCEL 'A'

ZONED TOD — TAX MAP No.: 50
GRID No.: 4,5,10,11 — PARCEL No.: 375
SIXTH ELECTION DISTRICT — HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN — DATE: JULY 6, 2015

SHEET 24 OF 58

SDP-14-080

I:\2013\13033\Engineering\Dwgs\13033-3001 SDP 24 PAVEMENT MARKING.dwg SHEET 24, 7/2/2015 9:57:01 AM, 1:1

Public Forest Conservation Easement Line Table (Retention)

LINE	BEARING	LENGTH
FC1	N 38°44'56" E	35.00'
FC2	S 68°32'22" E	12.27'
FC3	S 59°33'04" E	44.74'
FC4	S 76°28'22" E	60.42'
FC5	S 55°40'11" E	40.85'
FC6	S 42°34'24" E	58.12'
FC7	N 62°21'01" E	34.76'
FC8	S 68°10'09" E	103.83'
FC9	S 50°13'22" E	89.23'
FC10	S 45°36'21" E	89.21'
FC11	S 81°08'17" E	24.63'
FC12	N 56°00'09" E	40.34'
FC13	S 61°35'44" E	39.56'
FC14	N 68°23'40" E	22.58'
FC15	N 14°54'09" E	22.24'
FC16	N 15°06'06" W	15.66'
FC17	N 21°50'39" E	55.52'
FC18	N 03°51'27" E	33.00'
FC19	N 31°03'27" E	11.73'
FC20	N 52°07'01" E	19.19'
FC21	N 11°11'36" E	16.19'
FC22	N 29°38'19" W	14.02'
FC23	N 54°19'27" E	18.39'
FC24	N 15°08'36" W	65.36'
FC25	N 32°41'25" E	52.66'
FC26	N 21°07'47" E	99.67'
FC27	N 16°40'19" E	80.53'
FC28	N 10°04'23" E	65.21'
FC29	N 07°46'22" E	93.98'
FC30	N 13°36'18" E	73.49'
FC31	N 00°19'38" E	81.54'
FC32	N 36°57'49" E	42.87'
FC33	N 86°11'00" E	19.31'
FC34	S 55°43'07" E	28.52'
FC35	S 36°56'09" E	22.47'
FC36	S 23°18'13" E	28.90'
FC37	S 07°59'57" E	51.45'
FC38	S 11°16'34" E	45.81'
FC39	S 16°29'58" E	122.87'
FC40	S 14°49'40" E	40.60'
FC41	S 27°15'31" E	84.70'
FC42	S 44°37'56" E	73.63'
FC43	S 29°51'30" E	59.37'
FC44	N 24°42'48" E	21.08'
FC45	N 26°57'48" E	101.50'
FC46	N 31°12'48" E	99.00'
FC47	N 32°42'48" E	95.00'
FC48	N 36°27'48" E	203.80'
FC49	N 39°42'48" E	93.00'
FC50	N 43°33'48" E	52.04'
FC51	N 47°03'36" E	25.00'
FC53	S 51°15'04" E	734.65'

Public Forest Conservation Easement Curve Data Chart (Retention)

CURVE	RADIUS	ARC LENGTH
FC52	2192.01'	38.00'

N35°05'41"E 280.45'
25' WETLAND BUFFER
EX. WETLANDS
TEMPORARY PROTECTIVE FENCING
L.O.D.
FOREST CONSERVATION PERMANENT PROTECTIVE SIGNAGE (50' SPACING)
PARCEL #364
MI DEVELOPMENTS, INC.
c/o TSG DEVELOPMENTS MARYLAND
DEED: LIBER# 10518 / FOLIO 157
ZONED = TOD
EX. PUBLIC FOREST CONSERVATION EASEMENT AREA=6.664 AC. PLAT #23439
EX. 20' PUBLIC WATER & UTILITY EASEMENT PLAT NO. 23439
EX. PUBLIC GENERAL & UTILITY DRAINAGE & UTILITY EASEMENT
GUARD HOUSE
PRIVATE 1-1/2" W.L.
PRE-TREATMENT PLANT
EX. SPECIMEN TREE #8 (TULIP POPLAR) 30" DBH
DENOTED PERF. VERTICAL STAND PIPE (14 TYP.)
DENOTED CLEANOUT LOCATION (9 TYP.)
6" PERF. DRAIN PIPE
EX. STREAM
EX. WETLANDS
50' STREAM BUFFER
25' WETLAND BUFFER
Public Forest Conservation Easement (L.T. No.= (Retention)
EX. PUBLIC FOREST CONSERVATION EASEMENT AREA=5.664 AC. PLAT # 23439
EX. PUBLIC FOREST CONSERVATION EASEMENT AREA=6.664 AC. PLAT # 23439
R=2192.01' L=38.00'
N39°42'48"E 95.00'
N35°27'48"E 203.80'
N51°42'48"E 95.00'
N51°42'48"E 44.28'
EX. HEADWALL
EX. BRIDGE ABUTMENT
EX. BRIDGE OVERPASS
EX. RAILROAD
CSX RAIL ROAD
WHISKEY BOTTOM ROAD
(COUNTY OWNED AND MAINTAINED)
EX. RIPRAP CHANNEL
EX. CONC. HEADWALL
EX. CONC. FLUME
EX. 6" WATER
EX. 8" SANITARY SEWER
EX. 8" STORM DRAIN
EX. 12" STORM DRAIN
EX. 15" STORM DRAIN
EX. 18" STORM DRAIN
EX. 24" STORM DRAIN
EX. 30" STORM DRAIN
EX. 36" STORM DRAIN
EX. 42" STORM DRAIN
EX. 48" STORM DRAIN
EX. 54" STORM DRAIN
EX. 60" STORM DRAIN
EX. 66" STORM DRAIN
EX. 72" STORM DRAIN
EX.

FCP NOTES

1. ANY FOREST CONSERVATION EASEMENT (FCE) AREA SHOWN HEREON IS SUBJECT TO PROTECTIVE COVENANTS WHICH MAY BE FOUND IN THE LAND RECORDS OF HOWARD COUNTY WHICH RESTRICT THE DISTURBANCE AND USE OF THESE AREAS.

2. FORESTED AREAS OCCURRING OUTSIDE OF THE FCE SHALL NOT BE CONSIDERED PART OF THE FCE AND SHALL NOT BE SUBJECT TO PROTECTIVE LAND COVENANTS.

3. LIMITS OF DISTURBANCE SHALL BE RESTRICTED TO AREAS OUTSIDE THE LIMIT OF TEMPORARY FENCING OR THE FCE BOUNDARY, WHICHEVER IS GREATER.

4. THERE SHALL BE NO CLEARING, GRADING, CONSTRUCTION OR DISTURBANCE OF VEGETATION IN THE FOREST CONSERVATION EASEMENT, EXCEPT AS PERMITTED BY HOWARD COUNTY DPZ.

5. NO STOCKPILES, PARKING AREAS, EQUIPMENT CLEANING AREAS, ETC. SHALL OCCUR WITHIN AREAS DESIGNATED AS FOREST CONSERVATION EASEMENTS.

6. TEMPORARY FENCING SHALL BE USED TO PROTECT FOREST RESOURCES DURING CONSTRUCTION. FENCING SHALL BE INSTALLED ALONG LIMITS OF LIMITS OF DISTURBANCE OCCURRING WITHIN 50 FEET OF THE PROPOSED FCE LIMITS. PERMANENT SIGNAGE WILL BE POSTED AT 50-100 FOOT INTERVALS ALONG ALL FCE LIMITS, AS SHOWN HEREON.

7. THE FOREST CONSERVATION ACT REQUIREMENTS FOR THIS PROJECT WILL BE MET THROUGH THE RETENTION OF 6.64 ACRES OF NET TRACT AREA FOREST WHICH EXCEEDS THE BREAK EVEN POINT OF 6.0 ACRES THAT HAS BEEN CALCULATED FOR THE PROJECT. FOREST RETAINED OUTSIDE OF THE EASEMENT HAS BEEN CONSIDERED CLEARED FOR THE PURPOSE OF THE FCA CALCULATIONS AND IS NOT SUBJECT TO PROTECTIVE RESTRICTIONS.

8. A WAIVER (WP-14-103) WAS GRANTED TO ALLOW FOR THE REMOVAL OF SEVEN SPECIMEN TREES ON THIS PROJECT SITE.

9. THE FOREST CONSERVATION EASEMENTS HAVE BEEN ESTABLISHED TO FULFILL THE REQUIREMENTS OF SECTION 16.1200 OF THE HOWARD COUNTY CODE AND FOREST ACT. NO CLEARING, GRADING OR CONSTRUCTION IS PERMITTED WITHIN THE FOREST CONSERVATION EASEMENT; HOWEVER FOREST MANAGEMENT PRACTICES AS DEFINED IN THE DEED OF FOREST CONSERVATION EASEMENT ARE ALLOWED. THE FOREST CONSERVATION OBLIGATION (BREAK EVEN POINT) OF 6.0 ACRES HAS BEEN FULFILLED BY THE RETENTION OF 6.664 ACRES. SURETY FOR FOREST RETENTION IS NOT REQUIRED.

SPECIMEN TREE CHART

KEY	SPECIES	SIZE (in. dbh)	CRZ (feet radius)	COMMENTS
1	WILLOW OAK	36	54	TO BE REMOVED
2	WILLOW OAK	34.5	51.75	TO BE REMOVED
3	TULIP POPLAR	42	63	TO BE REMOVED
4	WILLOW OAK	32	48	TO BE REMOVED
5	BLACK OAK	31	46.5	TO BE REMOVED
6	WILLOW OAK	33	49.5	TO BE REMOVED
7	RED OAK	42	63	TO BE REMOVED
8	TULIP POPLAR	63	94.5	TO BE REMOVED

FOREST CONSERVATION WORKSHEET

Version 1.0

Project: COASTAL SUNBELT PRODUCE
Date: FEBRUARY 16, 2015

NET TRACT AREA			Acres
A. Total Tract Area			33.2
B. Area within 100 Year Floodplain			0
C. Area of existing impervious surface/unchanged use			0
D. Net Tract Area			33.2
LAND USE CATEGORY: (from table 3.2.1, page 40, Manual **ARA MDR IDA HDR MPD CIA**			
E. Afforestation Threshold	(percentage)	0.15	5.0
F. Conservation Threshold	(percentage)	0.15	5.0
EXISTING FOREST COVER:			
G. Existing forest cover (excluding floodplain)			9.9
H. Area of forest above afforestation threshold			4.9
I. Area of forest above conservation threshold			4.9
BREAK EVEN POINT			
J. Forest retention above threshold with no mitigation			1.0
		Break-Even Point	6.0
K. Clearing permitted without mitigation			3.9
PROPOSED FOREST CLEARING			
L. Total area of forest to be Cleared or Retained Outside FCE			3.24
M. Total area of forest to be Retained in FCE			6.66
PLANTING REQUIREMENTS			
N. Reforestation for clearing above Conservation Threshold			0.81
P. Reforestation for clearing below Conservation Threshold			0
Q. Credit for retention above Conservation Threshold			1.66
R. Total reforestation required			0
S. Total afforestation required			0
T. Total reforestation and afforestation required			0

CONSTRUCTION PERIOD PROTECTION PROGRAM

A. FOREST PROTECTION TECHNIQUES

1. SOIL PROTECTION AREA (CRITICAL ROOT ZONE)

THE SOIL PROTECTION AREA, OR CRITICAL ROOT ZONE, OF A TREE IS THAT PORTION OF THE SOIL COLUMN WHERE MOST OF ITS ROOTS MAY BE FOUND. THE MAJORITY OF ROOTS RESPONSIBLE FOR WATER AND NUTRIENTS UPTAKE ARE LOCATED JUST BELOW THE SOIL SURFACE. TEMPORARY FENCING SHALL BE PLACED AROUND THE CRITICAL ROOT ZONE OF THE FOREST IN AREAS WHERE THE FOREST LIMITS OCCUR WITHIN 25 FEET OF THE LIMIT OF DISTURBANCE.

2. FENCING AND SIGNAGE

EXISTING FOREST LIMITS OCCURRING WITHIN 25 FEET OF THE LIMITS OF DISTURBANCE SHALL BE PROTECTED USING TEMPORARY PROTECTIVE FENCING. PERMANENT SIGNAGE SHALL BE PLACED AROUND THE AFFORESTATION AREA PRIOR TO PLANT INSTALLATION, AS SHOWN ON THE PLAN.

B. PRE-CONSTRUCTION MEETING

UPON STAKING OF LIMITS OF DISTURBANCE A PRE-CONSTRUCTION MEETING WILL BE HELD BETWEEN THE DEVELOPER, CONTRACTOR AND APPROPRIATE COUNTY INSPECTOR. THE PURPOSE OF THE MEETING WILL BE TO VERIFY THAT ALL SEDIMENT CONTOL IS IN ORDER, AND TO NOTIFY THE CONTRACTOR OF POSSIBLE PENALTIES FOR NON-COMPLIANCE WITH THE FCP.

C. STORAGE FACILITIES/EQUIPMENT CLEANING

ALL EQUIPMENT STORAGE, PARKING, SANITARY FACILITIES, MATERIAL STOCKPILING, ETC. ASSOCIATED WITH THE CONSTRUCTION OF THE PROJECT WILL BE RESTRICTED TO THOSE AREAS OUTSIDE OF THE PROPOSED FOREST CONSERVATION EASEMENT. CLEANING OF EQUIPMENT WILL BE LIMITED TO AREA WITHIN LOD OF THE PROPOSED HOMESITES. WASTEWATER RESULTING FROM EQUIPMENT CLEANING WILL BE CONTROLLED TO PREVENT RUNOFF INTO ENVIRONMENTALLY SENSITIVE AREAS.

D. SEQUENCE OF CONSTRUCTION

THE FOLLOWING TIMETABLE REPRESENTS THE PROPOSED TIMETABLE FOR DEVELOPMENT OF THE SUBJECT PROPERTY. THE ITEMS OUTLINED IN THE FOREST CONSERVATION PLAN WILL BE ENACTED WITHIN TWO (2) YEARS OF SUBDIVISION APPROVAL.

BELOW FIND A PROPOSED SEQUENCE OF CONSTRUCTION.

1. INSTALL ALL SIGNAGE AND SEDIMENT CONTROL DEVICES.
2. HOLD PRE-CONSTRUCTION MEETING BETWEEN DEVELOPER, CONTRACTOR AND COUNTY INSPECTOR.
3. BUILD ACCESS ROADS, INSTALL WATER AND SEWER, AND CONSTRUCT HOUSES. STABILIZE ALL DISTURBED AREAS ACCORDINGLY.
4. REMOVE SEDIMENT CONTROL.
5. HOLD POST-CONSTRUCTION MEETING WITH COUNTY INSPECTORS TO ASSURE COMPLIANCE WITH FCP. SUBMIT CERTIFICATION OF RETENTION.

E. CONSTRUCTION MONITORING

ECO-SCIENCE PROFESSIONALS, OR ANOTHER QUALIFIED PROFESSIONAL DESIGNATED BY THE DEVELOPER, WILL MONITOR CONSTRUCTION OF THE PROJECT TO ENSURE THAT ALL ACTIVITIES ARE IN COMPLIANCE WITH THE FOREST CONSERVATION PLAN.

F. POST-CONSTRUCTION MEETING

UPON COMPLETION OF CONSTRUCTION, ECO-SCIENCE PROFESSIONALS, OR ANOTHER QUALIFIED PROFESSIONAL DESIGNATED BY THE DEVELOPER, WILL NOTIFY THE COUNTY THAT CONSTRUCTION HAS BEEN COMPLETED AND ARRANGE FOR A POST-CONSTRUCTION MEETING TO REVIEW THE PROJECT SITE. THE MEETING WILL ALLOW THE COUNTY INSPECTOR TO VERIFY THAT FOREST RETENTION REQUIREMENTS HAVE BEEN MET.

POST-CONSTRUCTION MANAGEMENT PLAN

HOWARD COUNTY REQUIRES A TWO YEAR POST-CONSTRUCTION MANAGEMENT PLAN BE PREPARED AS PART OF THE FOREST CONSERVATION PLAN. THE PLAN GOES INTO EFFECT UPON ACCEPTANCE OF THE CONSTRUCTION CERTIFICATION OF COMPLETION BY THE COUNTY. ECO-SCIENCE PROFESSIONALS, OR ANOTHER QUALIFIED PROFESSIONAL DESIGNATED BY THE DEVELOPER, WILL BE RESPONSIBLE FOR IMPLEMENTATION OF THE POST-CONSTRUCTION MANAGEMENT PLAN.

THE FOLLOWING ITEMS WILL BE INCORPORATED INTO THE PLAN FOR THE SUBJECT PROPERTY:

A. FENCING AND SIGNAGE

PERMANENT SIGNAGE INDICATING THE LIMITS OF THE RETENTION/PLANTING AREA SHALL BE MAINTAINED.

B. GENERAL SITE INSPECTIONS

SITE INSPECTIONS WILL BE PERFORMED TO INSURE THAT RETENTION OF THE FOREST IS MET IN ACCORDANCE WITH THIS PLAN AND THAT THE FOREST EDGE REMAINS HEALTHY AND STABLE.

C. EDUCATION

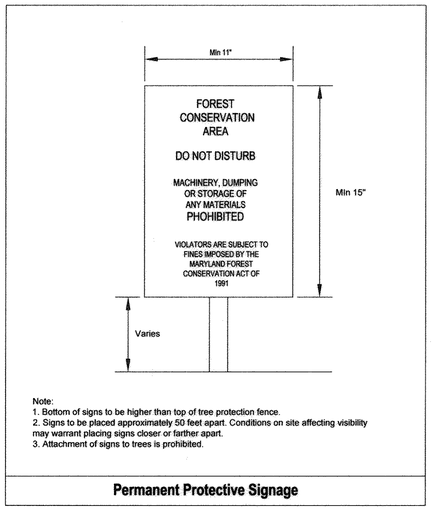
THE DEVELOPER WILL PROVIDE APPROPRIATE MATERIALS TO PROPERTY OWNERS INFORMING THEM OF THE LOCATION AND PURPOSE OF THE FOREST CONSERVATION EASEMENT. MATERIALS MAY INCLUDE SITE PLANS AND INFORMATION EXPLAINING THE INTENT OF THE FOREST CONSERVATION LAW.

D. FINAL INSPECTION

AT THE END OF THE TWO YEAR POST-CONSTRUCTION MANAGEMENT PERIOD, ECO-SCIENCE PROFESSIONALS, OR ANOTHER QUALIFIED PROFESSIONAL WILL SUBMIT TO THE ADMINISTRATOR OF THE HOWARD COUNTY FOREST CONSERVATION PROGRAM CERTIFICATION THAT ALL RETENTION/AFFORESTATION REQUIREMENTS HAVE BEEN MET. UPON ACCEPTANCE OF THIS CERTIFICATION, THE COUNTY WILL RELEASE THE DEVELOPER FROM ALL FUTURE OBLIGATIONS AND RELEASE THE DEVELOPER'S BOND.

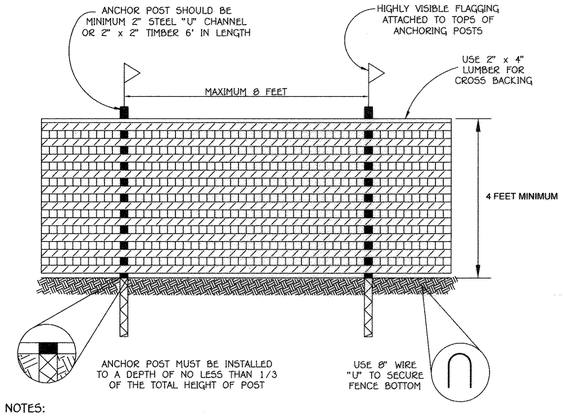
FOREST CONSERVATION EASEMENTS

EASEMENTS ARE A LEGAL MEANS OF PROVIDING PERMANENT PROTECTION OF FOREST, FARMLAND AND OPEN SPACE. IN ACCORDANCE WITH THE CRITERIA OUTLINED IN THE HOWARD COUNTY FOREST CONSERVATION MANUAL, A FOREST CONSERVATION EASEMENT WILL BE RECORDED FOR THE RETENTION AREAS OF THE SUBJECT PROPERTY. SUBMISSION OF THE EASEMENTS FOR RECORDATION WILL OCCUR PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITIES.



Note:
1. Bottom of signs to be higher than top of tree protection fence.
2. Signs to be placed approximately 50 feet apart. Conditions on site affecting visibility may warrant placing signs closer or farther apart.
3. Attachment of signs to trees is prohibited.

Permanent Protective Signage



NOTES:
1. BLAZE ORANGE OR BLUE MESH FENCE FOR FOREST PROTECTION DEVICE, ONLY.
2. BOUNDARIES OF RETENTION AREA WILL BE ESTABLISHED AS PART OF THE FOREST CONSERVATION PLAN REVIEW PROCESS.
3. BOUNDARIES OF RETENTION AREA SHOULD BE STAKED AN FLAGGED PRIOR TO INSTALLING DEVICE.
4. AVOID DAMAGE TO CRITICAL ROOT ZONE. DO NOT DAMAGE OR SEVER LARGE ROOTS WHEN INSTALLING POSTS.
5. PROTECTIVE SIGNS ARE REQUIRED, SEE DETAIL THIS SHEET.
6. DEVICE SHOULD BE MAINTAINED THROUGHOUT CONSTRUCTION.

TREE PROTECTION DETAIL

NOT TO SCALE

0" 1" 2" 3"
SCALE: 1" = 1"

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
ELLICOTT CITY, MARYLAND 21042
(410) 461 - 2855

OWNER
9001 WBR, LLC
1029 HARRISON DRIVE
LAUREL, MARYLAND
20707-3827
PH# 410-423-0460

DEVELOPER
WHISKEY SPEAK, LLC
2330 WEST JOPPA ROAD
SUITE 190
LUTHERVILLE, MARYLAND
21093-4614
PH# 410-296-3800

MD DNR Qualified Professional
USACOE Wetland Delineator
Certification # WDCP93MD0610044B
JOHN P. CANOLES

Eco-Science Professionals, Inc.
CONSULTING ECOLOGISTS

"PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 13204, EXPIRATION DATE: NOVEMBER 3, 2016."

CHARLES J. CROVO, SR., P.E. — 7/15/15 DATE

DATE	DESCRIPTION
	REVISION BLOCK

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Director - Department of Planning and Zoning — 8-7-15 Date

Chief, Division of Land Development — 8-04-15 Date

Chief, Development Engineering Division — 7/6/15 Date

STATE OF MARYLAND — CHARLES J. CROVO — No. 13204 — PROFESSIONAL ENGINEER

ADDRESS CHART	
BUILDING NO.	STREET ADDRESS
OFFICE/WAREHOUSE	9001 WHISKEY BOTTOM ROAD
GUARD HOUSE	9003 WHISKEY BOTTOM ROAD
FUTURE GARAGE	9005 WHISKEY BOTTOM ROAD
	LAUREL, MARYLAND 20723

PERMIT INFORMATION CHART

SUBDIVISION NAME	SECTION/AREA	LOT/PARCEL NO.
COASTAL SUNBELT PRODUCE	N/A	P. 375

PLAT# OR L/F	GRID#	ZONING	TAX MAP#	ELECT. DISTR.	CENSUS TRACT
23437-23439	4,5 10,11	TOD	50	SIXTH	6069.07

FOREST CONSERVATION NOTES AND DETAILS

COASTAL SUNBELT PRODUCE
WAREHOUSE DISTRIBUTION CENTER
PARCEL 'A'

ZONED TOD — TAX MAP No.: 50
GRID No.: 4,5,10,11 — PARCEL No.: 375
SIXTH ELECTION DISTRICT — HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN — DATE: JULY 6, 2015

SHEET 26 OF 50

SDP-14-080

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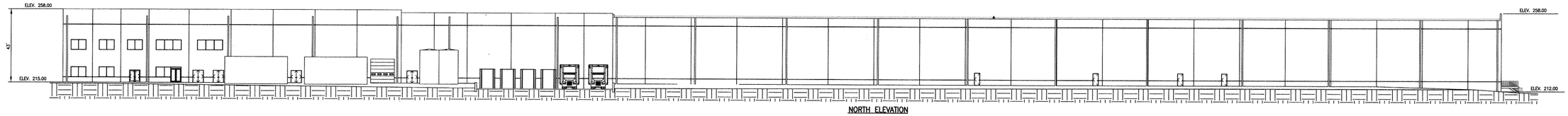
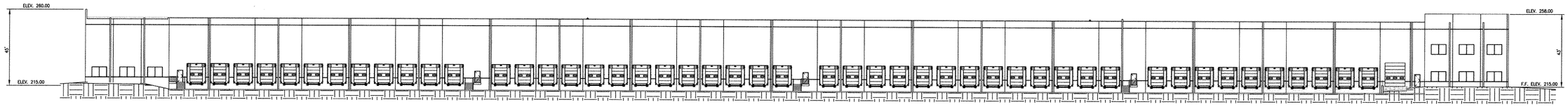
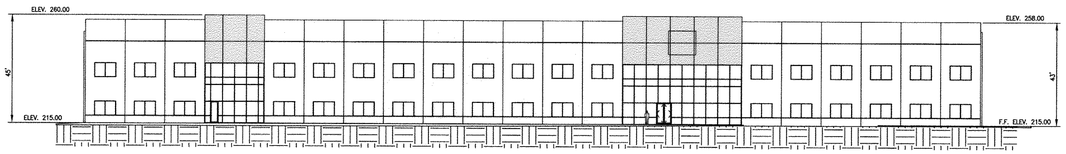


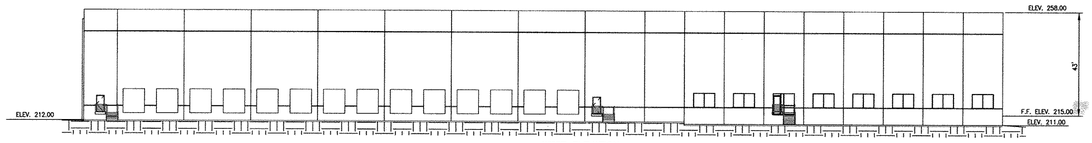
NORTH ELEVATION



SOUTH ELEVATION



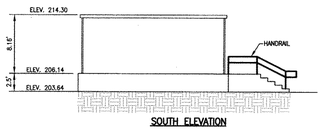
EAST ELEVATION



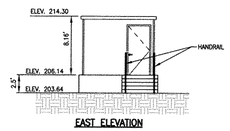
WEST ELEVATION

OFFICE/WAREHOUSE ELEVATIONS

SCALE: 1" = 30'



SOUTH ELEVATION



EAST ELEVATION

GUARD HOUSE ELEVATION

SCALE: 1" = 10'

0' 10' 20' 30'

SCALE: 1" = 10'

HILLIS - CARNES ENGINEERING ASSOCIATES, INC.

RECORD OF SOIL EXPLORATION

Project Name: Duvall Property - Final — Boring No.: SWM-1
Location: Howard County, Maryland — Job #: 13963B

SAMPLER

Datum: — Hammer Wt.: 140 lbs. — Hole Diameter: 6" — Foreman: J. Russell
Surf. Elev.: 210.54 ft — Hammer Drop: 30 in. — Rock Core Diameter: — Inspector:
Date Started: 3-06-14 — Pipe Size: 2.0 in. — Boring Method: HSA — Date Completed: 3-06-14

Elevation/ Depth	SOIL SYMBOLS/ SAMPLE CONDITIONS	Description	Boring and Sampling Notes	Rec.	NM%	SPT Blows	SPT Blows/Foot Curve N	10 30 50
210	D	Orange/Brown, moist, medium dense silty clayey SAND, little gravel (SC-SM)	0" Topsoil	15"		3-5-8	13	
	D			15"		10-10-12	22	
205	D	Tan, moist to wet, medium dense to very loose fine SAND, little silt, trace clay (SP-SM)	Groundwater encountered at 16.0' while drilling	18"		7-10-10	20	
	D		In-situ infiltration pipe set at 12.0'	15"		5-9-12	21	
200	D			13"		2-2-3	5	
195	D		Backfilled after 24 hrs	14"		4-6-7	13	
190		Bottom of Hole at 18.0'						

SAMPLER TYPE: DRIVEN SPLIT SPOON UNLESS OTHERWISE; PT - PRESSED SHELBY TUBE; CA - CONTINUOUS FLIGHT AUGER; RC - ROCK CORE

SAMPLE CONDITIONS: D - DISINTEGRATED; I - INTACT; U - UNDISTURBED; L - LOST

GROUND WATER		CAVE IN DEPTH	
AT COMPLETION	Dry ft.	10.0	ft.
AFTER 24 HRS.	Dry ft.	9.5	ft.
AFTER ___ HRS.	ft.		ft.

BORING METHOD: HSA - HOLLOW STEM AUGERS; CFA - CONTINUOUS FLIGHT AUGERS; DC - DRIVING CASING; MD - MUD DRILLING

STANDARD PENETRATION TEST-DRIVING 2" O.D. SAMPLER 1' WITH 140# HAMMER FALLING 30". COUNT MADE AT 6" INTERVALS.

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
ELLICOTT CITY, MARYLAND 21042
(410) 461 - 2855

OWNER
9001 WBR, LLC
1029 HARRISON DRIVE
LAUREL, MARYLAND
20707-3027
PH# 410-423-0460

DEVELOPER
WHISKEY SPEAK, LLC
2330 WEST JOPPA ROAD
SUITE 190
LUTHERVILLE, MARYLAND
21093-4614
PH# 410-296-3800

"PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 13204, EXPIRATION DATE: NOVEMBER 3, 2016."

CHARLES J. CROVO, SR., P.E. — 7/15/15 DATE

DATE	DESCRIPTION
	REVISION BLOCK

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Director - Department of Planning and Zoning — 8-7-15 Date

Chief, Division of Land Development — 8.7.15 Date

Chief, Development Engineering Division — 8/6/15 Date

STATE OF MARYLAND — CHARLES J. CROVO SR. — No. 13204 — PROFESSIONAL ENGINEER

ADDRESS CHART	
BUILDING NO.	STREET ADDRESS
OFFICE/WAREHOUSE	9001 WHISKEY BOTTOM ROAD
GUARD HOUSE	9003 WHISKEY BOTTOM ROAD
FUTURE GARAGE	9005 WHISKEY BOTTOM ROAD
	LAUREL, MARYLAND 20723

PERMIT INFORMATION CHART

SUBDIVISION NAME		SECTION/AREA		LOT/PARCEL NO.
COASTAL SUNBELT PRODUCE,		N/A		P. 375
PLAT# OR L/F	GRID#	ZONING	TAX MAP#	ELECT. DISTR.	CENSUS TRACT
22497-22499	4,5 10,11	TOD	50	SIXTH	6069.07

BUILDING ELEVATIONS AND BORING LOG

COASTAL SUNBELT PRODUCE
WAREHOUSE DISTRIBUTION CENTER
PARCEL 'A'

ZONED TOD — TAX MAP No.: 50
GRID No.: 4,5,10,11 — PARCEL No.: 375
SIXTH ELECTION DISTRICT — HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN — DATE: JULY 6, 2015

SHEET 27 OF 58

SDP-14-080

I:\2013\13033\Engineering\Dwgs\13033-3001 SDP 27-29 BORING LOGS.dwg, BORING LOGS SHEET 27, 7/2/2015 11:21:34 AM, 1:1

HILLIS - CARNES ENGINEERING ASSOCIATES, INC.

RECORD OF SOIL EXPLORATION

Project Name: **Duvall Property - Final** Boring No.: SWM-2
Location: Howard County, Maryland Job #: 13563B

SAMPLER
Datum: ____ Hammer Wt.: 140 lbs. Hole Diameter: 6" Foreman: J. Russell
Surf. Elev.: 210.35 ft Hammer Drop: 30 in. Rock Core Diameter: ____ Inspector: ____
Date Started: 3-06-14 Pipe Size: 2.0 in. Boring Method: HSA Date Completed: 3-06-14

Elevation/ Depth	Description	Boring and Sampling Notes	Rec.	NM%	SPT Blows	SPT Blows/Foot Curve N
210	Brown, moist, loose to very loose silty clayey SAND, trace gravel and fine rootmatter (SC-SM) Possible Fill	6" Topsoil	11"		2-3-3	6
			8"		2-2-2	4
205	Tan, moist, loose to medium dense fine SAND, trace to little silt (SP-SM)	Groundwater encountered at 16.0' while drilling	18"		2-3-4	7
		In-situ infiltration pipe set at 12.0'	16"		7-11-11	22
200	Orange/Brown, moist to wet, medium dense to dense fine silty SAND, trace gravel (SM)		16"		3-11-16	27
		Backfilled after 24 hrs	18"		18-17-17	34
195	Bottom of Hole at 18.0'					

SAMPLER TYPE: DRIVEN SPLIT SPOON UNLESS OTHERWISE; PT - PRESSED SHELBY TUBE; CA - CONTINUOUS FLIGHT AUGER; RC - ROCK CORE
SAMPLE CONDITIONS: D - DISINTEGRATED; I - INTACT; U - UNDISTURBED; L - LOST
GROUND WATER: AT COMPLETION Dry ft.; AFTER 24 HRS. Dry ft.; AFTER ___ HRS. ___ ft.
CAVE IN DEPTH: 14.0 ft.; 9.0 ft.; ___ ft.
BORING METHOD: HSA - HOLLOW STEM AUGERS; CFA - CONTINUOUS FLIGHT AUGERS; DC - DRIVING CASING; MD - MUD DRILLING

STANDARD PENETRATION TEST-DRIVING 2" O.D. SAMPLER 1' WITH 140# HAMMER FALLING 30": COUNT MADE AT 6" INTERVALS.

HILLIS - CARNES ENGINEERING ASSOCIATES, INC.

RECORD OF SOIL EXPLORATION

Project Name: **Duvall Property - Final** Boring No.: SWM-3
Location: Howard County, Maryland Job #: 13563B

SAMPLER
Datum: ____ Hammer Wt.: 140 lbs. Hole Diameter: 6" Foreman: J. Russell
Surf. Elev.: 212.97 ft Hammer Drop: 30 in. Rock Core Diameter: ____ Inspector: ____
Date Started: 3-05-14 Pipe Size: 2.0 in. Boring Method: HSA Date Completed: 3-05-14

Elevation/ Depth	Description	Boring and Sampling Notes	Rec.	NM%	SPT Blows	SPT Blows/Foot Curve N
215	Brown, moist, very loose to medium dense, fine to coarse silty clayey SAND, trace gravel (SC-SM) Possible Fill	6" Topsoil	8"		1-1-2	3
			14"		3-5-6	11
210	Tan, moist, very stiff silty CLAY, little fine sand (CL)	No groundwater encountered while drilling	18"		5-5-9	14
		In-situ infiltration pipe set at 14.0'	18"		8-9-11	20
205	Light Brown, moist to very moist, fine silty SAND, trace clay (SM)		18"		16-37-44	81
		Backfilled after 24 hrs	18"		28-17-17	34
200	Bottom of Hole at 20.0'					

SAMPLER TYPE: DRIVEN SPLIT SPOON UNLESS OTHERWISE; PT - PRESSED SHELBY TUBE; CA - CONTINUOUS FLIGHT AUGER; RC - ROCK CORE
SAMPLE CONDITIONS: D - DISINTEGRATED; I - INTACT; U - UNDISTURBED; L - LOST
GROUND WATER: AT COMPLETION Dry ft.; AFTER 24 HRS. Dry ft.; AFTER ___ HRS. ___ ft.
CAVE IN DEPTH: 12.0 ft.; 13.0 ft.; ___ ft.
BORING METHOD: HSA - HOLLOW STEM AUGERS; CFA - CONTINUOUS FLIGHT AUGERS; DC - DRIVING CASING; MD - MUD DRILLING

STANDARD PENETRATION TEST-DRIVING 2" O.D. SAMPLER 1' WITH 140# HAMMER FALLING 30": COUNT MADE AT 6" INTERVALS.

HILLIS - CARNES ENGINEERING ASSOCIATES, INC.

RECORD OF SOIL EXPLORATION

Project Name: **Duvall Property - Final** Boring No.: SWM-4
Location: Howard County, Maryland Job #: 13563B

SAMPLER
Datum: ____ Hammer Wt.: 140 lbs. Hole Diameter: 6" Foreman: B. VanDoren
Surf. Elev.: 221.83 ft Hammer Drop: 30 in. Rock Core Diameter: ____ Inspector: ____
Date Started: 3-04-14 Pipe Size: 2.0 in. Boring Method: HSA Date Completed: 3-04-14

Elevation/ Depth	Description	Boring and Sampling Notes	Rec.	NM%	SPT Blows	SPT Blows/Foot Curve N
220	Brown, moist, soft to stiff sandy CLAY (CL)	8" Topsoil	14"		1-2-3	5
			18"		3-4-7	11
215	Tan, moist, stiff silty CLAY (CL)		16"		4-6-8	14
	Tan, moist, medium dense fine SAND, little silt (SP-SM)	Groundwater encountered at 26.0' while drilling	18"		8-11-3	24
210	Light Brown, moist to very moist, medium dense clayey SAND, trace fine gravel (SC)		12"		6-11-11	22
			16"		6-8-8	16
205	Light Brown, very moist to wet, medium dense fine silty SAND, trace gravel (SM)	Backfilled after 24 hrs	12"		4-6-8	14
			16"		5-9-10	19
200	Bottom of Hole at 31.5'					

SAMPLER TYPE: DRIVEN SPLIT SPOON UNLESS OTHERWISE; PT - PRESSED SHELBY TUBE; CA - CONTINUOUS FLIGHT AUGER; RC - ROCK CORE
SAMPLE CONDITIONS: D - DISINTEGRATED; I - INTACT; U - UNDISTURBED; L - LOST
GROUND WATER: AT COMPLETION 23.0 ft.; AFTER 24 HRS. 20.0 ft.; AFTER ___ HRS. ___ ft.
CAVE IN DEPTH: 24.5 ft.; 20.5 ft.; ___ ft.
BORING METHOD: HSA - HOLLOW STEM AUGERS; CFA - CONTINUOUS FLIGHT AUGERS; DC - DRIVING CASING; MD - MUD DRILLING

STANDARD PENETRATION TEST-DRIVING 2" O.D. SAMPLER 1' WITH 140# HAMMER FALLING 30": COUNT MADE AT 6" INTERVALS.

HILLIS - CARNES ENGINEERING ASSOCIATES, INC.

RECORD OF SOIL EXPLORATION

Project Name: **Duvall Property - Final** Boring No.: SWM-5
Location: Howard County, Maryland Job #: 13563B

SAMPLER
Datum: ____ Hammer Wt.: 140 lbs. Hole Diameter: 6" Foreman: J. Russell
Surf. Elev.: 213.15 ft Hammer Drop: 30 in. Rock Core Diameter: ____ Inspector: ____
Date Started: 3-05-14 Pipe Size: 2.0 in. Boring Method: HSA Date Completed: 3-05-14

Elevation/ Depth	Description	Boring and Sampling Notes	Rec.	NM%	SPT Blows	SPT Blows/Foot Curve N
215	Brown, moist, very loose to loose, fine silty SAND, little clay (SC-SM)	6" Topsoil	16"		1-1-1	2
			12"		2-3-4	7
210	Tan/Gray, moist, very stiff sandy CLAY (CL)	No groundwater encountered while drilling	16"		15-8-9	17
	Light Brown to Brown, moist, medium dense to very dense silty SAND (SM)		18"		8-8-12	21
205			18"		16-17-16	33
	Bottom of Hole at 20.0'	Backfilled after 24 hrs	12"		48-28-29	57
200						

SAMPLER TYPE: DRIVEN SPLIT SPOON UNLESS OTHERWISE; PT - PRESSED SHELBY TUBE; CA - CONTINUOUS FLIGHT AUGER; RC - ROCK CORE
SAMPLE CONDITIONS: D - DISINTEGRATED; I - INTACT; U - UNDISTURBED; L - LOST
GROUND WATER: AT COMPLETION Dry ft.; AFTER 24 HRS. Dry ft.; AFTER ___ HRS. ___ ft.
CAVE IN DEPTH: 11.0 ft.; 11.0 ft.; ___ ft.
BORING METHOD: HSA - HOLLOW STEM AUGERS; CFA - CONTINUOUS FLIGHT AUGERS; DC - DRIVING CASING; MD - MUD DRILLING

STANDARD PENETRATION TEST-DRIVING 2" O.D. SAMPLER 1' WITH 140# HAMMER FALLING 30": COUNT MADE AT 6" INTERVALS.

HILLIS - CARNES ENGINEERING ASSOCIATES, INC.

RECORD OF SOIL EXPLORATION

Project Name: **Duvall Property - Final** Boring No.: SWM-6
Location: Howard County, Maryland Job #: 13563B

SAMPLER
Datum: ____ Hammer Wt.: 140 lbs. Hole Diameter: 6" Foreman: J. Russell
Surf. Elev.: 209.11 ft Hammer Drop: 30 in. Rock Core Diameter: ____ Inspector: ____
Date Started: 3-06-14 Pipe Size: 2.0 in. Boring Method: HSA Date Completed: 3-06-14

Elevation/ Depth	Description	Boring and Sampling Notes	Rec.	NM%	SPT Blows	SPT Blows/Foot Curve N
210	Brown, moist, medium dense to loose clayey SAND, trace organics (SC) Possible Fill	6" Topsoil	14"		1-6-10	16
			18"		3-3-6	9
205	Light Brown, moist, medium dense, fine silty SAND, little to some clay (SC-SM)	No groundwater encountered while drilling	15"		5-8-10	18
			18"		7-8-9	18
200		Backfilled after 24 hrs	15"		4-7-10	17
195	Bottom of Hole at 16.0'					

SAMPLER TYPE: DRIVEN SPLIT SPOON UNLESS OTHERWISE; PT - PRESSED SHELBY TUBE; CA - CONTINUOUS FLIGHT AUGER; RC - ROCK CORE
SAMPLE CONDITIONS: D - DISINTEGRATED; I - INTACT; U - UNDISTURBED; L - LOST
GROUND WATER: AT COMPLETION Dry ft.; AFTER 24 HRS. Dry ft.; AFTER ___ HRS. ___ ft.
CAVE IN DEPTH: 10.0 ft.; 8.0 ft.; ___ ft.
BORING METHOD: HSA - HOLLOW STEM AUGERS; CFA - CONTINUOUS FLIGHT AUGERS; DC - DRIVING CASING; MD - MUD DRILLING

STANDARD PENETRATION TEST-DRIVING 2" O.D. SAMPLER 1' WITH 140# HAMMER FALLING 30": COUNT MADE AT 6" INTERVALS.

HILLIS - CARNES ENGINEERING ASSOCIATES, INC.

RECORD OF SOIL EXPLORATION

Project Name: **Duvall Property - Final** Boring No.: SWM-7
Location: Howard County, Maryland Job #: 13563B

SAMPLER
Datum: ____ Hammer Wt.: 140 lbs. Hole Diameter: 6" Foreman: J. Russell
Surf. Elev.: 205.88 ft Hammer Drop: 30 in. Rock Core Diameter: ____ Inspector: ____
Date Started: 3-04-14 Pipe Size: 2.0 in. Boring Method: HSA Date Completed: 3-04-14

Elevation/ Depth	Description	Boring and Sampling Notes	Rec.	NM%	SPT Blows	SPT Blows/Foot Curve N
205	Light Brown, moist, medium dense fine silty SAND, trace clay (SM)	8" Topsoil	16"		3-9-10	19
			18"		5-7-9	16
200	Tan, moist, very stiff silty CLAY, trace fine sand (CL)	Groundwater encountered at 8.0' while drilling	16"		5-9-11	20
	Brown, wet, medium dense SAND, trace to little silt (SP)		14"		6-8-9	17
195	Brown, very moist, medium dense, fine to coarse clayey SAND and GRAVEL (SC-SC)	Backfilled after 24 hrs	16"		8-9-13	22
	Bottom of Hole at 14.0'					

SAMPLER TYPE: DRIVEN SPLIT SPOON UNLESS OTHERWISE; PT - PRESSED SHELBY TUBE; CA - CONTINUOUS FLIGHT AUGER; RC - ROCK CORE
SAMPLE CONDITIONS: D - DISINTEGRATED; I - INTACT; U - UNDISTURBED; L - LOST
GROUND WATER: AT COMPLETION Dry ft.; AFTER 24 HRS. Dry ft.; AFTER ___ HRS. ___ ft.
CAVE IN DEPTH: 8.0 ft.; 6.0 ft.; ___ ft.
BORING METHOD: HSA - HOLLOW STEM AUGERS; CFA - CONTINUOUS FLIGHT AUGERS; DC - DRIVING CASING; MD - MUD DRILLING

STANDARD PENETRATION TEST-DRIVING 2" O.D. SAMPLER 1' WITH 140# HAMMER FALLING 30": COUNT MADE AT 6" INTERVALS.

HILLIS - CARNES ENGINEERING ASSOCIATES, INC.

RECORD OF SOIL EXPLORATION

Project Name: **Duvall Property - Final** Boring No.: SWM-8
Location: Howard County, Maryland Job #: 13563B

SAMPLER
Datum: ____ Hammer Wt.: 140 lbs. Hole Diameter: 6" Foreman: J. Hersl
Surf. Elev.: 193.86 ft Hammer Drop: 30 in. Rock Core Diameter: ____ Inspector: ____
Date Started: 3-06-14 Pipe Size: 2.0 in. Boring Method: HSA Date Completed: 3-06-14

Elevation/ Depth	Description	Boring and Sampling Notes	Rec.	NM%	SPT Blows	SPT Blows/Foot Curve N
195	Dark Brown, moist, loose silty SAND with gravel and organics (SM)	3" Topsoil	8"		2-4-4	8
	Light Brown, very moist to wet, fine SAND, little to some silt (SP-SM)		12"		6-7-8	15
190		Groundwater encountered at 5.5' while drilling	13"		5-6-8	14
	Bottom of Hole at 10.0'	Backfilled after 24 hrs	16"		6-8-7	15
185						

SAMPLER TYPE: DRIVEN SPLIT SPOON UNLESS OTHERWISE; PT - PRESSED SHELBY TUBE; CA - CONTINUOUS FLIGHT AUGER; RC - ROCK CORE
SAMPLE CONDITIONS: D - DISINTEGRATED; I - INTACT; U - UNDISTURBED; L - LOST
GROUND WATER: AT COMPLETION 4.0 ft.; AFTER 24 HRS. 2.0 ft.; AFTER ___ HRS. ___ ft.
CAVE IN DEPTH: 4.5 ft.; 2.5 ft.; ___ ft.
BORING METHOD: HSA - HOLLOW STEM AUGERS; CFA - CONTINUOUS FLIGHT AUGERS; DC - DRIVING CASING; MD - MUD DRILLING

STANDARD PENETRATION TEST-DRIVING 2" O.D. SAMPLER 1' WITH 140# HAMMER FALLING 30": COUNT MADE AT 6" INTERVALS.

HILLIS - CARNES ENGINEERING ASSOCIATES, INC.

RECORD OF SOIL EXPLORATION

Project Name: **Duvall Property - Final** Boring No.: SWM-9
Location: Howard County, Maryland Job #: 13563B

SAMPLER
Datum: ____ Hammer Wt.: 140 lbs. Hole Diameter: 6" Foreman: J. Hersl
Surf. Elev.: 197.26 ft Hammer Drop: 30 in. Rock Core Diameter: ____ Inspector: ____
Date Started: 3-06-14 Pipe Size: 2.0 in. Boring Method: HSA Date Completed: 3-06-14

Elevation/ Depth	Description	Boring and Sampling Notes	Rec.	NM%	SPT Blows	SPT Blows/Foot Curve N
195	Brown/Gray, moist to wet, loose, fine to medium SAND, trace to little silt and gravel (SP-SM)	2" Topsoil	3"		1-5-5	10
			10"		3-4-4	8
190			8"		4-4-5	9
	Light Brown, very moist, medium dense clayey SAND, trace gravel (SC)	Groundwater encountered at 7.0' while drilling	13"		6-12-14	26
185	Brown, wet, loose to medium dense SAND, little silt, trace gravel (SP)		10"		3-3-4	7
	Bottom of Hole at 20.0'	Backfilled after 24 hrs	12"		5-8-11	19
180						
175						
170						
165						

SAMPLER TYPE: DRIVEN SPLIT SPOON UNLESS OTHERWISE; PT - PRESSED SHELBY TUBE; CA - CONTINUOUS FLIGHT AUGER; RC - ROCK CORE
SAMPLE CONDITIONS: D - DISINTEGRATED; I - INTACT; U - UNDISTURBED; L - LOST
GROUND WATER: AT COMPLETION 6.3 ft.; AFTER 24 HRS. 6.3 ft.; AFTER ___ HRS. ___ ft.
CAVE IN DEPTH: 8.0 ft.; 6.7 ft.; ___ ft.
BORING METHOD: HSA - HOLLOW STEM AUGERS; CFA - CONTINUOUS FLIGHT AUGERS; DC - DRIVING CASING; MD - MUD DRILLING

STANDARD PENETRATION TEST-DRIVING 2" O.D. SAMPLER 1' WITH 140# HAMMER FALLING 30": COUNT MADE AT 6" INTERVALS.

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
ELLICOTT CITY, MARYLAND 21042
(410) 461 - 2855

OWNER
9001 WBR, LLC
1029 HARRISON DRIVE
LAUREL, MARYLAND
20707-3027
PH# 410-423-0460

DEVELOPER
WHISKEY SPEAK LLC
2330 WEST JOPPA ROAD
SUITE 190
LUTHERVILLE, MARYLAND
21093-4614
PH# 410-296-3800

"PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 13204, EXPIRATION DATE: NOVEMBER 3, 2016."

CHARLES J. CROVO, SR., P.E. — 7/15/15 DATE

0" 1" 2" 3"
SCALE: 1" = 1"

DATE	DESCRIPTION
	REVISION BLOCK

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Director - Department of Planning and Zoning — 8-7-15 Date

Chief, Division of Land Development — 8-06-15 Date

Chief, Development Engineering Division — 8/6/15 Date

STATE OF MARYLAND — CHARLES JOSEPH CROVO — No. 13204 — PROFESSIONAL ENGINEER

ADDRESS CHART	
BUILDING NO.	STREET ADDRESS
OFFICE/WAREHOUSE	9001 WHISKEY BOTTOM ROAD
GUARD HOUSE	9003 WHISKEY BOTTOM ROAD
FUTURE GARAGE	9005 WHISKEY BOTTOM ROAD
	LAUREL, MARYLAND 20723

PERMIT INFORMATION CHART

SUBDIVISION NAME		SECTION/AREA		LOT/PARCEL NO.	
COASTAL SUNBELT PRODUCE		N/A		P. 375	
PLAT# OR L/F	GRID#	ZONING	TAX MAP#	ELECT. DISTR.	CENSUS TRACT
22437-22439	4,5 10,11	TOD	50	SIXTH	6069.07

BORING LOGS

COASTAL SUNBELT PRODUCE
WAREHOUSE DISTRIBUTION CENTER
PARCEL 'A'

ZONED TOD — TAX MAP No.: 50
GRID No.: 4,5,10,11 — PARCEL No.: 375
SIXTH ELECTION DISTRICT — HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN — DATE: JULY 6, 2015

SHEET 28 OF 58

SDP-14-080

I:\2013\13033\Engineering\Dwgs\13033-3001 SDP 27-29 BORING LOGS.dwg, BORING LOGS SHEET 28, 7/2/2015 10:12:00 AM, 1:1

HILLIS - CARNES ENGINEERING ASSOCIATES, INC.

RECORD OF SOIL EXPLORATION

Project Name: Duvall Property - Final — Boring No.: SWM-10
Location: Howard County, Maryland — Job #: 13563B

SAMPLER

Datum: — Hammer Wt.: 140 lbs. — Hole Diameter: 6" — Foreman: B. VanDoren
Surf. Elev.: 194.49 ft — Hammer Drop: 30 in. — Rock Core Diameter: — Inspector: —
Date Started: 3-06-14 — Pipe Size: 2.0 in. — Boring Method: HSA — Date Completed: 3-07-14

Elevation/ Depth	Description	Boring and Sampling Notes	Rec.	NM%	SPT Blows	N	SPT Blows/Foot Curve (10 30 50)
194	Brown, moist to wet, very loose to medium dense silty SAND, trace clay and gravel (SM)	2" Topsoil	4"		1-2-2	4	
			3"		3-2-3	5	
			3"		3-2-3	5	
		Groundwater encountered at 4.0' while drilling	14"		6-6-7	13	
189	Light Brown to Gray, very moist, medium dense to dense clayey SAND (SC)		14"		6-6-7	13	
		Backfilled after 24 hrs	16"		9-13-18	31	
184	Bottom of Hole at 20.0'						

SAMPLER TYPE: DRIVEN SPLIT SPOON UNLESS OTHERWISE; PT - PRESSED SHELBY TUBE; CA - CONTINUOUS FLIGHT AUGER; RC - ROCK CORE
SAMPLE CONDITIONS: D - DISINTEGRATED; I - INTACT; U - UNDISTURBED; L - LOST
GROUND WATER: AT COMPLETION Dry ft. 3.0 ft.; AFTER 24 HRS. Dry ft. 3.0 ft.; AFTER ___ HRS. ___ ft. ___ ft.
CAVE IN DEPTH: AT COMPLETION 3.0 ft.; AFTER 24 HRS. 3.0 ft.; AFTER ___ HRS. ___ ft.
BORING METHOD: HSA - HOLLOW STEM AUGERS; CFA - CONTINUOUS FLIGHT AUGERS; DC - DRIVING CASING; MD - MUD DRILLING

STANDARD PENETRATION TEST-DRIVING 2" O.D. SAMPLER 1" WITH 140# HAMMER FALLING 30". COUNT MADE AT 6" INTERVALS.

HILLIS - CARNES ENGINEERING ASSOCIATES, INC.

RECORD OF SOIL EXPLORATION

Project Name: Duvall Property - Final — Boring No.: SWM-11
Location: Howard County, Maryland — Job #: 13563B

SAMPLER

Datum: — Hammer Wt.: 140 lbs. — Hole Diameter: 6" — Foreman: B. VanDoren
Surf. Elev.: 188.66 ft — Hammer Drop: 30 in. — Rock Core Diameter: — Inspector: —
Date Started: 3-06-14 — Pipe Size: 2.0 in. — Boring Method: HSA — Date Completed: 3-06-14

Elevation/ Depth	Description	Boring and Sampling Notes	Rec.	NM%	SPT Blows	N	SPT Blows/Foot Curve (10 30 50)
189	Black, moist, very loose silty SAND with clay and organics (SM)	2" Topsoil	17"		1-1-2	3	
	Light Gray to Tan, moist to wet, medium dense to loose clayey SAND (SC)		9"		4-5-6	11	
		Groundwater encountered at 10.0' while drilling	12"		4-8-8	16	
179			12"		4-6-7	13	
		Backfilled after 24 hrs	4"		3-4-5	9	
174	Bottom of Hole at 15.0'						

SAMPLER TYPE: DRIVEN SPLIT SPOON UNLESS OTHERWISE; PT - PRESSED SHELBY TUBE; CA - CONTINUOUS FLIGHT AUGER; RC - ROCK CORE
SAMPLE CONDITIONS: D - DISINTEGRATED; I - INTACT; U - UNDISTURBED; L - LOST
GROUND WATER: AT COMPLETION 2.0 ft.; AFTER 24 HRS. 0.5 ft.; AFTER ___ HRS. ___ ft.
CAVE IN DEPTH: AT COMPLETION 10.0 ft.; AFTER 24 HRS. 3.0 ft.; AFTER ___ HRS. ___ ft.
BORING METHOD: HSA - HOLLOW STEM AUGERS; CFA - CONTINUOUS FLIGHT AUGERS; DC - DRIVING CASING; MD - MUD DRILLING

STANDARD PENETRATION TEST-DRIVING 2" O.D. SAMPLER 1" WITH 140# HAMMER FALLING 30". COUNT MADE AT 6" INTERVALS.

HILLIS - CARNES ENGINEERING ASSOCIATES, INC.

RECORD OF SOIL EXPLORATION

Project Name: Duvall Property - Final — Boring No.: SWM-12
Location: Howard County, Maryland — Job #: 13563B

SAMPLER

Datum: — Hammer Wt.: 140 lbs. — Hole Diameter: 6" — Foreman: B. VanDoren
Surf. Elev.: 186.80 ft — Hammer Drop: 30 in. — Rock Core Diameter: — Inspector: —
Date Started: 3-06-14 — Pipe Size: 2.0 in. — Boring Method: HSA — Date Completed: 3-06-14

Elevation/ Depth	Description	Boring and Sampling Notes	Rec.	NM%	SPT Blows	N	SPT Blows/Foot Curve (10 30 50)
185	Brown/Gray, very moist to wet, very loose to medium dense silty SAND, trace clay (SM)	4" Topsoil	4"		WOH/12"-1	1	
			12"		2-6-7	13	
		Groundwater encountered at 8.0' while drilling	10"		4-7-9	16	
180	Tan, moist, medim stiff silty CLAY, trace fine sand (CL)		8"		2-2-5	7	
	Tan, wet, loose clayey SAND (SC)	Backfilled after 24 hrs	16"		1-1-1	2	
175	Bottom of Hole at 15.0'						

SAMPLER TYPE: DRIVEN SPLIT SPOON UNLESS OTHERWISE; PT - PRESSED SHELBY TUBE; CA - CONTINUOUS FLIGHT AUGER; RC - ROCK CORE
SAMPLE CONDITIONS: D - DISINTEGRATED; I - INTACT; U - UNDISTURBED; L - LOST
GROUND WATER: AT COMPLETION 3.5 ft.; AFTER 24 HRS. 1.0 ft.; AFTER ___ HRS. ___ ft.
CAVE IN DEPTH: AT COMPLETION 7.5 ft.; AFTER 24 HRS. 5.0 ft.; AFTER ___ HRS. ___ ft.
BORING METHOD: HSA - HOLLOW STEM AUGERS; CFA - CONTINUOUS FLIGHT AUGERS; DC - DRIVING CASING; MD - MUD DRILLING

STANDARD PENETRATION TEST-DRIVING 2" O.D. SAMPLER 1" WITH 140# HAMMER FALLING 30". COUNT MADE AT 6" INTERVALS.

HILLIS - CARNES ENGINEERING ASSOCIATES, INC.

RECORD OF SOIL EXPLORATION

Project Name: Duvall Property - Final — Boring No.: SWM-13
Location: Howard County, Maryland — Job #: 13563B

SAMPLER

Datum: — Hammer Wt.: 140 lbs. — Hole Diameter: 6" — Foreman: B. VanDoren
Surf. Elev.: 184.55 ft — Hammer Drop: 30 in. — Rock Core Diameter: — Inspector: —
Date Started: 3-06-14 — Pipe Size: 2.0 in. — Boring Method: HSA — Date Completed: 3-06-14

Elevation/ Depth	Description	Boring and Sampling Notes	Rec.	NM%	SPT Blows	N	SPT Blows/Foot Curve (10 30 50)
184	Brown, wet, very loose to medium dense silty SAND, trace to little gravel (SM)	4" Topsoil	12"		WOH/6"-1-1	2	
			10"		3-5-7	12	
179	Brown/Gray, moist, medium dense fine silty clayey SAND, (SC-SM)	Groundwater encountered at 2.5' while drilling	15"		10-7-7	14	
	Orange/Brown/Gray, wet, loose fine silty SAND (SM)		13"		2-4-4	8	
174		Backfilled after 24 hrs	12"		2-3-3	6	
	Bottom of Hole at 13.0'						

SAMPLER TYPE: DRIVEN SPLIT SPOON UNLESS OTHERWISE; PT - PRESSED SHELBY TUBE; CA - CONTINUOUS FLIGHT AUGER; RC - ROCK CORE
SAMPLE CONDITIONS: D - DISINTEGRATED; I - INTACT; U - UNDISTURBED; L - LOST
GROUND WATER: AT COMPLETION 7.0 ft.; AFTER 24 HRS. 1.0 ft.; AFTER ___ HRS. ___ ft.
CAVE IN DEPTH: AT COMPLETION 8.0 ft.; AFTER 24 HRS. 3.0 ft.; AFTER ___ HRS. ___ ft.
BORING METHOD: HSA - HOLLOW STEM AUGERS; CFA - CONTINUOUS FLIGHT AUGERS; DC - DRIVING CASING; MD - MUD DRILLING

STANDARD PENETRATION TEST-DRIVING 2" O.D. SAMPLER 1" WITH 140# HAMMER FALLING 30". COUNT MADE AT 6" INTERVALS.

HILLIS - CARNES ENGINEERING ASSOCIATES, INC.

RECORD OF SOIL EXPLORATION

Project Name: Duvall Property - Final — Boring No.: SWM-14
Location: Howard County, Maryland — Job #: 13563B

SAMPLER

Datum: — Hammer Wt.: 140 lbs. — Hole Diameter: 6" — Foreman: B. VanDoren
Surf. Elev.: 186.41 ft — Hammer Drop: 30 in. — Rock Core Diameter: — Inspector: —
Date Started: 3-07-14 — Pipe Size: 2.0 in. — Boring Method: HSA — Date Completed: 3-07-14

Elevation/ Depth	Description	Boring and Sampling Notes	Rec.	NM%	SPT Blows	N	SPT Blows/Foot Curve (10 30 50)
185	Brown/Gray, very moist to wet, very loose to medium dense silty SAND, trace clay (SM)	3" Topsoil	4"		2-1-1	2	
			9"		10-14-12	26	
180		Groundwater encountered at 4.0' while drilling	7"		4-8-9	17	
	Light Brown, very moist, medium dense, fine to coarse clayey SAND (SC)		12"		10-11-14	25	
175		Backfilled after 24 hrs	12"		11-13-14	27	
	Bottom of Hole at 15.0'						

SAMPLER TYPE: DRIVEN SPLIT SPOON UNLESS OTHERWISE; PT - PRESSED SHELBY TUBE; CA - CONTINUOUS FLIGHT AUGER; RC - ROCK CORE
SAMPLE CONDITIONS: D - DISINTEGRATED; I - INTACT; U - UNDISTURBED; L - LOST
GROUND WATER: AT COMPLETION Dry ft. 3.0 ft.; AFTER 24 HRS. 0.5 ft. 1.0 ft.; AFTER ___ HRS. ___ ft. ___ ft.
CAVE IN DEPTH: AT COMPLETION 1.0 ft.; AFTER 24 HRS. 1.0 ft.; AFTER ___ HRS. ___ ft.
BORING METHOD: HSA - HOLLOW STEM AUGERS; CFA - CONTINUOUS FLIGHT AUGERS; DC - DRIVING CASING; MD - MUD DRILLING

STANDARD PENETRATION TEST-DRIVING 2" O.D. SAMPLER 1" WITH 140# HAMMER FALLING 30". COUNT MADE AT 6" INTERVALS.

HILLIS - CARNES ENGINEERING ASSOCIATES, INC.

RECORD OF SOIL EXPLORATION

Project Name: Duvall Property - Final — Boring No.: SWM-15
Location: Howard County, Maryland — Job #: 13563B

SAMPLER

Datum: — Hammer Wt.: 140 lbs. — Hole Diameter: 6" — Foreman: B. VanDoren
Surf. Elev.: 189.62 ft — Hammer Drop: 30 in. — Rock Core Diameter: — Inspector: —
Date Started: 3-07-14 — Pipe Size: 2.0 in. — Boring Method: HSA — Date Completed: 3-07-14

Elevation/ Depth	Description	Boring and Sampling Notes	Rec.	NM%	SPT Blows	N	SPT Blows/Foot Curve (10 30 50)
189	Brown/Gray, moist, very loose to medium dense fine clayey SAND (SC)	3" Topsoil	7"		WOH/12"-1	1	
			7"		3-5-6	11	
184		Groundwater encountered at 4.0' while drilling	9"		7-11-12	23	
	Brown to Orange/Brown, wet, medium dense to dense, fine to coarse silty clayey SAND, trace gravel (SC-SM)		11"		7-9-9	18	
179		Backfilled after 24 hrs	8"		11-15-18	33	
	Bottom of Hole at 15.0'						

SAMPLER TYPE: DRIVEN SPLIT SPOON UNLESS OTHERWISE; PT - PRESSED SHELBY TUBE; CA - CONTINUOUS FLIGHT AUGER; RC - ROCK CORE
SAMPLE CONDITIONS: D - DISINTEGRATED; I - INTACT; U - UNDISTURBED; L - LOST
GROUND WATER: AT COMPLETION 1.0 ft.; AFTER 24 HRS. 1.0 ft.; AFTER ___ HRS. ___ ft.
CAVE IN DEPTH: AT COMPLETION 3.0 ft.; AFTER 24 HRS. 2.0 ft.; AFTER ___ HRS. ___ ft.
BORING METHOD: HSA - HOLLOW STEM AUGERS; CFA - CONTINUOUS FLIGHT AUGERS; DC - DRIVING CASING; MD - MUD DRILLING

STANDARD PENETRATION TEST-DRIVING 2" O.D. SAMPLER 1" WITH 140# HAMMER FALLING 30". COUNT MADE AT 6" INTERVALS.

HILLIS - CARNES ENGINEERING ASSOCIATES, INC.

RECORD OF SOIL EXPLORATION

Project Name: Duvall Property - Final — Boring No.: SWM-16
Location: Howard County, Maryland — Job #: 13563B

SAMPLER

Datum: — Hammer Wt.: 140 lbs. — Hole Diameter: 6" — Foreman: B. VanDoren
Surf. Elev.: 184.81 ft — Hammer Drop: 30 in. — Rock Core Diameter: — Inspector: —
Date Started: 3-07-14 — Pipe Size: 2.0 in. — Boring Method: HSA — Date Completed: 3-07-14

Elevation/ Depth	Description	Boring and Sampling Notes	Rec.	NM%	SPT Blows	N	SPT Blows/Foot Curve (10 30 50)
184	Brown, moist to wet, very loose to medium dense fine silty clayey SAND (SC-SM)	3" Topsoil	7"		1-1-2	3	
			6"		6-6-5	11	
179		Groundwater encountered at 11.5' while drilling	10"		6-5-7	12	
			14"		5-8-10	18	
174	Brown, wet, medium dense, fine to coarse silty SAND and GRAVEL, trace clay (GM-SM)	Backfilled after 24 hrs	8"		10-14-10	24	
	Bottom of Hole at 13.0'						

SAMPLER TYPE: DRIVEN SPLIT SPOON UNLESS OTHERWISE; PT - PRESSED SHELBY TUBE; CA - CONTINUOUS FLIGHT AUGER; RC - ROCK CORE
SAMPLE CONDITIONS: D - DISINTEGRATED; I - INTACT; U - UNDISTURBED; L - LOST
GROUND WATER: AT COMPLETION 7.0 ft.; AFTER 24 HRS. 4.0 ft.; AFTER ___ HRS. ___ ft.
CAVE IN DEPTH: AT COMPLETION 90 ft.; AFTER 24 HRS. 7.5 ft.; AFTER ___ HRS. ___ ft.
BORING METHOD: HSA - HOLLOW STEM AUGERS; CFA - CONTINUOUS FLIGHT AUGERS; DC - DRIVING CASING; MD - MUD DRILLING

STANDARD PENETRATION TEST-DRIVING 2" O.D. SAMPLER 1" WITH 140# HAMMER FALLING 30". COUNT MADE AT 6" INTERVALS.

HILLIS - CARNES ENGINEERING ASSOCIATES, INC.

RECORD OF SOIL EXPLORATION

Project Name: Duvall Property - Final — Boring No.: SWM-17
Location: Howard County, Maryland — Job #: 13563B

SAMPLER

Datum: — Hammer Wt.: 140 lbs. — Hole Diameter: 6" — Foreman: B. VanDoren
Surf. Elev.: 183.59 ft — Hammer Drop: 30 in. — Rock Core Diameter: — Inspector: —
Date Started: 3-08-14 — Pipe Size: 2.0 in. — Boring Method: HSA — Date Completed: 3-08-14

Elevation/ Depth	Description	Boring and Sampling Notes	Rec.	NM%	SPT Blows	N	SPT Blows/Foot Curve (10 30 50)
183	Light Brown, moist, very loose clayey SAND (SC)	3" Topsoil	13"		1-1-1	2	
	Orange to Brown, wet, medium dense silty SAND, trace clay and gravel (SM)		2"		4-6-8	14	
178		Groundwater encountered at 2.5' while drilling	11"		4-8-8	16	
	Brown, moist, medium dense fine clayey SAND (SC)		12"		7-9-9	18	
173	Brown, wet, medium dense silty SAND (SM)	Backfilled after 24 hrs	8"		6-6-6	12	
	Bottom of Hole at 13.0'						

SAMPLER TYPE: DRIVEN SPLIT SPOON UNLESS OTHERWISE; PT - PRESSED SHELBY TUBE; CA - CONTINUOUS FLIGHT AUGER; RC - ROCK CORE
SAMPLE CONDITIONS: D - DISINTEGRATED; I - INTACT; U - UNDISTURBED; L - LOST
GROUND WATER: AT COMPLETION 2.5 ft.; AFTER 24 HRS. 1.0 ft.; AFTER ___ HRS. ___ ft.
CAVE IN DEPTH: AT COMPLETION 3.0 ft.; AFTER 24 HRS. 2.0 ft.; AFTER ___ HRS. ___ ft.
BORING METHOD: HSA - HOLLOW STEM AUGERS; CFA - CONTINUOUS FLIGHT AUGERS; DC - DRIVING CASING; MD - MUD DRILLING

STANDARD PENETRATION TEST-DRIVING 2" O.D. SAMPLER 1" WITH 140# HAMMER FALLING 30". COUNT MADE AT 6" INTERVALS.

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
ELLICOTT CITY, MARYLAND 21042
(410) 461 - 2855

OWNER
9001 WBE, LLC
1029 HARRISON DRIVE
LAUREL, MARYLAND
20707-3827
PH# 410-423-0460

DEVELOPER
WHISKEY SPEAK LLC
2330 WEST JOPPA ROAD
SUITE 190
LUTHERVILLE, MARYLAND
21093-4614
PH# 410-296-3800

"PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 13204, EXPIRATION DATE: NOVEMBER 3, 2016."

CHARLES J. CROVO, SR., P.E. — DATE 7/15/15

0" 1" 2" 3"
SCALE: 1" = 1"

DATE	DESCRIPTION
	REVISION BLOCK

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Director - Department of Planning and Zoning — Date 8-7-15
Chief, Division of Land Development — Date 8.06.15
Chief, Development Engineering Division — Date 8/6/15

STATE OF MARYLAND — CHARLES J. CROVO — 13204 — PROFESSIONAL ENGINEER

ADDRESS CHART

BUILDING NO.	STREET ADDRESS
OFFICE/WAREHOUSE	9001 WHISKEY BOTTOM ROAD
GUARD HOUSE	9003 WHISKEY BOTTOM ROAD
FUTURE GARAGE	9005 WHISKEY BOTTOM ROAD
	LAUREL, MARYLAND 20723

PERMIT INFORMATION CHART

SUBDIVISION NAME	SECTION/AREA	LOT/PARCEL NO.
COASTAL SUNBELT PRODUCE	N/A	P. 375

PLAT# OR L/F	GRID#	ZONING	TAX MAP#	ELECT. DISTR.	CENSUS TRACT
23497-23499	4,5 10,11	TOD	50	SIXTH	6069.07

BORING LOGS

COASTAL SUNBELT PRODUCE
WAREHOUSE DISTRIBUTION CENTER
PARCEL 'A'

ZONED TOD
GRID No.: 4,5,10,11
SIXTH ELECTION DISTRICT
SCALE: AS SHOWN

TAX MAP No.: 50
PARCEL No.: 375
HOWARD COUNTY, MARYLAND
DATE: JULY 6, 2015

SHEET 29 OF 58

SDP-14-080

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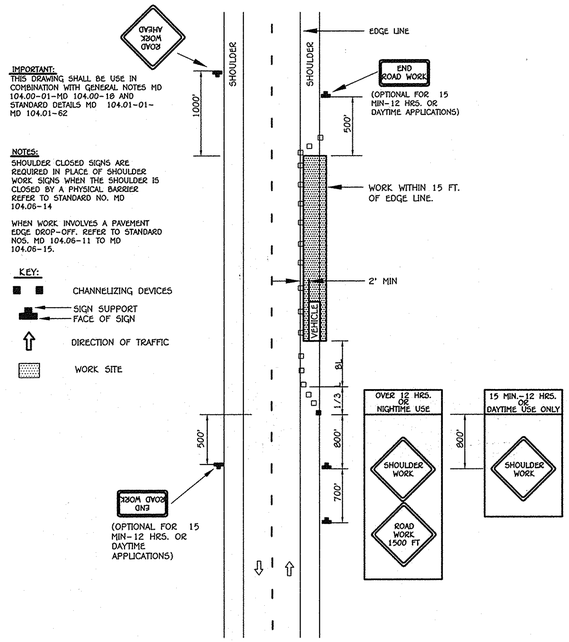


IMPORTANT:
THIS DRAWING SHALL BE USE IN COMBINATION WITH GENERAL NOTES MD 104.00-01-MD 104.00-18 AND STANDARD DETAILS MD 104.01-01-MD 104.01-62

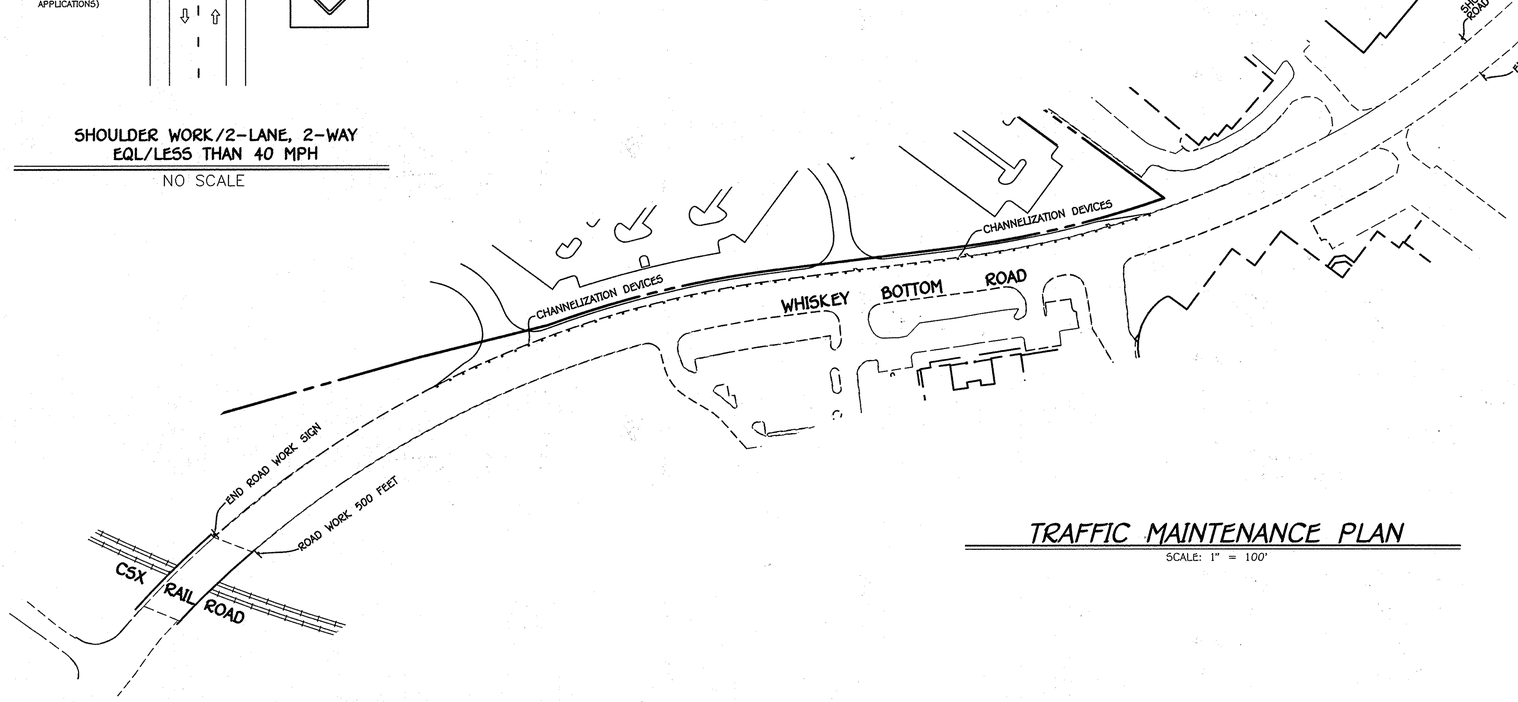
NOTES:
SHOULDER CLOSED SIGNS ARE REQUIRED IN PLACE OF SHOULDER WORK SIGNS WHEN THE SHOULDER IS CLOSED BY A PHYSICAL BARRIER REFER TO STANDARD NO. MD 104.06-14

WHEN WORK INVOLVES A PAVEMENT EDGE DROP-OFF, REFER TO STANDARD NOS. MD 104.06-11 TO MD 104.06-15.

KEY:
- CHANNELIZING DEVICES
- SIGN SUPPORT / FACE OF SIGN
- DIRECTION OF TRAFFIC
- WORK SITE

SHOULDER WORK/2-LANE, 2-WAY EQL/LESS THAN 40 MPH

NO SCALE

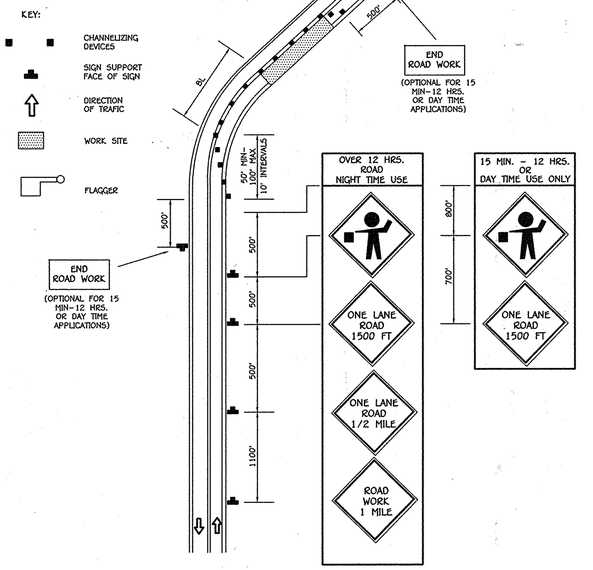


TRAFFIC MAINTENANCE PLAN

SCALE: 1" = 100'

IMPORTANT:
THIS DRAWING SHALL BE USED IN COMBINATION WITH THE GENERAL NOTES (104.XX-XX - 104.XX-XX) AND STANDARD DETAILS (104.XX-XX- 104.XX-XX).

NOTE:
FLAGGERS SHALL NEVER BE STATIONED MORE THAN 1000' AWAY FROM THE ADVANCE FLAGGER SIGN.



0' 100' 200' 300'

SCALE: 1" = 100'

FLAGGING OPERATION /-LANE, 2-WAY EQUAL/LESS THAN 40 MPH

NO SCALE

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
ELLICOTT CITY, MARYLAND 21042
(410) 461 - 2855

OWNER
9001 WBR, LLC
1029 HARRISON DRIVE
LAUREL, MARYLAND
20707-3827
PH# 410-423-0460

DEVELOPER
WHISKEY SPEAK LLC
2330 WEST JOPPA ROAD
SUITE 190
LUTHERVILLE, MARYLAND
21093-4614
PH# 410-296-3800

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CHARLES J. CROVO, SR., P.E. — 7/15/15 DATE

DATE	DESCRIPTION
	REVISION BLOCK

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Director - Department of Planning and Zoning — 8-7-15 Date

Chief, Division of Land Development — 8-06-15 Date

Chief, Development Engineering Division — 7/6/15 Date

STATE OF MARYLAND — CHARLES J. CROVO — No. 13204 — PROFESSIONAL ENGINEER

ADDRESS CHART	
BUILDING NO.	STREET ADDRESS
OFFICE/WAREHOUSE	9001 WHISKEY BOTTOM ROAD
GUARD HOUSE	9003 WHISKEY BOTTOM ROAD
FUTURE GARAGE	9005 WHISKEY BOTTOM ROAD
	LAUREL, MARYLAND 20723

PERMIT INFORMATION CHART

SUBDIVISION NAME		SECTION/AREA			LOT/PARCEL NO.
COASTAL SUNBELT PRODUCE		N/A			P. 375
PLAT# OR L/F	GRID#	ZONING	TAX MAP#	ELECT. DISTR.	CENSUS TRACT
22437-22439	4,5 10,11	TOD	50	SIXTH	6069.07

TRAFFIC MAINTENANCE PLAN

COASTAL SUNBELT PRODUCE
WAREHOUSE DISTRIBUTION CENTER
PARCEL 'A'

ZONED TOD — TAX MAP No.: 50
GRID No.: 4,5,10,11 — PARCEL No.: 375
SIXTH ELECTION DISTRICT — HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN — DATE: JULY 6, 2015

SHEET 30 OF 58

SDP-14-080

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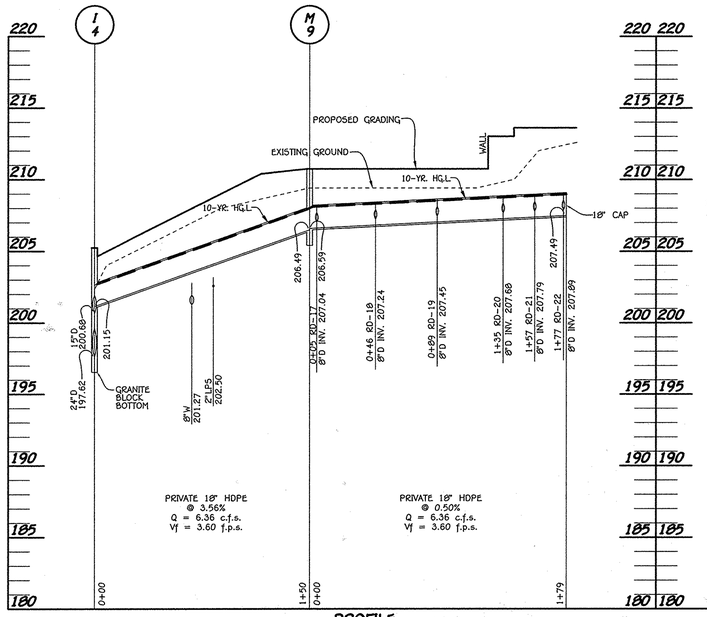
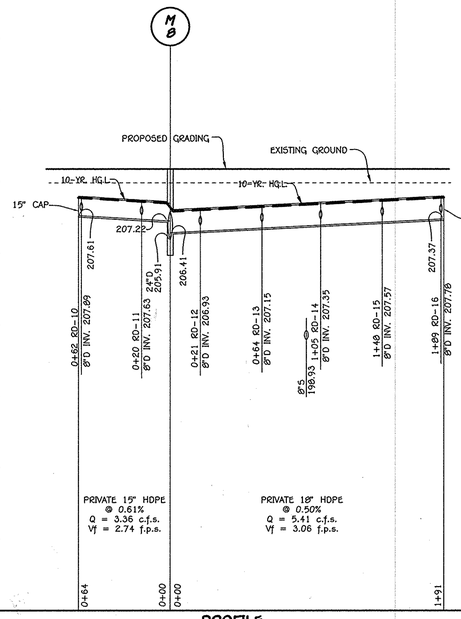


PROFILE
SCALE: HORIZ. : 1" = 50'
VERT. : 1" = 5'



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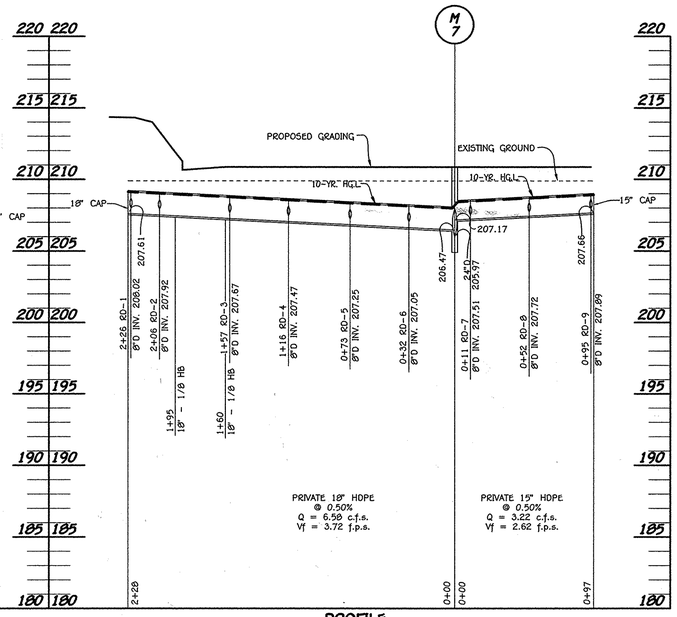

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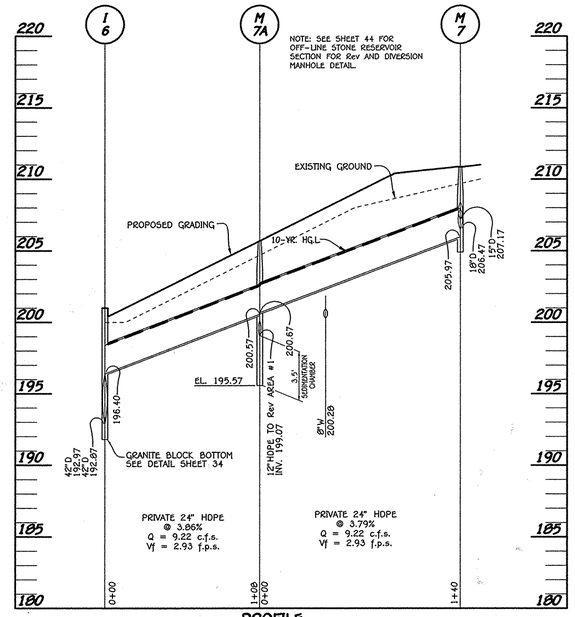

PROFILE
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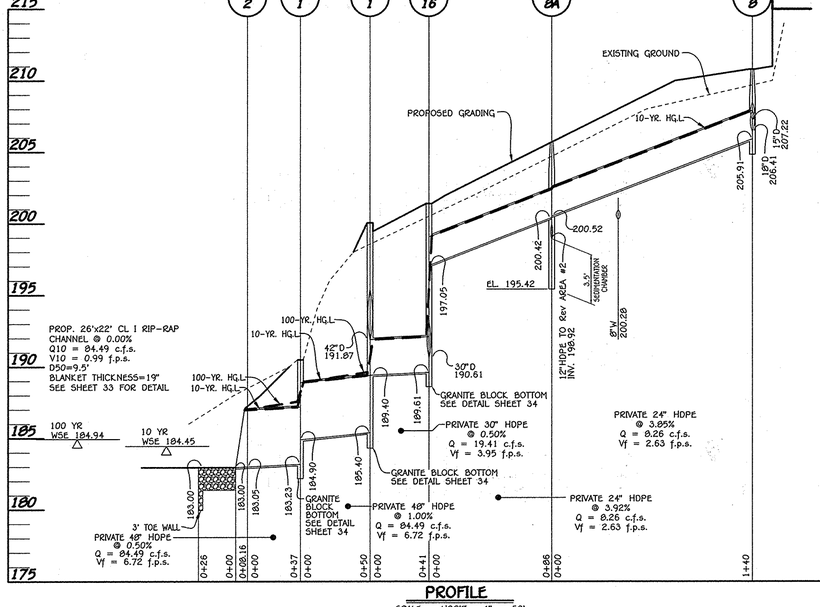

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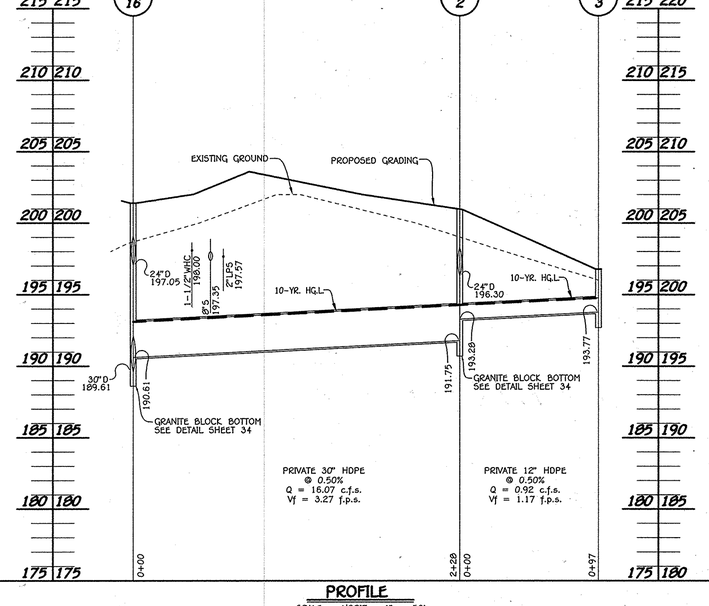

PROFILE
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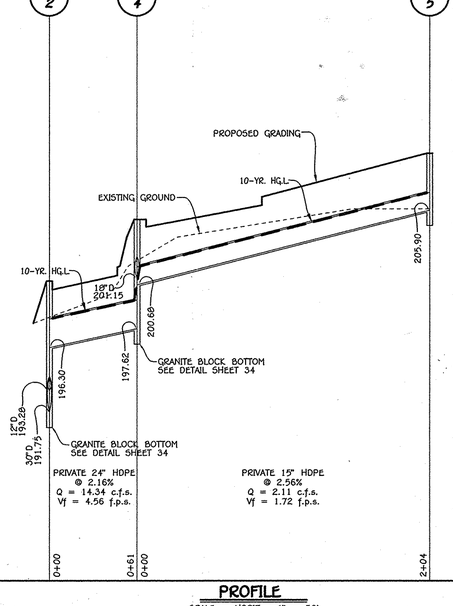
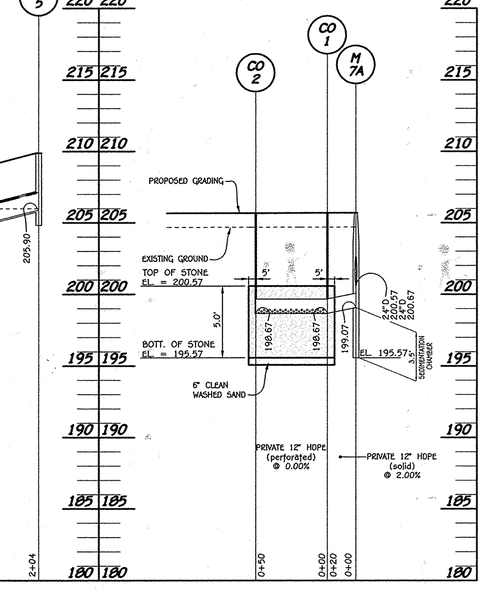
VERT. : 1" = 5'



PROFILE
SCALE: HORIZ. : 1" = 50'
VERT. : 1" = 5'



OFFLINE STONE RESERVOIR Rev #1 PROFILE
SCALE: HORIZ. : 1" = 50'
VERT. : 1" = 5'

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CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
ELLICOTT CITY, MARYLAND 21042
(410) 461 - 2855

OWNER
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1029 HARRISON DRIVE
LAUREL, MARYLAND
20707-3827
PH# 410-423-0460

DEVELOPER
WHISKEY SPEAK, LLC
2330 WEST JOPPA ROAD
SUITE 190
LUTHERVILLE, MARYLAND
21093-4614
PH# 410-296-3800

0' 50' 100' 150'
SCALE: 1" = 50'

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CHARLES J. CROVO, SR., P.E. — 7/15/15 DATE

DATE	DESCRIPTION
	REVISION BLOCK

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Director - Department of Planning and Zoning — 8-7-15 Date

Chief, Division of Land Development — 8.06.15 Date

Chief, Development Engineering Division — 7/15/15 Date

STATE OF MARYLAND — CHARLES JOSEPH CROVO — No. 13204 — PROFESSIONAL ENGINEER

ADDRESS CHART

BUILDING NO.	STREET ADDRESS
OFFICE/WAREHOUSE	9001 WHISKEY BOTTOM ROAD
GUARD HOUSE	9003 WHISKEY BOTTOM ROAD
FUTURE GARAGE	9005 WHISKEY BOTTOM ROAD
	LAUREL, MARYLAND 20723

PERMIT INFORMATION CHART

SUBDIVISION NAME			SECTION/AREA		LOT/PARCEL NO.
COASTAL SUNBELT PRODUCE			N/A		P. 375
PLAT# OR L/F	GRID#	ZONING	TAX MAP#	ELECT. DISTR.	CENSUS TRACT
23427-23430	4,5 10,11	TOD	50	SIXTH	6069.07

STORM DRAIN PROFILES

COASTAL SUNBELT PRODUCE
WAREHOUSE DISTRIBUTION CENTER
PARCEL 'A'

ZONED TOD — TAX MAP No.: 50
GRID No.: 4,5,10,11 — PARCEL No.: 375
SIXTH ELECTION DISTRICT — HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN — DATE: JULY 6, 2015

SHEET 31 OF 50

SDP-14-080

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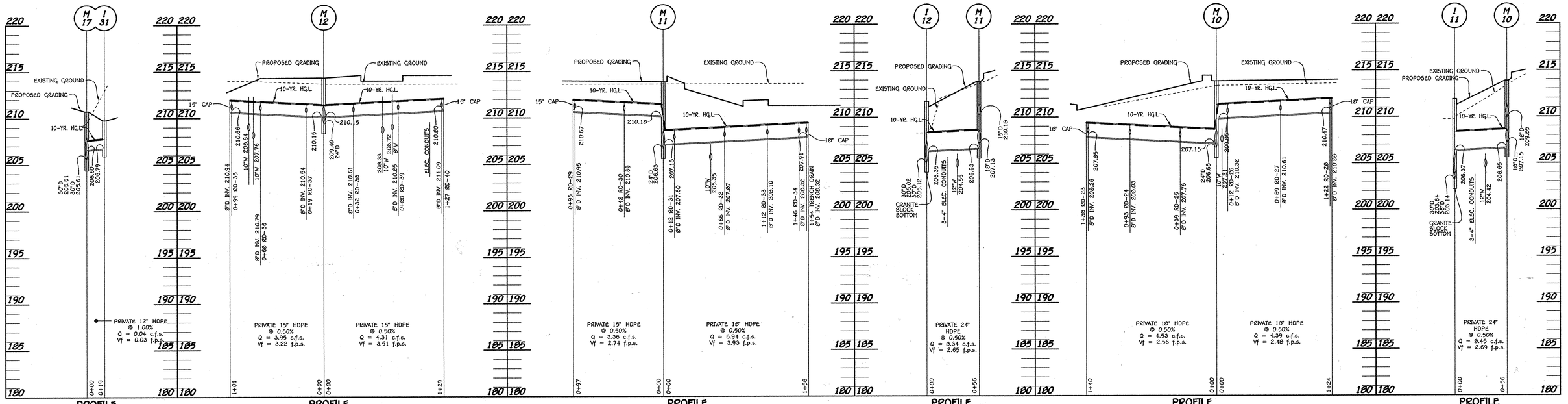

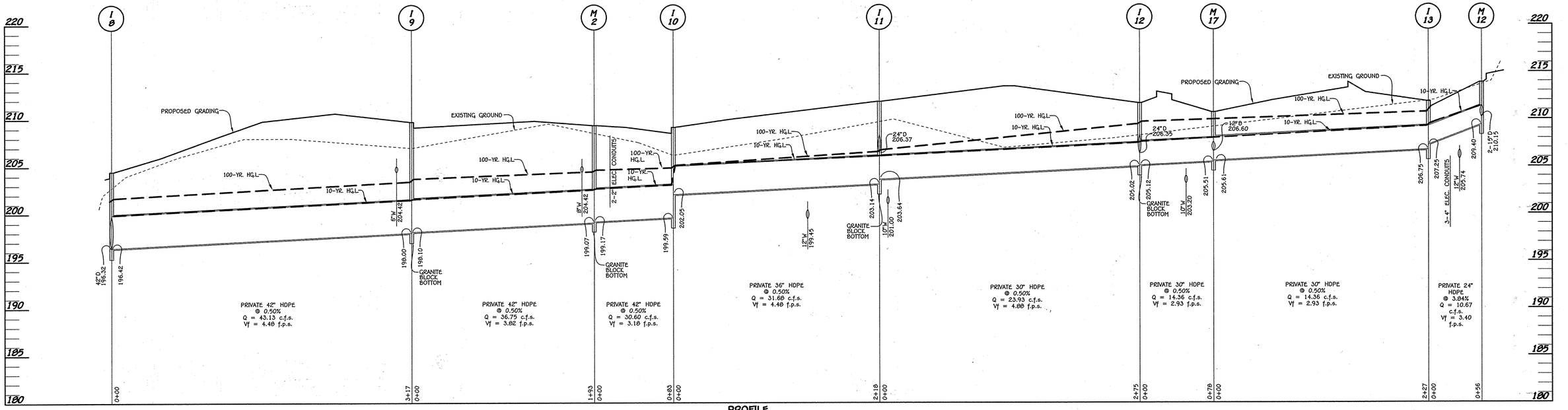

0' 50' 100' 150'
SCALE: 1" = 50'

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CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
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1029 HARRISON DRIVE
LAUREL, MARYLAND
20707-3827
PH# 410-423-0460

DEVELOPER
WHISKEY SPEAK, LLC
2330 WEST JOPPA ROAD
SUITE 190
LUTHERVILLE, MARYLAND
21093-4614
PH# 410-296-3800

"PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 13204, EXPIRATION DATE: NOVEMBER 9, 2016."

CHARLES J. CROJO, SR., P.E. — 7/15/15 DATE

DATE	DESCRIPTION
	REVISION BLOCK

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Director - Department of Planning and Zoning — 8-7-15 Date

Chief, Division of Land Development — 8-10-15 Date

Chief, Development Engineering Division — 8/6/15 Date

STATE OF MARYLAND — CHARLES J. CROJO — No. 13204 — PROFESSIONAL ENGINEER

ADDRESS CHART	
BUILDING NO.	STREET ADDRESS
OFFICE/WAREHOUSE	9001 WHISKEY BOTTOM ROAD
GUARD HOUSE	9003 WHISKEY BOTTOM ROAD
FUTURE GARAGE	9005 WHISKEY BOTTOM ROAD
	LAUREL, MARYLAND 20723

PERMIT INFORMATION CHART

SUBDIVISION NAME	SECTION/AREA	LOT/PARCEL NO.
COASTAL SUNBELT PRODUCE	N/A	P. 375

PLAT# OR L/F	GRID#	ZONING	TAX MAP#	ELECT. DISTR.	CENSUS TRACT
~~22497-22499~~	4,5 10,11	TOD	50	SIXTH	6069.07

STORM DRAIN PROFILES

COASTAL SUNBELT PRODUCE
WAREHOUSE DISTRIBUTION CENTER
PARCEL 'A'

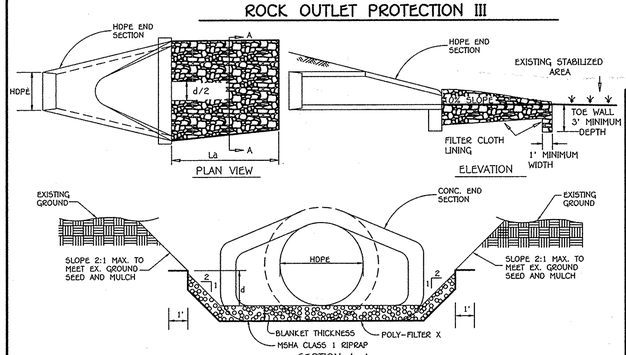
ZONED TOD — TAX MAP No.: 50
GRID No.: 4,5,10,11 — PARCEL No.: 375
SIXTH ELECTION DISTRICT — HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN — DATE: JULY 6, 2015

SHEET 32 OF 58

SDP-14-080

I:\2015\13033\Engineering\Dwgs\13033-3001 SDP 31-34 PROFILES & SS.dwg, PROFILE SHEET 32, 7/28/2015 11:35:47 AM, 1:1

ROCK OUTLET PROTECTION III



NOTE: FILTER CLOTH SHALL BE GEOTEXTILE CLASS C

RIP RAP CHANNEL DETAIL

NO SCALE

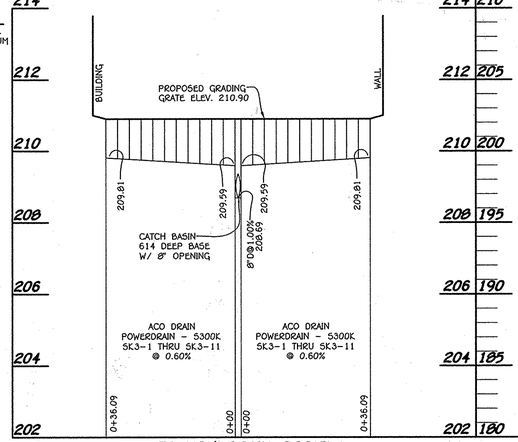
CONSTRUCTION SPECIFICATIONS FOR RIP-RAP OUTFALLS

1. The subgrade for the filter, riprap or gabion shall be prepared to the required lines and grades. Any fill required in the subgrade shall be compacted to a density of approximately that of the surrounding undisturbed material.

2. The rock or gravel shall conform to the specified grading limits when installed respectively in the riprap or filter.

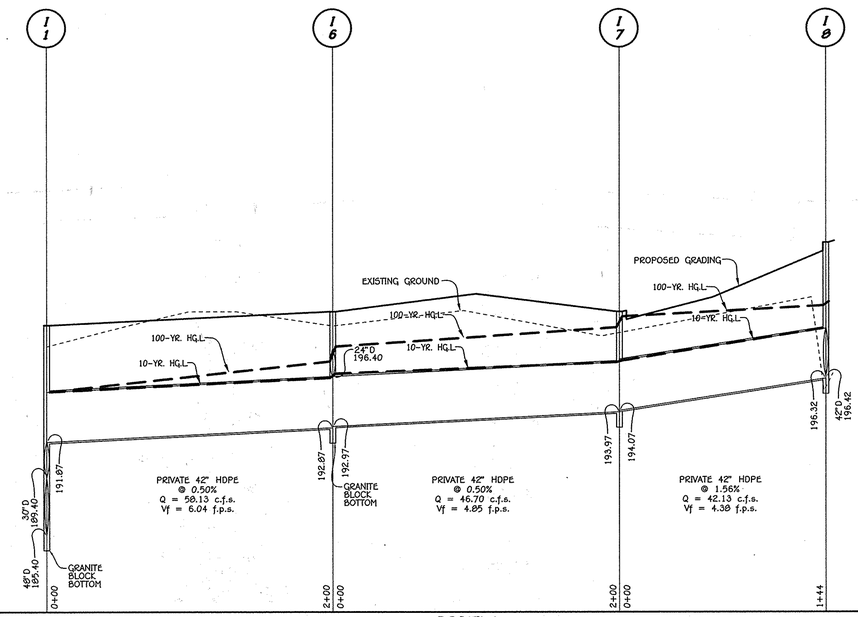
3. Filter cloth shall be protected from punching, cutting or tearing. Any damage other than an occasional shall hole shall be repaired by placing another piece of cloth over the damaged part or by completely replacing the cloth. All overlaps whether for repairs or for joining two pieces of cloth shall be a minimum of one foot.

4. Stone for the riprap or gabion outlets may be placed by equipment. Both shall each be constructed to the full course thickness in one operation and in such a manner as to avoid displacement of underlying materials. The stone for riprap or gabion outlets shall be delivered and placed in a manner that will insure that it is reasonably homogenous with the smaller stones and spalls filling the voids between the larger stones. Riprap shall be placed in a manner to prevent damage to the filter blanket or filter cloth. Hand placement will be required to the extent necessary to prevent damage to the permanent works.



TRENCH DRAIN PROFILE

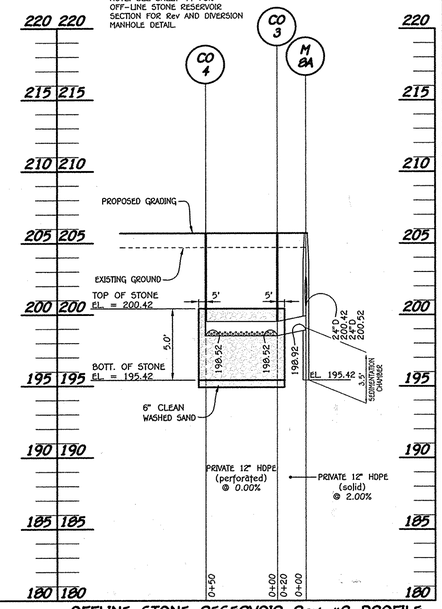
SCALE: HORIZ. : 1" = 20'
VERT. : 1" = 2'



PROFILE

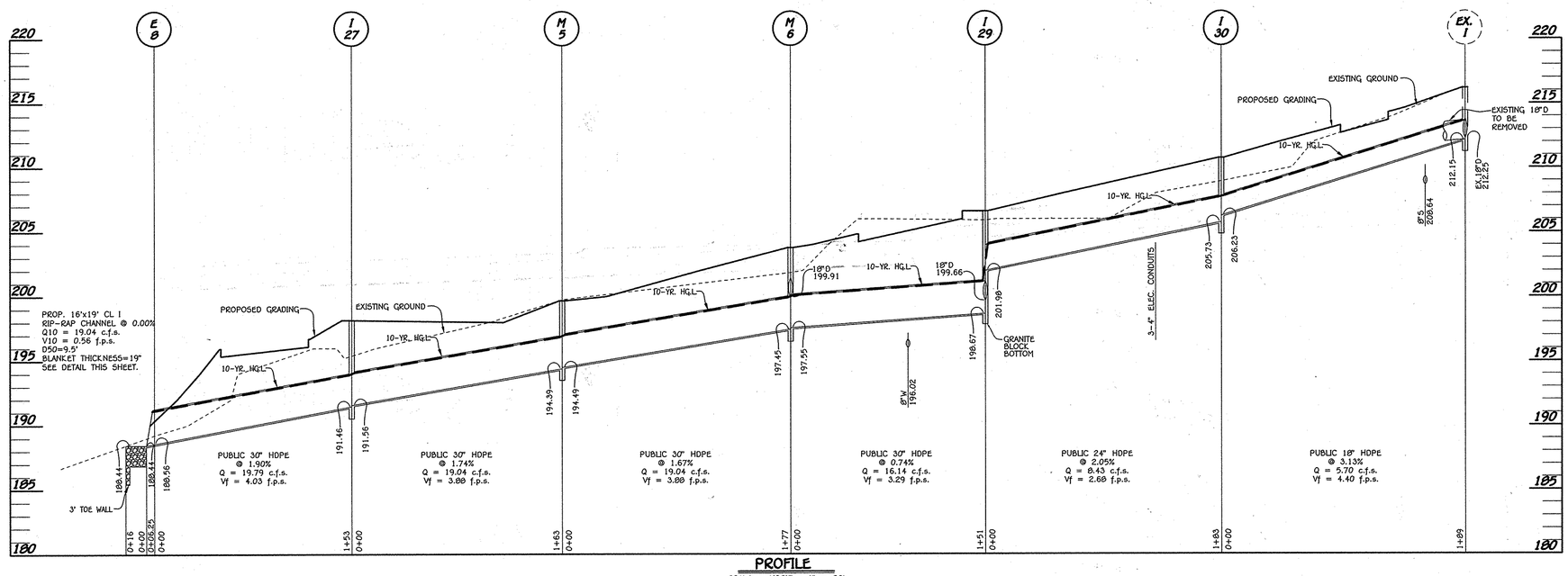
SCALE: HORIZ. : 1" = 50'
VERT. : 1" = 5'

NOTE: SEE SHEET 44 FOR OFF-LINE STONE RESERVOIR SECTION FOR Rev AND DIVERSION MANHOLE DETAIL.



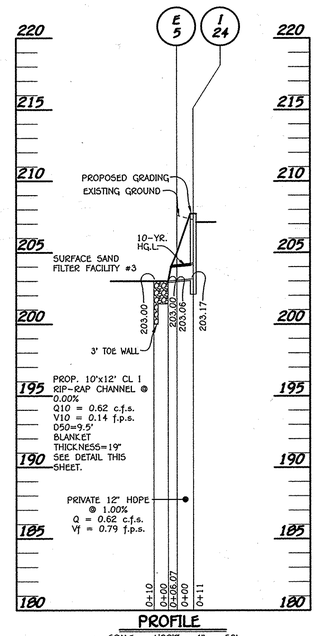
OFFLINE STONE RESERVOIR Rev #2 PROFILE

SCALE: HORIZ. : 1" = 50'
VERT. : 1" = 5'



PROFILE

SCALE: HORIZ. : 1" = 50'
VERT. : 1" = 5'



PROFILE

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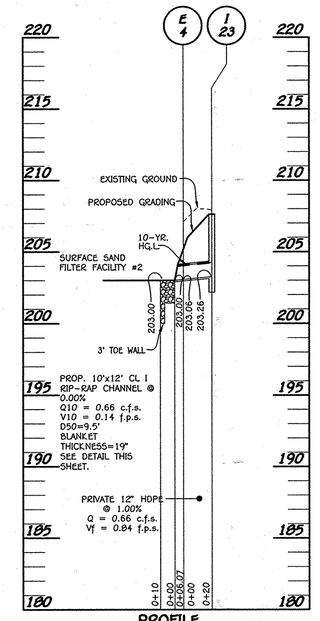
VERT. : 1" = 5'



PROFILE

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FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
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ELLICOTT CITY, MARYLAND 21042
(410) 461 - 2855

OWNER
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1029 HARRISON DRIVE
LAUREL, MARYLAND
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PH# 410-423-0460

DEVELOPER
WHISKEY SPEAK, LLC
2330 WEST JOPPA ROAD
SUITE 190
LUTHERVILLE, MARYLAND
21093-4614
PH# 410-296-3800

0' 50' 100' 150'
SCALE: 1" = 50'

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CHARLES J. CROVO, SR., P.E. — 7/15/16 DATE

DATE	DESCRIPTION
	REVISION BLOCK

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Director - Department of Planning and Zoning — 8-7-15 Date

Chief, Division of Land Development — 8-06-15 Date

Chief, Development Engineering Division — 8/6/15 Date

STATE OF MARYLAND — CHARLES J. CROVO — No. 13204 — PROFESSIONAL ENGINEER

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	LAUREL, MARYLAND 20723

PERMIT INFORMATION CHART

SUBDIVISION NAME			SECTION/AREA		LOT/PARCEL NO.
COASTAL SUNBELT PRODUCE			N/A		P. 375
PLAT# OR L/F	GRID#	ZONING	TAX MAP#	ELECT. DISTR.	CENSUS TRACT
23837-23839	4,5 10,11	TOD	50	SIXTH	6069.07

STORM DRAIN PROFILES

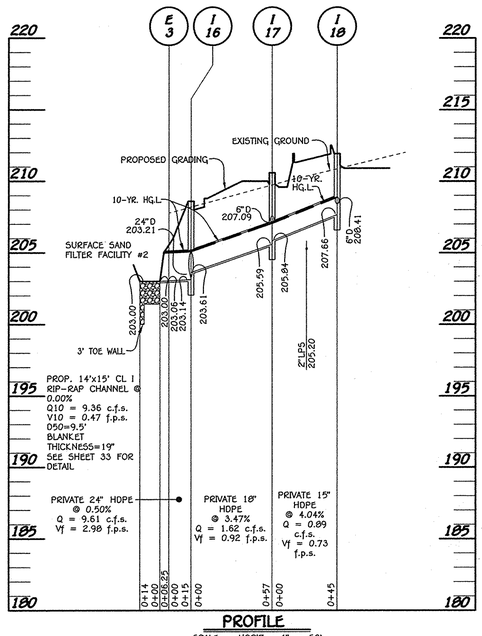
COASTAL SUNBELT PRODUCE
WAREHOUSE DISTRIBUTION CENTER
PARCEL 'A'

ZONED TOD — TAX MAP No.: 50
GRID No.: 4,5,10,11 — PARCEL No.: 375
SIXTH ELECTION DISTRICT — HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN — DATE: JULY 6, 2015

SHEET 33 OF 50

SDP-14-080

I:\2013\13033\Engineering\Dwgs\13033-3001 SDP 31-34 PROFILES & SS.dwg, PROFILE SHEET 33, 7/2/2015 10:49:32 AM, 11



PROFILE

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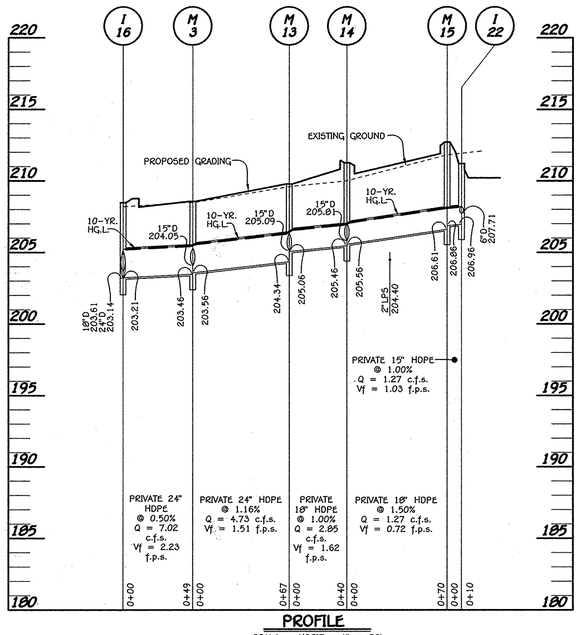
VERT. : 1" = 5'



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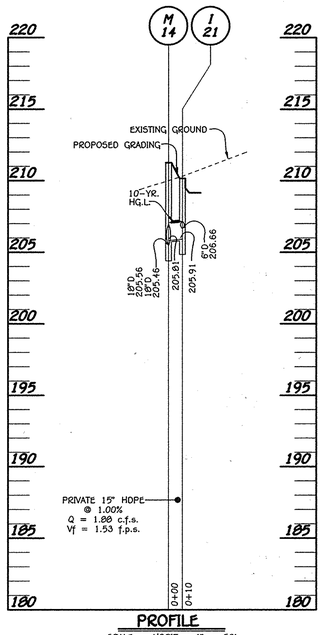
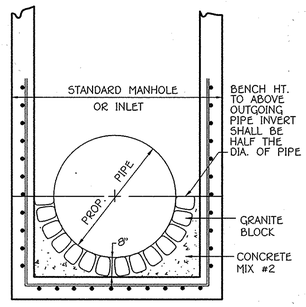


PROFILE

SCALE: HORIZ. : 1" = 50'
VERT. : 1" = 5'

PIPE SCHEDULE (PRIVATE)		
SIZE	CLASS	LENGTH
4"	PVC SCH 40	86 L.F.
4"	PVC SCH. 40 (Perforated)	16 L.F.
6"	PVC SCH 40	162 L.F.
6"	PVC SCH. 40 (Perforated)	592 L.F.
8"	HDPE	591 L.F.
12"	HDPE	162 L.F.
12"	HDPE (Perforated)	100 L.F.
15"	HDPE	1090 L.F.
18"	HDPE	1634 L.F.
24"	HDPE	1065 L.F.
30"	HDPE	1493 L.F.
36"	HDPE	218 L.F.
42"	HDPE	1137 L.F.
48"	HDPE	87 L.F.



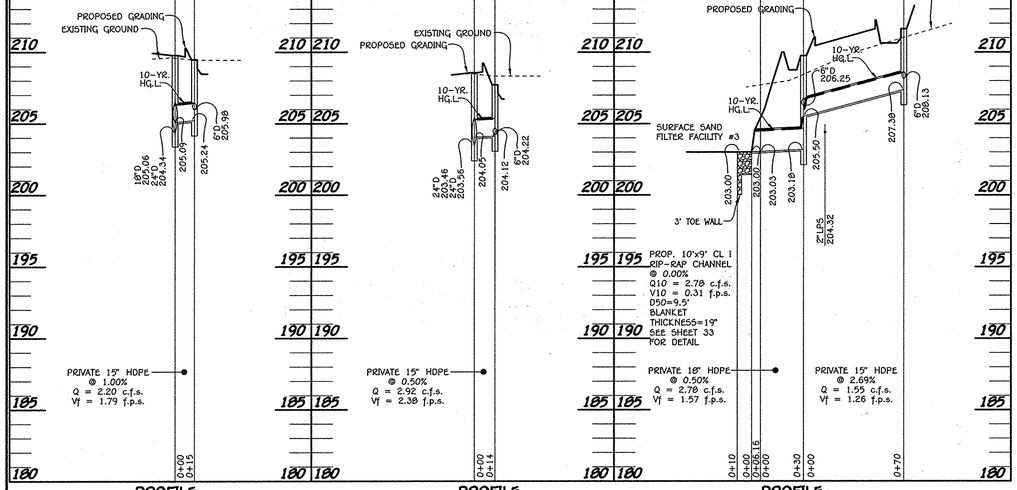
GRANITE BLOCK DETAIL

NOT TO SCALE

STRUCTURE SCHEDULE

STRUCTURE NO.	OWNERSHIP AND MAINTENANCE	TOP ELEVATION	INV.IN	INV.OUT	COORDINATES	WIDTH	TYPE	REMARKS
I-1	PRIVATE	200.05	189.40 (30"), 191.87 (42")	185.40 (48")	N 525774.00 E 1360997.00	4.5'	A-10 INLET	D = 4.04
I-2	PRIVATE	200.94	193.20 (12"), 196.30 (24")	191.75 (30")	N 525984.04 E 1361092.91	3.5'	A-5 INLET	D = 4.01
I-3	PRIVATE	196.77	-	193.77 (12")	N 526063.31 E 1361149.84	2.5'	A-10 INLET	D = 4.03
I-4	PRIVATE	205.25	200.66 (15"), 201.15 (18")	197.62 (24")	N 526020.11 E 1361042.94	2.5'	A-10 INLET	D = 4.03
I-5	PRIVATE	209.00	-	205.90 (15")	N 526214.66 E 1361099.20	2.5'	A-5 INLET	D = 4.01
I-6	PRIVATE	201.00	198.40 (24"), 192.97 (42")	192.87 (42")	N 525622.05 E 1360867.30	4.5'	A-10 INLET	D = 4.03
I-7	PRIVATE	201.00	194.07 (42")	193.97 (42")	N 525458.64 E 1360751.99	4.5'	A-10 INLET	D = 4.03
I-8	PRIVATE	205.78	196.42 (42")	196.32 (42")	N 525440.75 E 1360610.85	4.5'	A-10 INLET	D = 4.03
I-9	PRIVATE	209.75	198.10 (42")	198.00 (42")	N 525623.37 E 1360352.05	4.5'	A-5 INLET	D = 4.02
I-10	PRIVATE	209.13	202.05 (36")	199.59 (42")	N 525769.31 E 1360119.37	4.0'	A-5 INLET	D = 4.01
I-11	PRIVATE	211.88	206.37 (24"), 203.64 (30")	203.14 (36")	N 525947.42 E 1360245.06	4.0'	A-5 INLET	D = 4.01
I-12	PRIVATE	211.70	208.35 (24"), 205.12 (30")	205.02 (30")	N 526172.11 E 1360403.62	3.5'	A-5 INLET	D = 4.01
I-13	PRIVATE	211.85	207.25 (24")	206.75 (30")	N 526421.31 E 1360579.47	3.5'	A-5 INLET	D = 4.01
I-14	PRIVATE	204.10	199.60 (6"), 193.75 (15")	193.00 (24")	N 525460.31 E 1360216.46	-	S INLET	D = 4.22
I-15	PRIVATE	204.25	199.75 (6")	199.00 (15")	N 525588.26 E 1360049.11	-	S INLET	D = 4.22
I-16	PRIVATE	206.60	203.61 (18"), 203.21 (24")	203.14 (24")	N 525581.90 E 1360913.71	3.0'	A-5 INLET	D = 4.01
I-17	PRIVATE	210.59	207.09 (6"), 205.84 (15")	205.59 (18")	N 525529.74 E 1360995.33	-	S INLET	D = 4.22
I-18	PRIVATE	211.91	208.41 (6")	207.66 (15")	N 526493.70 E 1360867.92	-	S INLET	D = 4.22
I-19	PRIVATE	207.72	204.22 (6")	204.12 (15")	N 526618.30 E 1360876.63	-	S INLET	D = 4.22
I-20	PRIVATE	209.48	205.98 (6")	205.24 (15")	N 526657.78 E 1360819.59	-	S INLET	D = 4.22
I-21	PRIVATE	210.16	206.66 (6")	205.91 (15")	N 526615.65 E 1360784.52	-	S INLET	D = 4.22
I-22	PRIVATE	211.21	207.71 (6")	206.96 (15")	N 526558.64 E 1360743.90	-	S INLET	D = 4.22
I-23	PRIVATE	207.62	-	203.26 (12")	N 526576.45 E 1360990.70	2.5'	A-5 INLET	D = 4.01
I-24	PRIVATE	207.73	-	203.17 (12")	N 526552.70 E 1360993.56	2.5'	A-5 INLET	D = 4.01
I-25	PRIVATE	209.75	206.25 (6"), 205.50 (15")	203.18 (18")	N 526468.09 E 1360967.56	-	S INLET	D = 4.22
I-26	PRIVATE	211.63	208.13 (6")	207.38 (15")	N 526410.89 E 1360927.20	-	S INLET	D = 4.22
I-27	PUBLIC	195.89	191.56 (30")	191.46 (30")	N 526160.71 E 1361161.32	3.5'	A-10 INLET	D = 4.03
I-29	PUBLIC	206.52	199.66 (18"), 201.98 (24")	198.67 (30")	N 526636.39 E 1361054.21	3.0'	A-10 INLET	D = 4.03
I-30	PUBLIC	210.74	206.23 (18")	205.73 (24")	N 526816.51 E 1361024.23	2.5'	A-10 INLET	D = 4.03
I-31	PRIVATE	209.79	-	206.79 (15")	N 526226.24 E 1360463.01	-	DOUBLE S INLET	D = 4.23
M-1	PRIVATE	190.50	184.90 (48")	183.23 (48")	N 525740.90 E 1361035.86	6'	STD. MANHOLE	G - 5.13
M-2	PRIVATE	209.37	199.17 (42")	199.07 (42")	N 525724.14 E 1360186.27	6'	STD. MANHOLE	G - 5.13
M-3	PRIVATE	208.72	204.05 (15"), 203.56 (24")	203.46 (24")	N 526605.07 E 1360871.18	4'	STD. MANHOLE	G - 5.12
M-5	PUBLIC	199.80	194.49 (30")	194.39 (30")	N 526311.70 E 1361101.18	5'	STD. MANHOLE	G - 5.13
M-6	PUBLIC	203.33	199.91 (18"), 197.55 (30")	197.45 (30")	N 526405.60 E 1361065.65	5'	STD. MANHOLE	G - 5.13
M-7	PRIVATE	210.86	207.17 (15"), 206.47 (18")	205.97 (24")	N 525764.47 E 1360665.49	4'	STD. MANHOLE	G - 5.12
* M-7A	PRIVATE	205.70	200.67 (24")	200.57 (24") 199.07 (12")	N 525683.75 E 1360779.68	4'	STD. MANHOLE	G - 5.12
M-8	PRIVATE	210.86	207.22 (15"), 206.41 (18")	205.91 (24")	N 525927.00 E 1360780.19	4'	STD. MANHOLE	G - 5.12
* M-8A	PRIVATE	205.70	200.52 (24")	200.42 (24") 198.92 (12")	N 525846.28 E 1360894.57	4'	STD. MANHOLE	G - 5.12
M-9	PRIVATE	210.74	206.59 (18")	206.49 (18")	N 526106.02 E 1360921.20	4'	STD. MANHOLE	G - 5.12
M-10	PRIVATE	213.86	207.15 (18"), 209.85 (18")	206.65 (24")	N 526106.02 E 1360921.20	4'	STD. MANHOLE	G - 5.12
M-11	PRIVATE	213.05	210.16 (15"), 207.13 (18")	206.63 (24")	N 526138.36 E 1360447.11	4'	STD. MANHOLE	G - 5.12
M-12	PRIVATE	214.34	210.15 (15"), 210.15 (15")	209.40 (24")	N 526391.64 E 1360625.85	4'	STD. MANHOLE	G - 5.12
M-13	PRIVATE	209.78	205.09 (15"), 205.06 (18")	204.34 (24")	N 526643.14 E 1360815.56	4'	STD. MANHOLE	G - 5.12
M-14	PRIVATE	211.26	205.81 (15"), 205.56 (18")	205.46 (18")	N 526610.19 E 1360792.49	4'	STD. MANHOLE	G - 5.12
M-15	PRIVATE	212.70	206.86 (15")	206.61 (18")	N 526553.00 E 1360752.13	4'	STD. MANHOLE	G - 5.12
M-16	PRIVATE	201.40	197.05 (24"), 190.61 (30")	189.61 (30")	N 525796.70 E 1360964.83	6'	STD. MANHOLE	G - 5.13
M-17	PRIVATE	210.74	205.61 (30"), 206.60 (12")	205.51 (30")	N 526236.70 E 1360447.66	5'	STD. MANHOLE	G - 5.13
E-1	PRIVATE	179.90	176.57 (36")	176.50 (36")	N 525264.39 E 1360922.07	-	FLARED END SECTION	ADS OR EQUAL
E-2	PRIVATE	187.05	183.05 (48")	183.25 (48")	N 525707.65 E 1361020.59	-	FLARED END SECTION	ADS OR EQUAL
E-3	PRIVATE	205.06	203.06 (24")	203.00 (24")	N 526595.59 E 1360923.37	-	FLARED END SECTION	ADS OR EQUAL
E-4	PRIVATE	204.06	203.06 (12")	203.00 (12")	N 526596.31 E 1360983.44	-	FLARED END SECTION	ADS OR EQUAL
E-5	PRIVATE	204.06	203.06 (12")	203.00 (12")	N 526540.09 E 1360994.19	-	FLARED END SECTION	ADS OR EQUAL
E-6	PRIVATE	204.53	203.03 (18")	203.00 (18")	N 526491.91 E 1360986.00	-	FLARED END SECTION	ADS OR EQUAL
E-8	PUBLIC	191.60	188.56 (30")	188.46 (30")	N 526017.79 E 1361214.71	-	FLARED END SECTION	ADS OR EQUAL
E-9	PRIVATE	194.05	192.05 (24")	-----	N 525431.02 E 1360254.77	-	FLARED END SECTION	ADS OR EQUAL
R-1	PRIVATE	183.00	177.25 (6")	177.00 (36")	N 525295.47 E 1360877.91	6.67'	-	SEE SHEET 37
S-1	PRIVATE	204.50	200.50 (6")	200.25 (18")	N 526660.26 E 1360999.91	-	S INLET	D = 4.22
S-2	PRIVATE	204.50	200.50 (6")	200.25 (18")	N 526485.01 E 1361044.39	-	S INLET	D = 4.22

'A' INLET COORDINATES ARE AT CENTERLINE OF INLET AT FACE OF CURB.
* M-7A & M-8A HAVE 3.5' SEDIMENTATION CHAMBERS, SEE DIVERSION DETAIL, SHEET 44.
** SEE SHEET 44 FOR DIVERSION MANHOLE DETAIL



PROFILE

SCALE: HORIZ. : 1" = 50'
VERT. : 1" = 5'

PROFILE

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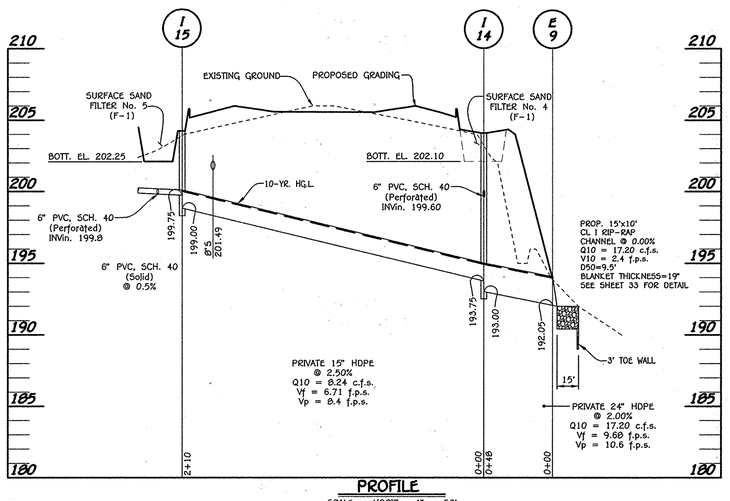

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CHARLES J. OLOVO, SR., P.E. — 7/15/15 DATE

DATE	DESCRIPTION
	REVISION BLOCK

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Director Department of Planning and Zoning — 8-7-15 Date

Chief, Division of Land Development — 8-06-15 Date

Chief, Development Engineering Division — 8/6/15 Date

STATE OF MARYLAND — CHARLES J. OLOVO — No. 13204 — PROFESSIONAL ENGINEER

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PERMIT INFORMATION CHART

SUBDIVISION NAME		SECTION/AREA		LOT/PARCEL NO.	
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PLAT# OR L/F	GRID#	ZONING	TAX MAP#	ELECT. DISTR.	CENSUS TRACT
23437-23439	4,5 10,11	TOD	50	SIXTH	6069.07

STORM DRAIN PROFILES AND STRUCTURE SCHEDULE

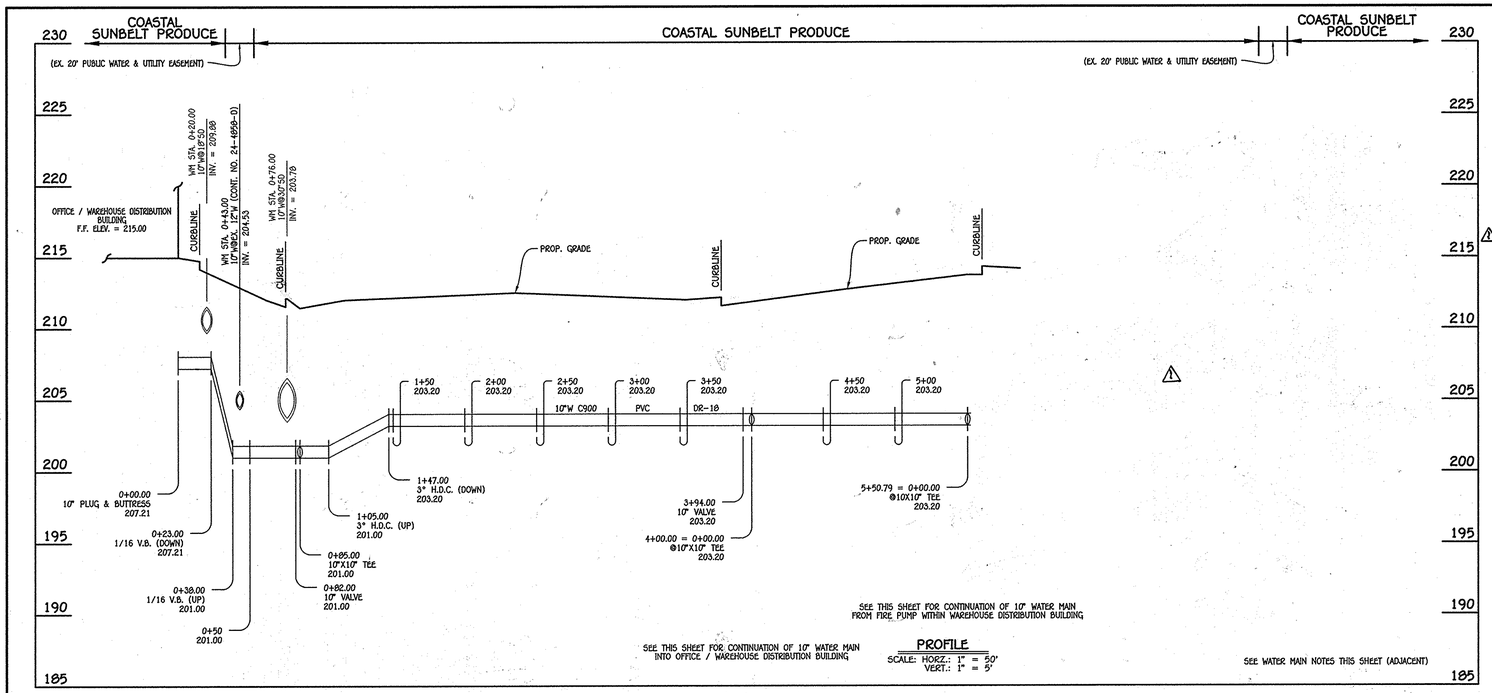
COASTAL SUNBELT PRODUCE
WAREHOUSE DISTRIBUTION CENTER
PARCEL 'A'

ZONED TOD — TAX MAP No.: 50
GRID No.: 4,5,10,11 — PARCEL No.: 375
SIXTH ELECTION DISTRICT — HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN — DATE: JULY 6, 2015

SHEET 34 OF 58

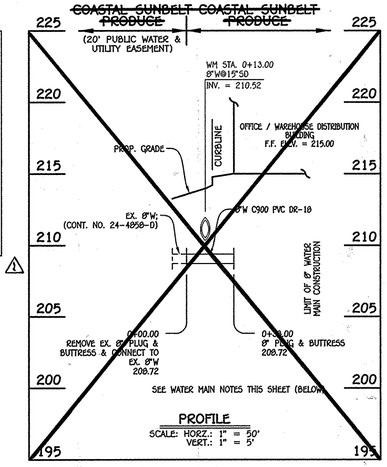
5DP-14-080

I:\2013\13033\Engineering\Dwgs\13033-5001 SDP 31-34 PROFILES & SS.dwg, PROFILE SHEET 34, 7/15/2015 3:50:15 PM, 1:1



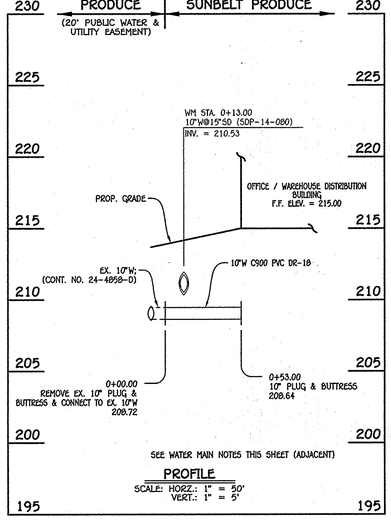
10" WATER MAIN: OFFICE / WAREHOUSE DISTRIBUTION BUILDING

WATER MAIN TABULATION CHART			
W.M. STA.	APPURTENANCE	NORTHING	EASTING
10" WATER MAIN: OFFICE / WAREHOUSE DISTRIBUTION BUILDING			
0+00.00	10" PLUG & BUTTRESS	525911.45	1360311.47
0+82.00	10" VALVE	525958.73	1360244.47
0+85.00	10"X10" TEE	525960.46	1360242.02
3+94.00	10" VALVE	526212.93	1360420.18
4+00.00 = 0+00.00	10"X10" TEE	526217.83	1360423.64
5+50.79 = 0+00.00	10"X10" TEE	526341.04	1360510.58
~~7+20.00~~	~~10"X10" TEE~~	~~526490.08~~	~~1360609.39~~
~~7+25.00~~	~~10" VALVE~~	~~526479.19~~	~~1360611.75~~
~~8+07.00~~	~~10" PLUG & BUTTRESS~~	~~526435.91~~	~~1360678.71~~



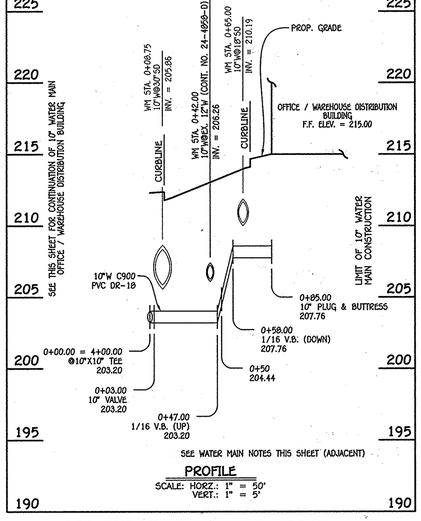
~~8" WATER MAIN: INTO OFFICE / WAREHOUSE DISTRIBUTION BUILDING~~

~~WATER MAIN TABULATION CHART~~			
~~W.M. STA.~~	~~APPURTENANCE~~	~~NORTHING~~	~~EASTING~~
~~8" WATER MAIN: INTO OFFICE / WAREHOUSE DISTRIBUTION BUILDING~~			
~~0+00.00~~	~~EX. 8" PLUG & BUTTRESS~~	~~526459.94~~	~~1360658.14~~
~~0+85.00~~	~~8" PLUG & BUTTRESS~~	~~526440.92~~	~~1360685.10~~



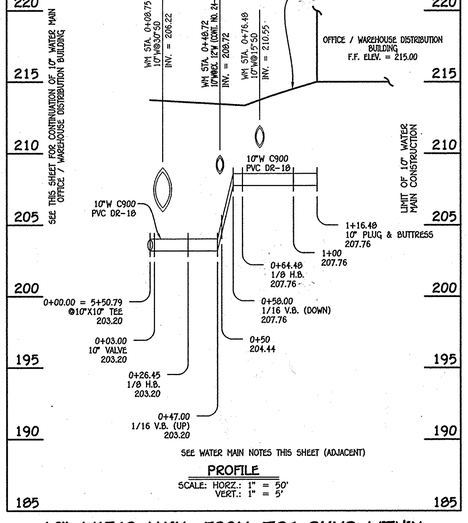
10" WATER MAIN: FROM FIRE PUMP WITHIN WAREHOUSE DISTRIBUTION BUILDING

WATER MAIN TABULATION CHART			
W.M. STA.	APPURTENANCE	NORTHING	EASTING
10" WATER MAIN: INTO OFFICE / WAREHOUSE DISTRIBUTION BUILDING			
0+00.00 =4+00.00	10"X10" TEE	526217.83	1360423.64
0+03.00	10" VALVE	526216.10	1360426.09
0+85.00	10" PLUG & BUTTRESS	526168.82	1360493.09



10" WATER MAIN: INTO OFFICE / WAREHOUSE DISTRIBUTION BUILDING

WATER MAIN TABULATION CHART			
W.M. STA.	APPURTENANCE	NORTHING	EASTING
10" WATER MAIN: FROM FIRE PUMP WITHIN WAREHOUSE DISTRIBUTION BUILDING			
0+00.00	EX. 10" PLUG & BUTTRESS	526337.39	1360571.65
0+53.00	10" PLUG & BUTTRESS	526306.83	1360614.95



10" WATER MAIN: FROM FIRE PUMP WITHIN WAREHOUSE DISTRIBUTION BUILDING

WATER MAIN NOTES:
1. ALL WATER MAINS SHALL BE AWWA C900 PVC PIPE; DR-18.
2. ALL PIPE BEDDING, TRACER WIRE, LOCATING TAPE AND OTHER APPURTENANCES SHALL BE IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL, VOLUME IV - WATER AND SEWER STANDARDS FOR AWWA C900 PVC WATER PIPE INSTALLATION.
3. DEFLECTION COUPLINGS SHALL BE CERTAIN-TEED PVC HIGH DEFLECTION COUPLINGS.
4. ALL WATER HOUSE CONNECTIONS AND TAPS SHALL BE PERFORMED USING A SADDLE.

WATER MAIN TABULATION CHART			
W.M. STA.	APPURTENANCE	NORTHING	EASTING
10" WATER MAIN: FROM FIRE PUMP WITHIN WAREHOUSE DISTRIBUTION BUILDING			
0+00.00 = 5+50.79	10"X10" TEE	526341.04	1360510.58
0+03.00	10" VALVE	526339.31	1360513.03
0+26.45	1/8 H.B.	526325.79	1360532.19
0+64.48	1/8 H.B.	526332.72	1360569.58
1+16.48	10" PLUG & BUTTRESS	526302.74	1360612.07

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
ELLICOTT CITY, MARYLAND 21042
(410) 461 - 2855

OWNER
9001 WBR, LLC
1029 HARRISON DRIVE
LAUREL, MARYLAND
20707-3827
PH# 410-423-0460

DEVELOPER
WHISKEY SPEAK LLC
2330 WEST JOPPA ROAD
SUITE 190
LUTHERVILLE, MARYLAND
21093-4614
PH# 410-296-3800

"PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 13204, EXPIRATION DATE: NOVEMBER 9, 2016."

CHARLES J. OLOVO, SR., P.E. — 7/6/15 DATE

DATE	DESCRIPTION
9/9/15	⚠1 REMOVE 10"W & 8"W PROFILES TO WAREHOUSE DISTRIBUTION BUILDING
DATE	REVISION BLOCK

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Director - Department of Planning and Zoning — 8-7-15 Date

Chief, Division of Land Development — 8-06-15 Date

Chief, Development Engineering Division — 8/6/15 Date

STATE OF MARYLAND — CHARLES J. OLOVO — No. 13204 — PROFESSIONAL ENGINEER

ADDRESS CHART	
BUILDING NO.	STREET ADDRESS
OFFICE/WAREHOUSE	9001 WHISKEY BOTTOM ROAD
GUARD HOUSE	9003 WHISKEY BOTTOM ROAD
FUTURE GARAGE	9005 WHISKEY BOTTOM ROAD
	LAUREL, MARYLAND 20723

PERMIT INFORMATION CHART

SUBDIVISION NAME		SECTION/AREA		LOT/PARCEL NO.
COASTAL SUNBELT PRODUCE		N/A		P. 375
PLAT# OR L/F	GRID#	ZONING	TAX MAP#	ELECT. DISTR.	CENSUS TRACT
12437 - 12439	4,5 10,11	TOD	50	SIXTH	6069.07

WATER & SEWER MAIN EXTENSIONS PROFILES, CHARTS AND NOTES

COASTAL SUNBELT PRODUCE
WAREHOUSE DISTRIBUTION CENTER
PARCEL 'A'

ZONED TOD — TAX MAP No.: 50
GRID No.: 4,5,10,11 — PARCEL No.: 375
SIXTH ELECTION DISTRICT — HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN — DATE: JULY 6, 2015

SHEET 35 OF 58

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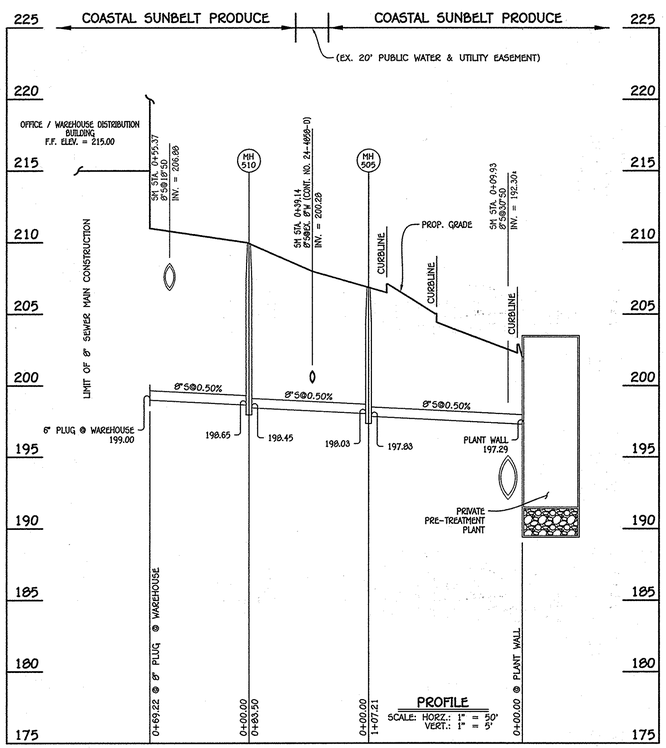
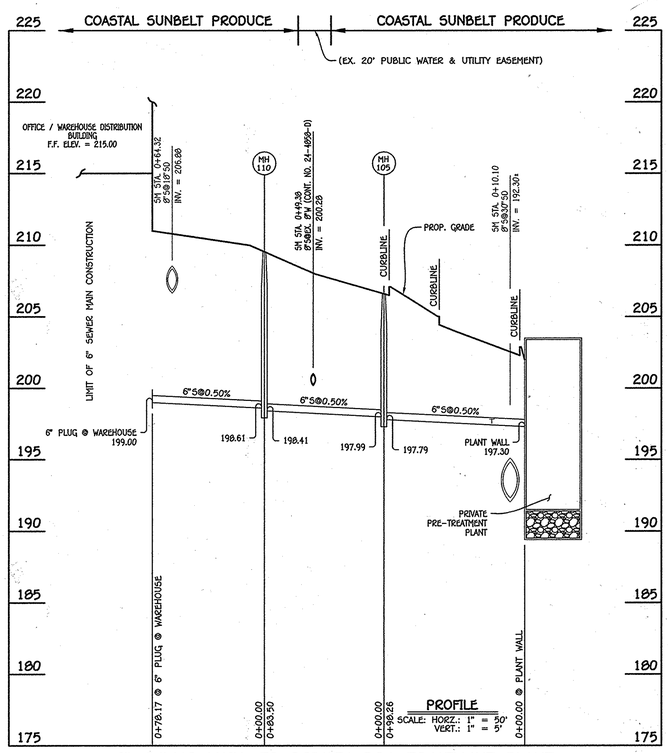


8" SEWER MAIN: TO PRIVATE PRE-TREATMENT PLANT

MANHOLE TABULATION CHART			
NO.	NORTHING	EASTING	RIM ELEVATION
@ PLANT WALL	525834.32	1361002.94	---
505	525696.13	1360915.34	206.86
510	525971.34	1360879.06	209.94
8" PLUG @ WAREHOUSE	526011.25	1360822.51	---

NOTE: SET MH RIMS FLUSH W/PROPOSED GRADE.

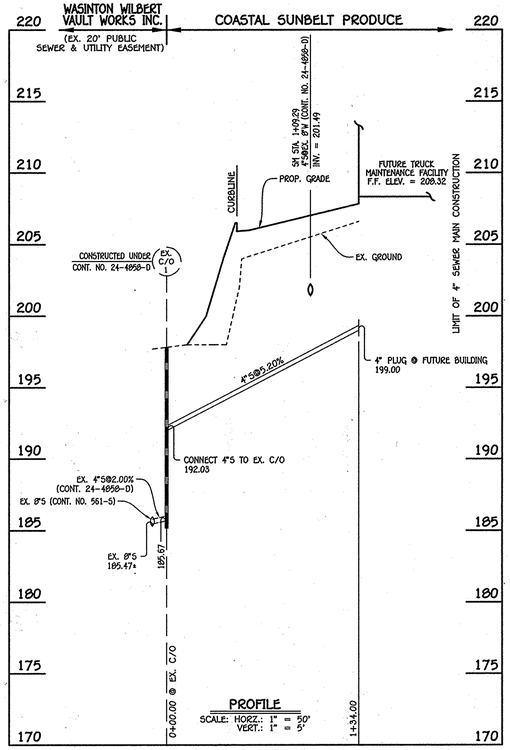


6" SEWER MAIN: TO PRIVATE PRE-TREATMENT PLANT

MANHOLE TABULATION CHART			
NO.	NORTHING	EASTING	RIM ELEVATION
@ PLANT WALL	525837.32	1361005.05	---
105	525893.97	1360924.77	206.61
110	525969.18	1360880.49	209.55
6" PLUG @ WAREHOUSE	526014.25	1360824.62	---

NOTE: SET MH RIMS FLUSH W/PROPOSED GRADE.

SEWER HOUSE CONNECTION CHART					
STATION	LOT	ELEVATION AT MAIN	ELEVATION AT BUILDING	M.C.E.	SLAB
PLANT WALL TO MH 105					
0+23 RT.	GUARD HOUSE	197.59	197.91	201.11	204.41

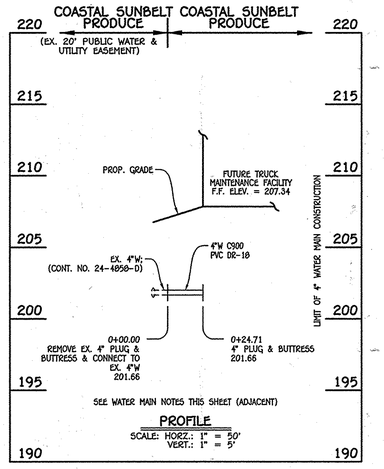


4" SEWER MAIN: FUTURE TRUCK MAINTENANCE FACILITY

MANHOLE TABULATION CHART			
NO.	NORTHING	EASTING	RIM ELEVATION
EX. C/O 1	525531.25	1359913.44	197.82
4" PLUG @ BUILDING	525453.95	1360022.90	---

WATER MAIN NOTES:
1. ALL WATER MAINS SHALL BE AWWA C900 PVC PIPE; DR-18.
2. ALL PIPE BEDDING, TRACER WIRE, LOCATING TAPE AND OTHER APPURTENANCES SHALL BE IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL, VOLUME IV - WATER AND SEWER STANDARDS FOR AWWA C900 PVC WATER PIPE INSTALLATION.
3. DEFLECTION COUPLINGS SHALL BE CERTAIN-TEED PVC HIGH DEFLECTION COUPLINGS.
4. ALL WATER HOUSE CONNECTIONS AND TAPS SHALL BE PERFORMED USING A SADDLE.

WATER MAIN TABULATION CHART			
W.M. STA.	APPURTENANCE	NORTHING	EASTING
4" WATER MAIN: FUTURE TRUCK MAINTENANCE FACILITY			
0+00.00	EX. 4" PLUG & BUTTRESS	525478.17	1360009.74
0+24.71	4" PLUG & BUTTRESS	525463.92	1360029.93



4" WATER MAIN: FUTURE TRUCK MAINTENANCE FACILITY

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
ELLICOTT CITY, MARYLAND 21042
(410) 461 - 2855

OWNER
9001 WBR, LLC
1029 HARRISON DRIVE
LAUREL, MARYLAND
20707-3827
PH# 410-423-0460

DEVELOPER
WHISKEY SPEAK LLC
2330 WEST JOPPA ROAD
SUITE 190
LUTHERVILLE, MARYLAND
21093-4614
PH# 410-296-3800

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CHARLES J. CROVO, SR., P.E. — 7/6/15 DATE

DATE	DESCRIPTION
	REVISION BLOCK

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Director - Department of Planning and Zoning — Date 8-7-15

Chief, Division of Land Development — Date 8-06-15

Chief, Development Engineering Division — Date 8/6/15

STATE OF MARYLAND — CHARLES JOSEPH CROVO — No. 13204 — PROFESSIONAL ENGINEER

ADDRESS CHART	
BUILDING NO.	STREET ADDRESS
OFFICE/WAREHOUSE	9001 WHISKEY BOTTOM ROAD
GUARD HOUSE	9003 WHISKEY BOTTOM ROAD
FUTURE GARAGE	9005 WHISKEY BOTTOM ROAD
	LAUREL, MARYLAND 20723

PERMIT INFORMATION CHART

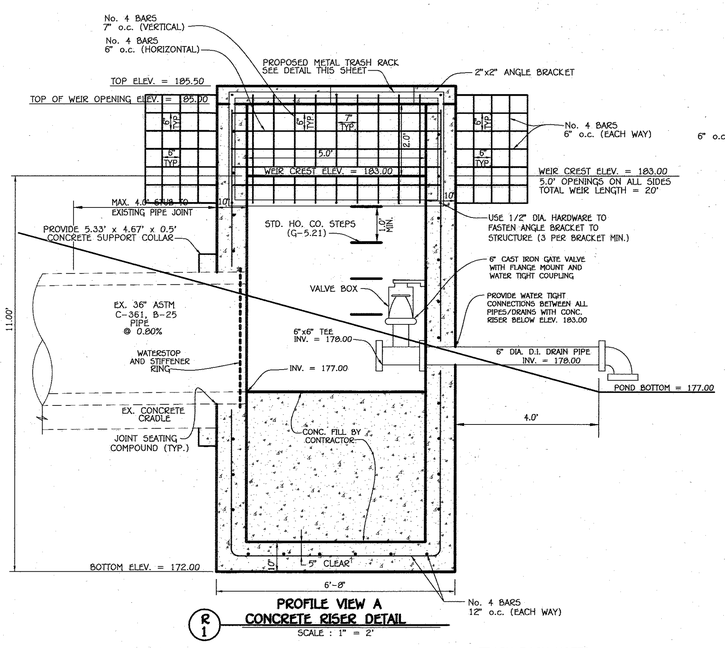
SUBDIVISION NAME		SECTION/AREA		LOT/PARCEL NO.
COASTAL SUNBELT PRODUCE		N/A		P. 375
PLAT# OR L/F	GRID#	ZONING	TAX MAP#	ELECT. DISTR.	CENSUS TRACT
22437-22439	4,5 10,11	TOD	50	SIXTH	6069.07

WATER & SEWER MAIN EXTENSIONS PROFILES, CHARTS AND NOTES

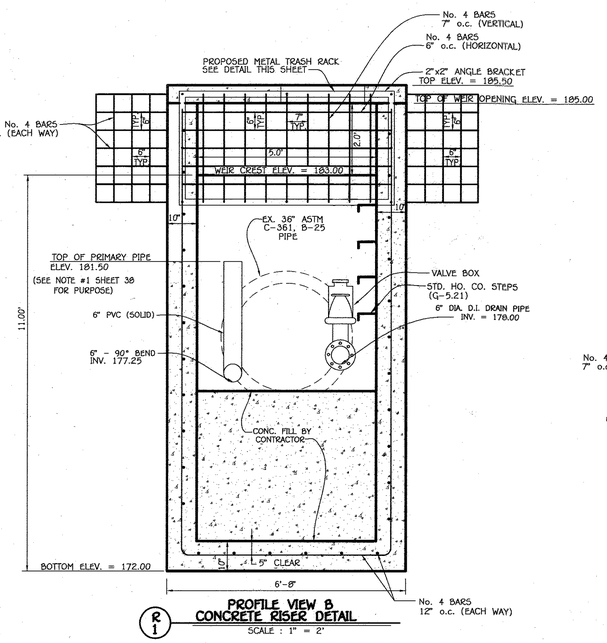
COASTAL SUNBELT PRODUCE
WAREHOUSE DISTRIBUTION CENTER
PARCEL 'A'

ZONED TOD — TAX MAP No.: 50
GRID No.: 4,5,10,11 — PARCEL No.: 375
SIXTH ELECTION DISTRICT — HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN — DATE: JULY 6, 2015

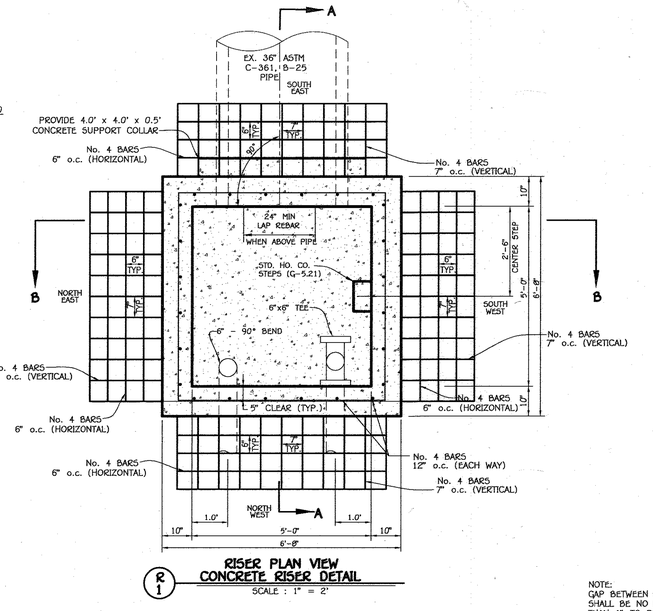
I:\2013\13033\Engineering\Design\Water and Sewer Contract No. 24-4056-D\Finals\Redline 1 - June, 2015\13033-3001 Water and Sewer Contract Plan.dwg, 6/30/2015 11:26:28 AM



PROFILE VIEW A
CONCRETE RISER DETAIL
SCALE : 1" = 2'

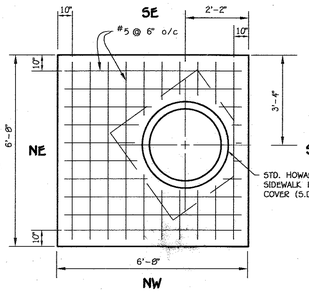


PROFILE VIEW B
CONCRETE RISER DETAIL
SCALE : 1" = 2'



RISER PLAN VIEW
CONCRETE RISER DETAIL
SCALE : 1" = 2'

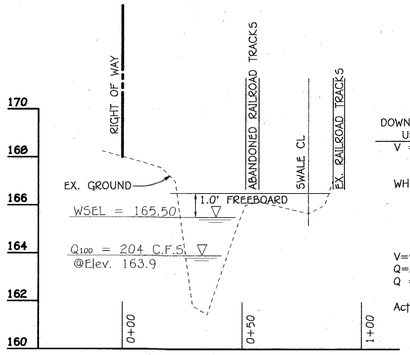
NOTES:
1. CONCRETE SHALL BE MSHA MIX No. 3 (FC > 3,500 P.S.I.)
2. REINFORCING STEEL: GRADE 60
3. FOR WALLS OF STRUCTURE SHALL UTILIZE L.M. SCOFIELD CO. T-9055 FORM LINERS (RANDOM SPLIT-FACE ROCK) OPTIONAL.
4. PROVIDE ROUGH BROOM FINISH.
5. ANCHOR BOLTS SHALL BE INSTALLED IN ACCORDANCE WITH SECTION 6.07.03.59 OF THE MSHA STANDARDS AND SPECS.
6. ALL REINFORCING SPLICES SHALL BE LAP SPLICES OF 30 BAR DIA. UNLESS OTHERWISE SHOWN.



TOP SLAB DETAIL
NO SCALE

TRASH RACK NOTES

1. *SEE SWM RISER DETAIL R-1 FOR STRUCTURE DIMENSIONS NOT SHOWN ON THIS DETAIL.*
2. *DETAIL SHOWN IS TYPICAL FOR BOTH ALL SIDES.*
3. *THE TRASH RACK SHALL BE GALVANIZED (2 COATS) AFTER FABRICATION AND PAINTED "BATTLESHIP GRAY" (2 COATS) AND CONFORM TO HOWARD COUNTY SPECIFICATIONS.*
4. *REBAR SHALL BE #4 SMOOTH STEEL BARS.*
5. *THE TRASH RACK FABRICATOR MAY SUBSTITUTE ANGLE BARS FOR FLAT BARS.*
6. *THE CONCRETE RISER SHALL BE FIELD-MEASURED PRIOR TO THE TRASH RACK FABRICATION TO ENSURE A REASONABLE TRASH RACK FIT. THE FABRICATOR CAN MAKE MINOR ADJUSTMENTS TO THE TRASH RACK DIMENSIONS (1/4"±) TO MAINTAIN THE OVERALL DIMENSIONS AND COVERING THE OPENINGS AS SHOWN. THE MAXIMUM OPENING DIMENSION (I.E., ALONG DIAGONAL) SHALL NOT EXCEED 9"*
7. *A TRASH RACK IS ONLY REQUIRED ON R-1.*



SECTION A-A
SCALE: 1" = 30' (HOR.)
1" = 3' (VER.)

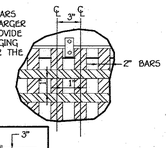
DOWNSTREAM CHANNEL EVALUATION
USING MANNINGS EQUATION

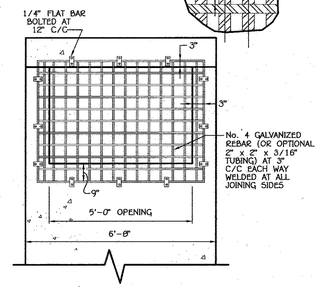
$V = \frac{1.486}{n} \times r^{2/3} \times s^{1/2}$

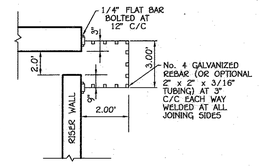
WHERE:
n = 0.035
r = a/p
a = 61.7 sq.ft. @ 165.50
p = 28 ft. @ 165.50
s = 1.64% (0.0164 ft/ft)
V=9.2 f.p.s.
Q=AV
Q = 61.7 x 9.2 = 568 c.f.s. Capacity for 1 Freeboard

Actual Q_{100} at this Study Point = 204 c.f.s.
@Elev. 163.9, V = 6.8 f.p.s.

NOTE:
GAP BETWEEN BARS SHALL BE NO LARGER THAN 1" TO PROVIDE ADEQUATE CLOGGING PROTECTION FOR THE 3.5" ORIFICE.







TRASH RACK 'A' DETAIL
(NO SCALE)

NOTES:
1. FIELD MEASURE THE STRUCTURE DIMENSIONS TO INSURE EXACT FIT OF TRASH RACK.
2. GALVANIZE ENTIRE TRASH RACK AFTER FABRICATION.
3. PAINT BATTLESHIP GRAY.

GEO-TECHNICAL EVALUATIONS AND RECOMMENDATIONS:

OUR FINDINGS SUGGEST THAT THE SITE CAN BE DEVELOPED FOR THE PROPOSED CONSTRUCTION UTILIZING CONVENTIONAL SPREAD FOOTINGS SUPPORTED ON NATURAL SOILS OR NEWLY PLACED ENGINEERED FILL AND GROUND-SUPPORTED SLAB CONSTRUCTION. SPECIAL CONSIDERATION SHOULD BE GIVEN TO THE PROPER MONITORING OF FILL OPERATIONS, FOOTING EXCAVATIONS AND CONCRETE PLACEMENT IN ALL STRUCTURAL AREAS. BASED ON THE GROUNDWATER CONDITIONS ENCOUNTERED, IT SHOULD BE ANTICIPATED THAT SOME FORM OF TEMPORARY DEWATERING WILL MOST LIKELY BE REQUIRED IN THE LOWER LYING AREAS SUCH AS THE STORMWATER MANAGEMENT FACILITY LOCATED IN THE VICINITY OF BORINGS SWM-9 THROUGH SWM-17 TO FACILITATE THE NECESSARY EXCAVATIONS AS WELL AS IN THE VICINITY OF BORINGS B-7, B-17, B-18 AND P-8 TO FACILITATE THE PLACEMENT OF THE REQUIRED STRUCTURE FILLS.

AS-BUILT CERTIFICATION

I HEREBY CERTIFY THAT THE FACILITY SHOWN ON THIS PLAN WAS CONSTRUCTED AS SHOWN ON THE " AS-BUILT" PLANS AND MEETS THE APPROVED PLANS AND SPECIFICATIONS.

SIGNATURE _____ P.E. NO. _____

DATE: _____

CERTIFY MEANS TO STATE OR DECLARE A PROFESSIONAL OPINION BASED UPON ONSITE INSPECTIONS AND MATERIAL TESTS WHICH ARE CONDUCTED DURING CONSTRUCTION. THE ONSITE INSPECTIONS AND MATERIAL TESTS ARE THOSE INSPECTIONS AND TESTS DEEMED SUFFICIENT AND APPROPRIATE COMMONLY ACCEPTED ENGINEERING STANDARDS. CERTIFY DOES NOT MEAN OR IMPLY A GUARANTEE BY THE ENGINEER NOR DOES AN ENGINEER'S CERTIFICATION RELIEVE ANY OTHER PARTY FROM MEETING REQUIREMENTS IMPOSED BY CONTRACT, EMPLOYMENT, OR OTHER MEANS, INCLUDING MEETING COMMONLY ACCEPTED INDUSTRY PRACTICES.

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
ELLICOTT CITY, MARYLAND 21042
(410) 461 - 2855

OWNER
9001 WBR, LLC
1029 HARRISON DRIVE
LAUREL, MARYLAND
20707-3827
PH# 410-423-0460

DEVELOPER
WHISKEY SPEAK LLC
2330 WEST JOPPA ROAD
SUITE 190
LUTHERVILLE, MARYLAND
21093-4614
PH# 410-296-3800

ENGINEER'S CERTIFICATE

"I CERTIFY THAT THIS PLAN FOR SEDIMENT AND EROSION CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT."

SIGNATURE OF ENGINEER — 6/16/15 DATE

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 DISTRICT."

SIGNATURE OF DEVELOPER — 6/17/15 DATE

"PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 13204, EXPIRATION DATE: NOVEMBER 3, 2016."

CHARLES J. CROVO, SR., P.E. — 6/16/15 DATE

THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

HOWARD SCD — 6/18/15 DATE

DATE	DESCRIPTION
10/26/16	REMOVE VALVE STEM GUIDE FROM RISER DETAILS
DATE	REVISION BLOCK

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Director - Department of Planning and Zoning — 8-7-15 Date

Chief, Division of Land Development — 8-26-15 Date

Chief, Development Engineering Division — 8/16/16 Date

STATE OF MARYLAND — CHARLES J. CROVO — No. 13204 — PROFESSIONAL ENGINEER

ADDRESS CHART	
BUILDING NO.	STREET ADDRESS
OFFICE/WAREHOUSE	9001 WHISKEY BOTTOM ROAD
GUARD HOUSE	9003 WHISKEY BOTTOM ROAD
FUTURE GARAGE	9005 WHISKEY BOTTOM ROAD
	LAUREL, MARYLAND 20723

PERMIT INFORMATION CHART

SUBDIVISION NAME	SECTION/AREA	LOT/PARCEL NO.
COASTAL SUNBELT PRODUCE	N/A	P. 375

PLAT# OR L/F	GRID#	ZONING	TAX MAP#	ELECT. DISTR.	CENSUS TRACT
~~23497-23499~~	4,5 10,11	TOD	50	SIXTH	6069.07

SWM DETAILS FOR FACILITY #1

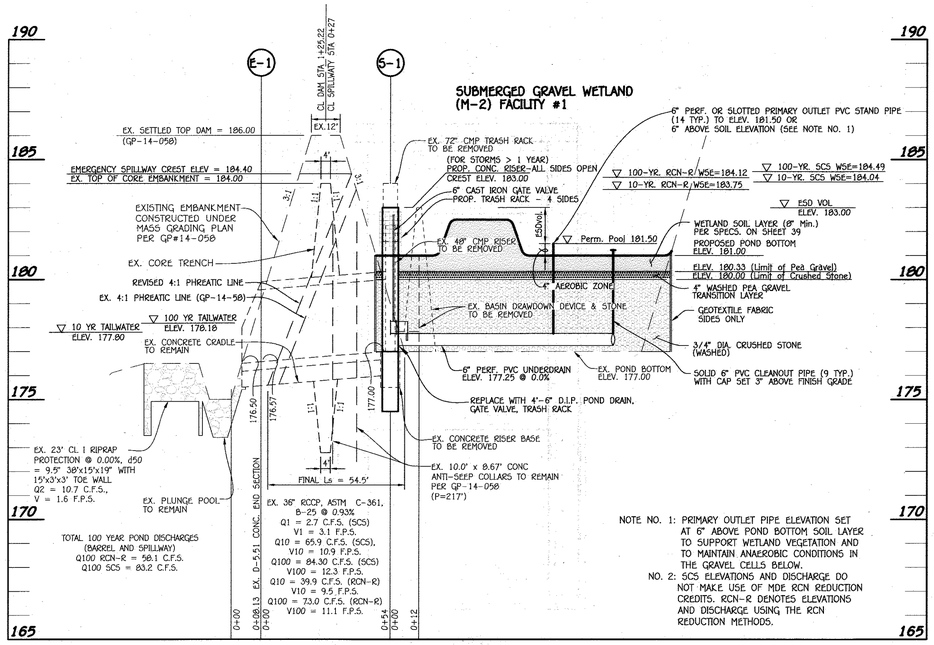
COASTAL SUNBELT PRODUCE
WAREHOUSE DISTRIBUTION CENTER
PARCEL 'A'

ZONED TOD — TAX MAP No.: 50
GRID No.: 4,5,10,11 — PARCEL No.: 375
SIXTH ELECTION DISTRICT — HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN — DATE: APRIL 20, 2015

SHEET 37 OF 58

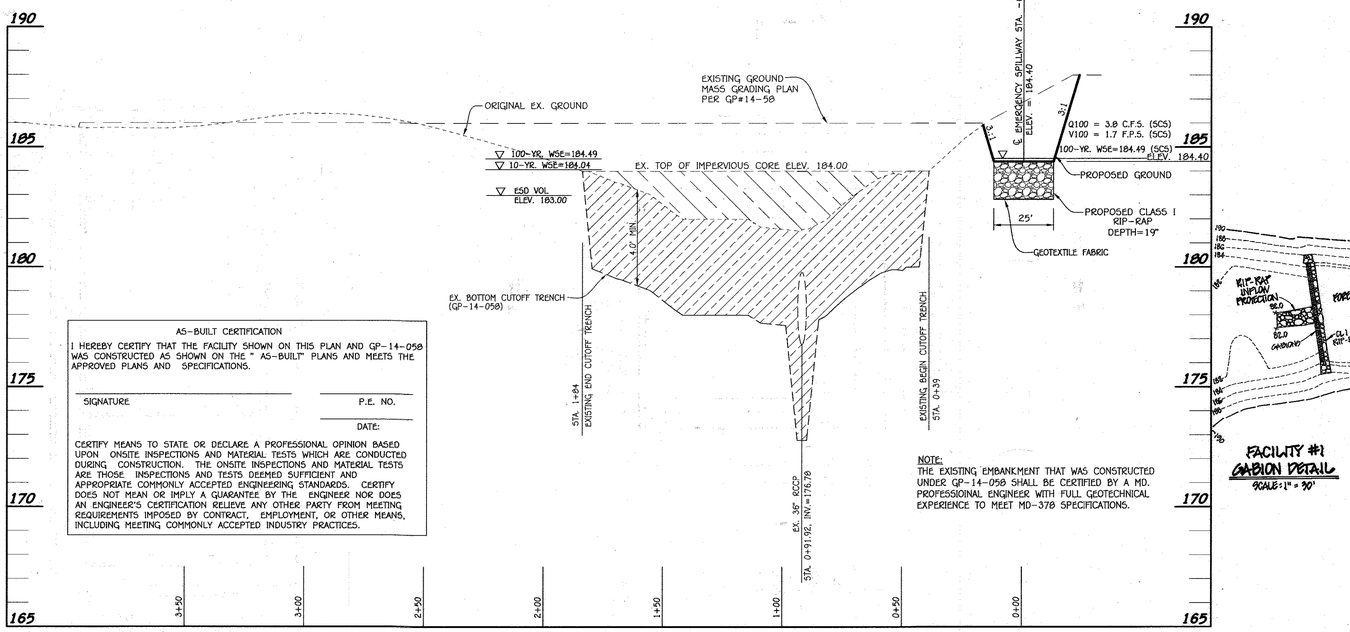
SDP-14-080

I:\2013\13133\Engineering\Dwgs\13133-3001 SDP 37 SWM PROFILES ADJUST 6 INCHES w smart plot.dwg 6/17/2015 10:26:50 AM\ 1:1



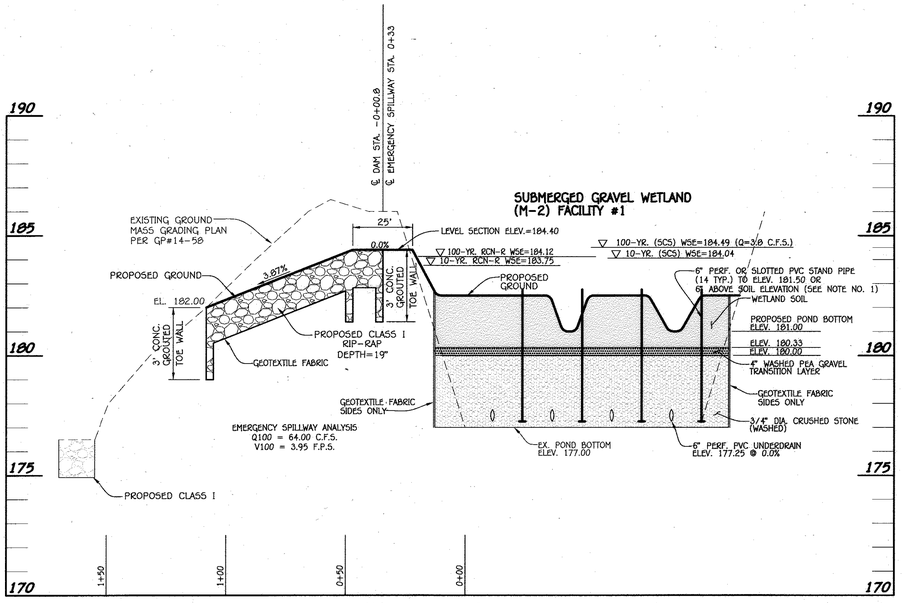
PROFILE THRU EXISTING CL DAM - SUBMERGED GRAVEL WETLAND (M-2) FACILITY #1

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



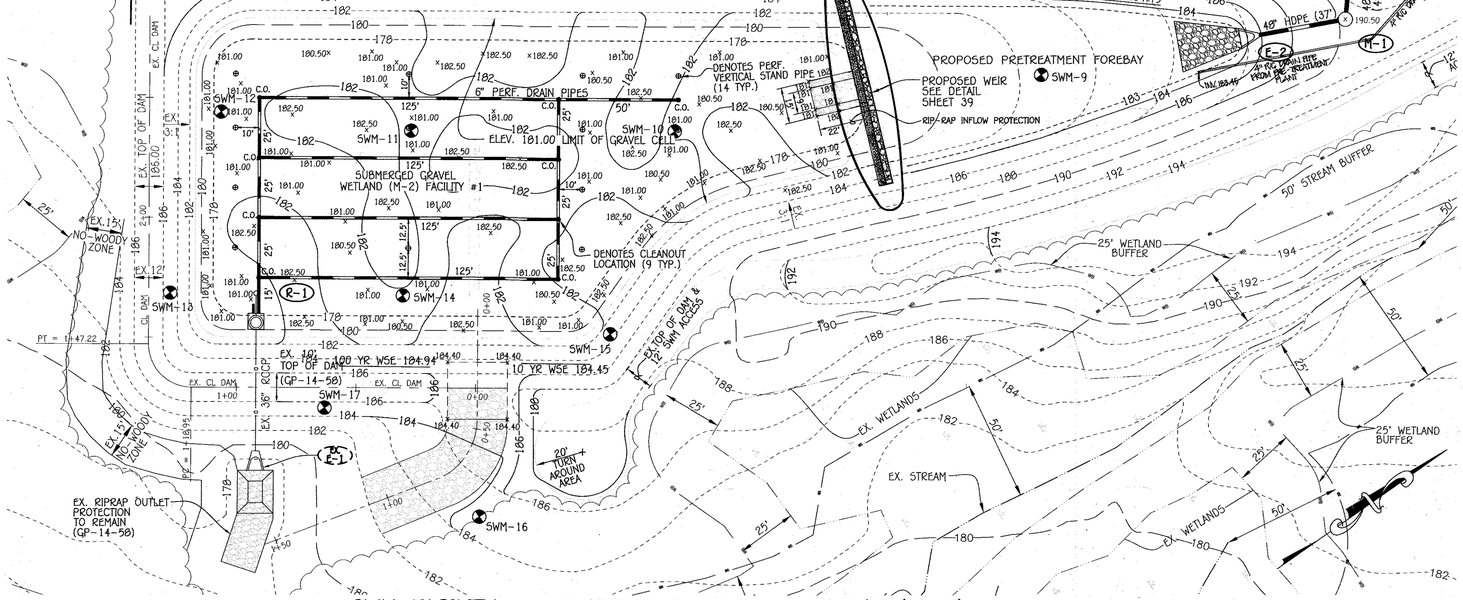
PROFILE ALONG EXISTING CL DAM - SUBMERGED GRAVEL WETLAND (M-2) FACILITY #1

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



PROFILE THRU EMERGENCY SPILLWAY

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



SWM FACILITY #1-SUBMERGED GRAVEL WETLAND (M-2)

SCALE: 1"=30'

(EXISTING SEDIMENT BASIN per GP-14-058 TO BE CONVERTED INTO S.G.W.)

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
ELLICOTT CITY, MARYLAND 21042
(410) 461 - 2855

OWNER
9001 WBR, LLC
1029 HARRISON DRIVE
LAUREL, MARYLAND
20707-3827
PH# 410-423-0460

DEVELOPER
WHISKEY SPEAK LLC
2330 WEST JOPPA ROAD
SUITE 190
LUTHERVILLE, MARYLAND
21093-4614
PH# 410-296-3800

ENGINEER'S CERTIFICATE

"I CERTIFY THAT THIS PLAN FOR SEDIMENT AND EROSION CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT."

SIGNATURE OF ENGINEER — DATE 6/16/15

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 DISTRICT."

SIGNATURE OF DEVELOPER — DATE 6/13/15

"PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 13204, EXPIRATION DATE: NOVEMBER 3, 2016."

CHARLES J. CROVO, SR., P.E. — DATE 6/16/15

THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

HOWARD SCD — DATE 6/16/15

DATE	DESCRIPTION
10/26/16	ADDED 4" DRAIN PIPE FROM PRE-TREATMENT PLANT
10/26/16	EXTEND GABION FOREBAY - FACILITY NO.1

REVISION BLOCK

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Director - Department of Planning and Zoning — Date 8-7-15

Chief, Division of Land Development — Date 8-6-15

Chief, Development Engineering Division — Date 10/31/16

STATE OF MARYLAND — CHARLES J. CROVO — No. 13204 — PROFESSIONAL ENGINEER

ADDRESS CHART	
BUILDING NO.	STREET ADDRESS
OFFICE/WAREHOUSE	9001 WHISKEY BOTTOM ROAD
GUARD HOUSE	9003 WHISKEY BOTTOM ROAD
FUTURE GARAGE	9005 WHISKEY BOTTOM ROAD
	LAUREL, MARYLAND 20723

PERMIT INFORMATION CHART

SUBDIVISION NAME	SECTION/AREA	LOT/PARCEL NO.
COASTAL SUNBELT PRODUCE	N/A	P. 375

PLAT# OR L/F	GRID#	ZONING	TAX MAP#	ELECT. DISTR.	CENSUS TRACT
22457-22459	4,5 10,11	TOD	50	SIXTH	6069.07

SWM PLAN AND PROFILES FOR FACILITY #1

COASTAL SUNBELT PRODUCE
WAREHOUSE DISTRIBUTION CENTER
PARCEL 'A'

ZONED TOD
GRID No.: 4,5,10,11
SIXTH ELECTION DISTRICT
SCALE: AS SHOWN

TAX MAP No.: 50
PARCEL No.: 375
HOWARD COUNTY, MARYLAND
DATE: APRIL 20, 2015

SHEET 38 OF 58

SDP-14-080

I:\2013\13033\Engineering\Dwgs\13033-2001 SDP 37-44 SWM PROFILES ADJUST 6 INCHES.dwg, Sheet 38, 6/16/2015 11:21:04 AM, 1:1

POND MD-378: N.R.C.S. - JANUARY 2000 CONSTRUCTION SPECIFICATIONS FOR SMALL EARTHEN DAMS

THESE SPECIFICATIONS ARE APPROPRIATE TO ALL PONDS WITHIN THE SCOPE OF THE STANDARD FOR PRACTICE MD-378. ALL REFERENCES TO ASTM AND AASHTO SPECIFICATIONS APPLY TO THE MOST RECENT VERSION.

SITE PREPARATION
AREAS DESIGNATED FOR BORROW AREAS, EMBANKMENT, AND STRUCTURAL WORKS SHALL BE CLEARED, GRUBBED AND STRIPPED OF TOPSOIL. ALL TREES, VEGETATION, ROOTS AND OTHER OBJECTIONABLE MATERIAL SHALL BE REMOVED. CHANNEL BANKS AND SHARP BREAKS SHALL BE SLOPED TO NO STEEPER THAN 1:1. ALL TREES SHALL BE CLEARED AND GRUBBED WITHIN 15 FEET OF THE TOE OF THE EMBANKMENT.
AREAS TO BE COVERED BY THE RESERVOIR WILL BE CLEARED OF ALL TREES, BRUSH, LOGS, FENCES, RUBBISH AND OTHER OBJECTIONABLE MATERIAL UNLESS OTHERWISE DESIGNATED ON THE PLANS. TREES, BRUSH, AND STUMPS SHALL BE CUT APPROXIMATELY LEVEL WITH THE GROUND SURFACE. FOR DRY STORMWATER MANAGEMENT PONDS, A MINIMUM OF A 25-FOOT RADIUS AROUND THE INLET STRUCTURE SHALL BE CLEARED.
ALL CLEARED AND GRUBBED MATERIAL SHALL BE DISPOSED OF OUTSIDE AND BELOW THE LIMITS OF THE DAM AND RESERVOIR AS DIRECTED BY THE OWNER OR HIS REPRESENTATIVE. WHEN SPECIFIED, A SUFFICIENT QUANTITY OF TOPSOIL WILL BE STOCKPILED IN A SUITABLE LOCATION FOR USE ON THE EMBANKMENT AND OTHER DESIGNATED AREAS.

EARTH FILL
MATERIAL - THE FILL MATERIAL SHALL BE TAKEN FROM APPROVED DESIGNATED BORROW AREAS. IT SHALL BE FREE OF ROOTS, STUMPS, WOOD, RUBBISH, STONES GREATER THAN 6", FROZEN OR OTHER OBJECTIONABLE MATERIALS. FILL MATERIAL FOR THE CENTER OF THE EMBANKMENT, AND CUT OFF TRENCH SHALL CONFORM TO UNIFIED SOIL CLASSIFICATION GC, SC, CH, OR CL AND MUST HAVE AT LEAST 30% PASSING THE #200 SIEVE. CONSIDERATION MAY BE GIVEN TO THE USE OF OTHER MATERIALS IN THE EMBANKMENT IF DESIGNED BY A GEOTECHNICAL ENGINEER. SUCH SPECIAL DESIGNS MUST HAVE CONSTRUCTION SUPERVISED BY A GEOTECHNICAL ENGINEER. MATERIALS USED IN THE OUTER SHELL OF THE EMBANKMENT MUST HAVE THE CAPABILITY TO SUPPORT VEGETATION OF THE QUALITY REQUIRED TO PREVENT EROSION OF THE EMBANKMENT.
PLACEMENT - AREAS ON WHICH FILL IS TO BE PLACED SHALL BE SCARIFIED PRIOR TO PLACEMENT OF FILL. FILL MATERIALS SHALL BE PLACED IN MAXIMUM 8 INCH THICK (BEFORE COMPACTION) LAYERS WHICH ARE TO BE CONTINUOUS OVER THE ENTIRE LENGTH OF THE FILL. THE MOST PERMEABLE BORROW MATERIAL SHALL BE PLACED IN THE DOWNSTREAM PORTIONS OF THE EMBANKMENT. THE PRINCIPAL SPILLWAY MUST BE INSTALLED CONCURRENTLY WITH FILL PLACEMENT AND NOT EXCAVATED INTO THE EMBANKMENT.
COMPACTION - THE MOVEMENT OF THE HAULING AND SPREADING EQUIPMENT OVER THE FILL SHALL BE CONTROLLED SO THAT THE ENTIRE SURFACE OF EACH LIFT SHALL BE TRAVERSED BY NOT LESS THAN ONE TREAD TRACK OF HEAVY EQUIPMENT OR COMPACTION SHALL BE ACHIEVED BY A MINIMUM OF FOUR COMPLETE PASSES OF A SHEEPSFOOT, RUBBER TIRED OR VIBRATORY ROLLER. FILL MATERIAL SHALL CONTAIN SUFFICIENT MOISTURE SUCH THAT THE REQUIRED DEGREE OF COMPACTION WILL BE OBTAINED WITH THE EQUIPMENT USED. THE FILL MATERIAL SHALL CONTAIN SUFFICIENT MOISTURE SO THAT IF FORMED INTO A BALL IT WILL NOT CRUMBLE, YET NOT BE SO WET THAT WATER CAN BE SQUEEZED OUT.
THE MINIMUM REQUIRED DENSITY SHALL NOT BE LESS THAN 95% OF MAXIMUM DRY DENSITY WITH A MOISTURE CONTENT WITHIN ±2% OF THE OPTIMUM. EACH LAYER OF FILL SHALL BE COMPACTED AS NECESSARY TO OBTAIN THAT DENSITY, AND IS TO BE CERTIFIED BY THE ENGINEER AT THE TIME OF CONSTRUCTION. ALL COMPACTION IS TO BE DETERMINED BY AASHTO METHOD T-99 (STANDARD PROCTOR).
CUT OFF TRENCH - THE CUTOFF TRENCH SHALL BE EXCAVATED INTO IMPERVIOUS MATERIAL ALONG OR PARALLEL TO THE CENTERLINE OF THE EMBANKMENT AS SHOWN ON THE PLANS. THE BOTTOM WIDTH OF THE TRENCH SHALL BE GOVERNED BY THE EQUIPMENT USED FOR EXCAVATION, WITH THE MINIMUM WIDTH BEING FOUR FEET. THE DEPTH SHALL BE AT LEAST FOUR FEET BELOW EXISTING GRADE OR AS SHOWN ON THE PLANS. THE SIDE SLOPES OF THE TRENCH SHALL BE 1 TO 1 OR FLATTER. THE BACKFILL SHALL BE COMPACTED WITH CONSTRUCTION EQUIPMENT, ROLLERS, OR HAND TAMPERS TO ASSURE MAXIMUM DENSITY AND MINIMUM PERMEABILITY.
EMBANKMENT CORE - THE CORE SHALL BE PARALLEL TO THE CENTERLINE OF THE EMBANKMENT AS SHOWN ON THE PLANS. THE TOP WIDTH OF THE CORE SHALL BE A MINIMUM OF FOUR FEET. THE HEIGHT SHALL EXTEND UP TO AT LEAST THE 10 YEAR WATER ELEVATION OR AS SHOWN ON THE PLANS. THE SIDE SLOPES SHALL BE 1 TO 1 OR FLATTER. THE CORE SHALL BE COMPACTED WITH CONSTRUCTION EQUIPMENT, ROLLERS, OR HAND TAMPERS TO ASSURE MAXIMUM DENSITY AND MINIMUM PERMEABILITY. IN ADDITION, THE CORE SHALL BE PLACED CONCURRENTLY WITH THE OUTER SHELL OF THE EMBANKMENT.

STRUCTURE BACKFILL
BACKFILL ADJACENT TO PIPES OR STRUCTURES SHALL BE OF THE TYPE AND QUALITY CONFORMING TO THAT SPECIFIED FOR THE ADJOINING FILL MATERIAL. THE FILL SHALL BE PLACED IN HORIZONTAL LAYERS NOT TO EXCEED FOUR INCHES IN THICKNESS AND COMPACTED BY HAND TAMPERS OR OTHER MANUALLY DIRECTED COMPACTION EQUIPMENT. THE MATERIAL NEEDS TO FILL COMPLETELY ALL SPACES UNDER AND ADJACENT TO THE PIPE. AT NO TIME DURING THE BACKFILLING OPERATION SHALL DRIVEN EQUIPMENT BE ALLOWED TO OPERATE CLOSER THAN FOUR FEET, MEASURED HORIZONTALLY, TO ANY PART OF A STRUCTURE. UNDER NO CIRCUMSTANCES SHALL EQUIPMENT BE DRIVEN OVER ANY PART OF A CONCRETE STRUCTURE OR PIPE, UNLESS THERE IS A COMPACTED FILL OF 24" OR GREATER OVER THE STRUCTURE OR PIPE.
STRUCTURE BACKFILL MAY BE FLOWABLE FILL MEETING THE REQUIREMENTS OF MARYLAND DEPARTMENT OF TRANSPORTATION, STATE HIGHWAY ADMINISTRATION STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS, SECTION 313 AS MODIFIED. THE MIXTURE SHALL HAVE A 100-200 PSI; 28 DAY UN-CONFINED COMPRESSIVE STRENGTH. THE FLOWABLE FILL SHALL HAVE A MINIMUM PH OF 4.0 AND A MINIMUM RESISTIVITY OF 2,000 OHM-CM. MATERIAL SHALL BE PLACED SUCH THAT A MINIMUM OF 6" (MEASURED PERPENDICULAR TO THE OUTSIDE OF THE PIPE) OF FLOWABLE FILL SHALL BE UNDER (BEDDING), OVER AND, ON THE SIDES OF THE PIPE. IT ONLY NEEDS TO EXTEND UP TO THE SPRING LINE FOR RIGID CONDUITS. AVERAGE SLUMP OF THE FILL SHALL BE 7" TO ASSURE FLOWABILITY OF THE MATERIAL. ADEQUATE MEASURES SHALL BE TAKEN (SAND BAGS, ETC.) TO PREVENT FLOATING THE PIPE. WHEN USING FLOWABLE FILL, ALL METAL PIPE SHALL BE BITUMINOUS COATED. ANY ADJOINING SOIL FILL SHALL BE PLACED IN HORIZONTAL LAYERS NOT TO EXCEED FOUR INCHES IN THICKNESS AND COMPACTED BY HAND TAMPERS OR OTHER MANUALLY DIRECTED COMPACTION EQUIPMENT. THE MATERIAL SHALL COMPLETELY FILL ALL VOIDS ADJACENT TO THE FLOWABLE FILL ZONE. AT NO TIME DURING THE BACKFILLING OPERATION SHALL DRIVEN EQUIPMENT BE ALLOWED TO OPERATE CLOSER THAN FOUR FEET, MEASURED HORIZONTALLY, TO ANY PART OF A STRUCTURE. UNDER NO CIRCUMSTANCES SHALL EQUIPMENT BE DRIVEN OVER ANY PART OF A STRUCTURE OR PIPE UNLESS THERE IS A COMPACTED FILL OF 24" OR GREATER OVER THE STRUCTURE OR PIPE. BACKFILL MATERIAL OUTSIDE THE STRUCTURAL BACKFILL (FLOWABLE FILL) ZONE SHALL BE OF THE TYPE AND QUALITY CONFORMING TO THAT SPECIFIED FOR THE CORE OF THE EMBANKMENT OR OTHER EMBANKMENT MATERIALS.

PIPE CONDUITS
ALL PIPES SHALL BE CIRCULAR IN CROSS SECTION.
REINFORCED CONCRETE PIPE - ALL OF THE FOLLOWING CRITERIA SHALL APPLY FOR REINFORCED CONCRETE PIPE:
1. MATERIALS - REINFORCED CONCRETE PIPE SHALL HAVE BELL AND SPIGOT JOINTS WITH RUBBER GASKETS AND SHALL EQUAL OR EXCEED ASTM C-361.
2. BEDDING - REINFORCED CONCRETE PIPE CONDUITS SHALL BE LAID IN A CONCRETE BEDDING / CRADLE FOR THEIR ENTIRE LENGTH. THIS BEDDING / CRADLE SHALL CONSIST OF HIGH SLUMP CONCRETE PLACED UNDER THE PIPE AND UP THE SIDES OF THE PIPE AT LEAST 50% OF ITS OUT-SIDE DIAMETER WITH A MINIMUM THICKNESS OF 6 INCHES. WHERE A CONCRETE CRADLE IS NOT NEEDED FOR STRUCTURAL REASONS, FLOWABLE FILL MAY BE USED AS DESCRIBED IN THE "STRUCTURE BACKFILL" SECTION OF THIS STANDARD. GRAVEL BEDDING IS NOT PERMITTED.
3. LAYING PIPE - BELL AND SPIGOT PIPE SHALL BE PLACED WITH THE BELL END UPSTREAM. JOINTS SHALL BE MADE IN ACCORDANCE WITH RECOMMENDATIONS OF THE MANUFACTURER OF THE MATERIAL. AFTER THE JOINTS ARE SEALED FOR THE ENTIRE LINE, THE BEDDING SHALL BE PLACED SO THAT ALL SPACES UNDER THE PIPE ARE FILLED. CARE SHALL BE EXERCISED TO PREVENT ANY DEVIATION FROM THE ORIGINAL LINE AND GRADE OF THE PIPE. THE FIRST JOINT MUST BE LOCATED WITHIN 4 FEET FROM THE RISER.
4. BACKFILLING SHALL CONFORM TO "STRUCTURE BACKFILL".
5. OTHER DETAILS (ANTI-SEEP COLLARS, VALVES, ETC.) SHALL BE AS SHOWN ON THE DRAWINGS.
PLASTIC PIPE - THE FOLLOWING CRITERIA SHALL APPLY FOR PLASTIC PIPE:
1. MATERIALS - PVC PIPE SHALL BE PVC-1120 OR PVC-1220 CONFORMING TO ASTM D-1785 OR ASTM D-2241. CORRUGATED HIGH DENSITY POLYETHYLENE (HDPE) PIPE, COUPLINGS AND FITTINGS SHALL CONFORM TO THE FOLLOWING: 4" - 10" INCH PIPE SHALL MEET THE REQUIREMENTS OF AASHTO M252 TYPE S, AND 12" THROUGH 24" INCH SHALL MEET THE REQUIREMENTS OF AASHTO M294 TYPE S.
2. JOINTS AND CONNECTIONS TO ANTI-SEEP COLLARS SHALL BE COMPLETELY WATERTIGHT.
3. BEDDING - THE PIPE SHALL BE FIRMLY AND UNIFORMLY BEDDED THROUGHOUT ITS ENTIRE LENGTH. WHERE ROCK OR SOFT, SPONGY OR OTHER UNSTABLE SOIL IS ENCOUNTERED, ALL SUCH MATERIAL SHALL BE REMOVED AND REPLACED WITH SUITABLE EARTH COMPACTED TO PROVIDE ADEQUATE SUPPORT.
4. BACKFILLING SHALL CONFORM TO "STRUCTURE BACKFILL".
5. OTHER DETAILS (ANTI-SEEP COLLARS, VALVES, ETC.) SHALL BE AS SHOWN ON THE DRAWINGS.
DRAINAGE DIAPHRAGMS - WHEN A DRAINAGE DIAPHRAGM IS USED, A REGISTERED PROFESSIONAL ENGINEER WILL SUPERVISE THE DESIGN AND CONSTRUCTION INSPECTION.

CONCRETE
CONCRETE SHALL MEET THE REQUIREMENTS OF MARYLAND DEPARTMENT OF TRANSPORTATION, STATE HIGHWAY ADMINISTRATION STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS, SECTION 414, MIX NO. 3.

ROCK RIPRAP
ROCK RIPRAP SHALL MEET THE REQUIREMENTS OF MARYLAND DEPARTMENT OF TRANSPORTATION, STATE HIGHWAY ADMINISTRATION STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS, SECTION 311.
GEOTEXTILE SHALL BE PLACED UNDER ALL RIPRAP AND SHALL MEET THE REQUIREMENTS OF MARYLAND DEPARTMENT OF TRANSPORTATION, STATE HIGHWAY ADMINISTRATION STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS, SECTION 921.09, CLASS C.

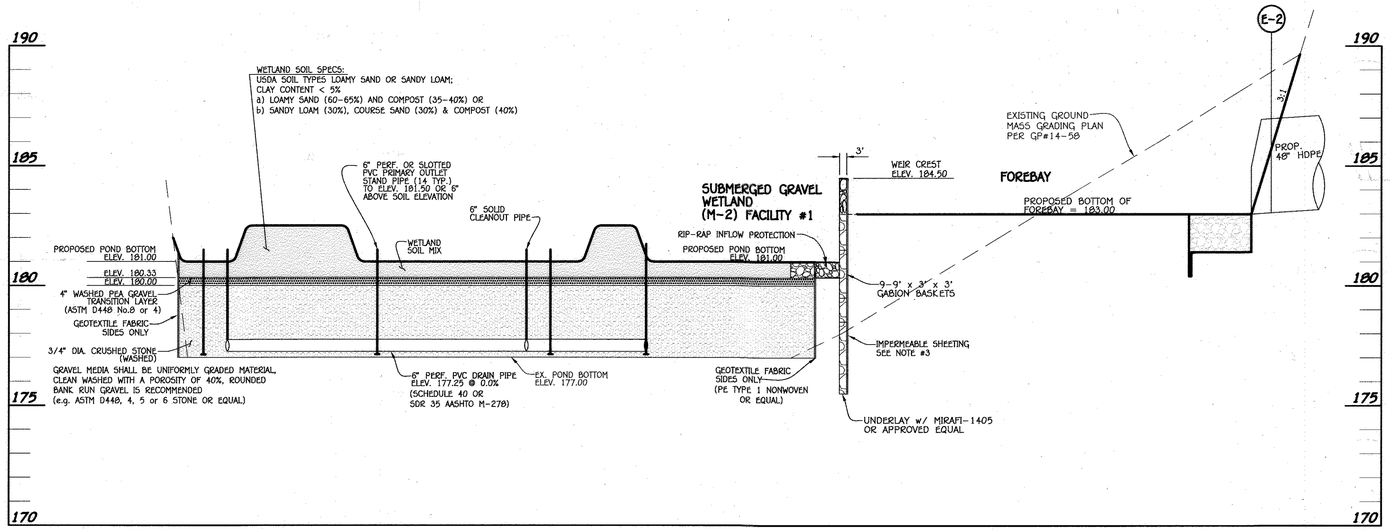
CARE OF WATER DURING CONSTRUCTION
ALL WORK ON PERMANENT STRUCTURES SHALL BE CARRIED OUT IN AREAS FREE FROM WATER. THE CONTRACTOR SHALL CONSTRUCT AND MAINTAIN ALL TEMPORARY DIKES, LEVEES, COFFERDAMS, DRAINAGE CHANNELS, AND STREAM DIVERSIONS NECESSARY TO PROTECT THE AREAS TO BE OCCUPIED BY THE PERMANENT WORKS. THE CONTRACTOR SHALL ALSO FURNISH, IN-STALL, OPERATE, AND MAINTAIN ALL NECESSARY PUMPING AND OTHER EQUIPMENT REQUIRED FOR REMOVAL OF WATER FROM VARIOUS PARTS OF THE WORK AND FOR MAINTAINING THE EXCAVATIONS, FOUNDATION, AND OTHER PARTS OF THE WORK FREE FROM WATER AS REQUIRED OR DIRECTED BY THE ENGINEER FOR CONSTRUCTING EACH PART OF THE WORK. AFTER HAVING SERVED THEIR PURPOSE, ALL TEMPORARY PROTECTIVE WORKS SHALL BE REMOVED OR LEVELED AND GRADED TO THE EXTENT REQUIRED TO PREVENT OBSTRUCTION IN ANY DEGREE WHATSOEVER OF THE FLOW OF WATER TO THE SPILLWAY OR OUTLET WORKS AND SO AS NOT TO INTERFERE IN ANY WAY WITH THE OPERATION OR MAINTENANCE OF THE STRUCTURE. STREAM DIVERSIONS SHALL BE MAINTAINED UNTIL THE FULL FLOW CAN BE PASSED THROUGH THE PERMANENT WORKS. THE REMOVAL OF WATER FROM THE REQUIRED EXCAVATION AND THE FOUNDATION SHALL BE ACCOMPLISHED IN A MANNER AND TO THE EXTENT THAT WILL MAINTAIN STABILITY OF THE EXCAVATED SLOPES AND BOTTOM REQUIRED EXCAVATIONS AND WILL ALLOW SATISFACTORY PERFORMANCE OF ALL CONSTRUCTION OPERATIONS. DURING THE PLACING AND COMPACTING OF MATERIAL IN REQUIRED EXCAVATIONS, THE WATER LEVEL AT THE LOCATIONS BEING REFILLED SHALL BE MAINTAINED BE-LOW THE BOTTOM OF THE EXCAVATION AT SUCH LOCATIONS WHICH MAY REQUIRE DRAINING THE WATER SUMPS FROM WHICH THE WATER SHALL BE PUMPED.

STABILIZATION
ALL BORROW AREAS SHALL BE GRADED TO PROVIDE PROPER DRAINAGE AND LEFT IN A SIGHTLY CONDITION. ALL EXPOSED SURFACES OF THE EMBANKMENT, SPILLWAY, SPOIL AND BORROW AREAS, AND BERMS SHALL BE STABILIZED BY SEEDING, LIMING, FERTILIZING AND MULCHING IN ACCORDANCE WITH THE NATURAL RESOURCES CONSERVATION SERVICE STANDARDS AND SPECIFICATIONS FOR CRITICAL AREA PLANTING (MD-342) OR AS SHOWN ON THE AC-COMPANYING DRAWINGS.

EROSION AND SEDIMENT CONTROL
CONSTRUCTION OPERATIONS WILL BE CARRIED OUT IN SUCH A MANNER THAT EROSION WILL BE CONTROLLED AND WATER AND AIR POLLUTION MINIMIZED. STATE AND LOCAL LAWS CONCERNING POLLUTION ABATEMENT WILL BE FOLLOWED. CONSTRUCTION PLANS SHALL DETAIL EROSION AND SEDIMENT CONTROL MEASURES.

OPERATION AND MAINTENANCE SCHEDULE FOR PRIVATELY OWNED AND MAINTAINED SURFACE STORMWATER FILTRATION SYSTEMS (F-1)

1. THE STORMWATER WETLAND FACILITY SHALL BE INSPECTED ANNUALLY AND AFTER MAJOR STORMS. INSPECTIONS SHALL BE PERFORMED DURING WET WEATHER TO DETERMINE IF THE FACILITY IS FUNCTIONING PROPERLY.
2. THE TOP AND SIDE SLOPES OF THE EMBANKMENT SHALL BE MOWED A MINIMUM OF ONCE PER YEAR, WHEN VEGETATION REACHES 18" IN HEIGHT OR AS NEEDED.
3. FILTERS THAT HAVE A GRASS COVER SHALL BE MOWED A MINIMUM OF THREE (3) TIMES PER GROWING SEASON TO MAINTAIN A MAXIMUM GRASS HEIGHT OF LESS THAN 12 INCHES.
4. DEBRIS AND LITTER SHALL BE REMOVED DURING REGULAR MOWING OPERATIONS AND AS NEEDED.
5. VISIBLE SIGNS OF EROSION IN THE FACILITY SHALL BE REPAIRED AS SOON AS IT IS NOTICED.
6. REMOVE SILT WHEN IT EXCEEDS FOUR (4) INCHES DEEP IN THE FOREBAY.
7. FILTER MATERIAL MUST BE REPLACED WHEN WATER REMAINS ON THE SURFACE OF THE FILTER BED FOR MORE THAN 24 HOURS FOLLOWING A 1 OR 2 YEAR STORM EVENT OR MORE THAN 48 HOURS AFTER A 10 YEAR STORM EVENT.
8. A LOGBOOK SHALL BE MAINTAINED TO DETERMINE THE RATE AT WHICH THE FACILITY DRAINS.
9. THE MAINTENANCE LOGBOOK SHALL BE AVAILABLE TO HOWARD COUNTY FOR INSPECTION TO INSURE COMPLIANCE WITH OPERATION AND MAINTENANCE CRITERIA.
10. ONCE THE PERFORMANCE CHARACTERISTICS OF THE INFILTRATION SYSTEM HAVE BEEN VERIFIED, THE MONITORING SCHEDULE CAN BE REDUCED TO AN ANNUAL BASIS UNLESS THE PERFORMANCE DATA INDICATES THAT A MORE FREQUENT SCHEDULE IS REQUIRED.



FOREBAY PROFILE - SUBMERGED GRAVEL WETLAND (M-2)

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

GENERAL STORMWATER MANAGEMENT NOTES

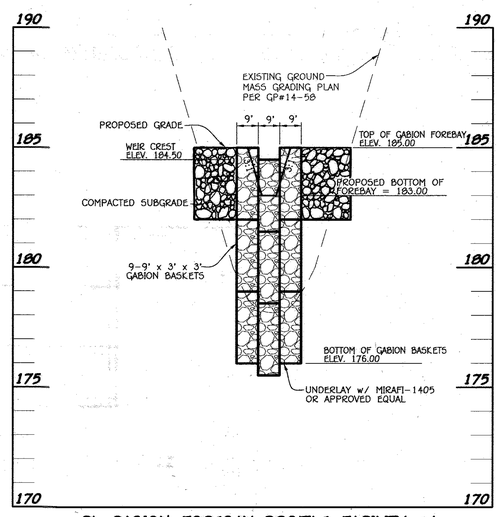
1. STORMWATER MANAGEMENT HAS BEEN PROVIDED WITH ONE (1) SUBMERGED GRAVEL WETLAND FACILITY #1 (MDE TYPE M-2), AND TWO (2) SURFACE SAND FILTER FACILITY #2 AND #3 (MDE TYPE F-1). PLEASE REFER TO THE SWM REPORT PREPARED BY FISHER, COLLINS, & CARTER, INC. DATED FEBRUARY 2015.
2. ALL CONSTRUCTION SHALL MEET THE LATEST EDITION OF THE HOWARD COUNTY STANDARDS AND SPECIFICATIONS, SMALL EARTHEN DAM SPECIFICATION MD-378, AND THE MARYLAND DEPARTMENT OF THE ENVIRONMENT'S CURRENT STORMWATER DESIGN MANUAL, OR AS SHOWN ON THESE PLANS. THE CONTRACTOR SHALL CONSULT THE ENGINEER SHOULD THERE BE ANY DISCREPANCIES. SEE BIORETENTION FACILITY NOTES AND SPECIFICATIONS THIS SHEET.
3. THE UTILITY LOCATIONS ARE APPROXIMATE. THE CONTRACTOR SHALL TEST PIT ALL KNOWN EXISTING UTILITIES TO VERIFY, SIZE, SHAPE, LOCATION, AND TYPE PRIOR TO PERFORMING ANY CONSTRUCTION. ANY UTILITY DAMAGED DUE TO CONSTRUCTION MUST BE REPAIRED IMMEDIATELY AT THE CONTRACTORS EXPENSE.
4. SHOULD THE CONTRACTOR DISCOVER DISCREPANCIES BETWEEN THE PLANS AND FIELD CONDITIONS, THE ENGINEER IS TO BE NOTIFIED IMMEDIATELY TO RESOLVE THE SITUATION. IF THE CONTRACTOR MAKES FIELD CORRECTIONS OR ADJUSTMENTS WITHOUT NOTIFYING THE ENGINEER OR OWNER, THE CONTRACTOR THEN ASSUMES ALL RESPONSIBILITY FOR THOSE CHANGES.
5. CONTRACTOR SHALL NOTIFY MISS UTILITY 1-800-257-7777 AND THE HOWARD COUNTY DEPARTMENT OF INSPECTION LICENSES & PERMITS THREE (3) WORKING DAYS BEFORE BEGINNING CONSTRUCTION.
6. FISHER, COLLINS & CARTER, INC. IS NOT RESPONSIBLE FOR THE CONTRACTOR'S UTILIZATION OF MEN, MATERIALS, EQUIPMENT, OR SAFETY MEASURES IN THE PERFORMANCE OF ANY WORK FOR THIS PROJECT. THE CONTRACTOR ASSUMES ALL RESPONSIBILITY FOR PERFORMING THE WORK CORRECTLY AND IN CONFORMANCE WITH CODE/SPECIFICATION REQUIREMENTS.
7. THE BMPs MAY BE GRADED, HOWEVER, THE PLANTING SOIL SHALL NOT BE INSTALLED IN THE BMPs UNTIL ALL UPSTREAM AREAS HAVE BEEN STABILIZED (i.e., THICK GRASS COVER, OR PAVED).
8. ALL STORMWATER MANAGEMENT MICRO-BIORETENTION BMPs FOR THIS PROJECT WILL BE PRIVATELY OWNED AND MAINTAINED.

GABION/FOREBAY WEIR OUTFALL NOTES

1. GABIONS SHALL BE MANUFACTURED BY MACCAFERRI GABIONS INC. OR APPROVED EQUAL. THE INSTALLATION SHALL FOLLOW THE MANUFACTURER'S SPECIFICATIONS AND INSTALLATION GUIDELINES.
2. THE GABION BASKETS SHALL BE PVC COATED AND FILLED WITH CLEAN 4" - 7" STONE. GABION STONE SHALL BE CAREFULLY PLACED AS TO CREATE A TIGHT INTERLOCKING STONE WALL WITH MINIMAL VOIDS.
3. ONE SHEET OF 8 MIL OR GREATER VINYL/PLASTIC SHEETING OR MIRAFI MCF-1212 SHALL BE PLACED ON THE BURIED UPSTREAM (FOREBAY SIDE) FACE OF THE GABION BASKETS NEXT TO THE FILTER FABRIC. USE 2 FT OVERLAP WHERE APPLICABLE.
4. GEOTEXTILE FABRIC (MIRAFI 600X OR APPROVED EQUAL) SHALL BE PLACED AGAINST ALL BURIED GABIONS (INCLUDING THE BURIED TOP OF GABIONS) INCLUDING THE IMPERMEABLE LAYER ON THE UPSTREAM BURIED FACE.
5. GABIONS SHALL BE CAREFULLY PLACED WITH NO DAMAGED WIRE. EARTH FOUNDATION SHALL BE FIRM. FILL SOIL AROUND GABIONS SHALL BE WELL-COMPACTED (95%).
6. GABIONS SHALL BE FASTENED TOGETHER WITH LACING OR RINGS PER MANUFACTURER'S RECOMMENDATIONS/SPECIFICATIONS. RINGS SHALL BE PER ASTM A975-97 SECTION 6.3. SPACING SHALL NOT EXCEED 6". SEE MACCAFERRI'S GABION INSTALLATION GUIDE.
7. MINIMUM GABION EMBEDDMENT INTO SIDE SLOPE IS A 2'-0" BURY.
8. ADDITIONAL GABIONS MAY BE NEEDED TO MEET THE MINIMUM EMBEDMENT INTO THE SIDE SLOPES. GABIONS CAN BE "NESTED".

OPERATION AND MAINTENANCE SCHEDULE FOR PRIVATELY OWNER AND MAINTAINED SUBMERGED GRAVEL WETLAND (M-2)

1. DURING THE FIRST YEAR OF OPERATION, THE OWNER SHALL INSPECT THE FACILITY AFTER EVERY HEAVY STORM AND REPLACE VEGETATION AS NEEDED.
2. THE OWNER SHALL REMOVE SEDIMENT ACCUMULATED IN THE PRETREATMENT AREAS AS NECESSARY.
3. SIGNS OF UNEVEN FLOW WITHIN THE WETLAND MAY MEAN THAT THE GRAVEL OR UNDERDRAIN IS CLOGGED. THE GRAVEL OR UNDERDRAIN SHALL BE REMOVED, CLEANED, AND REPLACED, AS NEEDED.
4. THE OWNER SHALL ENSURE A DENSE STAND OF WETLAND VEGETATION IS MAINTAINED THROUGH THE LIFE OF THE FACILITY AND REPLACE VEGETATION AS NEEDED.
5. THE OWNER SHALL ENSURE THE INLETS AND OUTLETS TO EACH GRAVEL WETLAND CELL ARE FREE FROM DEBRIS
6. THE OWNER SHALL REPAIR EROSION AT INFLOW POINTS AND ENSURE FLOW SPLITTERS AREA FUNCTIONAL TO PREVENT STORM WATER FROM BYPASSING THE FACILITY.

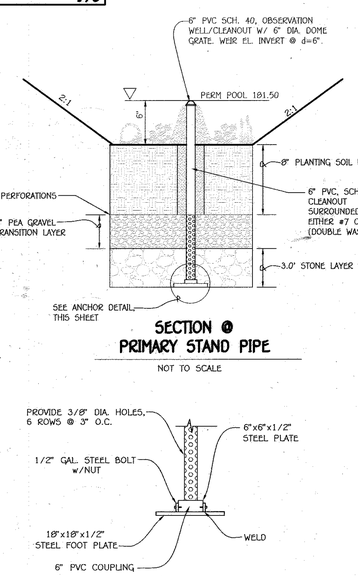


CL GABION FOREBAY PROFILE FACILITY #1

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

STANDARD SCS OPERATION, MAINTENANCE AND INSPECTION NOTE

INSPECTION OF THE POND(S) SHOWN HEREON SHALL BE PERFORMED AT LEAST ANNUALLY, IN ACCORDANCE WITH THE CHECKLIST AND REQUIREMENTS CONTAINED WITHIN USDA, SCS "STANDARD AND SPECIFICATIONS FOR PONDS" (MD-378). THE POND OWNER(S) AND ANY HEIRS, SUCCESSORS, OR ASSIGNS SHALL BE RESPONSIBLE FOR THE SAFETY OF THE POND AND THE CONTINUED OPERATION, SURVEILLANCE, INSPECTION, AND MAINTENANCE THEREOF. THE POND OWNER(S) SHALL PROMPTLY NOTIFY THE SOIL CONSERVATION DISTRICT OF ANY UNUSUAL OBSERVATIONS THAT MAY BE INDICATIONS OF DISTRESS SUCH AS EXCESSIVE SEEPAGE, TURBID SEEPAGE, SLIDING OR SLUMPING.



SECTION @ PRIMARY STAND PIPE

NOT TO SCALE

ANCHOR DETAIL

NO SCALE

AS-BUILT CERTIFICATION

I HEREBY CERTIFY THAT THE FACILITY SHOWN ON THIS PLAN WAS CONSTRUCTED AS SHOWN ON THE " AS-BUILT" PLANS AND MEETS THE APPROVED PLANS AND SPECIFICATIONS.

SIGNATURE _____ P.E. NO. _____

DATE: _____

CERTIFY MEANS TO STATE OR DECLARE A PROFESSIONAL OPINION BASED UPON ONSITE INSPECTIONS AND MATERIAL TESTS WHICH ARE CONDUCTED DURING CONSTRUCTION. THE ONSITE INSPECTIONS AND MATERIAL TESTS ARE THOSE INSPECTIONS AND TESTS DEEMED SUFFICIENT AND APPROPRIATE COMMONLY ACCEPTED ENGINEERING STANDARDS. CERTIFY DOES NOT MEAN OR IMPLY A GUARANTEE BY THE ENGINEER NOR DOES AN ENGINEER'S CERTIFICATION RELIEVE ANY OTHER PARTY FROM MEETING REQUIREMENTS IMPOSED BY CONTRACT, EMPLOYMENT, OR OTHER MEANS, INCLUDING MEETING COMMONLY ACCEPTED INDUSTRY PRACTICES.

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
ELLICOTT CITY, MARYLAND 21042
(410) 461 - 2855

OWNER
9001 WBR, LLC
1029 HARRISON DRIVE
LAUREL, MARYLAND
20707-3827
PH# 410-423-0460

DEVELOPER
WHISKEY SPEAK, LLC
2330 WEST JOPPA ROAD
SUITE 190
LUTHERVILLE, MARYLAND
21093-4614
PH# 410-296-3800

ENGINEER'S CERTIFICATE

"I CERTIFY THAT THIS PLAN FOR SEDIMENT AND EROSION CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT."

SIGNATURE OF ENGINEER _____ 6/16/15 DATE

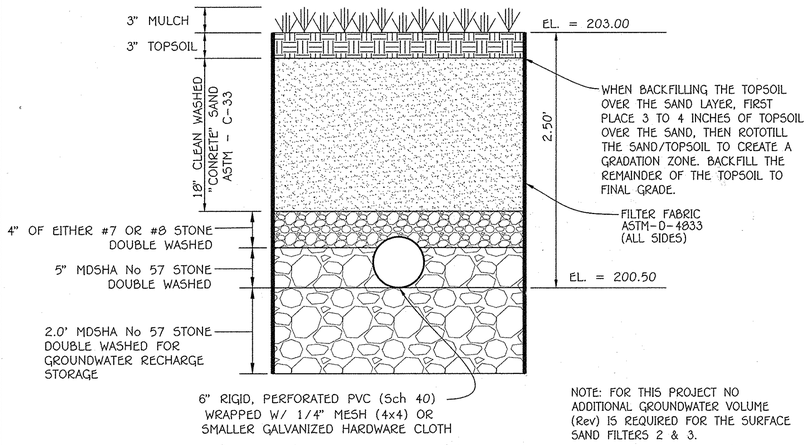
DEVELOPER'S CERTIFICATE

"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 DISTRICT."

SIGNATURE OF DEVELOPER _____ 6/17/15 DATE

"PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 13204, EXPIRATION DATE: NOVEMBER 3, 2016."

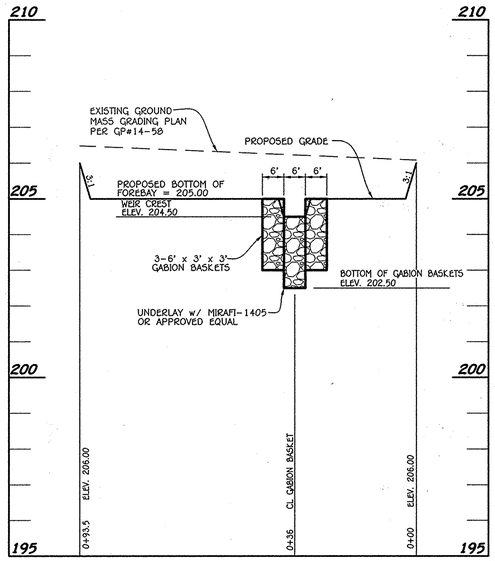
CHARLES J. CROVO, SR., P.E. _____ 6



NOTE: FOR THIS PROJECT NO ADDITIONAL GROUNDWATER VOLUME (Rev) IS REQUIRED FOR THE SURFACE SAND FILTERS 2 & 3.

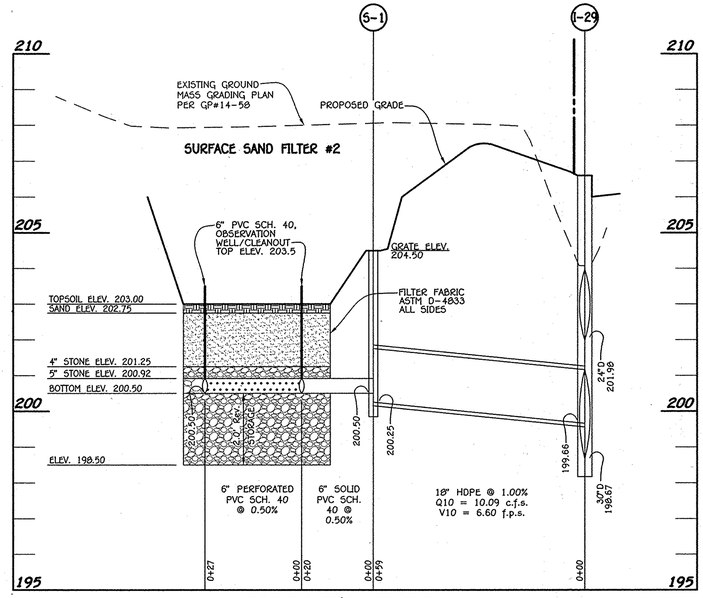
TYPICAL SECTION – SURFACE SAND FILTER No's. 2 & 3 (F-1)

NO SCALE



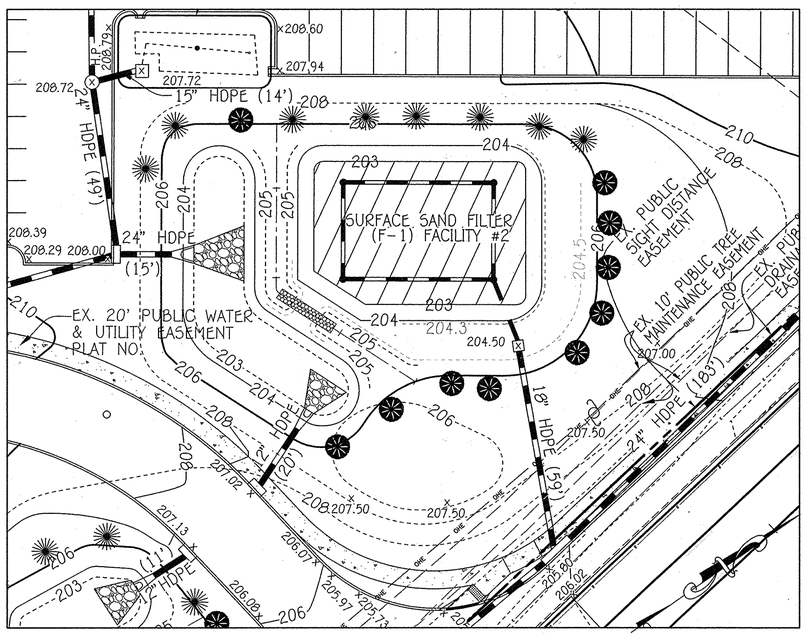
CL GABION FOREBAY PROFILE FACILITY #2

SCALE: HORIZ. : 1" = 20'
VERT. : 1" = 2'



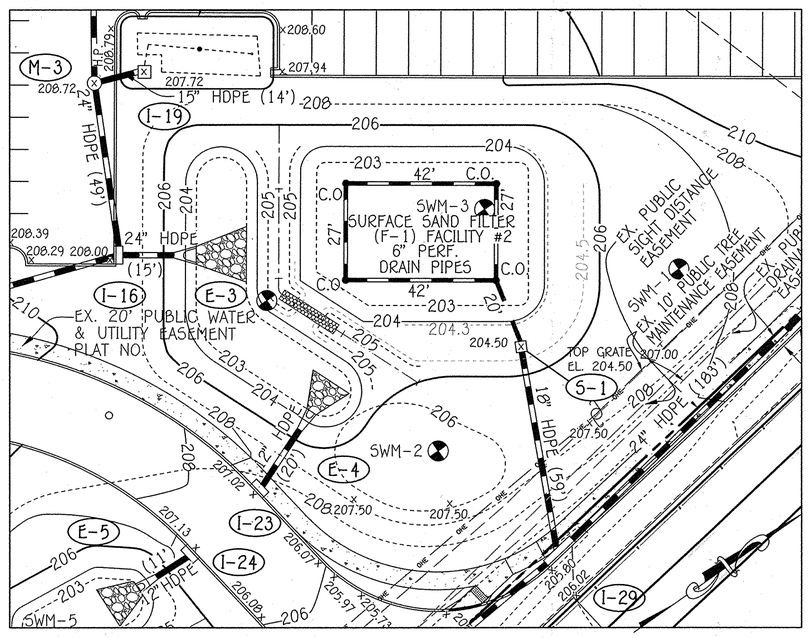
PROFILE THRU FACILITY #2

SCALE: HORIZ. : 1" = 20'
VERT. : 1" = 2'



SURFACE SAND FILTER (F-1) FACILITY #2 – LANDSCAPE PLAN

SCALE: 1"=20'



SURFACE SAND FILTER (F-1) FACILITY #2 – PLAN

SCALE: 1"=20'

SCHEDULE D STORMWATER MANAGEMENT AREA LANDSCAPING	
LINEAR FEET OF PERIMETER	D-1 : 380'
NUMBER OF TREES REQUIRED & PROVIDED: SHADE TREES EVERGREEN TREES	 8 10
CREDIT FOR EXISTING VEGETATION (NO, YES AND %)	NO
CREDIT FOR OTHER LANDSCAPING (NO, YES AND %)	NO

SCHEDULE 'D' PLANT LIST

SYMBOL	QTY.	BOTANICAL AND COMMON NAME	SIZE
	10	JUNIPERUS CHINENSIS 'PFITZERIANA COMPACTA'/COMPACT PFITZER JUNIPER	2 1/2-3" CAL.
	8	QUERCUS RUBRA RED OAK	2 1/2-3" CAL.

"THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL". FINANCIAL SURETY FOR THE REQUIRED 8 SHADE & 10 EVERGREEN TREES HAS BEEN POSTED AS PART OF THE DEVELOPER'S AGREEMENT IN THE AMOUNT OF $3,400.00.

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
ELLICOTT CITY, MARYLAND 21042
(410) 461 - 2855

OWNER
9001 WBR, LLC
1029 HARRISON DRIVE
LAUREL, MARYLAND
20707-3827
PH# 410-423-0460

DEVELOPER
WHISKEY SPEAK, LLC
2330 WEST JOPPA ROAD
SUITE 190
LUTHERVILLE, MARYLAND
21093-4614
PH# 410-296-3800

"PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 13204, EXPIRATION DATE: NOVEMBER 30, 2016."

CHARLES J. CROVO, SR., P.E. — 7/15/15 DATE

DATE	DESCRIPTION
	REVISION BLOCK

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Director - Department of Planning and Zoning — 8-7-15 Date

Chief, Division of Land Development — 8.06.15 Date

Chief, Development Engineering Division — 8/6/15 Date

STATE OF MARYLAND — CHARLES J. CROVO — No. 13204 — PROFESSIONAL ENGINEER

ADDRESS CHART	
BUILDING NO.	STREET ADDRESS
OFFICE/WAREHOUSE	9001 WHISKEY BOTTOM ROAD
GUARD HOUSE	9003 WHISKEY BOTTOM ROAD
FUTURE GARAGE	9005 WHISKEY BOTTOM ROAD
	LAUREL, MARYLAND 20723

PERMIT INFORMATION CHART

SUBDIVISION NAME		SECTION/AREA		LOT/PARCEL NO.
COASTAL SUNBELT PRODUCE		N/A		P. 375
PLAT# OR L/F	GRID#	ZONING	TAX MAP#	ELECT. DISTR.	CENSUS TRACT
22437-22439	4,5 10,11	TOD	50	SIXTH	6069.07

SWM PLANS AND DETAILS FOR FACILITY #2

COASTAL SUNBELT PRODUCE
WAREHOUSE DISTRIBUTION CENTER PARCEL 'A'

ZONED TOD — TAX MAP No.: 50
GRID No.: 4,5,10,11 — PARCEL No.: 375
SIXTH ELECTION DISTRICT — HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN — DATE: JULY 6, 2015

SHEET 40 OF 58

SDP-14-080

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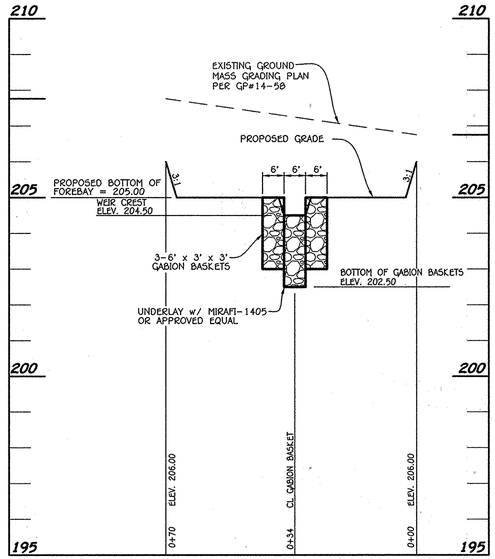
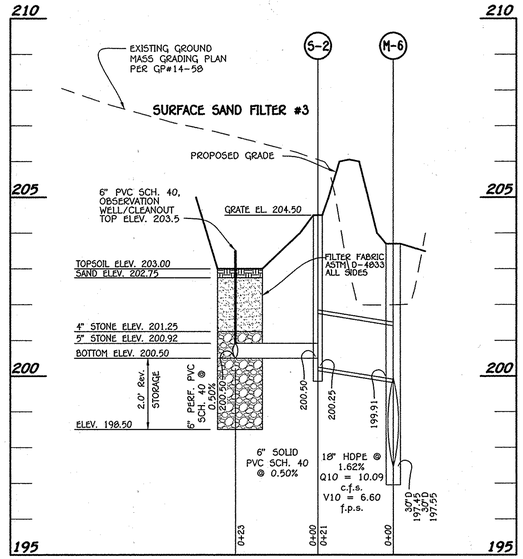


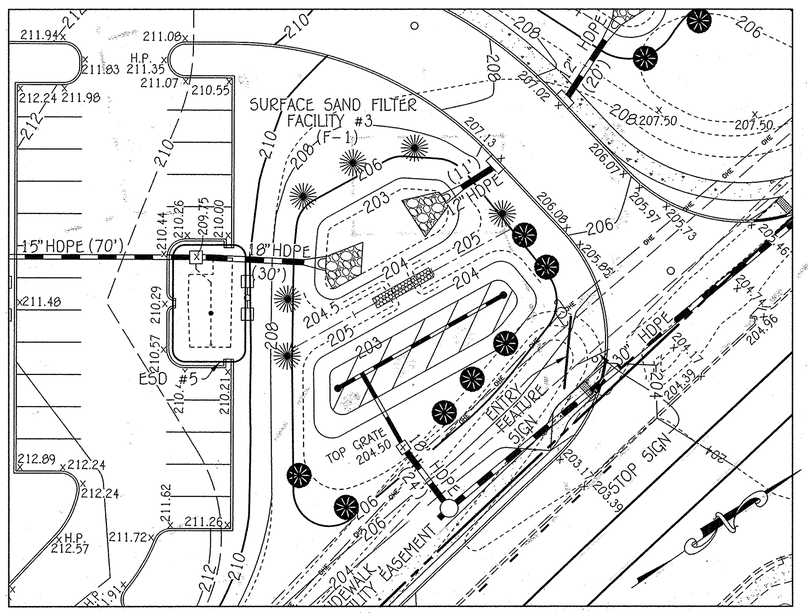
CL GABION FOREBAY PROFILE FACILITY #3

SCALE: HORIZ. : 1" = 20'
VERT. : 1" = 2'



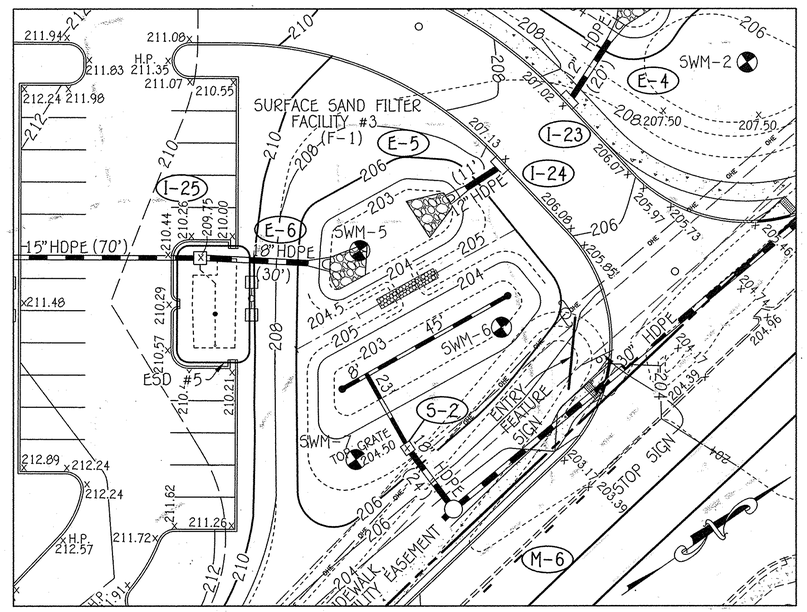
PROFILE THRU FACILITY #3

SCALE: HORIZ. : 1" = 20'
VERT. : 1" = 2'



SURFACE SAND FILTER (F-1) FACILITY #3-LANDSCAPE PLAN

SCALE: 1"=20'



SURFACE SAND FILTER (F-1) FACILITY #3-PLAN

SCALE: 1"=20'

SCHEDULE D STORMWATER MANAGEMENT AREA LANDSCAPING

LINEAR FEET OF PERIMETER	D-1 : 272'
NUMBER OF TREES REQUIRED & PROVIDED: SHADE TREES EVERGREEN TREES	6 7
CREDIT FOR EXISTING VEGETATION (NO, YES AND %)	NO
CREDIT FOR OTHER LANDSCAPING (NO, YES AND %)	NO

SCHEDULE 'D' PLANT LIST

SYMBOL	QTY.	BOTANICAL AND COMMON NAME	SIZE
	7	JUNIPERUS CHINENSIS 'PFITZERIANA COMPACTA'/COMPACT PFITZER JUNIPER	2 1/2-3" CAL.
	6	QUERCUS RUBRA RED OAK	2 1/2-3" CAL.

"THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL". FINANCIAL SURETY FOR THE REQUIRED 6 SHADE & 7 EVERGREEN TREES HAS BEEN POSTED AS PART OF THE DEVELOPER'S AGREEMENT IN THE AMOUNT OF $2,850.00.

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
ELLICOTT CITY, MARYLAND 21042
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OWNER
9001 WBR, LLC
1029 HARRISON DRIVE
LAUREL, MARYLAND
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PH# 410-423-0460

DEVELOPER
WHISKEY SPEAK, LLC
2330 WEST JOPPA ROAD
SUITE 190
LUTHERVILLE, MARYLAND
21093-4614
PH# 410-296-3800

"PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 13204, EXPIRATION DATE: NOVEMBER 9, 2016."

CHARLES J. CROVO, SR., P.E. — 7/15/15 DATE

DATE	DESCRIPTION
	REVISION BLOCK

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Director - Department of Planning and Zoning — 8-7-15 Date

Chief, Division of Land Development — 8-26-15 Date

Chief, Development Engineering Division — 8/6/15 Date

STATE OF MARYLAND — CHARLES J. CROVO — No. 13204 — PROFESSIONAL ENGINEER

ADDRESS CHART	
BUILDING NO.	STREET ADDRESS
OFFICE/WAREHOUSE	9001 WHISKEY BOTTOM ROAD
GUARD HOUSE	9003 WHISKEY BOTTOM ROAD
FUTURE GARAGE	9005 WHISKEY BOTTOM ROAD
	LAUREL, MARYLAND 20723

PERMIT INFORMATION CHART

SUBDIVISION NAME			SECTION/AREA		LOT/PARCEL NO.
COASTAL SUNBELT PRODUCE			N/A		P. 375
PLAT# OR L/F	GRID#	ZONING	TAX MAP#	ELECT. DIST.	CENSUS TRACT
23437-23439	4,5 10,11	TOD	50	SIXTH	6069.07

SWM PLANS AND DETAILS FOR FACILITY #3

COASTAL SUNBELT PRODUCE
WAREHOUSE DISTRIBUTION CENTER
PARCEL 'A'

ZONED TOD — TAX MAP No.: 50
GRID No.: 4,5,10,11 — PARCEL No.: 375
SIXTH ELECTION DISTRICT — HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN — DATE: JULY 6, 2015

SHEET 41 OF 58

SDP-14-080

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PLANT MATERIAL- BIO-RETENTION No. 4		
QUANTITY	NAME	MAXIMUM SPACING (FT.)
26	MIXED PERENNIALS	18"-24" o.c.
20	SHRUBS	36"-40" o.c.

PLANT MATERIAL- BIO-RETENTION No. 5		
QUANTITY	NAME	MAXIMUM SPACING (FT.)
26	MIXED PERENNIALS	18"-24" o.c.
20	SHRUBS	36"-40" o.c.

PLANT MATERIAL- BIO-RETENTION No. 6		
QUANTITY	NAME	MAXIMUM SPACING (FT.)
12	MIXED PERENNIALS	18"-24" o.c.
9	SHRUBS	36"-40" o.c.

PLANT MATERIAL- BIO-RETENTION No. 7		
QUANTITY	NAME	MAXIMUM SPACING (FT.)
11	MIXED PERENNIALS	18"-24" o.c.
8	SHRUBS	36"-40" o.c.

PLANT MATERIAL- BIO-RETENTION No. 8		
QUANTITY	NAME	MAXIMUM SPACING (FT.)
34	MIXED PERENNIALS	18"-24" o.c.
25	SHRUBS	36"-40" o.c.

PLANT MATERIAL- BIO-RETENTION No. 9		
QUANTITY	NAME	MAXIMUM SPACING (FT.)
25	MIXED PERENNIALS	18"-24" o.c.
19	SHRUBS	36"-40" o.c.

PLANT MATERIAL- BIO-RETENTION No. 10		
QUANTITY	NAME	MAXIMUM SPACING (FT.)
21	MIXED PERENNIALS	18"-24" o.c.
16	SHRUBS	36"-40" o.c.

PLANT MATERIAL- BIO-RETENTION No. 11		
QUANTITY	NAME	MAXIMUM SPACING (FT.)
18	MIXED PERENNIALS	18"-24" o.c.
13	SHRUBS	36"-40" o.c.

MIXED PERENNIALS

○ HEM - Hemerocallis Mix
PVS - Panicum virgatum 'Shenandoah'
IVH - Ilex Virginica 'Little Henry'
IGS - Ilex Glabra 'Shamrock'

Variety for all season bloom
Red Switch Grass
Virginia Sweetspire
Shamrock Inkberry

ANY OF THE PLANTS LISTED MAY BE USED

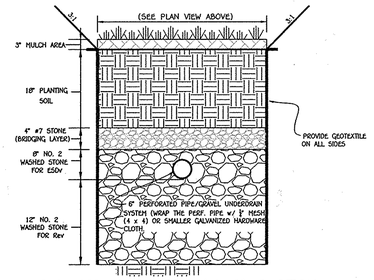
SHRUBS

BAYBERRY
SWEETBUSH
ARROWWOOD
WINTERBERRY
INKBERRY
WITCH HAZEL
BUTTONBRUSH BUCKEYE
BOTTLEBRUSH BUCKEYE

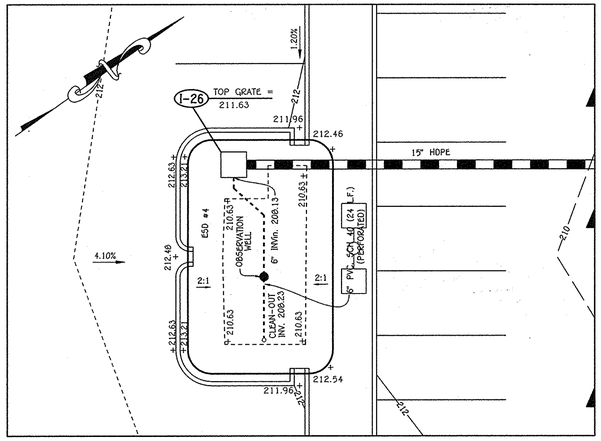
ANY OF THE SHRUBS LISTED MAY BE USED

NOTES:
Plant Material Must Cover At Least 50% Of The Surface Area Of The Bio-retention

See Plant Material Charts For Quantities And Spacing

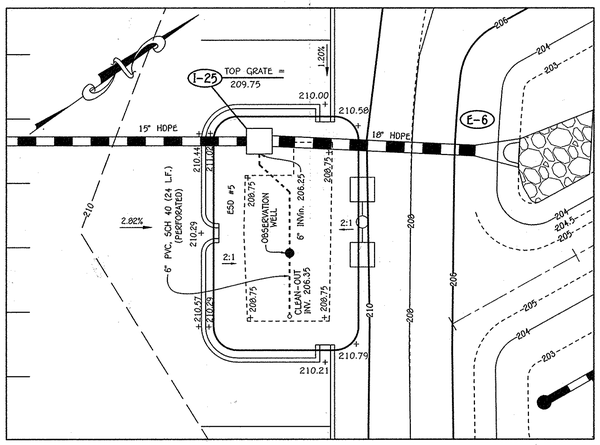


TYP. BIO-RETENTION (M-6) SECTION
NO SCALE



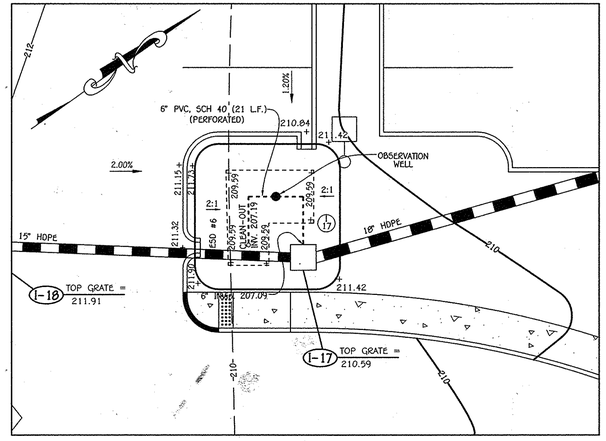
MICRO-BIORETENTION (M-6) FACILITY #4

SCALE: 1"=10'



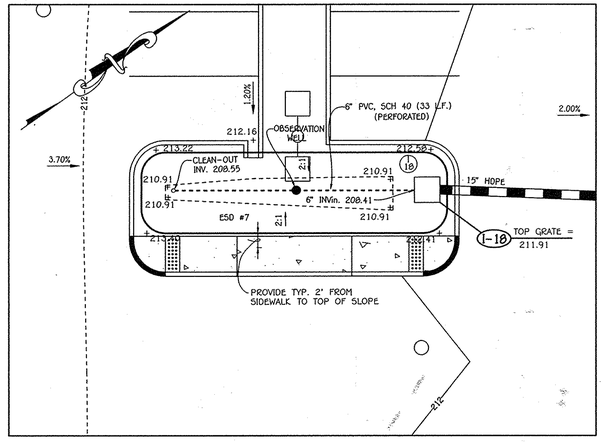
MICRO-BIORETENTION (M-6) FACILITY #5

SCALE: 1"=10'



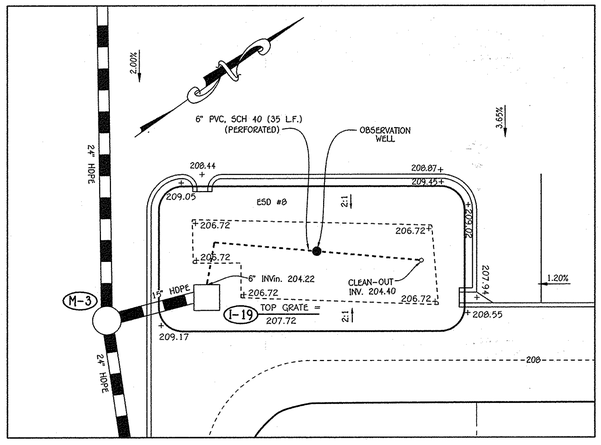
MICRO-BIORETENTION (M-6) FACILITY #6

SCALE: 1"=10'



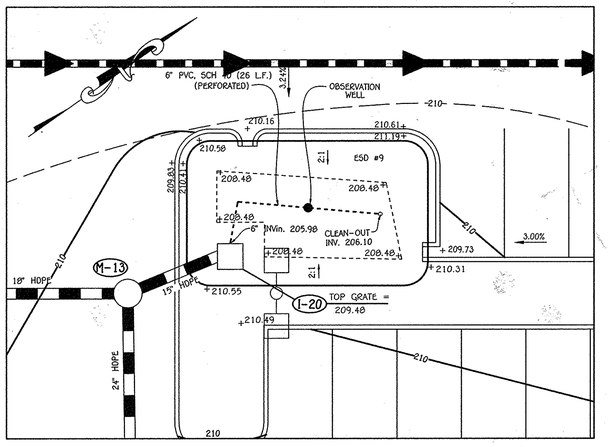
MICRO-BIORETENTION (M-6) FACILITY #7

SCALE: 1"=10'



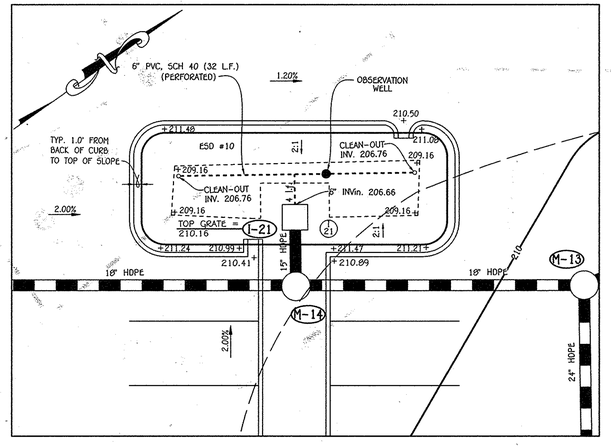
MICRO-BIORETENTION (M-6) FACILITY #8

SCALE: 1"=10'



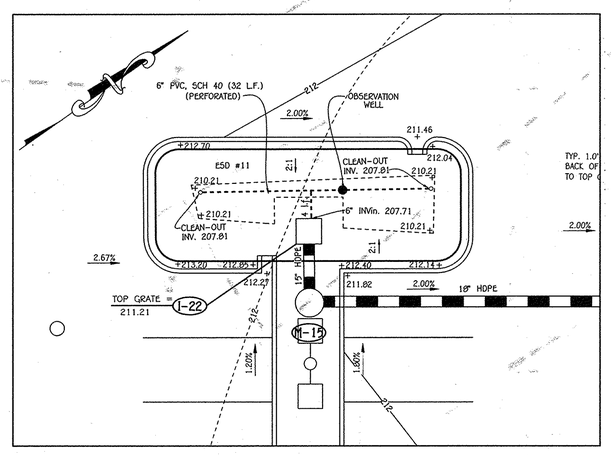
MICRO-BIORETENTION (M-6) FACILITY #9

SCALE: 1"=10'



MICRO-BIORETENTION (M-6) FACILITY #10

SCALE: 1"=10'



MICRO-BIORETENTION (M-6) FACILITY #11

SCALE: 1"=10'

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
ELLICOTT CITY, MARYLAND 21042
(410) 461 - 2855

OWNER
9001 WBR, LLC
1029 HARRISON DRIVE
LAUREL, MARYLAND
20707-3827
PH# 410-423-0460

DEVELOPER
WHISKEY SPEAK, LLC
2330 WEST JOPPA ROAD
SUITE 190
LUTHERVILLE, MARYLAND
21093-4614
PH# 410-296-3800

"PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 13204, EXPIRATION DATE: NOVEMBER 3, 2016."

CHARLES J. CROVO, SR., P.E. — 7/15/16 DATE

DATE	DESCRIPTION
	REVISION BLOCK

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Director - Department of Planning and Zoning — 8-7-16 Date

Chief, Division of Land Development — 8-16-16 Date

Chief, Development Engineering Division — 8/16/16 Date

STATE OF MARYLAND — CHARLES J. CROVO — No. 13204 — PROFESSIONAL ENGINEER

ADDRESS CHART	
BUILDING NO.	STREET ADDRESS
OFFICE/WAREHOUSE	9001 WHISKEY BOTTOM ROAD
GUARD HOUSE	9003 WHISKEY BOTTOM ROAD
FUTURE GARAGE	9005 WHISKEY BOTTOM ROAD
	LAUREL, MARYLAND 20723

PERMIT INFORMATION CHART

SUBDIVISION NAME		SECTION/AREA		LOT/PARCEL NO.
COASTAL SUNBELT PRODUCE		N/A		P. 375
PLAT# OR L/F	GRID#	ZONING	TAX MAP#	ELECT. DISTR.	CENSUS TRACT
22437-22439	4,5 10,11	TOD	50	SIXTH	6069.07

SWM PLANS FOR FACILITIES #4 TO #11

COASTAL SUNBELT PRODUCE
WAREHOUSE DISTRIBUTION CENTER
PARCEL 'A'

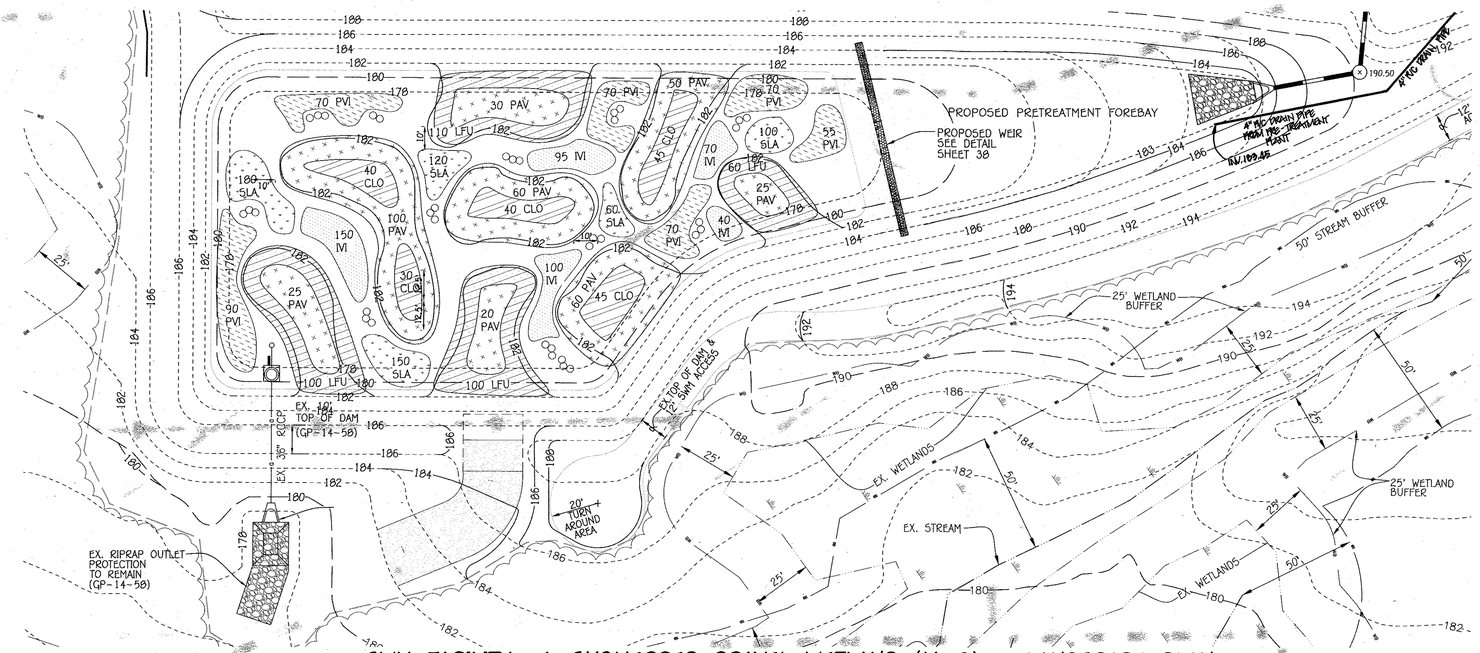
ZONED TOD — TAX MAP No.: 50
GRID No.: 4,5,10,11 — PARCEL No.: 375
SIXTH ELECTION DISTRICT — HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN — DATE: JULY 6, 2015

SHEET 42 OF 58

SDP-14-080

I:\2013\13033\Engineering\Dwgs\13033-3001 SDP 37-44 SWM PROFILES.dwg, Sheet 42, 7/2/2015 11:15:53 AM, 1:1

WETLAND PLANT LIST				
SYMBOL	QTY.	BOTANICAL AND COMMON NAME	SIZE	SPACING
CLO	200	CANNA (LONGWOOD HIBRID) RED CANNA	BARE ROOT OR PLUG	2' SPACING
IM	455	IRIS VIRGINICA BLUE FLAG IRIS	BARE ROOT OR PLUG	1.5' SPACING
LFU	370	LOBELIA FULGENS CARDINAL FLOWER	BARE ROOT OR PLUG	2' SPACING
PAV	370	PANICUM VIRGATUM RED SWITCHGRASS	BARE ROOT OR PLUG	3' SPACING
PVI	425	PELTANDA VIRGINICA ARROW ARUM	BARE ROOT OR PLUG	2' SPACING
SLA	610	SAGGITARIA LATIFOLIA ARROWHEAD	BARE ROOT OR PLUG	1' SPACING
○	35	HELVOLA OR PINK SURPRISE HARDY WATER LILLIES	BARE ROOT OR CONT.	3' SPACING



SWM FACILITY #1-SUBMERGED GRAVEL WETLAND (M-2) - LANDSCAPE PLAN

SCALE: 1"=30'

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
ELLICOTT CITY, MARYLAND 21042
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21093-4614
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"PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 13204, EXPIRATION DATE: NOVEMBER 30, 2016."

CHARLES J. PROVO, SR., P.E. — 7/15/15 DATE

DATE	DESCRIPTION
10/26/16	ADDED 4" DRAIN PIPE FROM PRE-TREATMENT PLANT
10/26/16	EXTEND CARBON FOREBAY - FACILITY NO.2

REVISION BLOCK

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Director - Department of Planning and Zoning — 8-7-15 Date

Chief, Division of Land Development — 8-06-15 Date

Chief, Development Engineering Division — 8/6/15 Date

STATE OF MARYLAND — CHARLES J. PROVO — No. 13204 — PROFESSIONAL ENGINEER

ADDRESS CHART	
BUILDING NO.	STREET ADDRESS
OFFICE/WAREHOUSE	9001 WHISKEY BOTTOM ROAD
GUARD HOUSE	9003 WHISKEY BOTTOM ROAD
FUTURE GARAGE	9005 WHISKEY BOTTOM ROAD
	LAUREL, MARYLAND 20723

PERMIT INFORMATION CHART					
SUBDIVISION NAME			SECTION/AREA		LOT/PARCEL NO.
COASTAL SUNBELT PRODUCE			N/A		P. 375
PLAT# OR L/F	GRID#	ZONING	TAX MAP#	ELECT. DISTR.	CENSUS TRACT
23637-23639	4,5 10,11	TOD	50	SIXTH	6069.07

SWM LANDSCAPING FOR FACILITY #1

COASTAL SUNBELT PRODUCE
WAREHOUSE DISTRIBUTION CENTER
PARCEL 'A'

ZONED TOD — TAX MAP No.: 50
GRID No.: 4,5,10,11 — PARCEL No.: 375
SIXTH ELECTION DISTRICT — HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN — DATE: JULY 6, 2015

SHEET 43 OF 58

SDP-14-080

I:\2015\13033\Engineering\Dwgs\13033-3001 SDP 37-44 SWM PROFILES.dwg Sheet 43, 7/2/2015 11:17:42 AM, 1:1

SOIL PREPARATION, TOPSOILING AND SOIL AMENDMENTS (B-4-2)

A. Soil Preparation

1. Temporary Stabilization

a. Seedbed preparation consists of loosening soil to a depth of 3 to 5 inches by means of suitable agricultural or construction equipment, such as disc harrows or chisel plows or rippers mounted on construction equipment. After the soil is loosened, it must not be rolled or dragged smooth but left in the roughened condition. Slopes 3:1 or flatter are to be tracked with ridges running parallel to the contour of the slope.

b. Apply fertilizer and lime as prescribed on the plans.

c. Incorporate lime and fertilizer into the top 3 to 5 inches of soil by disking or other suitable means.

2. Permanent Stabilization

a. A soil test is required for any earth disturbance of 5 acres or more. The minimum soil conditions required for permanent vegetative establishment are:

i. Soil pH between 6.0 and 7.0.
ii. Soluble salts less than 500 parts per million (ppm).
iii. Soil contains less than 40 percent clay but enough fine grained material (greater than 30 percent silt plus clay) to provide the capacity to hold a moderate amount of moisture. An exception: if lovegrass will be planted, then a sandy soil (less than 30 percent silt plus clay) would be acceptable.
iv. Soil contains 1.5 percent minimum organic matter by weight.
v. Soil contains sufficient pore space to permit adequate root penetration.

b. Application of amendments or topsoil is required if on-site soils do not meet the above conditions.

c. Graded areas must be maintained in a true and even grade as specified on the approved plan, then scarified or otherwise loosened to a depth of 3 to 5 inches.

d. Apply soil amendments as specified on the approved plan or as indicated by the results of a soil test.

e. Mix soil amendments into the top 3 to 5 inches of soil by disking or other suitable means. Rake lawn areas to smooth the surface, remove large objects like stones and branches, and ready the area for seed application. Loosen surface soil by dragging with a heavy chain or other equipment to roughen the surface where site conditions will not permit normal seedbed preparation. Track slopes 3:1 or flatter with tracked equipment leaving the soil in an irregular condition with ridges running parallel to the contour of the slope. Leave the top 1 to 3 inches of soil loose and friable. Seedbed loosening may be unnecessary on newly disturbed areas.

B. Topsoiling

1. Topsoil is placed over prepared subsoil prior to establishment of permanent vegetation. The purpose is to provide a suitable soil medium for vegetative growth. Soils of concern have low moisture content, low nutrient levels, low pH, materials toxic to plants, and/or unacceptable soil gradation.

2. Topsoil salvaged from an existing site may be used provided 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-NRCS.

3. Topsoiling 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.

4. Areas having slopes steeper than 2:1 require special consideration and design.

5. Topsoil Specifications: Soil to be used as topsoil must meet the following criteria:

a. Topsoil must be a loam, sandy loam, clay loam, silt loam, sandy clay loam, or loamy sand. Other soils may be used if recommended by an agronomist or soil scientist and approved by the appropriate approval authority. Topsoil must not be a mixture of contrasting textured subsoils and must contain less than 5 percent by volume of cinders, stones, slag, coarse fragments, gravel, sticks, roots, trash, or other materials larger than 1 1/2 inches in diameter.

b. Topsoil must be free of noxious plants or plant parts such as Bermuda grass, quack grass, Johnson grass, nut sedge, poison ivy, thistle, or others as specified.

c. 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.

6. Topsoil Application

a. Erosion and sediment control practices must be maintained when applying topsoil.

b. Uniformly distribute topsoil in a 5 to 8 inch layer and lightly compact to a minimum thickness of 4 inches. Spreading is to be performed in such a manner that sodding or seeding can proceed with a minimum of additional soil preparation and fillage. Any irregularities in the surface resulting from topsoiling or other operations must be corrected in order to prevent the formation of depressions or water pockets.

c. Topsoil must not be placed if 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.

C. Soil Amendments (Fertilizer and Lime Specifications)

1. Soil tests must be performed to determine the exact ratios and application rates for both lime and fertilizer on sites having disturbed areas of 5 acres or more. Soil analysis may be performed by a recognized private or commercial laboratory. Soil samples taken for engineering purposes may also be used for chemical analyses.

2. Fertilizers must be uniform in composition, free flowing and suitable for accurate application by appropriate equipment. Manure may be substituted for fertilizer with prior approval from the appropriate approval authority. Fertilizers must all be delivered to the site fully labeled according to the applicable laws and must bear the name, trade name or trademark and warranty of the producer.

3. Lime materials must be ground limestone (hydrated or burnt lime may be substituted except when hydroseeding) which contains at least 50 percent total oxides (calcium oxide plus magnesium oxide). Limestone must be ground to such fineness that at least 50 percent will pass through a #100 mesh sieve and 90 to 100 percent will pass through a #20 mesh sieve.

4. Lime and fertilizer are to be evenly distributed and incorporated into the top 3 to 5 inches of soil by disking or other suitable means.

5. Where the subsoil is either highly acidic or composed of heavy clays, spread ground limestone at the rate of 4 to 8 tons/Acre (200-400 pounds per 1,000 square feet) prior to the placement of topsoil.

TEMPORARY SEEDING NOTES (B-4-4)

Definition

To stabilize disturbed soils with vegetation for up to 6 months.

Purpose

To use fast growing vegetation that provides cover on disturbed soils.

Conditions where Practice Applies

Exposed soils where ground cover is needed for a period of 6 months or less. For longer duration of time, permanent stabilization practices are required.

Criteria

1. Select one or more of the species or seed mixtures listed in Table B.1 for the appropriate Plant Hardiness Zone (from Figure B.3), and enter them in the Temporary Seeding Summary below along with application rates, seeding dates and seeding depths. If this Summary is not put on the plan and completed, then Table B.1 plus fertilizer and lime rates must be put on the plan.

2. For sites having soil tests performed, use and show the recommended rates by the testing agency. Soil tests are not required for Temporary Seeding.

3. When stabilization is required outside of a seeding season, apply seed and mulch or straw mulch alone as prescribed in Section B-4-3.A.1.b and maintain until the next seeding season.

Temporary Seeding Summary

Hardiness Zone (from Figure B.3): 6b Seed Mixture (from Table B.1):				Fertilizer Rate (10-20-20)	Lime Rate
Species	Application Rate (lb/ac)	Seeding Dates	Seeding Depths		
BARLEY	96	3/1 - 5/15, 8/15 - 10/15	1"	436 lb/ac (10 lb/ 1000 sf)	2 tons/ac (90 lb/ 1000 sf)
OATS	72	3/1 - 5/15, 8/15 - 10/15	1"		
RYE	112	3/1 - 5/15, 8/15 - 10/15	1"		

PERMANENT SEEDING NOTES (B-4-5)

A. Seed Mixtures

1. General Use

a. Select one or more of the species or mixtures listed in Table B.3 for the appropriate Plant Hardiness Zone (from Figure B.3) and based on the site condition or purpose found on Table B.2. Enter selected mixture(s), application rates, and seeding dates in the Permanent Seeding Summary. The Summary is to be placed on the plan.

b. Additional planting specifications for exceptional sites such as shorelines, stream banks, or dunes or for special purposes such as wildlife or aesthetic treatment may be found in USDA-NRCS Technical Field Office Guide, Section 342 - Critical Area Planting.

c. For sites having disturbed area over 5 acres, use and show the rates recommended by the soil testing agency. d. For areas receiving low maintenance, apply urea form fertilizer (46-0-0) at 3 1/2 pounds per 1000 square feet (150 pounds per Acre) at the time of seeding in addition to the soil amendments shown in the Permanent Seeding Summary .

2. Turfgrass Mixtures

a. Areas where turfgrass may be desired include lawns, parks, playgrounds, and commercial sites which will receive a medium to high level of maintenance.

b. Select one or more of the species or mixtures listed below based on the site conditions or purpose. Enter selected mixture(s), application rates, and seeding dates in the Permanent Seeding Summary. The summary is to be placed on the plan.

i. Kentucky Bluegrass: Full Sun Mixture: For use in areas that receive intensive management. Irrigation required in the areas of central Maryland and Eastern Shore. Recommended Certified Kentucky Bluegrass Cultivars Seeding Rate: 1.5 to 2.0 pounds per 1000 square feet. Choose a minimum of three Kentucky bluegrass cultivars with each ranging from 10 to 35 percent of the total mixture by weight.

ii. Kentucky Bluegrass/Perennial Rye: Full Sun Mixture: For use in full sun areas where rapid establishment is necessary and when turf will receive medium to intensive management. Certified Perennial Ryegrass Cultivars/Certified Kentucky Bluegrass Seeding Rate: 2 pounds mixture per 1000 square feet. Choose a minimum of three Kentucky bluegrass cultivars with each ranging from 10 to 35 percent of the total mixture by weight.

iii. Tall Fescue/Kentucky Bluegrass: Full Sun Mixture: For use in drought prone areas and/or for areas receiving low to medium management in full sun to medium shade. Recommended mixture includes: Certified Tall Fescue Cultivars 95 to 100 percent, Certified Kentucky Bluegrass Cultivars 0 to 5 percent. Seeding Rate: 5 to 8 pounds per 1000 square feet. One or more cultivars may be blended.

iv. Kentucky Bluegrass/Fine Fescue: Shade Mixture: For use in areas with shade in Bluegrass lawns. For establishment in high quality, intensively managed turf area. Mixture includes: Certified Kentucky Bluegrass Cultivars 30 to 40 percent and Certified Fine Fescue and 60 to 70 percent. Seeding Rate: 1 1/2 to 3 pounds per 1000 square feet.

Notes:
Select turfgrass varieties from those listed in the most current University of Maryland Publication, Agronomy Memo #77, "Turfgrass Cultivar Recommendations for Maryland"

Choose certified material. Certified material is the best guarantee of cultivar purity. The certification program of the Maryland Department of Agriculture, Turf and Seed Section, provides a reliable means of consumer protection and assures a pure genetic line

c. Ideal Times of Seeding for Turf Grass Mixtures Western MD: March 15 to June 1, August 1 to October 1 (Hardiness Zones: 5b, 6a) Central MD: March 1 to May 15, August 15 to October 15 (Hardiness Zone: 6b) Southern MD, Eastern Shore: March 1 to May 15, August 15 to October 15 (Hardiness Zones: 7a, 7b)

d. Till areas to receive seed by disking or other approved methods to a depth of 2 to 4 inches, level and rake the areas to prepare a proper seedbed. Remove stones and debris over 1 1/2 inches in diameter. The resulting seedbed must be in such condition that future mowing of grasses will pose no difficulty.

e. If soil moisture is deficient, supply new seedings with adequate water for plant growth (1/2 to 1 inch every 3 to 4 days depending on soil texture) until they are firmly established. This is especially true when seedings are made late in the planting season, in abnormally dry or hot seasons, or on adverse sites.

Permanent Seeding Summary

Hardiness Zone (from Figure B.3): 6b Seed Mixture (from Table B.3): B					Fertilizer Rate (10-20-20)			Lime Rate
No.	Species	Application Rate (lb/ac)	Seeding Dates	Seeding Depths	N	P_2O_5	K_2O	
B	TALL FESCUE	100	Mar. 1-May 15 Aug. 1-Oct. 15	1/4-1/2 in.	45 lbs. per Acre (1.0 lb/ 1000 sf)	90 lb/ac (2 lb/ 1000 sf)	90 lb/ac (2 lb/ 1000 sf)	2 tons/ac (90 lb/ 1000 sf)

GENERAL STORMWATER MANAGEMENT NOTES

1. STORMWATER MANAGEMENT HAS BEEN PROVIDED WITH THREE (3) MICRO-BIORETENTION FACILITIES. PLEASE REFER TO THE SWM REPORT PREPARED BY FISHER, COLLINS, & CARTER, INC. DATED JANUARY 16, 2012.

2. ALL CONSTRUCTION SHALL MEET THE LATEST EDITION OF THE HOWARD COUNTY STANDARDS AND SPECIFICATIONS, SMALL EARTHEN DAM SPECIFICATION MD-378, AND THE MARYLAND DEPARTMENT OF THE ENVIRONMENT'S CURRENT STORMWATER DESIGN MANUAL, OR AS SHOWN ON THESE PLANS. THE CONTRACTOR SHALL CONSULT THE ENGINEER SHOULD THERE BE ANY DISCREPANCIES. SEE MICRO-BIORETENTION FACILITY SPECIFICATIONS ON SHEET C-15.

3. THE UTILITY LOCATIONS ARE APPROXIMATE. CONTRACTOR SHALL TEST PIT ALL KNOWN EXISTING UTILITIES TO VERIFY, SIZE, SHAPE, LOCATION, AND TYPE PRIOR TO PERFORMING CONSTRUCTION. ANY UTILITY DAMAGED DUE TO CONSTRUCTION MUST BE REPAIRED IMMEDIATELY.

4. SHOULD THE CONTRACTOR DISCOVER DISCREPANCIES BETWEEN THE PLANS AND FIELD CONDITIONS, THE ENGINEER IS TO BE NOTIFIED IMMEDIATELY TO RESOLVE THE SITUATION. IF THE CONTRACTOR MAKES FIELD CORRECTIONS OR ADJUSTMENTS WITHOUT NOTIFYING THE ENGINEER, THEN THE CONTRACTOR ASSUMES ALL RESPONSIBILITY FOR THOSE CHANGES.

5. CONTRACTOR SHALL NOTIFY MISS UTILITY 1-800-257-7777 AND THE HOWARD COUNTY DEPARTMENT OF INSPECTION LICENSES & PERMITS THREE (3) WORKING DAYS BEFORE BEGINNING CONSTRUCTION.

6. FISHER, COLLINS & CARTER, INC. IS NOT RESPONSIBLE FOR THE CONTRACTOR'S UTILIZATION OF MEN, MATERIALS, EQUIPMENT, OR SAFETY MEASURES IN THE PERFORMANCE OF ANY WORK FOR THIS PROJECT. THE CONTRACTOR ASSUMES ALL RESPONSIBILITY FOR PERFORMING THE WORK CORRECTLY AND IN CONFORMANCE WITH CODE/SPECIFICATION REQUIREMENTS.

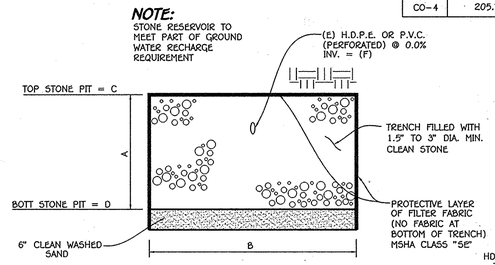
7. THE IMPs MAY BE GRADED, HOWEVER, THE PLANTING SOIL IN THE IMPs SHALL NOT BE INSTALLED UNTIL ALL UPSTREAM AREAS HAVE BEEN STABILIZED (i.e., THICK GRASS COVER, OR PAVED).

8. THE STORMWATER MANAGEMENT BIORETENTION IMPs FOR THIS PROJECT WILL BE PRIVATELY OWNED AND MAINTAINED.

9. THE IMPs SHALL BE AT LEAST 10 FT FROM THE SCHOOL BUILDING (TEMPORARY BUILDINGS EXCLUDED) AS MEASURED FROM THE 1 ft DEPTH WATER SURFACE ELEVATION TO THE BUILDING.

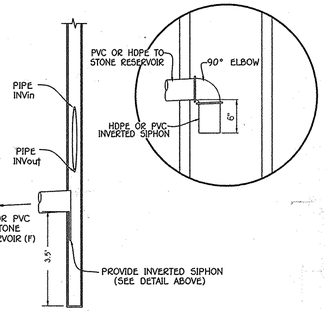
10. ALL ROOF LEADER OUTFALLS SHALL BE CONSTRUCTED PER THE ROOF LEADER OUTFALL SUMP DETAIL AS SHOWN ON THIS SHEET.

	Top Elevation	Invert	Northing	Easting
CO-1	205.70	198.67	525667.3628	1360768.4079
CO-2	205.70	198.67	525626.4052	1360739.7291
CO-3	205.70	198.52	525829.8961	1360883.1023
CO-4	205.70	198.52	525788.9385	1360854.4235



STONE RESERVOIR No.	A	B	C	D	E	F
1	5.0'	60.0'	200.57	195.57	12" HDPE	198.67
2	5.0'	60.0'	200.42	195.42	12" HDPE	198.52

OFF-LINE STONE RESERVOIR SECTION FOR Rev
NO SCALE



DIVERSION MANHOLE
NO SCALE

OPERATION AND MAINTENANCE SCHEDULE FOR MICRO-BIORETENTION (M-6)

1. THE OWNER SHALL MAINTAIN THE PLANT MATERIAL, MULCH LAYER AND SOIL LAYER ANNUALLY. MAINTENANCE OF MULCH AND SOIL IS LIMITED TO CORRECTING AREAS OF EROSION OR WASH OUT. ANY MULCH REPLACEMENT SHALL BE DONE IN THE SPRING. PLANT MATERIAL SHALL BE CHECKED FOR DISEASE AND INSECT INFESTATION AND MAINTENANCE WILL ADDRESS DEAD MATERIAL AND PRUNING. ACCEPTABLE REPLACEMENT PLANT MATERIAL IS LIMITED TO THE FOLLOWING: 2000 MARYLAND STORMWATER DESIGN MANUAL VOLUME II, TABLE A.4.1 AND 2.

2. THE OWNER SHALL PERFORM A PLANT IN THE SPRING AND IN THE FALL OF EACH YEAR. DURING THE INSPECTION, THE OWNER SHALL REMOVE DEAD AND DISEASED VEGETATION CONSIDERED BEYOND TREATMENT, REPLACE DEAD PLAN MATERIAL WITH ACCEPTABLE REPALCEMENT PLANT MATERIAL, TREAT DISEASED TREES AND SHRUBS, AND REPLACE ALL DEFICIENT STAKES AND WIRES.

3. THE OWNER SHALL INSPECT MULCH EACH SPRING. THE MULCH SHALL BE REPLACED EVERY TWO TO THREE YEARS. THE PREVIOUS MULCH LAYER SHALL BE REMOVED BEFORE THE NEW LAYER IS APPLIED.

4. THE OWNER SHALL CORRECT SOIL EROSION ON AN AS NEEDED BASIS, WITH A MINIMUM OF ONCE PER MONTH AND AFTER EACH HEAVY STORM.

OPERATION AND MAINTENANCE SCHEDULE FOR PRIVATELY OWNED AND MAINTAINED UNDERGROUND STORMWATER FILTRATION SYSTEMS (F-3)

1. THE OWNER SHALL CLEAN AND REPAIR THE SEDIMENT CHAMBER OUTLET DEVICES WHEN DRAW-DOWN TIMES WITHIN THE CHAMBER EXCEED THIRTY-SIX (36) HOURS.

2. THE OWNER SHALL REMOVE DEBRIS AND LITTER AS NECESSARY TO ENSURE PROPER OPERATION OF THE SYSTEM.

3. THE OWNER SHALL REMOVE SEDEMENT FROM THE SEDIMENTATION CHAMBER WHEN IT ACCUMULATES TO A DEPTH OF SIX (6) INCHES.

4. WHEN WATER PONDS ON THE SURFACE OF THE FILTER BED FOR MORE THAN SEVENTY-TWO (72) HOURS, THE OWNER SHALL REPLACE THE TOP FEW INCHES OF DISCOLORED MATERIAL WITH FRESH MATERIAL. PROPER CLEANING AND DISPOSAL OF THE REMOVED MATERIALS AND LIQUID MUST BE FOLLOWED BY THE OWNER.

5. THE OWNER SHALL MAINTAIN A LOG BOOK TO DETERMINE THE RATE AT WHICH THE FACILITY DRAINS.

6. THE MAINTENANCE LOG BOOK SHALL BE AVAILABLE TO HOWARD COUNTY FOR INSPECTION TO INSURE COMPLIANCE WITH OPERATION AND MAINTENANCE CRITERIA.

7. ONCE THE PERFORMANCE CHARACTERISTICS OF THE FILTRATION SYSTEM HAVE BEEN VERIFIED, THE MONITORING SCHEDULE CAN BE REDUCED TO AN ANNUAL BASIS UNLESS THE PERFORMANCE DATA INDICATES THAT A MORE FREQUENT SCHEDULE IS REQUIRED.

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PH# 410-296-3800

ENGINEER'S CERTIFICATE

"I CERTIFY THAT THIS PLAN FOR SEDIMENT AND EROSION CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT."

SIGNATURE OF ENGINEER — DATE 6/16/15

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 DISTRICT."

SIGNATURE OF DEVELOPER — DATE 6/17/15

"PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 13204, EXPIRATION DATE: NOVEMBER 3, 2016."

CHARLES J. CROVO, SR., P.E. — DATE 6/16/15

THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

HOWARD SCD — DATE 6/16/15

DATE	DESCRIPTION
	REVISION BLOCK

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Director - Department of Planning and Zoning — Date 8-7-15
Chief, Division of Land Development — Date 8-06-15
Chief, Development Engineering Division — Date 8-6-15

STATE OF MARYLAND — CHARLES J. CROVO — No. 13204 — PROFESSIONAL ENGINEER

ADDRESS CHART	
BUILDING NO.	STREET ADDRESS
OFFICE/WAREHOUSE	9001 WHISKEY BOTTOM ROAD
GUARD HOUSE	9003 WHISKEY BOTTOM ROAD
FUTURE GARAGE	9005 WHISKEY BOTTOM ROAD
	LAUREL, MARYLAND 20723

PERMIT INFORMATION CHART

SUBDIVISION NAME			SECTION/AREA		LOT/PARCEL NO.
COASTAL SUNBELT PRODUCE			N/A		P. 375
PLAT# OR L/F	GRID#	ZONING	TAX MAP#	ELECT. DISTR.	CENSUS TRACT
22497-22499	4,5 10,11	TOD	50	SIXTH	6069.07

STORMWATER MANAGEMENT NOTES

COASTAL SUNBELT PRODUCE
WAREHOUSE DISTRIBUTION CENTER
PARCEL 'A'

ZONED TOD — TAX MAP No.: 50
GRID No.: 4,5,10,11 — PARCEL No.: 375
SIXTH ELECTION DISTRICT — HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN — DATE: APRIL 20, 2015

SHEET 44 OF 58

SDP-14-080

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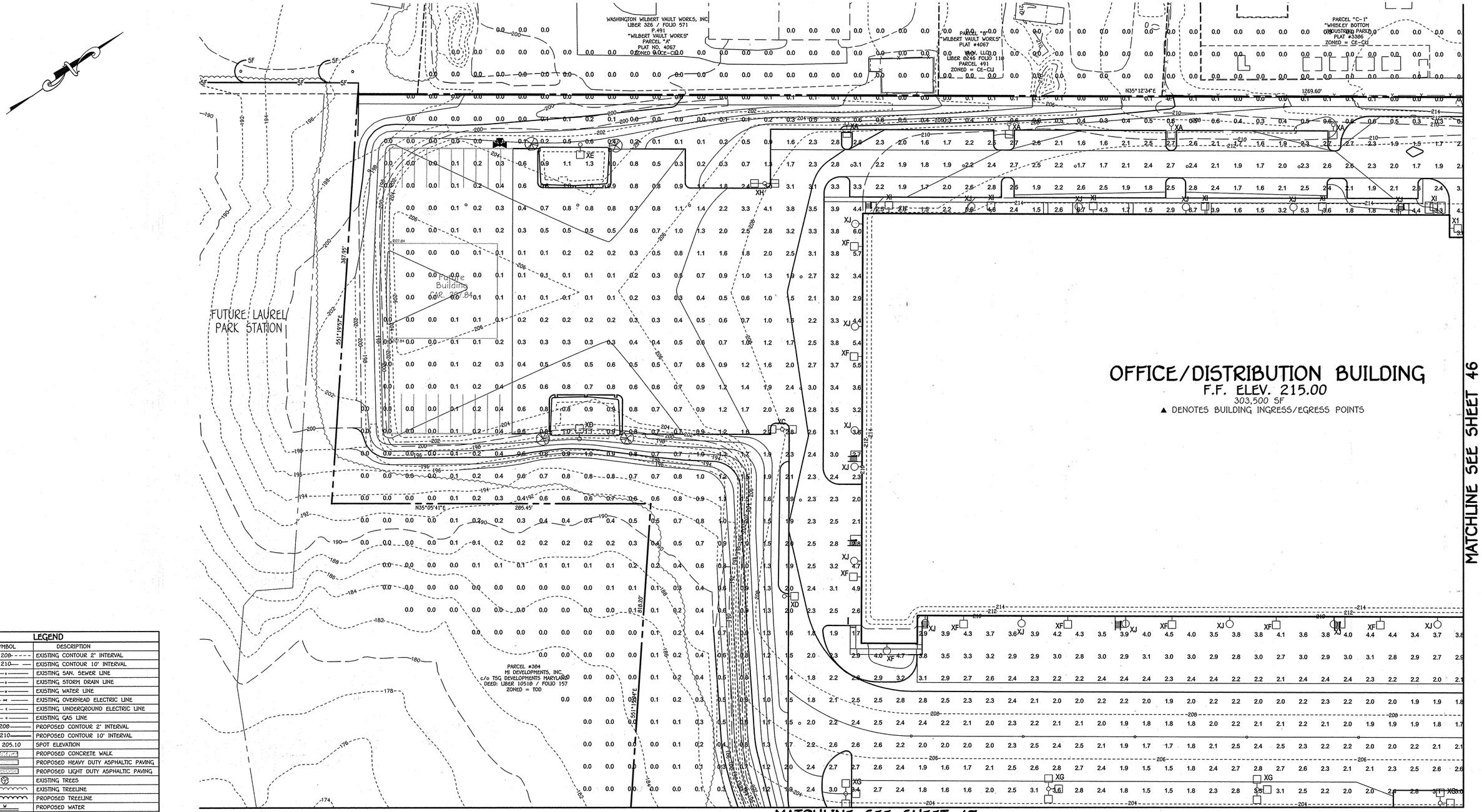


0' 40' 80' 120'

SCALE: 1" = 40'

LEGEND	
SYMBOL	DESCRIPTION
208	EXISTING CONTOUR 2' INTERVAL
210	EXISTING CONTOUR 10' INTERVAL
S	EXISTING SAN. SEWER LINE
D	EXISTING STORM DRAIN LINE
W	EXISTING WATER LINE
OHE	EXISTING OVERHEAD ELECTRIC LINE
E	EXISTING UNDERGROUND ELECTRIC LINE
G	EXISTING GAS LINE
208	PROPOSED CONTOUR 2' INTERVAL
210	PROPOSED CONTOUR 10' INTERVAL
+ 205.10	SPOT ELEVATION
	PROPOSED CONCRETE WALK
	PROPOSED HEAVY DUTY ASPHALTIC PAVING
	PROPOSED LIGHT DUTY ASPHALTIC PAVING
	EXISTING TREES
	EXISTING TREELINE
	PROPOSED TREELINE
8" W	PROPOSED WATER
18" HDPE	PROPOSED STORMDRAIN
8" SEWER	PROPOSED SEWER
x x x	PROPOSED CHAINLINK FENCE

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
ELLICOTT CITY, MARYLAND 21042
(410) 461 - 2855

OWNER
9001 WBR, LLC
1029 HARRISON DRIVE
LAUREL, MARYLAND
20707-3827
PH# 410-423-0460

DEVELOPER
WHISKEY SPEAK, LLC
2330 WEST JOPPA ROAD
SUITE 190
LUTHERVILLE, MARYLAND
21093-4614
PH# 410-296-3800

"PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 13204, EXPIRATION DATE NOVEMBER 3, 2016."

CHARLES J. CROVO, SR., P.E. — 7/15/15 DATE

DATE	DESCRIPTION
	REVISION BLOCK

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Director - Department of Planning and Zoning — 8-7-16 Date

Chief, Division of Land Development — 8-06-15 Date

Chief, Development Engineering Division — 8/6/15 Date

STATE OF MARYLAND — CHARLES J. CROVO — No. 13204 — PROFESSIONAL ENGINEER

ADDRESS CHART	
BUILDING NO.	STREET ADDRESS
OFFICE/WAREHOUSE	9001 WHISKEY BOTTOM ROAD
GUARD HOUSE	9003 WHISKEY BOTTOM ROAD
FUTURE GARAGE	9005 WHISKEY BOTTOM ROAD
	LAUREL, MARYLAND 20723

PERMIT INFORMATION CHART						
SUBDIVISION NAME			SECTION/AREA		LOT/PARCEL NO.	
COASTAL SUNBELT PRODUCE			N/A		P. 375	
PLAT# OR L/F	GRID#	ZONING	TAX MAP#	ELECT. DISTR.	CENSUS TRACT	
22437-22439	4,5 10,11	TOD	50	SIXTH	6069.07	

PHOTOMETRICS PLAN

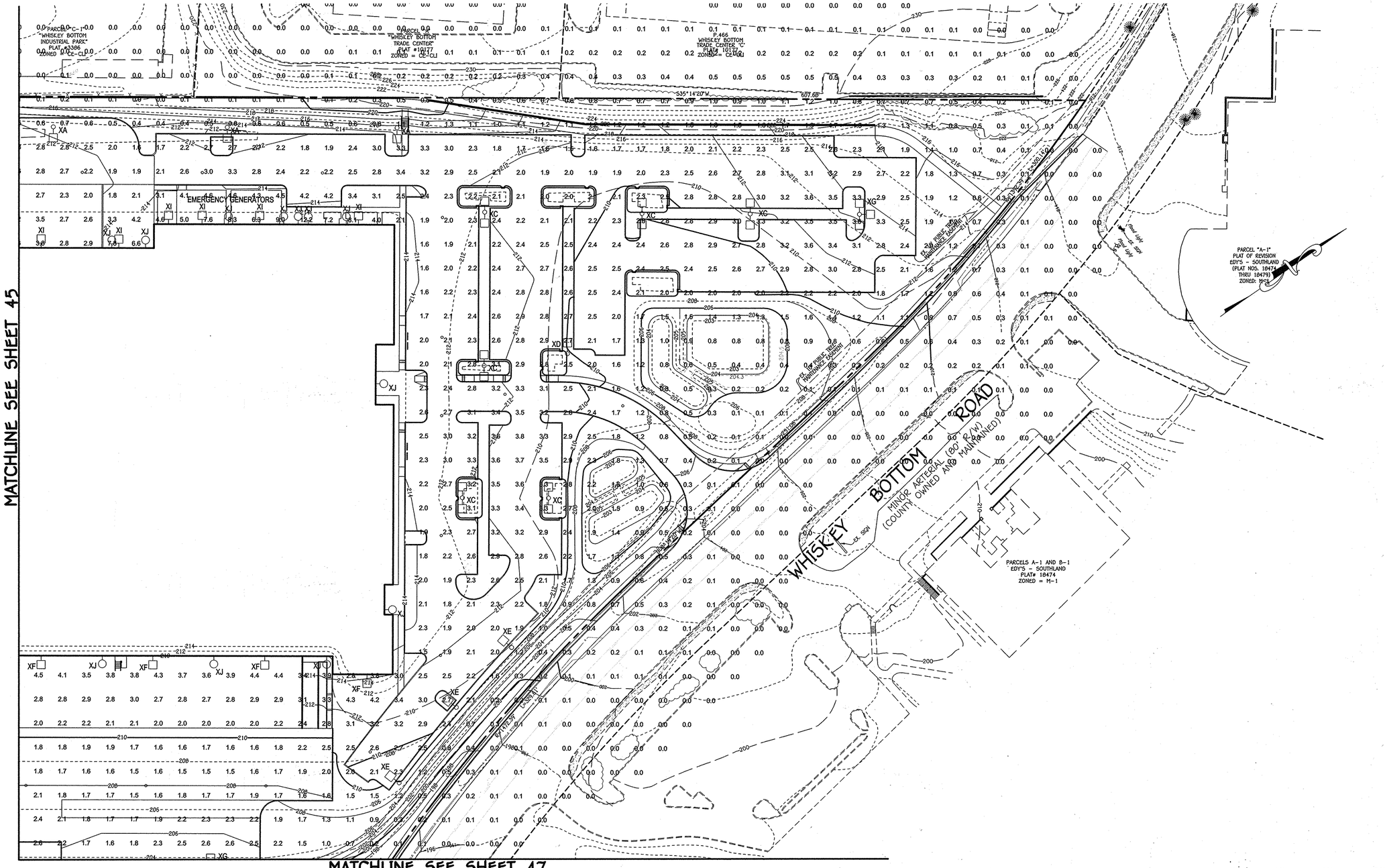
COASTAL SUNBELT PRODUCE
WAREHOUSE DISTRIBUTION CENTER
PARCEL 'A'

ZONED TOD — TAX MAP No.: 50
GRID No.: 4,5,10,11 — PARCEL No.: 375
SIXTH ELECTION DISTRICT — HOWARD COUNTY, MARYLAND
SCALE: 1" = 40' — DATE: JULY 6, 2015

SHEET 45 OF 50

SDP-14-080

I:\2013\13033\Engineering\Dwgs\13033-3001 SDP 45-47 PHOTOMETRICS.dwg, PHOTO (SHEET 45), 7/15/2015 3:38:14 PM, 1:1


MATCHLINE SEE SHEET 45
MATCHLINE SEE SHEET 47
PARCEL "C-1" "WHISKEY BOTTOM INDUSTRIAL PARK" PLAT #13386 ZONED = CE-CLI
PARCEL "B" "WHISKEY BOTTOM TRADE CENTER" PLAT #10177 ZONED = CE-CLI
P.466 WHISKEY BOTTOM TRADE CENTRE "C" PLAT# 10177 ZONED = CE-CLI
EMERGENCY GENERATORS
WHISKEY BOTTOM ROAD
MINOR ARTERIAL (80' R/W) (COUNTY OWNED AND MAINTAINED)
PARCEL "A-1" PLAT OF REVISION EDY'S - SOUTHLAND (PLAT NOS. 18474 THRU 18479) ZONED: M-1
PARCELS A-1 AND B-1 EDY'S - SOUTHLAND PLAT# 18474 ZONED = M-1
535°14'20"W 607.68'
S 87°47'08" W 1,330.10'
Ex. SWM
Proposed Light
Proposed Light
Proposed Light

MATCHLINE SEE SHEET 45

MATCHLINE SEE SHEET 46

PARCEL #384
MI DEVELOPMENTS, INC.
c/o TSG DEVELOPMENTS MARYLAND
DEED: LIBER 10518 / FOLIO 157
ZONED = TOD

GUARD HOUSE

FF 205.14
FCA 201.17

WHISKEY BOTTOM ROAD
MINOR ARTERIAL (80' R/W)
(COUNTY OWNED AND MAINTAINED)

Existing Treeline

Edge of Paved Roadway

HOWARD COUNTY PROPERTY
PLAT 8958

R=819.20'
L=38.00'
S51°15'20"E
25.00'
N43°33'48"E
52.01'
N39°42'48"E 93.00'
N36°27'48"E 203.80'
N32°42'48"E 95.00'
N31°12'48"E 99.00'
N24°57'48"E 101.50'
N24°42'48"E 44.28'

EX. RAILROAD

CSX RAIL ROAD

THE BALTIMORE AND OHIO RAILROAD COMPANY
(AKA: CSX RAILROAD)
AREA CONVEYED TO B & O RAILROAD BY
DEED GW LIBER 89 / FOLIO 218
(VAL MAP #V-181-6)

0' 40' 80' 120'
SCALE: 1" = 40'

LEGEND	
SYMBOL	DESCRIPTION
208	EXISTING CONTOUR 2' INTERVAL
210	EXISTING CONTOUR 10' INTERVAL
S	EXISTING SAN. SEWER LINE
D	EXISTING STORM DRAIN LINE
W	EXISTING WATER LINE
OHW	EXISTING OVERHEAD ELECTRIC LINE
UGE	EXISTING UNDERGROUND ELECTRIC LINE
G	EXISTING GAS LINE
208	PROPOSED CONTOUR 2' INTERVAL
210	PROPOSED CONTOUR 10' INTERVAL
+ 205.10	SPOT ELEVATION
	PROPOSED CONCRETE WALK
	PROPOSED HEAVY DUTY ASPHALTIC PAVING
	PROPOSED LIGHT DUTY ASPHALTIC PAVING
	EXISTING TREES
	EXISTING TREELINE
	PROPOSED TREELINE
8" W	PROPOSED WATER
10" HDPE	PROPOSED STORMDRAIN
8" SEWER	PROPOSED SEWER
x x x	PROPOSED CHAINLINK FENCE

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
ELLICOTT CITY, MARYLAND 21042
(410) 461 - 2855

OWNER
9001 WBR, LLC
1029 HARRISON DRIVE
LAUREL, MARYLAND
20707-3827
PH# 410-423-0460

DEVELOPER
WHISKEY SPEAK LLC
2330 WEST JOPPA ROAD
SUITE 190
LUTHERVILLE, MARYLAND
21093-4614
PH# 410-296-3800

"PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 13204, EXPIRATION DATE: NOVEMBER 30, 2016."

CHARLES J. CROVO, SR., P.E. — 7/15/15 DATE

DATE	DESCRIPTION
	REVISION BLOCK

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Director - Department of Planning and Zoning — 8-7-15 Date

Chief, Division of Land Development — 8/06/15 Date

Chief, Development Engineering Division — 8/6/15 Date

STATE OF MARYLAND
CHARLES J. CROVO
No. 13204
PROFESSIONAL ENGINEER

ADDRESS CHART	
BUILDING NO.	STREET ADDRESS
OFFICE/WAREHOUSE	9001 WHISKEY BOTTOM ROAD
GUARD HOUSE	9003 WHISKEY BOTTOM ROAD
FUTURE GARAGE	9005 WHISKEY BOTTOM ROAD
	LAUREL, MARYLAND 20723

PERMIT INFORMATION CHART

SUBDIVISION NAME		SECTION/AREA		LOT/PARCEL NO.
COASTAL SUNBELT PRODUCE		N/A		P. 375
PLAT# OR L/F	GRID#	ZONING	TAX MAP#	ELECT. DISTR.	CENSUS TRACT
23497-23499	4,5 10,11	TOD	50	SIXTH	6069.07

PHOTOMETRICS PLAN

COASTAL SUNBELT PRODUCE
WAREHOUSE DISTRIBUTION CENTER
PARCEL 'A'

ZONED TOD — TAX MAP No.: 50
GRID No.: 4,5,10,11 — PARCEL No.: 375
SIXTH ELECTION DISTRICT — HOWARD COUNTY, MARYLAND
SCALE: 1" = 40' — DATE: JULY 6, 2015

SHEET 47 OF 50

SDP-14-080

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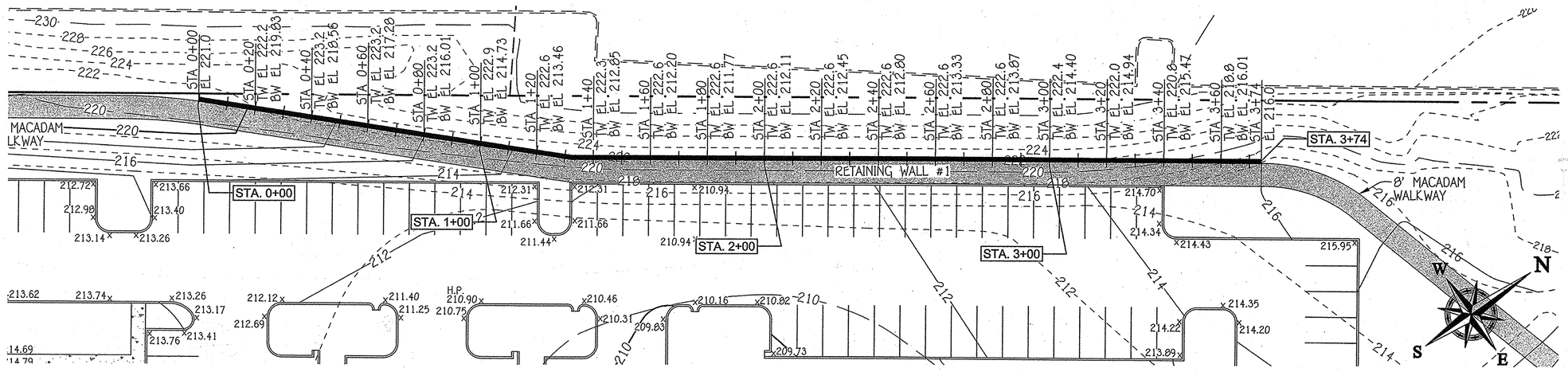

WALL #1 LOCATION PLAN
1" = 20'

20 10 0 20
Scale: 1" = 20'

HILLIS-CARNES
ENGINEERING ASSOCIATES
10975 Guilford Road, Suite A Annapolis Junction, Maryland
(410) 880-4788 WWW.HCEA.COM Fax: (410) 880-4098

OWNER
9001 WBR, LLC
1029 HARRISON DRIVE
LAUREL, MARYLAND
20707-3827
PH# 410-423-0460

DEVELOPER
WHISKEY SPEAK, LLC
2330 WEST JOPPA ROAD
SUITE 190
LUTHERVILLE, MARYLAND
21093-4614
PH# 410-296-3800

HCEA JOB NO.:	13563-C
DESIGNED BY:	AM
DRAWN BY:	AM
APPROVED BY:	RWS

DATE	DESCRIPTION
	REVISION BLOCK

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Director - Department of Planning and Zoning — Date 8-7-15

Chief, Division of Land Development — Date 8.06.15

Chief, Development Engineering Division — Date 8/6/15

PROFESSIONAL CERTIFICATION

I HEREBY CERTIFY THAT THESE PLANS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 14434, EXPIRATION DATE: 05/13/15.

STATE OF MARYLAND · RICHARD WILDEN SWANSON · NO. 14434 · REGISTERED PROFESSIONAL ENGINEER

ADDRESS CHART	
BUILDING NO.	STREET ADDRESS
OFFICE/WAREHOUSE	9001 WHISKEY BOTTOM ROAD
GUARD HOUSE	9003 WHISKEY BOTTOM ROAD
FUTURE GARAGE	9005 WHISKEY BOTTOM ROAD
	LAUREL, MARYLAND 20723

PERMIT INFORMATION CHART

SUBDIVISION NAME		SECTION/AREA		LOT/PARCEL NO.
COASTAL SUNBELT PRODUCE		N/A		P. 375
PLAT# OR L/F	GRID#	ZONING	TAX MAP#	ELECT. DISTR.	CENSUS TRACT
22437-22439	4,5 10,11	TOD	50	SIXTH	6069.07

RETAINING WALL LOCATION PLAN

COASTAL SUNBELT PRODUCE
WAREHOUSE DISTRIBUTION CENTER
PARCEL 'A'

ZONED TOD — TAX MAP No.: 50
GRID No.: 4,5,10,11 — PARCEL No.: 375
SIXTH ELECTION DISTRICT — HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN — DATE: APRIL 20, 2015

SHEET 48 OF 58

SDP-14-080

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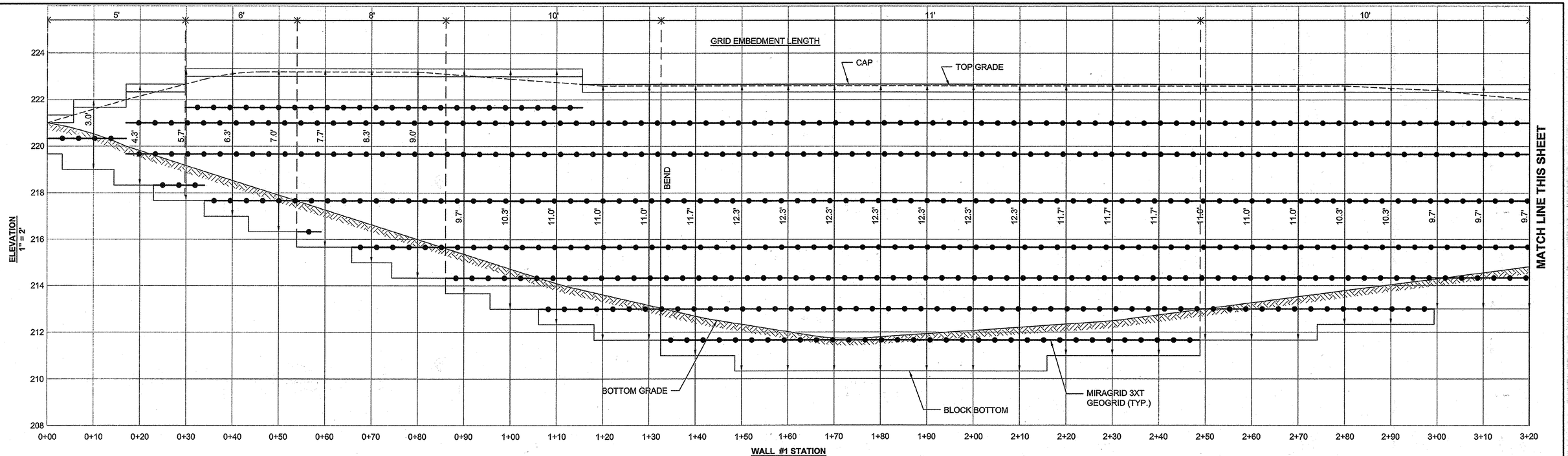
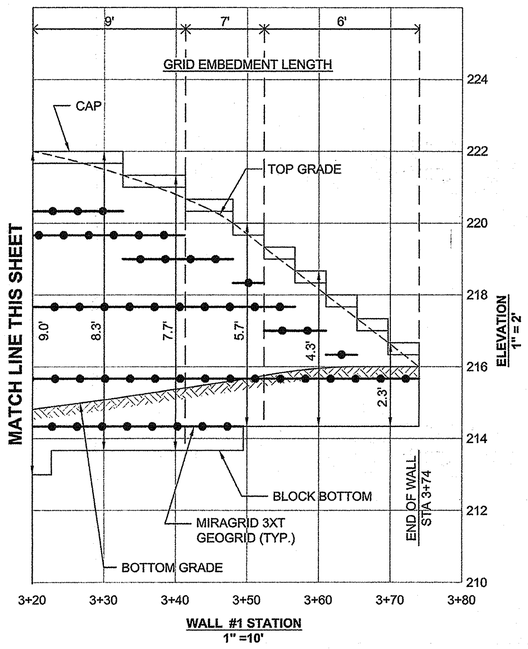


WALL #1 ELEVATION



WALL #1 ELEVATION

10 5 0 10
Scale: 1"=10'

HILLIS-CARNES
ENGINEERING ASSOCIATES
10975 Guilford Road, Suite A Annapolis Junction, Maryland
(410) 880-4788 WWW.HCEA.COM Fax: (410) 880-4098

OWNER
9001 WBR, LLC
1029 HARRISON DRIVE
LAUREL, MARYLAND
20707-3827
PH# 410-423-0460

DEVELOPER
WHISKEY SPEAK, LLC
2330 WEST JOPPA ROAD
SUITE 190
LUTHERVILLE, MARYLAND
21093-4614
PH# 410-296-3800

HCEA JOB NO.:	13563-C
DESIGNED BY:	AM
DRAWN BY:	AM
APPROVED BY:	RWS

DATE	DESCRIPTION
	REVISION BLOCK

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Director - Department of Planning and Zoning — Date 8-7-15

Chief, Division of Land Development — Date 8-06-15

Chief, Development Engineering Division — Date 8/11/15

PROFESSIONAL CERTIFICATION

I HEREBY CERTIFY THAT THESE PLANS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 14434, EXPIRATION DATE: 05/13/15.

STATE OF MARYLAND · RICHARD WARREN SWEENEY · No. 14434 · REGISTERED PROFESSIONAL ENGINEER

ADDRESS CHART	
BUILDING NO.	STREET ADDRESS
OFFICE/WAREHOUSE	9001 WHISKEY BOTTOM ROAD
GUARD HOUSE	9003 WHISKEY BOTTOM ROAD
FUTURE GARAGE	9005 WHISKEY BOTTOM ROAD
	LAUREL, MARYLAND 20723

PERMIT INFORMATION CHART

SUBDIVISION NAME			SECTION/AREA		LOT/PARCEL NO.
COASTAL SUNBELT PRODUCE			N/A		P. 375
PLAT# OR L/F	GRID#	ZONING	TAX MAP#	ELECT. DISTR.	CENSUS TRACT
23427-23429	4,5 10,11	TOD	50	SIXTH	6069.07

RETAINING WALL #1 ELEVATION

COASTAL SUNBELT PRODUCE
WAREHOUSE DISTRIBUTION CENTER
PARCEL 'A'

ZONED TOD — TAX MAP No.: 50
GRID No.: 4,5,10,11 — PARCEL No.: 375
SIXTH ELECTION DISTRICT — HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN — DATE: APRIL 20, 2015

SHEET 49 OF 58

SDP-14-080

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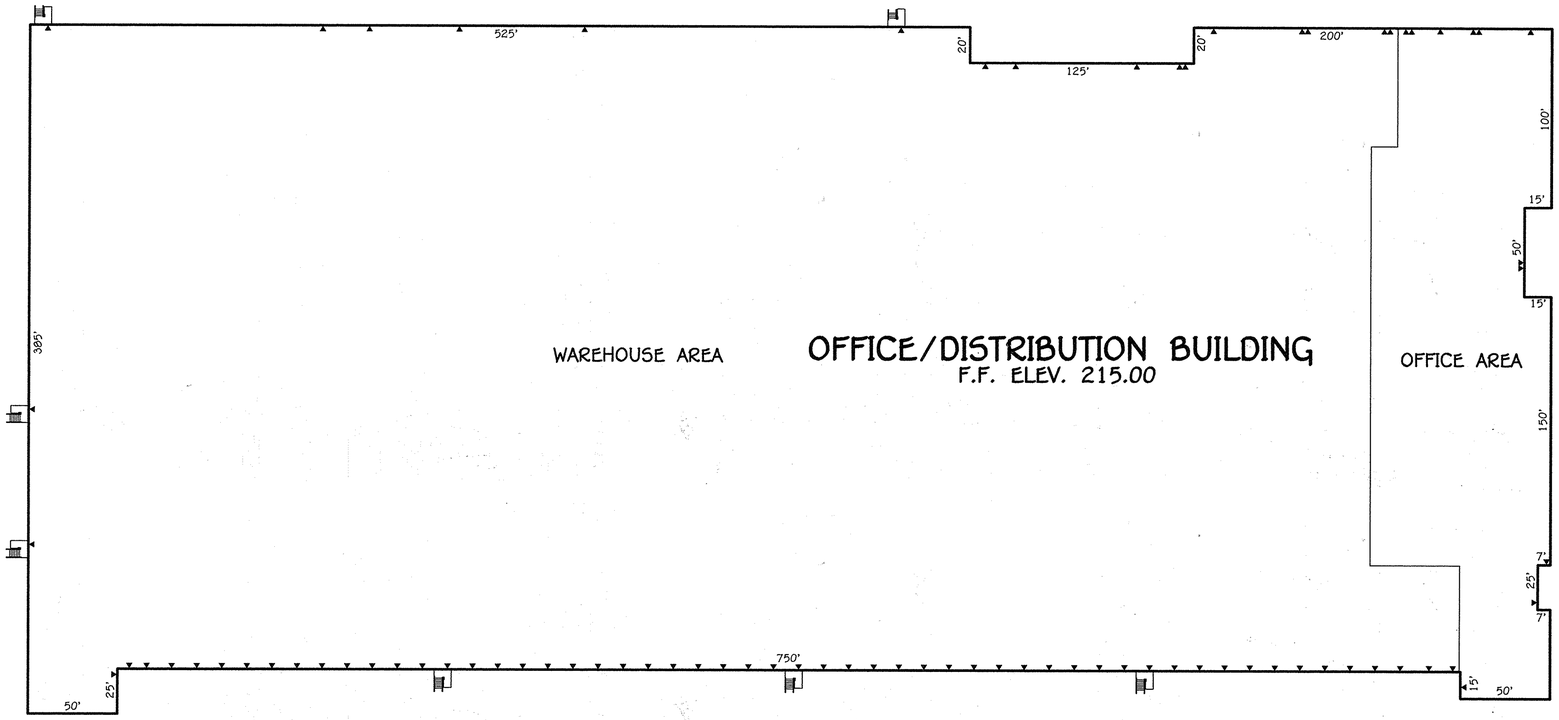
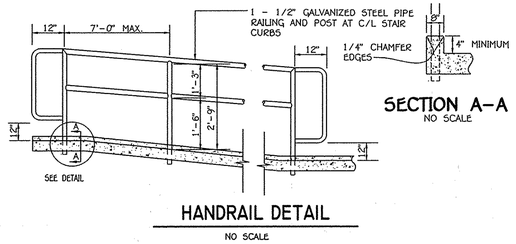


OFFICE/WAREHOUSE FOOTPRINT

SCALE: 1" = 40'

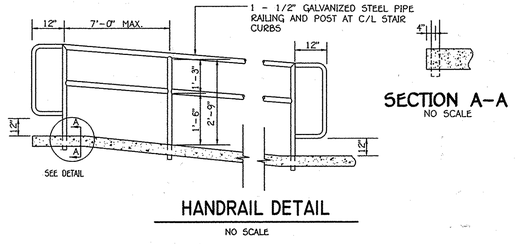


SECTION A-A

NO SCALE

HANDRAIL DETAIL

NO SCALE

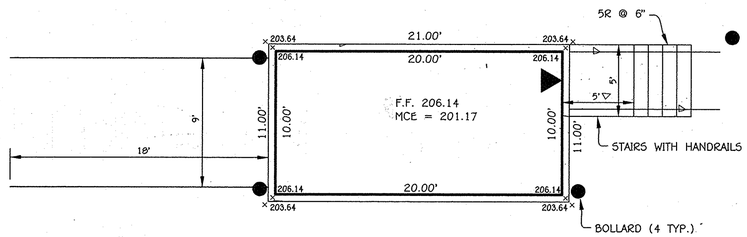


SECTION A-A

NO SCALE

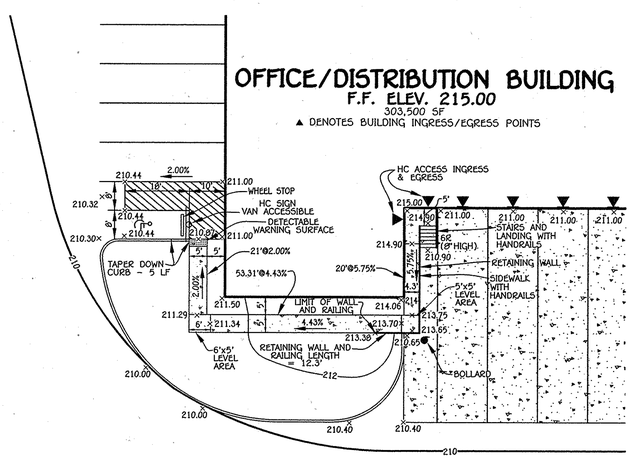
HANDRAIL DETAIL

NO SCALE



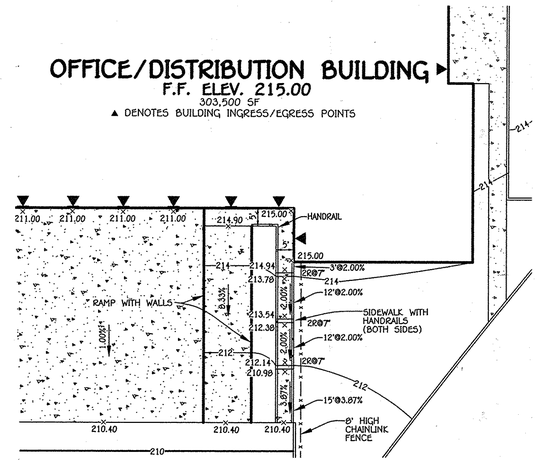
GUARD HOUSE FOOTPRINT

SCALE: 1" = 5'



HANDICAP ACCESS PLAN
@ EMPLOYEE ENTRANCE

SCALE: 1" = 20'



RAMP AND WALKWAY
@ EAST ENTRANCE

SCALE: 1" = 20'

0' 40' 80' 120'

SCALE: 1" = 40'

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
ELLICOTT CITY, MARYLAND 21042
(410) 461 - 2855

OWNER
9001 WBR, LLC
1029 HARRISON DRIVE
LAUREL, MARYLAND
20707-3827
PH# 410-423-0460

DEVELOPER
WHISKEY SPEAK LLC
2330 WEST JOPPA ROAD
SUITE 190
LUTHERVILLE, MARYLAND
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"PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPAREO OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDEE THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 13204, EXPIRATION DATE: NOVEMBER 9, 2016."

CHARLES J. UROVO, SR., P.E. — 7/15/15 DATE

DATE	DESCRIPTION
	REVISION BLOCK

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Director - Department of Planning and Zoning — 8-7-15 Date

Chief, Division of Land Development — 8-06-15 Date

Chief, Development Engineering Division — 8/6/15 Date

STATE OF MARYLAND · CHARLES J. UROVO · No. 13204 · PROFESSIONAL ENGINEER

ADDRESS CHART	
BUILDING NO.	STREET ADDRESS
OFFICE/WAREHOUSE	9001 WHISKEY BOTTOM ROAD
GUARD HOUSE	9003 WHISKEY BOTTOM ROAD
FUTURE GARAGE	9005 WHISKEY BOTTOM ROAD
	LAUREL, MARYLAND 20723

PERMIT INFORMATION CHART

SUBDIVISION NAME			SECTION/AREA		LOT/PARCEL NO.
COASTAL SUNBELT PRODUCE			N/A		P. 375
PLAT# OR L/F	GRID#	ZONING	TAX MAP#	ELECT. DISTR.	CENSUS TRACT
22437 - 23439	4,5 10,11	TOD	50	SIXTH	6069.07

BUILDING FOOTPRINTS AND HANDICAP ACCESS PLAN AND DETAIL SHEET

COASTAL SUNBELT PRODUCE
WAREHOUSE DISTRIBUTION CENTER
PARCEL 'A'

ZONED TOD — TAX MAP No.: 50
GRID No.: 4,5,10,11 — PARCEL No.: 375
SIXTH ELECTION DISTRICT — HOWARD COUNTY, MARYLAND
SCALE: 1" = 40' — DATE: JULY 6, 2015

SHEET 50 OF 50

SDP-14-080

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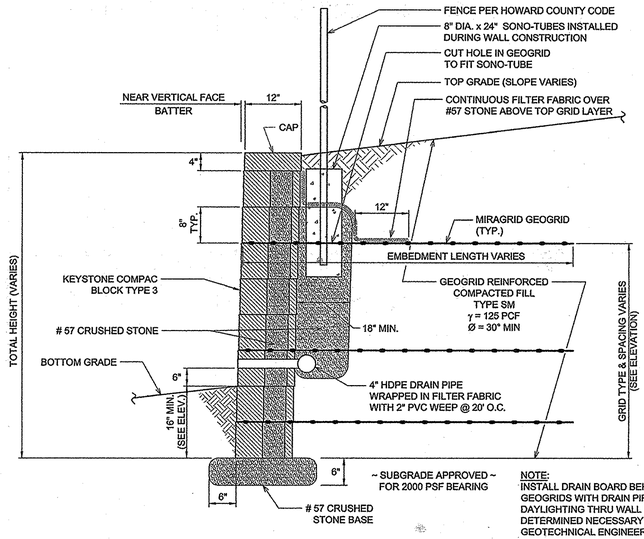

NOTE:
INSTALL DRAIN BOARD BEHIND GEOGRIDS WITH DRAIN PIPE DAYLIGHTING THRU WALL BLOCK AS DETERMINED NECESSARY BY SITE GEOTECHNICAL ENGINEER TO INTERCEPT ANY SEEPING WATER (OR AREAS LIKELY TO SEEP) ALONG THE EXCAVATION FACE.

TYPICAL RETAINING WALL SECTION
NOT TO SCALE

GENERAL NOTES:

1. No trees shall be planted within 10 feet of the top of the retaining wall.
2. Retaining walls shall only be constructed under the observation of a registered professional engineer and a (NICET, WACEL, or equiv.) certified soils technician.
3. The required bearing pressure beneath the wall system shall be verified in the field by a certified soils technician. Testing documentation must be provided to the Howard County Inspector prior to start of construction. The required bearing test shall be the Dynamic Cone Penetrometer test ASTM STP-399.
4. The suitability of fill material shall be confirmed by the on-site soils technician. Each 8" lift must be compacted to a minimum 95% standard proctor density and the testing report shall be made available to the Howard County Inspector upon completion of construction.
5. Walls shall not be constructed on uncertified fill materials.
6. Walls shall not be constructed within a Howard Co. right-of-way or easement.

SPECIFICATIONS
MODULAR CONCRETE BLOCK RETAINING WALL

PART 1: GENERAL

1.01 DESCRIPTION

A. WORK SHALL CONSIST OF FURNISHING AND CONSTRUCTION OF A MODULAR RETAINING WALL SYSTEM IN ACCORDANCE WITH THESE SPECIFICATIONS AND IN REASONABLY CLOSE CONFORMITY WITH THE LINES, GRADES, DESIGN, AND DIMENSIONS SHOWN ON THE PLANS.

B. WORK INCLUDES PREPARING FOUNDATION SOIL, FURNISHING AND INSTALLING LEVELING PAD, UNIT DRAINAGE FILL AND BACKFILL TO THE LINES AND GRADES SHOWN ON THE CONSTRUCTION DRAWINGS.

C. WORK INCLUDES FURNISHING AND INSTALLING GEOGRID SOIL REINFORCEMENT OF THE TYPE, SIZE, LOCATION, AND LENGTHS DESIGNATED ON THE CONSTRUCTION DRAWINGS.

1.02 DELIVERY, STORAGE AND HANDLING

A. CONTRACTOR SHALL CHECK ALL MATERIALS UPON DELIVERY TO ASSURE THAT THE PROPER TYPE, GRADE, COLOR, AND CERTIFICATION HAS BEEN RECEIVED.

B. CONTRACTOR SHALL PROTECT ALL MATERIALS FROM DAMAGE DUE TO JOB SITE CONDITIONS AND IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. DAMAGED MATERIALS SHALL NOT BE INCORPORATED INTO THE WORK.

PART 2: PRODUCTS

2.01 MODULAR CONCRETE RETAINING WALL UNITS

A. MODULAR CONCRETE UNITS SHALL CONFORM TO THE FOLLOWING ARCHITECTURAL REQUIREMENTS:

FACE COLOR - CONCRETE GRAY - STANDARD MANUFACTURERS' COLOR MAY BE SPECIFIED BY THE OWNER.

FACE FINISH - SCULPTURED ROCK FACE IN ANGULAR TRI-PLANER OR FLAT CONFIGURATION. OTHER FACE FINISHES WILL NOT BE ALLOWED WITHOUT WRITTEN APPROVAL OF OWNER.

BOND CONFIGURATION - RUNNING WITH BONDS NOMINALLY LOCATED AT MIDPOINT VERTICALLY ADJACENT UNITS, IN BOTH STRAIGHT AND CURVED ALIGNMENTS. EXPOSED SURFACES OF UNITS SHALL BE FREE OF CHIPS, CRACKS OR OTHER IMPERFECTIONS WHEN VIEWED FROM A DISTANCE OF 10 FEET UNDER DIFFUSED LIGHTING.

B. MODULAR CONCRETE MATERIALS SHALL CONFORM TO THE REQUIREMENTS OF ASTM C1372 - STANDARD SPECIFICATIONS FOR SEGMENTAL RETAINING WALL UNITS.

C. MODULAR CONCRETE UNITS SHALL CONFORM TO THE FOLLOWING STRUCTURAL AND GEOMETRIC REQUIREMENTS MEASURED IN ACCORDANCE WITH APPROPRIATE REFERENCES:

COMPRESSIVE STRENGTH = 3000 PSI MINIMUM; ABSORPTION = 8% MAXIMUM (6% IN NORTHERN STATES) FOR STANDARD WEIGHT AGGREGATES;

DIMENSIONAL TOLERANCES = ±1/8" FROM NOMINAL UNIT DIMENSIONS NOT INCLUDING ROUGH SPLIT FACE, ±1/16"

UNIT HEIGHT - TOP AND BOTTOM PLANES; UNIT SIZE - 8" (H) X 18" (W) X 12 (D) MINIMUM;

UNIT WEIGHT - 75 LBS/UNIT MINIMUM FOR STANDARD WEIGHT AGGREGATES;

INTER-UNIT SHEAR STRENGTH - 1000 PLF MINIMUM AT 2 PSI NORMAL PRESSURE; AT 2 PSI NORMAL FORCE.

GEOGRID/UNIT PEAK CONNECTION STRENGTH - 1000 PLF MINIMUM

D. MODULAR CONCRETE UNITS SHALL CONFORM TO THE FOLLOWING CONSTRUCTABILITY REQUIREMENTS:

VERTICAL SETBACK = 1/8"± PER COURSE (NEAR VERTICAL) OR 1"+ PER COURSE PER THE DESIGN;

ALIGNMENT AND GRID POSITIONING MECHANISM - FIBERGLASS PINS, TWO PER UNIT MINIMUM;

MAXIMUM HORIZONTAL GAP BETWEEN ERECTED UNITS SHALL BE - 1/2 INCH.

2.02 SHEAR CONNECTORS

A. SHEAR CONNECTORS SHALL BE 1/2 INCH DIAMETER THERMOSET ISOPTHALIC POLYESTER RESIN-PROTRUDED FIBERGLASS REINFORCEMENT RODS OR EQUIVALENT TO PROVIDE CONNECTION BETWEEN VERTICALLY AND HORIZONTALLY ADJACENT UNITS. STRENGTH OF SHEAR CONNECTORS BETWEEN VERTICAL ADJACENT UNITS SHALL BE APPLICABLE OVER A DESIGN TEMPERATURE OF 10 DEGREES F TO + 100 DEGREES F. B. SHEAR CONNECTORS SHALL BE CAPABLE OF HOLDING THE GEOGRID IN THE PROPER DESIGN POSITION DURING GRID PRE-TENSIONING AND BACKFILLING.

2.03 BASE LEVELING PAD MATERIAL

A. MATERIAL SHALL CONSIST OF A COMPACTED #57 CRUSHED STONE BASE AS SHOWN ON THE CONSTRUCTION DRAWINGS.

2.04 UNIT DRAINAGE FILL

A. UNIT DRAINAGE FILL SHALL CONSIST OF #57CRUSHED STONE

2.05 REINFORCED BACKFILL

A. REINFORCED BACKFILL SHALL TYPE SM, BE FREE OF DEBRIS AND MEET THE FOLLOWING GRADATION TESTED IN ACCORDANCE WITH ASTM D-422 AND MEET OTHER PROPERTIES SHOWN ON THE PLAN:

SIEVE SIZE	PERCENT PASSING
2 INCH	100-75
3/4 INCH	100-75
NO. 40	0-60
NO. 200	0-35

PLASTICITY INDEX (PI) <10 AND LIQUID LIMIT <40 PER ASTM D-4318.

B. MATERIAL CAN BE SITE EXCAVATED SOILS WHERE THE ABOVE REQUIREMENTS CAN BE MET. UNSUITABLE SOILS FOR BACKFILL (HIGH PLASTIC CLAYS OR ORGANIC SOILS) SHALL NOT BE USED IN THE REINFORCED SOIL MASS.

2.06 GEOGRID SOIL REINFORCEMENT

A. GEOSYNTHETIC REINFORCEMENT SHALL CONSIST OF GEOGRIDS MANUFACTURED SPECIFICALLY FOR SOIL REINFORCEMENT APPLICATIONS AND SHALL BE MANUFACTURED FROM HIGH TENACITY POLYESTER YARN.

2.07 DRAINAGE PIPE

A. THE DRAINAGE PIPE SHALL BE PERFORATED CORRUGATED HDPE PIPE MANUFACTURED IN ACCORDANCE WITH ASTM D-1248.

PART 3 EXECUTION

3.01 EXCAVATION

A. CONTRACTOR SHALL EXCAVATE TO THE LINES AND GRADES SHOWN ON THE CONSTRUCTION DRAWINGS. OWNER'S REPRESENTATIVE SHALL BE RESPONSIBLE FOR INSPECTING AND APPROVING THE EXCAVATION PRIOR TO PLACEMENT OF LEVELING MATERIAL OR FILL SOILS.

3.02 BASE LEVELING PAD

A. LEVELING PAD MATERIAL SHALL BE PLACED TO THE LINES AND GRADES SHOWN ON THE CONSTRUCTION DRAWINGS, TO A MINIMUM THICKNESS OF 6 INCHES AND EXTEND LATERALLY A MINIMUM OF 6" IN FRONT AND BEHIND THE MODULAR WALL UNIT.

B. LEVELING PAD SHALL BE PREPARED TO INSURE FULL CONTACT TO THE BASE SURFACE OF THE CONCRETE UNITS.

3.03 MODULAR UNIT INSTALLATION

A. FIRST COURSE OF UNITS SHALL BE PLACED ON THE LEVELING PAD AT THE APPROPRIATE LINE AND GRADE. ALIGNMENT AND LEVEL SHALL BE CHECKED IN ALL DIRECTIONS AND INSURE THAT ALL UNITS ARE IN FULL CONTACT WITH THE BASE AND PROPERLY SEATED.

B. PLACE THE FRONT OF UNITS SIDE-BY-SIDE. DO NOT LEAVE GAPS BETWEEN ADJACENT UNITS. LAYOUT OF CORNERS AND CURVES SHALL BE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

C. INSTALL SHEAR/CONNECTING DEVICES PER MANUFACTURER'S RECOMMENDATIONS.

D. PLACE AND COMPACT DRAINAGE FILL WITHIN AND BEHIND WALL UNITS. PLACE AND COMPACT BACKFILL SOIL BEHIND DRAINAGE FILL. FOLLOW WALL ERECTION AND DRAINAGE FILL CLOSELY WITH STRUCTURE BACKFILL.

E. MAXIMUM STACKED VERTICAL HEIGHT OF WALL UNITS, PRIOR TO UNIT DRAINAGE FILL AND BACKFILL PLACEMENT AND COMPACTION, SHALL NOT EXCEED THREE COURSES.

3.04 STRUCTURAL GEOGRID INSTALLATION

A. GEOGRID SHALL BE ORIENTED WITH THE HIGHEST STRENGTH AXIS PERPENDICULAR TO THE WALL ALIGNMENT.

B. GEOGRID REINFORCEMENT SHALL BE PLACED AT THE STRENGTHS, LENGTHS, AND ELEVATIONS SHOWN ON THE CONSTRUCTION DESIGN DRAWINGS OR AS DIRECTED BY THE ENGINEER.

C. THE GEOGRID SHALL BE LAID HORIZONTALLY ON COMPACTED BACKFILL AND ATTACHED TO THE MODULAR WALL UNITS. PLACE THE NEXT COURSE OF MODULAR CONCRETE UNITS OVER THE GEOGRID. THE GEOGRID SHALL BE PULLED TAUT, AND ANCHORED PRIOR TO BACKFILL PLACEMENT ON THE GEOGRID.

D. GEOGRID REINFORCEMENTS SHALL BE CONTINUOUS THROUGHOUT THEIR EMBEDMENT LENGTHS AND PLACED SIDE-BY-SIDE TO PROVIDE 100% COVERAGE AT EACH LEVEL. SPLICED CONNECTIONS BETWEEN SHORTER PIECES OF GEOGRID OR GAPS BETWEEN ADJACENT PIECES OF GEOGRID ARE NOT PERMITTED.

3.05 REINFORCED BACKFILL PLACEMENT

A. REINFORCED BACKFILL SHALL BE PLACED, SPREAD, AND COMPACTED IN SUCH A MANNER THAT MINIMIZES THE DEVELOPMENT OF SLACK IN THE GEOGRID AND INSTALLATION DAMAGE.

B. REINFORCED BACKFILL SHALL BE PLACED AND COMPACTED IN LIFTS NOT TO EXCEED 6 INCHES WHERE HAND COMPACTION IS USED, OR 8 - 10 INCHES WHERE HEAVY COMPACTION EQUIPMENT IS USED. LIFT THICKNESS SHALL BE DECREASED TO ACHIEVE THE REQUIRED DENSITY AS REQUIRED.

C. REINFORCED BACKFILL SHALL BE COMPACTED TO 95% OF THE MAXIMUM DENSITY AS DETERMINED BY ASTM D698. THE MOISTURE CONTENT OF THE BACKFILL MATERIAL PRIOR TO AND DURING COMPACTION SHALL BE UNIFORMLY DISTRIBUTED THROUGHOUT EACH LAYER AND SHALL BE + 3% TO - 3% OF OPTIMUM.

D. ONLY LIGHTWEIGHT HAND-OPERATED EQUIPMENT SHALL BE ALLOWED WITHIN 3 FEET FROM THE TAIL OF THE MODULAR CONCRETE UNIT.

E. TRACKED CONSTRUCTION EQUIPMENT SHALL NOT BE OPERATED DIRECTLY UPON THE GEOGRID REINFORCEMENT. A MINIMUM FILL THICKNESS OF 6 INCHES IS REQUIRED PRIOR TO OPERATION OF TRACKED VEHICLES OVER THE GEOGRID. TRACKED VEHICLE TURNING SHOULD BE KEPT TO A MINIMUM TO PREVENT TRACKS FROM DISPLACING THE FILL AND DAMAGING THE GEOGRID.

F. RUBBER TIRED EQUIPMENT MAY PASS OVER GEOGRID REINFORCEMENT AT SLOW SPEEDS, LESS THAN 10 MPH. SUDDEN BRAKING AND SHARP TURNING SHALL BE AVOIDED.

G. AT THE END OF EACH DAY'S OPERATION, THE CONTRACTOR SHALL SLOPE THE LAST LIFT OF REINFORCED BACKFILL AWAY FROM THE WALL UNITS TO DIRECT RUNOFF AWAY FROM WALL FACE. THE CONTRACTOR SHALL NOT ALLOW SURFACE RUNOFF FROM ADJACENT AREAS TO ENTER THE WALL CONSTRUCTION SITE.

3.06 CAP INSTALLATION

A. CAP UNITS SHALL BE GLUED TO UNDERLYING UNITS WITH AN ALL-WEATHER ADHESIVE RECOMMENDED BY THE MANUFACTURER.

3.07 FIELD QUALITY CONTROL

A. THE OWNER SHALL ENGAGE INSPECTION AND TESTING SERVICES, INCLUDING INDEPENDENT LABORATORIES, TO PROVIDE QUALITY ASSURANCE AND TESTING SERVICES DURING CONSTRUCTION.

B. AS A MINIMUM, QUALITY ASSURANCE TESTING SHOULD INCLUDE FOUNDATION SOIL INSPECTION, SOIL AND BACKFILL TESTING, VERIFICATION OF DESIGN PARAMETERS, AND OBSERVATION OF CONSTRUCTION FOR GENERAL COMPLIANCE WITH DESIGN DRAWINGS AND SPECIFICATIONS.

10 5 0 10
Scale: 1"=10'

HILLIS-CARNES
ENGINEERING ASSOCIATES
10975 Guilford Road, Suite A Annapolis Junction, Maryland
(410) 880-4788 WWW.HCEA.COM Fax: (410) 880-4099

OWNER
9001 WB2, LLC
1029 HARRISON DRIVE
LAUREL, MARYLAND
20707-3827
PH# 410-423-0460

DEVELOPER
WHISKEY SPEAK LLC
2330 WEST JOPPA ROAD
SUITE 190
LUTHERVILLE, MARYLAND
21093-4614
PH# 410-296-3800

HCEA JOB NO.:	13563-C
DESIGNED BY:	AM
DRAWN BY:	AM
APPROVED BY:	RWS

DATE	DESCRIPTION
	REVISION BLOCK

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Director - Department of Planning and Zoning — Date 8-7-15

Chief, Division of Land Development — Date 8-26-15

Chief, Development Engineering Division — Date 8/6/15

PROFESSIONAL CERTIFICATION

I HEREBY CERTIFY THAT THESE PLANS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 14434, EXPIRATION DATE: 05/13/15.

STATE OF MARYLAND — RICHARD WARREN WHITEHEAD — 14434 — REGISTERED PROFESSIONAL ENGINEER

ADDRESS CHART	
BUILDING NO.	STREET ADDRESS
OFFICE/WAREHOUSE	9001 WHISKEY BOTTOM ROAD
GUARD HOUSE	9003 WHISKEY BOTTOM ROAD
FUTURE GARAGE	9005 WHISKEY BOTTOM ROAD
	LAUREL, MARYLAND 20723

PERMIT INFORMATION CHART

SUBDIVISION NAME	SECTION/AREA	LOT/PARCEL NO.
COASTAL SUNBELT PRODUCE	N/A	P. 375

PLAT# OR L/F	GRID#	ZONING	TAX MAP#	ELECT. DISTR.	CENSUS TRACT
27437-27439	4,5 10,11	TOD	50	SIXTH	6069.07

RETAINING WALL CONSTRUCTION DETAILS

COASTAL SUNBELT PRODUCE
WAREHOUSE DISTRIBUTION CENTER
PARCEL 'A'

ZONED TOD — TAX MAP No.: 50
GRID No.: 4,5,10,11 — PARCEL No.: 375
SIXTH ELECTION DISTRICT — HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN — DATE: APRIL 20, 2015

SHEET 51 OF 58

SDP-14-080

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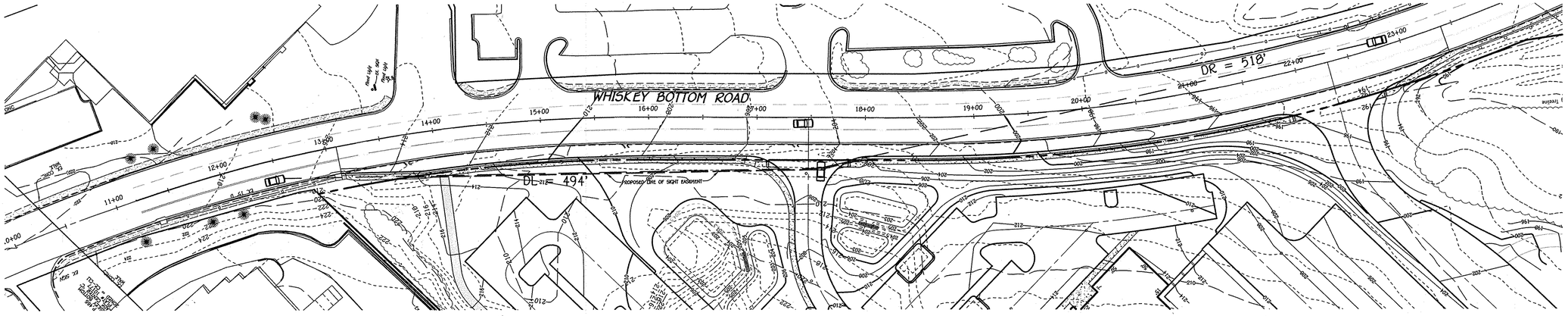
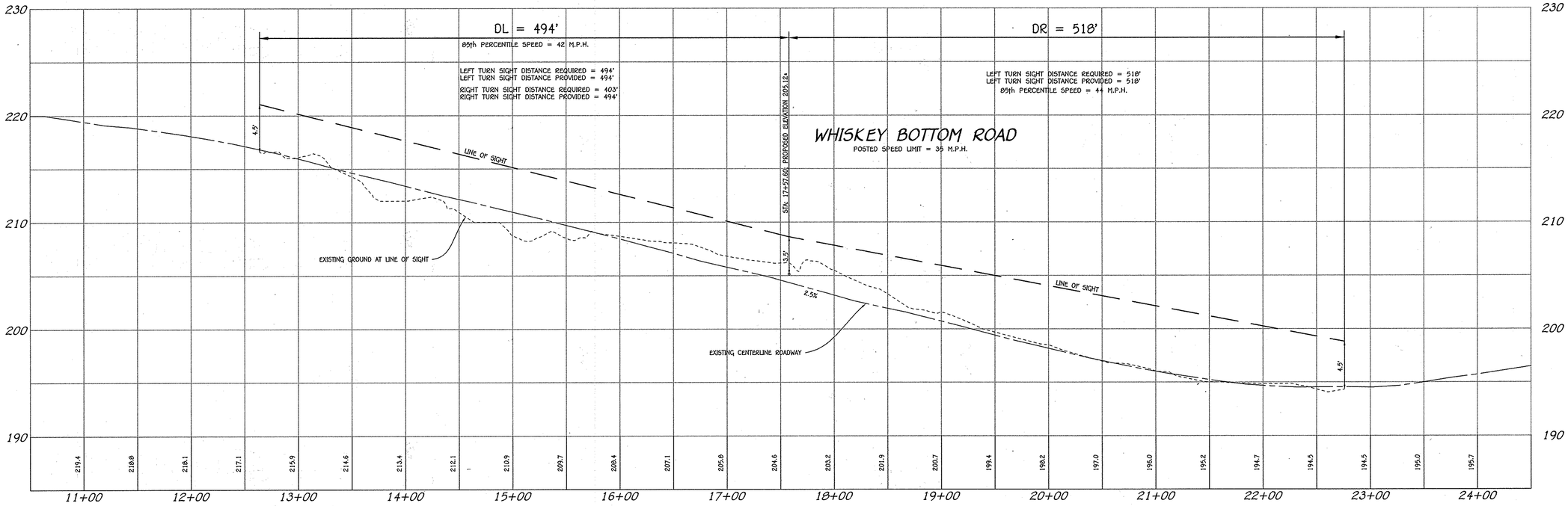


PLAN
SCALE: 1" = 50'



PROFILE
SCALE: HOR. : 1" = 50'
VER. : 1" = 5'

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
ELLICOTT CITY, MARYLAND 21042
(410) 461 - 2855

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"PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 13204, EXPIRATION DATE: NOVEMBER 3, 2016."

CHARLES J. CROVO, SR., P.E. — 7/16/15 DATE

DATE	DESCRIPTION
	REVISION BLOCK

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Director - Department of Planning and Zoning — 8-7-15 Date

Chief, Division of Land Development — 8.06.15 Date

Chief, Development Engineering Division — 8/6/15 Date

STATE OF MARYLAND — CHARLES JOSEPH CROVO — No. 13204 — PROFESSIONAL ENGINEER

ADDRESS CHART	
BUILDING NO.	STREET ADDRESS
OFFICE/WAREHOUSE	9001 WHISKEY BOTTOM ROAD
GUARD HOUSE	9003 WHISKEY BOTTOM ROAD
FUTURE GARAGE	9005 WHISKEY BOTTOM ROAD
	LAUREL, MARYLAND 20723

PERMIT INFORMATION CHART

SUBDIVISION NAME			SECTION/AREA		LOT/PARCEL NO.
COASTAL SUNBELT PRODUCE			N/A		P. 375
PLAT# OR L/F	GRID#	ZONING	TAX MAP#	ELECT. DISTR.	CENSUS TRACT
~~23437-23439~~	4,5 10,11	TOD	50	SIXTH	6069.07

CAR ENTRANCE INTERSECTION SIGHT DISTANCE PLAN AND PROFILE

COASTAL SUNBELT PRODUCE
WAREHOUSE DISTRIBUTION CENTER
PARCEL 'A'

ZONED TOD — TAX MAP No.: 50
GRID No.: 4,5,10,11 — PARCEL No.: 375
SIXTH ELECTION DISTRICT — HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN — DATE: JULY 6, 2015

SHEET 52 OF 58

SDP-14-080

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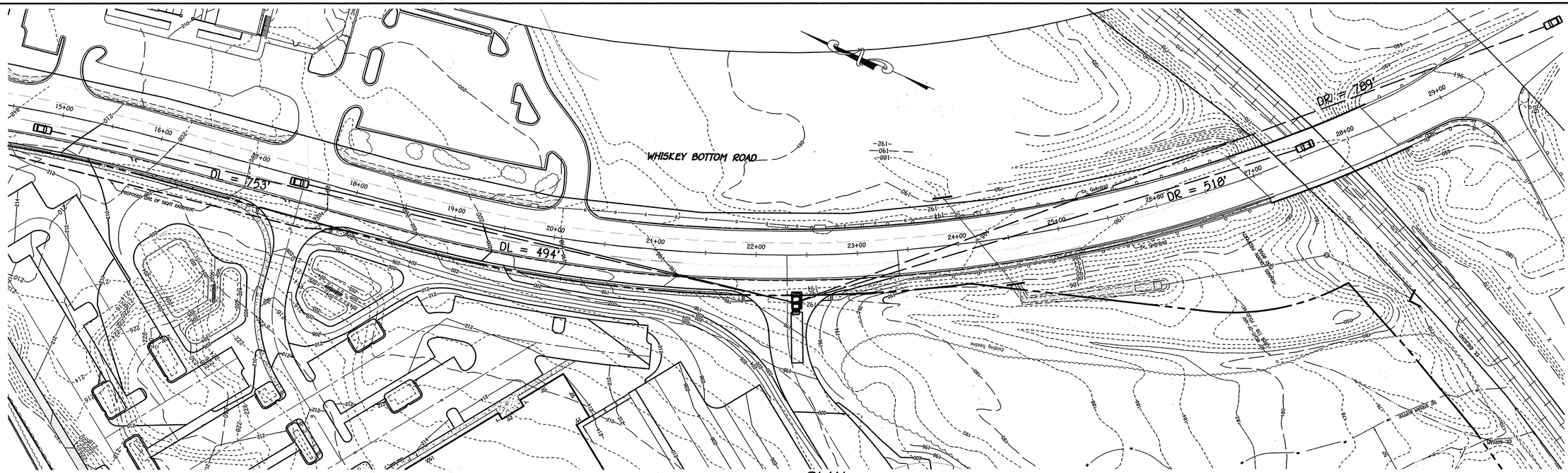
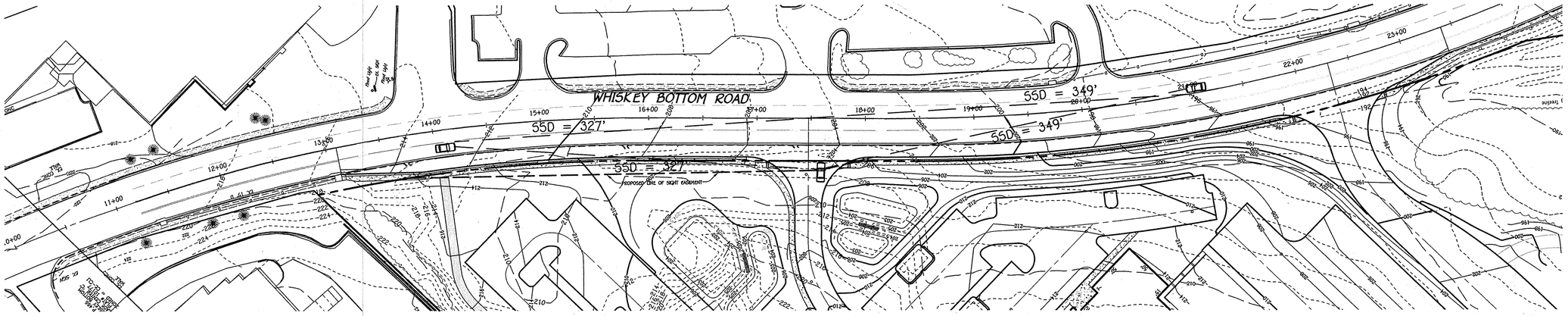
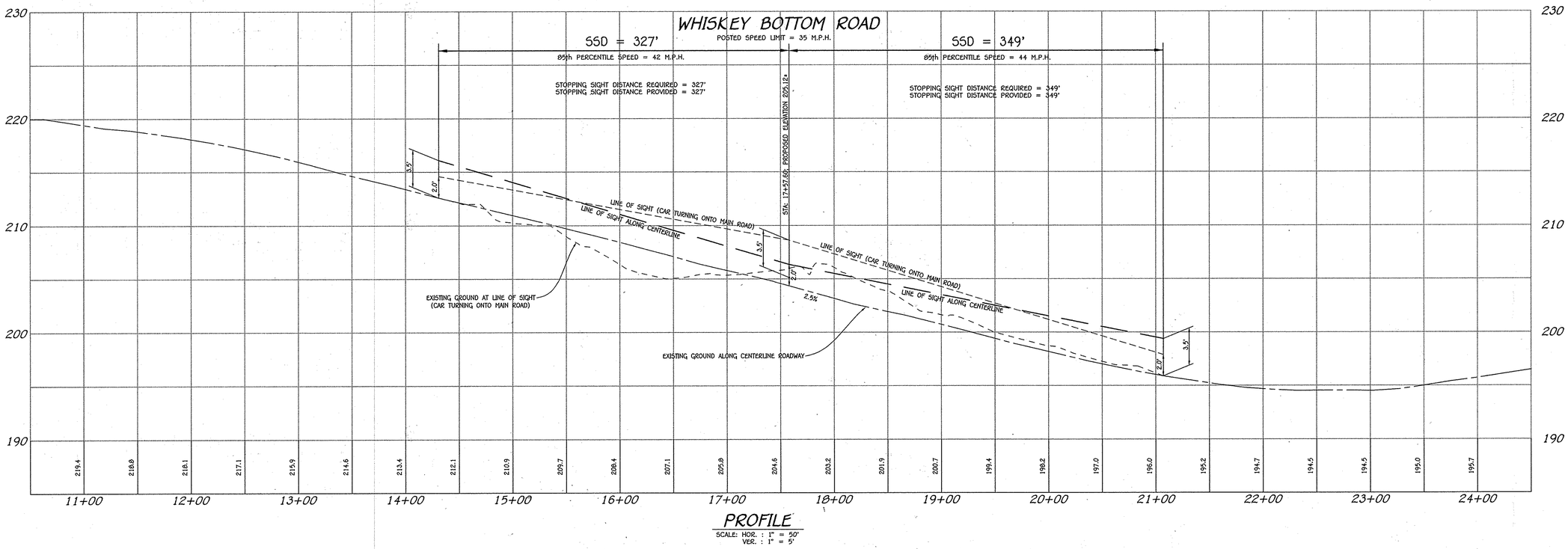

WHISKEY BOTTOM ROAD
DL = 753'
DL = 494'
DR = 518'
DR = 779'
Sight line of sight elevation
Existing tree line
Existing fence line
Existing house
Existing shed
Existing garage
Existing well
Existing septic
Existing gazebo
Existing pool
Existing deck
Existing patio
Existing pavilion
Existing pergola
Existing shed
Existing garage
Existing house
Existing fence line
Existing tree line
Existing tree line
Existing tree



PLAN
SCALE: 1" = 50'



PROFILE
SCALE: HOR. : 1" = 50'
VER. : 1" = 5'

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
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DEVELOPER
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"PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 13204, EXPIRATION DATE: NOVEMBER 3, 2016."

CHARLES J. CROVO, SR., P.E. — 7/15/15 DATE

DATE	DESCRIPTION
	REVISION BLOCK

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Director - Department of Planning and Zoning — 8-7-15 Date

Chief, Division of Land Development — 8-06-15 Date

Chief, Development Engineering Division — 7/6/15 Date

STATE OF MARYLAND — CHARLES J. CROVO — No. 13204 — PROFESSIONAL ENGINEER

ADDRESS CHART	
BUILDING NO.	STREET ADDRESS
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	LAUREL, MARYLAND 20723

PERMIT INFORMATION CHART

SUBDIVISION NAME		SECTION/AREA		LOT/PARCEL NO.
COASTAL SUNBELT PRODUCE		N/A		P. 375
PLAT# OR L/F	GRID#	ZONING	TAX MAP#	ELECT. DISTR.	CENSUS TRACT
23437-23439	4,5 10,11	TOD	50	SIXTH	6069.07

CAR ENTRANCE STOPPING SIGHT DISTANCE PLAN AND PROFILE

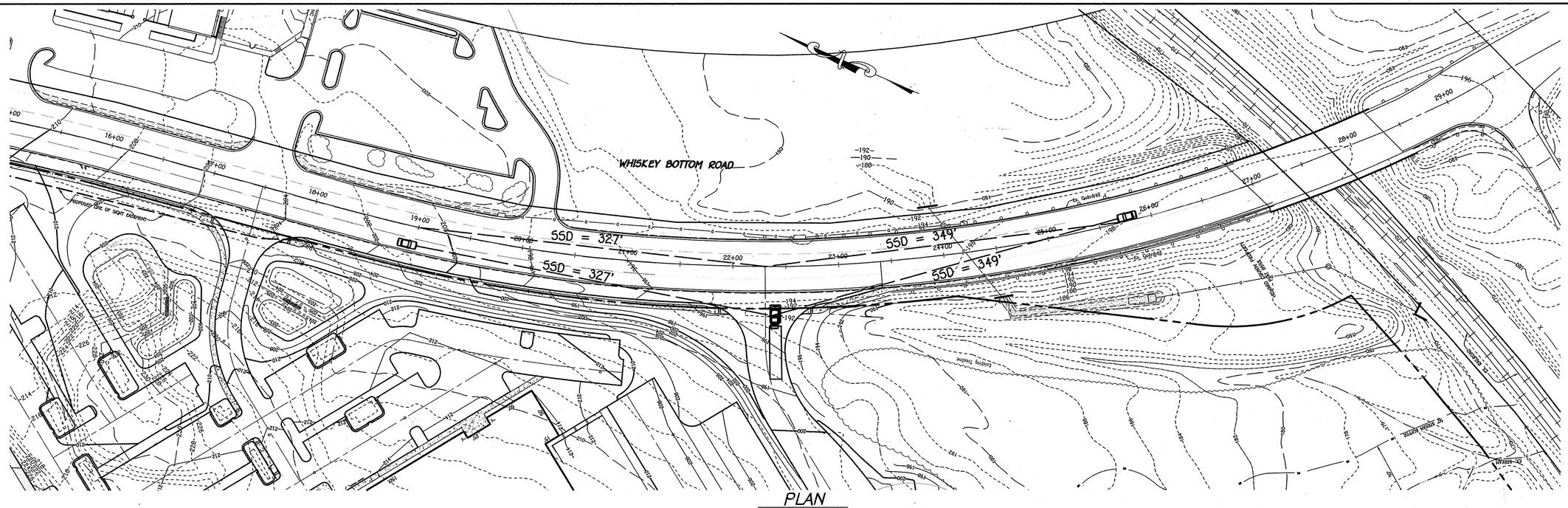
COASTAL SUNBELT PRODUCE
WAREHOUSE DISTRIBUTION CENTER
PARCEL 'A'

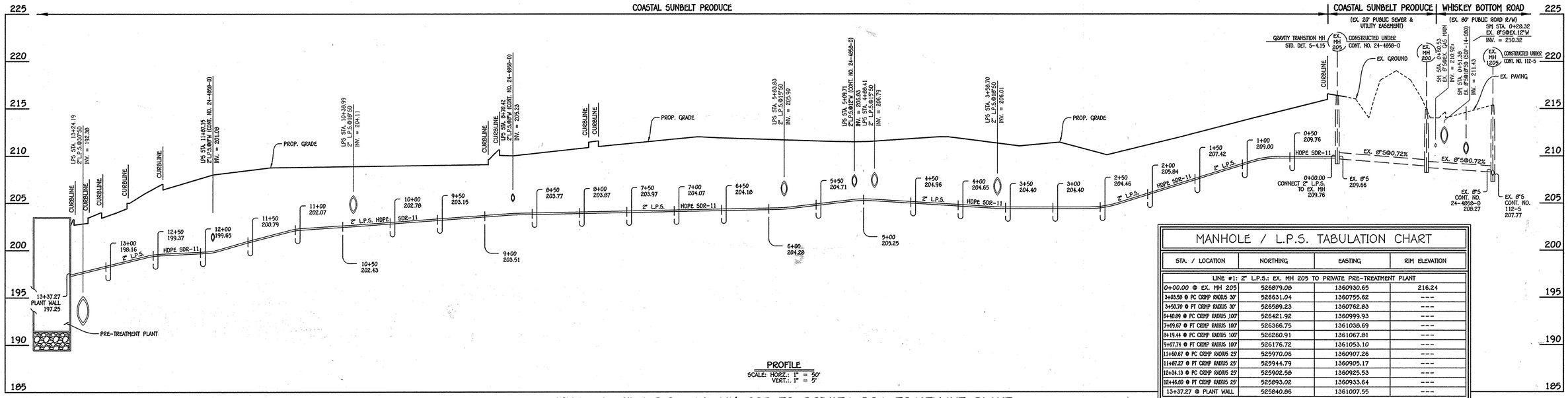
ZONED TOD — TAX MAP No.: 50
GRID No.: 4,5,10,11 — PARCEL No.: 375
SIXTH ELECTION DISTRICT — HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN — DATE: JULY 6, 2015

SHEET 54 OF 58

SDP-14-080

I:\2013\13033\Engineering\Dwgs\13033-3001 SDP 54-55 STOPPING DISTANCE.dwg, car stopping distance, 7/2/2015 2:36:09 PM, 1:1


WHISKEY BOTTOM ROAD
55D = 327'
55D = 349'
55D = 327'
55D = 349'
Sight Distance Easement
Existing Tree Line
Existing Treeline
Limits of Disturbance
Limits of Disturbance
Limits of Disturbance

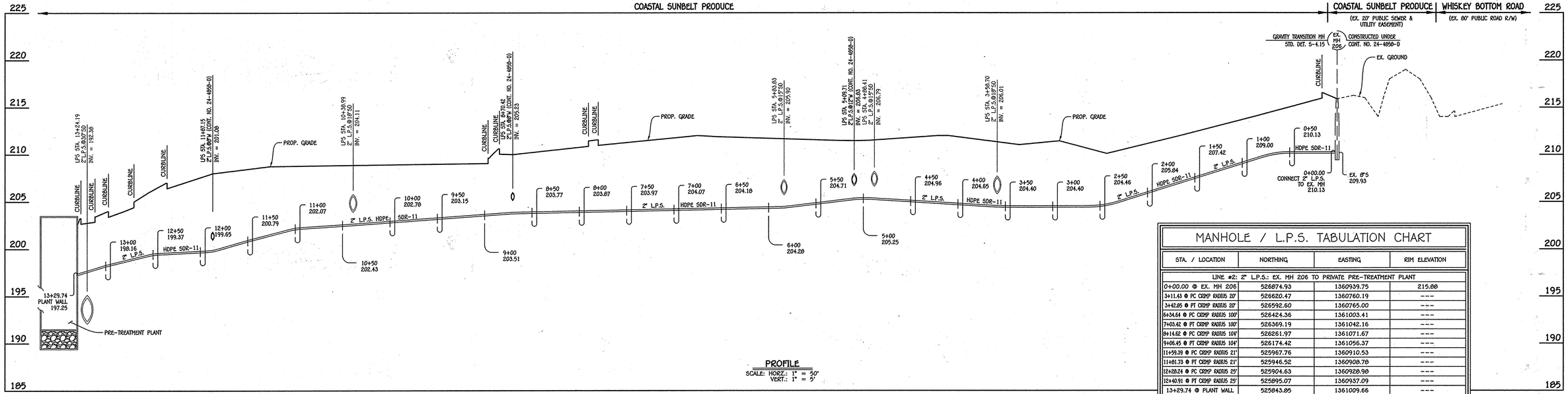


PROFILE
SCALE: HORZ.: 1" = 50'
VERT.: 1" = 5'

MANHOLE / L.P.S. TABULATION CHART

STA. / LOCATION	NORTHING	EASTING	RIM ELEVATION
LINE #1: 2" L.P.S.: EX. MH 205 TO PRIVATE PRE-TREATMENT PLANT			
0+00.00 @ EX. MH 205	526879.08	1360930.65	216.24
3+03.58 @ PC CRIMP RADIUS 30'	526631.04	1360755.62	---
3+50.70 @ PT CRIMP RADIUS 30'	526589.23	1360762.83	---
6+40.89 @ PC CRIMP RADIUS 100'	526421.92	1360999.93	---
7+09.67 @ PT CRIMP RADIUS 100'	526366.75	1361038.69	---
8+19.44 @ PC CRIMP RADIUS 100'	526260.91	1361067.81	---
9+07.74 @ PT CRIMP RADIUS 100'	526176.72	1361053.10	---
11+60.67 @ PC CRIMP RADIUS 25'	525970.06	1360907.26	---
11+87.27 @ PT CRIMP RADIUS 25'	525944.79	1360905.17	---
12+34.13 @ PC CRIMP RADIUS 25'	525902.58	1360925.53	---
12+46.80 @ PT CRIMP RADIUS 25'	525893.02	1360933.64	---
13+37.27 @ PLANT WALL	525840.86	1361007.55	---

LINE #1: 2" L.P.S.: EX. MH 205 TO PRIVATE PRE-TREATMENT PLANT



PROFILE
SCALE: HORZ.: 1" = 50'
VERT.: 1" = 5'

MANHOLE / L.P.S. TABULATION CHART

STA. / LOCATION	NORTHING	EASTING	RIM ELEVATION
LINE #2: 2" L.P.S.: EX. MH 206 TO PRIVATE PRE-TREATMENT PLANT			
0+00.00 @ EX. MH 206	526874.93	1360939.75	215.88
3+11.63 @ PC CRIMP RADIUS 20'	526620.47	1360760.19	---
3+42.85 @ PT CRIMP RADIUS 20'	526592.60	1360765.00	---
6+34.64 @ PC CRIMP RADIUS 100'	526424.36	1361003.41	---
7+03.42 @ PT CRIMP RADIUS 100'	526369.19	1361042.16	---
8+14.62 @ PC CRIMP RADIUS 104'	526261.97	1361071.67	---
9+06.45 @ PT CRIMP RADIUS 104'	526174.42	1361056.37	---
11+59.39 @ PC CRIMP RADIUS 21'	525967.76	1360910.53	---
11+81.73 @ PT CRIMP RADIUS 21'	525946.52	1360908.78	---
12+20.24 @ PC CRIMP RADIUS 25'	525904.63	1360928.98	---
12+40.91 @ PT CRIMP RADIUS 25'	525895.07	1360937.09	---
13+29.74 @ PLANT WALL	525843.85	1361009.66	---

LINE #2: 2" L.P.S.: EX. MH 206 TO PRIVATE PRE-TREATMENT PLANT

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
ELLICOTT CITY, MARYLAND 21042
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OWNER
9001 WBR, LLC
10289 HARRISON DRIVE
LAUREL, MARYLAND
20707-3827
PH# 410-423-0460

DEVELOPER
WHISKEY SPEAK LLC
2330 WEST JOPPA ROAD
SUITE 190
LUTHERVILLE, MARYLAND
21093-4614
PH# 410-296-3800

"PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 13204, EXPIRATION DATE: NOVEMBER 3, 2016."

CHARLES J. CROVO, SR., P.E. — 7/6/15 DATE

DATE	DESCRIPTION
	REVISION BLOCK

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Director - Department of Planning and Zoning — 8-7-15 Date

Chief, Division of Land Development — 8-06-15 Date

Chief, Development Engineering Division — 8/6/15 Date

STATE OF MARYLAND — CHARLES JOSEPH CROVO — No. 13204 — PROFESSIONAL ENGINEER

ADDRESS CHART	
BUILDING NO.	STREET ADDRESS
OFFICE/WAREHOUSE	9001 WHISKEY BOTTOM ROAD
GUARD HOUSE	9003 WHISKEY BOTTOM ROAD
FUTURE GARAGE	9005 WHISKEY BOTTOM ROAD
	LAUREL, MARYLAND 20723

PERMIT INFORMATION CHART

SUBDIVISION NAME	SECTION/AREA	LOT/PARCEL NO.
COASTAL SUNBELT PRODUCE	N/A	P. 375

PLAT# OR L/F	GRID#	ZONING	TAX MAP#	ELECT. DISTR.	CENSUS TRACT
23437-23439	4,5 10,11	TOD	50	SIXTH	6069.07

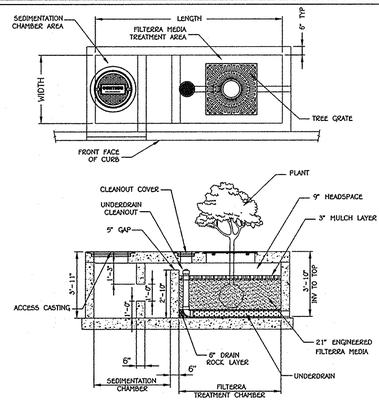
2" LOW PRESSURE SEWER MAINS PROFILES AND CHARTS

COASTAL SUNBELT PRODUCE
WAREHOUSE DISTRIBUTION CENTER
PARCEL 'A'

ZONED TOD — TAX MAP No.: 50
GRID No.: 4,5,10,11 — PARCEL No.: 375
SIXTH ELECTION DISTRICT — HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN — DATE: JULY 6, 2015

SHEET 56 OF 58

I:\2013\13033\Engineering\Dwga\Water and Sewer Contract No. 24-4958-D\Finals\Redline 1 - June, 2015\13033-3001 Water and Sewer Contract Plan.dwg, 6/30/2015 11:34:02 AM



UNIT DESIGNATION	INSIDE VAULT DIMENSIONS	FILTERRA TREATMENT AREA	MAXIMUM DRAINAGE AREA TREATED (SF)	WQv STORAGE CAPACITY (CF)
FTSC 6' x 4'	12' x 4'	6' x 4'	5,216	103
FTSC 8' x 4'	16' x 4'	8' x 4'	7,141	141
FTSC 6' x 6'	12' x 6'	6' x 6'	7,847	155
FTSC 8' x 6'	16' x 6'	8' x 6'	10,734	212
FTSC 10' x 6'	19' x 6'	10' x 6'	12,638	250
FTSC 10' x 8'	20' x 8'	10' x 8'	18,178	360
FTSC 11' x 8'	22' x 8'	11' x 8'	20,000	398

NOTE:
1. MAXIMUM DRAINAGE AREA TREATED ASSUMES 25% WQv AND FILTER SURFACE AREA REQUIREMENTS ARE BOTH MET
2. STORAGE CAPACITY ASSUMES 40% VOIDS IN UNDERDRAIN STONE AND 30% VOIDS IN MULCH AND MEDIA.
3. ALL INFORMATION IS BASED ON STANDARD 3.83' RIM TO OUTLET DEPTH. CONTACT CONTECH FOR CUSTOM SIZING IF DEPTH IS NOT 3.83'. ACCEPTABLE DEPTH IS 3.33' MIN. TO 5.00' MAX. RIM TO INVERT OUT.

CONTECH ENGINEERED SOLUTIONS LLC
www.ContechES.com

FILTERRA® WITH SEDIMENTATION CHAMBER

DESIGN GUIDELINES FOR USING FILTERRA

1. Do not place in a sump condition. The Standard Filterra® cannot be used as a stand alone inlet - it will need effective bypass during higher intensity rainfall events. For sump conditions please contact Filterra®.

Plans MUST show Filterra® Top Curb (TC) and Flow Line (FL) spot elevations and also bypass TC (where applicable) and bypass FL spot elevations.

The Filterra® TC and FL elevations MUST be higher than the bypass TC and FL elevations for effective bypass. Use Drawing FLP-2 (p.24) as a detail on the project plans.

2. For proper trash collection ensure a minimum 4" and maximum 6" Filterra® throat opening depth and use Drawing CGT-5 (p.25) as a detail on the project plans.

3. Do not direct surface flow to the standard Filterra® in a "head-on" configuration. Refer to Guidelines GU1-A (p.13) and GU2 (p.18) for grading design that encourages flow to enter a Filterra® in a cross linear flow - left-to-right or right to-left in the gutter in front of the throat, as per a wet curb which prevents system damage. During extreme storm events the excess flow should continue past the Filterra® to a bypass inlet or other means of relief. Guideline GU3, Parking Lot Corners, shows common situations (p.19).

4. To calculate which size Filterra® is required, use Table 1, Filterra® Quick Sizing Table, appropriate to the project's geographical region and target treatment regime (p.12). The entire contributing drainage area to the Filterra should be considered and the minimum allowable C factors noted. the maximum contributing drainage area will vary with site conditions. for further information relating to sizing please contact Filterra.

5. To ensure correct installation, include the Standard Filterra® Plan Notes (p.26-27) on your Filterra® detail project sheet, as well as detailed drawings FLP-2 and CGT-5 (p.24,25).

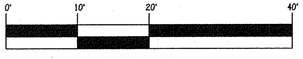
6. Positive drainage of each Filterra® unit's effluent treatment pipe is required to prevent free standing water from accumulating in the system or underdrain. This could occur due to tidal influences or improper connection of Filterra's effluent pipe to a bypass structure or other outfall.

FILTERRA: Operation and Maintenance

- Annual maintenance consists of a maximum of (2) scheduled visits. The visits are scheduled seasonally; the spring visit aims to clean up after winter loads including salts and sands. The fall visit helps the system by removing excessive leaf litter.

- Each maintenance inspection consists of the following tasks:

1. Filterra unit inspection
2. Foreign debris, silt, mulch and trash removal
3. Filter media evaluation and recharge as necessary
4. Plant health evaluation and pruning or replacement as necessary
5. Replacement of mulch
6. Disposal of all maintenance refuse items
7. Maintenance records updated and stored



SCALE: 1" = 10'

FILTERRA STANDARD PLAN NOTES

Construction & Installation

A. Each unit shall be constructed at the locations and elevations according to the sizes shown on the approved drawings. Any modifications to the elevation or location shall be at the direction of and approved by the Engineer.

B. If the Filterra® is stored before installation, the top slab must be placed on the box using the 2x4 wood provided, to prevent any contamination from the site. All internal fittings supplied (if any), must be left in place as per the delivery.

C. The unit shall be placed on a compacted sub-grade with a minimum 6-inch gravel base matching the final grade of the curb line in the area of the unit. The unit is to be placed such that the unit and top slab match the grade of the curb in the area of the unit. Compact undisturbed sub-grade materials to 95% of maximum density at +1- 2% of optimum moisture. Unsuitable material below sub-grade shall be replaced to the site engineer's approval.

D. Outlet connections shall be aligned and sealed to meet the approved drawings with modifications necessary to meet site conditions and local regulations.

E. Once the unit is set, the internal wooden forms and protective mesh cover must be left intact. Remove only the temporary wooden shipping blocks between the box and top slab. The top lid should be sealed onto the box section before backfilling, using a non-shrink grout, butyl rubber or similar waterproof seal. The boards on top of the lid and boards sealed in the unit's throat must NOT be removed. The Supplier (Americast or its authorized dealer) will remove these sections at the time of activation. Backfilling should be performed in a careful manner, bringing the appropriate fill material up in 6"lifts on all sides. Precast sections shall be set in a manner that will result in a watertight joint. In all instances, installation of Filterra® unit shall conform to ASTM specification C891 "Standard Practice for Installation of Underground Precast Utility Structures", unless directed otherwise in contract documents.

F. The contractor is responsible for inlet protection/sediment control and cleaning around each Filterra unit.

G. Curb and gutter construction (where present) shall ensure that the flow-line of the Filterra® units is at a greater elevation than the flow-line of the bypass structure or relief (drop inlet, curb cut or similar). Failure to comply with this guideline may cause failure and/or damage to the Filterra® environmental device.

H. Each Filterra® unit must receive adequate irrigation to ensure survival of the living system during periods of drier weather. This may be achieved through a piped system, gutter flow or through the tree grate.

Activation

A. Activation of the Filterra® unit is performed ONLY by the Supplier. Purchaser is responsible for Filterra® inlet protection and subsequent clean out cost. This process cannot commence until the project site is fully stabilized and cleaned (full landscaping, grass cover, final paving and street sweeping completed), negating the chance of construction materials contaminating the Filterra® system. Care shall be taken during construction not to damage the protective throat and top plates.

B. Activation includes installation of plant(s) and mulch layers as necessary.

Included Maintenance

A. Each correctly installed Filterra® unit is to be maintained by the Supplier, or a Supplier approved contractor for a minimum period of 1 year. The cost of this service is to be included in the price of each Filterra® unit. Extended maintenance contracts are available at extra cost upon request.

B. Annual included maintenance consists of a maximum of (2) scheduled visits. The visits are scheduled seasonally; the spring visit aims to clean up after winter loads that may include salts and sands. The fall visit helps the system by removing excessive leaf litter.

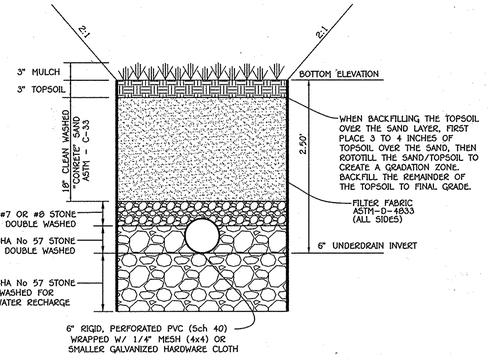
C. Each Included Maintenance visit consists of the following tasks.

1. Filterra® unit inspection
2. Foreign debris, silt, mulch & trash removal
3. Filter media evaluation and recharge as necessary
4. Plant health evaluation and pruning or replacement as necessary
5. Replacement of mulch
6. Disposal of all maintenance refuse items
7. Maintenance records updated and stored (reports available upon request)

D. The beginning and ending date of Supplier's obligation to maintain the installed system shall be determined by the Supplier at the time the system is activated. Owners must promptly notify the Supplier of any damage to the plant(s), which constitute(s) an integral part of the bioretention technology.

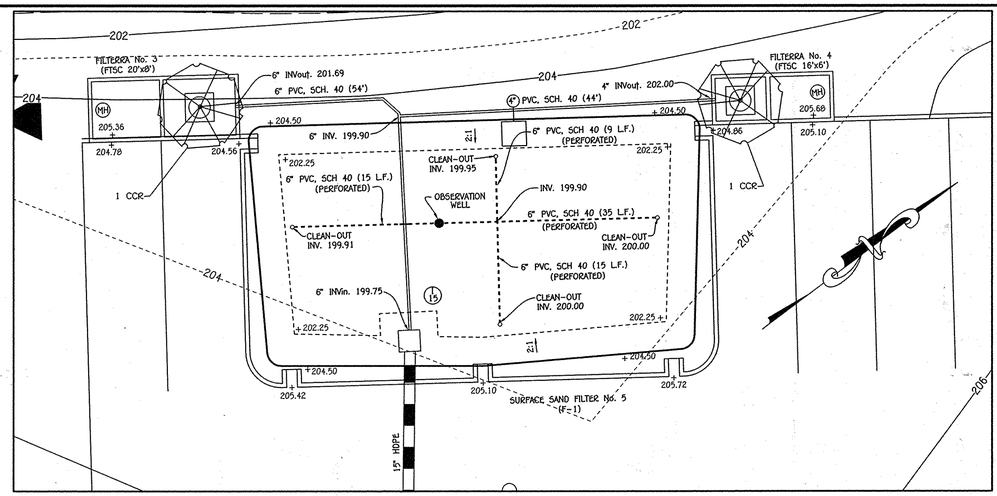
FILTERRA PIPE SCHEDULE

SIZE	CLASS	LENGTH
4"	PVC SCH. 40 (Solid)	86 L.F.
4"	PVC SCH. 40 (Perforated)	16 L.F.
6"	PVC SCH. 40 (Solid)	119 L.F.
6"	PVC SCH. 40 (Perforated)	20 L.F.



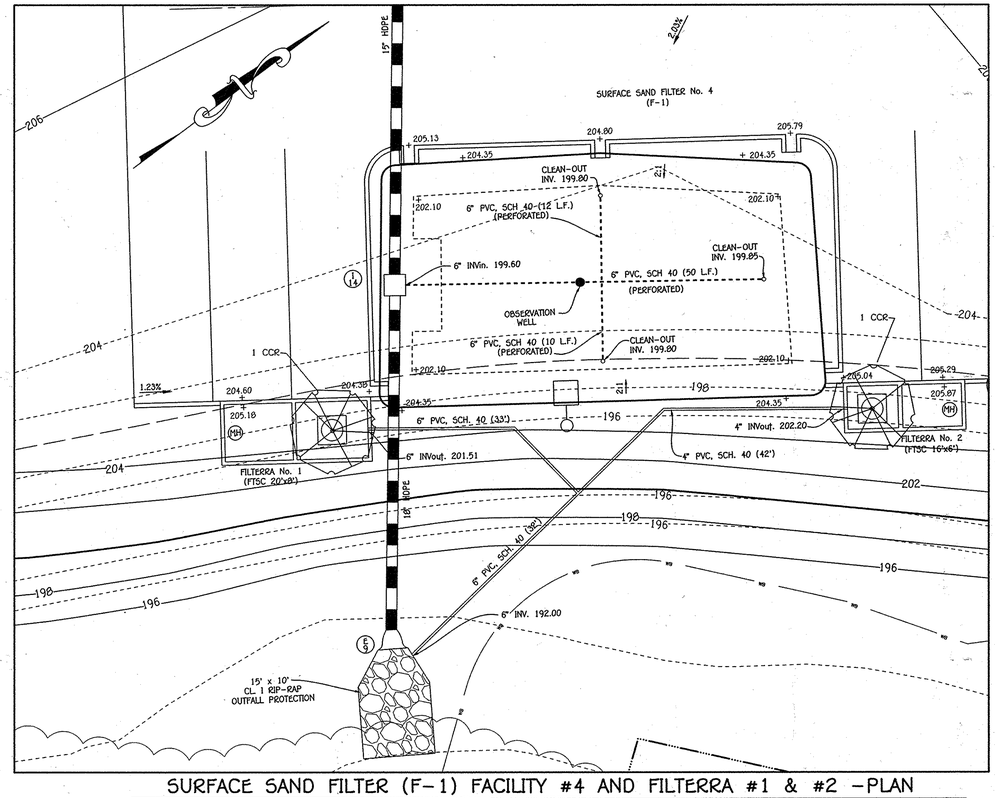
TYPICAL SECTION - SURFACE SAND FILTER No's. 4 & 5 (F-1)

NO SCALE



SURFACE SAND FILTER (F-1) FACILITY #5 AND FILTERRA #3 & #4 -PLAN

SCALE: 1"=10'



SURFACE SAND FILTER (F-1) FACILITY #4 AND FILTERRA #1 & #2 -PLAN

SCALE: 1"=10'

PRECAST FILTERRA STRUCTURE SCHEDULE

STRUCTURE NO.	OWNERSHIP AND MAINTENANCE	TOP ELEVATION	INV.IN	INV.OUT	Northing	Easting	TYPE	UNIT DESIGNATION
F-1	PRIVATE	205.18	-	201.51 (6")	525430.12	1360219.65	PRECAST FILTERRA WITH SEDIMENTATION CHAMBER	FTSC 20' x 8'
F-2	PRIVATE	205.87	-	202.20 (4")	525511.04	1360276.90		FTSC 16' x 6'
F-3	PRIVATE	205.36	-	201.69 (6")	525573.34	1359997.61		FTSC 20' x 8'
F-4	PRIVATE	205.68	-	202.00 (4")	525654.67	1360055.41		FTSC 16' x 6'

FILTERRA PLANT LIST

QTY.	KEY	BOTANICAL NAME COMMON NAME	SIZE	CONT.	REMARKS
TREES - ORNAMENTAL					
4	CCR	Cercis Canadensis Eastern Redbud	1 1/2" - 2" Cal.	B & B	

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
ELLICOTT CITY, MARYLAND 21042
(410) 461 - 2855

OWNER
9001 WBR, LLC
1029 HARRISON DRIVE
LAUREL, MARYLAND
20707-3827
PH# 410-423-0460

DEVELOPER
WHISKEY SPEAK, LLC
2330 WEST JOPPA ROAD
SUITE 190
LUTHERVILLE, MARYLAND
21093-4614
PH# 410-296-3800

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CHARLES J. CROVO, SR., P.E. — 7/15/15 DATE

DATE	DESCRIPTION
	REVISION BLOCK

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Director - Department of Planning and Zoning — Date 8-7-15

Chief, Division of Land Development — Date 8.6.15

Chief, Development Engineering Division — Date 7/6/15

STATE OF MARYLAND CHARLES JOSEPH CROVO No. 13204 PROFESSIONAL ENGINEER

ADDRESS CHART	
BUILDING NO.	STREET ADDRESS
OFFICE/WAREHOUSE	9001 WHISKEY BOTTOM ROAD
GUARD HOUSE	9003 WHISKEY BOTTOM ROAD
FUTURE GARAGE	9005 WHISKEY BOTTOM ROAD
	LAUREL, MARYLAND 20723

PERMIT INFORMATION CHART

SUBDIVISION NAME		SECTION/AREA		LOT/PARCEL NO.
COASTAL SUNBELT PRODUCE		N/A		P. 375
PLAT# OR L/F	GRID#	ZONING	TAX MAP#	ELECT. DISTR.	CENSUS TRACT
20377-20439	4,5 10,11	TOD	50	SIXTH	6069.07

STORMWATER MANAGEMENT NOTES & DETAILS

COASTAL SUNBELT PRODUCE
WAREHOUSE DISTRIBUTION CENTER
PARCEL 'A'

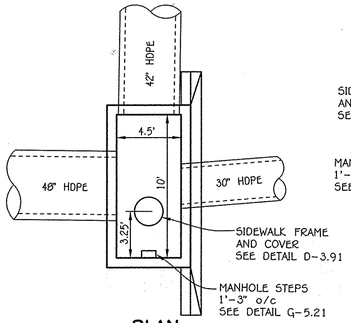
ZONED TOD — TAX MAP No.: 50
GRID No.: 4,5,10,11 — PARCEL No.: 375
SIXTH ELECTION DISTRICT — HOWARD COUNTY, MARYLAND
SCALE: — DATE: JULY 6, 2015

SHEET 57 OF 58

SDP-14-080

I:\2013\13033\Engineering\Dwgs\13033-3001 SDP 57 SWM DETAILS.dwg, sheet 57, 7/16/2015 7:33:46 AM, 1:1

INLET I-1
SCALE: 1" = 5'



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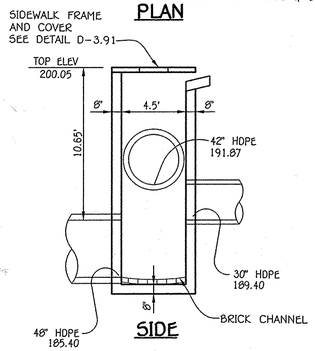
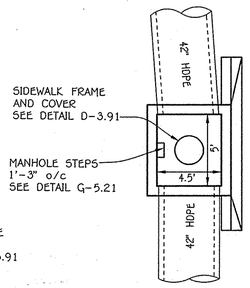


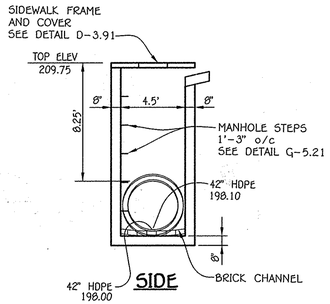
SIDE

1. REINFORCING = #4 @ 10" o/c EW IN CL OF WALLS, REINFORCING CONTINUOUS AT CORNERS, ALL LAP 1'-4".
2. REFER TO TYPE A-10 INLET CAST IN PLACE DETAIL D-4.04 FOR NOTES AND SPECS.

INLET I-9
SCALE: 1" = 5'



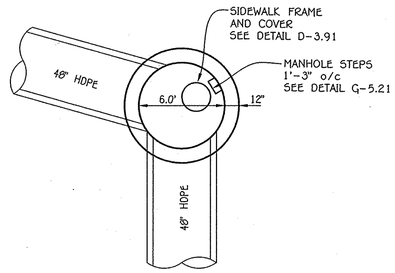
PLAN



SIDE

1. REINFORCING = #4 @ 10" o/c EW IN CL OF WALLS, REINFORCING CONTINUOUS AT CORNERS, ALL LAP 1'-4".
2. REFER TO TYPE A-5 INLET CAST IN PLACE DETAIL D-4.02 FOR NOTES AND SPECS.

MANHOLE M-1
SCALE: 1" = 5'



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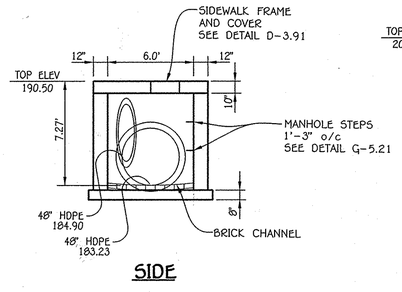
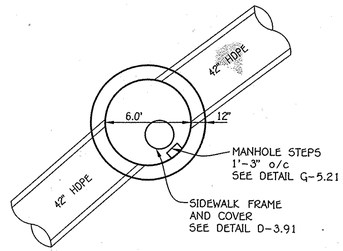


SIDE

1. REFER TO MANHOLE DETAIL G-5.12 FOR REBAR SIZES, NOTES AND SPECS.

MANHOLE M-2
SCALE: 1" = 5'



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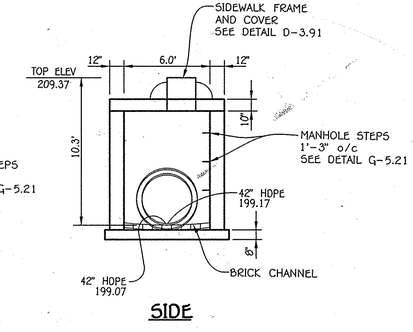
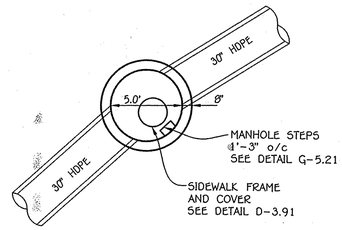


SIDE

1. REFER TO MANHOLE DETAIL G-5.12 FOR REBAR SIZES, NOTES AND SPECS.

MANHOLE M-5
SCALE: 1" = 5'



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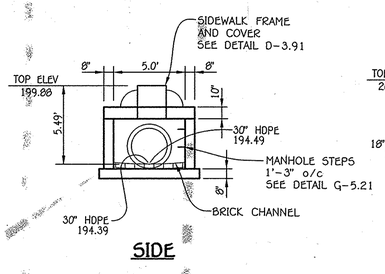
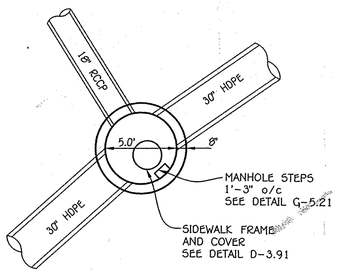


SIDE

1. REFER TO MANHOLE DETAIL G-5.12 FOR REBAR SIZES, NOTES AND SPECS.

MANHOLE M-6
SCALE: 1" = 5'



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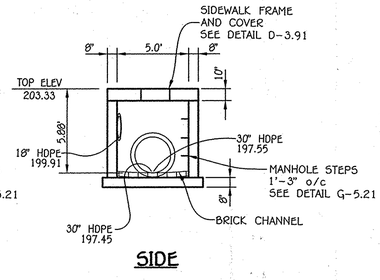
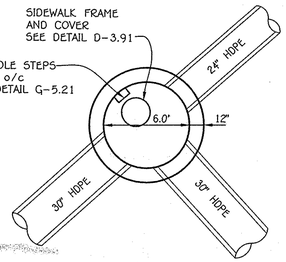


SIDE

1. REFER TO MANHOLE DETAIL G-5.12 FOR REBAR SIZES, NOTES AND SPECS.

MANHOLE M-16
SCALE: 1" = 5'



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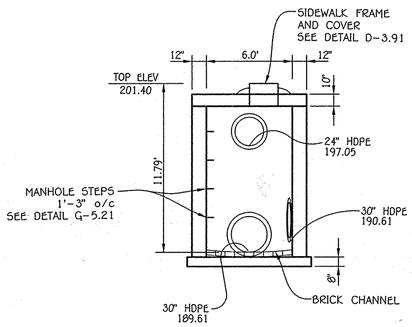
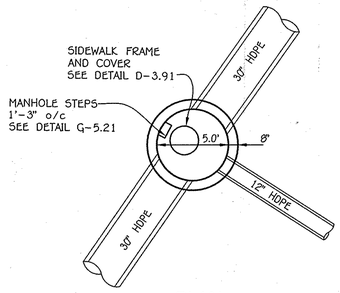


SIDE

1. REFER TO MANHOLE DETAIL G-5.12 FOR REBAR SIZES, NOTES AND SPECS.

MANHOLE M-17
SCALE: 1" = 5'



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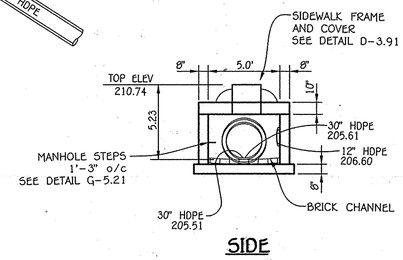

SIDE

1. REFER TO MANHOLE DETAIL G-5.12 FOR REBAR SIZES, NOTES AND SPECS.

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
ELLICOTT CITY, MARYLAND 21042
(410) 461 - 2855

OWNER
9001 WBC, LLC
1029 HARRISON DRIVE
LAUREL, MARYLAND
20707-3027
PH# 410-423-0460

DEVELOPER
WHISKEY SPEAK LLC
2330 WEST JOPPA ROAD
SUITE 190
LUTHERVILLE, MARYLAND
21093-4614
PH# 410-296-3800

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CHARLES J. CROVO, SR., P.E. — 7/15/15 DATE

DATE	DESCRIPTION
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APPROVED: DEPARTMENT OF PLANNING AND ZONING

Director - Department of Planning and Zoning — Date 8-7-15

Chief, Division of Land Development — Date 8-6-15

Chief, Development Engineering Division — Date 7/16/15

STATE OF MARYLAND — CHARLES J. CROVO — No. 13204 — PROFESSIONAL ENGINEER

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SHEET 58 OF 58

SDP-14-080

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