

GENERAL NOTES

- SUBJECT PROPERTY ZONED CE-CL1 PER THE 10/06/13 COMPREHENSIVE ZONING PLAN.
- PROPERTY ADDRESS: 8331 BRISTOL COURT.
- DEED REFERENCE: LIBER 10335, FOLIO 164.
- TOTAL AREA OF PROPERTY = 3.92 AC ±.
- THE SITE IS ON PUBLIC WATER AND PUBLIC SEWER.
- THE BOUNDARY SHOWN HEREON IS BASED ON A BOUNDARY SURVEY PERFORMED BY ADCOCK & ASSOCIATES, LLC IN NOVEMBER OF 2017.
- THE TOPOGRAPHY SHOWN IS BASED ON FIELD RUN TOPOGRAPHY BY ADCOCK & ASSOCIATES, LLC IN APRIL OF 2020 WITHIN THE AREA OF DEVELOPMENT. TOPOGRAPHY OUTSIDE THE AREA OF DEVELOPMENT IS BASED ON HOWARD COUNTY GIS TOPOGRAPHY FLOWN IN 2011.
- THE SOILS SHOWN HAVE BEEN TAKEN FROM THE US DEPARTMENT OF AGRICULTURE, NATURAL RESOURCE CONSERVATION SERVICE, WEB SOIL SURVEY WEBSITE. HOWARD COUNTY SOILS GRID D48, SUB-GRID 48.
- NO FLOODPLAINS, WETLANDS, STREAMS OR BUFFERS ARE PRESENT ON SITE.
- PRELIMINARY GEOTECHNICAL INFORMATION HAS BEEN TAKEN FROM THE US DEPARTMENT OF AGRICULTURE, NATURAL RESOURCE CONSERVATION SERVICE, WEB SOIL SURVEY WEBSITE AND FIELD INVESTIGATIONS. IF FUTURE INVESTIGATIONS SHOW UNSATISFACTORY SOIL CONDITIONS FOR ANY OF THE STORMWATER MANAGEMENT TREATMENTS SHOWN, EITHER UNDERDRAINS WILL BE PROVIDED OR A DIFFERENT PRACTICE WILL BE SUBSTITUTED.
- THE COORDINATES SHOWN HEREON ARE BASED UPON THE HOWARD COUNTY GEODETIC CONTROL, WHICH IS BASED ON THE MARYLAND STATE PLANE COORDINATE SYSTEM. HOWARD COUNTY MONUMENTS NUMBERS 43GA AND 43GB WERE USED FOR THIS PROJECT.
- NO GRADING, REMOVAL OF VEGETATIVE COVER OR TREES, PAVING AND NEW STRUCTURES SHALL BE PERMITTED WITHIN THE LIMITS OF WETLANDS, STREAMS, OR THEIR REQUIRED BUFFERS, FLOODPLAIN AND FOREST CONSERVATION EASEMENT AREAS, UNLESS WAIVERS HAVE BEEN APPROVED OR ACTIVITIES HAVE BEEN DETERMINED ESSENTIAL BY THE DEPARTMENT OF PLANNING AND ZONING.
- THE LOTS SHOWN HEREON COMPLY WITH THE MINIMUM OWNERSHIP, WIDTH AND LOT AREA AS REQUIRED BY THE MARYLAND DEPARTMENT OF THE ENVIRONMENT.
- ALL EXISTING WELLS, SEPTIC SYSTEMS AND SEWAGE DISPOSAL AREAS WITHIN 100 FEET OF THE PROPERTY BOUNDARIES AND ALL EXISTING AND PROPOSED WELLS THAT ARE LOCATED WITHIN 200 FEET DOWN-GRADIENT OF EXISTING OR PROPOSED SEPTIC SYSTEMS AND SEWAGE DISPOSAL EASEMENTS HAVE BEEN FIELD LOCATED.
- APPROVAL OF THIS ENVIRONMENTAL CONCEPT PLAN DOES NOT CONSTITUTE AN APPROVAL OF ANY SUBSEQUENT AND ASSOCIATED SUBDIVISION PLAN/PLAT AND/OR SITE DEVELOPMENT PLAN/DOR REDLINE REVISION PLAN. REVIEW OF THIS PROJECT FOR COMPLIANCE WITH THE HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS SHALL OCCUR AT THE SUBDIVISION PLAN/PLAT AND/OR SITE DEVELOPMENT PLAN STAGES AND/OR REDLINE REVISION PROCESS. THE APPLICANT AND CONSULTANT SHOULD EXPECT ADDITIONAL AND MORE DETAILED REVIEW COMMENTS (INCLUDING COMMENTS THAT MAY ALTER THE OVERALL SITE DESIGN) AS THIS PROJECT PROGRESSES THROUGH THE PLAN REVIEW STAGE.
- A SIMPLIFIED FOREST STAND DELINEATION HAS BEEN COMPLETED AND NO FOREST EXIST FOR THIS SITE. IT IS NOT LOCATED IN A 100 YEAR FLOODPLAIN, AND THERE ARE NO STREAMS ON SITE. THERE ARE NO STEEP SLOPES AND NO CRITICAL HABITAT AREAS. THERE ARE NO NON-TIDAL OR TIDAL WETLANDS ON SITE. NO RARE, THREATENED OR ENDANGERED SPECIES, OR THEIR HABITATS, WERE OBSERVED ON THE PROPERTY. NO HISTORIC ELEMENTS OR CEMETERIES ARE KNOWN TO OCCUR ON THE PROPERTY. SURROUNDING LAND USE IS COMMERCIAL/INDUSTRIAL/OFFICE. THE SITE IS LOCATED IN THE LITTLE PATUXENT RIVER WATERSHED, THE SECTION OF THE WATERSHED IS CLASSIFIED AS A USE CLASS 1.
- THIS PROJECT IS SUBJECT TO THE FOREST CONSERVATION ACT AND WILL BE EVALUATED FOR COMPLIANCE AT THE SITE DEVELOPMENT PLAN STAGE.
- PARKING:
 - REQUIRED:
 - GENERAL OFFICE: 3.3 SPACES PER 1,000 SF OF OFFICE SPACE (3,000 SF)
 - MANUFACTURING: 2.0 SPACES PER 1,000 SF (32,000 SF)
 - TOTAL REQUIRED: 106
 - PROVIDED: 106 (INCLUDING 1 HANDICAP SPACE)

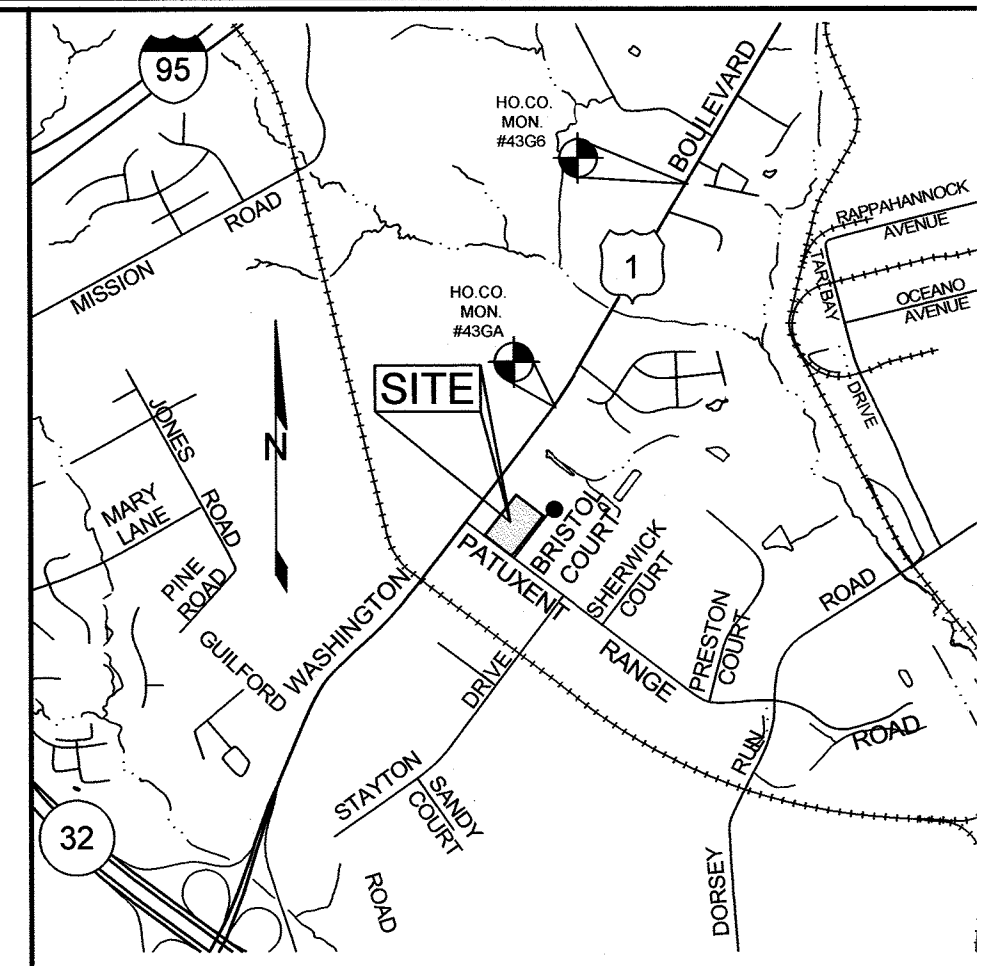
ENVIRONMENTAL CONCEPT PLAN

PRODUCT SUPPORT, INC.

HOWARD COUNTY, MARYLAND

LEGEND

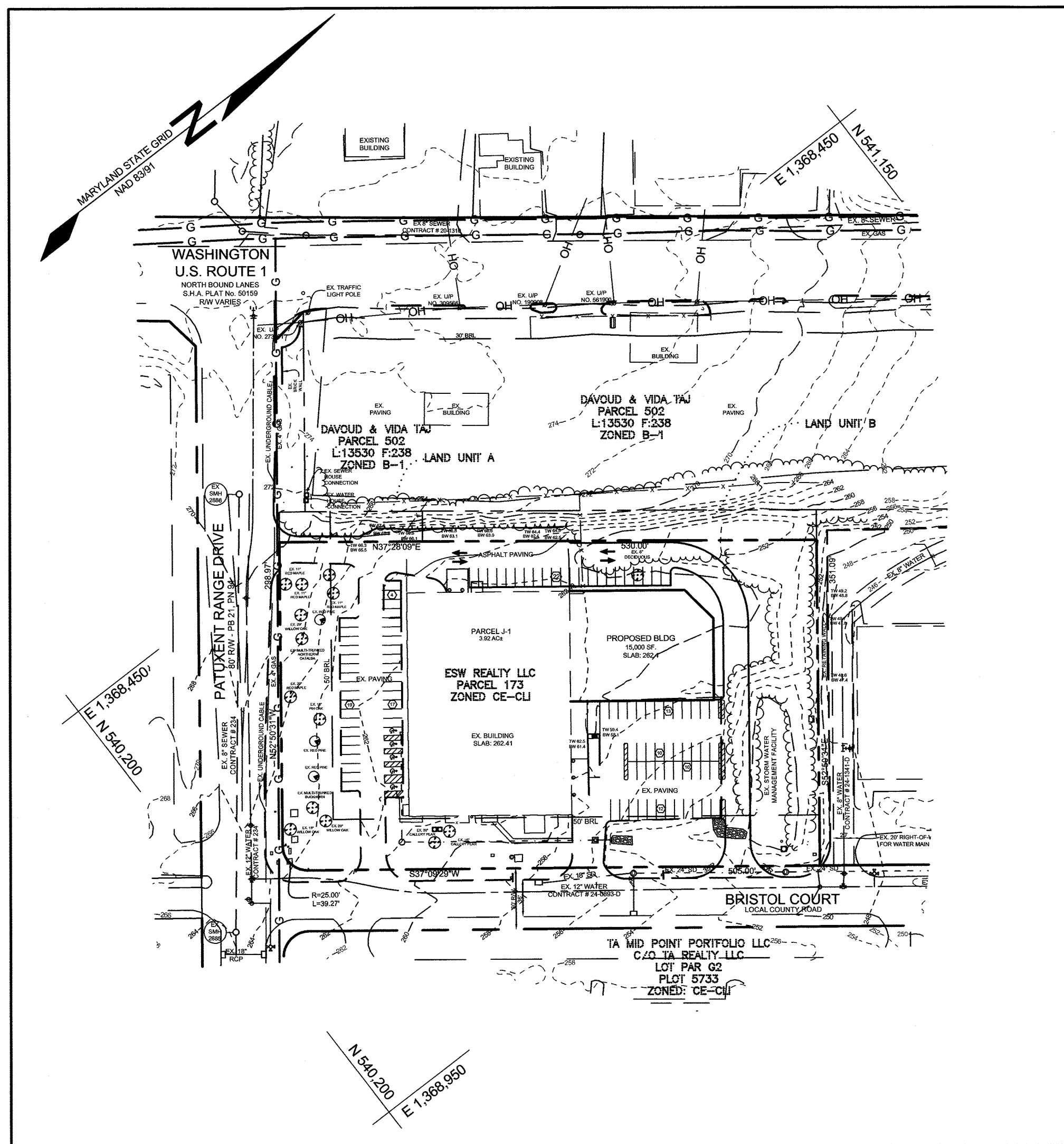
- EXISTING CONTOUR
- FIELD RUN
- EXISTING CONTOUR
- GIS
- EXISTING TREELINE
- EX. BOUNDARY LINE
- EX. LOT LINE
- EX. BUILDING
- SOIL BOUNDARY
- EX. SEWER
- EX. WATER
- EX. CONCRETE CURB & GUTTER
- EX. GAS
- EX. WOOD FENCE
- EX. CHAIN LINK FENCE
- EX. SD MANHOLE
- EX. CLEAN OUT
- EX. WATER VALVE
- EX. UTILITY POLE
- EX. BOLLARD
- EX. TREE
- EX. PINE TREE
- PROPOSED BUILDING
- EX. PARKING COURT



HOWARD COUNTY, MARYLAND ADC MAP 5054 GRID B6
Vicinity MAP
SCALE: 1"=200'

BENCHMARKS

| NUMBER | NORTHING | EASTING | ELEVATION | DESCRIPTION |
|--------|------------|--------------|-----------|--|
| 43GA | 541,797.03 | 1,369,159.57 | 240.97 | ON WASHINGTON BLVD AND NEAR GATEWOOD DRIVE |
| 46GB | 544,117.49 | 1,370,550.92 | 219.40 | ON WASHINGTON BLVD AND NEAR |



PLAN VIEW
SCALE: 1"=100'

SITE ANALYSIS DATA SHEET

| ENVIRONMENTAL AREA | SIZE OR USE |
|--------------------------|-------------|
| TOTAL PROJECT AREA | 3.9210 AC ± |
| ROW TO BE DEDICATED | N/A |
| PROPOSED PROJECT AREA | 1.3642 AC ± |
| LIMIT OF DISTURBANCE | 1.3642 AC ± |
| GREEN OPEN AREA (LAWN) | 1.42 AC ± |
| PROPOSED IMPERVIOUS AREA | 0.6702 AC ± |
| PROPOSED SITE USES | COMMERCIAL |
| WETLANDS | 0 AC ± |
| WETLAND BUFFERS | 0 AC ± |
| FLOODPLAINS | 0 AC ± |
| FLOODPLAIN BUFFERS | 0 AC ± |
| EXISTING FOREST | 0 AC ± |
| SLOPES 15%-24.9% | 0 AC ± |
| SLOPES GREATER THAN 25% | 0 AC ± |
| HIGHLY ERODIBLE SOILS | 0 AC ± (1) |

- *NOTES:
- SOIL INFORMATION HAS BEEN TAKEN FROM THE UNITED STATES DEPARTMENT OF AGRICULTURE, NATURAL RESOURCES CONSERVATION SERVICE, WEB SOIL SURVEY.
 - HIGHLY ERODIBLE SOILS ARE THOSE SOILS WITH A SLOPE GREATER THAN 15 PERCENT OR THOSE SOILS WITH A SOIL ERODIBILITY FACTOR 'K' GREATER THAN 0.35 AND WITH A SLOPE GREATER THAN 5 PERCENT.

| SOILS LEGEND | | | |
|--------------|---|-------|------------|
| SYMBOL | NAME / DESCRIPTION | GROUP | 'K' FACTOR |
| UID | URBAN LAND-UDORTHEMENTS COMPLEX, 0 TO 15 PERCENT SLOPES | D | 0.27 |

- NOTES:
- SOIL INFORMATION HAS BEEN TAKEN FROM THE UNITED STATES DEPARTMENT OF AGRICULTURE, NATURAL RESOURCES CONSERVATION SERVICE, WEB SOIL SURVEY.
 - HIGHLY ERODIBLE SOILS ARE THOSE SOILS WITH A SLOPE GREATER THAN 15 PERCENT OR THOSE SOILS WITH A SOIL ERODIBILITY FACTOR 'K' GREATER THAN 0.35 AND WITH A SLOPE GREATER THAN 5 PERCENT.

STORMWATER MANAGEMENT NOTES & DESIGN NARRATIVE

BELOW IS A LIST TO DESCRIBE THE STORMWATER MANAGEMENT REQUIREMENTS AND ACHIEVEMENTS FOR THE SITE PER THE 2000 MARYLAND STORMWATER DESIGN MANUAL, VOLUMES I AND II, AS AMENDED BY THE STORMWATER MANAGEMENT ACT OF 2007.

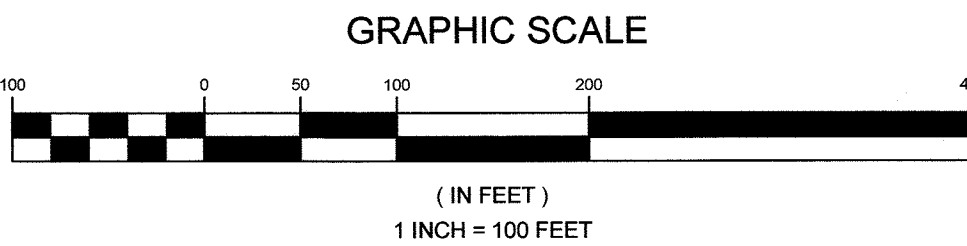
- ENVIRONMENTALLY SENSITIVE AREAS HAVE BEEN AVOIDED WHERE POSSIBLE. THE SITE WAS DESIGNED TO DISTURB AREAS OF STEEP SLOPES ONLY WHEN NECESSARY. THE LIMIT OF DISTURBANCE AND ALL DEVELOPMENT ACTIVITY IS OVER 14' AWAY FROM THE 100 YEAR FLOODPLAIN ON-SITE. NO STREAMS OR WETLANDS EXIST ON-SITE.
- TO THE GREATEST EXTENT PRACTICABLE THE NATURAL FLOW PATTERNS OF THE SITE HAVE BEEN MAINTAINED.
- IMPERVIOUS AREAS HAVE BEEN REDUCED BY POSITIONING THE BUILDING AS CLOSE TO THE STREET AS THE SETBACKS AND GRADES ALLOW.
- A STABILIZED CONSTRUCTION ENTRANCE, SILT FENCES AND SUPER SILT FENCES ARE USED AS SEDIMENT AND EROSION CONTROL.
- THE STORMWATER MANAGEMENT OBLIGATIONS FOR THIS PARCEL WILL BE MET BY THE USE OF A BIORETENTION FACILITY (F-6).
- ACCORDING TO THE DEFINITION IN THE HOWARD COUNTY FOREST CONSERVATION MANUAL, JUNE 1999, NO FOREST EXISTS ON THIS SITE.
- THE SITE CONTAINS AN EXISTING STORMWATER MANAGEMENT FACILITY, SHOWN ON SDP-81-058. THE FACILITY HAS BEEN IMPACTED BY THE PROPOSED DRIVE AISLE AND HAS BEEN GRADED TO MEET THE PREDEVELOPMENT FACILITY VOLUMES.

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

8/9/21
DATE

8/9/21
DATE

| LOT | Pe | | ESDv | | RECHARGE | | SWM PRACTICE | |
|-----|----------|----------|----------|----------|----------|----------|-----------------------|--|
| | REQUIRED | PROVIDED | REQUIRED | PROVIDED | REQUIRED | PROVIDED | BIORETENTION FACILITY | |
| 1 | 1.8' | 1.63' | 4388 CF | 4479 CF | 457 CF | 481 CF | 1 | |



OWNER / DEVELOPER

ESW REALTY LLC
8331 BRISTOL COURT
JESSUP MARYLAND 20794

| SHEET INDEX | |
|-------------|---|
| SHEET NO. | DESCRIPTION |
| 1 | COVER SHEET |
| 2 | SIMPLIFIED FOREST STAND DELINEATION |
| 3 | CONCEPTUAL GRADING PLAN |
| 4 | CONCEPTUAL SEDIMENT AND EROSION CONTROL PLAN |
| 5 | STORMWATER MANAGEMENT DRAINAGE AREA MAP |
| 6 | CONCEPTUAL STORMWATER MANAGEMENT PLAN NOTES & DETAILS |
| 7 | LANDSCAPING PLAN |

COVER SHEET

PRODUCT SUPPORT, INC.

8331 BRISTOL COURT
ZONED CE-CL1

TAX MAP 48 GRID 19
6TH ELECTION DISTRICT

PARCEL 173
HOWARD COUNTY, MARYLAND

PROFESSIONAL ENGINEER

SILL ENGINEERING GROUP, LLC

16005 Frederick Road, 2nd Floor
Woodbine, MD 21797
Phone: 443.325.5076
Fax: 410.696.2022
Email: info@sillengineering.com
Civil Engineering for Land Development

DESIGN BY: PS

DRAWN BY: SZS

CHECKED BY: PS

SCALE: AS SHOWN

DATE: AUGUST 5, 2021

PROJECT #: 20-002

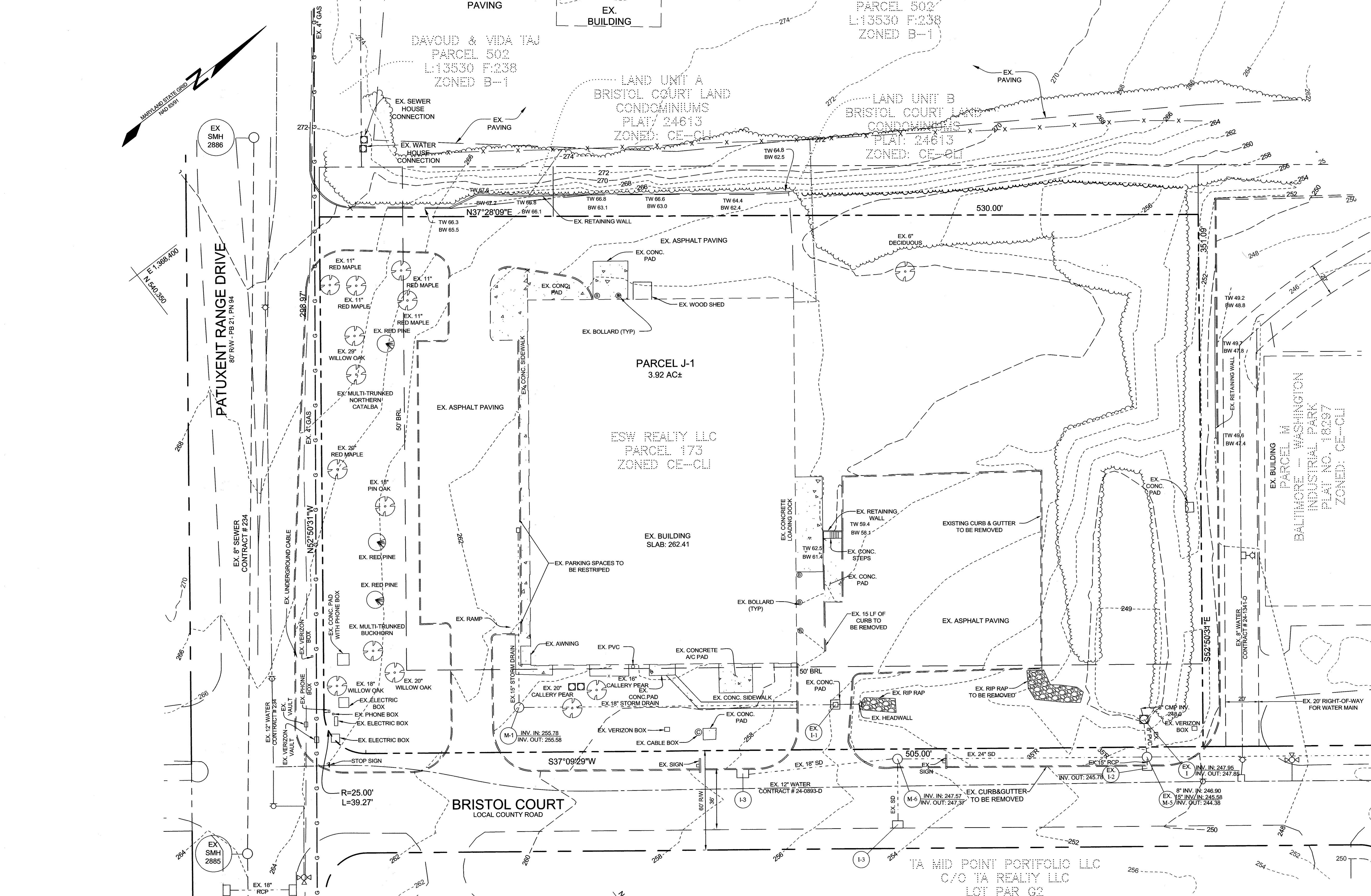
SHEET #: 1 of 7

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. 32025, EXPIRATION DATE JUNE 30, 2023

| SOILS LEGEND | | | |
|--------------|--|-------|------------|
| SYMBOL | NAME / DESCRIPTION | GROUP | 'K' FACTOR |
| UD | URBAN LAND-UDORIENTEDS COMPLEX, 0 TO 15 PERCENT SLOPES | D | 0.27 |

NOTES:
 1) SOIL INFORMATION HAS BEEN TAKEN FROM THE UNITED STATES DEPARTMENT OF AGRICULTURE; NATURAL RESOURCES CONSERVATION SERVICE; WEB SOIL SURVEY.
 2) HIGHLY ERODIBLE SOILS ARE THOSE SOILS WITH A SLOPE GREATER THAN 15 PERCENT OR THOSE SOILS WITH A SOIL ERODIBILITY FACTOR 'K' GREATER THAN 0.35 AND WITH A SLOPE GREATER THAN 5 PERCENT.

| LEGEND | |
|----------------------------|-----------------------|
| EXISTING GIS CONTOUR | --- |
| EXISTING FILED RUN CONTOUR | ---- |
| PROPOSED CONTOUR | --- |
| EXISTING SPOT ELEVATION | 382.3 |
| PROPOSED SPOT ELEVATION | + 82.53 |
| DIRECTION OF FLOW | → |
| EXISTING TREELINE | ~~~~~ |
| PROPOSED TREELINE | ~~~~~ |
| LIGHT POLES | ⊙ POST TOP ⊙ OVERHEAD |
| WALK OUT BASEMENT | W/O |



SIMPLIFIED FOREST STAND DELINEATION

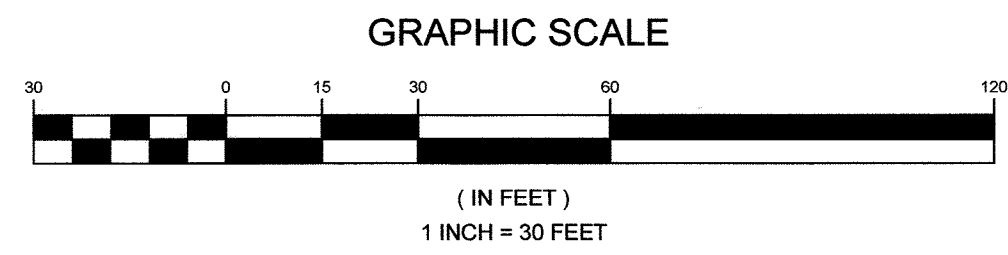
IN SEPTEMBER 2020, A SIMPLIFIED FOREST STAND DELINEATION WAS CONDUCTED AT THE PROPERTY LOCATED AT 8331 BRISTOL COURT, IN HOWARD COUNTY MARYLAND. THE SITE IS 3.92 AC ±, AND IS SHOWN ON COUNTY TAX MAP 48 AND PARCEL 173. THE PROPERTY IS SITUATED SOUTH EAST OF COLUMBIA AND WEST OF JESSUP, NEAR ROUTE 1 AND IS BOUNDED BY COMMERCIAL/INDUSTRIAL/OFFICE DEVELOPMENT. THE PROPERTY CURRENTLY HAS AN EXISTING OFFICE/WAREHOUSE/MANUFACTURING BUILDING, PARKING AND GREEN SPACE. THE SITE HAS A MIXTURE OF MATURE DECIDUOUS AND EVERGREEN LANDSCAPING AND STREET TREES. THERE IS ALSO A MIXTURE OF DECIDUOUS AND EVERGREEN TREES ALONG THE NORTHWEST AND NORTHEAST PROPERTY LINES. NO SPECIMEN OR STATE CHAMPION TREES WERE FOUND ON SITE. NO FOREST EXIST FOR THIS SITE. IT IS NOT LOCATED IN A 100 YEAR FLOODPLAIN, AND THERE ARE NO STREAMS OR STREAM BUFFERS ON SITE. THERE ARE NO STEEP SLOPES AND NO CRITICAL HABITAT AREAS. THERE ARE NO NON TIDAL OR TIDAL WETLANDS ON SITE. NO RARE, THREATENED OR ENDANGERED SPECIES, OR THEIR HABITATS WERE OBSERVED ON THE PROPERTY. NO HISTORIC ELEMENTS OR CEMETERIES ARE KNOWN TO OCCUR ON THE PROPERTY. SURROUNDING LAND USE IS COMMERCIAL/INDUSTRIAL/OFFICE. THE SITE IS LOCATED IN THE LITTLE PATUXENT RIVER WATERSHED. THE SECTION OF THE WATERSHED IS CLASSIFIED AS A USE CLASS 1.

FOREST CONSERVATION OBLIGATIONS

FOREST CONSERVATION OBLIGATIONS WILL BE ADDRESSED AT THE NEXT DESIGN PHASE. THEY WILL BE FULFILLED EITHER BY FEE-IN-LIEU OF OFFSITE PLANTING.

SIMPLIFIED FOREST STAND DELINEATION

PRODUCT SUPPORT, INC.
 8331 BRISTOL COURT
 ZONED CE-CL1
 TAX MAP 48 GRID 19
 6TH ELECTION DISTRICT
 PARCEL 17
 HOWARD COUNTY, MARYLAND



OWNER / DEVELOPER
 ESW REALTY LLC
 8331 BRISTOL COURT
 JESSUP MARYLAND 20794

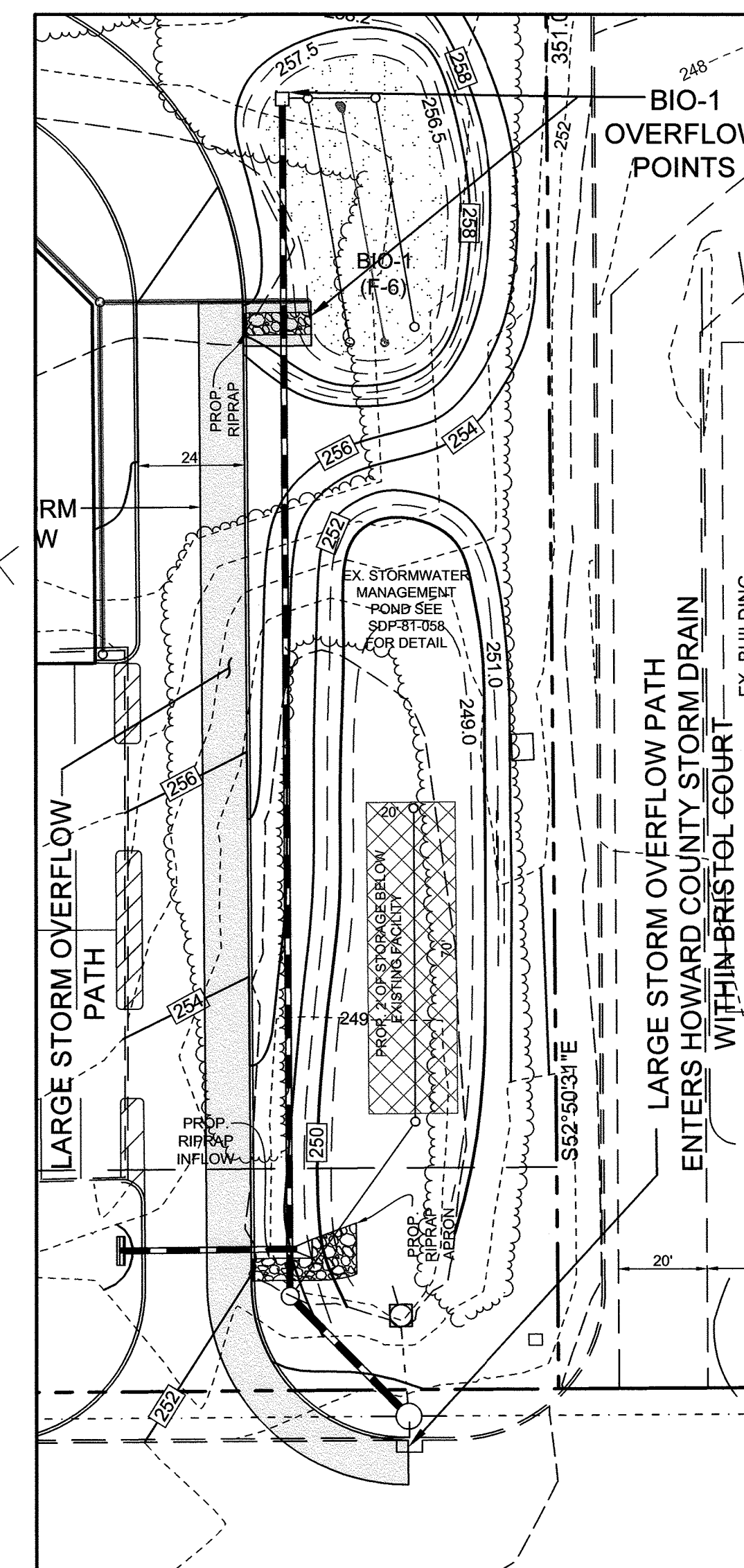
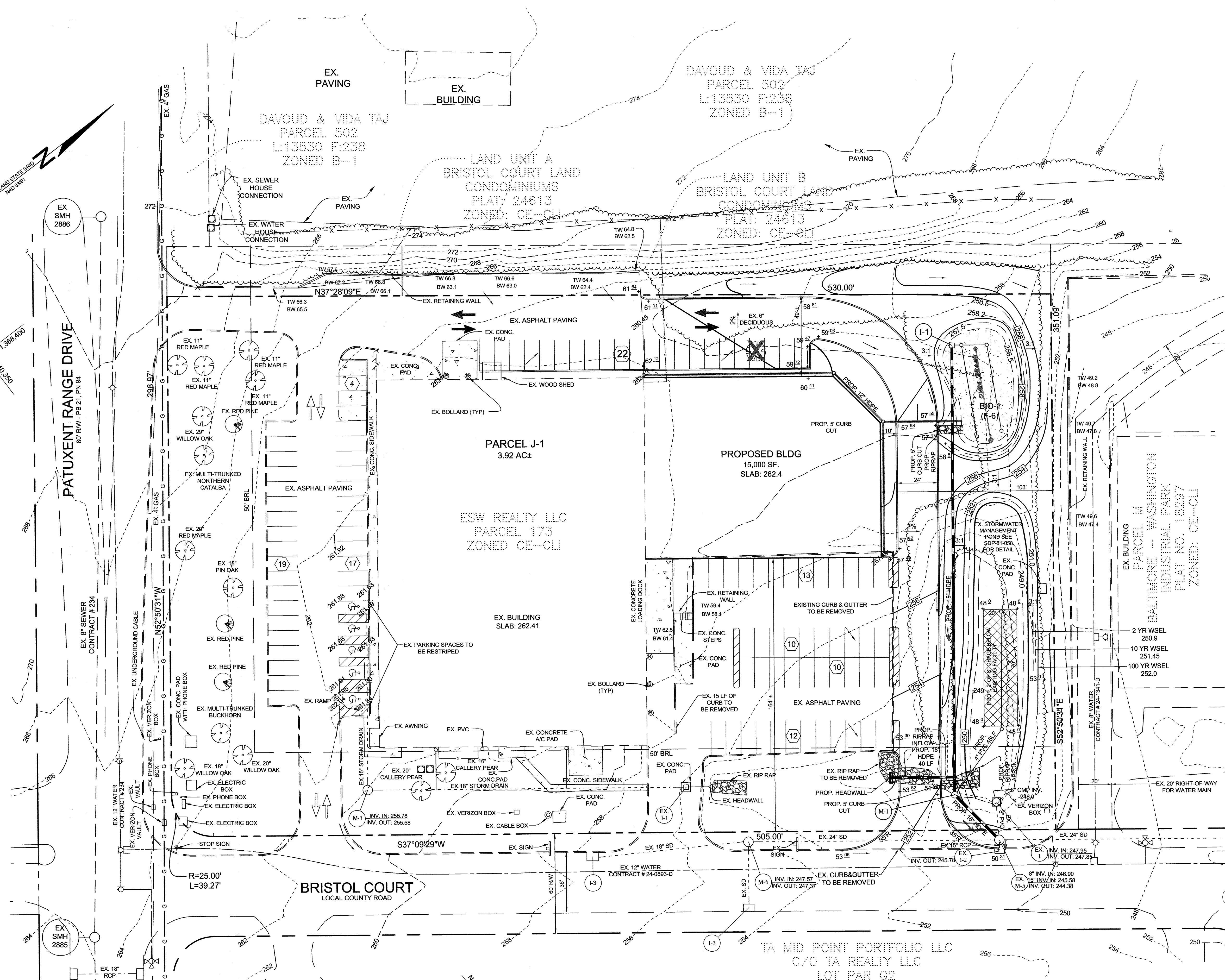
| | | |
|--|--|----------------------|
| | | DESIGN BY: PS |
| | 16005 Frederick Road, 2nd Floor Woodbine, MD 21797 Phone: 443.325.5076 Fax: 410.696.2022 Email: info@sillengineering.com Civil Engineering for Land Development | DRAWN BY: SZS |
| | SILL ENGINEERING GROUP, LLC | CHECKED BY: PS |
| | SCALE: AS SHOWN | DATE: AUGUST 5, 2021 |
| | PROJECT #: 20-002 SHEET #: 2 OF 7 | |

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 DATE: 8/3/21
 CHIEF, DIVISION OF LAND DEVELOPMENT
 DATE: 8/3/21

PLAN VIEW
 SCALE: 1"=30'

PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DU LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO. 32025, EXPIRATION DATE: JUNE 20, 2022

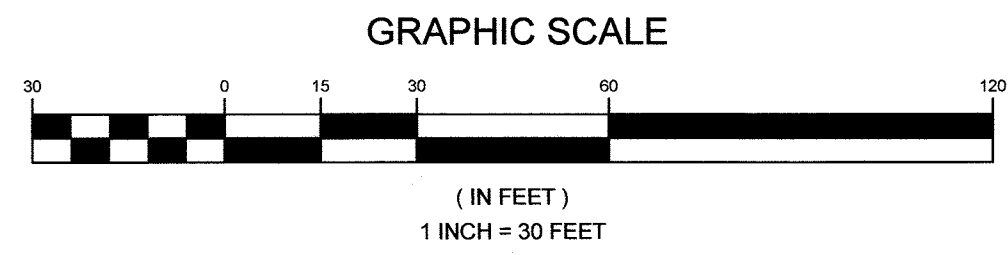
| LEGEND | |
|-----------------------------|-----|
| EXISTING GIS CONTOUR | --- |
| EXISTING FILED RUN CONTOUR | --- |
| PROPOSED CONTOUR | --- |
| EXISTING SPOT ELEVATION | + |
| PROPOSED SPOT ELEVATION | + |
| DIRECTION OF FLOW | → |
| EXISTING TREELINE | --- |
| PROPOSED TREELINE | --- |
| LIGHT POLES | ⊙ |
| EXISTING FIRE HYDRANT | ⊕ |
| EXISTING TREE TO BE REMOVED | ✕ |



LARGE STORM OVERFLOW PATH
SCALE: 1"=30'

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 DATE: 8/19/24

PLAN VIEW
 SCALE: 1"=30'



OWNER / DEVELOPER
 ESW REALTY LLC
 8331 BRISTOL COURT
 JESSUP MARYLAND 20794

CONCEPTUAL GRADING PLAN
 PRODUCT SUPPORT, INC.

8331 BRISTOL COURT
 ZONED CE-CL1

TAX MAP 48 GRID 19 PARCEL 17
 6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

| | | |
|--|--|----------------|
| | | DESIGN BY: PS |
| | 16005 Frederick Road, 2nd Floor Woodbine, MD 21797 Phone: 443.325.5076 Fax: 410.696.2022 Email: info@sillengineering.com Civil Engineering for Land Development | DRAWN BY: SZS |
| | SCALE: AS SHOWN DATE: AUGUST 5, 2024 | CHECKED BY: PS |
| | PROJECT #: 20-002 SHEET #: 3 OF 7 | |

PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DU LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 32025, EXPIRATION DATE: JUNE 20, 2027

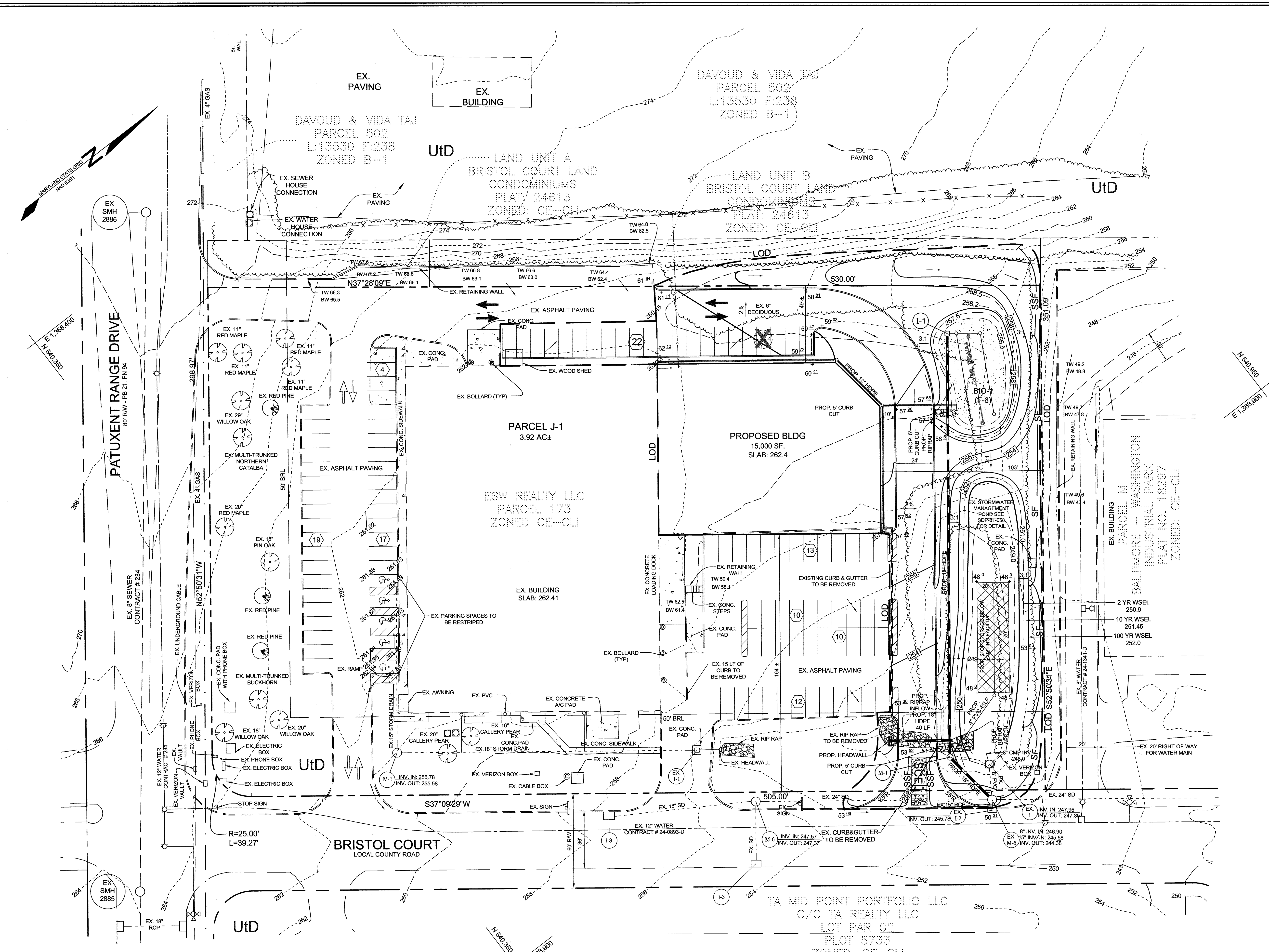
LEGEND

- EXISTING GIS CONTOUR -382
- EXISTING FIELD RUN CONTOUR -382
- PROPOSED CONTOUR -382
- EXISTING SPOT ELEVATION +82.53
- PROPOSED SPOT ELEVATION +82.53
- DIRECTION OF FLOW →
- EXISTING TREETRINE ~
- PROPOSED TREETRINE ~
- LIGHT POLES ☆ POST TOP ○ OVERHEAD ★ BOLLARD
- STABILIZED CONSTRUCTION ENTRANCE [Symbol]
- SILT FENCE — SF — SF —
- SUPER SILT FENCE — SSF — SSF —
- LIMIT OF DISTURBANCE — LOD —
- EXISTING SPECIMINE TREE TO BE REMOVED [Symbol]

SOILS LEGEND

| SYMBOL | NAME / DESCRIPTION | GROUP | 'K' FACTOR |
|--------|---|-------|------------|
| U1D | URBAN LAND-UDORTMENTS COMPLEX, 0 TO 15 PERCENT SLOPES | D | 0.27 |

- NOTES:
- 1) SOIL INFORMATION HAS BEEN TAKEN FROM THE UNITED STATES DEPARTMENT OF AGRICULTURE; NATURAL RESOURCES CONSERVATION SERVICE; WEB SOIL SURVEY.
 - 2) HIGHLY ERODIBLE SOILS ARE THOSE SOILS WITH A SLOPE GREATER THAN 15 PERCENT OR THOSE SOILS WITH A SOIL ERODIBILITY FACTOR 'K' GREATER THAN 0.35 AND WITH A SLOPE GREATER THAN 5 PERCENT.

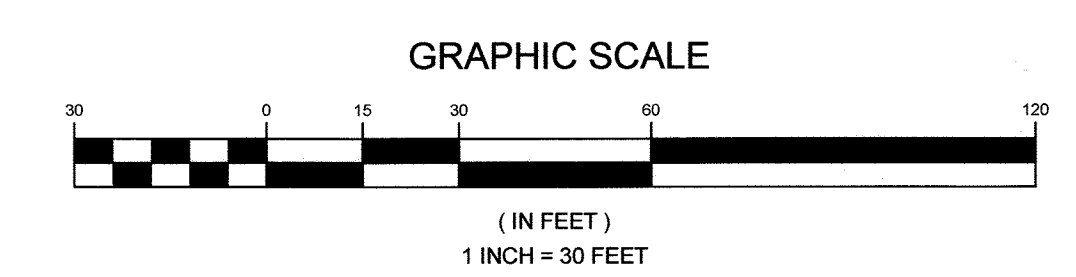


APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION *[Signature]* DATE: 8/9/21

CHIEF, DIVISION OF LAND DEVELOPMENT *[Signature]* DATE: 8/9/21

PLAN VIEW
SCALE: 1"=30'



OWNER / DEVELOPER

ESW REALTY LLC
8331 BRISTOL COURT
JESSUP MARYLAND 20794

CONCEPTUAL SEDIMENT CONTROL PLAN

PRODUCT SUPPORT, INC.

8331 BRISTOL COURT
ZONED CE-CL1

TAX MAP 48 GRID 19 PARCEL 17
6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

SILL ENGINEERING GROUP, LLC

16005 Frederick Road, 2nd Floor
Woodbine, MD 21797
Phone: 443.325.5076
Fax: 410.696.2022
Email: info@sillengineering.com
Civil Engineering for Land Development

DESIGN BY: PS

DRAWN BY: S2S

CHECKED BY: PS

SCALE: AS SHOWN

DATE: AUGUST 5, 2021

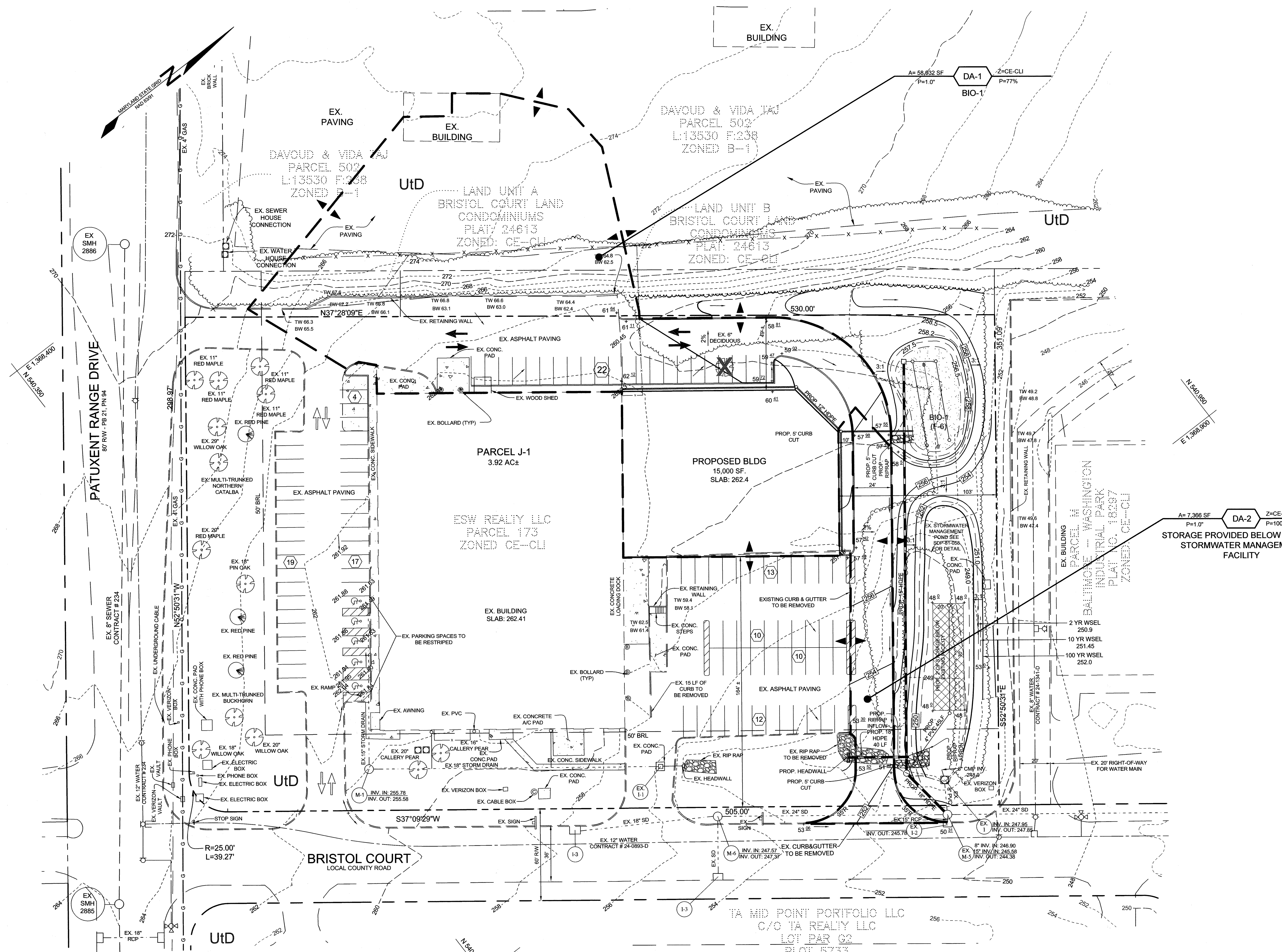
PROJECT #: 20-002

SHEET #: 4 OF 7

PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 32025, EXPIRATION DATE JUNE 20, 2022.

LEGEND

- EXISTING GIS CONTOUR ----- 382
- EXISTING FIELD RUN CONTOUR ----- 382
- PROPOSED CONTOUR ----- 382
- EXISTING SPOT ELEVATION ----- 382.5
- PROPOSED SPOT ELEVATION ----- +82.53
- DIRECTION OF FLOW -----
- EXISTING TREELINE -----
- PROPOSED TREELINE -----
- PROPOSED DRAINAGE DIVIDE -----
- EXISTING DRAINAGE DIVIDE -----
- SOIL BOUNDARY -----
- EXISTING SPECIMINE TREE TO BE REMOVED ----- X



DA-2 Z=CE-CL1
 P=1.0% P=100%
 STORAGE PROVIDED BELOW EXISTING
 STORMWATER MANAGEMENT
 FACILITY

STORMWATER MANAGEMENT DRAINAGE AREA MAP
PRODUCT SUPPORT, INC.
 8331 BRISTOL COURT
 ZONED CE-CL1
 TAX MAP 48 GRID 19
 6TH ELECTION DISTRICT
 PARCEL 17
 HOWARD COUNTY, MARYLAND

| | | |
|--|---|---|
| | | DESIGN BY: PS DRAWN BY: S2S CHECKED BY: PS SCALE: AS SHOWN DATE: AUGUST 5, 2021 PROJECT #: 20-002 SHEET #: 5 of 7 |
| | 16005 Frederick Road, 2nd Floor Woodbine, MD 21797 Phone: 443.325.5076 Fax: 410.696.2022 Email: info@sillengineering.com Civil Engineering for Land Development | |
| | PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A D. LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 32025, EXPIRATION DATE JUNE 20, 2025. | |
| | OWNER / DEVELOPER ESW REALTY LLC 8331 BRISTOL COURT JESSUP MARYLAND 20794 | |
| | GRAPHIC SCALE (IN FEET) 1 INCH = 30 FEET | |

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 DATE: 8/9/21
 CHIEF, DIVISION OF LAND DEVELOPMENT
 DATE: 8/9/21

PLAN VIEW
 SCALE: 1"=30'

MATERIALS SPECIFICATIONS FOR MICRO-BIORETENTION, RAIN GARDEN & LANDSCAPE INFILTRATION

| PLANTINGS | SPECIFICATION SEE PLANT LIST THIS SHEET | SIZE | NOTES |
|--|---|--|--|
| PLANTING SOIL [2'-4" TO 4' DEEP] | LOAMY SAND (60%-65%) & COMPOST (35%-40%) OR SANDY LOAM (30%), COARSE SAND (30%) & COMPOST (40%) | N/A | PLANTINGS ARE SITE-SPECIFIC. SEE PLANT LIST THIS SHEET. USDA SOIL TYPES LOAMY SAND OR SANDY LOAM. CLAY CONTENT < 5% |
| ORGANIC CONTENT | MIN. 10% BY DRY WEIGHT (ASTM-D-2974) | | SHREDDED HARDWOOD |
| PEA GRAVEL DIAPHRAGM | PEA GRAVEL: ASTM-D-448 | NO. 8 OR NO. 9 (1/8" TO 3/8") | AGED 6 MONTHS, MINIMUM. NO PINE OR WOOD CHIPS |
| CURTAIN DRAIN (IF REQUIRED) | ORNAMENTAL STONE: WASHED COBBLES | STONE: 2" TO 5" | |
| GEOTEXTILE | | N/A | PE TYPE 1 NONWOVEN |
| UNDERDRAIN GRAVEL | AASHTO M-43 | NO. 57 OR NO. 6 AGGREGATE (3/8" TO 3/4") | |
| UNDERDRAIN PIPING | F 758, TYPE PS 28 OR AASHTO M-278 | 4" TO 6" RIGID SCHEDULE 40 PVC OR SDR35 | SLOTTED OR PERFORATED PIPE, 3/8" PERF. @ 6" ON CENTER, 4 HOLES PER ROW, MINIMUM OF 3" OF GRAVEL OVER PIPES; NOT NECESSARY UNDERNEATH PIPES. PERFORATED PIPE SHALL BE WRAPPED WITH 1/4" GALVANIZED HARDWARE CLOTH. |
| POURED IN PLACE CONCRETE (IF REQUIRED) | MSHA MX NO.3, F _{cr} 3500 PSI @ 28 DAYS, NORMAL WEIGHT, AIR-ENTRAINED, REINFORCING TO MEET ASTM-615-60 | N/A | ON-SITE TESTING OF POURED-IN-PLACE CONCRETE REQUIRED: 28 DAY STRENGTH AND SLUMP TEST; ALL CONCRETE DESIGN (CAST-IN-PLACE OR PRE-CAST) NOT USING PREVIOUSLY APPROVED STATE OR LOCAL STANDARDS REQUIRES DESIGN DRAWINGS SEALED AND APPROVED BY A PROFESSIONAL STRUCTURAL ENGINEER LICENSED IN THE STATE OF MARYLAND. DESIGN TO INCLUDE MEETING ACI CODE 350.1R89; VERTICAL LOADING (H-10 OR H-20); ALLOWABLE HORIZONTAL LOADING (BASED ON SOIL PRESSURES); AND ANALYSIS OF POTENTIAL CRACKING. |
| SAND | AASHTO-M-6 OR ASTM-C-33 | 0.02" TO 0.04" | SAND SUBSTITUTIONS SUCH AS DIABASE AND GRAYSTONE (AASHTO) #10 ARE NOT ACCEPTABLE. NO CALCIUM CARBONATED OR DOLOMITIC SAND SUBSTITUTIONS ARE ACCEPTABLE. NO "ROCK DUST" CAN BE USED FOR SAND. |

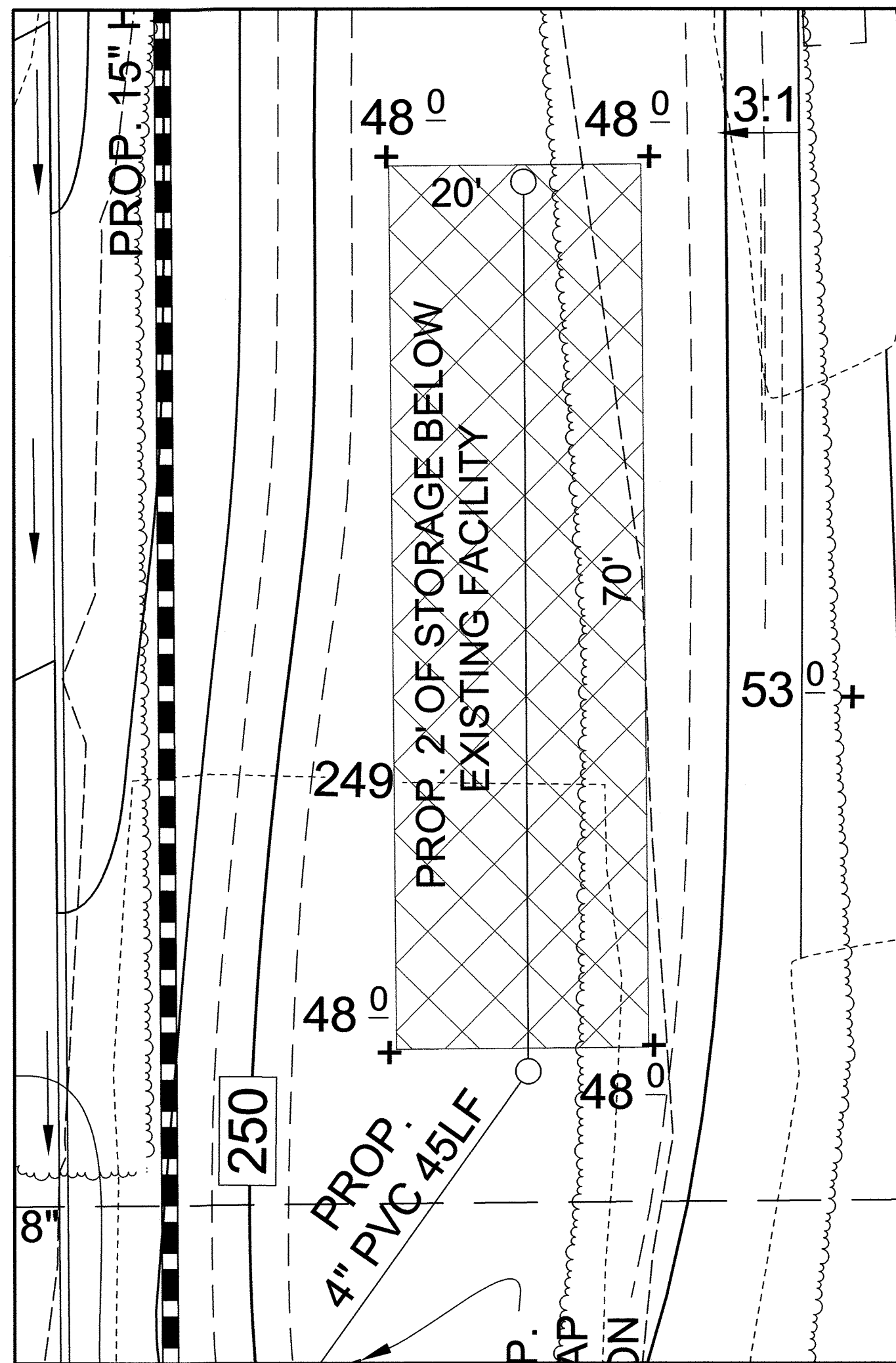
BIORETENTION ELEVATIONS AND DIMENSIONS

| DESCRIPTION | BIO 1 |
|-------------------------------------|--------|
| 'A' PONDING DEPTH | 1.0 |
| 'B' TOP OF MULCH | 256 |
| 'C' WSEL | 256.5 |
| 'D' EMBANKMENT WIDTH | 5' |
| 'E' SPILLWAY WIDTH | 42" |
| 'F' SPILLWAY LENGTH | 5.5' |
| 'G' FACILITY LENGTH | 92.5' |
| 'H' FACILITY WIDTH (AVERAGE) | 40' |
| 'I' PERF. UNDERDRAIN PIPE DIMENSION | 54" |
| 'J' UNDERDRAIN PIPE INVERT | 257.5 |
| 'K' SOLID UNDERDRAIN DIMENSION | N/A |
| 'L' OUTFALL INVERT | N/A |
| 'M' PERF. OVERFLOW PIPE DIMENSION | N/A |
| 'N' OVERFLOW PIPE INVERT | N/A |
| 'O' GRAVEL STORAGE DEPTH | 0.4' |
| 'P' BOTTOM ELEVATION OF FACILITY | 253.26 |
| 'Q' GRADE % OF OUTFALL PIPE | * |

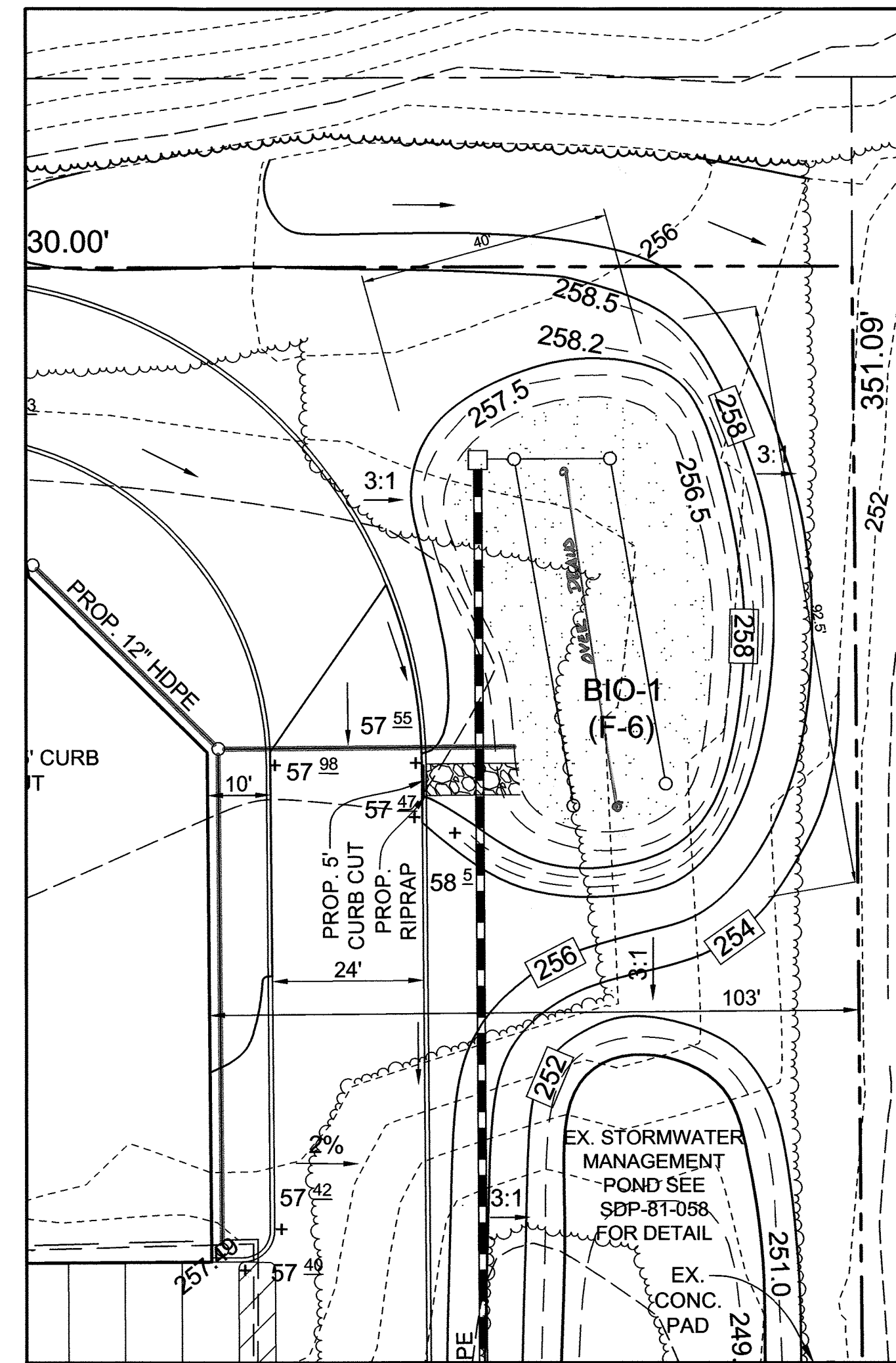
* WILL BE SHOWN ON THE STORM DRAIN PROFILES AT THE SITE DEVELOPMENT PLAN STAGE

OPERATION AND MAINTENANCE SCHEDULE FOR PRIVATELY OWNED AND MAINTAINED MICRO-BIORETENTION FACILITIES (M-6)

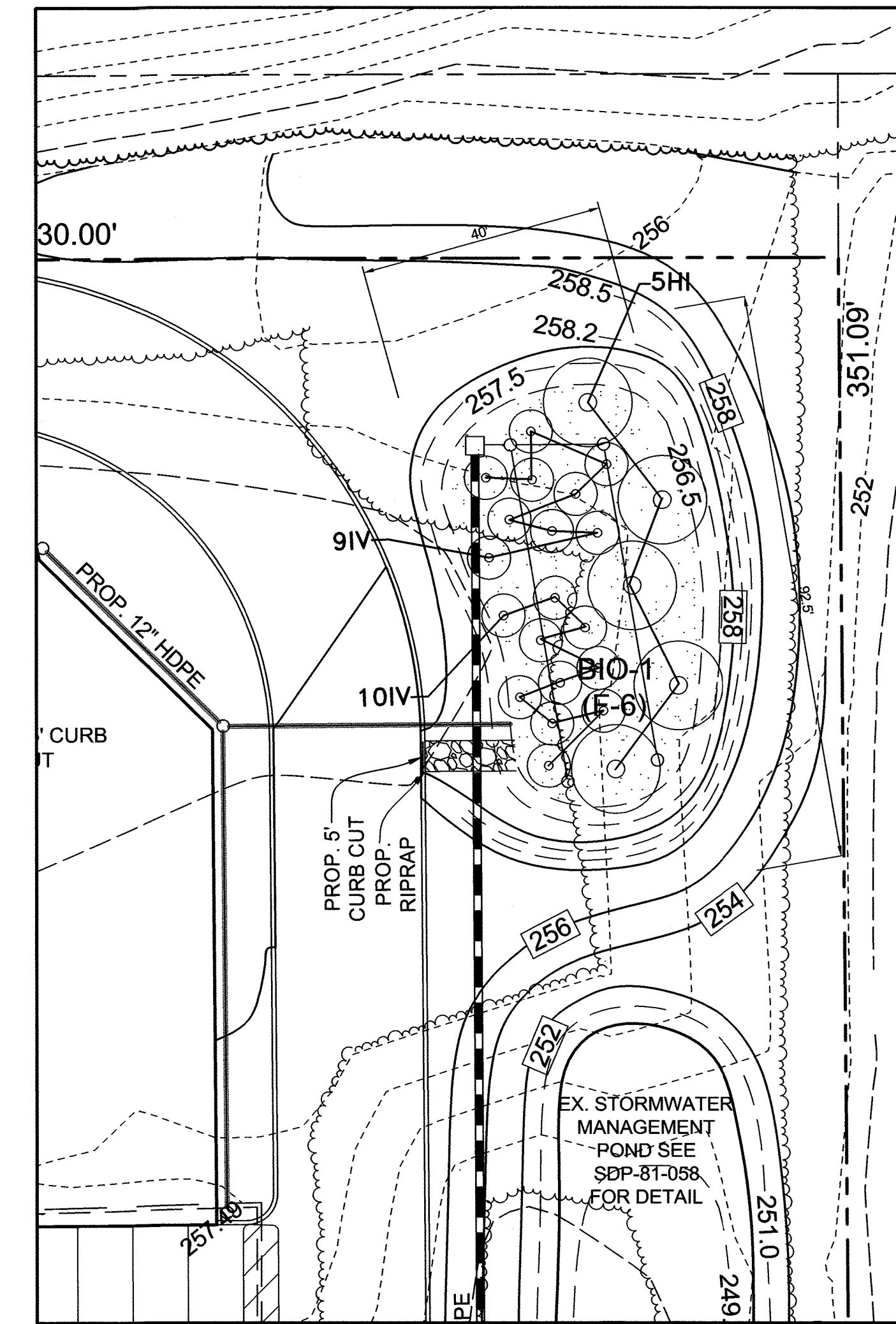
- THE OWNER SHALL MAINTAIN THE PLANT MATERIAL, MULCH LAYER AND SOIL LAYER ANNUALLY. MAINTENANCE OF MULCH AND SOIL IS LIMITED TO CORRECTING AREAS OF EROSION OR WASH OUT. ANY MULCH REPLACEMENT SHALL BE DONE IN THE SPRING. PLANT MATERIAL SHALL BE CHECKED FOR DISEASE AND INSECT INFESTATION AND MAINTENANCE 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.
- THE OWNER SHALL PERFORM A PLANT INSPECTION IN THE SPRING AND IN THE FALL OF EACH YEAR. DURING THE INSPECTION, THE OWNER SHALL REMOVE DEAD OR DISEASED VEGETATION CONSIDERED BEYOND TREATMENT. REPLACE DEAD PLANT MATERIAL WITH ACCEPTABLE REPLACEMENT PLANT MATERIAL. TREAT DISEASED TREES AND SHRUBS, AND REPLACE ALL DEFICIENT STAKES AND WIRES.
- THE OWNER SHALL INSPECT THE 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.
- THE OWNER SHALL CORRECT SOIL EROSION ON AN AS NEEDED BASIS, WITH A MINIMUM OF ONCE PER MONTH AND AFTER EACH HEAVY STORM.



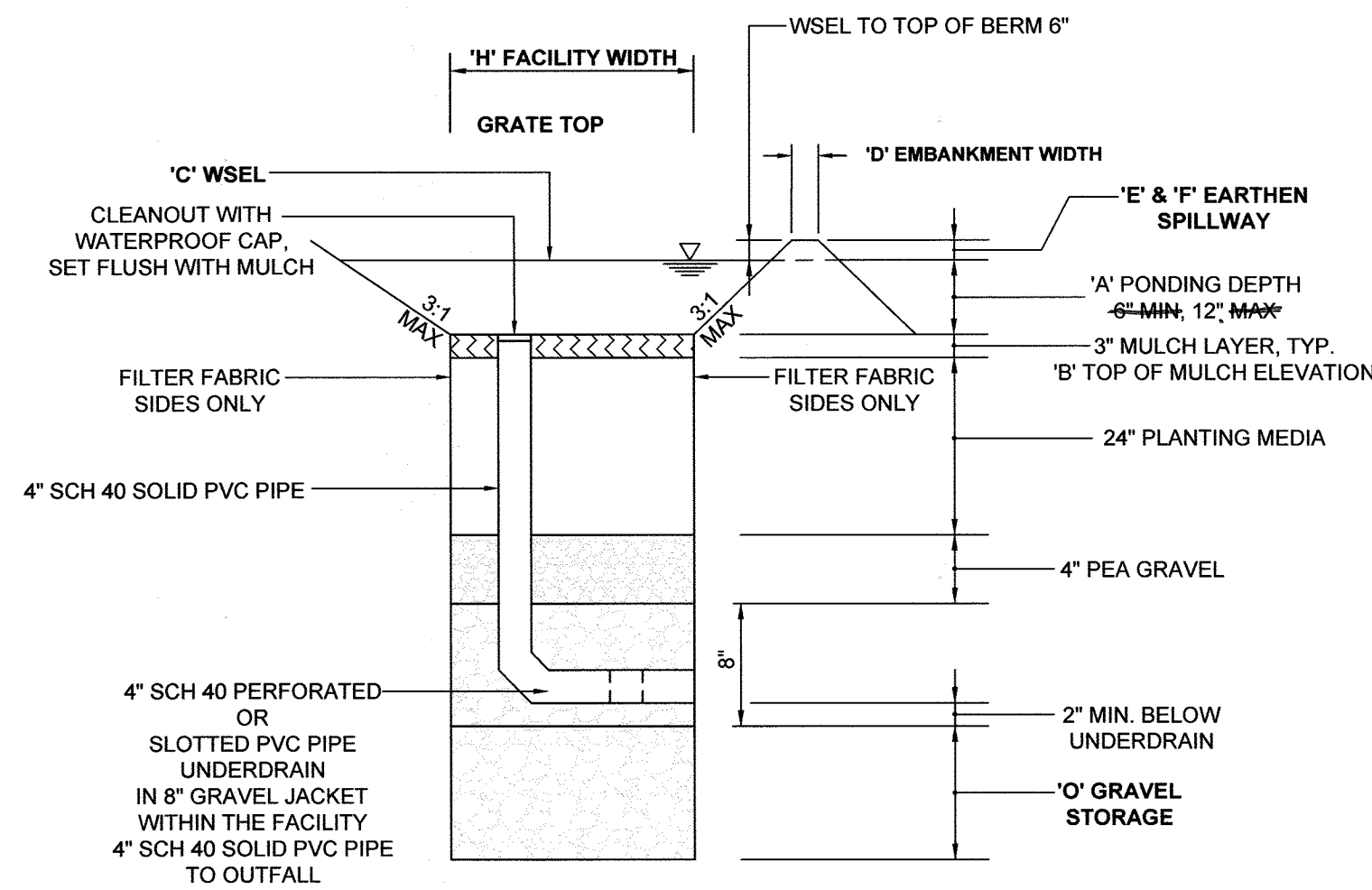
EXISTING STORMWATER MANAGEMENT FACILITY
SCALE: 1=20'



BIORETENTION FACILITY #1 (F-6)
SCALE: 1=20'

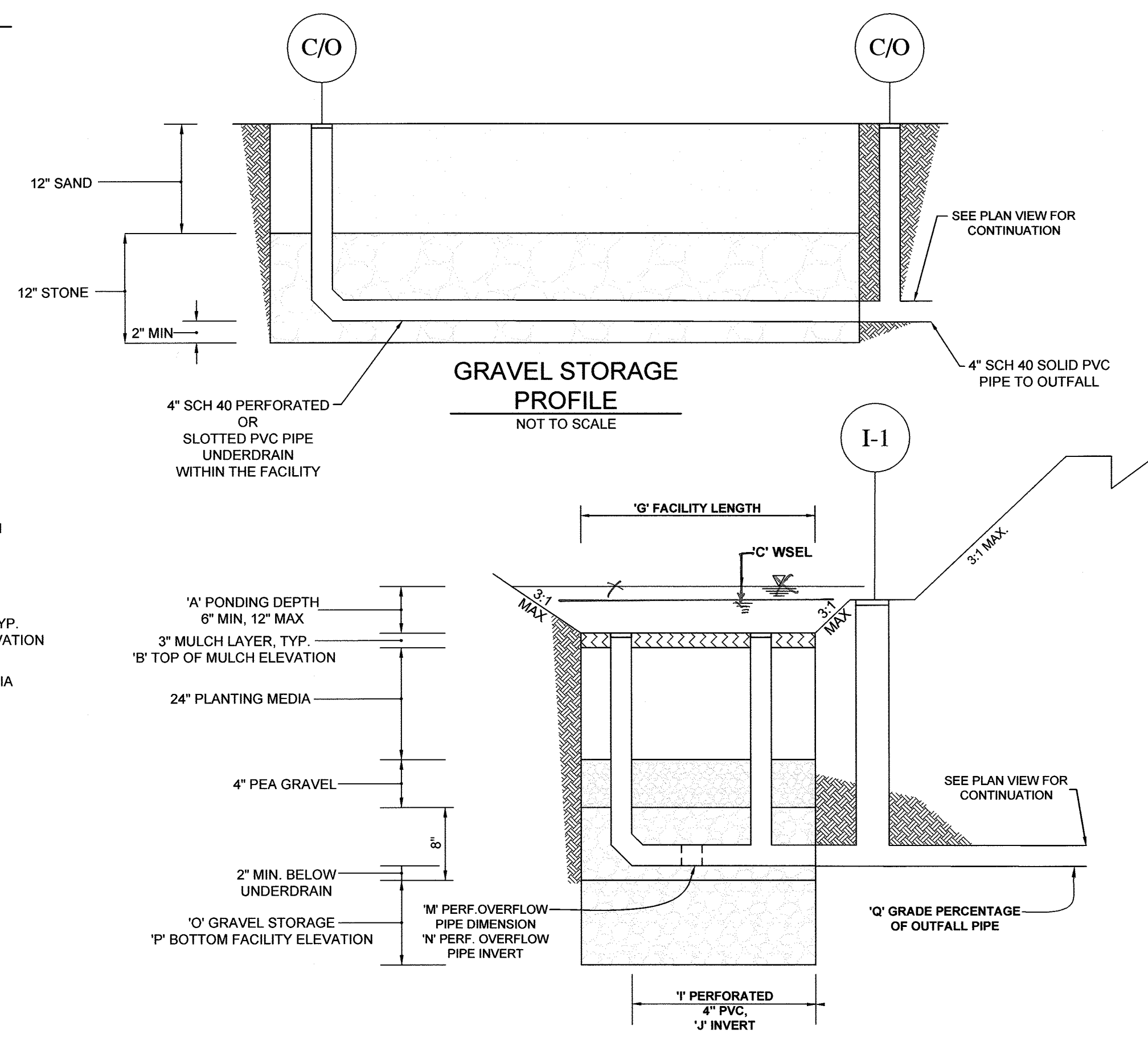


BIORETENTION FACILITY #1 (F-6)
LANDSCAPE PLAN VIEW
SCALE: 1=20'



BIORETENTION FACILITY
TYPICAL SECTION
NOT TO SCALE

NOTES:
FOR ADDITIONAL INFORMATION, SEE THE 2000 MARYLAND STORMWATER DESIGN MANUAL, VOLUMES I AND II.
SEE CHART, THIS SHEET, FOR ELEVATIONS AND DISTANCES



GRAVEL STORAGE
PROFILE
NOT TO SCALE

BIORETENTION FACILITY
TYPICAL PROFILE
NOT TO SCALE

BIORETENTION PLANT LIST

| KEY | QUANTITY | BOTANICAL NAME | COMMON NAME | SIZE | NOTE |
|-----|----------|--------------------------------|-------------|---------------|------------------------|
| HI | 5 | HAMMELIS X INTERMEDIA 'JELENA' | WITCH HAZEL | 36" - 48" HT. | |
| IV | 15 | ILEX VERTICILLATA 'WINTER RED' | WINTERBERRY | 36" HT. | AS SHOWN |
| IV | 4 | ILEX VERTICILLATA 'JIM DANDY' | WINTERBERRY | 36" HT. | 2 PER GROUP, IN CENTER |

NOTE: IF THERE ARE DISCREPANCIES BETWEEN THE PLANT LIST AND THE PLAN, THE GREATER QUANTITY SHALL PREVAIL.
WITH THE APPROVAL OF THE LANDSCAPE ARCHITECT, PLANTINGS MAY BE ADJUSTED ON SITE TO ALLOW FOR FINAL LOCATIONS OF UTILITIES AND OTHER SITE CONDITIONS.

NOTE: PLANT MATERIAL MUST COVER A MINIMUM 50% OF THE MULCH AREA AT MATURE GROWTH.
BIO 1 - BIORETENTION AREA = 2,225 S.F.

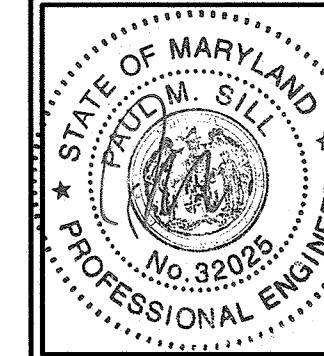
APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
CHIEF, DEVELOPMENT ENGINEERING DIVISION
DATE: 8/9/24
CHIEF, DIVISION OF LAND DEVELOPMENT
DATE: 8/9/24

OWNER / DEVELOPER
ESW REALTY LLC
8331 BRISTOL COURT
JESSUP MARYLAND 20794

CONCEPTUAL STORMWATER MANAGEMENT PLAN NOTES & DETAILS
PRODUCT SUPPORT, INC.

8331 BRISTOL COURT
ZONED CE-CL1

TAX MAP 48 GRID 19
6TH ELECTION DISTRICT
PARCEL 17
HOWARD COUNTY, MARYLAND

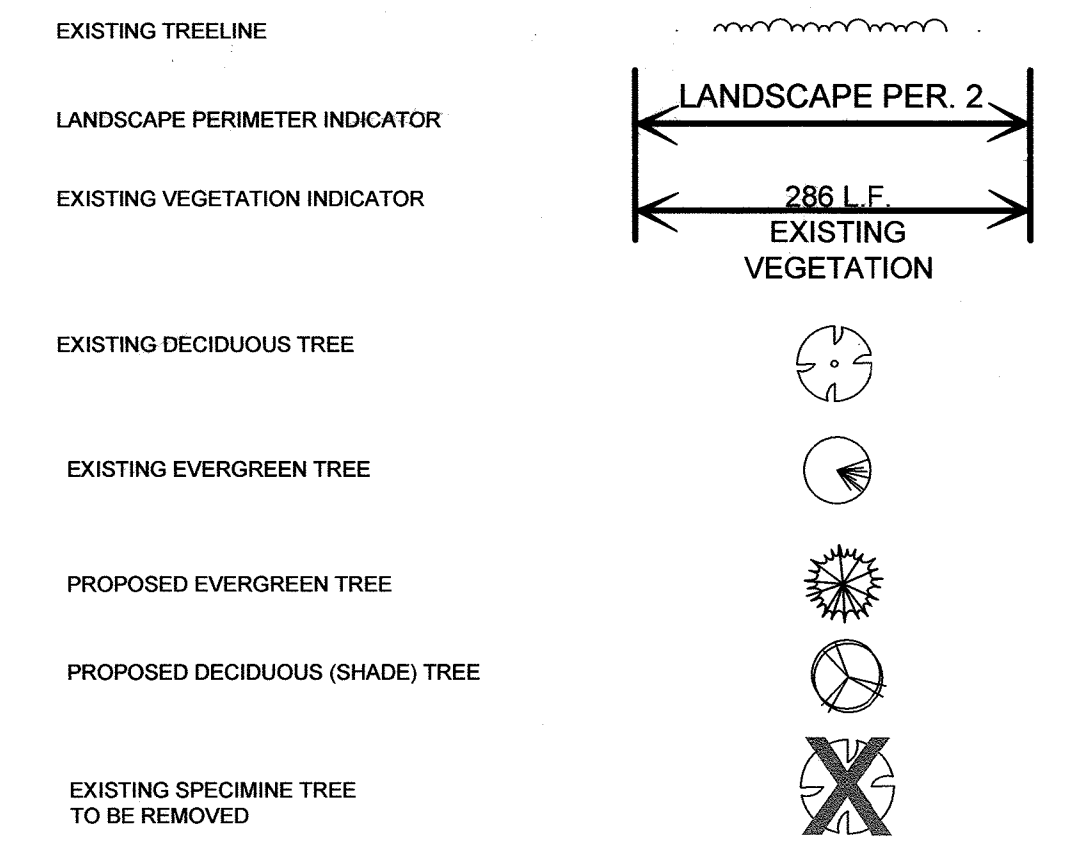


SILL ENGINEERING GROUP, LLC
16005 Frederick Road, 2nd Floor
Woodbine, MD 21797
Phone: 443.325.5076
Fax: 410.696.2022
Email: info@sillengineering.com
Civil Engineering for Land Development

DESIGN BY: PS
DRAWN BY: S2S
CHECKED BY: PS
SCALE: AS SHOWN
DATE: AUGUST 5, 2024
PROJECT #: 20-002
SHEET #: 8 of 7

PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 32028, EXPIRATION DATE: JUNE 20, 2025.

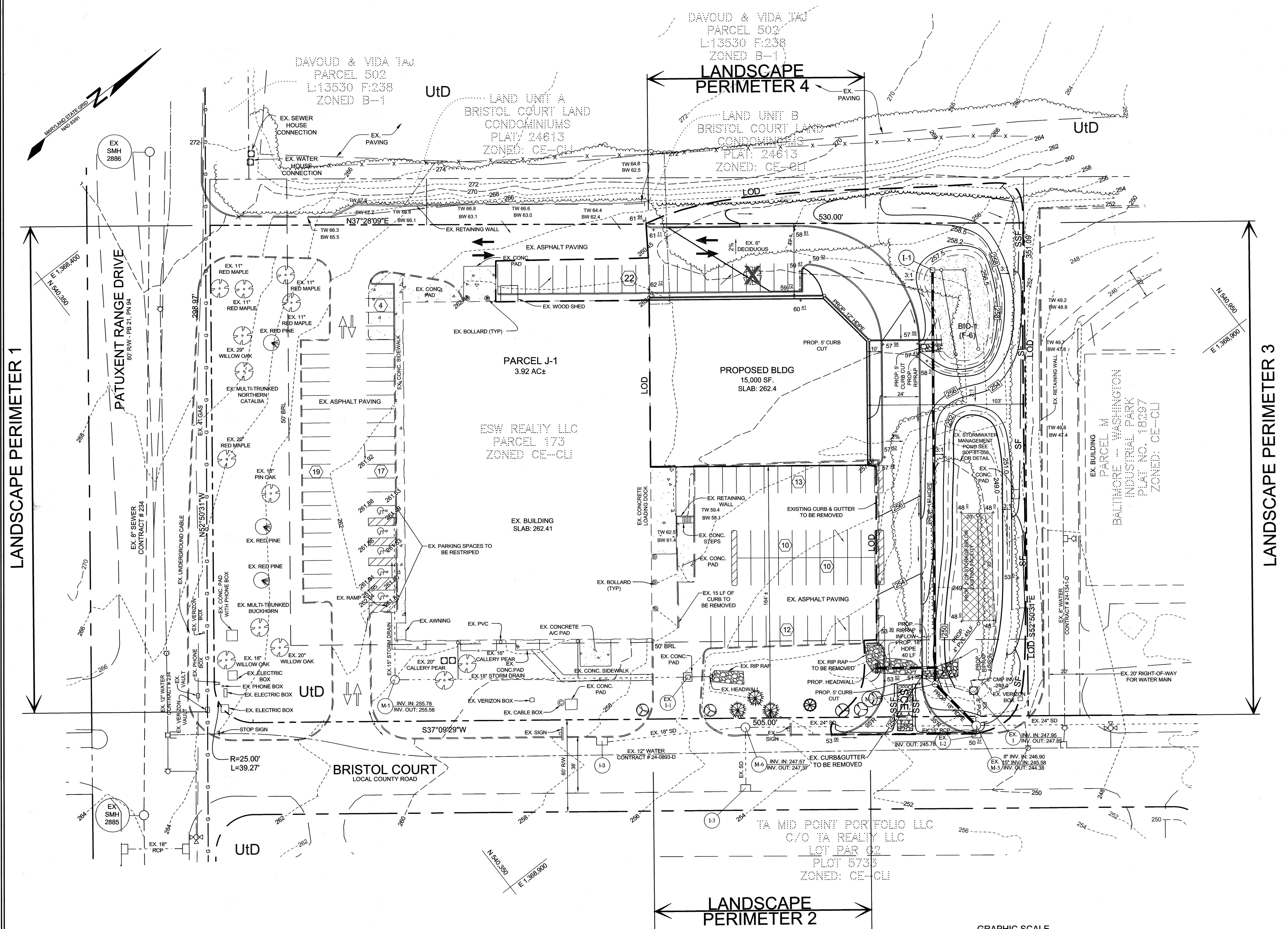
LEGEND



| SCHEDULE A PERIMETER LANDSCAPE EDGE | | | | |
|--|----------------------|----------------------------------|-----------|------------|
| CATEGORY | ADJACENT TO ROADWAYS | ADJACENT TO PERIMETER PROPERTIES | 1 | 2 |
| PERIMETER/FRONTAGE DESIGNATION | 1 | 2 | 3 | 4 |
| LANDSCAPE TYPE | 1 | 2 | 3 | 4 |
| LINEAR FEET OF ROADWAY FRONTAGE/PERIMETER | 319 (N/A) | 142 (B) | 352 (N/A) | 142 (A) |
| CREDIT FOR EXISTING VEGETATION (YES, NO, LINEAR FEET) | N/A | NO | N/A | YES 530 LF |
| REMAINING PERIMETER LENGTH CREDIT FOR WALL, FENCE OR BERM (YES, NO, LINEAR FEET) | N/A | NO | N/A | NO |
| REMAINING PERIMETER LENGTH NUMBER OF PLANTS REQUIRED | | | | |
| SHADE TREES | N/A | 1:50=3 | N/A | 1:80=3 |
| EVERGREEN TREES | N/A | 1:40=4 | N/A | - |
| SHRUBS | N/A | - | N/A | - |
| NUMBER OF PLANTS PROVIDED | NOTE 1 | 1:50=3 | NOTE 3 | NOTE 2 |
| SHADE TREES | N/A | 1:40=4 | N/A | 1:80=0 |
| EVERGREEN TREES | N/A | - | N/A | - |
| SHRUBS | N/A | - | N/A | - |

- N/A PER HOWARD COUNTY LANDSCAPE MANUAL REQUIREMENTS, PAGE 3, BULLET POINT 5.
- THREE SHADE TREES MOVED TO PERIMETER 2 DUE TO LACK OF SPACE AT THIS PERIMETER.
- INTERIOR BOUNDARY OF THE BALTIMORE-WASHINGTON INDUSTRIAL PARK SUBDIVISION.

| LANDSCAPE PLANT LIST | | | | |
|----------------------|----------|--|--------------|-------------|
| KEY | QUANTITY | BOTANICAL/Common NAME | SIZE | NOTE |
| | 3 | PLATANUS X ACERIFOLIA 'COLUMBIA' COLUMBIA LONDON PLANE | 2.5'-3' CAL. | B & B |
| | 2 | ACER RUBRUM 'OCTOBER GLORY' OCTOBER GLORY RED MAPLE | 3' CAL. | B & B |
| | 3 | ILEX OPACA AMERICAN HOLLY | 5'-6' HT. | B & B, FULL |
| | 1 | MAGNOLIA GRANDIFLORA SOUTHERN MAGNOLIA | 6'-8' HGT. | B & B |



LANDSCAPING PLAN
PRODUCT SUPPORT, INC.
 8331 BRISTOL COURT
 ZONED CE-CL1

TAX MAP 48 GRID 19
 6TH ELECTION DISTRICT

PARCEL 173
 HOWARD COUNTY, MARYLAND

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 Phone: 443.325.5076
 Fax: 410.696.2022
 Email: info@sillengineering.com
 Civil Engineering for Land Development

DESIGN BY: PS
 DRAWN BY: S2S
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OWNER / DEVELOPER
 ESW REALTY LLC
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APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE: 8/9/21

CHIEF, DIVISION OF LAND DEVELOPMENT DATE: 8/9/21

PLAN VIEW
 SCALE: 1"=30'

