

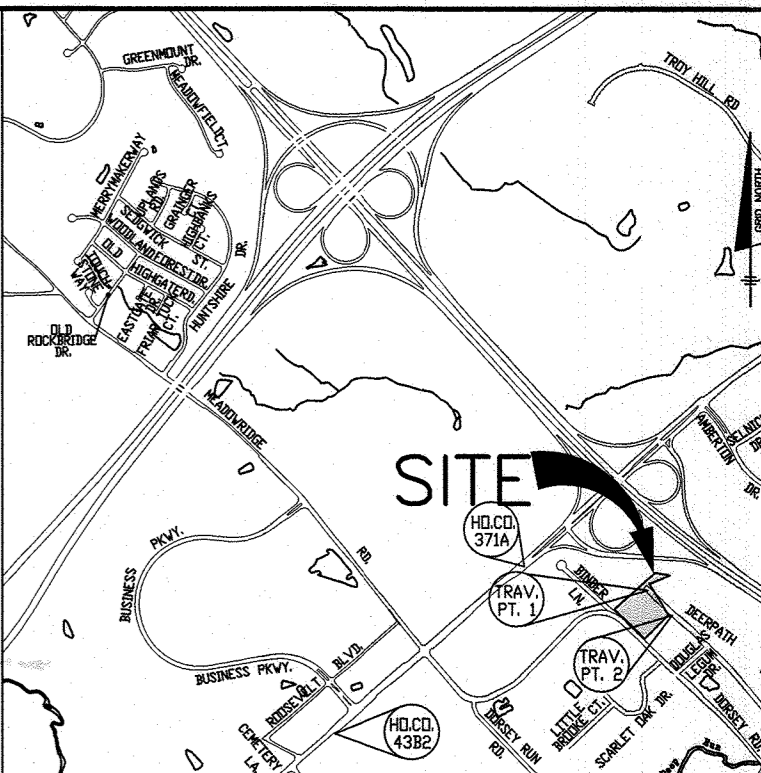
| SHEET | TITLE   |
|-------|---|
| 1     | COVER SHEET - EXISTING CONDITION PLANS AND SOILS MAP          |
| 2     | LAYOUT PLAN AND BIKE ROUTE TO DEERPATH BIKE LANES             |
| 3     | SITE DIMENSION PLAN   |
| 4-7   | DETAILED GRADING AND ACCESSIBILITY PLAN                       |
| 8     | GRADING, SEDIMENT AND EROSION CONTROL PLAN, NOTES AND DETAILS |
| 9     | GRADING, SEDIMENT AND EROSION CONTROL PLAN, NOTES AND DETAILS |
| 10    | SEDIMENT AND EROSION CONTROL NOTES AND DETAILS                |
| 11    | STORM DRAIN DRAINAGE AREA MAP                                 |
| 12-13 | STORM DRAIN PROFILES  |
| 14    | UTILITY PROFILES, STRUCTURE AND PIPE SCHEDULES AND DETAILS    |
| 15    | WALL DELETED  |
| 16    | WALL DELETED  |
| 17    | WALL DELETED  |
| 18    | WALL DELETED  |
| 19    | MD 103-DORSEY ROAD WIDENING AND IMPROVEMENT PLANS             |
| 20-22 | STORMWATER MANAGEMENT PLANS, SECTIONS AND DETAILS             |
| 23    | UNDERGROUND STORMWATER MANAGEMENT PLANS AND DETAILS           |
| 24    | SOIL BORINGS AND FOCAL POINT SPECIFICATIONS                   |
| 25    | OVERALL MATERIALS PLAN  |
| 26    | ENTRY MATERIALS PLAN  |
| 27    | COURTYARD MATERIALS PLAN                                      |
| 28    | DOG PARK MATERIALS PLAN                                       |
| 29    | POOL PLAN   |
| 30    | PAVING DETAILS  |
| 31-32 | WALL DETAILS  |
| 33    | STAIR DETAILS   |
| 34-35 | FENCE DETAILS   |
| 36    | FIRE PIT DETAILS  |
| 37    | POOL DETAILS  |
| 38    | SITE AMENITY DETAILS  |
| 39-40 | MINIMUM LANDSCAPE PLAN  |
| 41-44 | LANDSCAPE PLAN  |
| 45    | PLANTING DETAILS  |
| 46    | LIGHTING PLAN   |
| 47    | GARAGE FLOOR LAYOUTS  |
| 48    | BUILDING ELEVATIONS   |
| 49    | PHOTOMETRIC PLAN  |

# SITE DEVELOPMENT PLAN DORSEY CENTER APARTMENTS, PARCEL 'T' 1ST ELECTION DISTRICT HOWARD COUNTY, MARYLAND

## LEGEND

- EXISTING CONTOURS
- EXISTING TREELINE
- EXISTING STRUCTURE
- SOIL DELINEATION
- SOILS DELINEATION
- STEEP SLOPES - 25%

| BENCH MARKS-(NAD 83)   |                     |
|--|---------------------|
| TRAV. PT. 1  | EL.157.73 (NGVD 29) |
| TRV. MAG; 18.0' NORTHEAST OF CONC. CURB OF SOUTHEASTBOUND LANE OF DEERPATH ROAD; 20.3' NORTH OF EX. INLET N 553,149.12 | E 1,381,844.44      |
| TRAV. PT. 2  | EL.154.64 (NGVD 29) |
| TRV. MAG; 3.1' NORTHEAST OF CONC. CURB OF SOUTHEASTBOUND LANE OF DEERPATH ROAD; 20.3' NORTH OF EX. INLET N 553,037.81  | E 1,381,953.46      |



VICINITY MAP  
SCALE: 1" = 2000'  
ADC MAP NO. 17 GRID C-11

### PROJECT BACKGROUND INFORMATION

PRESENT ZONING: T.O.D.  
 LOCATION: TAX MAP 37 - GRID 24 - PARCELS 375  
 APPLICABLE DPZ FILE REFERENCES: SDP-05-29, F-86-109, F-07-80, SDP-07-016, WP-15-131, ECP-15-017, S-17-004, SDP-19-038, F-18-016  
 DEED REFERENCES: L.18128 F.00055, L.18128 F.00465  
 PROPOSED USE OF SITE: RESIDENTIAL APARTMENTS  
 PROPOSED WATER AND SEWER SYSTEMS: PUBLIC WATER & SEWER

### SITE DATA TABULATION

|  |   |
|--|---|
| 1) TOTAL PROJECT AREA.....   | 4.35 AC.±   |
| 2) AREA OF 100-YR. FLOODPLAIN.....   | 0.00 AC.±   |
| 3) AREA OF STEEP SLOPES (15% OR GREATER).....  | 0.14 AC.±   |
| 4) AREA OF EXISTING FOREST**.....  | 0.64 AC.±   |
| 5) AREA OF ERODIBLE SOILS.....   | 0.00 AC.±   |
| 6) AREA OF WETLANDS (INCLUDING BUFFER).....  | N/A   |
| 7) AREA OF STREAM BUFFER.....  | N/A   |
| 8) NET AREA OF PROJECT.....  | 4.35 AC.±   |
| 9) AREA OF PROPOSED DEVELOPMENT.....   | 4.35 AC.±   |
| 10) MINIMUM RESIDENTIAL DENSITY (20 PER NET ACRE).....   | 87 UNITS  |
| 11) NUMBER OF UNITS PROPOSED.....  | 210 UNITS   |
| 12) NUMBER OF PARCELS.....   | 1   |
| 13) APPROXIMATE LIMIT OF DISTURBANCE.....  | 4.85 AC.±   |
| 14) PRESENT ZONING DESIGNATION.....  | T.O.D.  |
| 15) PROPOSED USES FOR THE SITE & STRUCTURES.....   | RESIDENTIAL APARTMENTS  |
| 16) MINIMUM LOT SIZE.....  | N/A   |
| 17) AMENITY AREA REQUIRED (10% DEVELOPMENT AREA).....  | 0.44 ACRES  |
| 18) AMENITY AREA PROPOSED.....   | 0.46 ACRES (10%)*   |
| 19) RESIDENTIAL USES AREA ALLOWED (50%).....   | 2.18 ACRES  |
| 20) RESIDENTIAL USES AREA PROVIDED.....  | 0.07 ACRE SURFACE PARKING<br>1.93 ACRES UNIT AREA<br>2.00 ACRES (46%) ACRES |
| 21) NUMBER OF PARKING SPACES REQUIRED.....   | 483 SPACES (2.3/UNIT)   |
| 22) NUMBER OF PARKING SPACES PROVIDED.....   | 378 SPACES (1.8/UNIT)**   |
| 23) TOTAL IMPERVIOUS AREA.....   | 2.96 AC.±   |
| * AMENITY AREAS INCLUDE PATHWAYS, BENCHES AND DOG PARK TO BE USED BY THE PUBLIC. THE POOL AND COURTYARD AREAS ARE EXCLUDED FROM THE AMENITY AREAS. |   |
| ** FOREST CONSERVATION PREVIOUSLY ADDRESSED, SEE GENERAL NOTE #14.   |   |
| *** SEE GENERAL NOTE #32.  |   |

| MODERATE INCOME HOUSING UNITS (MIHU) ALLOCATION EXEMPTION TRACKING |     |
|--|-----|
| TOTAL NUMBER OF UNITS PROPOSED                                     | 210 |
| NUMBER OF MIHU REQUIRED  | 32  |
| NUMBER OF MIHU PROVIDED ON-SITE (EXEMPT FROM AFFO ALLOCATION)      | 52  |
| NUMBER OF AFFO ALLOCATIONS REQUIRED (REMAINING UNITS)              | 178 |
| MIHU FEE-IN-LIEU   | NO  |

### GENERAL NOTES

- THE SUBJECT PROPERTY IS ZONED TOD PER THE OCTOBER 6, 2013 COMPREHENSIVE ZONING PLAN.
- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY PLUS MSHA STANDARDS AND SPECIFICATIONS IF APPLICABLE.
- THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/BUREAU OF ENGINEERING/CONSTRUCTION INSPECTION DIVISION AT (410)-313-1880 AT LEAST FIVE (5) WORKING DAYS PRIOR TO THE START OF WORK.
- THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK BEING DONE.
- TRAFFIC CONTROL DEVICES, MARKINGS AND SIGNING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). ALL STREET AND REGULATORY SIGNS SHALL BE IN PLACE PRIOR TO THE PLACEMENT OF ANY ASPHALT.
- EXISTING UTILITIES ARE BASED ON FIELD SURVEY AND RECORD PLANS. CONTRACTOR SHALL VERIFY DEPTHS AND LOCATIONS OF EXISTING UTILITIES.
- THE EXISTING TOPOGRAPHY IS TAKEN FROM FIELD RUN TOPOGRAPHIC SURVEYS AT 2' INTERVALS PREPARED BY BENCHMARK ENGINEERING, INC., ON OR ABOUT JUNE, 2009, AND ADDITIONAL TOPO ADDED 2019 & 2020.
- THE COORDINATES SHOWN HEREON ARE BASED ON THE HOWARD COUNTY GEODETIC CONTROL, WHICH IS BASED UPON THE MARYLAND STATE PLANE COORDINATE SYSTEM, HOWARD COUNTY MONUMENT NOS. 374 AND 4382 WERE USED FOR THIS PROJECT.
- THIS PROPERTY IS WITHIN THE METROPOLITAN WATER AND SEWER DISTRICT.
- WATER AND SEWER WILL BE PUBLIC. THE PUBLIC SEWER CONNECTION WILL BE TO CONTRACT 24-W&S. THE PUBLIC WATER WILL BE TO CONTRACT 24-W&S.
- EXISTING UTILITIES SHOWN WERE LOCATED BY RECORD DRAWINGS AND FIELD LOCATIONS.
- THE BOUNDARY SHOWN HEREON IS TAKEN FROM THE BOUNDARY SURVEY PREPARED BY BENCHMARK ENGINEERING, INC. ON OR ABOUT JUNE, 2006.
- PREVIOUS DEPARTMENT OF PLANNING AND ZONING REFERENCE NUMBERS: SDP-05-29, F-86-109 & F-07-80, SDP-07-016, WP-15-131, ECP-15-017, S-17-004, F-18-016 SDP-19-038, F-20-069.
- THE FOREST CONSERVATION ACT REQUIREMENTS FOR 1.09 ACRES OF REQUIRED REFORESTATION HAVE BEEN MET THROUGH THE PAYMENT OF \$35,610.30. THIS PAYMENT WAS ADDRESSED AS PART OF THE PROCESSING OF SDP-07-016. THE ADDITION OF PARCEL 'S' INTO THE FOREST COMPUTATIONS FOR THIS PROJECT (SEE UPDATED WORKSHEET, SHEET 39) DID NOT GENERATE ANY ADDITIONAL FOREST CONSERVATION OBLIGATION.
- THERE ARE NO WETLANDS ON THIS SITE, BASED ON THE WETLAND STUDY PROVIDED BY HILLS-CARNES ENGINEERING ASSOCIATES, INC. DATED JULY 12, 2004 AND VERIFIED BY ECO-SCIENCE PROFESSIONALS, INC. DATED AUGUST 2014. THERE ARE NO STREAMS OR BUFFERS, OR STEEP SLOPES ON THE SITE, SINCE THE STREAM CLOSURE APPROVED UNDER SDP-19-038.
- STORMWATER MANAGEMENT FOR THIS DEVELOPMENT WILL BE BY MICRO-BORSTENTATION FACILITIES (M-B). THESE FACILITIES WILL BE PRIVATELY OWNED AND MAINTAINED. THE REQUIRED 10YR AND 100YR QUANTITY CONTROL WILL BE PROVIDED IN PRIVATELY OWNED AND MAINTAINED UNDERGROUND FACILITIES BENEATH THE LOWEST LEVEL OF THE PARKING DECK.
- A PRE-SUBMISSION COMMUNITY MEETING FOR THIS PROJECT WAS HELD ON NOVEMBER 28, 2015 IN ACCORDANCE WITH SECTION 16.128 AND 16.147(B)(1) OF THE SUBDIVISION REGULATIONS.
- THIS PLAN WAS PRESENTED TO DESIGN ADVISORY PANEL ON OCTOBER 26, 2016, REFERENCE REVIEW REPORT #16-15.

- DESIGN ADVISORY PANEL RECOMMENDATION:
    - THE APPLICANT RECONSIDER THE PRIMARY ENTRANCE TO THE MOTOR COURT AND HOW THAT CAN BE DEALT WITH IN A BETTER SCALE WITH ENTRY WALLS AND PYLONS OR SOME METHOD THAT RESOLVES THE ISSUE WITH THE LARGE MOUTH GARAGE. THE EXTERIOR BUILDING ELEVATION AT THE GARAGE ENTRY WILL BE REDUCED IN SCALE AND PROMINENCE BY LOWERING THE PARAPET WALL AND EXPLORING OTHER MATERIAL COMBINATIONS SO ONE'S EYE WILL BE DRAWN TOWARD THE MAIN BUILDING ELEVATION ON THE RIGHT SIDE OF THE MOTOR COURT.
    - TAKE ANOTHER LOOK AT THE ELEVATIONS AND SEE IF YOU CAN'T ACENT THE COURTYARDS AND MAYBE BREAK THE VERTICAL ELEMENTS DOWN A LITTLE BIT BASED ON WHETHER IT IS A COURTYARD OR A STREET TO HELP YOU GET SOME VARIETY AND DEFINITION.
  - THE TWO MAIN BUILDINGS WING FACADES CLOSEST TO DORSEY ROAD WILL BE RE-EXAMINED WITH THE INTENT TO DISTINGUISH THEM ARCHITECTURALLY FROM THE COURTYARD EXTERIOR FACADES THEREBY CREATING A BUILDING HIERARCHY THAT ADDS IDENTITY, INTEREST AND FURTHER VARIETY TO THE OVERALL BUILDING ELEVATION AND OUTDOOR SPACES DEFINE.
  - THAT THE APPLICANT SEND A LETTER TO THE COUNTY LOBBYING FOR A BETTER CONNECTION AND IDENTIFICATION TO THE MARC STATION.
- DOCUMENTS WILL accompany ELECTRONIC PLAN SUBMISSIONS TO REQUEST THAT HOWARD COUNTY REVIEW THE NEED FOR A BETTER CONNECTION AND IDENTIFICATION FOR THE MARC STATION WITHIN THE T.O.D ZONING DISTRICT.
- ALL PROPOSED EXTERIOR LIGHTING SHALL BE DIRECTED/REFLECTED AWAY FROM ALL ADJACENT PUBLIC ROADS AND RESIDENTIAL ZONING DISTRICTS IN ACCORDANCE WITH SECTION 134.0 OF THE HOWARD COUNTY ZONING REGULATIONS. EXCEPT FOR SPOTLIGHTS AND LOW INTENSITY LIGHTS AS DEFINED IN SECTION 134.0.C.2 AND 134.0.C.3. ALL LIGHT FIXTURES SHALL BE FULLY OR PARTIALLY SHIELDED.
  - IN ACCORDANCE WITH SECTION 127.0.F.2.C. OF THE ZONING REGULATIONS, AT LEAST 15% OF THE DWELLING UNITS SHALL BE MODERATE INCOME HOUSING UNITS. MIHU UNITS WILL BE PROVIDED BY ON-SITE UNITS. MIHU DOCUMENTS WERE RECORDED ON 04/11/2023.
  - KNOX BOX SHALL BE PLACED ON THE FRONT OF ALL BUILDINGS NO MORE THAN 6' TO THE RIGHT OF THE MAIN ENTRANCE AT A HEIGHT OF 4'-5". IT SHALL BE ELECTRONICALLY SUPERVISED TO NOTIFY THE OWNER THAT IT IS BEING ACCESSSED (INTEGRATED WITH THE FIRE SYSTEM).
  - A PLAN TO RESUBDIVIDE THE PROPERTY TO CREATE PARCELS 'T' HAS BEEN TECHNICALLY APPROVED BY DPZ. REFERENCE F-20-069.
  - TRASH PICK-UP FOR THIS DEVELOPMENT WILL BE PRIVATE. A TRASH COMPACTOR ROOM WILL BE LOCATED AT THE REAR OF THE BUILDING, AND TRASH CORRALS WILL BE LOCATED NEAR DEERPATH ROAD. THERE WILL BE A TOTAL OF FOUR (4) TRASH CHUTES IN TWO LOCATIONS, TWO WILL BE UTILIZED FOR TRASH AND TWO FOR RECYCLING. THE TRASH AND RECYCLING WILL BE REMOVED FROM THE SITE AT A MINIMUM OF TWO TIMES PER WEEK, THE PICK-UP SCHEDULE WILL BE DED DICTATIONS. IN ADDITION TO THE CHUTES, THERE WILL BE AN 8-YARD CONTAINER STRICTLY FOR CARBONADO. THIS DUMPSTER WILL BE STAGED IN ONE OF THE LOADING AREAS AND WILL BE EMPTIED AT LEAST ONCE PER WEEK OR MORE IF VOLUME REQUIRES.
  - A NOISE STUDY WAS PREPARED BY HUSH ACOUSTICS LLC AND SUBMITTED AS PART OF THIS SITE DEVELOPMENT PLAN. UNMITIGATED AND MITIGATED NOISE PROVIDED BY HUSH ACOUSTICS, LLC. NOISE MITIGATION PROVIDED BY THE PROPOSED BUILDING AND RETAINING WALLS.
  - TRAFFIC CONTROL DEVICES:
    - THE R1-1 ("STOP") SIGNS FOR THIS DEVELOPMENT MUST BE INSTALLED BEFORE THE BASE PAVING IS COMPLETED.
    - ALL TRAFFIC CONTROL DEVICES AND THEIR LOCATIONS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE "MARYLAND MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES"(MUTCD).
    - ANY 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), 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 (2) QUICK PUNCH HOLES ABOVE GROUND LEVEL. A GALVANIZED STEEL POLE CAP SHALL BE MOUNTED ON TOP OF EACH POST.
    - THE TRAFFIC CONTROL DEVICE LOCATIONS SHOWN ON THE PLANS ARE APPROXIMATE AND MUST BE FIELD APPROVED BY HOWARD COUNTY TRAFFIC DIVISION (410-313-2430) PRIOR TO THE INSTALLATION OF ANY OF THE TRAFFIC CONTROL DEVICES.
  - PARCEL IS NOT LOCATED WITHIN THE BOUNDARIES OF THE 1998 BALTIMORE/WASHINGTON INTERNATIONAL AIRPORT (BWI), AIRPORT NOISE ZONE AS WELL AS THE FOUR MILE RADIUS OF BWI AIRPORT. THEREFORE, NO APPROVAL FROM THE MARYLAND AVIATION ADMINISTRATION IS REQUIRED.
  - HEALTH DEPARTMENT APPROVAL OF THIS SITE DEVELOPMENT PLAN 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 THE SDP WILL REQUIRE REVIEW AND APPROVAL BY THE HEALTH DEPARTMENT. SUCH FACILITIES MAY INCLUDE, BUT NOT LIMITED TO, THOSE THAT HAVE SWIMMING POOLS, OR THAT SELL PREPARED OR PACKAGED FOOD, OR THAT MAY HAVE EQUIPMENT THAT EMITS RADIATION.
  - THE 55DBA NOISE LEVEL ESTABLISHED BY HOWARD COUNTY TO ALERT DEVELOPERS, BUILDERS AND FUTURE RESIDENTS THAT AREAS BEYOND THIS THRESHOLD MAY EXCEED GENERALLY ACCEPTED NOISE LEVELS ESTABLISHED BY THE U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT.
  - THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.24 OF THE HOWARD COUNTY CODE AND LANDSCAPE MANUAL. FINANCIAL SURETY IN THE AMOUNT OF \$32,400.00 FOR 102 SHADE TREES, 12 EVERGREEN/ORNAMENTAL TREES HAS BEEN POSTED WITH THE DEVELOPER'S AGREEMENT.
  - A TRAFFIC FOOTPRINT FOR THIS PROJECT WAS PREPARED BY THE TRAFFIC GROUP, INC. AND APPROVED UNDER S-17-004.
  - THIS BUILDING FOOTPRINT WILL UTILIZE THE FULL NFPA 13 COMPLIANT SPRINKLER SYSTEM SINCE FIRE DEPARTMENT VEHICLES ACCESS CANNOT BE PROVIDED AROUND THE BUILDING.
  - A PARKING STUDY WAS APPROVED BY THE DIRECTOR AS PART OF S-17-004 ALLOWING A PARKING REDUCTION OF 1.8 SPACES PER UNIT.
  - SHORT TERM AND LONG TERM BICYCLE PARKING SHALL BE WITHIN THE PARKING GARAGE.
  - THE FOLLOWING PROVISIONS SHALL APPLY TO A FIRE DEPARTMENT CONNECTION FOR FIRE PROTECTION SYSTEMS: (I) A FIRE DEPARTMENT CONNECTION FOR THE FIRE PROTECTION SYSTEM SHALL BE LOCATED: (A) ON THE SIDE OF THE STRUCTURE DISPLAYING THE ADDRESS CLEARLY VISIBLE TO THE RESPONDING UNITS (UNLESS AN ALTERNATIVE SIGN IS APPROVED BY THE AFD); (B) WITHIN 100 FT. OF A FIRE HYDRANT; (C) THE APPROPRIATE SIGN SHALL BE MOUNTED ON THE BUILDINGS WALL BETWEEN 8 AND 12 FEET ABOVE THE FIRE DEPARTMENT CONNECTION; (II) A FREE-STANDING FIRE DEPARTMENT CONNECTION SHALL HAVE THE SIGN MOUNTED ON A POLE DIRECTLY BEHIND THE CONNECTION APPROXIMATELY 6 FEET HIGH; (III) SIGNS SHALL HAVE A WHITE REFLECTIVE BACKGROUND WITH A RED REFLECTIVE BORDER, RED REFLECTIVE LETTERS AND A RED REFLECTIVE ARROW. THE BORDER SHALL HAVE A 3/8" STROKE. THE LETTER SHALL BE 6" HIGH WITH A 1" STROKE. THE ARROW SHALL HAVE A STROKE NOTE LESS THAN 2". THE OVERALL SIGN MEASUREMENTS SHALL BE 12" BY 18". (IV) ANY OBSTRUCTION OF CONDITION THAT DETERS OR HINDERS ACCESS TO A FDC IS PROHIBITED. A MINIMUM CLEAR SPACE OF 15 FEET (7.5 FEET ON ALL SIDES) SHALL BE MAINTAINED.
  - STREAM RESTORATION WORK PROPOSED IN SDP-19-038 MUST BE SUBSTANTIALLY COMPLETE BEFORE USE AND OCCUPANCY CERTIFICATES MAY BE ISSUED FOR THE APARTMENTS SHOWN ON SDP-20-033.
  - THE 42" TO 60" STREAM DIVERSION PIPES ON THE PROPERTY ARE PRIVATELY OWNED AND MAINTAINED.
  - PARCELS 'R' AND 'S' WERE CONSOLIDATED INTO PARCEL 'T' UNDER F-20-069.

- OFFSITE GRADING IS PROPOSED ON THE NORTH SIDE OF THE PLAN. A LETTER OF PERMISSION FROM THE PROPERTY OWNER HAS BEEN PROVIDED.
- THE APRIL 2023 REDLINE INCREASED IMPERVIOUS AREA BY 576 SF, WHICH IS LESS THAN 0.5% INCREASE. THE INCREASE AT THE REAR SIDEWALK WAS 474 SF, THE CENTER FRONT SIDEWALK INCREASED 28 SF AND THE SOUTH FRONT INCREASED 74 SF.

APPROVED: FOR PUBLIC WATER AND SEWERAGE SYSTEMS.  
 COUNTY HEALTH OFFICER  
 HOWARD COUNTY HEALTH DEPARTMENT  
 APPROVED: DEPARTMENT OF PLANNING AND ZONING  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION  
 CHIEF, DIVISION OF LAND DEVELOPMENT  
 DIRECTOR

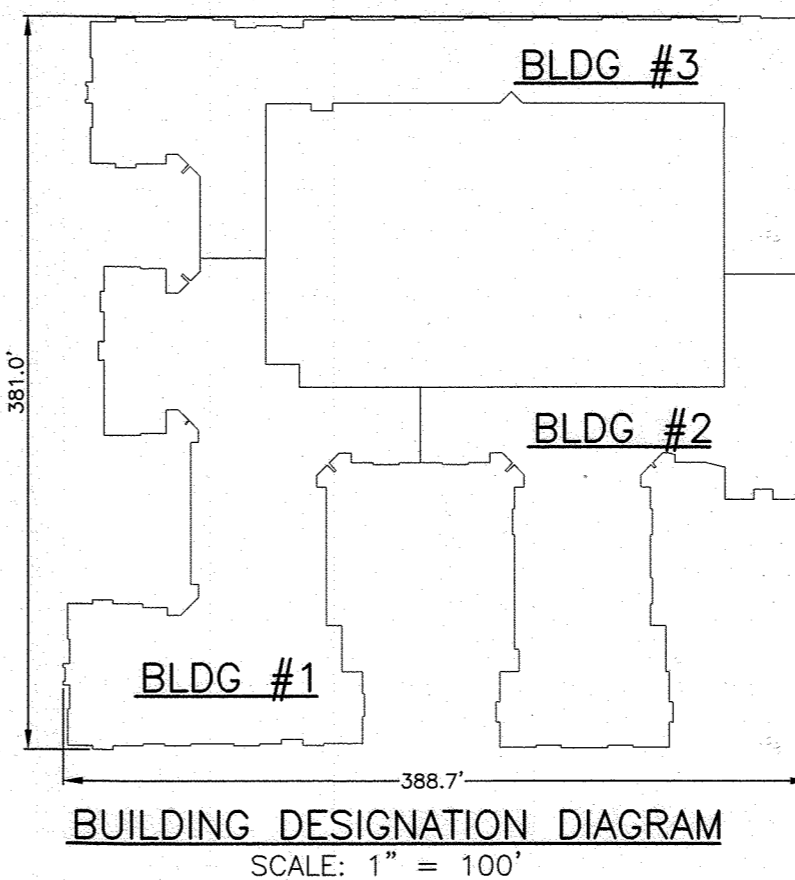
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 DATE: 7/13/23



| STORM  | PRE-DEVELOPED | POST-DEVELOPED |
|--------|---------------|----------------|
| 1-YR   | 44.10 CFS     | 44.06 CFS      |
| 10-YR  | 99.87 CFS     | 96.73 CFS      |
| 100-YR | 191.07 CFS    | 186.99 CFS     |

THE STORMWATER ANALYSIS INCLUDES THE SUBJECT PROPERTY (4.35 ACRES) AND APPROXIMATELY 21 ACRES OF OFFSITE AREA WHICH DRAINS THROUGH THE SITE. IN ORDER TO ACCURATELY PORTRAY HOW THE ON-SITE DEVELOPMENT AFFECTS THE DOWNSTREAM RUNOFF, IT WAS NECESSARY TO ANALYZE ALL OF THE FLOWS THROUGH THE PROPERTY. THE STUDY POINT FOR THIS ANALYSIS IS THE EXISTING 60" PIPE CONSTRUCTED UNDER SDP-19-038 LEAVING THE SOUTH PROPERTY BOUNDARY.

| Stormwater Management Information |                        |                          |        |         |                     |       |
|-----------------------------------|------------------------|--------------------------|--------|---------|---------------------|-------|
| Lot/Parcel Number                 | Facility Name & Number | Practice Type (Quantity) | Public | Private | Private Maintenance | Misc. |
| Parcel 'T'                        | FP-1 (M-6)             | ESD (Quality)            | x      |         | yes                 |       |
| Parcel 'T'                        | FP-2 (M-6)             | ESD (Quality)            | x      |         | yes                 |       |
| Parcel 'T'                        | FP-3 (M-6)             | ESD (Quality)            | x      |         | yes                 |       |
| Parcel 'T'                        | FP-4 (M-6)             | ESD (Quality)            | x      |         | yes                 |       |
| Parcel 'T'                        | FP-5 (M-6)             | ESD (Quality)            | x      |         | yes                 |       |
| Parcel 'T'                        | FP-6 (M-6)             | ESD (Quality)            | x      |         | yes                 |       |
| Parcel 'T'                        | FP-7 (M-6)             | ESD (Quality)            | x      |         | yes                 |       |
| Parcel 'T'                        | FP-9 (M-6)             | ESD (Quality)            | x      |         | yes                 |       |
| Parcel 'T'                        | FP-10 (M-6)            | ESD (Quality)            | x      |         | yes                 |       |
| Parcel 'T'                        | FP-11 (M-6)            | ESD (Quality)            | x      |         | yes                 |       |
| Parcel 'T'                        | FP-12 (M-6)            | ESD (Quality)            | x      |         | yes                 |       |
| Parcel 'T'                        | FP-13 (M-6)            | ESD (Quality)            | x      |         | yes                 |       |
| Parcel 'T'                        | FP-14 (M-6)            | ESD (Quality)            | x      |         | yes                 |       |
| Parcel 'T'                        | FP-15 (M-6)            | ESD (Quality)            | x      |         | yes                 |       |
| Parcel 'T'                        | FP-16 (M-6)            | ESD (Quality)            | x      |         | yes                 |       |
| Parcel 'T'                        | FP-17 (M-6)            | ESD (Quality)            | x      |         | yes                 |       |
| Parcel 'T'                        | FP-18 (M-6)            | ESD (Quality)            | x      |         | yes                 |       |
| Parcel 'T'                        | FP-19 (M-6)            | ESD (Quality)            | x      |         | yes                 |       |
| Parcel 'T'                        | FP-20 (M-6)            | ESD (Quality)            | x      |         | yes                 |       |
| Parcel 'T'                        | FP-21 (M-6)            | ESD (Quality)            | x      |         | yes                 |       |
| Parcel 'T'                        | FP-22 (M-6)            | ESD (Quality)            | x      |         | yes                 |       |
| Parcel 'T'                        | FP-23 (M-6)            | ESD (Quality)            | x      |         | yes                 |       |
| Parcel 'T'                        | UGSWM                  | Quantity (10-100)        | x      |         | yes                 |       |



| PARKING SPACES |            |
|----------------|------------|
| GARAGE LEVEL   | SPACES     |
| 1              | 2          |
| 2              | 89         |
| 3              | 89         |
| 4              | 89         |
| 5              | 97         |
| SURFACE        | 7          |
| TOTAL          | 378 SPACES |

| UNITS/LEVEL |       |
|-------------|-------|
| LEVEL       | UNITS |
| 1           | 45    |
| 2           | 55    |
| 3           | 55    |
| 4           | 55    |

| ADDRESS CHART |                  |
|---------------|------------------|
| BLDG. #       | STREET ADDRESS   |
| 1             | 6771 DORSEY ROAD |
| 2             | 6775 DORSEY ROAD |
| 3             | 6779 DORSEY ROAD |
| GARAGE        | 6767 DORSEY ROAD |

| PERMIT INFORMATION CHART              |                |                     |                      |
|---------------------------------------|----------------|---------------------|----------------------|
| PROJECT NAME                          | SECTION/AREA   | TAX MAP             | PARCEL               |
| DORSEY CENTER APARTMENTS              | -              | 37                  | 375                  |
| PLATS: 19440, 24635                   | BLOCK No. 0024 | ELECTION DISTRICT 1 | CENSUS TRACT 6012.03 |
| DEEDS: 16837 F.00055, L.18128 F.00465 | ZONE: TOD      |                     |                      |

PLEASE NOTE THAT THIS REVISION SUPERSEDES AND REPLACES THE NOVEMBER 2020 BEI PLAN SHEET.

THIS RESIDENTIAL PROJECT IS REQUIRED TO PROVIDE A MINIMUM OF 15% OF THE DWELLING UNITS AS MODERATE INCOME HOUSING UNITS.

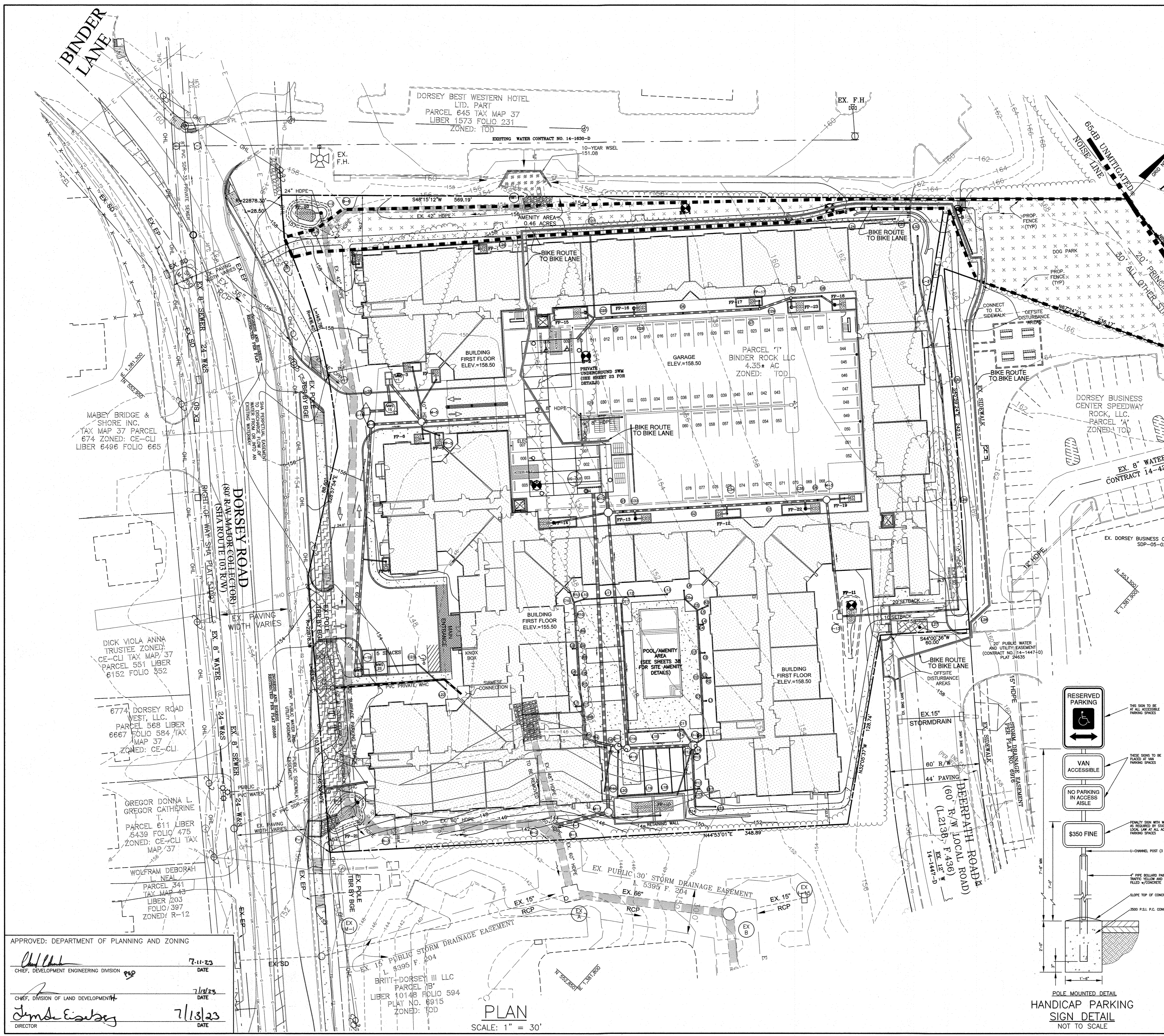
## BENCHMARK ENGINEERS & LAND SURVEYORS & PLANNERS

### ENGINEERING, INC.

3300 NORTH RIDGE ROAD & SUITE 140 A ELLICOTT CITY, MARYLAND 21043  
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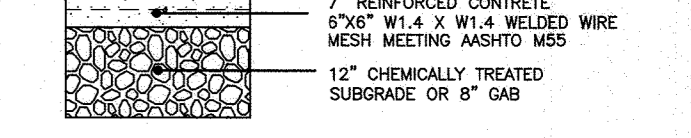
|  |  |
|--|--|
| OWNER/DEVELOPER:<br>BINDER ROCK LLC<br>C/O H & H ROCK COMPANIES<br>6800 DEERPATH ROAD<br>SUITE 100<br>ELKRIDGE, MARYLAND 21075<br>410.579.2442 | PROJECT: DORSEY CENTER APARTMENTS<br>210 UNITS<br>PARCEL 'T' |
| LOCATION:<br>TAX MAP 37 - GRID 24<br>1st ELECTION DISTRICT<br>HOWARD COUNTY, MARYLAND  | TITLE:<br>COVER SHEET<br>EXISTING CONDITIONS AND SOILS MAP   |
| DATE: APRIL 2023   | PROJECT NO. 1959   |
| SCALE: AS SHOWN  | DRAWING 1 OF 49  |
| Design: AAM  | Draft: AAM   |
| Check: CAM   |  |



**LEGEND**

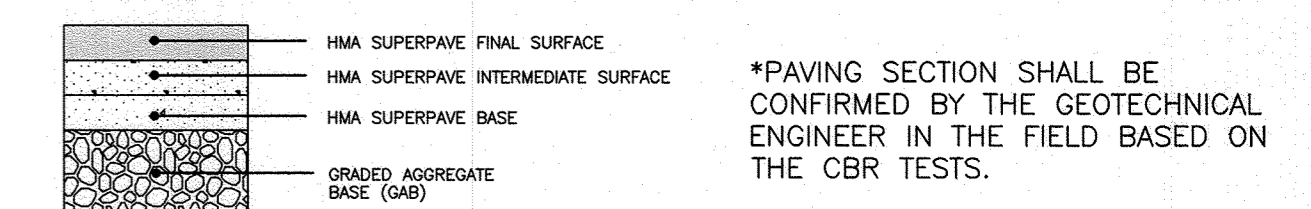
- EXISTING CONTOURS
- EXISTING TREELINE
- PROPOSED TREELINE
- EXISTING BUILDING
- EXISTING PAVING
- PROPOSED BUILDING
- AMENITY AREA
- PROPOSED STORM DRAIN
- STORM DRAIN DRAINAGE AREA
- UNDERGROUND FACILITY
- EX. CURB
- PUBLIC SIDEWALK EASEMENT
- PUBLIC UTILITY & DRAINAGE EASEMENT
- EXISTING BGE GAS (APPROXIMATE LOCATION)
- EXISTING BGE ELECTRIC OVERHEAD
- EXISTING BGE ELECTRIC UNDERGROUND (APPROXIMATE LOCATION)
- EXISTING SEWER
- EXISTING WATER
- EXISTING STORMDRAIN
- EXISTING STORMDRAIN UNDER SDP-19-038
- SOIL BORING LOCATIONS

NOTE: ALL FILL MATERIAL TO BE USED IS TO BE SELECT FILL, CONTROLLED AND COMPACTED AS CERTIFIED BY AN APPROVED GEOTECHNICAL ENGINEER.



**CONCRETE PAVING SECTION**  
NOT TO SCALE

| SECTION NUMBER | CALIFORNIA BEARING RATIO (CBR)       | 3 TO <5 |              | 5 TO <7 |              | 7                     |                       |
|----------------|--------------------------------------|---------|--------------|---------|--------------|-----------------------|-----------------------|
|                |                                      | MIN     | HMA WITH GAB | MIN     | HMA WITH GAB | HMA WITH CONSTANT GAB | HMA WITH CONSTANT GAB |
| P-2            | HMA SUPERPAVE FINAL SURFACE          | 1.5     | 1.5          | 1.5     | 1.5          | 1.5                   | 1.5                   |
|                | 9.5 MM PG 64-22, LEVEL 1 (LOW ESAL)  | 1.5     | 1.5          | 1.5     | 1.5          | 1.5                   | 1.5                   |
|                | HMA SUPERPAVE INTERMEDIATE SURFACE   | 1.5     | 1.5          | 1.5     | 1.5          | 1.5                   | 1.5                   |
|                | 9.5 MM PG 64-22, LEVEL 1 (LOW ESAL)  | 2.0     | 2.0          | 2.0     | 3.5          | 2.0                   | 2.0                   |
|                | HMA SUPERPAVE BASE                   | 2.0     | 2.0          | 2.0     | 3.5          | 2.0                   | 2.0                   |
|                | 19.0 MM PG 64-22, LEVEL 1 (LOW ESAL) | 2.0     | 2.0          | 2.0     | 3.5          | 2.0                   | 2.0                   |
|                | GRADED AGGREGATE BASE (GAB)          | 8.0     | 4.0          | 3.0     | 4.0          | 4.0                   | 4.0                   |



**TYPICAL PAVING SECTION DETAIL**  
NOT TO SCALE

\*PAVING SECTION SHALL BE CONFIRMED BY THE GEOTECHNICAL ENGINEER IN THE FIELD BASED ON THE CBR TESTS.  
P-2 SECTION IS TO BE USED FOR ALL ON-SITE PAVEMENT OUTSIDE OF PARKING GARAGE.  
HOWARD COUNTY DETAIL R-2.01

PLEASE NOTE THAT THIS REVISION SUPERSEDES AND REPLACES THE NOVEMBER 2020 BEI PLAN SHEET.

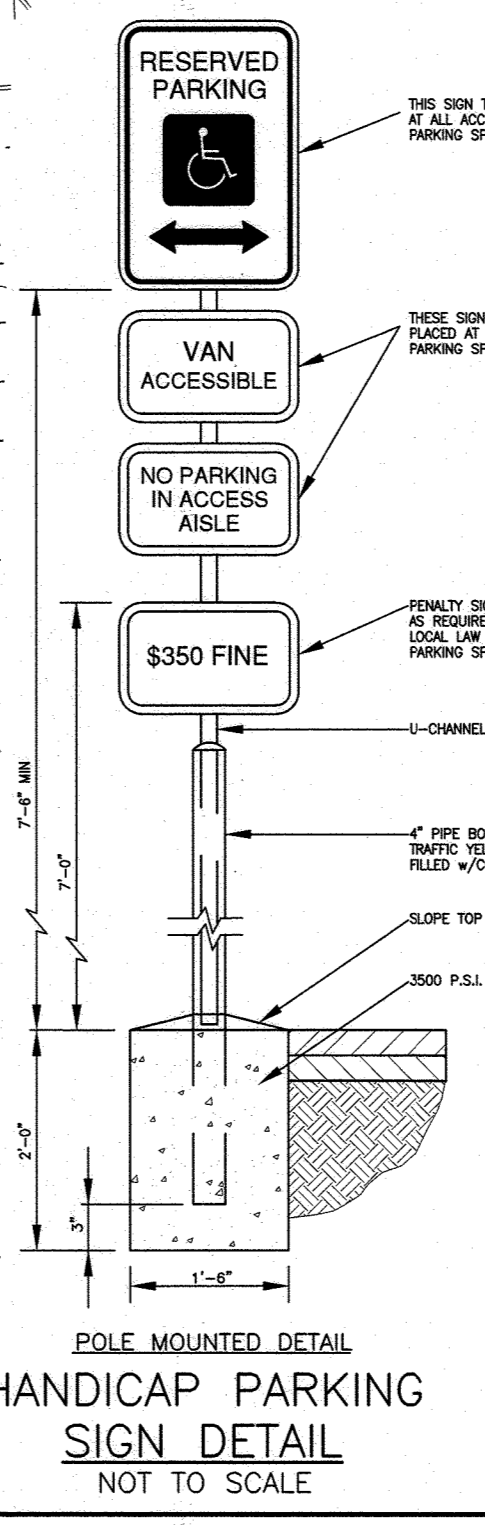
| NO. | DATE | REVISION  |
|-----|------|---|
| 1   | 4/28 | REMOVED BOULDER STAIRS, REVISED NORTH AND REAR SIDEWALKS AND REMOVED NORTHEAST RETAINING WALL. REVISED FRONT SIDEWALKS, AND EDC LOCATIONS. REVISED PUBLIC AMENITY AREA. |

**BENCHMARK ENGINEERS, LAND SURVEYORS & PLANNERS**  
**ENGINEERING, INC.**  
3300 NORTH RIDGE ROAD & SUITE 140 A ELICOTT CITY, MARYLAND 21043  
(P) 410-465-6105 (F) 410-465-6644  
WWW.BEI-CIVILENGINEERING.COM

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. 28376, Expiration Date: 3-1-25.

BEI-AAM  
2023.05.01 07:14:14 -04'00

|  |  |
|--|--|
| OWNER/DEVELOPER:<br>BINDER ROCK LLC<br>C/O H & H ROCK COMPANIES<br>6800 DEERPATH ROAD<br>SUITE 100<br>ELKRIDGE, MARYLAND 21075<br>410.579.2442 | PROJECT: DORSEY CENTER APARTMENTS<br>210 UNITS<br>PARCEL 'T'   |
| LOCATION:<br>TAX MAP 37<br>PARCEL 375 - GRID 24<br>1st ELECTION DISTRICT<br>HOWARD COUNTY, MARYLAND  | TITLE:<br>LAYOUT PLAN AND<br>BIKE ROUTE TO DEERPATH BIKE LANES |
| DATE: APRIL 2023   | PROJECT NO. 1959   |
| Design: AAM  | Draft: AAM   |
| Check: CAM   | SCALE: AS SHOWN  |
|  | DRAWING 2 OF 49  |



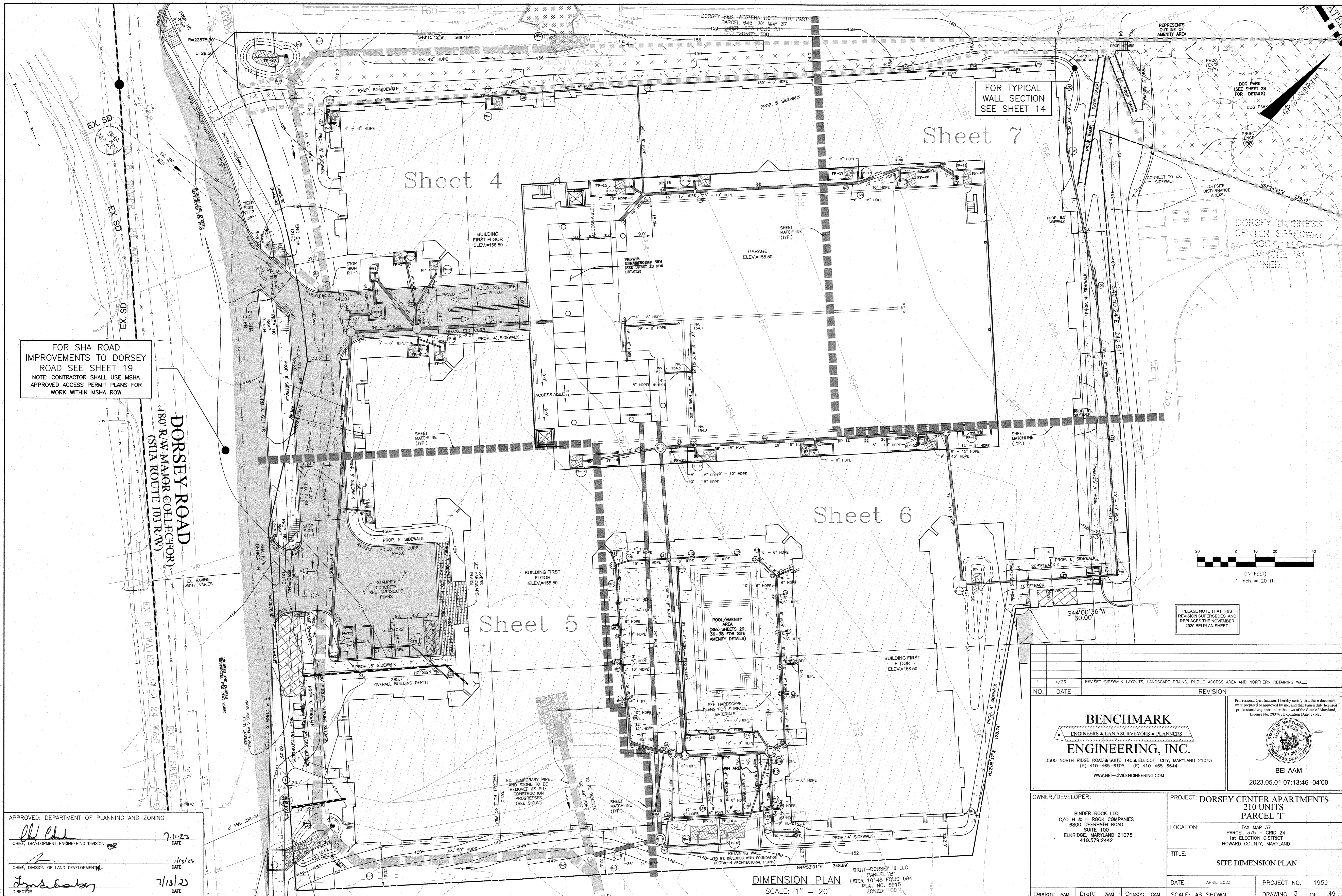
APPROVED: DEPARTMENT OF PLANNING AND ZONING

*[Signature]* 7/11/23  
CHIEF, DEVELOPMENT ENGINEERING DIVISION

*[Signature]* 7/12/23  
CHIEF, DIVISION OF LAND DEVELOPMENT

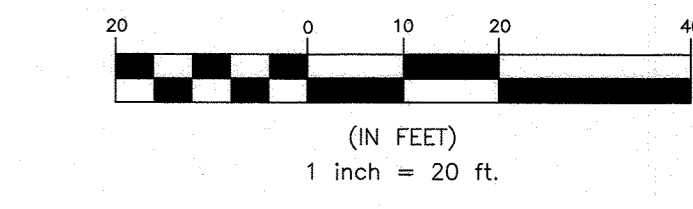
*[Signature]* 7/13/23  
DIRECTOR

**PLAN**  
SCALE: 1" = 30'



FOR SHA ROAD IMPROVEMENTS TO DORSEY ROAD SEE SHEET 19  
 NOTE: CONTRACTOR SHALL USE MSHA APPROVED ACCESS PERMIT PLANS FOR WORK WITHIN MSHA ROW

FOR TYPICAL WALL SECTION SEE SHEET 14



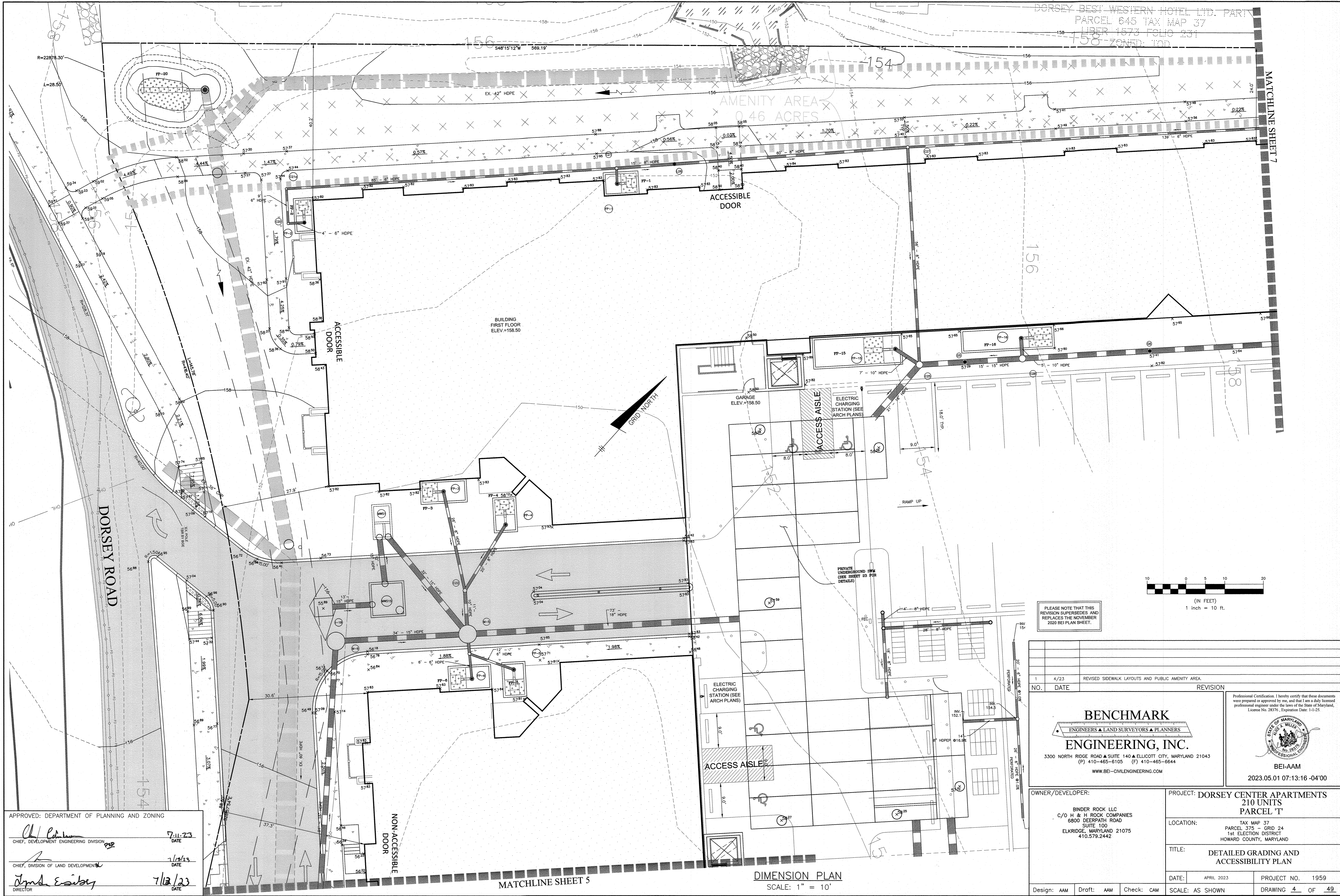
PLEASE NOTE THAT THIS REVISION SUPERSEDES AND REPLACES THE NOVEMBER 2020 BEI PLAN SHEET.

APPROVED: DEPARTMENT OF PLANNING AND ZONING  
 [Signature] 7/11/23 DATE  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION  
 [Signature] 7/13/23 DATE  
 CHIEF, DIVISION OF LAND DEVELOPMENT  
 [Signature] 7/13/23 DATE  
 DIRECTOR

DIMENSION PLAN  
 SCALE: 1" = 20'

BRIT-DORSEY III LLC  
 PARCEL 'B'  
 LIBER 10148 FOLIO 594  
 PLAT NO. 6915  
 ZONED: TOD

|  |   |
|--|---|
| 1 4/23 REVISED SIDEWALK LAYOUTS, LANDSCAPE DRAINS, PUBLIC ACCESS AREA AND NORTHERN RETAINING WALL.   |   |
| NO.  | DATE  |
| REVISION   |   |
| <b>BENCHMARK</b><br>ENGINEERS • LAND SURVEYORS • PLANNERS<br><b>ENGINEERING, INC.</b><br>3300 NORTH RIDGE ROAD SUITE 140 • ELLICOTT CITY, MARYLAND 21043<br>(P) 410-465-8105 (F) 410-465-6644<br>WWW.BEI-CIVILENGINEERING.COM  |   |
| 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. 28176. Expiration Date: 1-1-25.<br><br>BEI-AAM<br>2023.05.01 07:13:46 -04'00 |   |
| OWNER/DEVELOPER:   | PROJECT: DORSEY CENTER APARTMENTS 210 UNITS PARCEL 'T'  |
| BINDER ROCK LLC<br>C/O H & H ROCK COMPANIES<br>6800 DEERPATH ROAD<br>SUITE 100<br>ELK RIDGE, MARYLAND 21075<br>410.579.2442  | LOCATION: TAX MAP 37 PARCEL 375 - GRID 24 1st ELECTION DISTRICT HOWARD COUNTY, MARYLAND<br>TITLE: SITE DIMENSION PLAN |
| DATE: APRIL 2023   | PROJECT NO. 1959  |
| Design: AAM  | Draft: AAM  |
| Check: CAM   | SCALE: AS SHOWN   |
| DRAWING 3 OF 49  |   |
| SDP-20-033   |   |



APPROVED: DEPARTMENT OF PLANNING AND ZONING

*Chad P. ...* 7/11/23  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION  
 DATE

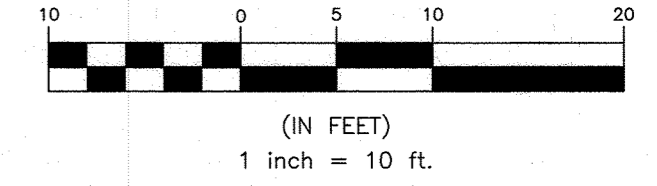
*Tom E. ...* 7/12/23  
 CHIEF, DIVISION OF LAND DEVELOPMENT  
 DATE

*Tom E. ...* 7/12/23  
 DIRECTOR  
 DATE

MATCHLINE SHEET 5

DIMENSION PLAN  
 SCALE: 1" = 10'

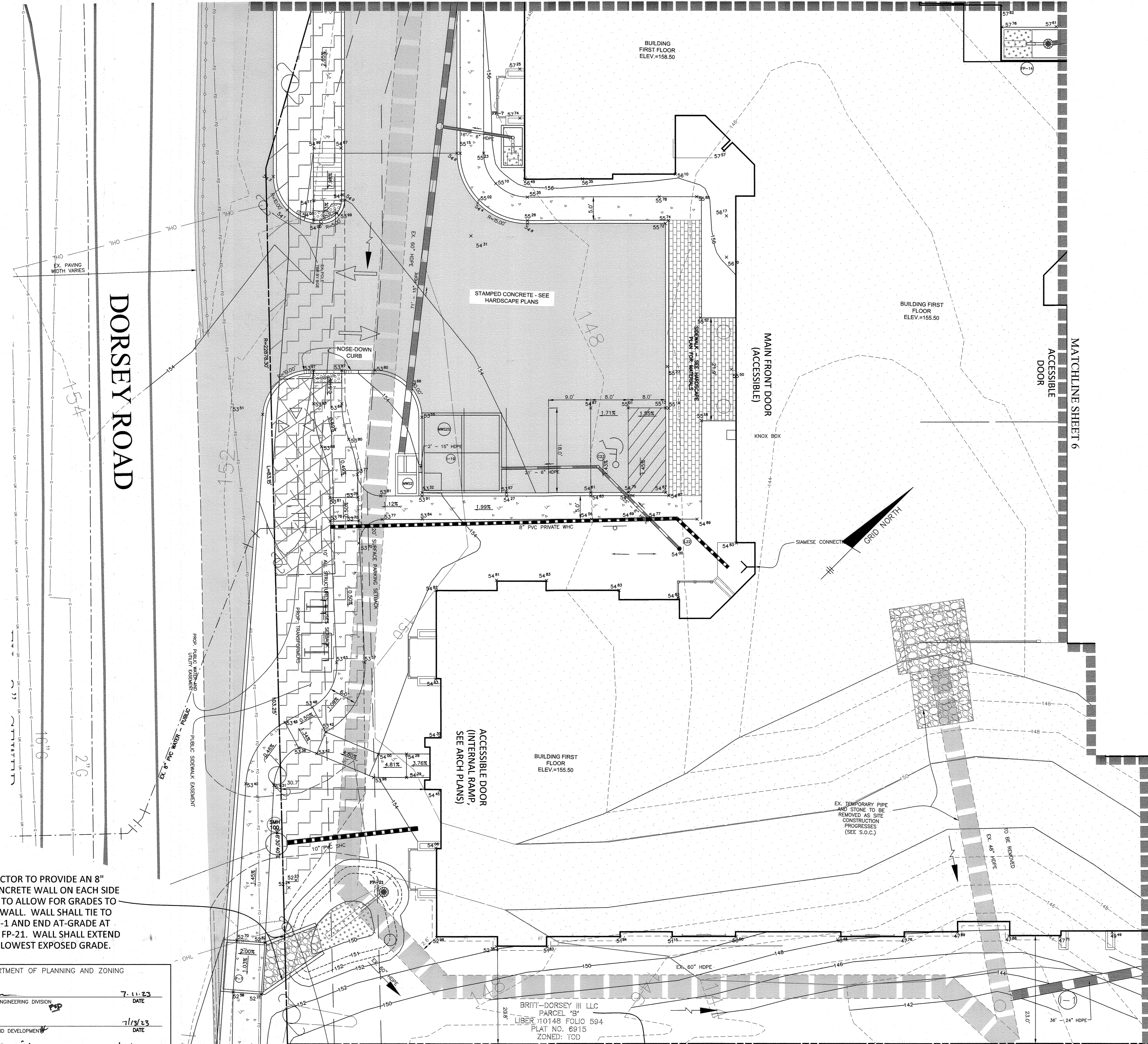
PLEASE NOTE THAT THIS REVISION SUPERSEDES AND REPLACES THE NOVEMBER 2020 BEI PLAN SHEET.



|   |            |             |  |            |
|---|------------|-------------|--|------------|
| 1   |            | 4/23        | REVISED SIDEWALK LAYOUTS AND PUBLIC AMENITY AREA.                                  | REVISION   |
| 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. 28376, Expiration Date: 1-1-25. |            |             |  |            |
| <b>BENCHMARK</b><br>ENGINEERS • LAND SURVEYORS • PLANNERS<br><b>ENGINEERING, INC.</b><br>3300 NORTH RIDGE ROAD & SUITE 140 A ELLICOTT CITY, MARYLAND 21043<br>(P) 410-465-6105 (F) 410-465-6644<br>WWW.BEI-CIVILENGINEERING.COM             |            |             | <br>BEI-AAM<br>2023.05.01 07:13:16 -04'00  |            |
| OWNER/DEVELOPER:  |            |             | PROJECT: DORSEY CENTER APARTMENTS 210 UNITS PARCEL 'T'                             |            |
| BINDER ROCK LLC<br>C/O H & H ROCK COMPANIES<br>6800 DEERPATH ROAD<br>SUITE 100<br>ELKBRIDGE, MARYLAND 21075<br>410.579.2442   |            |             | LOCATION: TAX MAP 37 - GRID 24<br>1st ELECTION DISTRICT<br>HOWARD COUNTY, MARYLAND |            |
| TITLE:  |            |             | DETAILED GRADING AND ACCESSIBILITY PLAN  |            |
| DATE:   | APRIL 2023 | PROJECT NO. | 1959   |            |
| Design:   | AAM        | Draft:      | AAM  | Check: CAM |
| SCALE:  | AS SHOWN   | DRAWING     | 4  | OF 49      |

MATCHLINE SHEET 7

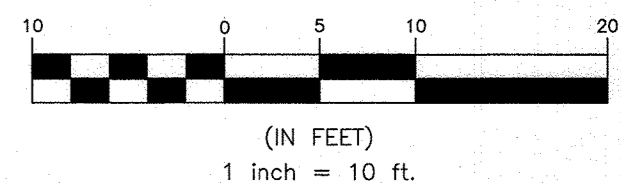
SDP-20-033



CONTRACTOR TO PROVIDE AN 8" POURED CONCRETE WALL ON EACH SIDE OF RIP-RAP TO ALLOW FOR GRADES TO TIE IN TO WALL. WALL SHALL TIE TO BACK OF F-1 AND END AT-GRADE AT BOTTOM OF FP-21. WALL SHALL EXTEND 2' BELOW LOWEST EXPOSED GRADE.

APPROVED: DEPARTMENT OF PLANNING AND ZONING  
*[Signature]* 7/11/23  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE  
*[Signature]* 7/13/23  
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE  
*[Signature]* 7/12/23  
 DIRECTOR DATE

DIMENSION PLAN  
 SCALE: 1" = 10'



PLEASE NOTE THAT THIS REVISION SUPERSEDES AND REPLACES THE NOVEMBER 2020 BEI PLAN SHEET.

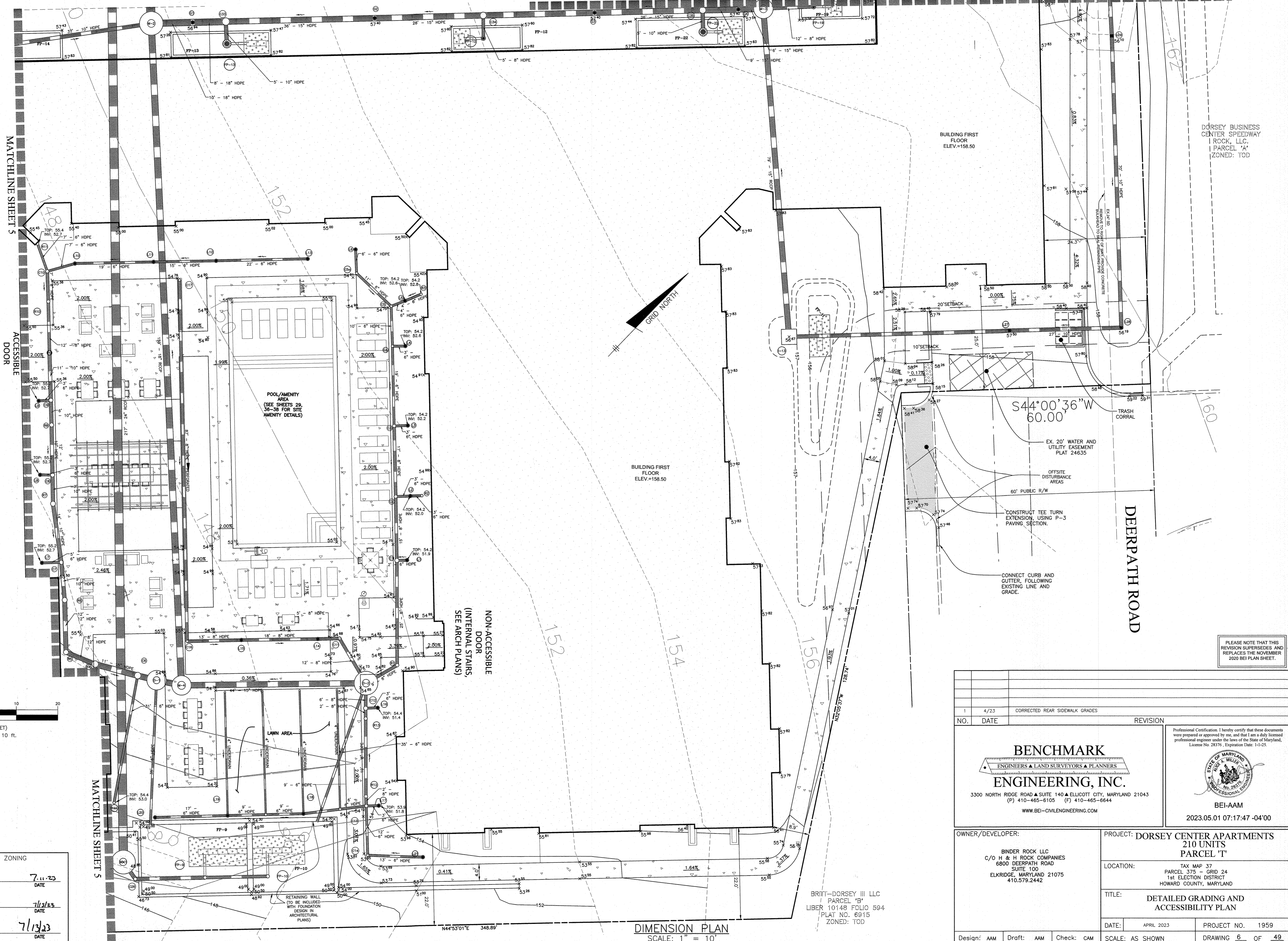
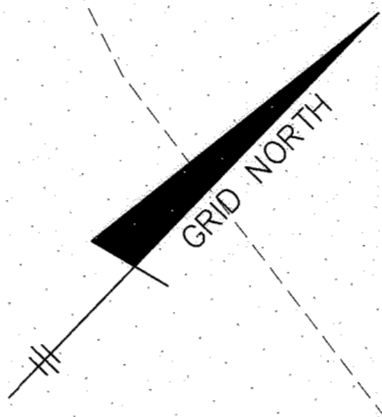
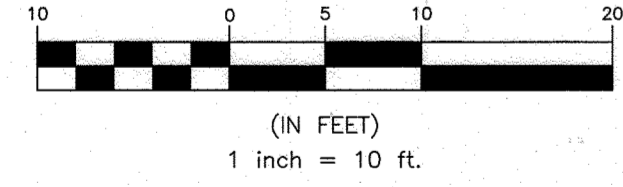
|  |            |   |  |
|--|------------|---|--|
| 1  |            | 4/23  | REVISED SOUTH FRONT SIDEWALK LAYOUTS, WHC LOCATION AND FDC LOCATION. |
| NO.  | DATE       | REVISION  |  |
| <p>Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland. License No. 28376. Expiration Date: 1-1-25.</p>   |            |   |  |
| <p><b>BENCHMARK</b><br/>         ENGINEERS &amp; LAND SURVEYORS &amp; PLANNERS<br/> <b>ENGINEERING, INC.</b><br/>         3300 NORTH RIDGE ROAD &amp; SUITE 140 A ELlicOTT CITY, MARYLAND 21043<br/>         (P) 410-465-6105 (F) 410-465-6644<br/>         WWW.BEI-CIVILENGINEERING.COM</p> |            | <p>BEI-AAM<br/>         2023.05.01 07:18:09 -04'00</p>  |  |
| OWNER/DEVELOPER:   |            | PROJECT: DORSEY CENTER APARTMENTS   |  |
| BINDER ROCK LLC<br>C/O H & H ROCK COMPANIES<br>6800 DEERPATH ROAD<br>SUITE 100<br>ELKRIDGE, MARYLAND 21075<br>410.579.2442   |            | 210 UNITS<br>PARCEL 'T'<br>LOCATION: TAX MAP 37<br>PARCEL 375 - GRID 24<br>1st ELECTION DISTRICT<br>HOWARD COUNTY, MARYLAND |  |
| TITLE: DETAILED GRADING AND ACCESSIBILITY PLAN   |            |   |  |
| DATE:  | APRIL 2023 | PROJECT NO.   | 1959   |
| Design:  | AAM        | Draft:  | AAM  |
| Check:   | CAM        | SCALE:  | AS SHOWN   |
|  |            | DRAWING   | 5 OF 49  |

MATCHLINE SHEET 5

ACCESSIBLE DOOR

NON-ACCESSIBLE DOOR (INTERNAL STAIRS SEE ARCH PLANS)

MATCHLINE SHEET 5



DORSEY BUSINESS CENTER SPEEDWAY  
ROCK, LLC.  
PARCEL 'A'  
ZONED: TCD

BUILDING FIRST FLOOR  
ELEV.=158.50

BUILDING FIRST FLOOR  
ELEV.=158.50

S44°00'36" W  
60.00'

EX. 20' WATER AND UTILITY EASEMENT  
PLAT 24635

CONSTRUCT TEE TURN  
EXTENSION, USING P-3  
PAVING SECTION.

CONNECT CURB AND  
GUTTER, FOLLOWING  
EXISTING LINE AND  
GRADE.

DEERPATH ROAD

PLEASE NOTE THAT THIS REVISION SUPERSEDES AND REPLACES THE NOVEMBER 2020 BEI PLAN SHEET.

| NO. | DATE | REVISION                       |
|-----|------|--------------------------------|
| 1   | 4/23 | CORRECTED REAR SIDEWALK GRADES |

**BENCHMARK**  
ENGINEERS & LAND SURVEYORS & PLANNERS  
**ENGINEERING, INC.**  
3300 NORTH RIDGE ROAD & SUITE 140 • ELICOTT CITY, MARYLAND 21043  
(P) 410-465-6105 (F) 410-465-6644  
WWW.BEI-CIVILENGINEERING.COM

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. 28376, Expiration Date: 1-1-25.

BEI-AAM  
2023.05.01 07:17:47 -04'00

APPROVED: DEPARTMENT OF PLANNING AND ZONING

*[Signature]* 7/11/23  
CHIEF, DEVELOPMENT ENGINEERING DIVISION

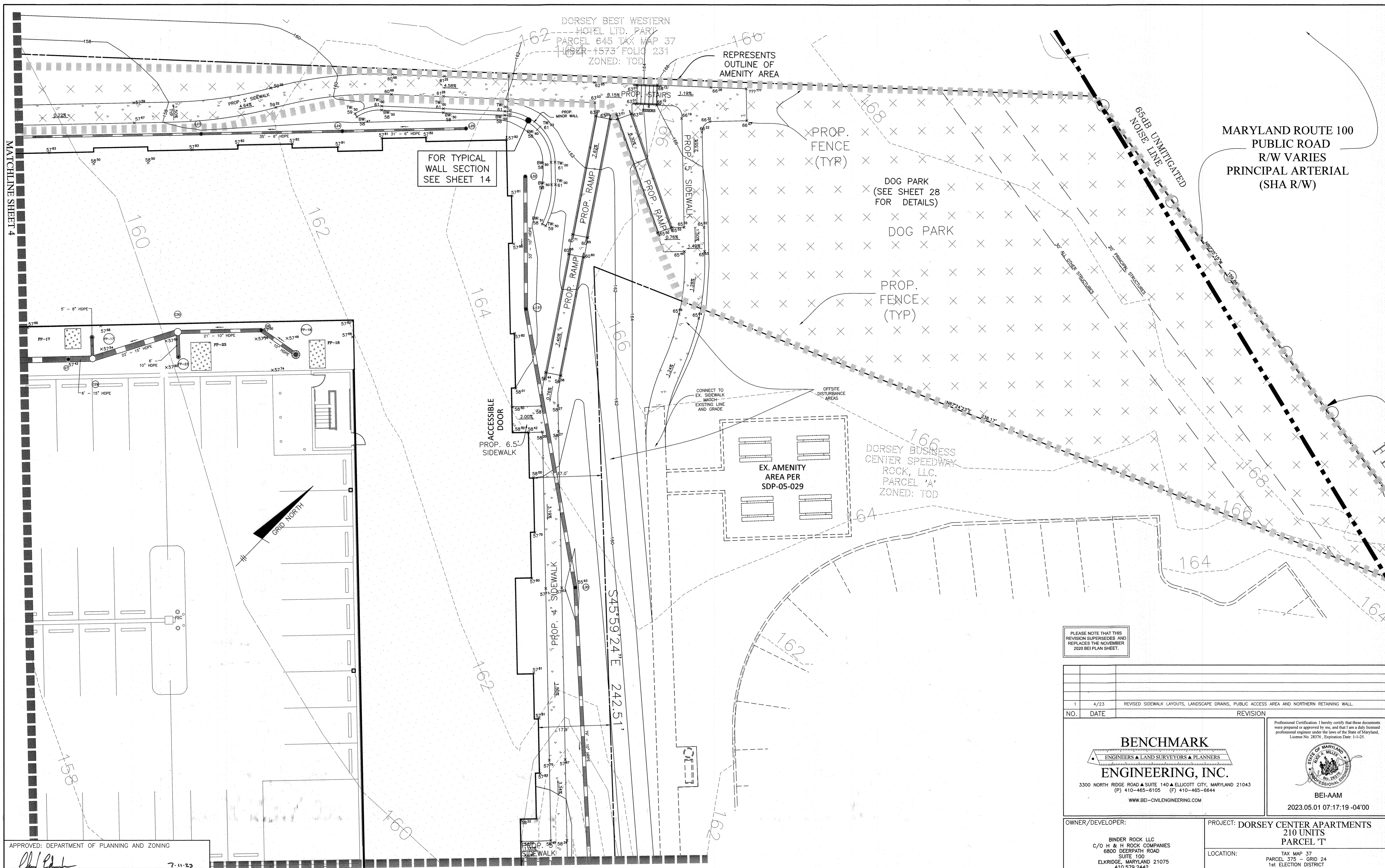
*[Signature]* 7/13/23  
CHIEF, DIVISION OF LAND DEVELOPMENT

*[Signature]* 7/13/23  
DIRECTOR

BRIT-DORSEY III LLC  
PARCEL 'B'  
LIBER 10148 FOLIO 594  
PLAT NO. 6915  
ZONED: TCD

DIMENSION PLAN  
SCALE: 1" = 10'

|  |  |
|--|--|
| OWNER/DEVELOPER:<br>BINDER ROCK LLC<br>C/O H & H ROCK COMPANIES<br>6800 DEERPATH ROAD<br>SUITE 100<br>ELKRIDGE, MARYLAND 21075<br>410.579.2442 | PROJECT: DORSEY CENTER APARTMENTS<br>210 UNITS<br>PARCEL 'T' |
| LOCATION:<br>TAX MAP 37<br>PARCEL 375 - GRID 24<br>1st ELECTION DISTRICT<br>HOWARD COUNTY, MARYLAND  | TITLE:<br>DETAILED GRADING AND<br>ACCESSIBILITY PLAN         |
| DATE: APRIL 2023   | PROJECT NO. 1959   |
| Design: AAM  | Draft: AAM   |
| Check: CAM   | SCALE: AS SHOWN  |
| DRAWING 6 OF 49  | SDP-20-033   |



MARYLAND ROUTE 100  
PUBLIC ROAD  
R/W VARIES  
PRINCIPAL ARTERIAL  
(SHA R/W)

FOR TYPICAL  
WALL SECTION  
SEE SHEET 14

ACCESSIBLE  
DOOR  
PROP. 6.5'  
SIDEWALK

EX. AMENITY  
AREA PER  
SDP-05-029

DORSEY BUSINESS  
CENTER SPEEDWAY  
ROCK, LLC,  
PARCEL 'A'  
ZONED: TOD

PLEASE NOTE THAT THIS  
REVISION SUPERSEDES AND  
REPLACES THE NOVEMBER  
2020 BEI PLAN SHEET.

| NO. | DATE | REVISION  |
|-----|------|---|
| 1   | 4/23 | REVISED SIDEWALK LAYOUTS, LANDSCAPE DRAINS, PUBLIC ACCESS AREA AND NORTHERN RETAINING WALL. |

**BENCHMARK**  
ENGINEERS & LAND SURVEYORS & PLANNERS  
**ENGINEERING, INC.**  
3300 NORTH RIDGE ROAD & SUITE 140 A ELLICOTT CITY, MARYLAND 21043  
(P) 410-465-6105 (F) 410-465-6644  
WWW.BEI-CIVILENGINEERING.COM

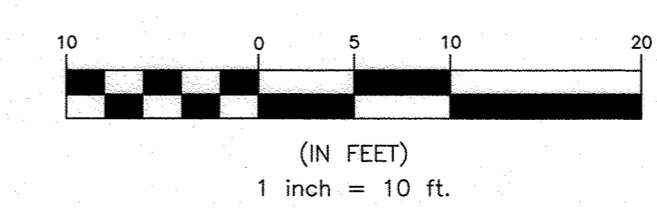
BEI-AAM  
2023.05.01 07:17:19 -04'00

APPROVED: DEPARTMENT OF PLANNING AND ZONING  
*[Signature]*  
CHIEF, DEVELOPMENT ENGINEERING DIVISION  
DATE: 7/11/23

*[Signature]*  
CHIEF, DIVISION OF LAND DEVELOPMENT  
DATE: 7/10/23

*[Signature]*  
DIRECTOR  
DATE: 7/13/23

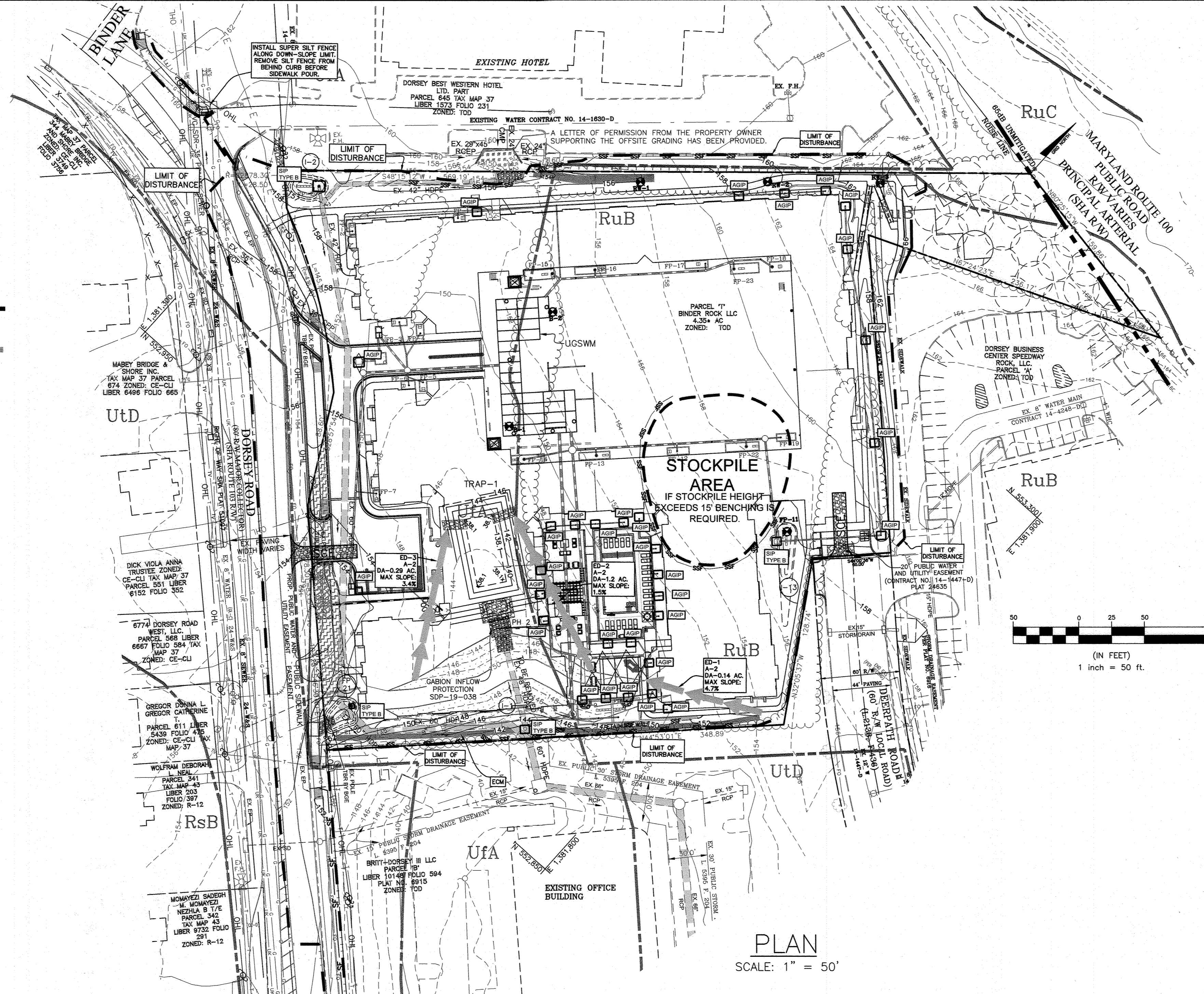
DIMENSION PLAN  
SCALE: 1" = 10'  
MATCHLINE SHEET 6



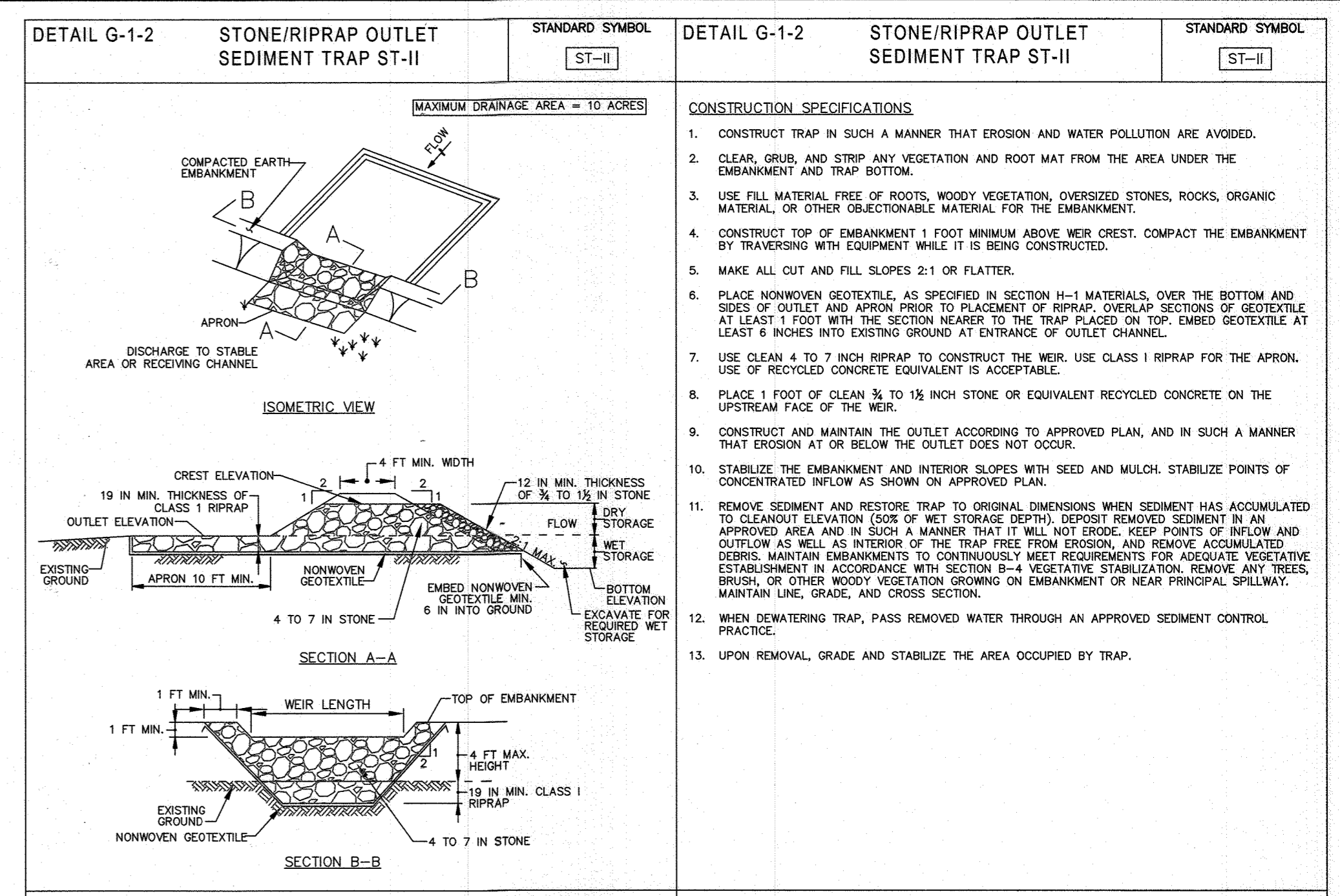
|  |                  |  |                 |
|--|------------------|--|-----------------|
| OWNER/DEVELOPER:<br>BINDER ROCK LLC<br>C/O H & H ROCK COMPANIES<br>6800 DEERPATH ROAD<br>SUITE 100<br>ELKRIDGE, MARYLAND 21075<br>410.579.2442 |                  | PROJECT: DORSEY CENTER APARTMENTS<br>210 UNITS<br>PARCEL 'T' |                 |
| LOCATION:<br>TAX MAP 37<br>PARCEL 375 - GRID 24<br>1st ELECTION DISTRICT<br>HOWARD COUNTY, MARYLAND  |                  | TITLE:<br>DETAILED GRADING AND<br>ACCESSIBILITY PLAN         |                 |
| DATE: APRIL 2023   | PROJECT NO. 1959 | SCALE: AS SHOWN  | DRAWING 7 OF 49 |
| Design: AAM  | Draft: AAM       | Check: CAM   |                 |

**LEGEND**

- EXISTING CONTOURS
- EXISTING TREELINE
- EXISTING STRUCTURE
- SOIL DELINEATION
- SOILS DELINEATION
- STEEP SLOPES - 25%
- LIMIT OF DISTURBANCE
- SILT FENCE
- SUPER SILT FENCE
- CLEANWATER DIVERSION
- STABILIZED CONSTRUCTION ENTRANCE
- TRAP DRAINAGE AREA
- INLET PROTECTION
- EROSION CONTROL
- MATTING



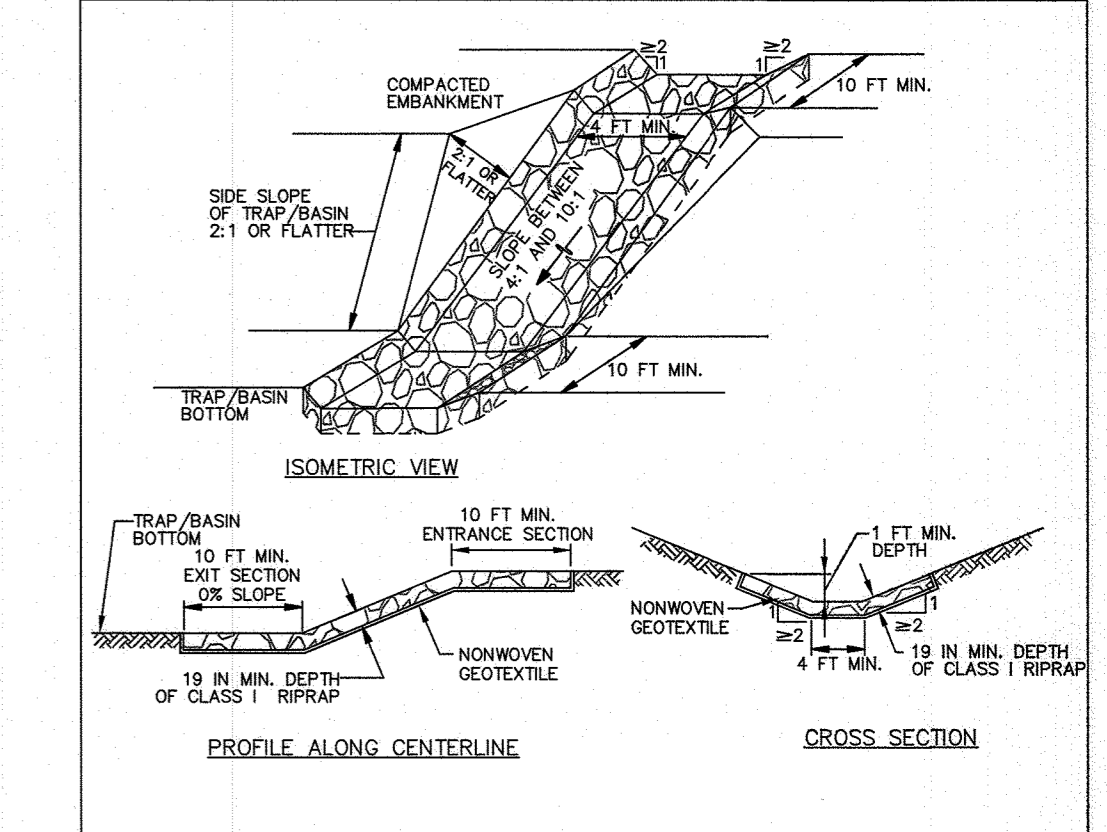
**PLAN**  
SCALE: 1" = 50'



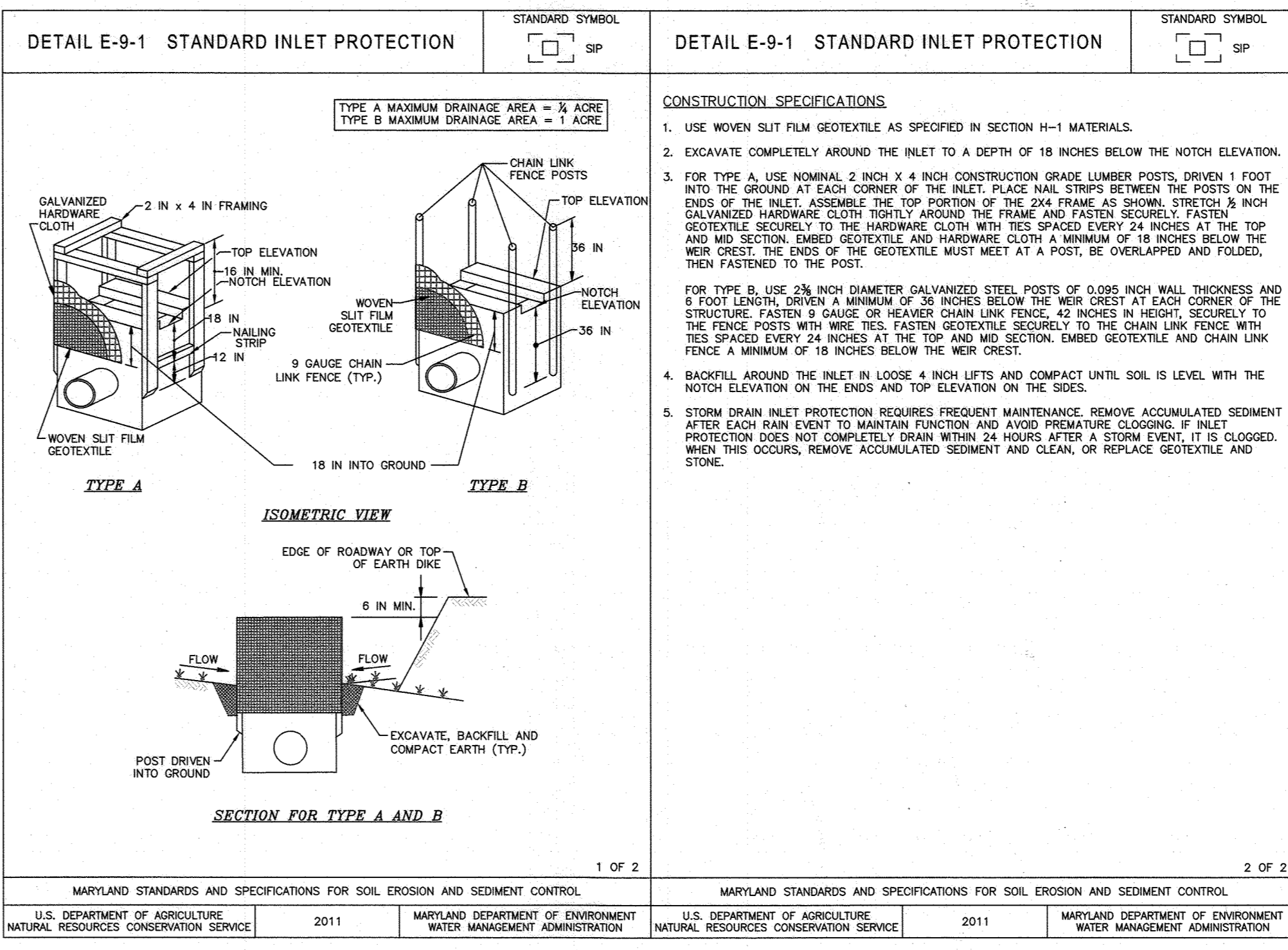
MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL  
U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE 2011

| STONE/RIPRAP OUTLET SEDIMENT TRAP ST-II, TRAP-1             |                                 |
|---|---------------------------------|
| DRAINAGE AREA - INITIAL                                     | 4.03 ACRES                      |
| DRAINAGE AREA - INTERIM                                     | 4.03 ACRES                      |
| DRAINAGE AREA - FINAL                                       | 4.03 ACRES                      |
| TOTAL STORAGE REQUIRED                                      | 14,508 CF                       |
| TOTAL STORAGE PROVIDED                                      | 17,156 CF                       |
| WET STORAGE REQUIRED  | 7254 CF                         |
| WET STORAGE PROVIDED  | 7328 CF                         |
| DRY STORAGE REQUIRED  | 7254 CF                         |
| DRY STORAGE PROVIDED  | 9828 CF                         |
| EXISTING GROUND ELEVATION AT OUTLET (WET STORAGE ELEVATION) | 142.0 FT                        |
| TRAP BOTTOM ELEVATION                                       | 138.1 FT                        |
| TRAP BOTTOM DIMENSIONS                                      | 30 X 60 FT X FT                 |
| WEIR LENGTH   | - 16 FT                         |
| WEIR CREST (DRY STORAGE) ELEVATION                          | 145.0 FT                        |
| CLEANOUT ELEVATION  | 140.57 FT                       |
| TOP OF EMBANKMENT ELEVATION                                 | 146.0 FT                        |
| SIDE SLOPE  | 2:1 H:V RATIO                   |
| EMBANKMENT TOP WIDTH  | 4 FT                            |
| OUTLET PROTECTION - LENGTH                                  | USE EX. GABIONS FROM SDP-19-038 |
| OUTLET PROTECTION - DEPTH                                   |                                 |

**DETAIL D-3-1 RIPRAP INFLOW PROTECTION**



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



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

PLEASE NOTE THAT THIS REVISION SUPERSEDES AND REPLACES THE NOVEMBER 2020 BEI PLAN SHEET.

| NO. | DATE | REVISION   |
|-----|------|--|
| 1   | 4/23 | REVISED INLET PROTECTION LOCATION TO MATCH REVISED LANDSCAPE DRAINS, AND SHOW REVISED AND OFFSITE GRADING. |

**BENCHMARK ENGINEERS, INC.**  
3360 NORTH RIDGE ROAD SUITE 140 ELLICOTT CITY, MARYLAND 21043  
(P) 410-465-6105 (F) 410-465-6644  
WWW.BEI-CIVILENGINEERING.COM

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. 28376, Expiration Date: 1-1-25.

BEI-AAM  
2023.05.01 07:19:25 -04'00

**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.

Alice A. Miller, P.E. 5/1/23

**DEVELOPER'S CERTIFICATE**  
I HEREBY 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.

Developer: 5/15/2023

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

Approved: Department of Planning and Zoning  
7/11/23

7/13/23

7/13/23

OWNER/DEVELOPER: BINDER ROCK LLC  
C/O H & H ROCK COMPANIES  
6800 DEERPATH ROAD SUITE 100  
ELKRIDGE, MARYLAND 21075  
410.579.2442

PROJECT: DORSEY CENTER APARTMENTS  
210 UNITS  
PARCEL 'T'

LOCATION: TAX MAP 37  
PARCEL 375 - GRID 24  
1st ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND

TITLE: REVISED GRADING, SEDIMENT AND EROSION CONTROL PLAN, NOTES AND DETAILS

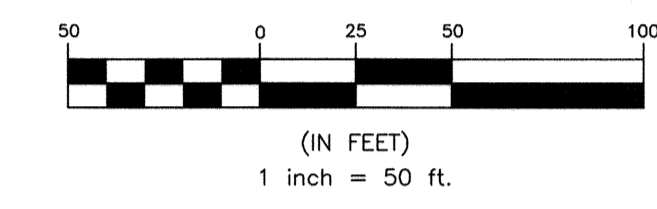
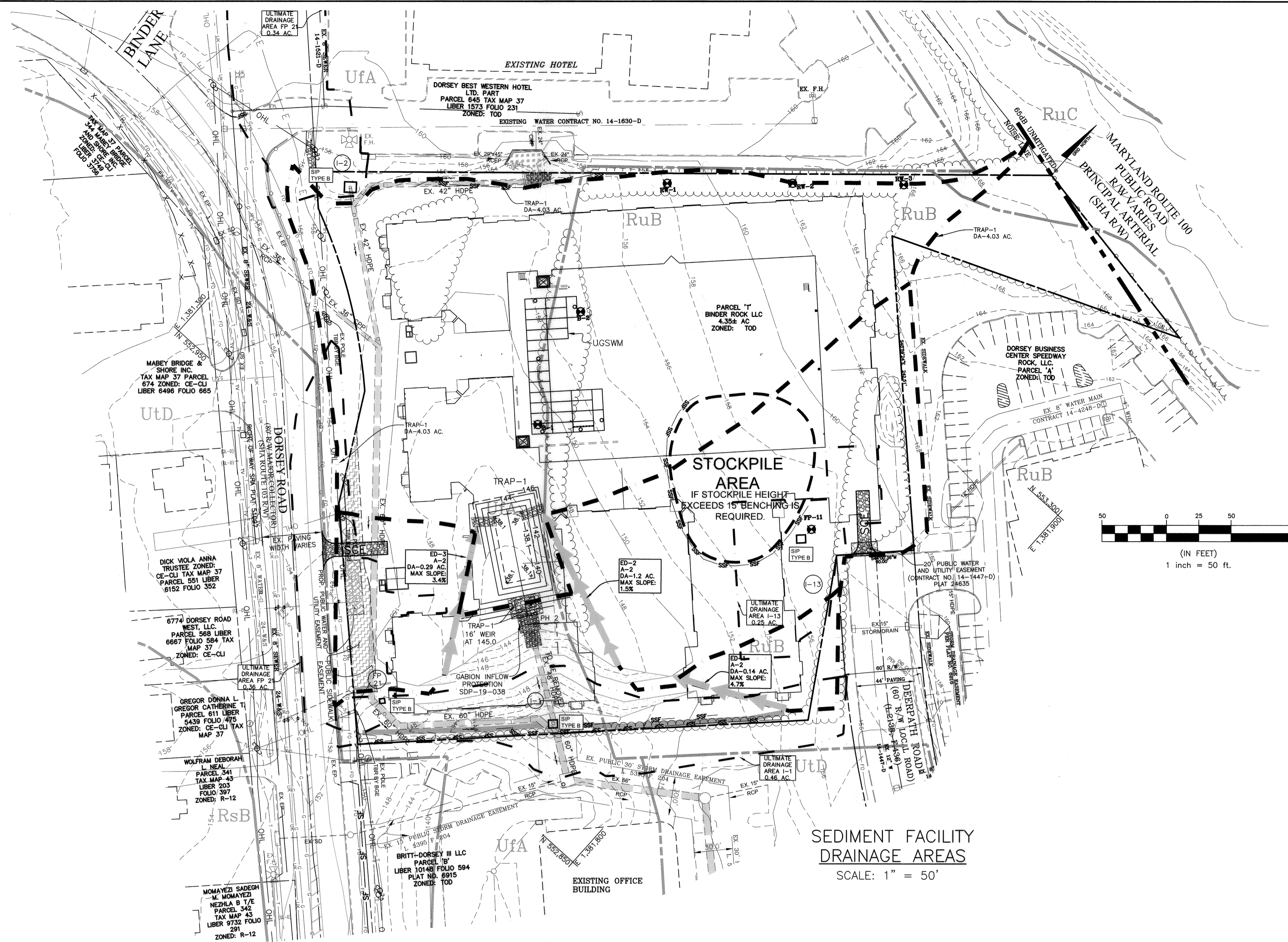
DATE: APRIL/2023 PROJECT NO. 1959

Design: AAM Draft: AAM Check: CAM SCALE: AS SHOWN DRAWING 8 OF 49



**LEGEND**

- EXISTING CONTOURS
- EXISTING TREELINE
- EXISTING STRUCTURE
- SOIL DELINEATION
- SOILS DELINEATION
- STEEP SLOPES - 25%
- LIMIT OF DISTURBANCE
- SILT FENCE
- SUPER SILT FENCE
- CLEANWATER DIVERSION
- STABILIZED CONSTRUCTION ENTRANCE
- TRAP DRAINAGE AREA



**DETAIL E-3 SUPER SILT FENCE**

**DETAIL C-1 EARTH DIKE**

**CONSTRUCTION SPECIFICATIONS**

- INSTALL 2 1/2 INCH DIAMETER GALVANIZED STEEL POSTS OF 0.085 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.
- FASTEN 9 GAUGE OR HEAVIER GALVANIZED CHAIN LINK FENCE (2 3/8 INCH MAXIMUM OPENING) 42 INCHES IN HEIGHT SECURELY TO THE FENCE POSTS WITH WIRE TIES OR HIG RINGS.
- FASTEN WOVEN SILT 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.
- WHERE ENDS OF THE GEOTEXTILE COME TOGETHER, THE ENDS SHALL BE OVERLAPPED BY 6 INCHES, FOLDED, AND STAPLED TO PREVENT SEDIMENT BY PASS.
- 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.
- PROVIDE MANUFACTURER CERTIFICATION TO THE INSPECTION/ENFORCEMENT AUTHORITY SHOWING THAT GEOTEXTILE MEETS THE REQUIREMENTS IN SECTION H-1 MATERIALS.
- REMOVE ACCUMULATED SEDIMENT AND DEBRIS WHEN BULGES DEVELOP IN FENCE OR WHEN SEDIMENT REACHES 50% OF FENCE HEIGHT. REPLACE GEOTEXTILE IF TORN. IF UNDERMINING OCCURS, REINSTALL CHAIN LINK FENCING AND GEOTEXTILE.

**CONSTRUCTION SPECIFICATIONS**

- REMOVE AND DISPOSE OF ALL TREES, BRUSH, STUMPS, OBSTRUCTIONS, AND OTHER OBJECTIONABLE MATERIAL SO AS NOT TO INTERFERE WITH PROPER FUNCTION OF EARTHDIKE.
- EXCAVATE OR SHAPE EARTH DIKE TO LINE, GRADE, AND CROSS SECTION AS SPECIFIED. BANK PROJECTIONS OR OTHER IRREGULARITIES ARE NOT ALLOWED.
- COMPACT FILL.
- CONSTRUCT FLOW CHANNEL ON AN UNINTERRUPTED, CONTINUOUS GRADE, ADJUSTING THE LOCATION DUE TO FIELD CONDITIONS AS NECESSARY TO MAINTAIN POSITIVE DRAINAGE.
- PROVIDE OUTLET PROTECTION AS REQUIRED ON APPROVED PLAN.
- STABILIZE EARTH DIKE WITHIN THREE DAYS OF INSTALLATION. STABILIZE FLOW CHANNEL FOR CLEAR WATER DIVERSION WITHIN 24 HOURS OF INSTALLATION.
- MAINTAIN LINE, GRADE, AND CROSS SECTION; REMOVE ACCUMULATED SEDIMENT AND DEBRIS, AND MAINTAIN POSITIVE DRAINAGE. KEEP EARTH DIKE AND POINT OF DISCHARGE FREE OF OBSTRUCTION AND CONTINUOUSLY MEET REQUIREMENTS FOR ADEQUATE VEGETATIVE ESTABLISHMENT IN ACCORDANCE WITH SECTION B-4 VEGETATIVE STABILIZATION.
- UPON REMOVAL OF EARTH DIKE, GRADE AREA FLUSH WITH EXISTING GROUND. WITHIN 24 HOURS OF REMOVAL STABILIZE DISTURBED AREA WITH TOPSOIL, SEED, AND MULCH, OR AS SPECIFIED ON APPROVED PLAN.

**DETAIL E-9-2 AT-GRADE INLET PROTECTION**

**CONSTRUCTION SPECIFICATIONS**

- USE NONWOVEN GEOTEXTILE AS SPECIFIED IN SECTION H-1 MATERIALS.
- LIFT GRATE AND WRAP WITH NONWOVEN GEOTEXTILE TO COMPLETELY COVER ALL OPENINGS. SECURE WITH WIRE TIES AND SET GRATE BACK IN PLACE.
- PLACE CLEAN 3/4 TO 1 1/2 INCH STONE OR EQUIVALENT RECYCLED CONCRETE 6 INCHES THICK ON THE GRADE.
- 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.

**DETAIL E-9-3 CURB INLET PROTECTION**

**CONSTRUCTION SPECIFICATIONS**

- USE NOMINAL 2 INCH x 4 INCH LUMBER
- USE NONWOVEN GEOTEXTILE AS SPECIFIED IN SECTION H-1 MATERIALS.
- NAIL THE 2x4 WEIR TO 9 INCH LONG VERTICAL SPACERS (MAXIMUM 6 FEET APART).
- ATTACH A CONTINUOUS PIECE OF 3/8 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.
- 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.
- INSTALL END SPACERS A MINIMUM OF 1 FOOT BEYOND THE ENDS OF THE THROAT OPENING.
- FORM THE HARDWARE CLOTH AND GEOTEXTILE TO THE CONCRETE GUTTER AND FACE OF CURB TO SPAN THE INLET OPENING. COVER THE HARDWARE CLOTH AND GEOTEXTILE WITH CLEAN 3/4 TO 1 1/2 INCH STONE OR EQUIVALENT RECYCLED CONCRETE.
- AT NON-SUMP LOCATIONS, INSTALL A TEMPORARY SANDBAG OR ASPHALT BERM TO PREVENT INLET BYPASS.
- 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.

**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.

Alice A. Miller, P.E. 11/3/2020

**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.

Developer: Alexander Statche 11/30/2020

APPROVED: DEPARTMENT OF PLANNING AND ZONING  
12.7.20

CHIEF, DEVELOPMENT ENGINEERING DIVISION

CHIEF, DIVISION OF LAND DEVELOPMENT 12/1/20

DIRECTOR 12/21/20

NO. DATE REVISION

**BENCHMARK ENGINEERS, INC.**  
8480 BALTIMORE NATIONAL PIKE SUITE 315 ELLICOTT CITY, MARYLAND 21043  
(P) 410-465-6105 (F) 410-465-6644  
WWW.BEI-CIVILENGINEERING.COM

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. 28377 Registration Date: 1-1-21

Nov 3 2020 7:53 PM DocuSign

OWNER/DEVELOPER: BINDER ROCK LLC C/O H & H ROCK COMPANIES 6800 DEERPATH ROAD SUITE 100 ELKRDGE, MARYLAND 21075 410.579.2442

PROJECT: DORSEY CENTER APARTMENTS 210 UNITS PARCEL 'T'

LOCATION: TAX MAP 37 PARCEL 375 - GRID 24 1st ELECTION DISTRICT HOWARD COUNTY, MARYLAND

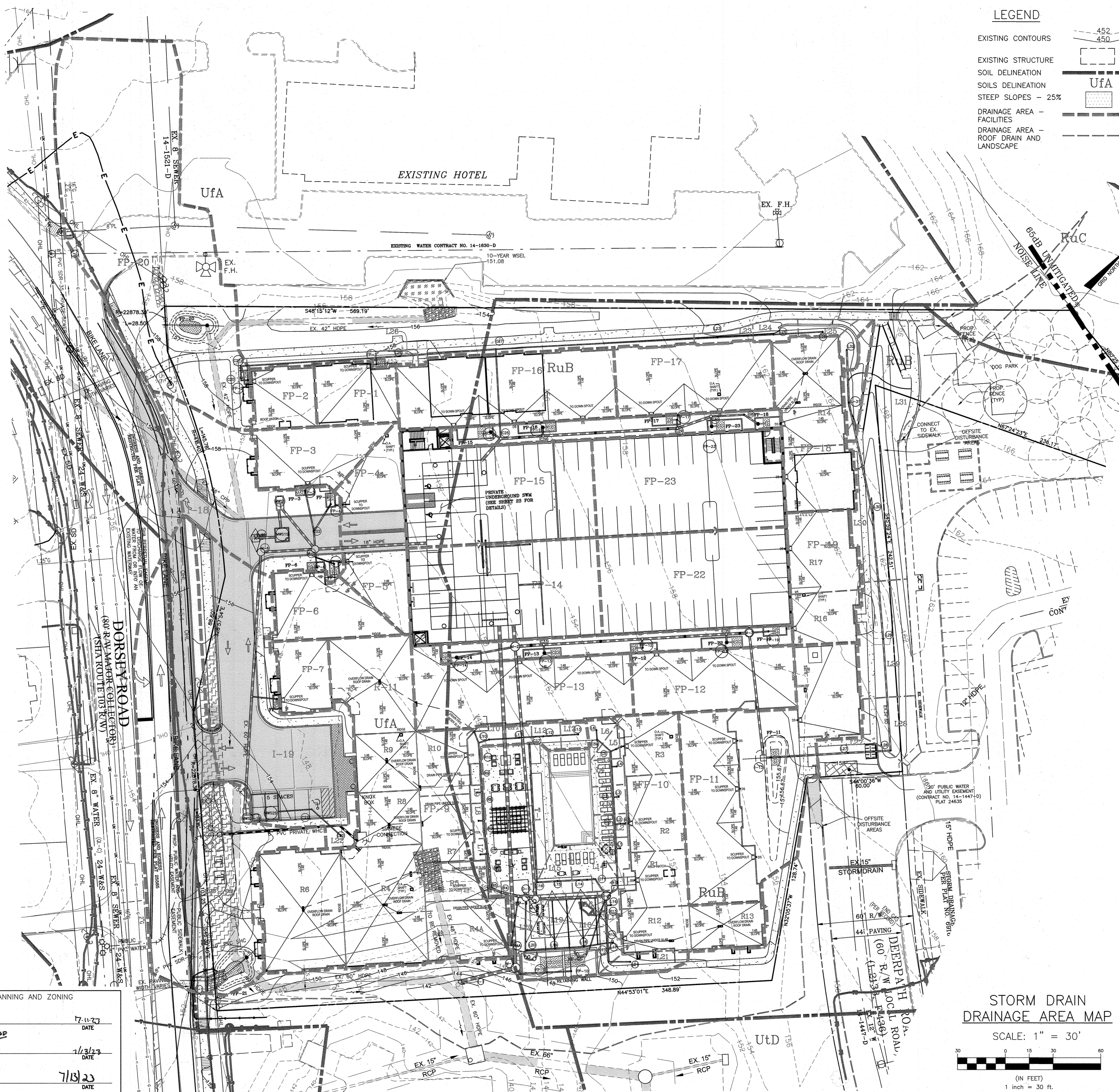
TITLE: GRADING, SEDIMENT AND EROSION CONTROL PLAN, NOTES AND DETAILS

DATE: OCTOBER 2020 PROJECT NO. 1959

SCALE: AS SHOWN DRAWING 9 OF 49

Design: AAM Draft: AAM Check: CAM





**LEGEND**

- EXISTING CONTOURS
- EXISTING STRUCTURE
- SOIL DELINEATION
- SOILS DELINEATION
- STEEP SLOPES - 25%
- DRAINAGE AREA - FACILITIES
- DRAINAGE AREA - ROOF DRAIN AND LANDSCAPE

| SOILS LEGEND |   |               |
|--------------|---|---------------|
| SYMBOL       | NAME/DESCRIPTION                                      | K VALUE GROUP |
| RuB          | RUSSETT AND BELTSVILLE SOIL, 2 TO 5 PERCENT SLOPES    | 0.37 C        |
| RuC          | RUSSETT AND BELTSVILLE SOIL, 5 TO 10 PERCENT SLOPES*  | 0.37 C        |
| RuB          | RUSSETT FINE SANDY LOAM, 2 TO 5 PERCENT SLOPES*       | 0.37 C        |
| UfA          | URBAN LAND-FALLSINGTON COMPLEX, 0 TO 5 PERCENT SLOPES | 0.20 D        |
| UfD          | URBAN LAND-UDORTHERTS COMPLEX, 0 TO 15 PERCENT SLOPES | 0.28 D        |

OBTAINED FROM USDA NRCS WEB SOIL NATIONAL COOPERATIVE SOIL SURVEY, NOVEMBER 2018. SEE HOWARD COUNTY SOIL SURVEY MAP NO. 25. \*HIGHLY ERODIBLE SOILS K>0.35 AND 5% OR GREATER SLOPES, OR 15% AND GREATER SLOPES.

**AREA AND "C" FACTOR TABULATION**


| PROJECT: Binder Apartments |        | DATE: 02/27/23 |                  |
|----------------------------|--------|----------------|------------------|
| INLET #                    | ZONING | AREA (A)       | % IMPERVIOUS (P) |
| FP-1                       | TOO    | 0.05           | 0.86             |
| FP-2                       | TOO    | 0.04           | 0.86             |
| FP-3                       | TOO    | 0.06           | 0.86             |
| FP-4                       | TOO    | 0.05           | 0.86             |
| FP-5                       | TOO    | 0.05           | 0.86             |
| FP-6                       | TOO    | 0.08           | 0.86             |
| FP-7                       | TOO    | 0.04           | 0.86             |
| FP-11                      | TOO    | 0.25           | 0.63             |
| FP-12                      | TOO    | 0.09           | 0.86             |
| FP-13                      | TOO    | 0.13           | 0.86             |
| FP-14                      | TOO    | 0.17           | 0.86             |
| FP-15                      | TOO    | 0.18           | 0.86             |
| FP-16                      | TOO    | 0.14           | 0.86             |
| FP-17                      | TOO    | 0.10           | 0.86             |
| FP-18                      | TOO    | 0.12           | 0.86             |
| FP-19                      | TOO    | 0.07           | 0.86             |
| FP-20                      | TOO    | 0.42           | 0.35             |
| FP-21                      | TOO    | 0.37           | 0.63             |
| FP-22                      | TOO    | 0.17           | 0.86             |
| FP-23                      | TOO    | 0.17           | 0.86             |
| T1                         | TOO    | 0.09           | 0.81             |
| I-18                       | TOO    | 0.17           | 0.56             |
| I-19                       | TOO    | 0.23           | 0.77             |
| L1                         | TOO    | 0.01           | 0.62             |
| L2                         | TOO    | 0.01           | 0.56             |
| L3                         | TOO    | 0.01           | 0.61             |
| L4                         | TOO    | 0.01           | 0.57             |
| L5                         | TOO    | 0.005          | 0.39             |
| L6                         | TOO    | 0.01           | 0.34             |
| L7                         | TOO    | 0.002          | 0.24             |
| L8                         | TOO    | 0.003          | 0.24             |
| L9                         | TOO    | 0.002          | 0.24             |
| L10                        | TOO    | 0.01           | 0.37             |
| L11                        | TOO    | 0.01           | 0.28             |
| L12                        | TOO    | 0.01           | 0.38             |
| L13                        | TOO    | 0.01           | 0.39             |
| L14                        | TOO    | 0.02           | 0.62             |
| L15                        | TOO    | 0.01           | 0.56             |
| L16                        | TOO    | 0.003          | 0.50             |
| L17                        | TOO    | 0.01           | 0.48             |
| L18                        | TOO    | 0.02           | 0.31             |
| L19                        | TOO    | 0.01           | 0.42             |
| L20                        | TOO    | 0.02           | 0.40             |
| L21                        | TOO    | 0.02           | 0.42             |
| L22                        | TOO    | 0.01           | 0.31             |
| L23                        | TOO    | 0.01           | 0.24             |
| L24                        | TOO    | 0.01           | 0.24             |
| L25                        | TOO    | 0.02           | 0.24             |
| L26                        | TOO    | 0.01           | 0.24             |
| L27                        | TOO    | 0.03           | 0.73             |
| L28                        | TOO    | 0.03           | 0.35             |
| L29                        | TOO    | 0.08           | 0.40             |
| L30                        | TOO    | 0.17           | 0.35             |
| L31                        | TOO    | 0.02           | 0.24             |
| L32                        | TOO    | 0.01           | 0.24             |
| R1                         | TOO    | 0.03           | 0.86             |
| R2                         | TOO    | 0.04           | 0.86             |
| R3                         | TOO    | 0.03           | 0.86             |
| R4                         | TOO    | 0.09           | 0.86             |
| R5                         | TOO    | 0.04           | 0.86             |
| R6                         | TOO    | 0.02           | 0.86             |
| R7                         | TOO    | 0.09           | 0.86             |
| R8                         | TOO    | 0.03           | 0.86             |
| R9                         | TOO    | 0.03           | 0.86             |
| R10                        | TOO    | 0.03           | 0.86             |
| R11                        | TOO    | 0.07           | 0.86             |
| R12                        | TOO    | 0.03           | 0.86             |
| R13                        | TOO    | 0.03           | 0.86             |
| R14                        | TOO    | 0.08           | 0.86             |
| R15                        | TOO    | 0.04           | 0.86             |
| R16                        | TOO    | 0.03           | 0.86             |
| R17                        | TOO    | 0.04           | 0.86             |

PLEASE NOTE THAT THIS REVISION SUPERSEDES AND REPLACES THE NOVEMBER 2020 BEI PLAN SHEET.

| NO. | DATE | REVISION   |
|-----|------|--|
| 1   | 4/23 | REVISED LANDSCAPE DRAINS AND FRONT AND REAR WALK/RAMP CONFIGURATION. |

**BENCHMARK**  
ENGINEERS • LAND SURVEYORS • PLANNERS  
**ENGINEERING, INC.**  
3300 NORTH RIDGE ROAD • SUITE 140A • ELICOTT CITY, MARYLAND 21043  
(P) 410-465-6105 (F) 410-465-6644  
WWW.BEI-CIVILENGINEERING.COM

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. 28376. Expiration Date: 11-1-25.

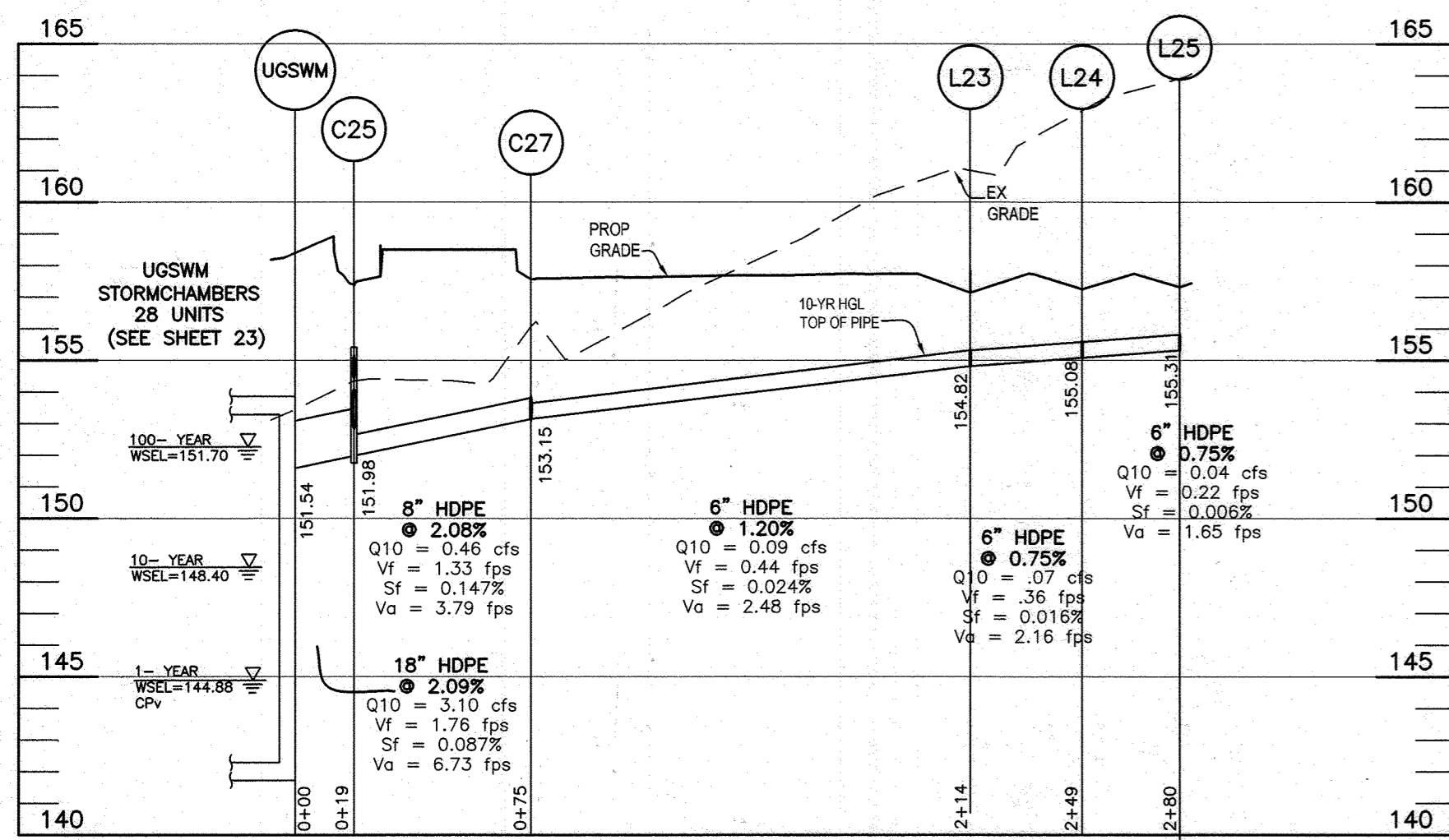


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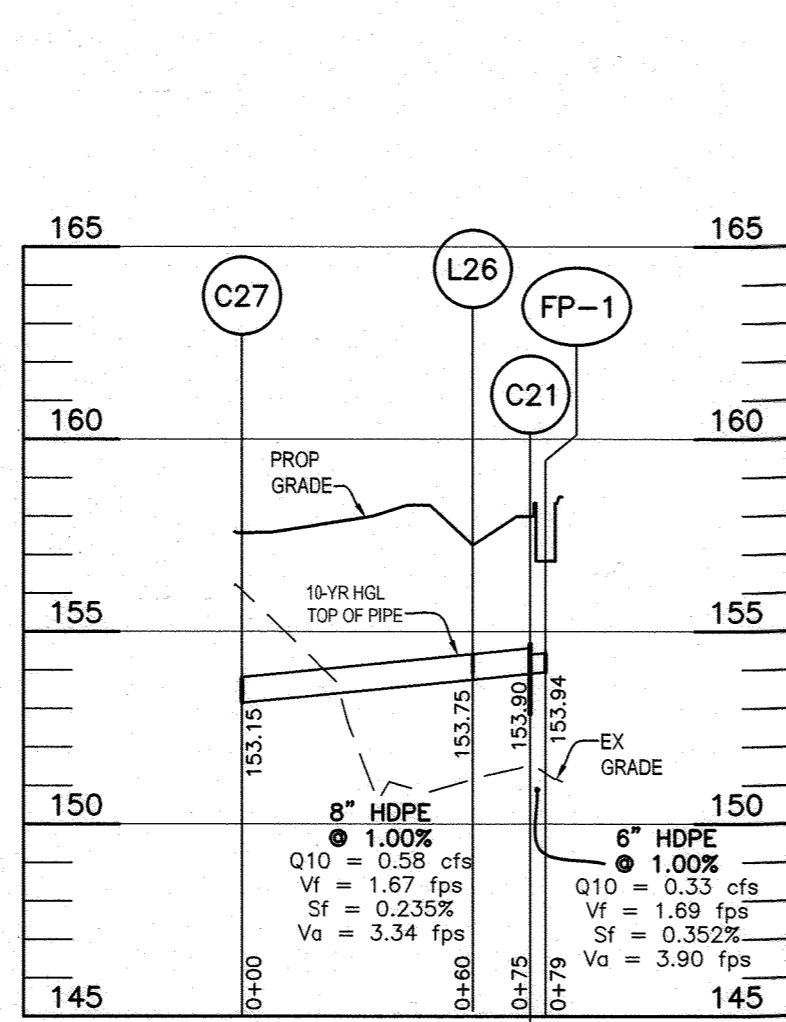
APPROVED: DEPARTMENT OF PLANNING AND ZONING  
*Chad Anderson* 7/11/23  
CHIEF, DEVELOPMENT ENGINEERING DIVISION  
*John A. Wisley* 7/13/23  
CHIEF, DIVISION OF LAND DEVELOPMENT  
*John A. Wisley* 7/13/23  
DIRECTOR

**STORM DRAIN DRAINAGE AREA MAP**  
SCALE: 1" = 30'  
(IN FEET)  
1 inch = 30 ft.

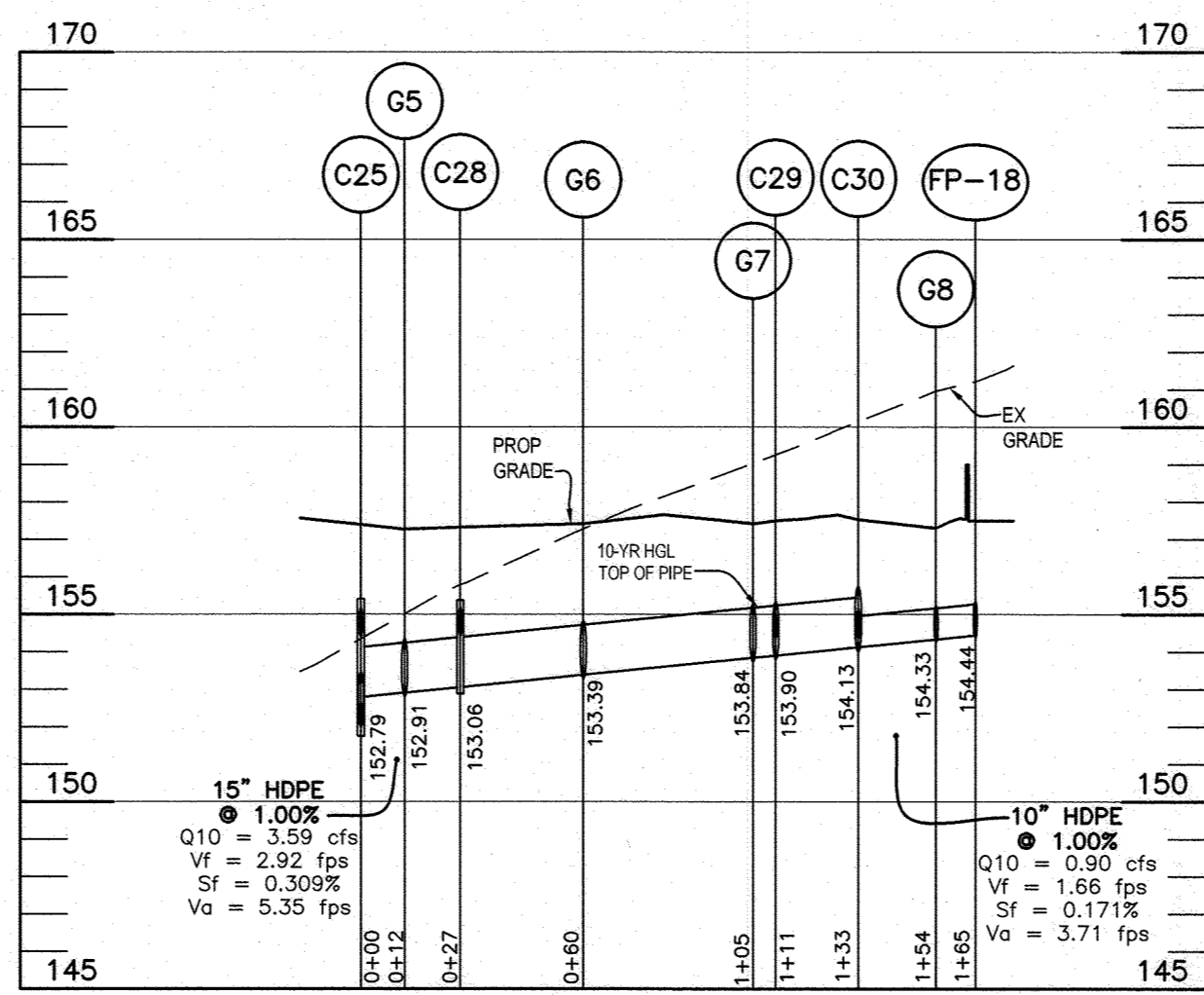
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|--|--|
| OWNER/DEVELOPER:<br>BINDER ROCK LLC<br>C/O H & H ROCK COMPANIES<br>6800 DEERPATH ROAD<br>SUITE 100<br>ELKRIDGE, MARYLAND 21075<br>410.579.2442 | PROJECT: DORSEY CENTER APARTMENTS<br>210 UNITS<br>PARCEL 'T' |
| LOCATION:<br>TAX MAP 37<br>PARCEL 37S - GRID 24<br>1st ELECTION DISTRICT<br>HOWARD COUNTY, MARYLAND  | TITLE:<br><b>STORM DRAIN DRAINAGE AREA MAP</b>               |
| DATE: APRIL 2023   | PROJECT NO. 1959   |
| SCALE: AS SHOWN  | DRAWING 11 OF 49   |
| Design: AAM  | Draft: AAM   |
| Check: CAM   | SDP-20-033   |



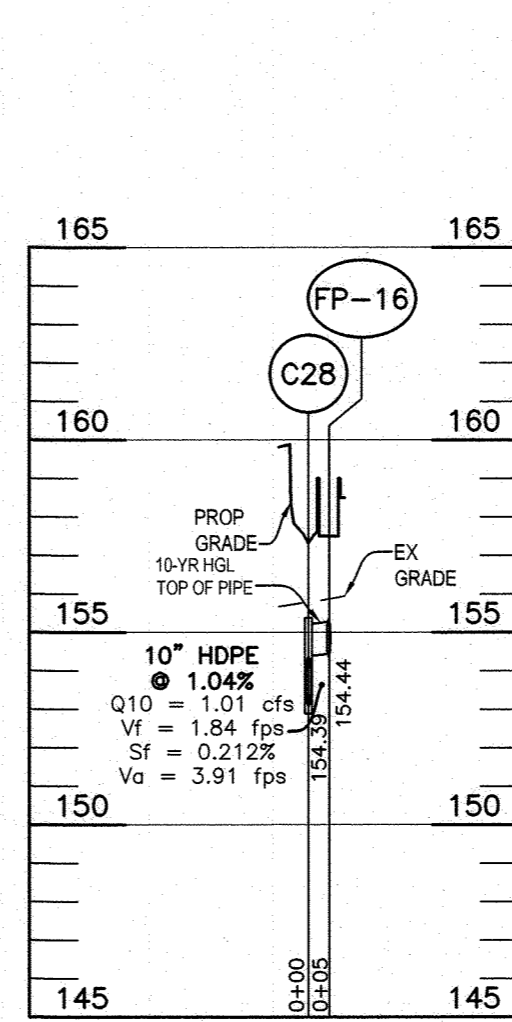
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1"=5' VERT.



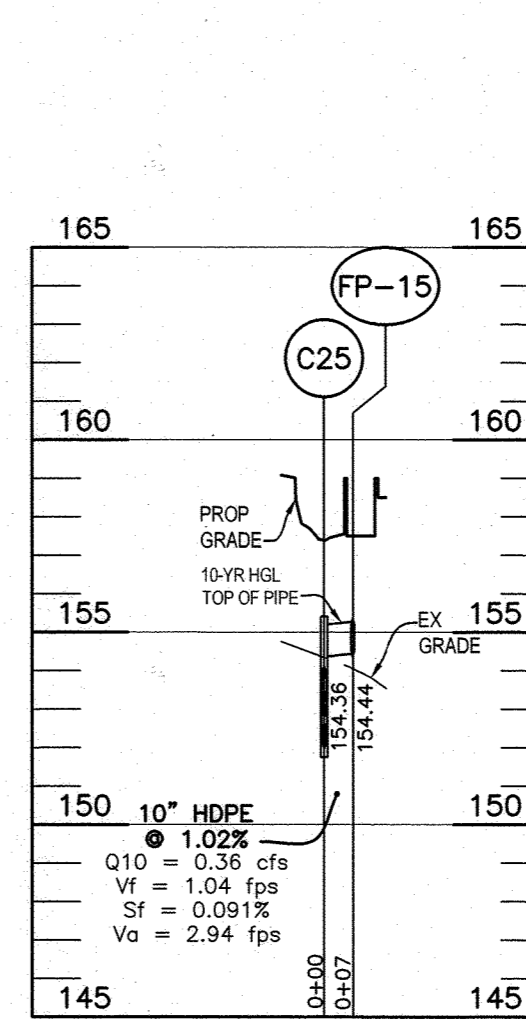
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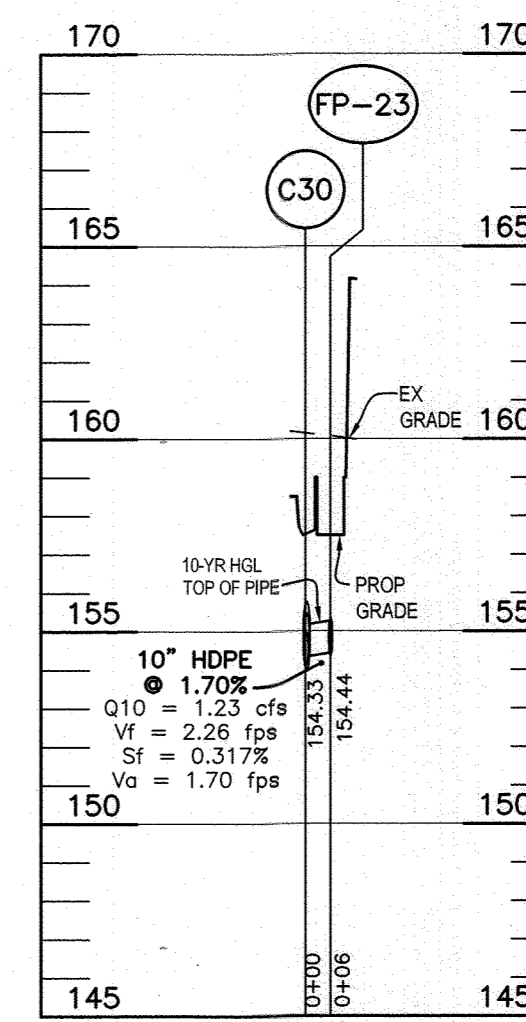
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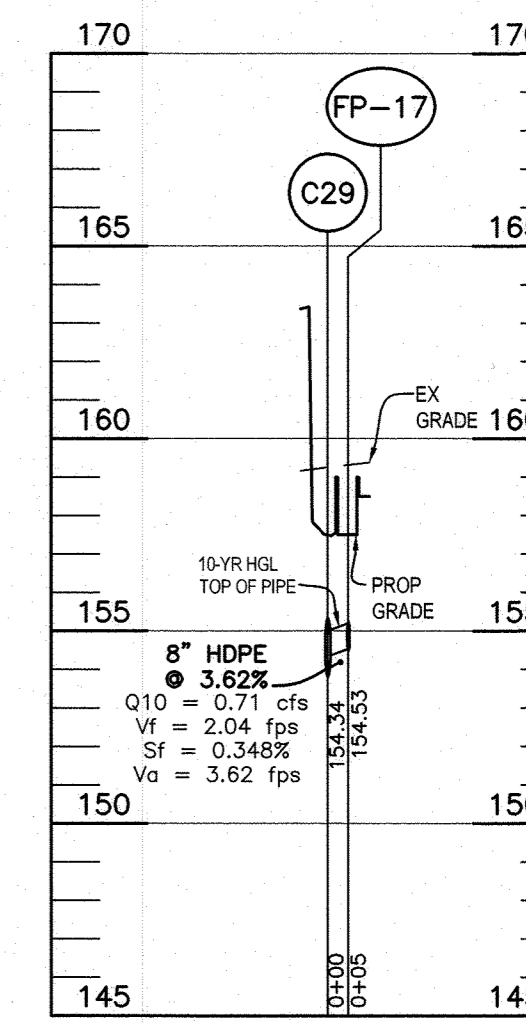
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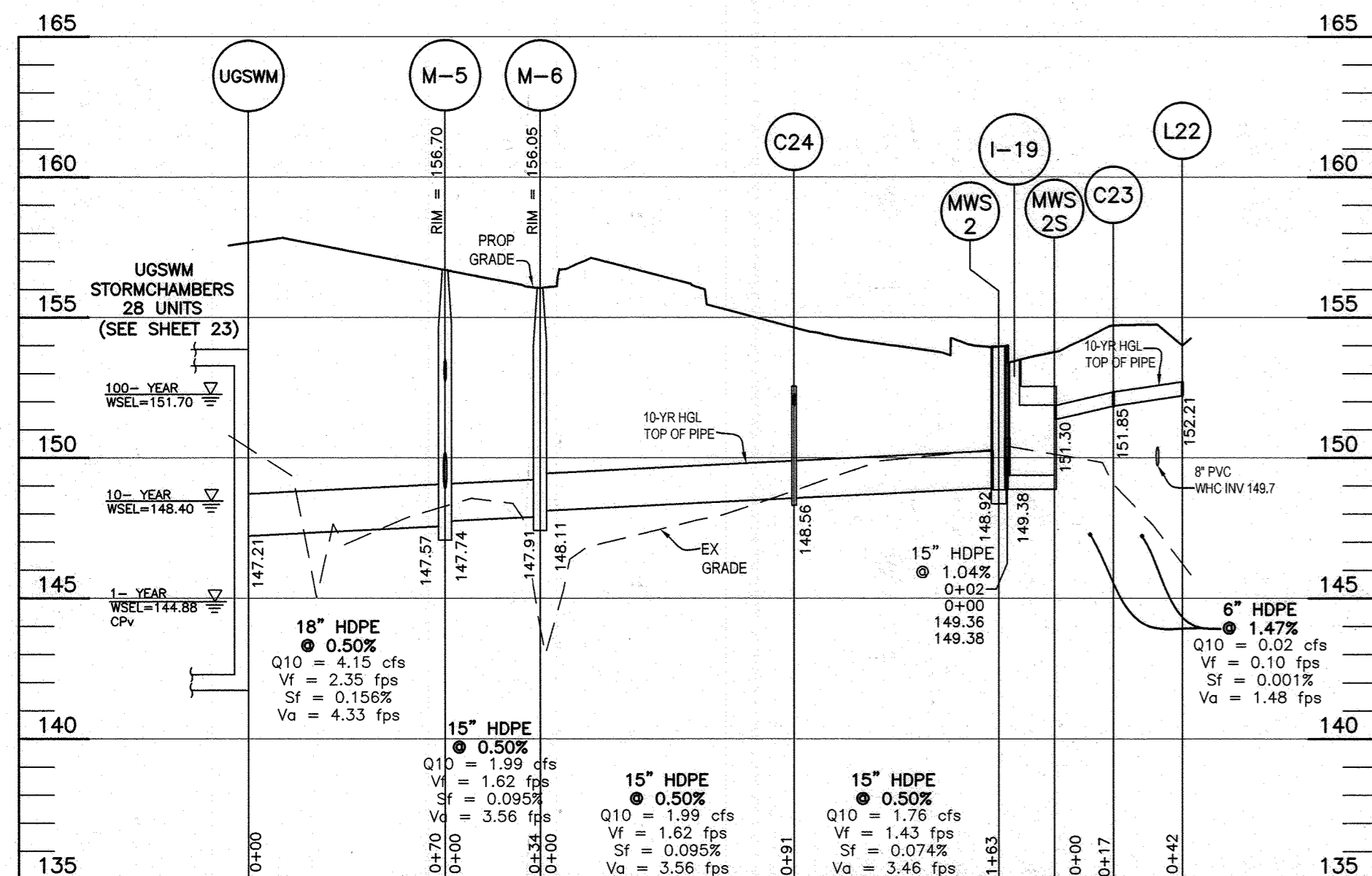
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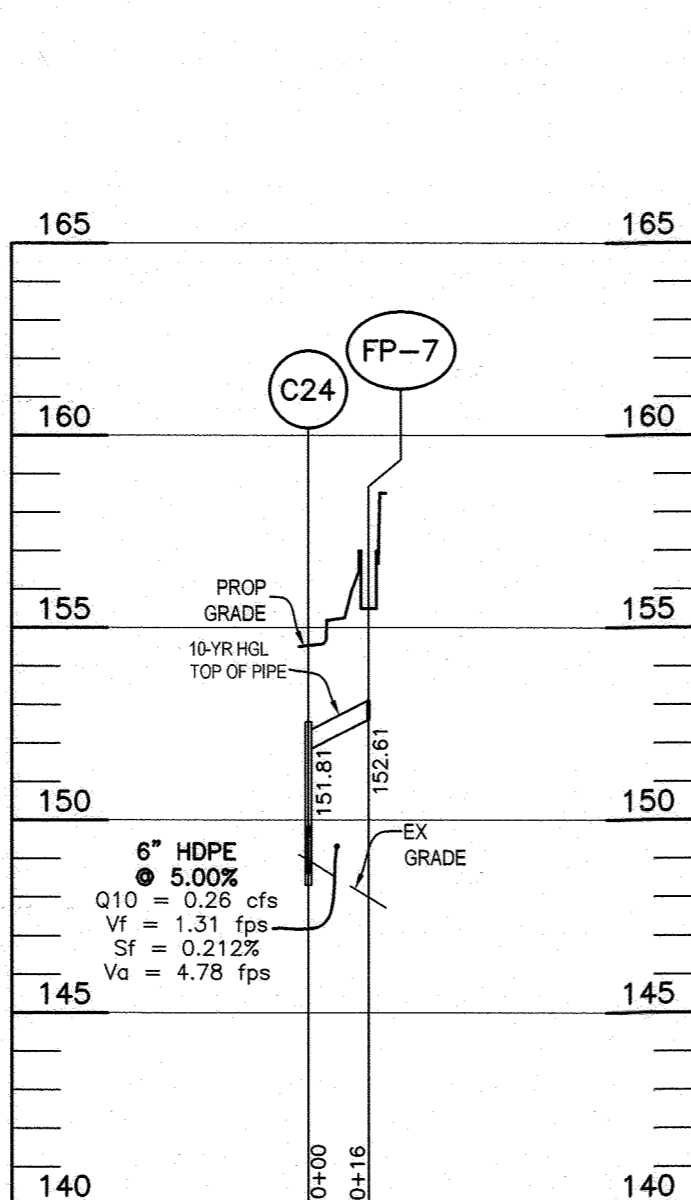
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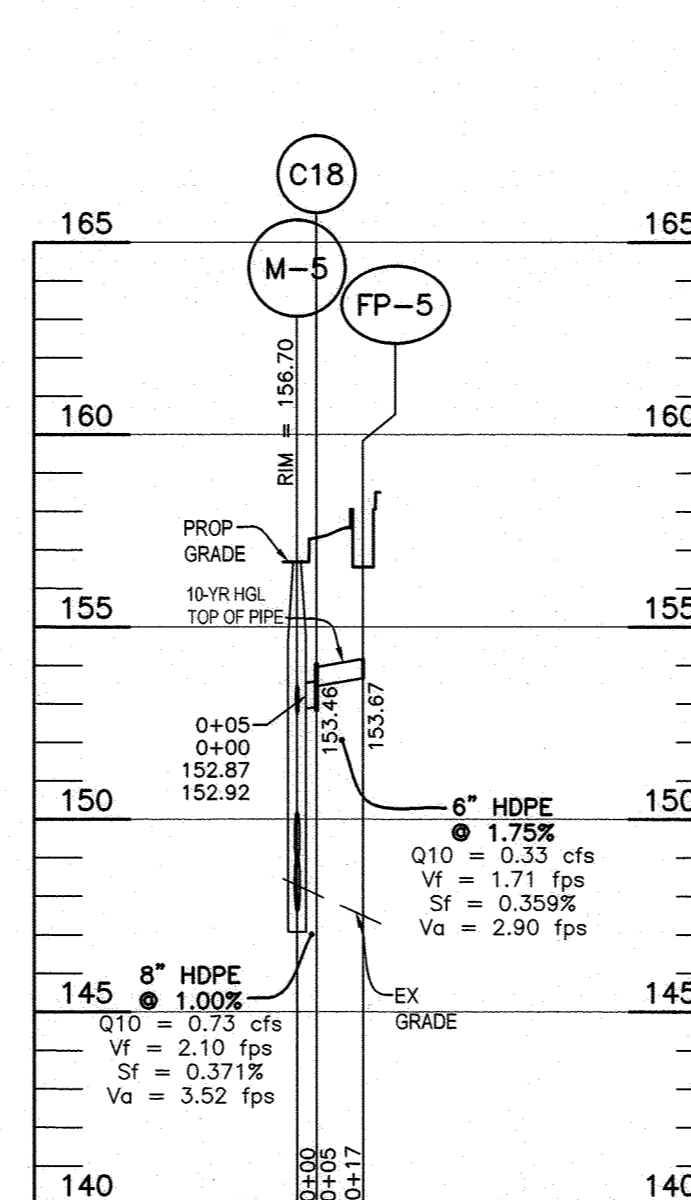
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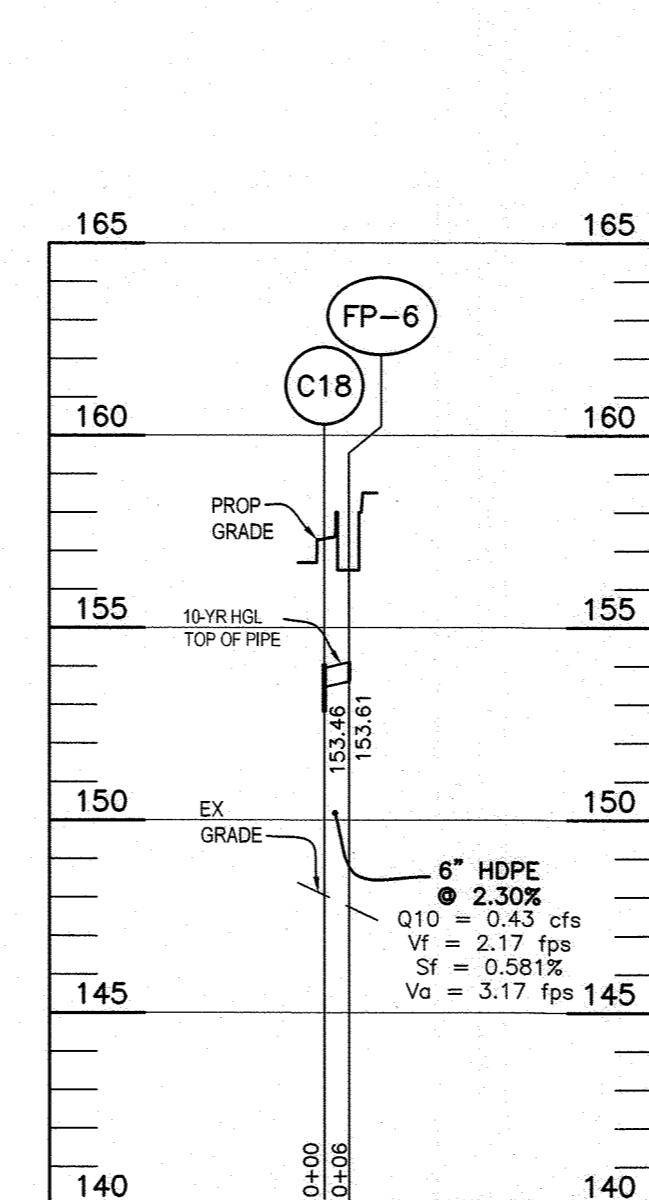
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1"=5' VERT.



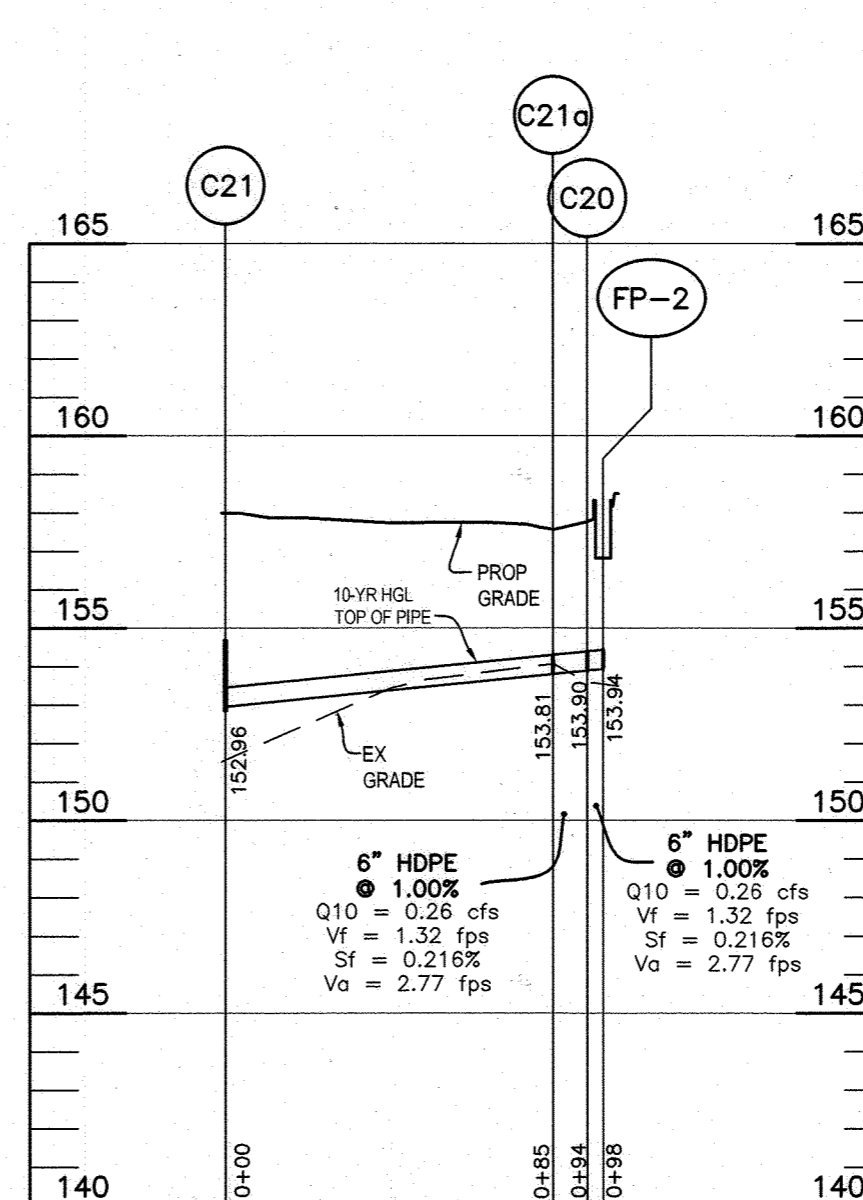
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1"=5' VERT.



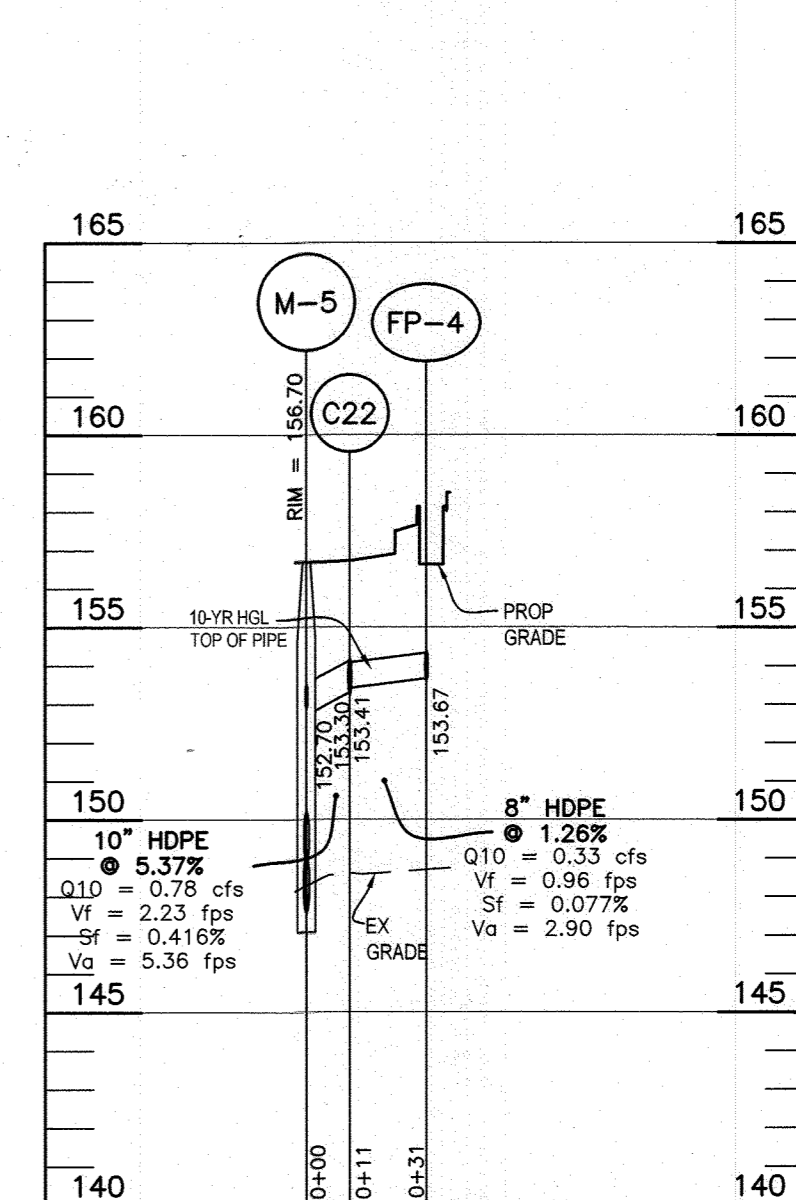
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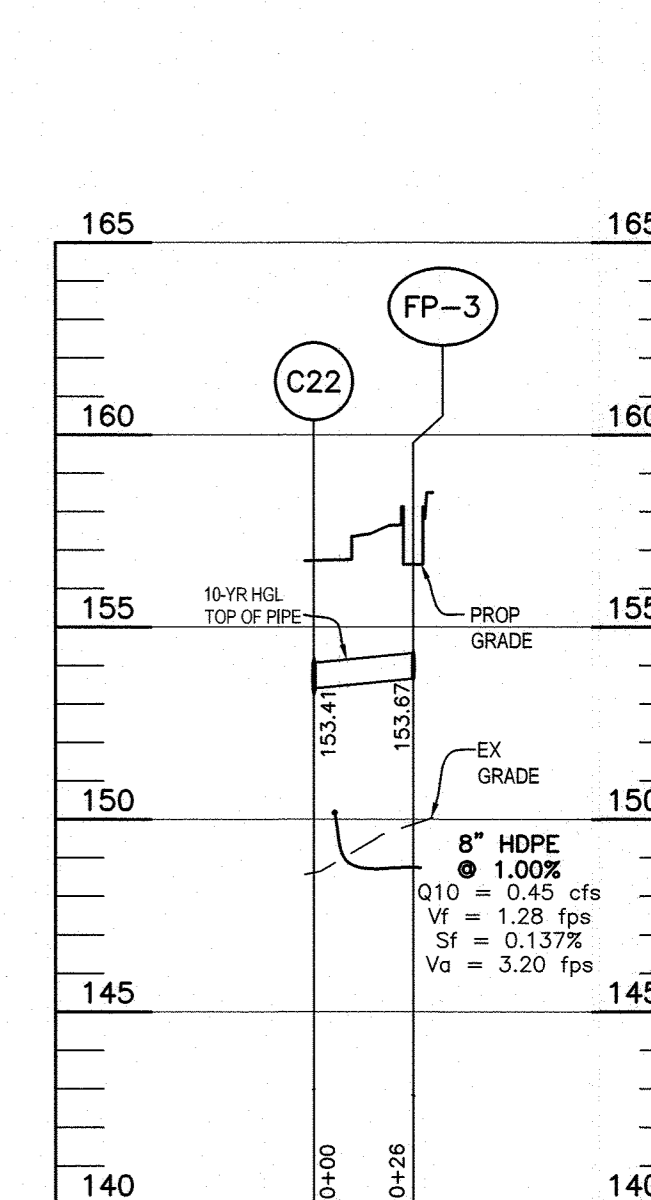
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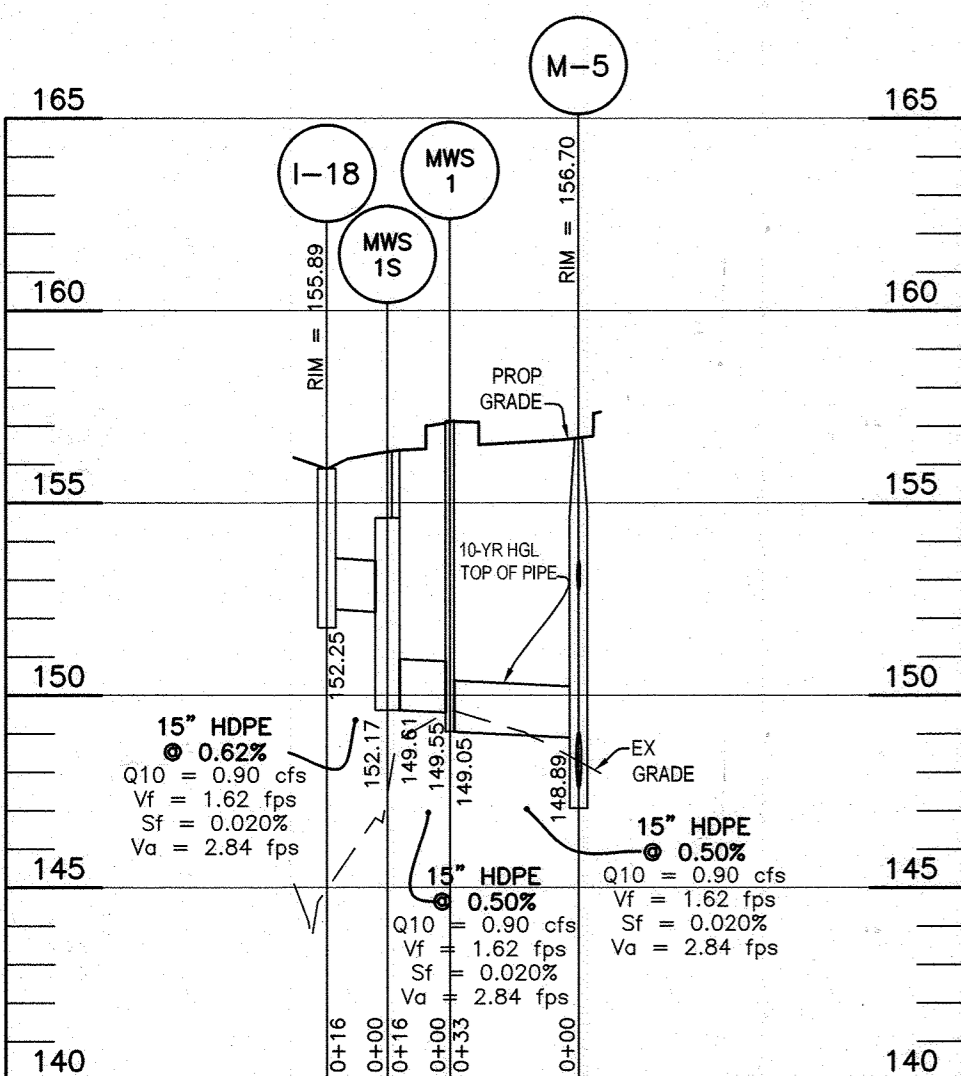
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1"=5' VERT.



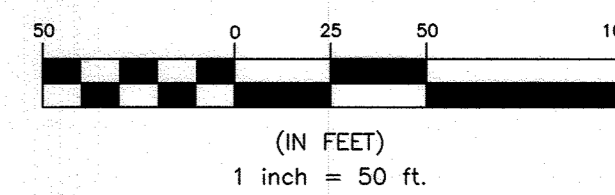
M-5 TO FP-4  
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1"=5' VERT.



C22 TO FP-3  
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1"=5' VERT.



I-18 to M-5  
SCALE: 1"=50' HORIZ.  
1"=5' VERT.



PLEASE NOTE THAT THIS REVISION SUPERSEDES AND REPLACES THE NOVEMBER 2020 BEI PLAN SHEET.

| NO. | DATE | REVISION                                     |
|-----|------|--|
| 1   | 4/23 | REVISED STORM DRAIN PROFILE FROM C27 TO L25. |

**BENCHMARK**  
ENGINEERS & LAND SURVEYORS & PLANNERS  
**ENGINEERING, INC.**

3300 NORTH RIDGE ROAD & SUITE 140 • ELICOTT CITY, MARYLAND 21043  
(P) 410-465-6105 (F) 410-465-6644  
WWW.BEI-CIVILENGINEERING.COM

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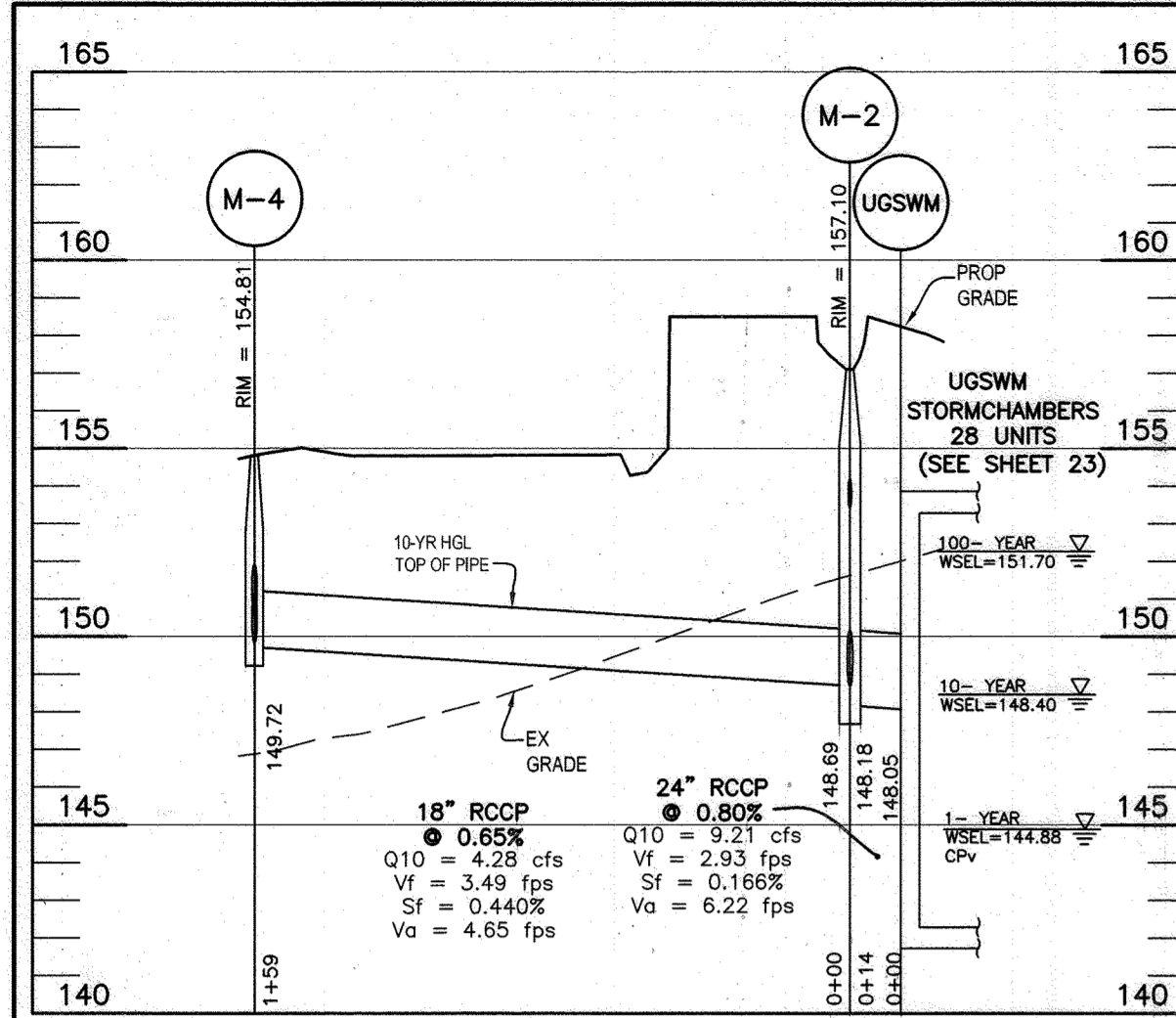
APPROVED: DEPARTMENT OF PLANNING AND ZONING

*[Signature]* 7/11/23  
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

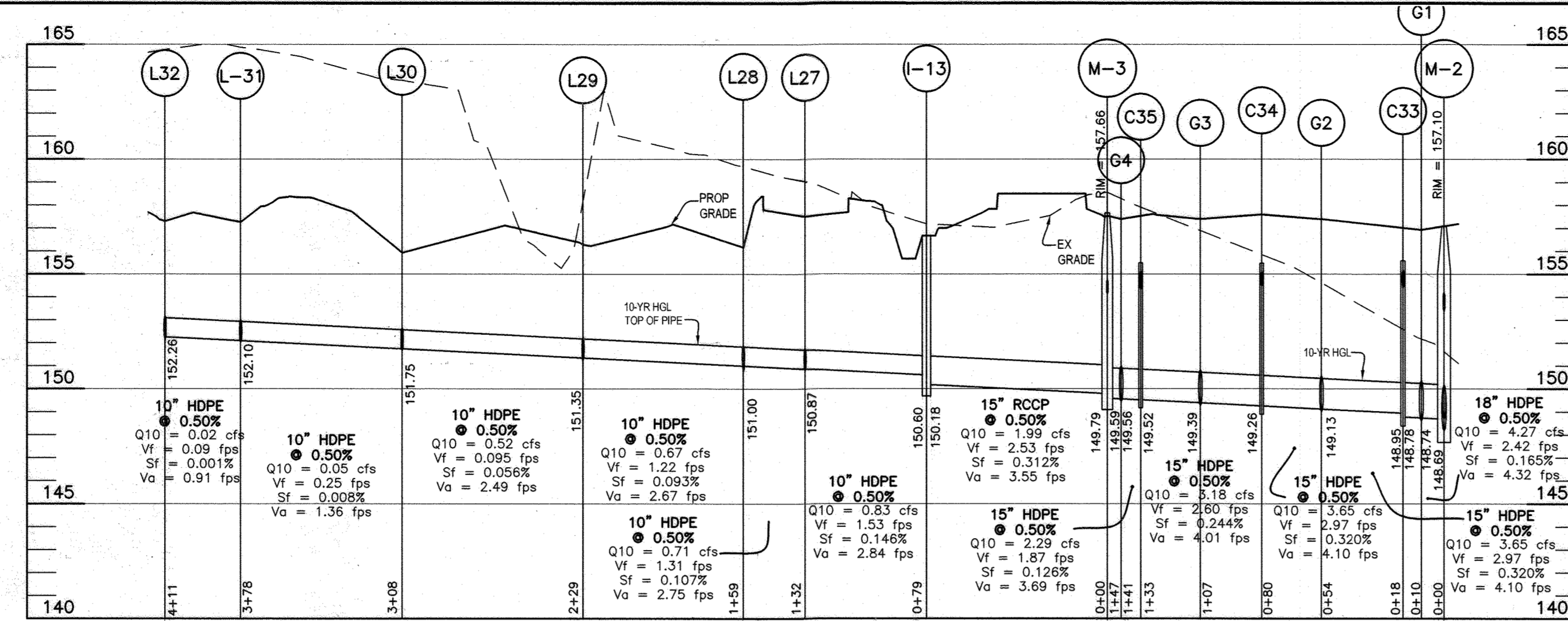
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CHIEF, DIVISION OF LAND DEVELOPMENT DATE

*[Signature]* 7/15/23  
DIRECTOR DATE

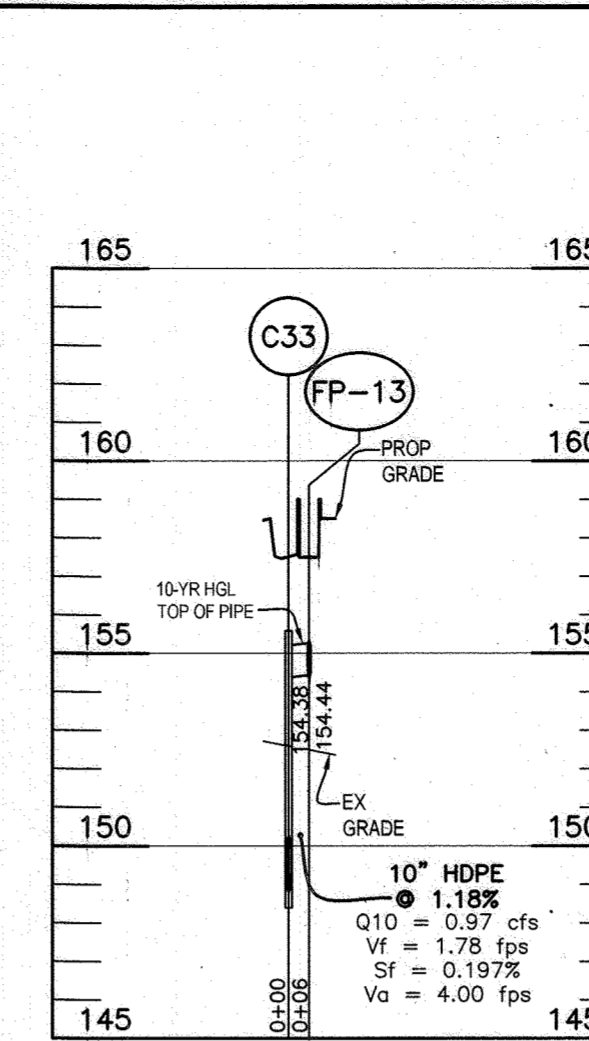
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|--|--|
| OWNER/DEVELOPER:<br>BINDER ROCK LLC<br>C/O H & H ROCK COMPANIES<br>6800 DEERPATH ROAD<br>SUITE 100<br>ELKRIDGE, MARYLAND 21075<br>410.579.2442 | PROJECT: DORSEY CENTER APARTMENTS<br>210 UNITS<br>PARCEL 'T' |
| LOCATION:<br>TAX MAP 37<br>PARCEL 375 - GRID 24<br>1st ELECTION DISTRICT<br>HOWARD COUNTY, MARYLAND  | TITLE:<br>STORM DRAIN PROFILES                               |
| DATE: APRIL 2023   | PROJECT NO. 1959   |
| Design: AAM  | Draft: AAM   |
| Check: CAM   | SCALE: AS SHOWN  |
|  | DRAWING 12 OF 49   |



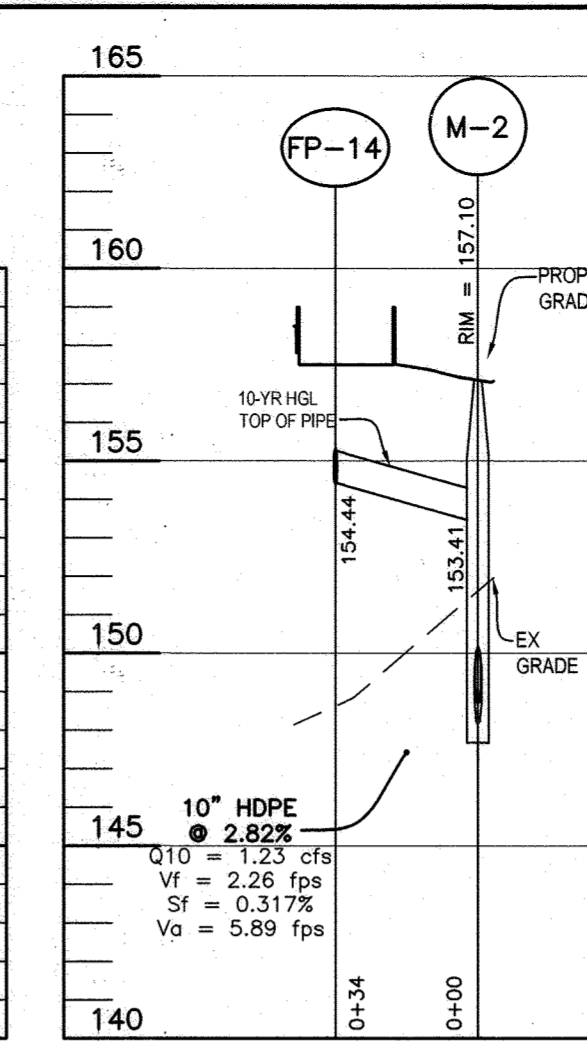
UGSWM to M-4  
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1"=5' VERT.



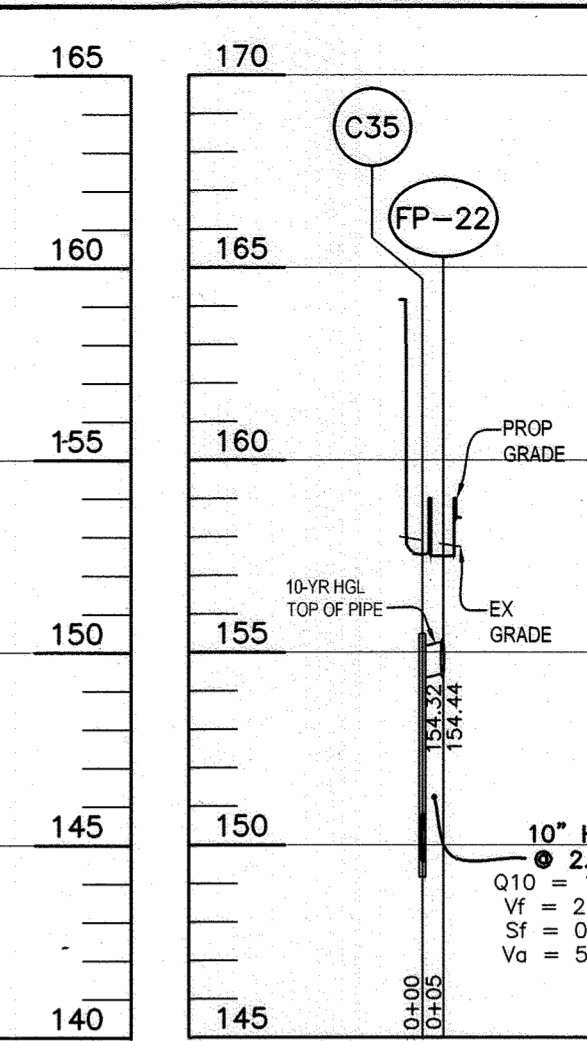
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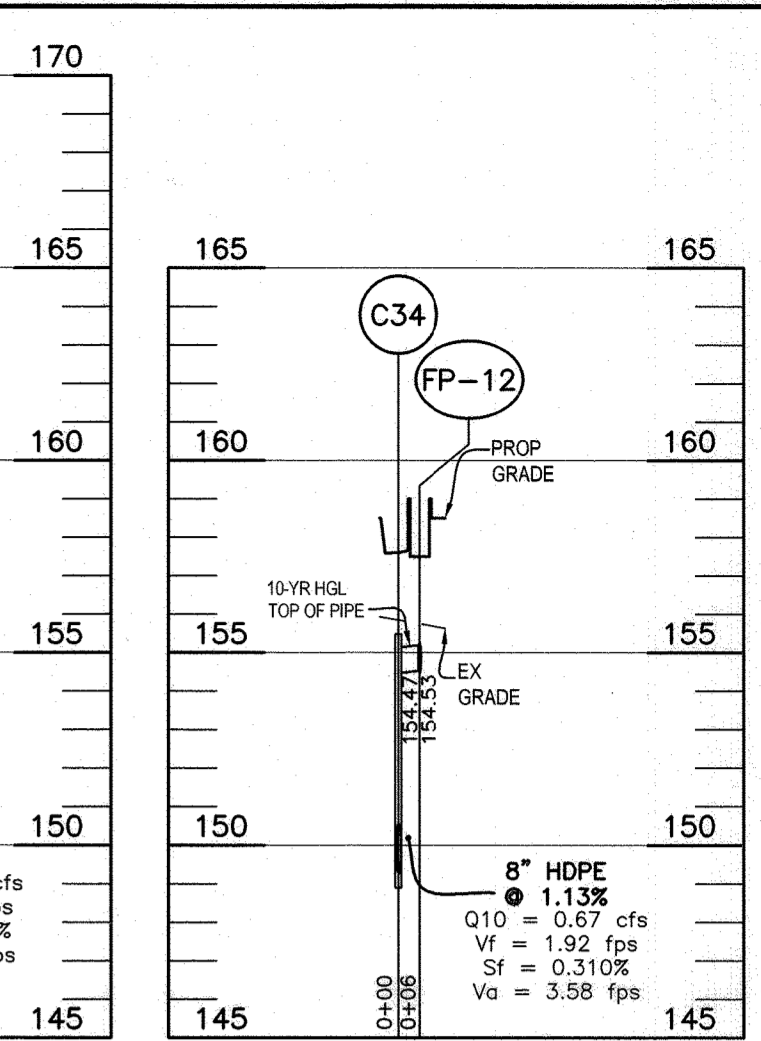
C33 TO FP-13  
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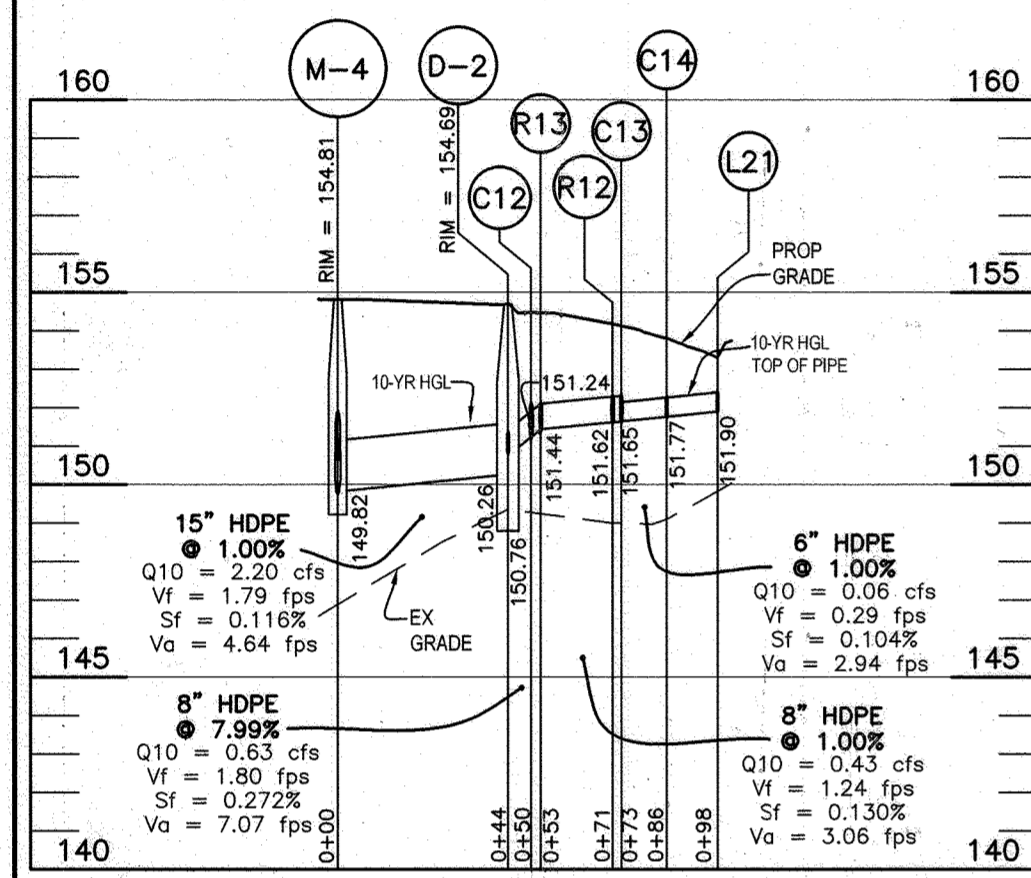
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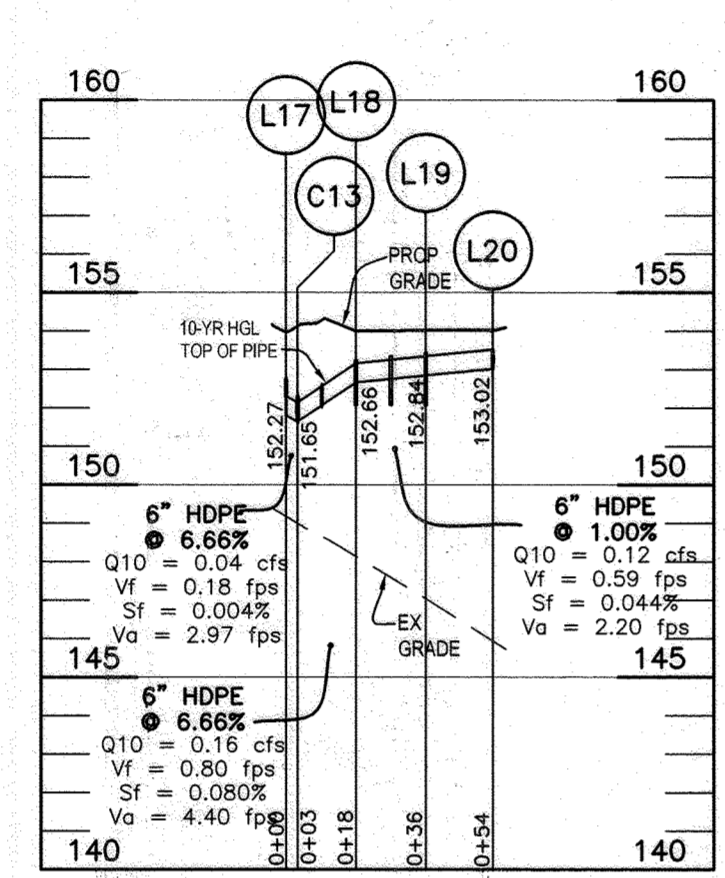
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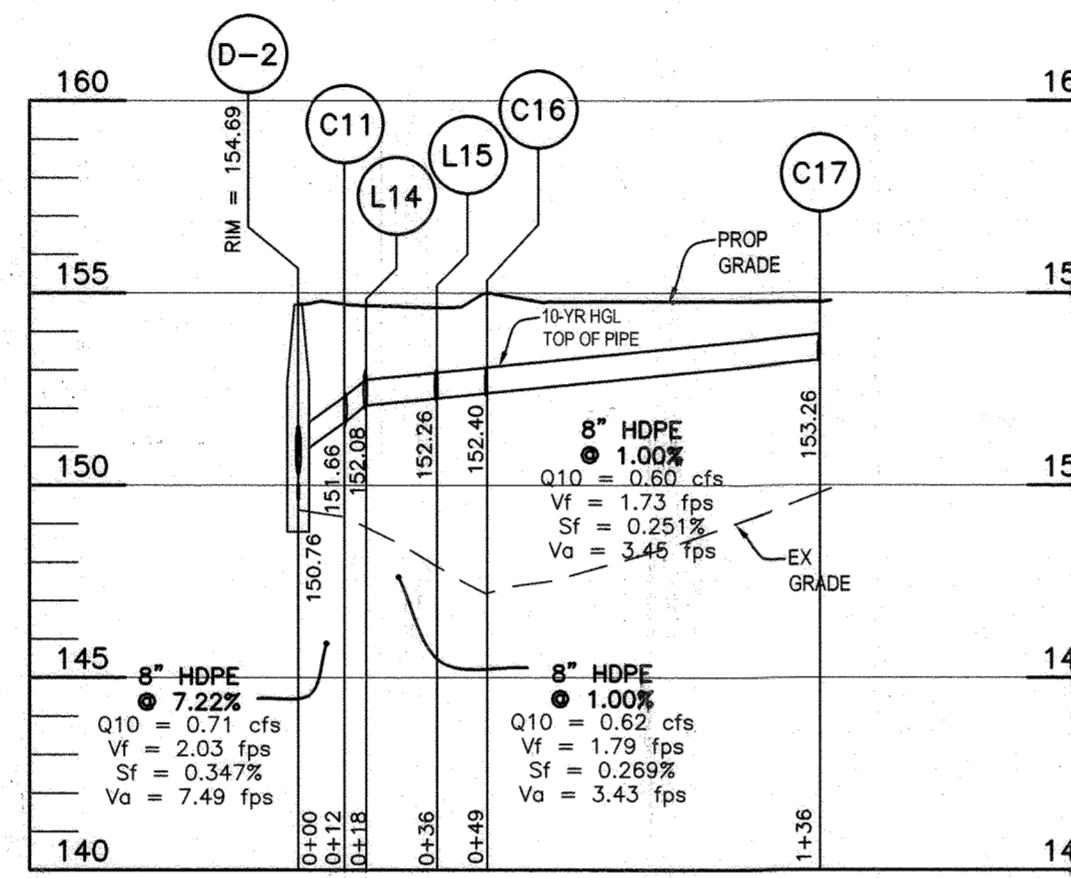
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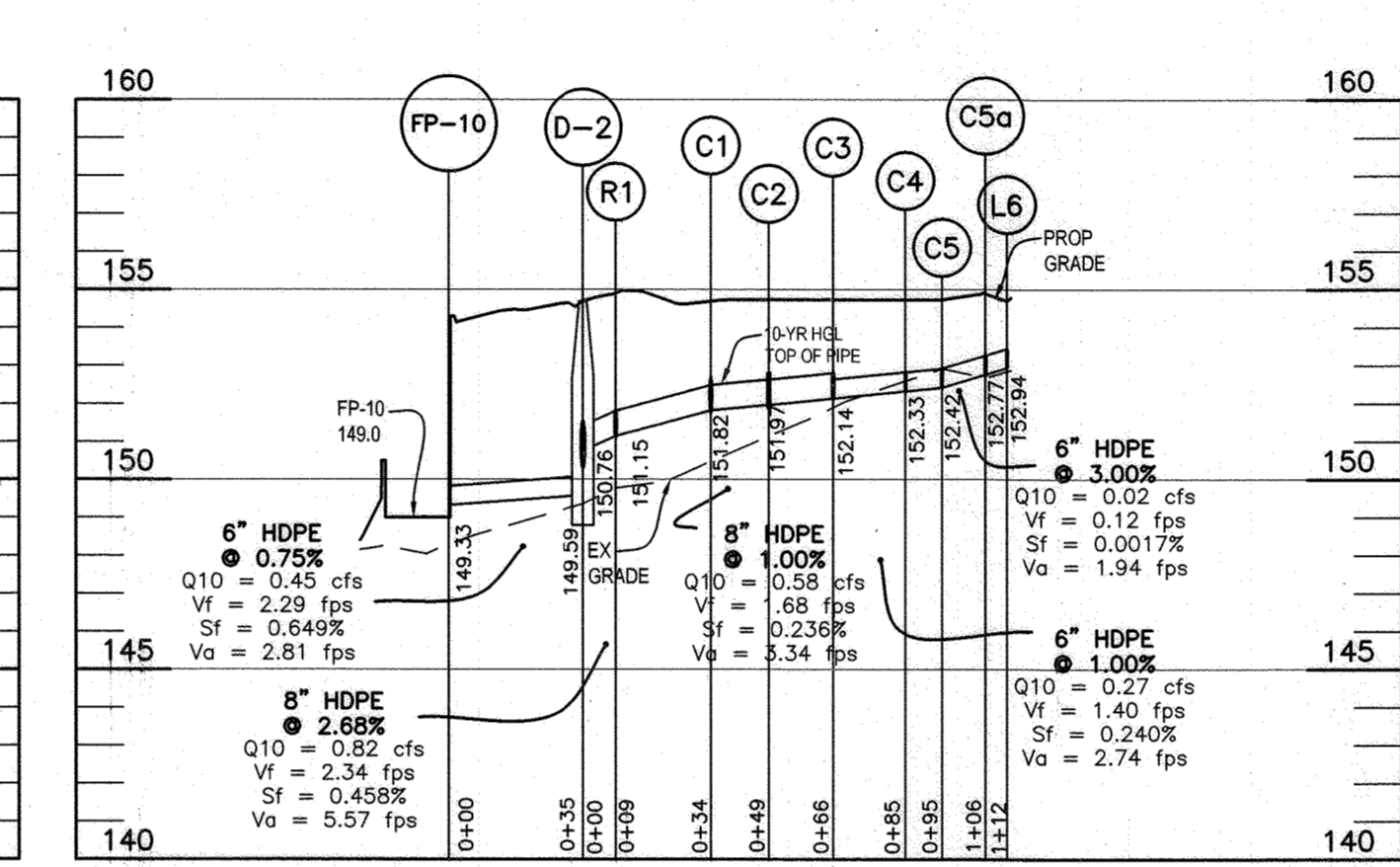
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1"=5' VERT.



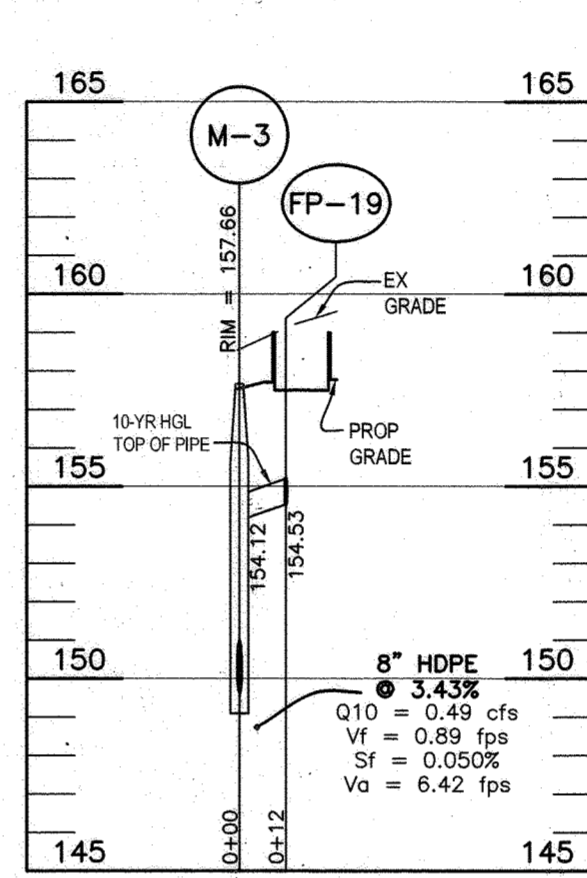
L17 TO L20  
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1"=5' VERT.



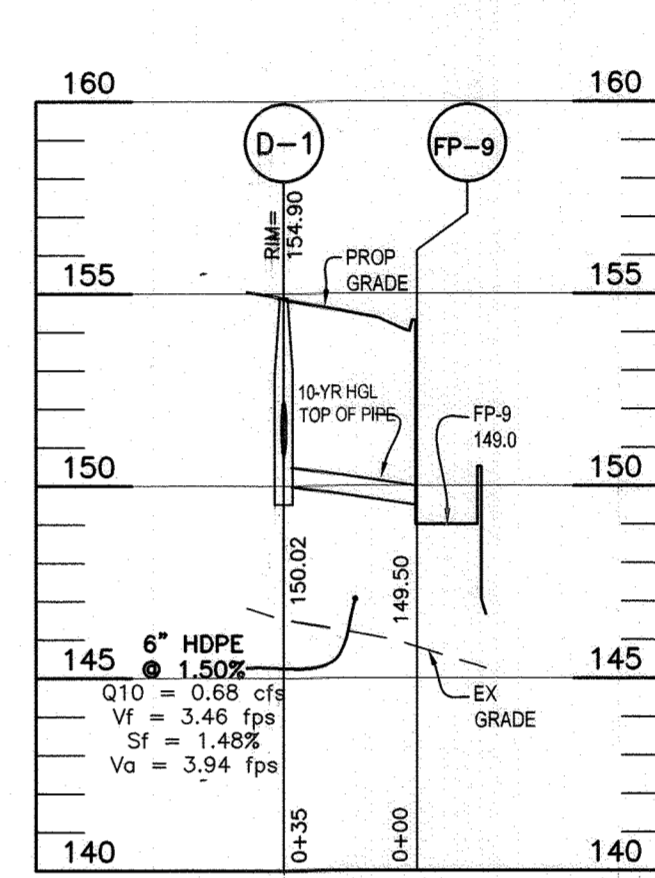
D-2 TO C17  
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1"=5' VERT.



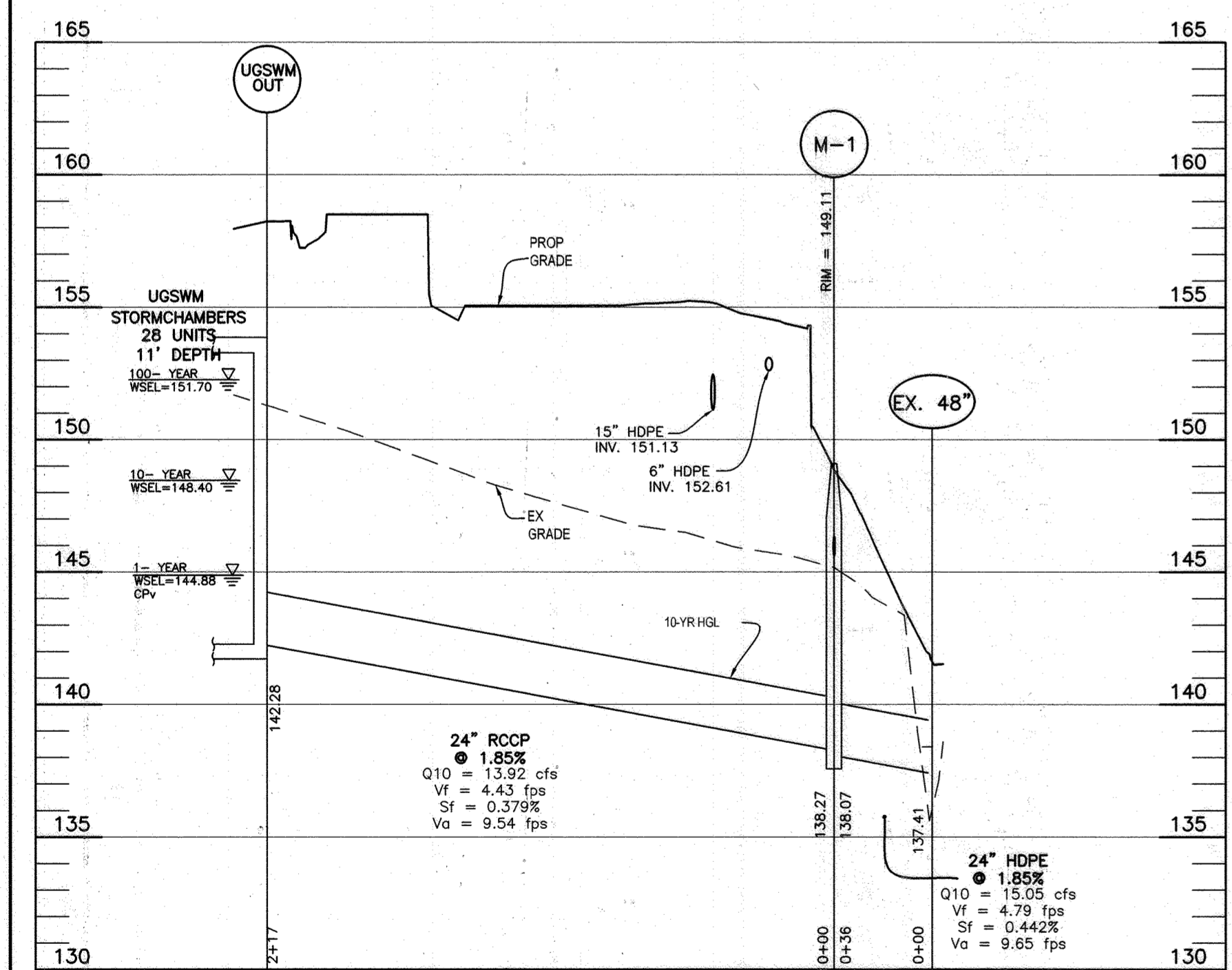
FP-10, D-2 TO L6  
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1"=5' VERT.



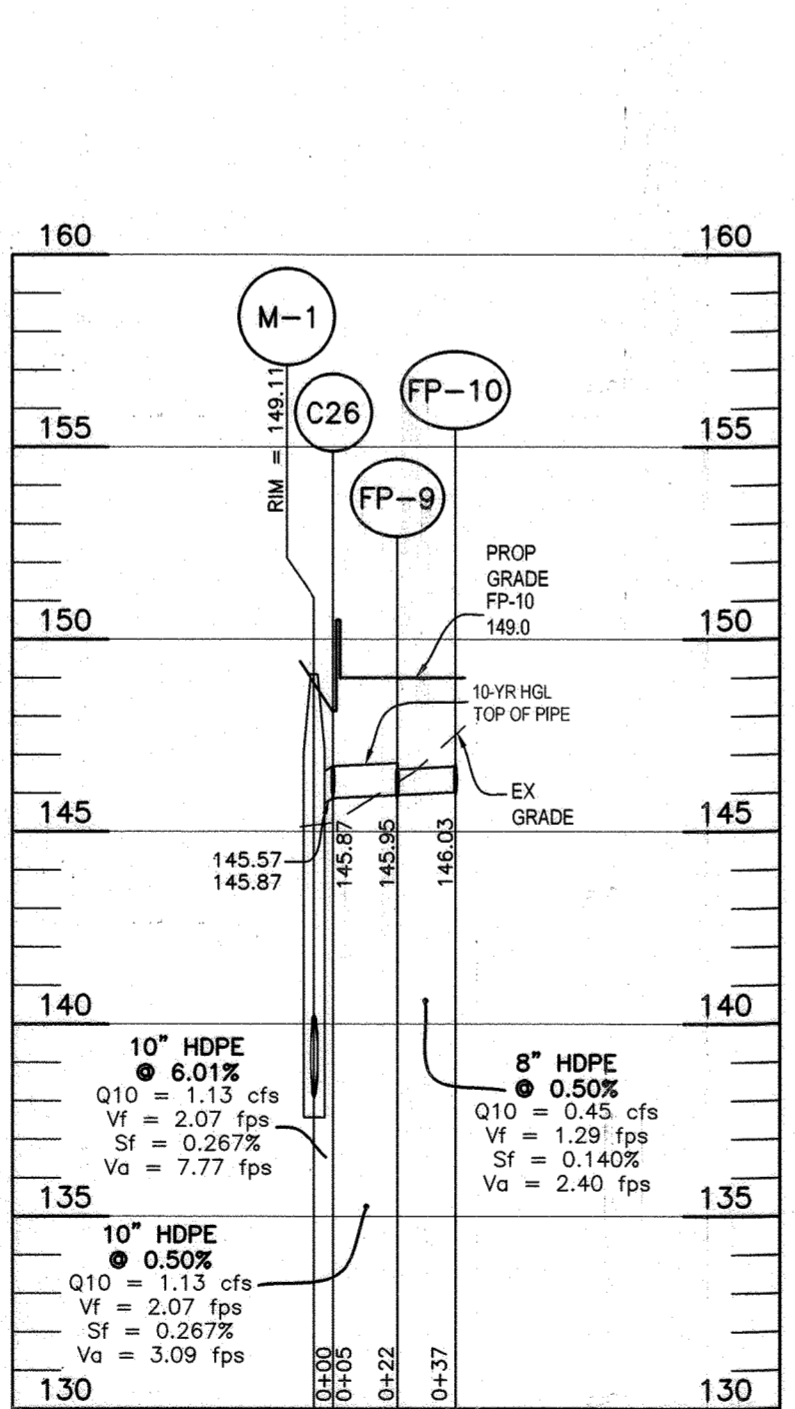
M-3 TO FP-19  
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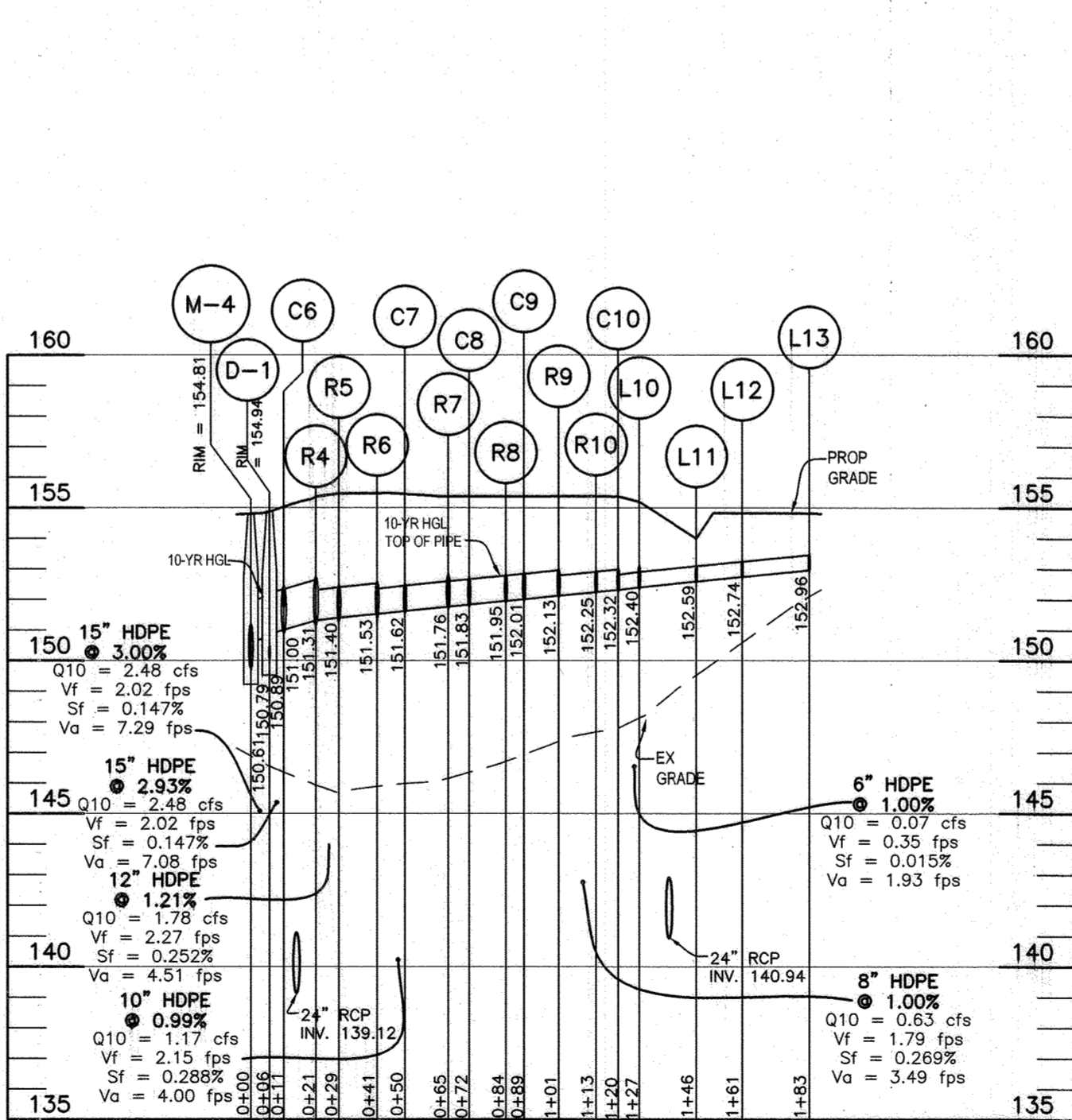
D-1 TO FP-9  
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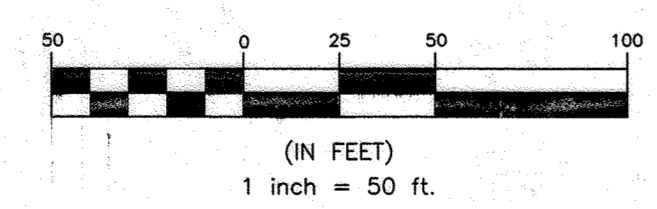
EX 48 IN TO UGSWM  
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1"=5' VERT.



M-1 TO FP-10  
SCALE: 1"=50' HORIZ.  
1"=5' VERT.



M-4 TO L13  
SCALE: 1"=50' HORIZ.  
1"=5' VERT.



PLEASE NOTE THAT THIS REVISION SUPERSEDES AND REPLACES THE NOVEMBER 2020 BEI PLAN SHEET.

| NO. | DATE | REVISION                                    |
|-----|------|---|
| 1   | 4/23 | REVISED STORM DRAIN PROFILE FROM L30 TO L32 |

**BENCHMARK ENGINEERS, INC.**  
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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. 28376. Expiration Date: 1-1-25.

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APPROVED: DEPARTMENT OF PLANNING AND ZONING  
*[Signature]*  
CHIEF, DEVELOPMENT ENGINEERING DIVISION  
DATE: 7/11/23

*[Signature]*  
CHIEF, DIVISION OF LAND DEVELOPMENT  
DATE: 7/13/23

*[Signature]*  
DIRECTOR  
DATE: 7/13/23

|  |  |
|--|--|
| OWNER/DEVELOPER:<br>BINDER ROCK LLC<br>C/O H & H ROCK COMPANIES<br>6800 DERRYPATH ROAD<br>SUITE 100<br>ELK RIDGE, MARYLAND 21075<br>410.579.2442 | PROJECT: DORSEY CENTER APARTMENTS<br>210 UNITS<br>PARCEL 'T' |
| LOCATION:<br>TAX MAP 37<br>PARCEL 375 - GRID 24<br>1st ELECTION DISTRICT<br>HOWARD COUNTY, MARYLAND  | TITLE:<br>STORM DRAIN PROFILES                               |
| DATE: APRIL 2023   | PROJECT NO. 1959   |
| SCALE: AS SHOWN  | DRAWING 13 OF 49   |

| STORM DRAIN STRUCTURE TABLE |          |                           |  |                           |           |               |         |                           |
|-----------------------------|----------|---------------------------|--|---------------------------|-----------|---------------|---------|---------------------------|
| NUMBER                      | TYPE     | LOCATION                  | INVERT IN                                | INVERT OUT                | TOP ELEV. | STD. DETAIL   | OWNER   | REMARKS                   |
| C1                          | Cleanout | 553049.1065, 138173.1654  | 151.82(6")<br>151.82(6")                 | 151.82(6")                | --        |               | PRIVATE |                           |
| C2                          | Cleanout | 553059.9486, 1381723.3476 | 151.97(6")<br>151.97(6")                 | 151.97(6")                | --        |               | PRIVATE |                           |
| C3                          | Cleanout | 553071.8755, 1381711.3330 | 152.14(6")<br>152.14(6")                 | 152.14(6")                | --        |               | PRIVATE |                           |
| C4                          | Cleanout | 553085.3746, 1381697.7861 | 152.33(6")<br>152.33(6")                 | 152.33(6")                | --        |               | PRIVATE |                           |
| C5                          | Cleanout | 553092.0662, 1381690.9157 | 152.42(6")<br>152.42(6")                 | 152.42(6")                | --        |               | PRIVATE |                           |
| C5c                         | Cleanout | 553091.9710, 1381679.4715 | 152.77(6")                               | 152.77(6")                | --        |               | PRIVATE |                           |
| C6                          | Cleanout | 552985.9371, 1381708.4916 | 151.00(16")<br>151.72(6")                | 151.00(16")               | --        |               | PRIVATE |                           |
| C7                          | Cleanout | 552992.8163, 1381676.4779 | 151.82(6")<br>151.82(10")                | 151.82(10")               | --        |               | PRIVATE |                           |
| C8                          | Cleanout | 553006.3975, 1381660.4409 | 151.83(10")<br>151.83(6")                | 151.83(10")               | --        |               | PRIVATE |                           |
| C9                          | Cleanout | 553019.0413, 1381647.7126 | 152.01(10")<br>152.01(6")                | 152.01(10")               | --        |               | PRIVATE |                           |
| C10                         | Cleanout | 553040.6951, 1381625.6707 | 152.32(6")<br>152.40(6")                 | 152.32(6")                | --        |               | PRIVATE |                           |
| C11                         | Cleanout | 553026.0672, 138173.2329  | 151.66(6")                               | 151.66(6")                | --        |               | PRIVATE |                           |
| C12                         | Cleanout | 553018.3781, 1381753.3513 | 151.24(8")<br>151.29(6")                 | 151.24(8")                | --        |               | PRIVATE |                           |
| C13                         | Cleanout | 553001.5936, 1381769.7173 | 151.65(6")<br>151.65(6")<br>151.65(6")   | 151.65(6")                | --        |               | PRIVATE |                           |
| C14                         | Cleanout | 552993.3423, 1381778.1708 | 151.77(6")                               | 151.77(6")                | --        |               | PRIVATE |                           |
| C16                         | Cleanout | 553000.1304, 1381711.3432 | 152.40(8")                               | 152.40(8")                | --        |               | PRIVATE |                           |
| C17                         | Cleanout | 553061.2172, 1381649.9510 |  | 153.26(8")                | --        |               | PRIVATE |                           |
| C18                         | Cleanout | 553058.6840, 1381472.0790 | 153.46(6")<br>153.46(6")                 | 152.92(6")                | --        |               | PRIVATE |                           |
| C20                         | Cleanout | 553109.7153, 1381363.3033 | 153.90(6")                               | 153.90(6")                | --        |               | PRIVATE |                           |
| C21                         | Cleanout | 553176.9134, 1381416.7427 | 153.90(6")<br>152.96(6")                 | 153.90(6")                | --        |               | PRIVATE |                           |
| C21a                        | Cleanout | 553116.0491, 1381356.9986 | 153.81(6")                               | 153.81(6")                | --        |               | PRIVATE |                           |
| C22                         | Cleanout | 553070.0033, 1381460.3178 | 153.41(8")<br>153.41(8")                 | 153.30(10")               | --        |               | PRIVATE |                           |
| C23                         | Cleanout | 552939.6188, 1381575.6271 | 151.85(6")                               | 151.85(6")                | --        |               | PRIVATE |                           |
| C24                         | Cleanout | 552966.9253, 1381500.5145 | 148.56(15")<br>151.81(6")                | 148.56(15")               | --        |               | PRIVATE |                           |
| C25                         | Cleanout | 553191.6101, 1381508.6043 | 151.98(8")<br>152.79(16")<br>154.36(10") | 151.98(18")               | --        |               | PRIVATE |                           |
| C26                         | Cleanout | 552950.4384, 1381741.8880 | 145.87(10")                              | 145.87(10")               | --        |               | PRIVATE |                           |
| C27                         | Cleanout | 553231.2095, 1381468.9101 | 153.15(6")<br>153.15(6")                 | 153.15(6")                | --        |               | PRIVATE |                           |
| C28                         | Cleanout | 553210.5833, 1381527.2670 | 153.06(16")<br>154.39(10")               | 153.06(16")               | --        |               | PRIVATE |                           |
| C29                         | Cleanout | 553270.5003, 1381586.7328 | 153.90(16")<br>154.34(8")                | 153.90(16")               | --        |               | PRIVATE |                           |
| C30                         | Cleanout | 553290.0350, 1381597.4466 | 154.13(10")<br>154.33(10")               | 154.13(16")               | --        |               | PRIVATE |                           |
| C32                         | Cleanout | 553288.6447, 1381640.8300 | 160.96(6")                               | 160.96(6")                | --        |               | PRIVATE |                           |
| C33                         | Cleanout | 553113.5629, 1381614.9723 | 148.95(15")<br>154.38(10")               | 148.78(18")               | --        |               | PRIVATE |                           |
| C34                         | Cleanout | 553157.5654, 1381658.5223 | 149.26(15")<br>154.47(8")                | 149.26(15")               | --        |               | PRIVATE |                           |
| C35                         | Cleanout | 553195.1194, 1381695.6036 | 149.52(16")<br>154.32(10")               | 149.52(16")               | --        |               | PRIVATE |                           |
| D-1                         | 48" MH   | 552988.2974, 1381712.5221 | 150.89(16")                              | 150.02(6")<br>150.79(16") | 154.90    | Ho.Co. G-5.12 | PRIVATE |                           |
| D-2                         | 60" MH   | 553022.7777, 1381749.2445 | 150.76(8")<br>150.76(8")<br>150.76(8")   | 149.59(6")<br>150.26(16") | 154.69    | Ho.Co. G-5.13 | PRIVATE |                           |
| FP-1                        | HARCO    | 553174.0656, 1381419.5155 | 153.94(6")                               | 157.83                    |           |               | PRIVATE | HARCO 12" DOMED OVERFLOW  |
| FP-2                        | HARCO    | 553112.6774, 1381366.2487 | 153.94(6")                               | 157.83                    |           |               | PRIVATE | HARCO 12" DOMED OVERFLOW  |
| FP-3                        | HARCO    | 553085.2493, 1381439.2039 | 153.67(8")                               | 157.64                    |           |               | PRIVATE | HARCO 12" DOMED OVERFLOW  |
| FP-4                        | HARCO    | 553089.6256, 1381456.7820 | 153.67(8")                               | 157.64                    |           |               | PRIVATE | HARCO 12" DOMED OVERFLOW  |
| FP-5                        | HARCO    | 553063.2768, 1381483.2575 | 153.67(6")                               | 157.56                    |           |               | PRIVATE | HARCO 12" DOMED OVERFLOW  |
| FP-6                        | HARCO    | 553054.3272, 1381478.8145 | 153.61(6")                               | 157.50                    |           |               | PRIVATE | HARCO 12" DOMED OVERFLOW  |
| FP-7                        | HARCO    | 552976.2933, 1381513.2261 | 152.61(6")                               | 156.50                    |           |               | PRIVATE | HARCO 12" DOMED OVERFLOW  |
| FP-9                        | HARCO    | 552962.3120, 1381753.7133 | 145.95(8")                               | 145.95(10")               | 150.00    |               | PRIVATE | HARCO 12" DOMED OVERFLOW  |
| FP-10                       | HARCO    | 552973.0107, 1381764.3692 | 146.03(8")                               | 150.00                    |           |               | PRIVATE | HARCO 12" DOMED OVERFLOW  |
| FP-12                       | HARCO    | 553153.6479, 1381662.3660 | 154.53(8")                               | 158.50                    |           |               | PRIVATE | HARCO 12" DOMED OVERFLOW  |
| FP-13                       | HARCO    | 553109.9191, 1381618.8377 | 154.44(10")                              | 158.50                    |           |               | PRIVATE | HARCO 24" DOMED OVERFLOW  |
| FP-14                       | HARCO    | 553076.8357, 1381578.5161 | 154.44(10")                              | 158.50                    |           |               | PRIVATE | HARCO 24" DOMED OVERFLOW  |
| FP-15                       | HARCO    | 553190.4700, 1381501.2794 | 154.44(10")                              | 158.50                    |           |               | PRIVATE | HARCO 24" DOMED OVERFLOW  |
| FP-16                       | HARCO    | 553214.2586, 1381523.5558 | 154.44(10")                              | 158.50                    |           |               | PRIVATE | HARCO 24" DOMED OVERFLOW  |
| FP-17                       | HARCO    | 553274.2114, 1381582.9434 | 154.53(8")                               | 158.50                    |           |               | PRIVATE | HARCO 12" DOMED OVERFLOW  |
| FP-18                       | HARCO    | 553306.4225, 1381622.4906 | 154.44(10")                              | 158.50                    |           |               | PRIVATE | HARCO 24" DOMED OVERFLOW  |
| FP-19                       | HARCO    | 553214.2331, 1381714.2235 | 154.53(8")                               | 158.50                    |           |               | PRIVATE | HARCO 24" DOMED OVERFLOW  |
| FP-20                       | N-24     | 553120.9909, 1381324.4034 | 149.03(24")                              | 156.00                    |           |               | PRIVATE | NYLOPLAST 24" DOMED GRATE |
| FP-21                       | N-24     | 555843.3401, 1381607.3553 | (60" CROWN)                              | 151.25                    |           |               | PRIVATE | NYLOPLAST 24" DOMED GRATE |
| FP-22                       | HARCO    | 553191.4523, 1381699.3093 | 154.44(10")                              | 158.50                    |           |               | PRIVATE | HARCO 24" DOMED OVERFLOW  |
| FP-23                       | HARCO    | 553285.7057, 1381601.8579 | 154.44(10")                              | 158.50                    |           |               | PRIVATE | HARCO 24" DOMED OVERFLOW  |
| G1                          | N-10     | 553107.8984, 1381609.3879 | 148.74(18")                              | 156.94                    |           |               | PRIVATE | NYLOPLAST 10" DOMED GRATE |
| G2                          | N-10     | 553139.0181, 1381640.1658 | 149.13(16")                              | 157.40                    |           |               | PRIVATE | NYLOPLAST 10" DOMED GRATE |
| G3                          | N-10     | 553176.6178, 1381677.3349 | 149.39(16")                              | 157.40                    |           |               | PRIVATE | NYLOPLAST 10" DOMED GRATE |
| G4                          | N-10     | 553201.2074, 1381701.6178 | 149.56(16")                              | 157.41                    |           |               | PRIVATE | NYLOPLAST 10" DOMED GRATE |
| G5                          | N-10     | 553199.9663, 1381516.8237 | 152.91(16")                              | 157.29                    |           |               | PRIVATE | NYLOPLAST 10" DOMED GRATE |
| G6                          | N-10     | 553233.9299, 1381550.4378 | 153.39(16")                              | 157.41                    |           |               | PRIVATE | NYLOPLAST 10" DOMED GRATE |
| G7                          | N-10     | 553266.2010, 1381582.4658 | 153.84(16")                              | 157.42                    |           |               | PRIVATE | NYLOPLAST 10" DOMED GRATE |
| G8                          | N-10     | 553304.8049, 1381612.1036 | 154.33(10")                              | 157.30                    |           |               | PRIVATE | NYLOPLAST 10" DOMED GRATE |

APPROVED: DEPARTMENT OF PLANNING AND ZONING

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DATE

7/13/23  
DATE

*[Signature]* 7/13/23  
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DIRECTOR

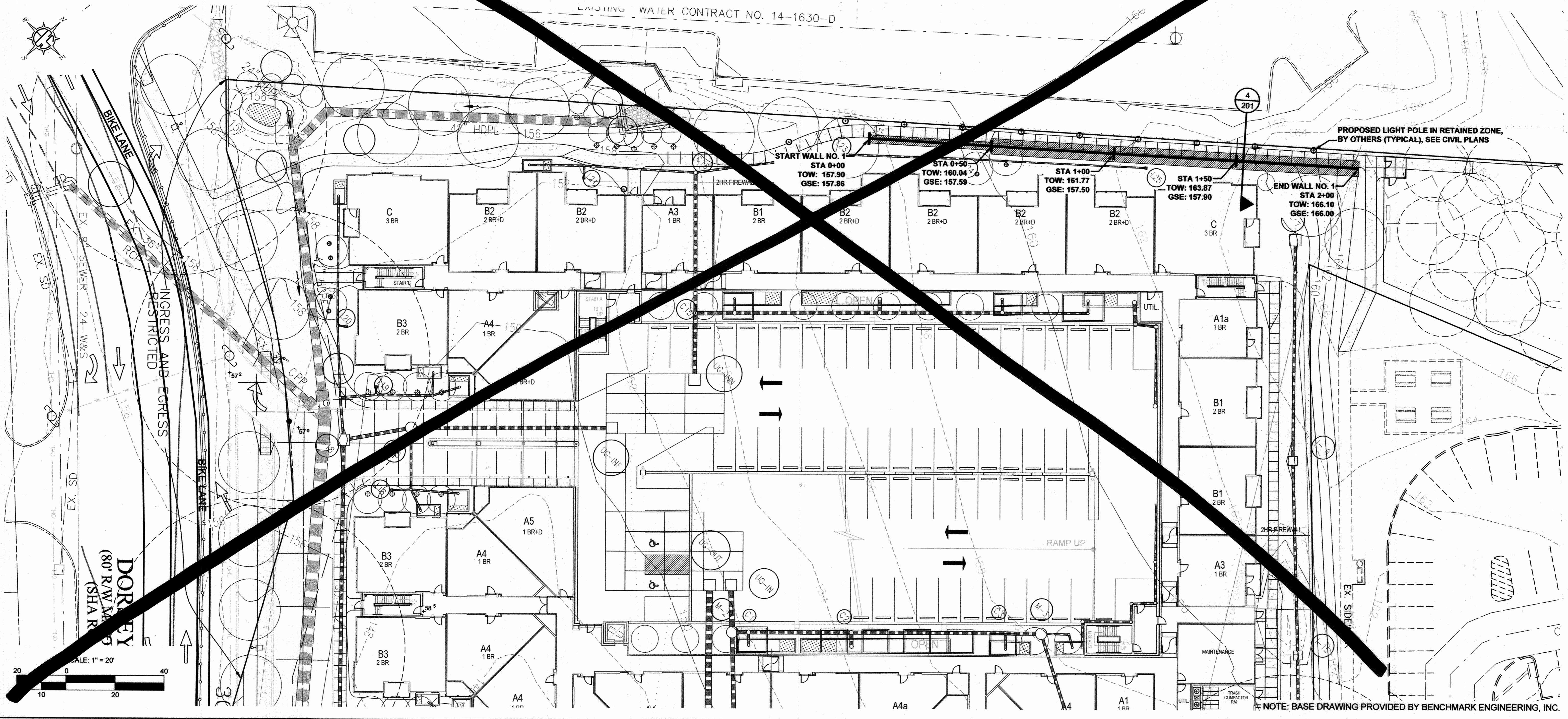
| STORM DRAIN STRUCTURE TABLE |            |                           |   |             |           |               |         |   |
|-----------------------------|------------|---------------------------|---|-------------|-----------|---------------|---------|---|
| NUMBER                      | TYPE       | LOCATION                  | INVERT IN   | INVERT OUT  | TOP ELEV. | STD. DETAIL   | OWNER   | REMARKS   |
| I-13                        | D          | 553153.1632, 1381764.8508 | 150.60(10")   | 150.18(15") | 156.67    | Ho.Co. D-4.11 | PRIVATE |   |
| I-18                        | S          | 553042.3636, 1381436.0684 |   | 152.25(15") | 155.89    | Ho.Co. D-4.24 | PRIVATE |   |
| I-19                        | MWS2S      | 552912.4571, 1381553.0087 |   | 149.38(15") | 153.45    |               | PRIVATE | MWS2S-CUSTOM PRE-STORAGE STRUCTURE WITH 5" INLET GRATE. SEE NOTE 4 BELOW. |
| L1                          | N-10       | 553050.8429, 1381735.8820 |   | 152.61(6")  | 154.20    |               | PRIVATE | NYLOPLAST 10" DOMED GRATE   |
| L2                          | N-10       | 553062.4537, 1381725.7811 | 152.00(6")  | 152.00(6")  | 154.20    |               | PRIVATE | NYLOPLAST 10" DOMED GRATE   |
| L3                          | N-10       | 553074.2248, 1381713.8069 |   | 152.50(6")  | 154.20    |               | PRIVATE | NYLOPLAST 10" DOMED GRATE   |
| L4                          | N-10       | 553087.5417, 1381699.9846 |   | 152.50(6")  | 154.20    |               | PRIVATE | NYLOPLAST 10" DOMED GRATE   |
| L5                          | N-10       | 553095.2918, 1381692.4004 | 152.46(6")  | 152.46(6")  | 154.20    |               | PRIVATE | NYLOPLAST 10" DOMED GRATE   |
| L6                          | N-10       | 553095.9057, 1381675.3296 |   | 152.94(6")  | 154.50    |               | PRIVATE | NYLOPLAST 10" DOMED GRATE   |
| L7                          | N-10       | 552989.4802, 1381673.2243 |   | 153.00(6")  | 155.20    |               | PRIVATE | NYLOPLAST 10" DOMED GRATE   |
| L8                          | N-10       | 553004.3817, 1381658.2578 |   | 153.00(6")  | 155.20    |               | PRIVATE | NYLOPLAST 10" DOMED GRATE   |
| L9                          | N-10       | 553016.9229, 1381645.7182 |   | 153.00(6")  | 155.20    |               | PRIVATE | NYLOPLAST 10" DOMED GRATE   |
| L10                         | N-10       | 553046.6509, 1381629.1557 | 152.40(6")  | 152.40(6")  | 154.90    |               | PRIVATE | NYLOPLAST 10" DOMED GRATE   |
| L11                         | N-10       | 553060.0249, 1381642.4532 | 152.59(6")  | 152.59(6")  | 154.50    |               | PRIVATE | NYLOPLAST 10" DOMED GRATE   |
| L12                         | N-10       | 553070.6527, 1381653.0757 | 152.74(6")  | 152.74(6")  | 154.50    |               | PRIVATE | NYLOPLAST 10" DOMED GRATE   |
| L13                         | N-10       | 553086.2684, 1381668.5727 |   | 152.96(6")  | 154.50    |               | PRIVATE | NYLOPLAST 10" DOMED GRATE   |
| L14                         | N-10       | 553022.3630, 1381733.5913 | 152.08(6")  | 152.08(6")  | 154.40    |               | PRIVATE | NYLOPLAST 10" DOMED GRATE   |
| L15                         | N-10       | 553009.3853, 1381720.5065 | 152.26(6")  | 152.26(6")  | 154.40    |               | PRIVATE | NYLOPLAST 10" DOMED GRATE   |
| L16                         | N-10       | 553020.4748, 1381755.3498 |   | 151.43(6")  | 154.40    |               | PRIVATE | NYLOPLAST 10" DOMED GRATE   |
| L17                         | N-10       | 553003.7480, 1381771.8309 |   | 152.27(6")  | 153.90    |               | PRIVATE | NYLOPLAST 10" DOMED GRATE   |
| L18                         | N-10       | 552989.7675, 1381760.1235 | 152.66(6")  | 152.66(6")  | 154.10    |               | PRIVATE | NYLOPLAST 10" DOMED GRATE   |
| L19                         | N-10       | 552976.8024, 1381747.3308 | 152.84(6")  | 152.84(6")  | 154.10    |               | PRIVATE | NYLOPLAST 10" DOMED GRATE   |
| L20                         | N-10       | 552964.3667, 1381735.1006 |   | 153.02(6")  | 154.10    |               | PRIVATE | NYLOPLAST 10" DOMED GRATE   |
| L21                         | N-10       | 553002.1642, 1381788.0469 |   | 151.90(6")  | 153.10    |               | PRIVATE | NYLOPLAST 10" DOMED GRATE   |
| L22                         | N-10       | 552939.5714, 1381600.2193 |   | 152.21(6")  | 154.00    |               | PRIVATE | NYLOPLAST 10" DOMED GRATE   |
| L23                         | N-10       | 553329.6192, 1381567.4342 | 154.82(6")  | 154.82(6")  | 157.20    |               | PRIVATE | NYLOPLAST 10" DOMED GRATE   |
| L24                         | N-10       | 553354.5124, 1381592.2774 | 155.08(6")  | 155.08(6")  | 157.20    |               | PRIVATE | NYLOPLAST 10" DOMED GRATE   |
| L25                         | N-10       | 553376.4574, 1381614.0128 |   | 155.31(6")  | 157.20    |               | PRIVATE | NYLOPLAST 10" DOMED GRATE   |
| L26                         | N-10       | 553187.7177, 1381427.1235 | 153.75(6")  | 153.75(6")  | 157.20    |               | PRIVATE | NYLOPLAST 10" DOMED GRATE   |
| L27                         | N-10       | 553190.9729, 1381802.0223 | 150.87(10")   | 150.87(10") | 157.50    |               | PRIVATE | NYLOPLAST 10" DOMED GRATE   |
| L28                         | N-10       | 553210.1381, 1381820.8737 | 151.00(10")   | 151.00(10") | 156.19    |               | PRIVATE | NYLOPLAST 10" DOMED GRATE   |
| L29                         | N-10       | 553258.9206, 1381770.7254 | 151.35(10")   | 151.35(10") | 156.10    |               | PRIVATE | NYLOPLAST 10" DOMED GRATE   |
| L30                         | N-10       | 553313.0587, 1381712.9430 | 151.75(10")   | 151.75(10") | 155.93    |               | PRIVATE | NYLOPLAST 10" DOMED GRATE   |
| L31                         | N-10       | 553354.4731, 1381655.9609 | 152.10(10")   | 152.10(10") | 157.25    |               | PRIVATE | NYLOPLAST 10" DOMED GRATE   |
| L32                         | N-10       | 553378.9366, 1381632.9366 |   | 152.26(10") | 157.30    |               | PRIVATE | NYLOPLAST 10" DOMED GRATE   |
| M-1                         | 60" MH     | 552951.3986, 1381737.0491 | 138.27(24")<br>145.57(10")                              | 138.07(24") | 149.11    | Ho.Co. G-5.13 | PRIVATE |   |
| M-2                         | 60" MH     | 553100.8113, 1381602.4011 | 153.41(10")<br>148.89(10")<br>148.89(10")               | 148.18(24") | 157.10    | Ho.Co. G-5.13 | PRIVATE |   |
| M-3                         | 48" MH     | 553205.4986, 1381705.8571 | 154.12(6")<br>149.79(15")                               | 149.59(16") | 157.66    | Ho.Co. G-5.12 | PRIVATE |   |
| M-4                         | 48" MH     | 552991.5815, 1381717.6879 | 149.82(16")<br>150.61(16")                              | 149.72(18") | 154.81    | Ho.Co. G-5.12 | PRIVATE |   |
| M-5                         | 48" MH     | 553062.1240, 1381468.3400 | 147.74(15")<br>152.87(8")<br>152.70(10")<br>148.89(15") | 147.57(18") | 156.70    | Ho.Co. G-5.12 | PRIVATE |   |
| M-6                         | 48" MH     | 553038.0214, 1381444.3076 | 148.11(15")   | 147.91(15") | 156.05    | Ho.Co. G-5.12 | PRIVATE |   |
| R1                          | Roof Drain | 553031.0879, 1381751.6542 | 151.15(8")  | 151.15(8")  | --        |               | PRIVATE |   |
| R2                          | Roof Drain | 553064.4055, 1381727.7478 |   | 152.04(6")  | --        |               | PRIVATE |   |
| R3                          | Roof Drain | 553099.0727, 1381694.1246 |   | 152.50(6")  | --        |               | PRIVATE |   |
| R4                          | Roof Drain | 552980.8636, 1381699.2686 |   | 151.31(     |           |               |         |   |

**GENERAL NOTES**

- THE OWNERS ITA SHALL CONFIRM THE SOIL PROPERTIES AND SHEAR STRENGTH PARAMETERS ON THESE PLANS PRIOR TO THE START OF WALL CONSTRUCTION. WHEN SHEAR STRENGTH TESTS ARE DEEMED NECESSARY BY THE ITA, TRIAXIAL SHEAR TESTING SHALL BE PERFORMED.
- CONSTRUCTION OF THE RETAINING WALLS SHOWN ON THIS PLAN SHALL BE PERFORMED UNDER THE OBSERVATION OF THE OWNERS INDEPENDENT TESTING AGENCY (ITA).
- IF THE ELEVATION, LOCATION, SURCHARGE LOADING, OR GRADING SURROUNDING THE RETAINING WALL CHANGES FROM THAT SPECIFIED ON THESE PLANS, ECS SHALL BE NOTIFIED SO THAT MODIFICATIONS TO THE GEOTECHNICAL DESIGN CAN BE MADE, IF NECESSARY. NO MATERIAL SUBSTITUTIONS ARE PERMITTED.
- UTILITIES AT TOE OF AND UNDERNEATH RETAINING WALL SHALL BE INSTALLED PRIOR TO RETAINING WALL CONSTRUCTION.
- CONTRACTOR TO BENCH OR SHORE TEMPORARY EXCAVATION AS NECESSARY, IN COMPLIANCE WITH LOCAL CODE, TO FACILITATE WALL CONSTRUCTION.

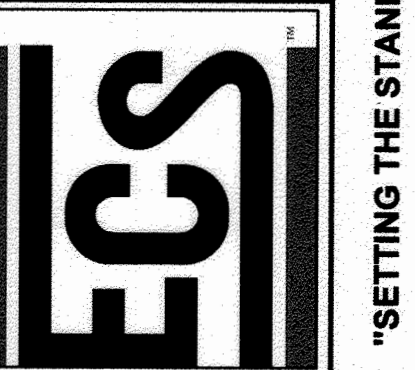
**RETAINING WALL DESIGN PARAMETERS**

|  |                  |
|--|------------------|
| <b>WALL SURCHARGE LOADS</b>            |                  |
| PEDESTRIAN LIVE LOAD (psf):            | 50               |
| <b>MINIMUM FACTORS OF SAFETY</b>       |                  |
| F.S. AGAINST SLIDING:                  | 1.5              |
| F.S. AGAINST OVERTURNING:              | 2.0              |
| F.S. AGAINST BEARING CAPACITY FAILURE: | 2.0              |
| F.S. AGAINST GLOBAL INSTABILITY:       | 1.5              |
| <b>SOIL WITHIN RETAINED ZONE</b>       |                  |
| DENSITY (PCF):                         | 115              |
| PHI (DEG):                             | 28°              |
| COHESION (PSF):                        | 0                |
| <b>FOUNDATION SOIL</b>                 |                  |
| DENSITY (PCF):                         | 115              |
| PHI (DEG):                             | 28°              |
| COHESION (PSF):                        | 50               |
| ALLOWABLE BEARING PRESSURE (PSF):      | SEE WALL PROFILE |



PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM ONLY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.  
 LICENSE NO. 8887, EXPIRATION DATE: 06/30/2021

ECS INC./ATLANTIC, LLC  
 1348 CHAMBERLAIN ROAD, SUITE A  
 HANOVER, MARYLAND 21075  
 (410) 888-4360 (PHONE)  
 (410) 888-4324 (FAX)



**DORSEY CENTER APARTMENTS**  
 CAST-IN-PLACE CONCRETE RETAINING WALL  
 ELK RIDGE, MARYLAND

**PLAN AND PARAMETERS**

|                        |                 |
|------------------------|-----------------|
| ECS REVISIONS          |                 |
| DESIGNER<br>MEC        | DRAFTING<br>DFA |
| SCALE<br>AS SHOWN      |                 |
| PROJECT NO.<br>02-9184 |                 |
| SHEET<br>101           |                 |
| DATE<br>11-10-2020     |                 |

APPROVED: DEPARTMENT OF PLANNING AND ZONING  
 [Signature] 12.7.20 DATE  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION  
 [Signature] 12/14/20 DATE  
 CHIEF, DIVISION OF LAND DEVELOPMENT  
 [Signature] 12/21/20 DATE  
 DIRECTOR

NOTE: THIS PLAN IS FOR RETAINING WALL CONSTRUCTION ONLY, AND SHOULD NOT BE RELIED UPON FOR BUILDING AND GARAGE INFORMATION.

OWNER/DEVELOPER:  
 BINDER ROCK LLC  
 C/O H & H ROCK COMPANIES  
 8800 DEERPATH ROAD  
 SUITE 100  
 ELK RIDGE, MARYLAND 21075  
 410.579.2442  
 DRAWING 15 OF 49  
 SDP-20-033

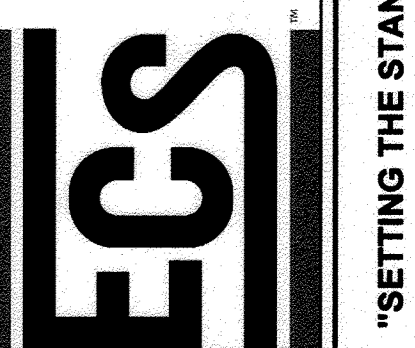






PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.  
 LICENSE NO. 9887 EXPIRATION DATE: 08/20/2021

ECS MID-ATLANTIC, LLC  
 1440 HANCOCK SQUARE A  
 HANCOCK, MARYLAND 21076  
 (410) 884-4300 (PHONE)  
 (410) 884-4324 (FAX)



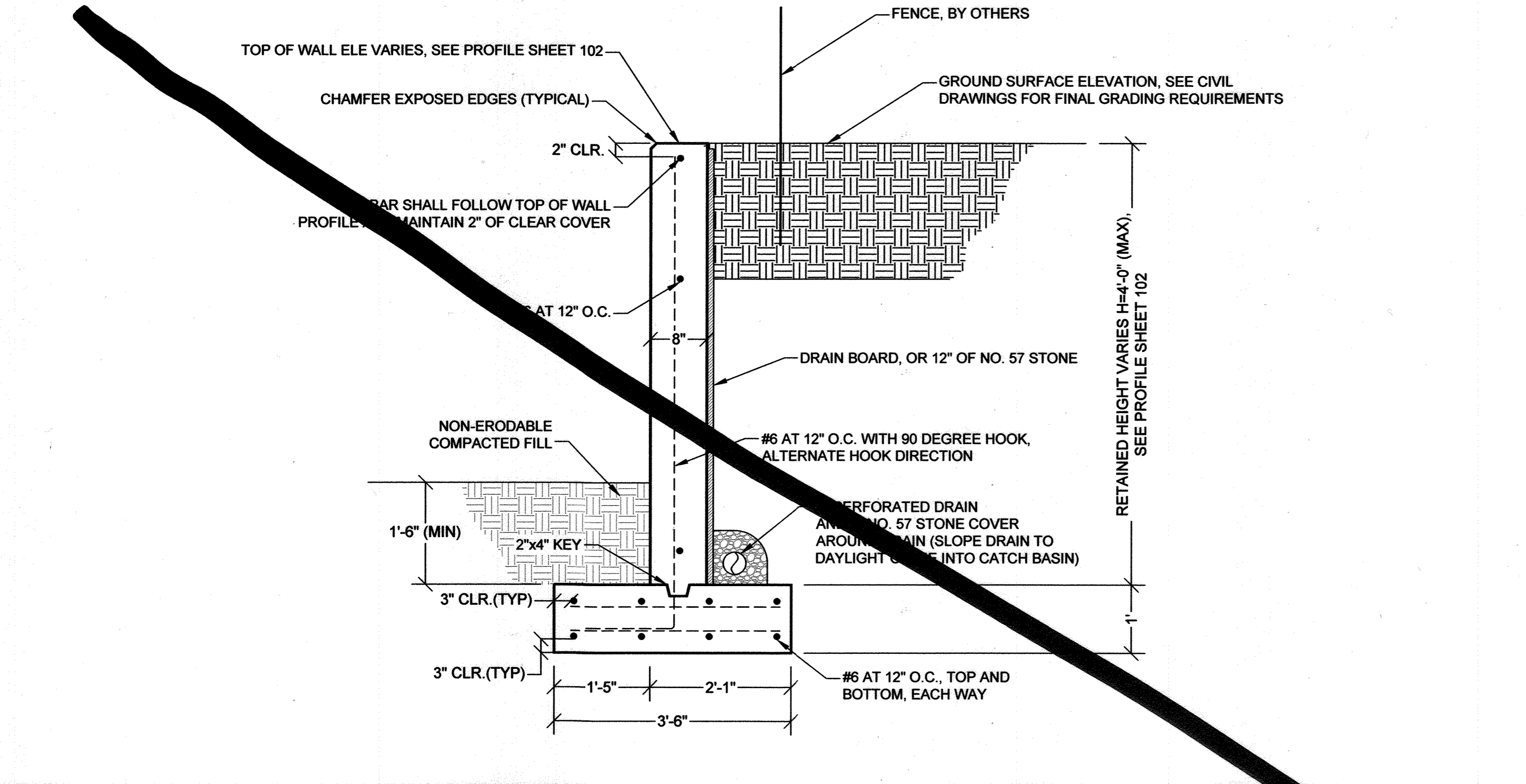
DORSEY CENTER APARTMENTS  
 CAST-IN-PLACE CONCRETE RETAINING WALL  
 ELKBRIDGE, MARYLAND

CAST-IN-PLACE CONCRETE WALL  
 DETAILS

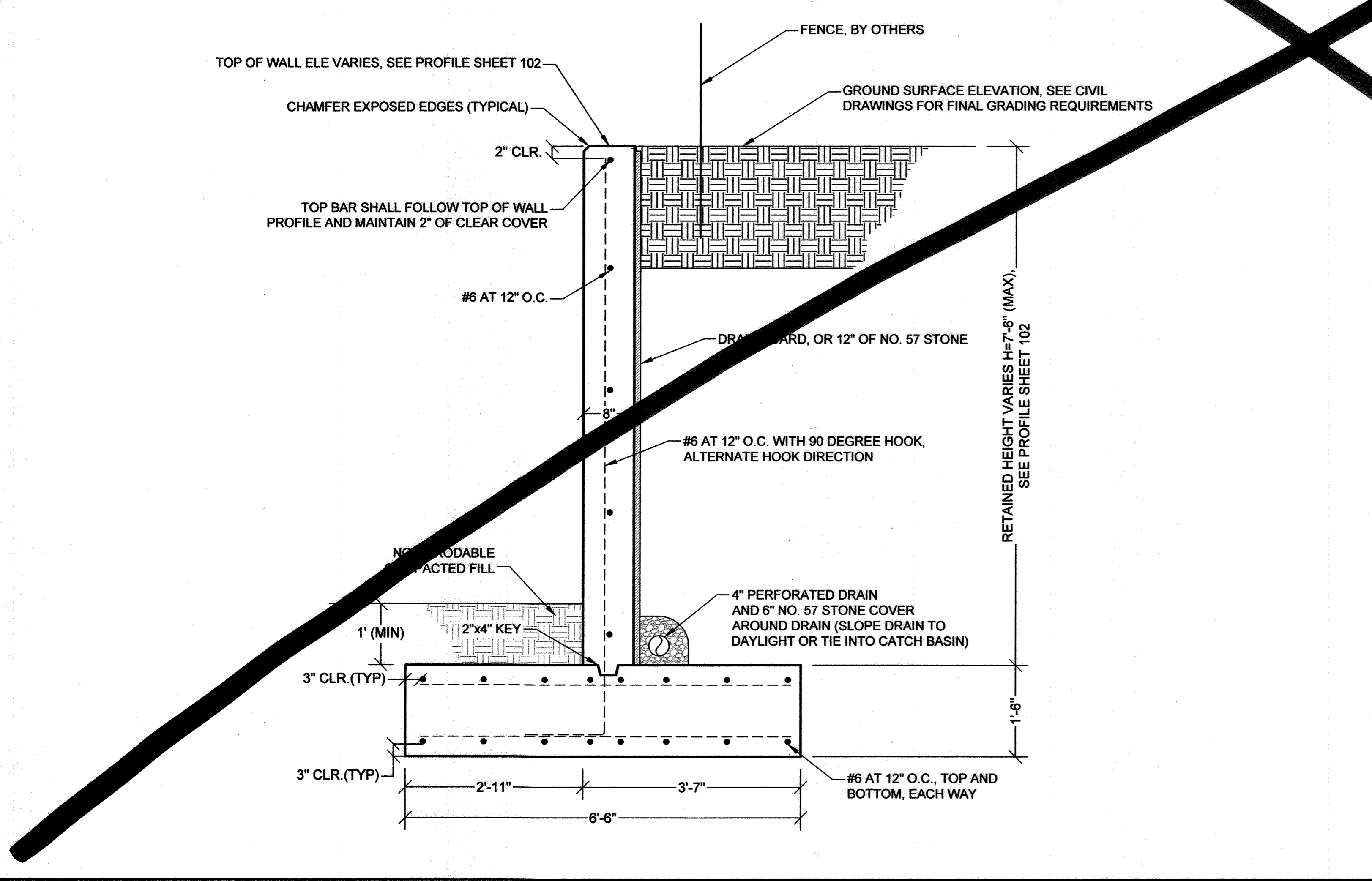
ECS REVISIONS

|                        |                 |
|------------------------|-----------------|
| DESIGNER<br>MEC        | DRAFTING<br>DFA |
| SCALE<br>AS SHOWN      |                 |
| PROJECT NO.<br>02-9184 |                 |
| SHEET<br>201           |                 |
| DATE<br>11-10-2020     |                 |

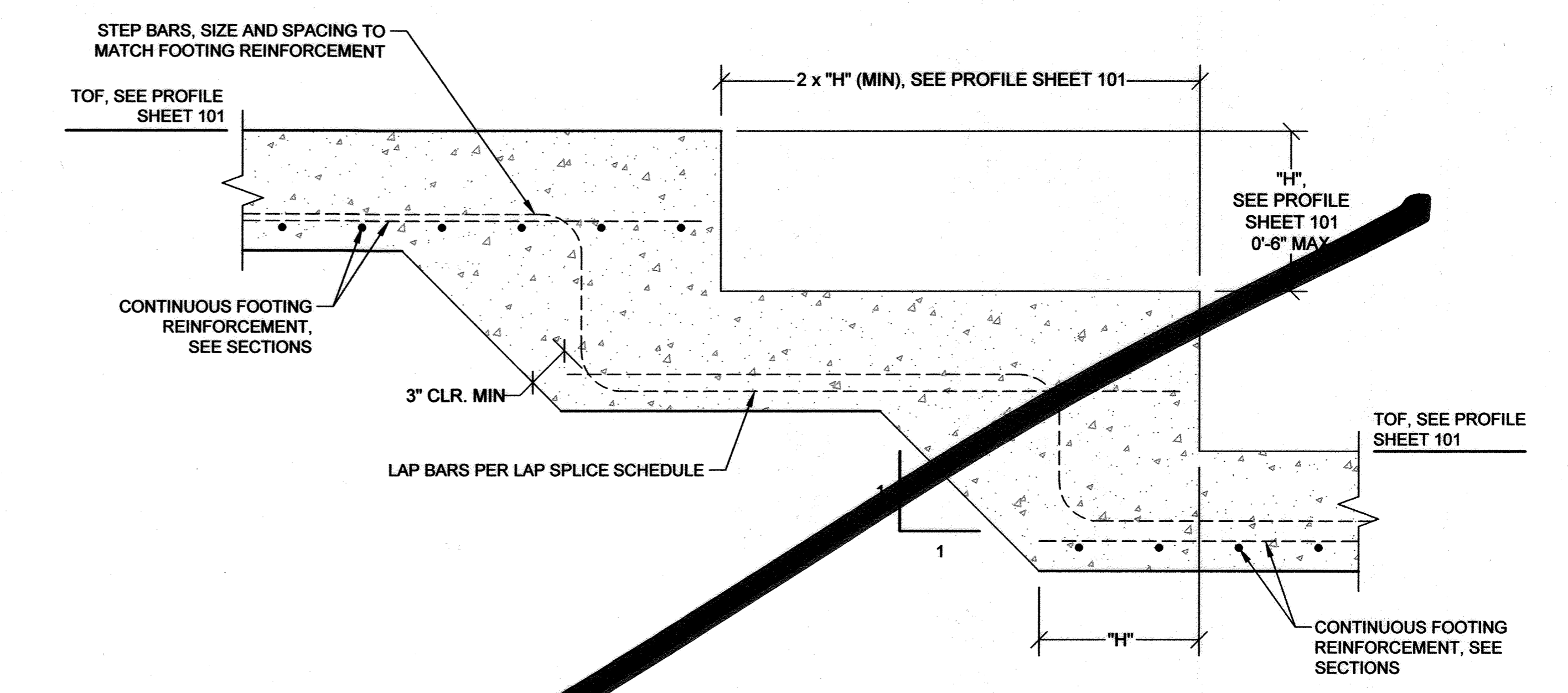
OWNER/DEVELOPER:  
 BINDER ROCK LLC  
 C/O H & H ROCK COMPANIES  
 6800 DEERPATH ROAD  
 SUITE 100  
 ELKBRIDGE, MARYLAND 21075  
 410.579.2442  
 DRAWING 17 OF 49  
 SDP-20-033



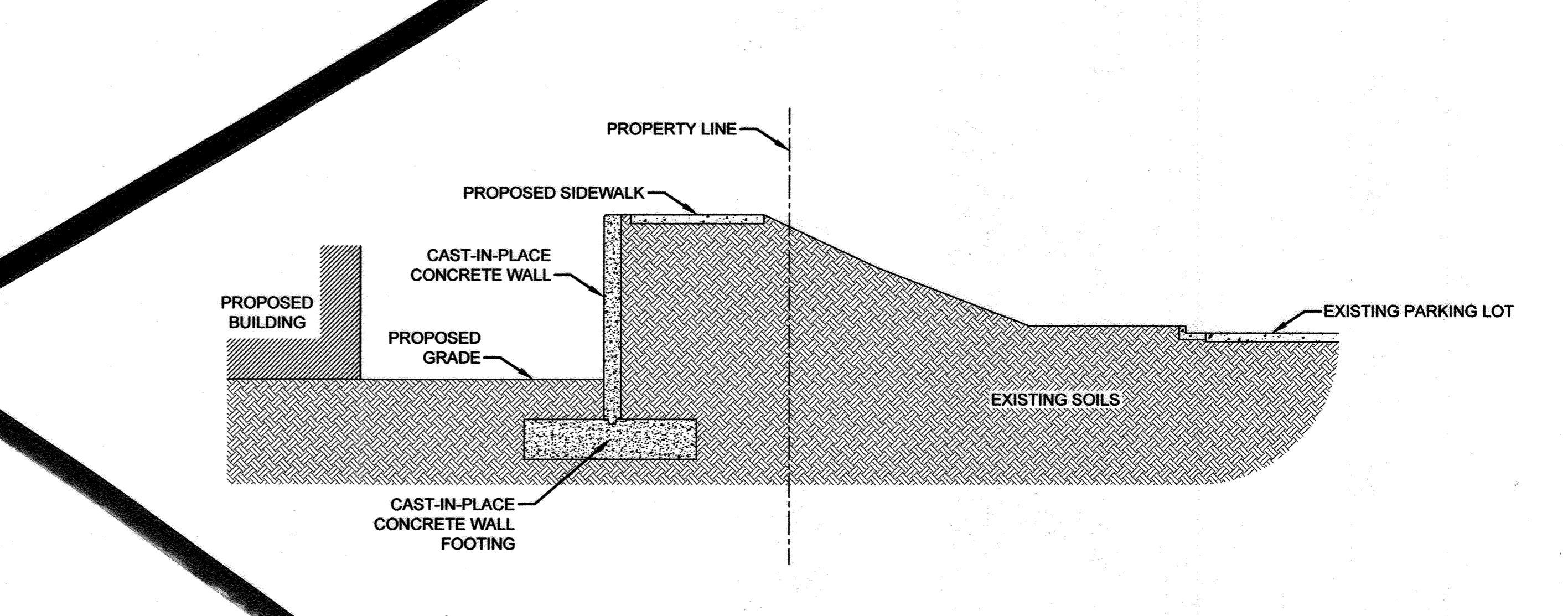
1 W-1 - TYPICAL CAST-IN-PLACE CONCRETE WALL SECTION STA 0+00 TO 0+50 NTS



2 W-2 - TYPICAL CAST-IN-PLACE CONCRETE WALL SECTION - STA 0+50 TO 2+00 NTS



3 TYPICAL CAST-IN-PLACE CONCRETE WALL FOOTING DETAILS NTS



NOTE: CONTRACTOR TO BENCH OR SHORE TEMPORARY EXCAVATION AS NECESSARY, IN COMPLIANCE WITH LOCAL CODE, TO FACILITATE WALL CONSTRUCTION.

4 TYPICAL SECTION - STA 1+55 NTS

| BAR SIZE | CLASS B TENSION LAP SPLICE GRADE 60 BARS (INCHES) |       |                       |       |                       |       |
|----------|---|-------|-----------------------|-------|-----------------------|-------|
|          | f <sub>c</sub> = 3000                             |       | f <sub>c</sub> = 4000 |       | f <sub>c</sub> = 5000 |       |
|          | TOP   | OTHER | TOP                   | OTHER | TOP                   | OTHER |
| #3       | 28  | 22    | 25                    | 19    | 22                    | 17    |
| #4       | 38  | 29    | 33                    | 25    | 29                    | 23    |
| #5       | 47  | 36    | 41                    | 31    | 36                    | 28    |
| #6       | 56  | 43    | 49                    | 37    | 43                    | 34    |
| #7       | 81  | 63    | 71                    | 54    | 63                    | 49    |
| #8       | 93  | 72    | 81                    | 62    | 72                    | 56    |
| #9       | 105   | 81    | 91                    | 70    | 81                    | 63    |
| #10      | 116   | 90    | 101                   | 78    | 90                    | 69    |
| #11      | 128   | 98    | 111                   | 85    | 99                    | 76    |

- NOTES:
- LAP LENGTHS ASSUME CLEAR SPACING BETWEEN BARS OF 2 BAR DIAMETERS, AND A MINIMUM COVER OF 1 BAR DIAMETER.
  - TOP BARS ARE DEFINED AS HORIZONTAL BARS WITH MORE THAN 12 INCHES OF FRESH CONCRETE BELOW.
  - LAP SPLICES IN CONTINUOUS MEMBER SHALL BE STAGGERED.

5 TENSION LAP SPLICE SCHEDULE

APPROVED: DEPARTMENT OF PLANNING AND ZONING

|   |          |
|---|----------|
|   | 12.7.20  |
| CHIEF, DEVELOPMENT ENGINEERING DIVISION | DATE     |
|   | 12/14/20 |
| CHIEF, DIVISION OF LAND DEVELOPMENT     | DATE     |
|   | 12/21/20 |
| DIRECTOR                                | DATE     |

1.0 GENERAL

THE CONSTRUCTION OF THE CAST-IN-PLACE (CIP) CONCRETE WALL SHOWN ON THESE PLANS SHALL BE MONITORED AND TESTED BY THE OWNER'S INDEPENDENT TESTING AGENCY (ITA) ON A FULL-TIME BASIS TO CONFIRM THAT THE CONSTRUCTION IS IN ACCORDANCE WITH THE INTENT OF THE DESIGN.

- 2. THE OWNERS ITA SHALL OBSERVE ALL WALL CONSTRUCTION ACTIVITIES TO CONFIRM THAT THE SITE CONDITIONS ARE CONSISTENT WITH THE DESIGN PARAMETERS.
3. UNLESS INDIVIDUALLY IDENTIFIED, THE TERM WALL OR WALLS REFERS TO ANY CIP CONCRETE WALL SHOWN ON THESE DRAWINGS.
4. IF THE ELEVATION, LOCATION, SURCHARGE, SLOPING, OR GRADING SURROUNDING THE WALL CHANGES FROM THOSE DEPICTED ON THESE PLANS, THE CONTRACTOR SHALL BE NOTIFIED SO THAT MODIFICATIONS TO THE GEOTECHNICAL DESIGN CAN BE MADE, IF NECESSARY.
5. THE FINAL GRADES SURROUNDING THE WALL SHALL NOT BE CHANGED WITHOUT NOTIFYING THE ENGINEER. ANY MODIFICATION TO THE GRADES BELOW OR ABOVE THE WALL MAY POSE CONSIDERABLE RISK TO THE PERFORMANCE/STABILITY OF THE WALL.
6. WHERE DISCREPANCIES ARE NOTED WITHIN THE CONTRACT DOCUMENTS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF SUCH DISCREPANCIES IN WRITING.
7. THESE PLANS SHALL NOT BE SCALED OR USED FOR LOCATION OF PAVEMENTS, STRUCTURES, OR RETAINING WALLS. THE CONTRACTOR SHALL PROVIDE LAYOUT AND COORDINATION AS NEEDED BY THE WALL CONTRACTOR.
8. THE SECTIONS AND DETAILS SHOWN SHALL BE CONSIDERED TO BE TYPICAL FOR ALL SIMILAR CONDITIONS. THE CONTRACTOR SHALL SUBMIT WRITTEN REQUESTS FOR INFORMATION FOR AREAS IN QUESTION.

A. RESPONSIBILITY FOR CONSTRUCTION COMPLIANCE

- 1. THE CONTRACTOR MUST PROVIDE FOR THE CONSTRUCTION OF THE WALL IN ACCORDANCE WITH THE CONTRACT DOCUMENTS, PLANS AND SPECIFICATIONS. THE CONTRACTOR IS ALSO RESPONSIBLE FOR THE VERIFICATION OF LINE, GRADE AND OTHER PHYSICAL FEATURES.
2. ENSURE WALL IS ALONG THE PROPER ALIGNMENT, AND WITHIN APPROPRIATE PROPERTY BOUNDARIES, AND CONSTRUCTION EASEMENTS.
3. CONTRACTOR IS SOLELY RESPONSIBLE FOR QUALITY OF THE WORK, INSPECTION, MONITORING, AND WALL TESTING BY THE OWNER, THEIR DESIGNATED REPRESENTATIVE, OR ECAS ARE SOLELY AT THE DISCRETION OF THE OWNER, AND IN NO WAY RELIEVE THE CONTRACTOR OF SOLE RESPONSIBILITY FOR MAINTAINING A QUALITY CONTROL PLAN.
4. CONTRACTOR SHALL CONTACT 811 A MINIMUM OF THREE (3) DAYS PRIOR TO START OF WORK. CONTRACTOR IS RESPONSIBLE FOR IMPLEMENTING A SOIL EROSION AND SEDIMENTATION PLAN IN ACCORDANCE WITH STAT, LOCAL AND FEDERAL GUIDELINES.
5. THE CONTRACTOR SHALL PROVIDE ALL LABOR, EQUIPMENT, AND MATERIALS TO CONSTRUCT THE PROJECT IN ACCORDANCE WITH THE REQUIREMENTS OF THESE PLANS AND SPECIFICATIONS OR AS DIRECTED BY THE ENGINEER. DURING THE COURSE OF THE CONSTRUCTION, ALTERNATIVES TO, OR CHANGES IN, THE PLANS AND SPECIFICATIONS MUST BE APPROVED BY THE ENGINEER PRIOR TO COMMENCEMENT OF WORK.
6. APPROXIMATE FIELD LOCATION OF EXISTING UTILITIES, FOUNDATIONS AND OTHER STRUCTURES IDENTIFIED TO THE ENGINEER ARE SHOWN ON THESE DRAWINGS. THE ENGINEER IS NOT RESPONSIBLE FOR FIELD VERIFYING THESE LOCATIONS AND DAMAGE TO IDENTIFIED AND UNIDENTIFIED UTILITIES AND FOUNDATION. THE CONTRACTOR SHALL FIELD VERIFY LOCATIONS AND ELEVATIONS OF ALL UTILITIES WITHIN 50 FEET BEHIND AND IN FRONT OF WALLS.
7. WALL HEIGHTS SHOWN ARE BASED ON INFORMATION AVAILABLE AT THE TIME OF DESIGN. IF THE ACTUAL WALL HEIGHTS ARE MORE THAN ONE FOOT GREATER THAN THE WALL HEIGHTS SHOWN ON THE DRAWINGS, THE WALL CONTRACTOR SHALL IMMEDIATELY INFORM THE ENGINEER OF HIS REPRESENTATIVE WHO WILL DETERMINE IF ADDITIONAL WALL MODIFICATIONS ARE REQUIRED.
8. THE CONTRACTOR SHALL FIELD VERIFY ALL CONDITION, GRADES AND DIMENSIONS AT THE SITE PRIOR TO WALL CONSTRUCTION. IF THE WALL CONTRACTOR DISCOVERS ANY ERRORS, OMISSIONS OR DISCREPANCIES, HE SHALL CONTACT THE ENGINEER PRIOR TO CONTINUING WALL CONSTRUCTION. THE ENGINEER WILL THEN ISSUE THE INSTRUCTIONS AS HOW TO PROCEED.
9. MEASURES SHALL BE IMPLEMENTED TO MEET LOCAL, STATE AND FEDERAL REQUIREMENTS FOR ALL PROTECTION, TRAFFIC BARRIERS, AND ALL OTHER SAFETY CONDITIONS AT THE WALL LOCATIONS BOTH DURING AND AFTER WALL CONSTRUCTION. SAFETY MEASURES AND CONDITIONS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. UNDER NO CIRCUMSTANCES SHALL THE ENGINEER BE RESPONSIBLE FOR PERFORMANCE OR IMPLEMENTATION OF THE SAFETY MEASURES OR ANY OTHER SAFETY CONDITIONS AT THE SITE BOTH DURING AND AFTER WALL CONSTRUCTION.
10. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR SITE SAFETY AND UNDER NO CIRCUMSTANCES SHALL THE ENGINEER BE RESPONSIBLE FOR CONSTRUCTION SITE SAFETY.
11. CONSTRUCTION OPERATIONS BEHIND AND IN FRONT OF PREVIOUSLY CONSTRUCTION PORTIONS FOR WALLS SHALL BE RESTRICTED TO PREVENT DAMAGE TO EXISTING WALLS. ONLY LIGHT COMPACTION EQUIPMENT SHALL BE USED WITHIN 5 FEET BEHIND WALL TO PREVENT EXCESSIVE LATERAL STRESS ON CONSTRUCTED PORTIONS OF THE WALLS.

B. CLEARING AND SUBGRADE PREPARATION

- 1. CLEARING AND STRIPPING LIMITS SHALL BE EXTENDED TO THE LIMITS SHOWN ON THE CIVIL DRAWINGS AND TO A MINIMUM OF 1 FOOT IN FRONT OF THE RETAINING WALLS AND 2 FEET BEHIND THE REINFORCED ZONE.
2. ALL EXISTING TOPSOIL, ROOTMAT, AND ANY OTHER SOFT OR UNSUITABLE MATERIALS SHALL BE REMOVED FROM THE CLEARING AND STRIPPING LIMITS.
3. PRIOR TO INITIATION OF RETAINING WALL CONSTRUCTION, THE STRIPPED AREA SHALL BE OBSERVED BY THE OWNER'S ITA TO DETERMINE THE EXTENT OF ANY REQUIRED REMEDIAL WORK. THESE MAY INCLUDE BUT ARE NOT LIMITED TO PROOFROLLING WITH A HEAVY RUBBER TIRE VEHICLE HAVING A SINGLE-AXLE WEIGHT OF AT LEAST 20,000 POUNDS, PORTABLE OR ELECTRONIC CONE PENETRATION TESTING AND OTHER METHODS DETERMINED APPROPRIATE BY THE OWNER'S ITA. PROOFROLLING SHALL INCLUDE MULTIPLE PASSES IN PERPENDICULAR DIRECTIONS OVER THE EXPOSED SUBGRADE.
4. CONSTRUCTION PHASE DEWATERING MAY BE NECESSARY TO SATISFACTORILY COMPLETE THESE SUBGRADE PREPARATION ACTIVITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR IMPLEMENTING AND MAINTAINING SATISFACTORY CONSTRUCTION PHASE DEWATERING.

C. EXCAVATION SUPPORT AND SLOPES

- 1. TEMPORARY SLOPES SHALL BE NO STEEPER THAN 1 1/2H:1V AND PURSUANT TO OSHA. IF THE DRAWINGS DO NOT PROVIDE A TEMPORARY EXCAVATION SUPPORT SYSTEM, THE CONTRACTOR IS RESPONSIBLE FOR ALL TEMPORARY EXCAVATION SUPPORT SYSTEMS REQUIRED TO CONSTRUCT THE RETAINING WALL SHOWN ON THESE DRAWINGS AND ENSURING THAT SUCH SYSTEMS ARE IN STRICT ACCORDANCE WITH CURRENT OSHA REQUIREMENTS.
2. EXCAVATION SHALL BE CONSTRUCTED AND BRACED IN ACCORDANCE WITH CURRENT OSHA REQUIREMENTS. EXCAVATION AND SITE SAFETY SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
3. THE CONTRACTOR SHALL NOT STOCKPILE EXCAVATED MATERIALS OR EQUIPMENT IMMEDIATELY ADJACENT TO EXCAVATION WALLS OR SLOPES. ALL SUCH MATERIALS SHALL BE KEPT BACK FROM THE TOP OF EXCAVATION A MINIMUM DISTANCE EQUAL TO THE EXCAVATION DEPTH. WHERE EQUIPMENT OR MATERIALS MUST BE PLACED IMMEDIATELY ADJACENT TO THE EXCAVATION WALLS, EXCAVATION WALLS SHALL BE DESIGNED FOR THE ANTICIPATED SURCHARGE LOADING. ADDITIONAL BRACING MUST BE PROVIDED TO SUPPORT THE ANTICIPATED SURCHARGE LOADING.
4. DEWATERING AND SITE DRAINAGE

D. DEWATERING AND SITE DRAINAGE

- 1. THE CONTRACTOR SHALL PROVIDE SUMP PIT AND PUMPING CAPABILITIES AS REQUIRED FOR DEWATERING THE RETAINING WALL AREA WHERE NEEDED.
2. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN ADEQUATE SITE DRAINAGE DURING SITE PREPARATION, EARTHWORK OPERATION, INCLUDING PROVIDING FOR DRAINAGE OF SURFACE WATER AWAY FROM THE CONSTRUCTION AREAS, AND ENHANCEMENT OF NATURAL DRAINAGE PATHS WITHOUT INTERRUPTING ITS PATTERN.
3. ALL EROSION AND SEDIMENTATION CONTROL SHALL BE CONTROLLED IN ACCORDANCE WITH SOUND ENGINEERING PRACTICE AND CURRENT STATE, COUNTY AND MUNICIPAL REQUIREMENTS.
4. PROVIDE AND MAINTAIN POSITIVE DRAINAGE FROM BACK OF WALL AT ALL TIMES DURING CONSTRUCTION.
5. THE DESIGN ASSUMES PERMANENT EROSION CONTROL MEASURES WILL BE IMPLEMENTED AT THE TOP AND BOTTOM OF THE WALL IMMEDIATELY UPON COMPLETION OF WALL CONSTRUCTION. THESE EROSION CONTROL MEASURES SHOULD BE SPECIFIED BY THE PROJECT CIVIL ENGINEER, IMPLEMENTED BY THE GENERAL CONTRACTOR, AND SHOULD BE MAINTAINED BY THE OWNER. FAILURE TO IMPLEMENT AND MAINTAIN PERMANENT EROSION CONTROL MEASURES MAY RESULT IN DAMAGE OF THE CIP CONCRETE WALL.

E. DESIGN CRITERIA

- 1. CONSTRUCT CIP CONCRETE WALL IN ACCORDANCE WITH THESE DRAWINGS.
2. THE DESIGN OF THE CIP CONCRETE WALL FOR THIS PROJECT COMPLETES EXTERNAL STABILITY, COMPOUND AND GLOBAL STABILITY.
3. THE CIP CONCRETE WALL HAS BEEN DESIGNED FOR FACTORS OF SAFETY FOR PERMANENT LOADING CONDITIONS OF 1.5 FOR DIRECT SLIDING AND FOR OVERTURNING AND 1.5 FOR LONG TERM GLOBAL STABILITY.
4. THE WALL HAS BEEN DESIGNED FOR FACTORS OF SAFETY OF 1.3 FOR TEMPORARY LOADING CONDITIONS SUCH AS SHORT TERM STORM EVENTS.
5. THE CIP CONCRETE WALL HAS BEEN DESIGNED FOR PERMANENT SURCHARGE LOADING OF 50 PSF TO ACCOUNT FOR PEDESTRIAN LOADS. SEE WALL PARAMETER SHEETS FOR INDIVIDUAL WALL LOADINGS.
6. SOIL PARAMETERS USED IN THE DESIGN OF THE WALL SHOULD BE VERIFIED IN THE FIELD PRIOR TO THE START OF WALL CONSTRUCTION.
7. GROUNDWATER IS NOT EXPECTED WITHIN THE EXCAVATION FOR THE WALL. HOWEVER, WEEP DRAINS WILL BE INSTALLED AS SHOWN ON THESE DRAWINGS. IF GROUNDWATER IS ENCOUNTERED, THE DESIGN ENGINEER MUST BE NOTIFIED TO MODIFY DESIGN IF REQUIRED.
8. RETAINING WALL HAS BEEN DESIGNED FOR AN ACTIVE EQUIVALENT FLUID PRESSURE (EFP) OF 42 PSF/FT. PASSIVE EFP OF 321 PSF/FT. FRICTION FACTOR OF 0.40. PROVIDE ADEQUATE DRAINAGE BEHIND WALLS TO ELIMINATE HYDROSTATIC PRESSURE ON THE WALL.

F. CODES

- 1. CIP CONCRETE WALL HAS BEEN DESIGNED IN ACCORDANCE WITH ACI318 BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE.
2. 2015 INTERNATIONAL BUILDING CODE.

2.0 MATERIALS

A. CAST-IN-PLACE CONCRETE

- 1. ALL CONCRETE WORK AND MATERIALS SHALL BE IN ACCORDANCE WITH ACI 315-18, ACI 318-19 AND ACI 301-16.
2. MINIMUM MATERIAL SPECIFICATIONS:
a. PORTLAND CEMENT: ASTM C 150, TYPE 1
b. FLY ASH: ASTM C 618, TYPE F (LIMIT TO 20% OF CEMENTITIOUS CONTENT).
c. NO WATER MAY BE ADDED AT THE SITE WITHOUT CONSENT OF THE ENGINEER.
3. FOUNDATIONS:
a. FOUNDATIONS SHALL HAVE A 28 DAY COMPRESSIVE STRENGTH OF 3,000 PSI.
4. RETAINING WALLS:
a. WALLS SHALL HAVE A 28 DAY COMPRESSIVE STRENGTH OF 4,500 PSI WITH A 0.45 WATER TO CEMENT RATIO AND 5% TO 8% AIR ENTRAINMENT TO COMPLY WITH ACI318 DURABILITY REQUIREMENTS FOR AN F2 EXPOSURE.
b. WALLS AND SLAB EDGES TO BE PERMANENTLY EXPOSED TO VIEW SHALL BE RUBBED, PATCHING ALL HONEYCOMBING AND VOIDS.
c. PROVIDE VERTICAL CONTROL JOINTS IN WALLS AT 20'-0" CENTERS. FORM JOINT WITH BACK TO BACK CHAMFER STRIP. DISCONTINUE HORIZONTAL REINFORCING AT THE JOINT. PROVIDE 3/4" x 18" SMOOTH, GREASED DOWELS ACROSS JOINT AT 18" O.C.
5. REINFORCING STEEL:
a. ALL DETAILING, FABRICATION, AND PLACING SHALL BE IN ACCORDANCE WITH ACI 315.
b. REINFORCING STEEL SHALL BE NEW BILLET BARS CONFORMING TO ASTM A615, GRADE 60.
c. PROVIDE MINIMUM 3" CONCRETE COVER FOR ALL CONCRETE CAST AGAINST EARTH.
d. PROVIDE HOOKED DOWELS IN FOOTING EQUIVALENT IN SIZE AND SPACING TO WALL REINFORCING. EXTEND DOWELS PER LAP SPlice SCHEDULE INTO WALL. LAP SPICES IN WALLS PER LAP SPlice SCHEDULE.
e. PROVIDE CLASS B SPICES AT HORIZONTAL BARS IN WALLS AND WALL CONNECTIONS.

B. FILL SOILS

- 1. FILL AREAS WHERE CRUSHED STONE IS NOT REQUIRED, SHALL BE BEST OF SOILS HAVING A UNIFIED SOIL CLASSIFICATIONS SYSTEM (USCS) DESIGNATION OF SM, SC, SP, SW, GM, GC, OR GW, BE FREE OF ORGANIC MATTER, COBBLES GREATER THAN 3 INCHES IN MAXIMUM DIMENSION, OR DEBRIS, AND HAVE MAXIMUM LIQUIDITY AND PLASTICITY INDEX OF 30 AND 10, RESPECTIVELY. FURTHERMORE, THE RETAINED FILL ZONES SHALL CONSIST OF MATERIALS THAT MEET OR EXCEED THE REQUIREMENTS OF THE DESIGN PARAMETERS. CONTRACTOR SHALL SUBMIT MATERIAL SOURCE AND GRADATION RESULTS TO THE ENGINEER.
2. UNACCEPTABLE FILL MATERIALS INCLUDE TOPSOIL, ORGANIC MATERIALS (OH, OI), PLASTIC SILTS AND CLAYS (CH, CL, ML, MH), AND SOILS NOT MEETING THE CRITERIA OF THE PREVIOUS PARAGRAPH.
3. OTHER MATERIALS MAY BE USED AS FILL MATERIALS IN THE RETAINED FILL ZONE PROVIDED THE MATERIALS MEET REQUIREMENTS OF THESE SPECIFICATIONS.

3.0 FOUNDATIONS

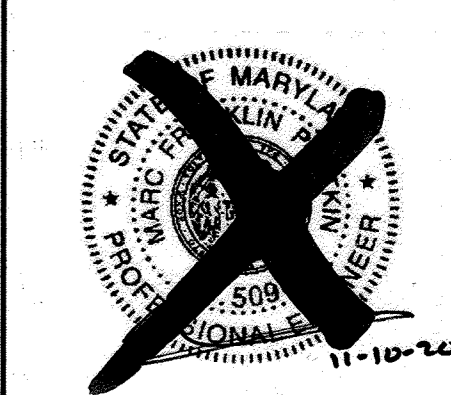
- 1. THE CIP CONCRETE WALL FOUNDATION SUBGRADE SOILS SHALL BE PREPARED IN ACCORDANCE WITH THE CLEARING AND SUBGRADE PREPARATION SECTION OF THESE SPECIFICATIONS.
2. THE BEARING CAPACITY OF THE SUBGRADE SUPPORTING CIP CONCRETE WALLS SHALL BE VERIFIED TO BE EQUAL TO OR GREATER THAN THE VALUE SHOWN ON THESE DRAWINGS AT THE TIME OF CONSTRUCTION BY THE OWNER'S ITA AT A MINIMUM FREQUENCY OF 25 FEET ON CENTER.
3. THE REQUIRED EMBEDMENT DEPTH FOR EACH SECTION OF WALL IS SPECIFIED ON THE DETAILS AND WALL PROFILE.
4. FOUNDATIONS SUBGRADE SOILS NOT MEETING THE MINIMUM BEARING REQUIREMENTS SHALL BE IMPROVED OR REMOVED AS DIRECTED IN THE FIELD BY THE ENGINEER.
5. THE CONTRACTOR SHALL NOTIFY THE EOR OF ANY BELOW GRADE STRUCTURE WHICH MAY AFFECT THE FOUNDATION PERFORMANCE.

4.0 QUALITY CONTROL SERVICES: CAST-IN-PLACE CONCRETE WALL

- 1. CONCRETE: TESTING AGENCY SHALL INSPECT PLACEMENT OF ALL REINFORCING AS SHOWN ON DRAWINGS AND SCHEDULES. CONCRETE TESTING SHALL BE IN ACCORDANCE WITH ACI 301 AND APPLICABLE ASTM STANDARDS. THE FOLLOWING TESTS SHOULD BE PERFORMED FOR EACH DAY'S FIRST LOAD AND EACH 100 CUBIC YARDS:
a. UNIT WEIGHT OF CONCRETE, ASTM C 138
b. SLUMP, ASTM C 143.
c. IF REQUIRED, AIR CONTENT OF FRESHLY MIXED CONCRETE BY PRESSURE METHOD, ASTM C 231 OR VOLUMETRIC METHOD, ASTM C 173.
d. CONCRETE TEMPERATURE AT PLACEMENT TIME.
e. AIR TEMPERATURE AND WEATHER (WINDY, CLOUDY, ETC) AT PLACEMENT TIME.
2. CONCRETE STRENGTH DETERMINED IN ACCORDANCE WITH ASTM C 39, A MINIMUM OF FOUR (4) CONCRETE CYLINDERS PER SAMPLE SHALL BE OBTAINED AND TESTED AT THE FOLLOWING SCHEDULE: ONE (1) AT SEVEN (7) DAYS, TWO (2) AT TWENTY EIGHT (28) DAYS AND ONE (1) FOR RESERVE.

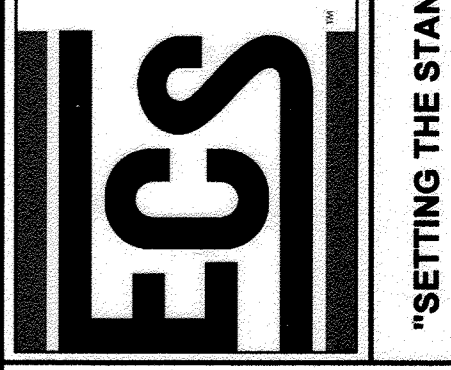
5.0 COMPACTIVE EFFORT AND FILL PLACEMENT

- 1. RETAINED FILL ZONE - THIS ZONE SHALL BE COMPACTED TO A MINIMUM OF 95 PERCENT OF THE MAXIMUM DRY DENSITY IN ACCORDANCE WITH ASTM D-698 STANDARD PROCTOR METHOD.
2. FILL MATERIALS SHALL NOT BE PLACED WHEN WET, FROZEN OR FROST HEAVED SOILS. ALL SUCH SOILS SHALL BE REMOVED PRIOR TO CONTINUATION OF FILL OPERATIONS.
3. FILL MATERIALS SHALL NOT CONTAIN FROZEN MATERIALS AT THE TIME OF PLACEMENT. ALL SUCH MATERIALS SHALL BE REMOVED PRIOR TO CONTINUATION OF FILL OPERATIONS.
4. FILL SOILS SHOULD BE PLACED IN LIFTS NOT EXCEEDING 6 INCHES IN LOOSE THICKNESS.
5. AT THE TIME OF COMPACTION, FILL SOILS SHALL BE WITHIN 3 PERCENT OF THE OPTIMUM MOISTURE CONTENT AS DETERMINED IN ACCORDANCE WITH THE APPROPRIATE STANDARD PROCTOR METHOD.
6. ALL FILL AND BACKFILL OPERATIONS SHALL BE OBSERVED ON A FULL-TIME BASIS BY THE OWNER'S ITA TO DETERMINE IF MINIMUM PLACEMENT AND COMPACTION REQUIREMENTS ARE BEING MET AND THAT MATERIALS MEETING OR EXCEEDING THE SPECIFICATION REQUIREMENTS ARE USED.
7. IN-PLACE DENSITY TESTS SHALL BE PERFORMED WITH A MINIMUM OF 1 TEST PER 500 SQUARE FEET OF SOIL FILL ARE A OR EACH LIFT OF FILL PLACE. THE ELEVATION AND LOCATION OF THE TESTS SHOULD BE CLEARLY IDENTIFIED AT THE TIME OF FILL PLACEMENT.
8. GRANULAR SOILS (UNIFIED SOIL CLASSIFICATION SM, SC OR COARSER) SHALL BE COMPACTED WITH VIBRATORY COMPACTION EQUIPMENT.
9. CARE SHOULD BE EXERCISED REGARDING THE USE OF RELATIVELY HEAVY MACHINERY CLOSE TO THE WALL. LIGHTER HAND OPERATED COMPACTION WITHIN 5 FEET OF THE WALL.
10. THE FILL AREA SHALL BE GRADED AT THE END OF EACH DAY TO FACILITATE THE POSITIVE DRAINAGE OF SURFACE WATER ASSOCIATED WITH PRECIPITATION AWAY FROM IT.



PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM ONLY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO. 9892 EXPIRATION DATE: 08/31/2021

ECG MID-ATLANTIC, LLC 11405 WOODBRIDGE SUITE A WASHINGTON, MARYLAND 20032 (410) 884-4303 (PH) (410) 884-4324 (FAX)



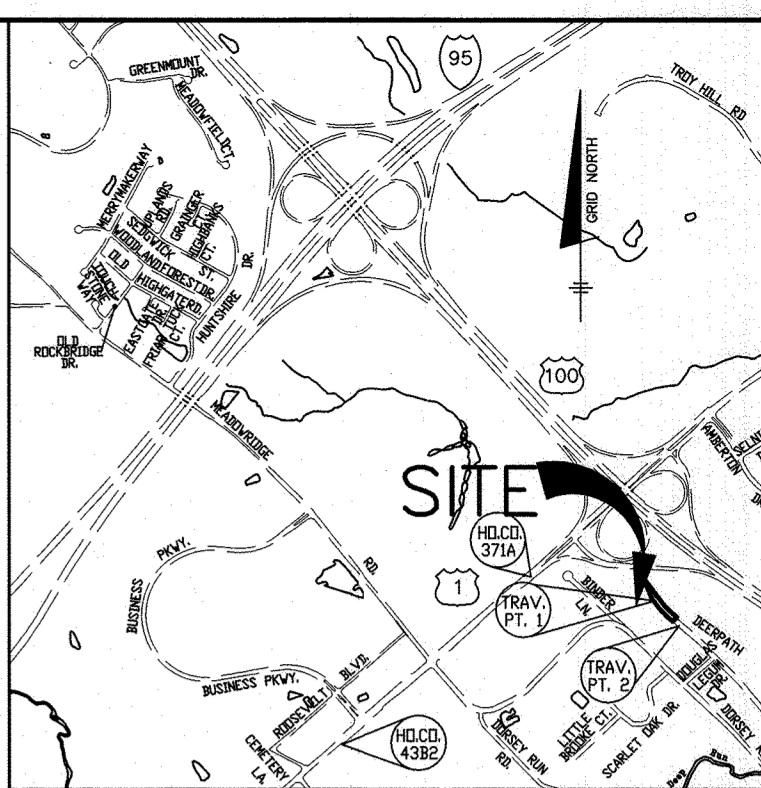
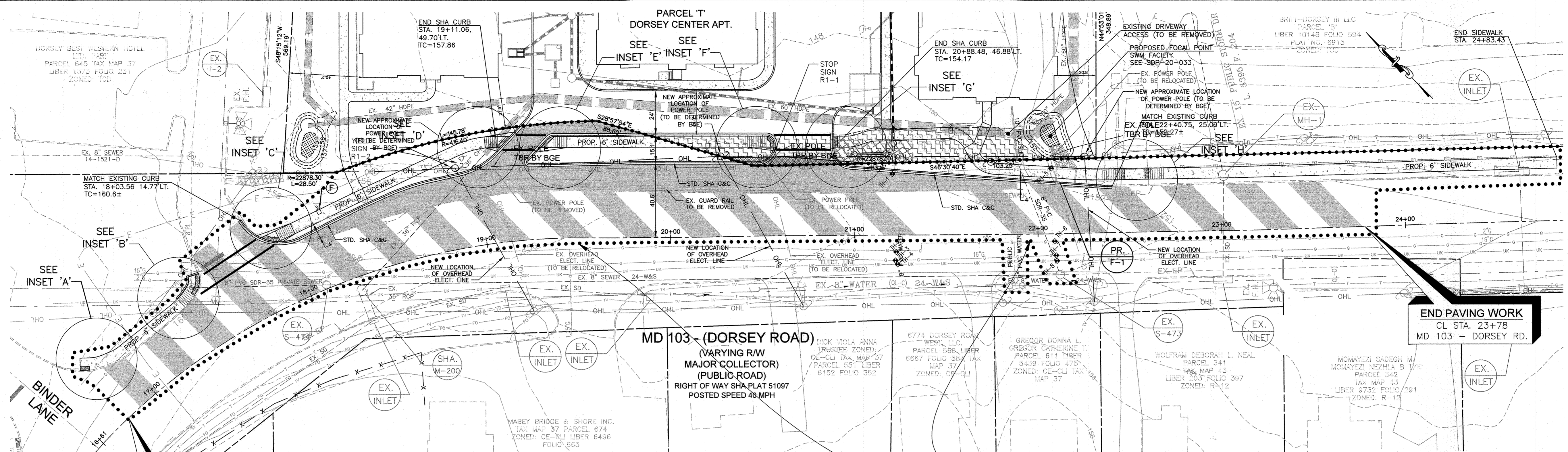
DORSEY CENTER APARTMENTS CAST-IN-PLACE CONCRETE RETAINING WALL ELKDRIDGE, MARYLAND

SPECIFICATIONS

Table with project details: DESIGNER MEC, DRAFTING DFA, SCALE AS SHOWN, PROJECT NO. 02-9184, SHEET 301, DATE 11-10-2020.

APPROVED: DEPARTMENT OF PLANNING AND ZONING. Signatures and dates for Chief, Development Engineering Division (11/7/20), Chief, Division of Land Development (12/1/20), and Director (12/31/20).

OWNER/DEVELOPER: BINDER ROCK LLC, C/O H & H ROCK COMPANIES, 6800 DEERPATH ROAD, SUITE 100, ELKDRIDGE, MARYLAND 21075, 410.579.2442. DRAWING 16 OF 49, SDP-20-033.



**VICINITY MAP**  
SCALE: 1" = 200'

**BENCH MARKS--(NAD'83)**

|   |                |
|---|----------------|
| TRAV. PT. 1   | EL. 157.73     |
| TRV. MAG. 18.0' NORTHEAST OF CONC. CURB OF SOUTHBOUND LANE OF DEERPATH ROAD; 20.3' NORTH OF EX. INLET |                |
| N 553,149.12  | E 1,381,844.44 |
| TRAV. PT. 2   | EL. 154.64     |
| TRV. MAG. 3.1' NORTHEAST OF CONC. CURB OF SOUTHBOUND LANE OF DEERPATH ROAD; 20.3' NORTH OF EX. INLET  |                |
| N 553,037.81  | E 1,381,953.46 |

**LEGEND**

- PAVEMENT FULL DEPTH
- MILL & OVERLAY/WEDGE & LEVEL CENTERLINE STA 16+80 TO 23+78
- FULL DEPTH PAVING (MINIMUM 4' WIDE)
- MILL AND OVERLAY
- SHA STD. NO. MD 620.02 TYPE A CONCRETE CURB & GUTTER
- SHA LIMIT OF DISTURBANCE
- FLOW ARROWS
- EXISTING INLET
- PROPOSED INLET
- MDOT SHA R/W

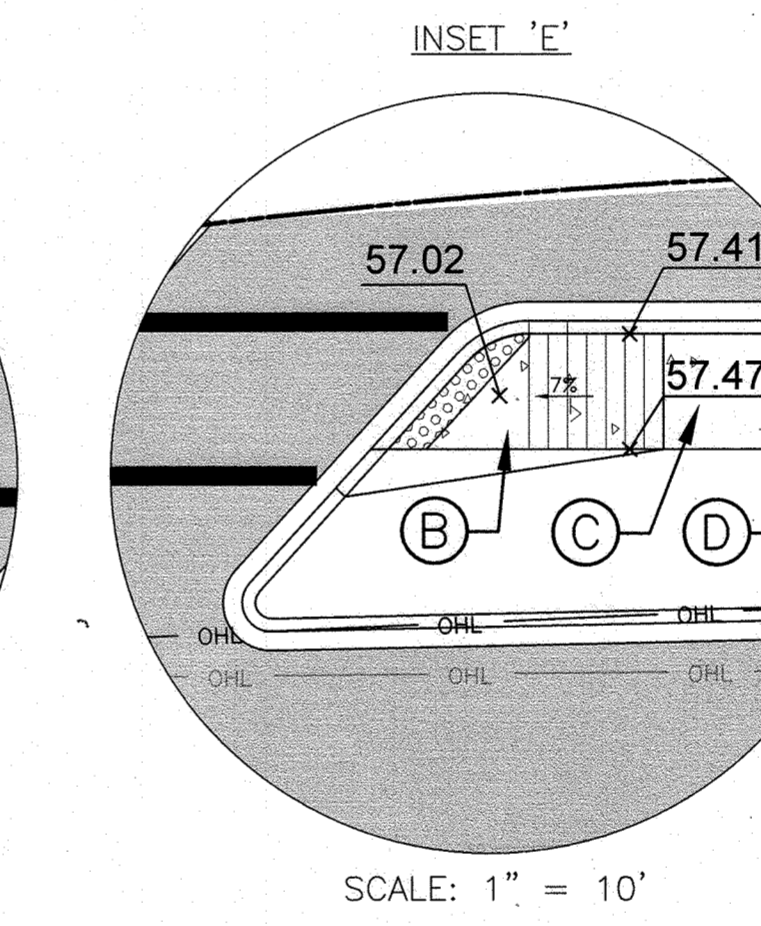
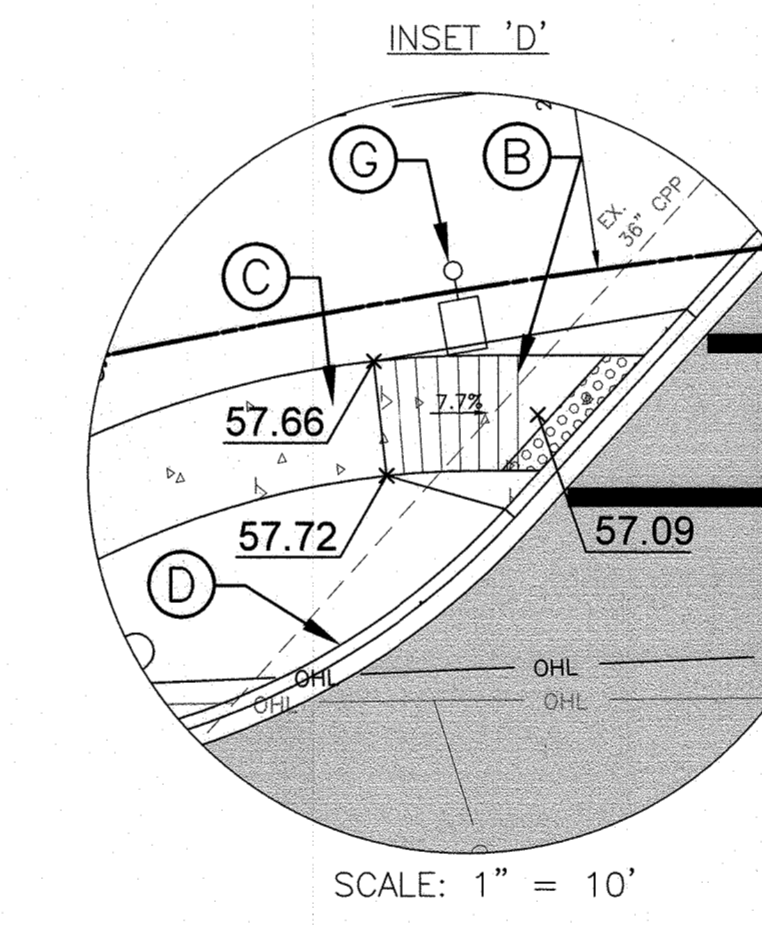
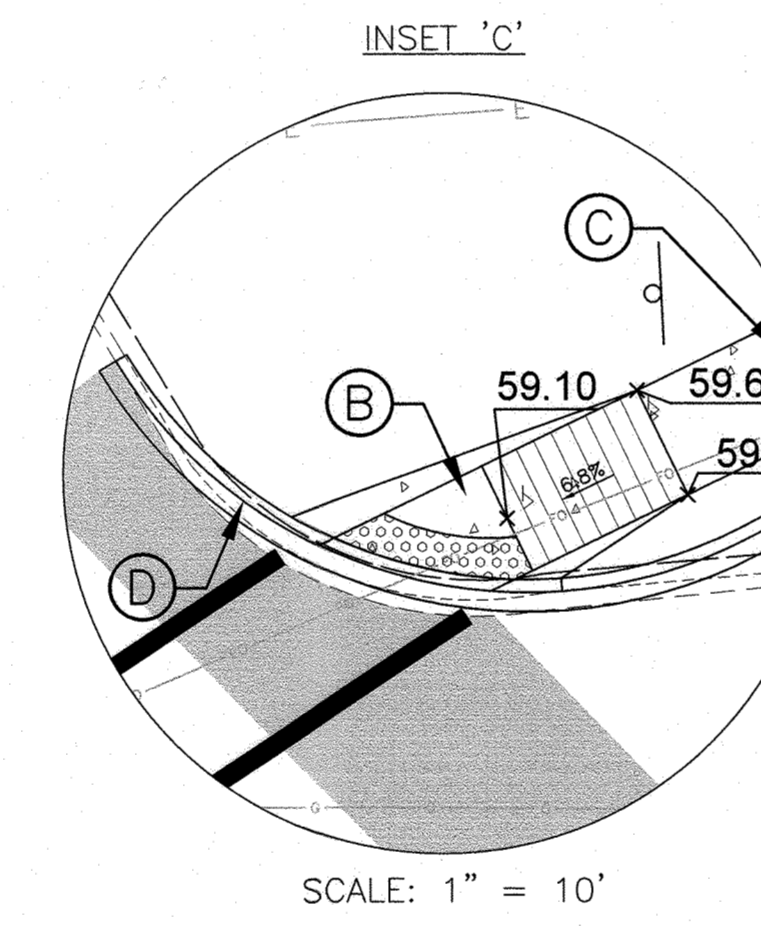
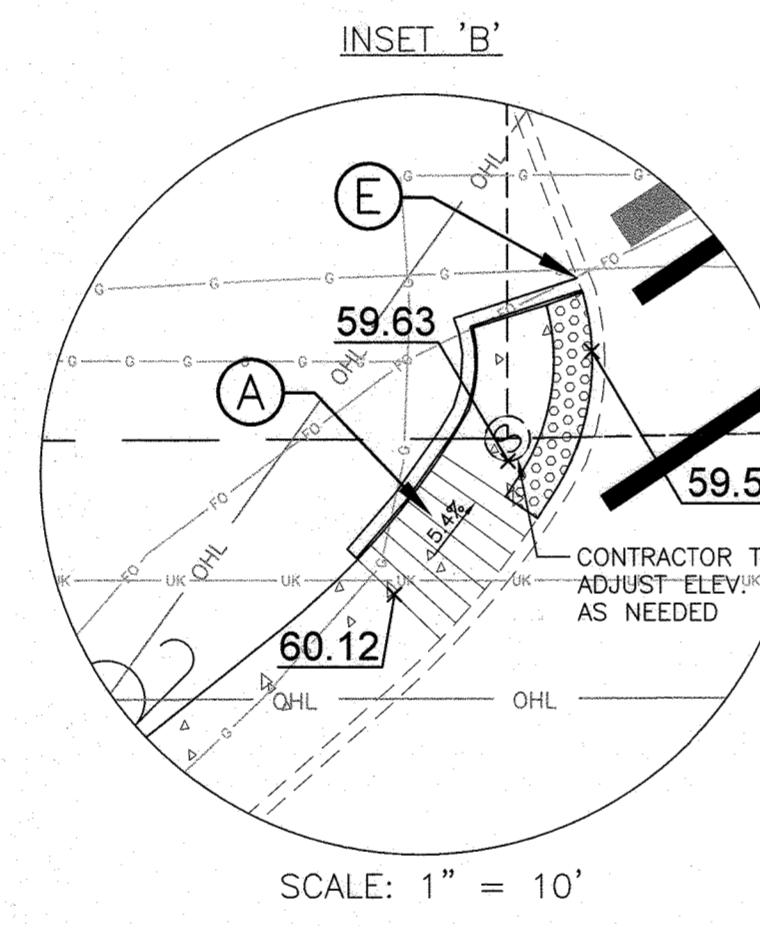
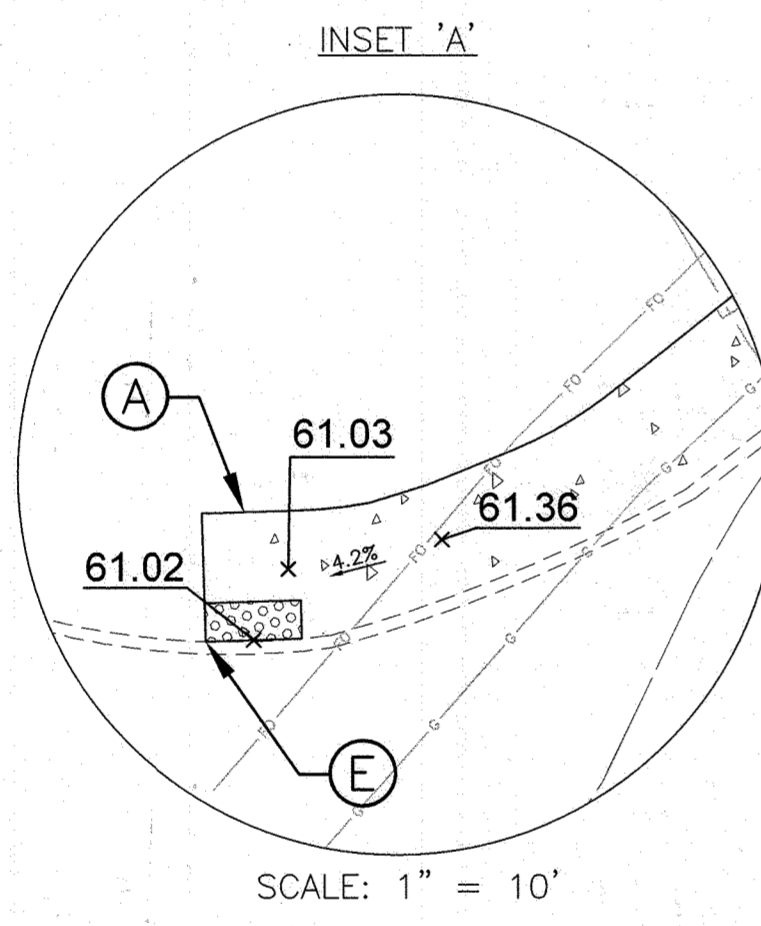
**ROAD WIDENING PLAN**  
SCALE: 1" = 30'

**NOTE:** CONTRACTOR SHALL ADJUST LID FOR EX. MH-1 TO A 2% CROSS SLOPE AND MAKE FLUSH WITH PROPOSED 6' SIDEWALK PATHWAY.

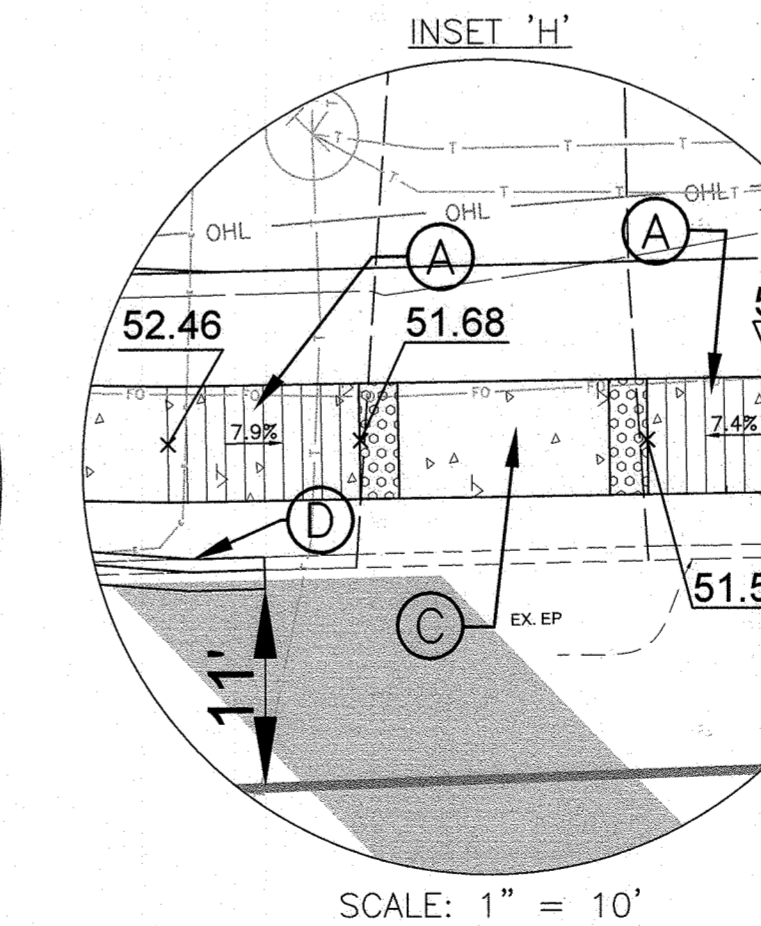
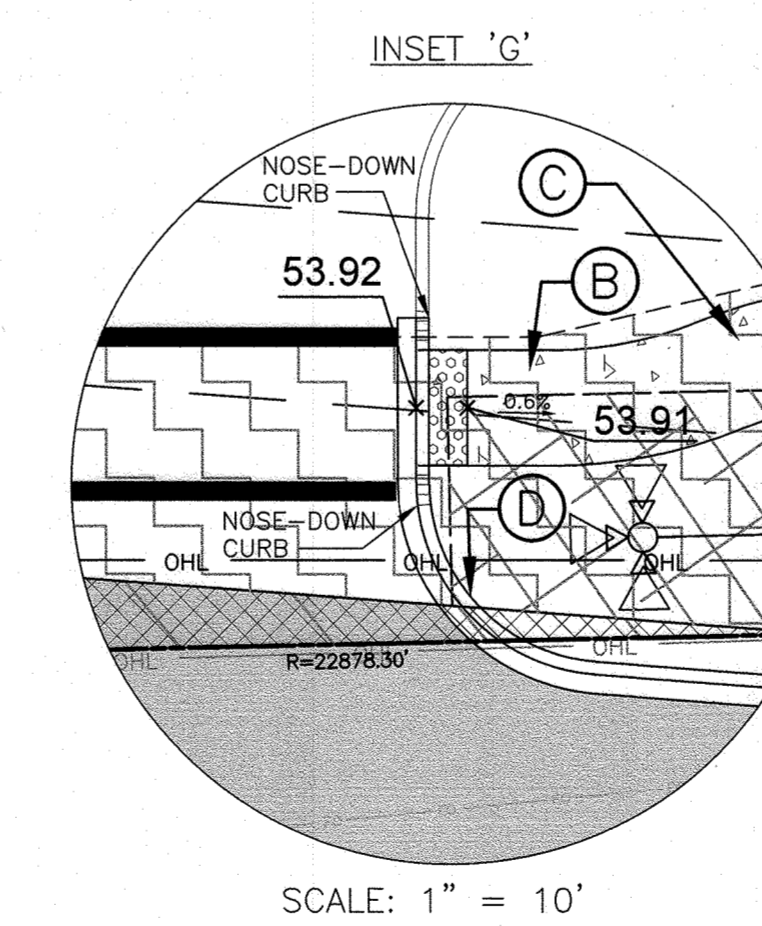
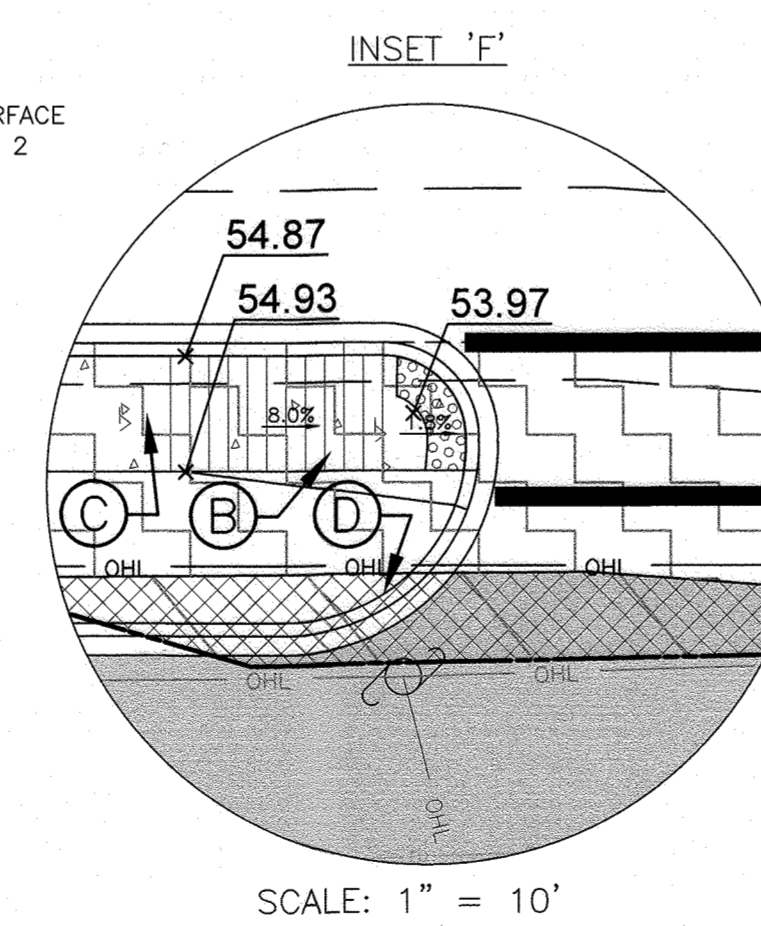
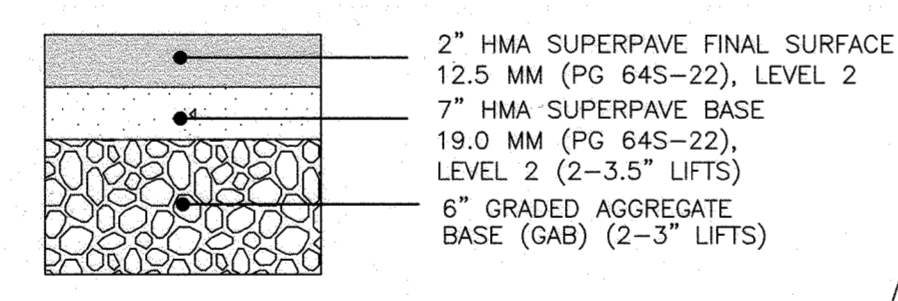
PROVIDE A 6' MINIMUM PATHWAY WITH A MAXIMUM 2% CROSS-SLOPE ACROSS THE ENTIRE ENTRANCE REGARDLESS OF TYPE OF MATERIAL USED.

**NOTE:** CONTRACTOR SHALL ADJUST ALL EXISTING MANHOLE RIM ELEVATIONS TO MATCH PROPOSED PAVING/GRADE.

**NOTE:** CONTRACTOR SHALL COORDINATE THE RELOCATION AND/OR REMOVAL OF ANY POWER POLES WITHING THE SHA RIGHT-OF-WAY WITH BGE.



- CONSTRUCTION DETAILS**
- INSTALL PARALLEL SIDEWALK RAMP (MD 655.12) WITH DETECTABLE WARNING SURFACE (MD 655.40).
  - INSTALL PERPENDICULAR SIDEWALK RAMP (MD 655.11) WITH DETECTABLE WARNING SURFACE (MD 655.40).
  - INSTALL 6' SIDEWALK.
  - INSTALL TYPE 'A' COMBINATION CURB AND GUTTER.
  - MATCH EXISTING CURB.
  - LIGHT FIXTURE (STA. 18+20, 42.0 LT.).



**OFFSITE IMPROVEMENTS**

PLEASE NOTE THAT THIS REVISION SUPERSEDES AND REPLACES THE NOVEMBER 2020 BEI PLAN SHEET.

| NO. | DATE | REVISION  |
|-----|------|---|
| 1   | 4/23 | REVISED SOUTH FRONT AND CENTER FRONT SIDEWALK CONNECTIONS |

**BENCHMARK ENGINEERING, INC.**  
ENGINEERS • LAND SURVEYORS • PLANNERS  
3300 NORTH RIDGE ROAD SUITE 140 • ELLICOTT CITY, MARYLAND 21043  
(P) 410-465-6105 (F) 410-465-6644  
WWW.BEI-CVILENGINEERING.COM

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. 28376, Expiration Date 1-1-25.

BEI-AAM  
2023.05.01 07:14:44 -04'00

**NOTES:**  
THE FOLLOWING STANDARDS (CONSTRUCTION AND TEMPORARY TRAFFIC CONTROL) ARE REQUIRED FOR THIS PROJECT:

- MD 104.03-06 - RIGHT LANE CLOSURE/UNDIVIDED UNCON. EQUAL/LESS THAN 40 MPH
- MD 655.11 - SIDEWALK RAMPS PERPENDICULAR
- MD 655.12 - SIDEWALK RAMPS PARALLEL
- MD 655.40 - DETECTABLE WARNING SURFACES
- MD 620.02 - STANDARD TYPES A AND B CONCRETE CURB AND COMBINATION CONCRETE CURB & GUTTER
- MD 104.06-09A - PED AND CURB-LANE CONTROL/MULTILANE UNDIV. SPEED LESS THAN OR EQUAL TO 40 MPH/OVER 12 HRS. OR NIGHTTIME USE
- MD SHA ACCESS MANUAL STANDARD FOR TYPICAL CLOSED SECTION STREET CONNECTION ALL PAVEMENT MARKINGS TO BE THERMOPLASTIC.

FOR ALL STANDARDS REFERRED TO ON THE PLANS THE CONTRACTOR MUST GO TO THE BOOK OF STANDARDS WHICH WILL HAVE THE MOST CURRENT VERSION. THE BOOK OF STANDARDS CAN BE ACCESS AT: <http://apps.roads.maryland.gov/businesswithsho/bizStdSoecoes.desManualStdPub/publicationonline/ohd/bookstd/index.asp>

ALL ITEMS ARE TO BE CONSTRUCTED IN ACCORDANCE WITH THE CURRENT VERSION OF THE REFERENCED STANDARDS AT THE TIME OF CONSTRUCTION.

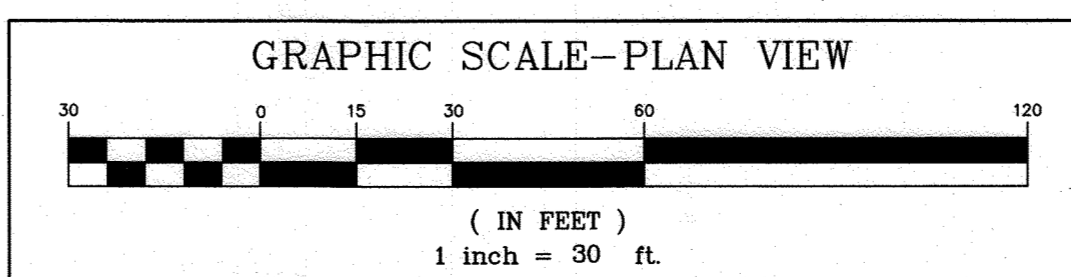
APPROVED: DEPARTMENT OF PLANNING AND ZONING

*[Signature]* 7.11.23  
CHIEF, DEVELOPMENT ENGINEERING DIVISION

*[Signature]* 7/11/23  
CHIEF, DIVISION OF LAND DEVELOPMENT

*[Signature]* 7/13/23  
DIRECTOR

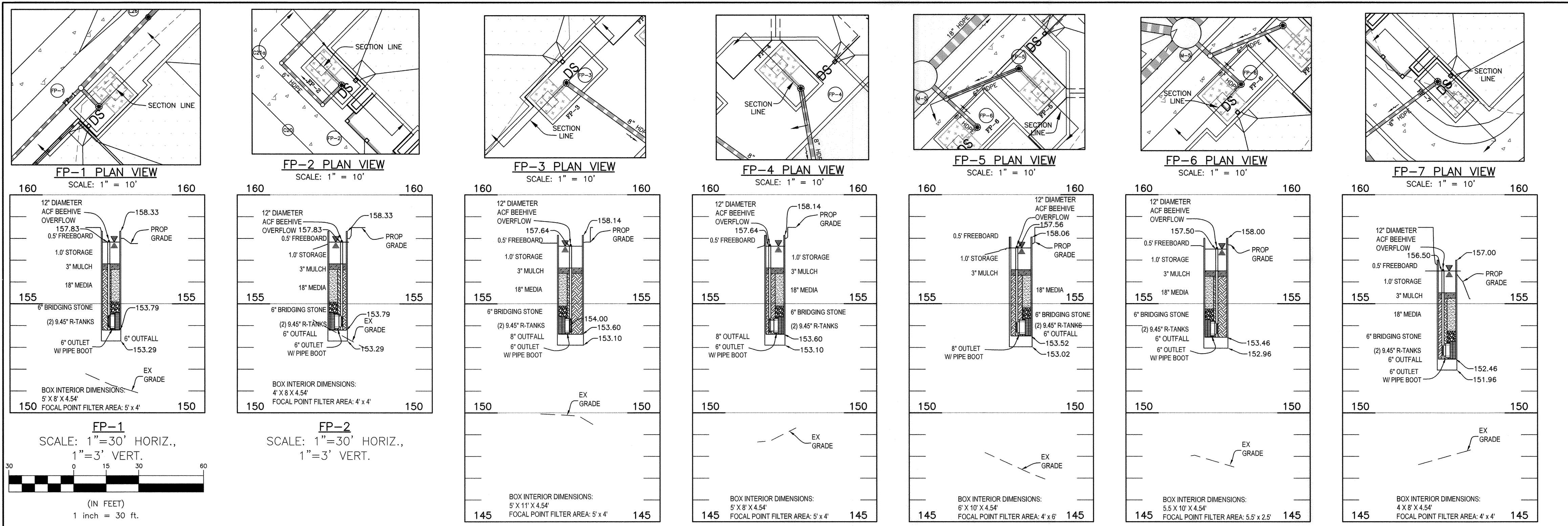
SHA Tracking No.: 16APH0017XX  
CONTRACTOR SHALL REFER TO THE APPROVED MSHA ACCESS PERMIT PLANS FOR WORK WITHIN THE MSHA R/W.



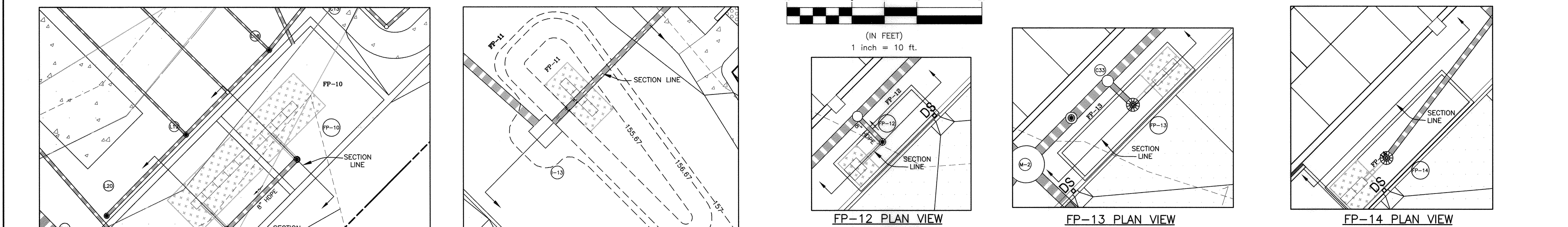
|  |   |
|--|---|
| OWNER/DEVELOPER:<br>BINDER ROCK LLC<br>C/O H & H ROCK COMPANIES<br>6800 DEERPATH ROAD<br>SUITE 100<br>ELKRIDGE, MARYLAND 21075<br>410.573.2442 | PROJECT: DORSEY CENTER APARTMENTS<br>210 UNITS<br>PARCEL 'T'    |
| LOCATION:<br>TAX MAP 37<br>PARCEL 375 - GRID 24<br>1st ELECTION DISTRICT<br>HOWARD COUNTY, MARYLAND  | TITLE:<br>MD 103 - DORSEY ROAD<br>WIDENING AND IMPROVEMENT PLAN |
| DATE: APRIL 2023   | PROJECT NO. 1959  |
| Design: AAM  | Draft: AAM  |
| Check: CAM   | SCALE: AS SHOWN   |
| DRAWING 19 OF 49   | SDP-20-033  |

| FACILITY                                     | Drainage Area | Impervious | I (%) | Rv    | ESDv (cf) | Volume Stored   | Pe Treated |
|--|---------------|------------|-------|-------|-----------|-----------------|------------|
| FP-1   | 1974          | 1974       | 100%  | 0.950 | 156       | 40 cf           | 1.024      |
| FP-2   | 1546          | 1546       | 100%  | 0.950 | 122       | 32 cf           | 1.046      |
| FP-3   | 2660          | 2660       | 100%  | 0.950 | 211       | 55 cf           | 1.045      |
| FP-4   | 1996          | 1996       | 100%  | 0.950 | 158       | 40 cf           | 1.013      |
| FP-5   | 2014          | 2014       | 100%  | 0.950 | 159       | 50 cf           | 1.254      |
| FP-6   | 2538          | 2538       | 100%  | 0.950 | 201       | 55 cf           | 1.095      |
| FP-7   | 1534          | 1534       | 100%  | 0.950 | 121       | 32 cf           | 1.054      |
| FP-9   | 21117         | 20330      | 96%   | 0.916 | 1613      | 408 cf          | 1.012      |
| FP-10  | 19811         | 15555      | 78%   | 0.757 | 1249      | 312 cf          | 0.999      |
| FP-11  | 11014         | 7160       | 65%   | 0.635 | 583       | 293 cf          | 2.011      |
| FP-12  | 3995          | 3995       | 100%  | 0.950 | 316       | 80 cf           | 1.012      |
| FP-13  | 5774          | 5774       | 100%  | 0.950 | 457       | 115 cf          | 1.006      |
| FP-14  | 7337          | 7337       | 100%  | 0.950 | 581       | 147 cf          | 1.012      |
| FP-15  | 7764          | 7764       | 100%  | 0.950 | 615       | 154 cf          | 1.022      |
| FP-16  | 5991          | 5991       | 100%  | 0.950 | 474       | 120 cf          | 1.012      |
| FP-17  | 4232          | 4232       | 100%  | 0.950 | 335       | 85 cf           | 1.015      |
| FP-18  | 4731          | 4731       | 100%  | 0.950 | 375       | 109 cf          | 1.159      |
| FP-19  | 3523          | 3523       | 100%  | 0.950 | 279       | 70 cf           | 1.004      |
| FP-20  | 18162         | 3351       | 18%   | 0.216 | 327       | 156 cf          | 1.308      |
| FP-21  | 18120         | 10138      | 56%   | 0.616 | 828       | 261 cf          | 1.260      |
| FP-22  | 7312          | 7312       | 100%  | 0.950 | 579       | 150 cf          | 1.037      |
| FP-23  | 7333          | 7333       | 100%  | 0.950 | 581       | 147 cf          | 1.013      |
| MBW1   | 7284          | 3745       | 51%   | 0.513 | 311       | 245 cf          | 1.050      |
| MBW2   | 10231         | 8703       | 85%   | 0.816 | 695       | 533 cf          | 1.022      |
| <b>UNDERGROUND 10- YEAR STORAGE FACILITY</b> |               |            |       |       |           | <b>28350 cf</b> |            |

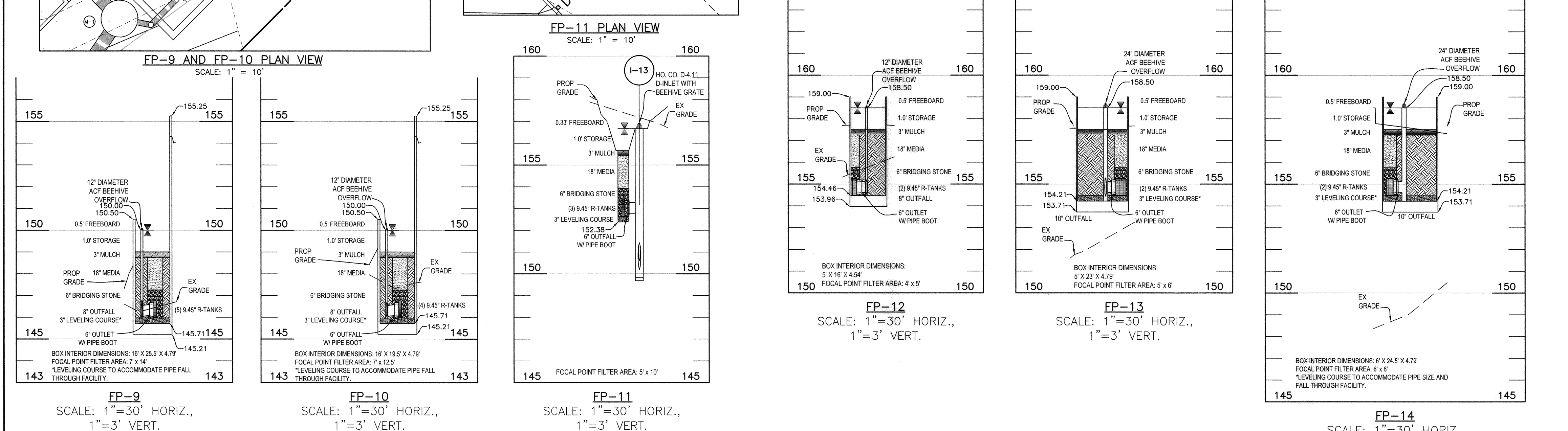
All facilities are privately owned and maintained.



FP-1 SCALE: 1"=30' HORIZ., 1"=3' VERT.  
 FP-2 SCALE: 1"=30' HORIZ., 1"=3' VERT.  
 FP-3 SCALE: 1"=30' HORIZ., 1"=3' VERT.  
 FP-4 SCALE: 1"=30' HORIZ., 1"=3' VERT.  
 FP-5 SCALE: 1"=30' HORIZ., 1"=3' VERT.  
 FP-6 SCALE: 1"=30' HORIZ., 1"=3' VERT.  
 FP-7 SCALE: 1"=30' HORIZ., 1"=3' VERT.



FP-9 AND FP-10 SCALE: 1"=10'  
 FP-11 SCALE: 1"=10'  
 FP-12 SCALE: 1"=10'  
 FP-13 SCALE: 1"=10'  
 FP-14 SCALE: 1"=10'



FP-9 SCALE: 1"=30' HORIZ., 1"=3' VERT.  
 FP-10 SCALE: 1"=30' HORIZ., 1"=3' VERT.  
 FP-11 SCALE: 1"=30' HORIZ., 1"=3' VERT.  
 FP-12 SCALE: 1"=30' HORIZ., 1"=3' VERT.  
 FP-13 SCALE: 1"=30' HORIZ., 1"=3' VERT.  
 FP-14 SCALE: 1"=30' HORIZ., 1"=3' VERT.

| MATERIAL                         | SPECIFICATION  | SIZE                             | NOTES  |
|----------------------------------|--|----------------------------------|--|
| PLANTINGS                        | SEE APPENDIX A, TABLE A.4.   | N/A                              | PLANTINGS ARE SITE SPECIFIC.   |
| PLANTING SOIL (2' TO 4' DEEP)    | LOAMY SAND 50-65% COMPOST 35-40% OR SANDY LOAM 30% COARSE SAND 30% & COMPOST 40%   | N/A                              | USDA SOIL TYPES: LOAMY SAND OR SANDY LOAM; CLAY CONTENT < 3%   |
| ORGANIC CONTENT                  | MIN 10% BY DRY WEIGHT  |                                  |  |
| MULCH                            | SHREDED HARDWOOD   | N/A                              | AGED 6 MONTHS, MINIMUM, NO PINE OR WOOD CHIPS  |
| GEOTEXTILE (CLASS 'C')           |  | N/A                              | PE TYPE 1 NONWOVEN   |
| GEOTEXTILE (1/4" WIRE MESH)      |  | 1/4" WIRE MESH                   | 1/4" WIRE MESH   |
| UNDERDRAIN GRAVEL                | AASHTO M-43  | NO. 57 OR NO. 8 0.375" TO 0.750" | 4" TO 6" RIGID SCH. 40 PVC, SBRSS OR HDPE  |
| UNDERDRAIN PIPING                | F 758, TYPE PC 28 OR AASHTO M-278  |                                  | 3/8" PERFT. @ 6" O/C. 4 HOLES PER ROW. MINIMUM OF 2" OF GRAVEL OVER PIPES, NOT NECESSARY UNDERNEATH PIPES.   |
| IMPERVIOUS LINER                 | ASTM-D-4833 (THICKNESS) 1.00 LB./YD. (TENSILE STRENGTH 1,100 LB./IN. ELONGATION 200%)<br>ASTM-D-624 (TEAR RESISTANCE - 150 LB./IN.)<br>ASTM-D-471 (WATER ABSORPTION: +8 TO -2% MASS)<br>ASTM-D-4833 (PUNCTURE STRENGTH 125LB.)<br>ASTM-D-4632 (TENSILE STRENGTH 300 LB.) | 30 MIL THICK                     | LINER TO BE TRAWLER RESISTANT. A GEOTEXTILE FABRIC SHOULD BE USED TO PROTECT THE LINER FROM PUNCTURING.  |
| GEOTEXTILE (BELOW IMPERV. LINER) | ASTM-D-4833 (PUNCTURE STRENGTH 125LB.)<br>ASTM-D-4632 (TENSILE STRENGTH 300 LB.)   |                                  |  |
| POURED IN PLACE CONCRETE         | MPSA MIX NO. 3, 1" - 3500 PSI@28 DAYS, NORMAL WEIGHT, AIR-ENTRANCED, 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 REQUIRE DESIGN DRAWINGS SEALED AND APPROVED BY A PROFESSIONAL STRUCTURAL ENGINEER LICENSED IN THE STATE OF MARYLAND - DESIGN TO INCLUDE TESTING AND CODE 300/P/S VERTICAL LOADING (H=10 OR H=20), ALLOWABLE HORIZONTAL LOADING (BASED ON SOIL PRESSURES), AND ANALYSIS OR POTENTIAL CRACKING. |
| SAND                             | AASHTO M-6 OR ASTM-C-33  | .02" TO .04"                     | SAND SUBSTITUTIONS SUCH AS DIBASE AND GRAVELS (ASTM) #10 ARE NOT ACCEPTABLE. NO CALCIUM CARBONATE OR DOLOMITE SAND SUBSTITUTIONS ARE ACCEPTABLE. NO ROCK DUST CAN BE USED FOR SAND.  |

**OPERATION AND MAINTENANCE SCHEDULE FOR BIORETENTION (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 WASHOUT. 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 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 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 REPLACED 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.

APPROVED: DEPARTMENT OF PLANNING AND ZONING  
 [Signature] 12/7/20  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE  
 [Signature] 12/21/20  
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE  
 [Signature] 12/21/20  
 DIRECTOR DATE

NO. DATE REVISION

**BENCHMARK ENGINEERING, INC.**  
 ENGINEERS & LAND SURVEYORS & PLANNERS  
 8480 BALTIMORE NATIONAL PIKE SUITE 315 ELLICOTT CITY, MARYLAND 21043  
 (P) 410-465-6105 (F) 410-465-6644  
 WWW.BEI-CVLENGINEERING.COM

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. 28376. Expiration Date: 1-1-21.

Nov 3 2020 7:59 PM DocuSign

OWNER/DEVELOPER: BINDER ROCK LLC  
 C/O H & H ROCK COMPANIES  
 6800 DEERPATH ROAD SUITE 100  
 ELKRIDGE, MARYLAND 21075  
 410.579.2442

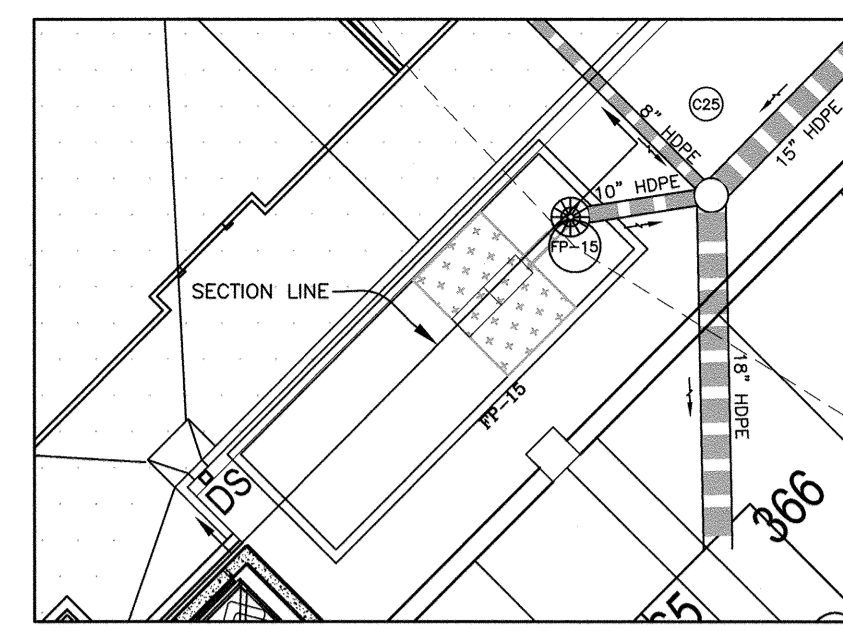
PROJECT: DORSEY CENTER APARTMENTS 210 UNITS PARCEL 'R'

LOCATION: TAX MAP 37 PARCEL 375 - GRID 24  
 1st ELECTION DISTRICT  
 HOWARD COUNTY, MARYLAND

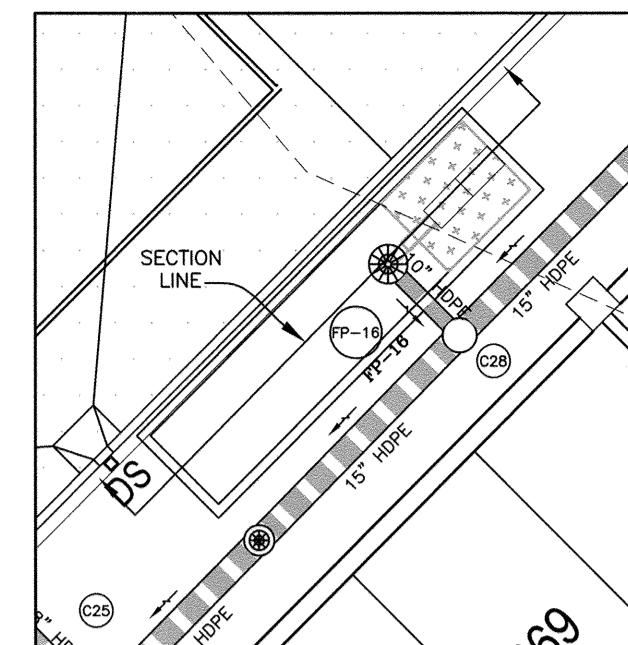
TITLE: STORMWATER MANAGEMENT PLANS, SECTIONS AND DETAILS

DATE: OCTOBER 2020 PROJECT NO. 1959

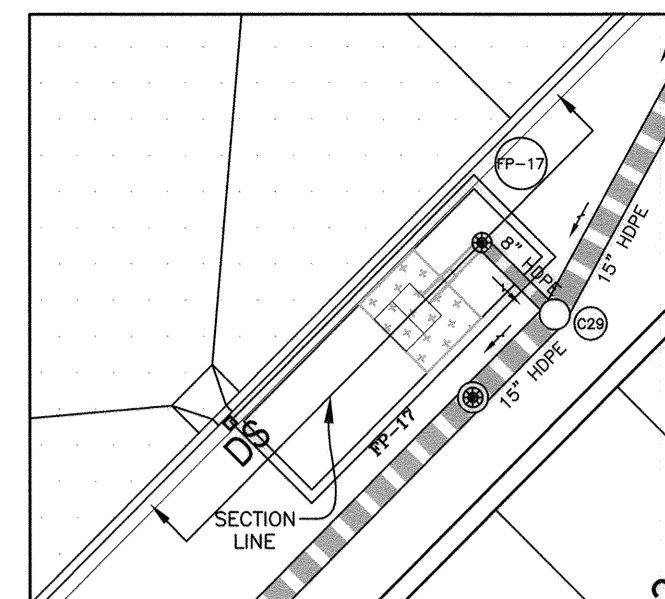
Design: AAM Draft: AAM Check: CAM SCALE: AS SHOWN DRAWING 20 OF 49



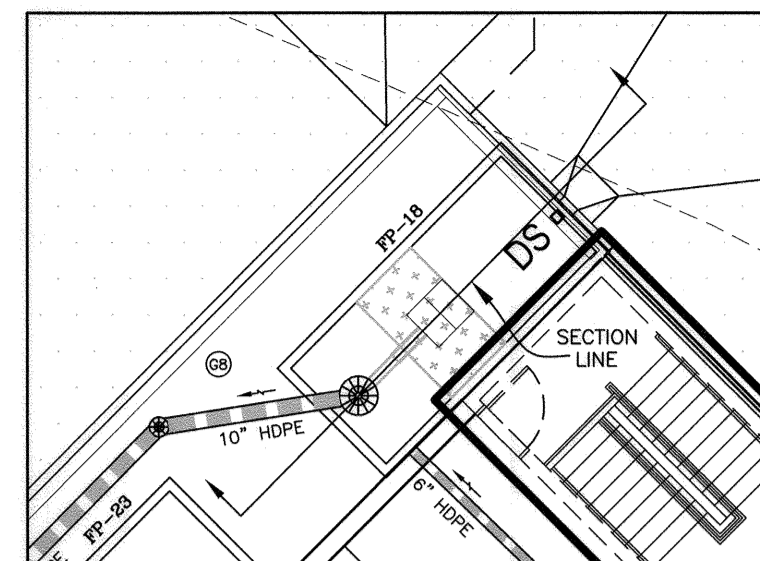
FP-15 PLAN VIEW  
SCALE: 1" = 10'



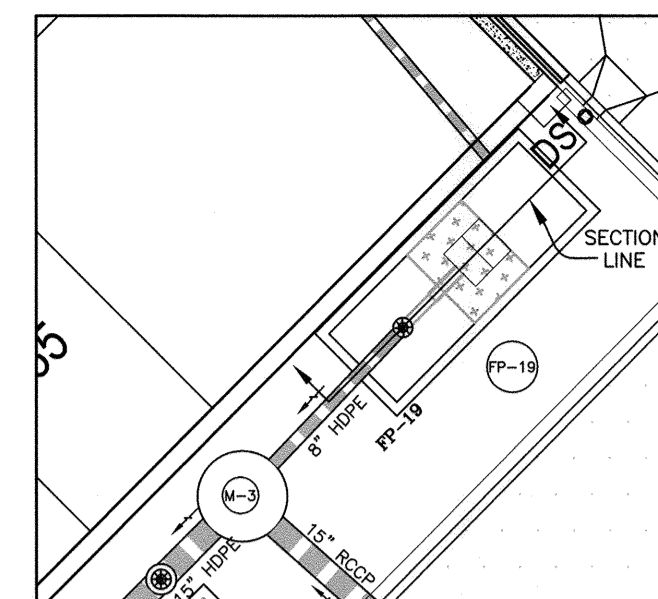
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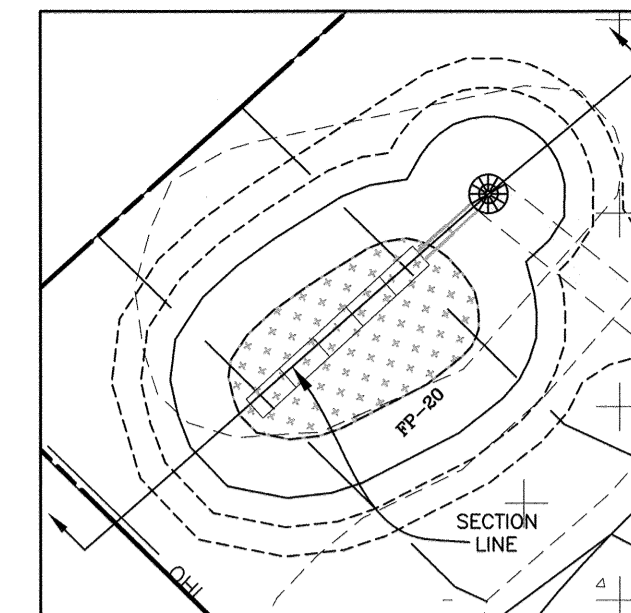
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SCALE: 1" = 10'



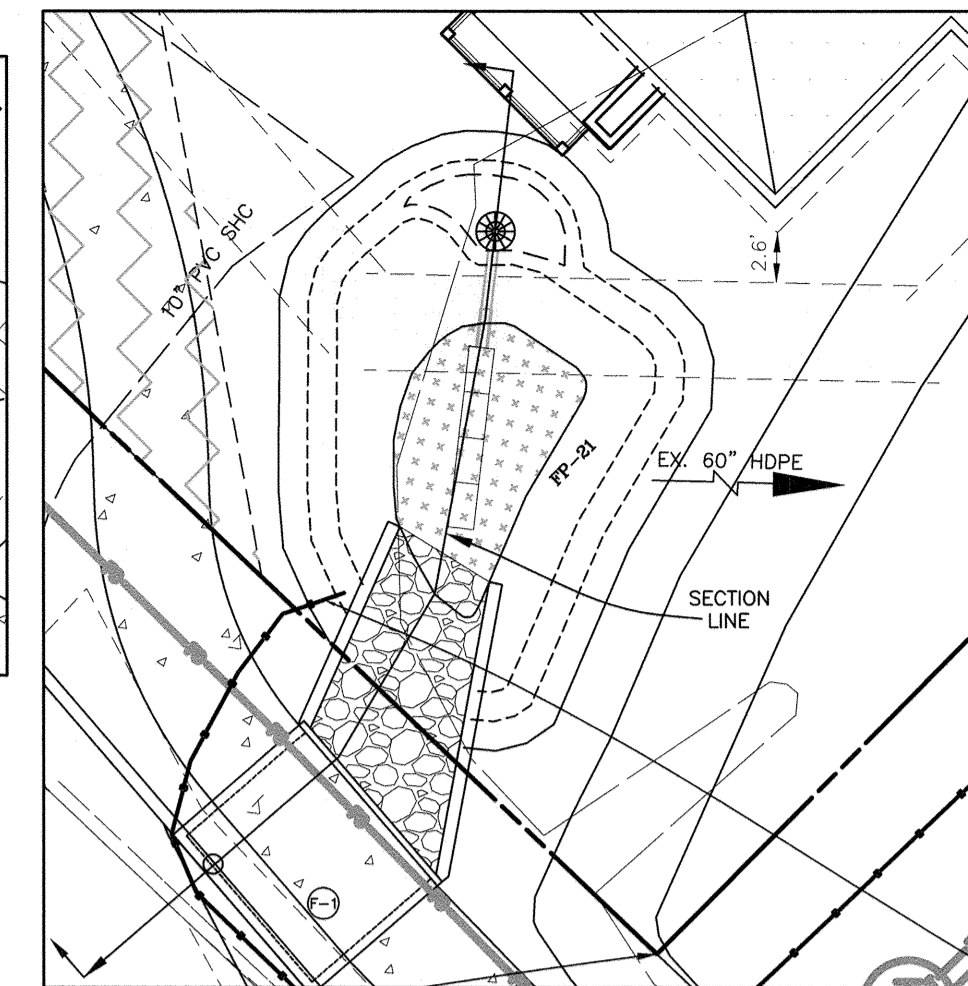
FP-18 PLAN VIEW  
SCALE: 1" = 10'



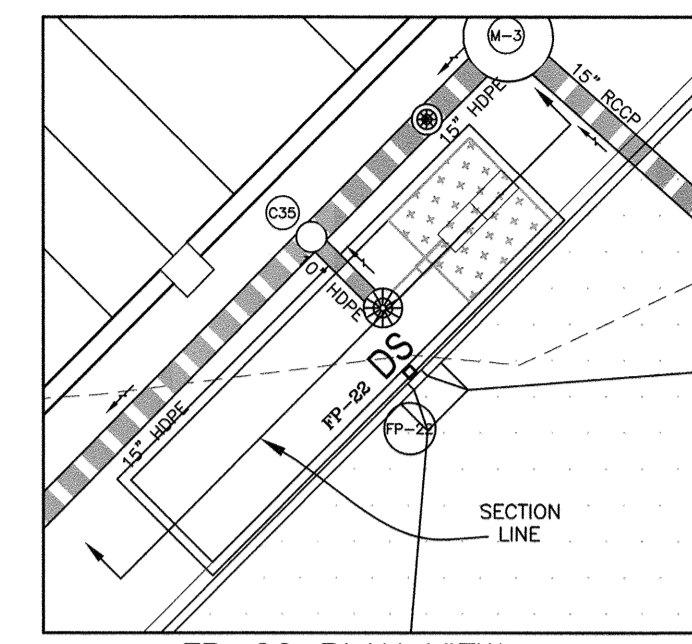
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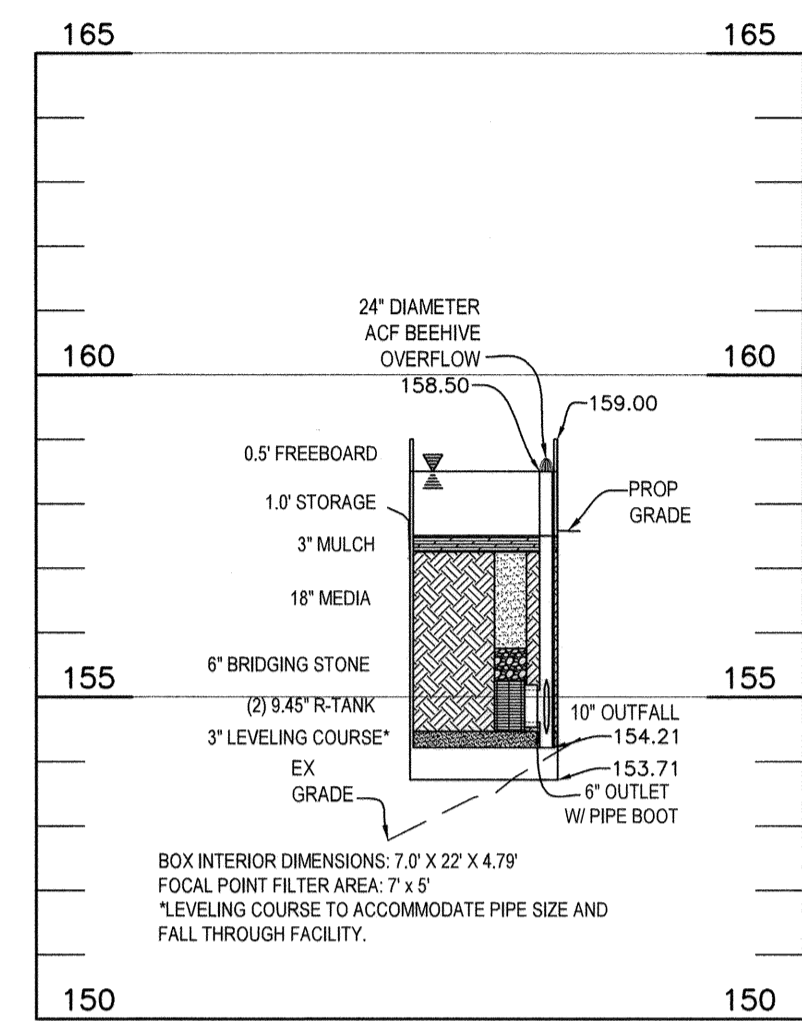
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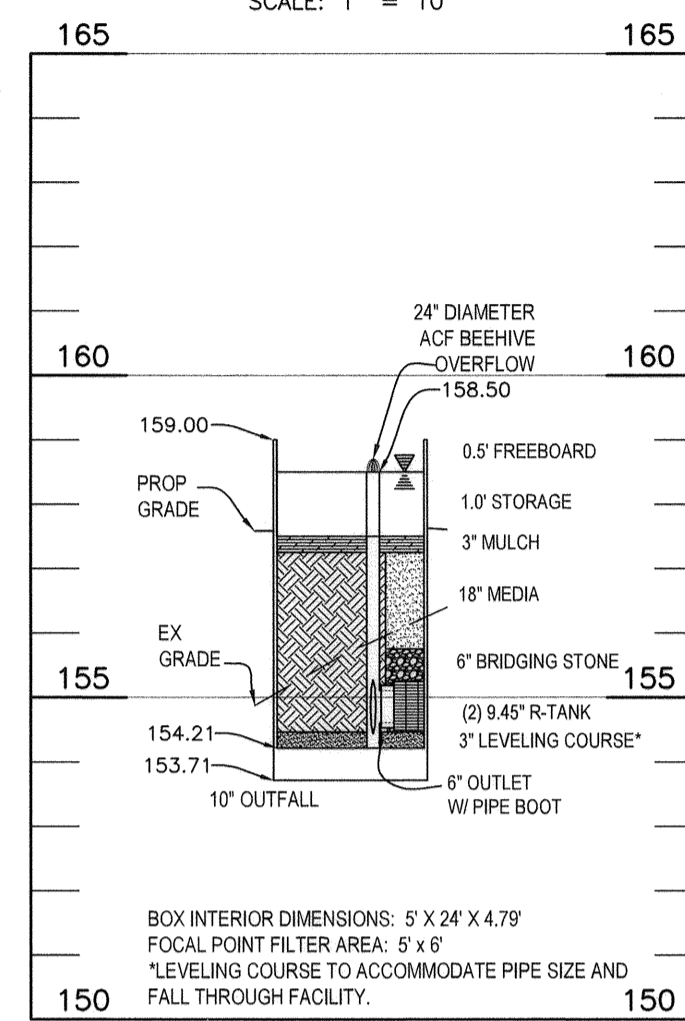
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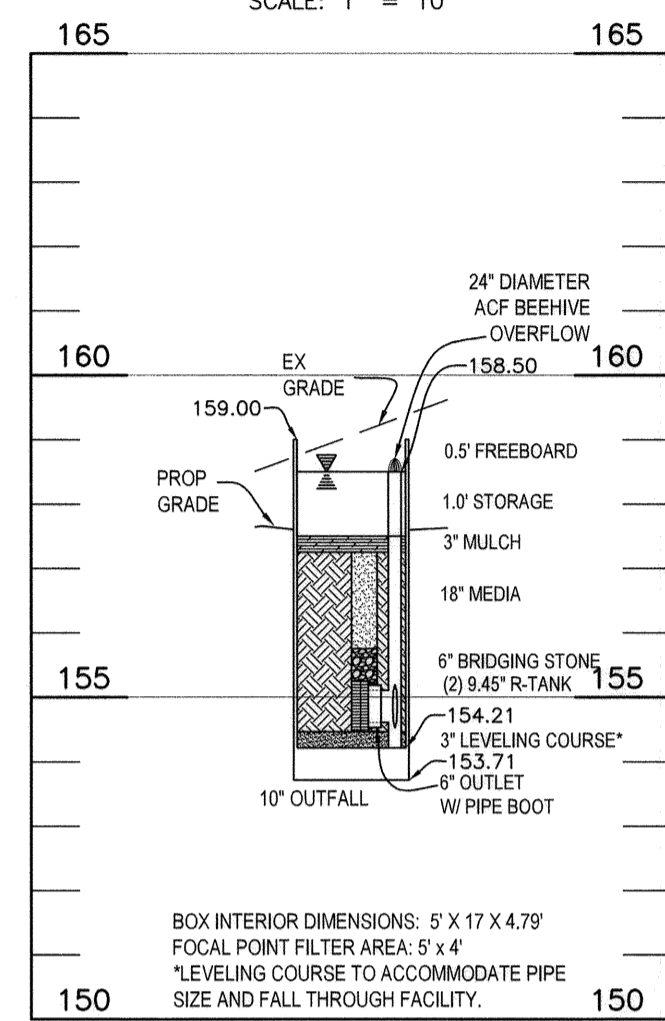
FP-22 PLAN VIEW  
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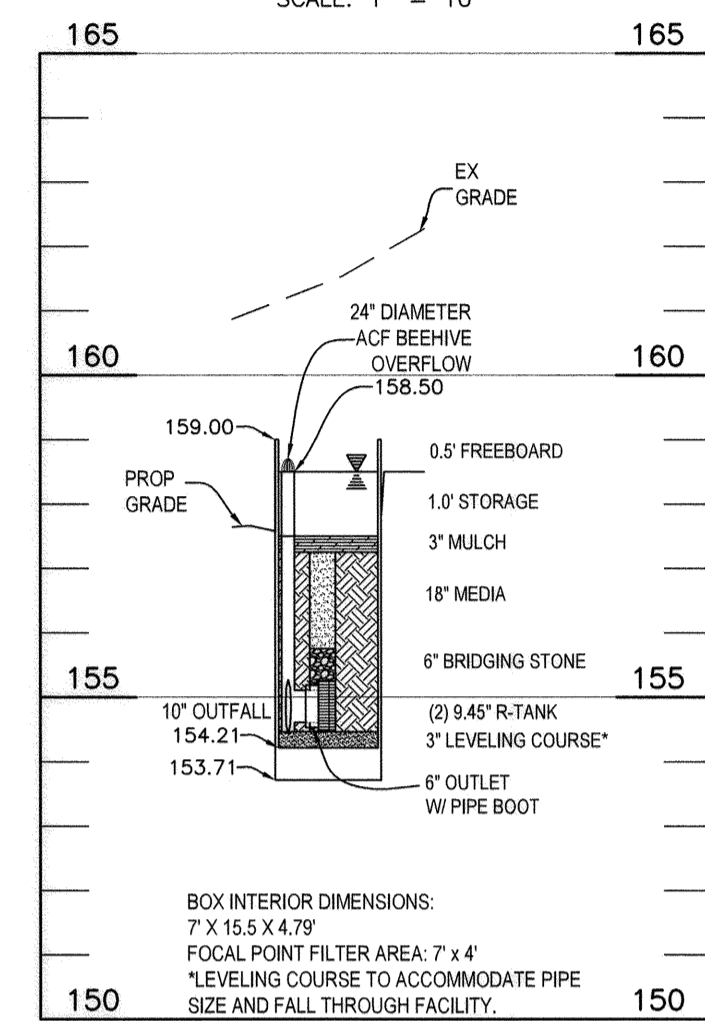
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1"=3' VERT.



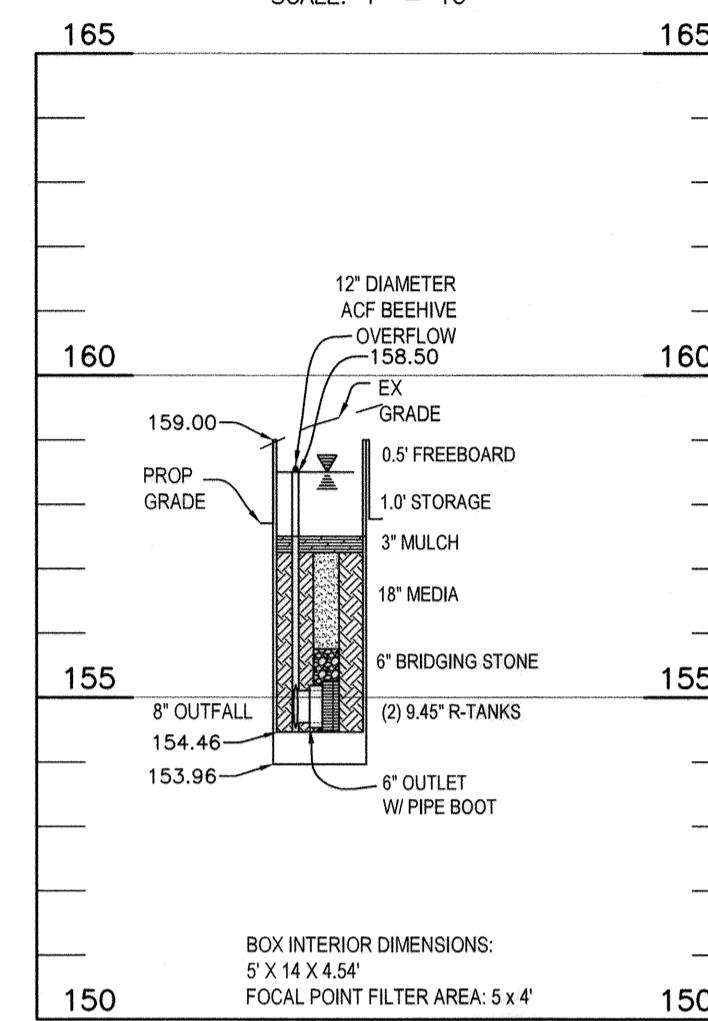
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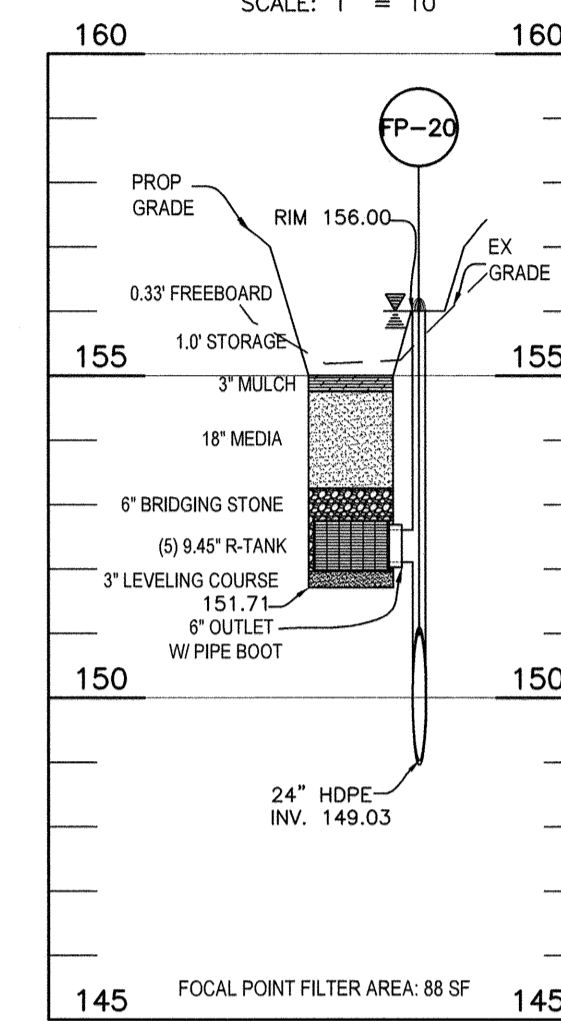
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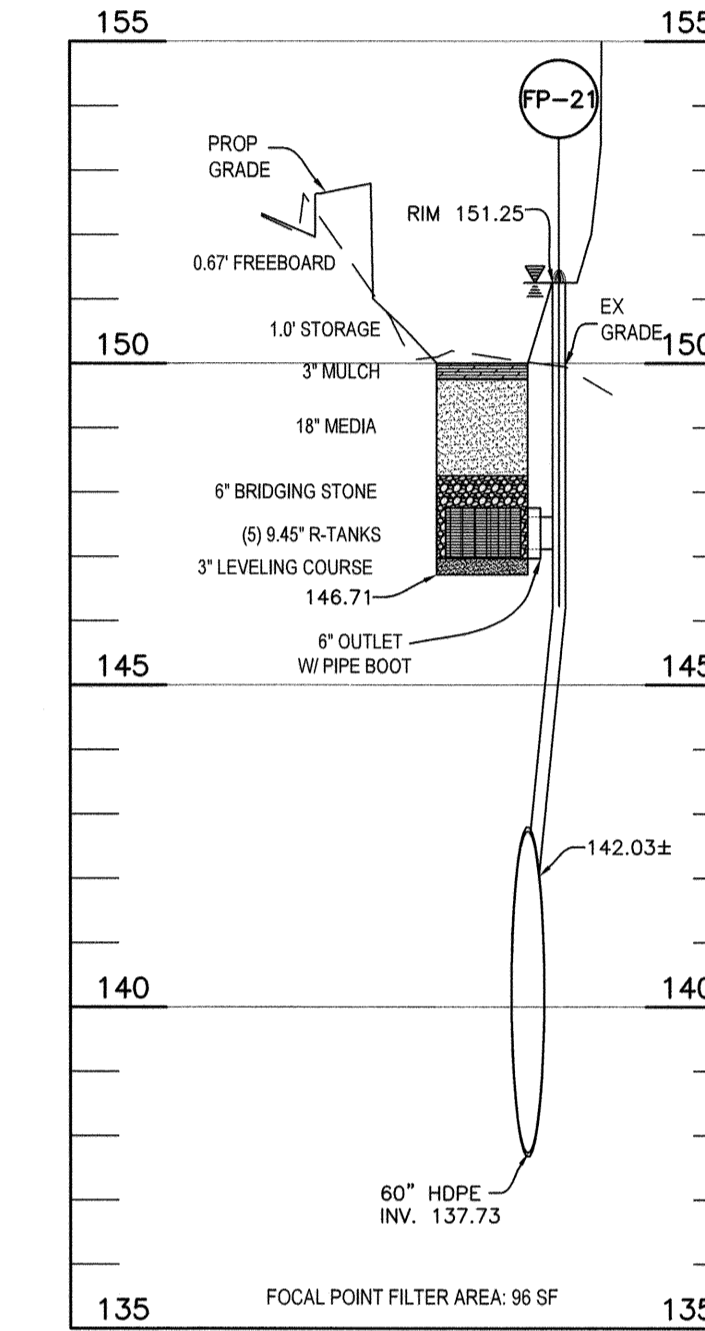
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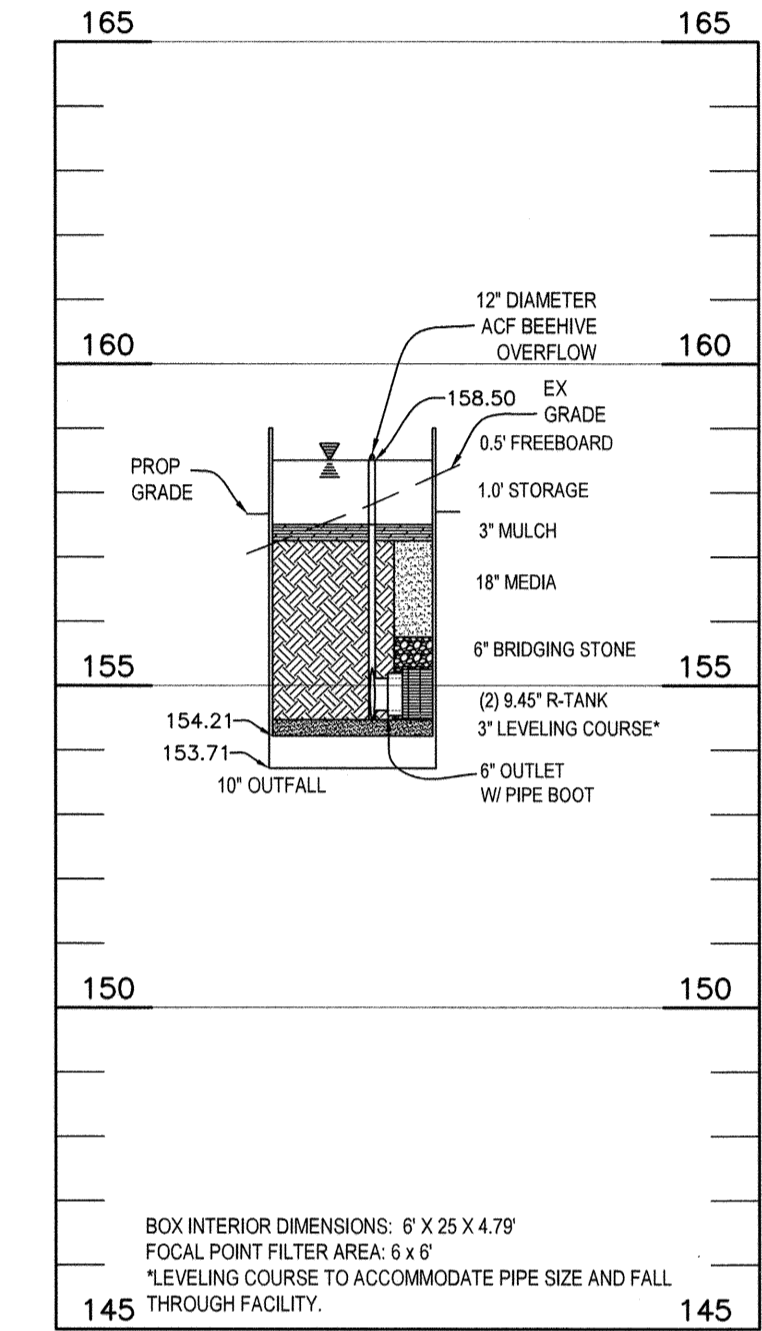
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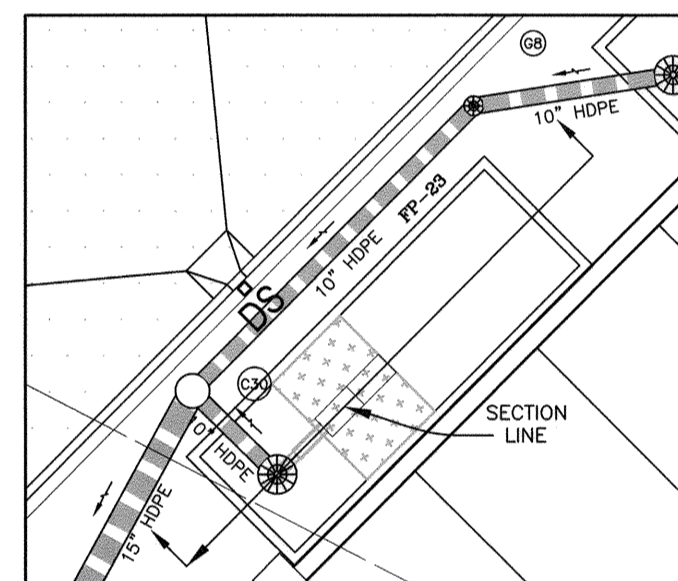
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1"=3' VERT.



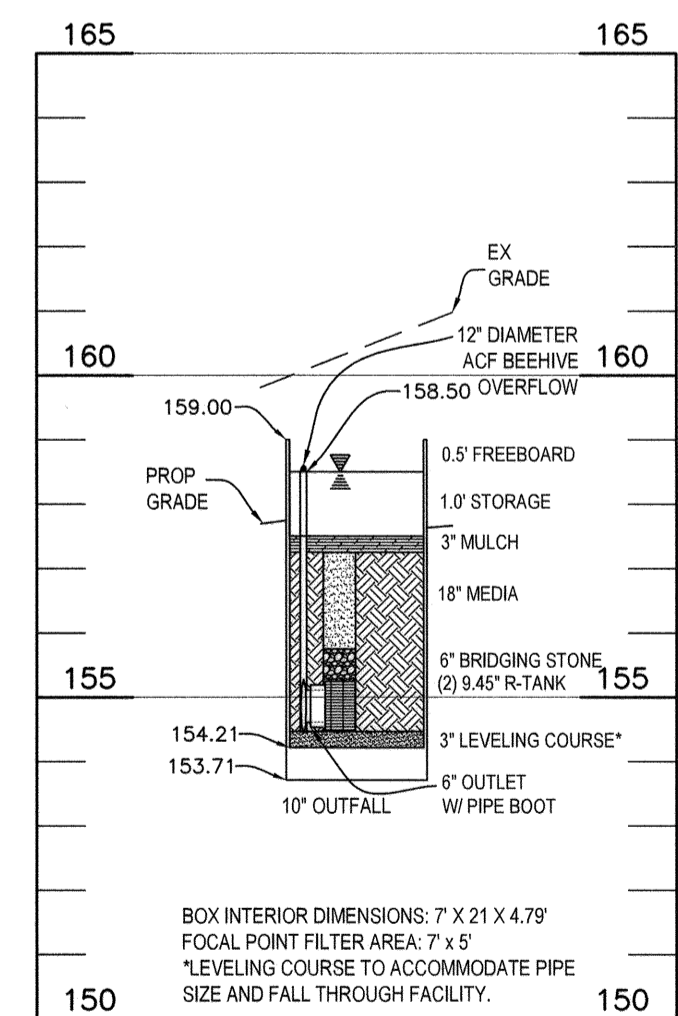
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1"=3' VERT.



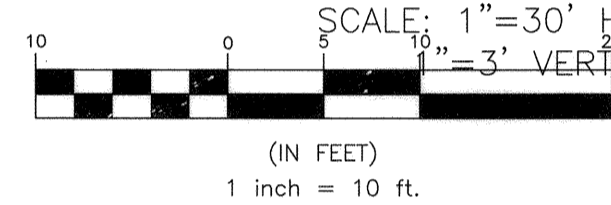
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1"=3' VERT.



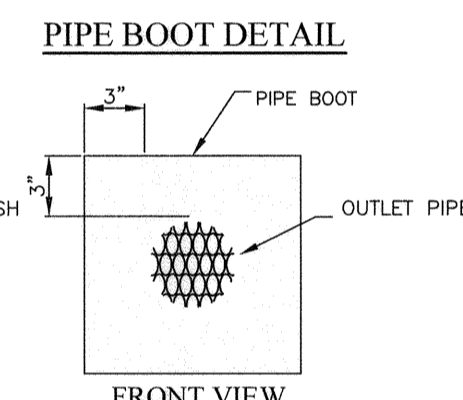
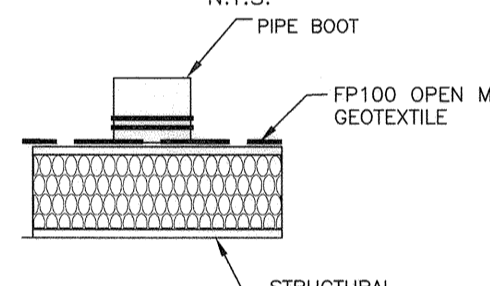
FP-23 PLAN VIEW  
SCALE: 1" = 10'



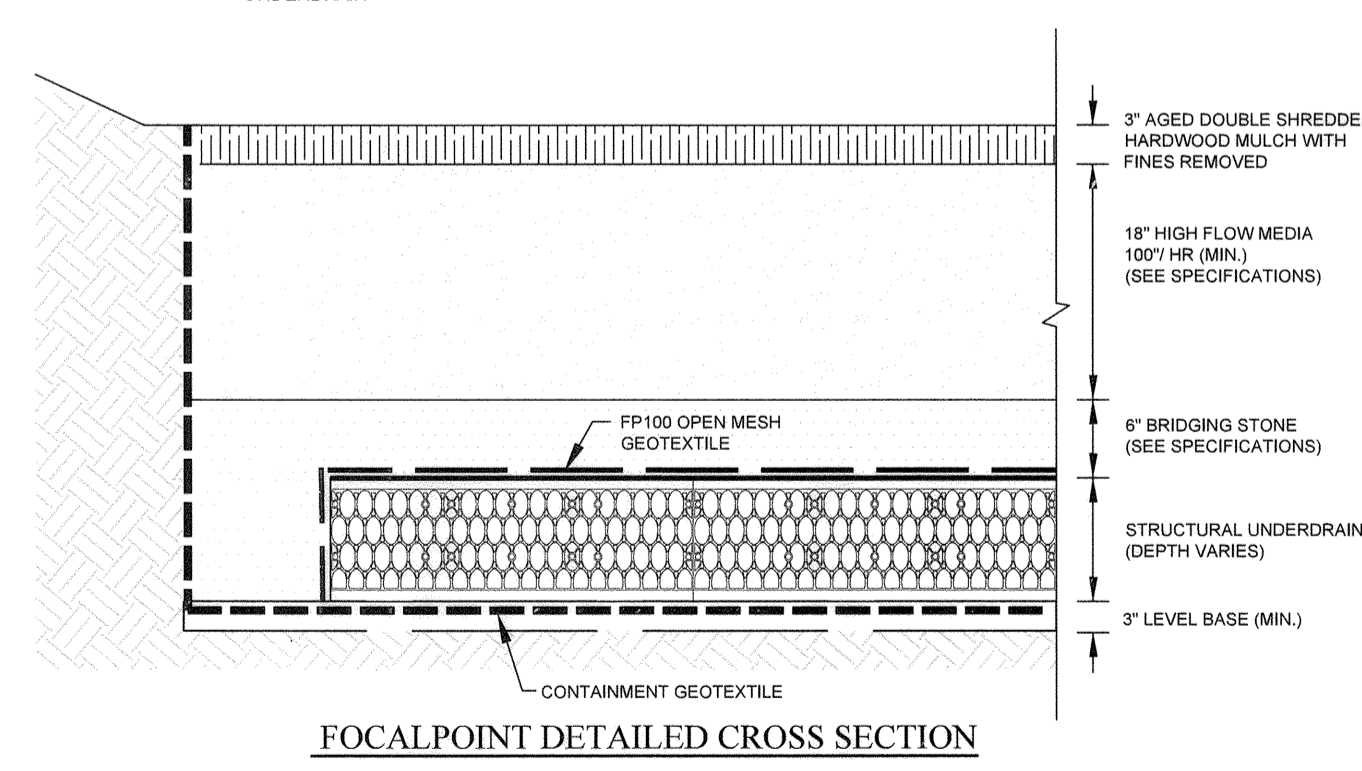
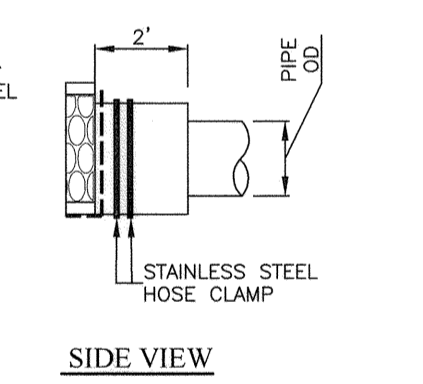
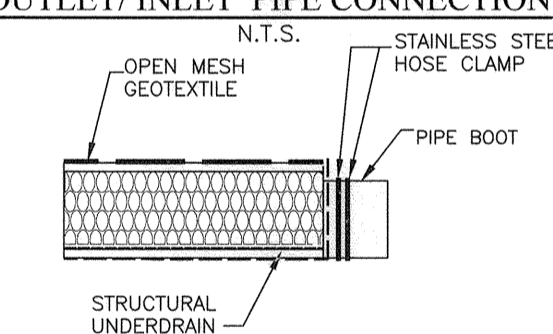
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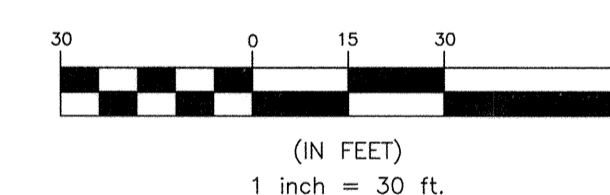
OBSERVATION/ MAINTENANCE PORT CONNECTION  
N.T.S.



OUTLET/ INLET PIPE CONNECTION  
N.T.S.



FOCAL POINT DETAILED CROSS SECTION  
NO SCALE



| NO. | DATE | REVISION |
|-----|------|----------|
|     |      |          |
|     |      |          |
|     |      |          |

**BENCHMARK**  
ENGINEERS & LAND SURVEYORS & PLANNERS  
**ENGINEERING, INC.**

8480 BALTIMORE NATIONAL PIKE SUITE 315 ELLICOTT CITY, MARYLAND 21043  
(P) 410-465-6105 (F) 410-465-6644  
WWW.BEI-CIVILENGINEERING.COM

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. 28376. Expiration Date: 1-1-21.

NOV 3 2020 8:01 PM DocuSign

|  |  |
|--|--|
| OWNER/DEVELOPER:<br>BINDER ROCK LLC<br>C/O H & H ROCK COMPANIES<br>6800 DEERPATH ROAD<br>SUITE 100<br>ELKRIDGE, MARYLAND 21075<br>410.579.2442 | PROJECT: DORSEY CENTER APARTMENTS<br>210 UNITS<br>PARCEL 'T'   |
| LOCATION:<br>TAX MAP 37<br>PARCEL 375 - GRID 24<br>141 ELECTION DISTRICT<br>HOWARD COUNTY, MARYLAND  | TITLE:<br>STORMWATER MANAGEMENT<br>PLANS, SECTIONS AND DETAILS |
| DATE: OCTOBER 2020   | PROJECT NO. 1959   |
| Design: AAM  | Draft: AAM   |
| Check: CAM   | SCALE: AS SHOWN  |
|  | DRAWING 21 OF 49   |

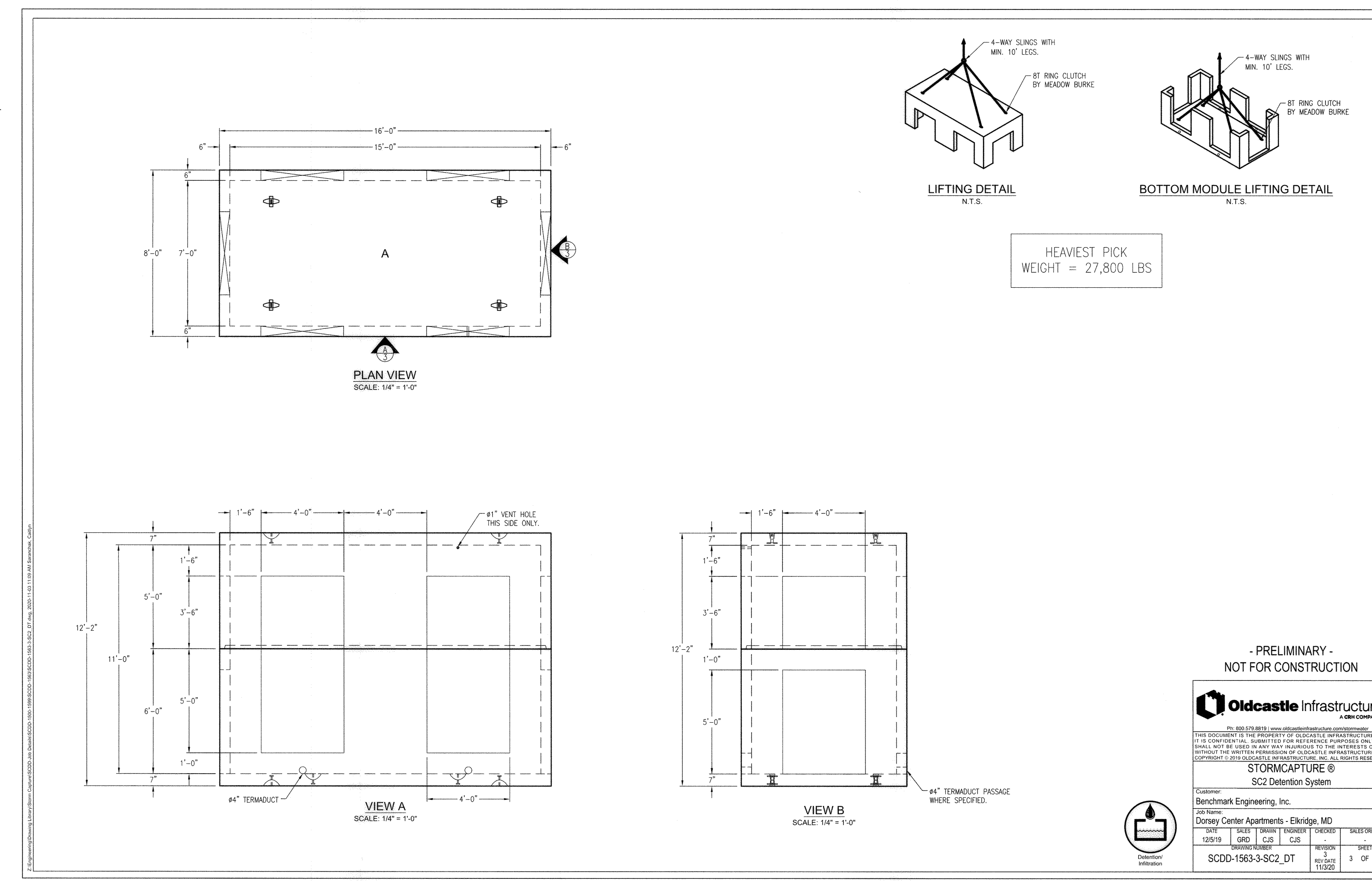
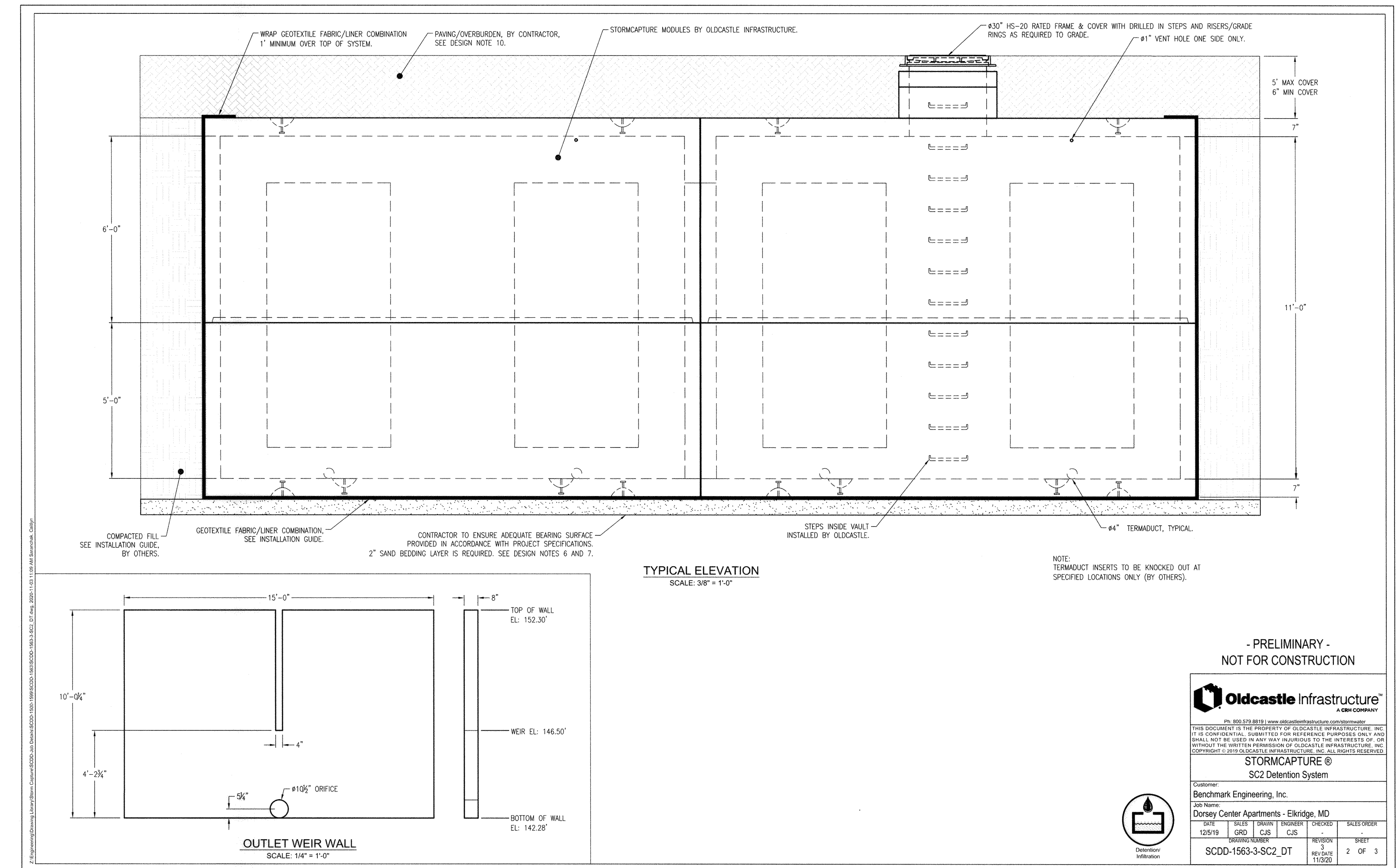
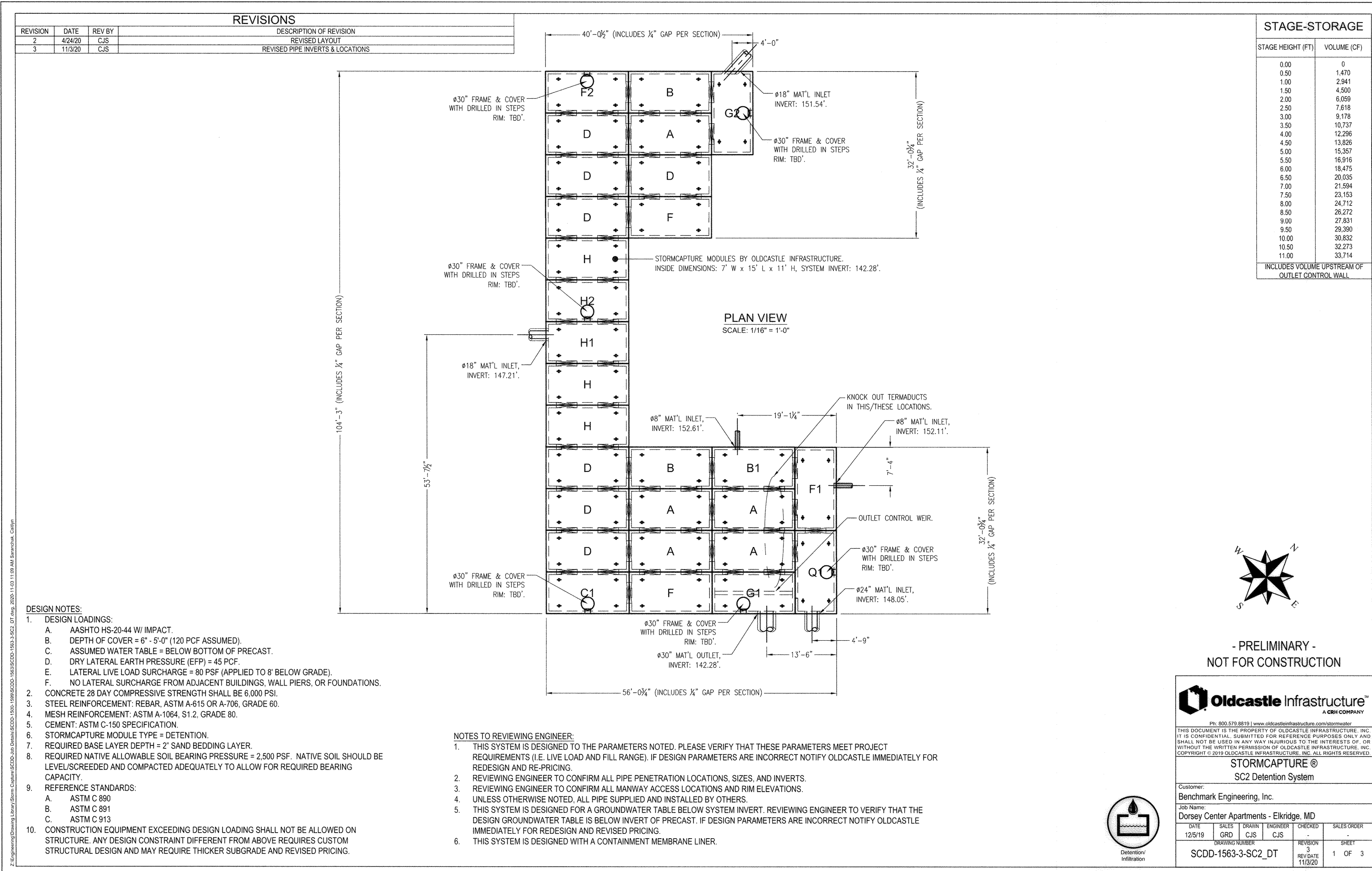
APPROVED: DEPARTMENT OF PLANNING AND ZONING

*[Signature]* 12-7-20  
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

*[Signature]* 12/14/20  
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

*[Signature]* 12/21/20  
DIRECTOR DATE





**BENCHMARK ENGINEERING, INC.**  
ENGINEERS & LAND SURVEYORS & PLANNERS  
8480 BALTIMORE NATIONAL PIKE SUITE 315 ELLICOTT CITY, MARYLAND 21043  
(P) 410-465-6105 (F) 410-465-6644  
WWW.BEI-CIVILENGINEERING.COM

**NOV 23 2020 6:01 PM DocuSign**

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. 28376. Expiration Date: 1-1-21.

**OWNER/DEVELOPER:**  
BINDER ROCK LLC  
C/O H & H ROCK COMPANIES  
6800 DEERPATH ROAD  
SUITE 100  
ELKDRIDGE, MARYLAND 21075  
410.579.2442

**PROJECT:** DORSEY CENTER APARTMENTS  
210 UNITS  
PARCEL 'T'

**LOCATION:** TAX MAP 37  
PARCEL 375 - GRID 24  
1st ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND

**TITLE:** UNDERGROUND STORMWATER MANAGEMENT DETAILS

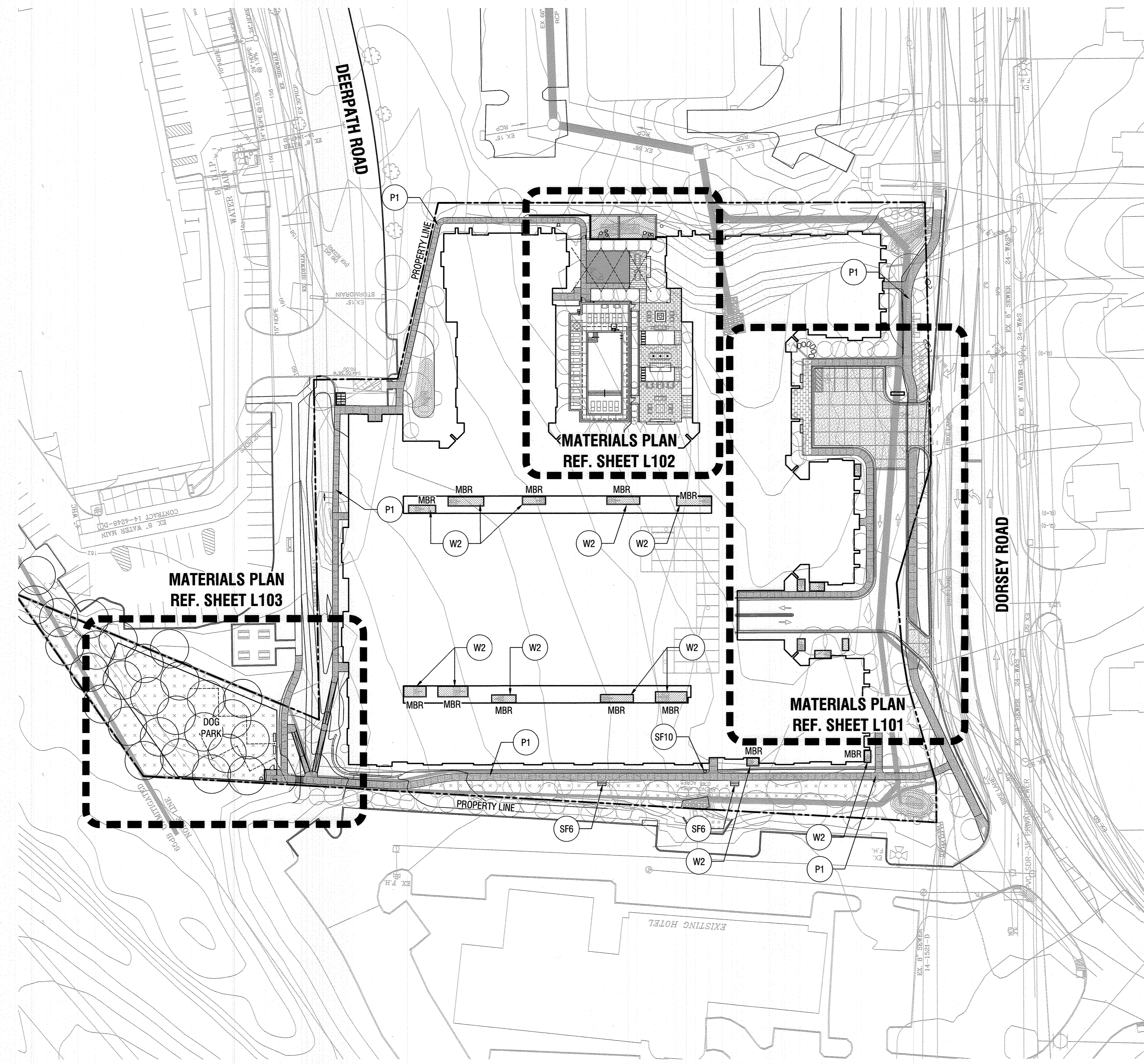
**DATE:** OCTOBER 2020 **PROJECT NO.:** 1959

**SCALE:** AS SHOWN **DRAWING 23 OF 49**

Design: AAM Draft: AAM Check: CAM







**MATERIALS AND PAVING LEGEND**

- P PAVING**
  - P1 (1 L200) CONCRETE TYPE 1 (PEDESTRIAN SECTION)  
COLOR: STANDARD GREY
  - P2 (REF. CIVIL) CONCRETE TYPE 2 (VEHICULAR SECTION)  
COLOR: STANDARD GREY
  - P3 (REF. CIVIL) INTEGRAL COLOR STAMPED CONCRETE (VEHICULAR SECTION)  
SEE NOTE SHEET L101
  - P4 (3 L200) PORCELAIN PAVER  
MANUFACTURER: MIRAGE EVO\_2/E  
COLLECTION / COLOR: QUARZITI\_2.0 / GLACIER QR61
  - P5 (4 L200) BLUESTONE PAVER  
COLOR: PREMIUM BLUE  
FINISH: THERMAL FINISHED ALL EXPOSED EDGES
  - P6 (5 L200) IRREGULAR BLUESTONE STEPPING STONES  
COLOR: PREMIUM BLUE  
FINISH: THERMAL FINISHED ALL EXPOSED EDGES
  - P7 (5 L200) RECTANGULAR BLUESTONE STEPPING STONES  
COLOR: PREMIUM BLUE  
FINISH: THERMAL FINISHED ALL EXPOSED EDGES
  - P8 (6 L200) SYNTHETIC TURF  
SYNLAWN 356
  - P9 (7 L200) MEXICAN BEACH PEBBLE
  - P10 (3 L201) RIVER JACK AND FIELD STONE OUTFALL
- F FENCE**
  - F1 (1 L207) PADDOCK FENCE - 4' HT.
  - F2 (1 L206) FENCE - 6' HT.
  - F3 (1 L203) GUARDRAIL
  - F4 (1 L203) RAMP HANDRAIL
- S STAIRS**
  - S3 (3 L205) CONCRETE STAIRS
- W WALLS**
  - W1 (1 L203) CONCRETE RETAINING WALL
  - W2 (1 L204) CONCRETE MBR UNIT  
REF. CIVIL DWGS. FOR SIZE AND DEPTH
  - W3 (1 L202) BRICK FACED CONCRETE MBR UNIT
  - W4 (2 L202) BRICK FACED CONCRETE WALL
  - W6 (6 L210) MODULAR WETLAND SYSTEM (MWS)
  - W7 (3 L202) LANDSCAPE BLOCK WALL
- SF SITE FURNISHINGS**
  - SF1 (1 L208) GRILL STATION
  - SF2 (1 L213) TV WALL
  - SF3 (1 L209) FIRE PIT
  - SF4 (1 L214) METAL PERGOLA
  - SF6 (1 L211) BENCH
  - SF7 (4 L211) ILLUMINATED BOLLARD
  - SF8 (2 L211) LIGHT POLE
  - SF9 (2 L212) ORNAMENTAL PLANTER (OP#)
  - SF10 (2 L214) DOG STATION

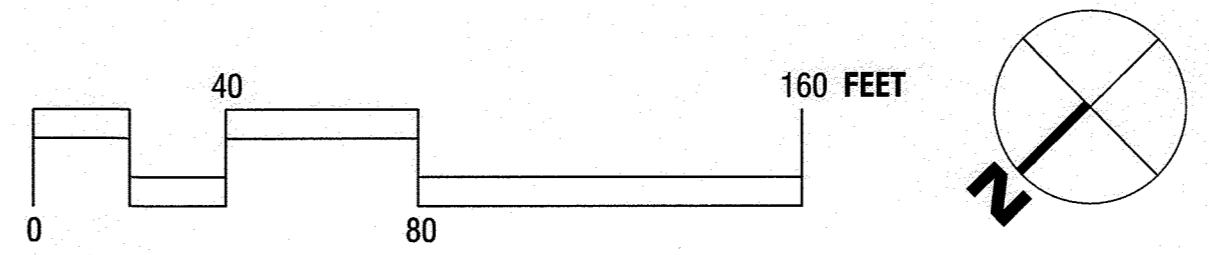
\*PLEASE NOTE THAT THIS PLAN SUPERSEDES AND REPLACES THE SEPTEMBER 2020 PLAN SHEET.



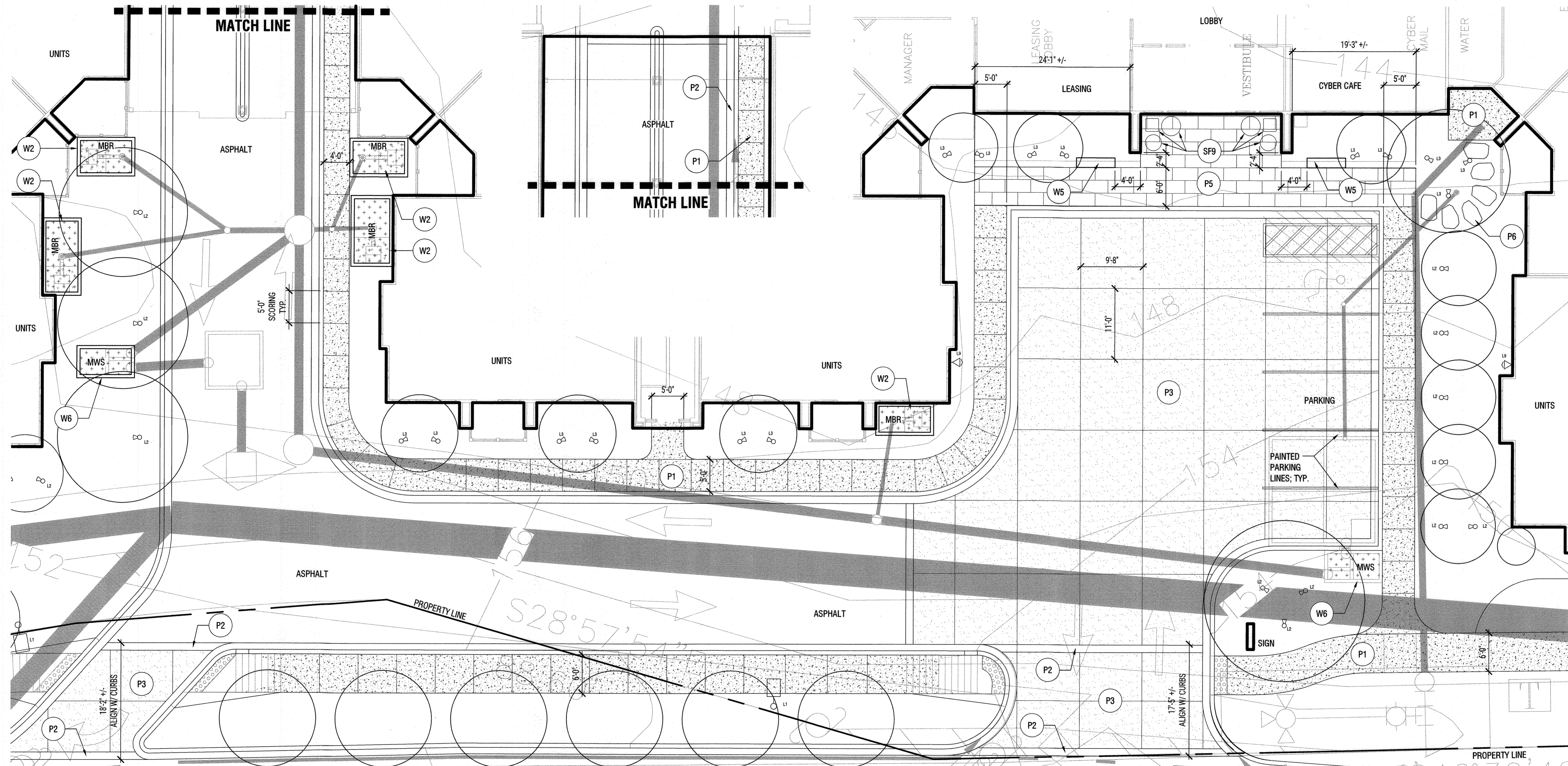
L100

APPROVED: DEPARTMENT OF PLANNING AND ZONING  
  
 7/11/23  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION  
 DATE

CHIEF, DIVISION OF LAND DEVELOPMENT  
  
 7/13/23  
 DIRECTOR  
 DATE



|   |  |
|---|--|
| 5.01.2023 REVISED SIDEWALK LAYOUT AND STAIR LOCATION AT NORTHWEST CORNER  |  |
| 4.16.2021 HUD REVIEW SET  |  |
| NO.   | DATE   |
| REVISION  |  |
| <h1>Design Collective</h1> <p>ARCHITECTURE PLANNING INTERIORS LANDSCAPE ARCHITECTURE GRAPHICS</p> <p>100 East Pratt Street, 18th Floor<br/>Baltimore, Maryland 21202<br/>P 410 685 6655   www.designcollective.com</p>  |  |
| "I certify that these documents were prepared or approved by me, and that I am a duly licensed landscape architect under the laws of the State of Maryland, License No. 1039, expiration date 06/12/2024"<br>By: Matt D'Amico, PLA<br>Design Collective, Inc. |  |
| OWNER/DEVELOPER:<br>BINDER ROCK LLC<br>C/O H & H ROCK COMPANIES<br>6800 DEERPETH ROAD<br>SUITE 100<br>ELKRIDGE, MARYLAND 21075<br>410.579.2442  | PROJECT: DORSEY CENTER APARTMENTS<br>210 UNITS<br>PARCEL 'T' |
| LOCATION:<br>TAX MAP 37<br>PARCEL 375 - GRID 24<br>14 <sup>th</sup> ELECTION DISTRICT<br>HOWARD COUNTY, MARYLAND  | TITLE:<br><b>OVERALL MATERIALS PLAN</b><br>MAY 2023          |
| DATE: SEPTEMBER 2020  | PROJECT NO. 1959   |
| Design: AAM   | Draft: AAM   |
| Check: CAM  | SCALE: 1" = 40'  |
| DRAWING 25 OF 49  |  |
| SDP-20-033  |  |



L101

**MATERIALS AND PAVING LEGEND**

- P PAVING**
- P1** 1 CONCRETE TYPE 1 (PEDESTRIAN SECTION)  
COLOR: STANDARD GREY
- P2** 2 CONCRETE TYPE 2 (VEHICULAR SECTION)  
COLOR: STANDARD GREY
- P3** 3 INTEGRAL COLOR STAMPED CONCRETE (VEHICULAR SECTION)  
COLOR: TBD PATTERN: TBD (SEE NOTE BELOW)
- P4** 4 PORCELAIN PAVER TYPE 1  
COLOR: STANDARD GREY  
PATTERN: DIRECTION PER PLAN
- P5** 5 BLUESTONE PAVER  
COLOR: PREMIUM BLUE  
FINISH: THERMAL FINISHED ALL EXPOSED EDGES
- P6** 6 BLUESTONE STEPPING STONES  
IRREGULAR; 24"x30" MIN.
- P7** 7 BLUESTONE STEPPING STONES  
RECTANGULAR; 18"x36"

- P8** 8 SYNTHETIC TURF  
SYNLAWN 356
- P9** 9 MEXICAN BEACH PEBBLE
- P10** 10 RIVER JACK AND FIELD STONE OUTFALL
- F FENCE**
- F1** 1 PADDOCK FENCE - 4' HT.
- F2** 2 FENCE - 6' HT.
- F3** 3 FENCE - 6' HT.
- S STAIRS**
- S1** 1 STONE SLAB STAIRS
- S2** 2 HANDRAIL

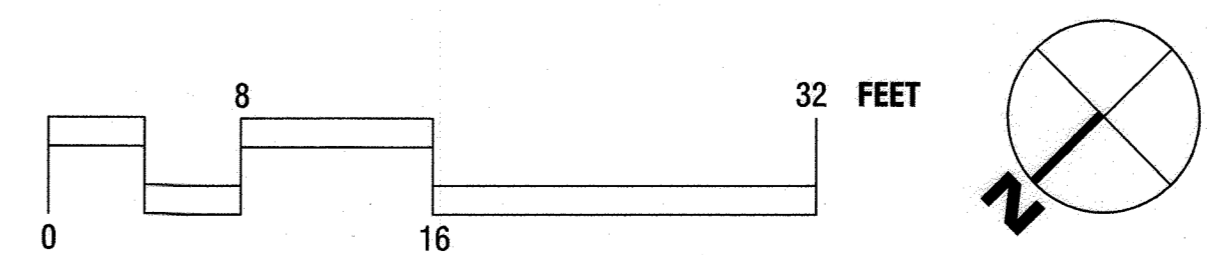
- W WALLS**
- W1** 1 CONCRETE RETAINING WALL
- W2** 2 CONCRETE MBR UNIT  
REF. CIVIL DWGS. FOR SIZE AND DEPTH
- W3** 3 BRICK FACED CONCRETE MBR UNIT
- W4** 4 BRICK FACED CONCRETE WALL
- W5** 5 STONE BLOCK SEAT WALL
- W6** 6 MODULAR WETLAND SYSTEM (MWS)
- B BOULDERS**
- B1** 1 BOULDER  
CHAMPLAIN STONE

- SF SITE FURNISHINGS**
- SF1** 1 GRILL STATION
- SF2** 2 TV WALL
- SF3** 3 FIRE PIT
- SF4** 4 METAL PERGOLA
- SF5** 5 METAL ARCHWAY
- SF6** 6 BENCH
- SF7** 7 ILLUMINATED BOLLARD
- SF8** 8 LIGHT POLE
- SF9** 9 PLANTER POT

**LIGHTING LEGEND**

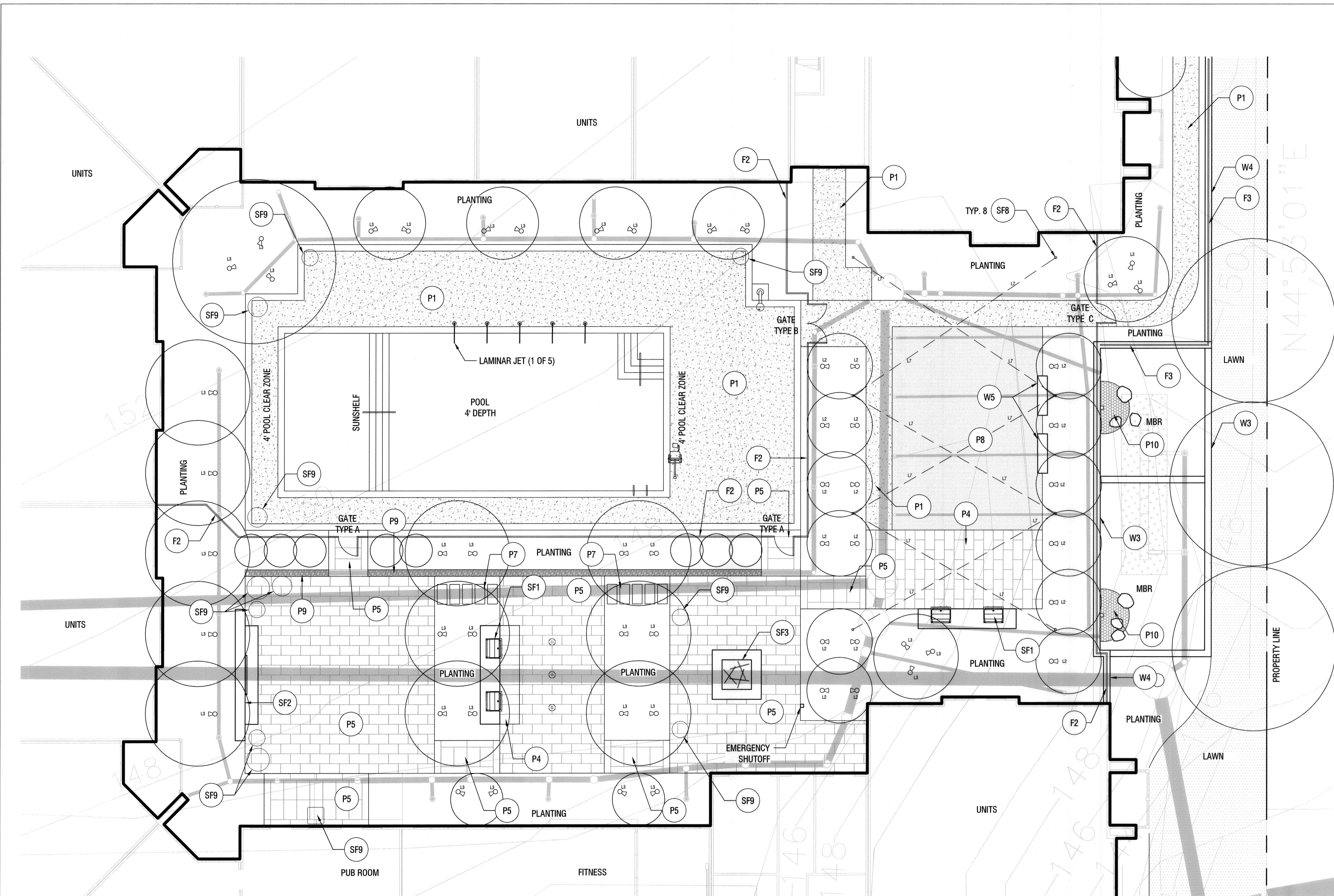
- L LIGHTING**
- L1** STREET LIGHT
- L2** TREE UPLIGHT - NARROW
- L3** TREE UPLIGHT - WIDE
- L4** UPLIGHT - ARCHWALL
- L5** DOWNLIGHT
- L6** BOLLARD
- L7** STRING LIGHTS
- L8** PATH LIGHT
- L9** BUILDING MOUNTED FLOOD

**NOTE:**  
 1. INTEGRAL COLOR STAMPED CONCRETE (P3)  
 MANUFACTURER: SCO FIELD  
 PATTERN: LONDON SLATE  
 INTEGRAL COLOR: LITHO CHROME<sup>®</sup>, C-284 LANDMARKS GRAY  
 ANTIQUE FINISH: LITHO CHROME<sup>®</sup>, ANTIQUING RELEASE PRO, A-21  
 DEEP CHARCOAL, 75% REMOVAL  
 SEALER: SCOPFIELD<sup>®</sup> CURESEAL<sup>™</sup> 350



APPROVED: DEPARTMENT OF PLANNING AND ZONING  
 [Signature] 12.7.20  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE  
 [Signature] 12/15/20  
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE  
 [Signature] 12/21/20  
 DIRECTOR DATE

|  |            |                  |   |          |  |
|--|------------|------------------|---|----------|--|
| NO.  |            | DATE             |   | REVISION |  |
| <p><b>Design Collective</b><br/>         ARCHITECTURE PLANNING INTERIORS LANDSCAPE ARCHITECTURE GRAPHICS<br/>         601 East Pratt Street, Suite 300<br/>         Baltimore, Maryland 21202<br/>         P 410 685 6655   www.designcollective.com</p> |            |                  |   |          |  |
| OWNER/DEVELOPER:   |            |                  | PROJECT:  |          |  |
| BINDER ROCK LLC<br>C/O H & H ROCK COMPANIES<br>8800 DEERPATH ROAD<br>SUITE 100<br>ELK RIDGE, MARYLAND 21075<br>410.579.2442  |            |                  | DORSEY CENTER APARTMENTS<br>210 UNITS<br>PARCEL 'T' |          |  |
| LOCATION: TAX MAP 37<br>PARCEL 375 - GRID 24<br>1st ELECTION DISTRICT<br>HOWARD COUNTY, MARYLAND   |            |                  |   |          |  |
| TITLE: ENTRY MATERIALS PLAN  |            |                  |   |          |  |
| DATE: SEPTEMBER 2020   |            | PROJECT NO. 1959 |   |          |  |
| SCALE: 1/16" = 1'-0"   |            | DRAWING 26 OF 49 |   |          |  |
| Design: AAM  | Draft: AAM | Check: CAM       |   |          |  |



- SF SITE FURNISHINGS**
- SF1 (1 L208) GRILL STATION
  - SF2 (1 L213) TV WALL
  - SF3 (1 L209) FIRE PIT
  - SF4 (1 L214) METAL PERGOLA
  - SF5 (1 L212) METAL ARCHWAY
  - SF6 (1 L211) BENCH
  - SF7 (4 L211) ILLUMINATED BOLLARD
  - SF8 (2 L211) LIGHT POLE
  - SF9 (2 L212) PLANTER POT

- L LIGHTING LEGEND**
- L LIGHTING**
- L1 STREET LIGHT
  - L2 TREE UPLIGHT - NARROW
  - L3 TREE UPLIGHT - WIDE
  - L4 UPLIGHT - ARCHWALL
  - L5 DOWNLIGHT
  - L6 BOLLARD
  - L7 STRING LIGHTS
  - L8 PATH LIGHT
  - L9 BUILDING MOUNTED FLOOD

**MATERIALS AND PAVING LEGEND**

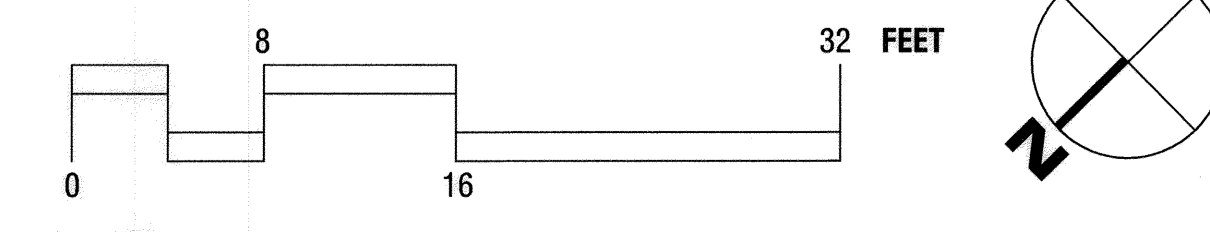
- P PAVING**
- P1 (1 L200) CONCRETE TYPE 1 (PEDESTRIAN SECTION) COLOR: STANDARD GREY
  - P2 (REF. CIVIL) CONCRETE TYPE 2 (VEHICULAR SECTION) COLOR: STANDARD GREY
  - P3 (REF. CIVIL) INTEGRAL COLOR STAMPED CONCRETE (VEHICULAR SECTION) COLOR: TBD PATTERN: TBD
  - P4 (3 L200) PORCELAIN PAVER TYPE 1 COLOR: PATTERN: DIRECTION PER PLAN
  - P5 (4 L200) BLUESTONE PAVER COLOR: PREMIUM BLUE FINISH: THERMAL FINISHED ALL EXPOSED EDGES
  - P6 (5 L200) BLUESTONE STEPPING STONES IRREGULAR; 24"x30" MIN.
  - P7 (5 L200) BLUESTONE STEPPING STONES RECTANGULAR; 18"x36"
  - P8 (6 L200) SYNTHETIC TURF SYNLAWN 356
  - P9 (7 L200) MEXICAN BEACH PEBBLE
  - P10 (3 L201) RIVER JACK AND FIELD STONE OUTFALL
- F FENCE**
- F1 (1 L207) PADDOCK FENCE - 4' HT.
  - F2 (1 L206) FENCE - 6' HT.
  - F3 (1 L203) FENCE - 6' HT.
- S STAIRS**
- S1 (1 L205) STONE SLAB STAIRS
  - S2 (2 L205) HANDRAIL
- W WALLS**
- W1 (1 L203) CONCRETE RETAINING WALL
  - W2 (1 L204) CONCRETE MBR UNIT REF. CIVIL DWGS. FOR SIZE AND DEPTH
  - W3 (1 L202) BRICK FACED CONCRETE MBR UNIT
  - W4 (2 L202) BRICK FACED CONCRETE WALL
  - W5 (3 L211) STONE BLOCK SEAT WALL
  - W6 (6 L210) MODULAR WETLAND SYSTEM (MWS)
  - B BOULDERS
  - B1 BOULDER CHAMPLAIN STONE

APPROVED: DEPARTMENT OF PLANNING AND ZONING

*David Edwards* 12.7.20  
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

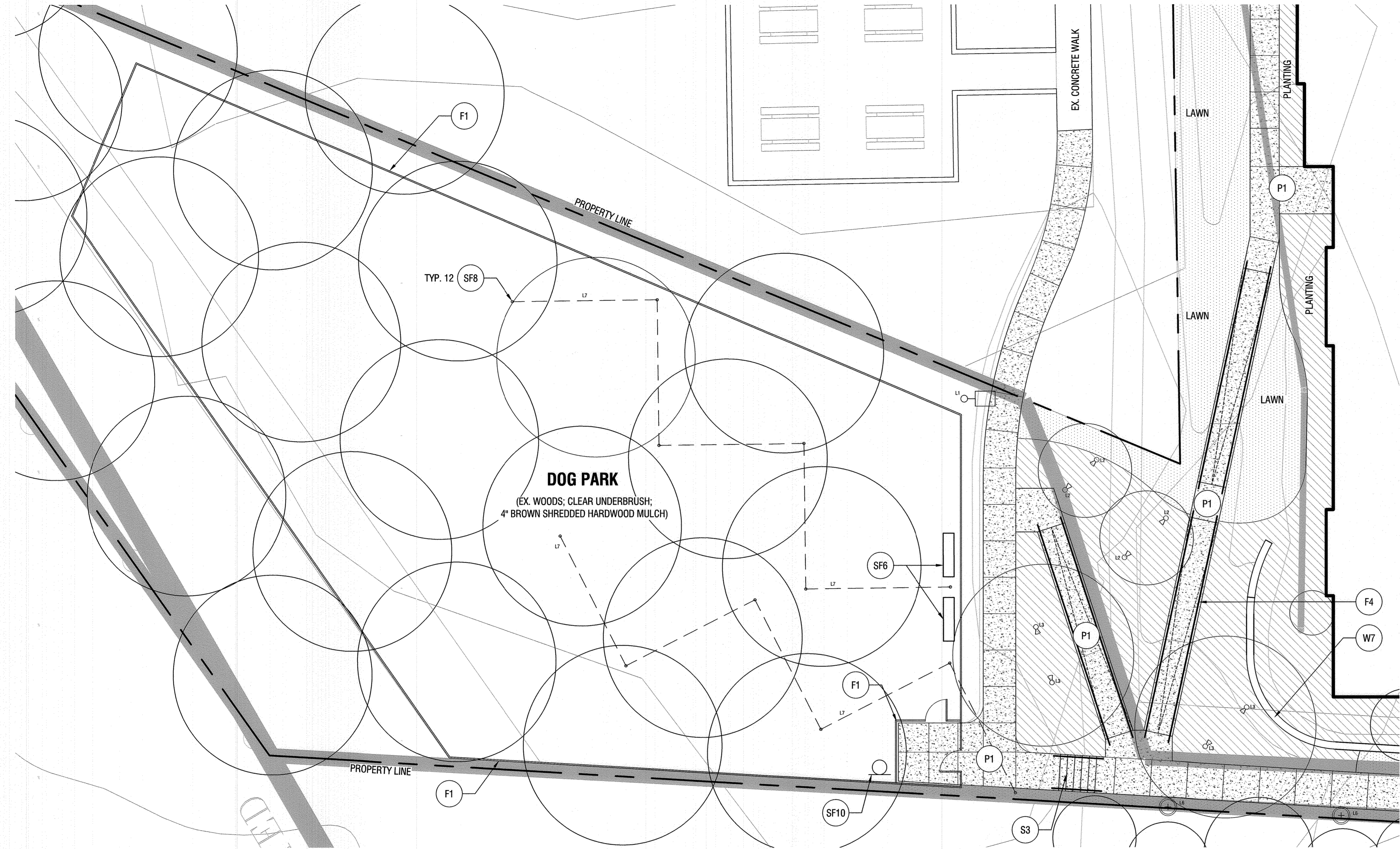
*[Signature]* 12/14/20  
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

*[Signature]* 12/21/20  
DIRECTOR DATE



L102

|   |  |                  |                                   |            |  |
|---|--|------------------|-----------------------------------|------------|--|
| NO.   |  | DATE             |                                   | REVISION   |  |
| <p><b>Design Collective</b></p> <p>ARCHITECTURE PLANNING INTERIORS 601 East Pratt Street, Suite 300<br/>LANDSCAPE ARCHITECTURE GRAPHICS Baltimore, Maryland 21202<br/>P 410 685 6655   www.designcollective.com</p> |  |                  |                                   |            |  |
| OWNER/DEVELOPER:  |  |                  | PROJECT: DORSEY CENTER APARTMENTS |            |  |
| BINDER ROCK LLC<br>C/O H & H ROCK COMPANIES<br>6800 DEERPATH ROAD<br>SUITE 100<br>ELKRIDGE, MARYLAND 21075<br>410.579.2442  |  |                  | 210 UNITS<br>PARCEL 'T'           |            |  |
| LOCATION: TAX MAP 37<br>PARCEL 375 - GRID 24<br>1st ELECTION DISTRICT<br>HOWARD COUNTY, MARYLAND  |  |                  |                                   |            |  |
| TITLE: COURTYARD MATERIALS PLAN   |  |                  |                                   |            |  |
| DATE: SEPTEMBER 2020  |  | PROJECT NO. 1959 |                                   |            |  |
| Design: AAM   |  | Draft: AAM       |                                   | Check: CAM |  |
| SCALE: 1/8" = 1'-0"   |  | DRAWING 27 OF 49 |                                   |            |  |



**MATERIALS AND PAVING LEGEND**

- P PAVING**
- P1** 1 L200 CONCRETE TYPE 1 (PEDESTRIAN SECTION) COLOR: STANDARD GREY
  - P2** REF. CIVIL CONCRETE TYPE 2 (VEHICULAR SECTION) COLOR: STANDARD GREY
  - P3** REF. CIVIL INTEGRAL COLOR STAMPED CONCRETE (VEHICULAR SECTION) SEE NOTE SHEET L-101
  - P4** 3 L200 PORCELAIN PAVER MANUFACTURER: MIRAGE EVO\_2/E COLLECTION / COLOR: QUARZITL\_2.0 / GLACIER QR01
  - P5** 4 L200 BLUESTONE PAVER COLOR: PREMIUM BLUE FINISH: THERMAL FINISHED ALL EXPOSED EDGES
  - P6** 5 L200 IRREGULAR BLUESTONE STEPPING STONES COLOR: PREMIUM BLUE FINISH: THERMAL FINISHED ALL EXPOSED EDGES
  - P7** 5 L200 RECTANGULAR BLUESTONE STEPPING STONES COLOR: PREMIUM BLUE FINISH: THERMAL FINISHED ALL EXPOSED EDGES
  - P8** 6 L200 SYNTHETIC TURF SYNLAWN 356
  - P9** 7 L200 MEXICAN BEACH PEBBLE
  - P10** 3 L201 RIVER JACK AND FIELD STONE OUTFALL

- F FENCE**
- F1** 1 L207 PADDOCK FENCE - 4' HT.
  - F2** 1 L206 FENCE - 6' HT.
  - F3** 1 L203 GUARDRAIL
  - F4** 1 L203 RAMP HANDRAIL
- S STAIRS**
- S3** 3 L205 CONCRETE STAIRS
- W WALLS**
- W1** 1 L203 CONCRETE RETAINING WALL
  - W2** 1 L204 CONCRETE MBR UNIT REF. CIVIL DWGS. FOR SIZE AND DEPTH
  - W3** 1 L202 BRICK FACED CONCRETE MBR UNIT
  - W4** 2 L202 BRICK FACED CONCRETE WALL

- SF SITE FURNISHINGS**
- SF1** 1 L208 GRILL STATION
  - SF2** 1 L213 TV WALL
  - SF3** 1 L209 FIRE PIT
  - SF4** 1 L214 METAL PERGOLA
  - SF6** 1 L211 BENCH
  - SF7** 4 L211 ILLUMINATED BOLLARD
- W6** 6 L210 MODULAR WETLAND SYSTEM (MWS)
- W7** 3 L202 LANDSCAPE BLOCK WALL

- Lighting Legend**
- L LIGHTING**
- L1 STREET LIGHT
  - L2 TREE UPLIGHT - NARROW
  - L3 TREE UPLIGHT - WIDE
  - L4 UPLIGHT - ARCH-WALL
  - L5 DOWNLIGHT
  - L6 BOLLARD
  - L7 STRING LIGHTS
  - L8 PATH LIGHT
  - L9 BUILDING MOUNTED FLOOD
- SF8** 2 L211 LIGHT POLE
- SF9** 2 L212 ORNAMENTAL PLANTER (OP#)
- SF10** 2 L214 DOG STATION

APPROVED: DEPARTMENT OF PLANNING AND ZONING

*[Signature]* 7.11.23 DATE

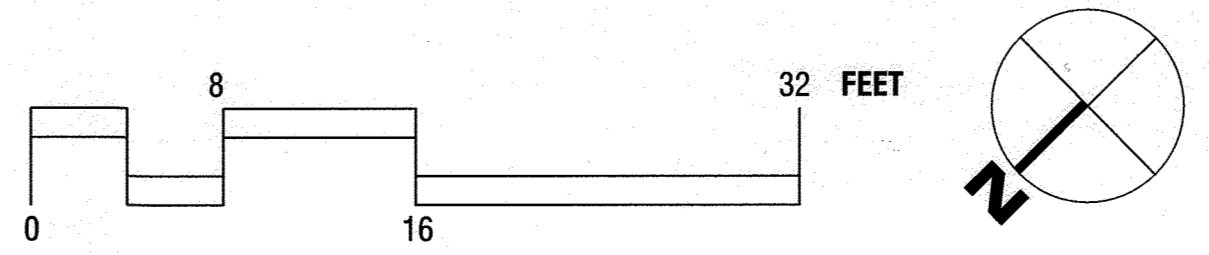
CHIEF, DEVELOPMENT ENGINEERING DIVISION

*[Signature]* 7/13/23 DATE

CHIEF, DIVISION OF LAND DEVELOPMENT

*[Signature]* 7/13/23 DATE

DIRECTOR



\* PLEASE NOTE THAT THIS PLAN SUPERSEDES AND REPLACES THE SEPTEMBER, 2020 PLANSET.

L103

| 5.01.2023 | REVISED SIDEWALK LAYOUT AND STAIR LOCATION |          |
|-----------|--|----------|
| 4.16.2021 | HUD REVIEW SET                             |          |
| NO.       | DATE                                       | REVISION |

ARCHITECTURE PLANNING INTERIORS  
LANDSCAPE ARCHITECTURE GRAPHICS

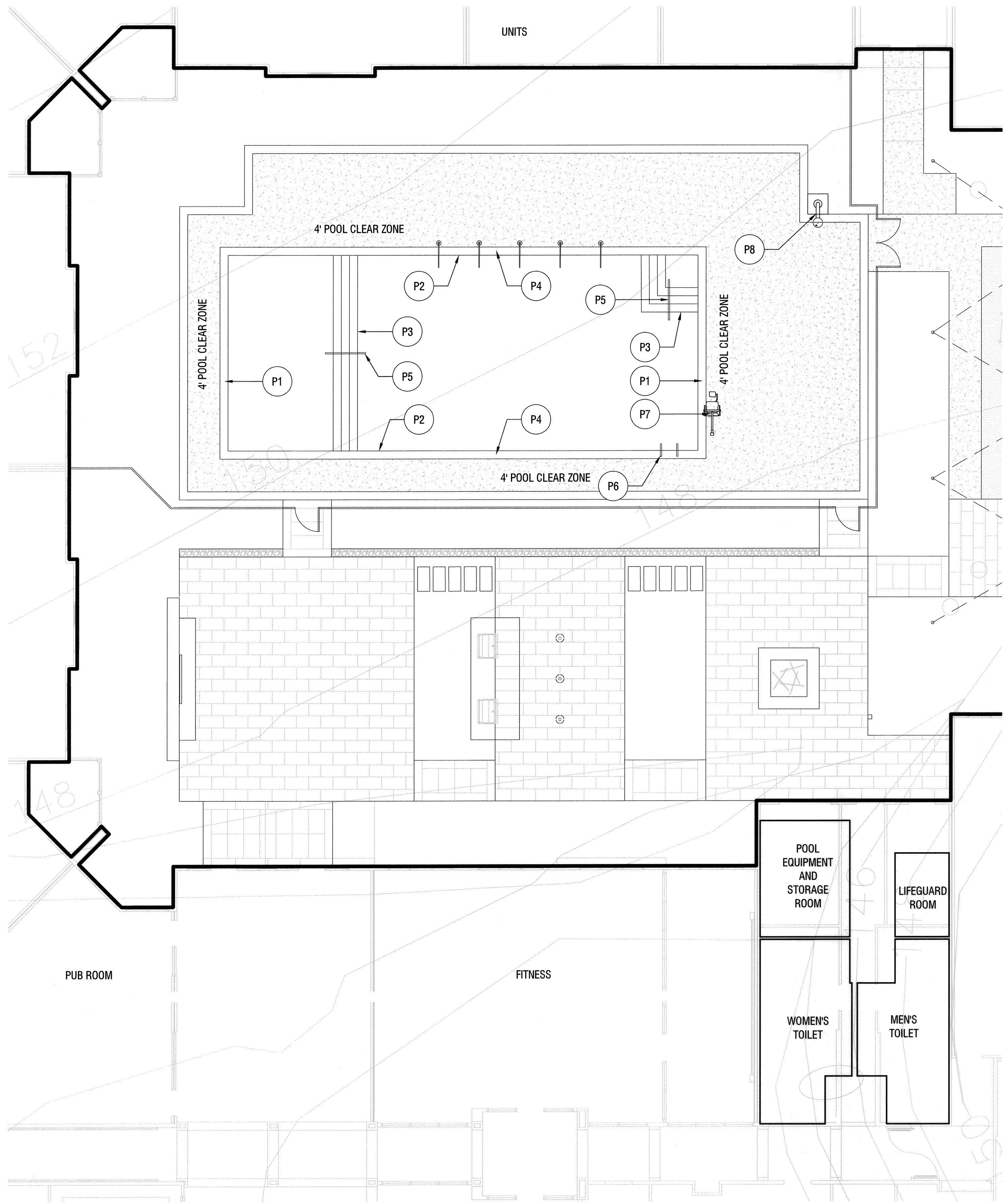
100 East Pratt Street, 18th Floor  
Baltimore, Maryland 21202  
P 410 685 6655 | www.designcollective.com

"I certify that these documents were prepared or approved by me, and that I am a duly licensed landscape architect under the laws of the State of Maryland, License No. 1039, expiration date 06/12/2024"

By: Matt D'Amico, PLA  
Design Collective, Inc.

|  |                  |  |                  |
|--|------------------|--|------------------|
| OWNER/DEVELOPER:   |                  | PROJECT: DORSEY CENTER APARTMENTS 210 UNITS PARCEL 'T'                                 |                  |
| BINDER ROCK LLC<br>C/O H & H ROCK COMPANIES<br>6800 DEERPATH ROAD<br>SUITE 100<br>ELKRIDGE, MARYLAND 21075<br>410.579.2442 |                  | TAX MAP 37<br>PARCEL 375 - GRID 24<br>1st ELECTION DISTRICT<br>HOWARD COUNTY, MARYLAND |                  |
| TITLE: DOG PARK MATERIALS PLAN<br>MAY 2023   |                  |  |                  |
| DATE: SEPTEMBER 2020   | PROJECT NO. 1959 | SCALE: 1/8" = 1'-0"  | DRAWING 28 OF 49 |

SDP-20-033



**GENERAL NOTES**

- 1) GENERAL CONTRACTOR TO SUBMIT POOL SHOP DRAWINGS FOR REVIEW BY LANDSCAPE ARCHITECT PRIOR TO CONSTRUCTION
- 2) FOUNTAIN EFFECTS: 5 POP JETS - REFER PLAN FOR LOCATIONS
- 3) LIGHTING: LED LIGHTS
- 3) POOL SYSTEM: SALT WATER SYSTEM
- 4) POOL EQUIPMENT LOCATION: 10x10' POOL EQUIPMENT ROOM PROVIDED - REFER PLAN FOR LOCATION
- 5) LIFEGUARD STORAGE: 10x10' ROOM PROVIDED - REFER PLAN FOR LOCATION
- 6) POOL DEPTH: REFER SCHEMATIC POOL PLAN FOR PROPOSED DEPTHS. THE FOLLOWING DEPTHS ARE FOR REFERENCE ONLY.
  - CHaise LOUNGE SHELF (6')
  - MIN DEPTH (42')
  - PREFERRED DEPTH (48')

**REQUIREMENTS**

- 1) RESTROOM REQUIREMENTS**
- REFER COMAR 10.17.01.35 SUBSECTION B - OWNER IS NOT REQUIRED TO PROVIDE TOILET, HAND SINK, AND SHOWER FACILITIES
- 2) HOWARD COUNTY HEALTH CODE**
- THE FOLLOWING LIST IDENTIFIES HOWARD COUNTY HEALTH CODE REQUIREMENTS FOR POOLS. THIS IS A PRELIMINARY LIST FOR PRICING PURPOSES AND IT IDENTIFIES THE MAIN REQUIREMENTS THAT AFFECT POOL PRICING. THIS IS NOT A COMPREHENSIVE LIST. THE POOL SHOP DRAWINGS PROVIDED BY THE DESIGN/BUILD CONTRACTOR SHOULD REVIEW THE FOLLOWING LIST AND ACCOMMODATE THESE AND OTHER REQUIREMENTS.
    - Section 21 Barrier - 6' Pool Fence required around pool.
    - Section 34 C Drinking Fountains - Required inside pool enclosure.
    - Section 34 D Hose Bibbs - On the deck at 150 intervals. In the equipment room. In both bathrooms (if bathrooms are required).
    - Section 35 Toilet, Hand Sink, and Shower Facilities
      - o Bathroom requirements.
        - See COMAR notes below.
        - o Shower requirements.
      - See COMAR notes below. We are exempt.
      - Section 40 Public Pool and Spa Safety
        - o Lifeguard room requirements.
          - Need a small room to accommodate items identified in Section 40
          - o Telephone. An outdoor telephone must be located within the pool enclosure.

**MATERIALS**

- P1** POOL COPING  
MATERIAL: BLUESTONE  
FINISH: THERMAL ALL EXPOSED EDGES  
COLOR: PREMIUM BLUE  
PROFILE: BULLNOSE  
SIZE: 12"x24"
- P2** POOL TILE (AT WATER LEVEL)  
MATERIAL: GLASS TILE  
COLOR: TBD  
SIZE: 1"x1"  
NOTE: POOL TILE SELECTED FOR PRICING PURPOSES ONLY. FINAL SELECTION TO BE MADE AT TIME OF SHOP DRAWING REVIEW.
- P3** POOL TILE (at steps)  
MATERIAL: CERAMIC TILE  
COLOR: TBD  
SIZE: 1"x1"  
NOTE: POOL TILE SELECTED FOR PRICING PURPOSES ONLY. FINAL SELECTION TO BE MADE AT TIME OF SHOP DRAWING REVIEW.
- P4** POOL DEPTH MARKER  
NOTE: POOL DEPTH MARKERS TO BE ENGRAVED INTO POOL COPING. SIZE AND COLOR PER LOCAL POOL REGULATIONS.
- P5** RAILING  
MANUFACTURER: S.R. SMITH  
PRODUCT: "ARTISAN SERIES" 304 STAINLESS STEEL  
HANDRAIL 1.90" x .065"
- P6** LADDER  
MANUFACTURER: S.R. SMITH  
PRODUCT: "ARTISAN SERIES" 3 TREAD 304 STAINLESS STEEL  
LADDER 1.90" x .065"
- P7** POOL LIFT  
MANUFACTURER: ASPEN  
PRODUCT: BP-350 BATTERY POWERED HANDICAP LIFT W/ FLUSH MOUNTED ANCHOR OR APPROVED EQUAL
- P8** DRINKING FOUNTAIN  
REF. 5/L210

| EQUIPMENT SCHEDULE |     |             |   |
|--------------------|-----|-------------|---|
| ITEM               | QTY | MFR         | ITEM DESCRIPTION - MODEL NUMBER                                       |
| 1                  | 1   | PENTAIR     | HAIR AND LINT STRAINER WITH EXTRA BASKET                              |
| 2                  | 1   | PENTAIR     | WFE - 8 PUMP & MOTOR 2HP (208-230V 11.0-10.2A) - "WHISPERFLO"         |
| 3                  | 1   | B & W       | 2 1/2" FLOWMETER - F-30250P (60-240 GPM)                              |
| 4                  | 1   | PENTAIR     | PRESSURE GAUGE WITH MANUAL AIR BLEED                                  |
| 5                  | 1   | PENTAIR     | 2" MULTI-PORT VALVE WITH SITE GLASS 26-1055                           |
| 6                  | 1   | PENTAIR     | 36" TR-140C HI-FLOW SAND PRESSURE FILTER                              |
| 7                  | 1   | CHEM-TAINER | 55 GALLON CHLORINE VAT WITH LID                                       |
| 8                  | 1   | STENNER     | 45M5 CHEMICAL FEEDER (120 VOLTS @ 1.7 AMP)                            |
| 9                  | 1   | CHEM-TAINER | 300 GALLON RETENTION TANK   |
| 10                 | 2   | PENTAIR     | GLOBRITE LOW VOLTAGE COLOR LED LIGHT (12V) - 100' CORD                |
| 11                 | 1   | S.R. SMITH  | 48" "ARTISAN SERIES" STAINLESS STEEL HANRAIL 1.90" X .065" #304 S.S.  |
| 12                 | 6   | HAYWARD     | SP1082R CYCOLAC SKIMMER W/ VENTED LID                                 |
| 13                 | 12  | STAY-RITE   | SWIMQUIP 1 1/2" CYCOLAC INLET FITTINGS                                |
| 14                 | 2   | HAYWARD     | SP-1022 1 1/2" VACUUM FITTING WITH COVER                              |
| 15                 | 1   | SPECTRUM    | MOTION TREK 350 BATTERY POWERED LIGHT W/ FLUSH MOUNTED ANCHOR         |
| 16                 | 2   | PENTAIR     | INTELLIBRITE LOW VOLTAGE 5G COLOR LED LIGHT (12V) - 100' CORD         |
| 17                 | 4   | PENTAIR     | WEATHER-PROOF JUNCTION BOX - U.L. LISTED - JB-750                     |
| 18                 | 1   | SPECTRUM    | 36" PORTABLE LIFEGUARD CHAIR - "PLASTIC WOOD" - 42022 "MENDOTA"       |
| 19                 | 1   | S.R. SMITH  | 3 TREAD #304 1.90" OD X .065" "ARTISAN SERIES" STAINLESS STEEL LADDER |
| 20                 | 1   | HAYWARD     | HYDROSTATIC RELIEF VALVE - SP1056                                     |
| 21                 | 2   | HAYWARD     | WG1048E 8" ROUND DRAIN COVER-VGBA COMPLIANT                           |



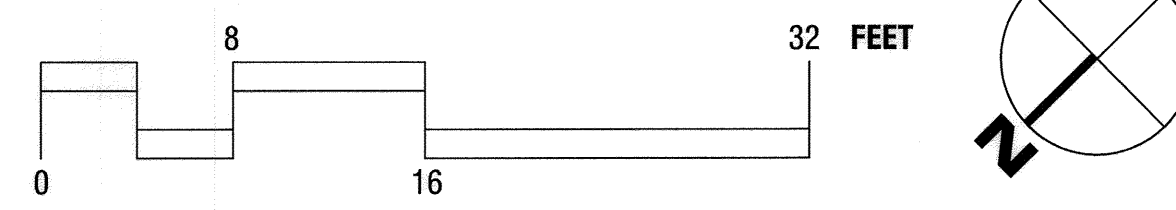
L120

APPROVED: DEPARTMENT OF PLANNING AND ZONING

*Chief* 12-7-20  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

*Chief* 12/1/20  
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

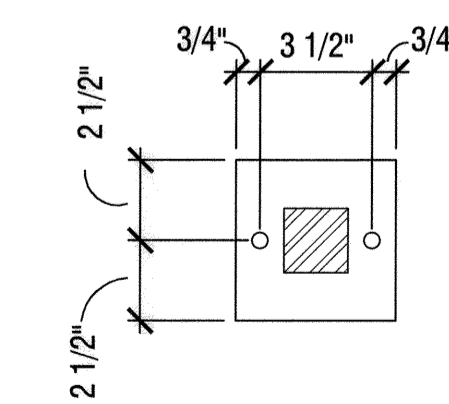
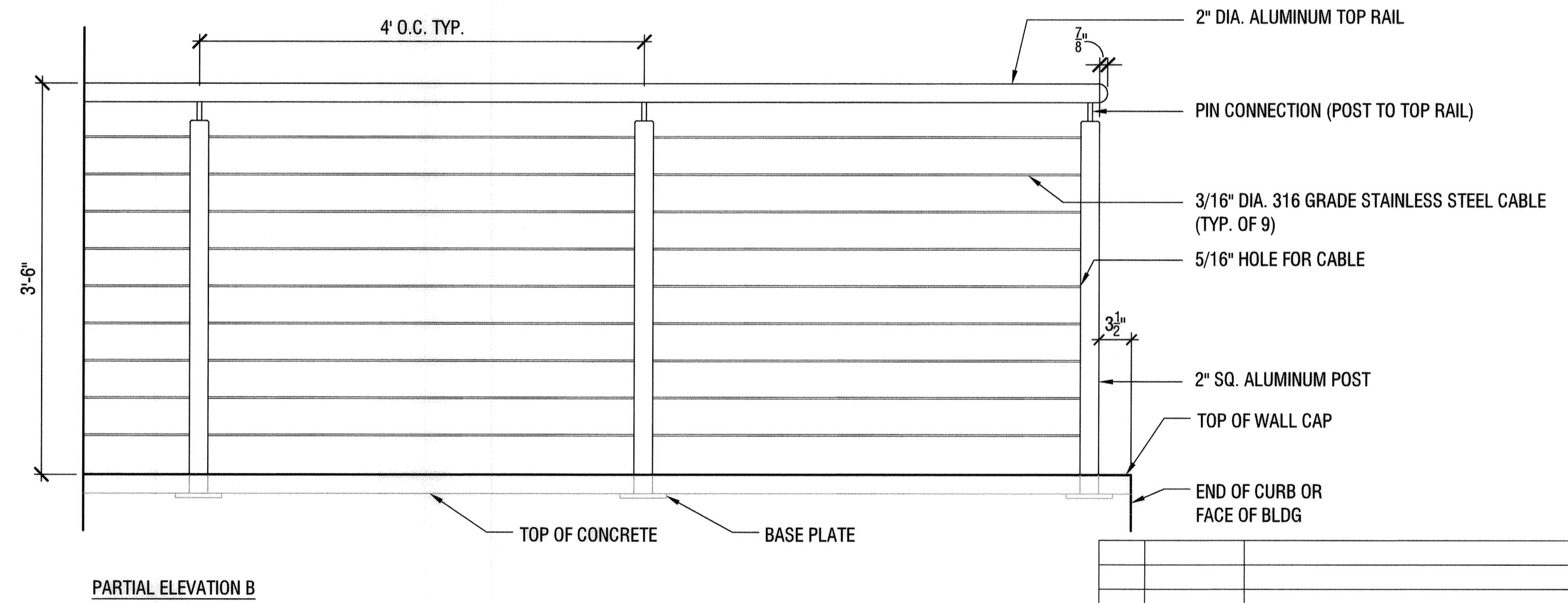
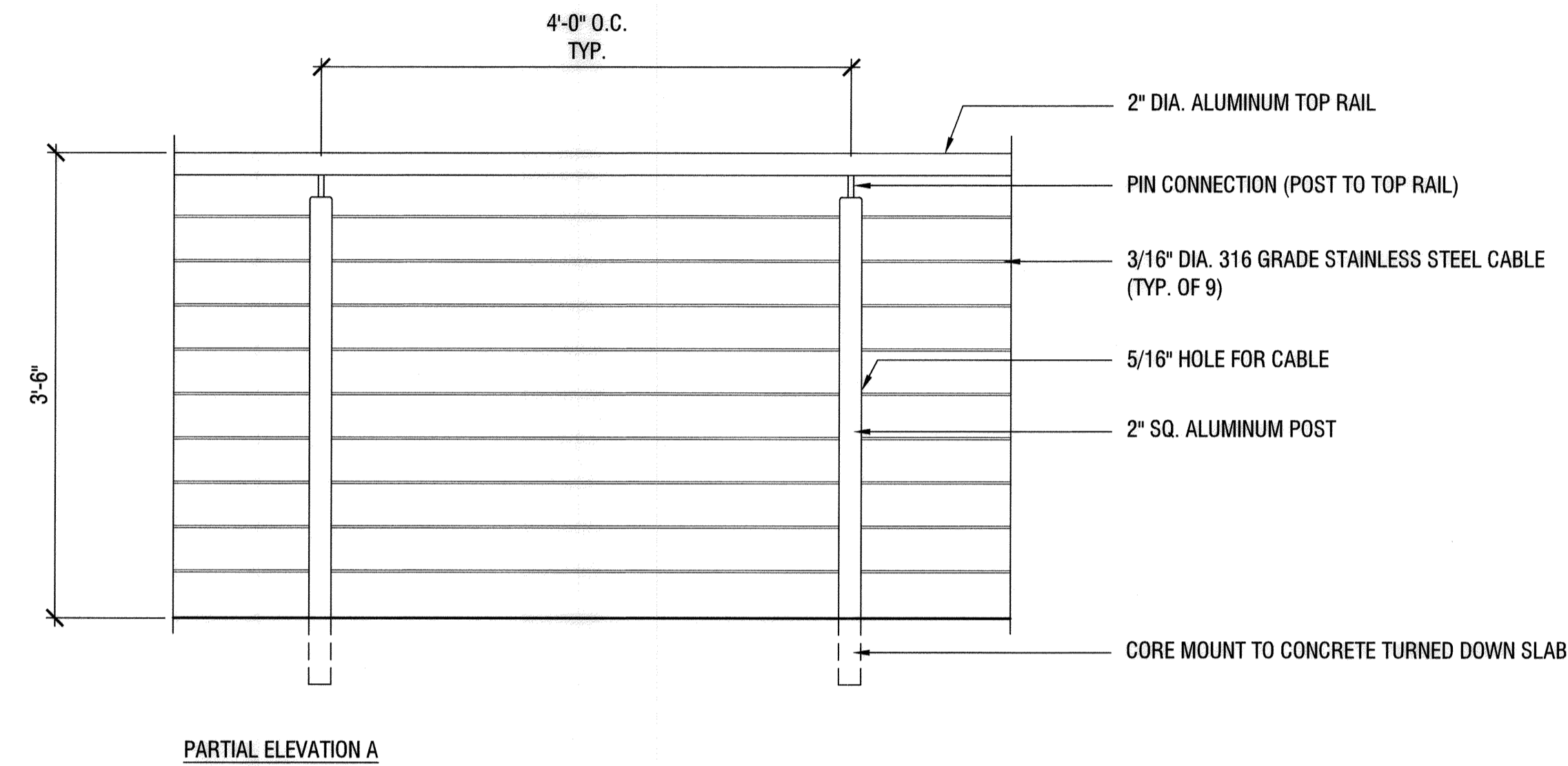
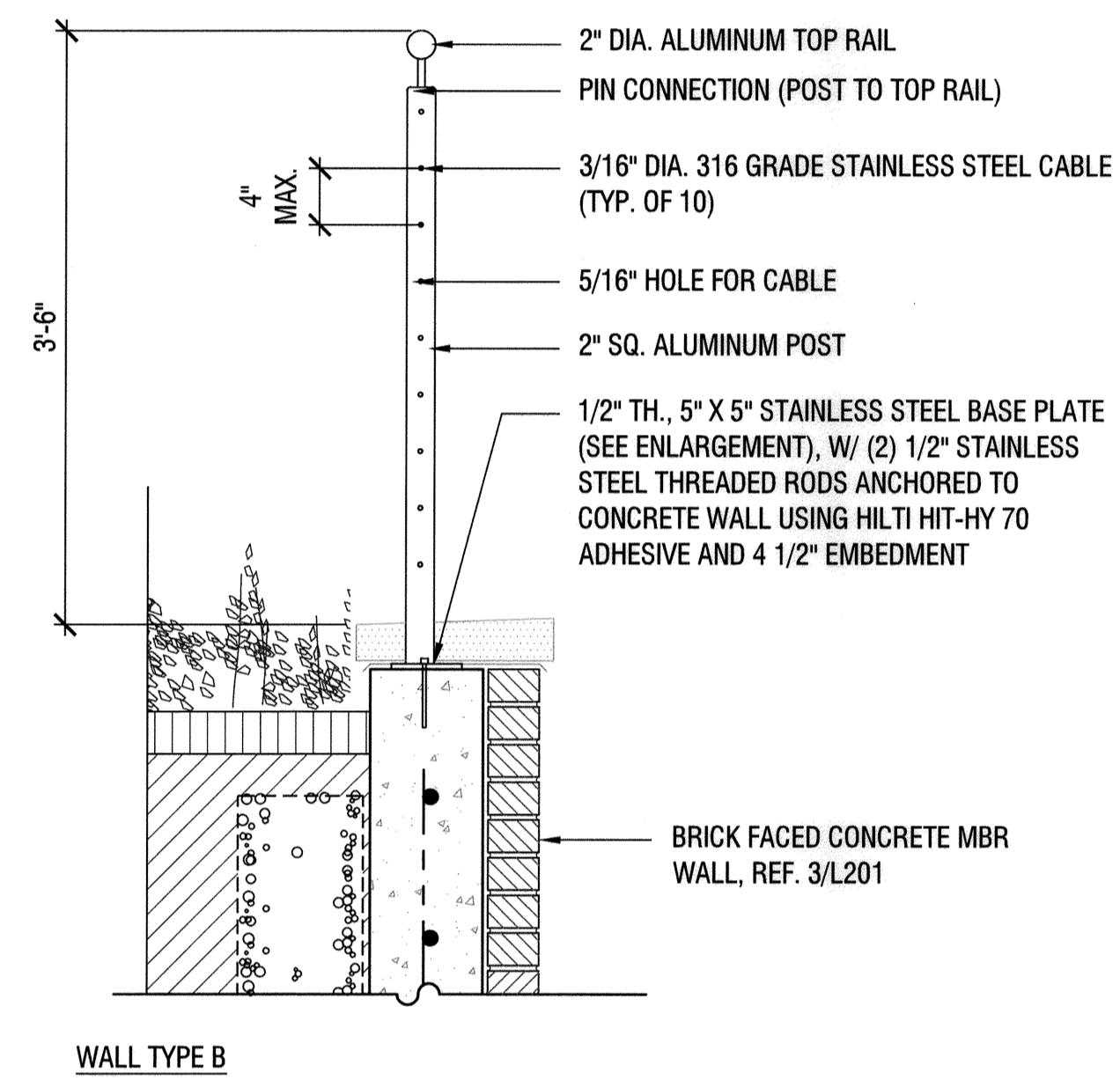
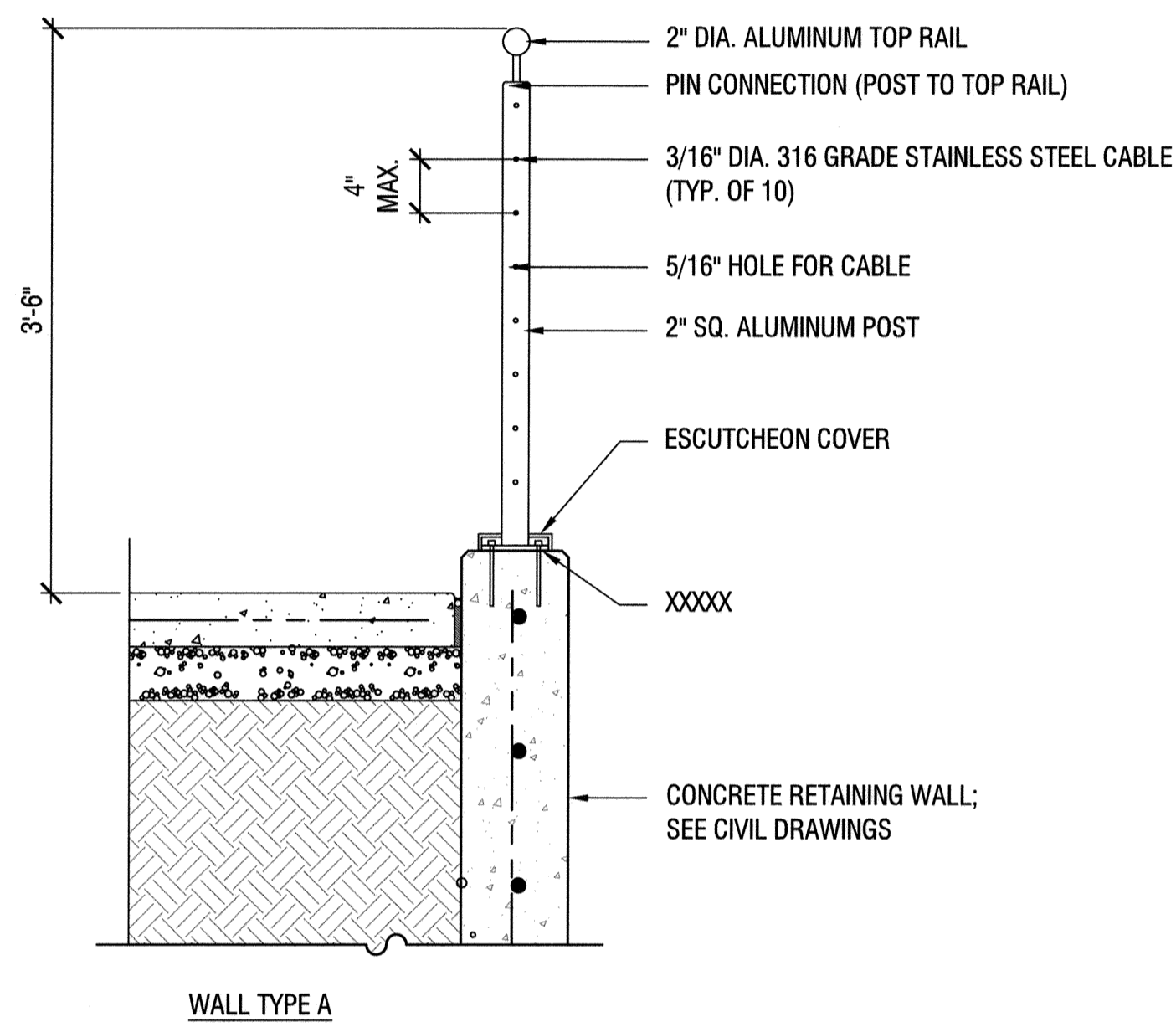
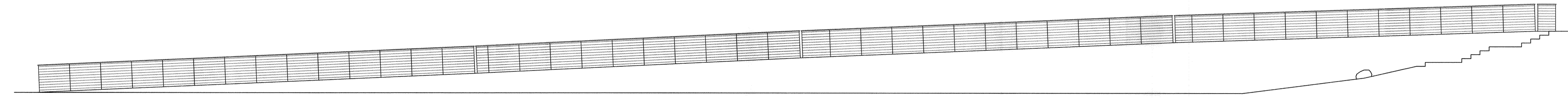
*Director* 12/21/20  
 DIRECTOR DATE



|   |   |
|---|---|
| NO. DATE REVISION   |   |
|   |   |
| ARCHITECTURE PLANNING INTERIORS LANDSCAPE ARCHITECTURE GRAPHICS<br>601 East Pratt Street, Suite 300<br>Baltimore, Maryland 21202<br>P 410 685 6655   www.designcollective.com   |   |
| "I certify that these documents were prepared or approved by me, and that I am a duly licensed landscape architect under the laws of the State of Maryland, License No. 1039, expiration date 06/12/2022"<br>By: Matt D'Amico, PLA<br>Design Collective, Inc. |   |
| OWNER/DEVELOPER:  | PROJECT: DORSEY CENTER APARTMENTS 210 UNITS PARCEL 'T'                                  |
| BINDER ROCK LLC<br>C/O H & H ROCK COMPANIES<br>6800 DEERPATH ROAD<br>SUITE 100<br>ELKBRIDGE, MARYLAND 21075<br>410.579.2442   | LOCATION: TAX MAP 37 PARCEL 375 - GRID 24 1st ELECTION DISTRICT HOWARD COUNTY, MARYLAND |
| TITLE: POOL PLAN  |   |
| DATE: SEPTEMBER 2020  | PROJECT NO. 1959  |
| SCALE: 1/8" = 1'-0"   | DRAWING 29 OF 49  |
| Design: AAM   | Draft: AAM Check: CAM   |



WALL ELEVATION - N.T.S.



BASE PLATE ENLARGEMENT  
SHOP DRAWINGS:  
LANDSCAPE ARCHITECT TO REVIEW AND APPROVE SHOP DRAWINGS.

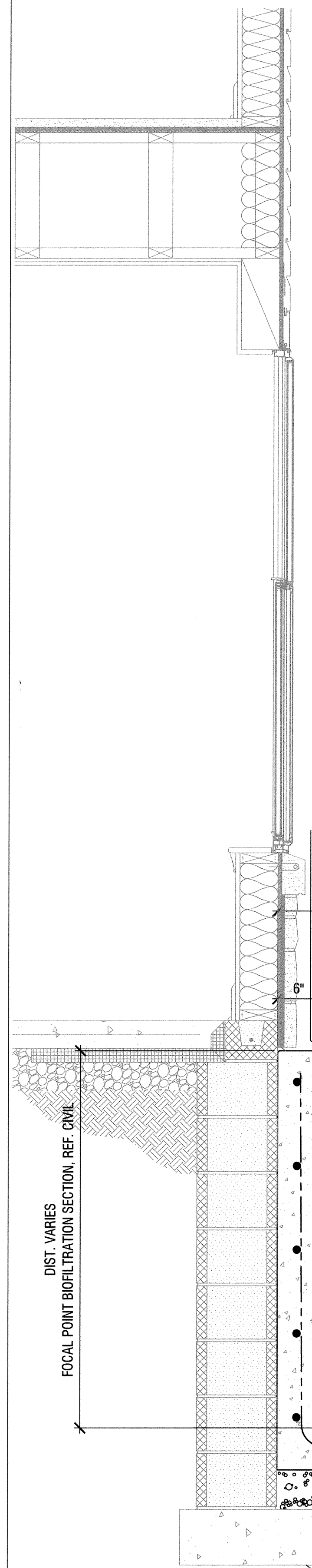
1 CABLE RAIL  
1" = 1'-0"



L203

APPROVED: DEPARTMENT OF PLANNING AND ZONING  
  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION  
 12-7-20  
 DATE  
  
 CHIEF, DIVISION OF LAND DEVELOPMENT  
 12/14/20  
 DATE  
  
 DIRECTOR  
 12/21/20  
 DATE

|  |  |   |
|--|--|---|
| <br>ARCHITECTURE PLANNING INTERIORS<br>LANDSCAPE ARCHITECTURE GRAPHICS<br>601 East Pratt Street, Suite 300<br>Baltimore, Maryland 21202<br>P-410-685-6555   www.designcollective.com |  | "I certify that these documents were prepared or approved by me, and that I am a duly licensed landscape architect under the laws of the State of Maryland, License No. 1039, expiration date 06/12/2022"<br>By: Matt D'Amico, PLA<br>Design Collective, Inc. |
| OWNER/DEVELOPER:<br>BINDER ROCK LLC<br>C/O H & H ROCK COMPANIES<br>6800 DEERPATH ROAD<br>SUITE 100<br>ELKRIDGE, MARYLAND 21075<br>410.579.2442                                       | PROJECT: DORSEY CENTER APARTMENTS<br>210 UNITS<br>PARCEL 'T'<br>LOCATION: TAX MAP 37<br>PARCEL 375 - GRID 24<br>1st ELECTION DISTRICT<br>HOWARD COUNTY, MARYLAND |   |
| TITLE: GUARDRAIL DETAILS   |  |   |
| DATE: SEPTEMBER 2020<br>Design: AAM<br>Draft: AAM<br>Check: CAM  | PROJECT NO.: 1959<br>DRAWING 31 OF 49  | SCALE: AS NOTED   |



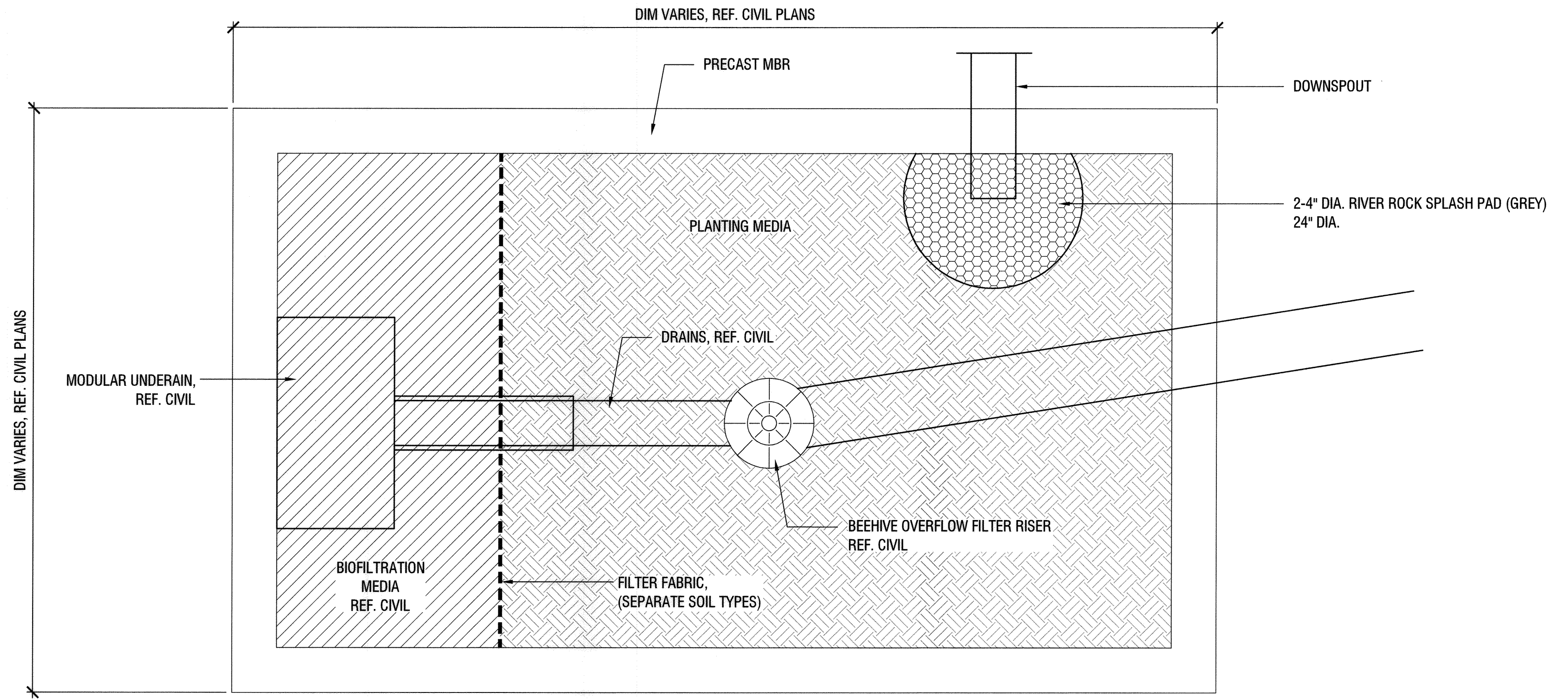
**PRECAST CONCRETE MBR**

**MANUFACTURER:** OLDCASTLE INFRASTRUCTURE  
1401 TRIMBLE ROAD  
EDGEWOOD, MD 21040  
(302) 535-2131

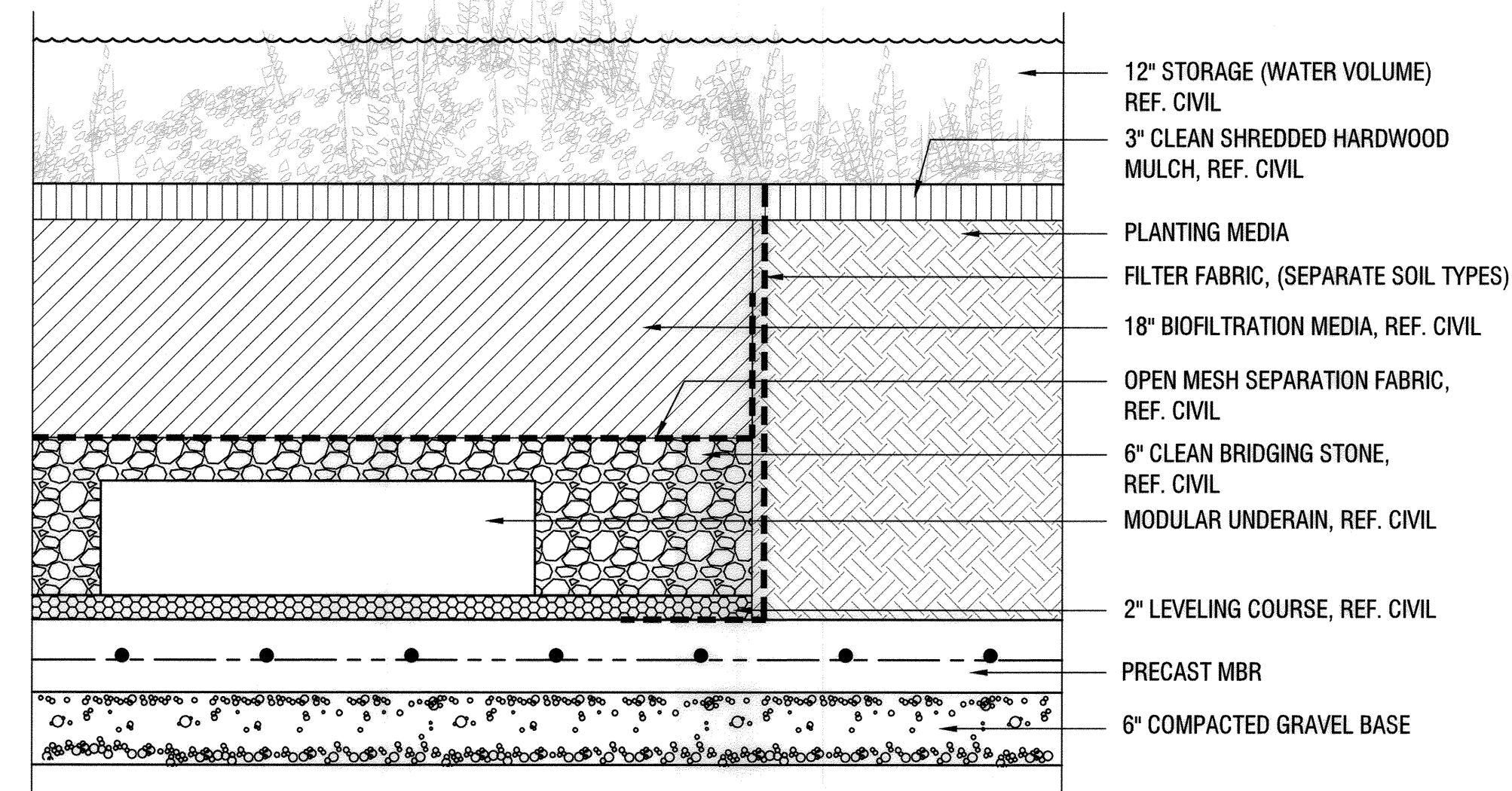
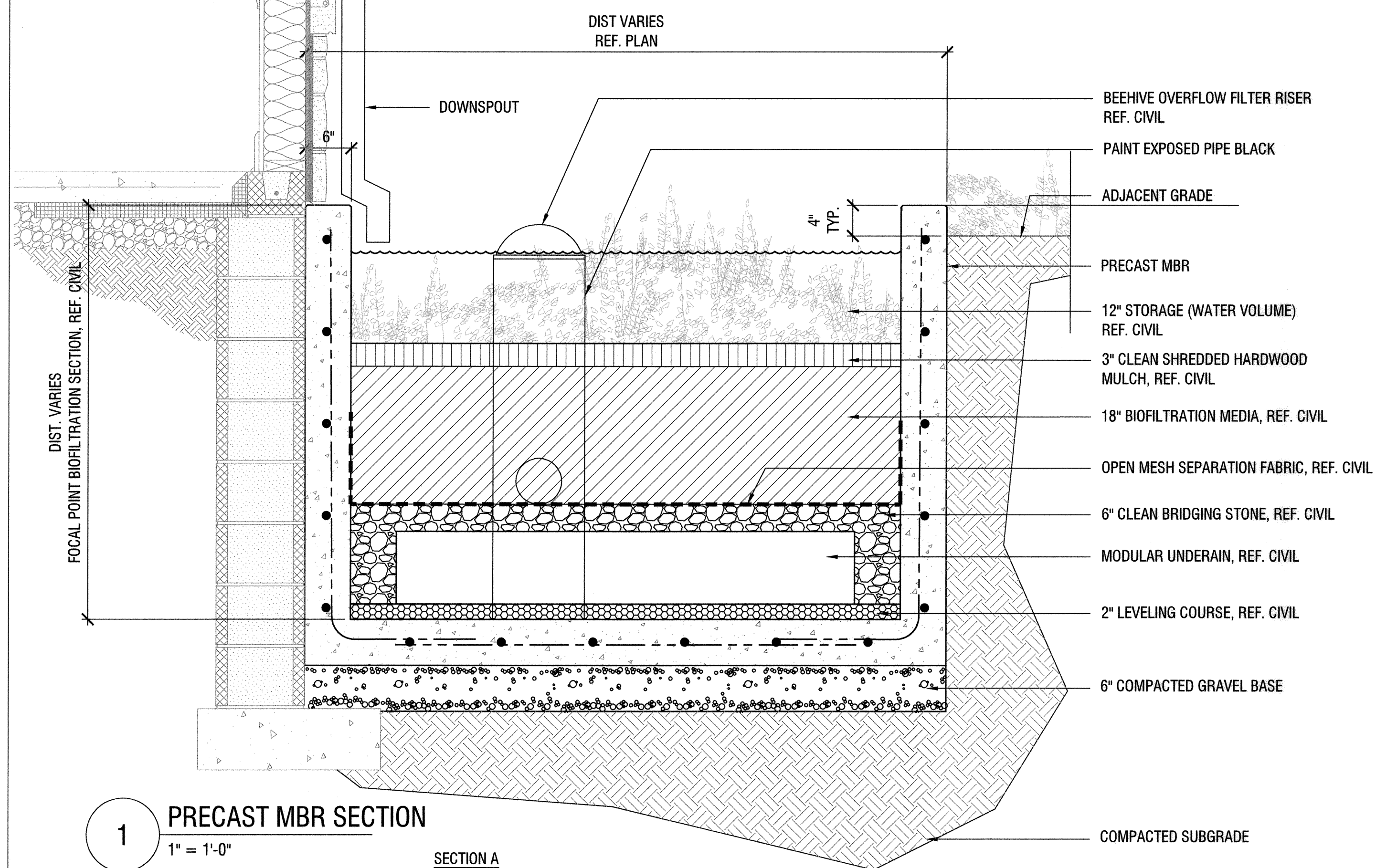
**PRODUCT:** BIOMOD MODULAR BIORETENTION SYSTEM  
[HTTPS://OLDCASTLEINFRASTRUCTURE.COM/PRODUCT/BIOMOD-MODULAR-BIORETENTION-SYSTEM/](https://oldcastleinfrastructure.com/product/biomod-modular-bioretenion-system/)

**SIZE:** VARIES, REF. CIVIL DWGS.

**FINISH:** 1/4" CHAMFER CONTINUOUS ALL EXPOSED EDGES. SMOOTH TROWEL FINISH ALL EXPOSED SURFACES



PARTIAL PLAN



SECTION B

**1 PRECAST MBR SECTION**  
1" = 1'-0"

APPROVED: DEPARTMENT OF PLANNING AND ZONING

*[Signature]* 12.7.20  
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

*[Signature]* 12/11/20  
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

*[Signature]* 12/21/20  
DIRECTOR DATE



L204

| NO. | DATE | REVISION |
|-----|------|----------|
|     |      |          |
|     |      |          |
|     |      |          |

ARCHITECTURE PLANNING INTERIORS  
LANDSCAPE ARCHITECTURE GRAPHICS

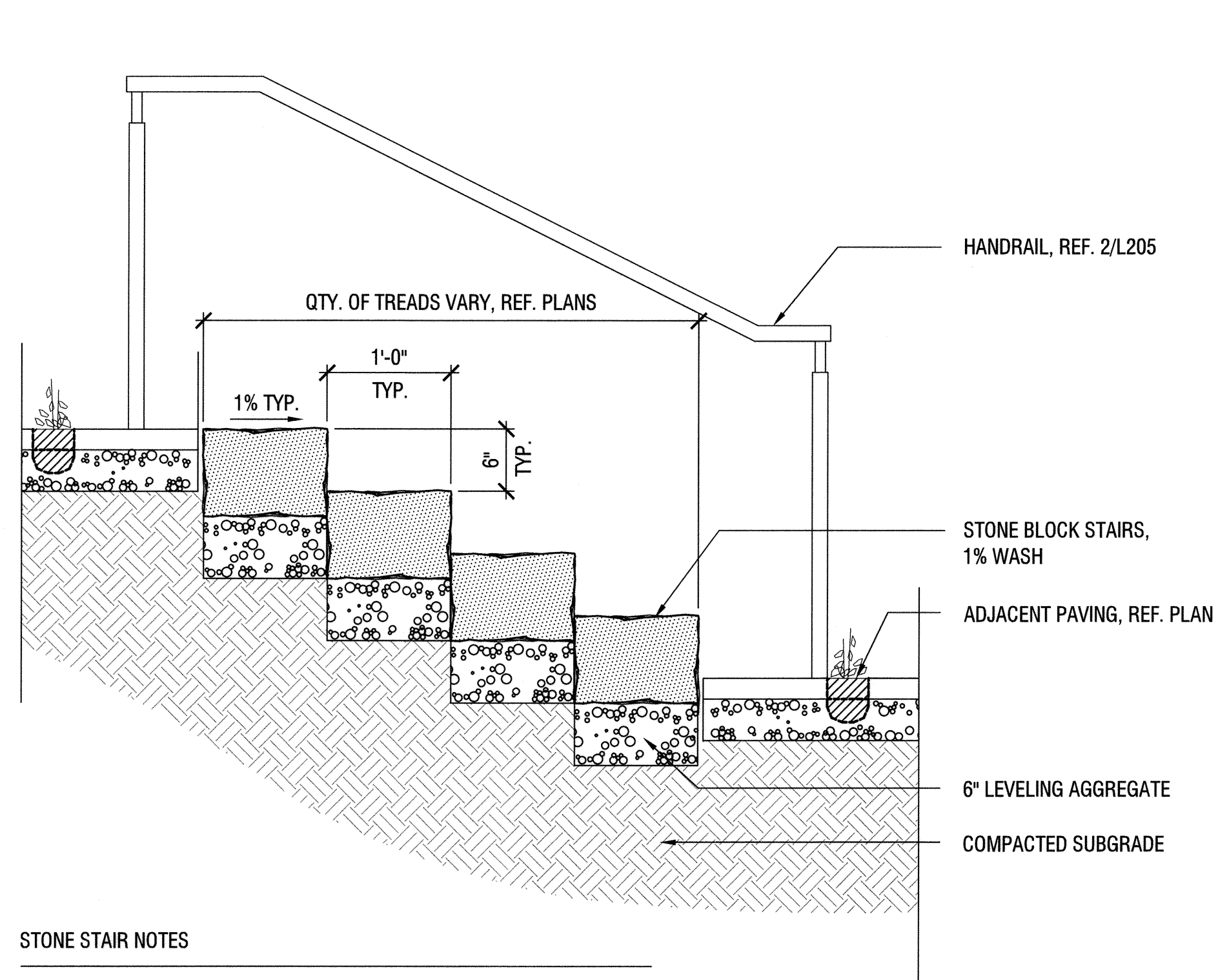
601 East Pratt Street, Suite 300  
Baltimore, Maryland 21202  
P 410 685 6655 | [www.designcollective.com](http://www.designcollective.com)

"I certify that these documents were prepared or approved by me, and that I am a duly licensed landscape architect under the laws of the State of Maryland, License No. 1039, expiration date 06/12/2022"

By: Matt D'Amico, PLA  
Design Collective, Inc.

|  |  |
|--|--|
| OWNER/DEVELOPER:<br>BINDER ROCK LLC<br>C/O H & H ROCK COMPANIES<br>6800 DEERPATH ROAD<br>SUITE 100<br>ELKRIDGE, MARYLAND 21075<br>410.579.2442 | PROJECT: DORSEY CENTER APARTMENTS<br>210 UNITS<br>PARCEL 'T' |
| LOCATION:<br>TAX MAP 37<br>PARCEL 375 - GRID 24<br>1st ELECTION DISTRICT<br>HOWARD COUNTY, MARYLAND  | TITLE:<br><b>WALL DETAILS</b>                                |
| DATE: SEPTEMBER 2020   | PROJECT NO. 1959   |
| Design: AAM Draft: AAM Check: CAM  | SCALE: AS NOTED DRAWING 32 OF 49                             |





**STONE STAIR NOTES**

MANUFACTURER: CHAMPLAIN STONE  
 27 ELM STREET  
 WARRENSBURG, NY 12885  
 (518) 623-2902  
 www.champlainstone.com

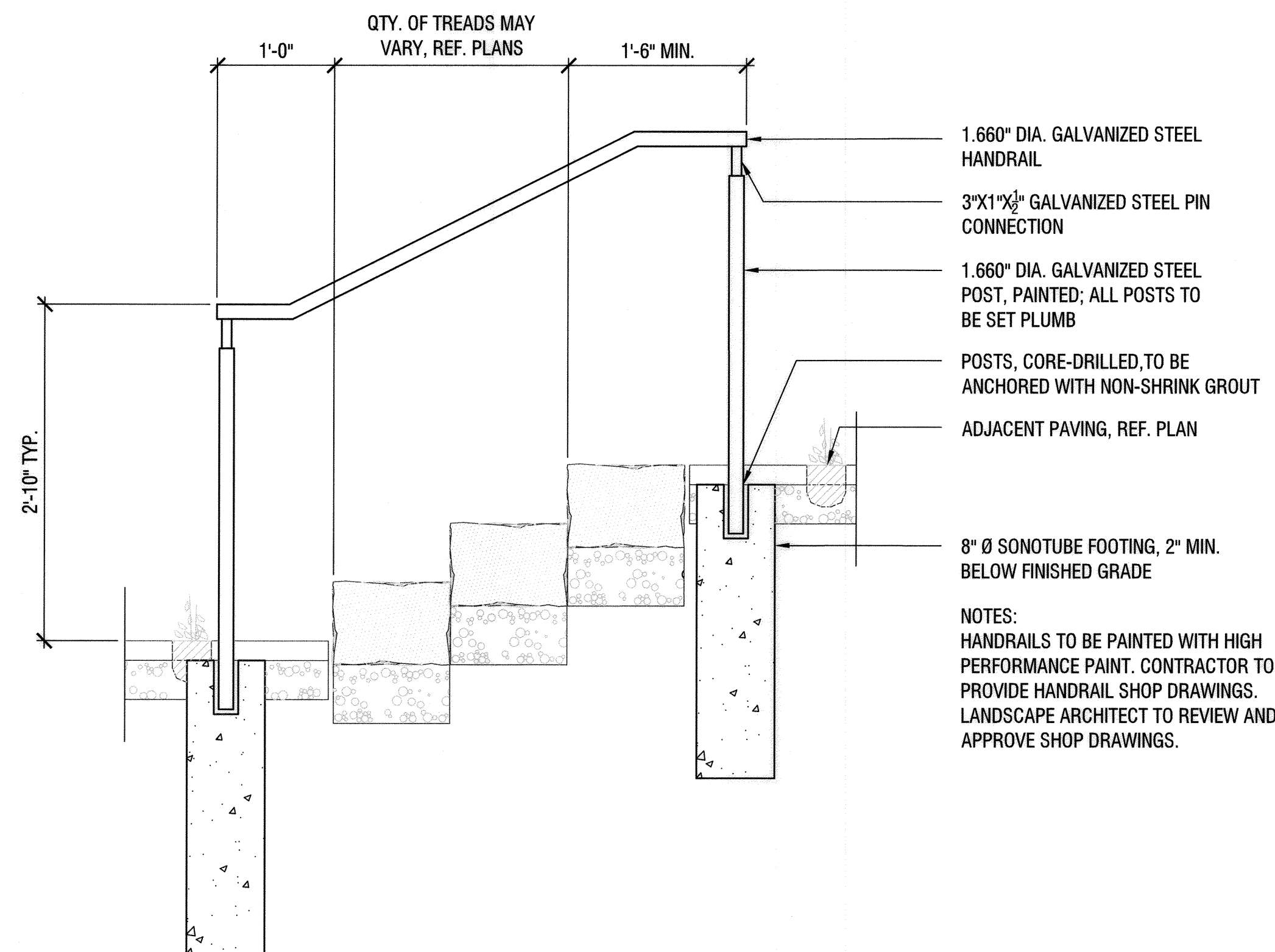
MATERIAL: CORINTHIAN GRANITE, NATURAL CLEFT

SIZE: 8" HT. X 12" WIDTH (+/- 1/2" TOLERANCE)

FINISH: THERMAL ON TOP, SANDBLASTED ON EXPOSED SIDES

SHOP DRAWINGS  
 LANDSCAPE ARCHITECT TO APPROVE SHOP DRAWINGS. CONTRACTOR TO PROVIDE LANDSCAPE ARCHITECT WITH PHOTOS AND STONE SAMPLES OF ALL FINAL PRODUCT SELECTIONS FOR APPROVAL. LANDSCAPE ARCHITECT TO APPROVE FINAL LOCATION OF STONE BLOCKS PRIOR TO INSTALLATION.

**1 STONE STAIRS**  
 1" = 1'-0"



**2 HANDRAIL**  
 1" = 1'-0"

1.660" DIA. GALVANIZED STEEL HANDRAIL

3"x1" GALVANIZED STEEL PIN CONNECTION

1.660" DIA. GALVANIZED STEEL POST, PAINTED; ALL POSTS TO BE SET PLUMB

POSTS, CORE-DRILLED, TO BE ANCHORED WITH NON-SHRINK GROUT

ADJACENT PAVING, REF. PLAN

8" Ø SONOTUBE FOOTING, 2" MIN. BELOW FINISHED GRADE

NOTES:  
 HANDRAILS TO BE PAINTED WITH HIGH PERFORMANCE PAINT. CONTRACTOR TO PROVIDE HANDRAIL SHOP DRAWINGS. LANDSCAPE ARCHITECT TO REVIEW AND APPROVE SHOP DRAWINGS.



**L205**

| NO. | DATE | REVISION |
|-----|------|----------|
|     |      |          |
|     |      |          |
|     |      |          |

**Design Collective**

ARCHITECTURE PLANNING INTERIORS  
 LANDSCAPE ARCHITECTURE GRAPHICS

601 East Pratt Street, Suite 300  
 Baltimore, Maryland 21202  
 P-410 685 6555 | www.designcollective.com

"I certify that these documents were prepared or approved by me, and that I am a duly licensed landscape architect under the laws of the State of Maryland, License No. 1039, expiration date 06/12/2022"

By: Matt D'Amico, PLA  
 Design Collective, Inc.

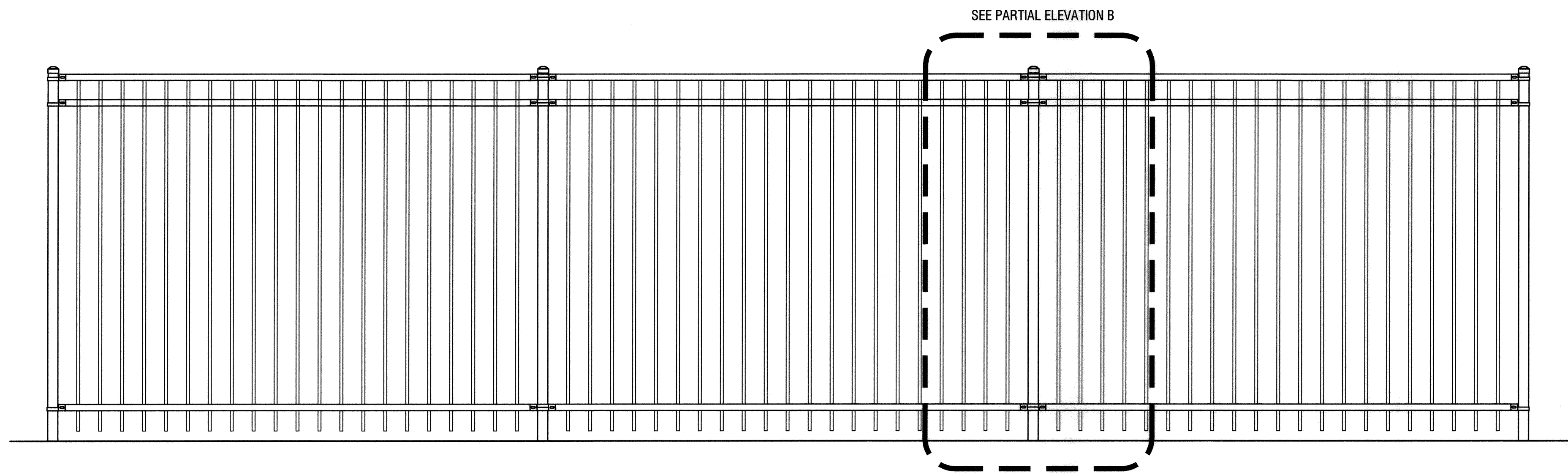
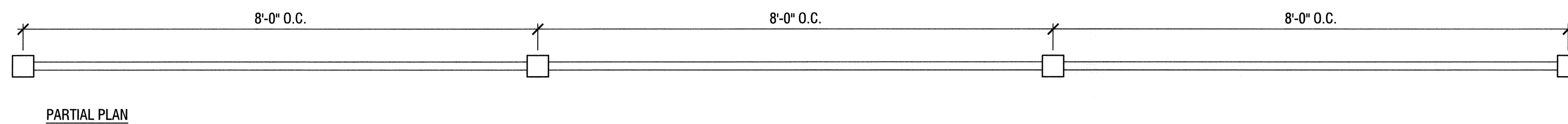
|  |  |
|--|--|
| OWNER/DEVELOPER:<br>BINDER ROCK LLC<br>C/O H & H ROCK COMPANIES<br>6800 DEERPATH ROAD<br>SUITE 100<br>ELKRIDGE, MARYLAND 21075<br>410.579.2442 | PROJECT: DORSEY CENTER APARTMENTS<br>210 UNITS<br>PARCEL 'T' |
| LOCATION:<br>TAX MAP 37<br>PARCEL 375 - GRID 24<br>1st ELECTION DISTRICT<br>HOWARD COUNTY, MARYLAND  | TITLE:<br><b>STAIR DETAILS</b>                               |
| DATE: SEPTEMBER 2020   | PROJECT NO. 1959   |
| Design: AAM  | Draft: AAM   |
| Check: CAM   | SCALE: AS NOTED  |
| DRAWING <b>33</b> OF <b>49</b>   |  |

APPROVED: DEPARTMENT OF PLANNING AND ZONING

*[Signature]* 12.7.20  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

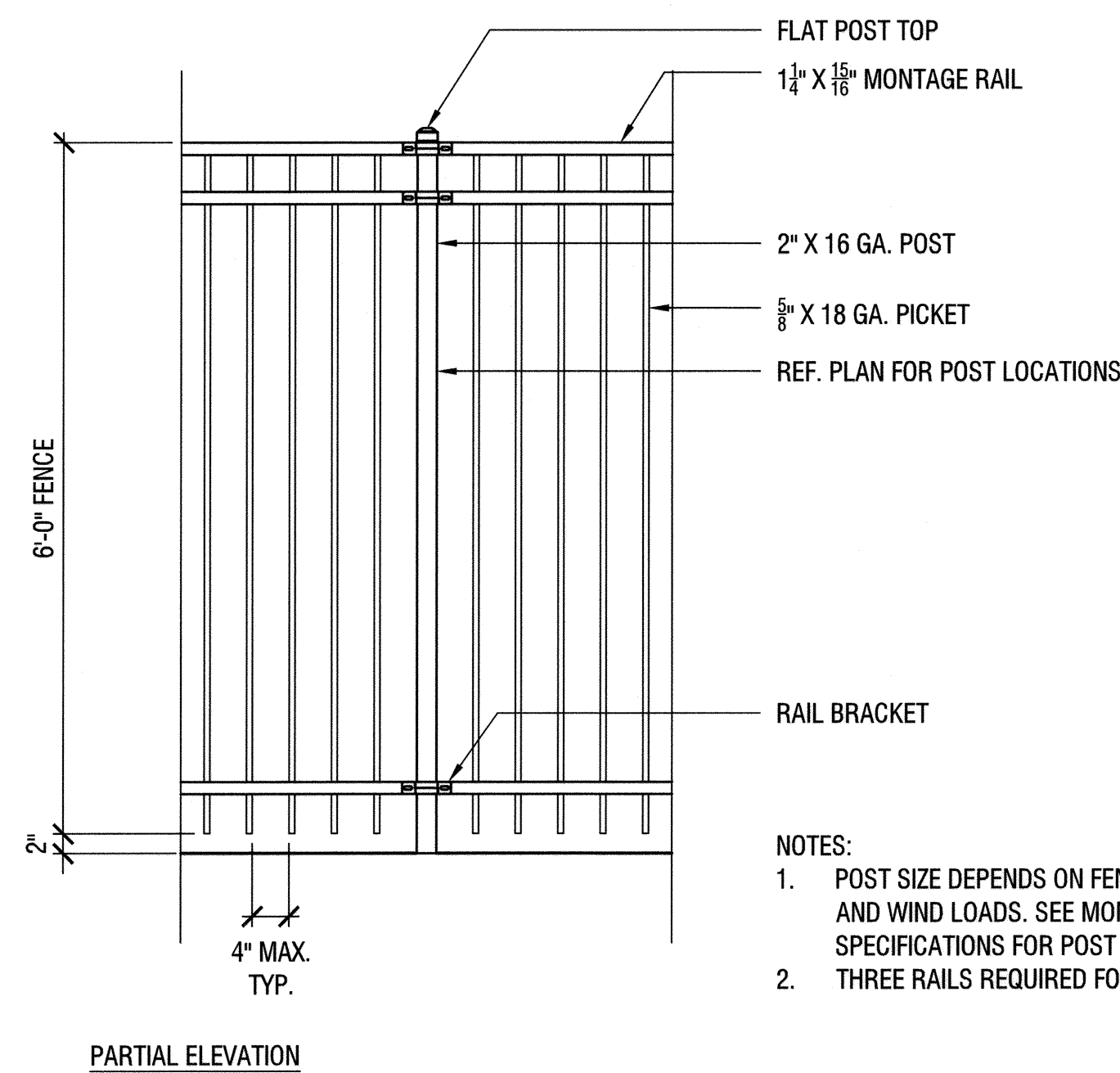
*[Signature]* 12/14/20  
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

*[Signature]* 12/21/20  
 DIRECTOR DATE

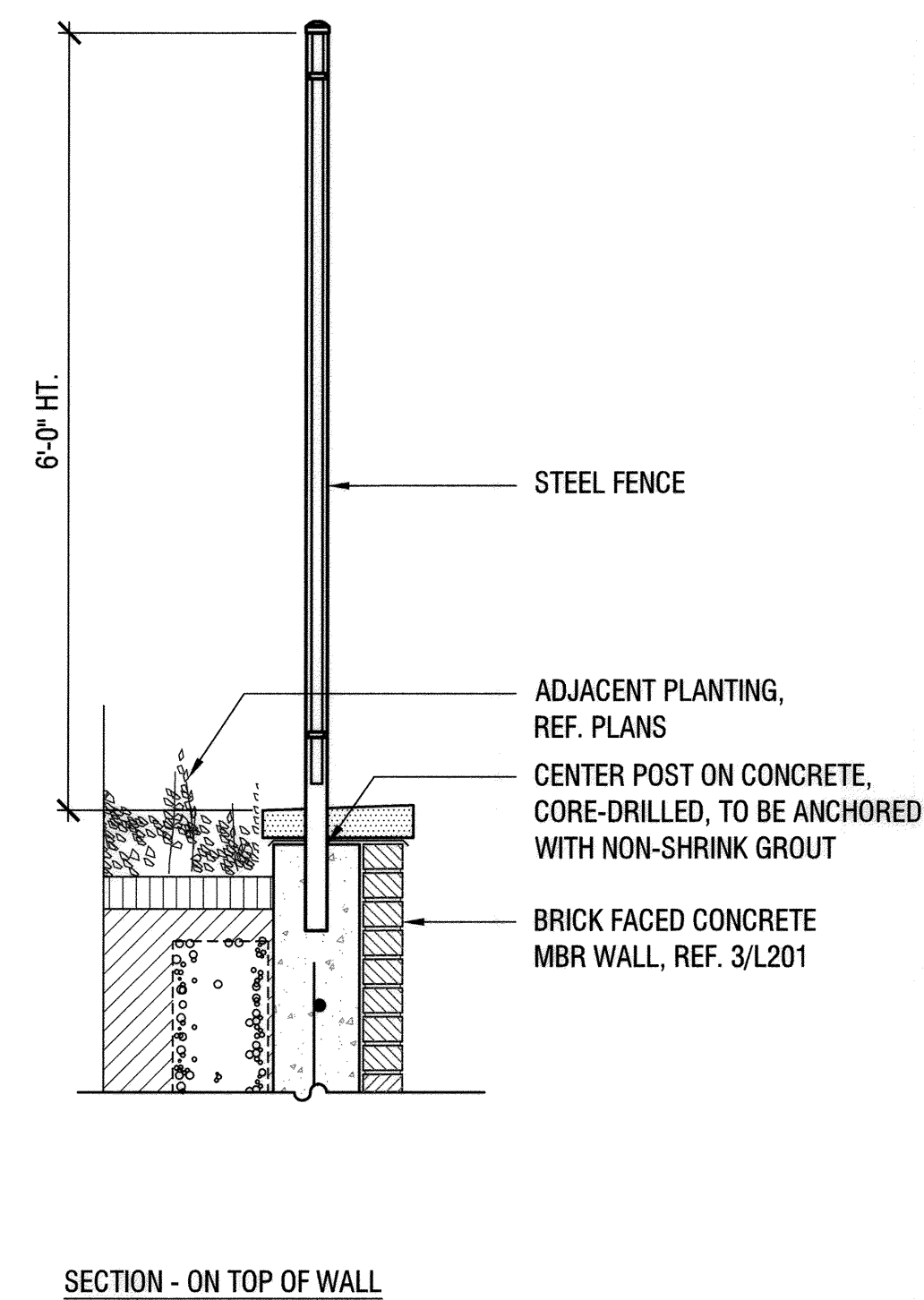
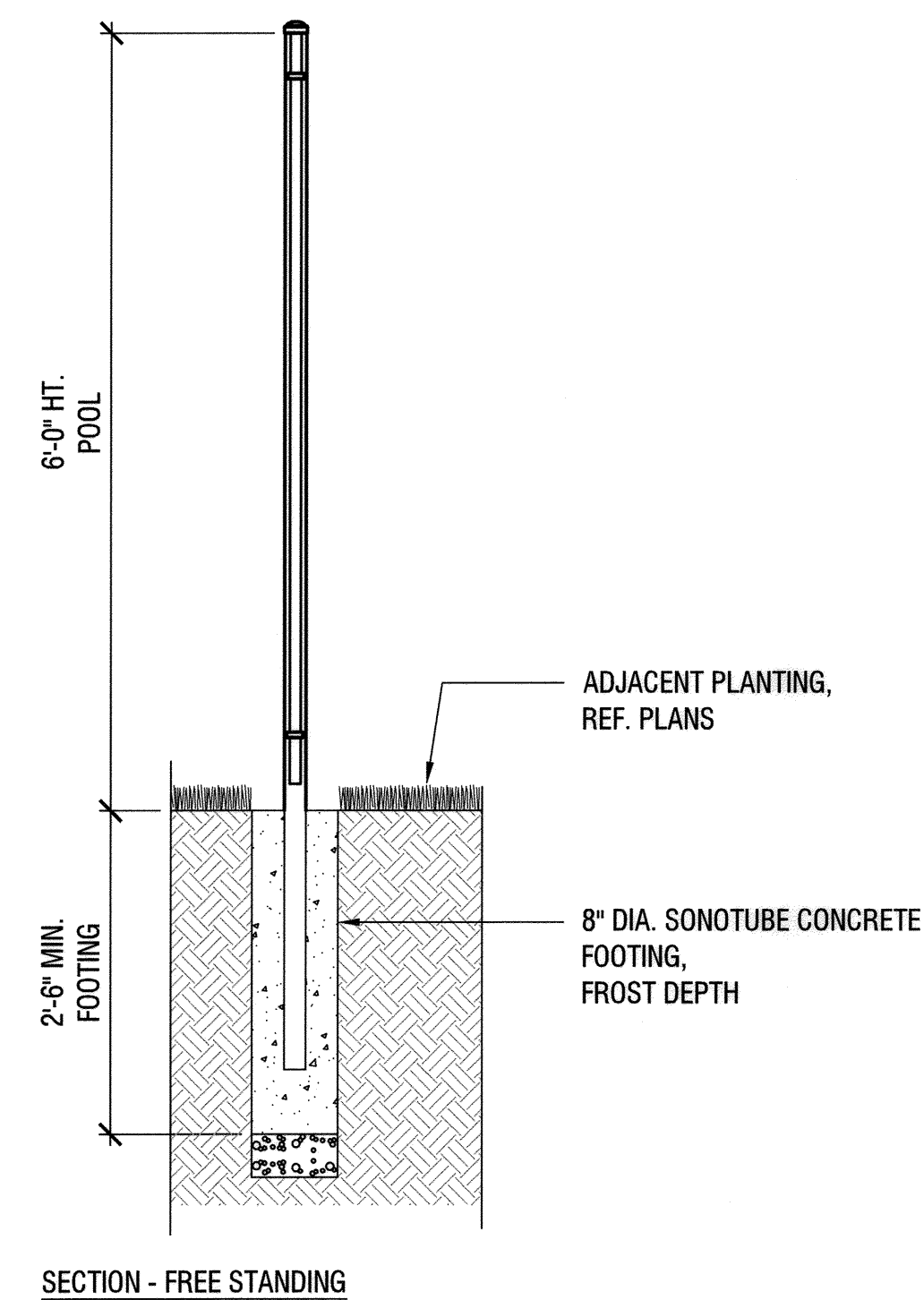


FENCE/GATE  
 MANUFACTURER:  
 PRODUCT:  
 STYLE:  
 SPACING:  
 HEIGHT:  
 FINISH:  
 COLOR:  
 NOTES:

AMERISTAR  
 MONTAGE PLUS (STEEL) FENCE W SWING GATE  
 MAJESTIC THREE RAIL PANEL  
 4" PICKETS  
 VARIES, REF. DETAIL  
 ECOAT  
 BLACK  
 STANDARD FLAT CAP  
 EXTENDED PICKET AT BOTTOM RAIL  
 SEE PRODUCT MANUFACTURER'S SPECIFICATIONS FOR  
 INSTALLATION. GATE HARDWARE TO BE COORDINATED W FENCE.  
 PROVIDE SHOP DRAWINGS OF FENCE, GATES AND HARDWARE FOR APPROVAL.



- NOTES:  
 1. POST SIZE DEPENDS ON FENCE HEIGHT AND WIND LOADS. SEE MONTAGE SPECIFICATIONS FOR POST SIZING CHART.  
 2. THREE RAILS REQUIRED FOR 6' TALL.



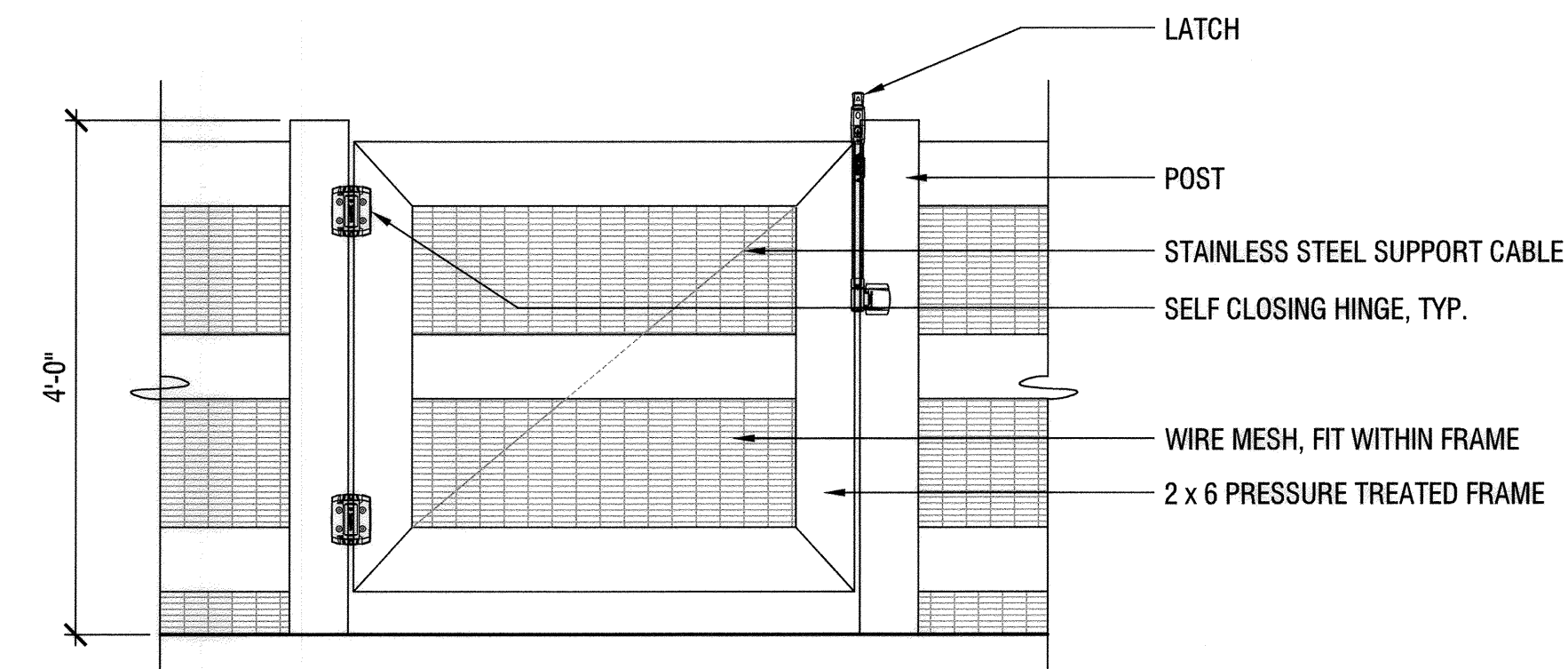
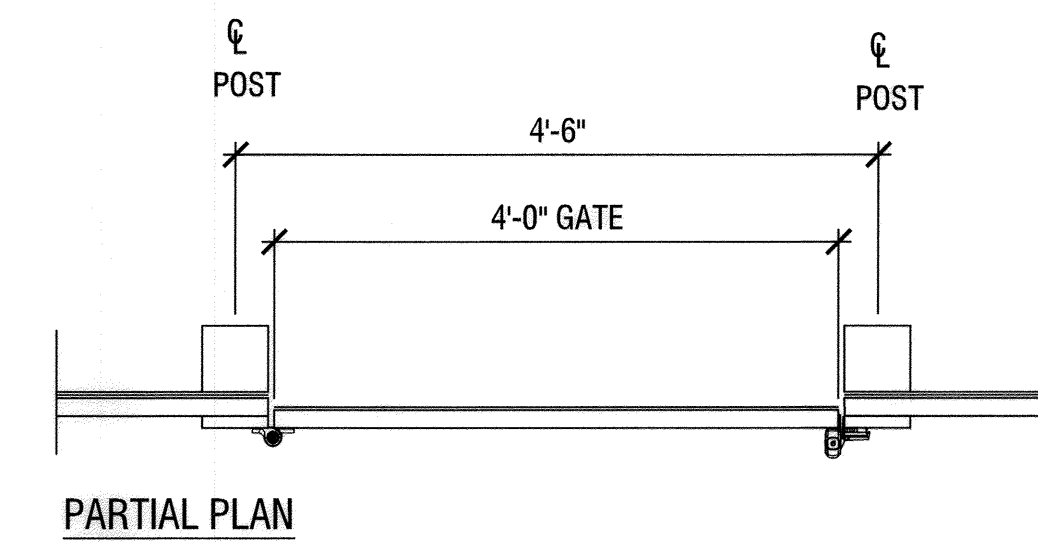
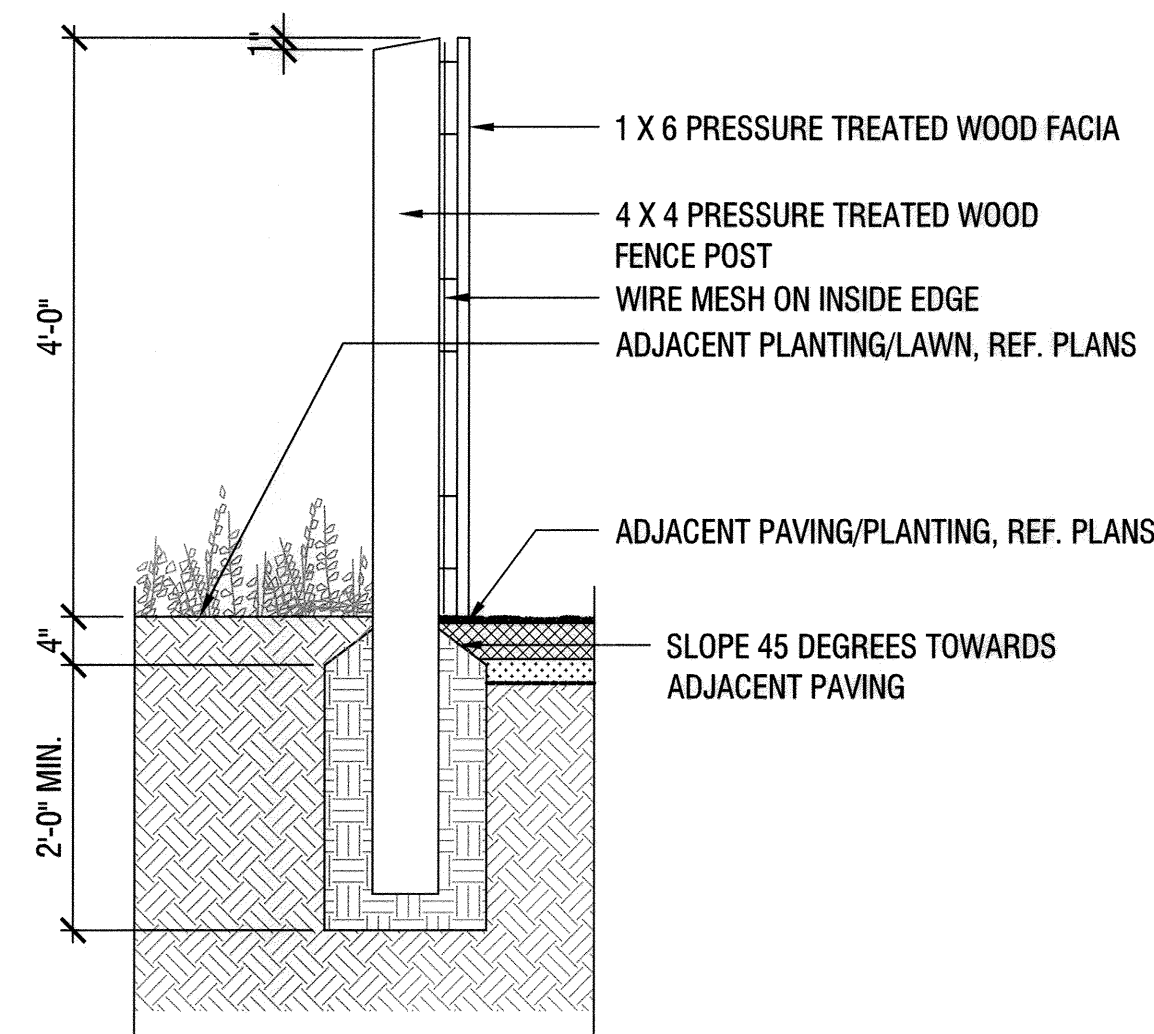
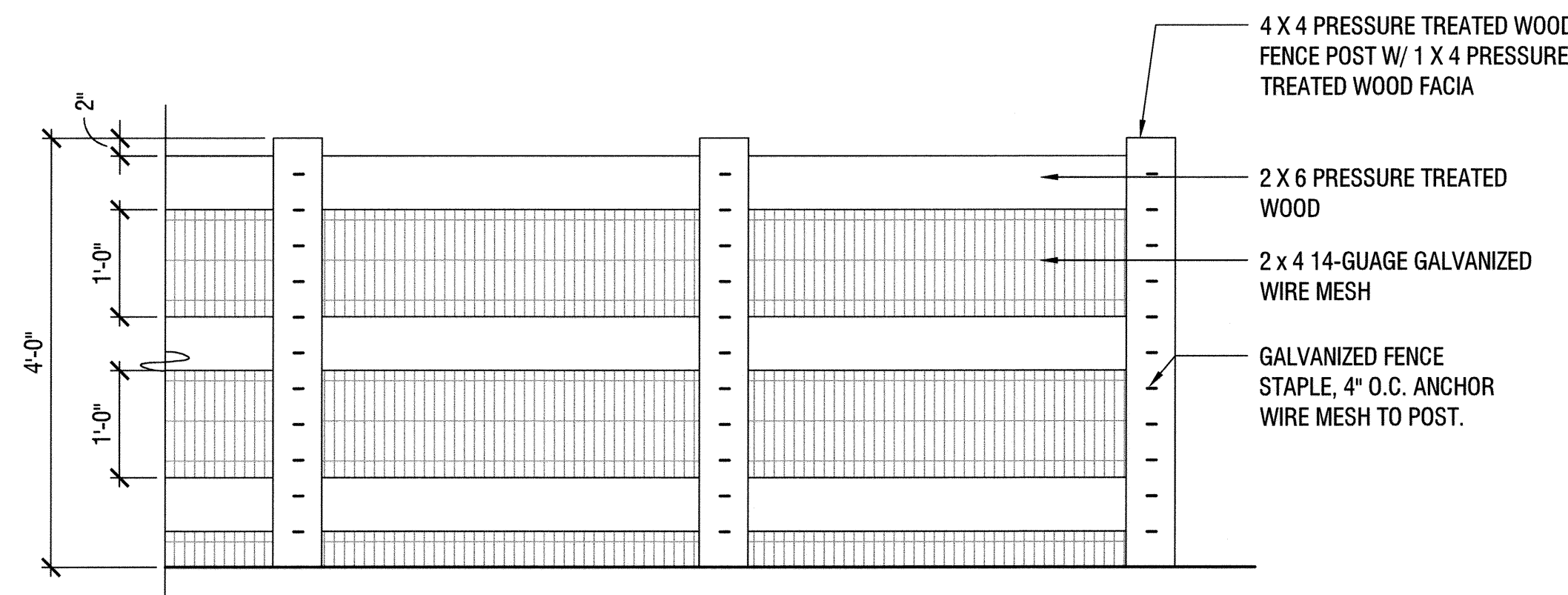
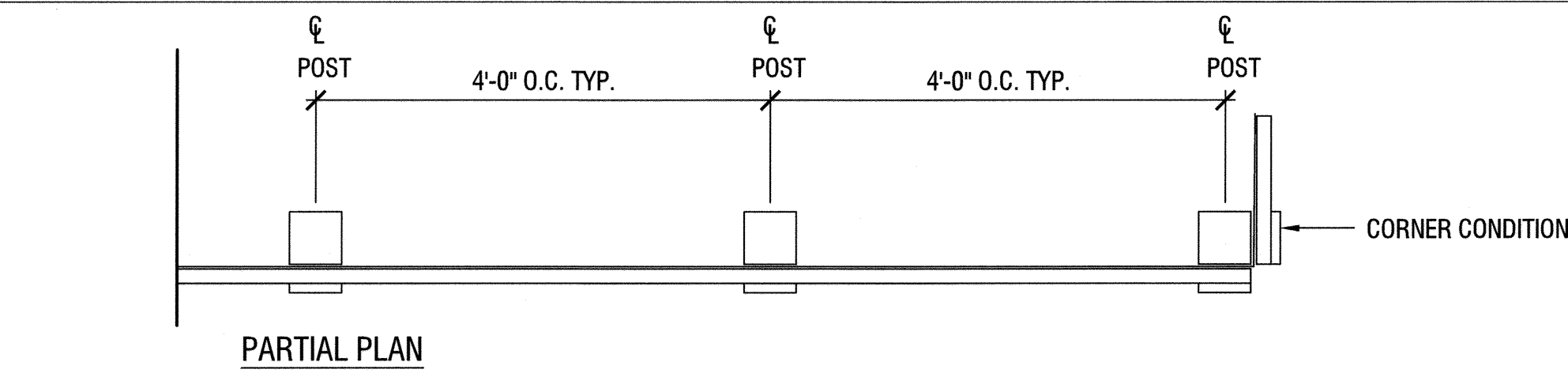
L206

1 PICKET FENCE  
 3/4" = 1'-0"

APPROVED: DEPARTMENT OF PLANNING AND ZONING  
 Chief, Development Engineering Division: 12.7.20  
 Chief, Division of Land Development: 12/1/20  
 Director: 12/21/20

| NO.  | DATE           | REVISION  |
|--|----------------|---|
| <p><b>Design Collective</b><br/>           ARCHITECTURE PLANNING INTERIORS LANDSCAPE ARCHITECTURE GRAPHICS<br/>           601 East Pratt Street, Suite 300<br/>           Baltimore, Maryland 21202<br/>           P 410 685 6655   www.designcollective.com</p> |                |   |
| <p>OWNER/DEVELOPER:<br/>           BINDER ROCK LLC<br/>           C/O H &amp; H ROCK COMPANIES<br/>           6800 DEERPATH ROAD<br/>           SUITE 100<br/>           ELK RIDGE, MARYLAND 21075<br/>           410.579.2442</p>                               |                | <p>PROJECT: DORSEY CENTER APARTMENTS<br/>           210 UNITS<br/>           PARCEL 'T'</p> |
| <p>LOCATION:<br/>           TAX MAP 37<br/>           PARCEL 375 - GRID 24<br/>           1st ELECTION DISTRICT<br/>           HOWARD COUNTY, MARYLAND</p>   |                | <p>TITLE:<br/> <b>FENCE DETAILS</b></p>   |
| DATE:  | SEPTEMBER 2020 | PROJECT NO. 1959  |
| Design: AAM  | Draft: AAM     | Check: CAM  |
| SCALE:   | AS NOTED       | DRAWING 34 OF 49  |

"I certify that these documents were prepared or approved by me, and that I am a duly licensed landscape architect under the laws of the State of Maryland, License No. 1039, expiration date 06/12/2022"  
 By: Matt D'Amico, PLA  
 Design Collective, Inc.

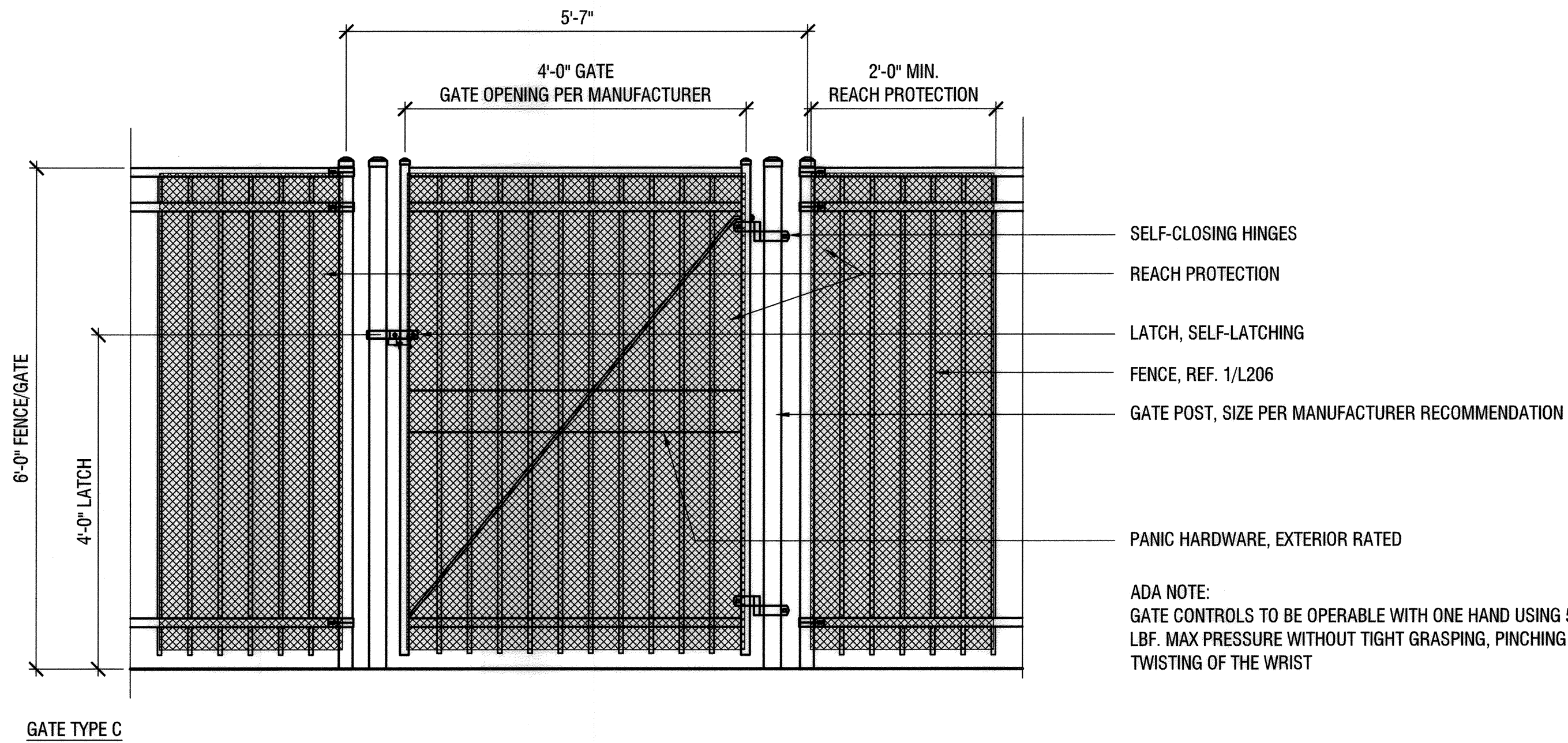
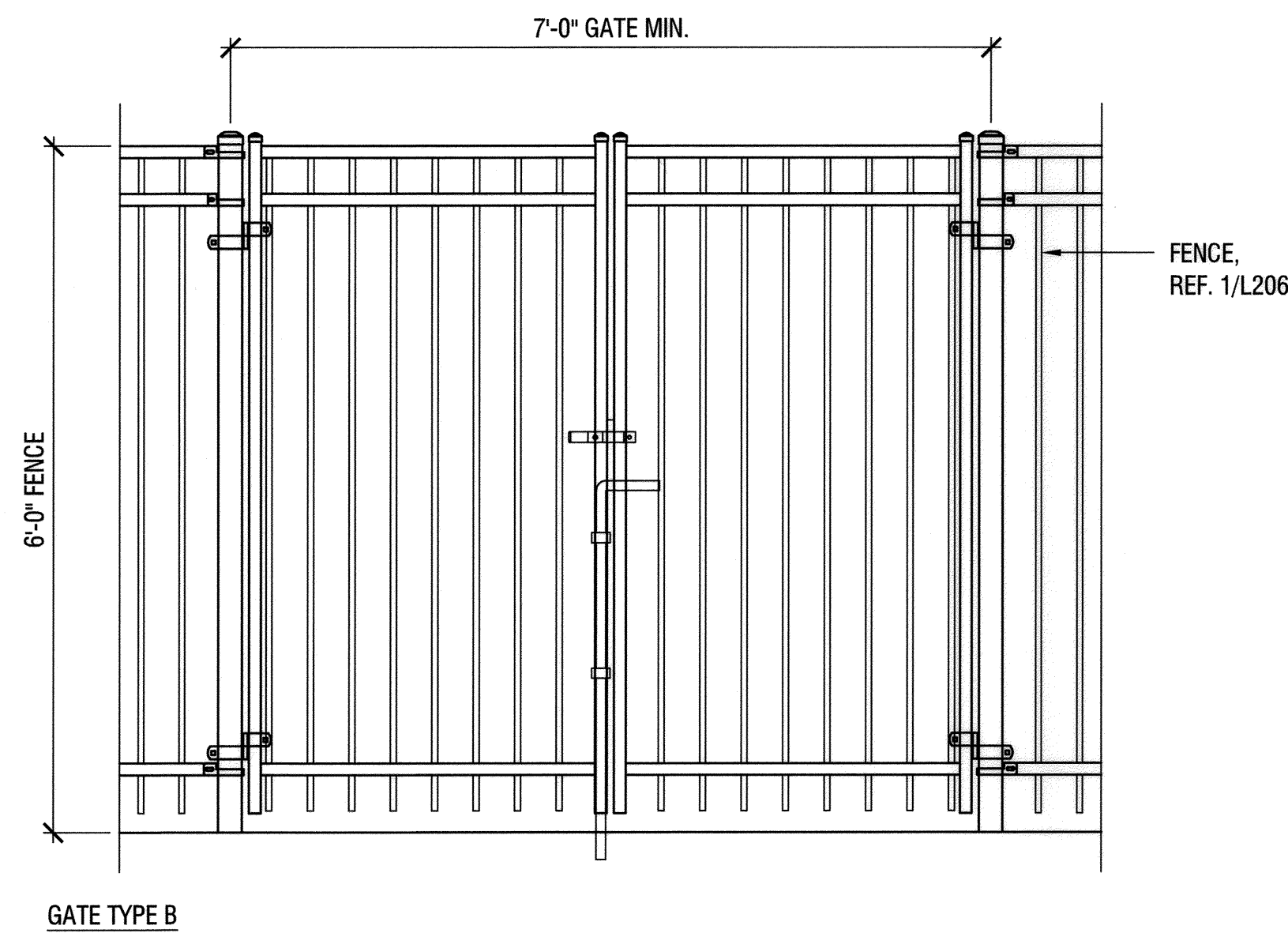
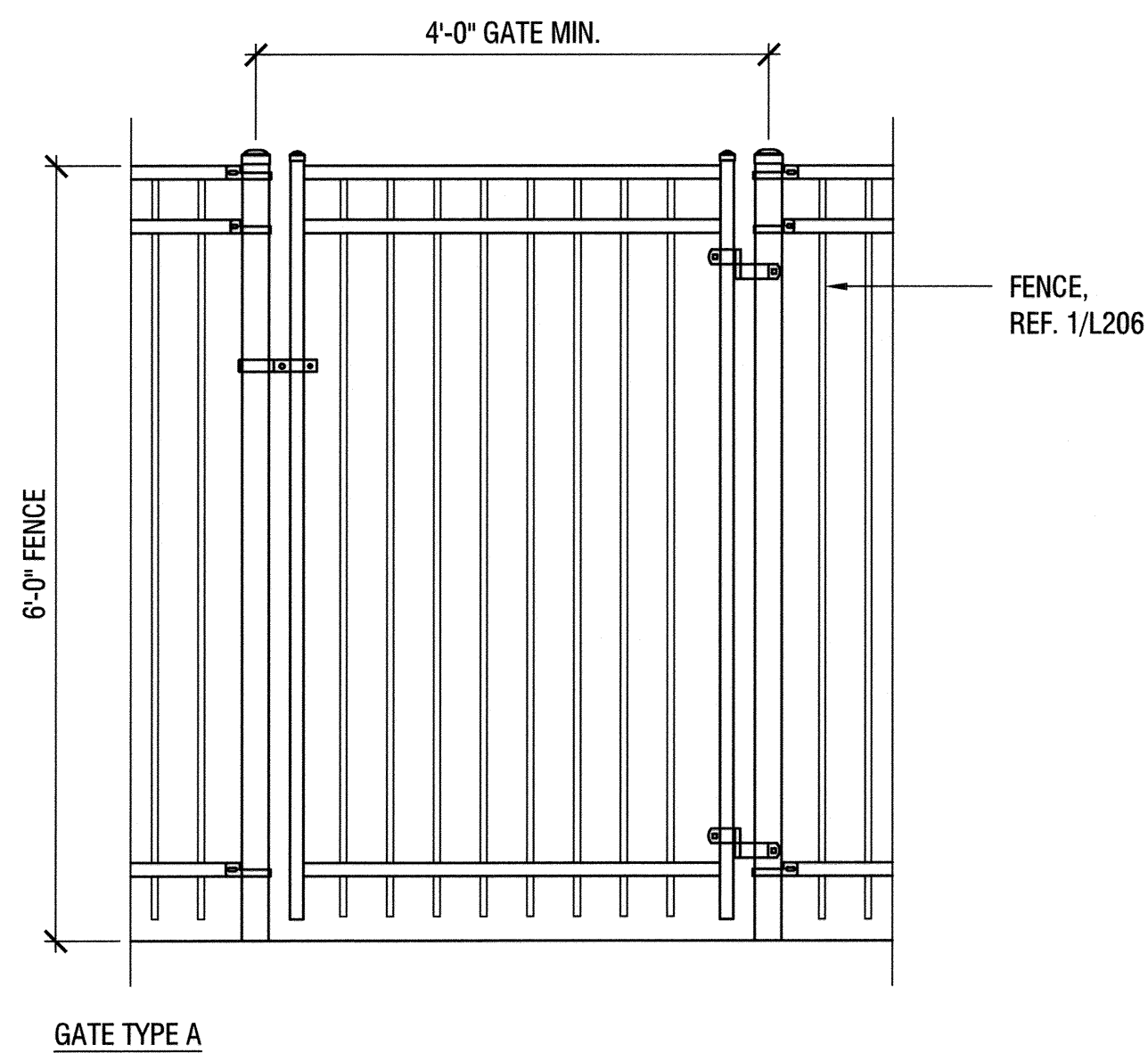


**HINGES**  
 MANUFACTURER: D AND D TECHNOLOGIES  
 PRODUCT: TRUCLOSE HEAVY DUTY - STANDARD  
 COLOR: BLACK  
 NOTES: SELF-CLOSING

**LATCH**  
 MANUFACTURER: D AND D TECHNOLOGIES  
 PRODUCT: MAGNALATCH SERIES 3 TOP PULL  
 FINISH/COLOR: BLACK

NOTE:  
 WIRE MESH INSERT ONLY IN FENCE  
 XX, REF. PLANS FOR LOCATIONS

**1 Paddock Fence**  
 3/4" = 1'-0"



SELF-CLOSING HINGES  
 REACH PROTECTION  
 LATCH, SELF-LATCHING  
 FENCE, REF. 1/L206  
 GATE POST, SIZE PER MANUFACTURER RECOMMENDATION  
 PANIC HARDWARE, EXTERIOR RATED

ADA NOTE:  
 GATE CONTROLS TO BE OPERABLE WITH ONE HAND USING 5 LBF. MAX PRESSURE WITHOUT TIGHT GRASPING, PINCHING OR TWISTING OF THE WRIST

**FENCE/GATE**  
 MANUFACTURER: AMERISTAR  
 PRODUCT: MONTAGE PLUS (STEEL) FENCE W SWING GATE  
 STYLE: MAJESTIC THREE RAIL PANEL  
 SPACING: 4" PICKETS  
 HEIGHT: VARIES, REF. DETAIL  
 FINISH: ECOAT  
 COLOR: BLACK  
 NOTES: STANDARD FLAT CAP  
 EXTENDED PICKET AT BOTTOM RAIL  
 SEE PRODUCT MANUFACTURER'S SPECIFICATIONS FOR INSTALLATION. GATE HARDWARE TO BE COORDINATED W FENCE. PROVIDE SHOP DRAWINGS OF FENCE, GATES AND HARDWARE FOR APPROVAL.

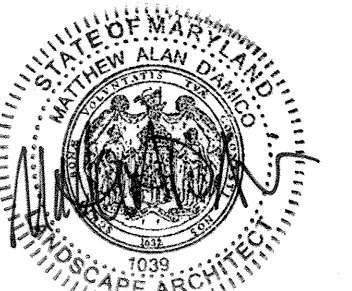
**REACH PROTECTION**  
 PRODUCT: EXPANDED METAL  
 PATTERN: 1/2" DIAMOND PATTERN (STEEL)  
 STYLE: POWDERCOAT  
 COLOR: BLACK  
 NOTES: ATTACH W TECH SCREW AND WASHER (BLACK TO MATCH) APPLIED IN FIELD. MIN. 24" EITHER SIDE OF GATE.

**HINGES**  
 MANUFACTURER: D AND D TECHNOLOGIES  
 PRODUCT: SURECLOSE READY FIT CLOSER AND HINGE EXTERNAL MOUNT  
 COLOR: BLACK  
 NOTES: SELF-CLOSING, GATE AND HARDWARE TO MEET LOCAL POOL CODE REQUIREMENTS.

**LATCH (POOL - GATE A AND B)**  
 MANUFACTURER: MAGNA LATCH  
 PRODUCT: ###  
 FINISH/COLOR: BLACK  
 MOUNTING HEIGHT PER LOCAL POOL CODE

**LATCH (PERIMETER - GATE C)**  
 FINISH/COLOR: BLACK  
 NOTE: CARD READER AND LATCH

**PANIC HARDWARE**  
 MANUFACTURER: DAK INDUSTRIES  
 PRODUCT: 6004 - 48" DETEK SURFACE MOUNT EXIT BAR (WEATHER RESISTANT) W MOUNTING PLATE  
 FINISH/COLOR: POWDERCOAT, BLACK  
 PROVIDE COMPATIBLE LATCH HARDWARE

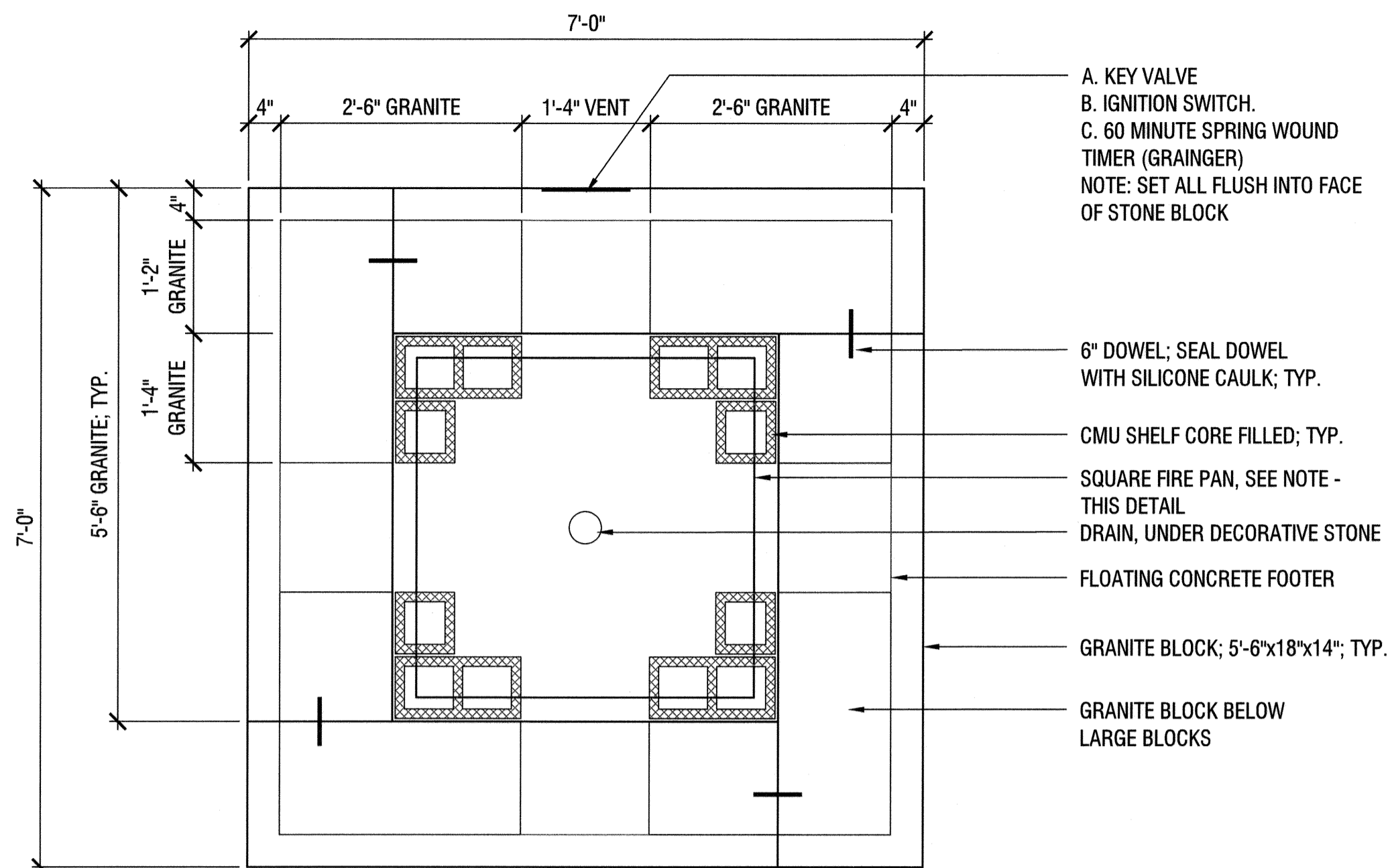


L207

**2 FENCE GATE**  
 3/4" = 1'-0"

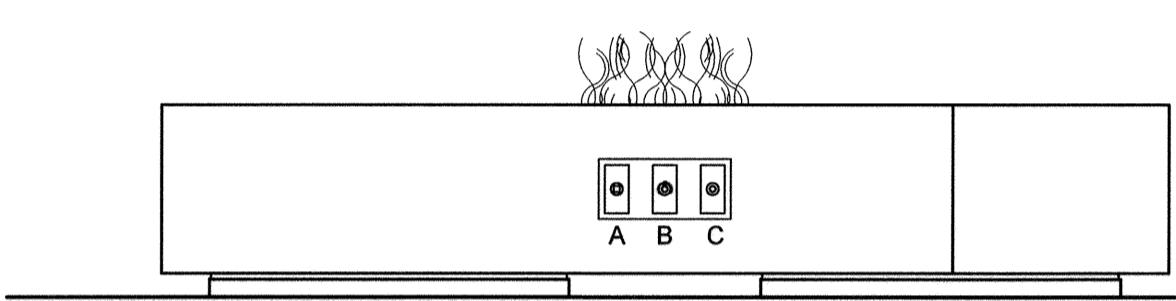
APPROVED: DEPARTMENT OF PLANNING AND ZONING  
 [Signature] 12-7-20  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION  
 [Signature] 12/11/20  
 CHIEF, DIVISION OF LAND DEVELOPMENT  
 [Signature] 12/21/20  
 DIRECTOR

|  |  |      |  |   |  |
|--|--|------|--|---|--|
| NO.  |  | DATE |  | REVISION  |  |
|  |  |      |  |   |  |
| OWNER/DEVELOPER:<br>BINDER ROCK LLC<br>C/O H & H ROCK COMPANIES<br>6800 DEERPATH ROAD<br>SUITE 100<br>ELKRIDGE, MARYLAND 21075<br>410.579.2442 |  |      |  | PROJECT: DORSEY CENTER APARTMENTS<br>210 UNITS<br>PARCEL 'T'<br>LOCATION: TAX MAP 37<br>PARCEL 375 - GRID 24<br>1st ELECTION DISTRICT<br>HOWARD COUNTY, MARYLAND<br>TITLE: FENCE DETAILS<br>DATE: SEPTEMBER 2020 PROJECT NO. 1959<br>SCALE: AS NOTED DRAWING 35 OF 49 |  |
| Design: AAM Draft: AAM Check: CAM  |  |      |  |   |  |



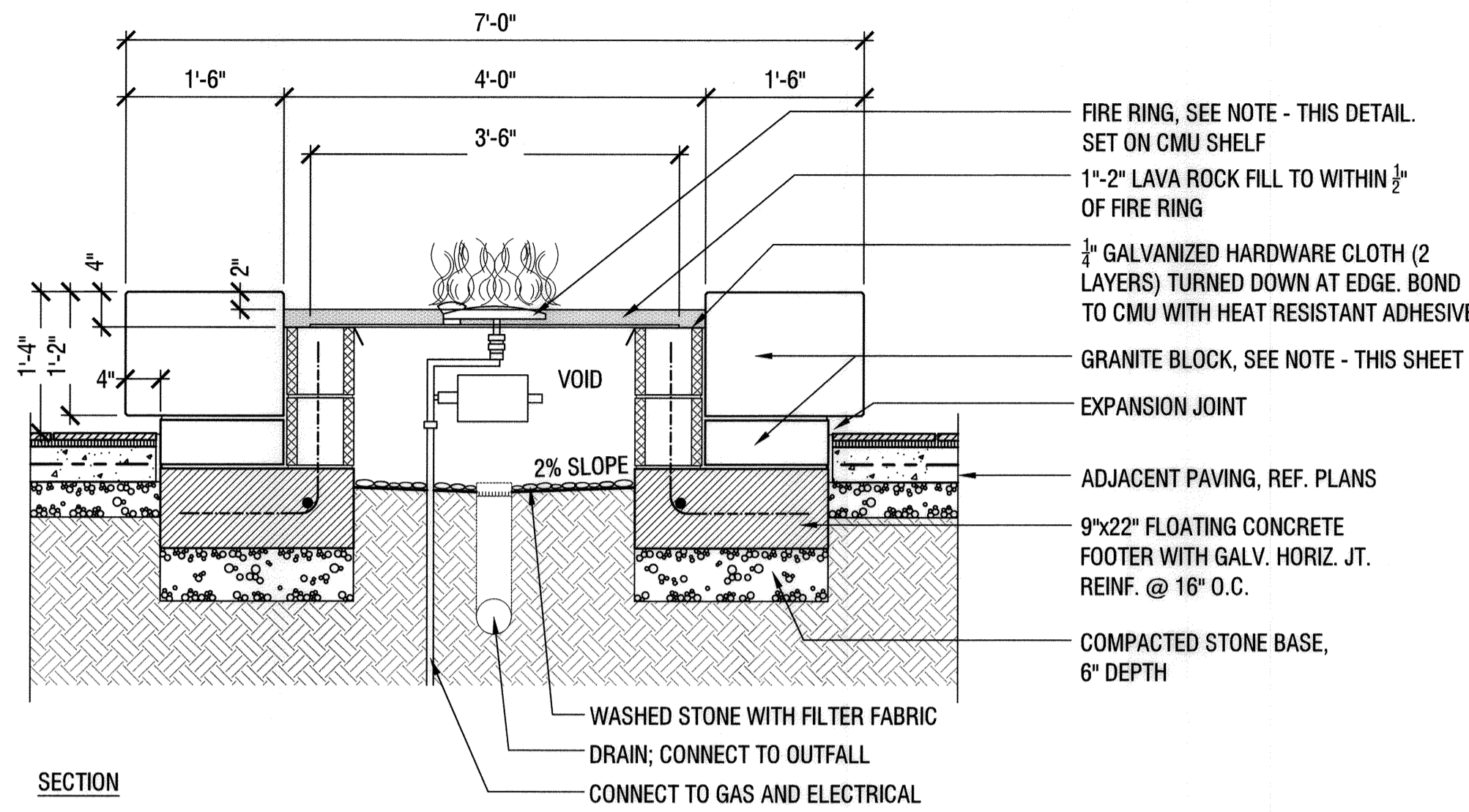
- A. KEY VALVE
- B. IGNITION SWITCH.
- C. 60 MINUTE SPRING WOUND TIMER (GRAINGER)
- NOTE: SET ALL FLUSH INTO FACE OF STONE BLOCK
- 6" DOWEL; SEAL DOWEL WITH SILICONE CAULK; TYP.
- CMU SHELF CORE FILLED; TYP.
- SQUARE FIRE PAN, SEE NOTE - THIS DETAIL
- DRAIN, UNDER DECORATIVE STONE
- FLOATING CONCRETE FOOTER
- GRANITE BLOCK; 5'-6"x18"x14"; TYP.
- GRANITE BLOCK BELOW LARGE BLOCKS

PARTIAL PLAN



- A. KEY VALVE
- B. IGNITION SWITCH.
- C. 60 MINUTE SPRING WOUND TIMER (GRAINGER)
- NOTE: SET ALL FLUSH INTO FACE OF STONE BLOCK

SECTION



- FIRE RING, SEE NOTE - THIS DETAIL. SET ON CMU SHELF
- 1"-2" LAVA ROCK FILL TO WITHIN 1/2" OF FIRE RING
- 3/8" GALVANIZED HARDWARE CLOTH (2 LAYERS) TURNED DOWN AT EDGE. BOND TO CMU WITH HEAT RESISTANT ADHESIVE
- GRANITE BLOCK, SEE NOTE - THIS SHEET
- EXPANSION JOINT
- ADJACENT PAVING, REF. PLANS
- 9"x22" FLOATING CONCRETE FOOTER WITH GALV. HORIZ. JT. REINF. @ 16" O.C.
- COMPACTED STONE BASE, 6" DEPTH
- WASHED STONE WITH FILTER FABRIC DRAIN; CONNECT TO OUTFALL
- CONNECT TO GAS AND ELECTRICAL

SECTION

STONE BLOCKS:

QUARRY: CHAMPLAIN STONE  
 STONE: CORINTHIAN GRANITE  
 FINISH: THERMAL FINISHED ON ALL EXPOSED FACES; SAWN ON ALL NON EXPOSED FACES; 1/4" CHAMFER ON ALL EXPOSED EDGES

FIRE RING:

MANUFACTURER: GRAINGER  
 MODEL: INTERMATIC TIMER, SPRING WOUND 1 HR COMMERCIAL GRADE MODEL #FF60MC WITH BRUSHED ALUMINUM FACE PLATE

TIMER:

MANUFACTURER: STARFIRE DIRECT - HEARTH PRODUCTS CONTROLS (HPC)  
 PRODUCT: HPC 42FSSEI-SQ-HI/LO-NG/120VAC; HPC SQUARE FLAT ELECTRONIC IGNITION FIRE PIT BURNER KIT - HI/LO  
 NOTE: INSTALL WITH MANUFACTURER RECOMMENDED KIT AND PER MANUFACTURERS RECOMMENDATIONS. DO NOT IGNITE FIRE RING WITHOUT LAVA ROCK INFILL

EMERGENCY SHUT OFF:

MANUFACTURER: GRAINGER  
 MODEL: EMERGENCY POWER OFF BUTTON, TURN TO RESET

GENERAL NOTE:

TWO STEP IGNITION PROCESS: TIMER OPENS THE GAS LINE AND IGNITION SWITCH IGNITES THE SYSTEM. WHEN TIMER EXPIRES, IT CUTS THE GAS CONNECTION TURNING OFF THE SYSTEM.

SUBSTITUTIONS TO FIRE PIT KIT MUST BE COORDINATED W/ FABRICATION OF FIRE PIT STONE BLOCKS.

EMERGENCY SHUT OFF LOCATED IN ADJACENT PLANTING SEE PLAN L102 FOR LOCATION.

SHOP DRAWINGS: LANDSCAPE ARCHITECT TO APPROVE SHOP DRAWINGS

**Hearth Products Controls Co**  
 CSA CERTIFIED-OUTDOOR USE ONLY  
 FOR COMMERCIAL AND RESIDENTIAL USE

RECOMMENDED ENCLOSURE SIZE

HEARTH PRODUCTS CONTROLS  
 3050 PLAINFIELD RD.  
 KETTERING, OH 45432  
 TOLL FREE: 1-877-433-7001  
 PHONE: (937) 433-7000  
 FAX: (937) 433-0704  
 www.hpcfire.com

AVAILABLE IN:  
 • 120VAC OR 24VAC  
 • ON/OFF OR HI/LOW  
 MATERIAL: 304 STAINLESS STEEL  
 HI/LO MODELS HAVE A 40% REDUCTION IN BTU ON LOW SETTING

| PART NUMBERS | STND BTU | DIMENSION CHART |    |    |
|--------------|----------|-----------------|----|----|
|              |          | A"              | B" | C" |
| 18FSSEI-SQ   | 65K      | 18              | 12 | 54 |
| 24FSSEI-SQ   | 125K     | 24              | 18 | 54 |
| 30FSSEI-SQ   | 200K     | 30              | 24 | 54 |
| 36FSSEI-SQ   | 250K     | 36              | 30 | 72 |
| 42FSSEI-SQ   | 400K     | 42              | 36 | 80 |

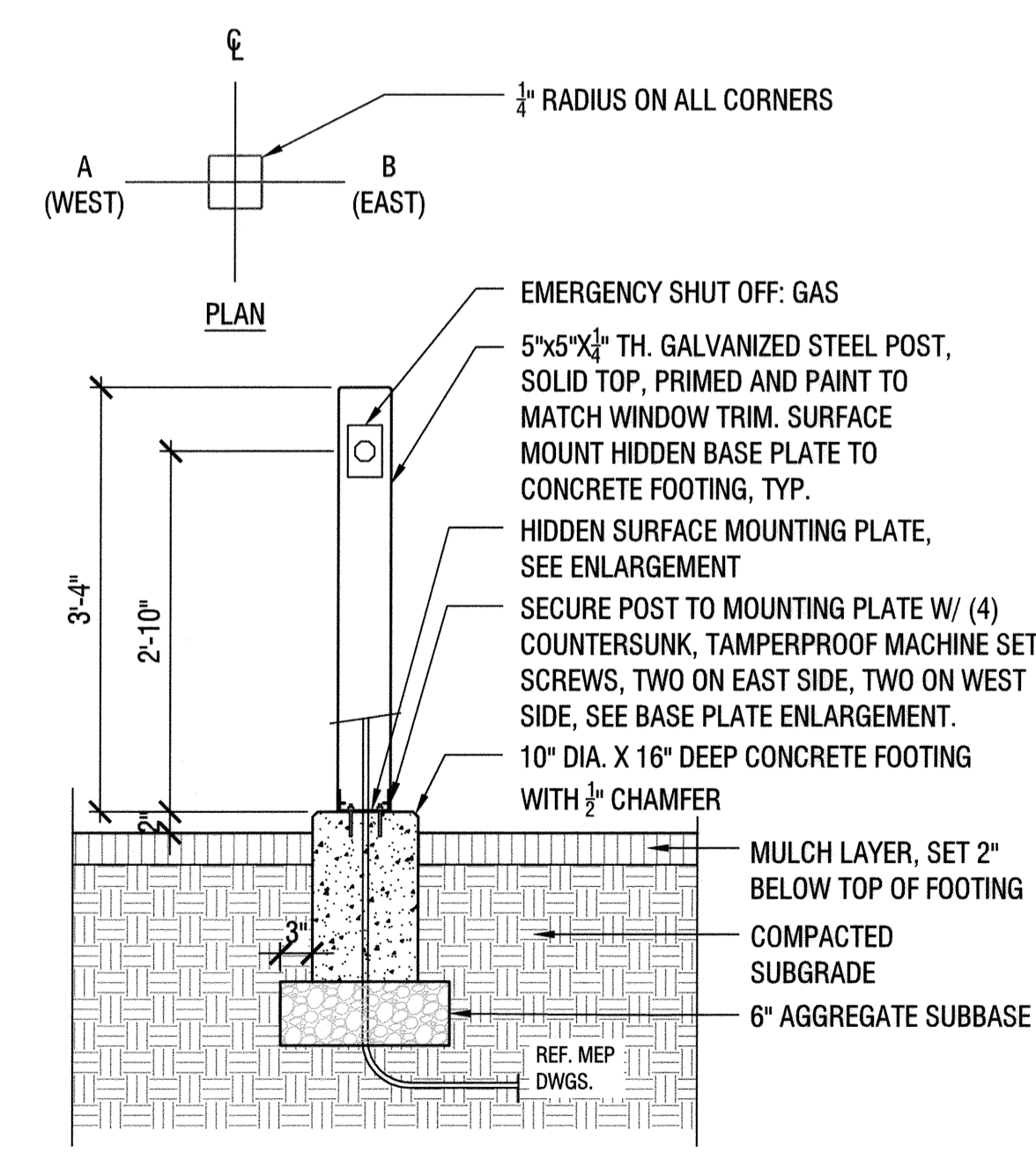
Notes:  
 1. PROPER VENTING  
 • ENCLOSURES: Recommend 4 each 18 sq.in. vents on opposing sides (Minimum 2 each 18 sq.in. vents)  
 • BOWLS (Copper, concrete or metal) - Bowl to be raised above mounting surface minimum of 3/4" gap. Bowl to have a minimum of 6" diameter hole in bottom  
 2. GAS SUPPLY - FOR USE WITH FIXED PIPING SYSTEMS ONLY - NOT FOR USE WITH SMALL TANKS.  
 • Natural Gas: Operating Supply Pressure: Minimum: 6.0" W.C.; Maximum: 7.0" W.C.  
 • LP Gas: Operating Supply Pressure: Minimum: 10.0" W.C.; Maximum: 11.0" W.C.  
 IMPORTANT: Ensure any flex line that may be used from the permanent main fuel supply to the product is rated to the stated max btu of the product and certified to ANSI Z21.75/CSA 6.27.  
 5. MODIFICATION OF PRODUCT WILL VOID ANY CERTIFICATION AND WARRANTY.  
 6. FOLLOW ALL MANUFACTURER INSTALLATION INSTRUCTIONS AND LOCAL CODES.  
 7. ALL DIMENSIONS ARE CONSIDERED TRUE AND REFLECT MANUFACTURER'S SPECIFICATIONS AS OF THE REVISION DATE.  
 8. DO NOT SCALE DRAWING.  
 9. THESE DRAWINGS ARE FOR SIZING AND PLANNING PURPOSES. ALL INFORMATION CONTAINED HEREIN WAS CURRENT AT THE TIME OF DEVELOPMENT. THE MANUFACTURER IS RESPONSIBLE FOR THE ACCURACY OF THE DRAWING.  
 10. CONTRACTOR'S NOTE: FOR PRODUCT AND COMPANY INFORMATION VISIT www.CADetails.com/info REFERENCE NUMBER 771-047.

ELECTRONIC IGNITION  
 EI SQUARE PAN- FLAME SENSING WITH ELECTRONIC HOT SURFACE IGNITION

771-047

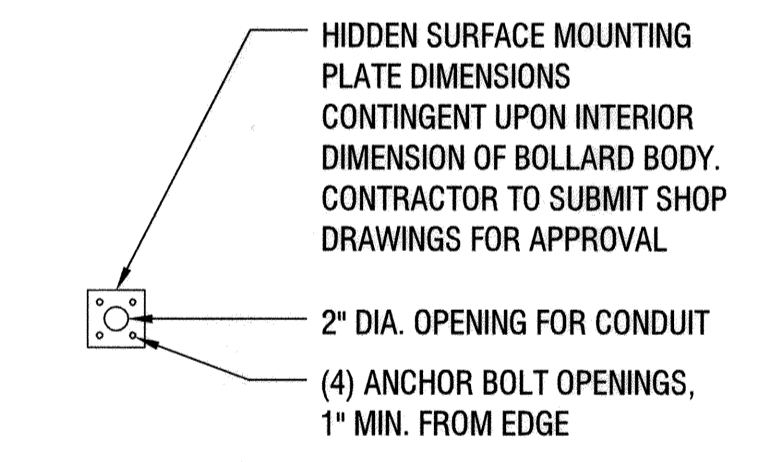
REVISION DATE 11/13/2017

1 FIREPIT  
 3/4" = 1'-0"



ELEVATION

2 EMERGENCY GAS SHUTOFF  
 3/4" = 1'-0"



BASE PLATE ENLARGEMENT

EMERGENCY SHUT OFF & TIMER

MANUFACTURER: FIREGEAR OUTDOORS  
 E-STOP GAS TIMER, SPRING WOUND 1 HR COMMERCIAL GRADE MODEL #ESTOP1-0H WITH 304 STAINLESS STEEL

SHOP DRAWINGS

LANDSCAPE ARCHITECT TO APPROVE SHOP DRAWINGS. CONTRACTOR TO PROVIDE LANDSCAPE ARCHITECT WITH CUT SHEET OF ALL FINAL PRODUCT SELECTIONS FOR APPROVAL.

APPROVED: DEPARTMENT OF PLANNING AND ZONING

*Chad Edwards* 12.7.20  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

*[Signature]* 12/14/20  
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

*[Signature]* 12/21/20  
 DIRECTOR DATE



L209

| NO. | DATE | REVISION |
|-----|------|----------|
|     |      |          |
|     |      |          |
|     |      |          |

Design Collective

ARCHITECTURE PLANNING INTERIORS  
 LANDSCAPE ARCHITECTURE GRAPHICS

601 East Pratt Street, Suite 300  
 Baltimore, Maryland 21202  
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By: Matt D'Amico, PLA  
 Design Collective, Inc.

OWNER/DEVELOPER: BINDER ROCK LLC  
 C/O H & H ROCK COMPANIES  
 6800 DEERPATH ROAD  
 SUITE 100  
 ELKRIDGE, MARYLAND 21075  
 410.579.2442

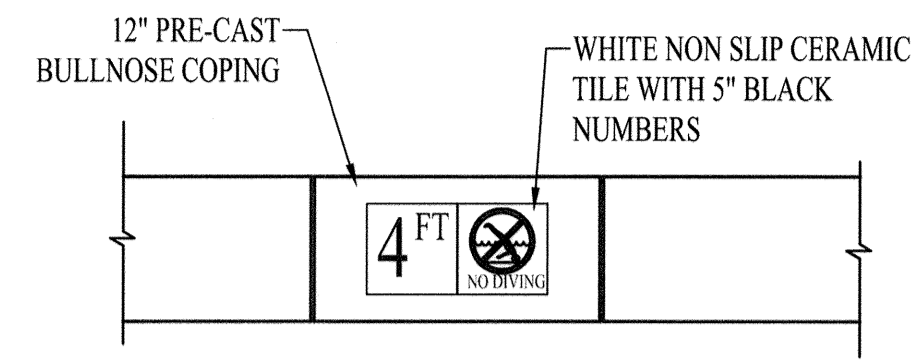
PROJECT: DORSEY CENTER APARTMENTS  
 210 UNITS  
 PARCEL 'T'

LOCATION: TAX MAP 37  
 PARCEL 375 - GRID 24  
 1st ELECTION DISTRICT  
 HOWARD COUNTY, MARYLAND

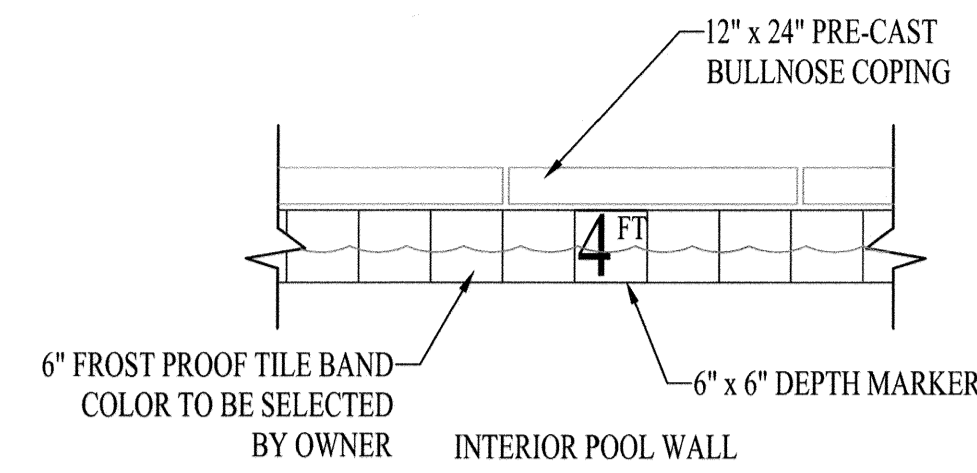
TITLE: FIRE PIT DETAILS

DATE: SEPTEMBER 2020 PROJECT NO. 1959

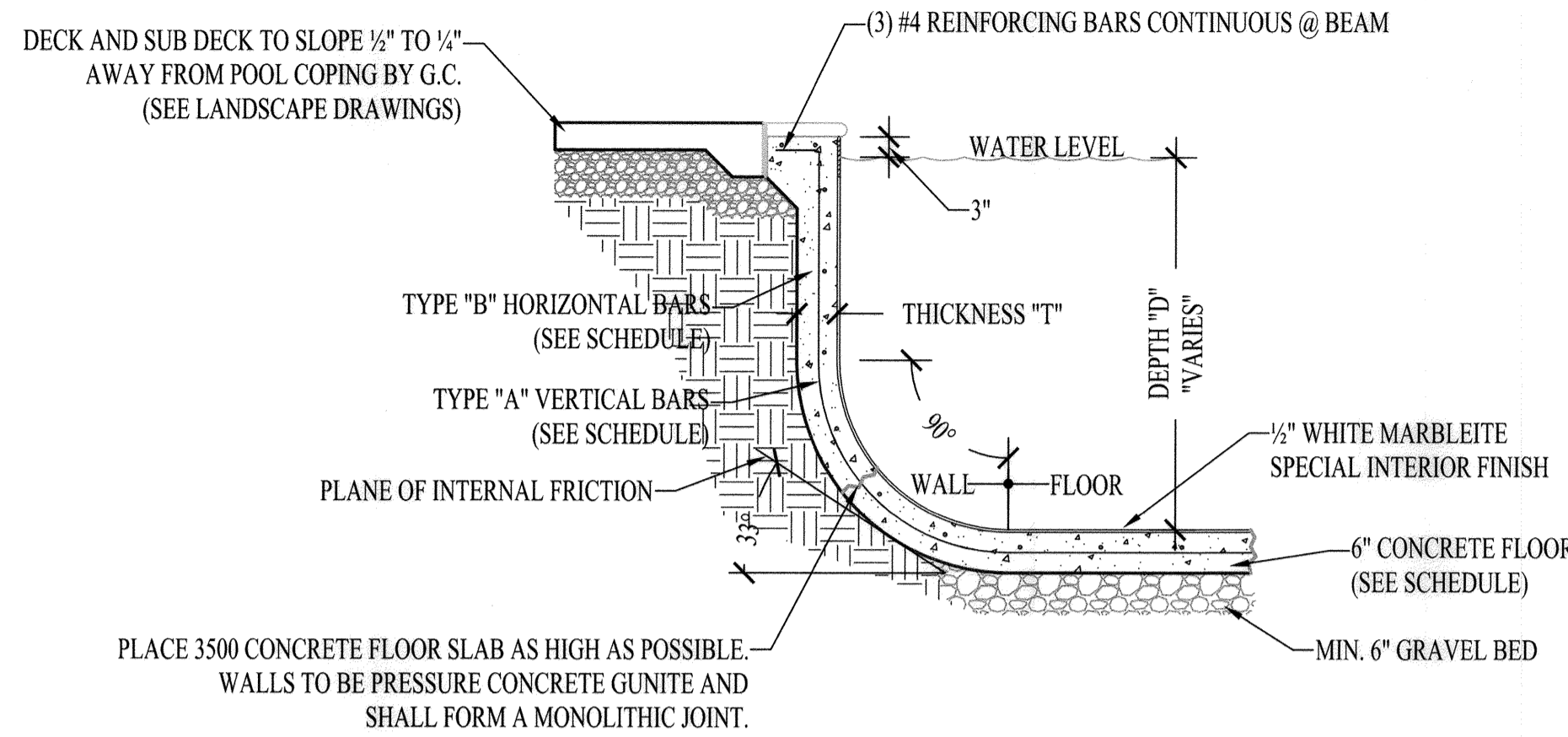
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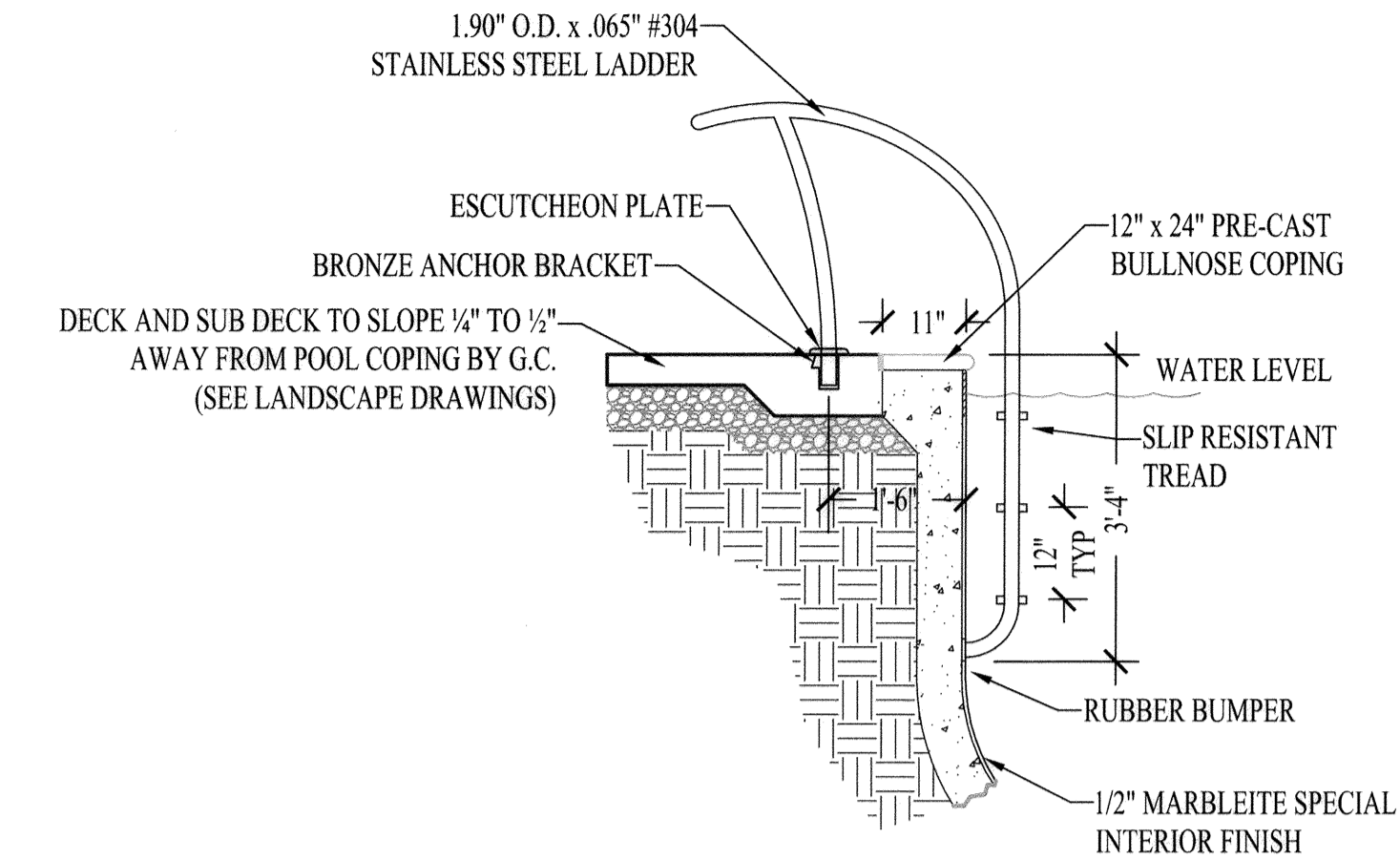
**1 DEPTH MARKER**  
3/4" = 1'-0"



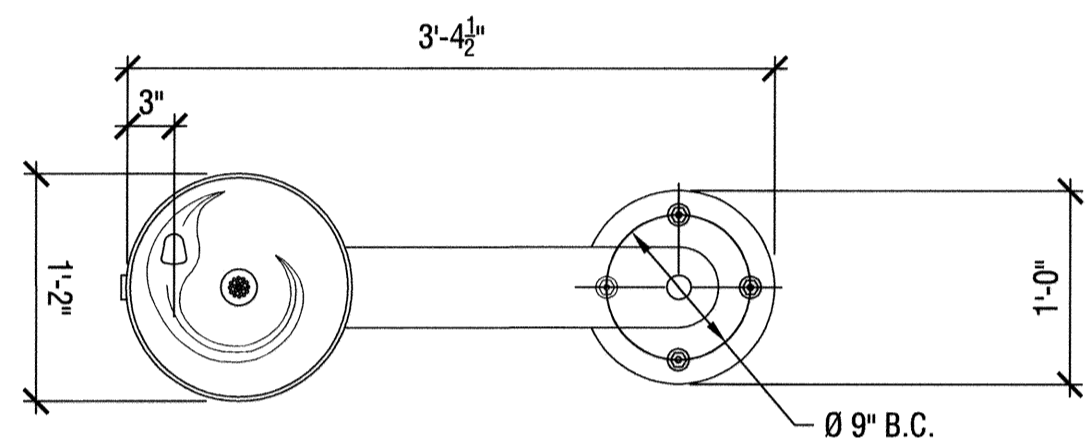
**2 INTERIOR POOL WALL**  
3/4" = 1'-0"



**3 POOL WALL (SECTION)**  
1/2" = 1'-0"



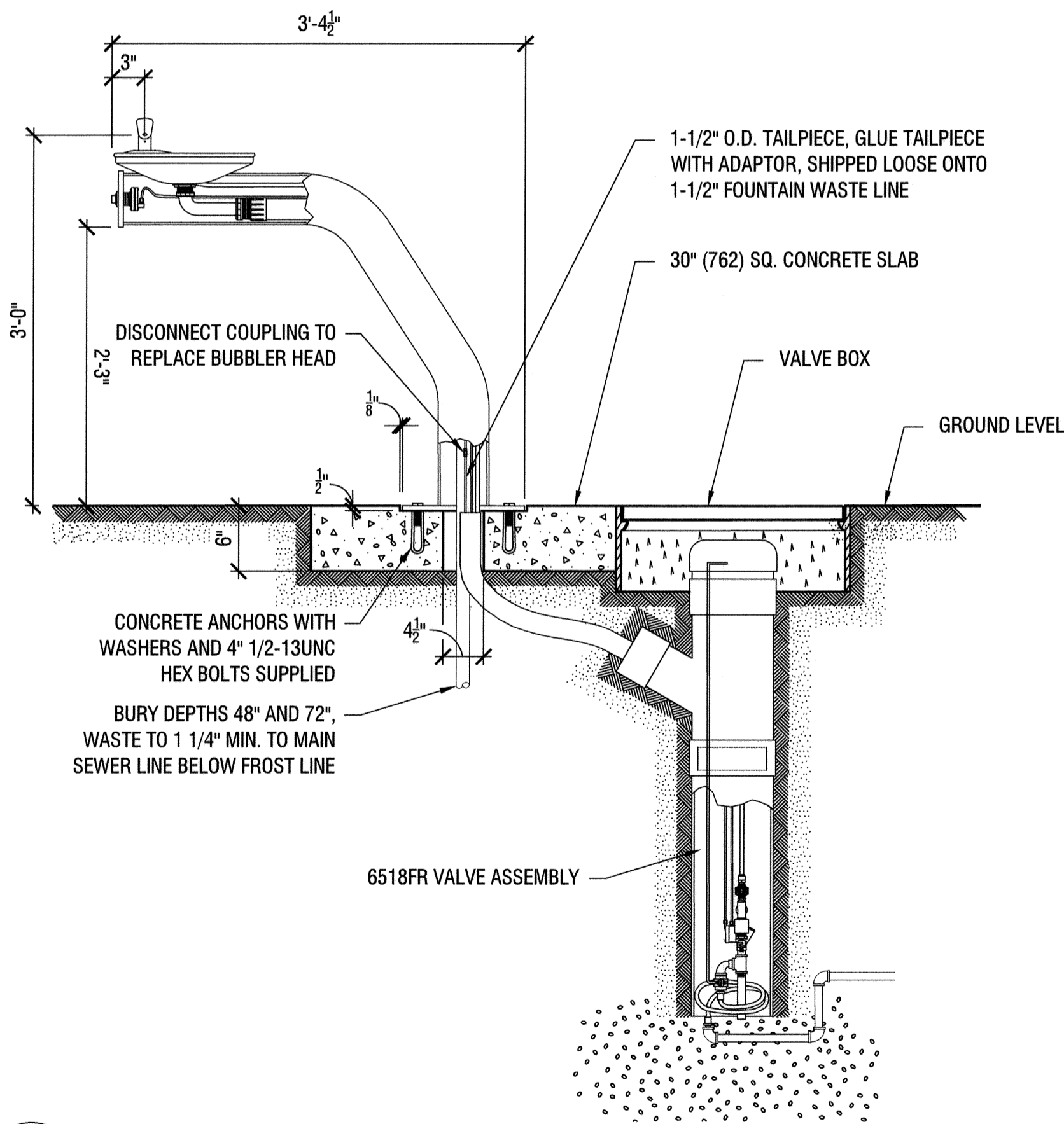
**4 POOL LADDER**  
1/2" = 1'-0"



DRINKING FOUNTAIN:

MANUFACTURER: HAWS CORPORATION  
1455 KLEPPE LANE  
SPARKS, NV 89431  
775.359.4712  
info@hawesco.com  
www.hawesco.com

PRODUCT: MODEL 3380FR/3380GFR WITH 6518FR



**5 DRINKING FOUNTAIN**  
1" = 1'-0"

| SITE SPECIFIC DATA                         |              |                  |           |
|--|--------------|------------------|-----------|
| PROJECT NAME                               |              |                  |           |
| PROJECT LOCATION                           |              |                  |           |
| STRUCTURE ID                               |              |                  |           |
| TREATMENT REQUIRED                         |              | FLOW BASED (CFS) |           |
| VOLUME BASED (CF)                          |              |                  |           |
| TREATMENT HQL AVAILABLE (FT)               |              |                  |           |
| PEAK BYPASS REQUIRED (CFS) - IF APPLICABLE |              |                  |           |
| PIPE DATA                                  | I.E.         | MATERIAL         | DIAMETER  |
| INLET PIPE 1                               |              |                  |           |
| INLET PIPE 2                               |              |                  |           |
| OUTLET PIPE                                |              |                  |           |
|  | PRETREATMENT | BIOFILTRATION    | DISCHARGE |
| RIM ELEVATION                              | PARKWAY      | OPEN PLANTER     | PARKWAY   |
| SURFACE LOAD                               | 35' X 35'    | N/A              | N/A       |
| FRAME & COVER                              | 35' X 35'    | N/A              | N/A       |
| WETLAND MEDIA VOLUME (CY)                  | 2.03         |                  |           |
| WETLAND MEDIA DELIVERY METHOD              | TBD          |                  |           |
| ORIFICE SIZE (DIA. INCHES)                 | #1.53"       |                  |           |
| MAXIMUM PICK WEIGHT (LBS)                  | 15000        |                  |           |
| NOTES:                                     |              |                  |           |

**INSTALLATION NOTES**

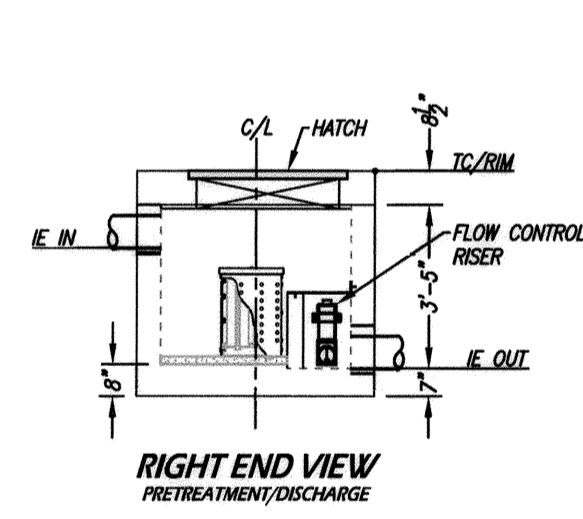
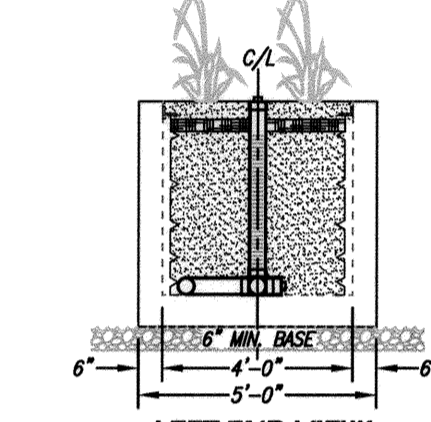
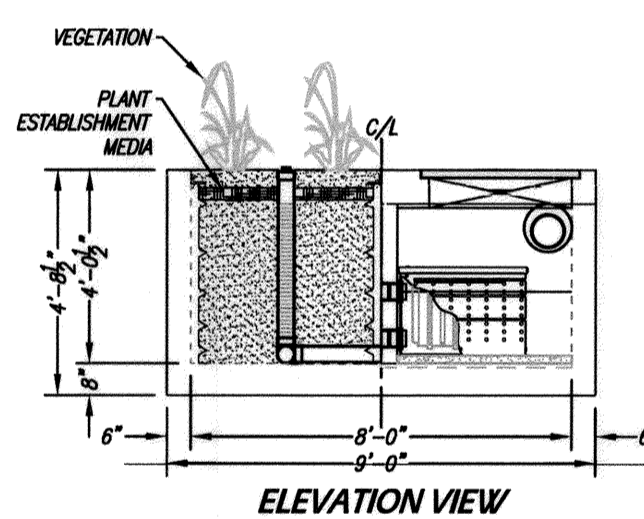
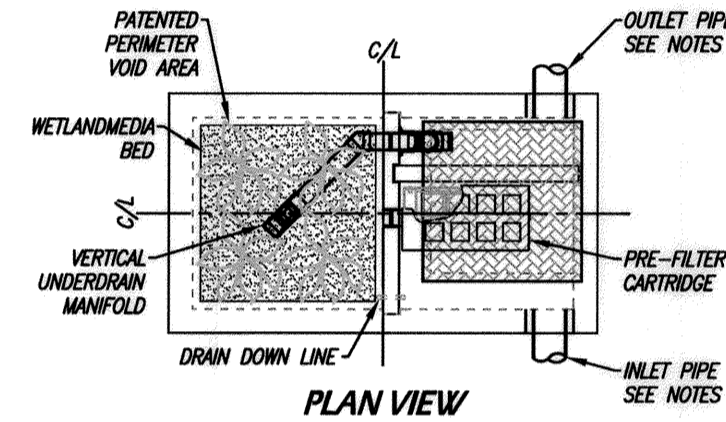
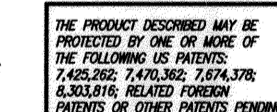
- CONTRACTOR TO PROVIDE ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS REQUIRED TO OFFLOAD AND INSTALL THE SYSTEM AND APPURTENANCES IN ACCORDANCE WITH THIS DRAWING AND THE MANUFACTURER'S SPECIFICATIONS, UNLESS OTHERWISE STATED IN MANUFACTURER'S CONTRACT.
- UNIT MUST BE INSTALLED ON LEVEL BASE. MANUFACTURER RECOMMENDS A MINIMUM 6" LEVEL ROCK BASE UNLESS SPECIFIED BY THE PROJECT ENGINEER. CONTRACTOR IS RESPONSIBLE TO VERIFY PROJECT ENGINEER'S RECOMMENDED BASE SPECIFICATIONS.
- ALL PIPES MUST BE FLUSH WITH INSIDE SURFACE OF CONCRETE (PIPES CANNOT INTRUDE BEYOND FLUSH). INVERT OF OUTFLOW PIPE MUST BE FLUSH WITH DISCHARGE CHAMBER FLOOR. ALL GAPS AROUND PIPES SHALL BE SEALED WATER TIGHT WITH A NON-SHINK GROUT PER MANUFACTURER'S STANDARD CONNECTION DETAIL AND SHALL MEET OR EXCEED REGIONAL PIPE CONNECTION STANDARDS.
- CONTRACTOR TO SUPPLY AND INSTALL ALL EXTERNAL CONNECTING PIPES.
- CONTRACTOR RESPONSIBLE FOR INSTALLATION OF ALL RISERS, MANHOLES, AND HATCHES. CONTRACTOR TO GROUT ALL MANHOLES AND HATCHES TO MATCH FINISHED SURFACE UNLESS SPECIFIED OTHERWISE.

**GENERAL NOTES**

- MANUFACTURER TO PROVIDE ALL MATERIALS UNLESS OTHERWISE NOTED.
- ALL DIMENSIONS, ELEVATIONS, SPECIFICATIONS AND CAPACITIES ARE SUBJECT TO CHANGE. FOR PROJECT SPECIFIC DRAWINGS DETAILING EXACT DIMENSIONS, WEIGHTS AND ACCESSORIES PLEASE CONTACT MANUFACTURER.

THE PRODUCT DESCRIBED MAY BE PROTECTED BY ONE OR MORE OF THE FOLLOWING PATENTS: U.S. PATENT # 7,646,811; U.S. PATENT # 7,646,812; U.S. PATENT # 7,646,813; U.S. PATENT # 7,646,814; U.S. PATENT # 7,646,815; U.S. PATENT # 7,646,816; U.S. PATENT # 7,646,817; U.S. PATENT # 7,646,818; U.S. PATENT # 7,646,819; U.S. PATENT # 7,646,820; U.S. PATENT # 7,646,821; U.S. PATENT # 7,646,822; U.S. PATENT # 7,646,823; U.S. PATENT # 7,646,824; U.S. PATENT # 7,646,825; U.S. PATENT # 7,646,826; U.S. PATENT # 7,646,827; U.S. PATENT # 7,646,828; U.S. PATENT # 7,646,829; U.S. PATENT # 7,646,830; U.S. PATENT # 7,646,831; U.S. PATENT # 7,646,832; U.S. PATENT # 7,646,833; U.S. PATENT # 7,646,834; U.S. PATENT # 7,646,835; U.S. PATENT # 7,646,836; U.S. PATENT # 7,646,837; U.S. PATENT # 7,646,838; U.S. PATENT # 7,646,839; U.S. PATENT # 7,646,840; U.S. PATENT # 7,646,841; U.S. PATENT # 7,646,842; U.S. PATENT # 7,646,843; U.S. PATENT # 7,646,844; U.S. PATENT # 7,646,845; U.S. PATENT # 7,646,846; U.S. PATENT # 7,646,847; U.S. PATENT # 7,646,848; U.S. PATENT # 7,646,849; U.S. PATENT # 7,646,850; U.S. PATENT # 7,646,851; U.S. PATENT # 7,646,852; U.S. PATENT # 7,646,853; U.S. PATENT # 7,646,854; U.S. PATENT # 7,646,855; U.S. PATENT # 7,646,856; U.S. PATENT # 7,646,857; U.S. PATENT # 7,646,858; U.S. PATENT # 7,646,859; U.S. PATENT # 7,646,860; U.S. PATENT # 7,646,861; U.S. PATENT # 7,646,862; U.S. PATENT # 7,646,863; U.S. PATENT # 7,646,864; U.S. PATENT # 7,646,865; U.S. PATENT # 7,646,866; U.S. PATENT # 7,646,867; U.S. PATENT # 7,646,868; U.S. PATENT # 7,646,869; U.S. PATENT # 7,646,870; U.S. PATENT # 7,646,871; U.S. PATENT # 7,646,872; U.S. PATENT # 7,646,873; U.S. PATENT # 7,646,874; U.S. PATENT # 7,646,875; U.S. PATENT # 7,646,876; U.S. PATENT # 7,646,877; U.S. PATENT # 7,646,878; U.S. PATENT # 7,646,879; U.S. PATENT # 7,646,880; U.S. PATENT # 7,646,881; U.S. PATENT # 7,646,882; U.S. PATENT # 7,646,883; U.S. PATENT # 7,646,884; U.S. PATENT # 7,646,885; U.S. PATENT # 7,646,886; U.S. PATENT # 7,646,887; U.S. PATENT # 7,646,888; U.S. PATENT # 7,646,889; U.S. PATENT # 7,646,890; U.S. PATENT # 7,646,891; U.S. PATENT # 7,646,892; U.S. PATENT # 7,646,893; U.S. PATENT # 7,646,894; U.S. PATENT # 7,646,895; U.S. PATENT # 7,646,896; U.S. PATENT # 7,646,897; U.S. PATENT # 7,646,898; U.S. PATENT # 7,646,899; U.S. PATENT # 7,646,900; U.S. PATENT # 7,646,901; U.S. PATENT # 7,646,902; U.S. PATENT # 7,646,903; U.S. PATENT # 7,646,904; U.S. PATENT # 7,646,905; U.S. PATENT # 7,646,906; U.S. PATENT # 7,646,907; U.S. PATENT # 7,646,908; U.S. PATENT # 7,646,909; U.S. PATENT # 7,646,910; U.S. PATENT # 7,646,911; U.S. PATENT # 7,646,912; U.S. PATENT # 7,646,913; U.S. PATENT # 7,646,914; U.S. PATENT # 7,646,915; U.S. PATENT # 7,646,916; U.S. PATENT # 7,646,917; U.S. PATENT # 7,646,918; U.S. PATENT # 7,646,919; U.S. PATENT # 7,646,920; U.S. PATENT # 7,646,921; U.S. PATENT # 7,646,922; U.S. PATENT # 7,646,923; U.S. PATENT # 7,646,924; U.S. PATENT # 7,646,925; U.S. PATENT # 7,646,926; U.S. PATENT # 7,646,927; U.S. PATENT # 7,646,928; U.S. PATENT # 7,646,929; U.S. PATENT # 7,646,930; U.S. PATENT # 7,646,931; U.S. PATENT # 7,646,932; U.S. PATENT # 7,646,933; U.S. PATENT # 7,646,934; U.S. PATENT # 7,646,935; U.S. PATENT # 7,646,936; U.S. PATENT # 7,646,937; U.S. PATENT # 7,646,938; U.S. PATENT # 7,646,939; U.S. PATENT # 7,646,940; U.S. PATENT # 7,646,941; U.S. PATENT # 7,646,942; U.S. PATENT # 7,646,943; U.S. PATENT # 7,646,944; U.S. PATENT # 7,646,945; U.S. PATENT # 7,646,946; U.S. PATENT # 7,646,947; U.S. PATENT # 7,646,948; U.S. PATENT # 7,646,949; U.S. PATENT # 7,646,950; U.S. PATENT # 7,646,951; U.S. PATENT # 7,646,952; U.S. PATENT # 7,646,953; U.S. PATENT # 7,646,954; U.S. PATENT # 7,646,955; U.S. PATENT # 7,646,956; U.S. PATENT # 7,646,957; U.S. PATENT # 7,646,958; U.S. PATENT # 7,646,959; U.S. PATENT # 7,646,960; U.S. PATENT # 7,646,961; U.S. PATENT # 7,646,962; U.S. PATENT # 7,646,963; U.S. PATENT # 7,646,964; U.S. PATENT # 7,646,965; U.S. PATENT # 7,646,966; U.S. PATENT # 7,646,967; U.S. PATENT # 7,646,968; U.S. PATENT # 7,646,969; U.S. PATENT # 7,646,970; U.S. PATENT # 7,646,971; U.S. PATENT # 7,646,972; U.S. PATENT # 7,646,973; U.S. PATENT # 7,646,974; U.S. PATENT # 7,646,975; U.S. PATENT # 7,646,976; U.S. PATENT # 7,646,977; U.S. PATENT # 7,646,978; U.S. PATENT # 7,646,979; U.S. PATENT # 7,646,980; U.S. PATENT # 7,646,981; U.S. PATENT # 7,646,982; U.S. PATENT # 7,646,983; U.S. PATENT # 7,646,984; U.S. PATENT # 7,646,985; U.S. PATENT # 7,646,986; U.S. PATENT # 7,646,987; U.S. PATENT # 7,646,988; U.S. PATENT # 7,646,989; U.S. PATENT # 7,646,990; U.S. PATENT # 7,646,991; U.S. PATENT # 7,646,992; U.S. PATENT # 7,646,993; U.S. PATENT # 7,646,994; U.S. PATENT # 7,646,995; U.S. PATENT # 7,646,996; U.S. PATENT # 7,646,997; U.S. PATENT # 7,646,998; U.S. PATENT # 7,646,999; U.S. PATENT # 7,646,1000.

PROPRIETARY AND CONFIDENTIAL: THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF MODULAR WETLANDS SYSTEMS, AND REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF MODULAR WETLANDS SYSTEMS IS PROHIBITED.



|                                     |       |
|-------------------------------------|-------|
| TREATMENT FLOW (CFS)                | 0.115 |
| OPERATING HEAD (FT)                 | 3.4   |
| PRETREATMENT LOADING RATE (GPM/SF)  | TBD   |
| WETLAND MEDIA LOADING RATE (GPM/SF) | 1.0   |

**MWS-L-4-8-V**  
STORMWATER BIOFILTRATION SYSTEM  
STANDARD DETAIL

**6 MWS WALL**  
N.T.S.



L210

APPROVED: DEPARTMENT OF PLANNING AND ZONING  
  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION  
 12/7/20  
 DATE  
  
 CHIEF, DIVISION OF LAND DEVELOPMENT  
 12/14/20  
 DATE  
  
 DIRECTOR  
 12/21/20  
 DATE

| NO. | DATE | REVISION |
|-----|------|----------|
|     |      |          |
|     |      |          |
|     |      |          |
|     |      |          |

# Design Collective

ARCHITECTURE PLANNING INTERIORS  
LANDSCAPE ARCHITECTURE GRAPHICS

601 East Pratt Street, Suite 300  
Baltimore, Maryland 21202  
P 410 685 6655 | www.designcollective.com

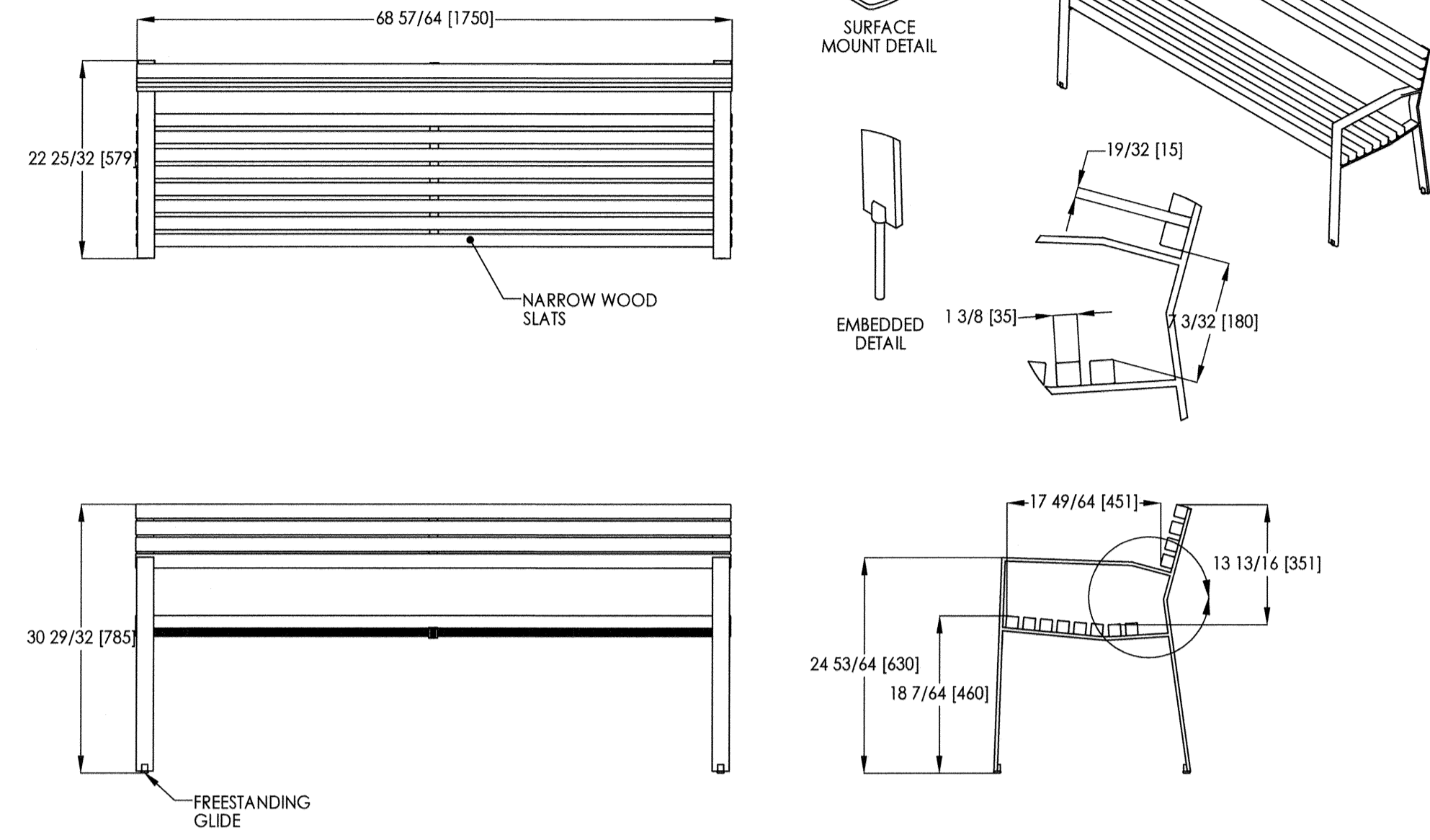
"I certify that these documents were prepared or approved by me, and that I am a duly licensed landscape architect under the laws of the State of Maryland, License No. 1039, expiration date 06/12/2022"

By: Matt D'Amico, PLA  
Design Collective, Inc.

|  |  |
|--|--|
| OWNER/DEVELOPER:   | PROJECT: DORSEY CENTER APARTMENTS<br>210 UNITS<br>PARCEL 'T'                                     |
| BINDER ROCK LLC<br>C/O H & H ROCK COMPANIES<br>6800 DEERPATH ROAD<br>SUITE 100<br>ELKRIDGE, MARYLAND 21075<br>410.579.2442 | LOCATION: TAX MAP 37<br>PARCEL 375 - GRID 24<br>1st ELECTION DISTRICT<br>HOWARD COUNTY, MARYLAND |
| TITLE:   | POOL DETAILS   |
| DATE: SEPTEMBER 2020   | PROJECT NO. 1959   |
| Design: AAM  | SCALE: AS NOTED DRAWING 37 OF 49   |
| Draft: AAM   | PROJECT NO. 1959   |
| Check: CAM   | DRAWING 37 OF 49   |

SDP-20-033

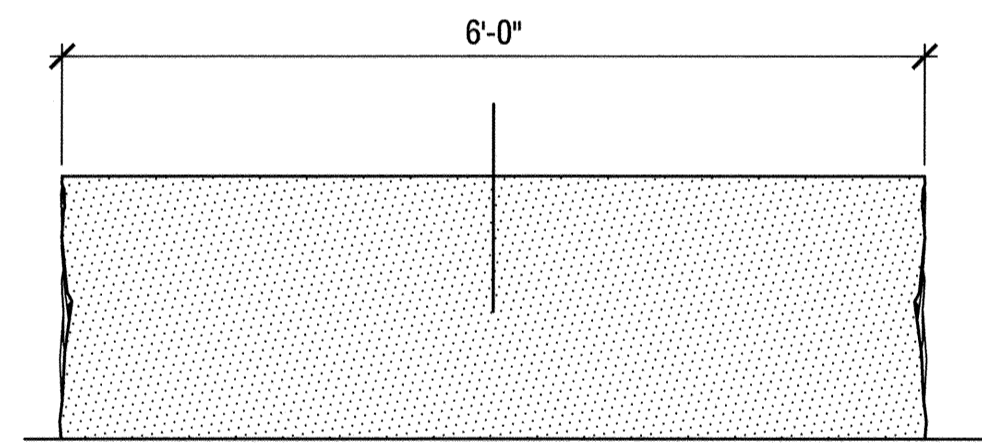
SURFACE MOUNT OPTION: (4) 1/4" THICK ANCHOR TABS WITH Ø1/2" HOLE FOR ANCHORING, NON-CORROSIVE ANCHORING HARDWARE SUPPLIED BY OTHERS.  
EMBEDDED OPTION: INCLUDES (4) 10mm x 120mm THREADED RODS



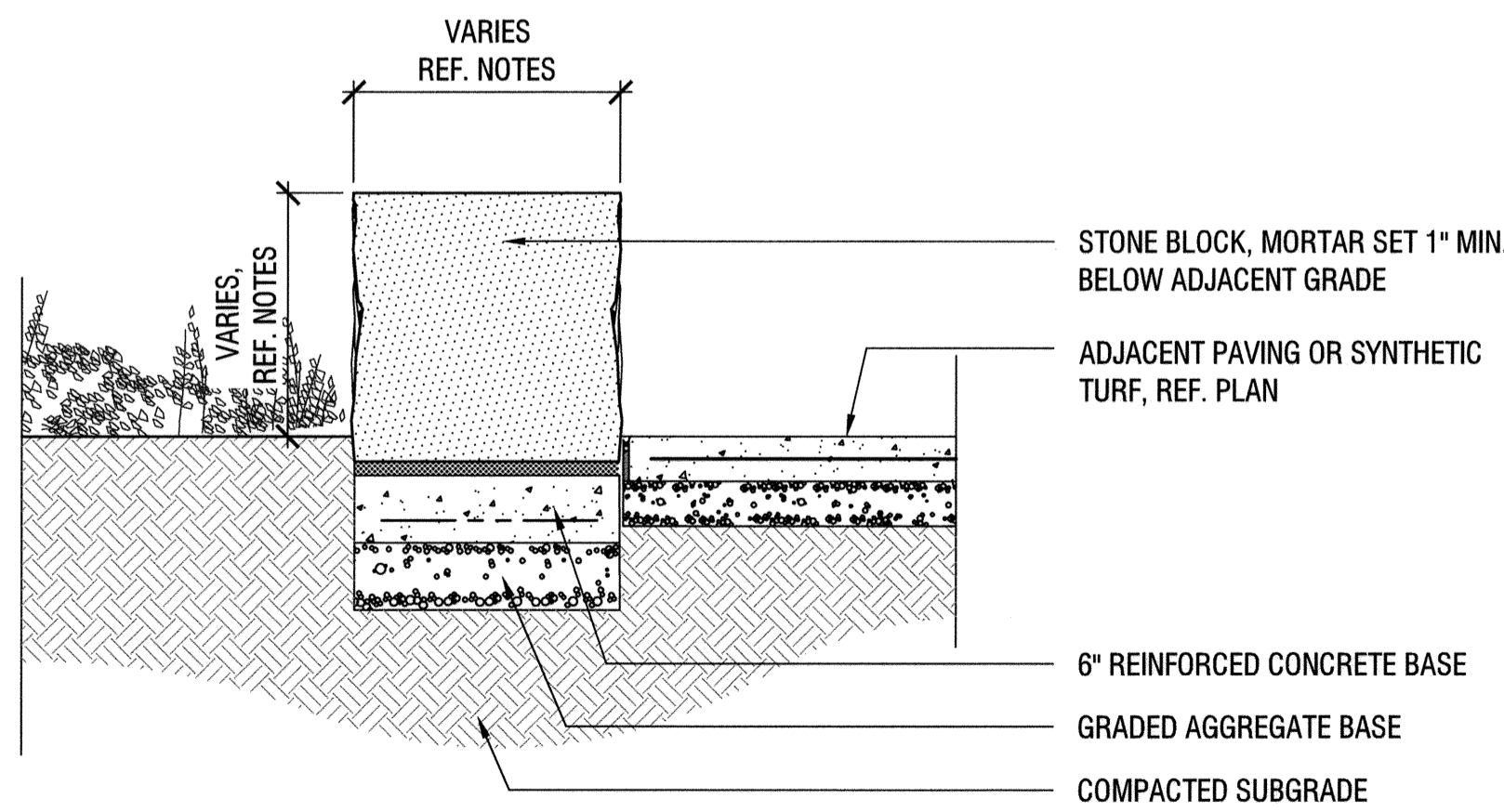
Drawing: AX203-01  
Dimensions are in inches [mm]

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1 BENCH  
N.T.S.



BENCH ELEVATION



3 STONE BLOCK WALL  
3/4" = 1'-0"

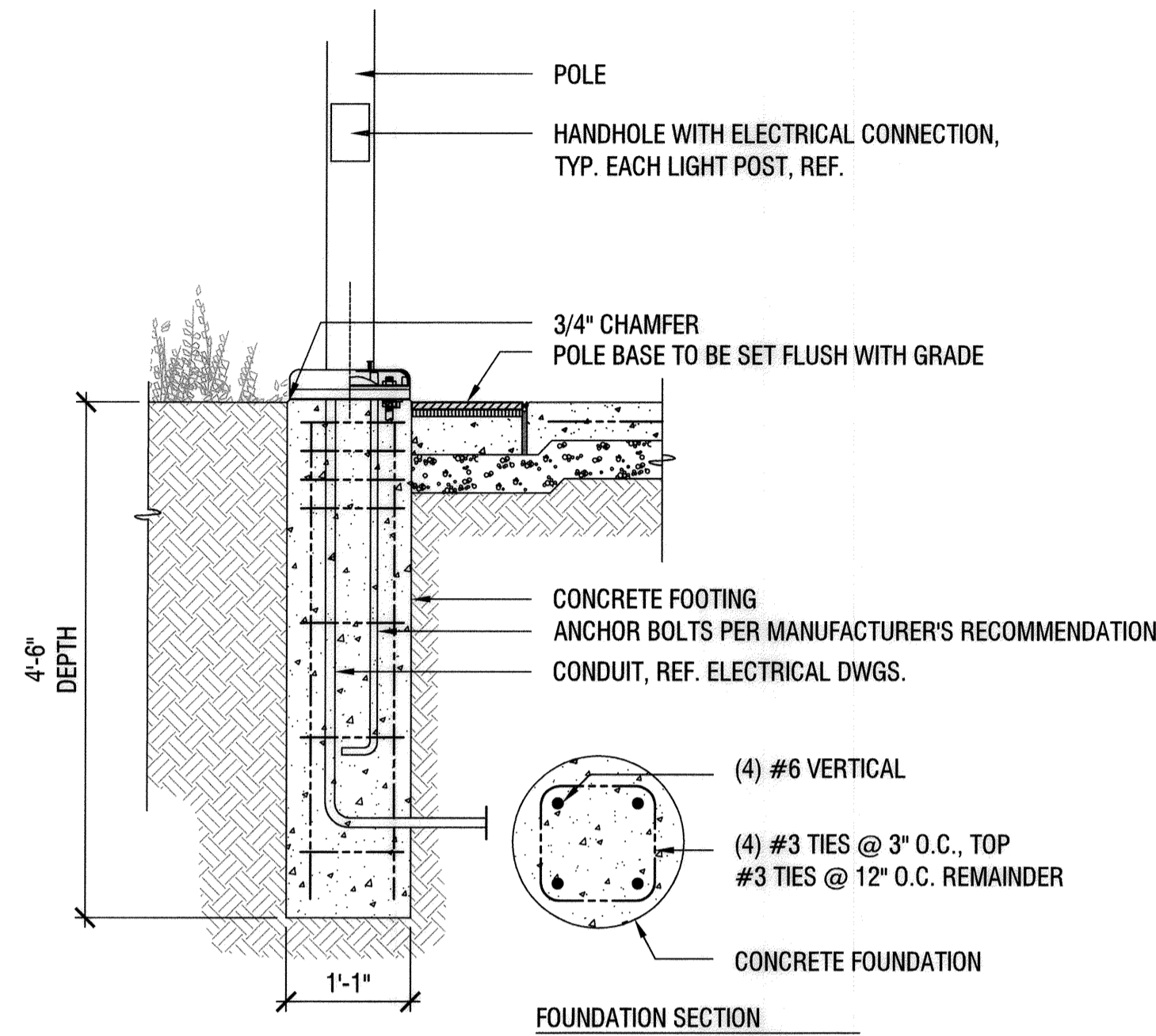
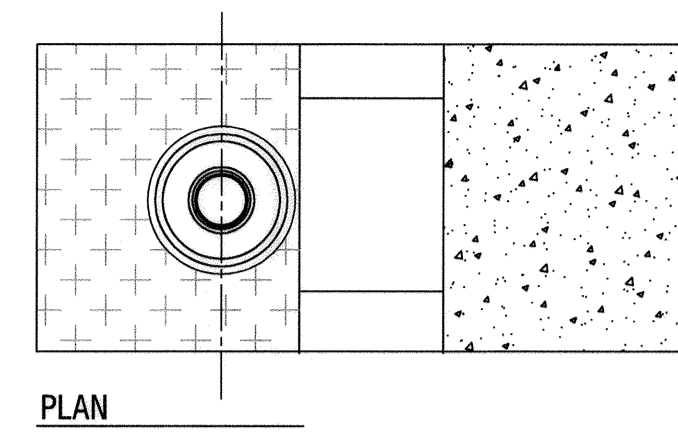
STONE BLOCK WALL NOTES

MANUFACTURER: CHAMPLAIN STONE  
27 ELM STREET  
WARRENSBURG, NY 12885  
(518) 623-2902  
www.champlainstone.com

MATERIAL: TBD, SAWN TOP AND BOTTOM, HONED TOP, NATURAL CLEFT SIDES, SAWN JOINTS.

SIZE: 2' HT. X 2' WIDTH (+/- 1/2" TOLERANCE)

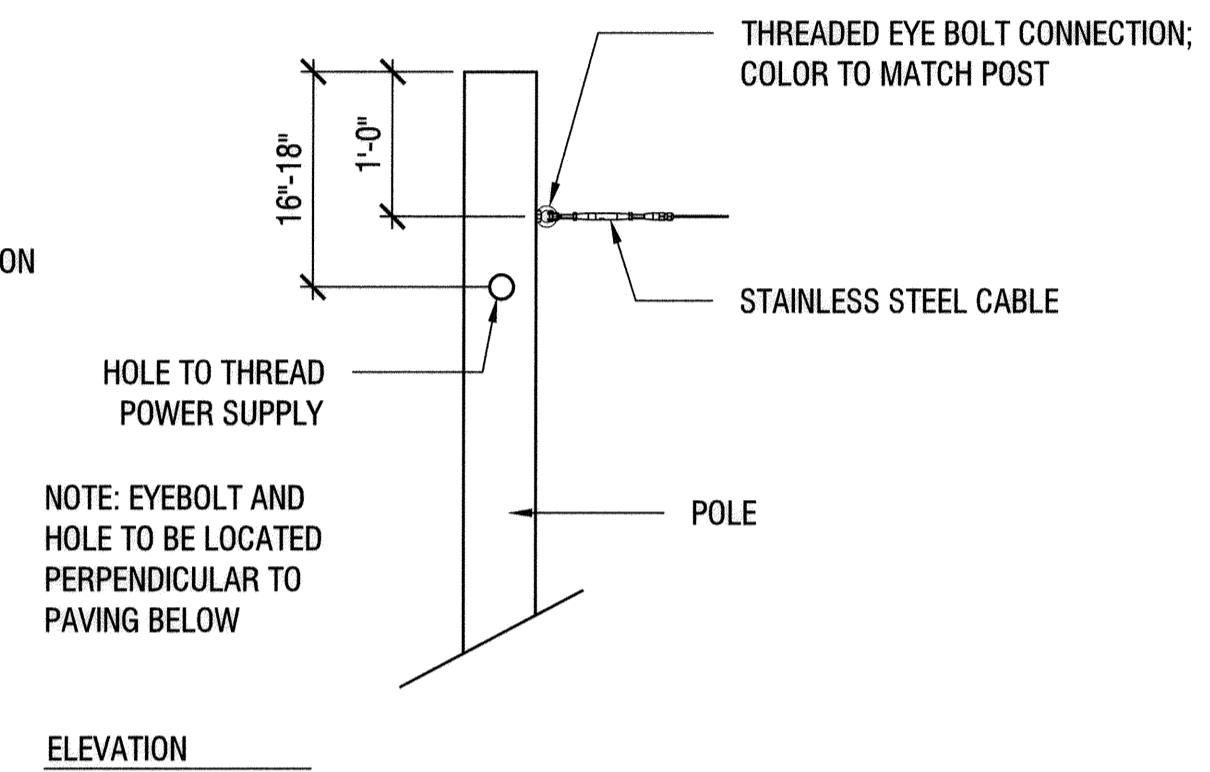
FINISH: THERMAL



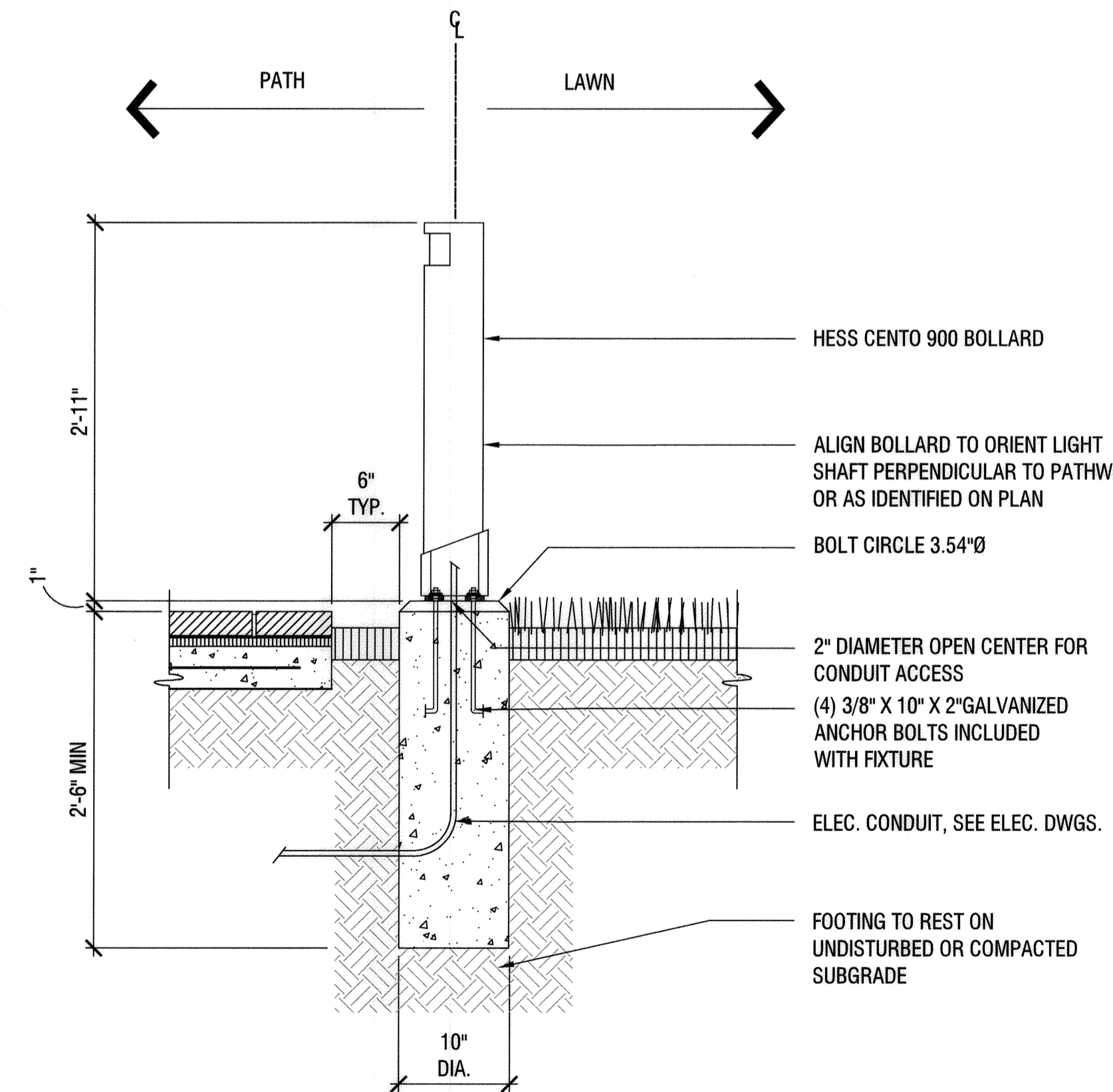
POLE  
MANUFACTURER: BEGA  
PRODUCT: 1108HR - TAPERED ROUND 11'-8" HT. POLE  
COLOR: BLACK  
HANDHOLE: RECEPTACLE OPTION - CAST ALUMINUM FESTOON MOUNTING PLATE, REF. MANUFACTURER

STAINLESS STEEL CABLE  
MANUFACTURER: JAKOB ROPE SYSTEMS  
COMPONENTS: CABLE: WIRE ROPE 6x7 + WC 3MM  
CABLE END 1: TURNBUCKLE W/ CLEVIS  
CABLE END 2: SWAGED CLEVIS  
THREADED EYE BOLT @ EACH POST

STRING LIGHTS  
MANUFACTURER: TOKISTAR  
PRODUCT: EXHIBITOR SERIES FESTOON LIGHTING SYSTEM  
COLOR: WHITE  
NOTE: REF. L400A & L400B LEGENDS - LL4 STRING LIGHTS



2 LIGHT POLE  
3/4" = 1'-0"



4 BOLLARD  
1" = 1'-0"



L211

|     |      |          |
|-----|------|----------|
| NO. | DATE | REVISION |
|     |      |          |
|     |      |          |
|     |      |          |

**Design Collective**  
ARCHITECTURE PLANNING INTERIORS LANDSCAPE ARCHITECTURE GRAPHICS  
601 East Pratt Street, Suite 300  
Baltimore, Maryland 21202  
P 410 685 6555 | www.designcollective.com

I certify that these documents were prepared or approved by me, and that I am a duly licensed landscape architect under the laws of the State of Maryland, License No. 1039, expiration date 06/12/2022.  
By: Matt D'Amico, PLA  
Design Collective, Inc.

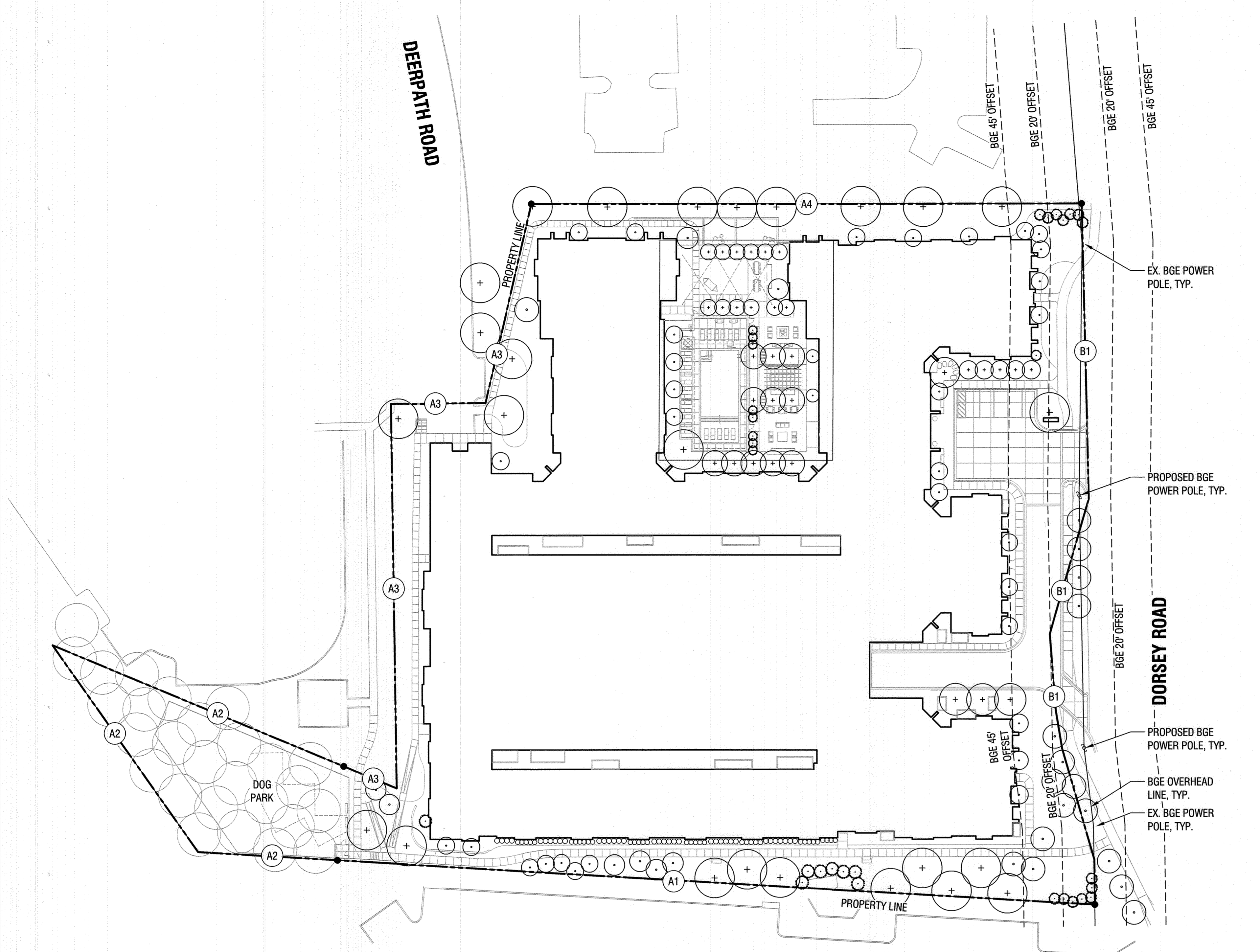
|  |  |
|--|--|
| OWNER/DEVELOPER:<br>BINDER ROCK LLC<br>C/O H & H ROCK COMPANIES<br>6800 DEERPATH ROAD<br>SUITE 100<br>ELKRIDGE, MARYLAND 21075<br>410.579.2442 | PROJECT: DORSEY CENTER APARTMENTS<br>210 UNITS<br>PARCEL 'T' |
| LOCATION:<br>TAX MAP 37<br>PARCEL 375 - GRID 24<br>1st ELECTION DISTRICT<br>HOWARD COUNTY, MARYLAND  | TITLE:<br>SITE AMENITY DETAILS                               |
| DATE: SEPTEMBER 2020   | PROJECT NO. 1959   |
| Design: AAM  | Draft: AAM   |
| Check: CAM   | SCALE: AS NOTED  |
| DRAWING 38   | OF 49  |

APPROVED: DEPARTMENT OF PLANNING AND ZONING

*Chad Edwards* 12.7.20  
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

*[Signature]* 12/11/20  
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

*[Signature]* 12/21/20  
DIRECTOR DATE



| SCHEDULE A - PERIMETER LANDSCAPE EDGE                                 |          |      |          |          |           |       |
|---|----------|------|----------|----------|-----------|-------|
| PERIMETER/FRONTAGE DESIGNATION  | A1       | A2   | A3       | A4       | B1        | TOTAL |
| LANDSCAPE TYPE  |          |      |          |          |           |       |
| LINEAR FEET PERIMETER   | 480      | 448  | 469      | 349      | 449       | 2195  |
| CREDIT FOR EXISTING VEGETATION (YES, NO, LINEAR FEET. DESCRIBE BELOW) | NO       | YES* | NO       | NO       | NO        | 448   |
| CREDIT FOR WALL, FENCE OR BERM (YES, NO, LINEAR FEET. DESCRIBE BELOW) | NO       | NO   | NO       | NO       | NO        | 0     |
| <b>NUMBER OF PLANTS REQUIRED</b>                                      |          |      |          |          |           |       |
| SHADE TREES   | 1:60 = 8 |      | 1:60 = 8 | 1:60 = 6 | 1:50 = 9  | 31    |
| EVERGREEN TREES   | 0        |      | 0        | 0        | 1:40 = 12 | 12    |
| SHRUBS  | 0        |      | 0        | 0        | 0         | 0     |
| <b>NUMBER OF PLANTS PROVIDED</b>                                      |          |      |          |          |           |       |
| SHADE TREES   | 8        |      | 8        | 6        | 0         | 22    |
| EVERGREEN TREES   | 0        |      | 0        | 0        | 12        | 12    |
| SHRUBS  | 0        |      | 0        | 0        | 0         | 0     |
| <b>SUBSTITUTIONS</b>  |          |      |          |          |           |       |
| 2 SM. DEC. FOR 1 SHADE TREE (2:1)                                     | 0        | 0    | 0        | 0        | 16        | 16    |
| 2 EVRGN. TREES FOR 1 SHADE TREE (2:1)                                 | 0        | 0    | 0        | 0        | 2         | 2     |
| 10 SHRUBS FOR 1 SHADE TREE (10:1)                                     | 0        | 0    | 0        | 0        | 0         | 0     |

| SCHEDULE B - PARKING LOT INTERNAL LANDSCAPING |   |                |
|---|---|----------------|
| NUMBER OF PARKING SPACES                      | 5 | UNITS REQUIRED |
| NUMBER OF TREES REQUIRED (1:10 SPACES)        | 1 | 1              |
| <b>NUMBER OF PLANTS PROVIDED</b>              |   |                |
| SHADE TREES                                   | 1 | UNITS PROVIDED |
| <b>SUBSTITUTIONS</b>                          |   |                |
| 2 SM. DEC. FOR 1 SHADE TREE (2:1)             | 0 | 0              |
| 2 EVERGREEN TREES FOR 1 SHADE TREE (2:1)      | 0 | 0              |

NOTE: PER THE LANDSCAPE MANUAL, SMALL DECIDUOUS TREES OR EVERGREEN TREES MAY BE SUBSTITUTED AT 2:1 RATIO FOR UP TO 50% OF THE REQUIRED SHADE TREES. THE REFORESTATION REQUIREMENTS OF THE FOREST CONSERVATION ACT HAVE BEEN MET THROUGH THE PAYMENT OF \$35,610.30. THIS PAYMENT WAS ADDRESSED AS PART OF THE PROCESSING OF SDP-07-016. THE ADDITION OF PARCEL 'S' INTO THE FOREST COMPUTATIONS FOR THIS PROJECT DID NOT GENERATE ANY ADDITIONAL FOREST CONSERVATION OBLIGATION.

**FOREST CONSERVATION WORKSHEET**  
VERSION 2.0  
(Enter in Yellow Cells)

Project Name: **DORSEY CENTER APARTMENTS** Date: **9/9/2020**

NET TRACT AREA:

|   |   |     |
|---|---|-----|
| A. Total tract area.....                          | = | 4.4 |
| B. Area within 100 year floodplain.....           | = | 0.8 |
| C. Area to remain in agricultural production..... | = | 0.0 |
| D. Net tract area.....                            | = | 3.7 |

LAND USE CATEGORY: (from table 3.2.1, page 40, Manual)

Input the number "1" under the appropriate land use zoning, and limit to only one entry.

|     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|
| ARA | MDR | IDA | HDR | MPD | CIA |
| 0   | 0   | 0   | 0   | 1   | 0   |

E. Afforestation Threshold..... 15% x D = **0.5**

F. Conservation Threshold..... 15% x D = **0.5**

EXISTING FOREST COVER:

|  |   |     |
|--|---|-----|
| G. Existing forest cover (excluding floodplain)..... | = | 0.6 |
| H. Area of forest above afforestation threshold..... | = | 0.1 |
| I. Area of forest above conservation threshold.....  | = | 0.1 |

BREAK EVEN POINT (BEP):

|   |   |     |
|---|---|-----|
| J. Forest retention above threshold with no mitigation (BEP)..... | = | 0.5 |
| K. Clearing permitted without mitigation.....                     | = | 0.1 |

PROPOSED FOREST CLEARING:

|   |   |     |
|---|---|-----|
| L. Total area of forest to be cleared.....  | = | 0.6 |
| M. Total area of forest to be retained..... | = | 0.0 |

PLANTING REQUIREMENTS:

|   |   |     |
|---|---|-----|
| N. Reforestation for clearing above conservation threshold..... | = | 0.0 |
| P. Reforestation for clearing below conservation threshold..... | = | 1.0 |
| Q. Credit for retention above conservation threshold.....       | = | 0.0 |
| R. Total reforestation required.....                            | = | 1.0 |
| S. Total afforestation required.....                            | = | 0.0 |
| T. Total reforestation and afforestation required.....          | = | 1.0 |

**GENERAL NOTES:**

- THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL. THE REQUIRED PARKING AND PERIMETER LANDSCAPING WILL BE BONDED PER THIS SUBMISSION.
- FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING HAS BEEN POSTED AS PART OF THE DEVELOPERS AGREEMENT IN THE AMOUNT OF \$32,400 FOR THE REQUIRED 102 SHADE TREES - REQUIRED (\$300ea) AND 12 EVERGREEN TREES (\$150ea)
- MAINTENANCE OF THE REQUIRED LANDSCAPING, PLANT MATERIALS, BERMS, FENCES AND WALLS. ALL PLANT MATERIALS SHALL BE MAINTAINED IN GOOD GROWING CONDITION AND WHEN NECESSARY, REPLACED WITH NEW MATERIALS TO ENSURE CONTINUED COMPLIANCE WITH APPLICABLE REGULATIONS. ALL REQUIRED LANDSCAPING SHALL BE PERMANENTLY MAINTAINED IN GOOD CONDITION, AND WHEN NECESSARY, REPAIRED OR REPLACED.
- AT THE TIME OF INSTALLMENT, ALL SHRUBS AND OTHER PLANTINGS LISTED HERewith AND APPROVED FOR THIS SITE SHALL BE OF THE PROPER HEIGHT REQUIREMENTS IN ACCORDANCE WITH THE HOWARD COUNTY LANDSCAPE MANUAL. IN ADDITION, NO SUBSTITUTIONS OR RELOCATION OF REQUIRED PLANTINGS MAY BE MADE WITHOUT PRIOR REVIEW AND APPROVAL FROM THE DEPARTMENT OF PLANNING AND ZONING. 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 ARE PLANTED AND/OR REVISIONS ARE MADE TO APPLICABLE PLANS AND CERTIFICATES.
- THERE ARE NO WETLANDS, STREAMS, OR 100'YR FLOODPLAIN ON SITE.

**LANDSCAPE SCHEDULE NOTE:**

- ALL PLANT MATERIALS SHALL BE FULL AND HEAVY, BE WELL FORMED AND SYMMETRICAL, CONFORM TO THE MOST CURRENT AAN SPECIFICATIONS AND BE INSTALLED IN ACCORDANCE WITH HOWARD COUNTY PLANTING SPECIFICATIONS.
- CONTRACTOR SHALL VERIFY LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO DIGGING.
- FINAL LOCATION OF PLANT MATERIAL MAY NEED TO VARY TO MEET FINAL FIELD CONDITIONS. TREES SHALL NOT BE PLANTED IN THE BOTTOM OF DRAINAGE SWALES.
- CONTRACTOR SHALL VERIFY PLANT QUANTITIES PRIOR TO BIDDING. IF PLAN DIFFERS FROM LANDSCAPE SCHEDULE, THE PLAN SHALL GOVERN.

**LANDSCAPE NOTES:**

- SHOULD ANY TREE DESIGNATED FOR PRESERVATION FOR WHICH LANDSCAPING 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 BE A MINIMUM OF 3 INCHES IN CALIPER AND INSTALLED AS REQUIRED IN THE HOWARD COUNTY LANDSCAPE MANUAL.
- PLANTINGS SHOWN HEREON ARE THE RESPONSIBILITY OF THE DEVELOPER TO INSTALL DURING THE CONSTRUCTION OF THE FINAL PLAN.
- SURETY FOR THE PROPOSED LANDSCAPING SHALL BE BASED ON THE NUMBER OF PLANTINGS REQUIRED.

| SCHEDULE C - RESIDENTIAL DEVELOPMENT INTERNAL LANDSCAPING |                    |                |
|---|--------------------|----------------|
| CATEGORY  | APARTMENTS (1:3DU) | UNITS REQUIRED |
| NUMBER OF DWELLING UNITS                                  | 210                | 70             |
| NUMBER OF SHADE TREES REQUIRED (1:3DU)                    | 70                 |                |
| <b>NUMBER OF SHADE TREES PROVIDED</b>                     |                    |                |
| SHADE TREES   | 34                 |                |
| <b>SUBSTITUTIONS</b>                                      |                    |                |
| 2 SM. DEC. FOR 1 SHADE TREE (2:1)                         | 41                 | 20.5           |
| 2 EVERGREEN TREES FOR 1 SHADE TREE (2:1)                  | 17                 | 8.5            |
| 10 SHRUBS FOR 1 SHADE TREE (10:1)                         | 70                 | 7              |

- PLANT KEY**
- SHADE TREE
  - EVERGREEN TREE
  - SMALL DECIDUOUS TREE
  - SHRUB

APPROVED: DEPARTMENT OF PLANNING AND ZONING

*[Signature]* 7/11/23  
CHIEF, DEVELOPMENT ENGINEERING DIVISION

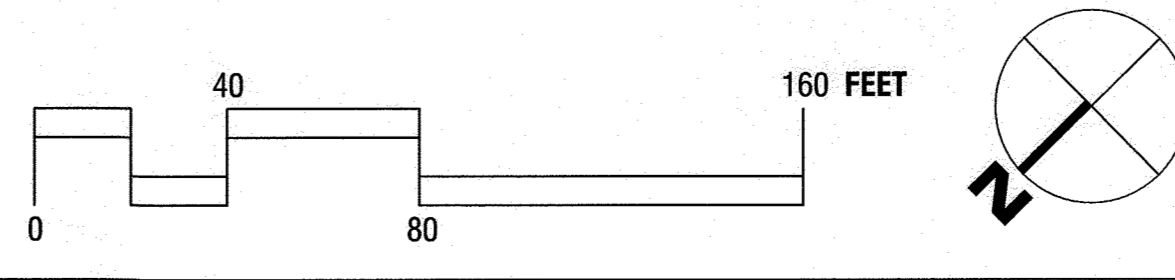
*[Signature]* 7/13/23  
CHIEF, DIVISION OF LAND DEVELOPMENT

*[Signature]* 7/13/23  
DIRECTOR

**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 OF 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.

*[Signature]* 5/5/2023  
DEVELOPER/OWNER



**L300**

**PLEASE NOTE THAT THIS PLAN SUPERSEDES AND REPLACES THE SEPTEMBER 2020 PLAN SHEET.**

|     |           |  |
|-----|-----------|--|
| NO. | DATE      | REVISION   |
|     | 5.01.2023 | REVISED TREE LOCATIONS TO ACCOMMODATE REVISED SIDEWALK |
|     | 4.16.2021 | HUD REVIEW SET   |

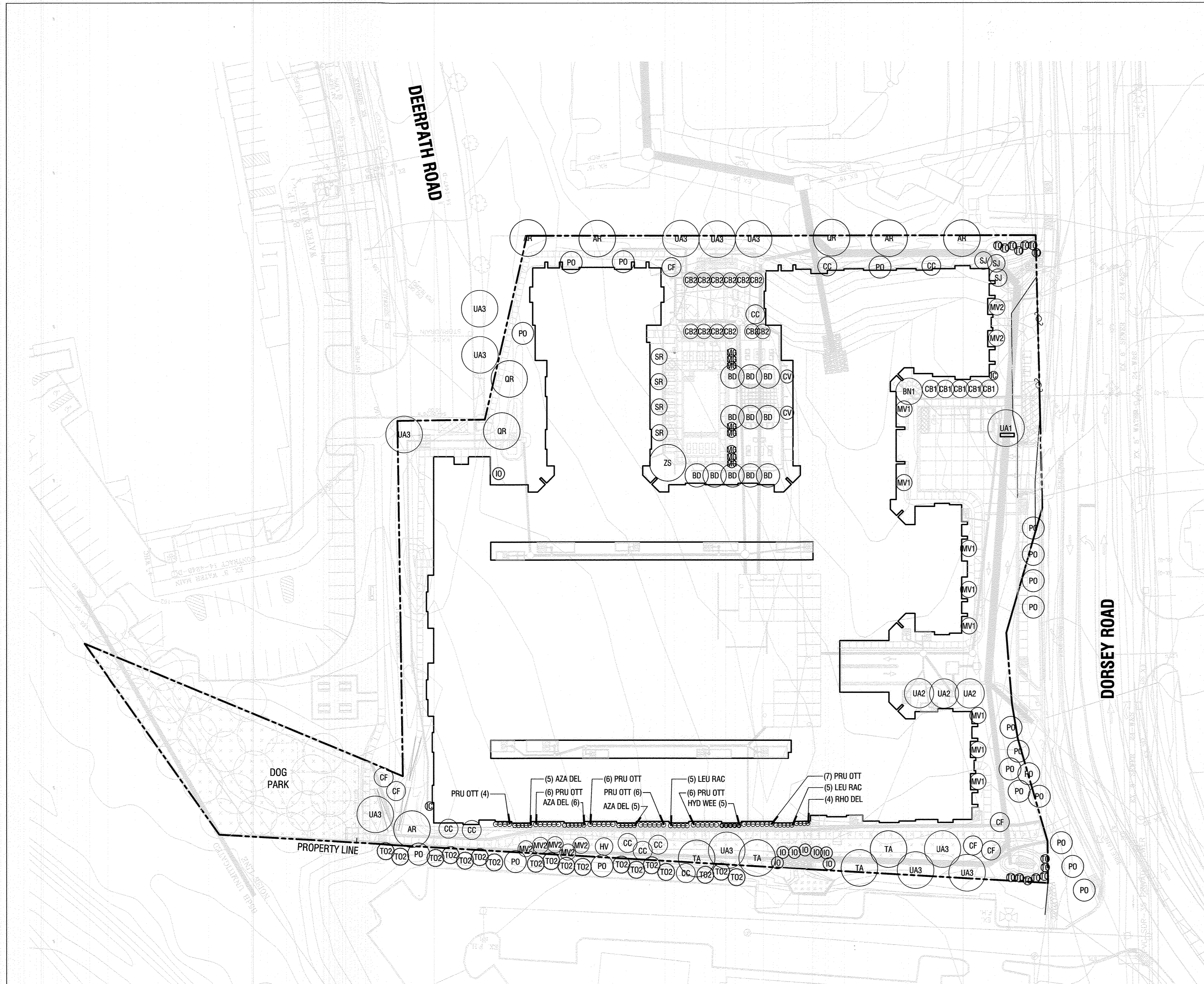
ARCHITECTURE PLANNING INTERIORS  
LANDSCAPE ARCHITECTURE GRAPHICS

100 East Pratt Street, 18th Floor  
Baltimore, Maryland 21202  
P 410 685 6655 | www.designcollective.com

I certify that these documents were prepared or approved by me, and that I am a duly licensed landscape architect under the laws of the State of Maryland, License No. 1039, expiration date 06/12/2024\*

By: Matt D'Amico, PLA  
Design Collective, Inc.

|  |                  |  |                  |
|--|------------------|--|------------------|
| OWNER/DEVELOPER:<br>BINDER ROCK LLC<br>C/O H & H ROCK COMPANIES<br>6800 DEERPATH ROAD<br>SUITE 100<br>ELKRIDGE, MARYLAND 21075<br>410.579.2442 |                  | PROJECT: DORSEY CENTER APARTMENTS<br>210 UNITS<br>PARCEL 'T'                         |                  |
| LOCATION:<br>TAX MAP 37<br>PARCEL 375 - GRID 24<br>14 <sup>th</sup> ELECTION DISTRICT<br>HOWARD COUNTY, MARYLAND                               |                  | TITLE:<br><b>MINIMUM LANDSCAPE PLAN AND FOREST<br/>CONSERVATION PLAN</b><br>MAY 2023 |                  |
| DATE: SEPTEMBER 2020   | PROJECT NO. 1959 | SCALE: 1" = 40'  | DRAWING 39 OF 49 |
| Design: AAM  | Draft: AAM       | Check: CAM   | SDP-20-033       |



**PLANT SCHEDULE**

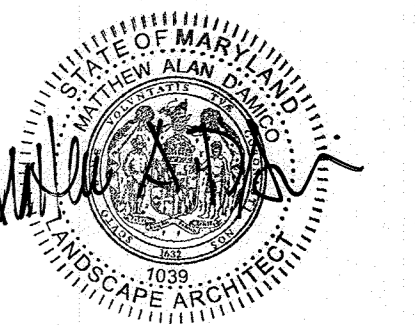
| EVERGREEN TREES       | QTY | BOTANICAL / COMMON NAME                | CONT   | CAL          | SIZE   | REMARKS   |
|-----------------------|-----|--|--------|--------------|--|---|
| IC                    | 2   | Ilex x 'Conat' TM                      | B & B  | -            | 6'-7' HT.  | Specimen; full to base  |
| IO                    | 8   | Ilex opaca 'Miss Helen'                | B & B  | -            | 7'-8' HT.  | Specimen; full to base; central leader; matched                   |
| MG                    | 8   | Miss Helen American Holly              | B & B  | -            | 10' HT.  | Specimen; full to base; matched                                   |
| TO                    | 14  | Magnolia grandiflora 'Teddy Bear'      | B & B  | -            | 10-12' HT.   | Central leader; matched; full to base                             |
| TO2                   | 18  | Thuja occidentalis 'Emerald Green'     | B & B  | -            | 10' HT.  | Specimen; matched; full to base                                   |
|                       |     | Emerald Green Arborvitae               | B & B  | -            |  |   |
|                       |     | Green Giant Arborvitae                 | B & B  | -            |  |   |
| SHADE TREES           | QTY | BOTANICAL / COMMON NAME                | CONT   | CAL          | SIZE   | REMARKS   |
| AR                    | 5   | Acer rubrum                            | B & B  | 3"Cal        | -  | Specimen; full and symmetrical canopy                             |
| BD                    | 11  | Betula nigra 'Duraheat'                | B & B  | 2.5"-3" Cal. | 12-14' HT.   | Specimens; matched; multi-stem; 3-4 trunks                        |
| BN1                   | 1   | Betula nigra 'Heritage'                | B & B  | 3"Cal        | 14-16' HT.   | Specimen; multi-stem; 3-4 trunks; full and symmetrical canopy     |
| CB1                   | 5   | Carpinus betulus 'Frans Fontaine'      | B & B  | 4.5"Cal      | -  | Specimen; matched; limbed up 6'; full and symmetrical canopy      |
| CB2                   | 12  | Frans Fontaine Hornbeam                | B & B  | 4"Cal        | -  | Specimen; matched; limbed up 4'; full and symmetrical canopy      |
| OR                    | 3   | Quercus rubra                          | B & B  | 4"Cal        | -  | Spring dug; specimen; central leader; full and symmetrical canopy |
| TA                    | 4   | Tilia americana                        | B & B  | 3"Cal        | -  | Specimen; full and symmetrical canopy                             |
| UA1                   | 1   | Ulmus americana 'Valley Forge'         | B & B  | 4.5"Cal      | -  | Specimen; full and symmetrical canopy                             |
| UA2                   | 3   | American Elm                           | B & B  | 4"Cal        | -  | Specimen; matched; full and symmetrical canopy                    |
| UA3                   | 11  | Ulmus americana 'Princeton'            | B & B  | 3"Cal        | -  | Specimen; full and symmetrical canopy                             |
| ZS                    | 1   | American Elm                           | B & B  | 4.5"Cal      | -  | Specimen; full and symmetrical canopy                             |
|                       |     | Zelkova serrata 'Village Green'        | B & B  | 4.5"Cal      | -  |   |
|                       |     | Sawiseal Zelkova                       | B & B  | 4.5"Cal      | -  |   |
| SMALL DECIDUOUS TREES | QTY | BOTANICAL / COMMON NAME                | CONT   | CAL          | SIZE   | REMARKS   |
| CC                    | 9   | Cercis canadensis                      | B & B  | 2-2.5"       | 7-8' HT.   | Single stem; full and symmetrical canopy                          |
| CF                    | 6   | Eastern Redbud                         | B & B  | 2-2.5"       | -  | Specimen; single stem   |
| CV                    | 2   | Cornus florida rubra                   | B & B  | 1.5"-2.0"    | 7-8' HT.   | Specimen; multi-stem  |
| HV                    | 1   | Chionanthus virginicus                 | B & B  | 1.5"-2.0"    | 8-10' HT.  | Multi stem; 3-5 stems; full and symmetrical canopy                |
| MV1                   | 8   | White Fringetree                       | B & B  | 2"-2.5"      | 10-12' HT.   | Multi-stem; 3-4 trunks; specimen; full and symmetrical canopy     |
| MV2                   | 7   | Hamamelis virginiana                   | B & B  | 1.5"-2.0"    | 8-10' HT.  | Multi-stem; 3-4 trunks; full and symmetrical canopy               |
| PO                    | 20  | Magnolia virginiana 'Moon Glow'        | B & B  | 2.5"Cal      | -  | Specimen  |
| SJ                    | 3   | Sweet Bay                              | B & B  | 2.5"Cal      | -  | Specimen; single trunk  |
| SR                    | 4   | Prunus x okame                         | B & B  | 2.5"-3" Cal. | -  | Single stem; specimen; full and symmetrical canopy                |
|                       |     | Okame Cherry                           | B & B  | 2.5"Cal      | -  |   |
|                       |     | Syrax japonicus                        | B & B  | 2.5"-3" Cal. | -  |   |
|                       |     | Japanese Snowbell                      | B & B  | 2.5"-3" Cal. | -  |   |
|                       |     | Syringa reticulata                     | B & B  | 2.5"-3" Cal. | -  |   |
|                       |     | Japanese Tree Lilac                    | B & B  | 2.5"-3" Cal. | -  |   |
| SHRUBS                | QTY | BOTANICAL / COMMON NAME                | SIZE   | SPACING      | REMARKS  |   |
| AZA DEL               | 16  | Azalea x 'Delaware Valley White'       | 7 gal  | 36" O.C.     | Full to base; matched; fully rooted to edge of container |   |
| HYD WEE               | 5   | Valley White Azalea                    | 5 gal  | 36" O.C.     | Matched; fully rooted to edge of container               |   |
| LEU RAC               | 10  | Hydrangea quercifolia 'Pee Wee'        | 5 gal  | 36" O.C.     | Matched; fully rooted to edge of container               |   |
| PRU OTT               | 35  | Laurothoe racemosa                     | 30" HT | 42" O.C.     | Matched; fully rooted to edge of container               |   |
| RHO DEL               | 4   | Dog-hobble                             | 7 gal  | 36" O.C.     | Matched; fully rooted to edge of container; full to base |   |
|                       |     | Prunus laurocerasus 'Otto Luyken'      | 7 gal  | 36" O.C.     | Specimens, matched, full to base                         |   |
|                       |     | Luykens Laurel                         | 7 gal  | 36" O.C.     |  |   |
|                       |     | Rhododendron x 'Delaware Valley White' | 7 gal  | 36" O.C.     |  |   |
|                       |     | Delaware Valley White Azalea           | 7 gal  | 36" O.C.     |  |   |

**PLANT SCHEDULE OFF SITE**

| EVERGREEN TREES       | QTY | BOTANICAL / COMMON NAME          | CONT  | CAL     | SIZE     | REMARKS                                  |
|-----------------------|-----|----------------------------------|-------|---------|----------|--|
| TO2                   | 16  | Thuja occidentalis 'Green Giant' | B & B | -       | 10' HT.  | Specimen; matched; full to base          |
|                       |     | Green Giant Arborvitae           | B & B | -       |          |  |
| SMALL DECIDUOUS TREES | QTY | BOTANICAL / COMMON NAME          | CONT  | CAL     | SIZE     | REMARKS                                  |
| CC                    | 1   | Cercis canadensis                | B & B | 2-2.5"  | 7-8' HT. | Single stem; full and symmetrical canopy |
| PO                    | 3   | Eastern Redbud                   | B & B | 2.5"Cal | -        | Specimen                                 |
|                       |     | Prunus x okame                   | B & B | 2.5"Cal | -        |  |
|                       |     | Okame Cherry                     | B & B | 2.5"Cal | -        |  |

\* PLEASE NOTE THAT THIS PLAN SUPERSEDES AND REPLACES THE SEPTEMBER 2020 PLAN SHEET.

L301



| 5.01.2023 | REVISED TREE LOCATIONS TO ACCOMMODATE REVISED SIDEWALK |          |
|-----------|--|----------|
| 4.16.2021 | HUD REVIEW SET   |          |
| NO.       | DATE   | REVISION |

# Design Collective

ARCHITECTURE PLANNING INTERIORS  
LANDSCAPE ARCHITECTURE GRAPHICS

100 East Pratt Street, 18th Floor  
Baltimore, Maryland 21202  
P 410 685 6655 | www.designcollective.com

"I certify that these documents were prepared or approved by me, and that I am a duly licensed landscape architect under the laws of the State of Maryland, License No. 10399, expiration date 06/12/2024"

By: Matt D'Amico, PLA  
Design Collective, Inc.

|  |                  |  |                  |
|--|------------------|--|------------------|
| OWNER/DEVELOPER:<br>BINDER ROCK LLC<br>C/O H & H ROCK COMPANIES<br>6800 DEERPATH ROAD<br>SUITE 100<br>ELKRIDGE, MARYLAND 21075<br>410.579.2442 |                  | PROJECT: DORSEY CENTER APARTMENTS<br>210 UNITS<br>PARCEL 'T' |                  |
| LOCATION:<br>TAX MAP 37<br>PARCEL 375 - GRID 24<br>1st ELECTION DISTRICT<br>HOWARD COUNTY, MARYLAND  |                  | TITLE:<br>MINIMUM LANDSCAPE PLAN<br>MAY 2023                 |                  |
| DATE: SEPTEMBER 2020   | PROJECT NO. 1959 | SCALE: 1" = 40'  | DRAWING 40 OF 49 |
| Design: AAM  | Draft: AAM       | Check: CAM   | SDP-20-033       |

APPROVED: DEPARTMENT OF PLANNING AND ZONING

*[Signature]* 7/11/23  
CHIEF, DEVELOPMENT ENGINEERING DIVISION

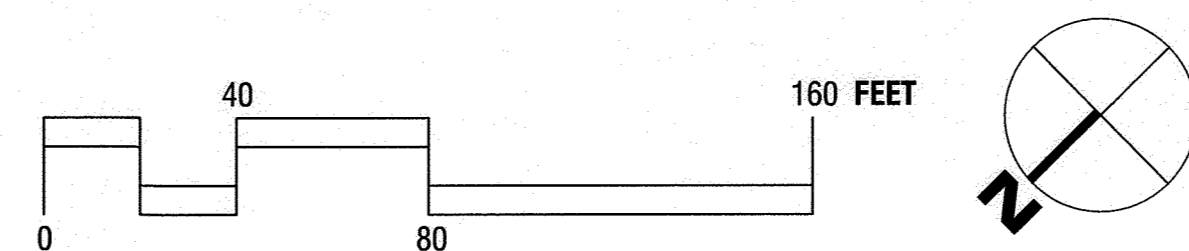
*[Signature]* 7/13/23  
CHIEF, DIVISION OF LAND DEVELOPMENT

*[Signature]* 7/13/23  
DIRECTOR

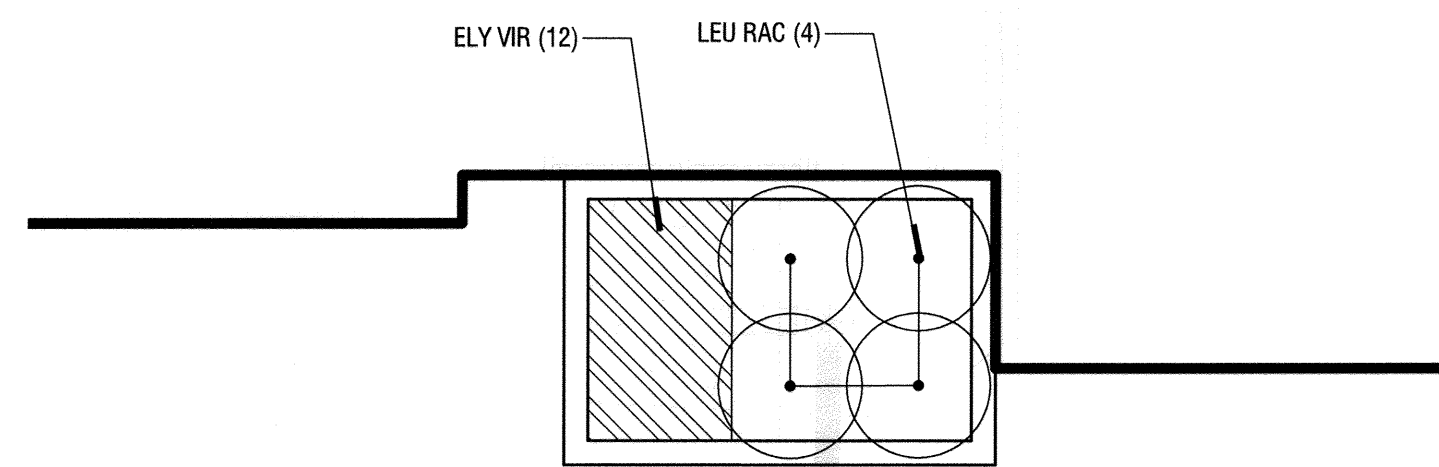
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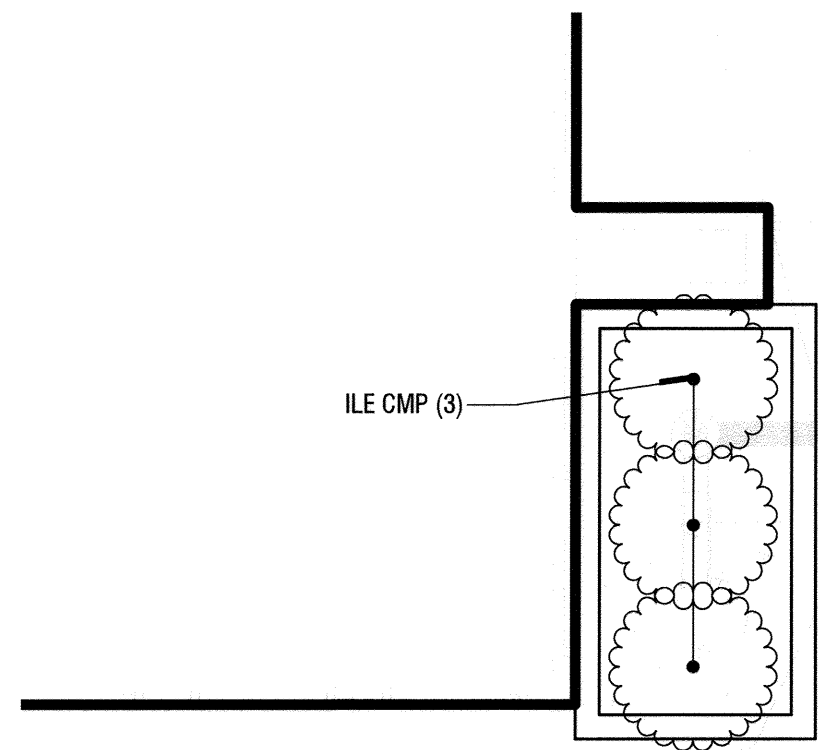
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DEVELOPER/OWNER



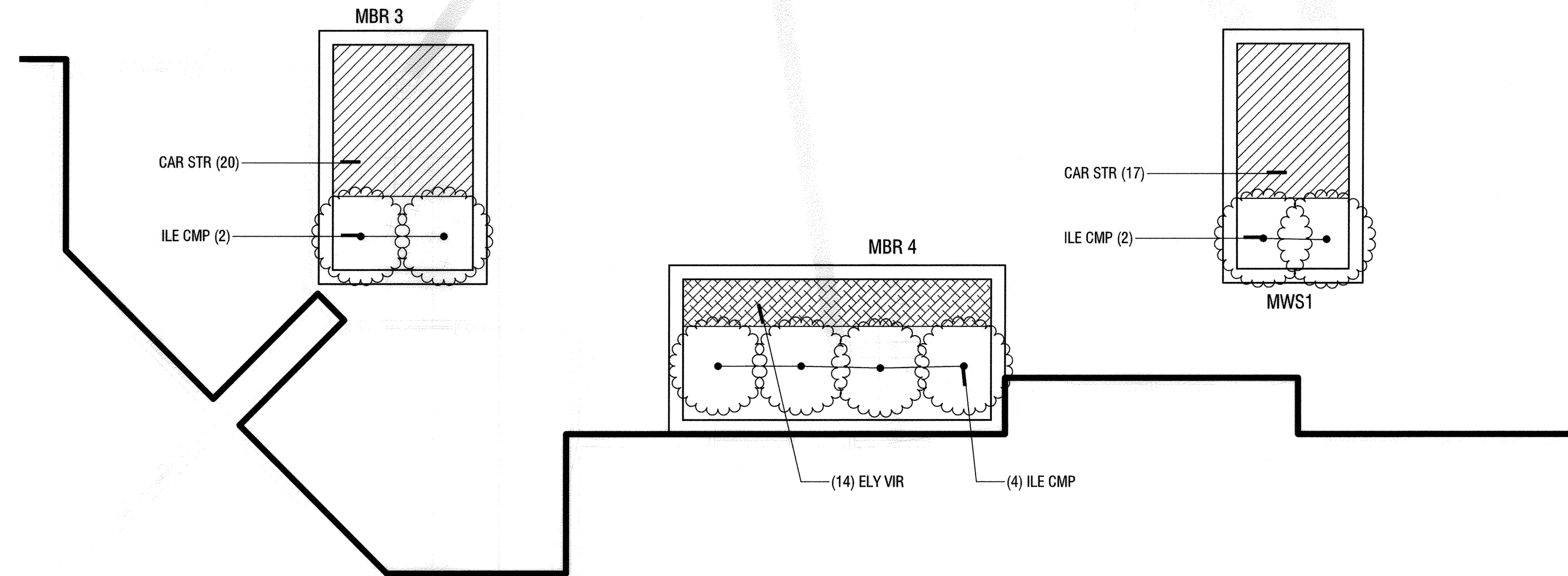




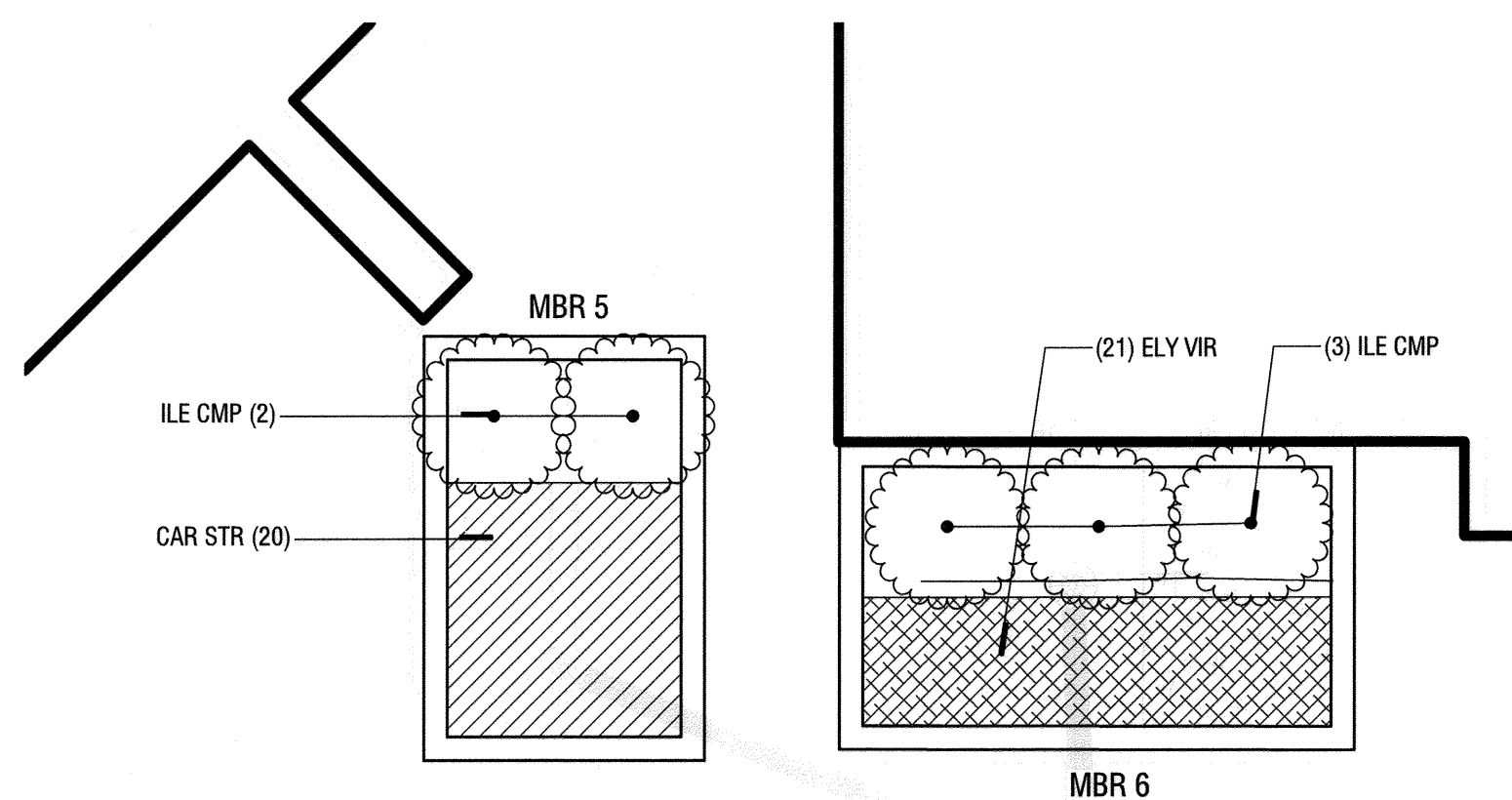
1 MBR 1 PLANTING  
1/4" = 1'-0"



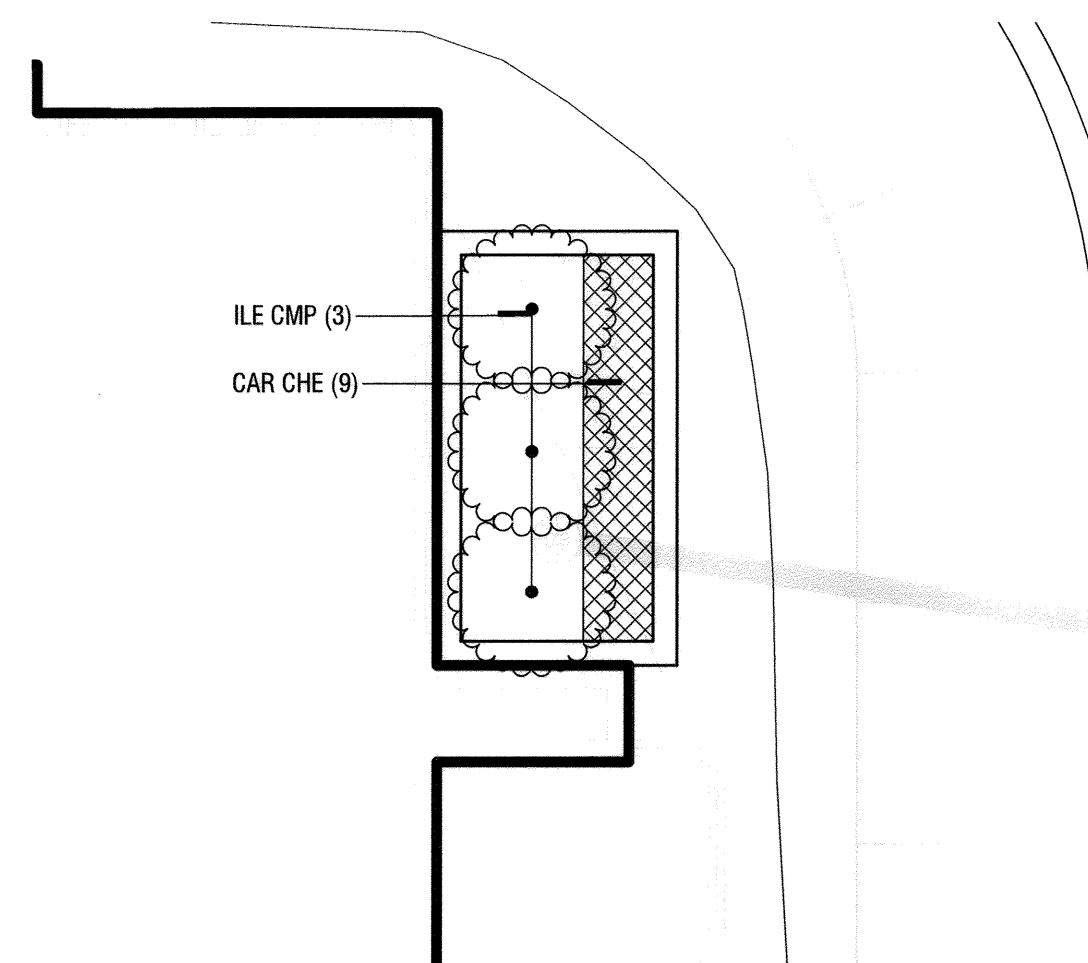
2 MBR 2 PLANTING  
1/4" = 1'-0"



3 MBR 3 & 4, MWS1 PLANTING  
1/4" = 1'-0"



5 MBR 5 & 6 PLANTING  
1/4" = 1'-0"



5 MBR 7 PLANTING  
1/4" = 1'-0"

PLANT SCHEDULE MBR 1

| SHRUBS  | QTY | BOTANICAL / COMMON NAME                | SIZE  | SPACING  | REMARKS                                    |
|---------|-----|--|-------|----------|--|
| LEU RAC | 4   | Leucothoe racemosa<br>Dog-hobble       | 5 gal | 36" O.C. | Matched; fully rooted to edge of container |
| GRASSES | QTY | BOTANICAL / COMMON NAME                | CONT  | SPACING  | REMARKS                                    |
| ELY VIR | 12  | Elymus virginicus<br>Virginia Wild Rye | 1 gal | 15" O.C. |  |

PLANT SCHEDULE MBR 2

| SHRUBS  | QTY | BOTANICAL / COMMON NAME                    | SIZE  | SPACING | REMARKS  |
|---------|-----|--|-------|---------|--|
| ILE CMP | 3   | Ilex glabra "Compacta"<br>Compact Inkberry | 5 gal |         | Full to base; matched; fully rooted to edge of container |

PLANT SCHEDULE MBR 3 & 4, MWS1

| SHRUBS  | QTY | BOTANICAL / COMMON NAME                    | SIZE  | SPACING  | REMARKS  |
|---------|-----|--|-------|----------|--|
| ILE CMP | 8   | Ilex glabra "Compacta"<br>Compact Inkberry | 5 gal |          | Full to base; matched; fully rooted to edge of container |
| GRASSES | QTY | BOTANICAL / COMMON NAME                    | CONT  | SPACING  | REMARKS  |
| CAR STR | 37  | Carex stricta<br>Tussock Sedge             | 1 gal | 15" O.C. |  |
| ELY VIR | 14  | Elymus virginicus<br>Virginia Wild Rye     | 1 gal | 15" O.C. |  |

PLANT SCHEDULE MBR 5 & 6

| SHRUBS  | QTY | BOTANICAL / COMMON NAME                    | SIZE  | SPACING  | REMARKS  |
|---------|-----|--|-------|----------|--|
| ILE CMP | 5   | Ilex glabra "Compacta"<br>Compact Inkberry | 5 gal |          | Full to base; matched; fully rooted to edge of container |
| GRASSES | QTY | BOTANICAL / COMMON NAME                    | CONT  | SPACING  | REMARKS  |
| CAR STR | 20  | Carex stricta<br>Tussock Sedge             | 1 gal | 15" O.C. |  |
| ELY VIR | 21  | Elymus virginicus<br>Virginia Wild Rye     | 1 gal | 15" O.C. |  |

PLANT SCHEDULE MBR 7

| SHRUBS  | QTY | BOTANICAL / COMMON NAME                    | SIZE  | SPACING  | REMARKS  |
|---------|-----|--|-------|----------|--|
| ILE CMP | 3   | Ilex glabra "Compacta"<br>Compact Inkberry | 5 gal |          | Full to base; matched; fully rooted to edge of container |
| GRASSES | QTY | BOTANICAL / COMMON NAME                    | CONT  | SPACING  | REMARKS  |
| CAR CHE | 9   | Carex cherokeensis<br>Cherokee Sedge       | 1 gal | 15" O.C. |  |



L310

| NO. | DATE | REVISION |
|-----|------|----------|
|     |      |          |
|     |      |          |
|     |      |          |

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By: Matt D'Amico, PLA  
Design Collective, Inc.

|   |  |
|---|--|
| OWNER/DEVELOPER:<br>BINDER ROCK LLC<br>H & H ROCK COMPANIES<br>6800 DEERPATH ROAD<br>SUITE 100<br>ELKBRIDGE, MARYLAND 21075<br>410.579.2442 | PROJECT: <b>DORSEY CENTER APARTMENTS<br/>210 UNITS<br/>PARCEL 'T'</b><br><br>LOCATION: TAX MAP 37<br>PARCEL 375 - GRID 24<br>1st ELECTION DISTRICT<br>HOWARD COUNTY, MARYLAND<br><br>TITLE: <b>MBR LANDSCAPE PLAN</b><br><br>DATE: SEPTEMBER 2020 PROJECT NO. 1959<br>SCALE: 1/4" = 1'-0" DRAWING 41 OF 49 |
| Design: AAM Draft: AAM Check: CAM   | SDP-20-033   |

APPROVED: DEPARTMENT OF PLANNING AND ZONING

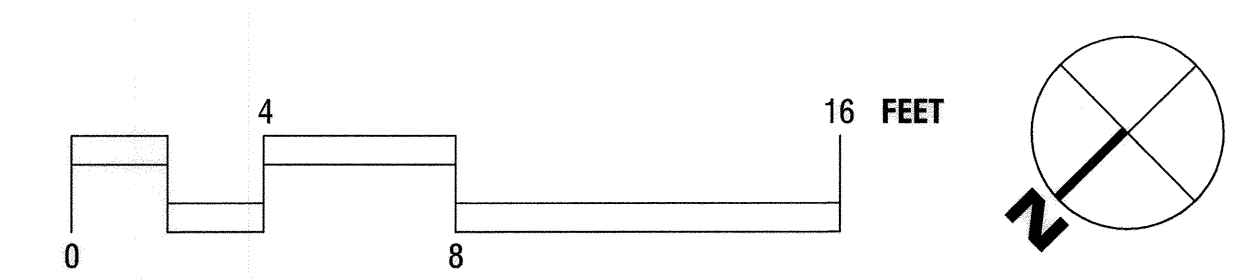
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CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

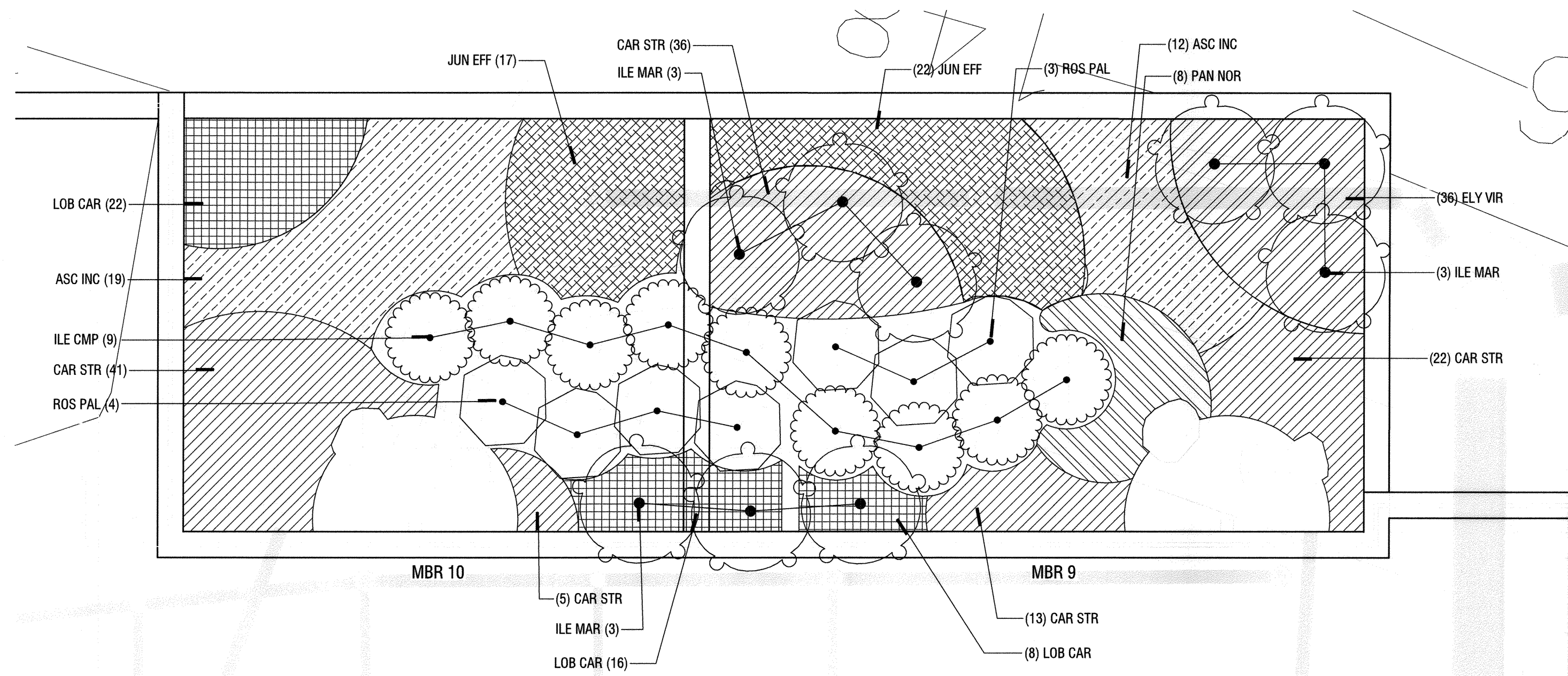
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CHIEF, DIVISION OF LAND DEVELOPMENT DATE

*[Signature]* 12/21/20  
DIRECTOR DATE

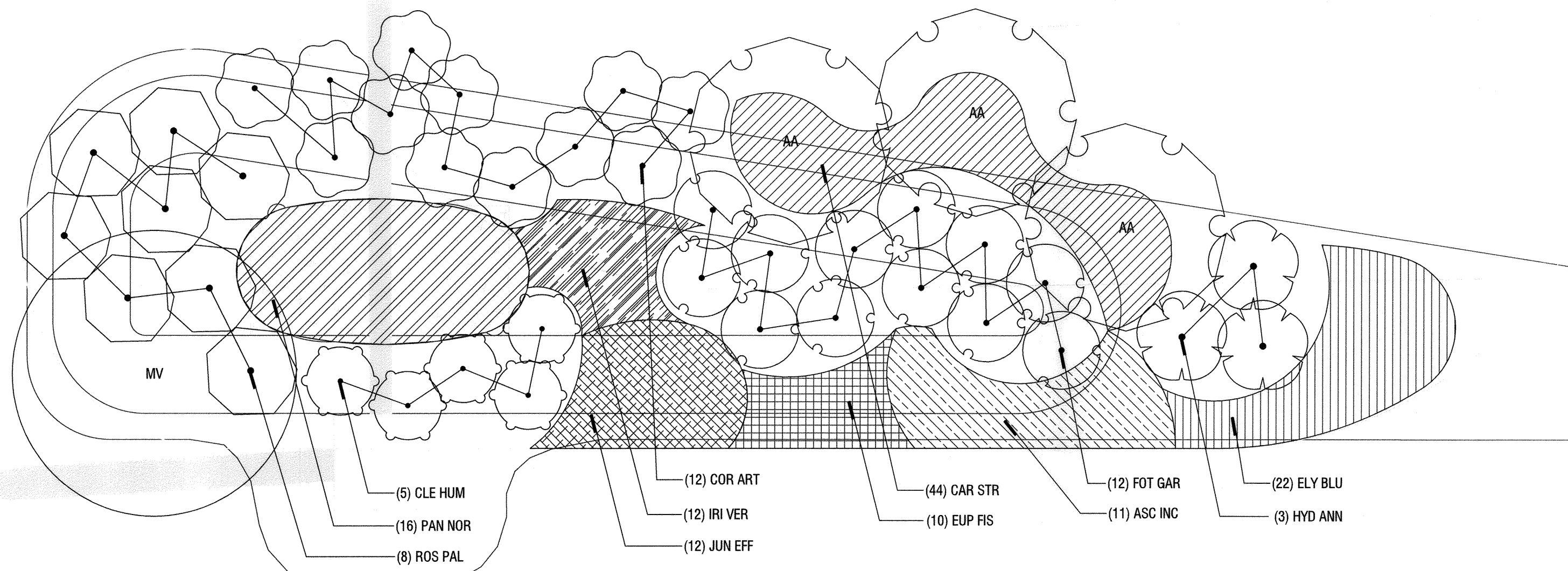
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DEVELOPER/OWNER \_\_\_\_\_ DATE \_\_\_\_\_

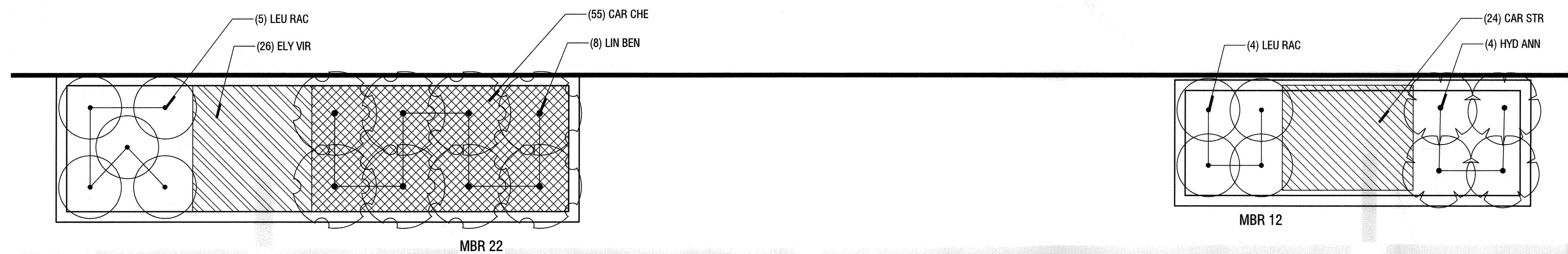




1 MBR 9 & 10 PLANTING  
1/4" = 1'-0"



2 MBR 11 PLANTING  
1/4" = 1'-0"



3 MBR 12 & 22 PLANTING  
1/4" = 1'-0"

PLANT SCHEDULE MBR 9 & 10

| SHRUBS     | QTY | BOTANICAL / COMMON NAME                                 | SIZE  | SPACING  | REMARKS  |
|------------|-----|---|-------|----------|--|
| ILE CMP    | 9   | Ilex glabra 'Compacta'                                  | 5 gal |          | Full to base; matched; fully rooted to edge of container |
| ILE MAR    | 9   | Ilex verticillata 'Maryland Beauty'                     | 7 gal | 48" O.C. | Matched; fully rooted to edge of container               |
| ROS PAL    | 7   | Rosa palustris<br>Swamp Rose                            | 7' HT | 42" O.C. | Matched; fully rooted to edge of container               |
| GRASSES    | QTY | BOTANICAL / COMMON NAME                                 | CONT  | SPACING  | REMARKS  |
| CAR STR    | 117 | Carex stricta<br>Tussock Sedge                          | 1 gal | 15" O.C. |  |
| ELY VIR    | 38  | Elymus virginicus<br>Virginia Wild Rye                  | 1 gal | 15" O.C. |  |
| JUN EFF    | 39  | Juncus effusus<br>Soft Rush                             | 1 qt  |          |  |
| PAN NOR    | 8   | Panicum virgatum 'North Wind'<br>Northwind Switch Grass | 1 gal | 24" O.C. |  |
| PERENNIALS | QTY | BOTANICAL / COMMON NAME                                 | CONT  | SPACING  | REMARKS  |
| ASC INC    | 31  | Asclepias incarnata<br>Swamp Milkweed                   | 1 gal | 24" O.C. |  |
| LOB CAR    | 46  | Lobelia cardinalis<br>Cardinal Flower                   | 1 gal | 15" O.C. |  |

PLANT SCHEDULE MBR 11

| TREES                 | QTY | BOTANICAL / COMMON NAME  | CONT  | CAL      | SIZE                                       | REMARKS              |
|-----------------------|-----|--|-------|----------|--|----------------------|
| AA                    | 3   | Amelanchier canadensis 'Autumn Brilliance'<br>Autumn Brilliance Serviceberry | B & B | -        | 6'-7' HT.                                  | Multi-Stem           |
| SMALL DECIDUOUS TREES | QTY | BOTANICAL / COMMON NAME  | CONT  | CAL      | SIZE                                       | REMARKS              |
| MV                    | 1   | Magnolia virginiana 'Moon Glow'<br>Sweet Bay                                 | B & B | -        | 8-10' HT.                                  | Multi-stem; specimen |
| SHRUBS                | QTY | BOTANICAL / COMMON NAME  | SIZE  | SPACING  | REMARKS                                    |                      |
| CLE HUM               | 5   | Clethra alnifolia 'Hummingbird'<br>Summersweet                               | 7 gal | 36" O.C. | Matched; fully rooted to edge of container |                      |
| COR ART               | 12  | Cornus sericea 'Arctic Fire'<br>Arctic Fire Dogwood                          | 7 gal | 36" O.C. | Matched; fully rooted to edge of container |                      |
| FOT GAR               | 12  | Fothergilla gardenii<br>Dwarf Fothergilla                                    | 7 gal | 36" O.C. | Matched; fully rooted to edge of container |                      |
| HYD ANN               | 3   | Hydrangea arborescens 'Annabelle'<br>Annabelle Hydrangea                     | 7 gal | 42" O.C. | Matched; fully rooted to edge of container |                      |
| ROS PAL               | 8   | Rosa palustris<br>Swamp Rose   | 7' HT | 42" O.C. | Matched; fully rooted to edge of container |                      |
| GRASSES               | QTY | BOTANICAL / COMMON NAME  | CONT  | SPACING  | REMARKS                                    |                      |
| CAR STR               | 44  | Carex stricta<br>Tussock Sedge   | 1 gal | 15" O.C. |  |                      |
| ELY BLU               | 22  | Elymus arenarius Blue Dune<br>Blue Dune Lyme Grass                           | 1 gal | 18" O.C. |  |                      |
| JUN EFF               | 12  | Juncus effusus<br>Soft Rush  | 1 qt  |          |  |                      |
| PAN NOR               | 16  | Panicum virgatum 'North Wind'<br>Northwind Switch Grass                      | 1 gal | 24" O.C. |  |                      |
| PERENNIALS            | QTY | BOTANICAL / COMMON NAME  | CONT  | SPACING  | REMARKS                                    |                      |
| ASC INC               | 11  | Asclepias incarnata<br>Swamp Milkweed  | 1 gal | 24" O.C. |  |                      |
| EUP FIS               | 10  | Eupatorium fistulosum<br>Joe Pye Weed  | 1 gal | 18" O.C. |  |                      |
| IRI VER               | 12  | Iris versicolor<br>Blue Flag   | 1 qt  |          |  |                      |

PLANT SCHEDULE MBR 12 & 22

| SHRUBS  | QTY | BOTANICAL / COMMON NAME                                  | SIZE  | SPACING  | REMARKS                                    |
|---------|-----|--|-------|----------|--|
| HYD ANN | 4   | Hydrangea arborescens 'Annabelle'<br>Annabelle Hydrangea | 7 gal | 42" O.C. | Matched; fully rooted to edge of container |
| LEU RAC | 9   | Leucothoe racemosa<br>Dog-hobble                         | 5 gal | 36" O.C. | Matched; fully rooted to edge of container |
| LIN BEN | 8   | Lindera benzoin<br>Spicebush                             | 7 gal |          | Matched; fully rooted to edge of container |
| GRASSES | QTY | BOTANICAL / COMMON NAME                                  | CONT  | SPACING  | REMARKS                                    |
| CAR CHE | 55  | Carex cherokeensis<br>Cherokee Sedge                     | 1 gal | 15" O.C. |  |
| CAR STR | 24  | Carex stricta<br>Tussock Sedge                           | 1 gal | 15" O.C. |  |
| ELY VIR | 26  | Elymus virginicus<br>Virginia Wild Rye                   | 1 gal | 15" O.C. |  |



L311

|   |                |             |  |          |     |
|---|----------------|-------------|--|----------|-----|
| NO.   |                | DATE        |  | REVISION |     |
|   |                |             |  |          |     |
| <p>"I certify that these documents were prepared or approved by me, and that I am a duly licensed landscape architect under the laws of the State of Maryland, License No. 1039, expiration date 06/12/2022"</p> <p>By: Matt D'Amico, PLA<br/>Design Collective, Inc.</p> |                |             |  |          |     |
| OWNER/DEVELOPER:  |                |             | PROJECT: DORSEY CENTER APARTMENTS 210 UNITS PARCEL 'T'   |          |     |
| BINDER ROCK LLC<br>C/O H & H ROCK COMPANIES<br>6800 DEERPATH ROAD<br>SUITE 100<br>ELKBRIDGE, MARYLAND 21075<br>410.579.2442   |                |             | LOCATION: TAX MAP 37<br>PARCEL 375 - GRID 24<br>1st ELECTION DISTRICT<br>HOWARD COUNTY, MARYLAND |          |     |
| TITLE: MBR LANDSCAPE PLAN   |                |             |  |          |     |
| DATE:   | SEPTEMBER 2020 | PROJECT NO. | 1959   |          |     |
| Design:   | AAM            | Draft:      | AAM  | Check:   | CAM |
| SCALE:  | 1/4" = 1'-0"   | DRAWING     | 42   | OF       | 49  |

APPROVED: DEPARTMENT OF PLANNING AND ZONING

*Chief*  
CHIEF, DEVELOPMENT ENGINEERING DIVISION

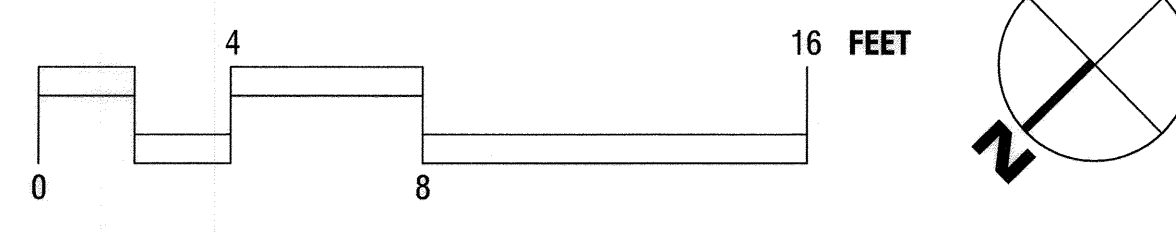
*Director*  
DIRECTOR

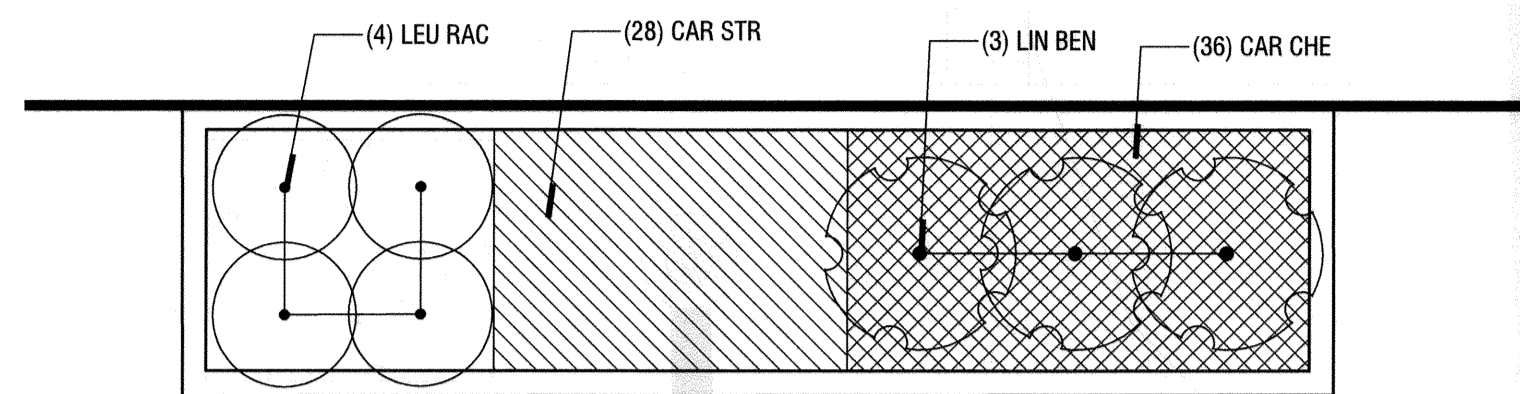
12-7-20  
12/14/20  
12/21/20

DEVELOPER'S/BUILDER'S CERTIFICATE

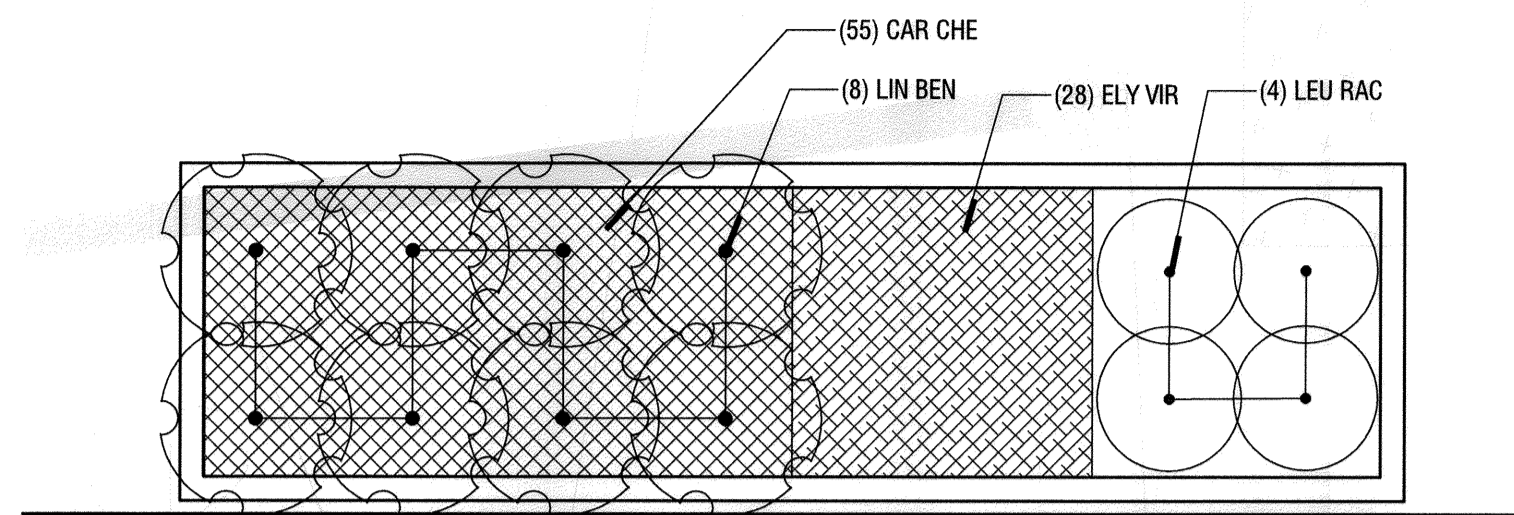
I/WE CERTIFY THAT THE LANDSCAPING SHOWN ON THIS PLAN WILL BE DONE ACCORDING TO THE PLAN, SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE HOWARD COUNTY LANDSCAPE MANUAL. I/WE FURTHER CERTIFY THAT UPON COMPLETION OF A LETTER OF LANDSCAPE INSTALLATION, ACCOMPANIED BY AN EXECUTED ONE-YEAR GUARANTEE OF PLANT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

DEVELOPER/OWNER: \_\_\_\_\_ DATE: \_\_\_\_\_





1 MBR 13 PLANTING  
1/4" = 1'-0"



2 MBR 14 PLANTING  
1/4" = 1'-0"

PLANT SCHEDULE MBR 13

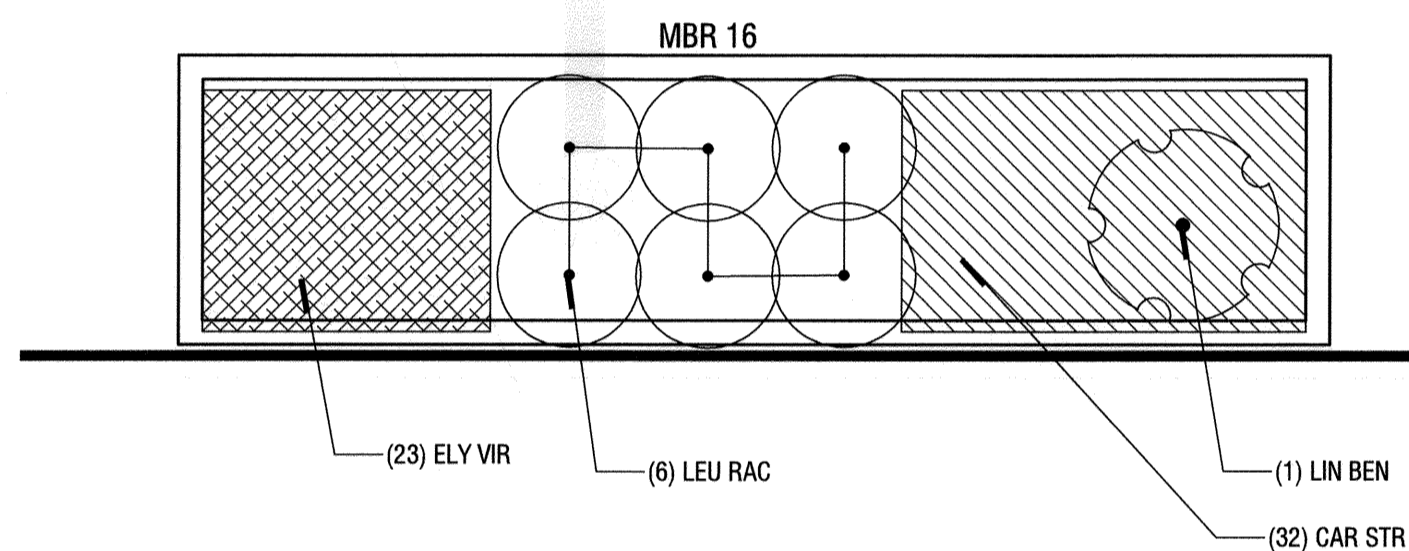
| SHRUBS  | QTY | BOTANICAL / COMMON NAME              | SIZE  | SPACING  | REMARKS                                    |
|---------|-----|--------------------------------------|-------|----------|--|
| LEU RAC | 4   | Leucothoe racemosa                   | 5 gal | 36" O.C. | Matched; fully rooted to edge of container |
| LIN BEN | 3   | Lindera benzoin<br>Spicebush         | 7 gal |          | Matched; fully rooted to edge of container |
| GRASSES | QTY | BOTANICAL / COMMON NAME              | CONT  | SPACING  | REMARKS                                    |
| CAR CHE | 36  | Carex cherokeensis<br>Cherokee Sedge | 1 gal | 15" O.C. |  |
| CAR STR | 28  | Carex stricta<br>Tussock Sedge       | 1 gal | 15" O.C. |  |

PLANT SCHEDULE MBR 14

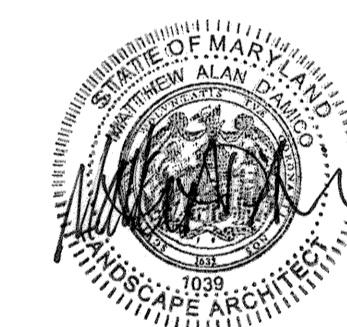
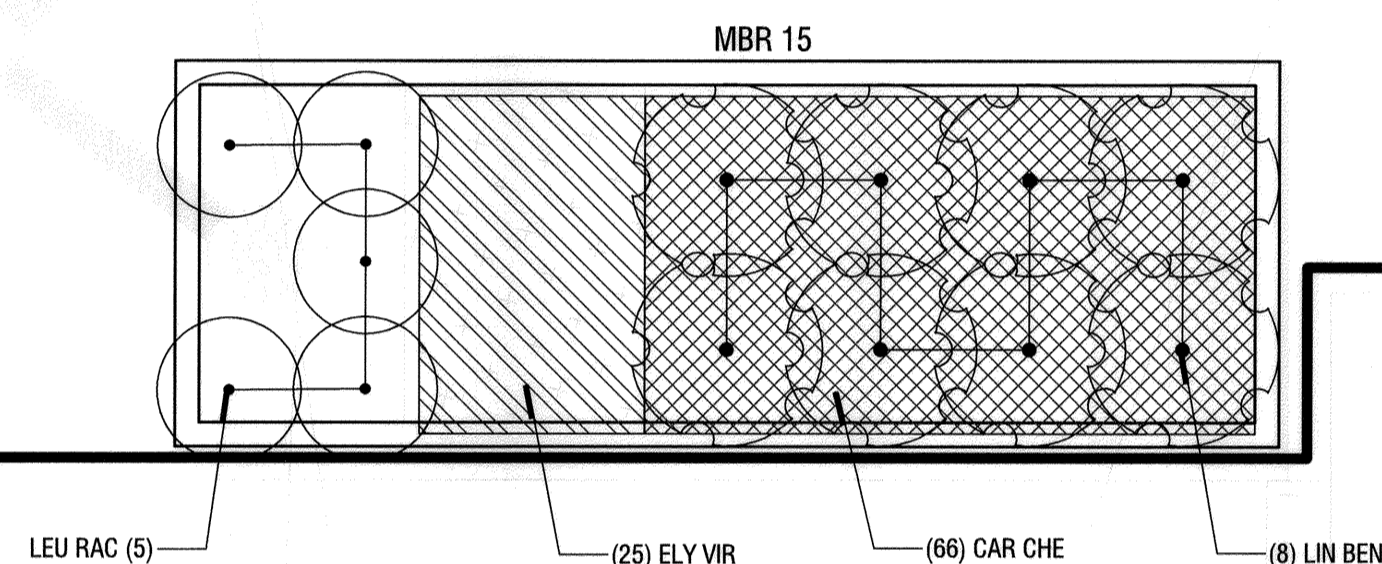
| SHRUBS  | QTY | BOTANICAL / COMMON NAME                | SIZE  | SPACING  | REMARKS                                    |
|---------|-----|--|-------|----------|--|
| LEU RAC | 4   | Leucothoe racemosa                     | 5 gal | 36" O.C. | Matched; fully rooted to edge of container |
| LIN BEN | 8   | Lindera benzoin<br>Spicebush           | 7 gal |          | Matched; fully rooted to edge of container |
| GRASSES | QTY | BOTANICAL / COMMON NAME                | CONT  | SPACING  | REMARKS                                    |
| CAR CHE | 55  | Carex cherokeensis<br>Cherokee Sedge   | 1 gal | 15" O.C. |  |
| ELY VIR | 28  | Elymus virginicus<br>Virginia Wild Rye | 1 gal | 15" O.C. |  |

PLANT SCHEDULE MBR 15 & 16

| SHRUBS  | QTY | BOTANICAL / COMMON NAME                | SIZE  | SPACING  | REMARKS                                    |
|---------|-----|--|-------|----------|--|
| LEU RAC | 11  | Leucothoe racemosa                     | 5 gal | 36" O.C. | Matched; fully rooted to edge of container |
| LIN BEN | 9   | Lindera benzoin<br>Spicebush           | 7 gal |          | Matched; fully rooted to edge of container |
| GRASSES | QTY | BOTANICAL / COMMON NAME                | CONT  | SPACING  | REMARKS                                    |
| CAR CHE | 66  | Carex cherokeensis<br>Cherokee Sedge   | 1 gal | 15" O.C. |  |
| CAR STR | 32  | Carex stricta<br>Tussock Sedge         | 1 gal | 15" O.C. |  |
| ELY VIR | 48  | Elymus virginicus<br>Virginia Wild Rye | 1 gal | 15" O.C. |  |



3 MBR 15 & 16 PLANTING  
1/4" = 1'-0"



L312

|  |  |                  |  |   |  |
|--|--|------------------|--|---|--|
| NO.  |  | DATE             |  | REVISION  |  |
|  |  |                  |  | *I certify that these documents were prepared or approved by me, and that I am a duly licensed landscape architect under the laws of the State of Maryland, License No. 1039, expiration date 06/12/2022*<br>By: Matt D'Amico, PLA<br>Design Collective, Inc. |  |
| OWNER/DEVELOPER:<br>BINDER ROCK LLC<br>C/O H & H ROCK COMPANIES<br>6800 DEERPATH ROAD<br>SUITE 100<br>ELKRIDGE, MARYLAND 21075<br>410.579.2442 |  |                  | PROJECT: DORSEY CENTER APARTMENTS<br>210 UNITS<br>PARCEL 'T'<br><br>LOCATION: TAX MAP 37<br>PARCEL 375 - GRID 24<br>1st ELECTION DISTRICT<br>HOWARD COUNTY, MARYLAND |   |  |
| TITLE: MBR LANDSCAPE PLAN  |  |                  |  |   |  |
| DATE: SEPTEMBER 2020   |  | PROJECT NO. 1959 |  |   |  |
| Design: AAM  |  | Draft: AAM       |  | Check: CAM  |  |
| SCALE: 1/4" = 1'-0"  |  | DRAWING 43 OF 49 |  |   |  |

APPROVED: DEPARTMENT OF PLANNING AND ZONING

*[Signature]* 12-7-20  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

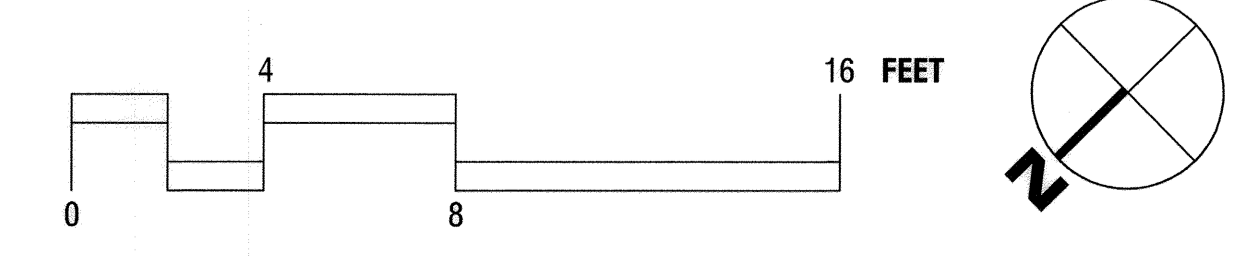
*[Signature]* 12/14/20  
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

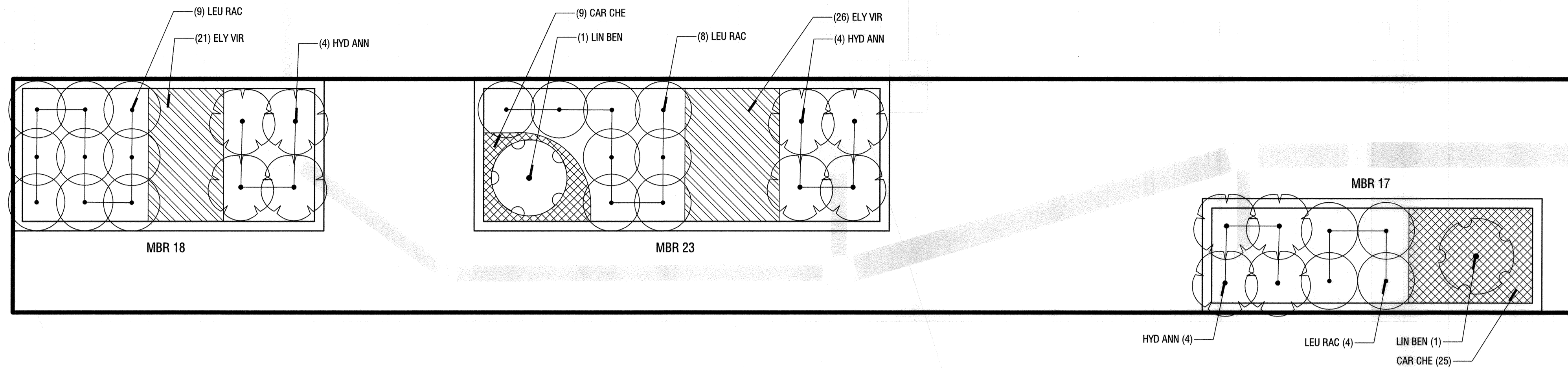
*[Signature]* 12/21/20  
 DIRECTOR DATE

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 OF 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.

DEVELOPER/OWNER \_\_\_\_\_ DATE \_\_\_\_\_





**PLANT SCHEDULE MBR 17 & 18 & 23**

| SHRUBS  | QTY | BOTANICAL / COMMON NAME                | SIZE  | SPACING  | REMARKS                                    |
|---------|-----|--|-------|----------|--|
| HYD ANN | 12  | Hydrangea arborescens 'Annabelle'      | 7 gal | 42" O.C. | Matched; fully rooted to edge of container |
| LEU RAC | 21  | Leucothoe racemosa<br>Dog-hobble       | 5 gal | 36" O.C. | Matched; fully rooted to edge of container |
| LIN BEN | 2   | Lindera benzoin<br>Spicebush           | 7 gal |          | Matched; fully rooted to edge of container |
| GRASSES | QTY | BOTANICAL / COMMON NAME                | CONT  | SPACING  | REMARKS                                    |
| CAR CHE | 34  | Carex cherokeensis<br>Cherokee Sedge   | 1 gal | 15" O.C. |  |
| ELY VIR | 47  | Elymus virginicus<br>Virginia Wild Rye | 1 gal | 15" O.C. |  |

**PLANT SCHEDULE MBR 19**

| SHRUBS  | QTY | BOTANICAL / COMMON NAME                | SIZE  | SPACING  | REMARKS                                    |
|---------|-----|--|-------|----------|--|
| LEU RAC | 6   | Leucothoe racemosa<br>Dog-hobble       | 5 gal | 36" O.C. | Matched; fully rooted to edge of container |
| GRASSES | QTY | BOTANICAL / COMMON NAME                | CONT  | SPACING  | REMARKS                                    |
| ELY VIR | 18  | Elymus virginicus<br>Virginia Wild Rye | 1 gal | 15" O.C. |  |

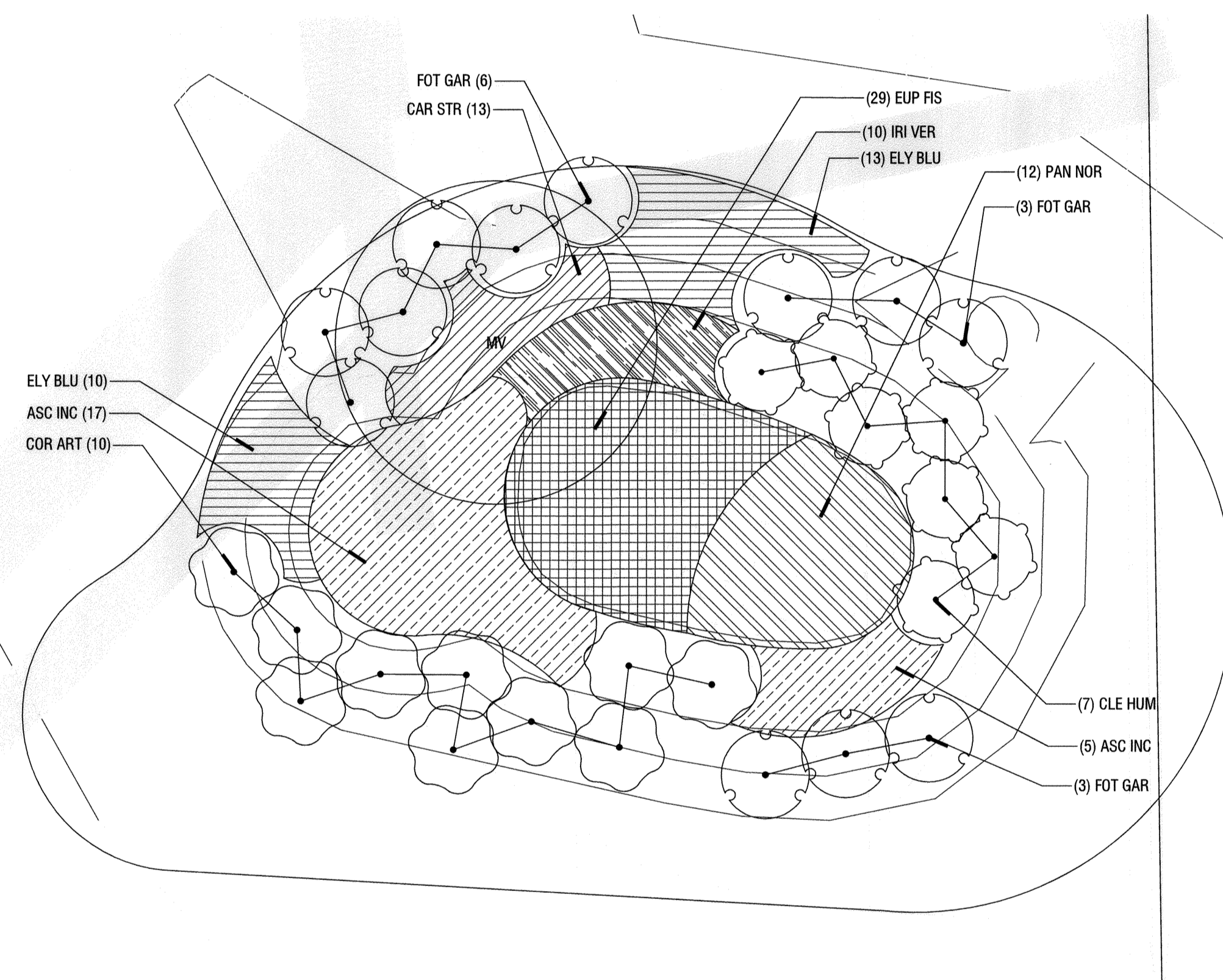
**PLANT SCHEDULE MBR 20**

| SMALL DECIDUOUS TREES | QTY | BOTANICAL / COMMON NAME                                 | CONT  | CAL      | SIZE                                       | REMARKS              |
|-----------------------|-----|---|-------|----------|--|----------------------|
| MV                    | 1   | Magnolia virginiana 'Moon Glow'<br>Sweet Bay            | B & B | -        | 8-10' HT.                                  | Multi-stem; specimen |
| SHRUBS                | QTY | BOTANICAL / COMMON NAME                                 | SIZE  | SPACING  | REMARKS                                    |                      |
| CLE HUM               | 7   | Clethra alnifolia 'Hummingbird'<br>Summersweet          | 7 gal | 36" O.C. | Matched; fully rooted to edge of container |                      |
| COR ART               | 10  | Cornus sericea 'Artic Fire'<br>Artic Fire Dogwood       | 7 gal | 36" O.C. | Matched; fully rooted to edge of container |                      |
| FOT GAR               | 12  | Fothergilla gardenii<br>Dwarf Fothergilla               | 7 gal | 36" O.C. | Matched; fully rooted to edge of container |                      |
| GRASSES               | QTY | BOTANICAL / COMMON NAME                                 | CONT  | SPACING  | REMARKS                                    |                      |
| CAR STR               | 13  | Carex stricta<br>Tussock Sedge                          | 1 gal | 15" O.C. |  |                      |
| ELY BLU               | 23  | Elymus arenarius Blue Dune<br>Blue Dune Lyme Grass      | 1 gal | 18" O.C. |  |                      |
| PAN NOR               | 12  | Panicum virgatum 'North Wind'<br>Northwind Switch Grass | 1 gal | 24" O.C. |  |                      |
| PERENNIALS            | QTY | BOTANICAL / COMMON NAME                                 | CONT  | SPACING  | REMARKS                                    |                      |
| ASC INC               | 22  | Asclepias incarnata<br>Swamp Milkweed                   | 1 gal | 24" O.C. |  |                      |
| EUP FIS               | 29  | Eupatorium fistulosum<br>Joe Pye Weed                   | 1 gal | 18" O.C. |  |                      |
| IRI VER               | 10  | Iris versicolor<br>Blue Flag                            | 1 qt  |          |  |                      |

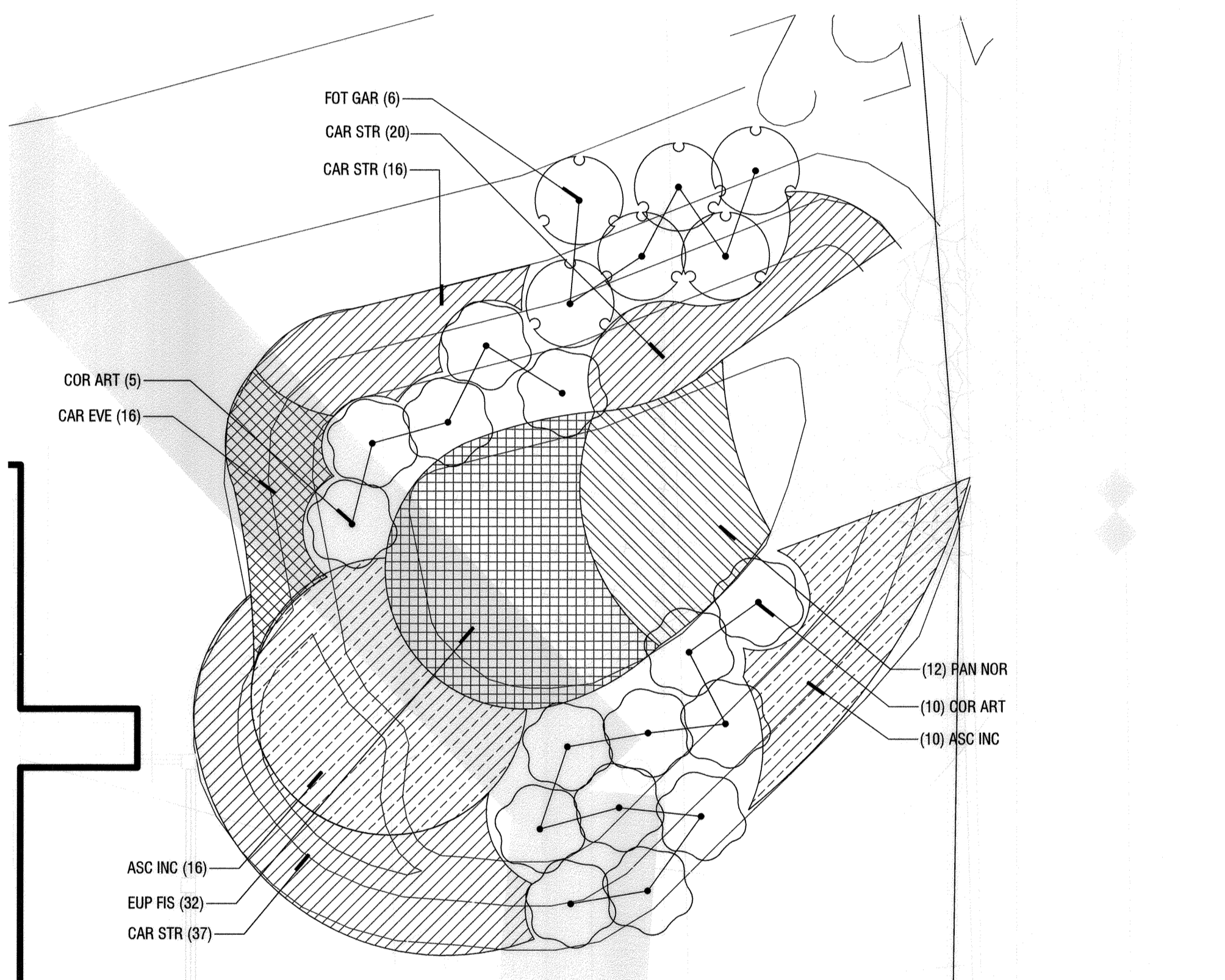
**PLANT SCHEDULE MBR 21**

| SHRUBS     | QTY | BOTANICAL / COMMON NAME                                  | SIZE  | SPACING  | REMARKS                                    |
|------------|-----|--|-------|----------|--|
| COR ART    | 15  | Cornus sericea 'Artic Fire'<br>Artic Fire Dogwood        | 7 gal | 36" O.C. | Matched; fully rooted to edge of container |
| FOT GAR    | 6   | Fothergilla gardenii<br>Dwarf Fothergilla                | 7 gal | 36" O.C. | Matched; fully rooted to edge of container |
| GRASSES    | QTY | BOTANICAL / COMMON NAME                                  | CONT  | SPACING  | REMARKS                                    |
| CAR EVE    | 16  | Carex oshimensis 'Evergold'<br>Variegated Japanese Sedge | 1 gal | 15" O.C. |  |
| CAR STR    | 73  | Carex stricta<br>Tussock Sedge                           | 1 gal | 15" O.C. |  |
| PAN NOR    | 12  | Panicum virgatum 'North Wind'<br>Northwind Switch Grass  | 1 gal | 24" O.C. |  |
| PERENNIALS | QTY | BOTANICAL / COMMON NAME                                  | CONT  | SPACING  | REMARKS                                    |
| ASC INC    | 26  | Asclepias incarnata<br>Swamp Milkweed                    | 1 gal | 24" O.C. |  |
| EUP FIS    | 32  | Eupatorium fistulosum<br>Joe Pye Weed                    | 1 gal | 18" O.C. |  |

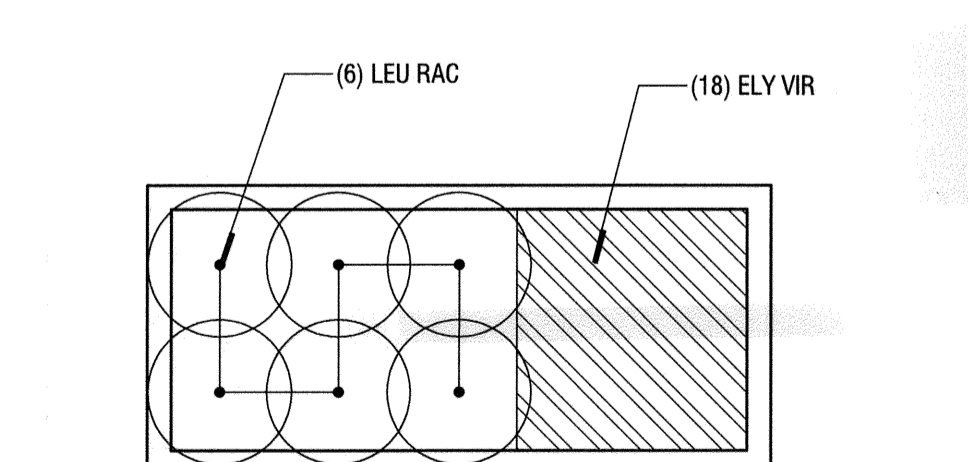
**1 MBR 17 & 18 & 23 PLANTING**  
1/4" = 1'-0"



**3 MBR 21 PLANTING**  
1/4" = 1'-0"



**2 MBR 20 PLANTING**  
1/4" = 1'-0"



**4 MBR 19 PLANTING**  
1/4" = 1'-0"



L313

|  |                |              |   |          |     |
|--|----------------|--------------|---|----------|-----|
| NO.  |                | DATE         |   | REVISION |     |
| <p><b>Design Collective</b><br/>ARCHITECTURE PLANNING INTERIORS LANDSCAPE ARCHITECTURE GRAPHICS<br/>601 East Pratt Street, Suite 300<br/>Baltimore, Maryland 21202<br/>P 410 685 6655   www.designcollective.com</p> |                |              |   |          |     |
| OWNER/DEVELOPER:   |                |              | PROJECT: DORSEY CENTER APARTMENTS<br>210 UNITS<br>PARCEL 'T'                        |          |     |
| BINDER ROCK LLC<br>C/O H & H ROCK COMPANIES<br>6800 DEERPATH ROAD<br>SUITE 100<br>ELKBRIDGE, MARYLAND 21075<br>410.579.2442  |                |              | LOCATION: TAX MAP 375 - GRID 24<br>1st ELECTION DISTRICT<br>HOWARD COUNTY, MARYLAND |          |     |
| TITLE: MBR LANDSCAPE PLAN  |                |              |   |          |     |
| DATE:  | SEPTEMBER 2020 | PROJECT NO.: | 1959  |          |     |
| Design:  | AAM            | Draft:       | AAM   | Check:   | CAM |
| SCALE:   | 1/4" = 1'-0"   | DRAWING      | 44  | OF       | 49  |

APPROVED: DEPARTMENT OF PLANNING AND ZONING

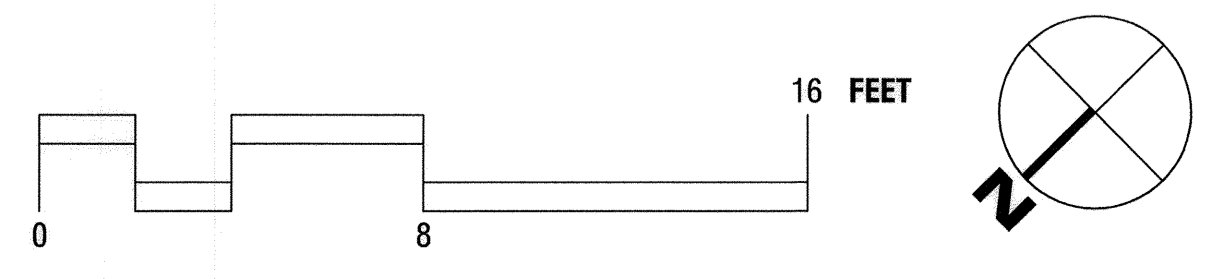
*Chad Blank* 12-7-20  
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

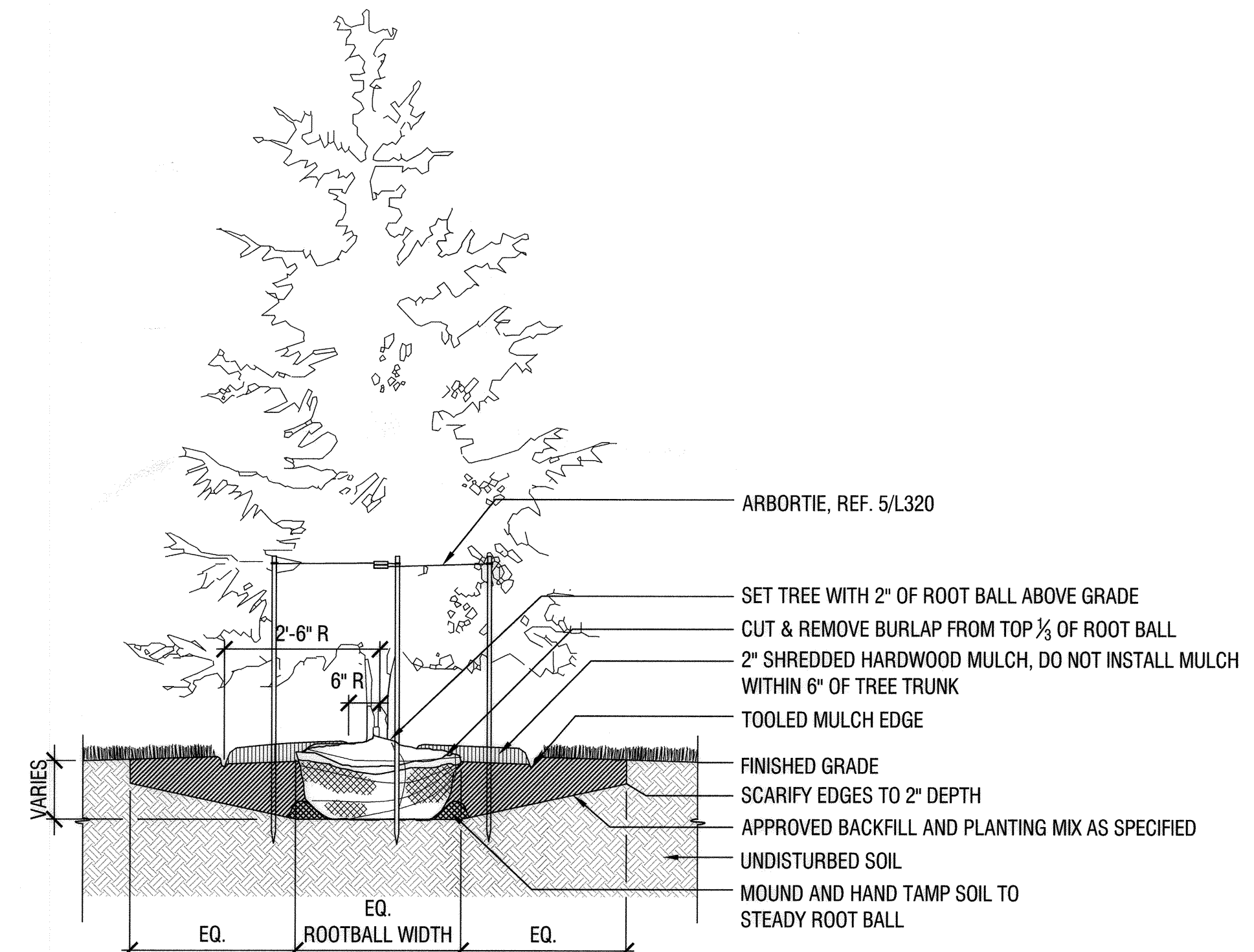
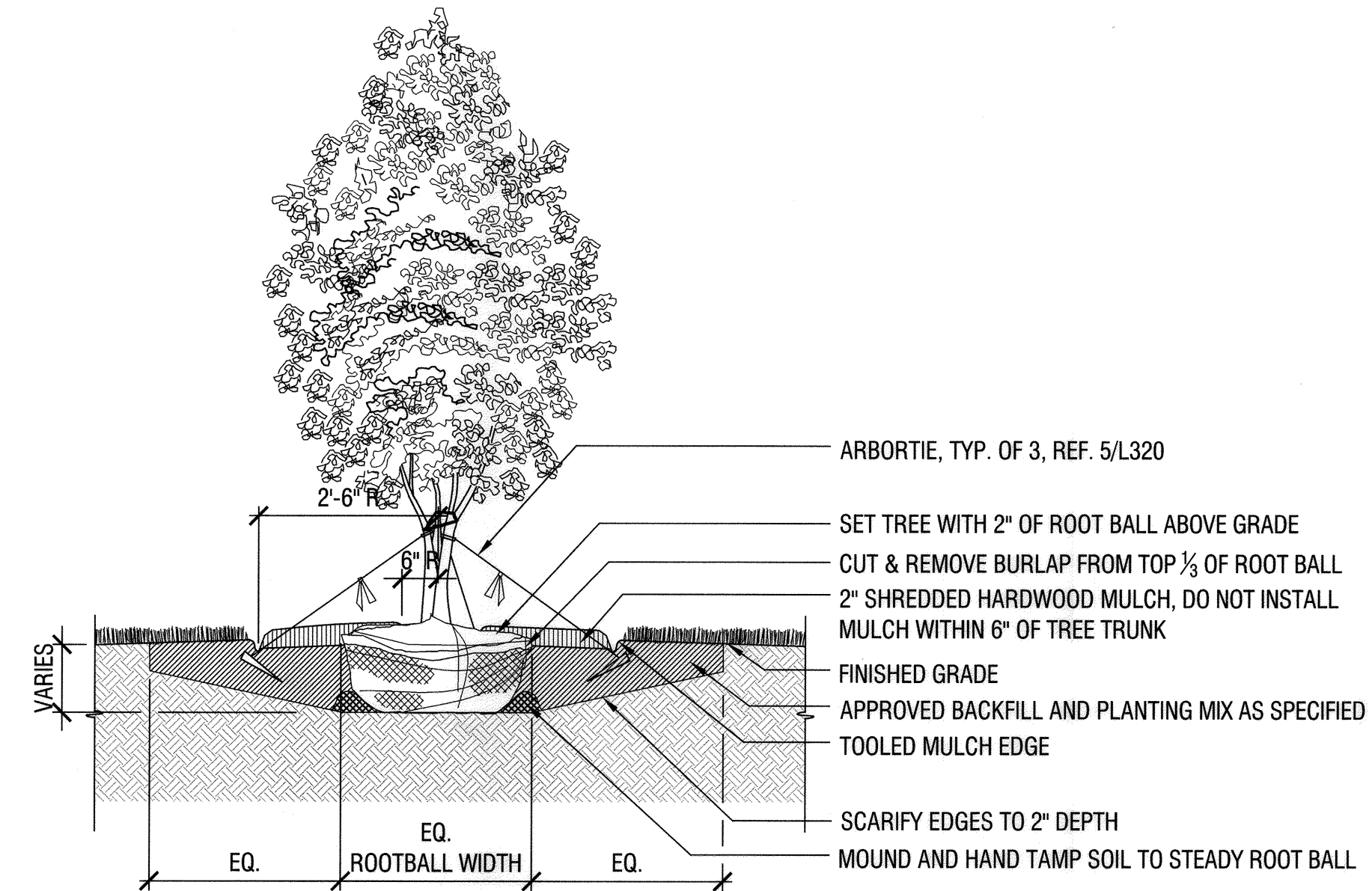
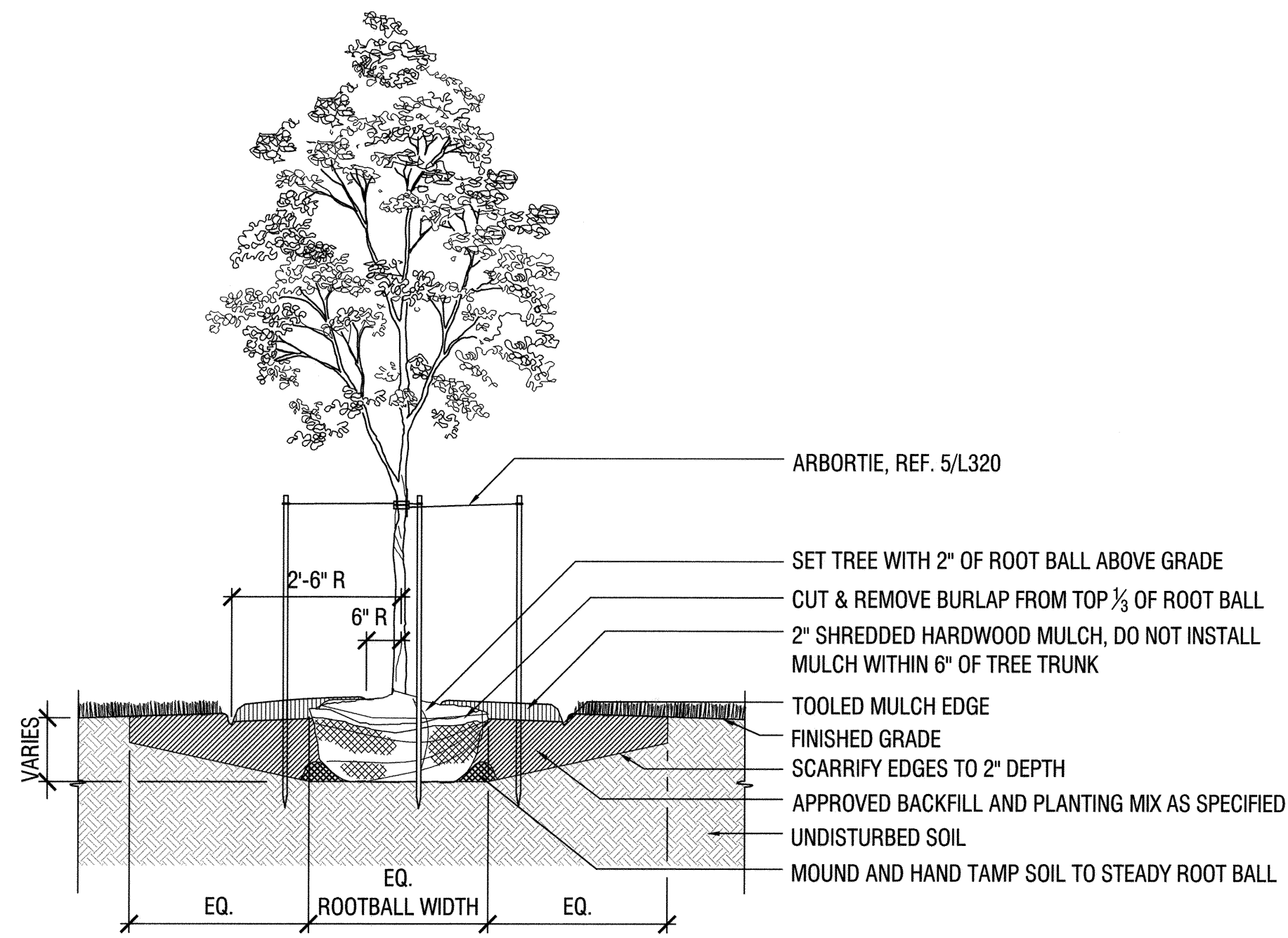
*[Signature]* 12/14/20  
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

*[Signature]* 12/21/20  
DIRECTOR DATE

**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 OF 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.

DEVELOPER/OWNER: \_\_\_\_\_ DATE: \_\_\_\_\_

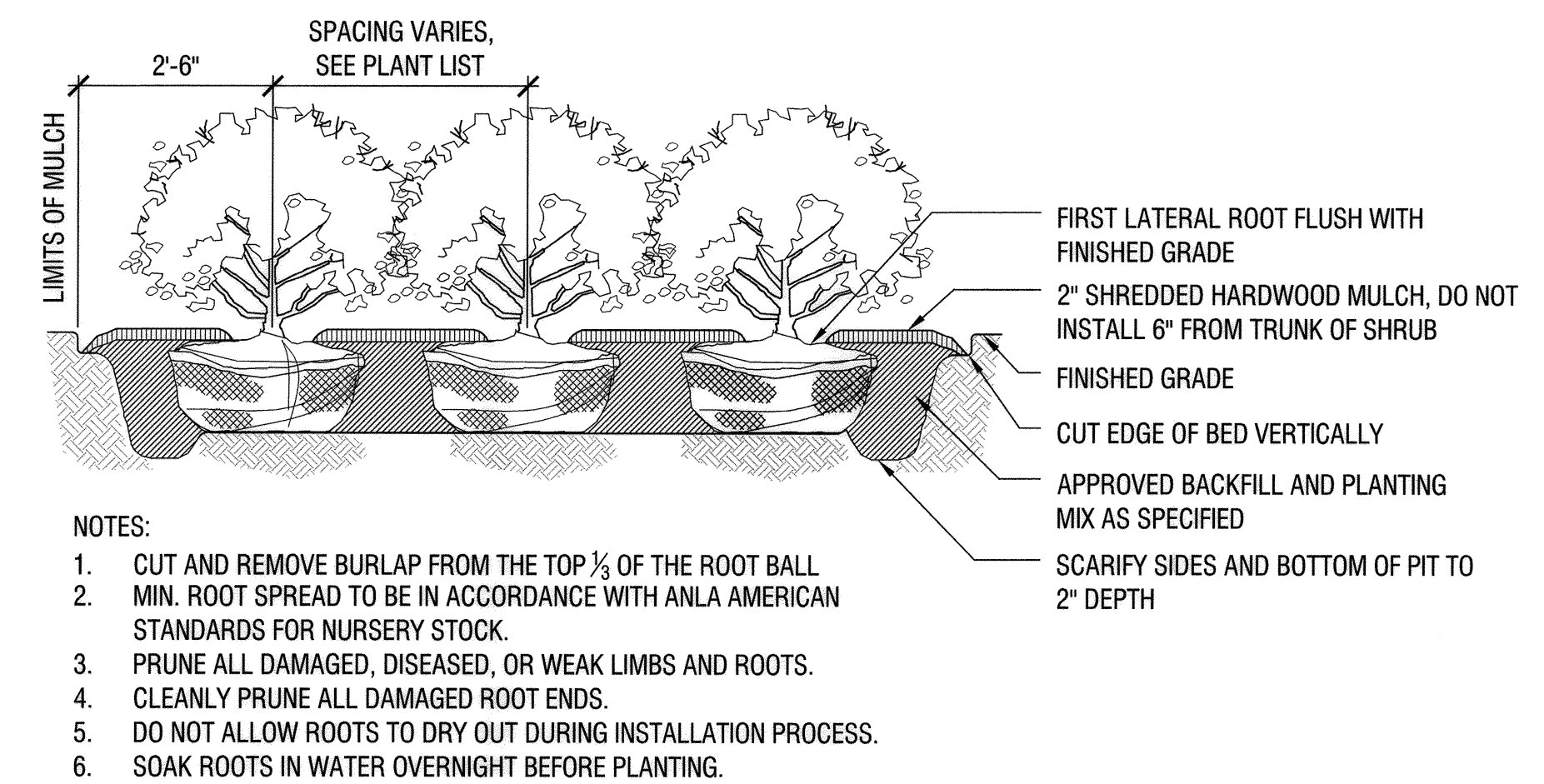
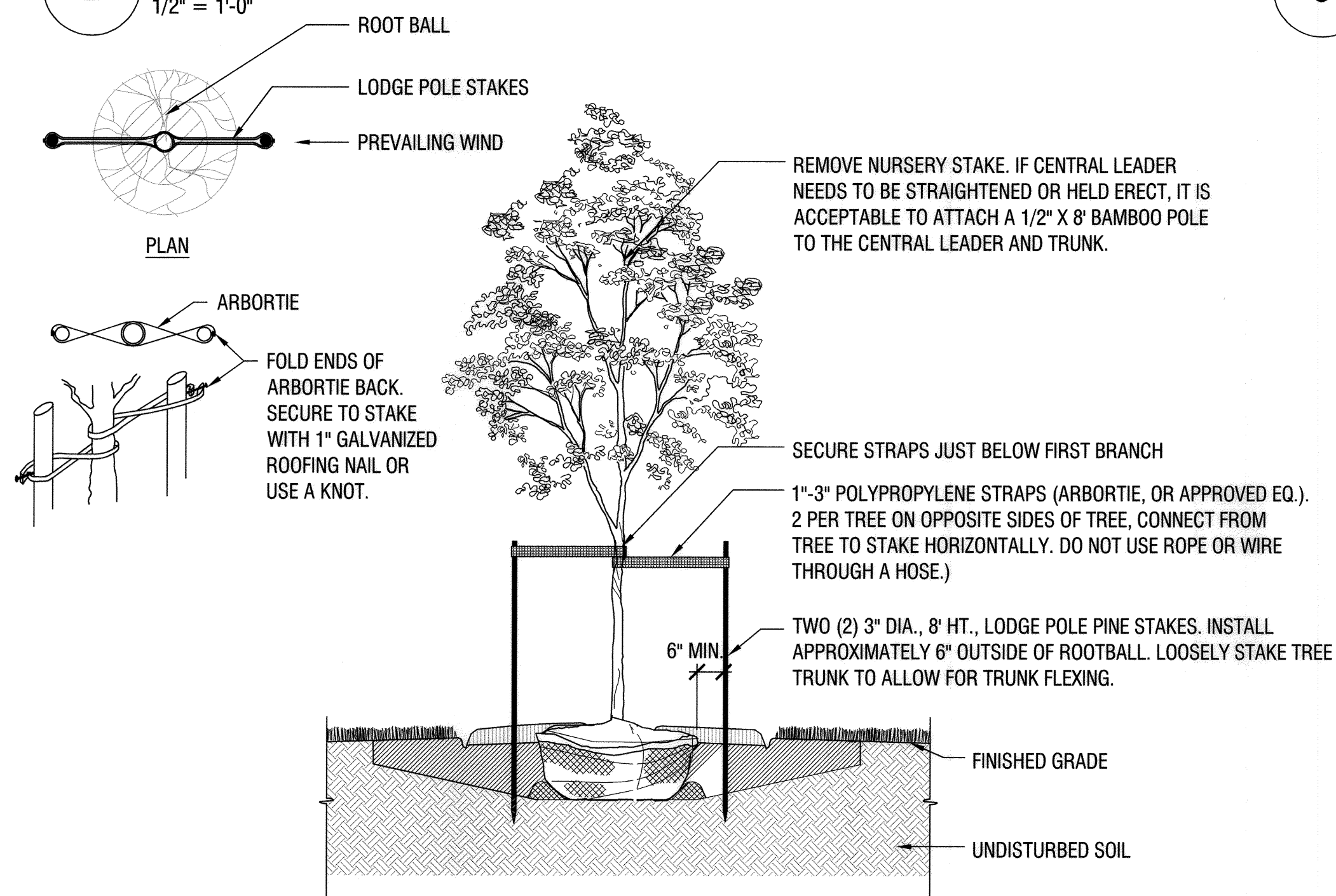
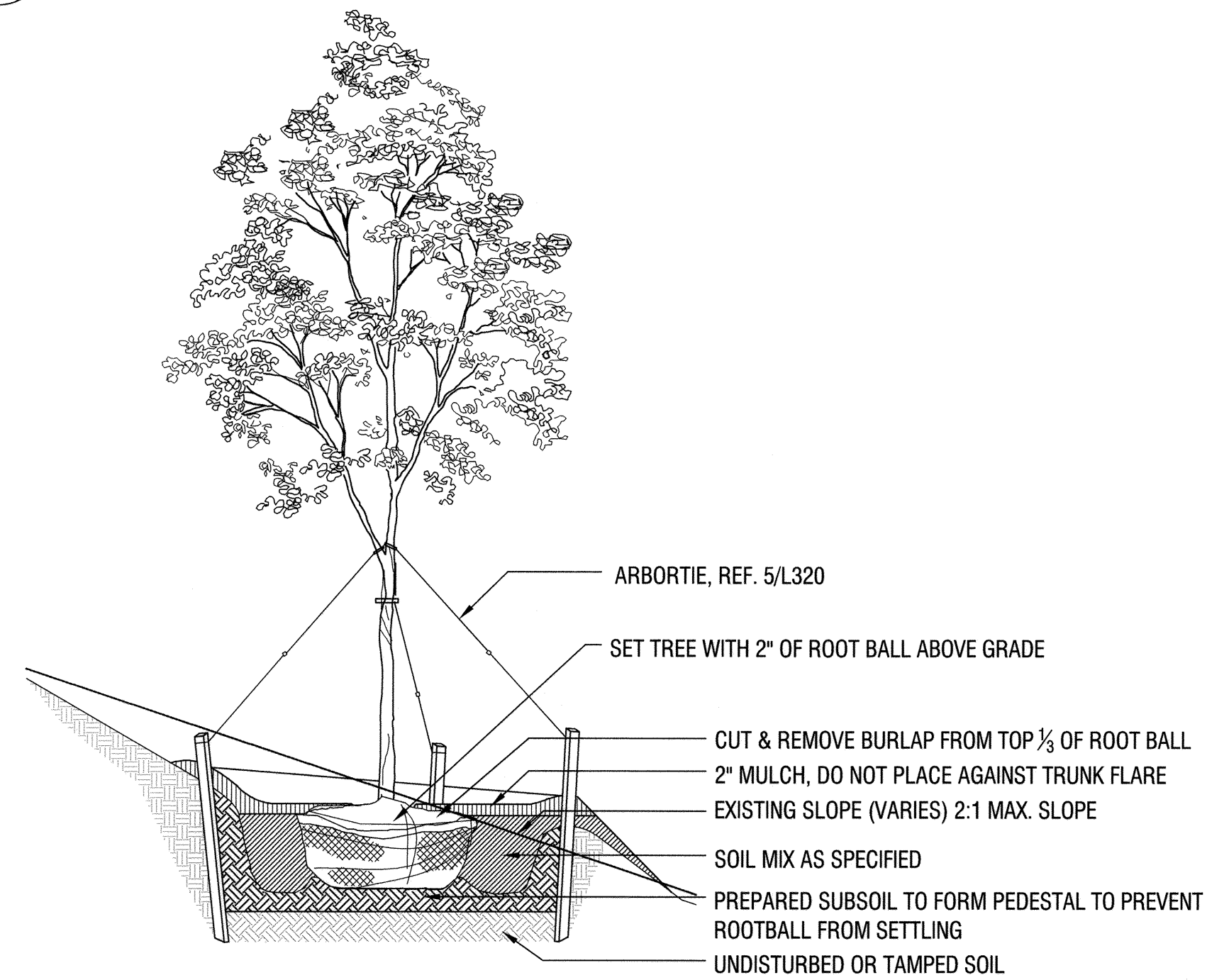




**1 DECIDUOUS TREE PLANTING**  
1/2" = 1'-0"

**2 MULTISTEM TREE PLANTING**  
1/2" = 1'-0"

**3 EVERGREEN TREE PLANTING**  
1/2" = 1'-0"

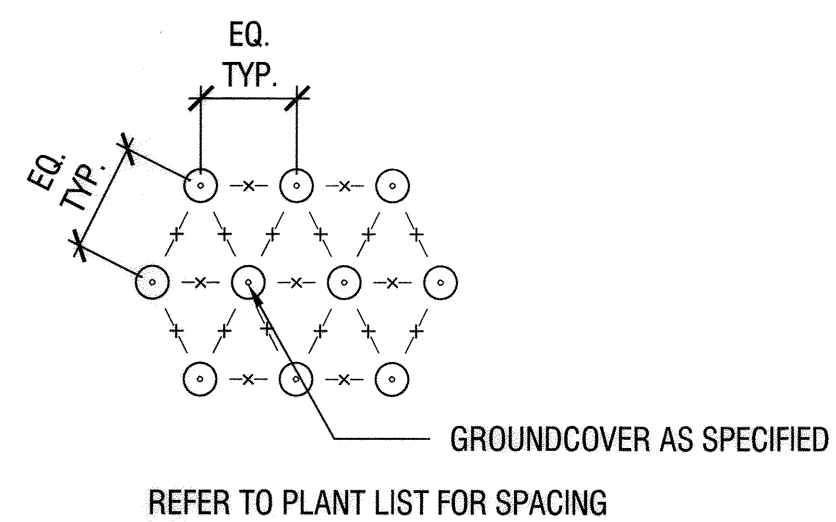


- NOTES:
- CUT AND REMOVE BURLAP FROM THE TOP 1/3 OF THE ROOT BALL
  - MIN. ROOT SPREAD TO BE IN ACCORDANCE WITH ANLA AMERICAN STANDARDS FOR NURSERY STOCK.
  - PRUNE ALL DAMAGED, DISEASED, OR WEAK LIMBS AND ROOTS.
  - CLEANLY PRUNE ALL DAMAGED ROOT ENDS.
  - DO NOT ALLOW ROOTS TO DRY OUT DURING INSTALLATION PROCESS.
  - SOAK ROOTS IN WATER OVERNIGHT BEFORE PLANTING.

**4 SLOPED TREE PLANTING**  
1/2" = 1'-0"

**5 ARBORTIE**  
1/2" = 1'-0"

**6 SHRUB PLANTING**  
1/2" = 1'-0"



**7 PLANT SPACING DIAGRAM**  
1/2" = 1'-0"



L320

APPROVED: DEPARTMENT OF PLANNING AND ZONING

*Chad Elmer* 12-7-20  
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

*[Signature]* 12/14/20  
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

*[Signature]* 12-21-20  
DIRECTOR DATE

| NO. | DATE | REVISION |
|-----|------|----------|
|     |      |          |
|     |      |          |
|     |      |          |

**Design Collective**

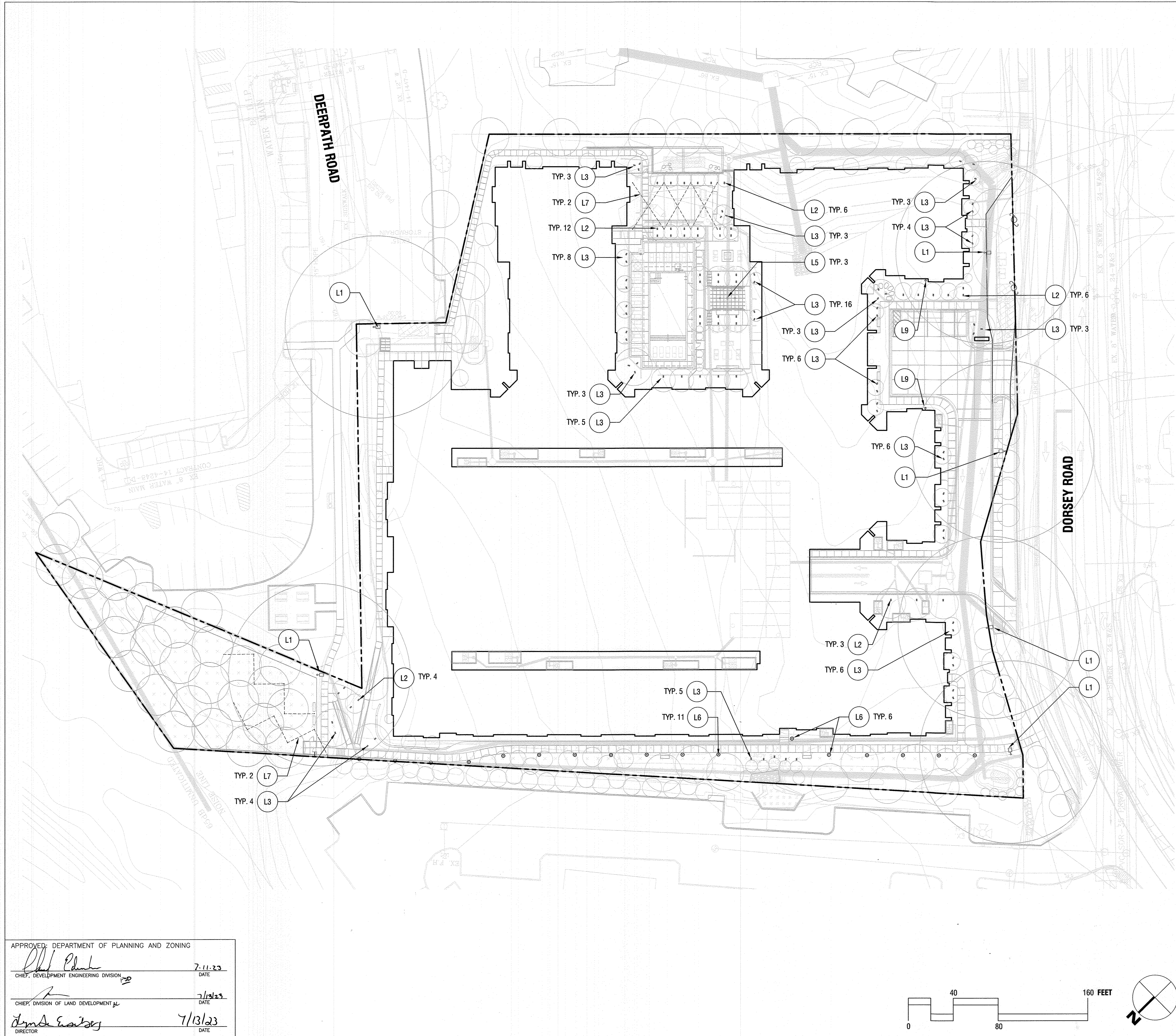
ARCHITECTURE PLANNING INTERIORS  
LANDSCAPE ARCHITECTURE GRAPHICS

601 East Pratt Street, Suite 300  
Baltimore, Maryland 21202  
P-410-686-6655 | www.designcollective.com

"I certify that these documents were prepared or approved by me, and that I am a duly licensed landscape architect under the laws of the State of Maryland, License No. 10399, expiration date 06/12/2022"

By: Matt D'Amico, PLA  
Design Collective, Inc.

|  |  |
|--|--|
| OWNER/DEVELOPER:<br>BINDER ROCK LLC<br>C/O H & H ROCK COMPANIES<br>6800 DEERPATH ROAD<br>SUITE 100<br>ELKRIDGE, MARYLAND 21075<br>410.579.2442 | PROJECT: DORSEY CENTER APARTMENTS<br>210 UNITS<br>PARCEL 'T' |
| LOCATION: TAX MAP 37<br>PARCEL 375 - GRID 24<br>1st ELECTION DISTRICT<br>HOWARD COUNTY, MARYLAND   |  |
| TITLE: PLANTING DETAILS  |  |
| DATE: SEPTEMBER 2020   | PROJECT NO. 1959   |
| Design: AAM  | Draft: AAM   |
| Check: CAM   | SCALE: AS NOTED  |
| DRAWING 45 OF 49   |  |



| LIGHTING LEGEND |                        |
|-----------------|------------------------|
| L               | LIGHTING               |
| L1              | STREET LIGHT           |
| L2              | TREE UPLIGHT - NARROW  |
| L3              | TREE UPLIGHT - WIDE    |
| L4              | UPLIGHT - ARCHWALL     |
| L5              | DOWNLIGHT              |
| L6              | BOLLARD                |
| L7              | STRING LIGHTS          |
| L8              | PATH LIGHT             |
| L9              | BUILDING MOUNTED FLOOD |



\* PLEASE NOTE THAT THIS PLAN SUPERSEDES AND REPLACES THE SEPTEMBER 2020 PLAN SHEET.

L400

| NO.       | DATE | REVISION   |
|-----------|------|--|
| 5.01.2023 |      | REVISED TREE UPLIGHT AND BOLLARD LIGHT LOCATIONS |
| 4.16.2021 |      | HUD REVIEW SET                                   |

## Design Collective

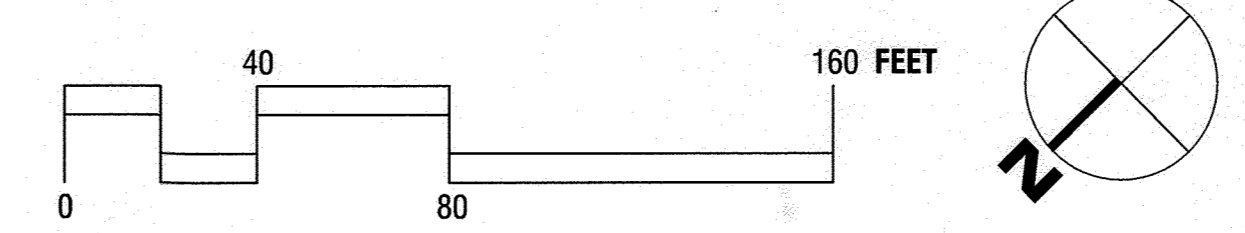
ARCHITECTURE PLANNING INTERIORS  
LANDSCAPE ARCHITECTURE GRAPHICS

100 East Pratt Street, 18th Floor  
Baltimore, Maryland 21202  
P 410 685 6655 | www.designcollective.com

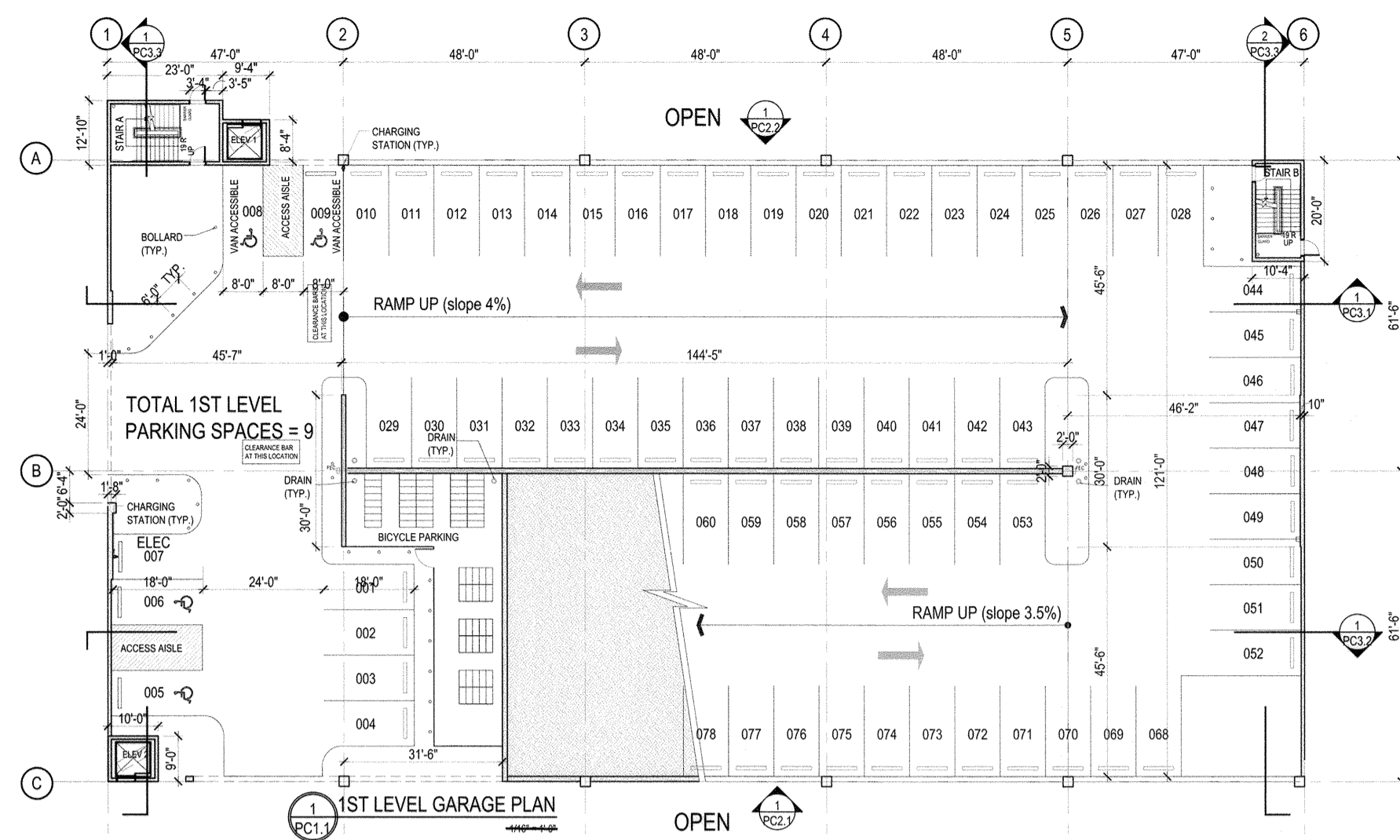
\*I certify that these documents were prepared or approved by me, and that I am a duly licensed landscape architect under the laws of the State of Maryland, License No. 1039, expiration date 06/12/2024\*

By: Matt D'Amico, PLA  
Design Collective, Inc.

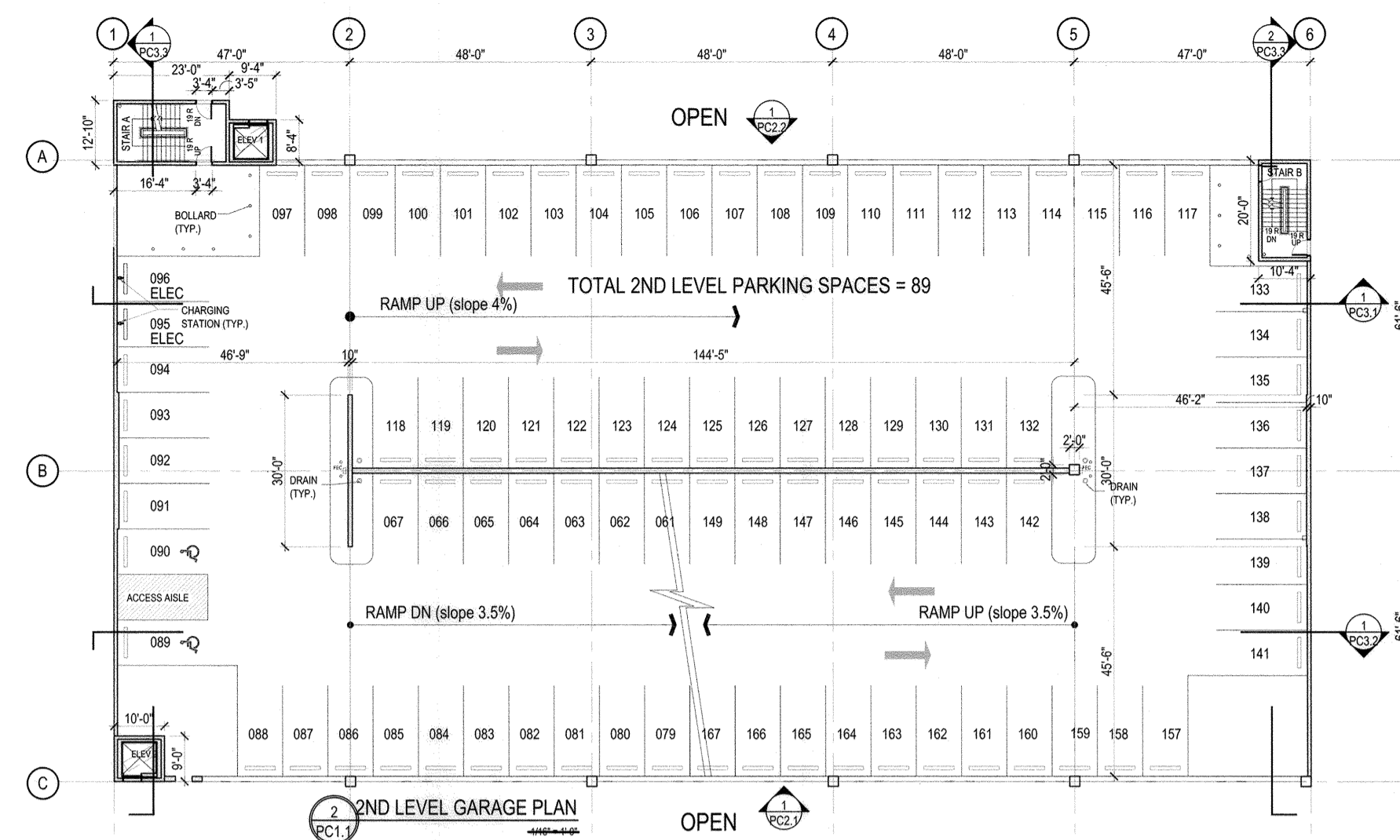
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| APPROVED: DEPARTMENT OF PLANNING AND ZONING |         |
| <i>[Signature]</i>                          | 7/11/23 |
| DATE  |         |
| CHIEF, DEVELOPMENT ENGINEERING DIVISION     |         |
| <i>[Signature]</i>                          | 7/13/23 |
| DATE  |         |
| CHIEF, DIVISION OF LAND DEVELOPMENT         |         |
| <i>[Signature]</i>                          | 7/13/23 |
| DATE  |         |
| DIRECTOR                                    |         |



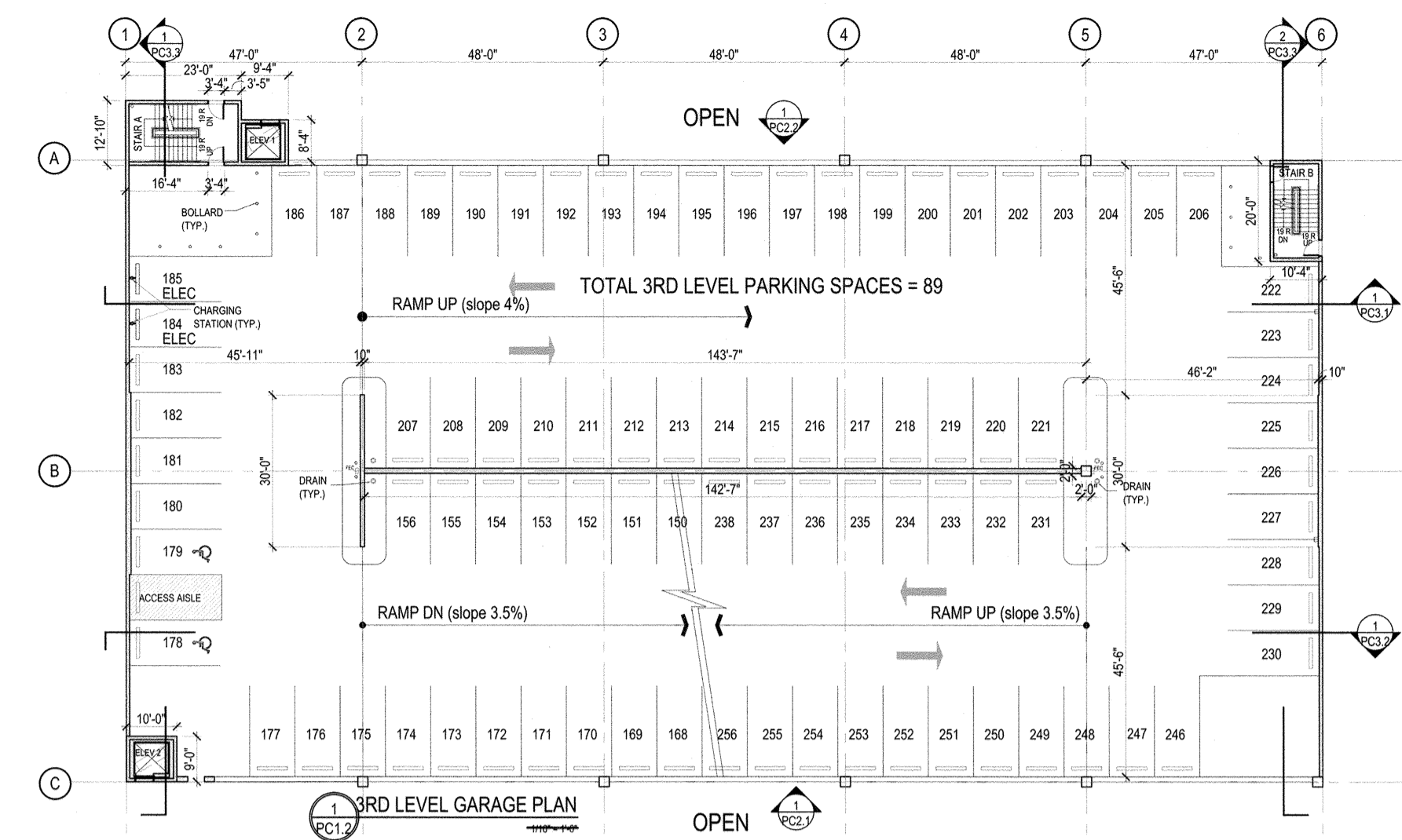
|  |                  |   |                  |
|--|------------------|---|------------------|
| OWNER/DEVELOPER:   |                  | PROJECT: DORSEY CENTER APARTMENTS<br>210 UNITS<br>PARCEL 'T'  |                  |
| BINDER ROCK LLC<br>C/O H & H ROCK COMPANIES<br>6800 DEERPATH ROAD<br>SUITE 100<br>ELKRIDGE, MARYLAND 21075<br>410.579.2442 |                  | LOCATION:<br>TAX MAP 37<br>PARCEL 375 - GRID 24<br>1st ELECTION DISTRICT<br>HOWARD COUNTY, MARYLAND |                  |
| TITLE: LIGHTING PLAN<br>MAR 2023   |                  |   |                  |
| DATE: SEPTEMBER 2020   | PROJECT NO. 1959 | SCALE: 1" = 40'   | DRAWING 46 OF 49 |
| Design: AAM  | Draft: AAM       | Check: CAM  | SDP-20-033       |



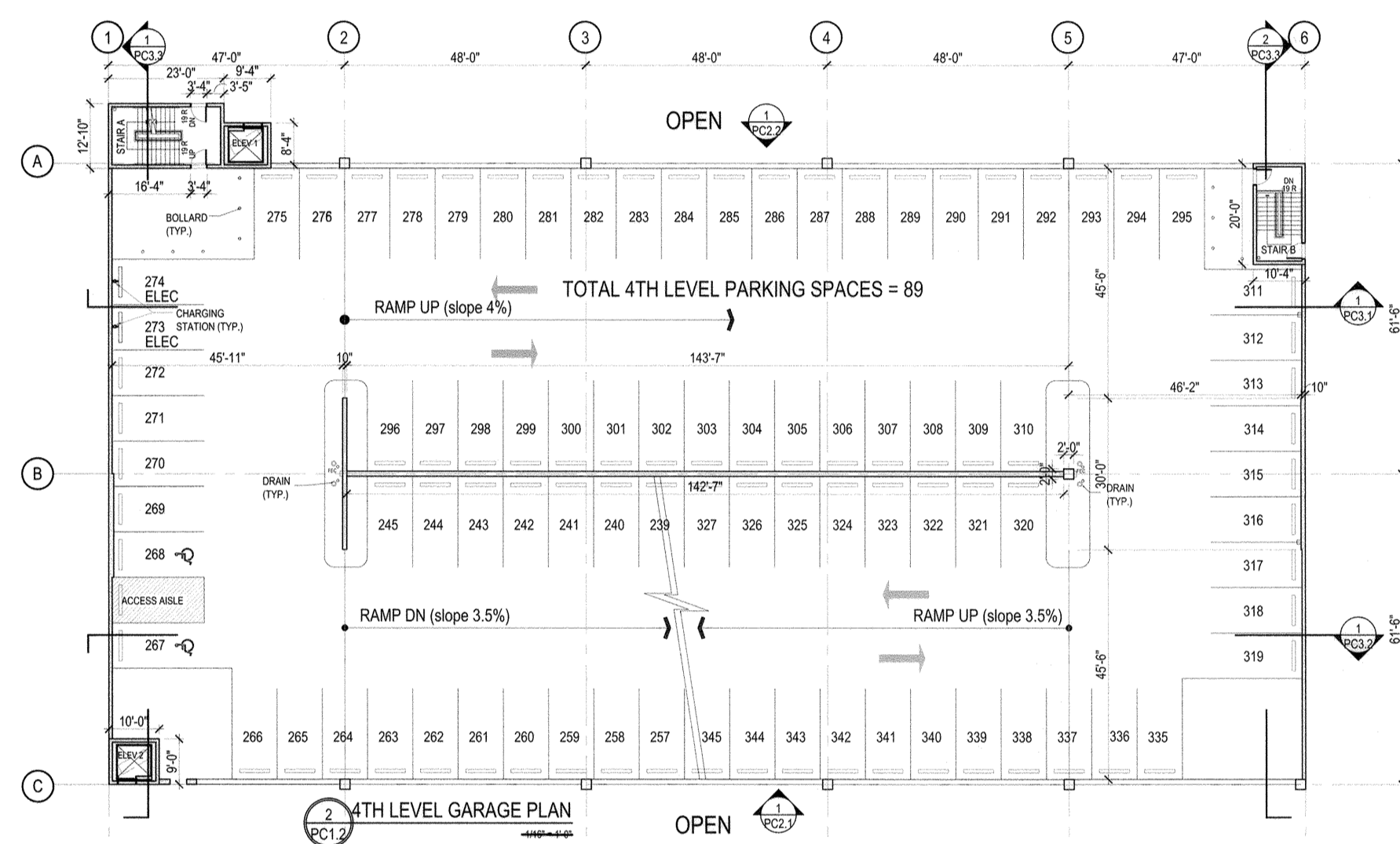
FIRST FLOOR PLAN  
SCALE: 1" = 30'



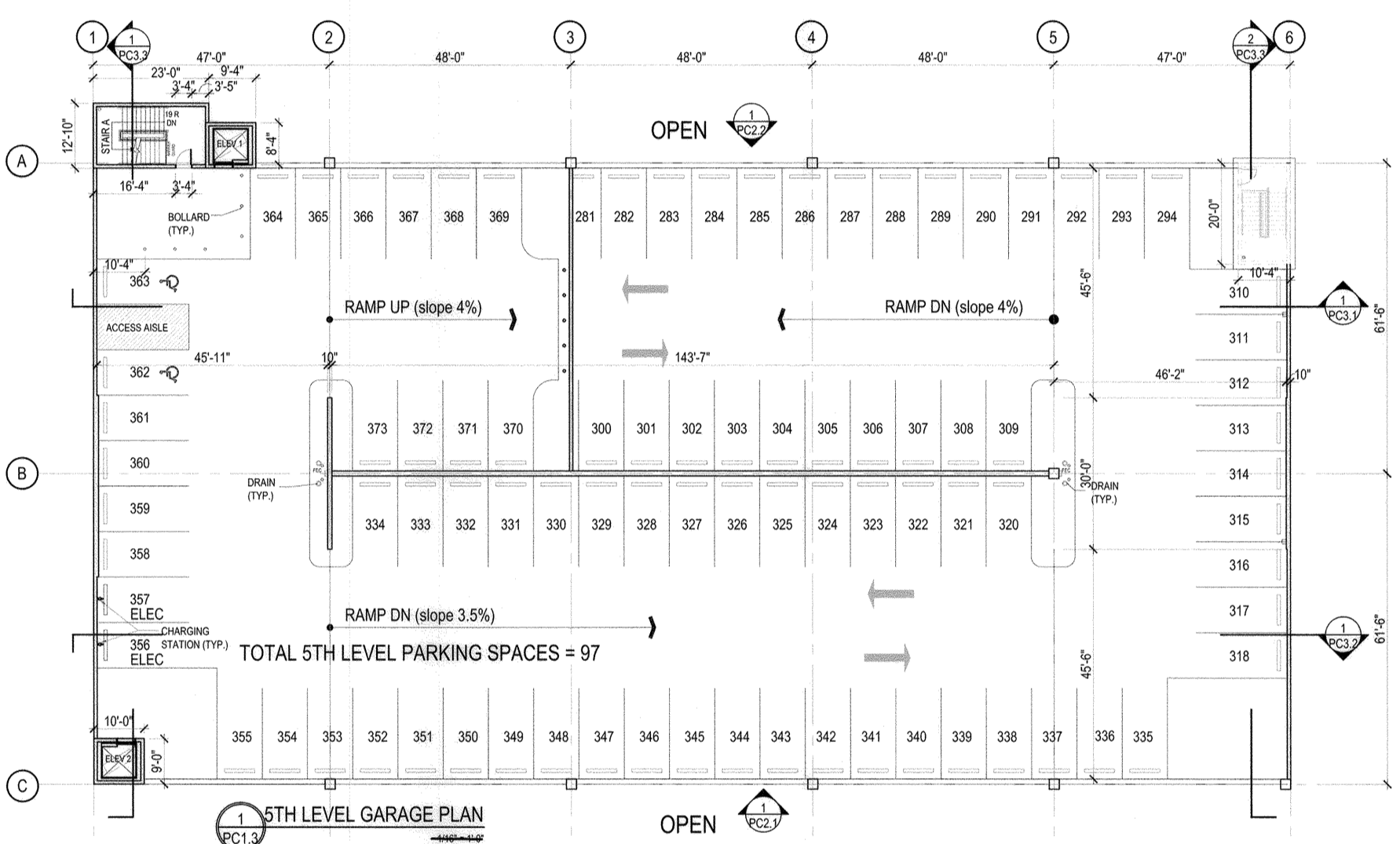
SECOND FLOOR PLAN  
SCALE: 1" = 30'



THIRD FLOOR PLAN  
SCALE: 1" = 30'



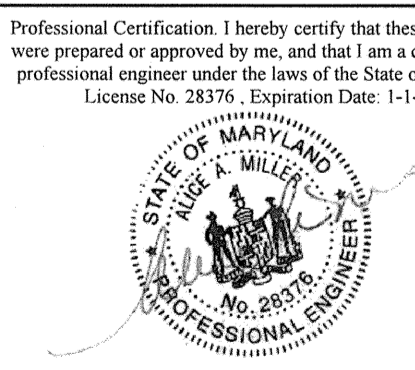
FOURTH FLOOR PLAN  
SCALE: 1" = 30'



FIFTH FLOOR PLAN  
SCALE: 1" = 30'



APPROVED: DEPARTMENT OF PLANNING AND ZONING  
*[Signature]* 12.7.20  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION  
 CHIEF, DIVISION OF LAND DEVELOPMENT 12/11/20  
 DIRECTOR 12/21/20

| NO.   | DATE             | REVISION   |
|---|------------------|--|
|   |                  |  |
|   |                  |  |
|   |                  |  |
| <b>BENCHMARK</b><br>ENGINEERS & LAND SURVEYORS & PLANNERS<br><b>ENGINEERING, INC.</b><br>8480 BALTIMORE NATIONAL PIKE SUITE 315 ELLICOTT CITY, MARYLAND 21043<br>(P) 410-465-6105 (F) 410-465-6644<br>WWW.BEI-CIVILENGINEERING.COM  |                  |  |
| 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. 28376, Expiration Date: 1-1-21.<br><br>Nov 3 2020 8:15 PM DocuSign<br>THIS PLAN IS SEALED FOR PRESENTATION ONLY. GARAGE FLOOR PLANS WERE PREPARED BY HENNEMAN AND ASSOCIATES. |                  |  |
| OWNER/DEVELOPER:<br>BINDER ROCK LLC<br>C/O H & H ROCK COMPANIES<br>6800 DEERPATH ROAD<br>SUITE 100<br>ELK RIDGE, MARYLAND 21075<br>410.579.2442   |                  | PROJECT: DORSEY CENTER APARTMENTS<br>210 UNITS<br>PARCEL 'T'<br>LOCATION: TAX MAP 37<br>PARCEL 375 - GRID 24<br>141 ELECTION DISTRICT<br>HOWARD COUNTY, MARYLAND<br>TITLE:<br>GARAGE FLOOR LAYOUTS |
| DATE: OCTOBER 2020  | PROJECT NO. 1959 | SCALE: AS SHOWN  |
| Design: AAM   | Draft: AAM       | Check: CAM   |
| DRAWING 47 OF 49  |                  |  |



WEST ELEVATION - VIEW FROM DORSEY ROAD



SOUTH ELEVATION



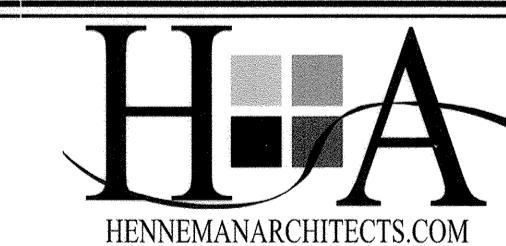
EAST ELEVATION



NORTH ELEVATION

SCALE: 1/16" = 1'-0"

**DORSEY CENTER APARTMENTS**  
09-15-2020



|   |          |
|---|----------|
| APPROVED: DEPARTMENT OF PLANNING AND ZONING |          |
|   | 12-7-20  |
| CHIEF, DEVELOPMENT ENGINEERING DIVISION     | DATE     |
|   | 12/17/20 |
| CHIEF, DIVISION OF LAND DEVELOPMENT         | DATE     |
|   | 12/21/20 |
| DIRECTOR                                    | DATE     |

| NO. | DATE | REVISION |
|-----|------|----------|
|     |      |          |
|     |      |          |
|     |      |          |
|     |      |          |

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Nov 3 2020 8:17 PM DocuSign

THIS PLAN IS SEALED FOR PRESENTATION ONLY. ELEVATIONS WERE PREPARED BY HENNEMAN AND ASSOCIATES

|   |   |
|---|---|
| <p>OWNER/DEVELOPER:</p> <p style="font-size: x-small;">BINDER ROCK LLC<br/>C/O H &amp; H ROCK COMPANIES<br/>6800 DEERPATH ROAD<br/>SUITE 100<br/>ELK RIDGE, MARYLAND 21075<br/>410.579.2442</p> | <p>PROJECT: DORSEY CENTER APARTMENTS<br/>210 UNITS<br/>PARCEL 'T'</p> <p>LOCATION: TAX MAP 37<br/>PARCEL 375 - GRID 24<br/>141 ELECTION DISTRICT<br/>HOWARD COUNTY, MARYLAND</p> <p>TITLE:<br/><b>BUILDING ELEVATIONS</b></p> |
| <p>Design: AAM    Draft: AAM    Check: CAM</p>  | <p>DATE: OCTOBER 2020    PROJECT NO. 1959</p> <p>SCALE: AS SHOWN    DRAWING 48 OF 49</p>  |



