DUNLORA PARK PHASE II
MAJOR SITE PLAN AMENDMENT
TO SDP 202100023 & SDP201800002

RIO MAGISTERIAL DISTRICT   ALBEMARLE COUNTY, VIRGINIA

GENERAL NOTES

OWNER/APPLICANT: 06100-00-00-165R0
DUNLORA INVESTMENTS, LLC
455 SECOND ST SE, SUITE 400
CHARLOTTESVILLE, VA 22902

ENGINEER: COLLINS ENGINEERING
200 GARRETT ST, SUITE K
CHARLOTTESVILLE, VA 22902
(434)293-3719

TAX MAP NO.: 062F0-04-00-000A2, 062F0-04-00-03200, 062F0-04-00-03300, & 062F0-04-00-03400

TOTAL PROJECT AREA: 8.62 ACRES TOTAL (PHASE I = 7.61 AC; PHASE II = 1.01 AC)
THIS PHASE, REDEVELOPMENT OF (3) LOTS AND OPEN SPACE 62F-4-A2
62F-4-32: 0.234 ACRES   62F-4-33: 0.189 ACRES
62F-4-34: 0.208 ACRES   62F-4-A2: 0.379 ACRES
TOTAL AREA OF THIS PHASE: 1.01 ACRES

ZONING: R-4 RESIDENTIAL (BY-RIGHT) - NO PROFFERS
AIRPORT IMPACT AREA (AIA)
A SPECIAL EXCEPTION REQUEST (SE202300023) WAS APPROVED BY THE BOS ON AUGUST 16, 2023, REDUCING THE REAR YARD SETBACK FOR THESE PROPERTIES FROM 20' TO 10'.
BONUS DENSITY: AFFORDABLE HOUSING (22%) DENSITY INCREASE
(4) ADDITIONAL AFFORDABLE UNITS & (4) ADDITIONAL MARKET RATE UNITS

PROPOSED USE: PHASE I -
16 SINGLE FAMILY ATTACHED UNITS AND
12 SINGLE FAMILY DETACHED UNITS
PHASE II - 3 TOWNHOUSES & 3 SINGLE FAMILY DETACHED HOUSES
AMENDMENT TO PHASE II (THIS SITE PLAN):
1. DELETE (3) SINGLE FAMILY DETACHED LOTS
2. PROPOSED (7) SINGLE FAMILY ATTACHED LOTS (7 UNITS)
3. PROPOSED (2) TWO-FAMILY ATTACHED LOTS (4 UNITS)

REQUIRED DENSITY: 4 DU/AC CLUSTER DEVELOPMENT -NO MINIMUM LOT SIZE
(AFFORDABLE HOUSING: UP TO 30% DENSITY INCREASE)
4 DU/AC x 30% = 5.2 DU/AC (MAXIMUM)

PROPOSED DENSITY: PHASE I - 28 UNITS
PHASE II - 6 UNITS
PHASE II (AMENDMENT, THIS SITE PLAN) - 8 UNITS (ADDED)
TOTAL - 42 DU/8.62 AC = 4.872 UNITS/AC

OPEN SPACE: REQ: 2.16 AC OF DEVELOPMENT AREA (25%);
PROVIDED:
PHASE I (OPEN SPACE A): 2.233 ACRES
PHASE II (OPEN SPACE A-2): 0.379 ACRES
ADDITIONAL OPEN SPACE (THIS PLAN): 0.164 ACRES
TOTAL OPEN SPACE PROVIDED: 2.776 AC (32.2%)
MINIMUM OF 0.98 AC OUTSIDE CRITICAL SLOPES & SWM (38% OF TOTAL)
THE OPEN SPACE WILL BE DEDICATED TO THE HOA FOR PUBLIC USE

BUILDING HEIGHTS: MAXIMUM BUILDING HEIGHTS SHALL NOT EXCEED 35'
HEIGHT TO EAVE OF UNITS = 29-11" +/-

NON-INFILL SETBACKS: FRONT: 5' MIN AND 25' MAX
SIDE: 5' (10' BUILDING SEPARATION)
REAR: 10' MIN. AND NO MAX. NOTE, A SPECIAL EXCEPTION (SE202300023) AS APPROVED BY THE BOS ON AUGUST 16, 2023 FOR THE REDUCTION OF THE REAR YARD SETBACK FROM 20' TO 10' FOR THESE PROPERTIES.

SUBDIVISION STREETS: PHASE I - CURB & GUTTER (PARKING ON ONE SIDE ONLY)
PHASE II - UNITS FRONTING RIO ROAD & DUNLORA DRIVE WITH PRIVATE ACCESS ALLEY (LINDLEY PLACE) FROM VARICK STREET (PARALLEL PARKING AS SHOWN ON THE SITE PLAN)

WATERSHED: THIS PARCEL IS NOT IN A WATER SUPPLY PROTECTED AREA - SITE DRAINS TO MEADOW CREEK.

AGRICULTURAL/ FORESTAL DISTRICT: NONE

TOPO & SURVEY: TOPOGRAPHY AND BOUNDARY INFORMATION PROVIDED WITH FIELD SURVEY BY ROUDABUSH, GALE AND ASSOCIATES IN SEPTEMBER 2016. NOTE: TOPOGRAPHY HAS BEEN UPDATED FOR PHASE I & PHASE II LAND DISTURBANCE. TOPO VISUALLY FIELD VERIFIED IN DECEMBER, 2023.

DATUM: NAD 83

EXISTING VEGETATION: CLEARED AREA, PARTIALLY DEVELOPED

LIGHTING: NO LIGHTING IS PROPOSED

PHASING: THIS PLAN IS AN AMENDMNT TO THE PHASE II OF DUNLORA PARK

RECREATION: 2.60 ACRES OPEN SPACE (PASSIVE RECREATION AREA)

PARKING: PHASE II: 2 OFF-STREET PARKING SPACES SHALL BE PROVIDED FOR EACH DWELLING UNIT, (1) SPACE PER UNIT FOR THE BASEMENT AFFORDABLE UNIT (2 OVER 1) + 1 SPACE PER (4) UNITS FOR GUEST PARKING:
TOTAL PARKING REQUIRED:
9 UNITS x 2 SPACES/UNIT = 18 SPACES
2 UNITS x 1 SPACE/UNIT = 2 SPACES
11 UNITS x 1 SPACE/4 UNITS = 3 SPACES
TOTAL PARKING REQUIRED: 23 SPACES
TOTAL PARKING PROVIDED:
20 GARAGE/DRIVEWAY SPACES ON THE LOTS & (3) GUEST SPACES
TOTAL PARKING PROVIDED: 23 SPACES

BUILDING SITES: PARCELS 1-40 MAY NOT BE FURTHER DIVIDED. ONLY (1) DWELLING UNIT PER LOT SHALL BE ALLOWED ON EACH LOT, EXCEPT LOT 36 & LOT 40. THESE LOTS SHALL HAVE TWO-FAMILY DWELLING UNITS ON EACH LOT.

BURIAL SITES: NONE

STREAM BUFFERS/FLOODPLAIN: THERE IS A PORTION OF A WPO STREAM BUFFER LOCATED AT THE SOUTHEAST CORNER OF THE SITE. THERE IS NO 100-YEAR FLOODPLAIN LIMITS ON THE SUBJECT PARCEL, PER FEMA MAP 51003C0229D; FEBRUARY 4, 2005.

OFFSITE DISTURBANCE: NO OFFSIDE DISTURBANCE IS PROPOSED WITH THIS PLAN.

LANDSCAPING: STREET TREES ARE PROPOSED ALONG RIO ROAD IN ACCORDANCE WITH ALBEMARLE COUNTY LANDSCAPING REQUIREMENTS.

LAND AREAS: OPEN SPACE: 2.612 AC. + 0.164 AC (THIS PHASE)= 2.776 AC (32%)
LOTS: 4.86 AC. - 0.164 AC (THIS PHASE)= 4.696 AC (54%)
ROW/ACCESS ESMT DEDICATION: 1.16 AC. (14%)

IMPERVIOUS AREA:
ROADWAY= 29,600 (PHASE I) + 9,500 (PHASE II) = 39,100 SF (0.890 AC)
SIDEWALK/DRIVEWAYS= 21,188 (PHASE I) + 5,650 (PHASE II) = 26,838 SF (0.62 AC)
BUILDINGS= 63,700 (PHASE I) + 10,200 (PHASE II) = 73,900 SF (1.70 AC)

SLOPES: THIS SITE CONTAINS BOTH MANAGED AND PRESERVED SLOPES AS SHOWN ON THIS PLAN. SEE SHEET 2 AND SHEET 4.

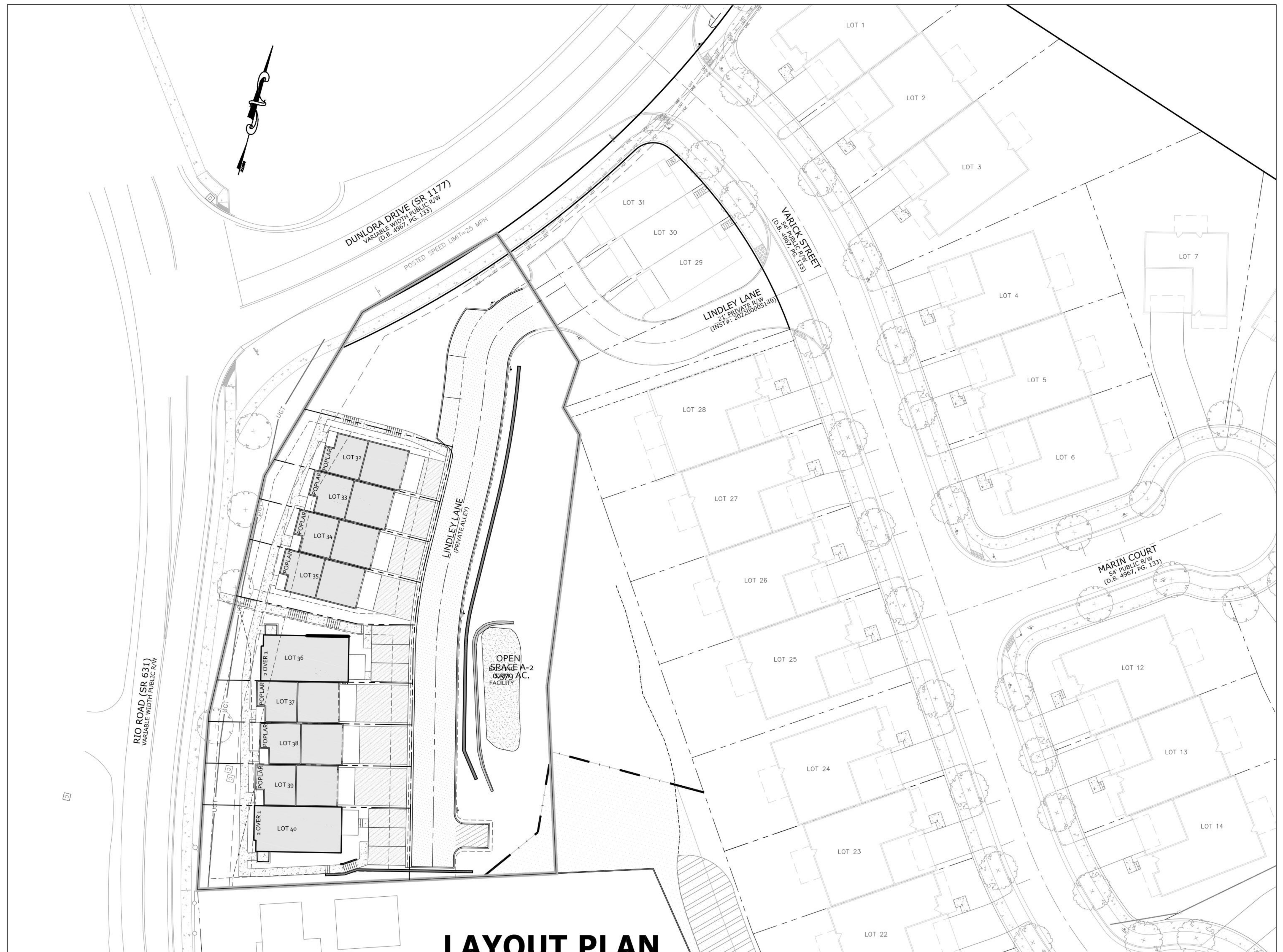
TRASH: ALL TRASH SHALL BE COLLECTED BY A DRIVING DUMPSTER SERVICE - EACH LOT SHALL HAVE AN INDIVIDUAL TRASH CONTAINER.

LIGHTING: NO ON-STREET LIGHTING IS PROPOSED WITH THIS PLAN.

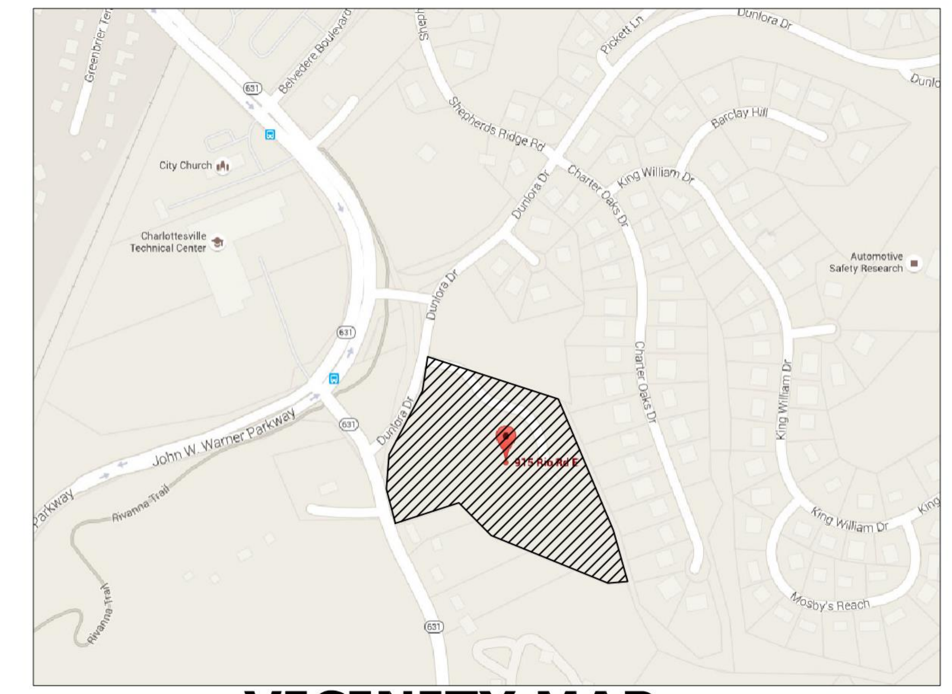
DAM INUNDATION: THIS PROPERTY IS NOT LOCATED WITHIN A DAM INUNDATION ZONE.

FIRE FLOW/ACCESS: AS REQUIRED, ALL FIRE FLOWS WITHIN THE DEVELOPMENT SHALL BE A MINIMUM OF 1000 GPM AT 20 PSI. EXISTING FIRE HYDRANTS ARE LOCATED ALONG RIO ROAD AND DUNLORA DRIVE THAT WILL SERVED THESE UNITS FOR FIRE PROTECTION. THE EXISTING FIRE FLOW 1135 GPM WITH 66 PSI PRESSURE.
ACCESS TO THE STRUCTURES FOR FIRE/RESCUE WILL BE FROM DUNLORA DRIVE AND FROM RIO ROAD.

STORMWATER MANAGEMENT: A WPO AMENDMENT SHALL BE SUBMITTED FOR THIS PHASE OF DEVELOPMENT FOR DUNLORA PARK. WATER QUALITY FOR THE DEVELOPMENT SHALL BE ACHIEVED WITH THE PURCHASE OF NUTRIENT CREDITS. WATER QUANTITY SHALL BE SATISFIED ONSITE WITH THE PROPOSED DRY RETENTION FACILITY. DETAILS ON THE NUTRIENT CREDITS AND THE DESIGN OF THE STORMWATER MANAGEMENT FACILITY WILL BE PROVIDED WITH THE WPO AMENDMENT PLAN.



LAYOUT PLAN
SCALE: 1" = 40'



VICINITY MAP
SCALE: 1" = 500'

LEGEND

ROADS

- EXISTING CULVERT
- CULVERT
- DROP INLET & STRUCTURE NO.
- CURB
- CURB & GUTTER
- PROPOSED PAVEMENT
- PROPOSED PERM PAVERS
- EC-3A DITCH
- 6" DEPTH OF EC-3A DITCH
- LOT LINE
- EARTH DITCH
- DRIVEWAY CULVERT
- BENCH MARK
- CLEARING LIMITS
- VDOT STANDARD STOP SIGN
- 200 EXISTING CONTOUR
- 200 PROPOSED CONTOUR
- 240.55 PROPOSED SPOT ELEVATION

Sheet List Table	
Sheet Number	Sheet Title
1	COVER
2	EXISTING CONDITIONS
3	LAYOUT PLAN
4	GRADING AND UTILITY PLAN
5	SITE UTILITY DETAILS
6	TRAFFIC, NOTES & DETAILS
7	PROFILES
8	DRAINAGE MAP
9	DRAINAGE CALCULATIONS
10	LANDSCAPING PLAN
10	TOTAL NUMBER OF SHEETS

TRIP GENERATION CALCULATIONS

ITE TRIP GENERATION: TRAFFIC IMPACT NUMBERS ARE BASED ON THE ITE TRIP GENERATION MANUAL, 10TH EDITION. CODE 220 WAS USED FOR THE DEVELOPMENT

PROPOSED 11 DWELLING UNITS (THIS PHASE)
ADT RATE - 7.32 VPD PER DU = 80 ADT (40 ENTER/ 40 EXIT)
AM PEAK RATE - 0.46 VPD PER DU = 5 VPH (1 ENTER/ 4 EXIT)
PM PEAK RATE - 0.56 VPD PER DU = 6 VPH (4 ENTER/ 2 EXIT)

OVERALL DEVELOPMENT:
30 MULTI-FAMILY UNITS (CODE 220)
12 SINGLE FAMILY DETACHED UNITS (CODE 210)

OVERALL ADT RATE: 332 VPD (166 ENTER/166 EXIT)
OVERALL AM PEAK RATE: 23 VPH (5 ENTER/18 EXIT)
OVERALL PM PEAK RATE: 29 VPH (18 ENTER/11 EXIT)

NOTES:
1. ALL PROPOSED UTILITY EASEMENTS SHALL BE DEDICATED TO ACSA FOR PUBLIC USE.
2. THE ACCESS ROADWAY FOR THESE 9 LOTS SHALL BE PRIVATE TRAVELWAY (LINDLEY LANE). SEE NOTES & DETAILS FOR MORE DETAIL ON THE PROPOSED TRAVELWAY CROSS SECTIONS.

PREVIOUS DUNLORA PARK PLANS:

1. SUB2021-00082
2. SUB2019-00172
3. SDP2018-00002
4. WPO2016-00058
5. WPO2017-00035
6. WPO2017-00052
7. WPO2017-00052 AMENDMENT
8. SDP2021-00023

MINOR SITE PLAN AMENDMENT PROPOSED CHANGES:

1. REPLATTED (3) SINGLE FAMILY DETACHED LOTS FOR (7) SFA LOTS AND (2) TWO-FAMILY SINGLE FAMILY LOTS.
2. ADJUSTMENTS TO THE LANDSCAPING WITH THE NEW TOWNHOUSE UNITS AND TWO-FAMILY SINGLE FAMILY LOTS.
3. GRADING AND UTILITY CHANGES FOR THE (9) NEW LOTS.
4. MINOR ADJUSTMENTS TO THE EXISTING LINDLEY ALLEY SERVING THESE UNITS.
5. MINOR ADJUSTMENTS AND ADDITIONAL RETAINING WALL FOR THE PROPOSED UNITS.
6. UPDATES TO THE OPEN SPACE WITH ADDITIONAL AREA ADDED ON THE RESUBDIVISION OF THE (3) SFD LOTS.

CONSTRUCTION FIRE PREVENTION NOTES:
1. SMOKING SHALL BE PROHIBITED IN AREAS WHERE SMOKING MAKES CONDITIONS SUCH AS TO MAKE SMOKING A HAZARD AND THESE AREAS SHALL BE DESIGNATED WITH NO SMOKING SIGNS PER VIRGINIA STATEWIDE FIRE PREVENTION CODE.
2. AREAS WHERE SMOKING CAN OCCUR, SHALL HAVE APPROPRIATE RECEPTACLES FOR DISCARDED SMOKING MATERIALS PER VIRGINIA STATEWIDE FIRE PREVENTION CODE.
3. PER THE VIRGINIA STATEWIDE FIRE PREVENTION CODE, VEHICULAR ACCESS FOR FIREFIGHTING SHALL BE PROVIDED AT ALL CONSTRUCTION AND DEMOLITION SITES, PROVIDE ACCESS TO WITHIN 100 FT. OF TEMPORARY OR PERMANENT FIRE DEPARTMENT CONNECTIONS, AND HAVE NO OVERHEAD WIRING OR OTHER OVERHEAD OBSTRUCTIONS LOWER THAN 13FT 6 INCHES; THIS ACCESS MAY BE VIA PERMANENT OR TEMPORARY ROAD, BUT SHALL BE CAPABLE OF SUPPORTING FIRE APPARATUS IN ALL WEATHER CONDITIONS.
4. CONTRACTOR SHALL ENSURE THE STREET NUMBERS ARE ALWAYS VISIBLE FROM THE FRONTAGE STREET DURING CONSTRUCTION PER THE VIRGINIA STATEWIDE FIRE CODE.
5. AN APPROVED WATER SUPPLY FOR FIREFIGHTING OPERATIONS SHALL BE IN PLACE AND AVAILABLE AS SOON AS COMBUSTIBLE MATERIALS ARRIVE ON SITE.
6. WASTE AND COMBUSTIBLE DEBRIS SHALL BE REMOVED FROM THE BUILDING AT THE END OF EACH DAY AND DISPOSED OF IN ACCORDANCE WITH THE VIRGINIA STATEWIDE FIRE CODE.
7. FIRE EXTINGUISHERS SHALL BE PROVIDED, WITH NOT LESS THAN ONE APPROVED FIRE EXTINGUISHER AT EACH STAIRWELL, ON ALL FLOOR LEVELS WHERE COMBUSTIBLE MATERIALS HAVE ACCUMULATED, IN EVERY STORAGE AND CONSTRUCTION SHED AND IN ARES OF SPECIAL; HAZARD, SUCH AS WHERE FLAMMABLE AND COMBUSTIBLE LIQUIDS ARE STORED OR USED, IN ACCORDANCE WITH THE VIRGINIA STATEWIDE FIRE CODE.
8. OPERATIONS INVOLVING THE USE OF CUTTING AND WELDING SHALL COMPLY WITH THE VIRGINIA STATEWIDE FIRE PREVENTION CODE AND SHALL REQUIRE A PERMIT FROM THE ALBEMARLE COUNTY FIRE MARSHAL'S OFFICE.

BUILDING CODE NOTES:
1. RETAINING WALLS GREATER THAN 3 FEET IN HEIGHT REQUIRE A SEPARATE BUILDING PERMIT. WALLS EXCEEDING 4 FEET IN HEIGHT REQUIRE A STAMPED ENGINEERED DESIGN ALSO. WALLS REQUIRE INSPECTIONS AS OUTLINED IN THE USBC.
2. ACCESSIBLE PARKING SPACES, ACCESS ISLES, AND ACCESSIBLE ROUTE SHALL BE INSTALLED IN ACCORDANCE WITH ICC ANSI A117.1-09 AND THE 2015 VIRGINIA CONSTRUCTION CODE.
3. WHERE THE FLOOD LEVEL RIMS OF PLUMBING FIXTURES ARE BELOW THE ELEVATION OF THE MANHOLE COVER OF THE NEXT UPSTREAM MANHOLE IN THE PUBLIC SEWER, THE FIXTURE SHALL BE PROTECTED BY A BACKWATER VALVE INSTALLED IN THE BUILDING DRAIN, BRANCH OF THE BUILDING DRAIN, OR HORIZONTAL BRANCH SERVING SUCH FIXTURES. PLUMBING FIXTURES HAVING FLOOD LEVEL RIMS ABOVE THE ELEVATION OF THE MANHOLE COVER OF THE NEXT UPSTREAM MANHOLE IN THE PUBLIC SEWER SHALL NOT DISCHARGE THROUGH A BACKWATER VALVE.
4. ALL ROOF DRAINS SHALL DISCHARGE IN A MANNER NOT TO CAUSE A PUBLIC NUISANCE AND NOT OVER SIDEWALKS.
5. BUILDINGS OR STRUCTURES BUILT BEFORE JANUARY 1, 1985 MUST HAVE AN ASBESTOS SURVEY PERFORMED IN ORDER TO APPLY FOR A DEMOLITION PERMIT. ASBESTOS REMOVAL PERMITS ARE REQUIRED IF POSITIVE FOR SUCH FROM ALBEMARLE COUNTY AND VDOLI. CONTACT VDOLI FOR THEIR ADDITIONAL REQUIREMENTS AND PERMITS FOR DEMOLITION PROJECTS AT 540-562-3850 x131.
6. ALL WATER, SEWER, AND FIRE LINES REQUIRE NEW INSPECTION AND TESTING PROCEDURES. THE ACSA PERFORMS ANY TESTING AND INSPECTIONS OF THE PUBLIC SEWER AND WATER MAIN(S). THE ALBEMARLE COUNTY BUILDING INSPECTIONS DEPARTMENT (ACBID) DOES A VISUAL INSPECTION AND WITNESSES THE TESTING OF THE BUILDING DRAIN, WATER SERVICE PIPE AND THE SPRINKLER LEAD-IN CONNECTION.
7. THE DEVELOPER/CONTRACTOR IS RESPONSIBLE TO RETAIN A SPECIAL INSPECTOR AS OUTLINED IN THE UPDATED ALBEMARLE COUNTY POLICY FOR SITE UTILITIES TO PERFORM THE VISUAL INSPECTION AND TESTING OF ALL UTILITIES NOT COVERED BY THE ACSA OR ACBID. THIS INCLUDES BUILDING SEWERS, WATER AND FIRE LINE BRANCHES BETWEEN THE MAIN AND THE METER(S)/BUILDING(S).
8. THE SPECIAL INSPECTOR'S REPORT MUST BE SUBMITTED AND APPROVED BY THE ALBEMARLE COUNTY ENGINEERING DEPARTMENT PRIOR TO A CERTIFICATE OF OCCUPANCY BEING ISSUED.

APPROVALS	DATE
DEPARTMENT OF COMMUNITY DEVELOPMENT	
PLANNER/ZONING	
ENGINEER	
INSPECTIONS	
ARB	
DEPARTMENT OF FIRE RESCUE	
ALBEMARLE COUNTY SERVICE AUTHORITY	
VIRGINIA DEPARMENT OF TRANSPORTATION	
HEALTH DEPARTMENT	

COMMONWEALTH OF VIRGINIA
SCOTT R. COLLINS
Lic. No. 035791
1/15/24
PROFESSIONAL ENGINEER

REVISIONS

DATE	REVISION DESCRIPTION
1/15/24	INITIAL SUBMITTAL - SITE PLAN AMENDMENT

COLLINS ENGINEERING
200 GARRETT STREET, SUITE K. - CHARLOTTESVILLE, VA 22902 - 434.293.3719

PROJECT
DUNLORA PARK - PHASE II MAJOR SITE PLAN AMENDMENT TO SPA #2

SHEET TITLE
COVER

JOB NO. 152118
SCALE AS NOTED
SHEET NO. 1

These plans and associated documents are the exclusive property of COLLINS ENGINEERING and may not be reproduced in whole or in part and shall not be used for any purpose whatsoever, inclusive, but not limited to construction, bidding, and/or construction staking without the express written consent of COLLINS ENGINEERING.

GRAPHIC SCALE

20 0 10 20 40

(IN FEET)
1 inch = 20 ft.

LEGEND

- ALBEMARLE COUNTY PRESERVED SLOPES
- ALBEMARLE COUNTY MANAGED SLOPES
- PORTION OF EX. ACCESS EASEMENT TO BE VACATED
- PORTION OF EX. DRAINAGE EASEMENT TO BE VACATED
- PORTION OF EX. UTILITY EASEMENT TO BE VACATED

SIDEWALK CURRENTLY BEING INSTALLED WITH THE DEVELOPMENT OF LOTS 29-31

10' PRIVATE DRAINAGE EASEMENT INST. #: 202200005149 TO REMAIN

350' FROM DUNLORA DRIVE TO LINDLEY LANE

DUNLORA DRIVE (SR 1177) VARIABLE WIDTH PUBLIC R/W (D.B. 4967, PG. 133)

25' E/P-E/P

VARICK STREET (D.B. 4967, PG. 133) 50' PUBLIC R/W

EXISTING 20' PUBLIC DRAINAGE EASEMENT DB 4967, PG.133 TO REMAIN

EX. 6" D.I. WATERLINE

EX. VDOT STD. CG-2 CURB

TMP 62F-04-31 LOT 31

EX. LOT

TMP 62F-04-30 LOT 30

EX. SAN. SEWER

TMP 62F-04-29 LOT 29

VARIABLE WIDTH PRIVATE ALLEY EASEMENT INST. #: 202200005149 PORTION OF EASEMENT TO REMAIN

LINDLEY LANE 21' PRIVATE R/W (INST#: 202200005149)

260' FROM RIO ROAD TO VARICK STREET

LOT LINE TO BE VACATED

EXISTING VDOT STD. CG-12 RAMP

EX. VDOT STD. CG-2 CURB

29' F/C-F/C

EX. DRAINAGE INLET

TMP 62F-04-28 LOT 28

20' PUBLIC DRAINAGE EASEMENT INST. #: 202200005149 PORTION OF EASEMENT TO REMAIN

PROPERTY LINE

VARIABLE WIDTH PRIVATE ALLEY EASEMENT INST. #: 202200005149 PORTION OF EASEMENT TO BE VACATED

EXISTING STREET TREE INSTALLED WITH RIO ROAD IMPROVEMENTS

EXISTING VDOT STD. CG-6 CURBING

EX. UNDERGROUND POWER LINE

EX. D.I. WATERLINE

TMP 62F-04-32 LOT 32 0.234 AC.

EX. ALBEMARLE COUNTY PRESERVED SLOPES

TMP 62F-04-27 LOT 27

EXISTING 20' PUBLIC DRAINAGE EASEMENT DB 4967, PG.133 TO REMAIN

EXISTING 20' ACSA SANITARY EASEMENT DB 4967, PG.133 TO REMAIN

LOT 26 TMP 62F-04-26

EX. ALBEMARLE COUNTY MANAGED SLOPES

LOT LINE TO BE VACATED

VARIABLE WIDTH PRIVATE ALLEY EASEMENT INST. #: 202200005149 PORTION OF EASEMENT TO BE VACATED

EXISTING STREET TREE INSTALLED WITH RIO ROAD IMPROVEMENTS

EXISTING 5' CONC. SIDEWALK

VARIABLE WIDTH PRIVATE UTILITY EASEMENT INST. #: 202200005149 PORTION OF EASEMENT TO BE VACATED

TMP 62F-04-A2 OPEN SPACE A-2 0.379 AC.

TMP 62F-04-33 LOT 33 0.189 AC.

TMP 62F-04-25 LOT 25

RIO ROAD (SR 631) VARIABLE WIDTH PUBLIC R/W

TEMPORARY GRADING EASEMENT FOR PUBLIC USE INST. #: 202200005149 TO BE VACATED

EX. SWM FACILITY

VARIABLE WIDTH PUBLIC SWM FACILITY MAINTENANCE EASEMENT INST. #: 202200005149 TO REMAIN

EXISTING STREET TREE INSTALLED WITH RIO ROAD IMPROVEMENTS

EX. UTILITY COMMUNICATION PEDESTALS

LOT LINE TO BE VACATED

TMP 62F-04-24 LOT 24

20' PUBLIC DRAINAGE EASEMENT INST. #: 202200005149 PORTION OF EASEMENT TO BE VACATED

EX. RETAINING WALL

EXISTING VDOT STD. CG-6 CURBING

LOT 34 0.208 AC. TMP 62F-04-34

EX. SWM FOREST AND OPEN SPACE EASEMENT DB. 4967, PG.133

TMP 62F-04-23 LOT 23

EXISTING 5' CONC. SIDEWALK

EX. 15' POWER EASEMENT

EX. ALBEMARLE COUNTY MANAGED SLOPES

EX. ALBEMARLE COUNTY PRESERVED SLOPES

N/F LAWRENCE E. MARTIN, JR. PARCEL: 61-165C (D.B. 4552, PG. 15)

TMP 62F-04-22 LOT 22

MARIN COURT 54' PUBLIC R/W (D.B. 4967, PG. 133)

LOT 1 LOT 2 LOT 3 LOT 4 LOT 5 LOT 6 LOT 7 LOT 8 LOT 11 LOT 12 LOT 13 LOT 14

CLUB DUN PARCEL (D.B. 357

SCOTT R. COLLINS
Lic. No. 035791
1/15/24
COMMONWEALTH OF VIRGINIA
PROFESSIONAL ENGINEER

REVISIONS

DATE	REVISION DESCRIPTION
1/15/24	INITIAL SUBMITTAL - SITE PLAN AMENDMENT

COLLINS ENGINEERING
200 GARRETT STREET, SUITE K. - CHARLOTTESVILLE, VA 22902 - 434.293.3719

PROJECT
DUNLORA PARK - PHASE II MAJOR SITE PLAN AMENDMENT TO SPA #2

SHEET TITLE
EXISTING CONDITIONS

JOB NO. 152118
SCALE 1" = 20'
SHEET NO. 2

These plans and associated documents are the exclusive property of COLLINS ENGINEERING and may not be reproduced in whole or in part and shall not be used for any purpose whatsoever, inclusive, but not limited to construction, bidding, and/or construction staking without the express written consent of COLLINS ENGINEERING.

NOTE: THE ASTERISK INDICATES THE PROPOSED AFFORDABLE UNITS. THESE TWO LOTS (LOT 36 & LOT 40) ARE TWO-FAMILY LOTS. BOTH UNITS ON EACH LOT WILL BE AFFORDABLE UNITS. THE AFFORDABILITY REQUIREMENTS FOR THESE UNITS SHALL COMPLY WITH ALBEMARLE COUNTY AFFORDABLE HOUSING REQUIREMENTS.

LOT AREA CHART

LOT NUMBER	LOT AREA	BUILDABLE AREA
LOT 32	2,101 sf	1,395 sf
LOT 33	1,682 sf	1,380 sf
LOT 34	1,690 sf	1,390 sf
LOT 35	2,239 sf	1,524 sf
LOT 36	2,933 sf	2,086 sf
LOT 37	1,920 sf	1,618 sf
LOT 38	1,965 sf	1,662 sf
LOT 39	1,986 sf	1,681 sf
LOT 40	3,787 sf	2,799 sf



GENERAL CONSTRUCTION NOTES:

1. CONTRACTOR SHALL VERIFY ALL ROAD CONNECTIONS, INCLUDING RECENTLY CONSTRUCTED AREAS, VERTICALLY AND HORIZONTALLY PRIOR TO CONSTRUCTION AND SHALL NOTIFY ENGINEER OF ANY DISCREPANCIES.
2. CONTRACTOR SHALL PROVIDE ENGINEER SURVEY WORKSHEETS OF ALL ROADWAYS, MANHOLE TOPS AND DRAINAGE STRUCTURES PRIOR TO INSTALLATION OF E/P, DRAINAGE, OR UTILITIES TO COLLINS ENGINEERING FOR REVIEW AND APPROVAL PRIOR TO CONSTRUCTION. COLLINS ENGINEERING SHALL VERIFY ALL SURVEY SHEETS TO ENSURE POSITIVE DRAINAGE AND PROPER ELEVATIONS FOR CONSTRUCTION.
3. CONTRACTOR SHALL CONFIRM ALL UTILITY, DRAINAGE, AND ROAD CONNECTIONS, AND SHALL NOTIFY ENGINEER OF ANY TIE-IN ISSUES OR DISCREPANCIES.
4. ALL PAVEMENT SHALL BE CAPABLE OF SUPPORTING FIRE APPARATUS WEIGHING 85,000 LBS.
5. CONTRACTOR SHALL ENSURE ALL ON-SITE UTILITIES, ABOVE AND BELOW GROUND, SERVICING ADJACENT PROPERTIES SHALL CONTINUE TO SERVICE THE ADJACENT PROPERTIES THROUGHOUT CONSTRUCTION AND UPON COMPLETION OF THE PROJECT TO THE FULLEST EXTENT POSSIBLE.
6. SEE EXISTING CONDITIONS SHEET FOR COMPLETE PROJECT BOUNDARY DIMENSIONS AND METES AND BOUNDS.
7. ③REPRESENTS ONE PROPOSED PARKING SPACE
8. CURB RADII SHOWN, REPRESENTED WITH AN 'R', DIMENSION THE FACE OF CURB.
9. OVERHEAD WIRING OR OTHER OBSTRUCTIONS SHALL BE HIGHER THAN 13'-6".
10. VISIBILITY OF ALL MECHANICAL EQUIPMENT FROM THE ENTRANCE CORRIDOR SHALL BE ELIMINATED. ALL MECHANICAL EQUIPMENT SHALL BE SCREENED FROM THE ENTRANCE CORRIDOR.
11. ALL RETAINING WALLS GREATER THAN 30" IN HEIGHT REQUIRE HANDRAILS. ALL RETAINING WALLS GREATER THAN 3 FEET IN HEIGHT REQUIRE A SEPARATE BUILDING PERMIT. WALLS EXCEEDING 4 FEET IN HEIGHT REQUIRE A STAMPED ENGINEERED DESIGN FOR THE WALLS SYSTEM.
12. BUILDINGS OR STRUCTURES BUILT BEFORE JANUARY 1, 1985 MUST HAVE AN ASBESTOS SURVEY PERFORMED IN ORDER TO APPLY FOR A DEMOLITION PERMIT. ASBESTOS REMOVAL PERMITS ARE REQUIRED IF POSITIVE FOR SUCH. CONTACT VDOLI FOR ADDITIONAL REQUIREMENTS AND PERMITS FOR DEMOLITION PROJECTS.
13. ALL PRIVATE TRAVELWAYS SHALL BE OWNED AND MAINTAINED BY THE APARTMENT COMPLEX. NO PUBLIC AGENCY, INCLUDING VDOT AND THE COUNTY OF ALBEMARLE WILL BE RESPONSIBLE FOR MAINTAINING THE TRAVELWAYS WITHIN THE APARTMENT COMPLEX.
14. ALL PUBLIC WATER AND SANITARY SEWER FACILITIES SHALL BE DEDICATED TO PUBLIC USE AND THE EASEMENTS FOR THOSE FACILITIES, AS IDENTIFIED ON THIS PLAN, SHALL BE DEDICATED TO THE ALBEMARLE COUNTY SERVICE AUTHORITY. THE ONSITE SANITARY SEWER IS A PRIVATE UTILITY AND NO EASEMENTS ARE REQUIRED .
15. ALL PRIVATE YARD DRAIN DESIGN INFORMATION (INCLUDING INVERTS OF THE SYSTEM) SHALL BE PROVIDED BY THE CIVIL ENGINEER DURING CONSTRUCTION.
16. EACH DWELLING UNIT WILL HAVE THEIR OWN TRASH BIN.

CONSTRUCTION FIRE PREVENTION NOTES:

1. A KNOX BOX WILL BE REQUIRED ON THE BUILDING. THE LOCATION OF THE KNOX BOX CAN BE COORDINATED WITH THE FIRE MARSHAL'S OFFICE.
2. SMOKING SHALL BE PROHIBITED IN AREAS WHERE SMOKING MAKES CONDITIONS SUCH AS TO MAKE SMOKING A HAZARD AND THESE AREAS SHALL BE DESIGNATED WITH NO SMOKING SIGNS PER VIRGINIA STATEWIDE FIRE PREVENTION CODE.
3. AREAS WHERE SMOKING CAN OCCUR, SHALL HAVE APPROPRIATE RECEPTACLES FOR DISCARDED SMOKING MATERIALS PER VIRGINIA STATEWIDE FIRE PREVENTION CODE.
4. PER THE VIRGINIA STATEWIDE FIRE PREVENTION CODE, VEHICULAR ACCESS FOR FIREFIGHTING SHALL BE PROVIDED AT ALL CONSTRUCTION AND DEMOLITION SITES, PROVIDE ACCESS TO WITHIN 100 FT. OF TEMPORARY OR PERMANENT FIRE DEPARTMENT CONNECTIONS, AND HAVE NO OVERHEAD WIRING OR OTHER OVERHEAD OBSTRUCTIONS LOWER THAN 13FT 6 INCHES; THIS ACCESS MAY BE VIA PERMANENT OR TEMPORARY ROAD, BUT SHALL BE CAPABLE OF SUPPORTING FIRE APPARATUS IN ALL WEATHER CONDITIONS.
5. CONTRACTOR SHALL ENSURE THE STREET NUMBERS ARE ALWAYS VISIBLE FROM THE FRONTAGE STREET DURING CONSTRUCTION PER THE VIRGINIA STATEWIDE FIRE CODE.
6. AN APPROVED WATER SUPPLY FOR FIREFIGHTING OPERATIONS SHALL BE IN PLACE AND AVAILABLE AS SOON AS COMBUSTIBLE MATERIALS ARRIVE ON SITE.
7. WASTE AND COMBUSTIBLE DEBRIS SHALL BE REMOVED FROM THE BUILDING AT THE END OF EACH DAY AND DISPOSED OF IN ACCORDANCE WITH THE VIRGINIA STATEWIDE FIRE CODE.
8. FIRE EXTINGUISHERS SHALL BE PROVIDED, WITH NOT LESS THAN ONE APPROVED FIRE EXTINGUISHER AT EACH STAIRWELL, ON ALL FLOOR LEVELS WHERE COMBUSTIBLE MATERIALS HAVE ACCUMULATED, IN EVERY STORAGE AND CONSTRUCTION SHED AND IN ARES OF SPECIAL; HAZARD, SUCH AS WHERE FLAMMABLE AND COMBUSTIBLE LIQUIDS ARE STORED OR USED, IN ACCORDANCE WITH THE VIRGINIA STATEWIDE FIRE CODE.
9. OPERATIONS INVOLVING THE USE OF CUTTING AND WELDING SHALL COMPLY WITH THE VIRGINIA STATEWIDE FIRE PREVENTION CODE AND SHALL REQUIRE A PERMIT FROM THE ALBEMARLE COUNTY FIRE MARSHAL'S OFFICE.

COMMONWEALTH OF VIRGINIA
SCOTT R. COLLINS
Lic. No. 035791
PROFESSIONAL ENGINEER
1/15/24

REVISIONS

DATE	REVISION DESCRIPTION
1/15/24	INITIAL SUBMITTAL - SITE PLAN AMENDMENT

COLLINS ENGINEERING
200 GARRETT STREET, SUITE K. - CHARLOTTESVILLE, VA 22902 - 434.293.3719

PROJECT
DUNLORA PARK - PHASE II MAJOR SITE PLAN AMENDMENT TO SPA #2

SHEET TITLE
SITE PLAN

JOB NO. 152118

SCALE 1" = 20'

SHEET NO. 3

These plans and associated documents are the exclusive property of COLLINS ENGINEERING and may not be reproduced in whole or in part and shall not be used for any purpose whatsoever, inclusive, but not limited to construction, bidding, and/or construction staking without the express written consent of COLLINS ENGINEERING.

STEEP SLOPE NOTES:
1. FOR CONSTRUCTED SLOPES, THE MAXIMUM STEEPNESS IS 2:1 (HORIZONTAL:VERTICAL).
2. FOR GRASS STABILIZATION ON CONSTRUCTED SLOPES, THE MAXIMUM STEEPNESS IS 3:1. SLOPES STEEPER THAN 3:1 MUST BE PERMANENTLY STABILIZED WITH LANDSCAPING VEGETATION HARDIER THAN GRASS, WHICH WILL NOT REQUIRE MOWING.

ACSA NOTES:
1. ALL WATER METERS SHALL BE ACSA APPROVED TRAFFIC-RATED METER BOXES.

DRAINAGE DESCRIPTIONS

STR. NO.	PIPE INFORMATION						INLET INFORMATION			
	DIA. (in.)	LENGTH* (ft.)	SLOPE (%)	INVERT IN	INVERT OUT	MATERIAL	INLET TYPE	Curb Type	SLOT LENGTH	RIM ELEVATION
8							DI-3C	CG-2	8	453.93
7	15	52.19	1.07%	448.81	448.25	HDPE				
6							MH-1	-	-	454.14
5	15	69.87	1.04%	448.15	447.42	HDPE				
4							MH-1	-	-	453.81
3	15	25.69	5.14%	447.32	446.00	HDPE				
2							DI-3B	CG-2	6	452.83
1	15	14.00	6.07%	443.78	442.93	HDPE				
1B							MH-1	CG-2	-	446.77
1A	15	16.55	5.02%	442.83	442.00	HDPE				
D							12" YARD INLET	-	-	465.50
D-C	8	39.00	4.49%	462.50	460.75	HDPE				
C							12" YARD INLET	-	-	463.75
C-B	8	33.40	2.25%	460.75	460.00	HDPE				
B							12" YARD INLET	-	-	463.50
B-A	8	38.10	18.37%	460.00	453.00	HDPE				
A							8" CLEAN OUT	-	-	456.00
A-STR 8	8	62.50	3.20%	453.00	451.00	HDPE				
K							12" YARD INLET	-	-	465.50
K-J	8	22.70	1.10%	462.50	462.25	HDPE				
J							12" YARD INLET	-	-	465.25
J-I	8	15.80	1.58%	462.25	462.00	HDPE				
I							12" YARD INLET	-	-	465.00
I-H	8	38.10	1.31%	462.00	461.50	HDPE				
H							12" YARD INLET	-	-	465.50
H-G	8	39.60	8.84%	461.50	458.00	HDPE				
G							8" CLEAN OUT	-	-	461.00
G-F	8	17.60	28.41%	458.00	453.00	HDPE				
F							12" YARD INLET	-	-	456.00
F-STR 2	8	58.60	5.12%	453.00	450.00	HDPE				

DUNLORA DRIVE (SR 1177)
VARIABLE WIDTH PUBLIC R/W
(D.B. 4967, PG. 133)
POSED SPEED LIMIT=25 MPH

EXISTING 6" D.I. W/L
EXISTING 20' DRAINAGE EASEMENT
5' PRIVATE SANITARY LATERAL EASEMENT (LOT 31) INST. #: 202200005149
10' PRIVATE DRAINAGE EASEMENT INST. #: 202200005149
PROPOSED UNDERGROUND ELECTRIC
PROPOSED 15' UNDERGROUND ELECTRIC EASEMENT
PROPOSED CONNECTION TO EXISTING 6" D.I. WATERLINE AT EXISTING 6"x6" TEE, INSTALL 6" G.V.
EXISTING FIRE HYDRANT & 6" G.V.
EXISTING WATERLINE
PROPOSED SANITARY CONNECTION AT EXISTING MH DnlraPk-2-7 (Ex.)
DnlraPk-2-7 (Ex.)
VARICK STREET
(D.B. 4967, PG. 133)
54' PUBLIC R/W
LINDLEY LANE
21' PRIVATE R/W
(INST#: 202200005149)
EXISTING 20' PUBLIC DRAINAGE EASEMENT INST.#: 202200005149
PROPOSED 20' PRIVATE UTILITY ESMT.
PROPOSED VAR. WIDTH PRIVATE UTILITY ESMT.
EX. 5' PRIVATE SANITARY LATERAL EASEMENT (LOT 29) INST. #: 202200005149
NEW 6" D.I. WATERLINE
CO A
LINDLEY LANE (PRIVATE ALLEY)
PROPOSED 22' ACCESS EASEMENT
YD B
YD C
YD D
YD J
YD K
YD I
YD F
YD H
CO G
5' PRIVATE DRAINAGE EASEMENT
6"-45° BEND
(P) 6" PVC SANITARY SEWER LATERAL W/ TRAFFIC RATED TOP (TYP.)
PROPOSED 20' PRIVATE STORM SEWER ESMT.
EXISTING DITCH OUTFALL TO STREAM
PROPOSED PRIVATE STORM SEWER
EXISTING DRY GRASS RETENTION SWM FACILITY. SEE WPO AMENDMENT #6 PLAN FOR UPDATES TO SWM FACILITY DESIGN
PROPOSED SEGMENTED RETAINING WALL (MAX HEIGHT=3')
(P) ⅝" WATER METER (TYP.)
EXISTING UNDERGROUND TELECOMMUNICATIONS
EXISTING WALL
RIO ROAD (SR 631)
VARIABLE WIDTH PUBLIC R/W
6"-12.25° BEND
EXISTING SWM FACILITY
VAR. WIDTH PUBLIC SWM FACILITY MAINTENANCE EASEMENT INST. #:202200005149
EXISTING SEGMENTED RETAINING WALL (HEIGHT TO BE INCREASED WHERE SHOWN ON THIS PLAN)
PRESERVED STEEP SLOPES
(P) 6" PVC SANITARY SEWER LATERAL WITH TRAFFIC RATED TOP (TYP.)
VDOT STD. EW-1
EXISTING EASEMENT
EXISTING TELECOMMUNICATION BOXES
VAR. WIDTH PRIVATE DRAINAGE EASEMENT
(P) SEGMENTED RETAINING WALL (MAX. HT.=6')
6"-90° BEND
(P) FIRE HYDRANT ASSEMBLY WITH 6" GATE VALVE
MANAGED STEEP SLOPES
THESE SLOPES HAVE BEEN DETERMINED LESS THAN 25% PER NEW TOPOGRAPHIC SURVEY AND SLOPES EXHIBIT PROVIDED BY ROUDABUSH, GALE, AND ASSOCIATES DATED MAY 18, 2017, AS PERMITTED UNDER SECTION 30.7.4(b)(h)
MARIN COURT
54' PUBLIC R/W
(D.B. 4967, PG. 133)
LOT 1 LOT 2 LOT 3 LOT 4 LOT 5 LOT 6 LOT 11 LOT 12 LOT 13 LOT 14 LOT 22 LOT 23 LOT 24 LOT 25 LOT 26 LOT 27 LOT 28 LOT 29 LOT 30 LOT 32 LOT 33 LOT 34 LOT 35 LOT 36 LOT 37 LOT 38 LOT 39 LOT 40

GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)
1 inch = 20 ft.

COMMONWEALTH OF VIRGINIA
SCOTT R. COLLINS
Lic. No. 035791
PROFESSIONAL ENGINEER
1/15/24

REVISIONS

DATE	REVISION DESCRIPTION
1/15/24	INITIAL SUBMITTAL - SITE PLAN AMENDMENT

COLLINS ENGINEERING
200 GARRETT STREET, SUITE K. - CHARLOTTESVILLE, VA 22902 - 434.293.3719

PROJECT
DUNLORA PARK - PHASE II MAJOR SITE PLAN AMENDMENT TO SPA #2

SHEET TITLE
GRADING & UTILITY PLAN

JOB NO. 152118
SCALE 1"=20'
SHEET NO. 4

These plans and associated documents are the exclusive property of COLLINS ENGINEERING and may not be reproduced in whole or in part and shall not be used for any purpose whatsoever, including, but not limited to construction, bidding, and/or construction staking without the express written consent of COLLINS ENGINEERING.

GENERAL CONSTRUCTION NOTES FOR STREETS:

1. CONSTRUCTION INSPECTION OF ALL PROPOSED ROADS WITHIN THE DEVELOPMENT WILL BE MADE BY THE COUNTY. THE CONTRACTOR MUST NOTIFY THE DEPARTMENT OF COMMUNITY DEVELOPMENT (296-5832) 48 HOURS IN ADVANCE OF THE START OF CONSTRUCTION.
2. UPON COMPLETION OF FINE GRADING AND PREPARATION OF THE ROADBED SUBGRADE, THE CONTRACTOR SHALL HAVE CBR TESTS PERFORMED ON THE SUBGRADE SOIL. THREE (3) COPIES OF THE TEST RESULTS SHALL BE SUBMITTED TO THE COUNTY. IF A SUBGRADE SOIL CBR OF 10 OR GREATER IS NOT OBTAINABLE, A REVISED PAVEMENT DESIGN SHALL BE MADE BY THE DESIGN ENGINEER AND SUBMITTED WITH THE TEST RESULTS FOR APPROVAL.
3. SURFACE DRAINAGE AND PIPE DISCHARGE MUST BE RETAINED WITHIN THE PUBLIC RIGHT-OF-WAY OR WITHIN EASEMENTS PRIOR TO ACCEPTANCE BY THE COUNTY. ALL DRAINAGE OUTFALL EASEMENTS ARE TO BE EXTENDED TO A BOUNDARY LINE OR A NATURAL WATERCOURSE.
4. GUARDRAIL LOCATIONS ARE APPROXIMATE. EXACT LENGTH, LOCATION AND APPROPRIATE END TREATMENTS WILL BE FIELD VERIFIED AT THE TIME OF CONSTRUCTION. ADDITIONAL GUARDRAIL MAY BE REQUIRED AT LOCATIONS NOT SHOWN WHEN, IN THE OPINION OF THE COUNTY ENGINEER, OR DESIGNEE, IT IS DEEMED NECESSARY. WHEN GUARDRAIL IS REQUIRED, IT SHALL BE INSTALLED FOUR (4) FEET OFFSET FROM THE EDGE OF PAVEMENT TO THE FACE OF GUARDRAIL, AND ROADWAY SHOULDER WIDTHS SHALL BE INCREASED TO SEVEN (7) FEET.
5. WHERE URBAN CROSS SECTIONS ARE INSTALLED, ALL RESIDENTIAL DRIVEWAY ENTRANCES SHALL CONFORM TO VDOT CG-9(A, B OR C).
6. WHERE RURAL CROSS SECTIONS ARE INSTALLED, ALL RESIDENTIAL DRIVEWAY ENTRANCES SHALL CONFORM TO VDOT STANDARD PE-1.
7. COMPLIANCE WITH THE MINIMUM PAVEMENT WIDTH, SHOULDER WIDTH AND DITCH SECTIONS, AS SHOWN ON THE TYPICAL PAVEMENT SECTION DETAIL, SHALL BE STRICTLY ADHERED TO.
8. ROAD PLAN APPROVAL FOR SUBDIVISIONS IS SUBJECT TO FINAL SUBDIVISION PLAT VALIDATION. SHOULD THE FINAL PLAT FOR THIS PROJECT EXPIRE PRIOR TO SIGNING AND RECORDATION, THEN APPROVAL OF THESE PLANS SHALL BE NULL AND VOID.
9. ALL SIGNS OR OTHER REGULATORY DEVICES SHALL CONFORM WITH THE VIRGINIA MANUAL FOR UNIFORM TRAFFIC CONTROL DEVICES AND THE ALBEMARLE COUNTY ROAD NAMING AND PROPERTY NUMBERING ORDINANCE AND MANUAL.
10. TRAFFIC CONTROL OR OTHER REGULATORY SIGNS OR BARRICADES SHALL BE INSTALLED BY THE DEVELOPER WHEN, IN THE OPINION OF THE COUNTY ENGINEER, OR DESIGNEE, THEY ARE DEEMED NECESSARY IN ORDER TO PROVIDE SAFE AND CONVENIENT ACCESS.
11. THE SPEED LIMITS TO BE POSTED ON SPEED LIMIT SIGNS ARE 5 MPH BELOW THE DESIGN SPEED, OR AS DETERMINED BY VDOT FOR PUBLIC ROADS.
12. VDOT STANDARD CD-1 OR CD-2 CROSS-DRAINS UNDER TO BE INSTALLED UNDER THE SUBBASE MATERIAL AT ALL CUT AND FILL TRANSITIONS AND GRADE SAG POINTS AS SHOWN ON THE ROAD PROFILES.
13. A VIDEO CAMERA INSPECTION IS REQUIRED FOR ALL STORM SEWERS AND CULVERTS THAT ARE DEEMED INACCESSIBLE TO VDOT OR COUNTY INSPECTIONS. THE VIDEO INSPECTION SHALL BE CONDUCTED IN ACCORDANCE WITH VDOT'S VIDEO CAMERA INSPECTION PROCEDURE AND WITH A VDOT OR COUNTY INSPECTOR PRESENT.

GENERAL ROAD NOTES:

GRADING

1. THE LATEST EDITION OF THE ROAD & BRIDGE SPECIFICATIONS, THE ROAD & BRIDGE STANDARDS OF THE VIRGINIA DEPARTMENT OF TRANSPORTATION SPECIFICATIONS SHALL GOVERN THE MATERIAL AND CONSTRUCTION METHODS OF THIS PROJECT.
2. WHERE UNSUITABLE MATERIAL IS ENCOUNTERED IN THE ROADWAY, IT SHALL BE REMOVED FROM THE ENTIRE ROAD RIGHT OF WAY WIDTH AND REPLACED WHERE NECESSARY WITH SUITABLE MATERIAL TO THE SATISFACTION OF THE ENGINEER.
3. ALL GROWTH OF TREES AND VEGETATION SHALL BE CLEARED AND GRUBBED FOR THE ENTIRE EASEMENT. OTHER TREES AND VEGETATION WHICH OBSTRUCT SIGHT DISTANCES AT ROAD INTERSECTIONS SHALL BE REMOVED.
4. ALL VEGETATION AND OVERBURDEN TO BE REMOVED FROM SHOULDER TO SHOULDER PRIOR TO THE CONSTRUCTION OF THE SUBGRADE.

DRAINAGE

1. ALL PIPE CULVERTS, EXCEPT PRIVATE ENTRANCES, SHOWN HEREON ARE TO BE RCP WITH A MINIMUM COVER OF ONE (1) FOOT.
2. STANDARD UNDERDRAINS (CD-1 OR CD-2 OR UD-4'S) TO BE PROVIDED AS INDICATED ON THE PLANS, OR WHERE FIELD CONDITIONS INDICATE.
3. ALL DRIVEWAY ENTRANCE PIPES SHALL BE A MINIMUM OF TWENTY (20) FEET IN LENGTH AND HAVE A MINIMUM DIAMETER OF FIFTEEN (15) INCHES AND SHALL BE PLACED IN ACCORDANCE WITH THE VIRGINIA DEPARTMENT OF TRANSPORTAION SPECIFICATIONS UNLESS OTHERWISE NOTED ON PLANS.
4. ALL DRAINAGE EASEMENT SHALL BE CLEARED AND GRADED TO THE SATISFACTION OF THE ENGINEER. DRAINAGE EASEMENTS SHALL EXTEND TO A POINT DEEMED AS NATURAL WATER COURSE.

PAVEMENT

1. AN ACTUAL COPY OF THE CBR REPORT IS TO BE SUBMITTED PRIOR TO THE PLACEMENT OF THE AGGREGATE BASE MATERIAL. IF THE SSV VALUES ARE LESS THAN 10, THE DEVELOPER WILL BE REQUIRED TO SUBMIT FOR ENGINEERS APPROVAL THE PROPOSED METHOD OF CORRECTION.
2. SUBGRADE MUST BE APPROVED BY THE ENGINEER FOR GRADE, TEMPLATE AND COMPACTION BEFORE BASE IS PLACED.
3. TEST REPORTS ON SELECT MATERIALS MUST BE SUBMITTED SHOWING THE MATERIAL MEETS REQUIRED GRADATION FOR TYPE I, II, OR III PRIOR TO PLACING AGGREGATE BASE.
4. THE REQUIREMENTS TO PUGMILL AGGREGATE BASE WILL BE WAIVED IN THE EVENT THAT THE SURFACE COURSE IS BEGINNING AT THE COMPLETION OF THE INSTALLATION OF THE AGGREGATE BASE. IN THE EVENT THAT THE SURFACE COURSE IS APPLIED PRIOR TO 60 DAYS, THE PUGMILL REQUIREMENT WILL APPLY.

ALBEMARLE COUNTY

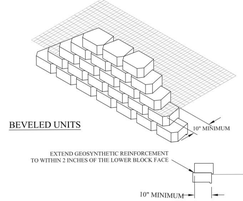
GENERAL CONSTRUCTION NOTES

1. PRIOR TO ANY CONSTRUCTION WITHIN ANY EXISTING PUBLIC RIGHT-OF-WAY, INCLUDING CONNECTION TO ANY EXISTING ROAD, A PERMIT SHALL BE OBTAINED FROM THE VIRGINIA DEPARTMENT OF TRANSPORTATION (VDOT). THIS PLAN AS DRAWN MAY NOT ACCURATELY REFLECT THE REQUIREMENTS OF THE PERMIT. WHERE ANY DISCREPANCIES OCCUR THE REQUIREMENTS OF THE PERMIT SHALL GOVERN.
2. ALL MATERIALS AND CONSTRUCTION METHODS SHALL CONFORM TO CURRENT SPECIFICATIONS AND STANDARDS OF VDOT UNLESS OTHERWISE NOTED.
3. EROSION AND SILTATION CONTROL MEASURES SHALL BE PROVIDED IN ACCORDANCE WITH THE APPROVED EROSION CONTROL PLAN AND SHALL BE INSTALLED PRIOR TO ANY CLEARING, GRADING OR OTHER CONSTRUCTION.
4. ALL SLOPES AND DISTURBED AREAS ARE TO BE FERTILIZED, SEEDED, AND MULCHED.
5. THE MAXIMUM ALLOWABLE SLOPE IS 2:1 (HORIZONTAL:VERTICAL). WHERE REASONABLY OBTAINABLE, LESSER SLOPES OF 3:1 OR BETTER ARE TO BE ACHIEVED.
6. PAVED, RIP-RAP OR STABILIZATION MAT LINED DITCH MAY BE REQUIRED WHEN IN THE OPINION OF THE COUNTY ENGINEER, OR DESIGNEE, IT IS DEEMED NECESSARY IN ORDER TO STABILIZE A DRAINAGE CHANNEL.
7. ALL TRAFFIC CONTROL SIGNS SHALL CONFORM WITH THE VIRGINIA MANUAL FOR UNIFORM TRAFFIC CONTROL DEVICES.
8. UNLESS OTHERWISE NOTED, ALL CONCRETE PIPE SHALL BE REINFORCED CONCRETE PIPE-CLASS III.
9. ALL EXCAVATION FOR UNDERGROUND PIPE INSTALLATION MUST COMPLY WITH OSHA STANDARDS FOR THE CONSTRUCTION INDUSTRY (29 CFR PART 1926).

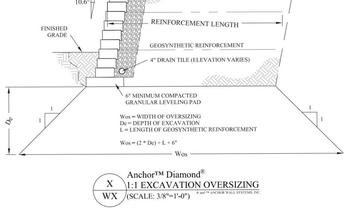
PROPOSED STATE MAINTAINED ROADS:

NOTE: MANDATORY INSPECTIONS AT THE FOLLOWING PHASES ARE REQUIRED FOR ROADS THAT ARE PROPOSED TO BE STATE MAINTAINED

i. INSTALLATION OF ANY ENCLOSED DRAINAGE SYSTEM BEFORE IT IS COVERED.
ii. INSTALLATION OF ANY ENCLOSED UTILITY PLACEMENTS WITHIN THE RIGHT-OF-WAY BEFORE BEING COVERED.
iii. CONSTRUCTION OF THE CUTS AND FILLS, INCLUDING FIELD DENSITY TESTS, BEFORE PLACEMENT OF ROADBED BASE MATERIALS.
iv. A FINAL PAVEMENT DESIGN, BASED ON ACTUAL SOIL CHARACTERISTICS AND CERTIFIED TESTS, SHALL BE COMPLETED AND APPROVED BEFORE THE PAVEMENT STRUCTURE IS PLACED.
v. PLACEMENT OF BASE MATERIALS, INCLUDING STONE DEPTHS, CONSISTENT WITH THE APPROVED PAVEMENT DESIGN, PRIOR TO PLACEMENT OF THE PAVING COURSE OR COURSES, FOLLOWED BY FIELD DENSITY AND MOISTURE TESTS AND THE PLACEMENT OF A PAVING COURSE AS SOON AS POSSIBLE.
vi. CONSTRUCTION OF PAVEMENT, INCLUDING DEPTH AND DENSITY, UPON COMPLETION AS PART OF THE FINAL INSPECTION.
vii. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING VDOT A MINIMUM OF ONE WEEK PRIOR TO EACH OF THE ABOVE PHASES OF CONSTRUCTION TO SCHEDULE AN INSPECTION.
viii. FAILURE OF THE CONTRACTOR TO SCHEDULE THESE INSPECTIONS WILL REQUIRE ADDITIONAL TESTING OF THE ROADS AT THE DISCRETION OF VDOT OR MAY LEAD TO THE ROADS NOT BEING ELIGIBLE FOR STATE MAINTENANCE.



Anchor™ Diamond® REINFORCEMENT CONNECTION (NOT TO SCALE)



Anchor™ Diamond® 1:1 EXCAVATION OVERSIZING (SCALE: 3/8"=1'-0")



Anchor™ Diamond® TYPICAL BASE PREPARATION (NOT TO SCALE)

SEGMENTED WALL DETAIL
DIAMOND PRO (TAN)
NOT TO SCALE

Builder Cast | 1024BK



NOTE: LIGHTING SPECS FOR FRONT PORCH LIGHT AND REAR GARAGE LIGHT. LIGHTS SHALL BE EQUIVALENT TO THIS FIXTURE. LUMENS SHALL RANGE FROM 1100 LUMENS TO 2500 LUMENS. LUMENS SHALL NOT EXCEED 3,000 LUMENS.



Measurements:

Height	Width	Extension
12.00"	8.00"	7.00"
BP Height	BP Width	HCO
4.50"	4.50"	2.00"

Hanging Weight: 2.55 lb

Lamping:

Incandescent MB	1,150 Rated Lumens
100 60W MB	Color Temperature
60 total watt	2,500 Rated Life
Dimmable : Standard	

Shipping:

Carton Weight	Carton Width	Carton Height	Carton Length
3.23 lb	8.27"	13.58"	8.86"
Master Pack Weight	Master Pack Width	Master Pack Height	Master Pack Length
22.02 lb	18.50"	14.37"	25.79"
Master Pack Qty	UPC	UPS	
6.0000	783209510415	Yes	

Finish: Black BK

Glass: Clear CL

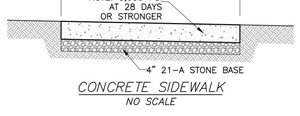
Material: Die Cast Aluminum

Certification: Wet Location, Location

Additional: MB (Not Included)

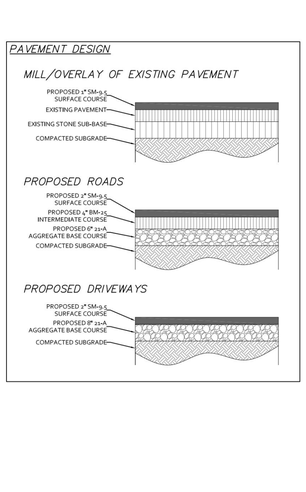
MAXIM LIGHTING INTERNATIONAL | 253 NORTH VINELAND AVE. | CITY OF INDUSTRY, CA 91746 | T. 626.956.4200 | F. 626.956.4225 | maximlighting.com | #MaximLighting

Always consult a qualified, licensed electrician before installation of any products...



CONCRETE SIDEWALK
NO SCALE

PAVEMENT DESIGN



DEVELOPMENT SITE MAP

SCALE: 1" = 30'

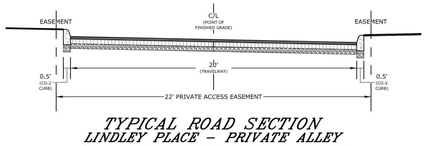


Table 4: Pavement Design (VDOT Pavement Design Guide)

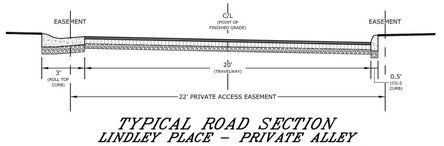
Pavement Design RF= 1.0

Location	ADT	HCV	Design ADT	CBR	SSV	Dr	Surface	h	a	Base	b	a	Sub-base	h	a	Dp
Alley A - Lindley Place	64	0	64	4	4	5.19	SM-9.5	2	2.25	BM-25	0	2.15	21A	8	0.6	9.30

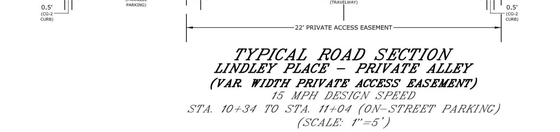
NOTE: CBRS SHALL BE SUBMITTED TO THE CIVIL ENGINEER AND VDOT ALONG WITH UPDATED PAVEMENT DESIGN WORKSHEETS TO FINALIZE PAVEMENT DEPTHS PRIOR TO PLACEMENT OF THE FINAL ASPHALT.



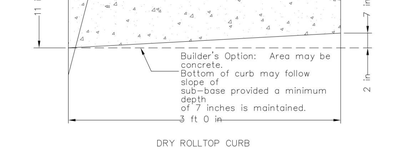
TYPICAL ROAD SECTION
LINDLEY PLACE - PRIVATE ALLEY
(VAR. WIDTH PRIVATE ACCESS EASEMENT)
15 MPH DESIGN SPEED
STA. 10+00 TO STA. 12+74 (2% CROSS SLOPE)
STA. 12+74 TO STA 13+00 (5% CROSS SLOPE)
(SCALE: 1"=5')



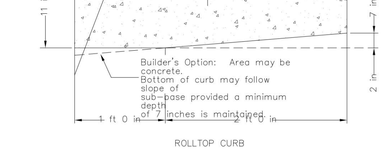
TYPICAL ROAD SECTION
LINDLEY PLACE - PRIVATE ALLEY
(VAR. WIDTH PRIVATE ACCESS EASEMENT)
15 MPH DESIGN SPEED
STA. 11+04 TO STA. 13+00 (ROLL TOP CURB ADJACENT TO UNITS WHERE INDICATED)
(SCALE: 1"=5')



TYPICAL ROAD SECTION
LINDLEY PLACE - PRIVATE ALLEY
(VAR. WIDTH PRIVATE ACCESS EASEMENT)
15 MPH DESIGN SPEED
STA. 10+34 TO STA. 11+04 (ON-STREET PARKING)
(SCALE: 1"=5')



DRY ROLLTOP CURB



ROLLTOP CURB

COMMONWEALTH OF VIRGINIA
SCOTT R. COLLINS
Lic. No. 035791
PROFESSIONAL ENGINEER
1/15/24

REVISIONS

DATE	REVISION DESCRIPTION
1/15/24	INITIAL SUBMITTAL - SITE PLAN AMENDMENT

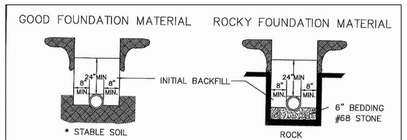
COLLINS ENGINEERING
200 GARRETT STREET, SUITE K - CHARLOTTESVILLE, VA 22902 - 434.293.3719

PROJECT: DUNLORA PARK - PHASE II MAJOR SITE PLAN AMENDMENT TO SPA #2

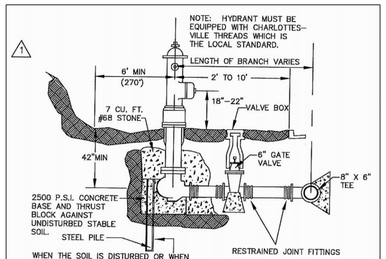
SHEET TITLE: NOTES & DETAILS

JOB NO. 152118
SCALE AS SHOWN
SHEET NO. 5

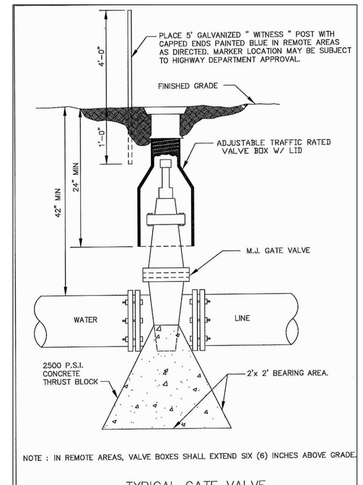
These plans and associated documents are the exclusive property of COLLINS ENGINEERING and may not be reproduced in whole or in part and shall not be used for any purpose whatsoever, inclusive, but not limited to construction, bidding, and/or construction staking without the express written consent of COLLINS ENGINEERING.



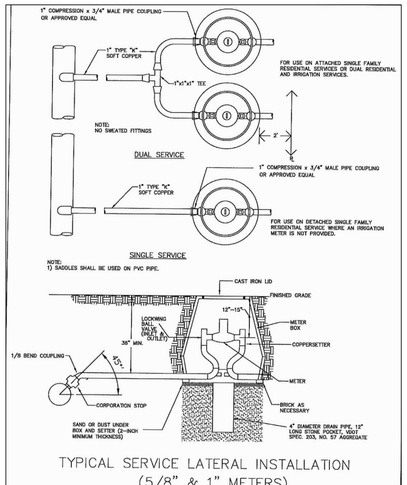
TD-2



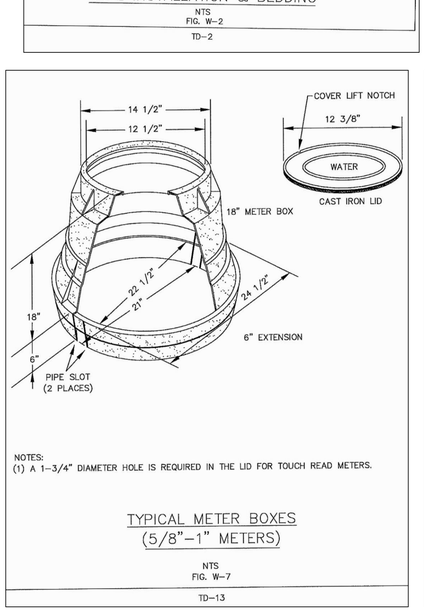
TD-8



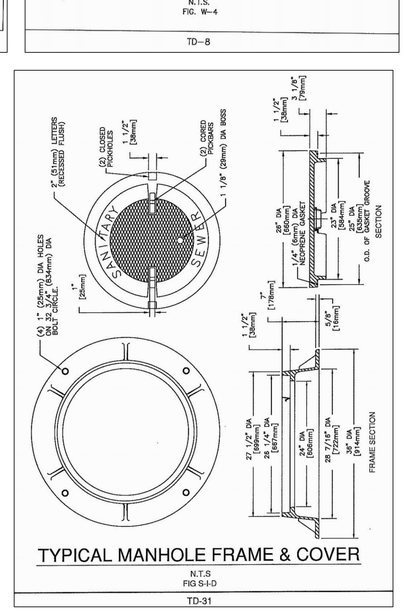
TD-9



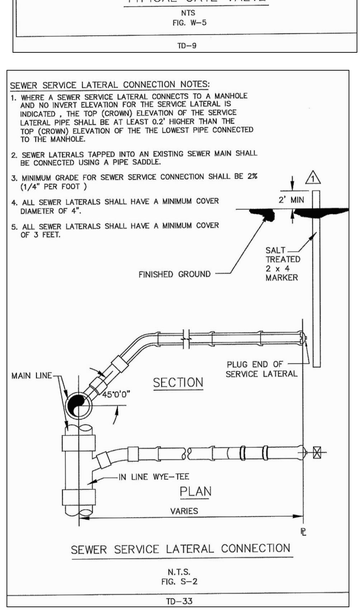
TD-10



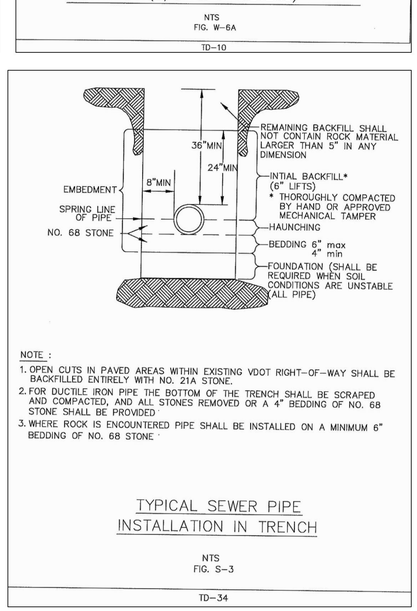
TD-13



TD-31



TD-33



TD-34

PLEASE REFER TO VDOT ROAD AND BRIDGE STANDARDS 2016 FOR DETAILS OF WP-2, IS-1

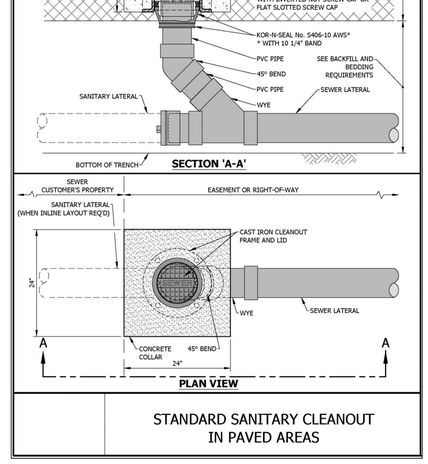
THE STANDARD DRAWINGS CONTAINED IN THE VDOT ROAD & BRIDGE STANDARDS ARE SIGNED AND SEALED ENGINEERING DRAWINGS THAT ARE COPYRIGHTED MATERIALS OF VDOT AND THE COMMONWEALTH OF VIRGINIA. VDOT'S POLICY IS TO OFFER THE STANDARD DRAWINGS IN A SECURE ELECTRONIC FORMAT AND EACH STANDARD IS AVAILABLE ON THIS WEBSITE. PLAN ASSEMBLIES USING THE ROAD & BRIDGE STANDARDS SHALL REFERENCE EACH STANDARD USED. INSERTING THE STANDARD DRAWINGS INTO VDOT, LOCALITY, OR PRIVATE DEVELOPMENT PLAN ASSEMBLIES, OR MODIFYING THE STANDARD DRAWINGS IN ANY WAY, IS NOT PERMITTED.

ACSA GENERAL WATER & SEWER CONDITIONS (SEPTEMBER 14, 2021)

1. WORK SHALL BE SUBJECT TO INSPECTION BY ALBEMARLE COUNTY SERVICE AUTHORITY (ACSA) INSPECTORS. THE CONTRACTOR WILL BE RESPONSIBLE FOR NOTIFYING THE PROPER ACSA OFFICIALS AT THE START OF THE WORK.
2. THE ALBEMARLE COUNTY SERVICE AUTHORITY SHALL HAVE ACCESS TO USE THE AIRSPACE ABOVE THE LOCATIONS OF CONSTRUCTION FOR THE FLIGHT OF UNMANNED AERIAL VEHICLES FOR THE PURPOSE OF IMAGERY COLLECTION.
3. THE LOCATION OF EXISTING UTILITIES ACROSS THE LINE OF THE PROPOSED WORK ARE NOT NECESSARILY SHOWN ON THE PLANS AND WHERE SHOWN ARE ONLY APPROXIMATELY CORRECT. THE CONTRACTOR SHALL, ON HIS OWN INITIATIVE, LOCATE ALL UNDERGROUND LINES AND STRUCTURES, AS NECESSARY.
4. ALL MATERIALS AND CONSTRUCTION SHALL COMPLY WITH THE CURRENT EDITION OF THE GENERAL WATER AND SEWER CONSTRUCTION SPECIFICATIONS, AS ADOPTED BY THE ACSA.
5. DATUM FOR ALL ELEVATIONS SHOWN IN NATIONAL GEODETIC SURVEY.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING MISS UTILITY (1-800-552-7001).
7. ALL WATER AND SEWER PIPES SHALL HAVE A MINIMUM OF THREE AND A HALF (3.5) FEET OF COVER MEASURED FROM THE TOP OF PIPE, OVER THE CENTERLINE OF PIPE. THIS INCLUDES ALL FIRE HYDRANT LINES, SERVICE LATERALS AND WATER LINES, ETC.
8. ALL WATER AND SEWER APPURTENANCES ARE TO BE LOCATED OUTSIDE OF ROADSIDE DITCHES.
9. VALVES ON DEADEND LINES SHALL BE RODDED TO PROVIDE ADEQUATE RESTRAINT FOR THE VALVE DURING A FUTURE EXTENSION OF THE LINE.
10. TREES ARE NOT PERMITTED IN THE ACSA EASEMENT.
11. THE CONTRACTOR SHALL BE RESPONSIBLE TO COMPLY WITH THE NOLEAD REGULATION REGARDING BRASS FITTINGS EFFECTIVE JANUARY 4, 2014 (SENATE BILL 3874 WHICH AMENDS THE SAFE DRINKING WATER ACT).
12. THE SEWER LATERAL BEYOND THE CONNECTION AT THE SEWER MAIN SHALL BE PRIVATE. THE SEWER LATERAL STUB-OUT SHALL UNDERGO THE ACSA LOW-PRESSURE AIR TEST TO SATISFY COUNTY TESTING REQUIREMENTS. VISUAL INSPECTION OF THE SEWER LATERAL STUB-OUT SHALL BE WITNESSED BY THE COUNTY BUILDING INSPECTIONS DEPARTMENT. THIS INSPECTION SHALL OCCUR UNDER AN "OTHER PLUMBING" PERMIT WHICH MUST BE OBTAINED BY THE CONTRACTOR.
13. THE SEWER LATERAL BEYOND THE CONNECTION AT A MANHOLE SHALL BE PRIVATE. VISUAL INSPECTION AND PRESSURE TESTING OF THE SEWER LATERAL SHALL BE WITNESSED BY THE COUNTY BUILDING INSPECTIONS DEPARTMENT. THIS INSPECTION SHALL OCCUR UNDER AN "OTHER PLUMBING" PERMIT WHICH MUST BE OBTAINED BY THE CONTRACTOR.
14. THE FIRE SPRINKLER MAIN DOWNSTREAM OF THE GATE VALVE IS PRIVATE, VISUAL INSPECTION AND TESTING OF THE FIRE SPRINKLER MAIN DOWNSTREAM OF THE GATE VALVE SHALL BE WITNESSED BY THE COUNTY BUILDING INSPECTIONS DEPARTMENT. THIS INSPECTION SHALL OCCUR UNDER AN "OTHER PLUMBING" PERMIT WHICH MUST BE OBTAINED BY THE CONTRACTOR.
15. ALL FLUSHING OF FIRE SPRINKLER MAINS SHALL NOT OCCUR UNTIL APPROVAL IS GIVEN BY THE ACSA.
16. PRIOR TO BACKFLOW PREVENTION DEVICE TESTING AND THE ESTABLISHMENT OF WATER SERVICE, ALL BACKFLOW PREVENTION DEVICE INSTALLATIONS SHALL MEET THE ACSA BACKFLOW REQUIREMENTS AS DETAILED IN SECTION 8 OF THE MOST RECENT REVISION OF THE ACSA RULES AND REGAULTIONS.
17. A DEED OF EASEMENT AND EASEMENT PLAT FOR THE UTILITY EASEMENTS, APPROVED BY THE ACSA, SHALL BE RECORDED PRIOR TO ANY WATER AND/OR SEWER SERVICE BEING ESTABLISHED.

Rivanna Water & Sewer Authority (RWSA)
General Water & Sanitary Sewer Notes
Last Revised: April 2016

1. All materials and methods of construction shall comply with the latest version of the General Water and Sewer Design and Construction Standards – Version 1.0, adopted in December 2015, except as modified below or modified in special notes.
2. RWSA shall approve all construction materials and methods of construction. A preconstruction conference shall be held with RWSA prior to the start of any work.
3. The contractor shall be responsible for notifying Miss Utility (1-800-552-7001).
4. RWSA Engineer (Victoria Fort at (434) 977-2970 ext. 205) shall be notified three business days prior to the start of construction.
5. All work is subject to inspection by RWSA staff. No tie-ins to the existing system shall be made without coordination with and the presence of RWSA staff. No work shall be conducted on RWSA facilities on weekends or holidays without special written permission from RWSA.
6. For sanitary sewer line construction: RWSA may require bypass pumping for tie-ins to the existing system. All doghouse manholes must be pressure-tested before a connection is made to the system.
7. The location of existing utilities as shown on the plans is from data available at the time of design and is not necessarily complete or accurate. The Contractor shall be responsible for the verification of the location, size and depth of all existing utilities, both surface and subsurface. The Contractor shall immediately notify the Engineer of any discrepancies between the plans and field conditions. The Contractor shall use due diligence to protect all utilities and structures from damage at all times, whether shown on the plans or not. Damage to any existing utilities shall be repaired by the Contractor to the original condition at no additional cost to the Owner.
8. Erosion and sediment control facilities shall not be permitted in the RWSA easement without special written permission from RWSA. No grading shall be permitted in the RWSA easement unless permitted otherwise by RWSA in writing.
9. No blasting shall be permitted within 100 feet of RWSA facilities without written permission and RWSA approval of the blasting plan. Ground monitoring during blasting and a pre-blast survey may be required. For blasting within 100 feet of any operative RWSA sewerlines, bypass pumping and/or pre- and post-CCTV may be required. RWSA may also require certification from a licensed professional engineer stating that the proposed blasting will not damage any RWSA facilities. Damage to any utilities due to blasting shall be repaired by the Contractor to the original condition at no additional cost to the Owner.
10. The contractor shall observe minimum separation requirements for utility crossings. When a crossing is made under an existing facility, adequate structural support shall be provided for the existing pipe. The area of the crossing shall be backfilled with compacted 57 stone to the springline of the existing pipe.
11. New water main installations shall be pressure tested, chlorinated, flushed and have water samples approved prior to making any permanent connection to the public water system. Approved methods of filling and flushing new water mains will be required to prevent any contamination of the public water system.
12. All easements for new RWSA facilities shall be recorded prior to placing the new facilities into service.
13. No permanent structural facilities will be permitted in the RWSA easement. This includes building overhangs, retaining walls, footers for any structure, drainage structures, etc.
14. Trees are not permitted in the RWSA easement.



COMMONWEALTH OF VIRGINIA
SCOTT R. COLLINS
Lic. No. 035791
PROFESSIONAL ENGINEER
1/15/24

REVISIONS

DATE	REVISION DESCRIPTION
1/15/24	INITIAL SUBMITTAL - SITE PLAN AMENDMENT

COLLINS ENGINEERING
200 GARRETT STREET, SUITE K. - CHARLOTTESVILLE, VA 22902 - 434.293.3719

PROJECT
DUNLORA PARK - PHASE II MAJOR SITE PLAN AMENDMENT TO SPA #2

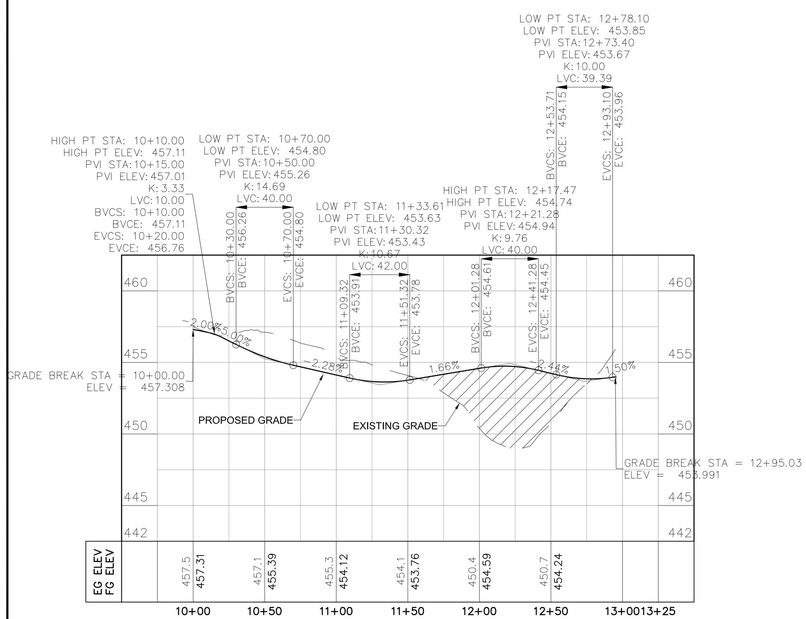
SHEET TITLE
SITE UTILITY NOTES & DETAILS

JOB NO.
152118

SCALE
N/A

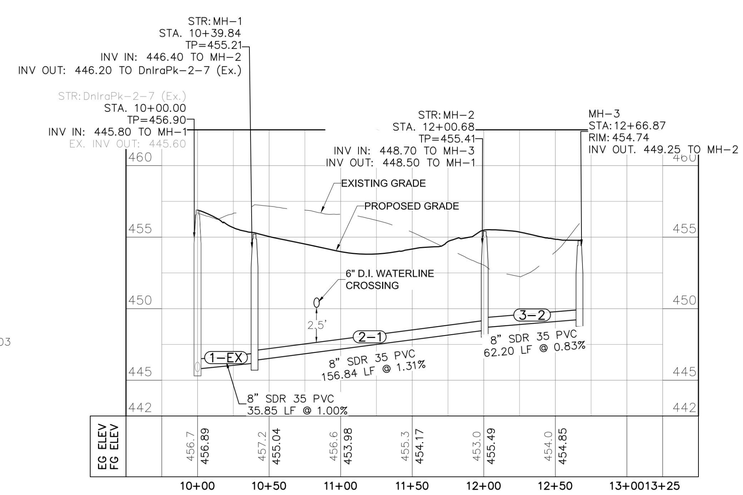
SHEET NO.
6

These plans and associated documents are the exclusive property of COLLINS ENGINEERING and may not be reproduced in whole or in part and shall not be used for any purpose whatsoever, inclusive, but not limited to construction, bidding, and/or construction staking without the express written consent of COLLINS ENGINEERING.

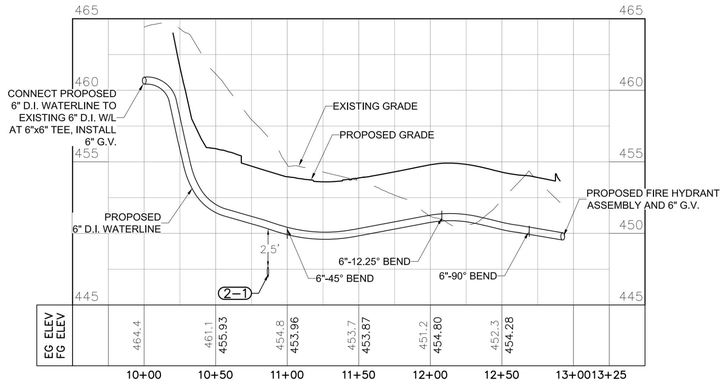


LINDLEY PLACE

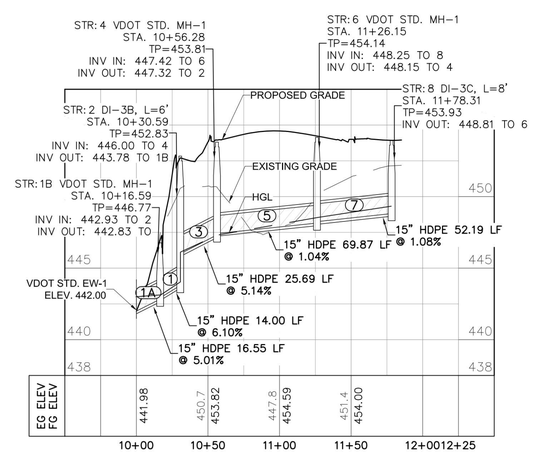
15 MPH DESIGN SPEED



LINDLEY PLACE SANITARY SEWER



LINDLEY PLACE WATERLINE



LINDLEY PLACE STR 8 - BASIN

VERTICAL SCALE

5 0 2.5 5 10 20

(IN FEET)
1 inch = 5 ft.

HORIZONTAL SCALE

50 0 25 50 100 200

(IN FEET)
1 inch = 50 ft.

NOTES:
1. ALL STORM PIPE SHALL BE CLASS III RCP UNLESS NOTED OTHERWISE. A MINIMUM OF 2' COVER OVER STORM PIPES MUST BE PROVIDED.
2. ALL ROADWAY EMBANKMENT MATERIAL SHALL CONSIST PREDOMINANTLY OF SOIL AND BE PLACED IN SUCCESSIVE UNIFORM LAYERS NOT MORE THAN 8 INCHES IN THICKNESS BEFORE COMPACTION OVER THE ENTIRE ROADBED AREA IN ACCORDANCE WITH VDOT 2007 ROAD AND BRIDGE SPECIFICATION 303.04.
3. ALL FILL MUST MEET 95% COMPACTION.
4. MINIMUM 3.5' OF COVER MUST BE MAINTAINED OVER SANITARY SEWER MAINS.
5. MINIMUM 3.5' OF COVER MUST BE MAINTAINED OVER W/L MAINS.
6. MINIMUM 1' OF VERTICAL SEPARATION FROM STORM SEWER & W/L AND 1.5' OF SEPARATION BETWEEN W/L & SANITARY SEWER MUST BE PROVIDED.
7. VDOT STD. IS-1 INLET SHAPING REQUIRED ON ALL STORM STRUCTURES.
8. VDOT STD SL-1 SAFETY SLAB REQUIRED WHERE DROP GREATER THAN 12' (NO SL-1 ON SANITARY MHS).
9. THE DUCTILE IRON WATERLINES SHALL BE WRAPPED IN POLYETHYLENE ENCASEMENT IF NEEDED BASED ON SOIL CONDITIONS, WHICH WILL BE TESTED AND INSPECTED DURING THE CONSTRUCTION PROCESS.
10. HDPE PIPE SHALL BE INSTALLED AND BACKFILLED IN ACCORDANCE WITH VDOT STANDARDS AND REQUIREMENTS. CONTRACTOR SHALL USE STONE BACKFILL MATERIAL AS REQUIRED AND SHALL INSTALL AND BACKFILL THE PIPES TO ENSURE PROPER COMPACTION AROUND THE PIPES AND PREVENT CRUSHING OR DEFORMING THE STORM PIPES DURING CONSTRUCTION.
11. THE CONTRACTOR SHALL CLEAN AND VIDEO CAMERA ALL PIPES AFTER CONSTRUCTION IS COMPLETE, AND PROVIDE THESE VIDEOS TO THE OWNER AND ENGINEER FOR CERTIFICATION.

COMMONWEALTH OF VIRGINIA
SCOTT R. COLLINS
Lic. No. 035791
PROFESSIONAL ENGINEER
1/15/24

REVISIONS

DATE	REVISION DESCRIPTION
1/15/24	INITIAL SUBMITTAL - SITE PLAN AMENDMENT

COLLINS ENGINEERING
200 GARRETT STREET, SUITE K. - CHARLOTTESVILLE, VA 22902 - 434.293.3719

PROJECT
DUNLORA PARK - PHASE II MAJOR SITE PLAN AMENDMENT TO SPA #2

SHEET TITLE
PROFILES

JOB NO.
152118

SCALE
AS NOTED

SHEET NO.
7

These plans and associated documents are the exclusive property of COLLINS ENGINEERING and may not be reproduced in whole or in part and shall not be used for any purpose whatsoever, inclusive, but not limited to construction, bidding, and/or construction staking without the express written consent of COLLINS ENGINEERING.

Structure	Area (Acres)	Cw	t_c (Min.)
1B	0.00	0.30	5.0
2	0.33	0.66	5.0
4	0.00	0.90	5.0
6	0.00	0.90	5.0
8	0.57	0.69	5.0
8STR	0.45	0.74	5.0
8P	0.12	0.50	5.0
2STR	0.16	0.78	5.0
2P	0.17	0.55	5.0

D.A. #8STR

D.A. #8 PIPED

D.A. #2STR

D.A. #2 PIPED

EX. D.A. #12

EX. D.A. #104

EX. D.A. #10

EX. D.A. #16

EX. D.A. #14

EX. D.A. #8

EX. D.A. #4

EX. D.A. #6

RIO ROAD (SR 631)
VARIABLE WIDTH PUBLIC R/W

LINDLEY PLACE

VARICK STREET

MARIN COURT

POPLAR

RAILROAD

LOT 3 LOT 4 LOT 5 LOT 6 LOT 7 LOT 8 LOT 12 LOT 13 LOT 14 LOT 22 LOT 24 LOT 25 LOT 26 LOT 27 LOT 28 LOT 29 LOT 30

GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)
1 inch = 20 ft.

COMMONWEALTH OF VIRGINIA
SCOTT R. COLLINS
Lic. No. 035791
PROFESSIONAL ENGINEER
1/15/24

REVISIONS

DATE	REVISION DESCRIPTION
1/15/24	INITIAL SUBMITTAL - SITE PLAN AMENDMENT

COLLINS ENGINEERING
200 GARRETT STREET, SUITE K. - CHARLOTTESVILLE, VA 22902 - 434.293.3719

PROJECT
DUNLORA PARK - PHASE II MAJOR SITE PLAN AMENDMENT TO SPA #2

SHEET TITLE
DRAINAGE MAP

JOB NO. 152118
SCALE 1" = 20'
SHEET NO. 8

These plans and associated documents are the exclusive property of COLLINS ENGINEERING and may not be reproduced in whole or in part and shall not be used for any purpose whatsoever, inclusive, but not limited to construction, bidding, and/or construction staking without the express written consent of COLLINS ENGINEERING.

Table 8: Pipe Design Table

PIPE DESIGN

n = 0.013

Pipe		Hydrology								Pipe								
Starting Structure	Ending Structure	A, Drainage area (acres)	C, rational coeff.	CA increment	CA sum accumulated	Tc, time of conc. (min)	I, rainfall Intesity	Q, flow incr. (cfs)	Qt, total flow	Invert in (ft)	Invert out (ft)	L, thrcat length (ft)	n, manning's coeff.	S, slope	D, Diameter (in)	Full Flow Capacity (cfs)	V, Velocity (fps)	Flow Time (min)	Remarks
Pipe run: STR 8 - BASIN																			
8	6	0.57	0.69	0.393	0.393	5.00	6.67	2.62	2.62	448.81	448.25	52.2	0.013	0.0107	15	7.25	5.39	0.16	
6	4	0.00	0.90	0.000	0.393	5.16	6.61	0.00	2.62	448.15	447.42	69.9	0.013	0.0104	15	7.15	5.32	0.22	
4	2	0.00	0.90	0.000	0.393	5.38	6.55	0.00	2.62	447.32	446.00	25.7	0.013	0.0514	15	15.86	9.46	0.05	
2	1B	0.33	0.66	0.218	0.611	5.43	6.53	1.42	3.99	443.78	442.93	14.0	0.013	0.0607	15	17.24	11.30	0.02	
1B	BASIN	0.00	0.30	0.000	0.611	5.45	6.52	0.00	3.99	442.83	442.00	16.6	0.013	0.0502	15	15.67	10.60	0.03	

Design Storm Year = **10**

POINT	DOWNSTREAM STRUCTURE	DRAIN AREA	RUNOFF COEFF.	CA		INLET TIME	RAIN FALL	RUNOFF Q	INVERT ELEVATIONS		LENGTH	SLOPE	DIA	CAPA-CITY	VEL	FLOW TIME
		ACRES	C	INCR	ACCUM	MIN	MIN	C.F.S.	UPPER	LOWER	FEET	FT./FT.	INCHES	C.F.S.	F.P.S.	SEC
8		0.57	0.69	0.39	0.39	5.00	6.67	2.6								
	6								448.81	448.25	52.19	0.0107	15	7.2	5.4	9.7
6		0.00	0.90	0.00	0.39	5.16	6.61	2.6								
	4								448.15	447.42	69.87	0.0104	15	7.2	5.3	13.1
4		0.00	0.90	0.00	0.39	5.38	6.55	2.6								
	2								447.32	446.00	25.69	0.0514	15	15.9	9.5	2.7
2		0.33	0.66	0.22	0.61	5.43	6.53	4.0								
	1B								443.78	442.93	14.00	0.0607	15	17.2	11.3	1.2
1B		0.00	0.30	0.00	0.61	5.45	6.52	4.0								
	BASIN								442.83	442.00	16.55	0.0502	15	15.7	10.6	1.6

Design Year: **10** Project: Dunlora Phase II Job #: 202202 Prepared by: KKW, PE

INLET STATION	OUTLET WATER SURFACE ELEV	t_{c0}	D_b	Q_b ZW	S_{f0}	H_f	JUNCTION LOSS V_o	H_o	Q_{IN}	V_{IN}	$Q_b*V_i/2g$	H_i	ANGLE	H_A	H_t	$1.3H_t$	$.5H_t$	FINAL H	INLET WATER SURFACE ELEV.	RIM ELEV
	443.00	16.55	15	3.99	0.003	0.05	3.3	0.0												
1B									4.0	3.3	13	0.2	0.06	48	0.062	0.16	N/A	0.08	0.13	**443.13**	**446.77**
	443.93	14.00	15	3.99	0.003	0.05	3.3	0.0												
2									2.6	2.1	5.6	0.1	0.02	90	0.05	0.12	NA	0.06	0.11	**444.04**	**452.83**
	447.00	25.69	15	2.62	0.001	0.04	2.1	0.0												
4									2.6	2.1	5.6	0.1	0.02	41	0.027	0.07	N/A	0.03	0.07	**447.07**	**453.81**
	448.42	69.87	15	2.62	0.001	0.10	2.1	0.0												
6									2.6	2.1	5.6	0.1	0.02	14	0	0.04	N/A	0.02	0.12	**448.54**	**454.14**
	449.25	52.19	15	2.62	0.001	0.07	2.1	0.0												
8													0.00	0	0	0.02	NA	0.01	0.08	**449.33**	**453.93**

DRAINAGE DESCRIPTIONS

STR. NO.	PIPE INFORMATION						INLET INFORMATION			
	DIA. (in.)	LENGTH* (ft.)	SLOPE (%)	INVERT IN	INVERT OUT	MATERIAL	INLET TYPE	Curb Type	SLOT LENGTH	RIM ELEVATION
8							DI-3C	CG-2	8	453.93
7	15	52.19	1.07%	448.81	448.25	HDPE				
6							MH-1	-	-	454.14
5	15	69.87	1.04%	448.15	447.42	HDPE				
4							MH-1	-	-	453.81
3	15	25.69	5.14%	447.32	446.00	HDPE				
2							DI-3B	CG-2	6	452.83
1	15	14.00	6.07%	443.78	442.93	HDPE				
1B							MH-1	CG-2	-	446.77
1A	15	16.55	5.02%	442.83	442.00	HDPE				
D							12" YARD INLET	-	-	465.50
D-C	8	39.00	4.49%	462.50	460.75	HDPE				
C							12" YARD INLET	-	-	463.75
C-B	8	33.40	2.25%	460.75	460.00	HDPE				
B							12" YARD INLET	-	-	463.50
B-A	8	38.10	18.37%	460.00	453.00	HDPE				
A							8" CLEAN OUT	-	-	456.00
A-STR 8	8	62.50	3.20%	453.00	451.00	HDPE				
K							12" YARD INLET	-	-	465.50
K-J	8	22.70	1.10%	462.50	462.25	HDPE				
J							12" YARD INLET	-	-	465.25
J-I	8	15.80	1.58%	462.25	462.00	HDPE				
I							12" YARD INLET	-	-	465.00
I-H	8	38.10	1.31%	462.00	461.50	HDPE				
H							12" YARD INLET	-	-	465.50
H-G	8	39.60	8.84%	461.50	458.00	HDPE				
G							8" CLEAN OUT	-	-	461.00
G-F	8	17.60	28.41%	458.00	453.00	HDPE				
F							12" YARD INLET	-	-	456.00
F-STR 2	8	58.60	5.12%	453.00	450.00	HDPE				

Table 6: Sump Inlet Design Table

INLETS IN SUMP, DESIGN (CURB SPREAD AND INLET SPREAD AND DEPTH)

Intensity 4.00 (Intensity is 4 in/hr for spread, and 6.5 in/hr for capacity and depth)
Mannings Coefficient, n is 0.013

	Inlet		Hydrology							Curb and Gutter						Inlet			
Plan Label	VDOT DI type	L, throat length (ft)	A, Drainage area (acres)	C, rational coeff.	CA	Q, flow incr. (cfs)	Qb, carry-over (cfs)	Qt, total flow	S, gutter longitudinal slope (ft/ft) *	Sx, lane cross slope (ft/ft)	W, gutter width (ft)	Sw, gutter cross-slope (ft/ft)	Sw/Sx	T, spread at curb (ft)	d, flow depth (ft)	d / h (height of opening, 5.5")	T, spread at inlet (ft)	Remarks
			left	0.15	0.74	0.111	0.44	0.00	0.44	0.0010	0.0500	2.0	0.0833	1.6660	4.27				
			right	0.30	0.74	0.222	0.89	0.00	0.89	0.0010	0.0500	2.0	0.0833	1.6660	5.54				
8STR	3C	**8.0**					combined flow		1.3							0.14	0.296	**2.71**	
			all	0.16	0.78	0.125	0.50	0.00	0.50	0.0010	0.0500	2.0	0.0833	1.6660	4.46				
2STR	3B	**6.0**					combined flow		0.5							0.08	0.174	**1.60**	

* gutter longitudinal slope of 0.001 should be used in a sump condition
- grate inlets (DI-7) in open pavement areas will not have a curb spread, but will have inlet spread and depth
- for inlets draining to stormwater management facilities, the 6.5in/hr check storm will suffice for the 10yr conveyance to the facilities
NOTE: Inlet size for structures determined by overland flow. Pipes have been sized to include overland flow as well as yard inlet and roof drain drainage areas.

Table 6: Sump Inlet Design Table

INLETS IN SUMP, DESIGN (CURB SPREAD AND INLET SPREAD AND DEPTH)

Intensity 6.50 (Intensity is 4 in/hr for spread, and 6.5 in/hr for capacity and depth)
Mannings Coefficient, n is 0.013

	Inlet		Hydrology							Curb and Gutter						Inlet			
Plan Label	VDOT DI type	L, throat length (ft)	A, Drainage area (acres)	C, rational coeff.	CA	Q, flow incr. (cfs)	Qb, carry-over (cfs)	Qt, total flow	S, gutter longitudinal slope (ft/ft) *	Sx, lane cross slope (ft/ft)	W, gutter width (ft)	Sw, gutter cross-slope (ft/ft)	Sw/Sx	T, spread at curb (ft)	d, flow depth (ft)	d / h (height of opening, 5.5")	T, spread at inlet (ft)	Remarks
			left	0.15	0.74	0.111	0.72	0.00	0.72	0.0010	0.0500	2.0	0.0833	1.6660	5.12				
			right	0.30	0.74	0.222	1.44	0.00	1.44	0.0010	0.0500	2.0	0.0833	1.6660	6.65				
8STR	3C	**8.0**					combined flow		2.2							0.19	0.409	**3.75**	
			all	0.16	0.78	0.125	0.81	0.00	0.81	0.0010	0.0500	2.0	0.0833	1.6660	5.36				
2STR	3B	**6.0**					combined flow		0.8							0.11	0.241	**2.21**	

* gutter longitudinal slope of 0.001 should be used in a sump condition
- grate inlets (DI-7) in open pavement areas will not have a curb spread, but will have inlet spread and depth
- for inlets draining to stormwater management facilities, the 6.5in/hr check storm will suffice for the 10yr conveyance to the facilities
NOTE: Inlet size for structures determined by overland flow. Pipes have been sized to include overland flow as well as yard inlet and roof drain drainage areas.

COMMONWEALTH OF VIRGINIA
SCOTT R. COLLINS
Lic. No. 035791
PROFESSIONAL ENGINEER
1/15/24

REVISIONS

DATE	REVISION DESCRIPTION
1/15/24	INITIAL SUBMITTAL - SITE PLAN AMENDMENT

COLLINS ENGINEERING
200 GARRETT STREET, SUITE K. - CHARLOTTESVILLE, VA 22902 - 434.293.3719

PROJECT: DUNLORA PARK - PHASE II MAJOR SITE PLAN AMENDMENT TO SPA #2

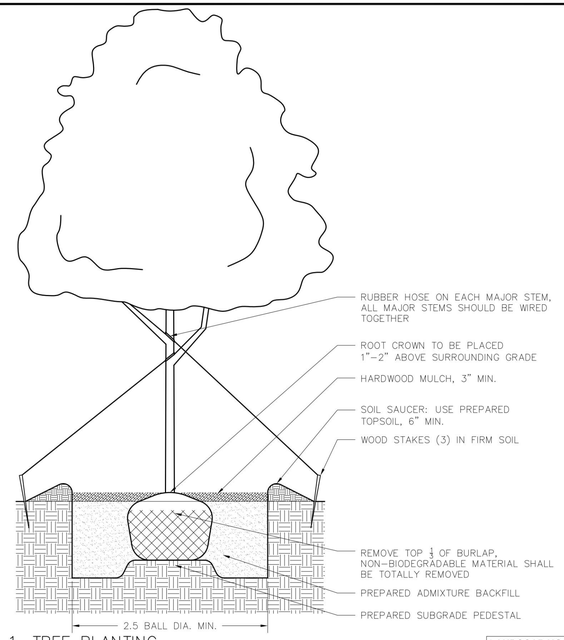
SHEET TITLE: DRAINAGE CALCULATIONS

JOB NO. 152118

SCALE: AS SHOWN

SHEET NO. 9

These plans and associated documents are the exclusive property of COLLINS ENGINEERING and may not be reproduced in whole or in part and shall not be used for any purpose whatsoever, including, but not limited to construction, bidding, and/or construction staking without the express written consent of COLLINS ENGINEERING.



1. TREE PLANTING

SCALE: NTS

County of Albemarle
Conservation Plan Checklist – To be placed on Landscape Plans
(Handbook, pp III-284-111-297 for complete specifications)

1. **The following items shall be shown on the plan:**
   - ☑ Trees to be saved;
   - ☑ Limits of clearing (outside dripline of trees to be saved);
   - ☑ Location and type of protective fencing;
   - ☑ Grade changes requiring tree wells or walls;
   - ☑ Proposed trenching or tunnelling beyond the limits of clearing.
2. **Markings:**
   - ☑ All trees to be saved shall be marked with print or ribbon at a height clearly visible to equipment operators.
   - ☑ No grading shall begin until the tree marking has been inspected and approved by a County Inspector.
3. **Pre-Construction Conference:**
   - ☑ Tree preservation and protection measures shall be reviewed with the contractor on site.
4. **Equipment Operation and Storage:**
   - ☑ Heavy equipment, vehicular traffic and storage of construction materials including soil shall not be permitted within the driplines of trees to be saved.
5. **Soil Erosion and Stormwater Detention Devices:**
   - ☑ Such devices shall not adversely affect trees to be saved.
6. **Fires:**
   - ☑ Fires are not permitted within 100 feet of the dripline of trees to be saved.
7. **Toxic Materials:**
   - ☑ Toxic materials shall not be stored within 100 feet of the dripline of trees to be saved.
8. **Protective Fencing:**
   - ☑ Trees to be retained within 40 feet of a proposed building or grading activity shall be protected by fencing.
   - ☑ Fencing shall be in place and shall be inspected and approved by a County Inspector prior to grading or construction.
9. **Tree Wells:**
   - ☑ When the ground level must be raised within the dripline of a tree to be saved, a tree well shall be provided and a construction detail submitted for approval.
10. **Tree Walls:**
    - ☑ When the ground level must be lowered within the dripline a tree to be saved, a tree wall shall be provided, and a construction detail submitted for approval.
11. **Trenching and Tunnelling:**
    - ☑ When trenching is required within the limits of clearing, it shall be done as far away from the trunks of trees as possible. Tunneling under a large tree shall be considered as an alternative when it is anticipated that necessary trenching will destroy feeder roots.
12. **Cleanup:**
    - ☑ Protective fencing shall be he last items removed during the final cleanup.
13. **Damaged Trees:**
    - ☑ Damaged trees shall be treated immediately by pruning, fertilization or other methods recommended by a tree specialist.

NOTE: IT IS THE DEVELOPER'S RESPONSIBILITY TO CONFER WITH THE CONTRACTOR ON TREE CONSERVATION REQUIREMENTS.

OWNER SIGNATURE **(DATE)**

CONTRACT PURCHASER SIGNATURE **(DATE)**

5/1/06 Page 1 of 1

PLANT SCHEDULE

CODE	BOTANICAL NAME	COMMON NAME	SIZE	ROOT	CANOPY	QUANTITY	TOTAL
SHADE TREES							
TC	TILIA CORDATA 'GREENSPIRE'	LITTLE LEAF LINDEN 'GREENSPIRE'	2" CAL	B&B	288	1	288
CB	CARPINUS BETULUS 'FASTIGIATA'	COLUMNAR EUROPEAN HORNBEAM	2" CAL	B&B	234	2	468
ORNAMENTAL FLOWERING TREES							
CC	CERCIS CANADENSIS	REDBUD	6-8' HT	B&B	124	3	372
MV	MAGNOLIA VIRGINIANA	SWEETBAY MAGNOLIA	6-8' HT	B&B	79	4	316
EVERGREEN TREES							
IO	ILEX OPACA 'GREEN LEAF'	GREEN LEAF AMERICAN HOLLY	6-8' HT	B&B	44	3	132
MG	MAGNOLIA GRANDIFLORA 'LITTLE GEM'	LITTLE GEM MAGNOLIA	6-8' HT	B&B	54	2	108
SHRUBS							
AG	ABELIA X GRANDIFLORA 'KALEIDOSCOPE'	KALEIDOSCOPE ABELIA	3 GAL		14	13	182
SB	SPIREA BURNALDA 'B10601'	LITTLE BONNIE DWARF SPIREA	3 GAL		7	7	49
						TOTAL	1915

LANDSCAPE TABULATION

PARKING

REQUIRED LANDSCAPING:	5% OF TOTAL PARKING AND VEHICLE CIRCULATION AREA
PARKING AREA :	17,000 SQ. FT. @ 5% = 85 SQ. FT. REQUIRED
PARKING AREA LANDSCAPING:	522 SQ. FT. PROVIDED
REQUIRED LANDSCAPING:	1 LARGE OR MEDIUM SHADE TREE PER 10 PARKING SPACES
TOTAL PROPOSED EXTERIOR SPACES:	3 SPACES
REQUIRED PARKING AREA LANDSCAPING:	1 LARGE OR MEDIUM SHADE TREES
TOTAL PARKING AREA LANDSCAPING:	2 LARGE SHADE TREES

CANOPY

REQUIRED LANDSCAPING:	20% CANOPY REQUIREMENT FOR PROJECT
TOTAL SITE AREA:	1.72 ACRES (75,098 SQ. FT.) - TOTAL PROJECT
EXISTING CANOPY TO BE PRESERVED:	1.64 ACRES (71,438 SQ. FT.) - PHASE I
ADDITIONAL CANOPY PROVIDED:	0.40 ACRES (3,485 SQ. FT.) - WITH PHASE I & PHASE II
ADDITIONAL CANOPY PROVIDED:	0.04 ACRES (1,915 SQ. FT.) - WITH PHASE II (AMENDMENT)
TOTAL CANOPY PROVIDED:	2.08 ACRES (90,605 SQ. FT.) - TOTAL PROJECT

LANDSCAPING NOTES:

APPLICABLE STANDARDS

AMERICAN STANDARD FOR NURSERY STOCK, ANSI Z60.1

AMERICAN JOINT COMMITTEE ON HORTICULTURAL NOMENCLATURE: STANDARDIZED PLANT NAMES

ALL PLANT MATERIAL SHALL BE NURSERY GROWN UNLESS OTHERWISE NOTED. PLANTS SHALL HAVE A HABIT OF GROWTH THAT IS NORMAL FOR THE SPECIES AND SHALL BE HEALTHY, VIGOROUS AND EQUAL OR EXCEED THE MEASUREMENTS SPECIFIED IN THE PLANT LIST, WHICH ARE THE MINIMUM ACCEPTABLE SIZES. PLANTS SHALL BE MEASURED BEFORE PRUNING WITH BRANCHES IN NORMAL POSITION. ANY NECESSARY PRUNING SHALL BE DONE AT THE TIME OF PLANTING. REQUIREMENTS FOR MEASUREMENTS, BRANCHING, GRADING, QUALITY, BALL AND BURLAPPING OF PLANTS IN THE PLANT LIST GENERALLY FOLLOW THE CODE OF STANDARDS CURRENTLY RECOMMEND BY THE AMERICAN STANDARD FOR NURSERY STOCK. PLANTS THAT MEET THE REQUIREMENTS SPECIFIED, BUT DO NOT HAVE THE NORMAL BALANCE OF HEIGHT AND SPREAD TYPICAL FOR THE RESPECTIVE PLANT, SHALL NOT BE ACCEPTED. ALL PLANTS SHALL BE FREE OF WEEDS AND OTHER OBJECTIONABLE VEGETATION.

PLANTS (GENERAL)

PLANTS SHALL BE NURSERY GROWN, HEALTHY, VIGOROUS, BUSHY, WELL-BALANCED, OF NORMAL HABIT OF GROWTH FOR THE SPECIES, AND SHALL BE FREE FROM DISEASE, INSECT EGGS AND LARVAE. THEY SHALL HAVE CROWN AND ROOT BALL SIZES THAT MEET OR EXCEED THE STANDARDS SET FORTH IN "AMERICAN ASSOCIATION OF NURSERYMEN, INC." THE SPECIFIED SIZES SHALL BE BEFORE PRUNING, AND PLANTS SHALL BE MEASURED WITH THEIR BRANCHES IN NORMAL POSITION. PLANTS SHALL NOT BE PRUNED PRIOR TO DELIVERY, EXCEPT UPON SPECIAL APPROVAL.

SHADE TREES SHALL BE HEALTHY, VIGOROUS, FULL-BRANCHED, WELL-SHAPED, AND SHALL MEET THE TRUNK DIAMETER, HEIGHT, AND SPREAD REQUIREMENTS OF THE PLANT LIST, AND MEET THE STANDARDS OF "THE AMERICAN ASSOCIATION OF NURSERYMEN." BALLS SHALL BE FIRM, NEAT, SLIGHTLY TAPERED AND WELL BURLAPPED. ANY TREE LOOSE IN THE BALL OR WITH BROKEN BALL A TIME OF PLANTING WILL BE REJECTED. BALLS SHALL BE SIZED IN ACCORDANCE WITH THE AAN STANDARDS.

TREE AND SHRUB PLANTING

PLANT TREES IN TREE-PITS GREATER IN DIAMETER THAN BALL AND AT A HEIGHT WHICH ASSURES PROPER DRAINAGE AND VIGOROUS GROWTH. FILL BOTTOM OF PIT (TO DEPTH OF ROOT BALL) WITH A MIXTURE OF SOIL. AFTER SETTLING THE TREE, THE PIT SHALL BE BACKFILLED WITH SOIL MIX, THEN CAREFULLY SETTLED BY WATERING TO PREVENT AIR POCKETS.

ALL PLANT BEDS PLUS AN AREA THREE FEET GREATER IN DIAMETER THAN THE BALL AROUND EACH TREE SHALL BE MULCHED WITH 3" OF CLEAN, HARDWOOD MULCH.

SHOULD THE CONTRACTOR ENCOUNTER SOIL CONDITIONS WHICH ARE INHOSPITABLE TO NORMAL PLANTING, IT IS HIS RESPONSIBILITY TO MODIFY THE SOIL SO THAT THE PLANTS WILL THRIVE. THESE MODIFICATIONS MAY INCLUDE PROVIDING DRAINAGE FOR TREES OR SHRUB BEDS AND PROVIDING ANY EXTRA SOIL AS MAY BE REQUIRED FOR PLANTING.

ALL SITE PLANTINGS OF TREES AND SHRUBS SHALL BE ALLOWED TO REACH, AND BE MAINTAINED AT, MATURE HEIGHT. THE TOPPING OF TREES IS PROHIBITED. SHRUBS AND TREES SHALL BE PRUNED MINIMALLY AND ONLY TO SUPPORT THE OVERALL HEALTH OF THE PLANT.

TREE PRESERVATION

1. CONTRACTOR TO USE EXTREME CARE AND CAUTION AS NOT TO DAMAGE ANY TREES SCHEDULED TO REMAIN OUTSIDE LIMITS OF CONSTRUCTION. PROPERTY LINE SERVES AS LIMITS OF CONSTRUCTION.
2. NO CONSTRUCTION EQUIPMENT OR STORAGE SHALL OCCUR WITHIN DRIPLINE OF EXISTING TREES.
3. CONTRACTOR TO MONITOR TREES FOR STRESS AND/OR DAMAGE AND ADVISE LANDSCAPE ARCHITECT IF ANY OCCUR.
4. CONTRACTOR TO NOTIFY LANDSCAPE ARCHITECT 48-HOURS IN ADVANCEOF ANY CONSTRUCTION ACTIVITY NEEDED WITHIN ANY TREE PROTECTION MEASURE. ALL TREE PROTECTION MEASURES SHALL BE REPLACED IN ORIGINAL LOCATION ONCE WORK HAS BEEN COMPLETED. NO WORK SHALL BE DONE WITHIN DRIPLINE OF EXISTING TREES UNLESS APPROVED BY LANDSCAPE ARCHITECT PRIOR TO WORK.
5. ALL WORK TO BE PERFORMED BY THE CONTRACTOR WITHIN THE DRIPLINE OF ANY EXISTING TREE OR TREE PROTECTION AREA SHALL BE DONE IN A MANNER SENSITIVE TO ENSURING NO DAMAGE WILL BE DONE TO THE EXISTING TREES. THE PREFERRED METHOD FOR GRADING SMALL AREAS WITHIN THE DRIPLINE SHALL BE DONE BY HAND. LARGER AREAS TO BE GRADED MAY BE DONE WITH A SMALL BOBCAT/TRACT-HOE, CONTRACTOR TO DISCUSS METHODS OF GRADING WORK WITH LANDSCAPE ARCHITECT PRIOR TO COMMENCING ANY SUCH WORK WITHIN DESIGNATED TREE PROTECTION AREAS OR WITHIN EXISTING DRIPLINES.

PRE-CONSTRUCTION

1. CONTRACTOR IS RESPONSIBLE FOR CONTACTING "MISS UTILITY" AT 1.800.552.7001 FOR LOCATION OF ALL UTILITY LINES.TREES SHALL BE LOCATED A MINIMUM OF 5 FEET FROM SEWER/WATER CONNECTIONS. NOTIFY LANDSCAPE ARCHITECT OF CONFLICTS.
2. VERIFY ALL PLANT MATERIAL QUANTITIES ON THE PLAN PRIOR TO BIDDING, PLANT LIST TOTALS ARE FOR CONVENIENCE ONLY AND SHALL BE VERIFIED PRIOR TO BIDDING.
3. PROVIDE PLANT MATERIALS OF QUANTITY, SIZE, GENUS, SPECIES, AND VARIETY INDICATED ON PLANS. ALL PLANT MATERIALS AND INSTALLATION SHALL COMPLY WITH RECOMMENDATIONS AND REQUIREMENTS OF ANSI Z60.1 "AMERICAN STANDARD FOR NURSERY STOCK". IF SPECIFIED PLANT MATERIAL IS NOT OBTAINABLE, SUBMIT PROOF OF ON-AVAILABILITY TO THE LANDSCAPE ARCHITECT, TOGETHER WITH PROPOSAL FOR USE OF EQUIVALENT MATERIAL.
4. PROVIDE AND INSTALL ALL PLANTS AS IN ACCORDANCE WITH DETAILS AND CONTRACT SPECIFICATIONS.
5. SOIL TESTS SHALL BE PERFORMED TO DETERMINE SOIL CHARACTER AND QUALITY. NECESSARY SOIL AMENDMENTS SHALL BE PERFORMED PER TEST RESULTS TO ENSURE PLANT HEALTH.

CONSTRUCTION/INSTALLATION

1. LANDSCAPE ARCHITECT RESERVES THE RIGHT TO REJECT ANY PLANTS AND MATERIALS THAT ARE IN AN UNHEALTHY OR UNSIGHTLY CONDITION, AS WELL AS PLANTS AND MATERIALS THAT DO NOT CONFORM TO ANSI Z60.1 "AMERICAN STANDARD FOR NURSERY STOCK" LABEL AT LEAST ONE TREE AND ONE SHRUB OF EACH VARIETY AND CALIPER WITH A SECURELY ATTACHED, WATERPROOF TAG BEARING THE DESIGNATION OF BOTANICAL AND COMMON NAME.
2. INSTALL LANDSCAPE PLANTINGS AT ENTRANCES/EXITS AND PARKING AREAS ACCORDING TO PLANS SO THAT MATERIALS WILL NOT INTERFERE WITH SIGHT DISTANCES.
3. CONTRACTOR IS RESPONSIBLE FOR WATERING ALL PLANT MATERIAL DURING INSTALLATION AND UNTIL FINAL INSPECTION AND ACCEPTANCE BY OWNER. CONTRACTOR SHALL NOTIFY OWNER OF CONDITIONS WHICH AFFECTS THE GUARANTEE.

INSPECTIONS/GUARANTEE

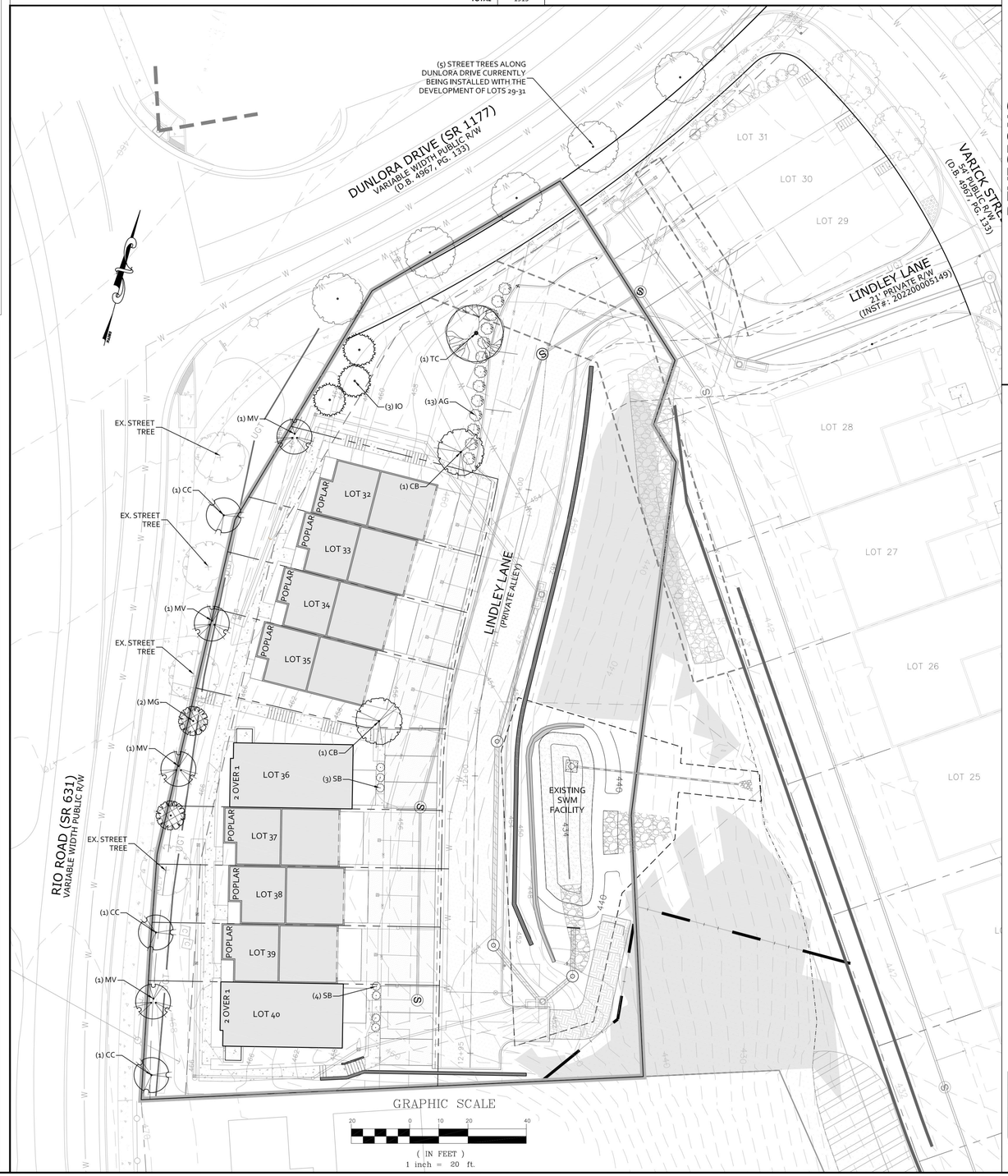
1. UPON COMPLETION OF LANDSCAPE INSTALLATION, THE LANDSCAPE CONTRACTOR SHALL NOTIFY THE GENERAL CONTRACTOR WHO WILL VERIFY COMPLETENESS, INCLUDING THE REPLACEMENT OF ALL DEAD PLANT MATERIAL. CONTRACTOR IS RESPONSIBLE FOR SCHEDULING A FINAL INSPECTION BY THE LANDSCAPE ARCHITECT.
2. ALL EXTERIOR PLANT MATERIALS SHALL BE GUARANTEED FOR ONE FULL YEAR AFTER DATE OF FINAL INSPECTION AGAINST DEFECTS INCLUDING DEATH AND UNSATISFACTORY GROWTH. DEFECTS RESULTING FROM NEGLECT BY THE OWNER, ABUSE OR DAMAGE BY OTHERS, OR UNUSUAL PHENOMENA OR INCIDENTS WHICH ARE BEYOND THE CONTRACTORS CONTROL ARE NOT THE RESPONSIBILITY OF THE CONTRACTOR.
3. REMOVE ALL GUY WIRES AND STAKES 12 MONTHS AFTER INSTALLATION.

4. MULTI-STEM TREE PLANTING

SCALE: NTS

3. SHRUB PLANTING

SCALE: NTS



SCOTT R. COLLINS
Lic. No. 035791
1/15/24
COMMONWEALTH OF VIRGINIA
PROFESSIONAL ENGINEER

REVISIONS

DATE	REVISION DESCRIPTION
1/15/24	INITIAL SUBMITTAL - SITE PLAN AMENDMENT

CE COLLINS ENGINEERING
200 GARRETT STREET, SUITE K - CHARLOTTESVILLE, VA 22902 - 434.293.3719

PROJECT: DUNLORA PARK - PHASE II MAJOR SITE PLAN AMENDMENT TO SPA #2

SHEET TITLE: LANDSCAPING PLAN

JOB NO. 152118

SCALE 1" = 20'

SHEET NO. 10

These plans and associated documents are the exclusive property of COLLINS ENGINEERING and may not be reproduced in whole or in part and shall not be used for any purpose whatsoever, inclusive, but not limited to construction, bidding, and/or construction staking without the express written consent of COLLINS ENGINEERING.