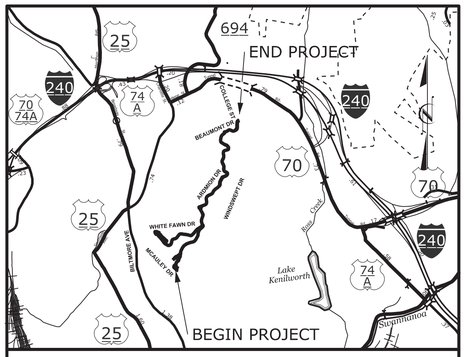
CITY OF ASHEVILLE NORTH CAROLINA

EROSION CONTROL PLAN

BEAUCATCHER GREENWAY

LOCATION:
FROM WHITE FAWN RESERVOIR TO
HELEN'S BRIDGE

TYPE OF WORK:
GRADING, PAVING, STRUCTURE,
DRAINAGE, & EROSION CONTROL



VICINITY MAP

EROSION AND SEDIMENT CONTROL MEASURES

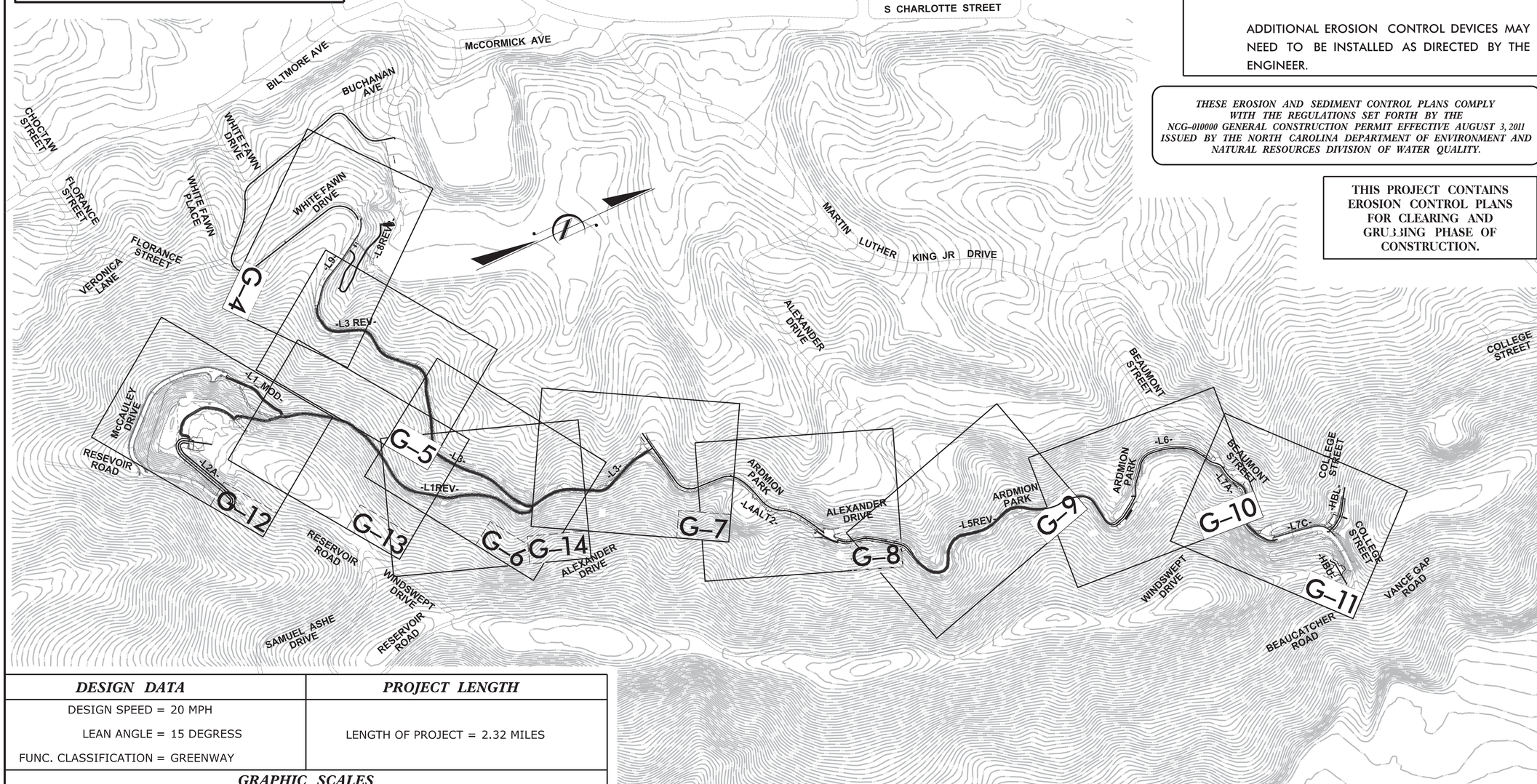
Description	Symbol
TREE PROTECTION FENCE	TP
SILT FENCE	SF
LIMITS OF DISTURBANCE	LD
SILT FENCE OUTLET	
CHECK DAM	
EXISTING TREE TO REMAIN	
EXISTING TREE TO BE REMOVED	
TREE NUMBER	1

NOTES: ANY DEVIATION FROM OPTIONS GIVEN WILL REQUIRE PRIOR APPROVAL BY ENGINEER.

ADDITIONAL EROSION CONTROL DEVICES MAY NEED TO BE INSTALLED AS DIRECTED BY THE ENGINEER.

THESE EROSION AND SEDIMENT CONTROL PLANS COMPLY WITH THE REGULATIONS SET FORTH BY THE NCG–010000 GENERAL CONSTRUCTION PERMIT EFFECTIVE AUGUST 3, 2011 ISSUED BY THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES DIVISION OF WATER QUALITY.

THIS PROJECT CONTAINS EROSION CONTROL PLANS FOR CLEARING AND GRUBBING PHASE OF CONSTRUCTION.



DESIGN DATA	PROJECT LENGTH
DESIGN SPEED = 20 MPH LEAN ANGLE = 15 DEGRESS FUNC. CLASSIFICATION = GREENWAY	LENGTH OF PROJECT = 2.32 MILES

GRAPHIC SCALES

30 15 0 30 60 — PLANS
30 15 0 30 60 — PROFILE (HORIZONTAL)
6 3 0 6 12 — PROFILE (VERTICAL)

LIMITS OF DISTURBANCE 9.00 AC

100% SUBMITTAL

BEAUCATCHER GREENWAY
WHITE FAWN RESERVOIR
TO
HELEN'S BRIDGE

PLANS PREPARED BY:
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STEWART

GREENWAY ENGINEER:
NORTH CAROLINA PROFESSIONAL SEAL 30932 ENGINEER ROBERT A. WILLIAMS
10/5/16

HYDRAULICS ENGINEER:
NORTH CAROLINA PROFESSIONAL SEAL 042301 ENGINEER ANDREW J. HICKLING

PROJECT NO.:
H13002.00

G-1

PROJECT DESCRIPTION

THE PROJECT SITE IS LOCATED IN BUNCOMBE COUNTY WITHIN THE CITY OF ASHEVILLE. THE PROPOSED PROJECT INCLUDES THE CONSTRUCTION OF APPROXIMATELY 2 MILES OF NEW GREENWAY ON BEAUCATCHER MOUNTAIN BETWEEN WHITE FAWN DRIVE AND HELEN'S BRIDGE. THE LIMITS OF DISTURBANCE WERE CALCULATED BASED ON CLEARING METHOD TWO AT APPROXIMATELY 8.85 ACRES FOR THIS SITE. ALL DISTURBED AREAS WILL BE STABILIZED WITH VEGETATION BY SEEDING AND MULCHING.

THE PROJECT DESIGN SHALL COMPLY WITH NORTH CAROLINA LAND QUALITY GUIDELINES AND PROCEDURES AND ALL APPLICABLE FEDERAL, STATE, AND CITY REQUIREMENTS AND STANDARDS; IDENTIFYING AREAS WHERE RIGHT–OF–WAY OR EASEMENT ACQUISITION MAY BE NECESSARY TO ACCOMMODATE THE GREENWAY PROJECT; AND PROVIDING PLANS, SPECIFICATIONS AND ESTIMATES. THE PLANS SHALL BE COMPLETED TO SHOW THE DESIGN, SITE PLANS, LANDSCAPING, DRAINAGE, EASEMENTS AND UTILITY CONFLICTS.

GENERAL NOTES

1. ANY STAGING, MATERIAL LAY DOWN, DIRT OR WASTE PILES WILL BE LOCATED WITHIN THE LIMITS OF DISTURBANCE. IF ANY ADDITIONAL STAGING AREAS ARE REQUIRED BY THE CONTRACTOR, ANY ADDITIONAL EASEMENTS AND REGULATORY PERMITS WILL BE THE RESPONSIBILITY OF THE CONTRACTOR.
2. ALL MATERIALS WILL BE CONTAINED WITHIN LIMITS OF DISTURBANCE AND WILL BE LOCATED A MINIMUM OF 50' FROM ANY WATERCOURSE OR DRAINAGE STRUCTURES
3. CONCRETE TRUCK CLEANOUT IS ALLOWED WITHIN THE CONSTRUCTION LIMITS AND SHALL BE PERFORMED AT THE CONCRETE WASHOUT LOCATION. SEE SHEET G–3C FOR CONCRETE WASHOUT.

CONSTRUCTION SEQUENCE

1. THE CONTRACTOR SHALL NOTIFY NCDENR DIVISION OF LAND QUALITY BEFORE BEGINNING ANY WORK ON THIS SITE.
2. HOLD PRECONSTRUCTION CONFERENCE AT LEAST ONE WEEK PRIOR TO STARTING CONSTRUCTION.
3. FLAG WORK LIMITS AND INSTALL TEMPORARY SILT FENCE, CONSTRUCTION ENTRANCES, COMBO FENCING, SILT FENCE OUTLETS, AND OTHER MEASURES AS SHOWN ON THE EROSION CONTROL PLANS. CLEAR ONLY AS NECESSARY TO INSTALL THESE DEVICES.
4. CONSTRUCT CLEAN WATER DITCHES, STABILIZE AND PROTECT.
5. CALL FOR ON–SITE INSPECTION BY ENVIRONMENTAL INSPECTOR TO OBTAIN APPROVAL.
6. COMPLETE SITE CLEARING AND GRUBBING FOR ENTIRE PROJECT. MAINTAIN AND ADJUST DEVICES AS NEEDED.
7. PERFORM GRADING OPERATIONS AND INSTALL PROPOSED DRAINAGE ITEMS. ROUGH GRADE SITE AND INSURE THAT SEDIMENT LADEN WATER IS DIRECTED TO SEDIMENT CONTROL DEVICES.
8. STABILIZE ALL DENUDED AREAS.
   STABILIZATION FOR THIS PROJECT SHALL COMPLY WITH THE TIME FRAME GUIDELINES AS SPECIFIED BY THE NCG–010000 GENERAL CONSTRUCTION PERMIT EFFECTIVE AUGUST 3, 2011 ISSUED BY THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES DIVISION OF WATER QUALITY. TEMPORARY OR PERMANENT GROUND COVER STABILIZATION SHALL OCCUR WITHIN 7 CALENDAR DAYS FROM THE LAST LAND DISTURBING ACTIVITY, WITH THE FOLLOWING EXCEPTIONS IN WHICH TEMPORARY OR PERMANENT GROUND COVER SHALL BE PROVIDED IN 14 CALENDAR DAYS FROM THE LAST LAND DISTURBING ACTIVITY:
   SLOPES 2:1 AND 3:1, WITH A SLOPE LENGTH OF 10 FEET OR LESS
   SLOPES 3:1 OR FLATTER, WITH A SLOPE LENGTH OF 50 FEET OR LESS
   SLOPES 4:1 OR FLATTER
9. INSPECT ALL EROSION AND SEDIMENT CONTROL DEVICES WEEKLY AND AFTER EVERY RAINFALL EVENT. PERFORM REQUIRED MAINTENANCE AND REPAIR IMMEDIATELY.
10. AFTER THE SITE IS STABILIZED, REMOVE ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES AND INSTALL PERMANENT VEGETATION ON THE DISTURBED AREAS.

TEMPORARY SEEDING SCHEDULE

FERTILIZER SHALL BE THE SAME ANALYSIS AS SPECIFIED FOR PERMANENT SEEDING AND APPLIED AT THE RATE OF 400 POUNDS AND SEEDED AT THE RATE OF 50 POUNDS PER ACRE. SWEET SUDAN GRASS, GERMAN MILLET, OR BROWNTOP MILLET SHALL BE USED IN THE SUMMER MONTHS AND RYE GRAIN DURING THE REMAINDER OF THE YEAR. THE ENGINEER WILL DETERMINE THE EXACT DATES FOR USING EACH KIND OF SEED.

ANNOUNCEMENT OF COMBINED SELF–MONITORING AND SELF–INSPECTION FORM

THE SEDIMENTATION POLLUTION CONTROL ACT WAS AMENDED IN 2006 TO REQUIRE THAT PERSONS RESPONSIBLE FOR LAND–DISTURBING ACTIVITIES INSPECT A PROJECT AFTER EACH PHASE OF THE PROJECT TO MAKE SURE THAT THE APPROVED EROSION AND SEDIMENTATION CONTROL PLAN IS BEING FOLLOWED.

RULES DETAILING THE DOCUMENTATION OF THESE INSPECTIONS BECAME EFFECTIVE OCTOBER 1, 2010.

TO SIMPLIFY DOCUMENTATION OF SELF–INSPECTION REPORTS AND NPDES SELF–MONITORING REPORTS, A COMBINED FORM IS NOW AVAILABLE. THE NEW FORM WAS DEVELOPED TO SATISFY THE REQUIREMENTS OF THE SEDIMENTATION POLLUTION CONTROL ACT AND THE NPDES STORMWATER PERMIT FOR CONSTRUCTION ACTIVITIES, NCG 010000. BEGINNING AUGUST 1, 2013 THE DIVISION OF ENERGY, MINERAL AND LAND RESOURCES IS RESPONSIBLE FOR ADMINISTERING BOTH THE SPCA AND THE NPDES STORMWATER PERMIT FOR THE CONSTRUCTION ACTIVITIES, NCG 010000. THE COMBINED FORM SHOULD MAKE IT EASIER TO COMPLY WITH SELF–INSPECTION REQUIREMENTS.

THE COMBINED SELF–MONITORING FORM IS AVAILABLE AS A PDF AND WORD DOCUMENT FROM THE LAND QUALITY WEB SITE,

http://portal.ncdenr.org/web/lr/erosion

IF YOU HAVE QUESTIONS, PLEASE CONTACT THE LAND QUALITY SECTION AT A DENR REGIONAL OFFICE.

MAINTENANCE REQUIREMENTS

1. EROSION AND SEDIMENT CONTROL PRACTICES WILL BE CHECKED FOR STABILITY AND OPERATION FOLLOWING EVERY RUNOFF–PRODUCING RAINFALL OR AT A MINIMUM ONCE A WEEK. IF REPAIRS ARE NEEDED THEY WILL BE DONE SO IMMEDIATELY.
2. SEDIMENT WILL BE REMOVED FROM BEHIND SILT FENCING WHEN IT BECOMES 0.5 FT DEEP OR GRATER. SILT FENCING WILL BE REPLACED AS NECESSARY TO MAINTAIN AN ADEQUATE BARRIER.
3. ALL SEEDED AREAS WILL BE FERTILIZED, RESEEDED AS NECESSARY, AND MULCHED ACCORDING TO THE SPECIAL PROVISIONS IN ORDER TO MAINTAIN A VIGOROUS, DENSE VEGETATIVE COVER.

STATION	DA / DITCH NAME	AREA	C VALUE	SLOPE	BOTTOM WIDTH	DEPTH	LINING
19+30	DA_DDL1REV_01	2.53	0.45	0.136	2	2	CLASS I RIP RAP
23+58	DA_DDL1REV_02	4.11	0.45	0.136	2	2	CLASS II RIP RAP
27+00	DA_DDL1REV_03	0.90	0.45	0.136	2	2	TURF REINFORCEMENT MATTING
10+40	DA_DDL2	0.62	0.46	0.136	2	2	TURF REINFORCEMENT MATTING
13+21	DA_DDL2_01	1.07	0.50	0.136	2	2	TURF REINFORCEMENT MATTING
16+23	DA_DDL2_02	2.18	0.46	0.025	2	2	CURLED MAT
25+77	DA_DDL3_01	1.04	0.46	0.059	2	2	CURLED MAT
28+27	DA_DDL3_02	1.46	0.45	0.059	2	2	TURF REINFORCEMENT MATTING
28+94	DA_DDL3_03	0.78	0.45	0.059	2	2	TURF REINFORCEMENT MATTING
13+35	DA_DDL4_01	5.40	0.45	0.045	2	2	CURLED MAT
17+87	DA_DDL4_02	0.30	0.46	0.045	2	2	TURF REINFORCEMENT MATTING
12+83	DA_DDL5_01	6.94	0.45	0.047	2	2	CURLED MAT
26+85	DA_DDL5_03	7.14	0.45	0.029	2	2	TURF REINFORCEMENT MATTING
15+41	DA_DDL6_01	4.49	0.45	0.013	2	2	TURF REINFORCEMENT MATTING
14+12	DA_DDL6_02	2.21	0.45	0.013	2	2	CURLED MAT
24+73	DA_DI22	0.12	0.55	0.025	2	2	CURLED MAT
23+11	DA_DI24	0.25	0.46	0.025	2	2	JUTE NET LINING
10+24	DA_DI914	0.86	0.45	0.025	2	2	CURLED MAT
12+69	DA_DI916	0.30	0.53	0.025	2	2	JUTE NET LINING
11+87	DA_DI918	0.02	0.55	0.025	2	2	JUTE NET LINING
11+27	DA_DI8	2.68	0.45	0.025	2	2	CURLED MAT
13+37	DA_HW10	1.05	0.46	0.056	2	2	CURLED MAT
15+85	DA_HW12	1.44	0.46	0.056	2	2	TURF REINFORCEMENT MATTING
18+38	DA_HW14	1.50	0.46	0.056	2	2	TURF REINFORCEMENT MATTING
21+38	DA_HW16	0.92	0.46	0.056	2	2	CURLED MAT
22+49	DA_HW18	0.17	0.51	0.056	2	2	CURLED MAT
23+11	DA_HW20	0.12	0.53	0.056	2	2	JUTE NET LINING
28+34	DA_L1REV_04	2.69	0.45	0.136	2	2	CLASS I RIP RAP
18+33	DA_L5_02	6.00	0.45	0.025	2	2	TURF REINFORCEMENT MATTING

DITCH NAME	AREA	C VALUE	SLOPE	STABILIZATION METHOD
8 (12+50 - 10+60)	4.66	0.36	0.061	TURF REINFORCEMENT MATTING
10(13+50-1250)	1.33	0.32	0.058	TURF REINFORCEMENT MATTING
12 (17+50-13+50)	2.10	0.35	0.063	TURF REINFORCEMENT MATTING
14 (21+40-17+50)	2.99	0.50	0.062	TURF REINFORCEMENT MATTING
16 (22+20-21+40)	5.26	0.38	0.044	TURF REINFORCEMENT MATTING
18 (23+00-22+20)	0.56	0.35	0.065	CURLED MAT
20 (23+00-24+20)	0.31	0.37	0.044	CURLED MAT
22 (24+20+24+80)	0.45	0.38	0.055	CURLED MAT
26(24+80-25+30)	0.19	0.32	0.046	CURLED MAT
28 (25+30-27+30)	2.49	0.31	0.033	TURF REINFORCEMENT MATTING
30 (27+30-30+00)	0.78	0.31	0.084	TURF REINFORCEMENT MATTING
701 (16+00-31+50)	3.33	0.31	0.014	CURLED MAT
801 (27+20-30+75)	0.34	0.08	0.076	CURLED MAT
914 (11+00-10+24)	0.86	0.31	0.101	TURF REINFORCEMENT MATTING

CITY OF ASHEVILLE NORTH CAROLINA

BEAUCATCHER GREENWAY
WHITE FAWN RESERVOIR
TO
HELEN'S BRIDGE

PLANS PREPARED BY:
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GREENWAY ENGINEER:
NORTH CAROLINA PROFESSIONAL SEAL 30932 ENGINEER ROBERT A. WILLIAMS
10/5/16

HYDRAULICS ENGINEER:
NORTH CAROLINA PROFESSIONAL SEAL 042301 ENGINEER ANDREW J. HICKLING

PROJECT NO.:
H13002.00

G-3

NOTES

EROSION CONTROL NOTES

TOTAL ACREAGE OF DISTURBED AREA IS 9.00 ACRES, ACREAGE OF PERMANENT SEEDING IS 2.32.
ACREAGE OF TEMPORARY SEEDING IS 0.79 ACRES.
SEE CONTRACT DOCUMENTS FOR SEEDING SPECIFICATIONS.

ON-SITE BURIAL PITS ARE NOT ACCEPTABLE.

ANY GRADING BEYOND THE LIMITS SHOWN ON THE PLAN IS A VIOLATION OF THE STATE/TOWN EROSION CONTROL ORDINANCE AND IS SUBJECT TO FINE.

STABILIZATION IS THE BEST FORM OF EROSION CONTROL. TEMPORARY SEEDING IS NECESSARY TO ACHIEVE EROSION CONTROL IN LARGE DENUDED AREAS AND ESPECIALLY WHEN SPECIFICALLY REQUIRED AS PART OF THE CONSTRUCTION SEQUENCE SHOWN ON THE PLAN.

ALL GRADED SLOPES MUST BE SEEDED AND MULCHED WITHIN THE TIMEFRAME DEFINED BY THE PROJECT STABILIZATION REQUIREMENTS

DURING UNSUITABLE GROWING SEASONS, MULCH WILL BE USED AS A TEMPORARY COVER ON SLOPES THAT ARE 4:1 OR STEEPER, MULCH WILL BE ANCHORED.

ADDITIONAL MEASURES TO CONTROL EROSION AND SEDIMENT MAY BE REQUIRED BY A LOCAL REPRESENTATIVE OF THE STATE/TOWN STORM WATER MANAGEMENT SECTION AND THE LOCAL INSPECTIONS DEPARTMENT.

CONSTRUCTION, MAINTENANCE, REMOVAL OF ALL EROSION CONTROL DEVICES, ALL FINES, LEGAL FEES AND RESTORATION COSTS ARE THE RESPONSIBILITY OF THE CONTRACTOR UNLESS OTHERWISE NOTED.

A COPY OF THE APPROVED PLANS MUST BE ON FILE AT THE JOB SITE.

CONTRACTOR SHALL OBTAIN A COPY OF EACH SUBSURFACE INVESTIGATION REPORT AND FOLLOW THE RECOMMENDATIONS OR AS DIRECTED FOR GRADING, COMPLETION AND PAVEMENT DESIGN, ETC.

STABILIZATION FOR THIS PROJECT SHALL COMPLY WITH THE TIME FRAME GUIDELINES AS SPECIFIED BY THE NCG-010000 GENERAL CONSTRUCTION PERMIT EFFECTIVE AUGUST 3, 2011 ISSUED BY THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES DIVISION OF WATER QUALITY.

CITY OF ASHEVILLE EROSION CONTROL NOTES

MONTHLY INSPECTIONS WILL BE CONDUCTED BY THE CITY (AT A MINIMUM). THE CITY WILL GIVE THE CONTRACTOR A COPY OF THE INSPECTION REPORT AND NOTIFY THEM OF ANY ISSUES THAT THE SITE MAY HAVE.

IF A NOV (NOTICE OF VIOLATION) IS ISSUED, THE SITE ISSUES WILL NEED TO BE ADDRESSED AS PER THE NOV LETTER BUT NO LATER THAN TEN CALENDAR DAYS. IF THE NOV IS NOT ADDRESSED, FINES MAY BE ISSUED ACCORDING TO THE CITY'S COMPREHENSIVE LIST OF FEES AND CHARGES.

IF THREE NOV'S ARE ISSUED ON ONE CONSTRUCTION SITE TO THE SAME CONTRACTOR, A STOP WORK ORDER WILL BE ISSUED AND RE- EDUCATION / TRAINING MUST BE CONDUCTED AND VERIFICATION OF TRAINING MUST BE PRESENTED TO THE CITY PRIOR TO RE -STARTING WORK.

ANY MUD TRACKED INTO THE STREET MUST BE CLEANED UP IMMEDIATELY. IF THE MUD/DIRT IS NOT ADDRESSED IN A TIMELY MANNER, THE CONTRACTOR WILL BE ASSESSED A FINE ACCORDING TO THE CITY'S COMPREHENSIVE LIST OF FEES AND CHARGES.

IF SEDIMENT LEAVES THE SITE INTO A WATER COURSE, NATURAL AREA, OR WETLAND AN AUTOMATIC FINE WILL BE ISSUED ACCORDING TO THE CITY'S COMPREHENSIVE LIST OF FEES AND CHARGES. IN ADDITION, NCDENR WILL BE AUTOMATICALLY NOTIFIED AND ADDITIONAL FINES MAY BE ASSESSED.

EROSION PROVISION

THE CONTRACTOR SHALL BE REQUIRED TO TAKE EVERY REASONABLE PRECAUTION THROUGHOUT THE CONTRACT TO PREVENT THE EROSION OF SOIL AND THE SEDIMENTATION OF STREAMS, LAKES, RESERVOIRS, OTHER WATER IMPOUNDMENTS, GROUND SURFACES, OR OTHER PROPERTY AS REQUIRED BY THE SEDIMENT POLLUTION CONTROL ACT OF 1973 AND THE 1974 AMENDMENTS TO THE ACT.

FAILURE ON THE PART OF THE CONTRACTOR TO COMPLY WITH THE PROVISIONS OF THE EROSION CONTROL PLAN OR TO PERFORM EROSION CONTROL WORK AS DIRECTED WILL RESULT IN THE ENGINEER, INSPECTOR OR NCDENR NOTIFYING THE CONTRACTOR TO COMPLY WITH THESE PROVISIONS. IN THE EVENT THAT THE CONTRACTOR FAILS TO BEGIN SUCH REMEDIAL ACTION OR FAILS TO BEGIN EROSION CONTROL WORK WITHIN 24 HOURS AFTER RECEIPT OF SUCH NOTICE WITH ADEQUATE FORCES AND EQUIPMENT, THE ENGINEER MAY PROCEED TO HAVE THE WORK PERFORMED WITH OTHER FORCES. NO PAYMENT WILL BE MADE TO THE CONTRACTOR FOR WORK PERFORMED BY OTHERS. ANY COSTS INCURRED BY THE CITY DUE TO THE FAILURE OF THE CONTRACTOR TO COMPLY WITH THESE PROVISIONS WILL BE BORNE BY THE CONTRACTOR. SUCH COSTS WILL INCLUDE CIVIL PENALTIES ASSESSED FOR SOIL EROSION AND SEDIMENTATION CONTROL VIOLATIONS.

ANY COSTS INCURRED BY THE CITY FOR WORK PERFORMED BY OTHERS AS PROVIDED ABOVE IN THE EXCESS OF THE COSTS THAT WOULD HAVE BEEN INCURRED HAD THE WORK BEEN PERFORMED BY THE CONTRACTOR WILL BE DEDUCTED FROM RETAINAGE OR OTHER MONIES DUE THE CONTRACTOR OR HIS CONTRACT.

MULCHING AND MATTING

A. APPLY MULCH OR MATTING AS REQUIRED TO RETAIN SOIL AND GRASS, BUT NO LESS THAN THE FOLLOWING:

1. SLOPES 2:1 AND GREATER BY SPREADING A LIGHT COVER OF MULCH OVER SEEDED AREA AT THE RATE OF NOT LESS THAN 92 LBS. PER 1000 SQ.FT.
2. SLOPES LESS THAN 2:1 MULCH WITH MATTING. PIN MATTING TO THE GROUND WITH WIRE STAPLES AT 5 FOOT INTERVALS, IMMEDIATELY AFTER SEEDING.
3. USE TACK TO PREVENT DISRUPTION OF MULCH.

B. FOR TACK USE AN ASPHALT TIE-DOWN OF EMULSIFIED ASPHALT GRADE AE-E OR CUT-BACK ASPHALT GRADE RC-2 OR OTHER APPROVED EQUAL. AN APPROVED JUTE MESH OR NET MAY BE USED IN LIEU OF TACKING STRAW MULCH.

C. OTHER TYPES OF MULCH AND ANCHORING METHODS MAY BE USED UPON APPROVAL BY THE ENGINEER.

D. EXCELSIOR MATTING SHALL MEET NCDOT STANDARD SPECIFICATIONS AND SHALL BE INSTALLED PER APPROVED PLANS.

PROTECTION

A. PROTECT SEEDED AREAS FROM DAMAGE BY BARRICADES, SIGNS, AND OTHER APPROPRIATE MEANS. MAINTAIN AND PROTECT SLOPES FROM WEATHER-DAMAGE.

SEEDING

A. ACCOMPLISH SEEDING BY MEANS OF AN APPROVED POWER-DRAWN SEED DRILL, COMBINATION CORRUGATED ROLLER-SEEDER, APPROVED HAND OPERATED MECHANICAL SEEDER, OR OTHER APPROVED METHODS TO PROVIDE EVEN DISTRIBUTION OF SEED.

B. DO NOT SEED WHEN GROUND IS EXCESSIVELY WET OR EXCESSIVELY DRY. AFTER SEEDING, ROLL AREA WITH A ROLLER, NOT LESS THAN 18 INCHES IN DIAMETER AND WEIGHING NOT MORE THAN 210 POUNDS PER FOOT OF WIDTH. UPON COMPLETION OF ROLLING, WATER AREA WITH A FINE SPRAY.

C. IMMEDIATELY FOLLOWING SEEDING APPLY MULCH OR MATTING. DO NOT SEED AREAS IN EXCESS OF THAT WHICH CAN BE MULCHED ON SAME DAY.

D. APPLY WATER WITH A FINE SPRAY IMMEDIATELY AFTER EACH AREA HAS BEEN MULCHED. SATURATE TO 4 INCHES OF SOIL DEPTH.

E. THE AMOUNT OF DISTURBED AREA REQUIRED TO BE TEMPORARILY STABILIZED SHALL BE THE LESSER OF 2500 LINEAR FEET OF DISTURBED AREA OR THE TIMEFRAMES DETAILED IN THE NCDENR NEW STABILIZATION TIMEFRAMES (EFFECTIVE AUG. 3, 2011).

NPDES Stormwater Discharge Permit for Construction Activities (NCGO1) NCDENR/Division of Water Quality

NEW STABILIZATION TIMEFRAMES
(Effective Aug. 3, 2011)

SITE AREA DESCRIPTION	STABILIZATION	TIMEFRAME EXCEPTIONS
Perimeter dikes, swales, ditches, slopes	7 days	None
High Quality Water (HQW) Zones	7 days	None
Slopes steeper than 3:1	7 days	If slopes are 10' or less in length and are not steeper than 2:1, 14 days are allowed.
Slopes 3:1 or flatter	14 days	7 days for slopes greater than 50' in length.
All other areas with slopes flatter than 4:1	14 days	None, except for perimeters and HQW Zones.

CITY OF ASHEVILLE NORTH CAROLINA

BEAUCATCHER GREENWAY
WHITE FAWN RESERVOIR
TO
HELEN'S BRIDGE

PLANS PREPARED BY:
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GREENWAY ENGINEER:
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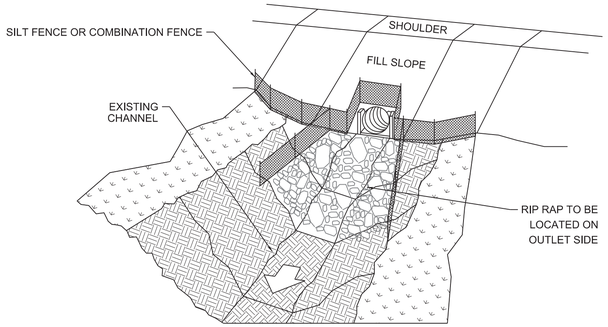
10/5/16

HYDRAULICS ENGINEER:
NORTH CAROLINA PROFESSIONAL SEAL 042301 ENGINEER ANDREW J. HICKLING

PROJECT NO.:
H13002.00

NTS

G-3A



1 DETAIL FOR SILT/COMBINATION FENCE INSTALLATION AT CULVERT OUTLET

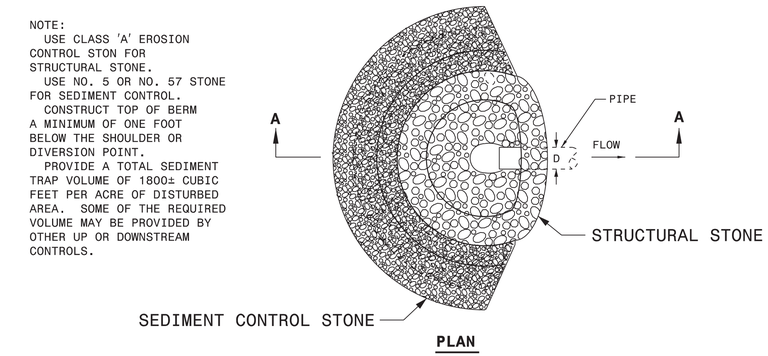
STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

7-06

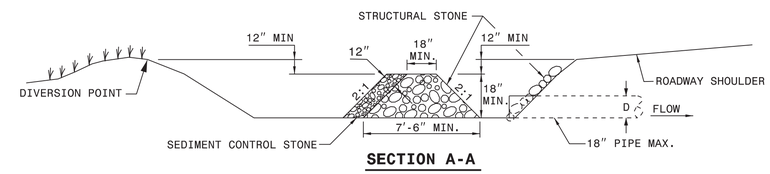
ENGLISH STANDARD DRAWING FOR
ROCK PIPE INLET SEDIMENT TRAP TYPE 'B'

SHEET 1 OF 1
1635.02

NOTE:
USE CLASS 'A' EROSION CONTROL STON FOR STRUCTURAL STONE.
USE NO. 5 OR NO. 57 STONE FOR SEDIMENT CONTROL.
CONSTRUCT TOP OF BERM A MINIMUM OF ONE FOOT BELOW THE SHOULDER OR DIVERSION POINT.
PROVIDE A TOTAL SEDIMENT TRAP VOLUME OF 1800± CUBIC FEET PER ACRE OF DISTURBED AREA. SOME OF THE REQUIRED VOLUME MAY BE PROVIDED BY OTHER UP OR DOWNSTREAM CONTROLS.



PLAN



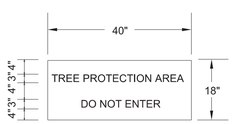
SECTION A-A

STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

7-06

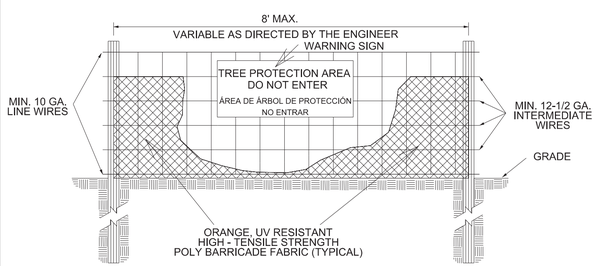
ENGLISH STANDARD DRAWING FOR
ROCK PIPE INLET SEDIMENT TRAP TYPE 'B'

SHEET 1 OF 1
1635.02

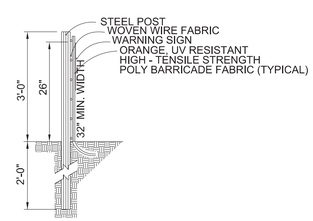


WARNING SIGN DETAIL

NOTES:
WARNING SIGNS TO BE MADE OF DURABLE, WEATHERPROOF MATERIAL.
LETTERS TO BE 3" HIGH MINIMUM, CLEARLY LEGIBLE AND SPACED AS DETAILED.
SIGNS SHALL BE PLACED AT 50' MAXIMUM INTERVALS.
PLACE A SIGN AT EACH END OF LINEAR TREE PROTECTION AND 50' ON CENTER THEREAFTER.
FOR TREE PROTECTION AREAS LESS THAN 200' IN PERIMETER, PROVIDE NO LESS THAN ONE SIGN PER PROTECTION AREA.
ATTACH SIGNS SECURELY TO FENCE POSTS AND FABRIC.
MAINTAIN TREE PROTECTION FENCE THROUGHOUT DURATION OF PROJECT.
ADDITIONAL SIGNS MAY BE REQUIRED BY CITY OF RALEIGH INSPECTIONS DEPARTMENT BASED ON ACTUAL FIELD CONDITIONS.
PLACE A SIGN AT EACH END OF LINEAR TREE PROTECTION AND 50' ON CENTER THEREAFTER.



FRONT VIEW

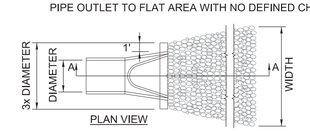


SIDE VIEW

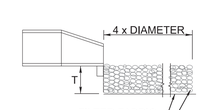
3 TREE PROTECTION FENCE

NOTE: FOR TREE PROTECTION ONLY

TYPE A
PIPE OUTLET TO FLAT AREA WITH NO DEFINED CHANNEL

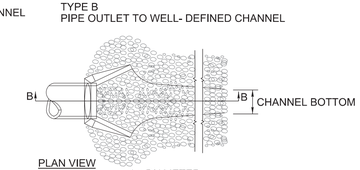


PLAN VIEW

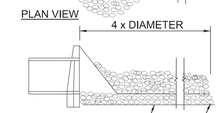


FILTER FABRIC
SEE PLANS FOR QUANTITIES
SECTION A-A

TYPE B
PIPE OUTLET TO WELL- DEFINED CHANNEL



PLAN VIEW



FILTER FABRIC
SEE PLANS FOR QUANTITIES
SECTION B-B

NOTES: FOOTING SIZE

PIPE SIZE	WIDTH	DEPTH
15" - 24"	8"	12"
>24" - 36"	12"	24"
>36" - 54"	18"	36"

FILTER FABRIC

H = RIP RAP TO TOP OF PIPE (MAX. H = D+T)
T = 15" CLASS 'I' RIPRAP
T = 12" CLASS 'B' RIP RAP

4 PIPE OUTLET PROTECTION

BEAUCATCHER GREENWAY
WHITE FAWN RESERVOIR
TO
HELEN'S BRIDGE

PLANS PREPARED BY:
STEWART
Firm License No. C-1051
421 Fayetteville St.
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Raleigh, NC 27601
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www.stewartinc.com

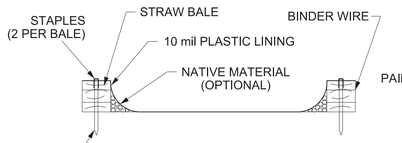
GREENWAY ENGINEER:
NORTH CAROLINA PROFESSIONAL SEAL 30932 ENGINEER ROBERT A. WILLIAMS
10/5/16

HYDRAULICS ENGINEER:
NORTH CAROLINA PROFESSIONAL SEAL 042301 ENGINEER ANDREW J. HICKLING

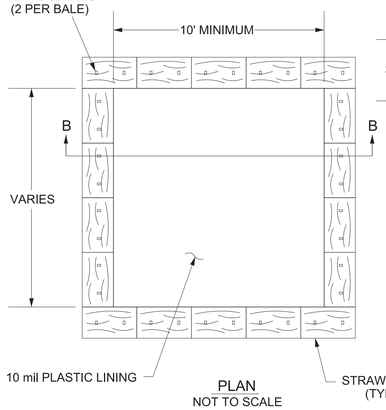
PROJECT NO.:
H13002.00

NTS

G-3B

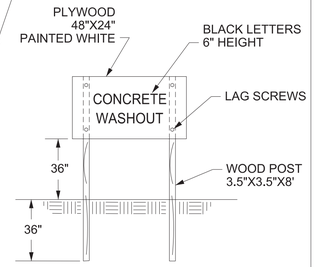


SECTION B-B
NOT TO SCALE

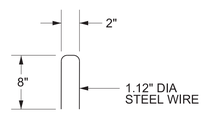


PLAN
NOT TO SCALE

TYPE "ABOVE GRADE" WITH STRAW BALES



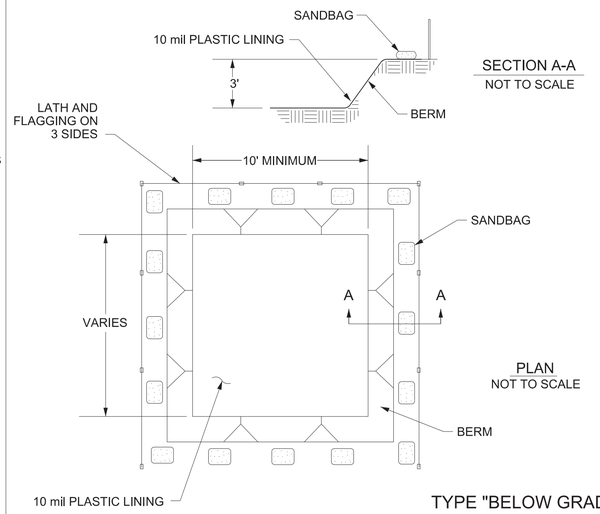
CONCRETE WASHOUT
SIGN DETAIL
(OR EQUIVALENT)



STAPLE
DETAIL

NOTES

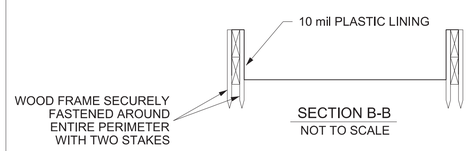
1. ACTUAL LAYOUT TO BE DETERMINED IN THE FIELD.
2. A CONCRETE WASHOUT SIGN SHALL BE INSTALLED WITHIN 30' OF THE TEMPORARY CONCRETE WASHOUT FACILITY.
3. MATERIALS USED TO CONSTRUCT TEMPORARY CONCRETE WASHOUT FACILITIES SHALL BE REMOVED FROM THE SITE OF THE WORK AND DISPOSED OF OR RECYCLED.
4. HOLES, DEPRESSIONS OR OTHER GROUND DISTURBANCE CAUSED BY THE REMOVAL OF THE TEMPORARY CONCRETE WASHOUT FACILITIES SHALL BE BACKFILLED, REPAIRED, AND STABILIZED TO PREVENT EROSION.
5. THERE IS NO SEPARATE PAY ITEM FOR CONCRETE WASHOUT. THE COST OF INSTALLATION, MAINTENANCE, AND REMOVAL SHALL BE DISTRIBUTED BETWEEN THE OTHER PAY ITEMS.



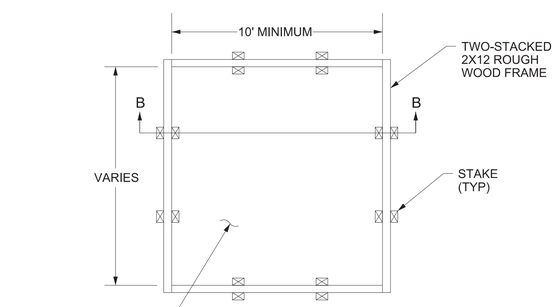
SECTION A-A
NOT TO SCALE

PLAN
NOT TO SCALE

TYPE "BELOW GRADE"



SECTION B-B
NOT TO SCALE

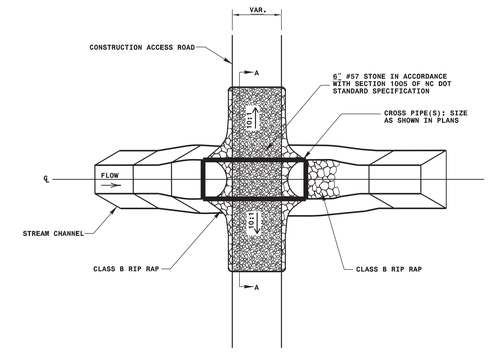


PLAN
NOT TO SCALE

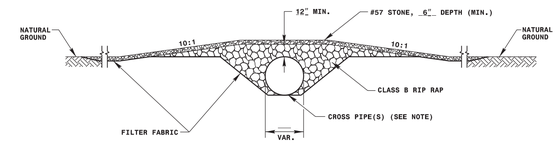
TYPE "ABOVE GROUND"
WITH WOOD PLANKS

CONCRETE WASHOUT

TEMPORARY STREAM CROSSING



PLAN VIEW



SECTION A-A
NOT TO SCALE

NOTES: PIPE(S) FOR TEMPORARY STREAM CROSSING ARE DESIGNED TO PASS THE PEAK OR BANKFULL FLOW, WHICHEVER IS LESS, FROM A 2-YEAR PEAK STORM, WITHOUT OVER TOPPING.

ALL CULVERT INSTALLATION/JURISDICTIONAL STREAM CROSSINGS SHOULD USE THE DETAILS PROVIDED OR CONTRACTOR CAN PROVIDE A DETAIL TO NCDENR FOR APPROVAL.

BEAUCATCHER GREENWAY
WHITE FAWN RESERVOIR
TO
HELEN'S BRIDGE

PLANS PREPARED BY:
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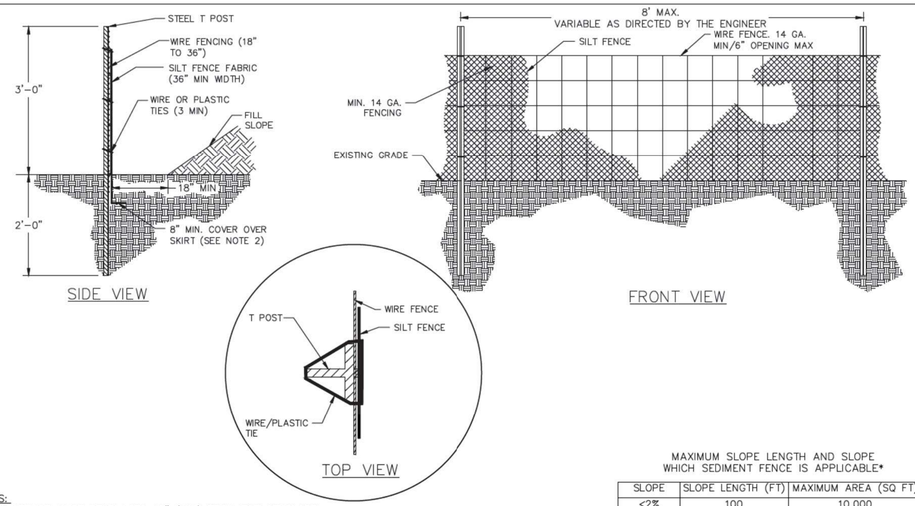
PROJECT NO.:
H13002.00

G-3C



NOTES:
1. SILT FENCE MUST BE PLACED 18" (MIN) FROM TOE OF SLOPE. IT CAN NOT BE USED TO HOLD BACK FILL MATERIALS
2. BOTTOM 12 INCHES OF SILT FENCE MUST BE BURIED. PLACE IT IN A TRENCH 8" DEEP AND 4" WIDE
3. USE SILT FENCE ONLY WHEN DRAINAGE AREA DOES NOT EXCEED 1/4 ACRE AND NEVER IN AREAS OF CONCENTRATED FLOW OR IN A STREAM BED.

MAXIMUM SLOPE LENGTH AND SLOPE WHICH SEDIMENT FENCE IS APPLICABLE*

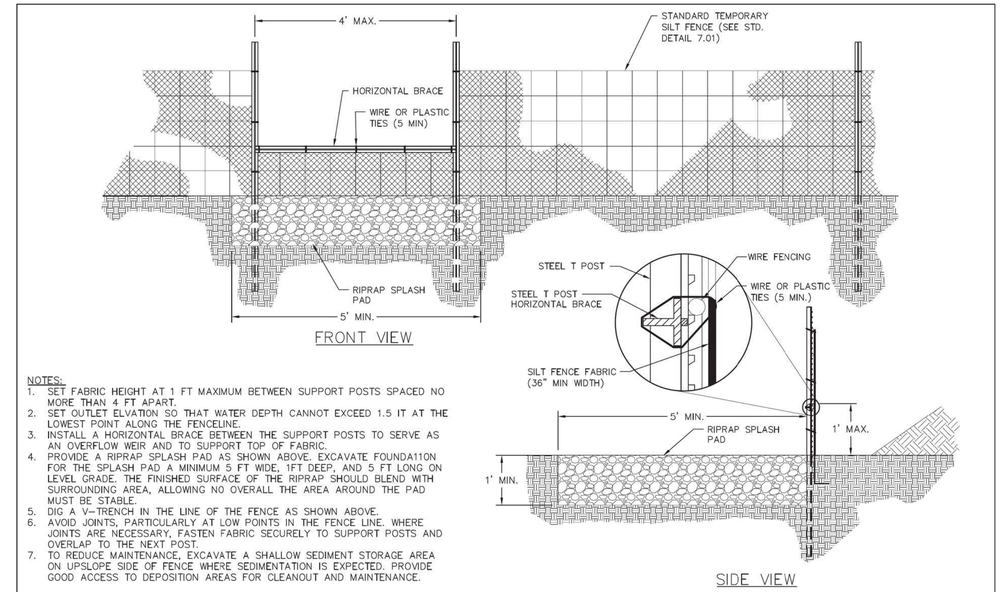
SLOPE	SLOPE LENGTH (FT)	MAXIMUM AREA (SQ FT)
<2%	100	10,000
2 TO 5%	75	7,500
5 TO 10%	50	5,000
10 TO 20%	25	2,500
>20%	15	1,500

* TABLE INFORMATION TAKEN FRON THE NORTH CAROLINA EROSION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL, DETAIL 6.62A.

City of Asheville, NC
Standard Specifications and Details Manual

STANDARD TEMPORARY SILT FENCE

REVISIONS		STD. NO.
DATE	DESCRIPTION	
6/9/15	MINOR GRAPHIC REP. REVISIONS	7.01



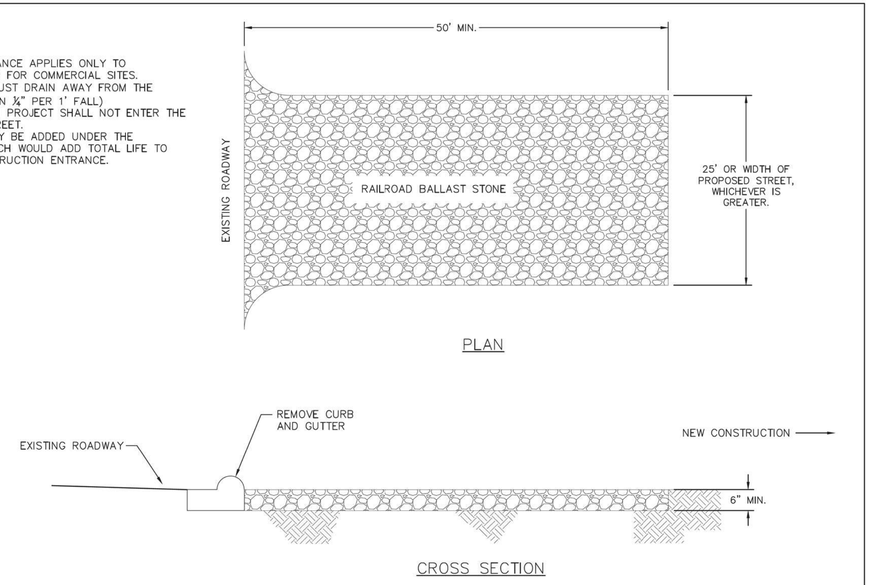
NOTES:
1. SET FABRIC HEIGHT AT 1 FT MAXIMUM BETWEEN SUPPORT POSTS SPACED NO MORE THAN 4 FT APART.
2. SET OUTLET ELVATION SO THAT WATER DEPTH CANNOT EXCEED 1.5 IT AT THE LOWEST POINT ALONG THE FENCELINE.
3. INSTALL A HORIZONTAL BRACE BETWEEN THE SUPPORT POSTS TO SERVE AS AN OVERFLOW WEIR AND TO SUPPORT TOP OF FABRIC.
4. PROVIDE A RIPRAP SPLASH PAD AS SHOWN ABOVE. EXCAVATE FOUNDA110N FOR THE SPLASH PAD A MINIMUM 5 FT WIDE, 1FT DEEP, AND 5 FT LONG ON LEVEL GRADE. THE FINISHED SURFACE OF THE RIPRAP SHOULD BLEND WITH SURROUNDING AREA, ALLOWING NO OVERALL THE AREA AROUND THE PAD MUST BE STABLE.
5. DIG A V-TRENCH IN THE LINE OF THE FENCE AS SHOWN ABOVE.
6. AVOID JOINTS, PARTICULARLY AT LOW POINTS IN THE FENCE LINE. WHERE JOINTS ARE NECESSARY, FASTEN FABRIC SECURELY TO SUPPORT POSTS AND OVERLAP TO THE NEXT POST.
7. TO REDUCE MAINTENANCE, EXCAVATE A SHALLOW SEDIMENT STORAGE AREA ON UPSLOPE SIDE OF FENCE WHERE SEDIMENTATION IS EXPECTED. PROVIDE GOOD ACCESS TO DEPOSITION AREAS FOR CLEANOUT AND MAINTENANCE.

City of Asheville, NC
Standard Specifications and Details Manual

STANDARD TEMPORARY SILT FENCE WITH REINFORCED STABILIZED OUTLET

REVISIONS		STD. NO.
DATE	DESCRIPTION	
		7.01A

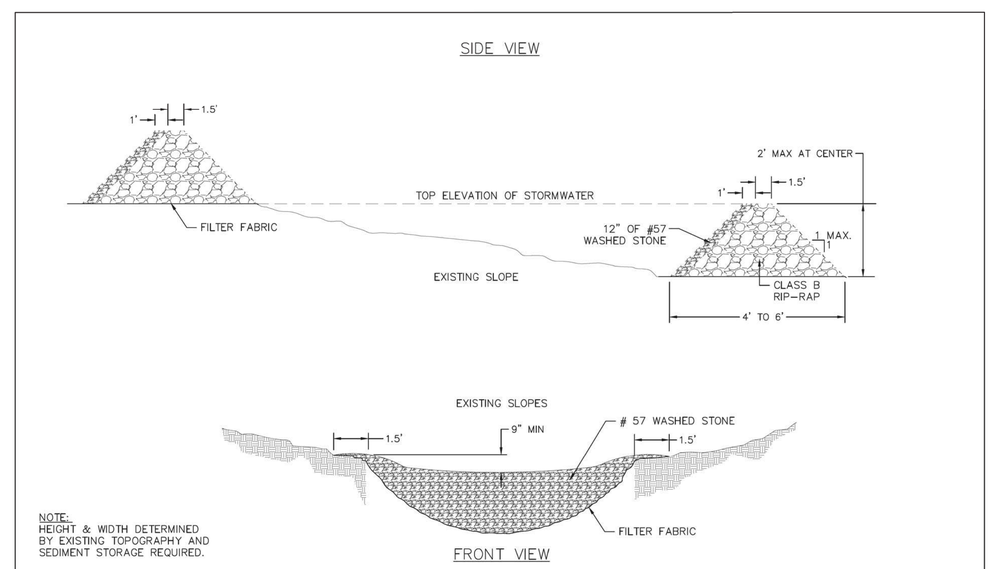
NOTES:
1. THIS ENTRANCE APPLIES ONLY TO ENTRANCES FOR COMMERCIAL SITES.
2. FIRST 5' MUST DRAIN AWAY FROM THE STREET (MIN ¼" PER 1' FALL)
3. FLOW FROM PROJECT SHALL NOT ENTER THE PUBLIC STREET.
4. FABRIC MAY BE ADDED UNDER THE STONE WHICH WOULD ADD TOTAL LIFE TO THE CONSTRUCTION ENTRANCE.



City of Asheville, NC
Standard Specifications and Details Manual

COMMERCIAL CONSTRUCTION ENTRANCE

REVISIONS		STD. NO.
DATE	DESCRIPTION	
		7.03



NOTE:
HEIGHT & WIDTH DETERMINED BY EXISTING TOPOGRAPHY AND SEDIMENT STORAGE REQUIRED.

City of Asheville, NC
Standard Specifications and Details Manual

CHECK DAM

REVISIONS		STD. NO.
DATE	DESCRIPTION	
		7.07

CITY OF ASHEVILLE NORTH CAROLINA

BEAUCATCHER GREENWAY
WHITE FAWN RESERVOIR
TO
HELEN'S BRIDGE

PLANS PREPARED BY:
STEWART
Firm License No. C-1051
421 Fayetteville St.
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Raleigh, NC 27601
T 919.380.8750
www.stewartinc.com

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NORTH CAROLINA PROFESSIONAL SEAL 30932 ENGINEER ROBERT A. WILLIAMS
10/5/16

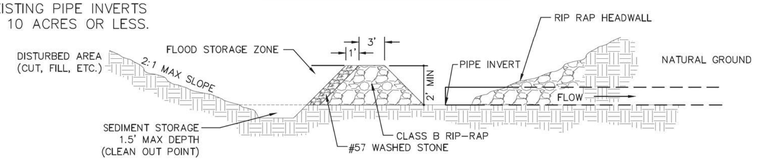
HYDRAULICS ENGINEER:
NORTH CAROLINA PROFESSIONAL SEAL 042301 ENGINEER ANDREW J. HICKLING

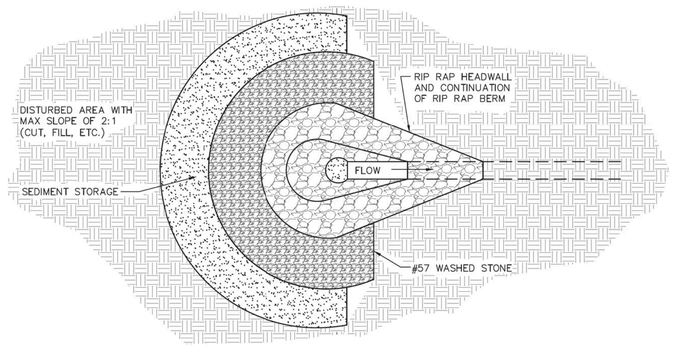
PROJECT NO.:
H13002.00

G-3D

NOTE:
GRAVEL & RIP RAP FILTER BERM BASIN DETAIL IS DESIGNED TO PROTECT EXISTING PIPE INVERTS THAT DRAIN 10 ACRES OR LESS.

SECTION THRU BASIN, FILTER AND CULVERT PIPE





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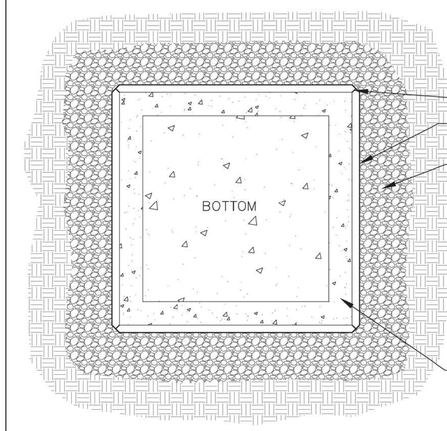
Standard Specifications and Details Manual

GRAVEL & RIP RAP PIPE INLET PROTECTION

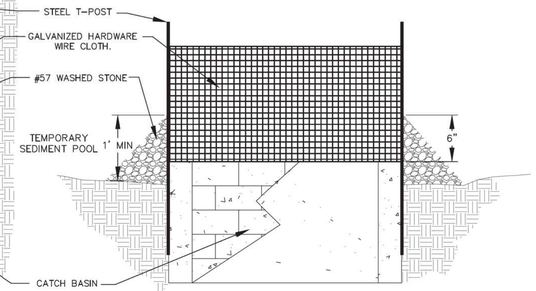
REVISIONS		STD. NO.
DATE	DESCRIPTION	
		7.10

NOTES:
1. SILT FENCE IS NOT ACCEPTABLE IN PLACE OF HARDWARE CLOTH.
2. ONLY STEEL T-POST ARE ACCEPTABLE.
3. #57 WASHED STONE MUST BE A MIN 6" ABOVE THE TOP OF THE CATCH BASIN.
4. TEMPORARY SEDIMENT POOL MUST BE 1' MINIMUM AND 2' MAXIMUM DEPTH

TOP ELEVATION



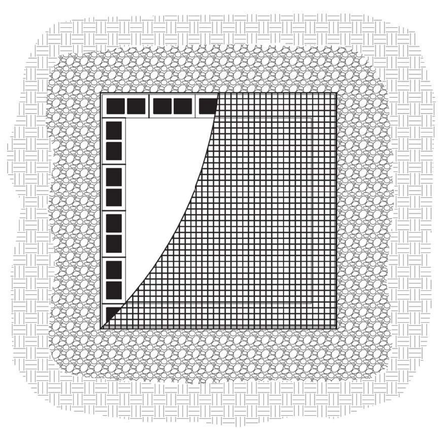
SIDE ELEVATION



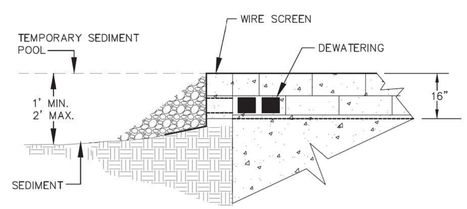
City of Asheville, NC
Standard Specifications and Details Manual

STANDARD CATCH BASIN INLET PROTECTION

REVISIONS		STD. NO.
DATE	DESCRIPTION	
		7.11



CONSTRUCTION SPECIFICATIONS
1. LAY ONE BLOCK ON EACH SIDE OF THE STRUCTURE ON ITS SIDE IN THE BOTTOM ROW TO ALLOW POOL DRAINAGE. THE FOUNDATION SHOULD BE EXCAVATED AT LEAST 2 INCHES BELOW THE CREST OF THE STORM DRAIN. PLACE THE BOTTOM ROW OF BLOCKS AGAINST THE EDGE OF THE STORM DRAIN FOR LATERAL SUPPORT AND TO AVOID WASHOUTS WHEN OVERFLOW OCCURS. IF NEEDED, GIVE LATERAL SUPPORT TO SUBSEQUENT ROWS BY PLACING 2 X 4 WOOD STUDS THROUGH BLOCK OPENINGS.
2. CAREFULLY FIT HARDWARE CLOTH OR COMPARABLE WIRE MESH WITH 1/2-INCH OPENINGS OVER ALL BLOCK OPENINGS TO HOLD GRAVEL IN PLACE.
3. USE CLEAN GRAVEL, 3/4- TO 1/2-INCH IN DIAMETER, PLACED 2 INCHES BELOW THE TOP OF THE BLOCK ON A 2:1 SLOPE OR FLATTER AND SMOOTH IT TO AN EVEN GRADE. DOT #57 WASHED STONE IS RECOMMENDED.



City of Asheville, NC
Standard Specifications and Details Manual

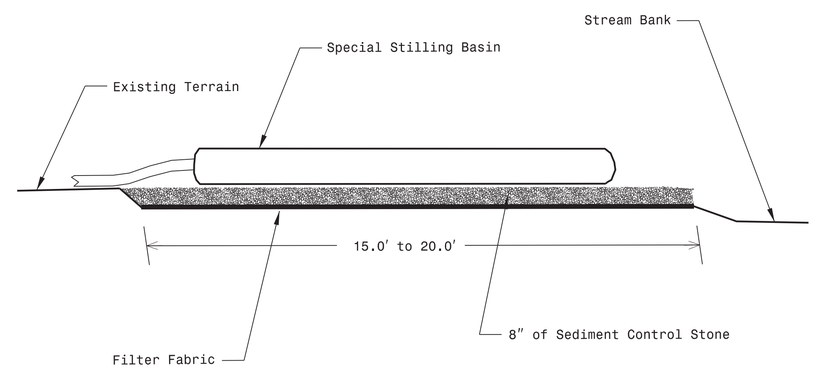
BLOCK AND GRAVEL INLET PROTECTION

REVISIONS		STD. NO.
DATE	DESCRIPTION	
		7.11A

STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

7-06

ENGLISH STANDARD DRAWING FOR
SPECIAL STILLING BASIN



Note: Provide Stabilized Outlet to Streambank
Not To Scale

SHEET 1 OF 1
1630.06

STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

7-06

ENGLISH STANDARD DRAWING FOR
SPECIAL STILLING BASIN

SHEET 1 OF 1
1630.06

BEAUCATCHER GREENWAY
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PLANS PREPARED BY:
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PROJECT NO.:
H13002.00

G-3E

MATTING INSTALLATION DETAIL

NOT TO SCALE

MATTING IN DITCHES

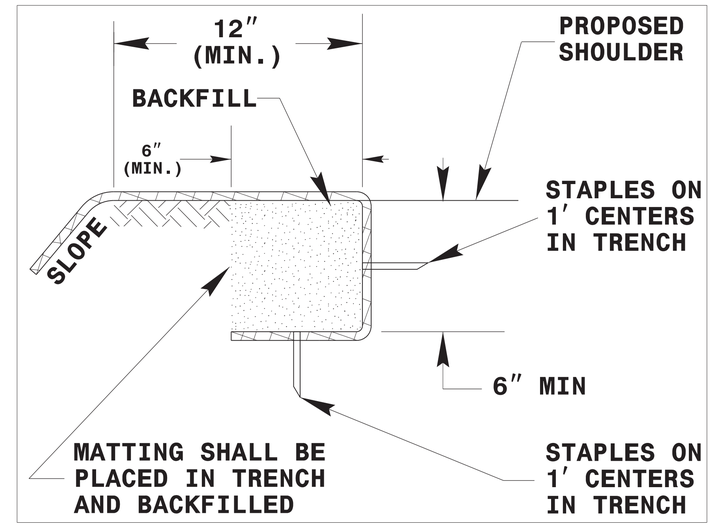
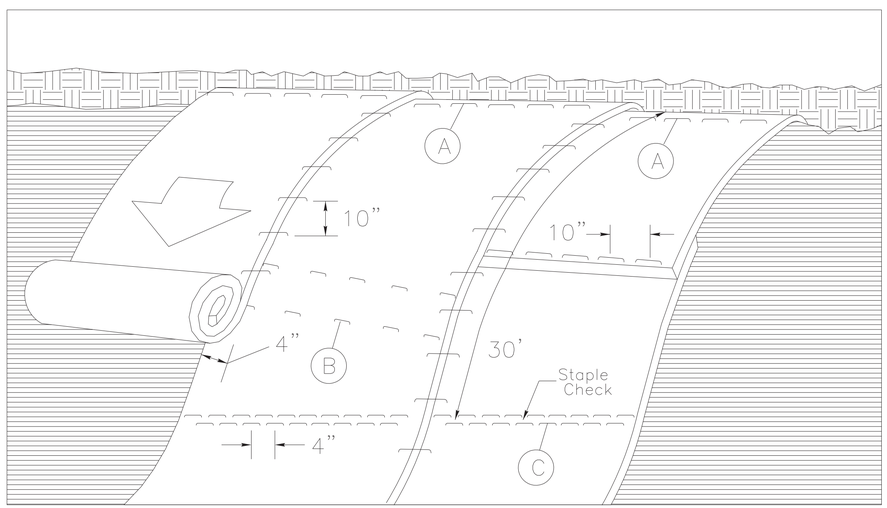


DIAGRAM A



MATTING ON SHOULDERS / SLOPES

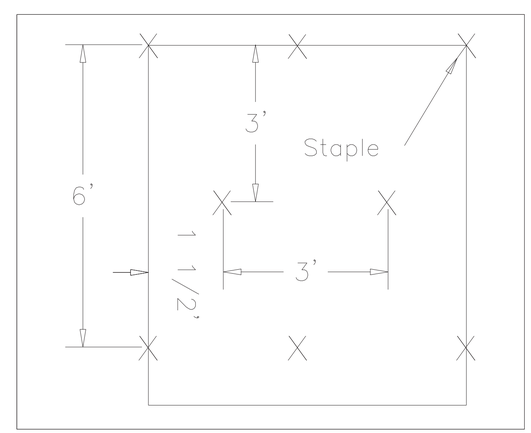


DIAGRAM B

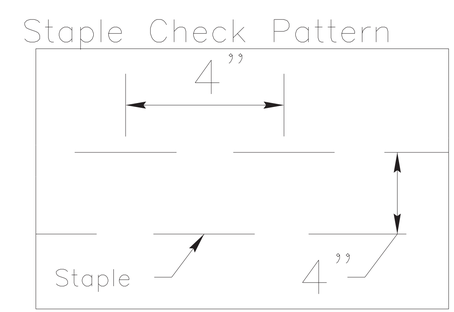


DIAGRAM C

NOTES:

THIS DETAIL APPLIES TO STRAW, EXCELSIOR, AND PERMANENT SOIL REINFORCEMENT MAT (PSRM) INSTALLATION.

STAPLES SHALL BE NO. 11 GAUGE STEEL WIRE FORMED INTO A "U" SHAPE WITH A MINIMUM THROAT WIDTH OF 1 INCH AND NOT LESS THAN 6 INCHES IN LENGTH.

SEE SHEET 3 FOR MATTING LOCATIONS AND QUANTITIES

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WHITE FAWN RESERVOIR
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STEWART

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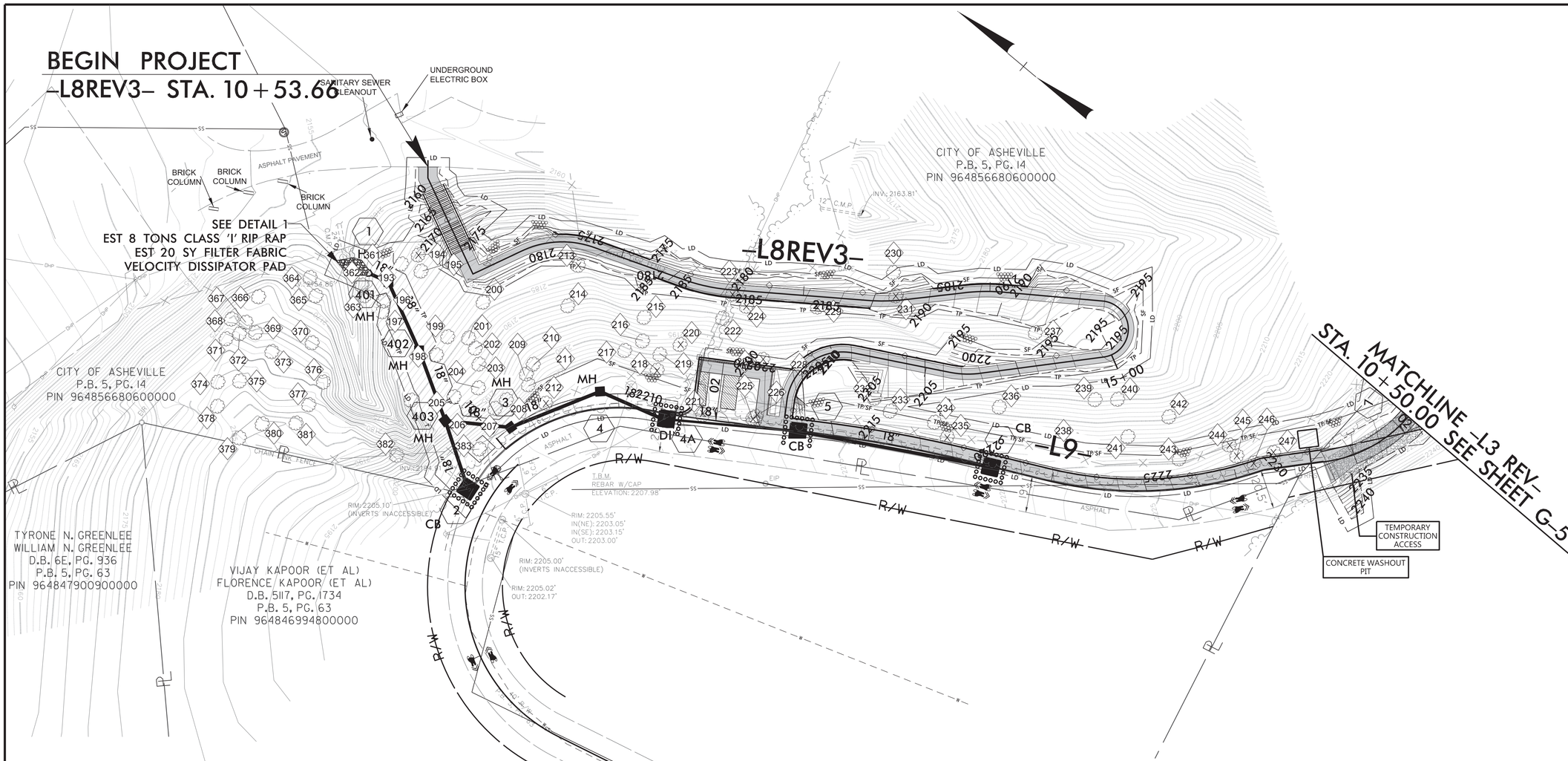
G-3F

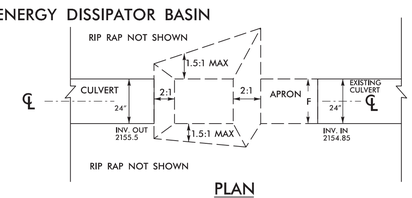


DETAIL 1

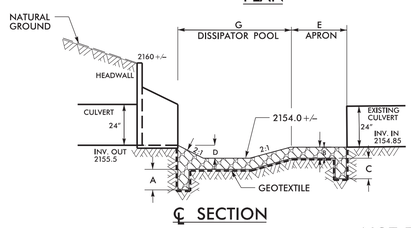
RIP-RAPPED ENERGY DISSIPATOR BASIN

DIM. (ft)	RIP RAP BASIN #		
A	15"		
B	15"		
C	15"		
D	12"		
E	1.0'		
F	2.0'		
G	4.0' +/-		

ALL DIMENSIONS APPROXIMATE



PLAN



℄ SECTION

NOT TO SCALE

30 15 0 30 60

SCALE: 1" = 30'

BEAUCATCHER GREENWAY

WHITE FAWN RESERVOIR
TO
HELEN'S BRIDGE

PLANS PREPARED BY:

STEWART

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GREENWAY ENGINEER:

NORTH CAROLINA PROFESSIONAL SEAL 30932 ENGINEER ROBERT A. WILLIAMS

10/5/16

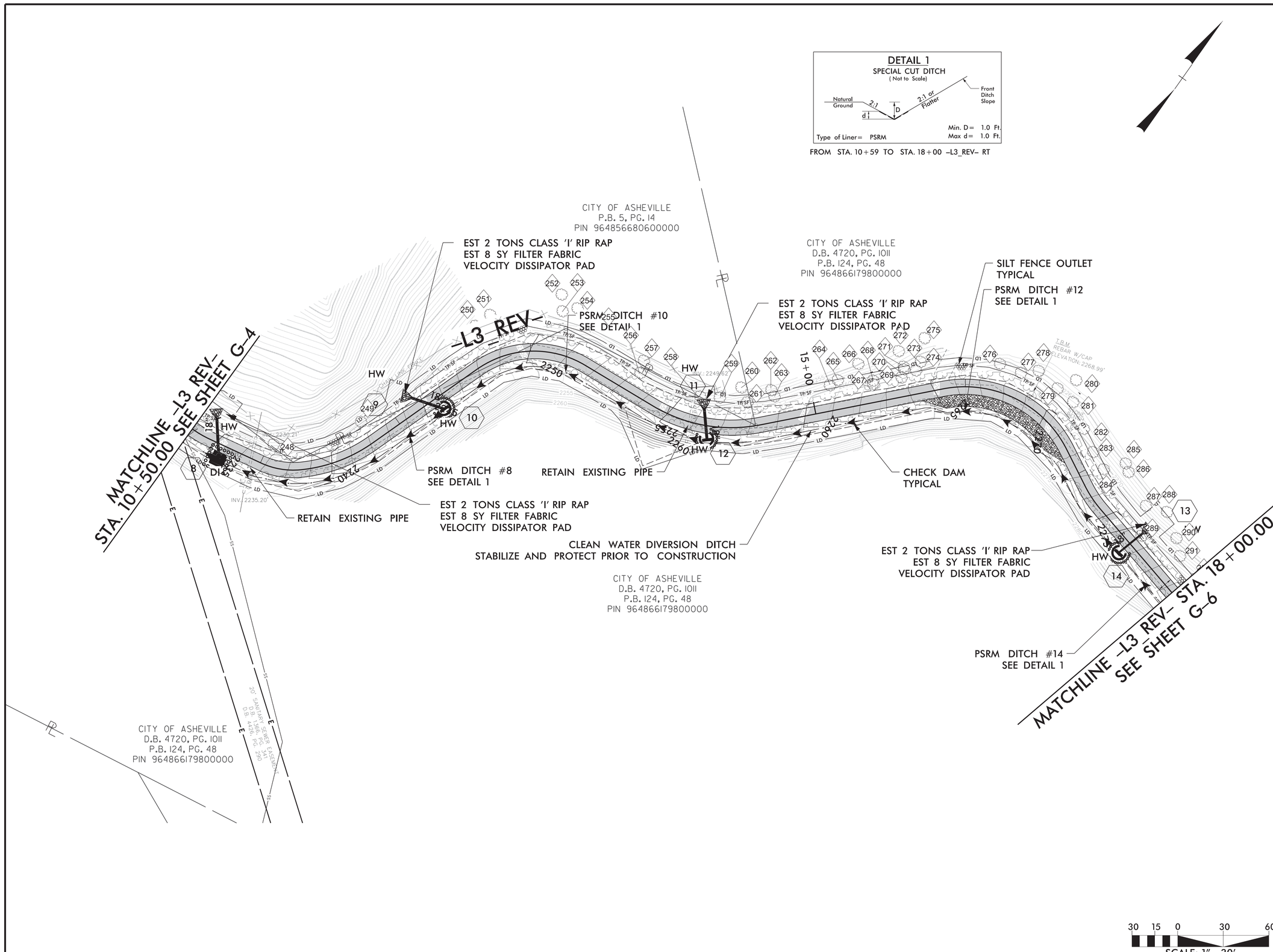
HYDRAULICS ENGINEER:

NORTH CAROLINA PROFESSIONAL SEAL 042301 ENGINEER ANDREW J. HICKLING

PROJECT NO.:

H13002.00

G-4



CITY OF ASHEVILLE
NORTH CAROLINA

BEAUCATCHER GREENWAY
WHITE FAWN RESERVOIR
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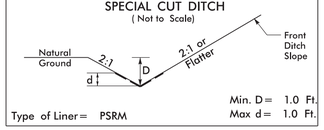
G-5

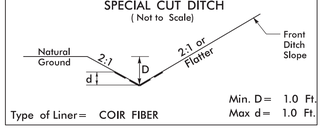
DETAIL 1
SPECIAL CUT DITCH
(Not to Scale)



Min. D= 1.0 Ft.
Max d= 1.0 Ft.
Type of Liner= PSRM

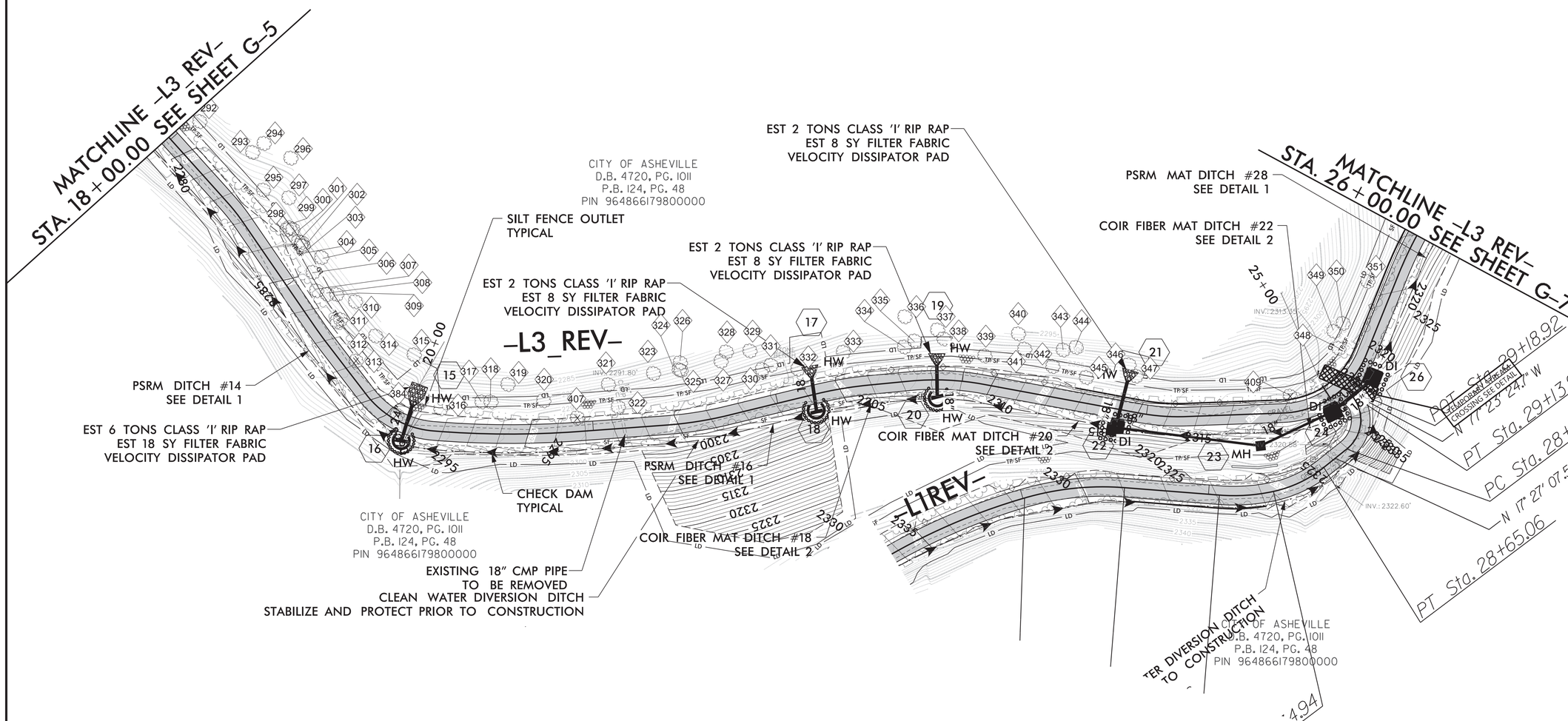
FROM STA. 18+00 TO STA. 22+20 –L3_REV– RT
FROM STA. 25+30 TO STA. 26+00 –L3_REV– RT

DETAIL 2
SPECIAL CUT DITCH
(Not to Scale)



Min. D= 1.0 Ft.
Max d= 1.0 Ft.
Type of Liner= COIR FIBER

FROM STA. 22+20 TO STA. 24+80 –L3_REV– RT



30 15 0 30 60
SCALE: 1" = 30'

BEAUCATCHER GREENWAY
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PROJECT NO.:
H13002.00

G-6

DETAIL 1
SPECIAL CUT DITCH
(Not to Scale)

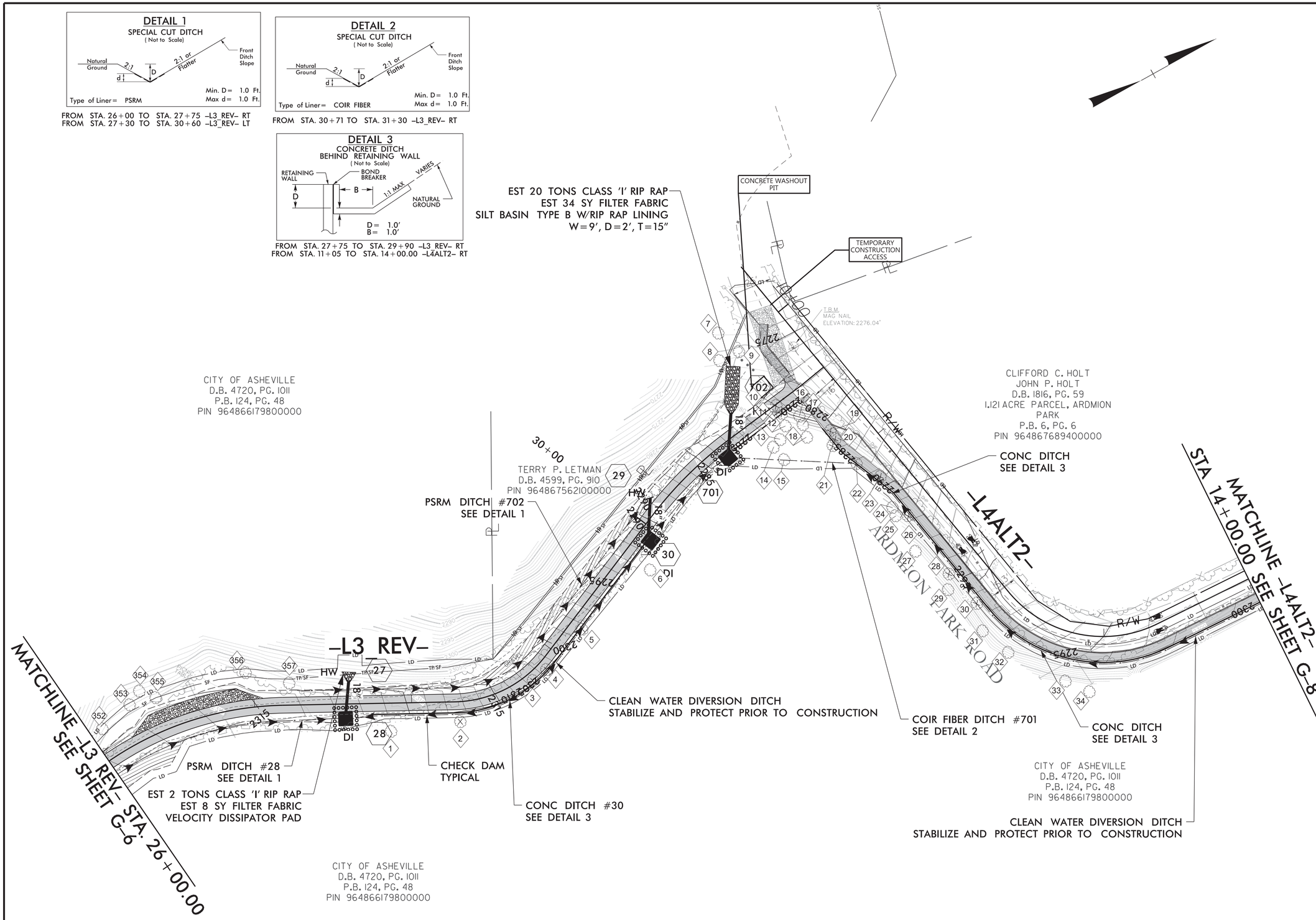
FROM STA. 26+00 TO STA. 27+75 –L3_REV– RT
FROM STA. 27+30 TO STA. 30+60 –L3_REV– LT

DETAIL 2
SPECIAL CUT DITCH
(Not to Scale)

FROM STA. 30+71 TO STA. 31+30 –L3_REV– RT

DETAIL 3
CONCRETE DITCH
BEHIND RETAINING WALL
(Not to Scale)

FROM STA. 27+75 TO STA. 29+90 –L3_REV– RT
FROM STA. 11+05 TO STA. 14+00.00 –L4ALT2– RT



BEAUCATCHER GREENWAY
WHITE FAWN RESERVOIR
TO
HELEN'S BRIDGE

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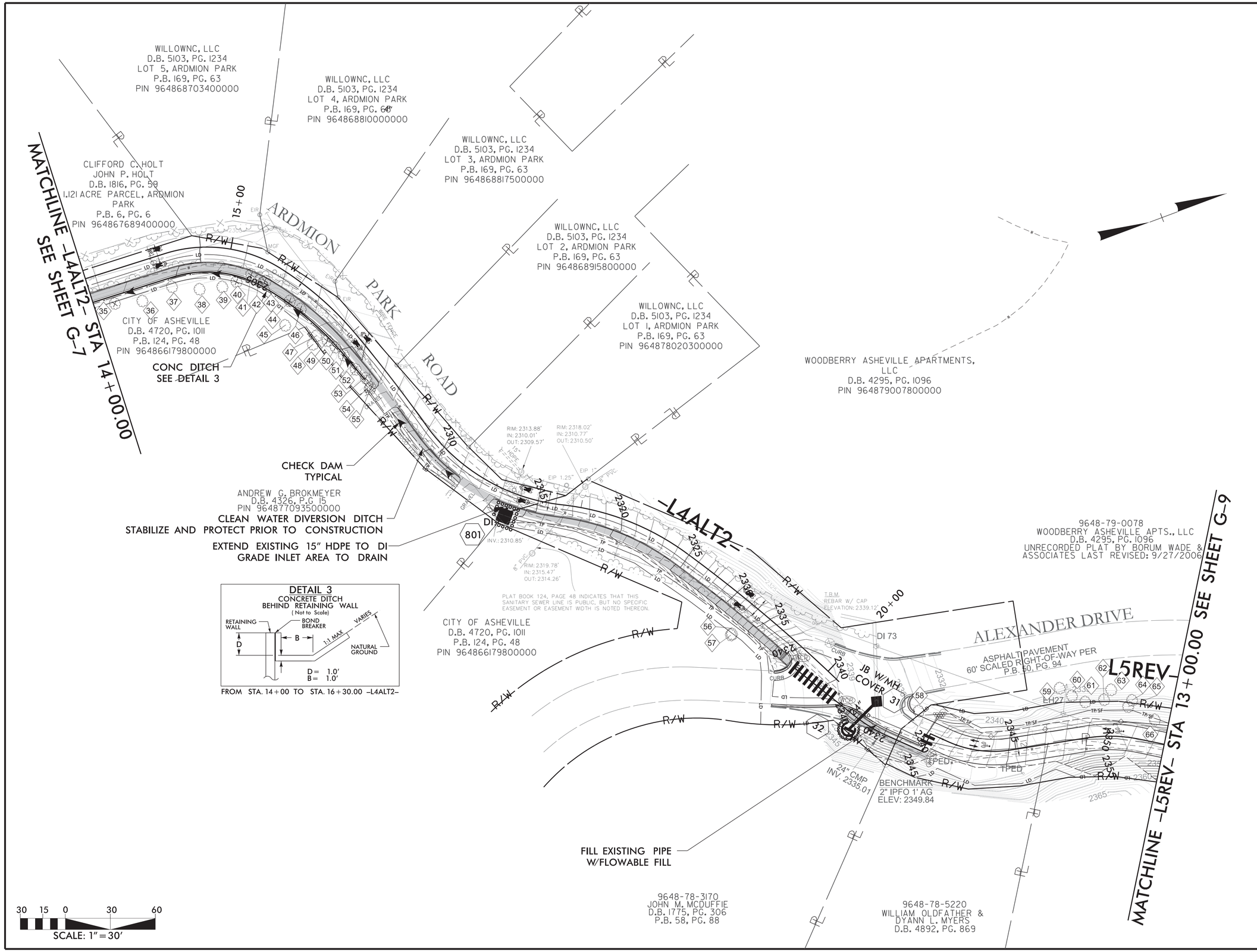
HYDRAULICS ENGINEER:

NORTH CAROLINA PROFESSIONAL SEAL 042301 ENGINEER ANDREW J. HICKLING

PROJECT NO.:
H13002.00

G-7



BEAUCATCHER GREENWAY

WHITE FAWN RESERVOIR
TO
HELEN'S BRIDGE

PLANS PREPARED BY:

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10/5/16

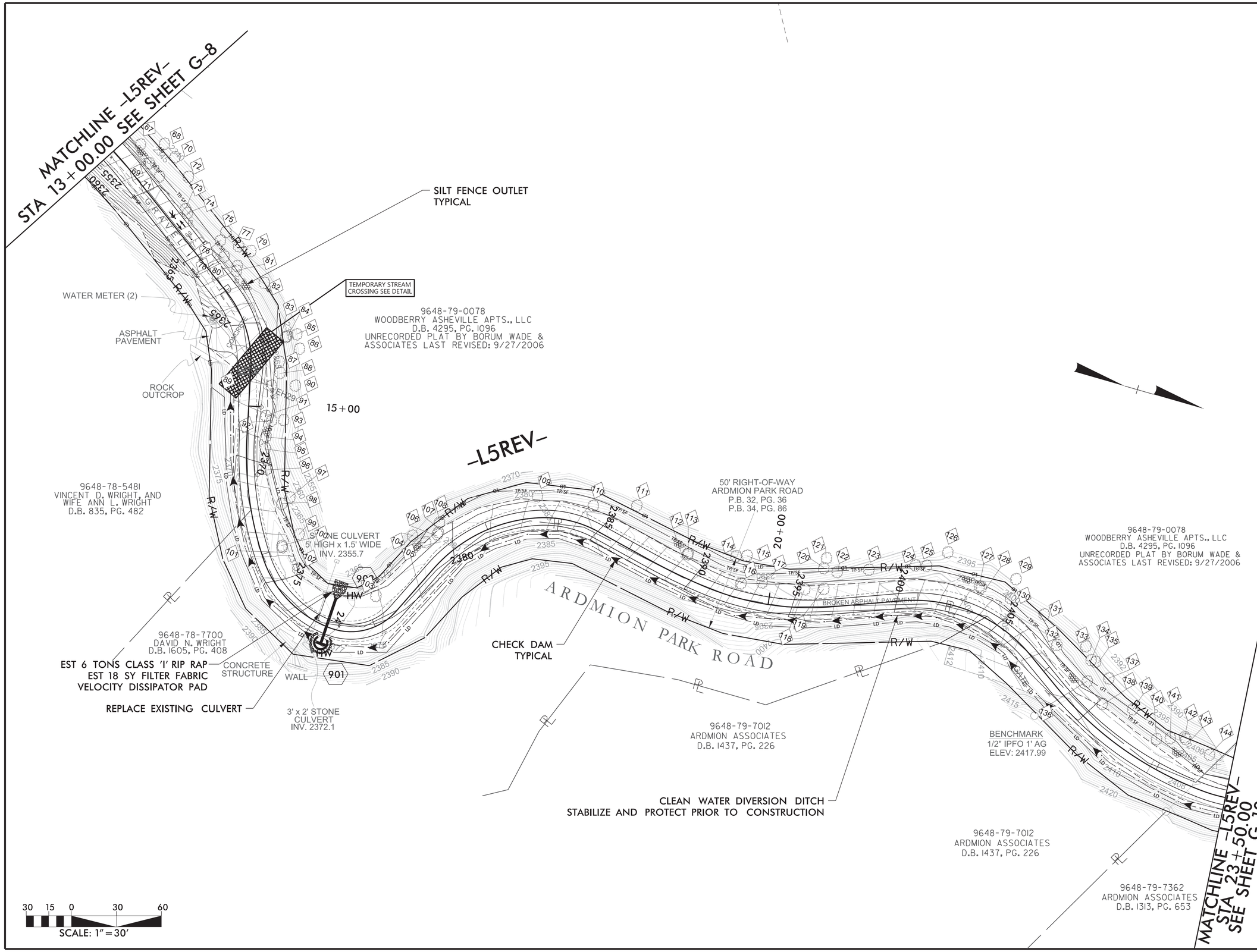
HYDRAULICS ENGINEER:

NORTH CAROLINA PROFESSIONAL SEAL 042301 ENGINEER ANDREW J. HICKLING

PROJECT NO.:

H13002.00

G-8



CITY OF ASHEVILLE NORTH CAROLINA

BEAUCATCHER GREENWAY

WHITE FAWN RESERVOIR
TO
HELEN'S BRIDGE

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10/5/16

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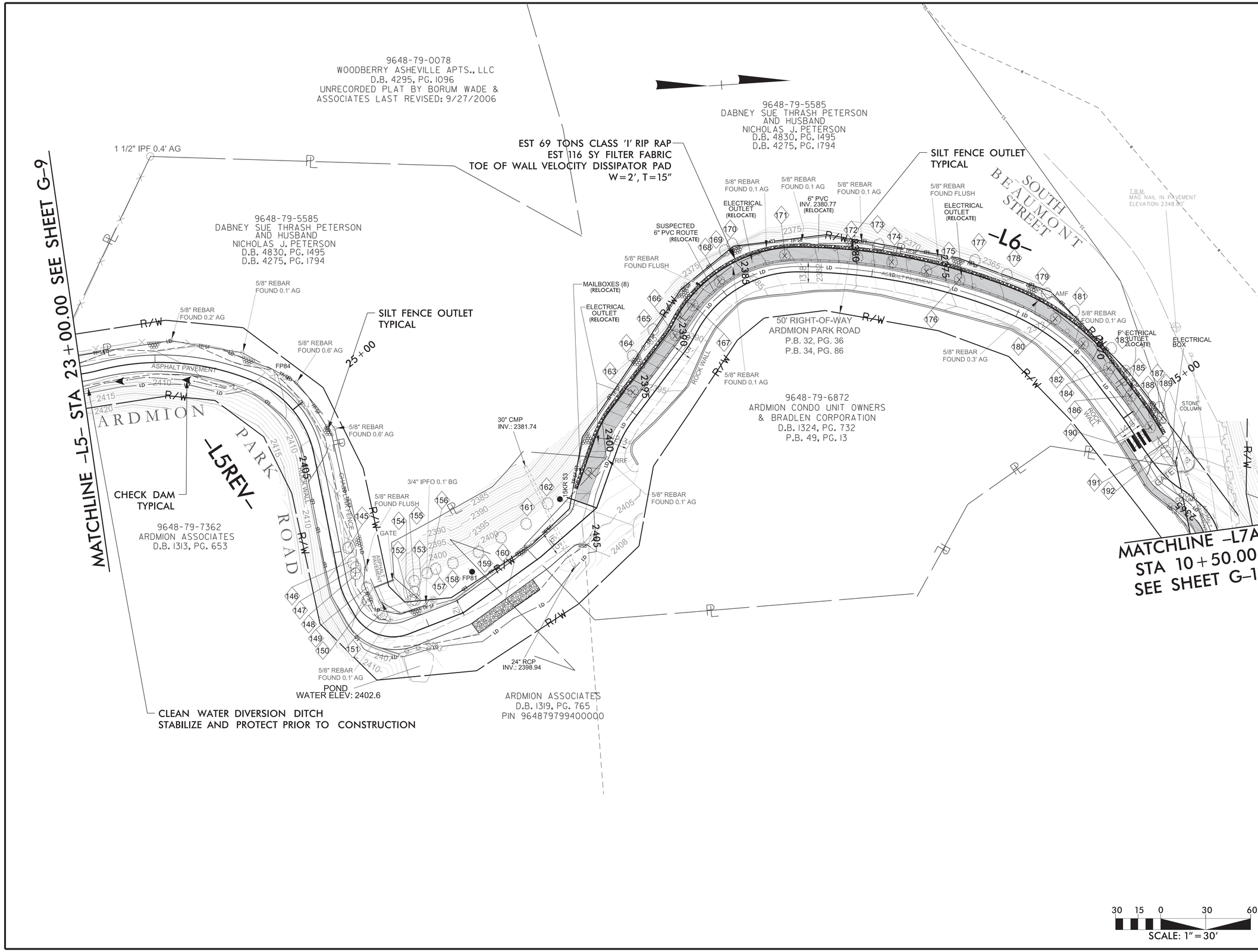
NORTH CAROLINA PROFESSIONAL SEAL 042301 ENGINEER ANDREW J. HICKLING

PROJECT NO.:

H13002.00

G-9



BEAUCATCHER GREENWAY
WHITE FAWN RESERVOIR TO HELEN'S BRIDGE

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10/5/16

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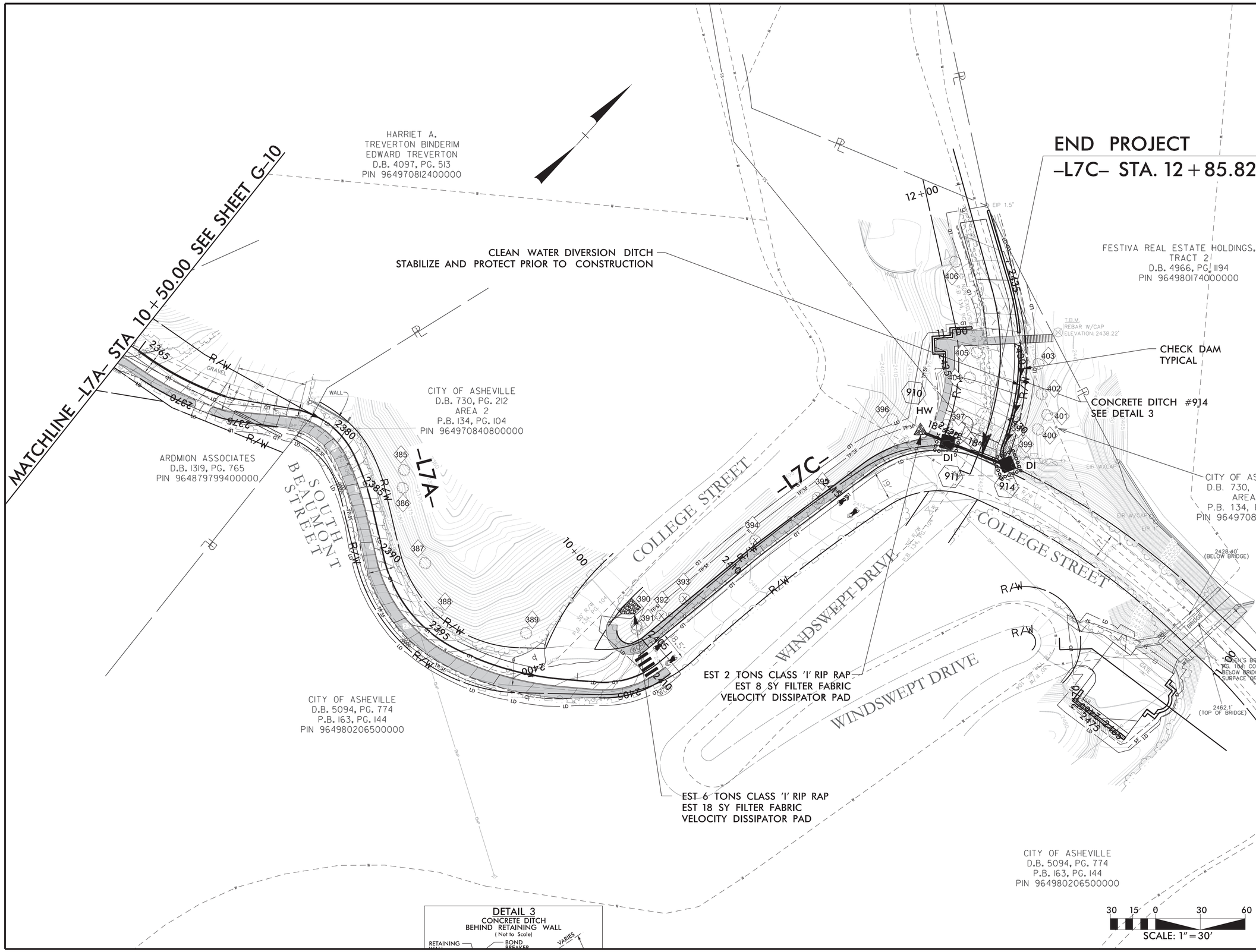
NORTH CAROLINA PROFESSIONAL SEAL 042301 ENGINEER ANDREW J. HICKLING

PROJECT NO.:
H13002.00

G-10



DETAIL 3
CONCRETE DITCH
BEHIND RETAINING WALL
(Not to Scale)

RETAINING WALL
BOND BREAKER
VARIES

CITY OF ASHEVILLE
NORTH CAROLINA

BEAUCATCHER GREENWAY
WHITE FAWN RESERVOIR
TO
HELEN'S BRIDGE

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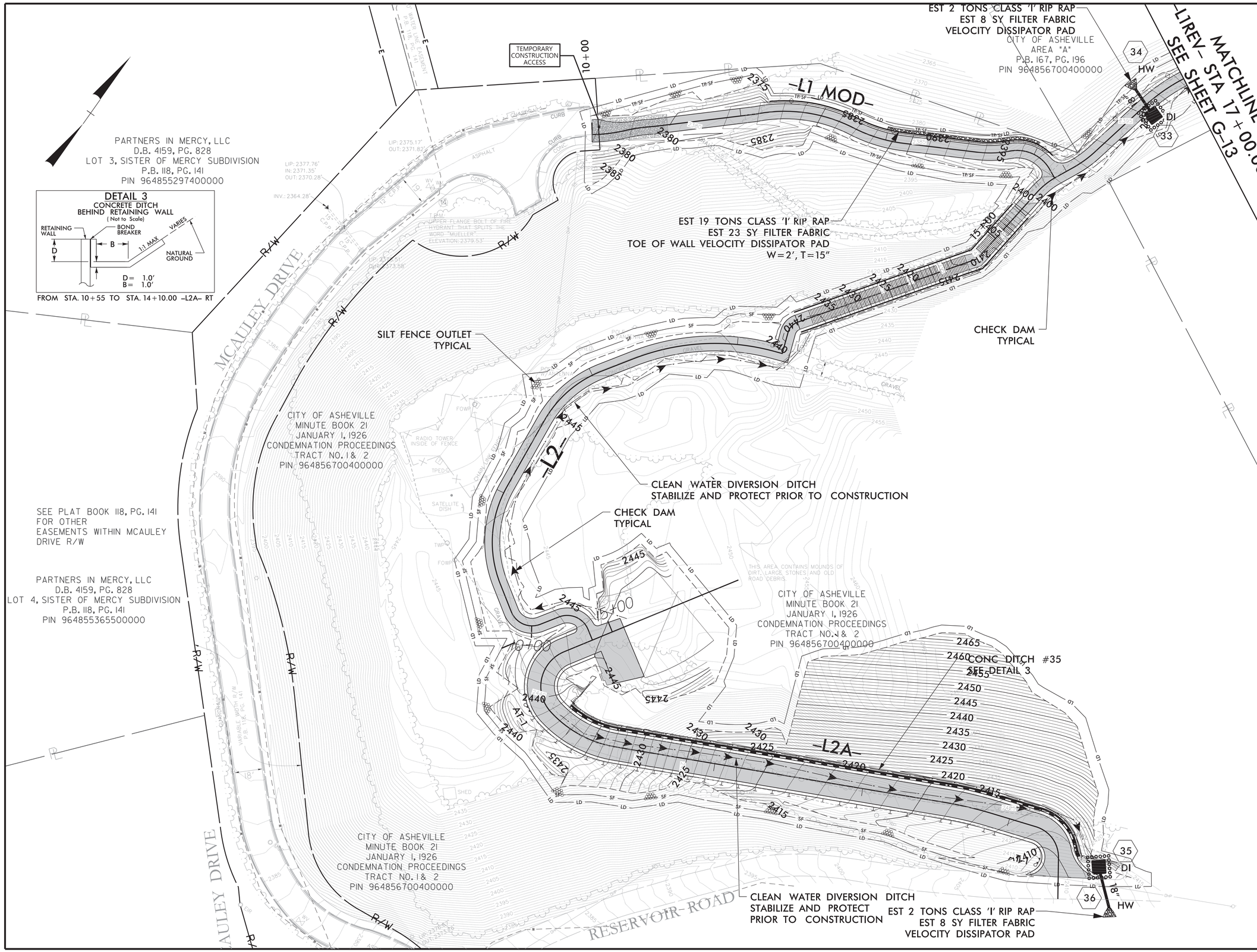
NORTH CAROLINA PROFESSIONAL SEAL 042301 ENGINEER ANDREW J. HICKLING

PROJECT NO.:
H13002.00

G-11



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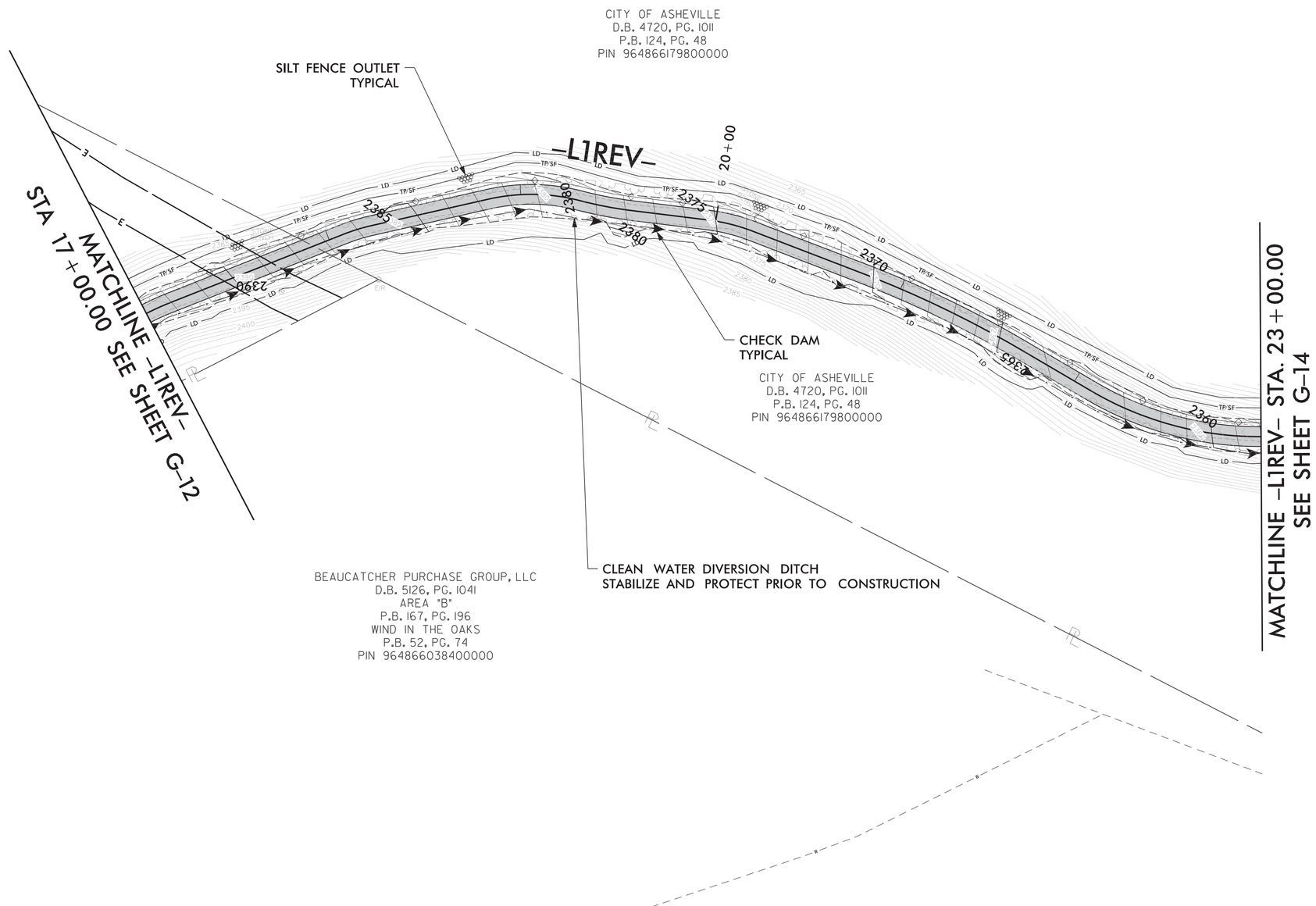
PROJECT NO.:

H13002.00

G-12



CITY OF ASHEVILLE NORTH CAROLINA

BEAUCATCHER GREENWAY
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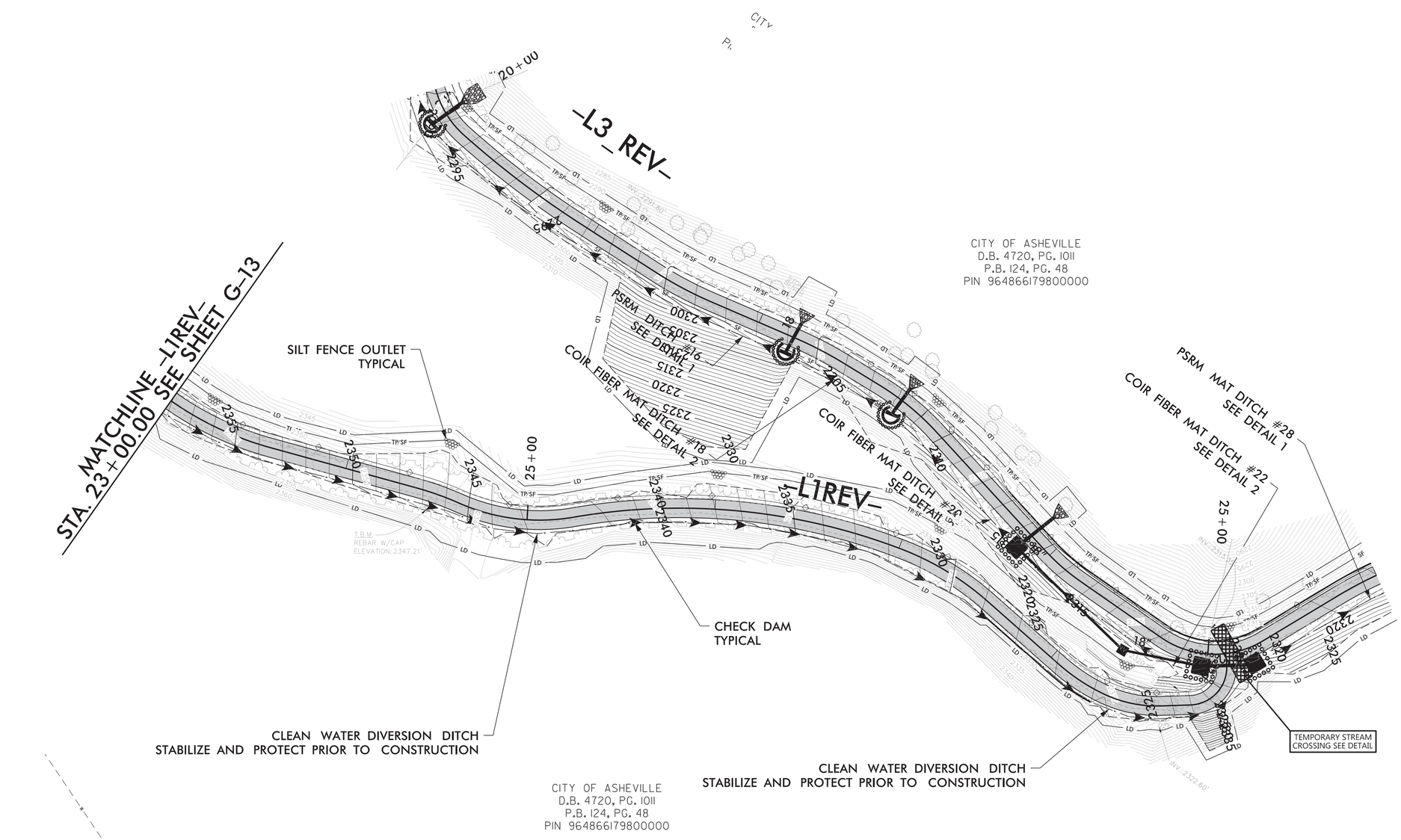
NORTH CAROLINA PROFESSIONAL SEAL 042301 ENGINEER ANDREW J. HICKLING

PROJECT NO.:

H13002.00

G-13



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10/5/16

HYDRAULICS ENGINEER:

NORTH CAROLINA PROFESSIONAL SEAL 042301 ENGINEER ANDREW J. WICKLINE

PROJECT NO.:

H13002.00

G-14

STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

1-12

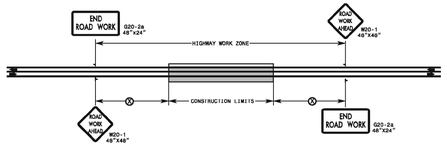
ENGLISH STANDARD DRAWING FOR

DETAIL DRAWING FOR TWO-WAY UNDIVIDED WORK ZONE WARNING SIGNS

SHEET 3 OF 3

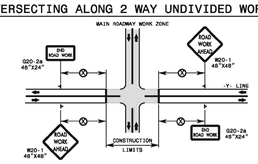
1101.01

TWO-WAY UNDIVIDED (L-LINES)



POSTED SPEED LIMIT (MPH)	RECOMMENDED MINIMUM SIGN SPACING (X)
≤ 60	600'
55	1000'

ROADWAYS INTERSECTING ALONG 2 WAY UNDIVIDED WORK ZONE (Y-LINES)



GENERAL NOTES

1- USE FLUORESCENT ORANGE SHEETING (TYPE VII OR HIGHER) ON ALL ADVANCED WORK ZONE SIGNS.

2- DO NOT INSTALL ADVANCE WARNING SIGNS MORE THAN 3 DAYS PRIOR TO BEGINNING OF WORK, UNLESS COVERED.

3- SIGNS SHOWN ARE REQUIRED FOR WORK ZONES THAT WILL REMAIN IN EFFECT OVERNIGHT. FOR SHORT-TERM DAILY MAINTENANCE TYPE OPERATIONS, THIS SIGNING APPLICATION IS OPTIONAL; MAY USE ONLY APPLICABLE ROADWAY STANDARD DRAWINGS INSTEAD. HOWEVER, IF THIS SIGNING APPLICATION IS USED, SIGNS MAY BE PORTABLE MOUNTED.

4- ALL SIGN SPACING DIMENSIONS ARE APPROXIMATE, FIELD ADJUST AS NECESSARY OR AS DIRECTED.

5- USE 3LB STEEL U-CHANNEL POST OR 4" X 4" WOOD POST FOR ALL WORK ZONE SIGNS. 3LB STEEL U-CHANNEL POSTS MUST MEET THE REQUIREMENTS OF STANDARD SPECIFICATION SECTION 1094-1(B), MAY BE GALVANIZED STEEL, OR MAY BE PAINTED GREEN BY THE POST MANUFACTURER. SQUARE STEEL TUBING POSTS HAVING EQUIVALENT STRENGTH OF THE 3 LB STEEL U-CHANNEL POST ARE ALSO ACCEPTABLE FOR USE. ERECT SIGNS PER ROADWAY STANDARD DRAWING 1110.01. PAVMENT FOR WOOD POSTS, 3LB STEEL U-CHANNEL AND SQUARE STEEL TUBING POSTS WITH SIGNS WILL BE MADE ACCORDING TO STANDARD SPECIFICATION "WORK ZONE SIGNS" SECTION 1110.

6- WHEN NECESSARY, USE SPLICING IN ACCORDANCE WITH ROADWAY STANDARD DRAWING NO. 1110.01.

7- DO NOT BACK BRACE SIGN SUPPORTS.

LEGEND

- STATIONARY SIGN
- DIRECTION OF TRAFFIC FLOW

STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

1-12

ENGLISH STANDARD DRAWING FOR

DETAIL DRAWING FOR TWO-WAY UNDIVIDED WORK ZONE WARNING SIGNS

SHEET 3 OF 3

1101.01

STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

1-12

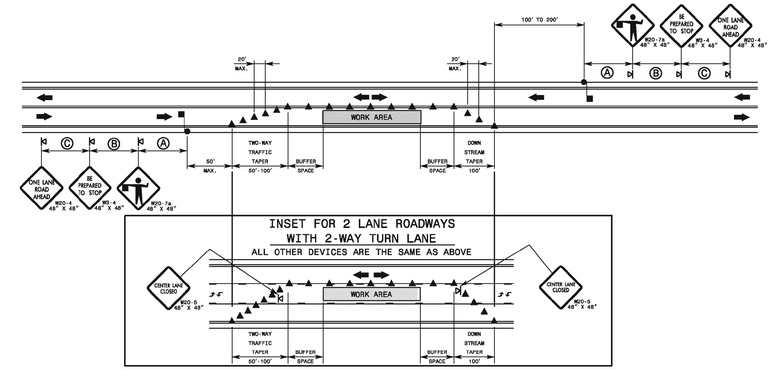
ENGLISH STANDARD DRAWING FOR

TEMPORARY LANE CLOSURES

2-LANE, 2-WAY ROADWAY-1 LANE CLOSED

SHEET 1 OF 15

1101.02



GENERAL NOTES FOR FLAGGER OPERATIONS

1- REFER TO STD. 1101.11 SHEET 4 FOR SIGN SPACING.

2- INSTALL LANE CLOSURES WITH THE TRAFFIC FLOW, BEGINNING WITH DEVICES ON THE UPSTREAM SIDE OF TRAFFIC.

3- REMOVE LANE CLOSURES AGAINST THE TRAFFIC FLOW, BEGINNING WITH DEVICES ON THE DOWNSTREAM SIDE OF TRAFFIC.

4- PLACE CONES THRU THE WORK AREA AT THE MAXIMUM SPACING EQUAL IN FEET TO 2 TIMES THE POSTED SPEED LIMIT.

5- EXTEND LANE CLOSURES AT THE BUFFER SPACE SUCH THAT STOPPING SIGHT DISTANCE IS PROVIDED TO THE FLAGGER (REFER TO STD. 1101.11 SHEET 2).

6- DO NOT STOP TRAFFIC IN ANY ONE DIRECTION FOR MORE THAN 5 MINUTES AT A TIME.

7- DRUMS OR SKINNY-DRUMS MAY BE USED IN LIEU OF CONES. REFER TO ROADWAY STANDARD DRAWING 1180.01 FOR SKINNY-DRUM REQUIREMENTS.

8- USE FLAGGERS TO CONTROL TRAFFIC AT INTERSECTIONS AFFECTED BY THE LANE CLOSURE. SUPPLEMENT FLAGGERS LOCATED AT INTERSECTIONS WITH FLAGGER AHEAD SIGNS (W20-7a) PLACED APPROXIMATELY 250 FT. IN ADVANCE OF THE FLAGGER. FOR SIGNALIZED INTERSECTIONS PLACE SIGNALS IN THE FLASH MODE AND RECOMMEND THE USE OF LAW ENFORCEMENT.

9- REFER TO 2009 MUTCD, CHAPTER 6, FOR FLAGGER CONTROL, REQUIREMENTS, AND PROCEDURES.

10- DO NOT EXCEED A 1 MILE LANE CLOSURE LENGTH UNLESS OTHERWISE SHOWN IN THE TMP OR AS DIRECTED BY THE ENGINEER.

GENERAL NOTES FOR PILOT CAR OPERATIONS

1- USE PILOT CARS WHEN DIRECTED BY THE ENGINEER.

2- IF ROADWAY WIDTH IS LESS THAN 22 FEET (EOP TO EOP), CONES MAY NOT BE REQUIRED ALONG WORK AREA, AND AT THE DISCRETION OF THE ENGINEER, CONES MAY BE OMITTED ALONG THE WORK AREA IF USING A PILOT CAR.

3- CONES ARE ALWAYS REQUIRED IN THE UPSTREAM AND DOWNSTREAM TAPERS.

4- MOUNT SIGN G20-4 "PILOT CAR FOLLOW ME" AT A CONSPICUOUS POSITION ON THE REAR OF THE PILOT VEHICLE.

5- DO NOT INSTALL MORE THAN ONE (1) MILE OF LANE CLOSURE, MEASURED FROM THE BEGINNING OF THE MERGE TAPER TO THE END OF THE LANE CLOSURE.

6- ADVISE RESIDENTS AND BUSINESSES WITHIN THE LANE CLOSURE LIMITS ABOUT METHODS OF SAFE EGRESS AND INGRESS FROM DRIVEWAYS DURING FLAGGING AND PILOT CAR OPERATIONS.

LEGEND

- FLAGGER
- CONE
- PORTABLE SIGN
- DIRECTION OF TRAFFIC FLOW

STATE OF NORTH CAROLINA
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DIVISION OF HIGHWAYS
RALEIGH, N.C.

1-12

ENGLISH STANDARD DRAWING FOR

TEMPORARY LANE CLOSURES

2-LANE, 2-WAY ROADWAY-1 LANE CLOSED

SHEET 1 OF 15

1101.02

STATE OF NORTH CAROLINA
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1-12

ENGLISH STANDARD DRAWING FOR

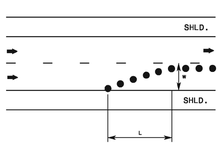
TRAFFIC CONTROL DESIGN TABLES

"L" DISTANCE AND CHANNELIZING DEVICE TAPER CRITERIA

SHEET 1 OF 4

1101.11

EXAMPLE OF "L" & "W" DESIGNATIONS



TAPER LENGTH CRITERIA FOR CHANNELIZING DEVICES IN WORK ZONES

TYPES OF TAPERS	TAPER LENGTH
UPSTREAM TAPER	
MERGING TAPER	L MINIMUM
SHIFTING TAPER	½ L MINIMUM
SHOULDER TAPER	⅓ L MINIMUM
TWO-WAY TRAFFIC TAPER	50 - 100 FEET MAXIMUM
DOWNSTREAM TAPER	100 FEET MAXIMUM

QUICK REFERENCE - "L" DISTANCE TABLE												
MINIMUM LONGITUDINAL DISTANCE "L" (FEET) (ROUNDED VALUES)												
POSTED SPEED ≥ 2 (MPH)	LATERAL WIDTH "W" (FEET)											
	1	2	3	4	5	6	7	8	9	10	11	12
20	10	15	20	30	35	40	50	55	60	70	75	80
25	15	25	35	45	55	65	75	85	95	105	115	125
30	15	30	45	60	75	90	105	120	135	150	165	180
35	25	45	65	85	105	125	145	165	185	205	225	245
40	30	55	80	110	135	160	190	215	240	270	295	320
45	45	90	135	180	225	270	315	360	405	450	495	540
50	50	100	150	200	250	300	350	400	450	500	550	600
55	55	110	165	220	275	330	385	440	495	550	605	660
60	60	120	180	240	300	360	420	480	540	600	660	720
65	65	130	195	260	325	390	455	520	585	650	715	780
70	70	140	210	280	350	420	490	560	630	700	770	840

GENERAL NOTES

1- TABLE FOR "L" DISTANCE IS BASED ON CHANNELIZATION TAPER FORMULA FROM THE M.U.T.C.D. WHERE:

SPEED LIMIT	FORMULA
40 MPH OR LESS	$L_{MIN} = \frac{W \times S^2}{60}$
45 MPH OR GREATER	$L_{MIN} = W \times S$

L = MINIMUM TAPER LENGTH IN FEET (LONGITUDINAL DISTANCE)
W = WIDTH OF OFFSET IN FEET (LATERAL DISTANCE)
S = POSTED SPEED LIMIT, OR OFF-PEAK 85 PERCENTILE SPEED IN MPH PRIOR TO WORK STARTING, OR THE ANTICIPATED OPERATING SPEED IN MPH

2- "L" DISTANCE IS FOR APPLICATION WITH CHANNELIZING DEVICE AND PAVEMENT MARKING TAPERS AND TRANSITIONS. CHANNELIZING DEVICES INCLUDE DRUMS, CONES, TUBULAR MARKERS, BARRICADES, RAISED ASPHALT ISLANDS, AND VERTICAL PANELS.

STATE OF NORTH CAROLINA
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RALEIGH, N.C.

1-12

ENGLISH STANDARD DRAWING FOR

TRAFFIC CONTROL DESIGN TABLES

"L" DISTANCE AND CHANNELIZING DEVICE TAPER CRITERIA

SHEET 1 OF 4

1101.11

STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
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RALEIGH, N.C.

1-12

ENGLISH STANDARD DRAWING FOR

TRAFFIC CONTROL DESIGN TABLES

BUFFER SPACE & SIGHT DISTANCE

SHEET 2 OF 4

1101.11

DESIGN SPEED (MPH)	MINIMUM SIGHT DISTANCE		MINIMUM LONGITUDINAL BUFFER SPACE (FEET)
	STOPPING SIGHT DISTANCE (FEET)	PASSING SIGHT DISTANCE (FEET)	
30	200	1090	85
35	250	1280	120
40	305	1470	155
45	360	1625	195
50	425	1835	240
55	495	1985	290
60	570	2135	345
65	645	2285	405
70	730	2480	470
75	820	2580	540
80	910	2860	615

GENERAL NOTES

1- TABLES ARE BASED ON THE AASHTO GREEN BOOK "A POLICY ON GEOMETRIC DESIGN OF HIGHWAYS AND STREETS" AND THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES". MINIMUM SIGHT DISTANCE VALUES ARE FOR PASSENGER CAR VEHICLES ON WET AND LEVEL ROADWAYS. CONSULT THE AASHTO GREEN BOOK TO MAKE FINAL DETERMINATION OF STOPPING SIGHT DISTANCE REQUIREMENTS.

2- BUFFER SPACE TABLE IS BASED ON THE BRAKING DISTANCE PORTION OF STOPPING SIGHT DISTANCE FOR WET AND LEVEL PAVEMENTS.

3- USE OF STOPPING SIGHT DISTANCE IN TRAFFIC CONTROL PLAN APPLICATIONS INCLUDES PROVIDING SIGHT DISTANCE FOR TRAFFIC APPROACHING A LANE CLOSURE. PROVIDE 2-LANE, 2-WAY ROADWAYS STOPPING SIGHT DISTANCE TO THE FLAGGER. FOR LANE CLOSURES ON MULTILANE ROADWAYS PROVIDE STOPPING SIGHT DISTANCE TO THE BEGINNING OF THE LANE CLOSURE MERGE TAPER, OR FLASHING ARROW BOARD. EXTEND LANE CLOSURES AT THE BUFFER SPACE SUCH THAT STOPPING SIGHT DISTANCE IS PROVIDED.

4- USE OF MINIMUM PASSING SIGHT DISTANCE TABLE IN TRAFFIC CONTROL PLAN APPLICATIONS INCLUDES PROVIDING SIGHT DISTANCE REQUIREMENTS FOR PLACEMENT OF PAVEMENT MARKING PASSING/NO-PASSING ZONES FOR 2-LANE, 2-WAY ROADWAYS.

STATE OF NORTH CAROLINA
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1-12

ENGLISH STANDARD DRAWING FOR

TRAFFIC CONTROL DESIGN TABLES

BUFFER SPACE & SIGHT DISTANCE

SHEET 2 OF 4

1101.11

CITY OF ASHEVILLE NORTH CAROLINA

BEAUCATCHER GREENWAY
WHITE FAWN RESERVOIR
TO
HELEN'S BRIDGE

PLANS PREPARED BY:
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STEWART

GREENWAY ENGINEER:

NORTH CAROLINA PROFESSIONAL SEAL 30932 ENGINEER ROBERT A. WILLIAMS
10/5/16

HYDRAULICS ENGINEER:

PROJECT NO.:
H13002.00

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TCP-1

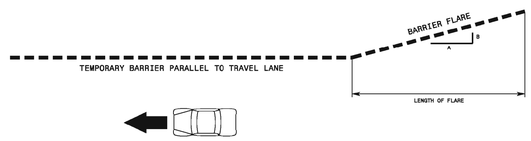
STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

1-12

ENGLISH STANDARD DRAWING FOR
TRAFFIC CONTROL DESIGN TABLES
TEMPORARY BARRIER FLARE RATES

SHEET 3 OF 4
1101.11

TEMPORARY BARRIER FLARE RATES		
POSTED SPEED LIMIT (MPH)	ANCHORED (A:B)	UNANCHORED (A:B)
≤ 30	8 : 1	7 : 1
35	9 : 1	8 : 1
40	10 : 1	8 : 1
45	12 : 1	10 : 1
50	14 : 1	11 : 1
55	18 : 1	12 : 1
60	18 : 1	14 : 1
65	19 : 1	15 : 1
70	20 : 1	15 : 1



GENERAL NOTES

1- REFER TO 2002 ROADSIDE DESIGN GUIDE.

2- A BARRIER IS CONSIDERED FLARED WHEN IT IS NOT PARALLEL TO THE EDGE OF THE TRAVELWAY.

3- THE PRIMARY USE OF BARRIERS ARE FOR WORK AREA PROTECTION. WHEN SERVING THE ADDITIONAL FUNCTION OF A CHANNELIZING DEVICE, SUCH AS WHEN SHIFTING TRAFFIC, BARRIER TAPERS SHALL MEET STANDARD CHANNELIZING TAPER LENGTHS AS SHOWN ON STD. 1101.11 SHEET 1.

STATE OF NORTH CAROLINA
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1-12

ENGLISH STANDARD DRAWING FOR
TRAFFIC CONTROL DESIGN TABLES
TEMPORARY BARRIER FLARE RATES

SHEET 3 OF 4
1101.11

STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
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RALEIGH, N.C.

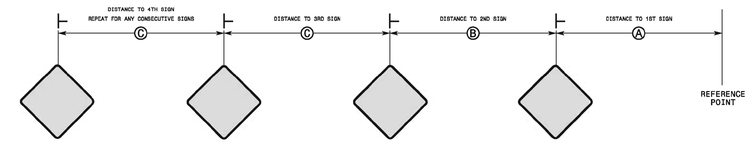
1-12

ENGLISH STANDARD DRAWING FOR
TRAFFIC CONTROL DESIGN TABLES
SPACING OF TEMPORARY SIGNS IN SERIES

SHEET 4 OF 4
1101.11

ADVANCE WARNING SIGN SPACING CHART			
POSTED SPEED LIMIT (MPH)	RECOMMENDED DISTANCE BETWEEN SIGNS (FEET)*		
	Ⓐ	Ⓑ	Ⓒ
≤ 35	200	200	200
40-50	350	350	350
55	500	500	500
CONTROLLED ACCESS ROADS (≥ 55)	1000	1500	2700

STATIONARY OR PORTABLE SIGNS



GENERAL NOTES

1- REFER TO 2009 MUTCD.

2- USE THIS STANDARD DRAWING IN CONJUNCTION WITH OTHER TRAFFIC CONTROL ROADWAY STANDARD DRAWINGS WHERE SIGN SPACING DISTANCES A, B, C, ARE SPECIFIED.

3- APPLY THE ADVANCE WARNING SIGN SPACING CHART WHERE A SERIES OF 2 OR MORE SIGNS ARE USED. ALL SIGN SPACING DIMENSIONS ARE APPROXIMATE. FIELD ADJUST AS VARIOUS CONDITIONS OCCUR, SUCH AS LIMITED SIGHT DISTANCE, OBSTRUCTION INTERFERENCE, ETC.

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1-12

ENGLISH STANDARD DRAWING FOR
TRAFFIC CONTROL DESIGN TABLES
SPACING OF TEMPORARY SIGNS IN SERIES

SHEET 4 OF 4
1101.11

STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
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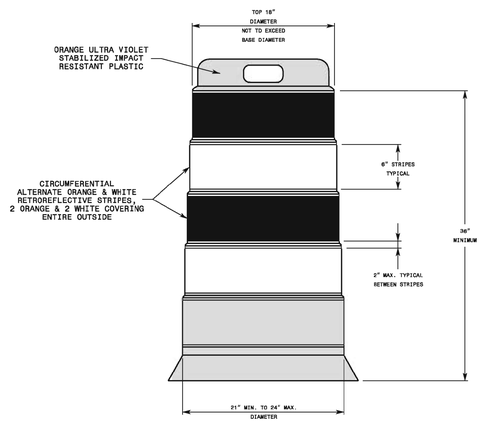
RALEIGH, N.C.

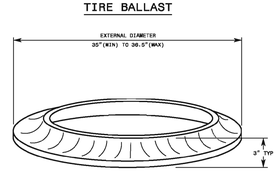
1-12

ENGLISH STANDARD DRAWING FOR
DRUM

SHEET 1 OF 1
1130.01



TIRE BALLAST



ALL RUBBER COLLARS MUST BE BLACK IN COLOR AND FREE OF ANY COLORED PAINT

BALLAST COLLAR SHOULD HAVE GOOD CONTACT WITH THE BARREL FLANGE AND BALLAST OUTER EDGE MUST LAY FLAT WITH ROAD SURFACE

DRUMS THAT USE TIRE BALLASTS ARE MANUFACTURED SPECIFICALLY FOR THAT PURPOSE. DO NOT USE TIRE BALLASTS WITH OTHER DRUM DESIGNS.

GENERAL NOTES

1- BALLASTING SHALL BE ACHIEVED BY THE SAND BAG, TIRE-SIDEWALL, OR PREFORMED WEIGHTED BASE METHODS. USE THE TIRE BALLAST AS SPECIFIED BY THE MANUFACTURER. DO NOT PLACE BALLAST ON TOP OF THE DRUM.

2- IF NECESSARY PLACE THE NAME OF THE AGENCY, CONTRACTOR, OR SUPPLIER ON NON-RETROREFLECTIVE DRUM SURFACES. SHOW THE LETTERS AND NUMBERS USING A NON-RETROREFLECTIVE COLOR AND NOT OVER 2" IN HEIGHT.

3- USE TYPE 3 OR HIGHER HIGH INTENSITY PRISMATIC SHEETING.

4- SEE THE DEPARTMENT'S APPROVED PRODUCT LIST AT https://apps.dot.state.nc.us/vendor/approvedproducts.

5- REFER THE STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES FOR ADDITIONAL INFORMATION.

STATE OF NORTH CAROLINA
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1-12

ENGLISH STANDARD DRAWING FOR
DRUM

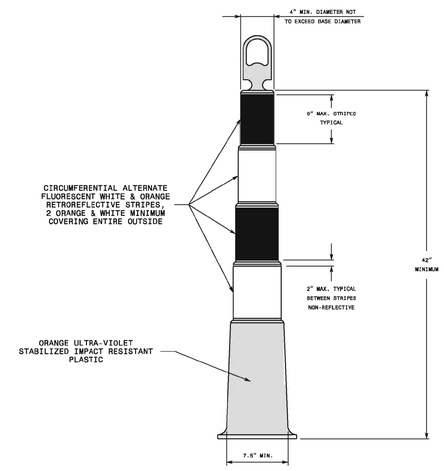
SHEET 1 OF 1
1130.01

STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

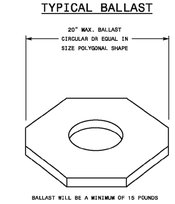
1-12

ENGLISH STANDARD DRAWING FOR
SKINNY-DRUM

SHEET 1 OF 1
1180.01



TYPICAL BALLAST



GENERAL NOTES

1- USE BALLAST AS SPECIFIED BY THE MANUFACTURER. DO NOT PLACE BALLAST ON TOP OF THE DRUM.

2- IF NECESSARY, PLACE THE NAME OF THE AGENCY, CONTRACTOR, OR SUPPLIER ON NON-RETROREFLECTIVE SURFACES. SHOW THE LETTERS AND NUMBERS USING A NON-RETROREFLECTIVE COLOR AND NOT OVER 2" IN HEIGHT.

3- REFER TO SECTION 1180, STANDARD SPECIFICATIONS FOR ROADS AND INSTRUCTIONS FOR ADDITIONAL REQUIREMENTS.

4- USE TYPE 3 OR HIGHER HIGH INTENSITY PRISMATIC SHEETING.

5- SEE THE DEPARTMENT'S APPROVED PRODUCTS LIST AT https://apps.dot.state.nc.us/vendor/approvedproducts.

STATE OF NORTH CAROLINA
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RALEIGH, N.C.

1-12

ENGLISH STANDARD DRAWING FOR
SKINNY-DRUM

SHEET 1 OF 1
1180.01

CITY OF ASHEVILLE NORTH CAROLINA

BEAUCATCHER GREENWAY
WHITE FAWN RESERVOIR
TO
HELEN'S BRIDGE

PLANS PREPARED BY:
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GREENWAY ENGINEER:
NORTH CAROLINA PROFESSIONAL SEAL 30932 ENGINEER ROBERT A. WILLIAMS
10/5/16

HYDRAULICS ENGINEER:

PROJECT NO.:
H13002.00

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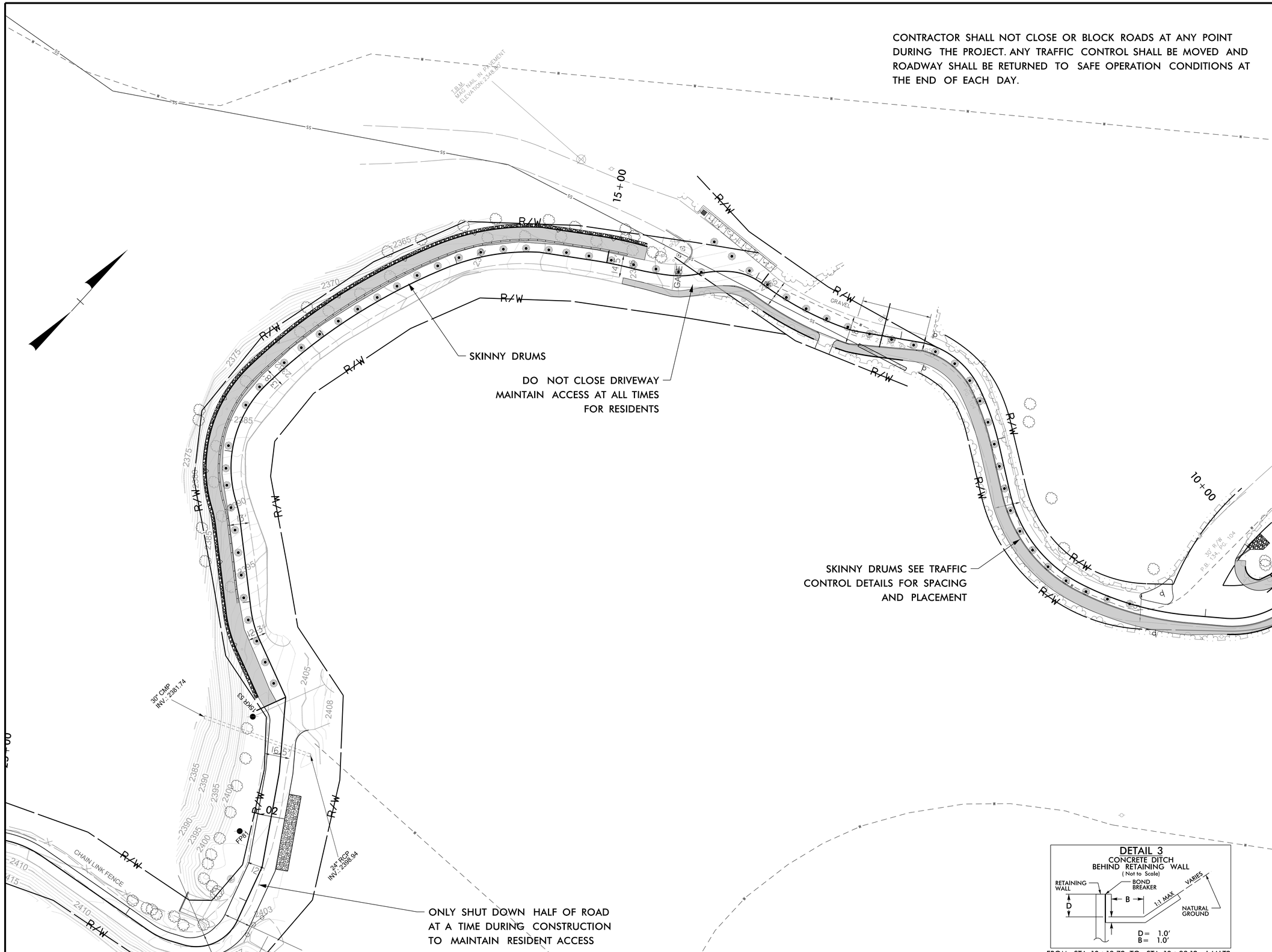
TCP-2

CONTRACTOR SHALL NOT CLOSE OR BLOCK ROADS AT ANY POINT DURING THE PROJECT. ANY TRAFFIC CONTROL SHALL BE MOVED AND ROADWAY SHALL BE RETURNED TO SAFE OPERATION CONDITIONS AT THE END OF EACH DAY.



CITY OF ASHEVILLE NORTH CAROLINA

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GREENWAY ENGINEER:

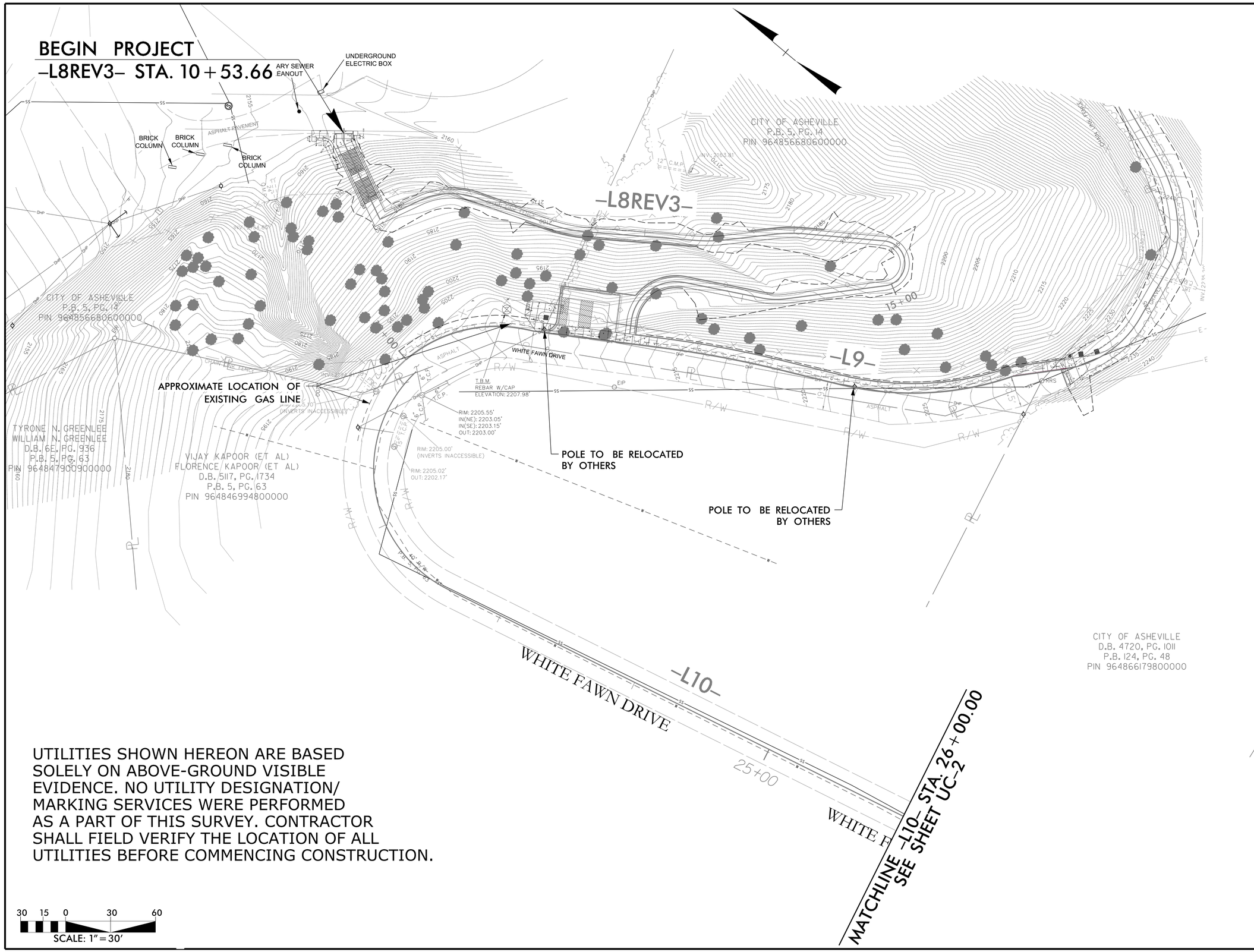
NORTH CAROLINA PROFESSIONAL SEAL ENGINEER 20032 ROBERT A. WILLIAMS
10/5/16

HYDRAULICS ENGINEER:

PROJECT NO.:

H13002.00

TCP-3



UTILITIES SHOWN HEREON ARE BASED SOLELY ON ABOVE-GROUND VISIBLE EVIDENCE. NO UTILITY DESIGNATION/ MARKING SERVICES WERE PERFORMED AS A PART OF THIS SURVEY. CONTRACTOR SHALL FIELD VERIFY THE LOCATION OF ALL UTILITIES BEFORE COMMENCING CONSTRUCTION.

CITY OF ASHEVILLE NORTH CAROLINA

BEAUCATCHER GREENWAY
WHITE FAWN RESERVOIR TO HELEN'S BRIDGE

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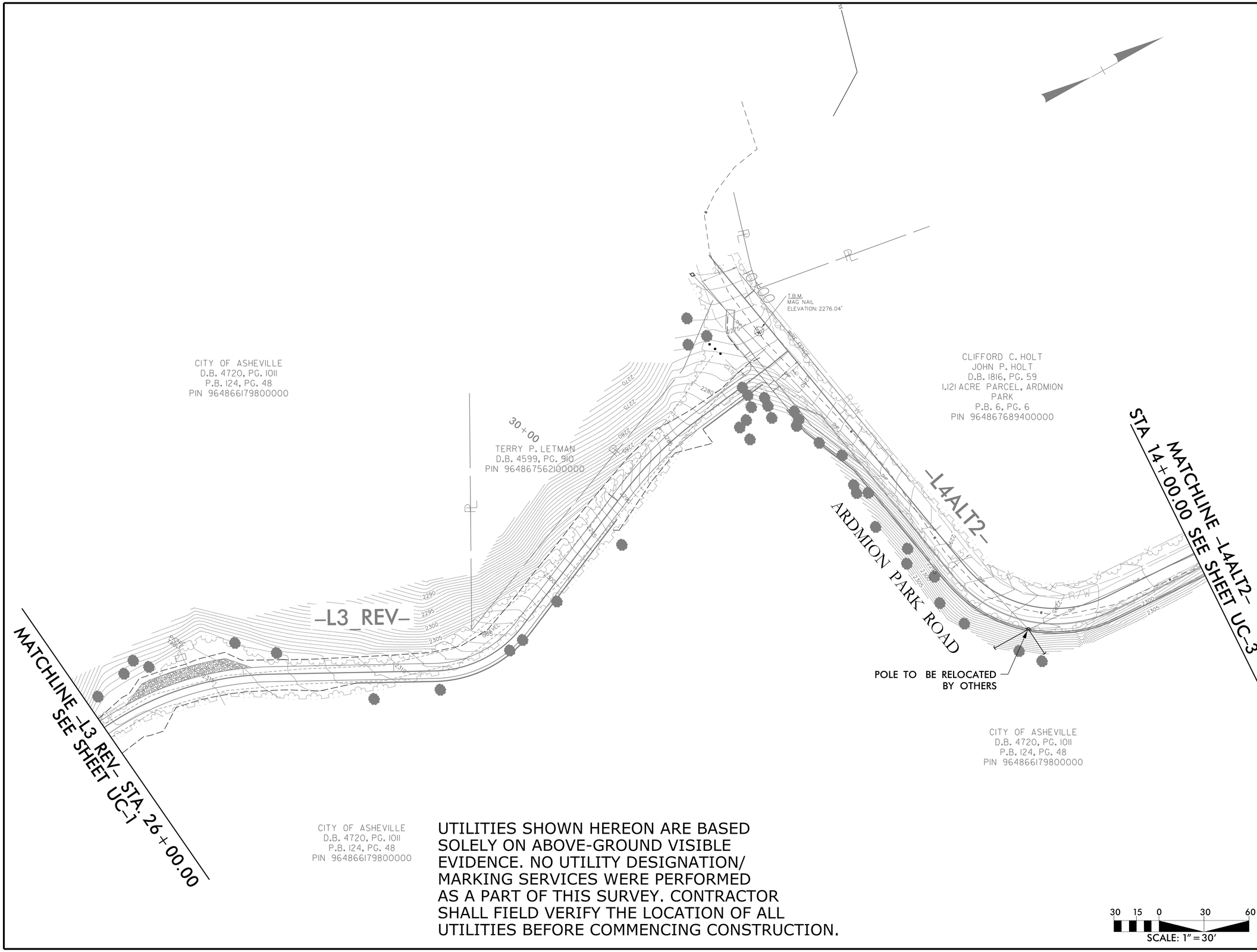
10/5/16

HYDRAULICS ENGINEER:

PROJECT NO.:

H13002.00

UC-1



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GREENWAY ENGINEER:

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10/5/16

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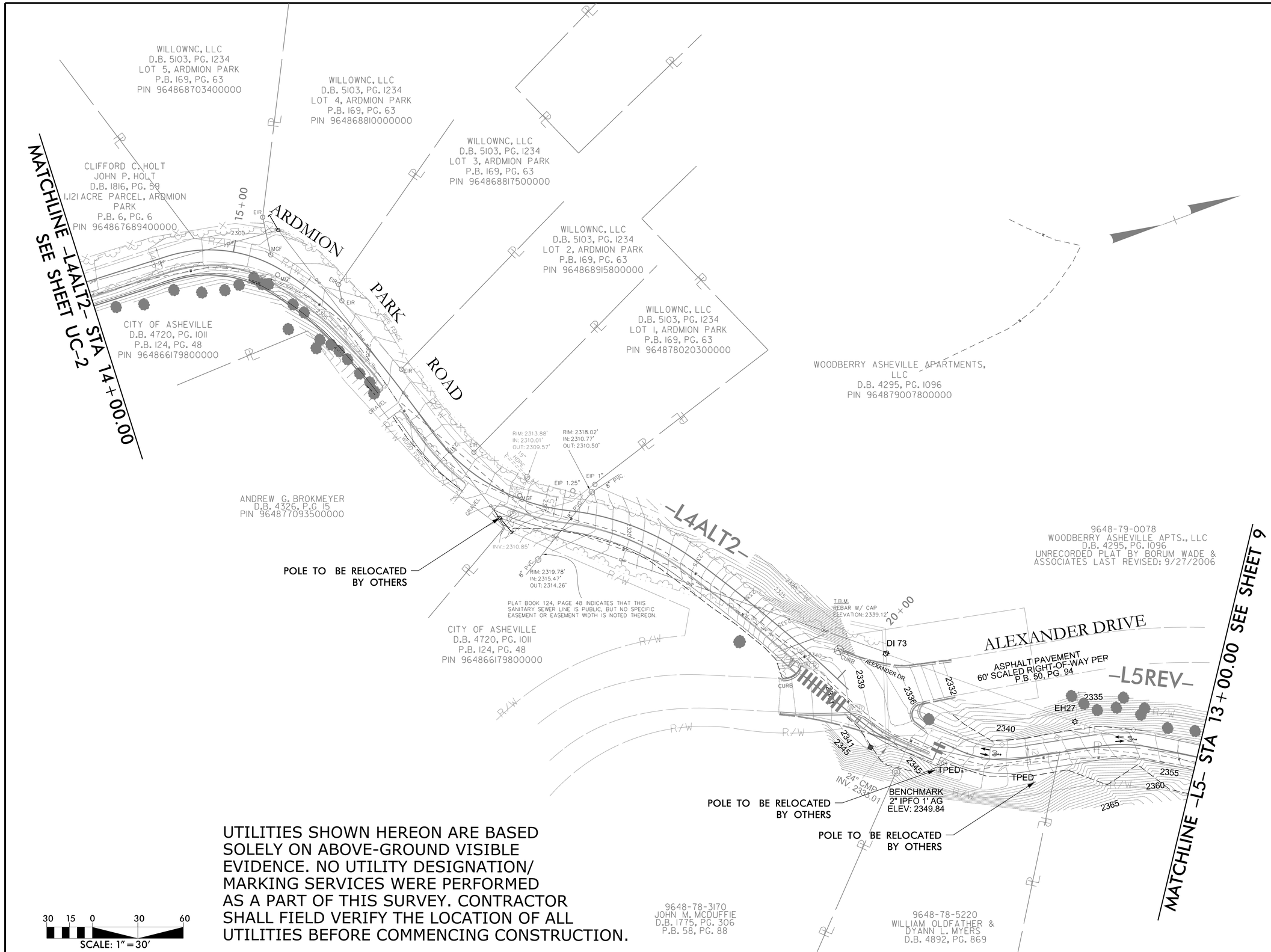
PROJECT NO.:

H13002.00

UC-2



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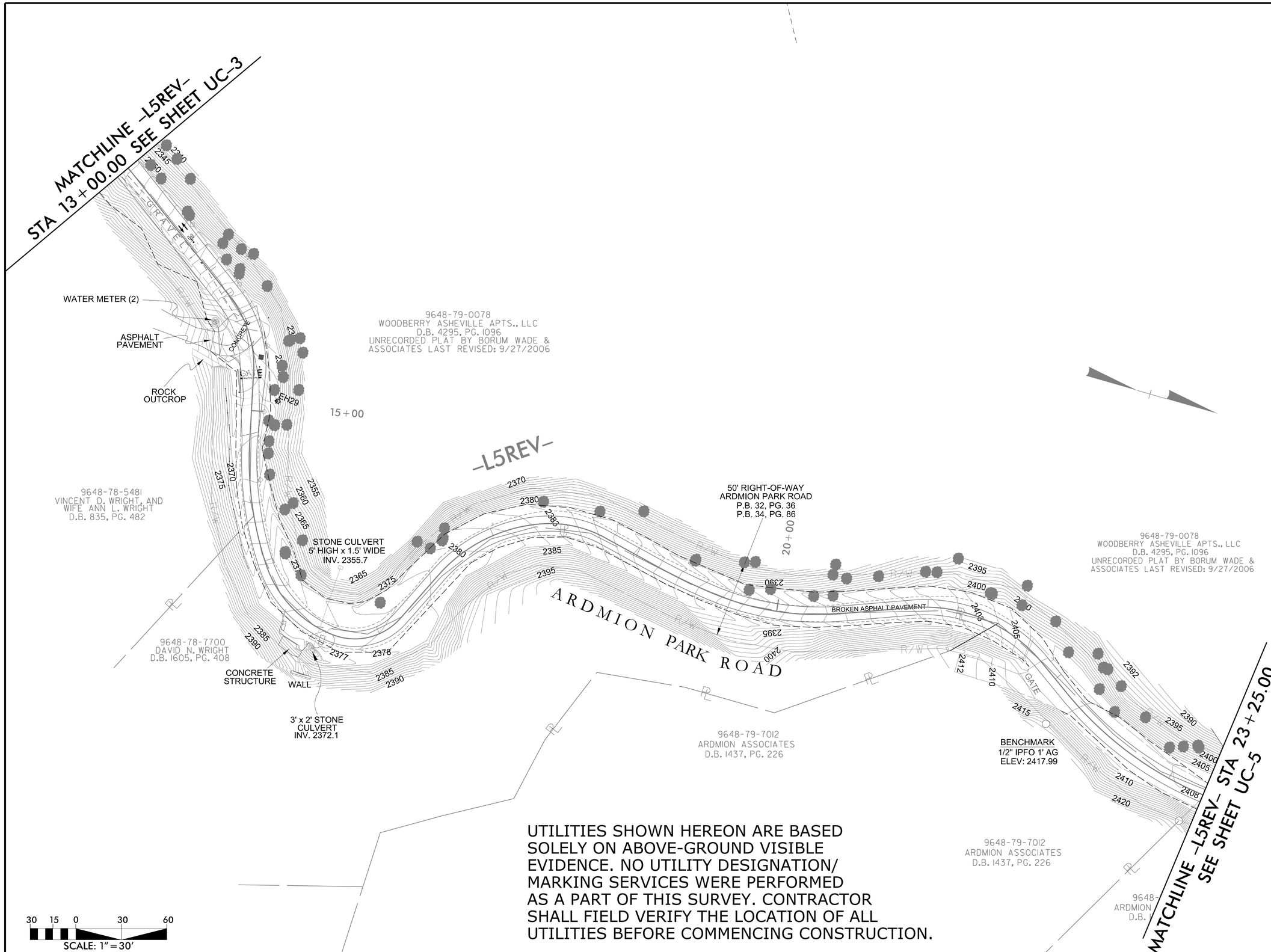
10/5/16

HYDRAULICS ENGINEER:

PROJECT NO.:

H13002.00

UC-3



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PROJECT NO.:
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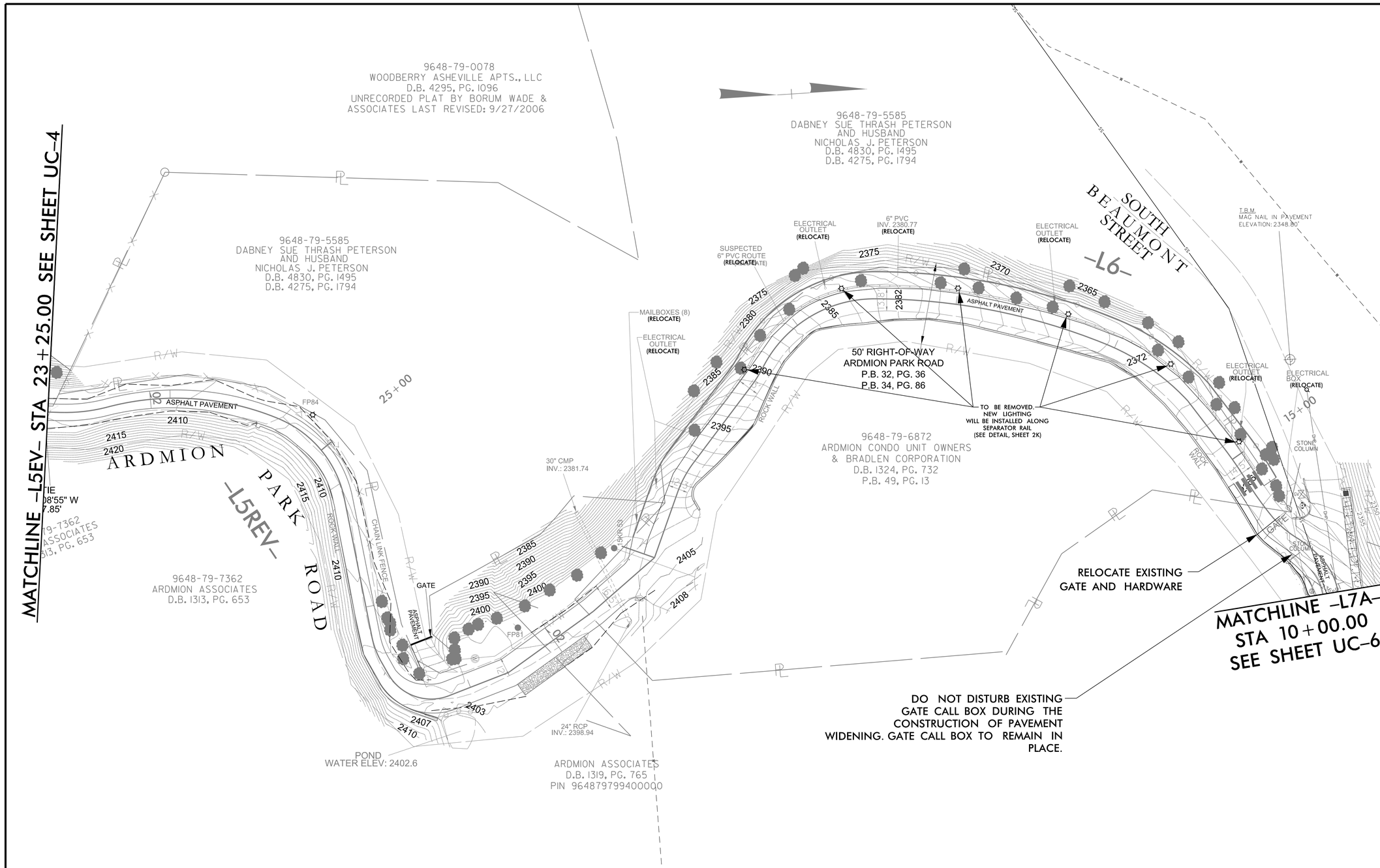
UC-4



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10/5/16

HYDRAULICS ENGINEER:

PROJECT NO.:
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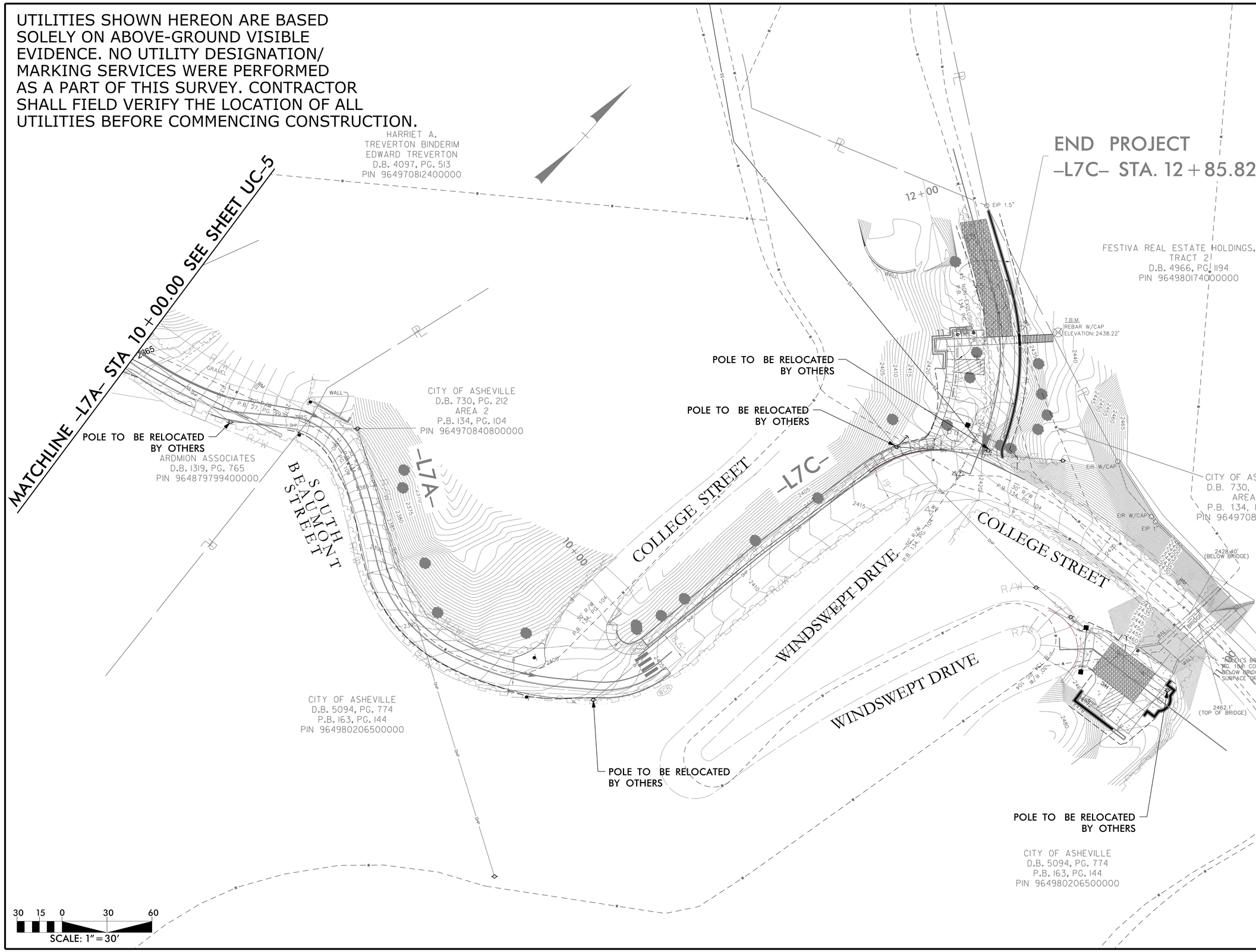
UTILITIES SHOWN HEREON ARE BASED SOLELY ON ABOVE-GROUND VISIBLE EVIDENCE. NO UTILITY DESIGNATION/ MARKING SERVICES WERE PERFORMED AS A PART OF THIS SURVEY. CONTRACTOR SHALL FIELD VERIFY THE LOCATION OF ALL UTILITIES BEFORE COMMENCING CONSTRUCTION.



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10/5/16

HYDRAULICS ENGINEER:

PROJECT NO.:
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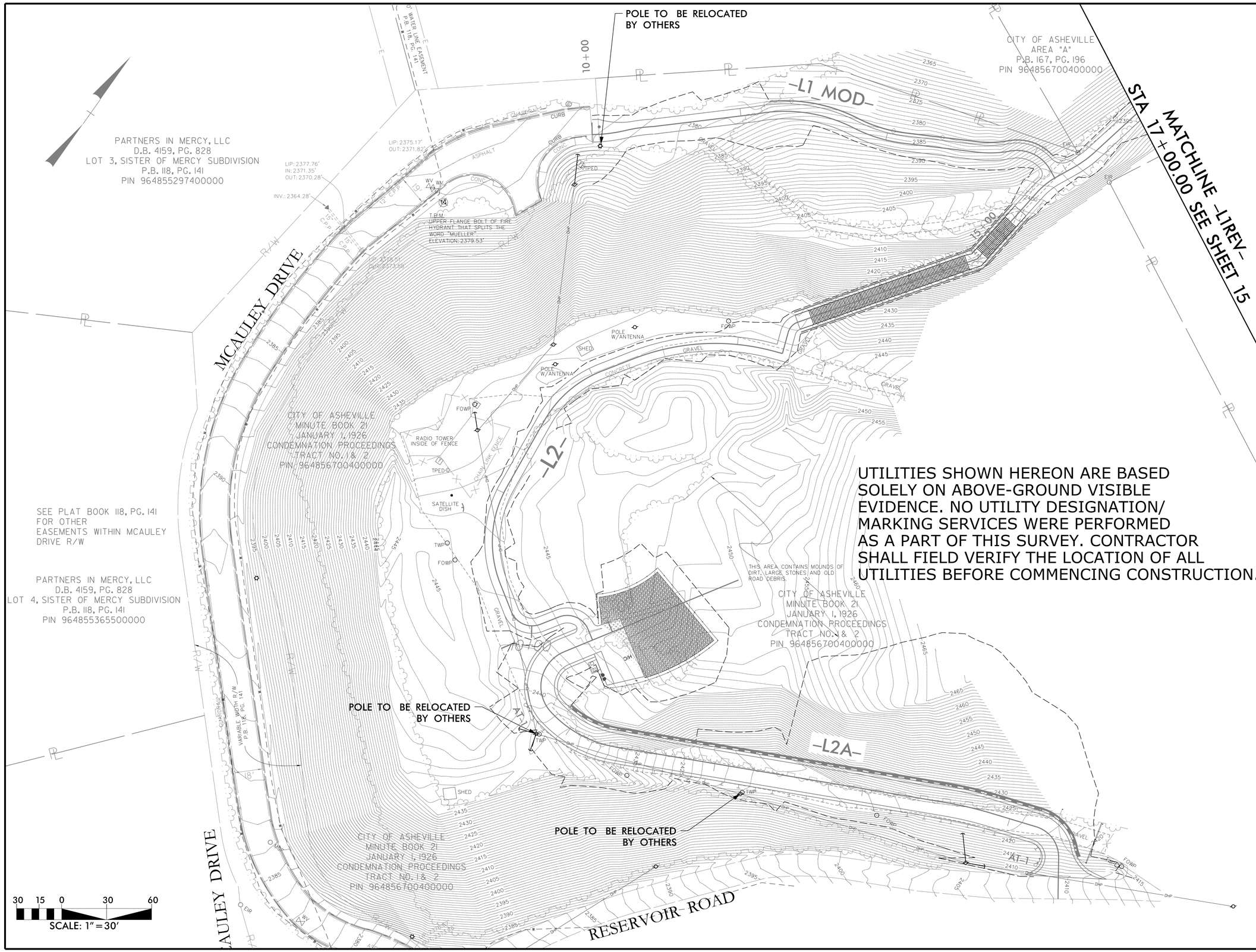
UC-6



BEAUCATCHER GREENWAY

WHITE FAWN RESERVOIR
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GREENWAY ENGINEER:

NORTH CAROLINA PROFESSIONAL SEAL 30692 ENGINEER ROBERT A. WILLIAMS

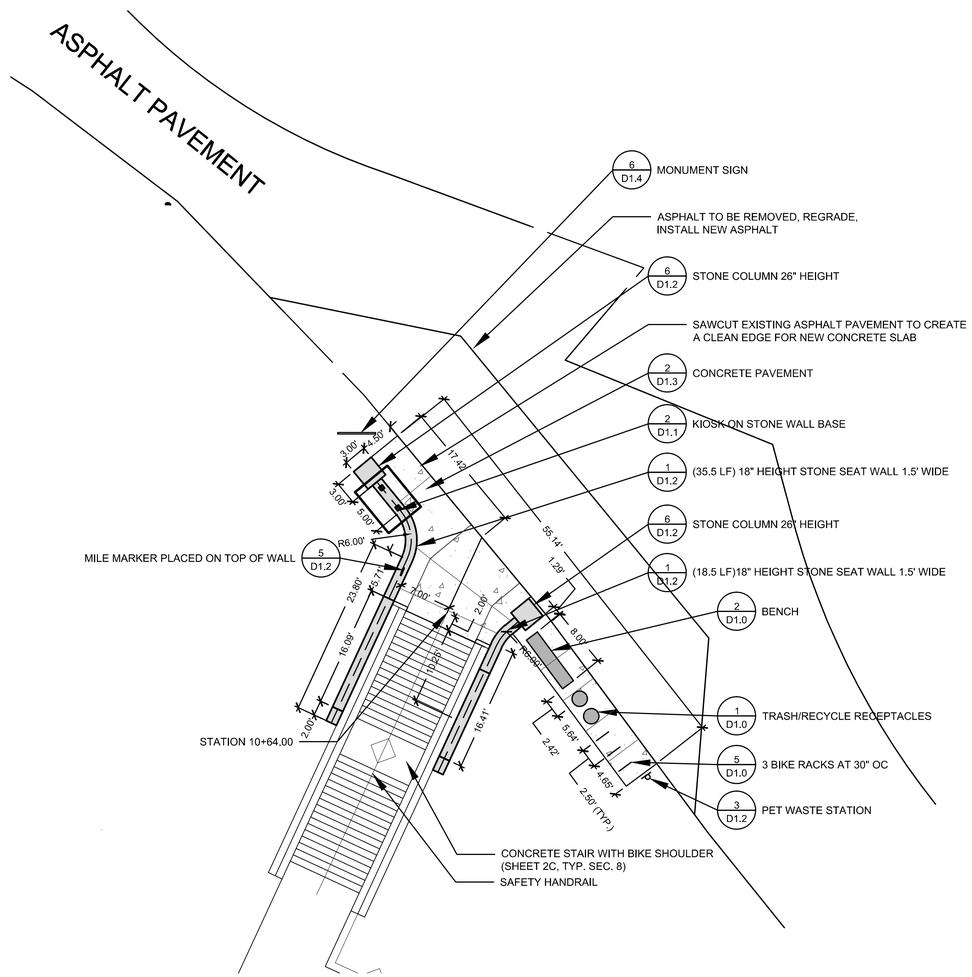
10/5/16

HYDRAULICS ENGINEER:

PROJECT NO.:

H13002.00

UC-7



NOTE:
SEE PLAN SHEET 4 OF THE TRAIL PLAN

0 5 10 20
SCALE: 1" = 10'

NORTH

CITY OF ASHEVILLE NORTH CAROLINA

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BEAUCATCHER GREENWAY

100% CONSTRUCTION DOCUMENTS

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 15332 DANIEL R. SASSAMAN 10/10/16

MEMORIAL STADIUM TRAILHEAD

LAYOUT AND STAKING PLAN

DATE: OCTOBER 10, 2016

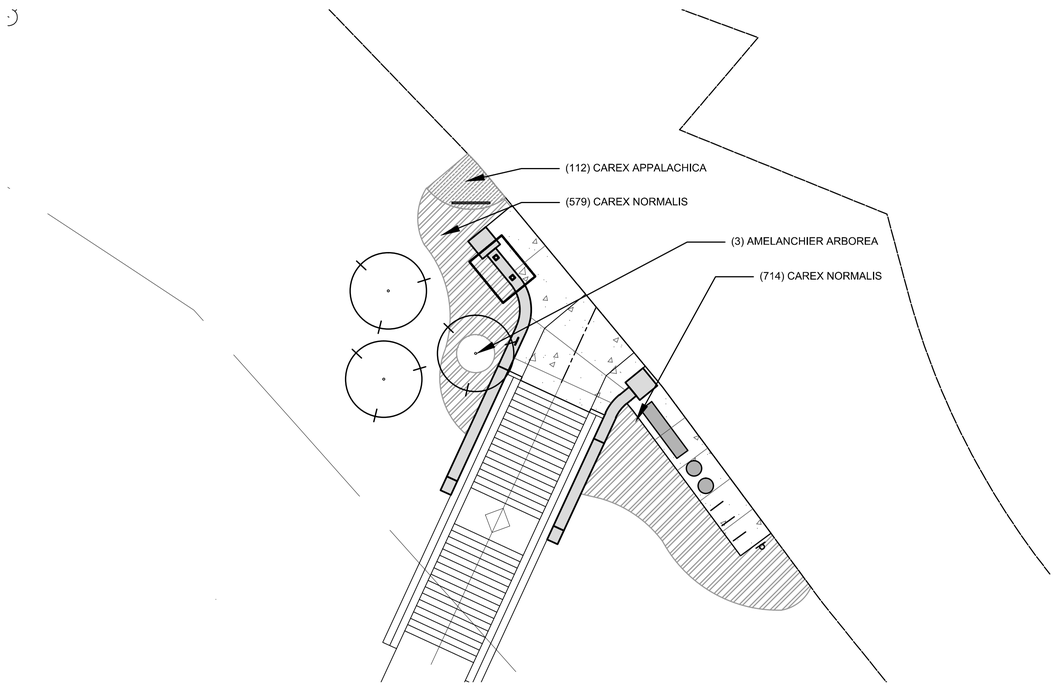
REVISIONS:

NO.	DATE

PROJECT NO.: H13002.00

SCALE: 1"=10'

TH1.0



NOTES:
SEE PLAN SHEET 4 OF
TRAIL PLANS

ALL DISTURBED AREAS TO BE SEEDED OR MULCHED. SEE TRAIL PLANS, DETAILS, AND SPECIFICATIONS.

PLANT SCHEDULE

	Quantity	Botanical Name	Common Name	Specifications
TREES				
	3	*Amelanchier arborea*	Serviceberry	min 8', strong leader
GROUNDCOVER *and* ORNAMENTAL GRASSES				
	1,293	*Carex normalis*	Greater Straw Sedge	Liner, 8" o.c.
	112	*Carex appalachica*	Appalachian Sedge	Liner, 8" o.c.

0 5 10 20
SCALE: 1" = 10'

NORTH

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BEAUCATCHER GREENWAY

100% CONSTRUCTION DOCUMENTS

NORTH CAROLINA PROFESSIONAL SEAL 11532 JAMES R. BLACKMAN
10/10/16

MEMORIAL STADIUM TRAILHEAD

LANDSCAPE PLAN

DATE: OCTOBER 10, 2016

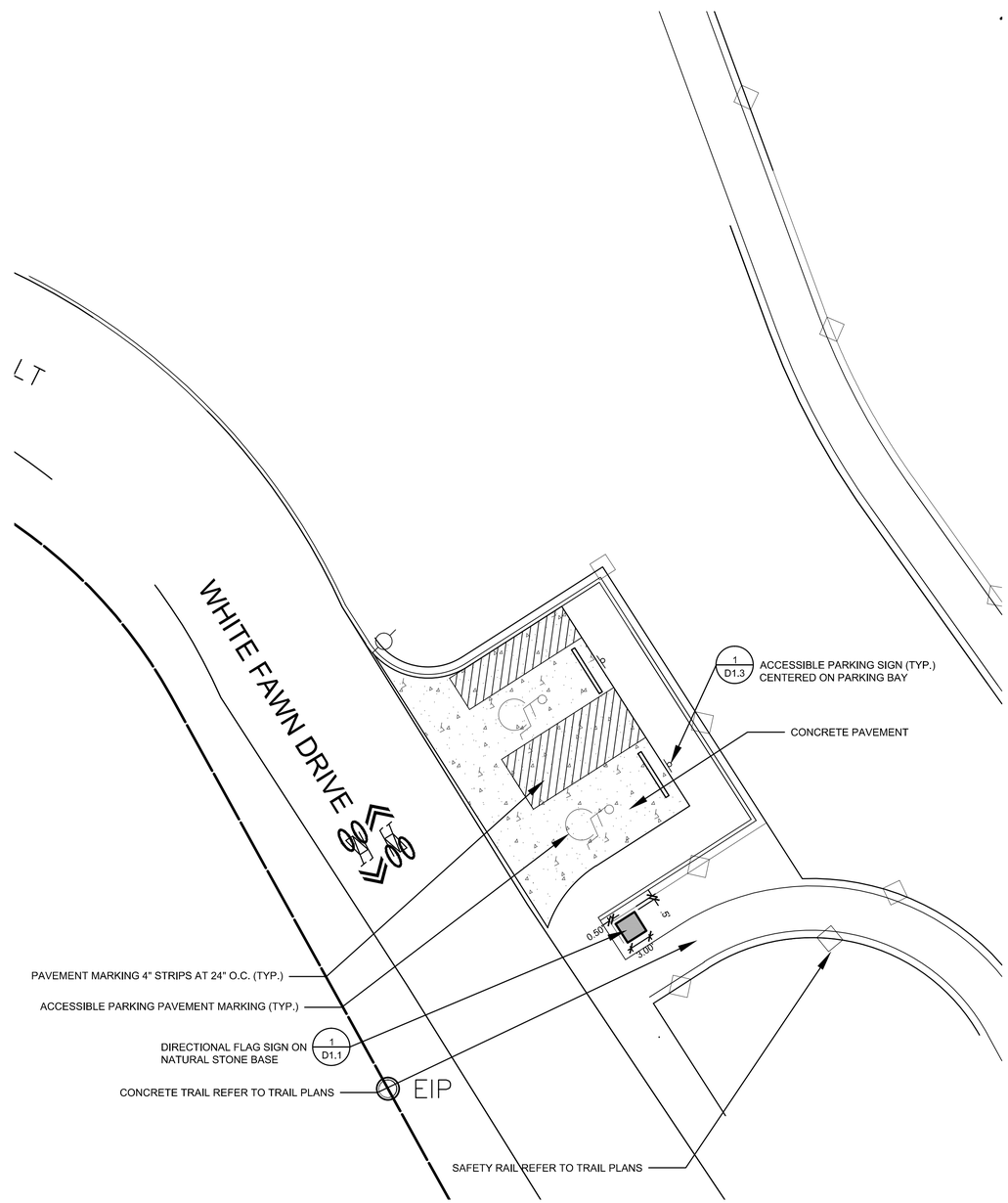
REVISIONS:

NO.	DATE

PROJECT NO.:
H13002.00

SCALE: 1"=10'

TH1.2



NOTE:
1) SEE PLAN SHEET 4 OF TRAIL PLANS.
2)REFER TO TRAIL PLANS FOR REGULATORY SIGNS.

0 5 10 20
SCALE: 1" = 10'

NORTH

CITY OF ASHEVILLE NORTH CAROLINA

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BEAUCATCHER GREENWAY

100% CONSTRUCTION DOCUMENTS

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 15332 JAMES R. BLANKENSHIP
10/10/16

WHITE FAWN DRIVE TRAILHEAD

LAYOUT AND STAKING PLAN

DATE: OCTOBER 10, 2016

REVISIONS:

NO.	DATE

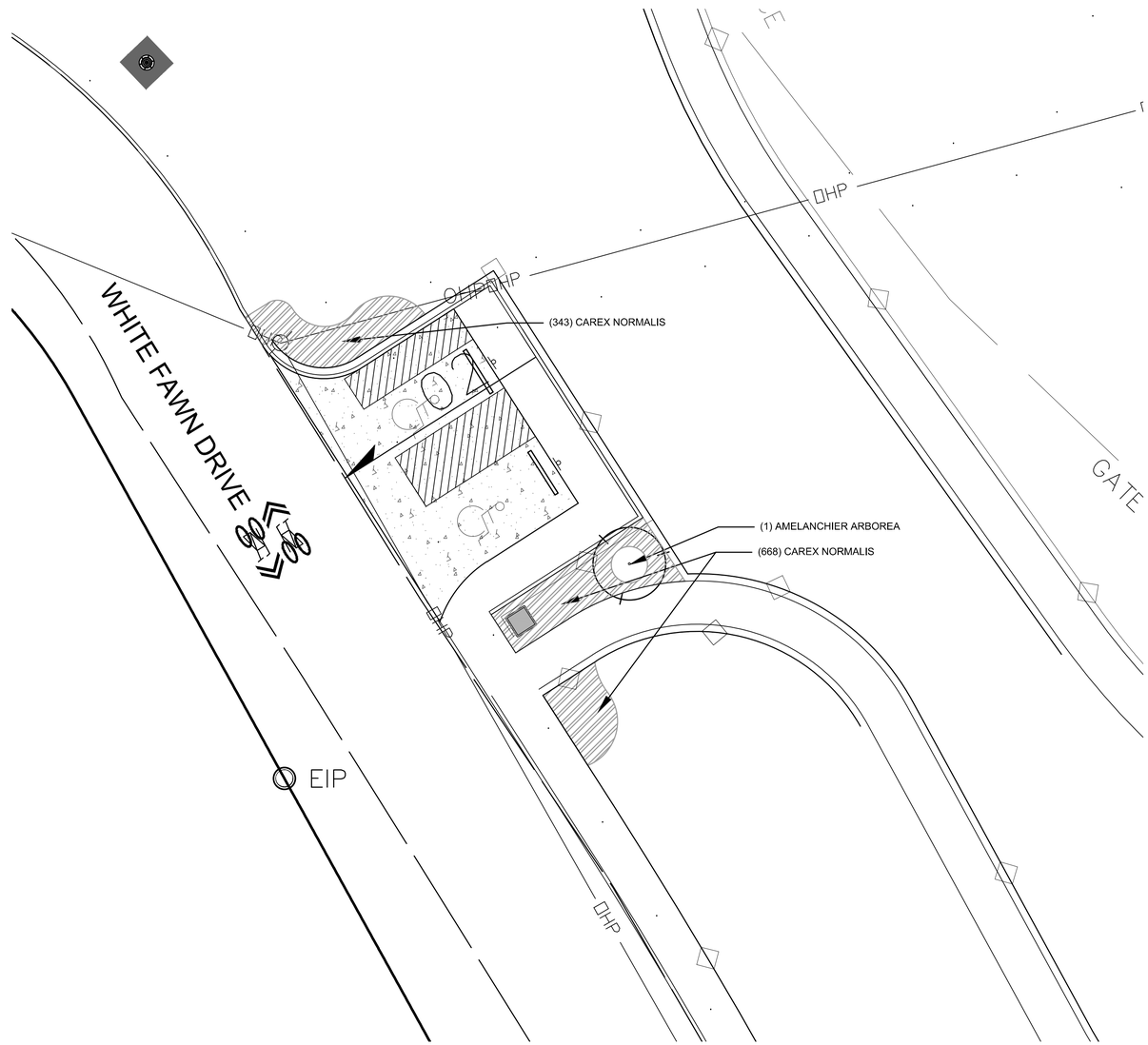
PROJECT NO.:
H13002.00

SCALE: 1"=10'

TH2.0

NOTES:
SEE PLAN SHEET 4 OF
TRAIL PLANS

ALL DISTURBED AREAS TO BE
SEEDED OR MULCHED. SEE TRAIL
PLANS, DETAILS, AND
SPECIFICATIONS.



PLANT SCHEDULE

	Quantity	Botanical Name	Common Name	Specifications
TREES				
	1	*Amelanchier arborea*	Serviceberry	min 8', strong leader
GROUNDCOVER *and* ORNAMENTAL GRASSES				
	1,063	*Carex normalis*	Greater Straw Sedge	Liner, 8" o.c.

0 5 10 20
SCALE: 1" = 10'

NORTH

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BEAUCATCHER GREENWAY

100% CONSTRUCTION DOCUMENTS

NORTH CAROLINA REGISTERED LANDSCAPE ARCHITECT 1332 JAMES R. BLANKENSHIP 10/10/16

WHITE FAWN DR. PARKING

LANDSCAPE PLAN

DATE: OCTOBER 10, 2016

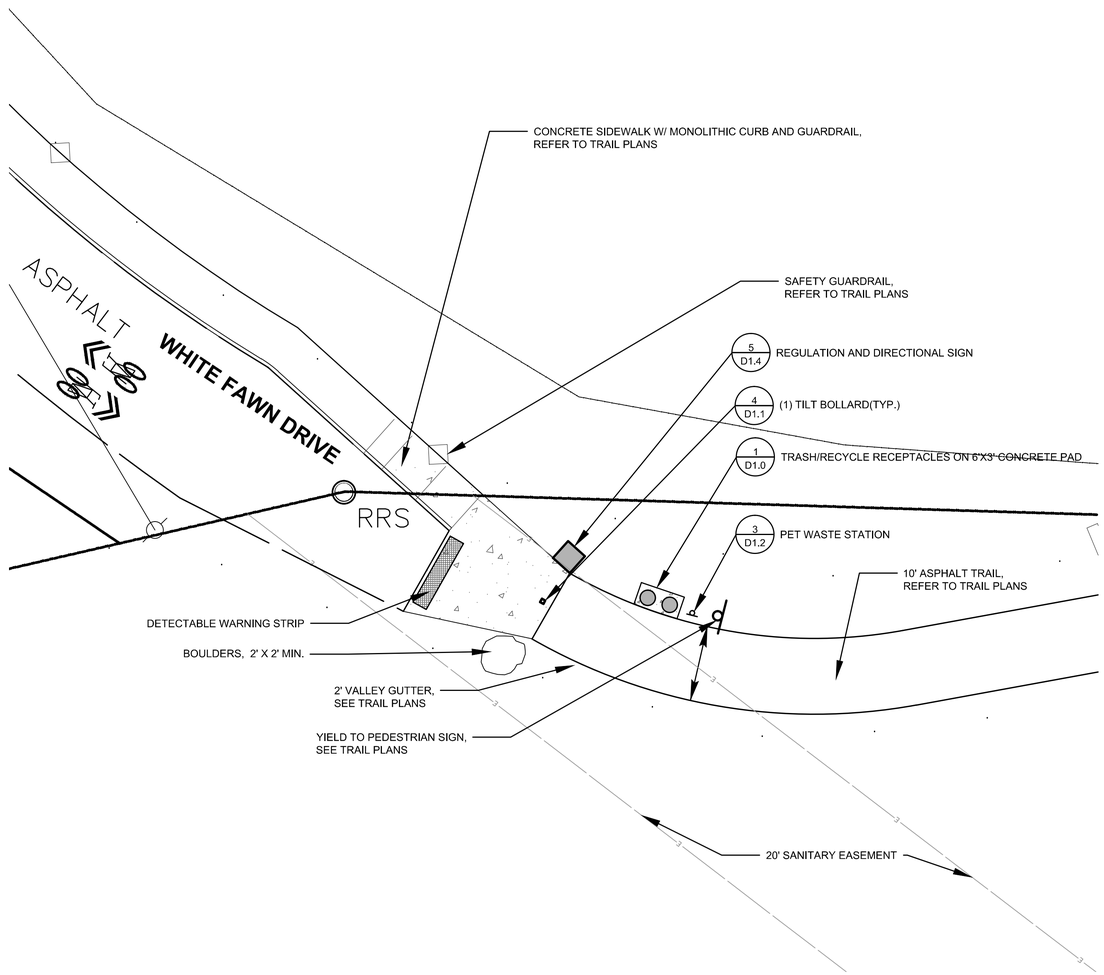
REVISIONS:

NO.	DATE

PROJECT NO.:
H13002.00

SCALE: 1"=10'

TH2.2



NOTE:

1. SEE PLAN SHEET 4
2. EXISTING GATE AND GRAVEL TO BE REMOVED.
3. SAWCUT AND REMOVE EXISTING ASPHALT TO MEET FLUSH WITH RAMP
4. REFER TO TRAIL PLANS FOR REGULATORY SIGNS

0 5 10 20
SCALE: 1" = 10'

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BEAUCATCHER GREENWAY

100% CONSTRUCTION DOCUMENTS

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 15132 JAMES R. BLANKENSHIP 10/10/16

WHITE FAWN DRIVE TRAILHEAD 2

LAYOUT AND STAKING PLAN

DATE: OCTOBER 10, 2016

REVISIONS:

NO.	DATE

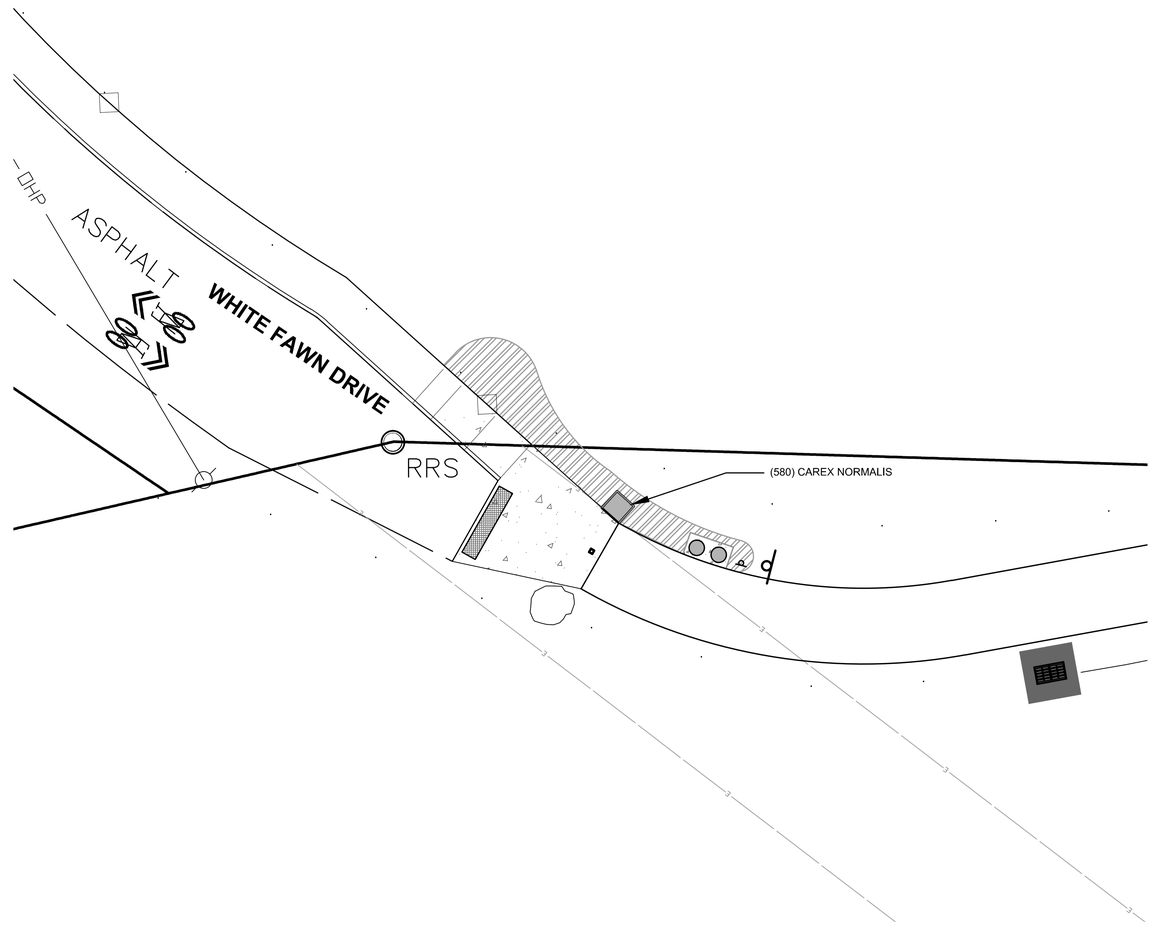
PROJECT NO.: H13002.00

SCALE: 1"=10'

TH3.0

NOTES:
SEE PLAN SHEET 4 OF
TRAIL PLAN

ALL DISTURBED AREAS TO BE SEEDED OR MULCHED. SEE TRAIL PLANS, DETAILS, AND SPECIFICATIONS.



PLANT SCHEDULE

	Quantity	Botanical Name	Common Name	Specifications
GROUNDCOVER *and* ORNAMENTAL GRASSES				
	580	*Carex normalis*	Greater Straw Sedge	Liner, 8" o.c.

0 5 10 20
SCALE: 1" = 10'

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NORTH CAROLINA PROFESSIONAL SEAL 11332 JENNIFER B. BLADSHAW 10/10/16

WHITE FAWN DRIVE TRAILHEAD 2

LANDSCAPE PLAN

DATE: OCTOBER 10, 2016

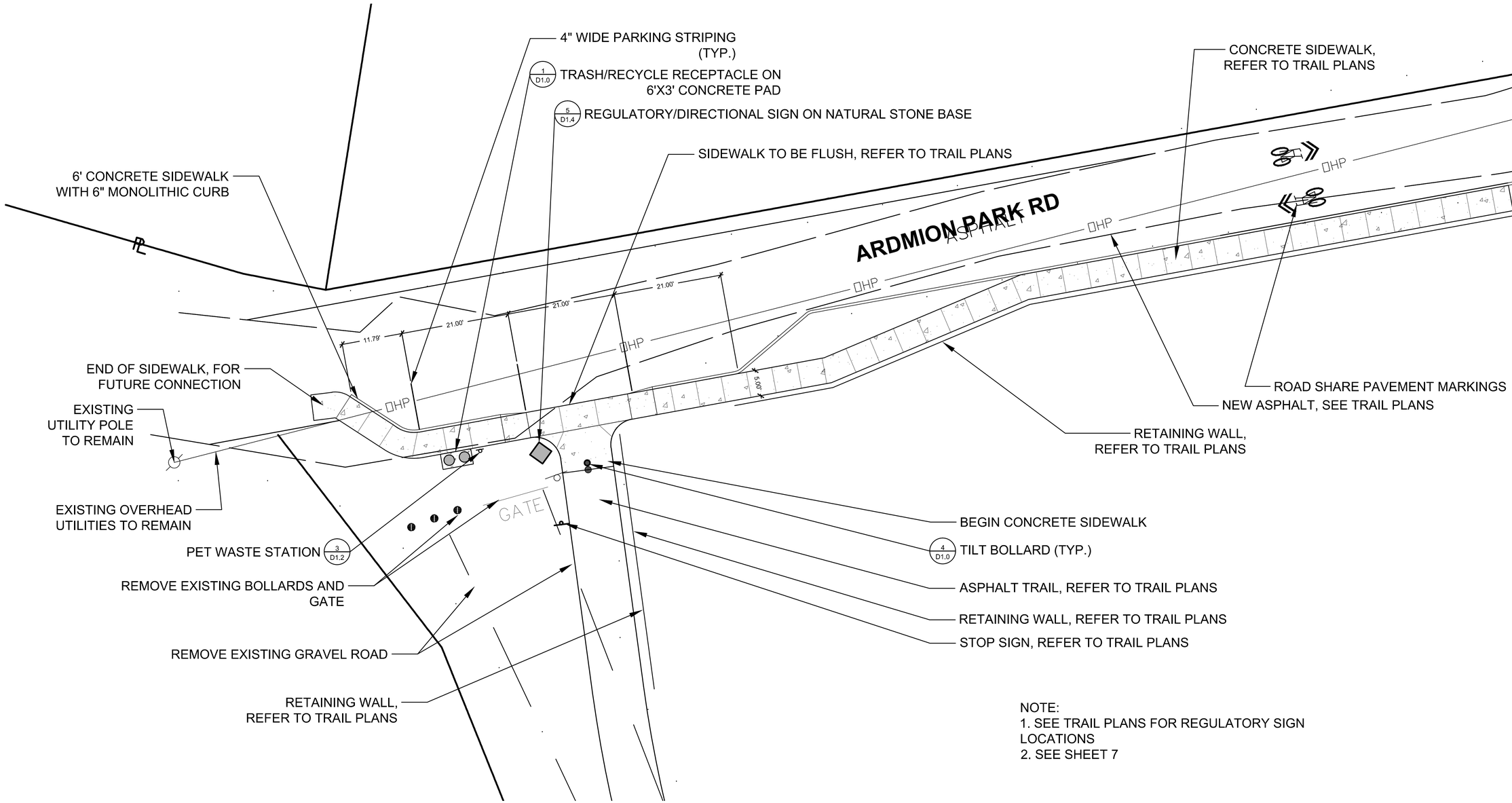
REVISIONS:

NO.	DATE

PROJECT NO.:
H13002.00

SCALE: 1"=10'

TH3.2



NOTE:
1. SEE TRAIL PLANS FOR REGULATORY SIGN LOCATIONS
2. SEE SHEET 7

5 10 20
SCALE: 1" = 10'

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NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 11532 JAMES R. BLANKENSHIP 10/10/16

SOUTH ARDIMON PARK TRAILHEAD

LAYOUT AND STAKING PLAN

DATE: OCTOBER 10, 2016

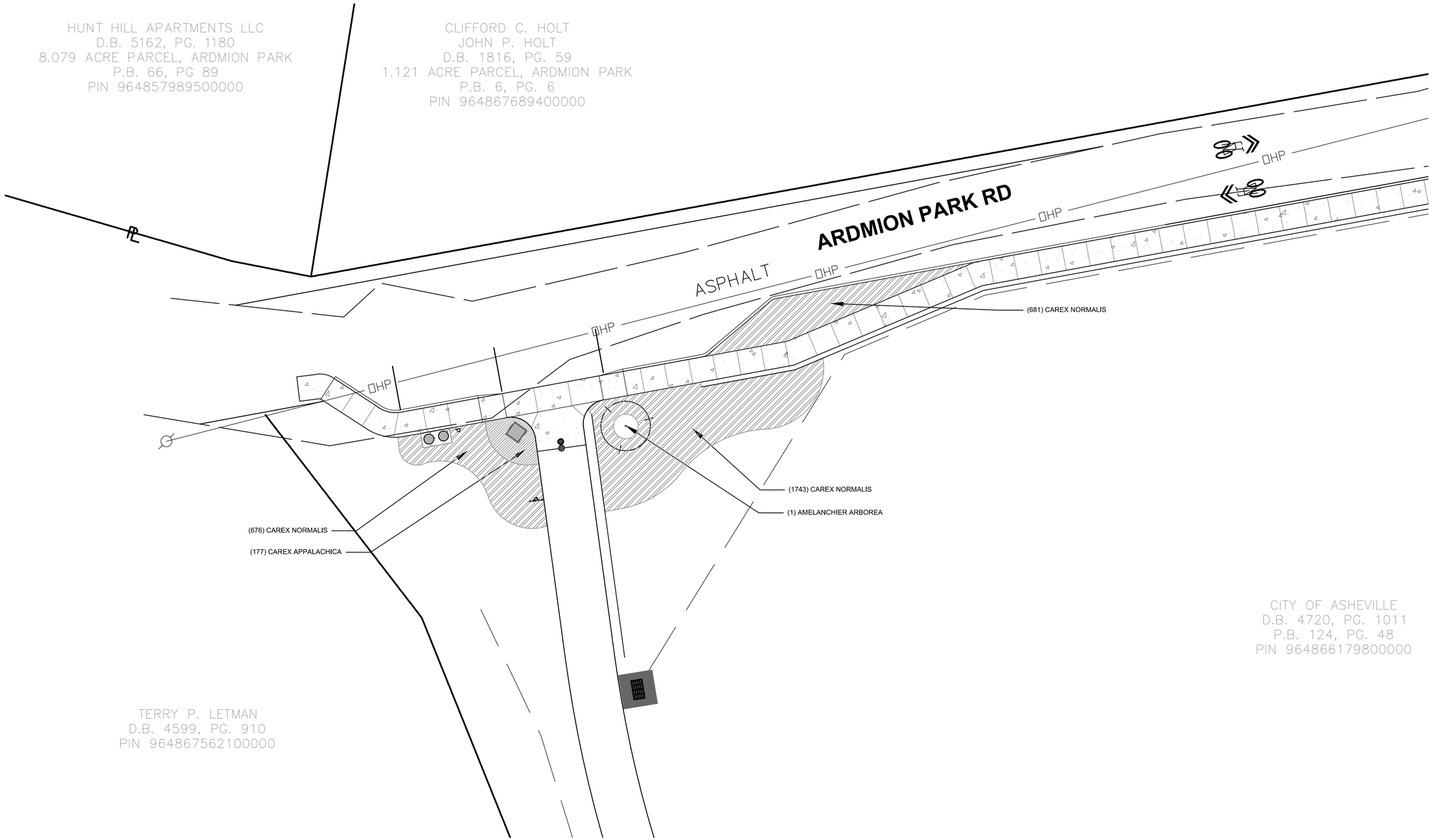
REVISIONS:

NO.	DATE

PROJECT NO.: H13002.00

SCALE: 1"=10'

TH4.0



NOTES:
SEE PLAN SHEET 7

ALL DISTURBED AREAS TO BE SEEDED OR MULCHED. SEE TRAIL PLANS, DETAILS, AND SPECIFICATIONS.

PLANT SCHEDULE

	Quantity	Botanical Name	Common Name	Specifications
TREES				
	1	*Amelanchier arborea*	Serviceberry	min 8', strong leader
GROUNDCOVER and ORNAMENTAL GRASSES				
	3,100	*Carex normalis*	Greater Straw Sedge	Liner, 8" o.c.
	177	*Carex appalachica*	Appalachian Sedge	Liner, 8" o.c.

5 10 20
SCALE: 1" = 10'

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NORTH CAROLINA PROFESSIONAL SEAL 1332 JENNIFER R. BLANKNER 10/10/16

SOUTH ARDIMON PARK TRAILHEAD

LANDSCAPE PLAN

DATE: OCTOBER 10, 2016

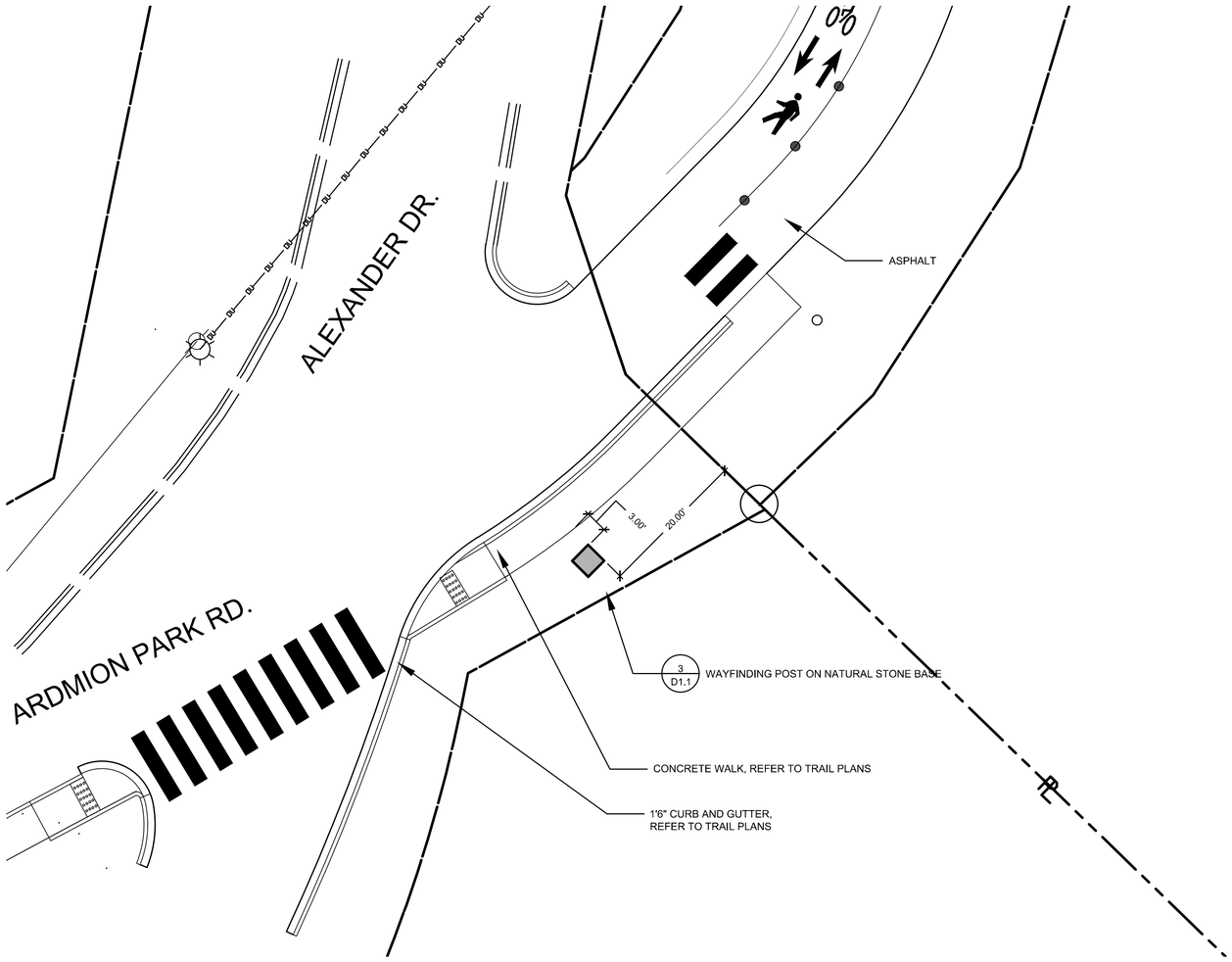
REVISIONS:

NO.	DATE

PROJECT NO.:
H13002.00

SCALE: 1"=10'

TH4.2



NOTE:
1. SEE PLAN SHEET 8 FOR CONCRETE WALK, WHEELCHAIR RAMPS, AND CROSSWALKS.
2. REFER TO TRAIL PLANS FOR REGULATORY SIGN TYPES AND LOCATIONS.
REFER TO TRAIL PLANS FOR GRADING.

5 10 20
SCALE: 1" = 10'

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NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 11532 JAMES E. STEWART 10/10/16

ALEXANDER DRIVE TRAILHEAD

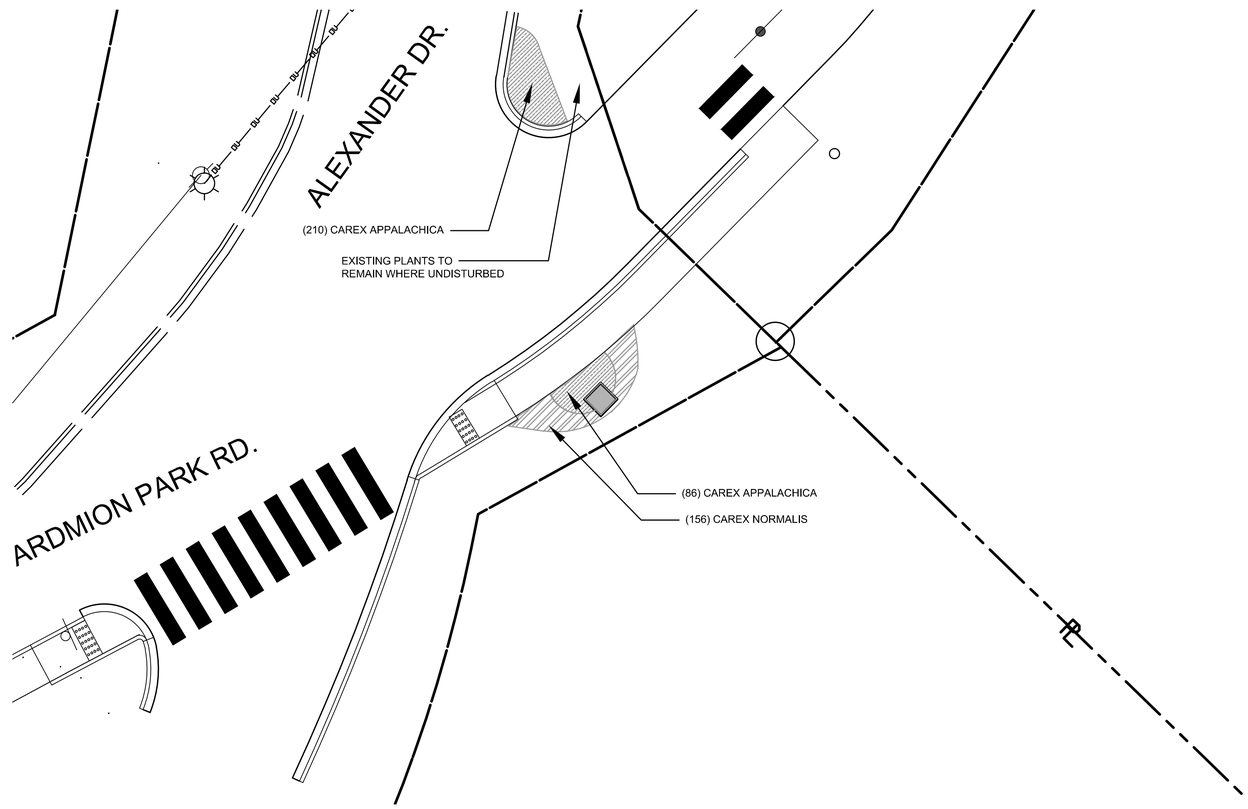
LAYOUT AND STAKING PLAN

DATE: OCTOBER 10, 2016
REVISIONS:

NO.	DATE

PROJECT NO.:
H13002.00

TH5.0



NOTES:
SEE PLAN SHEET 8

ALL DISTURBED AREAS TO BE SEEDED OR MULCHED. SEE TRAIL PLANS, DETAILS, AND SPECIFICATIONS.

PLANT SCHEDULE

	Quantity	Botanical Name	Common Name	Specifications
GROUNDCOVER *and* ORNAMENTAL GRASSES				
	156	*Carex normalis*	Greater Straw Sedge	Liner, 8" o.c.
	296	*Carex appalachica*	Appalachian Sedge	Liner, 8" o.c.

5 10 20
SCALE: 1" = 10'

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NORTH CAROLINA PROFESSIONAL SEAL 11532 LANDSCAPE ARCHITECT JAMES R. SUMMERVILLE 10/10/16

ALEXANDER DRIVE TRAILHEAD

LANDSCAPE PLAN

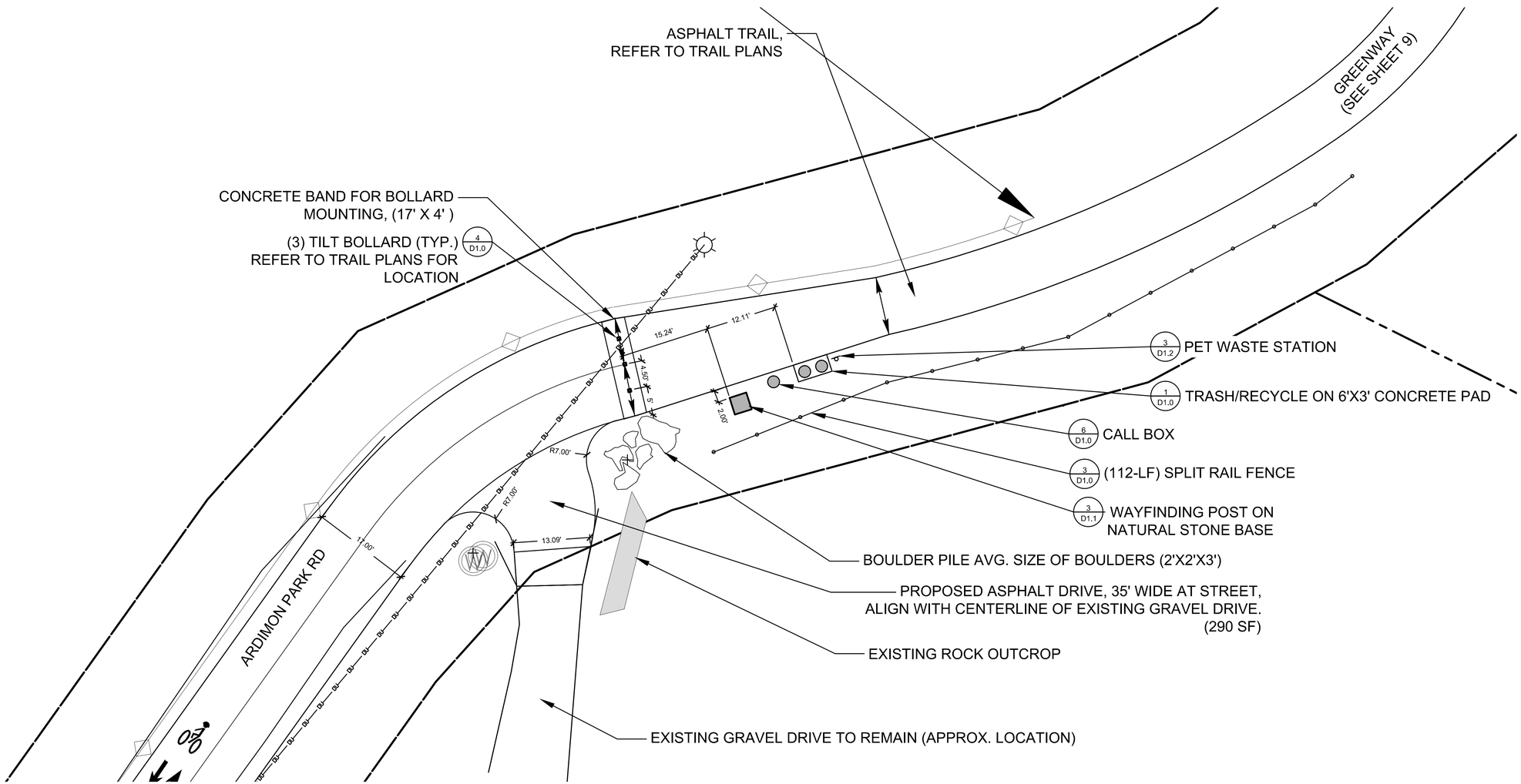
DATE: OCTOBER 10, 2016
REVISIONS:

NO.	DATE

PROJECT NO.:
H13002.00

SCALE: 1"=10'

TH5.2



NOTE:
1. SEE SHEET 9 OF TRAIL PLANS
2. EXISTING GATES AND HARDWARE TO BE REMOVED.
3. EXISTING CONCRETE DRIVE TO BE REMOVED
4. SEE TRAIL PLANS FOR REGULATORY SIGN LOCATIONS

0 5 10 20
SCALE: 1" = 10'

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NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 13332 DANIEL R. BLACKMON 10/10/16

NORTH ARDIMON PARK TRAILHEAD

LAYOUT AND STAKING PLAN

DATE: OCTOBER 10, 2016

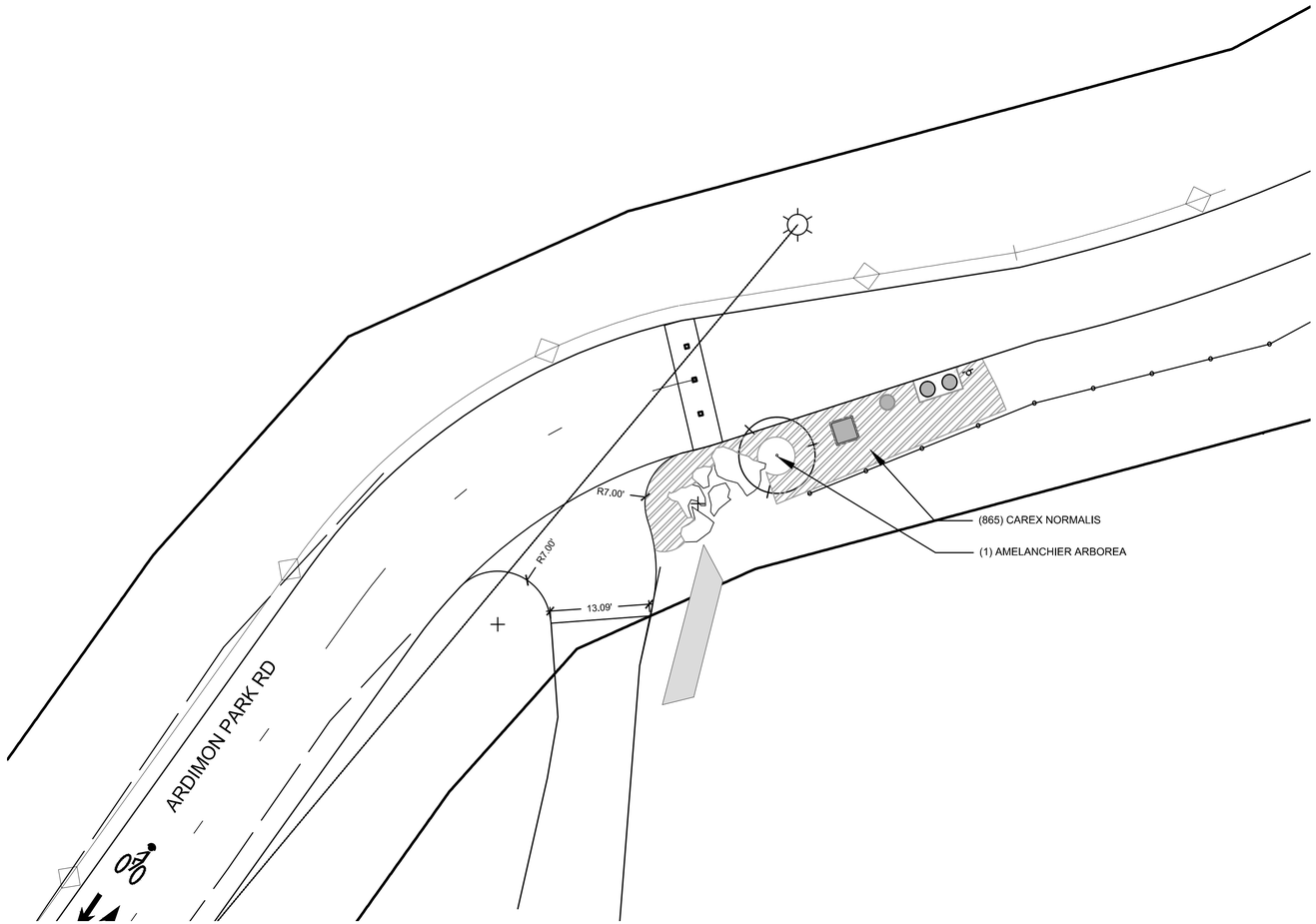
REVISIONS:

NO.	DATE

PROJECT NO.:
H13002.00

SCALE: 1"=10'

TH6.0



NOTES:
SEE PLAN SHEET 9

ALL DISTURBED AREAS TO BE SEEDED OR MULCHED. SEE TRAIL PLANS, DETAILS, AND SPECIFICATIONS.

PLANT SCHEDULE

	Quantity	Botanical Name	Common Name	Specifications
TREES				
	1	*Amelanchier arborea*	Serviceberry	min 8', strong leader
GROUNDCOVER *and* ORNAMENTAL GRASSES				
	865	*Carex normalis*	Greater Straw Sedge	Liner, 8" o.c.

0 5 10 20
SCALE: 1" = 10'

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NORTH CAROLINA PROFESSIONAL SEAL 1332 DANIEL R. BLACKMON 10/10/16

NORTH ARDIMON PARK TRAILHEAD

LANDSCAPE PLAN

DATE: OCTOBER 10, 2016

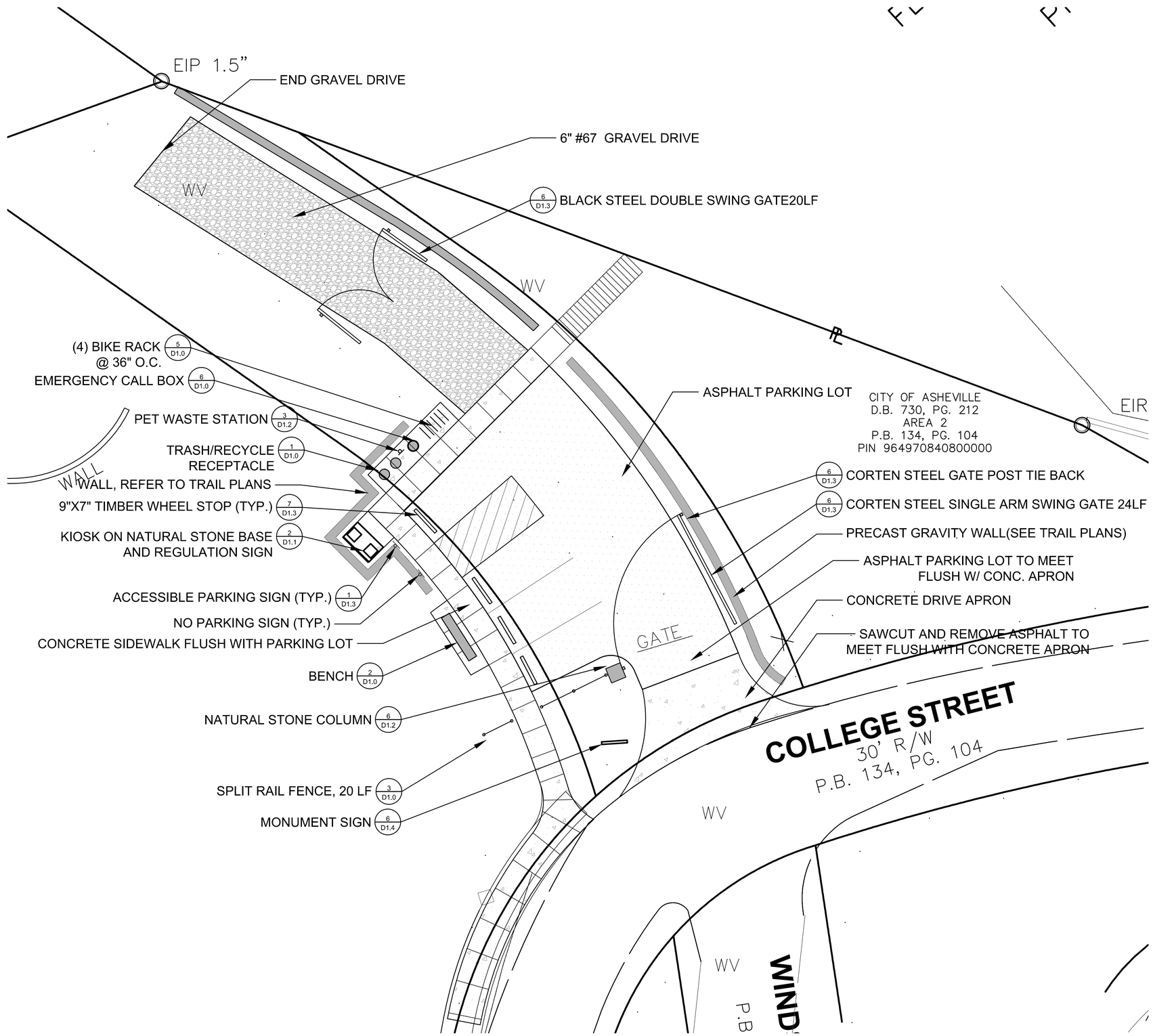
REVISIONS:

NO.	DATE

PROJECT NO.: H13002.00

SCALE: 1"=10'

TH6.2



NOTE:
1. SEE SHEET 11 OF TRAIL PLAN
2. EXISTING GATES AND HARDWARE TO BE REMOVED.
3. SEE TRAIL PLAN FOR REGULATORY SIGN LOCATION.

0 5 10 20
SCALE: 1" = 10'

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NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 1332 JAMES B. BLOOMER 10/10/16

HELEN'S BRIDGE TRAILHEAD

LAYOUT AND STAKING PLAN

DATE: OCTOBER 10, 2016

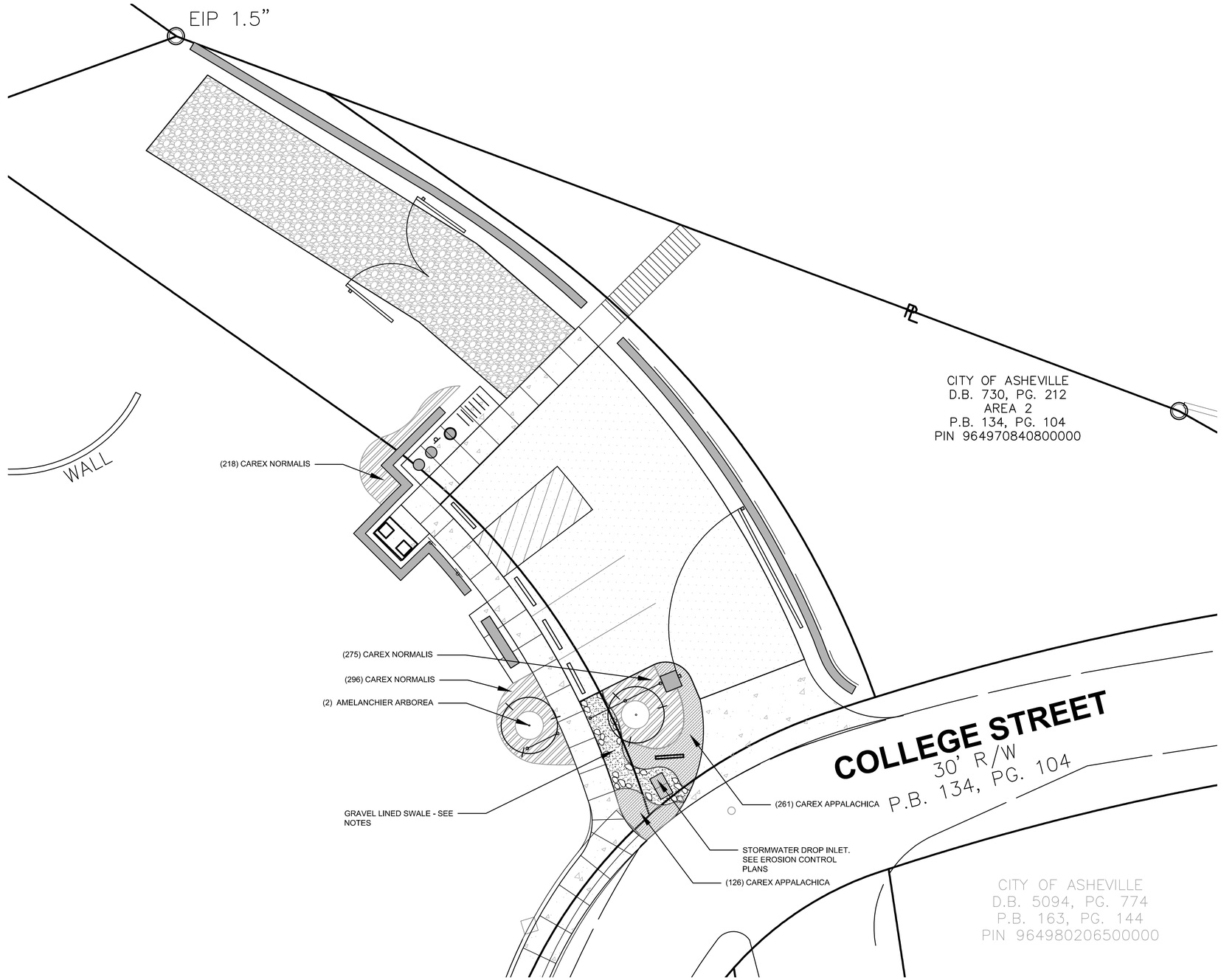
REVISIONS:

NO.	DATE

PROJECT NO.: H13002.00

SCALE: 1"=10'

TH7.0



NOTES:

1. SEE PLAN SHEET 11 FOR TRAIL INFORMATION.
2. GRAVEL LINED SWALE- INSTALL 113 SF NON-WOVEN POLYPROPYLENE GEOTEXTILE SOIL SEPARATOR FABRIC OVER FINIAL SWALE GRADES. INSTALL GRAVEL AND STONES AS FOLLOWS:
   1 TON, 3/4"- 1" RIVER JACKS AT 3" AVG. DEPTH
   1 TON, 5"-8" RIVER JACKS AT 6" AVG. DEPTH
   1 TON, 8"-12" RIVER STONES RANDOMLY SET IN GROUPINGS ALONG EDGES.
3. ALL DISTURBED AREAS TO BE SEEDED OR MULCHED. SEE TRAIL PLANS, DETAILS, AND SPECIFICATIONS.

PLANT SCHEDULE

	Quantity	Botanical Name	Common Name	Specifications
	TREES			
	2	*Amelanchier arborea*	Serviceberry	min 8', strong leader
	GROUNDCOVER and ORNAMENTAL GRASSES			
	789	*Carex normalis*	Greater Straw Sedge	Liner, 8" o.c.
	387	*Carex appalachica*	Appalachian Sedge	Liner, 8" o.c.

0 5 10 20

SCALE: 1" = 10'

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NORTH CAROLINA PROFESSIONAL SEAL 11332 ENGINEER - BUSINESS MANAGER 10/10/16

HELEN'S BRIDGE TRAILHEAD

LANDSCAPE PLAN

DATE: OCTOBER 10, 2016

REVISIONS:

NO.	DATE

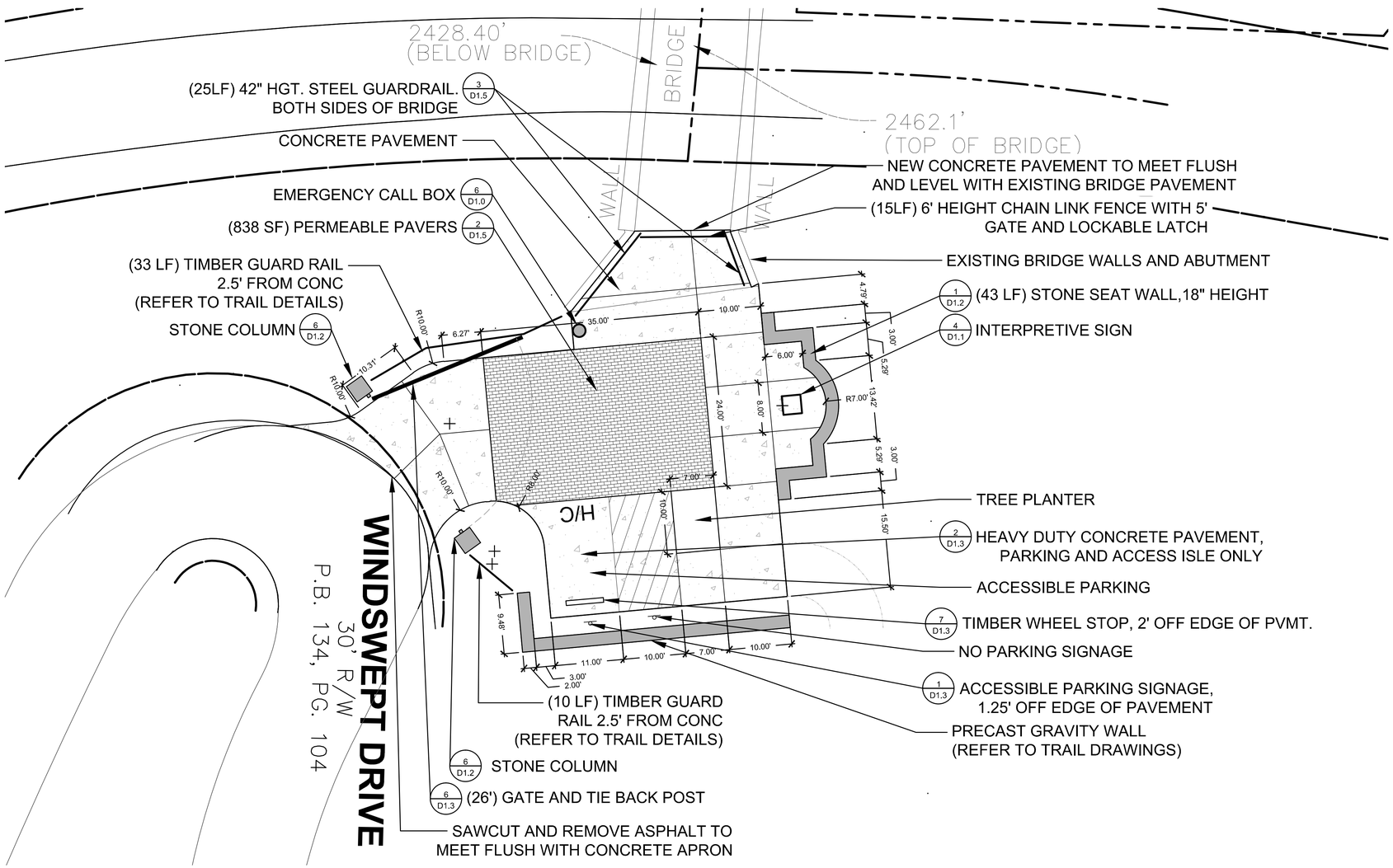
PROJECT NO.:

H13002.00

SCALE: 1"=10'

TH7.2

NOTE:
1. SEE SHEET 11
2. EXISTING GATES AND HARDWARE TO BE REMOVED.



0 5 10 20
SCALE: 1" = 10'

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NORTH CAROLINA 1332 PROFESSIONAL ENGINEER DANIEL R. BLACKMON 10/10/16

HELEN'S BRIDGE UPPER TRAILHEAD

LAYOUT AND STAKING PLAN

DATE: OCTOBER 10, 2016

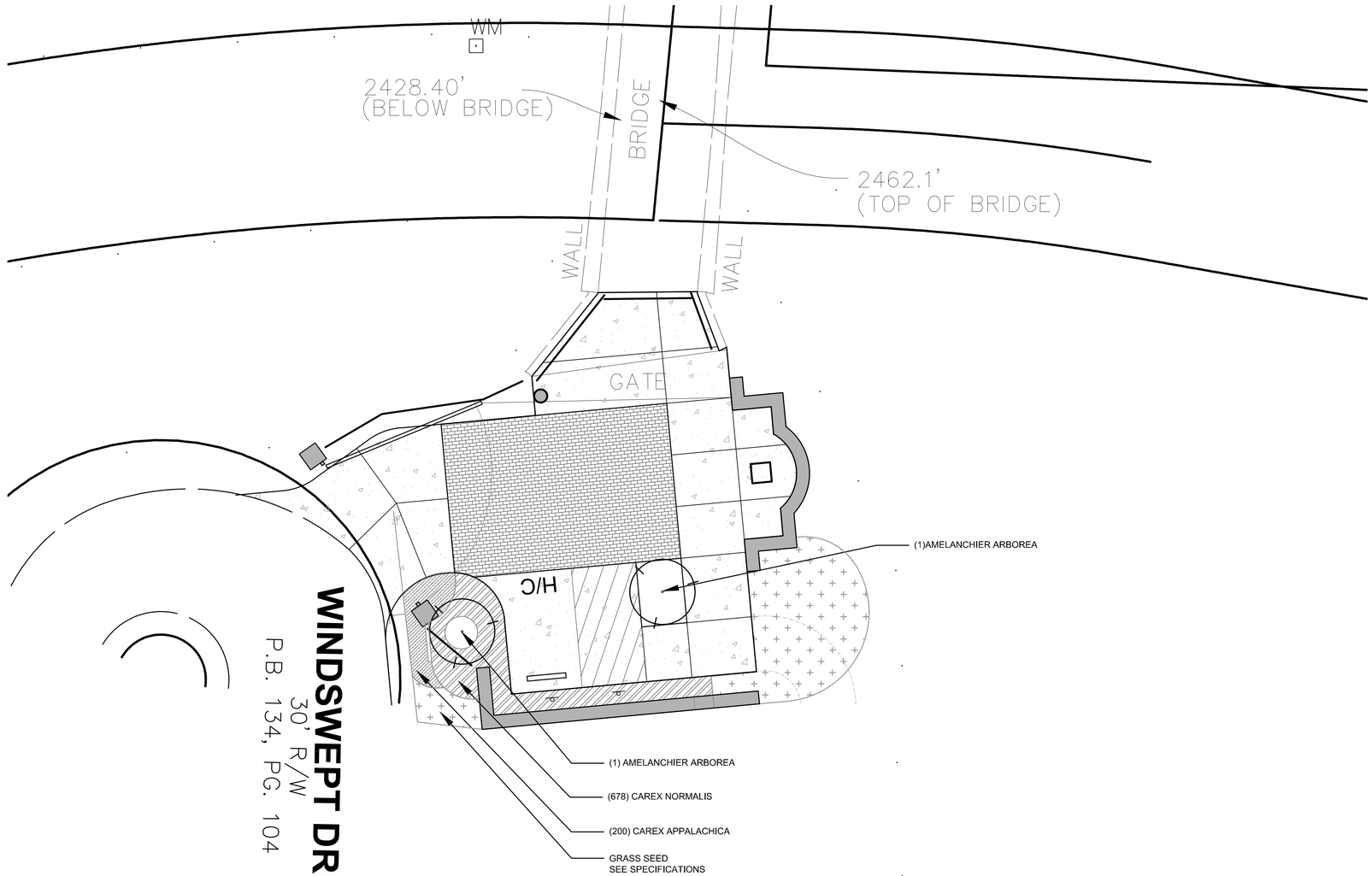
REVISIONS:

NO.	DATE

PROJECT NO.:
H13002.00

SCALE: 1"=10'

TH8.0



NOTES:
SEE PLAN SHEET 11

ALL DISTURBED AREAS TO BE SEEDED OR MULCHED. SEE TRAIL PLANS, DETAILS, AND SPECIFICATIONS.

PLANT SCHEDULE

Key	Quantity	Botanical Name	Common Name	Specifications
TREES				
	2	*Amelanchier arborea*	Serviceberry	min 8', strong leader
GROUNDCOVER *and* ORNAMENTAL GRASSES				
	678	*Carex normalis*	Greater Straw Sedge	Liner, 8" o.c.
	200	*Carex appalachica*	Appalachian Sedge	Liner, 8" o.c.

0 5 10 20
SCALE: 1" = 10'

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NORTH CAROLINA
REGISTERED
1332
PROFESSIONAL
DANIEL R. BLACKMAN
10/10/16

HELEN'S BRIDGE UPPER TRAILHEAD

LANDSCAPE PLAN

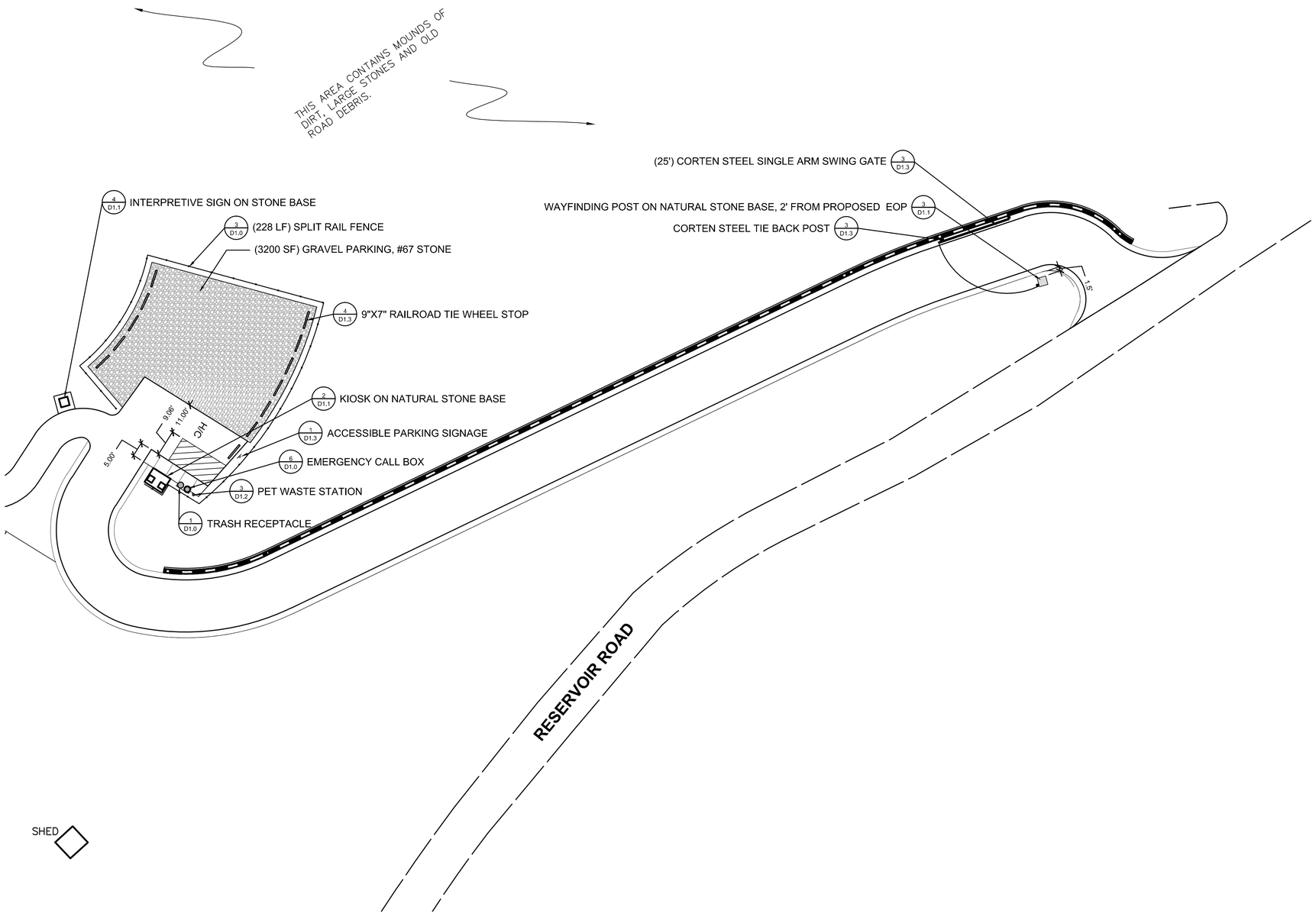
DATE: OCTOBER 10, 2016
REVISIONS:

NO.	DATE

PROJECT NO.:
H13002.00
SCALE: 1"=10'

TH8.2

NOTE:
1. SEE PLAN SHEET 14 OF TRAIL PLANS.



0 10 20 40
SCALE: 1" = 20'

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NORTH CAROLINA 11332 PROFESSIONAL ENGINEER SEAL 10/10/16

WHITE FAWN PARK

LAYOUT AND STAKING PLAN

DATE: OCTOBER 10, 2016
REVISIONS:

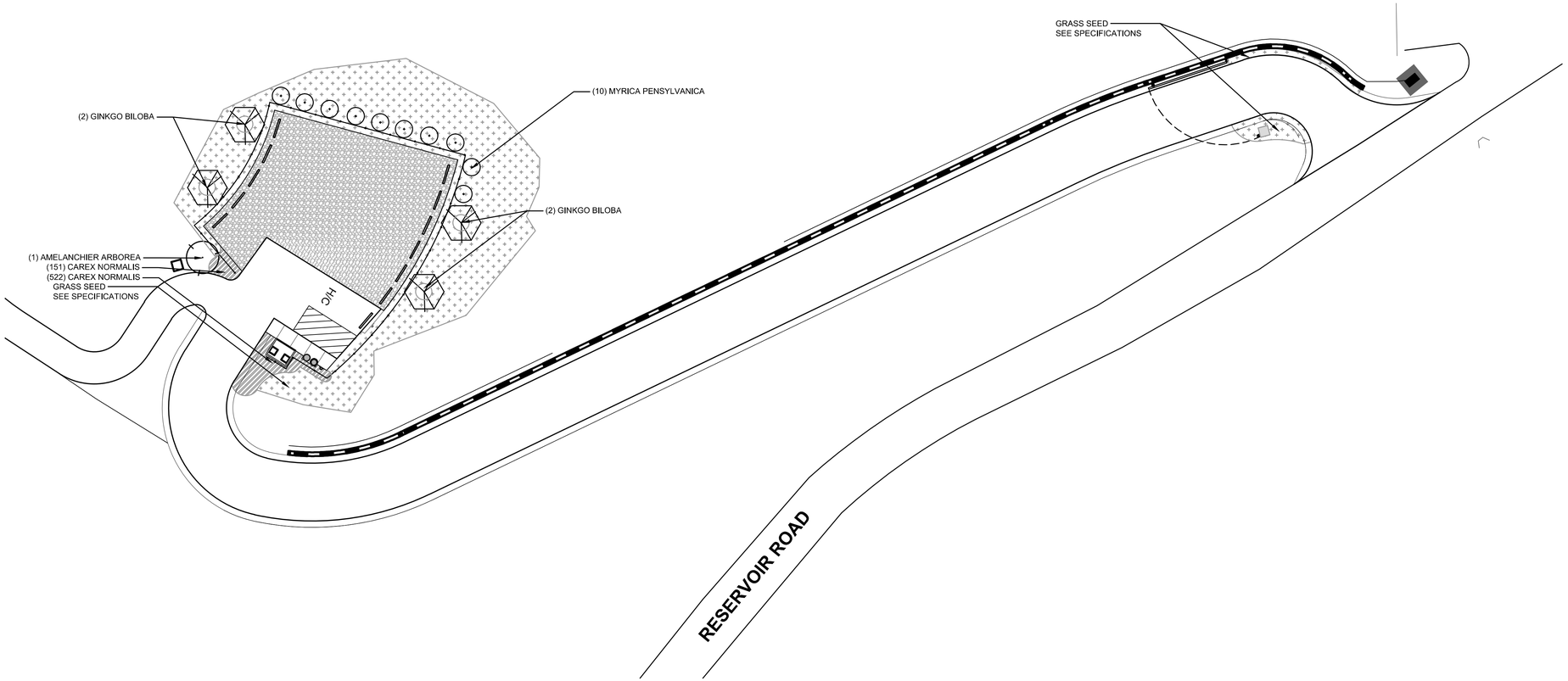
NO.	DATE

PROJECT NO.:
H13002.00

SCALE: 1"=20'

TH9.0

NOTE:
1. ALL DISTURBED AREAS TO BE SEEDED OR MULCHED. REFER TO TRAIL PLANS, DETAILS, AND SPECS



PLANT SCHEDULE

Key	Quantity	Botanical Name	Common Name	Specifications
TREES				
	4	*Ginkgo biloba*	Maidenhair Ginkgo	min 8', strong leader
	1	*Amelanchier arborea*	Serviceberry	min 8', strong leader
	10	*Myrica pensylvanica*	Northern Bayberry	3 Gal., 7' o.c.
GROUNDCOVER *and* ORNAMENTAL GRASSES				
	673	*Carex normalis*	Greater Straw Sedge	Liner, 8" o.c.

10 20 40
SCALE: 1" = 20'

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NORTH CAROLINA PROFESSIONAL SEAL 11332 ENGINEER
10/10/16

WHITE FAWN PARK

LANDSCAPE PLAN

DATE: OCTOBER 10, 2016

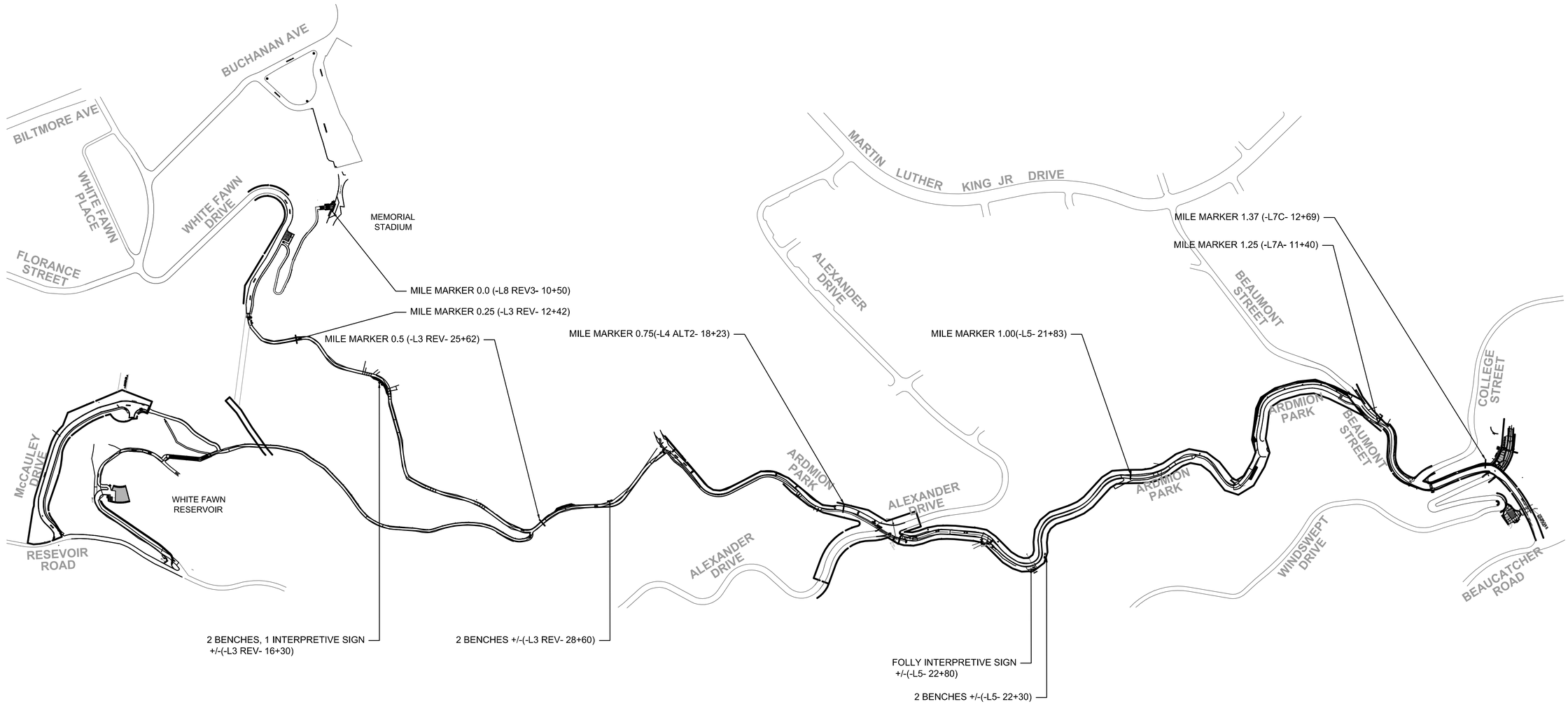
REVISIONS:

NO.	DATE

PROJECT NO.:
H13002.00

SCALE: 1"=20'

TH9.2



NOTE:

1. SEE DETAIL D1.0/2 FOR BENCH DETAIL
2. SEE DETAIL D1.2/5 FOR MILE MARKER DETAIL
3. BENCHES TO BE FIELD LOCATED+/- 2' FROM EOP AND BASED ON APPROXIMATE LOCATIONS. FIELD VERIFY.

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NORTH CAROLINA PROFESSIONAL SEAL 11332 JAMES TRACY MAN 10/10/16

TRAIL SIGNAGE AND BENCH LOCATIONS

DATE: OCTOBER 10, 2016

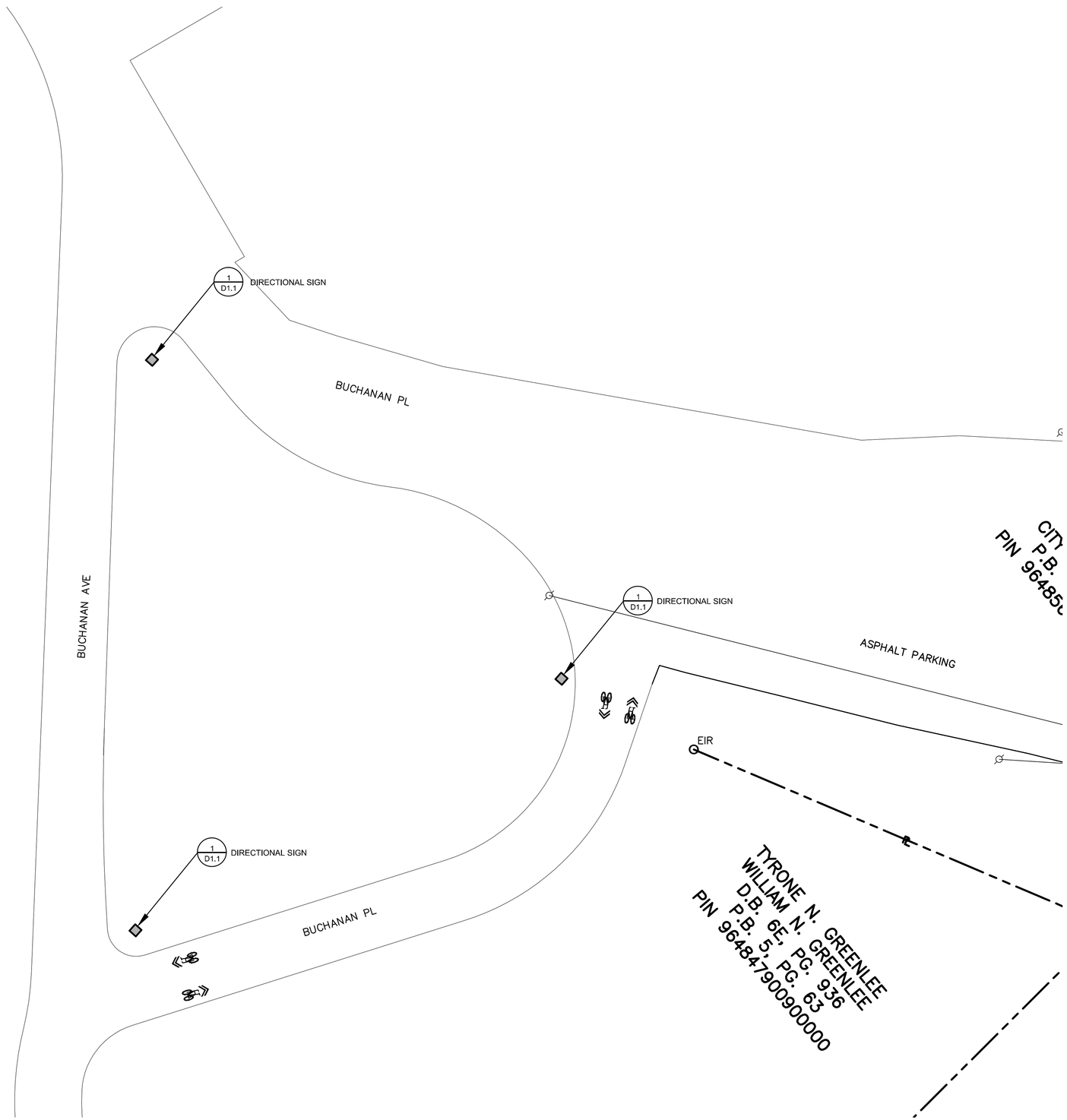
REVISIONS:

NO.	DATE

PROJECT NO.: H13002.00

SCALE: 1"=10'

TH10.0



NOTE:
SEE PLAN SHEET 13 OF
THE TRAIL PLAN

0 10 20 40
SCALE: 1" = 20'

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NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 15332 JAMES R. STEWART
10/10/16

MEMORIAL
STADIUM
TRAILHEAD

LAYOUT AND
STAKING
PLAN

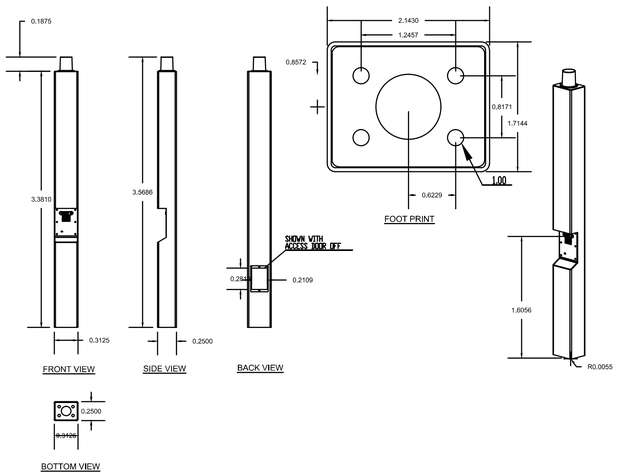
DATE: OCTOBER 10, 2016
REVISIONS:

NO.	DATE

PROJECT NO.:
H13002.00

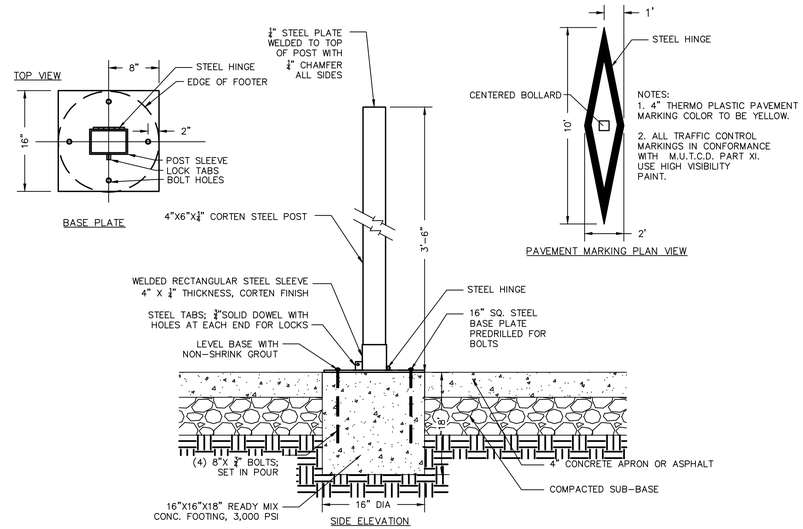
SCALE: 1"=10'

TH11.0



6 CALL BOX DETAIL

NTS

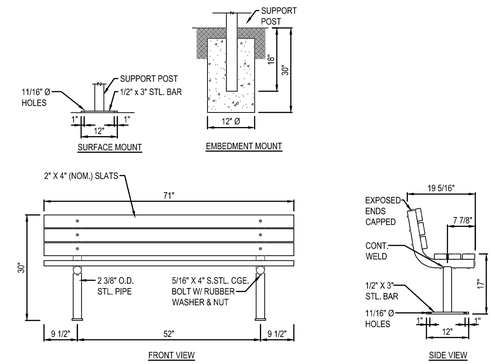


NOTES:
1. 4" THERMO PLASTIC PAVEMENT MARKING COLOR TO BE YELLOW.
2. ALL TRAFFIC CONTROL MARKINGS IN CONFORMANCE WITH M.U.T.C.D. PART XI. USE HIGH VISIBILITY PAINT.

NOTES:
1. ALL STEEL TO BE ¼" THICKNESS.
2. ALL WELDS TO BE GROUND SMOOTH PRIOR TO FINISH.
3. ALL STEEL TO BE CORTEN FINISH.

4 TILT BOLLARD

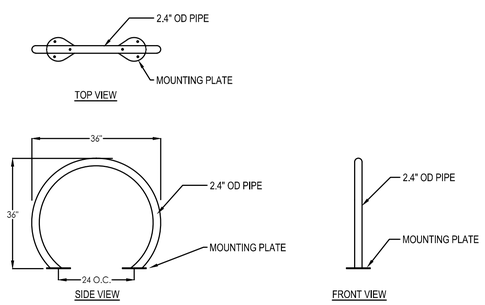
NTS



NOTES:
1. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
2. WOOD SLATS TO BE GRADE C OR BETTER, DOUGLAS FIR, KD S4S
3. ALL WOOD MEMBERS TREATED W/ CLEAR PRESERVATIVE.
4. ALL STEEL MEMBERS COATED W/ ZINC RICH EPOXY THEN FINISHED W/ BLACK POLYESTER POWDER COATING.
5. BENCHES AT TRAILHEAD LOCATIONS ARE TO BE SURFACE MOUNTED. ALL OTHER BENCHES TO BE EMBEDMENT MOUNTED.
6. BENCH BASIS OF DESIGN: 79-60 SERIES WOOD BENCH BY DUMOR, INC. OR APPROVED EQUAL.
7. APPROVED ALTERNATE MRF'S:
   7.1. #398-1149, The Park Catalog
   7.2. #2SG2-6, Kay Park Recreation Corp

2 WOOD BENCH DETAIL

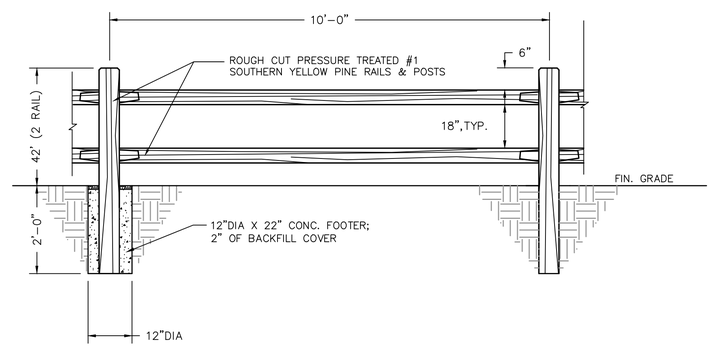
NTS



NOTES:
1. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
2. ALL STEEL MEMBERS COATED W/ ZINC RICH EPOXY THEN FINISHED W/ BLACK POLYESTER POWDER COATING.
3. BENCH BASIS OF DESIGN: # 536-1096 BY THE PARK CATALOG, OR APPROVED EQUAL.
4. APPROVED ALTERNATE MRF'S:
   4.1. #CBBR-2CR-BK, Belson Outdoors
   4.2. #72T7092, Park It Bike Racks

5 BIKE RACK DETAIL

NTS



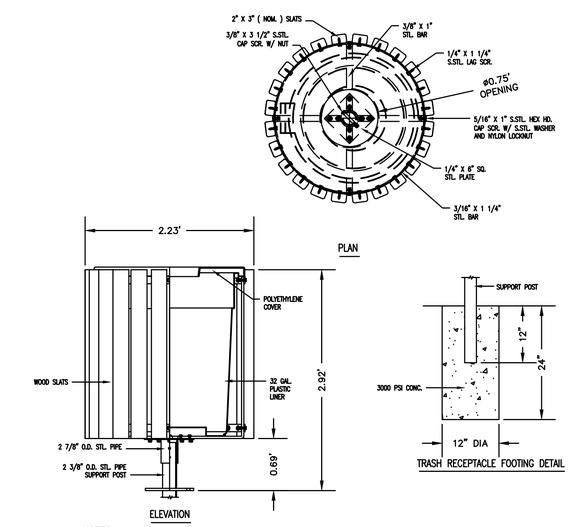
NOTES:
1. CONTRACTOR TO FURNISH FENCE SAMPLES FOR APPROVAL PRIOR TO INSTALLATION

2 USE READY-MIX CONCRETE FOR ALL FOOTERS WITH MIN. COMPRESSIVE STRENGTH OF 3,000 PSI OR DRY PACK WITH QUIKRETE FAST-SETTING CONCRETE MIX (NO. 1004) OR EQ.

3. CONCRETE FOOTINGS REQUIRED AT ALL CORNER POSTS, END POSTS, AND EVERY OTHER LINE POST

3 SPLIT RAIL FENCE

NTS



NOTES:
1. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
2. WOOD SLATS TO BE GRADE C OR BETTER, DOUGLAS FIR, KD S4S
3. ALL WOOD MEMBERS TREATED W/ CLEAR PRESERVATIVE.
4. ALL STEEL MEMBERS COATED W/ ZINC RICH EPOXY THEN FINISHED W/ BLACK POLYESTER POWDER COATING.
5. COVERS ARE TO BE FLAT SHAPE IN BLACK FINISH. RECYCLE RECEPTACLE TO HAVE RECYCLE SYMBOL ON COVER.
6. BASIS OF DESIGN: 41-32 RECEPTACLE BY DUMOR, INC. OR APPROVED EQUAL.
7. APPROVED ALTERNATE MRF'S:
   7.1. #166-1089, The Park Catalog
   7.2. #W53032LRRP, Kay Park Recreation Corp

1 TRASH RECEPTACLE DESIGN

NTS

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BEAUCATCHER GREENWAY

100% CONSTRUCTION DOCUMENTS

NORTH CAROLINA REGISTERED LANDSCAPE ARCHITECT 1332 DANIEL R. BLACKMAN 10/10/16

SITE DETAILS

DATE: OCTOBER 10, 2016

REVISIONS:

NO.	DATE

PROJECT NO.: H13002.00

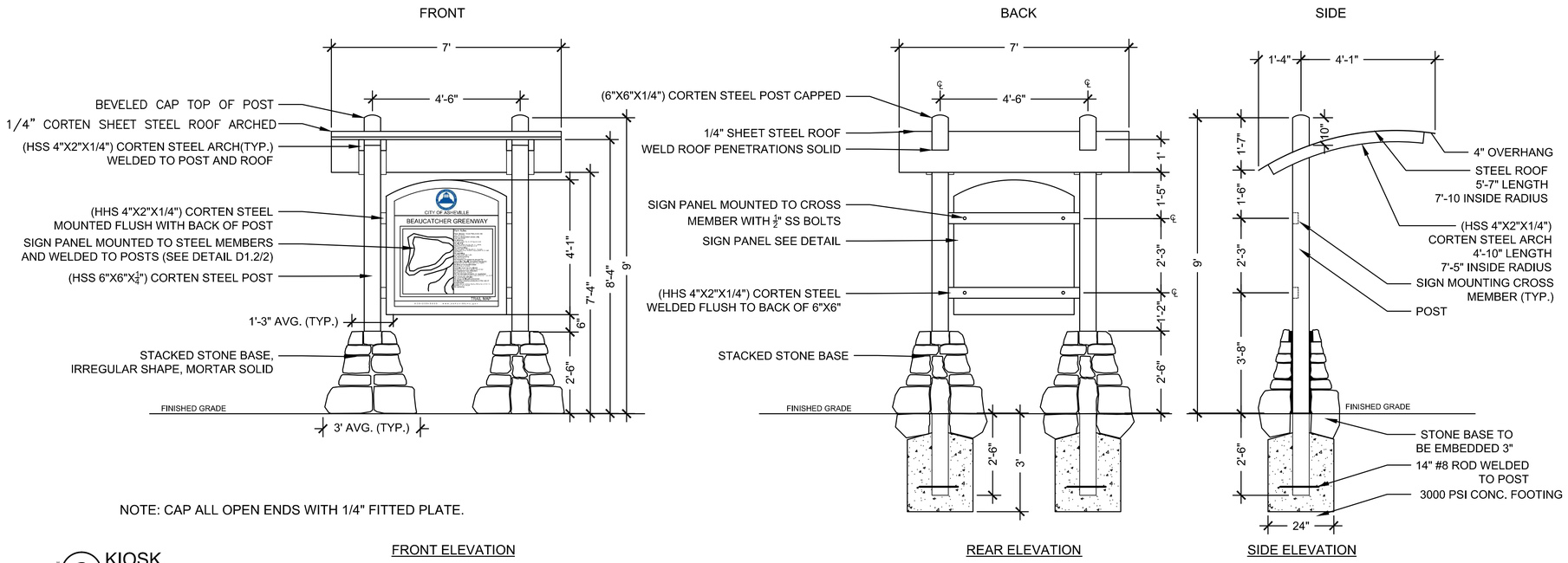
SCALE: AS NOTED

D1.0

Q:\PROJECTS\2013_Beaucatcher\H13002_site features.dwg Oct 10, 2016 - 5:40pm

NOTES:

1. ALL STONE TO BE OWNER APPROVED. SAMPLE PROVIDED BY CONTRACTOR.

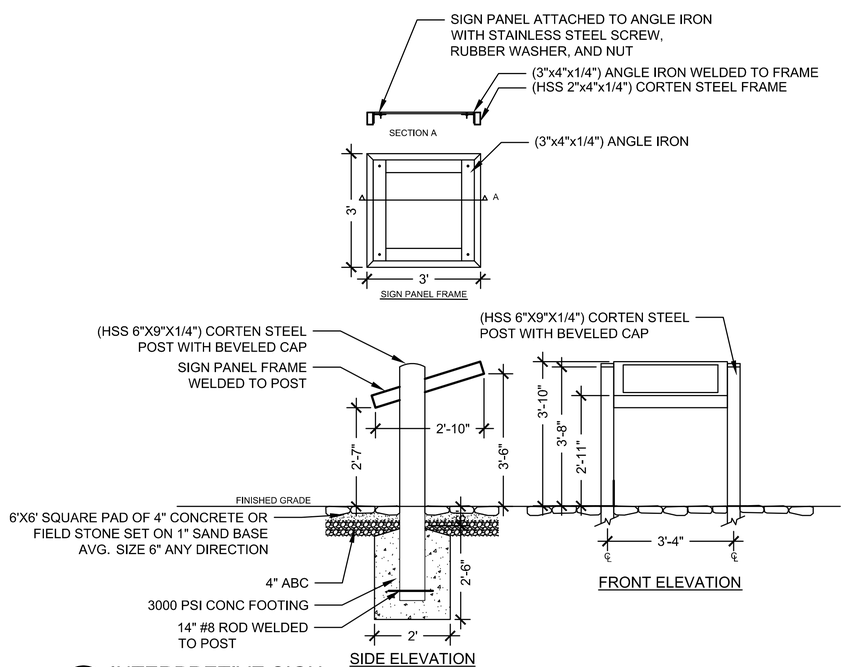


NOTE: CAP ALL OPEN ENDS WITH 1/4" FITTED PLATE.

FRONT ELEVATION — REAR ELEVATION — SIDE ELEVATION

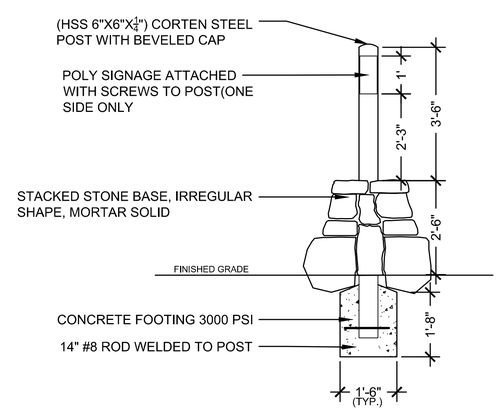
2 KIOSK

SCALE: 1/2"=1'-0"



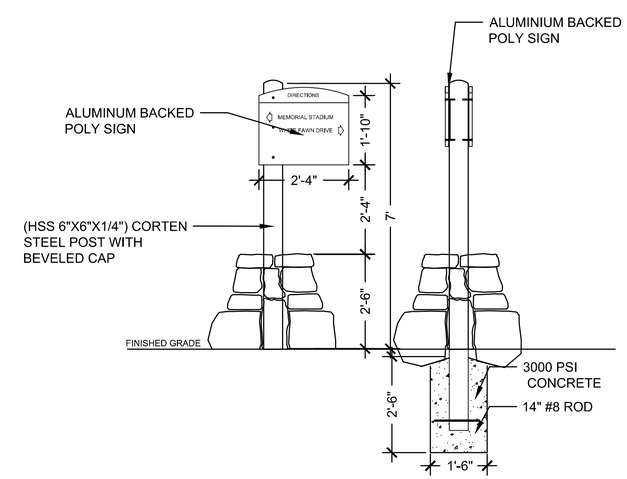
4 INTERPRETIVE SIGN

SCALE: 1/2"=1'-0"



3 WAYFINDING POST

SCALE: 1/2"=1'-0"



1 DIRECTIONAL SIGN

SCALE: 1/2"=1'-0"

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NORTH CAROLINA REGISTERED LANDSCAPE ARCHITECT 1332 DANIEL R. BLACKMAN 10/10/16

SITE DETAILS

DATE: OCTOBER 10, 2016

REVISIONS:

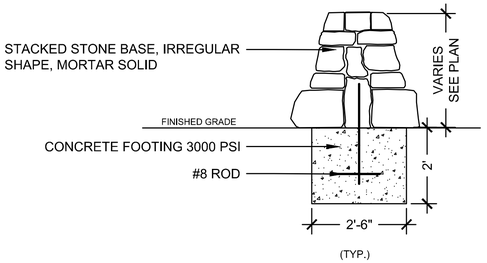
NO.	DATE

PROJECT NO.: H13002.00

SCALE: AS NOTED

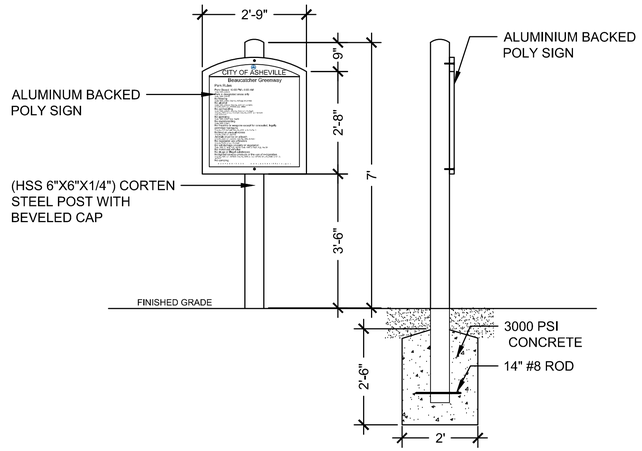
D1.1

Q:\PROJECTS\2013_Beaucatcher\H13002_site features.dwg Oct 10, 2016 - 5:44pm



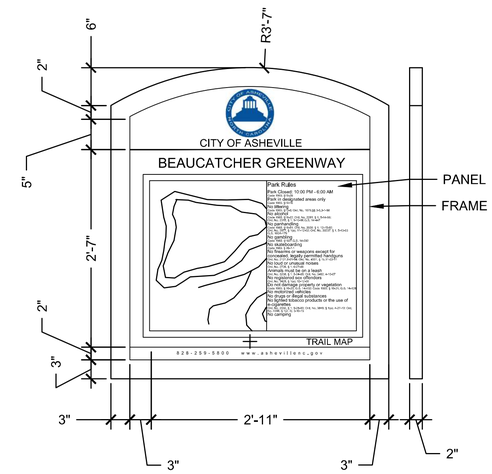
6 STONE COLUMN

NTS



4 REGULATION SIGN

SCALE: $\frac{1}{2}$"=1'

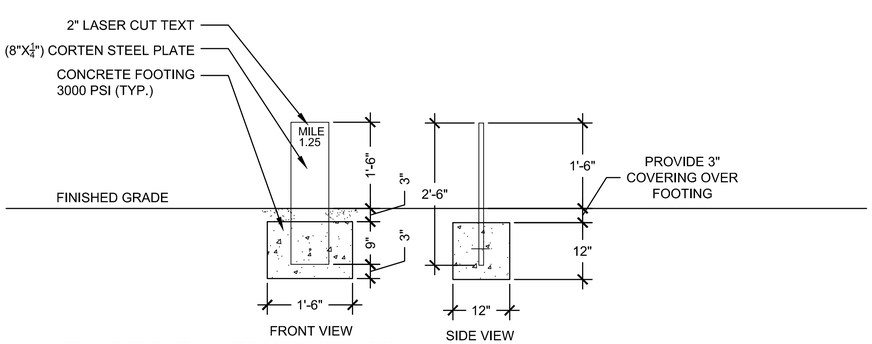


2 KIOSK SIGN PANEL

SCALE: 1"=1'

NOTES:

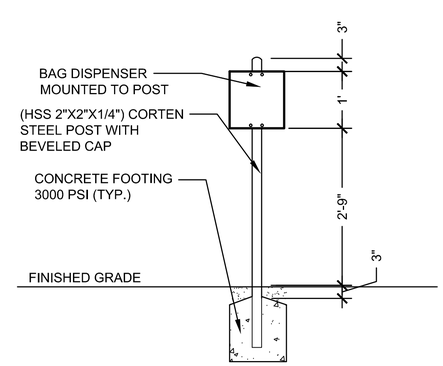
1. ALL STONE TO BE LOCALLY SOURCED AND OWNER APPROVED. SAMPLE TO BE PROVIDED BY CONTRACTOR.
2. VERIFY REGULATIONS WITH OWNER BEFORE MANUFACTURING.
3. CONTRACTOR TO COORDINATE WITH OWNER ON ALL TEXT, FONT SIZE, LOGO, SCRIPT, AND COLOR SELECTION ON SIGN.



NOTE: MARKER TO BE LOCATED 2' FROM EDGE OF TRAIL LEFT OR RIGHT OF TRAIL TO BE DETERMINED IN FIELD BASED ON CONDITIONS

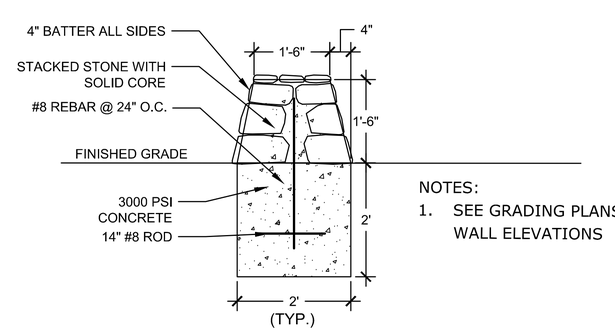
5 MILE MARKER DETAIL

SCALE $\frac{3}{4}$ = 1'



3 PET WASTE RECEPTACLE

SCALE $\frac{3}{4}$ = 1'



NOTES:

1. SEE GRADING PLANS FOR TOP OF WALL ELEVATIONS

1 SEAT WALL

SCALE $\frac{3}{4}$ = 1'

CITY OF ASHEVILLE NORTH CAROLINA

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BEAUCATCHER GREENWAY

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NORTH CAROLINA REGISTERED LANDSCAPE ARCHITECT 1332 JENNIFER R. BLACKMON 10/10/16

SITE DETAILS

DATE: OCTOBER 10, 2016

REVISIONS:

NO.	DATE

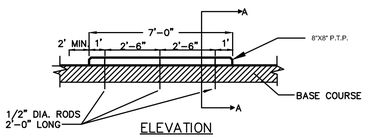
PROJECT NO.:

H13002.00

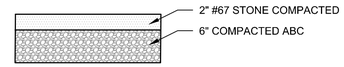
SCALE: AS NOTED

D1.2

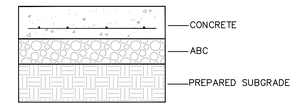
Q:\PROJECTS\2013_Beaucatcher\H13002_site features.dwg Oct 10, 2016 - 5:45pm



7 TIMBER TIE WHEEL STOP
NTS



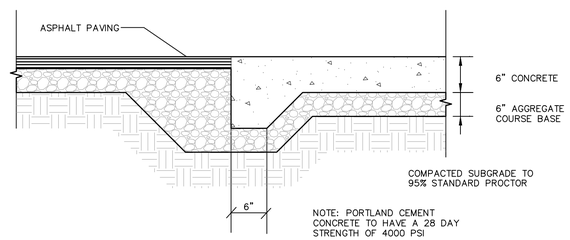
5 GRAVEL DRIVE
NTS



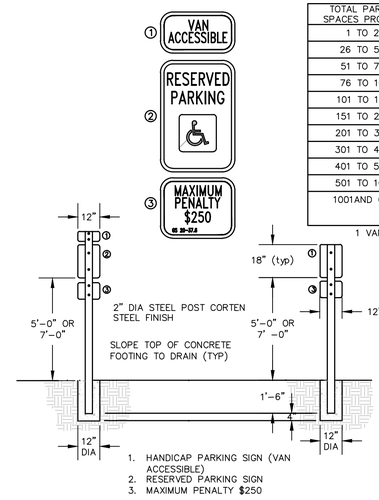
PAVEMENT SHALL BE CONSTRUCTED OF 4000 PSI CONCRETE. REINFORCEMENT BARS SHALL BE ONE (1) ROW AT 12" O.C. BOTH DIRECTIONS AS INDICATED BELOW. SURFACE FINISHES AND JOINT TO SCALE SHALL BE AS INDICATED ON PLANS AND DETAILS.

PAVEMENT TYPE	ABC	REINF.	CONCRETE
HEAVY DUTY	8"	WELDED WIRE MESH	6"
SIDEWALK	8"	WELDED WIRE MESH	4.5"

2 CONCRETE PAVING ON AGGREGATE BASE
NTS

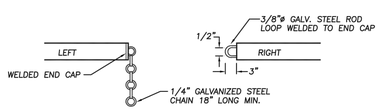


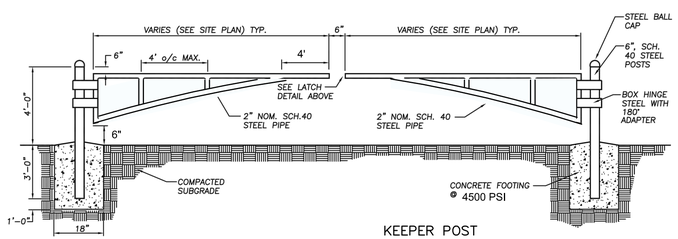
4 ASPHALT TO CONCRETE TRANSITION
NTS



TOTAL PARKING SPACES PROVIDED	REQUIRED MINIMUM NUMBER OF ACCESSIBLE SPACES
1 TO 25	1
26 TO 50	2
51 TO 75	3
76 TO 100	4
101 TO 150	5
151 TO 200	6
201 TO 300	7
301 TO 400	8
401 TO 500	9
501 TO 1000	2% OF TOTAL
1001AND OVER	20, PLUS ONE FOR EACH 100 OVER 1,000

1 VAN HC SPACE PER 8 REQUIRED ACCESSILBE SPACES

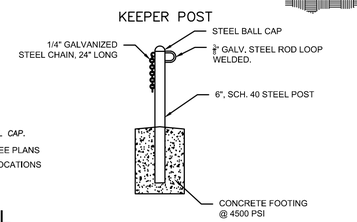




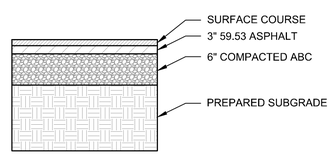
NOTES

1. PROVIDE 3" O.D. KEEPER POST (2 REQUIRED). SET IN 3' DEEP X 18" DIA. CONC. FOOTING. PROVIDE 180° HINGE SWING ADAPTER TO OPEN POSITION.
2. GATES SHALL INCLUDE KEEPER POSTS TO SECURE ACCESS. KEEPER POST SHALL BE 6" SCH. 40 STEEL POST INSTALLED WITH 18"X24" FOOTING AND SHALL INCLUDE CHAIN TO SECURE GATE ARM.(ONE KEEPER POST PER ARM). KEEPER POST SHALL HAVE STEEL BALL CAP.
3. CORTEN STEEL OR BLACK POLYESTER POWDER COAT, SEE PLANS
4. REFER TO PLANS FOR SINGLE AND DOUBLE LEAF GATE LOCATIONS

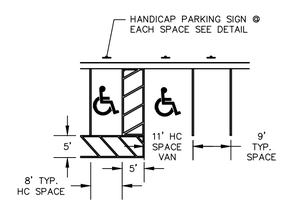
KEEPER POST



6 SWING GATE DETAIL
NTS



3 ASPHALT PAVING ON AGGREGATE BASE
NTS



ACCESSIBLE SPACE

NOTE:

1. THE RESERVED PARKING SIGN IS TO BE 5'-0" IF THE PEDESTRIAN PATH DOES NOT PASS UNDER OR AROUND SIGN IN ACCORDANCE WITH NORTH CAROLINA STATE HANDICAPPED ACCESSIBILITY CODE.
2. THE RESERVED PARKING SIGN IS TO BE 7'-0" IF THE PEDESTRIAN PATH GOES BY, UNDER, OR AROUND THE SIGN IN ACCORDANCE WITH NORTH CAROLINA STATE HANDICAPPED ACCESSIBILITY CODE.

1 ACCESSIBLE PARKING / SIGNAGE DETAIL
NTS

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BEAUCATCHER GREENWAY

100% CONSTRUCTION DOCUMENTS

NORTH CAROLINA REGISTERED LANDSCAPE ARCHITECT 1332 DANIEL R. BLACKMAN 10/10/16

SITE DETAILS

DATE: OCTOBER 10, 2016
REVISIONS:

NO.	DATE

PROJECT NO.: H13002.00

SCALE: AS NOTED

D1.3

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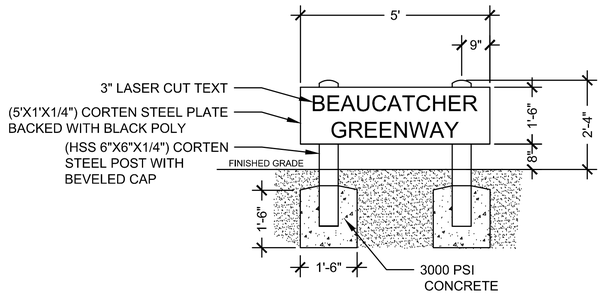
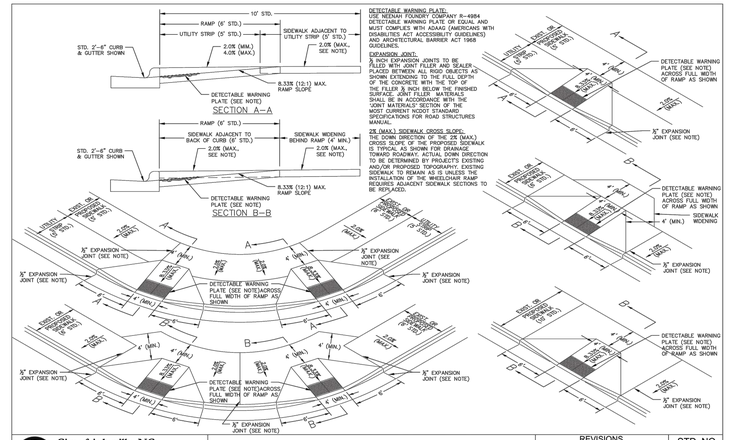


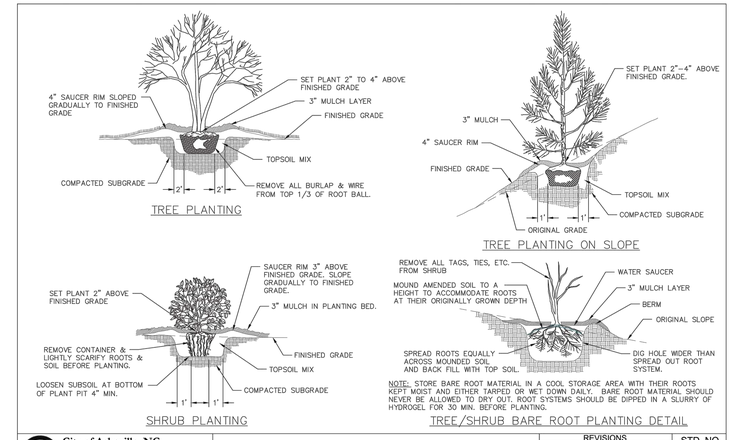
6 MONUMENT SIGN

SCALE: $\frac{1}{2}$"=1'



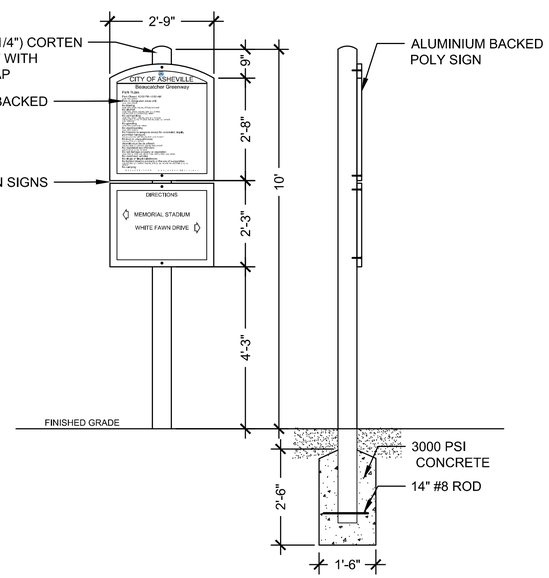
4 STANDARD WHEELCHAIR RAMP

NTS



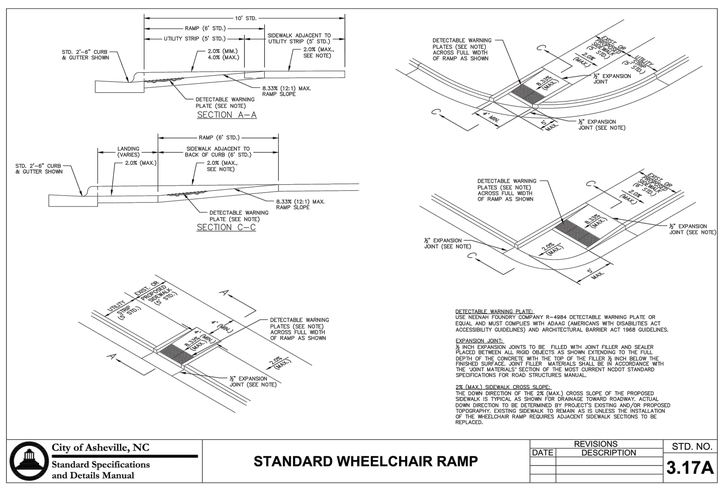
2 PLANTING DETAIL

NTS



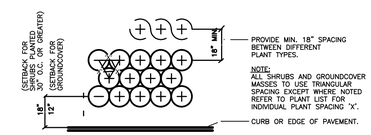
5 REGULATION AND DIRECTIONAL SIGN

SCALE: $\frac{1}{2}$"=1'



3 STANDARD WHEELCHAIR RAMP

NTS



1 TYPICAL PLANT SPACING

NTS

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BEAUCATCHER GREENWAY

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NORTH CAROLINA REGISTERED LANDSCAPE ARCHITECT 1332 DANIEL R. BLACKMAR 10/10/16

SITE DETAILS

DATE: OCTOBER 10, 2016

REVISIONS:

NO.	DATE

PROJECT NO.: H13002.00

SCALE: AS NOTED

D1.4

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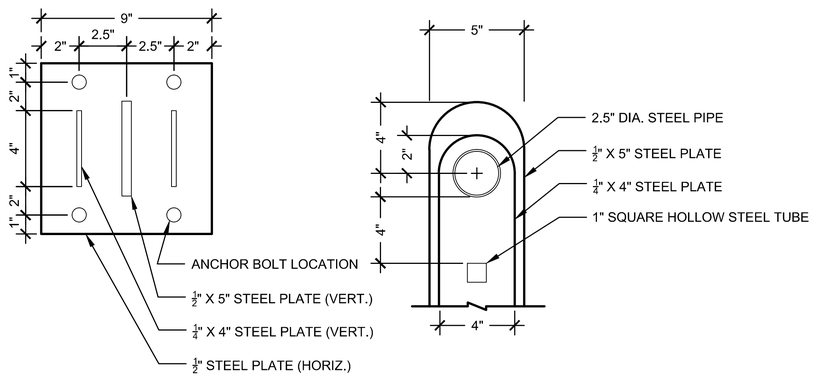
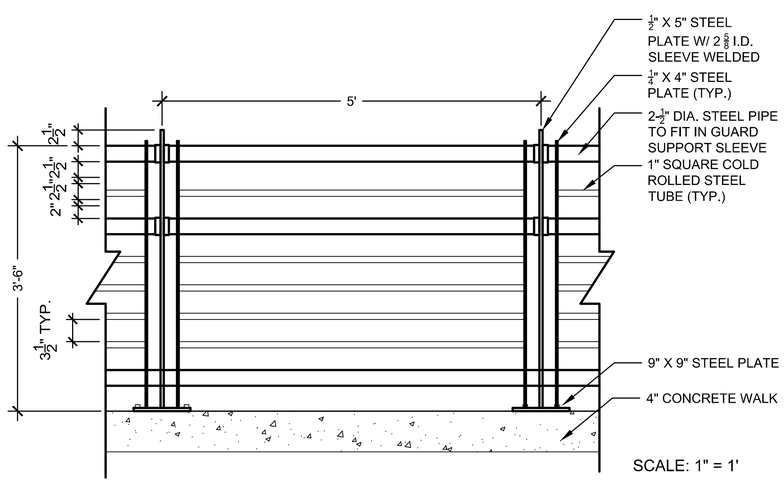


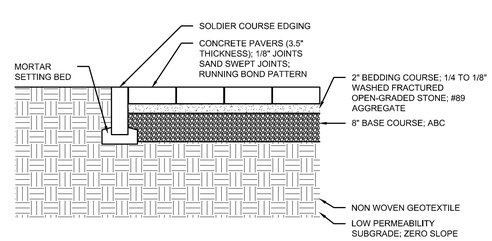
RAIL SUPPORT AND BASE PLATE

SCALE: 3" = 1'



SCALE: 1" = 1'

3 HELENS BRIDGE RAIL DETAIL



2 PERMEABLE PAVER

SCALE: ¾" = 1'

Greenway Amenity Sign Schedule

Sign Type	Location	Content
KIOSK (D1.2/2)		
	TH-1.0	MAP / CONTACT INFORMATION / PARK RULES
	TH-7.0	MAP / CONTACT INFORMATION / PARK RULES
	TH-9.0	MAP / CONTACT INFORMATION / PARK RULES
MONUMENT SIGN (D1.4/6)		
	TH-7.0	BEAUCATCHER GREENWAY
	TH-1	BEAUCATCHER GREENWAY
DIRECTIONAL SIGN (D1.1/1)		
	TH-11.0	MEMORIAL STADIUM (WITH APPROPRIATE DIRECTIONAL ARROWS)
	TH-11.0	MEMORIAL STADIUM (WITH APPROPRIATE DIRECTIONAL ARROWS)
	TH-11.0	MEMORIAL STADIUM (WITH APPROPRIATE DIRECTIONAL ARROWS)
	TH-2.0	MEMORIAL STADIUM / WHITE FAWN DRIVE (WITH APPROPRIATE DIRECTIONAL ARROWS)
REGULATION SIGN (D1.2/4)		
REGULATION & DIRECTION SIGN (D1.4/5)		
	TH-3.0	RULES (BELOW) (VERIFY WITH CITY) / WHITE FAWN DRIVE / SOUTH ARDMION DRIVE (WITH APPROPRIATE DIRECTIONAL ARROWS)
	TH-4.0	RULES (BELOW)(VERIFY WITH CITY) / ALEXANDER DRIVE / WHITE FAWN DRIVE (WITH APPROPRIATE DIRECTIONAL ARROWS)
WAYFINDING POST (D1.1/3)		
	TH-5.0	ALEXANDER DRIVE TRAILHEAD / BEAUCATCHER GREENWAY
	TH-6.0	NORTH ARDMION DRIVE TRAILHEAD / BEAUCATCHER GREENWAY
INTERPRETIVE SIGN (D1.1/4)		
	TH-8.0	OWNER PROVIDED
	+/- (L5-22+80)	OWNER PROVIDED
	+/- (L3 REV-16=30	OWNER PROVIDED

Park Rules

Park Closed: 10:00 PM - 6:00 AM
Code 1965, §19-28
Park in designated areas only
Code 1965, §19-16
No littering
Code 1965, §13-6; Ord. No. 1679,§§3-5,3-1-88
No alcohol
Code 1965, §18-22; Ord. No. 2281, § 1, 5-14-96;
Ord. No. 2315, § 1, 9-10-96,G.S. 14-447
No panhandling
Code 1965, §18-51; Ord. No. 2000, § 1, 12-15-92;
Ord. No. 2977, § 1(a), 11-12-02; Ord. No. 30237, § 1, 5-13-03
G.S. 160A-179
No gambling
Code 1965, §1927,G.S. 14-292
No skateboarding
Code 1965, § 28-7.1
No firearms or weapons except for concealed, legally permitted handguns
Ord. No. 2121,6-21-94; Ord. No. 4031, § 1b,11-22-11
No loud or unusual noises
Ord. No. 2726, § 1, 6-27-00
Animals must be on a leash
Ord. No. 3238, § 1, 5-24-05; Ord. No. 3462, 4-10-07
No registered sex offenders
Ord. No. 3428, § 1(b), 12-12-06
Do not damage property or vegetation
Code 1965, §19-20, G.S. 14-132; Code 1965, § 19-21, G.S. 14-128
No motorized vehicles
No drugs or illegal substances
No lighted tobacco products or the use of e-cigarettes
Ord. No. 2050, § 1, 9-28-93; Ord. No. 3849, § 1(a), 4-27-10; Ord. No. 4396, § 1(2, 3), 3-10-15
No camping

1 SIGNAGE CONTENT

CITY OF ASHEVILLE NORTH CAROLINA

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BEAUCATCHER GREENWAY

100% CONSTRUCTION DOCUMENTS

NORTH CAROLINA PROFESSIONAL LANDSCAPE ARCHITECT 1332 DANIEL R. BLACKMON 10/10/16

SITE DETAILS

DATE: OCTOBER 10, 2016
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NO.	DATE

PROJECT NO.:
H13002.00

SCALE: AS NOTED

D1.5

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