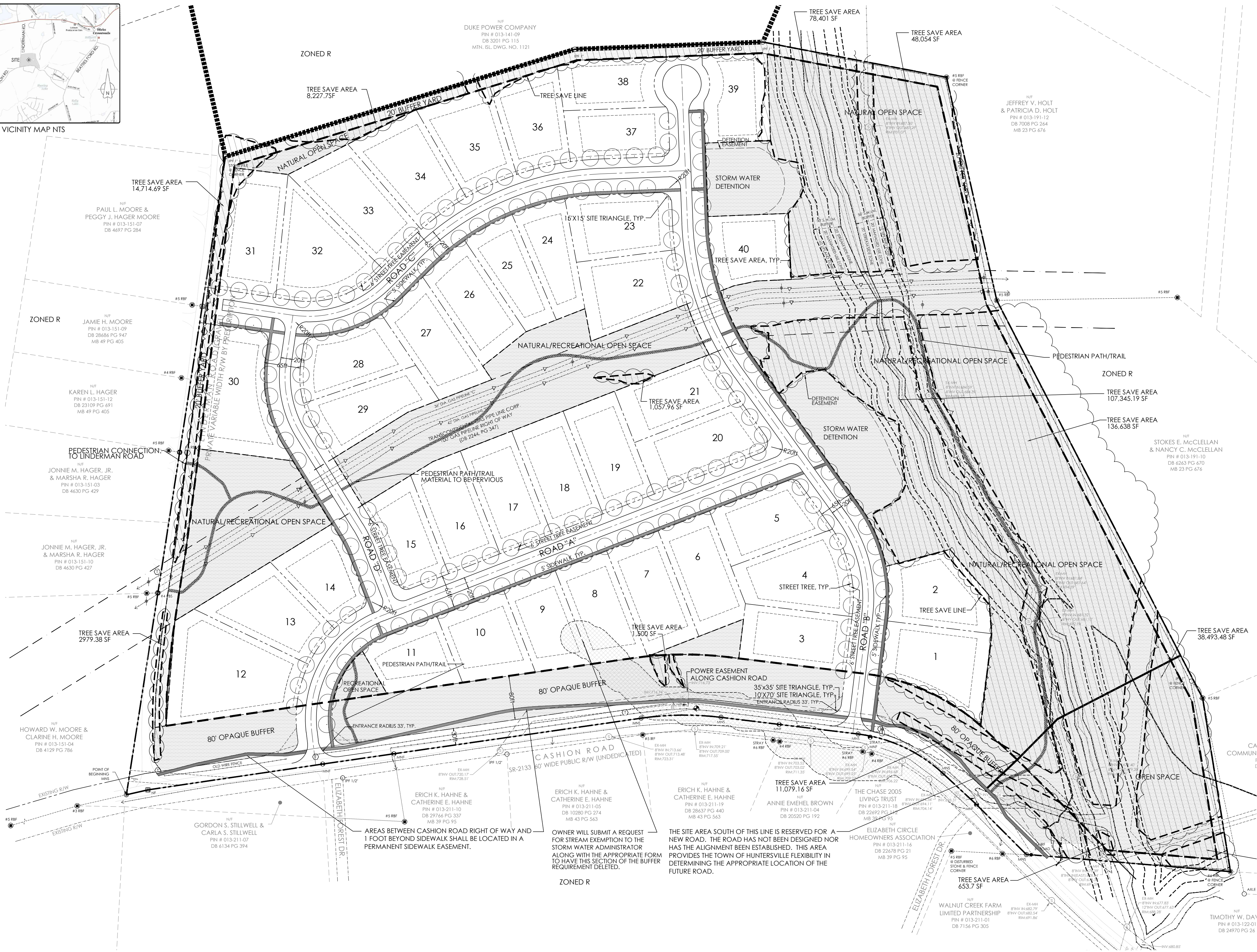




VICINITY MAP NTS

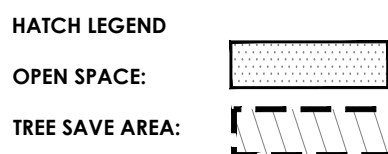


- SKETCH PLAN: GENERAL NOTES**
- ALL DEVELOPMENT AND CONSTRUCTION SHALL COMPLY WITH ALL ZONING AND SUBDIVISION STANDARDS OF THE TOWN OF HUNTERSVILLE, MECKLENBURG COUNTY, AND NCDOT, AS APPLICABLE.
 - THIS PROPERTY MAY BE SUBJECT TO ANY EASEMENTS AND/OR RIGHT-OF-WAY OF RECORD.
 - ALL AREAS DESIGNATED AS COMMON AND/OR URBAN OPEN SPACE SHALL BE OWNED AND MAINTAINED BY THE HOMEOWNERS ASSOCIATION AND DEDICATED FOR PERPETUITY.
 - ACCESS (INGRESS/EGRESS) LOCATION AND DESIGN SHOWN ON THIS SKETCH PLAN ARE SUBJECT TO ACHIEVING VERTICAL AND HORIZONTAL SIGHT DISTANCES. TURN LANE IMPROVEMENTS (INCLUDING RIGHT-OF-WAY) AND INTERSECTION WITH ADJACENT AND OPPOSING ACCESS POINTS. MODIFICATIONS TO PLAN MAY RESULT.
 - LARGE MATURING TREES WILL BE PLANTED 40' C/W WITHIN THE REQUIRED PLANTING STRIP ALONG ALL STREETS WITH THE EXCEPTION OF RURAL PARKWAYS WHERE EXISTING TREES CAN SATISFY THE STREET TREE REQUIREMENT.
 - SMALL MATURING TREES ARE TO BE USED WHERE OVERHEAD POWER LINES EXIST.
 - MAIL DELIVERY AND GARBAGE PICK UP WILL BE FROM THE PUBLIC STREETS WITHIN THE SUBDIVISION.
 - ALL LOTS WITHIN THE SUBDIVISION ARE GREATER THAN 60 FEET IN WIDTH. THEREFORE FRONT LOADING GARAGES SHALL BE RECESSED AT LEAST 10 FEET BEHIND THE PRIMARY PLANE OF THE FRONT FACADE OF THE STRUCTURE.
 - A TIA APPLICATION WAS SUBMITTED TO THE TOWN OF HUNTERSVILLE AND WAS IT WAS DETERMINED ON 8/19/15 THAT A TIA WAS NOT REQUIRED.
 - THE TOWN OF HUNTERSVILLE REQUIRES THAT ALL STREETS PROPOSED TO BE TAKEN OVER BY THE TOWN FOR MAINTENANCE BE REVIEWED, INSPECTED, AND CERTIFIED BY A LICENSED PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF NORTH CAROLINA FOR ADEQUATE CONSTRUCTION. REVIEW OF STREET CONSTRUCTION BY THE CERTIFYING ENGINEER IS REQUIRED THROUGHOUT THE CONSTRUCTION PROCESS. REFER TO THE TOWN OF HUNTERSVILLE ENGINEERING STANDARDS AND PROCEDURES MANUAL FOR ADDITIONAL INFORMATION INCLUDING THE REQUIRED CERTIFICATION FORM.

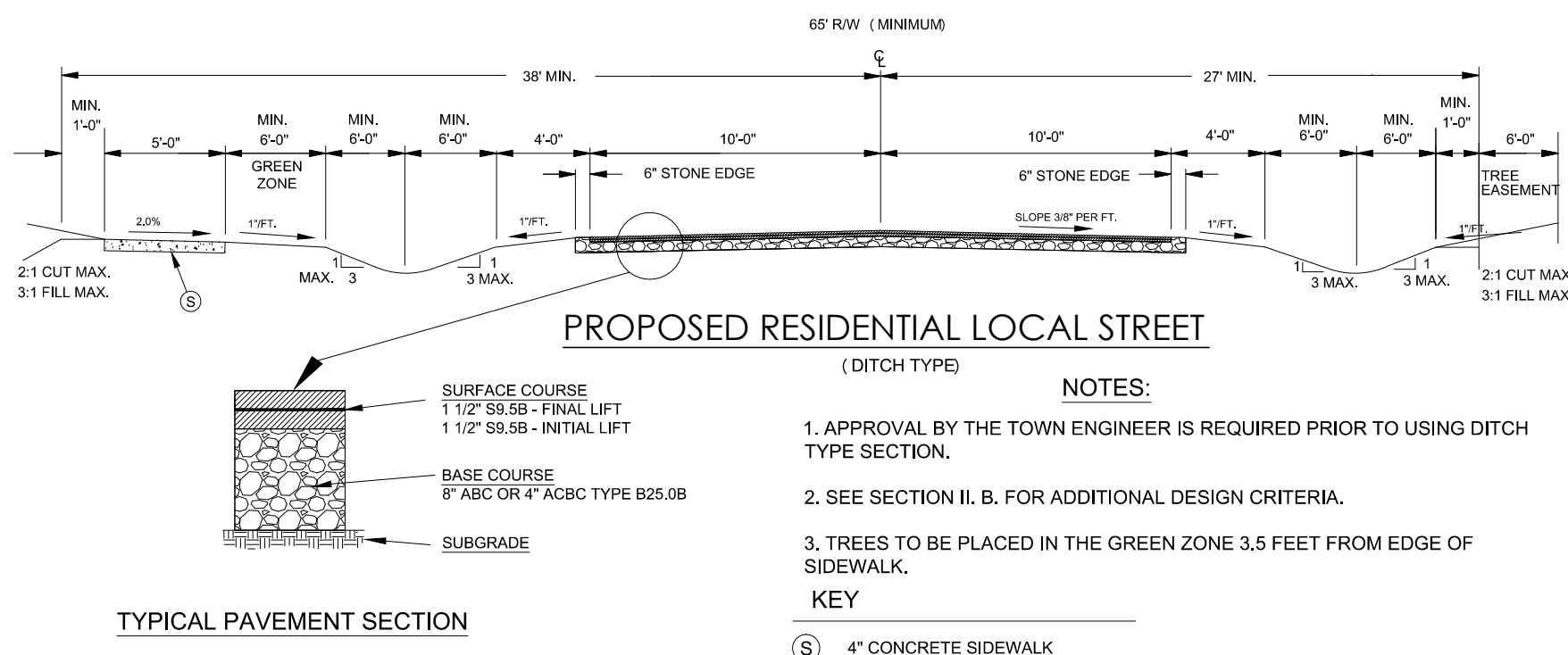
- ADDITIONAL NOTES**
- STREET CROSS SECTION UTILIZED IS A MODIFIED CROSS SECTION OF THE TOWN OF HUNTERSVILLE STANDARD CROSS SECTION 200.4. PLANNING STAFF AGREED TO DROP THE 6' GREEN ZONE TO MAKE THE TOTAL CROSS SECTION 65' WIDE.
 - ALL STREETS ARE PUBLIC STREETS.
 - EDGE OF PAVEMENT RADIUS IS 20' AT INTERSECTIONS.
 - LINDERMAN ROAD CURRENTLY SITS ON PART OF THIS PROPERTY. THIS PLAN PRESERVES THE EXISTING STREET AND PRESERVES THE ROW BY PRESCRIPTION. FOR THIS PURPOSE, THE REQUIRED 20' BUFFER WAS DRAWN AT THE EXISTING FENCE LINE ALONG LINDERMAN ROAD.
 - THERE IS AN EXISTING HEDGEROW OF CEDAR ALONG LINDERMAN WHICH WE PROPOSE SATISFIES THE REQUIRED 20' BUFFER YARD.
 - THERE WERE DETERMINED TO BE NO WETLANDS ON THE SITE.
 - THERE IS A REQUIRED 80' BUFFER ALONG CASHION ROAD.
 - STREET TREES AND LOT TREES WILL BE PROVIDED PER THE TOWN OF HUNTERSVILLE ZONING ORDINANCE.
 - THE APPLICANT AGREES TO RESERVE THE AREA IDENTIFIED ON THIS PLAN FOR A FUTURE ROAD CONNECTION TO THE EAST ACROSS THE CREEK TO THE ADJOINING PROPERTY.
 - THE PROPERTY LINE CURRENTLY GOES TO THE MIDDLE OF CASHION ROAD. APPLICANT AGREES TO DEDICATE THE NECESSARY ROW WHICH IS +/- 1.2 ACRES OF LAND.
 - THE SITE HAS NOT BEEN DE-FORESTED IN THE PAST THREE YEARS.
 - REQUIRED STREET TREES AND LOT TREES WILL BE PROVIDED IN ACCORDANCE WITH THE HUNTERSVILLE ZONING ORDINANCE.
 - 15'X15' SITE TRIANGLES ARE SHOWN ON ALL INTERNAL STREET INTERSECTIONS. A 35'X35' AND 10' X 70' SITE TRIANGLE IS SHOWN ON THE TWO CONNECTIONS TO CASHION ROAD.
 - THE EXISTING POWER LINES AND EASEMENTS ON THE INTERIOR OF THIS SITE WILL GO AWAY. THE POWER EASEMENT ALONG CASHION ROAD WILL REMAIN.
 - LOT BUA IS SUBJECT TO CHANGE DURING THE CONSTRUCTION DOCUMENT PHASE AS LONG AS THE TOTAL MAXIMUM SITE BUA LISTED ON THESE PLANS IS NOT EXCEEDED.
 - BOTH ENTRANCES FROM CASHION ROAD SHALL BE DESIGNED TO ACCOMMODATE A FIRE TRUCK.
 - DURING CONSTRUCTION PLAN SUBMITTAL, FIRE HYDRANT LOCATIONS AND CALCULATIONS WILL BE PROVIDED.
 - LENGTH OF SIDEWALK ALONG CASHION ROAD IS +/- 1,687 LF.

NOTE: FOR IMPERVIOUS AREA INFORMATION, AND BUA SUMMARY CHART CALCULATIONS SEE SHEET L-1

- BLOCK LENGTH TABLE:**
- ROAD "A" FROM CASHION ROAD TO INTERSECTION WITH ROAD "D": 348'
 - ROAD "A" FROM ROAD "D" TO INTERSECTION WITH ROAD "B": 784'
 - ROAD "B" FROM CASHION ROAD TO INTERSECTION OF ROAD "A": 532'
 - ROAD "B" FROM INTERSECTION OF ROAD "A" TO INTERSECTION OF ROAD "C": 585'
 - ROAD "B" CUL-DE-SAC: 192'
 - ROAD "C" FROM INTERSECTION WITH ROAD "B" TO INTERSECTION WITH ROAD "D": 789'
 - ROAD "C" FROM ROAD "D" TO PROPERTY LINE: 129'
 - ROAD "D": 584'

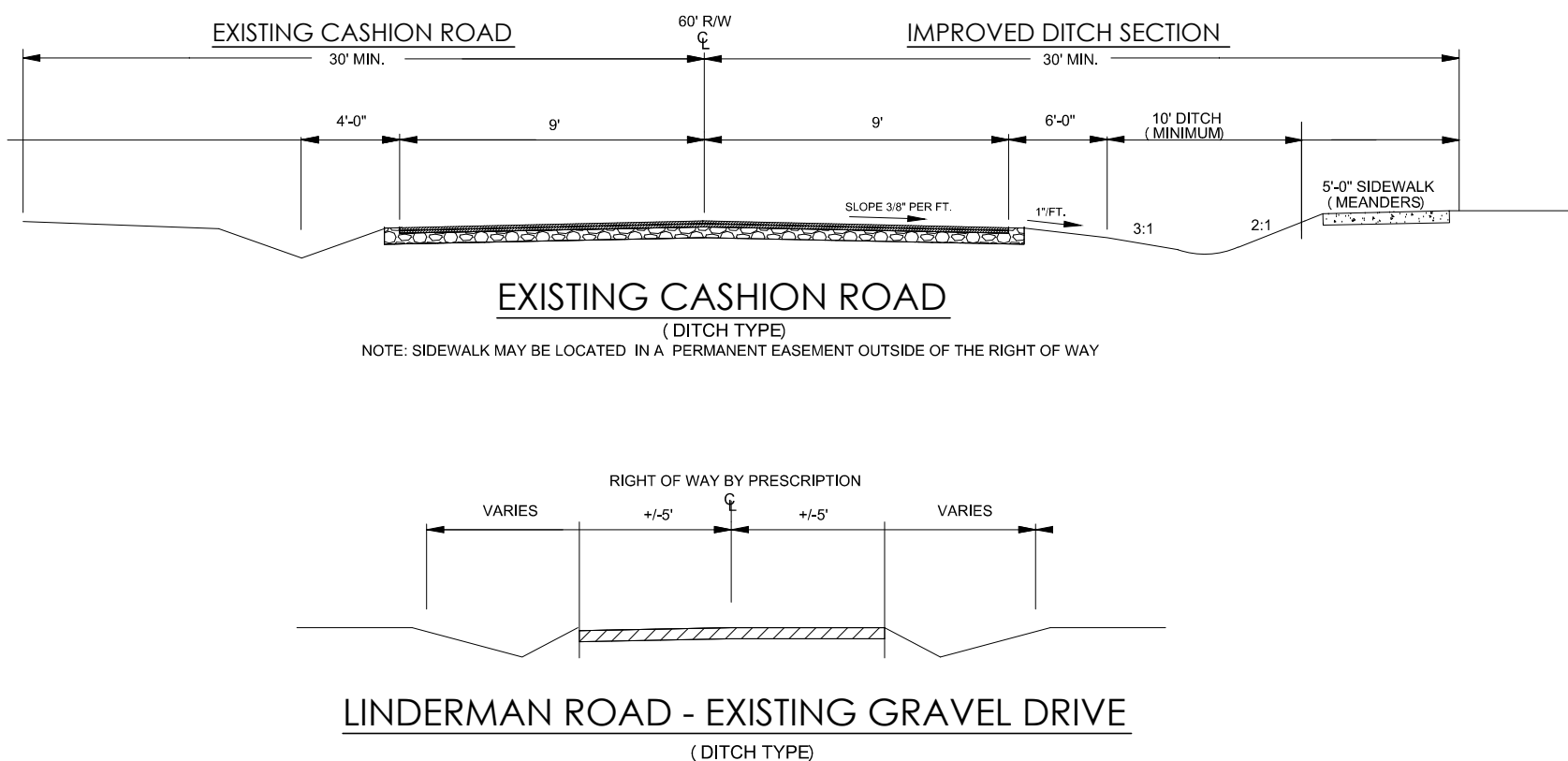


Site Plan Data Table	
Total Acreage	46.52 acres
Total Square Feet	2,026,411.20
Right of Way Dedication on Cashion Road	1.2 ac
Right of way to be preserved for Linderman	16,485 sf
Site Area to be used for Open space calculations:	45.3 ac (Total site ac minus Cashion ROW)
Principle Uses	Residential Subdivision
Zoning	Rural
POST CONSTRUCTION % of Impervious allowed	12%
% of Impervious shown	15.10%
Lot Count	40
Lot Range Size	
Lot Width	90' wide to 217' wide
Lot Acreage	15,763 sf to 36,188 sf
Number of Lots within each size Category	
90' x 200'	2 Lots
100' x 110' x 200'	32
110' x 200'	3
Wide Shallow lots (min. 95' deep x 130' x 150' wide)	3
Average Lot Width	109'
Average Lot sf	20,394 sf
Setbacks:	
Front Setback	25'
Side Yards	12'
Corner Lot Side Yard	15'
Rear yard	25'
Watershed District	MOUNTAIN ISLAND LAKE PA 1
LOW DENSITY	36% impervious area allowed
Tree Preservation and Canopy	
Specimen Trees on site	55
Heritage Trees on site	0
Specimen Trees saved	42
% of Specimen Trees required to save	50%
% of Specimen Trees saved	76%
% of Site covered by tree canopy	33% (15.07 ac)
% of tree canopy preservation required	50% (7.5 ac)
% of tree canopy actually saved	67%
Open space provided	20.80 ac
Site Density	.88 units/acre
% Open space required	45% (or 20.4 ac)
% of Open space provided	45.9% (or 20.80 ac)

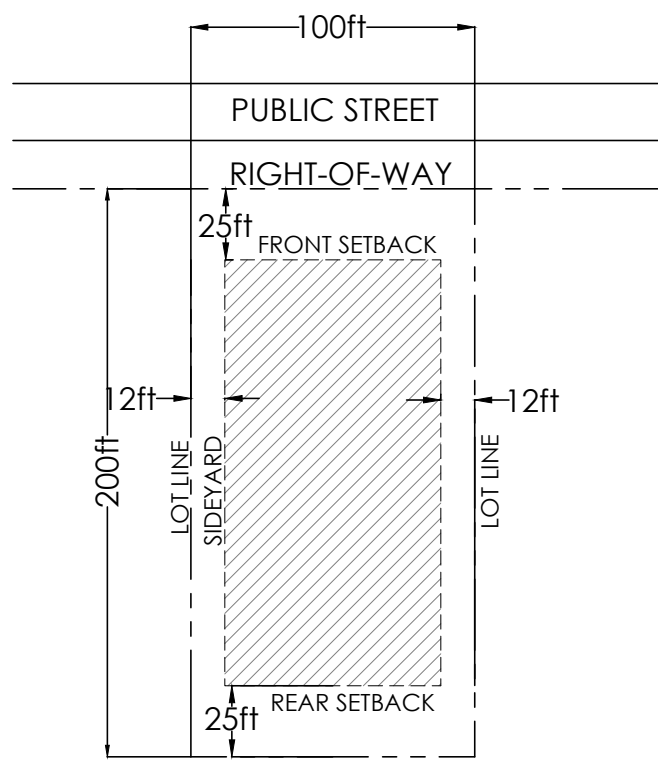


PROPOSED RESIDENTIAL LOCAL STREET

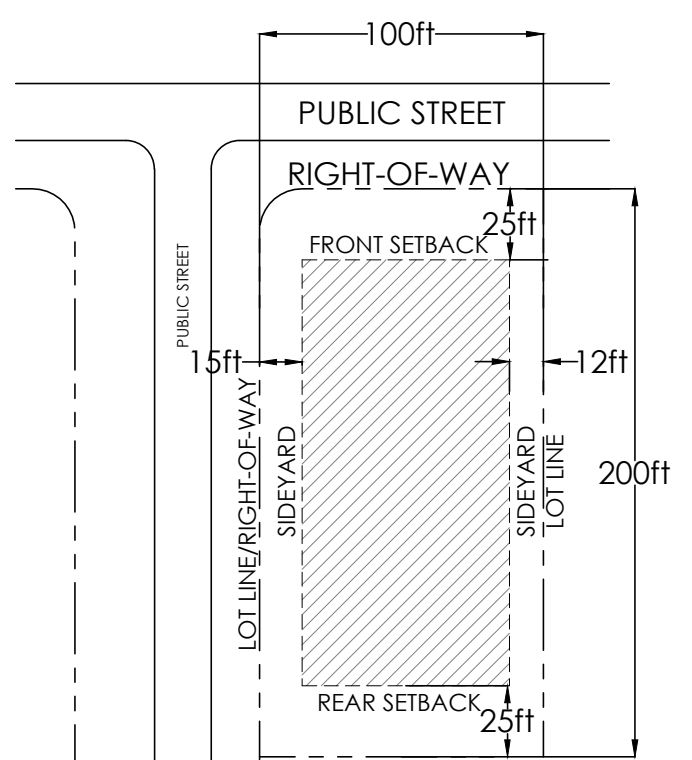
- NOTES:**
- APPROVAL BY THE TOWN ENGINEER IS REQUIRED PRIOR TO USING DITCH TYPE SECTION.
 - SEE SECTION II. B. FOR ADDITIONAL DESIGN CRITERIA.
 - TREES TO BE PLACED IN THE GREEN ZONE 3.5 FEET FROM EDGE OF SIDEWALK.
- KEY**
- 4" CONCRETE SIDEWALK



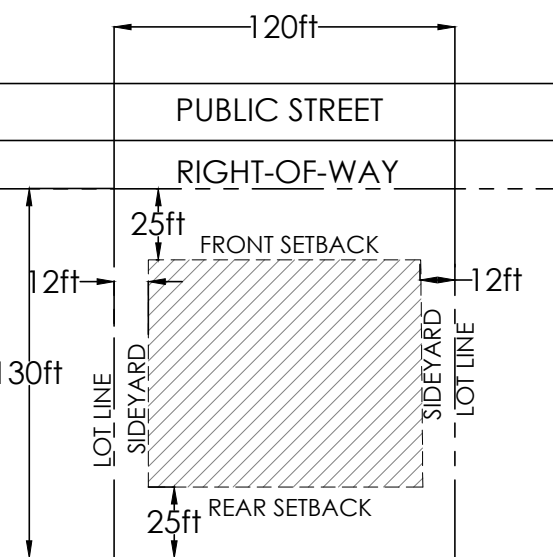
LINDERMAN ROAD - EXISTING GRAVEL DRIVE



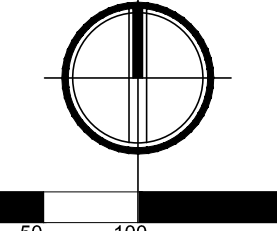
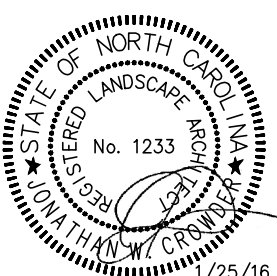
LOT DIAGRAM 1: TYPICAL LOT

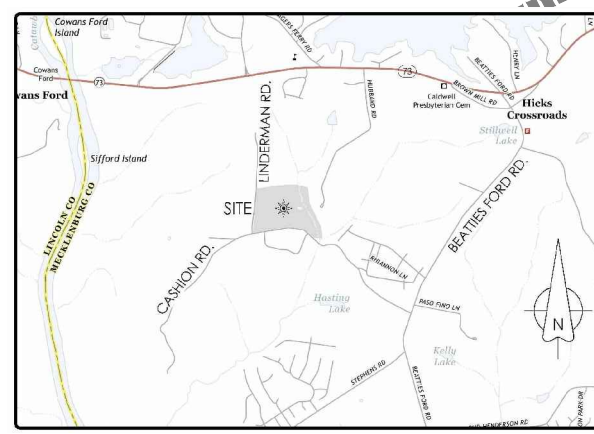


LOT DIAGRAM 2: TYPICAL CORNER LOT



LOT DIAGRAM 3: TYPICAL WIDE - SHALLOW LOT





EXISTING GAPS IN THE TREE LINE SHALL BE PLANTED PER THE 20' BUFFER DETAILED ON THIS SHEET.

DUKE POWER COMPANY
PIN # 013-141-09
DB 3201 PG 115
MFL, BL, DWG, NO. 1121

HATCHED AREA REPRESENTS THE TREE SAVE AREA.
TREE LINE (DOTTED) REPRESENTS THE NEW TREE LINE.
UTILIZE EXISTING FORESTED EDGE ALONG
NORTHERN BOUNDARY TO SATISFY THE 20' BUFFER
YARD.

JEFFREY V. HOLT
& PATRICIA D. HOLT
PIN # 013-191-12
DB 7008 PG 264
MB 23 PG 676

UTILIZE EXISTING FORESTED EDGE ALONG
EASTERN BOUNDARY TO SATISFY THE 20' BUFFER
YARD.

UTILIZE EXISTING FORESTED EDGE ALONG
EASTERN BOUNDARY TO SATISFY THE
20' BUFFER YARD.

PLANTING: GENERAL NOTES.

- LARGE MATURING TREES WILL BE PLANTED 40' O/C WITHIN THE REQUIRED PLANTING STRIP ALONG ALL STREETS WITH THE EXCEPTION OF RURAL PARKWAYS WHERE EXISTING TREES CAN SATISFY THE STREET TREE REQUIREMENT.
- SMALL MATURING TREES ARE TO BE USED WHERE OVERHEAD POWER LINES EXIST.
- STREET TREES WILL BE PLACED WITHIN A 6' STREET TREE EASEMENT ON THE SIDE OF THE STREET THAT DOES NOT HAVE A SIDEWALK.
- ALL PLANTING WILL COMPLY WITH THE TOWN OF HUNTERVILLE REQUIREMENTS.
- THE REQUIRED 20' BUFFER YARD IS SATISFIED WITH EXISTING VEGETATION ALONG THE PERIMETER OF THE SITE, WITH THE EXCEPTION OF CASHION ROAD, WHICH WILL BE PLANTED AS THE REQUIRED 80' BUFFER.
- RESIDENTIAL LOT TREES WILL BE PROVIDED PER THE HUNTERVILLE ORDINANCE
- LOTS BETWEEN 15,000 SF AND 20,000 SF REQUIRE 2 FRONT AND 2 REAR YARD TREES
- LOTS MORE THAN 20,000 SF REQUIRE 3 FRONT AND 3 REAR YARD TREES.
- SPECIMEN TREES SHOWN ARE NOTED WITH THE SIZE LISTED BUT SPECIES NAMES WERE NOT PROVIDED ON THE SURVEY.
- SPECIMEN TREES TO BE REMOVED ARE NOTED ON THIS SHEET.

80' OPAQUE SCREEN ALONG CASHION ROAD (SEE DIAGRAM BELOW)

3 TREES/1000 SF OF AREA
100 LF EXAMPLE (80' X 100' = 8000SF)
24 TREES REQUIRED (50% TO BE EVERGREEN)
6 LARGE MATURING
4 SMALL MATURING
12 EVERGREEN

SHRUBS
10 SHRUBS/1000 SF (75% EVERGREEN)
80 SHRUBS REQUIRED PER 100 LF OF 80' BUFFER

NOTE REGARDING THE BUFFER AREA IMPACTED BY THE POWER EASEMENT. WE REPLACED 2 LARGE EVERGREEN TREES WITH TWO SMALL MATURING TREES TO ACCOMMODATE THE POWER EASEMENT.

20' BUFFER YARD
3 TREES/100 SF OF AREA
100 LF EXAMPLE (20' X 100' = 2000SF)
6 TREES REQUIRED (25% TO BE EVERGREEN)
20 SHRUBS REQUIRED (100% EVERGREEN)

LEGEND

OPEN SPACE SYMBOL

TREE SAVE SYMBOL

Blue Heel Development

442 South Main Street, Suite 100
Davidson, North Carolina

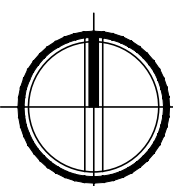
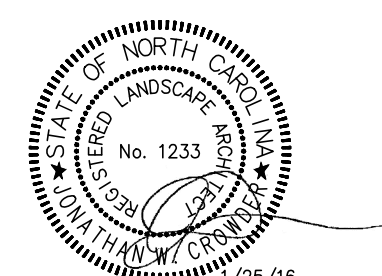
CASHION SITE

5917 Cashion road
Huntersville, North Carolina

PLANTING PLAN

Revisions:

12/21/15 REVISIONS PER FIRST REVIEW
01.25.16 REVISIONS PER SECOND REVIEW



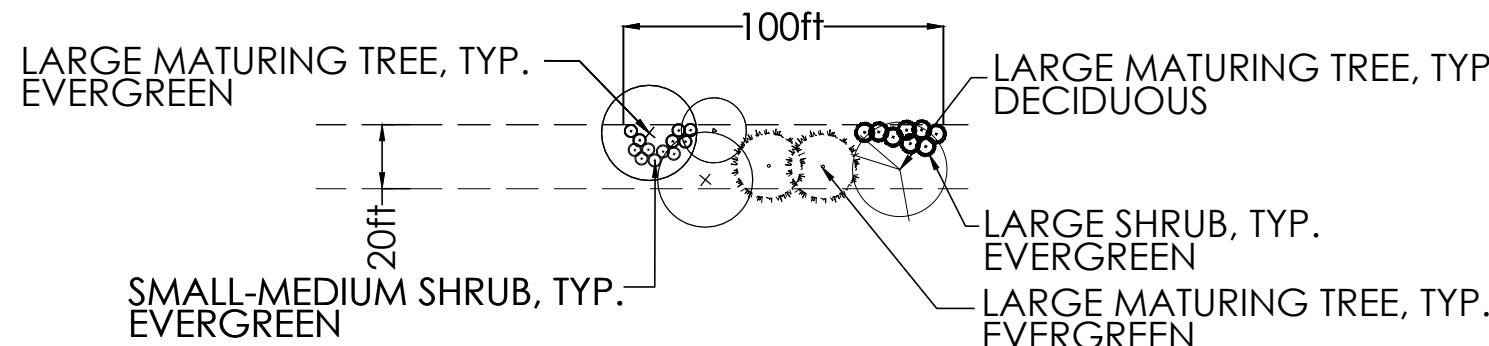
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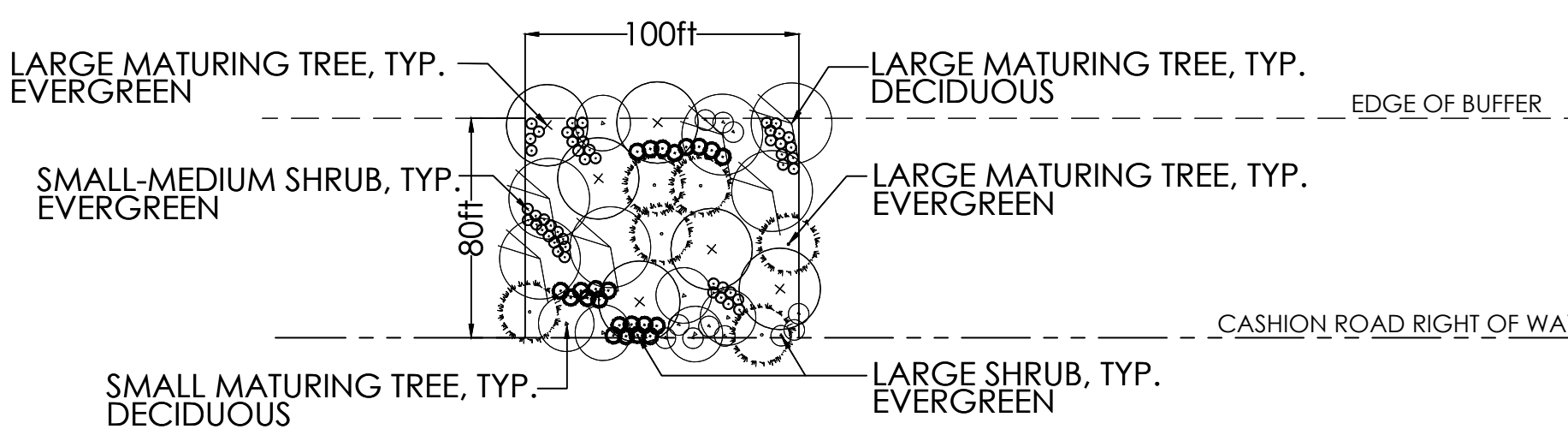
Project No. 1370

Sheet #

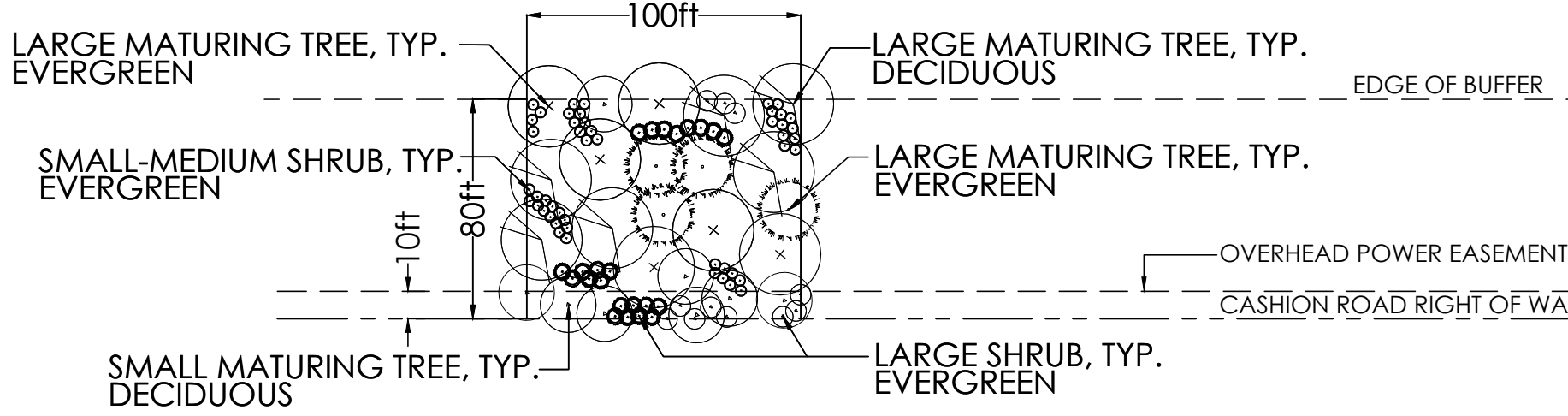
L-6



20' REQUIRED BUFFER YARD.
THIS TYPICAL SECTION WILL BE USED IN THE EVENT THAT THE EXISTING VEGETATION IS DETERMINED TO BE INSUFFICIENT TO MEET THE TOWNS STANDARD.



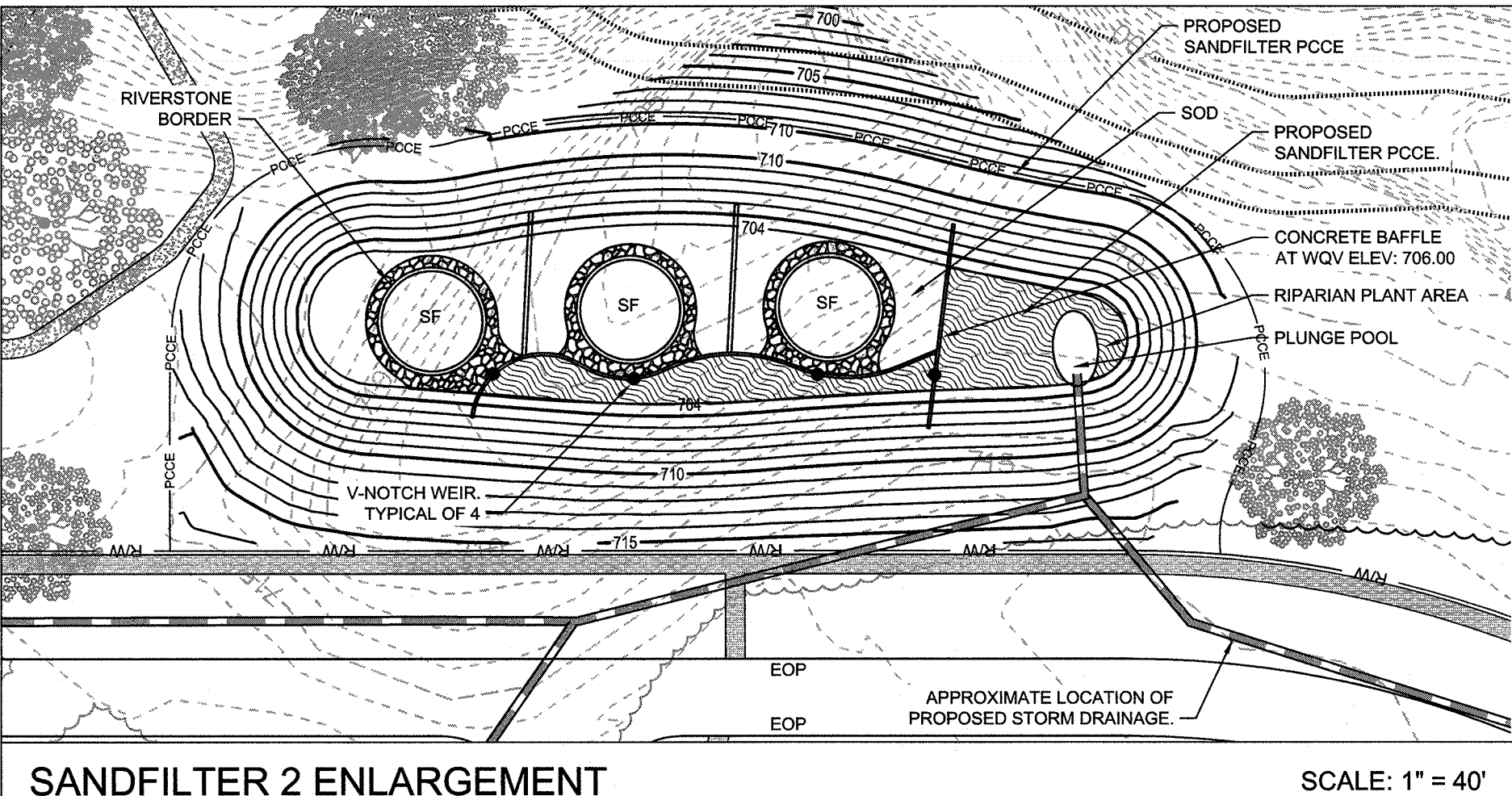
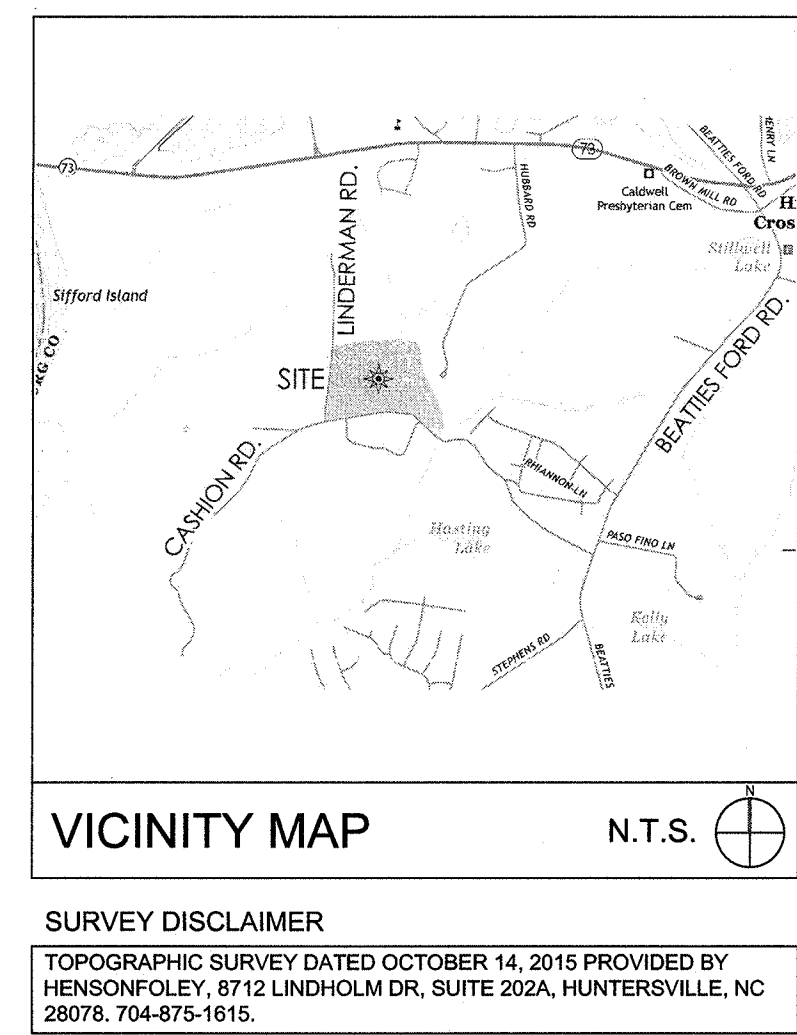
80' OPAQUE BUFFER - TYPICAL 100' SECTION WITH NO IMPACT FROM POWER EASEMENT



80' OPAQUE BUFFER - TYPICAL 100' SECTION WITH IMPACT FROM POWER EASEMENT



00228_SF Sandfilter Design(012216)	
Prepared by: Bior Design	Cashion Road Subdivision
HydroCAD® 10.00.15, sht 07600, © 2015 HydroCAD Software Solutions LLC	Printed: 1/22/2016
Page: 1	
Time span=0.00-56.00 hrs, dt=0.01 hrs, 3601 points	
Runoff by SCS TR-20 method, UH+SCS, Weighted-CN	
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method	
SubcatchmentPost SF1: Post DA SF1	Runoff Area=6.459 ac, 19.72% Impervious, Runoff Depth=3.74" Tc=12.0 min, CN=75, Runoff=24.15 cfs 2.006 af
SubcatchmentPost SF2: Post DA SF2	Runoff Area=21.598 ac, 17.45% Impervious, Runoff Depth=3.64" Tc=12.0 min, CN=74, Runoff=78.69 cfs 6.543 af
SubcatchmentPre SF1: Pre DA SF1	Runoff Area=6.459 ac, 6.00% Impervious, Runoff Depth=2.74" Flow Length=1,138', Tc=30.3 min, CN=65, Runoff=11.86 cfs 1.477 af
SubcatchmentPre SF2: Pre DA SF2	Runoff Area=21.598 ac, 6.00% Impervious, Runoff Depth=3.03" Flow Length=1,127', Tc=30.9 min, CN=68, Runoff=43.95 cfs 3.461 af
Pond SF1: Sandfilter1	Peak Elev=714.99', Storage=30.448 af, Inflow=24.15 cfs 2.006 af Outflow=11.75 cfs 1.956 af
Pond SF2: Sandfilter2	Peak Elev=706.75', Storage=89.626 af, Inflow=78.69 cfs 6.543 af Outflow=42.44 cfs 6.426 af



- North Carolina One-Call Center
DIAL 811 WWW.NC811.ORG
- CONTRACTOR SHALL CONTACT NORTH CAROLINA ONE-CALL CENTER PRIOR TO BEGINNING CONSTRUCTION AS REQUIRED IN THE NORTH CAROLINA "UNDERGROUND DAMAGE PREVENTION ACT", CHAPTER 785, SENATE BILL 168.
 - CONTRACTOR IS RESPONSIBLE FOR ASSURING ALL EXISTING UTILITIES ARE LOCATED PRIOR TO CONSTRUCTION.
 - CONTRACTOR IS RESPONSIBLE FOR PLACEMENT OF ALL BARRICADES, SIGNAGE, FLAGGERS, SHORING, ETC., TO ENSURE THE SAFETY OF WORKERS AND THE PUBLIC.
 - ALL PAVEMENT CUTS SHALL BE REPLACED ACCORDING TO NORTH CAROLINA DEPARTMENT OF TRANSPORTATION AND CHARLOTTE WATER STANDARDS.

landscape architecture, urban design
planning, healthcare

704.999.1203
2029 east 9th Street
Charlotte, NC 28204
www.designcraftpa.com
TSGTG

Blue Heel
Development

442 South Main Street, Suite 100
Davidson, North Carolina

CASHION SITE

5917 Cashion road
Huntersville, North Carolina

Sketch Plan

Revisions:

01.25.16 - Revisions per County Comments

FOR SKETCH PLAN
REVIEW ONLY

True North

SCALE: 1" = 100'

Date: 12/21/15
Project No. 00228.00

Sheet #

SF Exhibit 1