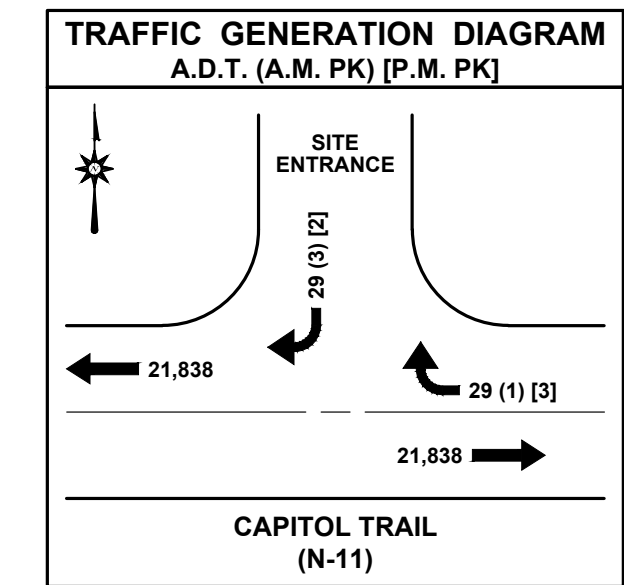


SITE DATA	
1. OWNER OF RECORD:	ALL PURPOSE, LLC - CAPITOL TRAIL SERIES 913 BRANCH ROAD NEWARK, DE 19711
2. PROPERTY ADDRESS:	515 CAPITOL TRAIL NEWARK, DE 19711
3. ENGINEER / SURVEYOR:	BECKER MORGAN GROUP INC. 250 SOUTH MAIN STREET, SUITE 109 NEWARK, DELAWARE 19711 302-734-7950
4. PROPERTY LOCATION:	LATITUDE: N32° 41' 30.99" WRS80 - NAD83 (2011) LONGITUDE: W75° 43' 40.26" WRS80 - NAD83 (2011)
5. PARCEL NUMBER:	1801000004 1801000005
6. DEED REFERENCE:	201708140041054
7. DELDOT CONTRACT:	87-061-08
8. SITE AREA SUMMARY:	PARCEL #1801000004 = 33,760 SQ. FT. ± PARCEL #1801000005 = 22,969 SQ. FT. ± <b>TOTAL = 56,729 SQ. FT. ± (1.0592 ACRES)</b>
9. ZONING CLASSIFICATION:	EXISTING: RS-9000 SQ. FT. ONE FAMILY DETACHED PROPOSED: RR- TOWN HOUSES
10. SETBACKS:	RR- TOWN HOUSES STREET YARD: 15 FEET SIDE YARD: 25 FEET REAR YARD: 12 FEET
11. BULK REQUIREMENTS:	RR- TOWN HOUSES MAX BUILDING HEIGHT: 35 FEET MINIMUM LOT AREA: 1,545 SQ. FT. MINIMUM LOT WIDTH: 16 FEET PER UNIT MAXIMUM LOT COVERAGE: 40% BUILDING
12. PRESENT USE:	RESIDENTIAL LOT
13. PROPOSED USED:	RESIDENTIAL SUBDIVISION
14. DENSITY:	PERMITTED: 10 UNITS / ACRE PROPOSED: 10 UNITS / ACRE
15. SANITARY SEWER FLOW:	AVERAGE DAILY FLOW: (SINGLE FAMILY ATTACHED) 250 GPD / UNIT; (250 GPD * 10 UNITS) = 2,500 GPD TOTAL SITE EXISTING FLOW: 300 GPD TOTAL SITE PROPOSED FLOW: 2,500 GPD 7,500 * 4.0 PEAKING FACTOR = 10,000 GPD PEAK DAILY FLOW: 10,000 GPD
16. PARKING CALCULATIONS:	PROPOSED: 2 SPACE / DWELLING * 10 DWELLINGS = 20 SPACES
17. TRAFFIC GENERATION:	EXISTING: 10 AVERAGE DAILY TRIPS PROPOSED: 58 AVERAGE DAILY TRIPS NET INCREASE: 48 AVERAGE DAILY TRIPS
18. UTILITIES:	WATER: CITY OF NEWARK SEWER: CITY OF NEWARK GAS: DELMARVA POWER GAS ELECTRIC: CITY OF NEWARK
19. ROAD CLASSIFICATION:	PRINCIPAL ARTERIAL - CAPITAL TRAIL (35 M.P.H.)
20. SURVEY DATUM:	NGS MONUMENTS VERTICAL: NAVD 88 - RV17 HORIZONTAL: NAD 83 (2011) DSP - CORS
21. MONUMENTATION:	4 FOUND 4 SET
22. SURVEY CLASSIFICATION:	URBAN SURVEY
23. SURVEY UNIT:	LINEAR: US SURVEY FOOT ANGULAR: DEGREES MINUTES SECONDS (DMS) COORDINATE: GROUND

PURPOSE OF PLAN	
1.	TO DEMOLISH AN EXISTING SINGLE FAMILY DWELLING AND CONSTRUCT A TEN (10) UNIT TOWN HOUSE SUBDIVISION WITH ASSOCIATED SITE IMPROVEMENTS.

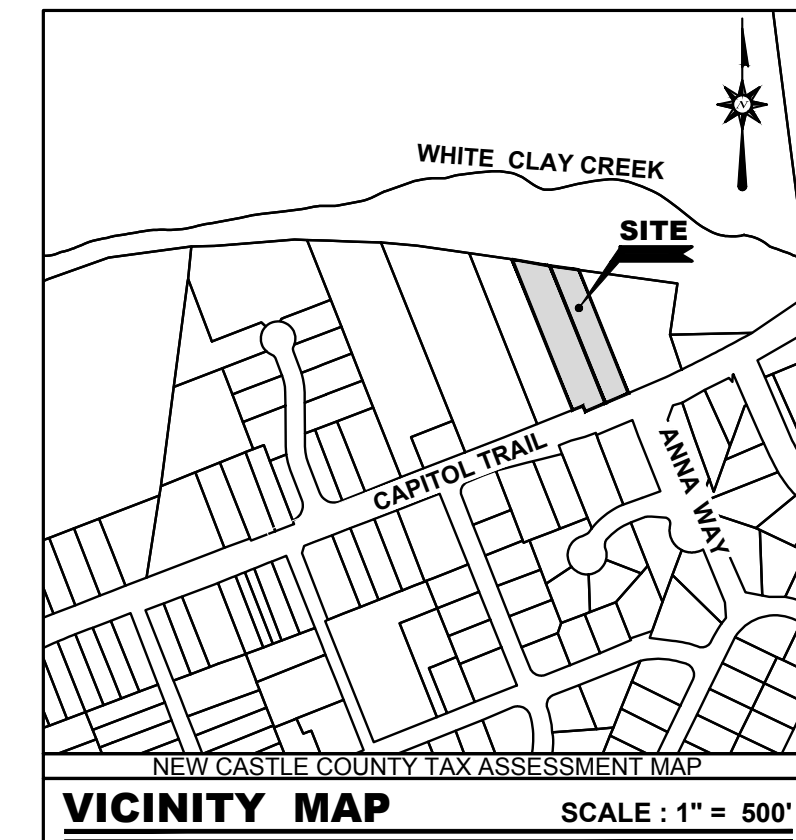
GENERAL CONSTRUCTION NOTES	
G-1	INSTALL INTEGRAL P.C.C. CURB & GUTTER-DEPRESSED CURB (DELDOT - TYPE 2) SEE DELDOT STANDARD DETAIL C-1.
G-2	INSTALL 4" THICK, 6" WIDE CONCRETE SIDEWALK.
G-3	INSTALL BITUMINOUS PAVEMENT. (DELDOT CLASS - 1)
G-4	INSTALL 6" BITUMINOUS CONCRETE. SEE DELDOT STANDARD DETAIL C-3.
G-5	CONTRACTOR TO TRANSITION FROM DELDOT TYPE 2 DEPRESSED CURB TO STANDARD DELDOT TYPE-2 CURB.
G-6	INSTALL INTEGRAL P.C.C. CURB & GUTTER (DELDOT - TYPE 2) ALONG SUBDIVISION ROADWAY. SEE DELDOT STANDARD DETAIL C-1.



ROAD TRAFFIC DATA:	
N-11 CAPITOL TRAIL - SPEED LIMIT = 35 MPH AADT = 39,487 Trips (from 2016 DelDOT Traffic Summary) 10 YEAR PROJECTED AADT: (1.01 <sup>10</sup> ) x AADT = 43,616 TRIPS 10 YEAR PROJECTED AADT + SITE ADT: 43,616 TRIPS	
DIRECTIONAL SPLIT: 50% / 50% PEAK HOUR: 10.75% = 4,695 TRIPS PEAK HOUR TRUCKS: 294 PEAK HOUR TRUCKS: 10.75% = 32 TRIPS	

SITE TRIPS GENERATED:	
SOURCE: ITE TRIP GENERATION MANUAL (8TH EDITION) ITE: 230 - TOWNHOUSE	
TOTAL SITE ADT = (10 UNITS x 5.81) = 58 TRIPS A.M. PEAK HR. TRIPS = 4 (11% IN / 89% OUT) P.M. PEAK HR. TRIPS = 5 (67% IN / 33% OUT)	

DIRECTIONAL DISTRIBUTION:	
50% FROM EAST (29 TRIPS) (1 a.m. pk.) (3 p.m. pk.) 50% TO WEST (29 TRIPS) (3 a.m. pk.) (2 p.m. pk.)	



ITEM	EXISTING	PROPOSED
SANITARY GRAVITY SEWER LINE, SIZE & FLOW DIRECTION	EX. 10" S	10" S
SANITARY SEWER FORCE MAIN, SIZE & FLOW DIRECTION	EX. 10" F.M.	12" F.M.
SANITARY SEWER MANHOLE (S.M.H.)	EX. 10" W	12" W
SANITARY SEWER CLEANOUT	EX. 10" W	12" W
WATER MAIN & SIZE	EX. 10" W	12" W
FIRE HYDRANT	EX. F.H.	F.H.
WATER VALVE (W.V.) OR METER (W.M.)	W.M. W.V.	W.M. W.V.
STORM DRAIN MANHOLE (S.D.M.H.)	EX. 10" W	12" W
STORM DRAIN LINE (CMP OR RCP)	EX. 10" W	12" W
CATCH BASIN	EX. 10" W	12" W
UTILITY POLE W/ OVERHEAD SERVICE (TELEPHONE OR ELECTRIC OR BOTH)	EX. U.T.	U.T.
UNDERGROUND ELECTRIC	EX. U.T.	U.T.
UNDERGROUND TELEPHONE	EX. U.T.	U.T.
UNDERGROUND GAS MAIN	EX. 2" G	2" G
PAVEMENT TO BE REMOVED	N/A	N/A
CONCRETE CURB & GUTTER	N/A	N/A
CONCRETE SIDEWALK, SLAB / PAVING	N/A	N/A
INTERIORS SURFACED ROAD, DRIVE OR LOT	N/A	N/A
INDIVIDUAL TREE OR BUSH	EVERGREEN DECIDUOUS	N/A
WIRE FENCE	CHAINLINK FENCE STOCKADE FENCE	N/A
STRUCTURE (CONCRETE, WOOD, METAL, ETC.)	N/A	N/A
DRAINAGE DITCH OR SWALE	N/A	N/A
EMBANKMENT SIDELAPES (DOWN)	N/A	N/A
CONTOUR	49	55
ELEVATION SPOT SHOT	43.55	25.15, 25.50, 25.00
BENCH MARK	N/A	N/A
PROPERTY OR RIGHT-OF-WAY LINE	N/A	N/A
CENTERLINE	N/A	N/A
LIGHT POLE	N/A	N/A
CONSTRUCTION NOTE	N/A	N/A

**GENERAL NOTES:**

- TOPOGRAPHIC AND BOUNDARY RETRACEMENT SURVEY WAS PREPARED BY BECKER MORGAN GROUP, DOVER, DE., IN OCTOBER OF 2017.
- THE BOUNDARY LINES PORTRAYED HEREON HAVE BEEN ESTABLISHED BASED SOLELY ON PHYSICAL EVIDENCE DISCOVERED IN THE FIELD IN CONJUNCTION WITH DETERMINATIONS DERIVED FROM SOURCE OF TITLE AND ADJACENT DEED RECORD INFORMATION.
- A DISCREPANCY BETWEEN THE TITLE FOR SURVEYED PARCELS AS SHOWN AND ADJACENT PARCEL 1801000001 TITLE WAS DISCOVERED WHEN PERFORMING THE BOUNDARY RETRACEMENT SURVEY. BECKER MORGAN GROUP WAS NOT CONTRACTED TO RESEARCH THIS MATTER ANY FARTHER AS PART OF THIS SURVEY.
- PROPERTY SHOWN HEREON IS SUBJECT TO ANY RIGHT-OF-WAY, EASEMENTS, RESTRICTIONS, ETC. AS MAY BE SHOWN OR NOTED IN ANY RECORD, PUBLIC OR OTHERWISE, OR ANY REQUIREMENT OR REGULATION OF ANY PUBLIC AGENCY.
- ALL MEASUREMENTS MADE ARE BASED ON A GNSS RTK SITE CALIBRATION SET BY BECKER MORGAN GROUP, DOVER, DE., IN OCTOBER OF 2017. BOTH VERTICAL AND HORIZONTAL COORDINATES FOR SITE CALIBRATION WERE DERIVED THROUGH A LIMITED CONSTRAINT POST PROCESS OF STATIC GNSS OBSERVATIONS. VERTICAL DATUM IS BASED ON NGS MONUMENT RV17 (NAVD 88) WITH TIES TO OTHER NEAR BY PASSIVE NGS MONUMENTS. HORIZONTAL DATUM IS BASED ON ACTIVE NGS MONUMENTS - DELAWARE STATE PLANE NAD 83 (2011).
- WHERE GNSS OBSERVATION WERE NOT SUITABLE, MEASUREMENTS WERE MADE WITH A TOPCON QS-3A ELECTRONIC TOTAL STATION. TRAVERSE RAN TO/FROM POINTS SET WITHIN CALIBRATION FILE WERE WITHIN MINIMUM CLOSURE STANDARD SET BY STATE STATUTE FOR AN URBAN SURVEY BEFORE ADJUSTMENT.
- PORTION OF PARCEL IS LOCATED WITHIN THE ONE HUNDRED YEAR FLOOD PLAIN ZONE, BASED ON FIRM MAP 1000302190K, PANEL 130 OF 475, DATED OCTOBER 2017.
- THE EXISTING UTILITIES SHOWN WERE TAKEN FROM THE BEST AVAILABLE RECORDS. THE CONTRACTOR SHALL CONTACT MISS UTILITY OF DELMARVA (1-800-282-8555) TO VERIFY THEIR EXACT LOCATION PRIOR TO THE START OF ANY CONSTRUCTION. ANY DAMAGE INCURRED TO ANY UTILITIES SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTORS EXPENSE. IF THE CONTRACTOR RELIES ON THE UTILITY LOCATIONS SHOWN HEREON, HE DOES SO AT HIS OWN RISK AND WILL NOT BE ENTITLED TO ADDITIONAL COMPENSATION DUE TO TIME DELAYS FROM SAID RELIANCE.
- DELAWARE REGULATIONS PROHIBIT THE BURIAL OF CONSTRUCTION DEMOLITION DEBRIS, INCLUDING TREES AND STUMPS ON CONSTRUCTION SITES. ANY SOLID WASTE FOUND DURING EXCAVATION MUST BE REMOVED AND PROPERLY DISCARDED.
- THIS DRAWING DOES NOT INCLUDE NECESSARY COMPONENT FOR CONSTRUCTION SAFETY. ALL CONSTRUCTION MUST BE DONE IN COMPLIANCE WITH THE OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970 AND ALL RULES AND REGULATIONS THERETO APPURTENANT.
- BEFORE THE CONTRACTOR CAN BEGIN CONSTRUCTION HE MUST OBTAIN THE PROPER PERMITS AND/OR APPROVALS FROM THE CITY OF NEWARK, DELAWARE DEPARTMENT OF TRANSPORTATION AND APPROPRIATE STATE AND COUNTY AGENCIES.
- ALL CONSTRUCTION METHODS AND MATERIALS SHALL BE ACCORDING TO THE CITY OF NEWARK AND THE STATE OF DELAWARE STANDARDS, MOST CURRENT DETAIL STANDARDS & SPECIFICATIONS.
- NO TREES GROWING OVER 18" AT MATURITY CAN BE PLANTED UNDER THE AERIAL POWER LINES ON SOUTH MAIN STREET.
- A BLANKET UTILITY EASEMENT IS PROVIDED ACROSS THE ENTIRE SITE TO THE CITY OF NEWARK TO PROVIDE CITY SERVICES TO THIS PROPERTY OR ADJACENT PROPERTIES.

**APPROVED BY: CITY OF NEWARK**

DIRECTOR OF PLANNING AND DEVELOPMENT CITY OF NEWARK	PRINTED NAME	DATE
CITY MANAGER - CITY OF NEWARK	PRINTED NAME	DATE
CITY SECRETARY - CITY OF NEWARK	PRINTED NAME	DATE

RECORDED: INSTRUMENT NO. \_\_\_\_\_

**OWNERS CERTIFICATION**

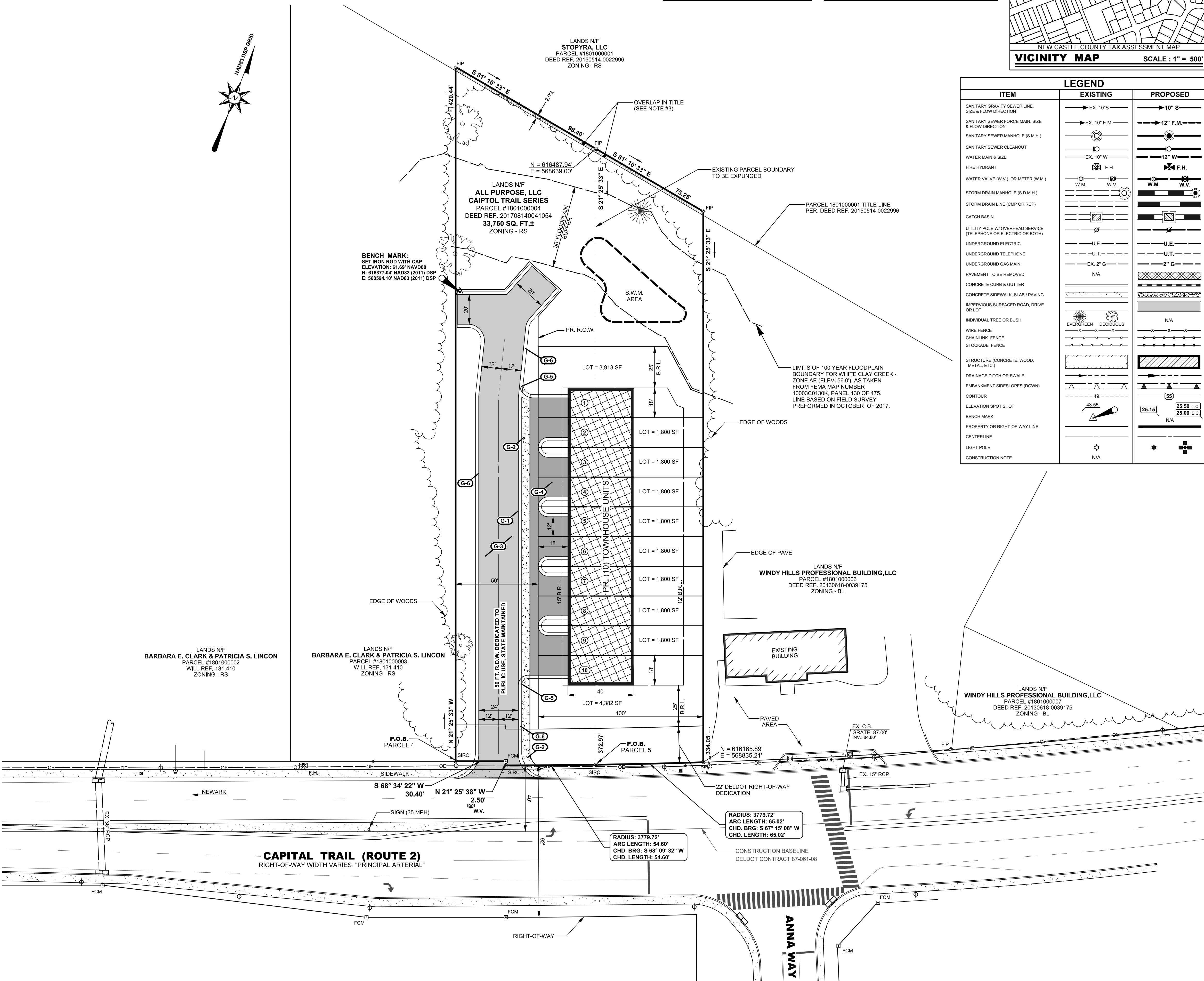
I, THE UNDERSIGNED, HEREBY CERTIFY THAT WE ARE THE OWNER OF THE PROPERTY DESCRIBED AND SHOWN ON THIS PLAN, THAT THE PLAN WAS MADE AT OUR DIRECTION, AND THAT WE ACKNOWLEDGE THE SAME TO BE OUR ACT AND DESIRE THE PLAN TO BE DEVELOPED AS SHOWN IN ACCORDANCE WITH ALL APPLICABLE LAWS AND REGULATIONS.

SIGNATURE \_\_\_\_\_ DATE \_\_\_\_\_

**ENGINEERS CERTIFICATION**

I, CHRISTOPHER D. DUKE, HEREBY CERTIFY THAT I AM A REGISTERED ENGINEER IN THE STATE OF DELAWARE, THAT THE INFORMATION SHOWN HEREON HAS BEEN PREPARED UNDER MY SUPERVISION AND TO MY BEST KNOWLEDGE AND BELIEF REPRESENTS GOOD ENGINEERING PRACTICES AS REQUIRED BY THE APPLICABLE LAWS OF THE STATE OF DELAWARE.

CHRISTOPHER D. DUKE P.E. NO. 16378 DATE \_\_\_\_\_



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ENGINEERING

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PROJECT TITLE  
**LANDS OF CHARLOTTE'S WAY**

515 CAPITOL TRAIL  
NEWARK, DE 19711  
TOWN OF NEWARK  
NEW CASTLE COUNTY

SHEET TITLE  
**CONCEPT PLAN**

MARK	DATE	DESCRIPTION
LAYER/STATE	CONCEPT PLAN	
PROJECT NO.:	2017177.00	
DATE:	11/15/17	
SCALE:	1" = 30'	
DRAWN BY:	A.P.C.	PROJ. MGR.: C.D.D.
SHEET		
<b>1 OF 1</b>		
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