SPECIAL USE PERMIT
SITE DEVELOPMENT PLANS
FOR

EAST VILLAGE AT MEADOWLANDS

A HABITAT FOR HUMANITY COMMUNITY
1317 US 70-A EAST
HILLSBOROUGH, NORTH CAROLINA 27278

TRC 1st SUBMITTAL: MAY 18, 2020
TRC 2nd SUBMITTAL: JUNE 22, 2020
TRC 3rd SUBMITTAL: JULY 20, 2020
TRC 4th SUBMITTAL: AUGUST 11, 2020

PLAN EXPIRATION:

1. A VESTED RIGHT PURSUANT TO G.S. 160A-385.1 AND SECTION 1.9 OF THE UNITED DEVELOPMENT ORDINANCE OF THE TOWN OF HILLSBOROUGH IS ESTABLISHED AS OF THE DATE HEREOF. UNLESS TERMINATED AT AND EARLIER DATE, THE VESTED RIGHT OF THE APPROVAL SHALL BE VALID UNTIL _____

GENERAL NOTES:

1. CONSTRUCTION ON THIS PROJECT SHALL BE IN ACCORDANCE WITH THE TOWN OF HILLSBOROUGH STANDARD DETAILS, CODE OF ORDINANCES AND STANDARD SPECIFICATIONS.
2. ALL SITE WORK AT A MINIMUM, SHALL BE PERFORMED IN ACCORDANCE WITH THE 2018 NCDOT ROADWAY STANDARD DRAWINGS AND STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES UNLESS OTHERWISE NOTED OR DIRECTED.
3. CONSTRUCTION ON THIS PROJECT SHALL BE IN ACCORDANCE WITH ALL APPLICABLE AND THE MOST CURRENT TOWN, COUNTY, STATE, NCDOT AND UTILITY PROVIDER STANDARDS, SPECIFICATIONS AND BUILDING CODES.
4. UNDERGROUND UTILITIES MAY EXIST ON, ALONG OR WITHIN CONFLICT OF THIS PROJECT. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING NC 811 OR THE APPROPRIATE UTILITY COMPANIES PRIOR TO ANY EXCAVATION.
5. THE CONTRACTOR SHALL OBSERVE ALL REQUIRED SAFETY PRECAUTIONS IN THE PERFORMANCE OF ALL WORK IN ACCORDANCE WITH OSHA.
6. THE CONTRACTOR SHALL GRADE, SEED AND SOD OR OTHERWISE PROVIDE TEMPORARY AND PERMANENT STABILIZATION OF ALL DISTURBED AREAS, ESPECIALLY SLOPES. SEE EROSION CONTROL INSTRUCTIONS, IF APPLICABLE.
7. WORK WITHIN PUBLIC RIGHT-OF-WAYS SHALL BE IN ACCORDANCE WITH ALL STATE AND LOCAL REQUIREMENTS, NOTIFICATIONS, STANDARDS AND POLICIES.
8. ANY SUBSTITUTIONS, CHANGES, OR MODIFICATIONS SHALL BE APPROVED BY THE PROJECT ENGINEER, PLANNING DEPARTMENT STAFF, AND DEVELOPER PRIOR TO INSTALLATION/CONSTRUCTION OF CORRESPONDING ITEMS.
9. THE GRADE LINES DENOTE THE FINISHED ELEVATIONS OF THE PROPOSED SURFACE. GRADE LINES MAY BE ADJUSTED AT THEIR BEGINNING, ENDING AND AT STRUCTURES AS DIRECTED BY THE ENGINEER IN ORDER TO PROVIDE A PROPER TIE-IN. CONTRACTOR SHALL FIELD VERIFY ALL PROPOSED INVERTS, FFE'S & FINISHED SURFACES TO ENSURE THAT MINIMUM SLOPE & COVER REQUIREMENTS ARE PROVIDED PRIOR TO INSTALLATION OF REFERENCED ITEMS.
10. THE EARTHWORK ON THIS PLAN DOES NOT NECESSARILY BALANCE; OFFSITE BORROW OR WASTE MAY BE REQUIRED.
11. ALL PIPE INVERTS TO BE VERIFIED IN THE FIELD PRIOR TO CONSTRUCTING GRAVITY SYSTEMS AND SHALL BE ADJUSTED BY THE ENGINEER IF NECESSARY.
12. ALL CONCRETE PIPE SHALL BE REINFORCED CLASS III, UNLESS NOTED OTHERWISE.
13. PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ACQUIRING ALL PERMITS NECESSARY FOR CONSTRUCTION. THE CONTRACTOR SHALL READ ALL PERMITS AND ENSURE THAT CONSTRUCTION COMPLIES WITH THE PERMITS. REQUIRED PERMITS AND REVIEWS MAY INCLUDE, BUT ARE NOT LIMITED TO: CITY/COUNTY APPROVALS/PERMITS, CITY FIRE DEPARTMENT, SOLID WASTE REVIEWS, NCDOT PERMITS, DRIVEWAY PERMITS, RIGHT OF WAY ENCROACHMENT AGREEMENTS, SOIL AND EROSION CONTROL PERMITS, NCDENR PERMITS, WATER PERMITS, SEWER PERMITS, ENVIRONMENTAL PERMITS, WETLAND DISTURBANCE PERMITS, STREAM CROSSING PERMITS, POWER EASEMENT ENCROACHMENT AGREEMENTS, USACE/DWQ PERMITS, STORMWATER PERMITS, ZONING APPROVAL, AND BUILDING CODE APPROVALS/PERMITS. IF THE CONTRACTOR HAS QUESTIONS ABOUT PERMIT LANGUAGE, OR THE NEED FOR A PERMIT, HE MUST CONTACT THE DEVELOPER AND THE ENGINEER PRIOR TO BEGINNING CONSTRUCTION.

ORANGE COUNTY SOLID WASTE NOTES:

1. PRIOR TO ANY DEMOLITION OR CONSTRUCTION ACTIVITY ON THE SITE, THE APPLICANT SHALL HOLD A PRE-DEMOLITION / PRE-CONSTRUCTION CONFERENCE WITH THE COUNTY'S SOLID WASTE STAFF. THIS MAY BE THE SAME MEETING HELD WITH OTHER DEVELOPMENT OFFICIALS.
2. BY ORANGE COUNTY ORDINANCE: ALL CLEAN WOOD WASTE, SCRAP METAL AND CORRUGATED CARDBOARD PRESENT IN CONSTRUCTION WASTE, MUST BE RECYCLED.
3. BY ORANGE COUNTY ORDINANCE, ALL HAULERS OF CONSTRUCTION WASTE MUST BE PROPERLY LICENSED.
4. ANY DUMPSTER AREA GATE DESIGN WILL INCLUDE GATE RETAINERS.
5. THE USER WILL BE RESPONSIBLE FOR OPENING GATES TO DUMPSTER AREA ON COLLECTION DAYS OF ANY MATERIALS TO BE COLLECTED FROM THIS LOCATION.
6. IF ANY VEHICLES ARE PARKED IN THE REFUSE OR RECYCLABLES COLLECTION VEHICLE ACCESS AREA, THE CONTAINERS WILL NOT RECEIVE SERVICE UNTIL THE NEXT SCHEDULED COLLECTION DAY
7. ORANGE COUNTY WILL NOT BE RESPONSIBLE FOR ANY PAVEMENT DAMAGE THAT MAY RESULT FROM SERVICE VEHICLES.
8. GFL ENVIRONMENTAL WILL COLLECT SOLID WASTE AND COMINGLED RECYCLABLE INCLUDING CARDBOARD FROM BULK CONTAINERS AT THE LOCATIONS SHOWN ON THE SITE PLAN.
9. ALL EXISTING STRUCTURES 500 SQUARE FEET AND LARGER IN SIZE SHALL BE ASSESSED PRIOR TO DEMOLITION TO ENSURE COMPLIANCE WITH THE COUNTY'S REGULATED RECYCLABLE MATERIALS ORDINANCE (RRMO) AND TO ASSESS THE POTENTIAL FOR DE-CONSTRUCTION AND/OR THE RE-USE OF SALVAGEABLE MATERIALS.
10. THE PRESENCE OF ANY ASBESTOS CONTAINING MATERIALS ('ACM') AND/OR OTHER HAZARDOUS MATERIALS IN CONSTRUCTION AND DEMOLITION WASTE SHALL BE HANDLED IN ACCORDANCE WITH ANY AND ALL LOCAL, STATE, AND FEDERAL REGULATIONS AND GUIDELINES.

SITE INFORMATION

CURRENT OWNERS: HENRIETTA C. AUMAN TRUST
C/O GUIDO DEMAERE, TRUSTEE
220 HUNTINGTON DR
CHAPEL HILL, NC 27514-2418

HART P. GRIFFITH-ZILL
1317 US HWY 70A
HILLSBOROUGH, NC 27278

PIN: 9874-80-9603, 9874-81-6134 and 9874-81-8049

LAND AREA: 10.895 ACRES

REFERENCE: P/O 5-15 & 101-103 BANKHEAD FOREST P1/59, 1-4 BANKHEAD FOREST P1/59, DB 4724, PG 116

PROPERTY ADDRESS: 1317 US HWY 70A
HILLSBOROUGH, NC 27278

JURISDICTION: TOWN OF HILLSBOROUGH

EXISTING USE: VACANT & RESIDENCE

PROPOSED USE: ATTACHED DWELLINGS: 20+ UNITS (TOWNHOUSE DEVELOPMENT)

EXISTING ZONING: R-1 (COUNTY)

PROPOSED ZONING: RSU

ADJ. ZONING: R-1 & R-2 (ORANGE COUNTY)
HIC (HILLSBOROUGH)

RIVER BASIN: NEUSE
WATERSHED: LOWER ENO UNPROTECTED
(10-DIGIT CODE: 030202103)

SOILS: GeB / GeC / Ch

BUILDING SETBACKS:
FRONT: 0'

SIDE: 0'

REAR: 0'

TOTAL NUMBER OF TOWNHOUSE UNITS = 76
THREE BEDROOM UNITS: 50
FOUR BEDROOM UNITS: 26

MAX. BUILDING HEIGHT: 45'
PROPOSED BUILDING HEIGHT: 32'-4"

OPEN SPACE:
REQUIRED: 10% GROSS AREA (10.89 AC x 10%) = 1.09 AC.
PROVIDED: 45,386 (1.04 AC)

RECREATION SPACE:
REQUIRED: 1/35 AC. (0.029 AC.) / UNIT x 76 UNITS = 2.20 AC.
PROVIDED: 68,206 SF (1.57 AC) ADDITIONAL AREA WILL BE PROVIDED BY PAYMENT IN LIEU TO THE TOWN OF HILLSBOROUGH.

IMPERVIOUS SURFACES

EXISTING IMPERVIOUS:	
BUILDING	3,062 SF
GRAVEL DRIVE	3,610 SF
CONC. PAD	722 SF
TOTAL EXISTING:	7,394 SF
AREAS TO BE DEMOLISHED:	7,394 SF
PROPOSED BUILDING:	66,978 SF
PROPOSED PAVEMENT:	86,552 SF
PROPOSED SIDEWALKS:	27,288 SF
TOTAL NEW IMPERVIOUS:	180,818 SF
AREA TO BE DEMOLISHED:	-7,394 SF
NET TOTAL IMPERVIOUS:	173,424 SF (36.5%)

PARKING

REQUIRED: 2 SPACES PER UNIT (76) = 152 SPACES (6 ACC. - 2 VAN)
PROPOSED: 166 SPACES (6 ACC. - 3 VAN)

DISTURBED AREA
SITE DISTURBED AREA = 433,882 SF (9.96 AC)

811
Know what's **below.**
Call before you dig.

CONTRACTOR SHALL NOTIFY "NC811" (811) OR (1-800-632-4949) AT LEAST 3 FULL BUSINESS DAYS PRIOR TO BEGINNING CONSTRUCTION OR EXCAVATION TO HAVE EXISTING UTILITIES LOCATED. CONTRACTOR SHALL CONTACT ANY LOCAL UTILITIES THAT PROVIDE THEIR OWN LOCATOR SERVICES INDEPENDENT OF "NC811". REPORT ANY DISCREPANCIES TO THE ENGINEER IMMEDIATELY.

ORANGE COUNTY SOLID WASTE WAIVER OF PUBLIC RECYCLING COLLECTION:

1. APPLICANT ELECTS TO PROVIDE RECYCLING SERVICES TO RESIDENTS/TENANTS OF THIS PROPERTY IN LIEU OF BUILDING A RECYCLING STATION CONSTRUCTED TO ORANGE COUNTY SPECIFICATIONS. THE SITE WILL NOT RECEIVE PUBLIC RECYCLING COLLECTION NOW OR IN THE FUTURE UNLESS SUCH A RECYCLING STATION IS CONSTRUCTED OR CONTINGENCY FOR SUCH A STATION IS INCLUDED ON THE DEVELOPMENT PLANS.
2. APPLICANT MUST REQUIRE AT LEAST THE SAME LEVEL OF SERVICE (CURRENT OF FUTURE) TO ITS RESIDENTS AS THAT PROVIDED BY ORANGE COUNTY.
3. COUNTY FEES FOR RECYCLING AND WASTE MANAGEMENT ASSOCIATED WITH THIS PROJECT/PROPERTY WILL NOT BE WAIVED.
4. APPLICANT AGREES TO ENTER INTO A SERVICE AGREEMENT ASSOCIATED WITH A PRIVATE SOLID WASTE/RECYCLING COLLECTION CONTRACTOR THAT IS ACCEPTABLE TO ORANGE COUNTY. FURTHER, THE AGREEMENT SHALL PROVIDE FOR THE COLLECTION AND RECYCLING OF CORRUGATED CARDBOARD IN ADDITION TO THE OTHER CO-MINGLED RECYCLABLES AND AN EXECUTED COPY OF THE AGREEMENT SHALL BE PROVIDED TO AND APPROVED BY ORANGE COUNTY PRIOR TO APPROVAL OF FINAL CONSTRUCTION PLANS FOR THE PROPERTY/PROJECT.

WAIVERS REQUIRED/REQUESTED FROM UNIFIED DEVELOPMENT ORDINANCE SECTION 6 DEVELOPMENT STANDARDS):

1. **Section 6 (Development Standards), Subsection 6.10 (Landscaping (Parking Lot)), Paragraph 6.10.3 (Landscaping Requirements), Sub-paragraph 6.10.3.4 states** "All planting medians or islands in parking lots shall be at least 10 feet X 10 feet measured from back of curb to back of curb (or pavement edge if the island is not curbed for stormwater purposes). When an island contains one or more shade trees, the island must have at least 300 square feet of unpaved space per shade tree."

Reason for need: The site design contains the required landscape islands for parking spacing and the minimum length and width, however, some of the islands are slightly under the required 300 square foot area. The design mitigated the need to meet the public street standards and the associated required widths and the result in some areas was a slightly smaller island. The islands are adequate for the required landscaping and meet the intent and spirit of the ordinance.

2. **Section 6 (Development Standards), Subsection 6.21 (Streets), Paragraph 6.21.3 (Design Standards - Public Streets), Sub-paragraph 6.21.3.3: states** "Minimum right of way widths by public street type:
   i. Arterial Streets shall provide 100 feet of right of way
   ii. Collector Streets shall provide 70 feet of public right of way
   iii. Local Street shall provide 60 feet of public right of way
   iv. Cul de sacs shall provide 50 feet of public right of way"

Reason for need: The streets for this project are all proposed to be public streets, however due to the nature of the development and the site constraints, the right-of-ways for all of the streets are shown to be 50 feet in width. This allows for proper access to maintain the public streets, while also allowing the room needed for the Townhome Units. The streets are classified as either Local streets or a Cul de sac and do not connect to any other properties or neighborhoods.

3. **Section 6 (Development Standards), Subsection 6.21 (Streets), Paragraph 6.21.3 (Design Standards - Public Streets), Sub-paragraph 6.21.3.1: states** "New public streets in the city limits must meet the Town of Hillsborough's Standard Specifications for Street Construction and Acceptance Procedures in the Checklist and Approval Requirements for Utility Projects." Section 2.1 of these standards are as follows:

   Right-of-Way Width: 60 feet

   Reason for need: The constraints of the site for the proposed development only allow for the dedication of a 50 foot right of way.

   Roadway Width (Face of Curb to Face of Curb): 26 feet **(No waiver required)**

   Planting Strip Width (both sides of street): 6 feet

   Reason for need: The site constraints for the site will not allow for the required planting strip width.

   Sidewalk Width (each side of street): 5 feet

   Reason for need: Site constraints for the site will only allow for a 5-foot sidewalk on one side of the street in certain areas. Overall, there will be adequate sidewalks provided for pedestrian access.

   Curb Radius at Intersections: 5 feet recommended; 10 feet maximum **(No waiver required)**

   Maintenance/Utilities Strip (both sides of street): 6 feet

   Reason for need: Site constraints for the site prohibit that standard 6-foot wide utility strip. Water and sewer utilities will be within the public right-of-way or separate easements. Other utilities will have adequate room for installation to serve the Townhome Units.

   Street Trees: Every 40 feet **(No waiver required)**

   Street Lighting: At all intersections and at least every 175 feet **(No waiver required)**

4. **Section 6 (Development Standards), Subsection 6.17 (Sidewalks and Walkways), Paragraph 6.17.3 (General Provisions), Sub-paragraph 6.17.3.2 (New Public Streets) states** "Sidewalks will be provided along both sides of all proposed and existing public streets within development."

Reason for need (Partial Waiver Request): Due to site constraints with space limitations and topography, it is not feasible to include a sidewalk along the west side of Hartland Circle from the entrance to the location of the mail kiosk. We have provided sidewalk along the east side of the street along this section and then on both sides of the street throughout the rest of the site.

5. **UDO Section 6 (Development Standards), Subsection 6.11 (Lighting), Paragraph 6.11.3 (Lighting Requirements) states** "Lighting plans shall include a layout of proposed fixture locations (including wall mounted lights, ground mounted lights, and illuminated signs), foot candle data that demonstrate conforming intensities and uniformities; and a description of the equipment (catalog cuts), glare control devices, lamps, mounting heights and means, hours of operation, and maintenance methods proposed. Illumination intensities (lighting contours) may be shown on an independent plan or integrated with other required plans."

Reason for need (Partial Waiver Request): We have provided a full site lighting plan for the streets and parking, however, we do not at this time have the lighting specifications for the building wall mounted fixtures, or the entrance monument sign. These specifications will be included with the construction drawings and sign application for the project and will comply with the required regulations per Section 6 of the UDO.

CURRENT OWNER
HENRIETTA C. AUMAN TRUST
C/O GUIDO DEMAERE, TRUSTEE
220 HUNTINGTON DR
CHAPEL HILL, NC 27514-2418

HART P. GRIFFITH-ZILL
317 US HWY 70A
HILLSBOROUGH, NC 27278

DEVELOPER
US 70 A, LLC
320 EXECUTIVE COURT
HILLSBOROUGH, NC 27278
(919) 730-5741
james.parker@summitde.net

SURVEY CONTACT
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(919) 732-6676 (FAX)
THOMAS.TELLUP@SUMMITDE.NET

ENGINEER CONTACT
SUMMIT DESIGN & ENGINEERING SERVICES
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320 EXECUTIVE COURT
HILLSBOROUGH, NC 27278
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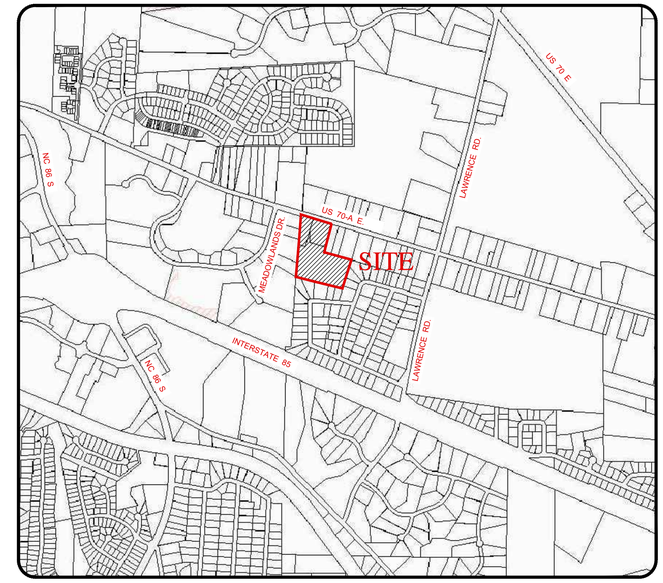
(919) 732-6676 (FAX)
TIM.SMITH@SUMMITDE.NET

PUBLIC SERVICE CONTACTS

WATER:	TOWN OF HILLSBOROUGH NATHAN CATES 105 E. CORBIN STREET HILLSBOROUGH, NC 27278 (336)516-4614
SEWER:	TOWN OF HILLSBOROUGH NATHAN CATES 105 E. CORBIN STREET HILLSBOROUGH, NC 27278 (336)516-4614
EROSION CONTROL:	ORANGE COUNTY PLANNING 131 W. MARGARET LN HILLSBOROUGH, NC 27278 KENNY OWENS (919)245-2584 kowens@orangecountync.gov NATHAN JACOBSEN (919) 245-2580 njacobsen@orangecountync.gov
ELECTRIC:	DUKE ENERGY ANTHONY PERRY 4412 HILLSBOROUGH RD DURHAM, NC 27705 (336) 708-0652
PUBLIC WORKS:	TOWN OF HILLSBOROUGH KEN HINES PUBLIC WORKS DIRECTOR 101 EAST ORANGE ST HILLSBOROUGH, NC 27278 (919)296-9601
SOLID WASTE:	WASTE INDUSTRIES 148 STONE PARK COURT DURHAM, NC 27703 (919) 596-1363
TELEPHONE:	CENTURYLINK TONY ROCCO (252)-469-7010 anthony.j.rocco@centurylink.com
GAS:	PSNC ENERGY BRIAN SMITH 2541 WHILDEN DRIVE DURHAM, NC 27713 (919) 598-7454 brian.smith@scana.com
RECYCLING:	ORANGE COUNTY SOLID WASTE MANAGEMENT - JEFF SCOUTEN ENVIRONMENTAL ENFORCEMENT SUPERVISOR 1207 EUBANKS ROAD CHAPEL HILL NC 27516 (919)968-2788
TOWN PLANNING/ ZONING:	TOWN OF HILLSBOROUGH TOM KING, AICP, CZO 101 EAST ORANGE ST HILLSBOROUGH, NC 27278 (919)296-9472
STORMWATER:	TOWN OF HILLSBOROUGH HEATHER FISHER 101 EAST ORANGE ST HILLSBOROUGH, NC 27278 (919)296-9622 heather.fisher@hillsboroughnc.gov



VICINITY MAP
SCALE: 1" = 1000'

N

PARCELS
PINS: 9874-81-6134, 9874-81-8049 & 9874-80-9603
03-E-130, DB 4724, PG 116
ZONING : R-1
10.89 ACRES

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TMTLA ASSOCIATES
5011 SOUTHPARK DRIVE, STE. 200 - DURHAM, NC 27713
p: (919) 484-8880 e: info@tmtla.com

Habitat for Humanity®

7		
6		
5		
4		
3	PER TRC #3 COMMENTS	8/11/2020 DMC
2	PER TRC #2 COMMENTS	7/20/2020 GS
1	PER TRC #1 COMMENTS	6/22/2020 DMC
REVISIONS		DATE BY

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SUMMIT DESIGN AND ENGINEERING SERVICES
DRAWING ALTERATION
IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ARCHITECT, ENGINEER, LANDSCAPE ARCHITECT, OR LICENSED PROFESSIONAL SURVEYOR, TO ALTER THIS DOCUMENT IN ANY WAY. ANY LICENSED PROFESSIONAL ALTERING THIS DOCUMENT IS REQUIRED BY LAW TO AFFIX HIS OR HER SEAL AND THE NOTATION "ALTERED" AND SUFFICIENT DESCRIPTION OF THE ALTERATIONS.

PROJECT ENGINEER/ARCHITECT
TAS (TIM.SMITH@SUMMITDE.NET)
PROJECT MANAGER
RFH (RANDY.HALL@SUMMITDE.NET)

DRAWN BY
DON CHITTY(@SUMMITDE.NET)
FIRST ISSUE DATE
05-18-2020

NOT FOR CONSTRUCTION
NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 30017 TIMOTHY A. SMITH
PRELIMINARY

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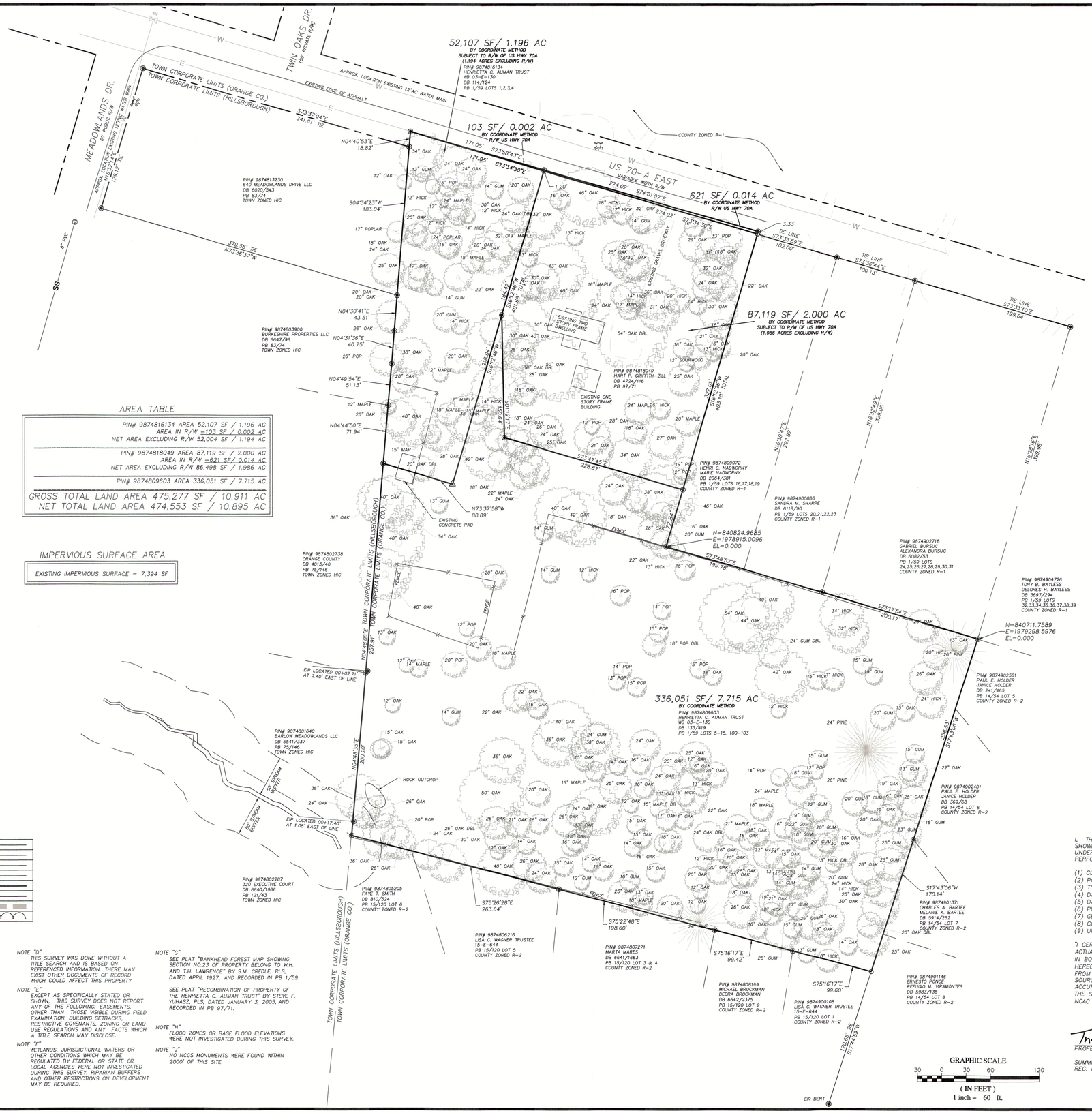
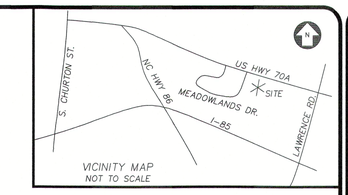
SUP - SITE DEVELOPMENT PLANS FOR
EAST VILLAGE AT MEADOWLANDS
1317 US 70-A EAST
HILLSBOROUGH, NORTH CAROLINA 27278

COVER SHEET

PROJECT NO.
20-0044
DRAWING NAME:
20-0044_CS.dwg
SHEET NO.
C-1





VICINITY MAP
NOT TO SCALE

NAD 83/11
NAVD 88

AREA TABLE

PIN# 9874816134 AREA 52,107 SF / 1.196 AC	
AREA IN R/W =103 SF / 0.002 AC	
NET AREA EXCLUDING R/W 52,004 SF / 1.194 AC	
PIN# 9874818049 AREA 87,119 SF / 2.000 AC	
AREA IN R/W =621 SF/ 0.014 AC	
NET AREA EXCLUDING R/W 86,498 SF / 1.986 AC	
PIN# 9874809603 AREA 336,051 SF / 7.715 AC	
GROSS TOTAL LAND AREA 475,277 SF / 10.911 AC	
NET TOTAL LAND AREA 474,553 SF / 10.895 AC	

IMPERVIOUS SURFACE AREA

EXISTING IMPERVIOUS SURFACE = 7,394 SF

SYMBOL LEGEND

	BENCHMARK
	IRON PIN SET
	IRON PIN FOUND
	CONIFEROUS TREE
	DECIDUOUS TREE
	BOLARD
	SIGN
SS	SANITARY CLEANOUT
S	SANITARY MANHOLE
	FLARED END SECTION
	STORM INLET
D	STORM MANHOLE
E	ELECTRIC BOX
	GUY WIRE ANCHOR
	LIGHT POLE
	YARD LIGHT
	POWER POLE
	GAS METER
	GAS VALVE
T	TELEPHONE BOX
	FIRE HYDRANT
	WATER METER
	WATER VALVE
	BACK FLOW PREVENTER
PVC	POLYVINYL CHLORIDE PIPE
RCP	REINFORCED CONCRETE PIPE
DIP	DUCTILE IRON PIPE
C&G	CURB AND GUTTER
INV	INVERT
ELEV	ELEVATION

WATER LINE	W
OVERHEAD ELECTRIC LINE	OH
SANITARY LINE	SS
GAS LINE	G
PROPERTY LINE	
RIGHT OF WAY LINE	
EXISTING STORM PIPE	
EXISTING TREE LINE	

NOTE "A"
SUBSURFACE AND ENVIRONMENTAL CONDITIONS WERE NOT EXAMINED OR CONSIDERED DURING THIS SURVEY. ALL BUILDINGS, SURFACE AND SUBSURFACE IMPROVEMENTS ON AND ADJACENT TO THE SITE ARE NOT NECESSARILY SHOWN HEREON. NO STATEMENT IS MADE CONCERNING THE EXISTENCE OF UNDERGROUND CONTAINERS WHICH MAY AFFECT THE USE OF THIS TRACT.

NOTE "B"
THE LOCATION OF UNDERGROUND UTILITIES AS SHOWN ARE BASED ON VISIBLE EVIDENCE AND DRAWINGS PROVIDED TO THE SURVEYOR. LOCATION OF UNDERGROUND UTILITIES AND STRUCTURES MAY VARY FROM LOCATIONS SHOWN HEREON, AND ADDITIONAL BURIED UTILITIES MAY EXIST. CONTACT THE APPROPRIATE UTILITY COMPANIES FOR INFORMATION REGARDING BURIED UTILITIES.

NOTE "C"
ALL DISTANCES ARE HORIZONTAL GROUND AND AREA BY COORDINATE COMPUTATION.

NOTE "D"
THIS SURVEY WAS DONE WITHOUT A TITLE SEARCH AND IS BASED ON REFERENCED INFORMATION. THERE MAY EXIST OTHER DOCUMENTS OF RECORD WHICH COULD AFFECT THIS PROPERTY

NOTE "E"
EXCEPT AS SPECIFICALLY STATED OR SHOWN, THIS SURVEY DOES NOT REPORT ANY OF THE FOLLOWING: EASEMENTS, OTHER THAN THOSE VISIBLE DURING FIELD EXAMINATION, BUILDING SETBACKS, RESTRICTIVE COVENANTS, ZONING OR LAND USE REGULATIONS AND ANY FACTS WHICH A TITLE SEARCH MAY DISCLOSE.

NOTE "F"
WETLANDS, JURISDICTIONAL WATERS OR OTHER CONDITIONS WHICH MAY BE REGULATED BY FEDERAL OR STATE OR LOCAL AGENCIES WERE NOT INVESTIGATED DURING THIS SURVEY. RIPARIAN BUFFERS AND OTHER RESTRICTIONS ON DEVELOPMENT MAY BE REQUIRED.

NOTE "G"
SEE PLAT "BANKHEAD FOREST MAP SHOWING SECTION NO.2,3 OF PROPERTY BELONG TO W.H. AND T.H. LAWRENCE" BY S.M. CREDLE, RLS, DATED APRIL 1927, AND RECORDED IN PB 1/59.

SEE PLAT "RECOMBINATION OF PROPERTY OF THE HENRIETTA C. AUMAN TRUST" BY STEVE F. YUHASZ, PLS, DATED JANUARY 3, 2005, AND RECORDED IN PB 97/71.

NOTE "H"
FLOOD ZONES OR BASE FLOOD ELEVATIONS WERE NOT INVESTIGATED DURING THIS SURVEY.

NOTE "J"
NO NGGS MONUMENTS WERE FOUND WITHIN 2000' OF THIS SITE.

I, THOMAS A. TELLUP, PLS NO. 4298, CERTIFY THAT NC GRID TIE DATA SHOWN ON THIS PLAT WAS OBTAINED FROM AN ACTUAL GPS SURVEY MADE UNDER MY SUPERVISION AND THE FOLLOWING INFORMATION WAS USED TO PERFORM THE SURVEY:

(1) CLASS OF SURVEY: "A"
(2) POSITIONAL ACCURACY: 0.07'
(3) TYPE OF GPS FIELD PROCEDURE: RTK NETWORK VRS
(4) DATES OF SURVEY: 03/06/2020
(5) DATUM/EPOCH: NAD 83/11 NAVD 88
(6) PUBLISHED/FIXED CONTROL USED: NA HELD VRS
(7) GEOID MODEL: GEOID18 (CONUS)NC
(8) COMBINED GRID FACTOR: 0.999947076
(9) UNITS: US SURVEY FEET

"I CERTIFY THAT THIS MAP WAS DRAWN UNDER MY SUPERVISION FROM AN ACTUAL SURVEY MADE UNDER MY SUPERVISION (DEED DESCRIPTION RECORDED IN BOOK/PAGE: AS NOTED HEREON OR OTHER REFERENCE SOURCE:AS NOTED HEREON); THAT THE BOUNDARIES NOT SURVEYED ARE INDICATED AS DRAWN FROM INFORMATION IN BOOK/PAGE:AS NOTED HEREON OR OTHER REFERENCE SOURCE:AS NOTED HEREON; THAT THE RATIO OF PRECISION OR POSITIONAL ACCURACY IS 1:10000+; AND THAT THIS MAP MEETS THE REQUIREMENTS OF THE STANDARDS OF PRACTICE FOR LAND SURVEYING IN NORTH CAROLINA (21 NCAC 56. 1600)."

Thomas Tellup 8/11/2020
PROFESSIONAL LAND SURVEYOR REG. NUMBER L-4298

SUMMIT DESIGN AND ENGINEERING SERVICES, PLLC.
REG. NUMBER P-0339

NORTH CAROLINA PROFESSIONAL SEAL L-4298 LAND SURVEYOR THOMAS A. TELLUP

	DATE	BY
7		
6		
5		
4		
3	8/11/2020	RAH
2	7/29/2020	RAH
1	6/22/2020	RAH

REVISIONS

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PROJECT ENGINEER/ARCHITECT
TAS
PROJECT MANAGER
BWW

DRAWN BY
RAH
SCALE
1"=60'

CLIENT'S ADDRESS
320 EXECUTIVE CT.
HILLSBOROUGH, NC 28287

OWNER'S ADDRESS

220 HUNTING DR.
CHAPEL HILL, NC 27514

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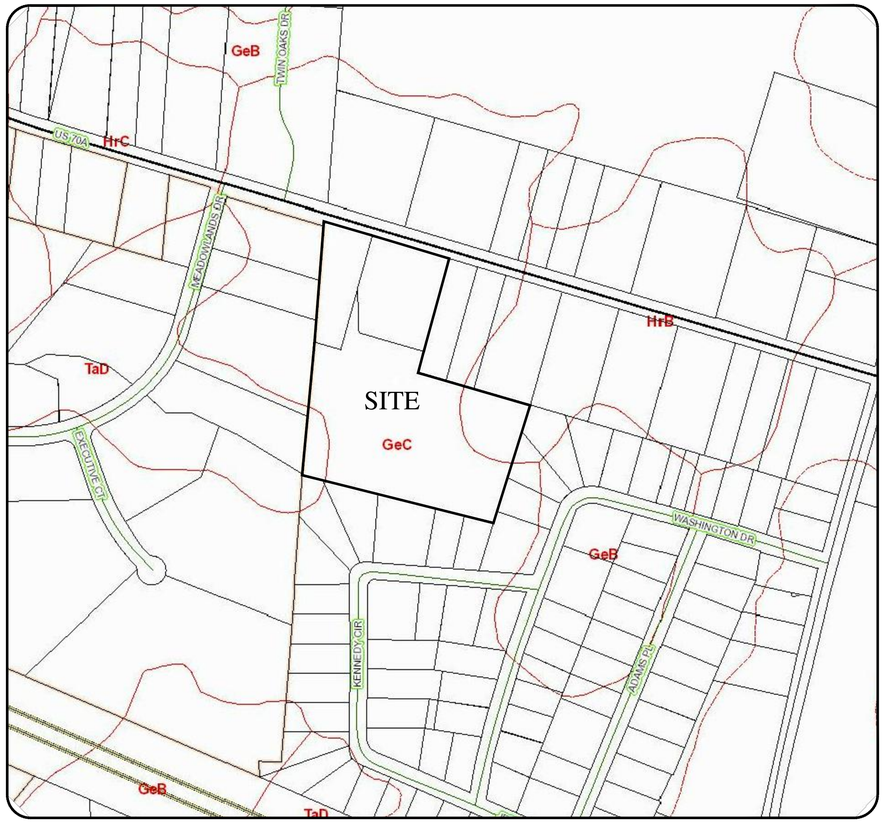
EXISTING CONDITIONS PLAN

FOR EAST VILLAGE AT MEADOWLANDS

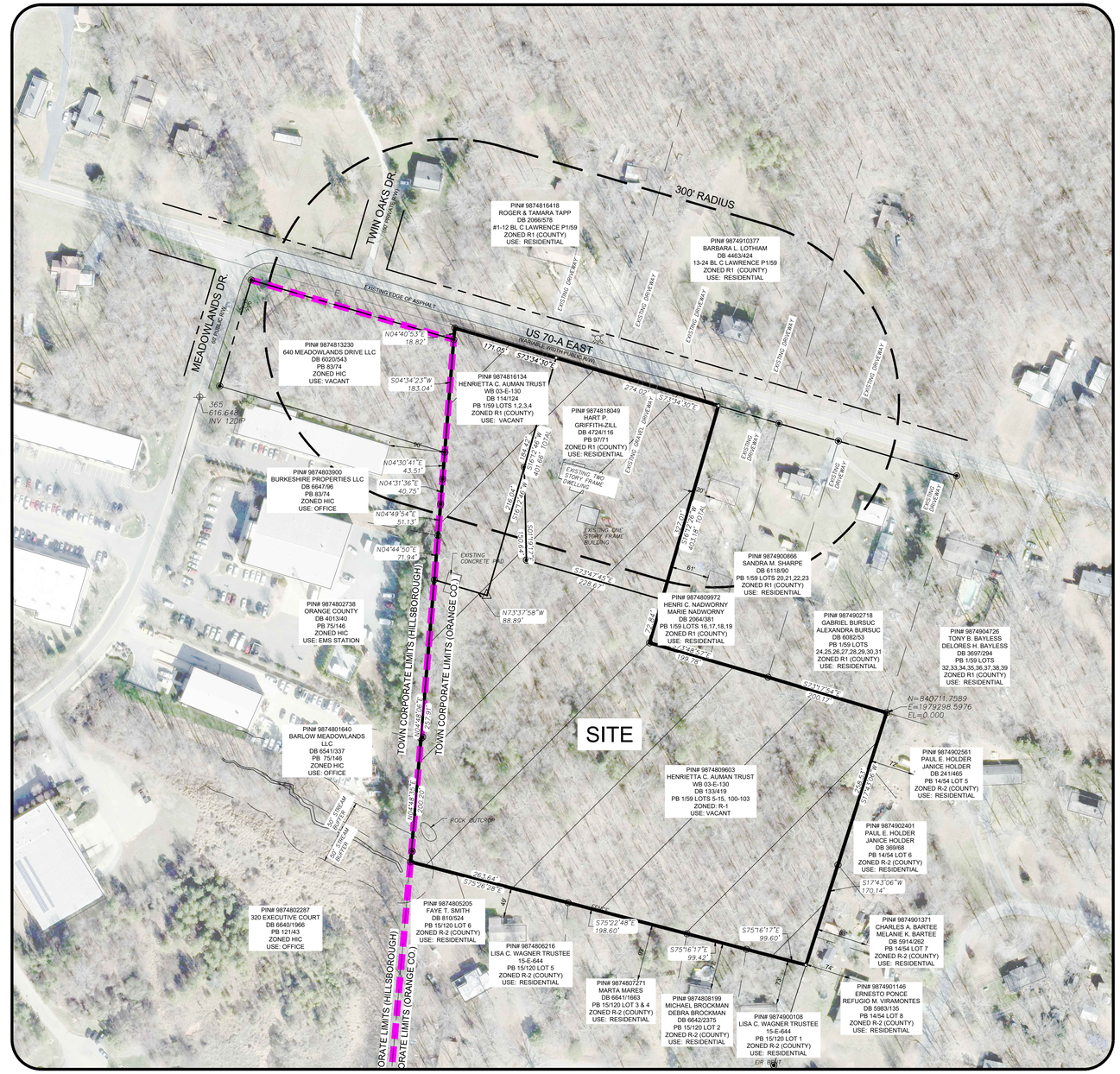
HILLSBOROUGH TWP., ORANGE CO., NORTH CAROLINA
PROPERTY AS DESCRIBED IN REFERENCE SHOWN HEREON
STANDING IN THE NAME OF
HENRIETTA CASTLEBURY AUMAN TRUST &
HART P. GRIFFITH-ZILL

PROJECT NO.
20-0044
DRAWING NO.
20-0044_BNDY
SHEET NO.
C-2



SOILS MAP

NTS



AREA MAP

SCALE: 1" = 100'

GRAPHIC SCALE

50 0 25 50 50 200

(IN FEET)
1 inch = 100 ft.

7				
6				
5				
4				
3	PER TRC #3 COMMENTS	8/11/2020	DMC	
2	PER TRC #2 COMMENTS	7/20/2020	GS	
1	PER TRC #1 COMMENTS	6/22/2020	DMC	
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RFH (RANDY.HALL@SUMMITDE.NET)

DRAWN BY
DON CHITTY(@SUMMITDE.NET)

FIRST ISSUE DATE
05-18-2020

NOT FOR CONSTRUCTION

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SUP - SITE DEVELOPMENT PLANS FOR EAST VILLAGE AT MEADOWLANDS

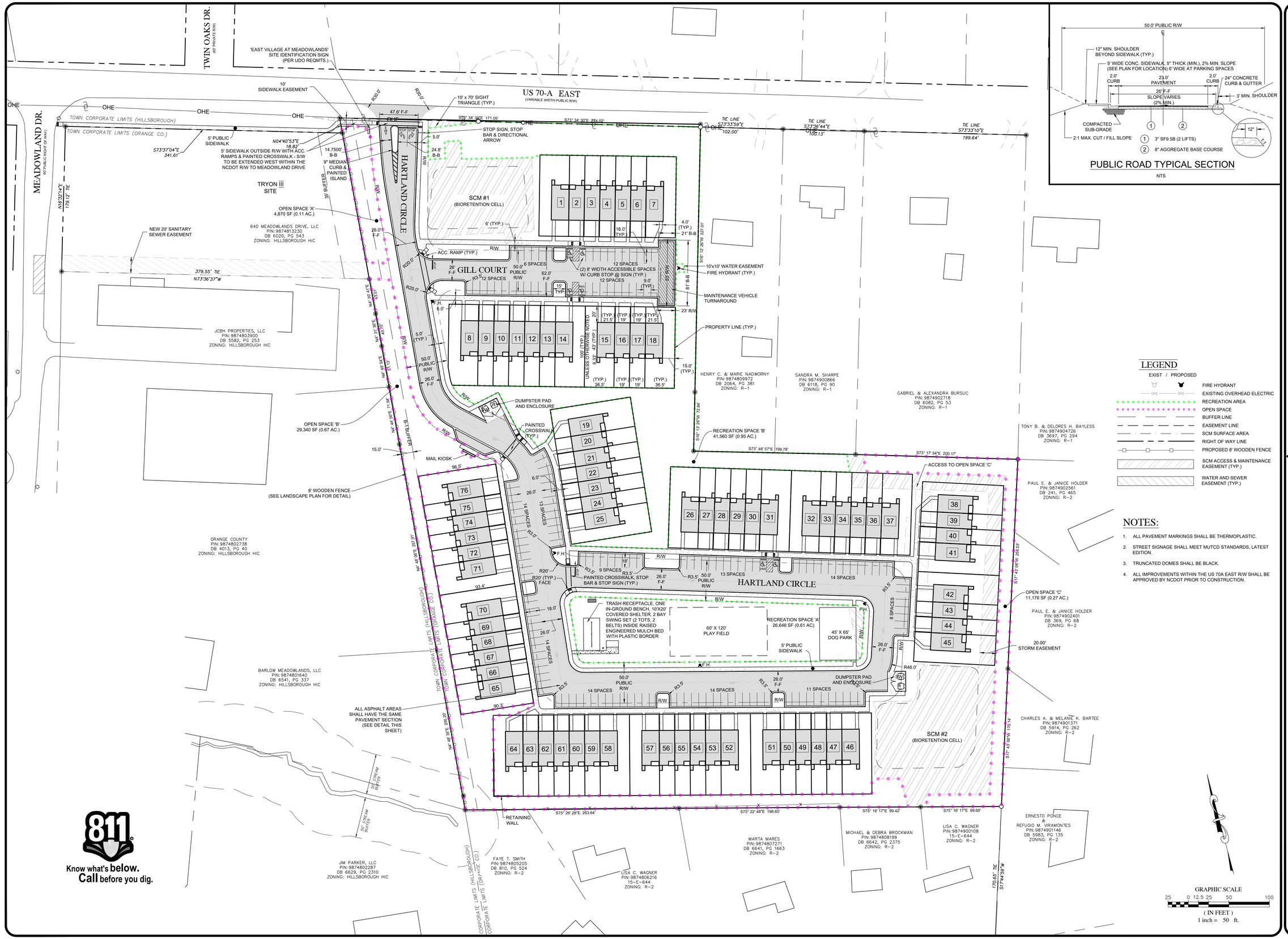
1317 US 70-A EAST
HILLSBOROUGH, NORTH CAROLINA 27278

AREA MAP & SOILS MAP

PROJECT NO.
20-0044

DRAWING NAME:
20-0044_AM.dwg

SHEET NO.
C-3



PUBLIC ROAD TYPICAL SECTION

NTS

LEGEND

EXIST / PROPOSED

- FIRE HYDRANT
- EXISTING OVERHEAD ELECTRIC
- RECREATION AREA
- OPEN SPACE
- BUFFER LINE
- EASEMENT LINE
- SCM SURFACE AREA
- RIGHT OF WAY LINE
- PROPOSED 8' WOODEN FENCE
- SCM ACCESS & MAINTENANCE EASEMENT (TYP.)
- WATER AND SEWER EASEMENT (TYP.)

NOTES:

1. ALL PAVEMENT MARKINGS SHALL BE THERMOPLASTIC.
2. STREET SIGNAGE SHALL MEET MUTCD STANDARDS, LATEST EDITION.
3. TRUNCATED DOMES SHALL BE BLACK.
4. ALL IMPROVEMENTS WITHIN THE US 70A EAST R/W SHALL BE APPROVED BY NCDOT PRIOR TO CONSTRUCTION.

Know what's below. Call before you dig.

7			
6			
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4			
3	PER TRC #3 COMMENTS	8/11/2020	DMC
2	PER TRC #2 COMMENTS	7/20/2020	GS
1	PER TRC #1 COMMENTS	6/22/2020	DMC
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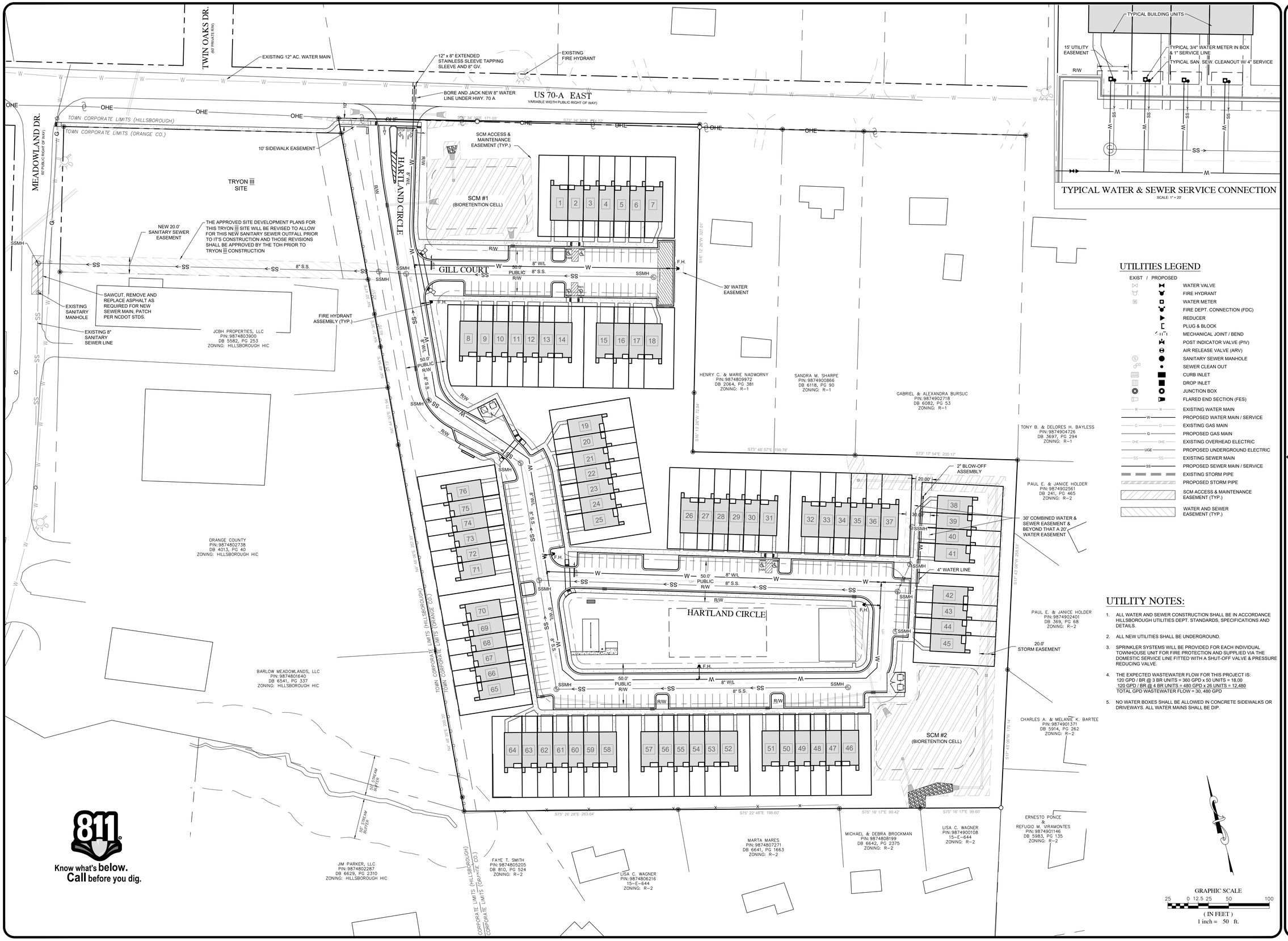
SUP - SITE DEVELOPMENT PLANS FOR EAST VILLAGE AT MEADOWLANDS

1317 US 70-A EAST
HILLSBOROUGH, NORTH CAROLINA 27278

SITE PLAN

PROJECT NO. 20-0044
DRAWING NAME: 20-0044_S.dwg
SHEET NO. C-4



UTILITIES LEGEND

EXIST / PROPOSED

- WATER VALVE
- FIRE HYDRANT
- WATER METER
- FIRE DEPT. CONNECTION (FDC)
- REDUCER
- PLUG & BLOCK
- MECHANICAL JOINT / BEND
- POST INDICATOR VALVE (PIV)
- AIR RELEASE VALVE (ARV)
- SANITARY SEWER MANHOLE
- SEWER CLEAN OUT
- CURB INLET
- DROP INLET
- JUNCTION BOX
- FLARED END SECTION (FES)
- EXISTING WATER MAIN
- PROPOSED WATER MAIN / SERVICE
- EXISTING GAS MAIN
- PROPOSED GAS MAIN
- EXISTING OVERHEAD ELECTRIC
- PROPOSED UNDERGROUND ELECTRIC
- EXISTING SEWER MAIN
- PROPOSED SEWER MAIN / SERVICE
- EXISTING STORM PIPE
- PROPOSED STORM PIPE
- SCM ACCESS & MAINTENANCE EASEMENT (TYP.)
- WATER AND SEWER EASEMENT (TYP.)

UTILITY NOTES:

1. ALL WATER AND SEWER CONSTRUCTION SHALL BE IN ACCORDANCE HILLSBOROUGH UTILITIES DEPT. STANDARDS, SPECIFICATIONS AND DETAILS.
2. ALL NEW UTILITIES SHALL BE UNDERGROUND.
3. SPRINKLER SYSTEMS WILL BE PROVIDED FOR EACH INDIVIDUAL TOWNHOUSE UNIT FOR FIRE PROTECTION AND SUPPLIED VIA THE DOMESTIC SERVICE LINE FITTED WITH A SHUT-OFF VALVE & PRESSURE REDUCING VALVE.
4. THE EXPECTED WASTEWATER FLOW FOR THIS PROJECT IS:
   120 GPD / BR @ 3 BR UNITS = 360 GPD x 50 UNITS = 18,00
   120 GPD / BR @ 4 BR UNITS = 480 GPD x 26 UNITS = 12,480
   TOTAL GPD WASTEWATER FLOW = 30, 480 GPD
5. NO WATER BOXES SHALL BE ALLOWED IN CONCRETE SIDEWALKS OR DRIVEWAYS. ALL WATER MAINS SHALL BE DIP.

7						
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4				8/11/2020	DMC	
3	PER TRC	#3 COMMENTS		7/20/2020	GS	
2	PER TRC	#2 COMMENTS		6/22/2020	DMC	
1	PER TRC	#1 COMMENTS				
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SUP - SITE DEVELOPMENT PLANS FOR
EAST VILLAGE AT MEADOWLANDS
1317 US 70-A EAST
HILLSBOROUGH, NORTH CAROLINA 27278

UTILITY PLAN

PROJECT NO.
20-0044
DRAWING NAME:
20-0044_S.dwg
SHEET NO.
C-5

GRADING & STORM LEGEND:

EXIST / PROPOSED

- CURB INLET (CI)
- DROP INLET (DI)
- JUNCTION BOX (JB)
- FLARED END SECTION (FES)
- EXISTING STORM PIPE
- PROPOSED STORM PIPE
- LIMITS OF DISTURBANCE
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- SCM ACCESS & MAINTENANCE EASEMENT (TYP.)
- WATER AND SEWER EASEMENT (TYP.)

NOTES:

1. ALL PERMANENT SLOPES, INCLUDING SCM SIDE SLOPES, WILL BE CONSTRUCTED AT NO STEEPER THAN 3:1.
2. ALL OFF SITE DRAINAGE WILL BE BYPASSED VIA STORM SEWER AND BYPASS SWALES. THESE DEVICES ARE INTENDED STRICTLY FOR DIVERSION OF OFF SITE RUNOFF ONLY AND WILL NOT SERVE AS ATTENUATION. RUNOFF FROM THE OVERALL DRAINAGE AREA WILL BE REDUCED FROM PRE-DEVELOPMENT CONDITIONS BY ATTENUATION IN SCM 2.
3. SEE SITE PLAN FOR STORM DRAINAGE EASEMENT LOCATIONS.

Slopes Table

Number	Minimum Slope	Maximum Slope	Color	Area	% Disturbed
1	15.00%	24.99%		24401.81 SF	86.34%
2	25.00%	100.00%		4285.00 SF	56.57%

*TOTAL AREA BEING GRADED WITHIN SITE: 433,882 SF

GRAPHIC SCALE
25 0 12.5 25 50 100
(IN FEET)
1 inch = 50 ft.

811 Know what's below. Call before you dig.

7			
6			
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4			
3	PER TRC #3 COMMENTS	8/11/2020	DMC
2	PER TRC #2 COMMENTS	7/20/2020	GS
1	PER TRC #1 COMMENTS	6/22/2020	DMC
	REVISIONS	DATE	BY

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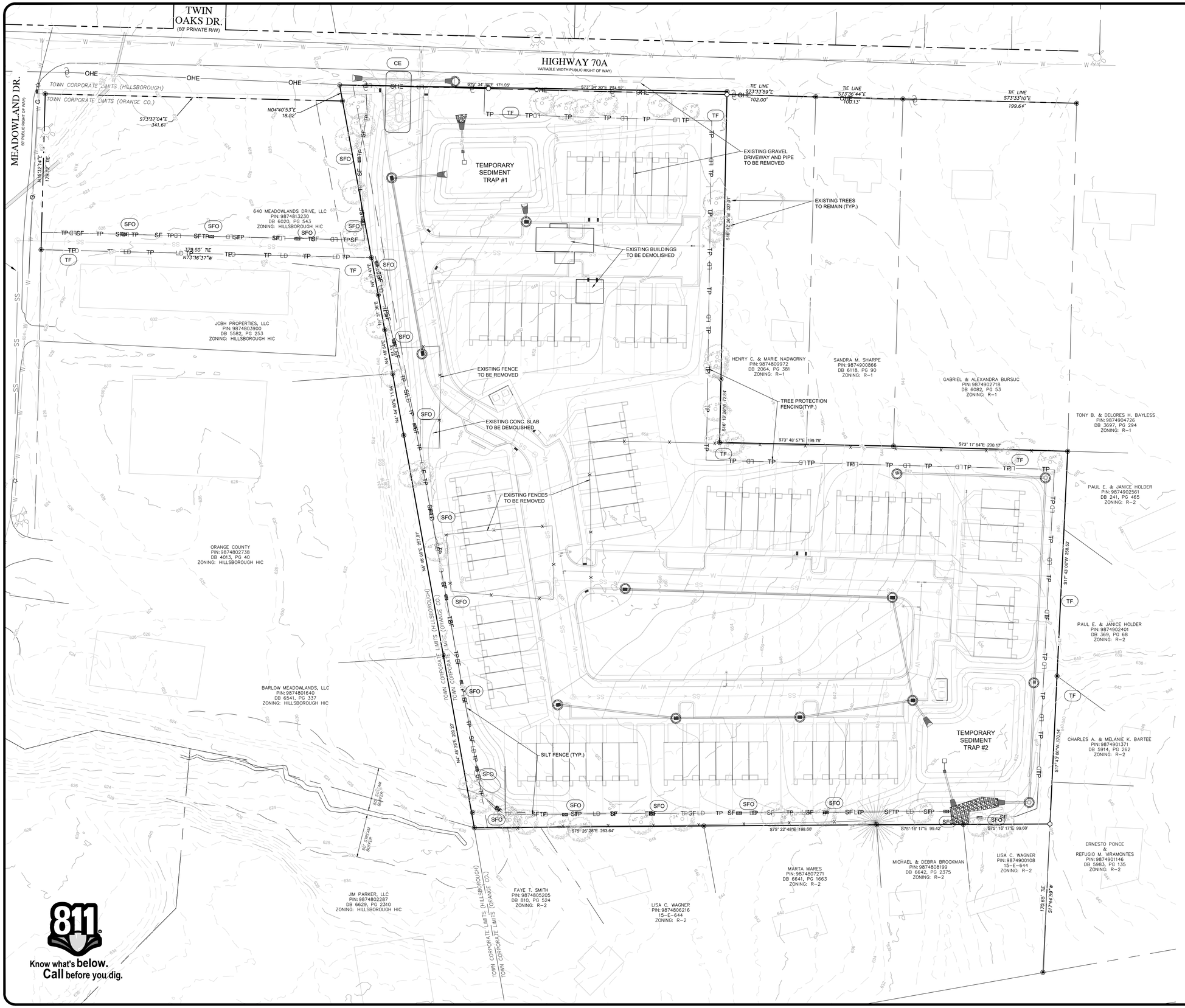
SUP - SITE DEVELOPMENT PLANS FOR
EAST VILLAGE AT MEADOWLANDS
1317 US 70-A EAST
HILLSBOROUGH, NORTH CAROLINA 27278

GRADING & STORM DRAINAGE PLAN

PROJECT NO.
20-0044
DRAWING NAME:
20-0044_G.dwg
SHEET NO.
C-6



EROSION CONTROL LEGEND

EXIST / PROPOSED

- CURB INLET
- DROP INLET
- JUNCTION BOX
- FLARED END SECTION (FES)
- IP — CATCH BASIN INLET PROTECTION
- IP — ROCK PIPE INLET PROTECTION
- SFO — SILT FENCE OUTLET
- TCD — TEMPORARY CHECK DAM
- SW — STRAW WATTLES
- CE — CONSTRUCTION ENTRANCE / EXIT
- EXISTING STORM PIPE
- PROPOSED STORM PIPE
- LD — LIMITS OF DISTURBANCE
- SF — SILT FENCE
- TF — TREE PROTECTION FENCING
- DIVERSION DITCH
- 100 — EXISTING MAJOR CONTOUR
- 99 — EXISTING MINOR CONTOUR
- 100 — PROPOSED MAJOR CONTOUR
- 99 — PROPOSED MINOR CONTOUR

IMPERVIOUS SURFACES

EXISTING IMPERVIOUS:	
BUILDING	3,062 SF
GRAVEL DRIVE	3,610 SF
CONC. PAD	722 SF
TOTAL EXISTING:	7,394 SF
AREAS TO BE DEMOLISHED:	7,394 SF
PROPOSED BUILDING:	66,978 SF
PROPOSED PAVEMENT:	86,552 SF
PROPOSED SIDEWALKS:	27,288 SF
TOTAL NEW IMPERVIOUS:	180,818 SF
AREA TO BE DEMOLISHED:	-7,394 SF
NET TOTAL IMPERVIOUS:	173,424 SF (36.5%)

NOTE:

1. ALL PERMANENT SLOPES, INCLUDING SCM SIDE SLOPES, WILL BE CONSTRUCTED AT NO STEEPER THAN 3:1'
2. ALL OFF SITE DRAINAGE RUN-ON WILL BE BYPASSED THROUGH THE USE OF DITCHES OR STORM SEWER INFRASTRUCTURE
3. THE EXISTING STRUCTURES ON THE SITE WILL BE DEMOLISHED AND PURSUANT TO ORANGE COUNTY'S REGULATED RECYCLABLE MATERIALS ORDINANCE (RRMO) A DECONSTRUCTION ASSESSMENT WILL BE REQUIRED TO BE CONDUCTED BY SOLID WASTE STAFF PRIOR TO THE ISSUANCE OF A DEMOLITION PERMIT.
4. A LAND DISTURBANCE PERMIT SHALL BE APPROVED BY ORANGE COUNTY PRIOR TO BEGINNING ANY CONSTRUCTION.
5. ALL EXISTING TREES WITHIN THE TREE PROTECTION FENCE AND SILT FENCE SHOWN WILL BE REMOVED.
6. SIGNAGE USED FOR TREE PROTECTION FENCING SHALL BE APPLIED TO SILT FENCE WHERE NO TREE PROTECTION FENCE IS INSTALLED.

TOTAL DISTURBED AREA = 433,882 SF (9.96 AC)

7			
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4	8/11/2020	DMC	
3	PER TRC #3 COMMENTS	7/20/2020	GS
2	PER TRC #2 COMMENTS	6/22/2020	DMC
1	PER TRC #1 COMMENTS		
REVISIONS		DATE	BY

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FIRST ISSUE DATE
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SUP - SITE DEVELOPMENT PLANS FOR EAST VILLAGE AT MEADOWLANDS

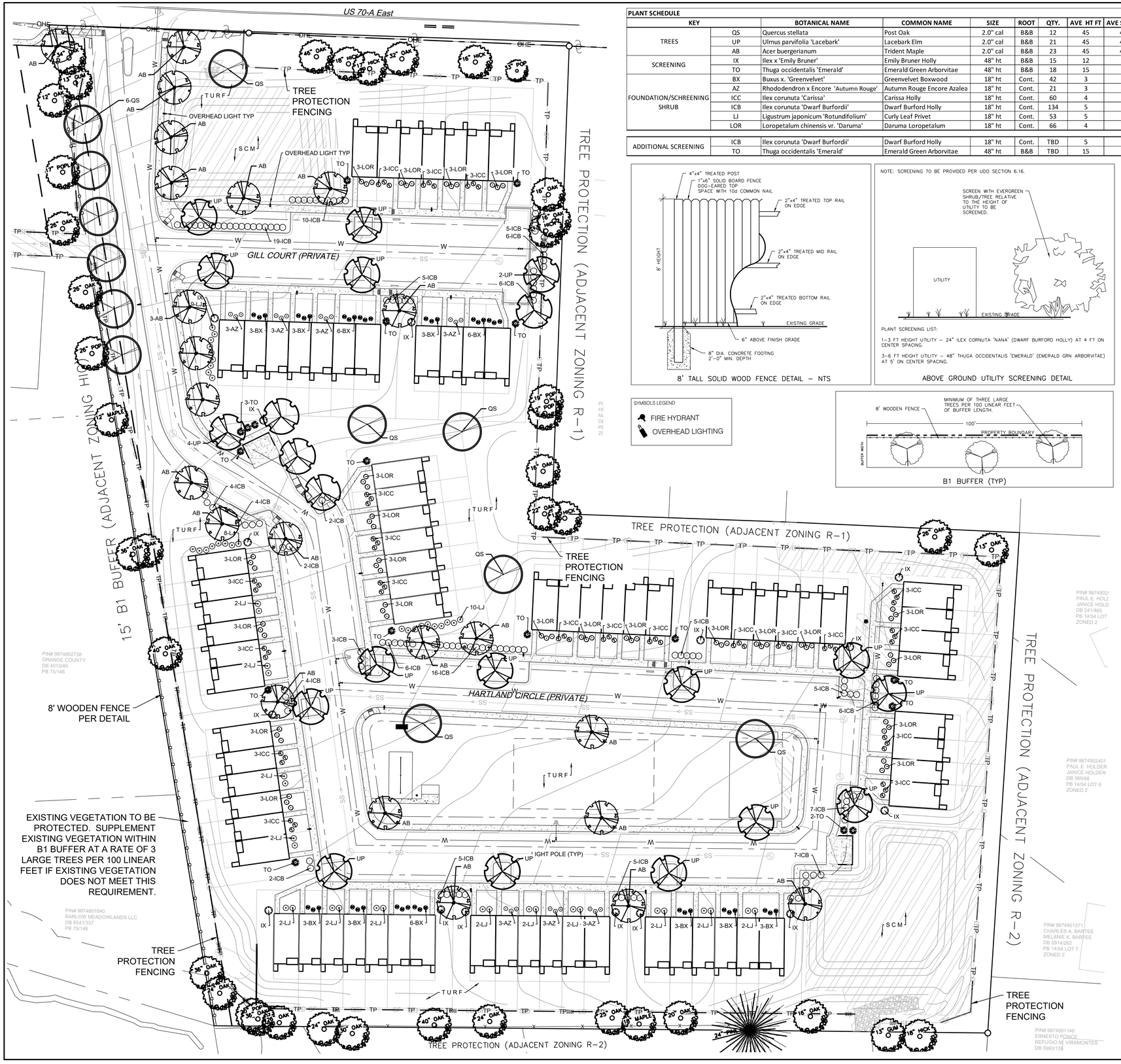
1317 US 70-A EAST
HILLSBOROUGH, NORTH CAROLINA 27278

EROSION CONTROL PLAN

PROJECT NO.
20-0044

DRAWING NAME:
20-0044_EC.dwg

SHEET NO.
C-7



PLANT SCHEDULE								
KEY		BOTANICAL NAME	COMMON NAME	SIZE	ROOT	QTY.	AVE HT FT	AVE SPD FT
TREES	QS	Quercus stellata	Post Oak	2.0" cal	B&B	12	45	40
	UP	Ulmus parvifolia 'Lacebark'	Lacebark Elm	2.0" cal	B&B	21	45	40
	AB	Acer buergerianum	Trident Maple	2.0" cal	B&B	23	45	40
SCREENING	IX	Ilex x 'Emily Bruner'	Emily Bruner Holly	48" ht	B&B	15	12	5
	TO	Thuga occidentalis 'Emerald'	Emerald Green Arborvitae	48" ht	B&B	18	15	5
FOUNDATION/SCHREENING SHRUB	BX	Buxus x. 'Greenvelvet'	Greenvelvet Boxwood	18" ht	Cont.	42	3	4
	AZ	Rhododendron x Encore 'Autumn Rouge'	Autumn Rouge Encore Azalea	18" ht	Cont.	21	3	3
	ICC	Ilex corunuta 'Carissa'	Carissa Holly	18" ht	Cont.	60	4	4
	ICB	Ilex corunuta 'Dwarf Burfordii'	Dwarf Burford Holly	18" ht	Cont.	134	5	5
	LJ	Ligustrum japonicum 'Rotundifolium'	Curly Leaf Privet	18" ht	Cont.	53	5	5
	LOR	Loropetalum chinensis vr. 'Daruma'	Daruma Loropetalum	18" ht	Cont.	66	4	4
ADDITIONAL SCREENING	ICB	Ilex corunuta 'Dwarf Burfordii'	Dwarf Burford Holly	18" ht	Cont.	TBD	5	5
	TO	Thuga occidentalis 'Emerald'	Emerald Green Arborvitae	48" ht	B&B	TBD	15	5

8' TALL SOLID WOOD FENCE DETAIL – NTS

NOTE: SCREENING TO BE PROVIDED PER UDO SECTION 6.16.

PLANT SCREENING LIST:

1- 3 FT HEIGHT UTILITY – 24" ILEX CORNUTA 'NANA' (DWARF BURFORD HOLLY) AT 4 FT ON CENTER SPACING.

3-6 FT HEIGHT UTILITY – 48" THUGA OCCIDENTALIS 'EMERALD' (EMERALD GRN ARBORVITAE) AT 5' ON CENTER SPACING.

ABOVE GROUND UTILITY SCREENING DETAIL

SYMBOLS LEGEND

FIRE HYDRANT

OVERHEAD LIGHTING

B1 BUFFER (TYP)

PARKING LANDSCAPE REQUIREMENTS

ONE SHADE TREE REQUIRED PER SEVEN REQUIRED PARKING SPACES
TREES REQUIRED - 152 REQUIRED SPACES / 7 = 22 PROVIDED = 22

5' PLANTING AREA BETWEEN PARKING AND BUILDING FACE:
PROVIDED AT THE BUILDING FRONT AND ALONG DRIVE LANE.

MIN 300 SF LANDSCAPE ISLAND CONTAINING A SHADE TREE - A WAIVER IS REQUESTED DUE TO SOME ISLANDS ARE SLIGHTLY UNDERSIZED.

BUFFER REQUIREMENTS

RSU ADJACENT TO R-1 and R-2 ZONING HAS NO BUFFER REQUIREMENT.

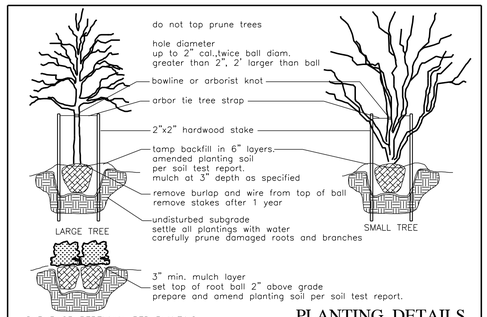
RSU ADJACENT TO HIC ZONING - 15' B-1 AT 3 LARGE SHADE TREES PER 100' REQUIRED. BUFFER PROVED BY EXISTING VEGETATION TO THE GREATEST EXTENT POSSIBLE, SUPPLEMENT WITH SHADE TREE IF REQUIRED.

SCREEN REQUIREMENTS

EVERGREEN SCREEN - PROVIDED AT DUMPSTER, PARKING LOT AND PER TYPICAL DETAIL FOR ABOVE GROUND UTILITIES.

SHADE TREE REQUIREMENTS

SHADE TREES PER MIN 40' ON CENTER - PROVIDED WHERE NOT IN CONFLICT WITH OVERHEAD LIGHTING AND UTILITIES.



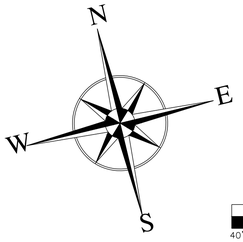
PLANTING DETAILS

GENERAL PLANTING NOTES

1. VERIFICATION OF TOTAL QUANITIES AS SHOWN SHALL BE THE RESPONSIBILITY OF THE PLANTING CONTRACTOR.
2. ALL TREES, SHRUBS, AND BEDDING PLANTS SHALL CONFORM TO THE ACCEPTED STANDARDS ESTABLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMEN.
3. ALL SAUCERS SHALL BE SOAKED WITH WATER AND MULCHED IMMEDIATELY FOLLOWING PLANTING.
4. SET TOP OF TREE ROOT BALL 4" ABOVE GRADE, SHRUBS 2" ABOVE GRADE.
5. PLANT MATERIAL SHALL CARRY A ONE YEAR WARRANTY AND REPLACEMENT GUARANTEE.
6. AMEND PLANTING SOIL WITH FERTILIZE AND/OR LIME PER SOIL TEST REPORT AT THE RECOMMENDED MANUFACTURERS APPLICATION RATE.
7. GUYING AND STAKING, IF NECESSARY, SHALL BE REMOVED AFTER ONE GROWING SEASON.
8. ALL ROOT BALLS REMOVED FROM CONTAINERS SHALL BE SCARIFIED PRIOR TO BACKFILLING.
9. ALL TREES HAVE BEEN LOCATED WITH RESPECT TO KNOWN OR EXISTING FACILITIES OR STRUCTURES, COORDINATE FIELD ADJUSTMENT WITH PROJECT OWNER OR AGENT.
10. ALL PLANT BEDS AND PLANT MATERIAL SHALL BE MAINTAINED IN GOOD HEALTH, AND ANY DEAD, UNHEALTHY OR MISSING PLANTS SHALL BE REPLACED WITH LOCALLY ADAPTED VEGETATION WHICH CONFORMS TO THE INITIAL PLANTING STANDARDS OF THE LANDSCAPE ORDINANCE.
11. REPORT ANY DESCREPANCIES TO THE PROJECT OWNER OR AGENT.
12. SUBSTITUTIONS OR ALTERATIONS SHALL NOT BE MADE WITHOUT PRIOR WRITTEN NOTIFICATION BY THE OWNER OR AGENT.
13. APPLY 3" OF DOUBLE SHREDDED HARDWOOD MULCH TO ALL PLANTING AREAS.
14. ADD COMPOST TO PLANTING SOIL TO ACHIEVE 5% ORGANIC CONTENT.
15. ALL MULCH BEDS ARE TO HAVE A SPADE-CUT EDGED WHEN ADJACENT TO TURF AREAS.

LANDSCAPE NOTES

1. All landscaping to be installed and maintained in accordance with the Town of Hillsborough Unified Development Ordinance and the latest edition of nursery standard by the American Nursery and Landscape Association (ANLA).
2. Call utility locator service prior to any construction on this site. Contractor shall be responsible for confirmation of marked utilities within the area of work.
3. Do not change the design without approval from the Owner and permit issuing Authority.
4. All landscape areas not specified shall be finished as either a mulched landscape bed or as turf.
5. All grass turf areas shall be permanently seeded with Rebel IV or Lesco tall turf fescue and established per sediment and erosion control requirements.
6. No trees shall be located within utility easements.
7. Landscape contractor shall verify plant quantities. If discrepancy exists, use quantity as shown on the plan.



811 Know what's below. Call before you dig.

40' 20' 0 40' 80'
SCALE: 1" = 40'

TMTLA ASSOCIATES
5011 SOUTHPARK DRIVE, STE. 200 - DURHAM, NC 27713
p: (919) 484-8880 e:info@tmtla.com

NORTH CAROLINA REGISTERED LANDSCAPE ARCHITECT No. C-551 PORTLAND DESIGN PLLC DBA TMTLA ASSOCIATES

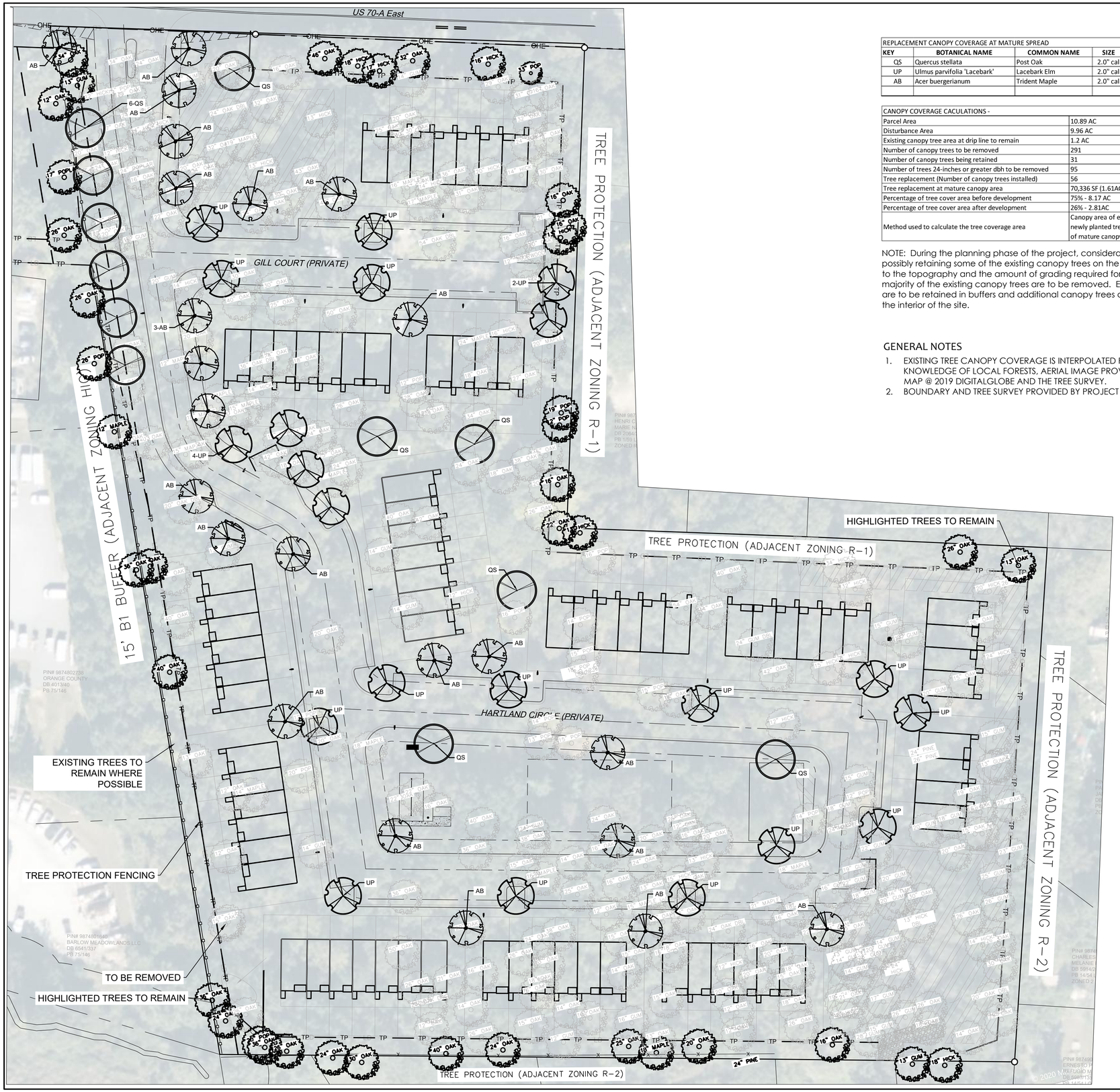
NORTH CAROLINA REGISTERED LANDSCAPE ARCHITECT 08-10-20 1994 JOHN G. BAKER

REVISIONS:

6-19-20 COMMENTS REVISION
7-20-20 COMMENTS REVISION
8-10-20 COMMENTS REVISION

Landscape Plan
EAST VILLAGE AT MEADOWLANDS
1317 HWY 70A
HILLSBOROUGH, NC 27278

SCALE: 1:40
DRAWN BY: JGB
PROJECT #
DATE: 05-18-20
SHEET
L-1
OF



REPLACEMENT CANOPY COVERAGE AT MATURE SPREAD								
KEY	BOTANICAL NAME	COMMON NAME	SIZE	QTY.	AVE HT FT	AVE SPD FT (D)	AVE SF OF COVERAGE EA	MATURE CANOPY AREA SF
QS	Quercus stellata	Post Oak	2.0" cal	12	45	40	1256	15072
UP	Ulmus parvifolia 'Lacebark'	Lacebark Elm	2.0" cal	21	45	40	1256	26376
AB	Acer buergerianum	Trident Maple	2.0" cal	23	45	40	1256	28888
								70336

CANOPY COVERAGE CACULATIONS -	
Parcel Area	10.89 AC
Disturbance Area	9.96 AC
Existing canopy tree area at drip line to remain	1.2 AC
Number of canopy trees to be removed	291
Number of canopy trees being retained	31
Number of trees 24-inches or greater dbh to be removed	95
Tree replacement (Number of canopy trees installed)	56
Tree replacement at mature canopy area	70,336 SF (1.61AC)
Percentage of tree cover area before development	75% - 8.17 AC
Percentage of tree cover area after development	26% - 2.81AC
Method used to calculate the tree coverage area	Canopy area of existing trees retained plus newly planted trees at estimated square feet of mature canopy area.

SYMBOLS LEGEND

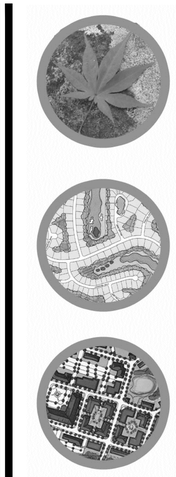
FIRE HYDRANT

OVERHEAD LIGHTING

NOTE: During the planning phase of the project, consideration was given to possibly retaining some of the existing canopy trees on the site. However, due to the topography and the amount of grading required for the project, the majority of the existing canopy trees are to be removed. Existing canopy trees are to be retained in buffers and additional canopy trees are planted within the interior of the site.

GENERAL NOTES

1. EXISTING TREE CANOPY COVERAGE IS INTERPOLATED FROM KNOWLEDGE OF LOCAL FORESTS, AERIAL IMAGE PROVIDED BY BING MAP @ 2019 DIGITALGLOBE AND THE TREE SURVEY.
2. BOUNDARY AND TREE SURVEY PROVIDED BY PROJECT ENGINEER.



TMTLA ASSOCIATES
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p: (919) 484-8880 e: info@tmtla.com

NORTH CAROLINA LANDSCAPE ARCHITECTURE ASSOCIATES No. C-551 LANDSCAPE ARCHITECTURE AND DESIGN PLLC DBA TMTLA ASSOCIATES

NORTH CAROLINA REGISTERED LANDSCAPE ARCHITECT 08-10-20 1994 JOHN G. BAKER

REVISIONS:

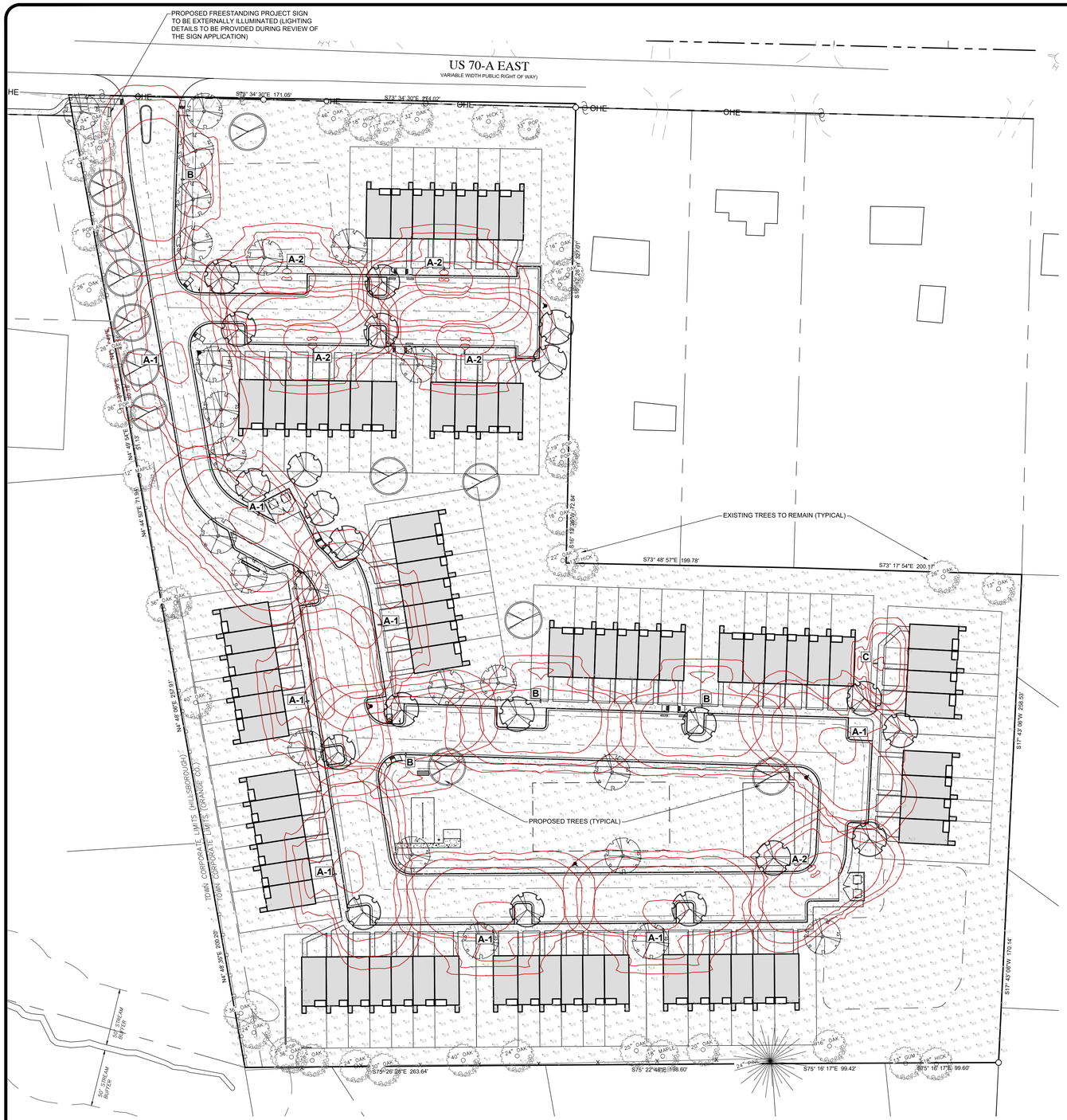
6-19-20 COMMENTS REVISION
7-20-20 COMMENTS REVISION
8-10-20 COMMENTS REVISION

TREE PROTECTION PLAN
EAST VILLAGE AT MEADOWLANDS
1317 HWY 70A
HILLSBOROUGH, NC 26278

SCALE: 1:40
DRAWN BY: JGB
PROJECT #
DATE: 05-18-20
SHEET
L-2
OF

Know what's below. Call before you dig.

SCALE: 1" = 40'



A-1 / A-2 / B

DUKE ENERGY.

Outdoor Lighting

Roadway LED

Subject to variance from manufacturer. Contact us for region-specific details.

The Roadway LED is a green solution and great fit for streets, roads, long, narrow areas and parking lots. This energy-efficient luminaire delivers the light where it is needed while increasing visibility and reducing spill light to adjoining properties. Choose low to medium light output on wood or aluminum poles (or mount on existing poles). Available with one to four fixtures per pole, depending on the fixture/pole combination selected.

LED (Light Emitting Diode)	50 | 70 | 110 | 150 | 220 | 280 watts
Mounting heights	15', 20', 25', 30', 35'
Colors	Bronze Black Gray Green
Poles	Style A Wood

For additional information, visit us at duke-energy.com/OutdoorLighting or call us toll free at 866.769.6417.

DUKE ENERGY.

Outdoor Lighting

Roadway LED

Light source: LED (white)
Wattage: 50 | 70 | 110 | 150 | 220 | 280
Light pattern: IESNA Type III (oval)
IESNA cutoff classification: Full cutoff
Color temperature: 4,000K
Warmup and restrike time: Instant on (no warmup or restrike time)

light distribution pattern

Poles available:

Type	Mounting height	Color
Aluminum	15', 20', 25', 30', 35'	Bronze Black Gray Green
Wood	25', 30', 35'	Standard

Features	Benefits
No installation cost	Frees up capital for other projects
Design services by lighting professionals included	Meets industry standards and lighting ordinances
Maintenance included	Eliminates high and unexpected repair bills
Electricity included	Less expensive than metered service
Warranty included	Worry-free
One low monthly cost on your electric bill	Convenience and savings for you
Turnkey operation	Provides hassle-free installation and service
Backed by over 40 years of experience	A name you can trust today ... and tomorrow

©2017 Duke Energy Corporation 170243 417

C

DUKE ENERGY.

Outdoor Lighting

Shoebox Pedestrian LED

The energy-efficient Shoebox Pedestrian LED combines a decorative, contemporary style with versatility and ample lighting effect that is perfect for streets, parking lots, commercial buildings and residential communities. The Shoebox "S" Pedestrian LED provides excellent color rendition along with a controlled light pattern that reduces glare and keeps the light directed only where you want it.

LED (light-emitting diode)	50 watts
Mounting heights	12', 17'
Colors	Black Dark Bronze
Pole	Colonial concrete
Applications	Neighborhoods Parks Shopping centers

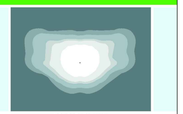
For additional information, visit us at duke-energy.com/OutdoorLighting or call us toll free at 866.769.6417.

DUKE ENERGY.

Outdoor Lighting

Shoebox Pedestrian LED

Light source: LED (white)
Wattage: 50
Lumens: 3,730
Light pattern: IESNA Type III (oval)
IESNA cutoff classification: Full cutoff
Color temperature: 4,000K



light distribution pattern

Pole available:

Name	Mounting height	Color
Colonial concrete	12', 17'	Black

Features	Benefits
Little or no installation cost	Frees up capital for other projects
Design services by lighting professionals included	Meets industry standards and lighting ordinances
Maintenance included	Eliminates high and unexpected repair bills
Electricity included	Less expensive than metered service
Warranty included	Worry-free
One low monthly cost on your electric bill	Convenience and savings for you
Turnkey operation	Provides hassle-free installation and service
Backed by over 40 years of experience	A name you can trust today ... and tomorrow

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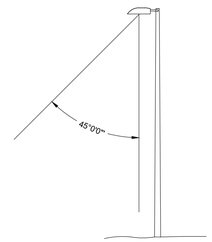
GENERAL LIGHTING NOTES:

1. DUKE ENERGY POWER WILL MAINTAIN EXTERIOR PARKING LOT LIGHTING.
2. CONTRACTOR SHALL INSTALL PARKING LOT LIGHTING FIXTURES AT 25' HEIGHT (MAX.) FOR POLE-MOUNTED FIXTURES. SEE LUMINAIRE SCHEDULE FOR ACTUAL MOUNTING HEIGHTS OF FIXTURES.
3. CONTRACTOR SHALL COORDINATE WITH PME PLANS AND DUKE ENERGY ENGINEER FOR ELECTRIC FEED SERVICE LOCATIONS SO THAT NECESSARY CONDUIT FOR LIGHT POLES CAN BE INSTALLED PRIOR TO PAVING OPERATIONS.
4. ELECTRICAL FEED WILL BE RUN UNDERGROUND, NOT OVERHEAD.
5. LIGHTS ARE TO ONLY OPERATE FROM DUSK TILL DAWN.
6. BUILDING MOUNTED LIGHTS WILL BE ADDED DURING THE CONSTRUCTION DRAWING PHASE. LIGHT FIXTURES SHOWN HEREON MAY BE ADJUSTED AS NEEDED TO COMPLY WITH THE HILLSBOROUGH UDO.

25' MAXIMUM HEIGHT FROM FINAL GRADE TO TOP OF LIGHTING FIXTURE



POLE MOUNTED PARKING LIGHT

Know what's **below.** **Call** before you dig.

LUMINAIRE SCHEDULE

Symbol	Label	Quantity	Manufacturer	Catalog Number	Description	Lamp	Number Lamps	Filename	Lumens Per Lamp	Light Loss Factor	Wattage	Height (FT)
	A-1	8	American Electric Lighting	ATB2 80BLEDE10 XXXXX R3	ATB2 SERIES 284W LED 1050MA TYPE 3 4000K CCT	LED Array	1	LED280_AEL14.ies	25049	1	284	25'
	A-2	5	American Electric Lighting	ATB2 80BLEDE10 XXXXX R3	ATB2 SERIES 284W LED 1050MA TYPE 3 4000K CCT	LED Array	1	LED280_AEL14.ies	25049	1	284	20'
	B	4	American Electric Lighting	ATB2 60BLEDE10 XXXXX R3	ATB2 SERIES 215W LED 1050MA TYPE 3 4000K CCT	LED Array	1	LED215_AEL14.ies	18561	1	215	25'
	C	1	American Electric Lighting	ATB0 20BLEDE70 XXXXX R3	ATB0 SERIES 49W LED 700MA TYPE 3 4000K CCT	LED Array	1	LED50_AEL14.ies	4808	1	49	12'

GRAPHIC SCALE
25 0 12.5 25 50 100
(IN FEET)
1 inch = 50 ft.

#	BY	DATE	REVISIONS
7			
6			
5			
4	DMC	8/11/2020	#3 COMMENTS
3	GS	7/20/2020	#2 COMMENTS
2	DMC	6/22/2020	#1 COMMENTS
1			PER TRC

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PROJECT ENGINEER/ARCHITECT
TAS (TIM.SMITH@SUMMITDE.NET)
PROJECT MANAGER
RFH (RANDY.HALL@SUMMITDE.NET)
DRAWN BY
DON CHITTY@SUMMITDE.NET)
FIRST ISSUE DATE
05-18-2020

SUMMIT
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320 Executive Court
Hillsborough, NC 27278
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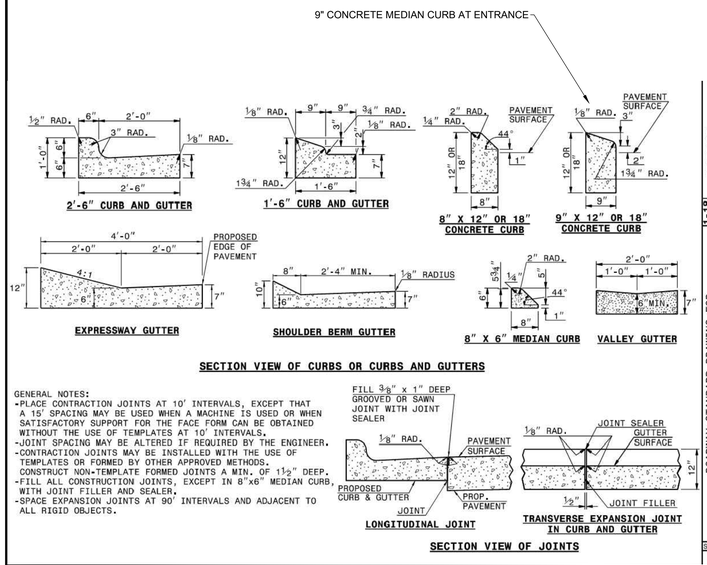
www.summitde.net

SUP - SITE DEVELOPMENT PLANS FOR EAST VILLAGE AT MEADOWLANDS

1317 US 70-A EAST
HILLSBOROUGH, NORTH CAROLINA 27278

LIGHTING PLAN

PROJECT NO.
20-0044
DRAWING NAME:
20-0044_LI.dwg
SHEET NO.
LI-1



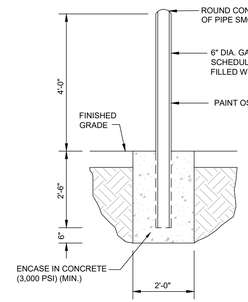
STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.

1-18

ROADWAY STANDARD DRAWING FOR **CONCRETE CURB, GUTTER AND CURB & GUTTER**

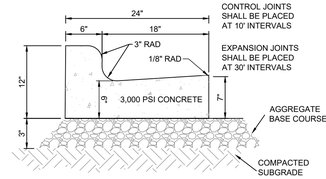
SHEET 1 OF 3

846.01



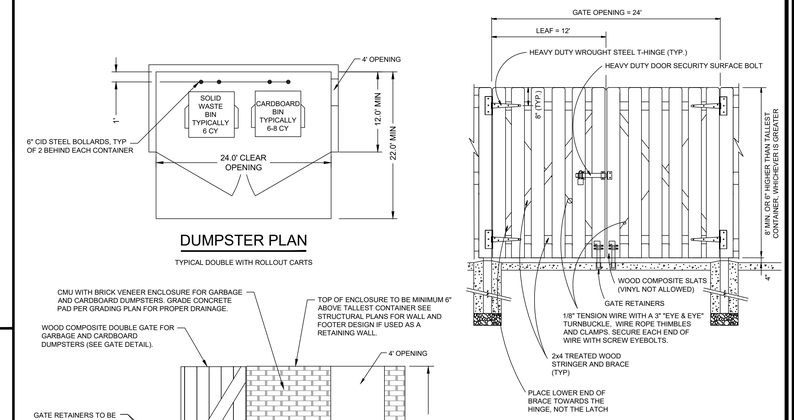
BOLLARD DETAIL

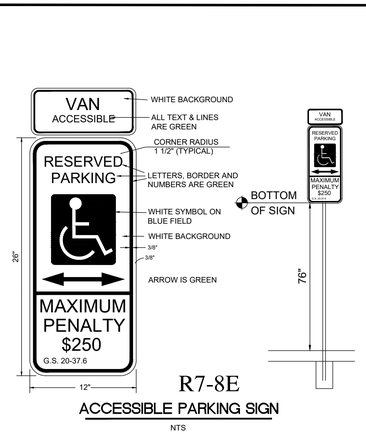
NTS

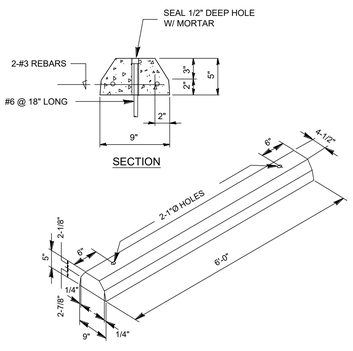


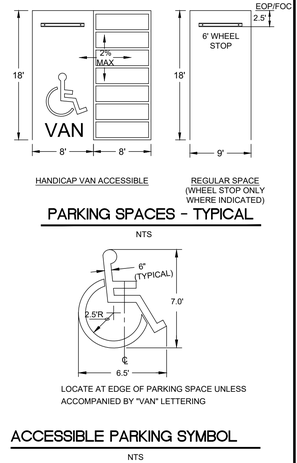
24" CURB & GUTTER

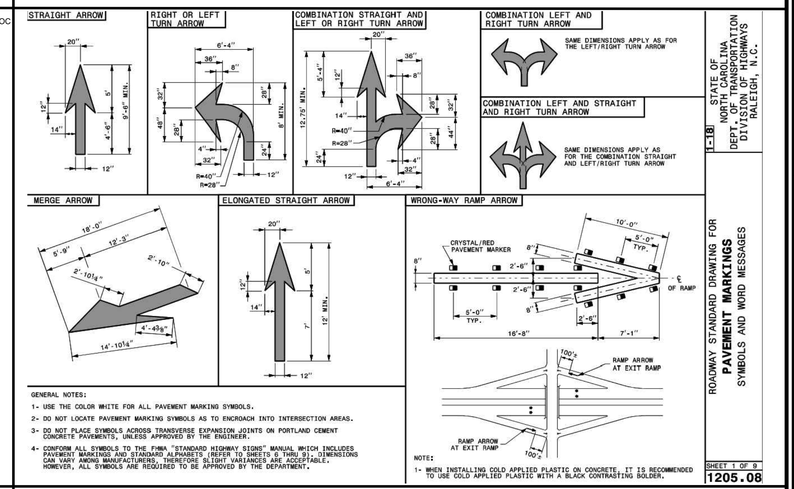
NTS











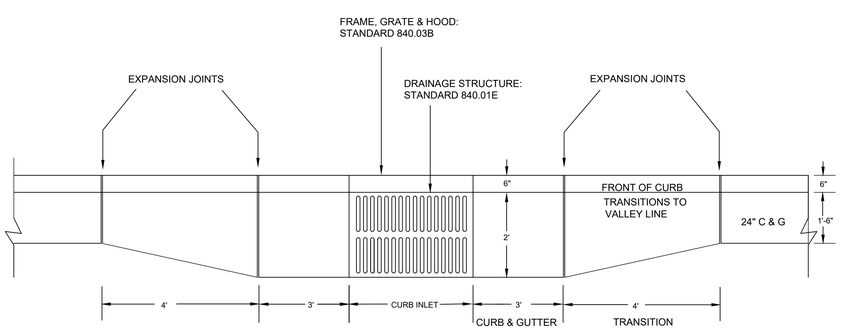
STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.

1-18

ROADWAY STANDARD DRAWING FOR **PAVEMENT MARKINGS** SYMBOLS AND WORD MESSAGES

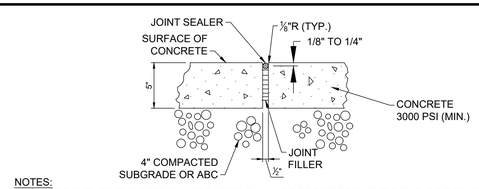
SHEET 1 OF 8

1205.08



24" C&G TO 30" C&G TRANSITION AT CURB INLET DETAIL

NTS

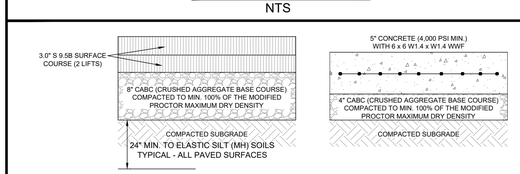


NOTES:

- A GROOVE JOINT 1" DEEP W/ 1/8" RADIUS SHALL BE REQUIRED IN THE CONC. SIDEWALK AT 5' INTERVALS. ONE 1/2" EXPANSION JOINT WILL BE REQUIRED AT 50' INTERVALS. A 1/2" EXPANSION JOINT WILL BE REQUIRED WHERE THE SIDEWALK JOINS ANY RIGID STRUCTURE.
- FINISHED SURFACE OF SIDEWALK TO BE BROOM FINISHED, PERPENDICULAR TO TRAFFIC FLOW.
- CROSS-SLOPE OF SIDEWALK SHALL NOT EXCEED 2%

SIDEWALK DETAIL

NTS

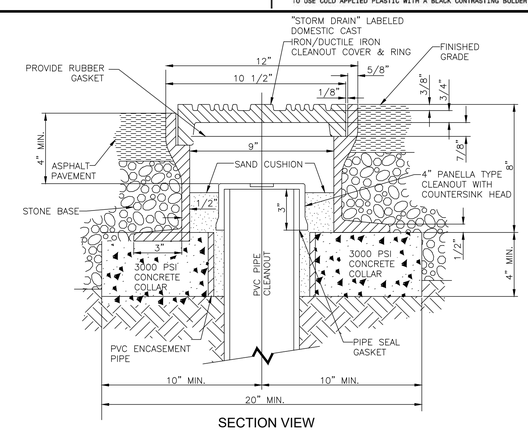


STANDARD DUTY ASPHALT LOADING AREA & DRIVE AISLES

HEAVY DUTY CONCRETE TRUCK / LOADING AREAS

ASPHALT/CONCRETE PAVING RECOMMENDATIONS

NTS



SECTION VIEW

STORM SEWER TRAFFIC BEARING CLEANOUT

NOT TO SCALE

7				
6				
5				
4			8/11/2020	DMC
3	PER TRC #3 COMMENTS		7/20/2020	GS
2	PER TRC #2 COMMENTS		6/22/2020	DMC
1	PER TRC #1 COMMENTS			BY
	REVISIONS			DATE

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PROJECT MANAGER
RFH (RANDY.HALL@SUMMITDE.NET)
DRAWN BY
DON CHITTY(@SUMMITDE.NET)
FIRST ISSUE DATE
05-18-2020

NOT FOR CONSTRUCTION
NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 30017 TIMOTHY A. SMITH

SUMMIT
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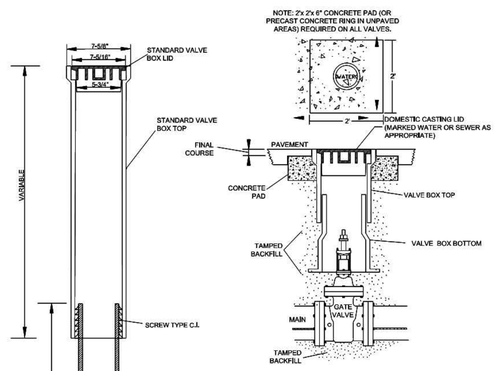
Hillsborough, NC 27278
Voice: (919) 732-3883 Fax: (919) 732-6676
www.summitde.net

SUP - SITE DEVELOPMENT PLANS FOR
EAST VILLAGE AT MEADOWLANDS
1317 US 70-A EAST
HILLSBOROUGH, NORTH CAROLINA 27278

SITE DETAILS

PROJECT NO.
20-0044
DRAWING NAME:
20-0044_D.dwg
SHEET NO.
D-1



TYPICAL TWO-PIECE VALVE BOX

NOTES:

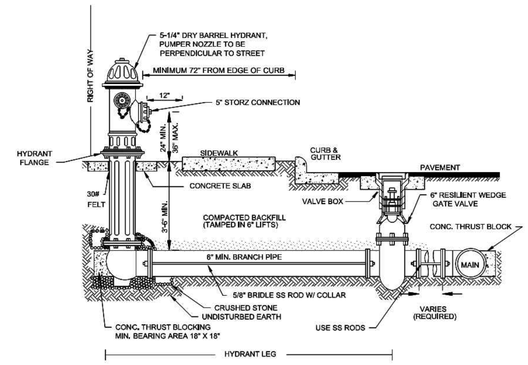
1. PREFERRED VALVE BOX IS MODEL 32563-S, A SCREW-TYPE TWO PIECE ADJUSTABLE HEIGHT BOX MANUFACTURED BY GENERAL FOUNDRIES. OTHER SIMILAR MODELS ARE AVAILABLE WITH VARIABLE HEIGHT RANGES AS NECESSARY.
2. VALVE BOX NOT TO CONTACT WATER MAIN OR SEWER FORCE MAIN
3. CAST IRON TO CONFORM TO ASTM A-48 CLASS 35B
4. TRAFFIC CASTINGS MUST BE H-20 WHEEL LOADING RATED
5. FOR ANY VALVES OVER 10' DEEP, A VALVE STEM EXTENSION MUST BE USED TO BRING TO A DEPTH OF NO MORE THAN 8'. EXTENSION MUST BE A MINIMUM OF 1' FOR MAINS 12" AND LARGER.
6. TOTAL VALVE BOX WEIGHT: MINIMUM OF 85 LBS.

rev	description	app'd	date
1	Added ref. to sewer applications	KPK	1/10/17
		KPK	

Town of Hillsborough
PO Box 429
101 East Orange Street
Hillsborough, North Carolina 27278
919.732.1270

VALVE BOX ASSEMBLY AND GATE VALVE

scale | NTS drawing no. | **WS-01**
date | JANUARY 2017
approved | Kenneth P. Keel, P.E., Town Engineer



NOTES:

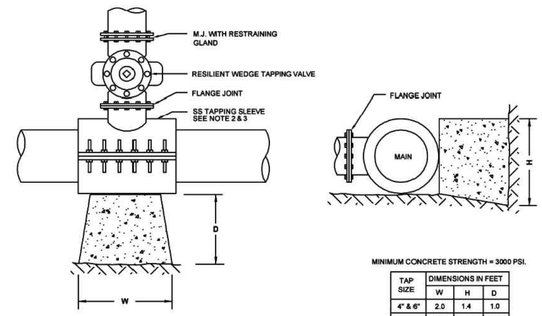
1. ALL CONCRETE SHALL BE 3000 PSI MIN
2. HYDRANTS SHALL BE MANUFACTURED BY GLOW (MEDALLION) OR AVK (SERIES 27 MOSTALGIC) AND MEET AWWA 502 STANDARDS ALL HYDRANT VALVES SHALL BE SECURED TO MAIN LINE BY S.S RODS AND BOLTS AND RESTRAINED JOINTS
3. CONCRETE PAD REQUIRED ON ALL VALVES OUTSIDE OF PAVED AREA
4. HYDRANT FLANGE SHALL BE INSTALLED BETWEEN 2" AND 6" ABOVE SURROUNDING FINAL GRADE
5. SEE TOH SPECIFICATIONS FOR HYDRANT SPACING AND COLOR
6. ALL CASTINGS SHALL BE MADE-IN-USA CONFORMING TO ASTM A48 CLASS 35B GRAY CAST IRON
7. HYDRANTS SHALL BE ORDERED FOR SPECIFIC BURY DEPTHS OF INTENDED LOCATION, WITH A MINIMUM BURY DEPTH OF 3'- 6"
8. NO MORE THAN ONE HYDRANT EXTENSION SHALL BE ALLOWED AND SHALL NOT EXCEED 1 FT. ALL EXTENSIONS MUST BE FROM THE SAME MAKE AND MODEL OF THE MANUFACTURER OF THE HYDRANT INSTALLED

rev	description	app'd	date
1	Min. curb distance & Storz conn.	KPK	1/10/17
		KPK	

Town of Hillsborough
PO Box 429
101 East Orange Street
Hillsborough, North Carolina 27278
919.732.1270

HYDRANTS

scale | NTS drawing no. | **W-01**
date | JANUARY 2017
approved | Kenneth P. Keel, P.E., Town Engineer



MINIMUM CONCRETE STRENGTH = 3000 PSI.

TAP SIZE	DIMENSIONS IN FEET		
	W	H	D
4" & 6"	2.0	1.4	1.0
8"	3.5	2.0	1.4
10"	4.0	2.5	1.8
12"	5.0	3.0	2.5

NOTES:

1. TAPS ONTO EQUAL SIZED MAINS MUST BE CUT AND SLEEVED WITH A TEE AND MAIN LINE VALVE INSTALLED
2. BOLTS AND NUTS FOR TAPPING SLEEVE SHALL BE STAINLESS STEEL
3. ALL TAPS 4" AND GREATER REQUIRE A STAINLESS STEEL TAPPING SLEEVE WITH FULL CIRCUMFERENTIAL SEAL, MECHANICAL JOINT OUTLET AND STAINLESS STEEL BOLTS
4. USE THRUST BLOCKING FOR ALL TAPS
5. DEPTH FROM GROUND SURFACE TO TOP OF BLOCKING SHALL BE GREATER THAN HEIGHT OF BLOCKING
6. THE END OF THE TAPPING SLEEVE SHALL BE NO CLOSER THAN 4 FEET TO A JOINT
7. TAPS ONTO ASBESTOS-CEMENT (AC) OR PVC MAINS REQUIRE AN EXTENDED LENGTH SLEEVE ON THE MAIN BEING TAPPED
8. A 3/4" TEST PLUG OR SLEEVE SHALL BE INSTALLED

rev	description	app'd	date
		KPK	
		KPK	

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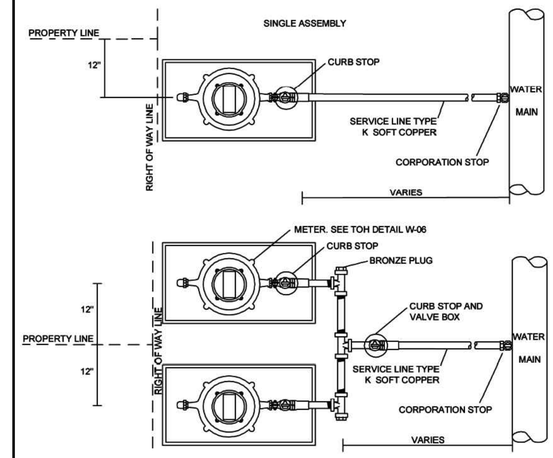
WATER MAIN TAPS

scale | NTS drawing no. | **W-05**
date | JUNE 2012
approved | Kenneth P. Keel, P.E., Town Engineer



NOTES:

1. ALL WATER METER LOCATIONS SHALL BE COORDINATED WITH THE METER READER SUPERVISOR
2. METERS WILL BE GROUPED IN PAIRS AT ADJOINING PROPERTY LINES
3. EACH SERVICE SHALL HAVE ITS OWN CURBSTOP/BALLSTOP IN ITS OWN METER BOX
4. MINIMUM SERVICE LINE IS 1"
5. FOR DUAL ASSEMBLY INSTALLATION, USE FORD BALL VALVE CURB STOP (B44-444-G) ON SERVICE PRIOR TO TEE AND STANDARD VALVE BOX

SIZE (I.D.) (SERVICE TAP SIZE FROM MAIN)	NUMBER OF METERED SERVICES ALLOWED	
	3/4"	1"
2"	9-16	5-8
1 1/2"	5-8	4
1"	4	2

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		KPK	

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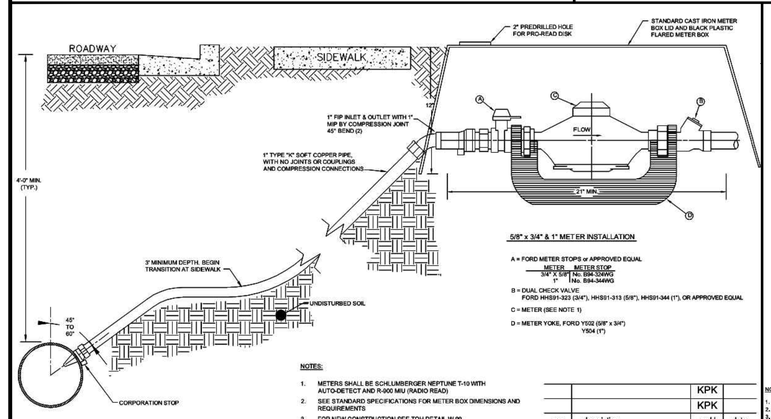
WATER METER LOCATION

scale | NTS drawing no. | **W-09**
date | JUNE 2012
approved | Kenneth P. Keel, P.E., Town Engineer



NOTES:

1. METERS SHALL BE SCHLUMBERGER NEPTUNE T-10 WITH AUTO-DETECT AND R-900 MIU (RADIO READ)
2. SEE STANDARD SPECIFICATIONS FOR METER BOX DIMENSIONS AND REQUIREMENTS
3. FOR NEW CONSTRUCTION SEE TOH DETAIL W-09

rev	description	app'd	date
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		KPK	

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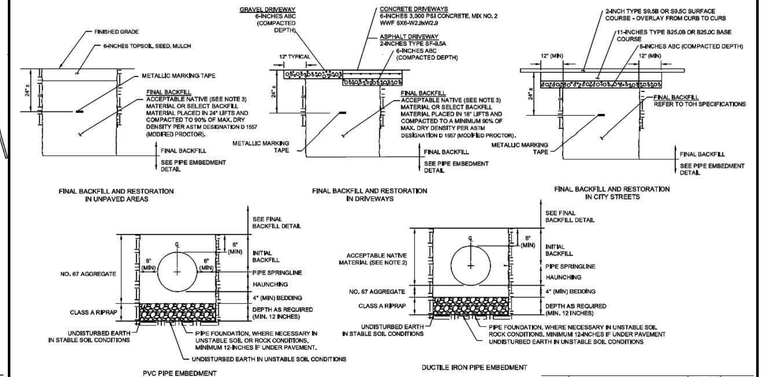
NOTE:
ALL WATER METERS SERVING INDIVIDUAL TOWNHOUSE RESIDENCES SHALL BE 3/4" x 3/4".

RESIDENTIAL WATER METER AND BOX

scale | NTS drawing no. | **W-06**
date | JUNE 2012
approved | Kenneth P. Keel, P.E., Town Engineer



NOTES:

1. REFERENCE TOH CODE SECTION 7-61-0 FOR STREET BASE & PAVEMENTS, MATERIALS AND TESTING STANDARDS (REFERENCES NCDOT STANDARDS)
2. NATIVE MATERIAL SHALL NOT CONTAIN ANY ROCKS GREATER THAN 2 INCHES AND FREE OF VEGETATION AND DEBRIS
3. NATIVE MATERIAL SHALL NOT CONTAIN ANY ROCKS GREATER THAN 6 INCHES AND FREE OF VEGETATION AND DEBRIS

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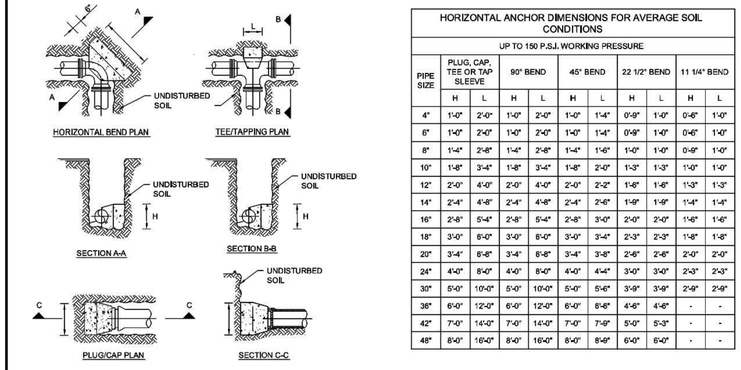
TRENCH DETAILS

scale | NTS drawing no. | **WS-03**
date | JUNE 2012
approved | Kenneth P. Keel, P.E., Town Engineer



HORIZONTAL ANCHOR DIMENSIONS FOR AVERAGE SOIL CONDITIONS										
UP TO 150 P.S.J. WORKING PRESSURE										
PIPE SIZE	PLUG, CAP, TEE OR TAP SLEEVE		90° BEND		45° BEND		22 1/2° BEND		11 1/4° BEND	
	H	L	H	L	H	L	H	L	H	L
4"	1'-0"	2'-0"	1'-0"	2'-0"	1'-0"	1'-4"	0'-9"	1'-0"	0'-6"	1'-0"
6"	1'-0"	2'-0"	1'-0"	2'-0"	1'-0"	1'-4"	0'-9"	1'-0"	0'-6"	1'-0"
8"	1'-4"	2'-8"	1'-4"	2'-8"	1'-4"	1'-6"	1'-0"	1'-0"	0'-9"	1'-0"
10"	1'-8"	3'-4"	1'-8"	3'-4"	1'-8"	2'-0"	1'-3"	1'-3"	1'-0"	1'-0"
12"	2'-0"	4'-0"	2'-0"	4'-0"	2'-0"	2'-2"	1'-6"	1'-6"	1'-3"	1'-3"
14"	2'-4"	4'-8"	2'-4"	4'-8"	2'-4"	2'-6"	1'-9"	1'-9"	1'-4"	1'-4"
16"	2'-8"	5'-4"	2'-8"	5'-4"	2'-8"	3'-0"	2'-0"	2'-0"	1'-6"	1'-6"
18"	3'-0"	6'-0"	3'-0"	6'-0"	3'-0"	3'-4"	2'-3"	2'-3"	1'-8"	1'-8"
20"	3'-4"	6'-8"	3'-4"	6'-8"	3'-4"	3'-8"	2'-6"	2'-6"	2'-0"	2'-0"
24"	4'-0"	8'-0"	4'-0"	8'-0"	4'-0"	4'-4"	3'-0"	3'-0"	2'-3"	2'-3"
30"	5'-0"	10'-0"	5'-0"	10'-0"	5'-0"	5'-6"	3'-9"	3'-9"	2'-9"	2'-9"
36"	6'-0"	12'-0"	6'-0"	12'-0"	6'-0"	6'-8"	4'-6"	4'-6"	-	-
42"	7'-0"	14'-0"	7'-0"	14'-0"	7'-0"	7'-9"	5'-0"	5'-3"	-	-
48"	8'-0"	16'-0"	8'-0"	16'-0"	8'-0"	8'-9"	6'-0"	6'-0"	-	-

NOTES:

1. SEE CHART "HORIZONTAL ANCHOR DIMENSIONS". USE WITH CHART UP TO 150 PSI WORKING PRESSURE.

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		KPK	

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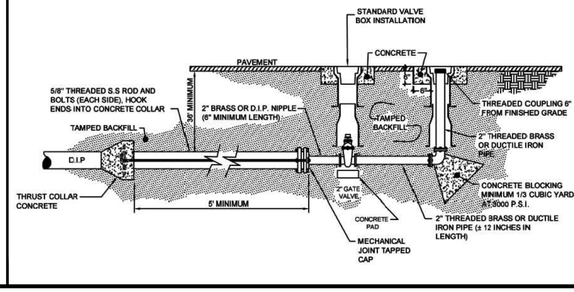
THRUST BLOCKING

scale | NTS drawing no. | **WS-02**
date | JUNE 2012
approved | Kenneth P. Keel, P.E., Town Engineer



MAIN SIZE	END PIPE SIZE
4" - 12"	2" BLOW-OFF
16" & GREATER	AS APPROVED BY TOWN ENGINEER

NOTES:

1. FOR MAINS THAT ARE TO BE EXTENDED, USE A VALVE EQUAL TO THE MAIN SIZE AS THE BLOW-OFF VALVE AND THEN REDUCE TO THE 2" STANDPIPE
2. RODS SHALL BE "HOOKED" INTO THRUST COLLAR

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BLOW-OFF DETAIL

scale | NTS drawing no. | **W-11**
date | JUNE 2012
approved | Kenneth P. Keel, P.E., Town Engineer

rev	description	app'd	date
7			
6			
5			
4			
3	PER TRC #3 COMMENTS	DMC	8/11/2020
2	PER TRC #2 COMMENTS	GS	7/20/2020
1	PER TRC #1 COMMENTS	DMC	6/22/2020
	REVISIONS	BY	DATE

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PROJECT MANAGER
RFH (RANDY.HALL@SUMMITDE.NET)
DRAWN BY
DON CHITTY(@SUMMITDE.NET)
FIRST ISSUE DATE
05-18-2020

NOT FOR CONSTRUCTION
PRELIMINARY
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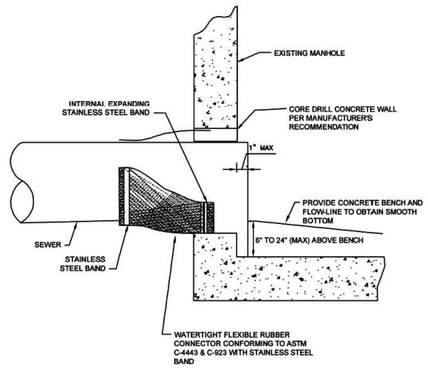
SUP - SITE DEVELOPMENT PLANS FOR
EAST VILLAGE AT MEADOWLANDS
1317 US 70-A EAST
HILLSBOROUGH, NORTH CAROLINA 27278

WATER DETAILS

PROJECT NO.
20-0044
DRAWING NAME:
20-0044_D.dwg
SHEET NO.
D-2



NOTES:

1. ALL CONNECTIONS TO EXISTING MANHOLES OR WETWELLS SHALL UTILIZE A CORING METHOD AND IN-FIELD INSTALLATION OF A RUBBER BOOT CONNECTION

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		KPK	
		KPK	

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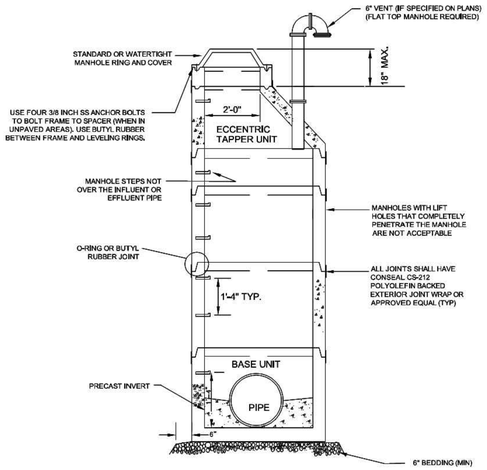
CORED CONNECTIONS SEWER WETWELL OR MANHOLE

scale | NTS drawing no. | **S-02**
date | JUNE 2012
approved | Kenneth P. Keel, P.E., Town Engineer



NOTES:

1. ALL VENT OPENINGS SHALL BE TWO FEET ABOVE HUNDRED YEAR FLOOD ELEVATION
2. VENT SHALL BE DIP WITH SS INSECT SCREEN
3. VENT SHALL BE ANGLED OR GOOSE-NECKED.
4. PIPING DEEPER THAN 16 FT SHALL REQUIRE A 5 FOOT DIAMETER MANHOLE WHILE MANHOLES 20 FOOT OR DEEPER SHALL BE 6 FOOT IN DIAMETER

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		KPK	
		KPK	

Town of Hillsborough

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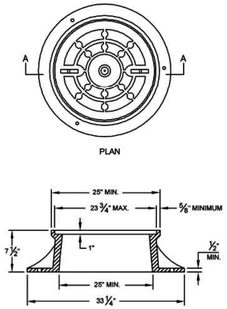
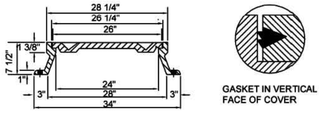
PRECAST CONCRETE MANHOLE

scale | NTS drawing no. | **S-08**
date | JUNE 2012
approved | Kenneth P. Keel, P.E., Town Engineer



SECTION A-A
STANDARD MANHOLE COVER & FRAME



SECTION A-A
WATERTIGHT MANHOLE COVER & FRAME

NOTES:

1. CASTINGS SHALL BE MADE-IN-USA CONFORMING TO ASTM A48, CLASS 35B GRAY CAST IRON
2. MANHOLE FRAME & COVER TO BE H-20 LOAD RATED IN PAVED AREAS

rev	description	app'd	date
		KPK	
		KPK	

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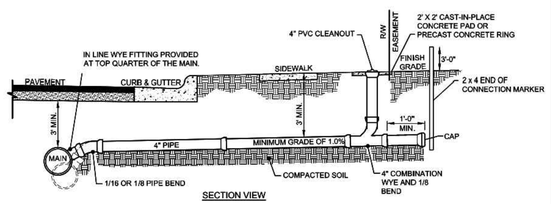
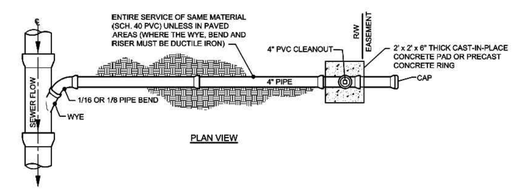
FRAMES AND COVER

scale | NTS drawing no. | **S-09**
date | JUNE 2012
approved | Kenneth P. Keel, P.E., Town Engineer



SECTION VIEW



PLAN VIEW

NOTES:

1. CLEANOUT SHALL BE PLACED AT RIGHT-OF-WAY OR EDGE OF EASEMENT
2. DO NOT INSTALL CLEANOUT INSIDE A FENCE
3. CONNECTIONS TO 15" OUTFALLS AND GREATER MUST BE MADE INTO MANHOLE

rev	description	app'd	date
1	Sch 40 service & PVC plug	KPK	1/10/17
		KPK	

Town of Hillsborough

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SEWER SERVICE AND CLEANOUT WITH COLLAR

scale | NTS drawing no. | **S-03**
date | JANUARY 2017
approved | Kenneth P. Keel, P.E., Town Engineer

	DATE	BY
7		
6		
5		
4	8/11/2020	DMC
3	7/20/2020	GS
2	6/22/2020	DMC
1		

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PROJECT MANAGER
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DRAWN BY
DON CHITTY@SUMMITDE.NET)
FIRST ISSUE DATE
05-18-2020

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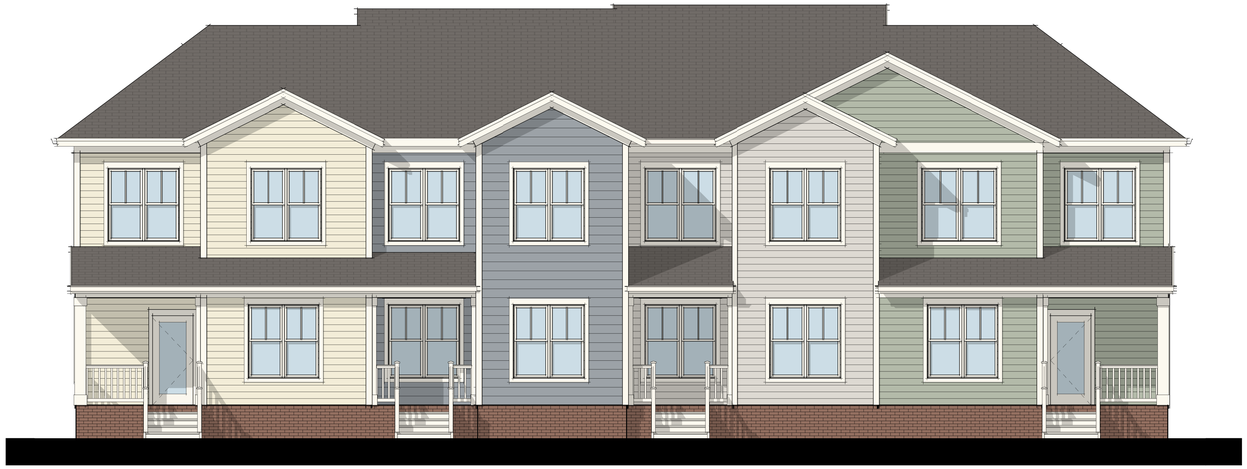
SUP - SITE DEVELOPMENT PLANS FOR
EAST VILLAGE AT MEADOWLANDS
1317 US 70-A EAST
HILLSBOROUGH, NORTH CAROLINA 27278

SANITARY SEWER DETAILS

PROJECT NO.
20-0044
DRAWING NAME:
20-0044_D.dwg
SHEET NO.
D-3



Townhouse (4-Unit) - Rear Elevation 2

3/16" = 1'-0"

Townhouse (4-Unit) - Typical Side Elevation 3

3/16" = 1'-0"

Townhouse (4-Unit) - Front Elevation 1

3/16" = 1'-0"

CLINE DESIGN ASSOCIATES, PA
REGISTERED ARCHITECTURAL COMPANY
50494
NORTH CAROLINA
RALEIGH, NC

JASON SCOTT LETTS
REGISTERED ARCHITECT
9685
NORTH CAROLINA
RALEIGH, N.C.

6.17.20

CLINE DESIGN

EAST VILLAGE @ MEADOWLANDS

HILLSBOROUGH, NC

SCALE: 3/16" = 1'-0"

0 5' - 4" 10' - 8"

BUILDING ELEVATIONS **A-1**

3/16" = 1'-0" | 06.17.20

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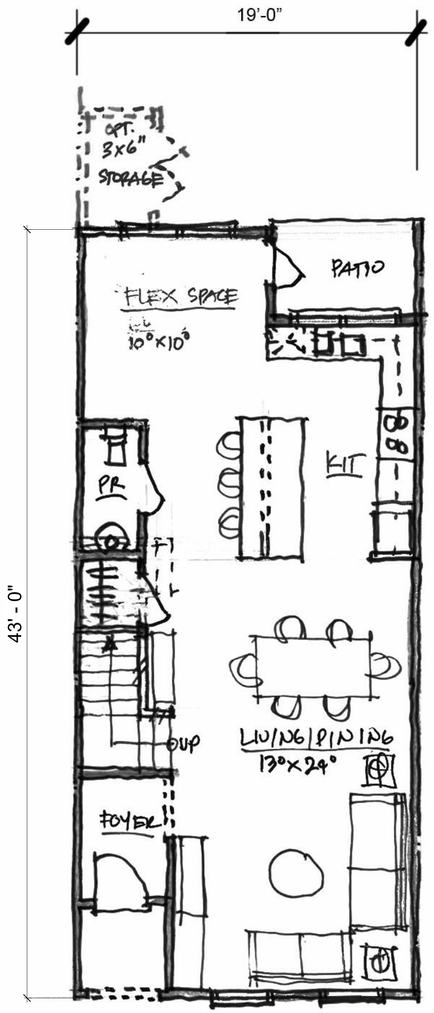
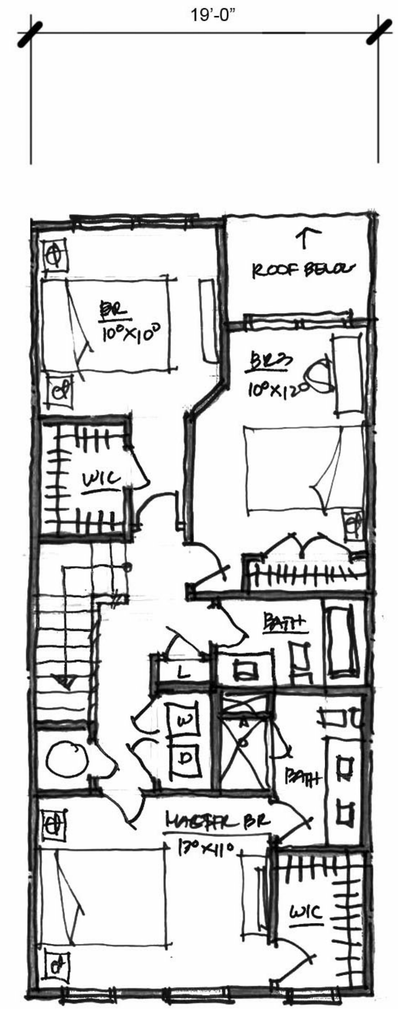


LOWER LEVEL PLAN
± 749 SF



UPPER LEVEL PLAN
± 735 SF

3 BR TH- 19' x 43' **TOTAL AREA= ±1,484 SF**

CLINE DESIGN ASSOCIATES, P.A. REGISTERED ARCHITECTURAL COMPANY 50494 NORTH CAROLINA RALEIGH, NC

JASON SCOTT LETTS REGISTERED ARCHITECT 9685 NORTH CAROLINA RALEIGH, N.C.
6.17.20

CLINE DESIGN

EAST VILLAGE @ MEADOWLANDS
HILLSBOROUGH, NC

SCALE: 1/4" = 1'-0"
0 4' - 0" 8' - 0"

3-BEDROOM UNIT PLANS **A-2**
1/4" = 1'-0" | 06.17.20

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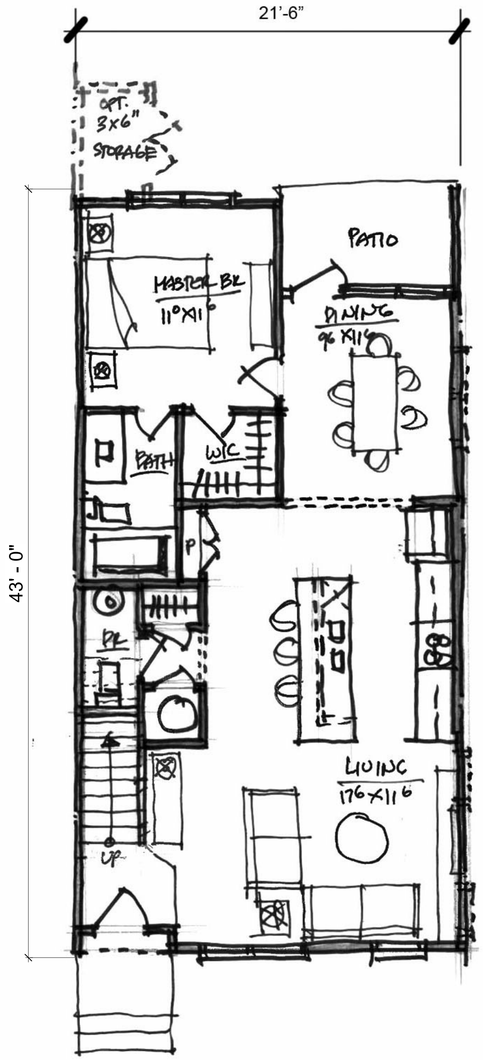
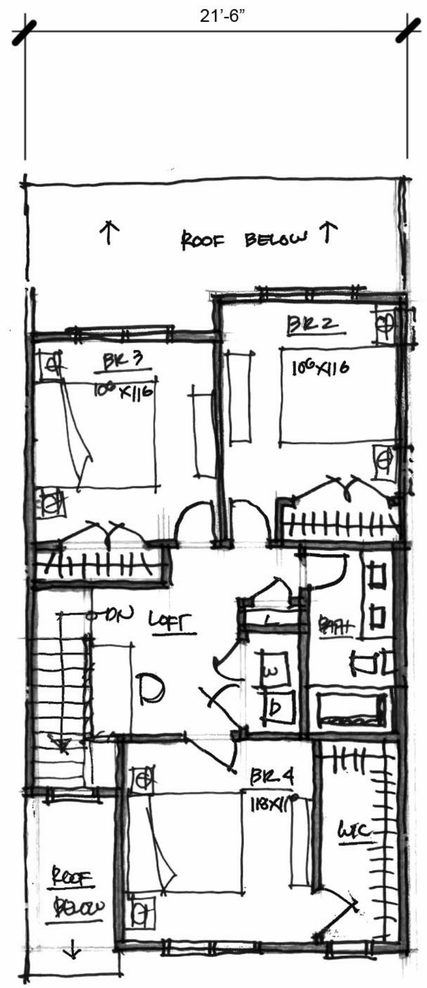


LOWER LEVEL PLAN
± 872 SF



UPPER LEVEL PLAN
± 680 SF

4 BR TH- 21'-6"x 43' **TOTAL AREA= ±1,552 SF**

CLINE DESIGN ASSOCIATES, PA
REGISTERED ARCHITECTURAL COMPANY
50494
NORTH CAROLINA
RALEIGH, NC

LYON SCOTT LETTS
REGISTERED ARCHITECT
9685
NORTH CAROLINA
RALEIGH, N.C.
6.17.20

CLINE DESIGN

EAST VILLAGE @ MEADOWLANDS
HILLSBOROUGH, NC

SCALE: 1/4" = 1'-0"
0 4'-0" 8'-0"

4-BEDROOM UNIT PLANS **A-3**
1/4" = 1'-0" | 06.17.20

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