

CONSTRUCTION PLANS FOR CANTERWOOD MANOR AT DEBARY

(ORIGINAL PLAN SUBMITTAL: FEBRUARY 2, 2018)
(REVISED PLAN SUBMITTAL: AUGUST 6, 2018)

SITE DATA

PROPERTY LOCATION: 32 DIRKSEN ROAD, DEBARY, FLORIDA 32713
PARCEL ID No.: 03-19-30-00-00-0240

OVERALL SITE AREA: 7.888± ACRES
PROJECT DEVELOPED AREA: 5.631± ACRES

EXISTING FUTURE LAND USE: C/R, COMMERCIAL RETAIL

EXISTING ZONING: BPUD
EXISTING USE: RESIDENTIAL

PROPOSED USE:
3-STORY ASSISTED CONGREGATE LIVING AND MEMORY CARE FACILITY
120 BEDS/ROOMS ALF
122,322 S.F. OVERALL FACILITY (40,774 SF/STORY)

BUILDING HEIGHT:
MAXIMUM & PROPOSED: 40 FEET (WITH AN ADDITIONAL 5 FOOT
PARAPET ALLOWANCE FOR MECHANICAL
SCREENING AND ARCHITECTURAL STYLIZATION
(MAX 3 STORIES)

PROPOSED DEVELOPMENT:

40,774 SF	16.62%	PROPOSED BUILDING (FOOTPRINT)
74,234 SF	30.26%	IMPERVIOUS SURFACES(PAVEMENT, SIDEWALK, STABILIZATION ETC.)
7,412 SF	3.03%	WATER FEATURE
122,420 SF	49.91%	TOTAL IMPERVIOUS AREA
15,798 SF	6.44%	DRY STORM WATER POND
107,087 SF	43.65%	PERVIOUS AREA (OPEN SPACE)
245,305 SF	100.00%	DEVELOPED ACREAGE TOTAL (5.631 AC)

FLOOR AREA RATIO:
MAXIMUM FAR: 0.50
PROPOSED FAR: 0.4987 (40,774 SF X THREE STORIES / SITE AREA 245,305 SF)

PARKING

1 SPACE PER 4 BEDS AND 1 SPACE PER EMPLOYEE
AND/OR VISITING DOCTORS ON LARGEST SHIFT
PARKING REQUIRED ASSISTED LIVING FACILITY (120 BEDS/4 + 30 EMPLOYEES + 3 VISITING DOCTORS) 63 SPACES
TOTAL PARKING REQUIRED 63 SPACES
SPACES REQUIRED TO BE RESERVED FOR HANDICAP 3 SPACES

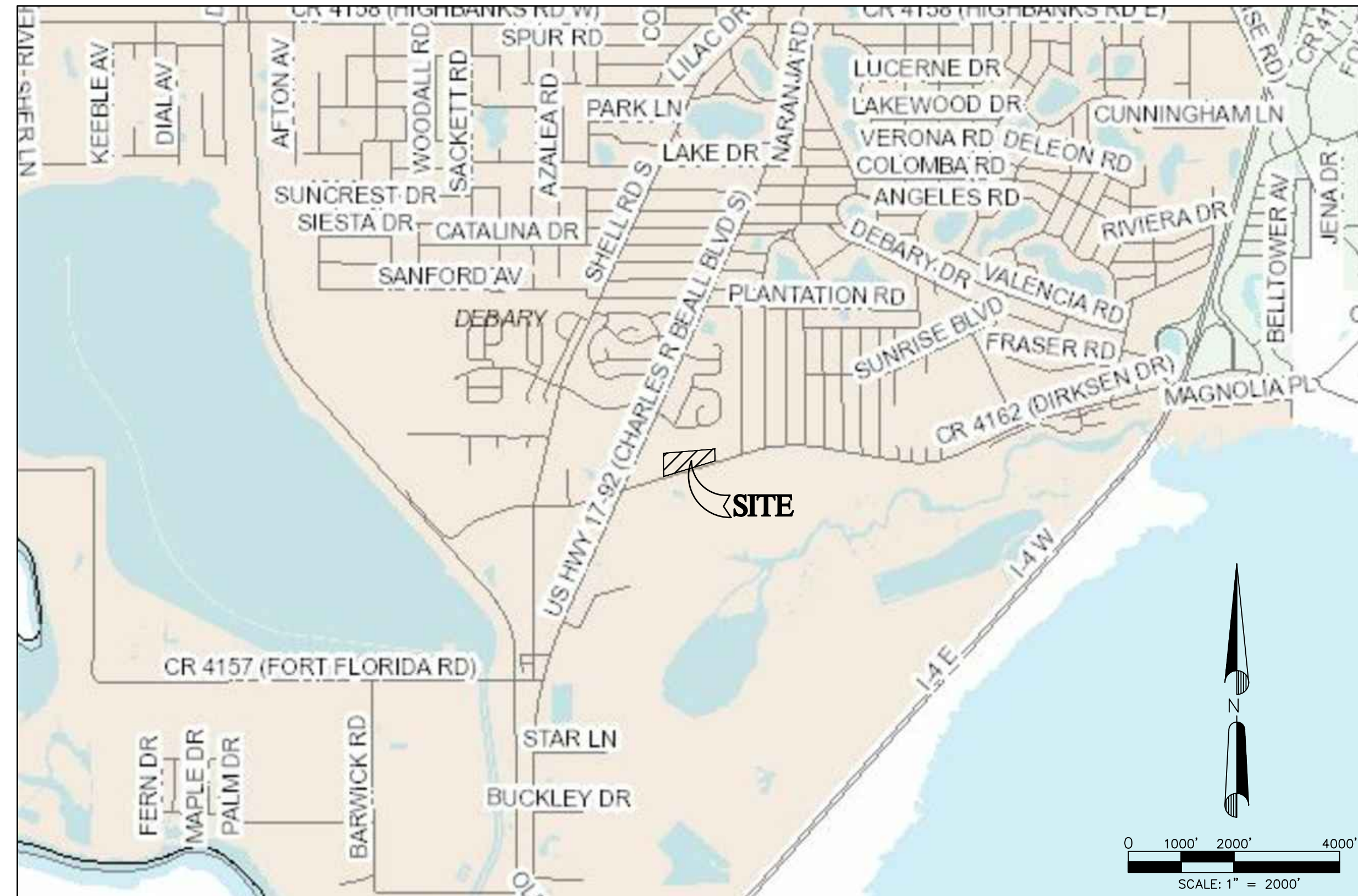
PARKING PROVIDED
STANDARD PARKING SPACES 75 SPACES
HANDICAP PARKING 5 SPACES
TOTAL PARKING PROVIDED 80 SPACES

BUILDING SETBACKS (REQUIRED)		BUILDING SETBACKS (PROPOSED)	
FRONT (DIRKSEN DRIVE)	35'	FRONT (DIRKSEN DRIVE)	51.7'
SIDE (EAST)	10'	SIDE (EAST)	160.2'
SIDE (WEST)	10'	SIDE (WEST)	413'
REAR (NORTH)	35'	REAR (NORTH)	59.2'

BUFFER YARDS (REQUIRED)		BUFFER YARDS (PROPOSED)	
FRONT (DIRKSEN DRIVE)	10'	FRONT (DIRKSEN DRIVE)	10'
SIDE (EAST)	10'	SIDE (EAST)	10'
SIDE (WEST)	10'	SIDE (WEST)	10'
REAR (NORTH)	35'	REAR (NORTH)	35'

UTILITY PROVIDERS

POTABLE WATER: VOLUSIA COUNTY
WASTEWATER: VOLUSIA COUNTY



VICINITY MAP

APPLICANT:

MJM ASSOCIATES, LLC
1030 N. ORANGE AVENUE
ORLANDO, FLORIDA 32801
CONTACT: JOEL HASS
PH: (407) 718-0546
EMAIL: jhass@mjmassocllc.com

OWNER:

J. CHARLES & SANDRA H. GRAY
263 BAYOU CIRCLE
DEBARY, FLORIDA 32713
CONTACT: CHARLES GRAY
PH: (407) 843-8880
EMAIL: Charlie.Gray@gray-robinson.com

DEVELOPER:

GREEN LEAF DEVELOPMENT, LLC
1344 HARDY AVENUE
ORLANDO, FL 32803
CONTACT: GREG HUDAK, PE
PH: (407) 492-6833
EMAIL: ghudak@hudakengineering.com

ARCHITECT:

HASKELL
111 RIVERSIDE AVENUE
JACKSONVILLE, FLORIDA 32202
PH: (904) 791-4500

ENGINEER:

HUDAK ENGINEERING, INC.
1344 HARDY AVENUE
ORLANDO, FL 32803
CONTACT: GREG HUDAK, PE
PH: (407) 492-6833
EMAIL: ghudak@hudakengineering.com

LANDSCAPE ARCHITECT:

LANDSCAPE DYNAMICS, INC.
PO BOX 2852
WINTER PARK, FLORIDA 32790-2852
CONTACT: RANDY BUCHANAN, RLA
PH: (407) 579-1811
EMAIL: randy@landscapedynamics.com

SURVEYOR:

HARTLEY SURVEYING, INC.
283 TIGER LILLY COURT
ALTAMONTE SPRINGS, FLORIDA 32714
CONTACT: JEFF L. HARTLEY, PSM
PH: (407) 383-6978
EMAIL: jhartley@cf.rr.com

LEGAL DESCRIPTION

LEGAL DESCRIPTION - ALTKEY 2465077

THE EAST 125 FEET OF THE WEST 375 FEET OF LOT 3, LYING NORTH OF DIRKSEN DRIVE, ASSESSOR'S SUBDIVISION OF THE SOUTHWEST 1/4 OF SECTION 3, TOWNSHIP 19 SOUTH, RANGE 30 EAST, ACCORDING TO MAP IN MAP BOOK 3, PAGE 3

LEGAL DESCRIPTION - ALTKEY 2465093

THE EAST 200 FEET OF THE WEST 575 FEET OF LOT 3, LYING NORTH OF DIRKSEN DRIVE, ASSESSOR'S SUBDIVISION OF THE SOUTHWEST 1/4 OF SECTION 3, TOWNSHIP 19 SOUTH, RANGE 30 EAST, ACCORDING TO MAP IN MAP BOOK 3, PAGE 3

LEGAL DESCRIPTION - ALTKEY 5444686

THE WEST 250 FEET OF LOT 3, LYING NORTH OF DIRKSEN DRIVE, ASSESSOR'S SUBDIVISION OF THE SOUTHWEST 1/4 OF SECTION 3, TOWNSHIP 19 SOUTH, RANGE 30 EAST, ACCORDING TO MAP IN MAP BOOK 3, PAGE 3

LEGAL DESCRIPTION - ALTKEY 5444694

THE EAST 394.69 FEET OF THE WEST 969.69 FEET LYING NORTH OF COUNTY ROAD, OF LOT 3, ASSESSOR'S SUBDIVISION OF THE SOUTHWEST 1/4 OF SECTION 3, TOWNSHIP 19 SOUTH, RANGE 30 EAST, ACCORDING TO MAP IN MAP BOOK 3, PAGE 3

LEGAL DESCRIPTION - ALTKEY 5892174

A PARCEL OF LAND LYING IN SECTION 3, TOWNSHIP 19 SOUTH, RANGE 30 EAST, VOLUSIA COUNTY, FLORIDA AND BEING A PART OF TRACTS "C" AND "D" OF "PARKVIEW SUBDIVISION" AS RECORDED IN MAP BOOK 45, PAGES 97 & 98, PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA, AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS: BEGINNING AT THE SOUTHWEST CORNER OF SAID TRACT "C" ALSO KNOWN AS THE SOUTHWEST CORNER OF THE NORTHWEST 1/4 OF SAID SECTION 3, RUN THENCE N 00°57'25" W ALONG THE WEST LINE OF SAID TRACT "C" ALSO KNOWN AS THE WEST LINE OF SAID NORTHWEST 1/4 A DISTANCE 40.99 FEET; RUN THENCE N 79°34'39" E ALONG THE SOUTHERLY LINE OF A 260.0 FOOT WIDE FLORIDA POWER COMMISSION EASEMENT PER OFFICIAL RECORDS BOOK 1745, PAGE 1655, PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA, A DISTANCE OF 952.20 FEET; RUN THENCE S 01°50'30" E A DISTANCE OF 141.95 FEET; RUN THENCE S 85°39'41" W ALONG THE SOUTHERLY LINE OF SAID TRACTS "C" AND "D" ALSO KNOWN AS THE SOUTH LINE OF THE SOUTHWEST 1/4 OF THE NORTHWEST 1/4 OF SAID SECTION 3, A DISTANCE OF 943.17 FEET TO THE POINT OF BEGINNING.

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C-4	PRE-DEVELOPMENT DRAINAGE MAP
C-5	POST-DEVELOPMENT DRAINAGE MAP
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C-7	DRAINAGE SYSTEM PLAN
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IR-2	IRRIGATION DETAILS
H-1	HARDSCAPE PLAN
*	BOUNDARY & TOPOGRAPHIC SURVEY
*	PHOTOMETRIC/LIGHTING PLAN
	ATTACHED

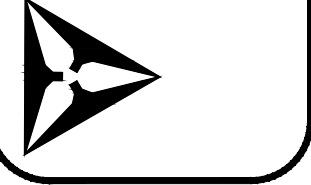
DATE	REVISIONS:

DRAWN BY	SMV	GDH	GDH	GDH

GREG HUDAK
PE # 54684

CANTERWOOD MANOR AT DEBARY
CITY OF DEBARY, FLORIDA

HUDAK ENGINEERING, INC.
CIVIL ENGINEERING & LAND DEVELOPMENT DESIGN SERVICES
CERTIFICATE OF AUTHORIZATION #9388
1344 HARDY AVENUE, ORLANDO, FL 32803
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DATE:
JANUARY 2018

SHEET No.
C-1
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CLEARING, EXCAVATING, GRADING AND PAVING GENERAL NOTES

- FOR IDENTIFICATION OF CONTRACTUAL AGREEMENTS, THE SET OF DRAWINGS IS DATED JANUARY 2018. ANY REVISIONS THEREAFTER WILL BE NOTED AND DATED ON THE AFFECTED DRAWING(S).
- UNLESS OTHERWISE NOTED ON THE PLANS, THE CONTRACTOR SHALL USE THE GEOMETRY PROVIDED ON THE CONSTRUCTION PLANS. BENCHMARK INFORMATION AS SHOWN ON THE SURVEY PLAN HAS BEEN OBTAINED BY SURVEYOR. ANY DISCREPANCIES BETWEEN FIELD MEASUREMENTS AND CONSTRUCTION PLAN INFORMATION SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER IMMEDIATELY.
- THE LOCATIONS OF ALL EXISTING UTILITIES SHOWN ON THE PLANS HAVE BEEN DETERMINED FROM THE BEST INFORMATION AVAILABLE AND ARE GIVEN FOR THE CONVENIENCE OF THE CONTRACTOR. THE ENGINEER WILL FIELD VERIFY THE UTILITIES TO THE BEST OF HIS ABILITY, HOWEVER ALL UTILITIES SHOULD BE FIELD VERIFIED BY THE CONTRACTOR. THE CONTRACTOR SHALL EXERCISE CAUTION WHEN CROSSING AN UNDERGROUND UTILITY, WHETHER SHOWN ON THE PLANS OR LOCATED BY THE UTILITY COMPANY. ALL UTILITIES THAT INTERFERE WITH THE PROPOSED ON SITE CONSTRUCTION SHALL BE RELOCATED BY THE RESPECTIVE UTILITY COMPANY. THE CONTRACTOR SHALL COOPERATE WITH THEM DURING RELOCATION OPERATIONS, ANY DELAY OR INCONVENIENCE CAUSED TO THE CONTRACTOR BY THE RELOCATION OF VARIOUS UTILITIES SHALL BE INCIDENTAL TO THE CONTRACTOR, AND NO EXTRA COMPENSATION WILL BE ALLOWED.
- SSOCOF**
FLORIDA LAW (F.S. 553.851) AND (F.S. 556) SSOCOF 1-800-432-4770 SUNSHINE STATE ONE CALL OF FLORIDA) PROTECTION OF UNDERGROUND PIPELINES MANDATES THAT "NO EXCAVATOR SHALL COMMENCE OR PERFORM ANY EXCAVATION IN ANY PUBLIC OR PRIVATE STREET, ALLEY, RIGHT-OF-WAY DEDICATED TO THE PUBLIC USE, OR GAS UTILITY EASEMENT WITHOUT FIRST OBTAINING INFORMATION CONCERNING THE POSSIBLE LOCATION OF GAS PIPELINES IN THE AREA OF THE PROPOSED EXCAVATION. THIS INCLUDES ANY OPERATION UTILIZING HAND TOOLS OR POWER TOOLS WHICH MOVES OR REMOVES ANY STRUCTURE, EARTH, ROCK OR OTHER MASS OF MATERIAL BY SUCH METHODS AS DIGGING, BACKFILLING, DEMOLITION, GRADING, DITCHING, DRILLING, BORING, AND CABLE PLOWING. THE EXCAVATOR MUST NOTIFY THE GAS UTILITY A MINIMUM OF 48 HOURS AND A MAXIMUM OF 5 DAYS PRIOR TO EXCAVATING (EXCLUDING SATURDAYS, SUNDAYS, AND LEGAL HOLIDAYS).
- TRENCH SAFETY**
CONTRACTOR SHALL COMPLY WITH OSHA TRENCH SAFETY STANDARDS 29 C.F.R., S. 926.650, SUBPART P, AND ALL SUBSEQUENT REVISIONS OR UPDATES ADOPTED BY THE DEPARTMENT OF LABOR AND EMPLOYMENT SECURITY AND WITH SECTION 553.62, FLORIDA STATUTES.
- THE BOUNDARY, TOPOGRAPHIC SURVEY, AND EXISTING CONDITIONS INFORMATION HAS BEEN PROVIDED TO THE OWNER BY HARTLEY SURVEYING, INC. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THE ACCURACY OF THE SURVEY INFORMATION PROVIDED.
- GEOTECHNICAL INFORMATION, INCLUDING WATER TABLE ELEVATIONS AND SITE PREPARATION RECOMMENDATIONS, HAVE BEEN FURNISHED TO THE OWNER AND ENGINEER BY CAVIN GEOTECHNICAL & ENVIRONMENTAL, LLC. THE CONTRACTOR IS DIRECTED TO OBTAIN COPIES OF THE REPORT AND COMPLY WITH ALL RECOMMENDATION THEREIN.
- THE CONTRACTOR IS DIRECTED TO OBTAIN A COPY OF ALL PERMITS INCLUDING PERMITS ISSUED BY THE WATER MANAGEMENT DISTRICT, THE CITY AND FDEP, IF APPLICABLE. THE CONTRACTOR SHALL ABIDE BY ALL PERMIT CONDITIONS.
- THE CONTRACTOR SHALL RECOGNIZE AND ABIDE BY ALL OSHA EXCAVATION SAFETY STANDARDS, INCLUDING THE FLORIDA TRENCH SAFETY ACT (90-96, LAWS OF FLORIDA). ANY MATERIAL, CONSTRUCTION METHODS, OR MATERIAL COST TO COMPLY WITH THESE LAWS SHALL BE INCIDENTAL TO THE CONTRACT.
- NO VIBRATORY ROLLERS OR OTHER SIMILAR EQUIPMENT THAT COULD DAMAGE ADJACENT BUILDINGS OR RESIDENCES SHALL BE USED ON THIS PROJECT. THE CONTRACTOR SHALL REFER TO THE GEOTECHNICAL REPORT FOR INSTRUCTIONS AND SHALL CONFER WITH THE GEOTECHNICAL ENGINEER, AND OWNER TO DETERMINE WHAT METHODS OF COMPACTION ARE SATISFACTORY. IF REPORTS OF DAMAGE TO ADJACENT PROPERTIES ARE RECEIVED, THE CONTRACTOR SHALL STOP WORK IMMEDIATELY UNTIL THE OWNER INVESTIGATE THE CLAIM AND PROVIDE INSTRUCTIONS.
- CLEAN SAND SUITABLE FOR FILL SHALL BE USED AS DIRECTED BY THE GEOTECHNICAL REPORT. CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVAL OF ALL UNSUITABLE FILL MATERIALS FROM THE SITE.
- PRIOR TO SUBMITTING A BID, THE CONTRACTOR SHALL VISIT AND INSPECT THE SITE TO FAMILIARIZE HIMSELF WITH EXISTING CONDITIONS WHICH MAY AFFECT HIS BID.
- THE CONTRACTOR SHALL BASE HIS BID ON HIS OWN ESTIMATE OF QUANTITIES, INCLUDING PIPE LENGTHS, PAVEMENT QUANTITIES, AND EXCAVATION AND BACKFILL QUANTITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY IMPORT BORROW FILL NEEDED, AND FOR REMOVAL AND DISPOSAL OF EXCESS OR UNSUITABLE MATERIALS.
- THE LIMITS OF DISTURBANCE HAVE BEEN PROVIDED TO THE CONTRACTOR ON THE CONSTRUCTION PLANS. UNLESS OTHERWISE DIRECTED BY THE OWNER OR ENGINEER, THE CONTRACTOR IS EXPECTED TO CONTAIN ALL CONSTRUCTION ACTIVITIES WITHIN THESE LIMITS. AT NO TIME SHALL THE CONTRACTOR DISTURB WETLAND AREAS, IF ANY, OUTSIDE THE SILT FENCE. THE CONTRACTOR SHALL NOT DISTURB SURROUNDING PROPERTIES OR TRAVEL ON SURROUNDING PROPERTIES WITHOUT WRITTEN CONSENT FROM THE PROPERTY OWNER. ANY REPAIR OR RECONSTRUCTION OF WETLAND OR OTHER DAMAGED AREAS IN SURROUNDING PROPERTIES SHALL BE REPAIRED BY THE CONTRACTOR IMMEDIATELY. ALL COSTS FOR REPAIRS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND NO EXTRA COMPENSATION SHALL BE PROVIDED.
- ALL TREES, BRUSH AND ORGANIC MATERIAL LOCATED FROM THIS SITE SHALL BE DISPOSED OF OFFSITE AT A PERMITTED LANDFILL OR DISPOSAL SITE.
- ALL AREAS TO RECEIVE FILL, WHETHER OPEN AREA, UNDER PAVEMENT OR STRUCTURES, SHALL FIRST BE STRIPPED OF ORGANIC MATERIAL BEFORE FILLING IS COMMENCED. FILL SHALL BE PLACED IN 12" LIFTS AND COMPACTED TO 98% MAXIMUM DENSITY IN AREAS UNDER PAVEMENT AND AROUND ALL STRUCTURES. THE CONTRACTOR IS DIRECTED TO OBTAIN A COPY OF THE SOIL REPORT AND AND COMPLY WITH ALL RECOMMENDATIONS THEREIN.
- THE CONTRACTOR SHALL BE EXPECTED, AT THE END OF EACH DAY, TO HAVE THE SITE GRADED IN SUCH A WAY AS TO NOT CAUSE ANY ADVERSE IMPACT FORM RUNOFF OR SILTATION TO ANY ADJACENT PROPERTIES. SILTATION BARRIERS SHALL BE MAINTAINED AND REPAIRED IF REQUIRED AT THE END OF EACH WORKING DAY. GRADING SHOWN ON THESE PLANS ARE PROVIDED TO THE CONTRACTOR TO EXPRESS THE GENERAL GRADING INTENT OF THE PROJECT. SMOOTH TRANSITIONS SHALL BE PROVIDED BETWEEN CONTOURS OR SPOT ELEVATIONS AS SHOWN ON THE PLANS TO ACCOMPLISH THE GRADING INTENT. ALL SLOPES SHALL BE STABILIZED IMMEDIATELY AFTER FINAL GRADING HAS BEEN COMPLETED. CONTRACTOR SHALL NOTIFY OWNER AND ENGINEER PRIOR TO DEMOBILIZATION OF GRADING EQUIPMENT TO DETERMINE THAT THE GRADING INTENT HAS BEEN ACHIEVED.
- ALL PAVING SURFACES SHALL BE GRADED TO DRAIN POSITIVELY IN THE DIRECTION GENERALLY SHOWN BY THE FLOW ARROWS OR TYPICAL SECTION. NO PUDDLING OR "BIRD BATH" WILL BE ACCEPTED IN THE PAVEMENT AREAS. PAVED SURFACES SHALL ALSO BE GRADED TO PROVIDE A SMOOTH DRIVING SURFACE FOR VEHICLES WITH NO SHARP BREAKS IN GRADE AND NO UNUSUALLY STEEP OR REVERSE CROSS SLOPES. APPROACHES TO INTERSECTIONS AND ENTRANCE AND EXIT FLOW LINE GRADES TO INTERSECTIONS AND ENTRANCE AND EXIT FLOW LINE GRADES TO INTERSECTIONS WILL BE DETERMINED IN THE FIELD AND ADJUSTMENTS MAY BE NECESSARY TO ACCOMPLISH THAT PURPOSE. THE CONTRACTOR IS RESPONSIBLE TO ACCOMPLISH THIS PURPOSE. ANY APPARENT DISCREPANCIES BETWEEN THE FLOW ARROWS AND SLOPES OR SPOT ELEVATIONS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE ENGINEER FOR EXPLANATION AND/OR CLARIFICATION.
- MATERIALS AND METHODS FOR STORM DRAINAGE CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LOCAL MUNICIPALITY CODES AND/OR THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, 1991, OR LATEST REVISION THEREOF, AND SUPPLEMENTAL SPECIFICATIONS THERETO. REINFORCED CONCRETE PIPE (RCP) SHALL BE CLASS III WITH RUBBER GASKET JOINTS, UNLESS OTHERWISE NOTED ON THE PLANS. ALL F.D.O.T., "C", "D", "E" AND "F" INLETS SHALL BE EQUIPPED WITH STEEL RETICULIN GRATE AND LIFTING CHAINS PER F.D.O.T. STANDARDS, WHERE APPROPRIATE. YARD INLETS MAY BE EQUIPPED WITH CAST IRON GRATES, IF THEY ARE NOT SUBJECT TO TRAFFIC. INLET WALL THICKNESS SHALL BE PER F.D.O.T.
- MATERIALS AND CONSTRUCTION METHODS FOR PAVEMENT CONSTRUCTION SHALL BE IN ACCORDANCE WITH CITY STANDARDS AND THE LATEST EDITION OF THE F.D.O.T. STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, AND SUPPLEMENTAL SPECIFICATIONS THERETO; AND IN ACCORDANCE WITH CITY STANDARDS AND SPECIFICATIONS.
- THE CONTRACTOR SHALL SOD SIDE SLOPES OF POND AND SEED POND BOTTOM.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE VARIOUS GRADING, DRAINAGE AND PAVING WORK TO ACCOMPLISH THE PROPER FUNCTIONING OF THE SITE IMPROVEMENTS TO PREVENT WATER FROM PONDING OR STANDING ON SIDEWALK OR PAVEMENT AREAS. SOD SHALL BE INSTALLED 0.2' BELOW THE EDGE OF ADJACENT PAVEMENT OR SIDEWALK.
- SHOP DRAWINGS AND CERTIFICATIONS FOR ALL STORM DRAINAGE MATERIALS AND STRUCTURES ARE TO BE SUBMITTED AND APPROVED BY THE OWNERS REPRESENTATIVE OR ENGINEER PRIOR TO ORDERING THE MATERIAL REQUIRED FOR CONSTRUCTION.
- ALL STORM WATER PIPES 24 INCHES OR MORE IN DIAMETER WHICH DISCHARGE INTO DRY RETENTION BASIN AREAS SHALL BE CHILD PROOFED WITH GRATES AS DESIGNATED IN F.D.O.T. INDEX 273. MAXIMUM OPENING BETWEEN BARS SHALL BE 4". OUTFALLS TO DRY RETENTION BASINS SHALL BE EQUIPPED WITH ENERGY DISSIPATORS OR SPLASH PADS AS SHOWN ON THE DETAIL SHEETS.
- REPAIR AND REPLACEMENT OF ALL PRIVATE AND PUBLIC PROPERTY AFFECTED BY THIS WORK SHALL BE RESTORED TO A CONDITION EQUAL TO OR BETTER THAN EXISTED BEFORE COMMENCING CONSTRUCTION.
- SIDEWALKS ARE TO BE CONSTRUCTED IN THE AREAS SHOWN ON THE CONSTRUCTION PLANS. THE SIDEWALK SHALL BE CONSTRUCTED OF 4" THICK CONCRETE WITH A 28-DAY COMPRESSION STRENGTH OF 3000 PSI. JOINTS SHALL BE EITHER TOOLED OR SAW CUT AT EVERY A DISTANCE EQUAL TO THE WIDTH OF THE SIDEWALK.
- CURBING SHALL BE CONSTRUCTED WHERE NOTED ON THE CONSTRUCTION PLANS. CONCRETE FOR CURBS SHALL BE A F.L.A. DEPARTMENT OF TRANSPORTATION CLASS "1" CONCRETE WITH A 28-DAY COMPRESSION STRENGTH OF 3000 PSI. ALL CURBS SHALL HAVE SAW CUT CONTRACTION JOINTS AND SHALL BE CONSTRUCTED AT INTERVALS NOT TO EXCEED 5' - 0" ON CENTER. CONSTRUCTION OF CURBS SHALL BE IN CONFORMANCE WITH F.D.O.T. STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (LATEST EDITION) SECTION 520 AND DETAILS PROVIDED ON THE CONSTRUCTION PLANS.
- CONTRACTOR TO SAW-CUT AREAS WHERE PAVEMENT OR CURBING OR CONCRETE, ETC. IS TO BE REMOVED.
- AT LEAST TWO WEEKS PRIOR TO FINAL COMPLETION, THE CONTRACTOR SHALL FURNISH THE ENGINEER COPIES OF AS-BUILT PLANS OF THE ENTIRE SITE DELINEATING ALL CHANGES, IF ANY, TO THESE CONSTRUCTION PLANS. THE AS-BUILT PLANS COULD BE PROVIDED AS "RED-LINED" SET WITH A STATEMENT OF VERIFICATION OR BY A REGISTERED SURVEYOR.
- ALL STORMWATER PIPE JOINTS WILL BE WRAPPED WITH FILTER FABRIC REGARDLESS OF MATERIAL.
- ALL WORK SHALL CONFORM TO THE LATEST VOLUSIA COUNTY UTILITY & STREET SPECIFICATIONS.

SANITARY SEWER AND WATER SYSTEM NOTES:

- ALL PVC PRESSURE SYSTEMS SHALL BE LOCATED WITH METAL WIRE ACCORDING TO THE VOLUSIA COUNTY STANDARD DETAIL FOR MARKING A PRESSURIZED MAIN.
- A MINIMUM THREE (3) FOOT COVER SHALL BE MAINTAINED OVER ALL PROPOSED UTILITY LINES.
- ALL PVC PIPE SHALL COMFORM TO ASTM 1785 & ASTM 2241.

WATER DISTRIBUTION NOTES:

- ALL P.V.C. WATER MAINS SHALL BE IN ACCORDANCE WITH AWWA STD. C900, MIN. WORKING PRESSURE OF 150 P.S.I. AND A DIMENSION RATIO (DR) OF 18.
- ALL DUCTILE IRON WATER MAINS SHALL BE IN ACCORDANCE WITH ANSI/AWWA A21.51/C151 CLASS 50 PIPE.
- HYDROSTATIC AND LEAKAGE TESTING SHALL BE PERFORMED ON ALL NEWLY INSTALLED WATER MAINS AND APPURTENANCES. THE TEST SHALL BE IN ACCORDANCE WITH AWWA C600 OR M23 AS APPLICABLE.
- THE WATER SYSTEM SHALL BE DISINFECTED IN ACCORDANCE WITH AWWA C651.
- ALL P.V.C. PIPE MUST BEAR THE NSF LOGO FOR POTABLE WATER USE.

PIPE SPECIFICATIONS:

PVC PIPE

ALL PVC PIPE OF NOMINAL DIAMETER SIX (6) THROUGH TWELVE (12) INCHES SHALL BE MANUFACTURED IN ACCORDANCE WITH AWWA C900, LATEST EDITION. THE PVC PIPE SHALL HAVE A MINIMUM WORKING PRESSURE RATING OF 150 PSI AND SHALL HAVE A DIMENSION RATION (DR) OF 18. PIPE SHALL BE THE SAME O.D. AS DUCTILE IRON PIPE. PVC PIPE OF NOMINAL DIAMETER FOR (4) INCHES SHALL BE POLYUBUTING.

MARKINGS

ALL PVC PIPE USED FOR POTABLE WATER USE WILL BEAR THE NSF LOGO.

DISINFECTION

BEFORE THE POTABLE WATER SYSTEM IS PLACED IN SERVICE, ALL WATER MAINS SHALL BE CHLORINATED IN ACCORDANCE WITH THE VOLUSIA COUNTY STANDARDS AND SPECIFICATIONS, AND THE PROCEDURES OUTLINED IN AWWA C-651 STANDARD PROCEDURE FOR DISINFECTING WATER MAINS.

PRESSURE TESTS

ALL NEWLY-INSTALLED WATER DISTRIBUTION PIPE AND APPURTENANCES SHALL HAVE HYDROSTATIC TESTS CONDUCTED ON THEM. THE TESTS SHALL BE PRESSURE TESTS AND LEAKAGE TESTS DONE IN ACCORDANCE WITH VOLUSIA COUNTY STANDARDS AND SPECIFICATIONS, ALSO COVERING ALL PROVISIONS OF AWWA C600.

Utility Separation - Vertical Clearance

- Where water and gravity sanitary sewer mains cross with less than 12 inches vertical clearance, or the sanitary sewer main is above the water main, then the sanitary sewer will be 20 feet, centered on the point of crossing, of either:
 - ductile iron pipe and hydrostatically pressure tested, or;
 - concrete encased vitrified clay; or
 - PVC pipe upgraded to water main standards and pressure tested.
- Where water mains and storm sewer pipes cross with less than 12 inches vertical clearance, or the storm main is above the water main, then the water main shall be 20 feet of ductile iron pipe centered on the point of crossing.

Utility Separation - Horizontal Separation

- When a water main parallels a gravity sanitary sewer main, a separation (measured edge to edge) of at least ten feet should be maintained. Where this separation is not met, one of the following must occur:
 - the water main is laid in a separate trench or on an undisturbed earth shelf located on one side of the sewer at such an elevation that the bottom of the water main is at least 12 inches above the top of the sewer, or;
 - if both sanitary sewer and potable water mains are proposed and the above (A) is not met, the sanitary sewer pipes shall be upgraded to the equivalent pipe material as the water main and pressure tested.
 - if the sanitary sewer is existing and the potable water main is proposed, the water main shall, at a minimum, be upgraded to ductile iron pipe, constructed in separate trenches, laid at a higher elevation than the sanitary sewer, and utilize staggered joints.
- Where water mains parallel storm sewer pipes with less than 10 feet horizontal clearance, the water main shall be AWWA C150/C151 ductile iron in those locations.
- Separation requirements of 10 feet horizontal and 12 inches vertical clearance between force mains and potable water mains must be maintained unless approved in advance by the Department.
- Where water mains and unrestricted access reuse pipes cross with less than 12 inches vertical clearance or 3 feet horizontal clearance, the unrestricted access reuse main shall be upgraded and hydrostatically tested in the same manner as gravity sanitary sewer mains (see A. above).
- Separation requirements between potable water mains and any type of reuse mains other than unrestricted access reuse is 10 feet horizontal and 12 inches vertical clearance, with mitigation allowed when approved in advance by the Department.

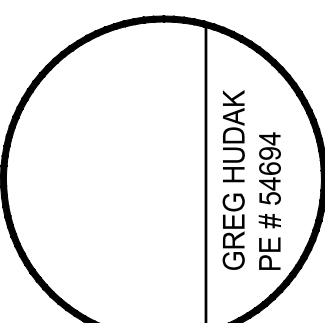
NOTES:

- ALL SITE AND UTILITY CONSTRUCTION SHALL CONFORM TO THE VOLUSIA COUNTY ENGINEERING STANDARDS MANUAL, LAND DEVELOPMENT CODE AND COUNTY DETAILS.
- IF THERE ARE ANY CONFLICTS BETWEEN THE COUNTY STANDARDS AND STANDARDS IN THE GENERAL NOTES, THE MOST STRINGENT STANDARD SHALL BE FOLLOWED.
- STORM DRAINAGE STRUCTURES AND PIPES INSTALLED FOR THIS PROJECT SHALL BE INSPECTED AND ACCEPTED BY THE ENGINEER OF RECORD AND THE CITY ENGINEER PRIOR TO FINAL PAVING OR SURFACE RESTORATION. PRIOR TO FINAL ACCEPTANCE, STORM PIPES INSTALLED FOR THIS PROJECT SHALL BE INSPECTED USING A CLOSED-CIRCUIT TELEVISION (CCTV) CAMERA. THE CCTV INSPECTION SHALL BE COMPLETED BY A FIRM WITH PERSONNEL THAT SPECIALIZES IN THIS TYPE OF WORK AND MUST BE APPROVED BY THE ENGINEER OF RECORD BEFORE FINAL ACCEPTANCE OF THE PROJECT.

GENERAL NOTES

DATE	REVISIONS:

DRAWN BY	SMV
DESIGN BY	GDH
CHECKED BY	GDH
APPROVED BY	GDH




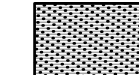
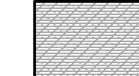




CANTERWOOD MANOR AT DEBARY
CITY OF DEBARY, FLORIDA

HUDAK ENGINEERING, INC.
CIVIL ENGINEERING & LAND DEVELOPMENT DESIGN SERVICES
CERTIFICATE OF AUTHORIZATION #9388
1344 HARDY AVENUE, ORLANDO, FL 32803
PHONE: (407) 462-4833
EMAIL: ghudak@hudakengineering.com

DATE:
JANUARY 2018

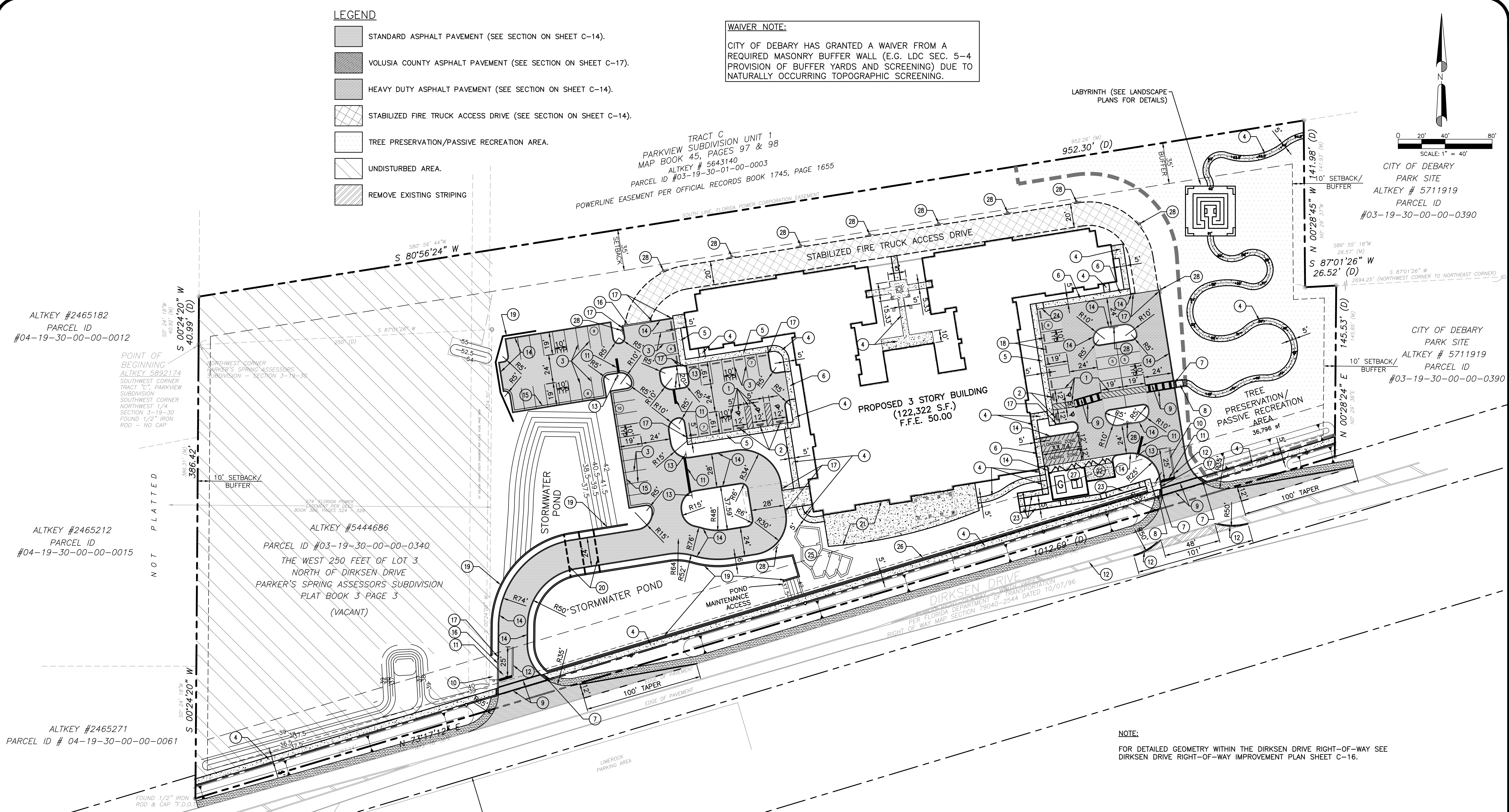
SHEET NO.
C-2
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LEGEND

-  STANDARD ASPHALT PAVEMENT (SEE SECTION ON SHEET C-14).
-  VOLUSIA COUNTY ASPHALT PAVEMENT (SEE SECTION ON SHEET C-17).
-  HEAVY DUTY ASPHALT PAVEMENT (SEE SECTION ON SHEET C-14).
-  STABILIZED FIRE TRUCK ACCESS DRIVE (SEE SECTION ON SHEET C-14).
-  TREE PRESERVATION/PASSIVE RECREATION AREA.
-  UNDISTURBED AREA.
-  REMOVE EXISTING STRIPING

WAIVER NOTE:

CITY OF DEBARY HAS GRANTED A WAIVER FROM A REQUIRED MASONRY BUFFER WALL (E.G. LDC SEC. 5-4 PROVISION OF BUFFER YARDS AND SCREENING) DUE TO NATURALLY OCCURRING TOPOGRAPHIC SCREENING.



KEYED NOTES

- 1 ACCESSIBLE PARKING STRIPING (TYP.), SEE DETAIL ON SHEET C-14.
- 2 ACCESSIBLE PARKING SIGN (TYP.), SEE DETAIL ON SHEET C-14.
- 3 PARKING STALL STRIPING (TYP.), SEE DETAIL ON SHEET C-14.
- 4 CONCRETE SIDEWALK, SEE DETAIL ON SHEET C-14.
- 5 MONOLITHIC CONCRETE SIDEWALK AND CURB (FLUSH W/PAVEMENT), SEE DETAIL ON SHEET C-14.
- 6 MONOLITHIC CONCRETE SIDEWALK AND CURB (6" ABOVE PAVEMENT), SEE DETAIL ON SHEET C-14.
- 7 INSTALL DETECTABLE WARNING PER FDOT INDEX No. 304.
- 8 CONSTRUCT PUBLIC SIDEWALK RAMP PER FDOT INDEX No. 304.
- 9 WHITE THERMOPLASTIC CROSSWALK PER FDOT INDEX No. 17346.
- 10 36" HIGH INTENSITY STOP SIGN.
- 11 24" WIDE THERMOPLASTIC STOP BAR.
- 12 6" DOUBLE YELLOW THERMOPLASTIC.
- 13 24" HIGH INTENSITY STOP SIGN.
- 14 TYPE 'D' CONCRETE CURB, SEE DETAIL ON SHEET C-14.

NOTE:

FOR DETAILED GEOMETRY WITHIN THE DIRKSEN DRIVE RIGHT-OF-WAY SEE DIRKSEN DRIVE RIGHT-OF-WAY IMPROVEMENT PLAN SHEET C-16.

KEYED NOTES

- 15 TYPE 'F' CONCRETE CURB & GUTTER, SEE DETAIL ON SHEET C-14.
- 16 12" CONCRETE RIBBON CURB, SEE DETAIL ON SHEET C-14.
- 17 3" TRANSITION CURB FROM 6" HIGH TO FLUSH WITH PAVEMENT.
- 18 WHEEL STOP (TYP.).
- 19 RETAINING WALL TOPPED WITH DECORATIVE FENCE (DESIGN BY OTHERS).
- 20 2-12' WIDE X 4' HIGH X 37' LONG BOX CULVERTS FDOT INDEX 289, 291 & 293 OR APPROVED EQUAL (DESIGN BY OTHERS).
- 21 PATIO (SEE ARCHITECTURAL PLANS).
- 22 DOUBLE DUMPSTER PAD, MATCH BUILDING DESIGN ELEMENTS (SEE ARCHITECTURAL PLANS).
- 23 CONCRETE SIDEWALK RAMP WITH HANDRAILS PER FDOT INDEX No.'S 304, 310 & 870.
- 24 6" TRANSITION PAVEMENT FROM 6" BELOW SIDEWALK TO FLUSH WITH SIDEWALK.
- 25 CASCADING WATER FEATURE (DESIGN BY OTHERS).
- 26 RETAINING (DESIGN BY OTHERS).
- 27 GENERATOR ENCLOSURE, MATCH BUILDING DESIGN ELEMENTS (SEE ARCHITECTURAL PLANS).
- 28 FIRE LANE MARKING SIGN, SEE DETAIL ON SHEET C-14.

SITE GEOMETRY PLAN

REVISIONS:

DATE	BY	DESCRIPTION

DRAWN BY	DESIGN BY	CHECKED BY	APPROVED BY

GREG HUDAK
PE # 54684

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