PERMITS:

NOTES:

- CITY OF OCALA CONCEPTUAL PLAN *APPROVED (DATE)/PENDING*
- CITY OF OCALA IMPROVEMENT PLAN *APPROVED (DATE)/PENDING*
- SJRWMD ERP *APPROVED (DATE)/ PENDING* FDEP - POTABLE WATER - *APPROVED (DATE) / PENDING*
- FDEP SANITARY SEWER *APPROVED (DATE) / PENDING* 5. FDEP - NPDES (BY OTHERS)

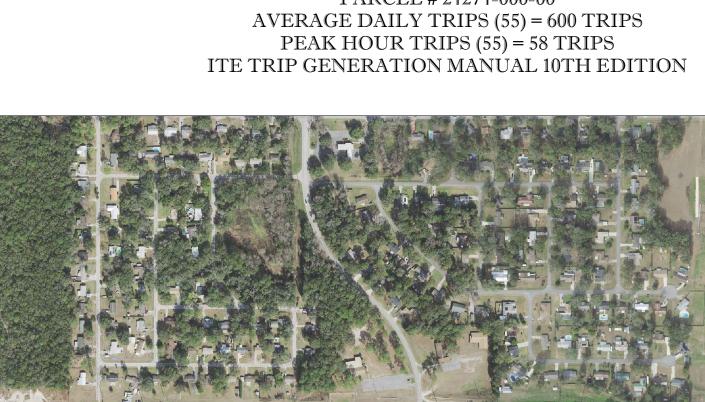
REQUESTED WAIVERS:

CONCEPTUAL PLAN GREENWAYRESERVE

SECTION 3, TOWNSHIP 15 SOUTH, RANGE 22 EAST CITY OF OCALA, MARION COUNTY, FLORIDA

THIS SITE CONTAINS:

RESIDENTIAL LOTS = 55 TOTAL MILES OF ROADWAY = 0.54 MILES PROJECT AREA = $12.67 \pm ACRES$ PARCEL # 24274-000-00



INDEX OF SHEETS

01.01 COVER SHEET 02.01 GENERAL NOTES AERIAL PHOTOGRAPH 03.01 04.01GEOMETRY PLAN

OWNER'S SIGNATURE

I HEREBY CERTIFY THAT I, MY SUCCESSORS, AND ASSIGNS SHALL PERPETUALLY MAINTAIN THE IMPROVEMENTS AS SHOWN ON THIS PLAN.

> GREEN FAMILY TRUST FRANK GREEN

ENGINEER CERTIFICATION

I HEREBY CERTIFY THAT THESE PLANS AND CALCULATIONS WERE COMPLETED IN ACCORDANCE WITH ALL APPLICABLE REQUIREMENTS OF THE MARION COUNTY LAND DEVELOPMENT CODE (LDC), EXCEPT AS WAIVED.

> TIMOTHY BROOKER JR., P.E. REGISTERED ENGINEER NO. 79259 STATE OF FLORIDA

SURVEYOR'S CERTIFICATE

I HEREBY CERTIFY THAT THE SURVEY REPRESENTED HEREON IS IN ACCORDANCE WITH ALL APPLICABLE REQUIREMENTS OF THE LDC AND MEETS THE MINIMUM TECHNICAL STANDARDS AS SET FORTH BY THE FLORIDA BOARD OF PROFESSIONAL SURVEYORS AND MAPPERS.

> CHRISTOPHER J. HOWSON JCH CONSULTING GROUP, INC. REGISTERED LAND SURVEYOR NO. 6553 STATE OF FLORIDA.

- ALL CONSTRUCTION COVERED BY THESE PLANS SHALL COMPLY WITH THE MATERIALS REQUIREMENTS AND QUALITY CONTROL STANDARDS CONTAINED IN THE CITY OF OCAL
- THIS PROJECT HAS NOT BEEN GRANTED CONCURRENCY APPROVAL AND/OR GRANTED AND/OR RESERVED ANY PUBLIC FACILITIES. FUTURE RIGHTS TO DEVELOP THE PROPERTY ARE SUBJECT TO DEFERRED CONCURRENCY DETERMINATION, AND FINAL APPROVAL TO DEVELO THE PROPERTY HAS NOT BEEN OBTAINED. THE COMPLETION OF CONCURRENCY REVIEW BUT NOT LIMITED TO, BUILDING PERMIT REVIEW.
- A COPY OF ALL PERMITS OBTAINED FROM REGULATORY AGENCIES AND WATER MANAGEMEN DISTRICTS WILL BE FORWARDED TO THE CITY PRIOR TO ISSUANCE OF BUILDING PERMITS.

- CONSTRUCTION OF IMPERVIOUS AREA. 9. AN APPROVED RIGHT-OF-WAY UTILIZATION PERMIT SHALL BE REQUIRED, FOR ANY WORK DONE WITHIN THE CITY'S RIGHT-OF-WAY, AT LEAST FIVE (5) BUSINESS DAYS PRIOR TO SCHEDULED STARTING DATE.

BASIS OF BEARING:

BEARINGS AND COORDINATES SHOWN HERON ARE BASED ON THE FLORIDA STATE PLAN ZONE, NORTH AMERICAN DATUM OF 1983 (NAD 83), WITH 2011 ADJUSTMENT AS DERIVED FROM THE OF TRANSPORTATION VIRTUAL REFERENCE STATION NETWORK.

BENCHMARKS:

TEMPORARY BENCHMARK (#16): SET 5/8" IRON ROD & CAP (LB 8071) ELEVATION = 74.89' N.1775865.32

TEMPORARY BENCHMARK (#17): FOUND 4"X4" CONCRETE MONUMENT (NO I.D.) ELEVATION = 83.00' N.1775872.89 E.624139.95 (NAVD 1988)

LEGAL DESCRIPTION:

(PER OFFICIAL RECORDS BOOK 8138, PAGE 1353)

PARCEL 4:

A PARCEL OF LAND LYING IN A PORTION OF THE SOUTHWEST 1/4 OF THE NORTHWEST 1/4 OF SECTION 3, TOWNSHIP 15 SOUTH, RANGE 22 EAST, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGIN AT THE INTERSECTION OF THE NORTH RIGHT OF WAY LINE OF NE 28TH STREET (80 FEET WIDE) WITH THE EAST RIGHT OF WAY LINE OF NE 25TH AVENUE (80 FEET WIDE); THENCE NORTH 00° 01' 58" EAST, ALONG SAID EAST RIGHT OF WAY LINE, 1280.54 FEET; THENCE DEPARTING SAID EAST RIGHT OF WAY LINE, NORTH 88° 52' 55" EAST A DISTANCE OF 432.59 FEET; THENCE SOUTH 00° 06' 34" WEST A DISTANCE OF 1280.53 FEET TO A POINT ON THE NORTH RIGHT OF WAY LINE OF SAID NE 28TH STREET; THENCE SOUTH 88° 52' 23" WEST, ALONG SAID NORTH RIGHT OF WAY LINE, 429.41 FEET TO THE POINT OF BEGINNING. SAID LANDS BEING SITUATE IN MARION COUNTY, FLORIDA.

OWNER:

GREEN FAMILY TRUST FRANK GREEN 6811 NE 37TH LN SILVER SPRINGS FLORIDA 34488-2108

CIVIL ENGINEER:

TILLMAN AND ASSOCIATES ENGINEERING, L.L.C. TIMOTHY BROOKER JR., P.E. 1720 SE 16TH AVE. BLDG. 100 OCALA, FLORIDA 34471 PH: (352) 387-4540

SURVEYOR:

JCH CONSULTING GROUP, INC. CHRISTOPHER J. HOWSON, P.S.M., CFM 426 SW 15TH STREET OCALA, FLORIDA 34471 PHONE (352) 405-1482

UTILITY COMPANIES:

WATER/SEWER

ELECTRIC CABLE/PHONE/INTERNET

CITY OF OCALA, OCALA ELECTRIC UTILITIES, CITY OF OCALA TELECOMM.

STACEY FERRANTE (352) 351-6775 RANDY HAHN (352) 351-6615 BRUCE STOUT (352) 401-3417 SHANE PARKER (352) 401-3999 MICHELLE OSBORNE (478) 314-3577

NOT VALID UNLESS SIGNED AND SEALED BY A PROFESSIONAL ENGINEER

DATE 8/12/2025 $DRAWNBY__AS_$ CHKD. BY TB *JOB NO.* __23-8340

ALL NOTES ON THIS SHEET ARE GENERAL IN NATURE. ALL NOTATION AND INFORMATION IN SUBSEQUENT SHEETS SHALL SUPERCEDE THESE NOTES IF

THE CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFICATION OF SIZE AND LOCATION OF ALL EXISTING UTILITIES AND RELATED CONSTRUCTION PRIOR TO COMMENCEMENT OR WORK.CONTRACTOR SHALL CONTACT SUNSHINE STATE ONE CALL OF FLORIDA, INC. AT 1-800-432-4770, IN ACCORDANCE WITH CHAPTER 556,

ALL CONSTRUCTION TO BE IN ACCORDANCE WITH THE LATEST STANDARDS OF <u>CITY OF OCALA</u> AND FDOT.

PAVEMENT STRIPING TO BE IN ACCORDANCE WITH CITY OF OCALA SPECIFICATIONS AND WITH THE FLORIDA D.O.T. ROADWAY & TRAFFIC STANDARDS, INDEX

ALL TRAFFIC CONTROL SIGNS SHALL BE IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

WHERE MUCK OR OTHER ORGANIC MATERIAL IS FOUND, IT SHALL BE REMOVED AND REPLACED BY GOOD QUALITY BACKFILL MATERIAL OBTAINED FROM THE RADING OPERATIONS OR OTHER SOURCE APPROVED BY THE ENGINEER. THE ORGANIC MATERIAL SHALL BE THEN USED AS TOP DRESSING WHEN MIXED WITH CLEAN SANDY SOIL.

ALL FINISHED GRADES AND ELEVATIONS ARE AS DENOTED BY THE APPLICABLE LEGEND.

AS PART OF THE CLEARING AND GRUBBING OPERATION. THE CONTRACTOR IS TO REMOVE EXISTING FACILITIES AND / OR FENCING FROM THE SITE AS SHOWN ON

THE CONTRACTOR SHALL NOTIFY CITY OF OCALA ENGINEERING DIVISION AND TILLMAN AND ASSOCIATES ENGINEERING, LLC AT LEAST ONE WEEK BEFORE COMMENCEMENT OF ANY CONSTRUCTION. CONTRACTOR SHALL OBTAIN A CITY OF OCALA R/W PERMIT PRIOR TO COMMENCING WORK WITHIN CITY OF OCALA

. A MINIMUM SEPARATION OF 1.5 FEET BETWEEN THE LIMEROCK BASE AND THE HIGHEST GROUNDWATER ELEVATION SHALL BE MAINTAINED WITHIN THE RIGHT-OF-WAY. CONTRACTOR TO NOTIFY ENGINEER IF 1.5 FEET OF SEPARATION IS NOT ACHIEVED.

A PRE-CONSTRUCTION MEETING IS REQUIRED PRIOR TO COMMENCEMENT OF CONSTRUCTION.

PER SECTION 82-371, CODE OF ORDINANCES: FOR ANY WORK WITHIN PUBLIC RIGHT OF WAYS, A RIGHT OF WAY UTILIZATION PERMIT MUST BE OBTAINED FROM THE ENGINEERING DEPARTMENT A MINIMUM OF 48 HOURS PRIOR TO THE START OF CONSTRUCTION

THE CONTRACTOR SHALL SUBMIT THREE (3) SETS OF STANDARD SHOP DRAWINGS AND MANUFACTURER'S CATALOGS WITH THE MODEL NUMBER OR TYPE OF THE ITEM ENCIRCLED OR OTHERWISE DESIGNATED. THE SUBMITTALS SHALL BEAR THE APPROVAL OF THE UNDERGROUND UTILITY CONTRACTOR. ALL UTILITY SHOP DRAWINGS AND MANUFACTURER'S CATALOGS SHALL BE APPROVED BY THE ENGINEER OF RECORD AND CITY OF OCALA PRIOR TO CONSTRUCTION.

ALL AS-BUILTS SHALL COMPLY WITH THE CURRENT LDC, SECTION 6.14.8 AND RETURNED IN NAD83 W. FORMAT WITH NORTHING AND EASTING COORDINATES FOR ALL ITEMS UNDER WATER AND WASTEWATER COMPONENTS MCU PERSONNEL ARE TO INSPECT ANY WORK PERFORMED ON OR AROUND EXISTING MCU INFRASTRUCTURE. A PRE-CONSTRUCTION MEETING IS REQUIRED TO BE

HELD A MINIMUM OF 48 HOURS PRIOR TO START OF ANY CONSTRUCTION. IF THE PRE-CONSTRUCTION MEETING IS NOT COMPLETED, ANY WORK MAY BE HALTED. TO SCHEDULE, CONTACT MCU'S CONSTRUCTION OFFICER AT 352-307-6163.

ALL UTILITIES UNDER EXISTING OR PROPOSED PAVEMENT SHALL BE SLEEVED IN ACCORDANCE WITH SECTION B.2.6A OF THE CITY OF OCALA LAND DEVELOPMENT

PIPE LENGTHS SHOWN REPRESENT SCALED DISTANCE BETWEEN CENTERLINES OF DRAINAGE STRUCTURES. ALL PAVEMENT RETURN RADII SHALL BE 28' AND MEASURED FROM THE INTERFACE OF THE CONCRETE CURB AND PAVEMENT SURFACE UNLESS OTHERWISE

DITCH BOTTOM AND CONTROL STRUCTURE INLET GRATES SHALL BE SECURED WITH CHAIN AND EYEBOLT

TOP ELEVATIONS OF MANHOLES IN GRASSED AREAS SHALL BE LOCATED AT FINISHED GRADE ELEVATION.

FIVE (5) FEET OF SOD IS REQUIRED AROUND ALL DITCH BOTTOM INLETS, MANHOLES, HEADWALLS AND MITERED END SECTIONS

AS AN ALTERNATIVE, CONTRACTOR MAY USE ALTERNATIVE PIPE MATERIALS IN LIEU OF RCP, HOWEVER CONTRACTOR MUST RECEIVE APPROVAL OF ALTERNATIVE PIPE MATERIALS IN WRITING BY CITY OF OCALA AND TILLMAN & ASSOCIATES PRIOR TO CONSTRUCTION. TO PURSUE USING AN ALTERNATIVE MATERIAL, THE CONTRACTOR SHALL SUBMIT A REQUEST IDENTIFYING THE ALTERNATIVE MATERIAL TYPE REQUESTED. VERIFICATION THAT THE MATERIAL IS INCLUDED ON THE FDOT APPROVED PRODUCTS LIST, AND THE SITE SPECIFIC INSTALLATION MEETS INSTALL CRITERIA SUCH AS DEPTH OF COVER AND UV PROTECTION FOR PIPE ENDS COUNTY WILL REVIEW THE REQUEST AND PROVIDE FEEDBACK. (IF ALTERNATIVE PIPE IS APPROVED AND USED, THE LAST RUN OF STORM PIPE SHALL BE RCP FOR

ALTERNATIVE PIPE MATERIALS SHALL BE ANCHORED AGAINST FLOTATION IN ACCORDANCE WITH MANUFACTURER SPECIFICATIONS.

TOP SOIL WHICH HAS BEEN STRIPPED AND STOCK PILED DURING THE COURSE OF CONSTRUCTION SHALL BE REDISTRIBUTED ON ALL REGRADED SURFACES SO AS TO PROVIDE AT LEAST FOUR INCHES OF EVEN COVER TO ALL DISTURBED AREAS OF THE DEVELOPMENT AND SHALL BE STABILIZED BY SEEDING OR PLANTING

ALL DISTURBED AREAS WITH SLOPES UP TO 6:1 SHALL BE SEEDED AND MULCHED. SLOPES STEEPER THAN 6:1 SHALL BE SODDED AND SLOPES 3:1 OR STEEPER SHALL HAVE THE SOD PEGGED.

SEE TABLE 2.0 FOR REQUIRED STORM PIPE COVER BENEATH AN UNPAVED SECTION.

SEE TABLE 3.0 FOR REQUIRED STORM PIPE COVER BENEATH RIGID PAVEMENT

SEE TABLE 4.0 FOR REQUIRED STORM PIPE COVER BENEATH FLEXIBLE PAVEMENT

THE TABULATED VALUES ARE RECOMMENDED MINIMUM DIMENSIONS TO WITHSTAND ANTICIPATED HIGHWAY TRAFFIC LOADS. ADDITIONAL COVER MAY BE REQUIRED TO SUPPORT CONSTRUCTION EQUIPMENT LOADS OR HIGHWAY TRAFFIC LOADS BEFORE PAVEMENT IS COMPLETED. SOME SIZE THICKNESS COMBINATIONS MAY REQUIRE MINIMUM COVER GREATER THAN THOSE LISTED ABOVE. SEE FDOT INDEX 205, SHEETS 1-6.

ALL RCP STORM WATER PIPE SHALL MEET THE COVER & CLASS CRITERIA AS OUTLINED IN FDOT INDEX 205.

ALL STORM PIPE JOINTS SHALL BE WRAPPED AS SPECIFIED IN FDOT INDEX 280.

THE LAST FOOT OF STORM WATER POND SHALL NOT BE EXCAVATED UNTIL ALL DISTURBED AREAS ARE STABILIZED.

ANY FILL MATERIAL MUST BE APPROVED BY ENGINEER IN WRITING PRIOR TO PLACEMEN'

SIGNIFICANT CARE MUST BE TAKEN WHEN GRADING RETENTION PONDS TO ENSURE THAT POND BOTTOMS DO NOT BECOME COMPACTED DURING CONSTRUCTION OR SEALED BY CONSTRUCTION SEDIMENT. IF SEDIMENTATION OR COMPACTION OF A POND BOTTOM OCCURS, IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RESTORE THE DESIGN HYDRAULIC CONDUCTIVITY.

TIRE DEPARTMENT

THE STRUCTURES BEING CONSTRUCTED ON THE PROPERTY WILL BE CONSTRUCTED UNDER THE <u>8TH</u> EDITION OF FLORIDA FIRE PREVENTION CODE.

FIRE HYDRANTS MUST BE LOCATED SO AS NOT TO REQUIRE THE LAYING OF MORE THAN FOUR-HUNDRED (400) FEET OF HOSE CONNECTED TO SUCH HYDRANT, ALONG THE NEAREST PUBLIC RIGHT-OF-WAY, TO THE

CENTER OF ANY BUILDABLE LOT OR PARCEL IN THE DEVELOPMENT. ANY NEW HYDRANTS MUST BE ABLE TO SUPPLY 1000 G.P.M. OF WATER AT 20 P.S.I. AT ANY TIME OF THE DAY. ANY NEW HYDRANTS SHALL BE TESTED

BY THE CONTRACTOR IN THE PRESENCE OF THE FIRE DEPARTMENT PRIOR TO APPROVAL OF THE FIRE HYDRANTS BY THE FIRE DEPARTMENT. (8TH EDITION OF FLORIDA FIRE PREVENTION CODE) EACH NEW FIRE HYDRANT SHALL BE CLOW MEDALLION WITH TOPS AND BONNETS POWDER COATED FROM FACTORY, SAFETY BLUE.

WHERE UNDERGROUND WATER MAINS AND HYDRANTS ARE TO BE PROVIDED, THEY SHALL BE INSTALLED, COMPLETED, AND IN SERVICE PRIOR TO CONSTRUCTION WORK. (8TH EDITION OF FLORIDA FIRE PREVENTION CODE)

THE ACCESS ROADS SHALL REMAIN CLEAR OF VEHICULAR OBSTRUCTIONS TO ALLOW ACCESS OF FIRE DEPARTMENT UNITS WHILE THE BUILDINGS ARE BEING CONSTRUCTED. (8TH EDITION OF FLORIDA FIRE PREVENTION CODE)

ANY NEW FIRE HYDRANT INSTALLED MUST BE FLOWED & PAINTED BY CONTRACTOR PER NFPA 291.0NCE ALL NEW HYDRANTS HAVE BEEN INSTALLED. ESTED, AND PAINTED PER NFPA 291 BY A THIRD PARTY CONTRACTOR. A THIRD PARTY CONTRACTOR WILL PROVIDE THE CITY OF OCALA FIRE PREVENTION OFFICE WITH A COPY OF THE HYDRANT FLOW DATA.

ALL CONSTRUCTION AND MATERIALS SHALL BE IN COMPLIANCE WITH THE <u>CITY OF OCALA</u> LDC FOR FORCE MAIN CONSTRUCTION.

ALL FORCE MAIN CONSTRUCTION AND MATERIALS TO BE OWNED AND MAINTAINED BY <u>CITY OF OCALA UTILITIES</u>.

PIPE LENGTHS SHOWN IN REPRESENT SCALED DISTANCES BETWEEN FITTINGS OF BRANCHES AND MAINS

DEFLECTIONS AT PIPE JOINTS SHALL NOT EXCEED THOSE RECOMMENDED BY THE PIPE MANUFACTURER. VALVES SHALL BE EQUIPPED WITH AN ADJUSTABLE CAST IRON VALVE BOX WITH COVER, WITH THREADED EXTENSIONS WHERE NEEDED, UNLESS

ALL PVC FORCE MAIN SHALL BE AS SPECIFIED IN THE CONTRACT DOCUMENTS, MARKED WITH THE SEAL OF APPROVAL OF THE NATIONAL SANITATION 22. ALL WATER MAIN TEES, BENDS, PLUGS, AND HYDRANTS WILL BE PROVIDED WITH THRUST BLOCKS OR RESTRAINED JOINTS TO PREVENT MOVEMENT. [FAC

ALL NON-METALLIC FORCE MAINS SHALL BE INSTALLED WITH A CONTINUOUS, INSULATED 10 GAUGE SOLID CORE COPPER WIRE INSTALLED DIRECTLY 23. THE MINIMUM COVER TO BE PROVIDED OVER POTABLE WATER LINES SHALL BE 3'. ON TOP OF THE PIPE FOR LOCATION PURPOSES. SEE STANDARD DRAWINGS. IN ADDITION, ALL PVC FORCE MAINS SHALL BE EITHER A SOLID GREEN COLOR OR WHITE WITH GREEN LETTERING. ALL LETTERING SHALL APPEAR LEGIBLY ON PIPE AND SHALL RUN THE ENTIRE LENGTH OF THE PIPE. LETTERING SHALL READ AS IS ACCEPTABLE FOR THE INTENDED USE

HYDROSTATIC & LEAKAGE TESTING OF THE FORCE MAIN SHALL BE DONE IN ACCORDANCE WITH THE AWWA STANDARDS. HYDROSTATIC TESTING TO BE DONE IN ACCORDANCE WITH AWWA C-600.

PVC - SHALL BE MANUFACTURED IN ACCORDANCE WITH AWWA STANDARD C900, LATEST EDITION. THE PVC SHALL HAVE A MINIMUM WORKING PRESSURE OF 100 PSI AND SHALL HAVE A DIMENSION RATIO (DR) OF 25 JNLESS OTHERWISE NOTED. PIPE SHALL BE THE SAME O.D. AS DUCTILE IRON PIPE. PVC JOINT - SHALL BE IN ACCORDANCE WITH ASTM D3139. DUCTILE IRON JOINT - SHALL BE IN ACCORDANCE WITH ANSI A21.11 AND

AIR RELEASE VALVES SHALL BE REQUIRED AT ALL HIGH POINTS IN THE PROPOSED FORCE MAIN, AS SHOWN ON PLANS. HIGH POINTS IN THE FORCE MAIN ARE DEFINED AS A CHANGE IN ELEVATION TWICE THE DIAMETER OF THE PIPE

ALL FORCE MAINS TO BE CONSTRUCTED WITH A MINIMUM OF 4 FEET OF COVER

ALL IRRIGATION, REUSE AND EFFLUENT REUSE PIPING TO BE OWNED AND MAINTAINED BY <u>CITY OF OCALA</u> SHALL BE A SOLID PURPLE COLOR.

REUSE AND EFFLUENT REUSE MAINS SHALL BE PVC CONFORMING TO AWWA C-900, DR 18 FOR PIPE SIZES 4"-12". PIPES LARGER THAN 12" SHALL BE AWWA C900, DR 18. ALL COUPLINGS, CLEANING COMPOUNDS, SOLVENTS, LUBRICANTS, AND PIPE PREPARATION, FOR LAYING SHALL BE IN ACCORDANCE WITH THE PIPE MANUFACTURERS LATEST RECOMMENDATIONS.

DEPTH OF REUSE AND EFFLUENT REUSE LINES TO BE 36" BELOW FINISHED GRADE.

REUSE AND EFFLUENT REUSE MAINS TO BE LOCATED 5' FROM BACK OF CURB OR EDGE OF PAVEMENT UNLESS OTHERWISE NOTED.

ALL REUSE AND EFFLUENT REUSE MAINS UNDER PAVEMENT SHALL BE DUCTILE IRON PIPE AND SHALL EXTEND 5' BEYOND THE EDGE OF PAVEMENT

ALL IRRIGATION SLEEVING UNDER PAVEMENT SHALL EXTEND 5' BEYOND THE EDGE OF PAVEMENT OR BACK OF CURB

WATER MAIN CONSTRUCTION NOTES

ALL CONSTRUCTION AND MATERIALS SHALL BE IN COMPLIANCE WITH AWWA STANDARDS AS WELL AS THE <u>CITY OF OCALA</u> LDC FOR WATER MAIN

2. ALL WATER MAIN CONSTRUCTION AND MATERIALS WITHIN R/W OR EASEMENT TO BE OWNED AND MAINTAINED BY CITY OF OCALA UTILITIES.

SEPARATION REQUIREMENTS (SEE TABLE 1.0-UTILITY SEPARATIONS)

3.1. HORIZONTAL SEPARATION BETWEEN UNDERGROUND WATER MAINS, SANITARY OR STORM SEWERS WASTEWATER OR STORM WATER FORCE MAINS, RECLAIMED WATER PIPELINES AND ON-SITE SEWAGE

3.1.1. NEW OR RELOCATED UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST 3' BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED STORM SEWER, STORM WATER FORCE MAIN OR PIPELINE CONVEYING RECLAIMED WATER REGULATED UNDER PART III

3.1.2. NEW OR RELOCATED UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST 3' AND PREFERABLY 10' BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED VACUUM-TYPE SANITARY SEWER.

3.1.3 NEW OR RELOCATED LINDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST 6' AND PREFERABLY 10' BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING IR PROPOSED GRAVITY OR PRESSURE-TYPE SANITARY SEWER, WASTEWATER FORCE MAIN OR PIPELINE CONVEYING RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610 F.A.C., THE MINIMUM HORIZONTAL SEPARATION DISTANCE BETWEEN WATER MAINS AND GRAVITY-TYPE SANITARY SEWERS SHALL B REDUCED TO 3' WHERE THE BOTTOM OF THE WATER MAIN IS LAID AT LEAST 6" ABOVE THE TOP OF THE SEWER.

3.2. VERTICAL SEPARATION BETWEEN UNDERGROUND WATER MAINS AND SANITARY OR STORM SEWERS. WASTEWATER OR STORM WATER FORCE MAINS OR RECLAIMED WATER PIPELINES:

3.2.1. NEW OR RELOCATED UNDERGROUND WATER MAINS CROSSING ANY GRAVITY OR VACUUM-TYPE SANITARY SEWER PIPE SHALL BE LAID SO THE OUTSIDE OF THE WATER MAIN IS AT LEAST 6" AND PREFERABLY 12" ABOVE OR AT LEAST 12" BELOW THE OUTSIDE OF THE OTHER PIPE. IT IS PREFERABLE TO LAY THE WATER MAIN ABOVE

3.2.2. NEW OR RELOCATED UNDERGROUND WATER MAINS CROSSING ANY EXISTING OR PROPOSED PRESSURE-TYPE SANITARY SEWER, WASTEWATER OR STORM WATER FORCE MAIN OR PIPELINE CONVEYING RECLAIMED WATER SHALL BE LAID SO THE OUTSIDE OF THE WATER MAIN IS AT LEAST 12" ABOVE OR BELOW THE OUTSIDE OF THE HER PIPELINE. IT IS PREFERABLE TO LAY THE WATER MAIN ABOVE THE OTHER PIPELIN

3.2.3. AT THE UTILITY CROSSINGS DESCRIBED IN THE ABOVE PARAGRAPHS. ONE FULL LENGTH OF WATER MAIN PIPE SHALL BE CENTERED ABOVE OR BELOW THE OTHER PIPELINE SO THE WATER MAIN JOINTS WILL BE AS FAR AS POSSIBLE FROM THE OTHER PIPELINE. ALTERNATIVELY, AT SUCH CROSSINGS, THE PIPES SHALL BE ARRANGED SO THAT ALL WATER MAIN JOINTS ARE AT LEAST 3' FROM ALL JOINTS IN VACUUM-TYPE SANITARY SEWERS. STORM SEWERS, STORM WATER FORCE MAINS OR PIPELINES CONVEYING RECLAIMED WATER REGULATED JNDER PART III OF CHAPTER 62-610, F.A.C., AND AT LEAST 6' FROM ALL JOINTS IN GRAVITY OR PRESSURE-TYPE SANITARY SEWERS, WASTEWATER FORCE MAINS, OR PIPELINES CONVEYING RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.

3.3. NO WATER MAIN SHALL PASS THROUGH OR COME INTO CONTACT WITH ANY PART OF A SANITARY SEWER MANHOLE OR A STORM SEWER MANHOLE

3.4. NEW OR RELOCATED FIRE HYDRANTS WITH UNDERGROUND DRAINS SHALL BE LOCATED SO THAT THE DRAINS ARE AT LEAST 3' FROM ANY EXISTING OR PROPOSED STORM SEWER. STORM WATER FORCE MAIN OR PIPELINE ONVEYING RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-610. F.A.C., AT LEAST 3' BUT PREFERABLY 10' FROM ANY EXISTING OR PROPOSED GRAVITY OR PRESSURE-TYPE SANITARY SEWER. WASTEWATER FORCE MAIN OR PIPELINE CONVEYING RECLAIMED WATER NOT REGULATED LINDER PART III OF CHAPTER 62-610, F.A.C. AND AT LEAST 10' FROM ANY EXISTING OR PROPOSED ON-SITE SEWAGE TREATMENT OR DISPOSAL SYSTEM AS DEFINED IN SECTION 381.0065(2), F.S. AND RULE 64E-6.002, F.A.C..

3.5. EXCEPTIONS / MITIGATION ADHERENCE TO THE ABOVE CONSTRAINTS AND SEPARATIONS IN THE ABOVE ITEMS SHALL BE COMPLIED THOUT EXCEPTION. IF FOR SOME REASON WHERE IT IS NOT TECHNICALLY FEASIBLE OR ECONOMICALL' SENSIBLE THAT THE ABOVE ITEMS CANNOT BE COMPLIED WITH. CONTRACTOR IS TO STOP WORK AND NOTIFY THE ENGINEER OF RECORD FOR THE APPROPRIATE SOLUTION. THE SOLUTION WILL BE SUBMITTED TO THE DEPARTMENT OF ENVIRONMENTAL PROTECTION FOR APPROVAL PRIOR TO WORK COMMENCEMENT.

4. PIPE LENGTHS SHOWN REPRESENT SCALED DISTANCES BETWEEN FITTINGS OF BRANCHES AND MAINS.

5. DEFLECTIONS AT PIPE JOINTS SHALL NOT EXCEED THOSE RECOMMENDED BY THE PIPE MANUFACTURER. ALL GATE VALVES SHALL BE EQUIPPED WITH AN ADJUSTABLE CAST IRON VALVE BOX WITH COVER, WITH THREADED EXTENSION WHERE NEEDED.

ALL PUBLIC WATER SYSTEMS COMPONENTS, EXCLUDING FIRE HYDRANTS, THAT SHALL BE INSTALLED UNDER THIS PROJECT, AND THAT SHALL COME INTO

CONTACT WITH DRINKING WATER SHALL CONFORM TO NSF INTERNATIONAL STANDARD 61 AND SHALL BE MARKED WITH NSF SEAL OF APPROVAL. 8. ALL PIPE AND PIPE FITTINGS INSTALLED UNDER THIS PROJECT SHALL BE COLOR CODED MARKED IN ACCORDANCE WITH SUBPARAGRAPH 62-555.320(21)(b)3. F.A.C.. USING BLUE AS A PREDOMINANT COLOR. ALL DUCTILE IRON WATER MAINS SHALL BE MARKED WITH A CONTINUOUS STRIPE LOCATED WITHIN THE TOP 90 DEGREES OF THE PIPE. SAID STRIPE SHALL BE A MINIMUM 2 INCHES IN WIDTH AND SHALL BE BLUE IN COLOR IF PAINT IS ISED INSTEAD OF TAPE. BACKFILL SHALL NOT BE PLACED FOR 30 MINUTES FOLLOWING PAINT APPLICATION. FOR PIPE WITH AN INTERNAL DIAMETER OF

24" OR GREATER, TAPE OR PAINT SHALL BE APPLIED IN CONTINUOUS LINES A LONG EACH SIDE OF THE PIPE AS WELL AS A LONG THE TOP OF THE PIPE. ALL NON-METALLIC WATER MAINS SHALL BE INSTALLED WITH A CONTINUOUS, INSULATED 10 GAUGE SOLID CORE COPPER WIRE INSTALLED DIRECTLY ON TOP OF THE PIPE FOR LOCATION PURPOSES. SEE STANDARD DRAWINGS. IN ADDITION, ALL PVC WATER MAINS SHALL BE A SOLID BLUE COLOR.

11. PIPE MATERIALS: ALL PIPES, PIPE FITTINGS, PIPE JOINT PACKING AND JOINTING MATERIALS, VALVES, FIRE HYDRANTS, AND METERS INSTALLED UNDER THIS PROJECT SHALL CONFORM TO APPLICABLE AWWA STANDARDS

A. PVC WATER MAINS 4 INCHES TO 12 INCHES SHALL BE IN ACCORDANCE WITH AWWA C900, LATEST EDITION AND SHALL BE DR18. PVC WATER MAIN PIPES LARGER THAN 12 INCHES SHALL BE IN ACCORDANCE WITH AWWA C900, LATEST EDITION AND SHALL BE DR18. PVC PIPES LESS THAN 4 INCHES ARE NOT ALLOWED IN CITY OF OCALA. IN OTHER JURISDICTIONS, THEY SHALL BE IN ACCORDANCE WITH ASTM D1785 (SCHEDULE 40, 80, 120) OR ASTM D2241 SDR 21. MINIMUM WORKING PRESSURE FOR ALL PVC SHALL BE 150 PSI. ALL PVC PIPE SHALL HAVE THE SAME O.D. AS DUCTILE IRON PIPE. PVC PIPE JOINTS SHALL BE IN ACCORDANCE WITH ASTM D3139 AND AWWA STANDARDS.

DUCTILE IRON PIPE SHALL CONFORM TO ANSI A21.51/AWWA C151 AND SHALL BE A MINIMUM OF CLASS 50. DUCTILE IRON JOINTS SHALL BE IN CORDANCE WITH ANSI A21.11 AND AWWA C111 C. ALL SERVICES SHALL BE POLYETHYLENE TUBING, CLASS 160 AND SHALL BE IN ACCORDANCE WITH AWWA C901.

12. ALL VALVES SHALL BE LOCATED IN NON PAVED AREAS, UNLESS SPECIFIED ON PLANS.

13. FIRE HYDRANT LEADS SHALL HAVE A MINIMUM INSIDE DIAMETER OF 6" AND SHALL INCLUDE AN AUXILIARY VALVE.

14. IF AGGRESSIVE SOIL CONDITIONS ARE FOUND DURING CONSTRUCTION, WATER MAINS SHALL BE PROTECTED THROUGH THE USE OF CORROSION RESISTANT MATERIALS, THROUGH ENCASEMENT OF THE WATER MAINS IN POLYETHYLENE, OR THROUGH PROVISION OF CATHODIC PROTECTION. 15. ALL PIPE AND PIPE FITTINGS INSTALLED UNDER THIS PROJECT SHAL BE "LEAD FREE" AS DEFINED IN THE LATEST VERSION OF THE SAFE WATER DRINKING

16. WHERE NEW OR ALTERED DEAD-END WATER MAINS INCLUDED IN THIS PROJECT CANNOT BE AVOIDED, THEY SHALL BE PROVIDED WITH A FIRE FLUSHING

HYDRANT OR BLOW-OFF FOR FLUSHING PURPOSES 17. ALL FIRE HYDRANTS THAT WILL BE INSTALLED UNDER THIS PROJECT SHALL BE LOCATED AT LEAST THREE FEET FROM ANY EXISTING OR PROPOSED STORM SEWER, STORM WATER FORCE MAIN, PIPELINE CONVEYING RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C., OR VACUUM - TYPE SANITARY SEWER; AT LEAST SIX FEET FROM ANY EXISTING OR PROPOSED GRAVITY - OR PRESSURE - TYPE SANITARY SEWER, WASTEWATER FORCE

MAIN, OR PIPELINE CONVEYING RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C. 18. PROPOSED FIRE HYDRANTS CONNECTED TO THE POTABLE WATER MAIN, FOR THIS PROJECT, SHALL BE PAINTED PER NFPA AND AWWA STANDARDS. FIRE

HYDRANTS CONNECTED TO THE DESIGNATED FIRE LINE SHALL BE PAINTED PER JURISDICTION IF LAND CLEARING OPERATIONS REQUIRE BURNING, A BURN PERMIT MUST BE OBTAINED FROM THE DEPARTMENT OF FORESTRY PRIOR TO BURNING

19. ALL PIPE AND PIPE FITTINGS INSTALLED UNDER THIS PROJECT WILL BE COLOR CODED OR MARKED IN ACCORDANCE WITH SUBPARAGRAPH 62-555.320(21)(b)3,F.A.C, USING BLUE AS A PREDOMINANT COLOR. (UNDERGROUND PLASTIC PIPE WILL BE SOLID-WALL BLUE PIPE, WILL HAVE A CO-EXTRUDED BLUE EXTERNAL SKIN, OR WILL BE WHITE OR BLACK PIPE WITH BLUE STRIPES INCORPORATED INTO, OR APPLIED TO, THE PIPE WALL; AND UNDERGROUND METAL OR CONCRETE PIPE WILL HAVE BLUE STRIPED APPLIED TO THE PIPE WALL. PIPE STRIPED DURING MANUFACTURING OF THE PIPE WILL HAVE CONTINUOUS STRIPES THAT RUN PARALLEL TO THE AXIS OF THE PIPE. THAT ARE LOCATED AT NO GREATER THAN 90-DEGREE INTERVALS AROUND THE PIPE, AND THAT WILL REMAIN INTACT DURING AND AFTER INSTALLATION OF THE PIPE. IF TAPE OR PAINT IS USED TO STRIPE PIPE DURING INSTALLATION OF THE PIPE, THE TAPE OR PAINT WILL BE APPLIED IN A CONTINUOUS LINE THAT RUNS PARALLEL TO THE AXIS OF THE PIPE AND THAT IS LOCATED ALONG THE TOP OF THE PIPE: FOR PIPE WITH AN INTERNAL DIAMETER OF 24 INCHES OR GREATER. TAPE OR PAINT WILL BE APPLIED IN CONTINUOUS LINES ALONG EACH SIDE OF THE PIPE AS WELL AS ALONG THE TOP OF THE PIPE. ABOVEGROUND PIPE WILL BE PAINTED BLUE OR WILL BE

COLOR CODED OR MARKED LIKE UNDERGROUND PIPE.) [FAC 62-555.320(21)(b)3] 20. THE OPEN END OF THE AIR RELIEF PIPE FROM ALL AUTOMATIC AIR RELIEF VALVES WILL BE EXTENDED TO AT LEAST ONE FOOT ABOVE GRADE AND WILL BE

PROVIDED WITH A SCREENED, DOWNWARD-FACING ELBOW. [FAC 62-555.320(21)(b)3, AND RSWW 8.4.2] 21. A CONTINUOUS AND UNIFORM BEDDING WILL BE PROVIDED IN TRENCHES FOR UNDERGROUND PIPE: BACKELL MATERIAL WILL BE TAMPED IN LAYERS. AROUND UNDERGROUND PIPE TO ADEQUATELY SUPPORT AND PROTECT THE PIPE: AND UNSUITABLY SIZED STONES (AS DESCRIBED IN APPLICABLE AWWA STANDARDS OR MANUFACTURERS' RECOMMENDED INSTALLATION PROCEDURES) FOUND IN TRENCHES WILL BE REMOVED FOR A DEPTH OF AT LEAST SIX INCHES BELOW THE BOTTOM OF UNDERGROUND PIPE. [FAC 62-555.320(21)(b)3, AND RSWW 8.5.2]

62-555.320(21)(b)3. AND RSWW 8.5.4]

WATER MAIN CONNECTIONS SHALL BE MADE UNDER THE SUPERVISION OF THE CITY OF OCALA. ALL VALVES SHALL BE OPERATED BY CITY OF OCALA PERSONNEL ONLY. WATER MAINS ARE TO BE DISINFECTED PER AWWA C651 AN<mark>D CITY OF OCALA</mark> LAND DEVELOPMENT CODE OF STAN<mark>DARDS AN</mark> SPECIFICATIONS FOR WASTEWATER AND WATER MAIN CONSTRUCTION SECTION 51.6 WHICH INCLUDES A FULL FLUSH. CONNECTING THE NEW MAINS PRIOR TO DISINFECTING, TO THE EXISTING ACTIVE SYSTEM FOR FILLING, FLUSHING, AND TESTING CONSTITUTES A PROHIBITED CROSS CONNECTION. PLEASE REFER TO CITY OF OCALA TEMPORARY JUMPER CONNECTION (DETAIL UT203).

25. SITE HAS <u>NO KNOWN</u> AGGRESSIVE SOILS OR CONTAMINATED BY LOW MOLECULAR-WEIGHT PETROLEUM PRODUCTS OR ORGANIC SOLVENTS WHERE WATER MAINS WILL BE INSTALLED. [32-555.520(4)(a) 10.f, F.A.C.]

26. APPROXIMATE GROUND WATER ELEVATION DURING DIFFERENT SEASONS IS ESTIMATED TO BE BELOW ELEVATION XX.XX', WHICH IS X.X' OR GREATER BELOW THE BOTTOM OF ANY PROPOSED WATER MAINS. [62-555.520(4)(a) 10.d, F.A.C.]

27. PVC WATER MAINS THAT HAVE AN INSIDE DIAMETER OF 3" OR GREATER, SHALL BE INSTALLED, PRESSURE, AND LEAK TESTED IN ACCORDANCE WITH AWWA STANDARD C605 AND DUCTILE IRON WATER MAINS IN ACCORDANCE WITH AWWA C600, 62-555.320(21)(b)1 AND 62-555.330F F.A.C. ALL INSTALLATION, TESTING, AND FIELD PROCEDURES MUST BE PROVIDED AND MUST CONFORM TO THE APPLICABLE AWWA STANDARDS.





SANITARY SEWER NOTES

1. ALL MATERIALS AND CONSTRUCTION SHALL BE IN COMPLIANCE WITH THE <u>CITY OF OCALA</u> LDC FOR WASTEWATER CONSTRUCTION.

ALL SANITARY SEWER CONSTRUCTION AND MATERIALS WITHIN R/W OR EASEMENT TO BE OWNED AND MAINTAINED BY CITY OF OCALA

3. ALL MANHOLES SHALL BE 4 FT. INSIDE DIAMETER. 4. PIPE LENGTHS SHOWN REPRESENT SCALED DISTANCES BETWEEN MANHOLE CENTERLINE.

5. ALL SANITARY SERVICE LATERALS SHALL BE 6 INCH DIAMETER, UNLESS SPECIFIED OTHERWISE ON PLANS.

INVERTS OF SANITARY SERVICE LATERALS AT THEIR CONNECTION TO SANITARY MANHOLES SHALL BE NO MORE THAN ONE (1) FOOT ABOVE

MINIMUM AS BUILT 8" PVC SEWER LINE SLOPE WILL BE 0.40% MINIMUM SLOPE OR WILL BE RE-LAID BY CONTRACTOR TO MEET THE MINIMUM SLOPE REQUIREMENT AT NO ADDITIONAL COST.

MARK LATERALS BY ETCHING AN "S" INTO CURBING.

9. PIPE MATERIAL IS ASTM D3034, SDR-26 UNLESS OTHERWISE NOTED

10. A MINIMUM 1.00% SLOPE SHALL BE MAINTAINED ON THE SANITARY SEWER SERVICE LATERALS. AT NO TIME SHALL A SANITARY SEWER LATERAL HAVE A SLOPE OF 15% OR GREATER.

SANITARY SEWER GRAVITY MAINS ARE TO BE UPGRADED IN MATERIAL TO WATER MAIN STANDARDS AND HYDROSTATICALLY PRESSURI TESTED WITH WATER TO ENSURE JOINT TIGHTNESS IF EITHER OF THE HORIZONTAL OR VERTICAL MINIMUM REQUIRED CLEARANCE FROM A WATER MAIN CANNOT BE MAINTAINED OR IF THE SEWER MAIN IS ABOVE THE WATER MAIN. UPGRADE TO MATERIAL CANNOT BE MADE WITHOUT PRIOR APPROVAL FROM FDEP.

12. LEAKAGE TEST ARE SPECIFIED REQUIRING THAT A) THE LEAKAGE EXFILTRATION OR INFILTRATION DOES NOT EXCEED 200 GALLONS PER INCH OF PIPE DIAMETER PER

MILE PER DAY FOR ANY SECTION OF THE SYSTEM B) EXFILTRATION OR INFILTRATION TESTS BE PERFORMED WITH A MINIMUM POSITIVE HEAD OF 2 FEET C) AIR TESTS, AS MINIMUM, CONFORM TO THE TEST PROCEDURE DESCRIBED IN ASTM C-924 FOR CONCRETE PIPE ASTM F-1417 FOR PLASTIC PIPE AND FOR OTHER MATERIALS APPROPRIATE TEST PROCEDURES, AIR TESTING, IF SPECIFIED FOR CONCRETE SEWER MANHOLES, CONFORMS TO THE TEST PROCEDURES DESCRIBED IN ASTM C-1244

DEFLECTION TESTS SHALL BE PERFORMED IN ACCORDANCE WITH THE RECOMMENDED STANDARDS FOR WASTEWATER FACILITIES, CHAPTER 33.85, FOR ALL GRAVITY SANITARY SEWER LINES. TESTING IS REQUIRED AFTER THE FINAL BACKFILL HAS BEEN IN PLACE AT LEAST 30 DAYS TO PERMIT STABILIZATION OF THE SOIL-PIPE SYSTEM. TESTING REQUIREMENTS SPECIFY:

 NO PIPE SHALL EXCEED A DEFLECTION OF 5%. 2) USING A RIGID BALL OR MANDREL FOR THE PIPE DEFLECTION TESTS WITH A DIAMETER NOT LESS THAN 95% OF THE BASE INSIDE DIAMETER OR AVERAGE INSIDE DIAMETER OF THE PIPE, DEPENDING ON WHICH IS SPECIFIED IN THE ASTM SPECIFICATION, INCLUDING THE APPENDIX, TO WHICH THE PIPE IS MANUFACTURED. 3) PERFORMING THE TEST WITHOUT MECHANICAL PULLING DEVICES.

14. TESTING OF THE SEWAGE COLLECTION SYSTEM IS AS FOLLOWS: A. ALL GRAVITY SEWER MAINS REQUIRE LOW PRESSURE AIR TESTING IN ACCORDANCE WITH THE LATEST UNI-BELL STANDARD FOR LOW PRESSURE AIR TESTS. AIR TEST, AS A MINIMUM, SHALL CONFORM TO THE TEST PROCEDURES DESCRIBED IN ASTM SPECIFICATIONS, ASTM F1417 FOR PLASTIC PIPE.

B. ALL SEWER MAINS SHALL BE LAMPED BY IN THE PRESENCE OF A **CITY OF OCALA** REPRESENTATIVE.

D. HYDRO-STATIC TESTS CONSISTING OF A HYDROSTATIC PRESSURE TEST AND HYDROSTATIC LEAKAGE TEST SHALL BE CONDUCTED ON ALL NEWLY INSTALLED SEWER FORCE MAIN SYSTEM PRESSURE PIPES AND APPURTENANCES IN ACCORDANCE WITH AWWA C600 OR M23 AS APPLICABLE. THE PRESSURE SHALL BE 150 PSI FOR TWO (2) HOURS.

E. DEFLECTION TEST ARE REQUIRED FOR ALL FLEXIBLE PIPE EXCLUDING FORCE MAINS. TESTS SHALL BE PERFORMED WITHOUT MECHANICAL PULLING DEVICES.D MEASURED FROM THE INTERFACE TO THE CONCRETE CURB AND PAVEMENT SURFACE UNLESS OTHERWISE NOTED.

C. ALL MANHOLES SHALL BE INSPECTED FOR INFILTRATION, ALIGNMENT, FLOW CHANNEL CONSTRUCTION AND COAL

15. SANITARY SEWER SERVICES SHALL BE INSTALLED 10' FROM BACK OF CURB.

16. THE CONTRACTOR SHALL SUBMIT THREE (3) SETS OF COMPLETE DETAILED SHOP DRAWINGS FOR ALL SANITARY MANHOLES. WET WELLS. OTHER CASTINI AND PUMPS. THE SUBMITTALS SHALL BEAR THE APPROVAL OF THE UNDERGROUND UTILITY CONTRACTOR ON EACH SHEET. A COMPLETE SET OF THE LIFT STATION ELECTRICAL SHOP DRAWINGS IS ALSO REQUIRED IF APPLICABLE. ALL UTILITY SHOP DRAWINGS SHALL BE APPROVED BY THE ENGINEER OF RECORD AND <u>CITY OF OCALA</u> PRIOR TO CONSTRUCTION.

DURING CONSTRUCTION, THE CONTRACTORS SHALL TAKE ALL REASONABLE MEASURES TO INSURE AGAINST POLLUTING, SILTING OR DISTURBING TO SUCH AN EXTENT AS TO CAUSE AN INCREASE IN TURBIDITY TO THE EXISTING SURFACE WATERS. SUCH MEASURES SHALL BE APPROVED BY THE PROJECT ENGINEER AND MAY INCLUDE, BUT NOT LIMITED TO, CONSTRUCTION OF TEMPORARY EROSION CONTROL STRUCTURES SUCH AS SEDIMENT BASINS, SEDIMENT CHECKS, OR SILT BARRIERS.

CONTRACTOR IS RESPONSIBLE TO COMPLY WITH ALL EROSION CONTROL MEASURES AS SHOWN ON THE EROSION CONTROL PLAN.

SODDING OF DETENTION PONDS SHOULD BE ACCOMPLISHED WITHIN 14 DAYS OF POND GRADING TO MINIMIZE EROSION POTENTIAL. AT A MINIMUM. THE RETENTION/DETENTION STORAGE AREA MUST BE EXCAVATED WITHIN ONE FOOT PRIOR TO BUILDING CONSTRUCTION OR PLACEMENT OF IMPERVIOUS SURFACE WITHIN THE AREA TO BE SERVED BY THOSE FACILITIES. TO PREVENT REDUCTION IN STORAGE VOLUME AND ERCOLATION RATES. ALL ACCUMULATED SEDIMENT MUST BE REMOVED FROM THE STORAGE AREA PRIOR TO FINAL GRADING AND STABILIZATION

IF DURING CONSTRUCTION, THE PROPOSED EROSION SYSTEM DOES NOT PERFORM SATISFACTORILY, ALTERNATIVES AND ADDITIONAL METHODS OF PROTECTION SHALL BE IMPLEMENTED BY THE CONTRACTOR IN ORDER TO COMPLY WITH S.J.R.W.M.D./S.W.F.W.M.D. AND <u>CITY OF OCALA</u> EROSION CONTROL COSTS INCLUDING ANY COSTS ASSOCIATED WITH COMPLIANCE ISSUES AND ENFORCEMENT ACTIONS.

6. A 2' STRIP OF SOD SHALL BE PLACED BEHIND BACK OF CURB.

ALL SODDED AND/OR SEEDED AREAS MUST BE WATERED AS NECESSARY DURING CONSTRUCTION AND 2 MONTHS AFTER COMPLETION OF CONSTRUCTION IN ORDER TO ENSURE STABILIZATION AND SURVIVAL.

THE FINAL APPROVED REVISED SITE PLAN IS TO BE EMAILED TO JKERR@OCALAFL.ORG USING THE BELOW MENTIONED OUS SITE PLAN REFERENCE

CUSTOMER MUST SUBMIT THE OCALA UTILITY SERVICES (OUS) COMMERCIAL LAND DATA SHEET AND THE OUS GENERAL INFORMATION SHEET TO THE GROWTH MANAGEMENT DEPT. PRIOR TO ANY SITE PERMITS BEING ISSUED. DATA SHEETS MUST BE APPROVED BY OUS ENGINEERING PRIOR TO ANY SITE PERMITS BEING ISSUED. MATERIAL LEAD TIMES MAY CAUSE A DELAY IN OBTAINING SERVICE, IF LOAD DATA IS NOT SUBMITTED AS SOON

CUSTOMER MUST CONTACT THE OCALA UTILITY SERVICES ENGINEERING DIVISION AT (352)351-6620 AT LEAST SIX (6) WEEKS PRIOR TO THE START OF CONSTRUCTION TO DISCUSS PERMANENT SERVICE REQUIREMENTS, TEMPORARY CONSTRUCTION POWER, TRANSFORMER LOCATION, AND METER

CONSTRUCTION FOR TEMPORARY SERVICE TO BE DETERMINED BY OCALA UTILITY SERVICES.

TREES CANNOT BE PLANTED AROUND, OVER, OR UNDER ANY EXISTING OR PROPOSED POWER LINES. THIS INCLUDES ANY LINES DESIGNED AFTER FINAL SITE PLAN APPROVAL.

UNDERGROUND ELECTRICAL SERVICE WILL BE AT CUSTOMER'S EXPENSE (SEC. 70-584 & SEC. 70-603) STREET LIGHTS, IF REQUIRED WILL BE ADDED AT A ONE TIME CHARGE TO THE CUSTOMER. ESTIMATED COST WILL BE PROVIDED AS PART

THE FINAL APPROVED REVISED SITE PLAN IS TO BE EMAILED TO JKERR@OCALAFL.ORG USING THE ABOVE MENTION OUS SITE PLAN

ADDITIONAL REQUIREMENTS ARE CONTAINED IN CHAPTER 70, ARTICLE VI AND ARTICLE VII OF THE OCALA CODE OF ORDINANCES. FOR ALL UNDERGROUND ELECTRIC POWER LINES ON PRIVATE PROPERTY A TEN (10) FOOT ELECTRICAL DISTRIBUTION FASEMENT WILL BE REQUIRED FOR OVERHEAD CONSTRUCTION, A TWENTY (20) FOOT EASEMENT WILL BE REQUIRED, ALSO, FOR ANY OVERHEAD POWER LINES, BOTH EXISTING AND PROPOSED, A TEN (10) FOOT TREE TRIMMING EASEMENT WILL BE REQUIRED, WHERE A REDUCED EASEMEN WIDTH IS ALLOWED, CONSISTENT WITH ORDINANCE REQUIREMENTS, THE FURTHEST 5 FEET WITHIN THE EASEMENT AND AWAY FROM

THE ROAD MUST BE RESERVED SOLELY FOR ELECTRIC CONDUCTORS AND FACILITIES. IN ALL CASES, ANY OTHER UTILITY

TOP OF THAT OTHER UTILITY PIPE, CABLE, OR CONDUIT AND MUST BE STUBBED TO AT LEAST 2 FEET BEYOND THE BACK BOUNDARY OF THE EASEMENT (SEC. 70-585 & SEC. 70-602) ALL ELECTRIC UTILITY FACILITIES SHALL BE INCLUDED ON THE SITE PLAN PRIOR TO SIRE PLAN APPROVAL (INCLUDE YELLOW AND BLACK FACILITY I.D. NUMBER)

INFRASTRUCTURE PASSING THROUGH THE ELECTRIC PORTION OF THE EASEMENT MUST HAVE A BURIED DEPTH OF AT LEAST 4' TO THE

METER LOCATION WILL BE DESIGNATED BY OCALA UTILITY SERVICES (SEC. 70-587) HOWEVER, DESIRED LOCATION MAY BE NOTED ON

14. THE REQUESTED SERVICE VOLTAGE IS 480 VOLT, 3 PHASE. REQUESTED SERVICE VOLTAGE IS NOT GUARANTEED TO BE SUPPLIED, HOWEVER, OUS WILL TRY TO ACCOMMODATE THE REQUEST WHEN POSSIBLE (SEC. 70-585 & SEC. 70-587) ANY INSTALLATION OF BILLBOARDS/SIGNS SHALL COMPLY WITH THE LATEST NESC AND OSHA REGULATIONS PERTAINING TO PROXIMITY TO OVERHEAD POWER LINES. NO BILLBOARDS OR SIGNS SHALL BE PLACED IN ANY ELECTRIC UTILITY EASEMENTS WITHOUT THE

LOCATION OF PUBLI	C WATER SYSTEM MAII	NS IN ACCORDANCE WITH	F.A.C. RULE 62-555.314
OTHER PIPE	HORIZONTAL SEPARATION	CROSSINGS (1)	JOINT SPACING @ CROSSINGS (FULL JOINT CENTERED)
STORM SEWER, STORMWATER FORCE MAIN, RECLAIMED WATER (2)	Water Main 3 ft. minimum	Water Main 12 inches is the minimum, except for storm sewer, then 6 inches is the minimum and 12 inches is preferred	ALTERNATE 3 FT. MINIMUM Water Main
VACUUM SANITARY SEWER	Water Main 10 ft. preferred 3 ft. minimum	Water Main 12 inches is preferred 6 inches minimum	ALTERNATE 3 FT. MINIMUM Water Main
GRAVITY OR PRESSURE SANITARY SEWER, SANITARY SEWER FORCE MAIN, RECLAIMED WATER (2)	Water Main 10 ft. preferred 6 ft. minimum (3)	Water Main 12 inches is the minimum, except for gravity sewer, then 6 inches is the minimum and 12 inches is preferred	ALTERNATE 6 FT. MINIMUM Water Main
ON-SITE SEWAGE TREATMENT & DISPOSAL SYSTEM	10 ft. minimum	_	_

WATER MAIN SHOULD CROSS ABOVE OTHER PIPE. WHEN WATER MAIN MUST BE BELOW OTHER PIPE, THE MINIMUM SEPARATION IS 12 INCHES. RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C 3 FT. FOR GRAVITY SANITARY SEWER WHERE THE BOTTOM OF THE WATER MAIN IS LAID AT LEAST 6 INCHES ABOVE THE TOP OF THE GRAVITY SANITARY SEWER. 4. RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.

Disclaimer - This document is provided for your convenience only. Please refer to F.A.C. Rule 62-555.314 for additional construction requirements.

THE CONTRACTOR SHALL SUBMIT A CERTIFIED SET OF RECORD DRAWINGS TO THE ENGINEER, THE CONTRACTOR SHALL BE RESPONSIBLE FOR RECORDING INFORMATION ON THE APPROVED PLANS CONCURRENTLY WITH CONSTRUCTION PROGRESS. RECORD DRAWINGS SUBMITTED TO THE ENGINEER AS PART OF THE PROJECT

ACCEPTANCE SHALL COMPLY WITH THE FOLLOWING REQUIREMENTS. A. DRAWINGS SHALL BE LEGIBLY MARKED TO RECORD ACTUAL CONSTRUCTION.

B. DRAWINGS SHALL SHOW ACTUAL LOCATION OF ALL UNDERGROUND AND ABOVE GROUND STORM DRAINAGE, WATER, REUSE AND WASTEWATER PIPING AND RELATED APPURTENANCES. ALL PIPING LOCATIONS INCLUDING HORIZONTAL AND VERTICAL LOCATIONS OF UTILITIES AND APPURTENANCES SHALL BE CLEARLY SHOWN AND REFERENCED TO PERMANENT SURFACE IMPROVEMENTS. DRAWINGS SHALL ALSO SHOW ACTUAL INSTALLED PIPE MATERIAL, CLASS, ETC.

DRAWINGS SHALL CLEARLY SHOW ALL FIELD CHANGES OF DIMENSION AND DETAIL INCLUDING CHANGES MADE BY FIELD ORDER OR BY CHANGE ORDER.

BUT CONSTRUCTED IN THE FIELD. ALL EQUIPMENT AND PIPING RELOCATION SHALL BE CLEARLY SHOWN. E. LOCATION OF ALL INLETS AND MANHOLES, HYDRANTS, VALVES AND VALVE BOXES SHALL

BE SHOWN. ALL VALVES SHALL BE REFERENCED FROM AT LEAST TWO PREFERABLY THREE PERMANENT POINTS. DIMENSIONS BETWEEN ALL INLETS AND MANHOLES SHALL BE VERIFIED AND SHOWN. THE

INVERTS AND GRADE ELEVATIONS OF ALL INLETS, CONTROL STRUCTURES AND

DRAWINGS SHALL CLEARLY SHOW ALL DETAILS NOT ON ORIGINAL CONTRACT DRAWINGS

G. CONTRACTOR SHALL PROVIDE AS-BUILT SURVEY FOR POND GRADING. SPOT ELEVATIONS SHALL BE TAKEN AT TOP OF BANK, POND BOTTOM, AND ALL GRADE BREAKS AT 50'

H. DRAWINGS SHALL CLEARLY INDICATE VERTICAL AND HORIZONTAL SEPARATION BETWEEN WATER MAIN AND STORM DRAINAGE/SANITARY SEWER/RECLAIM WATER MAINS AT POINTS OF CROSSING IN ACCORDANCE WITH FDEP CRITERIA. WHERE THE WATER MAIN CROSSES OTHER UTILITIES (STORM, GRAVITY SEWER, FORCE

MAIN AND RECLAIMED WATER), THE CERTIFIED AS-BUILT DRAWINGS SHALL CLEARLY

SEPARATION BETWEEN THE WATER MAIN AND OTHER UTILITIES MAY BE VERIFIED BY THI

ENGINEER. FAILURE TO PROVIDE THIS INFORMATION WILL RESULT IN THE CONTRACTOR

WILL RESULT IN THE CONTRACTOR EXCAVATING AND SURVEYING THE UTILITIES AT NO

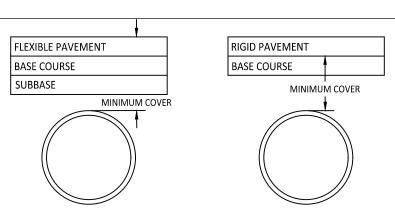
INDICATE THE CONSTRUCTED ELEVATIONS IN SUCH A WAY THAT THE VERTICAL

EXCAVATING AND SURVEYING THE UTILITIES AT NO ADDITIONAL COST TO THE OWNER. WHERE THE WATER MAIN CROSSES OTHER UTILITIES (STORM, GRAVITY SEWER, FORCE MAIN AND RECLAIMED WATER), THE CERTIFIED AS-BUILT DRAWINGS SHALL CLEARLY INDICATED THE LOCATIONS OF PIPE JOINTS IN SUCH A MANNER AS TO DEMONSTRATE THE PIPE IS CENTERED AT ALL THE CROSSING, FAILURE TO PROVIDE THIS INFORMATION

ADDITIONAL COST TO THE OWNER

2. EACH SHEET OF THE PLANS SHALL BE SIGNED, SEALED AND DATED BY REGISTERED SURVEYOR WITH A NOTE EADING "THESE AS-BUILT DRAWINGS ACCURATELY DEPICT THE ACTUAL IMPROVEMENTS AS CONSTRUCTED".

TABLE 1.0 - CORRUGATED ALUMINUM PIPE COVER

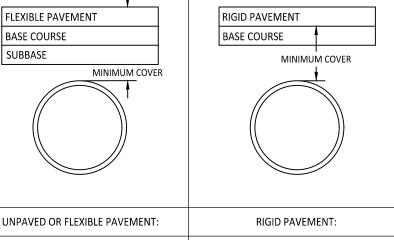


MINIMUM COVER - ROUND PIPE - $2\frac{2}{3}$ " $x\frac{1}{2}$ " CORRUGATION

(3" x 1" CORRUGATION) {SPIRAL RIB}

			((··· ·- ·- ,		
		SHEET THICKNESS IN INCHES (GAGE)					
		0.06	0.075	0.105	0.135	0.164	
D (IN.)	A (SQ.FT.)	(16)	(14)	(12)	(10)	(8)	
12	0.8	12"	12"	NA	NA	NA	
15	1.2	12" {12"}	12" {12"}	NA	NA	NA	
18	1.8	12" {12"}	12" {12"}	12"	NA	NA	
21	2.4	12" {12"}	12" {12"}	12"	NA	NA	
24	3.1	12" {12"}	12" {12"}	12"	NA	NA	
30	4.9	12" {15"}	12" {15"}	12" {15"}	NA	NA	
36	7.1	NS (12") {24"}	12" (12") {18"}	12" (12") {18"}	12"	NA	
42	9.6	NS (12")	NS (12") {21"}	12" (12") {21"}	12"	NA	
48	12.6	NS (12")	NS (12")	12" (12") {24"}	12" (12") {24"}	12"	
54	15.9	NS (12")	NS (12")	NS (12") {24"}	NS (12") {24"}	12"	
60	19.6	NS (12")	NS (12")	NS (12") {24"}	NS (12") {24"}	NS	
66	23.8	NS (12")	NS (12")	NS (12")	NS (12") {24"}	NS (12")	
72	28.3	(NS)	NS (12")	NS (12")	NS (12")	NS (12")	
78	33.2	(NS)	(12")	(12")	(12")	(12")	
84	38.5	(NS)	(NS)	(12")	(12")	(12")	
90	44.2	(NS)	(NS)	(12")	(12")	(12")	
96	50.3	(NS)	(NS)	(12")	(12")	(12")	
102	56.7	(NS)	(NS)	(NS)	(13")	(13")	
	- NA = NOT AV	/AILABLE	1	- NS =	NOT SUITABLE		

TABLE 2.0 - CONCRETE PIPE COVER - ROUND & **ELLIPTICAL**



APPROVAL DATE.

BASE COURSE

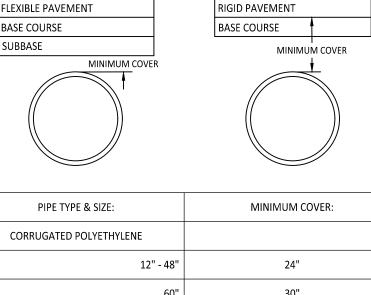
SUBBASE

THE CONTRACTOR SHALL NOTIFY THE ENGINEER IN WRITING 90 DAYS PRIOR TO THE ANTICIPATED COMPLETION OF CONSTRUCTION AND/OR CERTIFICATION OF

2. THE CONTRACTOR SHALL PROVIDE THE ENGINEER WITH SIGNED AND SEALED AS-BUILTS OF ALL UTILITY IMPROVEMENTS, PRESSURE TESTS, BACTERIOLOGICAL TESTS, AND ANY OTHER INFORMATION NECESSARY FOR THE CLEARANCE APPROVALS WITH F.D.E.P. AND THE LOCAL UTILITY PROVIDER. THIS INFORMATION SHALL BE PROVIDED TO THE ENGINEER 60 DAYS PRIOR TO THE ANTICIPATED COMPLETION OF CONSTRUCTION AND/OR CERTIFICATION OF COMPLETION

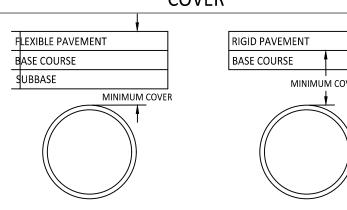
THE CONTRACTOR SHALL PROVIDE THE ENGINEER WITH SIGNED AND SEALED AS-BUILTS OF ALL STORM WATER SYSTEM IMPROVEMENTS AND ANY OTHER INFORMATION NECESSARY FOR THE CLEARANCE APPROVALS WITH S.J.R.W.M.D./S.W.F.W.M.D. AND THE LOCAL UTILITY PROVIDER. THIS INFORMATION SHALL BE PROVIDED TO THE ENGINEER 60 DAYS PRIOR TO THE ANTICIPATED COMPLETION OF CONSTRUCTION AND/OR CERTIFICATION OF COMPLETION APPROVAL DATE.

TABLE 3.0 - PLASTIC PIPE COVER



	111 E 111 E & 312E.	WINNING OF VERT
	CORRUGATED POLYETHYLENE	
".	12" - 48"	24"
	60"	30"
	CORRUGATED POLYPROPYLENE	
	12" - 48"	24"
	60"	30"
	CORRUGATED POLYVINYLCHLORIDE	
	ALL	24"
	STEEL REINFORCED POLYETHYLENE	
	30" - 60"	12"
	66" - 72"	18"
	84" - 96"	24"
	108"	30"
	120"	36"

TABLE 4.0 - CORRUGATED STEEL ROUND PIPE COVER



BASE COURSE	
MINIMU	I M COVER I

		MINIMUM COVER - ROUND PIPE - $2\frac{2}{3}$ " $x\frac{1}{2}$ " CORRUGATION (3" x 1" CORRUGATION) (SPIRAL RIB)				
			SHEET THICKNESS IN INCHES (GAGE)			
		0.064	0.079	0.109	0.138	0.168
D (IN.)	A (SQ.FT.)	(16)	(14)	(12)	(10)	(8)
12	0.79	12"	12"	NA	NA	NA
15	1.23	12"	12"	NA	NA	NA
18	1.77	12" {12"}	12" {12"}	12"	NA	NA
21	2.4	12" {12"}	12" {12"}	12" {12"}	NA	NA
24	3.14	12" {12"}	12" {12"}	12" {12"}	NA {12"}	NA
30	4.91	12" {12"}	12" {12"}	12" {12"}	NA {12"}	NA
36	7.1	12" (12") {12"}	12" (12") {12"}	12" (12") {12"}	12" {12"}	NA
42	9.6	12" (12") {12"}	12" (12") {12"}	12" (12") {12"}	12" {12"}	NA
48	12.6	12" (12") {12"}	12" (12") {12"}	12" (12") {12"}	12" (12") {12"}	12"
54	16	12" (12") {14"}	12" (12") {14"}	12" (12") {14"}	12" (12") {14"}	12"
60	19.6	NS (12")	NS (12") {15"}	12" (12") {15"}	12" (12") {15"}	12"
66	23.8	NS (12")	NS (12") {17"}	12" (12") {17"}	12" (12") {17"}	12" (12")
72	28.3	NS (12")	NS (12")	NS (12") {18"}	12" (12") {18"}	12" (12")
78	33.2	NS (12")	NS (12")	NS (12") {20"}	NS (12") {20"}	12" (12")
84	38 5	NS (12")	NS (12")	NS (12")	NS (12")	12" (12")

90	44.2	(12")	(12")	(12")	(12") {2
96	50.3	NS	(12")	(12")	(12"
102	56.7	NS	(13")	(13")	(13"
108	63.6	NS	NS	(14")	(14"
114	70.9	NS	NS	(15")	(15"
120	78.5	NS	NS	(15")	(15"
132	95	NS	NS	NS	(17"
- NA = NOT AVAILABLE				- NS =	NOT SUIT

(14")

(15")

(15")

8/12/2025 $DRAWN\,BY$ ASCHKD. BY TB *JOB NO.* <u>23-8340</u>

NOT VALID UNLESS SIGNED AND SEALED BY A PROFESSIONAL ENGINEER



