STANDARD ABBREVIATION FOR ENTIRE PLAN SET

AC	ACRES
ADA	AMERICANS WITH DISABILITY ACT
AHJ	AUTHORITY HAVING JURISDICTION
ARCH	ARCHITECTURAL
BC	BOTTOM OF CURB
BLDG	BUILDING
BM	BENCHMARK
CF	CUBIC FEET
CL	CENTERLINE
CMP	CORRUGATED METAL PIPE
C/O	CLEANOUT
CONC	CONCRETE
CY	CUBIC YARDS
DEP	DEPRESSED
DIP	DUCTILE IRON PIPE
ELEV	ELEVATION
EOP	EDGE OF PAVEMENT
EW	ENDWALL
EX	EXISTING
FES	FLARED END SECTION
FFE	FINISHED FLOOR ELEVATION
FH	FIRE HYDRANT
G	GRADE
GR	GRATE
GV	GATE VALVE
HDPE	HIGH DENSITY POLYETHYLENE PIPE
HP	HIGH POINT
HOR	HORIZONTAL
HW	HEADWALL
INT	INTERSECTION
INV	INVERT
LF	LINEAR FOOT
LOC	LIMITS OF CONSTRUCTION
LOD	LIMITS OF DISTURBANCE
LOW	LIMITS OF WORK
LP	LOW POINT
MAX	MAXIMUM
MIN	MINIMUM
MH	MANHOLE
MJ	MECHANICAL JOINT
OC	ON CENTER
PC	POINT OF CURVATURE
PCCR	POINT OF COMPOUND CURVATURE, CURB RETURN
PI	POINT OF INTERSECTION
PROP	PROPOSED
PT	POINT OF TANGENCY
PTCR	POINT OF TANGENCY, CURB RETURN
PVC	POLYVINYL CHLORIDE PIPE
PVI	POINT OF VERTICAL INSERTION
PVT	POINT OF VERTICAL TANGENCY
R	RADIUS
RCP	REINFORCED CONCRETE PIPE
R/W	RIGHT OF WAY
S	SLOPE
SAN	SANITARY SEWER
SF	SQUARE FEET
STA	STATION
STM	STORM
SW	SIDEWALK
TC	TOP OF CURB
TPF	TREE PROTECTION FENCE
TYP	TYPICAL
UG	UNDERGROUND
VIF	VERIFY IN FIELD
W/L	WATER LINE
±	PLUS OR MINUS
°	DEGREE
ø	DIAMETER
#	NUMBER

GRAPHIC LEGEND

PROPERTY LINE (PARCEL ID QUESTION)
OFF-SITE PROPERTY LINES
EXIST. CURB
EXIST. EDGE OF PAVEMENT
PROP. CURB
PROP. CURB TRANSITION
PROP. EDGE OF PAVEMENT
PROP. SAWCUT LINE
EXIST. CABLE LINE
EXIST. CABLE LINE
EXIST. ELECTRIC LINE
PROP. ELECTRIC LINE
EXIST. FIBER OPTIC LINE
PROP. FIBER OPTIC LINE
EXIST. GAS LINE
PROP. GAS LINE
EXIST. OVERHEAD WIRES
PROP. OVERHEAD WIRES
EXIST. TELEPHONE LINE
PROP. TELEPHONE LINE
EXIST. WATER LINE
PROP. WATER LINE
EXIST. UNDERGROUND ELEC./TELE. SERVICE (NO. & SIZE OF CONDUITS NOT DEFINED)
PROP. UNDERGROUND ELEC./TELE. SERVICE (NO. & SIZE OF CONDUITS NOT DEFINED)
EXIST. SANITARY SEWER LINE
OR
PROP. SANITARY SEWER LINE
EXIST. STORM DRAIN LINE
PROP. STORM DRAIN LINE
EXIST. MINOR CONTOUR & ELEVATION
EXIST. MAJOR CONTOUR & ELEVATION
PROP. FINISH GRADE CONTOUR & ELEVATION
PROP. LIMIT OF DISTURBANCE
SOIL DELINEATION LINE
PROP. DIRECTION OF DRAINAGE FLOW ARROW
EXIST. SPOT ELEVATIONS
PROP. GRADE SPOT ELEV.
PROP. GRADE SPOT ELEV. (HIGH POINT)
PROP. GRADE SPOT ELEV. (MEET EXIST.)
TC: 00.00 BC: 00.00
PROP. TOP OF CURB & BOTTOM OF CURB ELEV.
FFE: 00.00
PROP. FINISHED FLOOR ELEV.
TW: 00.00 BW: 00.00
PROP. TOP OF WALL & FINISHED GRADE @ LOW SIDE OF WALL (ACTUAL BOTTOM OF WALL FOOTING TO BE ESTABLISHED BY WALL DESIGNER)
EXIST. CONCRETE UTILITY POLE
EXIST. WOOD UTILITY POLE
EXIST. GUY WIRE
EXIST. LIGHT POLE
EXIST. BUILDING LIGHT
EXIST. SHOE BOX LIGHT
EXIST. COBRA LIGHT POLE
EXIST. TRAFFIC SIGNAL POLE
EXIST. SANITARY MANHOLE
EXIST. STORM MANHOLE
EXIST. "B" INLET
EXIST. YARD INLET
EXIST. FLARED END SECTION
EXIST. HEADWALL
EXIST. MONITORING WELL
APPROX. TEST PIT LOCATION
EXIST. FIRE HYDRANT
EXIST. WATER VALVE
EXIST. WATER METER
EXIST. GAS VALVE
EXIST. GAS METER
EXIST. ELECTRIC PULLBOX
EXIST. ELECTRIC METER
EXIST. ELECTRIC BOX
EXIST. CLEAN OUT
EXIST. SEWER VALVE
EXIST. WELL
EXIST. WATER SHUT OFF VALVE
EXIST. TELEPHONE BOX
EXIST. CABLE TV BOX
PROP. WATER VALVE
PROP. GAS VALVE
PROP. STORM CLEANOUT
PROP. SANITARY CLEANOUT
PROP. AREA LIGHT
PROP. OUTLET CONTROL STRUCTURE
PROP. DRAINAGE MANHOLE
PROP. SANITARY SEWER MANHOLE
PROP. "C" INLET
PROP. "E" INLET
PROP. YARD INLET
PROP. FLARED END SECTION
PROP. MITERED END SECTION
PROP. HEADWALL

WATER & SEWER UTILITY NOTES

1. ALL CONSTRUCTION SHALL MEET OR EXCEED THE AHJ REQUIREMENTS AND THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION REQUIREMENTS UNLESS OTHERWISE NOTED. IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN THE SPECIFICATIONS AND DETAILS FROM THE LOCAL AGENCY.

2. THE CONTRACTOR SHALL CONSTRUCT GRAVITY SEWER LATERALS, MANHOLES AND GRAVITY SEWER LINES AS SHOWN ON THESE PLANS. THE CONTRACTOR SHALL FURNISH ALL NECESSARY MATERIALS, EQUIPMENT, MACHINERY, TOOLS, MEANS OF TRANSPORTATION AND LABOR NECESSARY TO COMPLETE THE WORK IN FULL AND COMPLETE ACCORDANCE WITH THE SHOWN, DESCRIBED AND REASONABLY INTENDED REQUIREMENTS OF THE CONTRACT DOCUMENTS AND JURISDICTIONAL AGENCY REQUIREMENTS. IN THE EVENT THAT THE CONTRACT DOCUMENTS AND THE JURISDICTIONAL AGENCY REQUIREMENTS ARE NOT IN AGREEMENT, THE MOST STRINGENT SHALL GOVERN.

3. EXISTING UTILITIES SHOWN ARE LOCATED ACCORDING TO THE INFORMATION AVAILABLE TO THE ENGINEER AT THE TIME OF THE TOPOGRAPHIC SURVEY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR THE ENGINEER. GUARANTEE IS NOT MADE THAT ALL EXISTING UNDERGROUND UTILITIES ARE SHOWN OR THAT THE LOCATION OF THOSE SHOWN ARE ENTIRELY ACCURATE. FINDING THE ACTUAL LOCATION OF ANY EXISTING UTILITIES IS THE CONTRACTOR'S RESPONSIBILITY AND SHALL BE DONE BEFORE ANY WORK COMMENCES IN THE VICINITY. FURTHERMORE, THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES DUE TO THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES. THE OWNER OR ENGINEER WILL ASSUME NO LIABILITY FOR ANY DAMAGES SUSTAINED OR COST INCURRED BECAUSE OF THE OPERATIONS IN THE VICINITY OF EXISTING UTILITIES OR STRUCTURES, NOR FOR TEMPORARY BRACING AND SHORING OF SAME. IF IT IS NECESSARY TO SHORE, BRACE, SWING OR RELOCATE A UTILITY, THE UTILITY COMPANY OR DEPARTMENT AFFECTED SHALL BE CONTACTED AND THEIR PERMISSION OBTAINED REGARDING THE METHOD TO USE FOR SUCH WORK.

4. DEFLECTION OF PIPE JOINTS AND CURVATURE OF PIPE SHALL NOT EXCEED THE MANUFACTURER'S SPECIFICATIONS. SECURELY CLOSE ALL OPEN ENDS OF PIPE AND FITTINGS WITH A WATERTIGHT PLUG WHEN WORK IS NOT IN PROGRESS. THE INTERIOR OF ALL PIPES SHALL BE CLEAN AND JOINT SURFACES WIPED CLEAN AND DRY AFTER THE PIPE HAS BEEN LOWERED INTO THE TRENCH. VALVES SHALL BE PLUMB AND LOCATED ACCORDING TO THE PLANS.

5. ALL PHASES OF INSTALLATION, INCLUDING UNLOADING, TRENCHING, LAYING AND BACK FILLING, SHALL BE DONE IN A FIRST CLASS WORKMANLIKE MANNER. ALL PIPE AND FITTINGS SHALL BE CAREFULLY STORED FOLLOWING MANUFACTURER'S RECOMMENDATIONS. CARE SHALL BE TAKEN TO AVOID DAMAGE TO THE COATING OR LINING OF ANY D.I. PIPE FITTINGS. ANY PIPE OR FITTING WHICH IS DAMAGED OR WHICH HAS FLAWS OR IMPERFECTIONS WHICH, IN THE OPINION OF THE ENGINEER OR OWNER, RENDERS IT UNFIT FOR USE, SHALL NOT BE USED. ANY PIPE NOT SATISFACTORY FOR USE SHALL BE CLEARLY MARKED AND IMMEDIATELY REMOVED FROM THE JOB SITE, AND SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.

6. WATER FOR FIRE FIGHTING SHALL BE AVAILABLE FOR USE PRIOR TO COMBUSTIBLES BEING DELIVERED TO THE SITE.

7. ALL UTILITY AND STORM DRAIN TRENCHES LOCATED UNDER AREAS TO RECEIVE PAVING SHALL BE COMPLETELY BACK FILLED IN ACCORDANCE WITH THE GOVERNING JURISDICTIONAL AGENCY'S SPECIFICATIONS. IN THE EVENT THAT THE CONTRACT DOCUMENTS AND THE JURISDICTIONAL AGENCY REQUIREMENTS ARE NOT IN AGREEMENT, THE MOST STRINGENT SHALL GOVERN.

8. UNDERGROUND LINES SHALL BE AS-BUILT BY A STATE OF FLORIDA PROFESSIONAL LAND SURVEYOR BEFORE BACK FILLING.

9. CONTRACTOR SHALL PERFORM, AT HIS OWN EXPENSE, ANY AND ALL TESTS REQUIRED BY THE SPECIFICATIONS AND/OR ANY AGENCY HAVING JURISDICTION. THESE TESTS MAY INCLUDE, BUT MAY NOT BE LIMITED TO, INFILTRATION AND EXFILTRATION, TELEVISION INSPECTION AND A MANDREL TEST ON GRAVITY SEWER. A COPY OF THE TEST RESULTS SHALL BE PROVIDED TO THE UTILITY PROVIDER, OWNER AND JURISDICTIONAL AGENCY AS REQUIRED.

10. ALL PIPES AND CONNECTIONS ARE TO BE RESTRAINED IN ACCORDANCE WITH THE DETAILS OR JURISDICTIONAL AGENCY REQUIREMENTS, WHICHEVER IS MOST STRINGENT.

11. ALL LINES LABELED "FIRE" SHALL BE INSTALLED BY A CERTIFIED FIRE SPRINKLER INSTALLER.

12. ALL WATER DISTRIBUTION SYSTEM MATERIALS (INCLUDING SERVICES) AND INSTALLATION SHALL CONFORM TO THE SPECIFICATIONS OF THE LOCAL WATER PROVIDER AS PROVIDED IN THEIR STANDARD SPECIFICATIONS MANUAL AND THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION. THE CONTRACTOR IS RESPONSIBLE TO OBTAIN SPECIFICATION MANUALS PRIOR TO BIDDING THE PROJECT.

13. ALL POTABLE WATER PIPE AND PIPE FITTINGS INSTALLED UNDER THIS PROJECT WILL BE COLOR CODED OR MARKED IN ACCORDANCE WITH F.A.C. 62-555.320(21)(B)3, USING BLUE AS THE 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 WITH BLUE STRIPES INCORPORATED INTO, OR APPLIED TO, THE PIPE WALL. PIPE STRIPED DURING THE 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 AND AFTER 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 OR 24"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.

14. ALL WATER MAINS ARE DESIGNED FOR A MINIMUM WORKING PRESSURE OF 150 PSI, HAVE COMPRESSION TYPE BELL JOINTS AND BE EITHER ANSI/AWWA C-151/A21.51-02 DUCTILE IRON PIPE (D.I.P.), CLASS 50 FOR 6"DIAMETER PIPE AND LARGER AND CLASS 51 IF PIPE DIAMETER IS SMALLER THAN 6"OR ANSI/AWWA C-900-97, PVC PIPE WITH A MAXIMUM SDR OF 18. ALL D.I.P. WATER MAINS SHALL BE CEMENT LINED AND SEAL COATED IN ACCORDANCE WITH ANSI/AWWA STANDARDS. ALL D.I.P. FORCE MAINS SHALL BE COATED OUTSIDE WITH A BITUMINOUS COATING APPROXIMATELY ONE MIL THICK IN ACCORDANCE WITH ANSI 21.51-8, CEMENT MORTAR LININGS ARE NOT APPROPRIATE FOR THIS APPLICATION. ALL D.I.P. FORCE MAINS AND GRAVITY SEWER MAINS SHALL BE COATED INSIDE WITH POLYBOND VIRGIN POLYETHYLENE OR PROTECTOR 401 CERAMIC EPOXY COMPLYING WITH A.S.T.M. DESIGNATION D 1248 AND HAVE A MINIMUM "K"VALUE OF 0.012. SEE PROJECT SPECIFICATIONS MANUAL FOR MORE DETAILS. ALL D.I.P. PIPE SHALL BE LAID WITH A MINIMUM OF 30"CLEAR COVER. ALL PVC PIPE SHALL BE LAID WITH A MINIMUM OF 36"CLEAR COVER.

15. NEW OR RELOCATED, UNDERGROUND WATER MAINS INCLUDED IN THIS PROJECT WILL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST THREE FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED VACUUM-TYPE SANITARY SEWER, STORM SEWER, STORMWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER; A HORIZONTAL DISTANCE OF AT LEAST SIX FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED GRAVITY-TYPE SANITARY SEWER(OR A HORIZONTAL DISTANCE OF AT LEAST THREE FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED GRAVITY-TYPE SANITARY SEWER IF THE BOTTOM OF THE WATER MAIN WILL BE LAID AT LEAST SIX INCHES ABOVE THE TOP OF THE SEWER); A HORIZONTAL DISTANCE OF AT LEAST SIX FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED PRESSURE-TYPE SANITARY SEWER, WASTEWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER.

16. NEW OR RELOCATED, UNDERGROUND WATER MAINS INCLUDED IN THIS PROJECT THAT WILL CROSS ANY EXISTING OR PROPOSED GRAVITY- OR VACUUM-TYPE SANITARY SEWER OR STORM SEWER WILL BE LAID SO THE OUTSIDE OF THE WATER MAIN IS AT LEAST SIX INCHES ABOVE THE OTHER PIPELINE OR AT LEAST 12 INCHES BELOW THE OTHER PIPELINE; NEW OR RELOCATED, UNDERGROUND WATER MAINS INCLUDED IN THIS PROJECT THAT WILL CROSS ANY EXISTING OR PROPOSED PRESSURE-TYPE SANITARY SEWER,WASTEWATER OR STORMWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER WILL BE LAID SO THE OUTSIDE OF THE WATER MAIN IS AT LEAST 12 INCHES ABOVE OR BELOW THE OTHER PIPELINE.

17. THE WATER SYSTEM SHALL BE CLEANED OF DEBRIS, FLUSHED AND TESTED FOR A PERIOD OF NOT LESS THAN 2 HOURS AT A MINIMUM STARTING PRESSURE OF 150 PSI WITH AN ALLOWABLE LEAKAGE NOT TO EXCEED THE ALLOWABLE GAL/HR IN ACCORDANCE WITH THE ANSI/AWWA C-600-05 STANDARD SECTION 4.2.2.

$$\text{(EQUATION } Q = \frac{LD\sqrt{P}}{148{,}000}\text{)}$$

Q = ALLOWABLE LEAKAGE, GALLONS/HOUR
L = LENGTH OF PIPE TESTED, FEET
D = NOMINAL DIAMETER, INCHES
P = AVERAGE TEST PRESSURE, LB/IN GAUGE

18. AFTER THE PRESSURE TEST, THE SYSTEM SHALL BE DISINFECTED IN ACCORDANCE WITH ANSI/AWWA C651-05 STD. BACTERIOLOGICAL TESTS SHALL BE TAKEN TWO (2) CONSECUTIVE DAYS, AT LEAST 24 HOURS APART AND SHALL BE AT LEAST ONE SAMPLE PER 1,200 FEET OF MAIN IN THE SYSTEM. THE SAMPLE SHALL HAVE A HETEROTROPHIC PLATE COUNT (HPC) LESS THAN 500 CFU/ML AND SHALL BE FREE OF COLIFORM BACTERIA.

19. WATER SYSTEM PRESSURE TESTS SHALL BE FOR 2 HOURS AT LINE PRESSURE AFTER THE 150 PSI TEST & DISINFECTED. DISINFECTION SHALL BE IN ACCORDANCE WITH ANSI/AWWA C651-05 STD.

20. AT THE TIME OF BACTERIOLOGICAL SAMPLING, CHLORINE RESIDUAL DETERMINATION SHALL BE MADE TO INSURE THAT CHLORINE CONCENTRATION IN THE MAIN IS NO HIGHER THAN THAT GENERALLY IN THE SYSTEM (3.0 MG/L FREE OR 4.0 MG/L COMBINED MAXIMUM), OR LESS THAN 0.2 MG/L FREE OR 0.6 MG/L COMBINED. THE RESULT SHALL BE REPORTED ALONG WITH THE BACTERIOLOGICAL TEST RESULTS. ALL TESTING SHALL BE COORDINATED AND PAID FOR BY THE CONTRACTOR.

21. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT BUILDING UTILITY & ROOF DRAIN CONNECTION LOCATIONS. WHERE CONFLICTS EXIST WITH THESE SITE PLANS, ENGINEER IS TO BE NOTIFIED PRIOR TO CONSTRUCTION TO RESOLVE SAME. SERVICE SIZES TO BE DETERMINED BY ARCHITECT.

22. THE CONTRACTOR IS RESPONSIBLE FOR THE STABILIZATION OF ANY EXISTING UTILITY MAIN, STRUCTURES AND/OR APPURTENANCES DURING CONNECTION.

23. LOCATION & LAYOUT OF GAS, ELECTRIC & TELECOMMUNICATION UTILITY LINES AND SERVICES SHOWN ON THESE PLANS ARE SCHEMATIC IN NATURE. ACTUAL LOCATION & LAYOUT OF THESE UTILITIES & SERVICES ARE TO BE PER THE APPROPRIATE UTILITY PROVIDER.

24. ALL BUILDING FEATURES AND DIMENSIONS TO BE COORDINATED WITH ARCHITECTURAL PLANS ON THE APPROVED BUILDING PERMIT PLAN SET. ANY DISCREPANCIES WITH THE CIVIL CONSTRUCTION DOCUMENTS PLANS TO BE BROUGHT TO THE ENGINEER'S ATTENTION IMMEDIATELY.

25. ALL SEWER AND WATER FACILITIES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE REGULATORY AUTHORITY'S RULES AND REGULATIONS.

26. ALL PROPOSED UTILITIES TO BE INSTALLED UNDERGROUND UNLESS OTHERWISE NOTED.

27. PIPE LENGTHS ON THIS PLAN HAVE BEEN MEASURED AS THE DISTANCE BETWEEN THE CENTER POINT OF THE TWO CONNECTED STRUCTURES.

EXISTING UTILITIES

EXISTING UTILITIES SHOWN ARE LOCATED ACCORDING TO THE INFORMATION AVAILABLE TO THE ENGINEER AT THE TIME OF THE TOPOGRAPHIC SURVEY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR THE ENGINEER. GUARANTEE IS NOT MADE THAT ALL EXISTING UNDERGROUND UTILITIES ARE SHOWN OR THAT THE LOCATION OF THOSE SHOWN ARE ENTIRELY ACCURATE. FINDING THE ACTUAL LOCATION OF ANY EXISTING UTILITIES IS THE CONTRACTOR'S RESPONSIBILITY AND SHALL BE DONE BEFORE COMMENCING ANY WORK IN THE VICINITY. FURTHERMORE, THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES DUE TO THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES. THE OWNER OR ENGINEER WILL ASSUME NO LIABILITY FOR ANY DAMAGES SUSTAINED OR COST INCURRED BECAUSE OF THE OPERATIONS IN THE VICINITY OF EXISTING UTILITIES OR STRUCTURES, NOR FOR TEMPORARY BRACING AND SHORING OF SAME. IF IT IS NECESSARY TO SHORE, BRACE, SWING OR RELOCATE A UTILITY, THE UTILITY COMPANY OR DEPARTMENT AFFECTED SHALL BE CONTACTED AND THEIR PERMISSION OBTAINED REGARDING THE METHOD TO USE FOR SUCH WORK.

INTERRUPTION OF EXISTING UTILITIES

ANY CONSTRUCTION WORK THAT REQUIRES INTERRUPTION OF SERVICE TO ANY CUSTOMER SHALL BE DONE SO WITH A MINIMUM OF SEVENTY-TWO (72) HOUR NOTICE TO, AND WRITTEN APPROVAL BY THE APPROPRIATE UTILITY COMPANY. THE CONTRACTOR SHALL ARRANGE A MEETING WITH THE LOCAL JURISDICTIONAL AGENCIES AND OTHER GOVERNING AGENCIES, AND OTHER AFFECTED UTILITIES PRIOR TO SCHEDULING THE SHUTDOWN TO ASSESS THE SCOPE OF WORK. ALL UTILITY SHUT DOWNS SHALL BE SCHEDULED BY THE CONTRACTOR AT SUCH TIME THAT SYSTEM DEMAND IS LOW. THIS GENERALLY REQUIRES NIGHT TIME WORK BY THE CONTRACTOR AND REQUIRES FULL TIME INSPECTION BY A REPRESENTATIVE OF THE UTILITY. ALL COST FOR OVERTIME WORK BY THE REPRESENTATIVE OF THE UTILITY SHALL BE BORNE BY THE CONTRACTOR. EACH CUSTOMER AFFECTED BY THE SHUT DOWN SHALL BE PROVIDED, MINIMUM, FORTY-EIGHT (48) HOUR WRITTEN NOTIFICATION BY THE CONTRACTOR.

SURVEY DATA

1. THE CONTRACTOR SHALL PROTECT ALL PERMANENT REFERENCE MONUMENTS AND TAKE ALL PRECAUTIONS NECESSARY TO AVOID DAMAGE TO SURVEY MARKERS DURING CONSTRUCTION. ANY SURVEY MARKERS DAMAGED DURING CONSTRUCTION WILL BE REPLACED AT THE EXPENSE OF THE CONTRACTOR.

2. BENCHMARK LOCATION AND ELEVATION ARE AS REPRESENTED BY SURVEYOR AT THE TIME OF SURVEY. CONTRACTOR SHALL VERIFY ITS CORRECTNESS AT TIME OF CONSTRUCTION.

3. ALL ELEVATIONS ON THE PLANS OR REFERENCED IN THE SPECIFICATIONS ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (N.A.V.D. 1988).

MINIMUM REQUIRED "AS-BUILT" INFORMATION

1. ALL AS-BUILT INFORMATION SUBMITTED TO THE ENGINEER SHALL BE SUFFICIENTLY ACCURATE, CLEAR, AND LEGIBLE TO SATISFY THE ENGINEER THAT THE INFORMATION PROVIDES A TRUE REPRESENTATION OF THE IMPROVEMENTS CONSTRUCTED.

2. STORM DRAINAGE:
   - A. TOP ELEVATION OF EACH MANHOLE FRAME AND COVER / GRATE AS WELL ALL OTHER STRUCTURES (HEADWALLS, CONTROL STRUCTURES, ETC.).
   - B. INVERT ELEVATION OF EACH LINE ENTERING AND LEAVING EACH STRUCTURE, INCLUDING UNDERDRAIN PIPES.
   - C. INVERTS OF ALL MITERED END SECTIONS
   - D. ACTUAL LENGTH AND GRADE OF PIPE BETWEEN THE STRUCTURES
   - E. INVERT ELEVATION AND TWO HORIZONTAL TIES FROM PERMANENT VISIBLE OBJECTS TO ALL STORM STUB-OUTS.
   - F. CONTRACTOR SHALL PROVIDE ACCURATE AS-BUILT DIMENSIONS AND ELEVATIONS OF THE STORM WATER MANAGEMENT AREAS IMMEDIATELY AFTER FINAL GRADING AND PRIOR TO SEEDING OR SODDING OF THE SLOPES. AT A MINIMUM, THE CONTRACTOR SHALL PROVIDE CROSS SECTIONS ON ALL SIDES OF THE WATER MANAGEMENT AREAS AT 100-FOOT INTERVALS. THE CROSS SECTIONS SHALL BE PROVIDED FROM TOP OF BANK TO THE SLOPE BREAK BELOW CONTROL ELEVATION. THE ENGINEER'S APPROVAL IS REQUIRED PRIOR TO GRASSING OF THE BANK. IF ANY MODIFICATIONS ARE SPECIFIED, ADDITIONAL AS-BUILTS MAY BE REQUIRED.
3. UTILITY CROSSING SEPARATION INFORMATION FOR THAT PROVIDED ON THE PLANS VERIFYING:
   - A. FINISHED GRADE AT THE LOCATION OF THE CROSSING WITH SIZE AND MATERIAL OF EACH PIPE
   - B. BOTTOM ELEVATION OF TOP PIPE
   - C. TOP ELEVATION OF BOTTOM PIPE
   - D. CLEARANCE BETWEEN EACH PIPE
4. ALL OTHER REQUIREMENTS LISTED SHALL CONFORM TO THE AHJ DOCUMENTATION.
   - A. LOCATIONS AND DEPTHS OF UNDERGROUND UTILITIES.
   - B. REVISIONS TO ROUTING OF PIPING AND CONDUITS.
   - C. REVISIONS TO ELECTRICAL CIRCUITRY.
   - D. ACTUAL EQUIPMENT LOCATIONS.
   - E. CHANGES MADE BY CHANGE ORDER OR CONSTRUCTION CHANGE DIRECTIVE.
   - F. CHANGES MADE FOLLOWING ENGINEER'S WRITTEN ORDERS.
   - G. DETAILS NOT ON THE ORIGINAL CONTRACT DRAWINGS.
   - H. FIELD RECORDS FOR VARIABLE AND CONCEALED CONDITIONS.
   - I. ALL SLEEVES, FITTINGS, TEES, BENDS, VALVES, ETC. SHALL BE LOCATED BY STATION/OFFSET (OR METHOD APPROVED BY ENGINEER) AND ELEVATION OF TOP OF PIPE FOR ALL CONSTRUCTED SLEEVING. AS-BUILTS FOR ALL SLEEVING DEPICTING TOP OF PIPE AT 100-FOOT INTERVALS MUST BE PROVIDED.
   - J. RECORD DRAWINGS SHALL INDICATE AS-BUILT DATA FOR EVERY ELEVATION SHOWN ON THE PLANS.
   - K. IF A NEW BENCHMARK LOCATION IS ESTABLISHED, CONTRACTOR SHALL PROVIDE A BENCH LOOP CLOSURE TO THE CLOSEST EXISTING BENCHMARKS IN BOTH DIRECTIONS. ALL BENCHMARK DATA SHALL BE SUBMITTED BY A REGISTERED LAND SURVEYOR.
   - L. IDENTIFICATION OF ADDENDUM ITEMS ISSUED DURING BIDDING PERIOD.
   - M. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ALL AS-BUILT DATA FOR UTILITIES AND SLEEVING IS COLLECTED PRIOR TO PAVEMENT SECTION CONSTRUCTION. PRELIMINARY UTILITY AS-BUILTS MUST BE PROVIDED TO THE ENGINEER FOR REVIEW PRIOR TO PAVEMENT SECTION CONSTRUCTION.
   - N. PRESSURE SYSTEMS (WATER, FORCE MAIN AND RECLAIMED):
     - i. ACTUAL LENGTHS BETWEEN BRANCHES AND VALVES ALONG THE MAIN RUN.
     - ii. TOP OF PIPE AND FINISHED GRADE ELEVATIONS AT 100' INTERVALS.
     - iii. LOCATE WITH MEASUREMENTS FROM PERMANENT VISIBLE OBJECTS ALL FITTINGS/ACCESSORIES NOT VISIBLE FROM THE SURFACE (MINIMUM TWO POINT TIES).
     - iv. AS-BUILT INFORMATION SUBMITTED TO THE ENGINEER SHALL BE SUFFICIENTLY ACCURATE, CLEAR AND LEGIBLE TO SATISFY THE ENGINEER THAT THE INFORMATION PROVIDES A TRUE REPRESENTATION OF THE IMPROVEMENTS CONSTRUCTED.
     - v. UPON COMPLETION OF CONSTRUCTION, THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER OF RECORD COMPLETE SETS OF AS-BUILT CONSTRUCTION DRAWINGS AS REQUIRED FOR SUBMITTAL AND APPROVAL. THESE DRAWINGS SHALL BE MARKED TO SHOW "AS-BUILT" CONSTRUCTION CHANGES AND DIMENSIONED LOCATIONS AND ELEVATIONS OF ALL IMPROVEMENTS AND SHALL BE SIGNED AND SEALED BY A FLORIDA REGISTERED LAND SURVEYOR.
     - vi. ALL OTHER REQUIRED PRESSURE PIPE INFORMATION IN ACCORDANCE WITH THE AS-BUILT REQUIREMENTS OF AHJ.

PHASING NOTES

1. CONTRACTOR MAY PHASE EROSION AND SEDIMENTATION CONTROL MEASURES IN ACCORDANCE WITH SITE CONSTRUCTION PHASING.

2. CONTRACTOR SHALL ENSURE THAT THE CONSTRUCTION AREA IS SEPARATED FROM THE AREA NOT UNDER CONSTRUCTION WITH A TEMPORARY CHAIN LINK FENCE AND ENSURE THE SAFETY OF THE PUBLIC.

SEQUENCE OF CONSTRUCTION

UPON IMPLEMENTATION AND INSTALLATION OF THE FOLLOWING AREAS: TRAILER, PARKING, LAYDOWN, PORTA-POTTY, WHEEL WASH, CONCRETE WASHOUT, FUEL AND MATERIAL STORAGE CONTAINERS, SOLID WASTE CONTAINERS, ETC., IMMEDIATELY DENOTE THEM ON THE SITE MAPS AND NOTE ANY CHANGES IN LOCATION AS THEY OCCUR THROUGHOUT THE CONSTRUCTION PROCESS.

PHASE 1:
1. CONSTRUCT STABILIZED CONSTRUCTION ENTRANCE AND INSTALL SILT FENCE, TURBIDITY BARRIER AND INLET PROTECTION. CONTRACTOR TO OBTAIN APPROVAL FROM JURISDICTION HAVING AUTHORITY THAT ALL SOIL EROSION CONTROL MEASURES WERE INSTALLED PROPERLY.
2. PERFORM CLEARING AND GRUBBING AND DEMOLITION.

PHASE 2:
1. PERFORM MASS GRADING. ROUGH GRADE TO ESTABLISH PROPOSED DRAINAGE PATTERNS.
2. CONSTRUCT PROPOSED DRAINAGE INFRASTRUCTURE.
3. TEMPORARILY SEED WITH PURE LIVE SEED, THROUGHOUT CONSTRUCTION, DISTURBED AREAS THAT WILL BE INACTIVE FOR 7 DAYS OR MORE OR AS REQUIRED BY GENERIC PERMIT.
4. CONSTRUCT PROPOSED IMPROVEMENTS.
5. COMPLETE FINAL GRADING AND FINAL STABILIZATION.
6. REMOVE TEMPORARY EROSION CONTROL MEASURES.

NOTES

1. CONTRACTOR TO CONSIDER POTENTIAL DEWATERING ACTIVITIES WHEN PREPARING BID DOCUMENTS FOR THIS PROJECT.

2. CONTRACTOR SHALL OBTAIN ANY NECESSARY DEWATERING PERMITS AS SITE CONDITIONS AND CONSTRUCTION ACTIVITIES REQUIRE.

3. CONTRACTOR TO USE B.M.P.'S TO ENSURE COMPLIANCE WITH NPDES AND WATER MANAGEMENT DISTRICT REGULATIONS FOR STORMWATER DISCHARGE FROM CONSTRUCTION ACTIVITIES AND DEWATERING OPERATIONS.

4. THE ESCAPE OF SEDIMENT FROM THE SITE SHALL BE PREVENTED BY THE INSTALLATION OF EROSION AND SEDIMENT CONTROL MEASURES AND PRACTICES PRIOR, OR CONCURRENT WITH LAND DISTURBING ACTIVITIES.

AAC
PZ25-12000014
08/20/2025

DYNAMIC ENGINEERING CONSULTANTS, PC
"SURVEY • TRAFFIC"

BY	COMMENTS	DATE	REV.
	AGENCY COMMENTS	08/22/25	2
	DRC COMMENTS	07/16/25	1

THIS PLAN SET IS FOR PERMITTING PURPOSES ONLY AND MAY NOT BE USED FOR CONSTRUCTION

DRAWN BY: SRM
DESIGNED BY: EC
CHECKED BY: AP
CHECKED BY: -

PROJECT: LT 20, LLC
PROPOSED WAREHOUSE ADD