	INDEX OF SHEETS
SHEET	SHEET TITLE
C090	COVER
C100	GENERAL NOTES
C200	EXISTING CONDITIONS PLAN
C500	SITE PLAN
C600	GRADING AND PLAN
C900	CONSTRUCTION DETAILS
L100	LANDSCAPE PLANS (BY OTHERS)
L101	LANDSCAPE PLANS (BY OTHERS)

1. <u>SITE C</u>	HARACTERISTICS:	Construct 3,550 SF' Modular Building and Potable Water Connection and Storm Water Improvements.					
2. <u>PROPE</u>	ERTY LOCATION INFORM	IATION:					
	GENERAL VICINITY:	North of T	radeswinds Park				
3. <u>ZONIN</u> 4. DEVEL	PROPERTY TAX ID#: <u>G & LAND USE:</u> OPMENT CHARACTERIS	48421700 Xxxxx TICS:	00050				
	PROJECT AREA:	23,467 SI	F or 0.54 Acres				
	SETBACKS:	Front: Side: Back:	XX feet XX feet XX feet				
5. <u>PARKI</u>	NG:						
	PARKING REQUIRED:		12 Spaces				
	PARKING PROVIDED:		8 Regular Spaces <u>4 Handicap Spaces</u> 12 Spaces Total				



NOTES: ALL INDEX REFERENCES IN THIS SET OF PLANS REFER TO F.D.O.T. "ROADWAY AND TRAFFIC DESIGN STANDARDS" LATEST EDITION, UNLESS OTHERWISE STATED. GOVERNING SPECIFICATIONS STATE OF FLORIDA, DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION, AND SUPPLEMENTS THERETO IF NOTED FOR THIS PROJECT. ATTENTION IS DIRECTED TO THE FACT THAT THESE PLANS MAY HAVE BEEN REDUCED IN SIZE BY REPRODUCTION. THIS MUST BE CONSIDERED WHEN OBTAINING SCALED DATA. UNDERGROUND UTILITIES: THE LOCATIONS OF UNDERGROUND UTILITIES AS SHOWN ON THE PLANS HAVE BEEN OBTAINED BY FIELD SURVEYS AND SEARCHES OF AVAILABLE RECORDS. IT IS BELIEVED THAT THIS DATA IS ESSENTIALLY CORRECT. HOWEVER, THESE PLANS DO NOT GUARANTEE THEIR ACCURACY OR COMPLETENESS. THE CONTRACTOR WILL BE REQUIRED TO VERIFY THE EXACT LOCATION OF EACH FACILITY WITH THE UTILITY COMPANY WHEN THE POTENTIAL EXISTS FOR INVOLVEMENT AND SHALL TAKE DUE CARE IN ALL PHASES OF THE CONSTRUCTION TO PROTECT ANY SUCH FACILITIES WHICH MAY BE AFFECTED BY THE WORK. ANY DAMAGE TO EXISTING UTILITIES SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE. EFFECTIVE DECEMBER 1, 1993 THERE IS A STATEWIDE CALL 1 - (800)-432-4770 48 HOURS PRIOR TO COMMENCING WORK. CONTRACTOR SHALL NOTIFY ENGINEER IMMEDIATELY IF ANY CONFLICTS OCCUR SO THAT DESIGN MAY BE ADJUSTED. CONSTRUCTION MATERIALS QUALITY AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH FOOT SPECIFICATIONS AND STANDARDS, AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

- 6. NO CLEARING OF THIS SITE SHALL TAKE PLACE UNTIL FINAL APPROVAL OF THE SITE PLAN.
- 7. CONTRACTOR MUST SUBMIT & RECEIVE A R-O-W USE PERMIT PRIOR TO ALL WORK WITHIN R-O-W IF REQUIRED.



CONSTRUCTION PLANS FOR EQUINE ASSISTED THERAPIES

SHOP DRAWINGS TO BE SUBMITTED TO:

Matthew K. Johnson, P.E. JSK Consulting 464 West Pipkin Road, Suite 2 Lakeland, FL 33813

CLIENT/OWNER

Kevin DeBord Equine-Assisted Therapies of South Florida, Inc. 3600 W. Sample Road Coconut Creek, FL. 33073 Tel: (954) 974-2007

VICINITY MAP

SECTION 17, TOWNSHIP 48 S, RANGE 42 E

LEGAL DESCRIPTION: (BY OTHERS) A PORTION OF SECTION 17, TOWNSHIP 48 SOUTH, RANGE 42 EAST, ALSO BEING A PORTION OF THE LANDS DESCRIBED IN OFFICIAL RECORDS BOOK 5936, PAGE 827 OF THE PUBLIC RECORDS OF BROWARD COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

PARTICULARLY DESCRIBED AS FOLLOWS: COMMENCE AT THE NORTHWEST CORNER OF TRACT "C", LYONS TRADEWINDS PARK, ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT BOOK 117, PAGE 9, OF THE PUBLIC RECORDS OF BROWARD COUNTY, FLORIDA, SAID POINT ALSO BEING THE SOUTHWEST CORNER OF THE NORTH DNE-HALF (N 1/2) OF THE SOUTHEAST DNE QUARTER (SE 1/4) OF SAID SECTION 17, THENCE N88*45'26'E, ALONG THE NORTH LINE OF SAID TRACT "C", A DISTANCE OF 1253.67 FEET; THENCE N01'14''34'W A DISTANCE OF 637.92 FEET TO THE POINT OF BEGINNING; THENCE S89*12'42'W A DISTANCE OF 270.11 FEET; THENCE N01'14''34'W A DISTANCE OF 87.28 FEET; THENCE N5''32''38'W A DISTANCE OF 120.58 FEET; THENCE N00'21''27'E A DISTANCE OF 219.78 FEET; THENCE N87*33'48'E A DISTANCE OF 147.02 FEET; THENCE N00'50'14'W A DISTANCE OF 349.99 FEET; THENCE N08''04''48'E A DISTANCE OF 65.95 FEET TO A POINT ON A NON-TANGENT CUVYE CONCAVE TO THE NORTHEAST, WITH A RADIAL BEARING OF N88*27'48'W FROM THE CENTER OF SAID CURVE, AND A RADIUS OF 47.50 FEET; THENCE SOUTHEASTERLY, ALONG THE ARC OF SAID CURVE, THROUGH A CENTRAL ANGLE OF 61'36'18', AN ARC DISTANCE OF 51.07 FEET TO A POINT OF REVERSE CURVATURE OF A CURVE, THROUGH A CENTRAL ANGLE OF 59'07'54', AN ARC DISTANCE OF 44.50 FEET; THENCE SOUTHEASTERLY, ALONG THE ARC OF SAID CURVE, THROUGH A CENTRAL ANGLE OF 59'07'54', AN ARC DISTANCE OF 44.50 FEET; THENCE SOUTHEASTERLY, ALONG THE ARC OF 56.70 FEET; THENCE S03'35'35'' A DISTANCE OF 248,60 FEET TO A POINT ON A NON-TANGENT CURVE CONCAVE TO THE VEST, WITH A RADIAL BEARING OF S82'50'11'E FROM THE CENTER OF SAID CURVE, AND A RADIUS OF 11.10 FEET; THENCE SOUTHWESTERLY, ALONG THE ARC OF SAID CURVE, THROUGH A CENTRAL ANGLE OF 26''07''0'', AN ARC DISTANCE OF 96.23 FEET TO A POINT OF A NON-TANGENT CURVE CONCAVE TO THE EAST WITH A RADIAL BEARING OF NSA''11'9'W FROM THE CENTER OF SAID CURVE, AND A RADIUS DF 129.66 FEET; THENCE SOUTHWEST, ALONG THE ARC OF SAID CURVE, THROUGH A CENTRAL ANGLE OF 5''19''2'', AN ARC DISTANCE OF 16:10.10 FEET; THENCE SOUTHWEST, ALONG THE ARC OF SAID C

SAID LANDS SITUATE IN THE CITY OF COCONUT CREEK, BROWARD COUNTY, FLORIDA AND CONTAIN 239,900 SQUARE FEET (5.48 ACRES), MORE OR LESS.

REFERENCE FDOT M.O.T. INDEXES:

- 600 General Information For Traffic Control Through Work Zones
- 601 Two-Lane, Two-Way, Work Outside Shoulder
- 602 Two-Lane, Two-Way, Work on Shoulder 603 - Two-Lane, Two-Way, Work Within the Travel Way
- 607 Two-Lane, Two-Way, Mobile Operation, Work on Shoulder, Work Within the Travel Way
- 608 Two-Lane, Two-Way, Temporary Diversion Connection





GENERAL NOTES

- DRAWING DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER BEFORE COMMENCING WORK.
- NO FIELD CHANGES OR DEVIATIONS FROM THE DESIGN ARE TO BE MADE WITHOUT PRIOR APPROVAL OF THE ENGINEER.
- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) STANDARDS AND SPECIFICATIONS LATEST EDITION.
- PRIOR TO PROCEEDING WITH TRENCH EXCAVATION, CONTRACTOR SHALL CONTACT ALL UTILITY COMPANIES IN THE AREA TO AID IN LOCATING THEIR UNDERGROUND SERVICES. IT SHALL BE CONTRACTOR'S RESPONSIBILITY TO CONTACT UTILITY COMPANIES AT LEAST THREE (3) NORMAL WORKING DAYS BEFORE STARTING CONSTRUCTION.
- THE LOCATIONS AND SIZES OF ALL EXISTING UTILITIES SHOWN ON THE PLANS ARE APPROXIMATE AND ARE BASED ON THE BEST AVAILABLE INFORMATION. ADDITIONAL UTILITIES MAY EXIST WHICH ARE NOT SHOWN ON THE PLANS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LOCATION OF ALL EXISTING UTILITIES. THE CONTRACTOR SHALL VERIFY ALL UTILITIES BY ELECTRONIC METHODS AND BY HAND EXCAVATION IN COORDINATION WITH ALL UTILITY COMPANIES, PRIOR TO BEGINNING ANY CONSTRUCTION OPERATIONS. ALL CONFLICTS OF EXISTING UTILITIES. WITH PROPOSED IMPROVEMENTS SHALL BE RESOLVED BY THE OWNER/ENGINEER PRIOR TO BEGINNING ANY CONSTRUCTION OPERATIONS THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT AND NO ADDITIONAL COMPENSATION SHALL BE ALLOWED.
- THE CONTRACTOR SHALL COORDINATE INSTALLATION OF ANY UNDER-GROUND CONDUIT AND/OR PIPING REQUIRED FOR ELECTRIC POWER, TELEPHONE, CABLE TELEVISION, IRRIGATION, ETC. PRIOR TO BEGINNING SUBGRADE WORK. THE CONTRACTOR SHALL COORDINATE RELOCATION OF ALL EXISTING UTILITIES WITH THE APPLICABLE UTILITY COMPANIES.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING AND PAYING ALL NECESSARY FEES FOR HOLDING POWER POLES AND/OR LINES AFFECTED BY CONSTRUCTION ACTIVITIES. COST FOR THIS WORK SHALL BE INCLUDED IN THE BID UNIT PRICES FOR THIS PROJECT.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING EXISTING UTILITIES AT ALL TIMES DURING CONSTRUCTION, INCLUDING PROVIDING DIRECT SUPPORT AND/OR SHORING EXCAVATED AREAS AS NECESSARY. THE CONTRACTOR SHALL NOTIFY AFFECTED UTILITY COMPANIES PRIOR TO ATTEMPTING ANY FACILITY SUPPORT. IF A UTILITY COMPANY REQUIRES THAT ONLY THEIR CREWS MAY SUPPORT THEIR FACILITIES. THEN THE CONTRACTOR SHALL PROVIDE FOR THE REQUIRED COORDINATION AND PAYMENT. COST FOR THIS WORK SHALL BE INCLUDED IN THE BID UNIT PRICES FOR THIS PROJECT.
- ALL EXISTING WATER VALVES FIRE HYDRANTS WATER METERS/SERVICES AND APPURTENANCES AFFECTED BY CONSTRUCTION SHALL BE ADJUSTED AS NECESSARY. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT AND NO ADDITIONAL COMPENSATION SHALL BE ALLOWED.
- 0. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL REQUIRED CLEARING AND GRUBBING COST FOR THIS WORK SHALL BE INCLUDED IN THE BID UNIT PRICES FOR THIS PROJECT.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR STAKING OUT THE PIPE LINE LOCATION AND NOTIFYING THE ENGINEER AT LEAST FORTY-EIGHT (48) HOURS IN ADVANCE OF LAYOUT.
- THE "TRENCH SAFETY ACT" SHALL BE INCORPORATED INTO THIS CONTRACT AS ENACTED BY THE LEGISLATURE OF THE STATE OF FLORIDA TO BE IN EFFECT AS OF OCTOBER 1, 1990. NATIONAL GEODETIC VERTICAL DATUM (NGVD)
- 13. BENCH MARK DATA IS NATIONAL GEODETIC VERTICAL DATUM (NGVD) OF 1929. ANY NGVD MONUMENT WITHIN THE LIMITS OF CONSTRUCTION SHALL BE PROTECTED. IF IN DANGER OF DAMAGE, THE CONTRACTOR SHOULD NOTIFY: GEODETIC INFORMATION CENTER
 - 6001 EXECUTIVE BOULEVARD ROCKVILLE, MARYLAND 2085 TELEPHONE (301) 443-8319
- 15. SHOP DRAWINGS FOR ALL CONSTRUCTION ITEMS SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW AND APPROVAL.
- 6. ALL CONSTRUCTION DEWATERING (WELL POINTS, SUMPS, ETC) WILL REQUIRE A SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT (SWFWMD) WATER USE/DEWATERING PERMIT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SECURING WATER USE/DEWATERING PERMITS AS APPLICABLE. COST FOR THIS WORK SHALL BE INCLUDED IN THE BID UNIT PRICES FOR THIS
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR GAINING COMPLETE FAMILIARITY WITH THE PROJECT SITE INCLUDING ACCESS LIMITATIONS, SUBSURFACE SOIL CONDITIONS AND GROUND WATER TABLE LEVELS.
- 18. THE CONTRACTOR SHALL PROVIDE A QUALIFIED SUPERINTENDENT TO BE PRESENT AT THE PROJECT PRE-CONSTRUCTION MEETING AND TO REMAIN ON THE JOB SITE AT ALL TIMES WHILE WORK IS BEING PERFORMED.
- THE CONTRACTOR SHALL HAVE THE FOLLOWING AVAILABLE AT THE MINIMUM JOB SITE AT ALL TIMES: ONE COPY (1) OF THE CITY DESIGN AND CONSTRUCTION STANDARDS. ONE (1) COPY OF THE CONTRACT DOCUMENTS INCLUDING PLANS, SPECIFICATIONS, AND SPECIAL PROVISIONS, AND ONE (1) COPY OF EACH REQUIRED CONSTRUCTION PERMIT.
- THE CONTRACTOR SHALL RESTORE ALL DRAINAGE SWALES/DITCHES AND REPAIR OR REPLACE ALL DRAINAGE STRUCTURES (INLETS, CULVERTS, HEADWALLS, ETC) AFFECTED BY CONSTRUCTION ACTIVITIES. RESTORED DRAINAGE SWALES/DITCHES SHALL MEET ALL ORIGINA ONDITIONS (INCLUDING LOCATION, GRADE, SOD TYPE, ETC). REPAIRED OR REPLACE DRAINAGE STRUCTURES SHALL MEET ALL ORIGINAL CONDITIONS (INCLUDING LOCATION ELEVATION, SIZE, MATERIAL, ETC). PRE- AND POST-CONSTRUCTION AS-BUILT INFORMATION SHALL BE PROVIDED FOR ALL DISTURBED DRAINAGE FACILITIES. THE COST FOR DRAINAGE FACILITY RESTORATION/REPAIR/REPLACEMENT WORK (INCLUDING PRE- AND POST-CONSTRUCTION AS-BUILT INFORMATION) SHALL BE INCLUDED IN THE BID UNIT PRICES FOR THIS PROJECT
- THE CONTRACTOR SHALL RESTORE/REPLACE ALL EXISTING PAVEMENT DRIVEWAYS SIDEWALKS, MAILBOXES, SOD, LANDSCAPING, CONDUIT, CABLE, IRRIGATION SYSTEMS, ETC. AFFECTED BY CONSTRUCTION ACTIVITIES THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT AND NO ADDITIONAL COMPENSATION SHALL BE ALLOWED.
- 22. SOD SHALL BE REPLACED FOR THE FULL WIDTH DISTURBED. SOD TYPE SHALL MATCH EXISTING UNLESS OTHERWISE SPECIFIED. COST FOR THIS WORK SHALL BE INCLUDED IN THE BID UNIT PRICES FOR THIS PROJECT
- CONCRETE AND ASPHALT DRIVEWAYS SHALL BE RESTORED/REPLACED FROM SAW CUT TO EDGE OF ROADWAY PAVEMENT. COST FOR THIS WORK SHALL BE INCLUDED IN THE BID UNIT PRICES FOR THIS PROJECT.
- 24. SURVEY LAYOUT AND TESTING BY CONTRACTOR 25. ESTIMATED QUANTITIES SHOWN HEREIN ARE FOR PERMITTING PURPOSES ONLY AND ARE SUBJECT TO CHANGE BASED ON AGENCY REVIEW. THE CONTRACTOR'S BID SHALL BE BASED

OFF HIS/HER OWN ESTIMATED QUANTITIES.

- 26 THE CONTRACTOR SHALL NOT CONSTRUCT ANY INFRASTRUCTURE BASED ON BIDDING DOCUMENTS. IT IS THE CONTRACTOR'S RESPONSIBLE FOR OBTAINING THE APPROVED CONSTRUCTION PLANS FROM ALL APPLICABLE AGENCIES SUBSEQUENT OF THE REVIEW AND APPROVAL.
- THIS SITE LIES WITHIN FLOOD ZONE X PER FEMA FLOOD INSURANCE RATE MAP (FIRM) 120031C0115 F PANEL 115. EFFECTIVE DATE: AUGUST 18, 1992. ALL PROPOSED SITE WORK IS WITHIN FLOOD ZONE X, NO SITE WORK IS PROPOSED IN FLOOD ZONE A.
- 8. IT IS THE CONTRACTOR'S RESPONSIBILITY TO SCHEDULE PRE-CONSTRUCTION MEETINGS AND BECOME FAMILIAR WITH ALL APPLICABLE AGENCY PROCEDURES PRIOR TO COMMENCING WORK. THE ARCHITECT, OWNER, AND ENGINEER MUST BE INVITED (AT LEAST 5 DAYS IN ADVANCE) TO ATTEND SUCH MEETINGS.
- 29. IN ADDITION TO INFORMATION PROVIDED WITHIN THESE CONSTRUCTION DOCUMENTS, THE CONTRACTOR SHALL BE REQUIRED TO MEET ALL CONDITIONS AND REQUIREMENTS STATED IN APPLICABLE PERMITS. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO OBTAIN COPIES OF THESE PERMITS, KEEP COPIES EASILY ACCESSIBLE ON SITE, AND FULLY UNDERSTAND THE CONDITION AND REQUIREMENTS STATED WITHIN.

WATER MAINS

- ALL WATER SYSTEM CONSTRUCTION SHALL BE INSTALLED. INSPECTED AND TESTED IN ACCORDANCE WITH THE CITY MINIMUM DESIGN AND CONSTRUCTION STANDARDS MANUAL. LATEST EDITION. IN CASE OF DISCREPANCIES BETWEEN THE CONSTRUCTION PLANS AND THE CITY SPECIFICATIONS. THE MOST RESTRICTIVE SHALL APPLY.
- THE CONTRACTOR SHALL COORDINATE THE TIE-INS TO THE EXISTING UTILITIES WATER SYSTEM WITH THE CITY SYSTEM MAINTENANCE MANAGER AT LEAST TWO (2) WORKING DAYS PRIOR TO THE INTENDED TIME OF TIE-IN. THE METHOD AND CONDITIONS OF TIE-IN(S) SHALL BE IN ACCORDANCE WITH THE CURRENT STANDARDS AND PROCEDURES.
- THE CONTRACTOR SHALL NOTIFY THE CITY INSPECTION SERVICES DEPARTMENT AND THE UTILITIES SYSTEM MAINTENANCE MANAGER AT LEAST TWO (2) WORKING DAYS PRIOR TO COMMENCEMENT OF CONSTRUCTION OF THE WATER SYSTEM.
- PVC PIPE WATER LINE
- a. ALL PVC PIPE OF NOMINAL DIAMETER FOUR THROUGH TWELVE INCHES SHALL BF MANUFACTURED IN ACCORDANCE WITH AWWA STANDARD C900, LATEST EDITION. THE PVC PIPE SHALL HAVE A MINIMUM WORKING PRESSURE RATING OF 150 psi AND SHALL HAVE A DIMENSION RATIO (DR) OF 18. PIPE SHALL BE THE SAME 0.D. AS DUCTILE IRON
- b. ALL PVC PIPE OF NOMINAL DIAMETER 14 THROUGH 24 INCHES SHALL BE MANUFACTURED IN ACCORDANCE WITH AWWA STANDARD C905, LATEST EDITION. THE PVC PIPE SHALL HAVE A MINIMUM WORKING PRESSURE RATING OF 165 psi AND SHALL HAVE A DIMENSION RATIO (DR) OF 25. PIPE SHALL BE THE SAME O.D. AS DUCTILE IRON
- c. ALL PVC WATER MAINS SHALL BE BLUE IN COLOR.
- DUCTILE IRON PIPE (D.I.P.) SHALL BE CEMENT-MORTAR LINED. CLASS 350. MECHANICAL OR PUSH-ON JOINT, AND SHALL MEET ALL REQUIREMENTS OF THE FOLLOWING: ANSI/AWWA C104/A 21.4: ANSI/AWWA C111/A 21.11 (FOR RUBBER GASKET JOINTS); ANSI/AWWA C150/21.50 (FOR THICKNESS DESIGN) AND ANSI/AWWA C151/A 21.51 (FOR D.I.P. MOLDS).

- FITTINGS SHALL BE DUCTILE IRON, CEMENT-MORTAR LINED, MECHANICAL JOINT, RATED AT 350 Psi MEETING ALL REQUIREMENTS OF THE FOLLOWING: ANSI/AWWA C104/A21.4; ANSI/AWWA C110/A21.10; AND ANSI/AWWA C111/A21.11.
- 4. WATER MAINS SHALL BE MECHANICALLY RESTRAINED AT ELBOWS, VALVES, TEES AND DEAD ENDS IN ACCORDANCE WITH THE UTILITY COMPANY DESIGN AND CONSTRUCTION STANDARDS.
- PVC WATER MAINS SHALL HAVE A MINIMUM COVER OF THREE FEET (3') UNLESS OTHERWISE NOTED.
- WATER MAINS SHALL BE DISINFECTED IN ACCORDANCE WITH ANSI/AWWA C651 AND BACTERIOLOGICALLY TESTED FOR TWO (2) CONSECUTIVE DAYS. TEST REPORTS SHALL BE SUBMITTED TO THE ENGINEER. CONNECTION TO THE EXISTING LINES WILL NOT BE ALLOWED PRIOR TO FDEP APPROVAL OF CERTIFICATION.
- VALVES SHALL BE RESILIENT SEAT TYPE GATE VALVES IN ACCORDANCE WITH AWWA C509.
- ALL CONNECTIONS AND TAPS SHALL BE AT LEAST 24 INCHES FROM A FITTING OR BELL
- FIRE HYDRANTS SHALL HAVE 5 1/4 INCH VALVE OPENING AND SHALL COMPLY WITH AWWA STANDARD C502 FOR FIRE HYDRANTS FOR WATER WORKS SERVICE. EACH HYDRANT SHALL HAVE 6-INCH MECHANICAL JOINT ENDS WITH HARNESSING LUGS AND SHALL OPEN BY TURNING TO THE LEFT. OPERATING NUTS SHALL BE AWWA STANDARD. FIRE HYDRANTS SHALL BE EQUIPPED WITH "O-RING" PACKING.
- 10. POLYETHYLENE WATER SERVICE TUBING SHALL BE COPPER TUBE SIZE (CTS), SDR 9, RATED FOR 200 Psi IN ACCORDANCE WITH ASTM D2737 AND AWWA C901.

COUPLINGS AND FITTINGS FOR POLYETHYLENE TUBING SHALL BE GRIP-JOINT TYPE AS MANUFACTURED BY FORD OR APPROVED EQUIVALENT.

GRAVITY SANITARY SEWER

- PVC PIPE & FITTINGS (4"-15") SHALL BE SDR 35 CONFORMING TO THE REQUIREMENTS OF ASTM D3034. PVC PIPE & FITTINGS (18" OR GREATER) SHALL BE SDR 35 CONFORMING TO THE **REQUIREMENTS OF ASTM F679 T-1**
- MAXIMUM LAYING LENGTHS OF ALL PVC GRAVITY PIPE SIZES SHALL BE AS FOLLOWS: 4 INCHES THROUGH 15 INCHES - 13 FEET. 18 INCHES - 13 FEET. LARGER THAN 18 INCHES - 12 FEET. PVC GRAVITY PIPE SHALL BE GREEN IN COLOR.
- JOINTS FOR PVC GRAVITY PIPE 4 INCHES AND LARGER SHALL BE INTEGRAL BELL AND SPIGOT WITH A SINGLE RUBBER GASKET. THE BELL SHALL CONSIST OF AN INTEGRAL WALL SECTION WITH A SOLID CROSS SECTION ELECTROMETRIC RING, FACTORY INSTALLED, AND SHALL CONFORM TO ASTM F477 AND MEET THE REQUIREMENTS OF ASTM D3212.
- PVC FITTINGS SHALL BE MADE OF PVC PLASTIC HAVING A CELL CLASSIFICATION OF 12454-B, OR
- 12454-C, OR 13343-C AS DEFINED IN ASTM D1784, JOINED WITH A RUBBER GASKET JOINT 6. LAMPING, INTERNAL VIDEO INSPECTION, AND FIVE PERCENT (5%) DEFLECTION TESTING OF THE GRAVITY SEWER SYSTEM SHALL BE PERFORMED BY CONTRACTOR WITH COUNTY PRESENT.

PIPE LINE INSTALLATIONS

- INSTALLATION OF WATER MAINS AND FORCE MAINS SHALL BE IN ACCORDANCE WITH THE APPLICABLE PROVISIONS OF ANSI/AWWA C900 FOR PVC PIPE, AND ANSI/AWWA C600 FOR DUCTILE IRON PIPE
- ALL PIPE SHALL BE LAID IN TRENCHES HAVING A DRY AND STABLE BOTTOM. BACKFIELD SHALL BE FREE OF BOULDERS AND DEBRIS. PIPE SHALL BE FULLY SUPPORTED ALONG ITS ENTIRE LENGTH. SHARP OR ROCKY MATERIAL ENCOUNTERED IN THE BASE SHALL BE REPLACED WITH PROPER BEDDING. PIPE SHALL BE LAID ON LINE AND GRADE AS DESIGNED.
- ALL FOREIGN MATERIAL SHALL BE CLEANED FROM THE PIPE PRIOR TO INSTALLATION. PIPE LINES SHALL BE FLUSHED AFTER INSTALLATION USING AN APPROVED POLYURETHANE PIG. TEMPORARY FLUSHING STATIONS SHALL BE INSTALLED AS NECESSARY. PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL SUBMIT A PIPE LINE FILLING AND FLUSHING PLAN FOR REVIEW AND APPROVAL.
- ALL WATER MAINS AND FORCE MAINS SHALL BE INSTALLED WITH AN INSULATED 14 GAUGE COPPER WIRE ATTACHED DIRECTLY TO THE PIPE FOR LOCATION PURPOSES. THE WIRE SHALL BE CONTINUOUS FROM VALVE BOX TO VALVE BOX. WRAPPED TWICE AROUND EACH PIPE JOINT AND EXTENDED SUFFICIENTLY INTO EACH VALVE BOX OR CONCRETE COLLAR TO PERMIT ATTACHING LOCATOR DEVICES. THE WIRE SHALL BE BLUE FOR WATER MAINS AND GREEN FOR FORCE MAINS
- A 3" WIDE PLASTIC OR ALUMINUM FOIL WARNING/IDENTIFICATION TAPE SHALL BE INSTALLED NO DEEPER THAN 12" BELOW FINISHED GRADE DIRECTLY ABOVE THE PIPE.
- PIPE SHALL BE DEFLECTED AS NECESSARY TO OBTAIN THE REQUIRED ALIGNMENT APPROPRIATE FITTINGS SHALL BE USED WHEN DEFLECTION EXCEEDS 75% OF THE MANUFACTURER'S RECOMMENDED MAXIMUM DEFLECTION.

HANDLING AND STORAGE:

HANDLING: PIPE FITTINGS AND ACCESSORIES SHALL BE CAREFULLY INSPECTED BEFORE AND AFTER INSTALLATION AND THOSE FOUND DEFECTIVE SHALL BE REJECTED. PIPE AND FITTINGS SHALL BE FREE FROM FINS AND BURRS. PROPER EQUIPMENT SHALL BE PROVIDED FOR LOWERING SECTIONS OF PIPE INTO TRENCHES. UNDER NO CIRCUMSTANCES SHALL PIPE, FITTINGS OR ACCESSORIES BE DROPPED OR DUMPED INTO TRENCHES. STORAGE: PIPE SHOULD BE STORED AT THE JOB SITE IN UNIT PACKAGES PROVIDED BY THE MANUFACTURER. CAUTION SHOULD BE EXERCISED TO AVOID COMPRESSION DAMAGE OR DEFORMATION TO BELL ENDS OF THE PIPE. PIPE SHOULD BE STORED IN SUCH A WAY AS TO PREVENT SAGGING OR BENDING AND PROTECTED FROM EXPOSURE TO DIRECT SUNLIGHT BY COVERING WITH AN OPAQUE MATERIAL WHILE PERMITTING ADEQUATE AIR CIRCULATION ABOVE AND AROUND THE PIPE. GASKETS SHOULD BE STORED IN A COOL DARK PLACE OUT OF THE DIRECT RAYS OF THE SUN, IN THE ORIGINAL PACKAGING.

INSTALLATION:

BELL-AND-SPIGOT PIPE SHALL BE PLACED WITH THE BELL END POINTING IN THE DIRECTION OF PIPE LAYING. PIPE SHALL BE GRADED IN STRAIGHT LINES, TAKING CARE TO AVOID THE FORMATION OF ANY DIPS OR LOW POINTS. PIPE SHALL NOT BE LAID WHEN THE CONDITIONS O TRENCH OR WEATHER ARE UNSUITABLE. AT THE END OF EACH DAYS WORK, OPEN ENDS OF PIPE SHALL BE CLOSED TEMPORARILY WITH WOOD BLOCKS OR BULKHEADS. PIPE SHALL BE SUPPORTED AT ITS PROPER ELEVATION AND GRADE, TAKING CARE TO SECURE FIRM AND UNIFORM SUPPORT. WOOD SUPPORT BLOCKING WILL NOT BE PERMITTED. THE FULL LENGTH OF EACH SECTION OF PIPE AND FITTINGS SHALL REST SOLIDLY ON THE PIPE BED, WITH RECESSED ELEVATION TO ACCOMMODATE BELLS, JOINTS, AND COUPLINGS. ANCHORS AND SUPPORTS SHALL BE PROVIDED WHERE NECESSARY AND WHERE INDICATED ON THE DRAWINGS FOR FASTENING WORK INTO PLACE. FITTINGS SHALL BE INDEPENDENTLY SUPPORTED. SHORT LENGTHS OF PIPE SHALL BE USED IN AND OUT OF EACH RIGID JOINT OR RIGID STRUCTURE, WITH SUFFICIENT LENGTH PROVIDED FOR PROPER INSTALLATION OF JOINTING MATERIAL. BLOCKING OR WEDGING BETWEEN BELLS AND SPIGOTS WILL NOT BE PERMITTING. PIPE SHALL BE CUT BY MEANS OF SAWS, POWER DRIVEN ABRASIVE WHEELS OR PIPE CUTTERS, WHICH PRODUCE A SQUARE CUT. WEDGE-TYPE ROLLER CUTTERS WILL NOT BE PERMITTED. AFTER CUTTING, THE END OF THE PIPE SHALL BE BEVELED USING A	BELL-AND-SPIGOT PIPE SHALL BE PLACED WITH THE BELL END POINTING IN THE DIRECTION OF PIPE LAYING. PIPE SHALL BE GRADED IN STRAIGHT LINES, TAKING CARE TO AVOID THE FORMATION OF ANY DIPS OR LOW POINTS. PIPE SHALL NOT BE LAID WHEN THE CONDITIONS OF PIPE SHALL BE CLOSED TEMPORARILY WITH WOOD BLOCKS OR BULKHEADS. PIPE SHALL BE SUPPORTED AT ITS PROPER ELEVATION AND GRADE, TAKING CARE TO SECURE FIRM AND UNIFORM SUPPORT. WOOD SUPPORT BLOCKING WILL NOT BE PERMITTED. THE FULL LENGTH OF EACH SECTION OF PIPE AND FITTINGS SHALL REST SOLIDLY ON THE PIPE BED, WITH RECESSED ELEVATION TO ACCOMMODATE BELLS, JOINTS, AND COUPLINGS. ANCHORS AND SUPPORTS SHALL BE PROVIDED WHERE NECESSARY AND WHERE INDICATED ON THE DRAWINGS FOR FASTENING WORK INTO PLACE. FITTINGS SHALL BE INDEPENDENTLY SUPPORTED. SHORT LENGTHS OF PIPE SHALL BE USED IN AND OUT OF EACH RIGID JOINT OR RIGID STRUCTURE, WITH SUFFICIENT LENGTH PROVIDED FOR PROPER INSTALLATION OF JOINTING MATERIAL. BLOCKING OR WEDGING BETWEEN BELLS AND SPIGOTS WILL NOT BE PERMITTING. PIPE SHALL BE CUT BY MEANS OF SAWS, POWER DRIVEN ABRASIVE WHEELS OR PIPE CUTTERS, WHICH WILL PRODUCE A SQUARE CUT. WEDGE-TYPE ROLLER CUTTERS WILL NOT BE PERMITTED. AFTER CUTTING, THE END OF THE PIPE SHALL BE BEVELED USING A BEVELING TOOL, PORTABLE TYPE SANDER OR ABRASIVE DISC.		
	BEVELING TOOL, PORTABLE TYPE SANDER OR ABRASIVE DISC.	3.	BELL-AND-SPIGOT PIPE SHALL BE PLACED WITH THE BELL END POINTING IN THE DIRECTION OF PIPE LAYING. PIPE SHALL BE GRADED IN STRAIGHT LINES, TAKING CARE TO AVOID THE FORMATION OF ANY DIPS OR LOW POINTS. PIPE SHALL NOT BE LAID WHEN THE CONDITIONS OF TRENCH OR WEATHER ARE UNSUITABLE. AT THE END OF EACH DAYS WORK, OPEN ENDS OF PIPE SHALL BE CLOSED TEMPORARILY WITH WOOD BLOCKS OR BULKHEADS. PIPE SHALL BE SUPPORTED AT ITS PROPER ELEVATION AND GRADE, TAKING CARE TO SECURE FIRM AND UNIFORM SUPPORT. WOOD SUPPORT BLOCKING WILL NOT BE PERMITTED. THE FULL LENGTH OF EACH SECTION OF PIPE AND FITTINGS SHALL REST SOLIDLY ON THE PIPE BED, WITH RECESSED ELEVATION TO ACCOMMODATE BELLS, JOINTS, AND COUPLINGS. ANCHORS AND SUPPORTS SHALL BE PROVIDED WHERE NECESSARY AND WHERE INDICATED ON THE DRAWINGS FOR FASTENING WORK INTO PLACE. FITTINGS SHALL BE INDEPENDENTLY SUPPORTED. SHORT LENGTHS OF PIPE SHALL BE USED IN AND OUT OF EACH RIGID JOINT OR RIGID STRUCTURE, WITH SUFFICIENT LENGTH PROVIDED FOR PROPER INSTALLATION OF JOINTING MATERIAL. BLOCKING OR WEDGING BETWEEN BELLS AND SPIGOTS WILL NOT BE PERMITTING. PIPE SHALL BE CUT BY MEANS OF SAWS, POWER DRIVEN ABRASIVE WHEELS OR PIPE CUTTERS, WHICH WILL PRODUCE A SQUARE CUT. WEDGE-TYPE ROLLER CUTTERS WILL NOT BE PERMITTED. AFTER CUTTING, THE END OF THE PIPE SHALL BE BEVELED USING A DEVEL WA TOOL OF THE CANDER OF DADATES OF DADATES SHOLL BE BEVELED USING A

BACK FILL DENSITY TESTING:

9. ALL BACK FILL DENSITY TESTS SHALL BE CONDUCTED BY AN INDEPENDENT TESTING LAB. FOR TYPICAL PIPE TRENCHES, BACK FILL DENSITY TESTS SHALL BE PERFORMED AT 500 FEET (MAXIMUM) INTERVALS. FOR PIPE TRENCHES AT ROADWAYS, TURN-LANES, AND DRIVEWAY OPEN-CUTS, A MINIMUM OF ONE (1) BACK FILL DENSITY TEST SHALL BE PERFORMED AND THEREAFTER AT 50 FEET (MAXIMUM) INTERVALS. TESTS SHALL BE CONDUCTED AT THE TOP OF PIPE AND FOR EVERY 6 INCH LAYER TO FINISH GRADE. CERTIFIED COPIES OF THE TEST REPORTS SHALL BE PROVIDED TO THE OWNER/ENGINEER

HYDROSTATIC TESTING FOR LEAKAGE :

10. WATER MAINS AND FORCE MAINS SHALL UNDERGO HYDROSTATIC TESTING FOR LEAKAGE AT A PRESSURE OF 150 psi FOR TWO (2) CONSECUTIVE HOURS IN ACCORDANCE WITH ANSI/AWWA C600. TESTS MAY BE MADE ON SECTIONS NOT EXCEEDING 2.000 FEET. CONTRACTOR SHALL FURNISH ALL NECESSARY EQUIPMENT AND MATERIAL. MAKE ALL TAPS, AND FURNISH ALL CLOSURE PIECES IN THE PIPE AS REQUIRED. THE ENGINEER OF RECORD AND A CITY REPRESENTATIVE SHALL MONITOR AND APPROVE A SATISFACTORY TEST. FIRE LINES SHALL UNDERGO A 200 psi HYDROSTATIC TEST FOR TWO (2) CONSECUTIVE HOURS IN ACCORDANCE WITHIN FPA 24.

STANDARD SEPARATION OF WATER/SEWER CONFLICTS

- SANITARY SEWERS, FORCE MAINS, AND STORM SEWERS SHOULD ALWAYS CROSS UNDER WATER MAINS, SANITARY SEWERS, FORCE MAINS AND STORM SEWERS CROSSING WATER MAINS SHALL BE LAID TO PROVIDE A MINIMUM VERTICAL DISTANCE OF TWELVE INCHES (12") BETWEEN THE INVERT OF THE UPPER PIPE AND THE CROWN OF THE LOWER PIPE WHENEVER POSSIBLE. WHERE SANITARY SEWERS, FORCE MAINS, AND STORM SEWERS MUST CROSS A WATER MAIN WITH LESS THAN TWELVE INCHES (12") VERTICAL DISTANCE, BOTH THE SEWER AND THE WATER MAIN SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE (D.I.P.) AT THE CROSSING (D.I.P. IS NOT REQUIRED FOR STORM SEWERS IF IT IS NOT AVAILABLE IN THE SIZE PROPOSED), SUFFICIENT LENGTHS OF D.I.P. MUST BE USED TO PROVIDE A MINIMUM SEPARATION OF TEN FEET (10') BETWEEN ANY TWO JOINTS. ALL WATER MAIN JOINTS WITHIN TWENTY FEET (20') OF THE CROSSING SHALL BE LEAK-FREE AND MECHANICALLY RESTRAINED. ALL CROSSINGS SHALL BE ARRANGED SO THAT THE SEWER PIPE JOINTS AND THE WATER MAIN PIPE JOINTS ARE EQUIDISTANT FROM THE POINT OF CROSSING (PIPES CENTERED ON THE CROSSING). WHERE A NEW PIPE CONFLICTS WITH AN EXISTING PIPE. THE NEW PIPE SHALL BE CONSTRUCTED OF D.I.P. AND THE CROSSING SHALL BE ARRANGED TO MEET THE REQUIREMENTS ABOVE.
- A MINIMUM EIGHT FEET (8') HORIZONTAL SEPARATION SHALL BE MAINTAINED BETWEEN ANY TYPE OF SEWER AND WATER MAIN IN PARALLEL INSTALLATIONS WHENEVER POSSIBLE. IN CASES WHERE IT IS NOT POSSIBLE TO MAINTAIN A EIGHT FEET (8') HORIZONTAL SEPARATION THE WATER MAIN MUST BE LAID IN A SEPARATE TRENCH OR ON AN UNDISTURBED EARTH SHELF LOCATED ON ONE SIDE OF THE SEWER OR FORCE MAIN AT SUCH AN ELEVATION THAT THE BOTTOM OF THE WATER MAIN IS AT LEAST EIGHTEEN INCHES ABOVE THE TOP OF THE SEWER WHERE IT IS NOT POSSIBLE TO MAINTAIN A VERTICAL DISTANCE OF TWELVE INCHES (12") IN PARALLEL INSTALLATIONS, THE WATER MAIN SHALL BE CONSTRUCTED OF D.I.P. AND THE SEWER OR THE FORCE MAIN SHALL BE CONSTRUCTED OF D.I.P. (IF AVAILABLE IN THE SIZE PROPOSED) WITH A MINIMUM VERTICAL DISTANCE OF SIX INCHES. THE WATER MAIN SHOULD BE LOCATED AS FAR APART AS POSSIBLE FROM JOINTS ON THE SEWER OR FORCE MAIN (STAGGERED JOINTS).
- MAXIMUM OBTAINABLE SEPARATION OF RECLAIMED WATER LINES AND DOMESTIC WATER LINES SHALL BE PRACTICED. A MINIMUM HORIZONTAL SEPARATION OF FIVE FEET (5') CENTER TO

CENTER OR THREE FEET (3') OUTSIDE TO OUTSIDE SHALL BE MAINTAINED BETWEEN RECLAIMED WATER LINES AND EITHER POTABLE WATER MAINS OR SEWAGE COLLECTION LINES. A MINIMUM VERTICAL CLEARANCE OF TWELVE INCHES (12") MUST BE MAINTAINED BETWEEN RECLAIMED WATER LINES AND POTABLE WATER MAINS OR SEWAGE COLLECTION LINES. AT CROSSINGS, THE PROVISIONS OF F.A.C. RULE 62-604 AND 10 STATE STANDARDS APPLY.

GRADING & EARTHWORK

STRUCTURAL FILL

ALL NEW FILL WITHIN THE PROJECT, WHICH MAY BE USED FOR SUPPORT OF STRUCTURES, SIGNS, UTILITIES, PAVEMENTS, WALKS, WALLS, ETC. IS DEFINED AS STRUCTURAL FILL STRUCTURAL FILL SHOULD BE COMPRISED OF CLEAN SOIL, AND/OR AGGREGATE, FREE OF ORGANICS, DELETERIOUS MATERIALS, ICE, AND WASTE OF ANY KIND, AND BE OBSERVED AND DOCUMENTED BY A REPUTABLE SOIL ENGINEER. COMPACT STRUCTURAL FILL OUTSIDE BUILDING AREAS IN UNIFORM LIFTS NOT EXCEEDING 12 INCHES LOOSE THICKNESS, TO AT LEAST 95% OF STANDARD PROCTOR MAXIMUM DRY DENSITY (ASTM D698), ALL FILL SLOPES TO REMAIN SHALL BE PLACED AND COMPACTED BEYOND THE FINAL LINES AND GRADES. THEN CUT BACK TO ENSURE PROPER COMPACTION AT THE FINISH SLOPE FACE. ALL EXISTING SLOPES STEEPER THAN 5H:1V SHALL BE "BENCHED" AT LEAST 8 FEET INTO THE SLOPE FACE, TO ENSURE NEW FILLS ARE PLACED AND COMPACTED IN GENERALLY UNIFORM, HORIZONTAL LIFTS, ELIMINATING WEAKENED PLANES WITHIN THE NEW FILLS. THE TOP LIFT SHALL BE COMPACTED TO 98% STANDARD PROCTOR MAXIMUM DRY DENSITY (ASTM D698). COMPACT STRUCTURAL FILL WITHIN PAVED AREAS IN ACCORDANCE WITH PLANS AND SPECIFICATIONS. COMPACT STRUCTURAL FILL WITHIN BUILDING AREAS IN ACCORDANCE WITH GEOTECHNICAL ENGINEERING REPORT AND STRUCTURAL PLANS AND SPECIFICATIONS. SHOULD A DISCREPANCY ARISE BETWEEN THIS AND LOCAL MUNICIPAL CODES OR SPECIFICATIONS, THE MOST RESTRICTIVE SHALL APPLY.

UTILITY BACKFILL

ALL UNDERGROUND UTILITIES SHOULD BE BACKFILLED WITH THE TRENCH SPOIL, UNLESS THE SPOILS DO NOT MEET THE STRUCTURAL FILL REQUIREMENTS ABOVE. IN WHICH CASE, A SUITABLE STRUCTURAL FILL SHALL BE IMPORTED AND THE UNSUITABLE SPOILS DISPOSED OFF SITE.

SUBGRADE

THE ORIGINAL SUBGRADE, AND EACH SUCCESSIVE LIFT OF STRUCTURAL FILL INCLUDING THE FINAL LIFT SHALL BE STABLE UNDER THE WEIGHT OF A LOADED BIAXIAL DUMP TRUCK. STABLE IS DEFINED HEREIN AS A FIRM, UNYIELDING SURFACE, AND ALLOWING NO YIELDING, RUTTING, FANNING, PUMPING, OR OTHERWISE DEFLECTING IN EXCESS OF ½ INCH. IN ADDITION, THE FINAL SUBGRADE SHALL MEET THE FOLLOWING PARAMETERS:

BUILDING AND EXTERIOR SLABS:

a. GEOTECHNICAL REPORT REQUIREMENTS b. STRUCTURAL PLANS AND SPECIFICATIONS

FLEXIBLE AND RIGID PAVEMENT AREAS

a. PLANS AND SPECIFICATION REQUIREMENTS b. LOCAL MUNICIPAL REQUIREMENTS

ROAD DESIGN REQUIREMENTS

NOTE: REFER TO TYPICAL ASPHALT PAVEMENT SECTION ON DETAIL SHEET FOR THICKNESSES AND SPECIFICATIONS.

STABILIZED SUBGRADE

- ALL ROAD SUBGRADE, WHERE APPLICABLE, SHALL BE STABILIZED TO THE REQUIRED DEPTH AND REQUIRED FLORIDA BEARING VALUE, SIX INCHES OUTSIDE THE EDGE OF BASE ON EACH SIDE OF THE ROAD, AND SHOULDERS SHALL BE STABILIZED SIX INCHES DEEP TO FLORIDA BEARING VALUE OF 60. WHERE EXISTING SOILS TO BE USED IN THE ROAD SUBGRADE HAVE THE REQUIRED BEARING VALUE, NO ADDITIONAL STABILIZING MATERIAL NEED BE ADDED. MIXING SHALL BE DONE TO INSURE UNIFORMITY WHETHER OR NOT ADDITIONAL MATERIAL IS ADDED. 2. THE STABILIZING MATERIAL, IF REQUIRED, SHALL BE HIGH BEARING VALUE SOIL, CLAY, SAND,
- LIMEROCK, SHELL OR OTHER MATERIAL CONFORMING TO FDOT STANDARD SPECIFICATIONS. BASE COURSE
- THE MATERIALS PERMITTED AS BASE COURSE FOR FLEXIBLE PAVEMENT SHALL BE LIMEROCK, OYSTER SHELL, HOT PLANT MIX ASPHALTIC CONCRETE OR SOIL CEMENT AND SHALL MEET FDOT STANDARD SPECIFICATIONS.

SURFACE COURSE

4 ANY ASPHALTIC CONCRETE SUBFACE COURSE MEETING FOOT STANDARD SPECIFICATIONS WILL BE PERMITTED. ONLY ONE TYPE SURFACE OF COURSE WILL BE PERMITTED IN EACH DEVELOPMENT OR PHASE OF A DEVELOPMENT MINIMUM THICKNESS FOR ALL SURFACE COURSES SHALL BE ONE INCH. NO RECYCLED ASPHALT PAVEMENT (R.A.P.) MATERIAL SHALL BE ALLOWED IN SURFACE COURSES. ONLY VIRGIN MATERIAL IS PERMITTED.

FLEXIBLE PAVEMENT ROAD DESIGN :

- FOR COLLECTOR AND ARTERIAL ROADS, THE METHOD OF DETERMINING ROAD SUBBASE, BASE AND PAVEMENT THICKNESS FOR STANDARD TYPICAL SECTIONS SHOWN IN FIGURES A6_A15. TYPICAL ROAD SECTIONS AND STANDARD INTERSECTION DETAILS, SHALL BE THE STRUCTURAL NUMBER CRITERION. AS SET FORTH IN THE "FLEXIBLE PAVEMENT DESIGN MANUAL FOR NEW CONSTRUCTION AND PAVEMENT REHABILITATION" DOC# 625_010_002 PUBLISHED BY THE FDOT. THE MINIMUM STRUCTURE NUMBER SHALL BE 3.0 AS DETERMINED BY LAYER COEFFICIENTS.
- THE MINIMUM STRUCTURAL NUMBER ALLOWABLE FOR ANY ROAD SECTION DESIGNED FOR LOCAL RESIDENTIAL TRAFFIC WILL BE 2.29 AS DETERMINED BY THE LAYER COEFFICIENTS SHOWN IN TABLE A7, MINIMUM DESIGN THICKNESS SHALL BE ONE AND ONE HALF INCHES WITH CONSTRUCTION TOLERANCES OF 0.25 INCHES. THE MINIMUM SURFACE COURSE THICKNESS AT ANY POINT SHALL BE ONE AND ONE QUARTER INCH.
- THE TOTAL LAYER COEFFICIENT ALLOWED FOR THE SUBGRADE DESIGNED FOR LOCAL RESIDENTIAL TRAFFIC SHALL NOT EXCEED THE VALUE ASSIGNED FOR EIGHT INCH THICKNESS. THE BASE MATERIAL SPECIFIED IN TABLE A7 BASE COURSE, SHALL BE USED. THE PROPOSED TYPICAL SECTION SHALL BE SHOWN ON THE PLANS AND THE STRUCTURAL NUMBER COMPUTATION INCLUDED UNDER THE TYPICAL SECTION.
- PROPOSED LOCAL ROADS WHICH ARE TO ACCOMMODATE COMMERCIAL OR INDUSTRIAL TRAFFIC SHALL BE DESIGNED TO A MINIMUM STRUCTURAL NUMBER OF 3.00 AS DETERMINED BY THE LAYER OF COEFFICIENTS SHOWN IN TABLE A7.
- 9. TABLE A7 IS A SUGGESTED STARTING PLACE FOR DETERMINING PAVEMENT LAYER TYPE AND MATERIAL USE BASED ON PREVIOUS GENERAL EXPERIENCE. PAVEMENT SECTIONS DIFFERING FROM THESE GUIDELINES ARE FEASIBLE WHEN JUSTIFIED BY LOCAL EXPERIENCE. CONSTRUCTION PROCEDURE OR APPROPRIATE SUPPORTING DATA. FOR COST COMPARISON PURPOSES, IT MAY BE DESIRABLE TO USE THE THICKNESSES OF ABC TYPES I, II, AND III IN INCREMENTS OF ONE INCH.

AS-BUILT PLANS

- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING THE ENGINEER OF RECORD CERTIFIED UTILITY AS-BUILT SURVEYS (6 MIN IN ADDITION TO ANY COPIES REQUIRED BY OWNER) OF ALL UNDER GROUND UTILITIES SIGNED AND SEALED BY A REGISTERED LAND SURVEYOR IN THE STATE OF FLORIDA (AS WELL AS A DIGITAL CAD FILE IN 2004 OR NEWER FORMAT). THE AS-BUILT SURVEY SHALL BE ORIENTED IN STATE PLANE COORDINATES WITH A MINIMUM OF TWO REFERENCED BENCHMARK LOCATIONS. THE AS-BUILT DRAWINGS SHALL NOTE ALL DEVIATIONS FROM THE APPROVED PLANS DURING CONSTRUCTION. THE RECORD DRAWINGS MUST SHOW EACH AND EVERY WATER, WASTEWATER, AND RECLAIMED WATER SERVICE, TAP, CLEAN-OUT, VALVE, FIRE HYDRANT, FITTING, AND CASING END REFERENCED FROM AT LEAST TWO FIXED AND EASILY FOUND REFERENCE POINTS (E.G., PROPERTY CORNERS, EDGES OF PAVEMENT, ROADWAY CENTER LINES, RIGHT-OF-WAYS, MANHOLE LIDS. ETC.). DEPTHS, MATERIALS, SIZES OF PIPES, VALVES, RESTRAIN LENGTHS, AND FITTINGS MUST BE INDICATED AND STATED ON THE RECORD DRAWINGS. LOT NUMBERS, STREET NAMES, EASEMENTS (DRAINAGE, UTILITY, ACCESS, ETC), RIGHT-OF-WAYS, PROPERTY BOUNDARIES, ETC. MUST BE SHOWN ON THE RECORD DRAWINGS AND CONCUR WITH THE APPROVED AND RECORDED PLAT AS APPLICABLE.
- THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING THE ENGINEER OF RECORD CERTIFIED DRAINAGE AS BUILT SURVEYS (6 MIN IN ADDITION TO ANY COPIES REQUIRED BY OWNER) SIGNED & SEALED BY A REGISTERED LAND SURVEYOR IN THE STATE OF FLORIDA (AS WELL AS A DIGITAL CAD FILE IN 2004 OR NEWER FORMAT). THE AS BUILT DRAWINGS SHALL INCLUDE ALL GRADING ELEVATIONS, DRAINAGE STRUCTURES, PIPE INVERTS, PIPE MATERIAL TYPES, SLOPES, AND SIZES, AS WELL AS ALL ABOVE GROUND FEATURES, INCLUDING BUT NOT LIMITED TO, BUILDING LOCATIONS, FINISHED FLOOR ELEVATIONS, AND SIDEWALKS (WITH ELEVATIONS). THE SURVEY SHALL LOCATE ALL APPARENT POND AND SWALE TOPS AND BOTTOMS BOTH HORIZONTALLY AND VERTICALLY. A PERMANENT BENCHMARK SHALL BE INSCRIBED ON EACH POND DISCHARGE STRUCTURE AND LABELED ON THE AS-BUILT SURVEY AS APPLICABLE. ALL CURB AND PEDESTRIAN RAMPS SHALL BE ADEQUATELY DETAILED TO ENSURE COMPLIANCE WITH ADA ACCESSIBILITY STANDARDS. WHERE PROPOSED WORK IS LOCATED WITHIN PUBLIC (RIGHT-OF-WAY) OR PRIVATE ROADWAYS, ELEVATIONS SHALL BE PROVIDED AT INTERMITTENT CROSS SECTIONS NOT EXCEEDING 100 FEET.
- 3. AS BUILT DRAWINGS SHALL BE NEAT AND LEGIBLE. THE CONTRACTOR IS TO CONFIRM TO ENGINEER THAT AS BUILT DRAWINGS ARE ADEQUATE, COMPLETE, AND IN COMPLIANCE WITH THE REQUIREMENTS OF THE CONTRACT DOCUMENTS.
- 4. ALL COSTS ASSOCIATED WITH THE AFOREMENTIONED AS BUILTS SHALL BE INCLUDED IN THE CONTRACTOR'S BASE BID.

BID UNIT PRICES AND BASIS OF PAYMENT

THE PROJECT BID UNIT PRICES AND BASIS OF PAYMENT SHALL INCLUDE ALL MOBILIZATION, LABOR, MATERIALS, CLEARING, GRUBBING, EXCAVATION, DEWATERING, SILT BARRIERS, TRENCH SAFETY AND SHORING, PIPE BEDDING, SPECIAL BACKFILL, MECHANICAL RESTRAINT TESTING, MAINTENANCE OF TRAFFIC, INCIDENTALS, DISPOSAL OF EXCESS MATERIAL, CLEAN UP

AND ANY OTHER ITEMS REQUIRED TO COMPLETE CONSTRUCTION OF THE ENTIRE PROJECT.

<u>EXISTING</u> PROPOSED EXISTING INFORMATION WILL BE DEPICTED IN THIS TEXT STYLE. PROPOSED INFORMATION WILL BE DEPICTED IN THIS TEXT STYLE. <u>SITE</u> BUILDING ---- EDGE OF PAVEMENT =============== CURB CONCRETE _____ _ _ _ _ _ € OF ROAD PAVEMENT _____ STRIPING e Cure HANDICAP PARKING ____ - ____ - ____ ♀_ OF ROAD FLOW ARROW ---------------------- FENCE LINE PROPERTY PROPERTY LINE ---- EASEMENT _____ _ _ _ _ _ _ _ _ _ _ _ _ RIGHT OF WAY LINE SIGN PROPERTY BENCHMARI _____ EASEMENT <u>TOPO</u> UTILITIES GRADE SHOT WATER MAIN ______ × WM ____ WATER METER WATER VALVE MINOR CONTOUR - MAJOR CONTOUR ΡP DOUBLE WATER SERVICE TOP OF BANK "TOP" BOTTOM OF BANK "TOE or BOT" 4 A DOUBLE SEWER SERVICE € OF SWALE "DITCH" <u>UTILITIES</u> FIRE FIRE FIRE MAIN WATER MAIN - IRRIGATION LINE WATER METER WATER VALVE FIRE HYDRANT ______S S______ SANITARY SEWER (GRAVITY) SANITARY SEWER MANHOLE SANITARY SEWER MANHOLE 0 CO SANITARY SEWER CLEAN OUT OVERHEAD ELECTRIC ------ OHE --STORMWATER PIPE \ge TRANSFORMER ပ POWER POLE MITERED END SECTION LIGHT POLE _____ GAS _____ GAS LINE OVERHEAD ELECTRIC UNDERGROUND ELECTRIC TRANSFORMER Buffer BUFFER LINE POWER POLE LIGHT POLE APPROX SOIL BORING LOCATION – TEI – TEI – TELEPHONE FLOW ARROW \longrightarrow TELEPHONE RISER ¥ 105.97 FINISHED GRADE SHOT CBI CABLE ----- < ----- INVERTED CROWN ——179 — MINOR CONTOUR

_____W ____

LEGEND

	NOT ALL ABBREVIATIONS SHOWN HERE OF PLANS	JSED IN THIS MIGHT APP	EAR WITHIN THIS SET
AC AC	= ASPHALT CONCRETE = ACRE	N NGS	= NORTH = NATIONAL GEODETIC
APPD APPROX	= APPROVED = APPROXIMATE	NO (#)	SURVEY = NUMBER
ASPH ASSY	= ASCHIECTORAL = ASPHALT = ASSEMBLY	NTS	= NOT TO SCALE
AWWA	= AMERICAN WATER WORKS ASSOCIATION	OC OD	ON CENTEROUTSIDE DIAMETER
BLDG	= BUILDING	OPP ORIG	= OPPOSITE = ORIGINAL
BLVD BM BC	= BOULEVARD = BENCHMARK = BOTTOM OF CURB	OH	= OVERHEAD = PARALLEI
BFP	= BACK FLOW PREVENTER	PC	= PRECAST CONCRETE, POINT OF CURVATURE
CF CHDPE	= CUBIC FEET = CORRUGATED HIGH DENSITY	PERF PERM	= PERFORATED = PERMANENT
CI	POLYETHYLENE PIPE = CAST IRON - CENTER LINE	PERP PI PIV	= PERPENDICULAR = POINT OF INTERSECTION - POST INDICATOR VALVE
CLF CMP	= CHAIN LINK FENCE = CORRAGATED METAL PIPE	PL POL	= PROPERTY LINE, PLATE = POINT ON LINE
CO COL	= CLEAN OUT, COMPANY = CITY OF LAKELAND	PREFAB PRC	= PREFABRICATED = POINT OF REVERSE
	= COMMUNICATION = CONCRETE = CONDUIT (UNDERGROUND)		CURVATURE = PROJECT - PROPOSED
CONST. CONTR	= CONSTRUCT, CONSTRUCTION = CONTRACTOR, CONTRACT	PSF	= POUNDS PER SQUARE FOOT
CORR CU	= CORRUGATED = CUBIC	PSI	= POUNDS PER SQUARE
CU.FT. CU.IN.	= CUBIC FOOT = CUBIC INCH - CUBIC YARD		= POINT of POINT OF TANGENCY - POLYVINYL CHLORIDE
DBI	= DITCH BOTTOM INLET	PVMT	= PAVEMENT
DBL DEMO	= DOUBLE = DEMOLITION	R RAD	= RIGHT = RADIUS
DET DI	= DETAIL = DUCTILE IRON = DIAMETER	RCP	= REINFORCED CONCRETE PIPE
DIM DIP	= DIMENSION = DUCTILE IRON PIPE	RED REQ'D	= REDUCER = REQUIRED
DS DWG	= DOWNSPOUT, DOWNSTREAM = DRAWING	REV RH	= REVISION, REVISE = RIGHT HAND
DHWL =	= DESIGN HIGH WATER LEVEL	RM RND	= ROOM = ROUND
L EA EL	= EACH = ELEVATION	R/W R/W	= RIGHT OF WAY = RAILROAD
ELEC ENCL	= ELECTRIC, ELECTRICAL = ENCLOSURE	S	= SOUTH
EOP EOL	= EDGE OF PAVEMENT = EDGE OF LANE = EQUAL	SAN SCH	= SANITARY = SCHEDULE
ERCP	= EQUAL = ELLIPTICAL REINFORCED CONCRETE PIPF	SECT SEW SF or	= SEWER
EXIST EXP	= EXISTING = EXPANSION CONT.	SQ FT SH	= SQUARE FEET = SHEET
EXP JT EXT	= EXPANSION JOINT = EXTERIOR	SIM SLV	= SIMILAR = SLEEVE
FAR	= FLOOR AREA RATIO	SPEC SPR	= SPECIFICATION = SPRINKLER - SOUARE
FDOT	= FLORIDA DEPARTMENT OF TRANSPORTATION	SST ST	= SQUARE = STAINLESS STEEL = STREET
FF FH	= FINISHED FLOOR = FIRE HYDRANT	STA STD	= STATION = STANDARD
FLG FM FT (1)	= FLANGE = FORCE MAIN = FEET FOOT	STL STRUC	= STEEL = STRUCTURAL
GA	= GAUGE	SY, SQYD SYS	= SYMBOL = SQUARE YARDS = SYSTEM
GALV GR	= GALVANIZED = GRADE	SW SHWL	= SIDEWALK = SEASONAL HIGH WATER LEVEL
GRND GS	= GROUND = GALVANIZED STEEL,	TAN	= TANGENT
НВ	= HOSE BIB	TEL TEMP	= TO BE DETERMINED = TELEPHONE = TEMPERATURE.
HC HORIZ	= HANDICAP = HORIZONTAL	TERM	TEMPORARY = TERMINAL,
HP	= HIGH POINT, HIGH PRESSURE CONCRETE PIPE	ТОВ	TERMINATE = TOP OF BERM,
HT HW HWY	= HEIGHT = HIGH WATER = HIGHWAY	тс	TOP OF BANK = TOP OF CONC, TOP OF CURB
HYD	= HYDRANT, HYDRAULIC	TOP TOS	= TOP OF PAVEMENT = TOE OF SLOPE
ID IE IN (")	= INSIDE DIAMETER = INVERT ELEVATION = INCH	TOW TR TV	= TOP OF WALL = TREAD
IN (°) INC INFO	= INCH = INCORPORATED = INFORMATION	TYP T&B	= TELEVISION = TYPICAL = TOP AND BOTTOM
INV IRR	= INVERT = IRRIGATION	UG	= UNDERGROUND
ISAR	= IMPERVIOUS SURFACE AREA RATIO	UON	= UNLESS OTHERWISE NOTED
JCT		US	= UPSTREAM
JT	= JOINT, CONSTRUCTION JOINT	VUA	OF INTERSECTION = VEHICLE USE AREA
L LAB	= LEFT = LABORATORY = LATERAL	WM	
LAT LF LH	= LATERAL = LINEAR FEET = LEFT HAND	vv W/ W/O	= vvest, vidth, watt = WITH = WITHOUT
	= LOW POINT = LEVEL	WD WL	= WOOD = WATER LINE
_P _VL		WT WWF	= WEIGHT = WELDED WIRE FABRIC
_P _VL MAT			
_P _VL MAT MAX MECH MES	= MATERIAL = MAXIMUM = MECHANICAL - MITERED END SECTION	X-SEC	= CROSS SECTION
LP LVL MAT MAX MECH MES MEG MFG	= MATERIAL = MAXIMUM = MECHANICAL = MITERED END SECTION = MATCH EXISTING GRADE = MANUFACTURING	X-SEC YD	= CROSS SECTION = YARD
LP LVL MAT MECH MES MEG MFG MFGR MH	= MATERIAL = MAXIMUM = MECHANICAL = MITERED END SECTION = MATCH EXISTING GRADE = MANUFACTURING = MANUFACTURER = MANHOLE	X-SEC YD	= CROSS SECTION = YARD
P VL MAT MECH MES MEG MFGR MFGR MH MIN MISC	= MATERIAL = MAXIMUM = MECHANICAL = MITERED END SECTION = MATCH EXISTING GRADE = MANUFACTURING = MANUFACTURER = MANHOLE = MINIMUM = MISCELLANEOUS = MECHANICAL JOINT	X-SEC YD	= CROSS SECTION = YARD



HANDICAP PARKING

FIRE HYDRANT

SINGLE WATER SERVICE

SINGLE SEWER SERVICE

IRRIGATION WELL

SANITARY SEWER CLEAN OUT

EROSION CONTROL

BASIN LINE

MITERED END



$\int \frac{1}{20 + 40} \int \frac{1}{20 + $	DESIGNED BY:DRAFTED BY:DATEDRAFTED BY:DATEOct 07, 2014DRAFTED BY:JOB NO.CHECKED BY:JOB NO.No.DATE1DESCRIPTION2DESCRIPTION3DESCRIPTION4DESCRIPTION5DESCRIPTION6DESCRIPTION
	Construction Managers CONSTUCTION Managers CONSTUCTION Managers 464 West Pipkin Road, Suite # 2 Lakeland, Florida 38813 Phone (863) 619-6103 Certificate of Authorization No. 26932 www.jsk-consulting.com
Image: state stat	EQUINE ASSISTED THERAPIES GOO W. SAMPLE RD. 3600 W. SAMPLE RD. 3700 W.
BENCHMARK NOTES: • ELEVATIONS ARE (N. G. V.D. 1929) • REFERENCE BENCHMARK: 2752: Elevation 19.646. BENCH MARK AND EXISTING CONDITIONS SURVEY INFORMATION PROVIDED BY: SCOUT A CUTZL & ASSOC INC	MATTHEW K. JOHNSON, P.E. FLA. P.E. No. 60129 DATE

- SITE SPECIFIC UTILITY NOTES:
- 1. FOR CONTINUATION ON ALL CONNECTIONS TO BUILDING(S) REFER TO PLUMBING & FIRE PROTECTION DRAWINGS
- 2. ALL PVC SANITARY SEWER SERVICE LINES @ 1.0% MIN. SLOPE
- (TYP.)
- 3. WATER AND SEWER PROVIDED BY THE CITY OF COCONUT CREEK. EXISTING UTILITIES SHOWN ARE APPROXIMATE LOCATIONS BASED ON INFORMATION PROVIDED BY RECORD DRAWINGS, SITE VISITS, AND THE CITY OF COCONUT CREEK. DEVIATIONS IN ACTUAL SITE CONDITIONS CAN BE EXPECTED DUE TO INACCURACIES IN RECORD DRAWINGS AND PERIODIC MAINTENANCE BY OWNER. CONTRACTOR SHALL FIELD LOCATE ALL EXISTING UTILITIES WITHIN AREA OF CONSTRUCTION AND COORDINATE WITH OWNER, ARCHITECT, AND ENGINEER FOR ANY DEVIATIONS OR FIELD FITTING.
- CONTRACTOR TO FIELD LOCATE ALL EXISTING UTILITIES.
 CONTRACTOR TO NOTIFY THE CITY AT LEAST 48 HOURS IN
- ADVANCE IN ORDER TO HAVE A CITY INSPECTOR ON SITE FOR WATER AND SEWER CONNECTIONS TO EXISTING SYSTEM AND TESTING.
- 6. WATER AND SEWER LINES SHALL BE TESTED IN ACCORDANCE WITH OWNER, CITY, COUNTY, AND STATE REQUIREMENTS AT THE CONTRACTOR'S EXPENSE.
- ALL POTABLE WATER LINES TO BE INSIDE PVC SLEEVE WHEN UNDERNEATH PAVEMENT.
- 8. PORTIONS OF THIS PROJECT REQUIRE THE REPLACEMENT OF EXISTING WATER AND SEWER MAINS. FOR THESE AREAS, THE CONTRACTOR SHALL REMOVE THE EXISTING MAINS AND REPLACE AS PROPOSED. THIS WORK SHALL INCLUDE RECONNECTING EXISTING SERVICES AND THE INSTALLATION OF NEW CLEANOUTS, VALVES, COLLARS, RISERS, COVERS, AND ALL ASSOCIATED WORK TO CONNECT TO PROPOSED/EXISTING FACILITIES.
- PROPOSED SERVICE CONNECTION SIZES ARE BASED ON MECHANICAL AND FIRE PROTECTION DRAWINGS BY OTHERS. THESE SIZES SHALL BE VERIFIED BY ARCHITECT, MECHANICAL, AND FIRE DESIGN RECORD PROFESSIONALS FOR ADEQUACY.
- 10. CONTRACTOR TO BECOME FAMILIAR WITH LOCAL UTILITY STANDARDS AND MEET REQUIREMENTS SET FORTH FOR MATERIALS, INSTALLATION, INSPECTION, TESTING, AND CLEARING OF SYSTEMS IN ADDITION TO THOSE SET FORTH IN SPECIFICATIONS.
- 11. ADDITIONAL FITTINGS AND APPURTENANCES FOR WATER AND SEWER FEATURES MAY BE REQUIRED BEYOND THOSE DESCRIBED IN DETAIL IN THESE DRAWINGS AND ARE ASSUMED INHERENT TO MEET THE INTENT OF THE PROPOSED WORK. CONTRACTOR SHALL INCLUDE THESE ITEMS IN THE BASE BID. NO ADDITIONAL FUNDS WILL BE MADE AVAILABLE TO COMPLETE THE SITE UTILITIES AS PROPOSED.
- 12. REFER TO GENERAL NOTES(C100).

GENERAL SITE NOTES

- CONTRACTOR TO REFER TO ARCHITECTURAL DRAWINGS FOR DETAILED LAYOUT OF SPECIFIC BUILDINGS AND SITE FEATURES.
 CONTRACTOR TO PROVIDE CONCRETE PAVING ALTERNATE FOR PROPOSED ASPHALT PAVING PER TYPICAL
- CONCRETE SECTION.

PROPOSED CONSTRUCTION ACCESS

Ë ЫП THER/ Ш SISS КŇ 3600 W. SAMPLE COCONUT CREE EQUINE Δ SITE NOT VALID WITHOUT ORIGINAL SIGNATURE AND RAISED SEAL MATTHEW K. JOHNSON, P.E.

FLA. P.E. No. 60129

DATE

SHEET NUMBER

C500

SURVEYOR NOTE:

ELEVATIONS SHOWN HEREON ARE RELATIVE TO NATIONAL GEODETIC VERTICAL DATUM 1929 (NGVD '29) AND ARE BASED ON BROWARD COUNTY ENGINEERING BENCHMARK NO. 2752, ELEVATION = 19.646.

BENCHMARK NOTE:

A PERMANENT BENCHMARK SHALL BE SET FOR THE OUTFALL STRUCTURE, BY CONTRACTOR AND INCLUDED ON AS BUILT DRAWINGS. A STAMPED DISK RATHER THAN MARK ETCHED IN STRUCTURE SHALL BE PROVIDED.

SITE SPECIFIC GRADING & DRAINAGE NOTES:

• A FENCE SHALL BE CONSTRUCTED AROUND ANY STORMWATER POND WITH SIDESLOPES STEEPER THAN 4'(H) TO 1'(V).

• CONTRACTOR TO SAW CUT EXISTING PAVEMENT AT PROPOSED DRIVEWAY TIE IN'S TO PROVIDE A CLEAN EDGE FOR NEW PAVEMENT AND

• CONTRACTOR TO BECOME FAMILIAR WITH AND ADHERE TO ALL ADA STANDARDS.

 CONTRACTOR TO CONSTRUCT SIDEWALKS WITH A MAXIMUM 2% CROSS SLOPE AND A MAXIMUM 5% LINEAR SLOPE UNLESS OTHERWISE
 SPECIFIED ON THE CONSTRUCTION DOCUMENTS. ANY SIDEWALKS CONSTRUCTED EXCEEDING THESE PARAMETERS WILL BE RECONSTRUCTED AT THE CONTRACTORS EXPENSE.

• CONTRACTOR TO PROVIDE SMOOTH TRANSITION AT LOCATIONS WHERE PROPOSED FEATURES MEET EXISTING FEATURES (CONCRETE, • SILTATION RUNOFF TO THE PROPOSED STORMWATER POND(S) SHALL BE PREVENTED VIA SILT FENCE, HAY BALES, OR OTHER METHODS

UNTIL ALL DISTURBED SURFACES ARE STABILIZED VIA SOD, BUILDINGS, OR PAVING. ANY ACCUMULATION OF UNDESIRED MATERIALS ON POND BOTTOM ARE TO BE REMOVED BY CONTRACTOR PRIOR TO ACCEPTANCE OF WORK BY OWNER.

 ALL FILL PLACED FOR POND BERMING SHALL BE FREE OF ORGANICS, NON-PLASTIC GRANULAR SOIL (CLEAN SANDS). FILL SHALL BE PLACED IN MAX. OF 12" LIFTS AND COMPACTED TO A MINIMUM 95% per ASTM SPEC D-1557. TO OBTAIN BERM STABILITY. • ALL MEG ELEV, ROADWAY, AND UNDERGROUND STORM/UTILITY PIPES SHOWN ARE APPROXIMATE.

• ALL AREAS DISTURBED ARE TO BE SODDED VIA BAHIA SOD BY CONTRACTOR. SOD IS TO BE STAKED AS REQUIRED IN SLOPED AREAS AND MONITORED FOR WASHOUTS. ONCE THE SOD IN SLOPED AREAS IS ESTABLISHED AND THE SLOPE IS STABILIZED, CONTRACTOR MAY

STORMWATER MANAGEMENT SYSTEM OPERATING AND MAINTENANCE PROCEDURES

THE STORMWATER FACILITY MUST BE MAINTAINED PROPERLY IF IT IS TO PERFORM THE SERVICE FOR WHICH IT WAS DESIGNED. THIS IS INTENDED TO BE A GUIDE TO THE PROPER WAYS TO MAINTAIN THIS FACILITY. THIS IS ONLY A GUIDE AND SHOULD BE MODIFIED AS FIELD

. MONTHLY, VISUALLY INSPECT INLET OPENINGS TO INSURE THAT NO CLOGGING HAS OCCURRED. 2. ONCE EVERY THREE MONTHS, VISUALLY INSPECT ALL PIPES FOR OBSTRUCTIONS OR A BUILD-UP OF EXCESSIVE SEDIMENTS. IF EXCESS SEDIMENTATION HAS OCCURRED, HAVE ALL LINES PROPERLY FLUSHED. WEEKLY DURING THE SUMMER MONTHS AND BI-WEEKLY DURING THE REMAINDER OF THE YEAR, MOW ANY GRASS WITHIN THE STORMWATER RETENTION AND COLLECTION AREAS. GRASS CLIPPINGS SHALL BE COLLECTED AND REMOVED FROM THE SITE FOR

DESIGNED BY:	DRAFTED BY: DATE Oct 07, 2014	CHECKED BY: JOB NO. 1307.03	NO. DATE DESCRIPTION		2	3	4	5	9	
	 Civil Engineers, Land Planners Construction Managers N S U L T I N G MPLEMENTING • SOLVING MPLEMENTING • SOLVING 									
	EQUINE ASSISTED THERAPIES		3600 W. SAMPLE RD. COCONUT CREEK, FL 33073 GRADING AND DRAINAGE PLAN							
NOT VALID WITHOUT ORIGINAL SIGNATURE AND RAISED SEAL MATTHEW K. JOHNSON, P.E. FLA. P.E. No. 60129 DATE										

C600

STANDARD DETAIL

NOTES:

1. WHERE METAL TEMPLATES ARE USED FOR JOINT CONSTRUCTION, THE CURB AND CURB AND GUTTER SHALL BE CONSTRUCTED IN UNIFORM SECTIONS TEN FEET IN LENGTH, EXCEPT WHERE SHORTER SECTIONS ARE NECESSARY FOR CLOSURES, BUT NO SECTION SHALL BE LESS THAN FOUR FEET.

2. AT THE OPTION OF THE CONTRACTOR, THE SECTIONS MAY BE FORMED BY THE USE OF DUMMY JOINTS (EITHER FORMED OR SAWED) OR BY THE USE OF SHEET METAL TEMPLATES. IF SHEET METAL TEMPLATES ARE USED, THEY SHALL BE OF THE DIMENSIONS AND SHALL BE SET TO THE LINES SHOWN ON THE PLANS. THE TEMPLATES SHALL BE HELD FIRMLY DURING THE PLACING OF THE CONCRETE AND SHALL BE LEFT IN PLACE UNTIL THE CONCRETE HAS SET SUFFICIENTLY TO HOLD ITS SHAPE, BUT SHALL BE REMOVED WHILE THE FORMS ARE STILL IN PLACE.

3. DUMMY JOINTS SHALL BE SPACED AT INTERVALS OF TEN FEET FOR CURB AND INTERVALS OF FIVE FEET FOR SIDEWALKS. THEY SHALL BE 1/4 THE DEPTH OF THE CONCRETE. EXPANSION JOINTS SHALL BE PLACED IN SIDEWALKS AT A MAXIMUM OF 30 FEET AT DRIVEWAYS, SIDEWALK INTERSECTION, ALL INLETS, ALL RADIUS POINTS, ALL POINTS WHERE OPERATIONS CEASE FOR ANY CONSIDERABLE TIME (SUCH AS THE END OF THE DAY'S RUN).

