

GENERAL PROVISIONS

- 1. THE CONTRACTOR SHALL OBTAIN FROM THE OWNER COPIES OF ALL AVAILABLE REGULATORY AGENCY PERMITS AND LOCAL AGENCY PERMITS.
2. ALL CONSTRUCTION PROJECTS 1 OR MORE ACRES IN SIZE THAT DISCHARGE TO OFFSITE AREAS ARE REQUIRED TO COMPLY WITH THE REQUIREMENTS OF THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM NPDES...
3. UNLESS OTHERWISE NOTED ON THE PLANS, THE CONTRACTOR SHALL USE THE GEOMETRIC PROVIDED ON THE CONSTRUCTION PLANS...
4. BASE SURFACE INFORMATION INCLUDING BUT NOT LIMITED TO ELEVATIONS, EASEMENTS, RIGHTS OF WAY, AND OTHER TOPOGRAPHIC INFORMATION HAS BEEN PREPARED BY OTHER PROFESSIONALS...
5. THIS SET OF PLANS MAY CONTAIN DRAWINGS PREPARED BY OTHER PROFESSIONALS, WHICH CONTAIN THE NAME, ADDRESS AND DESIGN OF THE PROFESSIONAL...
6. THE CONTRACTOR SHALL SUBMIT COPIES OF SHOP DRAWINGS TO THE ENGINEER FOR APPROVAL PRIOR TO ORDERING THE MATERIALS...
7. PROTECT BENCHMARKS, PROPERTY CORNERS, AND OTHER SURVEY MONUMENTS FROM DAMAGE OR DISPLACEMENT...
8. THE CONTRACTOR IS RESPONSIBLE FOR ALL CONTROL TESTING AS A MINIMUM TESTING SHALL INCLUDE TESTING OF ASPHALT CONCRETE, PORTLAND CEMENT, PORTLAND CEMENT CONCRETE AND ASPHALT PAVING...
9. IN ADDITION TO QUALITY CONTROL TESTING, THE CONTRACTOR SHALL BE RESPONSIBLE FOR REQUIRED TESTING OR APPROVALS FOR ANY WORK OR ANY PART THEREOF...
10. ANY DESIGN OR TESTING LABORATORY UTILIZED BY THE CONTRACTOR SHALL BE AN INDEPENDENT LABORATORY...
11. TESTING RESULTS SHALL BE PROVIDED TO THE OWNER AND THE ENGINEER...
12. THE ENTIRE PROJECT SITE SHALL BE THOROUGHLY CLEANED AT THE COMPLETION OF THE WORK...

UTILITY GENERAL NOTES

- 1. THE UTILITIES DATA SHOWN ON THESE PLANS WAS LOCATED BY THE RESPECTIVE UTILITIES OR IS BASED ON UTILITIES DRAWINGS, MAPS, OR FIELD RECONNAISSANCE.
2. THE LOCATION, MATERIAL TYPE, AND SIZE OF ALL UTILITIES SHOWN ON THE PLANS HAVE BEEN DETERMINED FROM THE BEST INFORMATION AVAILABLE AND ARE GIVEN FOR THE CONVENIENCE OF THE CONTRACTOR...
3. A SINGLE POINT UTILIDENTIFICATION SERVICE HAS BEEN SET UP FOR UTILITIES UTILITIES. THE CONTRACTOR IS TO CONTACT THE SERVICE STATE ONE CALL CENTER...
4. THE FOLLOWING UTILITIES HAVE BEEN PREVIOUSLY INDICATED THAT THEY MAY HAVE FACILITIES IN THE VICINITY OF THE CONSTRUCTION AREA.

ELECTRIC

WILCOXHEE RIVER ELECTRIC COMPANY
1400 CHANNELSIDE DRIVE
TAMPA, FLORIDA 33605
352-588-5115
ATTN: COREY LITTLEFIELD

NATURAL GAS

TECO PEOPLES GAS
1400 CHANNELSIDE DRIVE
TAMPA, FLORIDA 33605
813-275-3743

TELEPHONE

VERIZON FLORIDA, INC.
1909 S.W. HIGHWAY 301 NORTH
TAMPA, FLORIDA 33619
813-827-8343

COMMUNICATIONS

BRIGHT HOUSE NETWORKS
30432 STATE ROAD 52
WESLEY, FLORIDA 33543
813-982-0522

WATER

PASCO COUNTY UTILITIES
1940 CENTRAL BOULEVARD
LAND O'LAES, FLORIDA 34637
813-235-6189
ATTN: DAVID PARADIS

SEWER

PASCO COUNTY UTILITIES
1940 CENTRAL BOULEVARD
LAND O'LAES, FLORIDA 34637
813-235-6189
ATTN: DAVID PARADIS

- 5. THE CONTRACTOR SHALL KEEP LOCATED TO DATE AT ALL TIMES.
6. THE CONTRACTOR IS RESPONSIBLE FOR ALL COORDINATION WITH EACH UTILITIES AND ALL COSTS ASSOCIATED WITH THE PROTECTION OF EXISTING FACILITIES DURING CONSTRUCTION...
7. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO MAINTAIN IN SERVICE ALL EXISTING PIPING CAN BE INTERRUPTED DURING CONSTRUCTION...
8. THE CONTRACTOR SHALL FIELD LOCATE ALL WATER AND SEWER SERVICES AND LATERALS WITHIN THE PROPOSED CONSTRUCTION AREA...
9. TYPICAL DETAILS AND PROPOSED CONSTRUCTION AS SHOWN ILLUSTRATE THE ENGINEERS INTENT AND ARE NOT PRESENTED AS A SOLUTION TO ALL CONSTRUCTION PROBLEMS...
10. FOR EACH RESPECTIVE PIPELINE CONSTRUCTION, THE CONTRACTOR SHALL FIELD LOCATE THE LOCATION, DEPTH, SIZE, MATERIAL TYPE, AND ALIGNMENT OF ALL EXISTING PIPES, CABLES, ETC...
11. THE CONTRACTOR SHALL PROVIDE AT HIS OWN EXPENSE ALL NECESSARY TESTING EQUIPMENT, WATER, WATER METERS, PRESSURE GAUGES, AND OTHER EQUIPMENT, MATERIAL AND FACILITIES REQUIRED FOR ALL HYDROSTATIC, LEAKAGE, AND PRESSURE TESTING...
12. THE CONTRACTOR SHALL FIELD LOCATE ALL WATER AND SEWER SERVICES AND LATERALS WITHIN THE PROPOSED CONSTRUCTION AREA...

AS-BUILT DRAWING REQUIREMENTS

- 1. AS-BUILT DRAWINGS SHALL BE PROVIDED BY THE CONTRACTOR TO THE ENGINEER AT LEAST THREE WEEKS PRIOR TO FINAL INSPECTION...
2. ALL RECORD DRAWINGS SHALL BE PREPARED BY THE CONTRACTOR IN ACAD FORMAT...
3. THE LOCATION AND ELEVATION BASED ON THE COORDINATE SYSTEM...
4. THE AS-BUILT INFORMATION IS TO MEET THE REQUIREMENTS OF ALL THE AGENCIES LISTED ON SHEET C-1 AND INCLUDE, AT A MINIMUM, THE FOLLOWING:
D. DISTANCE ALONG PIPE LINES BETWEEN STRUTS.
E. STORMWATER POND TOP OF BERM AND POND BOTTOM ELEVATIONS AND HORIZONTAL DIMENSIONS...
F. STORMWATER CONTROL STRUCTURE DIMENSIONS AND ELEVATIONS...
G. HORIZONTAL LOCATIONS AND VERTICAL ELEVATIONS OF ALL UTILITIES...
H. UTILITY PIPELINE IN TRENCHES TO EDGE OF PAVEMENT...
I. ALL PAVING AREAS AND SIDEWALK RAMP DESIGNATIONS...
J. HORIZONTAL AND VERTICAL DATA FOR ANY CONSTRUCTION THAT DEVIATES FROM THE APPROVED ENGINEERING DRAWINGS...
L. WHERE THE PLANS CONTAIN SPECIFIC HORIZONTAL LOCATION DATA...
M. WHERE THE PLANS CONTAIN SPECIFIC VERTICAL ELEVATION DATA...
N. RECORD DRAWINGS ARE TO BE PREPARED BY THE CONTRACTOR...
8. COMPLETE SIGNED AND SEALED RECORD DRAWINGS ARE REQUIRED TO BE DELIVERED TO THE OWNER PRIOR TO FINAL INSPECTION...
9. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING A MAINTENANCE OF TRAFFIC M.O.T. PLAN PRIOR TO CONSTRUCTION...
10. THE CONTRACTOR SHALL FIELD LOCATE ALL WATER AND SEWER SERVICES AND LATERALS WITHIN THE PROPOSED CONSTRUCTION AREA...
11. THE CONTRACTOR SHALL PROVIDE AT HIS OWN EXPENSE ALL NECESSARY TESTING EQUIPMENT, WATER, WATER METERS, PRESSURE GAUGES, AND OTHER EQUIPMENT, MATERIAL AND FACILITIES REQUIRED FOR ALL HYDROSTATIC, LEAKAGE, AND PRESSURE TESTING...

TRAFFIC CONTROL

- 1. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING A MAINTENANCE OF TRAFFIC M.O.T. PLAN PRIOR TO CONSTRUCTION...
2. ALL TRAFFIC CONTROL MEASURES SHALL BE IN ACCORDANCE WITH FOOT CLOSURE NO. 600 AND THE MANUAL ON TRAFFIC CONTROL DEVICES...
3. INSPECT TRAFFIC CONTROL DEVICES ON A DAILY BASIS TO ENSURE PROPER PLACEMENT OF BARRICADES AND FUNCTION OF LIGHTS...
4. CONTACT PROPERTY OWNERS AFFECTED BY CONSTRUCTION...
5. WEakened AREAS AS NECESSARY TO CONTROL TRAFFIC.
6. ADJUST TRAFFIC CONTROL DEVICES AS REQUIRED UNDER EMERGENCY CONDITIONS.
7. WHEN WORK OCCURS WITHIN 15 FEET OF ACTIVE ROAD TRAVEL LANES...
8. TYPE OR TYPE BARRICADES AT 20-FT CENTERS SHALL BE PLACED AND MAINTAINED ALONG THE EDGE OF THE ROAD...
9. ALL ELEVATIONS SHALL BE MADE BY OPEN CUT UNLESS OTHERWISE INDICATED...
10. ELEVATION TRENCHES TO DEPTH INDICATED OR REQUIRED FOR INDICATED FLOW LINES...
11. ALL BEDDING, FILL AND BACKFILL MATERIAL SHALL BE COMPACTED TO THE PROPOSED GRADE...
12. TRENCH BOTTOMS AND THE BOTTOMS OF ALL STRUCTURES SHALL BE LEVEL, COMPACTED, AND STABLE...
13. ALL EXISTING TRENCHES TO DEPTH INDICATED OR REQUIRED FOR INDICATED FLOW LINES...
14. ALL BEDDING, FILL AND BACKFILL MATERIAL SHALL BE COMPACTED TO THE PROPOSED GRADE...
15. ALL EXISTING TRENCHES TO DEPTH INDICATED OR REQUIRED FOR INDICATED FLOW LINES...
16. ALL EXISTING TRENCHES TO DEPTH INDICATED OR REQUIRED FOR INDICATED FLOW LINES...
17. ALL EXISTING TRENCHES TO DEPTH INDICATED OR REQUIRED FOR INDICATED FLOW LINES...
18. ALL EXISTING TRENCHES TO DEPTH INDICATED OR REQUIRED FOR INDICATED FLOW LINES...
19. ALL EXISTING TRENCHES TO DEPTH INDICATED OR REQUIRED FOR INDICATED FLOW LINES...
20. ALL EXISTING TRENCHES TO DEPTH INDICATED OR REQUIRED FOR INDICATED FLOW LINES...

SITE PREPARATION

- 1. UNLESS OTHERWISE DIRECTED BY THE OWNER OR ENGINEER, THE CONTRACTOR IS EXPECTED TO CONTAIN ALL CONSTRUCTION ACTIVITIES WITHIN THE PROPERTY...
2. STAKE OUT THE CONSTRUCTION, ESTABLISH LINES AND LEVELS...
3. PROTECT ALL TREES AND SHRUBS LOCATED OUTSIDE THE RIGHT-OF-WAY...
4. WITHIN THE RIGHT-OF-WAY, EASEMENTS, AND OWNER SECURED PROPERTY...
5. TREES TO REMAIN IN THE CONSTRUCTION AREA SHALL BE BODED, FENCED OR OTHERWISE PROTECTED...
6. AREAS TO BE CLEARED AND GRUBBING SHALL INCLUDE ALL AREAS TO BE OCCUPIED BY THE PROPOSED IMPROVEMENTS...
7. CLEARING SHALL CONSIST OF REMOVAL OF TREES AND BRUSH AND DISPOSAL OF OTHER MATERIALS...
8. EXERCISE EXTREME CARE DURING THE CLEARING AND GRUBBING OPERATIONS...
9. GRUBBING SHALL CONSIST OF REMOVAL AND DISPOSAL OF STUMPS, ROOTS LARGER THAN 2 IN DIAMETER...
10. ALL COMBUSTIBLE DEBRIS AND REFUSE FROM SITE PREPARATION OPERATIONS SHALL BE REMOVED TO LEGAL OFFSITE DISPOSAL AREAS.

DEWATERING

- 1. DESIGN AND PROVIDE A DEWATERING SYSTEM USING ACCEPTED AND PROFESSIONAL METHODS...
2. CONTROL BE ACCEPTABLE MEANS, ALL WATER REGARDLESS OF SOURCE AND BE FULFILL RESPONSIBLE FOR DISPOSAL...
3. DEWATERING DISCHARGE FROM THE SITE SHALL COMPLY WITH ALL APPLICABLE PERMIT REQUIREMENTS...
4. OPEN PUMPING WITH Sumps and Ditches SHALL BE ALLOWED PROVIDED IT DOES NOT RESULT IN LOSS OF FINES...
5. IF DEWATERING EQUIPMENT NEEDED EXCEEDS ANY OF THE FOLLOWING...
6. CONTROLS SHALL MAINTAIN ELEVATIONS AND DRAINAGE CONDITIONS...
7. WHEN CONSTRUCTION IS COMPLETE, REMOVE ALL DEWATERING EQUIPMENT FROM THE SITE...

GRADING

- 1. GRADING SHOWN ON THESE PLANS IS PROVIDED TO THE CONTRACTOR TO EXPRESS THE GENERAL GRADING INTENT...
2. ALL PAVING SURFACES INTERSECTING AND ADJACENT SECTIONS SHALL BE GRADDED FROM POSITION TO POSITION...
3. UNIFORM SMOOTH GRADE THE DEPRESSIONS FROM SETTLEMENT SHALL BE FILLED AND COMPACTED...
4. SLOPE GRADIENTS TO DRAIN AWAY FROM STRUCTURES AT A MINIMUM OF 1/4-INCH PER FOOT...
5. NEWLY GRADED AREAS SHALL BE PROTECTED FROM TRAFFIC AND EROSION...
6. IN CASES WHERE THE OWNER DETERMINES PARTIAL CLEARANCES FROM PERMITTING AGENCIES ARE BENEFICIAL...
7. COMPLETE RECORD DRAWINGS THAT ARE REQUIRED TO BE SATISFACTORY AS A RESULT OF THE ENGINEERS REVIEW...
8. COMPLETE SIGNED AND SEALED RECORD DRAWINGS ARE REQUIRED TO BE DELIVERED TO THE OWNER PRIOR TO FINAL INSPECTION...
9. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING A MAINTENANCE OF TRAFFIC M.O.T. PLAN PRIOR TO CONSTRUCTION...
10. THE CONTRACTOR SHALL FIELD LOCATE ALL WATER AND SEWER SERVICES AND LATERALS WITHIN THE PROPOSED CONSTRUCTION AREA...
11. THE CONTRACTOR SHALL PROVIDE AT HIS OWN EXPENSE ALL NECESSARY TESTING EQUIPMENT, WATER, WATER METERS, PRESSURE GAUGES, AND OTHER EQUIPMENT, MATERIAL AND FACILITIES REQUIRED FOR ALL HYDROSTATIC, LEAKAGE, AND PRESSURE TESTING...

EXCAVATION, TRENCHING, AND FILL

- 1. THE CONTRACTOR SHALL RECOGNIZE AND ADEQUATELY ALL OSHA EDUCATION SAFETY STANDARDS...
2. ROADWAY EXCAVATE AND GRADE AND PROPOSED STORMWATER PONDS AT THE START OF SITE GRADING ACTIVITIES...
3. POND CONSTRUCTION SHALL RESULT IN THE FINISHED POND HAVING SLOPE SIZES AND DIMENSIONS THAT ARE IN ACCORDANCE WITH THE DESIGN...
4. FIELD DENSITY TESTING PROCEDURES: A ONE TEST FOR EACH 1000 SQUARE FEET OR FRACTION THEREOF...
5. IT IS INTENDED THAT PROPOSED EXCAVATED MATERIALS CONFORMING TO THE FOLLOWING REQUIREMENTS BE UTILIZED WHERE POSSIBLE:
A. ACCEPTABLE MATERIALS: ASHTO M45 CLASSIFICATION A-1, A-3, A-2, A-4, A-5, A-6, A-7, A-8, ASTM D2487...
B. UNACCEPTABLE MATERIALS: ASHTO M45 CLASSIFICATION A-2.5, A-2.7, A-4, A-5, A-6, A-7, A-8, ASTM D2487...
6. PROVIDE BARRIERS, WARNING LIGHTS AND OTHER PROTECTIVE DEVICES AT ALL EXCAVATIONS...
7. SIDEWALKS, ROADS, STREETS, AND PAVEMENTS SHALL NOT BE BLOCED OR OBSTRUCTED...
8. FURNISH, INSTALL AND MAINTAIN WITHIN ADDITIONAL COMPENSATION, SHEETING, BRACING, AND SHORING...
9. SHEETING, SHORING, AND BRACING USED FOR THE SUPPORT OF EXCAVATIONS OVER 20 FEET DEEP SHALL BE DESIGNED BY A PROFESSIONAL ENGINEER...
10. ALL EXCAVATIONS SHALL BE MADE BY OPEN CUT UNLESS OTHERWISE INDICATED...
11. EXCAVATION TRENCHES TO DEPTH INDICATED OR REQUIRED FOR INDICATED FLOW LINES...
12. APPLICABLE HYDROSTATIC TEST PRESSURES FOR 200 PSI PIPE LINES...
13. APPLICABLE HYDROSTATIC TEST PRESSURES FOR 150 PSI PIPE LINES...
14. ALL BEDDING, FILL AND BACKFILL MATERIAL SHALL BE COMPACTED TO THE PROPOSED GRADE...
15. ALL EXISTING TRENCHES TO DEPTH INDICATED OR REQUIRED FOR INDICATED FLOW LINES...
16. ALL EXISTING TRENCHES TO DEPTH INDICATED OR REQUIRED FOR INDICATED FLOW LINES...
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RRIPRAP

- 1. ALL RRIPRAP CONSTRUCTION SHALL MEET THE REQUIREMENTS OF SECTION 630 OF THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION...
2. THE HORIZONTAL SEPARATION BETWEEN WATER MAINS AND SANITARY SEWER, STORM SEWER, WASTEWATER FORCE MAINS, STORMWATER FORCE MAINS, RECLAIMED WATER MAINS AND ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEMS SHALL BE IN ACCORDANCE WITH THE FOLLOWING:
A. THE DISTANCE BETWEEN WATER MAINS SHALL BE A MINIMUM OF THREE FEET...
B. THE DISTANCE BETWEEN WATER MAINS SHALL BE A MINIMUM OF THREE FEET...

UTILITY SEPARATION REQUIREMENTS

- 1. THE HORIZONTAL SEPARATION BETWEEN WATER MAINS AND SANITARY SEWER, STORM SEWER, WASTEWATER FORCE MAINS, STORMWATER FORCE MAINS, RECLAIMED WATER MAINS AND ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEMS SHALL BE IN ACCORDANCE WITH THE FOLLOWING:
A. THE DISTANCE BETWEEN WATER MAINS SHALL BE A MINIMUM OF THREE FEET...
B. THE DISTANCE BETWEEN WATER MAINS SHALL BE A MINIMUM OF THREE FEET...
2. THE DISTANCE BETWEEN WATER MAINS SHALL BE A MINIMUM OF THREE FEET...
3. THE DISTANCE BETWEEN WATER MAINS SHALL BE A MINIMUM OF THREE FEET...
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9. THE DISTANCE BETWEEN WATER MAINS SHALL BE A MINIMUM OF THREE FEET...
10. THE DISTANCE BETWEEN WATER MAINS SHALL BE A MINIMUM OF THREE FEET...

UTILITY SEPARATION REQUIREMENTS (CONTINUED)

- 1. THE DISTANCE BETWEEN WATER MAINS SHALL BE A MINIMUM OF TEN FEET FROM ALL PARTS OF AN EXISTING OR PROPOSED ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEM...
2. THE VERTICAL SEPARATION BETWEEN WATER MAINS AND SANITARY AND STORM SEWER, WASTEWATER OR STORMWATER FORCE MAINS, AND RECLAIMED WATER MAINS SHALL BE IN ACCORDANCE WITH THE FOLLOWING:
A. WHERE POSSIBLE, WATER MAINS SHALL CROSS OVER EXISTING OR PROPOSED GRADIENT SANITARY SEWER...
B. WHERE POSSIBLE, WATER MAINS SHALL CROSS OVER EXISTING OR PROPOSED RECLAIMED WATER MAINS...
3. NEW OR RELOCATED FIRE HYDRANTS SHALL BE LOCATED SUCH THAT THE UNDERGROUND DRAIN WEEP HOLES AT LEAST:
A. THREE FEET FROM AN EXISTING OR PROPOSED STORM SEWER...
B. THREE FEET FROM AN EXISTING OR PROPOSED GRADIENT SANITARY SEWER...
4. THE FOLLOWING ARE ACCEPTABLE ALTERNATE CONSTRUCTION FEATURES TO BE CONSIDERED FOR COST ESTIMATION...
5. WHERE A WATER MAIN IS LESS THAN THE REQUIRED MINIMUM HORIZONTAL DISTANCE FROM ANOTHER PIPELINE...
6. WHERE A WATER MAIN IS LESS THAN THREE FEET HORIZONTAL FROM ANOTHER PIPELINE...
7. FIRE PROTECTION SPRINKLER SYSTEMS INSTALLED SHALL COMPLY WITH NFPA 13...
8. ALL HYDRANTS SHALL BE PAINTED IN AN APPROVED MANNER...
9. BLUE PAVEMENT REFLECTOR CATEGORIES SHALL BE PLACED IN THE CENTERLINE OF THE DRIVING LANE...
10. NEW OR RELOCATED FIRE HYDRANTS SHALL BE LOCATED SUCH THAT THE UNDERGROUND DRAIN WEEP HOLES AT LEAST:
A. THREE FEET FROM AN EXISTING OR PROPOSED STORM SEWER...
B. THREE FEET FROM AN EXISTING OR PROPOSED GRADIENT SANITARY SEWER...
11. THE SEQUENCE OF TESTING AND INSPECTION SHALL BE AS FOLLOWS...
12. THE CONTRACTOR SHALL PROVIDE A POST-CONSTRUCTION FIRE FLOW TEST WITNESSED AND APPROVED BY THE ENGINEER...
13. APPLICABLE HYDROSTATIC TEST PRESSURES FOR 200 PSI PIPE LINES...
14. APPLICABLE HYDROSTATIC TEST PRESSURES FOR 150 PSI PIPE LINES...
15. NO LEAKAGE IS ALLOWED IN EXPOSED PIPING...
16. TESTED SECTIONS OF BURIED PIPING WITH SLIP-TYPE OR MECHANICAL JOINTS WILL NOT BE ACCEPTED...
17. DISINFECT ALL POTABLE WATER LINES, FIRE LINES, CABLES, FITTINGS, HYDRANTS...
18. ALL DISINFECTION WORK SHALL BE ACCEPTABLE TO THE STATE HEALTH AUTHORITY...
19. ALL DISINFECTION WORK SHALL BE ACCEPTABLE TO THE STATE HEALTH AUTHORITY...
20. ALL DISINFECTION WORK SHALL BE ACCEPTABLE TO THE STATE HEALTH AUTHORITY...

FIRE PROTECTION SYSTEMS

- 1. COMBUSTIBLE CONSTRUCTION CANNOT OCCUR UNTIL PROPER DOCUMENTATION HAS BEEN SUBMITTED TO THE LOCAL FIRE MARSHAL...
2. INSTALL ALL FIRE LINE PIPING AT A MINIMUM 36 INCHES OF COVER...
3. ALL FIRE LINE PIPING FROM POINT OF SERVICE AS DEFINED BY FS 633.021(16) SHALL BE C900 DR 14...
4. THE CONTRACTOR INSTALLING THE UNDERGROUND FIRE PROTECTION PIPING SHALL HOLD A CLASS 2 OR LEVEL 1 CERTIFICATION...
5. ALL HYDRANTS SHALL CONFORM TO AWMA C502 AND SHALL BE FURNISHED COMPLETE WITH WRENCH AND OTHER APPROPRIATE MAINTENANCE...
6. ALL HYDRANTS SHALL BE BREAENABLE TYPE WITH THE BREAENABLE SECTION LOCATED SLIGHTLY ABOVE THE FINISH GROUND...
7. ALL HYDRANTS SHALL BE PAINTED IN AN APPROVED MANNER...
8. BLUE PAVEMENT REFLECTOR CATEGORIES SHALL BE PLACED IN THE CENTERLINE OF THE DRIVING LANE...
9. NEW OR RELOCATED FIRE HYDRANTS SHALL BE LOCATED SUCH THAT THE UNDERGROUND DRAIN WEEP HOLES AT LEAST:
A. THREE FEET FROM AN EXISTING OR PROPOSED STORM SEWER...
B. THREE FEET FROM AN EXISTING OR PROPOSED GRADIENT SANITARY SEWER...
10. THE SEQUENCE OF TESTING AND INSPECTION SHALL BE AS FOLLOWS...
11. THE CONTRACTOR SHALL PROVIDE A POST-CONSTRUCTION FIRE FLOW TEST WITNESSED AND APPROVED BY THE ENGINEER...
12. APPLICABLE HYDROSTATIC TEST PRESSURES FOR 200 PSI PIPE LINES...
13. APPLICABLE HYDROSTATIC TEST PRESSURES FOR 150 PSI PIPE LINES...
14. ALL BEDDING, FILL AND BACKFILL MATERIAL SHALL BE COMPACTED TO THE PROPOSED GRADE...
15. ALL EXISTING TRENCHES TO DEPTH INDICATED OR REQUIRED FOR INDICATED FLOW LINES...
16. ALL EXISTING TRENCHES TO DEPTH INDICATED OR REQUIRED FOR INDICATED FLOW LINES...
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20. ALL EXISTING TRENCHES TO DEPTH INDICATED OR REQUIRED FOR INDICATED FLOW LINES...



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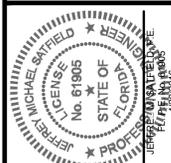


Table with 3 columns: No., Date, Revision. Contains project details and revision history.

Table with 3 columns: S, C, A. Contains project details and revision history.

Plans Prepared by CPH, Inc. 5601 Mariner St., Ste 105 Tampa, FL 33609 Phone: 813.233.2288

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GENERAL DETAILS McDonald's CYPRESS CREEK LUTZ-PASCO COUNTY, FLORIDA

Sheet No. C-2

McDONALD'S PROJECT CODE: 009-2994

WATER AND RECLAIMED WATER DISTRIBUTION SYSTEMS

- THE ENTIRE THAT WILL OPERATE AND MAINTAIN THE WATER AND RECLAIMED WATER SYSTEMS SHOWN ON THESE PLANS IS McDONALD'S. THE CONTRACTOR SHALL MEET ALL THE REQUIREMENTS OF PASCO COUNTY UTILITIES ENGINEERING DESIGN STANDARDS.
- ALL WATER AND RECLAIMED MAIN PIPE SHALL BE EITHER DUCTILE IRON OR P.C.P. UNLESS OTHERWISE NOTICED ON THE DRAWINGS.
- INSTALL ALL WATER AND RECLAIMED MAINS AT A MINIMUM 36 INCHES OF COVER.
- BURIED DUCTILE IRON PIPE SHALL CONFORM WITH ANS/AWWA C150/A21.50 AND C151/A21.51. AND SHALL HAVE A MINIMUM WORKING PRESSURE OF 150 PSI. BURIED PIPE SHALL COMPLY WITH THE FOLLOWING PRESSURE CLASSIFICATION: DESIGNATIONS UNLESS OTHERWISE NOTICED ON THE DRAWINGS: A: 12" DIAMETER AND SMALLER - PC 350-B: 14" THROUGH 24" DIAMETER - PC 250-C: 30" THROUGH 64" DIAMETER - PC 200.
- EXPPOSED PIPE 4" AND LARGER SHALL BE DUCTILE IRON FLANGED AND SHALL CONFORM WITH ANS/AWWA C115/A21.15. AND SHALL HAVE A MINIMUM WORKING PRESSURE OF 150 PSI. FLANGED PIPE SHALL COMPLY WITH THE FOLLOWING THICKNESS CLASSIFICATION UNLESS OTHERWISE NOTICED ON THE DRAWINGS: A: 4" DIAMETER - TC 54-B: 6" THROUGH 24" DIAMETER - TC 53.
- DUCTILE IRON PIPE AND FITTINGS WITHIN 10 FEET OF GAS MAINS SHALL HAVE AN 8-MIL POLYETHYLENE WRAP IN ACCORDANCE WITH ANS/AWWA C105/A21.5.
- P.C.P. PIPE 4" - 12" SHALL CONFORM TO AWWA C900. PIPE 14" - 30" SHALL CONFORM TO AWWA C905. PIPE SHALL CONFORM TO ASTM D1784. T.P.E. GRADE - 4000 PSI DESIGN STRESS, AND SHALL BE NATIONAL SANITATION FEDERATION NSF APPROVED. T.P.E. SHALL BE CLASSIFIED WITH MARKINGS ON EACH SECTION SHOWING CONFORMANCE TO THE ABOVE SPECIFICATIONS. JOINTS SHALL BE RUBBER GASETTED CONFORMING TO AWWA C900 OR C905. THE BELL SHALL BE INTEGRAL WITH THE PIPE AND OF EQUAL OR GREATER PRESSURE RATING. THE BELL OF PIPE AND FITTINGS INCLUDING JOINTS SHALL HAVE AN INTEGRAL GROOVE TO RETAIN THE GAS-SET IN PLACE.
- ALL FITTINGS SHALL BE MANUFACTURED OF DUCTILE IRON CONFORMING TO ANS/AWWA C110/A21.10 OR ANS/AWWA C153/A21.53. ALL FULL BODY - FITTINGS SHALL BE PRESSURATED TO 250 PSI. MINIMUM. ALL COMPACT FITTINGS C153/A21.53 SHALL BE PRESSURATED TO 350 PSI. MINIMUM.
- ALL DUCTILE IRON PIPE AND FITTINGS SHALL BE LINED AND COATED. INTERIOR LINING SHALL BE STANDARD THICKNESS CEMENT MORTAR LINING PER ANS/AWWA C104/A21.4. EXTERIOR COATING FOR BURIED PIPE AND FITTINGS SHALL BE A PETROLEUM ASPHALTIC COATING IN ACCORDANCE WITH ANS/AWWA C110/A21.10. EXTERIOR COATING FOR EXPOSED PIPE AND FITTINGS SHALL BE FACTOR APPLIED RUST INHIBITING EPOXY PRIMER, MINIMUM 3 MILS DR. FILM THICKNESS. AFTER INSTALLATION, EXTERIOR SURFACES SHALL BE PAINTED WITH A TWO COAT SYSTEM. THE FIRST COAT INTERMEDIATE COAT SHALL BE 4.0-10.0 MIL DFT THEMECOLOR H3B-LD EPOXY OLNE SERES N69 OR APPROVED EQUAL. AND THE FINAL COAT SHALL BE 2.0-3.0 MIL DFT THEMECOLOR RASHLED SERES 73 OR APPROVED EQUAL. THE FINAL COAT PAINT COLOR SHALL BE AS SELECTED BY THE LOCAL UTILITY.
- MECHANICAL AND PUSH ON JOINTS FOR DUCTILE IRON PIPE AND FITTINGS SHALL BE RUBBER GASETTED, CONFORMING TO ANS/AWWA C111/A21.11. LUBRICANTS OTHER THAN THAT FURNISHED BY THE PIPE MANUFACTURER WITH THE PIPE SHALL NOT BE USED.
- RESTRAINED JOINTS FOR DUCTILE IRON PIPE BELL JOINTS SHALL BE AMERICAN FAST GRIP GAS-SET, MCOWANE SJR GRP 350 GAS-SET. PIPE FELD LOG 350 GAS-SET, OR EBAA IRON MEGA LOG SERES 1100HD. RESTRAINED JOINTS FOR DUCTILE IRON PIPE AND FITTING MECHANICAL JOINTS SHALL BE EBAA IRON MEGA LOG SERES 1100. STAR GRIP SERES 2000. OR TLER NON THERMOPLASTIC LOCKING BELL JOINT RESTRAINT SHALL BE AMERICAN FLEXIRING JOINT, AMERICAN LOCKING JOINT, OR S.P.PE TR-FLEX. RESTRAINED JOINTS FOR P.C.P. MECHANICAL JOINTS SHALL BE TLER NONDIN SERES 2000 THERMOPLASTIC GRIP TLP JOINTS. RESTRAINED JOINTS FOR P.C.P. SERES 1500 CIGLE LOCK, OR EBAA IRON MEGA LOG SERES 2000HD. RESTRAINED JOINTS FOR P.C.P. PUSH ON JOINTS SHALL BE EBAA IRON MEGA LOG SERES 1500 OR SERES 1600 C900 P.C.P. SERES 2800 C905 P.C.P. FORD UNFLANGE SERES 1390, OR SMITH-BLAIR BELL LOG SERES 165. PIPE JOINTS SHALL BE RESTRAINED UPSTREAM AND DOWNSTREAM OF FITTINGS IN ACCORDANCE WITH THE MANUFACTURER'S REQUIREMENTS OR THE TABLE SHOWN IN THE DRAWINGS, WHICHEVER IS GREATER.
- POLYETHYLENE PIPE AND FITTINGS USED FOR SERVICE LINES 1/2" NCH DIAMETER SHALL BE POLYETHYLENE IN ACCORDANCE WITH AWWA C901. STANDARD CODE DESIGNATION PE 4710. SDR 35. 1/2" DIAMETER BASE DIAMETERS ON RATIO: 250 PSI. PIPE SHALL BE COLOR CODED BLUE. POTABLE WATER OR PURPLE RECLAIMED WATER. PIPE AND FITTINGS SHALL BE NSF APPROVED FOR THE USAGE TO WHICH THEY ARE TO BE APPLIED. JOINTS IN SDR-PR PIPE SHALL BE BUTT HEAT FUSION OR SOOT HEAT FUSION TYPE. FITTINGS SHALL BE MANUFACTURED OF THE SAME MATERIAL AS THE PIPE AND SHALL BE OF THE SAME SDR CLASS. P.C.P. ADAPTERS ARE REQUIRED TO JOIN PE PIPE TO P.C.P. FITTINGS AND EQUIPMENT OF OTHER MATERIALS.
- SERVICE SADDLES SHALL MEET THE REQUIREMENTS OF AWWA C800 AND SHALL CONSIST OF EPOXY COATED DUCTILE IRON BODIES IN ACCORDANCE WITH ASTM A538, WITH DOUBLE STAINLESS STEEL STRAPS, BOLTS, WASHERS AND NUTS. STAINLESS STEEL SHALL BE TYPE 304, AND NUTS ARE TO BE TEFLOON COATED. THE DUCTILE IRON BODIES TO BE FUSION BONDED NITRILE COATED, MINIMUM THICKNESS 12 MILS. O-TLET OF SADDLE IS TO HAVE NPT THREADS. SERVICE SADDLES SHALL BE MANUFACTURED BY: FORD, MELLER, OR SMITH-BLAIR.
- ALL SERVICES SHALL INCLUDE THE FOLLOWING: CURB STOPS, MANHOLES AS REQUIRED, CORPORATION STOPS, CONFORMANCE WITH AWWA C800 AND C901 IS REQUIRED. THE CONTRACTOR SHALL CUT 1" IN THE TOP CURB OF EACH WATER SERVICE AND A 1/2" AT ALL CALIE LOCATIONS. CUTS AND S'S SHALL BE HIGHLIGHTED WITH BLUE PAINT.
- UNLESS OTHERWISE NOTED IN THE PLANS, THE UTILITY COMPANIES SHALL PROVIDE AND INSTALL WATER METERS AND RECLAIMED WATER METERS. CONTRACTOR SHALL CONSTRUCT WATER SERVICE AND RECLAIMED WATER SERVICE TO THE CORPORATION STOP.
- UNLESS OTHERWISE INDICATED OR SPECIFIED, ALL CALIES TWO INCHES AND SMALLER SHALL BE ALL BRASS OR BRONZE. CALIES OVER TWO INCHES SHALL BE IRON BODIES, FULL BRONZE OR BRONZE MOUNTED.
- CALIES 4 INCHES AND LARGER SHALL BE LINED AND COATED. BURIED AND EXPOSED CALIES SHALL BE COATED INSIDE AND OUT WITH A RUST INHIBITING EPOXY PRIMER, FOLLOWED BY AN EPOXY COATING MEETING THE REQUIREMENTS OF AWWA C550. APPLIED AT THE FACTORY. THE INTERIOR OF CALIES WITH CAST IRON OR DUCTILE IRON BODIES SHALL BE PROTECTED WITH AN INTERMEDIATE COATING MEETING NSF INTERNATIONAL STANDARD 61 AND AWWA C550. AFTER INSTALLATION, EXTERIOR SURFACES SHALL BE PAINTED WITH A TWO COAT SYSTEM. THE FIRST COAT INTERMEDIATE COAT SHALL BE 4.0-10.0 MIL DFT THEMECOLOR H3B-LD EPOXY OLNE SERES N69 OR APPROVED EQUAL. AND THE FINAL COAT SHALL BE 2.0-3.0 MIL DFT THEMECOLOR RASHLED SERES 73 OR APPROVED EQUAL. THE FINAL COAT PAINT COLOR SHALL BE AS SELECTED BY THE LOCAL UTILITY.
- ALL CALIES 12" AND SMALLER SHALL BE GATE CALIES UNLESS OTHERWISE NOTICED ON THE DRAWINGS. GATE CALIES 3 INCHES TO 12 INCHES SHALL CONFORM TO AWWA C508 OR AWWA C515. THE CALIES SHALL BE IRON BODY, CAST IRON FULL ENCAPSULATED MOLDED RUBBER WEDGE COMPATIBLE WITH ASTM D2000, NON-RISING STEM WITH OR-ING SEALS. CALIES SHALL OPEN ON INTERLOCK WEDGE.
- TAPPING SLEEVES ARE TO BE 1.8" PIPE 304 STAINLESS STEEL AND COMPLING WITH ASTM D1167. AS MANUFACTURED BY JCM OR APPROVED EQUAL. TAPPING CALIES SHALL BE RESILIENT SEATED GATE CALIES AND SHALL CONFORM TO THE REQUIREMENTS OF AWWA C509. TAPPING CALIES SHALL BE AMERICAN FLOW CONTROL SERES 2500, CLOW SERES 6100, OR MELLER SERES A2361.
- CALIES 14" AND LARGER SHALL BE BUTTERFLY CALIES. BUTTERFLY CALIES SHALL MEET OR EXCEED THE DESIGN STRENGTH, TESTING AND PERFORMANCE REQUIREMENTS OF AWWA C504, CLASS 150. CALIE BODY SHALL BE MECHANICAL JOINT END TYPE. CALIE CONSTRUCTION OF CAST IRON OR DUCTILE IRON. DISC SHALL BE ONE PIPE CAST DESIGN WITH NO EXTERNAL RISBS TRANSVERSE TO FLOW. DISC SHALL BE CAST IRON OR DUCTILE IRON. THE RESILIENT SEAT SHALL HAVE A 3/16" OR 3/16" STAINLESS STEEL SURFACE.
- CALIE SEATS SHALL BE MECHANICALLY RETAINED, AND MAINTAINED EITHER THE BODY OR DISC. OR-ING SEATS ON CALIE DISCS ARE UNACCEPTABLE. SEATS FOR CALIES 14" DIAMETER AND LARGER SHALL BE FULLY FIELD REPLACEABLE WITHOUT THE USE OF SPECIAL TOOLS. OPERATORS OF THE ENCLOSED TRAINING UNIT SHALL BE PROVIDED UNLESS OTHERWISE NOTICED.
- ALL BURIED CALIES SHALL BE PROVIDED WITH ADJUSTABLE CALIE BODIES APPROXIMATELY 5 INCHES IN DIAMETER WITH A MINIMUM THICKNESS OF 3/16" NCH CAST IRON. BODIES SHALL BE OF SUFFICIENT LENGTH TO OPERATE ALL CALIES BURIED IN THE GROUND, CONSISTING OF BASE, CENTER SECTION, AND TOP SECTION WITH COVER. CALIE BODIES LOCATED IN UNPAVED AREAS SHALL BE SLIP-TYPE DESIGN TO PERMIT MOVEMENT OF THE TOP SECTION WITHOUT TRANSMITTING FORCES ONTO THE CALIE BODY. CALIE BODIES CAST INTO CONCRETE OR ASPHALT SURFACING SHALL HAVE BRASS COVERS. ALL CALIE BODIES SHALL BE INTERNALLY CHAINED TO CALIE BODIES WITH AN APPROXIMATE 18 NCH GALVANIZED CHAIN. CALIE BODIES COVERS SHALL BE CAST WITH THE INSCRIPTION "WATER" OR "RECLAIMED WATER".
- P.C.P. PIPES SHALL BE COLOR CODED BLUE. WATER MAINS OR PURPLE RECLAIMED WATER MAINS AND STENCILED 0.75-INCH LETTERING ON THE PIPE IN AT LEAST THREE AREAS PER PIPE SECTION: "POTABLE WATER MAIN" OR "RECLAIMED WATER MAIN" AS APPLICABLE.
- INSTALL IDENTIFICATION TAPE ALONG ALL DUCTILE IRON PIPE AND P.C.P. PIPE. MINIMUM THICKNESS 4 MILS, WIDTH 6 INCHES, LETTER SIZE 1 INCH. APPLICABLE TAPE SURFACE OF PIPE. CONTINUOUSLY EXTENDING FROM JOINT TO JOINT. TAPE COLOR AND LETTERING SHALL BE BLACK. PRINTING ON BLUE BACKGROUND WATER MAINS. BLACK PRINTING ON PURPLE BACKGROUND RECLAIMED WATER MAINS. PLACE TAPE AS FOLLOWS: 2" FROM CENTER ALONG TOP HALF OF PIPE 10" - 18" FROM CENTER ALONG BOTH SIDES OF THE TOP HALF OF PIPE. 20" FROM CENTER ALONG TOP HALF OF PIPE. 20" FROM CENTER ALONG BOTH SIDES OF THE TOP HALF OF PIPE WITH A THIRD STRIP CENTERED ALONG TOP HALF OF PIPE.
- INSTALL WARNING TAPE ALONG ALL PIPE LINES. PLACED 2 FEET ABOVE PIPE. TAPE SHALL BE 6-INCH WIDE NITRILE CONTINUOUS TAPE. TAPE SHALL BE COLORED BLUE. WATER MAINS OR PURPLE RECLAIMED WATER MAINS WITH BLACK LETTERING CODED AND WORDED "CAUTION: WATER MAIN BURIED BELOW" OR "CAUTION: RECLAIMED WATER MAIN BURIED BELOW", AS APPLICABLE.
- INSTALL LOCATING WIRE ALONG ALL P.C.P. PIPE LINES. WIRE SHALL BE COLOR CODED TO GAUGE CONTINUOUSLY LATED WIRE. COLOR CODING SHALL BE SIMILAR TO WARNING TAPE COLORS. INSTALL LOCATOR WIRE ALONG ALL PRESSURIZED PIPE LINES 2" AND LARGER. LOOP WIRE INTO ALL CALIE BODIES. LOOPING TO OCCUR EITHER 500 FEET MINIMUM WHERE THERE ARE NO CALIE BODIES TO ALLOW LOOPING, OR NEAR ACCESS BODIES PER CONTRACTOR REQUIREMENTS. CHECK WIRE FOR ELECTRICAL CONTINUITY.
- ALL CHANGES IN DIRECTION SHALL BE MADE WITH FITTINGS OR APPROVED JOINT DEFLECTION. BENDING OF PIPE, EXCEPT COPPER AND POLYETHYLENE, IS PROHIBITED. JOINT DEFLECTION SHALL NOT EXCEED 75% OF THE MANUFACTURER'S RECOMMENDED MAXIMUM DEFLECTION.
- TEST PROCEDURES SHALL BE APPROVED BY THE ENGINEER. ALL TESTS SHALL BE MADE IN THE PRESENCE OF THE ENGINEER AND UTILITY. NOTICE: THE ENGINEER AND UTILITY COMPANIES AT LEAST 72 HOURS BEFORE ANY WORK IS TO BE INSPECTED OR TESTED.
- PROVIDE ALL EQUIPMENT FOR TESTING. INCREMENTS ON GAGES USED FOR LOW PRESSURE AIR TESTING SHALL BE SCALED TO THE NEAREST 0.1 PSI. GAGES, PUMPS, AND HOSES SHALL BE IN GOOD WORKING ORDER WITH NO NOTICABLE LEAKS.
- ALL SERVICE LINES SHALL BE COMPLETED PRIOR TO TESTING, AND ARE SUBJECT TO THE SAME TESTING REQUIREMENTS AS THE MAIN LINE.

WATER AND RECLAIMED WATER DISTRIBUTION SYSTEMS (CONTINUED)

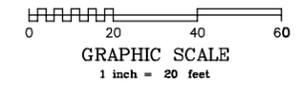
- THE PRESENCE OF TESTING AND INSPECTION SHALL BE AS FOLLOWS: 1) CONDUCT PRESSURE AND LEAKAGE TESTING; 2) PERFORM FLOWING PER UTILITY REQUIREMENTS AND AWWA C681; 3) INSPECT THE WATER MAIN, INCLUDING VALVES AND FITTINGS; AND 4) DECHLORINATE AND FLOW AFTER INSPECTION.
- APPLICABLE HYDROSTATIC TEST PRESSURE OF 150 PSI WATER MAINS; 200 PSI FIRE MAINS; OR 150 PSI RECLAIMED WATER MAINS FOR 10 MINUTES AND FOR SUCH ADDITIONAL PERIOD NECESSARY FOR THE ENGINEER TO COMPLETE THE INSPECTION OF THE LINE UNDER TEST. DO NOT EXCEED PIPE MANUFACTURER'S GUESTED THE DURATION AT THE TEST PRESSURE. IF DEFECTS ARE NOTED, REPAIRS SHALL BE MADE AND THE TEST REPEATED UNTIL ALL PARTS OF THE LINE WITHSTAND THE TEST PRESSURE.
- APPLICABLE LEAKAGE TEST PRESSURE OF 150 PSI WATER MAINS; 200 PSI FIRE MAINS; OR 150 PSI RECLAIMED WATER MAINS. MAINTAIN PRESSURE AT A MAXIMUM VARIATION OF 5% DURING THE ENTIRE LEAKAGE TEST. THE DURATION OF THE LEAKAGE TEST SHALL BE TWO HOURS MINIMUM, AND FOR SUCH ADDITIONAL TIME NECESSARY FOR THE ENGINEER TO COMPLETE INSPECTION OF THE SECTION OF LINE UNDER TEST. LEAKAGE MEASUREMENTS SHALL NOT BE STARTED UNTIL A CONSTANT TEST PRESSURE HAS BEEN ESTABLISHED. THE LINE LEAKAGE SHALL BE MEASURED BY MEANS OF A WATER METER INSTALLED ON THE SUPPLY SIDE OF THE PRESSURE POINT.
- NO LEAKAGE IS ALLOWED IN EXPOSED PIPING, BURIED PIPING WITH FLANGES, THREADED, OR WELDED JOINTS OR BURIED NON-POTABLE PIPING IN CONFLICT WITH POTABLE WATER LINES.
- TESTED SECTIONS OF BURIED PIPING WITH SLIP-TYPE OR MECHANICAL JOINTS WILL NOT BE ACCEPTED IF IT HAS A LEAKAGE RATE IN EXCESS OF THAT RATE DETERMINED BY THE FORMULA $L = SDR \sqrt{148000 \text{ WHERE } L = \text{MAXIMUM PERMISSIBLE LEAKAGE RATE, IN GALLONS PER HOUR, THROUGHOUT THE ENTIRE LENGTH OF LINE BEING TESTED}$; $S = \text{LENGTH OF LINE TESTED IN FEET}$; $D = \text{NOMINAL INTERNAL DIAMETER IN INCHES OF THE PIPE AND } P = \text{THE SERVICE ROOT OF THE ACTUAL PRESSURE IN PSI ON ALL JOINTS IN THE TESTED PORTION OF THE LINE. THIS ACTUAL PRESSURE SHALL BE DETERMINED BY FINDING THE DIFFERENCE BETWEEN THE AVERAGE ELEVATION OF ALL TESTED PIPE JOINTS AND THE ELEVATION OF THE PRESSURE GAUGE AND ADDING THE DIFFERENCE IN ELEVATION HEAD TO THE AVERAGE TEST PRESSURE.}$
- ALL APPARENT LEAKS DISCOVERED WITHIN ONE YEAR FROM THE DATE OF FINAL ACCEPTANCE OF THE WORK: BE THE OWNER SHALL BE LOCATED AND REPAIRED BY THE CONTRACTOR, REGARDLESS OF THE TOTAL LINE LEAKAGE RATE.
- PROR TO INSPECTIONS, CONDUCT FLOWING FLSHING OF PIPELINE IN SECTIONS IN ORDER TO REMOVE ANY SOLIDS OR CONTAMINATED MATERIAL THAT MAY HAVE BECOME LOGGED IN THE PIPE.
- OBTAIN A MINIMUM FLOWING VELOCITY OF 2.5 FEET PER SECOND PER AWWA C651.
- ALL TAPS REQUIRED FOR FLSHING AND THE TEMPORARY OR PERMANENT RELEASE OF AIR AS NEEDED FOR FLSHING SHALL BE PROVIDED BY THE CONTRACTOR.
- INSPECT ALL POTABLE WATER LINES, FIRE LINES, VALVES, FITTINGS, H.DRANTS, THE WATER MAIN DISINFECTION AND BACTERIOLOGICAL SAMPLING AND METHODS OF DISINFECTION FOR ALL WATER CONTAINMENT DEVICES AND PIPING SYSTEMS SHALL CONFORM TO AWWA C651. THE DISCHARGE LOCATIONS FOR THE CHLORINATED WATER SHALL BE APPROVED BY THE OWNER. NEUTRALIZE THE CHLORINE RESIDUAL BY MEANS OF A REDUCING AGENT IN ACCORDANCE WITH AWWA C651.
- ALL DISINFECTION WORK SHALL BE ACCEPTABLE TO THE STATE HEALTH AUTHORITY. IF ANY REQUIREMENTS OF THIS SECTION ARE IN CONFLICT WITH REQUIREMENTS OF THE AUTHORITY, THE AUTHORITY, THOSE OF THE AUTHORITY SHALL GOVERN. A BACTERIOLOGICAL TESTING SHALL BE PERFORMED BY A STATE CERTIFIED LABORATORY. NOTES: MINIMUM COVER SHALL BE MAINTAINED UNDER ALL JOINTS. PROCEED WITH TESTING AND SAMPLING SHALL ONLY BE COLLECTED BY CERTIFIED LABORATORY PERSONNEL. COPIES OF ALL TESTING RESULTS AND ALL RELATED CORRESPONDENCE FROM THE TESTING LAB SHALL BE SUBMITTED TO THE OWNER, UTILITY, AND ENGINEER.

SANITARY SEWER SYSTEMS

- THE ENTIRE THAT WILL OPERATE AND MAINTAIN THE SEWER SYSTEM SHOWN ON THESE PLANS IS McDONALD'S. THE CONTRACTOR SHALL MEET ALL THE REQUIREMENTS OF PASCO COUNTY UTILITIES ENGINEERING DESIGN STANDARDS.
- P.C.P. SEWER PIPE SHALL BE TYPE PSM P.C.P. CONFORMING TO ASTM D3034 AND SHALL BE SDR 35 FOR 4" THROUGH 15" AND ASTM F 679, WALL THICKNESS T-1, FOR PIPE 16" THROUGH 48".
- INSTALL ALL SEWER MAINS AT A MINIMUM 36 INCHES OF COVER.
- JOINTS SHALL MEET THE REQUIREMENTS OF ASTM D3212 INCLUDING RUBBER GAS-SETS CONFORMING TO ASTM F477.
- FITTINGS SHALL CONFORM TO THE SAME REQUIREMENTS AS THE PIPE. PROVIDE ADAPTERS AS REQUIRED TO JOIN P.C.P. PIPE TO P.C.P. FITTINGS AND EQUIPMENT OF OTHER MATERIALS. SOLVENT CEMENT SHALL BE AS RECOMMENDED BY THE PIPE MANUFACTURER.
- P.C.P. SEWER PIPE SHALL BE COLOR CODED GREEN, STENCILED "SEWER LINE" 2" LETTERING ON TWO SIDES OF THE PIPE IN AT LEAST THREE AREAS PER PIPE SECTION.
- INSTALL ADDRESS IDENTIFICATION TAPE ALONG PIPELINE. TAPE SHALL BE MINIMUM THICKNESS 4 MILS, WIDTH 6 INCHES, LETTER SIZE 1 INCH. TAPE COLOR AND LETTERING SHALL BE MINIMUM GREEN ON GREEN BACKGROUND. PLACE TAPE AS FOLLOWS: 2" FROM CENTER ALONG TOP HALF OF PIPE 10" - 18" FROM CENTER ALONG BOTH SIDES OF THE TOP HALF OF PIPE. 20" FROM CENTER ALONG TOP HALF OF PIPE. 20" FROM CENTER ALONG BOTH SIDES OF THE TOP HALF OF PIPE WITH A THIRD STRIP CENTERED ALONG TOP HALF OF PIPE.
- INSTALL WARNING TAPE ALONG ALL SEWER PIPE LINES. TAPE SHALL BE 6-INCH WIDE NITRILE CONTINUOUS TAPE, COLORED GREEN WITH BLACK LETTERING CODED AND WORDED "CAUTION: SEWER BURIED BELOW", INSTALL ALONG PIPELINE, 2 FEET ABOVE PIPE, MINIMUM 1 FOOT BELOW GRADE.
- CONNECTIONS TO EXISTING SEWER SHALL BE CONDUCTED IN SUCH A MANNER THAT THE EXISTING SEWER REMAINS IN OPERATION. PROVIDE BYPASS PIPING OF EXISTING FLOWS OR COLLECT AND LEGALLY DISPOSE OF EXISTING SEWER FLOW AS NEEDED TO ACCOMMODATE CONSTRUCTION WHILE PROTECTING EXISTING SEWER SERVICE.
- PROR TO INSPECTIONS AND TESTING, CLEAN ALL INSTALLED LINES AND MANHOLES. TEST PROCEDURES SHALL BE APPROVED BY THE ENGINEER. ALL TESTS SHALL BE MADE IN THE PRESENCE OF THE ENGINEER AND UTILITY. NOTICE: THE ENGINEER AND UTILITY COMPANIES AT LEAST 72 HOURS BEFORE ANY WORK IS TO BE INSPECTED OR TESTED.
- PROVIDE ALL EQUIPMENT FOR TESTING. INCREMENTS ON GAGES USED FOR LOW PRESSURE AIR TESTING SHALL BE SCALED TO THE NEAREST 0.1 PSI. GAGES, PUMPS, AND HOSES SHALL BE IN GOOD WORKING ORDER WITH NO NOTICABLE LEAKS.
- ALL SERVICE LATERALS SHALL BE COMPLETED PRIOR TO TESTING, AND ARE SUBJECT TO THE SAME TESTING REQUIREMENTS AS THE MAIN LINE.
- PROVIDE LIGHT SOURCE AND MIRRORS FOR LAMPING OF SEWER. AN SEWER IN WHICH THE DIRECT LIGHT OF A LAMP CANNOT BE SEEN IN EITHER DIRECTION, FULLY BLOCKED, BETWEEN ADJACENT MANHOLES SHALL BE CONSIDERED "SATISFACTOR" UNLESS THE LINE IS DESIGNED WITH HORIZONTAL DEFLECTIONS, AND SHALL BE REPAIRED BY THE CONTRACTOR WITHOUT ADDITIONAL COMPENSATION.
- CONDUCT LOW PRESSURE AIR TESTING 1.0 PSINUTIAL PRESSURE OF INSTALLED SEWER PIPE IN ACCORDANCE WITH ASTM F1417. MAXIMUM ALLOWABLE LEAKAGE 0.0015 CUBIC FEET PER MINUTE PER SQUARE FOOT INTERNAL SURFACE AREA BEING TESTED. ALLOWABLE AIR PRESSURE DROP DURING THE TEST 3.0 PSIG. MINIMUM TEST PRESSURE TEST TIME DURATION: 5" 2" 4" 6" 8" 10" 12" 14" 16" 18" 20" 22" 24" 26" 28" 30" 32" 34" 36" 38" 40" 42" 44" 46" 48" 50" 52" 54" 56" 58" 60" 62" 64" 66" 68" 70" 72" 74" 76" 78" 80" 82" 84" 86" 88" 90" 92" 94" 96" 98" 100" 102" 104" 106" 108" 110" 112" 114" 116" 118" 120" 122" 124" 126" 128" 130" 132" 134" 136" 138" 140" 142" 144" 146" 148" 150" 152" 154" 156" 158" 160" 162" 164" 166" 168" 170" 172" 174" 176" 178" 180" 182" 184" 186" 188" 190" 192" 194" 196" 198" 200" 202" 204" 206" 208" 210" 212" 214" 216" 218" 220" 222" 224" 226" 228" 230" 232" 234" 236" 238" 240" 242" 244" 246" 248" 250" 252" 254" 256" 258" 260" 262" 264" 266" 268" 270" 272" 274" 276" 278" 280" 282" 284" 286" 288" 290" 292" 294" 296" 298" 300" 302" 304" 306" 308" 310" 312" 314" 316" 318" 320" 322" 324" 326" 328" 330" 332" 334" 336" 338" 340" 342" 344" 346" 348" 350" 352" 354" 356" 358" 360" 362" 364" 366" 368" 370" 372" 374" 376" 378" 380" 382" 384" 386" 388" 390" 392" 394" 396" 398" 400" 402" 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2166" 2168" 2170" 2172" 2174" 2176" 2178" 2180" 2182" 2184" 2186" 2188" 2190" 2192" 2194" 2196" 2198" 2200" 2202" 2204" 2206" 2208" 2210" 2212" 2214" 2216" 2218" 2220" 2222" 2224" 2

McDonald's

STATE ROAD No. 56
SECTION 27, TOWNSHIP 26 SOUTH, RANGE 19 EAST
LUTZ, PASCO COUNTY, FLORIDA



PARKING SPACE TABLE	
STANDARD	EXISTING
0	0
0	0
0	0

CURVE C1
RADIUS = 2387.48'R
ARC = 356.44'R
CHORD = 356.11'R; 356.10'M
CHD. BRG. = N88°38'24"E R
N88°38'19"E M
DELTA = 08°33'14"R

CURVE C2
RADIUS = 173.00'R
ARC = 90.96'R
CHORD = 89.91'R; 89.91'M
CHD. BRG. = S85°35'42"W R
S85°35'45"W M
DELTA = 30°07'26"R

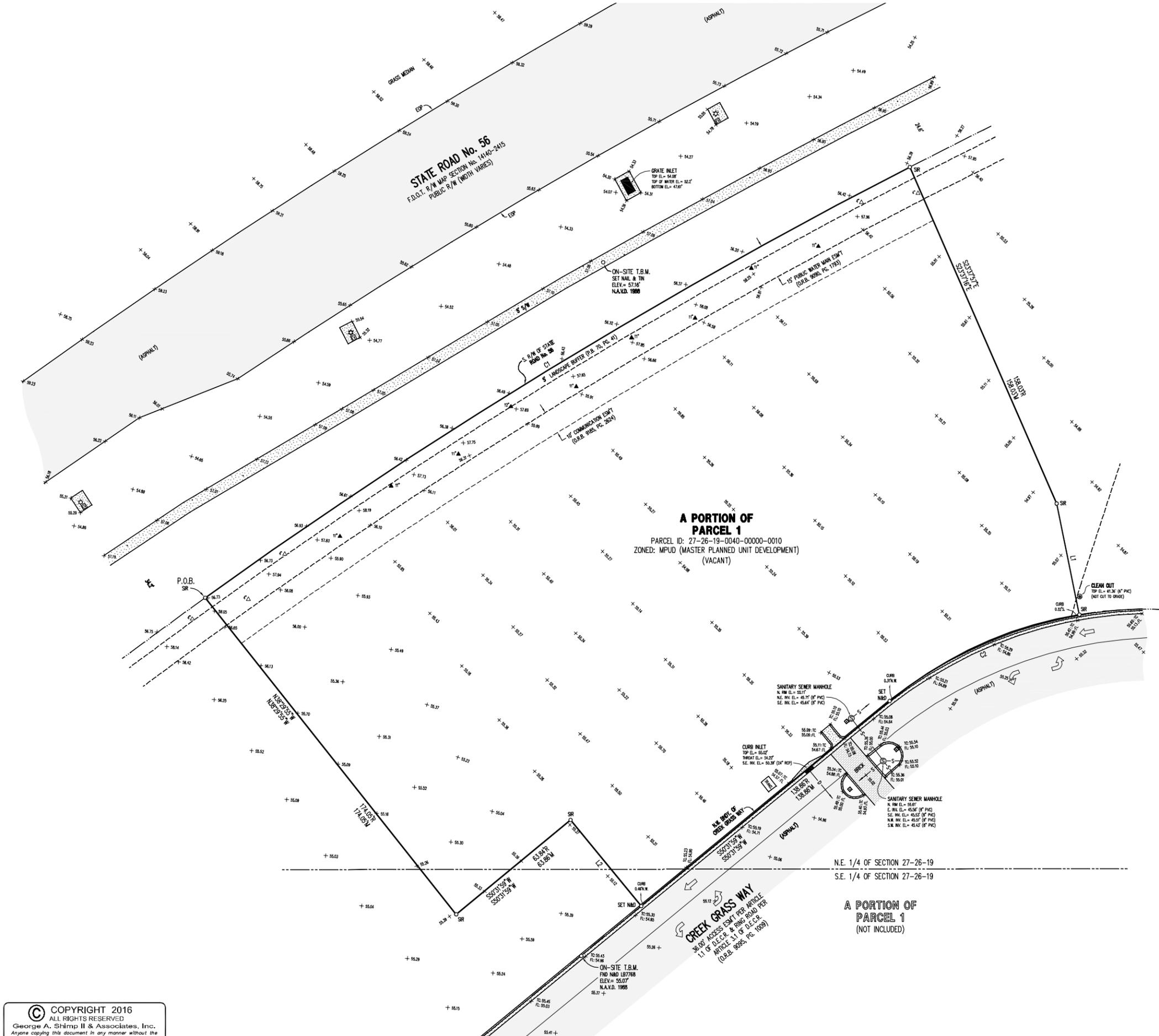
LEGEND

- ⊞ - ELECTRIC VAULT
- + - ELEVATION
- - GRATE INLET
- ⊙ - LIGHT POLE
- ⊙ - SANITARY SEWER MANHOLE
- ⊙ - SEWER CLEAN OUT
- ⊞ - SIGN
- S- - U.G. SANITARY SEWER LINE
- D- - U.G. STORM SEWER LINE
- ==== - 0.68' CURB
- ==== - 2' CURB & GUTTER
- ⊙ - OAK
- ⊙ - PALM

**A PORTION OF
PARCEL 1**
PARCEL ID: 27-26-19-0040-00000-0010
ZONED: MPUD (MASTER PLANNED UNIT DEVELOPMENT)
(VACANT)

N.E. 1/4 OF SECTION 27-26-19
S.E. 1/4 OF SECTION 27-26-19

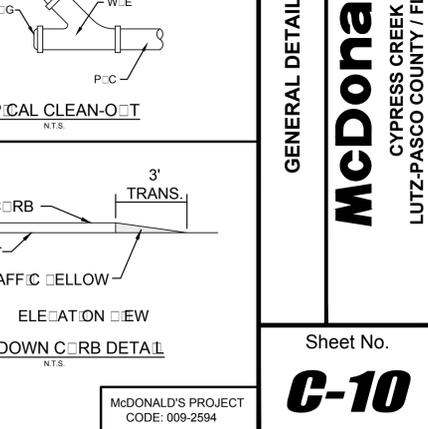
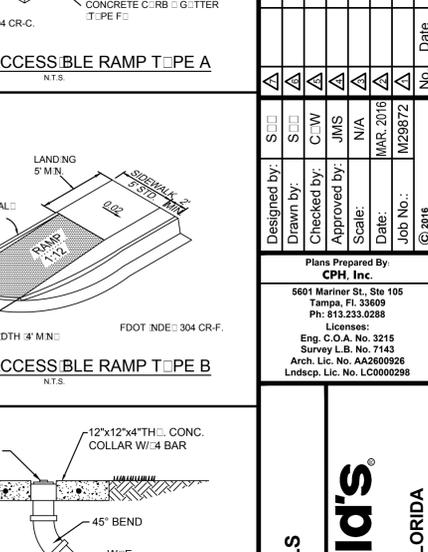
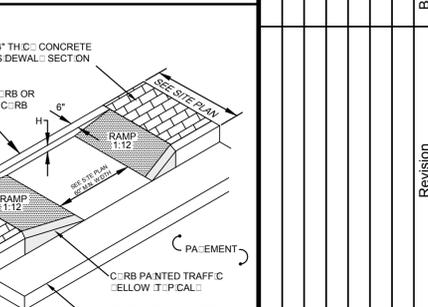
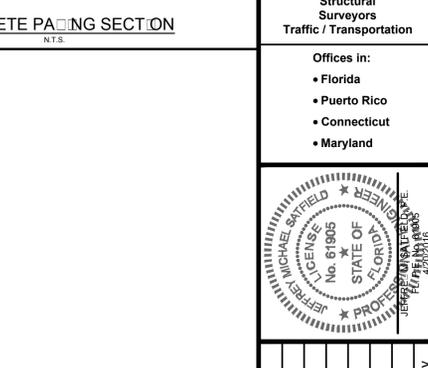
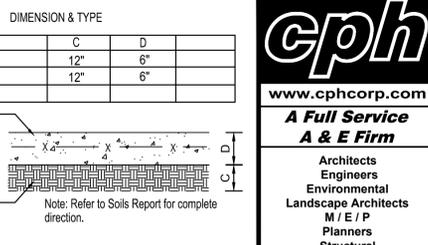
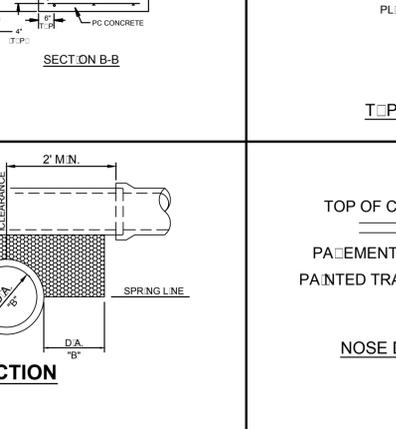
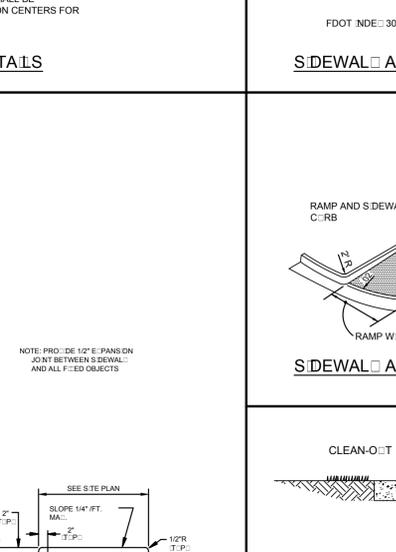
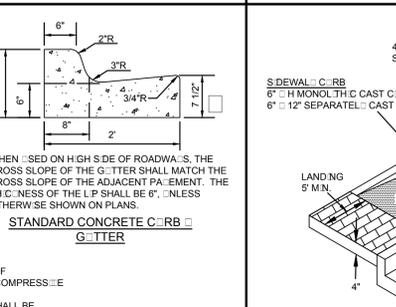
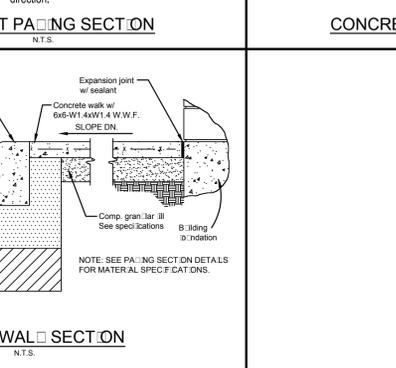
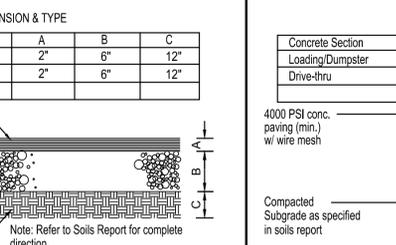
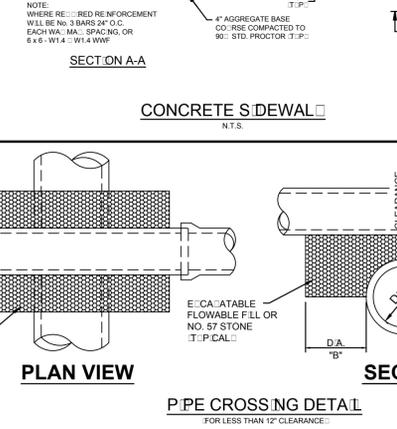
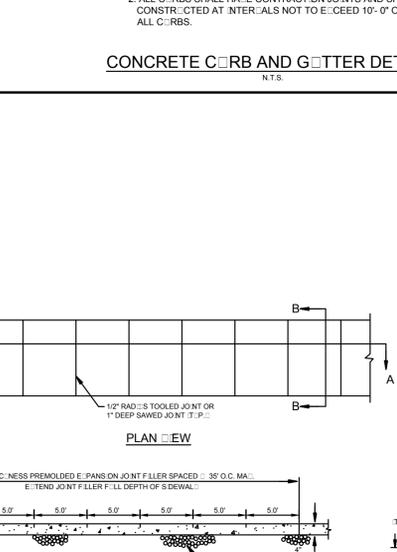
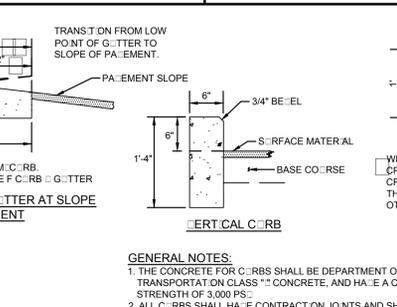
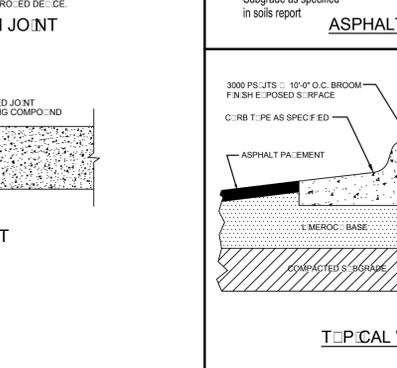
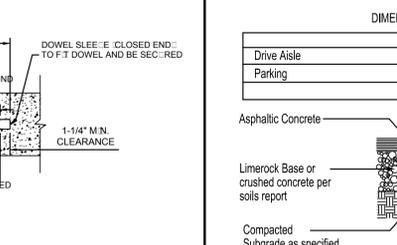
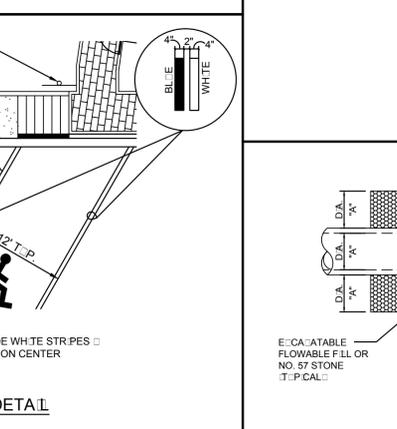
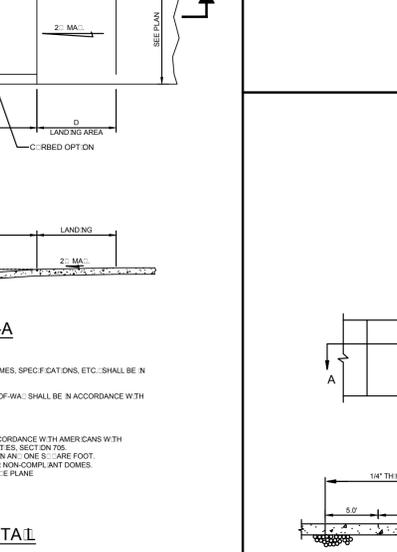
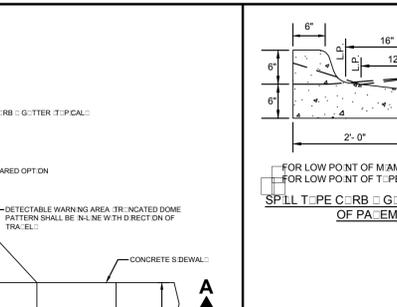
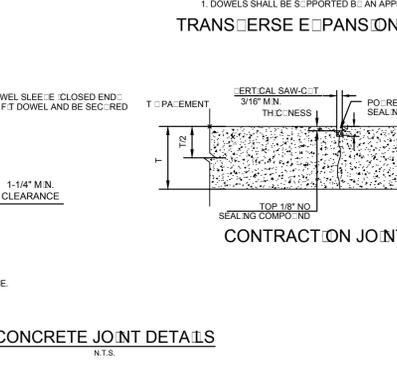
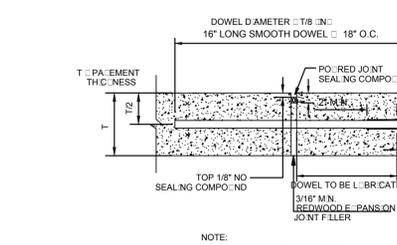
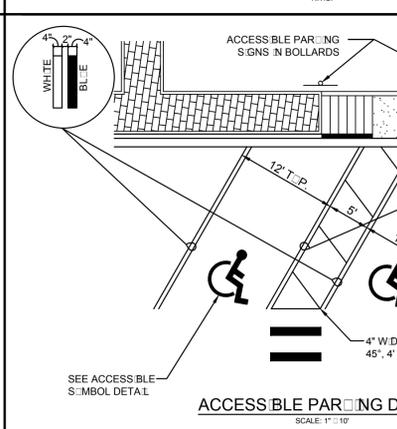
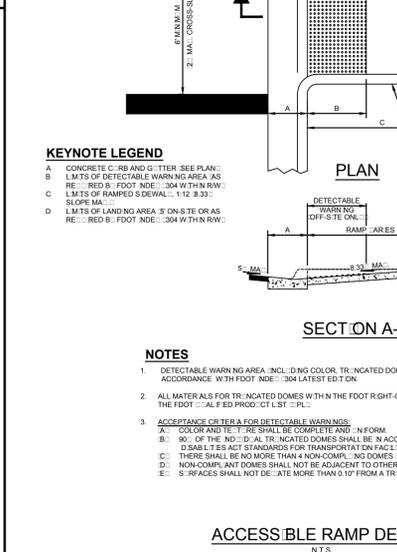
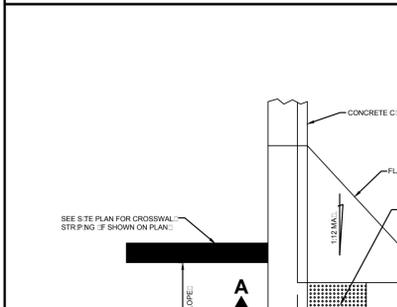
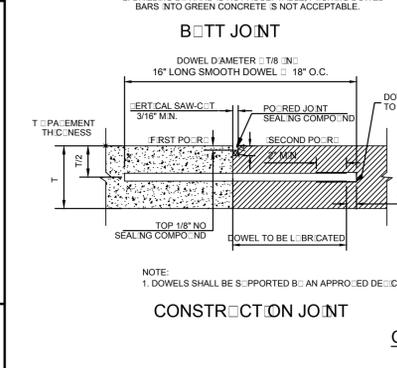
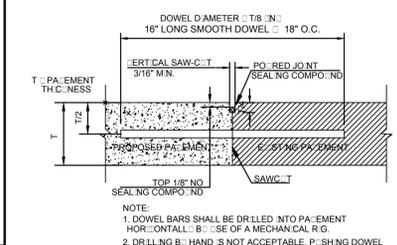
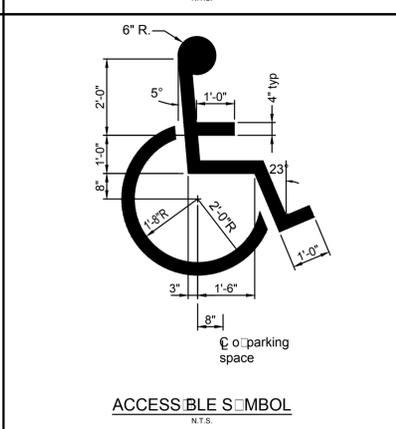
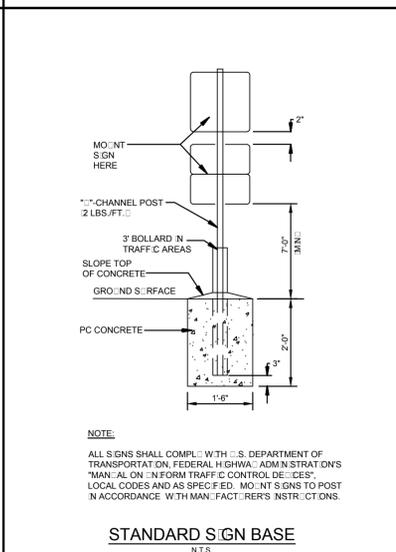
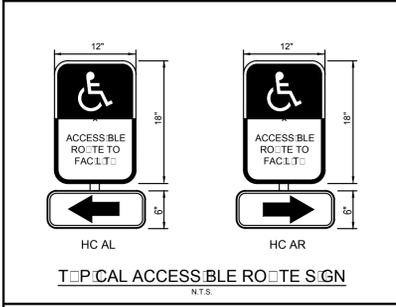
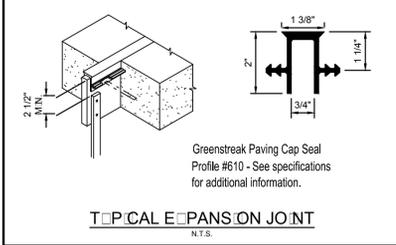
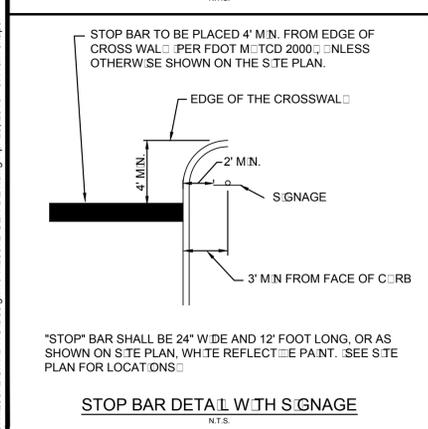
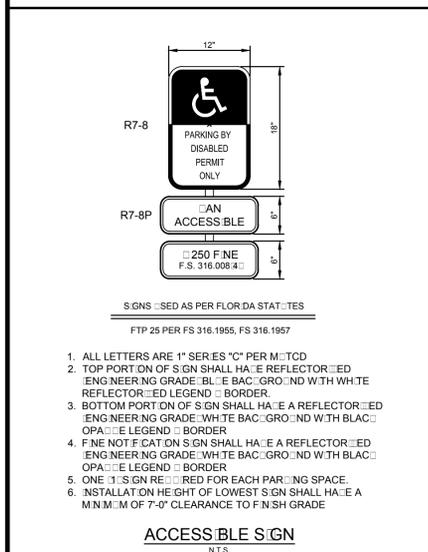
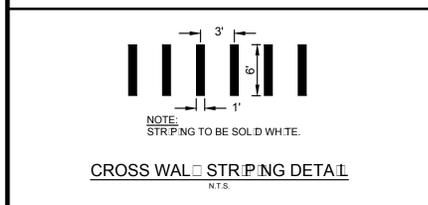
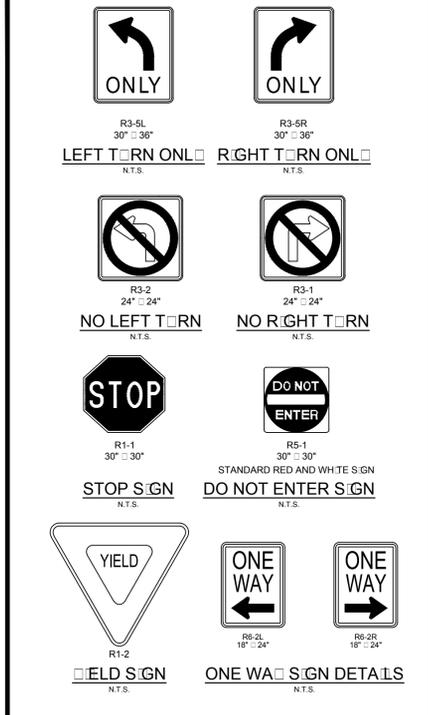
**A PORTION OF
PARCEL 1
(NOT INCLUDED)**



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ALTA/ACSM LAND TITLE SURVEY (L/C # 9-2594) - SHEET 3 OF 3

CERTIFICATION: I HEREBY CERTIFY TO THE BEST OF MY KNOWLEDGE AND BELIEF THAT THE SURVEY SHOWN HEREON SUBSTANTIALLY MEETS THE MINIMUM TECHNICAL STANDARDS FOR LAND SURVEYING DESCRIBED IN THE STATE OF FLORIDA RULE 5J-17, F.A.C. FURTHERMORE, THIS CERTIFICATION SHALL NOT EXTEND TO ANY OTHER PERSONS OR PARTIES OTHER THAN THOSE NAMED ON THIS SURVEY AND SHALL NOT BE VALID AND BINDING AGAINST THE UNDERSIGNED SURVEYOR WITHOUT THE ORIGINAL RAISED SEAL AND SIGNATURE OF THE FLORIDA LICENSED SURVEYOR AND MAPPER.		JOB NUMBER: 150317 DRAWING FILE: 150317.DWG LAST REVISION: N/A	DATE SURVEYED: 11-16-2015 DATE DRAWN: 11-19-2015 X REFERENCE: N/A
GEORGE A. SHIMP II, PROFESSIONAL SURVEYOR & MAPPER No. 6137		GEORGE A. SHIMP II AND ASSOCIATES, INCORPORATED LAND SURVEYORS LAND PLANNERS 3301 DaSOTO BOULEVARD, SUITE D PALM HARBOR, FLORIDA 34683 R.C. LB 1834 PHONE (727) 784-5106 FAX (727) 786-1256	



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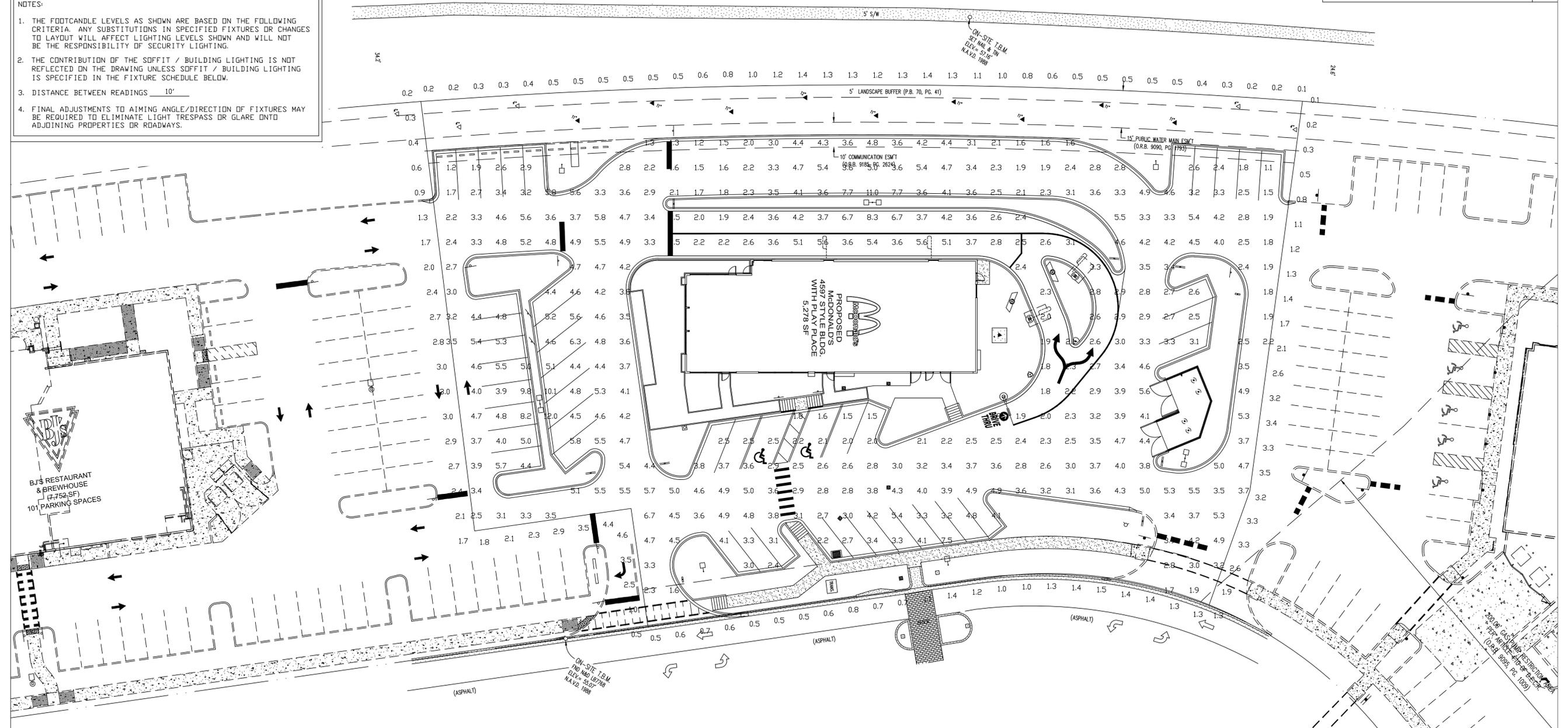
Offices in:
• Florida
• Puerto Rico
• Connecticut
• Maryland

DESIGNED BY: JAMES MCDONALD
DRAWN BY: JAMES MCDONALD
CHECKED BY: JAMES MCDONALD
APPROVED BY: JAMES MCDONALD
SCALE: N/A
DATE: MAR 2016
JOB NO.: M29872
BY: [Signature]

5601 Mariner St., Ste 105
Tampa, FL 33609
Ph: 813.233.0288
Licenses:
Eng. C.O.A. No. 3215
Survey L.B. No. 7143
Arch. Lic. No. AA2600926
Landscape Lic. No. LC0000298

Sheet No. **C-10**
McDONALD'S PROJECT CODE: 009-2594

- NOTES:
1. THE FOOTCANDLE LEVELS AS SHOWN ARE BASED ON THE FOLLOWING CRITERIA. ANY SUBSTITUTIONS IN SPECIFIED FIXTURES OR CHANGES TO LAYOUT WILL AFFECT LIGHTING LEVELS SHOWN AND WILL NOT BE THE RESPONSIBILITY OF SECURITY LIGHTING.
 2. THE CONTRIBUTION OF THE SOFFIT / BUILDING LIGHTING IS NOT REFLECTED ON THE DRAWING UNLESS SOFFIT / BUILDING LIGHTING IS SPECIFIED IN THE FIXTURE SCHEDULE BELOW.
 3. DISTANCE BETWEEN READINGS 10'
 4. FINAL ADJUSTMENTS TO AIMING ANGLE/DIRECTION OF FIXTURES MAY BE REQUIRED TO ELIMINATE LIGHT TRESPASS OR GLARE INTO ADJOINING PROPERTIES OR ROADWAYS.



PAVED SURFACE READINGS				PROPERTY LINE READINGS			
Average	3.6	Average	1.4				
Maximum	12.0	Maximum	4.6				
Minimum	1.1	Minimum	0.1				
Avg:Min	3.31	Avg:Min	13.86				
Max:Min	10.91	Max:Min	46.00				

** - SPECIFY COLOR

FIXTURE TYPE:	SYMBOL	FIXTURE QUANTITY	CONFIG	QUANTITY	TENDR TOP FITTERS	QUANTITY	EPA	MOUNTING HEIGHT	LLF	POLE TYPE:	QUANTITY	WIND LOAD	ALLOWED EPA
VP-L-96NB-280-5k-T4-UNV-RA-**	□	10	SGL	4	TTFVIPER	4	1.00	25'	0.87	CONCRETE BY OTHERS	7		
			DBL180	3	TTFVIPER	3	2.00						

THIS DRAWING MEETS OR EXCEEDS MCDONALD'S CURRENT ILLUMINATION SPECIFICATIONS OF A 3-4 FOOTCANDLE AVERAGE, UNLESS SUPERSEDED BY OTHER REQUIREMENTS.

THIS LAYOUT MAY NOT MEET TITLE 24 OR LOCAL ENERGY REQUIREMENTS. IF THIS LAYOUT NEEDS TO BE TITLE 24 COMPLIANT OR MEET OTHER ENERGY REQUIREMENTS, PLEASE CONSULT FACTORY WITH SPECIFIC DETAILS REGARDING PROJECT REQUIREMENTS SO THAT REVISIONS MAY BE MADE TO THE DRAWING.

THIS LIGHTING PATTERN REPRESENTS ILLUMINATION LEVELS CALCULATED FROM LABORATORY DATA TAKEN UNDER CONTROLLED CONDITIONS IN ACCORDANCE WITH ILLUMINATING ENGINEERING SOCIETY APPROVED METHODS. ACTUAL PERFORMANCE OF ANY MANUFACTURER'S LUMINAIRES MAY VARY DUE TO VARIATION IN ELECTRICAL VOLTAGE, TOLERANCE IN LAMPS, AND OTHER VARIABLE FIELD CONDITIONS.

LP-1

UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE IN INCHES

NOTES:

SCALE 1" = 20' 0" DATE 4/15/16 NEXT ASSEMBLY REF. DRWGS.

DRAWN BY MW

CHECKED BY

APPROVED BY

APPROVED BY

SHIP ORDER

PROJECT NO.

POINT-BY-POINT FOOTCANDLE PLOT FOR
MCDONALD'S
STATE RD 56
LUTZ, FL

DRAWING NUMBER
1PCP32339

PERFORMANCE DESIGN LIGHTING
Performance Design Lighting Products
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