

EMORY MEDICAL CORP. OFFICE BUILDING

CES

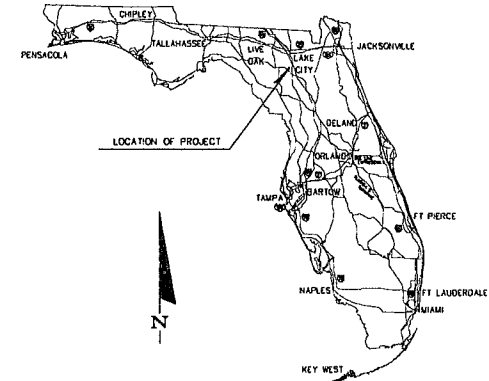
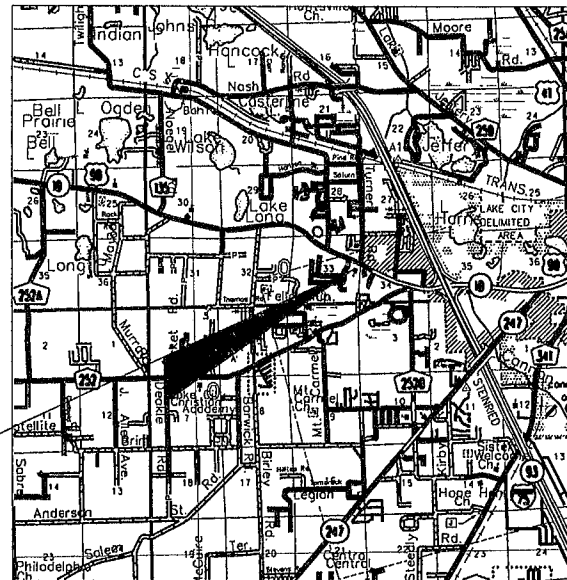
Crews Engineering Services, LLC

P.O. BOX 970
LAKE CITY, FL 32056
PHONE: 386.754.4085
www.crewsengineeringservices.com

CERTIFICATE OF AUTHORIZATION: NO. 28022

PROJECT LOCATION

SITE PLAN FOR:
EMORY MEDICAL CORP.
DR. CHANDLER MOHAN
351 NE FRANKLIN ST. #1125
LAKE CITY, FL 32025
PHONE: 773.368.0060



INDEX OF SHEETS

DET1	GENERAL NOTES
DET2	UTILITY NOTES
DET3-DET4	MISCELLANEOUS NOTES AND DETAILS
SIT1	EXISTING CONDITIONS
SIT2	SITE PLAN
PAV1	PAVING AND DRAINING
	APPLICABLE FDOT STANDARDS

LOCATION MAP

SECTION 33, TOWNSHIP 3 SOUTH, RANGE 16 EAST
COLUMBIA COUNTY, FLORIDA

PARCEL #33-3S-16-02460-007

CES PROJECT ID:
2012-030

BRETT A. CREWS, P. E. 65592

GENERAL NOTES

- 1 THE CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS AT THE JOB SITE TO INSURE THAT ALL NEW WORK WILL FIT IN THE MANNER INTENDED ON THE PLANS. SHOULD ANY CONDITIONS EXIST THAT ARE CONTRARY TO THOSE SHOWN ON THE PLANS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF SUCH DIFFERENCES IMMEDIATELY & PRIOR TO PROCEEDING WITH THE WORK.
2. THE CONTRACTOR SHALL MAINTAIN THE CONSTRUCTION SITE AT ALL TIMES IN A SECURE MANNER. ALL OPEN TRENCHES AND EXCAVATED AREAS SHALL BE PROTECTED FROM ACCESS BY THE GENERAL PUBLIC.
3. ANY PUBLIC LAND CORNER WITHIN THE LIMITS OF CONSTRUCTION IS TO BE PROTECTED. IF A CORNER MONUMENT IS IN DANGER OF BEING DESTROYED AND HAS NOT BEEN PROPERLY REFERENCED, THE CONTRACTOR SHOULD NOTIFY THE ENGINEER.
4. THE SURFACE WATER MANAGEMENT SYSTEM SHALL BE CONSTRUCTED IN ACCORDANCE WITH SRWMD RULES AND REGULATIONS (CH 40B-4 F.A.C).
5. EXISTING DRAINAGE STRUCTURES WITHIN THE CONSTRUCTION LIMITS SHALL BE REMOVED, UNLESS OTHERWISE SPECIFIED IN THE PLANS.
6. THE CONTRACTOR SHALL WASTE ALL EXCESS EARTH ON SITE AS DIRECTED BY THE ENGINEER.
- 7 ALL SITE CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE COLUMBIA COUNTY LAND DEVELOPMENT REGULATIONS.
8. SITE CONTRACTOR SHALL COORDINATE ALL WORK WITH OTHER CONTRACTORS WITHIN PROJECT LIMITS.
9. ALL PROPOSED CONSTRUCTION SHALL CONFORM TO CURRENT FDOT DESIGN STANDARDS AND FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION
10. ALL STORM PIPES SHALL HAVE A MINIMUM COVER OF 9" UNLESS OTHERWISE SHOWN IN THESE PLANS. LIMEROCK BACKFILL SHALL BE USED IF PIPE UNDER PAVEMENT HAS LESS THAN 12" COVER.
- 11 ALL SWALES, DEPRESSION AREAS AND RETENTION PONDS SHALL BE INSPECTED MONTHLY FOR SINKHOLE OCCURRENCE. SHOULD A SINKHOLE OCCUR, THE AREA SHOULD BE REPAIRED AS SOON AS POSSIBLE. IF A SOLUTION PIPE SINKHOLE FORMS WITHIN THE STORM WATER SYSTEM, THE SINKHOLE SHALL BE REPAIRED BY BACKFILLING WITH A LOW PERMEABILITY MATERIAL. A 2-FOOT CAP THAT EXTENDS 2 FEET BEYOND THE PERIMETER OF THE SINKHOLE SHALL BE CONSTRUCTED WITH CLAYEY SOILS. THE CLAYEY SOIL SHOULD HAVE AT LEAST 20% PASSING THE NUMBER 200 SIEVE, COMPACTED TO 96% OF STANDARD PROCTOR, AND COMPACTED IN A WET CONDITION WITH MOISTURE 2%-4% ABOVE OPTIMUM. THE CLAY SOIL CAP SHALL BE RE-GRADED TO PREVENT PONDING AND RE-VEGETATED.
- 12 ALL NEW TRAFFIC SIGNAGE AND PAVEMENT MARKINGS SHALL CONFORM TO THE CURRENT MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES AND THE CURRENT FDOT DESIGN STANDARDS.
13. MAINTENANCE OF TRAFFIC SHALL BE IN ACCORDANCE WITH CURRENT FDOT DESIGN STANDARDS. THE CONTRACTOR SHALL MEET ON SITE WITH FDOT FOR APPROVAL OF A MAINTENANCE OF TRAFFIC PLAN PRIOR TO BEGINNING WORK WITHIN FDOT RIGHT OF WAY.
14. CONTRACTOR SHALL CONTACT COLUMBIA COUNTY BUILDING AND ZONING DEPARTMENT AND C.E.S. TO PERFORM THE FOLLOWING SITE INSPECTIONS
A) EROSION AND SEDIMENT CONTROL - ONCE IN PLACE PRIOR TO BEGINNING CONSTRUCTION
B) CLEARING AND GRUBBING - VISUAL INSPECTION
B) SITE COMPLIANCE - ONCE BUILDING FOUNDATION IS POURED AND IMPROVEMENTS ARE STAKED OUT
C) FINAL SITE COMPLIANCE - ONCE ALL IMPROVEMENTS ARE FINALIZED
15. CONTRACTOR SHALL CONTACT SRWMD AND ENGINEER OF RECORD 48 HOURS PRIOR TO BEGINNING CONSTRUCTION.
16. ANY UNSUITABLE MATERIAL (SPOTIC CLAY, OTHER IMPERMEABLE SOILS) SHALL BE REMOVED FROM THE SURFACE WATER MANAGEMENT FACILITIES. THIS UNSUITABLE MATERIAL SHALL NOT BE USED AS FILL MATERIAL IN CONSTRUCTION OF THE BERMS. CONTRACTOR SHALL MEET WITH ENGINEER ON SITE PRIOR TO CONSTRUCTION OF SURFACE WATER MANAGEMENT FACILITY

EROSION CONTROL NOTES

- 1 CONTRACTORS SHALL ADHERE TO THE STORM WATER POLLUTION PREVENTION PLAN, EROSION AND SEDIMENT CONTROL REGULATIONS AS SET BY SRWMD AND OTHER GOVERNING AUTHORITIES AND USE (AS A MINIMUM) THE MEASURES DESCRIBED IN THESE PLANS.
2. ALL EROSION CONTROL MEASURES SHALL BE IMPLEMENTED AND WATER MANAGEMENT FACILITIES SHALL BE INSTALLED PRIOR TO ANY OTHER CONSTRUCTION
3. CONTRACTOR IS RESPONSIBLE FOR IMPLEMENTING ADDITIONAL MEASURES AS REQUIRED FOR PROPER EROSION AND SEDIMENT CONTROL. THE CONTRACTOR SHOULD USE BMP'S IN THE FLORIDA EROSION AND SEDIMENT CONTROL INSPECTOR'S MANUAL TO IMPLEMENT A PLAN THAT WILL WORK AND MEET ACTUAL FIELD CONDITIONS.
4. SEDIMENT AND EROSION CONTROL MEASURES SHALL NOT BE REMOVED UNTIL ALL CONSTRUCTION IS COMPLETE AND UNTIL A PERMANENT GROUND COVER HAS BEEN ESTABLISHED
5. ALL OPEN DRAINAGE SWALES SHALL BE GRASSED IMMEDIATELY AS REQUIRED TO CONTROL EROSION.
6. SILT FENCES SHALL BE LOCATED ON SITE TO PREVENT SEDIMENT AND EROSION FROM LEAVING PROJECT LIMITS. SILT FENCE SHALL BE CLEANED OR REPLACED WHEN SILT BUILDS UP TO WITHIN ONE FOOT OF TOP OF SILT FENCE.
- 7 DURING CONSTRUCTION AND AFTER CONSTRUCTION IS COMPLETE, ALL STRUCTURES SHALL BE CLEANED OF ALL DEBRIS AND EXCESS SEDIMENT
8. ALL DISTURBED AREAS SHALL BE STABILIZED IMMEDIATELY TO PREVENT EROSION. SLOPES GREATER THAN 1V:4H SHALL BE STABILIZED WITH SOD. STAPLE SOD SHALL BE USED ON SLOPES GREATER THAN 1V:2H. ALL DISTURBED AREAS NOT SODDED SHALL BE SEEDED WITH A MIXTURE OF LONG-TERM VEGETATION AND QUICK-GROWING SHORT-TERM VEGETATION FOR THE FOLLOWING CONDITIONS. FOR THE MONTHS FROM SEPTEMBER THROUGH MARCH, THE MIX SHALL CONSIST OF 70 POUNDS PER ACRE OF LONG-TERM SEED AND 20 POUNDS PER ACRE OF WINTER RYE. FOR THE MONTHS OF APRIL THROUGH AUGUST, THE MIX SHALL CONSIST OF 70 POUNDS PER ACRE OF LONG-TERM SEED AND 20 POUNDS PER ACRE OF MILLET
9. ALL STABILIZATION PRACTICES SHALL BE INITIATED AS SOON AS PRACTICABLE IN AREAS OF THE JOB WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY STOPPED, BUT IN NO CASE SHALL THE DISTURBED AREA BE LEFT UNPROTECTED FOR MORE THAN THREE (3) DAYS.
10. LOADED HAUL TRUCKS SHALL BE COVERED WITH TARPS AND EXCESS DIRT REMOVED DAILY
- 11 THIS PROJECT SHALL COMPLY WITH ALL APPLICABLE WATER QUALITY STANDARDS.
12. QUALIFIED PERSONNEL SHALL INSPECT THE STOCKPILE AREAS, SILT FENCE, CONSTRUCTION ENTRANCE, AND ALL DISTURBED AREAS THAT HAVE NOT BEEN FINALLY STABILIZED, AT LEAST ONCE EVERY SEVEN (7) CALENDAR DAYS AND WITHIN 24 HOURS AFTER A STORM OF 0.5 INCHES OR GREATER. CORRECTIVE ACTIONS SHALL BE TAKEN IMMEDIATELY
- 13 CONTRACTOR IS RESPONSIBLE FOR THE CONSTRUCTION AND MAINTENANCE OF ALL EROSION AND SEDIMENT CONTROLS DURING PROPOSED CONSTRUCTION.
14. SHOULD THIS SITE REQUIRE SEVERAL LOADS OF MATERIAL BE TRUCKED IN OR AWAY, THE CONTRACTOR SHALL INSTALL A "SOIL TRACKING PREVENTION DEVICE" AS FOUND IN INDEX NO. 106, SHT 1 OF 1

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION



CERTIFICATE OF AUTHORIZATION
NO. 28022
P.O. BOX 970
LAKE CITY, FL 32056
PHONE: 386.764.4065

Brett A. Crews, P.E. 66592

DRAWN BY:

BC

APPROVED BY:

BC

**EMORY MEDICAL CORP
OFFICE BUILDING**

GENERAL NOTES

CES PROJECT NO.

2012-030

SHEET:

DET1

GENERAL

1. ALL EXISTING UTILITIES SHALL BE LOCATED PRIOR TO BEGINNING WORK. THIS INCLUDES VERIFYING LOCATION (HORIZONTAL AND VERTICAL) AT ANY CONNECTION POINT OF THE EXISTING UTILITY. THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY OF ANY DISCREPANCIES EXISTING BETWEEN THE CONSTRUCTION PLANS AND ACTUAL FIELD CONDITIONS. EXISTING UTILITIES SHOWN IN THESE PLANS ARE APPROXIMATE ONLY AND SHALL BE VERIFIED IN THE FIELD BY NON-DESTRUCTIVE METHODS.
2. CONTRACTOR SHALL REVIEW AND BECOME FAMILIAR WITH ALL REQUIRED UTILITY CONNECTIONS PRIOR TO BIDDING. CONTRACTOR SHALL PROVIDE ALL WORK AND MATERIALS REQUIRED TO COMPLETE CONNECTION TO THE EXISTING UTILITIES. THIS INCLUDES, BUT IS NOT LIMITED TO, MANHOLE CORING, WET TAPS, PAVEMENT REPAIRS AND DIRECTIONAL BORING.
3. CONTRACTOR SHALL CONTACT THE CITY OF LAKE CITY (386.397.2310) PRIOR TO BEGINNING WORK TO COORDINATE INSPECTION OF UTILITY CONNECTIONS.
4. EXISTING WATER SHOULD REMAIN IN SERVICE DURING CONSTRUCTION. THE CITY OF LAKE CITY SHALL BE NOTIFIED IN THE EVENT INTERRUPTIONS TO SERVICE ARE REQUIRED.
5. ALL NEW AND RELOCATED WATER MAIN PIPES, FITTINGS, APPURTENANCES AND PACKING AND JOINT MATERIALS SHALL CONFORM TO APPLICABLE AMERICAN WATER WORKS ASSOCIATION (AWWA) STANDARDS AND/OR MANUFACTURERS RECOMMENDATIONS.
6. SUFFICIENT VALVES SHALL BE PROVIDED IN NEW AND RELOCATED WATER MAINS TO MINIMIZE INCONVENIENCE AND SANITARY HAZARDS DURING REPAIRS.
7. AT HIGH POINTS WHERE AIR CAN ACCUMULATE IN NEW AND RELOCATED WATER MAINS, HYDRANTS OR AIR RELEASE VALVES SHALL BE PROVIDED TO REMOVE AIR.
8. AUTOMATIC AIR RELEASE VALVES ON NEW AND RELOCATED WATER MAINS SHALL NOT BE LOCATED WHERE FLOODING OF THE VALVE MANHOLE OR CHAMBER COULD OCCUR.
9. HYDRANT DRAINS, FLUSHING DEVICES, AIR RELEASE VALVES OR CHAMBERS, MANHOLES CONTAINING VALVES, BLOW-OFFS, METERS, OR OTHER APPURTENANCES PROVIDED IN CONNECTION WITH NEW AND RELOCATED WATER MAINS SHALL NOT BE CONNECTED DIRECTLY TO ANY SANITARY OR STORM SEWER.
10. STONES FOUND IN TRENCHES FOR NEW AND RELOCATED WATER AND SANITARY SEWER MAINS SHALL BE REMOVED TO A DEPTH OF AT LEAST SIX INCHES BELOW THE BOTTOM OF PIPE. CONTINUOUS AND UNIFORM BEDDING SHALL BE PROVIDED IN THESE TRENCHES. THIS BACKFILL MATERIAL SHALL BE TAMPED IN LAYERS AROUND PIPE TO A SUFFICIENT HEIGHT ABOVE PIPE TO ADEQUATELY SUPPORT AND PROTECT THE PIPE.
11. ALL TEES, BENDS, PLUGS, AND HYDRANTS IN NEW AND RELOCATED WATER MAINS SHALL BE PROVIDED WITH RESTRAINED JOINTS TO PREVENT MOVEMENT. MEGALUG MECHANICAL JOINT RESTRAINTS OR APPROVED ALTERNATIVE (NOT THRUST BLOCKS) SHALL BE USED WITH MANUFACTURERS RECOMMENDATIONS. ALL RESTRAINED JOINTS SHALL BE LEFT OPEN UNTIL INSPECTED BY THE TOWN.
12. A 24" MINIMUM COVER HEIGHT SHALL BE PROVIDED ABOVE ANY NEW OR RELOCATED WATER OR SANITARY SEWER MAIN CROSSING UNDER ANY SURFACE WATER. PROVIDE THE FOLLOWING FEATURES IF WIDTH OF SURFACE WATER IS GREATER THAN 16' AT THIS CROSSING:
A) FLEXIBLE WATER TIGHT JOINTS THROUGHOUT THE CROSSING
B) EASILY ACCESSIBLE VALVES LOCATED IN A MANHOLE
C) PERMANENT TAPS ON EACH SIDE OF VALVE WITHIN THE MANHOLE TO ALLOW FOR SAMPLING AND INSERTION OF A SMALL METER TO DETERMINE LEAKAGE
13. PROPER BACKFLOW PREVENTION SHALL BE PROVIDED IN ACCORDANCE WITH RULE 62-555.360 F.A.C. (CROSS-CONNECTION CONTROL FOR PUBLIC WATER SYSTEMS).
15. THIS PROJECT SHALL NOT INCLUDE ANY INTERCONNECTION BETWEEN PREVIOUSLY SEPARATE PUBLIC WATER SYSTEMS HAVING SEPARATE WATER SUPPLY SOURCES
16. ANY NEW AND RELOCATED WATER LATERALS SHALL CROSS ABOVE SANITARY SEWER PIPE OR PROVIDE PROTECTION TO PREVENT CONTAMINATION AS REQUIRED BY FDEP AND OTHER APPLICABLE STANDARDS.
17. CONTRACTOR SHALL PROVIDE AN AS-BUILT SURVEY FOR WATER AND SANITARY SEWER EXTENSIONS.
18. CONTRACTOR SHALL PROVIDE TRACER WIRE ABOVE ALL NEW AND RELOCATED WATER AND SANITARY SEWER MAINS.
19. LOCATOR DEVICES SHALL BE PROVIDED AT WATER AND SANITARY SEWER TAP LOCATIONS.
20. ALL UTILITY CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CITY OF LAKE CITY UTILITY STANDARDS UNLESS OTHERWISE APPROVED BY THE ENGINEER.

PIPES AND FITTINGS

- A. GENERAL. ALL PIPE AND FITTINGS FOR WATER AND WASTEWATER SERVICE SHALL BE CLEARLY MARKED WITH THE NAME OR TRADEMARK OF THE MANUFACTURER, THE BATCH NUMBER, THE LOCATION OF THE PLANT AND THE STRENGTH DESIGNATION, AS APPLICABLE.
- B. POLYVINYL CHLORIDE (PVC):
1. POTABLE WATER AND EFFLUENT REUSE PIPE SHALL BE MANUFACTURED FROM CLEAN VIRGIN TYPE I, GRADE I RIGID UNPLASTICIZED POLYVINYL CHLORIDE RESIN CONFORMING TO ASTM DESIGNATION D1784. POTABLE WATER AND REUSE PIPE SHALL HAVE THE NATIONAL SANITATION FOUNDATION (NSF) SEAL. SHALL CONFORM TO AWWA C-900, AND SHALL HAVE A DIMENSION RATIO (DR) OF NOT MORE THAN 18. PVC PIPE FOR WASTEWATER FORCE MAINS SHALL HAVE A DR OF NOT MORE THAN 25, OR LESS IF DESIGN CONSIDERATIONS REQUIRE. THE PVC PIPE SHALL HAVE INTEGRAL BELL PUSH ON TYPE JOINTS CONFORMING TO ASTM D3139. PIPE USED FOR REUSE MAINS SHALL BE PURPLE (PANTONE 522C), FOR WATER MAIN SHALL BE BLUE, AND FOR WASTEWATER SHALL BE GREEN IN COLOR.
2. CONNECTIONS FOR PIPE 2 INCHES IN DIAMETER AND LARGER SHALL BE RUBBER COMPRESSION RING TYPE. PIPE SHALL BE EXTRUDED WITH INTEGRAL THICKENED BELL WALLS WITHOUT INCREASE IN DR. RUBBER RING GASKETS SHALL CONSIST OF SYNTHETIC COMPOUNDS MEETING THE REQUIREMENTS OF ASTM DESIGNATION D1899, AND SUITABLE FOR THE DESIGNATED SERVICE. OTHER CONNECTIONS SHALL BE SOLVENT CEMENTED JOINTS.
3. GRAVITY WASTEWATER PVC PIPE AND FITTINGS SHALL BE MANUFACTURED FROM POLYVINYL CHLORIDE RESIN CONFORMING TO ASTM DESIGNATION D1784. PIPE AND FITTINGS OF THIS MATERIAL SHALL CONFORM TO ASTM DESIGNATION D3034 AND P879. *STANDARD SPECIFICATIONS FOR TYPE FPM POLYVINYL CHLORIDE SEWER PIPE AND FITTINGS.* ALL PIPE AND FITTINGS SHALL HAVE A STANDARD DIMENSION RATIO (SDR) OF NOT MORE THAN 35.
4. PVC PIPE FOR GRAVITY SEWERS SHALL BE SUPPLIED IN STANDARD LENGTHS NOT TO EXCEED 20 FEET, AND BE FURNISHED WITH INTEGRALLY FORMED BELL JOINTS.
5. ALL PVC PIPE AND ACCESSORIES LESS THAN 2 INCHES IN DIAMETER SHALL BE SCHEDULE 80 AND BE PROVIDED WITHOUT POLYVINYL CHLORIDE PIPE AND ACCESSORIES SHALL CONFORM TO ASTM SPECIFICATION D1785 AND PRODUCT STANDARD PS2170. ALL MATERIALS TO BE FURNISHED COMPLETE TO PERFORM THE WORK, INCLUDING SOLVENT CEMENT, ETC.
6. CONNECTIONS. CONNECTION OF PVC GRAVITY SEWER LINES TO MANHOLES SHALL BE MADE BY USING A PVC MANHOLE COUPLING ADAPTER CONNECTING PIECE MANUFACTURED FROM A 2 FOOT PIECE OF PVC PIPE WITH A WATER STOP OR RUBBER BOOT. THE CONNECTION SHALL PROVIDE FLEXIBILITY AND A WATERTIGHT CONNECTION AT THE STRUCTURE
- C. SERVICE PIPE:
1. WATER SERVICE PIPE: ALL POTABLE WATER SERVICE LINES SHALL BE 1-INCH, 1 1/2 INCHES OR 2 INCHES POLYETHYLENE TUBING CONFORMING TO AWWA C-900 AND C-901
2. WASTEWATER SERVICE LATERAL. ALL WASTEWATER SERVICE LATERALS SHALL BE PVC AND HAVE A MINIMUM DIAMETER OF 6 INCHES AND SHALL CONFORM TO ASTM D3034, SDR 35.
- D. PRESSURE PIPE RESTRAINTS:
1. PRESSURE PIPE FITTINGS SHALL BE RESTRAINED WITH RESTRAINT GLANDS AND DEVICES AS APPROVED BY THE TOWN. CONCRETE THRUST BLOCKS ARE NOT ACCEPTABLE FOR PIPE RESTRAINT UNLESS PRIOR APPROVED BY THE CITY FOR LIMITED APPLICATIONS.
2. THE MINIMUM NUMBER OF RESTRAINED JOINTS REQUIRED FOR RESISTING FORCES AT FITTINGS AND CHANGES IN DIRECTION OF PIPE SHALL BE DETERMINED FROM THE LENGTH OF RESTRAINED PIPE ON EACH SIDE OF FITTINGS AND CHANGES IN DIRECTION NECESSARY TO DEVELOP ADEQUATE RESISTING FRICTION WITH THE SOIL. THE REQUIRED LENGTHS OF RESTRAINED JOINT DUCTILE IRON PIPE SHALL BE DETERMINED BY THE ENGINEER.
- G. SPECIAL ITEMS.
1. EXPANSION JOINTS: PIPE EXPANSION JOINTS SHALL BE SUITABLE FOR THE APPLICABLE SERVICE WITH A MINIMUM 160 PSI WORKING PRESSURE.
2. FLANGED COUPLING ADAPTERS: UNITS SHALL BE COMPATIBLE WITH ANSI STANDARD B16.1, 125 LB. FLANGES
3. CAST IRON SLEEVES AND WALL PIPES: UNITS SHALL HAVE INTEGRAL ANNULAR RING WATERSTOPS, AND ALSO CONFORM TO OTHER REQUIREMENTS FOR CAST IRON FITTINGS SPECIFIED IN THIS SECTION. SLEEVES AND WALL PIPES TO HAVE LAYING LENGTH AND ENDS REQUIRED FOR PROPER INSTALLATION
4. TAPPING SADDLES: UNITS SHALL BE FABRICATED OF DUCTILE IRON AND SUITABLE FOR EITHER WET OR DRY INSTALLATION. THE SEALING GASKET SHALL BE THE "O-RING TYPE SUITABLE FOR THE APPLICABLE SERVICE. OUTLET FLANGE SHALL BE ANSI B16.1, 125 LB. STANDARD TIE STRAPS AND BOLTS SHALL BE A CORROSION RESISTANT ALLOY STEEL.

PIPES AND FITTINGS CONT.

5. TAPPING SLEEVES: UNITS SHALL BE OF THE MECHANICAL JOINT TYPE OR FABRICATED STEEL TYPE SLEEVES FOR PRESSURE CONNECTIONS 4 INCHES AND LARGER. ALL PRESSURE CONNECTIONS TO ASBESTOS CEMENT PIPE AND ALL "SIZE ON SIZE" TAP SHALL UTILIZED MECHANICAL JOINT SLEEVES.
- A. MECHANICAL JOINT SLEEVES: SLEEVES SHALL BE CAST OF GRAY-IRON OR DUCTILE IRON AND HAVE AN OUTLET FLANGE WITH THE DIMENSIONS OF THE CLASS 125 FLANGES AS SHOWN IN ANSI B16.1 PROPERLY RECESSED FOR TAPPING VALVE. GLANDS SHALL BE GRAY-IRON OR DUCTILE IRON. GASKETS SHALL BE VULCANIZED NATURAL OR SYNTHETIC RUBBER. BOLTS AND NUTS SHALL COMPLY WITH ANSI/AWWA C-111/A 21 11. SLEEVES SHALL BE CAPABLE OF WITHSTANDING A 200 PSI WORKING PRESSURE.
- B. STEEL TAPPING SLEEVE: SLEEVES SHALL BE FABRICATED OF MINIMUM 3/8-INCH CARBON STEEL MEETING ASTM A285, GRADE
- C. OUTLET FLANGE SHALL MEET AWWA C-207, CLASS D, ANSI 160 LB. DRILLING AND BE PROPERLY RECESSED FOR THE TAPPING VALVE. BOLTS AND NUTS SHALL BE HIGH STRENGTH LOW ALLOY STEEL TO ANSI/AWWA A21.11/C-111. GASKET SHALL BE VULCANIZED NATURAL OR SYNTHETIC RUBBER. SLEEVE SHALL HAVE MANUFACTURER APPLIED FUSION BONDED EPOXY COATING, MINIMUM 12-MIL THICKNESS.
6. SERVICE SADDLES. SADDLES FOR DUCTILE IRON PIPE SHALL BE DOUBLE STRAP ANCHORED BY A MINIMUM FOUR (4) BOLT PATTERN ON A DUCTILE IRON SADDLE BODY. SERVICE SADDLES FOR PVC PIPE SHALL HAVE A DOUBLE STRAP SIZED EXACTLY TO THE PIPE OUTSIDE DIAMETER. SEALING GASKETS SHALL BE SUITABLE FOR THE APPLICABLE SERVICE AND STRAPS SHALL BE CORROSION RESISTANT ALLOY STEEL. THE CITY MAY REQUIRE A STAINLESS STEEL STRAP AND FUSION EPOXY OR NYLON COATED DUCTILE IRON BODY WITH STAINLESS STEEL HARDWARE IN AREAS DESIGNATED AS CORROSIVE.
7. POLYETHYLENE ENCASEMENT: ENCASEMENT SHALL HAVE A MINIMUM THICKNESS OF 8-MILS AND COMPLY WITH THE APPLICABLE PROVISIONS OF ANSI/AWWA C-105/A21.5, "POLYETHYLENE ENCASEMENT FOR GRAY AND DUCTILE IRON PIPING FOR WATER AND OTHER LIQUIDS."

PIPE RESTRAINT NOTES

1. DUCTILE IRON (DI) FITTINGS TO BE RESTRAINED TO PVC (C900) PIPE WITH SERIES OF 2000PV MECHANICAL RESTRAINT GLANDS AS MANUFACTURED BY EBAA IRON, INC. OR APPROVED EQUAL. DI FITTINGS TO BE RESTRAINED TO DIP PER CURRENT DIPRA STANDARDS
2. WATER MAIN OR FORCE MAIN TO BE RESTRAINED EACH SIDE OF FITTINGS FOR LENGTHS AS NOTED IN TABLE BELOW. RESTRAINT SHALL BE ACCOMPLISHED WITH DUCTILE IRON RESTRAINT HARNESSSES FOR PVC CONFORMING TO ASTM A-538. RESTRAINT HARNESSSES TO BE SERIES 1600 AS MANUFACTURED BY EBAA IRON, INC. OR APPROVED EQUAL. RESTRAINT FOR DIP SHALL BE BY INTERNAL RESTRAINT GASKETS PER CURRENT DIPRA STANDARDS.
3. THE TABLE BELOW SHOWS TYPICAL NUMBERS, IN 20'-SECTIONS, OF PIPE TO BE RESTRAINED FOR THE FOLLOWING ASSUMPTIONS: (1) DEPTH OF COVER = 36" (2) TEST PRESSURE = 160 psi, (3) SAFETY FACTOR = 1.5, (4) LAYING CONDITIONS = PIPE EMBEDDED IN LOOSE CLEAN SAND AND COMPACTED TO TOP OF PIPE (APPROXIMATELY 90% STANDARD PROCTOR), (5) SILTY SANDS AND SAND SILT MIXTURE FOR BACKFILL MATERIAL.

MINIMUM NUMBER OF RESTRAINED JOINTS IN 20' STRAIGHT PIPE, EACH SIDE OF RESTRAINED FITTING.						
	PIPE SIZE					
	6"	8"	10"	12"	16"	20"
90° BEND	1	1	1	2	2	3
45° BEND	0	0	0	0	1	1
22-1/2° BEND	0	0	0	0	0	0
11-1/4° BEND	0	0	0	0	0	0
PLUG OR BRANCH	2	3	4	5	6	7

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

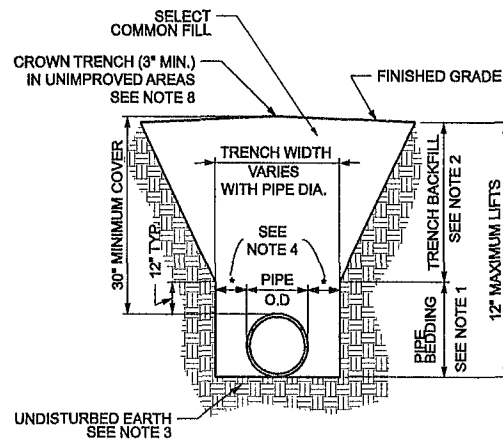
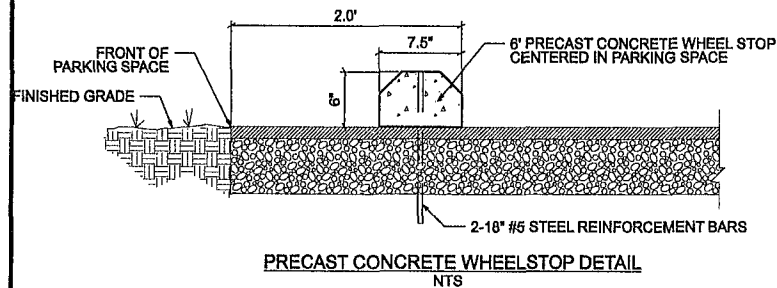


CERTIFICATE OF AUTHORIZATION
NO. 28022
P.O. BOX 970
LAKE CITY, FL 32056
PHONE: 386.754.4085

Brett A. Crews, P.E. 65592

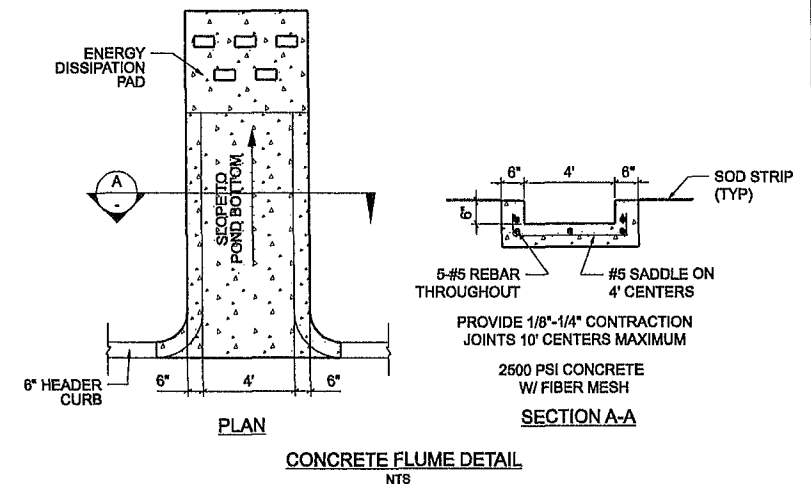
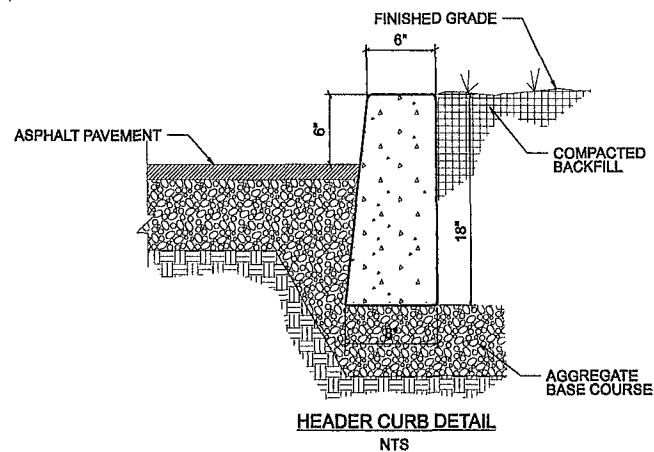
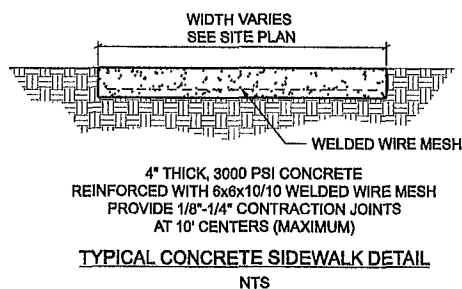
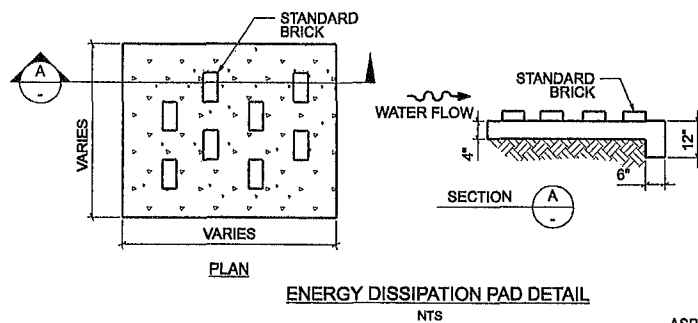
DRAWN BY: BC	EMORY MEDICAL CORP OFFICE BUILDING	CES PROJECT NO. 2012-030
APPROVED BY: BC		SHEET: DET2

UTILITY NOTES



NOTES

1. PIPE BEDDING: SELECT COMMON FILL COMPACTED TO 95% OF THE MAXIMUM DENSITY AS PER AASHTO T-180.
2. TRENCH BACKFILL: COMMON FILL COMPACTED TO 95% OF THE MAXIMUM DENSITY AS PER AASHTO T-180.
3. PIPE BEDDING UTILIZING SELECT COMMON FILL OR BEDDING ROCK WILL BE REQUIRED IF OVER-EXCAVATION OCCURS.
4. (*) 15" MAX. FOR PIPE DIAMETER LESS THAN 24", AND 24" MAX. FOR PIPE DIAMETER 24" AND LARGER.
5. WATER SHALL NOT BE PERMITTED IN THE TRENCH DURING CONSTRUCTION.
6. ALL PIPE TO BE INSTALLED WITH BELL FACING UPSTREAM TO THE DIRECTION OF THE FLOW.
7. PROVIDE TRENCH SLOPING AND BRACING AS REQUIRED FOR SAFETY.
8. FINAL RESTORATION IN IMPROVED AREAS SHALL BE IN COMPLIANCE WITH ALL APPLICABLE REGULATIONS OF GOVERNING AGENCIES. SURFACE RESTORATION WITHIN PAVED AREAS SHALL COMPLY WITH THE REQUIREMENTS OF THE ROAD CONSTRUCTION SPECIFICATIONS.



REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

CES
Crews Engineering Services, LLC

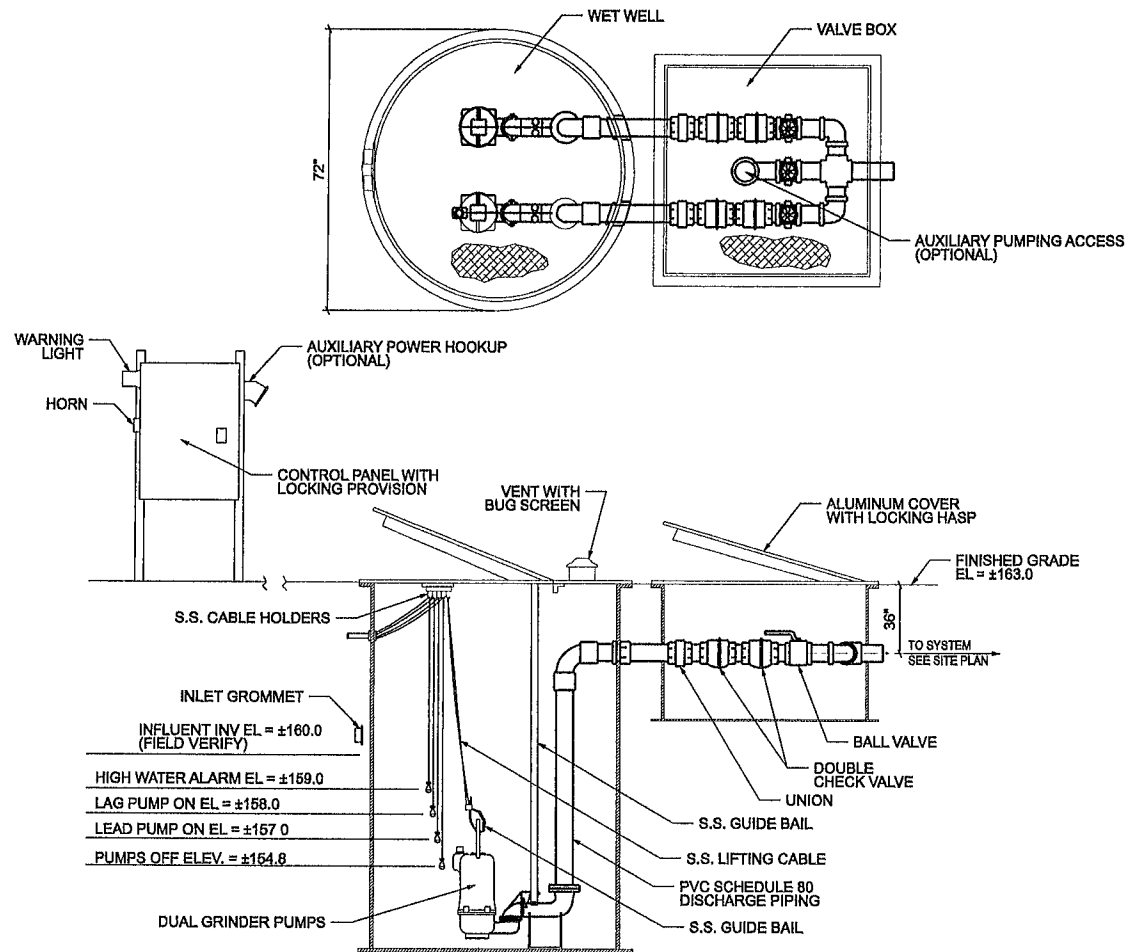
CERTIFICATE OF AUTHORIZATION
NO. 28022
P.O. BOX 970
LAKE CITY, FL 32056
PHONE: 386.754.4055

Brett A. Crews, P.E. 65592

DRAWN BY:
BC
APPROVED BY:
BC

**EMORY MEDICAL CORP
OFFICE BUILDING**
**MISCELLANEOUS NOTES
AND DETAILS**

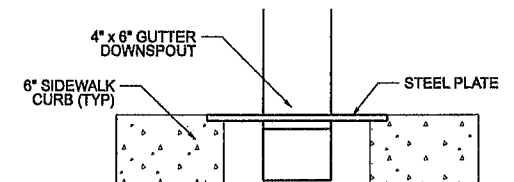
CES PROJECT NO.
2012-030
SHEET:
DET3



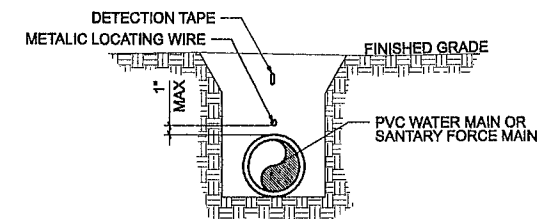
- NOTES:
- 1) LIFT STATION PUMP ASSEMBLY SHALL INCLUDE ALL ELECTRICAL CONTROLS, ALARMS AND TELEMETRY CONTROLS AS REQUIRED.
 - 2) PUMP SIZE SHALL BE PER MANUFACTURE'S RECOMMENDATIONS.
 - 3) SWITCH/ALARM ELEVATIONS ARE ESTIMATES ONLY AND SHALL BE INSTALLED PER PUMP MANUFACTURER'S RECOMMENDATION (RUN TIME = 10 MIN)
 - 4) MEASURES SHALL BE TAKEN TO PREVENT WET WELL FLOATATION AND GROUNDWATER INTRUSION
 - 5) SYSTEM SHALL BE APPROVED BY THE ENGINEER PRIOR TO INSTALLATION

PUMP STATION DATA		
	G.P.M	T.D.H
DEMAND	45	19.6

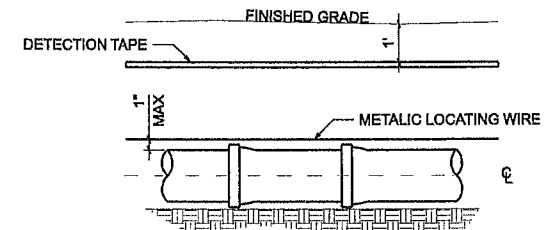
SANITARY LIFT STATION DETAIL
NTS



GUTTER DOWNSPOUT AT SIDEWALK DETAIL
NTS



SECTION



PROFILE

NOTES:

- 1) PVC PIPE SHALL REQUIRE INSULATED METALLIC LOCATING WIRE (14 GAUGE COPPER) CAPABLE OF DETECTION BY A CABLE LOCATOR AND SHALL BE BURIED DIRECTLY ABOVE THE CENTERLINE OF THE PIPE. LOCATING WIRE SHALL TERMINATE AT THE TOP OF EACH VALVE BOX AND BE CAPABLE OF EXTENDING 12" ABOVE TOP OF BOX IN SUCH A MANNER SO AS NOT TO INTERFERE WITH VALVE OPERATION. USE DUCT TAPE AS NECESSARY TO HOLD WIRE DIRECTLY ON THE TOP OF THE PIPE.
- 2) LOCATING TAPE SHALL BE INSTALLED 1 FOOT BELOW FINAL GRADE OVER THE CENTERLINE OF THE PIPE. THE TAPE INSTALLED 1 FOOT BELOW FINAL GRADE SHALL BE THE DETECTABLE TYPE. THE TAPE SHALL BE LAID CONTINUOUSLY WITHOUT GAPS BETWEEN ENDS OVER ALL INSTALLED PIPING. THE TAPE SHALL HAVE THE WORDS "CAUTION, WATER LINE BURIED BELOW" PRINTED CONTINUOUSLY ALONG LENGTH

PIPE LOCATING DETAIL
NTS

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

CES
Crews Engineering Services, LLC

CERTIFICATE OF AUTHORIZATION
NO. 28022
P.O. BOX 970
LAKE CITY, FL 32056
PHONE: 386.754.4085

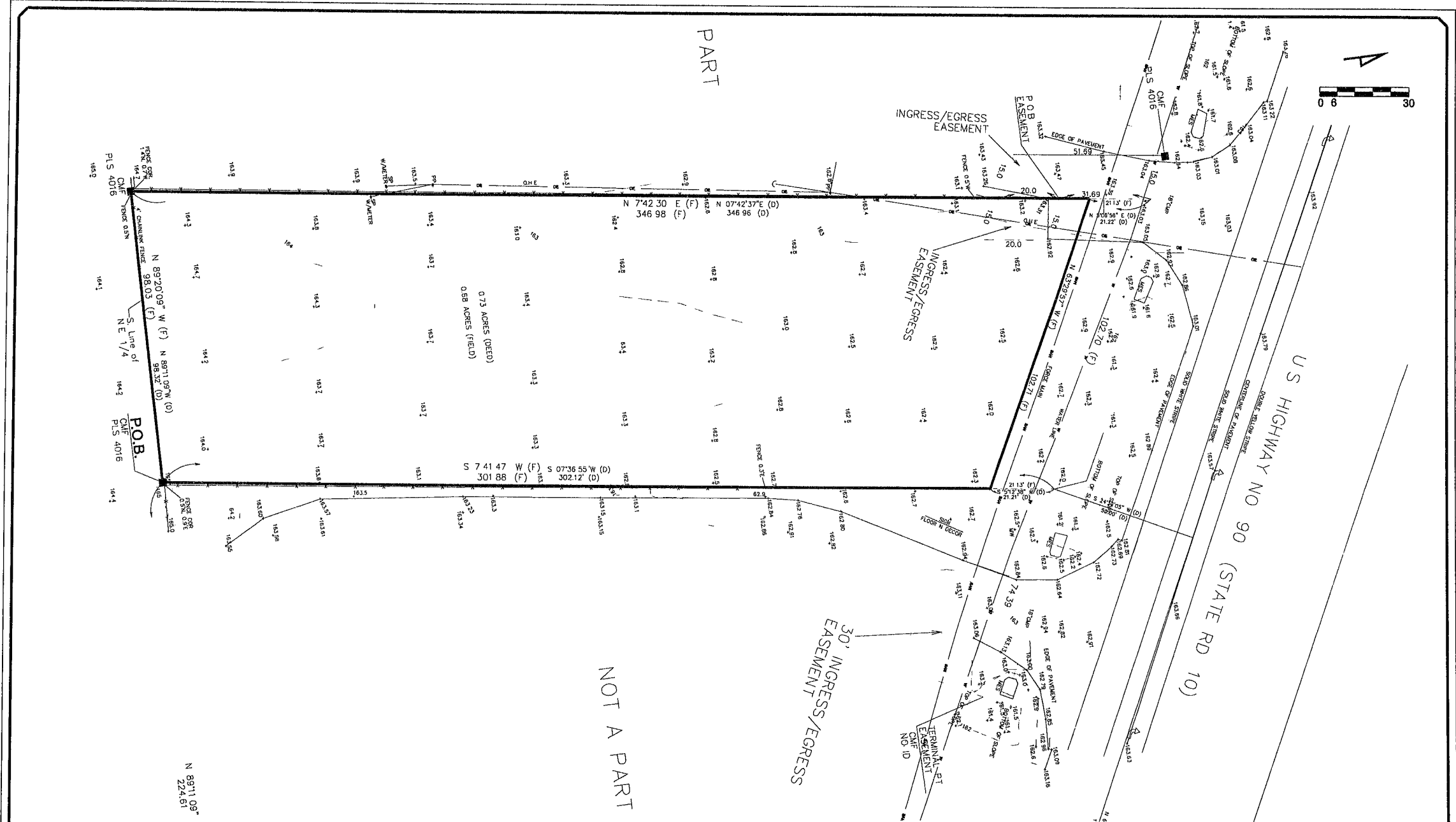
Brett A. Crews, P.E. 65592

DRAWN BY:
BC
APPROVED BY:
BC

**EMORY MEDICAL CORP
OFFICE BUILDING**

**MISCELLANEOUS NOTES
AND DETAILS**

CES PROJECT NO.
2012-030
SHEET
DET4



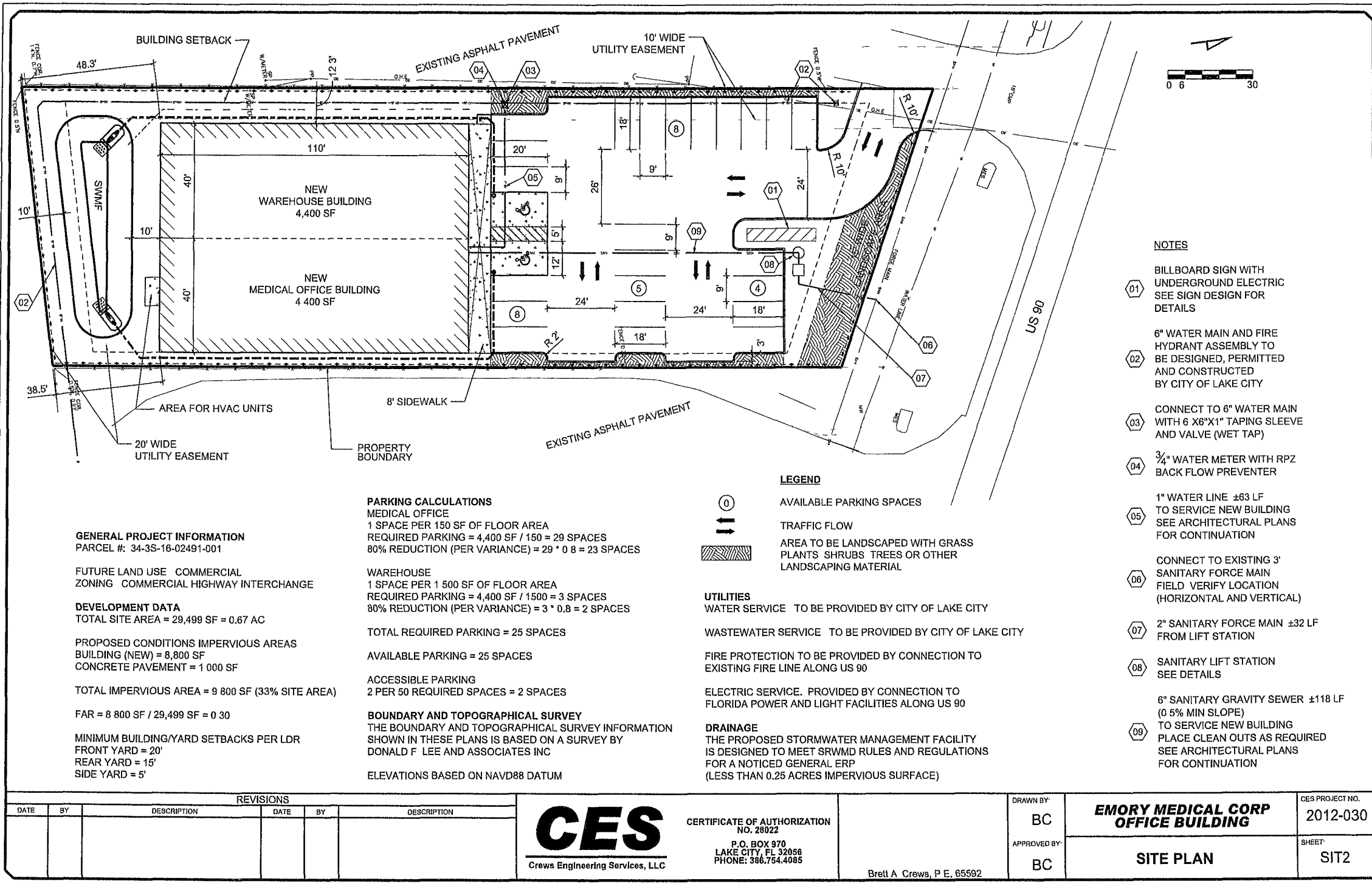
REVISIONS						DRAWN BY: BC	APPROVED BY: BC	EMORY MEDICAL CORP OFFICE BUILDING	EXISTING CONDITIONS	CES PROJECT NO. 2012-030
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION					SHEET: SIT1

CES

Crews Engineering Services, LLC

CERTIFICATE OF AUTHORIZATION
NO. 28022
P.O. BOX 970
LAKE CITY, FL 32056
PHONE: 386.754.4065

Brett A. Crews, P.E. 65592



GENERAL PROJECT INFORMATION

PARCEL #: 34-3S-16-02491-001

FUTURE LAND USE COMMERCIAL
ZONING COMMERCIAL HIGHWAY INTERCHANGE

DEVELOPMENT DATA

TOTAL SITE AREA = 29,499 SF = 0.67 AC

PROPOSED CONDITIONS IMPERVIOUS AREAS
BUILDING (NEW) = 8,800 SF
CONCRETE PAVEMENT = 1,000 SF

TOTAL IMPERVIOUS AREA = 9,800 SF (33% SITE AREA)

FAR = 8,800 SF / 29,499 SF = 0.30

MINIMUM BUILDING/YARD SETBACKS PER LDR
FRONT YARD = 20'
REAR YARD = 15'
SIDE YARD = 5'

PARKING CALCULATIONS
MEDICAL OFFICE
1 SPACE PER 150 SF OF FLOOR AREA
REQUIRED PARKING = 4,400 SF / 150 = 29 SPACES
80% REDUCTION (PER VARIANCE) = 29 * 0.8 = 23 SPACES

WAREHOUSE
1 SPACE PER 1,500 SF OF FLOOR AREA
REQUIRED PARKING = 4,400 SF / 1,500 = 3 SPACES
80% REDUCTION (PER VARIANCE) = 3 * 0.8 = 2 SPACES

TOTAL REQUIRED PARKING = 25 SPACES

AVAILABLE PARKING = 25 SPACES

ACCESSIBLE PARKING
2 PER 50 REQUIRED SPACES = 2 SPACES

BOUNDARY AND TOPOGRAPHICAL SURVEY
THE BOUNDARY AND TOPOGRAPHICAL SURVEY INFORMATION
SHOWN IN THESE PLANS IS BASED ON A SURVEY BY
DONALD F. LEE AND ASSOCIATES INC

ELEVATIONS BASED ON NAVD88 DATUM

LEGEND

- 0 AVAILABLE PARKING SPACES
- TRAFFIC FLOW
- AREA TO BE LANDSCAPED WITH GRASS, PLANTS, SHRUBS, TREES OR OTHER LANDSCAPING MATERIAL

UTILITIES

WATER SERVICE TO BE PROVIDED BY CITY OF LAKE CITY

WASTEWATER SERVICE TO BE PROVIDED BY CITY OF LAKE CITY

FIRE PROTECTION TO BE PROVIDED BY CONNECTION TO EXISTING FIRE LINE ALONG US 90

ELECTRIC SERVICE. PROVIDED BY CONNECTION TO FLORIDA POWER AND LIGHT FACILITIES ALONG US 90

DRAINAGE
THE PROPOSED STORMWATER MANAGEMENT FACILITY IS DESIGNED TO MEET SRWMD RULES AND REGULATIONS FOR A NOTICED GENERAL ERP (LESS THAN 0.25 ACRES IMPERVIOUS SURFACE)

NOTES

- 01 BILLBOARD SIGN WITH UNDERGROUND ELECTRIC. SEE SIGN DESIGN FOR DETAILS
- 02 6" WATER MAIN AND FIRE HYDRANT ASSEMBLY TO BE DESIGNED, PERMITTED AND CONSTRUCTED BY CITY OF LAKE CITY
- 03 CONNECT TO 6" WATER MAIN WITH 6 X 6" X 1" TAPING SLEEVE AND VALVE (WET TAP)
- 04 3/4" WATER METER WITH RPZ BACKFLOW PREVENTER
- 05 1" WATER LINE ±63 LF TO SERVICE NEW BUILDING. SEE ARCHITECTURAL PLANS FOR CONTINUATION
- 06 CONNECT TO EXISTING 3" SANITARY FORCE MAIN. FIELD VERIFY LOCATION (HORIZONTAL AND VERTICAL)
- 07 2" SANITARY FORCE MAIN ±32 LF FROM LIFT STATION
- 08 SANITARY LIFT STATION. SEE DETAILS
- 09 6" SANITARY GRAVITY SEWER ±118 LF (0.5% MIN SLOPE) TO SERVICE NEW BUILDING. PLACE CLEAN OUTS AS REQUIRED. SEE ARCHITECTURAL PLANS FOR CONTINUATION

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

CES
Crews Engineering Services, LLC

CERTIFICATE OF AUTHORIZATION
NO. 28022
P.O. BOX 970
LAKE CITY, FL 32056
PHONE: 386.754.4085

Brett A. Crews, P.E. 65592

DRAWN BY:
BC

APPROVED BY:
BC

**EMORY MEDICAL CORP
OFFICE BUILDING**

SITE PLAN

CES PROJECT NO.
2012-030

SHEET:
SIT2

