Appendix E

Development Plan

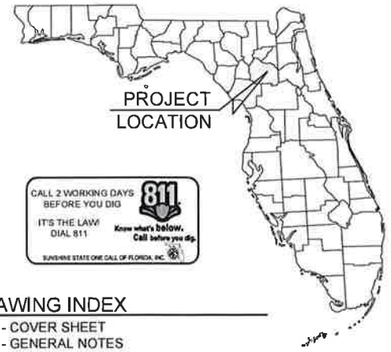
PALM GARDEN OF GAINESVILLE

SITE PLAN FOR FLORIDA CONVALESCENT CENTERS, INC.

CITY OF GAINESVILLE, FLORIDA

SECTION 04, TOWNSHIP 10 SOUTH, RANGE 19 EAST

APRIL 2016



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IT'S THE LAW! DIAL 811
811 Know what's below. Call before you dig.
SUNSHINE STATE ONE CALL OF FLORIDA, INC.

GENERAL NOTES

LAND USE DEVELOPMENT DATA

PARCEL ID NUMBER: 06855-002-017

PRESENT ZONING: COMMERCIAL (OF)

LAND USE: OFFICE (O)

PROJECT DESCRIPTION: 30 BED ADDITION TO AN EXISTING SKILLED NURSING FACILITY.
EXISTING BEDS: 62
PROPOSED BEDS: 30

WATER
POTABLE WATER WILL BE PROVIDED BY GAINESVILLE REGIONAL UTILITIES.

SEWER
WASTEWATER WILL BE PROVIDED BY GAINESVILLE REGIONAL UTILITIES.

REFUSE COLLECTION
EXISTING ON-SITE DUMPTERS.

FEMA DESIGNATION
THE REAL PROPERTY SHOWN HEREON LIES WITHIN ZONES "X" (SHADED), "X" (UNSHADED) AND "AE" AS DESIGNATED ON THE FLOOD INSURANCE RATE MAP NUMBERS 12001C0293D & 12001C0294D; COMMUNITY NUMBER: 125107; PANELS: 0293D & 0294D; EFFECTIVE DATE: 06/16/06. SAID MAP DESCRIBES ZONE "X" (SHADED) AS BEING "AREAS OF 0.2% ANNUAL CHANCE FLOOD; AREAS OF 1% ANNUAL CHANCE FLOOD WITH AVERAGE DEPTHS OF LESS THAN 1 FOOT OR WITH DRAINAGE AREAS LESS THAN 1 SQUARE MILE; AND AREAS PROTECTED BY LEVEES FROM 1% ANNUAL CHANCE FLOOD.", ZONE "X" (UNSHADED) AS BEING "AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN." AND ZONE "AE" AS BEING "SPECIAL FLOOD HAZARD AREAS (SFHAs) SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD, BASE FLOOD ELEVATIONS DETERMINED."

ROADWAYS, DRAINAGE, AND COMMON AREAS
ALL ROADWAYS, DRAINAGE AND COMMON AREAS SHALL BE PRIVATELY OWNED AND MAINTAINED.

EASEMENTS
ALL KNOWN EASEMENTS ARE DESIGNATED ON THE PLANS.

TREE LOCATION
TREE LOCATIONS ARE NOTED ON THE PLANS.

LOCAL BENCHMARK
BEARINGS AS SHOWN HEREON WERE PROJECTED FROM A BEARING OF N 00°04'44" W THE EAST BOUNDARY LINE OF THE PROPERTY SHOWN HEREON.

VERTICAL DATUM
ELEVATIONS SHOWN HEREON WERE BASED ON AN ELEVATION OF 124.54 FEET (NAVD 1988 DATUM) ON FLORIDA DEPARTMENT OF TRANSPORTATION BENCHMARK STATION 175 73 815. LOCATION AND ELEVATION ARE PER NATIONAL GEODETIC SURVEY DATA SHEET FOR PID AR0381.

LOCAL BENCHMARK
BEARINGS AS SHOWN HEREON WERE PROJECTED FROM A BEARING OF N 00°04'44" W THE EAST BOUNDARY LINE OF THE PROPERTY SHOWN HEREON.

SIGNAGE
SIGNAGE AND MARKINGS, WITH THE EXCEPTION OF SIGNS DIRECTING AND GUIDING TRAFFIC AND PARKING WILL BE PERMITTED SEPARATELY FROM THE DEVELOPMENT PLAN.

ADDITIONAL NOTES

1. THE SITE IS NOT IN THE HISTORICAL PRESERVATION DISTRICT.
2. THE SITE IS NOT EFFECTED BY WETLAND REGULATIONS.
3. THE SITE IS NOT LOCATED IN A NATURAL PARK OR GREENWAY DISTRICT.
4. THE SITE IS LOCATED IN A GATEWAY DISTRICT.
5. THE SITE IS NOT LOCATED WITHIN THE WELLFIELDS PROTECTION DISTRICT.
6. THE SITE IS LOCATED WITHIN THE CENTRAL CORRIDORS OVERLAY DISTRICT. ANY EXISTING NON-CONFORMING USES OF THE SITE MAY CONTINUE AS PROVIDED IN THE CITY OF GAINESVILLE LDC SECTION 30-23 AND SECTION 30-346. ALL PROPOSED DEVELOPMENT COMPLIES WITH THE CENTRAL CORRIDORS OVERLAY DISTRICT STANDARDS.
7. THE DEVELOPMENT SHALL COMPLY WITH THE FLORIDA FIRE PREVENTION CODE. GAINESVILLE FIRE PROTECTION CODE SECTION 10-2(a) & (b).
8. FIRE HYDRANTS AND STABILIZED SURFACES SHALL BE IN SERVICE PRIOR TO THE ACCUMULATION OF COMBUSTIBLES ON SITE. GAINESVILLE FIRE PREVENTION & PROTECTION CODE SECTION 10-9 (NFPA 1-16.4.3).
9. THIS DEVELOPMENT IS LOCATED IN ZONE "B" OF THE TRANSPORTATION MOBILITY PROGRAM AREA AND MUST MEET ALL RELEVANT TRANSPORTATION MOBILITY ELEMENT POLICY 10.1.4 AND 10.1.6 CRITERIA.
10. IN-BUILDING PUBLIC SAFETY RADIO ENHANCEMENT SYSTEMS SHALL BE PROVIDED IN ALL BUILDINGS WHERE MINIMUM RADIO SIGNAL STRENGTH FOR FIRE DEPARTMENT COMMUNICATIONS IS NOT ACHIEVED AT A LEVEL DETERMINED BY THE AHJ. IT IS HIGHLY RECOMMENDED THAT DEVELOPERS EVALUATE AND ADDRESS THE POTENTIAL NEED FOR I.B.P.S.R.E.S. IN THE EARLY STAGES OR PROJECT PLANNING. FOR ADDITIONAL SPECIFIC REQUIREMENTS PERTAINING TO SIGNAL STRENGTH, COVERAGE, MAINTENANCE AND TESTING REFER TO NFPA 72-14.4.12 AND 24.5.2, GAINESVILLE FIRE PREVENTION & PROTECTION CODE SECTION 10-9 (NFPA 1-11.10).
11. THE OWNER OR THE OWNER'S AUTHORIZED AGENT SHALL DEVELOP A FIRE SAFETY PROGRAM TO ADDRESS ALL ESSENTIAL FIRE AND LIFE SAFETY REQUIREMENTS FOR THE DURATION OF DEMOLITION, ALTERATION AND CONSTRUCTION. AS SPECIFIED IN THE FLORIDA FIRE PREVENTION CODE, INCLUDING NFPA 241, THE FIRE SAFETY PROGRAM SHALL INCLUDE AN EMERGENCY RESPONSE PLAN, AS WELL AS IDENTIFYING FIRE PREVENTION PRECAUTIONS, SITE AND BUILDING EMERGENCY ACCESS ROUTES, TEMPORARY AND PERMANENT WATER SUPPLIES, BUILDING EGRESS ROUTES, GOOD HOUSEKEEPING PRACTICES, AND FIRE PROTECTION SYSTEM INSTALLATION AND MAINTENANCE. GAINESVILLE FIRE PREVENTION & PROTECTION CODE SECTION 10-9 (NFPA 1-16).
12. THE DEVELOPMENT IS LOCATED WITHIN ZONE B OF THE TRANSPORTATION MOBILITY PROGRAM AREA AND WILL SATISFY THE TWO TRANSPORTATION ELEMENT POLICY ZONE B 10.1.6 CRITERIA BY PAYMENT TO THE PUBLIC WORKS DEPARTMENT PRIOR TO CONSTRUCTION.
13. THE DEVELOPMENT WILL COMPLY WITH THE CITY'S GENERAL PERFORMANCE STANDARDS IN SECTION 30-345.

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AGENCY CONTACT LISTING

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COX CABLE - ALACHUA
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PENSACOLA, FL 32514
LARRY TAYLOR
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DINO FARRUGGIO
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PROJECT OWNER AND CONSULTANTS

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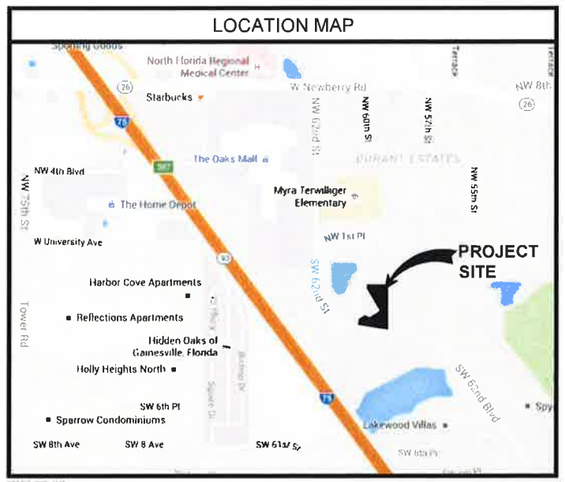
SARASOTA, FL 34237
ROBERT GREENE
(941) 552-9411

CIVIL ENGINEERING CONSULTANT:
KIMLEY-HORN AND ASSOCIATES, INC.
1823 SE FORT KING STREET, SUITE 200
OCALA, FLORIDA 34471
(352) 438-3000

SURVEYOR:
EDA ENGINEERS-SURVEYORS-PLANNERS, INC.
2404 NW 23RD STREET
GAINESVILLE, FLORIDA 32605
(352) 373-35401

LOCATION MAP



LEGAL DESCRIPTION

A PORTION OF SECTION 4, TOWNSHIP 10 SOUTH, RANGE 19 EAST ALACHUA COUNTY, FLORIDA BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE NORTHEAST CORNER OF SAID SECTION 4, AND RUN THENCE SOUTH 00 DEGREES 04 MINUTES 44 SECONDS EAST, ALONG THE EAST BOUNDARY OF SAID SECTION 4, A DISTANCE OF 3000.63 FEET TO THE POINT OF BEGINNING; THENCE NORTH 89 DEGREES 57 MINUTES 20 SECONDS WEST, 412.89 FEET; THENCE SOUTH 07 DEGREES 53 MINUTES 02 SECONDS WEST, 249.96 FEET; THENCE NORTH 85 DEGREES 46 MINUTES 08 SECONDS WEST, 330.78 FEET; THENCE NORTH 40 DEGREES 12 MINUTES 28 SECONDS WEST, 184.80 FEET; THENCE NORTH 00 DEGREES 13 MINUTES 16 SECONDS WEST, 361.56 FEET; THENCE SOUTH 89 DEGREES 58 MINUTES 55 SECONDS WEST, 63.95 FEET TO A POINT ON THE EASTERLY RIGHT OF WAY LINE OF SOUTHWEST 62ND STREET (100 FOOT RIGHT OF WAY); THENCE SOUTH 00 DEGREES 02 MINUTES 06 SECONDS EAST, ALONG SAID EASTERLY RIGHT OF WAY LINE, 84.21 FEET TO THE BEGINNING OF A CURVE CONCAVE NORTHEASTERLY HAVING A RADIUS OF 700.00 FEET; THENCE SOUTHEASTERLY ALONG AND WITH THE ARC OF SAID CURVE AND ALONG SAID RIGHT OF WAY LINE THROUGH A CENTRAL ANGLE OF 81 DEGREES 00 MINUTES 00 SECONDS, AN ARC DISTANCE OF 989.60 FEET TO THE END OF SAID CURVE; SAID ARC BEING SUBTENDED BY A CHORD HAVING A BEARING AND DISTANCE OF SOUTH 40 DEGREES 32 MINUTES 08 SECONDS EAST, 909.23 FEET; THENCE SOUTH 81 DEGREES 02 MINUTES 06 SECONDS EAST, ALONG SAID RIGHT OF WAY LINE, 376.08 FEET TO A POINT ON SAID EAST BOUNDARY; THENCE NORTH 00 DEGREES 04 MINUTES 44 SECONDS WEST ALONG SAID EAST BOUNDARY 554.04 FEET TO THE POINT OF BEGINNING.

DRAWING INDEX

C001 - COVER SHEET
C002 - GENERAL NOTES
C003 - EXISTING CONDITIONS DRAINAGE MAP
C004 - PROPOSED CONDITIONS DRAINAGE MAP
C005 - SITE PLAN
C006 - SITE PLAN
C007 - PAVING GRADING AND DRAINAGE PLAN
C008 - PAVING GRADING AND DRAINAGE PLAN
C009 - UTILITY PLAN
C010 - DEMOLITION PLAN
C011 - CIVIL DETAILS
C012 - EROSION CONTROL PLAN
C013 - EROSION CONTROL NOTES
C014 - EROSION CONTROL DETAILS

TM-100 - OVERALL TREE MITIGATION PLAN
TM-101 - TREE MITIGATION PLAN
TM-150 - TREE MITIGATION NOTES AND DETAILS

LS-200 - OVERALL LANDSCAPE PLAN
LS-201 - LANDSCAPE PLAN
LS-250 - LANDSCAPE DETAILS
LS-251 - LANDSCAPE NOTES

Table 1: Buildout Trip Generation

Land Use	Intensity	Daily Trips	AM Peak Hour of Adjacent Street			PM Peak Hour of Adjacent Street		
			Total	In	Out	Total	In	Out
Existing Development								
Assisted Living Facility	62 beds	345	9	6	3	34	6	8
	Subtotal	345	9	6	3	34	6	8
EXISTING NET NEW EXTERNAL TRIPS →		185	9	6	3	14	6	8
Proposed Development								
Assisted Living Facility	92 beds	245	13	8	5	20	9	11
	Subtotal	245	13	8	5	20	9	11
PROPOSED NET NEW EXTERNAL TRIPS →		245	13	8	5	20	9	11
NET INCREASE IN EXTERNAL TRIPS (PROPOSED MINUS EXISTNG)		80	4	2	2	6	3	3
NET INCREASE IN EXTERNAL TRIPS (PROPOSED MINUS EXISITNG) AT 25% REDUCTION PER TMPA 10.2.5		60						

Notes:
1. Trip Generation was calculated using the following data from ITE's Trip Generation, 9th Edition:
2. The project site is within a 1/4 mile of the Oaks Mall, an existing transit hub. Per 10.2.5, projects within the TMPA that construct net new average daily trip generation by 25% if they are within 1/4 mile of an existing transit hub.

Assisted Living Facility (ITE 254)
Daily
AM Peak Hour of Adjacent Street
PM Peak Hour of Adjacent Street

STORMWATER DATA

TOTAL IMPERVIOUS AREA	5.21 AC
TOTAL SEMI-IMPERVIOUS AREA	0.00 AC
DRA-01	
LOWEST DISCHARGE ELEVATION	82.0 AC
RETENTION VOLUME AT LOWEST DISCHARGE ELEVATION	2.13 AC-FT
RETENTION AREA AT LOWEST DISCHARGE ELEVATION	0.52 AC

PARKING DATA

HOSPITALS, CONVALESCENT AND NURSING HOMES AND PERSONAL CARE FACILITIES	REQUIRED	EXISTING
VEHICLE	1 PER 3 BEDS, OR 92/3 = 31 SPACES	120 SPACES / 5 ACCESSIBLE
BICYCLE	5% OF REQUIRED VEHICLE PARKING OR 31 x 5% = 2 SPACES	6 SPACES
MOTORCYCLE	1 SPACE PER 40 VEHICLES OR 1 SPACE	2 SPACES

SITE DATA

	ALLOWED	PROVIDED
MINIMUM YARD SETBACK		
FRONT	25 FT	257± FT
SIDE	25 FT	36± FT
REAR	25 FT	33± FT
MAXIMUM BUILDING HEIGHT	NONE	28± FT
NUMBER OF BUILDING STORIES	N/A	1
REQUIRED VEHICULAR BUFFER	SEE ATTACHED LANDSCAPE PLANS	

LOT COVERAGE DATA

	EXISTING	PROPOSED
IMPERVIOUS BUILDING AREA	46,266 SF	63,549 SF
IMPERVIOUS PAVEMENT AREA	137,850 SF	163,350 SF
PERVIOUS OPEN SPACE	121,876 SF	72,892 SF
TOTAL PROJECT AREA	7.02 AC (100%)	7.02 AC (100%)

NO	REVISIONS	DATE	BY
1	PERMIT SET - NOT FOR CONSTRUCTION	03-01-16	CPM

Kimley»Horn

1823 SE FORT KING STREET, SUITE 200, OCALA, FL 34471
PHONE: 352-438-3000
WWW.KIMLEY-HORN.COM CA 00000695

LICENSED PROFESSIONAL
RICHARD V. BUSCHE, PE
FLORIDA LICENSE NUMBER
58566
DATE:

KHA PROJECT 142350001
DATE APRIL 2016
SCALE AS SHOWN
DESIGNED BY KHA
DRAWN BY CPM
CHECKED BY RVB

COVER SHEET

PALM GARDEN OF GAINESVILLE
PREPARED FOR
FLORIDA CONVALESCENT CENTERS, INC.
CITY OF GAINESVILLE FLORIDA

SHEET NUMBER
C001

DB-16-37 SPA
Palm Garden of Gainesville
227 SW 62nd Blvd

GENERAL NOTES:

1. ALL WORK AND MATERIALS SHALL BE IN ACCORDANCE WITH ALL RELATIVE CITY OF GAINESVILLE LAND DEVELOPMENT CODES STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (LATEST FDOT EDITION), AND FDEP REGULATIONS, EXCEPT AS MODIFIED HEREIN.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND INSURANCE REQUIRED FOR THE WORK.
3. CONTRACTOR IS RESPONSIBLE FOR SCHEDULING A PRE-CONSTRUCTION INSPECTION OF THE SITE PRIOR TO THE BEGINNING OF THE WORK. CONTRACTOR SHALL INFORM THE OWNER, ENGINEER OF RECORD, UTILITY AUTHORITY AND INTERESTED COUNTY AGENCIES AT LEAST 48 HOURS PRIOR TO THE SCHEDULED INSPECTION.
4. THE LOCATION OF UTILITIES SHOWN ON THE DRAWINGS ARE FROM THE SURVEY PROVIDED BY EDA ENGINEERS-SURVEYORS-PLANNERS, INC. ON NOVEMBER 02, 2015. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONFIRM, IN THE FIELD, THE LOCATION AND ELEVATION OF ALL UTILITIES PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. SHOULD CONDITIONS VARY FROM THOSE SHOWN ON THE PLANS, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER OF RECORD PRIOR TO CONTINUING CONSTRUCTION.
5. CONTRACTOR SHALL LOCATE, VERIFY AND IDENTIFY ALL EXISTING UNDERGROUND UTILITIES SHOWN, OR NOT SHOWN, ON THE PLANS PRIOR TO ANY EXCAVATING ACTIVITIES.
6. CONTRACTOR SHALL TAKE ALL MEASURES NECESSARY TO PROTECT EXISTING AND NEWLY CONSTRUCTED UTILITIES DURING THE CONSTRUCTION. SHOULD ANY UTILITY LINE OR COMPONENT BECOME DAMAGED OR REQUIRE RELOCATION, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE RESPONSIBLE UTILITY COMPANY, ENGINEER OF RECORD, AND THE RESPONSIBLE CITY OF GAINESVILLE REPRESENTATIVE.
7. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO EXISTING UTILITIES CAUSED BY HIS OPERATIONS.
8. CONTRACTOR SHALL COORDINATE ALL CONSTRUCTION WITH OTHER WORK WHICH MAY BE ONGOING ADJACENT TO, OR AFFECTING, THIS CONSTRUCTION. CONTRACTOR SHALL COOPERATE WITH OTHER CONTRACTORS AND ALL AFFECTED UTILITY COMPANIES.
9. CONTRACTOR SHALL NOTIFY ALL APPLICABLE UTILITY COMPANIES AND THE ENGINEER OF RECORD 48 HOURS PRIOR TO THE INITIATING OF ANY EXCAVATION ACTIVITIES, OR AS SPECIFIED BY THE UTILITY COMPANY AND ANY PERMITS REQUIRED FOR THE WORK.
10. CONTRACTOR SHALL PROTECT EXISTING UTILITIES, SURVEY MARKERS, MONUMENTS, ETC. DURING CONSTRUCTION. CONTRACTOR SHALL RESTORE/REPLACE ANY DAMAGE DURING CONSTRUCTION ACTIVITIES.
11. CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL/DISPOSAL OF ANY UNSUITABLE MATERIAL FROM THE CONSTRUCTION OPERATION, FURNISHING AND COMPACTING SUITABLE REPLACEMENT BACKFILL MATERIAL. DISPOSAL OF UNSUITABLE MATERIAL SHALL BE IN ACCORDANCE WITH ALL FEDERAL, STATE AND LOCAL REGULATIONS.
12. CONTRACTOR SHALL PROVIDE AND MAINTAIN ADEQUATE EROSION AND TURBIDITY CONTROLS IN ACCORDANCE WITH FDEP DURING AND FOLLOWING CONSTRUCTION, UNTIL ALL DISTURBED AREAS HAVE BEEN STABILIZED TO AVOID ADVERSE ENVIRONMENTAL IMPACTS TO OFF-SITE PROPERTY AND DRAINAGE SYSTEMS.
13. CONSTRUCTION WARNING SIGNS SHALL BE MOUNTED AND ERECTED BEFORE CONSTRUCTION CAN COMMENCE. THESE, AND ALL TRAFFIC CONTROL DEVICES, SHALL FOLLOW THE STANDARDS SET FORTH BY THE MANUAL OF UNIFORM TRAFFIC DEVICES (MUTCD) AND FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) STANDARD INDEX.
14. CONTRACTOR SHALL BE RESPONSIBLE FOR CLEARLY IDENTIFYING THE AREA OF CONSTRUCTION AND SAFELY ROUTING ALL VEHICULAR AND PEDESTRIAN TRAFFIC AROUND THE CONSTRUCTION AREA. THE CONSTRUCTION AREA SHALL BE CLEARLY MARKED AT ALL TIMES.
15. CONTRACTOR SHALL SEED AND MULCH (OR SOD AS APPLICABLE) ALL AREAS DISTURBED BY THE CONSTRUCTION OF THIS PROJECT ACCORDING TO LOCAL REGULATIONS.
16. CONTRACTOR SHALL MAINTAIN "AS-BUILT" RECORD DRAWINGS INFORMATION ON A REGULAR BASIS. CONTRACTOR SHALL EMPLOY THE SERVICES OF A SURVEYOR REGISTERED IN THE STATE OF FLORIDA TO DETERMINE ALL "AS-BUILT" INFORMATION. WITHIN 14 DAYS OF THE COMPLETION OF THE WORK, CONTRACTOR SHALL PROVIDE SIGNED AND SEALED COPIES AND THE DIGITAL CAD FILE OF THE "AS-BUILT" DRAWINGS AND SUPPORTING SURVEY RECORDS TO THE ENGINEER OF RECORD. CAD FILES SHALL BE IN THE AUTOCAD FORMAT.
17. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PRODUCE, SUBMIT, AND OBTAIN APPROVAL OF THE REPRODUCIBLE AS-BUILT DRAWINGS FOR ANY JURISDICTIONAL AGENCIES AS MAY BE REQUIRED.
18. CONTRACTOR SHALL GIVE THE ENGINEER OF RECORD A MINIMUM OF 48 HOURS NOTICE OF ALL MEETINGS OR TESTING MEASURES REQUIRED TO BE WITNESSED BY THE CONSTRUCTION ACTIVITIES RELATED TO THE WORK.
19. CONTRACTOR SHALL GIVE THE ENGINEER OF RECORD A MINIMUM OF THREE (3) BUSINESS DAYS NOTICE FOR ANY FINAL INSPECTION.

GENERAL UTILITY NOTES:

1. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE CITY OF GAINESVILLE LAND DEVELOPMENT CODE, DETAILS AND SPECIFICATIONS, AS WELL AS ALL APPLICABLE STATE AND LOCAL REGULATIONS, EXCEPT AS MODIFIED HEREIN.
2. VERTICAL LOCATIONS OF ALL EXISTING UTILITIES SHOWN ON THE PLAN AND PROFILE SHEETS HAVE BEEN ASSUMED. CONTRACTOR SHALL EXERCISE CAUTION DURING EXCAVATION NEAR EXISTING UTILITIES SHOWN ON THE PLANS AND NOTIFY THE ENGINEER IF THE LOCATION DIFFERS FROM THAT SHOWN BEFORE CONTINUING WITH THE CONSTRUCTION.
3. UNSUITABLE MATERIALS UNDER PROPOSED PIPING SHALL BE REMOVED AND REPLACED WITH SELECT BACKFILL, PROPERLY COMPACTED TO 95% OF MAXIMUM DENSITY PER AASHTO T-180.
4. FITTINGS SHALL BE USED AT LOCATIONS INDICATED ON THE PLANS, UNLESS OTHERWISE APPROVED BY THE ENGINEER OF RECORD.
5. THE LENGTH OF TRENCH OPEN AT ANY ONE TIME SHALL BE CONTROLLED BY THE PARTICULAR SURROUNDING CONDITIONS, BUT SHALL BE LIMITED TO 300 LINEAR FEET UNLESS APPROVED BY THE CITY OF GAINESVILLE UTILITY ENGINEER IN WRITING.
6. NO CONNECTIONS TO EXISTING POTABLE WATER SYSTEMS SHALL BE ALLOWED UNTIL ALL PROPOSED WATER LINES HAVE BEEN PRESSURE TESTED, DISINFECTED, CLEARED FOR SERVICE AND ACCEPTED BY THE UTILITY COMPANY AND FDEP.
7. THE BACTERIOLOGICAL SAMPLE POINTS SHALL BE INDICATED IN RED ON THE "AS BUILT" DRAWINGS PRIOR TO THE REQUEST FOR A LETTER OF RELEASE TO PLACE THE CONSTRUCTION INTO SERVICE. THE SAMPLE NUMBERS WILL CORRESPOND TO THOSE ON THE BACTERIOLOGICAL SAMPLE LAB SHEETS.

WATER / SEWER SEPARATION:

1. SANITARY SEWERS (INCLUDING LATERALS), FORCE MAINS, AND STORM SEWERS SHALL CROSS UNDER WATER MAINS WHENEVER POSSIBLE. SANITARY SEWERS, FORCE MAINS AND STORM SEWERS CROSSING WATER MAINS SHALL BE INSTALLED TO PROVIDE A MINIMUM VERTICAL DISTANCE OF 18 INCHES BETWEEN THE INVERT OF THE UPPER PIPE AND THE CROWN OF THE LOWER PIPE WHENEVER POSSIBLE.
2. WHERE SANITARY SEWERS, FORCE MAINS AND STORM SEWERS MUST CROSS A WATER MAIN WITH LESS THAN 18 INCHES OF VERTICAL DISTANCE, THE WATER MAIN SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE (DIP) AT THE CROSSING. SUFFICIENT LENGTHS OF DIP MUST BE USED TO PROVIDE A MINIMUM SEPARATION OF 10 FEET BETWEEN ANY TWO JOINTS. ALL JOINTS ON THE WATER MAIN WITHIN 20 FEET OF THE CROSSING MUST BE MECHANICALLY RESTRAINED. AN ABSOLUTE MINIMUM OF VERTICAL CLEARANCE OF 6 INCHES MUST BE MAINTAINED AT ALL CROSSINGS.
3. A FULL, UNCUT LENGTH OF WATER MAIN PIPE, AT LEAST 20 FEET IN LENGTH, SHALL BE CENTERED AT THE POINT OF CROSSING OF ALL WATER AND SEWER PIPING, REGARDLESS OF THE VERTICAL SEPARATION.
4. IF A NEW PIPE CONFLICTS WITH AN EXISTING PIPE WITH LESS THAN 18 INCHES OF VERTICAL CLEARANCE, THE NEW PIPE SHALL BE CONSTRUCTED OF DIP AND THE NEW PIPE SHALL BE CONSTRUCTED TO MEET THE CROSSING REQUIREMENTS ABOVE.
5. PURSUANT TO F.A.C. 62-555.314, WATER MAINS SHALL BE LOCATED AT LEAST 6 FEET (PREFERABLY 10 FEET) HORIZONTALLY FROM PIPES CARRYING RAW WASTEWATER, AND 3 FEET HORIZONTALLY FROM PIPES CARRYING RECLAIMED WATER, UNLESS OTHERWISE SPECIFICALLY SHOWN ON THE PLANS. THE DISTANCE SHALL BE MEASURED FROM INSIDE EDGE OF PIPE TO INSIDE EDGE OF PIPE. WATER MAINS SHALL BE LAID TO PROVIDE A SEPARATION OF AT LEAST 18 INCHES BETWEEN THE BOTTOM OF WATER MAIN AND THE TOP OF SEWER OR RECLAIMED WATER PIPE. WATER MAINS SHALL CROSS ABOVE SEWER OR RECLAIMED WATER PIPE WITH A VERTICAL SEPARATION OF AT LEAST 18 INCHES.

WASTEWATER COLLECTION SYSTEMS

1. MATERIALS AND INSTALLATION FOR WASTEWATER COLLECTION SYSTEM INCLUDING GRAVITY SEWERS, MANHOLES, SERVICE LATERALS, FORCEMAINS, LIFT STATIONS, AND PRESSURE TESTING REQUIREMENTS SHALL CONFORM TO SECTIONS 7.2 AND 7.3 OF THE CITY OF GAINESVILLE LAND DEVELOPMENT CODE AND ALL APPLICABLE FDEP REGULATIONS. ALL PVC GRAVITY SEWER PIPE SHALL BE SDR-26.

WATER DISTRIBUTION SYSTEMS

1. MATERIALS AND INSTALLATION FOR WATER DISTRIBUTION SYSTEM INCLUDING PIPE FITTINGS, VALVES, JOINT RESTRAINTS, FIRE HYDRANTS, SERVICE LINES, PRESSURE TESTING, AND DISINFECTION SHALL CONFORM TO SECTIONS 7.2 AND 7.3 OF THE CITY OF GAINESVILLE LAND DEVELOPMENT CODE AND ALL APPLICABLE FDEP REGULATIONS. ALL PVC WATER PIPE SHALL BE DR-18.

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CALL 2 WORKING DAYS BEFORE YOU DIG
IT'S THE LAW! DIAL 811
Know what's below. Call before you dig.
SUNSHINE STATE ONE CALL OF FLORIDA, INC.

No	REVISIONS	DATE	BY
1	PERMIT SET - NOT FOR CONSTRUCTION	03-01-16	CPM

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KHA PROJECT 142350001
DATE APRIL 2016
SCALE AS SHOWN
DESIGNED BY KHA
DRAWN BY CPM
CHECKED BY RVB

GENERAL NOTES

PALM GARDEN OF GAINESVILLE
PREPARED FOR
FLORIDA CONVALESCENT CENTERS, INC.
CITY OF GAINESVILLE FLORIDA

SHEET NUMBER
C002

No.	REVISIONS	DATE	BY
1	PERMIT SET – NOT FOR CONSTRUCTION	03-01-16	CPM

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59566
DATE:

KHA PROJECT	142350001
DATE	APRIL 2016
SCALE	AS SHOWN
DESIGNED BY	KHA
DRAWN BY	CPM
CHECKED BY	RVB

EXISTING CONDITIONS DRAINAGE MAP

PALM GARDEN OF GAINESVILLE
PREPARED FOR
FLORIDA CONVALESCENT CENTERS, INC.
CITY OF GAINESVILLE FLORIDA

SHEET NUMBER
C003

NORTH

GRAPHIC SCALE IN FEET
0 15 30 60

LEGEND

- DRAINAGE BASIN
- FLOW ARROW
- B6 SOIL BORING
- FLOODPLAIN ENROACHMENT 0.77 AC-FT

ICPR LEGEND

- XX HYDROGRAPH
- XX STAGE/AREA NODE
- XX STAGE/TIME NODE
- XX DROP STRUCTURE
- CHANNEL
- PIPE
- WEIR

B-01 B-02 B-04 B-05

01 02 04 05 06

B1 B2 B3 B5 B6 B7

Tc PATH

SW 62nd BOULEVARD (100' R/W)

FEMA:

THE REAL PROPERTY SHOWN HEREON LIES WITHIN ZONES "X" (SHADED), "X" (UNSHADED) AND "AE" AS DESIGNATED ON THE FLOOD INSURANCE RATE MAP NUMBERS 12001C0293D & 12001C0294D, COMMUNITY NUMBER: 125107; PANELS: 0293D & 0294D; EFFECTIVE DATE: 06/16/06. SAID MAP DESCRIBES ZONE "X" (SHADED) AS BEING "AREAS OF 0.2% ANNUAL CHANCE FLOOD; AREAS OF 1% ANNUAL CHANCE FLOOD WITH AVERAGE DEPTHS OF LESS THAN 1 FOOT OR WITH DRAINAGE AREAS LESS THAN 1 SQUARE MILE; AND AREAS PROTECTED BY LEVEES FROM 1% ANNUAL CHANCE FLOOD.", ZONE "X" (UNSHADED) AS BEING "AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN." AND ZONE "AE" AS BEING "SPECIAL FLOOD HAZARD AREAS (SFHAs) SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD; BASE FLOOD ELEVATIONS DETERMINED."

No	REVISIONS	DATE	BY
1	PERMIT SET – NOT FOR CONSTRUCTION	03-01-16	CPM

Kimley»Horn
© 2016 KIMLEY-HORN AND ASSOCIATES, INC
1823 SE FORT KING STREET, SUITE 200, OCALA, FL 34471
PHONE: 352-438-3000
WWW.KIMLEY-HORN.COM CA 00000696

LICENSED PROFESSIONAL
RICHARD V. BUSCHE, PE
FLORIDA LICENSE NUMBER
58566
DATE:

KHA PROJECT 142350001
DATE APRIL 2016
SCALE AS SHOWN
DESIGNED BY KHA
DRAWN BY CPM
CHECKED BY RVB

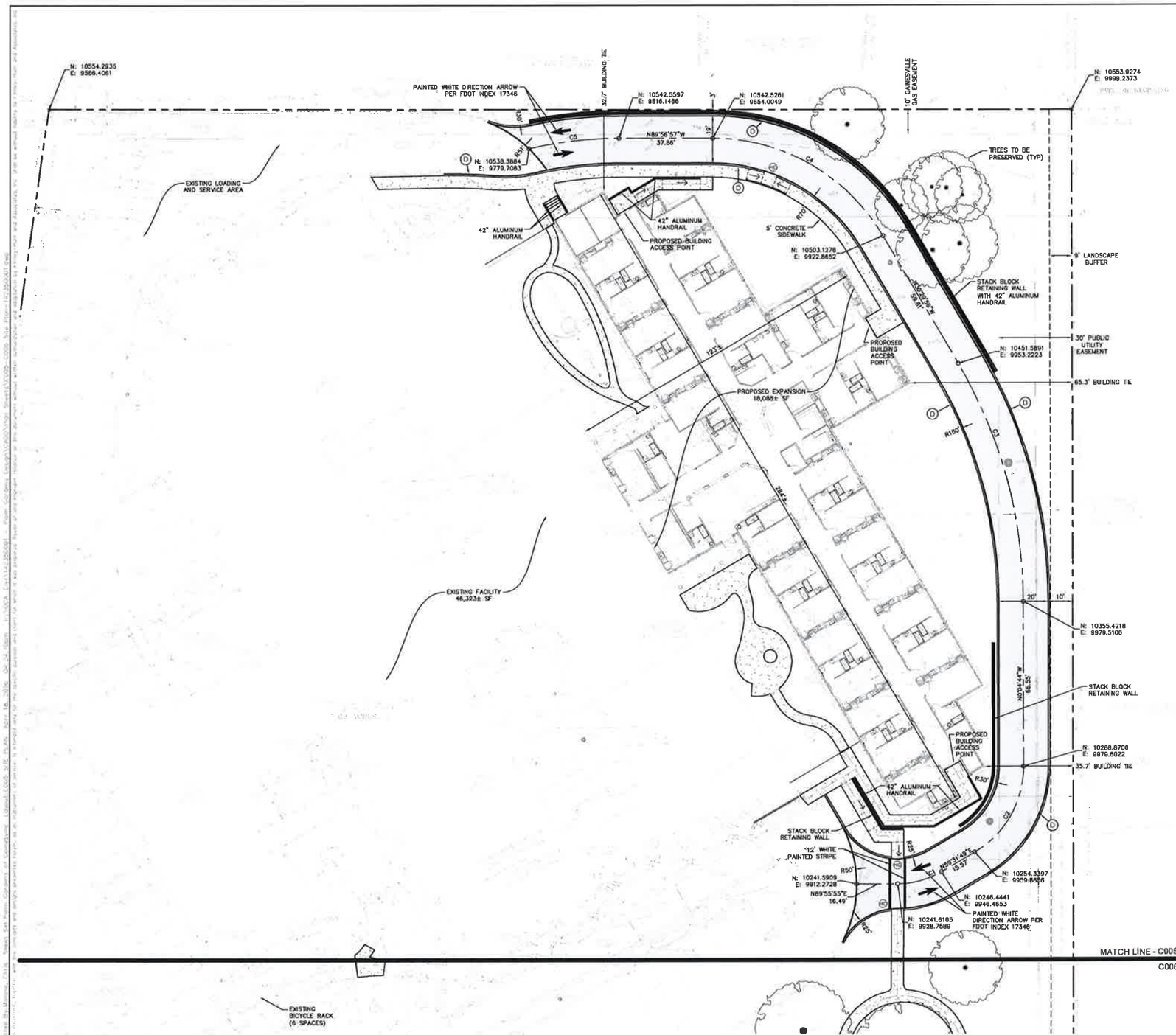
PROPOSED CONDITIONS DRAINAGE MAP

PALM GARDEN OF GAINESVILLE

PREPARED FOR
FLORIDA CONVALESCENT CENTERS, INC.

CITY OF GAINESVILLE FLORIDA

SHEET NUMBER
C004



RAMP NOTE

INSTALL DROP CURB AT ALL SIDEWALK CROSSINGS NOTED ON THESE PLANS WITH (HC) DESIGNATION.

REFER TO F.D.O.T. INDEX 304 FOR CURB RAMP CONSTRUCTION.

HANDRAIL NOTE

REFER TO ARCHITECTURAL PLANS FOR ALUMINUM HANDRAIL DETAILS.

PAVEMENT LEGEND

- ASPHALT PAVEMENT (SEE SHEET C011)
- CONCRETE SIDEWALK (SEE SHEET C011)

CURB LEGEND

(D) – 6" TYPE 'D' CURB (SEE SHEET C011)

(HC) – ADA ACCESSIBLE RAMP

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No.	REVISIONS	DATE	BY
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LICENSED PROFESSIONAL
RICHARD V. BUSCHE, PE
FLORIDA LICENSE NUMBER
58568
DATE:

KHA PROJECT 142350001
DATE APRIL 2016
SCALE AS SHOWN
DESIGNED BY KHA
DRAWN BY CPM
CHECKED BY RVB

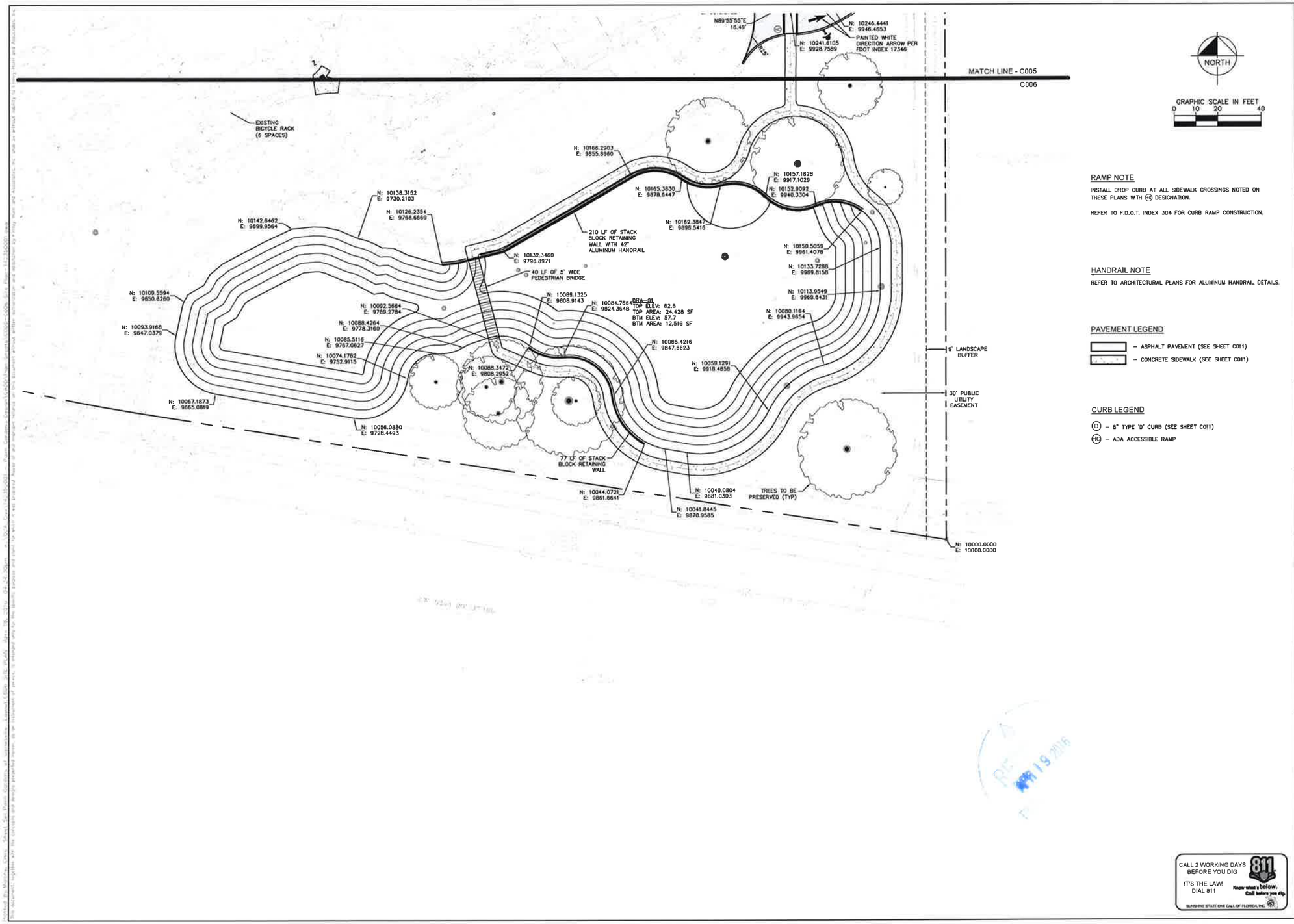
SITE PLAN

PALM GARDEN OF GAINESVILLE

PREPARED FOR
FLORIDA CONVALESCENT CENTERS, INC.

CITY OF GAINESVILLE FLORIDA

SHEET NUMBER
C005



No.	REVISIONS	DATE	BY
A	PERMIT SET – NOT FOR CONSTRUCTION	03-01-16	CPM

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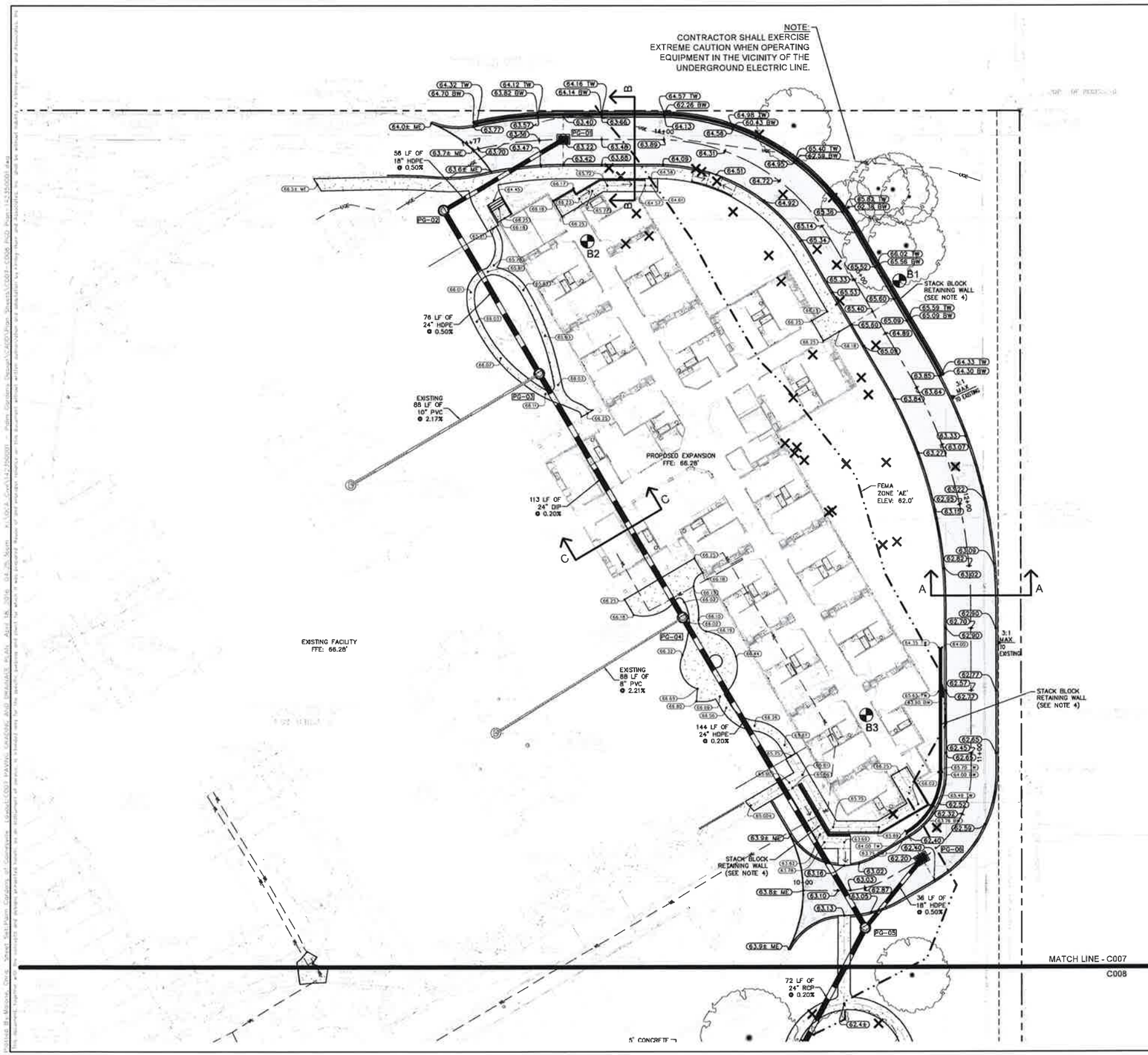
LICENSED PROFESSIONAL
RICHARD V. BUSCHE, PE
FLORIDA LICENSE NUMBER
58565
DATE:

KHA PROJECT	142350001
DATE	APRIL 2016
SCALE	AS SHOWN
DESIGNED BY	KHA
DRAWN BY	CPM
CHECKED BY	RVB

SITE PLAN

PALM GARDEN OF GAINESVILLE
PREPARED FOR
FLORIDA CONVALESCENT CENTERS, INC.
CITY OF GAINESVILLE FLORIDA

SHEET NUMBER
C006



NOTES:

1. ALL GRADES ARE TO THE EDGE OF PAVEMENT UNLESS OTHERWISE INDICATED.
2. ALL SIDEWALK CONSTRUCTION SHALL HAVE A MAXIMUM CROSS SLOPE OF 1.75%.
3. STORM PIPE MATERIALS SHALL BE AS NOTED UNLESS OTHERWISE APPROVED IN WRITING BY THE ENGINEER. PVC STORM DRAINS SHALL BE SDR-35.
4. STACK BLOCK RETAINING WALLS SHALL BE KEYSTONE STACKED BLOCK STRUCTURAL RETAINING WALL AS MANUFACTURED BY CONTECH, INC. OR APPROVED EQUAL. SIGNED AND SEALED ENGINEERING DRAWINGS ARE REQUIRED TO BE SUBMITTED TO THE ENGINEER OF RECORD PRIOR TO ORDERING ANY MATERIALS.
5. REMOVAL OF ALL CONSTRUCTION DEBRIS, LIMEROCK, EXCESS OF BUILDERS SAND, CONCRETE AND MORTAR DEBRIS, EXISTING WEEDS AND GRASSES, AND ALL FOREIGN MATERIALS IN THE PLANTING BED AND SOD AREAS SHALL BE REMOVED AND 36" OF CLEAN FLORIDA FILL OF PH 5.5-6.5 SHALL BE INSTALLED PRIOR TO ANY INSTALLATION OF PLANTS AND TREES.

NORTH

GRAPHIC SCALE IN FEET
0 10 20 40

LEGEND

- SELECT TREES TO BE PRESERVED
- TREES TO BE REMOVED
- (62.17) – PROPOSED SPOT ELEVATION (ALL POINTS ARE LOCATED AT EDGE OF PAVEMENT, UNLESS OTHERWISE NOTED)
- PG-07 – STORM DRAINAGE STRUCTURE LABEL
- PROPOSED DRAINAGE INLET
- PROPOSED STORMWATER MANHOLE
- EXISTING STORM PIPE
- PROPOSED STORM PIPE
- EXISTING CONTOURS
- (62.8) – PROPOSED CONTOURS
- PROPOSED FLOW DIRECTION ARROWS
- SOIL BORING LOCATION

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SUNSHINE STATE ONE CALL OF FLORIDA, INC.

STORM STRUCTURE TABLE

PG-01
TYPE 'F' INLET PER FDOT INDEX 232
N=10542.5597, E=9816.1465
GRATE: 63.22
INV OUT: 59.22 (SW 18")

PG-02
STORM MANHOLE PER FDOT INDEX 200, 201 WITH 'USF 3125' RING AND '5640' GRATE
N=10514.1735, E=9767.9618
GRATE: 64.27
INV IN: 58.94 (NE 18")
INV OUT: 58.94 (SE 24")

PG-03
STORM MANHOLE PER FDOT INDEX 200, 201 WITH 'USF 3125' RING AND '5640' GRATE
N=10448.8135, E=9806.4660
GRATE: 65.72
INV IN: 58.56 (NW 24")
INV IN: 61.30 (SW 10")
INV OUT: 57.66 (SE 24")

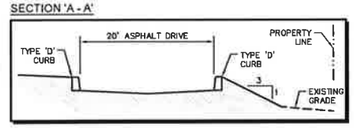
STORM STRUCTURE TABLE

PG-04
STORM MANHOLE PER FDOT INDEX 200, 201 WITH 'USF 3125' RING AND '5640' GRATE
N=10351.0845, E=9864.0391
GRATE: 65.76
INV IN: 57.43 (NW 24")
INV IN: 60.99 (SW 8")
INV OUT: 57.43 (SE 24")

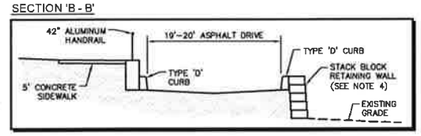
PG-05
STORM MANHOLE PER FDOT INDEX 200, 201 WITH 'USF 3125' RING AND '5640' GRATE
N=10226.6775, E=9937.3285
GRATE: 63.28
INV IN: 57.14 (NW 24")
INV IN: 57.14 (NE 18")
INV OUT: 57.14 (SW 24")

PG-06
TYPE 'F' INLET PER FDOT INDEX 232
N=10254.3397, E=9939.8858
GRATE: 62.20
INV OUT: 57.32 (SW 18")

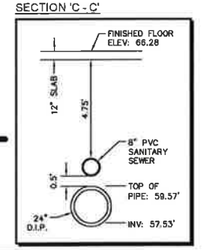
SECTION 'A - A'



SECTION 'B - B'



SECTION 'C - C'



FEMA:

THE REAL PROPERTY SHOWN HEREON LIES WITHIN ZONES 'X' (SHADED), 'X' (UNSHADED) AND 'AE' AS DESIGNATED ON THE FLOOD INSURANCE RATE MAP NUMBERS 12001C0293D & 12001C0294D; COMMUNITY NUMBER: 125107; PANELS: 0293D & 0294D; EFFECTIVE DATE: 06/16/06. SAID MAP DESCRIBES ZONE 'X' (SHADED) AS BEING "AREAS OF 0.2% ANNUAL CHANCE FLOOD; AREAS OF 1% ANNUAL CHANCE FLOOD WITH AVERAGE DEPTHS OF LESS THAN 1 FOOT OR WITH DRAINAGE AREAS LESS THAN 1 SQUARE MILE; AND AREAS PROTECTED BY LEVEES FROM 1% ANNUAL CHANCE FLOOD.", ZONE 'X' (UNSHADED) AS BEING "AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN." AND ZONE 'AE' AS BEING "SPECIAL FLOOD HAZARD AREAS (SFHAs) SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD, BASE FLOOD ELEVATIONS DETERMINED."

No.	REVISIONS	DATE	BY
1	PERMIT SET – NOT FOR CONSTRUCTION	03-01-16	CPM

Kimley»Horn

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WWW.KIMLEY-HORN.COM CA 00000696

LICENSED PROFESSIONAL
RICHARD V. BUSCHE, PE
FLORIDA LICENSE NUMBER
58568
DATE

KHA PROJECT 142350001
DATE APRIL 2016
SCALE AS SHOWN
DESIGNED BY KHA
DRAWN BY CPM
CHECKED BY RVB

PAVING GRADING AND DRAINAGE PLAN

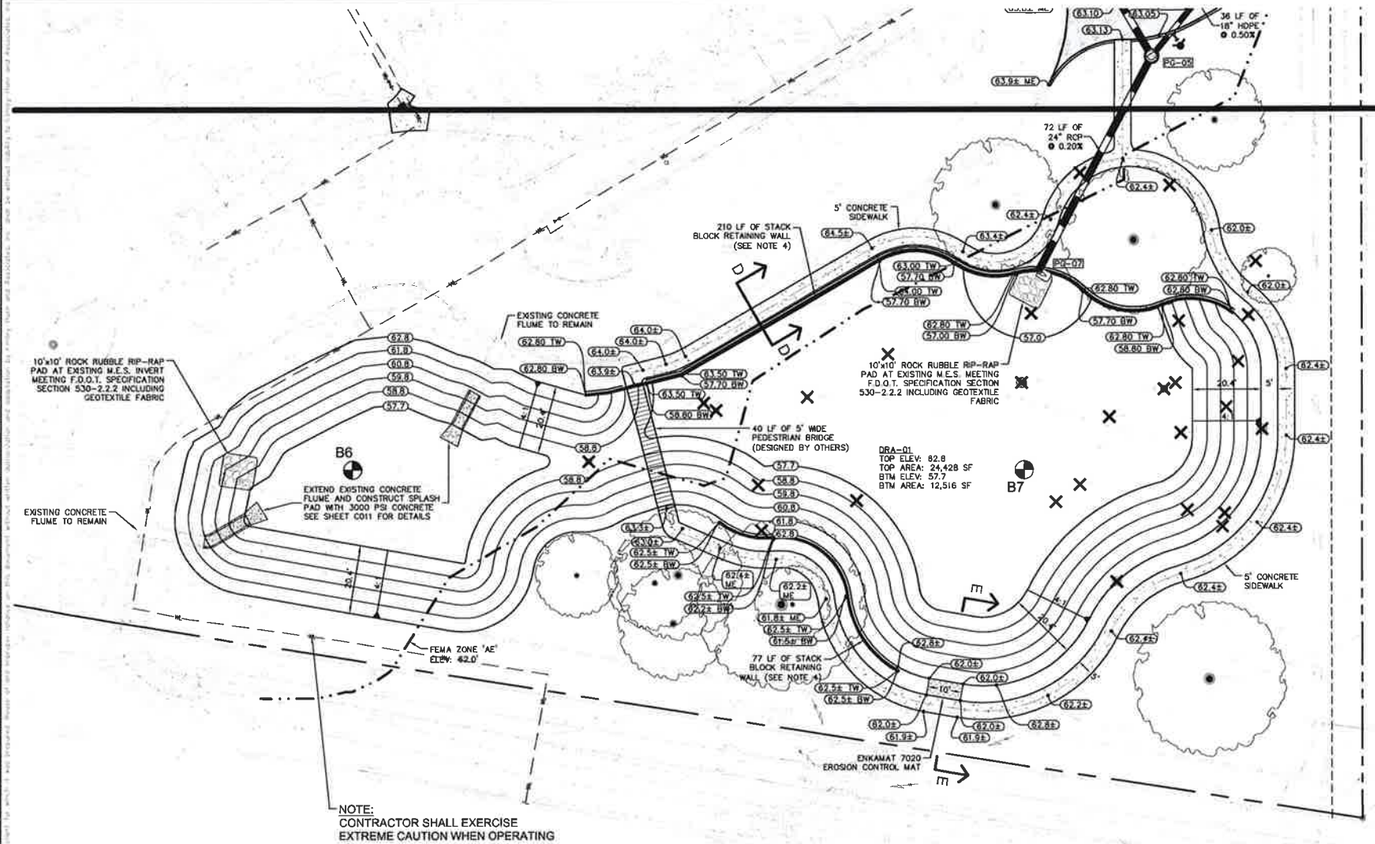
PALM GARDEN OF GAINESVILLE

PREPARED FOR
FLORIDA CONVALESCENT CENTERS, INC.

CITY OF GAINESVILLE FLORIDA

SHEET NUMBER
C007

APR 19 2016



NOTES:

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NORTH

GRAPHIC SCALE IN FEET
0 10 20 40

LEGEND

- SELECT TREES TO BE PRESERVED
- TREES TO BE REMOVED
- (82.17) – PROPOSED SPOT ELEVATION (ALL POINTS ARE LOCATED AT EDGE OF PAVEMENT, UNLESS OTHERWISE NOTED)
- PG-07 – STORM DRAINAGE STRUCTURE LABEL
- PROPOSED DRAINAGE INLET
- PROPOSED STORMWATER MANHOLE
- EXISTING STORM PIPE
- PROPOSED STORM PIPE
- EXISTING CONTOURS
- (82.8) – PROPOSED CONTOURS
- PROPOSED FLOW DIRECTION ARROWS
- SOIL BORING LOCATION

CALL 2 WORKING DAYS BEFORE YOU DIG
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SUNSHINE STATE ONE CALL OF FLORIDA, INC.

STORM STRUCTURE TABLE

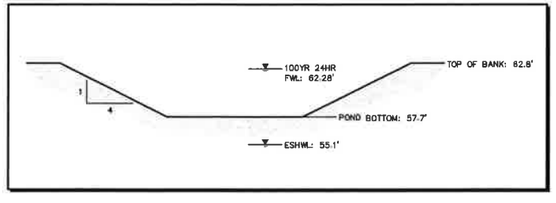
PG-05
STORM MANHOLE PER FDOT INDEX 200, 201
WITH 'USF 3125' RING AND '5640' GRATE
N=10226.6775, E=9937.3285
GRATE: 63.28
INV IN: 57.14 (NW 24")
INV IN: 57.14 (NE 18")
INV OUT: 57.14 (SW 24")

PG-07
FLUSH ENDWALL IN STACK BLOCK WALL (BY OTHERS)
N=10162.6816, E=9903.3823
FL INV: 57.00 (NE 24")

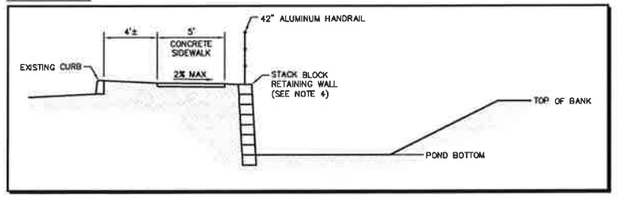
FEMA:

THE REAL PROPERTY SHOWN HEREON LIES WITHIN ZONES 'X' (SHADED), 'X' (UNSHADED) AND 'AE' AS DESIGNATED ON THE FLOOD INSURANCE RATE MAP NUMBERS 12001C0293D & 12001C0294D; COMMUNITY NUMBER: 125107; PANELS: 0293D & 0294D; EFFECTIVE DATE: 08/16/08. SAID MAP DESCRIBES ZONE 'X' (SHADED) AS BEING "AREAS OF 0.2% ANNUAL CHANCE FLOOD; AREAS OF 1% ANNUAL CHANCE FLOOD WITH AVERAGE DEPTHS OF LESS THAN 1 FOOT OR WITH DRAINAGE AREAS LESS THAN 1 SQUARE MILE; AND AREAS PROTECTED BY LEVEES FROM 1% ANNUAL CHANCE FLOOD.", ZONE 'X' (UNSHADED) AS BEING "AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN," AND ZONE 'AE' AS BEING "SPECIAL FLOOD HAZARD AREAS (SFHAs) SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD. BASE FLOOD ELEVATIONS DETERMINED."

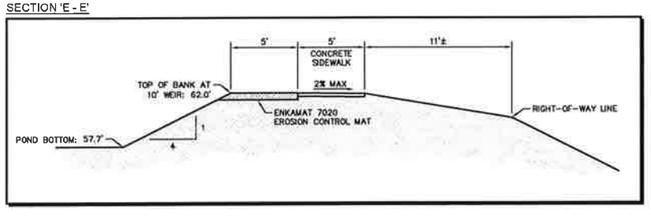
DRA-01



SECTION 'D - D'



SECTION 'E - E'



No	REVISIONS	DATE	BY
1	PERMIT SET - NOT FOR CONSTRUCTION	03-01-16	CPM

Kimley»Horn

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WWW.KIMLEY-HORN.COM CA 00000696

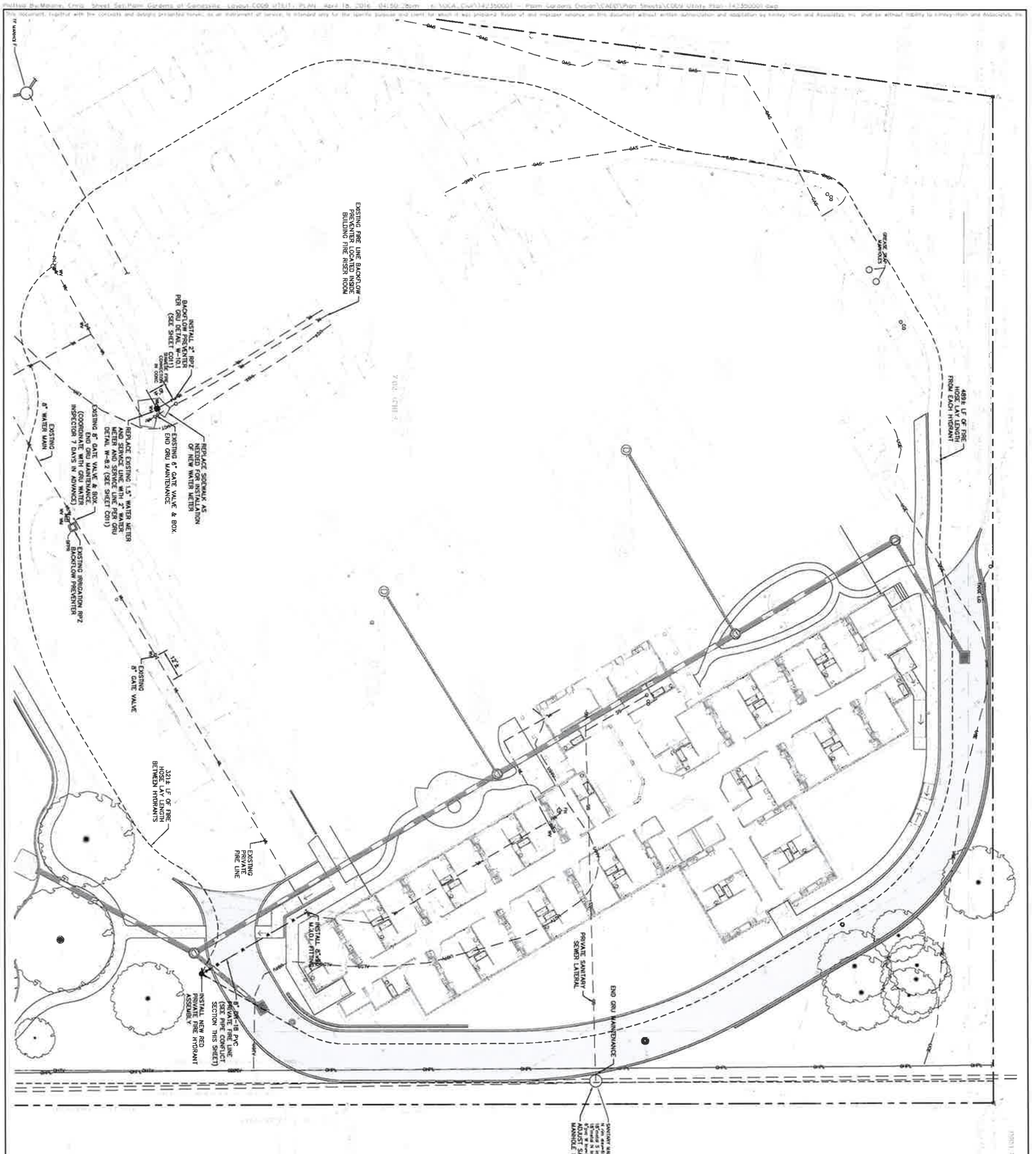
LICENSED PROFESSIONAL
RICHARD V. BUSCHE, PE
FLORIDA LICENSE NUMBER
58568
DATE:

KHA PROJECT 142350001
DATE APRIL 2016
SCALE AS SHOWN
DESIGNED BY KHA
DRAWN BY CPM
CHECKED BY RVB

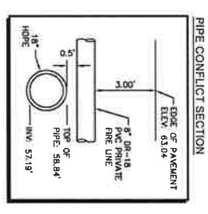
PAVING GRADING AND DRAINAGE PLAN

PALM GARDEN OF GAINESVILLE
PREPARED FOR
FLORIDA CONVALESCENT CENTERS, INC.
CITY OF GAINESVILLE FLORIDA

SHEET NUMBER
C008



PIPE CONFLICT SECTION



GAINESVILLE REGIONAL UTILITIES (GRU) STANDARD NOTES:

1. PRIVATE PERMITS THAT ARE REQUIRED BY ANY ASSOCIATED WITH THIS PROJECT THAT ARE REQUIRED BY CITY, COUNTY, FDOT, FDEP, OR OTHER AGENCY.
2. THE UTILITY PLAN AND PLAT SHOWS ALL PUBLIC UTILITY EASEMENTS (PUES) IN A METES AND BOUNDS FORMAT (OR BY REFERENCE TO PLATTED LOTS). IF PUES ARE NOT BEING PLATTED, OWNER MAY CHOOSE TO GRANT THE PUES BY SEPARATE INSTRUMENT. IF PUES ARE GRANTED, THE EASEMENT COVER THE ENTIRE PROPERTY, PROVIDED FACILITIES ARE INSTALLED WITHIN THE PRESCRIBED EASEMENT. ALL UTILITIES SHALL BE INSTALLED IN ACCORDANCE WITH THE UTILITY SEPARATION REQUIREMENTS SHOWN IN APPENDIX C OF THE GRU W/WW/RCW DESIGN STANDARDS.
3. ALL CONSTRUCTION MATERIALS AND METHODS FOR POTABLE WATER, WASTEWATER, AND RECLAIMED WATER SYSTEMS SHALL BE IN ACCORDANCE WITH GRU'S POTABLE WATER, WASTEWATER, & RECLAIMED WATER SYSTEM DESIGN STANDARDS, AND APPROVED MATERIALS MANUAL.
4. A MINIMUM 10 FEET HORIZONTAL AND 1.5 FOOT VERTICAL SEPARATION.
5. A MINIMUM HORIZONTAL SEPARATION OF 10 FEET FOR (GREATER THAN 12" DIAMETER) POTABLE AND RECLAIMED WATER MAINS, AND 15 FEET FOR GRAVITY WASTEWATER MAINS. MINIMUM HORIZONTAL SEPARATION FROM BUILDINGS/STRUCTURES, TRANSFORMERS, AND ALL PERMANENT STRUCTURES: POTABLE WATER, RECLAIMED WATER, AND SEWER LATERALS REQUIRE 5 FEET LESS WATER SERVICE LATERALS SHALL BE INSTALLED WITHIN 3' OF EDGE OF PAVEMENT. MINIMUM SEPARATION TO TREES IS REDUCED TO 7.5' FOR SLEEVES. SEPARATION TO TREES IS REDUCED TO 2.5' FOR GRAVITY MAINS AND SERVICES. (SEE APPENDIX C OF GRU'S POTABLE WATER, WASTEWATER, AND RECLAIMED WATER SYSTEM DESIGN STANDARDS FOR PARALLEL AND HORIZONTAL SEPARATION DISTANCES FOR PARALLEL AND PERPENDICULAR CLEARANCE FROM OTHER OBJECTS NOTED)

GRAPHIC SCALE IN FEET
0 10 20 40

NORTH

CALL 2 WORKING DAYS BEFORE YOU DIG IT'S THE LAW DIAL 811 811 Know what's below. Call before you dig.

SHEET NUMBER C009

PALM GARDEN OF GAINESVILLE
PREPARED FOR
FLORIDA CONVALESCENT CENTERS, INC.
CITY OF GAINESVILLE FLORIDA

UTILITY PLAN

KHA PROJECT 142350001
DATE APRIL 2016
SCALE AS SHOWN
DESIGNED BY KHA
DRAWN BY CPM
CHECKED BY RVB

LICENSED PROFESSIONAL
RICHARD V. BUSCHE, PE
FLORIDA LICENSE NUMBER 58568
DATE:

Kimley»Horn

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PHONE: 352-438-3000
WWW.KIMLEY-HORN.COM CA 00000696

No.	REVISIONS	DATE	BY
1	PERMIT SET – NOT FOR CONSTRUCTION	03-01-16	CPM

NORTH

GRAPHIC SCALE IN FEET
0 10 20 40

NOTES:
1. REMOVAL OF ALL CONSTRUCTION DEBRIS, LIMEROCK, EXCESS OF BUILDERS SAND, CONCRETE AND MORTAR DEBRIS, EXISTING WEEDS AND GRASSES, AND ALL FOREIGN MATERIALS IN THE PLANTING BED AND SOD AREAS SHALL BE REMOVED AND 36" OF CLEAN FLORIDA FILL OF PH 5.5–6.5 SHALL BE INSTALLED PRIOR TO ANY INSTALLATION OF PLANTS AND TREES.

CALL 2 WORKING DAYS BEFORE YOU DIG
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DIAL 811
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SUNSHINE STATE ONE CALL OF FLORIDA, INC.

EXISTING ASPHALT DRIVE, CURB, RETAINING WALL, AND SPILLWAYS TO BE REMOVED

EXISTING TREE TO BE REMOVED (TYP)

EXISTING FIRE HYDRANT TO BE REMOVED

EXISTING WATER LINE TO BE REMOVED

EXISTING PIPE AND MITERED END SECTIONS TO BE REMOVED

MATCH LINE
THIS SHEET

EXISTING TREE TO BE REMOVED (TYP)

MATCH LINE
THIS SHEET

4/8/2016

5. REMOVAL OF ALL CONSTRUCTION DEBRIS, LIMEROCK, EXCESS OF BUILDERS SAND, CONCRETE AND MORTAR DEBRIS, EXISTING WEEDS AND GRASSES, AND ALL FOREIGN MATERIALS IN THE PLANTING BED AND SOD AREAS SHALL BE REMOVED AND 36" OF CLEAN FLORIDA FILL OF PH 5.5–6.5 SHALL BE INSTALLED PRIOR TO ANY INSTALLATION OF PLANTS AND TREES.

No.	REVISIONS	DATE	BY
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FLORIDA LICENSE NUMBER
58568
DATE:

KHA PROJECT 142350001
DATE APRIL 2016
SCALE AS SHOWN
DESIGNED BY KHA
DRAWN BY CPM
CHECKED BY RVB

DEMOLITION PLAN

PALM GARDEN OF GAINESVILLE
PREPARED FOR
FLORIDA CONVALESCENT CENTERS, INC.
CITY OF GAINESVILLE FLORIDA

SHEET NUMBER
C010

NOTE: THESE TABLES ARE FOR PVC PIPE ONLY; SEE W-2.8 OR W-2.9 FOR DIP

FITTING	RESTRAIN "A" (LF) 4"	6"	8"	12"	16"	20"	24"	30"	36"
11¼° BEND	4	6	7	8	11	12	14	16	18
22½° BEND	7	10	12	18	20	23	27	31	35
45°/OFFSET	14	19	24	33	41	47	54	63	71
90° BEND	33	45	57	78	97	114	130	150	169
DEAD END	57	78	101	140	176	211	243	286	328

FITTING SIZE	RESTRAIN (LF) TEE "A"	REDUCER "B"
4x4	28	*
6x4	14	41
6x6	50	*
8x4	A.T.	73
8x6	38	43
8x8	73	*
12x4	A.T.	121
12x6	15	102
12x8	56	75
12x12	110	*
16x8	A.T.	146
16x8	28	129
16x12	88	75
16x16	146	*
20x6	A.T.	189
20x8	11	175
20x12	69	133
20x16	125	74
20x20	180	*
24x6	A.T.	225
24x8	A.T.	213
24x12	50	180
24x16	104	133
24x20	157	73
24x24	211	*

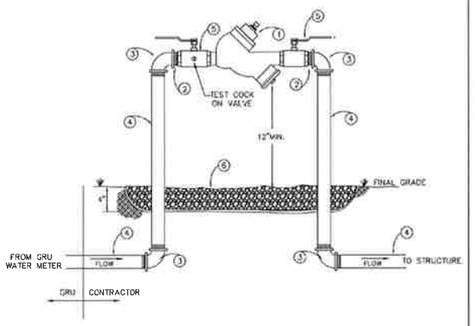
FITTING SIZE	RESTRAIN (LF) TEE "A"	REDUCER "B"
30x6	A.T.	272
30x8	A.T.	283
30x12	27	238
30x16	72	201
30x20	126	156
30x24	179	101
30x30	254	*
36x6	A.T.	315
36x8	A.T.	307
36x12	10	287
36x16	54	259
36x20	100	223
36x24	148	179
36x30	217	100
36x36	292	*

A.T.=RESTRAINT REQUIRED AT TEE ONLY.
*=NOT APPLICABLE

Revision Date: 10/27/2014

Gainesville Regional Utilities
Potable Water Construction Details
PVC RESTRAINED JOINT STANDARD FOR FOR BENDS, PLUGS, CAPS, TEES AND REDUCERS

W-2.8.1

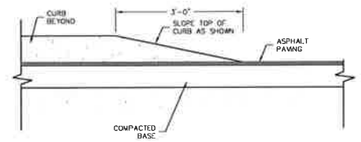


ITEM	MATERIALS DESCRIPTION
1	3/4", 1", 1-1/4", 1-1/2", 2" REDUCED PRESSURE ZONE BACKFLOW PREVENTER
2	3/4", 1", 1-1/4", 1-1/2", 2" BRASS NIPPLE
3	3/4", 1", 1-1/4", 1-1/2", 2" GALVANIZED 90 DEG ELBOW
4	3/4", 1", 1-1/4", 1-1/2", 2" GALVANIZED PIPE
5	3/4", 1", 1-1/4", 1-1/2", 2" 1/4 TURN BRASS BALL VALVE
6	GRAVEL BED (NO. 57 STONE)

Revision Date: 2/20/08

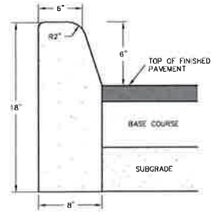
Gainesville Regional Utilities
Potable Water Construction Details
REDUCED PRESSURE ZONE BACKFLOW PREVENTER SINGLE SERVICE: 3/4", 1", 1-1/4", 1-1/2", 2"

W-10.1



CURB TAPER

PGKH44A.DWG N.T.S.



ALL CONCRETE SHALL BE 3,000 PSI

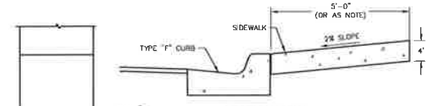
TYPE "D" CURB

PGKH22A.DWG N.T.S.

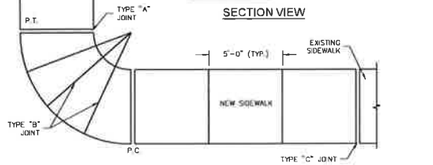
TABLE OF SIDEWALK THICKNESS - "T"	
LOCATION	"T"
RESIDENTIAL AREAS	4"
AT DRIVEWAYS AND OTHER AREAS	6"

TABLE OF SIDEWALK JOINTS	
TYPE	LOCATION
"A"	P.C. AND P.T. OF CURVES.
"B"	5'-0" CENTER TO CENTER ON SIDEWALKS (NOT LESS THAN 4' AND NOT GREATER THAN 10').
"C"	WHERE SIDEWALK ABUTS CONCRETE CURBS, DRIVEWAYS AND SIMILAR STRUCTURES. JUNCTION OF EXISTING AND NEW SIDEWALKS AT INTERVALS NOT GREATER THAN 100'.

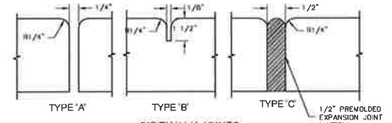
NOTE:
CONCRETE TO BE 3,000 P.S.I. AT 28 DAYS



SECTION VIEW



PLAN



SIDEWALK JOINTS

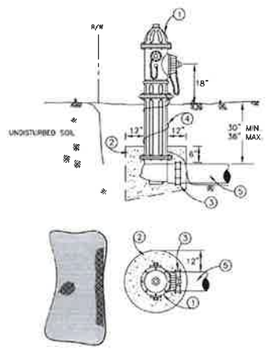
SIDEWALK CONSTRUCTION

PGKH34A.DWG N.T.S.

No.	REVISIONS	DATE	BY
1	PERMIT SET - NOT FOR CONSTRUCTION	03-01-16	CPM

Kimley»Horn
© 2016 KIMLEY-HORN AND ASSOCIATES, INC.
1823 SE FORT KING STREET, SUITE 200, OCALA, FL 34471
PHONE: 352-438-3000
WWW.KIMLEY-HORN.COM CA 00000696

LICENSED PROFESSIONAL
RICHARD V. BUSCHE, PE
FLORIDA LICENSE NUMBER
58566
DATE:



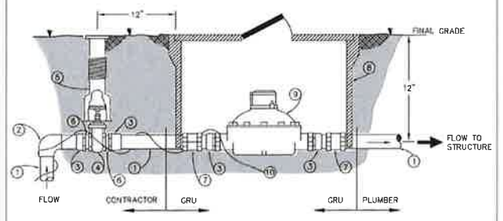
ITEM	MATERIALS DESCRIPTION
1	FIRE HYDRANT
2	GRAVEL DRAIN BED (No. 57 STONE)
3	EBAA MEGALUG RESTRAINT
4	TRACER WIRE, COPPER, BLUE INSULATED, #10 AWG
5	PIPE, D.I.

NOTES:
1. RESTRAIN MINIMUM 58' OF PIPE

Revision Date: 2/20/08

Gainesville Regional Utilities
Potable Water Construction Details
FIRE HYDRANT - DEAD END MAIN

W-5.0



METER ASSEMBLY

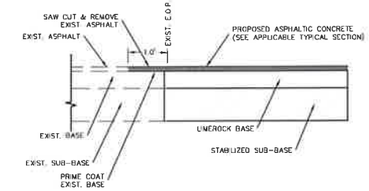
ITEM	MATERIALS DESCRIPTION
1	2" SCH 40 PVC PIPE
2	2" SCH 40 PVC 90 DEG ELBOW
3	2" SCH 40 PVC FEMALE ADAPTER, OR 2" x 1-1/2" REDUCER
4	1-1/2", 2" BRASS GATE VALVE
5	VALVE BOX, C.I.
6	BRASS NIPPLE
7	2" SCH 40 PVC COUPLING, COMPRESSION
8	METER BOX, PRECAST CONC.
9	1-1/2", 2" WATER METER
10	TRACER WIRE, COPPER, BLUE INSULATED, #10 AWG

NOTE:
1. GAINESVILLE REGIONAL UTILITIES WILL INSTALL WATER METER ASSEMBLY INCLUDING THE WATER METER BOX.

Revision Date: 2/20/08

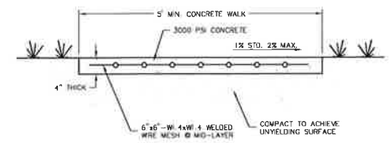
Gainesville Regional Utilities
Potable Water Construction Details
WATER METER ASSEMBLY: 1 1/2" & 2" & 3"

W-8.2



NEW ASPHALT PAVEMENT TIE-IN TYPICAL SECTION

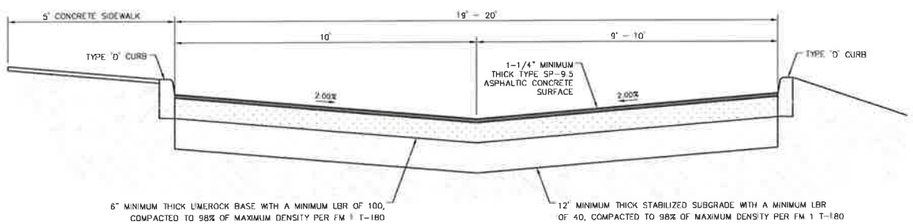
PGKH43A.DWG N.T.S.



NOTE: SEE SITE PLAN FOR SPECIFIC SIDEWALK LOCATIONS

TYPICAL SIDEWALK SECTION

PGKH39A.DWG N.T.S.



NOTE:
CONTRACTOR SHALL REMOVE ALL UNSUITABLE MATERIAL SUCH AS CLAY AND ROOTS PER AGENCY REQUIREMENTS.

TYPICAL ROAD SECTION

KHA PROJECT 142350001
DATE APRIL 2016
SCALE AS SHOWN
DESIGNED BY KHA
DRAWN BY CPM
CHECKED BY RVB

CIVIL DETAILS

PALM GARDEN OF GAINESVILLE

PREPARED FOR
FLORIDA CONVALESCENT CENTERS, INC.

CITY OF GAINESVILLE FLORIDA

SHEET NUMBER
C011

CALL 2 WORKING DAYS BEFORE YOU DIG
IT'S THE LAW
DIAL 811
811
Know what's below. Call before you dig.
SUNSHINE STATE ONE CALL OF FLORIDA, INC.

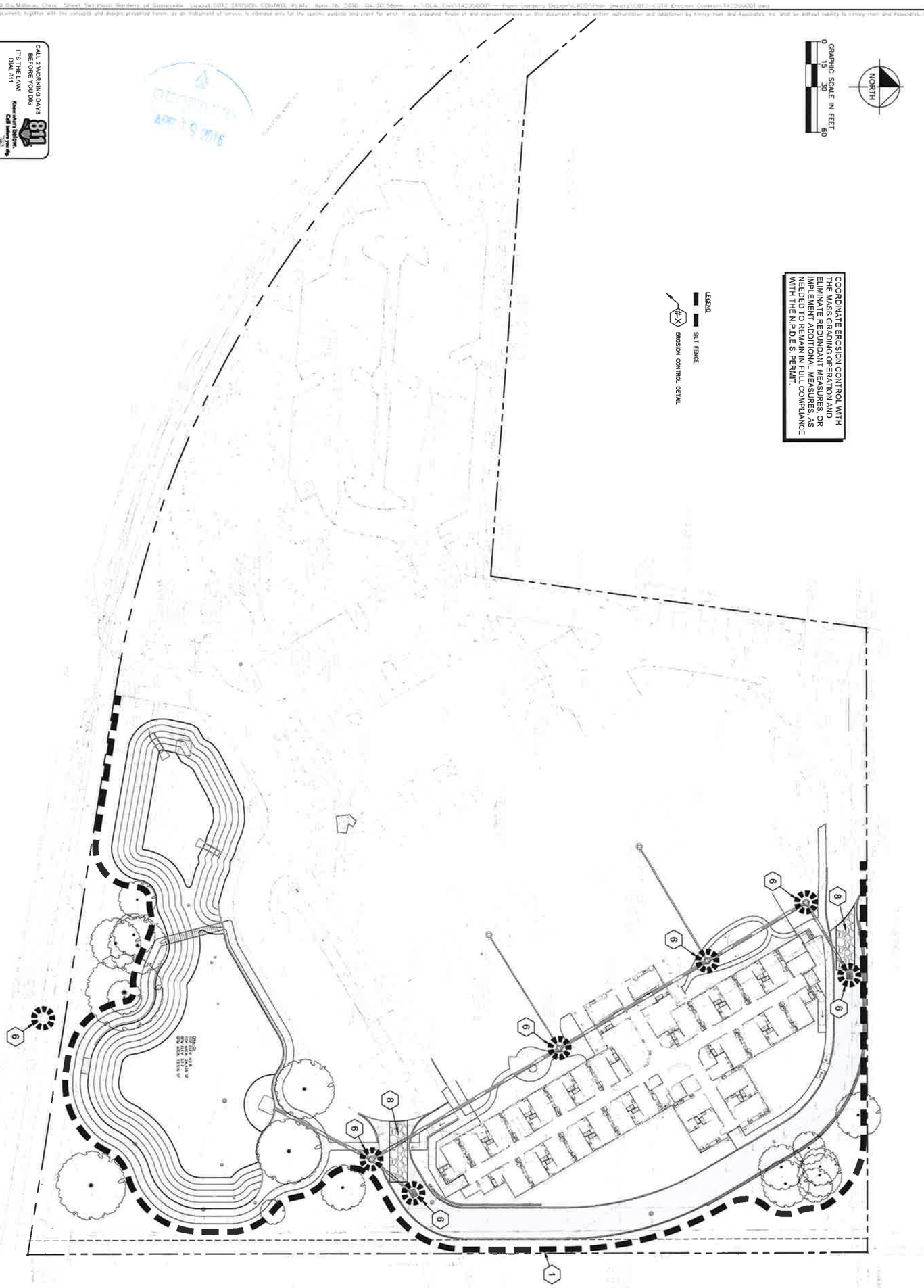
APR 15 2016

GRAPHIC SCALE IN FEET
0 15 30 60

NORTH

LEGEND
SILT FENCE
EROSION CONTROL DETAIL

COORDINATE EROSION CONTROL WITH THE MASS GRADING OPERATION AND ELIMINATE REDUNDANT MEASURES, OR IMPLEMENT ADDITIONAL MEASURES, AS NEEDED TO REMAIN IN FULL COMPLIANCE WITH THE N.P.D.E.S. PERMIT.



SHEET NUMBER C012

PALM GARDEN OF GAINESVILLE

PREPARED FOR
FLORIDA CONVALESCENT CENTERS, INC.
CITY OF GAINESVILLE FLORIDA

EROSION CONTROL PLAN

KHA PROJECT 142350001
DATE APRIL 2016
SCALE AS SHOWN
DESIGNED BY KHA
DRAWN BY CPM
CHECKED BY RVB

LICENSED PROFESSIONAL
RICHARD V. BUSCHE, PE
FLORIDA LICENSE NUMBER 58568
DATE:

Kimley»Horn

1823 SE FORT KING STREET, SUITE 200, OCALA, FL 34471
PHONE: 352-438-3000
WWW.KIMLEY-HORN.COM CA 00000696

No.	REVISIONS	DATE	BY
1	PERMIT SET – NOT FOR CONSTRUCTION	03-01-16	CPM

TIMING OF SEDIMENT - CONTROL PRACTICES:

SEDIMENT CONTROL PRACTICES SHALL BE FUNCTIONAL THROUGHOUT EARTH-DISTURBING ACTIVITY.

SETTLING FACILITIES, PERIMETER CONTROLS, AND OTHER PRACTICES INTENDED TO TRAP SEDIMENT SHALL BE IMPLEMENTED AS THE FIRST STEP OF GRADING AND WITHIN SEVEN DAYS FROM THE START OF GRUBBING. THEY SHALL CONTINUE TO FUNCTION UNTIL THE UPSLOPE DEVELOPMENT AREA IS RE-STABILIZED.

STABILIZATION OF NON STRUCTURAL PRACTICES:

CONTROL PRACTICES SHALL PRESERVE EXISTING VEGETATION WHERE ATTAINABLE AND DISTURBED AREAS SHALL BE RE-VEGETATED AS SOON AS PRACTICAL AFTER GRADING OR CONSTRUCTION.

DENUDED AREAS SHALL HAVE SOIL STABILIZATION APPLIED WITHIN FOURTEEN DAYS IF THEY ARE TO REMAIN DORMANT FOR MORE THAN FORTY-FIVE DAYS. PERMANENT OR TEMPORARY SOIL STABILIZATION SHALL BE APPLIED TO DENUDED AREAS WITHIN FOURTEEN DAYS AFTER FINAL GRADE IS REACHED ON ANY PORTION OF THE SITE, AND SHALL ALSO BE APPLIED WITHIN SEVEN DAYS TO DENUDED AREAS WHICH MAY NOT BE AT FINAL GRADE, BUT WILL REMAIN DORMANT (UNDISTURBED) FOR LONGER THAN FORTY-FIVE DAYS.

SEDIMENT BARRIERS:

SHEET FLOW RUNOFF FROM DENUDED AREAS SHALL BE INTERCEPTED BY SEDIMENT BARRIERS.

SEDIMENT BARRIERS SUCH AS SEDIMENT FENCE OR DIVERSIONS TO SETTLING FACILITIES SHALL PROTECT ADJACENT PROPERTIES AND WATER RESOURCES FROM SEDIMENT TRANSPORTED BY SHEET FLOW.

INLET PROTECTION:

ALL STORM SEWER INLETS WHICH ACCEPT WATER RUNOFF FROM THE DEVELOPMENT AREA SHALL BE PROTECTED SO THAT SEDIMENT-LADEN WATER WILL NOT ENTER THE STORM SYSTEM WITHOUT FIRST BEING PONDED AND FILTERED.

MAINTENANCE:

TEMPORARY EROSION CONTROL FEATURES SHALL BE ACCEPTABLY MAINTAINED AND SHALL BE REMOVED OR REPLACED WHEN DIRECTED BY THE ENGINEER AT NO COST TO THE OWNER. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE SPECIFICATIONS.

STOCKPILES:

ALL SOIL STOCKPILES SHALL BE PROTECTED FROM EROSION BY PERIMETER CONTROL DEVICES SUCH AS STRAW BALE DIKES OR FILTER FABRIC FENCES. AND THESE PERIMETER CONTROL DEVICES SHALL BE MAINTAINED THROUGHOUT THE LIFE OF THE PROJECT.

PERMANENT VEGETATION:

PERMANENT VEGETATION SHALL NOT BE CONSIDERED ESTABLISHED UNTIL GROUND COVER IS ACHIEVED WHICH, IN THE OPINION OF THE ENGINEER, PROVIDES ADEQUATE COVER AND IS MATURE ENOUGH TO CONTROL SOIL EROSION SATISFACTORILY AND TO SURVIVE ADVERSE WEATHER CONDITIONS.

CONSTRUCTION ACCESS ROUTES:

MEASURES SHALL BE TAKEN TO PREVENT SOIL TRANSPORT ONTO SURFACES OR PUBLIC ROADS WHERE RUNOFF IS NOT CHECKED.

INSPECTION SCHEDULE:

1. DIVERSION SWALE AND STRUCTURAL PROTECTION – INSPECT EVERY 7 DAYS OR AFTER EACH RAINSTORM PRODUCING RUNOFF. REPAIR AS REQUIRED.
2. INLET PROTECTION – INSPECT FOR SEDIMENT ACCUMULATION AFTER EACH RAINFALL AND DAILY DURING CONTINUED RAINFALL. REPAIR OR REPLACE WHEN WATER FLOW IS RESTRICTED BY SEDIMENT.
3. VEGETATIVE PLANTING – INSPECT AFTER SPROUTING OCCURS AND REPLANT BARE AREAS. INSPECT ESTABLISHED COVER EVERY 15 DAYS FOR DAMAGE; REPLANT AS REQUIRED. MAINTAIN ESTABLISHED COVER AT MAXIMUM 6" HEIGHT. IRRIGATE AS REQUIRED DURING DRY PERIODS TO MAINTAIN LIVE VEGETATION.

CONSTRUCTION SEQUENCE:

1. INSTALL SEDIMENT CONTROL MEASURES
2. PERFORM DEMOLITION ACTIVITIES.
3. STABILIZE SITE WITH TEMPORARY VEGETATION AS NEEDED.
4. PERFORM IRRIGATION AND UNDERGROUND UTILITY CONSTRUCTION ACTIVITIES.
5. CONSTRUCT NEW TRAILS AND INSTALL LANDSCAPING.
6. PERFORM FINAL GRADING.
7. INSTALL PERMANENT VEGETATION.
8. PERFORM CONTINUING MAINTENANCE THROUGHOUT ALL CONSTRUCTION OPERATIONS.

DITCH BARRIERS:

BALES SHALL BE PLACED IN A SINGLE ROW, LENGTHWISE, ORIENTED PERPENDICULAR TO THE CONTOUR, WITH ENDS OF ADJACENT BALES TIGHTLY ABUTTING ONE ANOTHER.

THE REMAINING STEPS FOR INSTALLING A STRAW BALE BARRIER FOR SHEET FLOW APPLICATIONS APPLY HERE, WITH THE FOLLOWING ADDITION. THE STRAW BALES SHALL BE INSTALLED SUCH THAT UNDERCUTTING BENEATH THE BALES IS MINIMIZED BY THE USE OF ROCK CHECK DAMS PLACED ADJACENT TO THE STRAW BALES.

THE BARRIER SHALL BE EXTENDED TO SUCH A LENGTH THAT THE BOTTOMS OF THE END BALES ARE HIGHER IN ELEVATION THAN THE TOP OF THE LOWEST MIDDLE BALE TO ASSURE THAT SEDIMENT-LADEN RUNOFF WILL FLOW EITHER THROUGH OR OVER THE BARRIER BUT NOT AROUND IT.

MAINTENANCE:

STRAW BALES SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL.

CLOSE ATTENTION SHALL BE PAID TO THE REPAIR OF DAMAGED BALES, END RUNS AND UNDERCUTTING BENEATH BALES.

NECESSARY REPAIRS TO BARRIERS OR REPLACEMENT OF BALES SHALL BE ACCOMPLISHED PROMPTLY.

SEDIMENT DEPOSITS SHOULD BE REMOVED AFTER EACH RAINFALL. THEY MUST BE REMOVED WHEN THE LEVEL OF DEPOSITION REACHES APPROXIMATELY ONE-HALF THE HEIGHT OF THE BARRIER.

ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE STRAW BALE BARRIER IS NO LONGER REQUIRED SHALL BE DRESSED TO CONFORM TO THE EXISTING GRADE, PREPARED AND SEEDED.

SEDIMENT FENCE:

THIS SEDIMENT BARRIER UTILIZES STANDARD STRENGTH OR EXTRA STRENGTH SYNTHETIC FILTER FABRICS. IT IS DESIGNED FOR SITUATIONS IN WHICH ONLY SHEET OR OVERLAND FLOWS ARE EXPECTED.

1. THE HEIGHT OF A SEDIMENT FENCE SHALL NOT EXCEED 36-INCHES (HIGHER FENCES MAY IMPOUND VOLUMES OF WATER SUFFICIENT TO CAUSE FAILURE OF THE STRUCTURE).
2. THE FILTER FABRIC SHALL BE PURCHASED IN A CONTINUOUS ROLL CUT TO THE LENGTH OF THE BARRIER TO AVOID THE USE OF JOINTS. WHEN JOINTS ARE NECESSARY, FILTER CLOTH SHALL BE SPLICED TOGETHER ONLY AT A SUPPORT POST, WITH A MINIMUM 6-INCH OVERLAP, AND SECURELY SEALED.
3. POSTS SHALL BE SPACED A MAXIMUM OF 10 FEET APART AT THE BARRIER LOCATION AND DRIVEN SECURELY INTO THE GROUND (MINIMUM OF 12 INCHES). WHEN EXTRA STRENGTH FABRIC IS USED WITHOUT THE WIRE SUPPORT FENCE, POST SPACING SHALL NOT EXCEED 6 FEET.
4. A TRENCH SHALL BE EXCAVATED APPROXIMATELY 4 INCHES WIDE AND 4 INCHES DEEP ALONG THE LINE OF POSTS AND UPSLOPE FROM THE BARRIER.
5. WHEN STANDARD STRENGTH FILTER FABRIC IS USED, A WIRE MESH SUPPORT FENCE SHALL BE FASTENED SECURELY TO THE UPSLOPE SIDE OF THE POSTS USING HEAVY DUTY WIRE STAPLES AT LEAST 1-INCH LONG, TIE WIRES OR HOG RINGS. THE WIRE SHALL EXTEND INTO THE TRENCH A MINIMUM OF 2 INCHES AND SHALL NOT EXTEND MORE THAN 36 INCHES ABOVE THE ORIGINAL GROUND SURFACE.
6. THE STANDARD STRENGTH FILTER FABRIC SHALL BE STAPLED OR WIRED TO THE FENCE, AND 8-INCHES OF THE FABRIC SHALL BE EXTENDED INTO THE TRENCH. THE FABRIC SHALL NOT EXTEND MORE THAN 36 INCHES ABOVE THE ORIGINAL GROUND SURFACE. FILTER FABRIC SHALL NOT BE STAPLED TO EXISTING TREES.
7. WHEN EXTRA STRENGTH FILTER FABRIC AND CLOSURE POST SPACING ARE USED, THE WIRE MESH SUPPORT FENCE MAY BE ELIMINATED IN SUCH A CASE. THE FILTER FABRIC IS STAPLED OR WIRED DIRECTLY TO THE POSTS WITH ALL OTHER PROVISIONS OF ITEM NO. 6 APPLYING.
8. THE TRENCH SHALL BE BACKFILLED AND SOIL COMPACTED OVER THE FILTER FABRIC.
9. SEDIMENT FENCES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFUL PURPOSE, BUT NOT BEFORE THE UPSLOPE AREA HAS BEEN PERMANENTLY STABILIZED.

MAINTENANCE

SEDIMENT FENCES AND FILTER BARRIERS SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REQUIRED REPAIRS SHALL BE MADE IMMEDIATELY.

SHOULD THE FABRIC ON A SEDIMENT FENCE OR FILTER BARRIER DECOMPOSE OR BECOME INEFFECTIVE PRIOR TO THE END OF THE EXPECTED USABLE LIFE AND THE BARRIER IS STILL NECESSARY, THE FABRIC SHALL BE REPLACED PROMPTLY.

SEDIMENT DEPOSITS SHOULD BE REMOVED AFTER EACH STORM EVENT. THEY MUST BE REMOVED WHEN DEPOSITS REACH APPROXIMATELY ONE-THIRD THE HEIGHT OF THE BARRIER.

ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE SEDIMENT FENCE OR FILTER BARRIER IS NO LONGER REQUIRED SHALL BE DRESSED TO CONFORM WITH THE EXISTING GRADE, PREPARED, AND SEEDED.

ADDITIONAL MEASURES:

THIS PLAN AND NARRATIVE REPRESENTS THE MINIMUM AMOUNT OF EROSION AND SEDIMENT CONTROL MEASURES, IN THE OPINION OF THE ENGINEER, THAT MAY BE NECESSARY UNDER FAVORABLE WEATHER CONDITIONS. THE CONTRACTOR IS RESPONSIBLE FOR ANY ADDITIONAL MEASURES OR PRACTICES THAT MAY BE NECESSARY TO CONTROL EROSION, TURBID DISCHARGE, FUGITIVE PARTICULATES, ETC. TO FULLY COMPLY WITH ALL GOVERNMENTAL RULES AND/OR PERMIT REQUIREMENTS.

EROSION AND SEDIMENT CONTROL NARRATIVE

PLAN DESIGNER: KIMLEY-HORN AND ASSOCIATES INC.
1823 SE FORT KING STREET, SUITE 200
OCALA, FLORIDA 34471
PHONE: (352) 438-3000

OWNER/ DEVELOPER: FLORIDA CONVALESCENT CENTERS, INC.
2033 MAIN STREET, SUITE 300
SARASOTA, FL 34237
(941)952-9411

ADJACENT AREAS:
NORTH: OFFICE
SOUTH: SW 62ND BOULEVARD
EAST: SINGLE FAMILY / CONSERVATION
WEST: SW 62ND BOULEVARD

EROSION CONTROL MEASURE: EROSION AND SITE RUNOFF WILL BE CONTROLLED BY THE USE OF SEDIMENT FENCE AND STABILIZED VEGETATION WHERE NEEDED.

SITE CONTACT: ROB GREENE
FLORIDA CONVALESCENT CENTERS, INC.
2033 MAIN STREET, SUITE 300
SARASOTA, FL 34237
(941) 952-9411

POLLUTION PREVENTION:

THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PROGRAM IS REGULATED THROUGH THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (FDEP). IF YOUR CONSTRUCTION ACTIVITY MEETS THE FOLLOWING CRITERIA:

1. CONTRIBUTES STORM WATER DISCHARGE TO SURFACE WATERS OF THE STATE OR INTO A MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4); AND/OR
2. DISTURBS ONE OR MORE ACRES OF LAND INCLUDING LESS THAN ONE ACRE IF ACTIVITY IS PART OF A LARGE COMMON PLAN OF DEVELOPMENT OR SALE THAT WILL MEET OR EXCEED A ONE ACRE THRESHOLD. DISTURBANCE INCLUDES CLEARING, GRADING AND EXCAVATING. THEN YOU WILL BE REQUIRED TO SUBMIT A NOTICE OF INTENT (NOI) AND PREPARE A STORM WATER POLLUTION PREVENTION PLAN (SWPPP). FOR MORE INFORMATION PLEASE VISIT FDEP'S WEBSITE AT WWW.DEP.STATE.FL.US/WATER/STORMWATER/NPDES.

CALL 2 WORKING DAYS BEFORE YOU DIG
IT'S THE LAW DIAL 811
Know what's below. Call before you dig.
SUNSHINE STATE ONE CALL OF FLORIDA, INC.

No.	REVISIONS	DATE	BY
1	PERMIT SET – NOT FOR CONSTRUCTION	03-01-16	CPM

Kimley»Horn

1823 SE FORT KING STREET, SUITE 200, OCALA, FL 34471
PHONE: 352-438-3000
WWW.KIMLEY-HORN.COM CA 00000696

LICENSED PROFESSIONAL
RICHARD V. BUSCHI, PE
FLORIDA LICENSE NUMBER
58568
DATE:

KHA PROJECT 142350001
DATE APRIL 2016
SCALE AS SHOWN
DESIGNED BY KHA
DRAWN BY CPM
CHECKED BY RVB

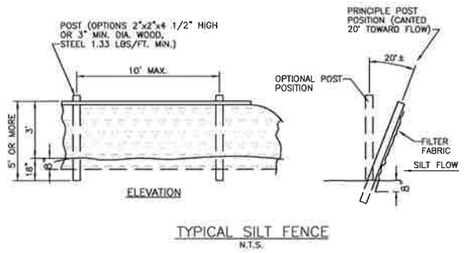
EROSION CONTROL NOTES

PALM GARDEN OF GAINESVILLE

PREPARED FOR
FLORIDA CONVALESCENT CENTERS, INC.

CITY OF GAINESVILLE FLORIDA

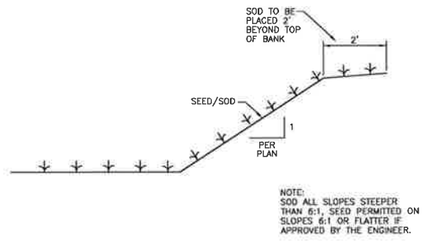
SHEET NUMBER
C013



TYPICAL SILT FENCE
N.T.S.

FILTER FABRIC
(IN CONFORMANCE
WITH SEC. 985 FDOT
SPECIFICATIONS)

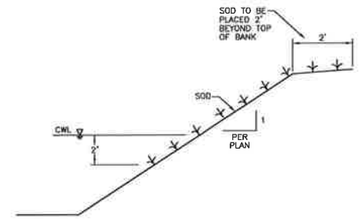
FIGURE 1



NOTE:
SOD ALL SLOPES STEEPER THAN 6:1, SEED PERMITTED ON SLOPES 6:1 OR FLATTER IF APPROVED BY THE ENGINEER.

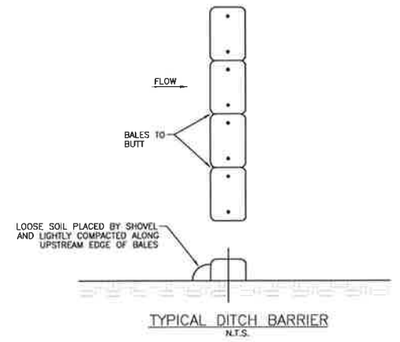
TYPICAL DRY DRAINAGE RETENTION AREA SECTION
N.T.S.

FIGURE 2



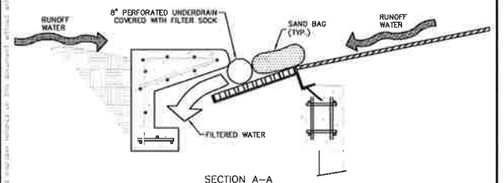
TYPICAL RETENTION/DETENTION POND SECTION
N.T.S.

FIGURE 3



TYPICAL DITCH BARRIER
N.T.S.

FIGURE 4

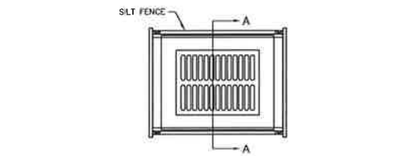


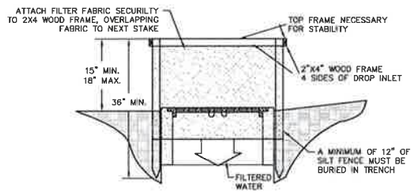
NOTES:
1. DIMENSIONS OF SEDIMENT FILTER DETAILS MAY BE ADJUSTED FOR TYPE "S" CURB INLET TOPS.
2. PRE-MANUFACTURED INLET SOCK MAY BE SUBSTITUTED IF APPROVED BY THE ENGINEER.
3. SEE EROSION CONTROL PLAN FOR LOCATION AND APPLICABILITY.

CURB INLET SEDIMENT FILTER DETAIL
N.T.S.

FIGURE 5

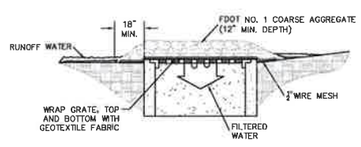
NOTES:
1. DROP INLET SEDIMENT BARRIERS ARE TO BE USED FOR SMALL NEARLY LEVEL DRAINAGE AREAS. (LESS THAN 5%).
2. USE 2"X4" WOOD OR EQUIVALENT METAL STAKES (3 FT. MIN. LENGTH).
3. INSTALL 2"X4" WOOD FRAME TO INSURE STABILITY.
4. SEE EROSION CONTROL PLAN FOR LOCATIONS AND APPLICABILITY.





SECTION A-A

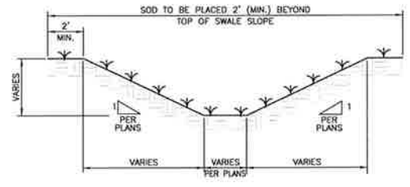
OPTION 1 SILT FENCE BARRIER



OPTION 2 GRAVEL AND WIRE MESH FILTER

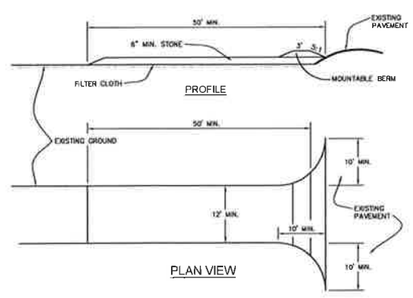
DROP INLET SEDIMENT FILTER DETAIL
N.T.S.

FIGURE 6



TYPICAL SWALE SECTION
N.T.S.

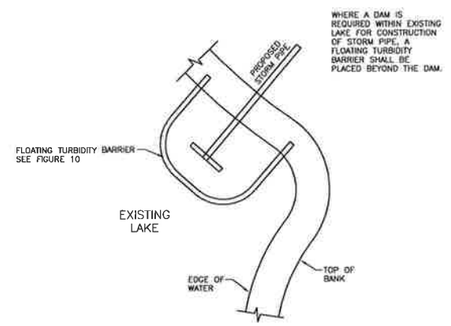
FIGURE 7



STABILIZED CONSTRUCTION ENTRANCE
1. STONE SIZE – USE 2" STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
2. FILTER CLOTH – WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE.

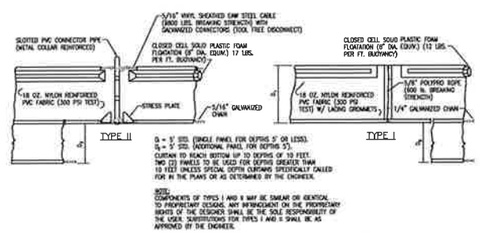
STABILIZED CONSTRUCTION ENTRANCE
NOT TO SCALE

FIGURE 8



FLOATING TURBIDITY BARRIER AT CONNECTION OF STORM PIPE TO EXISTING LAKE
N.T.S.

FIGURE 9



FLOATING TURBIDITY BARRIERS
N.T.S.

FIGURE 10

No.	REVISIONS	DATE	BY
1	PERMIT SET – NOT FOR CONSTRUCTION	03-01-16	CPM

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PHONE: 352-438-3020
WWW.KIMLEY-HORN.COM CA 00000696

LICENSED PROFESSIONAL
RICHARD V. BUSCHE, PE
FLORIDA LICENSE NUMBER
58568
DATE:

KHA PROJECT 142350001
DATE APRIL 2016
SCALE AS SHOWN
DESIGNED BY KHA
DRAWN BY CPM
CHECKED BY RVB

EROSION CONTROL DETAILS

PALM GARDEN OF GAINESVILLE
PREPARED FOR
FLORIDA CONVALESCENT CENTERS, INC.
CITY OF GAINESVILLE FLORIDA

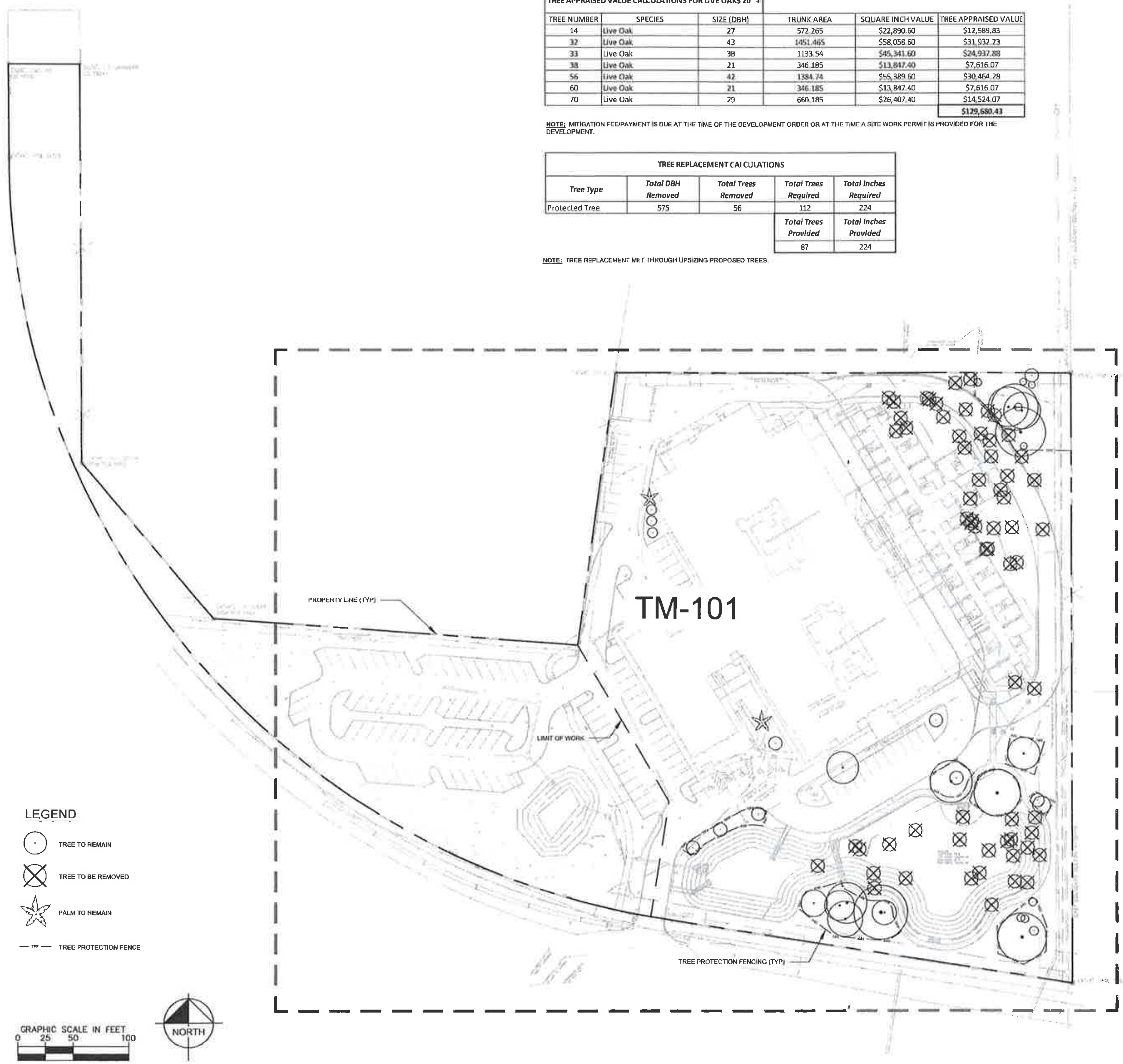
SHEET NUMBER
C014

TREE APPRAISED VALUE CALCULATIONS FOR LIVE OAKS 20" +					
TREE NUMBER	SPECIES	SIZE (DBH)	TRUNK AREA	SQUARE INCH VALUE	TREE APPRAISED VALUE
14	Live Oak	27	572.265	$22,890.60	$12,589.83
32	Live Oak	43	1451.465	$58,058.60	$31,932.23
33	Live Oak	38	1133.54	$45,341.60	$24,937.88
38	Live Oak	21	346.185	$13,847.40	$7,616.07
56	Live Oak	42	1384.74	$55,389.60	$30,464.28
60	Live Oak	21	346.185	$13,847.40	$7,616.07
70	Live Oak	29	660.185	$26,407.40	$14,524.07
					$129,680.43

NOTE: MITIGATION FEE/PAYMENT IS DUE AT THE TIME OF THE DEVELOPMENT ORDER OR AT THE TIME A SITE WORK PERMIT IS PROVIDED FOR THE DEVELOPMENT.

TREE REPLACEMENT CALCULATIONS				
Tree Type	*Total DBH Removed*	*Total Trees Removed*	*Total Trees Required*	*Total Inches Required*
Protected Tree	575	56	112	224
			Total Trees Provided	*Total Inches Provided*
			87	224

NOTE: TREE REPLACEMENT MET THROUGH UPSIZING PROPOSED TREES.



TREE OBSERVATION

TREE #	Species	Common Name	DBH	Status
1	Quercus laurifolia	Laurel Oak	7	REMOVE
2	Quercus virginiana	Live Oak	15	REMOVE
3	Quercus laurifolia	Laurel Oak	5	REMOVE
4	Liquidambar styraciflua	Sweetgum	17	REMOVE
5	Quercus laurifolia	Laurel Oak	4	REMOVE
6	Liquidambar styraciflua	Sweetgum	4	REMOVE
7	Liquidambar styraciflua	Sweetgum	10	REMOVE
8	Liquidambar styraciflua	Sweetgum	5	REMOVE
9	Liquidambar styraciflua	Sweetgum	5	REMOVE
10	Liquidambar styraciflua	Sweetgum	7	REMOVE
11	Quercus laurifolia	Laurel Oak	4	REMOVE
12	Magnolia grandiflora	Southern Magnolia	4	REMOVE
13	Celtis laevigata	Sugarberry	5	REMOVE
14	Quercus virginiana	Live Oak	27	REMOVE
15	Celtis laevigata	Sugarberry	5	REMOVE
16	Quercus laurifolia	Laurel Oak	4	REMOVE
17	Prunus serotina	Black cherry	5	REMOVE
18	Prunus serotina	Black cherry	5	REMOVE
19	Prunus serotina	Black cherry	7	REMOVE
20	Quercus laurifolia	Laurel Oak	5	REMOVE
21	Quercus laurifolia	Laurel Oak	7	REMOVE
22	Prunus serotina	Black cherry	5	REMOVE
23	Quercus laurifolia	Laurel Oak	17	REMOVE
24	Quercus laurifolia	Laurel Oak	11	REMOVE
25	Quercus laurifolia	Laurel Oak	7	REMOVE
26	Prunus serotina	Black cherry	4	REMOVE
27	Prunus serotina	Black cherry	4	REMOVE
28	Prunus serotina	Black cherry	9	REMOVE
29	Prunus serotina	Black cherry	9	REMOVE
30	Prunus serotina	Black cherry	9	REMOVE
31	Prunus serotina	Black cherry	4	REMOVE
32	Quercus virginiana	Live Oak	43	REMOVE
33	Quercus virginiana	Live Oak	38	REMOVE
34	Quercus laurifolia	Laurel Oak	23	REMOVE
35	Quercus laurifolia	Laurel Oak	29	REMOVE
36	Quercus laurifolia	Laurel Oak	25	REMOVE
37	Quercus laurifolia	Laurel Oak	27	REMOVE
38	Quercus virginiana	Live Oak	21	REMOVE
39	Unidentified	Unidentified	13	REMOVE
40	Unidentified	Unidentified	11	REMOVE
41	Liquidambar styraciflua	Sweetgum	6	REMOVE
42	Quercus laurifolia	Laurel Oak	7	REMOVE
43	Liquidambar styraciflua	Sweetgum	12	REMOVE
44	Quercus laurifolia	Laurel Oak	5	REMOVE
45	Liquidambar styraciflua	Sweetgum	8	REMOVE
46	Quercus laurifolia	Laurel Oak	40	REMOVE
47	Quercus laurifolia	Laurel Oak	6	REMOVE
48	Quercus laurifolia	Laurel Oak	4	REMOVE
49	Liquidambar styraciflua	Sweetgum	5	REMOVE
50	Quercus laurifolia	Laurel Oak	29	REMOVE
51	Quercus laurifolia	Laurel Oak	5	REMOVE
52	Quercus laurifolia	Laurel Oak	22	REMOVE
53	Quercus laurifolia	Laurel Oak	29	REMOVE
54	Quercus laurifolia	Laurel Oak	4	REMOVE
55	Quercus laurifolia	Laurel Oak	4	REMOVE
56	Quercus virginiana	Live Oak	42	REMOVE
57	Quercus laurifolia	Laurel Oak	8	REMOVE
58	Quercus virginiana	Live Oak	38	REMOVE
59	Quercus laurifolia	Laurel Oak	29	REMOVE
60	Quercus virginiana	Live Oak	21	REMOVE
61	Liquidambar styraciflua	Sweetgum	6	REMOVE
62	Quercus laurifolia	Laurel Oak	5	REMAIN
63	Liquidambar styraciflua	Sweetgum	8	REMAIN
64	Quercus laurifolia	Laurel Oak	4	REMAIN
65	Quercus laurifolia	Laurel Oak	4	REMAIN
66	Quercus laurifolia	Laurel Oak	24	REMAIN
67	Quercus virginiana	Live Oak	28	REMAIN
68	Quercus virginiana	Live Oak	5	REMAIN
69	Quercus virginiana	Live Oak	22	REMAIN
70	Quercus virginiana	Live Oak	29	REMOVE
71	Quercus virginiana	Live Oak	30	REMAIN
72	Prunus serotina	Black cherry	4	REMAIN
73	Quercus laurifolia	Laurel Oak	4	REMOVE
74	Quercus laurifolia	Laurel Oak	5	REMOVE
75	Ilex opaca	American holly	5	REMAIN
76	Prunus serotina	Black cherry	19	REMAIN
77	Acer rubrum	Red maple	4	REMAIN
78	Acer ruorum	Red maple	4	REMAIN
79	Acer rubrum	Red maple	4	REMAIN
80	Lagerstroemia indica	Crape myrtle	5	REMAIN
81	Sabal palmetto	Sabal palm	15	REMAIN
82	Quercus virginiana	Live Oak	29	REMAIN
83	Quercus laurifolia	Laurel Oak	5	REMAIN
84	Quercus virginiana	Live Oak	38	REMAIN
85	Quercus virginiana	Live Oak	42	REMAIN
86	Liquidambar styraciflua	Sweetgum	10	REMAIN
87	Quercus laurifolia	Laurel Oak	16	REMAIN
88	Liquidambar styraciflua	Sweetgum	7	REMAIN
89	Liquidambar styraciflua	Sweetgum	7	REMAIN
90	Quercus laurifolia	Laurel Oak	7	REMAIN
91	Liquidambar styraciflua	Sweetgum	8	REMAIN
92	Quercus virginiana	Live Oak	44	REMAIN
93	Quercus virginiana	Live Oak	22	REMAIN
94	Quercus virginiana	Live Oak	49	REMAIN
95	Quercus virginiana	Live Oak	37	REMAIN
96	Quercus virginiana	Live Oak	32	REMAIN
97	Quercus virginiana	Live Oak	27	REMAIN
98	Quercus laurifolia	Laurel Oak	24	REMAIN
99	Lagerstroemia indica	Crape myrtle	9	REMAIN
100	Lagerstroemia indica	Crape myrtle	9	REMAIN
101	Lagerstroemia indica	Crape myrtle	9	REMAIN
102	Sabal palmetto	Sabal palm	17	REMAIN

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No.	REVISIONS	DATE	BY

Kimley»Horn

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PHONE: 352-438-3000
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REGISTERED LANDSCAPE ARCHITECT CHRISTOPHER D. CIANFAGLIONE 6667207 STATE OF FLORIDA
DATE: 4/15/2016

KHA PROJECT 142350001
DATE APRIL 2016
SCALE AS SHOWN
DESIGNED BY KHA
DRAWN BY MDD
CHECKED BY CDC

OVERALL TREE MITIGATION PLAN

PALM GARDEN OF GAINESVILLE
PREPARED FOR
FLORIDA CONVALESCENT CENTERS, INC.
GAINESVILLE FLORIDA

SHEET NUMBER
TM-100

PROPERTY LINE (TYP)

LIMIT OF WORK (TYP)

TREE PROTECTION FENCING (TYP)

GRAPHIC SCALE IN FEET
0 15 30 60

NORTH

LEGEND

- TREE TO REMAIN
- TREE TO BE REMOVED
- PALM TO REMAIN
- SPF — TREE PROTECTION FENCE

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SUNSHINE STATE ONE CALL OF FLORIDA, INC.

No.	REVISIONS	DATE	BY

Kimley»Horn

1823 S.E. FORT KING STREET, SUITE 200, OCALA, FL 34471
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REGISTERED LANDSCAPE ARCHITECT CHRIS T. CAPAGIONE STATE OF FLORIDA 0667207

4/13/2016

KHA PROJECT	142350001
DATE	APRIL, 2016
SCALE	AS SHOWN
DESIGNED BY	KHA
DRAWN BY	MDD
CHECKED BY	CDC

TREE MITIGATION PLAN

PALM GARDEN OF GAINESVILLE
PREPARED FOR
FLORIDA CONVALESCENT CENTERS, INC.
GAINESVILLE FLORIDA

SHEET NUMBER
TM-101

APR 13 2016

TREE MITIGATION SPECIFICATIONS

A. GENERAL

1. CONTRACTOR SHALL ADHEAR TO ALL TREE PROTECTION REQUIREMENTS LISTED IN THESE SPECIFICATIONS AND/OR THOSE LISTED IN THE CITY OR COUNTY ZONNING CODE. TREE PROTECTION (LATEST EDITION), WHICHEVER IS MORE STRINGENT SHALL APPLY.
2. CONTRACTOR SHALL COORDINATE ALL CONSTRUCTION PROCEDURES WITH THE PROJECT ARBORIST PRIOR TO BEGINNING WORK.
3. ANY AREAS SUBJECT TO EROSION MUST BE ADEQUATELY STABILIZED WITH VEGETATION MATERIAL THAT WILL, WITHIN A REASONABLE TIME FRAME, DETER SOIL DISTURBANCE.
4. NO SIGNS, BUILDING PERMITS, WIRES OR OTHER ATTACHMENTS OF ANY KIND SHALL BE ATTACHED TO ANY TREE OR PALM. GUY WIRES DESIGNED TO PROTECT TREES ARE EXCLUDED FROM THIS PROHIBITION.
5. EXISTING TREE LOCATIONS AND SIZES ARE ESTIMATES AND ARE BASED ON A SURVEY PROVIDED BY THE OWNER SELECTED SURVEYOR.
6. CONTRACTOR SHALL COORDINATE TREE REMOVAL WITH PERMITTING AGENCY AND PROJECT ARBORIST PRIOR TO CONSTRUCTION. NO PERSON MAY REMOVE OR CAUSE TO BE REMOVED ANY PROTECTED TREE OR PALM WITHOUT FIRST HAVING PROCURED A PERMIT AS PROVIDED BY THE APPROPRIATE PERMITTING AGENCY.
7. FOR PROTECTED TREES OR PALMS BEING REMOVED, THE CONTRACTOR MUST GIVE THE PERMITTING AGENCY REASONABLE OPPORTUNITY TO RELOCATE TREES DESIGNATED FOR REMOVAL TO ANOTHER SITE AT THE PERMITTING AGENCY'S EXPENSE.
8. CONTRACTOR IS RESPONSIBLE FOR POSSESSING ALL REQUIRED APPLICATOR LICENSES, BUSINESS REGISTRATIONS AND INSURANCE, PESTICIDE LABELS, AND MATERIAL DATA SAFETY SHEETS. THE CONTRACTOR IS ALSO RESPONSIBLE FOR HAVING ALL SPILL CONTAINMENT MATERIALS AND REQUIRED PERSONAL PROTECTIVE EQUIPMENT FOR PESTICIDE APPLICATIONS AND ACCIDENTAL SPILLS ON SITE AT ALL TIMES. THE OWNER RESERVES THE RIGHT TO INSPECT EACH APPLICATOR AND HAVE THESE MATERIALS PRESENTED BEFORE AND DURING ANY PESTICIDE TREATMENT.
9. WHERE TRAFFIC AREAS ARE PROPOSED WITHIN THE DRIP LINE OF PROTECTED TREES AND LESS THAN FOUR (4) INCHES OF GRADE CHANGE ARE PROPOSED, PERMEABLE SURFACES THAT ALLOW AIR AND WATER INTO THE SOIL SHOULD BE USED IN LIEU OF ASPHALT OR OTHER SUCH IMPERVIOUS SURFACES.
10. TREE WELLS OF AN APPROVED DESIGN SHALL BE CONSTRUCTED AROUND ALL TREES TO BE PRESERVED WHEN MORE THAN FOUR INCHES OF FILL IS TO BE DEPOSITED WITHIN THE DRIP LINE AREA OF THOSE TREES. COORDINATE WITH PROJECT ARBORIST.
11. THE SEQUENCE OF TREE MITIGATION AND PRESERVATION MEASURES IS IMPERATIVE TO THE HEALTH AND SURVIVABILITY OF THE SUBJECT TREES AND SHALL BE COORDINATED WITH THE OWNER SELECTED PROJECT ARBORIST. THE DESIRED SEQUENCE IS OUTLINED BELOW:
    a. TREE PROTECTION FENCING.
    b. ROOT PRUNING AND ROOT BARRIERS.
    c. CLEARING.
    d. TREE CANOPY PRUNING.
    e. FERTILIZATION.
    f. INSECTICIDE.
    g. IRRIGATION.

B. TREE PROTECTION FENCING

1. PRIOR TO THE ERECTION OF ANY TREE PROTECTION FENCING, ALL FOREIGN SURFACE MATERIAL, TRASH OR DEBRIS SHALL BE REMOVED FROM THE AREA TO BE ENCLOSED BY THE FENCING. AFTER ERECTION OF THE FENCING NO SUCH MATERIAL OR LITTER SHALL BE PERMITTED TO REMAIN WITHIN THE PROTECTED AREA.
2. TREE PROTECTION FENCING SHALL BE PLACED AROUND ALL PROTECTED TREES TO CREATE A PROTECTIVE ROOT ZONE AND SHALL REMAIN IN PLACE UNTIL SITE CLEARING, LAND ALTERATION, AND CONSTRUCTION ACTIVITIES ARE COMPLETE.
3. NATIVE GROUND COVER AND UNDERSTORY VEGETATION EXISTING WITHIN THE PROTECTED AREA SHALL REMAIN THROUGHOUT CONSTRUCTION. OTHER DESIGNATED VEGETATION AND INVASIVE PLANT SPECIES SHALL BE REMOVED ONLY BY MANUAL LABOR UTILIZING HAND TOOLS, OR BY OTHER METHODS APPROVED BY THE PROJECT ARBORIST.
4. TREE PROTECTION FENCING TYPES AND LOCATIONS SHALL BE ERECTED AS SHOWN ON THE TREE MITIGATION PLANS AND DETAILS, OR AS REQUESTED BY LOCAL AGENCY.
5. FINAL LOCATIONS SHALL BE COORDINATED WITH AND APPROVED BY THE PROJECT ARBORIST.
6. NO MATERIALS, EQUIPMENT, SPOIL, WASTE OR WASHOUT WATER MAY BE DEPOSITED, STORED, OR PARKED WITHIN 20 FEET OF THE TREE PROTECTION ZONE.
7. EROSION CONTROL DEVICES SUCH AS SILT FENCING, DEBRIS BASINS, AND WATER DIVERSION STRUCTURES SHALL BE INSTALLED TO PREVENT SILTATION AND/OR EROSION WITHIN THE TREE PROTECTION ZONE.
8. CONSTRUCTION ACTIVITY SHALL NOT DESTROY OR IRREVERSIBLY HARM THE ROOT SYSTEM OF PROTECTED TREES. POST HOLES AND TRENCHES LOCATED CLOSE TO PROTECTED TREES SHALL BE ADJUSTED TO AVOID DAMAGE TO MAJOR ROOTS.
9. DO NOT INSTALL CONDUIT, DRAIN OR IRRIGATION LINES, OR ANY UTILITY LINE WITHIN THE TREE PROTECTION ZONE WITHOUT THE APPROVAL OF THE PROJECT ARBORIST. IF LINES MUST TRAVERSE THE PROTECTION AREA, THEY SHALL BE TUNNELED OR BORED UNDER THE TREE.
10. CONTRACTOR'S ACCESS TO FENCED TREE PROTECTION AREAS WILL BE PERMITTED ONLY WITH APPROVAL OF THE PROJECT ARBORIST.
11. EXCAVATION OR GRADING REQUIRED WITHIN THE PROTECTED AREA SHALL BE LIMITED TO THREE (3) INCHES OF CUT OR FILL. COORDINATE WITH PROJECT ARBORIST.
12. STRUCTURES AND UNDERGROUND FEATURES TO BE REMOVED WITHIN THE TREE PROTECTION ZONE SHALL BE COORDINATED WITH THE PROJECT ARBORIST.
13. TREE PROTECTION FENCING AROUND TREES TO BE RELOCATED SHALL BE ERECTED UNTIL THE TREE IS READY TO BE RELOCATED AND NEW FENCING SHALL BE ERECTED AT THE TREES NEW LOCATION AND WILL REMAIN IN PLACE UNTIL ALL CONSTRUCTION ACTIVITIES ARE COMPLETE.
14. IF ANY DAMAGE TO TREE PROTECTION FENCING SHOULD OCCUR BY ACCIDENT OR NEGLIGENCE, THE CONTRACTOR SHALL BE RESPONSIBLE FOR IMMEDIATE REPAIRS.
15. IF TEMPORARY HAUL OR ACCESS ROADS MUST PASS OVER THE PROTECTED AREA OF TREES TO BE PRESERVED, A ROAD BED OF SIX (6) INCHES OF MULCH OR GRAVEL SHALL BE CREATED TO PROTECT THE SOIL. THE ROAD BED MATERIAL SHALL BE REPLENISHED AS NECESSARY TO MAINTAIN A SIX (6) INCH ROAD BED AT ALL TIMES. CONTRACTOR SHALL REMOVE ALL SUCH MATERIALS FROM THE SITE AS SOON AS TEMPORARY ACCESS IS NO LONGER NECESSARY.
16. CONTRACTOR SHALL COORDINATE WITH THE PROJECT ARBORIST PRIOR TO THE REMOVAL OF ALL TREE PROTECTION FENCING.

C. ROOT PRUNING/TRENCHING

1. TRENCHING LOCATIONS SHALL BE APPROVED IN THE FIELD BY THE PROJECT ARBORIST.
2. TRENCHING EQUIPMENT THAT WILL TURN AT HIGH RPM'S IS PREFERRED, AND SHALL BE APPROVED BY THE PROJECT ARBORIST. APPROVED EQUIPMENT WILL BE USED TO PERFORM ALL ROOT PRUNING OPERATIONS. A MINIMUM DEPTH OF THREE FEET IS REQUIRED.
3. INSTALL ROOT BARRIER WHERE DESIGNATED, SEE TREE MITIGATION PLAN AND DETAIL SHEETS.
4. THE TRENCH SHALL BE BACKFILLED WITH PREVIOUSLY EXCAVATED SOIL AND COMPACTED IMMEDIATELY.
5. TREES TO BE RELOCATED SHALL BE ROOT PRUNED A MINIMUM OF TWELVE (12) WEEKS PRIOR TO TREE RELOCATION.
6. WHEN THE TREE ROOT ZONE WILL BE DISTURBED, AFFECTED ROOTS MUST BE SEVERED BY CLEAN PRUNING CUTS AT THE POINT WHERE CONSTRUCTION IMPACTS THE ROOTS.

D. CLEARING

1. ANY BRUSH CLEARING REQUIRED WITHIN THE TREE PROTECTION ZONE SHALL BE ACCOMPLISHED WITH HAND-OPERATED EQUIPMENT.
2. CONTRACTOR SHALL CLEAR ALL TREE PROTECTION AREAS OF VINES, SHRUBS, GROUND COVERS, WEEDS, SAPLINGS, AND INVASIVES LISTED ON THE LATEST EDITION OF THE FLORIDA EXOTIC PEST PLANT COUNCIL'S LIST OF INVASIVE SPECIES.
3. PROJECT ARBORIST MUST APPROVE METHODS OTHER THAN HAND CLEARING.
4. A TWO (2) INCH LAYER OF MULCH SHALL BE APPLIED OVER THE SURFACE OF EXPOSED ROOTS OF PROTECTED TREES DURING THE SITE CLEARING PHASE.

E. TREE CANOPY PRUNING

TREE PRUNING SPECIFICATIONS SHALL BE DEFINED BASED ON SPECIFIC RECOMMENDATIONS OF THE PROJECT ARBORIST. INFORMATION PRESENTED BELOW SHOULD BE USED AS A GUIDELINE.

1. CONTRACTOR SHALL VISIT THE SITE WITH THE PROJECT ARBORIST TO VERIFY THE EXTENT OF REQUIRED PRUNING.
2. ALL PRUNING SHALL BE PERFORMED IN ACCORDANCE WITH THE RECOMMENDATIONS OF A QUALIFIED INTERNATIONAL SOCIETY OF ARBORICULTURE (ISA) CERTIFIED ARBORIST OR AN AMERICAN SOCIETY OF CONSULTING ARBORISTS (ASCA) REGISTERED CONSULTING ARBORIST (RCA).
3. AT LEAST ONE MEMBER OF THE PRUNING CREW SHALL BE AN ISA CERTIFIED ARBORIST.
4. WHILE IN THE TREE, THE ARBORIST SHALL PERFORM AN AERIAL INSPECTION TO IDENTIFY DEFECTS THAT REQUIRE TREATMENT, ANY ADDITIONAL WORK NEEDED SHALL BE REPORTED TO THE OWNER.
5. PRUNING CUTS SHALL BE DONE IN ACCORDANCE WITH THE LATEST EDITION OF THE ANSI A300 PRUNING STANDARD (AMERICAN NATIONAL STANDARD FOR TREE CARE OPERATIONS) AND WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE LATEST EDITION OF ANSI Z133.1 SAFETY STANDARD. PRUNING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF ISA'S "BEST MANAGEMENT PRACTICES. TREE PRUNING".
6. WHERE TEMPORARY CLEARANCE IS NEEDED FOR ACCESS, BRANCHES SHALL BE TIED BACK TO HOLD THEM OUT OF THE CLEARANCE ZONE.
7. NO MORE THAN 20 PERCENT OF LIVE FOLIAGE SHALL BE REMOVED WITHIN ANY TREE.
8. ALL TREES WITHIN THE PROJECT AREA SHALL BE PRUNED AS FOLLOWS:
    a. LIVE BRANCH PRUNING SHOULD BE PERFORMED ONLY WHEN THE DANGER OF INSECT OR DISEASE INFESTATION IS NOT PRESENT.
    b. REMOVE STUBS, CUTTING OUTSIDE THE WOUND WOOD TISSUE THAT HAS FORMED AROUND THE BRANCH.
    c. CLEANING, FOR THE SELECTIVE REMOVAL OF DEAD, DISEASED, BROKEN, OR CROSSING BRANCHES DOWN TO ONE INCH IN DIAMETER OR AS DIRECTED BY THE PROJECT ARBORIST.
    d. PRUNING CUTS LARGER THAN 4 INCHES IN DIAMETER, EXCEPT FOR DEAD WOOD, SHALL BE AVOIDED.
    e. PRUNING CUTS THAT EXPOSE HEARTWOOD SHALL BE AVOIDED WHENEVER POSSIBLE.
    f. ALL TREES WITH CROWNS THAT PROJECT INTO PARKING LOT/ROADWAY AREAS SHALL BE RAISED TO 14 FEET ABOVE FINISHED GRADE.
    g. ALL TREES WITH CROWNS THAT PROJECT INTO SIDEWALK AREAS SHALL BE RAISED TO A HEIGHT OF 8 FEET ABOVE FINISHED GRADE.
9. TREES, WHOS ROOT SYSTEMS WILL BE IMPACTED SHALL RECEIVE THE FOLLOWING PRUNING TO COMPENSATE FOR ROOT LOSS:
    a. THE LOCATION AND SIZE OF BRANCHES FOR REDUCTION SHALL BE DEFINED BY THE PROJECT ARBORIST.
    b. REDUCTION, OR THE SELECTIVE PRUNING TO REDUCE TREE HEIGHT OR SPREAD.
    c. REDUCE END WEIGHT ON HEAVY, HORIZONTAL BRANCHES BY SELECTIVELY REMOVING SMALL DIAMETER BRANCHES, NO GREATER THAN 2 TO 3 INCHES, NEAR THE ENDS OF SCAFFOLD BRANCHES.
    d. RAISING SHALL CONSIST OF SELECTIVE PRUNING TO PROVIDE VERTICAL CLEARANCE.
10. PROPOSED REPLACEMENT TREES
    a. PRUNING SHALL BE LIMITED TO CLEANING.
11. BRUSH SHALL BE CHIPPED AND SPREAD (ONLY WHEN DISEASE OR INSECT INFESTATION IS NOT PRESENT) UNDERNEATH TREES WITHIN THE TREE PROTECTION ZONE TO A MAXIMUM DEPTH OF THREE (3) INCHES, LEAVING THE TRUNK CLEAR OF MULCH.
12. CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING ALL EXCESS DEBRIS ON A DAILY BASIS.

F. FERTILIZATION

1. CONTRACTOR SHALL COORDINATE FERTILIZATION PLAN, FOLLOWING BEST MANAGEMENT PRACTICES WITH THE PROJECT ARBORIST PRIOR TO COMMENCEMENT OF WORK.
2. EVERY EFFORT SHALL BE MADE TO UTILIZE CHEMICALS OF AN ORGANIC OR BIODEGRADABLE NATURE IN ORDER TO OFFER THE LEAST IMPACT TO THE NATURAL ENVIRONMENT. CONTRACTOR IS RESPONSIBLE FOR MIXING, APPLYING, AND DISPOSAL OF ALL CHEMICALS IN ACCORDANCE WITH STRICT ADHERENCE TO MANUFACTURER'S SPECIFICATIONS. COORDINATE WITH PROJECT ARBORIST FOR FURTHER INSTRUCTION.
3. ONLY TREES AFFECTED BY CONSTRUCTION OR AS SHOWN ON THE TREE MITIGATION PLAN AND TREE INVENTORY SCHEDULE SHALL BE TREATED.
4. TREES SPECIFIED TO RECEIVE FERTILIZER SHALL BE TREATED AS FOLLOWS.
    a. MIX FERTILIZER ACCORDING TO MANUFACTURER'S SPECIFICATIONS INTO A TANK WITH AGITATION CAPABILITY.
    b. MIX WETTING AGENT ACCORDING TO MANUFACTURER'S SPECIFICATIONS INTO SAME TANK WITH FERTILIZER. AGITATE MIX.
    c. INJECT THE MIXTURE WITH A HYDRAULIC INJECTION SYSTEM INTO THE UPPER 6-12 INCHES OF SOIL WITH A SOIL PROBE. INJECT AT THE RATE OF ONE THIRD (1/3) GALLON AT EACH INJECTION SITE.
    d. THE CRITICAL ROOT ZONE AREA PLUS 2' BEYOND THE CRITICAL ROOT ZONE SHALL BE INJECTED, BUT NOT BEYOND ROOT PRUNING LOCATIONS.
    e. FERTILIZER SHALL BE INSTALLED PRIOR TO THE INSTALLATION OF ANY AERATION SYSTEMS.
    f. EMPTY PRODUCT CONTAINERS SHALL BE STOCKPILED FOR INSPECTION BY THE PROJECT ARBORIST PRIOR TO DISPOSAL.
5. TRANSPLANT INOCULANT & BIOSTIMULANT.
    a. CONTRACTOR SHALL PROVIDE MYCORRHIZAL TRANSPLANT INOCULANT ACCORDING TO MANUFACTURER'S SPECIFICATIONS AND AS RECOMMENDED BY THE PROJECT ARBORIST. MIX INOCULANT IN 10' WIDE TOPSOIL RING AROUND THE ROOT BALL.
    b. CONTRACTOR SHALL PROVIDE INJECTABLE MYCORRHIZAL INOCULANT ACCORDING TO MANUFACTURER'S SPECIFICATIONS AND AS RECOMMENDED BY THE PROJECT ARBORIST. AGITATE FOR 10 MINUTES.
    c. INJECT THE MIXTURE WITH A HYDRAULIC INJECTION SYSTEM INTO THE UPPER 6-12 INCHES OF SOIL WITH A SOIL PROBE. INJECT AT THE RATE OF ONE THIRD (1/3) GALLON AT EACH INJECTION SITE.
    d. EMPTY PRODUCT CONTAINERS SHALL BE STOCKPILED FOR INSPECTION BY PROJECT ARBORIST PRIOR TO DISPOSAL.
7. TRANSPLANT MAINTENANCE
    a. APPROXIMATELY ONE YEAR AFTER PLANTING, THE CONTRACTOR SHALL REFERTILIZE ALL TRANSPLANTS UTILIZING THE SAME PROCEDURES ABOVE.

G. INSECTICIDE

1. NOTIFY PROJECT ARBORIST IF ANY INFESTATION IS NOTICED.
2. FOLLOW PROJECT ARBORIST'S RECOMMENDED PROCEDURES.
3. FOLLOW ALL MANUFACTURERS' RECOMMENDATIONS CONCERNING APPLICATION. READ ALL WARNING LABELS.
4. ANY PETS, AS WELL AS, THE PETS FOOD AND WATER BOWLS SHOULD BE REMOVED FROM THE AREA AND ANY SWIMMING POOLS SHOULD BE COVERED. COORDINATE WITH PROJECT ARBORIST FOR FURTHER INSTRUCTION.
5. ENSURE COMPLETE COVERAGE AND REAPPLY 2-3 MONTHS AFTER INITIAL APPLICATION UTILIZING SAME PROCEDURE.

H. IRRIGATION

1. EVERY EFFORT SHALL BE MADE TO WATER THE PRESERVED TREES AND TRANSPLANTS. CONTRACTOR SHALL IRRIGATE BY HAND OR BY TEMPORARY IRRIGATION.
2. IRRIGATE AS REQUIRED BY PROJECT ARBORIST UNTIL PERMANENT IRRIGATION IS INSTALLED AND OPERATING.
3. UNDERGROUND IRRIGATION SHALL NOT BE INSTALLED WITHIN THE DRIP LINES OF EXISTING TREES UNLESS ROOT PROTECTION MEASURES ARE PROVIDED AND APPROVED BY PROJECT ARBORIST.

I. TREE REMOVALS

1. PRIOR TO AND DURING LAND CLEARING, INCLUDING GRUBBING, ALL TREES TO BE REMOVED SHALL BE CLEARLY MARKED BY PROJECT ARBORIST WITH RED SURVEY RIBBONS AT 36 INCHES MINIMUM ABOVE GRADE.
2. CONTRACTOR SHALL REMOVE ALL TREES AS SHOWN ON THE TREE MITIGATION PLANS AFTER THE TREE PROTECTION FENCING IS INSTALLED.
3. ALL TREES SHOWN TO BE REMOVED SHALL BE FELLED WITH A CHAIN SAW AND STUMP GROUND 6" BELOW SURFACE. ANY TREE SHOWN TO BE REMOVED THAT IS IN AN AREA WHERE COMPACTION IS CRITICAL SHALL BE FELLED WITH A CHAIN SAW AND STUMP REMOVED BY CONTRACTOR.
4. ALL WOOD AND STUMPS FROM REMOVALS SHALL BE HAULED FROM THE SITE THE SAME DAY, EXCEPT FOR TOPS. ALL TOPS ARE TO BE MULCHED AND STOCKPILED OR HAULED DIRECTLY TO MULCHED AREAS FOR RELOCATED TREES IF SCHEDULING PERMITS. TOPS SHALL BE CHIPPED AND PLACED IN THE TREE PROTECTION ZONE TO A DEPTH OF THREE (3) INCHES, ALL EXCESS WOOD CHIPS SHOULD BE HAULED OFF SITE AFTER TRANSPLANTING IS COMPLETE.
5. ALL BURN PITS IF APPLICABLE MUST BE APPROVED BY THE PROJECT ARBORIST AND OWNER.
6. TREES TO BE REMOVED THAT HAVE BRANCHES EXTENDING INTO THE CANOPY OF TREES TO REMAIN MUST BE REMOVED BY A QUALIFIED ISA CERTIFIED ARBORIST AND NOT BY DEMOLITION OR CONSTRUCTION CONTRACTORS. THE QUALIFIED ARBORIST SHALL REMOVE THE TREE IN A MANNER THAT CAUSES NO DAMAGE TO THE TREES AND UNDERSTORY VEGETATION TO REMAIN.
7. TREES TO BE REMOVED LOCATED WITHIN THE TREE PROTECTION ZONE SHALL BE REMOVED BY A QUALIFIED ISA CERTIFIED ARBORIST. THE TREES SHALL BE CUT NEAR GROUND LEVEL AND THE STUMP GROUND OUT.

J. MACHINE DUG TRANSPLANTING

1. DIG TRANSPLANT-RECEIVING HOLE.
2. SET SPADE DUG ROOT BALL INTO RECEIVING HOLE 4"-6" ABOVE EXISTING GRADE.
3. WASH SAND OR TOPSOIL INTO AIR POCKETS BETWEEN ROOT BALL AND RECEIVING HOLE.
4. INSTALL TOPSOIL RING, 4" HIGH, 10" WIDE, AROUND PERIMETER OF ROOT BALL. MIX MYCORRHIZAL TRANSPLANT INOCULANT INTO TOPSOIL RING PER MANUFACTURERS SPECIFICATIONS.
5. INSTALL THREE INCHES OF MULCH FROM PERIMETER OF ROOT BALL TO WITHIN 6" OF TREE TRUNK.
6. COVER TOPSOIL RING WITH 1" OF MULCH AND EXTEND MULCH 4'-6" DEEP, AWAY FROM PERIMETER OF ROOT BALL.
7. WATER TRANSPLANT.

K. HOLDING AREA FOR TRANSPLANTS

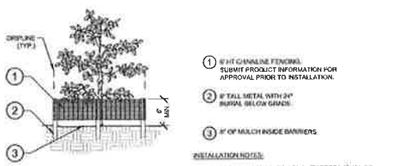
1. HOLDING AREAS SHOULD NOT BE NECESSARY. CONSTRUCTION PHASING SHOULD BE IMPLEMENTED SO THAT TREES ARE IMMEDIATELY RELOCATED TO THEIR PERMANENT LOCATION. COORDINATE WITH PROJECT ARBORIST AS NEEDED.
2. SHOULD A HOLDING AREA BE NECESSARY, TREE PROTECTION FENCING SHALL BE INSTALLED AT THE PERIMETER OF THE ENTIRE AREA.
3. CONTRACTOR SHALL COORDINATE LOCATION AND SPECIFICATIONS OF THE HOLDING AREA WITH PROJECT ARBORIST.
4. CONTRACTOR SHALL SUPPLY TEMPORARY IRRIGATION TO THE HOLDING AREA CONSISTING OF ABOVE GROUND PVC OR POLYETHYLENE PIPE, SPRAY OR ROTOR HEADS (WITH HEAD TO HEAD COVERAGE) AND A CONTROLLER. COORDINATE WITH PROJECT ARBORIST FOR CONTROLLER SETTINGS AND ALTERNATIVE WATERING METHODS.

L. TOPSOIL

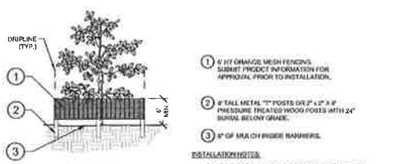
1. CONTRACTOR SHALL COORDINATE ALL EARTHWORK OPERATIONS WITHIN TREE PROTECTION AREAS WITH THE PROJECT ARBORIST PRIOR TO BEGINNING WORK.
2. ALL TOPSOIL SHALL BE NATURAL, FRIABLE, FERTILE, FINE LOAMY SOIL POSSESSING CHARACTERISTICS OF REPRESENTATIVE TOPSOIL IN THE VICINITY THAT PRODUCES HEAVY GROWTH.
3. TOPSOIL, PH RANGE OF 5.5 TO 7.0, 3-5 PERCENT ORGANIC MATERIAL MINIMUM, FREE FROM SUBSOIL, OBJECTIONABLE WEEDS, LITTER, SODS, STIFF CLAY, STONES LARGER THAN ONE (1) INCH IN DIAMETER, STUMPS, ROOTS, TRASH, TOXIC SUBSTANCES, OR ANY OTHER MATERIAL WHICH MAY BE HARMFUL TO PLANT GROWTH.
4. VERIFY AMOUNT STOCKPILED IF ANY, AND SUPPLY ADDITIONAL AS NEEDED FROM NATURALLY WELL-DRAINED SITES WHERE TOPSOIL OCCURS AT LEAST FOUR (4) INCHES DEEP. DO NOT OBTAIN TOPSOIL FROM BOGS OR MARSHES.
5. PROJECT ARBORIST SHALL APPROVE ALL TOPSOIL PRIOR TO PLACEMENT.

M. REPAIR OF DAMAGED TREES

1. IF DAMAGE TO ANY TREE SHOULD OCCUR BY ACCIDENT OR NEGLIGENCE DURING THE CONSTRUCTION PERIOD, THE PROJECT ARBORIST SHALL APPRAISE THE DAMAGE AND MAKE RECOMMENDATIONS TO THE OWNER FOR REPAIR BY THE CONTRACTOR.
2. IF ANY TREE DESIGNATED TO BE SAVED IS REMOVED FROM THE SITE WITHOUT PERMISSION OF THE OWNER'S REPRESENTATIVE, THE PROJECT ARBORIST SHALL APPRAISE THE TREE AND MAKE RECOMMENDATIONS TO THE OWNER FOR REPLACEMENT BY THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACEMENT OF THE TREE AND ANY FEES THAT MAY BE ASSESSED TO THE OWNER BY THE GOVERNING AGENCY.



1 TM-150 HIGH QUALITY TREE PROTECTION FENCING
ELEVATION / PLAN NTS



2 TM-150 REGULATED PROTECTION FENCING
ELEVATION / PLAN NTS

NO.	REVISIONS	DATE	BY

Kimley»Horn

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REGISTERED ARCHITECT CHRISTOPHER D. MORRISSEY STATE OF FLORIDA

KHA PROJECT	142350001
DATE	APRIL 2016
SCALE	AS SHOWN
DESIGNED BY	KHA
DRAWN BY	MDD
CHECKED BY	CDC
DATE	4/15/2016

TREE MITIGATION NOTES AND DETAILS

PALM GARDEN OF GAINESVILLE
PREPARED FOR
FLORIDA CONVALESCENT CENTERS, INC.
GAINESVILLE FLORIDA

SHEET NUMBER
TM-150

PLANT SCHEDULE

TREES	CODE	QTY	BOTANICAL NAME	COMMON NAME	CONT	CAL	HT	SPRD
	AF	5	ACER RUBRUM 'SUMMER RED'	SUMMER RED MAPLE	B & B	3" CAL MIN	10' HT MIN	4' MIN
	BR	3	BETULA NIGRA	RIVER BIRCH	B & B	3" CAL MIN	10' HT MIN	4' MIN
	CC	8	CERCIS CANADENSIS	EASTERN REDBUD	B & B	2" CAL OA	9' HT MIN	5' MIN
	CV	15	CHIONANTHUS VIRGINICUS	WHITE FRINGETREE	B & B	3" CAL OA	8' HT MIN	4' MIN
	IE	8	ILEX X ATTENUATA 'EAGLESTON'	EAGLESTON HOLLY	B & B	2" CAL OA	8' HT MIN	4' MIN
	LN	10	LAGERSTROEMIA X 'NATCHEZ'	CRAPE MYRTLE	B & B	3" CAL MIN	9' HT MIN	5' MIN
	MG	4	MAGNOLIA GRANDIFLORA	SOUTHERN MAGNOLIA	B & B	3" CAL MIN	10' HT MIN	6' MIN
	ML	1	MAGNOLIA GRANDIFLORA 'LITTLE GEM'	DWARF SOUTHERN MAGNOLIA	B & B	2" CAL MIN	6' HT MIN	22" MIN
	QF	5	QUERCUS FALCATA	SOUTHERN RED OAK	B & B	3" CAL MIN	10' HT MIN	6' MIN
	QV	7	QUERCUS VIRGINIANA	SOUTHERN LIVE OAK	B & B	3" CAL MIN	10' HT MIN	9' MIN
	SS	12	SABAL PALMETTO	CABBAGE PALMETTO	FG	HEAVY H.O. FULLY REGENERATED	10' - 16' CT VARIES	
	TD	15	TAXODIUM DISTICHUM	BALD CYPRESS	B & B	3" CAL MIN	10' HT MIN	6' MIN
	UA	5	ULMUS ALATA	WINGED ELM	B & B	2" CAL MIN	10' HT MIN	4' MIN

SHRUBS	CODE	QTY	BOTANICAL NAME	COMMON NAME	CONT	SPACING	SIZE
	CJ	72	CLEYERA JAPONICA	SAKAKI	7 GAL	36" OC	30" HT MIN
	LD	42	LIRIOPE MUSCARI 'BIG BLUE'	LILYTURF	1 GAL	18" OC	12" HT MIN
	MC	222	MUHLENBERGIA CAPILLARIS	PINK MUHLY	3 GAL	36" OC	24" FULL
	SR	75	SERENOA REPENS	SAW PALMETTO	7 GAL	48" OC	24" FULL
	VO	188	VIBURNUM ODORATISSIMUM	SWEET VIBURNUM	7 GAL	48" OC	30" HT MIN
	ZF	118	ZAMIA FLORIDANA	COONTIE	7 GAL	36" OC	18" FULL

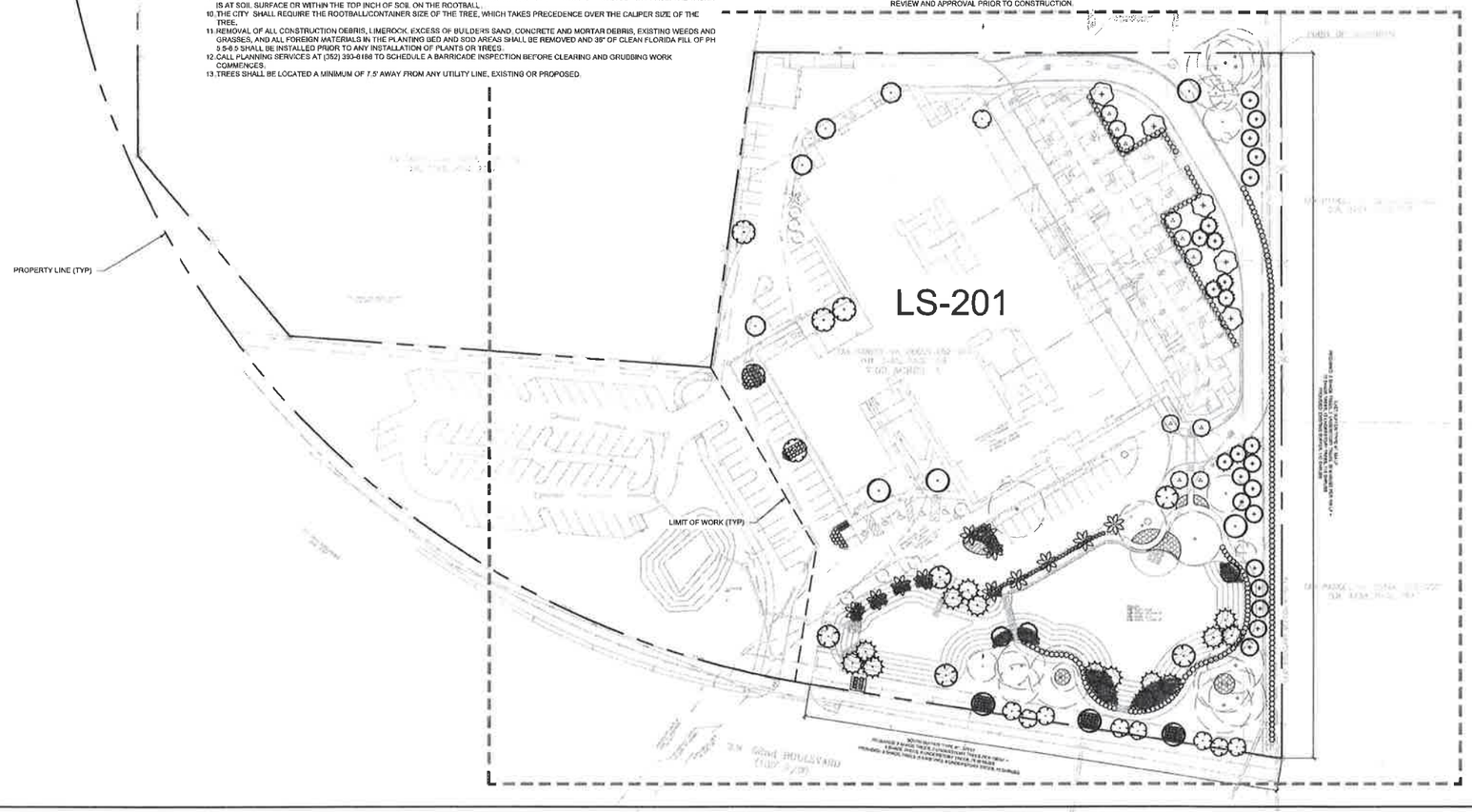
SHRUB AREAS	CODE	QTY	BOTANICAL NAME	COMMON NAME	CONT	SIZE	SPACING
	AA	261	ANNUALS	ANNUALS	1 GAL	12" FULL	12" o.c.
	RA	103	RHODODENDRON 'FORMOSA LAVENDER'	FORMOSA AZALEA	7 GAL	24" FULL	36" o.c.

PRESERVED TREE

PRESERVED PALM

NOTES:
1. ALL PLANT SPECIFICATIONS IN THE PLANT SCHEDULE SHALL BE CONSIDERED THE MINIMUM ALLOWABLE SPECIFICATIONS. CONTRACTOR SHALL PROCURE PLANT MATERIALS AND UPSIZE AS NECESSARY TO MEET THE MOST STRINGENT SPECIFICATION.
2. LANDSCAPE ARCHITECT RESERVES THE RIGHT TO FIELD ADJUST ALL PLANT MATERIAL.
3. ALL QUANTITIES PROVIDED FOR CONVENIENCE ONLY. CONTRACTOR SHALL CONFIRM ALL QUANTITIES PER PLAN PRIOR TO BIDDING AND CONSTRUCTION.
4. MULCH ALL DISTURBED AREAS WITH A THREE (3) INCH MINIMUM LAYER OF PINE BARK MULCH.
5. ALL PLANT MATERIAL SHALL BE GUARANTEED ONE YEAR AFTER ACCEPTANCE BY OWNER.
6. LANDSCAPE CONTRACTOR SHALL CALL PLANNING SERVICES AT (352) 393-8188 TO SCHEDULE AN ON-SITE MEETING PRIOR TO PURCHASING ANY PLANT MATERIAL.
7. ALL TREES IN SOD TO BE IN A (4) FOOT MINIMUM-MULCHED RING AROUND THE NEWLY PLANTED TREES.
8. ALL TREES PLANTED IN SOD TO HAVE (16) INCH PLASTIC PROTECTOR AROUND TRUNK BASE TO PROTECT FROM MOWING DAMAGE.
9. TREES SHALL BE PLANTED SO THAT THE TRUNK FLARE IS EXPOSED AND TOPMOST ROOT IN THE ROOTBALL ORIGINATING FROM THE TRUNK IS AT SOIL SURFACE OR WITHIN THE TOP INCH OF SOIL ON THE ROOTBALL.
10. THE CITY SHALL REQUIRE THE ROOTBALL/CONTAINER SIZE OF THE TREE, WHICH TAKES PRECEDENCE OVER THE CALIPER SIZE OF THE TREE.
11. REMOVAL OF ALL CONSTRUCTION DEBRIS, LIMEROCK, EXCESS OF BUILDERS SAND, CONCRETE AND MORTAR DEBRIS, EXISTING WEEDS AND GRASSES, AND ALL FOREIGN MATERIALS IN THE PLANTING BED AND SOD AREAS SHALL BE REMOVED AND 39" OF CLEAN FLORIDA FILL OF PH 5.5-6.5 SHALL BE INSTALLED PRIOR TO ANY INSTALLATION OF PLANTS OR TREES.
12. CALL PLANNING SERVICES AT (352) 393-8188 TO SCHEDULE A BARRICADE INSPECTION BEFORE CLEARING AND GRUBBING WORK COMMENCES.
13. TREES SHALL BE LOCATED A MINIMUM OF 7.5' AWAY FROM ANY UTILITY LINE, EXISTING OR PROPOSED.

IRRIGATION NOTES:
1. AUTOMATIC IRRIGATION SYSTEM IS REQUIRED FOR THIS DEVELOPMENT. PROVIDE BUBBLERS AT EACH TREE TO BE INSTALLED PER NOT #5 BELOW.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR TEMPORARY IRRIGATION OF ALL SOD AREAS THROUGH ESTABLISHMENT.
3. CONTRACTOR TO MODIFY / ADJUST EXISTING IRRIGATION SYSTEM OR INSTALL NEW SYSTEM COMPONENTS AS NECESSARY TO PROVIDE 100% HEAD TO HEAD COVERAGE OF ALL NEW PLANT MATERIAL AND MAINTAIN CURRENT IRRIGATION COVERAGE OF EXISTING MATERIAL TO REMAIN.
4. ALL DRIP ZONES SHALL BE INSTALLED WITH A FLUSH VALVE AND AIR RELIEF VALVE. IN THE EVENT THAT A DRIP ZONE HAS MORE THAN ONE HIGH OR LOW POINT, MORE THAN ONE AIR RELIEF VALVE OR FLUSH VALVE WILL BE REQUIRED FOR THAT ZONE. DRIPLINE SHALL PROVIDE 0.9 GPH EMITTERS, 18" O.C. WITH 18" LINE SPACING AT A MINIMUM.
5. ALL TREES AND PALMS SHALL BE IRRIGATED WITH FLOOD BUBBLERS LOCATED ON 5' MINIMUM LENGTH FLEXIBLE PIPING FOR PLACEMENT AT EACH TREE. CANOPY TREES SHALL RECEIVE TWO (2) 0.50 GPM FLOOD BUBBLERS PER TREE AND UNDERSTORY TREES / PALMS SHALL RECEIVE TWO (2) 0.25 GPM FLOOD BUBBLERS PER TREE.
6. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OF ALL IRRIGATION COMPONENTS AND PROPOSED ZONE(S) INFORMATION TO OWNER FOR REVIEW AND APPROVAL PRIOR TO CONSTRUCTION.



GRAPHIC SCALE IN FEET
0 25 50 100

NORTH

LANDSCAPE CALCULATIONS

STORMWATER LANDSCAPING PER SECTION 30.253.2.A.1

1 SHADE TREE / 35 LF OF BASIN PERIMETER
REQUIRED: 842 LF / 35 = 29 TREES
PROVIDED: 29 TREES (4 EXISTING)

PERIMETER LANDSCAPING PER SECTION 30.252.1.E

SOUTH BUFFER: 370 LF, 9' WIDTH
REQUIRED: 8 SHADE TREES, 8 UNDERSTORY TREES, 75 SHRUBS
PROVIDED: 8 SHADE TREES (5 EXISTING), 8 UNDERSTORY TREES, 75 SHRUBS

EAST BUFFER: 554 LF, 9' WIDTH
REQUIRED: 11 SHADE TREES, 11 UNDERSTORY TREES, 110 SHRUBS
PROVIDED: EXISTING TREE BUFFER, 110 SHRUBS

INTERIOR LANDSCAPING PER SECTION 30.252.2

1 TREE / LANDSCAPE ISLAND PROVIDED

STREET LANDSCAPING PER SECTION 30.253

1 HIGH QUALITY SHADE TREE AT 30' - 50' O.C. PROVIDED

PLANT SIZE SPECIFICATIONS PER SECTION 30.256.A.2
SHADE TREE: MINIMUM 7' HEIGHT, 2" CALIPER
75% OF TREES SHALL BE NATIVE SPECIES

APR 19 2016

CALL 2 WORKING DAYS BEFORE YOU DIG
IT'S THE LAW! DIAL 811
Know what's below. Call before you dig.
SUNSHINE STATE ONE CALL OF FLORIDA, INC.

No.	REVISIONS	DATE	BY

Kimley»Horn
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STATE OF FLORIDA — LANDSCAPE ARCHITECT — CHRISTOPHER D. CRAWFORD — LICENSE NO. 0001016 — DATE: 4/19/2016

KHA PROJECT	142350001
DATE	APRIL 2016
SCALE	AS SHOWN
DESIGNED BY	KHA
DRAWN BY	MDD
CHECKED BY	CDC

OVERALL LANDSCAPE PLAN

PALM GARDEN OF GAINESVILLE
PREPARED FOR
FLORIDA CONVALESCENT CENTERS, INC.
GAINESVILLE FLORIDA

SHEET NUMBER
LS-200

GRAPHIC SCALE IN FEET
0 15 30 60

NORTH

PLANT SYMBOL KEY

TREES	CODE	COMMON NAME
	AF	SUMMER RED MAPLE
	BR	RIVER BIRCH
	CC	EASTERN REDBUD
	CV	WHITE FRINGETREE
	IE	EAGLESTON HOLLY
	LN	CRAPE MYRTLE
	MG	SOUTHERN MAGNOLIA
	ML	DWARF SOUTHERN MAGNOLIA
	QF	SOUTHERN RED OAK
	QV	SOUTHERN LIVE OAK
	SS	CABBAGE PALMETTO
	TD	BALD CYPRESS
	UA	WINGED ELM

SHRUBS	CODE	COMMON NAME
	CJ	SAKAKI
	LD	LILYTURF
	MC	PINK MUHLY
	SR	SAW PALMETTO
	VO	SWEET VIBURNUM
	ZF	COONTIE

SHRUB AREAS	CODE	COMMON NAME
	AA	ANNUALS
	RA	FORMOSA AZALEA

LIMIT OF WORK (TYP)

PROPERTY LINE (TYP)

EAST BUFFER "TYPE A" 564 LF
REQUIRED: 2 SHADE TREES, 2 UNDERSTORY TREES PER 100 LF = 12 SHADE TREES, 12 UNDERSTORY TREES, 113 SHRUBS PER 100 LF = PROVIDED: EXISTING BUFFER, 10 SHRUBS

SOUTH BUFFER "TYPE A" - 370 LF
REQUIRED: 2 SHADE TREES, 2 UNDERSTORY TREES PER 100 LF = 8 SHADE TREES, 8 UNDERSTORY TREES, 75 SHRUBS
PROVIDED: 8 SHADE TREES (3 EXISTING), 8 UNDERSTORY TREES, 75 SHRUBS

CALL 2 WORKING DAYS BEFORE YOU DIG
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Know what's below. Call before you dig.
SUNSHINE STATE ONE CALL OF FLORIDA, INC.

APR 1 0 2016

No.	REVISIONS	DATE	BY

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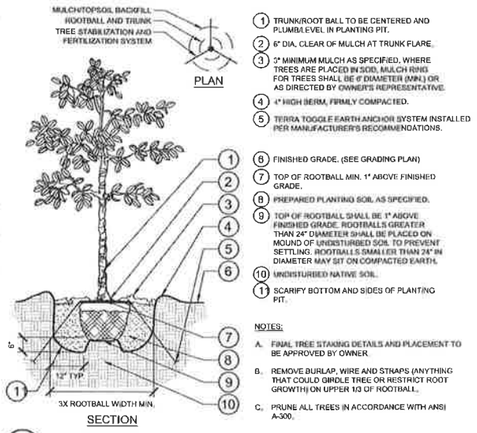
REGISTERED ARCHITECT CHRISTOPHER D. CHIAPPONE STATE OF FLORIDA

KHA PROJECT	142350001
DATE	APRIL 2016
SCALE	AS SHOWN
DESIGNED BY	KHA
DRAWN BY	MDD
CHECKED BY	CDC
DATE	4/7/2016

LANDSCAPE PLAN

PALM GARDEN OF GAINESVILLE
PREPARED FOR
FLORIDA CONVALESCENT CENTERS, INC.
GAINESVILLE FLORIDA

SHEET NUMBER
LS-201



1. TRUNK/ROOT BALL TO BE CENTERED AND PLUMB/LEVEL IN PLANTING PIT.
2. 6" DIA. CLEAR OF MULCH AT TRUNK FLARE.
3. 3" MINIMUM MULCH AS SPECIFIED, WHERE TREES ARE PLACED IN SOD, MULCH RING FOR TREES SHALL BE 6' DIAMETER (MIN.) OR AS DIRECTED BY OWNER'S REPRESENTATIVE.
4. 4" HIGH BERM, FIRMLY COMPACTED.
5. TERRA TOGGLE EARTH ANCHOR SYSTEM INSTALLED PER MANUFACTURER'S RECOMMENDATIONS.
6. FINISHED GRADE. (SEE GRADING PLAN)
7. TOP OF ROOTBALL MIN. 1" ABOVE FINISHED GRADE.
8. PREPARED PLANTING SOIL AS SPECIFIED.
9. TOP OF ROOTBALL SHALL BE 1" ABOVE FINISHED GRADE. ROOTBALLS GREATER THAN 24" DIAMETER SHALL BE PLACED ON MOUND OF UNDISTURBED SOIL TO PREVENT SETTLING. ROOTBALLS SMALLER THAN 24" IN DIAMETER MAY SIT ON COMPACTED EARTH.
10. UNDISTURBED NATIVE SOIL.
11. SCARIFY BOTTOM AND SIDES OF PLANTING PIT.

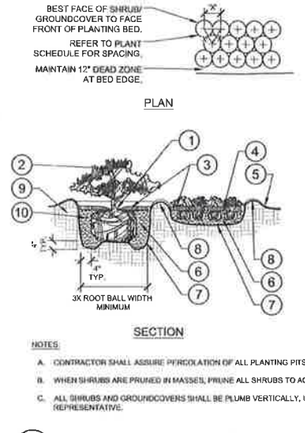
NOTES:

A. FINAL TREE STAKING DETAILS AND PLACEMENT TO BE APPROVED BY OWNER.

B. REMOVE BURLAP, WIRE AND STRAPS (ANYTHING THAT COULD GIRDLE TREE OR RESTRICT ROOT GROWTH) ON UPPER 1/3 OF ROOTBALL.

C. PRUNE ALL TREES IN ACCORDANCE WITH ANSI A-300.

1 LS-250 TREE PLANTING — SECTION / PLAN — NTS



1. TOP OF SHRUB ROOTBALLS TO BE PLANTED 1" - 2" HIGH WITH SOIL MOUNDING UP TO THE TOP OF ROOTBALL.
2. PRUNE ALL SHRUBS TO ACHIEVE A UNIFORM MASS/HEIGHT.
3. 3" MULCH LAYER AS SPECIFIED.
4. EXCAVATE ENTIRE BED SPECIFIED FOR GROUNDCOVER BED.
5. FINISHED GRADE (SEE GRADING PLAN).
6. PREPARED PLANTING SOIL AS SPECIFIED. (SEE LANDSCAPE NOTES). NOTE: WHEN GROUNDCOVERS AND SHRUBS USED IN MASSES, ENTIRE BED TO BE AMENDED WITH PLANTING SOIL MIX AS SPECIFIED.
7. SCARIFY OF PLANTING PIT SIDES AND BOTTOM.
8. 4" HIGH BERM FIRMLY COMPACTED.
9. UNDISTURBED NATIVE SOIL.
10. FERTILIZER TABLETS (MAX 3" DEEP)

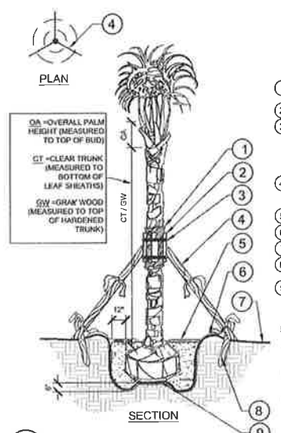
NOTES:

A. CONTRACTOR SHALL ASSURE PERCOLATION OF ALL PLANTING PITS PRIOR TO INSTALLATION.

B. WHEN SHRUBS ARE PRUNED IN MASSES, PRUNE ALL SHRUBS TO ACHIEVE UNIFORM MASS / HEIGHT.

C. ALL SHRUBS AND GROUNDCOVERS SHALL BE PLUMB VERTICALLY, UNLESS OTHERWISE DIRECTED BY OWNERS REPRESENTATIVE.

2 LS-250 SHRUB/GROUNDCOVER PLANTING — SECTION / PLAN — NTS



1. 5 LAYERS OF BURLAP TO PROTECT TRUNK.
2. FIVE 2" X 4" X 18" WOOD BATTENS.
3. SECURE BATTENS WITH 2- 3/4" CARBON STEEL BANDS TO HOLD BATTENS IN PLACE. NO NAILS SHALL BE DRIVEN INTO PALM. HEIGHT OF BATTENS SHALL BE LOCATED IN RELATION TO THE HEIGHT OF THE PALM FOR ADEQUATE BRACING.
4. (3) 2"X4"X8' SUPPORTS. NAIL (DRILL AN NAIL IF NECESSARY) TO BATTENS AND 2" 4" STAKES. STAIN DARK BROWN.
5. 3" SPECIFIED MULCH
6. BERM SOIL TO HOLD WATER.
7. FINISH GRADE
8. 2"X4"X24" (MIN) P.T. WOOD STAKES (TYP.) NAIL TO SUPPORT POLES.
9. PREPARED PLANTING SOIL AS SPECIFIED. (SEE LANDSCAPE NOTES).

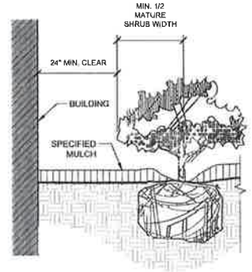
NOTES:

A. FINAL TREE STAKING DETAILS AND PLACEMENT TO BE APPROVED BY OWNER.

B. ALL TREE STAKING IS TO BE WITHIN MULCH BED AREA OUTSIDE TREE PIT.

C. CONTRACTOR SHALL ASSURE PERCOLATION OF ALL PLANTING PITS PRIOR TO INSTALLATION - REFER TO POOR DRAINAGE CONDITION DETAIL.

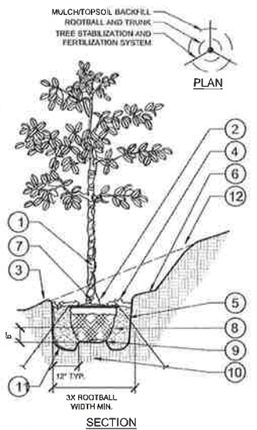
3 LS-250 PALM PLANTING — SECTION / PLAN — NTS



NOTES:

1. CLEAR ZONE: 36" MIN. FROM BUILDING TO CENTER OF NEAREST SHRUB.
2. INSTALL SPECIFIED MULCH: 24" MIN. FROM BUILDING. SPECIFIED MULCH TO BE INSTALLED AT A DEPTH OF 3" (MIN.)

4 LS-250 PLANTINGS ADJACENT TO BUILDINGS — SECTION — NTS



1. TRUNK/ROOT BALL TO BE CENTERED AND PLUMB/LEVEL IN PLANTING PIT.
2. 6" DIA. CLEAR OF MULCH AT TRUNK FLARE.
3. 3- 4" HIGH BERM, FIRMLY COMPACTED.
4. 3" MINIMUM OF HARDWOOD BARK MULCH AS SPECIFIED. WHERE TREES ARE PLACED IN SOD, MULCH RING FOR TREES SHALL BE 6' DIAMETER (MIN.) OR AS DIRECTED BY OWNER'S REPRESENTATIVE.
5. TERRA TOGGLE EARTH ANCHOR SYSTEM INSTALLED PER MANUFACTURER'S RECOMMENDATIONS.
6. 4" MIN. OF TOPSOIL TO BRING TO FINISHED GRADE. (SEE GRADING PLAN)
7. TOP OF ROOTBALL MIN. 1" ABOVE FINISHED GRADE.
8. PREPARED PLANTING SOIL AS SPECIFIED.
9. ROOTBALLS GREATER THAN 24" DIAMETER SHALL BE PLACED ON MOUND OF UNDISTURBED SOIL TO PREVENT SETTLING. ROOTBALLS SMALLER THAN 24" IN DIAMETER MAY SIT ON COMPACTED EARTH.
10. UNDISTURBED NATIVE SOIL.
11. SCARIFY BOTTOM AND SIDES OF PLANTING PIT.
12. CUT BACK SLOPE TO PROVIDE A FLAT SURFACE FOR PLANTING.

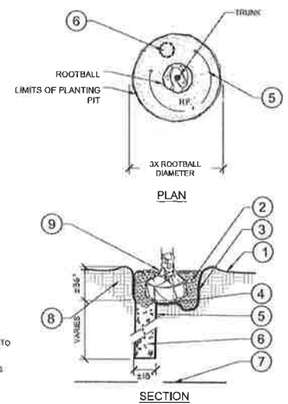
NOTES:

A. FINAL TREE STAKING DETAILS AND PLACEMENT TO BE APPROVED BY OWNER.

B. REMOVE BURLAP, WIRE AND STRAPS (ANYTHING THAT COULD GIRDLE TREE OR RESTRICT ROOT GROWTH) ON UPPER 1/3 OF ROOTBALL.

C. PRUNE ALL TREES IN ACCORDANCE WITH ANSI A-300.

5 LS-250 TREE PLANTING ON A SLOPE — SECTION / PLAN — NTS



1. FINISH GRADE (SEE GRADING PLANS).
2. BACKFILL WITH PREPARED PLANTING SOIL MIX AS SPECIFIED.
3. FILTER CLOTH, MIRAFI 500X OR BETTER.
4. SLOPE BOTTOM TO DRAIN.
5. AUGURED HOLE @ ±18" PENETRATE THROUGH OCCLUDING LAYER TO WATER TABLE OR TO A DEPTH OF 7' TO ASSURE PROPER PERCOLATION.
6. BACKFILL WITH 1/2" - 3/4" GRAVEL TO REQUIRED DEPTH THROUGH OCCLUDING LAYER TO ASSURE PROPER PERCOLATION.
7. WATER TABLE. (DEPTH VARIES)
8. UNDISTURBED NATIVE SOIL.
9. SET ROOTBALL ON UNDISTURBED STABLE SUBSOIL SO THAT TOP OF ROOT BALL IS 1" ABOVE FINISHED GRADE.

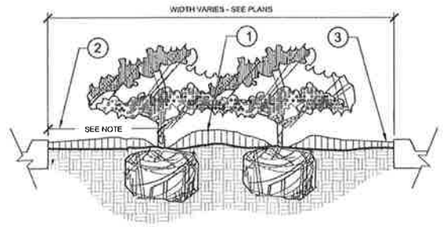
NOTES:

A. THIS DETAIL SHALL BE IMPLEMENTED WHERE PERCOLATION RATES ARE 2" PER HOUR OR LESS.

B. CONTRACTOR TO PERFORM PERCOLATION TEST AS REQUIRED, AND NOTIFY OWNER/LANDSCAPE ARCHITECT.

C. SEE TYPICAL TREE PLANTING DETAIL THIS SHEET FOR PLANT STAKING.

6 LS-250 POOR DRAINAGE CONDITION — SECTION / PLAN — NTS



1. CROWN ISLANDS @ 5:1 SLOPES (OR AS SPECIFIED ON THE LANDSCAPE PLANS).
2. CLEAR ZONE: 36" MIN. FROM BACK OF CURB TO CENTER OF NEAREST SHRUB. CLEAR ZONE SHALL CONTAIN 3" CONTINUOUS MULCH OR TURF, SEE PLANS.
3. 2' MIN VERTICAL CLEARANCE, TOP OF CURB TO TOP OF MULCH.

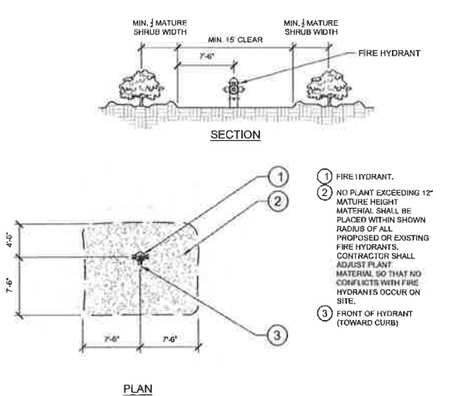
NOTES:

A. EXCAVATE A CONTINUOUS 24" DEEP PIT (FROM TOP OF CURB) FOR ENTIRE LENGTH AND WIDTH OF ISLAND & BACKFILL WITH APPROVED PLANTING MIX.

B. PROTECT AND RETAIN ALL CURBS AND BASE. COMPACTED SUBGRADE TO REMAIN FOR STRUCTURAL SUPPORT OF CURB SYSTEM (TYP).

C. ALL ISLANDS SHALL UTILIZE POOR DRAINAGE DETAIL WHEN PERCOLATION RATES ARE 2" PER HOUR OR LESS.

7 LS-250 PLANTED PARKING LOT ISLANDS/MEDIANS — SECTION — NTS



1. FIRE HYDRANT.
2. NO PLANT EXCEEDING 12" MATURE HEIGHT MATERIAL SHALL BE PLACED WITHIN SHOWN RADIUS OF ALL PROPOSED OR EXISTING FIRE HYDRANTS. CONTRACTOR SHALL ADJUST PLANT MATERIAL SO THAT NO CONFLICTS WITH FIRE HYDRANTS OCCUR ON SITE.
3. FRONT OF HYDRANT (TOWARD CURB)

8 LS-250 SHRUB PLANTING AT FIRE HYDRANT — SECTION / PLAN — NTS

Kimley»Horn

1825 S.E. PORT KING STREET, SUITE 200, OCALA, FL. 34471
PHONE: 352-438-3600
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NO.	REVISIONS	DATE	BY

KHA PROJECT	142350001
DATE	APRIL 2016
SCALE	AS SHOWN
DESIGNED BY	KHA
DRAWN BY	MDD
CHECKED BY	CDC
DATE	4/19/2016

LANDSCAPE DETAILS

PALM GARDEN OF GAINESVILLE
PREPARED FOR
FLORIDA CONVALESCENT CENTERS, INC.
GAINESVILLE FLORIDA

SHEET NUMBER
LS-250

GENERAL LANDSCAPE SPECIFICATIONS AND NOTES

A. SCOPE OF WORK

1. THE WORK CONSISTS OF: FURNISHING ALL LABOR, MATERIALS, EQUIPMENT, TOOLS, TRANSPORTATION, AND ANY OTHER APPURTENANCES NECESSARY FOR THE COMPLETION OF THIS PROJECT AS SHOWN ON THE DRAWINGS, AS INCLUDED IN THE PLANT LIST, AND AS SPECIFIED HEREIN.

2. WORK SHALL INCLUDE MAINTENANCE AND WATERING OF ALL CONTRACT PLANTING AREAS UNTIL CERTIFICATION OF ACCEPTANCE BY THE OWNER.

B. PROTECTION OF EXISTING STRUCTURES

1. ALL EXISTING BUILDINGS, WALKS, WALLS, PAVING, PIPING, OTHER SITE CONSTRUCTION ITEMS, AND PLANTING ALREADY COMPLETED OR ESTABLISHED AND DESIGNATED TO REMAIN SHALL BE PROTECTED FROM DAMAGE BY THE CONTRACTOR UNLESS OTHERWISE SPECIFIED. ALL DAMAGE RESULTING FROM NEGLIGENCE SHALL BE REPAIRED OR REPLACED TO THE SATISFACTION OF THE OWNER, AT NO COST TO THE OWNER.

2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL NECESSARY BMP DEVICES ACCORDING TO ALL REGULATORY AGENCY'S STANDARDS THROUGH THE DURATION OF ALL CONSTRUCTION ACTIVITIES.

3. THE CONTRACTOR SHALL SUBMIT A DETAILED PROJECT SPECIFIC WORK ZONE TRAFFIC CONTROL PLAN UNLESS THE WORK REQUIRES NOTHING MORE THAN A DIRECT APPLICATION OF FDOT DESIGN STANDARDS, INDEX 600. IF A DIRECT APPLICATION OF INDEX 600 IS PROPOSED, THE CONTRACTOR SHALL SUBMIT IN WRITING A STATEMENT INDICATING THE STANDARD INDEX AND PAGE NUMBER NO LESS THAN 10 BUSINESS DAYS PRIOR TO START OF CONSTRUCTION. WHEN A DIRECT APPLICATION OF FDOT STANDARD INDEX 600 IS NOT ACCEPTABLE A PROJECT SPECIFIC WORK ZONE TRAFFIC CONTROL PLAN SHALL BE PREPARED BY A FLORIDA PROFESSIONAL ENGINEER WHO HAS SUCCESSFULLY COMPLETED ADVANCED TRAINING IN MAINTENANCE OF TRAFFIC, AS DEFINED BY FDOT FOR APPROVAL BY THE COUNTY ENGINEER'S REPRESENTATIVE.

4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL UTILITIES, WHETHER PUBLIC OR PRIVATE, PRIOR TO EXCAVATION. THE INFORMATION AND DATA SHOWN WITH RESPECT TO EXISTING UNDERGROUND FACILITIES AT OR CONTIGUOUS TO THE SITE IS APPROXIMATE AND BASED ON INFORMATION FURNISHED BY THE OWNER OF SUCH UNDERGROUND FACILITIES OR ON PHYSICAL APPURTENANCES OBSERVED IN THE FIELD. THE OWNER AND DESIGN PROFESSIONAL SHALL NOT BE RESPONSIBLE FOR THE ACCURACY AND COMPLETENESS OF ANY SUCH INFORMATION OR DATA. THE CONTRACTOR SHALL HAVE FULL RESPONSIBILITY FOR: REVIEWING AND CHECKING ALL SUCH INFORMATION AND DATA; LOCATING ALL UNDERGROUND FACILITIES DURING CONSTRUCTION; THE SAFETY AND PROTECTION THEREOF; REPAIRING ANY DAMAGE THERETO RESULTING FROM THE WORK. THE COST OF ALL WILL BE CONSIDERED AS HAVING BEEN INCLUDED IN THE CONTRACT PRICE. THE CONTRACTOR SHALL NOTIFY ANY AFFECTED UTILITY COMPANIES OR AGENCIES IN WRITING AT LEAST 48 HOURS PRIOR TO BEGINNING CONSTRUCTION.

C. PROTECTION OF EXISTING PLANT MATERIALS

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL UNAUTHORIZED CUTTING OR DAMAGE TO TREES AND SHRUBS EXISTING OR OTHERWISE, CAUSED BY CARELESS EQUIPMENT OPERATION, MATERIAL STOCKPILING, ETC.. THIS SHALL INCLUDE COMPACTION BY DRIVING OR PARKING INSIDE THE DRIP-LINE AND SPILLING OIL, GASOLINE, OR OTHER DELETERIOUS MATERIALS WITHIN THE DRIP-LINE. NO MATERIALS SHALL BE BURNED ON SITE. EXISTING TREES KILLED OR DAMAGED SO THAT THEY ARE MISSHAPEN AND/OR UNSIGHTLY SHALL BE REPLACED AT THE COST TO THE CONTRACTOR OF THREE HUNDRED DOLLARS ($300) PER CALIPER INCH ON AN ESCALATING SCALE WHICH ADDS AN ADDITIONAL TWENTY (20) PERCENT PER INCH OVER FOUR (4) INCHES CALIPER AS FIXED AND AGREED LIQUIDATED DAMAGES. CALIPER SHALL BE MEASURED SIX (6) INCHES ABOVE GROUND LEVEL FOR TREES UP TO AND INCLUDING FOUR (4) INCHES IN CALIPER AND TWELVE (12) INCHES ABOVE GROUND LEVEL FOR TR~~EES OVER~~ FOUR (4) INCH~~ES IN CALIPER.~~

2. SEE TREE MITIGATION PLAN AND NOTES, IF APPLICABLE.

D. MATERIALS

1. GENERAL

MATERIAL SAMPLES LISTED BELOW SHALL BE SUBMITTED FOR APPROVAL, ON SITE OR AS DETERMINED BY THE OWNER. UPON APPROVAL, DELIVERY OF MATERIALS MAY COMMENCE.

MATERIAL	SAMPLE SIZE
MULCH	ONE (1) CUBIC FOOT
TOPSOIL MIX	ONE (1) CUBIC FOOT
PLANTS	ONE (1) OF EACH VARIETY (OR TAGGED IN NURSERY)

2. PLANT MATERIALS

a. PLANT SPECIES AND SIZE SHALL CONFORM TO THOSE INDICATED ON THE DRAWINGS. ALL NURSERY STOCK SHALL BE IN ACCORDANCE WITH GRADES AND STANDARDS FOR NURSERY PLANTS, LATEST EDITION, PUBLISHED BY THE FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES. ALL PLANTS SHALL BE FLORIDA GRADE NO. 1 OR BETTER AS DETERMINED BY THE FLORIDA DIVISION OF PLANT INDUSTRY. ALL PLANTS SHALL BE HEALTHY, VIGOROUS, SOUND, WELL-BRANCHED, AND FREE OF DISEASE AND INSECTS, INSECT EGGS AND LARVAE AND SHALL HAVE ADEQUATE ROOT SYSTEMS. TREES FOR PLANTING IN ROWS SHALL BE UNIFORM IN SIZE AND SHAPE. ALL MATERIALS SHALL BE SUBJECT TO APPROVAL BY THE OWNER. WHERE ANY REQUIREMENTS ARE OMITTED FROM THE PLANT LIST, THE PLANTS FURNISHED SHALL BE NORMAL FOR THE VARIETY. PLANTS SHALL BE PRUNED PRIOR TO DELIVERY ONLY WITH APPROVAL FROM OWNER OR OWNER'S REPRESENTATIVE. NO SUBSTITUTIONS SHALL BE MADE WITHOUT WRITTEN PERMISSION FROM THE OWNER'S REPRESENTATIVE.

b. MEASUREMENTS: THE HEIGHT AND/OR WIDTH OF TREES SHALL BE MEASURED FROM THE GROUND OR ACROSS THE NORMAL SPREAD OF BRANCHES WITH THE PLANTS IN THEIR NORMAL POSITION. THIS MEASUREMENT SHALL NOT INCLUDE THE IMMEDIATE TERMINAL GROWTH. PLANTS LARGER IN SIZE THAN THOSE SPECIFIED IN THE PLANT LIST MAY BE USED IF APPROVED BY THE OWNER. IF THE USE OF LARGER PLANTS IS APPROVED, THE BALL OF EARTH OR SPREAD OF ROOTS SHALL BE INCREASED IN PROPORTION TO THE SIZE OF THE PLANT.

c. INSPECTION: PLANTS SHALL BE SUBJECT TO INSPECTION AND APPROVAL AT THE PLACE OF GROWTH, OR UPON DELIVERY TO THE SITE, AS DETERMINED BY THE OWNER, FOR QUALITY, SIZE, AND VARIETY. SUCH APPROVAL SHALL NOT IMPAIR THE RIGHT OF INSPECTION AND REJECTION AT THE SITE DURING PROGRESS OF THE WORK OR AFTER COMPLETION FOR SIZE AND CONDITION OF ROOT BALLS OR ROOTS, LATENT DEFECTS OR INJURIES. REJECTED PLANTS SHALL BE REMOVED IMMEDIATELY FROM THE SITE. NOTICE REQUESTING INSPECTION SHALL BE SUBMITTED IN WRITING BY THE CONTRACTOR AT LEAST ONE (1) WEEK PRIOR TO ANTICIPATED DATE.

E. SOIL MIXTURE (PLANTING MEDIUM, PLANTING MIX, TOPSOIL MIX)

1. SOIL MIXTURE (PLANTING MEDIUM FOR PLANT PITS) SHALL CONSIST OF TWO PARTS OF TOPSOIL AND ONE PART SAND, AS DESCRIBED BELOW. CONTRACTOR TO SUBMIT SAMPLES AND PH TESTING RESULTS OF SOIL MIXTURE FOR OWNER'S REPRESENTATIVE APPROVAL PRIOR TO PLANT INSTALLATION OPERATIONS COMMENCE.

a. TOPSOIL FOR USE IN PREPARING SOIL MIXTURE FOR BACKFILLING PLANT PITS SHALL BE FERTILE, FRIABLE, AND OF A LOAMY CHARACTER, REASONABLY FREE OF SUBSOIL, CLAY LUMPS, BRUSH WEEDS AND OTHER LITTER, FREE OF ROOTS, STUMPS, STONES LARGER THAN 2" IN ANY DIRECTION, AND OTHER EXTRANEOUS OR TOXIC MATTER HARMFUL TO PLANT GROWTH. IT SHALL CONTAIN THREE (3) TO FIVE (5) PERCENT DECOMPOSED ORGANIC MATTER AND A PH BETWEEN 5.5 AND 7.0.

b. SAND SHALL BE COARSE, CLEAN, WELL-DRAINING, NATIVE SAND.

2. TREES SHALL BE PLANTED IN THE EXISTING NATIVE SOIL ON SITE, UNLESS DETERMINED TO BE UNSUITABLE - AT WHICH POINT THE CONTRACTOR SHALL CONTACT OWNER'S REPRESENTATIVE TO DISCUSS ALTERNATE RECOMMENDATION PRIOR TO PLANTING.

F. WATER

1. WATER NECESSARY FOR PLANTING AND MAINTENANCE SHALL BE OF SATISFACTORY QUALITY TO SUSTAIN ADEQUATE PLANT GROWTH AND SHALL NOT CONTAIN HARMFUL, NATURAL OR MAN-MADE ELEMENTS DETRIMENTAL TO PLANTS. WATER MEETING THE ABOVE STANDARD SHALL BE OBTAINED ON THE SITE FROM THE OWNER, IF AVAILABLE, AND THE CONTRACTOR SHALL BE RESPONSIBLE TO MAKE ARRANGEMENTS FOR ITS USE BY HIS TANKS, HOSES, SPRINKLERS, ETC.... IF SUCH WATER IS NOT AVAILABLE AT THE SITE, THE CONTRACTOR SHALL PROVIDE SATISFACTORY WATER FROM SOURCES OFF THE SITE AT NO ADDITIONAL COST TO THE OWNER.

2. CONTRACTOR SHALL PROVIDE TREEGATOR WATERING BAGS FOR ALL PALMS AND TREES THROUGHOUT THE WARRANTY PERIOD IF PERMANENT OR TEMPORARY IRRIGATION SYSTEM IS NOT AVAILABLE.

* WATERING/IRRIGATION RESTRICTIONS MAY APPLY - REFER TO PROPERTY'S JURISDICTIONAL AUTHORITY.

G. FERTILIZER

CONTRACTOR SHALL PROVIDE FERTILIZER APPLICATION SCHEDULE TO OWNER, AS APPLICABLE TO SOIL TYPE, PLANT INSTALLATION TYPE, AND SITE'S PROPOSED USE. SUGGESTED FERTILIZER TYPES SHALL BE ORGANIC OR OTHERWISE NATURALLY-DERIVED.

* FERTILIZER RESTRICTIONS MAY APPLY - REFER TO PROPERTY'S JURISDICTIONAL AUTHORITY.

H. MULCH

1. MULCH MATERIAL SHALL BE MOISTENED AT THE TIME OF APPLICATION TO PREVENT WIND DISPLACEMENT, AND APPLIED AT A DEPTH OF THREE (3) INCHES. CLEAR MULCH FROM EACH PLANT'S CROWN (BASE). MULCH SHALL BE ("FLORIMULCH" EUCALYPTUS MULCH, OR SIMILAR SUSTAINABLY HARVESTED MULCH UNLESS SPECIFIED OTHERWISE.

2. PROVIDE A THREE (3) INCH MINIMUM LAYER OF SPECIFIED MULCH OVER THE ENTIRE AREA OF EACH SHRUB BED, GROUND COVER, VINE BED, AND TREE PIT (6' MINIMUM) PLANTED UNDER THIS CONTRACT.

I. DIGGING AND HANDLING

1. PROTECT ROOTS OR ROOT BALLS OF PLANTS AT ALL TIMES FROM SUN, DRYING WINDS, WATER AND FREEZING, AS NECESSARY UNTIL PLANTING. PLANT MATERIALS SHALL BE ADEQUATELY PACKED TO PREVENT DAMAGE DURING TRANSIT. TREES TRANSPORTED MORE THAN TEN (10) MILES OR WHICH ARE NOT PLANTED WITHIN THREE (3) DAYS OF DELIVERY TO THE SITE SHALL BE SPRAYED WITH AN ANTITRANSPIRANT PRODUCT ("WILTPRUF" OR EQUAL) TO MINIMIZE TRANSPIRATIONAL WATER LOSS.

2. BALLED AND BURLAPPED (B&B), AND FIELD GROWN (FG) PLANTS SHALL BE DUG WITH FIRM, NATURAL BALLS OF SOIL OF SUFFICIENT SIZE TO ENCOMPASS THE FIBROUS AND FEEDING ROOTS OF THE PLANTS. NO PLANTS MOVED WITH A ROOT BALL SHALL BE PLANTED IF THE BALL IS CRACKED OR BROKEN. PLANTS SHALL NOT BE HANDLED BY STEMS.

3. PLANTS MARKED "BR" IN THE PLANT LIST SHALL BE DUG WITH BARE ROOTS. CARE SHALL BE EXERCISED THAT THE ROOTS DO NOT DRY OUT DURING TRANSPORTATION AND PRIOR TO PLANTING.

4. PROTECTION OF PALMS: ONLY A MINIMUM OF FRONDS SHALL BE REMOVED FROM THE CROWN OF THE PALM TREES TO FACILITATE MOVING AND HANDLING. CLEAR TRUNK (CT) SHALL BE AS SPECIFIED AFTER THE MINIMUM OF FRONDS HAVE BEEN REMOVED. ALL PALMS SHALL BE BRACED PER PALM PLANTING DETAIL.

5. EXCAVATION OF TREE PITS SHALL BE PERFORMED USING EXTREME CARE TO AVOID DAMAGE TO SURFACE AND SUBSURFACE ELEMENTS SUCH AS UTILITIES OR HARDSCAPE ELEMENTS, FOOTERS AND PREPARED SUB-BASES.

J. CONTAINER GROWN STOCK

1. ALL CONTAINER GROWN MATERIAL SHALL BE HEALTHY, VIGOROUS, WELL-ROOTED PLANTS ESTABLISHED IN THE CONTAINER IN WHICH THEY ARE SOLD. THE PLANTS SHALL HAVE TOPS WHICH ARE OF GOOD QUALITY AND ARE IN A HEALTHY GROWING CONDITION.

2. AN ESTABLISHED CONTAINER GROWN PLANT SHALL BE TRANSPLANTED INTO A CONTAINER AND GROWN IN THAT CONTAINER SUFFICIENTLY LONG ENOUGH FOR THE NEW FIBROUS ROOTS TO HAVE DEVELOPED SO THAT THE ROOT MASS WILL RETAIN ITS SHAPE AND HOLD TOGETHER WHEN REMOVED FROM THE CONTAINER. CONTAINER GROWN STOCK SHALL NOT BE HANDLED BY THEIR STEMS.

3. ROOT BOUND PLANTS ARE NOT ACCEPTABLE AND WILL BE REJECTED.

4. RPG= "ROOTS PLUS GROWER" CONTAINER PRODUCTS SHALL BE USED WHERE SPECIFIED.

K. COLLECTED STOCK

WHEN THE USE OF COLLECTED STOCK IS PERMITTED AS INDICATED BY THE OWNER OR OWNER'S REPRESENTATIVE, THE MINIMUM SIZES OF ROOTBALLS SHALL BE EQUAL TO THAT SPECIFIED FOR THE NEXT LARGER SIZE OF NURSERY GROWN STOCK OF THE SAME VARIETY.

L. NATIVE STOCK

PLANTS COLLECTED FROM WILD OR NATIVE STANDS SHALL BE CONSIDERED NURSERY GROWN WHEN THEY HAVE BEEN SUCCESSFULLY RE-ESTABLISHED IN A NURSERY ROW AND GROWN UNDER REGULAR NURSERY CULTURAL PRACTICES FOR A MINIMUM OF TWO (2) GROWING SEASONS AND HAVE ATTAINED ADEQUATE ROOT AND TOP GROWTH TO INDICATE FULL RECOVERY FROM TRANSPLANTING INTO THE NURSERY ROW.

M. MATERIALS LIST

QUANTITIES NECESSARY TO COMPLETE THE WORK ON THE DRAWINGS SHALL BE FURNISHED BY THE CONTRACTOR. QUANTITY ESTIMATES HAVE BEEN MADE CAREFULLY, BUT THE LANDSCAPE ARCHITECT OR OWNER ASSUMES NO LIABILITY FOR OMISSIONS OR ERRORS. SHOULD A DISCREPANCY OCCUR BETWEEN THE PLANS AND THE PLANT LIST QUANTITY, THE OWNER'S REPRESENTATIVE SHALL BE NOTIFIED FOR CLARIFICATION PRIOR TO BIDDING OR INSTALLATION. ALL DIMENSIONS AND/OR SIZES SPECIFIED SHALL BE THE MINIMUM ACCEPTABLE SIZE.

N. FINE GRADING

1. FINE GRADING UNDER THIS CONTRACT SHALL CONSIST OF FINAL FINISHED GRADING OF LAWN AND PLANTING AREAS THAT HAVE BEEN ROUGH GRADED BY OTHERS. BERMING AS SHOWN ON THE DRAWINGS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR, UNLESS OTHERWISE NOTED.

2. THE CONTRACTOR SHALL FINE GRADE THE LAWN AND PLANTING AREAS TO BRING THE ROUGH GRADE UP TO FINAL FINISHED GRADE ALLOWING FOR THICKNESS OF SOD AND/OR MULCH DEPTH. CONTRACTOR SHALL FINE GRADE BY HAND AND/OR WITH ALL EQUIPMENT NECESSARY INCLUDING A GRADING TRACTOR WITH FRONT-END LOADER FOR TRANSPORTING SOIL WITHIN THE SITE.

3. ALL PLANTING AREAS SHALL BE GRADED AND MAINTAINED FOR POSITIVE DRAINAGE TO SURFACE/SUBSURFACE STORM DRAIN SYSTEMS. AREAS ADJACENT TO BUILDINGS SHALL SLOPE AWAY FROM THE BUILDINGS. REFER TO CIVIL ENGINEER'S PLANS FOR FINAL GRADES, IF APPLICABLE.

O. PLANTING PROCEDURES

1. CLEANING UP BEFORE COMMENCING WORK: THE CONTRACTOR SHALL CLEAN WORK AND SURROUNDING AREAS OF ALL RUBBISH OR OBJECTIONABLE MATTER DAILY. ALL MORTAR, CEMENT, AND TOXIC MATERIAL SHALL BE REMOVED FROM THE SURFACE OF ALL PLANT BEDS. THESE MATERIALS SHALL NOT BE MIXED WITH THE SOIL. SHOULD THE CONTRACTOR FIND SUCH SOIL CONDITIONS BENEATH THE SOIL WHICH WILL IN ANY WAY ADVERSELY AFFECT THE PLANT GROWTH, HE SHALL IMMEDIATELY CALL IT TO THE ATTENTION OF THE OWNER'S REPRESENTATIVE. FAILURE TO DO SO BEFORE PLANTING SHALL MAKE THE CORRECTIVE MEASURES THE RESPONSIBILITY OF THE CONTRACTOR.

2. VERIFY LOCATIONS OF ALL UTILITIES, CONDUITS, SUPPLY LINES AND CABLES, INCLUDING BUT NOT LIMITED TO: ELECTRIC, GAS (LINES AND TANKS), WATER, SANITARY SEWER, STORMWATER SYSTEMS, CABLE, AND TELEPHONE. PROPERLY MAINTAIN AND PROTECT EXISTING UTILITIES. CALL SUNSHINE STATE ONE CALL OF FLORIDA, INC. (811) TO LOCATE UTILITIES AT LEAST 48 HOURS PRIOR TO CONSTRUCTION.

3. SUBGRADE EXCAVATION: CONTRACTOR IS RESPONSIBLE TO REMOVE ALL EXISTING AND IMPORTED LIMEROCK AND LIMEROCK SUB-BASE FROM ALL LANDSCAPE PLANTING AREAS TO A MINIMUM DEPTH OF 36". CONTRACTOR IS RESPONSIBLE TO BACKFILL THESE PLANTING AREAS TO ROUGH FINISHED GRADE WITH CLEAN TOPSOIL FROM AN ON-SITE SOURCE OR AN IMPORTED SOURCE. IF LIMEROCK OR OTHER ADVERSE CONDITIONS OCCUR IN PLANTED AREAS AFTER 36" DEEP EXCAVATION BY THE CONTRACTOR, AND POSITIVE DRAINAGE CAN NOT BE ACHIEVED, CONTRACTOR SHALL UTILIZE POOR DRAINAGE CONDITION PLANTING DETAIL.

4. FURNISH NURSERY'S CERTIFICATE OF COMPLIANCE WITH ALL REQUIREMENTS AS SPECIFIED HEREIN. INSPECT AND SELECT PLANT MATERIALS BEFORE PLANTS ARE DUG AT NURSERY OR GROWING SITE.

5. COMPLY WITH APPLICABLE FEDERAL, STATE, COUNTY, AND LOCAL REGULATIONS GOVERNING LANDSCAPE MATERIALS AND WORK. CONFORM TO ACCEPTED HORTICULTURAL PRACTICES AS USED IN THE TRADE. UPON ARRIVAL AT THE SITE, PLANTS SHALL BE THOROUGHLY WATERED AND PROPERLY MAINTAINED UNTIL PLANTED. PLANTS STORED ONSITE SHALL NOT REMAIN UNPLANTED OR APPROPRIATELY HEALED IN FOR A PERIOD EXCEEDING TWENTY-FOUR (24) HOURS. AT ALL TIMES WORKMANLIKE METHODS CUSTOMARY IN GOOD HORTICULTURAL PRACTICES SHALL BE EXERCISED.

6. THE WORK SHALL BE COORDINATED WITH OTHER TRADES TO PREVENT CONFLICTS. COORDINATE PLANTING WITH IRRIGATION WORK TO ASSURE AVAILABILITY OF WATER AND PROPER LOCATION OF IRRIGATION APPURTENANCES AND PLANTS.

7. ALL PLANTING PITS SHALL BE EXCAVATED TO SIZE AND DEPTH IN ACCORDANCE WITH THE USA STANDARD FOR NURSERY STOCK 260.1, UNLESS SHOWN OTHERWISE ON THE DRAWINGS, AND BACK FILLED WITH THE PREPARED PLANTING SOIL MIXTURE AS SPECIFIED IN SECTION E. TEST ALL TREE PITS WITH WATER BEFORE PLANTING TO ASSURE PROPER DRAINAGE PERCOLATION IS AVAILABLE. NO ALLOWANCE WILL BE MADE FOR LOST PLANTS DUE TO IMPROPER DRAINAGE. IF POOR DRAINAGE EXISTS, UTILIZE "POOR DRAINAGE CONDITION" PLANTING DETAIL. TREES SHALL BE SET PLUMB AND HELD IN POSITION UNTIL THE PLANTING MIXTURE HAS BEEN FLUSHED INTO PLACE WITH A SLOW, FULL HOSE STREAM. ALL PLANTING SHALL BE PERFORMED BY PERSONNEL FAMILIAR WITH PLANTING PROCEDURES AND UNDER THE SUPERVISION OF A QUALIFIED LANDSCAPE FOREMAN. PROPER "JETTING IN" SHALL BE ASSURED TO ELIMINATE AIR POCKETS AROUND THE ROOTS. "JET STICK" OR EQUAL IS RECOMMENDED.

8. TAKE ALL NECESSARY PRECAUTIONS TO AVOID DAMAGE TO BUILDINGS AND BUILDING STRUCTURES WHILE INSTALLING TREES.

9. SOIL MIXTURE SHALL BE AS SPECIFIED IN SECTION E OF THESE SPECIFICATIONS.

10. TREES AND SHRUBS SHALL BE SET STRAIGHT AT AN ELEVATION THAT, AFTER SETTLEMENT, THE PLANT CROWN WILL STAND ONE (1) TO TWO (2) INCHES ABOVE GRADE. EACH PLANT SHALL BE SET IN THE CENTER OF THE PIT. PLANTING SOIL MIXTURE SHALL BE BACK FILLED, THOROUGHLY TAMPED AROUND THE BALL, AND SETTLED BY WATER (AFTER TAMPING).

11. AMEND PINE AND OAK PLANT PITS WITH ECTOMYCORRHIZAL SOIL APPLICATION PER MANUFACTURER'S RECOMMENDATION. ALL OTHER PLANT PITS SHALL BE AMENDED WITH ENDOMYCORRHIZAL SOIL APPLICATION PER MANUFACTURER'S RECOMMENDATION. PROVIDE PRODUCT INFORMATION SUBMITTAL PRIOR TO INOCULATION.

12. FILL HOLE WITH SOIL MIXTURE, MAKING CERTAIN ALL SOIL IS SATURATED. TO DO THIS, FILL HOLE WITH WATER AND ALLOW TO SOAK MINIMUM TWENTY (20) MINUTES, STIRRING IF NECESSARY TO GET SOIL THOROUGHLY WET. PACK LIGHTLY WITH FEET, ADD MORE WET SOIL MIXTURE. DO NOT COVER TOP OF BALL WITH SOIL MIXTURE. ALL BURLAP, ROPE, WIRES, BASKETS, ETC., SHALL BE REMOVED FROM THE SIDES AND TOPS OF BALLS, BUT NO BURLAP SHALL BE PULLED FROM UNDERNEATH.

13. TREES SHALL BE PRUNED, AT THE DIRECTION OF THE OWNER OR OWNER'S REPRESENTATIVE, TO PRESERVE THE NATURAL CHARACTER OF THE PLANT. ALL SOFT WOOD OR SUCKER GROWTH AND ALL BROKEN OR BADLY DAMAGED BRANCHES SHALL BE REMOVED WITH A CLEAN CUT. ALL PRUNING TO BE PERFORMED BY CERTIFIED ARBORIST, IN ACCORDANCE WITH ANSI A-300.

14. SHRUBS AND GROUND COVER PLANTS SHALL BE EVENLY SPACED IN ACCORDANCE WITH THE DRAWINGS AND AS INDICATED ON THE PLANT LIST. MATERIALS INSTALLED SHALL MEET MINIMUM SPECIMEN REQUIREMENTS OR QUANTITIES SHOW ON PLANS, WHICHEVER IS GREATER. CULTIVATE ALL PLANTING AREAS TO A MINIMUM DEPTH OF 6", REMOVE AND DISPOSE ALL DEBRIS. MIX TOP 4" THE PLANTING SOIL MIXTURE AS SPECIFIED IN SECTION E. THOROUGHLY WATER ALL PLANTS AFTER INSTALLATION.

15. TREE GUYING AND BRACING SHALL BE INSTALLED BY THE CONTRACTOR IN ACCORDANCE WITH THE PLANS TO INSURE STABILITY AND MAINTAIN TREES IN AN UPRIGHT POSITION. IF THE CONTRACTOR AND OWNER DECIDE TO WAIVE THE TREE GUYING AND BRACING, THE OWNER SHALL NOTIFY THE PROJECT LANDSCAPE ARCHITECT IN WRITING AND AGREE TO INDEMNIFY AND HOLD HARMLESS THE PROJECT LANDSCAPE ARCHITECT IN THE EVENT UNSUPPORTED TREES PLANTED UNDER THIS CONTRACT FALL AND DAMAGE PERSON OR PROPERTY.

16. ALL PLANT BEDS SHALL BE KEPT FREE OF NOXIOUS WEEDS UNTIL FINAL ACCEPTANCE OF WORK. IF DIRECTED BY THE OWNER, "ROUND-UP" SHALL BE APPLIED FOR WEED CONTROL BY QUALIFIED PERSONNEL TO ALL PLANTING AREAS IN SPOT APPLICATIONS PER MANUFACTURER'S PRECAUTIONS AND SPECIFICATIONS. PRIOR TO FINAL INSPECTION, TREAT ALL PLANTING BEDS WITH AN APPROVED PRE-EMERGENT HERBICIDE AT AN APPLICATION RATE RECOMMENDED BY THE MANUFACTURER. (AS ALLOWED BY JURISDICTIONAL AUTHORITY)

P. LAWN SODDING

1. THE WORK CONSISTS OF LAWN BED PREPARATION, SOIL PREPARATION, AND SODDING COMPLETE, IN STRICT ACCORDANCE WITH THE SPECIFICATIONS AND THE APPLICABLE DRAWINGS TO PRODUCE A TURF GRASS LAWN ACCEPTABLE TO THE OWNER.

2. ALL AREAS THAT ARE TO BE SODDED SHALL BE CLEARED OF ANY ROUGH GRASS, WEEDS, AND DEBRIS BY MEANS OF A SOD CUTTER TO A DEPTH OF THREE (3) INCHES, AND THE GROUND BROUGHT TO AN EVEN GRADE. THE ENTIRE SURFACE SHALL BE ROLLED WITH A ROLLER WEIGHING NOT MORE THAN ONE-HUNDRED (100) POUNDS PER FOOT OF WIDTH. DURING THE ROLLING, ALL DEPRESSIONS CAUSED BY SETTLEMENT SHALL BE FILLED WITH ADDITIONAL SOIL, AND THE SURFACE SHALL BE REGRADED AND ROLLED UNTIL PRESENTING A SMOOTH AND EVEN FINISH TO THE REQUIRED GRADE.

3. PREPARE LOOSE BED FOUR (4) INCHES DEEP. HAND RAKE UNTIL ALL BUMPS AND DEPRESSIONS ARE REMOVED. WET PREPARED AREA THOROUGHLY.

4. SODDING

a. THE CONTRACTOR SHALL SOD ALL AREAS THAT ARE NOT PAVED OR PLANTED AS DESIGNATED ON THE DRAWINGS WITHIN THE CONTRACT LIMITS, UNLESS SPECIFICALLY NOTED OTHERWISE.

b. THE SOD SHALL BE CERTIFIED TO MEET FLORIDA STATE PLANT BOARD SPECIFICATIONS, ABSOLUTELY TRUE TO VARIETAL TYPE, AND FREE FROM WEEDS, FUNGUS, INSECTS AND DISEASE OF ANY KIND.

c. SOD PANELS SHALL BE LAID TIGHTLY TOGETHER SO AS TO MAKE A SOLID SODDED LAWN AREA. SOD SHALL BE LAID UNIFORMLY AGAINST THE EDGES OF ALL CURBS AND OTHER HARDSCAPE ELEMENTS, PAVED AND PLANTED AREAS. ADJACENT TO BUILDINGS, A 24 INCH STONE MULCH STRIP SHALL BE PROVIDED. IMMEDIATELY FOLLOWING SOD LAYING, THE LAWN AREAS SHALL BE ROLLED WITH A LAWN ROLLER CUSTOMARILY USED FOR SUCH PURPOSES, AND THEN THOROUGHLY IRRIGATED. IF, IN THE OPINION OF THE OWNER, TOP-DRESSING IS NECESSARY AFTER ROLLING TO FILL THE VOIDS BETWEEN THE SOD PANELS AND TO EVEN OUT INCONSISTENCIES IN THE SOD, CLEAN SAND, AS APPROVED BY THE OWNER'S REPRESENTATIVE, SHALL BE UNIFORMLY SPREAD OVER THE ENTIRE SURFACE OF THE SOD AND THOROUGHLY WATERED IN. FERTILIZE INSTALLED SOD AS ALLOWED BY PROPERTY'S JURISDICTIONAL AUTHORITY.

5. DURING DELIVERY, PRIOR TO, AND DURING THE PLANTING OF THE LAWN AREAS, THE SOD PANELS SHALL AT ALL TIMES BE PROTECTED FROM EXCESSIVE DRYING AND UNNECESSARY EXPOSURE OF THE ROOTS TO THE SUN. ALL SOD SHALL BE STACKED SO AS NOT TO BE DAMAGED BY SWEATING OR EXCESSIVE HEAT AND MOISTURE.

6. LAWN MAINTENANCE

a. WITHIN THE CONTRACT LIMITS, THE CONTRACTOR SHALL PRODUCE A DENSE, WELL ESTABLISHED LAWN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR AND RE-SODDING OF ALL ERODED, SUNKEN OR BARE SPOTS (LARGER THAN 12"X12") UNTIL CERTIFICATION OF ACCEPTANCE BY THE OWNER'S REPRESENTATIVE. REPAIRED SODDING SHALL BE ACCOMPLISHED AS IN THE ORIGINAL WORK (INCLUDING REGRADING IF NECESSARY).

b. CONTRACTOR RESPONSIBLE FOR ESTABLISHING AND MAINTAINING SOD/LAWN UNTIL ACCEPTANCE BY THE OWNER'S REPRESENTATIVE. PRIOR TO AND UPON ACCEPTANCE, CONTRACTOR TO PROVIDE WATERING/IRRIGATION SCHEDULE TO OWNER. OBSERVE ALL APPLICABLE WATERING RESTRICTIONS AS SET FORTH BY THE PROPERTY'S JURISDICTIONAL AUTHORITY.

Q. CLEANUP

UPON COMPLETION OF ALL PLANTING WORK AND BEFORE FINAL ACCEPTANCE, THE CONTRACTOR SHALL REMOVE ALL MATERIAL, EQUIPMENT, AND DEBRIS RESULTING FROM HIS WORK. ALL PAVED AREAS SHALL BE CLEANED AND THE SITE LEFT IN A NEAT AND ACCEPTABLE CONDITION AS APPROVED BY THE OWNER'S REPRESENTATIVE.

R. PLANT MATERIAL MAINTENANCE

ALL PLANTS AND PLANTING INCLUDED UNDER THIS CONTRACT SHALL BE MAINTAINED BY WATERING, CULTIVATING, SPRAYING, AND ALL OTHER OPERATIONS (SUCH AS RE-STAKING OR REPAIRING GUY SUPPORTS) NECESSARY TO INSURE A HEALTHY PLANT CONDITION BY THE CONTRACTOR UNTIL CERTIFICATION OF ACCEPTANCE BY THE OWNER'S REPRESENTATIVE.

S. FINAL INSPECTION AND ACCEPTANCE OF WORK

FINAL INSPECTION AT THE END OF THE WARRANTY PERIOD SHALL BE ON PLANTING, CONSTRUCTION AND ALL OTHER INCIDENTAL WORK PERTAINING TO THIS CONTRACT. ANY REPLACEMENT AT THIS TIME SHALL BE SUBJECT TO THE SAME ONE (1) YEAR WARRANTY (OR AS SPECIFIED BY THE LANDSCAPE ARCHITECT OR OWNER IN WRITING) BEGINNING WITH THE TIME OF REPLACEMENT AND ENDING WITH THE SAME INSPECTION AND ACCEPTANCE HEREIN DESCRIBED.

T. WARRANTY

1. THE LIFE AND SATISFACTORY CONDITION OF ALL PLANT MATERIAL INSTALLED (INCLUDING SOD) BY THE LANDSCAPE CONTRACTOR SHALL BE WARRANTED BY THE CONTRACTOR FOR A MINIMUM OF ONE (1) CALENDAR YEAR COMMENCING AT THE TIME OF CERTIFICATION OF ACCEPTANCE BY THE OWNER'S REPRESENTATIVE.

2. ANY PLANT NOT FOUND IN A HEALTHY GROWING CONDITION AT THE END OF THE WARRANTY PERIOD SHALL BE REMOVED FROM THE SITE AND REPLACED AS SOON AS WEATHER CONDITIONS PERMIT. ALL REPLACEMENTS SHALL BE PLANTS OF THE SAME KIND AND SIZE AS SPECIFIED IN THE PLANT LIST. THEY SHALL BE FURNISHED PLANTED AND MULCHED AS SPECIFIED AT NO ADDITIONAL COST TO THE OWNER.

3. IN THE EVENT THE OWNER DOES NOT CONTRACT WITH THE CONTRACTOR FOR LANDSCAPE AND IRRIGATION MAINTENANCE, THE CONTRACTOR SHOULD VISIT THE PROJECT SITE PERIODICALLY DURING THE ONE (1) YEAR WARRANTY PERIOD TO EVALUATE MAINTENANCE PROCEDURES BEING PERFORMED BY THE OWNER. CONTRACTOR SHALL NOTIFY THE OWNER IN WRITING OF MAINTENANCE PROCEDURES OR CONDITIONS WHICH THREATEN VIGOROUS AND HEALTHY PLANT GROWTH. SITE VISITS SHALL BE CONDUCTED A MINIMUM OF ONCE PER MONTH FOR A PERIOD OF TWELVE (12) MONTHS FROM THE DATE OF ACCEPTANCE.

No.	REVISIONS	DATE	BY

Kimley»Horn

1823 S.E. FORT KING STREET, SUITE 200, OCALA, FL 34471
PHONE: 352-438-3000
WWW.KIMLEY-HORN.COM CA 00000696

REGISTERED LANDSCAPE ARCHITECT
STATE OF FLORIDA
DATE: 4/13/2016

KHA PROJECT 142350001
DATE APRIL 2016
SCALE AS SHOWN
DESIGNED BY KHA
DRAWN BY MDD
CHECKED BY CDC

LANDSCAPE NOTES

PALM GARDEN OF GAINESVILLE
PREPARED FOR
FLORIDA CONVALESCENT CENTERS, INC.
GAINESVILLE FLORIDA

SHEET NUMBER
LS-251

SOLID STATE BOLLARDS

BRA SERIES-LED

SPECIFICATIONS

BOLLARD
Durable corrosion resistant extruded and cast aluminum construction. ¼" wall thickness.

LED POWER ARRAY™
Three-dimensional array consisting of 6 individual LED tubes for the BDA8 model and 4 individual LED tubes for the BDA6 model, which are fastened to a retaining plate equally spaced to provide 360° of even illumination output. Each LED tube consists of a circuit board populated with a multiple of LED's which is fastened to a radial aluminum heat sink. A white polycarbonate lens and end caps protect each LED tube's internal components and provides diffusion to prevent shadowing and striations.

INTERNAL LOUVER (IL) - A specular louver stack conceals the inner LED Power Array Module and provides uplight and glare control through the external clear polycarbonate lens.

CAST LOUVER (CL) - External cast aluminum louver stack protects the internal LED Power Array Module and provides uplight and glare control. An internal clear polycarbonate lens is integrated with the LED Power Array Module.

OPAL LENS (WP) - Exterior white polycarbonate lens protects the internal LED Power Array Module and provides a uniform white glow.

RADIAL LED MODULE
LED'S are mounted to a circular heatsink in a radial array. The radial LED module is concealed in the cap of the bollard. LED's are not directly visible from angles above 90°.

PARABOLIC REFLECTOR (TR) - A specular Parabolic Reflector reflects a portion of the distribution from the radial LED module and provides a uniform wide angle throw through the outer clear polycarbonate lens.

LED EMITTERS
High Output LED's are driven at 350mA for nominal 1 Watt output each. 70CRI Minimum. LED's are available in standard Neutral White (4000K), or optional Cool White (5000K) or Warm White (3000K). Consult Factory for other LED options.

LED DRIVER
UL and CUL recognized Constant Current LED drivers operate on input voltages from 120-277VAC, 50/60hz. Consult Factory for (347-480VAC). Driver is mechanically fastened to a retaining bracket. Driver has a minimum 4KV of internal surge protection, 10KV & 20KV Surge Protector optional. Dimmable and High-Low Driver options available.

FINISH
Polyester powder coat incorporates four step iron phosphate process to pretreat metal surface for maximum adhesion. Top coat is baked at 400°F for maximum hardness and exterior durability.

PROJECT NAME:

FIXTURE TYPE:

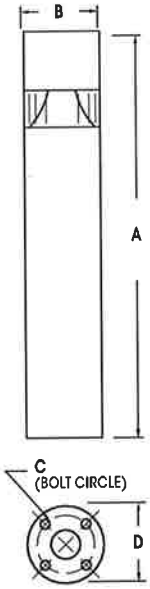
SB1: BRA6-IL-24LED-NW
SB2: BRA6-IL-24LED-NW-HS180

V2:

BRA

BRA8 SHOWN WITH -TR OPTICS

PATENT PENDING



BOLLARD	A	B	C	D
BRA8	42" 1067mm	8" 203mm	6" 152mm	8" 203mm
BRA6	42" 1067mm	6" 152mm	4" 102mm	6" 152mm

U.L. Listed for wet location

MADE IN THE USA

2015239

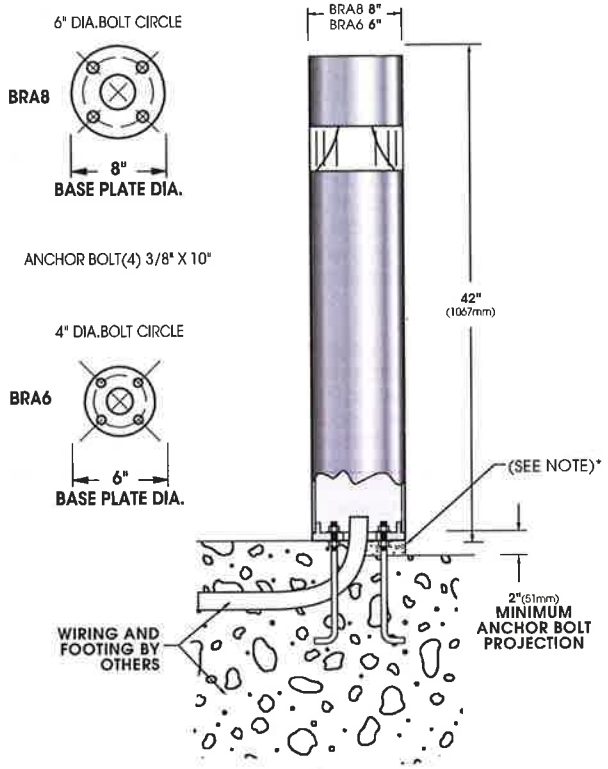
U.S. Architectural Lighting
660 West Avenue O, Palmdale, CA 93551
Phone (661) 233-2000 Fax (661) 233-2001
www.usallg.com

U.S. ARCHITECTURAL LIGHTING

BRA SERIES-LED

SPECIFICATIONS

INSTALLATION



*When mounting in soil, anchor bolt fasteners and other hardware must be protected from soil by grouting.

OPTICS

INTERNAL LOUVER
SUPPLIED WITH CLEAR POLYCARBONATE LENS — **IL**

CAST LOUVER — **CL**

OPAL POLYCARBONATE — **WA**

PARABOLIC REFLECTOR — **TR**

VPA - Vertical Array
BRA8 Available in: 36 LED Max
BRA6 Available in: 24LED Max

RADIAL LED Module
BRA8 Available in: 18 LED Module
BRA6 Available in: 12 LED Module

Spec/Order Example: **BRA6-TR/12LED120WW/RAL-8019-T/HLSW**

ORDERING INFORMATION

BOLLARD	OPTICS	# of LED's COLOR VOLTAGE	MOUNTING	FINISH	OPTIONS

BOLLARD

- ☐ **BRA8-LED**
- ☐ **BRA6-LED**

OPTICS

VERTICAL POWER ARRAY

- ☐ INTERNAL LOUVER ..... **IL**
- ☐ CAST LOUVER ..... **CL**
- ☐ OPAL POLYCARBONATE ..... **WP***

RADIAL LED MODULE

- ☐ PARABOLIC REFLECTOR ..... **TR**

*-WP OPTICS USE OPAL POLYCARBONATE LENS

LED

# of LEDs

- ☐ **36LED**[1] (42 Watts)
- ☐ **24LED** (28 Watts)
- ☐ **18LED**[1] (21 Watts)
- ☐ **12LED**[2] (15 Watts)

COLOR

- ☐ **NW** (4000K) Standard
- ☐ **CW** (5000K)
- ☐ **WW** (3000K)

OTHER LED COLORS AVAILABLE CONSULT FACTORY

VOLTAGE

- ☐ **120**
- ☐ **208**
- ☐ **240**
- ☐ **277**
- ☐ **347**
- ☐ **480**

NOTES:
1 – AVAILABLE IN BRA8 ONLY.
2 – AVAILABLE IN BRA6 ONLY.

MOUNTING

- ☐ **GROUND INSTALLATION** .... (STANDARD)
- ☐ WALL MOUNT **WM** .....

SB2 ONLY

FINISH

STANDARD TEXTURED FINISH

- ☐ BLACK **RAL-9005-T**
- ☐ WHITE **RAL-9003-T**
- ☐ GREY **RAL-7004-T**
- ☐ DARK BRONZE **RAL-8019-T**
- ☐ GREEN **RAL-6005-T**

FOR SMOOTH FINISH REPLACE SUFFIX "T" WITH SUFFIX "S" (EXAMPLE: RAL-9500-S)

SEE USALTG.COM FOR ADDITIONAL COLORS

OPTIONS

- ☐ DIMMABLE DRIVER (0-10V PROVIDED) ..... **DIM**
- ☐ HIGH-LOW DIMMING FOR HARDWIRED SWITCHING OR NONINTEGRATED MOTION SENSOR ..... **HLSW**
- ☐ INTERNAL HOUSE SIDE SHIELD.... **HS**
- ☐ DUPLEX RECEPTACLE ..... **DUP**
- ☐ GROUND FAULT RECEPTACLE ..... **GFI**
- ☐ 10KV SURGE PROTECTOR ..... **10SP** SB2 ONLY
- ☐ 20KV SURGE PROTECTOR (277V & 480V Only) ..... **20SP** SB2 ONLY

OPTIONAL HEIGHTS:

- ☐ **30"**
- ☐ **36"**

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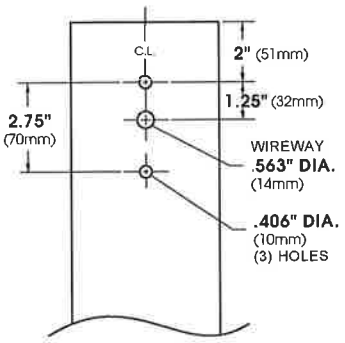
U.S. ARCHITECTURAL LIGHTING

LUM SERIES - PLED

SPECIFICATIONS

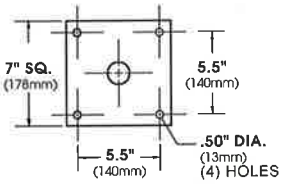
POLE DRILLING TEMPLATE



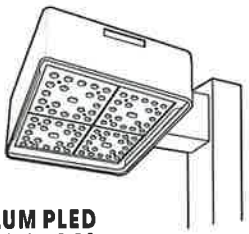
WALL MOUNT

EXTRUDED ALUMINUM ARM AND CAST ALUMINUM WALL BRACKET ASSEMBLY PROVIDED WITH BUILT IN GASKETED WIRE ACCESS FOR FIXTURE/SUPPLY WIRE CONNECTION.

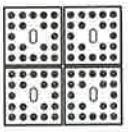
WALL PLATE



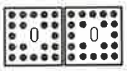
PLED™ MODULES



LUM PLED
E.P.A.= 1.12
Available in:
80 &40 LED Array



80 LED Array



40 LED Array

No. of LEDs	Drive Current	System Watts	HID Equivalent
40	350mA	45	70 - 100
	525mA	66	100 - 150
	700mA	91	175
	1050mA	142	200 - 250
80	350mA	92	150 - 175
	525mA	136	200 - 250
	700mA	184	400

Spec/Order Example: LUM-LED/PLED-V-SQ/80LED-700mA/NW/277/1/RAL9005

SPEC / ORDERING INFORMATION

MODEL

☐ LUM LED

OPTICS

PLED™ DISTRIBUTION

- ☐ TYPE II **PLED-II** .....
- ☐ TYPE II FRONT ROW **PLED-II-FR** .....
- ☐ TYPE II MEDIAN ILLUMINATOR **PLED-II-ML** .....
- ☐ TYPE III **PLED-III** .....
- ☐ TYPE IV **PLED-IV** .....
- ☐ TYPE IV **PLED-IV-FT** .....
- ☐ TYPE V NARROW **PLED-VSQ-N** ....
- ☐ TYPE V **PLED-V-SQ-M** ..
- ☐ TYPE V **PLED-V-SQ-W** ..

LED

No. LEDs

- ☐ 80LED[1]
- ☐ 40LED

NOTE:
1 - 700mA MAXIMUM

DRIVE CURRENT

- ☐ 1050mA
- ☐ 700mA
- ☐ 525mA
- ☐ 350mA

COLOR TEMP-CCT

- ☐ NW (4000K)* *STANDARD
- ☐ CW (5000K)
- ☐ WW (3000K)

OTHER LED COLORS AVAILABLE CONSULT FACTORY

VOLTAGE

- ☐ 120
- ☐ 208
- ☐ 240
- ☐ 277
- ☐ 347
- ☐ 480

MOUNTING

ARM MOUNT

- ☐ 1 .....
- ☐ 2-180 .....
- ☐ 2-90 .....
- ☐ 3-120 .....
- ☐ 3-90 .....
- ☐ 4-90 .....

ADJUSTABLE KNUCKLE FITTER

- ☐ NKLE27. .....
- ☐ NKLE23. .....
- ☐ UNIVERSAL POLE ADAPTOR. .... **UPA**

WALL MOUNT

- ☐ WM .....

FINISH

STANDARD TEXTURED FINISH

- ☐ BLACK **RAL-9005-T**
- ☐ WHITE **RAL-9003-T**
- ☐ GREY **RAL-7004-T**
- ☐ DARK BRONZE **RAL-8019-T**
- ☐ GREEN **RAL-6005-T**

FOR SMOOTH FINISH REPLACE SUFFIX "T" WITH SUFFIX "S" (EXAMPLE: RAL-9005-S)

SEE USALTG.COM FOR ADDITIONAL COLORS

OPTIONS

- ☐ HIGH-LOW DIMMING FOR HARDWIRED SWITCHING OR NONINTEGRATED MOTION SENSOR ..... **HLSW**
- ☐ INTERNAL HOUSE SIDE SHIELD ... **HS-PLED**
- ☐ PHOTO CELL + VOLTAGE (EXAMPLE: PC120V) .. **PC+V**
- ☐ TWIST LOCK PHOTO CELL + VOLTAGE (EXAMPLE: PC120V) .. **TPC+V**
- ☐ TWIST LOCK RECEPTACLE ONLY ... **TPR**
- ☐ SINGLE FUSE (120V, 277V) ..... **SF**
- ☐ DOUBLE FUSE (208V, 240V, 480V) .... **DF**

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Phone (661) 233-2000 Fax (661) 233-2001
www.usaltg.com

U.S. ARCHITECTURAL LIGHTING

LUM SERIES - PLED

LAMP/ELECTRICAL GUIDE

LED COUNT	SOURCE TYPE	SOURCE	INITIAL LUMENS - 4000K	INITIAL LUMENS - 3000K	INITIAL LUMENS - 5000K	L70 GREATER THAN (HR)	STARTING TEMP.	SYSTEM WATTS	VOLTS	MAX INPUT AMPS
40	LED	40 PLED Optical Module - 350mA	5,077 – 5,464	4,445 – 4,784	5,199 – 5,595	60,000+	-20°F	45	120 277	0.38 0.17
40	LED	40 PLED® Optical Module - 525mA	6,977 – 7,507	6,108 – 6,573	7,144 – 7,687	60,000+	-20°F	66	120 277	0.58 0.25
40	LED	40 PLED® Optical Module - 700mA	8,425 – 9,067	7,376 – 7,938	8,627 – 9,285	60,000+	-20°F	91	120 277	0.76 0.33
40	LED	40 PLED® Optical Module - 1050mA	10,956 – 11,792	9,592 – 10,324	11,219 – 12,075	60,000+	-20°F	142	120 277	1.19 0.52
80	LED	80 PLED® Optical Module - 350mA	10,153 – 10,926	8,889 – 9,566	10,397 – 11,188	60,000+	-20°F	92	120 277	0.77 0.34
80	LED	80 PLED® Optical Module - 525mA	13,952 – 15,015	12,215 – 13,146	14,287 – 15,376	60,000+	-20°F	136	120 277	1.14 0.50
80	LED	80 PLED® Optical Module - 700mA	16,851 – 18,139	14,752 – 15,877	17,254 – 18,570	60,000+	-20°F	184	120 277	1.54 0.67

NOTES:

1. Max Input Amps is the highest of starting, operating, or open circuit currents
2. Lumen values for LED Modules vary according to the distribution type
3. System Watts includes the source watts and all driver components.
4. Fuse value should be sufficient to protect all wiring components. For electronic driver and LED component protection, use 10KV – 20KV surge suppressors.
5. L70(9K) – TM-21 6x rule applied

WARNING: All fixtures must be installed in accordance with local codes or the National Electrical Code. Failure to do so may result in serious personal injury.

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PROJECT NAME: Palm Garden - Gainesville

FIXTURE TYPE: SP1

COL18-LED-V-SQ-64LED-PT-DB-10SP

SOLID STATE AREA LIGHTING

COLONIAL SERIES-LED

S P E C I F I C A T I O N S

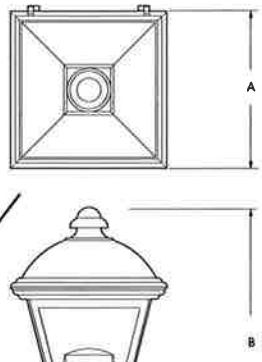
HOUSING
Durable, corrosion resistant, heavy cast low copper aluminum assembly (A356 alloy, <0.2% copper). Minimum wall thickness is .188". Traditional styling of the housing provided with cast aluminum housing top hinges for easy access. All hardware is stainless steel.

VLED® OPTICAL MODULE (Dark Sky Compliant-Full Cutoff)
Low copper A356 alloy (<.2% copper) cast aluminum housing. Integrated clear tempered 3/16" glass lens sealed with a continuous silicone gasket protects emitters (LED's) and emitter Reflector-Prism optics, and seals the module from water intrusion and environmental contaminants. LED's are available in standard Neutral White (4000K), or optional Cool White (5000K) or Warm White (3000K). Each emitter is optically controlled by a Reflector-Prism injection molded from H12 acrylic (3 types per module; one from 0° - 50°; one from 50° - 65°; one from 65° - 72°). Each Reflector-Prism has indexing pins for aiming and is secured to an optical plate made of matte black anodized aluminum. The optical plate locates every Reflector-Prism over an emitter. Reflector-Prisms are secured to the optical plate with a UV curing adhesive. The Reflector-Prisms are arrayed to produce IES Type II, III, IV, and V-SQ distributions. The entire **VLED®** Optical Module is field rotatable in 90° increments. Both module and drivers are factory wired using water resistant, insulated cord. Lens, module and drivers are field replaceable.

LED EMITTERS
High Output LED's are driven at 350mA for nominal 1 Watt output each or 525mA (COL21 and COL18 only) for nominal 1.5 Watt output each. LED's are available in standard Neutral White (4000K), or optional Cool White (5000K) or Warm White (3000K). Consult Factory for other LED options.

LED DRIVER
UL and CUL recognized High Power Factor, Constant Current LED drivers operate on input voltages from 120-277VAC, 50/60hz. Consult Factory for 347-480VAC. Driver is mechanically fastened to a retaining bracket. Main power quick disconnect provided. Driver has a minimum 4KV of internal surge protection, 10KV & 20KV Surge Protector optional. Dimming and High-Low Driver options available.

FINISH
Electrostatically applied TGIC Polyester Powder Coat on substrate prepared with 20 PSI power wash at 140°F. Four step iron phosphate pretreatment for protection and paint adhesion. 400°F bake for maximum hardness and durability. Texture finish is standard.

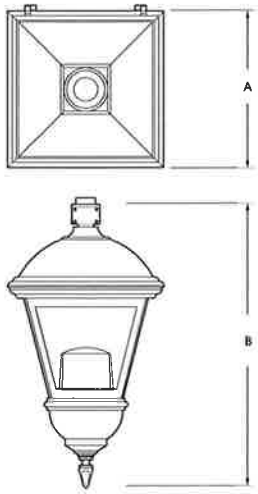


COL

PATENT PENDING

Fitter supplied to fit over 2 7/8" X 3" (73mm X 76mm) tennon.

FIXTURE	A	B
COL21-LED	21" 533mm	35" 889mm
COL18-LED	18" 457mm	31" 787mm
COL12-LED	12" 305mm	22" 559mm



COL-PM-LED

PATENT PENDING

FIXTURE	A	B
COL21-PM-LED	21" 553mm	36" 914mm
COL18-PM-LED	18" 457mm	32.5" 826mm
COL12-PM-LED	12" 305mm	24" 610mm

U.L. Listed for wet location

LPC 0% Uplight

MADE IN THE USA

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Sun Valley Lighting
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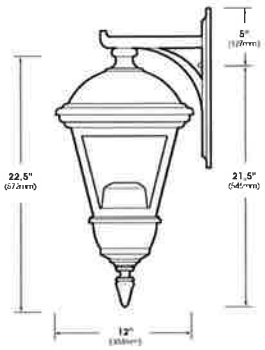
SUN VALLEY LIGHTING

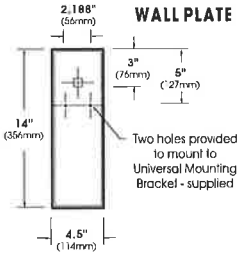
COLONIAL SERIES - LED

SPECIFICATIONS

WALL MOUNT



(COL12-WM shown)



ARM BRACKET EXTRUDED AND CAST ALUMINUM CONSTRUCTION.

VLED® MODULES

COL21-LED
COL21 E.P.A.= 2.03
COL21-PM E.P.A.= 1.93
Available in:
120, 100, 80, & 64
LED Module

COL18-LED
COL18 E.P.A.= 1.60
COL18-PM E.P.A.= 1.55
Available in:
64 & 48 LED Module

COL12-LED
COL12 E.P.A.= 0.90
COL12-PM E.P.A.= 0.81
Available in:
24 LED Module

120 LED Module

64 LED Module

24 LED Module

MAX INPUT WATTAGE

# OF LED's	DRIVE CURRENT 350mA	525mA
120	130W	192W
100	110W	164W
80	85W	126W
64	69W	103W
48	55W	76W
24	26W	-

Spec/Order Example: COL21/VLED-VSQ/120LED CW/3-90/RAL7004/DF

SPEC / ORDERING INFORMATION

LUMINAIRE	OPTICS	# of LED's	DRIVE CURRENT	COLOR TEMP - CCT	MOUNTING	FINISH	OPTIONS

LUMINAIRE

LUMINAIRE

- ☐ COL21-LED
- ☐ COL21-PM-LED
- ☐ COL18-LED
- ☐ COL18-PM-LED
- ☐ COL12-LED
- ☐ COL12-PM-LED

OPTICS

VLED®

- ☐ TYPE - II — VLED - II
- ☐ TYPE - III — VLED - III
- ☐ TYPE - IV — VLED - IV
- ☐ TYPE - V-SQ — VLED - VSQ
- ☐ TYPE - ASYMMETRIC — VLED - ASY
- ☐ TYPE - SYMMETRIC — VLED - SYM

LED

# of LEDs

COL21
- ☐ 120LED (132 Watts)
- ☐ 100LED (110 Watts)
- ☐ 80LED (89 Watts)
- ☐ 64LED (72 Watts)

COL18
- ☐ 64LED (72 Watts)
- ☐ 48LED (53 Watts)

COL12
- ☐ 24LED[1] (26 Watts)

NOTES:
1 – 350mA ONLY

DRIVE CURRENT
- ☐ 350mA
- ☐ 525mA

COLOR TEMP - CCT
- ☐ NW (4000K)* *STANDARD
- ☐ CW (5000K)
- ☐ WW (3000K)

OTHER LED COLORS AVAILABLE CONSULT FACTORY

VOLTAGE
- ☐ 120
- ☐ 208
- ☐ 240
- ☐ 277
- ☐ 347
- ☐ 480

MOUNTING

ARM MOUNT
- ☐ 1
- ☐ 2-180
- ☐ 2-90
- ☐ 3-90
- ☐ 3-120
- ☐ 4-90

WALL MOUNT
Refer to Sun Valley Lighting binder or website section - Arms/Wall Brackets
- ☐ WM

POST TOP
- ☐ PT

FINISH

STANDARD TEXTURED FINISH
- ☐ BLACK RAL-9005-T
- ☐ WHITE RAL-9003-T
- ☐ GREY RAL-7004-T
- ☐ DARK BRONZE RAL-8019-T
- ☐ GREEN RAL-6005-T

FOR SMOOTH FINISH REMOVE SUFFIX "T" (EXAMPLE: RAL-9500)

SEE USALTG.COM FOR ADDITIONAL COLORS

OPTIONS

- ☐ INTERNAL HOUSE SIDE SHIELD ..... HS
- ☐ DIMMABLE DRIVER(S) (0-10V) ..... DIM
- ☐ HIGH-LOW DIMMING FOR HARDWIRED SWITCHING OR NON-INTEGRATED MOTION SENSOR ..... HLSW
- ☐ 10KV SURGE PROTECTOR 10SP
- ☐ 20KV SURGE PROTECTOR (277V & 480V Only) 20SP
- ☐ PHOTO CELL + VOLTAGE (EXAMPLE: PC120V) ..... PC+V
- ☐ TWIST LOCK PHOTOCELL +VOLTAGE ..... TPC+V (COL21 & COL18 Only)
- ☐ TWIST LOCK PHOTOCELL RECEPTACLE ONLY ..... TPR (COL21 & COL18 Only)
- ☐ DOUBLE FUSE (208V, 240V) ..... DF

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SUN VALLEY LIGHTING

SOLID STATE AREA LIGHTING

COLONIAL-WA SERIES-LED

SPECIFICATIONS

PROJECT NAME:

FIXTURE TYPE:

LUMINAIRE

Four piece opal white acrylic lenses provided with heavy cast low copper aluminum corrosion resistant (A356 alloy, <0.2% copper) traditionally styled housing and top. Minimum wall thickness is .188". Top hinges for easy access. Silicone gasket between housing and hood. All hardware is stainless steel.

LED POWER ARRAY™

Three-dimensional array of individual LED Tubes fastened to a retaining plate. Each LED Tube consists of circuit board populated with a multiple of LED's and is mechanically fastened to a radial aluminum heat sink. An acrylic Lens and end cap protects each LED Tube's internal components.

VERTICAL POWER ARRAY™: LED Tubes are aligned vertically and equally arranged radially to produce an even raw light distribution that simulates standard light sources. Produces a minimal glare, symmetric diffuse light distribution. Used in conjunction with an opal smooth acrylic diffusing lens.

LED EMITTERS

High Output LED's are driven at 350mA for nominal 1 Watt output each. LED's are available in standard Neutral White (4000K), or optional Cool White (5000K) or Warm White (3000K). Consult Factory for other LED options.

LED DRIVER

UL and CUL recognized High Power Factor, Constant Current LED drivers operate on input voltages from 120-277VAC, 50/60hz. Consult Factory for 347-480VAC. Driver is mechanically fastened to a retaining bracket. Main power quick disconnect provided. Driver has a minimum 4KV of internal surge protection, 10KV & 20KV Surge Protector optional. Dimming and High-Low Driver options available.

FINISH

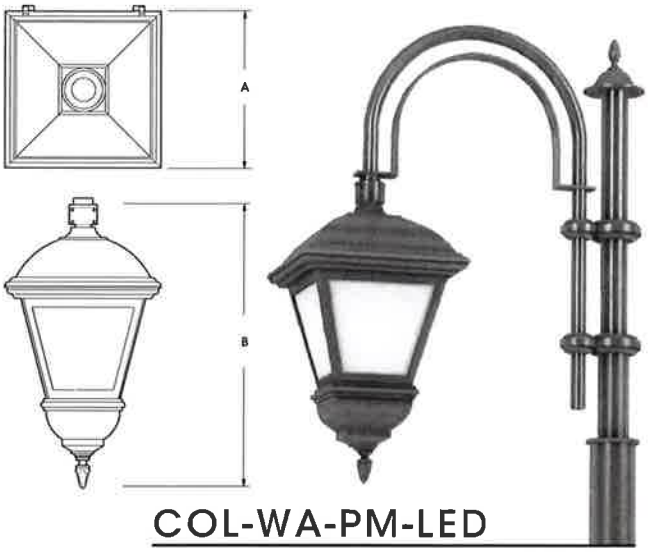
Polyester powder coat incorporates four step iron phosphate process to pretreat metal surface for maximum adhesion. Top coat is baked at 400°F for maximum hardness and exterior durability.

COL-WA-LED

PATENT PENDING

Fitter supplied to fit over 2 7/8" X 3" (73mm X 76mm) tennon.

FIXTURE	A	B
COL21-WA-LED	21" 533mm	35" 889mm
COL18-WA-LED	18" 457mm	31" 787mm
COL12-WA-LED	12" 305mm	22" 559mm



COL-WA-PM-LED

PATENT PENDING

FIXTURE	A	B
COL21-PM-WA-LED	21" 553mm	36" 914mm
COL18-PM-WA-LED	18" 457mm	32.5" 826mm
COL12-PM-WA-LED	12" 305mm	24" 610mm

U.L. Listed for wet location

MADE IN THE USA

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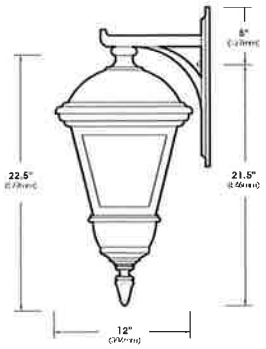
SUN VALLEY LIGHTING

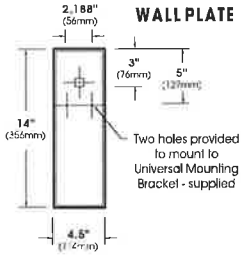
COLONIAL-WA SERIES - LED

SPECIFICATIONS

WALL MOUNT



(COL12-WM shown)



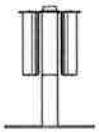
ARM BRACKET EXTRUDED AND CAST ALUMINUM CONSTRUCTION.

LED POWER ARRAY™ MODULES

COL21-WA-LED
COL21 E.P.A.= 3.02
COL21-PM E.P.A.= 2.93
ANGLED POWER ARRAY
80 LED Max.

COL18-WA-LED
COL18 E.P.A.= 2.35
COL18-PM E.P.A.= 2.30
ANGLED POWER ARRAY
64 LED Max.

COL12-WA-LED
COL12 E.P.A.= 1.12
COL12-PM E.P.A.= 1.13
VERTICAL ARRAY
24 LED Max.



VPA - Vertical Array
Base mount

Spec/Order Example: COL12-WA/VP-V/64LED NW/2-180/RAL8019/TPR

SPEC / ORDERING INFORMATION

LUMINAIRE	OPTICS	# of LED's	COLOR	VOLTAGE	MOUNTING	FINISH	OPTIONS

LUMINAIRE

LUMINAIRE

- ☐ COL21-WA-LED
- ☐ COL21-PM-WA-LED
- ☐ COL18-WA-LED
- ☐ COL18-PM-WA-LED
- ☐ COL12-WA-LED
- ☐ COL12-PM-WA-LED

OPTICS

VERTICAL POWER ARRAY

- ☐ Type - ASYMMETRIC **VPA-SYM** .....

LED

# of LEDs

COL21-WA
- ☐ 80LED (89 Watts)
- ☐ 64LED (69 Watts)
- ☐ 48LED (55 Watts)
- ☐ 36LED (40 Watts)

COL18-WA
- ☐ 64LED (69 Watts)
- ☐ 48LED (53 Watts)
- ☐ 36LED (40 Watts)

COL12-WA
- ☐ 24LED (26 Watts)
- ☐ 12LED (14 Watts)

COLOR TEMP - CCT

- ☐ NW (4000K)* *STANDARD
- ☐ CW (5000K)
- ☐ WW (3000K)

OTHER LED COLORS AVAILABLE CONSULT FACTORY

VOLTAGE

- ☐ 120
- ☐ 208
- ☐ 240
- ☐ 277
- ☐ 347
- ☐ 480

MOUNTING

ARM MOUNT

- ☐ 1 .....
- ☐ 2-180 .....
- ☐ 2-90 .....
- ☐ 3-90 .....
- ☐ 3-120 .....
- ☐ 4-90 .....

WALL MOUNT
Refer to Sun Valley Lighting binder or website section - Arms/Wall Brackets

- ☐ WM .....

POST TOP

- ☐ PT .....

FINISH

STANDARD TEXTURED FINISH

- ☐ BLACK RAL-9005-T
- ☐ WHITE RAL-9003-T
- ☐ GREY RAL-7004-T
- ☐ DARK BRONZE RAL-8019-T
- ☐ GREEN RAL-6005-T

FOR SMOOTH FINISH REMOVE SUFFIX "T" (EXAMPLE: RAL-9500)

SEE USALTG.COM FOR ADDITIONAL COLORS

OPTIONS

- ☐ HOUSE SIDE SHIELD... HS
- ☐ DIMMABLE DRIVER(S) (0-10V)..... DIM
- ☐ HIGH-LOW DIMMING FOR HARDWIRED SWITCHING OR NON-INTEGRATED MOTION SENSOR..... HLSW
- ☐ 10KV SURGE PROTECTOR..... 10SP
- ☐ 20KV SURGE PROTECTOR (277V & 480V Only) 20SP
- ☐ PHOTO CELL + VOLTAGE (EXAMPLE: PC120V) ....PC+V
- ☐ TWIST LOCK PHOTOCELL +VOLTAGE .....TPC+V (COL21 & COL18 Only)
- ☐ TWIST LOCK PHOTOCELL RECEPTACLE ONLY ...TPR
- ☐ SINGLE FUSE (120V, 277V)..... SF
- ☐ DOUBLE FUSE (208V, 240V)..... DF
- ☐ OPAL POLYCARBONATE DIFFUSER..... WP

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SUN VALLEY LIGHTING

SOLID STATE AREA LIGHTING

COLONIAL-CPA SERIES-LED

S P E C I F I C A T I O N S

LUMINAIRE
Four piece clear patterned acrylic lenses provided with heavy cast corrosion resistant low copper aluminum (A356 alloy, <0.2% copper) traditionally styled housing and top. Minimum wall thickness is .188". Top hinges for easy access. Silicone gasket between housing and hood. All hardware is stainless steel.

LED POWER ARRAY™
Three-dimensional array of individual LED Tubes fastened to a retaining plate. Each LED Tube consists of circuit board populated with a multiple of LED's and is mechanically fastened to a radial aluminum heat sink. An acrylic Lens and end cap protects each LED Tube's internal components.

ANGLED POWER ARRAY™: Micro-Reflectors mounted around each LED control the raw light output. LED Tubes are uniquely aimed horizontally and vertically and arrayed to produce highly efficient IES Distribution Types II, III, IV and V. Used in conjunction with a clear patterned acrylic lens.

VERTICAL POWER ARRAY™ WITH GLASS REFRACTOR: LED Tubes are aligned vertically and equally arranged radially to produce an even raw light distribution that simulates standard light sources. Array is secured within a 6" Prismatic Glass Refractor which provides the optical control. Used in conjunction with clear smooth or clear patterned lenses.

VERTICAL POWER ARRAY™: LED Tubes are aligned vertically and equally arranged radially to produce an even raw light distribution that simulates standard light sources. Produces a minimal glare, symmetric diffuse light distribution. Used in conjunction with a clear patterned acrylic.

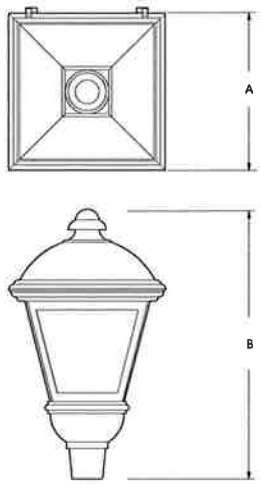
LED EMITTERS
High Output LED's are driven at 350mA for nominal 1 Watt output each. LED's are available in standard Neutral White (4000K), or optional Cool White (5000K) or Warm White (3000K). Consult Factory for other LED options.

LED DRIVER
UL and CUL recognized High Power Factor, Constant Current LED drivers operate on input voltages from 120-277VAC, 50/60hz. Consult Factory for 347-480VAC. Driver is mechanically fastened to a retaining bracket. Main power quick disconnect provided. Driver has a minimum 4KV of internal surge protection, 10KV & 20KV Surge Protector optional. Dimming and High-Low Driver options available.

FINISH
Polyester powder coat incorporates four step iron phosphate process to pretreat metal surface for maximum adhesion. Top coat is baked at 400°F for maximum hardness and exterior durability.

PROJECT NAME: _____

FIXTURE TYPE: _____

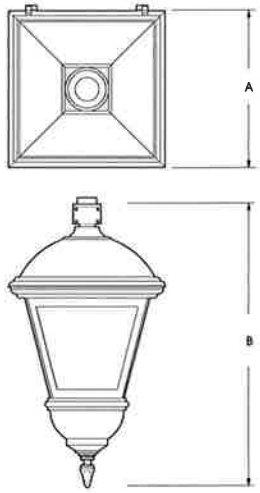


COL-CPA-LED

PATENT PENDING

Fitter supplied to fit over 2 7/8" X 3" (73mm X 76mm) tenon.

FIXTURE	A	B
COL21-CPA-LED	21" 533mm	35" 889mm
COL18-CPA-LED	18" 457mm	31" 787mm
COL12-CPA-LED	12" 305mm	22" 559mm



COL-PM-CPA-LED

PATENT PENDING

FIXTURE	A	B
COL21-PM-CPA-LED	21" 553mm	36" 914mm
COL18-PM-CPA-LED	18" 457mm	32.5" 826mm
COL12-PM-CPA-LED	12" 305mm	24" 610mm

U.L. Listed for wet location

MADE IN THE USA

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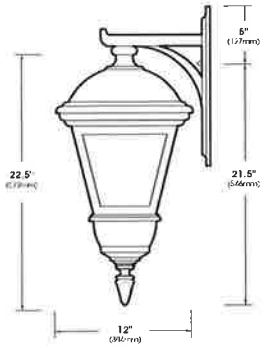
SUN VALLEY LIGHTING

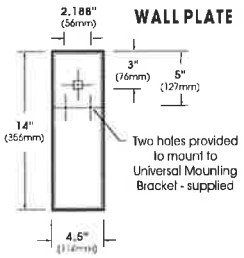
COLONIAL-CPA SERIES - LED

SPECIFICATIONS

WALL MOUNT



(COL12-WM shown)



ARM BRACKET EXTRUDED AND CAST ALUMINUM CONSTRUCTION.

LED POWER ARRAY™ MODULES

COL21-CPA-LED
COL21 E.P.A.= 3.02
COL21-PM E.P.A.= 2.93

ANGLED POWER ARRAY
80 LED Max.

GLASS REFRACTOR w/ VERTICAL ARRAY
36 LED Max.

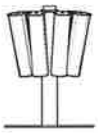
COL18-CPA-LED
COL18 E.P.A.= 2.35
COL18-PM E.P.A.= 2.30

ANGLED POWER ARRAY
48 LED Max.

GLASS REFRACTOR w/ VERTICAL ARRAY
36 LED Max.

COL12-CPA-LED
COL12 E.P.A.= 1.12
COL12-PM E.P.A.= 1.13

VERTICAL ARRAY
Available in:
6 Array 24 LED Max.



APA - Angled Array
Base mount
(COL21 and COL18 only)

GRV - Glass Refractor w/ Vertical Array
Base mount
(COL21 and COL18 only)

VPA - Vertical Array
Base mount
(COL12 only)

Spec/Order Example: COL21-CPA/GRV-III/180 LED CW/3-120/RAL8009/SF

SPEC / ORDERING INFORMATION

LUMINAIRE	OPTICS	# of LED's	COLOR	VOLTAGE	MOUNTING	FINISH	OPTIONS

LUMINAIRE

- ☐ COL21-CPA-LED
- ☐ COL21-PM-CPA-LED
- ☐ COL18-CPA-LED
- ☐ COL18-PM-CPA-LED
- ☐ COL12-CPA-LED
- ☐ COL12-PM-CPA-LED

OPTICS

ANGLED POWER ARRAY

- ☐ TYPE - II **APA - II**
- ☐ TYPE - III **APA - III**
- ☐ TYPE - IV **APA - IV**
- ☐ TYPE - V **APA - V**

GLASS REFRACTOR

- ☐ TYPE - III **GRV - III**
- ☐ TYPE - V **GRV-V**

VERTICAL POWER ARRAY

- ☐ TYPE - SYMMETRIC **VPA-SYM*** ....

*NOTE:
For Asymmetric distribution, use VPA-SYM with house side shield option.

LED

# of LEDs

COL21-CPA
- ☐ 80LED[1] (89 Watts)
- ☐ 60LED[1] (67 Watts)
- ☐ 40LED[1] (45 Watts)
- ☐ 36LED[2] (40 Watts)
- ☐ 24LED[2] (26 Watts)

COL18-CPA
- ☐ 48LED[1] (53 Watts)
- ☐ 36LED[2] (40 Watts)
- ☐ 32LED[1] (35 Watts)
- ☐ 24LED[2] (26 Watts)

COL12-CPA
- ☐ 24LED (26 Watts)
- ☐ 12LED (14 Watts)

COLOR TEMP - CCT
- ☐ NW (4000K)* *STANDARD
- ☐ CW (5000K)
- ☐ WW (3000K)

OTHER LED COLORS AVAILABLE CONSULT FACTORY

NOTES:
1 – ANGLED POWER ARRAY ONLY
2 – GLASS REFRACTOR ONLY

VOLTAGE
- ☐ 120
- ☐ 208
- ☐ 240
- ☐ 277
- ☐ 347
- ☐ 480

MOUNTING

ARM MOUNT
- ☐ 1
- ☐ 2-180
- ☐ 2-90
- ☐ 3-90
- ☐ 3-120
- ☐ 4-90

WALL MOUNT
Refer to Sun Valley Lighting binder or website section - Arms/Wall Brackets
- ☐ WM

POST TOP
- ☐ PT

FINISH

STANDARD TEXTURED FINISH
- ☐ BLACK **RAL-9005-T**
- ☐ WHITE **RAL-9003-T**
- ☐ GREY **RAL-7004-T**
- ☐ DARK BRONZE **RAL-8019-T**
- ☐ GREEN **RAL-6005-T**

FOR SMOOTH FINISH REMOVE SUFFIX "T" (EXAMPLE: RAL-9500)

SEE USALTG.COM FOR ADDITIONAL COLORS

OPTIONS

- ☐ HOUSE SIDE SHIELD ... **HS**
- ☐ DIMMABLE DRIVER(S) (0-10V) ... **DIM**
- ☐ HIGH-LOW DIMMING FOR HARDWIRED SWITCHING OR NON-INTEGRATED MOTION SENSOR ... **HLSW**
- ☐ 10KV SURGE PROTECTOR ... **10SP**
- ☐ 20KV SURGE PROTECTOR (277V & 480V Only) ... **20SP**
- ☐ PHOTO CELL + VOLTAGE (EXAMPLE: PC120V) ... **PC+V**
- ☐ TWIST LOCK PHOTOCELL +VOLTAGE ... **TPC+V** (COL21 & COL18 Only)
- ☐ TWIST LOCK PHOTOCELL RECEPTACLE ONLY ... **TPR** (COL21 & COL18 Only)
- ☐ SINGLE FUSE (120V, 277V) ... **SF**
- ☐ DOUBLE FUSE (208V, 240V) ... **DF**
- ☐ CLEAR SMOOTH POLYCARBONATE DIFFUSER ... **CP**

Sun Valley Lighting

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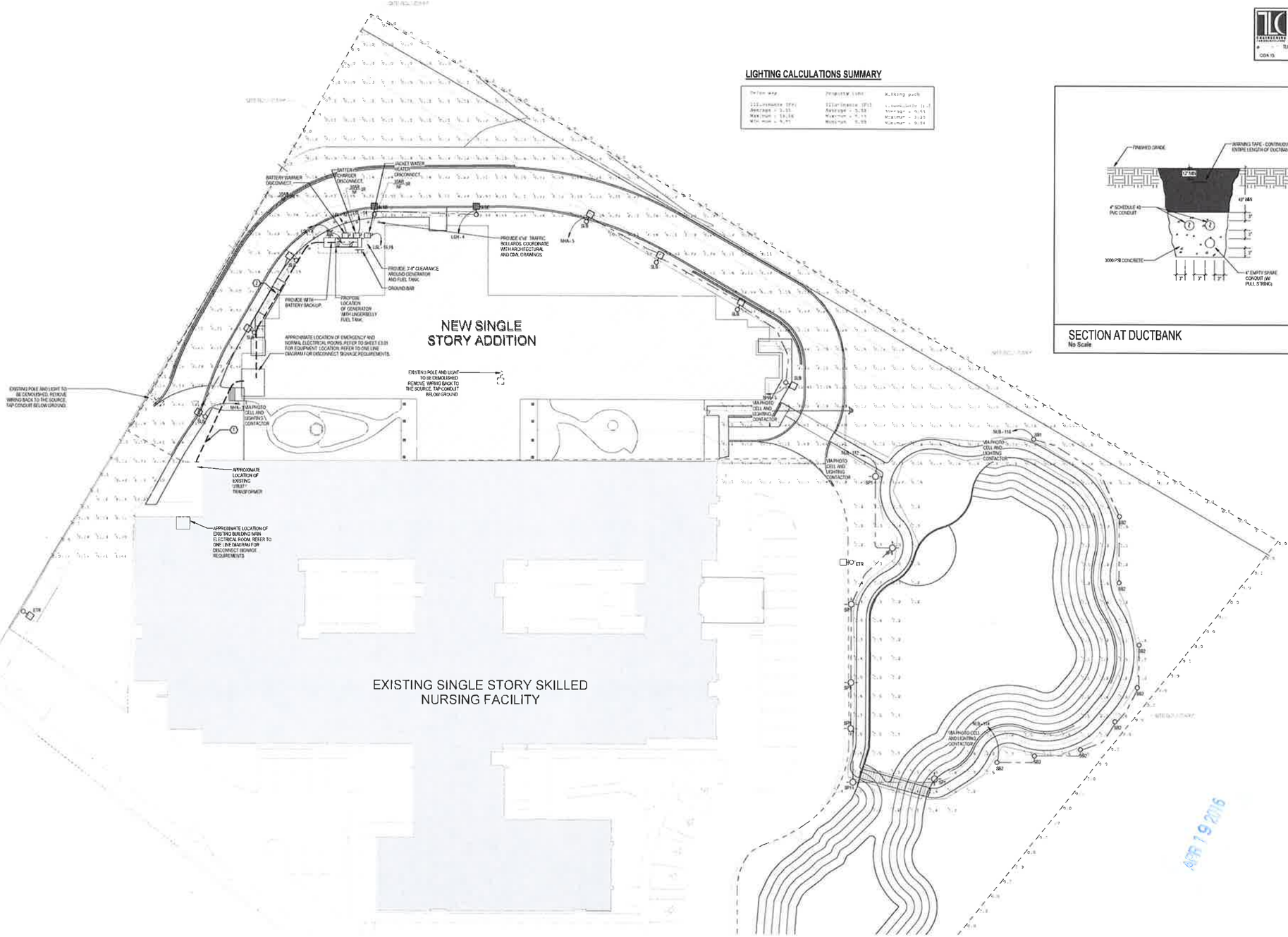
SUN VALLEY LIGHTING



LIGHTING CALCULATIONS SUMMARY

Perimeter	Property Line	Parking Lot
Illuminance (Fc)	Illuminance (Fc)	Illuminance (Fc)
Average = 1.31	Average = 5.53	Average = 9.51
Maximum = 10.16	Maximum = 9.11	Maximum = 3.25
Minimum = 0.00	Minimum = 0.00	Minimum = 9.34

SECTION AT DUCTBANK — No Scale — 1

1 SITE PLAN - ELECTRICAL

SCALE: 1" = 30'-0"

SITE LIGHTING FIXTURE SCHEDULE

#	DESCRIPTION	MANUFACTURER	MODEL	VOLTAGE	REQUIRED LAMPS TYPE	LAMP QUANTITY	VA	COMMENTS
SB1	BOLLARD, 6" ROUND X 42" HIGH, FULL CUT OFF	US ARCHITECTURAL LIGHTING	BRM-6-24LED-WW-120	120 V	LED	1	30 VA	
SB2	BOLLARD, 6" ROUND X 42" HIGH WITH INTERNAL HOUSE SHIELD AND FULL CUT OFF	US ARCHITECTURAL LIGHTING	BRM-6-24LED-NW-120-HS180	120 V	LED	1	30 VA	
SLB	LED, SINGLE HEAD, EXTERIOR SITE LIGHTING FIXTURE, POLE MOUNTED WITH TYPE 3 LIGHTING COVERAGE, FULL CUT-OFF	US ARCHITECTURAL LIGHTING	LUM LEDA-E-80-350-NW-277-1-FINISH	277 V	LED	PROVIDED WITH FIXTURE	92 VA	PROVIDE 10'-0" POLE BASIS OF DESIGN LYTE POLES MODEL#151-4011-10
SLBE	LED, SINGLE HEAD, EXTERIOR SITE LIGHTING FIXTURE, POLE MOUNTED WITH TYPE 3 LIGHTING COVERAGE, FULL CUT-OFF	US ARCHITECTURAL LIGHTING	LUM LEDA-E-80-350-NW-277-1-FINISH	277 V	LED	PROVIDED WITH FIXTURE	92 VA	PROVIDE 10'-0" POLE BASIS OF DESIGN LYTE POLES MODEL#151-4011-10
SP1	DECORATIVE, POST TOP, POLE, SINGLE LED, FULL CUT-OFF	Sun Valley Lighting	VCDE-154-EFW-SO-34-E50-PT-DB-1050	120 V	LED	1	72 VA	PROVIDE 16'-0" DECORATIVE POLE BASIS OF DESIGN PLP COMPOSITE MODEL#SOS DB FL 16' BR CI 1 B

GENERAL SITE NOTES:

1. ELECTRICAL SERVICE AND INSTALLATION SHALL CONFORM TO THE LATEST EDITION OF THE NATIONAL ELECTRIC CODE, APPLICABLE STATE AND LOCAL CODES AND LOCAL UTILITY COMPANY REQUIREMENTS.
2. CONTRACTOR SHALL COORDINATE ALL REQUIREMENTS OF THE ELECTRICAL SERVICE WITH THE UTILITY COMPANY PRIOR TO BID. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING LOCATIONS AND REQUIREMENTS OF TRANSFORMERS, POLES, SERVICE FEEDERS, METERING, ECT. AND OBTAIN ALL NECESSARY APPROVALS FROM THE UTILITY COMPANY PRIOR TO COMMENCEMENT OF WORK. UTILITIES SHOWN ON DRAWINGS ARE TO BE USED AS AN GUIDELINE ONLY AND MAY NOT NECESSARILY BE APPROVED IN FINAL APPROVALS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
3. CONTRACTORS SHALL COORDINATE ALL CONDUIT ROUTING WITH OTHER TRADES PRIOR TO ROUGH-IN TO DETERMINE ROUTES THAT WILL NOT INTERFERE WITH OTHER TRADES.

SITE KEY NOTES:

1. PROPOSED ROUTING OF TRANSFORMER SECONDARY FEED TO MDP-B. ROUTE 48" BELOW GRADE, COORDINATE ROUTING WITH STRUCTURAL SUPPORTS AND ALL UTILITIES PRIOR TO ROUGH-IN. REFER TO ONE LINE DIAGRAM FOR QUANTITIES OF CONDUITS. REFER TO GRU ENERGY DELIVERY SERVICE GUIDE APPENDICES FOR ADDITIONAL REQUIREMENTS
   https://www.gru.com/PublD/3001/Default.aspx
2. PROPOSE ROUTING OF GENERATOR FEED TO EMERGENCY WIREWAY. ROUTE 24" BELOW GRADE, COORDINATE ROUTING WITH STRUCTURAL SUPPORTS AND ALL UTILITIES PRIOR TO ROUGH-IN.

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Palm Garden
HEALTH AND REHABILITATION CENTER

PALM GARDEN OF GAINESVILLE

AN INDEPENDENT AND ASSISTED LIVING RETIREMENT COMMUNITY

GAINESVILLE, FLORIDA

Rafi W. Wietan, P.E.
Florida License # 58948

DATE: 03/04/2016

ISSUE:

Revision Schedule

No.	Description	Date
1	GRU COMMENTS	04/18/2016

SHEET TITLE:

SITE PLAN - ELECTRICAL

E1.01

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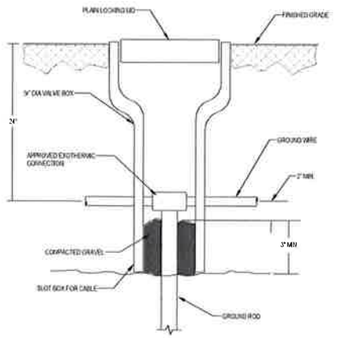

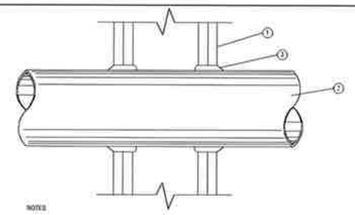

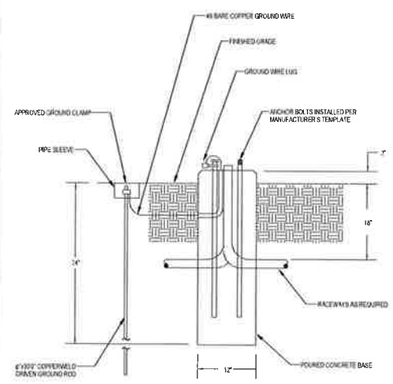

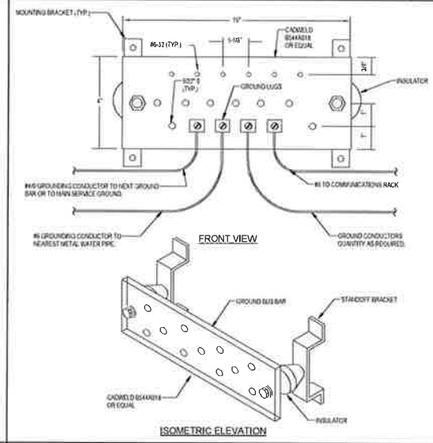

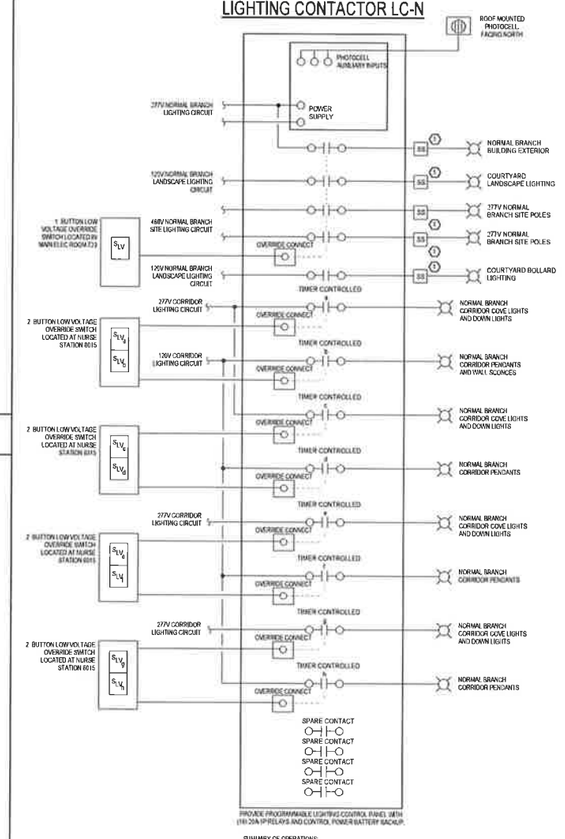

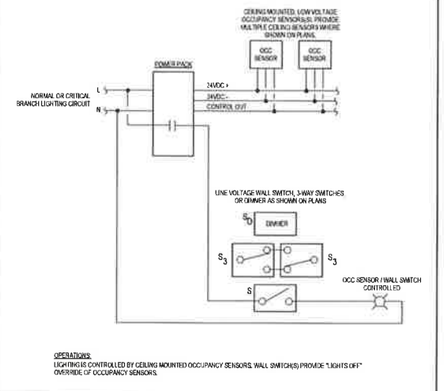

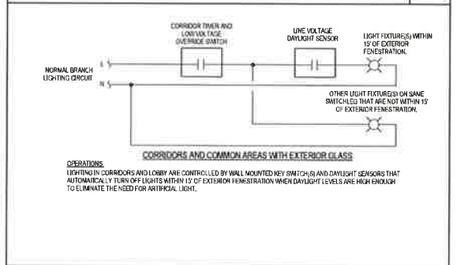

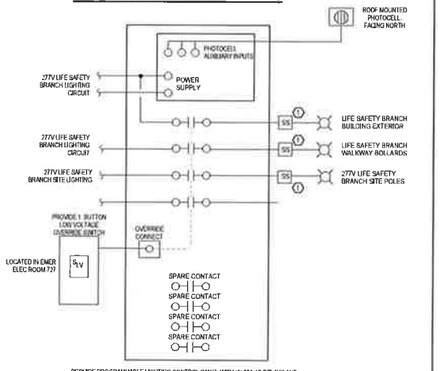

GROUND ROD INSPECTION WELL 7
No Scale

NOTES:

① WALL ASSEMBLY - THE 1, 2, 3 OR 4 HOUR FIRE-RATED GYPSUM WALLBOARD/STUD WALL ASSEMBLY SHALL BE CONSTRUCTED OF THE MATERIALS AND IN THE MANNER DESCRIBED IN THE INDIVIDUAL U300 OR U400 SERIES WALL OR PARTITION DESIGNS IN THE UL FIRE RESISTANCE DIRECTORY.

② CONDUIT - NOM 4" DIA OR SMALLER STEEL ELECTRICAL METALLIC TUBING. A MAX OF ONE CONDUIT IS PERMITTED IN THE FIRESTOP SYSTEM. CONDUIT TO BE INSTALLED NEAR CENTER OF STUD CAVITY WIDTH AND TO BE RIGIDLY SUPPORTED ON BOTH SIDES OF WALL ASSEMBLY.

③ FILL VOID OR CAVITY MATERIAL - CAULK FILL MATERIAL BEARING THE UL CLASSIFICATION MARKING INSTALLED TO COMPLETELY FILL ANNULAR SPACE BETWEEN PIPE OR CONDUIT AND GYPSUM WALLBOARD AND WITH A MIN 1/4" DIAM BEAD OF CAULK APPLIED TO PERIMETER OF CONDUIT AT ITS EGRESS FROM THE WALL. CAULK INSTALLED SYMMETRICALLY ON BOTH SIDES OF WALL ASSEMBLY. THE HOURLY F RATING OF THE FIRESTOP SYSTEM IS DEPENDENT UPON THE HOURLY FIRE RATING OF THE WALL ASSEMBLY IN WHICH IT IS INSTALLED AS SHOWN IN THE FOLLOWING TABLE. THE HOURLY T RATING OF THE FIRESTOP SYSTEM IS DEPENDENT UPON THE TYPE OR SIZE OF THE CONDUIT AND THE HOURLY FIRE RATING OF THE WALL ASSEMBLY IN WHICH IT IS INSTALLED, AS TABULATED BELOW.

MAX CONDUIT DIAM, IN	ANNULAR SPACE IN.	F RATING HR	T RATING HR
1	0 TO 3/16	1 OR 2	0, 1 OR 2
1	1/4 TO 1/2	3 OR 4	3 OR 4
4	0 TO 1-1/2	1 OR 2	0
6	1/4 TO 1/2	3 OR 4	0
12	3/16 TO 3/8	1 OR 2	0

CONDUIT PENETRATION OF FIREWALL 5
No Scale

POLE BASE FOR BOLLARDS 8
No Scale

GROUND BAR 6
No Scale

LIGHTING CONTACTOR LC-N

PROVIDE PROGRAMMABLE LIGHTING CONTROL PANEL WITH (16) 20A-1P RELAYS AND CONTROL POWER BATTERY BACKUP.

SUMMARY OF OPERATIONS:

FOR NORMAL BRANCH SITE LIGHTING AND BUILDING EXTERIOR LIGHTING, THE CIRCUIT(S) SHALL BE ENABLED BY PHOTOCELL AND CONTROLLED BY TIMER. SET TIMER PER OWNER REQUIREMENTS. PROVIDE (1) LOW VOLTAGE MOMENTARY SWITCH FOR OVERRIDE OF ALL BUILDING EXTERIOR AND SITE LIGHTING CONTROL RELAYS. WHEN MOMENTARY SWITCH IS ACTIVATED, ALL RELAYS SHALL ENERGIZE FOR A DURATION SPECIFIED BY OWNER UP TO A MAXIMUM OF 2 HOURS.

FOR NORMAL BRANCH CORRIDOR LIGHTING CONTROL. SET TIMER PER OWNER REQUIREMENTS. PROVIDE (4), 2 BUTTON, LOW VOLTAGE, MOMENTARY SWITCH FOR OVERRIDE OF LOCAL CORRIDOR LIGHTING. ALL RELAYS SHALL ENERGIZE FOR A DURATION SPECIFIED BY OWNER UP TO A MAXIMUM OF 2 HOURS.

LIGHTING CONTROL KEYNOTES:

① PROVIDE INDIVIDUAL SURGE SUPPRESSION FOR EACH EXTERIOR LIGHTING CIRCUIT.
BASIS OF DESIGN
EMERSON POWERSURE DRS SERIES TYPE 2

NORMAL BRANCH - EXTERIOR AND INTERIOR LIGHTING CONTROL 4
No Scale

OPERATIONS:
LIGHTING IS CONTROLLED BY CEILING MOUNTED OCCUPANCY SENSORS. WALL SWITCH(S) PROVIDE "LIGHTS OFF" OVERRIDE OF OCCUPANCY SENSORS.

CEILING OCCUPANCY SENSOR(S) WITH LINE VOLTAGE WALL SWITCH(S) FOR OVERRIDE. 1
No Scale

CORRIDORS AND COMMON AREAS WITH EXTERIOR GLASS

OPERATIONS:
LIGHTING IN CORRIDORS AND LOBBY ARE CONTROLLED BY WALL MOUNTED KEY SWITCH(S) AND DAYLIGHT SENSORS THAT AUTOMATICALLY TURN OFF LIGHTS WITHIN 15' OF EXTERIOR FENESTRATION WHEN DAYLIGHT LEVELS ARE HIGH ENOUGH TO ELIMINATE THE NEED FOR ARTIFICIAL LIGHT.

CEILING MOUNTED DAYLIGHT SENSOR(S) WITH LINE VOLTAGE CONTACT. 2
No Scale

LIGHTING CONTACTOR LC-LS

PROVIDE PROGRAMMABLE LIGHTING CONTROL PANEL WITH (8) 20A-1P RELAYS AND CONTROL POWER BATTERY BACKUP.

SUMMARY OF OPERATIONS:

PROVIDE PROGRAMMABLE LIGHTING CONTROL PANEL WITH (8) 20A-1P RELAYS. ALL RELAYS SHALL BE PROGRAMMED TO BE ENERGIZED BY PHOTOCELL. DO NOT SET "TIMED OFF" FUNCTION FOR ANY RELAY.

PROVIDE (1) LOW VOLTAGE, MOMENTARY SWITCH FOR TESTING OF ALL BUILDING EXTERIOR AND SITE LIGHTING AND CONTROL RELAYS. WHEN MOMENTARY SWITCH IS ACTIVATED, ALL RELAYS SHALL ENERGIZE FOR A DURATION SPECIFIED BY OWNER UP TO A MAXIMUM OF 2 HOURS

LIGHTING CONTROL KEYNOTES:

① PROVIDE INDIVIDUAL SURGE SUPPRESSION FOR EACH EXTERIOR LIGHTING CIRCUIT.
BASIS OF DESIGN
EMERSON POWERSURE DRS SERIES TYPE 2

LIFE SAFETY BRANCH - EXTERIOR LIGHTING CONTROL 3
No Scale

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Florida License # 50948

DATE: 03/04/2016
ISSUE:

Revision Schedule
No. Description Date

SHEET TITLE:
ELECTRICAL DETAILS

E6.01

9 EXTERIOR ELEVATION
A6.01 SCALE: 3/16" = 1'-0"

8 EXTERIOR ELEVATION
A6.01 SCALE: 3/16" = 1'-0"

7 EXTERIOR ELEVATION
A6.01 SCALE: 3/16" = 1'-0"

6 EXTERIOR ELEVATION
A6.01 SCALE: 3/16" = 1'-0"

5 EXTERIOR ELEVATION
A6.01 SCALE: 3/16" = 1'-0"

4 EXTERIOR ELEVATION
A6.01 SCALE: 3/16" = 1'-0"

3 EXTERIOR ELEVATION
A6.01 SCALE: 3/16" = 1'-0"

2 EXTERIOR ELEVATION
A6.01 SCALE: 3/16" = 1'-0"

1 EXTERIOR ELEVATION
A6.01 SCALE: 1/8" = 1'-0"

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Palm Garden
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GAINESVILLE, FLORIDA

STATE OF FLORIDA · GAYLEN H. LAING · AR97283 · 12-11-15 · REGISTERED ARCHITECT

DATE: 12/11/2015

ISSUE:
DESIGN DEVELOPMENT

Revision Schedule
No. Description Date

SHEET TITLE:
EXTERIOR ELEVATIONS

A6.01