March 21, 2024
PROJECT NAME: GENERAL RV OCALA (REVISION TO AR#21653)
PROJECT NUMBER: 2017100017
APPLICATION: MAJOR SITE PLAN REVISION #28464

1 DEPARTMENT: ENGDRN - STORMWATER REVIEW
REVIEW ITEM: 2.12.20 - Stormwater Infrastructure Supports Phasing
STATUS OF REVIEW: INFO
REMARKS: Stormwater improvements must be in place to support each phase of development at time of phase completion.

2 DEPARTMENT: ENGDRN - STORMWATER REVIEW
REVIEW ITEM: 6.13.2.B(8) - Calculation & Plan Consistency
STATUS OF REVIEW: INFO
REMARKS: Criteria to be reviewed with resubmittal.

3 DEPARTMENT: ENGDRN - STORMWATER REVIEW
REVIEW ITEM: 6.13.10.B - Copy of NPDES Permit or NOI
STATUS OF REVIEW: INFO
REMARKS: Please provide a copy of the NPDES permit or NOI prior to construction.

4 DEPARTMENT: ENGDRN - STORMWATER REVIEW
REVIEW ITEM: Copy of District Permit (County Interest)
STATUS OF REVIEW: INFO
REMARKS: Please provide a copy of the District permit prior to construction.

5 DEPARTMENT: ENGDRN - STORMWATER REVIEW
REVIEW ITEM: Additional Stormwater comments
STATUS OF REVIEW: INFO
REMARKS: If you have questions or would like to discuss the stormwater review comments, please contact Kevin Vickers, PE at 352-671-8695 or kevin.vickers@marionfl.org.

6 DEPARTMENT: ENGIN - DEVELOPMENT REVIEW
REVIEW ITEM: 2.12.4.K - List of approved waivers, their conditions, and the date of approval
STATUS OF REVIEW: INFO
REMARKS: 2/1/24 - add waivers if requested in the future

7 DEPARTMENT: ENGIN - DEVELOPMENT REVIEW
REVIEW ITEM: Additional Development Review Comments
STATUS OF REVIEW: INFO
REMARKS: After approval, plans will be electronically stamped by the County. The applicant will receive an email indicating that approved plans are available for download and are located in the ePlans project Approved folder. For Development Review submittals, with the exception of Final Plats and Minor Site Plans, applicants are required to print, obtain required signatures, and sign and seal two 24”x 36” sets of the electronically stamped approved plan and deliver them to the Office of County Engineer, Development Review Section, located at 412 SE 25th Avenue Ocala, FL 34471. Upon receipt, a development order will be issued. Until such time as that development order is issued, the project does not have final approval and construction, if applicable, shall not commence. For plans requiring As-Builts, As-Builts and associated documentation shall be submitted on paper in accordance with current county requirements.

8 DEPARTMENT: UTIL - MARION COUNTY UTILITIES
REVIEW ITEM: 6.14.4 - Capital Charges and Flow Rates - proposed use identified to calculate
STATUS OF REVIEW: INFO
REMARKS: at time of building permit application as applicable based on current building plan

9 DEPARTMENT: UTIL - MARION COUNTY UTILITIES
REVIEW ITEM: 6.15.3 - Fire Protection
STATUS OF REVIEW: INFO
REMARKS: defer to MCFR - will be served by MCFR water connection

10 DEPARTMENT: DOH - ENVIRONMENTAL HEALTH
REVIEW ITEM: Additional Health comments
STATUS OF REVIEW: INFO REMARKS:

11 DEPARTMENT: ZONE - ZONING DEPARTMENT
REVIEW ITEM: 4.4.4 -Sign (provisions for advertising signage), if it is a multi occupancy complex like shopping centers they must submit a master sign plan
STATUS OF REVIEW: INFO
REMARKS: Will there be any new signage?

12 DEPARTMENT: ENRAA - ACQ AGENT ENG ROW
REVIEW ITEM: Major Site Plan
STATUS OF REVIEW: INFO
REMARKS: Sec. 2.18.1.I - Show connections to other phases.
Sec.2.19.2.H – Legal Documents
Legal documents such as Declaration of Covenants and Restrictions, By-Laws, Articles of Incorporation, ordinances, resolutions, etc.
Sec. 6.3.1.B.1 – Required Right of Way Dedication (select as appropriate)
For Public Streets. "[All streets and rights-of-way shown on this plat or name specifically if less than all] are hereby dedicated for the use and benefit of the public."
Sec. 6.3.1.B.2 – Required Right of Way Dedication
For Non-Public Streets. "[All streets and rights-of-way shown on this plat or name specifically if less than all] are hereby dedicated privately to the [entity name]. All public authorities and their personnel providing services to the subdivision are granted an easement for access. The Board of County Commissioners of Marion County, Florida, shall have no responsibility, duty, or liability whatsoever regarding such streets. Marion County is granted an easement for emergency maintenance in the event of a local, state, or federal state of emergency wherein the declaration includes this subdivision or an emergency wherein the health, safety, or welfare of the public is deemed to be at risk."
Sec. 6.3.1.D.3 - Cross Access Easements
For Cross Access Easements. "All parallel access easements shown on this plat are hereby dedicated for the use and benefit of the public, and maintenance of said easements is the responsibility of [entity name]."
Sec. 6.3.1.C.1 - Utility Easements (select as appropriate)
"[All utility easements shown or noted or name specifically if less than all] are dedicated [private or to the public] for the construction, installation, maintenance, and operation of utilities by any utility provider."
Sec. 6.3.1.C.2 – Utility Easements
"[All utility tracts or identify each tract as appropriate] as shown are dedicated [private or to the public] for the construction and maintenance of such facilities."
Sec.6.3.1.D(c)(1)(2)(3) - Stormwater easements and facilities, select as appropriate:
1. "[All stormwater and drainage easements as shown or noted or name specifically if less than all] are dedicated [private or to the public] for the construction and maintenance of such facilities."
2. "[All stormwater management tracts or identify each tract as appropriate] as shown are dedicated [private or to the public] for the construction and maintenance of such facilities."

3. When any stormwater easement and/or management tract is not dedicated to the public or Marion County directly, the following statement shall be added to the dedication language: "Marion County is granted the right to perform emergency maintenance on the [stormwater easement and/or management tract, complete accordingly] in the event of a local, state, or federal state of emergency wherein the declaration includes this subdivision or an emergency wherein the health, safety, or welfare of the public is deemed to be at risk."
Sec.6.3.1.D(f) –
If a Conservation Easement is required the following shall be provided: "A conservation easement [as shown or on tract and identify the tract, complete accordingly] is dedicated to [the Board of County Commissioners of Marion County, Florida or entity name, if not Marion County] for the purpose of preservation of [listed species, habitat, Karst feature and/or native vegetation, complete accordingly]."

13 DEPARTMENT: ENGDRN - STORMWATER REVIEW
REVIEW ITEM: 2.12.4.L(9)(b) - Data Block (Impervious Area)
STATUS OF REVIEW: NO
REMARKS: Please confirm that the areas shown have been updated from the previous revision.

14 DEPARTMENT: ENGDRN - STORMWATER REVIEW
REVIEW ITEM: 6.13.8 - Stormwater Conveyance Criteria
STATUS OF REVIEW: NO
REMARKS: See comment under "6.13.2.B(5) - Hydraulic Analysis"

15 DEPARTMENT: ENGDRN - STORMWATER REVIEW
REVIEW ITEM: 6.13.2.B(5) - Hydraulic Analysis
STATUS OF REVIEW: NO
REMARKS: Please submit Hydraulic Calculations for the proposed conveyance system.

16 DEPARTMENT: ENGDRN - STORMWATER REVIEW
REVIEW ITEM: 6.13.2.A(11)(a) - Construction Entrance
STATUS OF REVIEW: NO
REMARKS: Please submit a construction entrance detail (with anti-tracking features) and indicate the location of the construction entrance on the erosion control plan.

17 DEPARTMENT: ENGDRN - STORMWATER REVIEW
REVIEW ITEM: 6.13.2.A(11)(b) - Erosion Control
STATUS OF REVIEW: NO
REMARKS: Please submit an erosion control plan for review.

18 DEPARTMENT: ENGDRN - STORMWATER REVIEW
REVIEW ITEM: 7.1.3 - Drainage Construction Specifications
STATUS OF REVIEW: NO
REMARKS: LDC requires the use of RCP pipe for stormwater conveyance piping. To pursue using an alternative material, the engineer needs to submit a request identifying the alternative material type requested, verification that the material is included on the FDOT Approved Products List, and the site specific installation meets install criteria such as depth of cover and UV protection for pipe ends. County will review the request and provide feedback. Being that previous phases of this project appear to have used alternative materials, staff will likely support further use in this phase.

19 DEPARTMENT: ENGDRN - STORMWATER REVIEW
REVIEW ITEM: Please provide a final signed and sealed hard copy signature page with references to the stormwater analysis or final hard copy of the full stormwater analysis.
STATUS OF REVIEW: NO

REMARKS: After all stormwater comments are resolved, please upload a digitally signed and sealed Drainage Narrative. A hard copy signed and sealed report can be submitted if desired.

20 DEPARTMENT: ENGIN - DEVELOPMENT REVIEW
REVIEW ITEM: 2.21.2.B - Major Site Plan fee per 23-R-254
STATUS OF REVIEW: NO
REMARKS: 2/1/24 - fee due with resubmittal

21 DEPARTMENT: UTIL - MARION COUNTY UTILITIES
REVIEW ITEM: MCUD DETAILS - current LDC version
STATUS OF REVIEW: NO
REMARKS: revise UT details BCC approved 4/13/23 - can be found in CAD format here https://utilities.marionfl.org/i-want-to/find-construction-related-forms

22 DEPARTMENT: ENGSUR - SURVEY REVIEW
REVIEW ITEM: 2.12.8 - Provide current boundary and topographic survey less than one year old
STATUS OF REVIEW: NO
REMARKS: Please provide.

23 DEPARTMENT: ENGSUR - SURVEY REVIEW
REVIEW ITEM: 2.12.11 - Provide an aerial map of the site with a layout of the development
STATUS OF REVIEW: NO
REMARKS: Please provide.

24 DEPARTMENT: LSCAPE - LANDSCAPE DESIGN AND IRRIGATION
REVIEW ITEM: 6.7.3 - Tree protection
STATUS OF REVIEW: NO
REMARKS: Show Tree protection on plan

25 DEPARTMENT: LSCAPE - LANDSCAPE DESIGN AND IRRIGATION
REVIEW ITEM: 6.8.2 - Landscape plan requirements (details, schedule, calculations, notes)
STATUS OF REVIEW: NO
REMARKS: Provide native status and calculation (%)

26 DEPARTMENT: LSCAPE - LANDSCAPE DESIGN AND IRRIGATION
REVIEW ITEM: 6.8.4 - Landscape area requirements for non-residential development
STATUS OF REVIEW: NO
REMARKS: Provide calculation

27 DEPARTMENT: LSCAPE - LANDSCAPE DESIGN AND IRRIGATION
REVIEW ITEM: 6.8.6 - Buffers
STATUS OF REVIEW: NO
REMARKS: Existing buffer (SW 16th Ave) shrubs and groundcovers appear to be dead or dying, replace according to previously approved plan is required - SW 16th Ave

28 DEPARTMENT: LSCAPE - LANDSCAPE DESIGN AND IRRIGATION
REVIEW ITEM: 6.8.7 - Parking areas and vehicular use areas
STATUS OF REVIEW: NO
REMARKS: Landscape Island with shade tree is required for every ten spaces (Vehicle parking adjacent to SW 16th Ave)

29 DEPARTMENT: LSCAPE - LANDSCAPE DESIGN AND IRRIGATION
REVIEW ITEM: 6.8.9 - Service and equipment areas
STATUS OF REVIEW: NO
REMARKS: Label Screening for trash enclosure

30 DEPARTMENT: LSCAPE - LANDSCAPE DESIGN AND IRRIGATION
REVIEW ITEM: 6.8.10 - General planting requirements (specifications)
STATUS OF REVIEW: NO
REMARKS: Provide specifications

31 DEPARTMENT: LSCAPE - LANDSCAPE DESIGN AND IRRIGATION
REVIEW ITEM: 6.8.12 - Landscape completion inspection requirements
STATUS OF REVIEW: NO
REMARKS: Provide note from this section of code

32 DEPARTMENT: LSCAPE - LANDSCAPE DESIGN AND IRRIGATION
REVIEW ITEM: 6.9.2 - Irrigation plan requirements (details, legend, notes)
STATUS OF REVIEW: NO
REMARKS: Provide water source, controller location, rain sensor location, etc

33 DEPARTMENT: LSCAPE - LANDSCAPE DESIGN AND IRRIGATION
REVIEW ITEM: Additional Landscape comments
STATUS OF REVIEW: NO
REMARKS: Some of the trees labeled as previously installed do not appear to exist - please clarify

Marion County
Board of County Commissioners

Office of the County Engineer

412 SE 25th Ave.
Ocala, FL 34471
Phone: 352-671-8686
Fax: 352-671-8687

AR 28464

DEVELOPMENT REVIEW COMMITTEE WAIVER REQUEST FORM

Date: 3/19/2024 Parcel Number(s): 41200-083-01 Permit Number: AR #28464

A. PROJECT INFORMATION: Fill in below as applicable:

Project Name: GENERAL RV OCALA - PHASE IV Commercial ☑ Residential ☐
Subdivision Name (if applicable): _____
Unit _____ Block _____ Lot _____ Tract _____

B. PROPERTY OWNER'S AUTHORIZATION: The property owner's signature authorizes the applicant to act on the owner's behalf for this waiver request. The signature may be obtained by email, fax, scan, a letter from the property owner, or original signature below.

Name (print): Ocala North LLC
Signature: Christopher S. McNeal Digitally signed by Christopher S. McNeal DN: cn=Christopher S. McNeal, o=McNeal Engineering, Inc, ou, email=cmcneal@mcnealengineering.com, c=US Date: 2024.03.19 12:06:08 -04'00'
Mailing Address: 25000 Assembly Park Drive City: Wixom
State: MI Zip Code: 48393 Phone # (248)866-5096
Email address: rob@generalrv.com

C. APPLICANT INFORMATION: The applicant will be the point of contact during this waiver process and will receive all correspondence.

Firm Name (if applicable): McNeal Engineering Contact Name: Christopher McNeal
Mailing Address: 15957 N Florida Avenue City: Lutz
State: FL Zip Code: 33549 Phone # (813) 968-1081
Email address: permitting@mcnealengineering.com

D. WAIVER INFORMATION:
Section & Title of Code (be specific): 2.21.3.C - Commence Improvements of Ph IVA & IVB Prior to Plan Approval
Reason/Justification for Request (be specific): Applicant requests permission to perform demolition, mass grading, tree removal, and building footer/foundation/slab prior to major site plan approval. Refer to yellow highlighted areas on attached site plan exhibit.

DEVELOPMENT REVIEW USE:
Received By: Email 3/19/24 Date Processed: 3/21/24 BM Project # 2017100017 AR # 28464

ZONING USE: Parcel of record: Yes ☐ No ☐ **Eligible to apply for Family Division: Yes ☐ No ☐**
Zoned: _____ ESOZ: _____ P.O.M. _____ Land Use: _____ **Plat Vacation Required: Yes ☐ No ☐**
Date Reviewed: _____ Verified by (print & initial): _____

Marion County
Board of County Commissioners

Office of the County Engineer

412 SE 25th Ave.
Ocala, FL 34471
Phone: 352-671-8686
Fax: 352-671-8687

DEVELOPMENT REVIEW COMMITTEE WAIVER REQUEST FORM

Section & Title of Code (be specific): 7.1.3.J(1)(b) - Alternative Drainage Pipe Material
Reason/Justification for Request (be specific): Request to use ADS pipe in-lieu-of RCP pipe for private on-site storm sewer.

Section & Title of Code (be specific): 6.13.8.B(7) - Minimum Pipe Size
Reason/Justification for Request (be specific): Proposed use of pipes smaller than 18" for area drains, yard drains, and smaller drainage areas at top of drainage network. Drainage calculations support use and demonstrate no impact from use of smaller pipe. All pipes smaller than 18" are part of the private system and are not located within any public areas.

Section & Title of Code (be specific):
Reason/Justification for Request (be specific):

Section & Title of Code (be specific):
Reason/Justification for Request (be specific):

Section & Title of Code (be specific):
Reason/Justification for Request (be specific):

Section & Title of Code (be specific):
Reason/Justification for Request (be specific):

Section & Title of Code (be specific):
Reason/Justification for Request (be specific):

MAJOR SITE PLANS FOR

GENERAL RV OCALA - PHASE IV

13150 SW 16TH AVE.
MARION COUNTY, FLORIDA

**** SPECIAL NOTE REGARDING CHANGES TO APPROVED PLANS ****

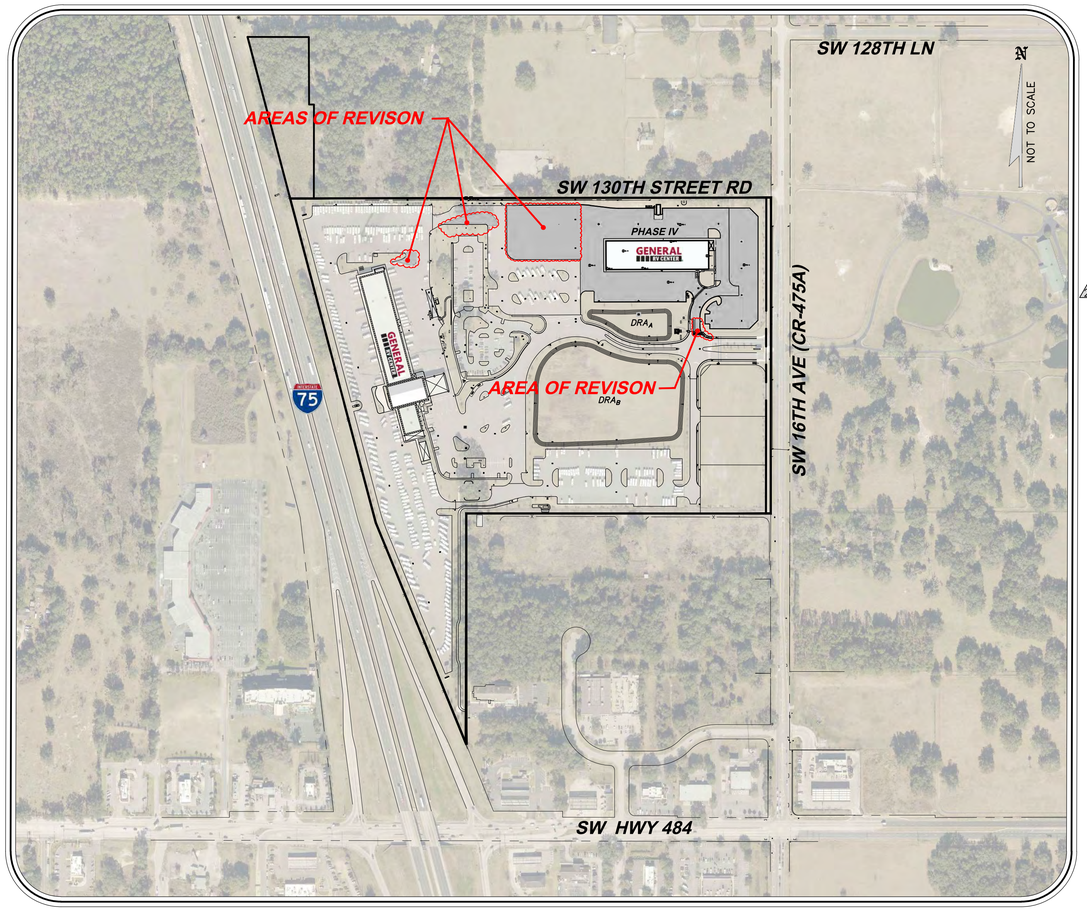
NO CHANGE TO THE WORK AS SHOWN ON THE APPROVED PLANS SHALL BE MADE WITHOUT NOTIFICATION TO AND APPROVAL BY THE OFFICE OF THE COUNTY ENGINEER.

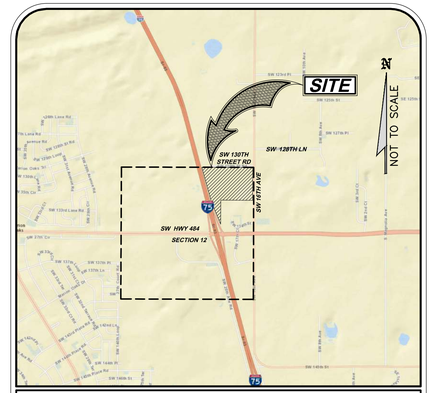
**** SPECIAL NOTE REGARDING CONCURRENCY APPROVAL / DEFERRAL ****

THIS PHASE OF THIS PROPOSED PROJECT HAS NOT BEEN GRANTED CONCURRENCY APPROVAL AND/OR GRANTED AND/OR RESERVED ANY PUBLIC FACILITY CAPACITIES. FUTURE RIGHTS TO DEVELOP THE PROPERTY ARE SUBJECT TO A DEFERRED CONCURRENCY DETERMINATION, AND FINAL APPROVAL TO DEVELOP THE PROPERTY HAS NOT BEEN OBTAINED. THE COMPLETION OF CONCURRENCY REVIEW AND/OR APPROVAL HAS BEEN DEFERRED TO LATER DEVELOPMENT REVIEW STAGES, SUCH AS, BUT NOT LIMITED TO, BUILDING PERMIT REVIEW.

DRAWING INDEX

MC	SJRWMD	CONSTRUCTION	SHEET NUMBER	SHEET TITLE
•	•	•	CS-1	COVER SHEET
•	•	•	C-1.0	NOTES
•	•	•	C-2.0	OVERALL SITE PLAN
•	•	•	C-3.1	DEMOLITION PLAN (SHEET 1 OF 2)
•	•	•	C-3.2	DEMOLITION PLAN (SHEET 2 OF 2)
•	•	•	C-4.1	DIMENSION CONTROL PLAN (SHEET 1 OF 2)
•	•	•	C-4.2	DIMENSION CONTROL PLAN (SHEET 2 OF 2)
•	•	•	C-5.0	MASTER DRAINAGE PLAN
•	•	•	C-6.1	GRADING & DRAINAGE PLAN (SHEET 1 OF 2)
•	•	•	C-6.2	GRADING & DRAINAGE PLAN (SHEET 2 OF 2)
•	•	•	C-6.3	SECTIONS (SHEET 1 OF 2)
•	•	•	C-6.4	SECTIONS (SHEET 2 OF 2)
•		•	C-7.1	DETAILED GRADING SHEET (SHEET 1 OF 3)
•		•	C-7.2	DETAILED GRADING SHEET (SHEET 2 OF 3)
•		•	C-7.3	DETAILED GRADING SHEET (SHEET 3 OF 3)
•	•	•	C-8.0	DRAINAGE PIPE & STRUCTURE TABLES
•	•	•	C-9.0	UTILITY PLAN OTHER
•	•	•	C-10.0	SEWER AND WATER PLAN
•	•	•	C-11.0	GRAVITY SANITARY PIPE & STRUCTURE TABLES
•	•	•	C-12.0	WATER CONNECTION
•	•	•	C-13.1	SITE DETAILS (SHEET 1 OF 2)
•	•	•	C-13.2	SITE DETAILS (SHEET 2 OF 2)
•	•	•	C-14.0 ⚠2	GRADING / DRAINAGE DETAILS
•	•	•	C-15.0 ⚠1	WATER DETAILS
•	•	•	C-16.1 ⚠1	SEWER DETAILS (SHEET 1 OF 2)
•	•	•	C-16.2	SEWER DETAILS (SHEET 2 of 2)
•		•	L-1.1	CODE LANDSCAPE PLAN (SHEET 1 OF 2)
•		•	L-1.2	CODE LANDSCAPE PLAN (SHEET 2 OF 2)
•		•	L-2.1	LANDSCAPE PLANTING SCHEDULES
•		•	L-2.2	LANDSCAPE DATA TABLES
•		•	L-3.1	LANDSCAPE DETAILS (SHEET 1 OF 2)
•		•	L-3.2	LANDSCAPE DETAILS (SHEET 2 OF 2)
•		•	IR-1.1	IRRIGATION PLAN (SHEET 1 OF 2)
•		•	IR-1.2	IRRIGATION PLAN (SHEET 2 OF 2)
•		•	PE-1.1	LIGHTING PLAN (SHEET 1 OF 2)
•		•	PE-1.2	LIGHTING PLAN (SHEET 2 OF 2)
•		•	PE-2.01-2.10	LIGHTING DETAILS
				ATTACHMENTS
•	•	•	1 – 5	BOUNDARY SURVEY
•	•	•	1 – 2	TOPOGRAPHIC & LIMITED PURPOSE SURVEY (PHASE IV)





VICINITY MAP
SECTION: 12 TOWNSHIP: 17S RANGE: 21E

PERMIT REFERENCE & STATUS:

MARION COUNTY: (PROJECT NO. 2017100017)

MAJOR SITE PLAN: (APPLICATION #21037)	APPROVED/CONSTRUCTED
MAJOR SITE PLAN (REVISED): (APPLICATION # 21653)	APPROVED/CONSTRUCTED
OFFSITE ROADWAY IMPROVEMENTS – SW 16TH AVE (REFER TO APPLICATION ID# 21171)	APPROVED/CONSTRUCTED
MAJOR SITE PLAN (REVISION 2): (APPLICATION #28464)	PENDING
SJRWMD: PERMIT#: 151800-3	APPROVED 02/28/24 ⚠2
FDEP NPDES: (FACILITY ID: FLR10RN41)	PENDING
FL DEPARTMENT OF HEALTH:	
DISTRIBUTION (WATER):	PENDING
ENVIRONMENTAL PROTECTION COMMISSION:	
FDEP/COLLECTION (WASTEWATER):	PENDING

WAIVERS:

THE FOLLOWING WAIVERS WERE GRANTED AT THE DECEMBER 11, 2017 DRC:

2.21.3.C COMMENCE IMPROVEMENTS PRIOR TO PLAN APPROVAL (PARTIAL EARLY START PERMITTED FOR TREE REMOVAL AND BUILDING PAD – WITH CONDITIONS)

6.11.4.B(1) CROSS ACCESS/PARALLELL ACCESS (PARTIAL DEFFERAL)
(PARTIALLY RELEASED BY OR BK 8029 PG 220)

6.13.8.B(7) MINIMUM STORMWATER PIPE SIZE (SMALLER PIPE ALLOWED)

THE FOLLOWING WAIVER WAS GRANTED AT THE DECEMBER 18, 2017 DRC:

6.7.4.A SHADE TREES (MINIMUM SHALL BE 1 SHADE TREE PER 6,000 SF)

THE FOLLOWING WAIVER WAS GRANTED AT THE JULY 2, 2018 DRC:

6.8.6.L(1)(c) PLANTINGS TO BE ON PUBLIC VIEW SIDE OF FENCE OR WALL (APPROVED TO HAVE THE PLANTINGS BE ON THE SIDE OF THE BUFFER WALL (FENCE) ALONG THE NORTHERN AND SOUTHERN BOUNDARY)

2.21.3.C – COMMENCE IMPROVEMENTS PRIOR TO PLAN APPROVAL (APPROVED TO ALLOW SIMULTANEOUS REVIEWS AND TO COMMENCE CONSTRUCTION – OF GOLF CART BUILDING – PRIOR TO FINAL PLAN APPROVAL SUBJECT TO IT BEING AT OWNER'S RISK AND NO FINAL INSPECTIONS MADE UNTIL THE MAJOR SITE PLAN IS APPROVED)

THE FOLLOWING WAIVERS ARE PENDING:

2.21.3.C COMMENCE IMPROVEMENTS PRIOR TO PLAN APPROVAL (PARTIAL EARLY START PERMITTED FOR TREE REMOVAL AND BUILDING PAD – WITH CONDITIONS)

6.13.8.B(7) MINIMUM STORMWATER PIPE SIZE (SMALLER PIPE ALLOWED)

7.1.3.J(1)(b) ALTERNATIVE DRAINAGE PIPE MATERIAL (ADS PIPE IN LIEU OF RCP PIPE)

AREA CALCULATIONS

DESCRIPTION	APPROVED ⚠2			PROPOSED		
	SF	ACRES	%	SF	ACRES	% ⚠2
Impervious	1,433,812	32.92	54.6%	1,576,701	36.20	60.0%
Future Impervious	260,431	5.98	9.9%	117,542	2.70	4.5%
DRA @ 74.0	263,560	6.05	10.0%	263,560	6.05	10.0%
RW (Previously Dedicated by OR BK 6725, PGS 415-417)	26,501	0.61	1.0%	26,501	0.61	1.0%
Pervious	643,057	14.76	24.5%	643,057	14.76	24.5%
Total	2,627,361	60.32	100.0%	2,627,361	60.32	100.0%

NOTES: (1) All impervious and future impervious areas are to be directed to the master DRA(s) within Basin 5579 as per the approved permit.
(2) REFER TO SHEET C-2.0 FOR ADDITIONAL INFORMATION.

⚠ LEGAL DESCRIPTION:

THAT PORTION OF PARCEL 41200-083-01 LYING IN SECTION 12, TOWNSHIP 17 SOUTH, RANGE 21 EAST. SAID PARCEL MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE NORTHEAST CORNER OF THE NORTHEAST 1/4 OF SAID SECTION 12 ALSO BEING THE SOUTHEAST CORNER OF THE SOUTHEAST 1/4 OF SAID SECTION 1; THENCE S.89 DEGREES 53'33"W., ON THE NORTH LINE OF THE NORTHEAST 1/4 OF THE NORTHEAST 1/4 OF SAID SECTION 12 ALSO BEING THE SOUTH LINE OF THE SOUTHEAST 1/4 OF THE SOUTHEAST 1/4 OF SAID SECTION 1, A DISTANCE OF 60.00 FEET TO A POINT ON THE WEST RIGHT OF WAY LINE OF SW 16TH STREET AND THE POINT OF BEGINNING; THENCE S.00 DEGREES 03'34"W., ON THE WEST RIGHT OF WAY LINE OF SAID SW 16TH STREET, A DISTANCE OF 1325.00 FEET TO A POINT ON THE SOUTH LINE OF THE NORTHEAST 1/4 OF THE NORTHEAST 1/4 OF SAID SECTION 12; THENCE N.89 DEGREES 59'11"W., ON THE SOUTH LINE OF THE NORTHEAST 1/4 OF THE NORTHEAST 1/4 OF SAID SECTION 12, A DISTANCE OF 1256.01 FEET TO THE SOUTHWEST CORNER OF THE NORTHEAST 1/4 OF THE NORTHEAST 1/4 OF SAID SECTION 12 ALSO BEING THE NORTHEAST CORNER OF THE SOUTHWEST 1/4 OF THE NORTHEAST 1/4 OF SAID SECTION 12; THENCE S.00 DEGREES 17'27"W., ON THE EAST LINE OF THE SOUTHWEST 1/4 OF THE NORTHEAST 1/4 OF SAID SECTION 12 ALSO BEING THE WEST LINE OF THE CROSSROAD PHASE II, AS RECORDED IN PLAT BOOK 6 PAGE 200 OF THE PUBLIC RECORDS OF MARION COUNTY, FLORIDA AND ALSO BEING THE WEST LINE OF THE CROSSROADS PHASE I, AS RECORDED IN PLAT BOOK 6 PAGE 46 OF THE PUBLIC RECORDS OF MARION COUNTY, FLORIDA, A DISTANCE OF 962.33 FEET TO A POINT ON THE EASTERLY RIGHT OF WAY LINE OF INTERSTATE NO. 75 (STATE ROAD NO. 93); THENCE ON THE EASTERLY RIGHT OF WAY LINE OF SAID INTERSTATE NO. 75 (STATE ROAD NO. 93) THE FOLLOWING FOUR (4) COURSES, (1) N.22 DEGREES 10'55"W., A DISTANCE OF 1000.05 FEET, (2) N.14 DEGREES 46'14"W., A DISTANCE OF 37.55 FEET TO A POINT ON THE NORTH LINE OF THE SOUTHWEST 1/4 OF THE NORTHEAST 1/4 OF SAID SECTION 12 ALSO BEING A POINT ON THE SOUTH LINE OF THE NORTHWEST 1/4 OF THE NORTHEAST 1/4 OF SAID SECTION 12, (3) N.14 DEGREES 46'14"W., A DISTANCE OF 1366.21 FEET TO A POINT ON THE NORTH LINE OF THE NORTHWEST 1/4 OF THE NORTHEAST 1/4 OF SAID SECTION 12 ALSO BEING A POINT ON THE SOUTH LINE OF THE SOUTHWEST 1/4 OF THE SOUTHEAST 1/4 OF SAID SECTION 1 AND (4) N.14 DEGREES 46'14"W., A DISTANCE OF 700.17 FEET TO A POINT ON THE NORTH LINE OF THE SOUTH 1/2 OF THE SOUTHWEST 1/4 OF THE SOUTHEAST 1/4 OF SAID SECTION 1; THENCE S.89 DEGREES 54'09"E., ON THE NORTH LINE OF THE SOUTH 1/2 OF THE SOUTHWEST 1/4 OF THE SOUTHEAST 1/4, A DISTANCE OF 257.28 FEET TO A POINT ON THE WEST LINE OF THE EAST 659.40 FEET OF THE SOUTHWEST 1/4 OF THE SOUTHEAST 1/4 OF SAID SECTION 1; THENCE S.00 DEGREES 08'26"E., ON THE WEST LINE OF THE EAST 659.40 FEET OF THE SOUTHWEST 1/4 OF THE SOUTHEAST 1/4 OF SAID SECTION 1, A DISTANCE OF 283.19 FEET TO A POINT ON THE SOUTH LINE OF THE NORTH 282.60 FEET OF THE SOUTH 1/2 OF THE SOUTHWEST 1/4 OF THE SOUTHEAST 1/4 OF SAID SECTION 1; THENCE S.89 DEGREES 47'41"E., ON THE SOUTH LINE OF THE NORTH 282.60 FEET OF THE SOUTH 1/2 OF THE SOUTHWEST 1/4 OF THE SOUTHEAST 1/4 OF SAID SECTION 1, A DISTANCE OF 20.87 FEET TO A POINT ON THE WEST LINE OF THE EAST 638.52 FEET OF THE SOUTHWEST 1/4 OF THE SOUTHWEST 1/4 OF SAID SECTION 1; THENCE S.00 DEGREES 08'02"W., ON THE WEST LINE OF THE EAST 638.52 FEET OF THE SOUTHWEST 1/4 OF THE SOUTHEAST 1/4 OF SAID SECTION 1 , A DISTANCE OF 393.14 FEET TO A POINT ON THE SOUTH LINE OF THE SOUTHWEST 1/4 OF THE SOUTHEAST 1/4 OF SAID SECTION 1 ALSO BEING THE NORTH LINE OF THE NORTHWEST 1/4 OF THE NORTHEAST 1/4 OF SAID SECTION 12; THENCE. N89 DEGREES 53'37"E., ON THE SOUTH LINE OF THE SOUTH LINE OF THE SOUTHWEST 1/4 OF THE SOUTHEAST 1/4 OF SAID SECTION 1 ALSO BEING THE NORTH LINE OF THE NORTHWEST 1/4 OF THE NORTHEAST 1/4 OF SAID SECTION 12, A DISTANCE OF 638.74 FEET TO THE SOUTHEAST CORNER OF THE SOUTHWEST 1/4 OF THE SOUTHEAST 1/4 OF SAID SECTION 1 ALSO BEING THE NORTHWEST CORNER OF THE NORTHEAST 1/4 OF THE NORTHEAST 1/4 OF SAID SECTION 12; THENCE N.89 DEGREES 53'53"E., ON THE NORTH LINE OF THE NORTHEAST 1/4 OF THE NORTHEAST 1/4 OF SAID SECTION 12 ALSO BEING THE SOUTH LINE OF THE SOUTHEAST 1/4 OF THE SOUTHEAST 1/4 OF SAID SECTION 1, A DISTANCE OF 1257.87 FEET TO THE POINT OF BEGINNING.

OVERALL PARCEL CONTAINS 62.49 ACRES. MORE OR LESS
LESS THAT PORTION LOCATED IN SECTION 1 (2.80 ACRES, MORE OR LESS)
TOTAL AREA = 59.69 ACRES, MORE OR LESS.

ENGINEER'S CERTIFICATION:

I HEREBY CERTIFY THAT THESE PLANS AND CALCULATIONS WERE COMPLETED IN ACCORDANCE WITH ALL APPLICABLE REQUIREMENTS OF THE MARION COUNTY LAND DEVELOPMENT CODE (LDC), EXCEPT AS WAIVED

CHRISTOPHER S. MCNEAL, FL REG. ENG NO. 56193 — DATE

OWNER'S CERTIFICATION:

I HEREBY CERTIFY THAT I, MY SUCCESSORS, AND ASSIGNS SHALL PERPETUALLY MAINTAIN THE IMPROVEMENTS AS SHOWN ON THIS PLAN.

NAME: — DATE

OWNER & APPLICANT:

OCALA NORTH, LLC
A MICHIGAN LIMITED LIABILITY COMPANY
c/o GENERAL RV CENTER
25000 ASSEMBLY PARK DR.
WIXOM, MI 48393
PHONE: (248) 662-9920
FAX: (248) 348-4150

OPERATOR:

GENERAL RV CENTER®
25000 ASSEMBLY PARK DR.
WIXOM, MI 48393
PHONE: (248) 662-9920
FAX: (248) 348-4150

NO.	REVISION & DATE
1	2/22/2024: Updated Drawing Index; Updated details; SJRWMD Resubmittal.
2	3/14/2024: Updated SJRWMD Permit; Updated legal description; Updated table.

PROJECT: MAJOR SITE PLANS FOR GENERAL RV OCALA - PHASE IV 13150 SW 16TH AVE (CR 475-A), MARION COUNTY, FL

PREPARED FOR: GENERAL RV

SHEET TITLE: COVER SHEET

McNEAL ENGINEERING, INC.
15957 N. FLORIDA AVE, LUTZ, FL 33549
PH. (813) 968-1081 FAX (813) 961-5839
CERTIFICATE OF AUTHORIZATION #08975

JOB NO.	21-116
ACAD FILE:	FCP
DRAWN BY:	MGF
CHK'D BY:	CSM
DATE:	24.03.14
SHEET:	CS-1

THE DESIGNS AND DRAWINGS CONTAINED HEREON ARE THE COPYRIGHTED PROPERTY OF McNEAL ENGINEERING, INC., AND SHOULD NOT BE DUPLICATED WITHOUT WRITTEN CONSENT OF THE ENGINEER.

SITE DATA TABLE:

PARCEL NUMBER:	PORTION OF PARCEL 41200-083-01
LAND USE DESIGNATION:	EC
DEVELOPMENT AGREEMENTS:	NONE
ZONING INFORMATION:	
EXISTING ZONING:	PUD – GENERAL RV – OCALA
	(APPLICATION #: 20175 | PROJECT #: 2017050016 | FILE NO: 170702Z)
SPECIAL USE PERMIT:	SIGNAGE SIZE ALONG I-75, WALL SIGNAGE, FLAG POLE & FLAG
	(APPLICATION APPROVAL#: 171007SU | RESOLUTION NO. 17-R-415)
APPROVED VARIANCES:	NONE KNOWN
ZONING REQUIREMENTS:	
LOT AREA:	1.0 ACRE (MINIMUM)
WIDTH:	100 FEET (AT BUILDING LINE)
SETBACKS:	FRONT: 40 FEET; SIDE: 10 FEET; REAR: 25 FEET
BUILDING HEIGHT:	50' MAX
OVERLAY ZONES:	CR 475A VISUAL ENHANCEMENT GATEWAY DEVELOPMENT OVERLAY & SECONDARY SPRINGS PROTECTION OVERLAY
AREA CALCULATIONS:	
SITE AREA (ACRES):	AREA = 59.69±
AREA BY PHASE (ACRES):	PHASE I=34.44±; PHASE II=5.74±; PHASE III =6.64±; PHASE IV=8.95±; PHASE V=3.92±
OPEN SPACE AREA:	16.3± ACRES (27%±) FOR PHASES I – IV (WITH 25% OF DRA AREA); PHASE V: FUTURE
IMPERVIOUS AREA:	SEE TABLE ON COVER SHEET
USES:	
EXISTING/PROPOSED:	RECREATIONAL VEHICLES, BOATS, CARS, SALES AND RENTAL, PREPARATION FOR SALES; SALES INVENTORY LOT, OUTDOOR STORAGE AND DISPLAY, ALL VEHICLES, TRAILER REPAIR AND MAINTENANCE OPERATIONS, FULL BODY AND PAINT WORK, ASSOCIATED ADMINISTRATIVE USES; PARTS, RETAIL SALES, & COMMERCIAL PARK
POTENTIAL FUTURE OUTPARCELS:	ALL B-2 USES (PHASE V)
BUILDING HEIGHT:	
EXISTING/ PROPOSED:	40 FEET (MAXIMUM) 15'-11" (MIN.) VERTICAL CLEARANCE ON DRIVE-THRU CANOPY

LANDSCAPE / OPEN SPACE:

PROJECT REQUIRED TO MEET MARION FRIENDLY LANDSCAPING AREA (MFLA) AND OPEN SPACE REQUIREMENTS. IN THE EVENT PARCEL IS SUBDIVIDED IN THE FUTURE, EACH PARCEL UNDER SAME OWNERSHIP WILL BE REQUIRED TO MEET MARION FRIENDLY LANDSCAPING AREA (MFLA) AND OPEN SPACE REQUIREMENTS. ALL OPEN SPACE AREAS TO BE MAINTAINED BY PROPERTY OWNER(S) OF EACH PARCEL AND/OR AS ASSIGNED TO COMMON ASSOCIATION.

Sunshine811

Design Ticket #278305386

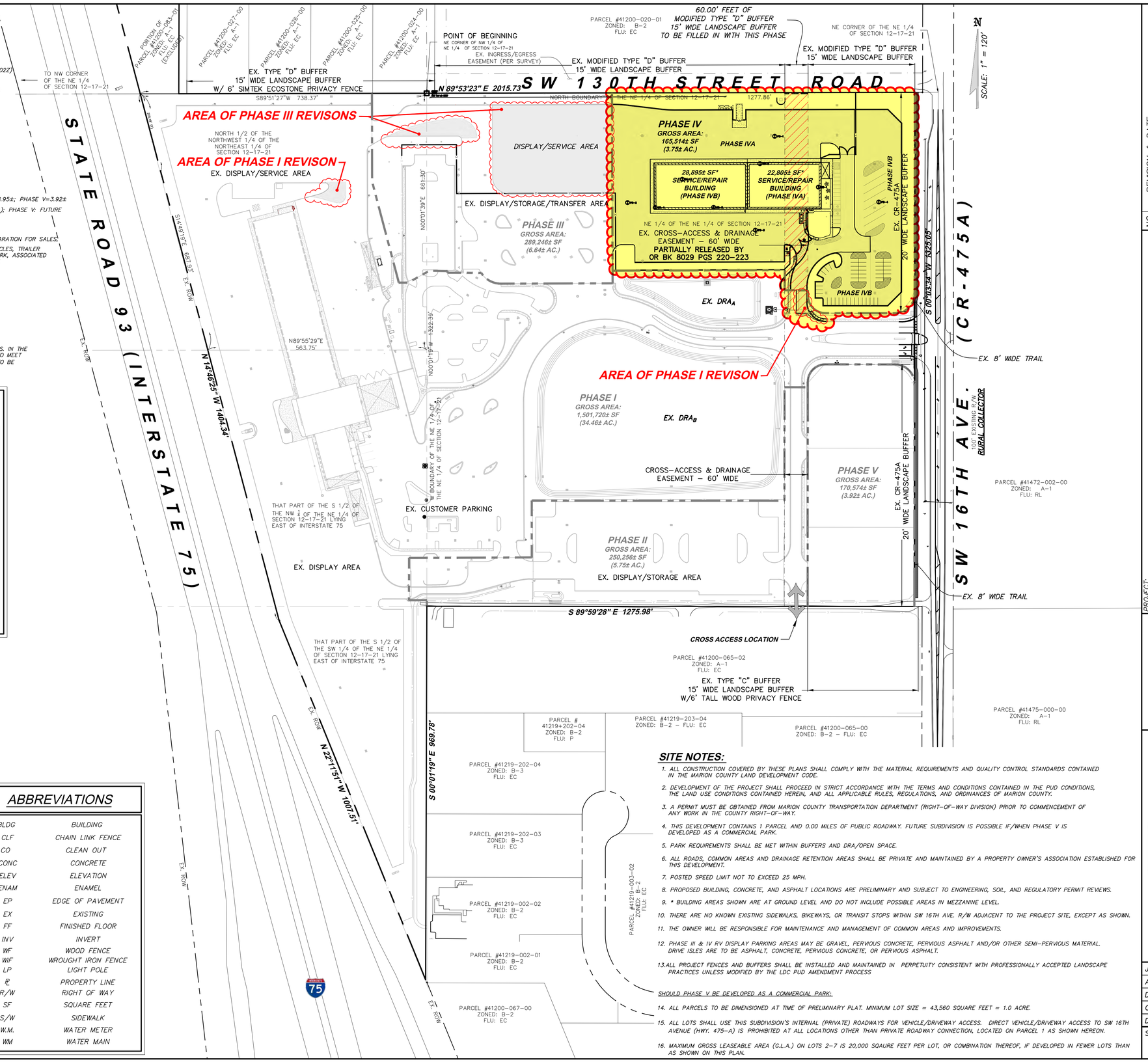
UTILITY:	NAME:	PHONE:
CENTURY LINK	BILL MCCLOUD	Day: (850) 599-1444
FIBER, TELEPHONE	RYAN EGAN	Alt: (918) 547-0063
CHARTER COMMUNICATIONS	DUFFY MCCLELLAND	Day: (352) 527-2187
CABLE, FIBER	USIC DISPATCH OFFICE	Alt: (800) 778-9140
LUMEN	NETWORK RELATIONS	Day: (352) 366-8344 x2
FIBER	TECH ON DUTY	Alt: (877) 366-8344 x3
MARION COUNTY UTILITIES	CARRIE HYDE	Day: (352) 307-6168
	VICTOR SHAHID	Alt: (352) 307-4622
SUMTER ELECTRIC COOPERATIVE	JANET COX	Day: (352) 569-9642
ELECTRIC	DISPATCH OFFICE SUMTER	Alt: (352) 793-3801
TECO PEOPLES GAS - OCALA	JOAN DOMNING	Day: (813) 275-3783
GAS, NATURAL GAS		
ZAYO GROUP/FORMERLY LIGHTWAVE LLC	HENRY KLOBUCAR	Day: (406) 496-6510
FIBER	STAKE CENTER / LOUIS SIMONE	Alt: (772) 579-8956

LEGEND

EXISTING	DESCRIPTION	PROPOSED
+100.0	SPOT ELEVATION	100.0
100.0	CONTOUR LINE	100.0
	OVERLAND FLOW	
	SWALE	
18" CMP	DRAINAGE SEWER WITH SIZE AND TYPE	48 LF ~ 18" CMP
	GRATE INLET	
D S	STORM/SAN SEWER MANHOLE	
6" PVC SAN	SANITARY SEWER WITH SIZE AND TYPE	30 LF ~ 6" PVC @ 0.50%
c.o.	CLEANOUT DEVICE	C.O.
WM WM	WATER MAIN	310 LF ~ 3" PVC WM
w.m.	WATER METER	WM
N/A	BACKFLOW PREVENTION	
g.v.	GATE VALVE OR PLUG VALVE	G.V. P.V.
	FIRE HYDRANT	
N/A	ASPHALT PAVING	
CONCRETE	CONCRETE	
N/A	ASPHALT TO BE REMOVED	
1	PARKING SPACE	
	WOOD DECK	
	UTILITY POLE	N/A
CATV	CABLE TELEVISION BOX	N/A
OHW OHW	OVERHEAD WIRE	N/A
GTE GTE	UNDERGROUND GTE	N/A
	RIGHT-OF-WAY	
	CENTERLINE	
LP	LIGHT POLE	

ABBREVIATIONS

BLDG	BUILDING
CLF	CHAIN LINK FENCE
CO	CLEAN OUT
CONC	CONCRETE
ELEV	ELEVATION
ENAM	ENAMEL
EP	EDGE OF PAVEMENT
EX	EXISTING
FF	FINISHED FLOOR
INV	INVERT
WF	WOOD FENCE
WIF	WROUGHT IRON FENCE
LP	LIGHT POLE
P.L.	PROPERTY LINE
R/W	RIGHT OF WAY
SF	SQUARE FEET
S/W	SIDEWALK
W.M.	WATER METER
WM	WATER MAIN



SITE NOTES:

1. ALL CONSTRUCTION COVERED BY THESE PLANS SHALL COMPLY WITH THE MATERIAL REQUIREMENTS AND QUALITY CONTROL STANDARDS CONTAINED IN THE MARION COUNTY LAND DEVELOPMENT CODE.
2. DEVELOPMENT OF THE PROJECT SHALL PROCEED IN STRICT ACCORDANCE WITH THE TERMS AND CONDITIONS CONTAINED IN THE PUD CONDITIONS, THE LAND USE CONDITIONS CONTAINED HEREIN, AND ALL APPLICABLE RULES, REGULATIONS, AND ORDINANCES OF MARION COUNTY.
3. A PERMIT MUST BE OBTAINED FROM MARION COUNTY TRANSPORTATION DEPARTMENT (RIGHT-OF-WAY DIVISION) PRIOR TO COMMENCEMENT OF ANY WORK IN THE COUNTY RIGHT-OF-WAY.
4. THIS DEVELOPMENT CONTAINS 1 PARCEL AND 0.00 MILES OF PUBLIC ROADWAY. FUTURE SUBDIVISION IS POSSIBLE IF/WHEN PHASE V IS DEVELOPED AS A COMMERCIAL PARK.
5. PARK REQUIREMENTS SHALL BE MET WITHIN BUFFERS AND DRA/OPEN SPACE.
6. ALL ROADS, COMMON AREAS AND DRAINAGE RETENTION AREAS SHALL BE PRIVATE AND MAINTAINED BY A PROPERTY OWNER'S ASSOCIATION ESTABLISHED FOR THIS DEVELOPMENT.
7. POSTED SPEED LIMIT NOT TO EXCEED 25 MPH.
8. PROPOSED BUILDING, CONCRETE, AND ASPHALT LOCATIONS ARE PRELIMINARY AND SUBJECT TO ENGINEERING, SOIL, AND REGULATORY PERMIT REVIEWS.
9. * BUILDING AREAS SHOWN ARE AT GROUND LEVEL AND DO NOT INCLUDE POSSIBLE AREAS IN MEZZANINE LEVEL.
10. THERE ARE NO KNOWN EXISTING SIDEWALKS, BIKEWAYS, OR TRANSIT STOPS WITHIN SW 16TH AVE. R/W ADJACENT TO THE PROJECT SITE, EXCEPT AS SHOWN.
11. THE OWNER WILL BE RESPONSIBLE FOR MAINTENANCE AND MANAGEMENT OF COMMON AREAS AND IMPROVEMENTS.
12. PHASE III & IV RV DISPLAY PARKING AREAS MAY BE GRAVEL, PERVIOUS CONCRETE, PERVIOUS ASPHALT AND/OR OTHER SEMI-PERVIOUS MATERIAL. DRIVE ISLES ARE TO BE ASPHALT, CONCRETE, PERVIOUS CONCRETE, OR PERVIOUS ASPHALT.
13. ALL PROJECT FENCES AND BUFFERS SHALL BE INSTALLED AND MAINTAINED IN PERPETUITY CONSISTENT WITH PROFESSIONALLY ACCEPTED LANDSCAPE PRACTICES UNLESS MODIFIED BY THE LDC PUD AMENDMENT PROCESS

SHOULD PHASE V BE DEVELOPED AS A COMMERCIAL PARK:

14. ALL PARCELS TO BE DIMENSIONED AT TIME OF PRELIMINARY PLAT. MINIMUM LOT SIZE = 43,560 SQUARE FEET = 1.0 ACRE.
15. ALL LOTS SHALL USE THIS SUBDIVISION'S INTERNAL (PRIVATE) ROADWAYS FOR VEHICLE/DRIVEWAY ACCESS. DIRECT VEHICLE/DRIVEWAY ACCESS TO SW 16TH AVENUE (HWY. 475-A) IS PROHIBITED AT ALL LOCATIONS OTHER THAN PRIVATE ROADWAY CONNECTION, LOCATED ON PARCEL 1 AS SHOWN HEREON.
16. MAXIMUM GROSS LEASEABLE AREA (G.L.A.) ON LOTS 2-7 IS 20,000 SQAURE FEET PER LOT, OR COMBINATION THEREOF, IF DEVELOPED IN FEWER LOTS THAN AS SHOWN ON THIS PLAN.

NO.	REVISION & DATE
1	3/12/2024: Updated areas based upon new survey.

MAJOR SITE PLANS FOR
GENERAL RV OCALA - PHASE IV
13150 SW 16TH AVE (CR 475-A), MARION COUNTY, FL

PROJECT:
GENERAL RV
13150 SW 16TH AVE

PREPARED FOR:
GENERAL RV

SHEET TITLE:
OVERALL SITE PLAN

McNEAL ENGINEERING, INC.
15957 N. FLORIDA AVE, LUTZ, FL 33549
PH. (813) 968-1081 FAX (813) 961-5839
CERTIFICATE OF AUTHORIZATION #08975

JOB NO.	21-116
ACAD FILE:	FCP
DRAWN BY:	MGF
CHK'D BY:	CSM
DATE:	24.03.14
SHEET:	C-2.0

THE DESIGNS AND DRAWINGS CONTAINED HEREON ARE THE COPYRIGHTED PROPERTY OF McNEAL ENGINEERING, INC., AND SHOULD NOT BE DUPLICATED WITHOUT WRITTEN CONSENT OF THE ENGINEER.

WAIVER EXHIBIT SHEET 2 OF 4

SW 130TH STREET ROAD

EX. SECO EASEMENT BY
OR BK 6788 PGS 709–711

TEMPORARY SILT FENCE
TO BE INSTALLED AROUND
ALL NEW INLETS UNTIL SOD
HAS BEEN COMPLETED (TYP.)

TEMPORARY SILT FENCE
TO BE INSTALLED AROUND
ALL NEW INLETS UNTIL PAVING
HAS BEEN COMPLETED (TYP.)

PB–1

SB–2

B–11

28,895± SF*
SERVICE/REPAIR
BUILDING
(PHASE IVB)

EX. SECO EASEMENT
BY OR BK 6788 PGS 709–711
PARTIALLY RELEASED BY
OR BK 8153 PGS 1968–1971

22,805± SF*
SERVICE/REPAIR
BUILDING

REMOVE EXISTING TREE
100001
36"

SB–1

PB–4

SB–4

SB–3

PB–2

PB–3

REMOVE EXISTING TREE
61326
34"

SILT FENCE (TYP.)

D–30A

D–30Z

D–32

D–31

D–30

D–28

D–X4

D–29

D–25

D–24

D–21

D–21A

DRA_A
$DHW_{100(24HR)}$ = 73.27
$DHW_{25(96HR)}$ = 72.70
$DHW_{25(24HR)}$ = 71.70
BOTTOM ELEV = 70.00

DRA_B
$DHW_{100(24HR)}$ = 73.27
$DHW_{25(96HR)}$ = 72.70
$DHW_{25(24HR)}$ = 71.70
BOTTOM ELEV = 70.00

EX. SECO EASEMENT BY
OR BK 6788 PGS 709–711

SAW–CUT AND REMOVE
~112 SY ASPHALT

REMOVE EXISTING
STRIPING

SAW–CUT AND REMOVE
~112' OF SIDEWALK
AND ADA RAMP

EX. SECO EASEMENT BY
OR BK 8073 PGS 1850–1852

CONTRACTOR RESPONSIBLE
TO MAINTAIN ADA ACCESS
TO PUBLIC R/W AT ALL
TIMES DURING CONSTRUCTION

REMOVE/REPLACE EXISTING FENCE
AS NECESSARY FOR INSTALLATION
OF UTILITIES AND GRADING

SW 16TH AVE. (CR-475A)

N

SCALE: 1" = 30'

NO.	REVISION & DATE

PROJECT:
MAJOR SITE PLANS FOR
GENERAL RV OCALA - PHASE IV
13150 SW 16TH AVE (CR 475-A), MARION COUNTY, FL

PREPARED FOR:
GENERAL RV

SHEET TITLE:
DEMOLITION PLAN
(SHEET 2 OF 2)

McNEAL ENGINEERING, INC.
15957 N. FLORIDA AVE, LUTZ, FL 33549
PH. (813) 968-1081 FAX (813) 961-5839
CERTIFICATE OF AUTHORIZATION #08975

JOB NO.	21–116
ACAD FILE:	FCP
DRAWN BY:	MGF
CHK'D BY:	CSM
DATE:	24.03.14
SHEET:	C-3.2

THE DESIGNS AND DRAWINGS CONTAINED HEREON ARE THE COPYRIGHTED PROPERTY OF McNEAL ENGINEERING, INC., AND SHOULD NOT BE DUPLICATED WITHOUT WRITTEN CONSENT OF THE ENGINEER.

WAIVER EXHIBIT SHEET 3 OF 4

RETAINING WALL
REFER TO SHEET C-7.3
FOR GRADING DETAIL
OF THIS AREA

PHASE IVA

PHASE IVB

B-11
28,895± SF*
SERVICE/REPAIR
BUILDING
(PHASE IVB)
FF ELEV = 78.65

22,805± SF*
SERVICE/REPAIR
BUILDING
(PHASE IVA)
FF ELEV = 78.65

PB-1
PB-2
PB-3
PB-4
SB-1
SB-2
SB-3
SB-4

D-413
D-414
D-415
D-451
D-452
D-453
D-454
D-455
D-456
D-456A
D-457
D-457A
D-458
D-459
D-460
D-461
D-471
D-472
D-473
D-474
D-303
D-318
D-32
D-31
D-30
D-29
D-28
D-26
D-25
D-20
D-14A
AD-1
AD-2
AD-3

DRA$_A$
DHW100(24HR) = 73.27
DHW25(96HR) = 72.70
DHW25(24HR) = 71.70
BOTTOM ELEV = 70.00
(REF PROJECT 2017100017
\SJRWMD PERMIT #15800-1)

SW 16TH AVE. (CR-475A)

N
SCALE: 1" = 30'

NOTE REGARDING PHASE IVB CONSTRUCTION:

CONTOURS SHOWN ARE TO FINISH GRADE. GRADING FOR PHASE IVB CONSTRUCTION TO BE TO SUB-GRADE. CONTRACTOR TO INSTALL GRAVEL TO FINISH GRADE, 3' AROUND ALL SIDES OF INLETS D-461, D-471, D-472, D-473 AND D-474 IF PHASE IVB PAVEMENT IS NOT INSTALLED AT THE SAME TIME AS PHASE IVA.

REFER TO SHEET C-8.0 FOR DRAINAGE STRUCTURE & PIPE TABLES

NO.	REVISION & DATE

MAJOR SITE PLANS FOR
GENERAL RV OCALA - PHASE IV
13150 SW 16TH AVE (CR 475-A), MARION COUNTY, FL

PROJECT: GENERAL RV

PREPARED FOR: GENERAL RV

SHEET TITLE: GRADING & DRAINAGE PLAN (SHEET 2 OF 2)

McNEAL ENGINEERING, INC.
15957 N. FLORIDA AVE, LUTZ, FL 33549
PH. (813) 968-1081 FAX (813) 961-5839
CERTIFICATE OF AUTHORIZATION #03975

JOB NO.	21-116
ACAD FILE:	FCP
DRAWN BY:	MGF
CHK'D BY:	CSM
DATE:	24.03.14
SHEET:	C-6.2

THE DESIGNS AND DRAWINGS CONTAINED HEREON ARE THE COPYRIGHTED PROPERTY OF McNEAL ENGINEERING, INC., AND SHOULD NOT BE DUPLICATED WITHOUT WRITTEN CONSENT OF THE ENGINEER.

WAIVER EXHIBIT SHEET 4 OF 4

MAJOR SITE PLANS FOR

GENERAL RV OCALA - PHASE IV

13150 SW 16TH AVE.
MARION COUNTY, FLORIDA

**** SPECIAL NOTE REGARDING CHANGES TO APPROVED PLANS ****

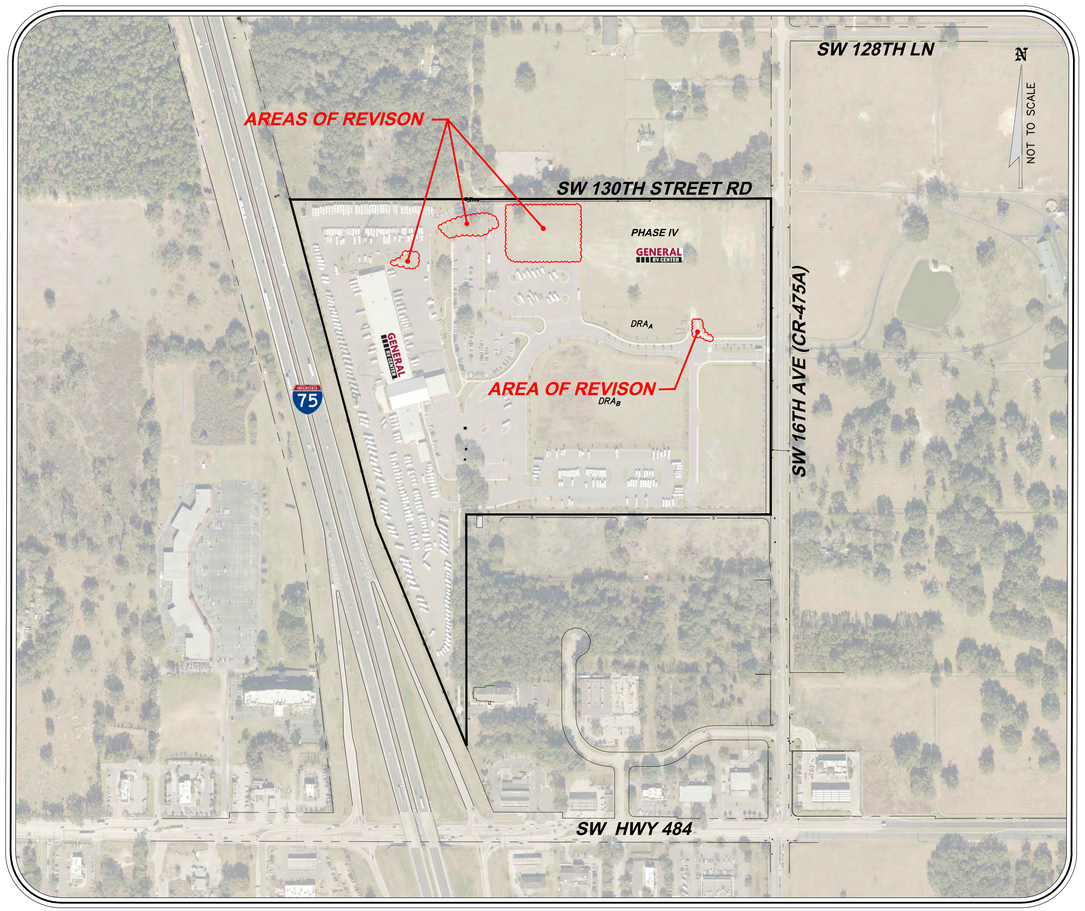
NO CHANGE TO THE WORK AS SHOWN ON THE APPROVED PLANS SHALL BE MADE WITHOUT NOTIFICATION TO AND APPROVAL BY THE OFFICE OF THE COUNTY ENGINEER.

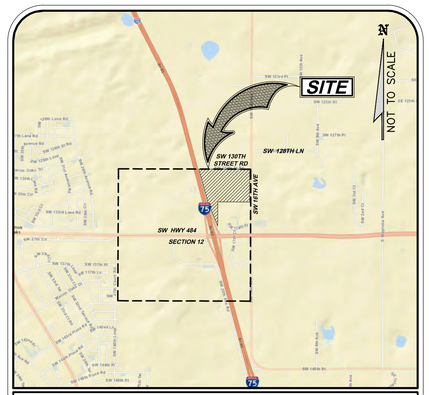
**** SPECIAL NOTE REGARDING CONCURRENCY APPROVAL / DEFERRAL ****

THIS PHASE OF THIS PROPOSED PROJECT HAS NOT BEEN GRANTED CONCURRENCY APPROVAL AND/OR GRANTED AND/OR RESERVED ANY PUBLIC FACILITY CAPACITIES. FUTURE RIGHTS TO DEVELOP THE PROPERTY ARE SUBJECT TO A DEFERRED CONCURRENCY DETERMINATION, AND FINAL APPROVAL TO DEVELOP THE PROPERTY HAS NOT BEEN OBTAINED. THE COMPLETION OF CONCURRENCY REVIEW AND/OR APPROVAL HAS BEEN DEFERRED TO LATER DEVELOPMENT REVIEW STAGES, SUCH AS, BUT NOT LIMITED TO, BUILDING PERMIT REVIEW

DRAWING INDEX

MC	SJRWMD	CONSTRUCTION	SHEET NUMBER	SHEET TITLE
•	•	•	CS–1	COVER SHEET
•	•	•	C–1.0	NOTES
•	•	•	C–2.0	OVERALL SITE PLAN
•	•	•	C–3.1	DEMOLITION PLAN (SHEET 1 OF 2)
•	•	•	C–3.2	DEMOLITION PLAN (SHEET 2 OF 2)
•	•	•	C–4.1	DIMENSION CONTROL PLAN (SHEET 1 OF 2)
•	•	•	C–4.2	DIMENSION CONTROL PLAN (SHEET 2 OF 2)
•	•	•	C–5.0	MASTER DRAINAGE PLAN
•	•	•	C–6.1	GRADING & DRAINAGE PLAN (SHEET 1 OF 2)
•	•	•	C–6.2	GRADING & DRAINAGE PLAN (SHEET 2 OF 2)
•	•	•	C–6.3	SECTIONS (SHEET 1 OF 2)
•	•	•	C–6.4	SECTIONS (SHEET 2 OF 2)
•		•	C–7.1	DETAILED GRADING SHEET (SHEET 1 OF 3)
•		•	C–7.2	DETAILED GRADING SHEET (SHEET 2 OF 3)
•		•	C–7.3	DETAILED GRADING SHEET (SHEET 3 OF 3)
•	•	•	C–8.0	DRAINAGE PIPE & STRUCTURE TABLES
•	•	•	C–9.0	UTILITY PLAN OTHER
•	•	•	C–10.0	SEWER AND WATER PLAN
•	•	•	C–11.0	GRAVITY SANITARY PIPE & STRUCTURE TABLES
•	•	•	C–12.0	WATER CONNECTION
•	•	•	C–13.1	SITE DETAILS (SHEET 1 OF 2)
•	•	•	C–13.2	SITE DETAILS (SHEET 2 OF 2)
•	•	•	C–14.0	DRAINAGE DETAILS
•	•	•	C–15.1	WATER DETAILS (SHEET 1 OF 2)
•	•	•	C–15.2	WATER DETAILS (SHEET 2 OF 2)
•	•	•	C–16.1	SEWER DETAILS (SHEET 1 OF 2)
•	•	•	C–16.2	SEWER DETAILS (SHEET 2 of 2)
•		•	L–1.1	CODE LANDSCAPE PLAN (SHEET 1 OF 2)
•		•	L–1.2	CODE LANDSCAPE PLAN (SHEET 2 OF 2)
•		•	L–2.1	LANDSCAPE PLANTING SCHEDULES
•		•	L–2.2	LANDSCAPE DATA TABLES
•		•	L–3.1	LANDSCAPE DETAILS (SHEET 1 OF 2)
•		•	L–3.2	LANDSCAPE DETAILS (SHEET 2 OF 2)
•		•	IR–1.1	IRRIGATION PLAN (SHEET 1 OF 2)
•		•	IR–1.2	IRRIGATION PLAN (SHEET 2 OF 2)
•		•	PE–1.1	LIGHTING PLAN (SHEET 1 OF 2)
•		•	PE–1.2	LIGHTING PLAN (SHEET 2 OF 2)
•		•	PE–2.01–2.10	LIGHTING DETAILS
				ATTACHMENTS
•	•	•	1 – 5	SURVEY (D.C. JOHNSON & ASSOCIATES)
•	•	•	1 – 2	TOPOGRAPHIC & LIMITED PURPOSE SURVEY (PHASE IV)





VICINITY MAP
SECTION: 12 TOWNSHIP: 17S RANGE: 21E

PERMIT REFERENCE & STATUS:

MARION COUNTY: (PROJECT NO. 2017100017)

MAJOR SITE PLAN: (APPLICATION #21037)	APPROVED/CONSTRUCTED
MAJOR SITE PLAN (REVISED): (APPLICATION # 21653)	APPROVED/CONSTRUCTED
OFFSITE ROADWAY IMPROVEMENTS – SW 16TH AVE (REFER TO APPLICATION ID# 21171)	APPROVED/CONSTRUCTED
MAJOR SITE PLAN (REVISION 2): (APPLICATION #28464)	PENDING
SJRWMD: PERMIT#: 151800–2	PENDING
FDEP NPDES: (FACILITY ID: FLR10RN41)	PENDING
FL DEPARTMENT OF HEALTH:	
DISTRIBUTION (WATER):	PENDING
ENVIRONMENTAL PROTECTION COMMISSION:	
FDEP/COLLECTION (WASTEWATER):	PENDING

WAIVERS:

THE FOLLOWING WAIVERS WERE GRANTED AT THE DECEMBER 11, 2017 DRC:

2.21.3.C COMMENCE IMPROVEMENTS PRIOR TO PLAN APPROVAL (PARTIAL EARLY START PERMITTED FOR TREE REMOVAL AND BUILDING PAD – WITH CONDITIONS)

6.11.4.B(1) CROSS ACCESS/PARALLELL ACCESS (PARTIAL DEFFERAL)
(PARTIALLY RELEASED BY OR BK 8029 PG 220)

6.13.8.B(7) MINIMUM STORMWATER PIPE SIZE (SMALLER PIPE ALLOWED)

THE FOLLOWING WAIVER WAS GRANTED AT THE DECEMBER 18, 2017 DRC:

6.7.4.A SHADE TREES (MINIMUM SHALL BE 1 SHADE TREE PER 6,000 SF)

THE FOLLOWING WAIVER WAS GRANTED AT THE JULY 2, 2018 DRC:

6.8.6.L(1)(c) PLANTINGS TO BE ON PUBLIC VIEW SIDE OF FENCE OR WALL (APPROVED TO HAVE THE PLANTINGS BE ON THE SIDE OF THE BUFFER WALL (FENCE) ALONG THE NORTHERN AND SOUTHERN BOUNDARY)

2.21.3.C – COMMENCE IMPROVEMENTS PRIOR TO PLAN APPROVAL (APPROVED TO ALLOW SIMULTANEOUS REVIEWS AND TO COMMENCE CONSTRUCTION – OF GOLF CART BUILDING – PRIOR TO FINAL PLAN APPROVAL SUBJECT TO IT BEING AT OWNER'S RISK AND NO FINAL INSPECTIONS MADE UNTIL THE MAJOR SITE PLAN IS APPROVED)

AREA CALCULATIONS

DESCRIPTION	APPROVED SF	APPROVED ACRES	APPROVED %	PROPOSED SF	PROPOSED ACRES	PROPOSED ACRES
Impervious	1,439,370	33.04	54.8%	1,576,701	36.20	60.0%
Future Impervious	254,873	5.85	9.7%	117,542	2.70	4.5%
DRA @ 74.0	263,560	6.05	10.0%	263,560	6.05	10.0%
RW (Previously Dedicated by OR BK 6725, PGS 415-417)	26,501	0.61	1.0%	26,501	0.61	1.0%
Pervious	643,057	14.76	24.5%	643,057	14.76	24.5%
Total	2,627,361	60.32	100.0%	2,627,361	60.32	100.0%

NOTES: (1) All impervious and future impervious areas are to be directed to the master DRA(s) within Basin 5579 as per the approved permit.
(2) REFER TO SHEET C-2.0 FOR ADDITIONAL INFORMATION.

OWNER & APPLICANT:

OCALA NORTH, LLC
A MICHIGAN LIMITED LIABILITY COMPANY
c/o GENERAL RV CENTER
25000 ASSEMBLY PARK DR.
WIXOM, MI 48393
PHONE: (248) 662–9920
FAX: (248) 348–4150

OPERATOR:

GENERAL RV CENTER®
25000 ASSEMBLY PARK DR.
WIXOM, MI 48393
PHONE: (248) 662–9920
FAX: (248) 348–4150

LEGAL DESCRIPTION:

THAT PORTION OF PARCEL 41200–083–01 DESCRIBED AS FOLLOWS:

OR BOOK 04681: PAGES 0346–0349 (PARCEL # 41200–083–01):

THAT PART OF THE SOUTH ½ OF THE NORTHWEST ¼ OF THE NORTHEAST ¼ LYING EAST OF INTERSTATE I–75 RIGHT–OF–WAY, THAT PART OF THE SOUTHWEST ¼ OF THE NORTHEAST ¼ LYING EAST OF INTERSTATE I–75 RIGHT–OF–WAY, AND THE NORTHEAST ¼ OF THE NORTHEAST ¼ OF SECTION 12, TOWNSHIP 17 SOUTH, RANGE 21 EAST;

AND

BEGINNING AT THE NORTHEAST CORNER OF THE NORTHWEST ¼ OF THE NORTHEAST ¼ OF SECTION 12, TOWNSHIP 17 SOUTH, RANGE 21 EAST, MARION COUNTY, FLORIDA, THENCE SOUTH 89°51'27" WEST ALONG THE NORTH BOUNDARY OF SAID NORTHWEST ¼ OF THE NORTHEAST ¼ A DISTANCE OF 738.37 FEET TO THE EASTERLY RIGHT OF WAY OF INTERSTATE No. 75, THENCE SOUTH 14°49'19" EAST ALONG SAID RIGHT OF WAY LINE 687.93 FEET, MORE OR LESS, TO THE SOUTH BOUNDARY OF THE NORTH ½ OF THE NORTHWEST ¼ OF THE NORTHEAST ¼, THENCE NORTH 89°55'29" EAST 563.75 FEET ALONG SAID SOUTH BOUNDARY, THENCE NORTH 00°01'39" EAST 661.30 FEET TO THE POINT OF BEGINNING.

EXCEPT THAT PART PREVIOUSLY DEDICATED FOR ROAD RIGHT OF WAY (OR BK 6725, PGS 415–417)

THE WEST 20.00 FEET OF THE EAST 60.00 FEET OF THE NORTHEAST ¼ OF THE NORTHEAST ¼ OF SECTION 12, TOWNSHIP 17 SOUTH, RANGE 21 EAST, MARION COUNTY, FLORIDA BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

FOR A POINT OF REFERENCE COMMENCE AT THE NORTHEAST CORNER OF SAID SECTION 12; THENCE S.89°53'23"W. ALONG THE NORTH BOUNDARY OF THE NORTHEAST ¼ OF SAID SECTION 12, A DISTANCE OF 40.00 FEET FOR A POINT OF BEGINNING; THENCE CONTINUE S.89°53'23"W., A DISTANCE OF 20.00 FEET; THENCE S.00°03'34"W. ALONG A LINE 60.00 FEET WEST OF AND PARALLEL WITH THE EAST BOUNDARY OF THE NORTHEAST ¼ OF SAID SECTION 12, A DISTANCE OF 1,325.01 FEET TO THE SOUTH BOUNDARY OF THE NORTHEAST ¼ OF THE NORTHEAST ¼ OF SAID SECTION 12; THENCE S.89°59'28"E. ALONG SAID SOUTH BOUNDARY, A DISTANCE OF 20.00 FEET; THENCE N.00°03'34"E. ALONG A LINE 40.00 WEST OF AND PARALLEL WITH AFOREMENTIONED EAST BOUNDARY OF THE NORTHEAST ¼ OF SAID SECTION 12, A DISTANCE OF 1,302.05 FEET TO THE POINT OF BEGINNING.

ENGINEER'S CERTIFICATION:

I HEREBY CERTIFY THAT THESE PLANS AND CALCULATIONS WERE COMPLETED IN ACCORDANCE WITH ALL APPLICABLE REQUIREMENTS OF THE MARION COUNTY LAND DEVELOPMENT CODE (LDC), EXCEPT AS WAIVED

CHRISTOPHER S. MCNEAL, FL REG. ENG NO. 56193 — DATE

OWNER'S CERTIFICATION:

I HEREBY CERTIFY THAT I, MY SUCCESSORS, AND ASSIGNS SHALL PERPETUALLY MAINTAIN THE IMPROVEMENTS AS SHOWN ON THIS PLAN.

NAME: — DATE

NO.	REVISION & DATE

PROJECT: GENERAL RV OCALA - PHASE IV
13150 SW 16TH AVE (CR 475-A), MARION COUNTY, FL

PREPARED FOR:

SHEET TITLE:

MCNEAL ENGINEERING, INC.
15957 N. FLORIDA AVE, LUTZ, FL 33549
PH. (813) 968–1081 FAX (813) 961–5839
CERTIFICATE OF AUTHORIZATION #08975

JOB NO.	21–116
ACAD FILE:	FCP
DRAWN BY:	MGF
CHK'D BY:	CSM
DATE:	24.01.11
SHEET:	CS-1

THE DESIGNS AND DRAWINGS CONTAINED HEREON ARE THE COPYRIGHTED PROPERTY OF McNEAL ENGINEERING, INC., AND SHOULD NOT BE DUPLICATED WITHOUT WRITTEN CONSENT OF THE ENGINEER.

GENERAL NOTES:

1. PROPOSED DEVELOPMENT AREA, A PORTION OF PARCEL #41200-083-01, CONTAINING 59.71(±) ACRES. [0.61 ACRES R/W PREVIOUSLY DEDICATED ALONG NW 16TH AVENUE FOR A TOTAL PROJECT AREA OF 61.32(±)] PROPOSED IMPROVEMENTS INCLUDE BUILDING AND STORAGE AREAS FOR THE SALES, STORAGE AND REPAIR OF RECREATIONAL VEHICLES, BOATS, CARS, AND TRAILERS, AS WELL AS ASSOCIATED ACCESS, UTILITY INFRASTRUCTURE AND APPROXIMATELY 1651 LF OF OFFSITE ROAD IMPROVEMENTS.

2. DEVELOPMENT TO BE BUILT IN MULTIPLE PHASES. **PHASE I, PHASE II & PHASE III ARE EXISTING. THIS REVISIONS MODIFIES PHASE IV, WITH MINOR REVISIONS TO PHASES I AND III.** SUBSEQUENT PHASES MAY BE CONSTRUCTED IN ANY ORDER OR COMBINATION. AN OPTION IS RESERVED TO DEVELOP PHASE V AS A COMMERCIAL PARK ALLOWING B-2 USES. SUBDIVISION OF PARCEL AND ADDITIONAL AGENCY APPROVALS WILL BE REQUIRED FOR DEVELOPMENT OF PHASE V.

3. PROPOSED IMPROVEMENTS ARE PRELIMINARY AND SUBJECT TO ENGINEERING, SOIL, TRANSPORTATION STUDY AND REGULATORY PERMIT REVIEWS. ATTENUATION & TREATMENT PER MARION COUNTY & SJRWMD CRITERIA IS REQUIRED.

4. CONSTRUCTION PLAN APPROVALS SUBJECT TO REVIEW AND AGENCY COMMENTS.

5. PUBLIC WATER AND SEWER IS LOCATED ON SITE. REFER TO PLANS FOR LOCATION.

6. EXTERIOR LIGHTING WITHIN THE PROJECT SHALL BE OF A LOW-PROJECTION NON-GLARE TYPE, DESIGNED TO PRODUCE A MINIMUM OF ILLUMINATION AND GLARE BEYOND PROJECT BOUNDARIES.

7. DEVELOPMENT OF THE PROJECT SHALL PROCEED IN STRICT ACCORDANCE WITH THE TERMS AND CONDITIONS CONTAINED IN THE DEVELOPMENT ORDER, THE GENERAL SITE PLAN, THE LAND USE CONDITIONS CONTAINED HEREIN AND ALL APPLICABLE RULES, REGULATIONS AND ORDINANCES OF MARION COUNTY.

8. GARBAGE DISPOSAL WILL BE BY COMPACTOR AND/OR DUMPSTER PICKUP LOCATED ON-SITE. COLOR AND FINISH OF DUMPSTER ENCLOSURES TO ARCHITECTURALLY MATCH THAT OF THE FRONT FACADE OF PROPOSED BUILDINGS AND SHALL BE SCREENED FROM PUBLIC VIEW.

9. LANDSCAPING SHALL BE PROVIDED IN ACCORDANCE WITH THE MARION COUNTY LANDSCAPE CODE.

10. BUILDING TO COMPLY WITH ALL MARION COUNTY BUILDING AND FIRE CODES.

11. SIDEWALKS TO MEET ALL ADA AND MARION COUNTY COMPLIANCE REGULATIONS. SIDEWALKS SHALL BE CONSTRUCTED OF 3,000 PSI FIBERMESH CONCRETE, TO A MINIMUM THICKNESS OF 4", WITH 6" MINIMUM WHERE VEHICLE TRAFFIC IS ANTICIPATED. CURB RAMPS SHALL BE PROVIDED WHERE THE PUBLIC SIDEWALK MEETS ALL DRIVEWAYS PER THE FLORIDA ACCESSIBILITY CODE STANDARDS AND SPECIFICATIONS.

12. THE DEVELOPER ASSURES THAT ACCESS TO THE PROPERTY WILL SUPPORT SERVICE BY EMERGENCY AND PARATRANSIT-TYPE VEHICLES.

13.THE PARCEL SHOWN HEREON APPEARS TO FALL WITHIN FLOOD ZONE "X", PER THE FLOOD INSURANCE RATE MAP 12083C, COMMUNITY PANEL NUMBER 0716 D DATED 4/19/2017 AND 0720 D. DATED 8/28/2008.

14. SURVEY PROVIDED BY DC JOHNSON ASSOCIATES, 813-588-2768. (REF. JOB NO. 2017-148A01.BG00002). SUPPLEMENTAL TOPOGRAPHICAL AND SPECIFIC PURPOSE SURVEY, DATED NOVERMBER 15, 2022, PROVIDED BY MCNEAL ENGINERING, INC. ALL COORDINATE VALUES SHOWN HEREON ARE BASED UPON THESE SURVEYS. CONTRACTOR/SURVEYOR PERFORMING CONSTRUCTION STAKING ASSOCIATED WITH THIS PROJECT SHALL FIELD VERIFY COORDINATE SYSTEM PRIOR TO ALL CONSTRUCTION STAKING ACTIVITIES AND NOTIFY ENGINEER IF ANY DISCREPANCIES ARE IDENTIFIED.

15. ELEVATIONS ARE BASED ON NAVD 88 DATUM AND FLORIDA DEPARTMENT OF TRANSPORTATION BENCHMARK 6142004:PUBLISHED ELEVATION = 72.53' (NAVD88). NGVD 29 = NAVD 88 + 0.97.

16. UTILITIES OTHER THAN THOSE SHOWN HEREON MAY EXIST WITHIN THE AREA OF CONSTRUCTION. NO GUARANTEE IS MADE THAT THE UTILITIES SHOWN ARE TRULY REPRESENTATIVE OF ACTUAL FIELD LOCATIONS. CONTRACTOR TO CALL SUNSHINE STATE ONE OF FLORIDA, INC. AT (800) 432-4770 AT LEAST 48 HOURS PRIOR TO START OF CONSTRUCTION IN R/W TO LOCATE EXISTING UNDERGROUND UTILITIES.

17. CONTRACTOR SHALL PROVIDE A SIGNED AND SEALED AS-BUILT DRAWING (INFORMATION PROVIDED BY A REGISTERED SURVEYOR) TO THE ENGINEER UPON COMPLETION OF WORK FOR DEVELOPMENT OF THE RECORD DRAWINGS. AS-BUILT SURVEY TO INCLUDE THE LOCATION OF ELECTRICAL CONDUIT RUNS, PETROLEUM PIPING RUNS AND ONSITE UTILITY INFORMATION, AS WELL AS, STORMWATER INVERTS AND OUTLETS, GRATE/RIMS, DETENTION/RETENTION BASINS, BUILDING FINISHED FLOOR, FOUR CORNERS OF BUILDINGS, & SIDEWALK. AS-BUILT SURVEY SHOULD SHOW ALL SETBACK LINES AND R/W.

18. ANY DISTURBED AREAS WITHIN THE RIGHT-OF-WAY SHALL BE RESTORED TO MARION COUNTY STANDARDS AND SPECIFICATIONS.

19.ALL SIGNAGE AND STRIPING TO COMPLY WITH THE MANUAL FOR UNIFORM TRAFFIC CONTROL DEVICES (M.U.T.C.D.).

20. THE APPLICANT/DEVELOPER SHALL NOTIFY MARION COUNTY AND THE ST. JOHNS RIVER WATER MANAGEMENT DISTRICT (SJRWMD) IF ANY NOTICEABLE SOIL SLUMPING OR SINKHOLE FORMATION BECOMES EVIDENT.

LANDSCAPING NOTES:

1. PROPOSED TREES AND SHRUBS SHALL BE FLORIDA GRADE #1.

2. NO MORE THAN 50% OF THE LANDSCAPED AREA MAY BE PLANTED WITH SHALLOW ROOTED; I.E., ST. AUGUSTINE TURF GRASS VARIETIES. PLACE SOD TIGHT AS SOON AS PRACTICAL AFTER SPECIFIC AREAS HAVE BEEN GRADED.

3. ALL TREE ROOTS EXISTING WITHIN APPROVED IMPROVEMENT AREAS AND ORIGINATING FROM A PROTECTED TREE, SHALL BE SEVERED CLEAN AT THE LIMITS OF THE PRESERVED AREA WHERE INDICATED ON THE APPROVED PLANS. A SPECIAL NOTE IDENTIFYING THE PRUNING TECHNIQUES/EQUIPMENT TO BE UTILIZED AND GRAPHIC DEPICTION OF WHERE ROOT PRUNING IS REQUIRED MUST BE NOTED ON THE GRADING SHEET OF THE SITE DEVELOPMENT CONSTRUCTION PLANS. THE NOTE MUST SPECIFY THAT ROOT PRUNING EQUIPMENT SELECTED WILL BE EQUIVALENT TO A DOSKO ROOT CUTTER.

4. PLACE CYPRESS MULCH TO 5' OF ALL EXISTING TO A MINIMUM DEPTH OF 4", LOOSE MEASURE. ALL HEDGE ROWS ARE TO BE 36" WIDE AND MULCHED WITH 4" LOOSE MEASURE, OF CYPRESS MULCH.

5. ONLY MINIMUM LANDSCAPE REQUIRED BY THE MARION COUNTY IS SHOWN HEREON. OWNER MAY CONTRACT WITH A LANDSCAPE FIRM OR THE DESIGN ENGINEER FOR AN ADVANCED LANDSCAPE PLAN.

6. THE CONSTRUCTION OF ALL ABOVE GROUND UTILITY APPURTENANCES SUCH AS PEDESTALS, UTILITY METERS, TRANSFORMERS, BACK-FLOW PREVENTION DEVICES, ETC. FOR NEW DEVELOPMENT OR REDEVELOPMENT ACTIVITIES SHALL CONFORM TO SCREENING REQUIREMENTS AS OUTLINED IN SECTION 6.8.8.A OF THE MARION COUNTY LAND DEVELOPMENT CODE. PLANT LOCATION MUST BE CONSIDERATE OF REQUIRED SPATIAL SEPARATIONS FROM A FIRE FLOW PROTECTION APPLIANCE IN ACCORDANCE TO THE UNIFORM FIRE CODE.

7. ANY TREES WITHIN SIGHT LINE TRIANGLES SHALL BE MAINTAINED IN ACCORDANCE WITH THE FDOT STANDARD INDEX #546, SHEET 2 OF 6, PICTORIAL WINDOW DETAIL, FY 2016/ 2017, OR LATEST EDITION.

8. DURING LAND ALTERATION AND CONSTRUCTION ACTIVITIES, IT SHALL BE UNLAWFUL TO REMOVE VEGETATION BY GRUBBING OR TO PLACE SOIL DEPOSITS, DEBRIS, SOLVENTS, CONSTRUCTION MATERIAL, MACHINERY OR OTHER EQUIPMENT OF ANY KIND WITHIN THE DRIP LINE OF A TREE TO REMAIN ON THE SITE UNLESS OTHERWISE APPROVED BY THE COUNTY.

9. ALL TRIMMING UNDERTAKEN ON A TREE PROTECTED BY THE PROVISIONS OF THE LAND DEVELOPMENT CODE SHALL BE IN ACCORDANCE WITH THE AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI) A-300 PRUNING STANDARDS.

10. IN ORDER TO COMPLY WITH SECTION 6.13.10 OF THE MARION COUNTY LAND DEVELOPMENT CODE TO MINIMIZE SOIL EROSION PROPOSED LAND ALTERATION ACTIVITIES SHALL NOT UNNECESSARILY REMOVE EXISTING VEGETATION AND ALTER EXISTING TOPOGRAPHY. ADEQUATE PROTECTION MEASURES (I.E. HAY BALES, BAFFLES, SODDING, AND SANDBAGGING) SHALL BE PROVIDED, AS NECESSARY, TO MINIMIZE EROSION AND DOWNSTREAM SEDIMENTATION CAUSED BY SURFACE WATER RUNOFF ON EXPOSED LAND SURFACES.

PAVING NOTES:

1. THE CRITERIA CONTAINED IN THESE NOTES WILL IDENTIFY THE TYPE OF MATERIAL REQUIRED FOR CONSTRUCTION OF THE DRIVEWAY SURFACES AND THE MINIMUM TESTING REQUIREMENTS. WORKMANSHIP AND MATERIALS SHALL BE IN CONFORMANCE WITH THE FDOT SPECIFICATIONS, LATEST EDITION. ANY R/W AND/OR PRIVATE PROPERTY DISTURBED BY THE CONSTRUCTION SHALL BE RESTORED TO A CONDITION EQUAL TO OR BETTER THAN THAT PRESENTLY EXISTING. RESTORATION OF THE GRASSED AREAS OF THE R/W WILL BE MADE USING ARGENTINE BAHIA SOD.

2. PRIOR TO PLACEMENT OF ANY FILL, THE SUBJECT AREA(S) SHALL BE STRIPPED AND PROOF ROLLED TO PROVIDE A DENSITY OF 98% MODIFIED PROCTOR TO A DEPTH OF 12". MATERIAL REMOVED FROM THE STRIPPING SHALL BE DISPOSED OF AS DIRECTED BY THE OWNER. THE EXCEPTION TO THIS REQUIREMENT IS THAT CLEARING OF AREAS OF THE SITE DESIGNATED TO RECEIVE POROUS CONCRETE SHALL BE MADE TO PREVENT DAMAGE TO THE ROOT SYSTEMS OF EXISTING TREES TO BE RETAINED. NO MECHANICAL EQUIPMENT SHALL BE OPERATED AND/OR PARKED UNDER THE DRIP LINE OF TREES DESIGNATED TO REMAIN.

3. THE FOLLOWING PARAGRAPHS SPECIFY THREE TYPES OF PAVEMENT SECTIONS, A, B, & C, DESCRIBED AS FOLLOWS:

A. HEAVY DUTY PAVEMENT SECTION

i. PRIOR TO PLACEMENT OF BASE MATERIALS, THE SITE CONTRACTOR SHALL ORDER LBR TESTING OF THE SUBGRADE. IF THE INSITU MATERIAL HAS A LBR IN EXCESS OF 40 AND IS COMPACTED TO 95% OF THE MODIFIED PROCTOR MAXIMUM DRY DENSITY, NO STABILIZATION WILL BE REQUIRED. IF STABILIZATION IS REQUIRED TO ACHIEVE THE MINIMUM BEARING SPECIFIED STABILIZE THE TOP 12" OF SUBGRADE TO ACHIEVE A MINIMUM LBR OF 40 AND A COMPACTION TO 95% OF THE MODIFIED PROCTOR MAXIMUM DRY DENSITY. MATERIALS USED FOR STABILIZATION SHALL BE AT THE OPTION OF THE SITE CONTRACTOR, SUBJECT TO THE APPROVAL OF THE ENGINEER.

ii. PLACE A MINIMUM 8 INCHES (2 LIFTS) OF LIMEROCK BASE OR APPROVED EQUAL, LBR 100, COMPACTED TO 98% OF THE MAXIMUM LABORATORY DENSITY, PRIMED AND SANDED.

iii. PLACE A MINIMUM OF 2 INCHES OF TYPE S-1 (OR SP-9.5) ASPHALTIC CONCRETE WITH A MINIMUM STABILITY OF 1,500 LBS COMPACTED TO 98% OF THE MAXIMUM LABORATORY DENSITY, LBR 100, PRIMED AND SANDED.

B. ONSITE PAVEMENT - ASPHALT PAVEMENT (STANDARD DUTY)

i. PRIOR TO PLACEMENT OF BASE MATERIALS, THE SITE CONTRACTOR SHALL ORDER LBR TESTING OF THE SUBGRADE. IF THE INSITU MATERIAL HAS A LBR IN EXCESS OF 40 AND IS COMPACTED TO 95% OF THE MODIFIED PROCTOR MAXIMUM DRY DENSITY, NO STABILIZATION WILL BE REQUIRED. IF STABILIZATION IS REQUIRED TO ACHIEVE THE MINIMUM BEARING SPECIFIED STABILIZE THE TOP 12" OF SUBGRADE TO ACHIEVE A MINIMUM LBR OF 40 AND A COMPACTION TO 95% OF THE MODIFIED PROCTOR MAXIMUM DRY DENSITY. MATERIALS USED FOR STABILIZATION SHALL BE AT THE OPTION OF THE SITE CONTRACTOR, SUBJECT TO THE APPROVAL OF THE ENGINEER.

ii. PLACE A MINIMUM 6 INCHES (1 LIFT) OF LIMEROCK BASE OR APPROVED EQUAL, LBR 100, COMPACTED TO 98% OF THE MAXIMUM LABORATORY DENSITY, PRIMED AND SANDED.

iii. PLACE A MINIMUM OF 1-1/2 INCHES OF TYPE S-1 (OR SP-9.5) ASPHALTIC CONCRETE WITH A MINIMUM STABILITY OF 1,500 LBS COMPACTED TO 98% OF THE MAXIMUM LABORATORY DENSITY, LBR 100, PRIMED AND SANDED.

C. ONSITE PAVEMENT - HEAVY DUTY CONCRETE PAVEMENT

(TO BE INSTALLED AT ALL CONCRETE LOCATIONS SHOWN UNLESS SPECIFIED ON BUILDING PLANS OR BY OTHER DETAIL WITHIN THESE PLANS.)

i. PRIOR TO PLACEMENT OF BASE MATERIALS, THE SITE CONTRACTOR SHALL ORDER LBR TESTING OF THE SUBGRADE. IF THE INSITU MATERIAL HAS A LBR IN EXCESS OF 40 AND IS COMPACTED TO 95% OF THE MODIFIED PROCTOR MAXIMUM DRY DENSITY, NO STABILIZATION WILL BE REQUIRED. IF STABILIZATION IS REQUIRED TO ACHIEVE THE MINIMUM BEARING SPECIFIED STABILIZE THE TOP 12" OF SUBGRADE TO ACHIEVE A MINIMUM LBR OF 40 AND A COMPACTION TO 95% OF THE MODIFIED PROCTOR MAXIMUM DRY DENSITY. MATERIALS USED FOR STABILIZATION SHALL BE AT THE OPTION OF THE SITE CONTRACTOR, SUBJECT TO THE APPROVAL OF THE ENGINEER.

ii. APPLY A MINIMUM THICKNESS OF 6 INCHES PORTLAND CEMEBT CONCRETE, 4,000 PSI AT 28 DAYS WHEN TESTED IN ACCORDANCE WITH ASTM C-39.

4. PAVEMENT SUBGRADE AND SUBBASE SHALL NOT CONTAIN ANY A-4 THROUGH A-7 SOILS OR MUCK. SHOULD ANY OF THESE SOILS BE ENCOUNTERED WITHIN THE AREA(S) OF IMPROVEMENT, THEY SHALL BE REMOVED AND REPLACED WITH SOIL ACCEPTABLE TO THE ENGINEER.

5. LEVELING COURSE WILL BE REQUIRED WHERE EVER NECESSARY.

6. THE CONTRACTOR IS TO REQUEST A COPY OF THE SOILS REPORT AND REVIEW IT THOROUGHLY PRIOR TO COMMENCEMENT OF CONSTRUCTION. IF ADDITIONAL SOILS ENGINEERING IS REQUESTED TO DETERMINE EXISTING SOILS CONDITIONS IS WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN THIS INFORMATION.

7. THE SITE CONTRACTOR SHALL SCHEDULE THE TESTING OF SUBGRADE, BASE, AND ASPHALT MATERIALS, AS REQUIRED FOR CONSTRUCTION OF THE PARKING AREA AND THE MARION ASSOCIATED ACCESS ROADWAY WITH A TESTING LABORATORY APPROVED BY THE OWNER. ALL TESTS NOTED BELOW SHALL BE PERFORMED AT A FREQUENCY OF ONE TESTING PER 5,000 SQ FT.

8. ALL TYPE "B", "D", "F" & "R" CURBING SHALL BE FDOT AND SHALL CONFORM TO THE FDOT SPECIFICATIONS, UNLESS OTHERWISE SPECIFIED ON THE PLANS. DIMENSIONS IN THESE PLANS IDENTIFY THE PAVEMENT WIDTH AS BEING FROM FACE OF CURB TO FACE OF CURB OR EDGE OF PAVEMENT.

9. ALL ASPHALT PAINT TO BE THERMOPLASTIC WITH GLASS BEADS. IF OWNER CHOOSES STANDARD ASPHALT PAINT (ONSITE OPTION ONLY), 2 COATS SHALL BE APPLIED.

10. ALL PROPOSED SIGNAGE AND STRIPING FOR THIS EXPANSION SHALL CONFORM TO THOSE IDENTIFIED IN THE MANUAL FOR UNIFORM TRAFFIC CONTROL DEVICES. ALL SIGNAGE SHALL BE SET IN CONCRETE.

DRAINAGE NOTES:

1. WORKMANSHIP AND MATERIALS FOR CONSTRUCTION OF INLETS SHALL INSURE THOSE STRUCTURES WILL SUPPORT H-20 LOADING. ALL STRUCTURES ARE TO BE PRECAST.

2. WATER FROM DEWATERING OPERATIONS SHALL NOT BE DISCHARGED ONTO ADJACENT PROPERTIES. THE CONTRACTOR IS CAUTIONED THAT ANY WATER DISCHARGED OFF SITE DURING DEWATERING OPERATIONS MUST MEET STATE WATER QUALITY STANDARDS FOR TURBIDITY. ANY TURBID WATER MUST BE RETAINED ON SITE UNTIL WATER QUALITY STANDARDS ARE MET.

3. WHEN MATCHING THE EXISTING PAVEMENT, THE SITE CONTRACTOR SHALL SAW CUT ALONG THE EDGE OF THE EXISTING PAVEMENT. MATCHING OF THE ASPHALT SHALL OCCUR AT THE SAW CUT LINE ¼-INCH ABOVE THE EXISTING PAVEMENT.

4. SIDEWALK TO DRIVEWAY/ROADWAY CONNECTIONS WILL BE CONSTRUCTED PER ADA AND MARION COUNTY SPECIFICATIONS.

5. DISTANCES FOR STORM DRAIN, IF ANY SHOWN, MAY VARY SLIGHTLY DEPENDING ON ORIENTATION OF STRUCTURE. CONTRACTOR TO CONFIRM PIPE LENGTHS TO BE INSTALLED. ALL CONCRETE PIPE INSTALLED SHALL BE CLASS III UNLESS OTHERWISE NOTED.

6. NO EXCAVATION SHALL EXTEND BELOW THE PERMITTED DESIGN DEPTHS/ELEVATIONS SHOWN ON THE DRAWINGS, UNLESS ADDITIONAL TESTING SUPPORTS OTHERWISE; AND NO LOWER SEMI-CONFINING UNIT CLAYEY SOIL MATERIAL AND/OR LIMESTONE MATERIALS SHALL BE EXCAVATED, REGARDLESS IF THESE MATERIALS ARE ENCOUNTERED WITHIN THE PERMITTED EXCAVATION DEPTHS/ELEVATIONS. IF ANY LOWER SEMI-CONFINING UNIT CLAY SOIL MATERIALS OR LIMESTONE MATERIALS ARE ENCOUNTERED ABOVE THE PERMITTED DEPTHS/ELEVATIONS, THEN EXCAVATION OPERATIONS SHALL CEASE IN THE GENERAL AREA. ST. JOHNS RIVER WATER MANAGEMENT DISTRICT MUST BE CONTACTED PRIOR TO ANY EXCAVATION OF CLAYS. * IN THE ABSENCE OF ANY CONFINING OR SEMI-CONFINING UNIT CLAYEY SOILS, A MINIMUM OF FIVE FEET OF UNDISTURBED SOILS SHALL REMAIN ABOVE THE UNDERLYING LIMESTONE.

EROSION CONTROL NOTES:

1. CONTRACTOR TO ABIDE BY ALL PROVISIONS OF THE NPDES GENERAL PERMIT FOR STORM WATER DISCHARGE FROM LARGE & SMALL CONSTRUCTION ACTIVITIES.

2. CONSTRUCTION SITE WILL BE INSPECTED FOR EROSION PROBLEMS DAILY/WEEKLY AND AFTER EACH RAINFALL EVENT PRODUCING GREATER THAN 0.5" OF RAIN. A RAIN GAUGE WILL BE ON SITE TO MEASURE THE RAINFALL AMOUNTS.

3. CONTRACTOR SHALL PROTECT ALL EXISTING STORMWATER COLLECTION SYSTEMS (E.G. STRUCTURES, PIPES, ETC.) FROM DAMAGE BY SEDIMENT OR OTHER CONSTRUCTION RELATED CAUSES.

INSTALLATION:

4. SILT FENCE (AND, IF NECESSARY, TURBIDITY FENCE) SHALL BE IN PLACE AROUND THE ENTIRE PERIMETER OF THE SITE, OR AS SHOWN, PRIOR TO CONSTRUCTION.

5. PROVIDE AND APPROVED BMP IN FRONT OF ALL DRAINAGE CURB INLETS AND GRATE/DITCH BOTTOM INLETS BEFORE COMMENCEMENT OF CONSTRUCTION OR AFTER INITIAL COMPLETION OF THE DRAINAGE STRUCTURES.

6. THE CONTRACTOR SHALL INSTALL & MAINTAIN A CONSTRUCTION ENTRANCE GRADED SO THAT SEDIMENT DOESN'T LEAVE THE SITE. GRAVEL TO BE A MINIMUM OF 12" THICK OVER FILTER FABRIC.

7. A CONCRETE WASH SUMP SHOULD BE CONSTRUCTED ONSITE.

8. HUMAN WASTEWATER WILL BE COLLECTED ONSITE BY THE USE OF TEMPORARY SANITARY SERVICE.

9. ALL TOXIC SUBSTANCES (IF ANY) BROUGHT ON-SITE SHALL BE HANDLED AND STOCKED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS AND STANDARDS. ALL SUBSTANCES THAT MAY BE CONSIDERED TOXIC SHALL ALSO BE HANDLED AND STORED ACCORDING TO FEDERAL, STATE, AND LOCAL LAWS AND STANDARDS.

10. IF DEWATERING IS REQUIRED, IT SHALL BE THROUGH A SEDIMENT CONTROL BMP, SUCH AS PUMPED WATER FILTER BAG DISCHARGING OVER NON-DISTURBED AREAS OR AREA AS APPROVED BY MUNICIPAL INSPECTOR. OTHER BMP METHODS MAY BE USED.

11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY ADDITIONAL BMPs DEEMED NECESSARY BY THE INSPECTOR OR GOVERNING AUTHORITIES FOR THE DURATION OF THE PROJECT.

12. IMMEDIATELY UPON DISCOVERING UNFORESEEN CIRCUMSTANCES POSING THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION, THE CONTRACTOR SHALL IMPLEMENT APPROPRIATE BMPs TO ELIMINATE THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION.

MAINTENANCE:

13. CONTRACTOR TO INSPECT AND MAINTAIN BMPs DAILY FOR DAMAGE AND CAPACITY. DAMAGED DEVICES SHOULD BE REPAIRED ACCORDINGLY. ALL BMPs TO BE CLEANED OF SEDIMENT WHEN 50% OR LESS OF BMP IS REACHED.

14. IF NECESSARY, THE ADJACENT STREET(S) SHALL BE SWEPT AT THE END OF EACH DAY, AND KEPT FREE OF DIRT FROM THE CONSTRUCTION SITE. THE CONSTRUCTION SITE SHALL BE CLEANED OF LITTER AND TRASH DAILY.

15. ANY ACCUMULATION OF SEDIMENT OR DEBRIS WITHIN A UTILITY SYSTEM SHALL BE REMOVED BY CONTRACTOR.

16. IN THE UNFORTUNATE EVENT THAT OFFSITE TRANSPORT OF SEDIMENT OR DEBRIS IS EXPERIENCED, THE CONTRACTOR SHOULD IMMEDIATELY COLLECT AND RETURN THE MATERIAL TO THE SITE AND/OR DISPOSE OF IT PROPERLY.

17. KEEP ALL TEMPORARY ROADWAY/DITCHES/GUTTERS CLEAR.

18. CONTRACTOR TO WATER DOWN DISTURBED AREAS AS NECESSARY TO ELIMINATE AIBORNE SEDIMENT TRANSPORT. VEHICLE/EQUIPMENT TRAVEL SPEED SHOULD ALSO BE REDUCED THROUGH DISTURBED AREAS.

19. ALL BMPs TO REMAIN IN PLACE UNTIL SUCH TIME AS THE INSPECTOR(S) ALLOW REMOVAL.

20. STOCK PILES SHALL BE ENCOMPASSED WITH SILT FENCE, NOT TO EXCEED 35' IN HEIGHT & NOT LOCATED NEAR THE PERIMETER OF THE SITE.

21. THE CONTRACTOR SHALL PROPERLY GRADE ALL EXCAVATED SURFACES TO PROVIDE POSITIVE DRAINAGE AND PREVENT PONDING OF WATER; SHALL CONTROL SURFACE WATER TO AVOID DAMAGE TO ADJOINING PROPERTIES OR TO FINISHED WORK ON THE SITE; AND SHALL TAKE REMEDIAL MEASURES TO PREVENT EROSION OF FRESHLY GRADED AREAS UNTIL SUCH TIME AS PERMANENT DRAINAGE AND EROSION CONTROL MEASURES HAVE BEEN INSTALLED.

STABILIZATION:

22. STABILIZING DISTURBED AREAS AS QUICKLY AS POSSIBLE WILL HELP PREVENT THE DISCHARGE OF SEDIMENT OFFSITE.

23. ALL DISTURBED AREAS TO BE SODDED EXCEPT AS SHOWN ON PLAN. ALL SLOPES 4:1 OR GREATER SHALL BE SODDED IMMEDIATELY AFTER FINAL GRADING. ADDITIONAL SUPPORT SHOULD BE INSTALLED IF/AS REQUIRED UNTIL THE SOD TAKES ROOT.

24. AREAS DISTURBED THAT WILL NOT BE IMPROVED OR STABILIZED FOR A PERIOD OF 17 DAYS OR MORE SHOULD RECEIVE TEMPORARY STABILIZATION AS DEEMED NECESSARY BY THE INSPECTOR. TEMPORARY STABILIZATION ALTERNATIVES INCLUDE:

A. MULCH WITH MULCH CONTROL NETTING OR EROSION CONTROL BLANKETS TO BE INSTALLED ON ALL SLOPES 3:1 AND STEEPER.
B. STRAW MULCH SHALL BE APPLIED IN LONG STRANDS, NOT CHOPPED OR FINELY BROKEN.
C. SODDING

25. ANY AREAS SUBJECT TO EROSION MUST BE ADEQUATELY STABILIZED WITH VEGETATIVE MATERIAL THAT WILL, WITHIN A REASONABLE TIME FRAME, DETER SOIL DISTURBANCE. SODDING, PLUGGING, SPRIGGING OR SEEDING IS ACCEPTABLE FOR STABILIZATION; HOWEVER, SODDING MAY BE REQUIRED IN AREAS OF EROSION-PRONE SOILS OR WHERE SLOPES ARE GREATER THAN 5:1. VEGETATION OTHER THAN GRASS IS ACCEPTABLE UNLESS OTHERWISE SPECIFIED.

26. FOR COMMERCIAL SITE DEVELOPMENT PROJECTS, NO MORE THAN 50% OF THE LANDSCAPED AREA MAY BE PLANTED WITH SHALLOW-ROOTED (I.E., ST. AUGUSTINE) TURF GRASS VARIETIES. THESE TURF GRASS VARIETIES SHALL BE CONSOLIDATED IN AND LIMITED TO AREAS THAT ARE PROVIDED WITH CENTRAL AUTOMATIC IRRIGATION SYSTEMS.

SEWER AND WATER NOTES:

1. SITE CONTRACTOR SHALL PROVIDE AS-BUILT DRAWINGS (INFORMATION PROVIDED BY A REGISTERED SURVEYOR) TO THE ENGINEER UPON COMPLETION OF WORK FOR DEVELOPMENT OF THE AS-BUILT PLANS. SEE THE SPECIFICATIONS FOR DETAILS REQUIRED FOR AS-BUILT INFORMATION.

2. LOCATION OF EXISTING UTILITIES HAS BEEN TAKEN FROM SURVEYS AS-BUILT RECORDS. THE SITE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL UTILITIES PRIOR TO ANY EXCAVATION.

3. CONTRACTOR SHALL MARK AREA OF EXCAVATION IN WHITE PRIOR TO CALL TO SUNSHINE ONE CALL.

4. ALL RELOCATION WORK SHALL BE DESIGNED AND PERFORMED IN ACCORDANCE WITH MARION COUNTY & FDOT STANDARDS.

SANITARY SEWER SPECIFIC NOTES:

5. GRAVITY SEWER INSTALLED SHALL BE PVC, MINIMUM SDR 26. FORCE MAINS ARE TO BE SOLID GREEN, MINIMUM DR OF 26.

6. DIP USED IN AREAS OF CONFLICT WITH STORM DRAINS AND/OR WATER MAINS SHALL BE CLASS 50 OR HIGHER. ADEQUATE PROTECTIVE MEASURES AGAINST CORROSION SHALL BE USED. ALL DIP AND FITTINGS SHALL HAVE AN INTERIOR AND EXTERIOR PROTECTIVE COATING APPROVED BY MCUD AND SHALL BE APPLIED ACCORDING TO THE MANUFACTURER'S SPECIFICATIONS.

7. THE CONTRACTOR SHOULD COORDINATE THE CIVIL DRAWINGS WITH THE MECHANICAL (PLUMBING) DRAWINGS FOR LOCATION OF THE NEW SERVICE LATERALS FROM THE BUILDINGS. CLEANOUTS LOCATED AT PROPOSED SERVICE LATERALS TO HAVE AN INVERT AT 3.7' BELOW FINISHED FLOOR UNLESS OTHERWISE NOTED.

8. THE FOLLOWING CERTIFICATES/SHOP DRAWINGS WILL BE REQUIRED, AT A MINIMUM, WHICH WILL BE REVIEWED WITH THE ENGINEER PRIOR TO APPROVAL FOR CONSTRUCTION:
A. DIP OR PVC CERTIFICATE OF MANUFACTURE,
B. FLEXIBLE COUPLING SHOP DRAWINGS,
C. MANHOLE SHOP DRAWINGS, AND
D. LIFT STATION DETAILS AND SHOP DRAWINGS.

9. THE CONTRACTOR SHALL PERFORM DEFLECTION AND LEAKAGE TESTS ON ALL GRAVITY SEWER AND PRESSURE/LEAKAGE TEST ON THE FORCE MAIN IN ACCORDANCE WITH SECTION 7.2.6 UTILITY CONSTRUCTION STANDARDS AND FDEP REGULATIONS. SAID TESTS ARE TO BE CERTIFIED BY THE ENGINEERING OF RECORD AND SUBMITTED TO MARION COUNTY UTILITIES DEPARTMENT. THE SCHEDULING, COORDINATION AND NOTIFICATION OF ALL PARTIES IS THE SITE CONTRACTOR'S RESPONSIBILITY.
A. GRAVITY SEWERS SHALL BE REQUIRED TO PASS A LEAKAGE TEST BEFORE ACCEPTANCE.
B. LEAKAGE TESTING SHALL BE CONDUCTED IN ACCORDANCE WITH THE PROCEDURE FOR "RECCOMMENDED PRACTICE FOR LOW PRESSURE AIR TESTING OF INSTALLED SEWER PIPE" AS ESTABLISHED BY THE UNI-BELL PVC PIPE ASSOCIATION AND ASTM F1417.
C. CONTRACTOR SHALL NOTIFY UTILITIES INSPECTOR A MINIMUM OF 48 HOURS PRIOR TO PERFORMING ANY LEAKAGE TESTING. THE RESULTS OF ALL LEAKAGE TESTING SHALL BE WITNESSED AND APPROVED BY THE MCUD INSPECTOR.
D. ALL GRAVITY SEWERS SHALL BE TESTED FOR ALIGNMENT, DEFLECTION AND INTEGRITY PRIOR TO ACCEPTANCE. ALIGNMENT, DEFLECTION AND INTEGRITY TESTING SHALL BE PERFORMED UTILIZING TELEVISION INSPECTION OR OTHER METHODS SOLELY AT THE DISCRETION OF MCUD.

10. THE CERTIFICATE OF OCCUPANCY WILL NOT BE ISSUED UNTIL THE FOLLOWING ITEMS HAVE BEEN COMPLETED:
A. FINAL INSPECTION IN CONJUNCTION WITH DEPARTMENT PERSONNEL COMPLETED,
B. AS-BUILTS HAVE BEEN SUBMITTED AND ACCEPTED,
C. ALL NECESSARY TESTING COMPLETED AND CERTIFIED, AND
D. D. PAYMENT OF ALL CONNECTION FEES.

11. ALL PIPE SHALL BE INSTALLED IN ACCORDANCE WITH AWWA C600. MINIMUM PIPE DEPTHS SHALL COMPLY WITH FDEP DESIGN CRITERIA.

12. ALL FORCE MAINS INSTALLED SHALL BE SOLID GREEN COLOR.

13. TRENCHLESS PIPE INSTALLATION SHALL MEET THE REQUIREMENTS OF SECTION 555 OF THE FDOT STANDARD SPECIFICATIONS.

14. HORIZONTAL DIRECTIONAL DRILLING SHALL USE 2 LOCATING WIRES WITH A TENSILE STRENGTH OF 1800 PSI.

15. ALL PVC PIPE UNDER PAVEMENT MUST BE SLEEVED OR MEET FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AS AMENDED.

WATER SPECIFIC NOTES:

16. NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST SIX FEET, AND PREFERABLY TEN FEET, BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED GRAVITY- OR PRESSURE-TYPE SANITARY SEWER, WAS

SITE DATA TABLE:

PARCEL NUMBER:	PORTION OF PARCEL 41200-083-01
LAND USE DESIGNATION:	EC
DEVELOPMENT AGREEMENTS:	NONE
ZONING INFORMATION:	
EXISTING ZONING:	PUD – GENERAL RV – OCALA
	(APPLICATION #: 20175 | PROJECT #: 2017050016 | FILE NO: 170702Z)
SPECIAL USE PERMIT:	SIGNAGE SIZE ALONG I-75, WALL SIGNAGE, FLAG POLE & FLAG
	(APPLICATION APPROVAL#: 171007SU | RESOLUTION NO. 17-R-415)
APPROVED VARIANCES:	NONE KNOWN
ZONING REQUIREMENTS:	
LOT AREA:	1.0 ACRE (MINIMUM)
WIDTH:	100 FEET (AT BUILDING LINE)
SETBACKS:	FRONT: 40 FEET; SIDE: 10 FEET; REAR: 25 FEET
BUILDING HEIGHT:	50' MAX
OVERLAY ZONES:	CR 475A VISUAL ENHANCEMENT GATEWAY DEVELOPMENT OVERLAY & SECONDARY SPRINGS PROTECTION OVERLAY
AREA CALCULATIONS:	
SITE AREA (ACRES):	GROSS AREA = 60.32± | R/W DEDICATION = 0.61± | NET AREA = 59.71±
NET AREA BY PHASE (ACRES):	PHASE I=34.46±; PHASE II=5.75±; PHASE III =6.64±; PHASE IV=8.94±; PHASE V=3.92±
OPEN SPACE AREA:	16.3± ACRES (27%±) FOR PHASES I – IV (WITH 25% OF DRA AREA); PHASE V: FUTURE
IMPERVIOUS AREA:	SEE TABLE ON COVER SHEET
USES:	
EXISTING/PROPOSED:	RECREATIONAL VEHICLES, BOATS, CARS, SALES AND RENTAL, PREPARATION FOR SALES; SALES INVENTORY LOT, OUTDOOR STORAGE AND DISPLAY, ALL VEHICLES, TRAILER REPAIR AND MAINTENANCE OPERATIONS, FULL BODY AND PAINT WORK, ASSOCIATED ADMINISTRATIVE USES; PARTS, RETAIL SALES, & COMMERCIAL PARK
POTENTIAL FUTURE OUTPARCELS:	ALL B-2 USES (PHASE V)
BUILDING HEIGHT:	
EXISTING/ PROPOSED:	40 FEET (MAXIMUM) 5'-11" (MIN.) VERTICAL CLEARANCE ON DRIVE-THRU CANOPY

LANDSCAPE / OPEN SPACE:

PROJECT REQUIRED TO MEET MARION FRIENDLY LANDSCAPING AREA (MFLA) AND OPEN SPACE REQUIREMENTS. IN THE EVENT PARCEL IS SUBDIVIDED IN THE FUTURE, EACH PARCEL UNDER SAME OWNERSHIP WILL BE REQUIRED TO MEET MARION FRIENDLY LANDSCAPING AREA (MFLA) AND OPEN SPACE REQUIREMENTS. ALL OPEN SPACE AREAS TO BE MAINTAINED BY PROPERTY OWNER(S) OF EACH PARCEL AND/OR AS ASSIGNED TO COMMON ASSOCIATION.

Sunshine811

Design Ticket #278305386

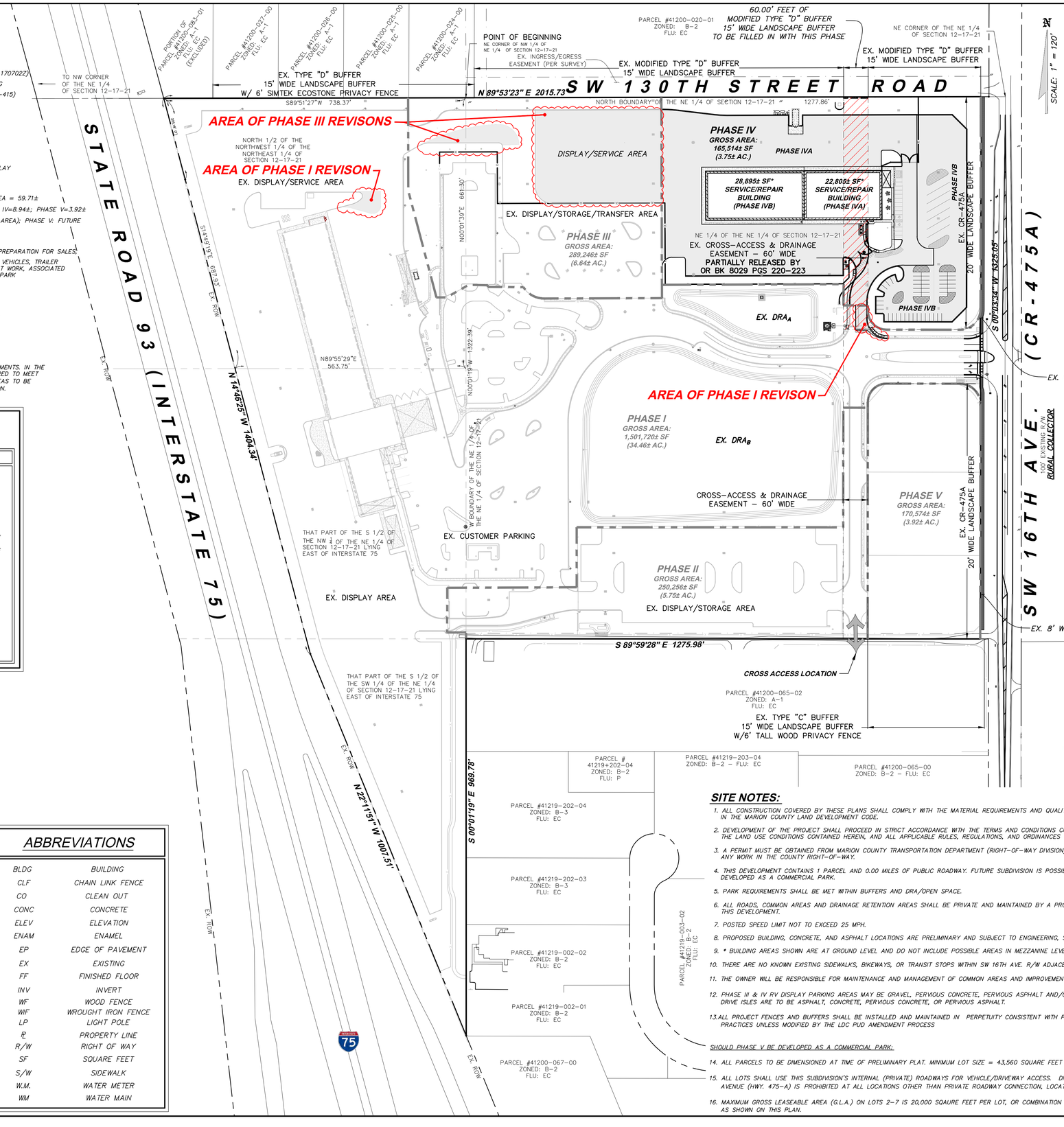
UTILITY:	NAME:	PHONE:
CENTURY LINK	BILL MCCLOUD	Day: (850) 599-1444
FIBER, TELEPHONE	RYAN EGAN	Alt: (918) 547-0063
CHARTER COMMUNICATIONS	DUFFY MCCLELLAND	Day: (352) 527-2187
CABLE, FIBER	USIC DISPATCH OFFICE	Alt: (800) 778-9140
LUMEN	NETWORK RELATIONS	Day: (352) 366-8344 x2
FIBER	TECH ON DUTY	Alt: (877) 366-8344 x3
MARION COUNTY UTILITIES	CARRIE HYDE	Day: (352) 307-6168
	VICTOR SHAHID	Alt: (352) 307-4622
SUMTER ELECTRIC COOPERATIVE	JANET COX	Day: (352) 569-9642
ELECTRIC	DISPATCH OFFICE SUMTER	Alt: (352) 793-3801
TECO PEOPLES GAS - OCALA	JOAN DOMNING	Day: (813) 275-3783
GAS, NATURAL GAS		
ZAYO GROUP/FORMERLY LIGHTWAVE LLC	HENRY KLOBUCAR	Day: (406) 496-6510
FIBER	STAKE CENTER / LOUIS SIMONE	Alt: (772) 579-8956

LEGEND

EXISTING	DESCRIPTION	PROPOSED
+100.0	SPOT ELEVATION	100.0
100.0	CONTOUR LINE	100.0
	OVERLAND FLOW	
	SWALE	
18" CMP	DRAINAGE SEWER WITH SIZE AND TYPE	48 LF ~ 18" CMP
	GRATE INLET	
Ⓓ Ⓢ	STORM/SAN SEWER MANHOLE	
6" PVC SAN	SANITARY SEWER WITH SIZE AND TYPE	30 LF ~ 6" PVC @ 0.50%
c.o.	CLEANOUT DEVICE	c.o.
WM WM	WATER MAIN	310 LF ~ 3" PVC WM
w.m.	WATER METER	WM
N/A	BACKFLOW PREVENTION	
g.v.	GATE VALVE OR PLUG VALVE	G.V. P.V.
	FIRE HYDRANT	
N/A	ASPHALT PAVING	
	CONCRETE	
N/A	ASPHALT TO BE REMOVED	
1	PARKING SPACE	
	WOOD DECK	
	UTILITY POLE	
CATV	CABLE TELEVISION BOX	N/A
OHW OHW	OVERHEAD WIRE	N/A
GTE GTE	UNDERGROUND GTE	N/A
	RIGHT-OF-WAY	N/A
	CENTERLINE	
LP	LIGHT POLE	

ABBREVIATIONS

BLDG	BUILDING
CLF	CHAIN LINK FENCE
CO	CLEAN OUT
CONC	CONCRETE
ELEV	ELEVATION
ENAM	ENAMEL
EP	EDGE OF PAVEMENT
EX	EXISTING
FF	FINISHED FLOOR
INV	INVERT
WF	WOOD FENCE
WIF	WROUGHT IRON FENCE
LP	LIGHT POLE
PL	PROPERTY LINE
R/W	RIGHT OF WAY
SF	SQUARE FEET
S/W	SIDEWALK
W.M.	WATER METER
WM	WATER MAIN



SITE NOTES:

1. ALL CONSTRUCTION COVERED BY THESE PLANS SHALL COMPLY WITH THE MATERIAL REQUIREMENTS AND QUALITY CONTROL STANDARDS CONTAINED IN THE MARION COUNTY LAND DEVELOPMENT CODE.
2. DEVELOPMENT OF THE PROJECT SHALL PROCEED IN STRICT ACCORDANCE WITH THE TERMS AND CONDITIONS CONTAINED IN THE PUD CONDITIONS, THE LAND USE CONDITIONS CONTAINED HEREIN, AND ALL APPLICABLE RULES, REGULATIONS, AND ORDINANCES OF MARION COUNTY.
3. A PERMIT MUST BE OBTAINED FROM MARION COUNTY TRANSPORTATION DEPARTMENT (RIGHT-OF-WAY DIVISION) PRIOR TO COMMENCEMENT OF ANY WORK IN THE COUNTY RIGHT-OF-WAY.
4. THIS DEVELOPMENT CONTAINS 1 PARCEL AND 0.00 MILES OF PUBLIC ROADWAY. FUTURE SUBDIVISION IS POSSIBLE IF/WHEN PHASE V IS DEVELOPED AS A COMMERCIAL PARK.
5. PARK REQUIREMENTS SHALL BE MET WITHIN BUFFERS AND DRA/OPEN SPACE.
6. ALL ROADS, COMMON AREAS AND DRAINAGE RETENTION AREAS SHALL BE PRIVATE AND MAINTAINED BY A PROPERTY OWNER'S ASSOCIATION ESTABLISHED FOR THIS DEVELOPMENT.
7. POSTED SPEED LIMIT NOT TO EXCEED 25 MPH.
8. PROPOSED BUILDING, CONCRETE, AND ASPHALT LOCATIONS ARE PRELIMINARY AND SUBJECT TO ENGINEERING, SOIL, AND REGULATORY PERMIT REVIEWS.
9. * BUILDING AREAS SHOWN ARE AT GROUND LEVEL AND DO NOT INCLUDE POSSIBLE AREAS IN MEZZANINE LEVEL.
10. THERE ARE NO KNOWN EXISTING SIDEWALKS, BIKEWAYS, OR TRANSIT STOPS WITHIN SW 16TH AVE. R/W ADJACENT TO THE PROJECT SITE, EXCEPT AS SHOWN.
11. THE OWNER WILL BE RESPONSIBLE FOR MAINTENANCE AND MANAGEMENT OF COMMON AREAS AND IMPROVEMENTS.
12. PHASE III & IV RV DISPLAY PARKING AREAS MAY BE GRAVEL, PERVIOUS CONCRETE, PERVIOUS ASPHALT AND/OR OTHER SEMI-PERVIOUS MATERIAL. DRIVE ISLES ARE TO BE ASPHALT, CONCRETE, PERVIOUS CONCRETE, OR PERVIOUS ASPHALT.
13. ALL PROJECT FENCES AND BUFFERS SHALL BE INSTALLED AND MAINTAINED IN PERPETUITY CONSISTENT WITH PROFESSIONALLY ACCEPTED LANDSCAPE PRACTICES UNLESS MODIFIED BY THE LDC PUD AMENDMENT PROCESS

SHOULD PHASE V BE DEVELOPED AS A COMMERCIAL PARK:

14. ALL PARCELS TO BE DIMENSIONED AT TIME OF PRELIMINARY PLAT. MINIMUM LOT SIZE = 43,560 SQUARE FEET = 1.0 ACRE.
15. ALL LOTS SHALL USE THIS SUBDIVISION'S INTERNAL (PRIVATE) ROADWAYS FOR VEHICLE/DRIVEWAY ACCESS. DIRECT VEHICLE/DRIVEWAY ACCESS TO SW 16TH AVENUE (HWY. 475-A) IS PROHIBITED AT ALL LOCATIONS OTHER THAN PRIVATE ROADWAY CONNECTION, LOCATED ON PARCEL 1 AS SHOWN HEREON.
16. MAXIMUM GROSS LEASEABLE AREA (G.L.A.) ON LOTS 2-7 IS 20,000 SQAURE FEET PER LOT, OR COMBINATION THEREOF, IF DEVELOPED IN FEWER LOTS THAN AS SHOWN ON THIS PLAN.

NO.	REVISION & DATE

PROJECT: **MAJOR SITE PLANS FOR GENERAL RV OCALA - PHASE IV**
13150 SW 16TH AVE (CR 475-A), MARION COUNTY, FL

PREPARED FOR:

SHEET TITLE: **OVERALL SITE PLAN**

McNEAL ENGINEERING, INC.
15957 N. FLORIDA AVE, LUTZ, FL 33549
PH. (813) 968-1081 FAX (813) 961-5839
CERTIFICATE OF AUTHORIZATION #08975

JOB NO.	21-116
ACAD FILE:	FCP
DRAWN BY:	MGF
CHK'D BY:	CSM
DATE:	24.01.11
SHEET:	C-2.0

THE DESIGNS AND DRAWINGS CONTAINED HEREON ARE THE COPYRIGHTED PROPERTY OF McNEAL ENGINEERING, INC., AND SHOULD NOT BE DUPLICATED WITHOUT WRITTEN CONSENT OF THE ENGINEER.

REMOVE/RE-USE IF POSSIBLE, EXISTING YARD DRAIN D-328. EXISTING 15" ADS STORM PIPE TO BE EXTENDED. (REFER TO SHEET C-6.1)

REMOVE EXISTING TREE

80004 24"

REMOVE/RE-USE IF POSSIBLE, EXISTING YARD DRAIN D-313. CAP EXISTING 12" ADS STORM PIPE

80007 42"

REMOVE EXISTING TREE

REMOVE/RELOCATE EXISTING FENCE AND GATE AS DIRECTED BY OWNER.

REMOVE EXISTING TREE

80003 66"

TEMPORARY SILT FENCE TO BE INSTALLED AROUND ALL NEW INLETS AND EXISTING INLETS WITHIN WORK AREA UNTIL PAVING HAS BEEN COMPLETED (TYP.)

SAW-CUT AND REMOVE ~322 LF CURB

REMOVE EXISTING TREE

80002 48"

SILT FENCE (TYP.)

REMOVE/RELOCATE EXISTING MAGNOLIA TREE

TEMPORARY SILT FENCE TO BE INSTALLED AROUND ALL NEW YARD DRAINS UNTIL SOD HAS BEEN COMPLETED (TYP.)

SAW-CUT AND REMOVE ~50 SY ASPHALT

REMOVE/RELOCATE EXISTING LIVE OAK TREE

TEMPORARY SILT FENCE TO BE INSTALLED UNTIL PAVING HAS BEEN COMPLETED (TYP.)

SAW-CUT AND REMOVE ~195 LF CURB

D-58 D-57 D-47 D-51 D-50 D-49 D-48 D-327 D-312 D-313 D-328 D-58A D-326 D-325 D-324 D-45 D-303 D-58 D-320 D-44 D-302 D-330 D-321 D-329 D-318 D-38 D-32 D-43 D-40 D-31 D-30 D-37 D-29 D-41 D-36 D-35 D-42 D-28

N

SCALE: 1" = 30'

NO.	REVISION & DATE

PROJECT:

MAJOR SITE PLANS FOR
GENERAL RV OCALA - PHASE IV
13150 SW 16TH AVE (CR 475-A), MARION COUNTY, FL

PREPARED FOR:

SHEET TITLE:

DEMOLITION PLAN (SHEET 1 OF 2)

McNEAL ENGINEERING, INC.
15957 N. FLORIDA AVE, LUTZ, FL 33549
PH. (813) 968-1081 FAX (813) 961-5839
CERTIFICATE OF AUTHORIZATION #08975

JOB NO.	21-116
ACAD FILE:	FCP
DRAWN BY:	MGF
CHK'D BY:	CSM
DATE:	24.01.11
SHEET:	C-3.1

THE DESIGNS AND DRAWINGS CONTAINED HEREON ARE THE COPYRIGHTED PROPERTY OF McNEAL ENGINEERING, INC., AND SHOULD NOT BE DUPLICATED WITHOUT WRITTEN CONSENT OF THE ENGINEER.

SW 130TH STREET ROAD

EX. SECO EASEMENT BY
OR BK 6788 PGS 709–711

TEMPORARY SILT FENCE
TO BE INSTALLED AROUND
ALL NEW INLETS UNTIL SOD
HAS BEEN COMPLETED (TYP.)

TEMPORARY SILT FENCE
TO BE INSTALLED AROUND
ALL NEW INLETS UNTIL PAVING
HAS BEEN COMPLETED (TYP.)

28,895± SF*
SERVICE/REPAIR
BUILDING
(PHASE IVB)

EX. SECO EASEMENT
BY OR BK 6788 PGS 709–711
PARTIALLY RELEASED BY
OR BK 8153 PGS 1968–1971

22,805± SF*
SERVICE/REPAIR
BUILDING
(PHASE IVA)

REMOVE EXISTING TREE
100001
36"

D–30A
D–30Z
D–32
D–31
D–30
D–28
D–34
D–26
D–25
D–20
D–21
D–21A

REMOVE EXISTING TREE
61326
34"

SILT FENCE (TYP.)

DRA_A
$DHW_{100(24HR)}$ = 73.27
$DHW_{25(96HR)}$ = 72.70
$DHW_{25(24HR)}$ = 71.70
BOTTOM ELEV = 70.00

EX. SECO EASEMENT BY
OR BK 6788 PGS 709–711

SAW–CUT AND REMOVE
~112 SY ASPHALT

REMOVE EXISTING
STRIPING

SAW–CUT AND REMOVE
~112' OF SIDEWALK
AND ADA RAMP

EX. SECO EASEMENT BY
OR BK 8073 PGS 1850–1852

CONTRACTOR RESPONSIBLE
TO MAINTAIN ADA ACCESS
TO PUBLIC R/W AT ALL
TIMES DURING CONSTRUCTION

REMOVE/REPLACE EXISTING FENCE
AS NECESSARY FOR INSTALLATION
OF UTILITIES AND GRADING

DRA_B
$DHW_{100(24HR)}$ = 73.27
$DHW_{25(96HR)}$ = 72.70
$DHW_{25(24HR)}$ = 71.70
BOTTOM ELEV = 70.00

SW 16TH AVE. (CR-475A)

N
SCALE: 1" = 30'

NO.	REVISION & DATE

PROJECT:
MAJOR SITE PLANS FOR
GENERAL RV OCALA - PHASE IV
13150 SW 16TH AVE (CR 475-A), MARION COUNTY, FL

PREPARED FOR:

SHEET TITLE:
DEMOLITION PLAN
(SHEET 2 OF 2)

McNEAL ENGINEERING, INC.
15957 N. FLORIDA AVE, LUTZ, FL 33549
PH. (813) 968–1081 FAX (813) 961–5839
CERTIFICATE OF AUTHORIZATION #08975

JOB NO.	21–116
ACAD FILE:	FCP
DRAWN BY:	MGF
CHK'D BY:	CSM
DATE:	24.01.11
SHEET:	**C-3.2**

THE DESIGNS AND DRAWINGS CONTAINED HEREON ARE THE COPYRIGHTED PROPERTY OF McNEAL ENGINEERING, INC., AND SHOULD NOT BE DUPLICATED WITHOUT WRITTEN CONSENT OF THE ENGINEER.

N

SCALE: 1" = 30'

EX. TYPE "D" BUFFER
15' WIDE LANDSCAPE BUFFER
W/ 6' SIMTEK ECOSTONE PRIVACY FENCE

EX. MODIFIED TYPE "D" BUFFER
15' WIDE LANDSCAPE BUFFER

PAVEMENT LEGEND

HEAVY DUTY CONCRETE

STANDARD DUTY ASPHALT

HEAVY DUTY ASPHALT

(SEE SHEET C-1.0 FOR ADDITIONAL INFORMATION)

EX. DISPLAY/SERVICE AREA

EXPANDED DISPLAY/SERVICE AREA

EX EP

110.08'

110.15'

31.50'

30.68'

R338.5'

TYPE F CURB & GUTTER (TYP.)

R10'

R50'

22.11'

21.81'

EXPANDED DISPLAY/SERVICE AREA

EX EP

98.51'

R50'

R10'

EXPANDED DISPLAY/SERVICE AREA

TYPE D CURB (TYP.)

5' PVC COATED (BLACK) CHAIN LINK PER FDOT STANDARD PLANS INDEX 550-002, TYPE B

EX EP

EX. DISPLAY/STORAGE/TRANSFER AREA

EX EP

R50'

EX. DISPLAY/SERVICE AREA

EX. EMPLOYEE PARKING

EX. 51,540± SF
SERVICE BUILDING

NO. | REVISION & DATE

MAJOR SITE PLANS FOR
GENERAL RV OCALA - PHASE IV
13150 SW 16TH AVE (CR 475-A), MARION COUNTY, FL

PROJECT:

PREPARED FOR:

SHEET TITLE:
DIMENSION CONTROL PLAN
(SHEET 1 OF 2)

McNEAL ENGINEERING, INC.
15957 N. FLORIDA AVE, LUTZ, FL 33549
PH. (813) 968-1081 FAX (813) 961-5839
CERTIFICATE OF AUTHORIZATION #08975

JOB NO.	21-116
ACAD FILE:	FCP
DRAWN BY:	MGF
CHK'D BY:	CSM
DATE:	24.01.11
SHEET:	C-4.1

THE DESIGNS AND DRAWINGS CONTAINED HEREON ARE THE COPYRIGHTED PROPERTY OF McNEAL ENGINEERING, INC., AND SHOULD NOT BE DUPLICATED WITHOUT WRITTEN CONSENT OF THE ENGINEER.

60.00' FEET OF MODIFIED TYPE "D" BUFFER 15' WIDE LANDSCAPE BUFFER TO BE FILLED IN WITH THIS PHASE

EX. MODIFIED TYPE "D" BUFFER 15' WIDE LANDSCAPE BUFFER

EX. MODIFIED TYPE "D" BUFFER 15' WIDE LANDSCAPE BUFFER

TRASH ENCLOSURE

RETAINING WALL – REFER TO SHEET C-7.3 FOR GRADING DETAIL OF THIS AREA. SEE NOTE THIS SHEET

TYPE F CURB & GUTTER (TYP.)

DISPLAY/SERVICE AREA

DISPLAY/SERVICE AREA

EXPANDED DISPLAY/SERVICE AREA

PHASE IVA

PHASE IVA

PHASE IVA

PHASE IVB

PHASE IVB

RIBBON CURB (TYP.)

5' PVC COATED (BLACK) CHAIN LINK PER FDOT STANDARD PLANS INDEX 550-002, TYPE B

TYPE D CURB (TYP.)

28,895± SF* SERVICE/REPAIR BUILDING (PHASE IVB)

22,805± SF* SERVICE/REPAIR BUILDING (PHASE IVA)

TEMPORARY SIDEWALK (PHASE IVA ONLY)

RIBBON CURB (TYP.)

CUSTOMER/EMPLOYEE PARKING

SERVICE STAGING AREA / CUSTOMER RV PARKING

EX EP

PHASE IVA

DISPLAY/SERVICE AREA

TYPE D CURB (TYP.)

TYPE F CURB & GUTTER (TYP.)

ADA RAMP W/ TRUNCATED DOME PER FDOT STANDARD PLANS (TYP.)

RIBBON CURB (TYP.)

PHASE IVB

CUSTOMER/EMPLOYEE PARKING

TYPE F CURB & GUTTER (TYP.)

5' PVC COATED (BLACK) CHAIN LINK PER FDOT STANDARD PLANS INDEX 550-002, TYPE B

MONOLITHIC TYPE F CURB, GUTTER & 6' WIDE CONCRETE SIDEWALK (TYP.)

DRA

6" DOUBLE SOLID YELLOW

24" SOLID WHITE (TYP.)

12" WHITE W/ 24" WHITE HIGH EMPHASIS CROSSWALK

S W 1 6 T H A V E . (C R - 4 7 5 A)

SCALE: 1" = 30'

NOTE REGARDING RETAINING WALL:
RETAINING WALLS SHOWN HEREON SHALL BE CONSTRUCTED PER FDOT STANDARD INDEX #6011. (OR APPROVED EQUAL) ADJUNCT GUIDERAIL REQUIRED WHEN WALL HEIGHT ABOVE GRADE EXCEEDS 24". TAPER END OF WALL AS NEEDED TO MATCH GRADE.

PAVEMENT LEGEND

- HEAVY DUTY CONCRETE
- STANDARD DUTY ASPHALT
- HEAVY DUTY ASPHALT

(SEE SHEET C-1.0 FOR ADDITIONAL INFORMATION)

NO.	REVISION & DATE

PROJECT:
MAJOR SITE PLANS FOR GENERAL RV OCALA - PHASE IV
13150 SW 16TH AVE (CR 475-A), MARION COUNTY, FL

PREPARED FOR:

SHEET TITLE:
DIMINSION CONTROL PLAN (SHEET 2 OF 2)

McNEAL ENGINEERING, INC.
15957 N. FLORIDA AVE, LUTZ, FL 33549
PH. (813) 968-1081 FAX (813) 961-5839
CERTIFICATE OF AUTHORIZATION #08975

JOB NO.	21-116
ACAD FILE:	FCP
DRAWN BY:	MGF
CHK'D BY:	CSM
DATE:	24.01.11
SHEET:	C-4.2

THE DESIGNS AND DRAWINGS CONTAINED HEREON ARE THE COPYRIGHTED PROPERTY OF McNEAL ENGINEERING, INC., AND SHOULD NOT BE DUPLICATED WITHOUT WRITTEN CONSENT OF THE ENGINEER.

REFER TO SHEET C-8.0 FOR DRAINAGE STRUCTURE & PIPE TABLES

N

SCALE: 1" = 60'

28,895± SF*
SERVICE/REPAIR
BUILDING
(PHASE IVB)
FF ELEV = 78.65

22,805± SF*
SERVICE/REPAIR
BUILDING
(PHASE IVA)
FF ELEV = 78.65

DRA$_A$
DHW100(24HR) = 73.27
DHW25(96HR) = 72.70
DHW25(24HR) = 71.70
BOTTOM ELEV = 70.00
(REF PROJECT 2017100017
\SJRWMD PERMIT #15800-1)

DRA$_B$
DHW100(24HR) = 73.27
DHW25(96HR) = 72.70
DHW25(24HR) = 71.70
BOTTOM ELEV = 70.00
(REF PROJECT 2017100017
\SJRWMD PERMIT #15800-1)

S W 1 6 T H A V E. (C R - 4 7 5 A)

NO.	REVISION & DATE

PROJECT:

MAJOR SITE PLANS FOR
GENERAL RV OCALA - PHASE IV
13150 SW 16TH AVE (CR 475-A), MARION COUNTY, FL

PREPARED FOR:

SHEET TITLE:
MASTER DRAINAGE PLAN

MCNEAL ENGINEERING, INC.
15957 N. FLORIDA AVE, LUTZ, FL 33549
PH. (813) 968-1081 FAX (813) 961-5839
CERTIFICATE OF AUTHORIZATION #28975

THE DESIGNS AND DRAWINGS CONTAINED HEREON ARE THE COPYRIGHTED PROPERTY OF McNEAL ENGINEERING, INC., AND SHOULD NOT BE DUPLICATED WITHOUT WRITTEN CONSENT OF THE ENGINEER.

JOB NO.	21-116
ACAD FILE:	FCP
DRAWN BY:	MGF
CHK'D BY:	CSM
DATE:	24.01.11
SHEET:	**C-5.0**

N

SCALE: 1" = 30'

REFER TO SHEET C-8.0 FOR DRAINAGE STRUCTURE & PIPE TABLES

NO.	REVISION & DATE

MAJOR SITE PLANS FOR

GENERAL RV OCALA - PHASE IV

13150 SW 16TH AVE (CR 475-A), MARION COUNTY, FL

PROJECT:

PREPARED FOR:

SHEET TITLE:

GRADING & DRAINAGE PLAN

(SHEET 1 OF 2)

McNEAL ENGINEERING, INC.

15957 N. FLORIDA AVE, LUTZ, FL 33549

PH. (813) 968-1081 FAX (813) 961-5839

CERTIFICATE OF AUTHORIZATION #08975

JOB NO.	21-116
ACAD FILE:	FCP
DRAWN BY:	MGF
CHK'D BY:	CSM
DATE:	24.01.11
SHEET:	**C-6.1**

THE DESIGNS AND DRAWINGS CONTAINED HEREON ARE THE COPYRIGHTED PROPERTY OF McNEAL ENGINEERING, INC., AND SHOULD NOT BE DUPLICATED WITHOUT WRITTEN CONSENT OF THE ENGINEER.

RETAINING WALL
REFER TO SHEET C-7.3
FOR GRADING DETAIL
OF THIS AREA

PHASE IVA

PHASE IVB

B-11

28,895± SF*
SERVICE/REPAIR
BUILDING
(PHASE IVB)
FF ELEV = 78.65

22,805± SF*
SERVICE/REPAIR
BUILDING
(PHASE IVA)
FF ELEV = 78.65

SB-1
SB-2
SB-3
SB-4
PB-1
PB-2
PB-3
PB-4

D-414 D-415 D-454 D-455 D-456 D-456A D-457 D-457A D-474 D-413 D-318 D-303 D-32 D-31 D-30 D-453 D-452 D-458 D-451 D-20 D-459 D-460 D-461 D-471 D-472 D-473 D-14A D-26 D-25 D-29 D-28 AD-1 AD-2 AD-3

DRA$_A$
DHW100(24HR) = 73.27
DHW25(96HR) = 72.70
DHW25(24HR) = 71.70
BOTTOM ELEV = 70.00
(REF PROJECT 2017100017
\SJRWMD PERMIT #15800-1)

NOTE REGARDING PHASE IVB CONSTRUCTION:

CONTOURS SHOWN ARE TO FINISH GRADE. GRADING FOR PHASE IVB CONSTRUCTION TO BE TO SUB-GRADE. CONTRACTOR TO INSTALL GRAVEL TO FINISH GRADE, 3' AROUND ALL SIDES OF INLETS D-461, D-471, D-472, D-473 AND D-474 IF PHASE IVB PAVEMENT IS NOT INSTALLED AT THE SAME TIME AS PHASE IVA.

SW 16TH AVE. (CR-475A)

SCALE: 1" = 30'

REFER TO SHEET C-8.0 FOR DRAINAGE STRUCTURE & PIPE TABLES

NO.	REVISION & DATE

PROJECT:
MAJOR SITE PLANS FOR
GENERAL RV OCALA - PHASE IV
13150 SW 16TH AVE (CR 475-A), MARION COUNTY, FL

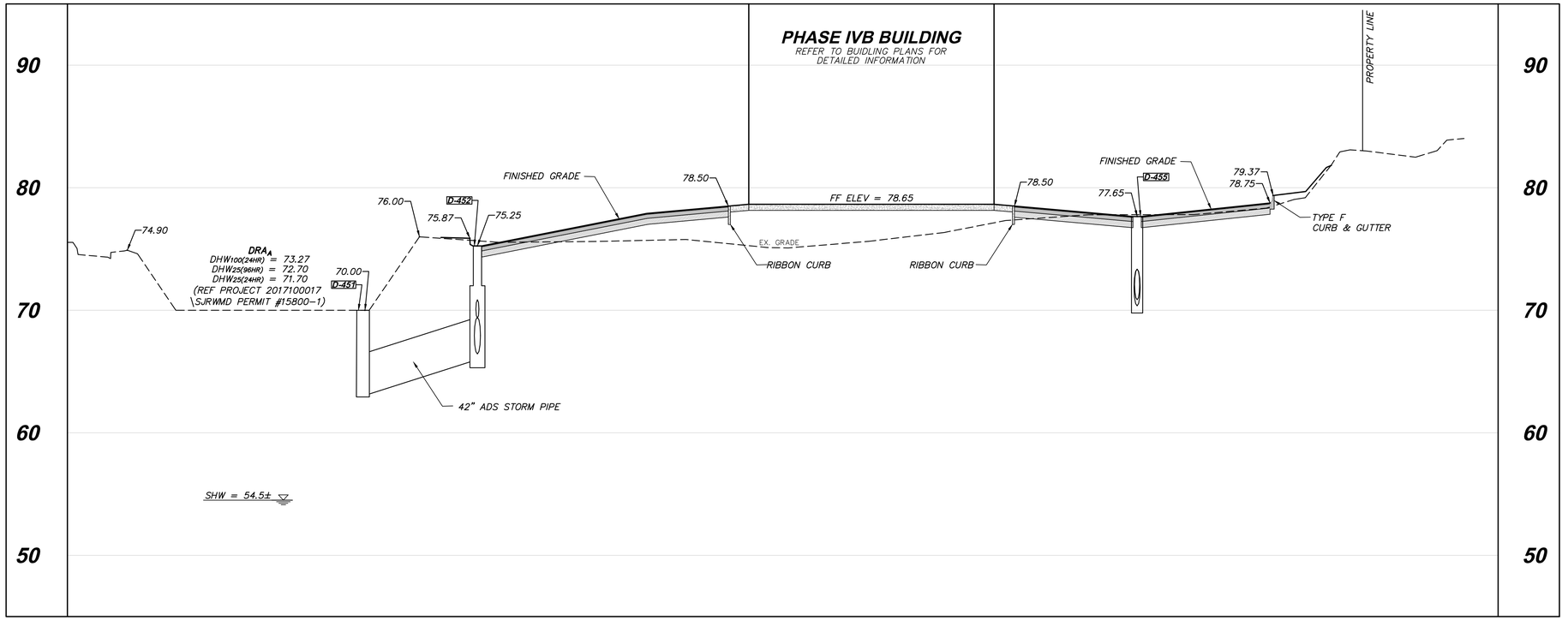
PREPARED FOR:

SHEET TITLE:
GRADING & DRAINAGE PLAN
(SHEET 2 OF 2)

McNEAL ENGINEERING, INC.
15957 N. FLORIDA AVE, LUTZ, FL 33549
PH. (813) 968-1081 FAX (813) 961-5839
CERTIFICATE OF AUTHORIZATION #03975

JOB NO.	21-116
ACAD FILE:	FCP
DRAWN BY:	MGF
CHK'D BY:	CSM
DATE:	24.01.11
SHEET:	C-6.2

THE DESIGNS AND DRAWINGS CONTAINED HEREON ARE THE COPYRIGHTED PROPERTY OF McNEAL ENGINEERING, INC., AND SHOULD NOT BE DUPLICATED WITHOUT WRITTEN CONSENT OF THE ENGINEER.



SECTION B

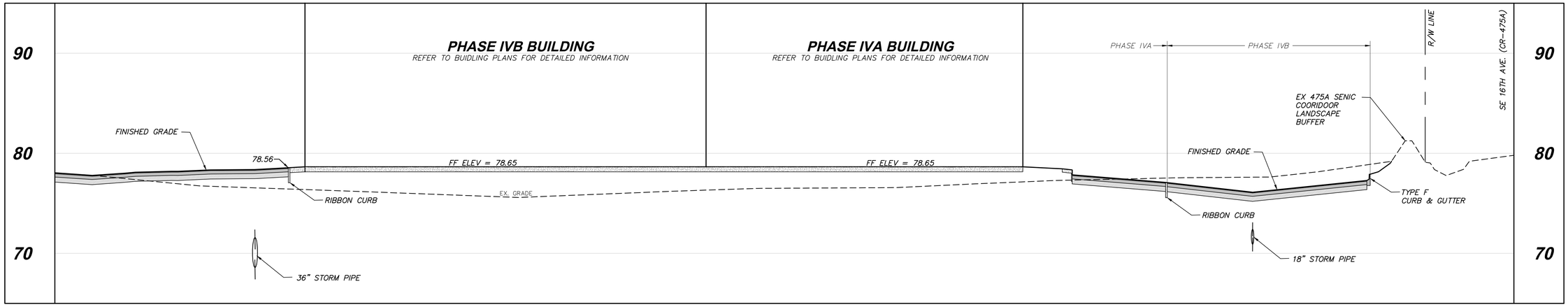
SCALE: 1" = 30' HORIZ.
1" = 5' VERT.
REFER TO SHEET C-6.2 FOR
PLAN VIEW OF SECTION LOCATION

NOTES REGARDING LIMEROCK:

1. LIMEROCK NOT ENCOUNTERED WITHIN 20' OF EXISTING GRADE. REFER TO GEOTECHNICAL REPORT FOR ADDITIONAL INFORMATION.
2. IF LIMESTONE IS ENCOUNTERED DURING THE EXCAVATION/CONSTRUCTION OF THE STORMWATER POND, THREE FEET OF OVER-EXCAVATION IS REQUIRED ON THE SIDE BANKS AND BOTTOM OF THE POND.
3. CONTRACTOR SHALL ABIDE BY ALL RECOMMENDATIONS OUTLINED WITHIN ANTICUS ENGINEERING'S GEOTECHNICAL REPORT DATED OCTOBER 31, 2017 (ANTICUS PROJECT NO: 01.3493.17) & MEMORANDUM DATED DECEMBER 17, 2017 (ANTICUS PROJECT NO: 01.3493-2.17).

POND SINKHOLE EMERGENCY RESPONSE:

1. SECURE AREA USING GENERAL SPACING AND BARRICADE PER MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) GUIDELINES AND ROPE OR TAPE BETWEEN BARRICADES FOR SAFETY OF THE GENERAL PUBLIC AS NECESSARY (THIS INCLUDES BUILDING AND/OR PARKING AREAS). IF NECESSARY, INVOLVE LOCAL EMERGENCY MANAGEMENT TO ASSIST.
2. WHERE PARKING AREAS OR BUILDING AREAS HAVE BEEN IMPACTED, BUILDING AND/OR VEHICLES SHOULD BE VACATED UNTIL SUCH TIME AS A GEOTECHNICAL ENGINEER OR OTHER QUALIFIED PROFESSIONAL (ENGINEER) HAS EVALUATED THE SUBSIDENCE AND PROVIDED PROFESSIONAL OPINIONS REGARDING THE SAFETY OF THE STRUCTURE/PARKING AREAS.
3. IF POSSIBLE, BACKFILL DEPRESSION WITH SOIL CONSISTING OF INERT SAND (SP), SAND WITH SILT (SP-SM), SILTY SAND (SM), SAND WITH CLAY (SP-SC) [SOILS CLASSIFIED IN ACCORDANCE WITH THE UNIFIED SOIL CLASSIFICATION SYSTEM] UNTIL SUCH TIME AS AN ENGINEER EVALUATES THE DEPRESSION AND PROVIDES REMEDIATION RECOMMENDATIONS, AS NECESSARY. TO THE EXTENT POSSIBLE, CONSIDERATION MUST BE GIVEN TO USING MATERIAL SIMILAR TO THE EXISTING SOIL PROFILE. THE BACKFILLING SHALL BE PERFORMED UNDER THE DIRECTION OF AN ENGINEER AND THE BACKFILL SHOULD BE MOUNDED (FROM CENTER AN APPROXIMATE 10% SLOPE), OR TO THE EXTENT NOTED BY THE ENGINEER TO ALLOW FOR STABILIZATION OF THE DEPRESSION.
4. AFTER BACKFILLING AND UNTIL AN ENGINEER HAS COMPLETED AN EVALUATION OF THE DEPRESSION AND REMEDIATION HAS BEEN COMPLETED, AS RECOMMENDED BY THE ENGINEER, PERIODIC MONITORING OF THE AREA SHALL BE PERFORMED, ON A WEEKLY BASIS AND AFTER EACH RAIN EVENT. MONITORING SHOULD INCLUDE CHANGES IN SIZE AND OR SETTLEMENT OF THE AREA AND NOTIFICATION OF ANY CHANGES SHOULD BE MADE TO THE ENGINEER.



SECTION A

SCALE: 1" = 30' HORIZ.
1" = 5' VERT.
REFER TO SHEET C-6.2 FOR
PLAN VIEW OF SECTION LOCATION

NO.	REVISION & DATE

MAJOR SITE PLANS FOR
GENERAL RV OCALA - PHASE IV
13150 SW 16TH AVE (CR 475-A), MARION COUNTY, FL

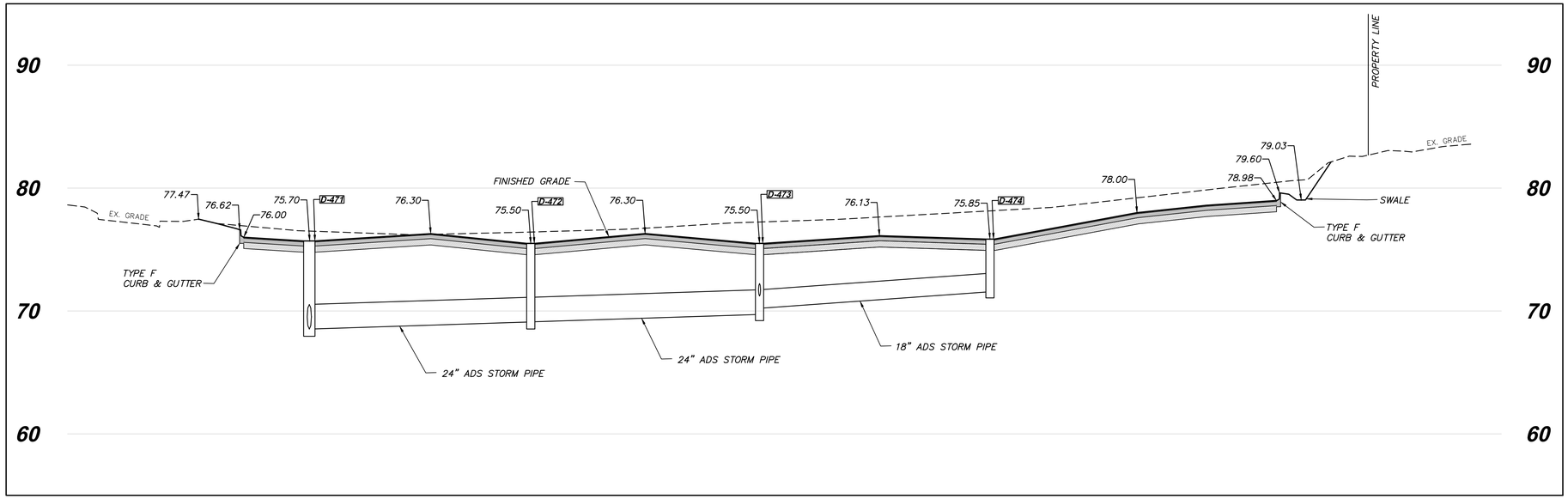
PROJECT:
PREPARED FOR:

SHEET TITLE:
SECTIONS (SHEET 1 OF 2)

McNEAL ENGINEERING, INC.
15957 N. FLORIDA AVE, LUTZ, FL 33549
PH. (813) 968-1081 FAX (813) 961-5839
CERTIFICATE OF AUTHORIZATION #08975

JOB NO.	21-116
ACAD FILE:	FCP
DRAWN BY:	MGF
CHK'D BY:	CSM
DATE:	24.01.11
SHEET:	C-6.3

THE DESIGNS AND DRAWINGS CONTAINED HEREON ARE THE COPYRIGHTED PROPERTY OF McNEAL ENGINEERING, INC., AND SHOULD NOT BE DUPLICATED WITHOUT WRITTEN CONSENT OF THE ENGINEER.



SECTION D

SCALE: 1" = 30' HORIZ.
1" = 5' VERT.
REFER TO SHEET C-6.2 FOR
PLAN VIEW OF SECTION LOCATION

NOTES REGARDING LIMEROCK:

1. LIMEROCK NOT ENCOUNTERED WITHIN 20' OF EXISTING GRADE. REFER TO GEOTECHNICAL REPORT FOR ADDITIONAL INFORMATION.

2. IF LIMESTONE IS ENCOUNTERED DURING THE EXCAVATION/CONSTRUCTION OF THE STORMWATER POND, THREE FEET OF OVER-EXCAVATION IS REQUIRED ON THE SIDE BANKS AND BOTTOM OF THE POND.

3. CONTRACTOR SHALL ABIDE BY ALL RECOMMENDATIONS OUTLINED WITHIN ANTICUS ENGINEERING'S GEOTECHNICAL REPORT DATED OCTOBER 31, 2017 (ANTICUS PROJECT NO: 01.3493.17) & MEMORANDUM DATED DECEMBER 17, 2017 (ANTICUS PROJECT NO: 01.3493-2.17).

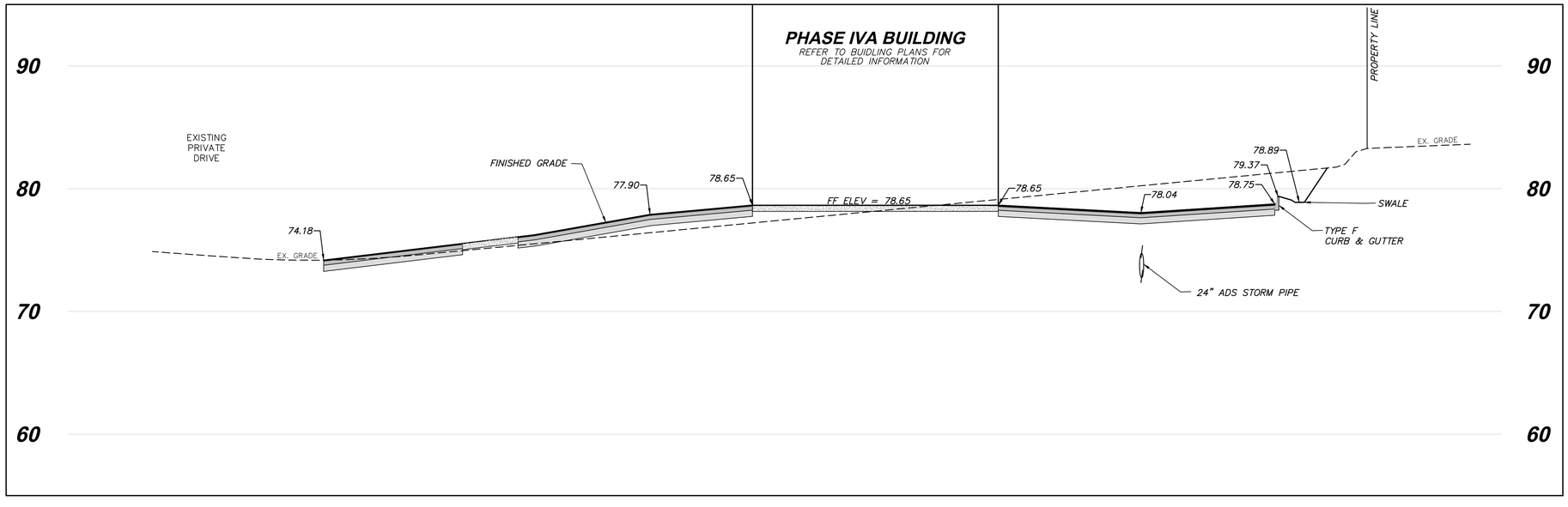
POND SINKHOLE EMERGENCY RESPONSE:

1. SECURE AREA USING GENERAL SPACING AND BARRICADE PER MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) GUIDELINES AND ROPE OR TAPE BETWEEN BARRICADES FOR SAFETY OF THE GENERAL PUBLIC AS NECESSARY (THIS INCLUDES BUILDING AND/OR PARKING AREAS). IF NECESSARY, INVOLVE LOCAL EMERGENCY MANAGEMENT TO ASSIST.

2. WHERE PARKING AREAS OR BUILDING AREAS HAVE BEEN IMPACTED, BUILDING AND/OR VEHICLES SHOULD BE VACATED UNTIL SUCH TIME AS A GEOTECHNICAL ENGINEER OR OTHER QUALIFIED PROFESSIONAL (ENGINEER) HAS EVALUATED THE SUBSIDENCE AND PROVIDED PROFESSIONAL OPINIONS REGARDING THE SAFETY OF THE STRUCTURE/PARKING AREAS.

3. IF POSSIBLE, BACKFILL DEPRESSION WITH SOIL CONSISTING OF INERT SAND (SP), SAND WITH SILT (SP-SM), SILTY SAND (SM), SAND WITH CLAY (SP-SC) [SOILS CLASSIFIED IN ACCORDANCE WITH THE UNIFIED SOIL CLASSIFICATION SYSTEM] UNTIL SUCH TIME AS AN ENGINEER EVALUATES THE DEPRESSION AND PROVIDES REMEDIATION RECOMMENDATIONS, AS NECESSARY. TO THE EXTENT POSSIBLE, CONSIDERATION MUST BE GIVEN TO USING MATERIAL SIMILAR TO THE EXISTING SOIL PROFILE. THE BACKFILLING SHALL BE PERFORMED UNDER THE DIRECTION OF AN ENGINEER AND THE BACKFILL SHOULD BE MOUNDED (FROM CENTER AN APPROXIMATE 10% SLOPE), OR TO THE EXTENT NOTED BY THE ENGINEER TO ALLOW FOR STABILIZATION OF THE DEPRESSION.

4. AFTER BACKFILLING AND UNTIL AN ENGINEER HAS COMPLETED AN EVALUATION OF THE DEPRESSION AND REMEDIATION HAS BEEN COMPLETED, AS RECOMMENDED BY THE ENGINEER, PERIODIC MONITORING OF THE AREA SHALL BE PERFORMED, ON A WEEKLY BASIS AND AFTER EACH RAIN EVENT. MONITORING SHOULD INCLUDE CHANGES IN SIZE AND OR SETTLEMENT OF THE AREA AND NOTIFICATION OF ANY CHANGES SHOULD BE MADE TO THE ENGINEER.



SECTION C

SCALE: 1" = 30' HORIZ.
1" = 5' VERT.
REFER TO SHEET C-6.2 FOR
PLAN VIEW OF SECTION LOCATION

NO.	REVISION & DATE

PROJECT:
MAJOR SITE PLANS FOR
GENERAL RV OCALA - PHASE IV
13150 SW 16TH AVE (CR 475-A), MARION COUNTY, FL

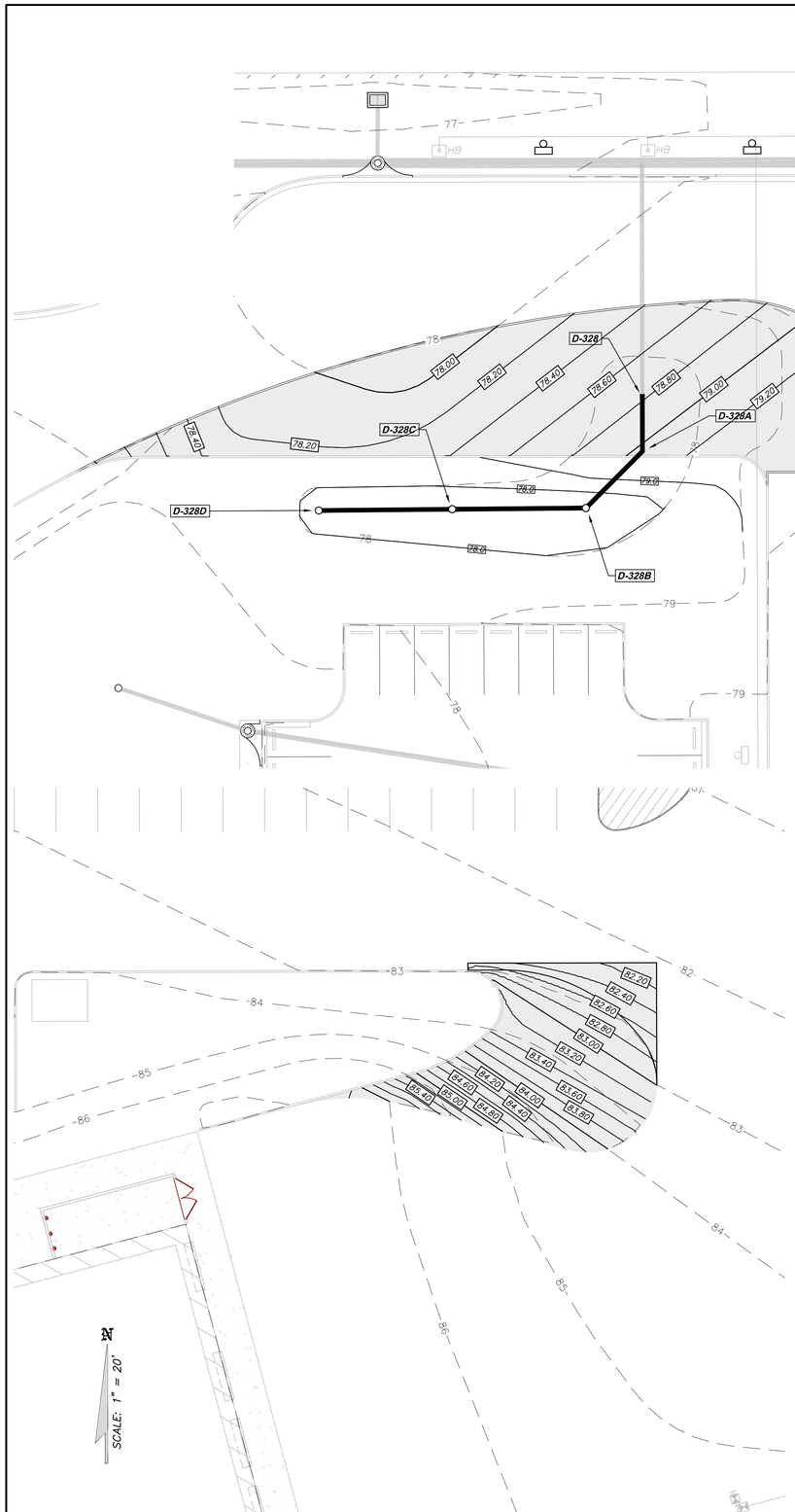
PREPARED FOR:

SHEET TITLE:
SECTIONS
(SHEET 2 OF 2)

MCNEAL ENGINEERING, INC.
15957 N. FLORIDA AVE. LUTZ, FL 33549
PH. (813) 968-1081 FAX (813) 961-5839
CERTIFICATE OF AUTHORIZATION #08975

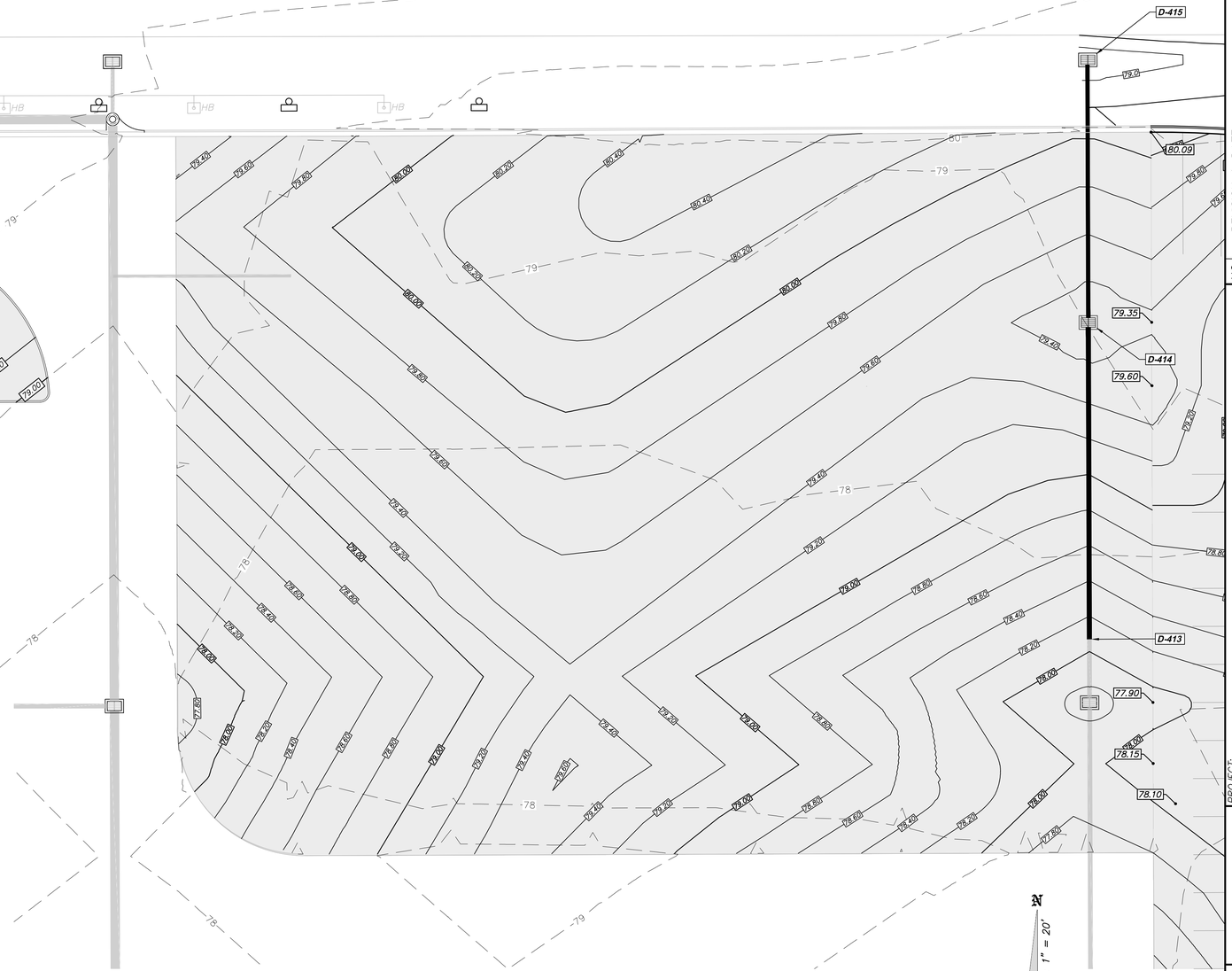
JOB NO.	21-116
ACAD FILE:	FCP
DRAWN BY:	MGF
CHK'D BY:	CSM
DATE:	24.01.11
SHEET:	C-6.4

THE DESIGNS AND DRAWINGS CONTAINED HEREON ARE THE COPYRIGHTED PROPERTY OF MCNEAL ENGINEERING, INC., AND SHOULD NOT BE DUPLICATED WITHOUT WRITTEN CONSENT OF THE ENGINEER.



PHASE I REVISION GRADING DETAIL

SCALE: 1" = 20'



PHASE III REVISION GRADING DETAIL

SCALE: 1" = 20'

NO.	REVISION & DATE

PROJECT:

GENERAL RV OCALA - PHASE IV

13150 SW 16TH AVE (CR 475-A), MARION COUNTY, FL

PREPARED FOR:

SHEET TITLE:

DETAILED GRADING SHEET (SHEET 1 OF 3)

McNEAL ENGINEERING, INC.
15957 N. FLORIDA AVE, LUTZ, FL 33549
PH. (813) 968-1081 FAX (813) 961-5839
CERTIFICATE OF AUTHORIZATION #28975

JOB NO.	21-116
ACAD FILE:	FCP
DRAWN BY:	MGF
CHK'D BY:	CSM
DATE:	24.01.11
SHEET:	C-7.1

THE DESIGNS AND DRAWINGS CONTAINED HEREON ARE THE COPYRIGHTED PROPERTY OF McNEAL ENGINEERING, INC., AND SHOULD NOT BE DUPLICATED WITHOUT WRITTEN CONSENT OF THE ENGINEER.

28,895± SF*
SERVICE/REPAIR
BUILDING
(PHASE IVB)
FF ELEV = 78.65

22,805± SF*
SERVICE/REPAIR
BUILDING
(PHASE IVA)
FF ELEV = 78.65

SCALE: 1" = 20'

NO.	REVISION & DATE

PROJECT:
MAJOR SITE PLANS FOR
GENERAL RV OCALA - PHASE IV
13150 SW 16TH AVE (CR 475-A), MARION COUNTY, FL

PREPARED FOR:

SHEET TITLE:
DETAILED GRADING SHEET
(SHEET 2 OF 3)

McNEAL ENGINEERING, INC.
15957 N. FLORIDA AVE, LUTZ, FL 33549
PH. (813) 968-1081 FAX (813) 961-5839
CERTIFICATE OF AUTHORIZATION #08975

JOB NO.	21-116
ACAD FILE:	FCP
DRAWN BY:	MGF
CHK'D BY:	CSM
DATE:	24.01.11
SHEET:	**C-7.2**

THE DESIGNS AND DRAWINGS CONTAINED HEREON ARE THE COPYRIGHTED PROPERTY OF McNEAL ENGINEERING, INC., AND SHOULD NOT BE DUPLICATED WITHOUT WRITTEN CONSENT OF THE ENGINEER.

SCALE: 1" = 20'

N

28,895± SF*
SERVICE/REPAIR
BUILDING
(PHASE IVB)
FF ELEV = 78.65

22,805± SF*
SERVICE/REPAIR
BUILDING
(PHASE IVA)
FF ELEV = 78.65

D-458 D-460 D-461 D-471 D-472 D-473 D-474 D-456 D-456A D-457 D-457A AD-1 AD-2 AD-3

NO.	REVISION & DATE

PROJECT:

MAJOR SITE PLANS FOR
GENERAL RV OCALA - PHASE IV
13150 SW 16TH AVE (CR 475-A), MARION COUNTY, FL

PREPARED FOR:

SHEET TITLE:
DETAILED GRADING SHEET
(SHEET 3 OF 3)

McNEAL ENGINEERING, INC.
15957 N. FLORIDA AVE, LUTZ, FL 33549
PH. (813) 968-1081 FAX (813) 961-5839
CERTIFICATE OF AUTHORIZATION #08975

JOB NO.	21-116
ACAD FILE:	FCP
DRAWN BY:	MGF
CHK'D BY:	CSM
DATE:	24.01.11
SHEET:	**C-7.3**

THE DESIGNS AND DRAWINGS CONTAINED HEREON ARE THE COPYRIGHTED PROPERTY OF McNEAL ENGINEERING, INC., AND SHOULD NOT BE DUPLICATED WITHOUT WRITTEN CONSENT OF THE ENGINEER.

THE FOLLOWING INFORMATION IS FROM PHASE I, PHASE II & PHASE IIIA ASBUILT PLANS AND IS FOR INFORMATIONAL PURPOSES ONLY

ASBUILT STORM STRUCTURE TABLE (PHASE I & PHASE II)

STRUCTURE NAME	DESCRIPTION	DETAILS	LOCATION	
D-14A	CURB INLET TYPE 1 TOP PER FDOT SI#210 TYPE P BOTTOM PER FDOT SI# 200	TOP ELEV = ~~76.19~~ **76.13** INV ELEV = ~~69.80~~ (S)**69.60**	~~1707671.532~~ N: ~~1707673.95~~ E: ~~607064.760~~ **607084.760**	
D-20	CURB INLET TYPE 2 TOP PER FDOT SI#210 TYPE P BOTTOM PER FDOT SI# 200	TOP ELEV = ~~74.35~~**74.36** INV ELEV = ~~67.00~~ (E)**67.10** INV ELEV = ~~66.50~~ (S)**66.60**	~~1707738.090~~ N: ~~1707739.19~~ E: ~~606949.65~~ **606949.673**	
D-21	CURB INLET TYPE 2 TOP PER FDOT SI#210 TYPE P BOTTOM PER FDOT SI# 200	TOP ELEV = ~~74.18~~ **74.20** INV ELEV = ~~68.75~~ (N)**68.80** INV ELEV = 67.40 (E) ✓ INV ELEV = ~~67.20~~ (W)**67.25**	~~1707739.233~~ N: ~~1707739.14~~ E: ~~606987.55~~ **606986.075**	TO BE REMOVED
D-21A	TYPE E INLET PER FDOT SI# 232	TOP ELEV = ~~73.95~~ **73.85** INV ELEV = ~~67.80~~ (W)**68.65**	~~1707736.804~~ N: ~~1707736.26~~ E: ~~607004.82~~ **607004.843**	TO BE REMOVED
D-28	INLET TYPE E TOP PER FDOT SI#232 TYPE J BOTTOM PER FDOT SI# 200	TOP ELEV = 70.00 ✓ INV ELEV = ~~61.50~~ (N)**61.35**	~~1707835.353~~ N: ~~1707835.68~~ E: ~~606475.31~~ **606475.604**	
D-29	MANHOLE TYPE 8 TOP PER FDOT SI#201 TYPE J BOTTOM PER FDOT SI# 200	TOP ELEV = ~~74.59~~**74.34** INV ELEV = ~~65.85~~ (N)**65.80** INV ELEV = ~~70.10~~ (E) **69.80** INV ELEV = ~~69.75~~ (W)**69.77** INV ELEV = ~~65.65~~ (S)**65.55**	~~1707853.588~~ N: ~~1707854.26~~ E: ~~606414.15~~ **606474.611**	
D-30	** STRUCTURE MODIFICATION ** PREVIOUS TOP ELEV.= 77.07 MANHOLE TYPE 8 TOP PER FDOT SI#201 TYPE J BOTTOM PER FDOT SI# 200	TOP ELEV = ~~76.52~~**76.46** INV ELEV = ~~66.35~~ (N) **66.10** INV ELEV = ~~66.15~~ (S)**65.90**	~~1707737.204~~ N: ~~1707737.95~~ E: ~~606475.46~~ **606475.757**	
D-31	** STRUCTURE TOP MODIFICATION ** PREVIOUS TOP ELEV.= 76.00 INLET TYPE E TOP PER FDOT SI#232 TYPE J BOTTOM PER FDOT SI# 200	TOP ELEV = ~~76.35~~ **76.02** INV ELEV = ~~66.60~~ (N)**66.42** INV ELEV = ~~66.40~~ (S)**66.13**	~~1707750.604~~ N: ~~1707749.95~~ E: ~~606475.59~~ **606473.425**	
D-32	INLET TYPE E TOP PER FDOT SI#232 TYPE J BOTTOM PER FDOT SI# 200	TOP ELEV = ~~75.90~~ **75.83** INV ELEV = ~~68.00~~ (N)**67.75** INV ELEV = ~~67.50~~ (W)**67.36** INV ELEV = ~~66.90~~ (S)**66.87**	**1707826.453** N: ~~1707826.98~~ E: ~~606475.33~~ **606472.069**	

ASBUILT STORM STRUCTURE TABLE (PHASE IIIA)

STRUCTURE NAME	DESCRIPTION	DETAILS	LOCATION
D-302	TYPE E INLET PER FDOT SI# 232	TOP ELEV = ~~76.75~~ **76.94** INV ELEV = ~~72.00~~ (N) **71.81** INV ELEV = ~~70.60~~ (S) **70.41**	**1707926.783** N: ~~1707926.98~~ E: ~~606474.91~~ **606475.487**
D-303	TYPE E INLET PER FDOT SI# 232	TOP ELEV = ~~77.75~~ **77.84** INV ELEV = ~~73.20~~ (N) **73.40** INV ELEV = ~~73.00~~ (S) **73.01**	**1708045.934** N: ~~1708046.98~~ E: ~~606474.44~~ **606473.983**
D-316	ADS TEMPORARY CAP	TOP ELEV = 78.07 INV ELEV = 73.40 (S)	N: ~~1708066.98~~ E: ~~606474.34~~ **605920.380**
*D-327	ADS INSERTA TEE	INV ELEV = 72.50 (S)	N: 1708230.85 E: 606070.05
D-328	YARD DRAIN	TOP ELEV = ~~77.50~~ **77.20** INV ELEV = ~~73.50~~ (N) **73.26**	**1708163.104** N: ~~1708163.29~~ E: ~~606070.18~~ **606070.344**

ASBUILT STORM PIPE TABLE (PHASE I & PHASE II)

FROM	TO	SIZE	LENGTH	SLOPE	MATERIAL
D-12	D-20	30"	227'	~~0.22%~~ **0.26%**	ADS
D-20	D-21	24"	35'	~~0.53%~~ **0.43%**	ADS
D-21	D-21A	24"	14'	~~1.16%~~ **8.93%**	ADS
D-28	D-29	42"	17'	~~22.18%~~ **24.7%**	ADS
D-29	D-34	15"	94'	~~1.63%~~ **1.28%**	ADS
D-29	D-30	42"	80'	~~0.36%~~ **0.13%**	ADS
D-30	D-31	42"	10'	~~0.42%~~ **0.30%**	ADS
D-31	D-32	42"	76'	~~0.39%~~ **0.59%**	ADS

ASBUILT STORM PIPE TABLE (PHASE IIIA)

FROM	TO	SIZE	LENGTH	SLOPE	MATERIAL
D-301	D-302	24"	79'	~~2.60%~~ **3.37%**	ADS
D-302	D-303	18"	118'	~~0.83%~~ **1.01%**	ADS
*D-303	D-316	18"	17'	1.00%	ADS

PROPOSED STORM STRUCTURE TABLE (PHASE IIIB)

STRUCTURE NAME	DESCRIPTION	DETAILS	LOCATION
D-413	REMOVE CAP CONNECT TO EXISTING 18" PIPE	INV IN = 73.40	N: 1708066.98 E: 606474.34
D-414	TYPE E INLET PER FDOT STANDARD PLANS INDEX 425-052	TOP ELEV. = 79.25 INV IN = 74.75 INV OUT = 74.40	N: 1708166.92 E: 606473.99
D-415	TYPE E INLET PER FDOT STANDARD PLANS INDEX 425-052	TOP ELEV. = 78.50 INV OUT = 75.25	N: 1708249.79 E: 606473.83

PROPOSED STORM STRUCTURE TABLE (PHASE IVA)

STRUCTURE NAME	DESCRIPTION	DETAILS	LOCATION
D-451	TYPE G INLET (MODIFIED) PER FDOT STANDARD PLANS INDEX 425-053 SEE DETAIL ON SHEET C-14.0	TOP ELEV. = 71.00 INV IN = 63.00	N: 1707768.94 E: 606739.24
D-452	TYPE E INLET WITH 6'-0" (MIN.) STRUCTURE BOTTOM PER FDOT STANDARD PLANS INDEX 425-052	TOP ELEV. = 75.25 INV IN = 66.43 INV IN = 69.35 INV OUT = 65.98	N: 1707824.98 E: 606738.95
D-453	TYPE E INLET WITH 6'-0" (MIN.) STRUCTURE BOTTOM PER FDOT STANDARD PLANS INDEX 425-052	TOP ELEV. = 75.25 INV IN = 67.42 INV OUT = 67.42	N: 1707824.40 E: 606572.91
D-454	TYPE E INLET WITH 6'-0" (MIN.) STRUCTURE BOTTOM PER FDOT STANDARD PLANS INDEX 425-052	TOP ELEV. = 77.65 INV IN = 69.36 INV OUT = 69.36	N: 1708147.23 E: 606571.69
D-455	TYPE E INLET PER FDOT STANDARD PLANS INDEX 425-052	TOP ELEV. = 77.65 INV IN = 70.86 INV OUT = 70.36	N: 1708147.76 E: 606737.52
D-456	TYPE E INLET PER FDOT STANDARD PLANS INDEX 425-052	TOP ELEV. = 77.65 INV IN = 72.35 INV IN = 73.01 INV OUT = 71.86	N: 1708148.29 E: 606904.00
D-456A	TYPE E INLET PER FDOT STANDARD PLANS INDEX 425-052	TOP ELEV. = 78.50 INV OUT = 74.25	N: 1708225.29 E: 606903.75
D-457	TYPE E INLET PER FDOT STANDARD PLANS INDEX 425-052	TOP ELEV. = 77.60 INV IN = 73.87 INV OUT = 73.37	N: 1708148.84 E: 607073.83
D-457A	TYPE E INLET PER FDOT STANDARD PLANS INDEX 425-052	TOP ELEV. = 78.45 INV OUT = 74.48	N: 1708225.84 E: 607073.59
D-458	TYPE E INLET PER FDOT STANDARD PLANS INDEX 425-052	TOP ELEV. = 75.25 INV OUT = 71.00	N: 1707825.45 E: 606904.25
D-459	CONNECT TO EXISITING 24" PIPE	INV IN = 67.25	N: 1707739.14 E: 606985.65
D-460	CURB INLET TYPE 2 TOP PER FDOT STANDARD PLANS INDEX 425-020 TYPE P BOTTOM PER FDOT STANDARD PLANS INDEX 425-010	TOP ELEV. = 74.02 INV IN = 67.40 INV OUT = 67.40	N: 1707739.13 E: 607000.65
D-461	TYPE E INLET PER FDOT STANDARD PLANS INDEX 425-052	TOP ELEV. = 74.00 INV IN = 67.85 INV OUT = 67.85	N: 1707742.08 E: 607045.58
D-462	24" CAP	INV OUT = 67.88	N: 1707742.08 E: 607052.08

PROPOSED STORM STRUCTURE TABLE (PHASE IVB)

STRUCTURE NAME	DESCRIPTION	DETAILS	LOCATION
AD-1	12" X 12" X 12" TEE	TOP ELEV. = 78.36 INV IN = 74.20 INV IN = 74.20 INV OUT = 74.20	N: 1707961.37 E: 607046.43
AD-2	AREA DRAIN (SEE DETAIL ON SHEET C-14.0)	TOP ELEV. = 78.00 INV OUT = 74.52	N: 1707938.71 E: 607046.50
AD-3	AREA DRAIN (SEE DETAIL ON SHEET C-14.0)	TOP ELEV. = 78.00 INV OUT = 74.37	N: 1707973.71 E: 607046.39
D-470	REMOVE 24" CAP CONNECT TO EXISTING 24" PIPE	TOP ELEV. = 70.16 INV IN = 67.88	N: 1707742.08 E: 607052.08
D-471	TYPE E INLET PER FDOT STANDARD PLANS INDEX 425-052	TOP ELEV. = 75.70 INV IN = 68.53 INV OUT = 68.53	N: 1707741.95 E: 607171.12
D-472	TYPE E INLET PER FDOT STANDARD PLANS INDEX 425-052	TOP ELEV. = 75.50 INV IN = 69.11 INV OUT = 69.11	N: 1707850.07 E: 607171.23
D-473	TYPE E INLET PER FDOT STANDARD PLANS INDEX 425-052	TOP ELEV. = 75.50 INV IN = 70.22 INV IN = 71.22 INV OUT = 69.72	N: 1707961.77 E: 607170.57
D-474	TYPE E INLET PER FDOT STANDARD PLANS INDEX 425-052	TOP ELEV. = 75.85 INV OUT = 71.57	N: 1708074.26 E: 607170.29

NOTE: PHASE IVB STORM INFRASTRUCTURE TO BE CONSTRUCTED AS PART OF PHASE IVA.

PROPOSED STORM STRUCTURE TABLE (PHASE III YARD DRAINS)

STRUCTURE NAME	DESCRIPTION	DETAILS	LOCATION
D-328	REMOVE/RELOCATE YARD DRAIN CONNECT TO EXISTING 15" PIPE	TOP ELEV. = 77.20 INV IN = 73.26	N: 1708163.10 E: 606070.54
D-328A	15" 45-DEGREE BEND	TOP ELEV. = 76.91 INV IN = 73.41 INV OUT = 73.41	N: 1708147.87 E: 606070.20
D-328B	YARD DRAIN	TOP ELEV. = 77.65 INV IN = 73.64 INV OUT = 73.64	N: 1708131.57 E: 606053.96
D-328C	YARD DRAIN	TOP ELEV. = 77.80 INV IN = 74.02 INV OUT = 74.02	N: 1708131.22 E: 606015.50
D-328D	YARD DRAIN	TOP ELEV. = 77.95 INV OUT = 74.40	N: 1708130.87 E: 605977.16

NOTES:

1. ALL STORM STRUCTURES (OTHER THAN YARD DRAINS) SHALL BE PRECAST AND DESIGNED TO ACCOMMODATE H-20 LOADING.
2. COORDINATE VALUES FOR INLETS AND CONTROL STRUCTURES ARE TO THE CENTER OF THE GRATE TOP, AND ARE BASED UPON STRUCTURE ORIENTATION SHOWN ON PLANS. ADJUSTMENT TO COORDINATE VALUE WILL BE REQUIRED IF ALTERNATE STRUCTURE TYPE OR ORIENTATION IS USED.
3. COORDINATE VALUES FOR MANHOLES ARE THE CENTER OF ROUND BASE. ADJUSTMENT TO COORDINATE VALUE WILL BE REQUIRED IF ALTERNATE STRUCTURE TYPE OR ORIENTATION IS USED.
4. REFER TO FDOT DESIGN STANDARDS, FY 2023-2024 EDITION, FOR REFERENCED STRUCTURE DETAILS.
5. ALL ADS PIPE SHOWN HEREON SHALL BE ADS N-12 ST IB (SOILTIGHT) PIPE, OR APPROVED EQUAL.

PROPOSED STORM PIPE TABLE (PHASE III YARD DRAINS)

FROM	TO	SIZE	LENGTH	SLOPE	MATERIAL
D-328	D-328A	15"	12'	1.00%	ADS
D-328A	D-328B	15"	20'	1.00%	ADS
D-328B	D-328C	15"	35'	1.00%	ADS
D-328C	D-328D	15"	35'	1.00%	ADS

PROPOSED STORM PIPE TABLE (PHASE IIIB)

FROM	TO	SIZE	LENGTH	SLOPE	MATERIAL
D-413	D-414	18"	98'	1.00%	ADS
D-414	D-415	15"	80'	0.60%	ADS

PROPOSED STORM PIPE TABLE (PHASE IVA)

FROM	TO	SIZE	LENGTH	SLOPE	MATERIAL
D-451	D-452	41"	51'	5.31%	ADS
D-452	D-458	18"	160'	1.00%	ADS
D-453	D-452	36"	160'	0.60%	ADS
D-453	D-454	36"	317'	0.60%	ADS
D-454	D-455	36"	161'	0.60%	ADS
D-455	D-456	30"	163'	0.60%	ADS
D-456	D-456A	18"	73'	1.60%	ADS
D-456	D-457	24"	167'	0.60%	ADS
D-457A	D-457	18"	73'	0.80%	ADS
D-459	D-460	24"	13'	1.00%	ADS
D-460	D-461	24"	42'	1.00%	ADS
D-461	D-462	24"	5'	0.54%	ADS

PROPOSED STORM PIPE TABLE (PHASE IVB)

FROM	TO	SIZE	LENGTH	SLOPE	MATERIAL
AD-1	AD-3	12"	9'	1.40%	ADS
AD-1	AD-2	12"	19'	1.40%	ADS
D-470	D-471	24"	118'	0.54%	ADS
D-471	D-472	24"	104'	0.54%	ADS
D-472	D-473	24"	109'	0.54%	ADS
D-473	AD-1	12"	120'	2.40%	ADS
D-473	D-474	18"	110'	1.20%	ADS

NO.	REVISION & DATE

PROJECT:
MAJOR SITE PLANS FOR
GENERAL RV OCALA - PHASE IV
13150 SW 16TH AVE (CR 475-A), MARION COUNTY, FL

PREPARED FOR:

SHEET TITLE:
DRAINAGE PIPE & STRUCTURE TABLES

MCNEAL ENGINEERING, INC.
15957 N. FLORIDA AVE, LUTZ, FL 33549
PH. (813) 968-1081 FAX (813) 961-5839
CERTIFICATE OF AUTHORIZATION #08975

JOB NO.	21-116
ACAD FILE:	FCP
DRAWN BY:	MGF
CHK'D BY:	CSM
DATE:	24.01.11
SHEET:	**C-8.0**

THE DESIGNS AND DRAWINGS CONTAINED HEREON ARE THE COPYRIGHTED PROPERTY OF McNEAL ENGINEERING, INC., AND SHOULD NOT BE DUPLICATED WITHOUT WRITTEN CONSENT OF THE ENGINEER.

REFER TO SHEETS C-10.0, C-11.0 & C-12.0 FOR SEWER, WATER AND FIRE INFORMATION

REFER TO SHEETS C-5.0, C-6.1, C-6.2 & C-8.0 FOR DRAINAGE STRUCTURE INFORMATION

SW 130TH STREET ROAD

SW 16TH AVE. (CR-475A)

EX. SECO SWITCHGEAR

UNDERGROUND PROPANE TANK, REMOTE FILL & UNDERGROUND LINE TO BUILDING (PLANS/PERMITTING BY OTHERS)

PHASE IIIB

PHASE IVA

PHASE IVB

28,895± SF* SERVICE/REPAIR BUILDING (PHASE IVB)

22,805± SF* SERVICE/REPAIR BUILDING (PHASE IVA)

APPROXIMATE LOCATION OF UNDERGROUND POWER TO BUILDING (BY OTHERS)

APPROXIMATE LOCATION OF RELOCATED SECO UNDERGROUND POWER LINE

EX. SECO TRANSFORMER

EX. SECO EASEMENT BY OR BK 8073 PGS 1850-1852

EX. SECO EASEMENT BY OR BK 6788 PGS 709-711

N

SCALE: 1" = 40'

NO.	REVISION & DATE

PROJECT:

MAJOR SITE PLANS FOR
GENERAL RV OCALA - PHASE IV
13150 SW 16TH AVE (CR 475-A), MARION COUNTY, FL

PREPARED FOR:

SHEET TITLE:

UTILITY PLAN OTHER

McNEAL ENGINEERING, INC.
15957 N. FLORIDA AVE, LUTZ, FL 33549
PH. (813) 968-1081 FAX (813) 961-5839
CERTIFICATE OF AUTHORIZATION #08975

JOB NO.	21-116
ACAD FILE:	FCP
DRAWN BY:	MGF
CHK'D BY:	CSM
DATE:	24.01.11
SHEET:	**C-9.0**

THE DESIGNS AND DRAWINGS CONTAINED HEREON ARE THE COPYRIGHTED PROPERTY OF McNEAL ENGINEERING, INC., AND SHOULD NOT BE DUPLICATED WITHOUT WRITTEN CONSENT OF THE ENGINEER.

PHASE IVA

PHASE IVB

28,895± SF*
SERVICE/REPAIR
BUILDING
(PHASE IVB)
FF ELEV = 78.65

22,805± SF*
SERVICE/REPAIR
BUILDING
(PHASE IVA)
FF ELEV = 78.65

6" FIRE SERVICE CONNECTION
(REFER TO PLANS BY OTHERS)

4" FIRE LINE CONNECTION
(REFER TO PLANS BY OTHERS)

4" SERVICE CONNECTION
(REFER TO MEP PLANS)

S-452 S-414 S-415 S-413 S-405 S-412 S-451 S-411 S-410 S-409 S-408 S-404 S-403 S-406 S-407 S-402 S-401

NO DOMESTIC SEWER
FUTURE FLOOR DRAIN(S) ONLY.

4" 45° BEND

228 LF ~ 4" C900 (DR-14) PVC
FIRE LINE

4" GV W/VB

4" 45° BEND

117 LF ~ 4" C900 (DR-18) PVC

4" 45° BEND

96 LF ~ 6" C900 (DR-18) PVC

FDC

FIRE HYDRANT

6" GV W/VB

8"X6" RED

8" TEE W/8" GV W/VB
(N, E, & W), &
8"X6" RED (N)

191 LF ~ 8" C900 (DR-18) PVC

8" TEE W/8" GV W/VB
(N, E, & W)

8" 90° BEND

4" 90° BEND

4" TEE, 4" GV W/VB
& 4" X 1" RED (W)

232 LF ~ 8" C900 (DR-14) PVC

224 LF ~ 4" C900 (DR-18) PVC

REFER TO SHEET C-12.0
FOR SERVICE CONNECTIONS

REFER TO NOTES ON THIS SHEET
REGARDING FIRE HYDRANT CLEAR
SPACE & FIRE HYDRANT MARKINGS

REFER TO NOTES ON THIS SHEET
REGARDING FDC IDENTIFICATION &
BOLLARD PLACEMENT

FIRE HYDRANT

8" X 6" RED

6" GV W/VB

8 LF ~ 6" C900 (DR-18) PVC

291 LF ~ 8" C900 (DR-18) PVC

83 LF ~ 1" C901 PE SERVICE LINE
HOSE BIB ASSEMBLY PER DETAIL
SHOWN ON SHEET C-15.2

HB

EX LIFT STATION

LS VB CP HB

EX 4" SAN FM

EX 10" FIRE

EX 6" WM

EX WATER METER ASSEMBLIES

P.O.C. POTABLE SERVICE
(REFER TO SHEET C-12.0)

P.O.C. FIRE
(REFER TO SHEET C-12.0)

SW 16TH AVE. (CR-475A)

N

SCALE: 1" = 30'

UTILITY NOTES:

1. SEWER SERVICE SHALL BE PROVIDED BY A (MCUD) CENTRAL SEWER SYSTEM.
2. POTABLE (& FIRE) WATER SHALL BE PROVIDED BY A (MCUD) CENTRAL WATER SYSTEM.
3. ELECTRIC SERVICE TO BE PROVIDED BY SECO.
4. ANY EXISTING WELL(S) NOT USED FOR IRRIGATION TO BE REMOVED/ABANDONED IN ACCORDANCE WITH ALL FEDERAL, STATE AND LOCAL REQUIREMENTS.
5. UTILITY SEPARATION DISTANCES REQUIREMENTS PER RULE 62-610.469(7)(c) AND CHAPTER 62-604 F.A.C.
6. ALL METER AND ABOVE GROUND ASSEMBLIES MUST BE INSULATED OR OTHERWISE PROTECT FROM FROST.
7. FDC SHALL BE PROTECTED BY BOLLARDS PER NPFA 14 §6.1.2.2.6. CLEAR SPACING AS REQUIRED BY NFPA 1 §18.5.7.
8. FIRE HYDRANTS SHALL BE PAINTED IN ACCORDANCE WITH NFPA 291.
9. FIRE HYDRANTS SHALL BE MARKED IN ACCORDANCE WITH NFPA 1 §18.5.10. "NO STOPPING OR STANDING" SIGN SHALL BE INSTALLED.
10. FIRE FLOW REQUIREMENT OF 4,500 GPM FOR 4 HOURS PER NFPA 1 TABLE 18.4.5.2.1.
    75% REDUCTION (3375 GPM) FOR AUTOMATIC SPRINKLER SYSTEM.
    REQUIRED HYDRANT FLOW OF 1,125 GPM PROVIDED BY TWO (2) HYDRANTS.
11. ALL FITTINGS TO BE DIP UNLESS OTHERWISE SHOWN.

NO.	REVISION & DATE

PROJECT:
MAJOR SITE PLANS FOR
GENERAL RV OCALA - PHASE IV
13150 SW 16TH AVE (CR 475-A), MARION COUNTY, FL

PREPARED FOR:

SHEET TITLE:
SEWER & WATER PLAN

McNEAL ENGINEERING, INC.
15957 N. FLORIDA AVE, LUTZ, FL 33549
PH. (813) 968-1081 FAX (813) 961-5839
CERTIFICATE OF AUTHORIZATION #28975

JOB NO.	21-116
ACAD FILE:	FCP
DRAWN BY:	MGF
CHK'D BY:	CSM
DATE:	24.01.11
SHEET:	C-10.0

THE DESIGNS AND DRAWINGS CONTAINED HEREON ARE THE COPYRIGHTED PROPERTY OF McNEAL ENGINEERING, INC., AND SHOULD NOT BE DUPLICATED WITHOUT WRITTEN CONSENT OF THE ENGINEER.

THE FOLLOWING INFORMATION IS FROM PHASE I ASBUILT PLANS AND IS FOR INFORMATIONAL PURPOSES ONLY

ASBUILT SANITARY STRUCTURE TABLE (PHASE I)

STRUCTURE NAME	DESCRIPTION	DETAILS	LOCATION
S-1	LIFT STATION (REFER TO SHEET LS-1.0)	TOP ELEV. = ~~75.50~~ 75.46 INV ELEV = ~~68.00~~ (S)68.06	1707699.953 N: ~~1707699.23~~ E: ~~606999.92~~ 606998.495
S-2	MANHOLE	TOP ELEV. = ~~76.03~~ 75.73 INV ELEV = ~~69.45~~ (W)69.40 INV ELEV = ~~69.00~~ (E) 68.81 INV ELEV = ~~68.00~~ (N)68.77	1707624.251 N: ~~1707624.23~~ E: ~~606999.94~~ 606897.466
S-16	MANHOLE	TOP ELEV. = ~~75.78~~ 75.73 INV ELEV = ~~69.70~~ (N)69.64 INV ELEV = ~~69.60~~ (S)69.58 INV ELEV = 69.50 (W)✓	1707624.498 N: ~~1707624.16~~ E: ~~606995.53~~ 606994.053
S-17	MANHOLE w/ 8" STUB & CAP (NORTH) STUB INV.= 70.80	TOP ELEV. = ~~75.04~~ 74.38 INV ELEV = ~~70.00~~ (S)70.53	1707800.972 N: ~~1707799.16~~ E: ~~606995.71~~ 606995.899
*S-18	TEMPORARY CAP	(INACCESSABLE 11-09-18) INV ELEV = 70.30 (N)	N:1707513.13 E: 606995.42

PROPOSED SANITARY STRUCTURE TABLE (PHASE IVA)

STRUCTURE NAME	DESCRIPTION	DETAILS	LOCATION
S-401	REMOVE EXISTING CAP REMOVE EXISTING STUB CONNECT TO EXISTING MANHOLE S-17 (ALTER EXISTING OPENING AS/IF REQUIRED)	TOP ELEV. = **74.38** INV IN = 70.80	N:1707801.58 E: 606995.51
S-402	8" x 8" x 6" PVC WYE	INV IN = 71.07 INV IN = 71.07 INV OUT = 71.07	N:1707846.75 E: 606991.82
S-403	MANHOLE	TOP ELEV. = 76.94 INV IN = 71.46 INV OUT = 71.26	N:1707878.59 E: 606989.21
S-404	8" x 8" X 6" PVC WYE 8" x 6" PVC REDUCER (NORTH)	INV IN = 71.76 INV IN = 71.76 INV OUT = 71.76	N:1707908.25 E: 606989.12
S-405	6" CLEANOUT (FOR BUIDLING WASTEWATER CONECTION) REFER TO BUIDLING PLANS INSTALL 6" PVC STUB & CAP	TOP ELEV. = 78.60 INV OUT = 72.21	N:1707953.56 E: 606988.98
S-406	6" PVC 45° BEND	INV IN = 71.16 INV OUT = 71.16	N:1707849.50 E: 606988.56
S-407	DUMP STATION REFER TO DETAIL ON SHEET C-16.2	TOP ELEV. = 76.20 INV OUT = 71.99	N:1707845.93 E: 606947.12
S-408	6" PVC 45° BEND	INV IN = 71.85 INV OUT = 71.85	N:1707911.49 E: 606982.23
S-409	OIL WATER SEPARATOR (6" OUTLET)	INV OUT = 72.00	N:1707924.22 E: 606982.23
S-410	3,000 GAL OIL WATER SEPARATOR WITH CONCRETE TOP (H-20 RATED) REFER TO DETAILS ON SHEET C-16.2		N:1707934.72 E: 606982.20
S-411	OIL WATER SEPARATOR (6" INLET)	INV IN = 72.08	N:1707945.55 E: 606982.17
S-412	6" PVC CLEANOUT	TOP ELEV. = 78.60 INV IN = 72.16 INV OUT = 72.16	N:1707953.54 E: 606982.15
S-413	6" x 6" x 6" PVC TEE 6" STUB & CAP (FOR BUIDLING FLOOR DRAIN CONNECTION) REFER TO PLANS BY OTHERS	INV IN = 72.69 INV OUT = 72.69	N:1707953.38 E: 606929.52
S-414	6" PVC CLEANOUT	TOP ELEV. = 78.60 INV IN = 73.63 INV OUT = 73.63	N:1707953.08 E: 606835.98
S-415	6" PVC CAP	INV OUT = 73.66	N:1707953.07 E: 606832.49

PROPOSED SANITARY PIPE TABLE (PHASE IVA)

FROM	TO	SIZE	LENGTH	SLOPE	MATERIAL
S-401	S-402	8"	45'	0.60%	PVC
S-402	S-406	6"	4'	2.00%	PVC
S-402	S-403	8"	30'	0.60%	PVC
S-403	S-404	8"	28'	1.00%	PVC
S-404	S-405	6"	45'	1.00%	PVC
S-404	S-408	6"	8'	1.20%	PVC
S-406	S-407	6"	42'	2.00%	PVC
S-408	S-409	6"	13'	1.20%	PVC
S-411	S-412	6"	8'	1.00%	PVC
S-412	S-413	6"	53'	1.00%	PVC
S-413	S-414	6"	94'	1.00%	PVC
S-414	S-415	6"	3'	1.00%	PVC

ASBUILT SANITARY PIPE TABLE (PHASE I)

FROM	TO	SIZE	LENGTH	SLOPE	MATERIAL
S-1	S-2	8"	73'	~~1.07%~~ 0.97%	PVC
S-2	S-16	8"	94'	~~0.52%~~ 0.73%	PVC
S-16	S-17	8"	173'	~~0.51%~~ 0.57%	PVC

PROPOSED SANITARY STRUCTURE TABLE (PHASE IVA)

STRUCTURE NAME	DESCRIPTION	DETAILS	LOCATION
S-451	REMOVE 6" PVC CAP CONNECT TO EXISTING 6" PVC	INV IN = 73.66	N:1707953.07 E: 606832.49
S-452	6" CLEAN OUT	TOP ELEV. = 78.60 INV OUT = 75.96	N:1707952.33 E: 606602.37

NOTE: S-451 TO S-452 IS NOT FOR DOMESTIC SEWER. FLOOR DRAIN(S) ONLY!

PROPOSED SANITRAY PIPE TABLE (PHASE IVB)

FROM	TO	SIZE	LENGTH	SLOPE	MATERIAL
S-451	S-452	6"	230'	1.00%	PVC

NOTE: S-451 TO S-452 IS NOT FOR DOMESTIC SEWER. FLOOR DRAIN(S) ONLY!

NO.	REVISION & DATE

PROJECT:
MAJOR SITE PLANS FOR
GENERAL RV OCALA - PHASE IV
13150 SW 16TH AVE (CR 475-A), MARION COUNTY, FL

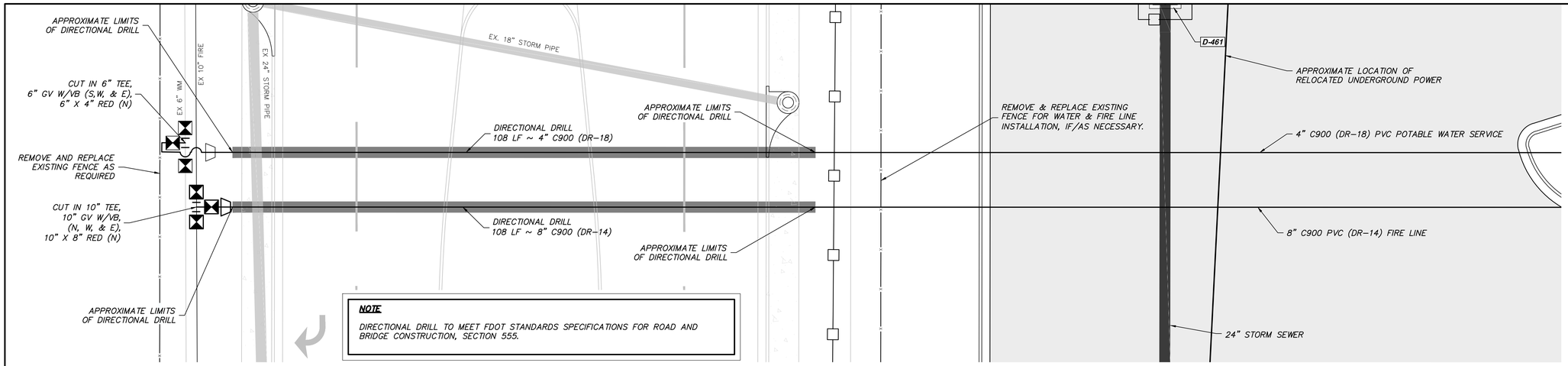
PREPARED FOR:

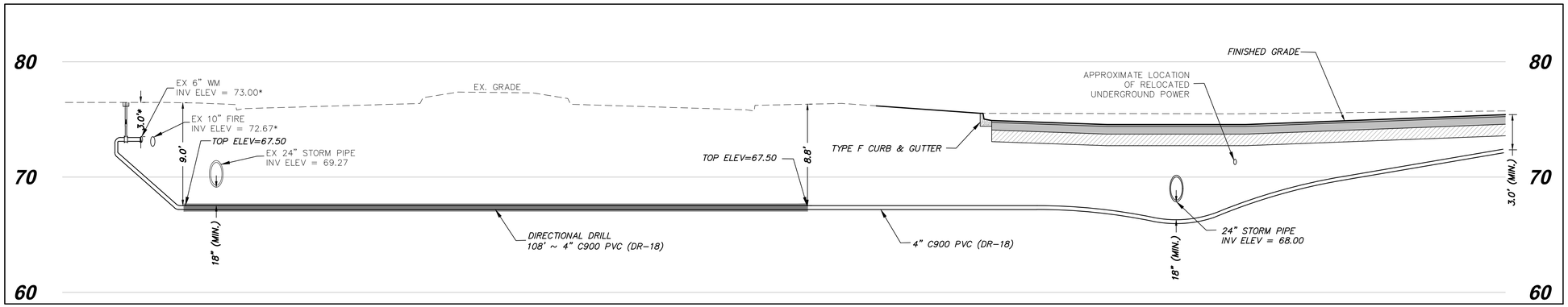
SHEET TITLE:
GRAVITY SANITARY PIPE & STRUCTURE TABLES

McNEAL ENGINEERING, INC.
15957 N. FLORIDA AVE, LUTZ, FL 33549
PH. (813) 968-1081 FAX (813) 961-5839
CERTIFICATE OF AUTHORIZATION #08975

JOB NO.	21-116
ACAD FILE:	FCP
DRAWN BY:	MGF
CHK'D BY:	CSM
DATE:	24.01.11
SHEET:	**C-11.0**

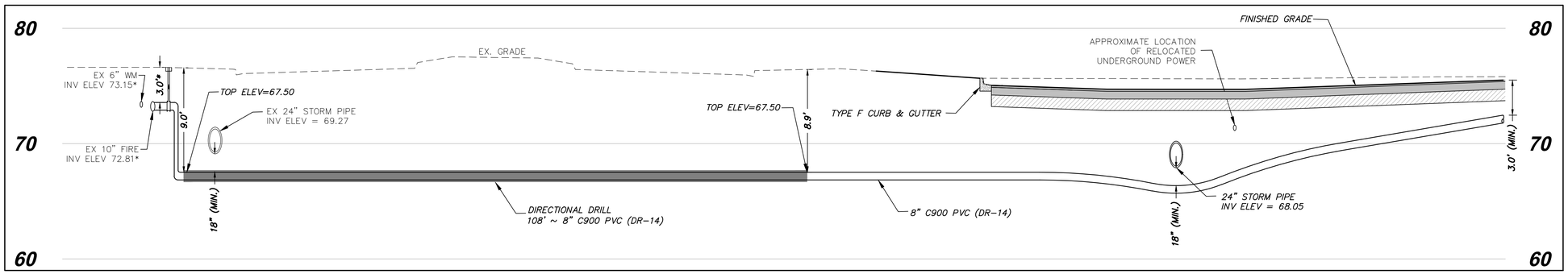
THE DESIGNS AND DRAWINGS CONTAINED HEREON ARE THE COPYRIGHTED PROPERTY OF McNEAL ENGINEERING, INC., AND SHOULD NOT BE DUPLICATED WITHOUT WRITTEN CONSENT OF THE ENGINEER.





WATER LINE

SCALE: 1" = 10' HORIZ.
1" = 5' VERT.



FIRE LINE

SCALE: 1" = 10' HORIZ.
1" = 5' VERT.

NOTE

*ELEVATION BASED ON ORIGINAL DESIGN. CONTRACTOR TO FILED VERIFY PRIOR TO CONSTRUCTION AND NOTIDY THE ENGINEER OF RECORD IF THERE ARE IN DEVIATIONS.

NO. | REVISION & DATE

PROJECT:
MAJOR SITE PLANS FOR
GENERAL RV OCALA - PHASE IV
13150 SW 16TH AVE (CR 475-A), MARION COUNTY, FL

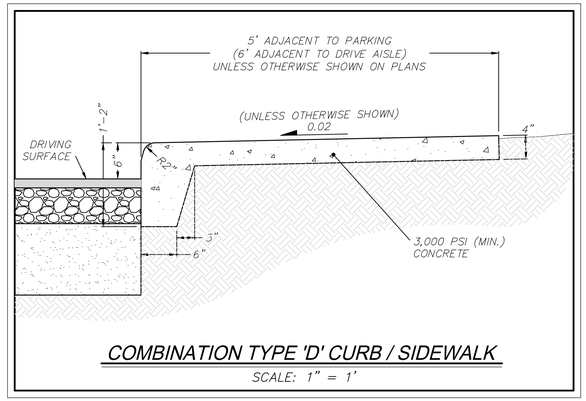
PREPARED FOR:

SHEET TITLE:
WATER CONNECTION

McNEAL ENGINEERING, INC.
15957 N. FLORIDA AVE. LUTZ, FL 33549
PH. (813) 968-1081 FAX (813) 961-5839
CERTIFICATE OF AUTHORIZATION #08975

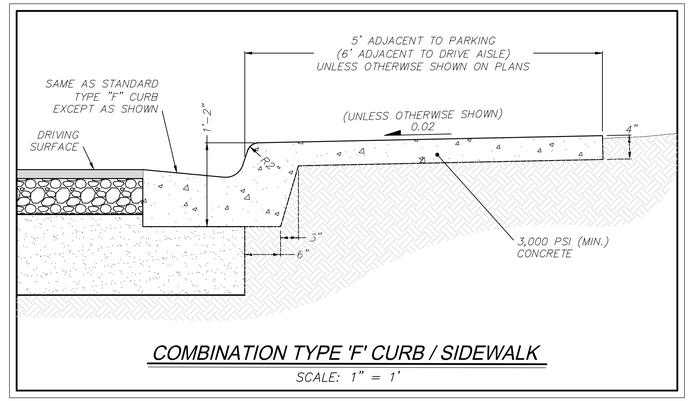
JOB NO.	21-116
ACAD FILE:	FCP
DRAWN BY:	MGF
CHK'D BY:	CSM
DATE:	24.01.11
SHEET:	C-12.0

THE DESIGNS AND DRAWINGS CONTAINED HEREON ARE THE COPYRIGHTED PROPERTY OF McNEAL ENGINEERING, INC., AND SHOULD NOT BE DUPLICATED WITHOUT WRITTEN CONSENT OF THE ENGINEER.



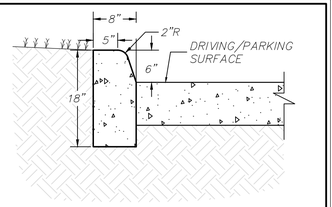
COMBINATION TYPE 'D' CURB / SIDEWALK

SCALE: 1" = 1'



COMBINATION TYPE 'F' CURB / SIDEWALK

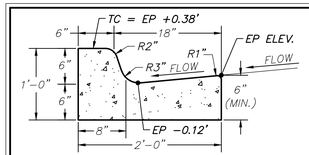
SCALE: 1" = 1'



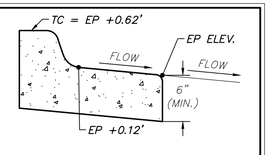
NOTE:
POUR & BACKFILL CURB PRIOR TO PLACEMENT OF BASE AND/OR CONCRETE.

TYPE "D" CONCRETE CURB

SCALE: 1" = 1'



STANDARD TYPE "F" CURB

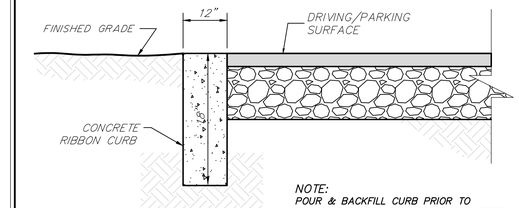


MODIFIED TYPE "F" CURB

NOTES:
1. MODIFIED TYPE "F" CURB SAME AS STANDARD TYPE "F" CURB EXCEPT AS SHOWN.
2. ELEVATIONS FOR MODIFIED TYPE "F" CURB TO BE AS SHOWN ON DETAIL UNLESS OTHERWISE NOTED ON PLANS.
3. PROVIDE 10' (MIN.) TRANSITION BETWEEN STANDARD TYPE "F" CURB AND MODIFIED TYPE "F" CURB UNLESS SITE GEOMETRY OTHERWISE PROHIBITS.
4. DIRECTION OF GUTTER FLOW IN CURB TO MATCH ADJACENT PAVEMENT SLOPE UNLESS OTHERWISE SPECIFIED ON PLANS.

TYPE "F" CONCRETE CURB & GUTTER

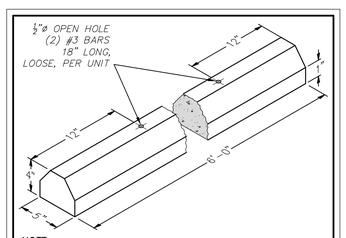
SCALE: 1" = 2'



NOTE:
POUR & BACKFILL CURB PRIOR TO PLACEMENT OF BASE AND/OR CONCRETE.

RIBBON CURB DETAIL

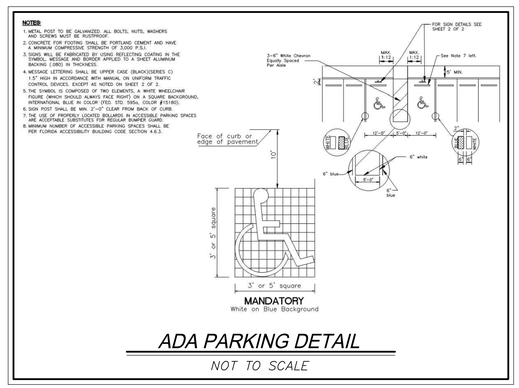
N.T.S.



NOTE:
ALTERNATIVE WHEEL STOPS TO BE CONSIDERED. SUPERWOOD STOPS, YELLOW IN COLOR, AND AVAILABLE FROM SOUTH FLORIDA FENCE, SEFFNER, FL. (813)689-8262 MAY BE USED UPON APPROVAL.

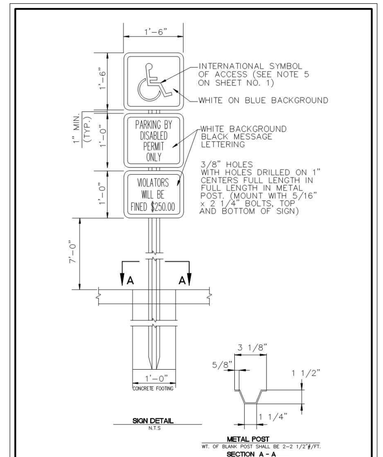
WHEEL STOP DETAIL

SCALE: 1/8" = 1'-0"



ADA PARKING DETAIL

NOT TO SCALE



ADA SIGNAGE DETAIL

NOT TO SCALE

NO.	REVISION & DATE

PROJECT:
MAJOR SITE PLANS FOR GENERAL RV OCALA - PHASE IV
13150 SW 16TH AVE (CR 475-A), MARION COUNTY, FL

PREPARED FOR:

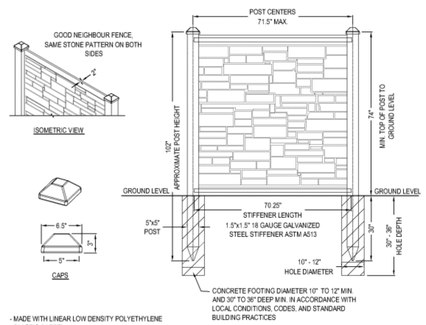
SHEET TITLE:
SITE DETAILS (SHEET 1 OF 2)

MCNEAL ENGINEERING, INC.
15957 N. FLORIDA AVE, LUTZ, FL 33549
PH. (813) 968-1081 FAX (813) 961-5839
CERTIFICATE OF AUTHORIZATION #08975

JOB NO.	21-116
ACAD FILE:	FCP
DRAWN BY:	MGF
CHK'D BY:	CSM
DATE:	24.01.11
SHEET:	C-13.1

THE DESIGNS AND DRAWINGS CONTAINED HEREON ARE THE COPYRIGHTED PROPERTY OF McNEAL ENGINEERING, INC., AND SHOULD NOT BE DUPLICATED WITHOUT WRITTEN CONSENT OF THE ENGINEER.

SIM TEK FENCE
1330 WEST 400 NORTH
OREM, UT 84057
TOLL FREE: 1-866-648-9336
PHONE: (801) 655-5236
FAX: (801) 655-5240
www.simtekfence.com



- MADE WITH LINEAR LOW DENSITY POLYETHYLENE PLASTIC (LLDPE)
- ACTUAL PANEL DIMENSIONS: 72"H x 69.75"W
- PANEL WEIGHT: 58LBS
- TOLERANCES ARE ± .5"

NOTES:
1. US PATENTS 7,478,797 / 7,635,114 FOREIGN PATENTS PENDING.
2. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
3. ALL DIMENSIONS ARE CONSIDERED TRUE AND REFLECT MANUFACTURER'S SPECIFICATIONS.
4. DO NOT SCALE DRAWING.
5. CONTRACTOR'S NOTE: FOR PRODUCT AND COMPANY INFORMATION VISIT www.CADdetails.com/info REFERENCE NUMBER 4312-002.

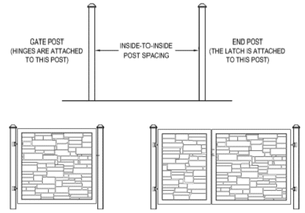
SIMTEK FENCE
MODEL FP72X72 - FENCE PANEL 6' H X 6' W

4312-002 REVISION DATE 05/06/2014

PROTECTED BY COPYRIGHT ©2014 CADDETAILS.COM LTD.

CADdetails.com

SIM TEK FENCE
1330 WEST 400 NORTH
OREM, UT, 84057
TOLL FREE: 1-866-648-9336
PHONE: (801) 655-5236
FAX: (801) 655-5240
www.simtekfence.com



SINGLE GATES
- SINGLE - 6' HIGH x 6' WIDE (ABOVE)
- SINGLE - 6' HIGH x 4' WIDE

DOUBLE GATES
- 8' OPENING - DOUBLE 6' HIGH x 4' WIDE GATE
- 10' OPENING - ONE 6' WIDE & ONE 4' WIDE GATE (ABOVE)
- 12' OPENING - DOUBLE 6' HIGH x 6' WIDE GATE

POST SPACING CHART

GATE SIZE	POST SPACING
4' SINGLE 6'H x 4'W GATE	50.5"
6' SINGLE 6'H x 6'W GATE	73.5"
8' DOUBLE 6'H x 4'W GATE	100.5"
10' ONE 6' GATE & ONE 4' GATE	123.5"
12' DOUBLE 6'D x 6'W GATE	146.5"

MADE WITH LINEAR LOW DENSITY POLYETHYLENE PLASTIC (LLDPE).

NOTES:
1. US PATENTS 7,478,797 / 7,635,114 FOREIGN PATENTS PENDING.
2. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
3. ALL DIMENSIONS ARE CONSIDERED TRUE AND REFLECT MANUFACTURER'S SPECIFICATIONS.
4. DO NOT SCALE DRAWING.
5. CONTRACTOR'S NOTE: FOR PRODUCT AND COMPANY INFORMATION VISIT www.CADdetails.com/info REFERENCE NUMBER 4312-022.

SIMTEK FENCE
GATE POST SPACING

4312-022 REVISION DATE 02/06/2011

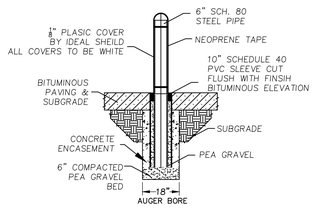
PROTECTED BY COPYRIGHT - 04/06/11

www.CADdetails.com

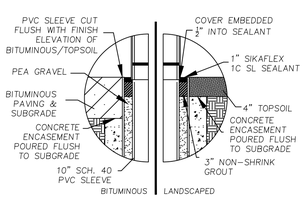
NOTES:
1. COLOR TO BE AS SPECIFIED BY OWNER.
2. FENCE PANELS, FENCE POSTS, GATES AND ALL HARDWARE, CAPS, FILLERS, ETC. TO BE INSTALLED IN ACCORDANCE WITH MANUFACTURE'S GUIDELINES & SPECIFICATIONS.
3. CONTRACTOR SHALL INCLUDE ALL HARDWARE, CAPS, FILLERS, ETC. IN UNIT COSTS FOR FENCE/GATES TO ENSURE THAT FINISHED PRODUCT IS INSTALLED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
4. CONTRACTOR TO SUBMIT SHOP DRAWING OF TRASH ENCLOSURE AREA TO ENGINEER OF RECORD FOR APPROVAL PRIOR TO INSTALLATION.

SIMTEK ECOSTONE FENCE & GATE DETAILS

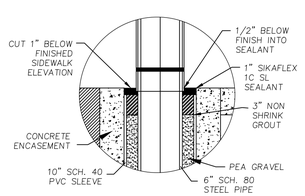
NOT TO SCALE



BOLLARD INSTALLATION IN ASPHALT AREAS



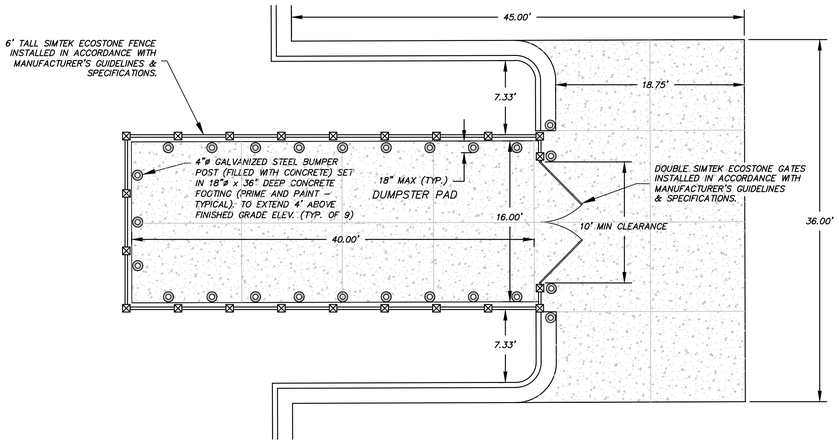
CAULK/GROUT DETAIL FOR LANDSCAPED & BITUMINOUS AREAS



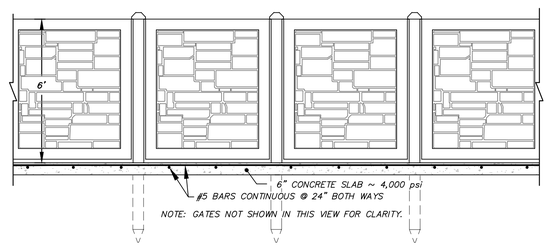
GENERAL DETAILS AND CAULK/GROUT DETAIL FOR CONCRETE AREAS

BOLLARD DETAIL

NOT TO SCALE



PLAN VIEW



PARTIAL ELEVATION VIEW

DUMPSTER AREA DETAIL

NOT TO SCALE

NO.	REVISION & DATE

PROJECT:
MAJOR SITE PLANS FOR GENERAL RV OCALA - PHASE IV
13150 SW 16TH AVE (CR 475-A), MARION COUNTY, FL

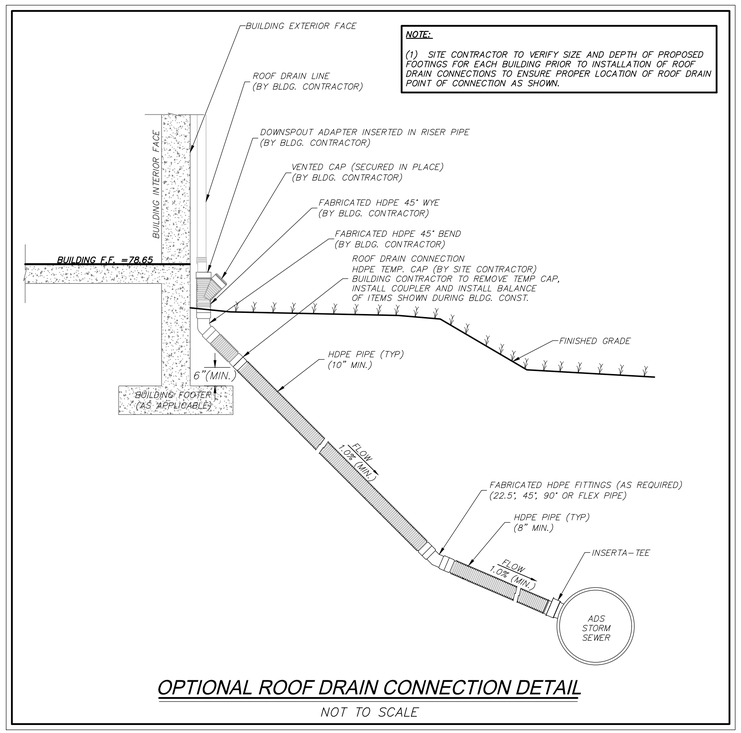
PREPARED FOR:

SHEET TITLE:
SITE DETAILS (SHEET 2 OF 2)

McNEAL ENGINEERING, INC.
15957 N. FLORIDA AVE. LUTZ, FL 33549
PH. (813) 968-1081 FAX (813) 961-5839
CERTIFICATE OF AUTHORIZATION #08975

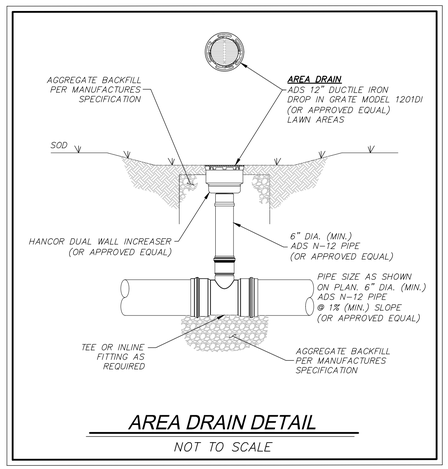
JOB NO.	21-116
ACAD FILE:	FCP
DRAWN BY:	MGF
CHK'D BY:	CSM
DATE:	24.01.11
SHEET:	C-13.2

THE DESIGNS AND DRAWINGS CONTAINED HEREON ARE THE COPYRIGHTED PROPERTY OF McNEAL ENGINEERING, INC., AND SHOULD NOT BE DUPLICATED WITHOUT WRITTEN CONSENT OF THE ENGINEER.



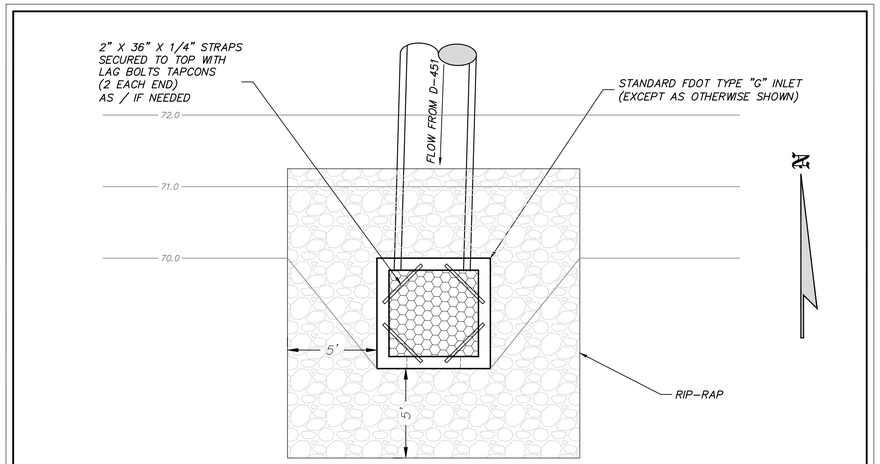
OPTIONAL ROOF DRAIN CONNECTION DETAIL

NOT TO SCALE

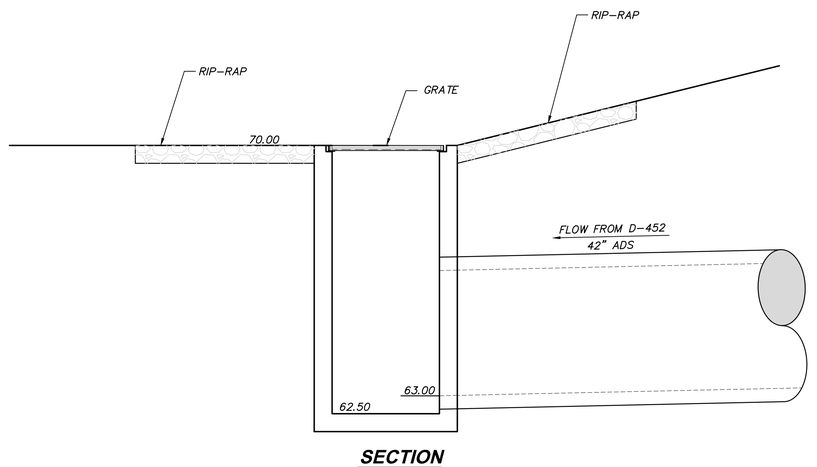


AREA DRAIN DETAIL

NOT TO SCALE



PLAN

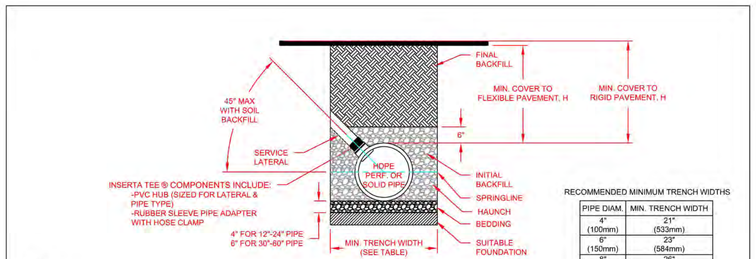


SECTION

NOTE: CONSTRUCTION TO BE IN ACCORDANCE WITH FDOT STANDARD PLAN INDEX 425-053, LATEST EDITION, EXCEPT AS NOTED.

STRUCTURE D-451

NOT TO SCALE



RECOMMENDED MINIMUM TRENCH WIDTHS

PIPE DIAM.	MIN. TRENCH WIDTH
4" (100mm)	21" (533mm)
6" (150mm)	23" (584mm)
8" (200mm)	26" (660mm)
10" (250mm)	28" (711mm)
12" (300mm)	30" (762mm)
15" (375mm)	34" (864mm)
18" (450mm)	39" (991mm)
24" (600mm)	48" (1219mm)
30" (750mm)	56" (1422mm)
36" (900mm)	64" (1626mm)
42" (1050mm)	72" (1829mm)
48" (1200mm)	80" (2032mm)
54" (1350mm)	88" (2235mm)
60" (1500mm)	96" (2438mm)

NOTES:

1. ALL PIPE SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH ASTM D2321, "STANDARD PRACTICE FOR UNDERGROUND INSTALLATION OF THERMOPLASTIC PIPE FOR SEWERS AND OTHER GRAVITY FLOW APPLICATIONS", LATEST ADDITION

2. MEASURES SHOULD BE TAKEN TO PREVENT MIGRATION OF NATIVE FINES INTO BACKFILL MATERIAL, WHEN REQUIRED.

3. THE INSERTA TEE® CONNECTION SHOULD NOT BE PLACED AT AN ANGLE EXCEEDING 45° FROM THE SPRINGLINE. GREATER ANGLES ARE SUBJECT TO DESIGN ENGINEER APPROVAL AND MAY REQUIRE PREMIUM BACKFILL.

4. FOUNDATION: WHERE THE TRENCH BOTTOM IS UNSTABLE, THE CONTRACTOR SHALL EXCAVATE TO A DEPTH REQUIRED BY THE ENGINEER AND REPLACE WITH SUITABLE MATERIAL AS SPECIFIED BY THE ENGINEER. AS AN ALTERNATIVE AND AT THE DISCRETION OF THE DESIGN ENGINEER, THE TRENCH BOTTOM MAY BE STABILIZED USING A GEOTEXTILE MATERIAL.

5. BEDDING: SUITABLE MATERIAL SHALL BE CLASS I, II OR III. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER. UNLESS OTHERWISE NOTED BY THE ENGINEER, MINIMUM BEDDING THICKNESS SHALL BE 4" (100mm) FOR 4"-24" (100mm-600mm); 6" (150mm) FOR 30"-60" (750mm-1500mm).

6. INITIAL BACKFILL: SUITABLE MATERIAL SHALL BE CLASS I, II OR III IN THE PIPE ZONE EXTENDING NOT LESS THAN 6" ABOVE CROWN OF PIPE. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER. MATERIAL SHALL BE INSTALLED AS REQUIRED IN ASTM D2321, LATEST EDITION.

7. MINIMUM COVER: MINIMUM COVER, H, IN NON-TRAFFIC APPLICATIONS (GRASS OR LANDSCAPE AREAS) IS 12" FROM THE TOP OF PIPE TO GROUND SURFACE. ADDITIONAL COVER MAY BE REQUIRED TO PREVENT FLOTATION. FOR TRAFFIC APPLICATIONS, MINIMUM COVER, H, IS 12" UP TO 48" DIAMETER PIPE AND 24" OF COVER FOR 54"-60" DIAMETER PIPE, MEASURED FROM TOP OF PIPE TO BOTTOM OF FLEXIBLE PAVEMENT OR TO TOP OF RIGID PAVEMENT.

© 2018 ADS, INC.

REV.	DESCRIPTION	BY	MM/DD/YY	CHK'D
2	REV. DRAWING NAME OR NUMBER	TJR	01/28/16	

ADVANCED DRAINAGE SYSTEMS, INC. ("ADS") HAS PREPARED THIS DETAIL BASED ON INFORMATION PROVIDED TO ADS. THIS DRAWING IS INTENDED TO DEPICT THE COMPONENTS AS REQUESTED. ADS HAS NOT PERFORMED ANY ENGINEERING OR DESIGN SERVICES FOR THIS PROJECT, NOR HAS ADS INDEPENDENTLY VERIFIED THE INFORMATION SUPPLIED. THE INSTALLATION DETAILS PROVIDED HEREIN ARE GENERAL RECOMMENDATIONS AND ARE NOT SPECIFIC FOR THIS PROJECT. THE DESIGN ENGINEER SHALL REVIEW THESE DETAILS PRIOR TO CONSTRUCTION. IT IS THE DESIGN ENGINEERS RESPONSIBILITY TO ENSURE THE DETAILS PROVIDED HEREIN MEETS OR EXCEEDS THE APPLICABLE NATIONAL, STATE, OR LOCAL REQUIREMENTS AND TO ENSURE THAT THE DETAILS PROVIDED HEREIN ARE ACCEPTABLE FOR THIS PROJECT.

INSERTA TEE DETAIL (HDPE)

DRAWING NUMBER: STD-1011

ADS ADVANCED DRAINAGE SYSTEMS, INC. 4640 TRUEMAN BLVD HILLIARD, OHIO 43026

DRAWN BY:	JLE
DATE:	11/5/10
SPEC #:	
SCALE:	NTS
SHEET:	1 OF 1

NO.	REVISION & DATE

PROJECT:

MAJOR SITE PLANS FOR
GENERAL RV OCALA - PHASE IV
13150 SW 16TH AVE (CR 475-A), MARION COUNTY, FL

PREPARED FOR:

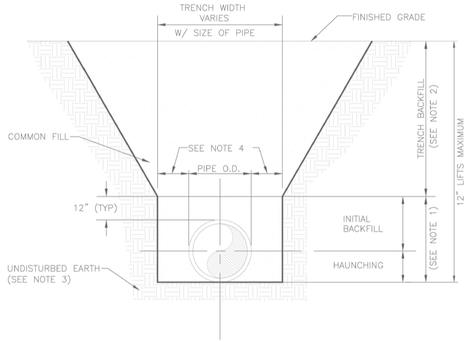
SHEET TITLE:

DRAINAGE DETAILS

MCNEAL ENGINEERING, INC.
15957 N. FLORIDA AVE, LUTZ, FL 33549
PH. (813) 968-1081 FAX (813) 961-5839
CERTIFICATE OF AUTHORIZATION #08975

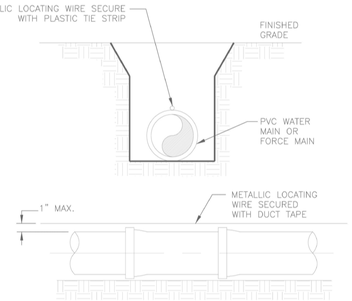
JOB NO.	21-116
ACAD FILE:	FCP
DRAWN BY:	MGF
CHK'D BY:	CSM
DATE:	24.01.11
SHEET:	C-14.0

THE DESIGNS AND DRAWINGS CONTAINED HEREON ARE THE COPYRIGHTED PROPERTY OF McNEAL ENGINEERING, INC., AND SHOULD NOT BE DUPLICATED WITHOUT WRITTEN CONSENT OF THE ENGINEER.



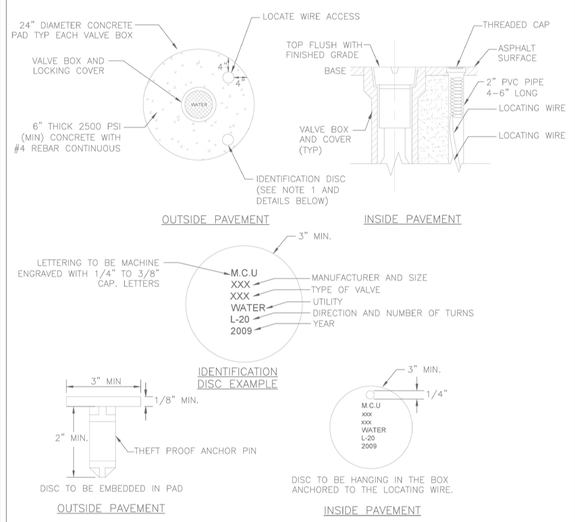
NOTES:
1. INITIAL BACKFILL AND HAUNCHING: SELECT COMMON FILL COMPACTED TO 95% (98% UNDER PAVEMENT) OF THE MAXIMUM DENSITY AS PER AASHTO T-180.
2. TRENCH BACKFILL: COMMON FILL COMPACTED TO 95% (98% UNDER PAVEMENT) OF THE MAXIMUM DENSITY AS PER AASHTO T-180.
3. PIPE BEDDING UTILIZING SELECT COMMON FILL OR BEDDING ROCK IN ACCORDANCE WITH TYPE A BEDDING AND TRENCHING DETAIL MAY BE REQUIRED AS DIRECTED BY UTILITIES.
4. 15" MAX. (12" MIN.) FOR PIPE DIAMETER LESS THAN 24" AND 24" MAX (12" MIN) FOR PIPE DIAMETER 24" AND LARGER.
5. WATER SHALL NOT BE PERMITTED IN THE TRENCH DURING CONSTRUCTION.
6. ALL PIPE TO BE INSTALLED WITH BELL FACING UPSTREAM TO THE DIRECTION OF THE FLOW.
7. FINAL RESTORATION IN IMPROVED AREAS SHALL BE IN COMPLIANCE WITH ALL APPLICABLE REGULATIONS OF GOVERNING AGENCIES. SURFACE RESTORATION WITHIN MARION COUNTY RIGHT-OF-WAY SHALL COMPLY WITH REQUIREMENTS OF RIGHT-OF-WAY UTILIZATION REGULATIONS AND ROAD CONSTRUCTION SPECIFICATIONS.

Marion County FLORIDA UTILITIES	MCBCC EFFECTIVE 10/12/2013	TYPE "B" BEDDING AND TRENCHING	7.3.2 UT 103
	REVISION # NA		



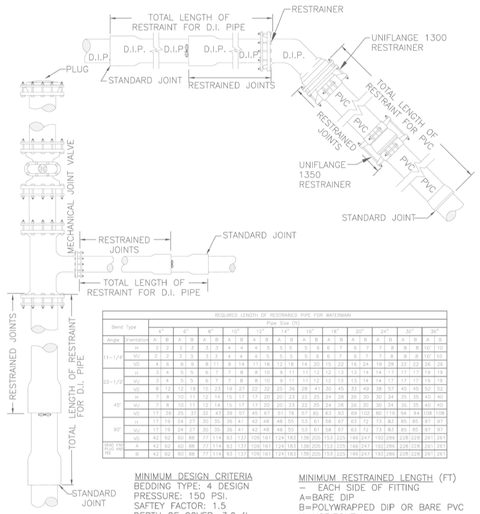
NOTES:
1. PVC PIPE SHALL REQUIRE INSULATED METALLIC LOCATING WIRE (14 GAUGE COPPER) CAPABLE OF
2. DETECTION BY A CABLE LOCATOR AND SHALL BE BURIED DIRECTLY ABOVE THE CENTERLINE OF THE PIPE.
3. LOCATING WIRE SHALL TERMINATE AT EACH VALVE BOX AND BE CAPABLE OF EXTENDING 12" ABOVE TOP OF BOX IN SUCH A MANNER SO AS NOT TO INTERFERE WITH VALVE OPERATION.
4. USE DUCT TAPE AS NECESSARY TO HOLD WIRE DIRECTLY ON THE TOP OF THE PIPE.
5. ALL WIRE CONNECTIONS IN VALVE BOXES SHALL BE SPLICED TOGETHER AND TAPED.
6. FOR HORIZONTAL DIRECTIONAL DRILLING, UTILIZE 2 LOCATING WIRES WITH ALUMINUM TENSILE STRENGTH OF 1800 PSI.

Marion County FLORIDA UTILITIES	MCBCC EFFECTIVE 10/12/2013	PIPE LOCATING WIRE	7.3.2 UT 104
	REVISION # NA		



NOTES:
1. BRONZE (OR STAINLESS STEEL) IDENTIFICATION DISC SHALL BE REQUIRED FOR ALL VALVES, EXCEPT HYDRANT VALVES.

Marion County FLORIDA UTILITIES	MCBCC EFFECTIVE 10/12/2013	VALVE BOX PAD	7.3.2 UT 112
	REVISION # NA		



REQUIRED LENGTH OF RESTRAINED PIPE FOR WATERMAIN

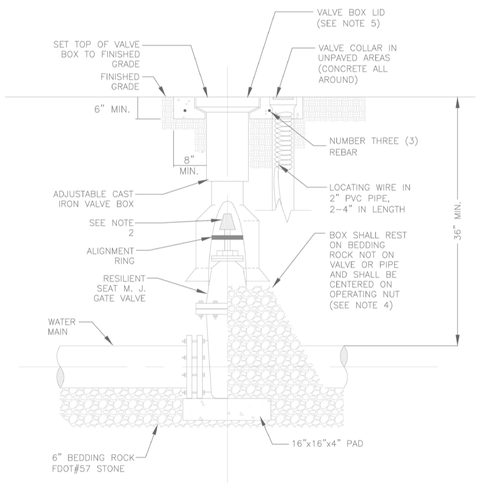
Bend Type		Pipe Size (in)																			
		4"		6"		8"		10"		12"		14"		16"		20"		24"		30"	
Angle	Fitting	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B
11-1/4°	H	2	2	2	3	3	3	4	4	4	5	5	5	5	6	6	7	7	8	8	10
	VD	3	4	4	5	5	6	6	8	8	9	9	11	11	12	14	15	17	18	21	23
	VU	4	6	6	9	8	11	9	14	11	16	13	18	14	20	18	22	22	26	28	34
22-1/2°	H	3	4	4	5	5	7	7	8	8	10	9	11	11	12	13	15	16	17	19	21
	VD	5	7	8	10	10	13	12	16	15	19	17	22	20	25	26	30	32	35	39	43
	VU	8	12	12	18	15	23	19	27	22	32	25	36	28	41	35	45	45	55	52	68
45°	H	5	7	8	10	11	13	15	17	20	23	23	25	28	29	33	34	39	40	47	49
	VD	7	8	10	11	13	14	15	17	17	20	20	21	22	25	24	28	26	30	34	35
	VU	17	18	24	27	30	43	39	55	45	65	51	75	57	85	69	93	90	114	108	142
60°	H	7	9	11	13	15	17	20	22	26	30	30	33	37	39	44	46	52	54	63	66
	VD	10	11	14	17	20	23	25	29	30	36	37	43	45	51	53	61	64	73	85	93
	VU	37	39	54	61	77	107	98	141	119	175	140	210	163	244	203	273	270	342	327	429
90°	H	10	13	16	19	22	26	30	34	39	45	45	50	56	59	66	69	78	81	95	99
	VD	14	16	21	25	30	35	38	44	45	54	56	64	68	76	80	92	96	110	128	140
	VU	62	65	90	102	129	179	163	235	199	292	234	351	272	407	339	456	450	570	545	715
BW 16"	A	42	62	60	88	77	114	93	132	109	151	124	170	139	189	155	208	186	228	217	247
BF 16"	B	42	62	60	88	77	114	93	132	109	151	124	170	139	189	155	208	186	228	217	247

MINIMUM DESIGN CRITERIA
BEDDING TYPE: 4 DESIGN
PRESSURE: 150 PSI.
SAFTEY FACTOR: 1.5
DEPTH OF COVER: 3.0 ft.
SOIL: SAND-SILT

MINIMUM RESTRAINED LENGTH (FT)
- EACH SIDE OF FITTING
A=BARE DIP
B=POLYWRAPPED DIP OR BARE PVC
H=HORIZONTAL
VU=VERTICAL-UP
VD=VERTICAL-DOWN

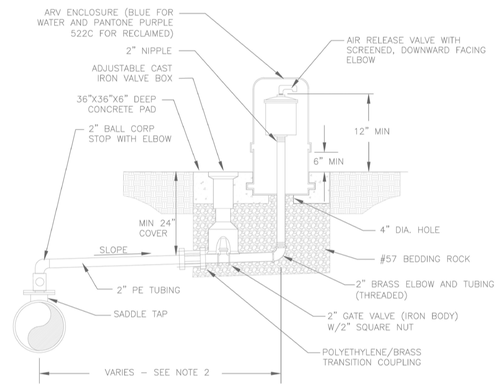
NOTES:
1. FOR LENGTH OF PIPE AND NUMBER OF JOINTS TO BE RESTRAINED
2. SEE TABLE.
3. ONLY DUCTILE IRON FITTINGS SHALL BE USED AT JOINTS TO BE RESTRAINED UNLESS OTHERWISE SPECIFIED BY THE COUNTY.
4. IN LINE VALVES TO BE RESTRAINED BOTH WAYS.

Marion County FLORIDA UTILITIES	MCBCC EFFECTIVE 10/12/2013	RESTRAINED PIPE TABLE WATER AND RECLAIMED MAINS	7.3.2 UT 200
	REVISION # NA		



NOTES:
1. PVC EXTENSIONS SHALL NOT BE USED ON VALVE BOX INSTALLATION.
2. THE ACTUATING NUT FOR DEEPER VALVES SHALL BE EXTENDED TO COME UP TO 4 FOOT DEPTH BELOW FINISHED GRADE.
3. GATE VALVES SHALL BE USED WITH ALL WATER MAINS UP TO TWELVE (12) INCHES, BUTTERFLY VALVES SHALL BE USED FOR ALL LARGER SIZES.
4. WHEN VALVE BOX IS TO BE INSTALLED IN ROADWAY OR OTHER TRAFFIC AREAS SET VALVE BOX ON FIVE (5) SOLID COMMON BRICKS.
5. VALVE BOX LID TO BE LETTERED WITH THE WORD "WATER" OR "RECLAIMED".
6. INSTALL BRASS ID TAG IN CONCRETE.

Marion County FLORIDA UTILITIES	MCBCC EFFECTIVE 10/12/2013	GATE VALVE WATER AND RECLAIMED MAINS	7.3.2 UT 204
	REVISION # NA		



NOTES:
1. FOR WATER OR RECLAIMED USE ONLY.
2. OFFSET DISTANCE TO BE FIELD DETERMINED AND AS CLOSE TO THE RIGHT OF WAY AS POSSIBLE.
3. ADJUST HORIZONTAL POSITION OF SIDEWALK, AS REQUIRED TO AVOID AR ENCLOSURE.
4. LOCATE ARV ENCLOSURE WITHIN 6" OF RIGHT OF WAY

Marion County FLORIDA UTILITIES	MCBCC EFFECTIVE 10/12/2013	AIR RELEASE VALVE	7.3.2 UT 206
	REVISION # NA		

NO.	REVISION & DATE

PROJECT:
GENERAL RV OCALA - PHASE IV
13150 SW 16TH AVE (CR 475-A), MARION COUNTY, FL

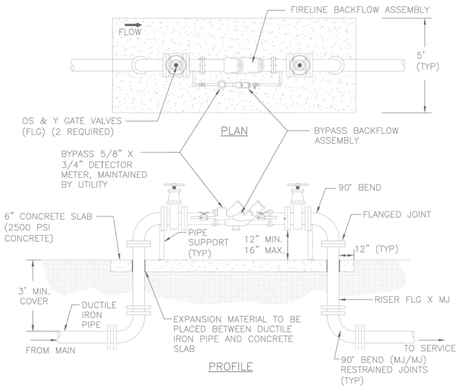
PREPARED FOR:

SHEET TITLE:
WATER DETAILS (SHEET 1 OF 2)

McNEAL ENGINEERING, INC.
15957 N. FLORIDA AVE, LUTZ, FL 33549
PH. (813) 968-1081 FAX (813) 961-5839
CERTIFICATE OF AUTHORIZATION #08975

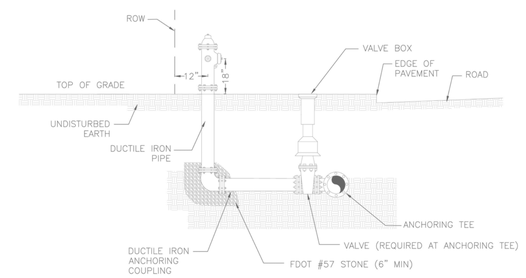
JOB NO.	21-116
ACAD FILE:	FCP
DRAWN BY:	MGF
CHK'D BY:	CSM
DATE:	24.01.11
SHEET:	C-15.1

THE DESIGNS AND DRAWINGS CONTAINED HEREON ARE THE COPYRIGHTED PROPERTY OF McNEAL ENGINEERING, INC., AND SHOULD NOT BE DUPLICATED WITH WRITTEN CONSENT OF THE ENGINEER.



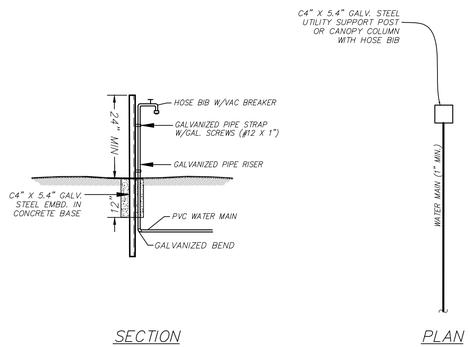
NOTES:
1. REQUIRED FOR SITES WITH SEPARATE DOMESTIC AND FIRE SYSTEM SUPPLY PIPING.
2. BACKFLOW ASSEMBLY SHALL BE OWNED AND MAINTAINED BY THE PROPERTY OWNER.
3. UTILITIES SHALL OWN AND MAINTAIN THE METER.
4. UTILITY EASEMENT REQUIRED FOR BY-PASS METER READING. MINIMUM EASEMENT SIZE IS 10 FEET BY 15 FEET.
5. DETAIL NOT APPLICABLE WHEN AN RPZ IS REQUIRED IN ACCORDANCE WITH THE BACKFLOW PREVENTION MANUAL.
6. SERVICES 4-INCH AND LARGER SHALL BE DIP FROM THE POINT OF CONNECTION AT THE MAIN TO THE METER ASSEMBLY IF THE MAIN IS ON THE SAME SIDE OF THE STREET AS TH ASSEMBLY. IF THE MAIN IS ON THE OPPOSITE SIDE OF THE STREET AS THE ASSEMBLY, A
7. MINIMUM OF ONE SEGMENT OF PIPE IMMEDIATELY UPSTREAM FROM THE METER ASSEMBLY SHALL BE DIP.
8. ALL FLANGES, PIPE, VALVES AND APPURTENANCES SHALL HAVE 316 S.S. HARDWARE.

Marion County FLORIDA UTILITIES	MCBCC EFFECTIVE 10/12/2013	DOUBLE DETECTOR CHECK VALVE ASSEMBLY	7.3.2
	REVISION # NA		UT 208



NOTES:
1. BONNET COLORS: TO BE DETERMINED BY FLOW TEST.
2. HYDRANT SHALL BE 1' INSIDE OF ROW, WHEN POSSIBLE

Marion County FLORIDA UTILITIES	MCBCC EFFECTIVE 10/12/2013	FIRE HYDRANT ASSEMBLY	7.3.2
	REVISION # NA		UT 210



HOSE BIB DETAIL

N.T.S.

NO. | REVISION & DATE

PROJECT:
GENERAL RV OCALA - PHASE IV
13150 SW 16TH AVE (CR 475-A), MARION COUNTY, FL

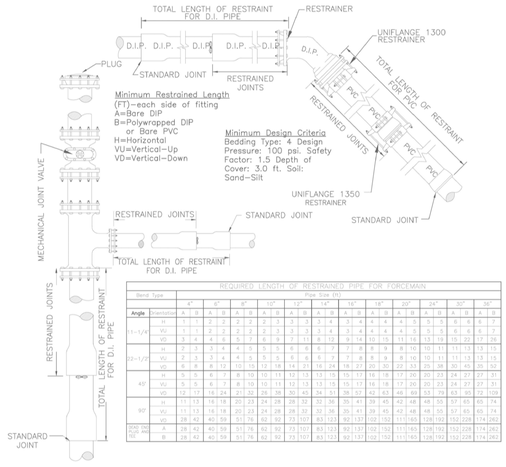
PREPARED FOR:

SHEET TITLE:
WATER DETAILS (SHEET 2 OF 2)

McNEAL ENGINEERING, INC.
15957 N. FLORIDA AVE, LUTZ, FL 33549
PH. (813) 968-1081 FAX (813) 961-5839
CERTIFICATE OF AUTHORIZATION #08975

JOB NO.	21-116
ACAD FILE:	FCP
DRAWN BY:	MGF
CHK'D BY:	CSM
DATE:	24.01.11
SHEET:	C-15.2

THE DESIGNS AND DRAWINGS CONTAINED HEREON ARE THE COPYRIGHTED PROPERTY OF McNEAL ENGINEERING, INC., AND SHOULD NOT BE DUPLICATED WITHOUT WRITTEN CONSENT OF THE ENGINEER.



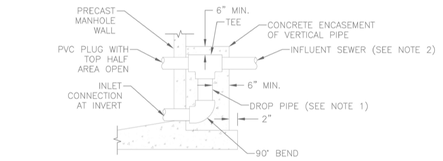
REQUIRED LENGTH OF RESTRAINED PIPE FOR FORCEMAIN

Bend Type		Pipe Size (in)																	
		4"		6"		8"		10"		12"		14"		16"		18"		20"	
Angle	Elevation	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B
11-1/4°	H	1	1	2	2	2	2	3	3	3	3	4	3	4	4	4	4	5	5
	VU	1	1	2	2	2	2	3	3	3	3	4	3	4	4	4	4	5	5
	VD	1	3	4	4	5	5	7	6	8	7	11	8	10	9	14	10	15	11
22-1/2°	H	2	3	3	4	4	5	5	6	6	6	7	7	8	8	9	9	10	10
	VU	2	3	3	4	4	5	5	6	6	6	7	7	8	8	9	9	10	10
	VD	6	8	8	12	10	15	12	18	14	21	16	24	18	27	20	30	22	33
45°	H	5	5	6	7	8	10	10	11	12	13	13	15	15	17	16	18	17	20
	VU	5	5	6	7	8	10	10	11	12	13	13	15	15	17	16	18	17	20
	VD	12	17	18	24	21	32	26	36	30	45	34	51	38	57	43	63	46	69
90°	H	11	13	16	18	20	23	24	28	28	32	32	36	35	41	39	45	42	48
	VU	11	13	16	18	20	23	24	28	28	32	32	36	35	41	39	45	42	48
	VD	28	42	40	59	51	76	62	92	73	107	83	123	92	137	102	152	111	165
ADD ON FOR ANY TEE	A	28	42	40	59	51	76	62	92	73	107	83	123	92	137	102	152	111	165
	B	28	42	40	59	51	76	62	92	73	107	83	123	92	137	102	152	111	165

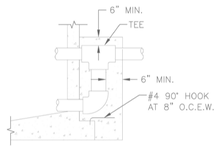
Bend Type		Pipe Size (in)																	
		22"		24"		30"		36"		42"		48"		54"		60"		64"	
Angle	Elevation	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B
11-1/4°	H	5	6	6	6	7	8	8	9	9	10	10	11	11	12	12	13	13	14
	VU	5	6	6	6	7	8	8	9	9	10	10	11	11	12	12	13	13	14
	VD	17	16	18	17	20	20	23	24	27	27	31	31	34	35	37	39	41	43
22-1/2°	H	10	10	11	11	13	13	15	15	17	17	19	19	21	21	23	24	25	26
	VU	10	10	11	11	13	13	15	15	17	17	19	19	21	21	23	24	25	26
	VD	24	33	26	36	32	45	38	54	45	63	51	72	57	81	63	90	69	97
45°	H	20	21	24	24	27	27	31	31	35	35	39	39	43	44	47	48	51	52
	VU	20	21	24	24	27	27	31	31	35	35	39	39	43	44	47	48	51	52
	VD	49	69	53	75	65	92	78	110	92	129	105	147	117	165	128	180	140	197
90°	H	45	48	48	55	57	65	65	74	74	83	83	92	92	101	101	110	110	119
	VU	45	48	48	55	57	65	65	74	74	83	83	92	92	101	101	110	110	119
	VD	117	165	128	192	152	228	174	262	197	296	220	330	243	364	265	398	288	432
ADD ON FOR ANY TEE	A	117	165	128	192	152	228	174	262	197	296	220	330	243	364	265	398	288	432
	B	117	165	128	192	152	228	174	262	197	296	220	330	243	364	265	398	288	432

NOTES:
1. FITTINGS SHALL HAVE RESTRAINED JOINTS UNLESS OTHERWISE INDICATED.
2. INSTALL FULL LENGTH JOINTS WITH TOTAL LENGTH EQUAL TO OR GREATER THAN LENGTH SHOWN IN THE TABLE.
3. WHERE TWO OR MORE FITTINGS ARE IN SERIES, SELECT FITTING RESTRAINT LENGTH THAT YIELDS THE LONGEST RESTRAINT DISTANCE.
4. ALL INLINE VALVES SHALL BE RESTRAINED.
5. WHERE INTERNAL RESTRAINED JOINTS ARE USED, THE ENTIRE BELL SHALL BE PAINTED RED.
6. LENGTHS SHOWN IN THE TABLE WERE CALCULATED IN ACCORDANCE WITH PROCEDURES OUTLINED IN "THRUST RESTRAINT DESIGN FOR DUCTILE IRON PIPE" GUIDELINES PUBLISHED BY DIPRA,
7. THE DESIGN ENGINEER SHALL INCREASE THE VALUES IN THE TABLE AS WARRANTED BY SITE-SPECIFIC PARAMETERS, SUCH AS SOIL DESIGNATIONS AND LAYING CONDITIONS.
8. FOR LENGTH OF PIPE AND NUMBER OF JOINTS TO BE RESTRAINED SEE TABLE BELOW RIGHT.
9. ONLY DUCTILE IRON FITTINGS SHALL BE USED AT JOINTS TO BE RESTRAINED UNLESS OTHERWISE SPECIFIED BY THE COUNTY.

Marion County FLORIDA UTILITIES | MCBCC EFFECTIVE 10/12/2013 | REVISION # NA | RESTRAINED PIPE TABLE WASTEWATER FORCE MAINS | 7.3.2 UT 300



GRAVITY OUTSIDE DROP CONNECTION (NEW MANHOLE)



GRAVITY OUTSIDE DROP CONNECTION (EXISTING MANHOLE)

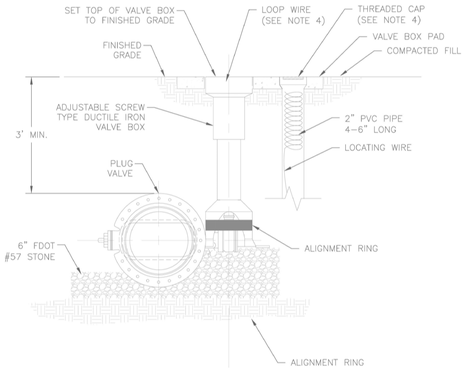


NEW AND EXISTING MANHOLES | NEW MANHOLES ONLY

STANDARD CONNECTION

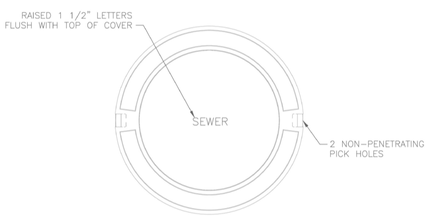
NOTES:
1. DROP PIPE AND FITTINGS SHALL BE OF EQUAL SIZE AND MATERIAL AS THE INFLUENT SEWER.
2. AN OUTSIDE DROP CONNECTION SHALL BE REQUIRED FOR ALL INFLUENT LINES WHICH HAVE AN INVERT 2' OR MORE ABOVE THE MANHOLE INVERT.
3. CONTRACTOR TO COORDINATE THE PRESENCE OF UTILITIES INSPECTOR DURING CORING AND CONNECTIONS TO EXISTING MANHOLES.
4. POUR NEW BENCH FOR CONNECTION.

Marion County FLORIDA UTILITIES | MCBCC EFFECTIVE 10/12/2013 | REVISION # NA | GRAVITY MANHOLE CONNECTION | 7.3.2 UT 303

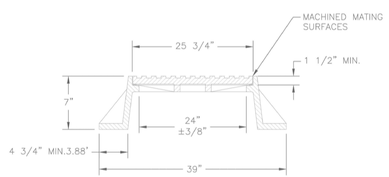


NOTES:
1. PVC PIPE EXTENSIONS SHALL BE USED ON VALVE BOX INSTALLATION.
2. THE VALVE ACTUATING NUT SHALL BE EXTENDED TO BE WITHIN 3' OF FINISHED GRADE.
3. PROVIDE A PLASTIC DEBRIS SHIELD / ALIGNMENT RING WHICH INSTALLS BELOW THE VALVE ACTUATING NUT. THIS SHIELD SHALL CENTER THE RISER PIPE BOX OVER THE ACTUATING NUT AND MINIMIZE INFILTRATION.
4. LOCATING WIRE SHALL BE CONTINUOUS WITH NO SPLICES AND SHALL EXTEND 12" ABOVE TOP OF COLLAR. WIRE SHALL BE COLOR CODED TO MATCH THE UTILITY INSTALLED.
5. FOR NEW CONSTRUCTION, THE VALVE BOX SHALL BE ADJUSTED TO MIDRANGE TO ALLOW FOR FUTURE
6. BOX ADJUSTMENTS.
7. REFER TO FIGURE A111 FOR INSTALLATIONS AT A DEPTH OF 6' OR GREATER.

Marion County FLORIDA UTILITIES | MCBCC EFFECTIVE 10/12/2013 | REVISION # NA | PLUG VALVE AND BOX | 7.3.2 UT 304

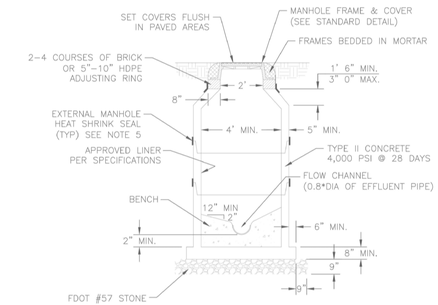


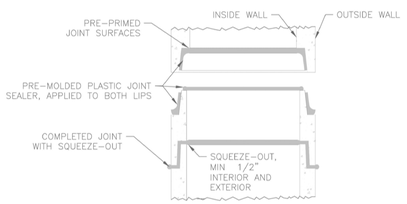
PLAN



ELEVATION

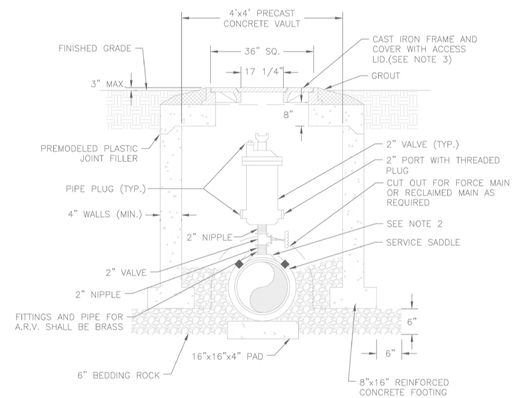
Marion County FLORIDA UTILITIES | MCBCC EFFECTIVE 10/12/2013 | REVISION # NA | STANDARD SEWER MANHOLE FRAME AND COVER | 7.3.2 UT 305





NOTES:
1. DROP CONNECTIONS ARE REQUIRED WHENEVER INVERT OF INFLUENT SEWER IS 24" OR MORE ABOVE THE INVERT OF THE MANHOLE. SEE MANHOLE CONNECTION DETAIL.
2. ECCENTRIC CONE DESIGN MAY BE USED FOR CONFLICT RESOLUTION WITH MCU APPROVAL.
3. A FLOW CHANNEL SHALL BE CONSTRUCTED INSIDE MANHOLE TO DIRECT INFLUENT INTO FLOW STREAM.
4. LIFT HOLES THROUGH STRUCTURE ARE NOT PERMITTED.
5. WRAP TIGHTLY AROUND CASTING JOINTS AND APPLY HIGH INTENSITY PROPANE TORCH TO EFFECTIVELY SEAL THEM FROM GROUND WATER INFILTRATION.
6. HDPE ADJUSTING RINGS MAY BE SUBSTITUTED FOR BRICK RISERS.
7. SECTION HEIGHTS VARY AS REQUIRED, AND AS AVAILABLE, FROM APPROVED MANUFACTURERS LISTED IN APPENDIX D.

Marion County FLORIDA UTILITIES | MCBCC EFFECTIVE 10/12/2013 | REVISION # NA | PRECAST CONCRETE MANHOLE | 7.3.2 UT 306



NOTES:
1. ABOVE DETAIL IS BASED ON 2" COMBINATION AIR/VACUUM RELEASE VALVE. CHANGE PIPE AND FITTINGS ACCORDINGLY FOR OTHER VALVE SIZES AND TYPES. VALVE SIZES TO BE DETERMINED BY THE ENGINEER AND APPROVED BY THE COUNTY PRIOR TO INSTALLATION.
2. THE MINIMUM DIMENSION FROM TOP OF PIPE TO FINISHED GRADE SHALL BE 3.0 FEET LID TO BE LETTERED WITH THE APPROPRIATE WORD "SEWER" OR "RECLAIMED".

Marion County FLORIDA UTILITIES | MCBCC EFFECTIVE 10/12/2013 | REVISION # NA | AIR RELEASE VALVE SEWER AND RECLAIMED | 7.3.2 UT 307

NO.	REVISION & DATE

PROJECT:
GENERAL RV OCALA - PHASE IV
13150 SW 16TH AVE (CR 475-A), MARION COUNTY, FL

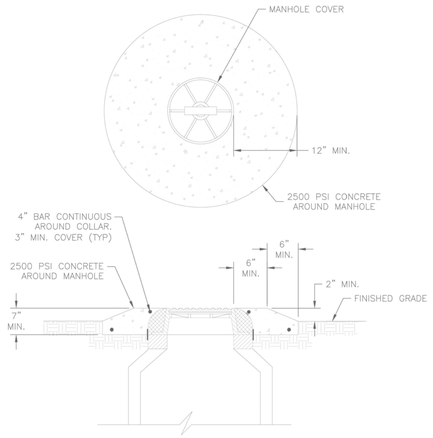
PREPARED FOR:

SHEET TITLE:
SEWER DETAILS (SHEET 1 OF 2)

MCNEAL ENGINEERING, INC.
15957 N. FLORIDA AVE, LUTZ, FL 33549
PH. (813) 968-1081 FAX (813) 961-5839
CERTIFICATE OF AUTHORIZATION #08975

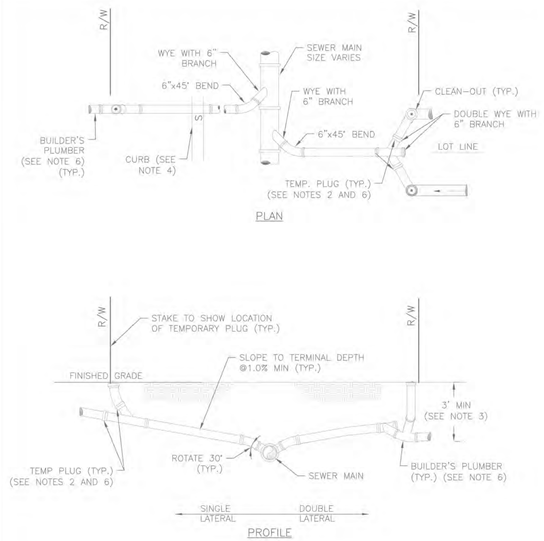
JOB NO.	21-116
ACAD FILE:	FCP
DRAWN BY:	MGF
CHK'D BY:	CSM
DATE:	24.01.11
SHEET:	C-16.1

THE DESIGNS AND DRAWINGS CONTAINED HEREON ARE THE COPYRIGHTED PROPERTY OF McNEAL ENGINEERING, INC., AND SHOULD NOT BE DUPLICATED WITHOUT WRITTEN CONSENT OF THE ENGINEER.



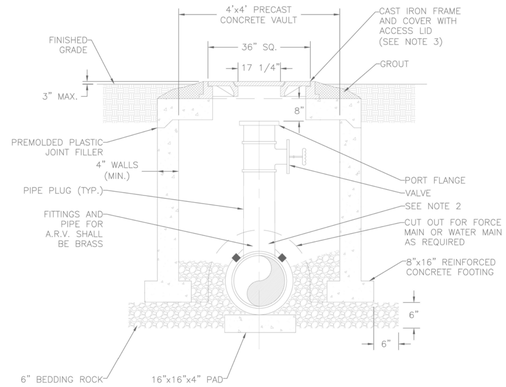
NOTES:
1. CLEARANCE OF 30" FREE FROM OBSTRUCTIONS IN ALL DIRECTIONS.
2. AREAS SUPPORTING CONCRETE COLLAR OR SLAB SHALL BE PROPERLY COMPACTED.
3. TOP OF MANHOLE SHALL BE 2" ABOVE FINISHED GRADE, CROWN OF ADJACENT ROADWAY, OR 100 YEAR FLOOD ELEVATION, WHICHEVER IS GREATER.

Marion County FLORIDA UTILITIES	MCBCC EFFECTIVE 10/12/2013	MANHOLE IN NON-PAVED AREA	7.3.2 UT 309
	REVISION # NA		



NOTES:
1. INVERT OF SERVICE LATERAL SHALL NOT ENTER SEWER MAIN BELOW SPRING LINE.
2. SERVICE LATERAL SHALL BE CAPPED BY DEVELOPER'S SITE-WORK CONTRACTOR.
3. WYE TO BE NO SHALLOWER THAN 3-FEET AND NO DEEPER THAN 5-FEET.
4. ALL FITTINGS SHOWN ARE TO BE INSTALLED.
5. SERVICE CONNECTIONS SHALL BE PERMANENTLY MARKED BY CUTTING AN "S" IN THE CURB DIRECTLY OVER THE LATERAL.
6. BUILDER'S PLUMBER WILL REMOVE PLUG, INSTALL CLEANOUT, AND CONNECT SERVICE LATERAL TO HOUSE.

Marion County FLORIDA UTILITIES	MCBCC EFFECTIVE 10/12/2013	SEWER SERVICE LATERAL	7.3.2 UT 312
	REVISION # NA		



NOTES:
1. ABOVE DETAIL IS BASED ON 2" COMBINATION AIR/VACUUM.
2. RELEASE VALVE, CHANGE PIPE AND FITTINGS ACCORDINGLY FOR OTHER VALVE SIZES AND TYPES. VALVE SIZES TO BE DETERMINED BY THE ENGINEER AND APPROVED BY THE COUNTY PRIOR TO INSTALLATION. THE MINIMUM DIMENSION FROM TOP OF PIPE TO FINISHED.
3. GRADE SHALL BE 3.0 FEET LID TO BE LETTERED WITH THE APPROPRIATE WORD "WATER" OR "SEWER".

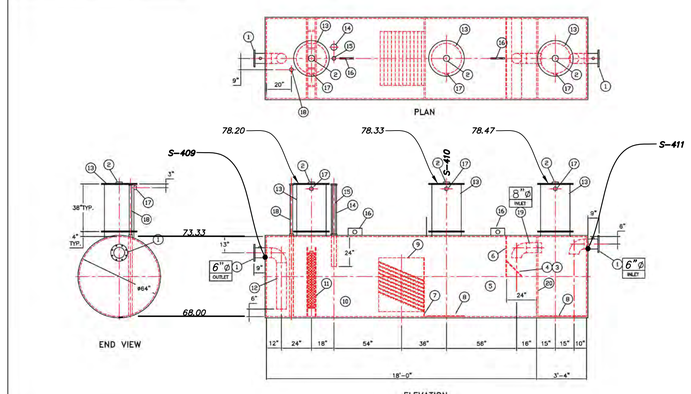
Marion County FLORIDA UTILITIES	MCBCC EFFECTIVE 10/12/2013	PIG PORT	7.3.2 UT 313
	REVISION # NA		

GENERAL SPECIFICATIONS
NO. REQ'D: (1)
CAPACITY: 3000 GALLONS
TYPE: HTC-G, HIGHGUARD, DOUBLE WALL
MATERIAL: MILD CARBON STEEL
FLOW RATE: 300 GPM
GAUGE: BASED ON 60" MAX BURIAL
INNER OUTER
SHELL- 7 GA. 10 GA.
HEADS- 7 GA. 10 GA.
SURFACE PREP:
SSPC NO.6 BLAST ALL EXTERIOR SURFACES
COATING- MATERIAL THICKNESS
EXTERIOR- HIGHGUARD (75 MILS)
INTERIOR- NONE
CONSTRUCTION :
LAP FIT & WELD ALL EXTERIOR SEAMS
OPERATING PRESSURE : ATMOSPHERIC

NOTES:
1. TANK TO BE H20 TRAFFIC RATED AND TO INCLUDE CONCRETE TOP PER MANUFACTURER SPECIFICATIONS.
2. VENT PIPE AND ALARM TO BE INCLUDED AND INSTALLED IN ACCORDANCE WITH MANUFACTURERS SPECIFICATIONS.
3. SHOP DRAWINGS DEPICTING PROPOSED VENT PIPING AND ALARM LOCATION TO BE SUBMITTED TO ENGINEER FOR APPROVAL PRIOR TO ORDERING OR INSTALLATION OF TANK.

PROVIDED EQUIPMENT
1. 150# R.F.S.O. FLANGE W/ 2" FNPT FOR VENT
2. 4"ø FNPT FOR GAUGE WITH PLUG
3. VELOCITY HEAD DIFFUSION BAFFLE
4. WEAR PLATE
5. SEDIMENT CHAMBER
6. UNDERFLOW BAFFLE (REMOVABLE)
7. SLUDGE BAFFLE
8. STRIKER PLATES
9. PARALLEL CORRUGATED PLATE COALESCER: CORELLA PVC PLATES (3" PLATE SPACING)
10. OIL/WATER SEPARATOR CHAMBER
11. 6" THICK PETROSCREEN COALESCER MATERIAL INSTALLED W/ PULL ROD SHIPPED LOOSE
12. STEEL OUTLET DOWNCOMER
13. 24"ø MANWAY WITH NEO-CORK GASKETS. BOLT-ON EXTENSION & BOLT-ON LOCK
14. 4"ø FNPT FOR OIL PUMP-OUT WITH INTERNAL PVC PIPE INSTALLED & RISER PIPE SHIPPED LOOSE
15. 2"ø FNPT FOR LEVEL SENSOR WITH RISER PIPE SHIPPED LOOSE
16. LIFTING LUG
17. 2"ø FNPT FOR VENT
18. 2"ø FNPT FOR LEAK SENSOR WITH RISER PIPE SHIPPED LOOSE
19. STEEL TRANSFER PIPING
20. 7 GA. BULKHEAD
21. SLUDGE CHAMBER

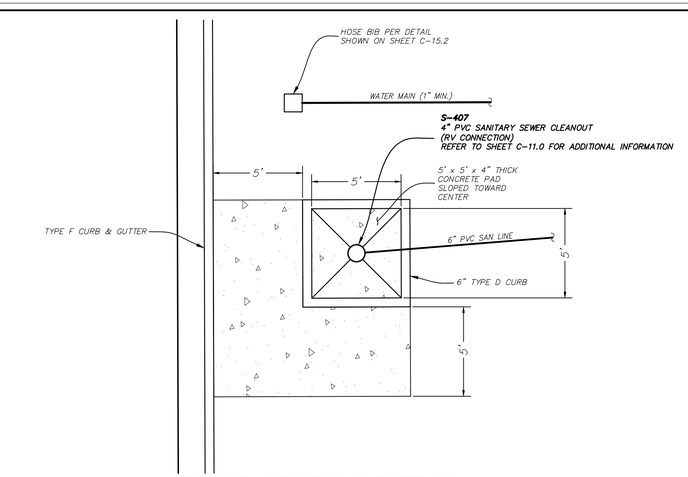
NOTES
1. POLYURETHANE HIGHGUARD TANK IS NOT APPROVED FOR THE STORAGE OF HEATED PRODUCTS
2. ALL VENT PIPING BY INSTALLER
3. 15000 VOLT SPARK TEST PROVIDED AT FACTORY



REVISIONS
Highland Tank
U.S. Patent #4,722,800 Canadian Patent # 1,296,263
3000 GALLON OIL WATER SEPARATOR
HTC-G, HIGHGUARD, DOUBLE WALL
CUSTOMER:
PROJECT:
QUOTE NO:
CHK'D BY:
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: ± DR ± 1"
SCALE: DATE: DWG. BY: DWG. NO.: 03000HGDWHTCG

NOTE:
ALL RIGHTS RESERVED. THIS DRAWING OR ANY PART THEREOF MUST NOT BE REPRODUCED IN ANY FORM WITHOUT THE WRITTEN PERMISSION OF HIGHLAND TANK.
HIGHLAND TANK SHALL BE RESPONSIBLE ONLY FOR ITEMS INDICATED ON THIS FABRICATION DRAWING UNLESS OTHERWISE NOTED. CUSTOMER IS RESPONSIBLE FOR VERIFYING CORRECTNESS OF SIZE / LOCATION OF FITTINGS , ACCESSORIES & COATINGS SHOWN ON THIS DRAWING

3,000 GAL OIL/WATER SEPARATOR DETAIL
N.T.S.



DUMP STATION DETAIL
N.T.S.

NO.	REVISION & DATE

PROJECT:
MAJOR SITE PLANS FOR
GENERAL RV OCALA - PHASE IV
13150 SW 16TH AVE (CR 475-A), MARION COUNTY, FL

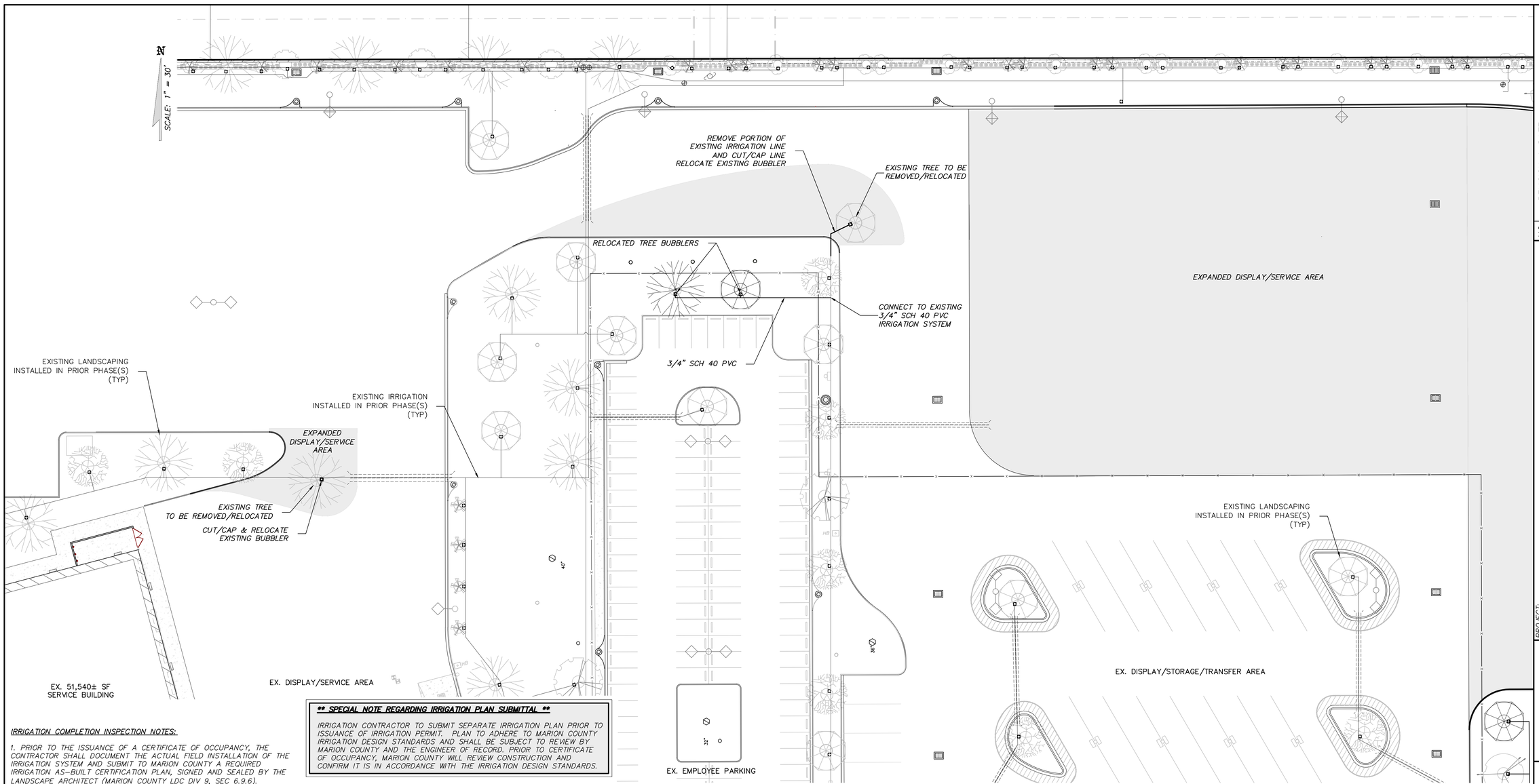
PREPARED FOR:
D.

SHEET TITLE:
SEWER DETAILS (SHEET 2 OF 2)

McNEAL ENGINEERING, INC.
15957 N. FLORIDA AVE, LUTZ, FL 33549
PH. (813) 968-1081 FAX (813) 961-5839
CERTIFICATE OF AUTHORIZATION #08975

JOB NO.	21-116
ACAD FILE:	FCP
DRAWN BY:	MGF
CHK'D BY:	CSM
DATE:	24.01.11
SHEET:	C-16.2

THE DESIGNS AND DRAWINGS CONTAINED HEREON ARE THE COPYRIGHTED PROPERTY OF McNEAL ENGINEERING, INC., AND SHOULD NOT BE DUPLICATED WITHOUT WRITTEN CONSENT OF THE ENGINEER.



***** SPECIAL NOTE REGARDING IRRIGATION PLAN SUBMITTAL *****

IRRIGATION CONTRACTOR TO SUBMIT SEPARATE IRRIGATION PLAN PRIOR TO ISSUANCE OF IRRIGATION PERMIT. PLAN TO ADHERE TO MARION COUNTY IRRIGATION DESIGN STANDARDS AND SHALL BE SUBJECT TO REVIEW BY MARION COUNTY AND THE ENGINEER OF RECORD. PRIOR TO CERTIFICATE OF OCCUPANCY, MARION COUNTY WILL REVIEW CONSTRUCTION AND CONFIRM IT IS IN ACCORDANCE WITH THE IRRIGATION DESIGN STANDARDS.

IRRIGATION COMPLETION INSPECTION NOTES:

1. PRIOR TO THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY, THE CONTRACTOR SHALL DOCUMENT THE ACTUAL FIELD INSTALLATION OF THE IRRIGATION SYSTEM AND SUBMIT TO MARION COUNTY A REQUIRED IRRIGATION AS-BUILT CERTIFICATION PLAN, SIGNED AND SEALED BY THE LANDSCAPE ARCHITECT (MARION COUNTY LDC DIV 9, SEC 6.9.6).

2. UPON COMPLETION OF THE INSTALLATION, AND AT A MINIMUM OF SEVEN (7) DAYS PRIOR TO FINAL INSPECTION, THE CONTRACTOR SHALL PROVIDE A CLEAR AND LEGIBLE AS-BUILT DIAGRAM THAT ACCURATELY REPRESENTS THE IRRIGATION SYSTEM AS INSTALLED, AND REQUEST AN ON-SITE INSPECTION BY THE LANDSCAPE ARCHITECT.

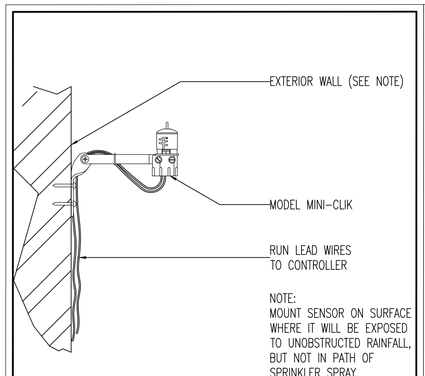
3. WHEN ACCEPTABLE TO THE LANDSCAPE ARCHITECT, THE AS-BUILT PLANS WILL BE APPROVED AND A FINAL INSPECTION AND IRRIGATION RELEASE GRANTED.

THE CONTRACTOR SHALL MARK-UP A COPY OF THE APPROVED IRRIGATION DESIGN PLAN WITH THE FOLLOWING AS-BUILT INFORMATION:

- *LOCATIONS OF MAINLINES AND VALVES*
- *LOCATIONS OF REMOTE CONTROL VALVES*
- *TOTAL WATER DEMAND PER OPERATING CYCLE*
- *CONTROLLER AND SENSOR INITIAL SCHEDULING, SETTINGS, AND SEASONAL ADJUSTMENTS*

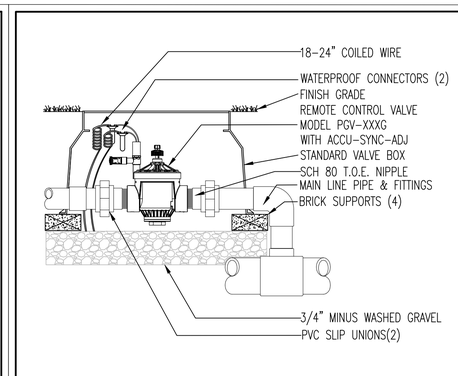
THE CONTRACTOR SHALL PROVIDE CONFIRMATION THAT THE OWNER HAS RECEIVED:

- *IRRIGATION CONTROLLER OWNER'S MANUAL*
- *WRITTEN INSTRUCTIONS COVERING HOW AND WHEN TO CHECK FOR LEAKS*
- *A COPY OF THE APPROVED IRRIGATION AS-BUILT PLA*



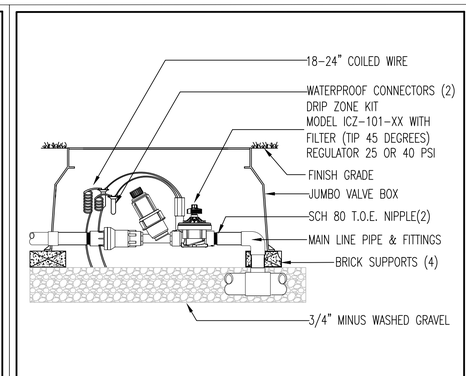
MINI-CLIK

SCALE: NOT TO SCALE — Hunter IRRIGATION DETAIL



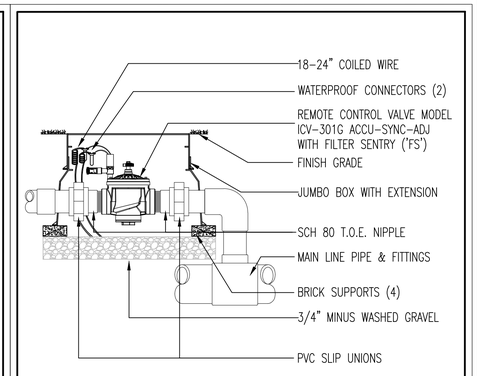
PGV GLOBE VALVE

SCALE: NOT TO SCALE — Hunter IRRIGATION DETAIL



DRIP CONTROL ZONE

SCALE: NOT TO SCALE — Hunter IRRIGATION DETAIL



ICV 3" GLOBE VALVE

SCALE: NOT TO SCALE — Hunter IRRIGATION DETAIL

NO.	REVISION & DATE

MAJOR SITE PLANS FOR
GENERAL RV OCALA - PHASE IV
13150 SW 16TH AVE (CR 475-A), MARION COUNTY, FL

PROJECT:

PREPARED FOR:

SHEET TITLE:
IRRIGATION PLAN (SHEET 1 OF 2)

McNEAL ENGINEERING, INC.
15957 N. FLORIDA AVE, LUTZ, FL 33549
PH. (813) 968-1081 FAX (813) 961-5839
CERTIFICATE OF AUTHORIZATION #08975

JOB NO.	21-116
ACAD FILE:	FCP
DRAWN BY:	MGF
CHK'D BY:	CSM
DATE:	24.01.11
SHEET:	**IR-1.1**

THE DESIGNS AND DRAWINGS CONTAINED HEREON ARE THE COPYRIGHTED PROPERTY OF McNEAL ENGINEERING, INC., AND SHOULD NOT BE DUPLICATED WITHOUT WRITTEN CONSENT OF THE ENGINEER.

EXISTING IRRIGATION INSTALLED IN PRIOR PHASE(S) (TYP)

3/4" SCH 40 PVC

TREE BUBBLER (TYP.)

DISPLAY/SERVICE AREA

DRIP IRRIGATION TUBING (TYP. ALL NEW HEDGE)

1-1/2" SCH 40 PVC

MODIFY EXISTING IRRIGATION SYSTEM AS REQUIRED FOR INSTALLATION OF STORM SEWER AND/OR RETAINING WALL

IRRIGATION SLEEVE (TYP.)

EXISTING LANDSCAPING INSTALLED IN PRIOR PHASE(S) (TYP)

1" SCH 40 PVC

EXPANDED DISPLAY/SERVICE AREA

PHASE IVA

PHASE IVB

28,895± SF*
SERVICE/REPAIR
BUILDING
(PHASE IVB)

22,805± SF*
SERVICE/REPAIR
BUILDING
(PHASE IVA)

CUSTOMER/EMPLOYEE PARKING

SERVICE STAGING AREA/
CUSTOMER RV PARKING

S W 1 6 T H A V E . (C R - 4 7 5 A)

EXISTING IRRIGATION INSTALLED IN PRIOR PHASE(S) (TYP)

DRA

LS

VB

HB

N

SCALE: 1" = 30'

REFER TO SHEETS IR-1.1 FOR IRRIGATION DETAILS AND NOTES

NO.	REVISION & DATE

MAJOR SITE PLANS FOR
GENERAL RV OCALA - PHASE IV
13150 SW 16TH AVE (CR 475-A), MARION COUNTY, FL

PROJECT:

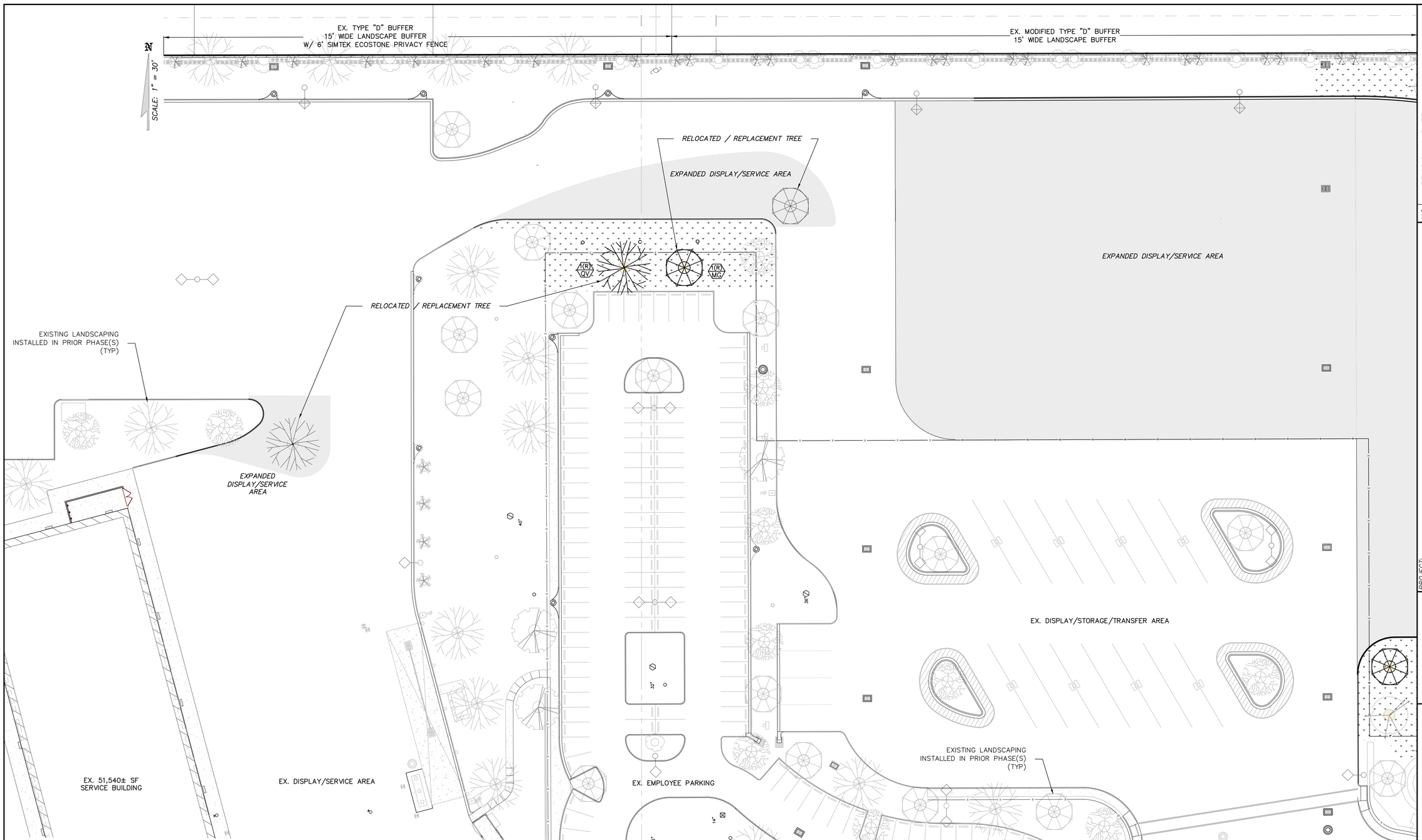
PREPARED FOR:

SHEET TITLE:
IRRIGATION PLAN
(SHEET 2 OF 2)

McNEAL ENGINEERING, INC.
15957 N. FLORIDA AVE, LUTZ, FL 33549
PH. (813) 968-1081 FAX (813) 961-5839
CERTIFICATE OF AUTHORIZATION #28975

JOB NO.	21-116
ACAD FILE:	FCP
DRAWN BY:	MGF
CHK'D BY:	CSM
DATE:	24.01.11
SHEET:	IR-1.2

THE DESIGNS AND DRAWINGS CONTAINED HEREON ARE THE COPYRIGHTED PROPERTY OF McNEAL ENGINEERING, INC., AND SHOULD NOT BE DUPLICATED WITHOUT WRITTEN CONSENT OF THE ENGINEER.



LANDSCAPE LEGEND

- HEDGE (REQUIRED) (HG)
- HEDGE (4' TALL) (HG*)
- HEDGE (OPTIONAL) (HGO)
- SHRUB – TYPE 1 (SH1)
- GROUND COVER (GC1)
- GROUND COVER (GC2)
- GROUND COVER (GCO)
- SHRUB – TYPE 2 (SH2)
- BAHIA SOD
- SEED & MULCH
- MULCH (ALL HEDGE & SHRUB AREAS)
- MULCH (ALL NEW TREES)

LEGEND OF EXISTING TREES TO REMAIN

- 12" EXISTING CAMPHOR TREE
- 12" EXISTING CEDAR TREE
- 12" EXISTING CHERRY LAUREL TREE
- 12" EXISTING CITRUS TREE
- 12" EXISTING OAK TREE
- 12" EXISTING MAGNOLIA TREE
- 12" EXISTING PALM TREE
- 12" EXISTING PINE TREE
- 12" EXISTING UNKNOWN TREE
- TREE DIAMETER — EXISTING TREE TO REMAIN (TYP.) FOR ALL EX. TREE SYMBOLS

REFER TO SHEET L-2.1 FOR SYMBOL IDENTIFICATION OF PROPOSED TREES

REFER TO SHEET C-2.0 FOR BUFFER DESIGNATIONS

REFER TO SHEET L-2.2 FOR LANDSCAPE DATA TABLES

REFER TO SHEET L-2.1 FOR LANDSCAPE PLANTING SCHEDULES

REFER TO SHEETS L-3.1 & L-3.2 FOR LANDSCAPE & BUFFER DETAILS

**** SPECIAL NOTE REGARDING LANDSCAPE PHASE LIMITS ****

LANDSCAPE PHASING SHOWN HEREON IS NOT THE SAME AS THE PROJECT PHASE LIMITS NOTED ON OTHER SHEETS WITHIN THESE PLAN. LANDSCAPE PHASE I INCLUDED ALL BUFFER AREAS ADJACENT TO PROJECT BOUNDARY.

**** SPECIAL NOTE REGARDING VEHICLE OVERHANG & LANDSCAPE BUFFER AREAS ****

AT ANY LOCATION THE DESIGNATED 15' WIDE LANDSCAPE BUFFER AREA IS WITHIN 10 FEET OF THE FACE OF CURB, THE OWNER/OPERATOR SHALL LIMIT VEHICLE OVERHANG. IF NECESSARY, A VERTICAL PERIMETER BARRIER SUCH AS BUMPER BLOCKS, BOLLARDS, DECORATIVE BORDER FENCING, OR SIMILAR, TO ENSURE THAT VEHICLE OVERHANG DOES NOT PROJECT INTO LANDSCAPE BUFFER AREAS MUST BE INSTALLED. THIS APPLIES TO THE 15' WIDE LANDSCAPE BUFFER ALONG THE NORTH AND SOUTH PROPERTY LINES OF THE SUBJECT PROPERTY.

NO. | REVISION & DATE

MAJOR SITE PLANS FOR
GENERAL RV OCALA - PHASE IV
13150 SW 16TH AVE (CR 475-A), MARION COUNTY, FL

PROJECT:

PREPARED FOR:

SHEET TITLE:
CODE LANDSCAPE PLAN (SHEET 1 OF 2)

MCNEAL ENGINEERING, INC.
15957 N. FLORIDA AVE, LUTZ, FL 33549
PH. (813) 968-1081 FAX (813) 961-5839
CERTIFICATE OF AUTHORIZATION #08975

JOB NO.	21-116
ACAD FILE:	FCP
DRAWN BY:	MGF
CHK'D BY:	CSM
DATE:	24.01.11
SHEET:	**L-1.1**

THE DESIGNS AND DRAWINGS CONTAINED HEREON ARE THE COPYRIGHTED PROPERTY OF McNEAL ENGINEERING, INC., AND SHOULD NOT BE DUPLICATED WITHOUT WRITTEN CONSENT OF THE ENGINEER.

60.00' FEET OF
MODIFIED TYPE "D" BUFFER
15' WIDE LANDSCAPE BUFFER
TO BE FILLED IN WITH THIS PHASE

EX. MODIFIED TYPE "D" BUFFER
15' WIDE LANDSCAPE BUFFER

EX. MODIFIED TYPE "D" BUFFER
15' WIDE LANDSCAPE BUFFER

DISPLAY/SERVICE AREA

DISPLAY/SERVICE AREA

PHASE IVA

EXISTING LANDSCAPING
INSTALLED IN PRIOR PHASE(S)
(TYP)

EXPANDED DISPLAY/SERVICE AREA

PHASE IVA

28,895± SF*
SERVICE/REPAIR
BUILDING
(PHASE IVB)

22,805± SF*
SERVICE/REPAIR
BUILDING
(PHASE IVA)

CUSTOMER/EMPLOYEE PARKING

PHASE IVA

PHASE IVB

SERVICE STAGING AREA/
CUSTOMER RV PARKING

SW 16TH AVE. (CR-475A)

N

SCALE: 1" = 30'

PHASE IVA

DISPLAY/SERVICE AREA

EXISTING LANDSCAPING
INSTALLED IN PRIOR PHASE(S)
(TYP)

DRA

PHASE IVB

CUSTOMER/EMPLOYEE PARKING

REFER TO SHEET L-1.1 FOR LEGENDS

**** SPECIAL NOTE REGARDING LANDSCAPE PHASE LIMITS ****
LANDSCAPE PHASING SHOWN HEREON IS NOT THE SAME AS THE PROJECT PHASE LIMITS NOTED ON OTHER SHEETS WITHIN THESE PLAN. LANDSCAPE PHASE I INCLUDED ALL BUFFER AREAS ADJACENT TO PROJECT BOUNDARY.

REFER TO SHEET C-2.0 FOR BUFFER DESIGNATIONS

REFER TO SHEET L-2.2 FOR LANDSCAPE DATA TABLES

REFER TO SHEET L-2.1 FOR LANDSCAPE PLANTING SCHEDULES

REFER TO SHEETS L-3.1 & L-3.2 FOR LANDSCAPE & BUFFER DETAILS

**** SPECIAL NOTE REGARDING VEHICLE OVERHANG & LANDSCAPE BUFFER AREAS ****
AT ANY LOCATION THE DESIGNATED 15' WIDE LANDSCAPE BUFFER AREA IS WITHIN 10 FEET OF THE FACE OF CURB, THE OWNER/OPERATOR SHALL LIMIT VEHICLE OVERHANG. IF NECESSARY, A VERTICAL PERIMETER BARRIER SUCH AS BUMPER BLOCKS, BOLLARDS, DECORATIVE BORDER FENCING, OR SIMILAR, TO ENSURE THAT VEHICLE OVERHANG DOES NOT PROJECT INTO LANDSCAPE BUFFER AREAS MUST BE INSTALLED. THIS APPLIES TO THE 15' WIDE LANDSCAPE BUFFER ALONG THE NORTH AND SOUTH PROPERTY LINES OF THE SUBJECT PROPERTY.

NO.	REVISION & DATE

PROJECT:
MAJOR SITE PLANS FOR
GENERAL RV OCALA - PHASE IV
13150 SW 16TH AVE (CR 475-A), MARION COUNTY, FL

PREPARED FOR:

SHEET TITLE:
CODE LANDSCAPE PLAN
(SHEET 2 OF 2)

MCNEAL ENGINEERING, INC.
15957 N. FLORIDA AVE. LUTZ, FL 33549
PH. (813) 968-1081 FAX (813) 961-5839
CERTIFICATE OF AUTHORIZATION #08975

JOB NO.	21-116
ACAD FILE:	FCP
DRAWN BY:	MGF
CHK'D BY:	CSM
DATE:	24.01.11
SHEET:	**L-1.2**

THE DESIGNS AND DRAWINGS CONTAINED HEREON ARE THE COPYRIGHTED PROPERTY OF MCNEAL ENGINEERING, INC., AND SHOULD NOT BE DUPLICATED WITHOUT WRITTEN CONSENT OF THE ENGINEER.

TREE PLANTING SCHEDULE (PHASES I - IV)

SYMBOL	ABRV.	SCIENTIFIC NAME	COMMON NAME	PLANTING REQUIREMENTS	COMMENT	UNIT	PHASE I QTY	PHASE I TOTAL INCHES	PHASE II QTY	PHASE II TOTAL INCHES	PHASE III QTY	PHASE III TOTAL INCHES	PHASE IV QTY	PHASE IV TOTAL INCHES	TOTAL QTY	TOTAL TOTAL INCHES
	AR	Acer rubrum	Red Maple	min 3.5" caliper, Min 10' height	Shade Tree/Replacement Tree	EACH	15	52.5	0	0	0	0	5	17.5	20	70
	IV	Ilex Vomitoria	Yaupon Holly	min 2" dia, min 10' height		EACH	124	248	0	0	0	0	0	0	124	248
	LI	Lagerstroemia indica	Crape Myrtle	min 3 stems, min 6' height		EACH	162		12		0		6		180	
	LS	Liquidambar styraciflua	Sweetgum	min 3.5" caliper, Min 10' height	Shade Tree/Replacement Tree	EACH	2	7	10	35	0	0	0	0	12	42
	PO	Platanus occidentalis	Sycamore	min 3.5" caliper, Min 10' height	Shade Tree/Replacement Tree	EACH	16	56	0	0	3	10.5	0	0	19	66.5
	QS	Quercus shumardii	Shumard Oak	min 3.5" caliper, Min 10' height	Shade Tree/Replacement Tree	EACH	28	98	11	38.5	6	21	5	17.5	50	175
	QV	Quercus virginiana	Live Oak	min 3.5" caliper, Min 10' height	Shade Tree/Replacement Tree	EACH	107	374.5	7	24.5	3	10.5	6	21	123	430.5
	SP	Sabal palmetto	Sabal Palm	min 10' height		EACH	39		0		0		3		42	
	MG	Magnolia grandiflora 'D.D. Blanchard'	Magnolia	min 3.5" caliper, min 10' height	Shade Tree/Replacement Tree	EACH	28	98	9	31.5	11	38.5	13	45.5	61	213.5
	UA	Ulmus alata	Winged Elm	min 3.5" caliper, min 10' height	Shade Tree/Replacement Tree	EACH	37	129.5	2	7	0	0	1	3.5	40	140
					TOTAL		558	1063.5	51	136.5	23	80.5	39	105	671	1385.5

TREE PLANTING SCHEDULE (PHASE V) - FUTURE OUTPARCELS

SYMBOL	ABRV.	SCIENTIFIC NAME	COMMON NAME	PLANTING REQUIREMENTS	COMMENT	UNIT	PHASE V QTY	PHASE V TOTAL INCHES
	AR	Acer rubrum	Red Maple	min 3.5" caliper, Min 10' height	Shade Tree/Replacement Tree	EACH	0	0
	IV	Ilex Vomitoria	Yaupon Holly	min 2" dia, min 10' height			0	0
	LI	Lagerstroemia indica	Crape Myrtle	min 3 stems, min 6' height		EACH	3	
	LS	Liquidambar styraciflua	Sweetgum	min 3.5" caliper, Min 10' height	Shade Tree/Replacement Tree	EACH	0	0
	PO	Platanus occidentalis	Sycamore	min 3.5" caliper, Min 10' height	Shade Tree/Replacement Tree	EACH	0	0
	QS	Quercus shumardii	Shumard Oak	min 3.5" caliper, Min 10' height	Shade Tree/Replacement Tree	EACH	0	0
	QV	Quercus virginiana	Live Oak	min 3.5" caliper, Min 10' height	Shade Tree/Replacement Tree	EACH	4	14
	SP	Sabal palmetto	Sabal Palm	min 10' height		EACH	0	
	MG	Magnolia grandiflora	Southern Magnolia	min 3.5" caliper, Min 10' height	Shade Tree/Replacement Tree	EACH	0	0
	UA	Ulmus alata	Winged Elm	min 3.5" caliper, Min 10' height	Shade Tree/Replacement Tree	EACH	5	17.5
					TOTAL		12	31.5

PLANTING SCHEDULE

SYMBOL	ABRV.	SCIENTIFIC NAME	COMMON NAME	PLANTING REQUIREMENTS	COMMENT	UNIT	PHASE I QTY	PHASE IV QTY	TOTAL QTY
	GC1	Dianella spp. Evolvulus glomeratus Juniperus conferta	Flax Lily Blue Daze Shore Juniper	36" c/c; alternate	OR APPROVED EQUAL	EACH	432	0	432
	GC2	Juniperus horizontalis Liriope muscari Muhlenbergia capillaris	Creeping Juniper Liriope Muhly grass	36" c/c; alternate	OR APPROVED EQUAL	EACH	2066	0	2066
	GCO	OPTIONAL GROUND COVER SHALL BE ONE (OR MORE) OF THE OPTIONS LISTED FOR GC1 OR GC2 AS APPROVED BY EOR & ONWER. INSTALLATION OF THESE ARE AT THE OPTION OF THE DEVELOPER. REQUIREMENTS FOR SPACING AND QUALITY SHALL BE THE SAME AS FOR GC1 & GC2.				EACH	1588	0	1588
	SH1	Pentas lanceolata Russelia sarmentosa	Pentas Firecracker Plant	36" c/c; alternate	OR APPROVED EQUAL	EACH	1544	0	1544
	SH2	Callistemon viminalis Zamia floridana	Dwarf Little John Bottlebrush Coontie	36" c/c; alternate	OR APPROVED EQUAL	EACH	238	0	238
	HG	REQUIRED HEDGE PLANTS SHALL BE FROM THE APPROVED HEDGE LIST (BELOW). SELECTION AT THE OPTION OF THE SITE CONTRACTOR. DO NOT MIX SPECIES IN SAME HEDGE ROW				EACH	1127	20	1147
	HG*	HEDGE PLANTS IN SHADED AREA AROUND MASTER WATER METER, LIFT STATION, IRRIGATION WELL, AND DDCV (FIRE) SHALL BE MIN. 4' HIGH AT THE TIME OF PLANTING.				EACH	98	0	98
	HGO	OPTIONAL HEDGES MAY DEVIATE FROM THE FOLLOWING LIST WITH EOR APPROVAL. INSTALLATION OF THESE ARE AT THE OPTION OF THE DEVELOPER. REQUIREMENTS FOR SPACING AND QUALITY SHALL REMAIN IN FORCE FOR OPTIONAL HEDGES.				EACH	79	0	79

APPROVED HEDGE PLANTINGS

ABRV.	SCIENTIFIC NAME	COMMON NAME	PLANTING REQUIREMENTS
IF	Illicium floridanum	Florida Anise	All hedge plants to have a minimum height of 24" and 3 Gal at time of planting, unless otherwise noted. Planting to be made at 36" c/c.
PM	Podocarpus macrp[hyllus	Podocarpus	
PT	Pittosporum tobira	Pittisporum	
RI	Indian Hawthorn	Raphiolepis Indica	
VS	Viburnum suspensum	Sandankwa Viburnum	
VW	Viburnum obovatum	Walter Viburnum	

LANDSCAPE COMPLETION INSPECTION NOTES:

1. PRIOR TO THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY, THE CONTRACTOR SHALL DOCUMENT THE ACTUAL FIELD INSTALLATION OF THE LANDSCAPE AND SUBMIT TO MARION COUNTY A REQUIRED LANDSCAPE AS-BUILT CERTIFICATION PLAN, SIGNED AND SEALED BY THE LANDSCAPE ARCHITECT (MARION COUNTY LDC DIV 8, SEC 6.8.12).

2. UPON COMPLETION OF THE INSTALLATION, AND AT A MINIMUM OF SEVEN (7) DAYS PRIOR TO FINAL INSPECTION, THE CONTRACTOR SHALL PROVIDE A CLEAR AND LEGIBLE AS-BUILT DIAGRAM THAT ACCURATELY REPRESENTS THE LANDSCAPE PLAN AS INSTALLED, AND REQUEST AN ON-SITE INSPECTION BY THE LANDSCAPE ARCHITECT.

3. WHEN ACCEPTABLE TO THE LANDSCAPE ARCHITECT, THE AS-BUILT PLANS WILL BE APPROVED AND A FINAL INSPECTION AND LANDSCAPE RELEASE GRANTED.

4. THE CONTRACTOR SHALL MARK-UP A COPY OF THE APPROVED LANDSCAPE DESIGN PLAN WITH THE FOLLOWING AS-BUILT INFORMATION: (NOTE PRE-APPROVAL BY THE DESIGN PROFESSIONAL IS REQUIRED FOR ANY DESIGN CHANGE (INCLUDING PLANT SUBSTITUTIONS, LAYOUT, QUANTITIES, MATERIALS, ETC.)

- INSTALLED PLANT SPECIES AND SIZES
- INSTALLED PLANT QUANTITIES
- OTHER INSTALLED MATERIALS DOCUMENTATION

5. THE CONTRACTOR SHALL PROVIDE CONFIRMATION THAT THE OWNER HAS RECEIVED:

- WRITTEN MAINTENANCE, PRUNING, AND FERTILIZER INSTRUCTIONS AND SCHEDUL TO THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY, THE CONTRACTOR SHALL DOCUMENT THE ACTUAL FIELD INSTALLATION OF THE IRRIGATION SYSTEM AND SUBMIT TO MARION COUNTY A REQUIRED IRRIGATION AS-BUILT CERTIFICATION PLAN, SIGNED AND SEALED BY THE LANDSCAPE ARCHITECT (MARION COUNTY LDC DIV 9, SEC 6.9.6).

NO. | REVISION & DATE

PROJECT:
GENERAL RV OCALA - PHASE IV
13150 SW 16TH AVE (CR 475-A), MARION COUNTY, FL

PREPARED FOR:

SHEET TITLE:
LANDSCAPE PLANTING SCHEDULES

McNEAL ENGINEERING, INC.
15957 N. FLORIDA AVE, LUTZ, FL 33549
PH. (813) 968-1081 FAX (813) 961-5839
CERTIFICATE OF AUTHORIZATION #08975

JOB NO.	21-116
ACAD FILE:	FCP
DRAWN BY:	MGF
CHK'D BY:	CSM
DATE:	24.01.11
SHEET:	L-2.1

THE DESIGNS AND DRAWINGS CONTAINED HEREON ARE THE COPYRIGHTED PROPERTY OF McNEAL ENGINEERING, INC., AND SHOULD NOT BE DUPLICATED WITHOUT WRITTEN CONSENT OF THE ENGINEER.

EXISTING TREES TO REMAIN

TYPE	SIZE (INCHES)	CREDIT
OAK	38	2
OAK	32	2
OAK	24	1
OAK	30	2
OAK	48	2
OAK	42	2
OAK	42	2
OAK	56	2
OAK	96	2
OAK	30	2
OAK	56	2
OAK	46	0
OAK	50	0
OAK	30	0
OAK	28	0
OAK	12	0
OAK	44	0
OAK	24	0
OAK	44	0
OAK	10	1
OAK	6	1
OAK	8	1
OAK	12	1
OAK	10	1
OAK	6	1
~~OAK~~	~~34~~	*0*
MAGNOLIA	14	1
MAGNOLIA	14	1
OAK	16	1
OAK	32	2
OAK	40	2
OAK	72	2
OAK	48	2
OAK	10	1
OAK	60	2
OAK	36	2
OAK	40	2
OAK	68	2
OAK	18	1
OAK	18	1
OAK	12	1
OAK	12	1
OAK	32	2
OAK	10	1
OAK	16	1
OAK	18	1
OAK	8	1
OAK	10	1
OAK	20	1
OAK	12	1
OAK	10	1
OAK	16	1
OAK	8	1
OAK	42	2
OAK	39	2
OAK	48	2
~~OAK~~	~~66~~	*0*
~~OAK~~	~~24~~	*0*
~~OAK~~	~~42~~	*0*
~~OAK~~	~~36~~	0
OAK	36	2
~~OAK~~	~~36~~	*0*
OAK	36	2
OAK	42	2

TOTAL	1737	75

LEGEND:

OAK	*TREE REMAINING FROM PRIOR PHASE*
~~OAK~~	*REVISION FROM PRIOR PHASE*
~~OAK~~	*CHANGE THIS PHASE*

EXISTING TREES TO BE REMOVED (ALL PHASES)

POINT #	TYPE	SIZE (INCHES)	REPLACEMENT FACTOR	REPLACEMENT (INCHES)	COMMENT
25001	OAK	6	0.00	0	
25002	OAK	8	0.00	0	
25003	OAK	8	0.00	0	
25004	OAK	6	0.00	0	
25005	OAK	12	0.50	6	
25006	OAK	6	0.00	0	
25007	OAK	10	0.00	0	
25008	OAK	2	0.00	0	
25013	OAK	6	0.00	0	
25014	OAK	4	0.00	0	
25015	OAK	8	0.00	0	
25016	OAK	12	0.50	6	
25018	CHERRY LAUREL	12	0.00	0	
25019	OAK	10	0.00	0	
25020	OAK	10	0.00	0	
25022	OAK	3	0.00	0	
25024	OAK	10	0.50	5	
25025	CHERRY LAUREL	9	0.00	0	
25026	CHERRY LAUREL	22	0.00	0	
60114	UNKNOWN	8	0.00	0	
60115	UNKNOWN	14	0.50	7	
60116	OAK	48	0.00	0	Poor Condition
61208	PALM	8	0.00	0	
61209	PALM	8	0.00	0	
61210	PALM	14	0.50	7	
61211	PALM	8	0.00	0	
61212	PALM	8	0.00	0	
61213	PALM	8	0.00	0	
61215	OAK	40	0.00	0	Poor Condition
61216	OAK	28	0.00	0	Dead
61217	OAK	38	0.00	0	Poor Condition
61289	OAK	46	0.00	0	Poor Condition
61290	OAK	50	0.00	0	Poor Condition
61291	OAK	30	0.00	0	Poor Condition
61292	OAK	28	0.00	0	Poor Condition
61293	OAK	12	0.00	0	Poor Condition
61294	OAK	44	0.00	0	Poor Condition
61295	OAK	24	0.00	0	Poor Condition
61296	OAK	44	0.00	0	Poor Condition
61297	OAK	8	0.00	0	
61298	OAK	6	0.00	0	
61299	PALM	18	0.50	9	
61300	MAGNOLIA	12	0.00	0	Poor Condition
61319	UNKNOWN	8	0.00	0	

POINT #	TYPE	SIZE (INCHES)	REPLACEMENT FACTOR	REPLACEMENT (INCHES)	COMMENT
61320	CEDAR	24	0.00	0	Poor Condition
61321	OAK	18	0.00	0	Poor Condition
61322	OAK	32	1.00	32	
61323	OAK	32	0.00	0	Poor Condition
61324	OAK	54	0.00	0	Poor Condition
61325	OAK	32	0.00	0	Poor Condition
61326	*OAK*	*34*	*1.00*	*34*	
61327	PALM	16	0.50	8	
61333	OAK	28	0.00	0	Poor Condition
61334	OAK	38	0.00	0	Poor Condition
61351	UNKNOWN	24	0.00	0	Celtis spp.
61353	OAK	32	1.00	32	
61355	UNKNOWN	8	0.00	0	
61356	OAK	40	0.00	0	Poor Condition
61357	OAK	56	0.00	0	Poor Condition
61358	OAK	6	0.00	0	
61359	OAK	22	0.75	16.5	
61360	OAK	6	0.00	0	
61361	UNKNOWN	24	0.00	0	Celtis spp.
70000	OAK	38	0.00	0	Poor Condition
80000	OAK	42	0.00	0	Poor Condition
80002	*OAK*	*48*	*0.00*	*0*	*Poor Condition*
80003	*OAK*	*66*	*1.00*	*66*	
80004	*OAK*	*24*	*0.75*	*18*	
80007	*OAK*	*42*	*1.00*	*42*	
80005	OAK	52	0.00	0	Dead
80006	UNKNOWN	8	0.00	0	
80008	UNKNOWN	6	0.00	0	
80009	UNKNOWN	12	0.50	6	
80010	UNKNOWN	6	0.00	0	
80027	OAK	48	0.00	0	Dead
80028	OAK	36	0.00	0	Poor Condition
80029	OAK	36	1.00	36	
80030	OAK	36	0.00	0	Poor Condition
80325	OAK	22	0.75	16.5	
80327	OAK	16	0.50	8	
80334	OAK	36	0.00	0	Poor Condition
80335	OAK	36	0.00	0	Poor Condition
80336	OAK	24	0.00	0	Poor Condition
80337	OAK	12	0.00	0	Poor Condition
80338	OAK	10	0.00	0	Poor Condition
80339	OAK	8	0.00	0	Poor Condition
80340	OAK	6	0.00	0	Poor Condition
100001	*OAK*	*36*	*1.00*	*36*	

SUB-TOTAL	*40*

SUB-TOTAL	*351*
TOTAL	*391*

LEGEND:

25000	TREE REMOVED PRIOR PHASE
25000	*TREE REMOVED THIS PLAN*

TREE REPLACEMENT CALCULATIONS

PRE-DEVELOPMENT:	
GROSS SITE AREA (ACRES)	*60.32*
TOTAL NUMBER OF INCHES OF EXISTING FAVORABLE TREES	*2640*
EXISTING AVERAGE INCHES PER ACRE	*44*
POST DEVELOPMENT:	
TOTAL REQUIRED NUMBER OF INCHES OF TREES	*2640*
TOTAL NUMBER OF INCHES OF TREES PROVIDED	*3154*
PROPOSED AVERAGE INCHES PER ACRE	*52*

SHADE TREE CALCULATIONS

RATE: 1 SHADE TREE REQUIRED PER 6,000 SF (BY WAIVER)	*QUANTITY*	*NUMBER OF TREES*
NET AREA (PHASES I - IV) AFTER R/W DEDICATION (SF)	*2,430,286*	*406*
NET AREA (PHASE V) (SF)	*170,574*	*28*
TOTAL SHADE TREES REQUIRED BEFORE CREDITS		*434*
CREDIT FOR EXISTING TREES TO REMAIN		*75*
TOTAL SHADE TREES REQUIRED FOR PROJECT		*359*
REQUIRED # SHADE TREES ATTRIBUTED TO PHASES I - IV	*93%*	*336*
TOTAL SHADE TREES PROVIDED		*325*
REQUIRED # SHADE TREES ATTRIBUTED TO PHASE V	*7%*	*24*
TOTAL SHADE TREES SHOWN ON PLANS		*9*
ADDITIONAL SHADE TREES TO BE PROVIDE WITH PHASE V		*25*
TOTAL SHADE TREES FOR PHASE V		*34*
PROJECT TOTALS (AREA SF | TOTAL SHADE TREES)	*2,600,860*	*434*
RESULTING SF PER SHADE TREE < 6,000 (BY WAIVER)		*5993*

NO.	REVISION & DATE

PROJECT:

MAJOR SITE PLANS FOR
GENERAL RV OCALA - PHASE IV
13150 SW 16TH AVE (CR 475-A), MARION COUNTY, FL

PREPARED FOR:

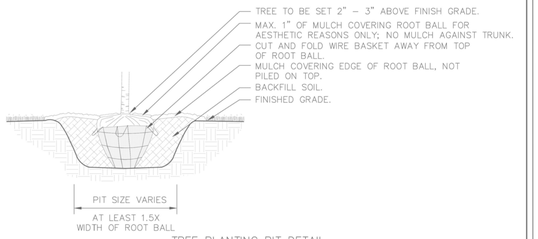
SHEET TITLE:

LANDSCAPE DATA TABLES

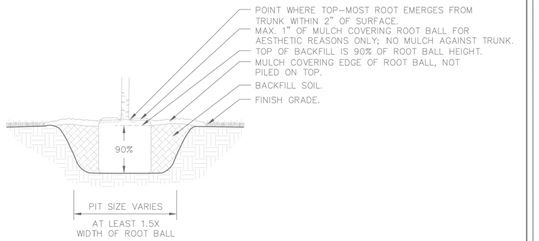
McNEAL ENGINEERING, INC.
15957 N. FLORIDA AVE, LUTZ, FL 33549
PH. (813) 968-1081 FAX (813) 961-5839
CERTIFICATE OF AUTHORIZATION #08975

JOB NO.	21-116
ACAD FILE:	FCP
DRAWN BY:	MGF
CHK'D BY:	CSM
DATE:	24.01.11
SHEET:	**L-2.2**

THE DESIGNS AND DRAWINGS CONTAINED HEREON ARE THE COPYRIGHTED PROPERTY OF McNEAL ENGINEERING, INC., AND SHOULD NOT BE DUPLICATED WITHOUT WRITTEN CONSENT OF THE ENGINEER.



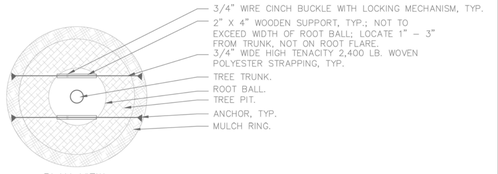
TREE PLANTING PIT DETAIL
(BALLED AND BURLAPPED)



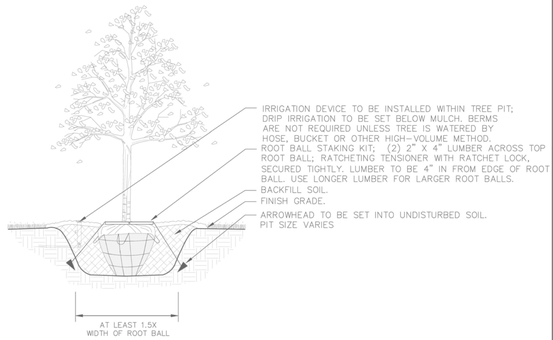
TREE PLANTING PIT DETAIL
(CONTAINER GROWN)

NOTES:
1. REMOVE ALL SYNTHETIC MATERIALS INCLUDING STRAPS, STRINGS, AND SYNTHETIC BURLAP. NATURAL BURLAP MAY BE LEFT IN PLACE.
2. ALL ROOT SYSTEMS SHALL BE REASONABLY FREE OF ROOT DEFECTS INCLUDING:
   A. POTENTIALLY STEM-GIRDLING ROOTS ABOVE THE ROOT COLLAR AND MAIN STRUCTURAL ROOTS,
   B. VERTICAL ROOTS, AND
   C. KINKED ROOTS.
3. BACKFILL SOIL SHALL BE NATIVE SOIL REMOVED FROM PIT FREE OF ROCKS, STICKS AND OTHER DELETERIOUS SOILS. WATER-IN AND LIGHTLY COMPACT BACKFILL TO REMOVE AIR POCKETS.
4. BERMS ARE NOT REQUIRED UNLESS TREE IS WATERED BY HOSE, BUCKET OR OTHER HIGH VOLUME METHOD.

Marion County FLORIDA PARKS AND RECREATION	MCBCC EFFECTIVE 10/12/2013	TREE PLANTING PIT	7.3.4
	REVISION # NA		LS 001



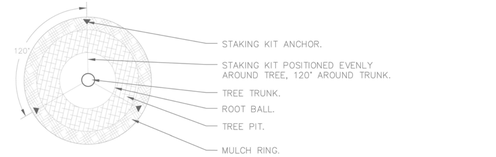
PLAN VIEW



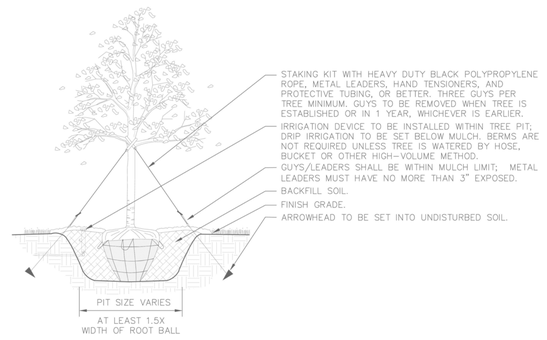
TREE INSTALLATION WITH ROOT BALL KIT
(TREES OVER 10' HEIGHT AT INSTALLATION AND WITHIN PUBLICLY USED AREAS)

SET TREE AND APPLY MULCH PER TREE PLANTING PIT DETAIL

Marion County FLORIDA PARKS AND RECREATION	MCBCC EFFECTIVE 10/12/2013	TREE INSTALLATION ROOT BALL KIT	7.3.4
	REVISION # NA		LS 002

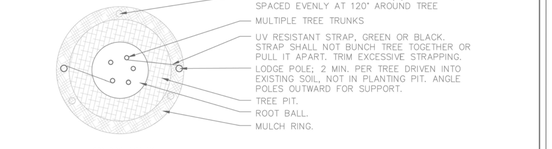


PLAN VIEW

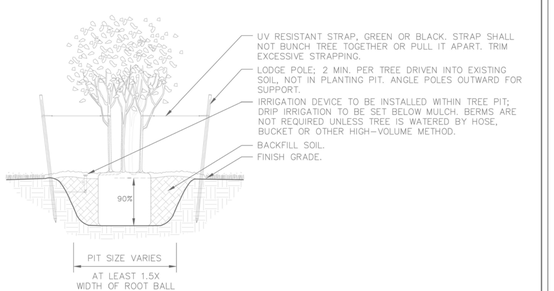


TREE INSTALLATION WITH STAKING KIT
(TREES OVER 10' HEIGHT AT INSTALLATION AND AWAY FROM PUBLICLY USED AREAS)
SET TREE AND APPLY MULCH PER TREE PIT DETAIL

Marion County FLORIDA PARKS AND RECREATION	MCBCC EFFECTIVE 10/12/2013	TREE INSTALLATION GUYING KIT	7.3.4
	REVISION # NA		LS 003



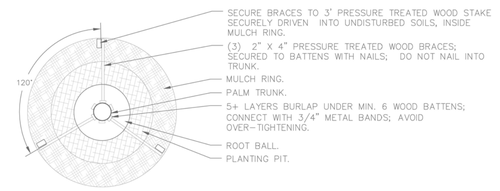
PLAN VIEW



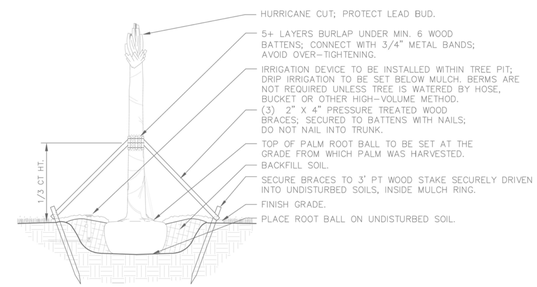
TREE INSTALLATION WITH LODGE POLES
(TREES UNDER 10' HEIGHT AT INSTALLATION)

SET TREE AND APPLY MULCH PER TREE PIT DETAIL

Marion County FLORIDA PARKS AND RECREATION	MCBCC EFFECTIVE 10/12/2013	TREE INSTALLATION LODGE POLES	7.3.4
	REVISION # NA		LS 004

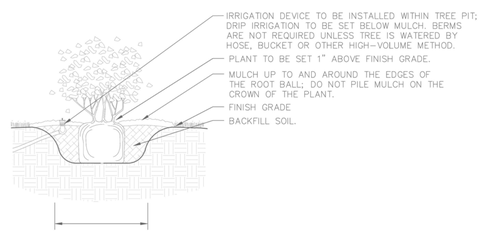


PLAN VIEW



PALM INSTALLATION WITH BATTEN KIT

Marion County FLORIDA PARKS AND RECREATION	MCBCC EFFECTIVE 10/12/2013	PALM INSTALLATION	7.3.4
	REVISION # NA		LS 005



SHRUB INSTALLATION

Marion County FLORIDA PARKS AND RECREATION	MCBCC EFFECTIVE 10/12/2013	SHRUB INSTALLATION	7.3.4
	REVISION # NA		LS 006

NO.	REVISION & DATE

PROJECT:
GENERAL RV OCALA - PHASE IV
13150 SW 16TH AVE (CR 475-A), MARION COUNTY, FL

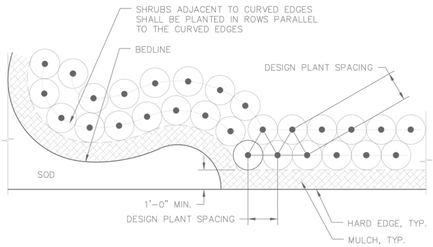
PREPARED FOR:

SHEET TITLE:
LANDSCAPE DETAILS (SHEET 1 OF 2)

McNEAL ENGINEERING, INC.
15957 N. FLORIDA AVE, LUTZ, FL 33549
PH. (813) 968-1081 FAX (813) 961-5839
CERTIFICATE OF AUTHORIZATION #08975

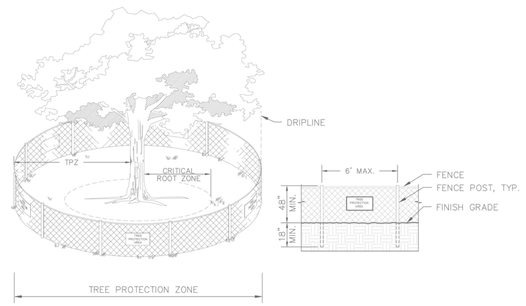
JOB NO.	21-116
ACAD FILE:	FCP
DRAWN BY:	MGF
CHK'D BY:	CSM
DATE:	24.01.11
SHEET:	**L-3.1**

THE DESIGNS AND DRAWINGS CONTAINED HEREON ARE THE COPYRIGHTED PROPERTY OF McNEAL ENGINEERING, INC., AND SHOULD NOT BE DUPLICATED WITHOUT WRITTEN CONSENT OF THE ENGINEER.



PLANT MASSING LAYOUT

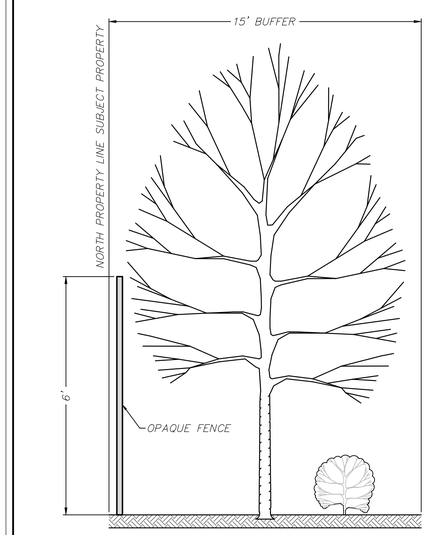
Marion County FLORIDA PARKS AND RECREATION	MCBCC EFFECTIVE 10/12/2013	SHRUB MASSING	7.3.4 LS 007
	REVISION # NA		



TREE PROTECTION DETAIL

NOTES:
1. TREE PROTECTION BARRICADES SHALL BE INSTALLED AROUND ALL PROTECTED TREES AND GROUPS OF TREES PRIOR TO ANY CLEARING OR GRADING OPERATIONS, INCLUDING THE REMOVAL OF OTHER TREES.
2. FOR LARGE GROUPS OF TREES, BARRICADES MAY BE PLACED BETWEEN THE PROTECTED TREES AND THE CONSTRUCTION ACTIVITY AREA.
3. BARRICADES SHALL BE MADE OF RIGID MATERIAL CAPABLE OF SURVIVING FOR THE DURATION OF THE CONSTRUCTION.
4. BARRICADES SHALL BE INSPECTED WEEKLY DURING THE DURATION OF CONSTRUCTION AND REPAIRED/REINSTALLED AS REQUIRED.
5. CLEANING OF EQUIPMENT OR MATERIAL OR THE DISPOSAL OF WASTE MATERIALS, INCLUDING BUT NOT LIMITED TO, PAINT, OIL, SOLVENT, ASPHALT, CONCRETE, AND MORTAR WITHIN THE TREE PROTECTION ZONE (TPZ) OF ANY TREE IS NOT ALLOWED.
6. THE MOVEMENT OF EQUIPMENT OR STORAGE OF EQUIPMENT, MATERIALS, DEBRIS, OR FILL WITHIN THE TPZ OF ANY TREE IS NOT ALLOWED.
7. IF ANY TREE WHICH IS NOT PERMITTED FOR REMOVAL IS DESTROYED, OR RECEIVES MAJOR DAMAGE DURING CONSTRUCTION, WITH THE EXCEPTION OF NATURAL EVENTS, SO AS TO PLACE ITS LONG TERM SURVIVAL IN QUESTION, MUST BE REPLACED AT AN INCH-TO-INCH BASIS OF THE TOTAL (COMBINED) DBH OF THE TREE(S) SO DESTROYED OR DAMAGED. THE REPLACEMENT TREE(S) SHALL BE OF COMPARABLE SPECIES OF THE DESTROYED OR DAMAGED TREE(S) WITH A MINIMUM SIZE OF 3 $\frac{1}{2}$" CALIPER.
8. REQUIRED SIGNS SHALL STATE "TREE PROTECTION ZONE".

Marion County FLORIDA PARKS AND RECREATION	MCBCC EFFECTIVE 10/12/2013	TREE PROTECTION	7.3.4 LS 009
	REVISION # NA		

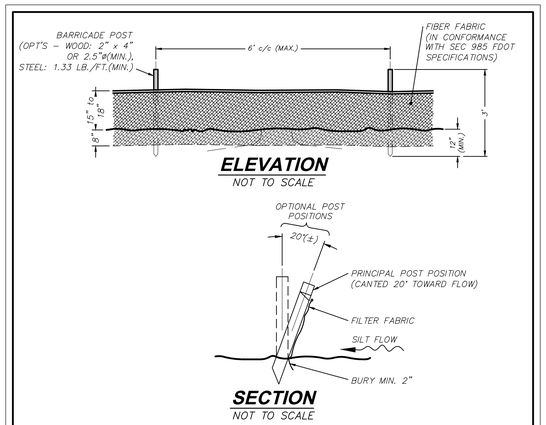


1. BUFFER SHALL BE SAME AS TYPICAL TYPE "D" BUFFER WITH EXCEPTION THAT INSTEAD OF A BUFFER WALL, A 6' HIGH OPAQUE FENCE SHALL BE INSTALLED.

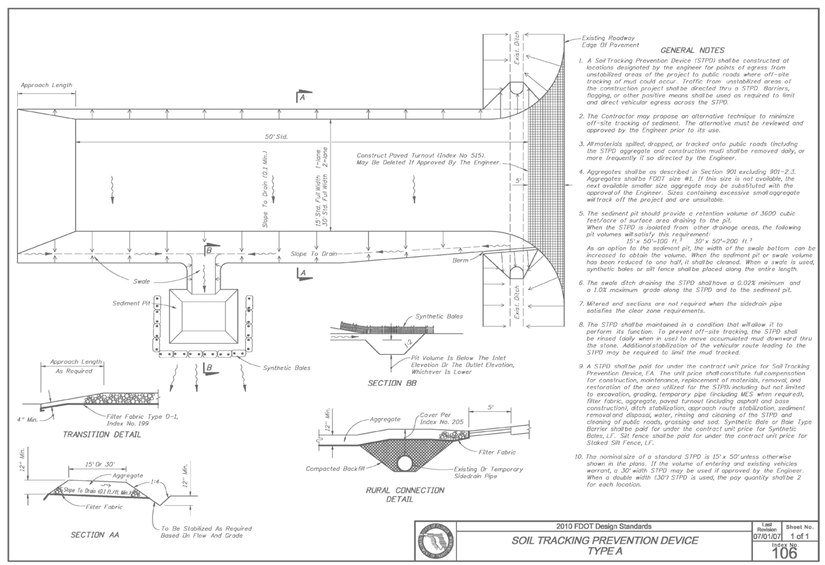
2. A MINIMUM OF TWO SHADE TREES AND THREE ACCCENT/ORNAMENTAL TREES FOR EVERY 100 LINEAL FEET, OR FRACTIONAL PART THEREOF, SHALL BE PROVIDED IN THE BUFFER. NOTE: SHADE TREES EXCLUDED FROM AREAS NEAR OVERHEAD POWER LINES.

3. SHRUBS AND GROUNDCOVER, EXCLUDING TURFGRASS, SHALL COMPRISE AT LEAST 25 PERCENT OF THE REQUIRED BUFFER.

15' MODIFIED TYPE " D" BUFFER
(NOT TO SCALE)



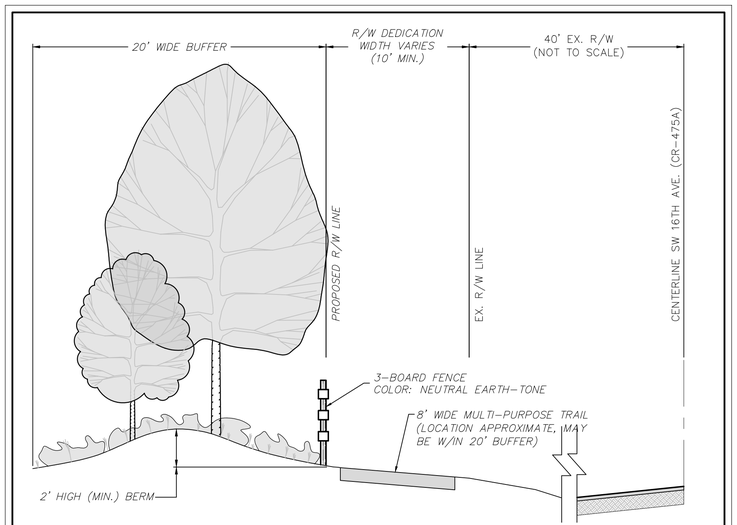
SEDIMENT BARRICADE DETAIL



GENERAL NOTES

1. A Soil Tracking Prevention Device (STPD) shall be constructed at locations designated by the engineer for points of egress from unstabilized areas of the project to public roads where off-site tracking of mud could occur. Traffic from unstabilized areas of the construction project shall be directed thru a STPD. Barriers, flagging, or other positive means shall be used as required to limit and direct vehicular egress across the STPD.
2. The Contractor may propose an alternative technique to minimize off-site tracking of sediment. The alternative must be reviewed and approved by the Engineer prior to its use.
3. All materials spilled, dropped, or tracked onto public roads (including the STPD aggregate and construction mud) shall be removed daily, or more frequently if so directed by the Engineer.
4. Aggregates shall be as described in Section 901 excluding 901-2.3. Aggregates shall be FDOT size #1. If this size is not available, the next available smaller size aggregate may be substituted with the approval of the Engineer. Sizes containing excessive small aggregate will track off the project and are unsuitable.
5. The sediment pit should provide a retention volume of 3600 cubic feet/acre of surface area draining to the pit. When the STPD is located from other drainage areas, the following pit volumes will satisfy this requirement:
   15' x 50'=105 ft.^{3} 30' x 50'=200 ft.^{3}
   As an option to the sediment pit, the width of the swale bottom can be increased to obtain the volume. When the sediment pit or swale volume has been reduced to one half, it shall be cleaned. When a swale is used, synthetic bales or silt fence shall be placed along the entire length.
6. The swale ditch draining the STPD shall have a 0.02% minimum and a 1.0% maximum grade along the STPD and to the sediment pit.
7. Mitered end sections are not required when the sidedrain pipe satisfies the clear zone requirements.
8. The STPD shall be maintained in a condition that will allow it to perform its function. To prevent off-site tracking the STPD shall be rinsed (daily when in use) to move accumulated mud downward thru the stone. Additional stabilization of the vehicular route leading to the STPD may be required to limit the mud tracked.
9. A STPD shall be paid for under the contract unit price for Soil Tracking Prevention Device, EA. The unit price shall constitute full compensation for construction, maintenance, replacement of materials, removal, and restoration of the area utilized for the STPD including but not limited to excavation, grading, temporary pipe (including MES when required), filter fabric, aggregate, paved turnout (including asphalt and base construction), ditch stabilization, approach route stabilization, sediment removal and disposal, water, rinsing and cleaning of the STPD and cleaning of public roads, grassing and sod. Synthetic Bale or Bale Type Barrier shall be paid for under the contract unit price for Synthetic Bales, LF. Silt fence shall be paid for under the contract unit price for Staked Silt Fence, LF.
10. The nominal size of a standard STPD is 15' x 50' unless otherwise shown in the plans. If the volume of entering and existing vehicles warrant, a 30' width STPD may be used if approved by the Engineer. When a double width (30') STPD is used, the pay quantity shall be 2 for each location.

	2010 FDOT Design Standards	Last Revision 07/01/07	Sheet No. 1 of 1
	SOIL TRACKING PREVENTION DEVICE TYPE A	Index No. 105	



1. A MINIMUM OF TWO SHADE TREES AND THREE ORNAMENTAL TREES FOR EVERY 100 LINEAR FEET, OR FRACTIONAL PART THEREOF, SHALL BE PROVIDED IN THE BUFFER.

2. SHRUBS AND GROUNDCOVER SHALL BE PROVIDED TO CREATE A LAYERED VISUAL EFFECT.

3. REFER TO LANDSCAPE PLAN FOR ADDITIONAL INFORMATION.

EXISTING BUFFER - SHOWN FOR REFERENCE ONLY!

20' WIDE BUFFER
CR 475A VISUAL ENHANCEMENT GATEWAY DEVELOPMENT OVERLAY
(NOT TO SCALE)

NO.	REVISION & DATE

PROJECT:
MAJOR SITE PLANS FOR
GENERAL RV OCALA - PHASE IV
13150 SW 16TH AVE (CR 475-A), MARION COUNTY, FL

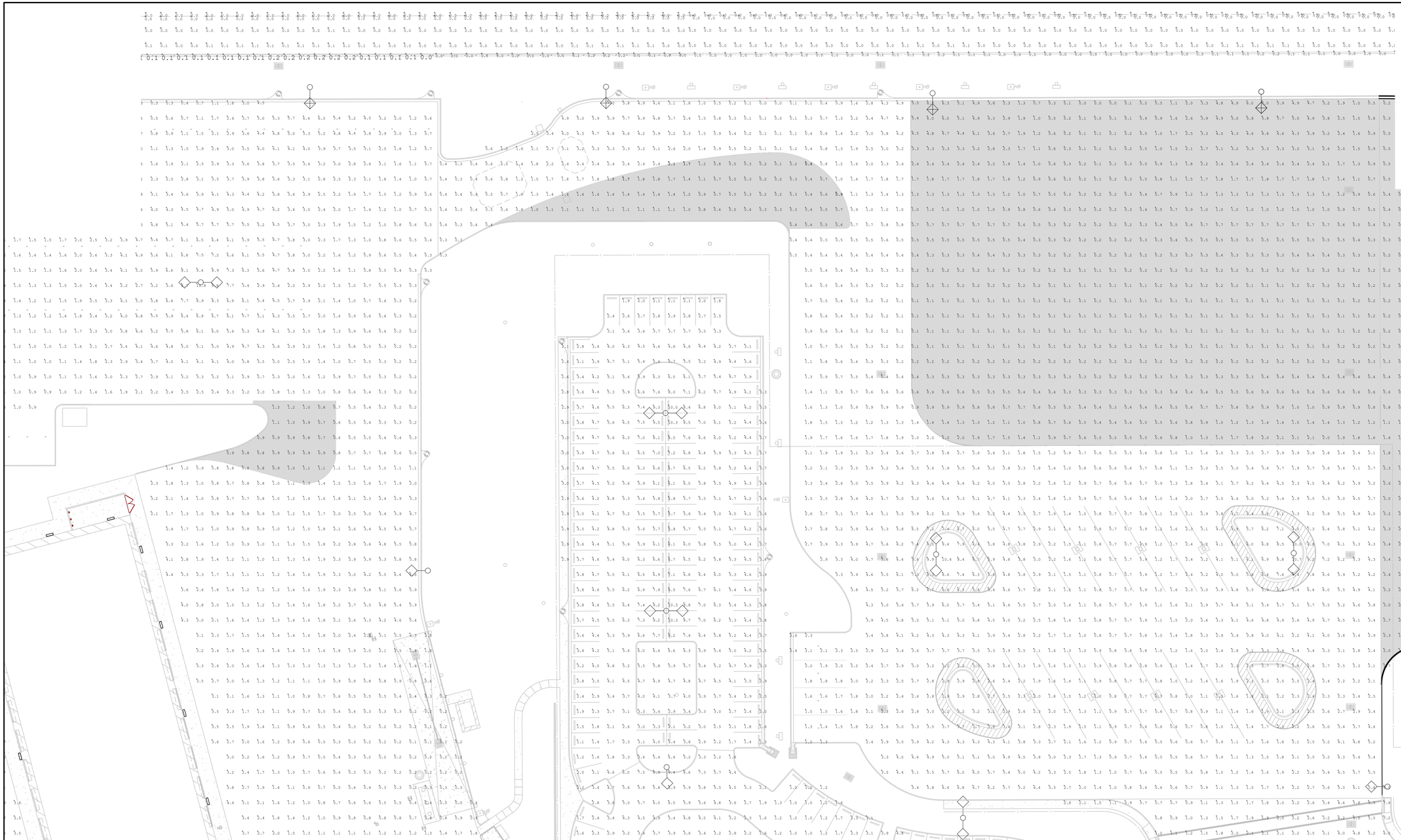
PREPARED FOR:

SHEET TITLE:
LANDSCAPE DETAILS (SHEET 2 OF 2)

MCNEAL ENGINEERING, INC.
15957 N. FLORIDA AVE, LUTZ, FL 33549
PH. (813) 968-1081 FAX (813) 961-5839
CERTIFICATE OF AUTHORIZATION #08975

JOB NO.	21-116
ACAD FILE:	FCP
DRAWN BY:	MGF
CHK'D BY:	CSM
DATE:	24.01.11
SHEET:	**L-3.2**

THE DESIGNS AND DRAWINGS CONTAINED HEREON ARE THE COPYRIGHTED PROPERTY OF McNEAL ENGINEERING, INC., AND SHOULD NOT BE DUPLICATED WITHOUT WRITTEN CONSENT OF THE ENGINEER.



NOTE TO CONTRACTOR:

TO ORDER LIGHTING EQUIPMENT SPECIFIED ON THESE PLANS, PLEASE CONTACT:

CLARUS LIGHTING & CONTROLS

30775 Barrington St.
Madison Heights, MI 48071
P: 248.677.0850
F: 248.677.0512
E: info@clarus-lighting.com

GENERAL RV NATIONAL ACCOUNTS
C/O JOE WILDS

CLARUS LIGHTING & CONTROLS
PHONE: (248) 677-0850

HOURS: MON-THUR 8AM TO 5PM

REFERENCE CLARUS REFERENCE #:CLC18-49303
DATED 08/21/2023

REFER TO SHEET PE-2.01 FIXTURE SCHEDULE & TABLES

REFER TO SHEETS PE-2.01 - PE-2.10 FOR LIGHTING DETAILS

LIGHTING NOTES

1. ALL EXTERIOR LIGHTING TO BE IN COMPLIANCE WITH WITH MARION COUNTY LAND DEVELOPMENT CODE (DIVISION 19. – EXTERIOR LIGHTING) AND ILLUMINATING ENGINEERING SOCIETY OF NORTH AMERICA (IESNA) OUTDOOR LIGHTING STANDARDS.

2. REFER TO ELECTRICAL PLANS FOR CONDUIT PLACEMENT AND ADDITIONAL INFORMATION.

3. FLOOD LIGHTS FOR DISPLAY AREAS, IF USED, ARE SHOWN HEREON FOR REFERENCE ONLY AND ARE NOT CONSIDERED IN CALCULATIONS. REFER TO ELECTRICAL PLANS PREPARED BY OTHERS FOR ADDITIONAL INFORMATION.

NO.	REVISION & DATE

PROJECT:

GENERAL RV OCALA - PHASE IV
13150 SW 16TH AVE (CR 475-A), MARION COUNTY, FL

PREPARED FOR:

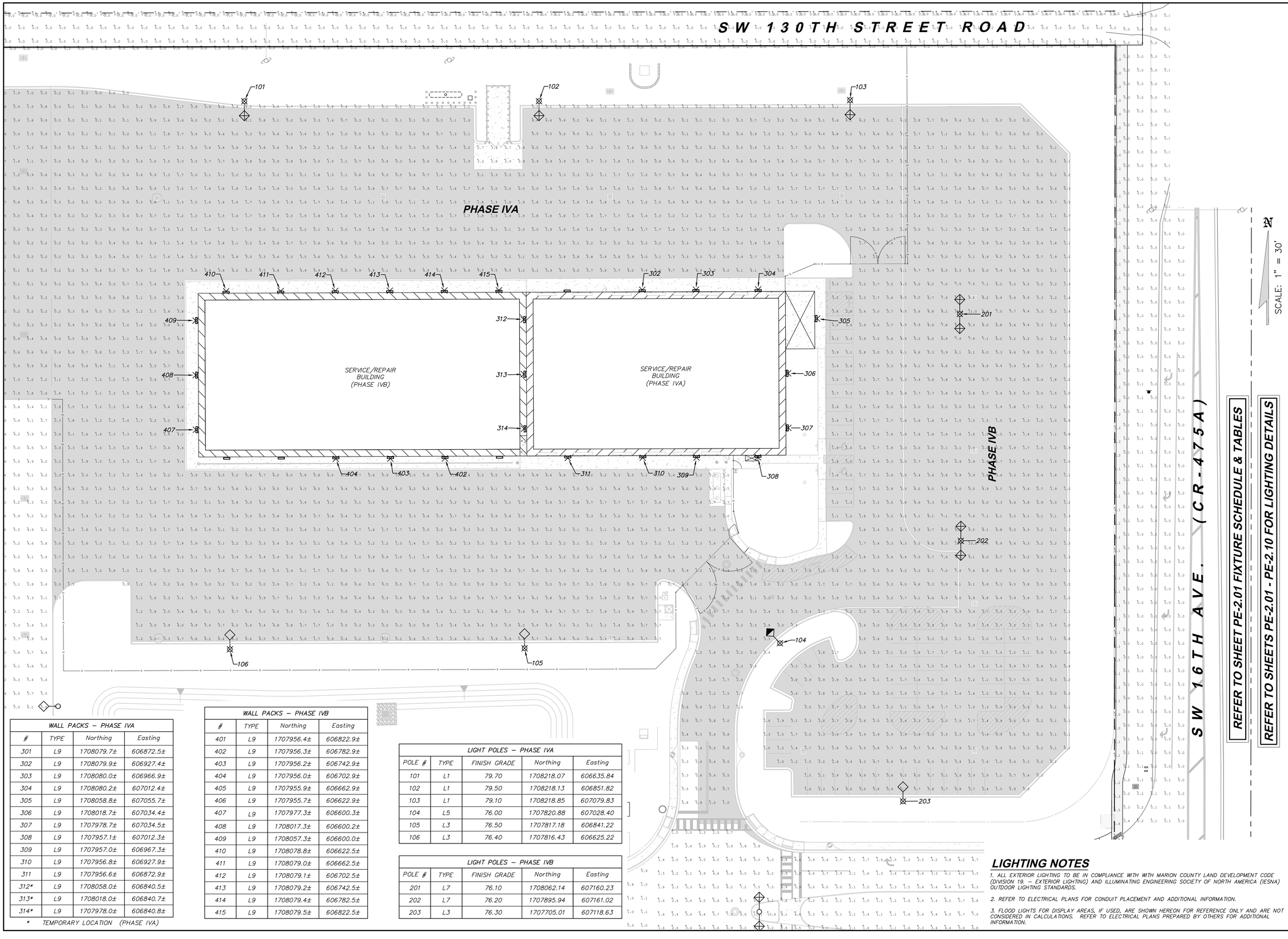
SHEET TITLE:

LIGHTING PLAN (SHEET 1 OF 2)

McNEAL ENGINEERING, INC.
15957 N. FLORIDA AVE, LUTZ, FL 33549
PH. (813) 968-1081 FAX (813) 961-5839
CERTIFICATE OF AUTHORIZATION #08975

JOB NO.	21-116
ACAD FILE:	FCP
DRAWN BY:	MGF
CHK'D BY:	CSM
DATE:	24.01.11
SHEET:	PE-1.1

THE DESIGNS AND DRAWINGS CONTAINED HEREON ARE THE COPYRIGHTED PROPERTY OF McNEAL ENGINEERING, INC., AND SHOULD NOT BE DUPLICATED WITHOUT WRITTEN CONSENT OF THE ENGINEER.



WALL PACKS – PHASE IVA			
#	TYPE	Northing	Easting
301	L9	1708079.7±	606872.5±
302	L9	1708079.9±	606927.4±
303	L9	1708080.0±	606966.9±
304	L9	1708080.2±	607012.4±
305	L9	1708058.8±	607055.7±
306	L9	1708018.7±	607034.4±
307	L9	1707978.7±	607034.5±
308	L9	1707957.1±	607012.3±
309	L9	1707957.0±	606967.3±
310	L9	1707956.8±	606927.9±
311	L9	1707956.6±	606872.9±
312*	L9	1708058.0±	606840.5±
313*	L9	1708018.0±	606840.7±
314*	L9	1707978.0±	606840.8±

* TEMPORARY LOCATION (PHASE IVA)

WALL PACKS – PHASE IVB			
#	TYPE	Northing	Easting
401	L9	1707956.4±	606822.9±
402	L9	1707956.3±	606782.9±
403	L9	1707956.2±	606742.9±
404	L9	1707956.0±	606702.9±
405	L9	1707955.9±	606662.9±
406	L9	1707955.7±	606622.9±
407	L9	1707977.3±	606600.3±
408	L9	1708017.3±	606600.2±
409	L9	1708057.3±	606600.0±
410	L9	1708078.8±	606622.5±
411	L9	1708079.0±	606662.5±
412	L9	1708079.1±	606702.5±
413	L9	1708079.2±	606742.5±
414	L9	1708079.4±	606782.5±
415	L9	1708079.5±	606822.5±

LIGHT POLES – PHASE IVA				
POLE #	TYPE	FINISH GRADE	Northing	Easting
101	L1	79.70	1708218.07	606635.84
102	L1	79.50	1708218.13	606851.82
103	L1	79.10	1708218.85	607079.83
104	L5	76.00	1707820.88	607028.40
105	L3	76.50	1707817.18	606841.22
106	L3	76.40	1707816.43	606625.22

LIGHT POLES – PHASE IVB				
POLE #	TYPE	FINISH GRADE	Northing	Easting
201	L7	76.10	1708062.14	607160.23
202	L7	76.20	1707895.94	607161.02
203	L3	76.30	1707705.01	607118.63

LIGHTING NOTES

1. ALL EXTERIOR LIGHTING TO BE IN COMPLIANCE WITH WITH MARION COUNTY LAND DEVELOPMENT CODE (DIVISION 19. – EXTERIOR LIGHTING) AND ILLUMINATING ENGINEERING SOCIETY OF NORTH AMERICA (IESNA) OUTDOOR LIGHTING STANDARDS.
2. REFER TO ELECTRICAL PLANS FOR CONDUIT PLACEMENT AND ADDITIONAL INFORMATION.
3. FLOOD LIGHTS FOR DISPLAY AREAS, IF USED, ARE SHOWN HEREON FOR REFERENCE ONLY AND ARE NOT CONSIDERED IN CALCULATIONS. REFER TO ELECTRICAL PLANS PREPARED BY OTHERS FOR ADDITIONAL INFORMATION.

REFER TO SHEET PE-2.01 FIXTURE SCHEDULE & TABLES
REFER TO SHEETS PE-2.01 - PE-2.10 FOR LIGHTING DETAILS

NO.	REVISION & DATE

PROJECT:

MAJOR SITE PLANS FOR
GENERAL RV OCALA - PHASE IV
13150 SW 16TH AVE (CR 475-A), MARION COUNTY, FL

PREPARED FOR:

SHEET TITLE:
LIGHTING PLAN
(SHEET 2 OF 2)

McNEAL ENGINEERING, INC.
15957 N. FLORIDA AVE, LUTZ, FL 33549
PH. (813) 968-1081 FAX (813) 961-5839
CERTIFICATE OF AUTHORIZATION #08975

JOB NO.	21-116
ACAD FILE:	FCP
DRAWN BY:	MGF
CHK'D BY:	CSM
DATE:	24.01.11
SHEET:	**PE-1.2**

THE DESIGNS AND DRAWINGS CONTAINED HEREON ARE THE COPYRIGHTED PROPERTY OF McNEAL ENGINEERING, INC., AND SHOULD NOT BE DUPLICATED WITHOUT WRITTEN CONSENT OF THE ENGINEER.

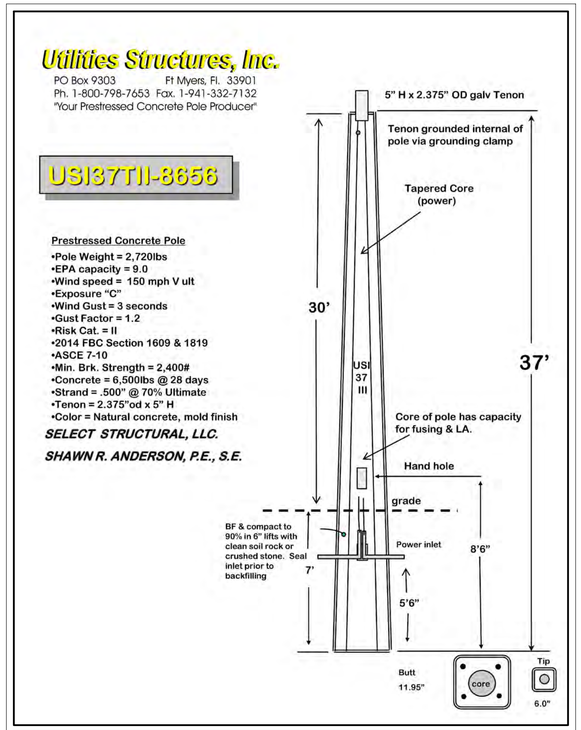
FIXTURE SCHEDULE

SYMBOL	TYPE	PHASE IVA	PHASE IVB	TOTAL	DESCRIPTION	ARRANGEMENT	MOUNT HEIGHT	LLF	VOLTAGE	ARR. WATTS	ARR. LUM. LUMENS
	L1	3	0	3	MCGRAW-EDISON GALLEON LED GLAN-SA6D-740-U-SL4-HSS	SINGLE POLE MOUNT	30.0 FT	0.900	120	368	37,734
	L3	2	1	3	MCGRAW-EDISON GALLEON LED GLAN-SA8C-740-U-SL4-T4FT	SINGLE POLE MOUNT	30.0 FT	0.900	120	429	56,646
	L5	1	0	1	MCGRAW-EDISON GALLEON LED GLAN-SA6D-740-U-5WQ	SINGLE POLE MOUNT	30.0 FT	0.900	120	368	48,011
	L7	0	2	2	MCGRAW-EDISON GALLEON LED GLAN-SA7C-740-U-5MQ	DOUBLE POLE MOUNT	30.0 FT	0.900	120	754	102,718
	L9	14*	15*	26*	MCGRAW-EDISON GALLEON WALL LED GWC-SA2B-740-U-SL4	SINGLE WALL MOUNT	20.0 FT	0.900	120	86	11,333
TOTAL FIXTURES		20*	18*	35*							
LIGHT POLES		6	3	9	UTILITY STRUCTURES INC USI37TII-86-56						

NOTE: ALL LIGHTING FIXTURES NOTED SHALL BE AS SPECIFIED, OR APPROVED EQUAL.
* FIXTURE #'S 312, 313 & 314 TO BE RELOCATED IN PHASE IVB;
ALL WALL MOUNTED UNITS TO BE PROVIDED AND INSTALLED BY BUILDING CONTRACTOR, SHOWN HEREON FOR PHOTOMETRICS ONLY.

CALCULATION SUMMARY (PHASE IV)

LOCATION	CALC TYPE	UNITS	AVG	MAX	MIN	MAX/MIN	DESCRIPTION
25' BEYOND PROPERTY LINE (EAST)	ILLUMINANCE	Fc	0.03	0.4	0.0	N/A	HORIZONTAL PLANE OF CALCULATION AT ZERO FT AFG
25' BEYOND PROPERTY LINE (NORTH)	ILLUMINANCE	Fc	0.00	0.1	0.0	N/A	HORIZONTAL PLANE OF CALCULATION AT ZERO FT AFG
ADJACENT COMMERCIAL ZONE NORTH	ILLUMINANCE	Fc	0.00	0.1	0.0	N/A	HORIZONTAL PLANE OF CALCULATION AT ZERO FT AFG
ADJACENT RESIDENTIAL ZONE NORTH	ILLUMINANCE	Fc	0.02	0.1	0.0	N/A	HORIZONTAL PLANE OF CALCULATION AT ZERO FT AFG
ADJACENT RESIDENTIAL ZONE SOUTH	ILLUMINANCE	Fc	0.02	0.2	0.0	N/A	HORIZONTAL PLANE OF CALCULATION AT ZERO FT AFG
ENTRANCE	ILLUMINANCE	Fc	4.03	11.1	0.9	12.33	HORIZONTAL PLANE AT ZERO FT AFG
MAIN PARKING AREA & DRIVES	ILLUMINANCE	Fc	2.41	19.5	0.0	N/A	
PROPERTY LINE	ILLUMINANCE	Fc	0.08	0.9	0.0	N/A	HORIZONTAL PLANE OF CALCULATION AT ZERO FT AFG
PROPERTY LINE PHASE IV	ILLUMINANCE	Fc	0.05	0.6	0.0	N/A	
25' BEYOND PROPERTY LINE (PHASE IV)	ILLUMINANCE	Fc	0.01	0.4	0.0	N/A	
PHASE IV (COMBINED EAST & NORTH)	ILLUMINANCE	Fc	1.99	11.0	0.0	N/A	



TYPICAL LIGHT POLE DETAIL
NOT TO SCALE

NO. | REVISION & DATE

PROJECT:
MAJOR SITE PLANS FOR
GENERAL RV OCALA - PHASE IV
13150 SW 16TH AVE (CR 475-A), MARION COUNTY, FL

PREPARED FOR:

SHEET TITLE:
LIGHTING DETAILS

McNEAL ENGINEERING, INC.
15957 N. FLORIDA AVE, LUTZ, FL 33549
PH. (813) 968-1081 FAX (813) 961-5839
CERTIFICATE OF AUTHORIZATION #08975

JOB NO.	21-116
ACAD FILE:	FCP
DRAWN BY:	MGF
CHK'D BY:	CSM
DATE:	24.01.11
SHEET:	PE-2.01

THE DESIGNS AND DRAWINGS CONTAINED HEREON ARE THE COPYRIGHTED PROPERTY OF McNEAL ENGINEERING, INC., AND SHOULD NOT BE DUPLICATED WITHOUT WRITTEN CONSENT OF THE ENGINEER.

Project	GENRV OCALA PHASE 4	Catalog #		Type	L1
Prepared by		Notes		Date	



McGraw-Edison

GALN Galleon II

Area / Site Luminaire

Typical Applications

Outdoor • Parking Lots • Walkways • Roadways • Building Areas

Interactive Menu

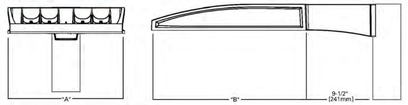
- Ordering Information page 2
- Mounting Details page 3
- Optical Distributions page 5
- Product Specifications page 5
- Energy and Performance Data page 6
- Control Options page 10

Quick Facts

- Lumen packages range from 3,300 - 73,500 (33W - 552W)
- 16 optical distributions
- Efficacy up to 159 lumens per watt

Dimensional Details

Standard Arm



Number of Light Squares	Width 'A'	Housing Length 'B'	Weight with Standard or QM Arm	EPA with Standard or QM Arm
1-4	16"	22"	29 lb	0.95
5-6	22"	22"	39 lb	0.95
7-9	22"	28-1/8"	48 lb	1.1

NOTES:
For arm selection requirements and additional line art, see Mounting Details section.

Product Certifications

Resources

Connected Systems

- WaveLinx Lite
- WaveLinx

McGraw-Edison

GALN Galleon II

Ordering Information

SAMPLE NUMBER: **GALN-SA4C-740-U-T4FT-GM**

Product Family [1,2]	Light Engine: Configuration	Light Engine: Drive Current	Color Temperature	Voltage	Distribution	Mounting	Finish
GALN=Galleon II	**SA1**=1 Square **SA2**=2 Square **SA3**=3 Square **SA4**=4 Square **SA5**=5 Square **SA6**=6 Square **SA7**=7 Square **SA8**=8 Square **SA9**=9 Square	**A**=600mA **B**=800mA **C**=1000mA **D**=1200mA [3, 4]	**727**=700CRI, 2200K **727**=700CRI, 2700K **730**=700CRI, 3000K **735**=700CRI, 3500K **740**=700CRI, 4000K **750**=700CRI, 5000K **760**=700CRI, 6000K **827**=900CRI, 2700K **830**=900CRI, 3000K **AMB**=Amber, 590nm [5, 6]	**UNIVERSAL** **H**=347V-480V [7] **1**=120V **2**=208V **3**=240V **4**=277V [7] **5**=480V [7] **9**=347V [7]	**T2**=Type II **T2R**=Type II Roadway **T3**=Type III **T4FT**=Type IV Forward Throw **T4W**=Type IV Wide **SNQ**=Type V Narrow **SMQ**=Type V Square Medium **SWQ**=Type V Square Wide **SL2**=Type II w/Split Control **SL3**=Type III w/Split Control **SL4**=Type IV w/Split Control **SLL**=90° Split Light Eliminator Left **SLR**=90° Split Light Eliminator Right **RW**=Rectangular Wide Type I **AFL**=Automotive Frontline	**[blank]**=Standard Pole Mount Arm **QM**=Standard Pole Mount Arm with Quick Mount Adaptor **PA**=Pole Mount, Adjustable **SP**=Slipfitter, Adjustable [8] **MA**=Mast Arm, Fixed **WM**=Wall Mount, Fixed **WA**=Wall Mount, Adjustable **UP**=Upswept Arm	**AP**=Gray **BZ**=Bronze **BK**=Black **DP**=Dark Platinum **GM**=Graphite Metallic **WH**=White

Options (Add as Suffix)	Controls and System Options (Add as Suffix)	Accessories (Order Separately)
DIM=External 0-10V Dimming Leads [9] **F**=Single Fuse (120, 277 or 347V Specify Voltage) **FF**=Double Fuse (208, 240 or 480V Specify Voltage) **20K**=20kV IR, 1449 listed surge protective device [10] **2L**=Two Circuits [11] **HA**=50°C High Ambient **HSS**=Installed House Side Shield [12] **GBSBK**=Glare Reducing Shield, Black [13] **GBSWH**=Glare Reducing Shield, White [13] **RTD**=Field Adj. CCT Sensor Required to Match Housing [14] **TDD**=Tool-less Door Hardware **CC**=Coastal Construction finish [15] **LNS**=Optics Rotated 90° Left **RNS**=Optics Rotated 90° Right **AMS14**=After Hours Dim, 5 Hours [16] **AMS245**=After Hours Dim, 6 Hours [16] **AMS35**=After Hours Dim, 7 Hours [16] **AMS55**=After Hours Dim, 8 Hours [16] **DALI**=DALI Driver	**BPC**=Button Type Photocontrol [17] **PR**=NEMA 3-Prong Photocontrol Receptacle **PR7**=NEMA 7-Pin Photocontrol Receptacle [17] **SPB2**=Dimming Motion Sensor, 9'-15' mounting [18] **SPB4**=Dimming Motion Sensor, 21'-40' mounting [18] **SPB2LX**=Dimming Motion Sensor, limited square count, 9'-20' mounting [18] **SPB4LX**=Dimming Motion Sensor, limited square count, 21'-40' mounting [18] **ZW**=WaveLinx Module with DALI driver and 4 PIN Receptacle [18] **ZW-SWPD4XX**=WaveLinx Sensor Only, 7-15ft [19, 20, 21] **ZW-SWPD5XX**=WaveLinx Sensor Only, 15-40ft [19, 20, 21] **ZW-WDBXX**=WaveLinx Sensor with Bluetooth, 7-15ft [19, 20, 21] **ZW-WDFXX**=WaveLinx Sensor with Bluetooth, 15-40ft [19, 20, 21] **ZD-SWPD4ZX**=WaveLinx Sensor Only, 7-15ft [19, 20, 21] **ZD-SWPD5ZX**=WaveLinx Sensor Only, 15-40ft [19, 20, 21] **ZD-WDBZX**=WaveLinx Sensor with Bluetooth, 7-15ft [19, 20, 21] **ZD-WDFZX**=WaveLinx Sensor with Bluetooth, 15-40ft [19, 20, 21] **DIM10-MS/DIM-LSS**=Synapse Occupancy Sensor (9'-20' Mounting) [18] **DIM10-MS/DIM-LAS**=Synapse Occupancy Sensor (21'-40' Mounting) [18]	**DA/RA1016**=NEMA Photocontrol Multi-Tap - 105-285V **DA/RA1027**=NEMA Photocontrol - 480V **DA/RA1201**=NEMA Photocontrol - 347V **DA/RA1015**=Photocontrol Shorting Cap **DA/RA1014**=120V Photocontrol **MA1232**=10kV Surge Module Replacement **MA1036-XX**=Single Tenon Adapter for 2-3/8" O.D. Tenon **MA1037-XX**=2@180° Tenon Adapter for 2-3/8" O.D. Tenon **MA1197-XX**=3@120° Tenon Adapter for 2-3/8" O.D. Tenon **MA1158-XX**=4@90° Tenon Adapter for 2-3/8" O.D. Tenon **MA1199-XX**=2@90° Tenon Adapter for 2-3/8" O.D. Tenon **MA1190-XX**=5@90° Tenon Adapter for 2-3/8" O.D. Tenon **MA1191-XX**=3@120° Tenon Adapter for 2-3/8" O.D. Tenon **MA1038-XX**=Single Tenon Adapter for 3-1/2" O.D. Tenon **MA1039-XX**=2@180° Tenon Adapter for 3-1/2" O.D. Tenon **MA1192-XX**=3@120° Tenon Adapter for 3-1/2" O.D. Tenon **MA1193-XX**=4@90° Tenon Adapter for 3-1/2" O.D. Tenon **MA1194-XX**=2@90° Tenon Adapter for 3-1/2" O.D. Tenon **MA1195-XX**=5@90° Tenon Adapter for 3-1/2" O.D. Tenon **SRA238**=Adapter kit for mounting to 2-3/8" O.D. Tenon **LSXISS**=Field Installed House Side Shield [12] **LS/GBSBK**=Glare Reducing Shield, Black [13] **LS/GBSWH**=Glare Reducing Shield, White [13] **LS/PRS**=Perimeter Shield, Black [22] **WGL-CP-10A**=WaveLinx Outdoor Control Module [17, 19] **WOA-XX**=WaveLinx Wireless Sensor, 7'-15' Mounting Height [17, 18, 19, 20] **WOE-XX**=WaveLinx Wireless Sensor, 15'-40' Mounting Height [17, 18, 19, 20]

NOTES:
1. Customizer is required to file for engineering analysis to confirm pole and fixture compatibility for all applications. Refer to our white paper WP07300109 for additional support information.
2. Designs gifts Conservatism Qualified. Refer to www.designlights.org Qualified Products List under Family Models for details.
3. Coastal construction finish salt spray tested to over 5,000 hours per ASTM B117, with a surface rating of 9 per ASTM D1654.
4. Not available in 1A.
5. 2.1% current 120mA not available with color temperatures 727, 727 or 830 when either 10A or HSS options are selected.
6. 1.1% option not 50 rated. Not available with Coastal Construction (CC) option.
7. Not available with voltage option H, 4 or 5.
8. Requires the use of an internal slip-fitter transformer when combined with sensor options. Not available with sensor or dimming options. Not available with 2L, 20K, 3G, 4G, 5G, 7G, 8G, 9G, BPC, DALI, DIM, F, FF, PR, PR7, RTD.
9. Adjustable dimming leads are limited to vertical 7" sensor. For mounting to 2-3/8" O.D. tenons, order accessory SRA238.
10. One required for each Light Square.
11. Not available with SPP or as NEMA or 480V. Not available with WaveLinx or Enlighted sensors, or 20kV surge option.
12. Replace XX with sensor color (WH, BZ or BK).
13. WAC Gateway required to enable field-configurability. Order WAC-PoE and WPOS-12B (48V to PoE injector) power supply if needed. WAC not required for LC Bluetooth sensors.
14. Requires ZW or ZD receptacle.
15. Narrow-band 590nm +/- 5nm for wildlife and observatory use. Choose this runner if, supplied at 500mA drive current only. Available with SWQ, SNQ, SL3, SL3 and SL4 distributions. Can be used with HSS option.
16. Set of 4 pcs. One set required per Light Square.
17. Not available with 1A or 1.2A.
18. Not for use with SNQ, SMQ, SWQ or RW optics. A black trim plate is used when HSS is selected.
19. Cannot be used with other control options.
20. Low voltage control boot brought out 18" outside fixture. Not available with (2xL) or integrated controls options
21. Not available if any SPD, (XP), or (Xsize) sensor is selected. Motion sensor has an integral photocell.
22. Not available with 1A, 1.2A or 20kV surge. Not available with WaveLinx receptacle with photocontrol accessory.
23. Not for use with "LRT", T4W or SL4 optics. See CD files for details.
24. Sensor configuration mobile application required for configuration. See controls page for details.
25. Replace X with number of Light Squares controlled by the GPX, entering the "GPX-E Availability Table" on the controls page.
26. Not available with HSS, GBSBK or GBSWH.

LumenSafe Integrated Network Security Camera Technology Options (Add as Suffix)

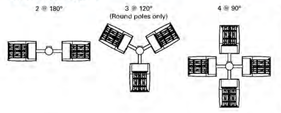
Product Family	Camera Type	Data Backhaul
L=LumenSafe Technology	**D**=Standard Dome Camera **H**=Hi-Res Dome Camera **P**=Remote PTZ Camera	**C**=Cellular, No SIM **A**=Cellular, AT&T **V**=Cellular, Verizon **S**=Cellular, Sprint **R**=Cellular, Rogers **W**=Wi-Fi Networking w/ Omni-Directional Antenna **E**=Ethernet Networking

McGraw-Edison

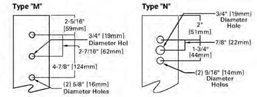
GALN Galleon II

Mounting Details

Pole Configuration Options

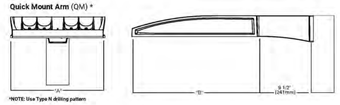


Pole Drilling Patterns



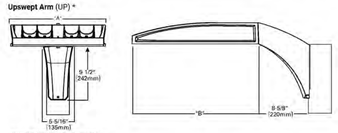


Quick Mount Arm (QM) *



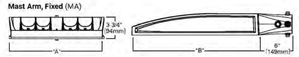
*NOTE: Use Type N drilling pattern

Upswept Arm (UP) *

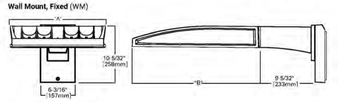


*NOTE: Use Type H, R or M drilling pattern

Mast Arm, Fixed (MA)



Wall Mount, Fixed (WM)

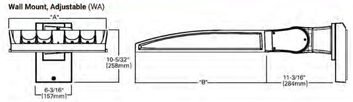


McGraw-Edison

GALN Galleon II

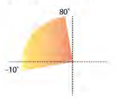
Mounting Details

Wall Mount, Adjustable (WA)

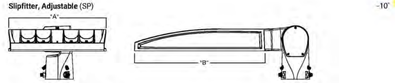


Adjustable Arm Range of Motion

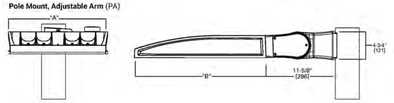
- Wall Mount (WA), Slipfitter (SP) and Pole Mount (PA)
- Adjustable in increments of 5°
- Must maintain downward facing orientation



Slipfitter, Adjustable (SP)



Pole Mount, Adjustable Arm (PA)



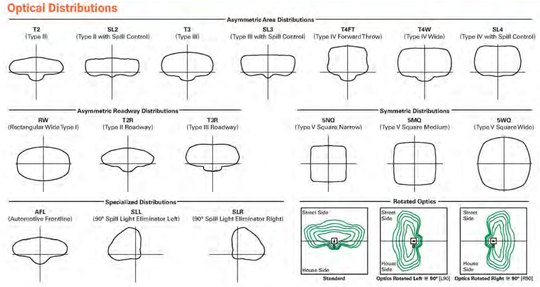
Fixture Weights and EPAs

Tilt Angle (Degrees)	Number of Light Squares	Weight	1 @ 90°	2 @ 180°	2 @ 90°	2 @ 120°	3 @ 90°	3 @ 120°	4 @ 90°
0°	1-4	33.5 lb (15.2 kg)	0.85	1.70	1.46	1.66	2.31	2.25	2.35
	5-6	43.5 lb (19.7 kg)	0.86	1.71	1.62	1.80	2.49	2.35	2.50
	7-9	52.5 lb (23.8 kg)	0.98	1.95	1.75	1.98	2.73	2.55	2.76
15°	1-4	33.5 lb (15.2 kg)	1.10	1.71	1.95	2.26	2.81	3.30	2.87
	5-6	43.5 lb (19.7 kg)	1.42	1.71	2.27	2.72	3.13	3.63	3.15
	7-9	52.5 lb (23.8 kg)	1.69	1.96	2.67	3.22	3.65	4.38	3.72
30°	1-4	33.5 lb (15.2 kg)	1.72	1.81	2.58	3.21	3.44	4.59	3.53
	5-6	43.5 lb (19.7 kg)	2.26	2.29	3.11	4.00	3.97	5.27	4.00
	7-9	52.5 lb (23.8 kg)	2.75	2.85	3.73	4.83	4.71	6.45	4.81
45°	1-4	33.5 lb (15.2 kg)	2.25	2.36	3.10	4.00	3.96	5.63	4.08
	5-6	43.5 lb (19.7 kg)	2.96	2.99	3.81	5.06	4.67	6.49	4.71
	7-9	52.5 lb (23.8 kg)	3.63	3.76	3.73	6.17	5.59	8.03	5.73
60°	1-4	33.5 lb (15.2 kg)	2.63	2.77	3.49	4.58	4.34	6.21	4.48
	5-6	43.5 lb (19.7 kg)	3.46	3.51	4.32	5.84	5.19	7.01	5.22
	7-9	52.5 lb (23.8 kg)	4.27	4.44	5.25	7.15	6.23	8.80	6.40

McGraw-Edison

GALN Galleon II

Optical Distributions



Product Specifications

Construction
- Die-cast aluminum housing and heat sink
- Three housing sizes, using 1 to 9 light squares

Optics
- High-efficiency injection-molded AccuLED Optics technology
- 16 optical distributions for area site and roadway applications
- 3 shielding options include HSS, GRS and PFS
- IDA certified (3000K CCT and warmer only, arms at 0° tilt)

Electrical
- Removable power tray assembly includes drivers, surge modules and control modules for ease of maintenance and serviceability
- Standard with 0-10V dimming
- Standard with 10kV surge module, optional 20kV surge module
- Suitable for operation in -40°C to 40°C ambient environments. Optional 50°C high ambient (HA) configuration

Mounting
- Arms are factory installed, enabling closed-housing installation
- All arms suitable for round or square pole installation
- All arms provide clearance for multiple fixture installations at 90°

Finish
- 6 standard finishes use super durable TGIC polyester powder coat paint, providing 2.5 mil nominal thickness and salt-spray tested to 3,000 hours per ASTM B117
- RAL and custom color matches available
- Coastal Construction (CC) option salt-spray tested to 5,000 hours per ASTM B117, achieving a scribe rating of 9 per ASTM D1654

Warranty
- Five year limited warranty

Energy and Performance Data

Lumen Maintenance (TM-21)

Drive Current	Ambient Temperature	25,000 hours*	50,000 hours*	60,000 hours*	100,000 hours**	Theoretical L70 hours**
Up to 1A	25°C	99.4%	99.0%	98.9%	98.3%	> 2.4M
	40°C	98.7%	98.3%	98.1%	97.4%	> 1.9M
	50°C	98.2%	97.2%	96.8%	95.2%	> 851,000
1.2A	25°C	99.4%	99.0%	98.9%	98.3%	> 2.4M
	40°C	98.5%	97.9%	97.7%	96.7%	> 1.3M

Lumen Multiplier

Ambient Temperature	Lumen Multiplier
0°C	1.02
10°C	1.01
25°C	1.00
40°C	0.99
50°C	0.97

McGraw-Edison

GALN Galleon II

Performance Table, Drive Current "A" (615mA)

Number of Light Squares		1	2	3	4	5	6	7	8	9
Nominal Power (Watts)		33	63	93	121	154	182	213	244	274
Input Current @ 120V		0.283	0.529	0.778	1.058	1.310	1.556	1.839	2.099	2.335
Input Current @ 208V		0.165	0.309	0.460	0.618	0.771	0.919	1.082	1.240	1.379
Input Current @ 240V		0.143	0.270	0.398	0.540	0.671	0.796	0.944	1.076	1.194
Input Current @ 277V		0.125	0.237	0.352	0.473	0.581	0.705	0.818	0.962	1.057
Input Current @ 347V		0.098	0.181	0.272	0.362	0.454	0.544	0.636	0.736	0.816
Input Current @ 480V		0.073	0.133	0.200	0.267	0.335	0.400	0.470	0.554	0.600
Optics										
T2	4000K Lumens	4,654	9,249	13,730	18,194	23,032	27,273	32,094	37,189	41,694
	BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5
	Lumens per Watt	141	147	148	150	150	150	149	152	152
T2R	4000K Lumens	4,716	9,372	13,913	18,437	23,340	27,637	32,462	37,634	42,251
	BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4
	Lumens per Watt	143	149	150	152	152	152	151	154	154
T3	4000K Lumens	4,589	9,120	13,538	17,940	22,711	26,892	31,560	36,620	41,112
	BUG Rating	B1-U0-G1	B2-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B4-U0-G4
	Lumens per Watt	139	145	146	148	147	148	147	150	150
T3R	4000K Lumens	4,735	9,411	13,970	18,513	23,435	27,751	32,596	37,790	42,425
	BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G3	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5
	Lumens per Watt	143	149	150	153	152	152	152	155	155
T4FT	4000K Lumens	4,617	9,176	13,622	18,051	22,851	27,058	31,782	36,847	41,366
	BUG Rating	B1-U0-G2	B2-U0-G2	B2-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5
	Lumens per Watt	140	146	148	149	148	149	148	153	151
T4W	4000K Lumens	4,631	9,203	13,642	18,104	22,918	27,138	31,876	36,955	41,486
	BUG Rating	B1-U0-G1	B2-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G4	B4-U0-G4	B4-U0-G4
	Lumens per Watt	140	146	147	150	149	149	148	151	151
SL2	4000K Lumens	4,619	9,180	13,627	18,058	22,860	27,069	31,795	36,861	41,383
	BUG Rating	B1-U0-G2	B2-U0-G2	B2-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5	B4-U0-G5
	Lumens per Watt	140	146	147	149	148	149	148	151	151
SL3	4000K Lumens	4,596	9,115	13,531	17,931	22,695	26,879	31,571	36,632	41,097
	BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G3	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5
	Lumens per Watt	139	145	145	148	147	148	147	150	150
SL4	4000K Lumens	4,529	9,002	13,363	17,709	22,417	26,544	31,178	36,146	40,580
	BUG Rating	B1-U0-G2	B1-U0-G3	B2-U0-G3	B2-U0-G4	B2-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5
	Lumens per Watt	137	143	144	146	146	146	145	148	148
SNQ	4000K Lumens	4,829	9,598	14,247	18,880	23,901	28,301	33,242	38,539	43,266
	BUG Rating	B2-U0-G1	B3-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G2	B5-U0-G3	B5-U0-G3
	Lumens per Watt	146	152	153	155	155	155	155	158	158
SMQ	4000K Lumens	4,803	9,545	14,318	18,974	24,020	28,442	33,407	38,731	43,482
	BUG Rating	B3-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4
	Lumens per Watt	147	153	154	157	156	156	155	159	159
SWQ	4000K Lumens	4,843	9,625	14,288	18,934	23,969	28,382	33,337	38,649	43,390
	BUG Rating	B3-U0-G1	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G5	B5-U0-G5
	Lumens per Watt	147	153	154	156	156	156	155	159	158
SLL/ SLR	4000K Lumens	3,989	7,927	11,768	15,594	19,741	23,375	27,436	31,831	35,736
	BUG Rating	B1-U0-G2	B1-U0-G2	B2-U0-G3	B2-U0-G3	B2-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5
	Lumens per Watt	121	126	127	129	128	128	128	130	130
RW	4000K Lumens	4,774	9,488	14,085	18,665	23,628	27,979	32,863	38,100	42,774
	BUG Rating	B2-U0-G1	B3-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G3
	Lumens per Watt	145	151	151	154	153	154	153	156	156
AFL	4000K Lumens	4,673	9,286	13,785	18,268	23,126	27,384	32,164	37,290	41,864
	BUG Rating	B1-U0-G1	B1-U0-G1	B2-U0-G2	B2-U0-G2	B3-U0-G2	B3-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3
	Lumens per Watt	142	147	148	151	150	150	150	153	153

* Nominal data for 70 CRI. ** For additional performance data, please reference the Gleheon Supplemental Performance Guide.

LIGHT FIXTURE: L1

NO. | REVISION & DATE

PROJECT:

MAJOR SITE PLANS FOR
GENERAL RV OCALA - PHASE IV
13150 SW 16TH AVE (CR 475-A), MARION COUNTY, FL

PREPARED FOR:

SHEET TITLE:
LIGHTING DETAILS

MCNEAL ENGINEERING, INC.
15957 N. FLORIDA AVE, LUTZ, FL 33549
PH. (813) 968-1081 FAX (813) 961-5839
CERTIFICATE OF AUTHORIZATION #08975

JOB NO.	21-116
ACAD FILE:	FCP
DRAWN BY:	MGF
CHK'D BY:	CSM
DATE:	24.01.11
SHEET:	PE-2.02

THE DESIGNS AND DRAWINGS CONTAINED HEREON ARE THE COPYRIGHTED PROPERTY OF McNEAL ENGINEERING, INC., AND SHOULD NOT BE DUPLICATED WITHOUT WRITTEN CONSENT OF THE ENGINEER.

McGraw-Edison — GALN Galleon II

Performance Table, Drive Current "B" (800mA)

Number of Light Squares		1	2	3	4	5	6	7	8	9
Nominal Power (Watts)		44	82	121	164	204	243	286	325	364
Input Current @ 120V		0.367	0.689	1.014	1.378	1.704	2.027	2.393	2.716	3.041
Input Current @ 208V		0.213	0.401	0.594	0.802	0.997	1.188	1.400	1.605	1.792
Input Current @ 240V		0.184	0.347	0.516	0.694	0.860	1.021	1.210	1.386	1.531
Input Current @ 277V		0.160	0.303	0.449	0.605	0.757	0.898	1.065	1.242	1.347
Input Current @ 347V		0.125	0.235	0.355	0.471	0.592	0.710	0.828	0.958	1.065
Input Current @ 480V		0.092	0.172	0.258	0.344	0.432	0.517	0.605	0.706	0.775
Optics										
T2	4000K Lumens	5,793	11,508	17,083	22,638	28,658	33,935	39,859	46,210	51,879
	BUG Rating	B1-U0-G2	B2-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B4-U0-G5
	Lumens per Watt	132	140	141	138	140	140	139	142	143
T2R	4000K Lumens	5,868	11,662	17,311	22,941	29,041	34,388	40,391	46,827	52,572
	BUG Rating	B1-U0-G1	B2-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G4	B4-U0-G4	B3-U0-G4	B3-U0-G5
	Lumens per Watt	133	142	143	140	142	142	141	144	144
T3	4000K Lumens	5,710	11,347	16,845	22,322	28,258	33,461	39,309	45,565	51,155
	BUG Rating	B1-U0-G1	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B4-U0-G4	B4-U0-G5	B4-U0-G5
	Lumens per Watt	130	138	139	136	139	138	137	140	141
T3R	4000K Lumens	5,892	11,716	17,383	23,035	29,161	34,530	40,558	47,020	52,788
	BUG Rating	B1-U0-G2	B2-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B4-U0-G5
	Lumens per Watt	134	143	144	140	143	142	142	145	146
T4FT	4000K Lumens	5,745	11,418	16,949	22,460	28,433	33,668	39,546	45,847	51,471
	BUG Rating	B1-U0-G2	B2-U0-G3	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	131	139	140	137	139	139	138	141	141
T4W	4000K Lumens	5,782	11,481	16,999	22,526	28,517	33,767	39,662	45,982	51,622
	BUG Rating	B1-U0-G1	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G4	B4-U0-G4	B4-U0-G4	B4-U0-G4
	Lumens per Watt	131	140	140	137	140	139	139	141	142
SL2	4000K Lumens	5,747	11,422	16,956	22,469	28,444	33,681	39,561	45,865	51,491
	BUG Rating	B1-U0-G2	B2-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B4-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	131	139	140	137	139	139	138	141	141
SL3	4000K Lumens	5,707	11,342	16,836	22,311	28,244	33,444	39,283	45,542	51,129
	BUG Rating	B1-U0-G2	B2-U0-G3	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5
	Lumens per Watt	130	138	139	136	138	138	137	140	140
SL4	4000K Lumens	5,636	11,201	16,627	22,034	27,893	33,028	38,794	44,976	50,493
	BUG Rating	B1-U0-G2	B1-U0-G3	B2-U0-G4	B2-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5
	Lumens per Watt	128	137	137	134	137	136	136	138	139
SNQ	4000K Lumens	6,009	11,942	17,727	23,492	29,739	35,214	41,362	47,953	53,835
	BUG Rating	B2-U0-G1	B3-U0-G1	B4-U0-G2	B4-U0-G2	B5-U0-G2	B5-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G3
	Lumens per Watt	137	146	147	143	146	145	145	148	148
SMQ	4000K Lumens	6,039	12,001	17,816	23,609	29,887	35,389	41,568	48,191	54,101
	BUG Rating	B3-U0-G1	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4	B5-U0-G5
	Lumens per Watt	137	146	147	144	147	146	145	148	149
SWQ	4000K Lumens	6,026	11,976	17,778	23,589	29,824	35,315	41,480	48,090	53,989
	BUG Rating	B3-U0-G1	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4	B5-U0-G5	B5-U0-G5
	Lumens per Watt	137	146	147	144	146	145	145	148	148
SLL/ SLR	4000K Lumens	4,963	9,863	14,642	19,403	24,563	29,085	34,163	39,607	44,465
	BUG Rating	B1-U0-G2	B1-U0-G3	B2-U0-G3	B2-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5
	Lumens per Watt	113	120	121	118	120	120	119	122	122
RW	4000K Lumens	5,940	11,806	17,526	23,224	29,400	34,813	40,891	47,407	53,222
	BUG Rating	B3-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4
	Lumens per Watt	135	144	145	142	144	143	143	146	146
AFL	4000K Lumens	5,814	11,555	17,159	22,730	28,773	34,079	40,021	46,398	52,090
	BUG Rating	B1-U0-G1	B2-U0-G1	B2-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G4
	Lumens per Watt	132	141	142	139	141	140	140	143	143

* Nominal data for 70 CRI. ** For additional performance data, please reference the Gleneon Supplemental Performance Guide.

McGraw-Edison — GALN Galleon II

Performance Table, Drive Current "C" (1050mA)

Number of Light Squares		1	2	3	4	5	6	7	8	9
Nominal Power (Watts)		57	108	160	213	266	321	377	425	481
Input Current @ 120V		0.478	0.905	1.398	1.810	2.244	2.675	3.150	3.564	4.013
Input Current @ 208V		0.279	0.532	0.780	1.064	1.313	1.559	1.845	2.093	2.339
Input Current @ 240V		0.243	0.458	0.664	0.916	1.123	1.328	1.582	1.788	1.991
Input Current @ 277V		0.213	0.404	0.582	0.808	0.997	1.164	1.401	1.589	1.745
Input Current @ 347V		0.164	0.322	0.471	0.644	0.795	0.943	1.117	1.269	1.414
Input Current @ 480V		0.121	0.235	0.341	0.469	0.579	0.681	0.814	0.923	1.022
Optics										
T2	4000K Lumens	7,154	14,219	21,107	27,975	33,408	41,927	49,247	57,094	64,098
	BUG Rating	B1-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	126	132	132	131	132	131	131	133	133
T2R	4000K Lumens	7,230	14,408	21,389	28,344	35,881	42,487	49,905	57,857	64,954
	BUG Rating	B1-U0-G1	B2-U0-G2	B2-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	127	133	134	133	133	132	132	135	135
T3	4000K Lumens	7,054	14,020	20,812	27,580	34,914	41,342	48,560	56,297	63,203
	BUG Rating	B1-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G4	B3-U0-G4	B4-U0-G4	B4-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	124	130	130	129	130	129	129	131	131
T3R	4000K Lumens	7,280	14,468	21,477	28,461	36,021	42,663	50,111	58,095	65,222
	BUG Rating	B1-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	128	134	134	134	134	133	133	135	136
T4FT	4000K Lumens	7,098	14,107	20,941	27,751	35,110	41,598	48,860	56,646	63,594
	BUG Rating	B1-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	125	131	131	130	131	130	130	132	132
T4W	4000K Lumens	7,119	14,148	21,003	27,832	35,233	41,720	49,004	56,812	63,761
	BUG Rating	B1-U0-G1	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G4	B4-U0-G4	B4-U0-G4	B4-U0-G5	B5-U0-G5
	Lumens per Watt	125	131	131	131	131	130	130	132	133
SL2	4000K Lumens	7,101	14,112	20,949	27,761	35,144	41,614	48,879	56,668	63,619
	BUG Rating	B1-U0-G2	B2-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	125	131	131	130	131	130	130	132	132
SL3	4000K Lumens	7,051	14,013	20,802	27,566	34,897	41,321	48,535	56,269	63,172
	BUG Rating	B1-U0-G2	B2-U0-G3	B2-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	124	130	130	129	130	129	129	131	131
SL4	4000K Lumens	6,963	13,839	20,543	27,223	34,463	40,808	47,932	55,569	62,366
	BUG Rating	B1-U0-G2	B2-U0-G3	B2-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5
	Lumens per Watt	122	128	128	128	128	127	127	130	130
SNQ	4000K Lumens	7,424	14,755	21,903	29,025	36,743	43,505	51,104	59,247	66,510
	BUG Rating	B3-U0-G1	B3-U0-G2	B4-U0-G2	B5-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4
	Lumens per Watt	130	137	137	136	137	136	136	138	138
SMQ	4000K Lumens	7,461	14,828	22,012	29,169	36,926	43,725	51,399	59,542	66,846
	BUG Rating	B3-U0-G1	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4	B5-U0-G5	B5-U0-G5
	Lumens per Watt	131	137	138	137	137	136	136	139	139
SWQ	4000K Lumens	7,445	14,797	21,966	29,108	36,845	43,633	51,250	59,417	66,705
	BUG Rating	B3-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G5	B5-U0-G5	B5-U0-G5	B5-U0-G5
	Lumens per Watt	131	137	137	137	137	136	136	139	139
SLL/ SLR	4000K Lumens	6,132	12,187	18,091	23,979	30,348	35,936	42,210	48,915	54,938
	BUG Rating	B1-U0-G2	B2-U0-G3	B2-U0-G3	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5
	Lumens per Watt	108	113	113	113	113	112	112	114	114
RW	4000K Lumens	7,340	14,587	21,653	28,694	36,325	43,013	50,522	58,573	65,767
	BUG Rating	B3-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4
	Lumens per Watt	129	135	135	135	135	134	134	137	137
AFL	4000K Lumens	7,183	14,276	21,193	28,084	35,552	42,098	49,448	57,327	64,359
	BUG Rating	B1-U0-G1	B2-U0-G2	B2-U0-G2	B3-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B4-U0-G4
	Lumens per Watt	126	132	132	132	132	131	131	134	134

* Nominal data for 70 CRI. ** For additional performance data, please reference the Gleneon Supplemental Performance Guide.

McGraw-Edison — GALN Galleon II

Performance Table, Drive Current "D" (1200mA)

Number of Light Squares		1	2	3	4	5	6	7	8	9
Nominal Power (Watts)		65	125	184	245	309	368	433	493	552
Input Current @ 120V		0.546	1.041	1.535	2.062	2.578	3.070	3.619	4.114	4.605
Input Current @ 208V		0.318	0.610	0.893	1.219	1.504	1.786	2.113	2.397	2.679
Input Current @ 240V		0.276	0.523	0.758	1.046	1.282	1.516	1.806	2.041	2.274
Input Current @ 277V		0.241	0.460	0.662	0.920	1.133	1.325	1.593	1.807	1.987
Input Current @ 347V		0.187	0.370	0.543	0.740	0.915	1.085	1.285	1.459	1.628
Input Current @ 480V		0.138	0.269	0.391	0.537	0.663	0.782	0.932	1.057	1.173
Optics										
T2	4000K Lumens	7,872	15,645	23,225	30,777	38,562	46,135	54,189	62,824	70,550
	BUG Rating	B1-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	121	125	126	126	126	125	125	127	128
T2R	4000K Lumens	7,977	15,854	23,535	31,188	39,482	46,751	54,913	63,663	71,472
	BUG Rating	B1-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B4-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	123	127	128	127	128	127	127	129	129
T3	4000K Lumens	7,762	15,427	22,901	30,348	38,418	45,491	53,433	61,947	69,546
	BUG Rating	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G4	B4-U0-G4	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	119	123	124	124	124	123	123	126	126
T3R	4000K Lumens	8,010	15,920	23,632	31,317	39,645	46,944	55,139	63,925	71,767
	BUG Rating	B1-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	123	127	128	128	128	128	127	130	130
T4FT	4000K Lumens	7,816	15,522	23,043	30,535	38,655	45,772	53,763	62,350	69,976
	BUG Rating	B1-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	120	124	125	125	125	124	124	126	127
T4W	4000K Lumens	7,833	15,566	23,110	30,625	38,749	45,907	53,921	62,513	70,182
	BUG Rating	B2-U0-G1	B2-U0-G2	B3-U0-G3	B3-U0-G3	B4-U0-G4	B4-U0-G4	B4-U0-G5	B4-U0-G5	B5-U0-G5
	Lumens per Watt	121	125	126	125	125	125	125	127	127
SL2	4000K Lumens	7,813	15,528	23,052	30,547	38,670	45,790	53,784	62,334	70,000
	BUG Rating	B2-U0-G2	B3-U0-G3	B3-U0-G4	B3-U0-G4	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	120	124	125	125	125	124	124	126	127
SL3	4000K Lumens	7,758	15,419	22,889	30,332	38,398	45,468	53,406	61,916	69,511
	BUG Rating	B1-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	119	123	124	124	124	124	123	126	126
SL4	4000K Lumens	7,662	15,233	22,605	29,955	37,921	44,903	52,742	61,146	68,646
	BUG Rating	B1-U0-G2	B2-U0-G3	B2-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5	B4-U0-G5
	Lumens per Watt	118	122	123	122	123	122	122	124	124
SNQ	4000K Lumens	8,169	16,235	24,101	31,938	40,431	47,874	56,232	65,193	73,190
	BUG Rating	B3-U0-G1	B3-U0-G2	B4-U0-G2	B5-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4
	Lumens per Watt	126	130	131	130	131	130	130	132	133
SMQ	4000K Lumens	8,210	16,316	24,221	32,097	40,632	48,113	56,512	65,517	73,554
	BUG Rating	B3-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G5	B5-U0-G5	B5-U0-G5
	Lumens per Watt	126	131	132	131	131	131	131	133	133
SWQ	4000K Lumens	8,152	16,202	24,170	32,029	40,546	48,011	56,390	65,379	73,399
	BUG Rating	B3-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4	B5-U0-G5	B5-U0-G5	B5-U0-G5
	Lumens per Watt	126	130	131	131	131	130	130	133	133
SLL/ SLR	4000K Lumens	6,747	13,410	19,906	26,379	33,994	39,542	46,445	53,846	60,451
	BUG Rating	B1-U0-G2	B2-U0-G3	B2-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5	B4-U0-G5
	Lumens per Watt	104	107	108	108	108	107	107	109	110
RW	4000K Lumens	8,076	16,060	23,826	31,574	39,970	47,329	55,592	64,450	72,356
	BUG Rating	B3-U0-G1	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4	B5-U0-G5
	Lumens per Watt	124	128	129	129	129	129	128	131	131
AFL	4000K Lumens	7,904	15,709	23,220	30,902	39,120	46,323	54,410	63,079	70,817
	BUG Rating	B1-U0-G1	B2-U0-G2	B3-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G4	B4-U0-G4	B4-U0-G4
	Lumens per Watt	122	126	127	126	127	126	126	128	128

* Nominal data for 70 CRI. ** For additional performance data, please reference the Gleneon Supplemental Performance Guide.

McGraw-Edison — GALN Galleon II

Control Options

0-10V (DIM)
This fixture is offered standard with 0-10V dimming driver(s). The DIM option provides 0-10V dimming wire leads for use with a lighting control panel or other control method.

Photocontrol (BPC, PR and PR7)
Optional button-type photocontrol (BPC) and photocontrol receptacles (PR and PR7) provide a flexible solution to enable "dusk-to-dawn" lighting by sensing light levels. Advanced control systems compatible with NEMA 7-pin standards can be utilized with the PR7 receptacle.

After Hours Dim (AHD)
This feature allows photocontrol-enabled luminaires to achieve additional energy savings by dimming during scheduled portions of the night. The dimming profile will automatically take effect after a "dusk-to-dawn" period has been calculated from the photocontrol input. Specify the desired dimming profile for a simple, factory-shipped dimming solution requiring no external control wiring. Reference the After Hours Dim supplemental guide for additional information.

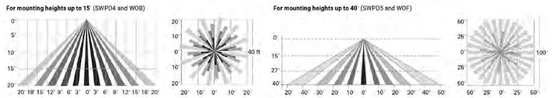
Dimming Occupancy Sensor (SPB)
These passive infrared (PIR) sensors are factory installed in the luminaire housing. When the SPB sensor option is selected, the occupancy sensor is connected to a dimming driver and the entire luminaire dims when no motion is detected. After a period of time, the luminaire turns off, and when motion is detected, the luminaire returns to full light output. The SPB sensor default parameters are listed in the table below, and can be configured utilizing the Sensor Configuration mobile application for iOS and Android devices. The SPB/X is configured to control only the specified number of light squares. An integral photocontrol can be activated with the app for "dusk-to-dawn" control or daylight harvesting - the factory default is off. Three sensor lenses are available to optimize the coverage pattern for mounting heights from 8'-40'. Four sensor colors are available; Bronze, Black, Gray and White, and are automatically selected based on the luminaire finish as indicated by the table below.

SPB sensor finish matched to luminaire finish		
Luminaire Finish		SPB Sensor Finish
WH	White	White
BK	Black	Black
GM	Graphite Metallic	Black
BZ	Bronze	Bronze
AP	Gray	Gray
DP	Dark Platinum	Gray

SPB/X Availability Table	
Fixture Square Count	Available SPB/X Square Count
1	Not Available
2	Not Available
3	Not Available
4	2
5	2 or 3
6	3
7	2, 3, 4 or 5
8	2, 3, 5 or 6
9	3 or 5

WaveLinx Wireless Control and Monitoring System
Operates on a wireless mesh network based on IEEE 802.15.4 standards enabling wireless control of outdoor lighting. WaveLinx and WaveLinx Lite sensors utilize the Zhaga Book 18 compliant 4-PIN receptacle (ZD or ZW), while the WSLC control module utilizes a 7-PIN receptacle. ZW option provides 4-PIN receptacle and control module to enable future installation of WaveLinx sensors. ZD option provides 4-PIN receptacle and sensor-ready (SR) driver to enable future installation of WaveLinx sensors, power monitoring, and advanced functionality. WaveLinx (SWPD4 to SWPD5) outdoor wireless sensors offer passive infrared (PIR) occupancy and photocell for closed loop daylight harvesting, and can be factory or field-installed. Sensors are factory preset to dim down to 50% after 15 minutes of no motion detected. Two lens options are available for mounting heights of 7' to 40'. Use the WaveLinx mobile application for set-up and configuration. At least one Wireless Area Controller (WAC) is required for full functionality and remote communication (including adjustment of any factory pre-sets). WaveLinx Lite (WOF and WOB) outdoor wireless sensors provide PIR occupancy and photocell for closed loop daylight harvesting, and can be factory or field-installed. Sensors are factory preset to dim down to 50% after 15 minutes of no motion detected. Two lens options are available for mounting heights of 7' to 40'. Use the WaveLinx Lite mobile application for set-up and configuration. WAC not required. WaveLinx Outdoor Control Module (WOLC-7P-10A) accessory provides a photocontrol enabling astronomic or time-based schedules to provide ON, OFF and dimming control of fixtures utilizing a 7-PIN receptacle. The out-of-box functionality is ON at dusk and OFF at dawn.

For mounting heights up to 15' (SWPD4 and WOB)



For mounting heights up to 40' (SWPD5 and WOF)

LumenSafe Integrated Network Security Camera (LD)
Cooper Lighting Solutions brings ease of camera deployment to a whole new level. No additional wiring is needed beyond providing line power to the luminaire. A variety of networking options allows security integrators to design the optimal solution for active surveillance. As the ideal solution to meet the needs for active surveillance, the LumenSafe integrated network camera is a streamlined, outdoor-ready fixed dome that provides HDTV 1080p video. This IP camera is optimally designed for deployment in the video management system or security software platform of choice.

Synapse (DIM10)
SimplySNAP integrated wireless controls system by Synapse. Includes factory installed DIM10 Synapse control module and M8/DC motion sensor; requires additional Synapse system components for operation. Contact Synapse at www.synapsewireless.com for product support, warranty and terms and conditions.

Cooper Lighting Solutions
1121 Highway 74 South
Peachtree City, GA 30269
P 770-486-4500
www.cooperlighting.com

© 2021 Cooper Lighting Solutions
All Rights Reserved.

Specifications and dimensions
subject to change without notice.

LIGHT FIXTURE:
L1

NO. | REVISION & DATE

PROJECT:
GENERAL RV OCALA - PHASE IV
13150 SW 16TH AVE (CR 475-A), MARION COUNTY, FL

PREPARED FOR:

SHEET TITLE:
LIGHTING DETAILS

MCNEAL ENGINEERING, INC.
15957 N. FLORIDA AVE, LUTZ, FL 33549
PH. (813) 968-1081 FAX (813) 961-5839
CERTIFICATE OF AUTHORIZATION #08975

JOB NO.	21-116
ACAD FILE:	FCP
DRAWN BY:	MGF
CHK'D BY:	CSM
DATE:	24.01.11
SHEET:	PE-2.03

THE DESIGNS AND DRAWINGS CONTAINED HEREON ARE THE COPYRIGHTED PROPERTY OF McNEAL ENGINEERING, INC., AND SHOULD NOT BE DUPLICATED WITHOUT WRITTEN CONSENT OF THE ENGINEER.

Project	GENRV OCALA PHASE 4	Catalog #		Type	L3
Prepared by		Notes		Date	



McGraw-Edison

GALN Galleon II

Area / Site Luminaire

Typical Applications

Outdoor • Parking Lots • Walkways • Roadways • Building Areas

Interactive Menu

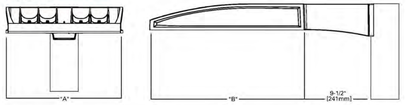
- Ordering Information page 2
- Mounting Details page 3
- Optical Distributions page 5
- Product Specifications page 5
- Energy and Performance Data page 6
- Control Options page 10

Quick Facts

- Lumen packages range from 3,300 - 73,500 (33W - 552W)
- 16 optical distributions
- Efficacy up to 159 lumens per watt

Dimensional Drawings

Standard Arm



Number of Light Squares	Width "A"	Housing Length "B"	Weight with Standard or QM Arm	EPA with Standard or QM Arm
1-4	16"	22"	29 lb	0.95
5-6	22"	22"	39 lb	0.95
7-9	22"	28-1/8"	48 lb	1.1

NOTES:
1. For arm selection requirements and additional fine art, see Mounting Details section.

Product Certifications

Resources

Connected Systems

- WaveLinx Lite
- WaveLinx

Ordering Information

SAMPLE NUMBER: **GALN-SA4C-740-U-T4FT-GM**

Product Family [1,2]	Light Engine		Color Temperature	Voltage	Distribution	Mounting	Finish
	Configuration	Drive Current					
GALN=Galleon II	**SA1**=1 Square **SA2**=2 Squares **SA3**=3 Squares **SA4**=4 Squares **SA5**=5 Squares **SA6**=6 Squares **SA7**=7 Squares **SA8**=8 Squares **SA9**=9 Squares	**A**=600mA **B**=800mA **C**=1000mA **D**=1200mA [4, 17]	**727**=700CRI, 2200K **727**=700CRI, 2700K **730**=700CRI, 3000K **735**=700CRI, 3500K **740**=700CRI, 4000K **750**=700CRI, 5000K **760**=700CRI, 6000K **827**=900CRI, 2700K **830**=900CRI, 3000K **AMB**=Amber, 590nm [15, 17]	**UNIVERSAL** **H**=347V-480V [3] **1**=120V **2**=208V **3**=240V **4**=277V [7] **5**=480V [7] **9**=347V [7]	**T2**=Type II **T2R**=Type II Roadway **T3**=Type III **T3R**=Type III Roadway **T4FT**=Type IV Forward Throw **T4W**=Type IV Wide **SNQ**=Type V Narrow **SMQ**=Type V Square Medium **SWQ**=Type V Square Wide **SL2**=Type II w/Split Control **SL3**=Type III w/Split Control **SL4**=Type IV w/Split Control **SLL**=90° Split Light Eliminator Left **SLR**=90° Split Light Eliminator Right **RW**=Rectangular Wide Type I **AFL**=Automotive Frontline	**[blank]**=Standard Pole Mount Arm **QM**=Standard Pole Mount Arm with Quick Mount Adaptor **PA**=Pole Mount, Adjustable **SP**=Slipfitter, Adjustable [8] **MA**=Mast Arm, Fixed **WM**=Wall Mount, Fixed **WA**=Wall Mount, Adjustable **UP**=Upswept Arm	**AP**=Gray **BZ**=Bronze **BK**=Black **DP**=Dark Platinum **GM**=Graphite Metallic **WH**=White

Options (Add as Suffix)	Controls and Systems Options (Add as Suffix)	Accessories (Order Separately)
DIM=External 0-10V Dimming Leads [26] **F**=Single Fuse (120, 277 or 347V Specify Voltage) **FF**=Double Fuse (208, 240 or 480V Specify Voltage) **20K**=20kV IX, 1449 based surge protective device [24] **2L**=Two Circuits [18] **HA**=50°C High Ambient **HSS**=Installed House Side Shield [19] **GRSBK**=Glare Reducing Shield, Black [19] **GRSWH**=Glare Reducing Shield, White [19] **RTA**=Tool-less Arm Mounted to Match Housing [20] **TDD**=Tool-less Door Mechanism **CC**=Coastal Construction finish [1] **LNS**=Optics Rotated 90° Left **RNS**=Optics Rotated 90° Right **AD015**=After Hours Dim, 5 Hours [22] **AH245**=After Hours Dim, 6 Hours [22] **AH235**=After Hours Dim, 7 Hours [22] **AH355**=After Hours Dim, 8 Hours [22] **DALI**=DALI Drivers	**BPC**=Button Type Photocontrol [1] **PR**=NEMA 3 Pin Photocontrol Receptacle **PR7**=NEMA 7-PIN Photocontrol Receptacle [6] **SPB2**=Dimming Motion Sensor, 9'-15' mounting [24] **SPB4**=Dimming Motion Sensor, 21'-40' mounting [24] **SPB2LX**=Dimming Motion Sensor, limited square count, 9'-20' mounting [24] **SPB4LX**=Dimming Motion Sensor, limited square count, 21'-40' mounting [24] **ZW**=WaveLinx Module with DALI driver and 4 PIN Receptacle [18] **ZW-SWPD4XX**=WaveLinx Sensor Only, 7-15ft [14,15,16] **ZW-SWPD5XX**=WaveLinx Sensor Only, 15-40ft [14,15,16] **ZW-WDBXX**=WaveLinx Sensor with Bluetooth, 7-15ft [14,15,16] **ZW-WDFXX**=WaveLinx Sensor with Bluetooth, 15-40ft [14,15,16] **ZD-SHPD4ZX**=WaveLinx Sensor Only, 7-15ft [14,15,16] **ZD-SWPD5XX**=WaveLinx Sensor Only, 15-40ft [14,15,16] **ZD-WDBXX**=WaveLinx Sensor with Bluetooth, 7-15ft [14,15,16] **ZD-WDFXX**=WaveLinx Sensor with Bluetooth, 15-40ft [14,15,16] **DIM10-MS/DIM-LSB**=Synapse Occupancy Sensor (9'-20' Mounting) [24] **DIM10-MS/DIM-LAB**=Synapse Occupancy Sensor (21'-40' Mounting) [24]	**DA/RA1016**=NEMA Photocontrol Multi-Tap - 105-285V **DA/RA1027**=NEMA Photocontrol - 480V **DA/RA1201**=NEMA Photocontrol - 347V **DA/RA1015**=Photocontrol Shorting Cap **DA/RA1014**=120V Photocontrol **MA1232**=10kV Surge Module Replacement **MA1036-XX**=Single Tenon Adapter for 2-3/8" O.D. Tenon **MA1037-XX**=2@180° Tenon Adapter for 2-3/8" O.D. Tenon **MA1197-XX**=3@120° Tenon Adapter for 2-3/8" O.D. Tenon **MA1158-XX**=4@90° Tenon Adapter for 2-3/8" O.D. Tenon **MA1199-XX**=2@90° Tenon Adapter for 2-3/8" O.D. Tenon **MA1190-XX**=5@90° Tenon Adapter for 2-3/8" O.D. Tenon **MA1191-XX**=3@120° Tenon Adapter for 2-3/8" O.D. Tenon **MA1038-XX**=Single Tenon Adapter for 3-1/2" O.D. Tenon **MA1039-XX**=2@180° Tenon Adapter for 3-1/2" O.D. Tenon **MA1192-XX**=3@120° Tenon Adapter for 3-1/2" O.D. Tenon **MA1193-XX**=4@90° Tenon Adapter for 3-1/2" O.D. Tenon **MA1194-XX**=2@90° Tenon Adapter for 3-1/2" O.D. Tenon **MA1195-XX**=5@90° Tenon Adapter for 3-1/2" O.D. Tenon **SRA238**=Adapter kit for mounting to 2-3/8" O.D. Tenon **LSHSS**=Field Installed House Side Shield [19] **LS/GRSBK**=Glare Reducing Shield, Black [19] **LS/GRSWH**=Glare Reducing Shield, White [19] **LS/PRS**=Perimeter Shield, Black [19] **WGL-CP-10A**=WaveLinx Outdoor Control Module [11,12] **WGX-XX**=WaveLinx Wireless Sensor, 7'-15' Mounting Height [11,12,14,15] **WGE-XX**=WaveLinx Wireless Sensor, 15'-40' Mounting Height [11,12,14,15]

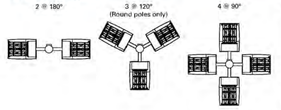
NOTES:
1. Customizer is responsible for engineering analysis to confirm pole and fixture compatibility for all applications. Refer to our white paper WP07300010N for additional support information.
2. Designs qualify Conservatively Qualified. Refer to www.designlights.org Qualified Products List under Family Models for details.
3. Coastal construction finish salt spray tested to over 5,000 hours per ASTM B117, with a scribe rating of 9 per ASTM D1654.
4. Not available with SPD.
5. 2A is current 1200mA not available with color temperatures 727, 727 or 830 when either 10A or HSS options are selected.
6. 7 PIN prism not 30 rated. Not available with Coastal Construction (CC) option.
7. Not available with voltage system 4, 8 or 9.
8. Requires the use of an internal slip-fitter transformer when combined with sensor options. Not available with sensor or control options that require more than 1 amp of power. Not available with 480V or 347V options.
9. Adjustable slipfitter arm limited to vertical 0° mount. For mounting to 2-3/8" O.D. tenon, order accessory SRA238.
10. One required for each Light Square.
11. Not available with SPD or HSS or 480V. Not available with WaveLinx or Enlighted sensors, or 20kV surge option.
12. Replace XX with sensor color (WH, BZ or BK).
13. WAC Gateway required to enable field-configurability. Order WAC-PoE and WPOS-1DX (48V to PoE injector) power supply if needed. WAC not required for LC Bluetooth sensors.
14. Requires ZW or ZD receptacle.
15. Narrow-band 590nm +/- 5nm for wildlife and observatory use. Choose drive current A, supplied at 500mA drive current only. Available with SWQ, SNQ, SL3, SL3 and SL4 distributions. Can be used with HSS option.
16. Set of 4 pcs. One set required per Light Square.
17. Not available with HSS, GRSBK or GRSWH.
18. Not for use with SNQ, SMQ, SWQ or SW optics. A black trim plate is used when HSS is selected.
19. Cannot be used with other control options.
20. Low voltage control boot brought out 18" outside fixture. Not available with (2AL) or integrated controls options
21. Not available if any DPD, CRYL or Shield/Louver is selected. Mottom lenses has an integral photocell.
22. Not available with SPD. Not available with 480V. Not available with photocontrol receptacle with photocontrol accessory.
23. Not for use with "UNV", 347 or 3L4 options. See CCI Tau for details.
24. Sensor configuration matrix application required for configuration. See controls page for details.
25. Replace X with number of Light Squares controlled by the DPD, ordered by the "DPD-X Availability Table" on the controls page.
26. Not available with HSS, GRSBK or GRSWH.

LumenSafe Integrated Network Security Camera Technology Options (Add as Suffix)

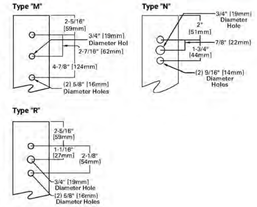
Product Family	Camera Type	Data Backhaul
L=LumenSafe Technology	**D**=Standard Dome Camera **H**=Hi-Rez Dome Camera **P**=Remote PTZ Camera	**C**=Cellular, No SIM **A**=Cellular, AT&T **V**=Cellular, Verizon **S**=Cellular, Sprint **E**=Cellular, Rogers **W**=Wi-Fi Networking w/ Omni-Directional Antenna **E**=Ethernet Networking

Mounting Details

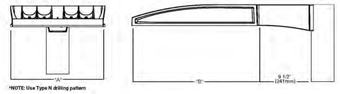
Pole Configuration Options



Pole Drilling Patterns

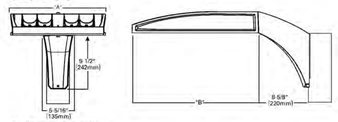


Quick Mount Arm (QM) *



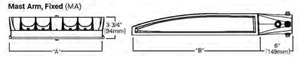
*NOTE: Use Type N drilling pattern

Upswept Arm (UP) *

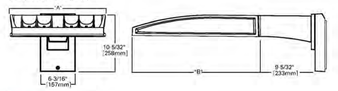


*NOTE: Use Type N, R or M drilling pattern

Mast Arm, Fixed (MA)

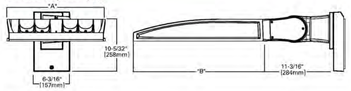


Wall Mount, Fixed (WM)



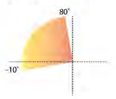
Mounting Details

Wall Mount, Adjustable (WA)

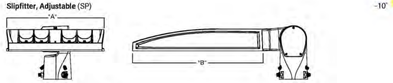


Adjustable Arm Range of Motion

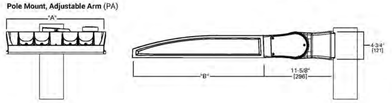
- Wall Mount (WA), Slipfitter (SP) and Pole Mount (PA)
- Adjustable in increments of 5°
- Must maintain downward facing orientation



Slipfitter, Adjustable (SP)



Pole Mount, Adjustable Arm (PA)

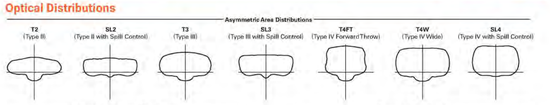


Fixture Weights and EPAs

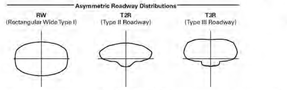
Tilt Angle (Degrees)	Number of Light Squares	Weight	1 @ 90°	2 @ 180°	2 @ 90°	2 @ 120°	3 @ 90°	3 @ 120°	4 @ 90°
0°	1-4	33.5 lb (15.2 kg)	0.85	1.70	1.46	1.66	2.31	2.25	2.35
	5-6	43.5 lb (19.7 kg)	0.86	1.71	1.62	1.80	2.49	2.35	2.50
	7-9	52.5 lb (23.8 kg)	0.98	1.95	1.75	1.98	2.73	2.55	2.76
15°	1-4	33.5 lb (15.2 kg)	1.10	1.71	1.95	2.26	2.81	3.30	2.87
	5-6	43.5 lb (19.7 kg)	1.42	1.71	2.27	2.72	3.13	3.63	3.15
	7-9	52.5 lb (23.8 kg)	1.69	1.96	2.67	3.22	3.65	4.38	3.72
30°	1-4	33.5 lb (15.2 kg)	1.72	1.81	2.58	3.21	3.44	4.59	3.53
	5-6	43.5 lb (19.7 kg)	2.26	2.29	3.11	4.00	3.97	5.27	4.00
	7-9	52.5 lb (23.8 kg)	2.75	2.85	3.73	4.83	4.71	6.45	4.81
45°	1-4	33.5 lb (15.2 kg)	2.25	2.36	3.10	4.00	3.96	5.63	4.08
	5-6	43.5 lb (19.7 kg)	2.96	2.99	3.81	5.06	4.67	6.49	4.71
	7-9	52.5 lb (23.8 kg)	3.63	3.76	3.73	6.17	5.59	8.03	5.73
60°	1-4	33.5 lb (15.2 kg)	2.63	2.77	3.49	4.58	4.34	6.21	4.48
	5-6	43.5 lb (19.7 kg)	3.46	3.51	4.32	5.84	5.19	7.01	5.22
	7-9	52.5 lb (23.8 kg)	4.27	4.44	5.25	7.15	6.23	8.80	6.40

Optical Distributions

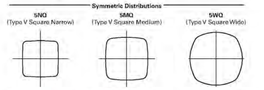
Asymmetric Area Distributions



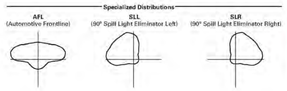
Asymmetric Roadway Distributions



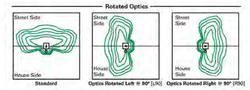
Symmetric Distributions



Specialized Distributions



Rotated Optics



Product Specifications

Construction
- Die-cast aluminum housing and heat sink
- Three housing sizes, using 1 to 9 light squares

Optics
- High-efficiency injection-molded AccuLED Optics technology
- 16 optical distributions for area site and roadway applications
- 3 shielding options include HSS, GRS and PFS
- IDA certified (3000K CCT and warmer only, arms at 0° tilt)

Electrical
- Removable power tray assembly includes drivers, surge modules and control modules for ease of maintenance and serviceability
- Standard with 0-10V dimming
- Standard with 10kV surge module, optional 20kV surge module
- Suitable for operation in -40°C to 40°C ambient environments. Optional 50°C high ambient (HA) configuration

Mounting
- Arms are factory installed, enabling closed-housing installation
- All arms suitable for round or square pole installation
- All arms provide clearance for multiple fixture installations at 90°

Finish
- 6 standard finishes use super durable TGIC polyester powder coat paint, providing 2.5 mil nominal thickness and salt-spray tested to 3,000 hours per ASTM B117
- RAL and custom color matches available
- Coastal Construction (CC) option salt-spray tested to 5,000 hours per ASTM B117, achieving a scribe rating of 9 per ASTM D1654

Warranty
- Five year limited warranty

Energy and Performance Data

Lumen Maintenance (TM-21)

Drive Current	Ambient Temperature	25,000 hours*	50,000 hours*	60,000 hours*	100,000 hours**	Theoretical L70 hours**
Up to 1A	25°C	99.4%	99.0%	98.9%	98.3%	> 2.4M
	40°C	98.7%	98.3%	98.1%	97.4%	> 1.9M
	50°C	98.2%	97.2%	96.8%	95.2%	> 851,000
1.2A	25°C	99.4%	99.0%	98.9%	98.3%	> 2.4M
	40°C	98.5%	97.9%	97.7%	96.7%	> 1.3M

* Supported by IES TM-21 standards.
** Theoretical values represent extrapolations commonly used; however, refer to the IES position on LED Product Lifetime Prediction, IES PS-10-19, explaining proper use of IES TM-21 and LM-80.

Lumen Multiplier

Ambient Temperature	Lumen Multiplier
0°C	1.02
10°C	1.01
25°C	1.00
40°C	0.99
50°C	0.97

Performance Table, Drive Current "A" (615mA)

Number of Light Squares		1	2	3	4	5	6	7	8	9
Nominal Power (Watts)		33	63	93	121	154	182	213	244	274
Input Current @ 120V		0.283	0.529	0.778	1.058	1.310	1.556	1.839	2.099	2.335
Input Current @ 208V		0.165	0.309	0.460	0.618	0.771	0.919	1.082	1.240	1.379
Input Current @ 240V		0.143	0.270	0.398	0.540	0.671	0.796	0.944	1.076	1.194
Input Current @ 277V		0.125	0.237	0.352	0.473	0.581	0.705	0.818	0.962	1.057
Input Current @ 347V		0.098	0.181	0.272	0.362	0.454	0.544	0.636	0.736	0.816
Input Current @ 480V		0.073	0.133	0.200	0.267	0.335	0.400	0.470	0.554	0.600
Optics										
T2	4000K Lumens	4,654	9,249	13,730	18,194	23,032	27,273	32,004	37,128	41,694
	BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5
	Lumens per Watt	141	147	148	150	150	150	149	152	152
T2R	4000K Lumens	4,716	9,372	13,913	18,437	23,340	27,637	32,462	37,634	42,251
	BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4
	Lumens per Watt	143	149	150	152	152	152	151	154	154
T3	4000K Lumens	4,589	9,120	13,538	17,940	22,711	26,892	31,580	36,620	41,112
	BUG Rating	B1-U0-G1	B2-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B4-U0-G4
	Lumens per Watt	139	145	146	148	147	148	147	150	150
T3R	4000K Lumens	4,735	9,411	13,970	18,513	23,435	27,751	32,596	37,790	42,425
	BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G3	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5
	Lumens per Watt	143	149	150	153	152	152	152	155	155
T4FT	4000K Lumens	4,617	9,176	13,622	18,051	22,851	27,058	31,782	36,847	41,366
	BUG Rating	B1-U0-G2	B2-U0-G2	B2-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5
	Lumens per Watt	140	146	148	149	148	149	148	151	151
T4W	4000K Lumens	4,631	9,203	13,662	18,104	22,918	27,138	31,876	36,955	41,486
	BUG Rating	B1-U0-G1	B2-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G4	B4-U0-G4	B4-U0-G4
	Lumens per Watt	140	146	147	150	149	149	148	151	151
SL2	4000K Lumens	4,619	9,180	13,627	18,058	22,860	27,069	31,795	36,861	41,383
	BUG Rating	B1-U0-G2	B2-U0-G2	B2-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5	B4-U0-G5
	Lumens per Watt	140	146	147	149	148	149	148	151	151
SL3	4000K Lumens	4,596	9,135	13,551	17,951	22,695	26,879	31,571	36,632	41,097
	BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G3	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5
	Lumens per Watt	139	145	145	148	147	148	147	150	150
SL4	4000K Lumens	4,529	9,002	13,363	17,709	22,417	26,544	31,178	36,146	40,580
	BUG Rating	B1-U0-G2	B1-U0-G3	B2-U0-G3	B2-U0-G4	B2-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5
	Lumens per Watt	137	143	144	146	146	146	145	148	148
SNQ	4000K Lumens	4,829	9,598	14,247	18,880	23,901	28,301	33,242	38,539	43,266
	BUG Rating	B2-U0-G1	B3-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G2	B5-U0-G3	B5-U0-G3
	Lumens per Watt	146	152	153	156	155	155	155	158	158
SMQ	4000K Lumens	4,803	9,545	14,318	18,974	24,020	28,442	33,407	38,731	43,482
	BUG Rating	B3-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4
	Lumens per Watt	147	153	154	157	156	156	155	159	159
SWQ	4000K Lumens	4,843	9,625	14,288	18,934	23,969	28,382	33,337	38,649	43,390
	BUG Rating	B3-U0-G1	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G5	B5-U0-G5
	Lumens per Watt	147	153	154	156	156	156	155	158	158
SLL/ SLR	4000K Lumens	3,989	7,927	11,768	15,594	19,741	23,375	27,436	31,831	35,736
	BUG Rating	B1-U0-G2	B1-U0-G2	B2-U0-G3	B2-U0-G3	B2-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5
	Lumens per Watt	121	126	127	129	128	128	128	130	130
RW	4000K Lumens	4,774	9,488	14,085	18,665	23,628	27,979	32,863	38,100	42,774
	BUG Rating	B2-U0-G1	B3-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G3
	Lumens per Watt	145	151	151	154	153	154	153	156	156
AFL	4000K Lumens	4,673	9,286	13,785	18,268	23,126	27,384	32,164	37,290	41,864
	BUG Rating	B1-U0-G1	B1-U0-G1	B2-U0-G2	B2-U0-G2	B3-U0-G2	B3-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3
	Lumens per Watt	142	147	148	151	150	150	150	153	153

* Nominal data for 70 CRI. ** For additional performance data, please reference the Lithonia Supplemental Performance Guide.

LIGHT FIXTURE: L3

NO. | REVISION & DATE

PROJECT: **MAJOR SITE PLANS FOR GENERAL RV OCALA - PHASE IV**
13150 SW 16TH AVE (CR 475-A), MARION COUNTY, FL

PREPARED FOR:

SHEET TITLE: **LIGHTING DETAILS**

MCNEAL ENGINEERING, INC.
15957 N. FLORIDA AVE, LUTZ, FL 33549
PH. (813) 968-1081 FAX (813) 961-5839
CERTIFICATE OF AUTHORIZATION #08975

JOB NO.	21-116
ACAD FILE:	FCP
DRAWN BY:	MGF
CHK'D BY:	CSM
DATE:	24.01.11
SHEET:	PE-2.04

THE DESIGNS AND DRAWINGS CONTAINED HEREON ARE THE COPYRIGHTED PROPERTY OF McNEAL ENGINEERING, INC., AND SHOULD NOT BE DUPLICATED WITHOUT WRITTEN CONSENT OF THE ENGINEER.

McGraw-Edison — GALN Galleon II

Performance Table, Drive Current "B" (800mA)

Number of Light Squares		1	2	3	4	5	6	7	8	9
Nominal Power (Watts)		44	82	121	164	204	243	286	325	364
Input Current @ 120V		0.367	0.689	1.014	1.378	1.704	2.027	2.393	2.716	3.041
Input Current @ 208V		0.213	0.401	0.594	0.802	0.997	1.188	1.400	1.605	1.792
Input Current @ 240V		0.184	0.347	0.516	0.694	0.860	1.021	1.210	1.386	1.531
Input Current @ 277V		0.160	0.303	0.449	0.605	0.757	0.898	1.065	1.242	1.347
Input Current @ 347V		0.125	0.235	0.355	0.471	0.592	0.710	0.828	0.958	1.065
Input Current @ 480V		0.092	0.172	0.258	0.344	0.432	0.517	0.605	0.706	0.775
Optics										
T2	4000K Lumens	5,793	11,508	17,083	22,638	28,658	33,935	39,859	46,210	51,879
	BUG Rating	B1-U0-G2	B2-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B4-U0-G5
	Lumens per Watt	132	140	141	138	140	140	139	142	143
T2R	4000K Lumens	5,868	11,662	17,311	22,941	29,041	34,388	40,391	46,827	52,572
	BUG Rating	B1-U0-G1	B2-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G4	B4-U0-G4	B3-U0-G4	B3-U0-G5
	Lumens per Watt	133	142	143	140	142	142	141	144	144
T3	4000K Lumens	5,710	11,347	16,845	22,322	28,258	33,461	39,309	45,565	51,155
	BUG Rating	B1-U0-G1	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B4-U0-G4	B4-U0-G5	B4-U0-G5
	Lumens per Watt	130	138	139	136	139	138	137	140	141
T3R	4000K Lumens	5,892	11,716	17,383	23,035	29,161	34,530	40,558	47,020	52,788
	BUG Rating	B1-U0-G2	B2-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B4-U0-G5
	Lumens per Watt	134	143	144	140	143	142	142	145	146
T4FT	4000K Lumens	5,745	11,418	16,949	22,460	28,433	33,668	39,546	45,847	51,471
	BUG Rating	B1-U0-G2	B2-U0-G3	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	131	139	140	137	139	139	138	141	141
T4W	4000K Lumens	5,782	11,481	16,999	22,526	28,517	33,767	39,662	45,982	51,622
	BUG Rating	B1-U0-G1	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G4	B4-U0-G4	B4-U0-G4	B4-U0-G4
	Lumens per Watt	131	140	140	137	140	139	139	141	142
SL2	4000K Lumens	5,747	11,422	16,956	22,469	28,444	33,681	39,561	45,865	51,491
	BUG Rating	B1-U0-G2	B2-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B4-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	131	139	140	137	139	139	138	141	141
SL3	4000K Lumens	5,707	11,342	16,836	22,311	28,244	33,444	39,283	45,542	51,129
	BUG Rating	B1-U0-G2	B2-U0-G3	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5
	Lumens per Watt	130	138	139	136	138	138	137	140	140
SL4	4000K Lumens	5,636	11,201	16,627	22,034	27,893	33,028	38,794	44,976	50,493
	BUG Rating	B1-U0-G2	B1-U0-G3	B2-U0-G4	B2-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5
	Lumens per Watt	128	137	137	134	137	136	136	138	139
SNQ	4000K Lumens	6,009	11,942	17,727	23,492	29,739	35,214	41,362	47,953	53,835
	BUG Rating	B2-U0-G1	B3-U0-G1	B4-U0-G2	B4-U0-G2	B5-U0-G2	B5-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G3
	Lumens per Watt	137	146	147	143	146	145	145	148	148
SMQ	4000K Lumens	6,039	12,001	17,816	23,609	29,887	35,389	41,568	48,191	54,101
	BUG Rating	B3-U0-G1	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4	B5-U0-G5
	Lumens per Watt	137	146	147	144	147	146	145	148	149
SWQ	4000K Lumens	6,026	11,976	17,778	23,559	29,824	35,315	41,480	48,090	53,989
	BUG Rating	B3-U0-G1	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G5	B5-U0-G5
	Lumens per Watt	137	146	147	144	146	145	145	148	148
SLL/ SLR	4000K Lumens	4,963	9,863	14,642	19,403	24,563	29,085	34,163	39,607	44,465
	BUG Rating	B1-U0-G2	B1-U0-G3	B2-U0-G3	B2-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5
	Lumens per Watt	113	120	121	118	120	120	119	122	122
RW	4000K Lumens	5,940	11,806	17,526	23,224	29,400	34,813	40,891	47,407	53,222
	BUG Rating	B3-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4
	Lumens per Watt	135	144	145	142	144	143	143	146	146
AFL	4000K Lumens	5,814	11,555	17,159	22,730	28,773	34,079	40,021	46,398	52,090
	BUG Rating	B1-U0-G1	B2-U0-G1	B2-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4
	Lumens per Watt	132	141	142	139	141	140	140	143	143

* Nominal data for 70 CRI. ** For additional performance data, please reference the Gleneon Supplemental Performance Guide.

COOPER Lighting Solutions

McGraw-Edison — GALN Galleon II

Performance Table, Drive Current "C" (1050mA)

Number of Light Squares		1	2	3	4	5	6	7	8	9
Nominal Power (Watts)		57	108	160	213	266	321	377	429	481
Input Current @ 120V		0.478	0.905	1.398	1.810	2.244	2.675	3.150	3.580	4.013
Input Current @ 208V		0.279	0.532	0.780	1.064	1.313	1.559	1.845	2.093	2.339
Input Current @ 240V		0.243	0.458	0.664	0.916	1.123	1.328	1.582	1.788	1.991
Input Current @ 277V		0.213	0.404	0.582	0.808	0.997	1.164	1.401	1.589	1.745
Input Current @ 347V		0.164	0.322	0.471	0.644	0.795	0.943	1.117	1.269	1.414
Input Current @ 480V		0.121	0.235	0.341	0.469	0.579	0.681	0.814	0.923	1.022
Optics										
T2	4000K Lumens	7,154	14,219	21,107	27,975	33,408	41,927	49,247	57,094	64,098
	BUG Rating	B1-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	126	132	132	131	132	132	131	133	133
T2R	4000K Lumens	7,230	14,408	21,389	28,344	35,881	42,487	49,905	57,857	64,954
	BUG Rating	B1-U0-G1	B2-U0-G2	B2-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	127	133	134	133	133	132	132	135	135
T3	4000K Lumens	7,054	14,020	20,812	27,580	34,914	41,342	48,560	56,297	63,203
	BUG Rating	B1-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G4	B3-U0-G4	B4-U0-G4	B4-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	124	130	130	129	130	129	129	131	131
T3R	4000K Lumens	7,280	14,468	21,477	28,461	36,020	42,663	50,111	58,096	65,222
	BUG Rating	B1-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	128	134	134	134	134	133	133	135	135
T4FT	4000K Lumens	7,098	14,107	20,941	27,751	35,110	41,598	48,860	56,640	63,594
	BUG Rating	B1-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	125	131	131	130	131	130	130	132	132
T4W	4000K Lumens	7,119	14,148	21,003	27,832	35,233	41,720	49,004	56,812	63,781
	BUG Rating	B1-U0-G1	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G4	B4-U0-G4	B4-U0-G4	B4-U0-G5	B5-U0-G5
	Lumens per Watt	125	131	131	131	131	130	130	132	133
SL2	4000K Lumens	7,101	14,112	20,949	27,761	35,144	41,614	48,879	56,668	63,619
	BUG Rating	B1-U0-G2	B2-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	125	131	131	130	131	130	130	132	132
SL3	4000K Lumens	7,051	14,013	20,802	27,566	34,897	41,321	48,535	56,269	63,172
	BUG Rating	B1-U0-G2	B2-U0-G3	B2-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	124	130	130	129	130	129	129	131	131
SL4	4000K Lumens	6,963	13,839	20,543	27,223	34,463	40,808	47,932	55,569	62,366
	BUG Rating	B1-U0-G2	B2-U0-G3	B2-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5
	Lumens per Watt	122	128	128	128	129	127	127	130	130
SNQ	4000K Lumens	7,424	14,755	21,903	29,025	36,743	43,505	51,104	59,247	66,516
	BUG Rating	B3-U0-G1	B3-U0-G2	B4-U0-G2	B5-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4
	Lumens per Watt	130	137	137	136	137	136	136	138	138
SMQ	4000K Lumens	7,461	14,828	22,012	29,169	36,926	43,725	51,399	59,542	66,846
	BUG Rating	B3-U0-G1	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4	B5-U0-G5	B5-U0-G5
	Lumens per Watt	131	137	138	137	137	136	136	139	139
SWQ	4000K Lumens	7,445	14,797	21,966	29,108	36,845	43,633	51,250	59,417	66,705
	BUG Rating	B3-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G5	B5-U0-G5	B5-U0-G5	B5-U0-G5
	Lumens per Watt	131	137	137	137	137	136	136	139	139
SLL/ SLR	4000K Lumens	6,132	12,187	18,091	23,979	30,348	35,936	42,210	48,915	54,938
	BUG Rating	B1-U0-G2	B2-U0-G3	B2-U0-G3	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5
	Lumens per Watt	108	113	113	113	113	112	112	114	114
RW	4000K Lumens	7,340	14,587	21,653	28,694	36,325	43,013	50,522	58,573	65,767
	BUG Rating	B3-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4
	Lumens per Watt	129	135	135	135	135	134	134	137	137
AFL	4000K Lumens	7,183	14,276	21,193	28,084	35,552	42,068	49,448	57,327	64,359
	BUG Rating	B1-U0-G1	B2-U0-G2	B2-U0-G2	B3-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B4-U0-G4
	Lumens per Watt	126	132	132	132	132	131	131	134	134

* Nominal data for 70 CRI. ** For additional performance data, please reference the Gleneon Supplemental Performance Guide.

COOPER Lighting Solutions

McGraw-Edison — GALN Galleon II

Performance Table, Drive Current "D" (1200mA)

Number of Light Squares		1	2	3	4	5	6	7	8	9
Nominal Power (Watts)		65	125	184	245	309	368	433	493	552
Input Current @ 120V		0.546	1.041	1.535	2.062	2.578	3.070	3.619	4.114	4.605
Input Current @ 208V		0.318	0.610	0.893	1.219	1.504	1.786	2.113	2.397	2.679
Input Current @ 240V		0.276	0.523	0.758	1.046	1.282	1.516	1.806	2.041	2.274
Input Current @ 277V		0.241	0.460	0.662	0.920	1.133	1.325	1.593	1.807	1.987
Input Current @ 347V		0.187	0.370	0.543	0.740	0.915	1.085	1.285	1.459	1.628
Input Current @ 480V		0.138	0.269	0.391	0.537	0.663	0.782	0.932	1.057	1.173
Optics										
T2	4000K Lumens	7,872	15,645	23,225	30,777	38,962	46,135	54,189	62,824	70,550
	BUG Rating	B1-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	121	125	126	126	126	125	125	127	128
T2R	4000K Lumens	7,977	15,854	23,535	31,188	39,492	46,751	54,913	63,663	71,472
	BUG Rating	B1-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B4-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	123	127	128	127	128	127	127	129	129
T3	4000K Lumens	7,762	15,427	22,901	30,348	38,418	45,491	53,433	61,947	69,546
	BUG Rating	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G4	B4-U0-G4	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	119	123	124	124	124	124	123	126	126
T3R	4000K Lumens	8,010	15,920	23,632	31,317	39,645	46,944	55,139	63,925	71,767
	BUG Rating	B1-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	123	127	128	128	128	128	127	130	130
T4FT	4000K Lumens	7,816	15,522	23,043	30,535	38,655	45,772	53,763	62,330	69,976
	BUG Rating	B1-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	120	124	125	125	125	124	124	126	127
T4W	4000K Lumens	7,833	15,566	23,110	30,623	38,749	45,907	53,921	62,513	70,182
	BUG Rating	B2-U0-G1	B2-U0-G2	B3-U0-G3	B3-U0-G3	B4-U0-G4	B4-U0-G4	B4-U0-G5	B4-U0-G5	B5-U0-G5
	Lumens per Watt	121	125	126	125	125	125	125	127	127
SL2	4000K Lumens	7,813	15,528	23,052	30,547	38,670	45,790	53,784	62,334	70,000
	BUG Rating	B2-U0-G2	B3-U0-G3	B3-U0-G4	B3-U0-G4	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	120	124	125	125	125	124	124	126	127
SL3	4000K Lumens	7,758	15,419	22,889	30,332	38,398	45,468	53,406	61,916	69,511
	BUG Rating	B1-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	119	123	124	124	124	124	123	126	126
SL4	4000K Lumens	7,662	15,233	22,605	29,955	37,921	44,903	52,742	61,146	68,646
	BUG Rating	B1-U0-G2	B2-U0-G3	B2-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5	B4-U0-G5
	Lumens per Watt	118	122	123	122	123	122	122	124	124
SNQ	4000K Lumens	8,169	16,235	24,101	31,938	40,431	47,874	56,232	65,193	73,190
	BUG Rating	B3-U0-G1	B3-U0-G2	B4-U0-G2	B5-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4
	Lumens per Watt	126	130	131	130	131	130	130	132	133
SMQ	4000K Lumens	8,210	16,316	24,221	32,097	40,632	48,113	56,512	65,517	73,554
	BUG Rating	B3-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G5	B5-U0-G5	B5-U0-G5
	Lumens per Watt	126	131	132	131	131	131	131	133	133
SWQ	4000K Lumens	8,152	16,202	24,170	32,029	40,546	48,011	56,390	65,379	73,399
	BUG Rating	B3-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G5	B5-U0-G5	B5-U0-G5	B5-U0-G5
	Lumens per Watt	126	130	131	131	131	130	130	133	133
SLL/ SLR	4000K Lumens	6,747	13,410	19,906	26,379	33,394	39,542	46,445	53,846	60,451
	BUG Rating	B1-U0-G2	B2-U0-G3	B2-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5	B4-U0-G5
	Lumens per Watt	104	107	108	108	108	107	107	109	110
RW	4000K Lumens	8,076	16,050	23,826	31,574	39,970	47,329	55,592	64,450	72,356
	BUG Rating	B3-U0-G1	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4	B5-U0-G5
	Lumens per Watt	124	128	129	129	129	129	128	131	131
AFL	4000K Lumens	7,904	15,709	23,220	30,902	39,120	46,323	54,410	63,079	70,817
	BUG Rating	B1-U0-G1	B2-U0-G2	B3-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G4	B4-U0-G4	B4-U0-G4
	Lumens per Watt	122	126	127	126	127	126	126	128	128

* Nominal data for 70 CRI. ** For additional performance data, please reference the Gleneon Supplemental Performance Guide.

COOPER Lighting Solutions

McGraw-Edison — GALN Galleon II

Control Options

0-10V (DIM)
This fixture is offered standard with 0-10V dimming driver(s). The DIM option provides 0-10V dimming wire leads for use with a lighting control panel or other control method.

Photocontrol (BPC, PR and PR7)
Optional button-type photocontrol (BPC) and photocontrol receptacles (PR and PR7) provide a flexible solution to enable "dusk-to-dawn" lighting by sensing light levels. Advanced control systems compatible with NEMA 7-pin standards can be utilized with the PR7 receptacle.

After Hours Dim (AHD)
This feature allows photocontrol-enabled luminaires to achieve additional energy savings by dimming during scheduled portions of the night. The dimming profile will automatically take effect after a "dusk-to-dawn" period has been calculated from the photocontrol input. Specify the desired dimming profile for a simple, factory-shipped dimming solution requiring no external control wiring. Reference the After Hours Dim supplemental guide for additional information.

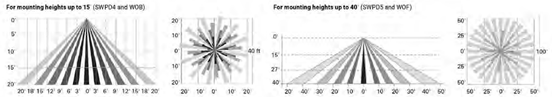
Dimming Occupancy Sensor (SPB)
These passive infrared (PIR) sensors are factory installed in the luminaire housing. When the SPB sensor option is selected, the occupancy sensor is connected to a dimming driver and the entire luminaire dims when no motion is detected. After a period of time, the luminaire turns off, and when motion is detected, the luminaire returns to full light output. The SPB sensor default parameters are listed in the table below, and can be configured utilizing the Sensor Configuration mobile application for iOS and Android devices. The SPB/X is configured to control only the specified number of light squares. An integral photocontrol can be activated with the app for "dusk-to-dawn" control or daylight harvesting - the factory default is off. Three sensor lenses are available to optimize the coverage pattern for mounting heights from 8'-40'. Four sensor colors are available; Bronze, Black, Gray and White, and are automatically selected based on the luminaire finish as indicated by the table below.

SPB sensor finish matched to luminaire finish		
Luminaire Finish		SPB Sensor Finish
WH	White	White
BK	Black	Black
GM	Graphite Metallic	Black
BZ	Bronze	Bronze
AP	Gray	Gray
DP	Dark Platinum	Gray

SPB/X Availability Table	
Fixture Square Count	Available SPB/X Square Count
1	Not Available
2	Not Available
3	Not Available
4	2
5	2 or 3
6	3
7	2, 3, 4 or 5
8	2, 3, 5 or 6
9	3 or 5

WaveLinx Wireless Control and Monitoring System
Operates on a wireless mesh network based on IEEE 802.15.4 standards enabling wireless control of outdoor lighting. WaveLinx and WaveLinx Lite sensors utilize the Zhaga Book 18 compliant 4-PIN receptacle (ZD or ZW), while the WSLC control module utilizes a 7-PIN receptacle. ZW option provides 4-PIN receptacle and control module to enable future installation of WaveLinx sensors. ZD option provides 4-PIN receptacle and sensor-ready (SR) driver to enable future installation of WaveLinx sensors, power monitoring, and advanced functionality. WaveLinx (SWPD4 to SWPD5) outdoor wireless sensors offer passive infrared (PIR) occupancy and photocell for closed loop daylight harvesting, and can be factory or field-installed. Sensors are factory preset to dim down to 50% after 15 minutes of no motion detected. Two lens options are available for mounting heights of 7' to 40'. Use the WaveLinx mobile application for set-up and configuration. At least one Wireless Area Controller (WAC) is required for full functionality and remote communication (including adjustment of any factory pre-sets). WaveLinx Lite (WOF and WOB) outdoor wireless sensors provide PIR occupancy and photocell for closed loop daylight harvesting, and can be factory or field-installed. Sensors are factory preset to dim down to 50% after 15 minutes of no motion detected. Two lens options are available for mounting heights of 7' to 40'. Use the WaveLinx Lite mobile application for set-up and configuration. WAC not required. WaveLinx Outdoor Control Module (WOLC-TP-10A) accessory provides a photocontrol enabling astronomic or time-based schedules to provide ON, OFF and dimming control of fixtures utilizing a 7-PIN receptacle. The out-of-box functionality is ON at dusk and OFF at dawn.

For mounting heights up to 15' (SWPD4 and WOB)



For mounting heights up to 40' (SWPD5 and WOF)

LumenSafe Integrated Network Security Camera (LD)
Cooper Lighting Solutions brings ease of camera deployment to a whole new level. No additional wiring is needed beyond providing line power to the luminaire. A variety of networking options allows security integrators to design the optimal solution for active surveillance. As the ideal solution to meet the needs for active surveillance, the LumenSafe integrated network camera is a streamlined, outdoor-ready fixed dome that provides HDTV 1080p video. This IP camera is optimally designed for deployment in the video management system or security software platform of choice.

Synapse (DIM10)
SimplySNAP integrated wireless controls system by Synapse. Includes factory installed DIM10 Synapse control module and M8/DC motion sensor; requires additional Synapse system components for operation. Contact Synapse at www.synapsewireless.com for product support, warranty and terms and conditions.

COOPER Lighting Solutions

Cooper Lighting Solutions
1121 Highway 74 South
Peachtree City, GA 30269
P 770-486-4500
www.cooperlighting.com

© 2021 Cooper Lighting Solutions
All Rights Reserved.

Specifications and dimensions
subject to change without notice.

LIGHT FIXTURE:
L3

NO. | REVISION & DATE

PROJECT:
GENERAL RV OCALA - PHASE IV
13150 SW 16TH AVE (CR 475-A), MARION COUNTY, FL

PREPARED FOR:

SHEET TITLE:
LIGHTING DETAILS

MCNEAL ENGINEERING, INC.
15957 N. FLORIDA AVE, LUTZ, FL 33549
PH. (813) 968-1081 FAX (813) 961-5839
CERTIFICATE OF AUTHORIZATION #08975

JOB NO.	21-116
ACAD FILE:	FCP
DRAWN BY:	MGF
CHK'D BY:	CSM
DATE:	24.01.11
SHEET:	PE-2.05

THE DESIGNS AND DRAWINGS CONTAINED HEREON ARE THE COPYRIGHTED PROPERTY OF McNEAL ENGINEERING, INC., AND SHOULD NOT BE DUPLICATED WITHOUT WRITTEN CONSENT OF THE ENGINEER.

Project	GENRV OCALA PHASE 4	Catalog #		Type	L5
Prepared by		Notes		Date	



McGraw-Edison

GALN Galleon II

Area / Site Luminaire

Typical Applications

Outdoor • Parking Lots • Walkways • Roadways • Building Areas

Interactive Menu

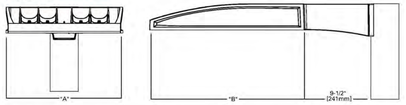
- Ordering Information page 2
- Mounting Details page 3
- Optical Distributions page 5
- Product Specifications page 5
- Energy and Performance Data page 6
- Control Options page 10

Quick Facts

- Lumen packages range from 3,300 - 73,500 (33W - 552W)
- 16 optical distributions
- Efficacy up to 159 lumens per watt

Dimensional Drawings

Standard Arm



Number of Light Squares	Width "A"	Housing Length "B"	Weight with Standard or QM Arm	EPA with Standard or QM Arm
1-4	16"	22"	29 lb	0.95
5-6	22"	22"	39 lb	0.95
7-9	22"	28-1/8"	48 lb	1.1

NOTES:
1. For arm selection requirements and additional fine art, see Mounting Details section.

Product Certifications

Resources

Connected Systems

- WaveLinx Lite
- WaveLinx

McGraw-Edison

GALN Galleon II

Ordering Information

SAMPLE NUMBER: **GALN-SA4C-740-U-T4FT-GM**

Product Family [1,2]	Light Engine: Configuration	Light Engine: Drive Current	Color Temperature	Voltage	Distribution	Mounting	Finish
GALN=Galleon II	**SA1**=1 Square **SA2**=2 Squares **SA3**=3 Squares **SA4**=4 Squares **SA5**=5 Squares **SA6**=6 Squares **SA7**=7 Squares **SA8**=8 Squares **SA9**=9 Squares	**A**=600mA **B**=800mA **C**=1000mA **D**=1200mA [3, 17]	**727**=700CRI, 2200K **727**=700CRI, 2700K **730**=700CRI, 3000K **735**=700CRI, 3500K **740**=700CRI, 4000K **750**=700CRI, 5000K **760**=700CRI, 6000K **827**=900CRI, 2700K **830**=900CRI, 3000K **AMB**=Amber, 590nm [15, 17]	**MVOLT**=277-480V [4] **H**=347V-480V [4] **1**=120V **2**=208V **3**=240V **4**=277V [4] **5**=480V [4] **9**=347V [4]	**T2**=Type II **T2R**=Type II Roadway **T3**=Type III **T4FT**=Type IV Forward Throw **T4W**=Type IV Wide **SNQ**=Type V Narrow **SMQ**=Type V Square Medium **SWQ**=Type V Square Wide **SLL**=Type II w/Split Control **SLR**=Type III w/Split Control **AFL**=Automotive Frontline	**[blank]**=Standard Pole Mount Arm **QM**=Standard Pole Mount Arm with Quick Mount Adaptor **PA**=Pole Mount, Adjustable **SP**=Slipfitter, Adjustable [5] **MA**=Mast Arm, Fixed **WM**=Wall Mount, Fixed **WA**=Wall Mount, Adjustable **UP**=Upswept Arm	**AP**=Gray **BZ**=Bronze **BK**=Black **DP**=Dark Platinum **GM**=Graphite Metallic **WH**=White

Options (Add as Suffix)	Controls and System Options (Add as Suffix)	Accessories (Order Separately)
DIM=External 0-10V Dimming Leads [26] **F**=Single Fuse (120, 277 or 347V Specify Voltage) **FF**=Double Fuse (208, 240 or 480V Specify Voltage) **20K**=20kV IB, 1449 based surge protective device [18] **2L**=Two Circuits [19] **HA**=50°C High Ambient **HSS**=Installed House Side Shield [16] **GRSBK**=Glare Reducing Shield, Black [16] **GRSWH**=Glare Reducing Shield, White [16] **TGIC**=TGIC Polyester Powder Coated to Match Housing [20] **DF**=Dual Integ. Door Interlock **CC**=Coastal Construction finish [3] **LHO**=Optics Rotated 90° Left **RHO**=Optics Rotated 90° Right **AMS15**=After Hours Dim, 5 Hours [22] **AMD45**=After Hours Dim, 6 Hours [22] **AMD55**=After Hours Dim, 7 Hours [22] **AMD55**=After Hours Dim, 8 Hours [22] **DALI**=DALI Drivers	**BPC**=Button Type Photocontrol [7] **PR**=NEMA 3-Prong Photocontrol Receptacle **PR7**=NEMA 7-Pin Photocontrol Receptacle [8] **SPB2**=Dimming Motion Sensor, 9'-15' mounting [24] **SPB4**=Dimming Motion Sensor, 21'-40' mounting [24] **SPB2/X**=Dimming Motion Sensor, limited square count, 9'-20' mounting [24] **SPB4/X**=Dimming Motion Sensor, limited square count, 21'-40' mounting [24] **ZW**=WaveLinx Module and 4-PIN Receptacle [18] **ZD**=WaveLinx Module with DALI driver and 4-PIN Receptacle [18] **ZW-SWPD-XXX**=WaveLinx Sensor Only, 7-15ft [9,10,11] **ZW-SWPD/SXX**=WaveLinx Sensor Only, 15-40ft [9,10,11] **ZW-WOBXX**=WaveLinx Sensor with Bluetooth, 7-15ft [9,10,11] **ZW-WOFXX**=WaveLinx Sensor with Bluetooth, 15-40ft [9,10,11] **ZD-SWPD4XX**=WaveLinx Sensor Only, 7-15ft [9,10,11] **ZD-SWPD/SXX**=WaveLinx Sensor Only, 15-40ft [9,10,11] **ZD-WOBXX**=WaveLinx Sensor with Bluetooth, 7-15ft [9,10,11] **ZD-WOFXX**=WaveLinx Sensor with Bluetooth, 15-40ft [9,10,11] **DIM10-MS/DIM-LSS**=Synapse Occupancy Sensor (9'-20' Mounting) [12] **DIM10-MS/DIM-LAS**=Synapse Occupancy Sensor (21'-40' Mounting) [12]	**DA/RA1016**=NEMA Photocontrol Multi-Tap - 105-285V **DA/RA1027**=NEMA Photocontrol - 480V **DA/RA1201**=NEMA Photocontrol - 347V **DA/RA1015**=Photocontrol Shorting Cap **DA/RA1014**=120V Photocontrol **MA1232**=10kV Surge Module Replacement **MA1036-XX**=Single Tenon Adapter for 2-3/8" O.D. Tenon **MA1037-XX**=2@180° Tenon Adapter for 2-3/8" O.D. Tenon **MA1197-XX**=3@120° Tenon Adapter for 2-3/8" O.D. Tenon **MA1158-XX**=4@90° Tenon Adapter for 2-3/8" O.D. Tenon **MA1199-XX**=2@90° Tenon Adapter for 2-3/8" O.D. Tenon **MA1190-XX**=5@90° Tenon Adapter for 2-3/8" O.D. Tenon **MA1191-XX**=2@120° Tenon Adapter for 2-3/8" O.D. Tenon **MA1038-XX**=Single Tenon Adapter for 3-1/2" O.D. Tenon **MA1039-XX**=2@180° Tenon Adapter for 3-1/2" O.D. Tenon **MA1192-XX**=3@120° Tenon Adapter for 3-1/2" O.D. Tenon **MA1193-XX**=4@90° Tenon Adapter for 3-1/2" O.D. Tenon **MA1194-XX**=2@90° Tenon Adapter for 3-1/2" O.D. Tenon **MA1195-XX**=5@90° Tenon Adapter for 3-1/2" O.D. Tenon **SRA238**=Adapter kit for mounting to 2-3/8" O.D. Tenon **LSHSS**=Field Installed House Side Shield [16] **LS/GRSBK**=Glare Reducing Shield, Black [16] **LS/GRSWH**=Glare Reducing Shield, White [16] **LS/PPS**=Perimeter Shield, Black [16] **WGL-CP-10A**=WaveLinx Outdoor Control Module [13,14] **WOA-XX**=WaveLinx Wireless Sensor, 7'-15' Mounting Height [9,10,14,16] **WOE-XX**=WaveLinx Wireless Sensor, 15'-40' Mounting Height [9,10,14,16]

NOTES:
1. Customer is responsible for engineering analysis to confirm pole and fixture compatibility for all applications. Refer to our white paper WP07310EN for additional support information.
2. Designs qlss Conservatism Qualified. Refer to www.designlights.org Qualified Products List under Family Models for details.
3. Coastal construction finish salt spray tested to over 5,000 hours per ASTM B117, with a scribe rating of 9 per ASTM D1654.
4. Not available with 10kV.
5. 2" tenon current 120mph not available with fusing or HSS options are selected.
6. 1.5" option not 50 rated. Not available with Coastal Construction (CC) option.
7. Not available with voltage option H, 5 or 9.
8. Requires the use of an internal cap-down transformer when combined with sensor options. Not available with sensor or DALI options. Not available with 347V, 480V, 5 or 9 voltage options. Not available with 10kV surge.
9. Adjustable slipfitter sets limited to vertical 0° tenon. For mounting to 2-3/8" O.D. tenon, order accessory SRA238.
10. One required for each Light Square.
11. Not available with SPD or MOTS or 480V. Not available with Wireless, nLight Enhanced sensors, or 208V surge option.
12. Replace XX with sensor color (WH, BZ or BK).
13. WAC Gateway required to enable field configurability. Order WAC-PoE and WPOS-12B (48V to PoE injector) power supply if needed. WAC not required for LC Bluetooth sensors.
14. Requires ZW or ZD receptacle.
15. Narrow-band 590nm +/- 5nm for wildlife and observatory use. Choose drive current A, supplied at 500mA drive current only. Available with SWQ, SNQ, SLL, SLR and QM A mtg options. Can be used with HSS option.
16. Set of 4 pcs. One set required per Light Square.
17. Not available with MVOLT option.
18. Not for use with SNQ, SMQ, SWQ or SW optics. A black trim plate is used when HSS is selected.
19. Cannot be used with other control options.
20. Low voltage control boot brought out 18" outside fixture. Not available with (2L) or integrated controls options
21. Not available if any DPS, DS, or Shield/Lens sensor is selected. Motion sensor has an integral photocell.
22. Not available with 10kV surge option. Not available with DALI driver. Not available with photocontrol accessory.
23. Not for use with "LAT", T4W or SL4 optics. See CCI Tau for details.
24. Sensor configuration mobile application required for configuration. See controls page for details.
25. Replace X with number of Light Squares controlled by the DPS, ordered as the "DPS-X Availability Table" on the controls page.
26. Not available with HSS, GRSBK or GRSWH.

LumenSafe Integrated Network Security Camera Technology Options (Add as Suffix)

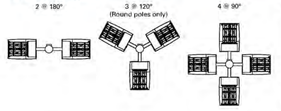
Product Family	Camera Type	Data Backhaul
L=LumenSafe Technology	**D**=Standard Dome Camera **H**=Hi-Rez Dome Camera **P**=Remote PTZ Camera	**C**=Cellular, No SIM **A**=Cellular, AT&T **V**=Cellular, Verizon **S**=Cellular, Sprint **R**=Cellular, Rogers **W**=Wi-Fi Networking w/ Omni-Directional Antenna **E**=Ethernet Networking

McGraw-Edison

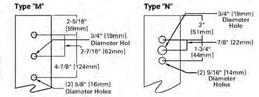
GALN Galleon II

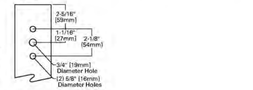
Mounting Details

Pole Configuration Options

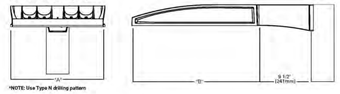


Pole Drilling Patterns



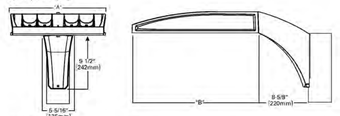


Quick Mount Arm (QM) *



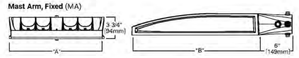
*NOTE: Use Type N drilling pattern

Upswept Arm (UP) *

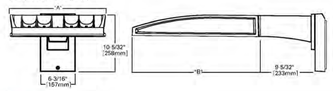


*NOTE: Use Type H, R or M drilling pattern

Mast Arm, Fixed (MA)



Wall Mount, Fixed (WM)

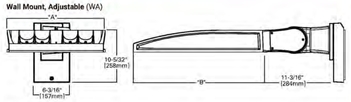


McGraw-Edison

GALN Galleon II

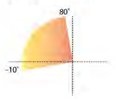
Mounting Details

Wall Mount, Adjustable (WA)

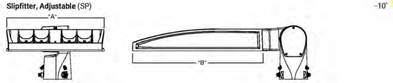


Adjustable Arm Range of Motion

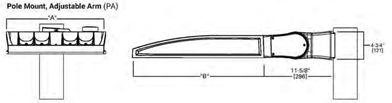
- Wall Mount (WA), Slipfitter (SP) and Pole Mount (PA)
- Adjustable in increments of 5°
- Must maintain downward facing orientation



Slipfitter, Adjustable (SP)



Pole Mount, Adjustable Arm (PA)



Fixture Weights and EPAs

Tilt Angle (Degrees)	Number of Light Squares	Weight	1 @ 90°	2 @ 180°	2 @ 90°	2 @ 120°	3 @ 90°	3 @ 120°	4 @ 90°
0°	1-4	33.5 lb (15.2 kg)	0.85	1.70	1.46	1.66	2.31	2.25	2.35
	5-6	43.5 lb (19.7 kg)	0.86	1.71	1.62	1.80	2.49	2.35	2.50
	7-9	52.5 lb (23.8 kg)	0.98	1.95	1.75	1.98	2.73	2.55	2.76
15°	1-4	33.5 lb (15.2 kg)	1.10	1.71	1.95	2.26	2.81	3.30	2.87
	5-6	43.5 lb (19.7 kg)	1.42	1.71	2.27	2.72	3.13	3.63	3.15
	7-9	52.5 lb (23.8 kg)	1.69	1.96	2.67	3.22	3.65	4.38	3.72
30°	1-4	33.5 lb (15.2 kg)	1.72	1.81	2.58	3.21	3.44	4.59	3.53
	5-6	43.5 lb (19.7 kg)	2.26	2.29	3.11	4.00	3.97	5.27	4.00
	7-9	52.5 lb (23.8 kg)	2.75	2.85	3.73	4.83	4.71	6.45	4.81
45°	1-4	33.5 lb (15.2 kg)	2.25	2.36	3.10	4.00	3.96	5.63	4.08
	5-6	43.5 lb (19.7 kg)	2.96	2.99	3.81	5.06	4.67	6.49	4.71
	7-9	52.5 lb (23.8 kg)	3.63	3.76	3.73	6.17	5.59	8.03	5.73
60°	1-4	33.5 lb (15.2 kg)	2.63	2.77	3.49	4.58	4.34	6.21	4.48
	5-6	43.5 lb (19.7 kg)	3.46	3.51	4.32	5.84	5.19	7.01	5.22
	7-9	52.5 lb (23.8 kg)	4.27	4.44	5.25	7.15	6.23	8.80	6.40

McGraw-Edison

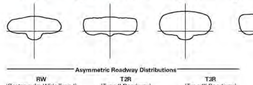
GALN Galleon II

Optical Distributions

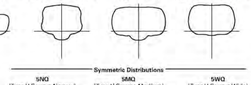
Asymmetric Area Distributions



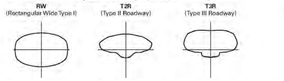
Asymmetric Roadway Distributions



Symmetric Distributions



Specialized Distributions



Rotated Optics



Product Specifications

Construction
- Die-cast aluminum housing and heat sink
- Three housing sizes, using 1 to 9 light squares

Optics
- High-efficiency injection-molded AccuLED Optics technology
- 16 optical distributions for area site and roadway applications
- 3 shielding options include HSS, GRS and PFS
- IDA certified (3000K CCT and warmer only, arms at 0°/180)

Electrical
- Removable power tray assembly includes drivers, surge modules and control modules for ease of maintenance and serviceability
- Standard with 0-10V dimming
- Standard with 10kV surge module, optional 20kV surge module
- Suitable for operation in -40°C to 40°C ambient environments. Optional 50°C high ambient (HA) configuration

Mounting
- Arms are factory installed, enabling closed-housing installation
- All arms suitable for round or square pole installation
- All arms provide clearance for multiple fixture installations at 90°

Finish
- 6 standard finishes use super durable TGIC polyester powder coat paint, providing 2.5 mil nominal thickness and salt-spray tested to 3,000 hours per ASTM B117
- RAL and custom color matches available
- Coastal Construction (CC) option salt-spray tested to 5,000 hours per ASTM B117, achieving a scribe rating of 9 per ASTM D1654

Warranty
- Five year limited warranty

Energy and Performance Data

Lumen Maintenance (TM-21)

Drive Current	Ambient Temperature	25,000 hours*	50,000 hours*	60,000 hours*	100,000 hours**	Theoretical L70 hours**
Up to 1A	25°C	99.4%	99.0%	98.9%	98.3%	> 2.4M
	40°C	98.7%	98.3%	98.1%	97.4%	> 1.9M
	50°C	98.2%	97.2%	96.8%	95.2%	> 851,000
1.2A	25°C	99.4%	99.0%	98.9%	98.3%	> 2.4M
	40°C	98.5%	97.9%	97.7%	96.7%	> 1.3M

* Supported by IES TM-21 standards.
** Theoretical values represent extrapolations commonly used; however, refer to the IES position on LED Product Lifetime Prediction, IES PS-10-19, explaining proper use of IES TM-21 and LM-80.

Lumen Multiplier

Ambient Temperature	Lumen Multiplier
0°C	1.02
10°C	1.01
25°C	1.00
40°C	0.99
50°C	0.97

McGraw-Edison

GALN Galleon II

Performance Table, Drive Current "A" (615mA)

Number of Light Squares		1	2	3	4	5	6	7	8	9
Nominal Power (Watts)		33	63	93	121	154	182	213	244	274
Input Current @ 120V		0.283	0.529	0.778	1.058	1.310	1.556	1.839	2.099	2.335
Input Current @ 208V		0.165	0.309	0.460	0.618	0.771	0.919	1.082	1.240	1.379
Input Current @ 240V		0.143	0.270	0.398	0.540	0.671	0.796	0.944	1.076	1.194
Input Current @ 277V		0.125	0.237	0.352	0.473	0.581	0.705	0.818	0.962	1.057
Input Current @ 347V		0.098	0.181	0.272	0.362	0.454	0.544	0.636	0.736	0.816
Input Current @ 480V		0.073	0.133	0.200	0.267	0.335	0.400	0.470	0.554	0.600
Optics										
T2	4000K Lumens	4,654	9,249	13,730	18,194	23,032	27,273	32,094	37,189	41,694
	BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5
	Lumens per Watt	141	147	148	150	150	150	149	152	152
T2R	4000K Lumens	4,716	9,372	13,913	18,437	23,340	27,637	32,462	37,634	42,251
	BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4
	Lumens per Watt	143	149	150	152	152	152	151	154	154
T3	4000K Lumens	4,589	9,120	13,538	17,940	22,711	26,892	31,560	36,620	41,112
	BUG Rating	B1-U0-G1	B2-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B4-U0-G4
	Lumens per Watt	139	145	146	148	147	148	147	150	150
T3R	4000K Lumens	4,735	9,411	13,970	18,513	23,435	27,751	32,596	37,790	42,425
	BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G3	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5
	Lumens per Watt	143	149	150	153	152	152	152	155	155
T4FT	4000K Lumens	4,617	9,176	13,622	18,051	22,851	27,058	31,782	36,847	41,366
	BUG Rating	B1-U0-G2	B2-U0-G2	B2-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5
	Lumens per Watt	140	146	148	149	148	149	148	151	151
T4W	4000K Lumens	4,631	9,203	13,662	18,104	22,918	27,138	31,876	36,955	41,486
	BUG Rating	B1-U0-G1	B2-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G4	B4-U0-G4	B4-U0-G4
	Lumens per Watt	140	146	147	150	149	149	148	151	151
SL2	4000K Lumens	4,619	9,180	13,627	18,058	22,860	27,069	31,795	36,861	41,383
	BUG Rating	B1-U0-G2	B2-U0-G2	B2-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5	B4-U0-G5
	Lumens per Watt	140	146	147	149	148	149	148	151	151
SL3	4000K Lumens	4,596	9,135	13,551	17,951	22,695	26,879	31,571	36,632	41,097
	BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G3	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5
	Lumens per Watt	139	145	145	148	147	148	147	150	150
SL4	4000K Lumens	4,529	9,002	13,363	17,709	22,417	26,544	31,178	36,146	40,580
	BUG Rating	B1-U0-G2	B1-U0-G3	B2-U0-G3	B2-U0-G4	B2-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5
	Lumens per Watt	137	143	144	146	146	146	145	148	148
SNQ	4000K Lumens	4,829	9,598	14,247	18,880	23,901	28,301	33,242	38,539	43,266
	BUG Rating	B2-U0-G1	B3-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G2	B5-U0-G3	B5-U0-G3
	Lumens per Watt	146	152	153	156	155	155	155	158	158
SMQ	4000K Lumens	4,803	9,545	14,318	18,974	24,020	28,442	33,407	38,731	43,482
	BUG Rating	B3-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4
	Lumens per Watt	147	153	154	157	156	156	155	159	159
SWQ	4000K Lumens	4,843	9,625	14,288	18,934	23,969	28,382	33,337	38,649	43,390
	BUG Rating	B3-U0-G1	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G5	B5-U0-G5
	Lumens per Watt	147	153	154	156	156	156	155	159	158
SLL/ SLR	4000K Lumens	3,989	7,927	11,768	15,594	19,741	23,375	27,436	31,831	35,736
	BUG Rating	B1-U0-G2	B1-U0-G2	B2-U0-G3	B2-U0-G3	B2-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5
	Lumens per Watt	121	126	127	129	128	128	128	130	130
RW	4000K Lumens	4,774	9,488	14,085	18,665	23,628	27,979	32,863	38,100	42,774
	BUG Rating	B2-U0-G1	B3-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G3
	Lumens per Watt	145	151	151	154	153	154	153	156	156
AFL	4000K Lumens	4,673	9,286	13,785	18,268	23,126	27,384	32,164	37,290	41,864
	BUG Rating	B1-U0-G1	B1-U0-G1	B2-U0-G2	B2-U0-G2	B3-U0-G2	B3-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3
	Lumens per Watt	142	147	148	151	150	150	150	153	153

* Nominal data for 70 CRI. ** For additional performance data, please reference the Lithonia Supplemental Performance Guide.

NO.	REVISION & DATE

PROJECT:

MAJOR SITE PLANS FOR
GENERAL RV OCALA - PHASE IV
13150 SW 16TH AVE (CR 475-A), MARION COUNTY, FL

PREPARED FOR:

SHEET TITLE:

LIGHTING DETAILS

MCNEAL ENGINEERING, INC.
15957 N. FLORIDA AVE, LUTZ, FL 33549
PH. (813) 968-1081 FAX (813) 961-5839
CERTIFICATE OF AUTHORIZATION #08975

JOB NO.	21-116
ACAD FILE:	FCP
DRAWN BY:	MGF
CHK'D BY:	CSM
DATE:	24.01.11
SHEET:	PE-2.06

LIGHT FIXTURE: L5

THE DESIGNS AND DRAWINGS CONTAINED HEREON ARE THE COPYRIGHTED PROPERTY OF McNEAL ENGINEERING, INC., AND SHOULD NOT BE DUPLICATED WITHOUT WRITTEN CONSENT OF THE ENGINEER.

McGraw-Edison — GALN Galleon II

Performance Table, Drive Current "B" (800mA)

Number of Light Squares		1	2	3	4	5	6	7	8	9
Nominal Power (Watts)		44	82	121	164	204	243	286	325	364
Input Current @ 120V		0.367	0.689	1.014	1.378	1.704	2.027	2.393	2.716	3.041
Input Current @ 208V		0.213	0.401	0.594	0.802	0.997	1.188	1.400	1.605	1.792
Input Current @ 240V		0.184	0.347	0.510	0.694	0.860	1.021	1.210	1.386	1.531
Input Current @ 277V		0.160	0.303	0.449	0.605	0.757	0.898	1.065	1.242	1.347
Input Current @ 347V		0.125	0.235	0.355	0.471	0.592	0.710	0.828	0.958	1.065
Input Current @ 480V		0.092	0.172	0.258	0.344	0.432	0.517	0.605	0.706	0.775
Optics										
T2	4000K Lumens	5,793	11,508	17,083	22,638	28,658	33,935	39,859	46,210	51,879
	BUG Rating	B1-U0-G2	B2-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	132	140	143	138	140	140	139	142	143
T2R	4000K Lumens	5,868	11,662	17,311	22,941	29,041	34,388	40,391	46,827	52,572
	BUG Rating	B1-U0-G1	B2-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G4	B4-U0-G4	B3-U0-G4	B3-U0-G5
	Lumens per Watt	133	142	143	140	142	142	141	144	144
T3	4000K Lumens	5,710	11,347	16,845	22,322	28,258	33,461	39,309	45,565	51,155
	BUG Rating	B1-U0-G1	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B4-U0-G4	B4-U0-G5	B4-U0-G5
	Lumens per Watt	130	138	139	136	139	138	137	140	141
T3R	4000K Lumens	5,892	11,716	17,383	23,035	29,161	34,530	40,558	47,020	52,788
	BUG Rating	B1-U0-G2	B2-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B4-U0-G5
	Lumens per Watt	134	143	144	140	143	142	142	145	146
T4FT	4000K Lumens	5,745	11,418	16,949	22,460	28,433	33,668	39,546	45,847	51,471
	BUG Rating	B1-U0-G2	B2-U0-G3	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	131	139	140	137	139	139	138	141	141
T4W	4000K Lumens	5,782	11,481	16,999	22,526	28,517	33,767	39,662	45,982	51,622
	BUG Rating	B1-U0-G1	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G4	B4-U0-G4	B4-U0-G4	B4-U0-G4
	Lumens per Watt	131	140	140	137	140	139	139	141	142
SL2	4000K Lumens	5,747	11,422	16,956	22,469	28,444	33,681	39,561	45,865	51,491
	BUG Rating	B1-U0-G2	B2-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B4-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	131	139	140	137	139	139	138	141	141
SL3	4000K Lumens	5,707	11,342	16,836	22,311	28,244	33,444	39,283	45,542	51,129
	BUG Rating	B1-U0-G2	B2-U0-G3	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5
	Lumens per Watt	130	138	139	136	138	138	137	140	140
SL4	4000K Lumens	5,636	11,201	16,627	22,034	27,893	33,028	38,794	44,976	50,493
	BUG Rating	B1-U0-G2	B1-U0-G3	B2-U0-G4	B2-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5
	Lumens per Watt	128	137	137	134	137	136	136	138	139
SNQ	4000K Lumens	6,009	11,942	17,727	23,492	29,739	35,214	41,362	47,953	53,835
	BUG Rating	B2-U0-G1	B3-U0-G1	B4-U0-G2	B4-U0-G2	B5-U0-G2	B5-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G3
	Lumens per Watt	137	146	147	143	146	145	145	148	148
SMQ	4000K Lumens	6,039	12,001	17,816	23,609	29,887	35,389	41,568	48,191	54,101
	BUG Rating	B3-U0-G1	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4	B5-U0-G5
	Lumens per Watt	137	146	147	144	147	146	145	148	149
SWQ	4000K Lumens	6,026	11,976	17,778	23,559	29,824	35,315	41,480	48,090	53,989
	BUG Rating	B3-U0-G1	B4-U0-G2	B4-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4	B5-U0-G5	B5-U0-G5
	Lumens per Watt	137	146	147	144	146	145	145	148	148
SLL/ SLR	4000K Lumens	4,963	9,863	14,642	19,403	24,563	29,085	34,163	39,607	44,465
	BUG Rating	B1-U0-G2	B1-U0-G3	B2-U0-G3	B2-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5
	Lumens per Watt	113	120	121	118	120	120	119	122	122
RW	4000K Lumens	5,940	11,806	17,526	23,224	29,400	34,813	40,891	47,407	53,222
	BUG Rating	B3-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4
	Lumens per Watt	135	144	145	142	144	143	143	146	146
AFL	4000K Lumens	5,814	11,555	17,159	22,730	28,773	34,079	40,021	46,398	52,090
	BUG Rating	B1-U0-G1	B2-U0-G1	B2-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4
	Lumens per Watt	132	141	142	139	141	140	140	143	143

* Nominal data for 70 CRI. ** For additional performance data, please reference the Gleneon Supplemental Performance Guide.

COOPER Lighting Solutions

P5500602EN page 7
August 2, 2021 1:53 PM

McGraw-Edison — GALN Galleon II

Performance Table, Drive Current "C" (1050mA)

Number of Light Squares		1	2	3	4	5	6	7	8	9
Nominal Power (Watts)		57	108	160	213	266	321	377	425	481
Input Current @ 120V		0.478	0.905	1.398	1.810	2.244	2.675	3.150	3.564	4.013
Input Current @ 208V		0.279	0.532	0.780	1.064	1.313	1.559	1.845	2.093	2.339
Input Current @ 240V		0.243	0.458	0.664	0.916	1.123	1.328	1.582	1.788	1.991
Input Current @ 277V		0.213	0.404	0.582	0.808	0.997	1.164	1.401	1.589	1.745
Input Current @ 347V		0.164	0.322	0.471	0.644	0.795	0.943	1.117	1.269	1.414
Input Current @ 480V		0.121	0.235	0.341	0.469	0.579	0.681	0.814	0.923	1.022
Optics										
T2	4000K Lumens	7,154	14,219	21,107	27,975	33,408	41,927	49,247	57,094	64,098
	BUG Rating	B1-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	126	132	132	131	132	131	131	133	133
T2R	4000K Lumens	7,220	14,408	21,389	28,344	35,881	42,487	49,905	57,857	64,954
	BUG Rating	B1-U0-G1	B2-U0-G2	B2-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	127	133	134	133	133	132	132	135	135
T3	4000K Lumens	7,054	14,020	20,812	27,580	34,914	41,342	48,560	56,297	63,203
	BUG Rating	B1-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G4	B3-U0-G4	B4-U0-G4	B4-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	124	130	130	129	130	129	129	131	131
T3R	4000K Lumens	7,280	14,468	21,477	28,461	36,025	42,663	50,111	58,096	65,222
	BUG Rating	B1-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	128	134	134	134	134	133	133	135	136
T4FT	4000K Lumens	7,098	14,107	20,941	27,751	35,110	41,598	48,860	56,646	63,594
	BUG Rating	B1-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	125	131	131	130	131	130	130	132	132
T4W	4000K Lumens	7,119	14,148	21,003	27,832	35,233	41,720	49,004	56,812	63,751
	BUG Rating	B1-U0-G1	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G4	B4-U0-G4	B4-U0-G4	B4-U0-G5	B5-U0-G5
	Lumens per Watt	125	131	131	131	131	130	130	132	133
SL2	4000K Lumens	7,101	14,112	20,949	27,761	35,144	41,614	48,879	56,668	63,619
	BUG Rating	B1-U0-G2	B2-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	125	131	131	130	131	130	130	132	132
SL3	4000K Lumens	7,051	14,013	20,802	27,566	34,897	41,321	48,535	56,269	63,172
	BUG Rating	B1-U0-G2	B2-U0-G3	B2-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	124	130	130	129	130	129	129	131	131
SL4	4000K Lumens	6,963	13,839	20,543	27,223	34,463	40,808	47,932	55,569	62,366
	BUG Rating	B1-U0-G2	B2-U0-G3	B2-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5
	Lumens per Watt	122	128	128	128	128	127	127	130	130
SNQ	4000K Lumens	7,424	14,755	21,903	29,025	36,743	43,505	51,104	59,247	66,510
	BUG Rating	B3-U0-G1	B3-U0-G2	B4-U0-G2	B5-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4
	Lumens per Watt	130	137	137	136	137	136	136	138	138
SMQ	4000K Lumens	7,461	14,828	22,012	29,169	36,926	43,725	51,399	59,542	66,846
	BUG Rating	B3-U0-G1	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4	B5-U0-G5	B5-U0-G5
	Lumens per Watt	131	137	138	137	137	136	136	139	139
SWQ	4000K Lumens	7,445	14,797	21,966	29,108	36,845	43,633	51,250	59,417	66,705
	BUG Rating	B3-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G5	B5-U0-G5	B5-U0-G5	B5-U0-G5
	Lumens per Watt	131	137	137	137	137	136	136	139	139
SLL/ SLR	4000K Lumens	6,132	12,187	18,091	23,979	30,348	35,936	42,210	48,915	54,938
	BUG Rating	B1-U0-G2	B2-U0-G3	B2-U0-G3	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5
	Lumens per Watt	108	113	113	113	113	112	112	114	114
RW	4000K Lumens	7,340	14,587	21,653	28,694	36,325	43,013	50,522	58,573	65,767
	BUG Rating	B3-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4
	Lumens per Watt	129	135	135	135	135	134	134	137	137
AFL	4000K Lumens	7,183	14,276	21,193	28,084	35,552	42,098	49,448	57,327	64,359
	BUG Rating	B1-U0-G1	B2-U0-G2	B2-U0-G2	B3-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B4-U0-G4
	Lumens per Watt	126	132	132	132	132	131	131	134	134

* Nominal data for 70 CRI. ** For additional performance data, please reference the Gleneon Supplemental Performance Guide.

COOPER Lighting Solutions

P5500602EN page 8
August 2, 2021 1:53 PM

McGraw-Edison — GALN Galleon II

Performance Table, Drive Current "D" (1200mA)

Number of Light Squares		1	2	3	4	5	6	7	8	9
Nominal Power (Watts)		65	125	184	245	309	365	433	493	552
Input Current @ 120V		0.546	1.041	1.535	2.062	2.578	3.091	3.619	4.114	4.605
Input Current @ 208V		0.318	0.610	0.893	1.219	1.504	1.786	2.113	2.397	2.679
Input Current @ 240V		0.276	0.523	0.758	1.046	1.282	1.516	1.806	2.041	2.274
Input Current @ 277V		0.241	0.460	0.662	0.920	1.133	1.325	1.593	1.807	1.987
Input Current @ 347V		0.187	0.370	0.543	0.740	0.915	1.085	1.285	1.459	1.628
Input Current @ 480V		0.138	0.269	0.391	0.537	0.663	0.782	0.932	1.057	1.173
Optics										
T2	4000K Lumens	7,872	15,645	23,225	30,777	38,962	46,135	54,189	62,824	70,550
	BUG Rating	B1-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	121	125	126	126	126	125	125	127	128
T2R	4000K Lumens	7,977	15,854	23,535	31,188	39,492	46,751	54,913	63,663	71,472
	BUG Rating	B1-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B4-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	123	127	128	127	128	127	127	129	129
T3	4000K Lumens	7,762	15,427	22,901	30,348	38,418	45,491	53,433	61,947	69,546
	BUG Rating	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G4	B4-U0-G4	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	119	123	124	124	124	123	123	126	126
T3R	4000K Lumens	8,010	15,920	23,632	31,317	39,645	46,944	55,139	63,925	71,767
	BUG Rating	B1-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	123	127	128	128	128	128	127	130	130
T4FT	4000K Lumens	7,816	15,522	23,043	30,535	38,655	45,772	53,763	62,330	69,976
	BUG Rating	B1-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	120	124	125	125	125	124	124	126	127
T4W	4000K Lumens	7,833	15,566	23,110	30,625	38,749	45,907	53,921	62,513	70,182
	BUG Rating	B2-U0-G1	B2-U0-G2	B3-U0-G3	B3-U0-G3	B4-U0-G4	B4-U0-G4	B4-U0-G5	B4-U0-G5	B5-U0-G5
	Lumens per Watt	121	125	126	125	125	125	125	127	127
SL2	4000K Lumens	7,815	15,528	23,052	30,547	38,670	45,790	53,784	62,334	70,000
	BUG Rating	B2-U0-G2	B3-U0-G3	B3-U0-G4	B3-U0-G4	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	120	124	125	125	125	124	124	126	127
SL3	4000K Lumens	7,758	15,419	22,889	30,332	38,398	45,468	53,406	61,916	69,511
	BUG Rating	B1-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	119	123	124	124	124	124	123	126	126
SL4	4000K Lumens	7,662	15,233	22,605	29,955	37,921	44,903	52,742	61,146	68,646
	BUG Rating	B1-U0-G3	B2-U0-G3	B2-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5	B4-U0-G5
	Lumens per Watt	118	122	123	122	123	122	122	124	124
SNQ	4000K Lumens	8,169	16,235	24,101	31,938	40,431	47,874	56,232	65,193	73,190
	BUG Rating	B3-U0-G1	B3-U0-G2	B4-U0-G2	B5-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4
	Lumens per Watt	126	130	131	130	131	130	130	132	133
SMQ	4000K Lumens	8,210	16,316	24,221	32,097	40,632	48,113	56,512	65,517	73,554
	BUG Rating	B3-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G5	B5-U0-G5	B5-U0-G5
	Lumens per Watt	126	131	132	131	131	131	131	133	133
SWQ	4000K Lumens	8,152	16,202	24,170	32,029	40,546	48,027	56,390	65,379	73,399
	BUG Rating	B3-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G5	B5-U0-G5	B5-U0-G5	B5-U0-G5
	Lumens per Watt	126	130	131	131	131	130	130	133	133
SLL/ SLR	4000K Lumens	6,747	13,410	19,906	26,379	33,394	39,542	46,445	53,846	60,451
	BUG Rating	B1-U0-G2	B2-U0-G3	B2-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5	B4-U0-G5
	Lumens per Watt	104	107	108	108	108	107	107	109	110
RW	4000K Lumens	8,076	16,050	23,826	31,574	39,970	47,329	55,592	64,450	72,356
	BUG Rating	B3-U0-G1	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4	B5-U0-G5
	Lumens per Watt	124	128	129	129	129	129	128	131	131
AFL	4000K Lumens	7,904	15,709	23,320	30,902	39,120	46,323	54,410	63,079	70,817
	BUG Rating	B1-U0-G1	B2-U0-G2	B3-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G4	B4-U0-G4	B4-U0-G4
	Lumens per Watt	122	126	127	126	127	126	126	128	128

* Nominal data for 70 CRI. ** For additional performance data, please reference the Gleneon Supplemental Performance Guide.

COOPER Lighting Solutions

P5500602EN page 9
August 2, 2021 1:53 PM

McGraw-Edison — GALN Galleon II

Control Options

0-10V (DIM)
This fixture is offered standard with 0-10V dimming driver(s). The DIM option provides 0-10V dimming wire leads for use with a lighting control panel or other control method.

Photocontrol (BPC, PR and PR7)
Optional button-type photocontrol (BPC) and photocontrol receptacles (PR and PR7) provide a flexible solution to enable "dusk-to-dawn" lighting by sensing light levels. Advanced control systems compatible with NEMA 7-pin standards can be utilized with the PR7 receptacle.

After Hours Dim (AHD)
This feature allows photocontrol-enabled luminaires to achieve additional energy savings by dimming during scheduled portions of the night. The dimming profile will automatically take effect after a "dusk-to-dawn" period has been calculated from the photocontrol input. Specify the desired dimming profile for a simple, factory-shipped dimming solution requiring no external control wiring. Reference the After Hours Dim supplemental guide for additional information.

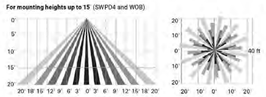
Dimming Occupancy Sensor (SPB)
These passive infrared (PIR) sensors are factory installed in the luminaire housing. When the SPB sensor option is selected, the occupancy sensor is connected to a dimming driver and the entire luminaire dims when no motion is detected. After a period of time, the luminaire turns off, and when motion is detected, the luminaire returns to full light output. The SPB sensor default parameters are listed in the table below, and can be configured utilizing the Sensor Configuration mobile application for iOS and Android devices. The SPB/X is configured to control only the specified number of light squares. An integral photocontrol can be activated with the app for "dusk-to-dawn" control or daylight harvesting - the factory default is off. Three sensor lenses are available to optimize the coverage pattern for mounting heights from 8'-40'. Four sensor colors are available; Bronze, Black, Gray and White, and are automatically selected based on the luminaire finish as indicated by the table below.

SPB sensor finish matched to luminaire finish		
Luminaire Finish		SPB Sensor Finish
WH	White	White
BK	Black	Black
GM	Graphite Metallic	Black
BZ	Bronze	Bronze
AP	Gray	Gray
DP	Dark Platinum	Gray

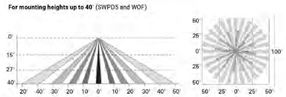
SPB/X Availability Table	
Fixture Square Count	Available SPB/X Square Count
1	Not Available
2	Not Available
3	Not Available
4	2
5	2 or 3
6	3
7	2, 3, 4 or 5
8	2, 3, 5 or 6
9	3 or 5

WaveLinx Wireless Control and Monitoring System
Operates on a wireless mesh network based on IEEE 802.15.4 standards enabling wireless control of outdoor lighting. WaveLinx and WaveLinx Lite sensors utilize the Zhaga Book 18 compliant 4-PIN receptacle (ZD or ZW), while the WSLC control module utilizes a 7-PIN receptacle. ZW option provides 4-PIN receptacle and control module to enable future installation of WaveLinx sensors. ZD option provides 4-PIN receptacle and sensor-ready (SR) driver to enable future installation of WaveLinx sensors, power monitoring, and advanced functionality. WaveLinx (SWPD4 to SWPD5) outdoor wireless sensors offer passive infrared (PIR) occupancy and photocell for closed loop daylight harvesting, and can be factory or field-installed. Sensors are factory preset to dim down to 50% after 15 minutes of no motion detected. Two lens options are available for mounting heights of 7' to 40'. Use the WaveLinx mobile application for set-up and configuration. At least one Wireless Area Controller (WAC) is required for full functionality and remote communication (including adjustment of any factory pre-sets). WaveLinx Lite (WOF and WOB) outdoor wireless sensors provide PIR occupancy and photocell for closed loop daylight harvesting, and can be factory or field-installed. Sensors are factory preset to dim down to 50% after 15 minutes of no motion detected. Two lens options are available for mounting heights of 7' to 40'. Use the WaveLinx Lite mobile application for set-up and configuration. WAC not required. WaveLinx Outdoor Control Module (WOLC-TP-10A) accessory provides a photocontrol enabling astronomic or time-based schedules to provide ON, OFF and dimming control of fixtures utilizing a 7-PIN receptacle. The out-of-box functionality is ON at dusk and OFF at dawn.

For mounting heights up to 15' (SWPD4 and WOB)



For mounting heights up to 40' (SWPD5 and WOF)



LumenSafe Integrated Network Security Camera (LD)
Cooper Lighting Solutions brings ease of camera deployment to a whole new level. No additional wiring is needed beyond providing line power to the luminaire. A variety of networking options allows security integrators to design the optimal solution for active surveillance. As the ideal solution to meet the needs for active surveillance, the LumenSafe integrated network camera is a streamlined, outdoor-ready fixed dome that provides HDTV 1080p video. This IP camera is optimally designed for deployment in the video management system or security software platform of choice.

Synapse (DIM10)
SimplySNAP integrated wireless controls system by Synapse. Includes factory installed DIM10 Synapse control module and M8/DC motion sensor; requires additional Synapse system components for operation. Contact Synapse at www.synapsewireless.com for product support, warranty and terms and conditions.

COOPER Lighting Solutions

Cooper Lighting Solutions
1121 Highway 74 South
Peachtree City, GA 30269
P 770-486-4500
www.cooperlighting.com

© 2021 Cooper Lighting Solutions
All Rights Reserved.

Specifications and dimensions
subject to change without notice.

P5500602EN page 10
August 2, 2021 1:53 PM

LIGHT FIXTURE:
L5

NO. | REVISION & DATE

PROJECT:
GENERAL RV OCALA - PHASE IV
13150 SW 16TH AVE (CR 475-A), MARION COUNTY, FL

PREPARED FOR:

SHEET TITLE:
LIGHTING DETAILS

MCNEAL ENGINEERING, INC.
15957 N. FLORIDA AVE, LUTZ, FL 33549
PH. (813) 968-1081 FAX (813) 961-5839
CERTIFICATE OF AUTHORIZATION #08975

JOB NO.	21-116
ACAD FILE:	FCP
DRAWN BY:	MGF
CHK'D BY:	CSM
DATE:	24.01.11
SHEET:	**PE-2.07**

THE DESIGNS AND DRAWINGS CONTAINED HEREON ARE THE COPYRIGHTED PROPERTY OF McNEAL ENGINEERING, INC., AND SHOULD NOT BE DUPLICATED WITHOUT WRITTEN CONSENT OF THE ENGINEER.

Project	GENRV OCALA PHASE 4	Catalog #		Type	L7
Prepared by		Notes		Date	



McGraw-Edison

GALN Galleon II

Area / Site Luminaire

Typical Applications

Outdoor • Parking Lots • Walkways • Roadways • Building Areas

Interactive Menu

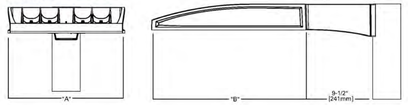
- Ordering Information page 2
- Mounting Details page 3
- Optical Distributions page 5
- Product Specifications page 5
- Energy and Performance Data page 6
- Control Options page 10

Quick Facts

- Lumen packages range from 3,300 - 73,500 (33W - 552W)
- 16 optical distributions
- Efficacy up to 159 lumens per watt

Dimensional Drawings

Standard Arm



Number of Light Squares	Width "A"	Housing Length "B"	Weight with Standard or QM Arm	EPA with Standard or QM Arm
1-4	16"	22"	29 lb	0.95
5-6	22"	22"	39 lb	0.95
7-9	22"	28-1/8"	48 lb	1.1

NOTES:
For arm selection requirements and additional fine art, see Mounting Details section.

Product Certifications

Resources

Connected Systems

- WaveLinx Lite
- WaveLinx

McGraw-Edison

GALN Galleon II

Ordering Information

SAMPLE NUMBER: **GALN-SA4C-740-U-T4FT-GM**

Product Family [1,2]	Light Engine: Configuration	Light Engine: Drive Current	Color Temperature	Voltage	Distribution	Mounting	Finish
GALN=Galleon II	**SA1**=1 Square **SA2**=2 Squares **SA3**=3 Squares **SA4**=4 Squares **SA5**=5 Squares **SA6**=6 Squares **SA7**=7 Squares **SA8**=8 Squares **SA9**=9 Squares	**A**=600mA **B**=800mA **C**=1000mA **D**=1200mA [3, 17]	**722**=700CRI, 2200K **727**=700CRI, 2700K **730**=700CRI, 3000K **735**=700CRI, 3500K **740**=700CRI, 4000K **750**=700CRI, 5000K **760**=700CRI, 6000K **827**=800CRI, 2700K **830**=800CRI, 3000K **AMB**=Amber, 590nm [15, 17]	**Blank**=Universal Voltage **H**=347V-480V [4] **1**=120V **2**=208V **3**=240V **4**=277V [4] **5**=480V [4] **9**=347V [4]	**T2**=Type II **T2R**=Type II Roadway **T3**=Type III **T3R**=Type III Roadway **T4FT**=Type IV Forward Throw **T4W**=Type IV Wide **SNQ**=Type V Narrow **SMQ**=Type V Square Medium **SWQ**=Type V Square Wide **SL2**=Type II w/Spill Control **SL3**=Type III w/Spill Control **SL4**=Type IV w/Spill Control **SLL**=90° Spill Light Eliminator Left **SLR**=90° Spill Light Eliminator Right **RW**=Rectangular Wide Type I **AFL**=Automotive Frontline	**[Blank]**=Standard Pole Mount Arm **QM**=Standard Pole Mount Arm with Quick Mount Adaptor **PA**=Pole Mount, Adjustable **SP**=Slipfitter, Adjustable [5] **MA**=Mast Arm, Fixed **WM**=Wall Mount, Fixed **WA**=Wall Mount, Adjustable **UP**=Upswept Arm	**AP**=Gray **BZ**=Bronze **BK**=Black **DP**=Dark Platinum **GM**=Graphite Metallic **WH**=White

Options (Add as Suffix)	Controls and Systems Options (Add as Suffix)	Accessories (Order Separately)
DIM=External 0-10V Dimming Leads [26] **F**=Single Fuse (120, 277 or 347V Specify Voltage) **FF**=Double Fuse (208, 240 or 480V Specify Voltage) **20K**=20kV IR, 1449 based surge-protective device [24] **2L**=Two Circuits [18] **HA**=50°C High Ambient **HSS**=Installed House Side Shield [19] **GBSBK**=Glare Reducing Shield, Black [6,7] **GBSWH**=Glare Reducing Shield, White [6,7] **RTA**=Tool-less Arm Mounted to Match Housing [25] **TDD**=Tool-less Door Hardware **CC**=Coastal Construction finish [8] **L90**=Optics Rotated 90° Left **R90**=Optics Rotated 90° Right **AD0143**=After Hours Dim, 5 Hours [22] **AH0245**=After Hours Dim, 6 Hours [22] **AH0255**=After Hours Dim, 7 Hours [22] **AH0355**=After Hours Dim, 8 Hours [22] **DALI**=DALI Driver	**BPC**=Button Type Photocontrol [9] **PR**=NEMA 3-Prong Photocontrol Receptacle **PR7**=NEMA 7-Pin Photocontrol Receptacle [9] **SPB2**=Dimming Motion Sensor, 9'-15' mounting [24] **SPB4**=Dimming Motion Sensor, 21'-40' mounting [24] **SPB2LX**=Dimming Motion Sensor, limited square-count, 9'-20' mounting [24] **SPB4LX**=Dimming Motion Sensor, limited square-count, 21'-40' mounting [24] **ZW**=WaveLinx Module and 4-PIN Receptacle [10] **ZD**=WaveLinx Module with DALI driver and 4-PIN Receptacle [10] **ZW-SWPD-XX**=WaveLinx Sensor Only, 7-15ft [10, 11, 12] **ZW-SWPD/SXX**=WaveLinx Sensor Only, 15-40ft [10, 11, 12] **ZW-WDBXX**=WaveLinx Sensor with Bluetooth, 7-15ft [10, 11, 12, 13] **ZW-WDFXX**=WaveLinx Sensor with Bluetooth, 15-40ft [10, 11, 12, 13] **ZD-SWPD-XX**=WaveLinx Sensor Only, 7-15ft [10, 11, 12] **ZD-SWPD/SXX**=WaveLinx Sensor Only, 15-40ft [10, 11, 12] **ZD-WDBXX**=WaveLinx Sensor with Bluetooth, 7-15ft [10, 11, 12, 13] **ZD-WDFXX**=WaveLinx Sensor with Bluetooth, 15-40ft [10, 11, 12, 13] **DIM10-MS/DIM-LSS**=Synapse Occupancy Sensor (9'-20' Mounting) [10] **DIM10-MS/DIM-LAS**=Synapse Occupancy Sensor (21'-40' Mounting) [10]	**DA/RA1016**=NEMA Photocontrol Multi-Tap - 105-285V **DA/RA1027**=NEMA Photocontrol - 480V **DA/RA1201**=NEMA Photocontrol - 347V **DA/RA1015**=Photocontrol Shorting Cap **DA/RA1014**=120V Photocontrol **MA1232**=10kV Surge Module Replacement **MA1036-XX**=Single Tenon Adapter for 2-3/8" O.D. Tenon **MA1037-XX**=2@180° Tenon Adapter for 2-3/8" O.D. Tenon **MA1197-XX**=3@120° Tenon Adapter for 2-3/8" O.D. Tenon **MA1138-XX**=4@90° Tenon Adapter for 2-3/8" O.D. Tenon **MA1139-XX**=2@90° Tenon Adapter for 2-3/8" O.D. Tenon **MA1190-XX**=3@90° Tenon Adapter for 2-3/8" O.D. Tenon **MA1191-XX**=2@120° Tenon Adapter for 2-3/8" O.D. Tenon **MA1038-XX**=Single Tenon Adapter for 3-1/2" O.D. Tenon **MA1039-XX**=2@180° Tenon Adapter for 3-1/2" O.D. Tenon **MA1192-XX**=3@120° Tenon Adapter for 3-1/2" O.D. Tenon **MA1193-XX**=4@90° Tenon Adapter for 3-1/2" O.D. Tenon **MA1194-XX**=2@90° Tenon Adapter for 3-1/2" O.D. Tenon **MA1195-XX**=3@90° Tenon Adapter for 3-1/2" O.D. Tenon **SRA238**=Adapter kit for mounting to 2-3/8" O.D. Tenon **LSIS5S**=Field Installed House Side Shield [6,7] **LS/GBSBK**=Glare Reducing Shield, Black [6,7] **LS/GBSWH**=Glare Reducing Shield, White [6,7] **LS/PRS**=Perimeter Shield, Black [6] **WGL-CP-10A**=WaveLinx Outdoor Control Module [11,16] **WDA-XX**=WaveLinx Wireless Sensor, 7'-15' Mounting Height [11,12,14,16] **WDE-XX**=WaveLinx Wireless Sensor, 15'-40' Mounting Height [11,12,14,16]

NOTES:
1. Customizer is required to file for engineering analysis to confirm pole and fixture compatibility for all applications. Refer to our white paper WP07250010N for additional support information.
2. Designs.gbls.ConsortiumNA Qualified. Refer to www.designlights.org Qualified Products List under Family Models for details.
3. Coastal construction finish salt spray tested to over 5,000 hours per ASTM B117, with a scribe rating of 9 per ASTM D1654.
4. Not for use with SPD.
5. 2.0 lm current 530mA not available with color temperature 722, 727 or 850 when either 10A or HSS options are selected.
6. T1 option not 50 rated. Not available with Coastal Construction (CC) option.
7. Not available with mileage system, 4, 8 or 9.
8. Requires the use of an internal cap-down transformer when combined with sensor options. Not available with sensor or WaveLinx when ordering 480V. Not available with 347V when ordering 2 or more sensors or WaveLinx.
9. Adjustable slipfitter arm limited to vertical 0° mount. For mounting to 2-3/8" O.D. tenons, order accessory SRA238.
10. One required for each Light Square.
11. Not for use with 480V, SPD or HCT4 or 480V. Not available with WaveLinx or Enlighted sensors, or 20kV surge option.
12. Replace XX with sensor color (WH, BZ or BK).
13. WAC Gateway required to enable field-configurability. Order WAG-PoE and WPOS-12B (48V to PoE injector) power supply if needed. WAC not required for LC Bluetooth sensors.
14. Requires ZW or ZD receptacle.
15. Narrow-band 590nm +/- 5nm for wildlife and observatory use. Choose drive current A, supplied at 500mA drive current only. Available with SWQ, SNQ, SL3, SL3 and SL4 distributions. Can be used with HSS option.
16. Set of 4 qtys. One set required per Light Square.
17. Not available with HSS, GBSBK or GBSWH.
18. Not for use with SNQ, SMQ, SWQ or SW option, A black trim plate is used when HSS is selected.
19. Cannot be used with other control options.
20. Low voltage control boot brought out 18" outside fixture. Not available with (2AL) or integrated controls options
21. Not available if any SPD, (9Y), or Shield, no sensor is selected. Motion sensor has an integral photocell.
22. Not for use with 347V, 480V or HCT. Not available with DMG enabled receptacle with photocontrol accessory.
23. Not for use with "UNV", 347V or DL4 option. See CD files for details.
24. Sensor configuration matrix application required for configuration. See controls page for details.
25. Replace X with number of Light Squares controlled by the RTA, ordering only the "RTA-X" as field-installable "slide" on the controls page.
26. Not available with HSS, GBSBK or GBSWH.

LumenSafe Integrated Network Security Camera Technology Options (Add as Suffix)

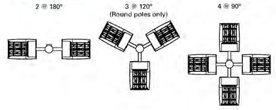
Product Family	Camera Type	Data Backhaul
L=LumenSafe Technology	**D**=Standard Dome Camera **H**=Hi-Rez Dome Camera **P**=Remote PTZ Camera	**C**=Cellular, No SIM **A**=Cellular, AT&T **V**=Cellular, Verizon **S**=Cellular, Sprint **R**=Cellular, Rogers **W**=Wi-Fi Networking w/ Omni-Directional Antenna **E**=Ethernet Networking

McGraw-Edison

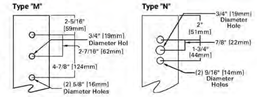
GALN Galleon II

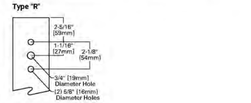
Mounting Details

Pole Configuration Options

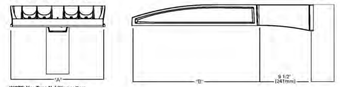


Pole Drilling Patterns



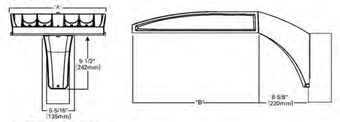


Quick Mount Arm (QM) *



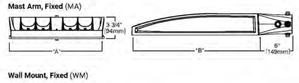
*NOTE: Use Type N drilling pattern

Upswept Arm (UP) *

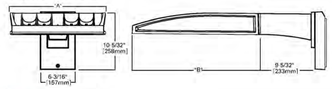


*NOTE: Use Type H, R or M drilling pattern

Mast Arm, Fixed (MA)



Wall Mount, Fixed (WM)

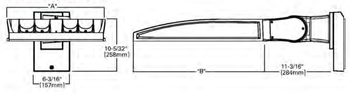


McGraw-Edison

GALN Galleon II

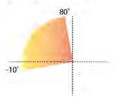
Mounting Details

Wall Mount, Adjustable (WA)



Adjustable Arm Range of Motion

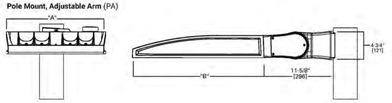
- Wall Mount (WA), Slipfitter (SP) and Pole Mount (PA)
- Adjustable in increments of 5°
- Must maintain downward facing orientation



Slipfitter, Adjustable (SP)



Pole Mount, Adjustable Arm (PA)



Fixture Weights and EPAs

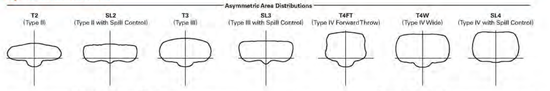
Tilt Angle (Degrees)	Number of Light Squares	Weight	1 @ 90°	2 @ 180°	2 @ 90°	2 @ 120°	3 @ 90°	3 @ 120°	4 @ 90°
0°	1-4	33.5 lb (15.2 kg)	0.85	1.70	1.46	1.66	2.31	2.25	2.35
	5-6	43.5 lb (19.7 kg)	0.86	1.71	1.62	1.80	2.49	2.35	2.50
	7-9	52.5 lb (23.8 kg)	0.98	1.95	1.75	1.98	2.73	2.55	2.76
15°	1-4	33.5 lb (15.2 kg)	1.10	1.71	1.95	2.26	2.81	3.30	2.87
	5-6	43.5 lb (19.7 kg)	1.42	1.71	2.27	2.72	3.13	3.63	3.15
	7-9	52.5 lb (23.8 kg)	1.69	1.96	2.67	3.22	3.65	4.38	3.72
30°	1-4	33.5 lb (15.2 kg)	1.72	1.81	2.58	3.21	3.44	4.59	3.53
	5-6	43.5 lb (19.7 kg)	2.26	2.29	3.11	4.00	3.97	5.27	4.00
	7-9	52.5 lb (23.8 kg)	2.75	2.85	3.73	4.83	4.71	6.45	4.81
45°	1-4	33.5 lb (15.2 kg)	2.25	2.36	3.10	4.00	3.96	5.63	4.08
	5-6	43.5 lb (19.7 kg)	2.96	2.99	3.81	5.06	4.67	6.49	4.71
	7-9	52.5 lb (23.8 kg)	3.63	3.76	3.73	6.17	5.59	8.03	5.73
60°	1-4	33.5 lb (15.2 kg)	2.63	2.77	3.49	4.58	4.34	6.21	4.48
	5-6	43.5 lb (19.7 kg)	3.46	3.51	4.32	5.84	5.19	7.01	5.22
	7-9	52.5 lb (23.8 kg)	4.27	4.44	5.25	7.15	6.23	8.80	6.40

McGraw-Edison

GALN Galleon II

Optical Distributions

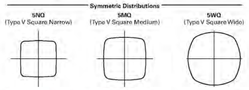
Asymmetric Area Distributions



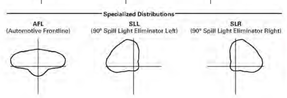
Asymmetric Roadway Distributions



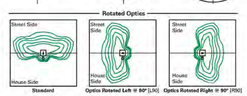
Symmetric Distributions



Specialized Distributions



Rotated Optics



Product Specifications

Construction
- Die-cast aluminum housing and heat sink
- Three housing sizes, using 1 to 9 light squares

Optics
- High-efficiency injection-molded AccuLED Optics technology
- 16 optical distributions for area site and roadway applications
- 3 shielding options include HSS, GRS and PFS
- IDA certified (3000K CCT and warmer only, arms at 0° tilt)

Electrical
- Removable power tray assembly includes drivers, surge modules and control modules for ease of maintenance and serviceability
- Standard with 0-10V dimming
- Standard with 10kV surge module, optional 20kV surge module
- Suitable for operation in -40°C to 40°C ambient environments. Optional 50°C high ambient (HA) configuration

Mounting
- Arms are factory installed, enabling closed-housing installation
- All arms suitable for round or square pole installation
- All arms provide clearance for multiple fixture installations at 90°

Finish
- 6 standard finishes use super durable TGIC polyester powder coat paint, providing 2.5 mil nominal thickness and salt-spray tested to 3,000 hours per ASTM B117
- RAL and custom color matches available
- Coastal Construction (CC) option salt-spray tested to 5,000 hours per ASTM B117, achieving a scribe rating of 9 per ASTM D1654

Warranty
- Five year limited warranty

Energy and Performance Data

Lumen Maintenance (TM-21)

Drive Current	Ambient Temperature	25,000 hours*	50,000 hours*	60,000 hours*	100,000 hours**	Theoretical L70 hours**
Up to 1A	25°C	99.4%	99.0%	98.9%	98.3%	> 2.4M
	40°C	98.7%	98.3%	98.1%	97.4%	> 1.9M
	50°C	98.2%	97.2%	96.8%	95.2%	> 851,000
1.2A	25°C	99.4%	99.0%	98.9%	98.3%	> 2.4M
	40°C	98.5%	97.9%	97.7%	96.7%	> 1.3M

* Supported by IES TM-21 standards.
** Theoretical values represent extrapolations commonly used; however, refer to the IES position on LED Product Lifetime Prediction, IES PS-10-19, explaining proper use of IES TM-21 and LM-80.

Lumen Multiplier

Ambient Temperature	Lumen Multiplier
0°C	1.02
10°C	1.01
25°C	1.00
40°C	0.99
50°C	0.97

McGraw-Edison

GALN Galleon II

Performance Table, Drive Current "A" (615mA)

Number of Light Squares		1	2	3	4	5	6	7	8	9
Nominal Power (Watts)		33	63	93	121	154	182	213	244	274
Input Current @ 120V		0.283	0.529	0.778	1.058	1.310	1.556	1.839	2.099	2.335
Input Current @ 208V		0.165	0.309	0.460	0.618	0.771	0.919	1.082	1.240	1.379
Input Current @ 240V		0.143	0.270	0.398	0.540	0.671	0.796	0.944	1.076	1.194
Input Current @ 277V		0.125	0.237	0.352	0.473	0.581	0.705	0.818	0.962	1.057
Input Current @ 347V		0.098	0.181	0.272	0.362	0.454	0.544	0.636	0.736	0.816
Input Current @ 480V		0.073	0.133	0.200	0.267	0.335	0.400	0.470	0.554	0.600
Optics										
T2	4000K Lumens	4,654	9,249	13,730	18,194	23,032	27,273	32,004	37,128	41,694
	BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5
	Lumens per Watt	141	147	148	150	150	150	149	152	152
T2R	4000K Lumens	4,716	9,372	13,913	18,437	23,340	27,637	32,462	37,634	42,251
	BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4
	Lumens per Watt	143	149	150	152	152	152	151	154	154
T3	4000K Lumens	4,589	9,120	13,538	17,940	22,711	26,892	31,580	36,620	41,112
	BUG Rating	B1-U0-G1	B2-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B4-U0-G4
	Lumens per Watt	139	145	146	148	147	148	147	150	150
T3R	4000K Lumens	4,735	9,411	13,970	18,513	23,435	27,751	32,596	37,790	42,425
	BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G3	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5
	Lumens per Watt	143	149	150	153	152	152	152	155	155
T4FT	4000K Lumens	4,617	9,176	13,622	18,051	22,851	27,058	31,782	36,847	41,366
	BUG Rating	B1-U0-G2	B2-U0-G2	B2-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5
	Lumens per Watt	140	146	148	149	148	149	148	151	151
T4W	4000K Lumens	4,631	9,203	13,662	18,104	22,918	27,138	31,876	36,955	41,486
	BUG Rating	B1-U0-G1	B2-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G4	B4-U0-G4	B4-U0-G4
	Lumens per Watt	140	146	147	150	149	149	148	151	151
SL2	4000K Lumens	4,619	9,180	13,627	18,058	22,860	27,069	31,795	36,861	41,383
	BUG Rating	B1-U0-G2	B2-U0-G2	B2-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5	B4-U0-G5
	Lumens per Watt	140	146	147	149	148	149	148	151	151
SL3	4000K Lumens	4,596	9,135	13,551	17,951	22,695	26,879	31,571	36,632	41,097
	BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G3	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5
	Lumens per Watt	139	145	145	148	147	148	147	150	150
SL4	4000K Lumens	4,529	9,002	13,363	17,709	22,417	26,544	31,178	36,146	40,580
	BUG Rating	B1-U0-G2	B1-U0-G3	B2-U0-G3	B2-U0-G4	B2-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5
	Lumens per Watt	137	143	144	146	146	146	145	148	148
SNQ	4000K Lumens	4,829	9,598	14,247	18,880	23,901	28,301	33,242	38,539	43,266
	BUG Rating	B2-U0-G1	B3-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G2	B5-U0-G3	B5-U0-G3
	Lumens per Watt	146	152	153	156	155	155	155	158	158
SMQ	4000K Lumens	4,803	9,545	14,318	18,974	24,020	28,442	33,407	38,731	43,482
	BUG Rating	B3-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4
	Lumens per Watt	147	153	154	157	156	156	155	159	159
SWQ	4000K Lumens	4,843	9,625	14,288	18,934	23,969	28,382	33,337	38,649	43,390
	BUG Rating	B3-U0-G1	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G5	B5-U0-G5
	Lumens per Watt	147	153	154	156	156	156	155	159	158
SLL/ SLR	4000K Lumens	3,989	7,927	11,768	15,594	19,741	23,375	27,436	31,831	35,736
	BUG Rating	B1-U0-G2	B1-U0-G2	B2-U0-G3	B2-U0-G3	B2-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5
	Lumens per Watt	121	126	127	129	128	128	128	130	130
RW	4000K Lumens	4,774	9,488	14,085	18,665	23,628	27,979	32,863	38,100	42,774
	BUG Rating	B2-U0-G1	B3-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G3
	Lumens per Watt	145	151	151	154	153	154	153	156	156
AFL	4000K Lumens	4,673	9,286	13,785	18,268	23,126	27,384	32,164	37,290	41,864
	BUG Rating	B1-U0-G1	B1-U0-G1	B2-U0-G2	B2-U0-G2	B3-U0-G2	B3-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3
	Lumens per Watt	142	147	148	151	150	150	150	153	153

* Nominal data for 70 CRI. ** For additional performance data, please reference the Lithonia Supplemental Performance Guide.

NO. | REVISION & DATE

PROJECT:

MAJOR SITE PLANS FOR
GENERAL RV OCALA - PHASE IV
13150 SW 16TH AVE (CR 475-A), MARION COUNTY, FL

PREPARED FOR:

SHEET TITLE:
LIGHTING DETAILS

MCNEAL ENGINEERING, INC.
15957 N. FLORIDA AVE, LUTZ, FL 33549
PH. (813) 968-1081 FAX (813) 961-5839
CERTIFICATE OF AUTHORIZATION #08975

JOB NO.	21-116
ACAD FILE:	FCP
DRAWN BY:	MGF
CHK'D BY:	CSM
DATE:	24.01.11
SHEET:	PE-2.08

LIGHT FIXTURE:
L7

THE DESIGNS AND DRAWINGS CONTAINED HEREON ARE THE COPYRIGHTED PROPERTY OF McNEAL ENGINEERING, INC., AND SHOULD NOT BE DUPLICATED WITHOUT WRITTEN CONSENT OF THE ENGINEER.

McGraw-Edison — GALN Galleon II

Performance Table, Drive Current "B" (800mA)

Number of Light Squares		1	2	3	4	5	6	7	8	9
Nominal Power (Watts)		44	82	121	164	204	243	286	325	364
Input Current @ 120V		0.367	0.689	1.014	1.378	1.704	2.027	2.393	2.716	3.041
Input Current @ 208V		0.213	0.401	0.594	0.802	0.997	1.188	1.400	1.605	1.792
Input Current @ 240V		0.184	0.347	0.510	0.694	0.860	1.021	1.210	1.386	1.531
Input Current @ 277V		0.160	0.303	0.449	0.605	0.757	0.898	1.065	1.242	1.347
Input Current @ 347V		0.125	0.235	0.355	0.471	0.592	0.710	0.828	0.958	1.065
Input Current @ 480V		0.092	0.172	0.258	0.344	0.432	0.517	0.605	0.706	0.775
Optics										
T2	4000K Lumens	5,793	11,508	17,083	22,638	28,658	33,935	39,859	46,210	51,879
	BUG Rating	B1-U0-G2	B2-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B4-U0-G5
	Lumens per Watt	132	140	141	138	140	140	139	142	143
T2R	4000K Lumens	5,868	11,662	17,311	22,941	29,041	34,388	40,391	46,827	52,572
	BUG Rating	B1-U0-G1	B2-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G4	B4-U0-G4	B3-U0-G4	B3-U0-G5
	Lumens per Watt	133	142	143	140	142	142	141	144	144
T3	4000K Lumens	5,710	11,347	16,845	22,322	28,258	33,461	39,309	45,565	51,155
	BUG Rating	B1-U0-G1	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B4-U0-G4	B4-U0-G5	B4-U0-G5
	Lumens per Watt	130	138	139	136	139	138	137	140	141
T3R	4000K Lumens	5,892	11,716	17,383	23,035	29,161	34,530	40,558	47,020	52,788
	BUG Rating	B1-U0-G2	B2-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	134	143	144	140	143	142	142	145	146
T4FT	4000K Lumens	5,745	11,418	16,949	22,460	28,433	33,668	39,546	45,847	51,471
	BUG Rating	B1-U0-G2	B2-U0-G3	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	131	139	140	137	139	139	138	141	141
T4W	4000K Lumens	5,782	11,481	16,999	22,526	28,517	33,767	39,662	45,982	51,622
	BUG Rating	B1-U0-G1	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G4	B4-U0-G4	B4-U0-G4	B4-U0-G4
	Lumens per Watt	131	140	140	137	140	139	139	141	142
SL2	4000K Lumens	5,747	11,422	16,956	22,469	28,444	33,681	39,561	45,865	51,491
	BUG Rating	B1-U0-G2	B2-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B4-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	131	139	140	137	139	139	138	141	141
SL3	4000K Lumens	5,707	11,342	16,836	22,311	28,244	33,444	39,283	45,542	51,129
	BUG Rating	B1-U0-G2	B2-U0-G3	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5
	Lumens per Watt	130	138	139	136	138	138	137	140	140
SL4	4000K Lumens	5,636	11,201	16,627	22,034	27,893	33,028	38,794	44,976	50,493
	BUG Rating	B1-U0-G2	B1-U0-G3	B2-U0-G4	B2-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5
	Lumens per Watt	128	137	137	134	137	136	136	138	139
SNQ	4000K Lumens	6,009	11,942	17,727	23,492	29,739	35,214	41,362	47,953	53,835
	BUG Rating	B2-U0-G1	B3-U0-G1	B4-U0-G2	B4-U0-G2	B5-U0-G2	B5-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G3
	Lumens per Watt	137	146	147	143	146	145	145	148	148
SMQ	4000K Lumens	6,039	12,001	17,816	23,609	29,887	35,389	41,568	48,191	54,101
	BUG Rating	B3-U0-G1	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4	B5-U0-G5
	Lumens per Watt	137	146	147	144	147	146	145	148	149
SWQ	4000K Lumens	6,026	11,976	17,778	23,559	29,824	35,315	41,480	48,090	53,989
	BUG Rating	B3-U0-G1	B4-U0-G2	B4-U0-G3	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G5	B5-U0-G5
	Lumens per Watt	137	146	147	144	146	145	145	148	148
SLL/ SLR	4000K Lumens	4,963	9,863	14,642	19,403	24,563	29,085	34,163	39,607	44,465
	BUG Rating	B1-U0-G2	B1-U0-G3	B2-U0-G3	B2-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5
	Lumens per Watt	113	120	121	118	120	120	119	122	122
RW	4000K Lumens	5,940	11,806	17,526	23,224	29,400	34,813	40,891	47,407	53,222
	BUG Rating	B3-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4
	Lumens per Watt	135	144	145	142	144	143	143	146	146
AFL	4000K Lumens	5,814	11,555	17,159	22,730	28,773	34,079	40,021	46,398	52,090
	BUG Rating	B1-U0-G1	B2-U0-G1	B2-U0-G2	B3-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4
	Lumens per Watt	132	141	142	139	141	140	140	143	143

* Nominal data for 70 CRI. ** For additional performance data, please reference the Gleneon Supplemental Performance Guide.

COOPER Lighting Solutions

McGraw-Edison — GALN Galleon II

Performance Table, Drive Current "C" (1050mA)

Number of Light Squares		1	2	3	4	5	6	7	8	9
Nominal Power (Watts)		57	108	160	213	266	321	[redacted]	425	481
Input Current @ 120V		0.478	0.905	1.338	1.810	2.244	2.675	[redacted]	3.564	4.013
Input Current @ 208V		0.279	0.532	0.780	1.064	1.313	1.559	1.845	2.093	2.339
Input Current @ 240V		0.243	0.458	0.664	0.916	1.123	1.328	1.582	1.788	1.991
Input Current @ 277V		0.213	0.404	0.582	0.808	0.997	1.164	1.401	1.589	1.745
Input Current @ 347V		0.164	0.322	0.471	0.644	0.795	0.943	1.117	1.269	1.414
Input Current @ 480V		0.121	0.235	0.341	0.469	0.579	0.681	0.814	0.923	1.022
Optics										
T2	4000K Lumens	7,154	14,219	21,107	27,975	33,408	41,927	49,247	57,094	64,098
	BUG Rating	B1-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	126	132	132	131	132	131	131	133	133
T2R	4000K Lumens	7,230	14,408	21,389	28,344	35,881	42,487	49,905	57,857	64,954
	BUG Rating	B1-U0-G1	B2-U0-G2	B2-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	127	133	134	133	133	132	132	135	135
T3	4000K Lumens	7,054	14,020	20,812	27,580	34,914	41,342	48,560	56,297	63,203
	BUG Rating	B1-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G4	B3-U0-G4	B4-U0-G4	B4-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	124	130	130	129	130	129	129	131	131
T3R	4000K Lumens	7,280	14,468	21,477	28,461	36,025	42,663	50,111	58,096	65,222
	BUG Rating	B1-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	128	134	134	134	134	133	133	135	136
T4FT	4000K Lumens	7,098	14,107	20,941	27,751	35,110	41,598	48,860	56,646	63,594
	BUG Rating	B1-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	125	131	131	130	131	130	130	132	132
T4W	4000K Lumens	7,119	14,148	21,003	27,832	35,233	41,720	49,004	56,812	63,781
	BUG Rating	B1-U0-G1	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G4	B4-U0-G4	B4-U0-G4	B4-U0-G5	B5-U0-G5
	Lumens per Watt	125	131	131	131	131	130	130	132	133
SL2	4000K Lumens	7,101	14,112	20,949	27,761	35,144	41,614	48,879	56,668	63,619
	BUG Rating	B1-U0-G2	B2-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	125	131	131	130	131	130	130	132	132
SL3	4000K Lumens	7,051	14,013	20,802	27,566	34,897	41,321	48,535	56,269	63,172
	BUG Rating	B1-U0-G2	B2-U0-G3	B2-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	124	130	130	129	130	129	129	131	131
SL4	4000K Lumens	6,963	13,839	20,543	27,223	34,463	40,808	47,932	55,569	62,366
	BUG Rating	B1-U0-G2	B2-U0-G3	B2-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5
	Lumens per Watt	122	128	128	128	128	127	127	130	130
SNQ	4000K Lumens	7,424	14,755	21,903	29,025	36,743	43,505	51,104	59,247	66,510
	BUG Rating	B3-U0-G1	B3-U0-G2	B4-U0-G2	B5-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4
	Lumens per Watt	130	137	137	136	137	136	136	138	138
SMQ	4000K Lumens	7,461	14,828	22,012	29,169	36,926	43,725	[redacted]	59,542	66,846
	BUG Rating	B3-U0-G1	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	[redacted]	B5-U0-G5	B5-U0-G5
	Lumens per Watt	131	137	138	137	137	136	[redacted]	139	139
SWQ	4000K Lumens	7,445	14,797	21,966	29,108	36,845	43,633	51,250	59,417	66,705
	BUG Rating	B3-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G5	B5-U0-G5	B5-U0-G5	B5-U0-G5
	Lumens per Watt	131	137	137	137	137	136	136	139	139
SLL/ SLR	4000K Lumens	6,132	12,187	18,091	23,979	30,348	35,936	42,210	48,915	54,938
	BUG Rating	B1-U0-G2	B2-U0-G3	B2-U0-G3	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5
	Lumens per Watt	108	113	113	113	113	112	112	114	114
RW	4000K Lumens	7,340	14,587	21,653	28,694	36,325	43,013	50,522	58,573	65,767
	BUG Rating	B3-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4
	Lumens per Watt	129	135	135	135	135	134	134	137	137
AFL	4000K Lumens	7,183	14,276	21,193	28,084	35,552	42,068	49,448	57,327	64,359
	BUG Rating	B1-U0-G1	B2-U0-G2	B2-U0-G2	B3-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B4-U0-G4
	Lumens per Watt	126	132	132	132	132	131	131	134	134

* Nominal data for 70 CRI. ** For additional performance data, please reference the Gleneon Supplemental Performance Guide.

COOPER Lighting Solutions

McGraw-Edison — GALN Galleon II

Performance Table, Drive Current "D" (1200mA)

Number of Light Squares		1	2	3	4	5	6	7	8	9
Nominal Power (Watts)		65	125	184	245	309	368	433	493	552
Input Current @ 120V		0.546	1.041	1.535	2.062	2.578	3.070	3.619	4.114	4.605
Input Current @ 208V		0.318	0.610	0.893	1.219	1.504	1.786	2.113	2.397	2.679
Input Current @ 240V		0.276	0.523	0.758	1.046	1.282	1.516	1.806	2.041	2.274
Input Current @ 277V		0.241	0.460	0.662	0.920	1.133	1.325	1.593	1.807	1.987
Input Current @ 347V		0.187	0.370	0.543	0.740	0.915	1.085	1.285	1.459	1.628
Input Current @ 480V		0.138	0.269	0.391	0.537	0.663	0.782	0.932	1.057	1.173
Optics										
T2	4000K Lumens	7,872	15,645	23,225	30,777	38,962	46,135	54,189	62,824	70,550
	BUG Rating	B1-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	121	125	126	126	126	125	125	127	128
T2R	4000K Lumens	7,977	15,854	23,535	31,188	39,482	46,751	54,913	63,663	71,472
	BUG Rating	B1-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B4-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	123	127	128	127	128	127	127	129	129
T3	4000K Lumens	7,762	15,427	22,901	30,348	38,418	45,491	53,433	61,947	69,546
	BUG Rating	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G4	B4-U0-G4	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	119	123	124	124	124	123	126	126	126
T3R	4000K Lumens	8,010	15,920	23,632	31,317	39,645	46,944	55,139	63,925	71,767
	BUG Rating	B1-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	123	127	128	128	128	128	127	130	130
T4FT	4000K Lumens	7,816	15,522	23,043	30,535	38,655	45,772	53,763	62,330	69,976
	BUG Rating	B1-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	120	124	125	125	125	124	124	126	127
T4W	4000K Lumens	7,833	15,566	23,110	30,625	38,749	45,907	53,921	62,513	70,182
	BUG Rating	B2-U0-G1	B2-U0-G2	B3-U0-G3	B3-U0-G3	B4-U0-G4	B4-U0-G4	B4-U0-G5	B4-U0-G5	B5-U0-G5
	Lumens per Watt	121	125	126	125	125	125	125	127	127
SL2	4000K Lumens	7,813	15,528	23,052	30,547	38,670	45,790	53,784	62,334	70,000
	BUG Rating	B2-U0-G2	B3-U0-G3	B3-U0-G4	B3-U0-G4	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	120	124	125	125	125	124	124	126	127
SL3	4000K Lumens	7,758	15,419	22,889	30,332	38,398	45,468	53,406	61,916	69,511
	BUG Rating	B1-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	119	123	124	124	124	124	123	126	126
SL4	4000K Lumens	7,662	15,233	22,605	29,955	37,921	44,903	52,742	61,146	68,646
	BUG Rating	B1-U0-G2	B2-U0-G3	B2-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5	B4-U0-G5
	Lumens per Watt	118	122	123	122	123	122	122	124	124
SNQ	4000K Lumens	8,169	16,235	24,101	31,938	40,431	47,874	56,232	65,193	73,190
	BUG Rating	B3-U0-G1	B3-U0-G2	B4-U0-G2	B5-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4
	Lumens per Watt	126	130	131	130	131	130	130	132	133
SMQ	4000K Lumens	8,210	16,316	24,221	32,097	40,632	48,113	56,512	65,517	73,554
	BUG Rating	B3-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G5	B5-U0-G5	B5-U0-G5
	Lumens per Watt	126	131	132	131	131	131	131	133	133
SWQ	4000K Lumens	8,152	16,202	24,170	32,029	40,546	48,011	56,390	65,379	73,399
	BUG Rating	B3-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G5	B5-U0-G5	B5-U0-G5	B5-U0-G5
	Lumens per Watt	126	130	131	131	131	130	130	133	133
SLL/ SLR	4000K Lumens	6,747	13,410	19,906	26,379	33,394	39,542	46,445	53,846	60,451
	BUG Rating	B1-U0-G2	B2-U0-G3	B2-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5	B4-U0-G5
	Lumens per Watt	104	107	108	108	108	107	107	109	110
RW	4000K Lumens	8,076	16,060	23,826	31,574	39,970	47,329	55,592	64,450	72,356
	BUG Rating	B3-U0-G1	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4	B5-U0-G5
	Lumens per Watt	124	128	129	129	129	129	128	131	131
AFL	4000K Lumens	7,904	15,709	23,320	30,922	39,120	46,323	54,410	63,079	70,817
	BUG Rating	B1-U0-G1	B2-U0-G2	B3-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G4	B4-U0-G4	B4-U0-G4
	Lumens per Watt	122	126	127	126	127	126	126	128	128

* Nominal data for 70 CRI. ** For additional performance data, please reference the Gleneon Supplemental Performance Guide.

COOPER Lighting Solutions

Control Options

0-10V (DIM)
This fixture is offered standard with 0-10V dimming driver(s). The DIM option provides 0-10V dimming wire leads for use with a lighting control panel or other control method.

Photocontrol (BPC, PR and PR7)
Optional button-type photocontrol (BPC) and photocontrol receptacles (PR and PR7) provide a flexible solution to enable "dusk-to-dawn" lighting by sensing light levels. Advanced control systems compatible with NEMA 7-pin standards can be utilized with the PR7 receptacle.

After Hours Dim (AHD)
This feature allows photocontrol-enabled luminaires to achieve additional energy savings by dimming during scheduled portions of the night. The dimming profile will automatically take effect after a "dusk-to-dawn" period has been calculated from the photocontrol input. Specify the desired dimming profile for a simple, factory-shipped dimming solution requiring no external control wiring. Reference the After Hours Dim supplemental guide for additional information.

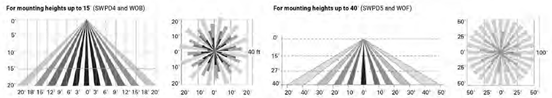
Dimming Occupancy Sensor (SPB)
These passive infrared (PIR) sensors are factory installed in the luminaire housing. When the SPB sensor option is selected, the occupancy sensor is connected to a dimming driver and the entire luminaire dims when no motion is detected. After a period of time, the luminaire turns off, and when motion is detected, the luminaire returns to full light output. The SPB sensor default parameters are listed in the table below, and can be configured utilizing the Sensor Configuration mobile application for iOS and Android devices. The SPB/X is configured to control only the specified number of light squares. An integral photocontrol can be activated with the app for "dusk-to-dawn" control or daylight harvesting - the factory default is off. Three sensor lenses are available to optimize the coverage pattern for mounting heights from 8'-40'. Four sensor colors are available; Bronze, Black, Gray and White, and are automatically selected based on the luminaire finish as indicated by the table below.

SPB sensor finish matched to luminaire finish		
Luminaire Finish		SPB Sensor Finish
WH	White	White
BK	Black	Black
GM	Graphite Metallic	Black
BZ	Bronze	Bronze
AP	Gray	Gray
DP	Dark Platinum	Gray

SPB/X Availability Table	
Fixture Square Count	Available SPB/X Square Count
1	Not Available
2	Not Available
3	Not Available
4	2
5	2 or 3
6	3
7	2, 3, 4 or 5
8	2, 3, 5 or 6
9	3 or 5

WaveLinx Wireless Control and Monitoring System
Operates on a wireless mesh network based on IEEE 802.15.4 standards enabling wireless control of outdoor lighting. WaveLinx and WaveLinx Lite sensors utilize the Zhaga Book 18 compliant 4-PIN receptacle (ZD or ZW), while the WSLC control module utilizes a 7-PIN receptacle. ZW option provides 4-PIN receptacle and control module to enable future installation of WaveLinx sensors. ZD option provides 4-PIN receptacle and sensor-ready (SR) driver to enable future installation of WaveLinx sensors, power monitoring, and advanced functionality. WaveLinx (SWPD4 to SWPD5) outdoor wireless sensors offer passive infrared (PIR) occupancy and photocell for closed loop daylight harvesting, and can be factory or field-installed. Sensors are factory preset to dim down to 50% after 15 minutes of no motion detected. Two lens options are available for mounting heights of 7' to 40'. Use the WaveLinx mobile application for set-up and configuration. At least one Wireless Area Controller (WAC) is required for full functionality and remote communication (including adjustment of any factory pre-sets). WaveLinx Lite (WOF and WOB) outdoor wireless sensors provide PIR occupancy and photocell for closed loop daylight harvesting, and can be factory or field-installed. Sensors are factory preset to dim down to 50% after 15 minutes of no motion detected. Two lens options are available for mounting heights of 7' to 40'. Use the WaveLinx Lite mobile application for set-up and configuration. WAC not required. WaveLinx Outdoor Control Module (WOLC-TP-10A) accessory provides a photocontrol enabling astronomic or time-based schedules to provide ON, OFF and dimming control of fixtures utilizing a 7-PIN receptacle. The out-of-box functionality is ON at dusk and OFF at dawn.

For mounting heights up to 15' (SWPD4 and WOB)



For mounting heights up to 40' (SWPD5 and WOF)

LumenSafe Integrated Network Security Camera (LD)
Cooper Lighting Solutions brings ease of camera deployment to a whole new level. No additional wiring is needed beyond providing line power to the luminaire. A variety of networking options allows security integrators to design the optimal solution for active surveillance. As the ideal solution to meet the needs for active surveillance, the LumenSafe integrated network camera is a streamlined, outdoor-ready fixed dome that provides HDTV 1080p video. This IP camera is optimally designed for deployment in the video management system or security software platform of choice.

Synapse (DIM10)
SimplySNAP integrated wireless controls system by Synapse. Includes factory installed DIM10 Synapse control module and M8/DC motion sensor; requires additional Synapse system components for operation. Contact Synapse at www.synapsewireless.com for product support, warranty and terms and conditions.

COOPER Lighting Solutions

Cooper Lighting Solutions
1121 Highway 74 South
Peachtree City, GA 30269
P 770-486-4500
www.cooperlighting.com

© 2021 Cooper Lighting Solutions
All Rights Reserved.

Specifications and dimensions
subject to change without notice.

LIGHT FIXTURE:
L7

NO. | REVISION & DATE

PROJECT:
GENERAL RV OCALA - PHASE IV
13150 SW 16TH AVE (CR 475-A), MARION COUNTY, FL

PREPARED FOR:

SHEET TITLE:
LIGHTING DETAILS

MCNEAL ENGINEERING, INC.
15957 N. FLORIDA AVE, LUTZ, FL 33549
PH. (813) 968-1081 FAX (813) 961-5839
CERTIFICATE OF AUTHORIZATION #08975

JOB NO.	21-116
ACAD FILE:	FCP
DRAWN BY:	MGF
CHK'D BY:	CSM
DATE:	24.01.11
SHEET:	**PE-2.09**

THE DESIGNS AND DRAWINGS CONTAINED HEREON ARE THE COPYRIGHTED PROPERTY OF McNEAL ENGINEERING, INC., AND SHOULD NOT BE DUPLICATED WITHOUT WRITTEN CONSENT OF THE ENGINEER.

Project	GENRV OCALA PHASE 4	Catalog #		Type	L9
Prepared by		Notes		Date	



McGraw-Edison

GWC Galleon Wall

Wall Mount Luminaire

Typical Applications

Exterior Wall • Walkway

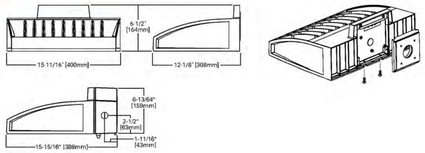
Interactive Menu

- Ordering Information page 2
- Product Specifications page 2
- Optical Configurations page 3
- Energy and Performance Data page 4
- Control Options page 6

Quick Facts

- Choice of thirteen high-efficiency, patented AccuLED Optics™
- Downward and inverted wall mounting configurations
- Eight lumen packages from 3,215 up to 17,056
- Efficacies up to 154 lumens per watt

Dimensional Details



Product Certifications

Connected Systems

- WaveLinx
- Enlighted

Ordering Information

SAMPLE NUMBER: **GWC-SA2C-740-U-T4FT-GM**

Product Family *	Light Engine		Color Temperature	Voltage	Distribution	Finish
	Configurations	Drive Current				
GWC-Galleon Wall	SA1=1 Square SA2=2 Squares [F]	A=615mA B=800mA C=1050mA D=1200mA [A]	722=70CRI, 2200K 727=70CRI, 2700K 730=70CRI, 3000K 735=70CRI, 3500K 740=70CRI, 4000K 750=70CRI, 5000K 760=70CRI, 6000K 822=80CRI, 2700K 830=80CRI, 3000K AMB=Amber, 590nm [L,F]	Universal 1=120V 2=208V 3=240V 4=277V 5=480V [V] 9=347V [J]	T2=Type II T3=Type III T4FT=Type IV Forward Throw T4W=Type IV Wide SL2=Type II with Spill Control SL3=Type III with Spill Control SL4=Type IV with Spill Control SLL=90° Spill Light Eliminator Left SLR=90° Spill Light Eliminator Right RW=Rectangular Wide Type I SNQ=Type V Square Narrow SMQ=Type V Square Medium SWQ=Type V Square Wide	AP=Grey BZ=Bronze BK=Black DP=Dark Platinum GM=Graphite Metallic WH=White

Options (Add as Suffix)	Controls and Systems Options (Add as Suffix)	Accessories (Order Separately)
F=Single Fused (120, 277 or 347V. Must Specify Voltage) FF=Double Fused (208, 240 or 480V. Must Specify Voltage) 10K=10kV Surge Module 20K=Series 20kV UL 1449 Surge Protective Device DIM=External 0-10V Dimming Leads [J, I] CBP=Shipped Pack with Back Box, Cold Weather Rated [I, A, M, W] CBP-CEC=Shipped Pack with Back Box, Cold Weather Rated, CEC compliant [I, A, J] LNS=Optics Rotated 90° Left RNS=Optics Rotated 90° Right HSS=Factory Installed House Side Shield [C] GRSBK=Factory Installed Glare Shield, BK [C] GRSWH=Factory Installed Glare Shield, WH [C] UPL=Uplight Housing [I] HA=50°C High Ambient [I] LCI=Light Source Trim Plate Painted to Match Housing [I] KT=Terminal Block and Mounting Clip GM=Coastal Construction Finish CE=CE Marking and Small Terminal Block [D] AMB140=After Hours Dim, 5 Hours [K] AMB245=After Hours Dim, 6 Hours [K] AMB350=After Hours Dim, 7 Hours [K] AMB355=After Hours Dim, 8 Hours [K] DALI=DALI Driver [E]	BPC=Button Type Photocontrol (120, 208, 240 or 277V. Must Specify Voltage) PR=NEMA 7-Pin Twistlock Photocontrol Receptacle [K] PRT=NEMA 7-Pin Twistlock Photocontrol Receptacle [K] SPB1=Dimming Occupancy Sensor with Bluetooth Interface, <8' Mounting [G,M] SPB2=Dimming Occupancy Sensor with Bluetooth Interface, 8' - 20' Mounting [G,M] SPB4=Dimming Occupancy Sensor with Bluetooth Interface, 21' - 40' Mounting [G,M] MS-LXX=Motion Sensor for On/Off Operation [F, H, N] MS/DIM-LXX=Motion Sensor for Dimming Operation [F, H, N] 2W=WaveLinx-enabled 4-PIN Twistlock Receptacle [H, N] 2D=WaveLinx Module with DALI driver and 4-PIN Receptacle [H, M] SMPS4XX=WaveLinx Sensor Only, 7'-15' [H, N] SMPS5XX=WaveLinx Sensor Only, 15'-40' [H, N] WSBXX=WaveLinx Sensor with Bluetooth, 7'-15' [H, N] WOFXX=WaveLinx Sensor with Bluetooth, 15'-40' [H, N] LWR-LW=Enlighted Wireless Sensor, Wide Lens for 8'-16' Mounting Height [H, M, O] LWR-LN=Enlighted Wireless Sensor, Narrow Lens for 16'-40' Mounting Height [H, M, O]	GA/RA1013=Photocontrol Shorting Cap [N] GA/RA1032=NEMA Photocontrol - 208V Tap 105-285V [N] GA/RA1321=NEMA Photocontrol - 347V [N] GA/RA1027=NEMA Photocontrol - 480V [N] MA1352=105V Circuit Module Replacement MA1595XX=Thru-branch Back Box (Must Specify Color) LS/WS-F=Field Installed House Side Shield [B, C] LS/GRSBK=Glare Shield, Black [B, C] LS/GRSWH=Glare Shield, White [B, C] LS/PFS=Perimeter Shield, Black FSW-100=Wireless Configuration Tool for Occupancy Sensor [P] WCLC-7P-10A=WaveLinx Outdoor Control Module (7-pin) [N, O] SWPSX-XX=Wireless Wireless Sensor, 7' - 15' Mounting Height [H, M, N, O] SWPDS-XX=Wireless Wireless Sensor, 15' – 40' Mounting Height [H, M, N, O]

NOTES:

1. DesignLight Consortium® Qualified. Refer to www.designlights.org. Qualified Products List under Family Models for details.
2. Two light squares with CRI options limited to 27°C. Not available in combination with sensor options at 1200mA.
3. Narrow-band 850nm +/- 5nm for wildlife and observatory use. Choose drive current A, supplied at 609mA drive current only. Available with SWQ, SMQ, SL2, SL3 and SL4 distributions. Can be used with ROS option.
4. Not available with HA option.
5. Coastal construction finish salt spray tested to over 5,400-hours per ASTM B117, with a score rating of 9 per ASTM D1654.
6. Require the use of a step down transformer. Not available in combination with sensor options at 1200mA.
7. 480V must use Wye system only. Per NEC, not for use with ungrounded systems, impedance grounded systems or corner grounded systems (commonly known as Three Phase Three Wire Delta, Three Phase High Leg Delta and Three Phase Corner Grounded Delta systems).
8. Restricted.
9. Cannot be used with other control options.
10. Low voltage control leads extended 18" from fixture.
11. Not available in 1200mA. When used with CBP or HA options, only available with single light square.
12. Not available in 1200mA. LRT, or LCI options. Available with single light square.
13. Not available with SL2, SL3, SL4, HA, CBP, PR or PRT options.
14. Operates a single light square only. Operates at -30°C to +40°C. Backbox is non-IP rated. Control option limited to BPC.
15. Compatible with standard 3-PIN photocontrols, 5-PIN or 7-PIN ANSI controls.
16. Requires the use of BPC photocontrol or the PRT or PR photocontrol receptacle with photocontrol accessory. See After Hours Dim supplemental guide for additional information.
17. The FSW-100 configuration tool is required to adjust parameters such as high and low modes, sensitivity, time delay and cutoff. Consult your lighting representative at Cooper Lighting Solutions for more information.
18. Replace LXX with LHS (<8' mounting), L30 (8'-20' mounting) or L40W (21'-40' mounting.)
19. Includes integral photosensor.
20. Enlighted wireless sensors are factory-installed requiring network components to appropriate quantities.
21. White sensor shipped on all housing color options.
22. Not available with ROS or SWQ options.
23. Not for use with SWQ, SMQ, SWQ or WW options. The light square trim plate is painted black when the BTG option is selected.
24. CE is not available with the 120, DALI, LHN, MS, MS/DIM, BPC, PR or PRT options. Available in 120-277V only.
25. Use required for earth-fault bypass.
26. Requires FM7.
27. Not for use with T4FT, T4W or SL4 optics.
28. Cannot be used in conjunction with additional photosensorial or other controls systems (BPC, PR, PRT, MS, LNW).
30. WAC Gateway required to enable field-configurability: Order WAC-PoE and WPOE-12E (10V to PoE injector) power supply if needed.
31. Requires CN or DA mastpoles.
32. Replace XX with sensor color (WH, BZ, or BK).
33. Specify 120V or 277V.
34. Smart device with mobile application required to change system defaults. See controls section for details.

Product Specifications

Construction

- Driver enclosure thermally isolated from optics for optimal thermal performance
- Die-cast aluminum heat sinks
- IP66 rated housing
- 1.5G vibration rated

Optics

- Patented, high-efficiency injection-molded AccuLED Optics technology
- 13 optical distributions
- IDA Certified (3000K CCT and warmer only)

Electrical

- LED driver assembly mounted for ease of maintenance
- Standard with 0-10V dimming
- Optional 10kV or 20kV surge module
- Suitable for operation in -40C to 40C ambient environments. Optional 50C high ambient (HA) configuration.

Mounting

- Gasketed and zinc plated rigid steel mounting attachment
- "Hook-N-Lock" mechanism for easy installation

Finish

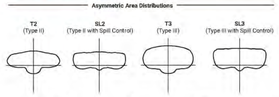
- Housing finished in super durable TGIC polyester powder coat paint, 2.5 mil nominal thickness
- Heat sink is powder coated black
- RAL and custom color matches available
- Coastal Construction (CC) option available

Warranty

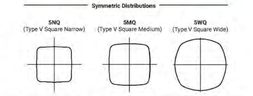
- Five-year warranty

Optical Distributions

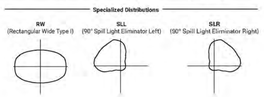
Asymmetric Area Distributions



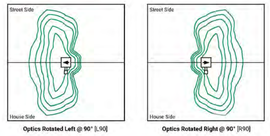
Symmetric Distributions



Specialized Distributions



Optic Orientation



Optics Rotated Left @ 90° [L90]

Optics Rotated Right @ 90° [R90]

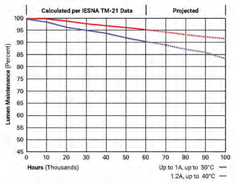
Energy and Performance Data

Lumen Multiplier

Ambient Temperature	Lumen Multiplier
0°C	1.02
10°C	1.01
25°C	1.00
40°C	0.99
50°C	0.97

Lumen Maintenance

Drive Current	Ambient Temperature	TM-21 Lumen Maintenance (60,000 Hours)	Projected L70 (Hours)
Up to 1A	Up to 50°C	> 95%	> 416,000
1.2A	Up to 40°C	> 90%	> 205,000



Energy and Performance Data

View GWC Galleon Wall IES files

4000K/5000K/6000K CCT, 70 CRI

Number of Light Squares		1				2			
Drive Current		615mA	800mA	1050mA	1.2A	615mA	800mA	1050mA	1.2A
Nominal Power (Watts)		34	44	59	67	66	86	113	129
Input Current @ 120V (A)		0.30	0.39	0.51	0.58	0.58	0.77	1.02	1.15
Input Current @ 208V (A)		0.17	0.22	0.29	0.33	0.34	0.44	0.58	0.67
Input Current @ 240V (A)		0.15	0.19	0.25	0.29	0.30	0.38	0.48	0.55
Input Current @ 277V (A)		0.14	0.17	0.23	0.25	0.26	0.35	0.42	0.48
Input Current @ 347V (A)		0.11	0.15	0.17	0.20	0.19	0.24	0.32	0.39
Input Current @ 480V (A)		0.08	0.11	0.14	0.15	0.15	0.18	0.24	0.30
Optics									
T2	Lumens	4,883	5,989	7,412	8,131	9,543	11,703	14,485	15,891
	BUG Rating	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G3	B2-U0-G3
	Lumens per Watt	144	136	126	121	145	136	128	123
T3	Lumens	4,978	6,105	7,556	8,288	9,729	11,929	14,764	16,196
	BUG Rating	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G3
	Lumens per Watt	146	139	128	124	147	139	131	126
T4FT	Lumens	5,008	6,140	7,599	8,337	9,783	11,998	14,850	16,290
	BUG Rating	B1-U0-G2	B1-U0-G2	B1-U0-G3	B1-U0-G3	B2-U0-G3	B2-U0-G3	B2-U0-G3	B2-U0-G3
	Lumens per Watt	147	140	129	124	148	140	131	126
T4W	Lumens	4,942	6,060	7,502	8,229	9,658	11,843	14,656	16,080
	BUG Rating	B1-U0-G2	B1-U0-G2	B1-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G3	B3-U0-G3
	Lumens per Watt	145	138	127	123	146	138	130	125
SL2	Lumens	4,874	5,979	7,399	8,117	9,528	11,684	14,461	15,863
	BUG Rating	B1-U0-G2	B1-U0-G2	B1-U0-G2	B2-U0-G3	B2-U0-G3	B2-U0-G3	B2-U0-G3	B3-U0-G3
	Lumens per Watt	143	136	125	121	144	136	126	123
SL3	Lumens	4,976	6,104	7,555	8,287	9,727	11,927	14,763	16,194
	BUG Rating	B1-U0-G2	B1-U0-G2	B1-U0-G2	B1-U0-G3	B1-U0-G3	B2-U0-G3	B2-U0-G3	B2-U0-G3
	Lumens per Watt	146	139	128	124	147	139	131	126
SL4	Lumens	4,729	5,799	7,178	7,873	9,239	11,328	14,025	15,387
	BUG Rating	B1-U0-G2	B1-U0-G2	B1-U0-G3	B1-U0-G3	B1-U0-G3	B2-U0-G3	B2-U0-G4	B2-U0-G4
	Lumens per Watt	139	132	122	118	140	132	124	119
SNQ	Lumens	5,134	6,296	7,793	8,547	10,033	12,303	15,226	16,704
	BUG Rating	B2-U0-G1	B2-U0-G1	B3-U0-G1	B3-U0-G1	B3-U0-G1	B3-U0-G1	B3-U0-G2	B3-U0-G2
	Lumens per Watt	151	143	132	128	152	143	135	129
SMQ	Lumens	5,228	6,412	7,935	8,705	10,215	12,529	15,506	17,011
	BUG Rating	B3-U0-G1	B3-U0-G1	B3-U0-G2	B3-U0-G2	B3-U0-G2	B4-U0-G2	B4-U0-G2	B4-U0-G2
	Lumens per Watt	154	146	134	130	155	146	137	132
SWQ	Lumens	5,242	6,428	7,956	8,728	10,244	12,563	15,548	17,056
	BUG Rating	B3-U0-G1	B3-U0-G2	B3-U0-G2	B3-U0-G2	B4-U0-G2	B4-U0-G2	B4-U0-G2	B4-U0-G2
	Lumens per Watt	154	146	135	130	155	146	138	132
SLL/SLR	Lumens	4,373	5,365	6,640	7,283	8,547	10,481	12,973	14,231
	BUG Rating	B1-U0-G2	B1-U0-G2	B1-U0-G2	B1-U0-G3	B1-U0-G3	B2-U0-G3	B2-U0-G3	B2-U0-G3
	Lumens per Watt	129	122	113	109	130	122	115	110
RW	Lumens	5,087	6,238	7,721	8,472	9,941	12,190	15,088	16,553
	BUG Rating	B2-U0-G1	B3-U0-G1	B3-U0-G1	B3-U0-G1	B3-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2
	Lumens per Watt	150	142	131	126	151	142	134	128

* Nominal lumen data for 70 CRI. BUG rating for 4000K/5000K. Refer to IES files for 3000K BUG ratings.

3000K CCT, 80 CRI

Number of Light Squares		1				2			
Drive Current		615mA	800mA	1050mA	1.2A	615mA	800mA	1050mA	1.2A
Nominal Power (Watts)		34	44	59	67	66	86	113	129
Input Current @ 120V (A)		0.30	0.39	0.51	0.58	0.58	0.77	1.02	1.16
Input Current @ 208V (A)		0.17	0.23	0.29	0.33	0.34	0.44	0.55	0.67
Input Current @ 240V (A)		0.15	0.19	0.25	0.29	0.30	0.38	0.48	0.55
Input Current @ 277V (A)		0.14	0.17	0.23	0.25	0.28	0.36	0.42	0.48
Input Current @ 347V (A)		0.11	0.15	0.17	0.20	0.19	0.24	0.32	0.39
Input Current @ 480V (A)		0.08	0.11	0.14	0.15	0.15	0.18	0.24	0.30
Optics									
T2	Lumens	3,880	4,759	5,899	6,461	7,583	9,300	11,519	12,628
	BUG Rating	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2	B1-U0-G2	B2-U0-G2	B2-U0-G3
	Lumens per Watt	114	108	100	96	115	108	102	98
T3	Lumens	3,955	4,851	6,004	6,586	7,731	9,479	11,732	12,870
	BUG Rating	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G2
	Lumens per Watt	116	110	102	98	117	110	104	100
T4FT	Lumens	3,980	4,879	6,038	6,625	7,774	9,534	11,800	12,945
	BUG Rating	B1-U0-G2	B1-U0-G2	B1-U0-G2	B1-U0-G2	B1-U0-G3	B2-U0-G3	B2-U0-G3	B2-U0-G3
	Lumens per Watt	117	111	102	99	118	111	104	100
T4W	Lumens	3,927	4,816	5,961	6,539	7,675	9,411	11,648	12,778
	BUG Rating	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G3
	Lumens per Watt	116	109	101	98	116	109	103	99
SL2	Lumens	3,873	4,751	5,880	6,450	7,571	9,285	11,491	12,605
	BUG Rating	B1-U0-G2	B1-U0-G2	B1-U0-G2	B1-U0-G2	B1-U0-G3	B2-U0-G3	B2-U0-G3	B2-U0-G3
	Lumens per Watt	114	108	100	96	115	108	102	98
SL3	Lumens	3,954	4,851	6,004	6,585	7,729	9,478	11,731	12,858
	BUG Rating	B1-U0-G2	B1-U0-G2	B1-U0-G2	B1-U0-G2	B1-U0-G2	B1-U0-G3	B2-U0-G3	B2-U0-G3
	Lumens per Watt	116	110	102	98	117	110	104	100
SL4	Lumens	3,758	4,608	5,704	6,256	7,342	9,006	11,145	12,227
	BUG Rating	B1-U0-G2	B1-U0-G2	B1-U0-G2	B1-U0-G3	B1-U0-G3	B1-U0-G3	B1-U0-G3	B1-U0-G3
	Lumens per Watt	111	105	97	93	111	105	99	95
SNQ	Lumens	4,080	5,003	6,193	6,792	7,973	9,776	12,099	13,274
	BUG Rating	B2-U0-G0	B2-U0-G1	B2-U0-G1	B2-U0-G1	B3-U0-G1	B3-U0-G1	B3-U0-G1	B3-U0-G2
	Lumens per Watt	120	114	105	101	121	114	107	103
SMQ	Lumens	4,154	5,095	6,305	6,917	8,118	9,956	12,323	13,516
	BUG Rating	B2-U0-G1	B3-U0-G1	B3-U0-G1	B3-U0-G1	B3-U0-G2	B3-U0-G2	B4-U0-G2	B4-U0-G2
	Lumens per Watt	122	116	107	103	123	116	109	105
SWQ	Lumens	4,166	5,108	6,322	6,936	8,140	9,983	12,355	13,553
	BUG Rating	B3-U0-G1	B3-U0-G1	B3-U0-G1	B3-U0-G2	B3-U0-G2	B4-U0-G2	B4-U0-G2	B4-U0-G2
	Lumens per Watt	123	116	107	104	123	116	109	105
SLL/SLR	Lumens	3,475	4,263	5,276	5,787	6,792	8,329	10,309	11,309
	BUG Rating	B1-U0-G2	B1-U0-G2	B1-U0-G2	B1-U0-G2	B1-U0-G3	B1-U0-G3	B2-U0-G3	B2-U0-G3
	Lumens per Watt	102	97	89	86	103	97	91	88
RW	Lumens	4,042	4,957	6,135	6,732	7,900	9,687	11,998	13,154
	BUG Rating	B2-U0-G1	B2-U0-G1	B3-U0-G1	B3-U0-G1	B3-U0-G1	B3-U0-G1	B3-U0-G2	B3-U0-G2
	Lumens per Watt	119	113	104	100	120	113	105	102

* Nominal lumen data for 70 CRI. BUG rating for 4000K/5000K. Refer to IES files for 3000K BUG ratings.

Control Options

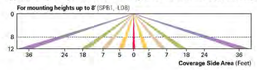
0-10V This fixture is offered standard with 0-10V dimming driver(s). The DIM option provides 0-10V dimming wire leads for use with a lighting control panel or other control method.

Photocontrol (BPC, PR, and PR7) Optional button-type photocontrol (BPC) and photocontrol receptacles (PR and PR7) provide a flexible solution to enable "dusk-to-dawn" lighting by sensing light levels. Advanced control systems compatible with NEMA 7-pin standards can be utilized with the PR7 receptacle.

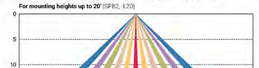
After Hours Dim (AHD) This feature allows photocontrol-enabled luminaires to achieve additional energy savings by dimming during scheduled portions of the night. The dimming profile will automatically take effect after a "dusk-to-dawn" period has been calculated from the photocontrol input. Specify the desired dimming profile for a simple, factory-shipped dimming solution requiring no external control wiring. Reference the After Hours Dim supplemental guide for additional information.

Dimming Occupancy Sensor (SPB, MS/DIM-LXX and MS-LXX) These sensors are factory installed in the luminaire housing. When the SPB or MS/DIM sensor options are selected, the occupancy sensor is connected to a dimming driver and the entire luminaire dims when there is no activity detected. When activity is detected, the luminaire returns to full light output. The MS/DIM sensor is factory preset to dim down to approximately 50 percent power with a time delay of five minutes. The MS-LXX sensor is factory preset to turn the luminaire off after five minutes of no activity. SPB motion sensors require the Sensor Configuration mobile application by Wattstopper to change factory default dimming level, time delay, sensitivity and other parameters. Available for iOS and Android devices. The SPB sensor is factory preset to dim down to approximately 10% power with a time delay of five minutes. The MS/DIM occupancy sensors require the FSIR-100 programming tool to adjust factory defaults.

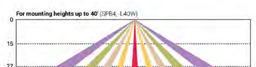
For mounting heights up to 8' (SPB1, LCB)



For mounting heights up to 20' (SPB2, LCD)

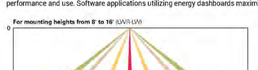


For mounting heights up to 40' (SPB4, L40W)



Enlighted Wireless Control and Monitoring System (LWR-LW and LWR-LN) The Enlighted control system is a connected lighting solution, combining LED luminaires with an integrated wireless sensor system. The sensor controls the lighting system in compliance with the latest energy codes while collecting valuable data about building performance and use. Software applications utilizing energy dashboards maximize data inputs to help optimize the use of other resources beyond lighting.

For mounting heights from 8' to 16' (LWR-LW)



For mounting heights from 16' to 40' (LWR-LN)



WaveLinx Wireless Outdoor Lighting Control Module (WOLC-7P-10A) The 7-pin wireless outdoor lighting control module enables WaveLinx to control outdoor area, site and flood lighting. WaveLinx controls outdoor lighting using schedules to provide ON, OFF and dimming controls based on astronomic or time schedules based on a 7 day week.

Cooper Lighting Solutions
1121 Highway 74 South
Peachtree City, GA 30269
P 770.486.4800
www.cooperlighting.com

© 2021 Cooper Lighting Solutions
All Rights Reserved.

Specifications and dimensions subject to change without notice.

NO.	REVISION & DATE

PROJECT:

GENERAL RV OCALA - PHASE IV
13150 SW 16TH AVE (CR 475-A), MARION COUNTY, FL

PREPARED FOR:

MCNEAL ENGINEERING, INC.
15957 N. FLORIDA AVE, LUTZ, FL 33549
PH. (813) 968-1081 FAX (813) 961-5839
CERTIFICATE OF AUTHORIZATION #08975

SHEET TITLE:

LIGHTING DETAILS

JOB NO.	21-116
ACAD FILE:	FCP
DRAWN BY:	MGF
CHK'D BY:	CSM
DATE:	24.01.11
SHEET:	PE-2.10

LIGHT FIXTURE:
L9

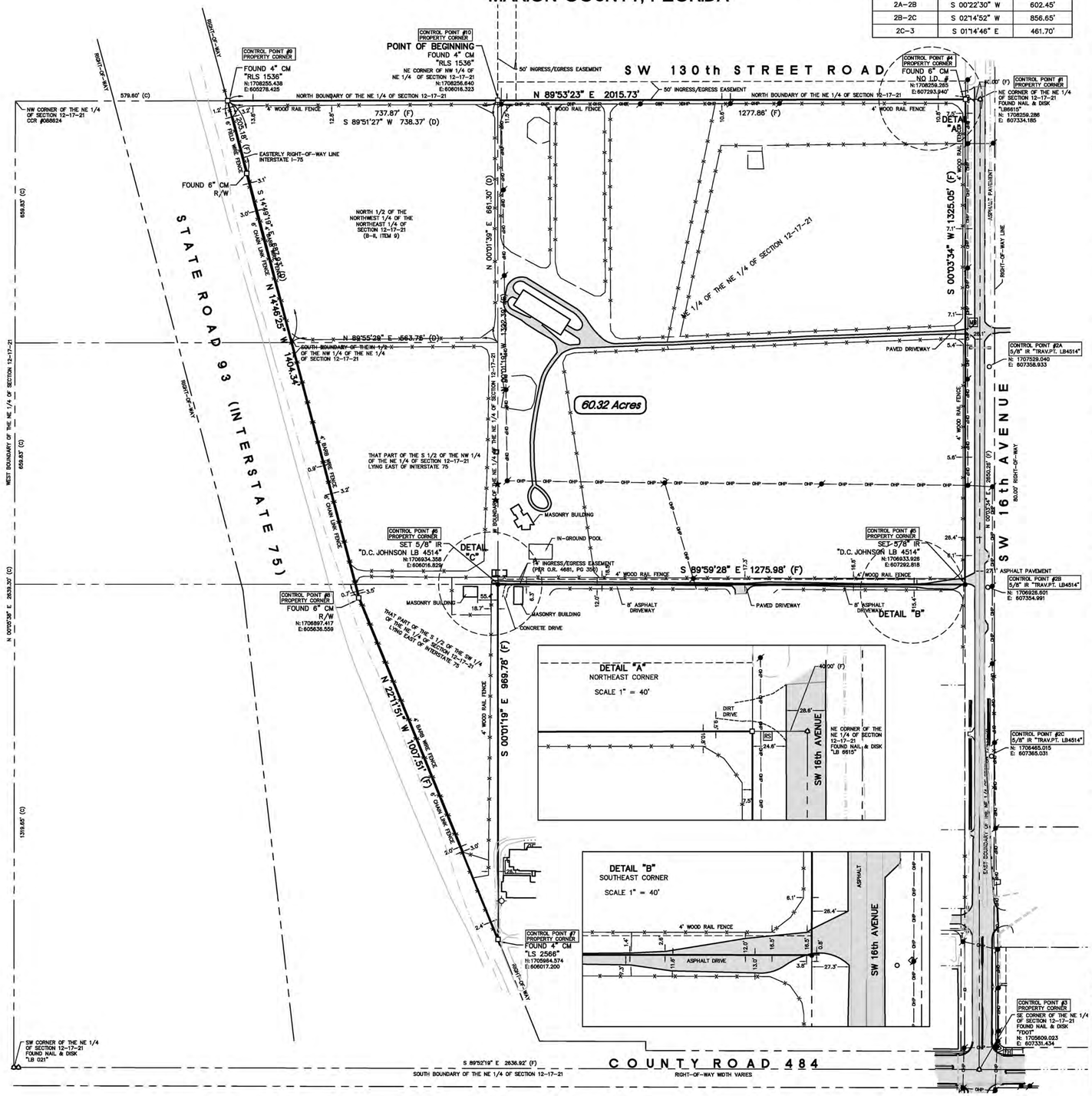
THE DESIGNS AND DRAWINGS CONTAINED HEREON ARE THE COPYRIGHTED PROPERTY OF McNEAL ENGINEERING, INC., AND SHOULD NOT BE DUPLICATED WITHOUT WRITTEN CONSENT OF THE ENGINEER.

AN ALTA/NSPS LAND TITLE SURVEY
OF A PORTION OF
THE NORTHEAST 1/4 OF
SECTION 12, TOWNSHIP 17 SOUTH, RANGE 21 EAST
MARION COUNTY, FLORIDA



VICINITY MAP

16TH STREET CONTROL POINT DATA		
POINT #'S	BEARING	DISTANCE
1–2A	S 01°56'28" E	730.67'
2A–2B	S 00°22'30" W	602.45'
2B–2C	S 02°14'52" W	856.65'
2C–3	S 01°14'46" E	461.70'



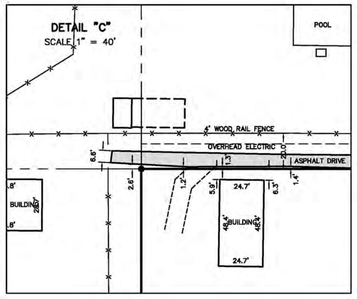


SCALE 1" = 150'

0 75 150 300

LEGEND

IP, IR = IRON PIPE, IRON ROD
CM = CONCRETE MONUMENT
(F) = FIELD DERIVED MEASUREMENT
(P) = MEASUREMENT PER PLAT
(D) = MEASUREMENT PER DESCRIPTION
(C) = CALCULATED MEASUREMENT
℄ ℄ = PROPERTY LINE, CENTERLINE
R/W = RIGHT OF WAY
O.R. = OFFICIAL RECORDS BOOK
PG. = PAGE
○ = FOUND IR (SIZE & REGISTRATION NUMBER AS NOTED)
◎ = FOUND IP (SIZE & REGISTRATION NUMBER AS NOTED)
● = SET 5/8" IR "D.C. JOHNSON LB 4514"
□ = FOUND CM (SIZE & REGISTRATION NUMBER AS NOTED)
■ = SET 4"x4" CM "LB 4514"
△ = FOUND RAILROAD SPIKE
✖ = FOUND SCRIBE
⌂ = FOUND NAIL & DISK (REGISTRATION NUMBER AS NOTED)
◈ = COMMUNICATION EQUIPMENT BOX
℄ = GUY ANCHOR
✓ = POWER POLE
MB = MAILBOX
RS = ROAD SIGN



SEE SHEETS 2-5 FOR TOPOGRAPHY

DESCRIPTION: (per ALTA Commitment, Plant File # 17–21373, as issued by Klein & Klein, LLC and underwritten by Westcor Land Title Company)

BEGINNING at the Northeast corner of the Northwest 1/4 of the Northeast 1/4 of Section 12, Township 17 South, Range 21 East, Marion County, Florida; thence S.89°51'27"W., along the North boundary of said Northwest 1/4 of the Northeast 1/4, a distance of 738.37 feet to the Easterly right–of–way line of Interstate No. 75; thence S.14°49'19"E., along said right–of–way line 667.93 feet, more or less to the South boundary of the North 1/2 of the Northwest 1/4 of the Northeast 1/4; thence N.89°55'29"E., 563.75 feet along said South boundary; thence N.00°01'39"E., 661.30 feet to the POINT OF BEGINNING.

AND

That part of the South 1/2 of the Northwest 1/4 of the Northeast 1/4 lying East of Interstate I–75 right–of–way, that part of the Southwest 1/4 of the Northeast 1/4 lying East of Interstate I–75 right–of–way, and the Northeast 1/4 of the Northeast 1/4 in Section 12, Township 17 South, Range 21 East, Marion County, Florida.

SURVEYOR'S NOTES:

1. Use of this survey for purposes other than intended, without written verification, will be at the user's sole risk and without liability to the surveyor. Nothing herein shall be construed to give any rights or benefits to anyone other than those certified to. The survey meets the "Standards of Practice" set forth by the Florida Board of Land Surveyors in Chapter 5J–17 Florida Administrative Code.
2. Surveyor has reviewed the ALTA Commitment, Plant File # 17–21373, as issued by Klein & Klein, LLC, and underwritten by Westcor Land Title Insurance Company, with an effective date of April 12, 2107 at 8:00 a.m. All pertinent matters except leases, liens, mortgages, taxes, and/or other similar financial matters, identified as encumbrances in Schedule B–II of said ALTA Commitment, have been shown or noted hereon. The undersigned has relied solely upon said ALTA Commitment for all matters pertaining to easements, rights–of–way, setback lines, agreements, reservations, or other similar matters.
3. ALTA Commitment makes exception (B–II, Item 9) to an easement recorded in Official Records Book 391, Page 354, of the public records of Marion County, Florida. Said easement is a blanket easement for Sumter Electric Cooperative of a portion of the Subject Property over electric lines. The Surveyor did not observe any evidence of electric lines in this area.
4. ALTA Commitment makes exception (B–II, Item 10) to an easement recorded in Official Records Book 4681, Page 350, of the public records of Marion County, Florida. Said easement does affect the Subject Property and is shown hereon.
5. No underground installations, improvements or encroachments, have been located except those shown hereon.
6. No instruments of record reflecting easements, right–of–ways and/or ownership were furnished to the undersigned except as shown.
7. Bearings shown hereon are based on the North boundary of the Northeast 1/4 of Section 12, Township 17 South, Range 21 East, Marion County, Florida. Said line bears N.89°53'23"E.
8. Subject property may contain lands that are subject to jurisdiction or restriction by one or more of the following agencies: Army Corp. of Engineers, Southwest Florida Water Management District (S.W.F.W.M.D.) or Florida Department of Environmental Protection (F.D.E.P.).
9. Elevations shown hereon are based upon North American Vertical Datum of 1988 (NAVD88), Florida Department of Transportation benchmark "61402004", published elevation = 72.53' (NAVD88).
10. Subject property appears to lie in Flood Zone "X" according to F.I.R.M. Community Panel 12083C0720D, dated August 28, 2008 and 12083C0716D, dated April 19, 2017.
11. Bearings and distances shown hereon are field measured, unless otherwise indicated.
12. No construction and/or earth moving work was observed during the course of this survey.
13. Surveyor observed no evidence of the subject property site being used as a solid waste dump, sump or sanitary landfill.
14. No wetlands of record are known by the surveyor.
15. I hereby certify that the survey represented hereon is in accordance with all applicable requirements of the Marion County Land Development Code and meets the minimum technical standards as set forth by the Florida Board of Professional Surveyors and Mappers.
16. Coordinates shown hereon are based upon the Florida State Plane Coordinate System–West Zone (NAD83), U.S. survey feet, utilizing the Florida Permanent Reference Network (FPRN).

CERTIFICATION:

To Utah Development, LLC, a Michigan limited liability company; Westcor Land Title Insurance Company; Comerica Bank; Klein & Klein, LLC and McNeal Engineering, Inc.:

This is to certify that this map or plat and the survey on which it is based were made in accordance with the 2016 Minimum Standard Detail Requirements for ALTA/NSPS Land Title Surveys, jointly established and adopted by ALTA and NSPS, and includes items 1–5, 6(b), 7(a), 7(b)(1), 7(c), 8, 11, 14, and 16–19 from Table A thereof. The field work was completed on 7/15/2017.

Date of Field Survey: 5/3/2017

DANIEL C JOHNSON License Number 3653 STATE OF FLORIDA REGISTERED LAND SURVEYOR

For D.C. Johnson & Associates, Inc.
Daniel C. Johnson
Florida Registered Land Surveyor No. 3653
Florida Licensed Business Number 4514
Not valid without the signature and the original raised seal of a Florida licensed surveyor and mapper.

DATE	REVISION	BY
12/27/2017	ADDITIONAL CONTROL POINT & BENCHMARK INFORMATION	LDJ
12/05/17	ADD STATE PLANE COORDINATES TO BOUNDARY CORNERS/ADD NOTE # 16	ARG
10/13/17	ADD INTERIOR FENCING; BUILDING HEIGHTS; SQUARE FOOTAGE	ARG
10/5/17	ADD ADDITIONAL TREES AND TOPOGRAPHY	ARG

D.C. JOHNSON ASSOCIATES
SURVEYING AND MAPPING
Phone: (352) 588–2768
11911 South Curley Street
San Antonio, Florida 33576
www.dcjohnson.com
Email: Survey@dcjohnson.com

BOUNDARY SURVEY

PREPARED FOR
McNeal Engineering, Inc.

SW 16th Avenue
TW & P Parcel

PROJECT NO.: 2017–148A01.BG00002		SCALE: 1" = 150'
DRAWN BY : ARG	7/15/17	SHEET 1 OF 5
CHECKED BY : DCJ	7/15/17	



SCALE 1" = 80'

0 40 80 160

LEGEND

IP, IR = IRON PIPE, IRON ROD
CM = CONCRETE MONUMENT
(F) = FIELD DERIVED MEASUREMENT
(P) = MEASUREMENT PER PLAT
(D) = MEASUREMENT PER DESCRIPTION
℄ = PROPERTY LINE, CENTERLINE
R/W = RIGHT OF WAY
○ = FOUND IR (SIZE & REGISTRATION NUMBER AS NOTED)
◎ = FOUND IP (SIZE & REGISTRATION NUMBER AS NOTED)
● = SET 5/8" IR "D.C. JOHNSON LB 4514"
□ = FOUND CM (SIZE & REGISTRATION NUMBER AS NOTED)
■ = SET 4"x4" CM "LB 4514"
= GUY WIRE
= POWER POLE
EB = ELECTRIC BOX
= TELEPHONE BOX
RS = ROAD SIGN
= OAK TREE
= TREE (UNKNOWN VARIETY)
MB = MAIL BOX
GV = GATE VALVE
T = BURIED TELEPHONE LINE MARK
SS = SANITARY MANHOLE
FH = FIRE HYDRANT
= GAS LINE FLAG
ST = STORM MANHOLE
AR = AIR RELEASE VALVE
= PALM TREE
= VERTICAL CONTROL BENCHMARK
= MAGNOLIA TREE
= CHERRY LAUREL TREE
= WELL
= CEDAR TREE
= CAMPHOR TREE
93.8'x = SPOT ELEVATION
RCP = REINFORCED CONCRETE PIPE
CMP = CORRUGATED METAL PIPE
ERCP = ELLIPTICAL REINFORCED CONCRETE PIPE
EL: = ELEVATION
OHP OHP = OVERHEAD POWER LINE
= ASPHALT

N 89°53'23" E 2015.73'

1277.86' (F)

S 00°03'34" W 1325.05' (F)

N 00°01'19" W 1322.39' (F)

S 89°59'28" E 1275.28' (F)

205.18' (F)

N 46°25'25" W 140.34'

60.32 Acres

TBM #1
5/8" IR
"TRAV. PT.
LB 4514"
EL: 78.47'

FINISHED FLOOR EL: 79.00'
7644.16 SQ.FT. 260' HIGH

GAS PUMP PAD EL: 82.94

ASPHALT DRIVE

WELL WITH PUMP

WELL

MASONRY BUILDING
2134 Sq.Ft. 14.7' High

POOL

10.3'x16.6' BARN WITH AWNING

MASONRY BUILDING
1113.56 Sq.Ft.: 20.8' High

BARN
1195.48 Sq.Ft.: 12' High

SEE SHEET 1

D.C. JOHNSON ASSOCIATES
SURVEYING AND MAPPING
Phone: (352) 588-2768
11911 South Curley Street
San Antonio, Florida 33576
www.dcjohnson.com
Email: Survey@dcjohnson.com

BOUNDARY & TOPOGRAPHIC SURVEY

PREPARED FOR

McNeal Engineering, Inc.

SW 16th Avenue
TW & P Parcel

PROJECT NO.: 2017-148A01.BG00002		SCALE: 1" = 80'
DRAWN BY : ARG	7/15/17	SHEET
CHECKED BY : DCJ	7/15/17	2 OF 5

SEE SHEET 3

SEE SHEET 4

LEGEND

IP, IR = IRON PIPE, IRON ROD
CM = CONCRETE MONUMENT
(F) = FIELD DERIVED MEASUREMENT
(P) = MEASUREMENT PER PLAT
(D) = MEASUREMENT PER DESCRIPTION
℄ = PROPERTY LINE, CENTERLINE
R/W = RIGHT OF WAY
○ = FOUND IR (SIZE & REGISTRATION NUMBER AS NOTED)
◎ = FOUND IP (SIZE & REGISTRATION NUMBER AS NOTED)
● = SET 5/8" IR "D.C. JOHNSON LB 4514"
□ = FOUND CM (SIZE & REGISTRATION NUMBER AS NOTED)
■ = SET 4"x4" CM "LB 4514"
◡ = GUY WIRE
◪ = POWER POLE
EB = ELECTRIC BOX
◈ = TELEPHONE BOX
RS = ROAD SIGN
○ 6" = OAK TREE
○ 6" = TREE (UNKNOWN VARIETY)
MB = MAIL BOX
GV = GATE VALVE
T = BURIED TELEPHONE LINE MARK
SS = SANITARY MANHOLE
FH = FIRE HYDRANT
G = GAS LINE FLAG
ST = STORM MANHOLE
AR = AIR RELEASE VALVE
✕ 6" = PALM TREE
■ = VERTICAL CONTROL BENCHMARK
○ 6" = MAGNOLIA TREE
△ 6" = CHERRY LAUREL TREE
★ = WELL
◪ 6" = CEDAR TREE
○ 6" = CAMPHOR TREE
93.6'+ = SPOT ELEVATION
RCP = REINFORCED CONCRETE PIPE
CMP = CORRUGATED METAL PIPE
ERCP = ELLIPTICAL REINFORCED CONCRETE PIPE
EL: = ELEVATION
OHP —— = OVERHEAD POWER LINE
= ASPHALT

10.3'x16.8' BARN WITH AWNING
MASONRY BUILDING
BARN
N 22°11'51" W 1007.51' (F)
S 00°04'10" E 969.78' (F)
TBM #2
BOX CUT IN CURB CORNER
EL: 79.16'

SCALE 1" = 60'
0 30 60 120

SW 16th Avenue
SW County Highway 484
SW 16th Avennue

FUTURE RIGHT-OF-WAY PER OFFICIAL RECORDS BOOK 3653, PAGE 473
10' DEDICATED RIGHT-OF-WAY PER PLAT BOOK 6, PAGE 46
STORM MANHOLE TOP EL: 73.99' 36" CMP(W/S) EL: 64.44' 18" RCP(S/W) EL: 67.27'
CURB INLET GRATE EL: 71.95' 18" CMP(Y) EL: 67.84'
CONCRETE SIDEWALK
TRANSFORMER PAD
ASPHALT PARKING
CURB INLET GRATE EL: 72.62' 24" CMP(S) EL: 68.45'
STORM MANHOLE TOP EL: 72.30' 40" CMP(S) EL: 66.07' 18" PVC(E) EL: 66.44' 40" CMP(NY) EL: 65.55'
CONCRETE MEDIAN
CURB INLET GRATE EL: 71.88' 40" CMP(N) EL: 66.78' 24" CMP(SE) EL: 67.56'
SANITARY LID OVER 36"CMP
CURB INLET GRATE EL: 72.07' 40" CMP(W) EL: 66.03' 40" CMP(W) EL: 65.73'
BACK OF CURB
FDOT BM#61402004 BRASS DISK IN SIDEWALK PUBLISHED ELEVATION: 72.533' (NAVD88)
CURB INLET GRATE EL: 67.79' 24" CMP(W) EL: 63.61'
24" CMP(W) EL: 69.60'

SCALE 1" = 20'
0 10 20 40

D.C. JOHNSON ASSOCIATES SURVEYING MAPPING

D.C. JOHNSON ASSOCIATES
SURVEYING AND MAPPING

Phone: (352) 588-2768
11911 South Curley Street
San Antonio, Florida 33576
www.dcjohnson.com
Email: Survey@dcjohnson.com

BOUNDARY & TOPOGRAPHIC SURVEY

PREPARED FOR
McNeal Engineering, Inc.

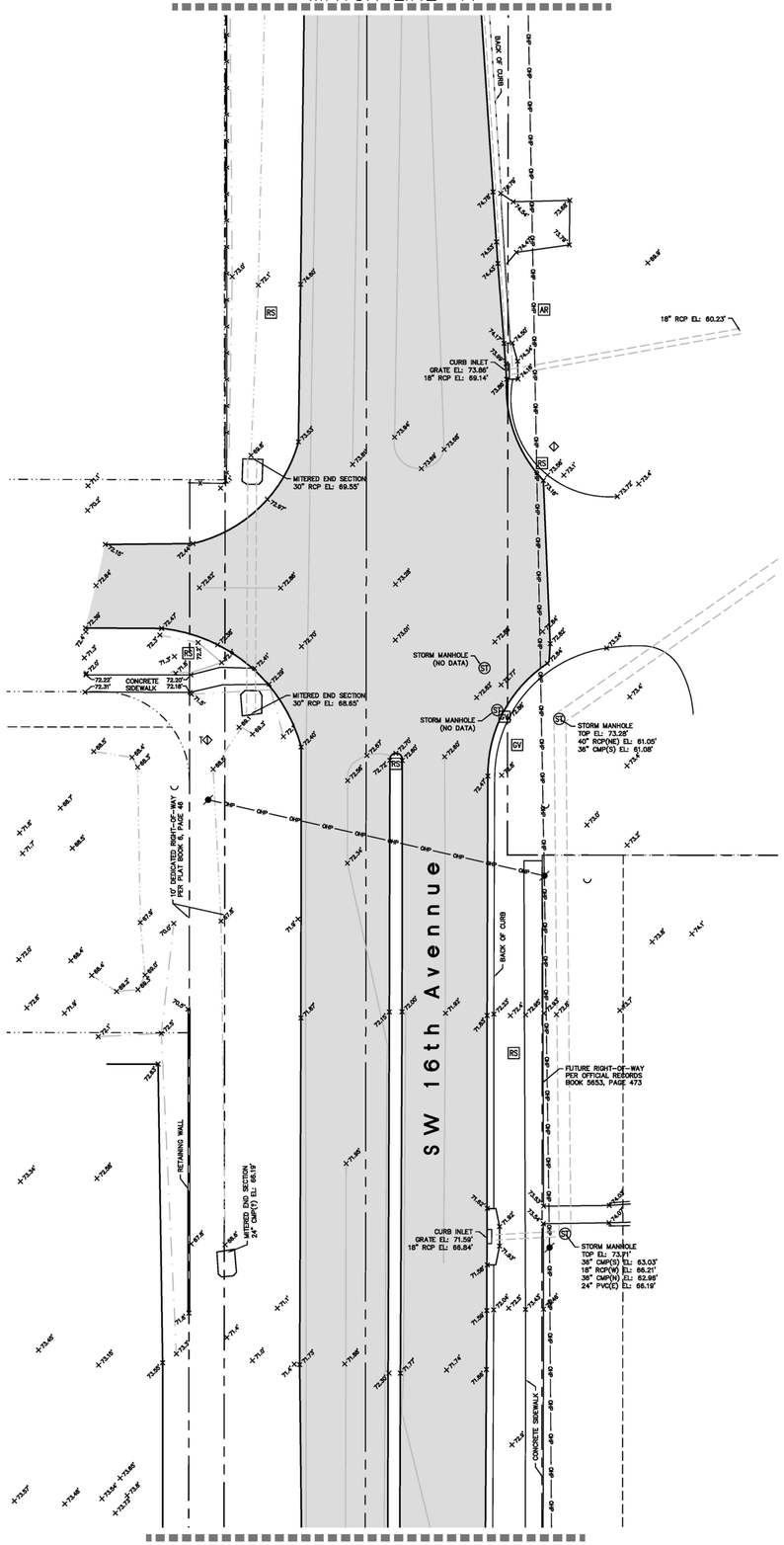
SW 16th Avenue
TW & P Parcel

PROJECT NO.: 2017-148A01.BG00002		SCALE: 1" = VARIES
DRAWN BY : ARG	7/15/17	SHEET
CHECKED BY : DCJ	7/15/17	3 OF 5

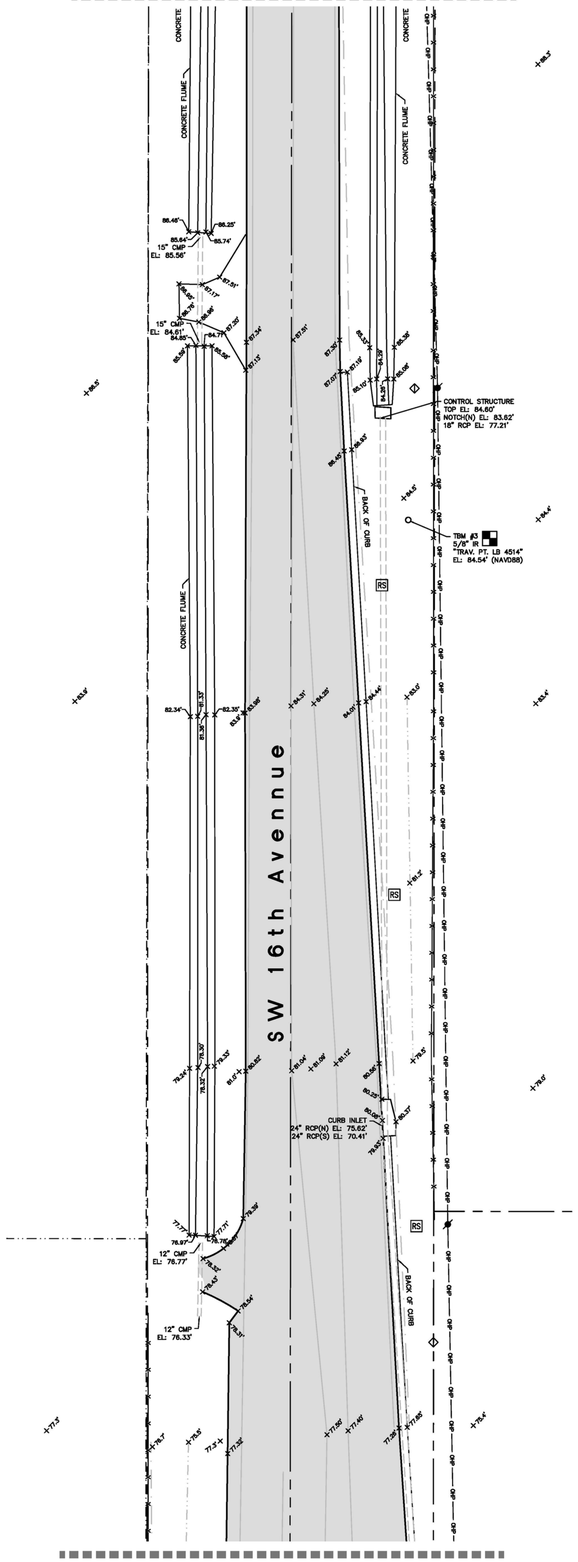
MATCH LINE "A"

MATCH LINE "B"

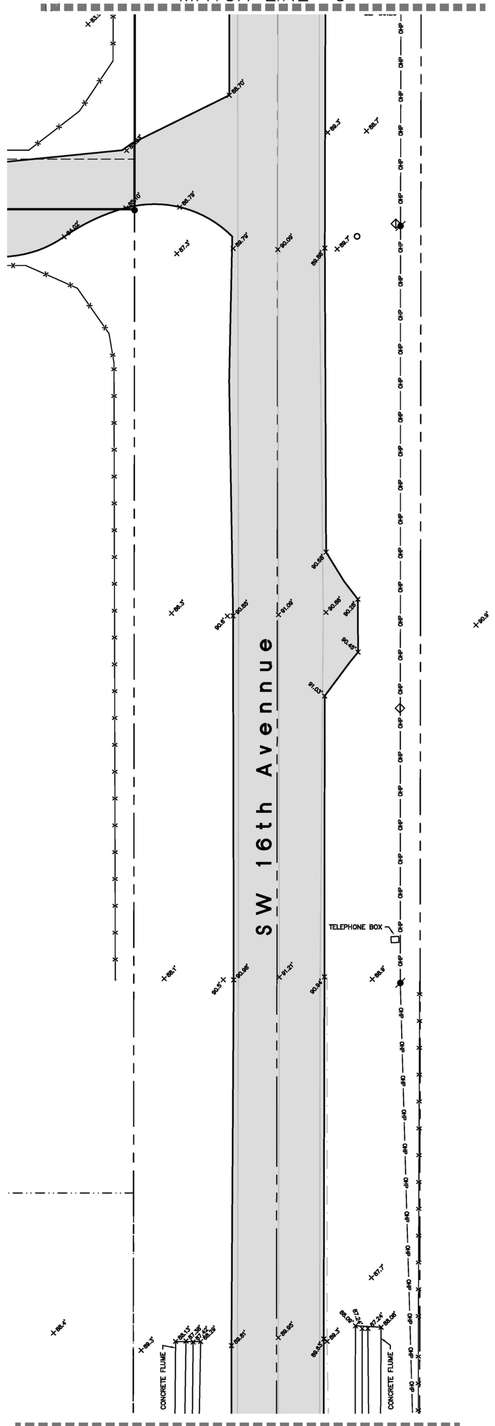
MATCH LINE "C"



SEE SHEET 3



MATCH LINE "A"



MATCH LINE "B"

N

W D.C. JOHNSON ASSOCIATES SURVEYING MAPPING E

S

SCALE 1" = 20'

0 10 20 40

LEGEND

IP, IR = IRON PIPE, IRON ROD
CM = CONCRETE MONUMENT
(F) = FIELD DERIVED MEASUREMENT
(P) = MEASUREMENT PER PLAT
(D) = MEASUREMENT PER DESCRIPTION
℄ ℄ = PROPERTY LINE, CENTERLINE
R/W = RIGHT OF WAY
○ = FOUND IR (SIZE & REGISTRATION NUMBER AS NOTED)
◎ = FOUND IP (SIZE & REGISTRATION NUMBER AS NOTED)
● = SET 5/8" IR "D.C. JOHNSON LB 4514"
□ = FOUND CM (SIZE & REGISTRATION NUMBER AS NOTED)
■ = SET 4"x4" CM "LB 4514"
◡ = GUY WIRE
◪ = POWER POLE
EB = ELECTRIC BOX
TB = TELEPHONE BOX
RS = ROAD SIGN
OAK TREE
= TREE (UNKNOWN VARIETY)
MB = MAIL BOX
GV = GATE VALVE
T = BURIED TELEPHONE LINE MARK
SS = SANITARY MANHOLE
FH = FIRE HYDRANT
= GAS LINE FLAG
ST = STORM MANHOLE
AR = AIR RELEASE VALVE
= PALM TREE
= VERTICAL CONTROL BENCHMARK
= MAGNOLIA TREE
= CHERRY LAUREL TREE
= WELL
= CEDAR TREE
= CAMPHOR TREE
93.8'× = SPOT ELEVATION
RCP = REINFORCED CONCRETE PIPE
CMP = CORRUGATED METAL PIPE
ERCP = ELLIPTICAL REINFORCED CONCRETE PIPE
EL: = ELEVATION
CMP CMP = OVERHEAD POWER LINE
= ASPHALT

DCJOHNSON ASSOCIATES
SURVEYING AND MAPPING
Phone: (352) 588-2768
11911 South Curley Street
San Antonio, Florida 33576
www.dcjohnson.com
Email: Survey@dcjohnson.com

BOUNDARY & TOPOGRAPHIC SURVEY

PREPARED FOR
McNeal Engineering, Inc.

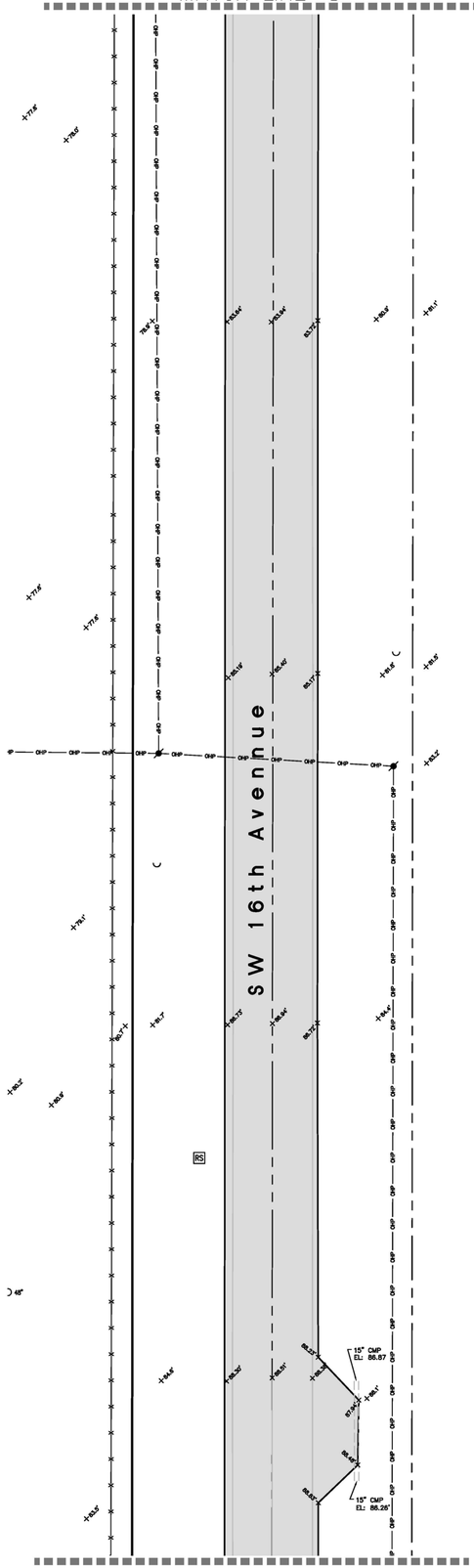
SW 16th Avenue
TW & P Parcel

PROJECT NO.: 2017-148A01.BG00002		SCALE: 1" = 20'
DRAWN BY : ARG	7/15/17	SHEET 4 OF 5
CHECKED BY : DCJ	7/15/17	

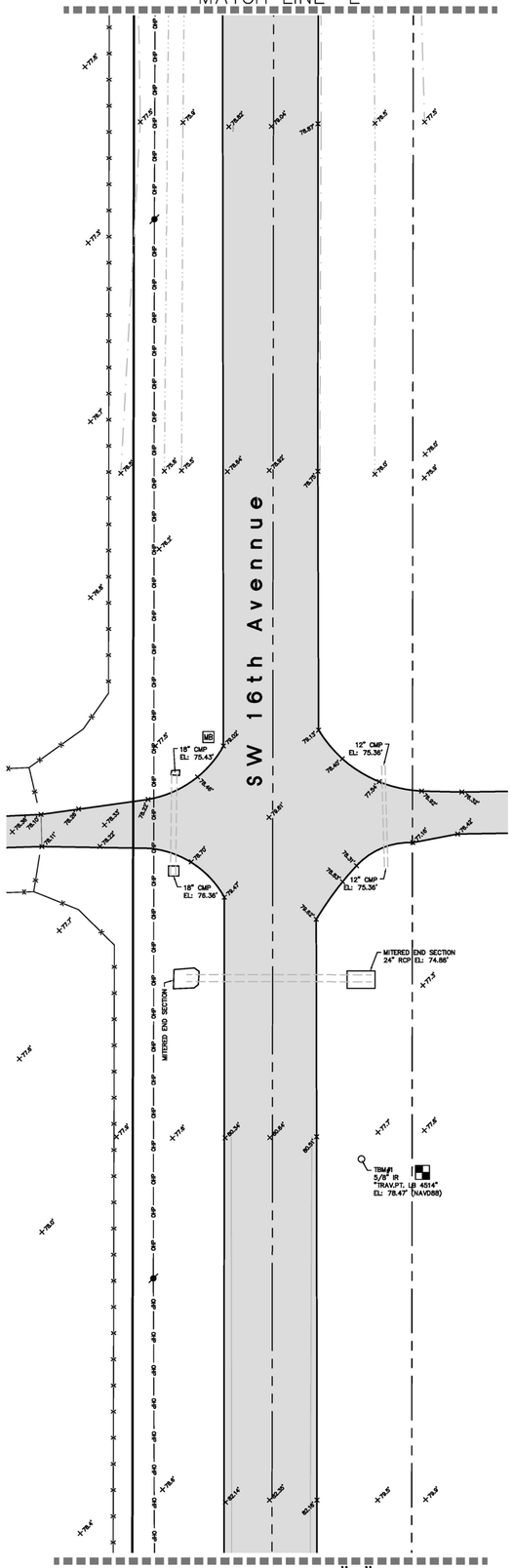
MATCH LINE "D"

MATCH LINE "E"

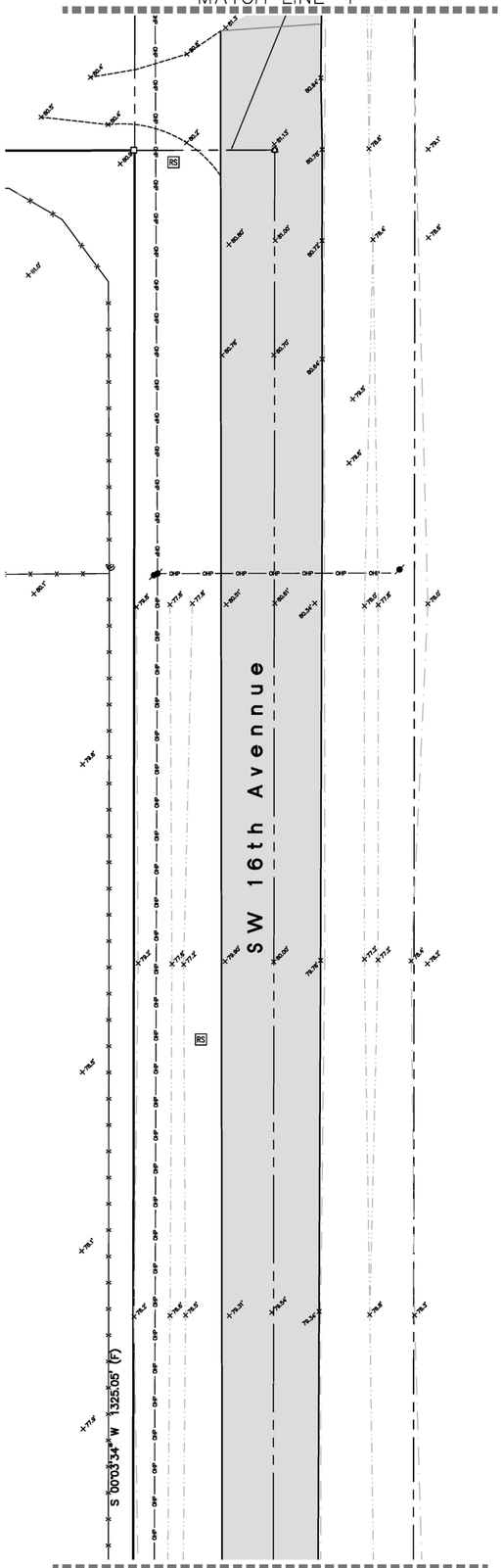
MATCH LINE "F"



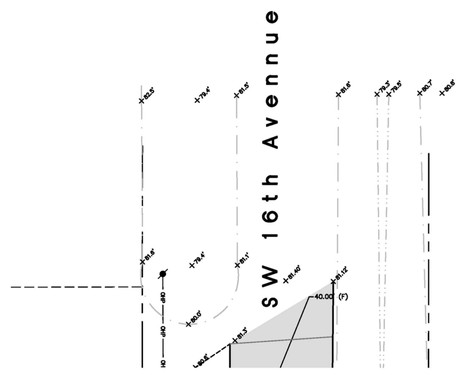
MATCH LINE "C"



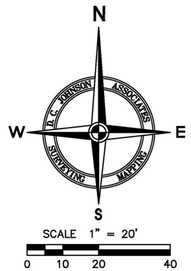
MATCH LINE "D"



MATCH LINE "E"



MATCH LINE "F"



SCALE 1" = 20'

0 10 20 40

LEGEND

IP, IR = IRON PIPE, IRON ROD
CM = CONCRETE MONUMENT
(F) = FIELD DERIVED MEASUREMENT
(P) = MEASUREMENT PER PLAT
(D) = MEASUREMENT PER DESCRIPTION
℄ ℄ = PROPERTY LINE, CENTERLINE
R/W = RIGHT OF WAY
○ = FOUND IR (SIZE & REGISTRATION NUMBER AS NOTED)
◎ = FOUND IP (SIZE & REGISTRATION NUMBER AS NOTED)
● = SET 5/8" IR "D.C. JOHNSON LB 4514"
□ = FOUND CM (SIZE & REGISTRATION NUMBER AS NOTED)
■ = SET 4"x4" CM "LB 4514"
◡ = GUY WIRE
◪ = POWER POLE
EB = ELECTRIC BOX
TB = TELEPHONE BOX
RS = ROAD SIGN
= OAK TREE
= TREE (UNKNOWN VARIETY)
MB = MAIL BOX
GV = GATE VALVE
T = BURIED TELEPHONE LINE MARK
SS = SANITARY MANHOLE
FH = FIRE HYDRANT
G = GAS LINE FLAG
ST = STORM MANHOLE
AR = AIR RELEASE VALVE
= PALM TREE
= VERTICAL CONTROL BENCHMARK
= MAGNOLIA TREE
= CHERRY LAUREL TREE
= WELL
= CEDAR TREE
= CAMPHOR TREE
93.8'× = SPOT ELEVATION
RCP = REINFORCED CONCRETE PIPE
CMP = CORRUGATED METAL PIPE
ERCP = ELLIPTICAL REINFORCED CONCRETE PIPE
EL: = ELEVATION
OHP —— OHP —— = OVERHEAD POWER LINE
= ASPHALT

D.C. JOHNSON ASSOCIATES
SURVEYING AND MAPPING
Phone: (352) 588-2768
11911 South Curley Street
San Antonio, Florida 33576
www.dcjohnson.com
Email: Survey@dcjohnson.com

BOUNDARY & TOPOGRAPHIC SURVEY

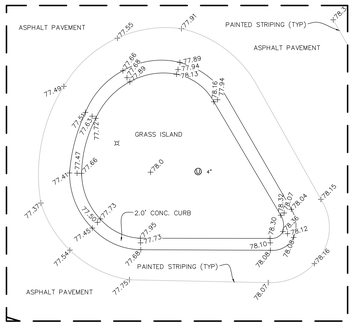
PREPARED FOR
McNeal Engineering, Inc.

SW 16th Avenue
TW & P Parcel

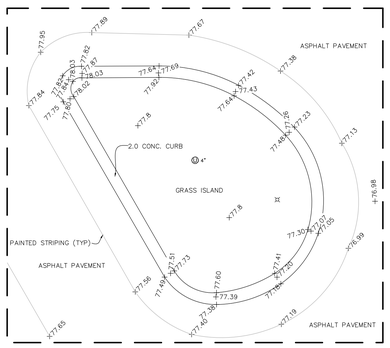
PROJECT NO.: 2017-148A01.BG00002		SCALE: 1" = 20'
DRAWN BY : ARG	7/15/17	SHEET 5 OF 5
CHECKED BY : DCJ	7/15/17	

TOPOGRAPHICAL AND SPECIFIC PURPOSE SURVEY

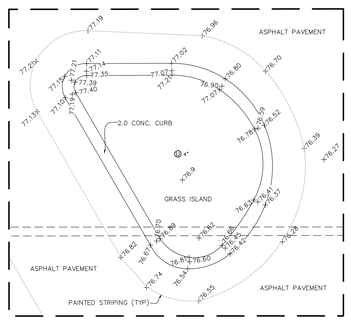
SECTION 12, TOWNSHIP 17 SOUTH, RANGE 21 EAST
MARION COUNTY, FLORIDA



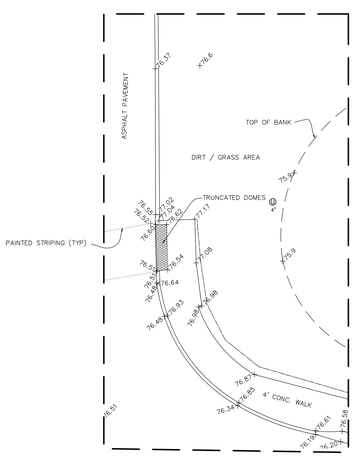
DETAIL "A"
SCALE: 1" = 10'



DETAIL "B"
SCALE: 1" = 10'

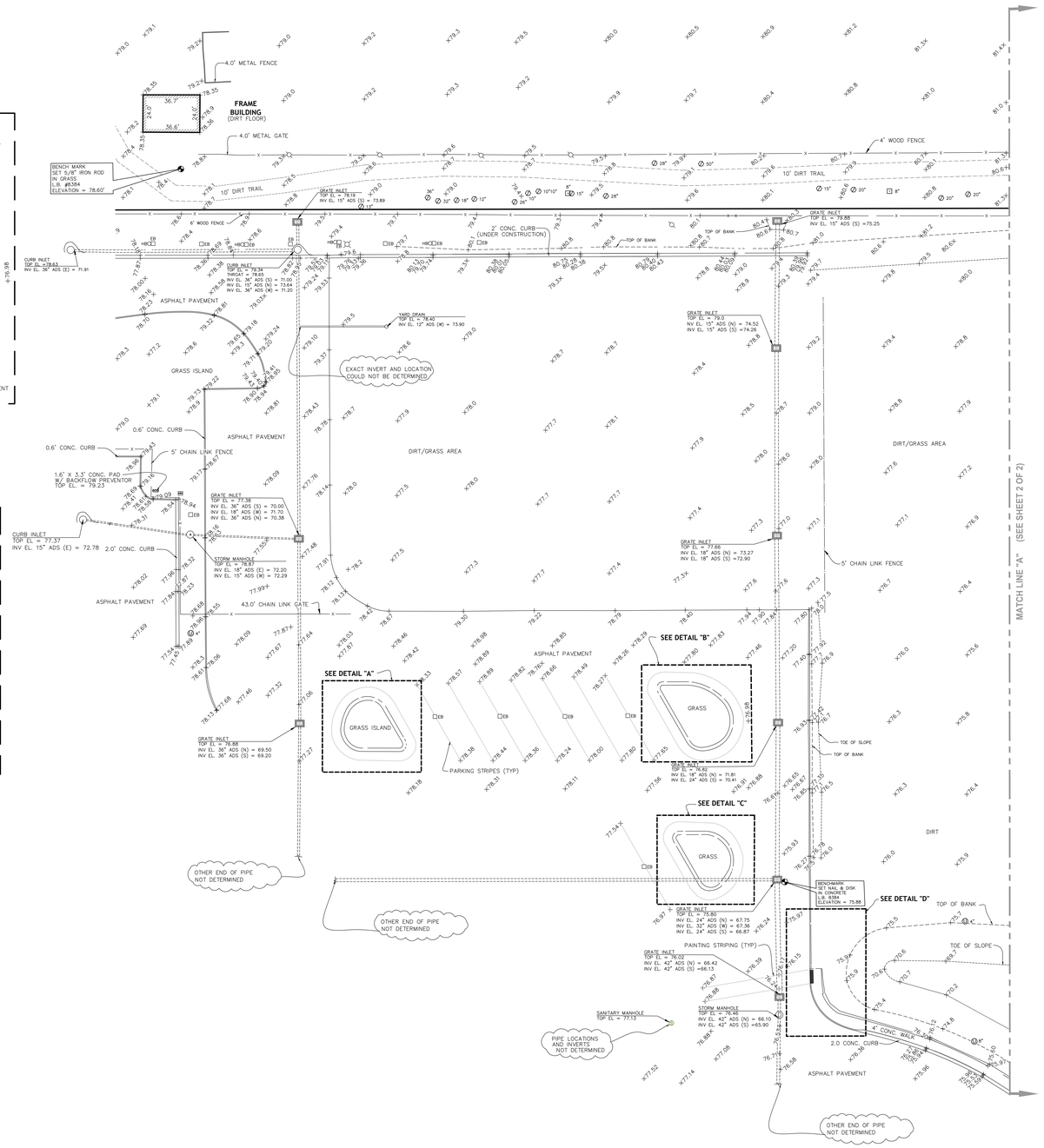


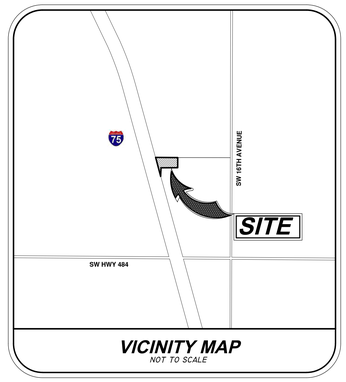
DETAIL "C"
SCALE: 1" = 10'



DETAIL "D"
SCALE: 1" = 10'

NORTH
GRAPHIC SCALE
30 0 10 30
(IN FEET)
1 INCH = 30 FEET





VICINITY MAP
NOT TO SCALE

SURVEYOR'S REPORT

1. This survey not valid unless embossed or stamped with a surveyor's seal.
2. Underground encroachments such as utilities and foundations, that may exist, have not been located.
3. Subject property lies within Flood Zone "X", according to Flood Insurance Rate Map 12083C0716E, prepared by the Federal Emergency Management Agency, last revised April 19, 2017.
4. Boundary lines shown heron taken from Boundary Survey prepared by DC Johnson Associates, Project No. 2017–148A01.BG00001, and last revised on 5/4/2017.
5. Parent bench mark is Florida Department of Transportation Benchmark No. "6142004". Elevation = 72.53'
6. On–site bench marks are delineated within the framework of the survey drawing.
7. Elevations shown heron are relative to the North American Vertical Datum (NAVD) of 1988.
8. The Specific purpose of this survey is to delineate trees five inches (5") in diameter or greater in the limits of the survey.

SURVEYOR'S CERTIFICATE

I, the undersigned Professional Surveyor and Mapper, hereby certify that this Topographic, and Specific Purpose Survey was prepared under my direct supervision, that to the best of my knowledge, information and belief is a true and accurate representation of the land shown and described, and that it meets the Standards of Practice for Land Surveying in the State of Florida Chapter 5J–17, Florida Administrative Code.

DENNIS J. BENHAM LICENSE NUMBER 4697 STATE OF FLORIDA PROFESSIONAL SURVEYOR AND MAPPER

Dennis J. Benham
Professional Surveyor and Mapper No. 4697
State of Florida
McNeal Engineering, Inc.
Licensed Business No. 8384

NO. | REVISION & DATE

PROJECT:
GENERAL RV - OCALA
SECTION 01, TOWNSHIP 17 SOUTH, RANGE 21 EAST
MARION COUNTY, FLORIDA

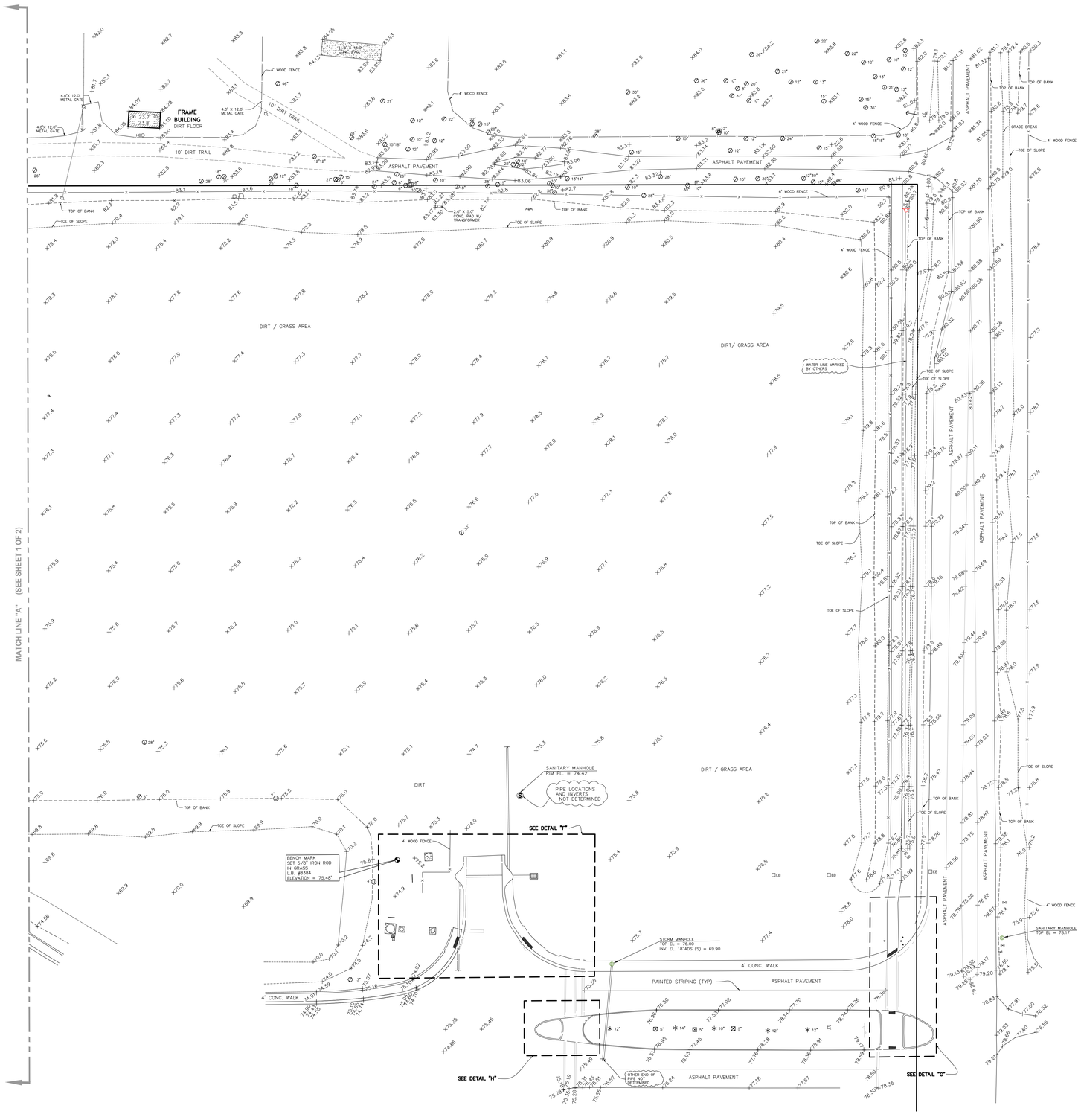
PREPARED FOR:
GENERAL RV CENTER

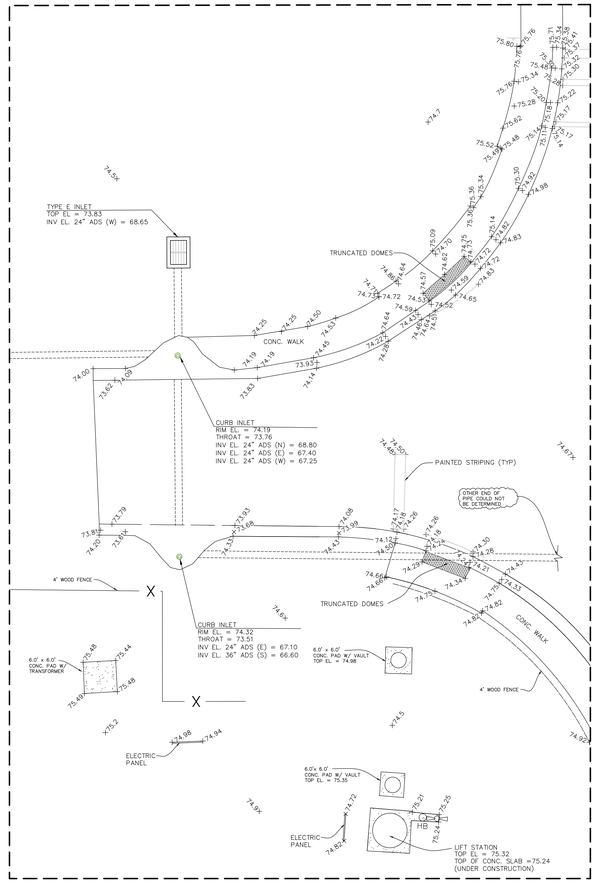
SHEET TITLE:
TOPOGRAPHIC AND SPECIFIC PURPOSE SURVEY

McNEAL ENGINEERING, INC.
15957 N. FLORIDA AVE, LUTZ, FL 33549
PH: (813) 968–1081 FAX (813) 961–5839
CA #9351, LB #8384

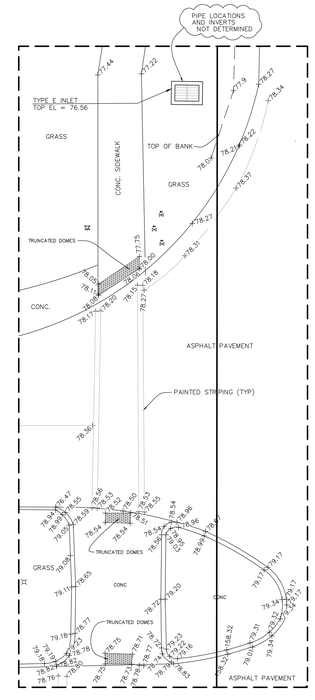
JOB NO.	21–116
ACAD FILE:	T&SP
DRAWN BY:	TC
CHK'D BY:	DJB
DATE:	22.11.15
SHEET NO.	1 of 2

THE DESIGNS AND DRAWINGS CONTAINED HEREON ARE THE COPYRIGHTED PROPERTY OF McNEAL ENGINEERING, INC., AND SHOULD NOT BE DUPLICATED WITHOUT WRITTEN CONSENT OF THE ENGINEER.

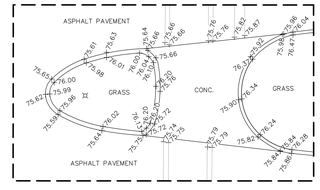




DETAIL "F"
SCALE: 1" = 10'



DETAIL "G"
SCALE: 1" = 10'



DETAIL "H"
SCALE: 1" = 10'

NO.	REVISION & DATE

PROJECT:

GENERAL RV - OCALA
SECTION 01, TOWNSHIP 17 SOUTH, RANGE 21 EAST
MARION COUNTY, FLORIDA

PREPARED FOR:

GENERAL RV CENTER

SHEET TITLE:

TOPOGRAPHIC AND SPECIFIC PURPOSE SURVEY

MCNEAL ENGINEERING, INC.
15957 N. FLORIDA AVE, LUTZ, FL 33549
PH. (813) 968-1081 FAX (813) 961-5839
CA #6581, LB #6534

JOB NO.	21-116
ACAD FILE:	T&SP
DRAWN BY:	TC
CHK'D BY:	DJB
DATE:	22.11.15
SHEET NO.	

THE DESIGNS AND DRAWINGS CONTAINED HEREON ARE THE COPYRIGHTED PROPERTY OF McNEAL ENGINEERING, INC., AND SHOULD NOT BE DUPLICATED WITHOUT WRITTEN CONSENT OF THE ENGINEER.