

July 31, 2025

PROJECT NAME: STICKNEY DENTAL & AESTHETICS

PROJECT NUMBER: 2025010012

APPLICATION: MAJOR SITE PLAN #32349

- 1 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.
- 2 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.
- 3 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.
- 4 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: 2/14/25-add waivers if requested in future
- 5 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.
- 6 DEPARTMENT: UTIL - MARION COUNTY UTILITIES
REVIEW ITEM: 6.14.2.A - Sewer Connection Requirements
STATUS OF REVIEW: INFO
REMARKS: 7/25/25 Per Carrie Hyde, Approved with the conditions within the waiver for section 6.14.2 - as listed on the cover sheet. 6/25/25 – Comment remains. The Engineer of Record has requested a waiver for the sewer connection. Reviews will continue to be rejected until the outcome of the waiver request is provided at the next Board of County Commissioners meeting. Prev. 2.24.25 - C4.1 Septic Tank is shown, sewer is available. (2) MCU understands a waiver for sewer connection is being proposed. In the event of the waiver being denied, sewer connections and details will re required to be shown.

- 7 DEPARTMENT: UTIL - MARION COUNTY UTILITIES
REVIEW ITEM: 6.14.3 - Onsite Waste Treatment and Disposal System (OSTDS) - connection requirement on plan
STATUS OF REVIEW: INFO
REMARKS: 7/25/25 Septic System approved - please see NOTE on C4.1 in regards to future MCU sewer connection.
- 8 DEPARTMENT: DOH - ENVIRONMENTAL HEALTH
REVIEW ITEM: Additional Health comments
STATUS OF REVIEW: INFO
REMARKS: Will need septic permit through the Department of Environmental Protection if waiver for sewer connection is granted. Connection to sewer is required if available.
Will need biomedical waste permit through the Department of Health in Marion County
- 9 DEPARTMENT: LUCURR - LAND USE CURRENT REVIEW
REVIEW ITEM: 2.12.4.L(6) - Gross/wetland/floodplain acreage listed?
STATUS OF REVIEW: INFO
REMARKS: No wetlands or floodplain on-site.
- 10 DEPARTMENT: ZONE - ZONING DEPARTMENT
REVIEW ITEM: 2.12.6 - Location of water and sewer. Does this need a special use permit?
STATUS OF REVIEW: INFO
REMARKS: Defer to Marion County Utilities. Waiver for temporary septic was denied.



**Marion County
Board of County Commissioners**

AR #32349

Office of the County Engineer

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

DEVELOPMENT REVIEW PLAN APPLICATION

Date: 1/6/2025

A. PROJECT INFORMATION:

Project Name: Stickney Dental & Aesthetics

Parcel Number(s): 35483-102-00

Section 8 Township 16 Range 21 Land Use Commercial Zoning Classification B-2

Commercial ☒ Residential ☐ Industrial ☐ Institutional ☐ Mixed Use ☐ Other ☐

Type of Plan: MAJOR SITE PLAN

Property Acreage 1.41 ac Number of Lots 1 Miles of Roads NA

Location of Property with Crossroads Tract A-2, Pidgeon Park, Approximately 150 feet South of SR 200.

Additional information regarding this submittal: New Dental office with onsite parking and onsite stormwater retention

B. CONTACT INFORMATION (*Check the appropriate box indicating the point for contact for this project. Add all emails to receive correspondence during this plan review.*)



Engineer:

Firm Name: Riddle - Newman Engineering, Inc. Contact Name: Keith E. Riddle, P.E.

Mailing Address: 115 North Canal Street City: Leesburg State: FL Zip Code: 34748

Phone # 352-787-7482 Alternate Phone #

Email(s) for contact via ePlans: keith@riddlenewman.com



Surveyor:

Firm Name: Preece Land Surveying, Inc. Contact Name: Glen H. Preece, Jr.

Mailing Address: 2201 SE 30th Ave., Suite 102 City: Ocala State: FL Zip Code: 34471

Phone # 352-351-0091 Alternate Phone #

Email(s) for contact via ePlans: tammy@plsinc.us

Property Owner:

Owner: PRS DMD, LLC Contact Name: Peter Stickney, Manager

Mailing Address: 17750 SW 61st Lane Road City: Dunnellon State: FL Zip Code: 34432

Phone # 352-854-2000 Alternate Phone #

Email address: PStickney@imagendentalpartners.com

Developer:

Developer: PRS DMD, LLC Contact Name: Peter Stickney, Manager

Mailing Address: 17750 SW 61st Lane Road City: Dunnellon State: FL Zip Code: 34432

Phone # 352-854-2000 Alternate Phone #

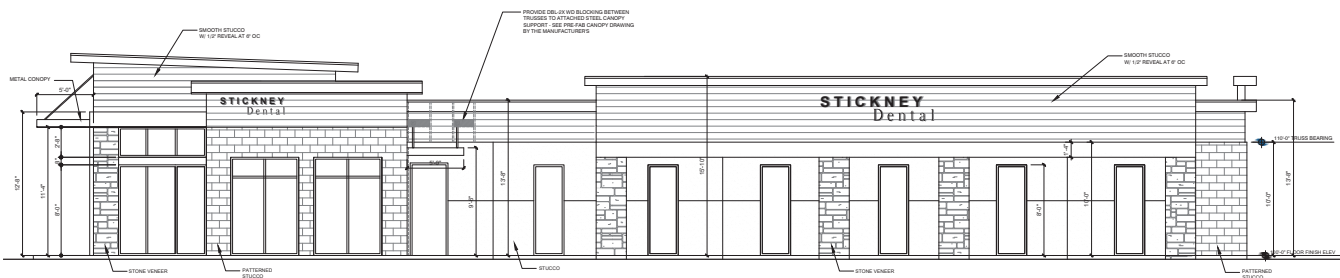
Email address: PStickney@imagendentalpartners.com

Revised 6/2021

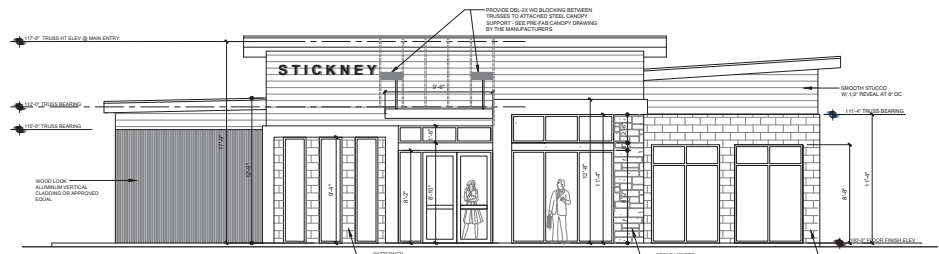
CLEAR FORM

Empowering Marion for Success

marionfl.org



RIGHT ELEVATION
Scale: 3/16" = 1'-0"



FRONT ELEVATION
Scale: 1/4" = 1'-0"

DRAWING DATE: PCN#1
DATE: JAN 31, 2025
REVISED: --



GENERAL CONTRACTOR
Loyde W. Sadlowski, Inc.
7500 SW 61st Ave, Ste 200
Ocala, Florida 34478
(352) 861-0875 Fax (352) 861-178
FL OCC-009522

David P. King, Jr.
ARCHITECT
7000 SW 81st A
SUITE 107
OCALA, FL 34478
DAVIDP.KING@GMAIL.COM

REGISTRATION:
STATE OF FLORIDA
DATE OF EXPIRATION: APR 13, 2026

PROJECT
NEW
BUILDING

FOR
STICKNEY
DENTAL

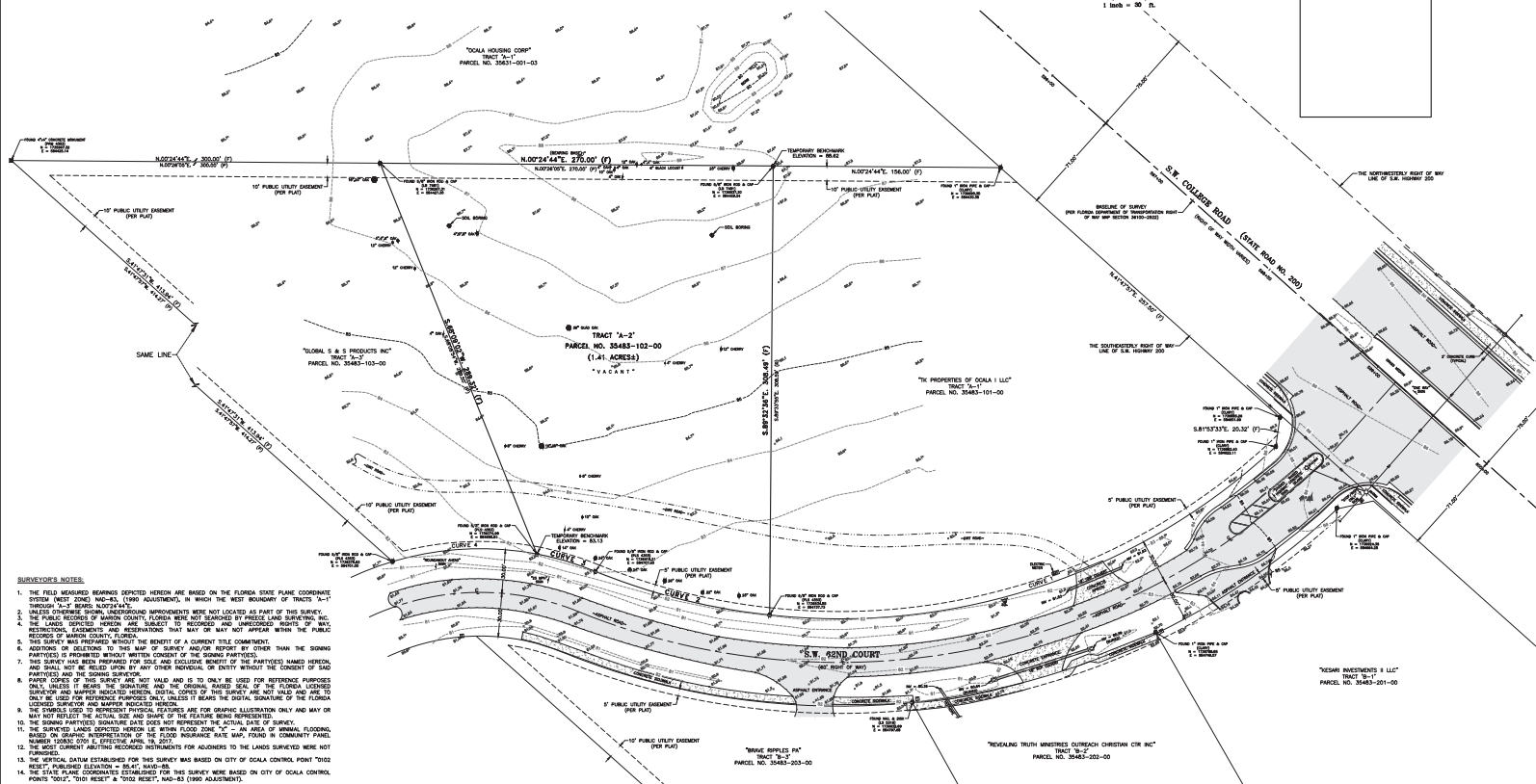
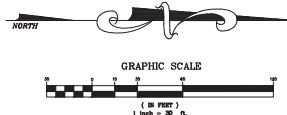
PARCEL NO. 35483-102-00
MAHON COUNTY, FLORIDA

APPROVED BY:
ARCHITECT'S PROJECT No.:

SHEET TITLE:
EXTERIOR ELEVATION

SHEET NUMBER:
A1

DESCRIPTION:
(PER OFFICIAL RECORDS BOOK #219, PAGE 985, PUBLIC RECORDS OF MARION COUNTY, FLORIDA)
TRACT A-2, PIGEON PARK, AS PER PLAT THEREOF RECORDED IN PLAT BOOK 1, PAGES 189 AND 190, PUBLIC RECORDS OF MARION COUNTY, FLORIDA.



- [illegible]

[illegible]

BOUNDARY & TOPOGRAPHIC SURVEY
FOR:
LOYDE SADLOWSKI



ELLWETHER PROFESSIONAL PARK
1 S.E. 30TH AVENUE, SUITE 102
OCALA, FL 34471
(352) 351-0091
EMAIL: glen@piet.us

SURVEYOR'S CERTIFICATION

THIS SURVEY WAS PREPARED IN ACCORDANCE WITH THE STANDARDS OF PRACTICE ESTABLISHED IN CHAPTER 5J-17, FLORIDA ADMINISTRATIVE CODE, FOR A BOUNDARY & TOPOGRAPHIC SURVEY.

DATE _____

GLEN H. PREECE, JR., P.S.M. - LS 5427

DATE OF FIELD SURVEY: JULY 23, 2024				
DRAWING		G.I.P.		REVISIONS
CHECKED:		G.I.P.		BY
F.B.		PAGES		DATE
127		32-33		
FILE INFO:				
FIELD MARK				
DRAWING MARK				

<div style="display: flex; justify-content: space-between;"> <div> COVER SHEET MAJOR SITE PLAN </div> <div> STICKNEY DENTAL FLORIDA </div> </div>		<div style="display: flex; justify-content: space-between;"> <div> ENGINEERING INC. REGISTERED PROFESSIONAL ENGINEER NO. 12412 </div> <div> STICKNEY DENTAL FLORIDA </div> </div>	
<div style="display: flex; justify-content: space-between;"> <div> OWNER: R.S.H. ADDRESS: 12345 E. 1st Ave. DATE: 1/1/2007 </div> <div> PROJECT: MAJOR SITE PLAN DATE: 1/1/2007 </div> </div>		<div style="display: flex; justify-content: space-between;"> <div> ENGINEERING INC. REGISTERED PROFESSIONAL ENGINEER NO. 12412 </div> <div> STICKNEY DENTAL FLORIDA </div> </div>	
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(PER OFFICIAL RECORDS BOOK 8219, PAGE 985, PUBLIC RECORDS OF MARION COUNTY, FLORIDA)
TRACT A-2, PIGEON PARK, AS PER PLAT THEREOF RECORDED IN PLAT BOOK 1, PAGES 189 AND 190, PUBLIC RECORDS OF MARION COUNTY, FLORIDA.

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.

ARTICLE 6, DIV 14, SECTION 6.14.2 - CONNECTION REQUIREMENTS - WAIVER REQUESTED TO UTILIZE ON-SEPTIC TANK UNTIL SUCH TIME AS CENTRALIZED SEWER BECOMES AVAILABLE. COST TO RUN FORCE MAIN TO SR 200 AND UNDERNEATH THE HIGHWAY IS PROHIBITIVE. OTHER DEVELOPMENTS ALONG THE FORCE MAIN ROUTE ARE EXISTING AND ALREADY APPROVED ON SEPTIC TANKS, THUS COST SHARING IS NOT AN OPTION.

LAND USE: MEDICAL - DENTAL OFFICE
LAND USE CODE: 720
ITE 9TH ADDITION
PM PEAK HOURS RATE = 4.45 PER 1,000 square feet
PEAK HOUR TRIPS = $4.45 \times 5.65 = 25$

MARION COUNTY UTILITIES CUSTOMER SERVICE 24/7/365
11800 US 441 BELLEVUE, FL 34420
PHONE (352) 307-6000

[illegible]

PARCEL, JOB 35483-102-00

TOTAL AREA = 62.99 ac. (1.41 ac.)

PROPOSED IMPERVIOUS AREA = 32.964 ac. (0.74 ac.)

PERCENT IMPERVIOUS = 52.35% (of total area)

LOT IS POINTED FOR A MAXIMUM OF 60% IMPERVIOUS SURFACE RATIO.

PROPOSED SURFACE RATIO = 47.5%

FLOODING ZONE = "C"

ZONING = R-70

FUTURE LAND USE = COMMERCIAL

WATERMOUNT LOT = SECONDARY SURROUND PROTECTION ZONE

WATERMOUNT LOT

MINIMUM LOT WIDTH = 100'

MINIMUM BUILDING HEIGHT = 10'

PROPOSED BUILDING HEIGHT = 25'

MAXIMUM BUILDING AREA RATIO (FAR) = 1.0

PROPOSED FAR = 0.69

SETBACKS: FRONT = 40' / SIDE / REAR = 25'

SETBACKING USE = 40' / SIDE / REAR = 25'

PROPOSED USE OF USE = MEDICAL OFFICE, BUSINESS OFFICE

PROPOSED BUILDING SQUARE FOOTAGE = 5,653 sq. ft. (LEASABLE SPACE)

PARKING REQUIRED = 1 per 200 sq. ft. = 23 spaces

PROPOSED PARKING = 23

ALL CONSTRUCTION COVERED BY THESE PLANS COMPLIES WITH THE WATER QUALITY ACT AND THE NATIONAL POLLUTION DISCHARGE CONTROLS ACT IN THE MARION COUNTY LAND DEVELOPMENT CODE.

NO CHANGE TO THE WORK AS SHOWN ON THE APPROVED PLANS SHALL BE MADE WITHOUT THE WRITTEN APPROVAL BY THE OFFICE OF THE CLERK OF SUPERIOR COURT.

ELEANOR B. BROWN, N.A.S.M. 1988, MEMBER P.A.C.

C1.1	COVER SHEET
C1.2	STORMWATER POLLUTION PREVENTION PLAN
C1.3	TREE REMOVAL PLAN
C2.1	GEOMETRY PLAN
C3.1-C3.2	GRADING & DRAINAGE PLANS
C4.1	UTILITY PLAN
C5.1-C5.3	DETAIL SHEETS

CONTRACTOR SHALL SCHEDULE A PRE-CONSTRUCTION MEETING WITH THE UTILITY DEPARTMENT 2 WEEKS PRIOR TO THE START OF CONSTRUCTION AND PRIOR TO ANY MATERIALS BEING DELIVERED ON-SITE.

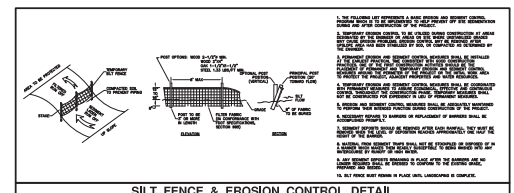
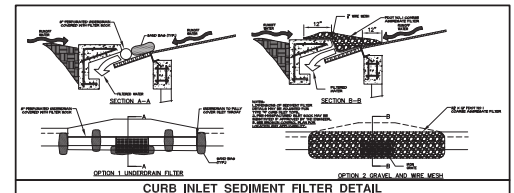
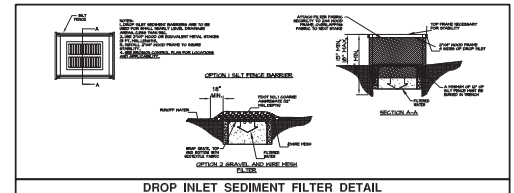
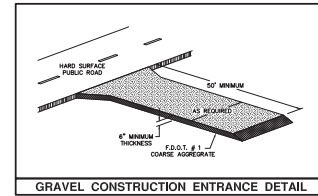
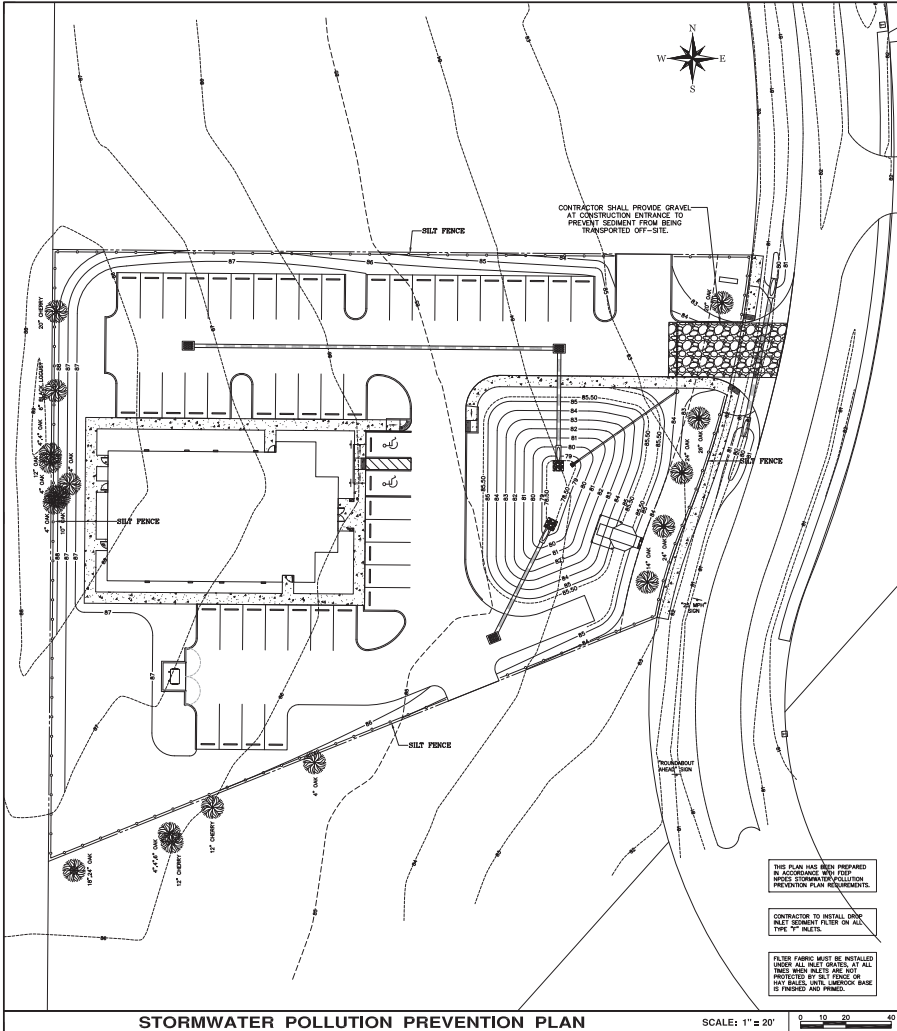
*Peter Stickney, Manager
PRS DMD, LLC
17750 SW 61st Lane Road
Dunnellon, Florida 34432
Phone (352) 854-2000*

Loyde Sadlowski
Loyde W. Sadlowski, Inc.
7500 SW 61st Avenue, Suite 200
Ocala, Florida 34476
Phone (352) 861-0075

Keith E. Riddle, P.E.
Riddle - Newman Engineering, Inc.
115 North Canal Street
Leesburg, Florida 34748
Phone (352) 787-7482
Fax (352) 787-7412

Glen H. Preece, Jr.
Preece Land Surveying, Inc.
Bellwether Professional Park
2201 S.E. 30th Avenue, Suite 10
Ocala, Florida 34471
Phone (352) 351-0091





NPDES Requirements

- Federal Law prohibits all point source discharge of pollutants, which includes the discharge of sediment associated with large (greater than 1 acre) construction activities or small (less than 1 acre and greater than 1/4 acre) construction activities, in waters of the United States without a National Pollutant Discharge Elimination System (NPDES) permit. Under the Clean Water Act, the NPDES permit program requires that all construction activities in waters of the United States be subject to the NPDES permit program. The NPDES permit program requires that all construction activities in waters of the United States be subject to the NPDES permit program. The NPDES permit program requires that all construction activities in waters of the United States be subject to the NPDES permit program.
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NPDES REQUIREMENTS

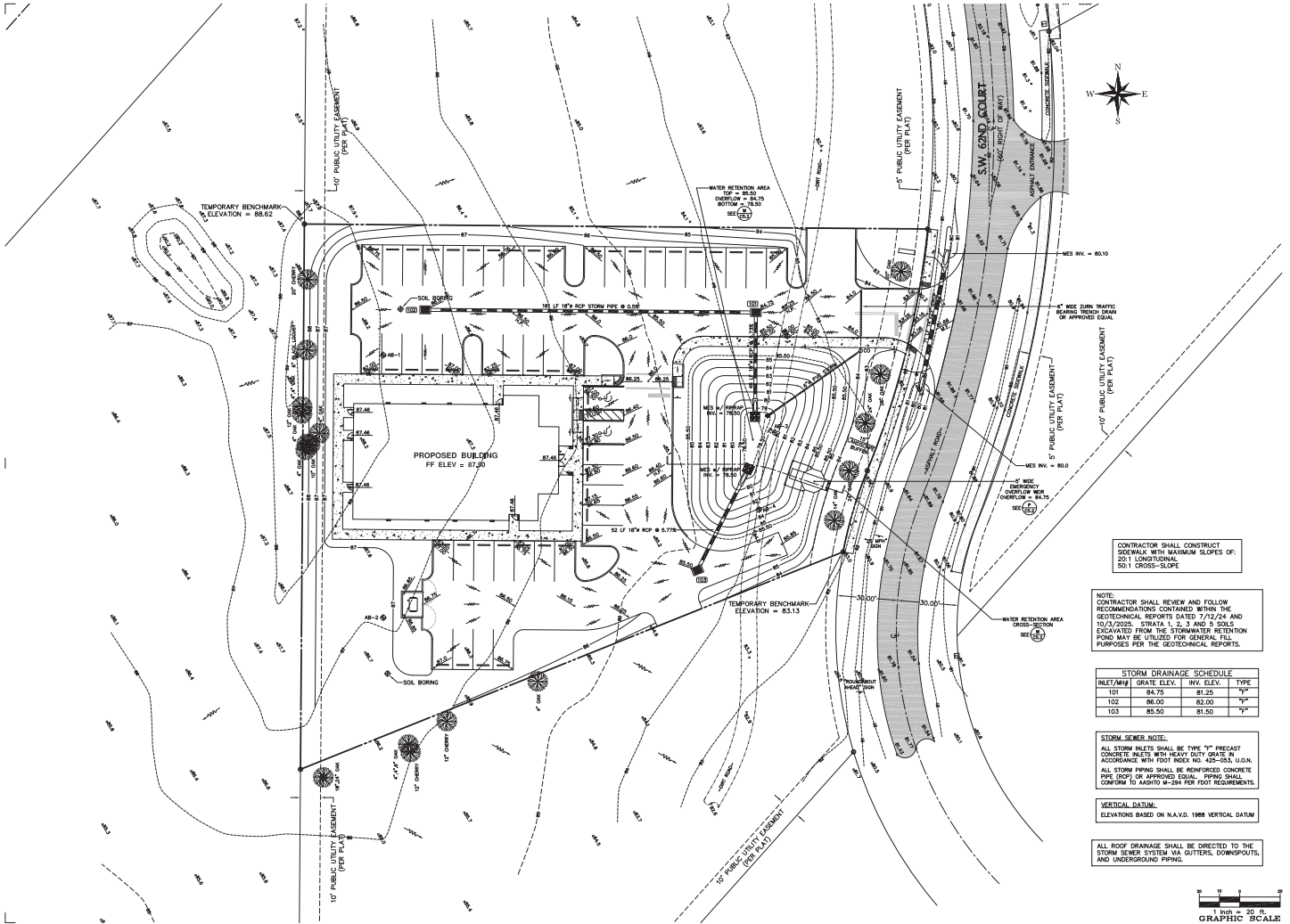
RODOLFO NEWMAN ENGINEERING INC.
 11111 NE 11th Ave, Suite 100
 Fort Lauderdale, FL 33304
 Phone: (954) 771-7412
 Fax: (954) 771-7412
 Email: info@rodolfo-newman.com

STORMWATER POLLUTION PREVENTION PLAN
 MAJOR SITE PLAN

STICKNEY DENTAL
 MARION COUNTY
 FLORIDA

DATE: 1/19/25
 SCALE: 1"=20'
 PROJECT NO: 2412

PREP BY: C.1.2



CONTRACTOR SHALL CONSTRUCT SIDEWALK WITH MAXIMUM SLOPES OF: 2% LONGITUDINAL, 5% CROSS-SLOPE

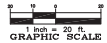
NOTE: CONTRACTOR SHALL REVIEW AND FOLLOW RECOMMENDATIONS CONTAINED WITHIN THE GEOTECHNICAL REPORTS DATED 7/12/24 AND 10/3/2025. STRATA 1, 2, 3 AND 5 SOILS EXCAVATED FROM THE STORMWATER RETENTION POND MAY BE UTILIZED FOR GENERAL FILL PURPOSES FOR THE GEOTECHNICAL REPORTS.

INLET/MAN	GRATE ELEV.	INV. ELEV.	TYPE
101	84.75	81.25	"6"
102	86.00	82.00	"6"
103	85.50	81.50	"6"

STORM SEWER NOTE:
ALL STORM INLETS SHALL BE TYPE "1" PRECAST CONCRETE INLETS WITH HEAVY DUTY GRATE IN ACCORDANCE WITH FOOT RICK NO. 445-163 U.O.N.
ALL STORM PIPING SHALL BE REINFORCED CONCRETE PIPE (RCP) OR APPROVED EQUAL. PIPING SHALL CONFORM TO AASHTO M-294 PER FOOT REQUIREMENTS.

VERTICAL DATUM:
ELEVATIONS BASED ON N.A.S.D. 1988 VERTICAL DATUM

ALL ROOF DRAINAGE SHALL BE DIRECTED TO THE STORM SEWER SYSTEM VIA GUTTERS, DOWNSPOUTS, AND UNDERGROUND PIPING.



STICKNEY DENTAL
MARION COUNTY
FLORIDA

93.1

DATE: 7/11/24
SCALE: 1"=20'
DATE: 1/9/25
PROJECT NO: 2412

REVISIONS: 01
FLA. REG. NO. 38500

GRADING & DRAINAGE PLAN
MAJOR SITE PLAN

REVISIONS: 01
FLA. REG. NO. 38500

PROJECT: STICKNEY DENTAL
MARION COUNTY
FLORIDA

REVISIONS: 01
FLA. REG. NO. 38500

DATE: 7/11/24
SCALE: 1"=20'
DATE: 1/9/25
PROJECT NO: 2412

REVISIONS: 01
FLA. REG. NO. 38500

GRADING & DRAINAGE PLAN
MAJOR SITE PLAN

REVISIONS: 01
FLA. REG. NO. 38500

PROJECT: STICKNEY DENTAL
MARION COUNTY
FLORIDA

REVISIONS: 01
FLA. REG. NO. 38500

RIDDLE - NEWMAN ENGINEERING INC.
11000 N. W. 11TH AVE.
SUITE 100
FORT LAUDERDALE, FL 33304
PHONE: (954) 792-7412
FAX: (954) 792-7412
WWW.RIDDLE-NEWMAN.COM
CA# 0000383

INLET/MP	GRATE ELEV.	INV. ELEV.	TYPE
101	84.75	81.25	4"
102	86.00	82.00	4"
103	85.50	81.50	4"

STORM SEWER NOTE:
ALL STORM INLETS SHALL BE TYPE "Y" PRECAST CONCRETE INLETS WITH HEAVY DUTY GRATE IN ACCORDANCE WITH FOOT INDEX NO. 425-503, U.G.N. ALL STORM PIPING SHALL BE HANCOX AASHTO HDPE STORM PIPE OR APPROVED EQUAL. PIPING SHALL CONFORM TO AASHTO M-284 PER FOOT REQUIREMENTS.

VERTICAL DATUM:
ELEVATIONS BASED ON N.A.S.D. 1988 VERTICAL DATUM

PVC PIPING SPECIFICATIONS:
DOMESTIC WATER LINES SHALL BE C-900 PVC, DR15, CLASS 185.
FIRE LINES SHALL BE C-900 PVC, DR14, CLASS 305.

CONTRACTOR SHALL SCHEDULE A PRE-CONSTRUCTION MEETING WITH THE UTILITY DEPARTMENT 2 WEEKS PRIOR TO THE START OF CONSTRUCTION AND PRIOR TO ANY MATERIALS BEING DELIVERED ON-SITE.

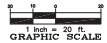
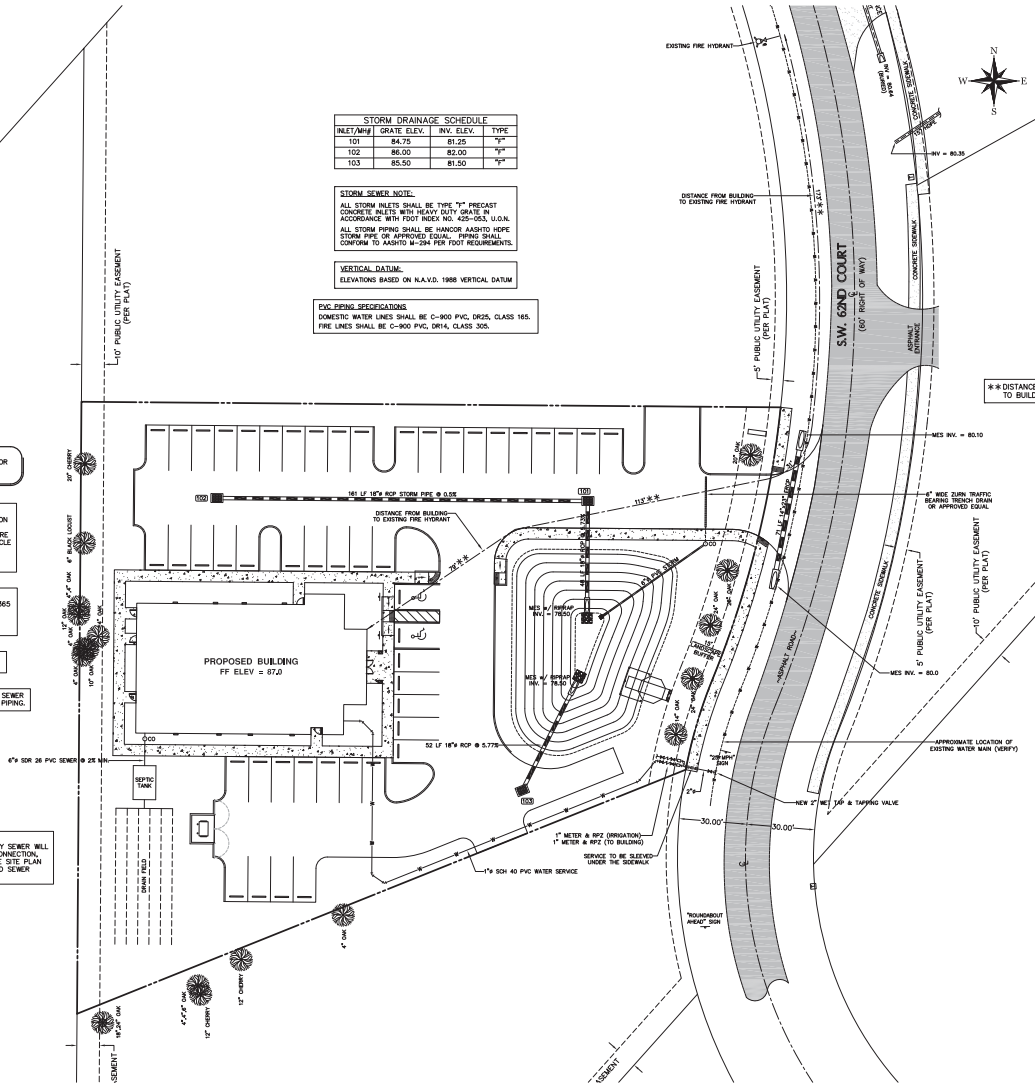
WATER DISTRIBUTION SYSTEMS:
MATERIALS AND INSTALLATION FOR WATER DISTRIBUTION SYSTEM INCLUDING FIRE FITTINGS, VALVES, JOINT RESTRAINTS, FIRE HYDRANTS, SERVICE LINES, PRESSURE TESTING, AND DISINFECTION SHALL CONFORM TO ARTICLE 7, DIVISIONS 2 AND 3 OF THE MARION COUNTY LAND DEVELOPMENT CODE AND ALL APPLICABLE DEEP REGULATIONS.

WATER/SEWER POINT OF CONTACT:
MARION COUNTY UTILITIES CUSTOMER SERVICE 24/7/365
11800 US 441
BELLEVILLE, FL 34420
PHONE (352) 307-6000

NO COOKING OR FOOD PREPARATION PROPOSED IN BUILDING AND THUS NO GREASE TRAP REQUIRED.

ALL ROOF DRAINAGE SHALL BE DIRECTED TO THE STORM SEWER SYSTEM VIA GUTTERS, DOWNSPOUTS, AND UNDERGROUND PIPING.

NOTE: IF MCH DETERMINES PUBLIC GRAVITY SEWER WILL BE AVAILABLE FOR A STANDARD CONNECTION, THE DSR CDSR AS SHOWN ON THE SITE PLAN WILL NO LONGER BE APPROVED AND SEWER CONNECTION WILL BE REQUIRED.



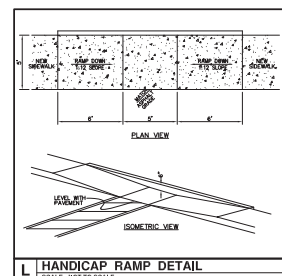
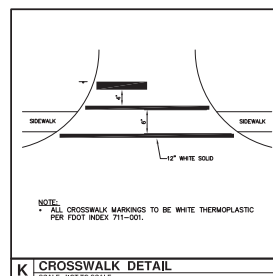
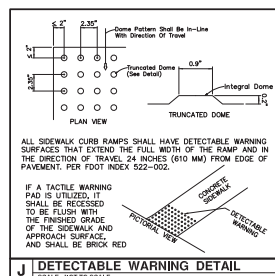
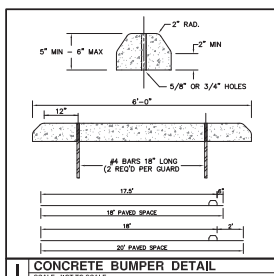
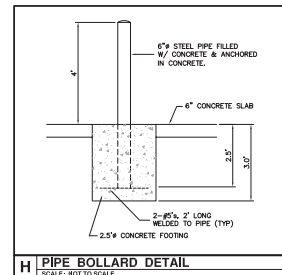
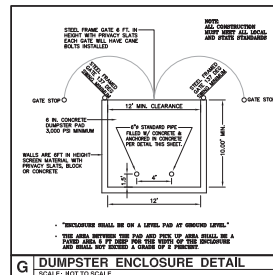
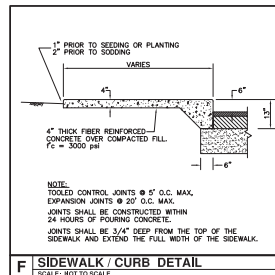
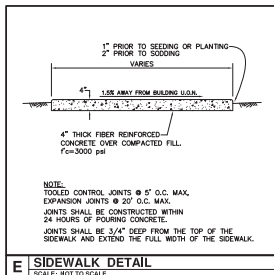
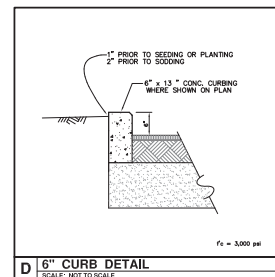
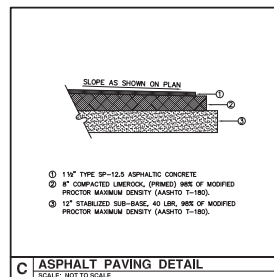
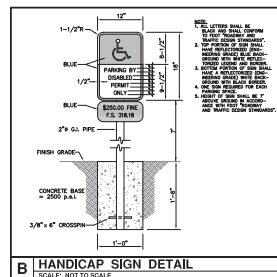
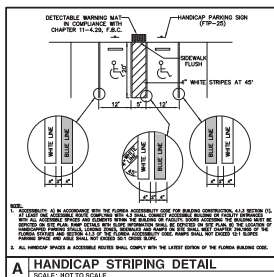
STICKNEY DENTAL
MARION COUNTY
FLORIDA

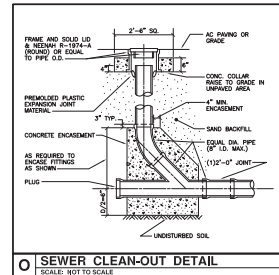
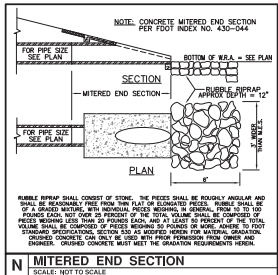
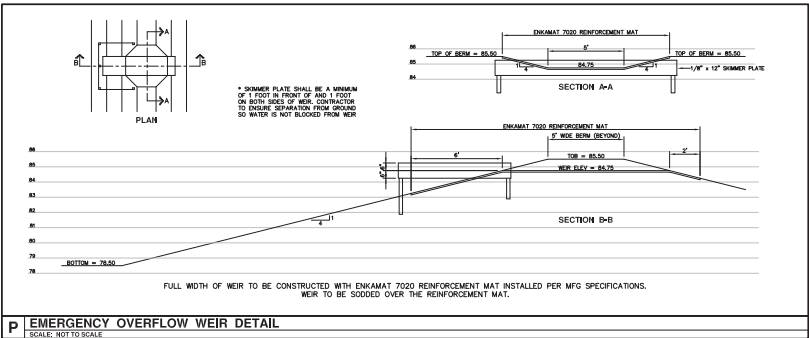
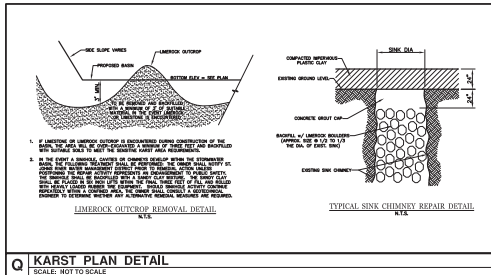
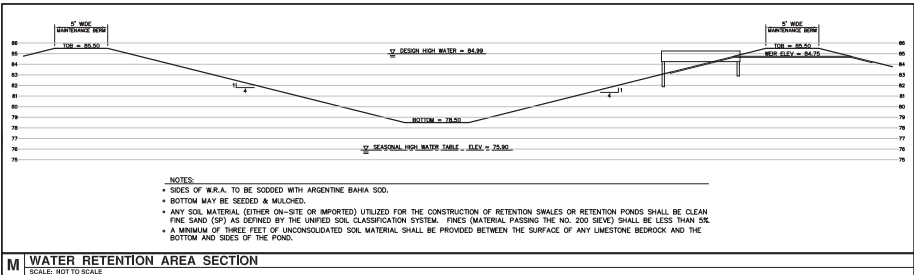
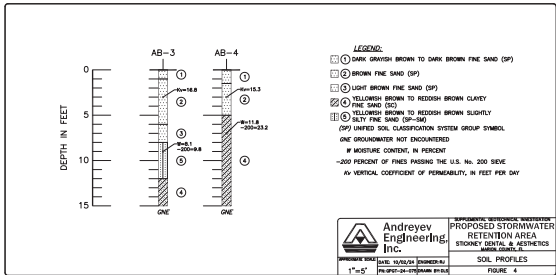
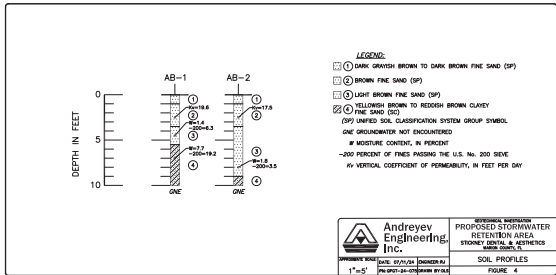
UTILITY PLAN
MAJOR SITE PLAN

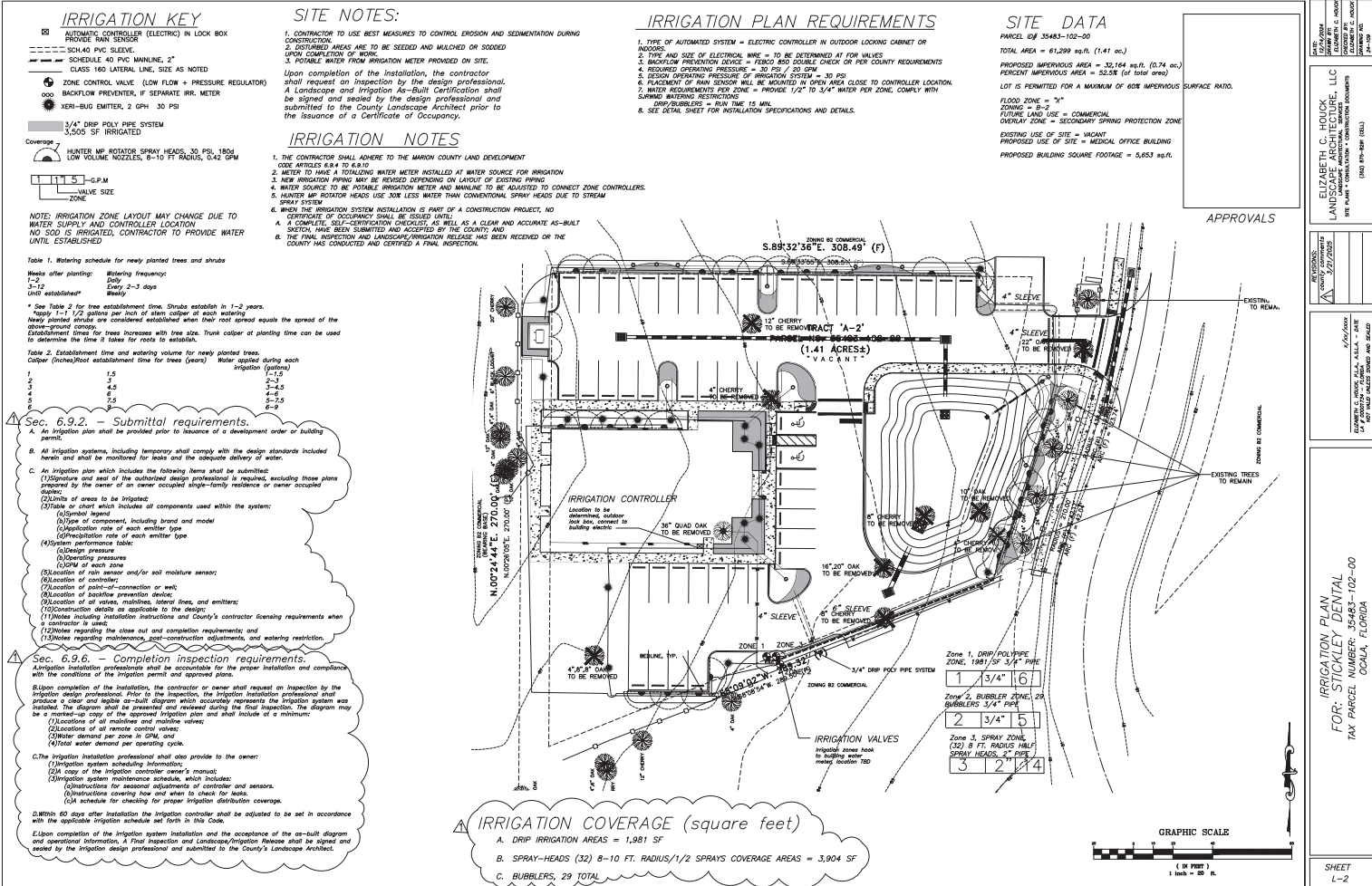
STICKNEY DENTAL
MARION COUNTY
FLORIDA

STICKNEY DENTAL
MARION COUNTY
FLORIDA

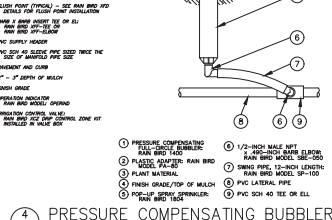
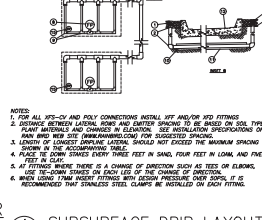
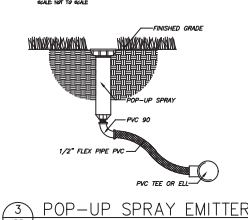
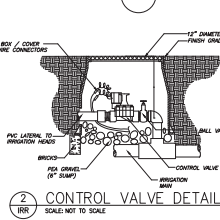
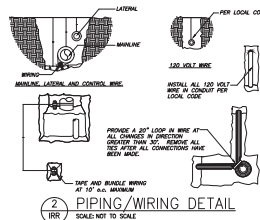
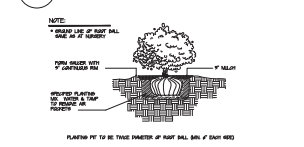
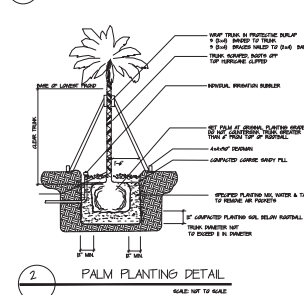
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MARION COUNTY
FLORIDA



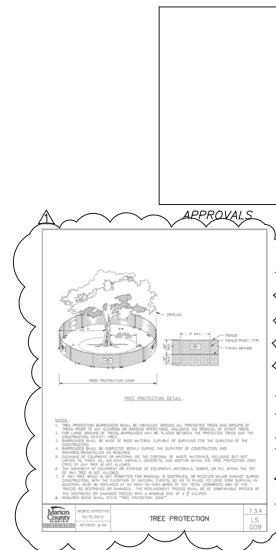




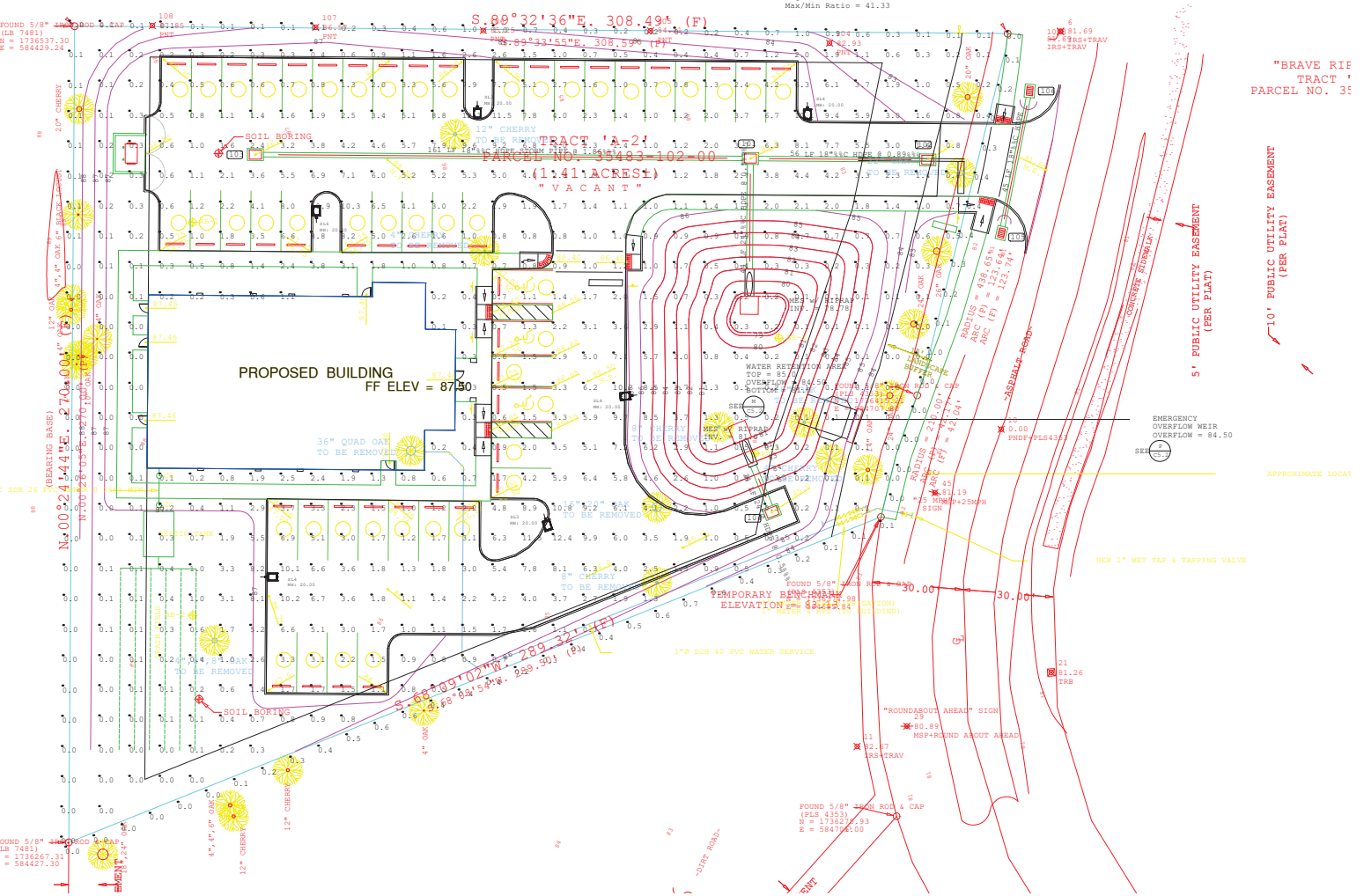
1. This schematic irrigation plan serves primarily as a guide. The Contractor shall be entirely responsible for proper coverage and operation of the system. The Contractor shall be responsible for making any adjustments to the system to compensate for changes from the plan as necessary to adjust for actual site conditions.
2. The Contractor shall be responsible for providing all labor, materials, and equipment for the complete installation and for meeting all performance requirements outlined herein.
3. All work shall be installed in accordance with the regulations of the local, state, and federal governments, and all applicable codes, specifications, and impact fees required shall be meter water required.
4. The water sources shall be meter water. Design data shall be verified by the Contractor prior to installation.
5. A rain sensor device, Mini-IRL™, or approved equal, shall be installed for each zone and be properly installed.
6. All remote control valves, gate valves, ball valves, hose bibs and wire splices shall be installed in a suitable AEMT (1" pipe) valve box of proper size as determined by the local authority having jurisdiction. The depth of the 1" of cover. Valve boxes shall be set flush and sloped with the surrounding ground.
7. All PVC pipe in the system less than 2" O.D. except risers, shall be Class 150 PS Polyvinyl Chloride solvent weld pipe conforming to the ASTM-D2466, Type 1, requirements, NSF approved.
8. All PVC pipe in the system greater or equal to 2" O.D. and fittings shall be Schedule 40, Type 1, NSF approved such including but not limited to:
 - a. All wiring, if required, shall be U.S. ULF wiring. A separate power wire shall be installed for each zone. All wiring shall be installed in a suitable AEMT (1" pipe) and be installed in metal wire race. All wiring shall be installed in a suitable AEMT (1" pipe) and be installed in metal wire race. All wiring shall be installed in a suitable AEMT (1" pipe) and be installed in metal wire race. All wiring shall be installed in a suitable AEMT (1" pipe) and be installed in metal wire race.
9. Provide pressure compensating devices as necessary to reduce misting.
10. Verify the presence of all sleeving before commencing work. Where sleeving must pass under existing concrete or pavement, it shall be jacked or jelled under the existing concrete or pavement. If the sleeving is to be installed, permission will be given by the U.S. ULF to cut paving. If this is necessary, all work shall be done in accordance with the specifications. The existing shall be installed under this section of the specifications.
11. All PVC piping and wiring shall be installed in the trenches with a minimum trench depth of 24" except where specific permission is obtained from the Landscape Architect and/or Owner for less trench depth. Where necessary for reasons necessary because of landscaping, cover pipe shall be as deep as required.
12. All flex pipe shall be buried to a depth of at least 4" (or covered with 3" of mulch) except where the tubing daylight over newly planted rootstock.
13. All emitters and food bubblers shall be installed about the trunk/crown and rootstock of the plant.
14. The Contractor shall warrant the installation workmanship for a period of one year from date of job completion and retolence release. The Contractor shall further see to the fulfillment of all manufacturer's warranties and shall be responsible for any and all reasonable and probable actual cost from the original showing all dimensioned system components shall be required for final job.



1. All plants shall be Florida No. 1 or better, as outlined under Grades and Standards for Nursery Plants, Division of Plant Industries, State of Florida, latest edition.
2. All work shall be performed in accordance with standard and accepted nursery practices in a workmanlike manner.
3. The Landscape Contractor shall be responsible for finish grading all areas of the site. Root balls will be within 2' of finish grade. The Landscape Contractor shall be responsible for any grade disturbed by his work.
4. The Landscape Contractor shall be responsible for the thorough removal of existing weeds and grass in the areas to be planted, including application(s) of appropriate herbicides before and after plant installation.
5. Soil used for planting shall consist of two parts of the existing soil and one part domestic peat moss (or sandy fill in heavy soils), mixed with two lbs. fertilizer per cubic yard. Fertilizer shall be SLOW RELEASE for new plantings.
6. Terra-Sorb, or approved equal, shall be incorporated into the planting soil at all trees in sandy soils only at the following rates:
 a. Hand potted containers = one (3 oz.) Handy Pac
 30 gallon containers = two (3 oz.) Handy Pacs
 Up to 3" caliper = one (3 oz.) Handy Pac
 4" to 5" caliper = two (3 oz.) Handy Pacs
 Broadcast 1/2 throughout the planting pit; mix 1/2 with backfill.
7. All plant beds shall be top-dressed with 3" of pine bark nuggets or pine straw.
8. The Landscape Architect reserves the right to field locate or review flagged locations of any or all plant material.
9. All balled and burlapped trees shall be hardened-off at the supplier's for a minimum of 30 days prior to shipping. All suppliers must be approved by the Landscape Architect prior to delivery and installation of the trees; any tree which shows signs of stress shall be replaced immediately at no charge to the Owner.
10. No substitutions shall be permitted without prior approval from the Landscape Architect.
11. Warranty (from time of job completion and retainage release):
 Trees and shrubs = 1 year
12. Irrigation System to include backflow device and to be designed at 100% coverage using water supply. Rainsoaker to be installed at controller pursuant to S.C. Chapter 373.

[illegible]

Calculation Summary								Parking Lot
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min	
Property Line	ILLUMINANCE	Fc	0.22	1.0	0.0	N.A.	N.A.	ILLUMINANCE (Fc) Average = 3.52
Site	ILLUMINANCE	Fc	2.13	12.4	0.0	N.A.	N.A.	
Parking Lot	ILLUMINANCE	Fc	3.52	12.4	0.3	11.73	41.33	

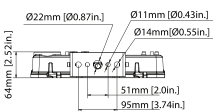
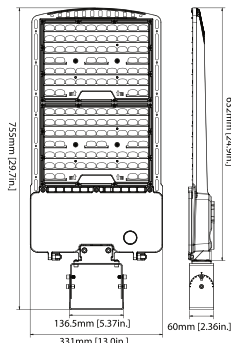
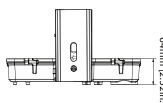
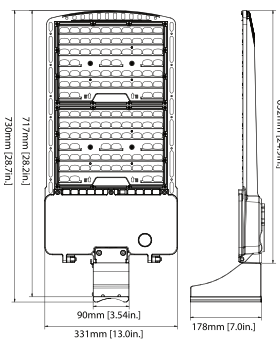
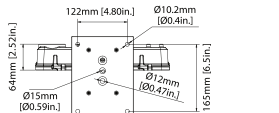
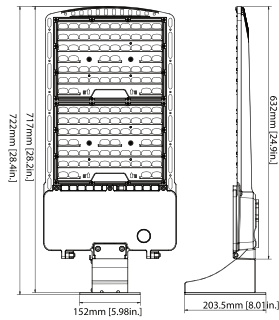
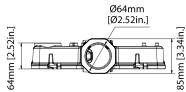
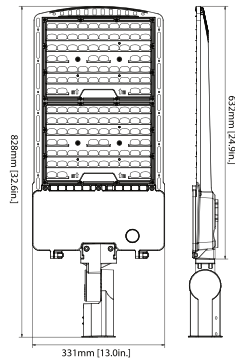




MOUNTING OPTIONS



EASY 3 COLORS
SELECTOR
3500K • 4000K • 5000K



FEATURES

OAL-304-LED is easy to install and operate and has an instant start with zero flickering and humming. Choose to be eco-friendly with this fixture that consists of no mercury and is energy saving with a long lifespan. The soft and uniform light it emits has no UV or IR and is great for outdoor applications such as sports fields, stadiums, and gymnasiums as well as warehouses and transport stations.

LUMENS	20000L/28000L/36000/42000
CCT	30K/40K/50K
CRI	80+
VOLTAGE	120-277 VAC
MOUNTING	Arm, Slipfitter, Wall, Trunnion, Pole
DISTRIBUTION	Type II, Type III, Type IV, Type V
EMERGENCY	O-EMG-8W
WORKING TEMPERATURE	-40°C (-40°F) to 50°C (122°F)
SURGE PROTECTION	6kV
EPA RATING	150W is 1.63 300W is 2.46
LIFETIME	L85 AT 100,000 Hours

NOMINAL LUMENS	DELIVERED LUMENS	WATTAGE
42000	42000	300W
36000	36000	240W
28000	28000	180W
20000	20000	120W

Based on 4000K, 85+ CRI. Actual wattage may vary +/-5%



OPTIC

Available in IES Type II, III, IV, V distributions
Light engines are available in adjustable color temperature (3000K & 4000K & 5000K) configurations.
Scalable Lumen Packages from 10,000 to 21,000 Lumens replaces up to 1000W Metal Halide.
Optics is precisely designed to shape the distribution, maximizing efficiency and application spacing.
The optics can conform to dark sky requirement.

CONSTRUCTION

The rugged, one-piece die-cast aluminum housing features a complete heat sink that optimizes heat dissipation through convection cooling management. Low profile, 3G vibration rated compact design minimizes wind load requirements. Housing is completely sealed against moisture and environmental contaminants.

MOUNTING

Wall mounted for area light delivering uniform, widespread high output.

OPTIONS & ACCESSORIES

Optional photocell (PHC) detects changing light levels and saves energy by turning off during the day
Optional occupancy sensor

DIMMING & DRIVER INFORMATION

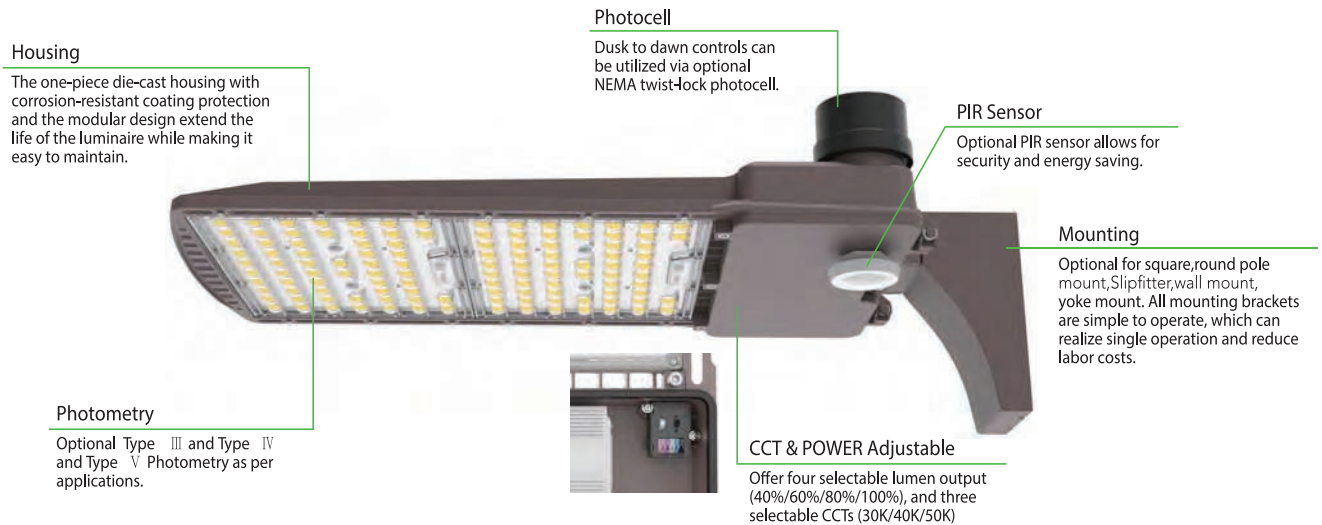
- Universal 120-277 VAC or 347-480 VAC input voltage
- Standard with 0-10V dimming driver
- Power adjustable: 100%, 80%, 60%, 40%.
- THD: ≤20%
- Power Factor: ≥90%

WARRANTY

Five-year warranty for parts and components

LISTINGS

c-UL-us - Listed for Feed Through Wiring.



Example: **OAL-304-LED-20000L/28000L/36000L/42000L-DIM10-MVOLT-30K/40K/50K-T3D-BZ-PM**

SERIES	PERFORMANCE	DIMMING	VOLTAGE	CCT	DISTRIBUTION	ACCESSORIES	MOUNTING	FINISH
OAL-304-LED	20000	*	MVOLT	40K	T4D			
OAL-304-LED	20000L/28000L/36000L/42000L	DIM10 0-10V Dimming	MVOLT - 120-277V 347-480V	30K/40K/50K	T3D - Type III Standard T4D- Type IV T5D-Type V <i>Included in box</i>	PHC - Photocell MS - Motion Sensor SP- 10K Surge Protection T2D- Type II	OAL-204/304-ACC-PM OAL-204/304-ACC-PM-ADJ OAL-204/304-ACC-WM OAL-204/304-ACC-YM OAL-204/304-ACC-SFM PM- Pole Mount WM- Wall Mount SFM- Slipfitter Mount AM- Arm Mount TRM- Trunnion Mount	BZ- Bronze BK- Black WH- White

OAL-304-LED									
SETTING	SYSTEM WATTS	DIST. TYPE	CRI	3000K		4000K		5000K	
				LUMENS	LPW	LUMENS	LPW	LUMENS	LPW
100%	300 W	3	70	41000 lm	137 lm/W	45000lm	150 lm/W	42000 lm	140 lm/W
80%	240 W	3	70	35000 lm	146 lm/W	38500lm	160 lm/W	36000 lm	150 lm/W
60%	180 W	3	70	28000 lm	156 lm/W	30000lm	167 lm/W	28500 lm	158 lm/W
40%	120 W	3	70	19200 lm	160 lm/W	21500lm	179 lm/W	20000 lm	167 lm/W

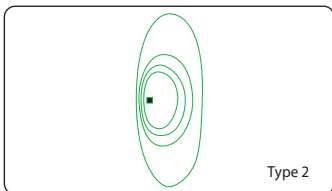
BUG RATING

SYSTEM WATTS	DIST. TYPE	B	U	G
300W	2	5	0	4
	3	4	0	4
	4	4	0	4
	5	5	0	4

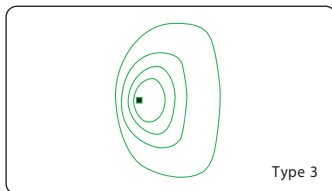
EPA OF AREA LIGHT

Item	1	2 @90°	2 @120°	2@180°	3 @90°	3 @120°	4 @90°
100W/140W/180W	0.3632	0.6849	0.8861	0.7264	1.0481	1.2078	1.0481
250W/300W/400W	0.4758	0.8091	1.059	0.9516	1.2849	1.3923	1.2849

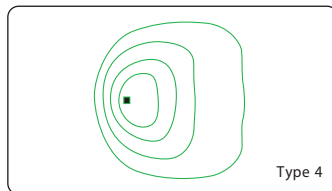
PHOTOMETRICS



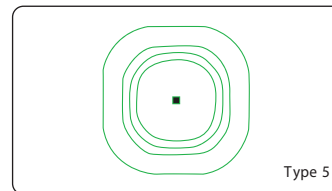
Type 2 optics are well-suited for scenarios requiring luminaires to be spaced at greater distances along a road or pathway. The light distribution pattern is designed for elongated areas, enabling increased pole spacing without compromising lighting quality.



Type 3 optics generate an asymmetrical pattern, directing the majority of light forward and evenly on both sides of the luminaire. When arranged in a back-to-back configuration, it forms a rectangular pattern that can extend the spacing between poles.



Type 4 is ideal for situations where the primary need is forward-directed light with minimal backlight. Common installations involve perimeter poles.



Type 5 optics create a symmetrical square distribution pattern, evenly distributing light on all sides of the luminaire. Type 5 luminaires are versatile and suitable for a wide range of area lighting applications.

MOUNTING

- Standard versatile mounting arm accommodates multiple drilling patterns as well as square and round poles
- Optional for cast aluminum slipfitter mounting adapter.

Mounting Options



Pole Mount

(4" and 5" Square and Round poles)
Standard versatile mounting arm is simple to install and can be used with existing poles for retrofit installations.



Slipfitter Mount

An optional cast aluminum mast arm adapter secures fixture head to nominal 2-3/8" O.D. horizontal steel tenon arm.



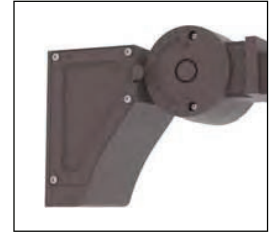
Wall Mount

Wall Mount is easy to install for direct wall mounting with 1/2" conduit wiring or standard J-box mounting



Yoke Mount

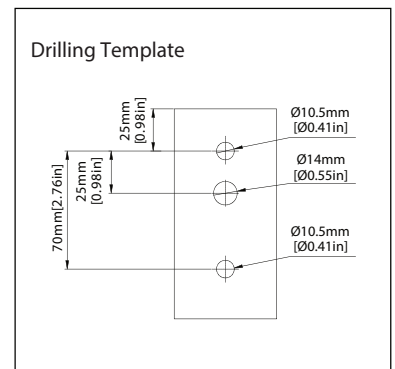
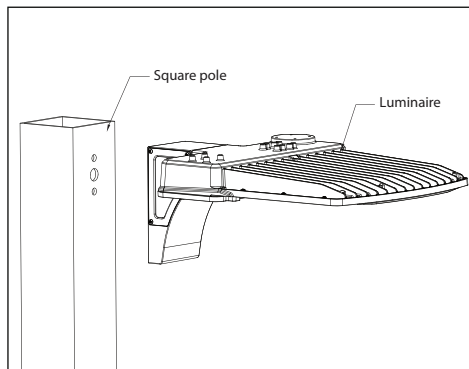
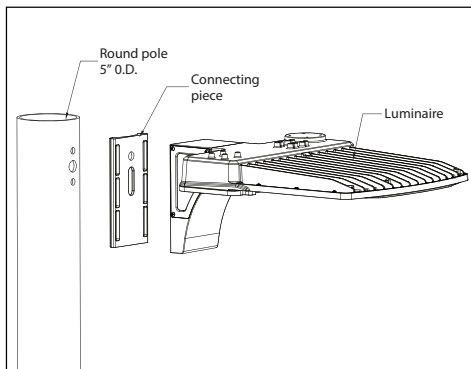
Die-cast aluminum trunnion is easily adapted to many surfaces and allows easy fixture aiming angles.



Adjustable Arm Mount

Standard versatile mounting arm is simple to install and can be used with existing poles for retrofit installations.

Mounting Dimensions



Note : CCT adjustable(3000K/4000K/5000K) and power adjustable(100%, 80%, 60%, 40%).

ACCESSORIES(Optional)

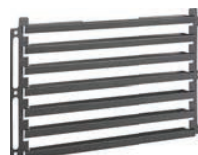
OAL series features a backlight control which provides reduced pixilation and increased visual comfort without compromising performance.
External Glare Shield: sold separately or as an accessory.



OAL-304-ACC-GLARE SHIELD
EXTERNAL GLARE SHIELD



OAL - 304-ACC-GLARE
FULL VISOR External Glare Full Visor



Back Light Control Shield
OAL-204/304-ACC-BLCS
need 2 pcs

ADDITIONAL MOUNTING ACCESSORIES

POLE BRACKET • For mounting one fixture on an existing pole			
	<p>4" Square Pole Mount with 2-3/8" O.D. Tenon No. 4SQ-SP-D Finish: Dark Bronze USE: For use with square, non-tapered steel and aluminum poles. Furnished with four 5/16" hex head stainless-steel bolts. Vertical tenon measures 2-3/8" O.D., and is made of steel tubing. Fixtures mounted to this bracket can be adjusted both vertically and horizontally.</p>		<p>4" Round Pole Mount with 2-3/8" O.D. Tenon No. 4RQ-SP-D Finish: Dark Bronze USE: For use with Round, non-tapered steel and aluminum poles. Furnished with three 3/8" hex head stainless-steel bolts. Vertical tenon measures 2-3/8" O.D., and is made of steel tubing. Fixtures mounted to this bracket can be adjusted both vertically and horizontally.</p>
	<p>5" Square Pole Mount with 2-3/8" O.D. Tenon No. 5SQ-SP-D Finish: Dark Bronze USE: For use with square, non-tapered steel and aluminum poles. Furnished with four 5/16" hex head stainless-steel bolts. Vertical tenon measures 2-3/8" O.D., and is made of steel tubing. Fixtures mounted to this bracket can be adjusted both vertically and horizontally.</p>		<p>5" Round Pole Mount with 2-3/8" O.D. Tenon No. 5RQ-SP-D Finish: Dark Bronze USE: For use with Round, non-tapered steel and aluminum poles. Furnished with three 3/8" hex head stainless-steel bolts. Vertical tenon measures 2-3/8" O.D., and is made of steel tubing. Fixtures mounted to this bracket can be adjusted both vertically and horizontally.</p>
	<p>Pole Bracket Accessories - Angle-Adjustment Adapter No. 5QA-ALDA Finish: Dark Bronze USE: Durable brackets are engineered to provide versatile mounting options. These arms are made from rugged die-cast aluminum. They allow optimal positioning of the light fixture to maximize the lighting effectiveness vertically and horizontally.</p>		<p>Pole Bracket accessories - Tenon & Yoke Adaptor No. 5P-TR-D Finish: Dark Bronze USE: The 2-3/8" OD Tenon Mount Adaptor for Yoke Fixtures is designed to mount Elite light fixtures that are equipped with a yoke mount onto a 2-3/8" OD tenon. It may be utilized with the Elite Flood Light Series of light fixtures.</p>
	<p>Horizontal Wall or Square or Round pole mount with 2-3/8" Tenon Bracket No. 5Q/R-SP-D Finish: Dark Bronze USE: This tenon bracket can be installed onto a wall, square pole, round pole. Provides wiring access and built-in 2-3/8" O.D. tenon to mount a fixture with our adjustable slipfitter. Suggested 3/8" diameter bolts for mounting.</p>		
WALL BRACKET • Attaches to any flat surface • Provides wiring access		Mid-Pole tenon Bracket	
	<p>90° Wall Mount Bracket with 2-3/8" O.D. Tenon No. WM-SP-D Finish: Dark Bronze USE: The 90° wall mount bracket with 2-3/8" tenon attaches an Elite floodlight to almost any surface: wall, roof, or wood pole. Provides wiring access and built-in 2-3/8" O.D. tenon to mount a fixture with our adjustable slipfitter. Suggested 3/8" diameter bolts for mounting. Mounting holes are spaced 3-1/4" apart.</p>		<p>2-3/8" OD Horizontal Tenon Mid-Pole Bracket No. SQ-SP-D Finish: Dark Bronze USE: 2-3/8" OD Horizontal Tenon Mid-Pole Bracket is designed to mount light fixture that is equipped with an adjustable slipfitter onto a 2-3/8" OD horizontal tenon</p>
Round External Mount Horizontal Tenon • To mount 2 3/4 fixtures on a existing pole			
	<p>Double 90° Horizontal Tenon Adaptor No. R60-SP2-90-D Finish: Dark Bronze USE: The Bracket is designed to mount over 2-3/8" (60mm) O.D. vertical tenon. Two fixtures can be mounted to the Round External Mount Horizontal Tenon and adjusted horizontally</p>		<p>Triple 120° Horizontal Tenon Adaptor No. R60-SP3-120-D Finish: Dark Bronze USE: The Bracket is designed to mount over 2-3/8" (60mm) O.D. vertical tenon. Three fixtures can be mounted to the Round External Mount Horizontal Tenon and adjusted horizontally</p>
	<p>Double 180° Horizontal Tenon Adaptor No. R60-SP2-180-D Finish: Dark Bronze USE: The Bracket is designed to mount over 2-3/8" (60mm) O.D. vertical tenon. Two fixtures can be mounted to the Round External Mount Horizontal Tenon and adjusted horizontally</p>		<p>Quad 90° Horizontal Tenon Adaptor No. R60-SP4-90-D Finish: Dark Bronze USE: The Bracket is designed to mount over 2-3/8" (60mm) O.D. vertical tenon. Four fixtures can be mounted to the Round External Mount Horizontal Tenon and adjusted horizontally</p>
	<p>Triple 90° Horizontal Tenon Adaptor No. R60-SP3-90-D Finish: Dark Bronze USE: The Bracket is designed to mount over 2-3/8" (60mm) O.D. vertical tenon. Three fixtures can be mounted to the Round External Mount Horizontal Tenon and adjusted horizontally</p>		

OAL-304-LED-20000L-28000L-36000L-42000L-DIM10-MVOLT-30K-40K-50K-T2D-BZ

TEST NO.: **EL11302360**

INPUT WATTS: **294.3**

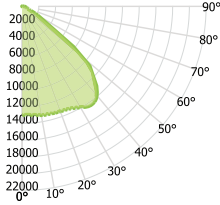
LUMENS: **48501**

EFFICACY: **165**

BEAM ANGLE: **66**

SPACING CRITERIA: **1.63**

CANDELA DISTRIBUTION



CANDELA TABLE

	0°	90°
0°	12977	12977
10°	13200	13424
20°	13345	14450
30°	13924	15246
40°	13871	15923
50°	9687	16627
60°	2048	17728
70°	660	12199
80°	350	3785
90°	0	0

LUMINANCE (cd/sq.m)

	0.00°	90.00°
0.00°	1216731	1216731
45.00°	1629421	2157794
55.00°	762963	2801121
65.00°	204356	3621923
75.00°	176451	3729819
85.00°	224950	618823

LUMENS PER ZONE

ZONE	LUMENS
0° - 10°	1243
10° - 20°	3702
20° - 30°	6111
30° - 40°	8282
40° - 50°	9612
50° - 60°	9387
60° - 70°	6853
70° - 80°	2832
80° - 90°	479

ZONAL LUMEN SUMMARY

ZONE	UMENS	% LUMINAIRE
0° - 20°	4946	10%
0° - 30°	11056	23%
0° - 40°	19339	40%
0° - 60°	38337	79%
0° - 80°	48022	99%
0° - 90°	48501	100%

CONE OF LIGHT

MOUNTING HEIGHT	FC AT BEAM CENTER	BEAM DIA. 0°-180°	BEAM DIA. 90°-270°
6.0 ft	360.5 fc	8.7 ft	42.0 ft
8.0 ft	202.8 fc	11.6 ft	56.0 ft
10.0 ft	129.8 fc	14.6 ft	70.0 ft
12.0 ft	90.1 fc	17.5 ft	84.0 ft
14.0 ft	66.2 fc	20.4 ft	98.0 ft
16.0 ft	50.7 fc	23.3 ft	112.0 ft
18.0 ft	40.1 fc	26.2 ft	126.0 ft
20.0 ft	32.4 fc	29.1 ft	140.0 ft

INDOOR COEFFICIENTS OF UTILIZATION

pf	20%																		0%
pc	80%																		0%
pw	70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0%	
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	
1	109	104	100	96	106	102	98	94	98	94	91	94	91	89	90	88	86	84	
2	99	90	83	77	96	88	82	77	85	79	75	81	77	73	78	75	71	69	
3	89	79	70	64	87	77	69	63	74	67	62	71	65	61	69	64	60	57	
4	81	69	60	53	79	68	59	53	65	58	52	63	56	51	61	55	50	48	
5	74	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43	41	
6	68	55	45	39	66	54	45	39	52	44	38	50	43	38	48	42	37	35	
7	63	49	40	34	61	48	40	34	47	39	33	45	38	33	44	38	33	31	
8	59	45	36	30	57	44	35	30	43	35	29	41	34	29	40	34	29	27	
9	55	41	32	26	53	40	32	26	39	31	26	38	31	26	37	31	26	24	
10	51	37	29	24	50	37	29	24	36	29	24	35	28	23	34	28	23	22	

OAL-304-LED-20000L-28000L-36000L-42000L-DIM10-MVOLT-30K-40K-50K-T3D-BZ

TEST NO.: **EL11302360**

INPUT WATTS: **295.2**

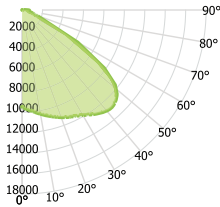
LUMENS: **44812**

EFFICACY: **152**

BEAM ANGLE: **80**

SPACING CRITERIA: **1.93**

CANDELA DISTRIBUTION



CANDELA TABLE

	0°	90°
0°	9469	9469
10°	10304	9611
20°	11152	10222
30°	11868	11052
40°	12849	11721
50°	12004	12293
60°	6008	14051
70°	1283	12534
80°	625	4241
90°	0	0

LUMINANCE (cd/sq.m)

	0.00°	90.00°
0.00°	887856	887856
45.00°	1696460	1568860
55.00°	1565319	2130595
65.00°	612328	3253213
75.00°	297144	3297346
85.00°	737526	882781

LUMENS PER ZONE

ZONE	LUMENS
0° - 10°	912
10° - 20°	2793
20° - 30°	4804
30° - 40°	6725
40° - 50°	8123
50° - 60°	8693
60° - 70°	7604
70° - 80°	4320
80° - 90°	839

ZONAL LUMEN SUMMARY

ZONE	UMENS	% LUMINAIRE
0° - 20°	3705	8%
0° - 30°	8509	19%
0° - 40°	15234	34%
0° - 60°	32049	72%
0° - 80°	43973	98%
0° - 90°	44812	100%

CONE OF LIGHT

MOUNTING HEIGHT	FC AT BEAM CENTER	BEAM DIA. 0°-180°	BEAM DIA. 90°-270°
6.0 ft	263.0 fc	11.7 ft	53.2 ft
8.0 ft	148.0 fc	15.7 ft	70.9 ft
10.0 ft	94.7 fc	19.6 ft	88.6 ft
12.0 ft	65.8 fc	23.5 ft	106.3 ft
14.0 ft	48.3 fc	27.4 ft	124.0 ft
16.0 ft	37.0 fc	31.3 ft	141.8 ft
18.0 ft	29.2 fc	35.2 ft	159.5 ft
20.0 ft	23.7 fc	39.1 ft	177.2 ft

INDOOR COEFFICIENTS OF UTILIZATION

pf	20%																		0%		
pc	80%																		0%		
pw	70%				70%				50%				30%				10%				0%
	70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0%			
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100			
1	107	102	97	93	105	100	96	92	96	92	89	92	89	86	88	86	83	81			
2	96	87	80	73	94	85	78	72	82	76	71	78	73	69	75	71	67	65			
3	87	75	66	59	84	73	65	58	70	63	57	68	61	56	65	60	55	53			
4	79	65	56	48	76	64	55	48	61	54	47	59	52	47	57	51	46	44			
5	72	58	48	41	69	56	47	40	54	46	40	52	45	39	50	44	39	37			
6	66	51	42	35	64	50	41	34	48	40	34	47	39	34	45	38	33	31			
7	61	46	37	30	59	45	36	30	44	35	29	42	35	29	41	34	29	27			
8	56	42	32	26	54	41	32	26	39	32	26	38	31	26	37	30	25	23			
9	52	38	29	23	51	37	29	23	36	28	23	35	28	23	34	27	23	21			
10	49	35	26	21	47	34	26	21	33	26	21	32	25	20	31	25	20	18			

OAL-304-LED-20000L-28000L-36000L-42000L-DIM10-MVOLT-30K-40K-50K-T4D-BZ

TEST NO.: **EL11302360**

INPUT WATTS: **300.1**

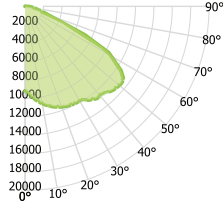
LUMENS: **45098**

EFFICACY: **150**

BEAM ANGLE: **63**

SPACING CRITERIA: **2.00**

CANDELA DISTRIBUTION



CANDELA TABLE

	0°	90°
0°	9196	9196
10°	10704	9386
20°	11609	9979
30°	11875	10516
40°	12643	11161
50°	13347	11842
60°	10890	12868
70°	3231	8653
80°	948	1083
90°	0	0

LUMINANCE (cd/sq.m)

	0.00°	90.00°
0°	0.00°	0
10°	0	0
20°	55.00°	0
30°	65.00°	0
40°	75.00°	0
50°	85.00°	0
60°	0	0
70°	0	0
80°	0	0
90°	0	0

LUMENS PER ZONE

ZONE	LUMENS
0° - 10°	896
10° - 20°	2812
20° - 30°	4787
30° - 40°	6565
40° - 50°	7939
50° - 60°	8938
60° - 70°	8219
70° - 80°	4236
80° - 90°	705

ZONAL LUMEN SUMMARY

ZONE	UMENS	% LUMINAIRE
0° - 20°	3709	8%
0° - 30°	8496	19%
0° - 40°	15061	33%
0° - 60°	31938	71%
0° - 80°	44393	98%
0° - 90°	45098	100%

CONE OF LIGHT

MOUNTING HEIGHT	FC AT BEAM CENTER	BEAM DIA. 0°-180°	BEAM DIA. 90°-270°
6.0 ft	255.4 fc	11.6 ft	31.1 ft
8.0 ft	143.7 fc	15.5 ft	41.5 ft
10.0 ft	92.0 fc	19.4 ft	51.9 ft
12.0 ft	63.9 fc	23.2 ft	62.3 ft
14.0 ft	46.9 fc	27.1 ft	72.7 ft
16.0 ft	35.9 fc	31.0 ft	83.0 ft
18.0 ft	28.4 fc	34.8 ft	93.4 ft
20.0 ft	23.0 fc	38.7 ft	103.8 ft

INDOOR COEFFICIENTS OF UTILIZATION

pf	20%																		0%												
pc	80%						70%						50%						30%						10%						0%
pw	70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0%							
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	102	100	100	100	100	100	100	0%						
1	108	102	97	93	105	100	96	92	96	92	89	92	89	86	88	86	83	81	81	81	81	81	81	81	0%						
2	96	87	80	73	94	85	78	72	82	76	70	78	73	69	75	71	67	65	65	65	65	65	65	65	0%						
3	87	75	66	59	84	73	65	58	70	63	57	67	61	56	65	59	55	53	53	53	53	53	53	53	0%						
4	78	65	55	48	76	64	55	48	61	53	47	59	52	46	56	51	46	43	43	43	43	43	43	43	0%						
5	71	57	47	40	69	56	47	40	54	46	39	52	45	39	50	44	39	36	36	36	36	36	36	36	0%						
6	65	51	41	34	63	50	41	34	48	40	34	46	39	33	45	38	33	31	31	31	31	31	31	31	0%						
7	60	46	36	30	58	45	36	29	43	35	29	42	34	29	40	34	29	27	27	27	27	27	27	27	0%						
8	56	41	32	26	54	41	32	26	39	31	26	38	31	25	37	30	25	23	23	23	23	23	23	23	0%						
9	52	38	29	23	50	37	29	23	36	28	23	35	28	22	34	27	22	20	20	20	20	20	20	20	0%						
10	49	34	26	20	47	34	26	20	33	25	20	32	25	20	31	25	20	18	18	18	18	18	18	18	0%						

OAL-304-LED-20000L-28000L-36000L-42000L-DIM10-MVOLT-30K-40K-50K-T5D-BZ

TEST NO.: **EL11302360**

INPUT WATTS: **298.8**

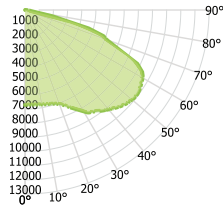
LUMENS: **46013**

EFFICACY: **154**

BEAM ANGLE: **140**

SPACING CRITERIA: **2.00 x 2.00**

CANDELA DISTRIBUTION



CANDELA TABLE

	0°	90°
0°	6706	6706
10°	6770	6810
20°	7072	7119
30°	8298	7618
40°	9167	8756
50°	9853	10151
60°	9569	10240
70°	6099	8446
80°	430	399
90°	0	0

LUMINANCE (cd/sq.m)

	0.00°	90.00°
0°	0.00°	0
10°	0	0
20°	55.00°	0
30°	65.00°	0
40°	75.00°	0
50°	85.00°	0
60°	0	0
70°	0	0
80°	0	0
90°	0	0

LUMENS PER ZONE

ZONE	LUMENS
0° - 10°	650
10° - 20°	2006
20° - 30°	3583
30° - 40°	5506
40° - 50°	7573
50° - 60°	9448
60° - 70°	10173
70° - 80°	6540
80° - 90°	535

ZONAL LUMEN SUMMARY

ZONE	UMENS	% LUMINAIRE
0° - 20°	2656	6%
0° - 30°	6238	14%
0° - 40°	11744	26%
0° - 60°	28765	63%
0° - 80°	45478	99%
0° - 90°	46013	100%

CONE OF LIGHT

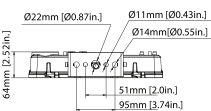
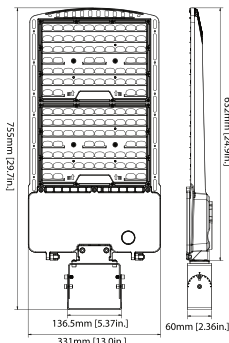
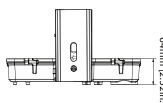
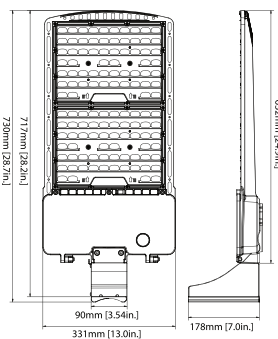
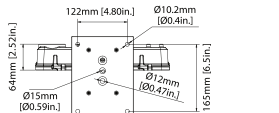
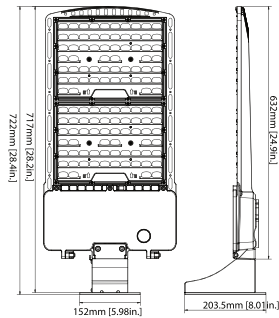
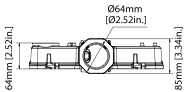
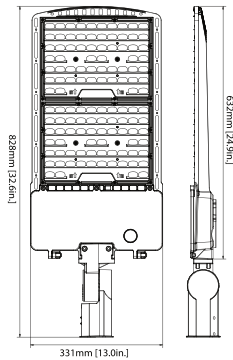
MOUNTING HEIGHT	FC AT BEAM CENTER	BEAM DIA. 0°-180°	BEAM DIA. 90°-270°
6.0 ft	186.3 fc	33.2 ft	36.5 ft
8.0 ft	104.8 fc	44.2 ft	48.7 ft
10.0 ft	67.1 fc	55.3 ft	60.9 ft
12.0 ft	46.6 fc	66.3 ft	73.1 ft
14.0 ft	34.2 fc	77.4 ft	85.2 ft
16.0 ft	26.2 fc	88.4 ft	97.4 ft
18.0 ft	20.7 fc	99.5 ft	109.6 ft
20.0 ft	16.8 fc	110.5 ft	121.8 ft

INDOOR COEFFICIENTS OF UTILIZATION

pf	20%																		0%	
pc	80%						70%						30%						10%	0%
pw	70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0%		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100		
1	106	101	95	91	103	98	93	89	94	90	86	90	87	84	86	84	81	79		
2	94	84	76	69	91	82	74	68	78	72	66	75	69	65	72	67	63	61		
3	84	71	61	53	81	69	60	53	66	58	52	63	56	51	61	55	50	47		
4	75	61	51	43	73	60	50	42	57	48	42	54	47	41	52	46	40	38		
5	68	53	43	35	66	52	42	35	50	41	34	48	40	34	46	39	33	31		
6	62	47	37	29	60	46	36	29	44	35	29	42	34	28	40	33	28	26		
7	57	42	32	25	55	41	31	25	39	31	24	38	30	24	36	29	24	22		
8	53	38	28	21	51	37	28	21	35	27	21	34	26	21	33	26	21	19		
9	49	34	25	19	47	33	25	19	32	24	18	31	24	18	30	23	18	16		
10	46	31	22	17	44	31	22	16	29	22	16	28	21	16	28	21	16	14		


MOUNTING OPTIONS


EASY 3 COLORS
SELECTOR
 3500K • 4000K • 5000K


FEATURES

OAL-304-LED is easy to install and operate and has an instant start with zero flickering and humming. Choose to be eco-friendly with this fixture that consists of no mercury and is energy saving with a long lifespan. The soft and uniform light it emits has no UV or IR and is great for outdoor applications such as sports fields, stadiums, and gymnasiums as well as warehouses and transport stations.

LUMENS	20000L/28000L/36000/42000
CCT	30K/40K/50K
CRI	80+
VOLTAGE	120-277 VAC
MOUNTING	Arm, Slipfitter, Wall, Trunnion, Pole
DISTRIBUTION	Type II, Type III, Type IV, Type V
EMERGENCY	O-EMG-8W
WORKING TEMPERATURE	-40°C (-40°F) to 50°C (122°F)
SURGE PROTECTION	6kV
EPA RATING	150W is 1.63 300W is 2.46
LIFETIME	L85 AT 100,000 Hours

NOMINAL LUMENS	DELIVERED LUMENS	WATTAGE
42000	42000	300W
36000	36000	240W
28000	28000	180W
20000	20000	120W

Based on 4000K, 85+ CRI. Actual wattage may vary +/-5%



OPTIC

Available in IES Type II, III, IV, V distributions
Light engines are available in adjustable color temperature (3000K & 4000K & 5000K) configurations.
Scalable Lumen Packages from 10,000 to 21,000 Lumens replaces up to 1000W Metal Halide.
Optics is precisely designed to shape the distribution, maximizing efficiency and application spacing.
The optics can conform to dark sky requirement.

CONSTRUCTION

The rugged, one-piece die-cast aluminum housing features a complete heat sink that optimizes heat dissipation through convection cooling management. Low profile, 3G vibration rated compact design minimizes wind load requirements. Housing is completely sealed against moisture and environmental contaminants.

MOUNTING

Wall mounted for area light delivering uniform, widespread high output.

OPTIONS & ACCESSORIES

Optional photocell (PHC) detects changing light levels and saves energy by turning off during the day
Optional occupancy sensor

DIMMING & DRIVER INFORMATION

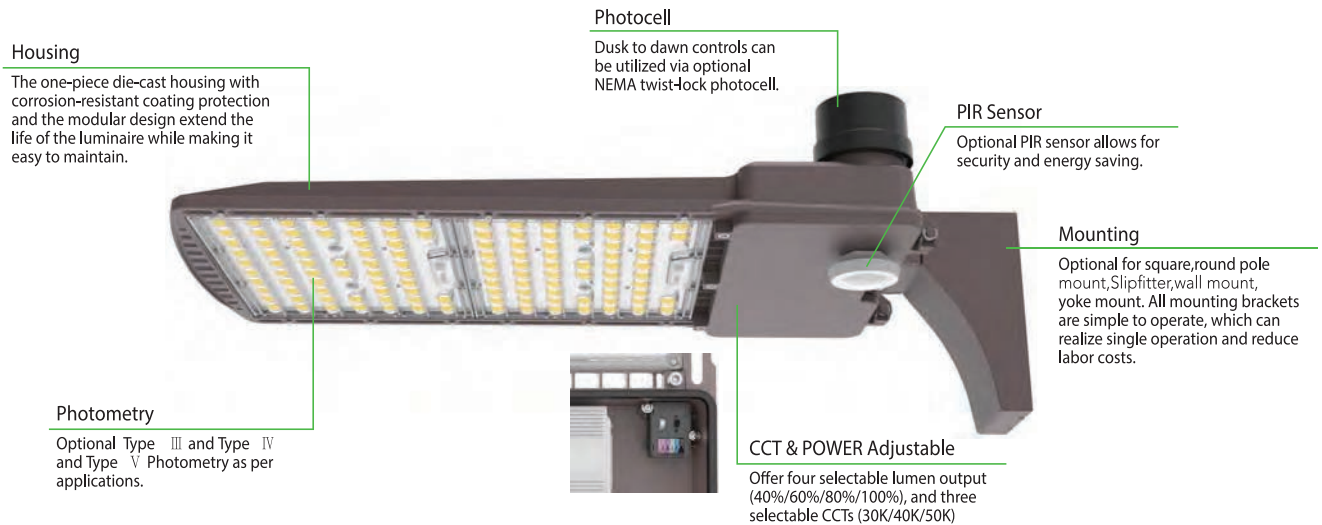
- Universal 120-277 VAC or 347-480 VAC input voltage
- Standard with 0-10V dimming driver
- Power adjustable: 100%, 80%, 60%, 40%.
- THD: ≤20%
- Power Factor: ≥90%

WARRANTY

Five-year warranty for parts and components

LISTINGS

c-UL-us - Listed for Feed Through Wiring.



Example: **OAL-304-LED-20000L/28000L/36000L/42000L-DIM10-MVOLT-30K/40K/50K-T3D-BZ-PM**





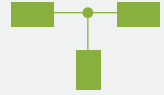


SERIES	PERFORMANCE	DIMMING	VOLTAGE	CCT	DISTRIBUTION	ACCESSORIES	MOUNTING	FINISH
OAL-304-LED	20000L/28000L/36000L/42000L	DIM10 0-10V Dimming	MVOLT - 120-277V 347-480V	30K/40K/50K	T3D - Type III Standard T4D- Type IV T5D-Type V <i>Included in box</i>	PHC - Photocell MS - Motion Sensor SP- 10K Surge Protection T2D- Type II	OAL-204/304-ACC-PM OAL-204/304-ACC-PM-ADJ OAL-204/304-ACC-WM OAL-204/304-ACC-YM OAL-204/304-ACC-SFM PM- Pole Mount WM- Wall Mount SFM- Slipfitter Mount AM- Arm Mount TRM- Trunnion Mount	BZ- Bronze BK- Black WH- White

OAL-304-LED									
SETTING	SYSTEM WATTS	DIST. TYPE	CRI	3000K		4000K		5000K	
				LUMENS	LPW	LUMENS	LPW	LUMENS	LPW
100%	300 W	3	70	41000 lm	137 lm/W	45000lm	150 lm/W	42000 lm	140 lm/W
80%	240 W	3	70	35000 lm	146 lm/W	38500lm	160 lm/W	36000 lm	150 lm/W
60%	180 W	3	70	28000 lm	156 lm/W	30000lm	167 lm/W	28500 lm	158 lm/W
40%	120 W	3	70	19200 lm	160 lm/W	21500lm	179 lm/W	20000 lm	167 lm/W

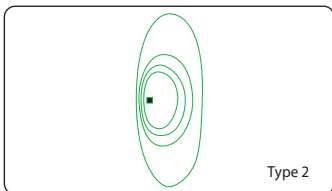
BUG RATING

SYSTEM WATTS	DIST. TYPE	B	U	G
300W	2	5	0	4
	3	4	0	4
	4	4	0	4
	5	5	0	4

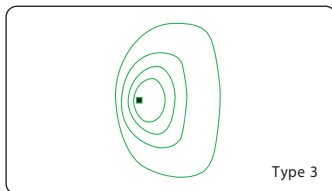
EPA OF AREA LIGHT

Item							
	1	2 @90°	2 @120°	2@180°	3 @90°	3 @120°	4 @90°
100W/140W/180W	0.3632	0.6849	0.8861	0.7264	1.0481	1.2078	1.0481
250W/300W/400W	0.4758	0.8091	1.059	0.9516	1.2849	1.3923	1.2849

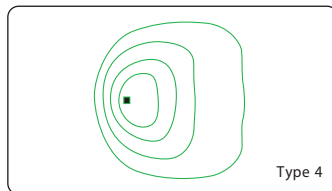
PHOTOMETRICS



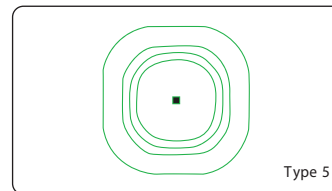
Type 2 optics are well-suited for scenarios requiring luminaires to be spaced at greater distances along a road or pathway. The light distribution pattern is designed for elongated areas, enabling increased pole spacing without compromising lighting quality.



Type 3 optics generate an asymmetrical pattern, directing the majority of light forward and evenly on both sides of the luminaire. When arranged in a back-to-back configuration, it forms a rectangular pattern that can extend the spacing between poles.



Type 4 is ideal for situations where the primary need is forward-directed light with minimal backlight. Common installations involve perimeter poles.



Type 5 optics create a symmetrical square distribution pattern, evenly distributing light on all sides of the luminaire. Type 5 luminaires are versatile and suitable for a wide range of area lighting applications.

MOUNTING

- Standard versatile mounting arm accommodates multiple drilling patterns as well as square and round poles
- Optional for cast aluminum slipfitter mounting adapter.

Mounting Options



Pole Mount

(4" and 5" Square and Round poles)
Standard versatile mounting arm is simple to install and can be used with existing poles for retrofit installations.



Slipfitter Mount

An optional cast aluminum mast arm adapter secures fixture head to nominal 2-3/8" O.D. horizontal steel tenon arm.



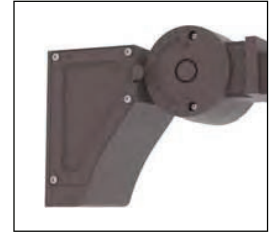
Wall Mount

Wall Mount is easy to install for direct wall mounting with 1/2" conduit wiring or standard J-box mounting



Yoke Mount

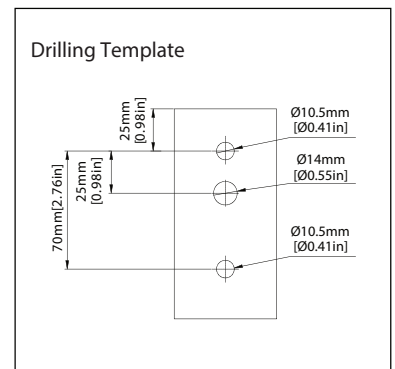
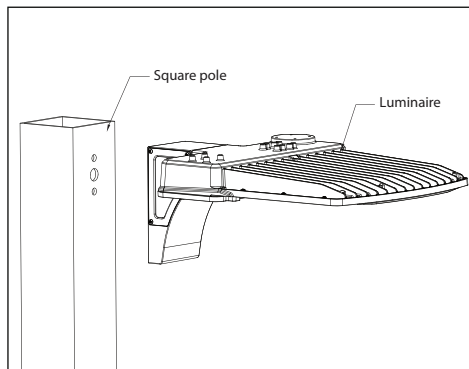
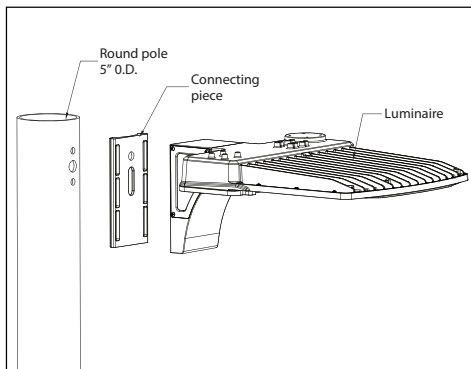
Die-cast aluminum trunnion is easily adapted to many surfaces and allows easy fixture aiming angles.



Adjustable Arm Mount

Standard versatile mounting arm is simple to install and can be used with existing poles for retrofit installations.

Mounting Dimensions



Note : CCT adjustable(3000K/4000K/5000K) and power adjustable(100%, 80%, 60%, 40%).

ACCESSORIES(Optional)

OAL series features a backlight control which provides reduced pixilation and increased visual comfort without compromising performance.
External Glare Shield: sold separately or as an accessory.



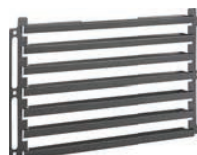
OAL-304-ACC-GLARE SHIELD
EXTERNAL GLARE SHIELD



OAL - 304-ACC-GLARE



FULL VISOR External Glare Full Visor



Back Light Control Shield
OAL-204/304-ACC-BLCS
need 2 pcs

ADDITIONAL MOUNTING ACCESSORIES

POLE BRACKET • For mounting one fixture on an existing pole			
	<p>4" Square Pole Mount with 2-3/8" O.D. Tenon No. 4SQ-SP-D Finish: Dark Bronze USE: For use with square, non-tapered steel and aluminum poles. Furnished with four 5/16" hex head stainless-steel bolts. Vertical tenon measures 2-3/8" O.D., and is made of steel tubing. Fixtures mounted to this bracket can be adjusted both vertically and horizontally.</p>		<p>4" Round Pole Mount with 2-3/8" O.D. Tenon No. 4RQ-SP-D Finish: Dark Bronze USE: For use with Round, non-tapered steel and aluminum poles. Furnished with three 3/8" hex head stainless-steel bolts. Vertical tenon measures 2-3/8" O.D., and is made of steel tubing. Fixtures mounted to this bracket can be adjusted both vertically and horizontally.</p>
	<p>5" Square Pole Mount with 2-3/8" O.D. Tenon No. 5SQ-SP-D Finish: Dark Bronze USE: For use with square, non-tapered steel and aluminum poles. Furnished with four 5/16" hex head stainless-steel bolts. Vertical tenon measures 2-3/8" O.D., and is made of steel tubing. Fixtures mounted to this bracket can be adjusted both vertically and horizontally.</p>		<p>5" Round Pole Mount with 2-3/8" O.D. Tenon No. 5RQ-SP-D Finish: Dark Bronze USE: For use with Round, non-tapered steel and aluminum poles. Furnished with three 3/8" hex head stainless-steel bolts. Vertical tenon measures 2-3/8" O.D., and is made of steel tubing. Fixtures mounted to this bracket can be adjusted both vertically and horizontally.</p>
	<p>Pole Bracket Accessories - Angle-Adjustment Adapter No. 5QA-ALDA Finish: Dark Bronze USE: Durable brackets are engineered to provide versatile mounting options. These arms are made from rugged die-cast aluminum. They allow optimal positioning of the light fixture to maximize the lighting effectiveness vertically and horizontally.</p>		<p>Pole Bracket accessories - Tenon & Yoke Adaptor No. 5P-TR-D Finish: Dark Bronze USE: The 2-3/8" OD Tenon Mount Adaptor for Yoke Fixtures is designed to mount Elite light fixtures that are equipped with a yoke mount onto a 2-3/8" OD tenon. It may be utilized with the Elite Flood Light Series of light fixtures.</p>
	<p>Horizontal Wall or Square or Round pole mount with 2-3/8" Tenon Bracket No. 5Q/R-SP-D Finish: Dark Bronze USE: This tenon bracket can be installed onto a wall, square pole, round pole. Provides wiring access and built-in 2-3/8" O.D. tenon to mount a fixture with our adjustable slipfitter. Suggested 3/8" diameter bolts for mounting.</p>		
WALL BRACKET • Attaches to any flat surface • Provides wiring access		Mid-Pole tenon Bracket	
	<p>90° Wall Mount Bracket with 2-3/8" O.D. Tenon No. WM-SP-D Finish: Dark Bronze USE: The 90° wall mount bracket with 2-3/8" tenon attaches an Elite floodlight to almost any surface: wall, roof, or wood pole. Provides wiring access and built-in 2-3/8" O.D. tenon to mount a fixture with our adjustable slipfitter. Suggested 3-1/4" diameter bolts for mounting. Mounting holes are spaced 3-1/4" apart.</p>		<p>2-3/8" OD Horizontal Tenon Mid-Pole Bracket No. SQ-SP-D Finish: Dark Bronze USE: 2-3/8" OD Horizontal Tenon Mid-Pole Bracket is designed to mount light fixture that is equipped with an adjustable slipfitter onto a 2-3/8" OD horizontal tenon</p>
Round External Mount Horizontal Tenon • To mount 2 3/4 fixtures on a existing pole			
	<p>Double 90° Horizontal Tenon Adaptor No. R60-SP2-90-D Finish: Dark Bronze USE: The Bracket is designed to mount over 2-3/8" (60mm) O.D. vertical tenon. Two fixtures can be mounted to the Round External Mount Horizontal Tenon and adjusted horizontally</p>		<p>Triple 120° Horizontal Tenon Adaptor No. R60-SP3-120-D Finish: Dark Bronze USE: The Bracket is designed to mount over 2-3/8" (60mm) O.D. vertical tenon. Three fixtures can be mounted to the Round External Mount Horizontal Tenon and adjusted horizontally</p>
	<p>Double 180° Horizontal Tenon Adaptor No. R60-SP2-180-D Finish: Dark Bronze USE: The Bracket is designed to mount over 2-3/8" (60mm) O.D. vertical tenon. Two fixtures can be mounted to the Round External Mount Horizontal Tenon and adjusted horizontally</p>		<p>Quad 90° Horizontal Tenon Adaptor No. R60-SP4-90-D Finish: Dark Bronze USE: The Bracket is designed to mount over 2-3/8" (60mm) O.D. vertical tenon. Four fixtures can be mounted to the Round External Mount Horizontal Tenon and adjusted horizontally</p>
	<p>Triple 90° Horizontal Tenon Adaptor No. R60-SP3-90-D Finish: Dark Bronze USE: The Bracket is designed to mount over 2-3/8" (60mm) O.D. vertical tenon. Three fixtures can be mounted to the Round External Mount Horizontal Tenon and adjusted horizontally</p>		

OAL-304-LED-20000L-28000L-36000L-42000L-DIM10-MVOLT-30K-40K-50K-T2D-BZ

TEST NO.: **EL11302360**

INPUT WATTS: **294.3**

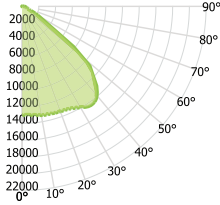
LUMENS: **48501**

EFFICACY: **165**

BEAM ANGLE: **66**

SPACING CRITERIA: **1.63**

CANDELA DISTRIBUTION



CANDELA TABLE

	0°	90°
0°	12977	12977
10°	13200	13424
20°	13345	14450
30°	13924	15246
40°	13871	15923
50°	9687	16627
60°	2048	17728
70°	660	12199
80°	350	3785
90°	0	0

LUMINANCE (cd/sq.m)

	0.00°	90.00°
0.00°	1216731	1216731
45.00°	1629421	2157794
55.00°	762963	2801121
65.00°	204356	3621923
75.00°	176451	3729819
85.00°	224950	618823

LUMENS PER ZONE

ZONE	LUMENS
0° - 10°	1243
10° - 20°	3702
20° - 30°	6111
30° - 40°	8282
40° - 50°	9612
50° - 60°	9387
60° - 70°	6853
70° - 80°	2832
80° - 90°	479

ZONAL LUMEN SUMMARY

ZONE	UMENS	% LUMINAIRE
0° - 20°	4946	10%
0° - 30°	11056	23%
0° - 40°	19339	40%
0° - 60°	38337	79%
0° - 80°	48022	99%
0° - 90°	48501	100%

CONE OF LIGHT

MOUNTING HEIGHT	FC AT BEAM CENTER	BEAM DIA. 0°-180°	BEAM DIA. 90°-270°
6.0 ft	360.5 fc	8.7 ft	42.0 ft
8.0 ft	202.8 fc	11.6 ft	56.0 ft
10.0 ft	129.8 fc	14.6 ft	70.0 ft
12.0 ft	90.1 fc	17.5 ft	84.0 ft
14.0 ft	66.2 fc	20.4 ft	98.0 ft
16.0 ft	50.7 fc	23.3 ft	112.0 ft
18.0 ft	40.1 fc	26.2 ft	126.0 ft
20.0 ft	32.4 fc	29.1 ft	140.0 ft

INDOOR COEFFICIENTS OF UTILIZATION

pf	20%																		0%
pc	80%																		0%
pw	70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0%	
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	
1	109	104	100	96	106	102	98	94	98	94	91	94	91	89	90	88	86	84	
2	99	90	83	77	96	88	82	77	85	79	75	81	77	73	78	75	71	69	
3	89	79	70	64	87	77	69	63	74	67	62	71	65	61	69	64	60	57	
4	81	69	60	53	79	68	59	53	65	58	52	63	56	51	61	55	50	48	
5	74	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43	41	
6	68	55	45	39	66	54	45	39	52	44	38	50	43	38	48	42	37	35	
7	63	49	40	34	61	48	40	34	47	39	33	45	38	33	44	38	33	31	
8	59	45	36	30	57	44	35	30	43	35	29	41	34	29	40	34	29	27	
9	55	41	32	26	53	40	32	26	39	31	26	38	31	26	37	31	26	24	
10	51	37	29	24	50	37	29	24	36	29	24	35	28	23	34	28	23	22	

OAL-304-LED-20000L-28000L-36000L-42000L-DIM10-MVOLT-30K-40K-50K-T3D-BZ

TEST NO.: **EL11302360**

INPUT WATTS: **295.2**

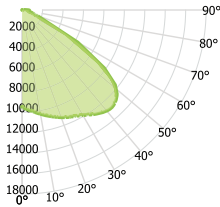
LUMENS: **44812**

EFFICACY: **152**

BEAM ANGLE: **80**

SPACING CRITERIA: **1.93**

CANDELA DISTRIBUTION



CANDELA TABLE

	0°	90°
0°	9469	9469
10°	10304	9611
20°	11152	10222
30°	11868	11052
40°	12849	11721
50°	12004	12293
60°	6008	14051
70°	1283	12534
80°	625	4241
90°	0	0

LUMINANCE (cd/sq.m)

	0.00°	90.00°
0.00°	887856	887856
45.00°	1696460	1568860
55.00°	1565319	2130595
65.00°	612328	3253213
75.00°	297144	3297346
85.00°	737526	882781

LUMENS PER ZONE

ZONE	LUMENS
0° - 10°	912
10° - 20°	2793
20° - 30°	4804
30° - 40°	6725
40° - 50°	8123
50° - 60°	8693
60° - 70°	7604
70° - 80°	4320
80° - 90°	839

ZONAL LUMEN SUMMARY

ZONE	UMENS	% LUMINAIRE
0° - 20°	3705	8%
0° - 30°	8509	19%
0° - 40°	15234	34%
0° - 60°	32049	72%
0° - 80°	43973	98%
0° - 90°	44812	100%

CONE OF LIGHT

MOUNTING HEIGHT	FC AT BEAM CENTER	BEAM DIA. 0°-180°	BEAM DIA. 90°-270°
6.0 ft	263.0 fc	11.7 ft	53.2 ft
8.0 ft	148.0 fc	15.7 ft	70.9 ft
10.0 ft	94.7 fc	19.6 ft	88.6 ft
12.0 ft	65.8 fc	23.5 ft	106.3 ft
14.0 ft	48.3 fc	27.4 ft	124.0 ft
16.0 ft	37.0 fc	31.3 ft	141.8 ft
18.0 ft	29.2 fc	35.2 ft	159.5 ft
20.0 ft	23.7 fc	39.1 ft	177.2 ft

INDOOR COEFFICIENTS OF UTILIZATION

pf	20%																		0%		
pc	80%																		0%		
pw	80%				70%				50%				30%				10%				0%
	70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0%			
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100			
1	107	102	97	93	105	100	96	92	96	92	89	92	89	86	88	86	83	81			
2	96	87	80	73	94	85	78	72	82	76	71	78	73	69	75	71	67	65			
3	87	75	66	59	84	73	65	58	70	63	57	68	61	56	65	60	55	53			
4	79	65	56	48	76	64	55	48	61	54	47	59	52	47	57	51	46	44			
5	72	58	48	41	69	56	47	40	54	46	40	52	45	39	50	44	39	37			
6	66	51	42	35	64	50	41	34	48	40	34	47	39	34	45	38	33	31			
7	61	46	37	30	59	45	36	30	44	35	29	42	35	29	41	34	29	27			
8	56	42	32	26	54	41	32	26	39	32	26	38	31	26	37	30	25	23			
9	52	38	29	23	51	37	29	23	36	28	23	35	28	23	34	27	23	21			
10	49	35	26	21	47	34	26	21	33	26	21	32	25	20	31	25	20	18			

OAL-304-LED-20000L-28000L-36000L-42000L-DIM10-MVOLT-30K-40K-50K-T4D-BZ

TEST NO.: **EL11302360**

INPUT WATTS: **300.1**

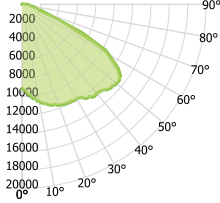
LUMENS: **45098**

EFFICACY: **150**

BEAM ANGLE: **63**

SPACING CRITERIA: **2.00**

CANDELA DISTRIBUTION



CANDELA TABLE

	0°	90°
0°	9196	9196
10°	10704	9386
20°	11609	9979
30°	11875	10516
40°	12643	11161
50°	13347	11842
60°	10890	12868
70°	3231	8653
80°	948	1083
90°	0	0

LUMINANCE (cd/sq.m)

	0.00°	90.00°
0°	0.00°	0
10°	0	0
20°	55.00°	0
30°	65.00°	0
40°	75.00°	0
50°	85.00°	0
60°	0	0
70°	0	0
80°	0	0
90°	0	0

LUMENS PER ZONE

ZONE	LUMENS
0° - 10°	896
10° - 20°	2812
20° - 30°	4787
30° - 40°	6565
40° - 50°	7939
50° - 60°	8938
60° - 70°	8219
70° - 80°	4236
80° - 90°	705

ZONAL LUMEN SUMMARY

ZONE	UMENS	% LUMINAIRE
0° - 20°	3709	8%
0° - 30°	8496	19%
0° - 40°	15061	33%
0° - 60°	31938	71%
0° - 80°	44393	98%
0° - 90°	45098	100%

CONE OF LIGHT

MOUNTING HEIGHT	FC AT BEAM CENTER	BEAM DIA. 0°-180°	BEAM DIA. 90°-270°
6.0 ft	255.4 fc	11.6 ft	31.1 ft
8.0 ft	143.7 fc	15.5 ft	41.5 ft
10.0 ft	92.0 fc	19.4 ft	51.9 ft
12.0 ft	63.9 fc	23.2 ft	62.3 ft
14.0 ft	46.9 fc	27.1 ft	72.7 ft
16.0 ft	35.9 fc	31.0 ft	83.0 ft
18.0 ft	28.4 fc	34.8 ft	93.4 ft
20.0 ft	23.0 fc	38.7 ft	103.8 ft

INDOOR COEFFICIENTS OF UTILIZATION

pf	pc	pw	70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0%
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	102	100	0%
1	108	102	97	93	105	100	96	92	96	92	89	92	89	86	88	86	83	81	81	0%
2	96	87	80	73	94	85	78	72	82	76	70	78	73	69	75	71	67	65	65	0%
3	87	75	66	59	84	73	65	58	70	63	57	67	61	56	65	59	55	53	53	0%
4	78	65	55	48	76	64	55	48	61	53	47	59	52	46	56	51	46	43	43	0%
5	71	57	47	40	69	56	47	40	54	46	39	52	45	39	50	44	39	36	36	0%
6	65	51	41	34	63	50	41	34	48	40	34	46	39	33	45	38	33	31	31	0%
7	60	46	36	30	58	45	36	29	43	35	29	42	34	29	40	34	29	27	27	0%
8	56	41	32	26	54	41	32	26	39	31	26	38	31	25	37	30	25	23	23	0%
9	52	38	29	23	50	37	29	23	36	28	23	35	28	22	34	27	22	20	20	0%
10	49	34	26	20	47	34	26	20	33	25	20	32	25	20	31	25	20	18	18	0%

OAL-304-LED-20000L-28000L-36000L-42000L-DIM10-MVOLT-30K-40K-50K-T5D-BZ

TEST NO.: **EL11302360**

INPUT WATTS: **298.8**

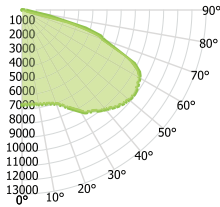
LUMENS: **46013**

EFFICACY: **154**

BEAM ANGLE: **140**

SPACING CRITERIA: **2.00 x 2.00**

CANDELA DISTRIBUTION



CANDELA TABLE

	0°	90°
0°	6706	6706
10°	6770	6810
20°	7072	7119
30°	8298	7618
40°	9167	8756
50°	9853	10151
60°	9569	10240
70°	6099	8446
80°	430	399
90°	0	0

LUMINANCE (cd/sq.m)

	0.00°	90.00°
0°	0.00°	0
10°	0	0
20°	55.00°	0
30°	65.00°	0
40°	75.00°	0
50°	85.00°	0
60°	0	0
70°	0	0
80°	0	0
90°	0	0

LUMENS PER ZONE

ZONE	LUMENS
0° - 10°	650
10° - 20°	2006
20° - 30°	3583
30° - 40°	5506
40° - 50°	7573
50° - 60°	9448
60° - 70°	10173
70° - 80°	6540
80° - 90°	535

ZONAL LUMEN SUMMARY

ZONE	UMENS	% LUMINAIRE
0° - 20°	2656	6%
0° - 30°	6238	14%
0° - 40°	11744	26%
0° - 60°	28765	63%
0° - 80°	45478	99%
0° - 90°	46013	100%

CONE OF LIGHT

MOUNTING HEIGHT	FC AT BEAM CENTER	BEAM DIA. 0°-180°	BEAM DIA. 90°-270°
6.0 ft	186.3 fc	33.2 ft	36.5 ft
8.0 ft	104.8 fc	44.2 ft	48.7 ft
10.0 ft	67.1 fc	55.3 ft	60.9 ft
12.0 ft	46.6 fc	66.3 ft	73.1 ft
14.0 ft	34.2 fc	77.4 ft	85.2 ft
16.0 ft	26.2 fc	88.4 ft	97.4 ft
18.0 ft	20.7 fc	99.5 ft	109.6 ft
20.0 ft	16.8 fc	110.5 ft	121.8 ft

INDOOR COEFFICIENTS OF UTILIZATION

pf	pc	pw	70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0%
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	102	100	0%
1	106	101	95	91	103	98	93	89	94	90	86	90	87	84	86	84	81	79	79	0%
2	94	84	76	69	91	82	74	68	78	72	66	75	69	65	72	67	63	61	61	0%
3	84	71	61	53	81	69	60	53	66	58	52	63	56	51	61	55	50	47	47	0%
4	75	61	51	43	73	60	50	42	57	48	42	54	47	41	52	46	40	38	38	0%
5	68	53	43	35	66	52	42	35	50	41	34	48	40	34	46	39	33	31	31	0%
6	62	47	37	29	60	46	36	29	44	35	29	42	34	28	40	33	28	26	26	0%
7	57	42	32	25	55	41	31	25	39	31	24	38	30	24	36	29	24	22	22	0%
8	53	38	28	21	51	37	28	21	35	27	21	34	26	21	33	26	21	19	19	0%
9	49	34	25	19	47	33	25	19	32	24	18	31	24	18	30	23	18	16	16	0%
10	46	31	22	17	44	31	22	16	29	22	16	28	21	16	28	21	16	14	14	0%