

13,250 SF **BUILDING AREA:** BUILDING TYPE: **BUILDING HEIGHT:** 33'-6" # STORIES: LOT COVERAGE: 12.08% FLOOR AREA RATIO: 0.121:1 FRONT BUILDING SETBACK: 53 SPACES PARKING REQUIRED: HANDICAP PARKING REQUIRED: 3 SPACES PARKING PROVIDED: 54 SPACES 16,456 SF LANDSCAPE REQUIRED: LANDSCAPE PROVIDED: 20,414 SF\* 55,162 S.F. (0.503:1) IMPERVIOUS AREA:

\*DOES NOT INCLUDE FUTURE DEV. AREA



OWNER:

LEBCO INDUSTRIES, L.P.
10676 KING WILLIAMS
DALLAS, TEXAS 75220
PHONE: (214) 631-1813
CONTACT: LEW BROWN





## THE RI

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY LAWRENCE A. CATES, P.E. 41838

ON 07. 01.13

THE FIRE DEPARTMENT.

BENCHMARKS:

1. AT&T MANHOLE LOCATED AT 5.5 FEET FROM THE NORTH CORNER OF LOT 2 IN THE RIGHT OF WAY OF INTERSTATE HIGHWAY NO. 30. ELEVATION = 565.20'

2. WATER VALVE LOCATED 5.7 FEET FROM THE WEST CORNER OF LOT 2 IN THE RIGHT OF WAY OF INTERSTATE HIGHWAY NO. 30. ELEVATION = 559.42'

SPRINKLED. ALTERNATIVE FIRE PROTECTION MEASURES MAY BE APPROVED BY

4. ALL SIGNAGE IS SUBJECT TO BUILDING INSPECTION DIVISION APPROVAL.

5. ALL FENCES AND RETAINING WALLS SHALL BE SHOWN ON THE SITE PLAN AND ARE SUBJECT TO BUILDING INSPECTION DIVISION APPROVAL.

# SITE PLAN - SP2013-014

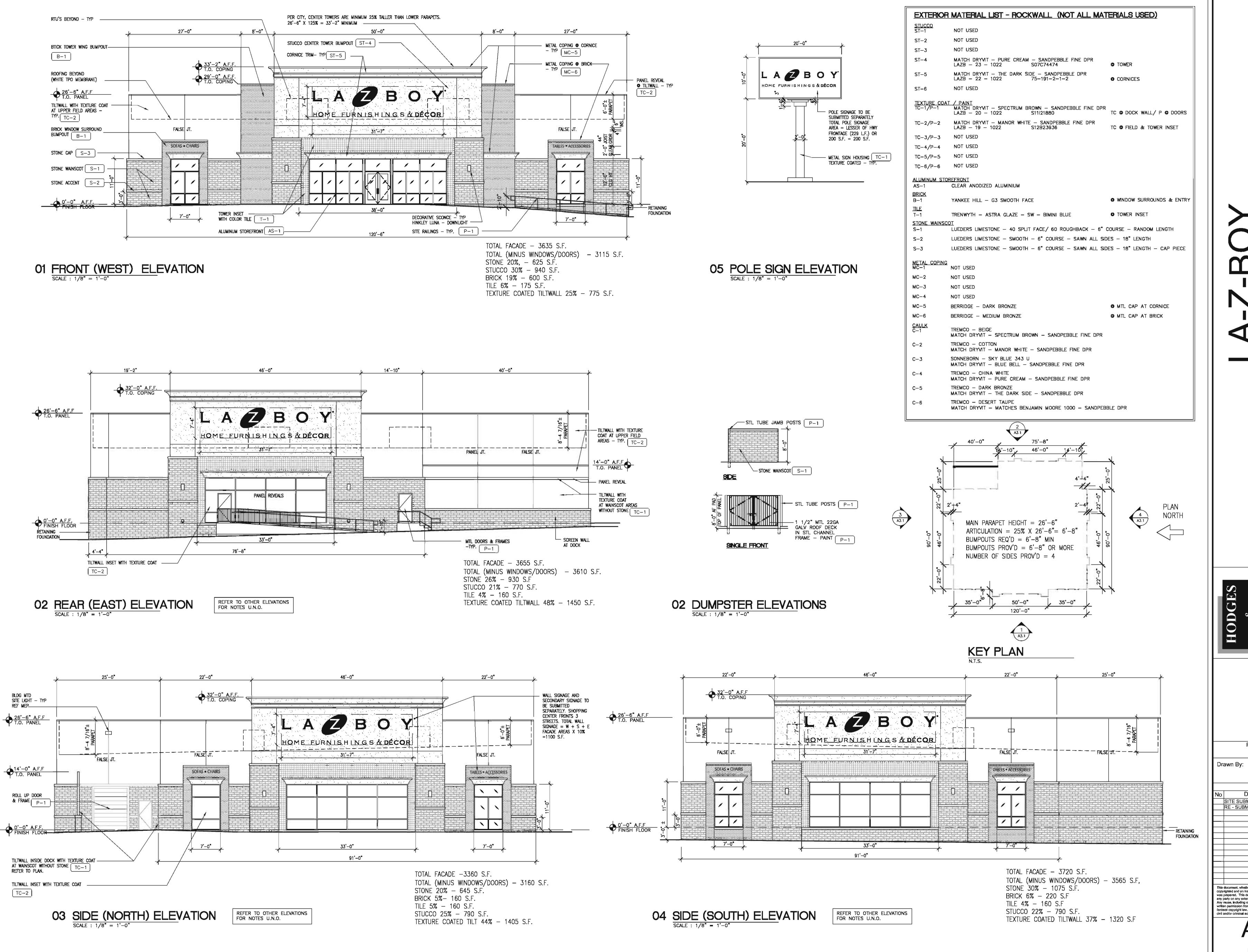
LA-Z-BOY

LOT 2, BLOCK 1, ROCKWALL CENTRE CORNERS ADDN.

	THE	CITY	OF RO	CKWALL	, TEXAS		
$\mathbf{C}_{\mathbf{A}}$	Cates - Clark & Associates, LLP  Consulting Engineers  Cates - Clark & Associates, LLP  Consulting Engineers  14800 Quorum Drive, Suite 200  Dallas, Texas 75254  Office: 972-385-2272 Fax: 972-980-1627  TBPE F-3751						
SIGN	DRAWN	DATE	SCALE	NOTES	FILE	NO.	
CCA	CCA	06.03.13	1=30'	D.P.	126~001 SITE	C1.2	

ENGINEER/SURVEYOR

CATES - CLARK & ASSOC., LLP
14800 QUORUM DRIVE, SUITE 200
DALLAS, TEXAS 75254
PHONE: (972) 385-2272
CONTACT: LAWRENCE A. CATES, P.E., R.P.L.S.



Project Number: 12108-01 Checked By

Description

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EXTERIOR ELEVATIONS

## LANDSCAPE NOTES

- 1. Contractor shall verify all existing and proposed site elements and notify Architect of any discrepancies. Survey data of existing conditions was supplied by others.
- Contractor shall jocate all existing underground utilities and notify Architect of any conflicts. Contractor shall exercise caution when working in the vicinity of underground utilities.
- Contractor is responsible for obtaining all required landscape and imigation
- 4. Contractor to provide a minimum 2% slope away from all structures.
- All planting beds and lawn areas to be separated by steel edging. No steel to be installed adjacent to sidewalks or curbs.
- All landscape areas to be 100% irrigated with an underground automatic irrigation system and shall include rain and freeze sensors.
- 7. All lawn areas to be Solid Sod Bermudagrass, unless otherwise noted on the

## **MAINTENANCE NOTES**

VISIBILITY EASEMENT

CAB. \$. SLIDE 299-

UTILITY EASEMENT CAB G, SLIDE 299-

3

PROP. 30'1

POLE SIGN

- The Owner, tenant and their agent, if any, shall be jointly and severally responsible for the maintenance of all landscape.
- All landscape shall be maintained in a neat and orderly manner at all times. This shall include mowing, edging, pruning, fertilizing, watering, weeding and other such activities common to landscape maintenance.
- 3. All landscape areas shall be kept free of trash, litter, weeds and other such material or plants not part of this plan.
- 4. All plant material shall be maintained in a healthy and growing condition as is appropriate for the season of the year.
- 5. All plant material which dies shall be replaced with plant material of equal or better value.
- Contractor shall provide separate bid proposal for one year's maintenance to begin after final acceptance.

- LUTLITY FASEMENT CAB. G. 9LUCE 299

## GENERAL LAWN NOTES

- Fine grade areas to achieve final contours indicated on dW plans.
- Adjust contours to achieve positive drainage away from buildings. Provide uniform rounding at top and bottom of slopes and other breaks in grade. Correct irregularities and areas where water may stand.
- All lawn areas to receive solid sod shall be left in a maximum of 1" below final finish grade. Contractor to coordinate operations with on-site Construction Manager.
- imported topsoil shall be natural, friable soil from the region, known as bottom and sail, free from lumps, clay, toxic substances, roots, debris, vegetation, stones, containing no salt and black to brown in color.
- All lawn areas to be fine graded, irrigation trenches completely settled, and finish grade approved by the Owner's Construction Manager or Architect
- All rocks 3/4" diameter and larger, dirt clods, sticks, concrete spoils, etc. shall be removed prior to placing topsoil and any lawn installation
- Contractor shall provide (1") one inch of imported topsoil on all areas to receive lawn.

LA-Z-BOY

13,250 S.F. F.F.= 261.15

53 PARKING SPACES REQUIRED

ROCKWALL CENTRE CORNERS ADDITION

CABINET C. SLIDE 299

P.R.TC.T.

CPI MORTGAGE INVESTORS LP

VOLUME 6816, PAGE 64

54 PARKING SPACES PROVIDED 6.83

PROPOSED CONCRETE -

### SOLID SOD NOTES

- 1. Fine grade areas to achieve final contours indicated. Leave areas to receive topsoil 3" below final desired grade in planting areas and 1" below final grade.
- Adjust contours to achieve positive drainage away from buildings. Provide uniform rounding at top and bottom of slopes and other breaks in grade. Correct irregularities and areas where water may stand.
- 3. All lawn areas to receive solid sod shall be left in a maximum of 1" below final finish grade. Contractor to coordinate operations with on-site Construction
- 4. Contractor to coordinate with on-site Construction Manager for availability of existing topsoil.

are touching. Top dress joints by hand with topsoil to fill voids,

- 5. Plant sod by hand to cover indicated area completely. Insure edges of sod
- 6. Roll grass areas to achieve a smooth, even surface, free from unnatural
- Water sod thoroughly as sod operation progresses.

SCREENING WALL

- 8. Contractor shall maintain all lawn areas until final acceptance. This shall include, but not limited to: mowing, watering, weeding, cultivating, cleaning and replacing dead or bare areas to keep plants in a vigorous, healthy
- 9. Contractor shall guarantee establishment of an acceptable turf area and shall provide replacement from local supply if necessary.
- 10. If installation occurs between September 1 and March 1, all sod areas to be over-seeded with Winter Ryegrass, at a rate of (4) pounds per one thousand (1000) square feet,

LOT 1 - BLOCK 1

TOYOTA OF ROCKWALL

CABINET "G", SLIDE 153-156

JACKSON AUTOMOTIVE REAL ESTATE INV LLC

VOLUME 5001, PAGE 9

D.R.R.C.T.

ZONING - LI WITH IH 30 OVERLAY

USE: CAR DEALERSHIP

## PLANT LIST

QTY.	TYPE	COMMON NAME	BOTANICAL NAME	SIZE	REMARKS
1	CE	Cedar EJm	Ulmus crassifolia	4" cal,	container grown, 15' ht., 5' spread min., 5' clear truni
(T)	LO	Live Oak	Quercus virginiana	4° cal.	container grown, 15' ht., 5' spread min.
10	TY	Tree Yaupon Holly	llex vomitoria	6' ht.	B&B, 3 cane, tree form, no cross caning
SHRUBS					
QTY.	TYPE	COMMON NAME	BOTANICAL NAME	SIZE	REMARKS
97	DBH	Dwarf Burford Holly	llex cornuta "Burfordii nena"	36" ht.	container, full plant, 24" o.c.
19	IH	Indian Hawthorne 'Claral	Raphiologis Indica 'Clara'	5 gal.	container, full plant, 24" o.c.
49	KNR	Double Knockout Rose	Rosa sp. 'Double Knockou'	3 gal.	container, full plant, 24" o.c.
52	HMG	Dwarf Hamlen Grass	Pennisetum sp. 'Hamlen'	1 gal.	container, full top of container, 18" o.c.
GROUND	COVERS				
QTY.	TYPE	COMMON NAME	BOTANICAL NAME	SIZE	REMARKS
40	LG	Giard Linope	Liriope gigantea	3 gal.	container, full top of container, 24" o.c.
		Common Bermudagrass	Cynodon dactylon	roll sod	solid sod, refer to notes

NOTE: Plant list is an aid to bidders only. Contractor shall verify all quantities on plan. All heights and spreads are minimums. All plant material shall meet or exceed remarks as indicated. All trees to have straight trunks and be matching

- FUTURE DEVELOPMENT -

ENGINEER/SURVEYOR

CATES - CLARK & ASSOC., LLP

14800 QUORUM DRIVE, SUITE 200

DALLAS, TEXAS 75254

PHONE: (972) 385-2272 CONTACT: LAWRENCE A. CATES, P.E., R.P.L.S.

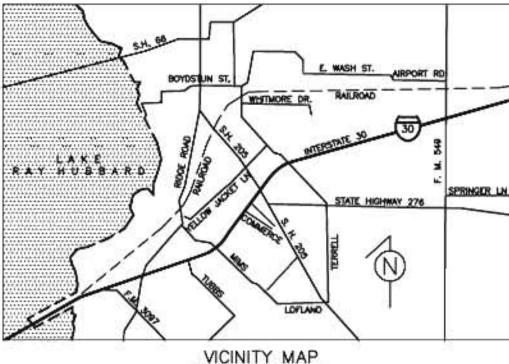
OWNER:

LEBCO INDUSTRIES, L.P.

10676 KING WILLIAMS

DALLAS, TEXAS 75220

PHONE: (---) -----CONTACT: LEW BROWN



NOT-TO-SCALE

## LANDSCAPE TABULATIONS

SITE REQUIREMENTS (site area 109,712 s.f.) Requirements: 15% site area to be landscaped

16,456,8 s.f. (15%) 20,414 s.f. (18.6%)

FRONT YARD REQUIREMENTS Requirements: 50% of required landscape must be

located in front yard

8,228.4 s.f. (50%) 8,402 s.f.

STREET REQUIREMENTS: IH 30 OVERLAY Requirements: (3) canopy tree 4" cal. and (4) accent trees, 4" ht. per 100 l.f. of frontage

Requirements: 5% of total parking lot area and (1) tree, 4" cal.

IH 30 FRONTAGE (229.32 I.f.) Required

PARKING LOT (54 spaces; 21,439 s.f.)

(7) trees, 4" cal. (7) trees, 4" cat. (10) trees, 4' ht. (10) trees, 6' ht.

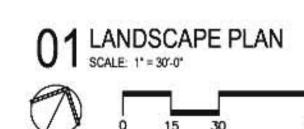
per 20 parking spaces

(3) trees, 4° cal. (6) trees, 4° cal. 1,072 s.f. (5%) 2,554 s.f. 11.9%

ALL TREES TO BE LOCATED 5' FROM WATER, SEWER AND STORM SEWER LINES

ALL TREES AND SHRUBS TO BE SETBACK 4' FROM ALL HEAD-IN PARKING

SITE DATA	LOT 2, BLOCK 1
ZONING:	LI/C WITH IH-30 OVERLAY
PROPOSED USE:	RETAIL
LOT AREA:	2.519 AC. (109,712 SF)
BUILDING AREA:	13,250 SF
BUILDING TYPE:	IIB
BUILDING HEIGHT:	33'-6"
# STORIES:	1
LOT COVERAGE:	12.08%
FLOOR AREA RATIO:	0.121:1
FRONT BUILDING SETBACK:	25'
PARKING REQUIRED:	53 SPACES
HANDICAP PARKING REQUIRED:	3 SPACES
PARKING PROVIDED:	54 SPACES
LANDSCAPE REQUIRED:	16,456.8
LANDSCAPE PROVIDED:	20,414
IMPERVIOUS AREA:	55,162 S.F. (0.503:1)



landscape architects, inc. 1708 N. Griffin Street Oalas, Texas 75202 Tel 214.871.0083 Fex 214.871.0545

Email am/@amr-la.com

SP2013-014









1 7.1.13 CITY COMMENTS
REV. DATE REMARKS

LA-Z-BOY LOT 2, BLOCK 1, ROCKWALL CENTRE CORNERS ADDN. THE CITY OF ROCKWALL, TEXAS 14800 Quorum Drive, Suite 200 Dulins, Texns 75254 Office: 972-385-2272 Fax: 972-980-1627 TBPE F-3751 Cates - Clark & Associates, LLP Consulting Engineers DESIGN DRAWN DATE SCALE NOTES FILE NO. 126-001 SITE BDA 1"=30" BDA 06.14.13 D.P.

LANDSCAPE PLAN

### **SECTION 02900 - LANDSCAPE**

### PART 1 - GENERAL

PART 3 - EXECUTION

3.1 BED PREPARATION & FERTILIZATION

B. All planting areas shall be conditioned as follows:

batter board against the bed areas.

(1,000) square feet.

C. Grass Areas:

3.2 INSTALLATION

### 1.1 REFERENCED DOCUMENTS

Refer to bidding requirements, special provisions, and schedules for additional requirements.

Work included: Furnish all supervision, labor, materials, services, equipment and appliances required to complete the work covered in conjunction with the landscaping covered in these specifications and landscaping plans, including:

- 1. Planting (trees, shrubs, and grass) Bed preparation and fertilization
- Notification of sources Water and Maintenance until final acceptance

## Guarantee 1.3 REFERENCE STANDARDS

- American Standard for Nursery Stock published by American Association of Nurserymen: 27 October 1980, Edition; by American National Standards Institute, Inc. (Z60.1) – plant
- American Joint Committee on Horticultural Nomenclature: 1942 Edition of Standardized
- Texas Association of Nurserymen, Grades and Standards.

## D. Hortis Third, 1976 - Cornell University 1.4 NOTIFICATION OF SOURCES AND SUBMITTALS

- The Contractor shall, within ten (10) days following acceptance of bid, notify the Architect/Owner of the sources of plant materials and bed preparation required for the
- Samples: Provide representative quantities of sandy loam soil, mulch, bed mix material, gravel, and crushed stone. Samples shall be approved by Architect before use on
- Product Data: Submit complete product data and specifications on all other specified
- Submit three representative samples of each variety of ornamental trees, shrubs, and groundcover plants for Architect's approval. When approved, tag, install, and maintain as representative samples for final installed plant materials.
- File Certificates of Inspection of plant material by state, county, and federal authorities

Landscape Contractor to inspect all existing conditions and report any deficiencies to the

1. Prepare new planting beds by scraping away existing grass and weeds as necessary.

Till existing soil to a depth of six (6") inches prior to placing compost and fertilizer.

such as Sustane or Green Sense at the rate of twenty (20) pounds per one thousand

Apply fertilizer as per manufacturers recommendations. Add six (6") inches of compost and till into a depth of six (6") inches of the topsoil. Apply organic fertilizer

3. Backfill for tree pits shall be as follows: Use existing top soil on site (use imported

1. Areas to be Solid Sod Bermudagrass: Blocks of sod should be laid joint to joint, (staggered joints) after fertilizing the ground first. Roll grass areas to achieve a

topsoil where they are evidently gaped open, then watered thoroughly.

topsoil as needed) free from large clumps, rocks, debris, caliche, subsoils, etc.,

smooth, even surface. The joints between the blocks of sod should be filled with

seed at a rate of two (2) pounds per one thousand (1,000) square feet. Use a 4' x 8'

2. Areas to be Hydromulch Common Bermudagrass: Hydromulch with bermudagrass

Maintenance of plant materials shall begin immediately after each plant is delivered to the

ready for planting. All shipments of nursery materials shall be thoroughly protected from

the drying winds during transit. All plants which cannot be planted at once, after delivery

to the site, shall be well protected against the possibility of drying by wind and sun. Balls

of earth of B & B plants shall be kept covered with soil or other acceptable material. All

Notify the Landscape Architect for inspection and approval of all positioning of plant

depth that, when planted and settled, the crown of the plant shall bear the same

relationship to the finish grade as it did to soil surface in original place of growth.

Excavate pits with vertical sides and horizontal bottom. Tree pits shall be large enough to

permit handling and planting without injury to balls of earth or roots and shall be of such

plants remain the property of the Contractor until final acceptance.

Position the trees and shrubs in their intended location as per plan.

site and shall continue until all construction has been satisfactorily accomplished.

Plant materials shall be delivered to the site only after the beds are prepared and area

2. All planting areas shall receive a two (2") inch layer of specified mulch.

placed in nine (9") inch layers and watered in thoroughly.

Soil Analysis: Provide sandy loam soil analysis if requested by the Architect.

## JOB CONDITIONS

- General Contractor to complete the following punch list: Prior to Landscape Contractor initiating any portion of landscape installation, General Contractor shall leave planting bed areas three (3") inches below finish grade of sidewalks, drives and curbs as shown on the drawings. All lawn areas to receive solid sod shall be left one (1") inch below the finish grade of sidewalks, drives, and curbs. All construction debris shall be removed prior to Landscape Contractor beginning any work.
- B. General Contractor shall provide topsoil as described in Section 02200 Earthwork.
- Storage of materials and equipment at the job site will be at the risk of the Landscape Contractor. The Owner cannot be held responsible for theft or damage.

### 1.6 MAINTENANCE AND GUARANTEE

### A. Maintenance:

- 1. The Landscape Contractor will be held responsible for the maintenance of all work from the time of planting until final acceptance by the Owner. No trees, shrubs, groundcover or grass will be accepted unless they show a healthy growth and satisfactory foliage conditions.
- 2. Maintenance shall include watering of trees and plants, cultivation, weeding spraying, edging, pruning of trees, mowing of grass, cleaning up and all other work necessary
- 3. A written notice requesting final inspection and acceptance should be submitted to the Owner at least seven (7) days prior to completion. An on-site inspection by
- Owner and Landscape Contractor will be completed prior to written acceptance. After final acceptance of installation, the Landscape Contractor will not be required to do any of the above listed work.

## B. Guarantee:

this section.

should be thoroughly moist before removing containers.

- 1. Trees shall be guaranteed for a twelve (12) month period after acceptance. Shrubs and groundcover shall be guaranteed for twelve (12) months. The Contractor shall replace all dead materials as soon as weather permits and upon notification of the Owner. Plants, including trees, which have partially died so that shape, size, or symmetry has been damaged, shall be considered subject to replacement. In such cases, the opinion of the Owner shall be final.
- a. Plants used for replacement shall be of the same size and kind as those originally planted and shall be planted as originally specified. All work, including materials, labor and equipment used in replacements, shall carry a twelve (12) month guarantee. Any damage, including ruts in lawn or bed areas, incurred as a result of making replacements shall be immediately
- b. At the direction of the Owner, plants may be replaced at the start of the next year's planting season. In such cases, dead plants shall be removed from the premises immediately. c. When plant replacements are made, plants, soil mix, fertilizer and mulch are to be utilized as originally specified and reinspected for full compliance with Contract requirements. All replacements are to be included under "Work" of

Shrub and tree pits shall be no less than two (2') feet, twenty-four (24") inches, wider than

the lateral dimension of earth ball and six (6") inches deeper than it's vertical dimension. Remove and haul from site all rocks and stones over one (1") inch in diameter. Plants

Dig a wide, rough sided hole exactly the same depth as the height of the ball, especially at

the surface of the ground. The sides of the hole should be rough and jagged, never slick

hours, the tree needs to move to another location or have drainage added. Install a PVC

Backfill only with 5 parts existing soil or sandy loam and 1 part bed preparation. When

as well as all nylon, plastic string and wire mesh. Container trees will usually be pot

L. Mulch the top of the ball. Do not plant grass all the way to the trunk of the tree. Leave the

M. All plant beds and trees to be mulched with a minimum settled thickness of two (2")

area above the top of the ball and mulch with at least two (2") inches of specified mulch.

Obstruction below ground: In the event that rock, or underground construction work or obstructions are encountered in any plant pit excavation work to be done under this

section, alternate locations may be selected by the Owner. Where locations cannot be

changed, the obstructions shall be removed to a depth of not less than three (3') feet

properly set at the required grade. The work of this section shall include the removal from

below grade and no less than six (6") inches below the bottom of ball when plant is

Trees and large shrubs shall be staked as site conditions require. Position stakes to

Pruning and Mulching: Pruning shall be directed by the Architect and shall be pruned in

accordance with standard horticultural practice following Fine Pruning, Class I pruning

tipping of the branched is not permitted. Do not cut terminal branches.

1. Dead wood or suckers and broken badly bruised branches shall be removed. General

3. Immediately after planting operations are completed, all tree pits shall be covered with

a layer of organic material two (2") inches in depth. This limit of the organic material

1. Curbing shall be aligned as indicated on plans. Stake out limits of steel curbing and

Stakes are to be installed on the planting bed side of the curbing, as opposed to the

the site of such rock or underground obstructions encountered at the cost of the

the hole is dug in solid rock, topsoil from the same area should not be used. Carefully

settle by watering to prevent air pockets. Remove the burlap from the top 1/3 of the ball,

H. Percolation Test: Fill the hole with water. If the water level does not percolate within 24

stand pipe per tree planting detail as approved by the Landscape Architect.

bound, if so follow standard nursery practice of 'root scoring'.

J. Do not wrap trees.

K. Do not over prune

inches over the entire bed or pit.

secure tree against seasonal prevailing winds.

standards provided by National Arborist Association.

2. Pruning shall be done with clean, sharp tools.

obtain Owners approval prior to installation

Do not install steel edging along sidewalks.

. All steel curbing shall be free of kinks and abrupt bends.

areas clean by sweeping or hosing at end of each days work.

Top of curbing shall be 3/4" maximum height above grade.

3. Cut steel edging at 45 degree angle where edging meets sidewalk.

**END OF SECTION** 

Cleanup: During the work, the premises shall be kept neat and orderly at all times.

Storage areas for all materials shall be so organized that they, too, are neat and orderly All trash and debris shall be removed from the site as work progresses. Keep paved

Landscape Contractor.

Q. Steel Curbing Installation:

3.3 CLEANUP AND ACCEPTANCE

- 2. The Owner agrees that for the guarantee to be effective, he will water plants at least twice a week during dry periods and cultivate beds once a month after final
- 3. The above guarantee shall not apply where plants die after acceptance because of injury from storms, hail, freeze, insects, diseases, injury by humans, machines or
- 4. Acceptance for all landscape work shall be given after final inspection by the Owner provided the job is in a completed, undamaged condition, and there is a stand of grass in all lawn areas. At this time, the Owner will assume maintenance on the
- Repairs: Any necessary repairs under the Guarantee must be made within ten (10) days after receiving notice, weather permitting, and in the event the Landscape Contractor does not make repairs accordingly, the Owner, without further notice to Contractor, may provide materials and men to make such repairs at the expense of the Landscape Contractor.

## QUALITY ASSURANCE

- General: Comply with applicable Federal, State, County and Local regulations governing landscape materials and work
- Personnel: Employ only experienced personnel who are familiar with the required work. Provide full time supervision by a qualified foreman acceptable to Landscape Architect.
- Selection of Plant Material:
- 1. Make contact with suppliers immediately upon obtaining notice of contract acceptance to select and book materials. Develop a program of maintenance (pruning and fertilization) which will insure the purchased materials will meet and/or exceed project
- specifications 2. Landscape Architect will provide a key identifying each tree location on site. Written verification will be required to document material selection, source and delivery schedules to site.
- 3. Owner and/or Architect shall inspect all plant materials when reasonable at place of growth for compliance with requirements for genus, species, cultivar/variety, size and 4. Owner and/or Architect retains the right to further inspect all plant material upon
- arrival at the site and during installation for size and condition of root balls, limbs, branching habit, insects, injuries, and latent defects. 5. Owner and/or Architect may reject unsatisfactory or defective material at any time during the process of work. Remove rejected materials from the site immediately.

Plants damaged in transit or at job site shall be rejected.

## PRODUCT DELIVERY, STORAGE AND HANDLING

### A. Preparation:

1. Balled and Burlapped (B&B) Plants: Dig and prepare shipment in a manner that will not damage roots, branches, shape, and future development. 2. Container Grown Plants: Deliver plants in rigid container to hold ball shape and

- A. Delivery:
  - 1. Deliver packaged materials in sealed containers showing weight, analysis and name of manufacturer. Protect materials from deterioration during delivery and while stored
  - 2. Deliver only plant materials that can be planted in one day unless adequate storage and watering facilities are available on job site.
  - 3. Protect root balls by heeling in with sawdust or other approved moisture retaining material if not planted within 24 hours of delivery.
- 4. Protect plants during delivery to prevent damage to root balls or desiccation of leaves. Keep plants moist at all times. Cover all materials during transport.
- 5. Notify Architect of delivery schedule 72 hours in advance so plant material may be observed upon arrival at job site.
- 6. Remove rejected plant material immediately from site.
- 7. To avoid damage or stress, do not lift, move, adjust to plumb, or otherwise manipulate plants by trunk or stems.

## PART 2 - PRODUCTS

## 2.1 PLANTS

- General: Well-formed No. 1 grade or better nursery grown stock. Listed plant heights are from tops of root balls to nominal tops of plants. Plant spread refers to nominal outer width of the plant, not to the outer leaf tips. Plants will be individually approved by the Architect and his decision as to their acceptability shall be final.
- Quantities: The drawings and specifications are complimentary. Anything called for on one and not the other is as binding as if shown and called for on both. The plant schedule is an aid to bidders only. Confirm all quantities on plan.
- Quality and size: Plant materials shall conform to the size given on the plan, and shall be healthy, symmetrical, well-shaped, full branched, and well rooted. The plants shall be free from injurious insects, diseases, injuries to the bark or roots, broken branches, objectionable disfigurements, insect eggs and larvae and are to be of specimen quality.
- Approval: All plant materials shall be subject to the approval of the Owner. All plants which are found unsuitable in growth, or in any unhealthy, badly shaped, or undersized condition, will be rejected by the Landscape Architect, either before or after planting, and shall be removed at the expense of the Landscape Contractor and replaced with acceptable plants as specified.
- Trees shall be healthy, full-branched, well-shaped and shall meet the trunk diameter and height requirements of the plant schedule. Balls shall be firm, neat, slightly tapered, and well wrapped in burlap. Any tree loose in the ball or with broken ball at time of planting will be rejected. Balls shall be ten (10") inched in diameter for each one (1") inch of trunk diameter, Measured six (6") inched above ball. Nomenclature conforms to the customary nursery usage: for clarification, the term
- Pruning: All pruning of trees and shrubs, as directed by the Landscape Architect, shall be executed by the Landscape Contractor at no additional cost to the Owner

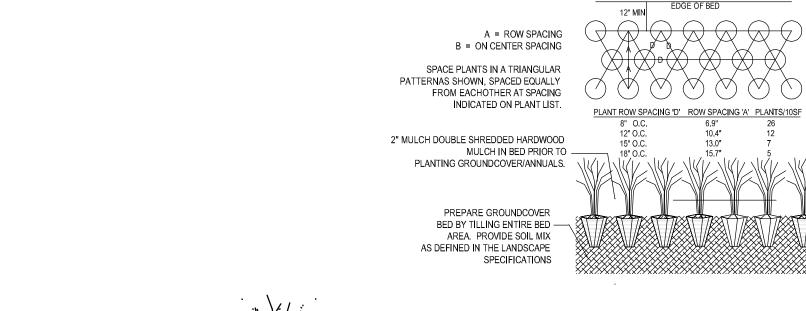
"multi-trunk" defines a plant having three (3) or more trunks of nearly equal diameter.

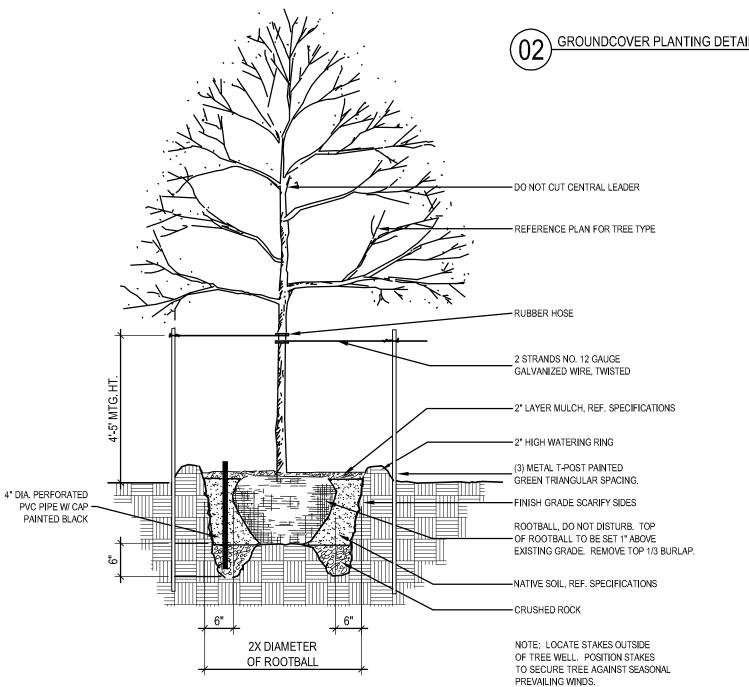
## 2.2 SOIL PREPARATION MATERIALS

- A. Sandy Loam:
- 1. Friable, fertile, dark, loamy soil, free of clay lumps, subsoil, stones and other extraneous material and reasonably free of weeds and foreign grasses. Loam
- containing Dallasgrass or Nutgrass shall be rejected. Physical properties as follows:
  - Clay between 7-27 percent Silt – between 15-25 percent Sand – less than 52 percent
- Organic matter shall be 3%-10% of total dry weight. 4. If requested, provide a certified soil analysis conducted by an approved soil testing laboratory verifying that sandy loam meets the above requirements.
- Organic Material: Compost with a mixture of 80% vegetative matter and 20% animal
- waste. Ingredients should be a mix of course and fine textured material. Premixed Bedding Soil as supplied by Vital Earth Resources, Gladewater, Texas;
- Professional Bedding Soil as supplied by Living Earth Technology, Dallas, Texas or Acid Gro Municipal Mix as supplied by Soil Building Systems, Dallas, Texas or approved equal.
- Sharp Sand: Sharp sand must be free of seeds, soil particles and weeds. Mulch: Double Shredded Hardwood Mulch, partially decomposed, dark brown. Living Earth Technologies or approved equal.
- Organic Fertilizer: Fertilaid, Sustane, or Green Sense or equal as recommended for required applications. Fertilizer shall be delivered to the site in original unopened
- containers, each bearing the manufacturer's guaranteed statement of analysis. Commercial Fertilizer: 10-20-10 or similar analysis. Nitrogen source to be a minimum
- 50% slow release organic Nitrogen (SCU or UF) with a minimum 8% sulphur and 4% iron,
- Peat: Commercial sphagnum peat moss or partially decomposed shredded pine bark or other approved organic material.

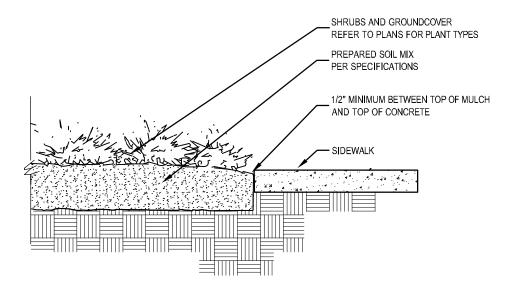
## 2.3 MISCELLANEOUS MATERIALS

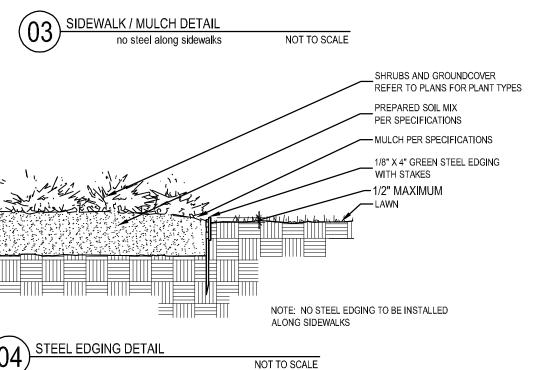
- Steel Edging: Shall be Ryerson "Estate Curbing", 1/8" x 4" with stakes 4' on center.
- B. Staking Material for Shade Trees:
- 1. Post: Studded T-Post, #1 Armco with anchor plate; 6'-0" length; paint green.
- 2. Wire: 12 gauge, single strand, galvanized wire. Rubber hose: 2 ply, fiber reinforced hose, minimum ½ inch inside diameter. Color:
- Gravel: Washed native pea gravel, graded 1 in. to 1-1/2 in.
- Filter Fabric: Mirafi 140N by Celanese Fibers Marketing Company, available at Loftland Co., (214) 631-5250 or approved equal.

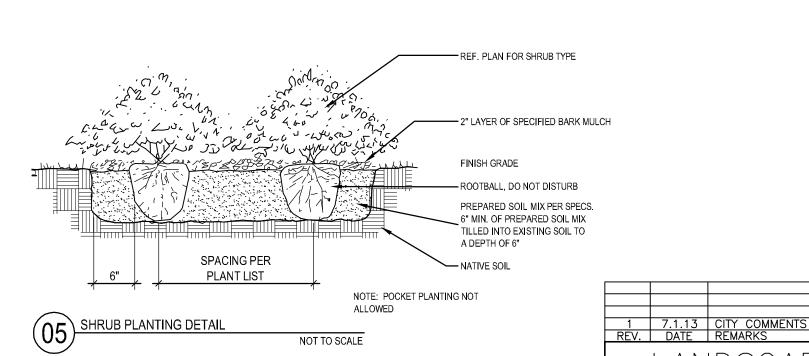




(01) TREE PLANTING DETAIL NOT TO SCALE









landscape architects, inc 1708 N. Griffin Street Dallas, Texas 75202 Tel 214.871.0083 Fax 214.871.0545 Email smr@smr-la.com

SP2013-014

126-001 SITE

LANDSCAPE SPECIFICATIONS LA-Z-BOY LOT 2, BLOCK 1, ROCKWALL CENTRE CORNERS ADDN THE CITY OF ROCKWALL. TEXAS 14800 Quorum Drive, Suite 200 Cates - Clark & Associates, LLP Dallas, Texas 75254 Office: 972-385-2272 Fax: 972-980-1627 TBPE F-3751 Consulting Engineers DESIGN | DRAWN | DATE | SCALE | NOTES FILE NO.

NONE

D.P.

BDA

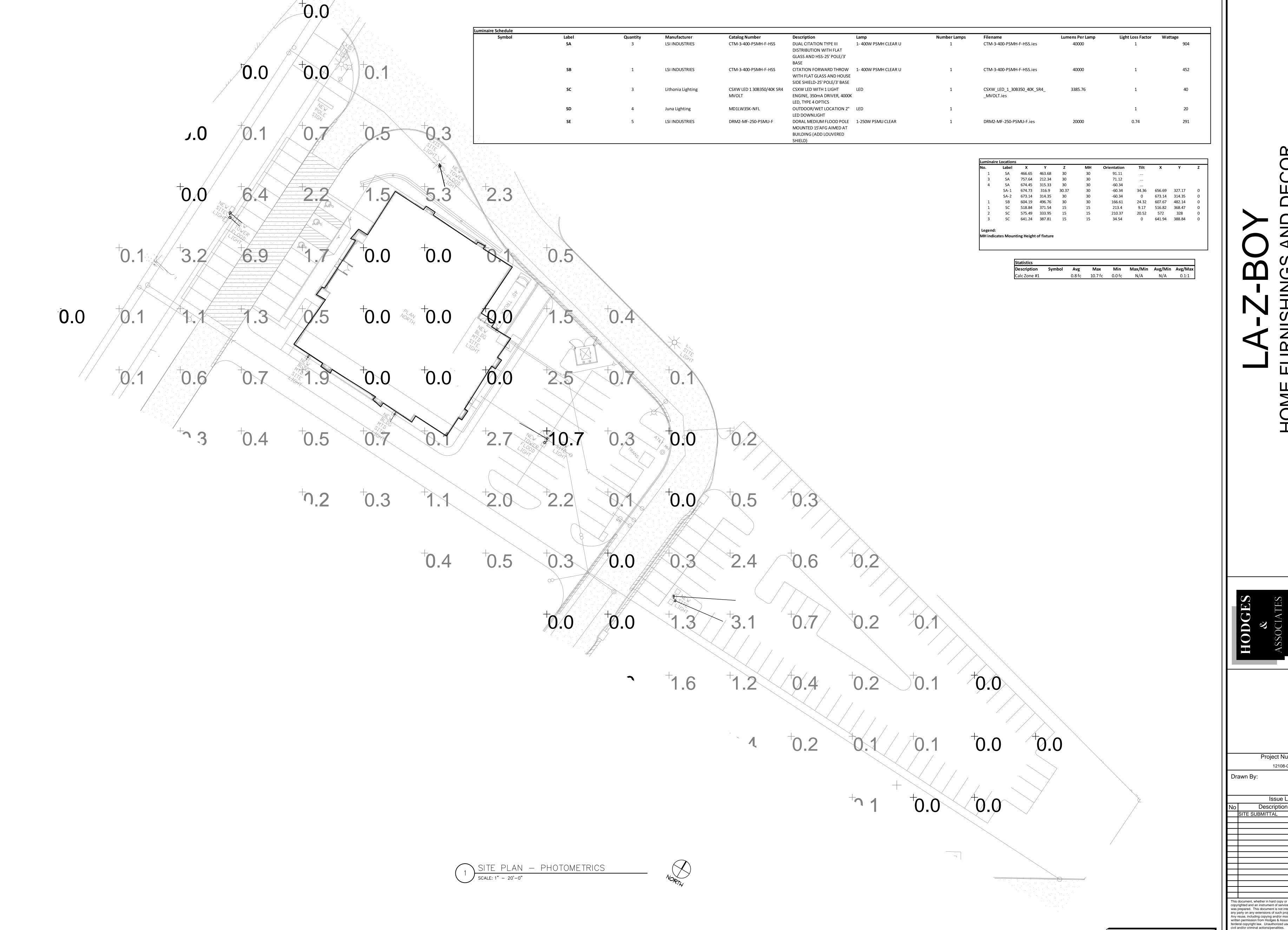
BDA

06.14.13

OWNER: LEBCO INDUSTRIES, L.P. 10676 KING WILLIAMS DALLAS, TEXAS 75220 PHONE: (---) -----CONTACT: LEW BROWN

ENGINEER/SURVEYOR CATES - CLARK & ASSOC., LLP 14800 QUORUM DRIVE, SUITE 200 DALLAS, TEXAS 75254 PHONE: (972) 385-2272

CONTACT: LAWRENCE A. CATES, P.E., R.P.L.S.





Project Number:

Checked By

Issue Log No Description
SITE SUBMITTAL

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SITE PLAN

## **JUNO**®

## MINI LED DOWNLIGHT

Project:	
Fixture Type:	
Location:	
Contact/Phone:	

OUTDOOR/WET LOCATION MD 1 LW RECESSED HOUSING AND TRIM

## **LOW VOLTAGE**



### **PRODUCT DESCRIPTION**

The MD1LW mini LED recessed downlight is for use in wet locations and is IC rated for insulated or non-insulated applications • Sleek, compact form factor provides direct accent lighting with low glare optic system that approximates the light output and distribution of 20W halogen lamps • Ideal for both residential and commercial wet location applications including bathrooms and eave lighting • Remote mount Class 2 120V to 12V AC electronic or magnetic driver/transformer required • Designed to provide 50,000 hours of life • 5 year limited warranty on LED components.

### **ENVIRONMENTALLY FRIENDLY, ENERGY EFFICIENT**

- No harmful ultraviolet or infrared wavelengths
- No lead or mercury
- Comparable light output to 20W MR11 halogen lamps while consuming 5W



### **PRODUCT SPECIFICATIONS**

**LED Light Engine** Lumileds LUXEON® Rebel LEDs provide outstanding reliability, performance and color quality/consistency • 2700K, 3000K, 3500K or 4100K color temperatures available • 85 CRI typical.

**Optical System** Fixtures are offered with a choice of spot (16°), narrow flood (24°) or flood (35°) beam patterns • LED source concealed with lensed optic is deeply regressed into an internal reflector to produce a low glare system • Reflectors finished to match trim ring color for uniform appearance • Field replacement of optical lenses is NOT recommended.

**LED Driver/Transformer** Onboard fixture LED driver operates at less than 5 watts input at 12-volts AC • Requires remote mount Class 2, 120V to 12V AC electronic or magnetic driver/transformer for operation • Juno's TL602E electronic driver/transformer and TL576 magnetic transformer are designed specifically for use with these fixtures

**Dimming** May be dimmed with dimmers tested and qualified by Juno for use with TL602E and TL576– see driver/transformer specifications for compatible dimmers • Color temperature remains constant over dimming range • Consult factory for additional information.

Life Rated for 50,000 hours at 70% lumen maintenance.

**Labels** UL Listed for wet locations and daisy chaining • Union made • UL and cUL listed • RoHS compliant.

**Testing** All reports are based on published industry procedures; field performance may differ from laboratory performance.

Product specifications subject to change without notice.

### **HOUSING FEATURES**

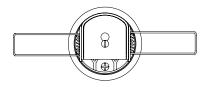
**Housing** Designed for use in IC (insulated ceiling) or non-IC construction
• Die cast aluminum housing • Finished with either corrosion resistant painted finishes or E-coat for decorative plated finishes.

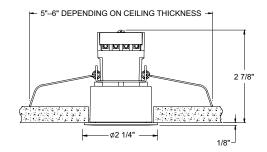
**Wiring Compartment** Provided with removable access plate • Four pole terminal block allows for quick, secure connection • UL /cUL listed for daisy chaining • Easy to wire with commonly available low voltage cable (Type CL2 or NEC equivalent, 18-12 AWG). Consult local codes for compliant wiring methods.

**Mounting** Zinc plated torsion clips are provided fully assembled to housing ● Springs allow for fast, secure installation or removal in mounting surfaces from 1/8″ to 1″ thick material ● 2″ Cutout dimension corresponds to common hole saw size.

LUXEON is a registered trademark of the Philips Lumileds Lighting Company

### **DIMENSIONS**





2" CUTOUT

### **ELECTRICAL DATA**

Input Voltage	12VAC		
Input Power	4.8W		
Input Current - Max	0.42A		
Frequency	Varies with Transformer		

### **ORDERING INFORMATION:**

Example: MD1LW41K-NFL-SN

Fixture							
Catalog No.	Colo	r Temp.			Optic		Finish
			]-[		]-[		
MD1LW	27K	2700K		SP	Spot	WH	White
	3K	3000K		NFL	Narrow Flood	BL	Black
	35K	3500K		FL	Flood	SN	Satin Nicke
	41K	4100K				ΒZ	Bronze

Transformer
-------------

Description		
ver/Transformer		



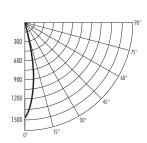
## MINI LED DOWNLIGHT

## MD1LW OUTDOOR/WET LOCATION RECESSED HOUSING AND TRIM

## **LOW VOLTAGE**

### PHOTOMETRIC REPORT

Test Report #: PT10102802 Catalog No: MD1LW35K-SP-WH **Luminaire Spacing Criterion:** 0.28 Luminaire LPW: 38.6



### **CANDLEPOWER DISTRIBUTION**

0

N

13	U
85	0
90	0
Multiplier:	27K - 0.92
	3K - 0.96

55

65

### **AVERAGE INITIAL FOOTCANDLES**

Multiple Units (Square Array, 60'x60' room) Ceiling 80% Wall 50% Floor 20%

Spacing	RCR1	RCR3	RCR5
4.0′	14	13	12
5.0´	9	8	7
6.0′	6	6	5
7.0′	5	5	4
8.0′	4	4	3
9.0′	3	3	3
10.0′	2	2	2

### **70NALILIMENI SIIMMADV**

LONAL	LOMEIA	SOMM	MKI
Zone	Lumens	%Lamp	%Fixture
0 - 30°	182	N/A	94.2
0 - 40°	189	N/A	98.2
0 - 60°	193	N/A	100.0
0 - 90°	193	N/A	100.0

### **INITIAL FOOTCANDLES**

(One Unit, 5W, 15.7° Beam)

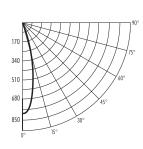
Distance to Illuminated Plane (Feet)	Footcandles Beam Center	Beam Diameter
4	90.8	1.1′
6	40.4	1.7′
8	22.7	2.2'
10	14.5	2.8′

### **LUMINANCE** (Average cd/m²)

	Average 0°	
Degrees	Luminance	
45	6377	
55	0	
65	0	
75	0	
85	0	

### PHOTOMETRIC REPORT

Test Report #: LTL21544 Catalog No: MD1LW35K-NFL-WH **Luminaire Spacing Criterion:** 0.40 Luminaire LPW: 38.2



### **CANDLEPOWER DISTRIBUTION** (Candelas)

•	•
Degrees	
Vertical	0°
0	803
5	701
15	277
25	74
35	19
45	5
55	2
65	0
75	0
85	0
90	0
Multiplier:	27K - 0.92

### 3K - 0.96 41K - 1 06

### **AVERAGE INITIAL FOOTCANDLES** Multiple Units (Square Array, 60'x60' room)

Ceiling 80	% Wall 50	% Floor 20	0%
Spacing	RCR1	RCR3	RCR5
4.0′	13	12	11
5.0′	9	8	7
6.0′	6	5	5
7.0′	5	4	4
8.0′	4	4	3
9.0′	3	3	2
10.0′	2	2	2

Zone	Lumens	%Lamp	%Fixture
0 - 30°	172	N/A	90.3
0 - 40°	184	N/A	96.7
0 - 60°	191	N/A	100.0
0 - 90°	191	N/A	100.0

## **INITIAL FOOTCANDLES**

(One Unit, 5W , 23.6°	Beam)
Distance to Illuminated Diane	Castemal

Distance to Illuminated Plane (Feet)	Footcandles Beam Center	Beam Diameter
4	50.2	1.7′
6	22.3	2.5'
8	12.5	3.3'
10	8.0	4.2'

### ZONAL LUMEN SUMMARY

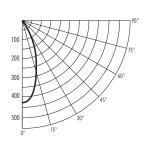
Zone	Lumens	%Lamp	%Fixture
0 - 30°	172	N/A	90.3
0 - 40°	184	N/A	96.7
0 - 60°	191	N/A	100.0
0 - 90°	191	N/A	100.0

### LUMINANCE (Average cd/m²)

	Average U	
Degrees	Luminance	
45	6171	
55	3215	
65	0	
75	0	
85	0	

### **PHOTOMETRIC REPORT**

Test Report #: PT10102803 Catalog No: MD1LW35K-FL-WH **Luminaire Spacing Criterion: 0.56** Luminaire LPW: 37.2



### **CANDLEPOWER DISTRIBUTION**

(Canaeias)			
Degrees			
Vertical	0°		
0	424		
5	403		
15	240		
25	104		
35	28		
45	9		
55	4		
65	2		
75	0		
85	0		
90	0		
Multiplier:	27K - 0.92		
	3K - 0.96		

41K - 1.06

## **AVERAGE INITIAL FOOTCANDLES**

Multiple Units (Square Array, 60'x60' room) Ceiling 80% Wall 50% Floor 20% RCR1 RCR3 RCR5 Spacing

T.U	10	17	- 11
5.0′	8	8	7
6.0′	6	5	5
7.0′	5	4	4
8.0′	4	3	3
9.0′	3	3	2
10.0′	2	2	2

## **ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixture	
0-30°	154	N/A	82.8	
0 - 40°	173	N/A	93.0	
0-60°	184	N/A	98.9	
0-90°	186	N/A	100.0	

### **INITIAL FOOTCANDLES** (One Unit, 5W, 34.9° Beam)

Distance to Illuminated Plane (Feet)	Footcandles Beam Center	Beam Diameter
4	26.5	2.5'
6	11.8	3.8'
8	6.6	5.0'
10	4.2	6.3'

### **LUMINANCE** (Average cd/m²)

	Average 0°	
Degrees	Luminance	
45	16739	
55	7738	
65	7000	
75	0	
85	0	

Fixtures tested to IES recommended standard for solid state lighting per LM-79-08. Photometric performance on a single unit at 12VAC in a 25°C ambient represents a baseline of performance for the fixture. Results may vary in the field and when multiple fixtures are used in a system.



## **DORAL®** - **MEDIUM** (Various reflectors are protected by U.S. Patent No. 6,464,378.)



## **DIMENSIONS** (406mm) (508mm) (251mm) 9-7/8" (270mm) 10-5/8 (541mm) (381mm) 21-5/16 EPA - 2.2 140° AIMING RANGE 360°

### **MOUNTING BRACKETS**

STANCHION MOUNT TENON (SMT): 3" (76mm) O.D. x 250" (6mm) x 22.65" (575mm) cast aluminum with 2" (51mm) pipe tenon (2-3/8" OD x 4-3/4" min. length). Wiring and internal ground lug accessible through hand hole.

PAD/WALL MOUNT (PWM)

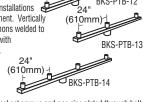
2" (51mm) pipe size aluminum tenon welded to a cast aluminum plate. Plate has four 1/2" (13mm) dia. mounting holes, and plate has two 1/2" (13mm) N.P.T. for conduit entry. Powder finish. Wall mount is single fixture only. Pad mount may use multiple mounting.

FLOODLIGHTING BRACKETS FBO-5 For installations not requiring horizontal fixture adjustment. Horizontally mounted 2" (51mm) x 4-3/4" (120mm) pipe size tenon welded to a steel plate and secured by two bolts. FBO-18 For installations requiring horizontal fixture أفروا adjustment. Vertically mounted 2" (51mm) x 17-1/2" (445mm) pipe size tenon welded to a steel plate and secured by two bolts.

POLE PREPARATION - Pole preparation "SF" or "DF" required when ordering FBO-5 or FBO-18 brackets. Note: FBO-5 and FBO-18 brackets can be ordered for round or square steel poles.

TENON MOUNT BRACKET (PTB):For installations requiring full horizontal fixture adjustment. Vertically mounted 2" (51mm) pipe size steel tenons welded to 2" (51mm) x 4" (102mm) steel arms, with

removable end caps for wiring access. Arms are welded to a round slipfitter, compatible with stanchions or poles with 2" (51mm) pipe size tenons (2-3/8" O.D. x 4-3/4" min. length) Slipfitters are secured by 6 stainless steel set screws and one zinc plated through bolt.



Catalog #

48"

(1219mm)

🗓 FB0-5

Square Poles Round Poles

FBO-18

BKS-PTB-12

**HOUSING** - One-piece cast aluminum in a multi-radiused rectangular shape with integral cooling ribs over the back. Internal concealed hinges permit full access to reflector area and housing interior. One-piece extruded silicone gasket between housing and door frame.

**DOOR FRAME - One-piece cast aluminum** door frame mates with housing to create multi-radiused shape. Door frame secures to housing by two internal (concealed) hinge brackets. 3/16" thick clear tempered glass lens seals to door frame by a one-piece silicone sponge gasket and stainless steel clips. Door frame secures to housing by four captive stainless steel recessed fasteners. Four holes provided for attachment of Glare Shield, Polycarbonate Shield, and Louver Shield.

**SOCKETS** - Porcelain mogul-base sockets. All sockets are pulse-rated.

**LIGHT SOURCES - Pulse-Start Metal** Halide, Pulse-Start Metal Halide Reduced Envelope, or High Pressure Sodium. Clear lamp is supplied as standard.

### **BALLASTS/ELECTRICAL COMPONENTS**

- Factory mounted in housing and prewired with leads extending through gasketing and into swivel mounting arm. UL listed components with high-power factor ballasts rated for -20° F starting. Optional photocell internally mounted in swivel mounting arm wiring access cover.

### REFLECTORS/DISTRIBUTION PATTERNS

- Doral Medium offers four reflector types: Horizontal Flood (HF), Medium Flood (MF), Vertical Flood (VF), and Spot Flood (SP). Reflectors are offered with highly reflective optical components. Photometric data is tested in accordance with IESNA guidelines.

## ARCHITECTURAL FLOOD

ADJUSTABLE SWIVEL MOUNTING ARM - Two-piece cast aluminum ratcheting swivel design with external splice compartment supplied with aluminum access cover. Access cover permits field wiring while fixture is in position on pole or bracket. Internal toothed ratcheting system provides positive locking in a range of 190° with adjustment in increments of 5°. Swivel mounting arm accepts standard 2-3/8" O.D. x 4-3/4" minimum or 2-7/8" O.D. x 4-3/4" minimum tenon and is secured by four recessed allen set screws (through bolt optional by others). Swivel adjustment is made by concealed hex head pivot bolt. Mounting arm is internally and externally sealed by gasketing.

BRACKETS - Stanchion Mounts, Pad/Wall Mounts, or PTBs may be ordered with Doral Medium fixtures.

FINISHES - Each fixture is finished with LSI's DuraGrip<sup>®</sup> polyester powder coat finishing process. The DuraGrip finish withstands extreme weather changes without cracking or peeling, and is guaranteed for five full years. Standard colors include bronze, black, platinum plus, white, satin verde green, metallic silver, and graphite.

PHOTOMETRICS - Please visit our web site at www.lsi-industries.com for detailed photometric data.



ARRA **Funding Compliant** 



SHIPPING WEIG	GHTS - Doral	Medium		
Catalog Number	Est. Weight (kg/lbs.)	Length (mm/in.)	Width (mm/in.)	Height (mm/in.)
DRM	27/59	546/21.5	337/13.25	603/23.75

**Project Name** Fixture Type 12/06/11

### **LUMINAIRE ORDERING INFORMATION**

TYPICAL ORDER EXAMPLE: DRM2 **VF 400 HPS** PCI120 **BLK** MT



Luminaire Prefix	Distribution	Lamp Wattag		Lens	Line Voltage	Luminaire Finish	Options
DRM2 – Doral Medium	HF – Horizontal Flood MF – Medium Flood VF – Vertical Flood SP – Spot		PSMU – Pulse-Start Metal Halide Universal 250 Watt PSMUR – Pulse-Start Metal Halide Reduced Envelope Universal 400 Watt HPS – High Pressure Sodium 250, 400 Watt  WT – Multi Tap consists of 120V, 208t for highest voltage. Alternate voltage TT – Tri-Tap consists of 120V, 277V at for Canadian applications and is prepa voltages will require f	/, 240V and 277V and is prepe es will require field adjustmer nd 347V and is shipped stand red for highest voltage. Alter	it. ard	BRZ - Bronze BLK - Black PLP - Platinum Plus WHT - White SVG - Satin Verde Green GPT - Graphite MSV - Metallic Silver	PCI120 – Button-Type Photocell PCI208 – Button-Type Photocell PCI240 – Button-Type Photocell PCI247 – Button-Type Photocell PCI347 – Button-Type Photocell PCI347 – Button-Type Photocell SQT - Standby Quartz (Time Delay) SQN - Standby Quartz (Non-Time Delay) LL – Less Lamp

### FOOTNOTES:

- 1- Photocells on 208V, 240V and 277V fixtures are wired for 277V operation. 208V or 240V photocells will require field re-wiring.
- 2- SQN and SQT options available with HF or VF distribution only.

### **BRACKET ORDERING INFORMATION**

Bracket Designation	Bracket Type	Bracket Configuration	Length	Bracket Finish	Options	EPA Values*
BKA – Bracket Aluminum	DRM2 – Doral Medium	SMT – Stanchion Mount Tenon PWM – Pad/Wall Mount	23" 6"	BRZ – Bronze BLK – Black PLP – Platinum Plus	None	
BKS – Bracket Steel	_	FBO – Flood Bolt-on	5" 18"	BUF – Buff WHT – White GPT - Graphite		0.1 0.6
		PTB-12 – Pole Top Bracket PTB-13 – Pole Top Bracket PTB-14 – Pole Top Bracket	48" 48" 72"	SVG - Satin Verde Green MSV - Metallic Silver		1.8 1.8 2.5

TYPICAL ORDER EXAMPLE: **BKA DRM2 SMT** 23 **BLK** 

PTB brackets slipfit 2-3/8" OD tenon. FBO brackets are available on steel round and square poles. FBO brackets require pole preparation and must be ordered with "SF" or "DF" pole option.

\*The bracket EPA should be added to the fixture EPA when selecting the

ACCESSORY ORDERING INFORMATION	(Accessories are field installed)		•
Description	Order Number	Description	Order Number
BD – Barn Doors	90849CLR	FK120 - Single Fusing	FK120++
GS – Glare Shield	90850CLR	FK277 - Single Fusing	FK277++
PS – Polycarbonate Shield (Clear only)	90852	DFK208,240 - Double Fusing	DFK208,240++
LS – Louver Shield (Black only)	90853+	DFK480 - Double Fusing	DFK480++
+Available on Medium Flood and Spot distributions	only	FK347 - Single Fusing	FK347++
		++ Fusing to be installed in a compatible junction box (supplied by contractor) pole or stanchion mounting bracket.	,
BARN DOORS (BD)- Extruded aluminum doors with ar Each door hinged with a stainless steel clip – locks by Doors are individually removable. Assembly mounts to frame holes. <b>Caution</b> : Not recommended for ground-randal-prone areas. Available in standard finishes.	a mounting screw.	POLYCARBONATE SHIELD (PS) - 1/8" clear convex, U.V. stabilized, formed polyc Mounts to cast door frame holes. May be used with Glare Shield. <b>Caution</b> : Use only when vandalism is anticipated. Useful life is limited by U.V. discoloration from sunlight,HPS or MH lamps.	carbonate.
GLARE SHIELD (GS)- Formed 1/16" thick aluminum. door frame holes and may be used with Polycarbonate	Mounts to cast Shield option.	LOUVER SHIELD (LS) - Formed 1/16" thick aluminum with black finish.  Mounts to cast door frame holes. Provides glare control. Available on Medium Flood and Spot distribution only.	



Project Name \_ \_\_\_\_\_ Fixture Type \_\_\_ Catalog #\_

12/06/11





LUNA 1664BZ-LED
BRONZE

MATERIAL	EXTRUDED ALUMINUM
GLASS	ETCHED GLASS
WIDTH	9.0"
HEIGHT	24.0"
EXTENSION	4.0"
тто	11.5"
BACKPLATE HEIGHT	24.0"
BACKPLATE WIDTH	9.0"
BULB	TWO 4.5W COL. 35W INCANDESCENT EQUIVALANT
VOLTAGE	120V
UPC	640665166477
NOTES:	

AT HINKLEY, WE EMBRACE THE DESIGN PHILOSOPHY THAT YOU CAN MERGE TOGETHER THE LIGHTING, FURNITURE, ART, COLORS AND ACCESSORIES YOU LOVE INTO A BEAUTIFUL ENVIRONMENT THAT DEFINES YOUR OWN PERSONAL STYLE. WE HOPE YOU WILL BE INSPIRED BY OUR COMMITMENT TO KEEP YOUR 'LIFE AGLOW.'



# THE CITATION SERIES

Excellent Lighting Control.

Exceptional Value.



## THE CITATION SERIES -FOR MAXIMUM OPERATIONAL VALUE

One of the best just got better.

Featuring the ultimate in high performance and efficient construction, the Citation Series has been improved to offer a wider variety of enhanced optical choices. Depending on your requirements, you can choose from three sizes, in addition to wattages ranging from 100 to 1000.

For new construction or upgrades to existing sites, the Citation Series offers you an extensive selection of energy-saving features designed to help improve the safety, security and overall image of any outdoor lighting area.

### THE CITATION II

The Citation II features a 400-Watt reduced envelope, Vertical or Horizontal Burn lamp option in the small Citation housing. With the Citation II, you can enjoy one of the outdoor lighting industry's finest operational values.

The Citation II is loaded with cost-saving features, including flat or sag glass lenses, Pulse-Start Metal Halide lamps, optional tool-less entry/ground re-lamping (ground re-lamping on Citation II Vertical Burn only), plus more.

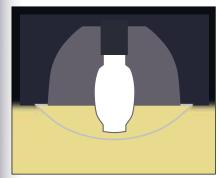




A WIDE VARIETY OF OPTICAL CHOICES



### HIGH-PERFORMANCE VERTICAL BURN OR HORIZONTAL BURN

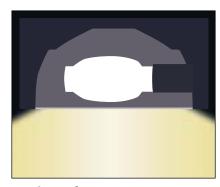


### Vertical Burn

Utilizing a sag lens, Vertical Burn fixtures control light output and distribute light more evenly over a larger area.

High-performance, multi-faceted reflectors surround the vertically oriented lamp to deliver brilliant light and provide maximum lighting distribution and uniformity. This creates better "see-ability" and efficiency using fewer fixtures, thus lowering your total cost of ownership.

- Greater lighting effectiveness and efficiency with fewer fixtures
- Lower energy costs
- Lower installation costs
- Lower total cost of ownership



### Horizontal Burn

When your lighting requirements include sharp cutoff luminaires with a high degree of light control, specify Horizontal Burn.

Utilizing a flat lens, horizontal lamp orientation and high-performance, multi-faceted reflectors, Horizontal Burn fixtures allow you to place more direct emphasis on ground elements without sacrificing uniformity.

- Powerful, sharp cutoff illumination meets IESNA full cutoff classification
- Excellent for areas with strict zoning requirements

### Housing

One-piece aluminum housing is available in small, medium and large sizes. Welded and finished corners provide a clean, sharp appearance, increased housing strength and weather-tight construction.

### LENS/GASKET

Clear, flat tempered glass lens or sag tempered glass lens is sealed to the housing with an EPDM gasket to prevent entry of moisture and insects.

### **LIGHT SOURCES**

Designed to operate with either a Pulse-Start Metal Halide; Super Metal Halide; Super Metal Halide Reduced Envelope; Metal Halide; Metal Halide Reduced Envelope or High Pressure Sodium lamp with mogul-base sockets. A clear lamp is supplied as standard.



FIXTURE SHOWN: CT2V CITATION II

High-power factor type ballast is designed for -20° F operation. Ballast is mounted to the housing reinforcing plate.

### **BRACKETS**

BALLAST

Aluminum bolt-on bracket is shipped standard (2 1/2" x 6" x 6" on small models. 2 1/2" x 6" x 8" on medium models, 2 1/2" x 6" x 12" on large models). Optional 6" bracket is available for single and D180° configurations.

### INTERNAL FITTERS

Upgrading to the Citation Series is easy and cost-efficient with one of LSI's patented Internal Fitters (U.S. Patent No. 5.599.094). For existing 4" or 5" square poles, insert an Internal Fitter in the pole, and turn to tighten.



### **REFLECTOR OPTIONS**

The Citation Series offers a wide variety of reflector choices to meet your needs, including these high-performance options: Note: Various reflector models are protected by U.S. Patent 6,464,378.

SOCKETS

EASY ACCESS

Porcelain, mogul-base sockets feature

spring-reinforced contacts for long life.

Standard doors feature two captive,

stainless steel door fasteners, which

access. Optional, on Citation II fixtures,

is a new spring-loaded quarter-turn

fastener which allows for "tool-less

entry" by hand, or "ground re-lamping"

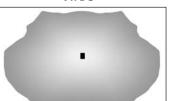
with a special re-lamping tool. Ground

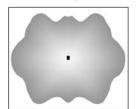
re-lamping is only possible on Vertical

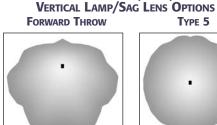
Burn Citation II fixtures.

provide secure closure and easy

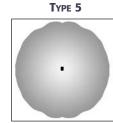
### CITATION II (CT2H) HORIZONTAL LAMP/FLAT LENS OPTIONS TYPE 3 Type 5



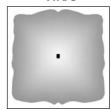




CITATION II (CT2V)



CITATION MEDIUM (CTM) TYPE 5



Please visit our web site at www.lsi-industries.com for detailed photometric data.

### **Optional Ground Re-Lamping**

A ground re-lamping option is available for Vertical Burn Citation II fixtures with lower pole heights. A special ground re-lamping tool opens and closes the unit, in addition to removing and replacing the lamp, making re-lamping remarkably easy.

- No bucket truck or ladders necessary
- No need for the added expense of hiring an outside contractor
- Maximum tool length of 15'

### **Pulse-Start Metal Halide Lamps**

With Pulse-Start Metal Halide lamps, you can enjoy the white light of Metal Halide, along with the energy efficiency and lumen maintenance of High Pressure Sodium. Consider the benefits: **COMPARE** 

- Longer lamp life (up to 30,000 hours)
- More lumens per watt
- Better lumen maintenance for more light output over time
- Improved color stability and less color shift
- Faster warm-up



**Vietal Halide** 

Whiter

90-110

80-85%

35-750

15-30

andard M.H.

White

60-85

175-1000

Efficacy (L/W)

Lumen Maint.

Lamp Life (kHrs)

Lamps





PULSE-START CASE STUDY

H.P.S.

Yellow

100-125

90%

35-1000

400 CWA 320 Super CWA (Standard M.H.) (Pulse-Start) **Pulse-Start** 

,	(otaliaala illiil) (i aloo otali)				
System Watts Per Fixture	458 Watts	365 Watts			
Mean Lumens	28,800	26,400			
Fixtures	20	20			
Power Cost Per Fixt. Per Yr. @ 8¢ (4000 Hrs)	\$146.00	\$116.00			

Luminaire Prefix	Lamp Distribution	Wattage	Light Source	Lens	Line Voltage²	Luminaire Finish	Options
CT2H – Small (Horizontal lamp)	A – Asymmetrical 3 – Type III FT – Forward Throw 5 – Type V	100 150 175 250 320 400	PSMH – Pulse-Start Metal Halide 320 Watt SMH – Super Metal Halide 175, 250 Watt SMHR – Super Metal Halide Reduced Envelope 400 Watt MH – Metal Halide 175, 250 Watt MHR – Metal Halide Reduced Envelope 400 Watt HPS – High Pressure Sodium 100,150, 250, 400 Watt	F — Flat Clear Tempered Glass	480 V MT — Multi-Tap³ TT — Tri-Tap⁴	BRZ – Bronze BLK – Black PLP – Platinum Plus BUF – Buff WHT – White GRN – Green GPT – Graphite	6BK – 6" Bracket (CTL and CTM) <sup>5</sup> PCR – Photoelectric Control Receptacle <sup>6</sup> TE – Tool-less Entry <sup>7</sup> GR – Ground Re-Lamp (includes tool-less entry) <sup>8</sup> LL – Less Lamp
CT2V – Small (Vertical lamp)	FP – Forward Perimeter 5 – Type V	150 175 250 320 400	PSMV – Pulse-Start Metal Halide 175, 250, 320 Watt SMVR – Super Metal Halide Reduced Envelope 400 Watt MH – Metal Halide 175, 250 Watt MHR – Metal Halide Reduced Envelope 400 Watt HPS – High Pressure Sodium 150 Watt	CT — Contoured Clear Tempered Glass			
CTM — Medium (Horizontal lamp)	A – Asymmetrical 3 – Type III FT – Forward Throw 5 – Type V	250 320 400	PSMH – Pulse-Start Metal Halide 320 Watt SMH – Super Metal Halide 250, 400 Watt MH – Metal Halide 250, 400 Watt HPS – High Pressure Sodium 250, 400 Watt	F — Flat Clear Tempered Glass			
CTL – Large (Horizontal lamp)	A – Asymmetrical 3 – Type III FT – Forward Throw <sup>1</sup>	1000	MH – Metal Halide 1000 Watt HPS – High Pressure Sodium 1000 Watt				
							C(NT) IIS
Example o	f Typical Order	CT2H	3 400 SMHI	₹ F	MT BR	RZ	LISTED

CTL-FT – Forward Throw reflectors are field-rotatable.
 For international voltages, consult factory.
 MT – Multi-Tap is shipped standard unless otherwise specified. Multi-Tap consists of 120V, 208V, 240V and 277V. Multi-Tap is pre-wired for 277V. Alternate voltages will require field re-wiring.
 Tir-Tap is shipped standard for C-UL applications. Tir-Tap consists of 120V, 277V, and 347V. Tir-Tap is pre-wired for 347V. Alternate voltages will require field re-wiring.

5) A 6" bracket can only be ordered with single and D180º configurations on CTL and CTM.
 6) PCR factory installed and pre-wired for 277V. Alternate voltages will require field re-wiring.
 7) Tool-less Entry option available on CT2V and CT2H.
 8) Ground re-lamp option available on CT2V only. Maximum length 15 ft. See below for Capacita Lamp Changes.

Ground Lamp Changer.

Listed for

wet locations.

LUMINAIRE EPA CHART			<del>-2-</del>	<u>.</u>			
Includes Bracket.	Single	D90°	D180 <sup>O</sup>	T90 <sup>o</sup>	TN120 <sup>0</sup>	Q90°	Parallel
Small Citation (CT2V) 6" Bracket	1.5	2.4	3.0	3.9	3.9	4.7	2.4
Small Citation (CT2H) 6" Bracket	1.4	2.2	2.8	3.6	3.6	4.4	2.2
Medium Citation (CTM) 8" Bracket	2.2	3.9	4.0	6.1	6.2	7.8	3.9
Large Citation II (CTL) 12" Bracket	3.2	5.1	6.4	8.3	8.5	10.2	5.1
House side shield adds to fixture EPA. Consult factory.							

Description

## Accessory Ordering Information

FICCESSONT ONDERING INTO	1.11011
Description	Order Number
PC120V – Photocell	122514
PC208V – Photocell	122515
PC240V - Photocell	122516
PC277V - Photocell	122517
PC480V – Photocell	1225180
FK120V – Single Fusing	FK120V
FK277V – Single Fusing	FK277V
DFK208, 240V – Double Fusing	DFK208, 240V
DFK480V — Double Fusing	DFK480V
FK347V — Single Fusing	FK347V

CT2V HSS – House Side Shield	122519BLK <sup>†</sup>
CT2H HSS – House Side Shield	122519BLK <sup>†</sup>
CTM HSS – House Side Shield	122520BLK <sup>†</sup>
CTL HSS – House Side Shield	122521BLK <sup>†</sup>
CT2H PLS – Polycarbonate Shield	168702
CTM PLS - Polycarbonate Shield	122523
CTL PLS - Polycarbonate Shield	122524
RPP2 – Round Pole Plate	162914BLK <sup>†</sup>
BKS-BO-WM-*-CLR Wall-Mount P	ate 123111CLR
Ground Lamp Changer	132678A <sup>™</sup>
†Black only.	<sup>††</sup> For use with 250, 320, standard and 400 watt Reduced Envelope

<sup>††</sup>For use with 250, 320, standard and 400 watt Reduced Envelope

**Order Number** 

### **LUMINAIRE FINISHES**

Each Citation fixture is finished with DuraGrip®, LSI's baked-on, polyester-powder coat finishing process. LSI's DuraGrip finish withstands weather changes without cracking or peeling, and is guaranteed for 5 full years.









### **D**IMENSIONS SAG LENS C Ε Α В D CT2V (Small) 20-1/8 8" 14-5/8 6" 11-1/4" CT2H (Small) 14-5/8" 20-1/8' 8" 6" CTM (Medium) 25" 8" 18-3/8' 29" 21 12" CTL (Large) 10'

BRACKET - 2-BOLT PATTERN Note: A six-inch bolt-on bracket is shipped standard with a small Citation. An eight-inch bolt-on bracket is shipped standard with a medium Citation. A twelve-inch bolt-on bracket is shipped standard with a large Citation, unless otherwise noted

### THEPOWEROFIMAGE







### CONTOUR

## **Specifications**

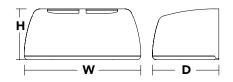
7-1/8" Height: (29.2 cm)

16-3/8" Width: (41.6cm)

9-5/16" Depth:

Weight 30 lbs

(max): (13.6 kg)



### Catalog Number

Notes

Туре

### Introduction

The Contour® Series luminaires offer traditional square dayforms with softened edges for a versatile look that complements many applications.

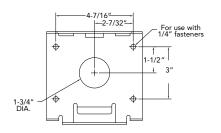
The CSXW LED combines the latest in LED technology with the familiar aesthetic of the Contour® Series for stylish, high-performance illumination that lasts. It is ideal for replacing 100-400W metal halide in wall-mounted applications with typical energy savings of 80% and expected service life of over 100,000 hours.

### **Ordering Information**

### **EXAMPLE: CSXW LED 1 30B700/40K SR3 MVOLT DDBTXD**

CSXW LED									
Series	Light Engines	Performance Package <sup>1</sup>	Distribution	Voltage	Mounting	Options	Finish (required)		
CSXW LED	1 One engine (30 LEDs)	350 mA options: 30B350/30K 3000K 30B350/40K 4000K 30B350/50K 5000K  530 mA options: 30B530/30K 3000K 30B530/40K 4000K 30B530/50K 5000K  700 mA options: 30B700/30K 3000K 30B700/40K 4000K 30B700/50K 5000K	SR2 Type II SR3 Type III SR4 Type IV FT Forward throw	MVOLT <sup>2</sup> 120 <sup>2</sup> 208 <sup>2</sup> 240 <sup>2</sup> 277 <sup>2</sup> 347 <sup>3</sup> 480 <sup>3</sup>	Shipped included (blank) Surface mount  Shipped separately BBW Surface- mounted back box (for conduit entry) 4	Shipped installed PE Photoelectric cell, button type 5.6 DMG 0-10V dimming driver (no controls) 7 SF Single fuse (120, 277, 347V) 8 DF Double fuse (208, 240, 480V) 8  Shipped separately 4 VG Vandal guard WG Wire guard	DDBXD Dark bronze DBLXD Black DNAXD Natural aluminum DWHXD White DDBTXD Textured dark bronze DBLBXD Textured black DNATXD Textured natural aluminum DWHGXD Textured white		

### **Mounting Detail**



### Accessories

Ordered and shipped separately

CSXWBBW DDBXD U CSXWWG U CSXWVG U

Back box accessory (specify finish) Wire guard accessory Vandal guard accessory

### NOTES

- Configured with 4000K (/40K) provides the shortest lead times. Consult factory for 3000K (/30K) and 5000K (/50K) lead times.
- MVOLT driver operates on any line voltage from 120-277V (50/60 Hz). Specify 120, 208, 240 or 277 options only when ordering with fusing (SF, DF options) or photocontrol (PE option).
- Available with 700 mA options only (30B700).
- Also available as a separate accessory; see Accessories information at left
- Photocontrol (PE) requires 120, 208, 240, 277 or 347 voltage option. Must be ordered with fixture; cannot be field installed.
- Not available with 530 mA options (30B530) or 347 or
- Single fuse (SF) requires 120, 277 or 347 voltage option. Double fuse (DF) requires 208, 240 or 480 voltage



### **Performance Data**

### **Lumen Output**

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of the configurations shown, within the tolerances allowed by Lighting Facts. Actual performance may differ as a result of end-user environment and application. Contact factory for performance data on any configurations not shown here.

Light	Drive Current (mA)	Performance Package	System Watts	Dist. Type	40K (4000K, 67 CRI)				
Engines					Lumens	В	U	G	LPW
		30B350/K	38W	SR2	3259	1	0	1	85
	350			SR3	3233	1	0	1	85
	330			SR4	3308	1	0	1	87
				FT	3311	1	0	1	87
	530	30B530/K	57 W	SR2	4522	1	0	1	79
1				SR3	4475	1	0	1	79
(30 LEDs)				SR4	4583	1	0	2	80
				FT	4613	1	0	1	81
	700	30B700/K	74W	SR2	5514	1	0	2	75
				SR3	5403	1	0	2	73
				SR4	5565	1	0	2	75
				FT	5601	1	0	2	76

### **Lumen Ambient Temperature (LAT) Multipliers**

Use these factors to determine relative lumen output for average ambient temperatures from 0-40  $^{\circ}$ C (32-104  $^{\circ}$ F).

Amb	Ambient			
0°C	32°F	1.02		
10°C	50°F	1.01		
20°C	68°F	1.00		
25°C	77°F	1.00		
30°C	86°F	1.00		
40°C	104°F	0.99		

### **Projected LED Lumen Maintenance**

Data references the extrapolated performance projections for the **CSXW LED 1 30B700** platform in a **40°C ambient**, based on 10,000 hours of LED testing (tested per IESNA LM-80-08 and projected per IESNA TM-21-11).

To calculate LLF, use the lumen maintenance factor that corresponds to the desired number of operating hours below. For other lumen maintenance values, contact factory.

Operating Hours	0	25,000	50,000	100,000	
Lumen Maintenance Factor	1.0	0.95	0.92	0.87	

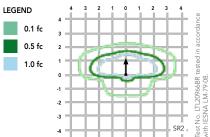
### **Electrical Load**

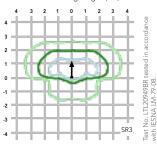
			Current (A)					
Light Engines	Drive Current (mA)	System Watts	120	208	240	277	347	480
	350	38W	0.35	0.20	0.18	0.15	0.12	0.09
1	530	57W	0.53	0.30	0.26	0.23	0.18	0.13
	700	74W	0.69	0.40	0.34	0.30	0.24	0.17

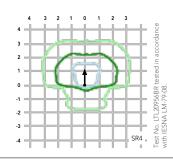
### **Photometric Diagrams**

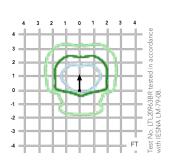
To see complete photometric reports or download .ies files for this product, visit Lithonia Lighting's CSXW homepage.

Isofootcandle plots for the CSXW LED 1 30B700/40K. Distances are in units of mounting height (20').









### **FEATURES & SPECIFICATIONS**

### INTENDED USE

The Contour Series Wall LED luminaire is ideal for commercial building mounted applications from over-the-door to 20 ft mounting heights.

### CONSTRUCTION

Rugged, die-cast, single-piece aluminum housing. Unique flow-through design for optimized thermal management. Modularity allows for ease of maintenance and potential for future system upgrades. Metallic screen covers the top of the housing, preventing debris build-up while allowing for air flow. Housing is completely sealed against moisture and environmental contaminants.

### FINISH

Exterior parts are protected by a zinc-infused Super Durable TGIC thermoset powder coat finish that provides superior resistance to corrosion and weathering. A tightly controlled multi-stage process ensures a minimum 3 mils thickness for a finish that can withstand extreme climate changes without cracking or peeling.

### OPTICS

Precision-molded acrylic lenses provide optimal luminaire spacing and improved uniformity. Lenses are indexed to the circuit board to ensure consistent optical alignment and delivering repeatable photometric performance. Light engines are available in standard 4000K (67 CRI) or optional 3000K (80 CRI) or 5000K (67 CRI) configurations. The CSXW has zero uplight and qualifies as a Nighttime Friendly  $^{\rm IM}$  product, meaning it is consistent with the LEED  $^{\rm IM}$  and Green Globes  $^{\rm IM}$  criteria for eliminating wasteful uplight.

### ELECTRICAL

Light engine consists of 30 high-efficacy LEDs mounted to a metal-core circuit board to maximize heat dissipation and promote long life (100,000 hrs at 40°C, L87). Class 1 electronic driver has a power factor >90%, THD <20%, and has an expected life of 100,000 hours with <1% failure rate. Easily-serviceable surge protection device meets a minimum Category C Low operation (per ANSI/IEEE C62.41.2).

### INSTALLATION

Universal mounting mechanism with integral mounting support allows fixture to hinge down. Bubble level provides correct alignment with every installation.

### LISTINGS

CSA Certified to U.S. and Canadian standards. Light engine is IP66 rated. Luminaire is IP65 rated.

### WARRANTY

Five year limited warranty. Full warranty terms located at www.acuitybrands.com/CustomerResources/Terms\_and\_conditions.aspx.

**Note:** Specifications subject to change without notice.

