

Notary Public in and for the State of Texas

DEVELOPMENT APPLICATION

City of Rockwall Planning and Zoning Department 385 S. Goliad Street Rockwall, Texas 75087

PLANNING & ZON	JASE NO.	SP2020 -007
NOTE: THE APPLICAT	TION IS NOT C	CONSIDERED ACCEPTED BY THE
		TOR AND CITY ENGINEER HAVE

CITY ENGINEER:

Please check the appropriate box below to indicate the type of development request [SELECT ONLY ONE BOX]:

[] Preliminary Pla [] Final Plat (\$300.00 [] Replat (\$300.00 [] Amending or M [] Plat Reinstatem Site Plan Applicatio [] Site Plan (\$250.00	00.00 + \$15.00 Acre) ¹ t (\$200.00 + \$15.00 Acre) ¹ 0.00 + \$20.00 Acre) ¹ 0 + \$20.00 Acre) ¹ 0 + \$20.00 Acre) ¹ Ilinor Plat (\$150.00) nent Request (\$100.00)	n (\$100.00)	[] Specific Us [] PD Develop Other Applica [] Tree Remo [] Variance R Notes: 1: In determining	ange (\$200.00 + e Permit (\$200. oment Plans (\$2 t ion Fees:	00 + \$15.00 A 00.00 + \$15.0 0) e the exact acrea	cre) ¹ 0 Acre) ¹ lige when multiply	
PROPERTY INFO	RMATION [PLEASE PRINT]						
Address	1480 Justin Rd.						
Subdivision	SPR Packaging Addition	n		Lot	2	Block	Α
General Location	1/2 mile north of Highwa	y 30 at the interse	ection of Justin R	d. and Indus	trial Blvd.		
ZONING, SITE PL	AN AND PLATTING INFO	ORMATION [PLEAS	E PRINT]				
Current Zoning	LI		Current Use	Warehous	e, Manufac	turing, Office)
Proposed Zoning	LI		Proposed Use	Warehous	e, Manufac	turing, Office)
Acreage	10.1893	Lots [Current]		Lot	s [Proposed]		
process, and failur	PLATS: By checking this box you ac re to address any of staff's comment ANT/AGENT INFORMAT	s by the date provided or	n the Development Ca	lendar will result i	n the denial of y	our case.	
[] Owner	Alvaplast US Development LL	C (SPR Packaging)	[X] Applicant	Pross Design	Group		
Contact Person	Carolina Molina		Contact Person	David A. Mo	rales		
Address	1480 Justin Rd.		Address	5310 Harves	st Hill Rd.		
				Suite 180			
City, State & Zip	Rockwall, TX 75087		City, State & Zip	Dallas, TX 7	5230		
Phone	469-745-9231		Phone	972-759-140			
E-Mail	cmolina@sprpackaging.c	om	E-Mail	dmorales@p	odgarch.net		
this application to be true "I hereby certify that I an cover the cost of this app that the City of Rockwall permitted to reproduce a information."	cation [REQUIRED] The dauthority, on this day personally a and certified the following: The owner for the purpose of this a lication, has been paid to the City of a lice. "City") is authorized and permiting copyrighted information submitted as a log office on this the	pplication; all information Rockwall on this the itted to provide informa	day of	true and correct; of this application t	and the applicat. 20 A By s to the public. T sociated or in re	ion fee of \$igning this application the City is also a real sponse to a real	, to cation, I agree uthorized and uest for public
Given under my nana and	Owner's Signature	Edipe H	dure			Commission Ex May 3, 2023	

My Commission Expires





City of Rockwall

Planning & Zoning Department 385 S. Goliad Street Rockwall, Texas 75032 (P): (972) 771-7745 (W): www.rockwall.com The City of Rockwall GIS maps are continually under development and therefore subject to change without notice. While we endeavor to provide timely and accurate information, we make no guarantees. The City of Rockwall makes no warranty, express or implied, including warranties of merchantability and fitness for a particular purpose. Use of the information is the sole responsibility of the user.



Date: March 20, 2020

Project: SPR Office and Ink Room

Project No.: 1854 – 1914 Case No: SP2019-030

RE: REVISION NARRATIVE - AMENDED SITE PLAN SUBMITTAL

The following changes have been made to the previous approved site plan.

ARCHITECTURAL:

A1.0 Site Plan

- The compactor enclosure has been moved further east and adjoined to the lnk Room addition exterior wall. The building wall will be protected by a traffic rated guardrail.
- Doors and stairs along the existing south wall have been relocated as needed to accommodate the new location of the compactor enclosure.
- At the existing west drive, the drive lane has been straightened with the Owner's removal of the existing 30" unprotected Bois d'Arc tree. Parking has been reconfigured to add three additional spaces to the site.
- Parking data is updated to reflect the additional parking spaces and the actual number of parking spaces added with the office and ink room additions.

A1.1 Demolition / Existing Site Plan

Demolition is depicted for the above site changes.

A3.1 Ink Room Exterior Elevations

• Elevations are revised to show the new location of the compactor enclosure and the correct depiction of the entry stairs to the future locker room portion.

Variance Request Letter

 The parking variance request is revised to reflect the additional parking spaces added with these changes.

LANDSCAPE:

L1.01 Tree Preservation Plan

Revised to show the removal of tree 1654 along the west drive.

L2.01 Landscape Plan

 Revised landscaping and tree location along the new parking configuration and affected drive areas.

L3.01 Irrigation Plan

• Revised irrigation design along the new parking configuration and affected drive areas.

The following sheets are included in the submission but are unchanged:

- A3.0 Office Addition Exterior Elevations
- L2.02 Landscape Specifications and Details
- L3.02 Irrigation Specifications and Details
- MEP1.1 Site Photometric Plans
- MEP1.2 Light Fixture Cut Sheets
- MEP1.3 Light Fixture Cut Sheets
- MEP1.1 Lighting Wall Elevations

Additional submittal items included:

- Application and Fee
- Owner supplied letter regarding parking needs

Sincerely,

David A. Morales Project Architect

Attachments:

A1.0, A1.1, A3.0, A3.1, L1.01, L2.01, L2.02, L3.01, L3.02, MEP1., MEP1.2, MEP1.3, MEP1.4 Variance Request Letter, Owner Parking Letter, Application and Fee

SPR OFFICE ADDITION SITE PLAN SUBMITTAL REQUESTED VARIANCES

On behalf of SPR Packaging, the following is a list of variances to the City of Rockwall Development Codes that we wish to submit to your office for the Site Plan Submittal.

SPR Packaging, located at 1480 Justin Rd., proposes a two-phase expansion which will include a two-story 22,564 SF Office addition and a 7,046 SF Ink Storage Room and future Employee Locker Room addition. In connection with this project, we request the following variances:

A. Off-Street Parking Requirements:

Article VI, section 2.3 indicates that when a building is expanded, the provisions for parking and loading shall be provided for the portion of land use and/or building that has been added. By this calculation, the proposed additions would require 82 spaces. Due to site constraints, only a total of 54 new parking spaces can be provided with this addition. The Owner feels that the total parking provided on-site after the completion of the two additions (154 spaces) is adequate for their actual needs. The Owner wishes to be granted a variance to reduce the required parking amount.

B. Construction Materials:

In order to achieve the desired architectural aesthetic, the Owner wishes to be granted a variance to eliminate requirements for stone and masonry on the building facades and the 10% maximum of secondary materials based on Article V, Section 4.01.A.2 Exception.

C. Building Articulation:

In order to achieve the desired architectural aesthetic, the Owner wishes to be granted a variance to the requirements for Horizontal and Vertical Articulation of Facades.

D. Dumpster Enclosure:

To accommodate the new office addition, the existing dumpster enclosure must be relocated. The only possible location is directly to the east of the existing location on the side that fronts Justin Rd. Based on the fact that the existing dumpster enclosure faced Justin Rd., we request a variance to locate the dumpster as proposed facing Justin Rd.

SPR Office Addition Requested Variances 03/19/20 Page 2

Although the Owner has requested these variances, it is their intent to provide a unique and aesthetically pleasing architectural design constructed of high-quality materials. Additionally, as a compensatory measure for the requested site-related variances, additional landscaping and trees will be added to the landscaping fronting Justin Rd.

Sincerely,

David A. Morales
Project Architect

DAM/cs

Attachments: Owner Letter Re: Parking



September 5, 2019

Ryan Miller Director of Planning and Zoning City of Rockwall 385 S. Goliad Street Rockwall, TX 75087

Mr. Miller,

Please accept this letter as an indication of the sincere interest in ensuring that, the addition of the Headquarter Office, is not to exceed the number of 125 people working per shift at the same time. The office addition is forethought will relocate the administrative office to the new addition and the production office to the actual main area. The intention is to improve the available workspace for the office and production employees as well.

This number covers the entire staff that will use the parking space for 24 hours, seven days a week. Considering that the currently designed parking spaces are more than the minimum requirement for that number of people; we assume it will not be any inconvenience in the future. Therefore, we would appreciate your approval on this subject. Thank you for your time and consideration.

Sincerely,

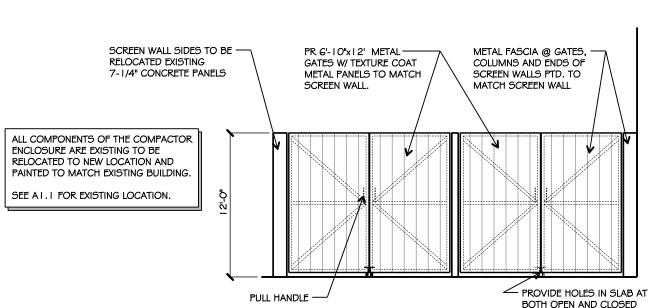
Ignacio Echávarri President SPR Packaging



PROJECT DATA

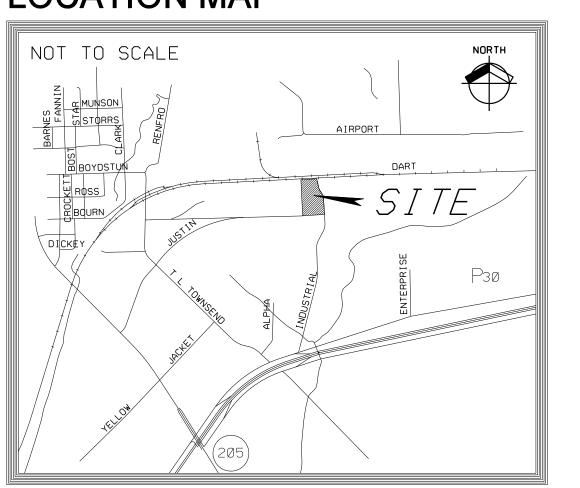
LIGHT INDUSTRIAL PROPOSED LAND USE: WAREHOUSE, MANUF., OFFICE SITE AREA: 10.18 AC 443,480.8 SF **BUILDING AREA**: **EXISTING BUILDING:** 188,516 SF OFFICE ADDITION 11,628 SF FIRST FLOOR: SECOND FLOOR: 10,936 SF 22,564 SF INK ROOM / LOCKER ROOM ADDITION 7,046 SF

PROPOSED USE	REQ. SPACES		
EXISTING BUILDING			•
OFFICE	26,038 SF	EXISTING	-
MANUFACTURING	18,805 SF	EXISTING	-
WAREHOUSE	143,673 SF	EXISTING	-
PROPOSED ADDITION			•
OFFICE (2-STORIES)	22,564 SF	1:300	75
INK ROOM (WAREHOUSE)	7,046 SF	1:1000	7
TOTALS			\checkmark
- REQUIRED FOR ADDITION	IS	(82
- PROVIDED WITH ADDITIO	NS	>	54
TOTAL PARKING VARIANCE	REQUESTE) (28
ACCESSIBLE PARKING REQU	JIREMENTS		
- REQUIRED FOR OFFICE A	DDITION		*4
- PROVIDED FOR OFFICE A	DDITION		4



POSITIONS FOR GATE KEEPERS → COMPACTOR ENCLOSURE SCALE: 1/8"=1'-0"

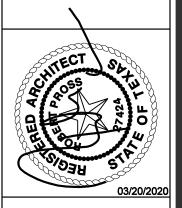
LOCATION MAP



ALVAPLAST US, INC. / SPR PACKAGING CONTACT: CAROLINA MOLINA 1480 JUSTIN ROAD ROCKWALL, TX 75087 469-402-1232

ARCHITECT: PROSS DESIGN GROUP, INC. CONTACT: BOBBY PROSS 5310 HARVEST HILL RD., SUITE 180 DALLAS, TX 75230 972-759-1400

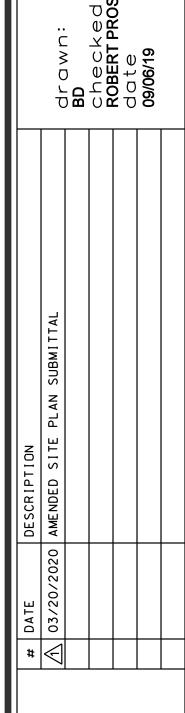
CASE NO: SP2019-030





job no sheet A1.0

SCALE: 1"=40'-0"







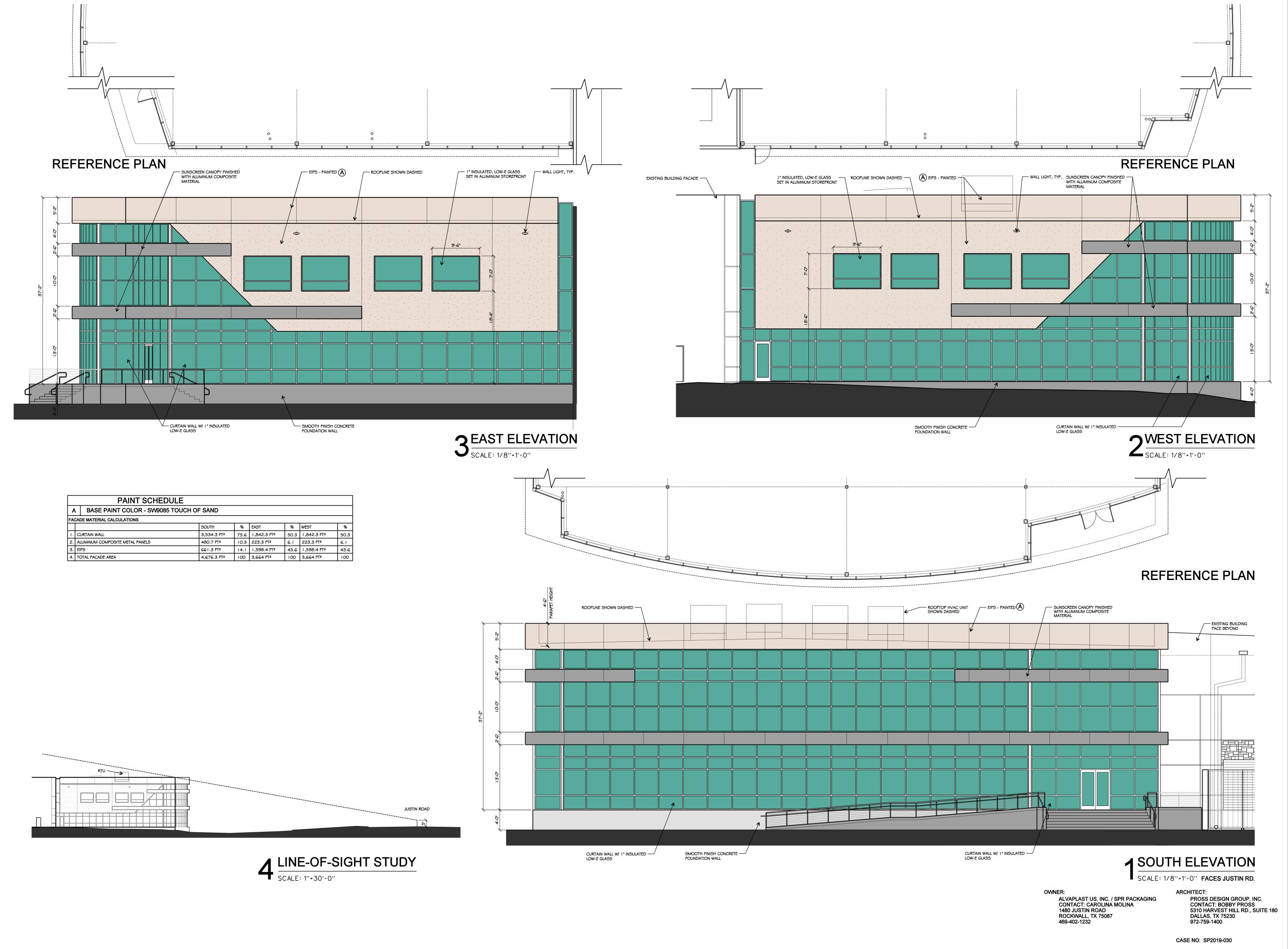
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ALVAPLAST US, INC. / SPR PACKAGING CONTACT: CAROLINA MOLINA 1480 JUSTIN ROAD ROCKWALL, TX 75087 469-402-1232

ARCHITECT: PROSS DESIGN GROUP, INC. CONTACT: BOBBY PROSS 5310 HARVEST HILL RD., SUITE 180 **DALLAS, TX 75230** 972-759-1400

sheet A1.1

CASE NO: SP2019-030



DATE DESCRIPTION

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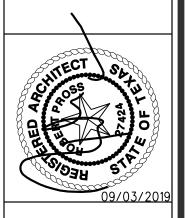
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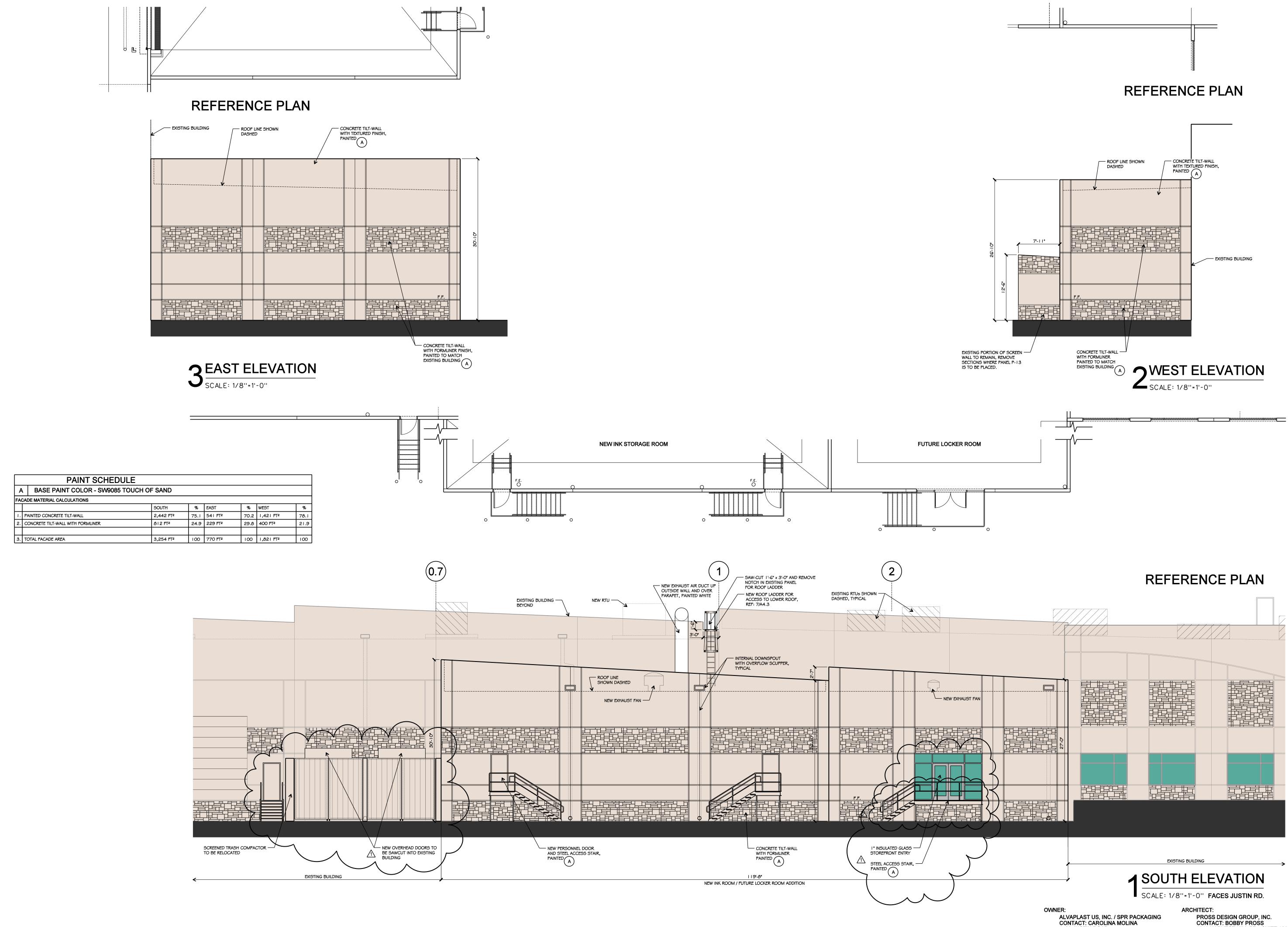
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SS design group, incorl





DESCRIPTION

AMENDED SITE PLAN SUBMITTAL

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date

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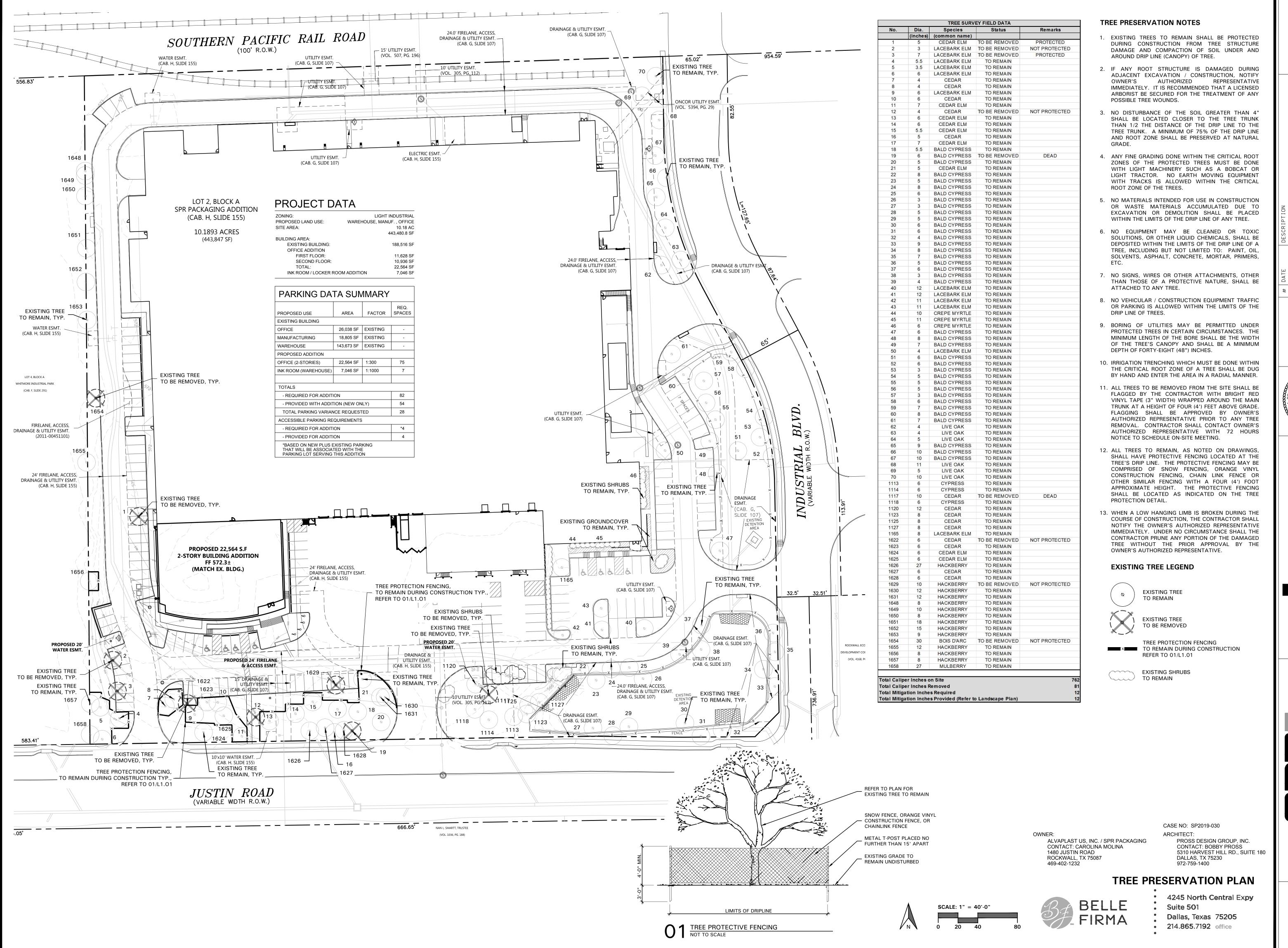
A3.1

5310 HARVEST HILL RD., SUITE 180 DALLAS, TX 75230

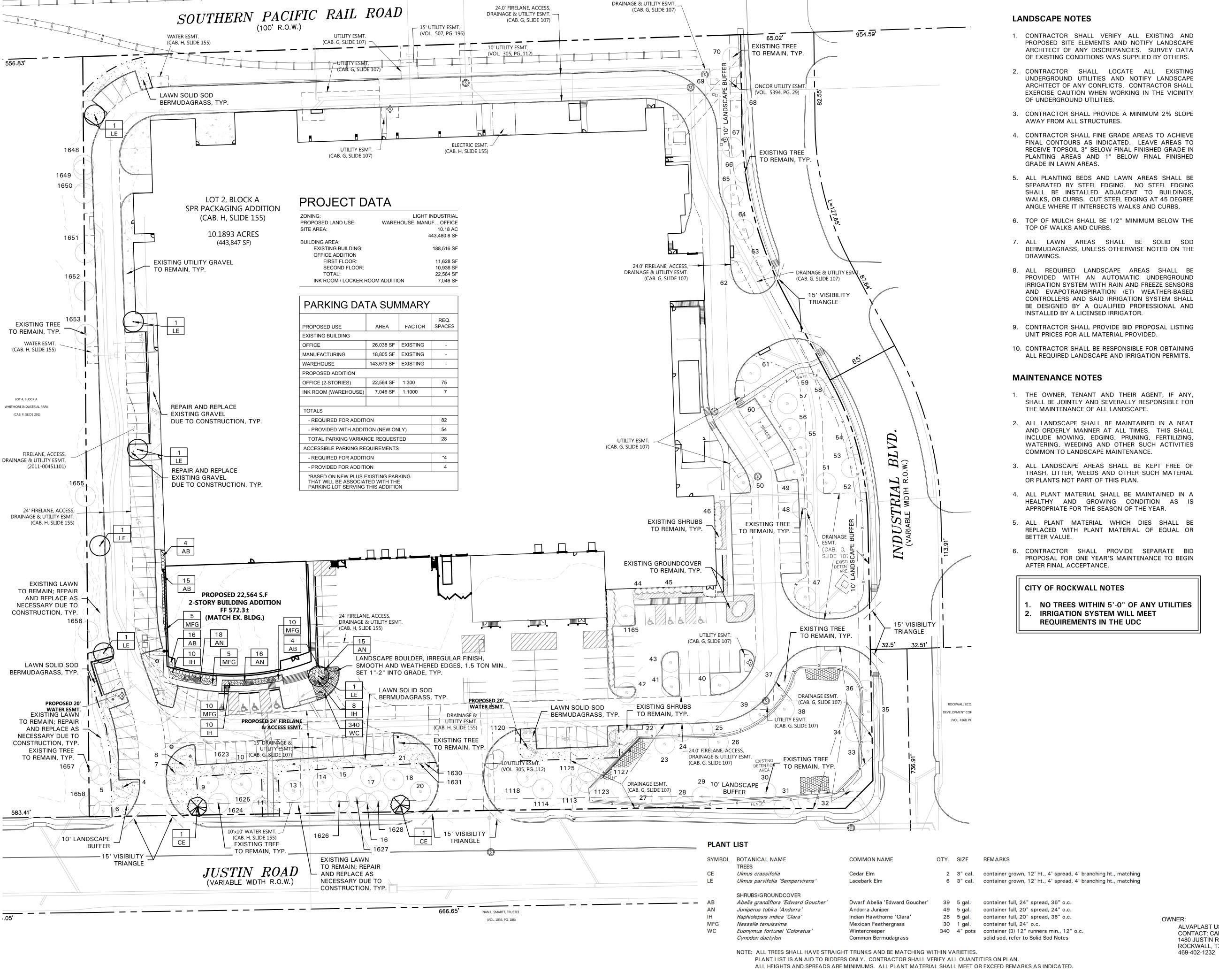
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CASE NO: SP2019-030

1480 JUSTIN ROAD ROCKWALL, TX 75087 469-402-1232



1854 sheet L1.01



- FINAL CONTOURS AS INDICATED. LEAVE AREAS TO RECEIVE TOPSOIL 3" BELOW FINAL FINISHED GRADE IN PLANTING AREAS AND 1" BELOW FINAL FINISHED
- 7. ALL LAWN AREAS SHALL BE SOLID SOD BERMUDAGRASS, UNLESS OTHERWISE NOTED ON THE
- PROVIDED WITH AN AUTOMATIC UNDERGROUND IRRIGATION SYSTEM WITH RAIN AND FREEZE SENSORS AND EVAPOTRANSPIRATION (ET) WEATHER-BASED BE DESIGNED BY A QUALIFIED PROFESSIONAL AND
- 10. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING
- SHALL BE JOINTLY AND SEVERALLY RESPONSIBLE FOR
- AND ORDERLY MANNER AT ALL TIMES. THIS SHALL INCLUDE MOWING, EDGING, PRUNING, FERTILIZING, WATERING, WEEDING AND OTHER SUCH ACTIVITIES
- TRASH, LITTER, WEEDS AND OTHER SUCH MATERIAL
- HEALTHY AND GROWING CONDITION AS IS
- PROPOSAL FOR ONE YEAR'S MAINTENANCE TO BEGIN

GENERAL LAWN NOTES

- 1. CONTRACTOR SHALL COORDINATE OPERATIONS AND AVAILABILITY OF EXISTING TOPSOIL WITH ON-SITE CONSTRUCTION MANAGER.
- 2. CONTRACTOR SHALL LEAVE LAWN AREAS 1" BELOW FINAL FINISHED GRADE PRIOR TO TOPSOIL INSTALLATION.
- 3. CONTRACTOR SHALL FINE GRADE AREAS TO ACHIEVE FINAL CONTOURS AS INDICATED ON CIVIL 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.
- 4. ALL LAWN AREAS SHALL BE FINE GRADED, IRRIGATION TRENCHES COMPLETELY SETTLED AND FINISH GRADE APPROVED BY THE OWNER'S CONSTRUCTION MANAGER OR LANDSCAPE ARCHITECT PRIOR TO LAWN INSTALLATION.
- 5. CONTRACTOR SHALL REMOVE ALL ROCKS 3/4" DIAMETER AND LARGER, DIRT CLODS, STICKS, CONCRETE SPOILS, ETC. PRIOR TO PLACING TOPSOIL AND LAWN INSTALLATION.
- 6. CONTRACTOR SHALL MAINTAIN ALL LAWN AREAS UNTIL FINAL ACCEPTANCE. THIS SHALL INCLUDE, BUT NOT BE LIMITED TO: MOWING, WATERING, WEEDING, CULTIVATING, CLEANING AND REPLACING DEAD OR BARE AREAS TO KEEP PLANTS IN A VIGOROUS, HEALTHY CONDITION.
- 7. CONTRACTOR SHALL GUARANTEE ESTABLISHMENT OF ACCEPTABLE TURF AREA AND SHALL PROVIDE REPLACEMENT FROM LOCAL SUPPLY IF NECESSARY.

SOLID SOD NOTES

- 1. PLANT SOD BY HAND TO COVER INDICATED AREAS COMPLETELY. ENSURE EDGES OF SOD ARE TOUCHING. TOP DRESS JOINTS BY HAND WITH TOPSOIL TO FILL
- 2. ROLL GRASS AREAS TO ACHIEVE A SMOOTH, EVEN SURFACE, FREE FROM UNNATURAL UNDULATIONS.
- 3. WATER SOD THOROUGHLY AS SOD OPERATION PROGRESSES.
- 4. IF INSTALLATION OCCURS BETWEEN SEPTEMBER AND MARCH 1, OVER-SEED BERMUDAGRASS SOD WITH WINTER RYEGRASS, AT A RATE OF FOUR (4) POUNDS PER ONE THOUSAND (1000) SQUARE FEET.

LANDSCAPE TABULATIONS THE CITY OF ROCKWALL, TEXAS

STREET LANDSCAPING

(14) trees, 3" cal.

1. 10' wide landscape buffer with one tree per 50 l.f.

INDUSTRIAL BLVD.: 684 I.f. Required (14) existing trees, 4" cal. +

JUSTIN RD.: 671 I.f. Required

(2) trees, 3" cal. (12) existing trees, 4" cal. +

PARKING LOT LANDSCAPING 5% of the interior parking lot shall be landscape.

One (1) tree for every ten (10) parking spaces. All parking spaces shall be a minimum eighty (80) feet from a tree.

Total interior parking lot area: 47,761 s.f.

Total parking spaces: 127 spaces

Required

2,388 s.f. (5%) 7,580 s.f. (16%) (13) trees (6) trees, 3" cal.

SITE LANDSCAPING 10% of the total site shall be landscaped for LIGHT

INDUSTRIAL

(11) existing trees

100% of the total requirements shall be located in the front of and along side buildings for LIGHT INDUSTRIAL

Total site: 10.18 AC; 443,480 s.f.

Required 109,997 s.f. (25%) 44,348 s.f. (10%) 44,348 s.f. (100%) 76,646 s.f.

DETENTION BASIN REQUIREMENTS

1. A minimum of one (1) tree for every 750 s.f. of dry land

Dry Land Area: 26,232 s.f. (35) trees (35) existing trees

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CASE NO: SP2019-030

ARCHITECT: PROSS DESIGN GROUP, INC. CONTACT: BOBBY PROSS 5310 HARVEST HILL RD., SUITE 180 DALLAS, TX 75230 972-759-1400

LANDSCAPE PLAN

4245 North Central Expy • Suite 501 Dallas, Texas 75205 • 214.865.7192 office

PART 1 - GENERAL

1.1 REFERENCED DOCUMENTS

A. Refer to Landscape Plans, notes, details, bidding requirements, special provisions, and schedules for additional requirements.

1.2 DESCRIPTION OF WORK

- A. 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 grasses)
- 2. Bed preparation and fertilization
- 3. Notification of sources
- 4. Water and maintenance until final acceptance
- Guarantee

1.3 REFERENCE STANDARDS

- A. American Standard for Nursery Stock published by American Association of Nurserymen: 27 October 1980, Edition; by American National Standards Institute, Inc. (Z60.1) – plant
- B. American Joint Committee on Horticultural Nomenclature: 1942 Edition of Standardized Plant Names.
- C. Texas Association of Nurserymen, Grades and Standards
- D. Hortis Third, 1976 Cornell University

1.4 NOTIFICATION OF SOURCES AND SUBMITTALS

A. Samples: Provide representative quantities of sandy loam soil, mulch, bed mix material, gravel, crushed stone, steel edging and tree stakes. Samples shall be approved by Owner's Authorized Representative before use on the project.

1.5 JOB CONDITIONS

- A. General Contractor to complete the following punch list: Prior to 1.7 QUALITY ASSURANCE Landscape Contractor initiating any portion of landscape installation, General Contractor shall leave planting bed areas three (3") inches below final 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 final finish grade of sidewalks, drives and curbs. All construction debris shall be removed prior to Landscape Contractor beginning any work.
- B. 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 shall 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 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 of maintenance.
- 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 the Owner's Authorized Representative will be completed prior to written acceptance

B. Guarantee:

- 1. Trees, shrubs and groundcover shall be guaranteed for a twelve (12) month period after final acceptance. 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 have been damaged, shall be considered subject to replacement. In such cases, the opinion of the Owner shall be final.
- 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 repaired.

a. Plants used for replacement shall be of the same size

- 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 1.8 PRODUCT DELIVERY, STORAGE AND HANDLING
- c. When plant replacements are made, plants, soil mix, fertilizer and mulch are to be utilized as originally specified and re-inspected for full compliance with the contract requirements. All replacements are to be included under "Work" of this section.
- 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 acceptance.
- 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 theft.
- 4. Acceptance for all landscape work shall be given after final inspection by the Owner provided the job is in a complete, undamaged condition and there is a stand of grass in all lawn areas. At that time, the Owner will assume maintenance on the accepted work.
- C. Repairs: Any necessary repairs under the Guarantee must be made within ten (10) days after receiving notice, weather permitting. 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 to the Landscape Contractor.

- A. General: Comply with applicable federal, state, county and local regulations governing landscape materials and work.
- B. Personnel: Employ only experienced personnel who are familiar with the required work. Provide full time supervision by a qualified foreman acceptable to Landscape Architect.
- C. 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 ensure the purchased materials will meet and / or exceed project specifications.
- 2. Substitutions: Do not make plant material substitutions. If the specified landscape material is not obtainable, submit proof of non-availability to Landscape Architect, together with proposal for use of equivalent material. At the time bids are submitted, the Contractor is assumed to have located the materials necessary to complete the job as specified.
- 3. 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
- 4. Measurements: Measure trees with branches and trunks or canes in their normal position. Do not prune to obtain required sizes. Take caliper measurements six inches above ground for trees up to and including 4" caliper size, and twelve inches above ground for larger sizes. Measure main body of all plant material of height and spread dimensions,

do not measure from branch or root tip-to-tip.

- 5. Owner's Authorized Representative shall inspect all plant material with requirements for genus, species, cultivar / variety size and quality.
- 6. Owner's Authorized Representative retains the right to further inspect all plant material upon arrival to the site and during installation for size and condition of root balls and root systems, limbs, branching habit, insects, injuries and latent defects.
- 7. Owner's Authorized Representative may reject unsatisfactory or defective material at any time during the process work. Remove rejected materials immediately from the site and replace with acceptable material at no additional cost to the Owner. Plants damaged in transit or at job site shall be rejected.

- 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 protect root mass.

- Deliver packaged materials in sealed containers showing weight, analysis and name of manufacturer. Protect materials from deterioration during delivery and while stored on site.
- 2. Deliver only plant materials that can be planted in one day unless adequate storage and watering facilities are available on iob 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 Owner's Authorized Representative of delivery schedule 72 hours in advance job site.
- 6. Remove rejected plant material immediately from job site.
- 7. To avoid damage or stress, do not lift, move, adjust to plumb, or otherwise manipulate plants by trunk or stems.

2.1 PLANTS

PART 2 - PRODUCTS

- A. 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 Owner's Authorized Representative and his decision as to their acceptability shall be final.
- B. Quantities: The drawings and specifications are complimentary. 2.3 MISCELLANEOUS MATERIALS 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.
- C. 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.
- D. Approval: All plants which are found unsuitable in growth, or are in any unhealthy, badly shaped or undersized condition will be rejected by the Owner's Authorized Representative either before or after planting and shall be removed at the expense of the Landscape Contractor and replaced with acceptable plant as

specified at no additional cost to the Owner.

- E. Trees shall be healthy, full-branched, well-shaped, and shall meet the minimum trunk and diameter 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 a broken PART 3 - EXECUTION root ball at time of planting will be rejected. Balls shall be ten (10") inches in diameter for each one (1") inch of trunk diameter, 3.1 BED PREPARATION & FERTILIZATION measured six (6") inches above ball. (Nomenclature confirms to the customary nursery usage. For clarification, the term "multi-trunk" defines a plant having three (3) or more trunks of nearly equal diameter.)
- Pruning: All pruning of trees and shrubs, as directed by the Landscape Architect prior to final acceptance, shall be executed by the Landscape Contractor at no additional cost to the Owner.

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.
- 2. Physical properties as follows: a. Clay – between 7-27 percent b. Silt – between 15-25 percent c. Sand – less than 52 percent
- 3. Organic matter shall be 3%-10% of total dry weight.
- 4. If requested, Landscape Contractor shall provide a certified soil analysis conducted by an approved soil testing laboratory verifying that sandy loam meets the above requirements.
- B. Organic Material: Compost with a mixture of 80% vegetative matter and 20% animal waste. Ingredients should be a mix of 3.2 INSTALLATION course and fine textured material.
- C. 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
- D. Sharp Sand: Sharp sand must be free of seeds, soil particles and
- E. Mulch: Double Shredded Hardwood Mulch, partially decomposed, dark brown. Living Earth Technologies or approved equal.
- F. 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.
- G. 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% sulfur and 4% iron, plus micronutrients.
- H. Peat: Commercial sphagnum peat moss or partially decomposed shredded pine bark or other approved organic material.

- A. Steel Edging: All steel edging shall be 3/16" thick x 4" deep x 16' long with 6 stakes per section, painted black at the factory as manufactured by The J.D. Russell Company and under its trade name DURAEDGE Heavy Duty Steel.
- B. Staking Material for Shade Trees: refer to details.
- C. Gravel: Washed native pea gravel, graded 1 inch to 1-1/2 inch.
- D. Filter Fabric: 'Mirafi Mirascape' by Mirafi Construction Products available at Lone Star Products, Inc., (469) 523-0444 or approved equal.
- E. River Rock: 'Colorado' or native river rock, 2" 4" dia.

F. Decomposed Granite: Base material shall consist of a natural material mix of granite aggregate not to exceed 1/8" diameter in size and shall be composed of various stages of decomposed

- A. Landscape Contractor to inspect all existing conditions and report any deficiencies to the Owner.
- B. All planting areas shall be conditioned as follows:
- 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. Apply fertilizer as per Manufacturer's recommendations. Add six (6") inches of compost and till into a depth of six (6") inches of the topsoil. Apply organic fertilizer such as Sustane or Green Sense at the rate of twenty (20) pounds per one thousand (1,000) square feet.
- 2. All planting areas shall receive a two (2") inch layer of specified mulch.
- 3. Backfill for tree pits shall be as follows: Use existing top soil on site (use imported topsoil as needed) free from large clumps, rocks, debris, caliche, subsoils, etc., placed in nine (9") inch layers and watered in thoroughly.

1. Blocks of sod should be laid joint to joint (staggered joints) after fertilizing the ground first. Roll grass areas to achieve a smooth, even surface. The joints between the blocks of sod should be filled with topsoil where they are evidently gaped open, then watered thoroughly.

- A. Maintenance of plant materials shall begin immediately after each plant is delivered to the site and shall continue until all construction has been satisfactorily accomplished.
- B. Plant materials shall be delivered to the site only after the beds are prepared and areas are 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 Balls of earth of B & B plants shall be kept covered with soil or other acceptable material. All plants remain the property of the Contractor until final acceptance.
- . Position the trees and shrubs in their intended location as per
- D. Notify the Owner's Authorized Representative for inspection and approval of all positioning of plant materials.
- 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 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.
- . Shrub and tree pits shall be no less than twenty-four (24") inches wider than the lateral dimension of the earth ball and six (6") inches deeper than it's vertical dimension. Remove and haul from site all rocks and stones over three-quarter ($\frac{3}{4}$ ") inch in diameter. Plants should be thoroughly moist before removing 3.3 CLEANUP AND ACCEPTANCE
- G. 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 or
- H. Percolation Test: Fill the hole with water. If the water level does not percolate within 24 hours, the tree needs to move to another END OF SECTION location or have drainage added. Install a PVC stand pipe per

- tree planting detail as approved by the Landscape Architect if the percolation test fails.
- I. Backfill only with 5 parts existing soil or sandy loam and 1 part bed preparation. When 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 $\frac{1}{3}$ of the ball, as well as all nylon, plastic string and wire. Container trees will usually be root bound, if so follow standard nursery practice of 'root scoring'.
- J. Do not wrap trees.
- K. Do not over prune.
- Mulch the top of the ball. Do not plant grass all the way to the trunk of the tree. Leave the area above the top of the ball and mulch with at least two (2") inches of specified mulch.
- M. All plant beds and trees to be mulched with a minimum settled thickness of two (2") inches over the entire bed or pit.
- N. 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 below grade and no less than six (6") inches below the bottom of ball when plant is properly set at the required grade. The work of this section shall include the removal from the site of such rock or underground obstructions encountered at the cost of the Landscape Contractor.
- O. Trees and large shrubs shall be staked as site conditions require. Position stakes to secure trees against seasonal prevailing winds.
- P. Pruning and Mulching: Pruning shall be directed by the Landscape Architect and shall be pruned in accordance with standard horticultural practice following Fine Pruning, Class I pruning standards provided by the National Arborist Association.
- 1. Dead wood, suckers, broken and badly bruised branches shall be removed. General tipping of the branches is not permitted. Do not cut terminal branches.
- Pruning shall be done with clean, sharp tools.
- 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 for trees shall be the diameter of the plant pit.

Q. Steel Curbing Installation:

- Curbing shall be aligned as indicated on plans. Stake out limits of steel curbing and obtain Owners approval prior to installation.
- 2. All steel curbing shall be free of kinks and abrupt bends.
- finished grade. 4. Stakes are to be installed on the planting bed side of the

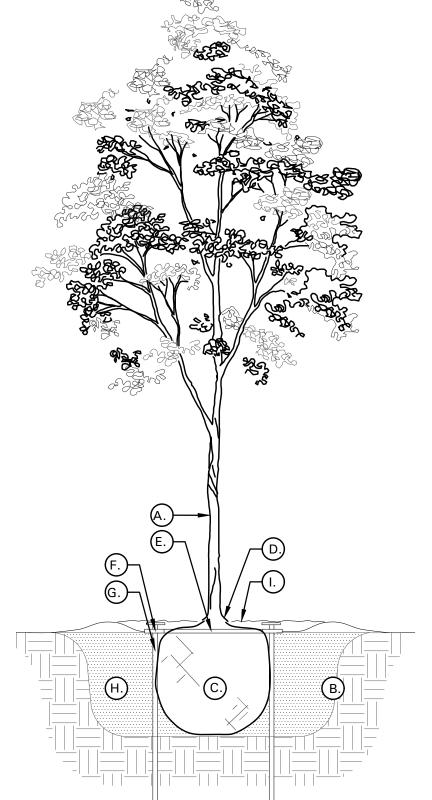
3. Top of curbing shall be $\frac{1}{2}$ " maximum height above final

- curbing, as opposed to the grass side.
- 6. Cut steel edging at 45 degree angle where edging meets

5. Do not install steel edging along sidewalks or curbs.

sidewalks or curbs.

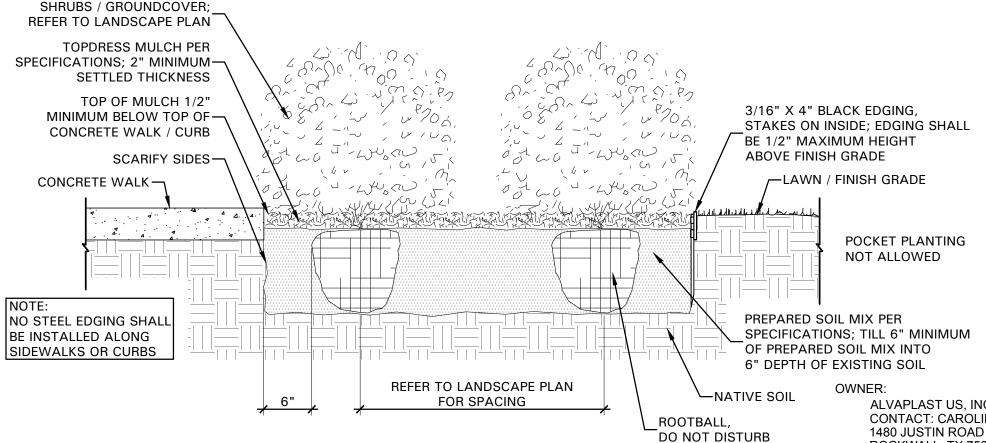
A. Cleanup: During the work, the premises shall be kept neat and orderly at all times. Storage areas for all materials shall be so organized so that they, too, are neat and orderly. All trash and debris shall be removed from the site as work progresses. Keep paved areas clean by sweeping or hosing them at end of each work day.



TREE PLANTING DETAIL LEGEND AND NOTES

- A. TREE: TREES SHALL CONFORM WITH LATEST AMERICAN STANDARD FOR
- NURSERY STOCK. www.anla.org B. TREE PIT: WIDTH TO BE AT LEAST TWO (2) TIMES THE DIAMETER OF THE ROOT BALL CENTER TREE IN HOLE & REST ROOT BALL ON UNDISTURBED NATIVE
- C. ROOT BALL: REMOVE TOP 1/3 BURLAP AND ANY OTHER FOREIGN OBJECT; CONTAINER GROWN STOCK TO BE
- D. ROOT FLARE: ENSURE THAT ROOT FLARE IS EXPOSED, FREE FROM MULCH, AND AT LEAST TWO INCHES ABOVE GRADE. TREES SHALL BE REJECTED WHEN GIRDLING ROOTS ARE PRESENT &
- SIZING. PLACE ROOTBALL ANCHOR
- STAKE: REFER TO MANUFACTURER'S GUIDELINES FOR SIZING. INSTALL NAIL STAKES WITH HAMMER OR MALLET FIRMLY INTO UNDISTURBED GROUND. DRIVE NAIL STAKES FLUSH WITH "U" BRACKET ADJACENT TO ROOTBALL (DO NOT DISTURB ROOTBALL).

- MULCH: HARDWOOD MULCH 2 INCH SETTLED THICKNESS, WITH 2" HT. WATERING RING; ENSURE THAT ROOT FLARE IS EXPOSED. BELOW GROUND STAKE
- TREE STAKES: AVAILABLE FROM: Tree Stake Solutions ATTN: Jeff Tuley
- THE CONTRACTOR TO OBTAIN A COPY MANUFACTURER'S SPECIFICATIONS PRIOR INSTALLATION OF TREE STAKES. CONTRACTOR SHALL ADHERE TO MANUFACTURER'S INSTALLATION GUIDELINES, SPECIFICATIONS, AND OTHER REQUIREMENTS FOR TREE STAKE



ALVAPLAST US, INC. / SPR PACKAGING CONTACT: CAROLINA MOLINA 1480 JUSTIN ROAD ROCKWALL, TX 75087 469-402-1232

CASE NO: SP2019-030

ARCHITECT: PROSS DESIGN GROUP, INC. CONTACT: BOBBY PROSS 5310 HARVEST HILL RD., SUITE 180 DALLAS, TX 75230 972-759-1400

LANDSCAPE SPECIFICATIONS



AND DETAILS 4245 North Central Expy Suite 501 Dallas, Texas 75205 • 214.865.7192 office

job no 1854 sheet

O2 SHRUB / GROUNDCOVER DETAIL NOT TO SCALE

INSTALLATION.

jeff@treestakesolutions.com www.treestakesolutions.com OR APPROVED EQUAL. TREES SHALL BE STAKED BELOW GROUND WHERE NECESSARY; ABOVE GROUND STAKING IS EXPRESSLY PROHIBITED.

(903) 676-6143

K. IT SHALL BE THE RESPONSIBILITY OF

RING ON BASE OF ROOTBALL, TRUNK SHOULD BE IN THE CENTER OF THE F. ROOT ANCHOR BY TREE STAKE

SOLUTIONS.

(no amendments) WATER THOROUGHLY TO ELIMINATE AIR POCKETS. DOUBLE SHREDDED

INSPECTED FOR GIRDLING ROOTS. ROOT FLARE IS NOT APPARENT. E. ROOTBALL ANCHOR RING: REFER TO MANUFACTURER'S GUIDELINES FOR H. BACKFILL: USE EXISTING NATIVE SOIL

SHOULD NOT BE VISIBLE. TREE STAKE SOLUTIONS 'SAFETY STAKE' BELOW GROUND MODEL

TREE PLANTING DETAIL NOT TO SCALE

SLEEVING NOTES

- 1. SLEEVES SHALL BE FURNISHED AND INSTALLED BY GENERAL CONTRACTOR.
 - 2. SLEEVE MATERIAL SHALL BE SCHEDULE 40 PIPE, SIZE AS INDICATED ON PLAN.
 - 3. CONTRACTOR SHALL LAY SLEEVES AND CONDUITS AT TWENTY-FOUR (24") INCHES BELOW FINISH GRADE OF THE TOP OF PAVEMENT.
 - 4. CONTRACTOR SHALL EXTEND SLEEVES ONE (1') FOOT BEYOND EDGE OF ALL PAVEMENT.
 - 5. CONTRACTOR SHALL CAP PIPE ENDS USING PVC CAPS.
 - 6. CONTRACTOR SHALL FURNISH OWNER AND IRRIGATION CONTRACTOR WITH AN 'AS-BUILT' DRAWING SHOWING ALL SLEEVE LOCATIONS.

IRRIGATION NOTES

- 1. THE IRRIGATION CONTRACTOR SHALL COORDINATE INSTALLATION OF THE IRRIGATION SYSTEM WITH THE LANDSCAPE CONTRACTOR SO THAT ALL PLANT MATERIAL WILL BE WATERED IN ACCORDANCE WITH THE INTENT OF THE PLANS AND SPECIFICATIONS.
- 2. ALL SPRINKLER EQUIPMENT NUMBERS REFERENCE THE WEATHERMATIC EQUIPMENT CATALOG UNLESS OTHERWISE INDICATED.
- 3. TEN DAYS PRIOR TO START OF CONSTRUCTION, IRRIGATION CONTRACTOR SHALL VERIFY STATIC WATER PRESSURE. IF STATIC PRESSURE IS LESS THAN 65 P.S.I., NOTIFY THE LANDSCAPE ARCHITECT IMMEDIATELY. DO NOT WORK UNTIL NOTIFIED TO DO SO BY OWNER.
- 4. SLEEVES SHALL BE FURNISHED AND INSTALLED BY GENERAL CONTRACTOR. SLEEVE MATERIAL SHALL BE SCHEDULE 40, SIZE AS INDICATED ON PLAN. REFER TO SLEEVING NOTES.
- 5. ALL MAIN LINE AND LATERAL LINE PIPING IN PLANTING AND LAWN AREAS SHALL HAVE A MINIMUM OF 12 INCHES OF COVER. ALL PIPING UNDER PAVING SHALL HAVE A MINIMUM OF 18 INCHES OF COVER. CONTRACTOR TO VERIFY LOCAL FREEZE DEPTHS AND ADJUST DEPTH OF COVER ACCORDINGLY.
- 6. LAWN SPRAY HEADS SHALL BE WEATHERMATIC LX-4 INSTALLED PER DETAIL SHOWN.
- 7. ROTOR HEADS SHALL BE WEATHERMATIC TURBO INSTALLED PER DETAIL SHOWN. (WITH BUILT-IN CHECK VALVE)
- 8. NOZZLES SHALL BE WEATHERMATIC 5500 SERIES, UNLESS OTHERWISE NOTED. IRRIGATION CONTRACTOR SHALL SELECT THE PROPER ARC AND RADIUS FOR EACH NOZZLE TO ENSURE 100% AND PROPER COVERAGE OF ALL LAWN AREAS AND PLANT MATERIAL. NO WATER SHALL SPRAY ON BUILDING.
- 9. ALL NOZZLES IN PARKING LOT ISLANDS AND PLANTING BEDS SHALL BE LOW ANGLE NOZZLES TO MINIMIZE OVER SPRAY ON PAVEMENT SURFACES.
- 10. ELECTRIC CONTROL VALVES SHALL WEATHERMATIC 11000 SERIES INSTALLED PER DETAIL SHOWN. SIZE OF VALVES AS SHOWN ON PLAN. VALVES SHALL BE INSTALLED IN VALVE BOXES LARGE ENOUGH TO PERMIT MANUAL OPERATION, REMOVAL OF SOLENOID AND / OR VALVE COVER WITHOUT ANY EARTH EXCAVATION.
- 11. QUICK COUPLING VALVES SHALL BE WEATHERMATIC QV75 INSTALLED PER DETAIL SHOWN. SWING JOINTS SHALL BE CONSTRUCTED USING 3/4" SCHEDULE 80 ELBOWS. CONTRACTOR SHALL SUPPLY OWNER WITH THREE (3) CH75 COUPLERS AND THREE (3) #10HSL SWIVEL HOSE ELLS AS PART OF THIS CONTRACT.
- 12. ALL 24 VOLT VALVE WIRING TO BE UF 14 GAUGE SINGLE CONDUCTOR. ALL WIRE SPLICES ARE TO BE PERMANENT AND WATERPROOF.
- 13. AUTOMATIC CONTROLLER SHALL BE INSTALLED AT LOCATION SHOWN. POWER (120V) SHALL BE LOCATED IN A JUNCTION BOX WITHIN FIVE (5') FEET OF CONTROLLER, LOCATION BY OTHER TRADES. RAIN AND FREEZE SENSORS SHALL BE INSTALLED WITH EACH CONTROLLER.
- 14. THE DESIGN PRESSURE IS 65 PSI.
- 15. ELECTRICAL SPLICES AT EACH VALVE AND CONTROLLER ONLY.
- 16. IRRIGATION IN TEXAS IS REGULATED BY: THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY (TCEQ) MC-178 / PO BOX 13087
- 17. TCEQ'S WEBSITE IS WWW.TCEQ.STATE.TX.US.

IRRIGATION LEGEND

WEATHERMATIC LX-4 POP-UP LAWN HEAD

HUNTER MP ROTATOR NOZZLE

WEATHERMATIC TURBO ROTARY PC

WEATHERMATIC TURBO ROTARY FC

WEATHERMATIC 106.5 BUBBLER (2 PER TREE, TYP.)

WEATHERMATIC 11000 SERIES ELECTRIC VALVE WEATHERMATIC QV75 QUICK COUPLER

CONTROLLER, SIZE AS INDICATED WATER METER, SIZE AS INDICATED

WITH D.C.A., SIZE AS INDICATED

PVC SCHEDULE 40 SLEEVING PVC CLASS 200 MAINLINE

PVC CLASS 200 LATERAL LINE XXX \ VALVE SIZE

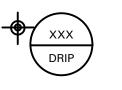
- GPM



NETAFIM TECHLINE#TLDL6-1210 (18" LATERAL SPACING, 12" EMITTER SPACING) PVC LATERAL PIPING SIZED AS REQUIRED INSTALL ALL EQUIPMENT ACCORDING TO MANUFACTURERS SPECIFICATIONS



NETAFIM TECHLINE#TLDL6-1210 (18" LATERAL SPACING, 12" EMITTER SPACING) PVC LATERAL PIPING SIZED AS REQUIRED INSTALL ALL EQUIPMENT ACCORDING TO MANUFACTURERS SPECIFICATIONS



NETAFIM DISC FILTER #DF100-080 NETAFIM PRESSURE REGULATOR #PRV15025 INSTALL ALL EQUIPMENT ACCORDING TO MANUFACTURERS SPECIFICATIONS

BUBBLER PIPING CHART

NUMBER OF BUBBLERS	SIZE OF PIPE
1 - 5	<u>1/2"</u>
6 - 10	3/4"
11 - 20	1"
21 - 30	1 ¼"
31 - 40	1 ½"

SMARTLINE CERTIFIED DESIGN

- 1. THIS IRRIGATION DESIGN FEATURES SMARTLINE CONTROLLER AND WEATHER MONITOR TECHNOLOGY AND UTILIZES 'ET' BASED WATER CONSERVATION AUTO ADJUSTING SCHEDULING.
- 2. THE IRRIGATION CONTRACTOR MUST PROGRAM THE CONTROLLER BY SELECTING THE PROPER SPRINKLER TYPE, PLANT TYPE, SOIL TYPE, SLOPE AND SUN / SHADE EXPOSURE FOR EACH ZONE.
- 3. THE IRRIGATION CONTRACTOR MUST CONTACT THE IRRIGATION DESIGNER FOR APPROVAL OF CONTROLLER SETTINGS.
- 4. THE IRRIGATION DESIGNER IS
- JOHN WINGFIELD (972) 513-3859.

5. ALL EQUIPMENT MUST BE INSTALLED AS SPECIFIED. NO EQUIPMENT SUBSTITUTIONS WILL BE PERMITTED.



ALVAPLAST US, INC. / SPR PACKAGING CONTACT: CAROLINA MOLINA ROCKWALL, TX 75087

CASE NO: SP2019-030 ARCHITECT:

PROSS DESIGN GROUP, INC. CONTACT: BOBBY PROSS 5310 HARVEST HILL RD., SUITE 180 DALLAS, TX 75230 972-759-1400

IRRIGATION PLAN

4245 North Central Expy Suite 501 Dallas, Texas 75205 • 214.865.7192 office

1480 JUSTIN ROAD

469-402-1232

OWNER:



1.1 DESCRIPTION

- A. Provide underground irrigation sleeves as indicated on the drawings.
- 1.2 RELATED WORK SPECIFIED ELSEWHERE
- A. Section 32 8424 Irrigation System
- 1.3 REFERENCED STANDARDS
- A. American Society for Testing and Materials:
 - 1. ASTM D2441 Poly (Vinyl Chloride) (PVC) Plastic Pipe
 - (SD R-PR) ASTM - D2466 Poly (Vinyl Chloride) (PVC) Plastic Pipe
 - Fittings, Socket Type, Schedule 40. 3. ASTM - D2564 Solvent Cements for Poly Vinyl Chloride
 - Plastic Pipe and Fittings.

PART 2 - MATERIALS

2.1 DEFINITIONS

- A. Sleeve A pipe within which another pipe is placed for carrying water or other utilities to be installed.
- B. Wire Sleeves A pipe used to carry low voltage irrigation wires for operation of the electric solenoid valves.

2.2 GENERAL

- A. Polyvinyl Chloride Pipe (PVC) Manufactured in accordance with standards noted herein:
- 1. Marking and Identification Permanently marked with SDR number. ASTM standard number, and the NSF (National Sanitation Foundation) seal.
- 2. Solvent As recommended by manufacturer to make solvent-welded joints. Thoroughly clean pipe and fittings before applying solvent.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Coverage Provide twenty-four inches (24") minimum cover over top of sleeve from finish grade.
- B. Sleeve Extensions Extend sleeves one foot (1') past edge of pavement or concrete walls. Install 90 degree elbow on each sleeve end and add additional length of same size pipe to extend above finish grade by twelve inches (12"). Cap pipe ends using duct tape.

3.2 BACKFILL

- A. Compaction Place backfill over sleeves in six (6") inch lifts. Tamp firmly into place taking care not to damage sleeve. Complete backfill and compaction to prevent any future settlement. Compact to 85% Standard Proctor.
- B. Damage Repair any damage resulting from improper compaction including pavement repair and replacement.

END OF SECTION

SECTION 32 8424 - IRRIGATION SYSTEM

PART 1 - GENERAL

1.1 SCOPE

Provide complete sprinkler installation as detailed and specified herein, includes furnishing all labor, material, tools, equipment, and related items for the complete and proper

1 SLEEVE DETAIL NOT TO SCALE

installation of the irrigation system as indicated by the Drawings. All costs associated with this installation, including fees for testing and inspections of the system components are the responsibility of the installer of this irrigation system.

B. Work includes but is not limited to:

- 1. Trenching and backfill.
- 2. Installation of automatic controlled system. 3. Upon completion of installation, supply as-built drawings showing details of construction including location of mainline piping, manual and automatic valves, electrical

supply to valves, and specifically the exact location of

- C. All sleeves as shown on plans shall be furnished by General Contractor. Meter and power source shall be provided by
- General Contractor.

1.2 RELATED WORK SPECIFIED ELSEWHERE

automatic valves.

- A. Refer to Irrigation Plans for controller, head, and valve
- B. Section 32 8423 Underground Irrigation Sleeves and Utility Conduits
- C. Section 32 9300 Landscape
- D. Refer to Landscape Plans, notes, details, bidding requirements, special provisions, and schedules for additional requirements.

1.3 APPLICABLE STANDARDS

- A. America Standard for Testing and Materials (ASTM) Latest
- 1. D2241 Poly (Vinyl Chloride) (PVC) Plastic Pipe (SDR-PR) 2. D2464 Poly (Vinyl Chloride) (PVC) Plastic Pipe Fittings, Thread, Schedule 80
- 3. D2455 Poly (Vinyl Chloride) (PVC) Plastic Pipe Fittings, Schedule 40 4. D2467 Poly (Vinyl Chloride) (PVC) Plastic Pipe Fittings,
- Socket Type, Schedule 80 5. D2564 Solvent Cements for Poly (Vinyl Chloride) (PVC)
- Plastic Pipe and Fittings
- 6. D2287 Flexible Poly Vinyl Chloride (PVC) Plastic Pipe 7. F656 Poly Vinyl Chloride (PVC) Solvent Weld Primer 8. D2855 Making Solvent - Cemented Joints with Poly (Vinyl Chloride) (PVC) Pipe and Fittings

1.4 MAINTENANCE AND GUARANTEE

- A. The Contractor shall guarantee materials and workmanship for one (1) calendar year after final acceptance by Owner.
- B. Guarantee is limited to repair and replacement of defective materials or workmanship, including repair of backfill settlement.
- C. Provide maintenance of system, including raising and lowering of heads to compensate for lawn growth, cleaning and adjustment of heads, and raising and lowering of shrub heads to compensate for shrub growth for one (1) year after completion of installation.

1.5 SUBMITTALS

- A. Procedure: Comply with Division I requirements.
- B. Product Data: The Contractor shall submit five (5) copies of equipment manufacturer's 'cut sheets' and shop drawings for approval by Owner Authorized Representative prior to installation, including, but not limited to the following: sprinkler head, pipe, controller, valves, backflow prevention devices, valve boxes, wire, conduit, fittings, and all other types of fixtures proposed to be installed on the job. The submittal shall include the manufacturer's name, model number, equipment capacity, and manufacturer's installation recommendations, if applicable, for each proposed item
- C. No work covered under this section may begin until the

Contractor has submitted the required information. No partial submittal shall be accepted and submittals shall be neatly bound into a brochure and logically organized. After the submittal has been approved, substitutions will not be allowed, except by written consent by the Owner Authorized Representative.

D. Shop drawings include dimensions, elevations, construction details, arrangements, and capacity equipment, as well as manufacturer's installation recommendations.

E. Operating and Maintenance Manuals:

- 1. Provide three (3) individually bound manuals detailing operating and maintenance requirements for the irrigation
- system 2. Manuals shall be delivered to the Owner Authorized Representative no later than ten (10) days prior to completion of the irrigation system.
- 3. Provide descriptions of all installed materials and systems in sufficient detail to permit maintenance personnel to understand, operate, and maintain the equipment.
- 4. Provide the following in each manual: a. Index sheet with Contractor's name, address,
- telephone number, and contact name. b. Duration of guarantee period. Include warranties and guarantees extended to the Owner by the
- manufacturer of all equipment. c. Equipment list providing the following for each item: 1) Manufacturer's name
- Make and model number 3) Name and address of local part's representative
- 4) Spare parts list in detail 5) Details operating and maintenance instructions for major equipment.

F. Project Record Documents:

- 1. Comply with Division I requirements.
- 2. Locate by written dimension, routing of mainline piping, remote control valves, and quick coupling valves. Locate mainlines by single dimensions from permanent site features provided they run parallel to these elements. Locate valves, intermediate electrical connections, and quick couplers by two dimensions from a permanent site feature at approximately 70 degrees to each other.
- 3. When dimensioning is complete, transpose work to bond 4. Submit three (3) copies of the completed as-built drawings, along with a CD with PDF files of the same, to the Owner Authorized Representative prior to final

acceptance of the work. Mark drawings "Record Prints

- Showing Significant Changes". Date and sign drawings. G. Quick Coupler Keys: Provide three (3) coupler keys with boiler drains attached using brass reducer.
- H. Controller Keys: Provide three (3) sets of keys to controller enclosure(s).
- I. Use of materials differing in quality, size, or performance from those specified shall only be allowed upon written approval of the Landscape Architect. The decision shall be based on comparative ability of material or article to perform fully all purposes of mechanics and general design considered to be possessed by item specified.
- J. Bidders desiring to make a substitution for specified sprinklers shall submit manufacturer's catalog sheet showing full specification of each type sprinkler proposed as a substitute, including discharge in GPM maximum allowable operating pressure at sprinkler.
- K. Approval of substitute sprinkler shall not relieve Irrigation Contractor of his responsibility to demonstrate that final installed sprinkler system shall operate according to intent of originally designed and specified system.
- L. It is the responsibility of the Irrigation Contractor to demonstrate that final installed sprinkler system shall operate according to intent of originally designed and specified system. If Irrigation Contractor notes any problems in head spacing or potential coverage, it is his responsibility to notify the Landscape Architect in writing, before proceeding with

work. Irrigation Contractor guarantees 100% coverage of all areas to be irrigated.

1.6 TESTING

- A. Perform testing required with other trades, including earthwork, paving, plumbing, electrical, etc., to avoid unnecessary cutting, patching, and boring.
- B. Water Pressure: This irrigation system has been designed to operate with a minimum static water pressure indicated on Drawings. The Contractor shall take a pressure reading at each water meter prior to beginning construction. Confirm findings to Owner Authorized Representative in writing. If static pressure varies from pressure stated on drawings, do not start work until notified to do so by Owner Authorized Representative.

1.7 COORDINATION

- A. Coordinate installation with other trades, including earthwork, paving, and plumbing to avoid unnecessary cutting, patching and boring.
- B. Coordinate to ensure that electrical power source is in place.
- C. Coordinate system installation with work specified in other sections and coordinate with Landscape Contractor to ensure plant material is uniformly watered in accordance with intent shown on drawings.

PART 2 - PRODUCTS

2.1 GENERAL

- A. Mainline: Mainlines are the piping from water source to operating valves. This portion of piping is subject to surges, being a closed portion of sprinkler system. Hydrant lines are considered a part of sprinkler main.
- B. Lateral Piping: Lateral piping is that portion of piping from operating valve to sprinkler heads. This portion of piping is not subject to surges, being an "open end" portion of sprinkler system.

2.2 POLY VINYL CHLORIDE PIPE (PVC PIPE)

- A. PVC pipe shall be manufactured in accordance with commercial standards noted herein.
- Marking and Identification: PVC pipe shall be continuously and permanently marked with the following information: manufacturer's name, pipe size, type of pipe, and material, SDR number, product standard number, and the NSF (National Sanitation Foundation) seal.
- C. PVC Pipe Fittings: Shall be of the same material as the PVC pipe specified and shall be compatible with PVC pipe furnished.

2.3 COPPER TUBING

A. Hard, straight lengths of domestic manufacture only. Do not use copper tube of foreign extrusion or any so-called irrigation tubing (thin wall).

2.4 COPPER TUBE FITTINGS

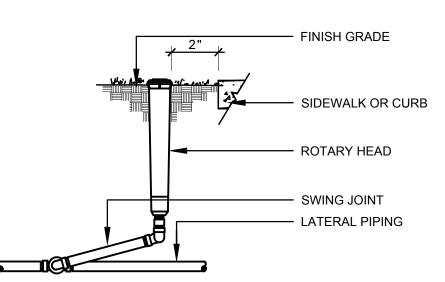
A. Cast brass or wrought copper, sweat - solder type.

2.5 WIRE

- A. Type UF with 4/64" thick waterproof insulation which is Underwriter's Laboratory approved for direct underground burial when used in a National Electric Code Class II Circuit (30 volts AC or less).
- B. Wire Connectors: Waterproof splice kit connectors. Type DBY by 3M.

2.6 SCHEDULE 80 PVC NIPPLES

A. Composed of Standard Schedule 40 PVC Fittings and PVC



03 ROTARY HEAD NOT TO SCALE

- meeting noted standards. No clamps or wires may be used. Nipples for heads and shrub risers to be nominal one-half inch $(\frac{1}{2})$ ") diameter by eight (8") inches long, where applicable.
- B. Polyethylene nipples six (6") inches long shall be used on all pop-up spray heads.

2.7 MATERIALS - SEE IRRIGATION PLAN

- A. Sprinkler heads in lawn area as specified on plan.
- B. PVC Pipe: Class 200, SDR 21
- C. Copper Tubing (City Connection): Type "M"
- D. 24V Wire: Size 14, Type UF
- E. Electric valves: Shall be all plastic construction as indicated
- F. Backflow Prevention Device: Refer to drawing requirements and flow valve. Coordinate exact location with General Contractor.

PART 3 - EXECUTION

3.1 INSTALLATION - GENERAL

- A. Staking: Before installation is started, place a stake where each sprinkler is to be located, in accordance with drawing. Staking shall be approved by Owner Authorized Representative before proceeding with work.
- B. Excavations: Excavations are unclassified and include earth, loose rock, rock or any combination thereof, in wet or dry state. Backfill trenches with material removed, provided that the earth is suitable for compaction and contains no lumps, clods rock, debris, etc. Special backfill specifications, if furnished take preference over this general specification.
- C. Backfill: Flood or hand-tamp to prevent after settling. Hand rake trenches and adjoining area to leave grade in as good or better condition than before installation.
- D. Piping Layout: Piping layout is diagrammatic. Route piping around trees and shrubs in such a manner as to avoid damage to plantings. Do not dig within ball of newly planted trees or shrubs. In areas where existing trees are present, trenches shall be adjusted on-site to provide a minimum clearance of four (4) feet between the drip line of any tree or trench. The Contractor shall notify the Owner Authorized Representative in writing of a planned change in trench routing from that shown on the drawings.

3.2 PIPE INSTALLATION

- A. Sprinkler Mains: Install a four (4") inch wide minimum trench with a minimum of eighteen (18") inches of cover.
- B. Lateral Piping: Install a four (4") inch wide minimum trench deep enough to allow for installation of sprinkler heads and valves, but in no case, with less than twelve (12") of cover.
- C. Trenching: Remove lumber, rubbish, and large rocks from trenches. Provide firm, uniform bearing for entire length of each pipe line to prevent uneven settlement. Wedging or blocking of pipe shall not be permitted. Remove foreign matter or dirt from inside of pipe before welding, and keep piping clean by approved means during and after laying of

3.3 PVC PIPE AND FITTING ASSEMBLY

3.4 COPPER TUBING AND FITTING ASSEMBLY

- A. Solvent: Use only solvent recommended by manufacturer to make solvent-welded joints. Thoroughly clean pipe and fittings of dirt, dust and moisture before applying solvent.
- B. PVC to metal connection: Work metal connections first. Use a non-hardening pipe dope such as Permatex No. 2 on threaded PVC adapters into which pipe may be welded.

connections to remove residue from pipe. Attach fittings to tubing in an approved manner using 50-50 soft solid core

A. Clean pipe and fitting thoroughly and lightly sand pipe

3.5 POP-UP SPRAY HEADS

A. Supply pop-up spray heads in accordance with materials list and plan. Attach sprinkler to lateral piping with a semi-flexible polyethylene nipple not less than three (3") inches or more than six (6") inches long.

3.6 VALVES

A. Supply valves in accordance with materials list and sized according to drawings. Install valves in a level position in accordance with manufacturer's specifications. See plan for typical installation of electric valve and valve box.

3.7 WIRING

- A. Supply wire from the automatic sprinkler controls to the valves. No conduit will be required for UF wire unless otherwise noted on the plan. Wire shall be tucked under the
- B. A separate wire is required from the control to each electric valve. A common neutral wire is also required from each control to each of the valves served by each particular control.
- C. Bundle multiple wires and tape them together at ten (10') foot intervals. Install ten (10") inch expansion coils at not more than one hundred (100') foot intervals. Make splices

3.8 AUTOMATIC SPRINKLER CONTROLS

A. Supply in accordance with Irrigation Plan. Install according to manufacturer's recommendations.

3.9 TESTING

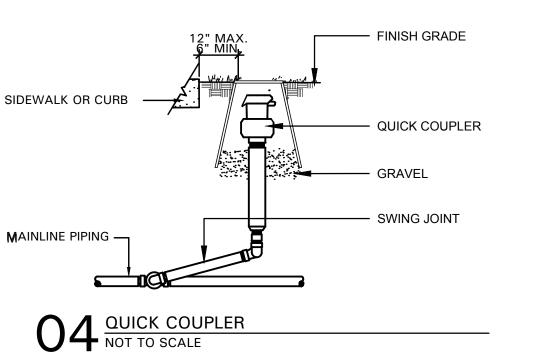
- A. Sprinkler Mains: Test sprinkler main only for a period of twelve (12) to fourteen (14) hours under normal pressure. If leaks occur, replace joint or joints and repeat test.
- B. Complete tests prior to backfilling. Sufficient backfill material may be placed in trenches between fittings to ensure stability of line under pressure. In each case, leave fittings and couplings open to visual inspection for full period of test.

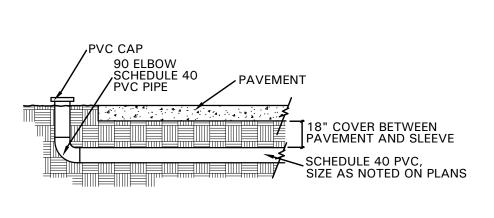
3.10 FINAL ADJUSTMENT

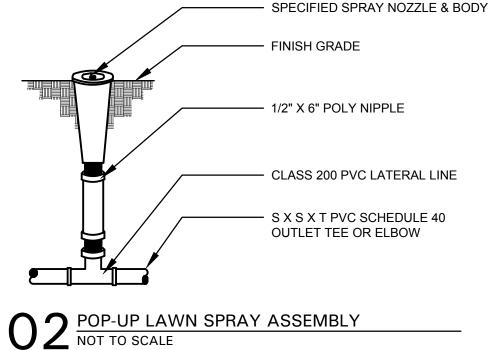
- A. After installation has been completed, make final adjustment of sprinkler system in preparation for Owner Authorized Representative's final inspection.
- B. Completely flush system to remove debris from lines by removing nozzle from heads on end of lines and turning on system.
- C. Check sprinklers for proper operation and proper alignment for
- D. Check each section of spray heads for operating pressure and balance to other sections by use of flow adjustment on top of each valve.
- E. Check nozzling for proper coverage. Prevailing wind conditions may indicate that arch of angle of spray should be other than shown on drawings. In this case, change nozzles to provide correct coverage and furnish data to Owner Authorized Representative with each change.

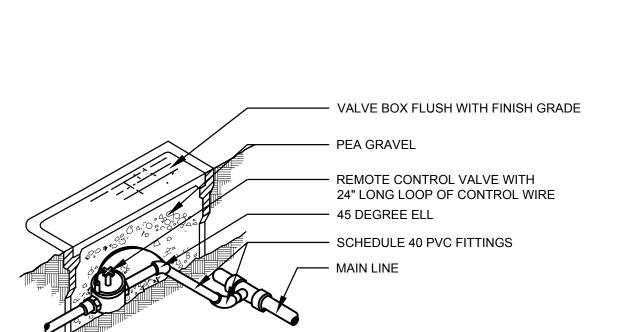
3.11 SYSTEM DEMONSTRATION

A. Instruct Owner's personnel in operation and maintenance of system including adjusting of sprinkler heads. Use operation and maintenance manual for basis of demonstration.



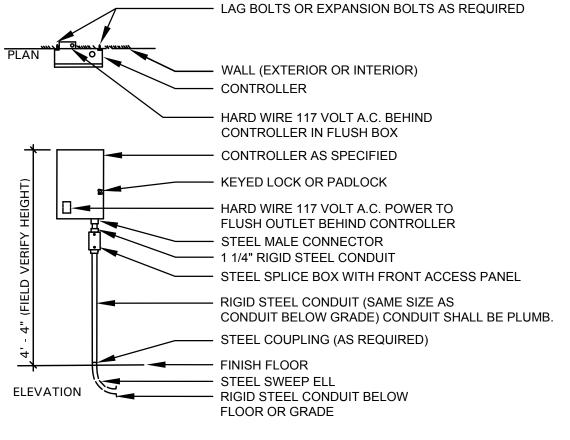




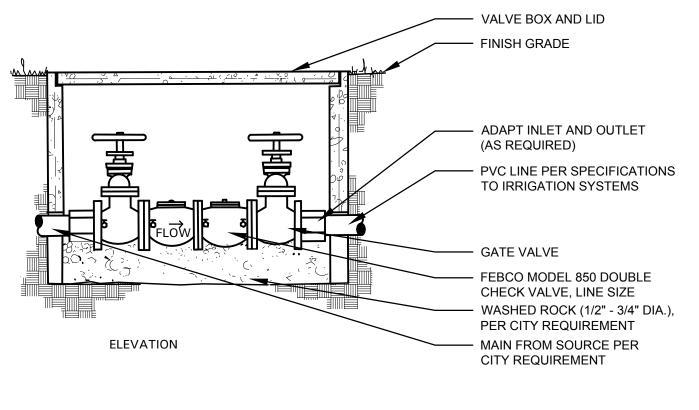




ISOMETRIC



WALL MOUNTED CONTROLLER NOT TO SCALE



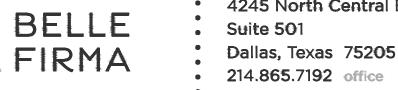


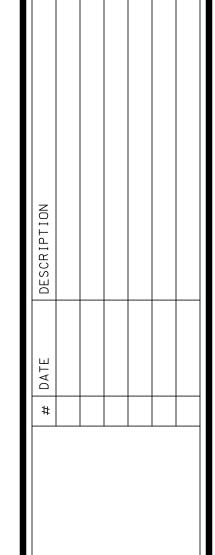
ALVAPLAST US, INC. / SPR PACKAGING CONTACT: CAROLINA MOLINA 1480 JUSTIN ROAD ROCKWALL, TX 75087 469-402-1232 **IRRIGATION SPECIFICATIONS**

CASE NO: SP2019-030 ARCHITECT:

PROSS DESIGN GROUP, INC. **CONTACT: BOBBY PROSS** 5310 HARVEST HILL RD., SUITE 180 DALLAS, TX 75230 972-759-1400

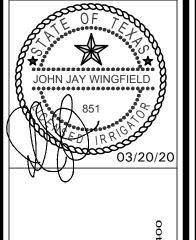
AND DETAILS 4245 North Central Expy





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job no sheet

PROJECT DATA

PROPOSED LAND USE: SITE AREA:

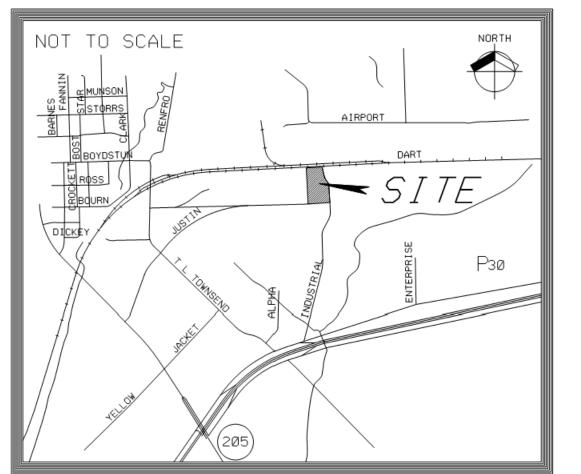
LIGHT INDUSTRIAL WAREHOUSE, MANUF., OFFICE 10.18 AC

10,936 SF

443,480.8 SF BUILDING AREA:

EXISTING BUILDING: 188,516 SF ADDITION FIRST FLOOR: 11,628 SF ADDITION SECOND FLOOR:

LOCATION MAP

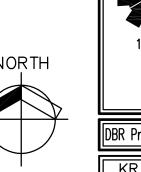


ALVAPLAST US, INC. / SPR PACKAGING CONTACT: CAROLINA MOLINA 1480 JUSTIN ROAD ROCKWALL, TX 75087

469-402-1232

ARCHITECT: PROSS DESIGN GROUP, INC. CONTACT: BOBBY PROSS 5310 HARVEST HILL RD., SUITE 180 DALLAS, TX 75230 972-759-1400

CASE NO: SP2019-000





job no

1854 sheet **D-Series Size 1** LED Area Luminaire

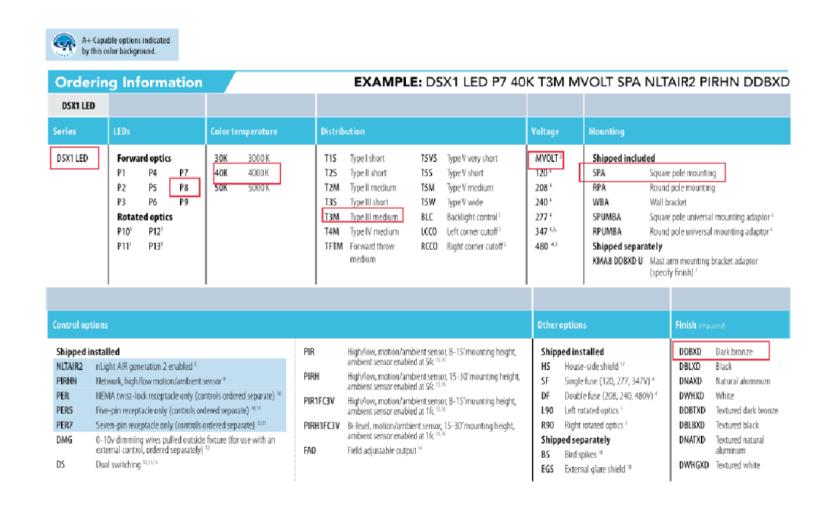
Specifications

MTD ON 28' POLE w 30" BASE

Introduction

The modern styling of the D-Series is striking yet unobtrusive - making a bold, progressive statement even as it blends seamlessly with its environment. The D-Series distills the benefits of the latest in LED technology into a high

The outstanding photometric performance results in sites with excellent uniformity, greater pole spacing and lower power density. It is ideal for replacing up to 750W metal halide in pedestrian and area lighting applications with typical energy savings of 65% and expected service life of over 100,000 hours.





Performance Data

One Lithonia Way • Conyers, Georgia 30012 • Phone: 800.279.8041 • www.lithonia.com © 2011-2018 Acuity Brands Lighting, Inc. All rights reserved.

Electrical	Load						
	Performance Package	LED Count	Drive Current	Wattage	120	208	

Am	bient	Lumen Multiplie
0°C	32°F	1.04
5°C	41°F	1.04
10°C	50°F	1.03
15°C	50°F	1.02
20°C	68°F	1.01
25°C	77°F	1.00
30°C	86°F	0.99
35°C	95°F	0.98
40°C	104°F	0.97

Lumen Ambient Temperature (LAT) Multipliers

Projected LED Lumen Maintenance	
Data references the extrapolated performance projections for the platforms noted in 25°C ambient, based on 10,000 hours of LED testing (tested per IESNA LM-80-0 projected per IESNA TM-21-11).	
To calculate LLF, use the lumen maintenance factor that corresponds to the desired in	umber

	0			the same and the same	1.00						
	25,000)			0.96						
	50,000)		0.92							
	100,00	0			0.85						
		Motion Ser	isor Default S	ettings							
		Phototcell Operation	Dwell Time	Ramp-up Time	Ramp-down Time						
PIR or PIRH	3V (37%) Output	10V (100%) Cutput	Enabled @ 5FC	5 min	3 sec	5 min					
*PIR1FC3V or PIRH1FC3V	3V (37%) Output	10V (100%) Cutput	Enabled @ 1FC	5 min	3 sec	5 min					

	Раскаде		Current							
	P1	30	530	54	0.45	0.26	0.23	0.19	0.10	0.
	P2	30	700	70	0.59	0.34	0.30	0.25	0.20	0
	P3	30	1050	102	0.86	0.50	0.44	0.38	0.30	0
	P4	30	1250	125	1.06	0.60	0.52	0.46	0.37	0
Forward Optics (Non-Rotated)	P5	30	1400	138	1.16	0.67	0.58	0.51	0.40	0
	P6	40	1250	163	1.36	0.78	0.68	0.59	0.47	0
	P7	40	1400	183	1.53	0.88	0.76	0.66	0.53	0
	P8	60	1050	207	1.74	0.98	0.87	0.76	0.64	(
	P9	60	1250	241	2.01	1.16	1.01	0.89	0.70	0
	P10	60	530	106	0.90	0.52	0.47	0.43	0.33	0
Rotated Optics (Requires L90	P11	60	700	137	1.15	0.67	0.60	0.53	0.42	0
or R90)	P12	60	1050	207	1.74	0.99	0.87	0.76	0.60	0
	P13	60	1250	231	1.93	1.12	0.97	0.86	0.67	0

		Controls Options		
Nomenclature	Descripton	Functionality	Primary control device	Notes
FAO	Field adjustable output device installed inside the lumiaire; wired to the driver dimming leads.	Allows the lumiaire to be manually dimmed, effectively trimming the light output.	FAO device	Cannot be used with other controls options that need the 0-10V leads
DS	Drivers wired independantly for 50/50 luminaire operation	The luminare is wired to two separate circuits, allowing for 50/50 operation.	Independently wired drivers	Requires two seperately switched circuits. Consider nLight AIR as a more cost effective alternative.
PERS or PER7	Twist-lock photocell recepticle	Compatible with standard twist-lock photocells for dusk to dawn operation, or advanced control nodes that provide 0-10V dimming signals.	Twist-lock photocells such as DLL Elite or advanced control nodes such as ROAM.	Pins 4 & 5 to dimming leads on driver, Pins 6 & 7 are capped inside luminaire
PIR or PIRH	Motion sensors with integral photocell. PIR for 8–15' mounting; PIRH for 15–30' mounting	Luminaires dim when no occupancy is detected.	Acuity Controls SBOR	Also available with PIRH1FC3V when the sensor photocell is used for dusk-to-dawn operation.
NLTAIR2 PIRHN	nLight AIR enabled luminaire for motion sensing, photocell and wireless communication.	Motion and ambient light sensing with group response. Scheduled dimming with motion sensor over-ride when wirelessly connected to the nLight Edypse.	nLight Air rSDGR	nLight AIR sensors can be programmed and commissione from the ground using the CIAIRity Pro app.

All A	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
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DSX1-LED

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Rev. 12/18/18

Ordering Information

Accessories

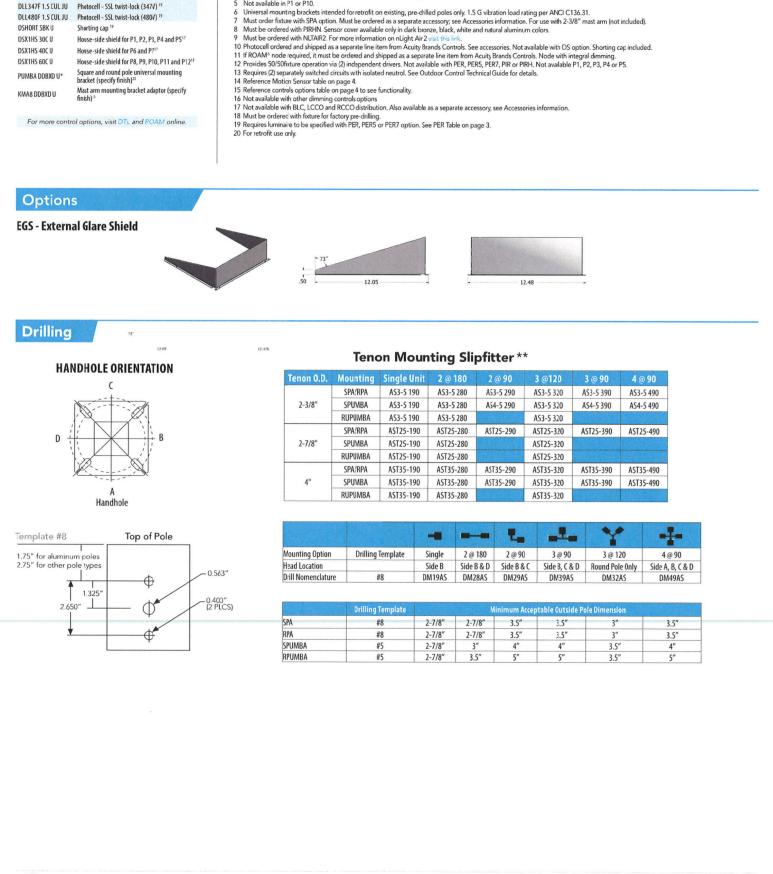
Ordered and shipped separately.

DLL127F 1.5 JU Photocell - SSL twist-lock (120-277V) 19

Performance Data

DLL347F 1.5 CUL JU Photocell - SSL twist-lock (347V) 19

performance, high efficacy, long-life luminaire.



NOTES

1 P10, P11, P12 or P13 and rotated optics (L90, R90) only available together.

2 Not available with H5.

3 MVOLT driver operates on any line voltage from 120-277V (50/60 Hz).

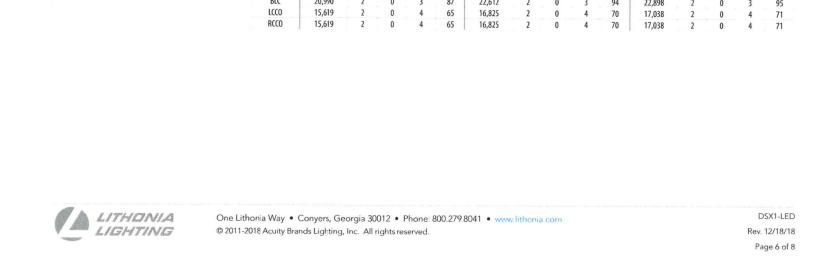
4 Single fuse (SF) requires 120V, 277V or 347V. Double fuse (DF) requires 208V, 240V or 480V.

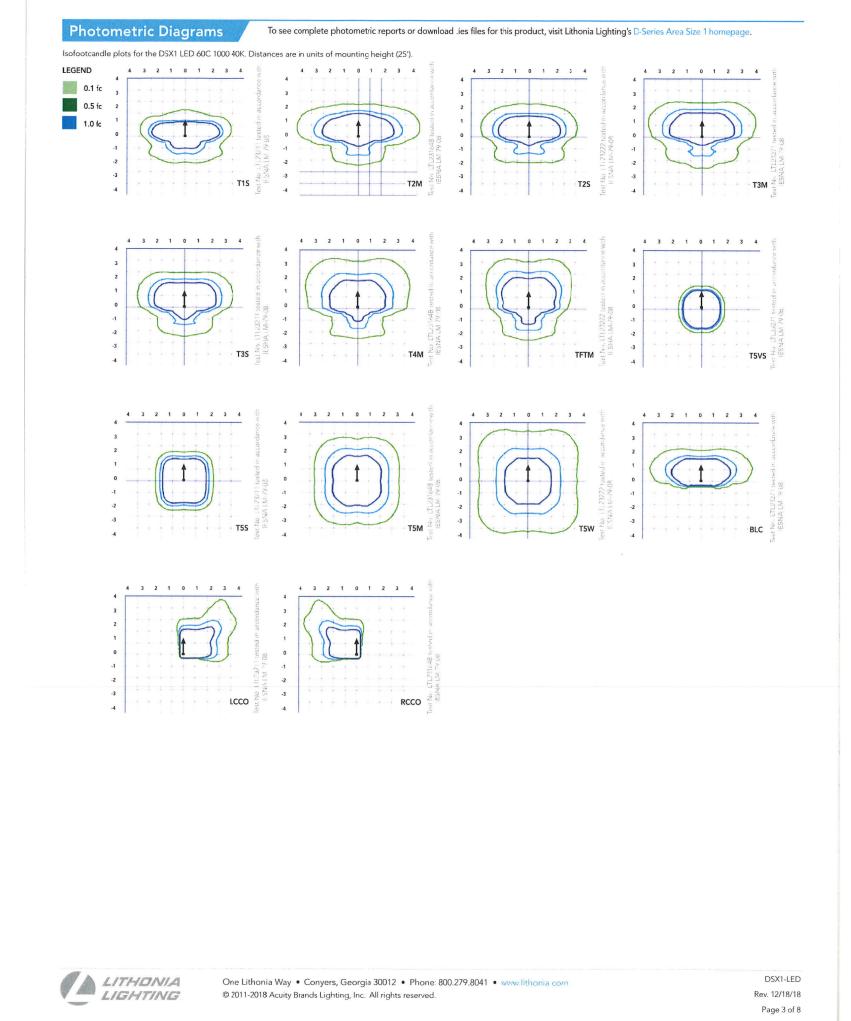
5 Not available in P1 or P10.





Forward O	ptics																								
LED Count	Drive	Power	System	Dist.			30K K, 70 CRI)					40K K, 70 CRI)				(500	50K 0 K, 70 CRI	1							
	Current	Package	Watts	Туре	Lumens	В	U	G	LPW	Lumens	В	U	G	LPW	Lumens	В	U	G	L						
				T1S	17,654	3	0	3	108	19,018	3	0	3	117	19,259	3	0	3	1						
				T2S	17,635	3	0	3	108	18,998	3	0	3	117	19,238	3	0	3	1						
				T2M	17,726	3	0	3	109	19,096	3	0	3	117	19,337	3	0	3	1						
						T3S	17,167	3	0	3	105	18,493	3	0	3	113	18,727	3	0	3	1				
				T3M T4M	17,683	3	0	3	108	19,049	3	0	3	117	19,290	3	0	3	1						
		P6	P6		TFTM	17,299 17,672	3	0	3	106 108	18,635 19,038	3	0	4	114 117	18,871	3	0	4	1					
40	1250			P6	163W	TSVS	18,379	4	0	1	113	19,800	4	0	1	121	19,279 20,050	3	0	1	1				
						TSS	18,394	4	0	2	113	19,816	4	0	2	122	20,030	4	0	2	1				
				T5M	18,348	4	0	2	113	19,766	4	0	2	121	20,016	4	0	2	1						
				T5W	18,228	5	0	3	112	19,636	5	0	3	120	19,885	5	0	3	1						
				BLC	14,489	2	0	2	89	15,609	2	0	3	96	15,806	2	0	3	9						
				LCC0	10,781	1	0	3	66	11,614	1	0	3	71	11,761	2	0	3							
				RCCO	10,781	1	0	3	66	11,614	1	0	3	71	11,761	2	0	3							
				T1S	19,227	. 3	0	3	105	20,712	. 3	0	3	113	20,975	3	0	3	1						
				T2S	19,206	3	0	3	105	20,690	3	0	3	113	20,952	3	0	3	. 1						
				T2M	19,305	3	0	3	105	20,797	3	0	3	114	21,060	3	0	3	1						
				T3S	18,696	3	0	3	102	20,141	3	0	3	110	20,396	3	0	4	. 1						
				T3M T4M	19,258	3	0	3	105	20,746	3	0	3	113	21,009	3	0	3	1						
				TFTM	18,840 19,246	3	. 0	4	103	20,296 20,734	3	0	4	111	20,553	. 3	. 0	4	. 1						
40	1400	P7	183W	TSVS	20,017	4	0	1	109	21,564	4	0	4	113 118	20,996 21,837	3	0	4	1						
				TSS	20,033	4	0	2	109	21,581	4	0	2	118	21,854	4	0	2	1						
				T5M	19,983	4	0	2	109	21,527	5	0	3	118	21,799	5	. 0	3	1						
				T5W	19,852	5	0	3	108	21,386	5	0	3	117	21,656	5	0	3	1						
				BLC	15,780	2	0	3	86	16,999	2	0	3	93	17,214	2	0	3	9						
				LCC0	11,742	2	0	3	64	12,649	2	0	3	69	12,809	2	0	3	7						
\sim	\sim	\sim	m	~ RCQ~	11742~	~	my.	N.	~64~	12,649	m	مهم	~~	~6º~	12,809	m	m	~~	~						
										T1S T2S	22,490 22,466	3	0	3	109	24,228 24,202	3	0	3	117	24,535	3	0	3	1
					T2M	22,582	3	0	3	109	24,202	3	0	4	117 118	24,509 24,635	3	0	4	1					
					T3S	21,870	3	0	4	106	23,560	3	0	4	114	23,858	3	0	3	1					
								T3M	22,527	3	0	4	109	24,268	3	0	4	117	24,575	3	0	4	1		
				T4M	22,038	3	0	4	106	23,741	3	0	4	115	24,041	3	0	4	1						
60	1050	DΩ	207W	TFTM	22,513	3	0	4	109	24,253	3	0	4	117	24,560	3	0	4	1						
00	1030	P8	207 VV	T5VS	23,415	5	0	1	113	25,224	5	0	1	122	25,543	5	0	1	1						
				TSS	23,434	4	0	2	113	25,244	4	0	2	122	25,564	4	0	2	1.						
				T5M	23,374	5	0	3	113	25,181	5	0	3	122	25,499	5	0	3	1						
				T5W	23,221	5	0	4	112	25,016	5	0	4	121	25,332	5	0	4	1.						
				BLC	18,458	2	0	3	89	19,885	2	0	3	96	20,136	2	0	3	9						
				RCCO	13,735 13,735	2 2	0	3	66	14,796	2	0	4	71	14,983	2	0	4	7						
uu	mi	un	uu	may me	13,733	ىئىر	ىيى	ىن	1	14,796 	2	سيد	4	71	14,983 27,960	2	0	4	7						
				T2S	25,548	3	0	4	106	27,522	3	0	4	114	27,871	3	0	4	1						
				T2M	25,680	3	0	3	107	27,664	3	0	3	115	28,014	3	0	3	1						
				T3S	24,870	3	0	4	103	26,791	3	0	4	111	27,130	3	0	4	1						
				T3M	25,617	3	0	4	106	27,597	3	0	4	115	27,946	3	0	4	- 1						
				T4M	25,061	3	0	4	104	26,997	3	0	4	112	27,339	3	0	4	1						
60	1250	P9	241W	TFTM	25,602	3	0	4	106	27,580	3	0	4	114	27,929	3	0	4	11						
			2	TSVS	26,626	5	0	1	110	28,684	5	0	1	119	29,047	5	0	1	12						
				TSS	26,648	4	0	2	111	28,707	5	0	2	119	29,070	5	0	2	12						
				T5M	26,581	5	0	3	110	28,635	5	0	3	119	28,997	5	0	3	12						
				T5W BLC	26,406	5	0	4	110	28,447	5	0	4	118	28,807	5	0	4	12						
				FCC0	20,990 15,619	2	0	3	87 65	22,612	2	0	3	94	22,898	2	. 0	3	9						
				RCCO	15,619	2	0	4	65	16,825 16,825	2	0	4	70 70	17,038 17,038	2	0	4	7						







4 Capable Luminaire This item is an A+ capable luminaire, which has been designed and tested to provide consistent color appearance and system-level interoperability.

specification for luminaire to photocontrol

 All configurations of this luminaire meet the Acuity Brands' specification for chromatic consistency This luminaire is A+ Certified when ordered with DTL® controls marked by a shaded background. DTL DLL equipped luminaires meet the A+

interoperability1 This luminaire is part of an A+ Certified so ution for ROAM® or XPoint™ Wireless control networks, providing out-of-the-box control compatibility with simple commissioning, when ordered with drivers and control options marked by a shaded background¹

To learn more about A+,

visit <u>www.acuitybrands.com/aplus</u>.

See ordering tree for details.

2. A+ Certified Solutions for ROAM require the order of one ROAM node per luminaire. Sold Separately: Link to Roam, Link to DTL DLL

FEATURES & SPECIFICATIONS

The sleek design of the D-Series Size 1 reflects the embedded high performance LED technology. It is ideal for many commercial and municipal applications, such as

parking lots, plazas, campuses, and streetscapes. CONSTRUCTION Single-piece die-cast aluminum housing has integral heat sink fins to optimize thermal management through conductive and convective cooling. Modular design allows for ease of maintenance and future light engine upgrades. The LED drivers are mounted in direct contact with the casting to promote low operating temperature and long life. Housing is completely sealed against moisture and

environmental contaminants (IP65). Low EPA (1.01 ft²) for optimized pole wind

loading.

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 cl mate changes without cracking or peeling. Available in both textured and non-textured finishes.

Precision-molded proprietary acrylic lenses are engineered for superior area

lighting distribution, uniformity, and pole spacing. Light engines are available in standard 3000 K, 4000 K and 5000 K (70 CRI) configurations. The D-Series Size 1 has zero uplight and qualifies as a Nighttime Friendly™ product, meaning it is consistent with the LEED® and Green Globes™ criteria for eliminating wasteful

ELECTRICAL Light engine configurations consist of high-efficacy LEDs mounted to metalcore circuit boards to maximize heat dissipation and promote long life (up to L85/100,000 hours at 25°C). Class 1 electronic drivers are designed to have a power factor >90%, THD <20%, and an expected life of 100,000 hours with <1% failure rate. Easily serviceable 10kV surge protection device meets a minimum

Category C Low operation (per ANSI/IEEE C62.41.2). STANDARD CONTROLS The DSX1 LED area luminaire has a number of control options. Dusk to dawn

controls can be utilized via optional NEMA twist-lock photocell receptacles. Integrated motion sensors with on-board photocells feature field-adjustable programing and are suitable for mounting heights up to 30 feet.

nLIGHT AIR CONTROLS

The DSX1 LED area luminaire is also available with nLight® AIR for the ultimate in wireless control. This powerful controls platform provides out-of-the-box basic motion sensing and photocontrol functionality and is suitable for mounting heights up to 40 feet. Once commissioned using a smartphone and the easy-to-use CLAIRITY app, nLight AIR equipped luminaries can be grouped, resulting in motion sensor and photocell group response without the need for additional equipment. Scheduled dimming with motion sensor over-ride can be achieved when used with the nLight Eclypse. Additional information about nLight Air can be found here.

Included mounting block and integral arm facilitate quick and easy installation. Stainless steel bolts fasten the mounting block securely to poles and walls, enabling the D-Series Size 1 to withstand up to a 3.0 G vibration load rating per ANSI C136.31. The D-Series Size 1 utilizes the AERIS™ series pole drilling pattern (template #8). NEMA ohotocontrol receptacle are also

UL Listed for wet locations. Light engines are IP66 rated; luminaire is IP65 rated. Rated for -40°C minimum ambient. U.S. Patent No. D672,492 S. International patent pending. DesignLights Consortium® (DLC) Premium qualified product and DLC

Not all versions of this product may be DLC Premium qualified or DLC qualified. Please check the DLC Qualified Products List at www.designlights. org/QPL to confirm which versions are qualified. International Dark-Sky Association (IDA) Fixture Seal of Approval (FSA) is

available for all products on this page utilizing 3000K color temperature only. 5-year limited warranty. Complete warranty terms located at:

Note: Actual performance may differ as a result of end-user environment All values are design or typical values, measured under laboratory conditions at 25 °C. Specifications subject to change without notice.



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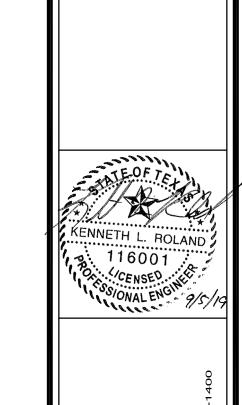
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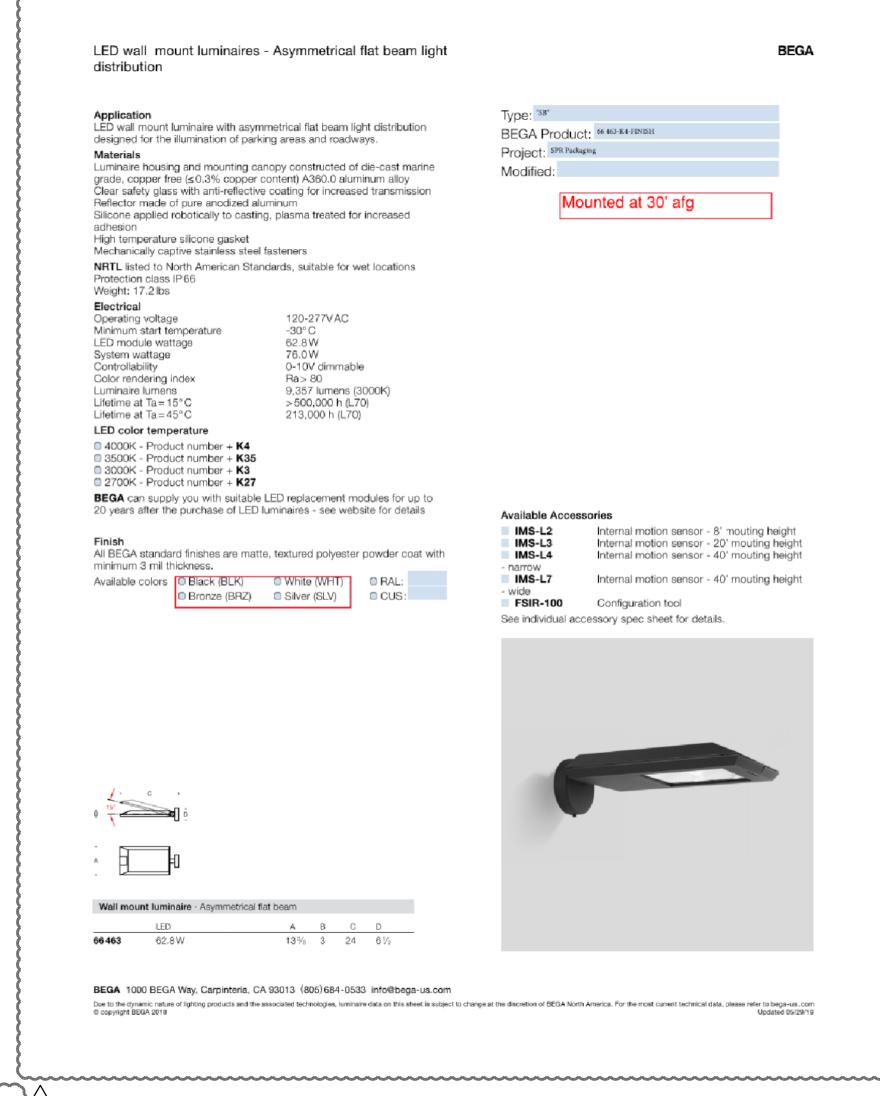
Rev. 12/18/18

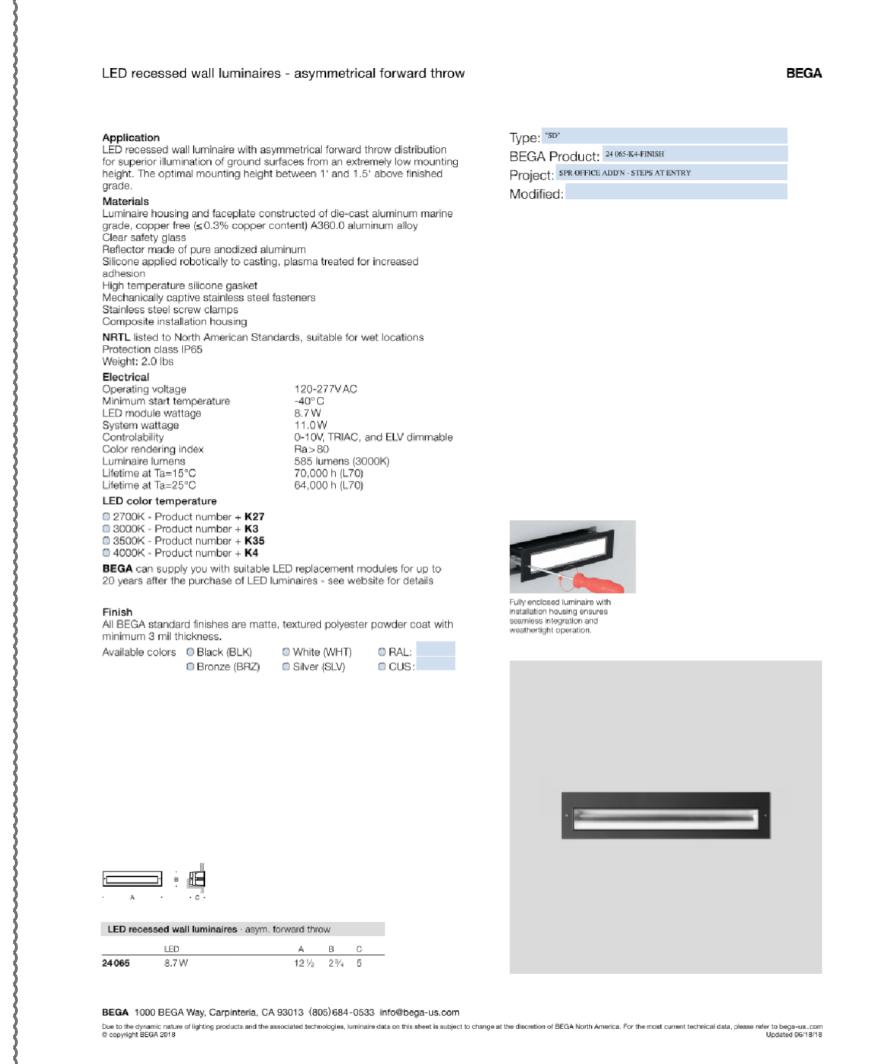


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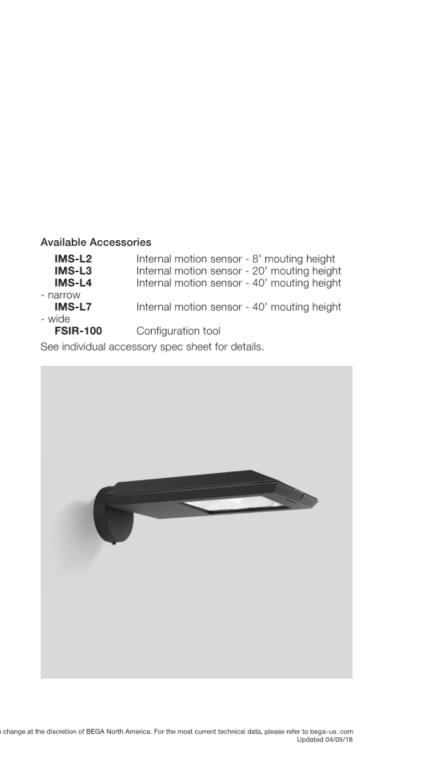




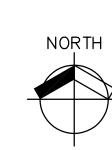














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