IV.E.

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Architectural Review Board Staff Report

Meeting Date: April 14, 2022

From: Chris Dietz, Planner

Location: 1851 Schoettler Rd.

Description: **Logan University ASP:** An Amended Site Plan, Landscape Plan, Tree Stand Delineation, Tree Preservation Plan, Architectural Elevations, and Architect's Statement of Design for a 102.43-acre tract of land zoned "NU"–Non-Urban District located on the west side of Schoettler Rd., north of its intersection with Brook Hill Dr.

PROPOSAL SUMMARY

ITTNER Architects and CEDC, Inc., on behalf of Logan University, have submitted an Amended Site Plan for a two-story, 8,000 square-foot addition to the Science Building at the center of the Logan University Campus. Although the building will only be visible from the interior of the campus, the Unified Development Code states that the Architectural Review Board (ARB) shall review any addition if it is greater than 5,000 square feet or if the addition significantly impacts architectural components previously approved by Planning Commission or the ARB.

Figure 1: Subject Site

HISTORY OF SUBJECT SITE

Pre-1988—Site was zoned "NU"—Non-Urban prior to City's incorporation, with the first buildings built in the 1960s, according to St. Louis County records.

2000—Site Plan approved for the addition of a maintenance building, restrooms, and pavilion on the northern end of the campus.

2005—Amended Site Plan approved for a lecture hall and Amphitheater located in the southeast corner of the campus.

2010—Amended Site Plan approved for 3-story addition to an administrative and classroom building.

2017—Amended Architectural Elevations approved for lighting changes to the bell tower at the center of the campus. A Specialty Lighting Package was approved for this project the following year.

STAFF ANALYSIS

The Unified Development Code's Architectural Review Design Standards are broken down into two (2) areas of review: Site Design & Building Design.

The general requirements for Site Design include Site Relationships, Topography & Parking, Circulation & Access, and Retaining Walls while the general requirements for Building Design include Scale, Design, Materials & Colors, Landscape Design & Screening, Signage, and Lighting.

The UDC has specific provisions regarding the redevelopment of existing buildings. All additions and exterior renovations to existing structures shall advance such structures toward further compliance with the provisions of UDC's Architectural Review Design Standards. Exterior additions must also be incorporated into one (1) cohesive design with the existing structure.

A. Site Relationships

The proposed addition is located well-within the 102-acre campus of Logan University. The university itself is surrounded by single-family residential in the greater area. With this proposed addition being located at the center of the campus, it will have little or no impact on the surrounding residential areas once completed.

B. Circulation System and Access

The campus is currently served by two (2) vehicular access points along Schoettler Rd., with no other entrances to the site. As this site is a university campus, pedestrian access is prevalent throughout, with the center of the campus reserved exclusively for pedestrians. The proposed addition will be located within this area causing the pedestrian path in front of the building to be relocated just south of the new portion of the building, as shown in Figures 2 and 3:

Figure 2: Colored Site Plan

Figure 3: Building Addition Footprint

C. Topography & Parking

The area on which the building addition will be located is relatively flat. Parking is provided to the north, east, and west of the existing building.

D. Scale

The building features a two-story design, similar to that of the existing building and will be slightly smaller than the existing building. The addition caters to the pedestrian scale as it is located on a pedestrian plaza in the center of the campus.

E. Design

The design of the building deviates slightly from the existing building by incorporating more glass and an arc-shaped façade on the south elevation. The curtain wall will be accompanied by aluminum composite panels that break up the massing of the south elevation of the building, with pedestrian entrances on both east and west elevations of the new addition. A canopy system will be located on the southeast corner of the new building above the pedestrian entrance. The roof of the new addition will reach 29'4" in height with a parapet reaching just over 8'0" at 37'7$^{1/2}$" in height around the south side of the building. Beyond the parapet, a mechanical screen will extend to a height of 41'4" to screen rooftop mechanical equipment from view.

F. Materials and Color

Brick veneer is the primary building material used in this building expansion, and is patterned to break up massing on the east and west elevations. The brick color will match the tan brick of the existing building. The aluminum composite paneling material will be used primarily in the curtain wall system that spans the south elevation, with the aluminum paneling wrapping around the east elevation at the pedestrian entrance. Tinted glass is also found in the curtain wall system and around the east and west sides of the building, with sunshades covering fritted glass on the floor-to-ceiling windows featured on the angled sections of the east and west elevations. A

natural-colored metal coping will be used at the top of the building along with the metal rooftop screen painted to match the tan brick.

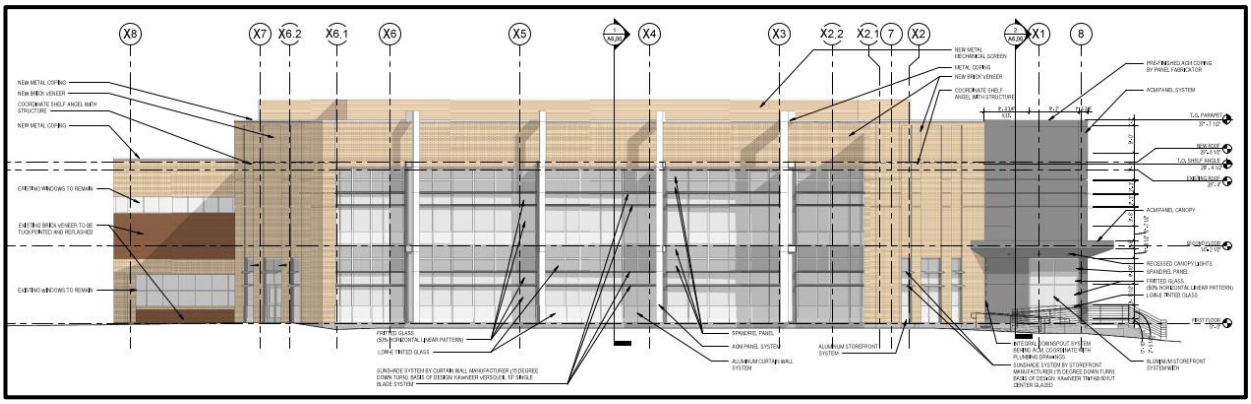


Figure 4: Building Addition Footprint

G. Landscape Design and Screening

Minor landscape changes are taking place to accommodate the addition of this building, including removal of trees where the addition is to be located. The new plantings will consist of a variety of deciduous, evergreen and ornamental varieties around the new addition. The rooftop equipment is set back toward the center of the building and will be totally screened by the 8'0" parapet and 12'0" screening wall behind it. This mechanical screen will be extended onto the existing building to cover existing and new rooftop units.

H. Lighting

Expansion of the science building requires the relocation of some of the existing campus standard bollards to accommodate the addition. New wall pack fixtures will be located on the east and west side of the addition near the entrances to the building. Soffit lighting will be used underneath the canopy on the east elevation near the pedestrian entrance, and will be used to upgrade current soffit lighting around the existing building. Decorative uplighting fixtures will be placed at the base of each column on the south elevation. This particular fixture can be approved by Planning Commission if no off-site glare light trespass in excess of 0.5 foot-candle is produced and the proposed fixtures will improve the appearance of the site. To this end, the applicant has provided cutsheets and a lighting exhibit on the lighting plan depicting no illumination past the roofline.

Rendering

Figure 5: Rendering

DEPARTMENT INPUT

Be advised, this project is still going through development review by City Staff and will not proceed to the Planning Commission until all outstanding items have been addressed. All recommendations made by the ARB will be included in Staff's report to the Planning Commission.

Staff requests review and recommendation on the Amended Site Plan for the Logan University (ASP):

MOTION

The following options are provided to the Architectural Review Board for consideration relative to this application:

1) "I move to forward the Amended Site Plan, Landscape Plan, Tree Stand Delineation, Tree Preservation Plan, Architectural Elevations, and Architect's Statement of Design for Logan University (ASP) as presented, with a recommendation for approval (or denial) to the Planning Commission."

2) "I move to forward the Amended Site Plan, Landscape Plan, Tree Stand Delineation, Tree Preservation Plan, Architectural Elevations, and Architect's Statement of Design for Logan University (ASP) to the Planning Commission with the following recommendations…"

Attachments
1. Architectural Review Packet Submittal

ITTNER
CORDOGAN CLARK GROUP

02/23/2022

ARCHITECTURAL REPORT

Project Name:	Logan University 1851 Schoettler Road Chesterfield, MO 63017	**Ittner Project No.:**	202010.00
		Date: 02/23/2022	

General Project Description:
Logan University has a desire to make improvements to the campus including select interior renovations in the Administration Center and a significant renovation and building addition the existing Science Building. The buildings are located on the main campus at 1851 Schoettler Road, Chesterfield, MO 63017. The campus is approximately 102.43 acres with this project consisting of approximately 0.31 acres. There are two existing access points to the site from Schoettler Road. The exterior and site improvements are part of a building addition on the south side of the Science building.

History:
Logan College was established in 1935 and located in St. Louis, MO. The college moved to the current site in Chesterfield, MO in 1972 and became Logan University in 2013. Since moving to the Chesterfield site, the campus has had several significant site improvements and building additions included but not limited to the Science Building and Clinic Addition in the 1980's, Purser Center in 2008, and the Assessment Center addition in 2011.

Architectural Design Standard Statement:
This report is provided to demonstrate the application of the Architectural Review Design Standards per section 405.04.010.

Part A (Applicability And Compliance):
The campus is bound by Schoettler Road along the eastern end of the site and residential properties around the other 3 sides of the property. The north and west property lines are heavily wooded with virtually no visibility to the campus from the surrounding residents. The south property line is also wooded with very minimal visibility from the residents along the property line.

ARCHITECTURAL REPORT

It should be noted the planned exterior and site improvements are limited to the existing Science Building at the core of the campus (see red outline on the google map image below). The planned addition is on the south side of the science building facing the interior courtyard. The north elevations and portions of the east and west elevations have very minimal to no changes. Therefore, there is virtually no impact to the surrounding community.

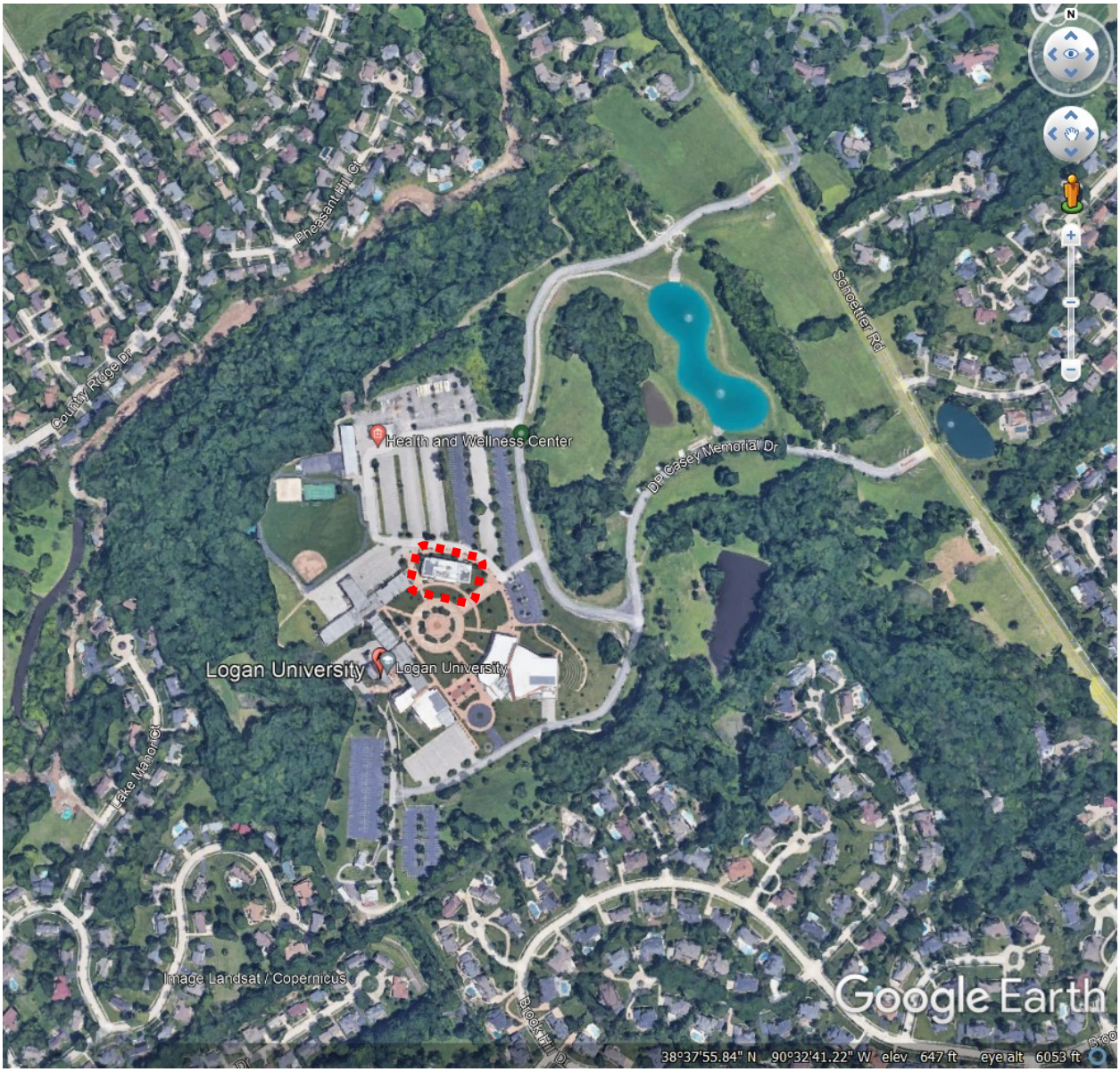


Exhibit A (Google Maps) image of Logan University (Chesterfield, MO)

Part B (Submittal Requirements and Procedures):
The submitted package includes the requirements outlined in part B (Submittal Requirements and Procedures) and with input from the city planner.

ARCHITECTURAL REPORT

Part C (General Requirements for Site Design):
As stated earlier, the planned improvements are minimal relative to the overall campus. There are no changes planned to the vehicular drives and parking. Pedestrian walking paths are maintained and improved around the planned building addition. The courtyard features are maintained and improved. The new addition has glazing on the south façade to optimize views to the courtyard and site. Building features, glazing types, and shades allow sunlight into the building in an optimal and energy efficient manner. The site area being improved has minimal slopes with no retaining walls required.

Part D (General Requirements for Building Design):
The overall scale of the addition is appropriate and matches the existing building with appropriate screening features for most roof top equipment. The overall design of the building façade complements the existing building design and materials including brick veneers, ACM panel systems, curtain wall & storefront systems and glazing with sunshade systems and canopies to allow sunlight into the building in an optimal and energy efficient manner. The building envelop systems are designed to comply with or exceed the requirements of the adopted energy code. Appropriate landscaping is provided to complement the existing campus and enhance views from the building. The specified landscaping palette includes seasonal color with trees, shrubs, and native perennials with decorative rock mulch along the front edge of the building. Pedestrian light standards and light bollards are provided to complement the existing campus. Code compliant lighting is provided at building entries and egress doors with building accent lighting to complement the exterior building design.

EXTERIOR MATERIALS

Project Name:	Logan University 1851 Schoetter Road Chesterfield, MO 63017	**Ittner Project No.:**	202010.00
		Date:	3/14/2022

Science Building Exterior Finishes:

Rendering Proposed New South Elevation

Photo of Existing South Elevation:

EXTERIOR MATERIALS

The materials for the new addition will match and complement the existing building. The new brick will be a light beige brick to match the existing brick.

Brick; match existing beige
Coping Above Brick: Bone white or equal to ACM color
ACM: ALPOLIC 4mm FR panel, Bone white at fins and grey at east entry
Curtain Wall and Sunshade: Clear Anodized or White.
Glazing: Vision panels – clear solarban 70 with 25% and 50% white ceramic frit applied to some (lateral line pattern), Spandrel Opacicoat white
Perforated Fin: Kynar White
Roof Screen: Centria CS-620 (TBD) color beige family to match brick.

See samples on the next page-

ITTNER
CORDOGAN CLARK GROUP

EXTERIOR MATERIALS

Sample for RTU Screen Panels to match brick. We will continue to gather samples and work on more closely matching the brick

Painted Finish to Match Clear Anodized Windows

Bone White Metal Sample

Brick to Match Existing Light Brick

CONCEPT SITE PLAN

SCALE: 1"= 80'

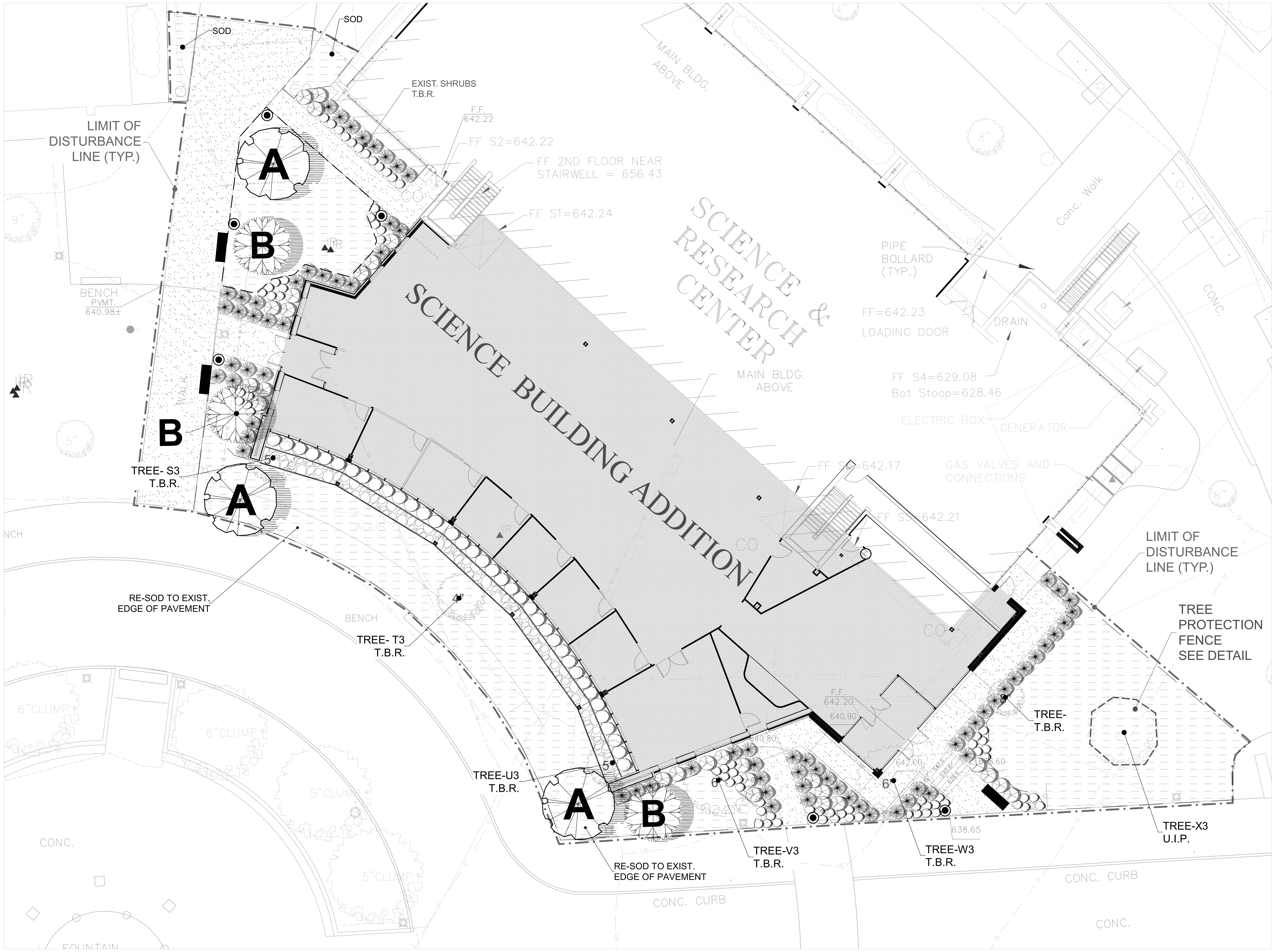
LOGAN UNIVERSITY SCIENCE BUILDING ADDITION

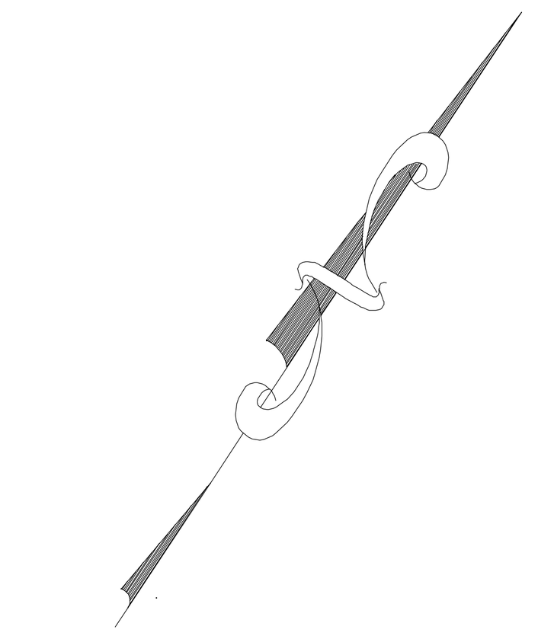
1851 SCHOETTLER ROAD
CHESTERFIELD, MISSOURI

LOGAN UNIVERSITY LEADERS Made

ITTNER CORDOGAN CLARK GROUP

02.23.22





EXISTING TREE LEGEND

- EXISTING DECIDUOUS TREE TO REMAIN

PROPOSED LEGEND

- TURF - SOD (Turf Type Fescue)
- 2" MIN. THICK STONE MULCH "A" W/FILTER FABRIC
- 4 FT. HIGH TREE PROTECTION FENCE
- LIMIT OF DISTURBANCE LINE
- NEW CONCRETE PAVEMENT
- BOLLARD PATH LIGHT RE: SITE LIGHTING PLAN
- 6 ft. METAL BENCH
- BLACK ALUMINUM LANDSCAPE EDGING

GRAPHIC SCALE

10 0 10 20

(IN FEET)
1 inch = 10 ft.

PROPOSED LANDSCAPE PLANT LIST

LOGAN UNIVERSITY – SCIENCE BUILDING ADDITION — January 17, 2022

QUANT.

(3) 2.5" DECIDUOUS CANOPY TREES — **50% provided** (A)

COMMON NAME	BOTANICAL NAME	MATURE HEIGHT	GROWTH RATE	SIZE CLASS
Red Maple 'Scarlet Sentinel'	(Acer rubrum 'Scarsen')	40 feet	Medium/Fast	Large

(3) 2.5"/6 ft. DECIDUOUS ORNAMENTAL TREES — **50 % provided** (B)

COMMON NAME	BOTANICAL NAME	MATURE HEIGHT	GROWTH RATE	SIZE CLASS
Sweetbay Magnolia	(Magnolia virginiana 'Jim Wilson)	15-25 feet	Medium	Small
Saucer Magnolia	(Magnolia x soulangiana)	20-30 feet	Slow/Medium	Medium
Flowering Dogwood	(Cornus florida)	15-25 feet	Slow/Medium	Small

(27) 18-24" min. DECIDUOUS SHRUBS

COMMON NAME	BOTANICAL NAME	MATURE HEIGHT	GROWTH RATE	SIZE CLASS
"Henry's Garnet" Sweetspire	(Itea virginica 'Henry's Garnet')	2-3 feet	Medium	Small
"Minuet" Weigela	(Weigela florida 'Minuet')	2-3 feet	Medium	Small
Tiny Wine Ninebark	(Physocarpus opulifolius 'Tiny Wine')	2-3 feet	Medium	Small
Kalm St. John's Wort	(Hypericum kalmianum 'Ames')	2-3 feet	Medium	Small
Abbottswood Shrubby Qinquefoil	(Potentilla fruticosa 'Abbotswood')	2-3 feet	Medium	Small

(74) 18-24" min. EVERGREEN SHRUBS

COMMON NAME	BOTANICAL NAME	MATURE HEIGHT	GROWTH RATE	SIZE CLASS
"Green Velvet" Boxwood	(Buxus x 'Green Velvet')	3 feet	Medium	Small
"Taunton" Yew	(Taxus x media 'Tauntonii')	3 feet	Medium	Small
Green Mound Jap Juniper	(J. procumbens 'Green Mound')	.75 feet	Medium	Small
Strongbox Inkberry	(Ilex glabra 'Strongbox')	2-3 feet	Medium	Small

(37) 1-3 GAL. ORNAMENTAL GRASS

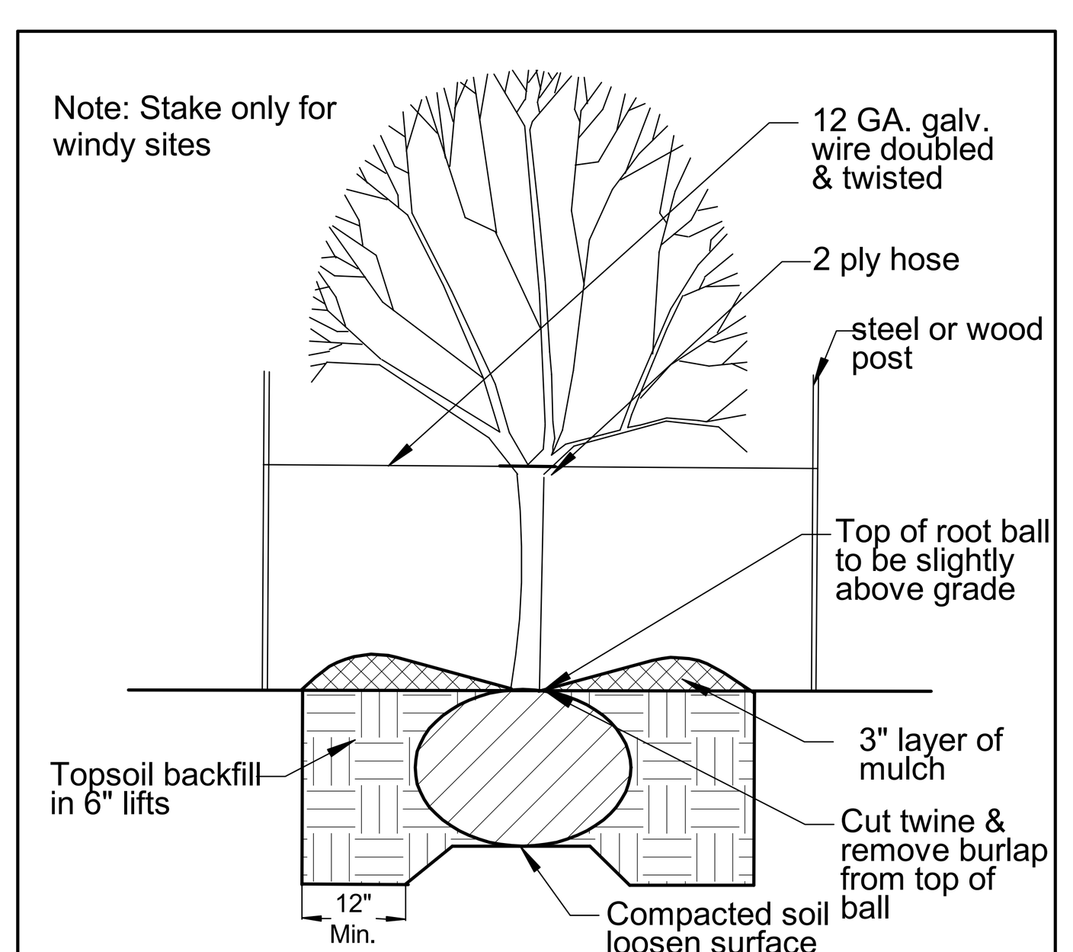
COMMON NAME	BOTANICAL NAME	MATURE HEIGHT	GROWTH RATE	SIZE CLASS
Dwarf Fountain Grass	(P. alopecuroides 'Hameln')	2 feet	Medium	Small

(74) 1 QT.-1 GAL. PERENNIAL FLOWER

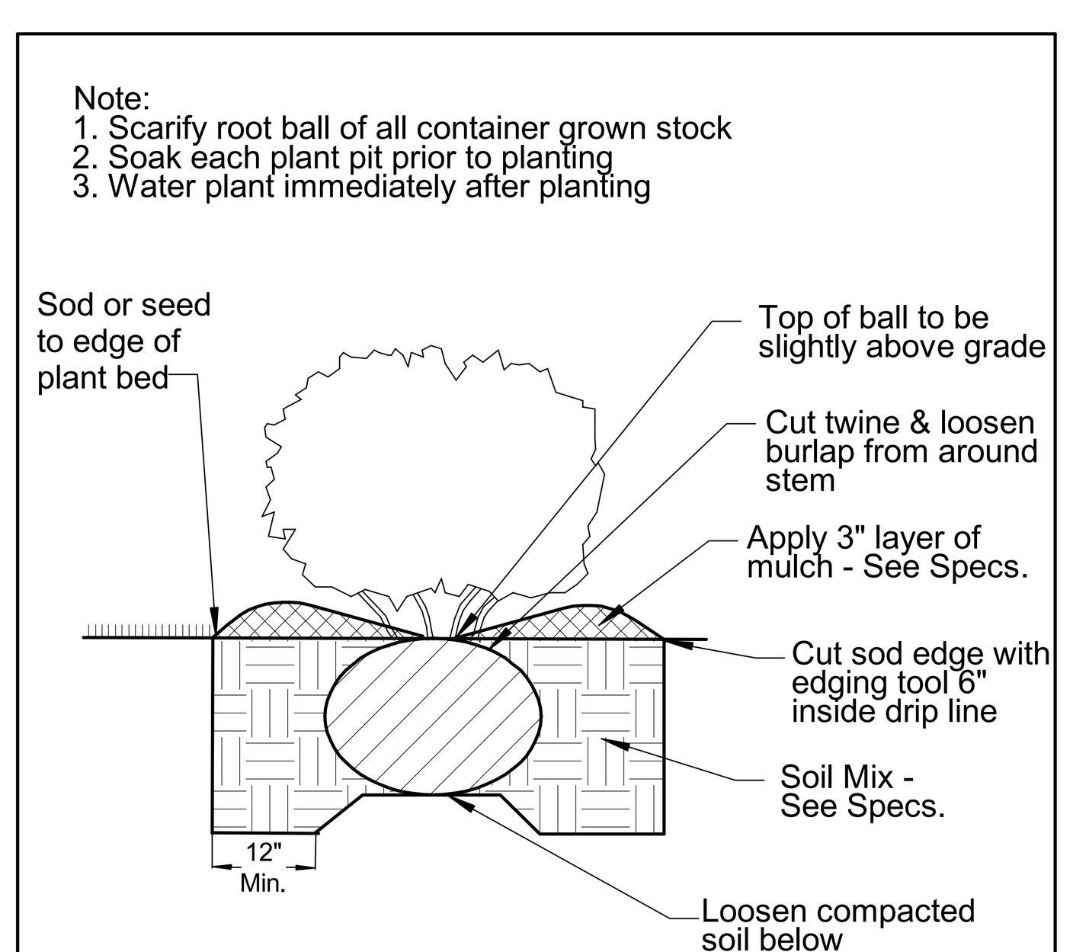
COMMON NAME	BOTANICAL NAME	MATURE HEIGHT	GROWTH RATE	SIZE CLASS
Happy Returns Daylily	(Hemerocallis x 'Happy Returns')	2 feet	Medium	Small
Little Spire Russian Sage	(P. atriplicifolia 'Little Spire')	2 feet	Medium	Small
Big Blue Lilyturf	(Liriope muscari 'Big Blue')	1-2 feet	Medium	Small
October Skies Aster	(Symph. oblongifolium 'October Skies'	1-2 feet	Medium	Small
Rose Verbena	(Glandularia canadensis)	1.5 feet	Medium	Small
Blazing Star	(Liatris spicata 'Kobold')	2.5 feet	Medium	Small

EXISTING TREE LIST

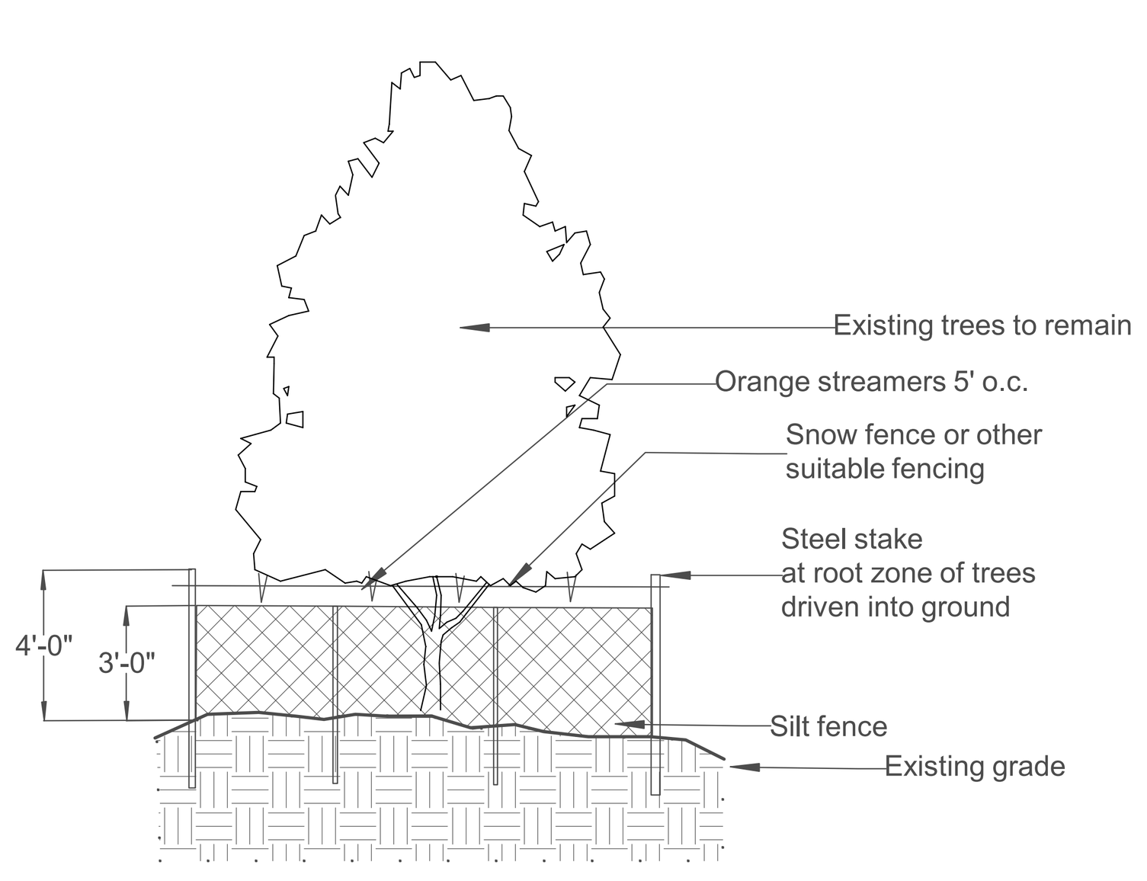
#	TREE SPECIES	DBH	COMMENTS	COND.
S3	red maple	4"	good form	GOOD
T3	red maple	4"	wound on trunk, co-dominant at 5'	FAIR
U3	red maple	4"	large wound on trunk with exposed decay, co-dominant at 6'	POOR
V3	sugar maple	6"	co-dominant at 6'	GOOD
W3	sugar maple	7"	co-dominant at 10', slightly bulbous trunk	GOOD
X3	red maple	7"	co-dominant at 10', pruned, minor deadwood	GOOD



1 L-1 TREE PLANTING DETAIL
N.T.S. GATEWAY DESIGN STUDIO



2 L-1 SHRUB PLANTING DETAIL
N.T.S. GATEWAY DESIGN STUDIO



COMBINED SILT AND TREE PROTECTION FENCE

TREE PROTECTION NOTES:

A. Protective fencing shall be installed along the Limit of Disturbance Line to prevent damage to the roots, trunk, and tops of protected trees. This protective fence shall protect the tree and its roots from clearing, grading, soil filling, storage of materials, parking of vehicles, utility installation or other construction activity of any kind.

B. Signs designating required tree protection areas shall be posted along the Limit of Disturbance Line.

C. Root Pruning or trenching shall occur when roots, within the critical root zone of a protected tree, will be damaged as a result of nearby excavation or the addition of fill over the root system.

D. Trenches are not permitted inside the drip line of a tree's canopy.

E. Sediment and Erosion Control Structures must be used to keep eroded soil from covering roots of protected trees. Siltation screens, etc., are appropriate.

F. Clearing limits shall be rough staked or marked by the applicant's surveyor in order to facilitate location for trenching and fencing installation.

G. No clearing or grading shall begin in areas where tree treatment and preservation measures have not been completed.

H. Refer to this sheet for protective devices details.

I. Early maintenance shedule shall be provided by Tree Specialist noting any pruning, injection, fertilizing required.

J. Name of Tree Specialist shall be determined prior to construction.

EXISTING TREE LEGEND

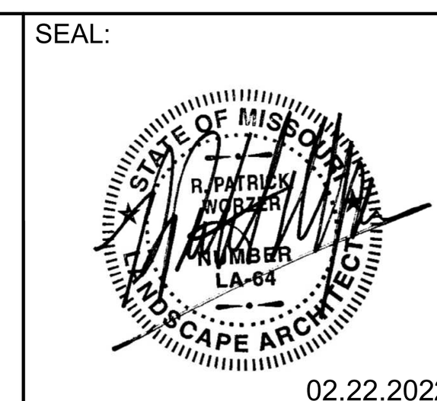
- EXISTING DECIDUOUS TREE TO REMAIN
- 19" TBR — EXISTING DECIDUOUS TREE TBR

PLAN NOTES:

1. Contractor to review and field verify existing and proposed conditions prior to installation.
2. Contractor to notify GATEWAY DESIGN STUDIO of any discrepancies.
3. Contractor to coordinate with other trades.
4. Contractor to adjust plantings accordingly, notify GATEWAY DESIGN STUDIO of any major changes.
5. Proposed plant material is to be selected by the contractor and approved by GATEWAY DESIGN STUDIO or Owner prior to installation.
6. Tree locations and planting beds to be located by the contractor and approved by GATEWAY DESIGN STUDIO or Owner prior to installation.
7. MULCH: All planting beds to receive a 3 inch layer of shredded bark mulch in a continuous bed. Apply a granular pre-emergent weed control barrier prior to mulching.
8. Quantity of sod and seeding shown is for bidding purposes only. Submit unit cost for any additional cost or credit.
9. Contractor is responsible for installing all plant material shown on plan.
10. All landscape improvements and maintenance to be done according to City of Chesterfield requirements.
11. Plantings shall not prohibit site distance requirements.
12. Proposed conditions based on latest plans prepared by CEDC, Inc. Refer to Civil Plans for proposed site development and grading requirements.

NOT FOR CONSTRUCTION - FOR REVIEW ONLY
100% CD QAQC SET - UPDATED 2-25-22

SEAL:



02.22.2022

ORIGINAL ISSUE DATE: 2.18.2022

REVISIONS:

#	DESCRIPTION	DATE

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gateway design studio
planning
landscape architecture
environmental design
Vision...Sustainability...Purpose!
30th ANNIVERSARY 1992 GATEWAY DESIGN STUDIO

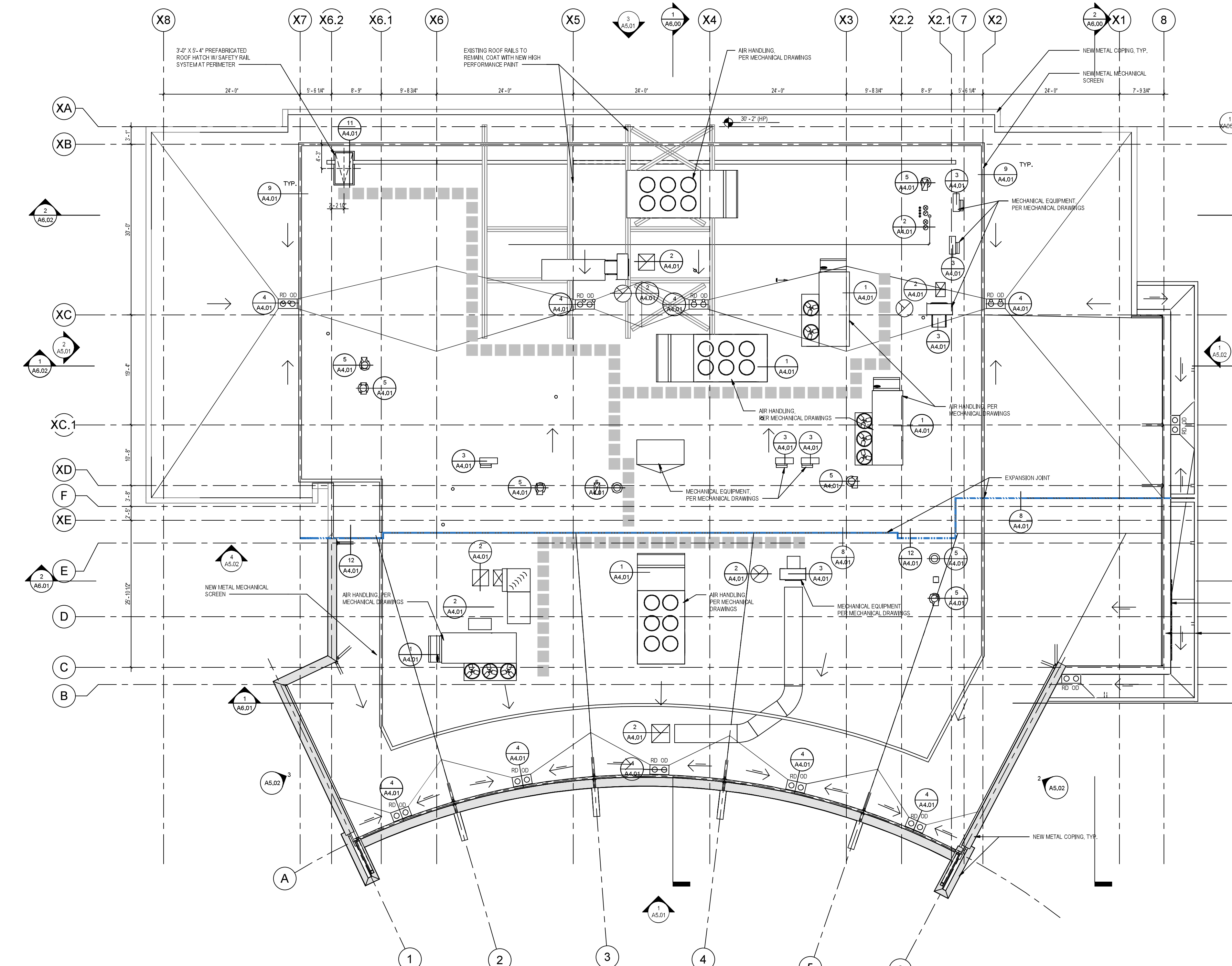
LOGAN UNIVERSITY
NEW ACADEMIC BUILDING AND ADMINISTRATION CENTER RENOVATION
1851 SCHOETTLER RD., CHESTERFIELD, MO 63017

WBI PROJECT NO. 202010.01 GDS #021-06

DRAWING TITLE: LANDSCAPE DEV. PLAN - SCIENCE BUILDING ADD.

DRAWING NO. L-2.1

NEW ACADEMIC BUILDING AND ADMINISTRATION CENTER RENOVATION



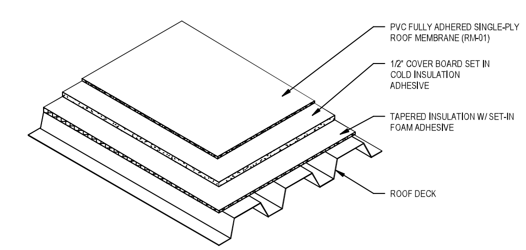
3 ROOF PLAN
1/8" = 1'-0"

ROOF PLAN GENERAL NOTES

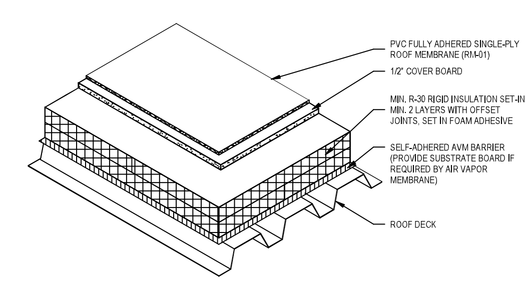
1. REFER TO THE MEP DRAWINGS FOR THE LOCATIONS/ INDICATIONS OF MISCELLANEOUS VENTS AND/OR ROOF PENETRATIONS.
2. UNIT / EQUIPMENT ROOF CURBS SHALL BE OF SUFFICIENT HEIGHT TO MAINTAIN A MINIMUM OF 12" FROM BASE OF THE UNIT / EQUIPMENT TO THE FINISHED SUFACE OF THE ROOF, UNLESS NOTED OTHERWISE. SEE UNIT / EQUIPMENT RECOMMENDED ROOF CURBS.
3. ALL ROOF SLOPES TO BE A MINIMUM OF 1/4" PER FOOT. UNLESS NOTED OTHERWISE.
4. 1/2" TAPERED INSULATION CRICKETS TO BE USED AT ALL ROOF TOP UNITS, CURBS, EQUIPMENT, AND ANYTHING IMPEDING THE DRAINAGE OF WATER.
5. REFER TO STRUCTURAL DRAWINGS FOR STEEL SLOPES.
6. PROVIDE STAINLESS STEEL FLASHING AT ALL VENT/PIPE STACKS. VENT/PIPE STACKS TO BE A MINIMUM OF 12" ABOVE THE FINISHED ROOF.
7. SEE SHEET A4.01 FOR TYPICAL ROOF DETAILS.

ROOF PLAN LEGEND

SYMBOL	DESCRIPTION		
	EXISTING ROOF HATCH TO REMAIN		ROOF SLOPE SLOPED STRUCTURE
RD	ROOF DRAIN		ROOF SLOPE TAPERED INSULATION 1/4" PER FOOT
OD	OVERFLOW DRAIN		ROOF SLOPE TAPERED INSULATION 1/2" PER FOOT
	NEW 2'X2' ROOF PAD		EXHAUST FAN/ VENT FAN
	PLUMBING VENT STACK	D.S.	ROOF DOWNSPOUT
	SADDLE HIGH SIDE OF ALL CURBS		EXPANSION JOINT



2 CANOPY ROOF SECTION DETAIL
1 1/2" = 1'-0"



1 ROOF SECTION DETAIL
1 1/2" = 1'-0"

100% CD QAQC SET

SEAL:

TODD D. POWERS, AIA
MO ARCHITECTURAL REGISTRATION NO. A-007192

ORIGINAL ISSUE DATE:
2.18.2022

REVISIONS:

#	DESCRIPTION	DATE

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CONSULTANTS:

LOGAN UNIVERSITY
FUHR SCIENCE CENTER
1851 SCHOETTLER RD., CHESTERFIELD, MO 63017

WBI PROJECT NO.
202010.01

DRAWING TITLE:
ROOF PLAN

DRAWING NO.
A4.00
FUHR SCIENCE CENTER

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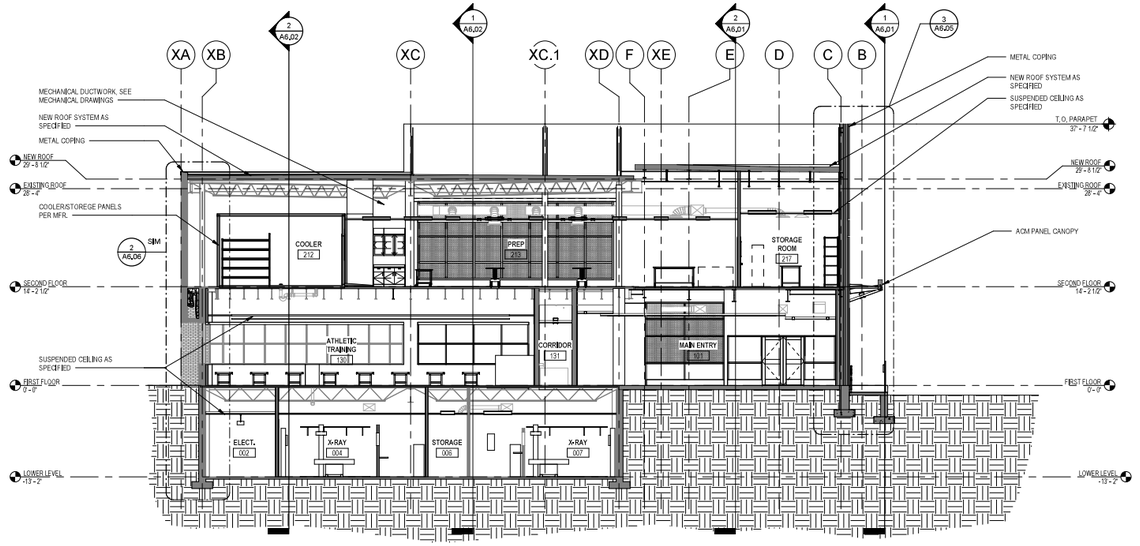
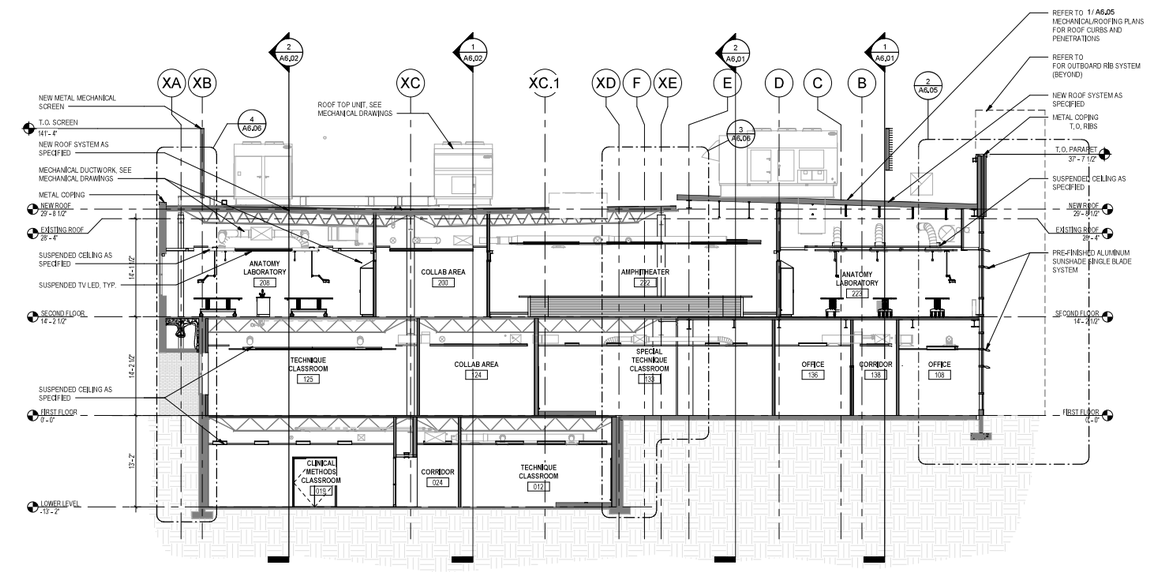


2 BUILDING SECTION - NORTH SOUTH1
1/8" = 1'-0"



1 BUILDING SECTION - NORTH SOUTH
1/8" = 1'-0"

SEAL:
TODD D. POWERS, AIA
MO ARCHITECTURAL REGISTRATION NO. A-5210

ORIGINAL ISSUE DATE:
2.18.2022

REVISIONS:

DESCRIPTION	DATE

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CONSULTANTS:

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FUHR SCIENCE CENTER
1851 SCHOETTLER RD., CHESTERFIELD, MO 63017

WBI PROJECT NO.
202010.01

DRAWING TITLE:
BUILDING SECTIONS

DRAWING NO.
A6.00
FUHR SCIENCE CENTER

100% CD DACC SET

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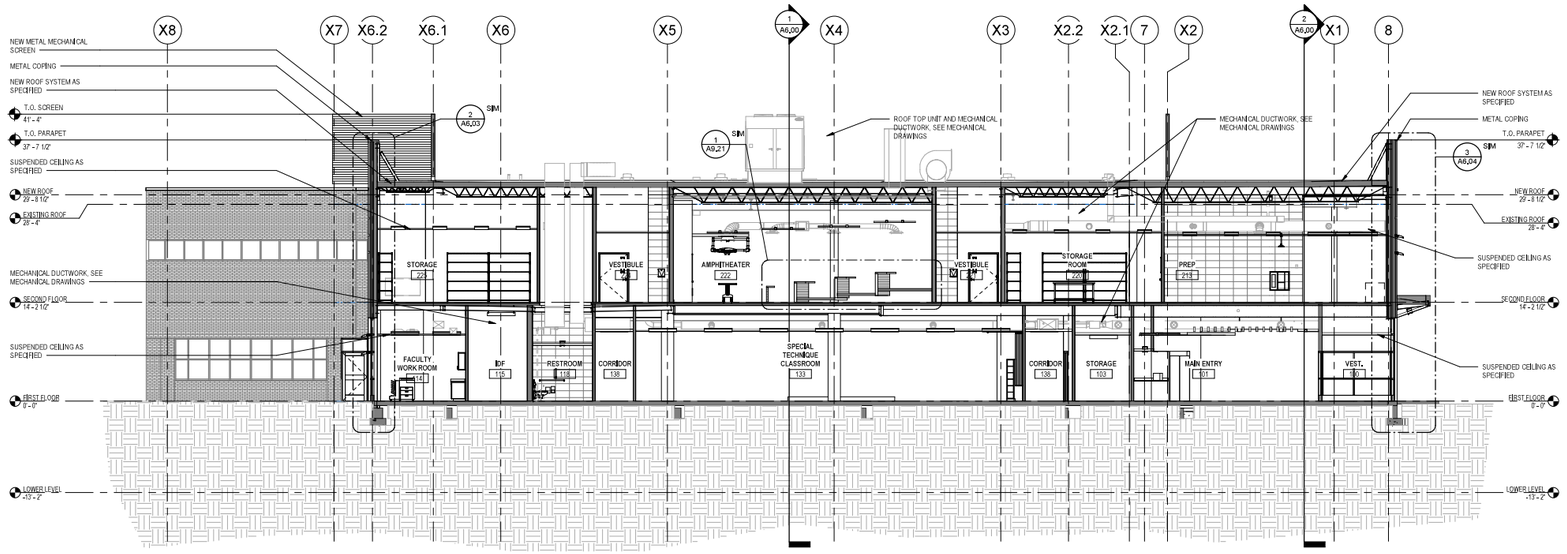
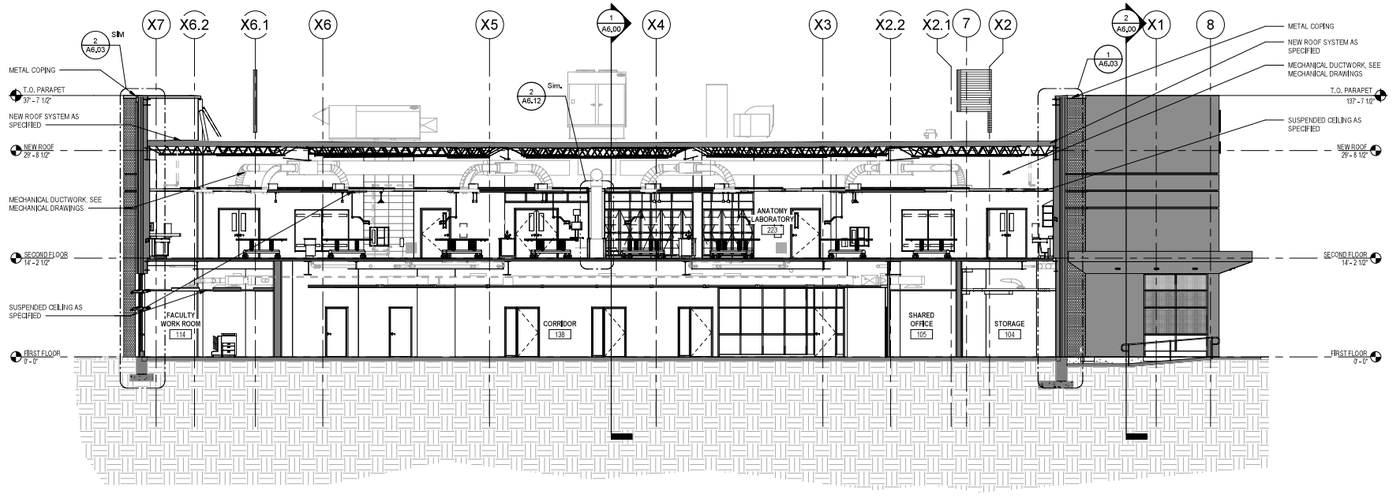


2 BUILDING SECTION - EAST WEST - NEW ADDITION
1/8" = 1'-0"



1 BUILDING SECTION - EAST WEST - NEW ADDITION
1/8" = 1'-0"

SEAL:

TODD D. POWERS, AIA
MO ARCHITECTURAL REGISTRATION NO. A-5211C

ORIGINAL ISSUE DATE:
2.18.2022

REVISIONS:

#	DESCRIPTION	DATE

ITTNER
CORDOGAN CLARK GROUP

WM. B. ITTNER, INC.
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ST. LOUIS, MO 63101
PHONE: (314) 421-4342
www.ittnerarchitects.com
MISSOURI ARCHITECTURAL CORPORATION
CERTIFICATE OF AUTHORITY NO. 000504

CONSULTANTS:

LOGAN UNIVERSITY
FUHR SCIENCE CENTER
1851 SCHOETTLER RD., CHESTERFIELD, MO 63017

WBI PROJECT NO.
202010.01

DRAWING TITLE:
BUILDING SECTIONS

DRAWING NO.
A6.01
FUHR SCIENCE CENTER

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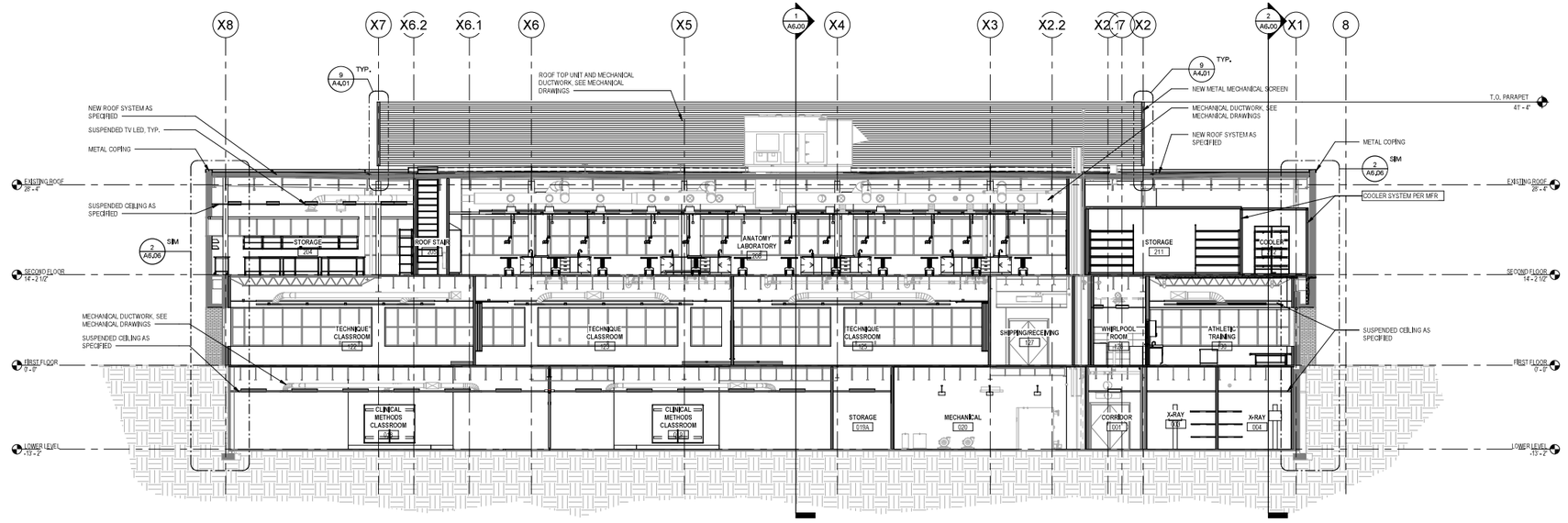
2/21/2022 11:24:56 PM



2 BUILDING SECTION - EAST WEST - EXISTING BUILDING
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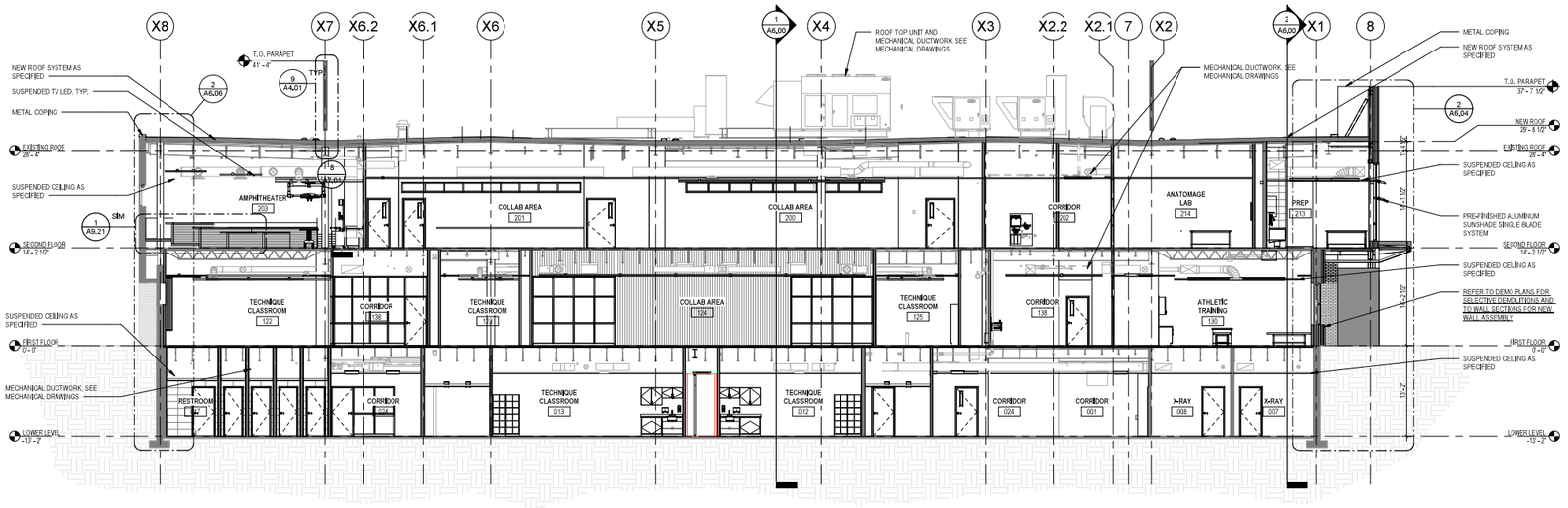

1 BUILDING SECTION - EAST WEST - EXISTING BUILDING
1/8" = 1'-0"

SEAL:

TODD D. POWERS, AIA
MO ARCHITECTURAL REGISTRATION NO. A-5210

ORIGINAL ISSUE DATE:
2.18.2022

REVISIONS:

#	DESCRIPTION	DATE

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CONSULTANTS:

LOGAN UNIVERSITY
FUHR SCIENCE CENTER
1851 SCHOETTLER RD., CHESTERFIELD, MO 63017

WBI PROJECT NO.
202010.01

DRAWING TITLE:
BUILDING SECTIONS

DRAWING NO.
A6.02
FUHR SCIENCE CENTER

100% CD DADC SET

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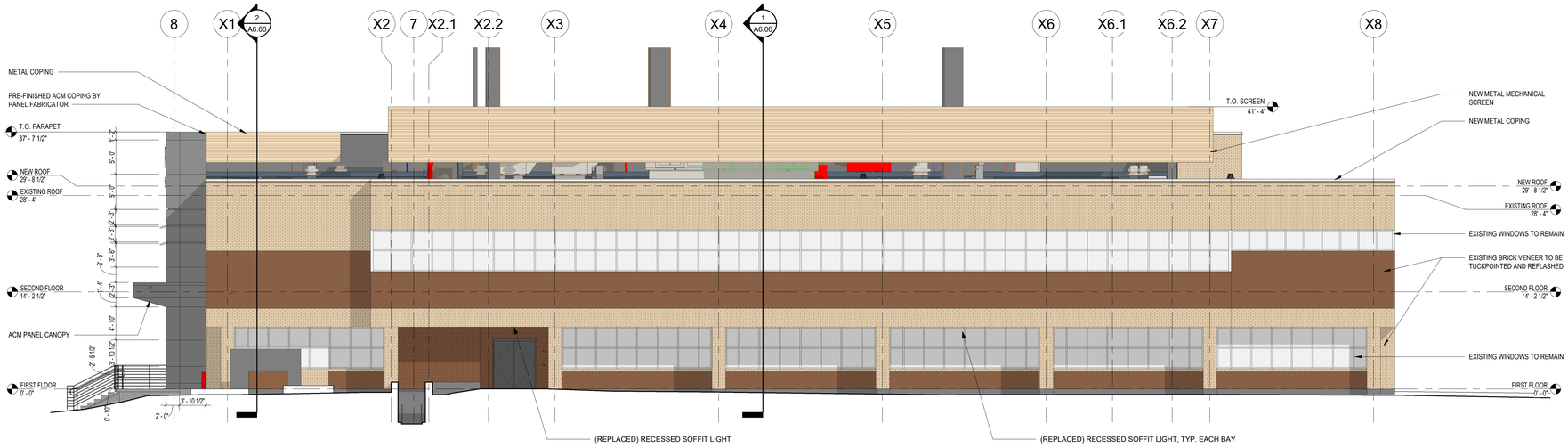

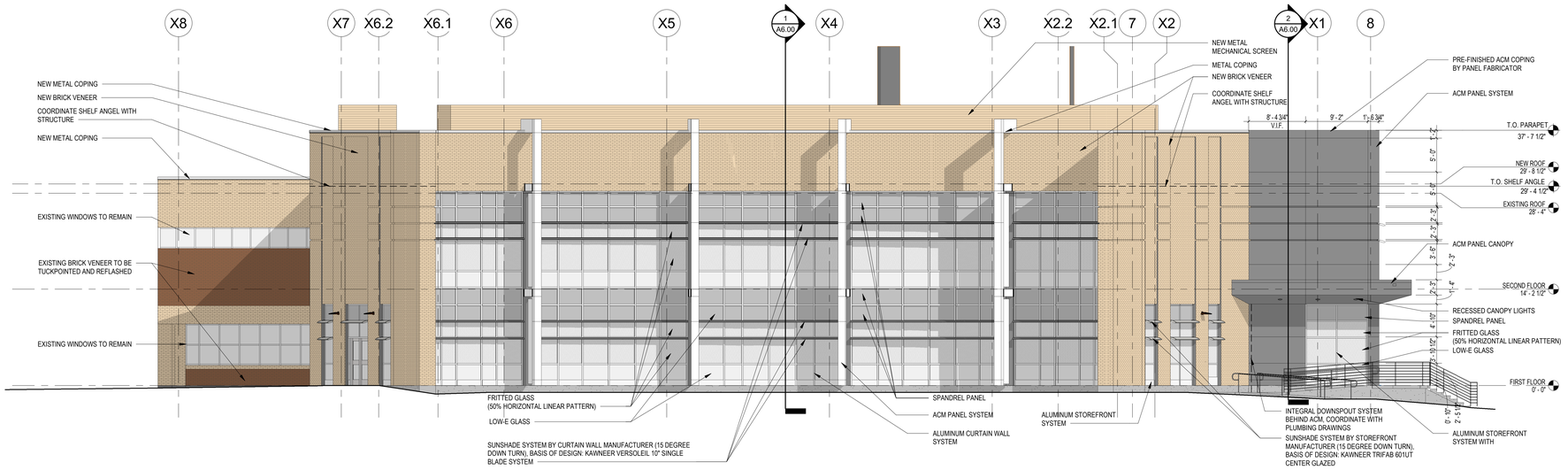

SEAL:

RICHARD W. KEISKER
MO ARCHITECTURAL REGISTRATION NO. 2001027388

ORIGINAL ISSUE DATE:
03.15.2022

REVISIONS:

#	DESCRIPTION	DATE

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STRUCTURAL ENGINEER:
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960 RIDGEWAY AVENUE
AURORA, IL 60506
MISSOURI CERTIFICATE OF AUTHORITY
NO. 2019017445

CIVIL ENGINEER:
CEDC CIVIL ENGINEERING
10820 SUNSET OFFICE DRIVE
SUITE 200
ST. LOUIS, MO 63127
MISSOURI CERTIFICATE OF AUTHORITY
NO. 2003035046

LANDSCAPE ARCHITECT:
GATEWAY DESIGN STUDIO, LLC.
100 CHESTERFIELD BUSINESS PARKWAY
SUITE 200
ST. LOUIS, MO 63005
MISSOURI CERTIFICATE OF AUTHORITY
NO. 2018004102

MEP ENGINEER:
CORDOGAN CLARK & ASSOCIATES, INC.
960 RIDGEWAY AVENUE
AURORA, IL 60506
MISSOURI CERTIFICATE OF AUTHORITY
NO. 2019017445

LABORATORY PLANNER:
HERA, INC.
411 NORTH TENTH STREET
SUITE 400
ST. LOUIS, MO 63101-1335
MISSOURI CERTIFICATE OF AUTHORITY
NO. 00064950

IT / AV / ACOUSTICAL / SECURITY:
SHEN MILSON & WILKE, LLC
2 N RIVERSIDE PLAZA
SUITE 1460
CHICAGO, IL 60606

LOGAN UNIVERSITY
FUHR SCIENCE CENTER
1851 SCHOETTLER RD., CHESTERFIELD, MO 63017

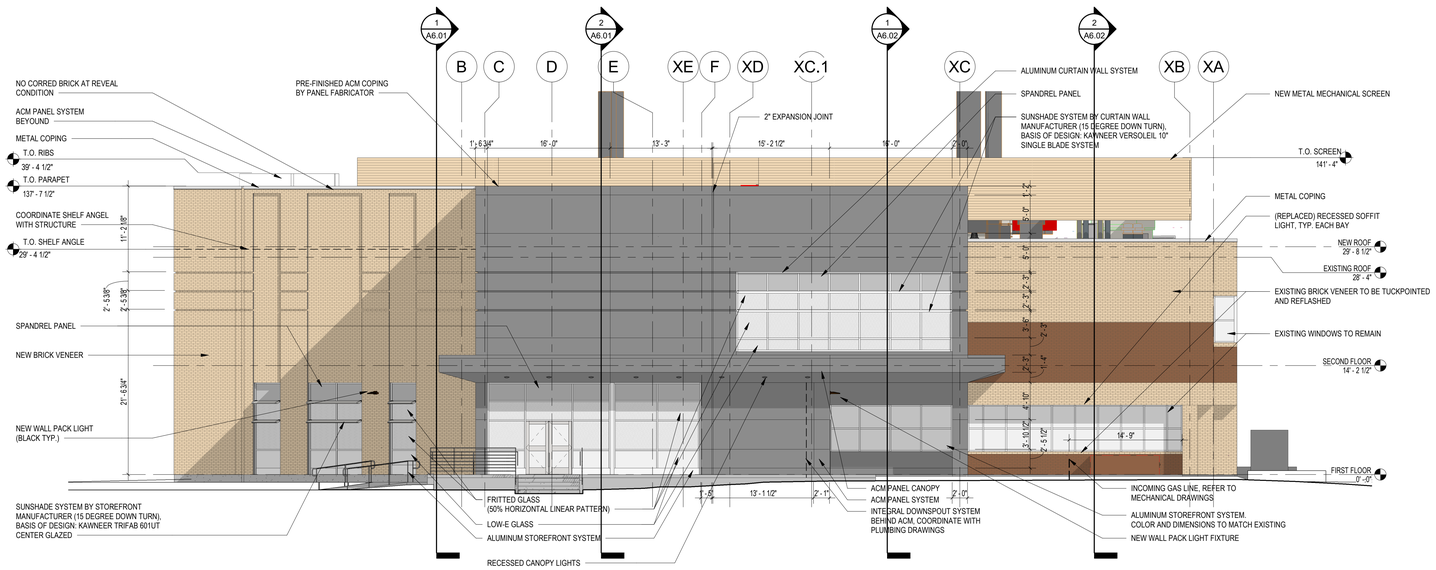
WBI PROJECT NO.
202010.01

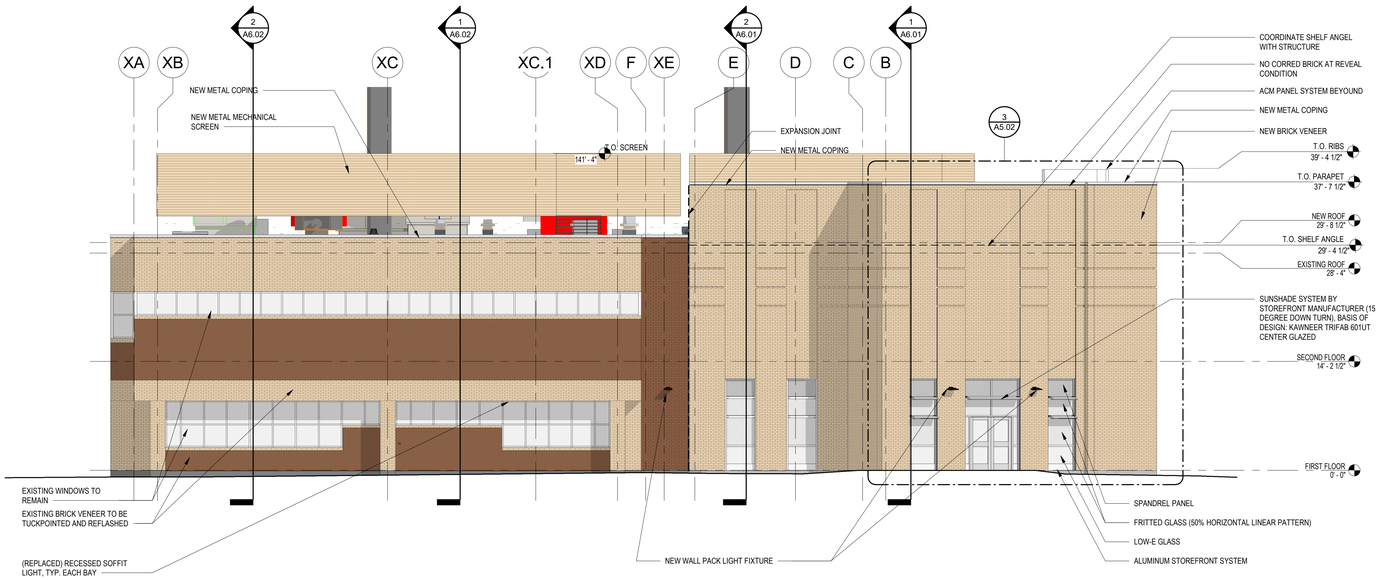
DRAWING TITLE:
BUILDING ELEVATIONS

DRAWING NO.
ASP 01
FUHR SCIENCE CENTER

BID SET

3/14/2022 1:34:32 PM





SEAL:

RICHARD W. KEISKER
MO ARCHITECTURAL REGISTRATION NO. 2001027388

ORIGINAL ISSUE DATE:
03.15.2022

REVISIONS:

#	DESCRIPTION	DATE

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CONSULTANTS:

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960 RIDGEWAY AVENUE
AURORA, IL 60506
MISSOURI CERTIFICATE OF AUTHORITY NO. 2019017445

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CEDC CIVIL ENGINEERING
10820 SUNSET OFFICE DRIVE
SUITE 200
ST. LOUIS, MO 63127
MISSOURI CERTIFICATE OF AUTHORITY NO. 2003030461

LANDSCAPE ARCHITECT:
GATEWAY DESIGN STUDIO, LLC.
100 CHESTERFIELD BUSINESS PARKWAY
SUITE 200
ST. LOUIS, MO 63005
MISSOURI CERTIFICATE OF AUTHORITY NO. 2018004102

MEP ENGINEER:
CORDOGAN CLARK & ASSOCIATES, INC.
960 RIDGEWAY AVENUE
AURORA, IL 60506
MISSOURI CERTIFICATE OF AUTHORITY NO. 2019017445

LABORATORY PLANNER:
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SUITE 400
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MISSOURI CERTIFICATE OF AUTHORITY NO. 00064660

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CHICAGO, IL 60606

LOGAN UNIVERSITY
FUHR SCIENCE CENTER
1851 SCHOETTLER RD., CHESTERFIELD, MO 63017

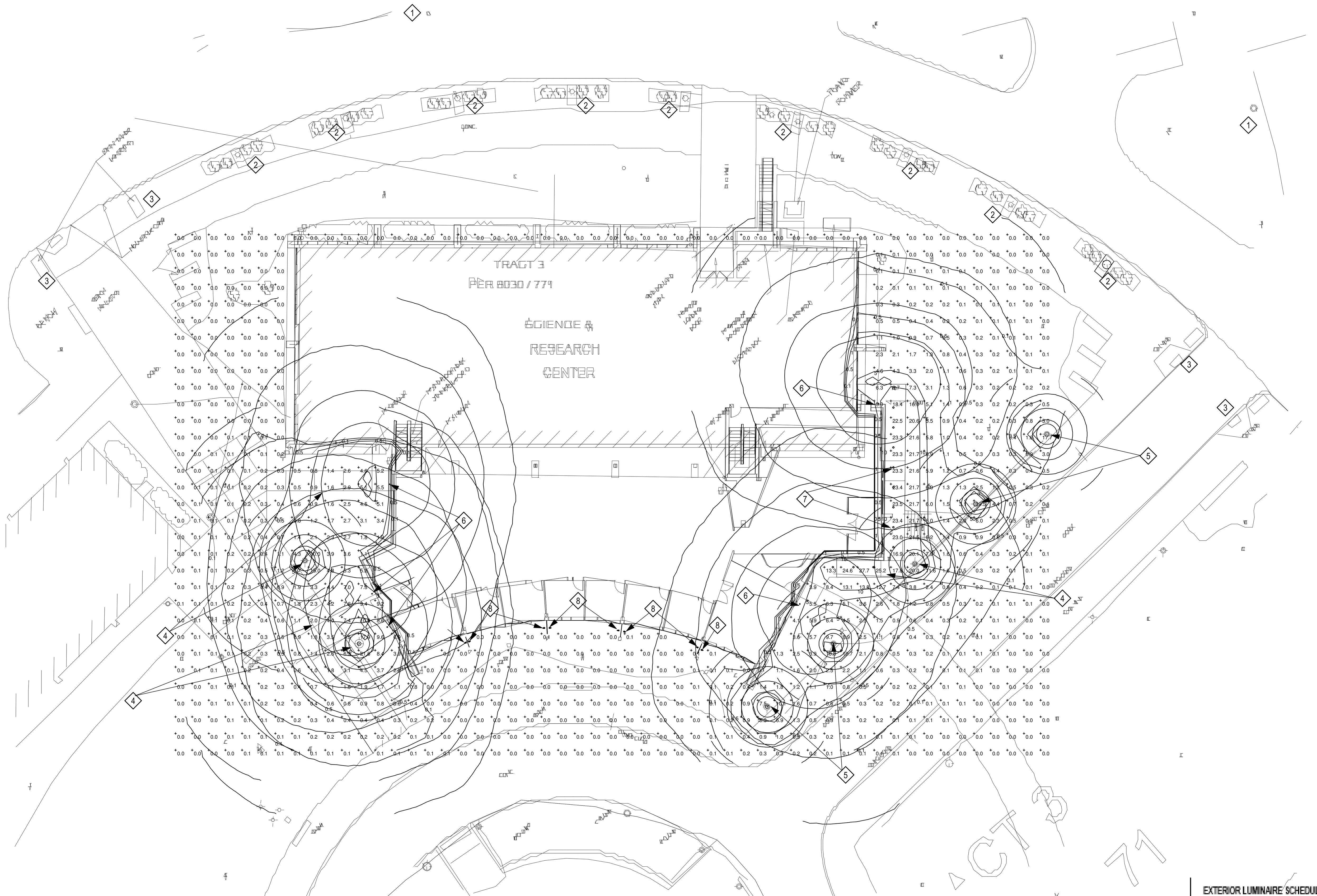
WBI PROJECT NO.
202010.01

DRAWING TITLE:
BUILDING ELEVATIONS

DRAWING NO.
ASP 02
FUHR SCIENCE CENTER

BID SET

3/14/2022 1:34:52 PM



Statistics						
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Calc Zone #3	+	1.5 fc	27.7 fc	0.0 fc	N/A	N/A

1 SCIENCE BLDG SITE LIGHTING PLOT
1" = 20'-0"

ELECTRICAL LIGHTING KEYNOTES

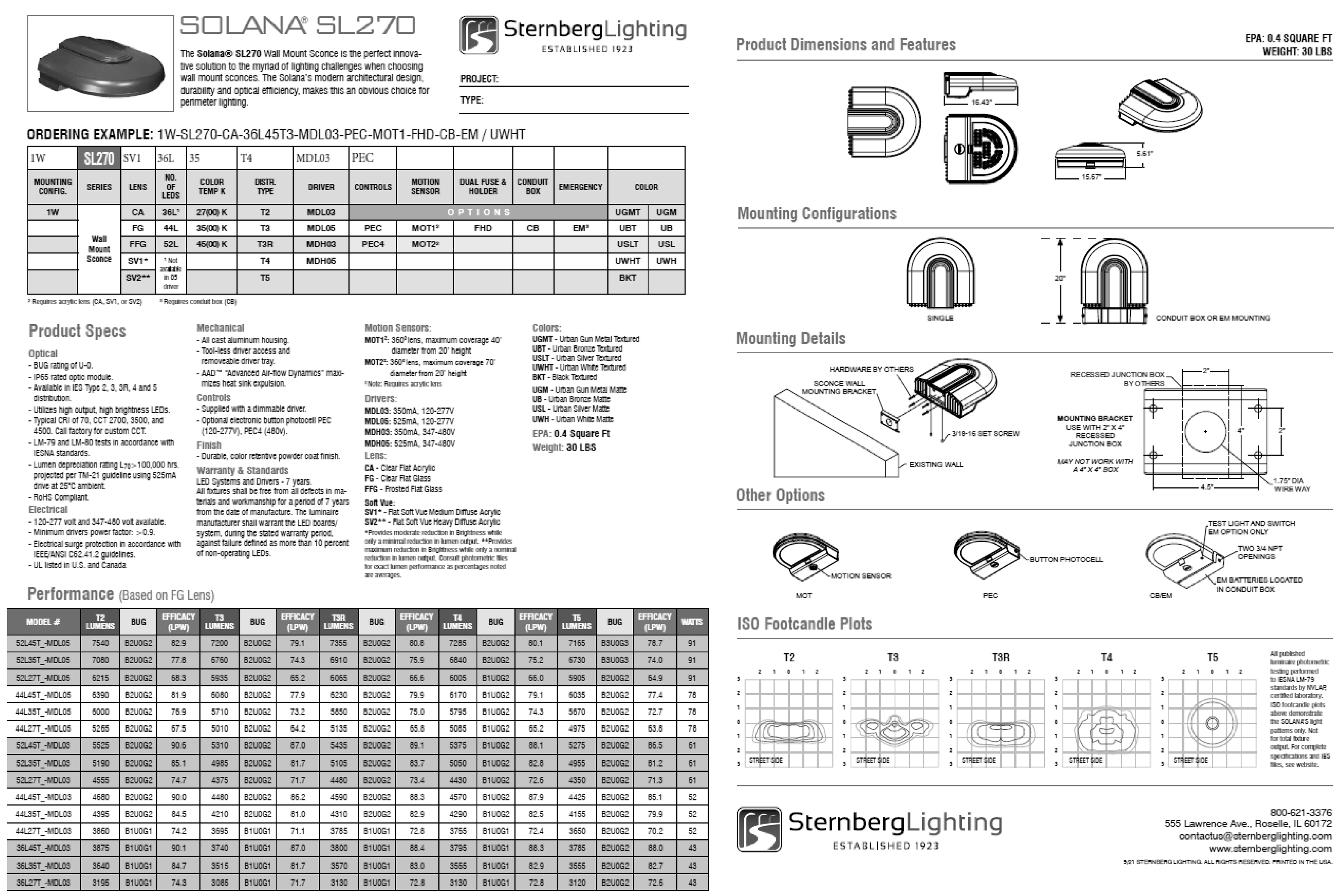
1. EXISTING PARKING LOT LIGHTING TO REMAIN (TYPICAL). NO NEW WORK.
2. EXISITNG PARKWAY POST LUMINAIRES TO REMAIN. NO NEW WORK.
3. EXISTING PIER MOUNTED LUMINAIRES AND PIERS TO REMAIN. NO NEW WORK.
4. EXISTING BOLLARD FIXTURE TO BE RELOCATED. TRACE AND SECURE EXISTING BRANCH CIRCUIT WIRING AND EXTEND TO NEW LOCATION. PROVIDE NEW FOUNDATION TO MATCH EXISTING.
5. EXISTING BOLLARD FIXTURE TO REMAIN. TRACE AND SECURE EXISTING BRANCH CIRCUIT WIRING; REMOVE FIXTURE TO SECURE STORAGE FOR REUSE. RE-INSTALL UPON COMPLETION OF NEW BLDG.
6. NEW OL2 EXTERIOR WALLPACK FIXTURE (SEE CUT SHEET DETAIL 3 AND ELEVATION DETAIL 2 THIS SHEET.
7. NEW FLUSH CANOPY OL3 DOWNLIGHTS TO ILLUMINATE TERRACE AND RAMPS. SEE REFLECTED CEILING PLAN.
8. ACCENT LIGHTING ULLUMINATING PERPENDICULAR SCREENS PER DETAIL 1 THIS SHEET. TYPICAL FOR 10 SCREEN FACES.

OL3 SOFFIT DOWNLIGHT

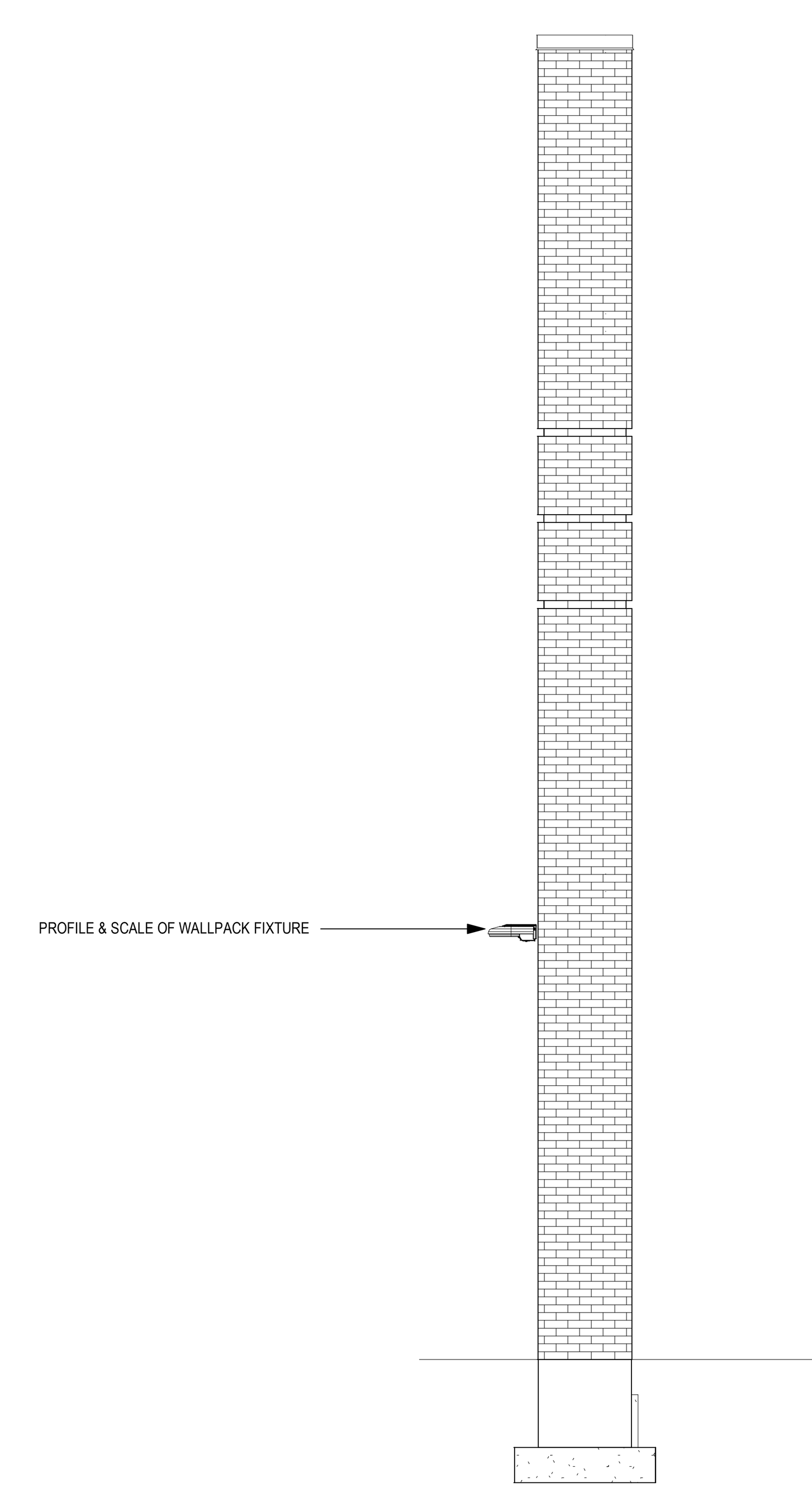
EXISTING CAMPUS STANDARD BOLLARD

EXTERIOR LUMINAIRE SCHEDULE

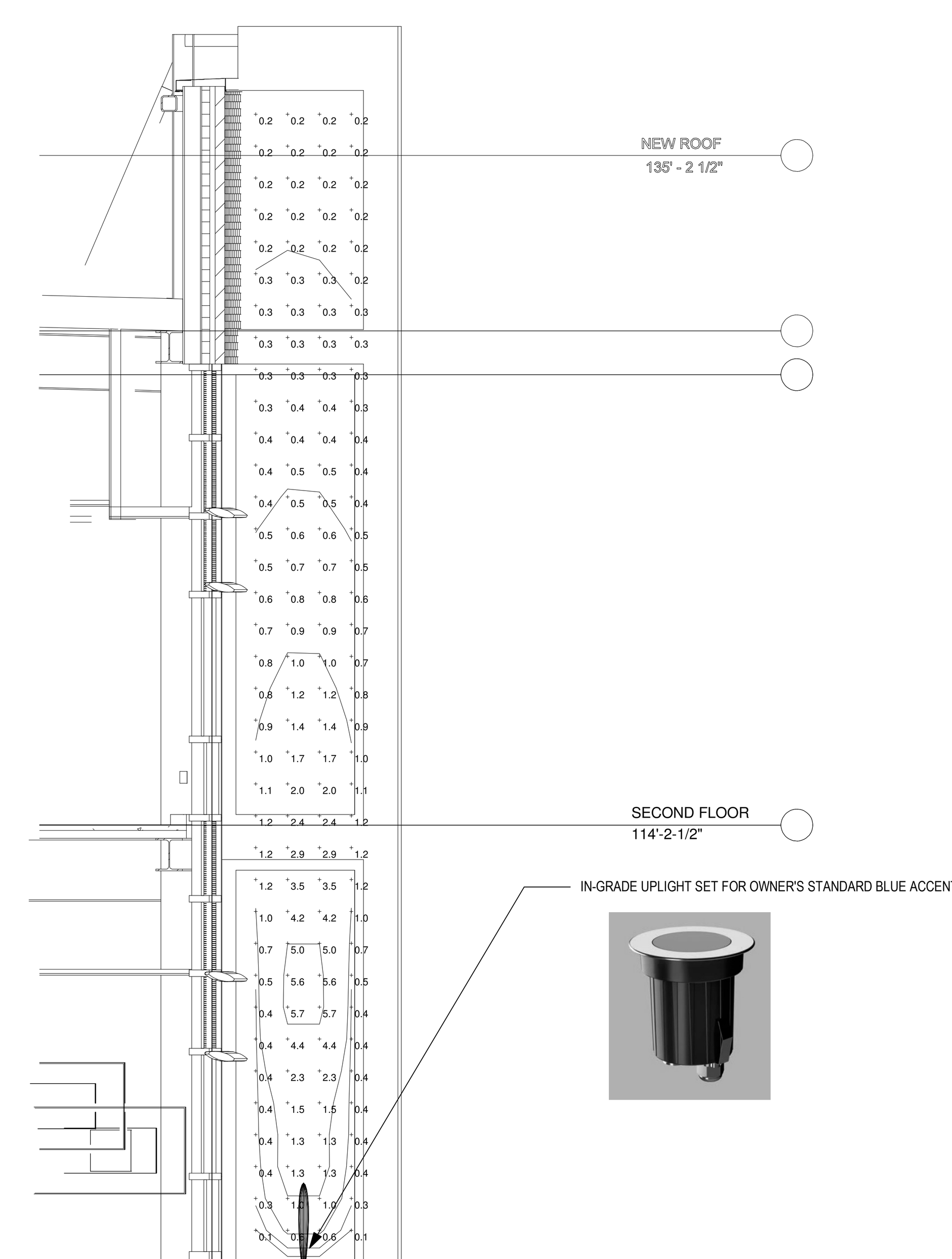
OL1	2374 LU, 4000K LED	CANOPY	CEILING SURFACE	MAX-LITE	CPL-20-B-U-C-40-B-PC SERIES	e-CONOLITE	DIFFUSE	BRONZE	20	120/277	--	COLD WEATHER TOLERANT, J-BOX MOUNTING, INTEGRAL PHOTOCELL.
OL2	3565 LU, 4000K LED	WALLPACK	12' A.F.F.	STERNBERG	1W-SL270-SV1-36L-35-T4-MDL03-PEC-BKT SERIES	LITHONIA, GARDCO	DIFFUSE ACRYLIC	BLACK	42	120/277	82.9	COLD WEATHER TOLERANT, J-BOX MOUNTING, INTEGRAL PHOTOCELL.
OL3	1705 LU, 4000K LED	SOFFIT DOWNLIGHT	FLUSH + SLP ADTR	HALO	RLS6-15-9FS-1E-WH-DM SERIES	---	OPAL ACRYLIC	WHITE	19	120	85.8	DIRECT MOUNT RECESSED LED WITH INTEGRAL SLOPE ADAPTER, FIELD SELECTABLE CCT.



3 PROPOSED EXTERIOR WALLACK



WALLPACK ELEVATION



Statistics						
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Fixture B	+	1.0 fc	5.7 fc	0.1 fc	57.0:1	10.0:1

2 FLUSH ACCENT LIGHT

SEAL:

ORIGINAL ISSUE DATE: 02.18.2022

REVISIONS: DESCRIPTION DATE

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MISSOURI ARCHITECTURAL CORPORATION CERTIFICATE OF AUTHORITY NO. 000004

CONSULTANTS:

LOGAN UNIVERSITY SCIENCE BUILDING
1851 SCHOETTLER RD., CHESTERFIELD, MO 63017

WBI PROJECT NO.: 202010.01

DRAWING TITLE: ELECTRICAL SITE PHOTOMETRICS

DRAWING NO.: E5.2

SCIENCE BUILDING

100% CD QAQC SET

3/9/2022 10:50:29 AM

CORDOGAN CLARK
ARCHITECTURE ▪ ENGINEERING ▪ CONSTRUCTION

February 18, 2022

RE: LOGAN UNIVERSITY AREA AND FAÇADE LIGHTING

Gentlemen:

Please find included with this submittal a photometric study of new exterior lighting associated with the addition to and renovation of the existing Science Building. Drawing E5.2, included, shows the results of the study.

1. The existing area lighting in the immediate area of the addition consists of short bollard fixtures. Other than removal/protection/re-installation to accommodate the new foundation work and repositioning of three bollards to accommodate realignment of pedestrian pathways, the general area lighting will ultimately be unmodified. The existing luminaires in question have cut-off optics as required. The photometric study depicted on E5.2 is intended to demonstrate compliance with the city lighting ordinance regarding light trespass but can only consider new luminaires or those impacted by new work because the surrounding existing custom post and pier lights not affected by the work are obsolete and electronic files are unavailable regardless.
2. The Science Building addition will have external egress doors requiring exterior egress lighting. We are proposing a couple of options for this application to the Architect and Owner.
    a. An architectural sconce matching the design of the existing bollard fixtures and having fully shielded, cut-off, flat lensed optics as required.
    b. A fully shielded, cut-off, flat lensed wall pack fixture in lieu of above for a less ostentatious appearance.

    Elsewhere, downlights in a new exterior soffit will illuminate the main east terrace and ramps. The soffit is sloped, so the downlights will need adapters to make sure the illumination is truly vertical and glare free.
3. The Architect is proposing specialty accent lighting to illuminate the vertical fins of the south elevation of the building addition as a compliment to other buildings on the campus. Our photometric study of an accent uplight proposes a spot optic that limits its width and height to the screen dimensions; the Owner's standard blue hue of the lighting will soften the overall result. The proposed fixture will be equipped with a glare reduction screen.

The submittal includes E5.3, a photometric study of a proposed Phase 2 parking lot at the south end of the campus. The drawing includes a partial cut sheet of the proposed luminaire, which will be fully shielded and have cut-off optics and flat lens. The twenty foot poles would be mounted on 3' high foundation pedestals; the lighting patterns are selected for sharp cut-off at the limits of the paving, with secondary lighting ending at 10' from the paving and no spillage beyond. Worst case vertical lighting is at 8.6 FC at the pole falling quickly to match the horizontal readings. The resulting statistics are compliant with Table 3 of the lighting ordinance.

Finally, we include a package of cutsheets and images for the luminaires proposed for the Science Building area, including the Kipp sconce and some evening images of it, the alternate Sternberg wall pack, the Halo downlight, and the in ground uplight, also with evening image.

Note that all fixtures have low glare ratings, are designed to mitigate light spillage, and have high efficacy ratings; DLC (Cooper yes) and dark sky (Sternberg yes) compliance will very between manufacturers. The selections are intended to maintain the campus lighting standards of safety and security without excessive glare and spillage.

Sincerely,

Cordogan Clark

Douglas A. Schomer, LEED AP
Electrical Designer

Kipp Wall

Project name:

Project type:

Notes:

Design

Alfred Homann

Product description

A conical-shaped luminaire atop a slender sculpted shaft with three die-cast aluminum arms. Luminaire is sealed by clear IK10 conical lens and features an inner opal diffuser concealing the COB LED Light Engine. Available in graphite or natural aluminum powder coat paint. The Kipp Wall is part of a family which includes a post top and bollard.

Variant options

Color	Light source	Lumen	Voltage frequency
Black	30W LED/3000K	1013	120-277V/60HZ
Natural paint aluminum	30W LED/4000K	967	

Light description

The luminaire emits a glare-free reflected light directed downwards and outwards. The LED is surrounded by a conical opal acrylic diffuser, ensuring a uniform light. Features good, functional and pleasant lighting comfort Form of the luminaire can be appreciated illuminated at night as well as during the daylight. Available in 3000K and 4000K CCT, controlled by 0-10V dimmable driver.

Mounting

Surface: Mounting plate anchored to wall, centered over junction box. Plate is mounted through three 0.3 inch screw holes on a 9.7 inch circular diameter, spaced 120 degrees apart. Mounting hardware by others.

Information

Electrical:
System Wattage: 30 W
LED Wattage: 28 W
Delivered lumens: 967 lm - 1,013 lm
Efficacy: 32.2 - 33.8 lm/W
Certifications:
cULus, Wet Location
Protection class IP55
IK class 10
BUG Rating: B1-U3-G1
Controllability: 0-10V Dimming
Min.-Max. Ambient Temp: -40°C to +40°C
Color Rendering: Ra≥80

Finish

Black, Natural paint aluminum

Material

Diffuser: Injection molded white opal acrylic. Top shade: Die cast aluminum, 0. 08" thick. Enclosure: Injection molded clear U. V. stabilized polycarbonate, 0. 05" thick. Frame and wall bracket: Die cast aluminum, 0. 06" thick.
Standard finish are matte, textured surface powder coat with minimum 2 mils thickness in black or natural painted aluminum.

Weight

Min: 13.841 lbs Max: 13.841 lbs

Other functions

LED in 2700K or 3500K. Amber LED available for sea turtle nesting areas. Custom finishes. Custom wall brackets. Alternative dimming controls, including wireless systems.

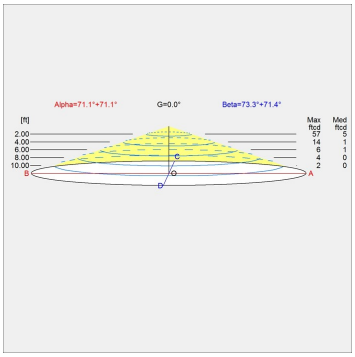
Voltage

120-277V/60HZ

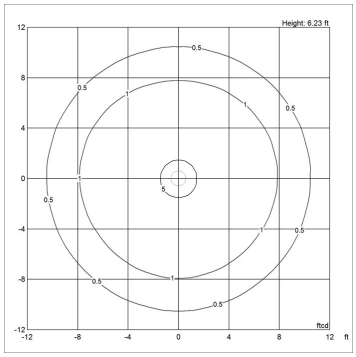
Light distribution diagrams

For the full data set on all variants, see louispoulsen.com.

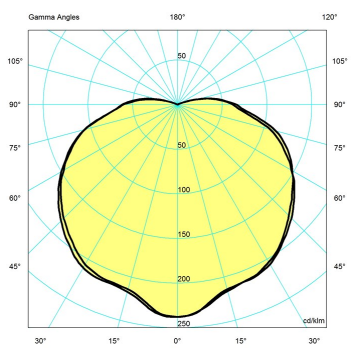
Cartesian



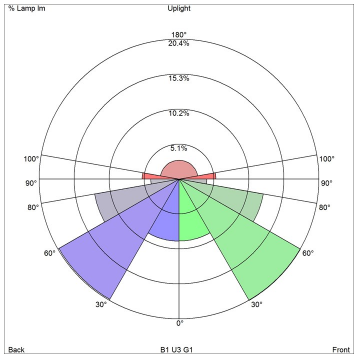
Isolux



Polar



Bug




THEIS VINE
THEIS VINE

SOLANA® SL270

The **Solana® SL270** Wall Mount Sconce is the perfect innovative solution to the myriad of lighting challenges when choosing wall mount sconces. The Solana's modern architectural design, durability and optical efficiency, makes this an obvious choice for perimeter lighting.

SternbergLighting
ESTABLISHED 1923

PROJECT:

TYPE:

ORDERING EXAMPLE: 1W-SL270-CA-36L45T3-MDL03-PEC-MOT1-FHD-CB-EM / UWHT

1W	SL270	SV1	36L	35	T4	MDL03	PEC					
MOUNTING CONFIG.	**SERIES**	**LENS**	**NO. OF LEDS**	**COLOR TEMP K**	**DISTR. TYPE**	**DRIVER**	**CONTROLS**	**MOTION SENSOR**	**DUAL FUSE & HOLDER**	**CONDUIT BOX**	**EMERGENCY**	**COLOR**	
1W		**CA**	**36L[1]**	**27(00) K**	**T2**	**MDL03**	**OPTIONS**					**UGMT**	**UGM**
		FG	**44L**	**35(00) K**	**T3**	**MDL05**	**PEC**	**MOT1[2]**	**FHD**	**CB**	**EM[3]**	**UBT**	**UB**
		FFG	**52L**	**45(00) K**	**T3R**	**MDH03**	**PEC4**	**MOT2[2]**				**USLT**	**USL**
	Wall Mount Sconce	**SV1***	[1] Not available in 05 driver		**T4**	**MDH05**						**UWHT**	**UWH**
		SV2**			**T5**							**BKT**	

[2] Requires acrylic lens (CA, SV1, or SV2) [3] Requires conduit box (CB)

Product Specs

Optical

- BUG rating of U-0.
- IP65 rated optic module.
- Available in IES Type 2, 3, 3R, 4 and 5 distribution.
- Utilizes high output, high brightness LEDs.
- Typical CRI of 70, CCT 2700, 3500, and 4500. Call factory for custom CCT.
- LM-79 and LM-80 tests in accordance with IESNA standards.
- Lumen depreciation rating L_{70}>100,000 hrs. projected per TM-21 guideline using 525mA drive at 25°C ambient.
- RoHS Compliant.

Electrical

- 120-277 volt and 347-480 volt available.
- Minimum drivers power factor: >0.9.
- Electrical surge protection in accordance with IEEE/ANSI C62.41.2 guidelines.
- UL listed in U.S. and Canada

Mechanical

- All cast aluminum housing.
- Tool-less driver access and removeable driver tray.
- AAD™ "Advanced Air-flow Dynamics" maximizes heat sink expulsion.

Controls

- Supplied with a dimmable driver.
- Optional electronic button photocell PEC (120-277V), PEC4 (480v).

Finish

- Durable, color retentive powder coat finish.

Warranty & Standards

LED Systems and Drivers - 7 years.
All fixtures shall be free from all defects in materials and workmanship for a period of 7 years from the date of manufacture. The luminaire manufacturer shall warrant the LED boards/system, during the stated warranty period, against failure defined as more than 10 percent of non-operating LEDs.

Motion Sensors:

MOT1[2]: 360° lens, maximum coverage 40' diameter from 20' height
MOT2[2]: 360° lens, maximum coverage 70' diameter from 20' height

[2] Note: Requires acrylic lens

Drivers:

MDL03: 350mA, 120-277V
MDL05: 525mA, 120-277V
MDH03: 350mA, 347-480V
MDH05: 525mA, 347-480V

Lens:

CA - Clear Flat Acrylic
FG - Clear Flat Glass
FFG - Frosted Flat Glass

Soft Vue:
SV1* - Flat Soft Vue Medium Diffuse Acrylic
SV2** - Flat Soft Vue Heavy Diffuse Acrylic
*Provides moderate reduction in Brightness while only a minimal reduction in lumen output. **Provides maximum reduction in Brightness while only a nominal reduction in lumen output. Consult photometric files for exact lumen performance as percentages noted are averages.

Colors:

UGMT - Urban Gun Metal Textured
UBT - Urban Bronze Textured
USLT - Urban Silver Textured
UWHT - Urban White Textured
BKT - Black Textured
UGM - Urban Gun Metal Matte
UB - Urban Bronze Matte
USL - Urban Silver Matte
UWH - Urban White Matte

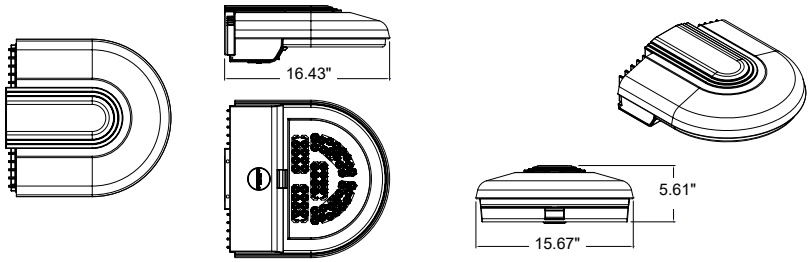
EPA: 0.4 Square Ft
Weight: 30 LBS

Performance (Based on FG Lens)

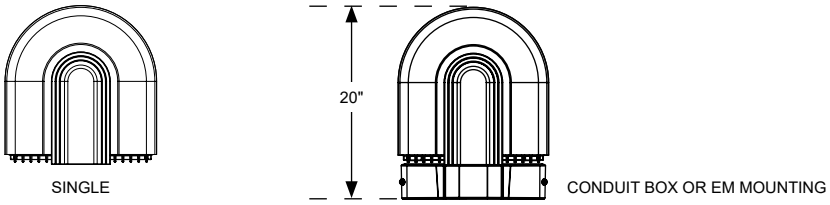
MODEL #	T2 LUMENS	BUG	EFFICACY (LPW)	T3 LUMENS	BUG	EFFICACY (LPW)	T3R LUMENS	BUG	EFFICACY (LPW)	T4 LUMENS	BUG	EFFICACY (LPW)	T5 LUMENS	BUG	EFFICACY (LPW)	WATTS
52L45T_-MDL05	7540	B2U0G2	82.9	7200	B2U0G2	79.1	7355	B2U0G2	80.8	7285	B2U0G2	80.1	7165	B3U0G3	78.7	91
52L35T_-MDL05	7080	B2U0G2	77.8	6760	B2U0G2	74.3	6910	B2U0G2	75.9	6840	B2U0G2	75.2	6730	B3U0G3	74.0	91
52L27T_-MDL05	6215	B2U0G2	68.3	5935	B2U0G2	65.2	6065	B2U0G2	66.6	6005	B1U0G2	66.0	5905	B2U0G2	64.9	91
44L45T_-MDL05	6390	B2U0G2	81.9	6080	B2U0G2	77.9	6230	B2U0G2	79.9	6170	B1U0G2	79.1	6035	B2U0G2	77.4	78
44L35T_-MDL05	6000	B2U0G2	76.9	5710	B2U0G2	73.2	5850	B2U0G2	75.0	5795	B1U0G2	74.3	5670	B2U0G2	72.7	78
44L27T_-MDL05	5265	B2U0G2	67.5	5010	B2U0G2	64.2	5135	B2U0G2	65.8	5085	B1U0G2	65.2	4975	B2U0G2	63.8	78
52L45T_-MDL03	5525	B2U0G2	90.6	5310	B2U0G2	87.0	5435	B2U0G2	89.1	5375	B1U0G2	88.1	5275	B2U0G2	86.5	61
52L35T_-MDL03	5190	B2U0G2	85.1	4985	B2U0G2	81.7	5105	B2U0G2	83.7	5050	B1U0G2	82.8	4955	B2U0G2	81.2	61
52L27T_-MDL03	4555	B2U0G2	74.7	4375	B2U0G2	71.7	4480	B2U0G2	73.4	4430	B1U0G2	72.6	4350	B2U0G2	71.3	61
44L45T_-MDL03	4680	B2U0G2	90.0	4480	B2U0G2	86.2	4590	B2U0G2	88.3	4570	B1U0G2	87.9	4425	B2U0G2	85.1	52
44L35T_-MDL03	4395	B2U0G2	84.5	4210	B2U0G2	81.0	4310	B2U0G2	82.9	4290	B1U0G2	82.5	4155	B2U0G2	79.9	52
44L27T_-MDL03	3860	B1U0G1	74.2	3695	B1U0G1	71.1	3785	B1U0G1	72.8	3765	B1U0G1	72.4	3650	B2U0G2	70.2	52
36L45T_-MDL03	3875	B1U0G1	90.1	3740	B1U0G1	87.0	3800	B1U0G1	88.4	3795	B1U0G1	88.3	3785	B2U0G2	88.0	43
36L35T_-MDL03	3640	B1U0G1	84.7	3515	B1U0G1	81.7	3570	B1U0G1	83.0	3565	B1U0G1	82.9	3555	B2U0G2	82.7	43
36L27T_-MDL03	3195	B1U0G1	74.3	3085	B1U0G1	71.7	3130	B1U0G1	72.8	3130	B1U0G1	72.8	3120	B2U0G2	72.6	43

Product Dimensions and Features

EPA: 0.4 SQUARE FT
WEIGHT: 30 LBS



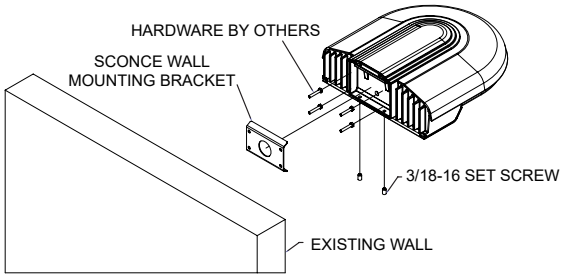
Mounting Configurations

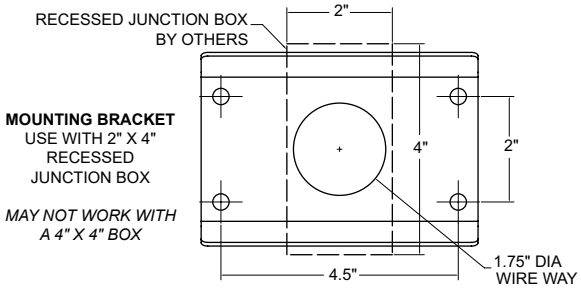


SINGLE

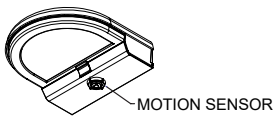
CONDUIT BOX OR EM MOUNTING

Mounting Details

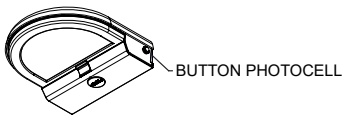




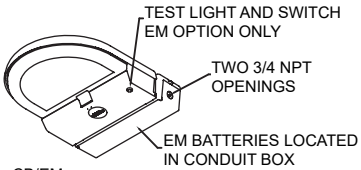
Other Options



MOT

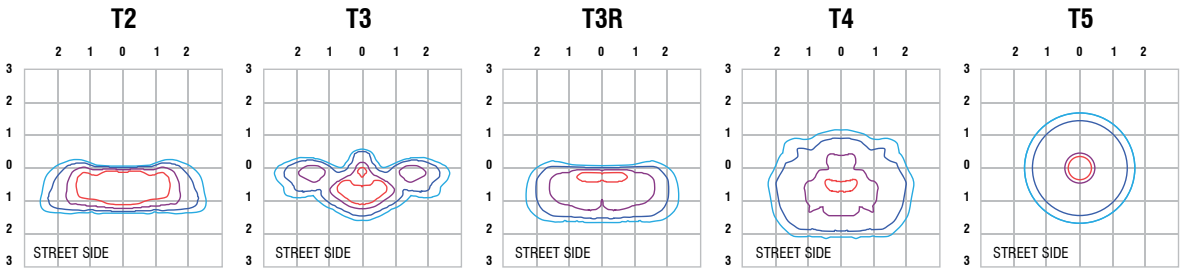


PEC



CB/EM

ISO Footcandle Plots



All published luminaire photometric testing performed to IESNA LM-79 standards by NVLAP, certified laboratory. ISO footcandle plots above demonstrate the SOLANA'S light patterns only. Not for total fixture output. For complete specifications and IES files, see website.

SternbergLighting
ESTABLISHED 1923

800-621-3376
555 Lawrence Ave., Roselle, IL 60172
contactus@sternberglighting.com
www.sternberglighting.com

Project		Catalog #		Type	
Prepared by		Notes		Date	

HALO

RL6 Slope Ceiling | Direct Mount

6” Slope Ceiling LED Direct Mount Module
1500 Lumen Series

Typical Applications

Residential

Interactive Menu

Product Certification

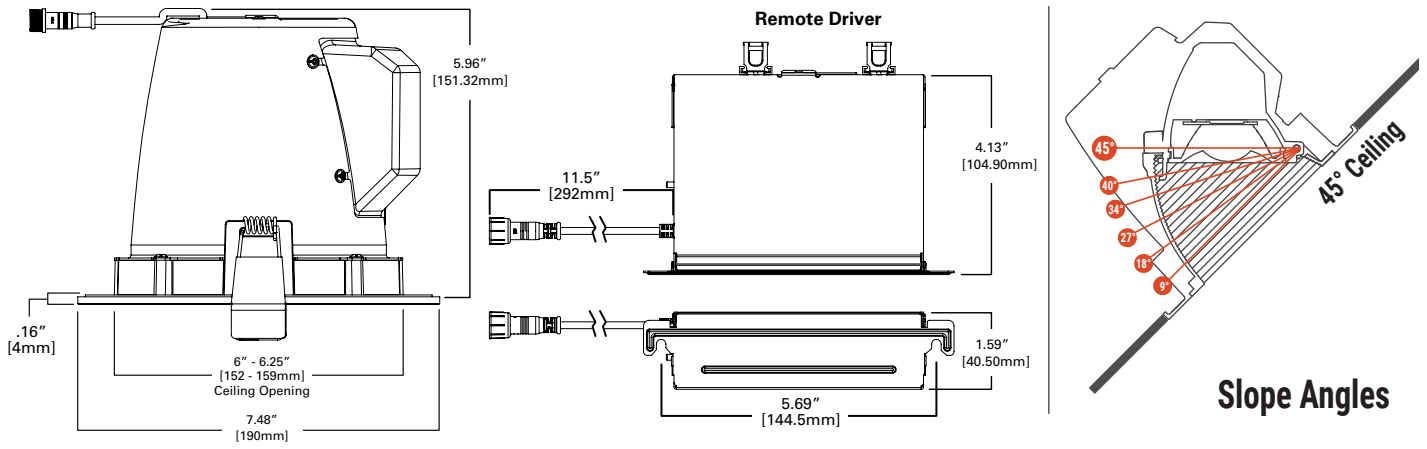
Refer to ENERGY STAR® Certified Products List.
Can be used to comply with California Title 24 High Efficacy requirements.
Certified to California Appliance Efficiency Database under JA8.

Product Features

Top Product Features

- Adjusts from 9° to 45° to match virtually any ceiling pitch
- Select from 5 CCTs via switch: 2700K, 3000K, 3500K, 4000K, 5000K
- Canless installation, no housing required
- 120V input, phase cut dimming to 5%
- Perfect for new construction or remodel work

Dimensional and Mounting Details



Order Information

SAMPLE ORDER NUMBER: **RLS6159FS1EWHDMR**

A complete luminaire consists of an LED module and remote driver/junction box.

Models | Lumens | CRI/CCT | Driver | Finish | Mounting | Packaging

Models	Lumens	CRI/CCT	Driver	Finish	Mounting	Packaging
RLS6 = 6" RL Slope Ceiling direct mount module	**15** = 1500 lumen series (nominal)	**9FS** = 90 CRI min, 5-color selectable CCT	**1E** = 120V 60Hz, LE & TE phase cut 5% dimming	**WH** = Matte white baffle	**DM** = Direct Mount	**R** = recyclable 4-color unit carton
Notes	**Notes**	**Notes**	**Notes**	**Notes**	**Notes**	**Notes**

Accessories

Accessories
Mounting Frame **HL6RSMF** = 6" round and square new construction mounting frame **Extension Cable | seleCCTable Driver/Jbox** **HLB06FSEC** – 6 ft. extension cable **HLB12FSEC** – 12 ft. extension cable **HLB20FSEC** – 20 ft. extension cable

Product Specifications

Module
- LED module consists of LED (chip on board), optical assembly, driver and self-flanged trim
- Regressed baffle style trim
- Achieving L70 at 50,000 hours in IC and non-IC applications
- Adjustment mechanism tilts the light engine from 9° up to 45° to match 2/12 to 12/12 ceiling pitches

Gaskets
- Closed cell gasket achieves restrictive airflow requirements without additional caulking

LED
- Chip on board LEDs provide a uniform source with high efficiency and no pixilation
- Available in 90 CRI minimum, R9 greater than 50 and color accuracy within 4 SDCM provide color accuracy and uniformity
- Available in 5-color field selectable CCT: 2700K, 3000K, 3500K, 4000K, 5000K

Optical Assembly
- Optical assembly provides flood distribution useful for general and task lighting in sloped ceiling applications
- Diffuse injection molded lens with contoured profile provides uniformity and a familiar lamp like appearance
- Meets ENERGY STAR® color angular uniformity requirements

Junction Box
- Die formed metal driver / junction box with captive hinged junction box cover
- Listed for (6) #12 AWG 90˚ C splice conductors, 2-in, 2-out plus (2) ground
- (3) ½" conduit pry-outs
- (2) Slide-N-Side™ non-metallic (NM) wire traps accept 14-2, 14-3, 12-2, 12-3 U.S. and 14-2, 14-3, 12-2 Canadian NM cable
- (3) 4-port push wire nuts for quick and reliable mains voltage connections
- Integral mounting facilitates direct mounting to building structure or mounting frame

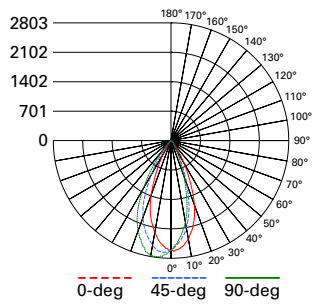
Driver
- Remote 120V 60 Hz constant current driver provides high efficiency operation
- Continuous, flicker-free dimming from 100% to 5% with select leading or trailing edge 120V phase cut dimmers – consult dimming guide for more information
- Consult dimmer manufacturer for compatibility and conditions of use

Installation
- Can be installed in 1/2" to 1-1/4" thick ceilings
- Round ceiling cutout
- Heat treated springs hold fixture fitting securely in the ceiling eliminating light leaks
- Can be removed from below the ceiling for service or replacement

Compliance
- UL Certified for US and Canada, type IC suitable for direct contact with air permeable insulation
- Not for use in direct contact with spray foam insulation, reference NEMA LSD57-2013
- Damp location listed
- Air-tite per ASTM-E283
- Suitable for use in clothes closets when installed in accordance with the NEC 410.16 spacing requirements
- EMI/RFI emissions per FCC 47CFR Part 15 consumer limits
- Contains no mercury or lead and is RoHS compliant
- Photometric testing in accordance with IES LM79-08
- Lumen maintenance projections in accordance with IES LM-80-08 and TM-21-11
- Compliant with California Title 24 High Efficiency LED under JA8, reference Modernized Appliance Efficiency Database System (MAEDBS) for 2019 JA8 High Efficacy Lighting
- ENERGY STAR® certified, reference "Certified Light Fixtures" database

Warranty
- Five year limited warranty, consult website for details. www.cooperlighting.com/legal

Photometric Data

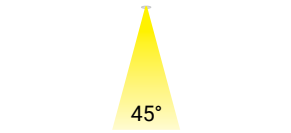


RLS6159FS1EWHDM-3000K
Spacing criterion: (0-180) 1.19
(90-270) 1.19
(Diagonal) 1.28
Beam Angle: 45°
Field Angle: 70°
Lumens: 1630
Input Watts: 19 W
Efficacy: 85.8 LPW
Test Report:
RLS6159FS1EWHDM 3000K.ies

Zonal Lumen	Lumens	% Lumens
0-30	1271	78
0-40	1492	91.5
0-60	1603	98.3
0-90	1625	99.7

TM-30-15	Rf = 93
	Rg = 99
CRI/CIE	Ra = 96
	R9 = 71

CCT - Range of 2700K- 5000K



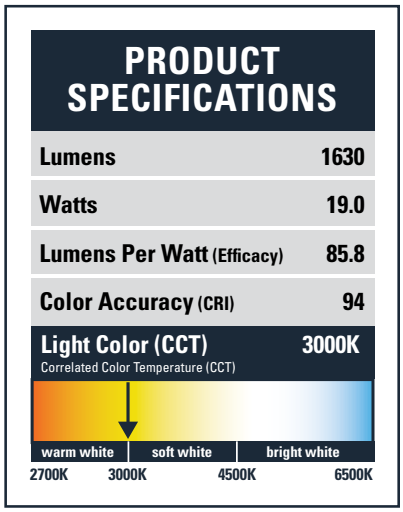
Energy Data

Energy Data @ 3000K	
Lumens	1500 Series
Input Voltage	120V
Input Current	157.7 (mA)
Input Power	19.0 (W)
Efficiency	85.8 (LPW)
Inrush (A)	3.3 (A)
THD: ≤ 20%	
PF: ≥ 0.90	
T Ambient -30 - +40°C	
Sound Rating ≤ 22dBA	

RLS6-DM	CCT	Lumens	Power (W)	LPW
Field Selectable CCT	2700K	1588	19.0	83.6
	3000K	1630	19.0	85.8
	3500K	1670	19.0	87.9
	4000K	1705	19.0	89.7
	5000K	1745	19.1	91.4

Product Specifications

RLS6099FS1EWHDMR



Cooper Lighting Solutions
1121 Highway 74 South
Peachtree City, GA 30269
P: 770-486-4800
www.cooperlighting.com

suelo

The real strength of the Suelo range is its sheer variety. Efficient, versatile, and safe, with a hardwearing flange, a black silkscreened protective screen for increased visual comfort, and the AquaStop® patented protection system, Suelo has been completely redesigned, with drive-over uplights offering unmistakeable Linea Light Group quality.

Materials
Aluminum body

AISI 316L stainless steel flange

suelo range

	2 W	4.2 W	7.2 W	13 W	30 W
Suelo_R	Ø 1.2 in	Ø 2.5 in	Ø 3.6 in	-	-
Suelo_RJ	-	Ø 2.5 in	Ø 3.6 in	-	-
Suelo_RX	-	-	Ø 4.7 in	Ø 6.7 in	Ø 9.1 in
Suelo_RXJ	-	-	Ø 4.7 in	Ø 6.7 in	-
SueloPRO_R	Ø 1.4 in	Ø 2.5 in	Ø 3.6 in	-	-
SueloPRO_RX	Ø 2 in	-	Ø 4.7 in	Ø 6.7 in	-
Suelo_RX Double	-	-	-	Ø 6.7 in (12W)	Ø 9.1 in (24W)
Suelo Telescopic	-	-	-	Ø 7.9 in	Ø 7.9 in (25W)
Options	HC PRO_R, PRO_RX	HC _R, PRO_R DL PRO_R	HC _R, _RX, PRO_R, _PRO_RX DL PRO_R, _PRO_RX	HC _RX, PRO_R, _PRO_RX DL _RX, _PRO_RX	HC _RX DL _RX
CRI 80	2700K 3000K 4000K	2700K 3000K 4000K	2700K 3000K 4000K RGBW (_RX)	2700K 3000K 4000K RGBW (_RX)	2700K 3000K 4000K RGBW (_RX)
Optics — **Standard**	08° 15° 30° 60° 90° Diffused	10° 20° 30° 60° 90° Diffused Elliptic Asymmetric	06° 15° 20° 30° 60° 105° Diffused Elliptic Asymmetric	06° 15° 30° 35° 45° 60° Diffused Asymmetric	06° 15° 30° 35° 60° Asymmetric
Optics — **Pro**	15° 30° 60° Elliptic Diffused	20° 30° 50°	06° 15° 30° 60°	15° 30° 60° Asymmetric	-
Driver	Remote	Remote	Remote	Remote 120-277V On/Off (PRO_RX, _RX Double)	Remote 120-277V On/Off (_RX, _RX Double)
Current	C.C. C.V.	C.C. C.V.	C.C. C.V.	C.C.	C.C.

The range

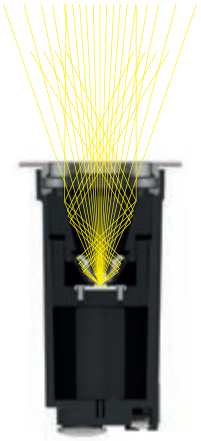
The Suelo family offers a variety of solutions for every design need: fixed and tiltable versions, small-flanged flush-mount uplights. There are PRO models with recessed optics. RGBW engines and beam control filters are also available. All models have the exclusive AquaStop® protection systems, and there are versions with 24V converters.

RGBW

Visual comfort

Suelo fixtures with honeycomb louver, screen secondary light and reduce glare, maintaining a high-quality light. A darklight filter directs the illumination onto the intended part of the wall by sectioning part of the beam, and prevents glare even close to the source.

For full beam control and a drastically reduced glare risk, choose the Suelo PRO versions, in which the recessed source increases the screening angle, totally skimming off the secondary flow to give a cleaner, more concentrated and efficient light.



Suelo PRO

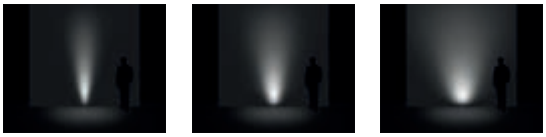
Suelo + Honeycomb

Suelo + Darklight

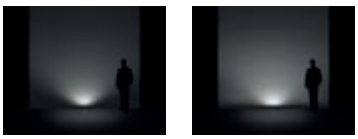
Performance and control

Six outputs to choose from, ranging from 1 to 30 watts, three color temperatures including warm light at 2700 and 3000K, and daylight at 4000K.
The uniquely wide spectrum of optics includes an elliptical, a wall wash for high, narrow walls, and an asymmetric version that gives an even, homogeneous wash.

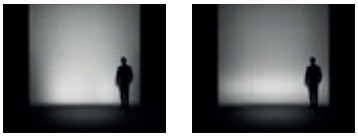
Spot



Flood

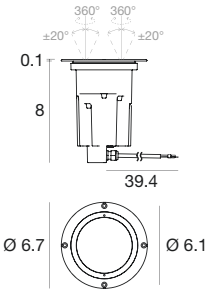


Diffused



Asymmetric

Suelo_RX Double | Screw-in | Up-Light | arrayLED | 120-277V | Wet location | Integral Driver | Adjustable | Driver over | 13.5W 350mA



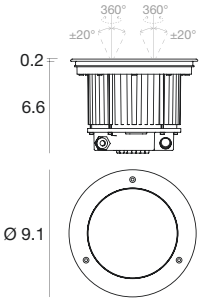
On/Off

Steel Alu **E81619**	2700K	1114 lm	**M**	Spot	**15**
	3000K	1176 lm	**W**	Medium Flood	**30**
	4000K	1300 lm	**N**	Flood	**60**

Recessed casings

E84932
Outer casing for ground-mounting installation

Suelo_RX Double | Screw-in | Up-Light | arrayLED | 120-277V | Wet location | Integral Driver | Adjustable | Driver over | 26W 700mA

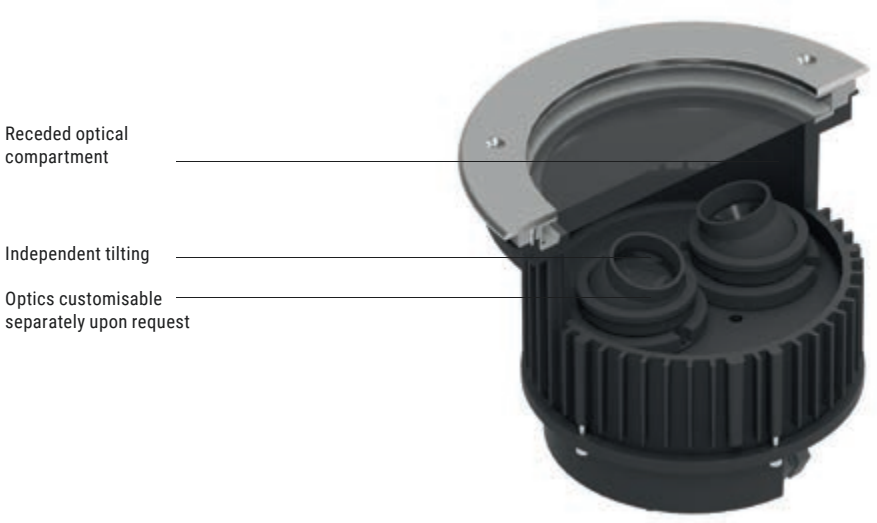


CRI 80

Steel Alu **E81620**	2700K	2207 lm	**M**	Spot	**15**
	3000K	2377 lm	**W**	Medium Flood	**30**
	4000K	2547 lm	**N**	Flood	**60**

Recessed casings

E99794
Outer casing for ground-mounting installation



index
technical information