VII. A.

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Planning Commission Staff Report

Project Type: Site Development Plan

Meeting Date: November 26, 2018

From: Mike Knight, Planner JmK

Location: 16861 Chesterfield Airport Road – south of Interstate 64 and northeast of the intersection of Chesterfield Airport Road and Chesterfield Commons East Drive

Applicant: Johnny Yoon (Johnny Y Properties)

Description: **Kemp Auto Museum (Johnny Y Properties) Site Development Plan**: A Site Development Plan, Landscape Plan, Lighting Plan, Architectural Elevations and Architect's Statement of Design for a 2.7-acre tract of land zoned "PC" Planned Commercial District.

PROPOSAL SUMMARY

This request is for construction of a new, one level shopping center with 17,977 square feet of gross leasable area with eight tenant spaces consisting of office, retail, and restaurant along with 87 parking spaces. The property is a narrow, east to west tract of land, and is bordered on the north by Interstate 64 and the south by Chesterfield Airport Road. The proposed building is parallel to Chesterfield Airport Road and the top parapet has varying heights, with the highest parapet at 28'4".

HISTORY OF SUBJECT SITE

The subject site was originally zoned "NU" Non-Urban District through St. Louis County. In 1974, the property was rezoned from the "NU" District to "M-3" Planned Industrial District by St. Louis County Ordinance 7014. In 2007, the City of Chesterfield ordinance 2397 changed the zoning from an "M-3" Planned Industrial District to a "PC" Planned Commercial District.

In July of 2016, City of Chesterfield ordinance 2905 amended the existing "PC" Planned Commercial District to a new "PC" Planned Commercial District creating the current site specific governing ordinance and Preliminary Development Plan. The project was presented to the Architectural Review Board on September 14, 2017. At that time, the Board made a motion to forward the project to the Planning Commission as presented with considerations.

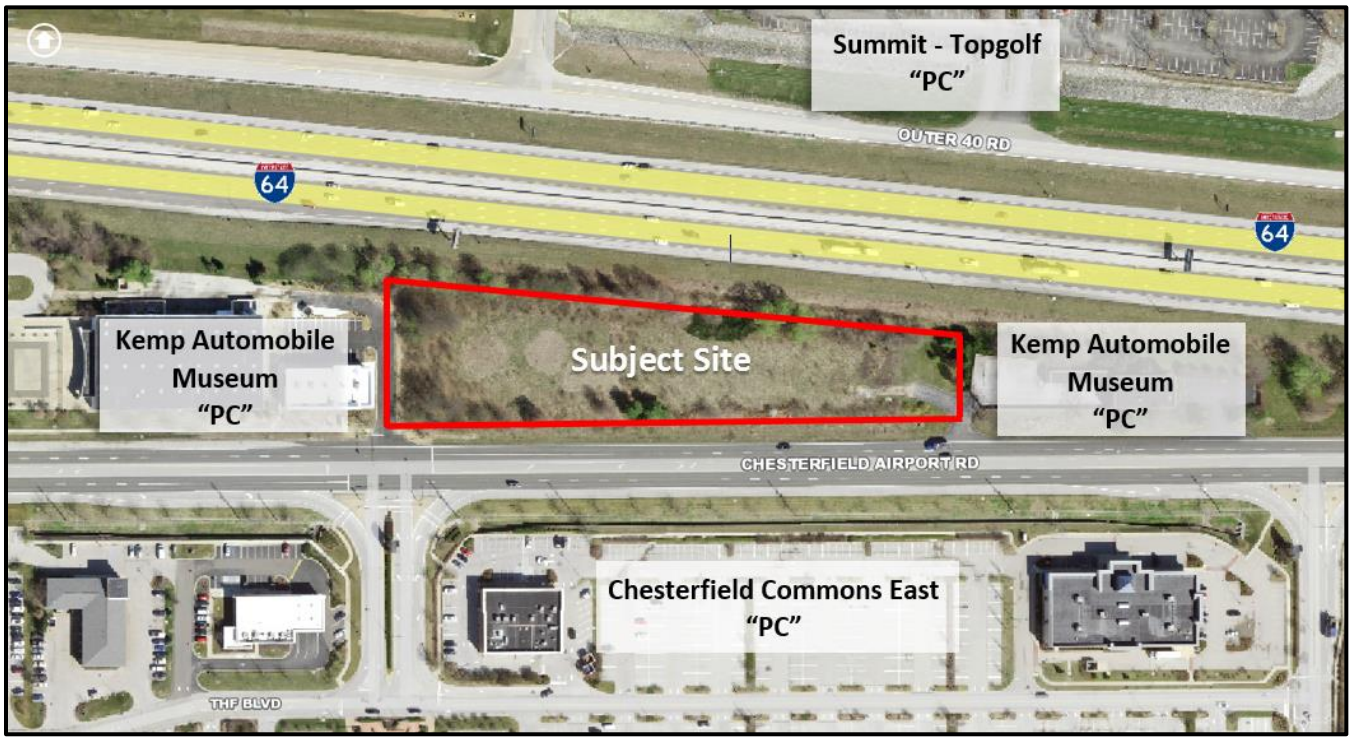


Figure 1: Yoon Strip Center – 16861 Chesterfield Airport Road (lots not drawn to scale/approximated)

COMPREHENSIVE PLAN

The subject site is located within Ward 4 of the City of Chesterfield and is within the Mixed Commercial Use land use designation per the City's Comprehensive Land Use Plan. All of the surrounding parcels are also within the Mixed Commercial Use land use designation. The Comprehensive Plan designates the permitted land uses under Mixed Commercial Use as Retail, Low-Density Office, and Limited Office/Warehouse Facilities.

Chesterfield Valley Design Policies: The City of Chesterfield's Comprehensive Land Use Plan has a specific Chesterfield Valley Policies Element. The policies include commercial development with particular concern over the image presented by development along I-64. There are six specific policies of which four are applicable to the design of this project. Staff outlines the applicable policies below and how the Site Development Plan relates to those policies.

Policy 1: Facades of Buildings along I-64 and Arterial Roadways – Care should be taken to make sure that any portion of a building is equally uniform in materials and attractiveness as the primary facade. The intent is to avoid projects having their view from I-64/US 40 appear to be the rear or side of a development.

The strip center is positioned that the rear of the building faces I-64. North of the building, a 20 ft. tree buffer will be added between the rear of the building and I-64. The primary building materials of brick, concrete block and EIFS in the front of the building have been extended to the rear to provide a four-sided design.

Policy 2: Lighting of Buildings along I-64/US 40 **-** The facades of buildings facing I-64 should be lighted to provide an attractive image at night for individuals traveling along I-64.

The lighting currently submitted is utilitarian in nature with all flat lensed fully shielded fixtures.

Policy 3: Automobile Parking for Buildings along I-64 - Parking should be primarily located to the side or rear of any building façade facing I-64/US 40 or along North Outer 40.

The Site Development Plan (SDP) has roughly 56% of the parking to the side of the building and 44% of the parking in front of the building facing Chesterfield Airport Road.

Policy 4: Pedestrian Circulation - In order to promote pedestrian movement, each development is required to address pedestrian circulation within and between all developments. This pedestrian system shall be designed in an overall safe, clearly understood plan meeting ADA (American Disabilities Act) requirements.

The SDP contains pedestrian infrastructure that both circumnavigate the building itself but also connects to Chesterfield Airport Road through a sidewalk at the center of the site with additional pedestrian striping that connects through the drive aisle.

STAFF ANALYSIS

A. Site Relationships

This is a 2.7-acre tract located on the north side of Chesterfield Airport Road and south of Interstate Highway 64. The applicant provided a color site plan showing the location of the proposed building and the associated parking. There are 8 possible tenant spaces shown on the color site plan below (Figure 2).

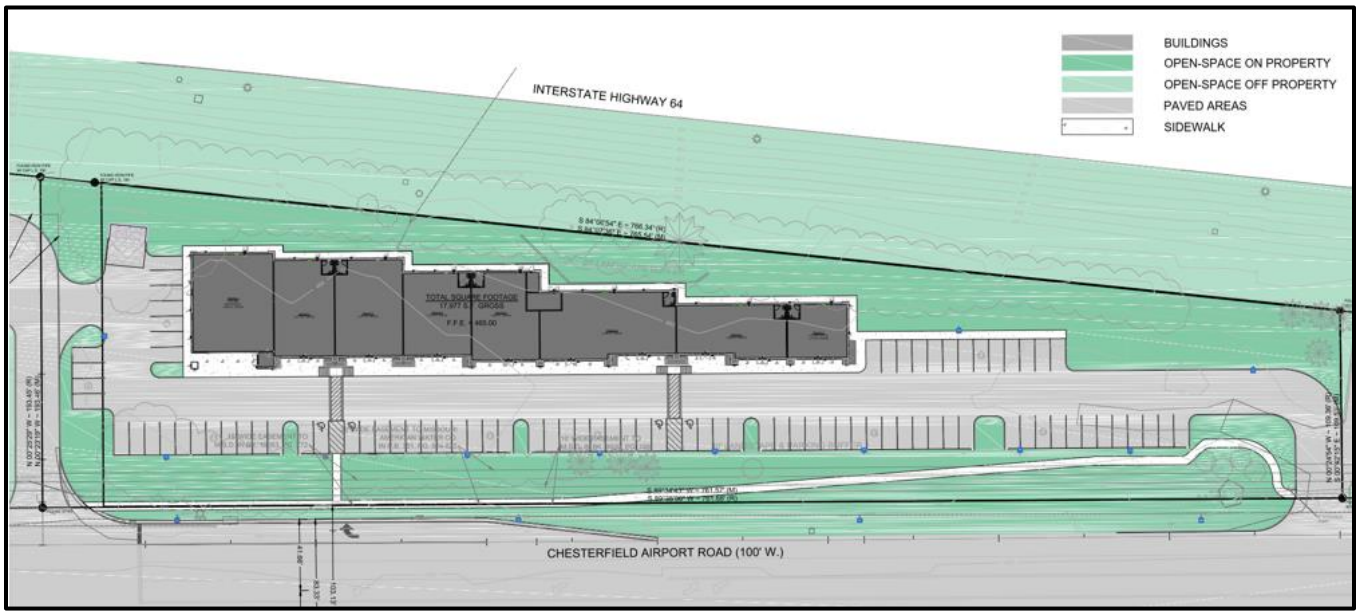


Figure 2: Color Site Plan

The proposed building will be highly visible to Chesterfield Airport Road by traffic travelling both east and west. Chesterfield Airport Road is owned and operated by St. Louis County and is designated as a minor arterial in accordance to the City of Chesterfield functional classification of roads. The proposed Landscape Plan has heavy buffering between both Chesterfield Airport Road and I-64 limiting visibility from the arterials.

A "Desirable Practice" under the Site Relation section identified within the City of Chesterfield's Unified Development Code (UDC) is to provide safe pedestrian movement and connections between elements. These safe pedestrian movements include both moving safely internally throughout the subject site, and externally connecting to neighboring sites.

Internally, the proposed site plan includes pedestrian connectivity with the presence of a 5' wide sidewalk that connects each storefront of the property, as well as circumnavigates around the building. The plan also includes an enhanced striped connection to the sidewalk adjacent to Chesterfield Airport Road. Potential external pedestrian connections are mainly to developments to the west and south given the location within the Chesterfield Valley.

External connections are limited to the north by Interstate 64, and are limited to the east by the intersection of Chesterfield Airport Road and Interstate 64.

An active Tesla project is situated nearby to the west of this proposed site. The Tesla site adds a new sidewalk connection to Chesterfield Airport Road that connects with the adjacent Pacific Dental site which then connects to the subject site. The neighboring sites to the west have frontage close to Chesterfield Airport Road, with parking in the rear, and encourage a strong pedestrian experience along the arterial roadway.

B. Circulation System and Access

There are two primary access points off of Chesterfield Airport Road with shared cross-access between the neighboring sites to the east and west. The site exceeds distance and spacing requirements for a minor arterial roadway having greater than 350' of downstream drive spacing and greater than 60' of driveway throat length.

C. Topography

The site is generally flat, with approximately 4' of grade change across the property. Areas of the site will be both cut and filled to accommodate the building and parking area.

D. Scale

The applicant provided elevations and exterior renderings showing the building size and height. The building is 19' to the roofline, 24' to the top of the lower parapet, and 28' 4" to the top of the higher parapet. The parapet extends on all four elevations and screens all the rooftop units.

This development does not exceed 28'-4" anywhere on the subject site. The height is compatible with the adjacent developments and other standalone developments in the area. Neighboring buildings mostly reside directly to the west and south. These developments are displayed in Figure 3. All of the

buildings are one story in height. As referenced below, most maximum building heights are from 20-25', demonstrating the proposed building is compatible in scale with neighboring developments.

Figure 3: Neighboring Building Height Compatibility

E. Design

The front façade consists of multiple building materials, primarily of brick, EIFS, and porcelain panels. The base of the building has masonry finish with ground face concrete block, lined with a limestone fill-in. The building façade, between the top of the store windows and doors, and before the parapet is a combination of EIFS and Slimlite porcelain panels. The storefronts are separated by brick pillars and the aforementioned combination of EIFS and porcelain above the individual stores.

The porcelain tile is used as an accent finish. Full height masonry pilaster with accent brick in recessed areas is complemented with soldier brick, and includes a decorative LED downlight light on each pillar (as indicated later in the lighting discussion), which illuminates masonry and ground face concrete block sill at height.

A 12'-0" high black anodized aluminum storefront frame is at each entry with an EIFS overhang for building entry point. Architectural detail on the EIFS border and parapet detail enhance the architectural element design. Along the front façade is the porcelain tile at a consistent width of 8'-4" high. This is utilized in areas to break any linear repetition with the intent to create a refined look. Figure 4 is a color south elevation to assist with the design description. The recessed entry along the storefronts is illuminated with LED recessed cans.

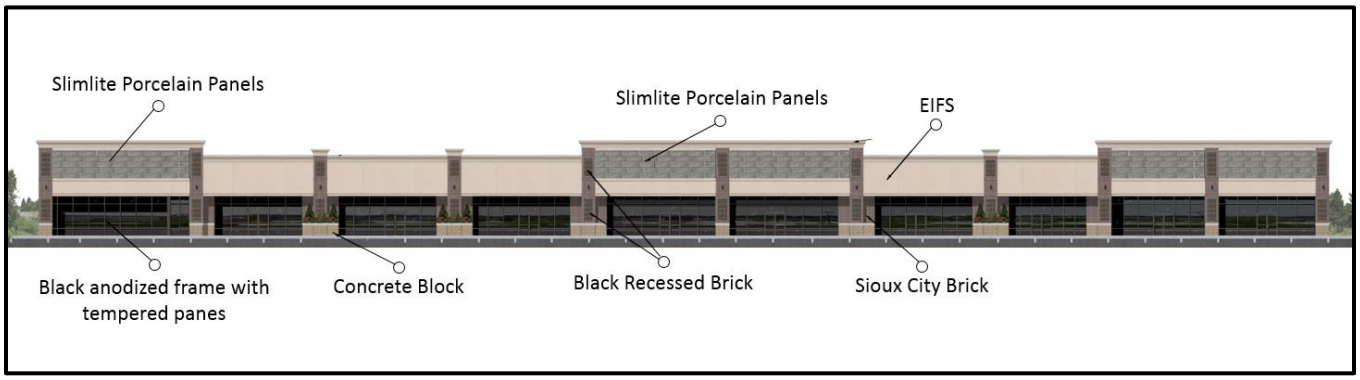


Figure 4: South Elevation

The north elevation in Figure 5 below displays rear elevation. The masonry finished parapet continues on both side facades while the rear façade shows pre-finished metal guttering and downspout. Recessed brick also exists along the rear matching the characteristics of the front. The brick pilaster feature on the front façade extends to the rear façade as an architectural element. Along the rear of the building are eight open ended seam metal awnings above each tenant door.

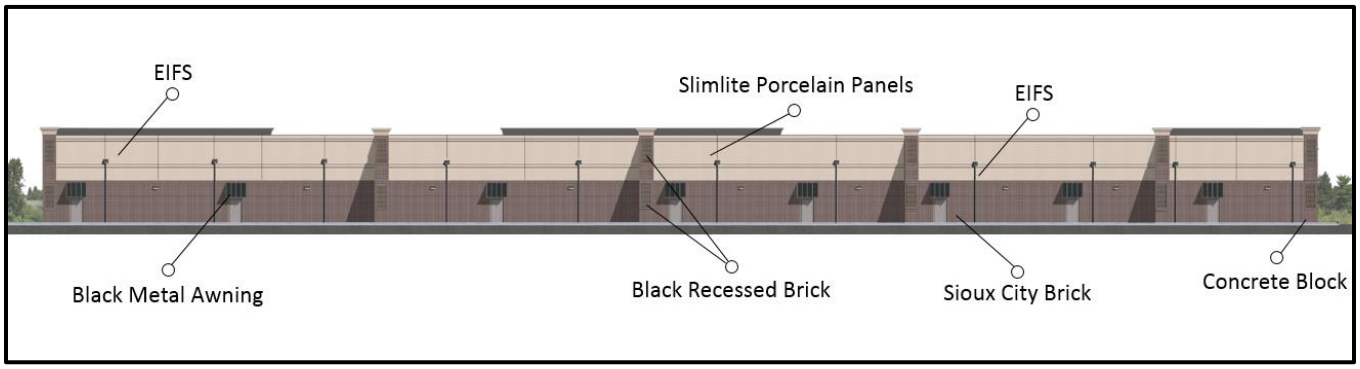


Figure 5: North Elevation

The east and west elevations are largely consistent with materials and color with the north and south elevations. The west elevation solely depicts the largest tenant space and is labeled as a future restaurant on the Site Development Plan. The black anodized storefront frame with the 1" clear insulated glazing wraps around the building from the front to the west elevation. There are tempered pane doors for people to use to enter and exit the tenant space. The EIFS, brick and concrete block continue to both the west and east elevations, but the porcelain does not. Both east and west elevations will have decorative wall sconces similar to the north and south elevations.

F. Materials and Color

The materials proposed on the exterior façade of the shopping center–masonry, EIFS, ground face concrete, porcelain, and black anodized aluminum storefront—form a cohesive design with complementary colors. These colors are also compatible with adjacent properties. There will be no highly reflective material or prefabricated building material finishes. The front façade shows two different heights in parapet to help break the linear repetition along the streetscape. Each pilaster is in a (Midtown Ironspot Smooth) color masonry with the recessed area filled with darker accent brick color (Black Diamond Modular). The concrete block's neutral color (Marengo) and the neutral color (#110 Van Dyke) EIFS parapet detail complement the black anodized aluminum storefronts' finishing color. The porcelain tile is in dark gray (Rock TP44) and also utilizes an architectural feature.

G. Landscape Design and Screening

Landscaping surrounds the entire site with the most density along the north boundary seen in Figure 6 on the following page. There are 79 trees proposed consisting of deciduous trees (39), evergreen (25), and ornamental trees (15). As one enters the parking area, they are greeted by Little Leaf Linden and Red Oak deciduous trees and then once arrived, Crimson Cloud Hawthorn break up the parking area located primarily in the parking islands. The City of Chesterfield approved a Landscape Buffer modification request in which a 20ft wide landscape buffer may be utilized along I-64 in lieu of the 30ft

requirement which was written into the governing ordinance. In conjunction with this approval, additional plantings are permitted in MODOT ROW and shown on the submitted Landscape Plan. The applicant received approval from a MODOT traffic specialist to plant within the ROW.

Three planters, ranging from individual round planters in front of the storefront windows to built-in stone planters at the base of the brick columns, have been incorporated to the front facade per the recommendation of the ARB and further discussed later in this report.

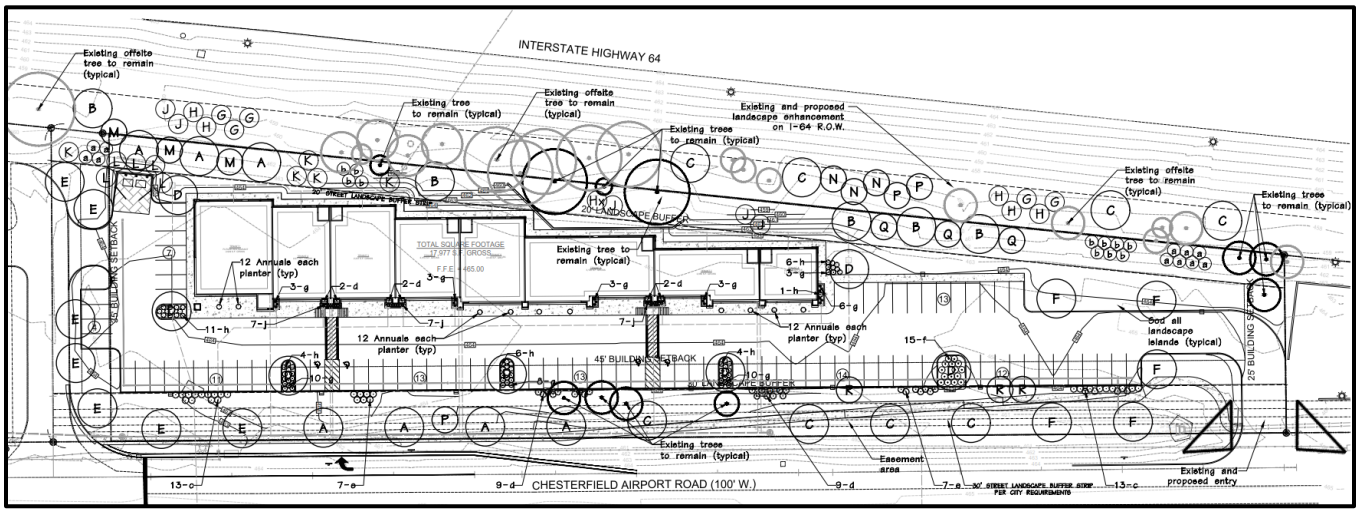


Figure 6: Landscape Plan

The trash enclosure will have the same material finish as the building façade including the brick veneer and concrete footings below. The overall height of the trash enclosure would be 5'7" with the doors being steel and painted black. Plantings surround the trash enclosure to provided additional screening consisting of Eastern Red Cedar and Little Leaf Linden and are provided within the Landscape Plan. A trash enclosure detail can be found in Figure 7 below.

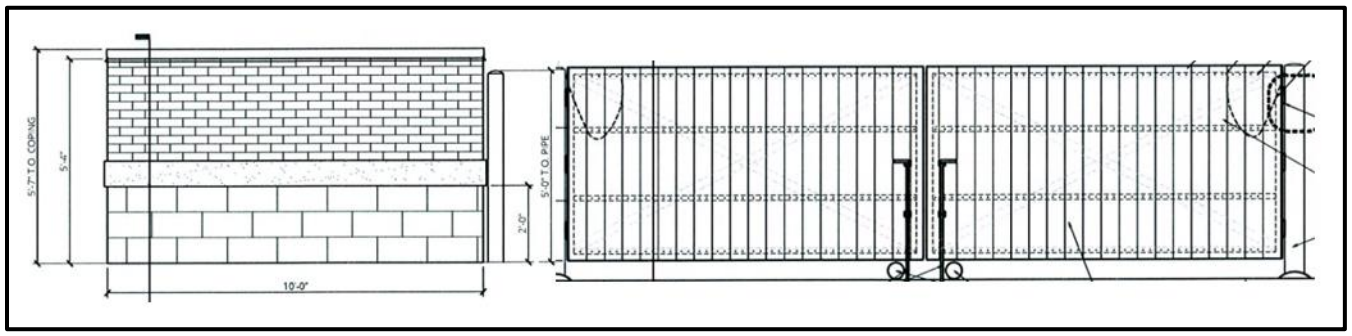


Figure 7: Trash Enclosure Detail

F. Lighting

LED Lighting was selected to enhance energy efficiency and meet the City of Chesterfield standards. All proposed outdoor fixtures are flat lensed and fully shielded. A total of five different lighting fixtures will be used. Pole-mounted parking fixtures are placed throughout the parking area. Four different lighting fixtures will be used on the building. Decorative sconces are used on the east and west edges of the building. Two different types of flat, fully shielded LED lights will be used around the perimeter of the building in the form of a wall pack and emergency lighting. Recessed cans illuminate the southern frontage under the proposed canopy. A lighting fixture detail is provided in Figure 8 below.

Figure 8: Lighting Fixtures

ARCHITECTURAL REVIEW BOARD

The proposed development was reviewed by the Architectural Review Board on Thursday September 14, 2017. At that time the Board made a motion to forward the project to the Planning Commission as presented with the following considerations.

- Project needs to fully capture a four-sided building design including roof-top screening from I-64 by using an integral part of the architecture to screen the units completely from the southern and western viewpoints

- Incorporate additional landscaping to the front of the building and along the frontage

- Incorporate additional architectural features to break up the long façade to the front of the building that faces Chesterfield Airport Road. This could include, but not be limited to, adding undulations and plane changes along the front façade

- As discussed, the proposed porcelain is not suitable for signage or other installations due to the nature of the material.

The applicant has since responded with an updated submittal that captures all of these considerations. The project incorporates the four-sided building design by expanding the parapet to the rear and continuing the brick columns with recessed brick along the entire façade. The EIFS is also utilized in the rear façade to continue the same mix of materials. (Figure 9). The east and west elevations were refined by adding pilasters, EIFS, and tile continuing from the front façade.

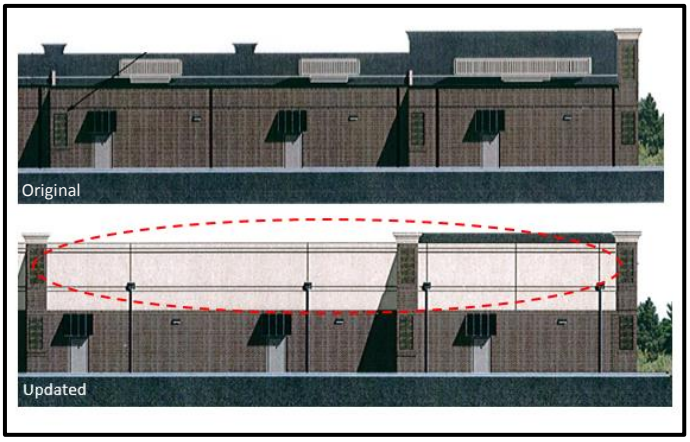


Figure 9: Four-Sided Design

Additional landscaping has been added through a variety of planters along the front façade. There are a series of planters built into the brick and concrete columns, planters built into the ground, and individual round planters placed along the front façade. This adds a human scale element in addition to breaking up the long front façade (Figure 10).

Figure 10: Additional Landscaping

Also along the front façade are a series of plane changes extenuating the individual tenant spaces. The front parking was flipped closer to Chesterfield Airport Road to avoid the front bumper of the car to overhang along the sidewalk and provide space for the large planters and encourage additional human interaction (Figure 11).

Given the discussion that the proposed porcelain is not a suitable for signage or other installations due to the nature of the material, the applicant has acknowledged that signage is a separate process and future wall signs will not be placed on the porcelain areas.

Figure 11: Plane Changes and Parking

STAFF RECOMMENDATION

Staff has reviewed the Site Development Plan, Landscape Plan, Lighting Plan, Architectural Elevations and Architect's Statement of Design for the 2.7-acre tract of land zoned "PC"

Planned Commercial District and has found the proposal to be in compliance with the site specific ordinance, Comprehensive Land Use Plan, and all City Code requirements. Staff recommends approval on the proposed development of Kemp Auto Museum (Johnny Y Properties).

MOTION

The following options are provided to the Planning Commission for consideration relative to this application:

1) "I move to approve (or deny) the Site Development Plan, Landscape Plan, Lighting Plan, Architectural Elevations, and Architect's Statement of Design for Kemp Auto Museum (Johnny Y Properties)"

2) "I move to approve the Site Development Plan, Landscape Plan, Lighting Plan, Architectural Elevations, and Architect's Statement of Design for Kemp Auto Museum (Johnny Y Properties) with the following conditions… " (Conditions may be added, eliminated, altered, or modified)

Attachments:
Site Development Plan
Landscape Plan
Tree Stand Delineation
Tree Preservation Plan
Lighting Plan
Architectural Elevations
Architect's Statement of Design

DEVELOPMENT SUMMARY

STATISTIC	PERMITTED / REQUIREMENT	PROVIDED
CURRENT ZONING	PC - PLANNED COMMERCIAL DISTRICT	PC - PLANNED COMMERCIAL DISTRICT
SUBDIVISION	KEMP AUTOMOBILE MUSEUM	KEMP AUTOMOBILE MUSEUM
LOT NUMBER	LOT C 803	LOT C 803
PROPOSED USE	COMMERCIAL	COMMERCIAL
TOTAL SITE AREA	115,434 SF 2.65 +/- ACRES	115,434 SF 2.65 +/- ACRES
LOT COVERAGE**	35% OPEN SPACE	40.31% (1.58 ACRES)
BUILDING SETBACKS	FRONT: 45' BSBL SIDES (EAST): 25' BSBL SIDE (WEST): 35' BSBL REAR: 20' BSBL	FRONT: 79.5' SIDES (EAST): 288.2' SIDE (WEST): 87.9' REAR: 30.7'
TOTAL PARKING	4.25 SP /1,000 GFA 17,977/1000 = 17.98 17.98 * 4.25 = 76.4 = 76 SPACES MAX PARKING 76 * 120% = 91.2 **MINIMUM SPACES REQUIRED = 76** **MAXIMUM SPACES ALLOWED = 91**	HANDICAP SPACES: 4 STANDARD SPACES: 83 **TOTAL SPACES PROVIDED: 87**
LANDSCAPE PLAN	SEE SHEET L1	SEE SHEET L1
DRAINAGE PLAN	SEE SHEET C3	SEE SHEET C3
TRAFFIC STUDY	N/A	N/A
SITE ACCESS	PER CHESTERFIELD, MO.	2 ACCESS POINTS

DEVELOPMENT SUMMARY

STATISTIC	PERMITTED / REQUIREMENT	PROVIDED
F.A.R.**	0.55	0.16

GENERAL NOTES

1. ALL SIDEWALKS TO BE CONSTRUCTED TO CURRENT ST. LOUIS COUNTY / ADA STANDARDS.

2. PRIOR TO IMPROVEMENT / CONSTRUCTION PLAN APPROVAL, THE ENGINEER SHALL PROVIDE A SIGNED AND SEALED NOTE ON THE PLANS FOR BOTH RESIDENTIAL AND COMMERCIAL PROJECTS, STATING THAT THE UNIMPROVED EXISTING SIDEWALK ALONG THE PROJECT FRONTAGE MEETS CURRENT ST. LOUIS COUNTY / ADA STANDARDS.

3. ALL PROPOSED IMPROVEMENT SHALL BE CONSTRUCTED TO ST. LOUIS COUNTY STANDARDS.

4. NO SLOPES WITHIN ST. LOUIS COUNTY R.O.W. SHALL EXCEEPT 3 (HORIZONTAL) TO 1 (VERTICAL).

5. ALL DRIVEWAYS INTERSECTING ST. LOUIS COUNTY ARTERIAL AND CLASSIFIED ROADWAYS SHALL HAVE ONSITE TURNAROUND CAPABILITY.

6. STORM WATER SHALL BE DISCHARGED AT AN ADEQUATE NATURAL DISCHARGE POINT. SINKHOLES ARE NOT ADEQUATE DISCHARGE POINTS.

7. PRIOR TO "SPECIAL USE PREMIT" ISSUANCE BY THE ST. LOUIS COUNTY DEPARTMENT OF TRANSPORTATION, A SPECIAL CASH ESCROW OR A SPECIAL ESCROW SUPPORTED BY AN IRREVOCABLE LETTER OF CREDIT, MUST BE ESTABLISHED WITH THE ST. LOUIS COUNTY DEPARTMENT OF TRANSPORTATION TO GUARANTEE COMPLETION OF THE REQUIRED ROADWAY IMPROVEMENTS.

8. IMPROVE CHESTERFIELD ROAD TO ONE-HALF OR A 100' R.O.W. AND A 45.5' PAVEMENT OR MINIMUM OF 45.5' PAVEMENT.

9. PROVIDE A SIDEWALK CONFORMING TO ST. LOUIS COUNTY ADA STANDARDS ADJACENT TO CHESTERFIELD AIRPORT ROAD.

10. ACCESS TO DEVELOPMENT FROM CHESTERFIELD AIRPORT ROAD SHALL BE VIA 2 EXISTING SHARED ENTRANCES LOCATED AT THE EAST AND WEST ENDS OF PROPERTY TO PROVIDE REQUIRED SIGHT DISTANCE AND CONSTRUCTED TO ST. LOUIS STANDARDS AS DIRECTED BY ST. LOUIS COUNTY DEPARTMENT OF TRANSPORTATION.

11. ALL PROPOSED ACCESS TO ST. LOUIS ROADS FOR NEW DEVELOPMENT SHALL MEET MINIMUM ST. LOUIS COUNTY SIGHT DISTANCE REQUIREMENTS.

12. ALL HYDRANTS, POWER POLES OR OTHER POTENTIAL OBSTRUCTIONS WITHIN THE ST. LOUIS COUNTY ROAD RIGHT-OF-WAY, SHALL HAVE A MINIMUM TWO (2) FOOT SETBACK FROM THE FACE OF CURB, AS DIRECTED BY THE ST. LOUIS COUNTY DEPARTMENT OF TRANSPORTATION.

SITE NOTES

1. THE SITE LAND USE SHALL BE COMMERCIAL.

2. THE SITE IS SERVICED BY:
WATER: MISSOURI AMERICAN WATER
SEWER: METROPOLITAN ST. LOUIS SEWER DISTRICT
TELEPHONE: AT&T DISTRIBUTION/CHARTER COMMUNICATIONS/MCI
ELECTRIC: AMEREN MISSOURI ELECTRIC
GAS: LACEDE GAS COMPANY

3. **FLOOD NOTE:** THIS SITE FALLS WITHIN THE "UNSHADED ZONE X" AREAS OF 500 YEAR FLOOD, AREAS PF 100 YEAR FLOOD WITH AVERAGE DEPTHS LESS THAN 1' OR WITH DRAINAGE AREAS LESS THAN 1 SQ. MILE; AREAS PROTECTED BY LEVEES FROM 100 YEAR FLOOD, ACCORDING TO THE NATIONAL FLOOD INSURANCE PROGRAM, FLOOD INSURANCE RATE MAP FOR ST. LOUIS COUNTY AND UNINCORPORATED AREAS PER MAP NUMBER 29189C0165K WITH AN EFFECTIVE MAP DATE OF FEBRUARY 4, 2015.

4. ALL SIGNAGE TO BE APPROVED AS A SEPARATE PROCESS.

5. ALL UTILITIES TO BE INSTALLED UNDERGROUND.

6. THE PROPOSED BUILDING HEIGHT SHALL NOT EXCEED 35'.

7. THE SITE SHALL CONFORM TO THE CITY OF CHESTERFIELD STANDARDS.

8. UNDERGROUND STRUCTURES, FACILITIES AND UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE SURVEYS, DEEDS AND RECORDS. THEREFORE, THEIR LOCATIONS MUST BE CONSIDERED APPROXIMATE ONLY.THERE MAY BE OTHERS, THE EXISTENCE OF WHICH IS NOT KNOWN.

9. ALL ROADWAY DIMENSIONS ARE TO THE FACE OF CURB UNLESS OTHERWISE NOTED.

10. NO INVESTIGATION HAS BEEN PERFORMED BY ARNOLD CONSULTING ENGINEERING SERVICES REGARDING HAZARDOUS WASTE, UNDERGROUND CONDITIONS OR UTILITIES AFFECTING THE TRACT SHOWN HEREON.

11. THE DRAWING DOES NOT DOES NOT CONSTITUTE A BOUNDARY SURVEY.

12. ALL PAVEMENT STRIPPING SHALL BE 4" WIDE, PAINTED YELLOW.

13. LOCATION, REPLACEMENT AND CONNECTION OF THE UTILITIES SHALL BE COORDINATED WITH THE UTILITY COMPANIES.

14. ALL MECHANICAL, HVAC AND UTILITY EQUIPMENT SHALL BE SCREENED FROM PUBLIC VIEW ACCORDING TO CITY ORDINANCE.

15. SLOPES SHALL NOT EXCEED 3 HORIZONTAL TO 1 VERTICAL (3:1).

***NOTES: THE SITE SHALL COMPLY WITH ALL ACCESSIBILITY STANDARDS.**

LEGEND

- BENCHMARK
- IRON PIN FOUND
- CONCRETE R/W MONUMENT
- SANITARY SEWER MANHOLE
- SANITARY SEWER CLEAN OUT
- ANCHOR
- UTILITY POLE
- SIGNAL POLE
- ELECTRIC BOX
- ELECTRIC METER
- GAS VALVE
- WATER VALVE
- WATER METER
- FIRE HYDRANT
- GAS METER
- TELEPHONE PEDESTAL
- STORM SEWER MANHOLE
- DROP BOX INLET
- PIPE BOLLARD
- GUTTER OUTLET
- ROAD SIGN
- TREE
- LAMP POLE

BSBL BUILDING SET BACK LINE
ESOL EACH SIDE OF LINE
PUE PUBLIC UTILITY EASEMENT
FFE FINISHED FLOOR ELEVATION

PROPERTY LINE
SETBACK LINE
EASEMENTS
CENTERLINE
UNDERGROUND ELECTRIC
GAS LINE
OVERHEAD UTILITIES
BURIED TELEPHONE
SANITARY SEWER LINE
WATER LINE
STORM SEWER LINE
FENCE LINE

PROPOSED SITE LIGHTING / STREET LIGHTING FOR CHESTERFIELD AIRPORT ROAD

0' 40' 80' 120'
GRAPHIC SCALE: 1" = 40'

STORM WATER RUNOFF CALCULATIONS

PRE-DEVELOPED
TOTAL AREA (At) = 2.50 ACRES
AREA OF IMPERVIOUS (Ai) = 0.08 ACRES
AREA OF PERVIOUS (Ap) = 2.42 ACRES
Ci = 0.95 Cp = 0.25

WT. "C" = (Ai * Ci) + (Ap * Cp) / At = (0.08 * 0.95) + (2.42 * 0.25) / 2.50 = 0.27

POST-DEVELOPED
TOTAL AREA (At) = 2.50 ACRES
AREA OF IMPERVIOUS (Ai) = 0.78 ACRES
AREA OF PERVIOUS (Ap) = 1.72 ACRES
Ci = 0.95 Cp = 0.25

WT. "C" = (Ai * Ci) + (Ap * Cp) / At = (0.78 * 0.95) + (1.72 * 0.25) / 2.50 = 0.47

Δ "C" = 0.47 - 0.27 = 0.20

PROPERTY DESCRIPTION:

A TRACT OF LAND BEING ADJUSTED LOT C308 OF BOUNDARY ADJUSTMENT PLAT AS RECORDED IN PLAT BOOK 355 PAGE 647, IN U.S. SURVEY 2031, TOWNSHIP 45 NORTH, RANGE 4 EAST OF THE 5TH P.M., CITY OF CHESTERFIELD, ST. LOUIS COUNTY, MISSOURI AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

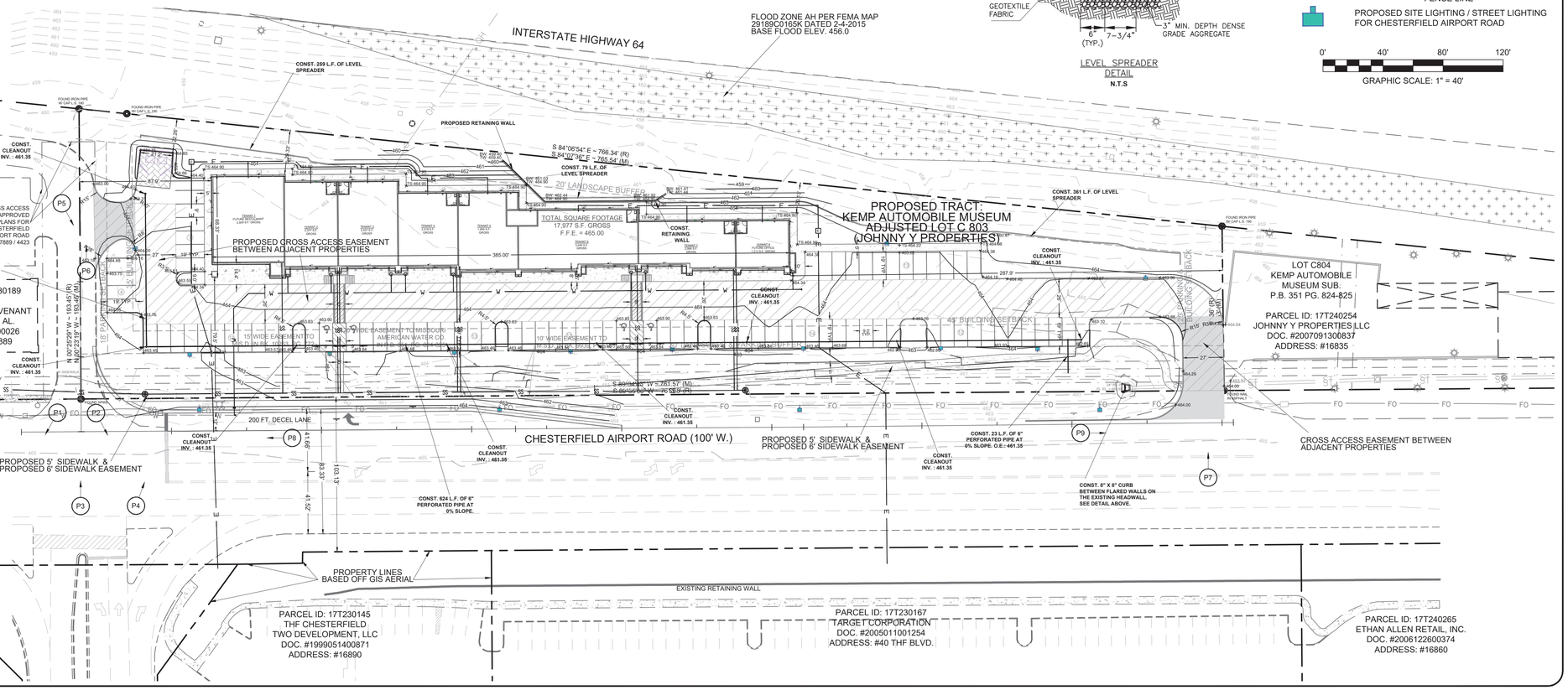
BEGINNING AT A FOUND IRON PIPE AT THE NORTHWEST CORNER OF SAID ADJUSTED LOT C803; THENCE ALONG THE NORTH LINE OF SAID LOT,
S84°06'54"E, 766.34 FEET TO THE NORTHEAST CORNER OF SAID ADJUSTED LOS C803; THENCE ALONG THE EAST LINE OF SAID LOT, S00°24'54"E, 109.36 FEET TO THE SOUTHWEST CORNER OF SAID ADJUSTED LOT C803; THENCE ALONG THE SOUTH LINE OF SAID LOT,
S89°35'06"W, 761.68 FEET TO THE SOUTHWEST CORNER OF SAID ADJUSTED LOT C803; THENCE ALONG THE WEST LINE OF SAID LOT,
N00°25'29"W, 193.45 FEET TO THE POINT OF BEGINNING, CONTAINING 2.65 ACRES. SUBJECT TO ANY AND ALL EASEMENTS, RESTRICTIONS, CONDITIONS, ETC. OF RECORD.

TERRACON CONSULTANTS HAS PROVIDED GEOTECHNICAL SERVICES FOR THE PROJECT PROPOSED HEREON. A GEOTECHNICAL INVESTIGATION WAS CONDUCTED DURING FEBRUARY 2007 & SEPTEMBER 2018 FOR THE DEVELOPMENT PROPOSED HEREON. OUR FINDINGS INDICATE THAT THE EARTH-RELATED ASPECTS ARE SUITABLE FOR THE DEVELOPMENT PROPOSED PURSUANT TO THE GEOTECHNICAL RECOMMENDATIONS SET FORTH IN OUR *GEOTECHNICAL ENGINEERING REPORT* DATED OCTOBER 24, 2018.

JONATHAN D. BRUNER, P.E.

STATE OF MISSOURI JONATHAN D. BRUNER NUMBER E-2001004566 11/6/18 PROFESSIONAL ENGINEER

PX NUMBERED PHOTO BY MAP LOCATION



LEVEL SPREADER DETAIL
N.T.S

Know what's below. Call before you dig.

REVISIONS

16861 CHESTERFIELD AIRPORT ROAD CHESTERFIELD, MO.

ACES
ARNOLD CONSULTING ENGINEERING SERVICES, INC.
P.O. BOX 1338
BOWLING GREEN, KY 42101
PHONE (270) 780-9445

JOB NUMBER: L5109
DATE: 10-29-2018
SCALE: 1" = 40'
DRAWN: C. WICKER
CHECKED: B. ZACKERY
FILE PATH: Z:\SITDEV\SDP

STATE OF MISSOURI JEFF ARNOLD NUMBER PE-2015008301 PROFESSIONAL ENGINEER 11/19/18

SDP
SITE DEVELOPMENT PLAN

DEVELOPMENT S□MMARY

STATISTIC	PERMITTED □RE□□IREMENT	PROVIDED
C□RRENT □ONING	PC - PLANNED COMMERCIAL DISTRICT	PC - PLANNED COMMERCIAL DISTRICT
S□BDIVISION	KEMP A□TOMOBILE M□SE□M	KEMP A□TOMOBILE M□SE□M
LOT N□MBER	LOT C 803	LOT C 803
PROPOSED □SE	COMMERCIAL	COMMERCIAL
TOTAL SITE AREA	115,434 SF 2.65 □□ ACRES	115,434 SF 2.65 □□ ACRES
LOT COVERAGE□□	35□ OPEN SPACE	40.31□ (1.58 ACRES)
B□ILDING SETBACKS	FRONT: 45' BSBL SIDES (EAST): 25' BSBL SIDE (WEST): 35' BSBL REAR: 20' BSBL	FRONT: 79.5' SIDES (EAST): 288.2' SIDE (WEST): 87.9' REAR: 30.7'
TOTAL PARKING	4.25 SP./1,000 GFA 17,977:1000 = 17.98 17.98 □4.25 = 76.4 = 76 SPACES MA□ PARKING 76 □120□ = 91.2 **MINIMUM SPACES REQUIRED = 76** **MAXIMUM SPACES ALLOWED = 91**	HANDICAP SPACES: 4 STANDARD SPACES: 83 **TOTAL SPACES PROVIDED: 87**
LANDSCAPE PLAN	SEE SHEET L1	SEE SHEET L1
DRAINAGE PLAN	SEE SHEET C3	SEE SHEET C3
TRAFFIC ST□DY	N/A	N/A
SITE ACCESS	PER CHESTERFIELD, MO.	2 ACCESS POINTS

DEVELOPMENT S□MMARY

STATISTIC	PERMITTED □RE□□IREMENT	PROVIDED
F.A.R.□□	0.55	0.16

GENERAL NOTES

1. ALL SIDEWALKS TO BE CONSTR□CTED TO C□RRENT ST. LO□IS CO□NTY □ADA STANDARDS.

2. PRIOR TO IMPROVEMENT □CONSTR□CTION PLAN APPROVAL, THE ENGINEER SHALL PROVIDE A SIGNED AND SEALED NOTE ON THE PLANS FOR BOTH RESIDENTIAL AND COMMERCIAL PROJECTS, STATING THAT THE □NIMPROVED E□ISTING SIDEWALK ALONG THE PROJECT FRONTAGE MEETS C□RRENT ST. LO□IS CO□NTY □ADA STANDARDS.

3. ALL PROPOSED IMPROVEMENT SHALL BE CONSTR□CTED TO ST. LO□IS CO□NTY STANDARDS.

4. NO SLOPES WITHIN ST. LO□IS CO□NTY R.O.W. SHALL E□CEEPT 3 (HORI□ONTAL) TO 1 (VERTICAL).

5. ALL DRIVEWAYS INTERSECTING ST. LO□IS CO□NTY ARTERIAL AND CLASSIFIED ROADWAYS SHALL HAVE ONSITE T□RNARO□ND CAPABILITY.

6. STORM WATER SHALL BE DISCHARGED AT AN ADE□□ATE NAT□RAL DISCHARGE POINT. SINKHOLES ARE NOT ADE□□ATE DISCHARGE POINTS.

7. PRIOR TO "SPECIAL □SE PERMIT" ISS□ANCE BY THE ST. LO□IS CO□NTY DEPARTMENT OF TRANSPORTATION, A SPECIAL CASH ESCROW OR A SPECIAL ESCROW S□PPORTED BY AN IRREVOCABLE LETTER OF CREDIT, M□ST BE ESTABLISHED WITH THE ST. LO□IS CO□NTY DEPARTMENT OF TRANSPORTATION TO G□ARANTEE COMPLETION OF THE RE□□IRED ROADWAY IMPROVEMENTS.

8. IMPROVE CHESTERFIELD ROAD TO ONE-HALF OR A 100' R.O.W. AND A 45.5' PAVEMENT OR MINIM□M OF 45.5' PAVEMENT.

9. PROVIDE A SIDEWALK CONFORMING TO ST. LO□IS CO□NTY ADA STANDARDS ADJACENT TO CHESTERFIELD AIRPORT ROAD.

10. ACCESS TO DEVELOPMENT FROM CHESTERFIELD AIRPORT ROAD SHALL BE VIA 2 E□ISTING SHARED ENTRANCES LOCATED AT THE EAST AND WEST ENDS OF PROPERTY TO PROVIDE RE□□IRED SIGHT DISTANCE AND CONSTR□CTED TO ST. LO□IS STANDARDS AS DIRECTED BY ST. LO□IS CO□NTY DEPARTMENT OF TRANSPORTATION.

11. ALL PROPOSED ACCESS TO ST. LO□IS ROADS FOR NEW DEVELOPMENT SHALL MEET MINIM□M ST. LO□IS CO□NTY SIGHT DISTANCE RE□□IREMENTS.

12. ALL HYDRANTS, POWER POLES OR OTHER POTENTIAL OBSTR□CTIONS WITHIN THE ST. LO□IS CO□NTY ROAD RIGHT-OF-WAY, SHALL HAVE A MINIM□M TWO (2) FOOT SETBACK FROM THE FACE OF C□RB, AS DIRECTED BY THE ST. LO□IS CO□NTY DEPARTMENT OF TRANSPORTATION.

B□ILDINGS
OPEN-SPACE ON PROPERTY
OPEN-SPACE OFF PROPERTY
PAVED AREAS
SIDEWALK

SITE NOTES

1. THE SITE LAND □SE SHALL BE COMMERCIAL.

2. THE SITE IS SERVICED BY:
WATER: MISSO□RI AMERICAN WATER
SEWER: METROPOLITAN ST. LO□IS SEWER DISTRICT
TELEPHONE: AT&T DISTRIB□TION CHARTER COMM□NICATIONS:MCI
ELECTRIC: AMEREN MISSO□RI ELECTRIC
GAS: LACEDE GAS COMPANY

3. **FLOOD NOTE:** THIS SITE FALLS WITHIN THE "□NSHADED □ONE □" AREAS OF 500 YEAR FLOOD, AREAS OF 100 YEAR FLOOD WITH AVERAGE DEPTHS LESS THAN 1' OR WITH DRAINAGE AREAS LESS THAN 1 S□□ MILE□AREAS PROTECTED BY LEVEES FROM 100 YEAR FLOOD, ACCORDING TO THE NATIONAL FLOOD INS□RANCE PROGRAM, FLOOD INS□RANCE RATE MAP FOR ST. LO□IS CO□NTY AND □NINCORPORATED AREAS PER MAP N□MBER 29189C0165K WITH AN EFFECTIVE MAP DATE OF FEBR□ARY 4, 2015.

4. ALL SIGNAGE TO BE APPROVED AS A SEPARATE PROCESS.

5. ALL □TILITIES TO BE INSTALLED □NDERGRO□ND.

6. THE PROPOSED B□ILDING HEIGHT SHALL NOT E□CEED 35'.

7. THE SITE SHALL CONFORM TO THE CITY OF CHESTERFIELD STANDARDS.

8. □NDERGRO□ND STR□CT□RES, FACILITIES AND □TILITIES HAVE BEEN PLOTTED FROM AVAILABLE S□RVEYS, DEEDS AND RECORDS. THEREFORE, THEIR LOCATIONS M□ST BE CONSIDERED APPRO□IMATE ONLY.THERE MAY BE OTHERS, THE E□ISTENCE OF WHICH IS NOT KNOWN.

9. ALL ROADWAY DIMENSIONS ARE TO THE FACE OF C□RB □NLESS OTHERWISE NOTED.

10. NO INVESTIGATION HAS BEEN PERFORMED BY ARNOLD CONS□LTING ENGINEERING SERVICES REGARDING HA□ARDO□S WASTE, □NDERGRO□ND CONDITIONS OR □TILITIES AFFECTING THE TRACT SHOWN HEREON.

11. THE DRAWING DOES NOT DOES NOT CONSTIT□TE A BO□NDARY S□RVEY.

12. ALL PAVEMENT STRIPPING SHALL BE 4" WIDE, PAINTED YELLOW.

13. LOCATION, REPLACEMENT AND CONNECTION OF THE □TILITIES SHALL BE COORDINATED WITH THE □TILITY COMPANIES.

14. ALL MECHANICAL, HVAC AND □TILITY E□□IPMENT SHALL BE SCREENED FROM P□BLIC VIEW ACCORDING TO CITY ORDINANCE.

15. SLOPES SHALL NOT E□CEED 3 HORI□ONTAL TO 1 VERTICAL (3:1).

*NOTES: THE SITE SHALL COMPLY WITH ALL ACCESSIBILITY STANDARDS.

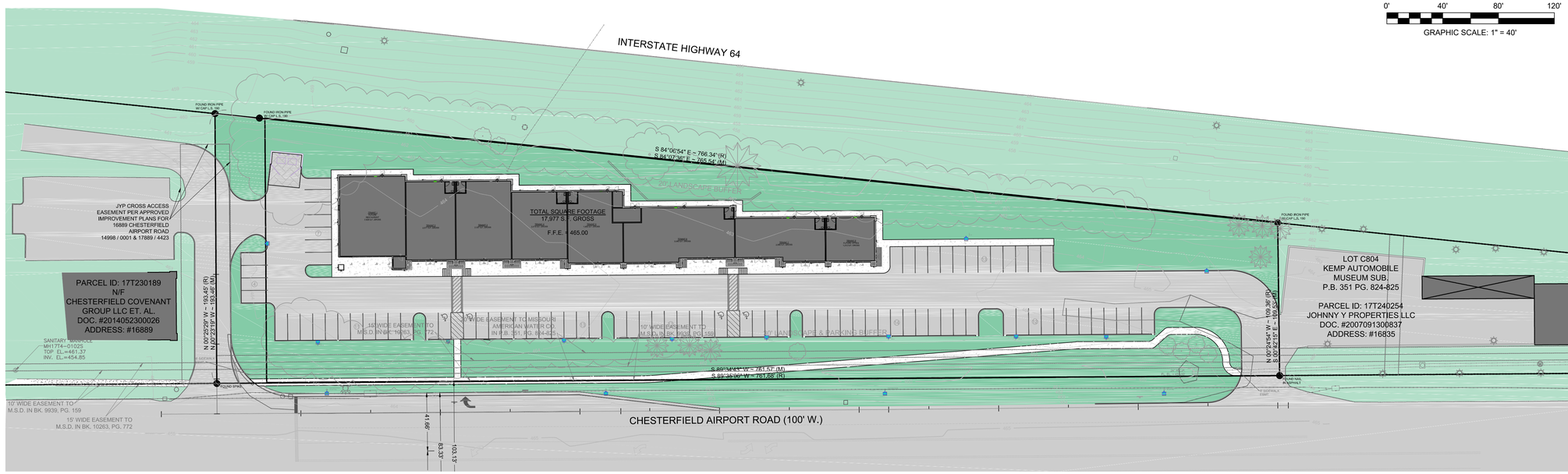
LEGEND

- BENCHMARK
- IRON PIN FO□ND
- CONCRETE R□W MON□MENT
- SANITARY SEWER MANHOLE
- SANITARY SEWER CLEAN O□T
- ANCHOR
- □TILITY POLE
- SIGNAL POLE
- ELECTRIC BO□
- ELECTRIC METER
- GAS VALVE
- WATER VALVE
- WATER METER
- FIRE HYDRANT
- GAS METER
- TELEPHONE PEDESTAL
- STORM SEWER MANHOLE
- DROP BO□ INLET
- PIPE BOLLARD
- G□TTER O□TLET
- ROAD SIGN
- TREE
- LAMP POLE

BSBL B□ILDING SET BACK LINE
ESOL EACH SIDE OF LINE
P□E P□BLIC □TILITY EASEMENT
FFE FINISHED FLOOR ELEVATION

PROPERTY LINE
SETBACK LINE
EASEMENTS
CENTERLINE
□NDERGRO□ND ELECTRIC
GAS LINE
OVERHEAD □TILITIES
B□RIED TELEPHONE
SANITARY SEWER LINE
WATER LINE
STORM SEWER LINE
FENCE LINE

PROPOSED SITE LIGHTING □STREET LIGHTING FOR CHESTERFIELD AIRPORT ROAD



Know what's below. Call before you dig.

REVISIONS

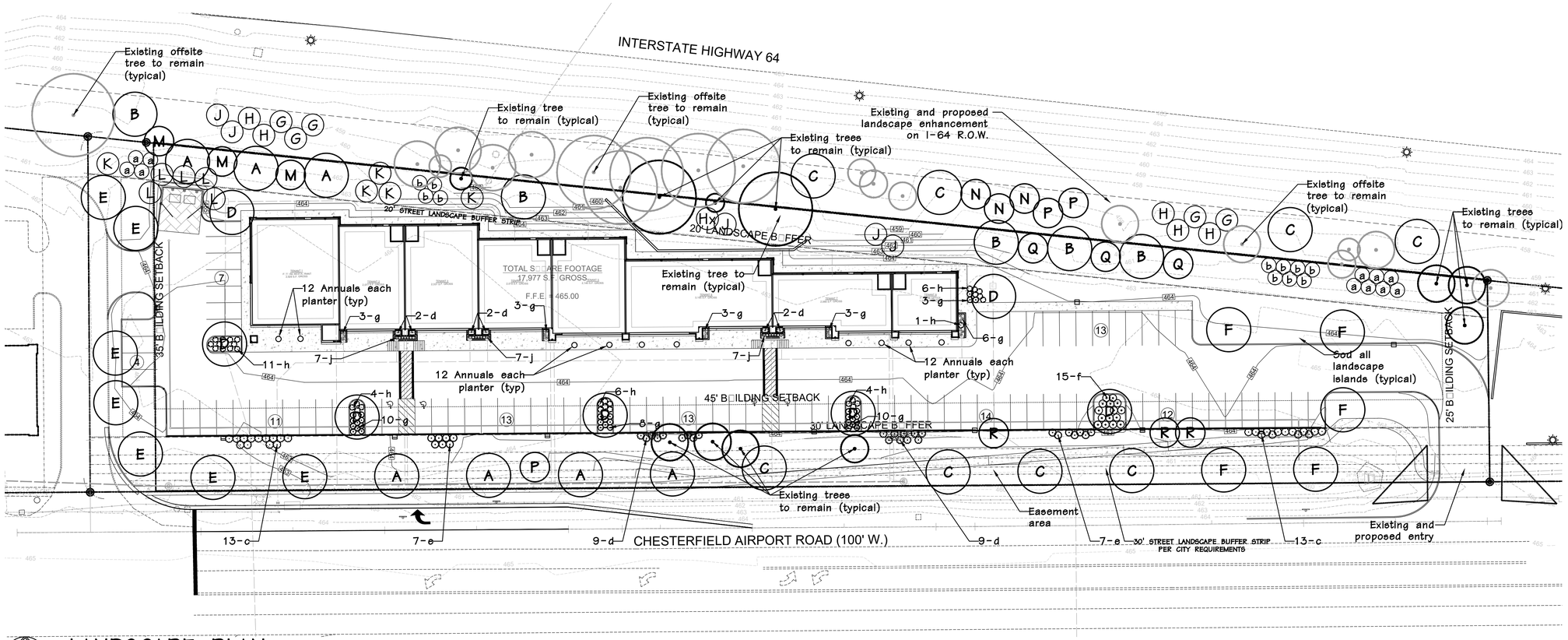
16861 CHESTERFIELD AIRPORT ROAD CHESTERFIELD, MO.

ACES
ARNOLD CONSULTING ENGINEERING SERVICES, INC.
P.O. BOX 1338
BOWLING GREEN, KY 42101
PHONE (270) 780-9445

JOB N□MBER:	L5109
DATE:	10-10-2018
SCALE:	1" = 40'
DRAWN:	C. WICKER
CHECKED:	B. □ACKERY
FILE PATH:	□SITDEV.CSP

STATE OF MISSOURI
TERRY ARNOLD
NUMBER PE-2015008301
PROFESSIONAL ENGINEER
4/19/18

CSP
COLOR SITE PLAN



LANDSCAPE PLAN

SCALE 1" = 30'

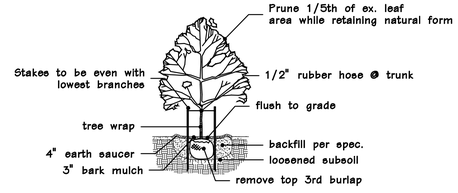
0 30 60 120

PLANTING SCHEDULE								
Deciduous Trees								
SYMBOL	QUANTITY	BOTANICAL NAME	COMMON NAME	SIZE	COMMENTS	GROWTH RATE	SIZE CLASS	PERCENTAGE
A	7	Acer x freemanii 'FTR 102'	Autumn Fantasy Maple	2.5"	B&B	Med./Fast	Large	16%
B	5	Quercus acutissima	Sawtooth Oak	2.5"	B&B	Medium	Large	13%
C	8	Zelkova serrata 'Green Vase'	Green Vase Zelkova	2.5"	B&B	Slow/Med.	Large	20%
D	7	Crataegus laevigata 'Superba'	Crimson Cloud Hawthorn	2.5"	B&B	Medium	Small	18%
E	7	Tilia cordata 'Greenspire'	Greenspire Littleleaf Linden	2.5"	B&B	Medium	Large	18%
F	5	Quercus rubra	Red Oak	2.5"	B&B	Medium	Large	13%
Evergreen Trees							% Total	100%
G	5	Picea pungens	Colorado Blue Spruce	6'	B&B	Medium	Medium	20%
H	5	Picea glauca	White Spruce	6'	B&B	Medium	Medium	20%
J	5	Pinus strobus	Eastern White Pine	6'	B&B	Fast	Large	20%
K	5	Ilex opaca	American Holly	6'	B&B	Slow	Large	20%
L	5	Juniperus virginiana	Eastern Redcedar	6'	B&B	Medium	Medium	20%
Ornamental Trees							% Total	100%
M	3	Cercis canadensis	Redbud	1.5"	B&B	Fast	Medium	20%
N	3	Carpinus caroliniana	American Hornbeam	1.5"	B&B	Medium	Small	20%
P	3	Amelanchier x grandiflora 'Robin Hill'	Robin Hill Serviceberry	1.5"	B&B	Slow/Med.	Medium	20%
Q	3	Cornus florida	Dogwood	1.5"	B&B	Slow/Med.	Small	20%
R	3	Prunus serrulata	Cherry	1.5"	B&B	Medium	Medium	20%
Deciduous Shrubs							% Total	100%
a	11	Callicarpa americana	Beautyberry	18"				
b	11	Aronia melanocarpa	Black Chokeberry	18"				
c	26	Physocarpus opulifolius 'Diabolo'	Diabolo Ninebark	18"				
d	24	Viburnum carlesii	Koreanspice Viburnum	18"				
e	14	Juniperus virginiana 'Grey Owl'	Grey Owl Juniper	18"				
f	15	Buxus sempervirens 'Vardar Valley'	Vardar Valley Boxwood	18"				
g	49	Weigela 'Dark Horse'	Dark Horse Weigela	18"				
h	32	Abelia x grandiflora 'Kaleidoscope'	Kaleidoscope Abelia	18"				
j	21	Buxus microphylla var. japonica	Morris Midget Boxwood	1 gal				
Annuals (Planter locations)								
ann	120	Annuals	To be selected	2" c.p.	Planters			

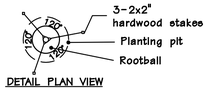
Open Space 40.31%

KEY

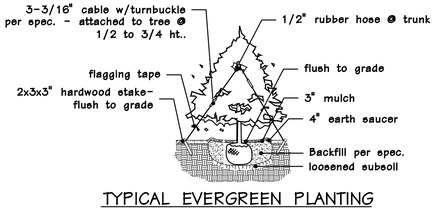
- Existing Individual Tree to remain
- Existing Individual Tree in R.O.W. (Offsite)
- A — Deciduous Trees
- G — Evergreen Trees
- M — Ornamental Trees
- a — Shrubs



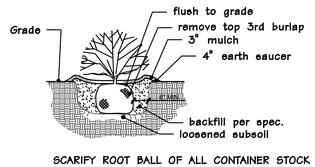
CANOPY TREE PLANTING



DETAIL PLAN VIEW



TYPICAL EVERGREEN PLANTING



SCARIFY ROOT BALL OF ALL CONTAINER STOCK

TYPICAL SHRUB PLANTING

STATE OF MISSOURI
JERALD A. SAUNDERS
NUMBER LA-7
LANDSCAPE ARCHITECT
2/22/18

Jerald Saunders - Landscape Architect
MO License # LA-007

Consultants:

Yoon Commercial Development

16861 Chesterfield Airport Road, Chesterfield, Missouri

Revisions:

Date	Description	No.
5-24-17	Plan Changes	3
8-18-17	Plan Changes	4
9-11-17	Plan Changes	5
11-17-17	Planters	6
1-12-18	Plan Changes	7
3-21-18	City Comments	8
7-18-18	City Comments	9
8-22-18	City Comments	10

Drawn: KP
Checked: JS

loomisAssociates

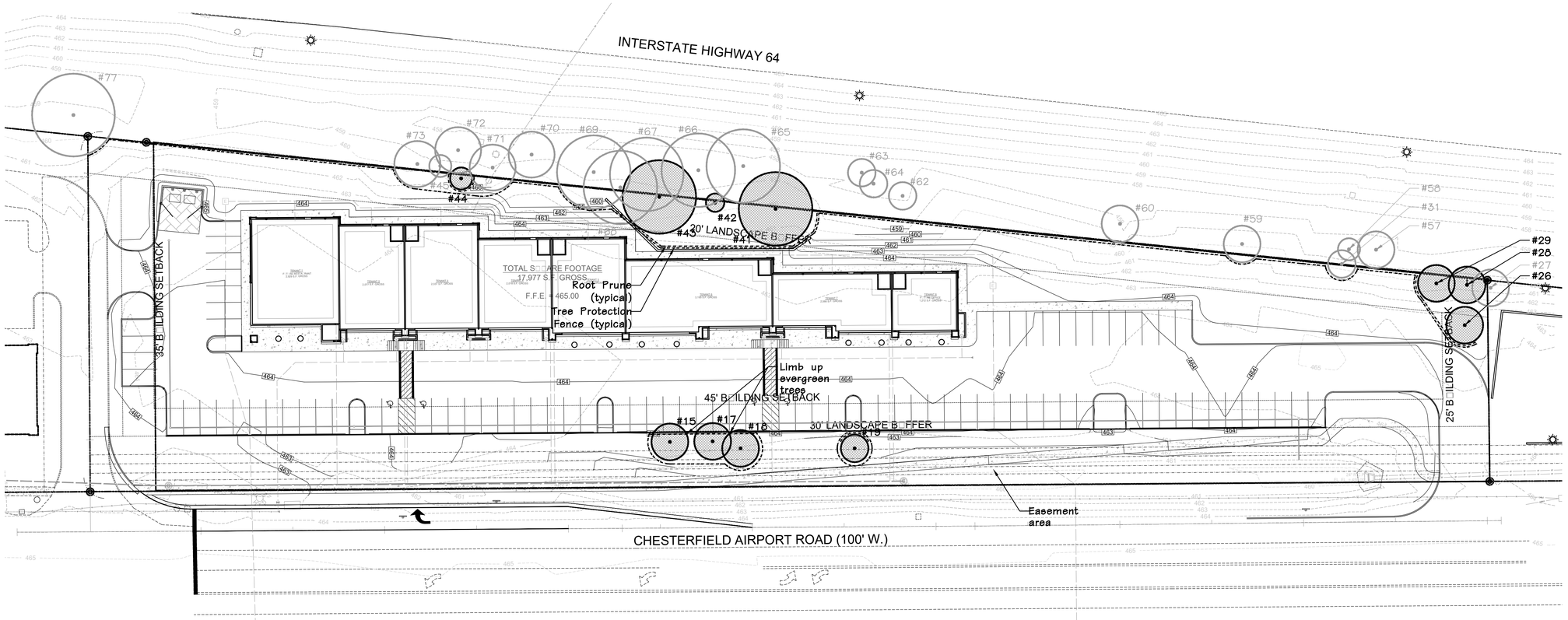
landscapeArchitects/planners
727 Spirit 40 Park Drive, Suite 125
Chesterfield, Missouri 63005-1194
(636)519-8668 Fax (636)519-0797
e-mail: lap@loomis-associates.com

Loomis Associates Inc.
Missouri State Certificate of Authority #: LAC #000019

Sheet Title: Landscape Plan

Sheet No: L-1

Date: 03/29/17
Job #: 968.001



TREE PRESERVATION PLAN

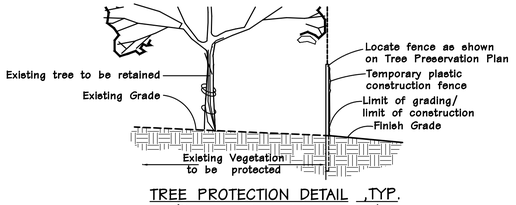
SCALE 1"=30'

0 30 60 120

Total Canopy = 14,370 sq. ft. or 0.33 Ac.

Maximum 70% removal = 10,059 sq. ft. or 0.23 Ac.
Canopy to be removed = 9,664 sq. ft. or 0.22 Ac. (67.25%)

Minimum 30% preservation = 4,311 sq. ft. or 0.1 Ac.
Canopy to remain = 4,706 sq. ft. or 0.11 Ac. (32.75%)



TREE PROTECTION DETAIL ,TYP.
(See plan for actual location)

KEY

- # — Existing Tree to remain
- Existing Individual Tree in R.O.W. (Offsite) to remain
- Tree protection fence
- Root prune

Preserved Trees

	Species	DBH	Condition	Canopy Diam.	Canopy Sq. Ft.	Comments
15	White Pine	12	4	20	314	
16	Norway Spruce	10	4	18	0	Easement area
17	White Pine	10	4	20	314	
18	White Pine	10	4	20	314	
19	River Birch	8	3	15	177	
26	Norway Spruce	10	4	18	254	
28	Norway Spruce	10	4	18	254	
29	White Pine	8	3	20	314	
41	Bald Cypress	28	4	50	1963	Monarch
42	Mulberry	6	3	10	79	
43	Bald Cypress	14	4	40	1257	
44	Mulberry	5	3	10	79	

Preserved Off-Site R.O.W. Trees

27	Norway Spruce	12	4	20	314	
31	Mulberry	7	3	10	79	
45	Mulberry	5	3	10	79	
57	Mulberry	6	3	20	314	
58	Mulberry	4	3	12	113	
59	Mulberry	8	3	20	314	
60	Mulberry	6	4	20	314	
62	Mulberry	6	4	15	177	
63	unidentified	4	4	10	79	
64	Mulberry	4	3	15	177	
65	Bald Cypress	20	4	50	1963	
66	Bald Cypress	28	4	50	1963	
67	Bald Cypress	14	4	40	1257	
68	Bald Cypress	14	4	40	1257	
69	Bald Cypress	14	4	40	1257	
70	Crabapple	8	3	25	491	
71	Crabapple	8	3	25	491	
72	Crabapple	8	3	25	491	
73	Crabapple	8	3	25	491	
77	Willow	28	2	50	1963	Broken limbs, deadwood

Note:
Off-site R.O.W. trees #61, 74, 75, 76 are proposed to be removed due to poor condition of trees.

TREE PROTECTION NOTES:

1) Preserved canopy is delineated with shading.

2) Pre-construction meeting to be held on-site to include a presentation of tree protection measures to operators; construction supervisors; developer's representative; and city zoning inspector.

3) Clearing Limits to be rough staked in order to facilitate location for installation of protection fencing. No early maintenance schedule is required. Required siltation devices to be installed along limit of disturbance line.

4) No clearing or grading shall begin in areas where the treatment and preservation measures have not been completed including the installation of tree protection fencing along all "Limit of Disturbance" lines shown on the plan.

5) Tree Protection Fencing shall be 4-foot high temporary plastic construction fence. No equipment traffic/parking, concrete washout, material storage or other such construction activity shall be permitted to penetrate the protection fencing or disrupt the Protected Woodland Area. Any proposed plantings shall be subject to the review and approval of the City Arborist. All ground plane shall be mulched with hardwood bark mulch. Tree Protection Signage will be placed along the Protection Fencing as shown as the dashed line on the plan.

6) Tree protection measures to be maintained throughout construction sequence.

7. Within the tree protection area, all Bush Honeysuckle and any other identified invasive species shall be removed mechanically by hand, either completely or at ground level and the stump shall be treated with a stump treatment herbicide.

TREE PROTECTION ACTION KEY SEQUENCE:

1) Survey limit of disturbance.

2) Install tree protection fencing.

3) Post tree protection signage on fence (No signs will be posted on trees).

4) Remove Honeysuckle and other invasive species from within the tree protection area.

5) Maintain tree protection area as an off-limits zone.

Tree Stand Delineation & Preservation Plan Prepared under direction of:
Brian Bage
Certified Arborist MW- 5033A

STATE OF MISSOURI
JERALD A. SAUNDERS
NUMBER LA-7
LANDSCAPE ARCHITECT
2/22/18

Jerald Saunders - Landscape Architect
MO License # LA-007

Consultants:

Yoon Commercial Development

16861 Chesterfield Airport Road, Chesterfield, Missouri

Revisions:

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7-18-18	City Comments	9
8-22-18	City Comments	10

Drawn: BB
Checked: JG

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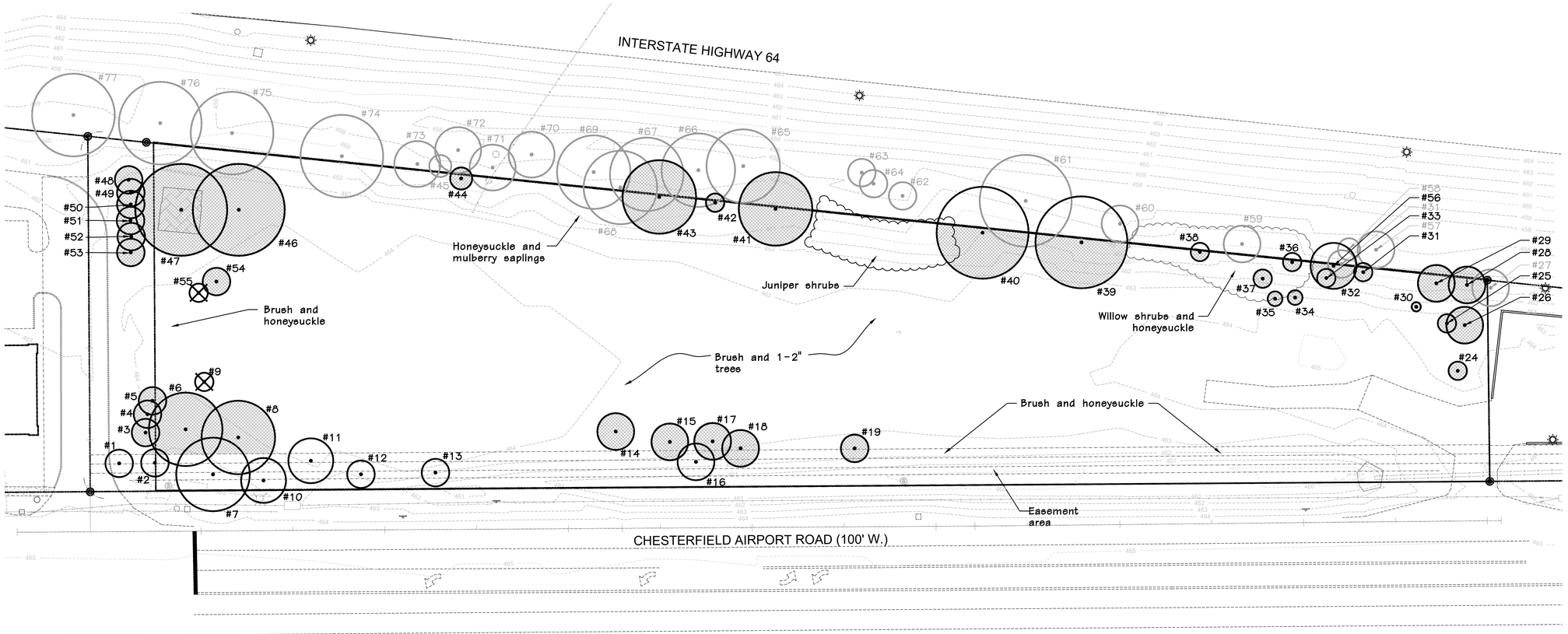
(636)519-8668 fax 636519-0797
e-mail: lap@loomis-associates.com
Loomis Associates Inc.
Missouri State Certificate of Authority #: LAC #000019

Sheet Title: Tree Preservation Plan

Sheet No: TPP

Date: 03/24/16
Job #: 968.001



TREE STAND DELINEATION PLAN

SCALE 1"=30'

0 30 60 120

Site Description:

This site once had previously been planted with ornamental trees and shrubs of which many still remain but now has given way to volunteer bush honeysuckle and Mulberry.

The southwest corner of the property along Chesterfield Airport Road consists of Red Oak and White Oak ranging from 16 to 21"DBH . The understory is dominated by dense bush honeysuckle, a small population of Amur Maple along the western property line, and some Crabapple along the roadway.

The northwest corner of the property along the Hwy 40 R.O.W. features two Red Oak sizing 20 and 23"DBH with a poorly conditioned understory of Amur Maple and dense bush honeysuckle.
The northern boundary consists of small Mulberry and Bush Honeysuckle with an overhanging canopy from the Hwy 40 Right-of-Way.

There are two stands of White Pine and Norway Spruce ranging in size of 8 to 12"DBH, along the southern property line and the northeast corner.
Along Chesterfield Airport Road at the east entrance to the site there is a small stand of multi-stemmed Cornelian Cherry Dogwood. These are multi-stemmed at about ground level with and 6"DBH.

The interior of the site consists or overgrown grasses and forbs, and sparsely populated with 1-3" caliper Pear, Boxelder, and Mulberry trees.

The Hwy 40 R.O.W. has grown grown into patches of dense bush honeysuckle and volunteer Mulberry ranging in size from 1" to 9"DBH and willow shrubs. There is a slope planted in juniper shrubs. There are groupings of good conditioned Bald Cypress, poor conditioned Weeping Willow, and Crabapple.

Tree Condition Rating

0-Dead
1-In Decline
2-Poor
3-Fair
4-Good
5-Excellent

Total Canopy = 14,370 sq. ft. or 0.33 Ac.

Note: Trees located in existing Easement areas are not included in the total canopy.

Tree Inventory

	Species	DBH	Condition	Canopy Diam.	Canopy Sq. Ft.	Comments
1	Amur Maple	13	3	15	0	Easement area
2	Amur Maple	10	3	15	0	Easement area
3	Amur Maple	10	3	15	177	Multi-stem
4	Amur Maple	10	2	15	177	Multi-stem
5	Amur Maple	10	3	15	177	Multi-stem
6	Pin Oak	19	4	50	1963	
7	Pin Oak	17	3	50	0	Easement area
8	Pin Oak	19	4	50	1963	
9	Ash	6	0	0	0	Dead
10	Crabapple	10	3	20	314	Easement area
11	Crabapple	12	3	20	314	Easement area
12	Swamp White Oak	16	4	28	0	Easement area
13	Swamp White Oak	18	4	28	0	Easement area
14	Swamp White Oak	16	4	28	616	
15	White Pine	12	4	20	314	
16	Norway Spruce	10	4	18	0	Easement area
17	White Pine	10	4	20	314	
18	White Pine	10	4	20	314	
19	River Birch	8	3	15	177	
24	Hornbeam	8	4	10	79	
25	Hornbeam	10	4	10	79	
26	Norway Spruce	10	4	18	254	
28	Norway Spruce	10	4	18	254	
29	White Pine	8	3	20	314	
30	White Pine	3	3	4	13	
32	Mulberry	9	3	25	491	
33	Mulberry	3	3	10	79	
34	Juniper	1.5	3	4	13	B&B
35	Arborvitae	2	4	4	13	B&B
36	Mulberry	6	3	10	79	
37	Mulberry	8	3	10	79	
38	Mulberry	6	3	10	79	
39	Willow	30	2	60	2827	
40	Willow	30	1	50	1963	

Tree Inventory

	Species	DBH	Condition	Canopy Diam.	Canopy Sq. Ft.	Comments
41	Bald Cypress	28	4	50	1963	Monarch
42	Mulberry	6	3	10	79	
43	Bald Cypress	14	4	40	1257	
44	Mulberry	5	3	10	79	
46	Red Oak	21	3	50	1963	Galls
47	Red Oak	21	3	50	1963	Galls
48	Amur Maple	8	3	14	154	Multi-stem
49	Amur Maple	8	1	14	154	Multi-stem
50	Amur Maple	8	1	14	154	Multi-stem
51	Amur Maple	8	3	14	154	Multi-stem
52	Amur Maple	8	3	14	154	Multi-stem
53	Amur Maple	8	3	14	154	Multi-stem
54	Mulberry	5	3	10	79	
55	Ash	8	0	0	0	Dead
56	Mulberry	6	3	15	177	

R.O.W. Trees

	Species	DBH	Condition	Canopy	Area- Sq. Ft.	Comments
27	Norway Spruce	12	4	20	314	
31	Mulberry	7	3	10	79	
45	Mulberry	5	3	10	79	
57	Mulberry	6	3	20	314	
58	Mulberry	4	3	12	113	
59	Mulberry	8	3	20	314	
60	Mulberry	6	4	20	314	
61	Willow	28	1	50	1963	Broken limbs, deadwood
62	Mulberry	6	4	15	177	
63	unidentified	4	4	10	79	
64	Mulberry	4	3	15	177	
65	Bald Cypress	20	4	50	1963	
66	Bald Cypress	28	4	50	1963	
67	Bald Cypress	14	4	40	1257	
68	Bald Cypress	14	4	40	1257	
69	Bald Cypress	14	4	40	1257	
70	Crabapple	8	3	25	491	
71	Crabapple	8	3	25	491	
72	Crabapple	8	3	25	491	
73	Crabapple	8	3	25	491	
74	Willow	28	2	50	1963	Broken limbs, deadwood
75	Willow	28	2	50	1963	Broken limbs, deadwood
76	Willow	28	2	50	1963	Broken limbs, deadwood
77	Willow	28	2	50	1963	Broken limbs, deadwood

KEY

- # — Existing Individual Tree
- Existing Individual Tree in Easement Area
- Existing Individual Tree in R.O.W. (Offsite)
- Existing Tree (Dead)

Tree Stand Delineation & Preservation Plan Prepared under direction of:
Brian Bage
Certified Arborist MW- 5033A

STATE OF MISSOURI
JERALD A. SAUNDERS
NUMBER LA-7
LANDSCAPE ARCHITECT
2/22/16

Jerald Saunders - Landscape Architect
MO License # LA-007

Consultants:

Yoon Commercial Development

16861 Chesterfield Airport Road, Chesterfield, Missouri

Revisions:

Date	Description	No.
2-1-16	Added off-site	1
5-24-17	Tree Inventory	3
8-18-17	Plan Changes	4
9-11-17	Plan Changes	5
3-21-18	City Comments	8
8-22-18	City Comments	10

Drawn: BB
Checked: JS

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Loomis Associates Inc.
Missouri State Certificate of Authority #: LAC #000019

Sheet Title: Tree Stand Delineation Plan

Sheet No: TSD

Date: 09/24/15
Job #: 968.001

STREET LIGHTING NOTE:

FIXTURE TO BE AMEREN APPROVED STREET LIGHTS TO BE PURCHASED THRU & INSTALLED BY AMEREN. STREET POLE TO BE PURCHASED THRU AMERN OR EQUAL THRU ALT. SOURCE - TO BE INSTALLED BY G.C.
FINAL INSTALLATION PENDING ST. LOUIS COUNTY DEPARTMENT OF TRANSPORTATION APPROVAL (COUNTY ROAD)

FIXTURE SPECIFICATION: F2(a)
AMEREN MISSOURI LED DUSK-TO-DAWN OUTDOOR LIGTING LED AREA LIGHTING
(4) QTY. - BRACKET MOUNT /
100 LED | 200 LED | 400 LED (LAMP RATING T.B.D. BY AMEREN) /
MONTHLY AMEREN RATE APPLIES
(INCLUDES AMEREN MAINTENANCE AGREEMENT)
POLE SPECIFICATION:
22FT MINIMUM HEIGHT REQUIRED

POLE SPACING TO BE 200FT O.C (MAX.) W/ 3FT OFFSET FROM COUNTY RD.

1 PROPOSED LIGHTING PLAN
A0.2 SCALE: 1" = 30'-0"

NORTH

THE PHOTOMETRIC & LIGHT FIXTURES SELECTION SHALL MEET CITY OF CHESTERFIELD LIGHTING STANDARD OF SEC. 31-04-03 TABLE 2 & TABLE 3.
ALL LIGHTING FIXTURE TO BE FULLY-SHIELDED, CUT-OFF OPTICS, FLAT-LENS LUMINAIRES.
G.C. TO COMPLY WITH THE REQUIREMENTS OUTLINED. CONTACT ARCHITECT IF ANY DISCREPANCIES TO MEET THESE REQUIREMENTS OF LIGHTING STANDARDS.

Table 2
Footcandle Standards

Location	Average Maintained Footcandles	Uniformity Ratio (avg: min)
Roadways, local residential	0.4	6:1
Roadways, local commercial	0.9	6:1
Walkways and bikeways	0.5	5:1
Building entrances and exits	5.0	n/a

Table 3
Illumination Standards in Footcandles for Structures and Their Parking Areas

	Residential	Commercial	Other
Minimum initial level at any point on the parking area	0.07	0.5	0.3
Maximum initial level 5 feet from the base of a light standard	3.0	8.0	5.0

POLE FIXTURES MOUNTED AT 20' INCLUDING BASE
LIGHT LEVEL CALCULATED ON THE GROUND

Calculation Summary

Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
SIDEWALKS	Illuminance	Fc	5.11	7.9	2.4	2.13	3.29
SITE	Illuminance	Fc	1.61	4.7	0.5	3.22	9.40
SPILL LIGHT	Illuminance	Fc	0.18	2.8	0.0	N.A.	N.A.
STORE ENTRANCE TYPICAL	Illuminance	Fc	5.56	6.9	3.7	1.50	1.86

Luminaire Schedule

Symbol	Qty	Label	Arrangement	Lum. Watts	Total Watts	LLF	Description
	1	F1	SINGLE	113	113	1.000	GLEON-AF-02-LED-E1-SL4
	8	F2	SINGLE	59	472	1.000	GLEON-AF-01-LED-E1-SL4
	1	F3	SINGLE	59	59	1.000	GLEON-AF-01-LED-E1-SL3-HSS
	1	F4	SINGLE	166	166	1.000	GLEON-AF-03-LED-E1-RW
	16	EXT 1 A	SINGLE	6.6	105.6	1.000	Q4LS-NNW-10833051
	15	EXT 2 A	SINGLE	12.2	183	1.000	XTOR1B-Y-BZ
	30	EXT 3 A	SINGLE	9.9	297	1.000	LD4B10D010 EU4B10208030 4LBW1H
	18	EXT 4	SINGLE	16.4	295.2	1.000	MERU-AC
							AT EACH ENTRY DOOR, FIXTURE TO BE EMERGENCY ONLY. AT EACH SERVICE DOOR , FIXTURE TO BE GENERAL & EMERGENCY WITH DAWN TO DUSK OPERATION.

DESIGN IS BASED ON CURRENT INFORMATION PROVIDED AT THE TIME OF REQUEST. ANY CHANGES IN MOUNTING HEIGHT OR LOCATION, LAMP WATTAGE, LAMP TYPE, AND EXISTING FIELD CONDITIONS, THAT EFFECT ANY OF THE PREVIOUSLY MENTIONED, WILL VOID CURRENT LAYOUT AND REQUIRE A CHANGE REQUEST AND RECALCULATION.

LIGHTING FIXTURE SCHEDULE

NOTE: VENDORS TO VERIFY ALL QUANTITIES

SYMBOL	PLAN MARK	QTY.	DESCRIPTION	MANUFACTURER AND MODEL #	VOLT	TYPE	LAMP WATT	LAMP NO.	MODEL# (G.E.)	FIXTURE LOCATION	MOUNTING TYPE	NOTES
	EXT1A	16	LED EXTERIOR WALL SCONCE 6"W x 16.4" H x 8.2" D DARK BRONZE FINISH – DOWNLIGHT	QUBE 400 LX Q4LS–NNW–10833051 DARK BRONZE	120	LED – –	8.2	1	LIGHTING ASSOCIATES SEE GEN. NOTE	EXTERIOR WALL –	SURFACE – –	SEE GENERAL NOTES SEE PLAN & EXTERIOR ELEVATIONS DAWN TO DUSK OPERATION
	EXT2A	15	LED EXTERIOR WALL PACK – –	EATON – LUMARK – XTOR CROSSTOUR IN BRONZE XTOR1B–Y–BZ	120	LED – –	12	1	LIGHTING ASSOCIATES SEE GEN. NOTE	EXTERIOR WALL –	SURFACE – –	SEE GENERAL NOTES SEE PLAN & EXTERIOR ELEVATIONS DAWN TO DUSK OPERATION
	EXT3A	30	LED EXTERIOR RECESSED CAN CLEAR DIFFUSER DIMMABLE	EATON– PORTFOLIO LD4B10D010 EU4B10208030 4LBW1H	120	LED – –	12	1	LIGHTING ASSOCIATES SEE GEN. NOTE	CEILING – –	RECESSED – –	SEE GENERAL NOTES SEE PLAN & EXTERIOR ELEVATIONS DAWN TO DUSK OPERATION
	EXT4	18	LED EXTERIOR GENERAL & EMERGENCY LIGHTING FULLY SHIELDED & GASKETED	MULE LIGHTING MERU SERIES – DARK BRONZE MERU–LED–ACEM–DB	120	LED – –	11	1	LIGHTING ASSOCIATES SEE GEN. NOTE	EXTERIOR WALL –	SURFACE – –	AT EACH SERVIE DOOR – APPLY DAWN TO DUSK OPERATION. AT EACH ENTRY DOOR – FIXTURE TO BE EMERGENCY OPERATION ONLY
	XEM	18	EXIT SIGN WITH EMERGENCY LIGHTING WITH BATTERY BACK–UP	COOPER SURE–LITES APC7G	120/277	LED – –	1.55	2	LIGHTING ASSOCIATES SEE GEN. NOTE	CEILING OR WALL –	PROVIDED BRACKET –	SEE GENERAL NOTES – –
	F1	1	PARKING LOT POLE LIGHT FULLY–SHIELDED, 20 FEET POLE HIGH MAX. TYPE SL4 DISTRIBUTION W/ SPILL CONTROL	EATON – McGRAW–EDISON GLEON–AF–02–LED–E1–SL4–BK BLACK COLOR	120/277	LED – –	113	1	LIGHTING ASSOCIATES SEE GEN. NOTE	EXTERIOR PARKING –	POLE MTD. – –	SEE GENERAL NOTES SEE ARCHITECTURAL SITE PLAN FOR LOCATION –
	F2	8	PARKING LOT POLE LIGHT FULLY–SHIELDED, 20 FEET POLE HIGH MAX. TYPE SL4 DISTRIBUTION W/ SPILL CONTROL	EATON – McGRAW–EDISON GLEON–AF–01–LED–E1–SL4–BK BLACK COLOR	120/277	LED – –	59	1	LIGHTING ASSOCIATES SEE GEN. NOTE	EXTERIOR PARKING –	POLE MTD. – –	SEE GENERAL NOTES SEE ARCHITECTURAL SITE PLAN FOR LOCATION –
	F3	1	PARKING LOT POLE LIGHT FULLY–SHIELDED, 20 FEET POLE HIGH MAX. TYPE SL3 DISTRIBUTION W/ SPILL CONTROL	EATON – McGRAW–EDISON GLEON–AF–01–LED–E1–SL3–BK– HSS (IN BLACK COLOR)	120/277	LED – –	59	1	LIGHTING ASSOCIATES SEE GEN. NOTE	EXTERIOR PARKING –	POLE MTD. – –	SEE GENERAL NOTES SEE ARCHITECTURAL SITE PLAN FOR LOCATION –
	F4	1	PARKING LOT POLE LIGHT FULLY–SHIELDED, 20 FEET POLE HIGH MAX. TYPE RW DISTRIBUTION	EATON – McGRAW–EDISON GLEON–AF–03–LED–E1–RW–BK– BLACK COLOR	120/277	LED – –	166	1	LIGHTING ASSOCIATES SEE GEN. NOTE	EXTERIOR PARKING –	POLE MTD. – –	SEE GENERAL NOTES SEE ARCHITECTURAL SITE PLAN FOR LOCATION –

GENERAL NOTES:
1) ANY INFORMATION NOT PROVIDED ON SCHEDULE TO BE SUPPLIED BY MANUFACTURER OR DISTRIBUTOR
2) ANY DISCREPANCIES, CONTACT ARCHITECT IMMEDIATELY
3) ALL FIXTURES TO BE CENTERED IN CEILING TILE (U.N.O.)
4) ALL FIXTURES TO BE PROVIDED BY, RECEIVED, STORED AND INSTALLED BY LICENSED ELECTRICAL CONTRACTOR
5) ELECTRICAL CONTRACTOR SHALL SUPPLY 10% (MIN.) ADDITIONAL SPARE LAMPS OF ALL TYPES, TO BE LEFT AT JOB SITE AT END OF JOB.
6) MANUFACTURER'S REP:
LIGHTING ASSOCIATES – CALLIA BALL cball@laiweb.net LIGHTING ASSOCIATES INC. 314–406–9946 (CELL)
7) ALL LAMPS OF THE SAME TYPE ARE TO HAVE THE SAME CRI AND COLOR TEMPERATURE–NO EXCEPTIONS
8) ALL CFL AND FLOURESCENT LAMPS TO BE "WARM"–NO EXCEPTIONS
9) ALL CFL AND FLOURESCENT LAMPS TO BE INSTANT START–NO EXCEPTIONS
10) NOTE MAX. WATTAGES FOR ENERGY CALCULATIONS

PHOTOMETRIC SITE PLAN GENERATED BY LIGHTING SUPPLIER, LIGHTING ASSOCIATES, INC.
PLAN IS OVERLAID ON CURRENT CIVIL SITE PLAN FROM ARNOLD CONSULTING ENGINEERING SERVICES, INC.

NOTE:
THE SOURCE OF ILLUMINATION SHALL NOT BE LOWER THAN 10 FEET ABOVE GRADE NOR SHALL THE LIGHT FIXTURE EXCEED 20 FEET IN HEIGHT ABOVE GRADE.

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PROJECT: KWA #16937
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STATE OF MISSOURI
JOSEPH HENRY KLITZING
NUMBER A-4591
ARCHITECT
Joseph Henry Klitzing - Architect
MO# A-4591

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File Name: 16937 A0.0-A0.2

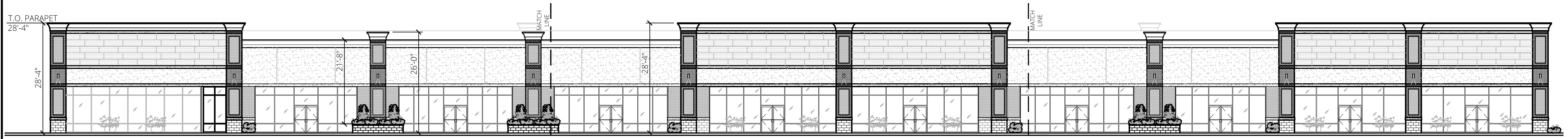
No.	Date:	Issue:
1	08-14-17	CITY COMMENT - SDP REVIEW
2	01-12-18	CITY COMMENT - SDP/ARB
3	07-25-18	CITY COMMENT - SDP
4	09-19-18	CITY COMMENT - SDP

SHEET TITLE:
LIGHTING PLAN

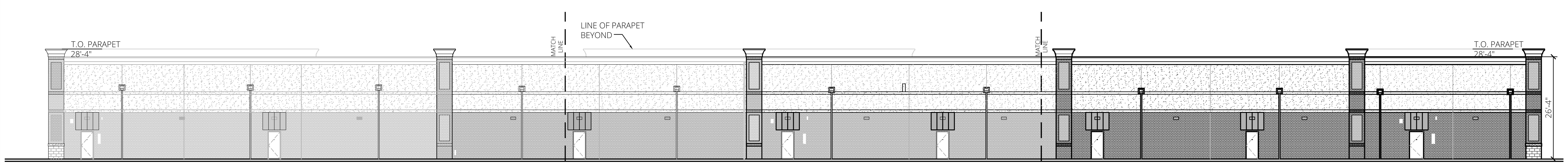
Date: 03-22-17
X OF X

A0.2

1 A3.0 **PROPOSED SOUTH ELEVATION**
SCALE: 1/4" = 1'-0"

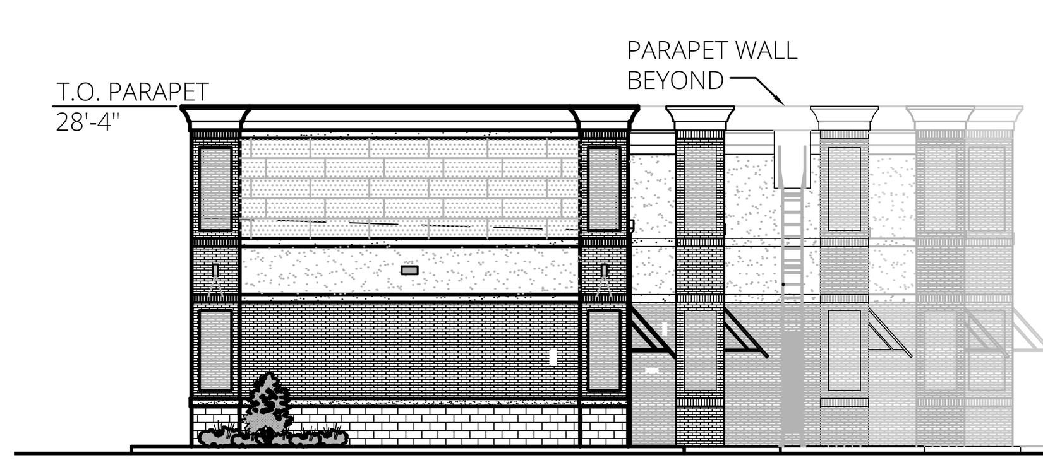


2 A3.0 **OVERALL SOUTH ELEVATION**
SCALE: 1/16" = 1'-0"



3 A3.0 **OVERALL NORTH ELEVATION**
SCALE: 1/16" = 1'-0"

4 A3.0 **WEST ELEVATION**
SCALE: 1/16" = 1'-0"



5 A3.0 **EAST ELEVATION**
SCALE: 1/16" = 1'-0"

EXTERIOR MATERIALS: INDICATED BY ◇ SYMBOL

B1
FIELD PRODUCT: BRICK
MANUFACTURER: SIOUX CITY BRICK
COLOR: MIDTOWN IRONSPOT SMOOTH
MORTAR TO CONFORM TO ASTM C270. ADD - SOLOMON MORTAR COLOR SGS 10XLT. BUFF.
REPRESENTATIVE CONTACT:
DANIELLE BACH WITH MIDWEST BLOCK & BRICK AT 314-420-4541 (CELL) OR dbach@midwestblock.com

B2
FIELD PRODUCT: BRICK - RECESSED AREA
MANUFACTURER: CLOUD CERAMICS
COLOR: BLACK DIAMOND MODULAR
MORTAR TO CONFORM TO ASTM C270. ADD - SOLOMON MORTAR COLOR SGS 10XLT. BUFF.
REPRESENTATIVE CONTACT:
DANIELLE BACH WITH MIDWEST BLOCK & BRICK AT 314-420-4541 (CELL) OR dbach@midwestblock.com

B3
FIELD PROD□CT: GRO□ND FACE CONCRETE BLOCK
MAN□FACT□RER: TRENDSTONE
COLOR: MARENGO
SI□E: 7⅝" □ 15⅝" □ 3 9/16"
MORTAR TO CONFORM TO ASTM C270. ADD - SOLOMON MORTAR COLOR SGS 10XLT. BUFF.
REPRESENTATIVE CONTACT:
DANIELLE BACH WITH MIDWEST BLOCK & BRICK AT 314-420-4541 (CELL) OR dbach@midwestblock.com

B4
FIELD PROD□CT AT PLANTER WALL ONLY: GRO□ND FACE CONCRETE BLOCK
MAN□FACT□RER: TRENDSTONE
COLOR: MARENGO
SI□E: 7⅝" □ 15⅝" □ 7 9/16"
MORTAR TO CONFORM TO ASTM C270. ADD - SOLOMON MORTAR COLOR SGS 10XLT. BUFF.
REPRESENTATIVE CONTACT:
DANIELLE BACH WITH MIDWEST BLOCK & BRICK AT 314-420-4541 (CELL) OR dbach@midwestblock.com

E1
FIELD PRODUCT: EIFS
MANUFACTURER: DRYVIT
COLOR: #110 VAN DYKE
FINISH: SANDPEBBLE TEXTURE
ARCHITECT SUGGEST OUTSULATION PLUS MD SYSTEM WITH BACKSTOP NT AIR/ WATER - RESISTIVE BARRIER.
REPRESENTATIVE CONTACT:
MICHAEL WELCH WITH CEILING SUPPLY AT 314-629-9248 OR m.welch@ceilingsuplly.com

AL1
BLACK ANODIZED ALUMINUM STOREFRONT FRAME WITH 1" CLEAR INSULATED GLAZING. TEMPERED PANES ADJACENT DOORS.

MTL1
2" H. (EXPOSED) PRE-FINISHED METAL COPING TO MATCH WITH EIFS CORNICE - SUBMIT PRODUCT FOR ARCHITECT APPROVAL

EXT1
FIELD PRODUCT: SLIMLITE PORCELAIN PANELS
MANUFACTURER: DALTILE
SIZE: 20"H x59"L , 3.5mm th.
COLOR: TERRA COLLECTION - ROCK TP44
INSTALLATION NOTE: INSTALL TILE AS RUNNING BOND WITH 25% OFFSET
REPRESENTATIVE CONTACT:
JOANNIE MILLAR, ARCH. REP. DALTILE, MIDWEST REGION
2059 WESTPORT CENTER DR., ST. LOUIS, MO 63146
314-568-9241 MBL joannie.millar@daltile.com

AW1
FIELD PRODUCT: AWNING - OPEN ENDS.
TYPE: STANDING SEAM METAL AWNING
MANUFACTURER: LAWRENCE FABRIC
COLOR: BLACK

NOTE:

EXT1 MANUF. APPLICATION 15 YR. WARRANTY:
WATERPROOFING MEMBRANE: LATICRETE HYDRO BAN (LI□□ID-APPLIED) OR LATAPO□Y WATERPROOF FLASHING MORTAR (TROWELLABLE)
THICK BED MORTAR □SCRATCH & BROWN: LATICRETE 3701 FORTIFIED MORTAR BED
THINSET MORTAR: LATICRETE 254 PLATIN□M THINSET (REG□LAR OR RAPID VERSION) OR LATICRETE 255 M□LTIMA□ THINSET.
GRO□T: LATICRETE PERMACOLOR GRO□T - #35 MOCHA 100□
SILICONE CA□LK: LATICRETE LATASIL (WITH LATICRETE LATASIL 9118 PRIMER AS NEEDED)
TILE AND STONE INSTALLATION MATERIALS TO BE S□PPLIED SOLELY BY LATICRETE INTERNATIONAL, INC.□BETHANY, CT□□SA
TELEPHONE: (203) 393-0010
WEBSITE: WWW.LATICRETE.COM

LARGE FORMAT TILE INSTALLATION REQUIRES PARTICULAR ATTENTION TO PROPER SUBSTRATE PREPARATION, GROUT JOINT SIZING, TROWEL SELECTION, AND MORTAR COVERAGE. IT IS CRITICAL THAT LARGE FORMAT TILE BE INSTALLED ON A LEVEL SUBSTRATE. MAKE SURE THE SUBSTRATE IS DRY, WITHOUT DUST, GREASE, OILS, AND ANY MATERIALS NOT COMPLETELY BONDED. ADDITIONALLY, THERE MUST BE AT LEAST 90% MORTAR CONTACT AND A MINIMUM GROUT JOINT OF 1/4".
INSTALLATION REQUIREMENT: FOR PROPER BONDING, MEDIUM BED MORTAR SHOULD BE USED IN INSTALLING TILES WITH A DIMENSIONAL LENGTH GREATER THAN 20" X 20", LARGE RECTANGLES OR TILES WITH GREATER DIMENSIONAL THICKNESS THAN NORMAL. BACK BUTTERING TILES OF THIS NATURE IN THE INSTALLATION PROCESS WILL ALSO ASSURE PROPER COVERAGE FOR BODY
A TYPICAL WALL ASSEMBLY CONSISTS OF 6" DEEP 16 GA. METAL FRAMING. PLEASE FOLLOW TCNA GUIDELINES WHERE EXPANSION JOINTS MUST BE USED 8' TO 12' IN EACH DIRECTION.

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PROJECT: KWA #16937
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STATE OF MISSOURI JOSEPH HENRY KLITZING NUMBER A-4591 ARCHITECT
Joseph Henry Klitzing - Architect
MO# A-4591

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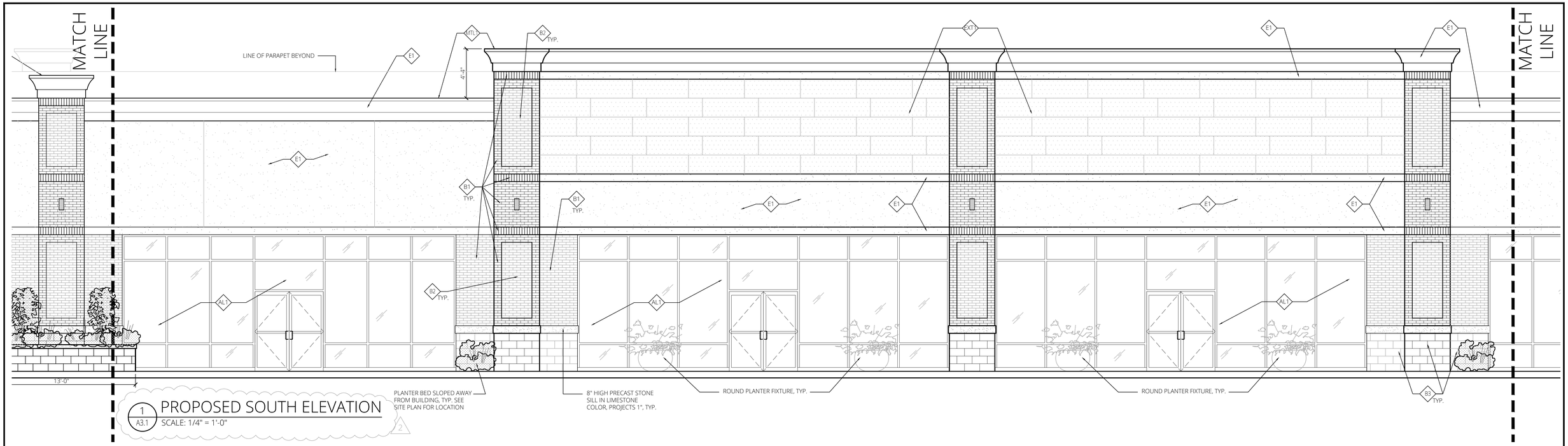
File Name: 16937 A3.0-A3.4.dwg

No.	Date:	Issue:
1	08-14-17	CITY COMMENT - SDP REVIEW
2	01-12-18	CITY COMMENT - SDP/ARB

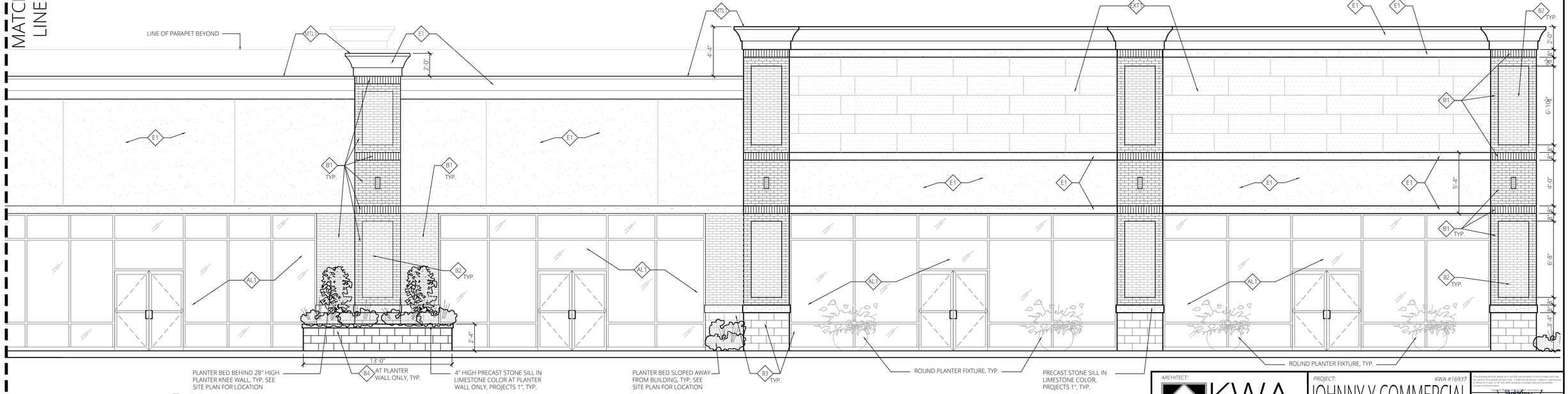
SHEET TITLE:
OVERALL ELEVATIONS & PROPOSED SOUTH ELEVATION

Date: 03-22-17
OF
A3.0



1 A3.1 PROPOSED SOUTH ELEVATION

SCALE: 1/4" = 1'-0"



2 A3.1 PROPOSED SOUTH ELEVATION

SCALE: 1/4" = 1'-0"

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PROJECT: KWA #16937

JOHNNY Y COMMERCIAL DEVELOPMENT

16861 CHESTERFIELD AIRPORT ROAD
CHESTERFIELD, MO

STATE OF MISSOURI
JOSEPH HENRY KLITZING
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ARCHITECT
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Drawn by: Checked by: JHK

File Name: 16937 A3.0-A3.4.dwg

No.	Date:	Issue:
2	01-12-18	CITY COMMENT - SDP/ARB

SHEET TITLE:
PROPOSED SOUTH ELEVATION

Date: 03-22-17

OF

A3.1

1
A3.2
PROPOSED NORTH ELEVATION
SCALE: 1/4" = 1'-0"

2
A3.2
PROPOSED NORTH ELEVATION
SCALE: 1/4" = 1'-0"

ARCHITECT:
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3109 S. GRAND BLVD. SUITE #200
ST. LOUIS, MO 63118
(314) 772-8073
FAX: 772-0108
www.klitzingwelsch.com
KLITZING WELSCH ASSOCIATES, INC.
MISSOURI STATE CERTIFICATE OF AUTHORITY # 2009024038

PROJECT: KWA #16937

JOHNNY Y COMMERCIAL DEVELOPMENT

16861 CHESTERFIELD AIRPORT ROAD
CHESTERFIELD, MO

DISCLAIMER: THE ARCHITECT OF RECORD ASSUMES RESPONSIBILITY FOR PORTIONS OF NEW CONSTUCTION AS DESCRIBED IN THIS DRAWING SET ONLY AND DISCLAIMS ANY RESPONSIBILITY FOR ALL PREVIOUSLY CONSTRUCTED ELEMENTS.

STATE OF MISSOURI
JOSEPH HENRY KLITZING
NUMBER A-4591
ARCHITECT
Joseph Henry Klitzing - Architect
MO# A-4591

The Professional Architect's seal affixed to this sheet applies only to the material and items shown on this sheet. All drawings, instruments or other documents not exhibiting this seal shall not be considered prepared by this architect, and this architect expressly disclaims any and all responsibility for such plan, drawings or documents not exhibiting this seal.

Structural Engineer

MPE Consultant

Civil Engineer

Historic Consultant

Interior Designer
KWA Interiors
3109 S.Grand Blvd – Ste 200
St. Louis, MO 63118
PHN: 314–772–8073
FAX: 314–772–0108

Acoustical Consultant

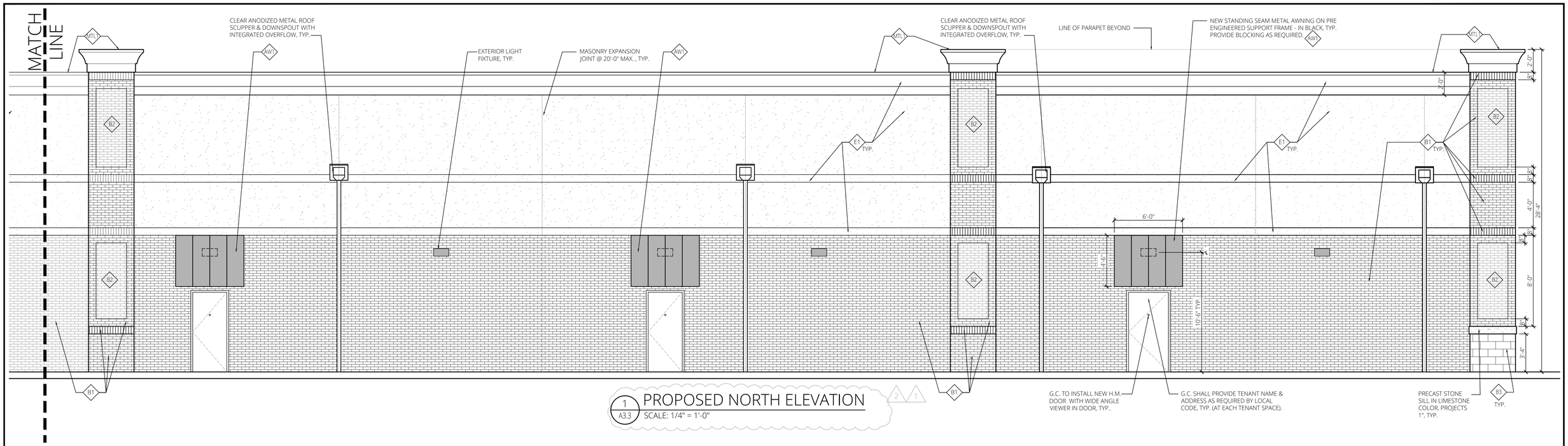
Drawn by:
Checked by: JHK
File Name: 16937 A3.0-A3.4.dwg

No.	Date:	Issue:
1	08-14-17	CITY COMMENT - SDP REVIEW
2	01-12-18	CITY COMMENT - SDP/ARB

SHEET TITLE:
PROPOSED NORTH ELEVATION

Date: 03-22-17
OF

A3.2



1 A3.3 PROPOSED NORTH ELEVATION

SCALE: 1/4" = 1'-0"

ARCHITECT:

KWA KLITZING WELSCH ASSOCIATES, INC.

3109 S. GRAND BLVD. SUITE #200 (314) 772-8073
ST. LOUIS, MO 63118 FAX: 772-0108
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Drawn by: Checked by: JHK

File Name: 16937 A3.0-A3.4.dwg

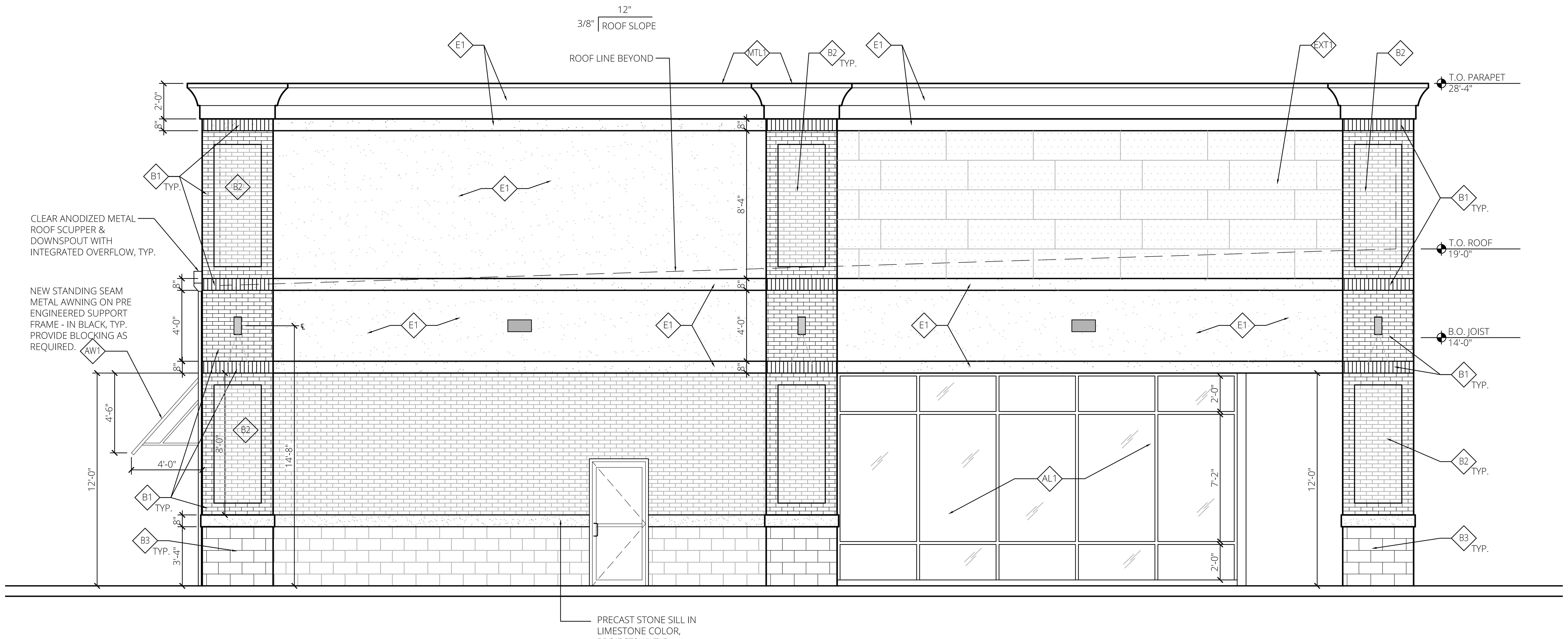
No.	Date:	Issue:
1	08-14-17	CITY COMMENT - SDP REVIEW
2	01-12-18	CITY COMMENT - SDP/ARB

SHEET TITLE: PROPOSED NORTH ELEVATION

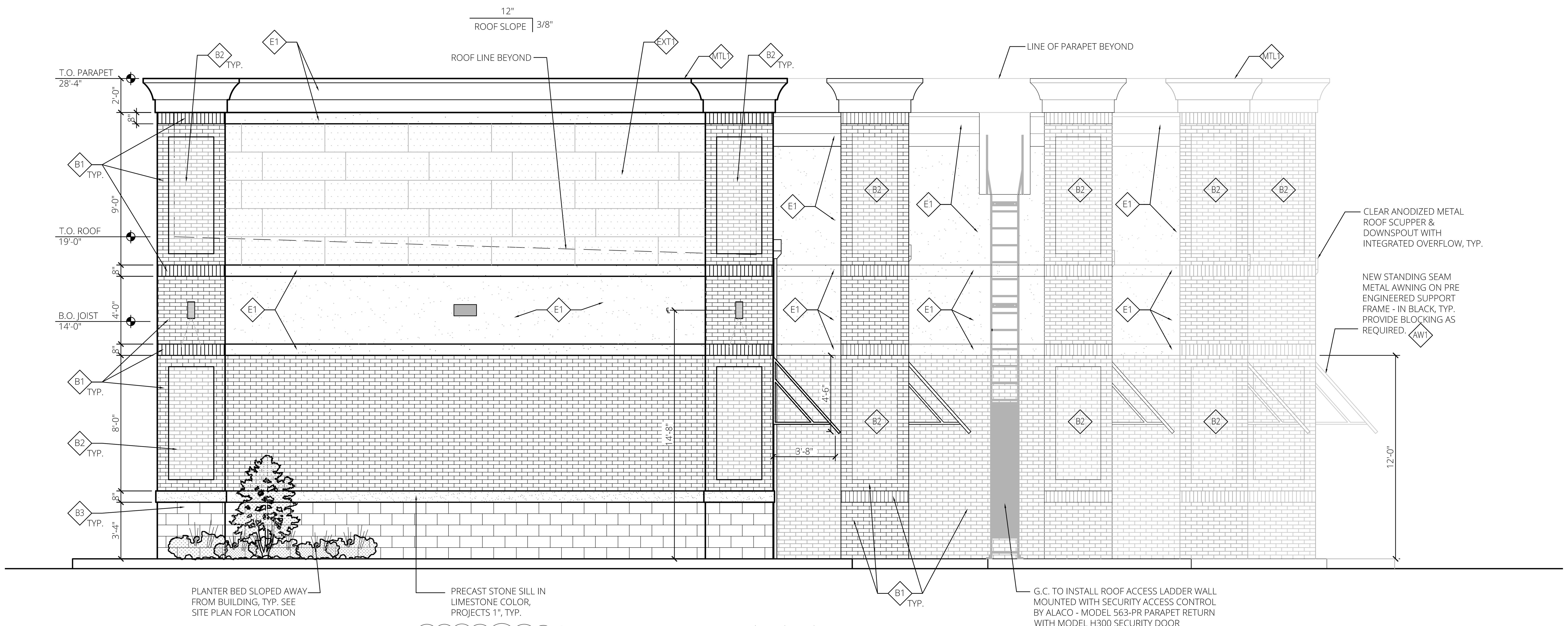
Date: 03-22-17

OF

A3.3



1 PROPOSED WEST ELEVATION
A3.4 SCALE: 1/4" = 1'-0"



2 PROPOSED EAST ELEVATION
A3.4 SCALE: 1/4" = 1'-0"

ARCHITECT:
KWA KLITZING WELSCH ASSOCIATES, INC.
3109 S. GRAND BLVD. SUITE #200 (314) 772-8073
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PROJECT: KWA #16937
JOHNNY Y COMMERCIAL DEVELOPMENT
16861 CHESTERFIELD AIRPORT ROAD
CHESTERFIELD, MO

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STATE OF MISSOURI JOSEPH HENRY KLITZING NUMBER A-4591 ARCHITECT
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Drawn by: Checked by: JHK
File Name: 16937 A3.0-A3.4.dwg

No.	Date:	Issue:
1	08-14-17	CITY COMMENT - SDP REVIEW
2	01-12-18	CITY COMMENT - SDP/ARB
3	07-18-18	SDP - LIGHT FIXTURE

SHEET TITLE:
PROPOSED WEST & EAST ELEVATIONS

Date: 03-22-17
OF
A3.4

TEGEL 12 WALL SCONCE

TYPE EXT1

TECH LIGHTING®

Understated modern design characterizes Tegel outdoor LED wall sconces. Providing well-controlled up and down lighting, or down light only, these wall sconces provide accent and ambient illumination. The option of three finish choices ensures this design profile successfully blends with all architectural aesthetics.

High quality LM80-tested LEDs
for consistent long-life performance and color

Outstanding protection against the elements:

- Marine-grade powder coat finishes
- Stainless Steel mounting hardware
- Impact-resistant, UV stabilized frosted acrylic lensing

Up light and down light options, with 10° and 36° beam spread options

SPECIFICATIONS

DELIVERED LUMENS	2346 Up-Downlight / 1212 Downlight
WATTS	29.2 Up-Downlight / 15.6 Downlight
VOLTAGE	Universal 120V-277V, with integral transient 2.5kV surge protection (driver)
DIMMING	0-10, ELV
LIGHT DISTRIBUTION	Symmetric Up/Down Lighting, or Down Only
MOUNTING OPTIONS	Wall
OPTICS	10° and 36°
PERFORMANCE OPTIONS	Photocontrol / In-Line Fuse / Surge Protector
CCT	3000K or 4000K
CRI	80+
COLOR BINNING	3 Step
BUG RATING	Up-Downlight B1-U5-G0 / Downlight B1-U0-G0
DARK SKY	Compliant (Downlight)
WET LISTED	IP65
GENERAL LISTING	ETL, Title 24
START TEMP	-30°C
FIELD SERVICEABLE LED	Yes
CONSTRUCTION	Aluminum
HARDWARE	Stainless Steel
FINISH	Marine Grade Powder Coat
LED LIFETIME	L70; 70,000 Hours
WARRANTY*	5 Years

* Visit techlighting.com for specific warranty limitations and details.

TEGEL 12
shown in bronze

TEGEL 12
shown in charcoal

TEGEL 12
shown in gray

ORDERING INFORMATION

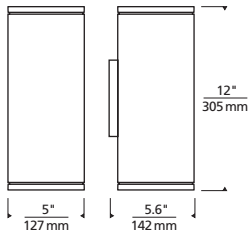
700OWTEG	CRI/CCT	LENGTH	BEAM SPREAD*	LENS	FINISH	FUNCTION	VOLTAGE	OPTIONS
	830 80 CRI, 3000K 840 80 CRI, 4000K	12 12"	N 10° NARROW W 36° WIDE NN 10° UP AND DOWN WW 36° UP AND DOWN NW 10° AND 36°	C CLEAR	Z BRONZE H CHARCOAL Y GRAY	DO DOWNLIGHT ONLY UD UPLIGHT /DOWNLIGHT	UNV 120V–277V	NONE PC BUTTON PHOTOCONTROL LF IN-LINE FUSE SP SURGE PROTECTION PCLF BUTTON PHOTOCONTROL & IN-LINE FUSE PCSP BUTTON PHOTOCONTROL & SURGE PROTECTION LFSP IN-LINE FUSE & SURGE PROTECTION PCLFSP BUTTON PHOTOCONTROL, IN-LINE FUSE & SURGE PROTECTION

dawn to dusk operation

*N, W = DOWNLIGHT ONLY (DO); NN, WW, NW = UP AND DOWNLIGHT ONLY (UD)

TEGEL 12 WALL SCONCE

TECH LIGHTING®



Tegel 12

PHOTOMETRICS*

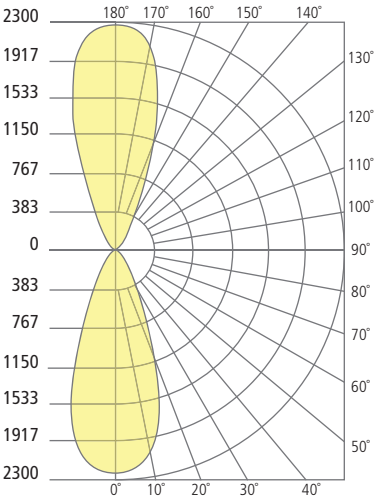
*For latest photometrics, please visit www. techlighting.com/OUTDOOR

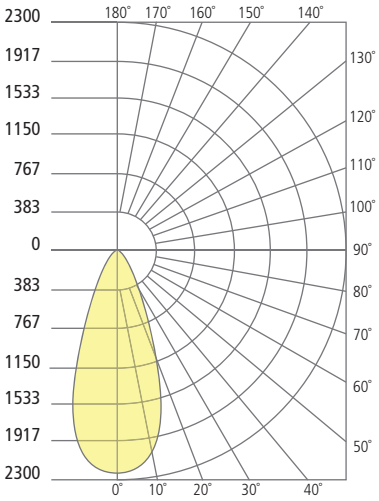
TEGEL 12 UP/DOWN

Total Lumen Output:	2346
Total Power:	29.2
Luminaire Efficacy:	80.2
Color Temp:	3000K
CRI:	80+
BUG Rating:	B1-U5-G0

TEGEL 12 DOWN

Total Lumen Output:	1212
Total Power:	15.6
Luminaire Efficacy:	77.7
Color Temp:	3000K
CRI:	80+
BUG Rating:	B1-U0-G0





PROJECT INFO

FIXTURE TYPE & QUANTITY

JOB NAME & INFO

NOTES

TECH LIGHTING®
GENERATION BRANDS
7400 Linder Avenue, Skokie, Illinois 60077
T 847.410.4400 F 847.410.4500

Lumark

DESCRIPTION

The patented Lumark Crosstour™ LED Wall Pack Series of luminaries provides an architectural style with super bright, energy efficient LEDs. The low-profile, rugged die-cast aluminum construction, universal back box, stainless steel hardware along with a sealed and gasketed optical compartment make the Crosstour impervious to contaminants. The Crosstour wall luminaire is ideal for wall/surface, inverted mount for façade/canopy illumination, post/bollard, site lighting, floodlight and low level pathway illumination including stairs. Typical applications include building entrances, multi-use facilities, apartment buildings, institutions, schools, stairways and loading docks test.

Catalog #	TYPE EXT2	**Type**
Project		
Comments		**Date**
Prepared by		

SPECIFICATION FEATURES

Construction

Slim, low-profile LED design with rugged one-piece, die-cast aluminum hinged removable door and back box. Matching housing styles incorporate both a small and large design. The small housing is available in 7W and 18W. The large housing is available in the 26W model. Patent pending secure lock hinge feature allows for safe and easy tool-less electrical connections with the supplied push-in connectors. Back box includes three (3) half-inch, NPT threaded conduit entry points. The universal back box supports both the small and large forms and mounts to standard 3-1/2" to 4" round and octagonal, 4" square, single gang and masonry junction boxes. Key hole gasket allows for adaptation to junction box or wall. External fin design extracts heat from the fixture surface. One-piece silicone gasket seals door and back box. Minimum 5" wide pole for site lighting application. Not recommended for car wash applications.

Optical

Silicone sealed optical LED chamber incorporates a custom engineered mirrored anodized reflector providing high-efficiency illumination. Optical assembly includes impact-resistant tempered glass and meets IESNA requirements for full cutoff compliance. Solid state LED Crosstour luminaries are thermally optimized with five (5) lumen packages in cool 5000K or neutral warm 3500K LED color temperature (CCT).

Electrical

LED driver is mounted to the die-cast housing for optimal heat sinking. LED thermal management system incorporates both conduction and natural convection to transfer heat rapidly away from the LED source. 7W models operate in -40°C to 40°C [-40°F to 104°F]. 18W and 26W models operate in -40°C to 40°C [-40°F to 104°F]. High ambient 50°C models available. Crosstour luminaires maintain greater than 90% of initial light output after 72,000 hours of operation. Three (3) half-inch NPT threaded conduit entry points allow for thru-branch wiring. Back box is an authorized electrical wiring compartment. Integral LED electronic driver incorporates surge protection. 120-277V 50/60Hz or 347V 60Hz models.

Finish

Crosstour is protected with a Super durable TGIC carbon bronze or summit white polyester powder coat paint. Super durable TGIC powder coat paint finishes withstand extreme climate conditions while providing optimal color and gloss retention of the installed life.

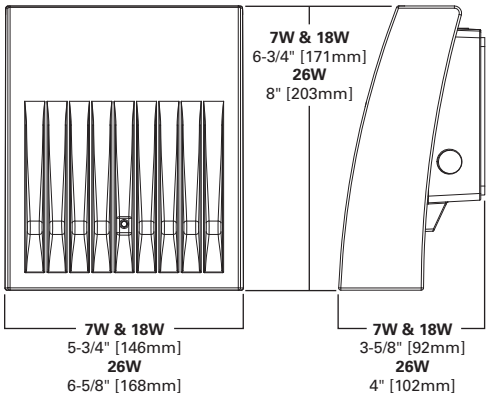
Warranty

Five-year warranty.

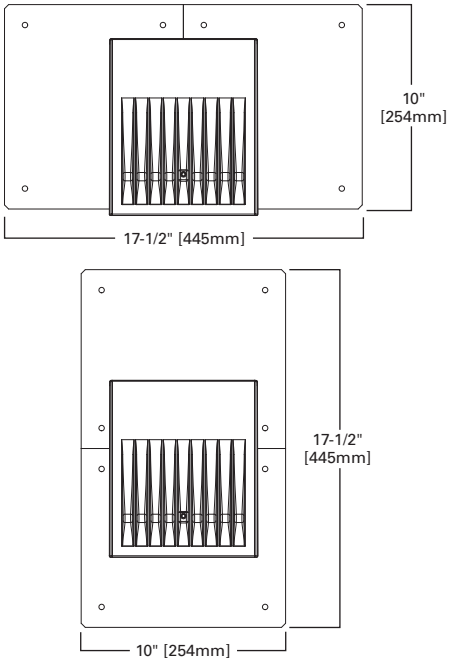
XTOR
CROSSTOUR LED

APPLICATIONS:
WALL / SURFACE
POST / BOLLARD
LOW LEVEL
FLOODLIGHT
INVERTED
SITE LIGHTING

DIMENSIONS



ESCUTCHEON PLATES



CERTIFICATION DATA

UL/cUL Wet Location Listed
LM79 / LM80 Compliant
ROHS Compliant
ADA Compliant
NOM Compliant Models
IP66 Ingressed Protection Rated
Title 24 Compliant
DesignLights Consortium® Qualified*

TECHNICAL DATA

40°C Maximum Ambient Temperature
External Supply Wiring 90°C Minimum

EPA

Effective Projected Area (Sq. Ft.):
XTOR1A/XT0R2A=0.34
XTOR3A=0.45

SHIPPING DATA:

Approximate Net Weight:
3.7 – 5.25 lbs. [1.7 – 2.4 kgs.]

*www.designlights.org

LUMEN MAINTENANCE

Ambient Temperature	TM-21 Lumen Maintenance (72,000 Hours)	Theoretical L70 (Hours)
XTOR1A Model		
25°C	> 92%	> 290,000
40°C	> 92%	> 290,000
50°C	> 91%	> 270,000
XTOR2A Model		
25°C	> 91%	> 270,000
40°C	> 90%	> 260,000
50°C	> 88%	> 225,000
XTOR3A Model		
25°C	> 91%	> 280,000
40°C	> 91%	> 270,000
50°C	> 89%	> 240,000

LUMENS - CRI/CCT TABLE

LED Information	XTOR1A	XTOR2A	XTOR2A-N	XTOR3A	XTOR3A-N
Delivered Lumens (Wall Mount)	722	1,633	1,523	2,804	2,284
Delivered Lumens (With Flood Accessory Kit) [1]	468	1,060	978	2,168	1,738
B.U.G. Rating [2]	B0-U0-G0	B1-U0-G0	B1-U0-G0	B1-U0-G0	B1-U0-G0
CCT (Kelvin)	5,000	5,000	3,500	5,000	3,500
CRI (Color Rendering Index)	65	65	70	65	70
Power Consumption (Watts)	7W	18W	18W	26W	26W

NOTES: 1 Includes shield and visor. **2** B.U.G. Rating does not apply to floodlighting.

CURRENT DRAW

Voltage	Model Series		
	XTOR1A	XTOR2A	XTOR3A
120V	0.05A	0.15A	0.22A
208V	0.03A	0.08A	0.13A
240V	0.03A	0.07A	0.11A
277V	0.03A	0.06A	0.10A
347V	0.025A	0.058A	0.082A

dawn to dusk operation

ORDERING INFORMATION

Sample Number: XTOR2A-N-WT-PC1

Series [1]	**LED Kelvin Color**	**Housing Color**	**Options** (Add as Suffix)	**Accessories** (Order Separately)
XTOR1A=Small Door, 7W **XTOR2A**=Small Door, 18W **XTOR3A**=Small Door, 26W	**[Blank]**=Bright White (Standard) 5000K **N**=Neutral Warm White, 3500K [2]	**[Blank]**=Carbon Bronze (Standard) **WT**=Summit White	**PC1**=Photocontrol 120V [3] **PC2**=Photocontrol 208-277V [3,4] **347V**=347V [5] **HA**=50°C High Ambient [5]	**WG/XTOR**=Wire Guard [6] **XTORFLD-KNC**=Knuckle Floodlight Kit [7] **XTORFLD-TRN**=Trunnion Floodlight Kit [7] **XTORFLD-KNC-WT**=Knuckle Floodlight Kit, Summit White [7] **XTORFLD-TRN-WT**=Trunnion Floodlight Kit, Summit White [7] **EWP/XTOR**=Escutcheon Wall Plate, Carbon Bronze **EWP/XTOR-WT**=Escutcheon Wall Plate, Summit White

NOTES: 1 DesignLights Consortium® Qualified. Refer to www.designlights.org Qualified Products List under Family Models for details. **2** XTOR1A not available in 3500K. **3** Photocontrols are factory installed. **4** Order PC2 for 347V models. **5** Thru-branch wiring not available with HA option or with 347V. **6** Wire guard for wall/surface mount. Not for use with floodlight kit accessory. **7** Floodlight kit accessory supplied with knuckle (KNC) or trunnion (TRN) base, small and large top visors and small and large impact shields.

STOCK ORDERING INFORMATION

7W Series	18W Series	26W Series
XTOR1A=7W, 5000K, Carbon Bronze	XTOR2A=18W, 5000K, Carbon Bronze	XTOR3A=26W, 5000K, Carbon Bronze
XTOR1A-WT=7W, 5000K, Summit White	XTOR2A-N=18W, 3500K, Carbon Bronze	XTOR3A-N=26W, 3500K, Carbon Bronze
XTOR1A-PC1=7W, 5000K, 120V PC, Carbon Bronze	XTOR2A-WT=18W, Summit White	XTOR3A-WT=26W, Summit White
	XTOR2A-PC1=18W, 120V PC, Carbon Bronze	XTOR3A-PC1=26W, 120V PC, Carbon Bronze

5-DAY QUICK SHIP ORDERING INFORMATION

7W Series	18W Series	26W Series
XTOR1A-WT-PC1=7W, 5000K, Summit White, 120V PC	XTOR2A-PC2=18W, 5000K, 208-277V PC, Carbon Bronze	XTOR3A-PC2=26W, 5000K, 208-277V PC, Carbon Bronze
	XTOR2A-WT-PC1=18W, 5000K, Summit White, 120V PC	XTOR3A-WT-PC1=26W, 5000K, Summit White, 120V PC
	XTOR2A-WT-PC2=18W, 5000K, Summit White, 208-277V PC	XTOR3A-WT-PC2=26W, 5000K, Summit White, 208-277V PC
	XTOR2A-N-WT=18W, 3500K, Summit White	XTOR3A-N-WT=26W, 3500K, Summit White
	XTOR2A-N-PC1=18W, 3500K, 120V PC, Carbon Bronze	XTOR3A-N-PC1=26W, 3500K, 120V PC, Carbon Bronze
	XTOR2A-N-PC2=18W, 3500K, 208-277V PC, Carbon Bronze	XTOR3A-N-PC2=26W, 3500K, 208-277V PC, Carbon Bronze
	XTOR2A-N-WHT-PC1=18W, 3500K, Summit White, 120V PC	XTOR3A-N-WHT-PC1=26W, 3500K, Summit White, 120V PC
	XTOR2A-N-WT-PC2=18W, 3500K, Summit White, 208-277V PC	XTOR3A-N-WT-PC2=26W, 3500K, Summit White, 208-277V PC

ID+ 4.5"

LED DOWNLIGHT

TYPE EXT3

FOCAL POINT®


clear diffuse


warm diffuse


white painted flange

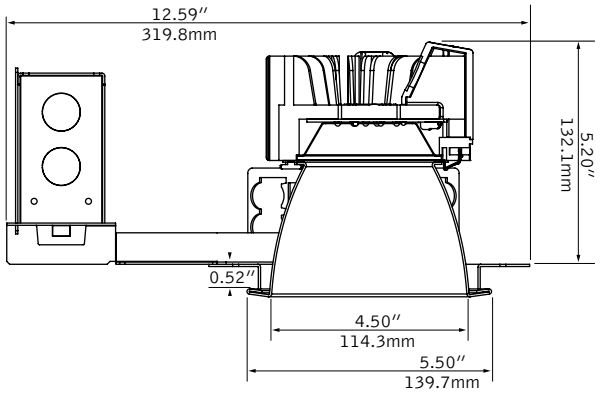

black reflector


white reflector

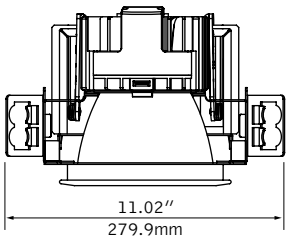

trimless companion

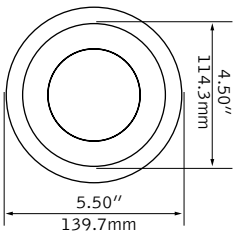
DIMENSIONAL DATA

Downlight



Trim





FEATURES

ChromaSure: Color consistency resulting in a 2-step MacAdam ellipse across the entire ID+ product line.

Field adjustability of ceiling thickness from 0.5" - 2.5".

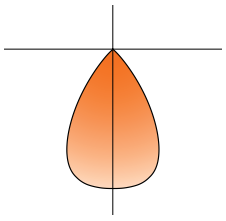
Shallow housing.

50° cutoff to light source and its image.

Selection of dimming drivers available.

Right Light: Standard delivered lumen outputs 1000, 1500, 2000, 2500, and 3000.

PERFORMANCE



Clear Diffuse Reflector
3500k

Delivered Lumens: 2000lm

Total System Watts: 26W

PRODUCT OVERVIEW

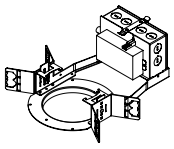
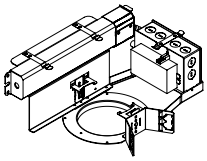
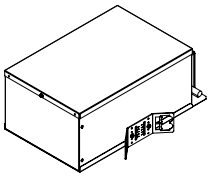
Lumen Output:	1000-3000lm
Wattage:	12-45W
LPW:	66-81
Spacing Criteria:	1.01-1.02
SDCM:	2
Lumen Maintenance:	L70 @ 63,000hrs

ENERGY STAR

Photometric performance is measured in accordance with IESNA LM-79.
Visit focalpointlights.com for complete photometric data. Visit energystar.gov for model specifics.

fixture: project:

HOUSING DETAILS

Standard	Emergency Battery	Chicago Plenum
		
L x W x H 12.59" x 11.02" x 5.20"	L x W x H 16.21" x 11.21" x 6.02"	**Standard** L x W x H 16.85" x 11.45" x 6.13" **Emergency** L x W x H 16.85" x 12.95" x 6.13"

HOUSING SPECIFICATIONS

Construction

Thermally protected housing for new construction applications. Insulation to be kept 3" away from housing. Butterfly brackets allow mounting to ½ emt. Order bar hangers as an accessory. Die-cast aluminum heat sink designed for maximum thermal dissipation. Die-formed housing and integral junction box with (7) 1/2" pry outs. UL & cUL listed for (6) #14 AWG (3 in, 3 out) 90°C conductors and feed through–branch wiring. Accommodates ceiling thicknesses up to 0.5" standard, field adjustable up to 2.5" thickness. For thicker ceiling consult factory. Order TZB option for TechZone compatible housing brackets. Fixture will not exceed 5 lb.

Electrical

Choice of constant current dimming drivers. Power factor > .9 typical.

Emergency

Emergency Battery Pack: Bodine BSL17C–C2. Emergency output —7W for 90 minutes. Maximum mounting height: 23.3ft. (Black reflector color: 18.1ft.)

Labels

UL and cUL listed. Suitable for Dry or Damp Locations, indoor use only. Specify wet listed (WL) for recessed ceiling applications in indoor and outdoor locations. Lutron Drivers not recommended for outdoor environments below 0˚C.

Lumen Maintenance

Reported: L70 at >63,000 hours
Derived from EPA TM-21 calculator

Warranty

LED System rated for operation in ambient environments up to 25°C. 5-year limited warranty.

TRIM & LED SPECIFICATIONS

LED System

Proprietary array incorporates premium LEDs on a robust platform. May be specified in 2700K, 3000K, 3500K or 4000K, CRI>80. Color accuracy within 2 SDCM. Aluminum heat sink provides appropriate thermal management.

Aesthetics

Parabolic reflector cone ensures glare free optics. Reflector is .050 spun aluminum. Torsion springs pull trim tight to the ceiling with no visible fasteners within the trim. Trims are self-flanged. Non-painted trim matches reflector finish. White painted flange may also be specified.

Optics

50-degree cut–off to light source and its image.

PERFORMANCE CHART

Delivered Lumens	System Watts	LPW
1000	12	81
1500**	19	78
2000**	26	76
2500	36	70
3000	45	66

*Based on 3000/3500K. Clear Diffuse reflector cone. 80CRI Multipliers: 2700K: 0.94, 4000K: 0.1.06. 90CRI Multipliers: 2700K: 0.71, 3000/3500K: 0.83, 4000K: 0.89. Black Multiplier: 0.56. White Multiplier: 1.13. Lumen output may vary +/- 5%. Actual wattage may vary +/- 5%. **LU5 output: 1500L=1250lm, 2000L=1800lm.

HOUSING ORDERING

Housing Series		FLC4D
ID+ 4.5" Round Downlight	FLC4D	
Trim Type		RO
Round Overlap (Click to view trimless cutsheet)	RO	
Lumen Output		
1000 Lumens	1000L	
1500 Lumens	1500L	
2000 Lumens	2000L	
2500 Lumens	2500L	
3000 Lumens	3000L	
Voltage		
120V	120	
277V**	277	
Driver		
0-10V - 1% Dimming (Not available with 1000L)	L11	
0-10V - 10% Dimming	LD1	
Lutron A-Series - 1% EcoSystem Digital (Consult factory for 3-wire control)	L3D	
Lutron H-Series - 1% Dimming	LH1	
Lutron 5-Series - 5% EcoSystem Digital (Not available with 1000L & 3000L)	LU5	
DALI - 1% Dimming	D11	
DMX - 3-Channel, 0% Dimming	MZ3	
Housing Type		T
Thermally Protected, Non-IC	T	
Factory Options		
Bar Hangers	BH	
Chicago Plenum / National Plenum	CP	
Emergency Battery (Must order LC4EM trim)	EM	
TechZone Brackets	TZB	

TRIM & LED MODULE

Aperture		
4.5" Round Reflector	LC4	
4.5" Round Reflector - Emergency (Required for "EM" option)	LC4EM	
Trim Type		RD
Round	RD	
Lumen Output (Trim & Housing output must match)		
1000 Lumens	1000L	
1500 Lumens	1500L	
2000 Lumens	2000L	
2500 Lumens	2500L	
3000 Lumens	3000L	
Color Temperature		
2700K	27K	
2700K, 90CRI	927K	
3000K	30K	
3000K, 90CRI	930K	
3500K	35K	
3500K, 90CRI	935K	
4000K	40K	
4000K, 90CRI	940K	
Optic		DN
Downlight	DN	
Color		
Clear Diffuse	CD	
Warm Diffuse	WD	
Black (Black Painted flange only)	BK	
White (White Painted flange only)	WH	
Flange Finish		
Non-Painted (Clear and warm diffuse only)	NP	
Black Painted	BP	
White Painted	WP	
Factory Options		
Wet Listed (Not available with 90CRI)	WL	

QS 5 DAY*

*For more information visit focalpointlights.com/reference or consult factory. **1500 and 2000 lumen outputs add 2 watts to system wattage. Quickship is a limited offering, visit focalpointlights.com/quickship for specifics.

TYPE XEM

COOPER LIGHTING - SURE-LITES®

DESCRIPTION

The All Pro Series is the most economical LED combo (including LED emergency light heads) for general purpose applications. The durable, injection molded, thermoplastic material resists discoloration due to UV radiation and the energy efficient, low maintenance LEDs provide bright illumination. All AP series combos offer universal configurations (single and double face) and have universal mounting capability (ceiling, wall, end).

Catalog #		**Type**
Project		
Comments		**Date**
Prepared by		

SPECIFICATION FEATURES

Electrical
- Dual Voltage Input 120/277 VAC, 60Hz
- Line-latching
- Solid-State Voltage Limited Charger
- Solid-State Switching
- Brownout Protection
- Low Voltage Disconnect
- Overload/Short Circuit Protection
- Test Switch / Power Indicator Light
- High Power Combo available capable of running two additional LED remote heads
- 3.6V, .78W DC long Lasting LED Heads

Housing Construction
- All components are injection molded, color stable, high impact thermoplastic material
- Designer white textured finish standard
- Components are of snap-fit construction to facilitate under 5-minute installation
- Reinforcing ribs throughout to provide maximum strength
- Molded-in wireways facilitate internal wire routing and connections
- All components including battery and electronics are located inside the exit housing
- Snap-out or snap-in chevron directional indicators have full 3/4" stroke
- Universal exits can be field configured as single face or double face
- Snap-fit canopy with captive mounting screws included with all exits
- Exit can be ceiling, wall, or end mounted
- Universal J-box mounting pattern
- Operating temperature range 10C to 40C

Battery
- Sealed Nickel Cadmium
- Maintenance Free, Long Life
- Standard Recharge Time: 24 hrs (max.)

Code Compliance
- UL 924 Listed
- UL Damp Location Listed
- Life Safety NFPA 101
- NEC/OSHA
- Most State and Local Codes

Lamp Data
- AC LED: Long life LED lamps provide uniform diffused illumination
- DC: LED DC lamps (Brighter in emergency mode)
- Heads DC: 3.6V, .78W Long Life LED Heads Light Output Equivalent to 5.4W Incandescent

Warranty
- Five-year warranty

APC / APCH SERIES EXITS WITH LED HEADS COMBO

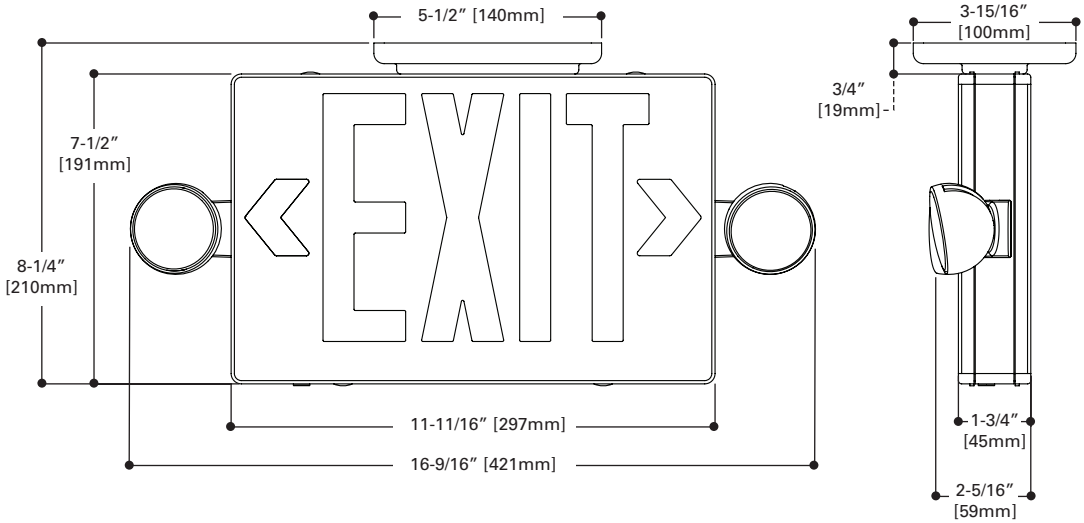
THERMOPLASTIC

SELF POWERED

EXIT / EMERGENCY WITH DOUBLE HEADS

LED LAMPS

TOTALLY PREDICTABLE RELIABILITY.



ENERGY DATA

Maximum power consumption under all charge conditions:

Combo LED Exits - Red
Input Power:
120V = 1.31W
277V = 1.68W
Input Current (Max.):
120V = .09A
277V - .09A
Power Factor:
120V = >.12
277V = >.07

Combo LED Exits - Green
Input Power:
120V = 1.55W
277V = 1.45W
Input Current (Max.):
120V = .09A
277V = .09A
Power Factor:
120V = >.14
277V = >.06

Combo High Power LED Exits - Red
Input Power:
120V = 2.34W
277V = 1.62W
Input Current (Max.):
120V = .14A
277V - .10A
Power Factor:
120V = >.14
277V = >.06

Combo High Power LED Exits - Green
Input Power:
120V = 2.8W
277V = 2.1W
Input Current (Max.):
120V = .10A
277V = .10A
Power Factor:
120V = >.20
277V = >.07

COOPER Lighting
www.cooperlighting.com

Specifications and dimensions subject to change without notice.
Consult your representative for additional options and finishes.

ORDERING INFORMATION

SAMPLE NUMBER: APC7R

Family
APC7 = Self-Powered with LED All Pro Exit/Emergency with LED Heads
APCH7 = Self-Powered with LED All Pro Exit/Emergency with LED Heads, High Power with remote capability

Face Options
__ = Universal

Letter Colors
R = Red
G = Green

TECHNICAL DATA

Lamps
The AP Series Exits with Heads use energy efficient, long life LED's to provide uniform diffuse illumination of the exit face. The low operating costs and zero maintenance requirement makes LED lamps the wisest choice for exit signs today. Emergency exit illumination is provided by LED lamps and the heads employ 3.6V, .78W DC Long Lasting LED Heads.

Housing Construction
Rugged, durable, injection molded thermoplastic materials are used throughout the AP Series Exits with Heads. All structural components are designed with reinforcing ribs to add additional rigidity and to maximize structural integrity. These materials are impact and scratch resistant, and they have been UV stabilized to resist discoloration due to age and ultraviolet radiation. All components are designed to be of snap-fit construction - no mechanical fasteners - to facilitate installation in under 5-minutes. Any components required for installation (wirenuts, wire leads, universal metal J-box bracket, etc.) are all included with each exit. The universal design of the AP Series Exits with Heads enables universal exits to be configured as single face or double face in the field. The AP Series Exits with Heads can be wall, ceiling, or end mounted; a rugged, snap-fit, low profile canopy with captive screws is included with every exit for ceiling and end mounting applications.

Lens
Lenses for the AP Series Exits with Heads are made from durable impact resistant thermoplastic. All exit faces are designed with full 3/4" stroke snap-out or snap-in chevron directional indicators to insure maximum visibility and compliance with the latest codes.

Line-Latched
All Pro's line-latched electronic circuitry makes installation easy and economical. A labor efficient AC activated load switch prevents the lamps from turning on during installation to a non-energized AC circuit. Line-latching eliminates the need for a contractor's return to a job site to connect the batteries when the building's main power is turned on.

Solid-State Charger
Supplied with a 120/277 VAC, voltage regulated solid-state charger. Immediately upon restoration of AC current after a power failure, the charger provides a high charge rate. The charge circuit reacts to the condition of the battery and regulates the charging process in order to maintain peak battery capacity and maximize battery life. Solid-state construction recharges the battery following a power failure in accordance with UL 924.

Brownout Circuit
The brownout circuit on All Pro's exits monitors the flow of AC current to the exit and activates the emergency lighting system when a predetermined reduction of AC power occurs. This dip in voltage will cause most ballasted fixtures to extinguish causing loss of normal lighting even though a total power failure has not occurred.

Solid-State Transfer
The AP Series Exits with Heads incorporates solid-state switching which eliminates corroded and pitted contacts or mechanical failures associated with relays. The switching circuit is designed to detect a loss of AC voltage and automatically energizes the lamps using DC power. Upon restoration of AC power, the DC power will be disconnected and the charger will automatically recharge the battery.

Low Voltage Disconnect
When the battery's terminal voltage falls, the low voltage circuitry disconnects the lighting load. The disconnect remains in effect until normal utility power is restored, preventing deep battery discharge.

Test Switch/Power Indicator Light
A test switch located on the bottom of the exit permits the activation of the emergency circuit for a complete operational systems check. The Power Indicator Light provides visual assurance that the AC power is on.

Overload and Short Circuit Protection
The solid-state overload monitoring device in the DC circuit disconnects the lamp load from the battery should excessive wattage demands be made and automatically resets when the overload or short circuit is removed. This overload current protective feature eliminates the need for fuses or circuit breakers for the DC load.

Sealed Nickel Cadmium Battery
All Pro Emergency sealed nickel cadmium batteries are maintenance-free with a life expectancy of 15 years. The sealed rechargable nickel cadmium battery offers high discharge rates and stable performance over a wide range of temperatures. The specially designed resealable vent automatically controls cell pressure, assuring safety and reliability. This battery is best suited for harsh ambient temperatures because the electrolyte is not active in the electrochemical process.

Warranty
All Pro products are backed by a five-year warranty.

Sure-Lites • Customer First Center • 1121 Highway 74 South • Peachtree City, GA 30269 • TEL 770.486.4800 • FAX 770.486.4801

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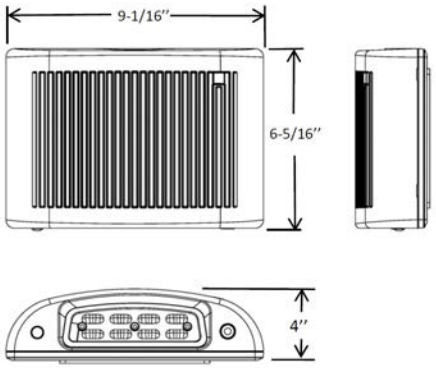
MERU Series

LED GENERAL & EMERGENCY LIGHTING

PROJECT:
FIXTURE TYPE: TYPE EXT4
LOCATION:
CONTACT/PHONE:

PRODUCT DESCRIPTION

The MERU Series is an architectural, low-profile outdoor light, offering "normally On" AC and emergency lighting with powerful LED illumination. The housing is fully sealed and gasketed, and has an IP65 rating. Designed for wall mounting with universal K/O pattern in back-plate for easy installation to most standard size junction boxes. Includes a single ½" NPT conduit entry in the top, center of the housing. Illumination provided by 8 high power LEDs which achieve 1,600 lumens in AC and 600 lumens in emergency. LED color at 3000K.



PRODUCT SPECIFICATIONS

CONSTRUCTION

Die cast aluminum housing with superior heat sink • Scratch resistant Polyester powder coat finish • UV resistant polycarbonate lens • Snap-fit housing and mounting plate are held together by four stainless steel clips • Universal mounting pattern molded into the back plate • 1/2" threaded top access for surface conduit installation • Silicone rubber seal with hollow center, shape adaptive design protects the electrical components • Junction box neoprene seal is attached to the back plate for a weather proof installation • Dark Bronze or White textured finish.

ELECTRICAL

Dual voltage 120/277VAC 60Hz input • Solid state charging and switching • Battery low voltage disconnect • AC power indicator and test switch at the bottom of the unit • Standard with Self Diagnostics to monitor proper operation.

LAMPS

Supplied with eight (8) LG SMD 3000K LED'S • L70 > 72,000hours • 17 Watts total (32 Watts with IH option) • 1600 Lumens in AC mode, 600 Lumens in Emergency mode • Full cut-off optics for Dark Sky compliance

BATTERY

Maintenance-free, long-life rechargeable NiCad battery will operate fixture for a minimum of 90 minutes in the event of a power outage • 24 hour recharge after 90 minute discharge.

CODE COMPLIANCE

UL924 • Listed for wet location applications (0˚C-50˚C) • Optional "IH" cold weather package for (-40˚C-50˚C) • IP65 Rated • NFPA 101 Life Safety Code compliant • NEC and OSHA compliant • DLC Listed • RoHS Compliant

WARRANTY

5-year warranty. Product specifications subject to change without notice.

ACEM Model (NiCad Battery Backup)

Integral photocell: Unit operates as a dusk to dawn luminaire and in the event of a power failure as an emergency light.
Remote Switched: The integral photocell can be defeated to allow remote switching for normal operation. In the event of a power failure unit operates as an emergency light.

INSTALLATION

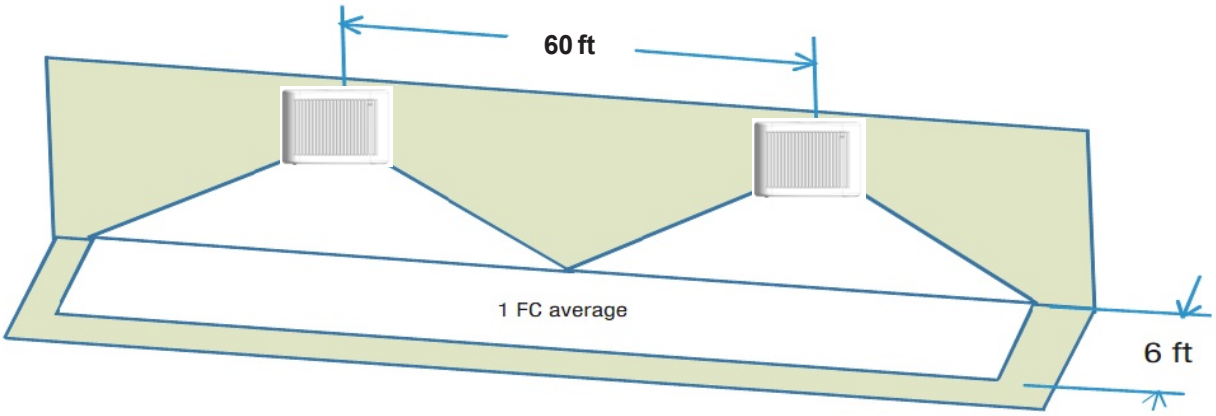
MOUNTING

Suitable for indoor or outdoor wall mounting on junction box, or with surface conduit using the supplied 1/2" threaded top access • Mounting plate has molded universal mounting pattern for simple mounting over junction box.

ORDERING INFORMATION

model	operation mode	housing color	options
MERU-LED	ACEM = General & Emergency Lighting	DB = Dark Bronze	*Self-Diagnostics & Photocell* *(Included Standard)*
	AC = General Lighting	WH = White	IH = Internal Heater
		BK = Black *(non-stock, special order)*	PIR = Passive Infra-Red Motion Sensor
Ordering Example: MERU-ACEM-DB		NK = Nickel *(non-stock, special order)*	

PHOTOMETRICS



Note: Meets Life Safety Code standard minimum illuminance of 0.1 FC and average illuminance of 1.0 FC.
Illustration shown is a guideline for corridor center-to-center with 9 ft mounting height and Minimum 80-50-20 reflectance values.

Mounting Height	Center to center distance
7.2ft	45ft
9ft	60ft
10ft	65ft

SELF DIAGNOSTICS

Included Self Diagnostic

Diagnostic Indicator / Test Switch

- Ready
- In Test
- Battery Circuit Fault
- Battery Capacity Failure
- Charger Failure
- Transformer Fault
- Lamp Failure

Manual Testing

Press button once - 1 minute test
Press button twice - 5 minute test
Press button 3 times - 30 minute test
Press button 4 times - 90 minute test

Full self-test, self-diagnostic system is standard in every unit, performs a monthly, test as well as continuously monitoring all functions to ensure reliability, a manual test may be initiated at any time

McGraw-Edison

DESCRIPTION

The Galleon™ LED luminaire delivers exceptional performance in a highly scalable, low-profile design. Patented, high-efficiency AccuLED Optics™ system provides uniform and energy conscious illumination to walkways, parking lots, roadways, building areas and security lighting applications. IP66 rated and UL/cUL Listed for wet locations.

Catalog #		**Type**
Project		
Comments		**Date**
Prepared by		

SPECIFICATION FEATURES

Construction
Extruded aluminum driver enclosure thermally isolated from Light Squares for optimal thermal performance. Heavy-wall, die-cast aluminum end caps enclose housing and die-cast aluminum heat sinks. A unique, patent pending interlocking housing and heat sink provides scalability with superior structural rigidity. 3G vibration tested and rated. Optional tool-less hardware available for ease of entry into electrical chamber. Housing is IP66 rated.

Optics
Patented, high-efficiency injection-molded AccuLED Optics technology. Optics are precisely designed to shape the distribution maximizing efficiency and application spacing. AccuLED Optics create consistent distributions with the scalability to meet customized application requirements. Offered standard in 4000K (+/- 275K) CCT 70 CRI. Optional 3000K, 5000K and 6000K CCT.

Electrical
LED drivers are mounted to removable tray assembly for ease of maintenance. 120-277V 50/60Hz, 347V 60Hz or 480V 60Hz operation. 480V is compatible for use with 480V Wye systems only. Standard with 0-10V dimming. Shipped standard with Eaton proprietary circuit module designed to withstand 10kV of transient line surge. The Galleon LED luminaire is suitable for operation in -40°C to 40°C ambient environments. For applications with ambient temperatures exceeding 40°C, specify the HA (High Ambient) option. Light Squares are IP66 rated. Greater than 90% lumen maintenance expected at 60,000 hours. Available in standard 1A drive current and optional 600mA, 800mA and 1200mA drive currents (nominal).

Mounting
STANDARD ARM MOUNT: Extruded aluminum arm includes internal bolt guides allowing for easy positioning of fixture during mounting. When mounting two or more luminaires at 90° and 120° apart, the EA extended arm may be required. Refer to the arm mounting requirement table. Round pole adapter included. For wall mounting, specify wall mount bracket option. QUICK MOUNT ARM: Adapter is bolted directly to the pole. Quick mount arm slide into place on the adapter and is secured via two screws, facilitating quick and easy installation. The versatile, patent pending, quick mount arm accommodates multiple drill patterns ranging from 1-1/2" to 4-7/8". Removal of the door on the quick mount arm enables wiring of the fixture without having to access the driver compartment. A knock-out enables round pole mounting.

Finish
Housing finished in super durable TGIC polyester powder coat paint, 2.5 mil nominal thickness for superior protection against fade and wear. Heat sink is powder coated black. Standard housing colors include black, bronze, grey, white, dark platinum and graphite metallic. RAL and custom color matches available.

Warranty
Five-year warranty.

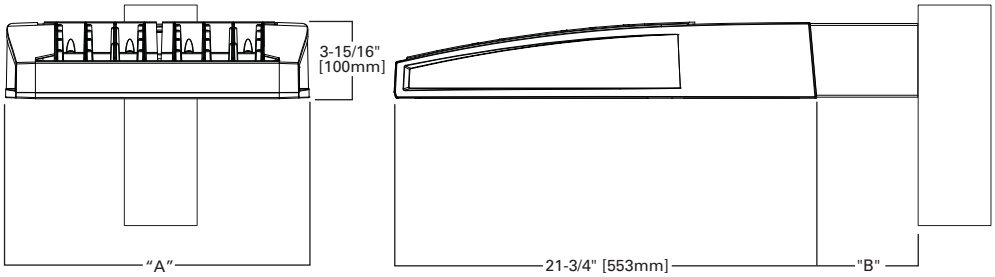
GLEON
GALLEON LED

1-10 Light Squares

Solid State LED

AREA/SITE LUMINAIRE

DIMENSIONS



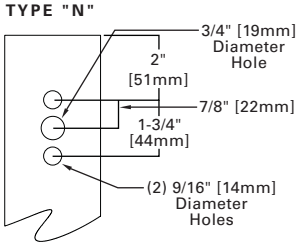
DIMENSION DATA

Number of Light Squares	"A" Width	"B" Standard Arm Length	"B" Optional Arm Length [1]	Weight with Arm (lbs.)	EPA with Arm [2] (Sq. Ft.)
1-4	15-1/2" (394mm)	7" (178mm)	10" (254mm)	33 (15.0 kgs.)	0.96
5-6	21-5/8" (549mm)	7" (178mm)	10" (254mm)	44 (20.0 kgs.)	1.00
7-8	27-5/8" (702mm)	7" (178mm)	13" (330mm)	54 (24.5 kgs.)	1.07
9-10	33-3/4" (857mm)	7" (178mm)	16" (406mm)	63 (28.6 kgs.)	1.12

NOTES: 1. Optional arm length to be used when mounting two fixtures at 90° on a single pole. **2.** EPA calculated with optional arm length.

DRILLING PATTERN

TYPE "N"



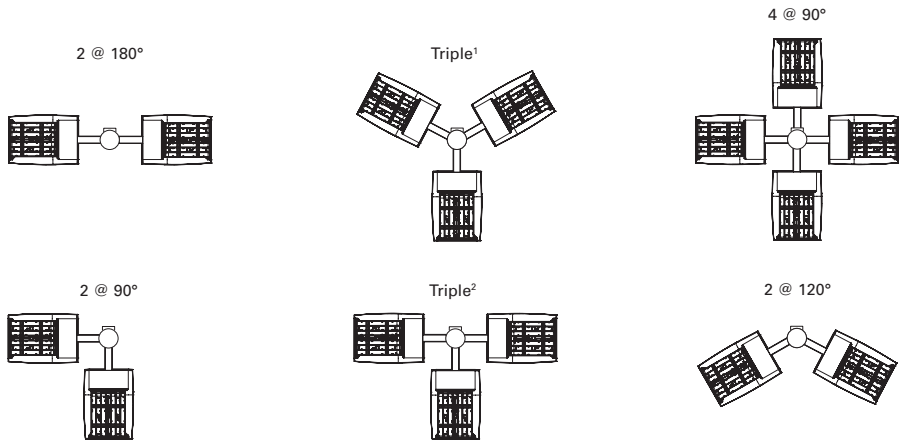
CERTIFICATION DATA
UL/cUL Wet Location Listed
ISO 9001
LM79 / LM80 Compliant
3G Vibration Rated
IP66 Rated
DesignLights Consortium™ Qualified*

ENERGY DATA
Electronic LED Driver
>0.9 Power Factor
<20% Total Harmonic Distortion
120V-277V 50/60Hz
347V & 480V 60Hz
-40°C Min. Temperature
40°C Max. Temperature
50°C Max. Temperature (HA Option)

*www.designlights.org

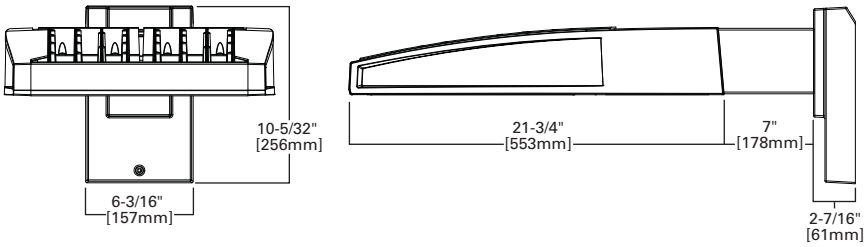
ARM MOUNTING REQUIREMENTS

Configuration	90° Apart	120° Apart
GLEON-AF-01	7" Arm (Standard)	7" Arm (Standard)
GLEON-AF-02	7" Arm (Standard)	7" Arm (Standard)
GLEON-AF-03	7" Arm (Standard)	7" Arm (Standard)
GLEON-AF-04	7" Arm (Standard)	7" Arm (Standard)
GLEON-AF-05	10" Extended Arm (Required)	7" Arm (Standard)
GLEON-AF-06	10" Extended Arm (Required)	7" Arm (Standard)
GLEON-AF-07	13" Extended Arm (Required)	13" Extended Arm (Required)
GLEON-AF-08	13" Extended Arm (Required)	13" Extended Arm (Required)
GLEON-AF-09	16" Extended Arm (Required)	16" Extended Arm (Required)
GLEON-AF-10	16" Extended Arm (Required)	16" Extended Arm (Required)

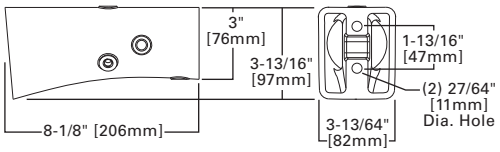


NOTES: 1 Round poles are 3 @ 120°. Square poles are 3 @ 90°. **2** Round poles are 3 @ 90°.

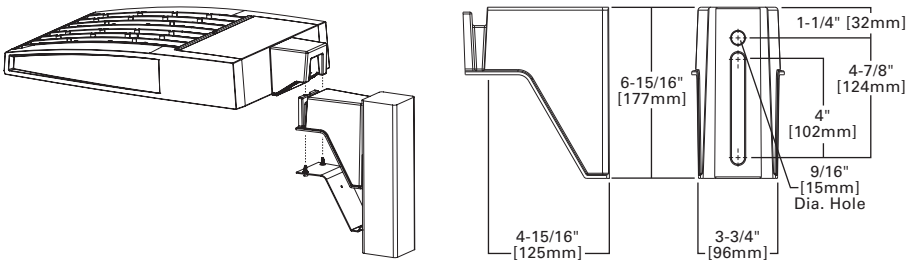
STANDARD WALL MOUNT



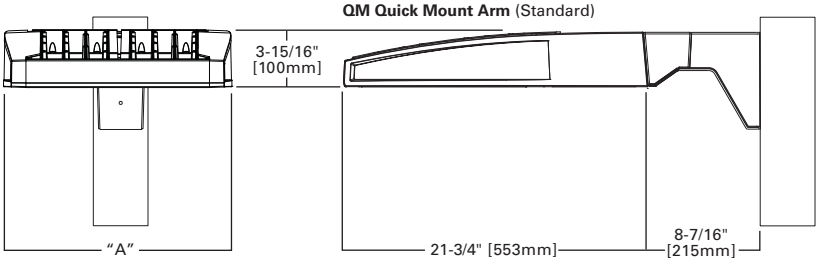
MAST ARM MOUNT



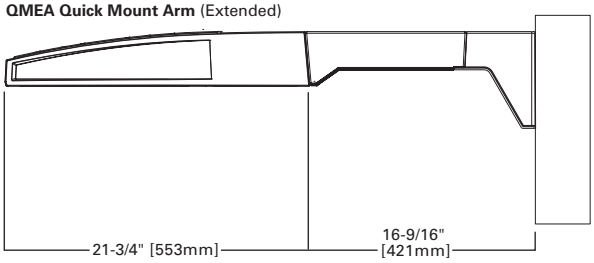
QUICK MOUNT ARM (INCLUDES FIXTURE ADAPTER)



QM Quick Mount Arm (Standard)



QMEA Quick Mount Arm (Extended)



QUICK MOUNT ARM DATA

Number of Light Squares [1,2]	"A" Width	Weight with QM Arm (lbs.)	Weight with QMEA Arm (lbs.)	EPA (Sq. Ft.)
1-4	15-1/2" (394mm)	35 (15.91 kgs.)	38 (17.27 kgs.)	1.11
5-6 [3]	21-5/8" (549mm)	46 (20.91 kgs.)	49 (22.27 kgs.)	
7-8	27-5/8" (702mm)	56 (25.45 kgs.)	59 (26.82 kgs.)	

NOTES: 1 QM option available with 1-8 light square configurations. **2** QMEA option available with 1-6 light square configurations. **3** QMEA arm to be used when mounting two fixtures at 90° on a single pole.

envisor®
screening systems

innovative

generations ahead

equipment

of the next best solution

screens

No roof penetrations, attractive, code compliant and long lasting...

Envisor® equipment screens offer architects the flexibility to create affordable, elegant, **customized screening solutions** that blend into the overall design, all with **no rooftop penetration**. Our patented roof screen system provides practical solutions for **municipal screening requirements** of HVAC units, chillers, air handlers, power exhausts, roof stacks, communication equipment - you name it!

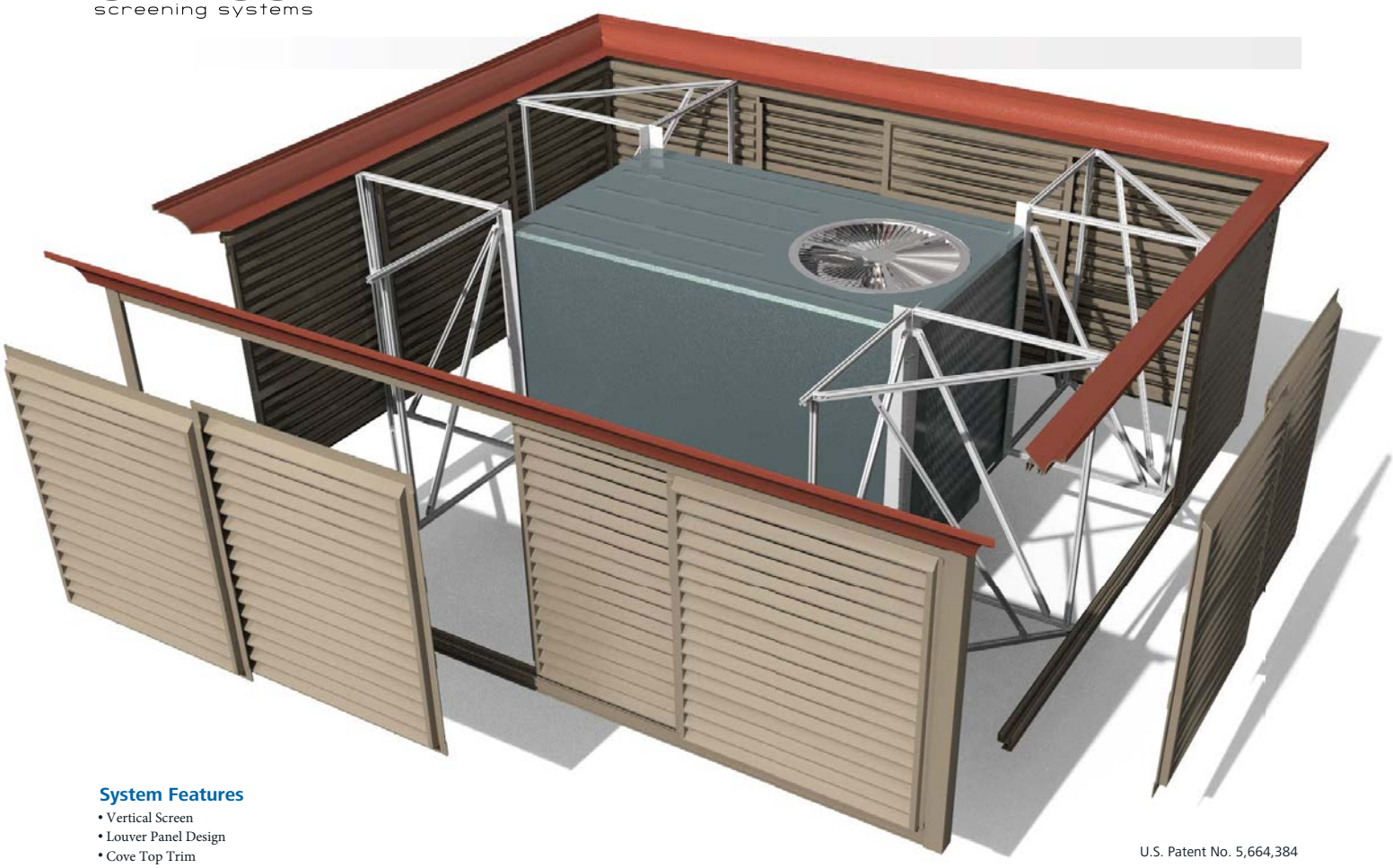
The Ohio State University Foundation - Columbus, Ohio

Customizing a screen to fit your needs is easy...

Simply choose your style, panel design, trim option and color and tell us about the units you want to screen then let our project manager take care of it from there.

52" Louver Panels

envisor
screening systems



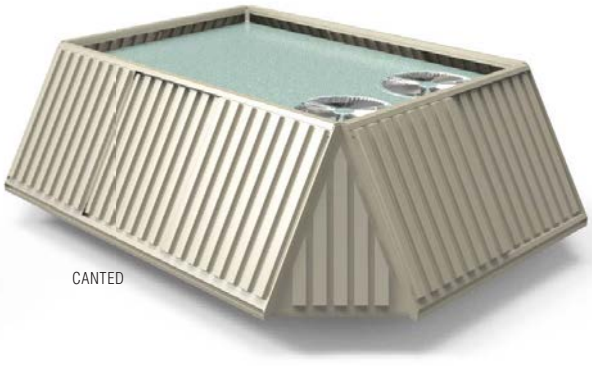
System Features

- Vertical Screen
- Louver Panel Design
- Cove Top Trim
- Panel Color: Oyster
- Top Trim Color: Terra Cotta

U.S. Patent No. 5,664,384
U.S. Patent No. 7,000,362
U.S. Patent No. 7,707,798

Step 1: Choose a Vertical or Canted System

VERTICAL



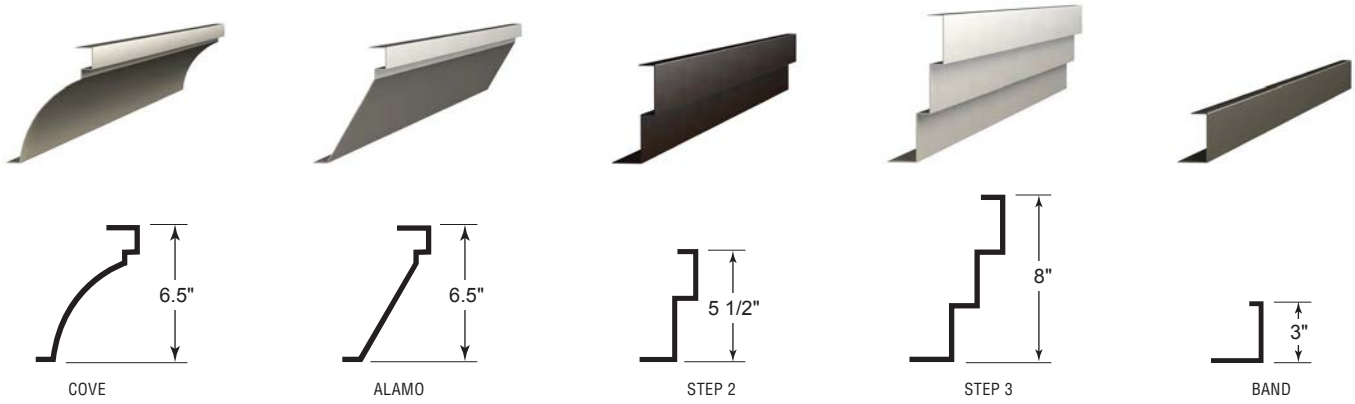
CANTED

Envisor screens are the perfect alternative to parapet walls and they satisfy even the strictest screening code requirements. Both styles feature our patented attachment method, which secure our screens directly to the equipment with no rooftop penetration. Screen heights are available to screen virtually anything you desire.

Step 2: Decide on a Panel Style

Panels are available in 5 standard styles allowing you to control the project without sacrificing the essential elements of the building design. The panels are constructed of thermoformed high impact ABS with co-extruded UV protective layer on both sides. The panels are held firmly in place using a rust-free, double tracked aluminum rail system. This enables the panels to slide side-to-side for easy access to the unit during servicing and maintenance. Don't see a panel that fits your project? Tell us and we'll make one that you design.

Step 3: Select a Top Trim (optional)



Decorative top trim options offer the flexibility to further customize the elegant appearance of the screens by **picking up on your building design elements** and incorporating those details into the screen itself. Although optional, they offer one more way to make screens part of the design, not part of the problem. We can manufacture any size and shape top trim you create.

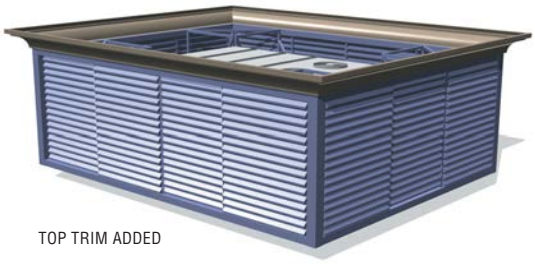
Step 4: Pick a Designer Color

ALABASTER | ALMOND | OYSTER | PUTTY | KHAKI | SAGEBRUSH

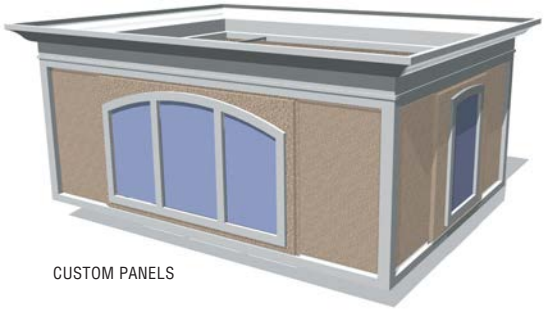
SHADOW GRAY | SLATE GRAY | RANCHERO RED | CYPRESS MOSS | FOREST GREEN | MANSARD BROWN

Our designer colors complement most architectural applications, but don't let standard colors limit your creativity. We have the ability to match to any cross-referenced color specifications. Send us samples to match. We've even matched a color to a rock! Colors are only approximate. Please call for actual samples.

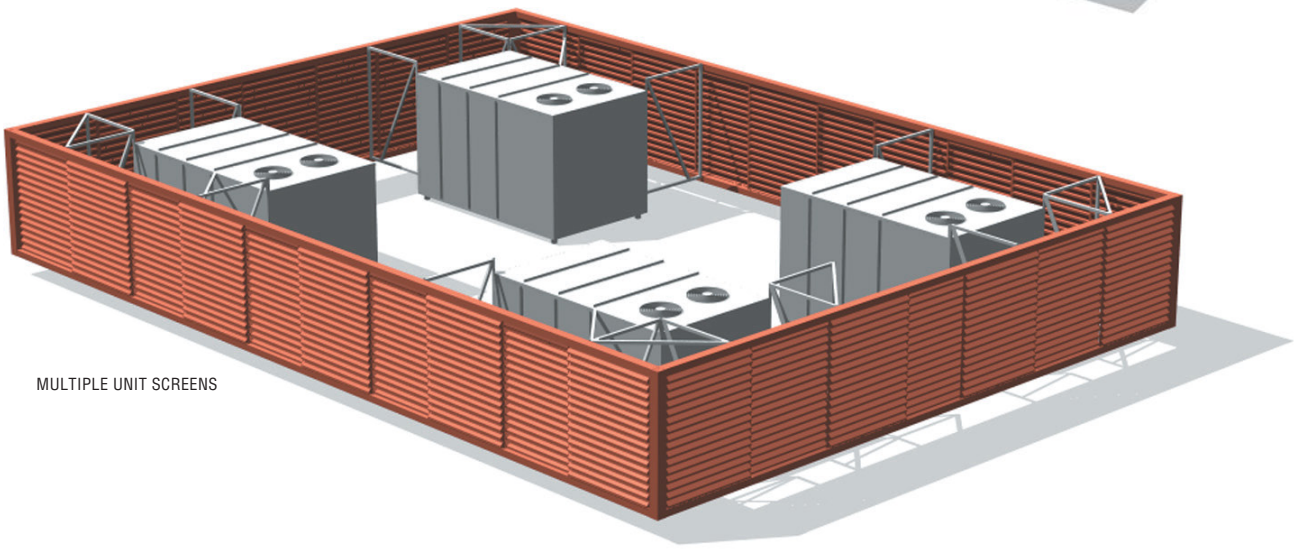
Step 5: Custom Designed Solutions



TOP TRIM ADDED



CUSTOM PANELS



MULTIPLE UNIT SCREENS

Envisor equipment screens can be manufactured in a limitless combination of shapes and configurations to help reduce cost, add to the aesthetics of a building, or both. Let us design one for you! Just tell us the equipment manufacturer, the model numbers, and the special requirements you might have. Call for a complete design kit today or visit our website at **www.cityscapesinc.com**.

envisor
screening systems

Product Features

No Rooftop Penetration

Pre-Engineered Screening System

Screening Code Solution

Attractive Alternative to Parapet Walls

Multiple Panel Designs

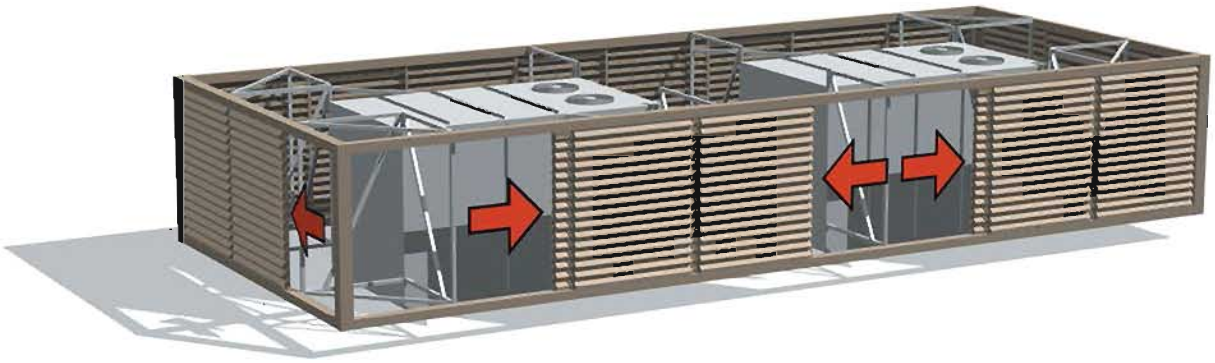
Designer Top Trim Accents

Vertical or Canted Designs

Wide Range of Designer Colors

Panels Slide for Easy Service Access

Custom Design Capabilities



Our panels are designed to slide side-to-side in either direction for easy access to the equipment for servicing and routine maintenance.

Equipment Vendors

Commercial HVAC and Chiller Equipment Vendors who have installed **Envisor** Rooftop Equipment Screens include:

Trane
Lennox
York
Carrier
Heil
AAON
Liebert
Rheem
Reznor
Hussmann
Airwise
Bryant
McQuay
BAC
Hill Phoenix
American Standard
Munters
Engineered Air

Retail Clients

Some of the clients utilizing **Envisor** Rooftop Equipment screens on their HVAC and Chiller Equipment include:

Aldi
AMC Theaters
Avis
Best Buy
Blockbuster
Costco
CVS
Hertz
Home Depot
Kohl's
Lowe's
McDonald's
Meijer
Mobil Oil
Muvico
Rite Aid
Sam's Club
Sears
Target
Walgreens
Walmart
Wendy's

envisor®
screening systems

by CityScapes International
4200 Lyman Court
Hilliard, OH 43026
Toll Free: 877.727.3367
Fax: 800.726.4817

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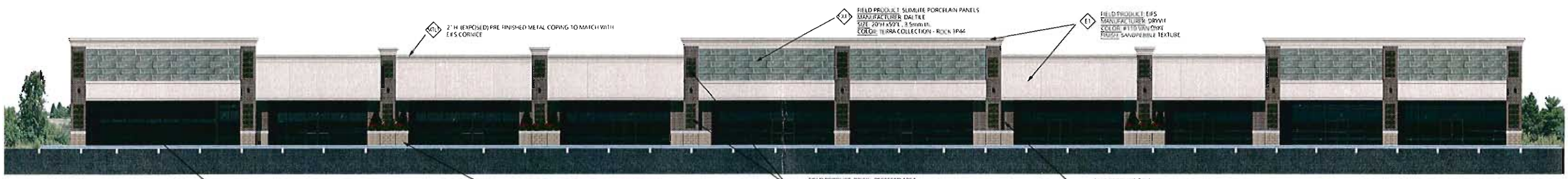
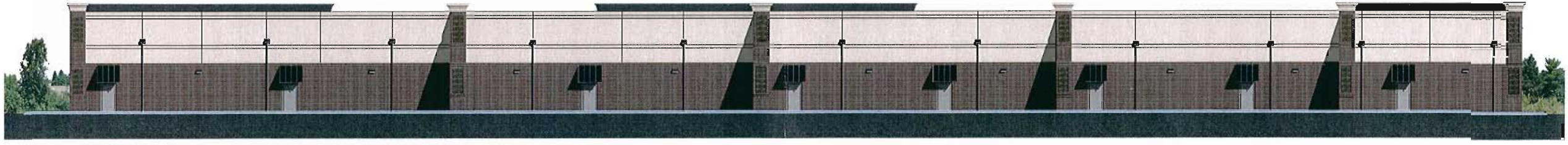
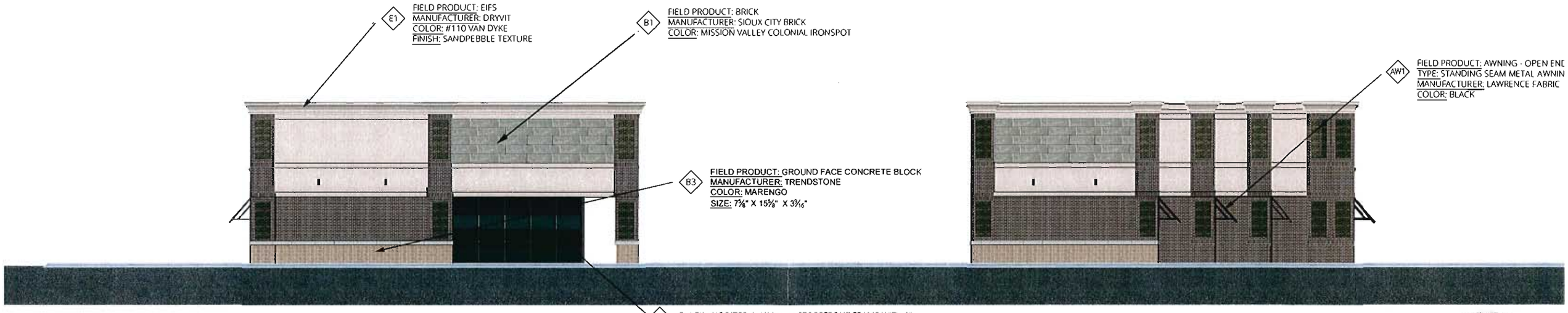


KWA

North Elevation



South Elevation



KWA ASSOCIATES, INC

West Elevation

East Elevation

STATE OF ILLINOIS
ARCHITECT

KLITZING WELSCH ASSOCIATES

08-14-17

Attn: Planning Commission and Development Reviewer
City of Chesterfield
690 Chesterfield Parkway West
Chesterfield, MO 63017
636-537-4745

RE: **Architectural Review Board – Architect's Statement of Design**
Proposed: Johnny Y commercial development
16861 Chesterfield Airport Road
Chesterfield, MO

Please accept the enclosed Architect's statement of design that portray Architectural review design standard found in Sec. 31-04-01. Johnny Y commercial development is a one level shopping center with 17,677 square foot gross leasable area with eight tenant spaces and having 80 parking spaces. The property is a long and narrow bordered on the north by I-64 and the south by Chesterfield Airport Road. The building is 385' length that is parallel to the Chesterfield Airport Road and top of parapet have a few different heights with the highest parapet will be 28'-4" high.

Section A. Applicability and compliance.
Arnold Consulting Engineering Services Inc. and Klitzing Welsch Associates have submitted plans for Site Development Package and Architectural Review Board for review by City of Chesterfield.

Section B. Submittal requirements and procedures.
Arnold Consulting Engineering Services Inc. and Klitzing Welsch Associates prepare all documents as required per sec. 31-04-01 for review by City of Chesterfield. Please see attached documents.

Section C. General Requirements for site design.
Five-foot sidewalk will be located along the building to provide safe pedestrian circulation. There will be a striping for connection to sidewalk along Chesterfield Airport Road. Please see attached updated site plan for more detailed information.

Trash enclosure will be enclosed on all sides with 5'-7 high that incorporate architectural building finishes. Please see architectural sheet A0.1 for more detailed information.

Section D. General requirements for building design.

1. Scale

   Please see attached exterior elevations and exterior rendering showing the building size & height are compatible with the adjacent development with no exceeding building height limitation up to 35 feet and having masonry finish with ground face concrete block, eifs and porcelain tile as an accent finish thus create sophisticated look.

   Full height masonry pilaster with accent brick in recessed area and soldier brick and LED downlight full shielded fixture to illuminate masonry and ground face concrete block at sill height is located at front façade. 12'-0" high black anodized aluminum storefront frame at each entry with an eifs overhang for building entry point. Architectural detail on eifs border and parapet detail enhance the architectural element design. At front façade, 8'-4" high porcelain tile will be utilized at areas to break any linear repetitive and create refined look.

2. Design

   As described above, exterior façade will have a few different exterior finishes with its color, shape & size that will complement each finishes.

   With its long facade, the front façade shows two different heights parapet to help breaking the linear repetitive streetscape. Each pilaster in maroon masonry with its recessed area filled with accent dark brick color, the neutral color of ground face concrete block and neutral color eifs parapet detail with black anodized aluminum storefront complement each finishes color. The porcelain tile in dark gray color is being utilized as another architectural feature.

   The recessed entry which is illuminated with LED recessed cans is located at each corner of building while an eifs overhang is provided at each tenant space.

   The full height parapet with masonry finish continues at both sides' facades while the rear façade shows pre-finished metal gutter and downspout. The pilaster feature at front façade with its brick soldier continues at rear façade to carry on as an architectural element. Rooftop Unit screening in neutral color which is similar with the eifs color are added at rear façade.

   LED lighting has been selected for all lighting fixtures at the building & parking lot poles to enhance energy efficiency.

3. Materials and color.

   The exterior façade of the shopping center with its masonry colors, eifs colors, ground face concrete block color, porcelain tile color and black storefront will look compatible with the adjacent properties. No high reflective material and prefabricated building

finishes are selected. Enclosed are a few pictures of adjacent buildings showing the proposed exterior finishes will look compatible with adjacent buildings

4. Landscape design and screening
   Please see attached landscaping plan provided by Arnold Consulting Engineering. Trash enclosure will have the same material finishes as the building façade. Roof top unit screening color has been incorporated with similar eifs color.

5. Signage
   Please see attached site plan for approximate location of monument signage. Signage will be submitted under separate permit.

6. Lighting
   LED Lighting has been selected to enhance energy efficiency that meet City of Chesterfield standard. All outdoor fixtures will be flat lenses and fully shielded. Photometric Layout is provided to meet the average footcandle for walkways at 0.5 fc and 5.0 fc at building entrance and exit. The parking pole illumination shall not be lower than 10 feet above grade nor shall the light fixture exceed 20 feet in height above grade.

Section E. Specific requirements for the Chesterfield Valley.
We have utilized architectural elements from the front façade on both sides and rear of façade, which bringing the masonry finish to continue along the building.
Accent LED downlights are added at each pilaster at the front façade. All outdoor fixture will be flat lenses and fully shielded. Trash enclosure will have the same material finishes as the exterior façade for finishes consistency.
Roof top unit screening has the similar color with the eifs that is compliment with masonry finish.

We have enclosed the ARB application, documents and a few photos are attached in this document in order to help convey the exterior work we are proposing.
A colored rendering of all sides of elevations in also enclosed.
Please call me with any questions and thank you for all of your assistance so far.

Sincerely,

Joe Klitzing/ Ivon Tjandra
c.c. Gary Klein
Klitzing Welsch Associates