**CITY OF MUSKEGON**
**HISTORIC DISTRICT COMMISSION**
**REGULAR MEETING**

DATE OF MEETING: Wednesday, January 12, 2022
TIME OF MEETING: 4:00 p.m.
PLACE OF MEETING: Conference Room 204, City Hall

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AGENDA

I. Call to Order

II. Approval of Minutes of the regular meeting of November 2, 2021.

III. Old Business

IV. New Business

Case 2022-01 – 350 W. Webster – Lighting/Bollards/Electrical Upgrade

Case 2022-02 – 296 W. Webster – Addition

Case 2022-03 – 238 Houston – Demolition

Case 2022-04 – 1500 Clinton – Siding

Case 2022-05 – 1314 Peck – Siding

Case 2022-06 – 339 Houston – Addition

V. Other Business

HDC Openings

2021 Staff Approval Update #3

VI. Adjourn

*"We admire that which is old not because it is old, but because it is beautiful." Winston Churchill*

AMERICAN DISABILITY ACT POLICY FOR ACCESS TO OPEN MEETING OF THE CITY COMMISSION AND ANY OF ITS COMMITTEES OR SUBCOMMITTEES

The City of Muskegon will provide necessary reasonable auxiliary aids and services, such as signers for the hearing impaired and audio tapes of printed materials being considered at the meeting, to individuals with disabilities who want to attend the meeting, upon twenty-four hour notice to the City of Muskegon. Individuals with disabilities requiring auxiliary aids or services should contact the City of Muskegon by writing or calling the following: Ann Marie Cummings, City Clerk at 933 Terrace Street, Muskegon, MI 49440 or by calling (231) 724-6705 or TTY/TDD: Dial 7-1-1 and request that representative dial 231-724-6705

## II. APPROVAL OF MINUTES

Approval of Minutes of the regular meeting of November 2, 2021.

## III. OLD BUSINESS

None

## IV. NEW BUSINESS

**Case 2022-01 – 350 W. Webster – Lighting/Bollards/Electrical Upgrade**
**Applicant: City of Muskegon (Department of Public Works)**
**District: National Register**
**Current Function: Park**

### Discussion

The applicant is seeking approval to complete an electrical upgrade to Hackley Park. As part of the upgrade, a number of features are proposed to be installed above-grade.

1. 36 lighted bollards – Three design options were submitted for bollards that are proposed to be installed at the intersections of the park's walkways. Depending on the style of bollard, they will also contain electrical outlets for use during park events.

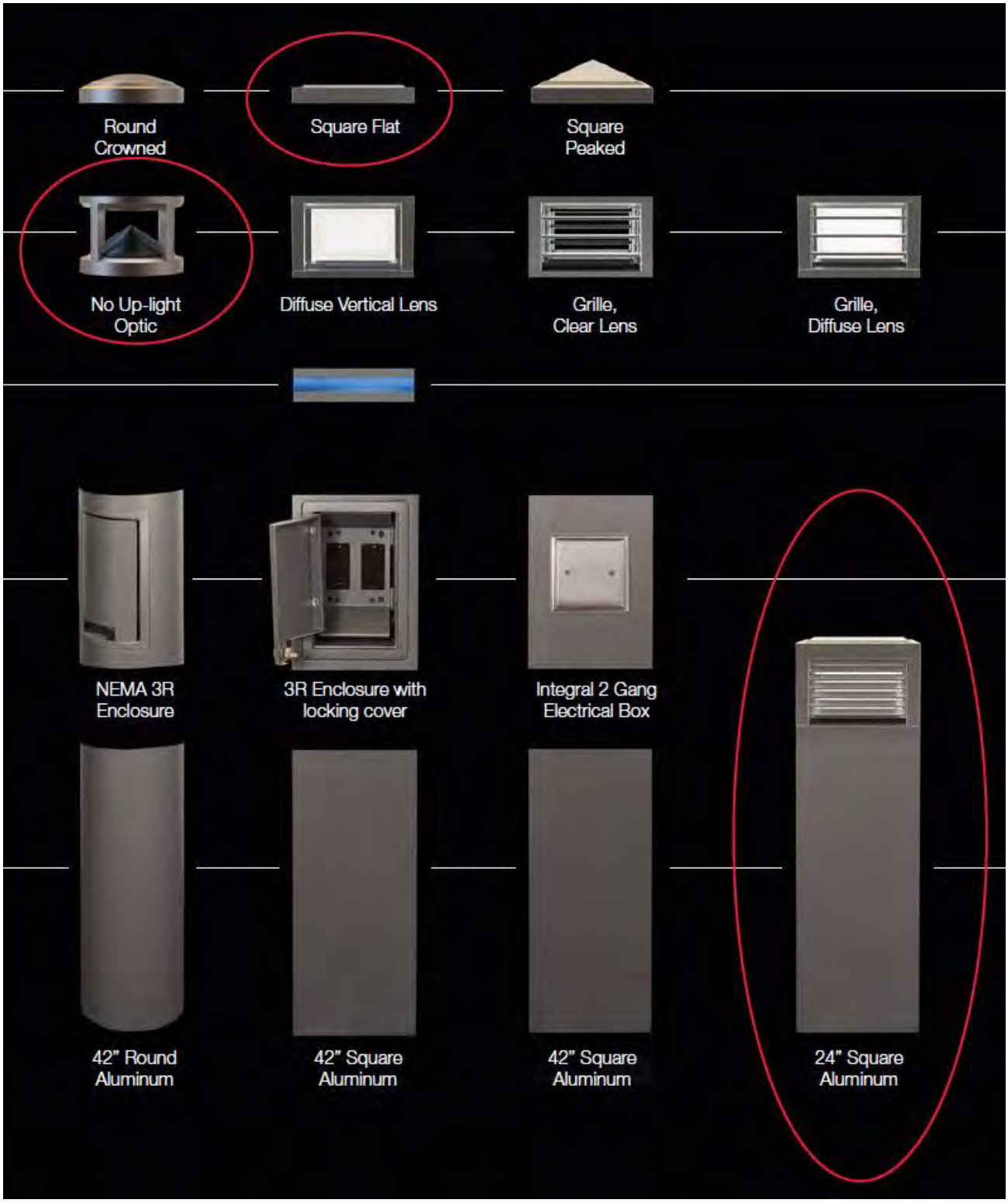
2. Light fixtures for corner statues – The center monument is up-lighted by a series of ground-mounted light fixtures, but the four statues located at each corner of the park are not. A single lighting fixture would be located within the landscaping at the base of each statue with the beam focused on the front side of the statue.

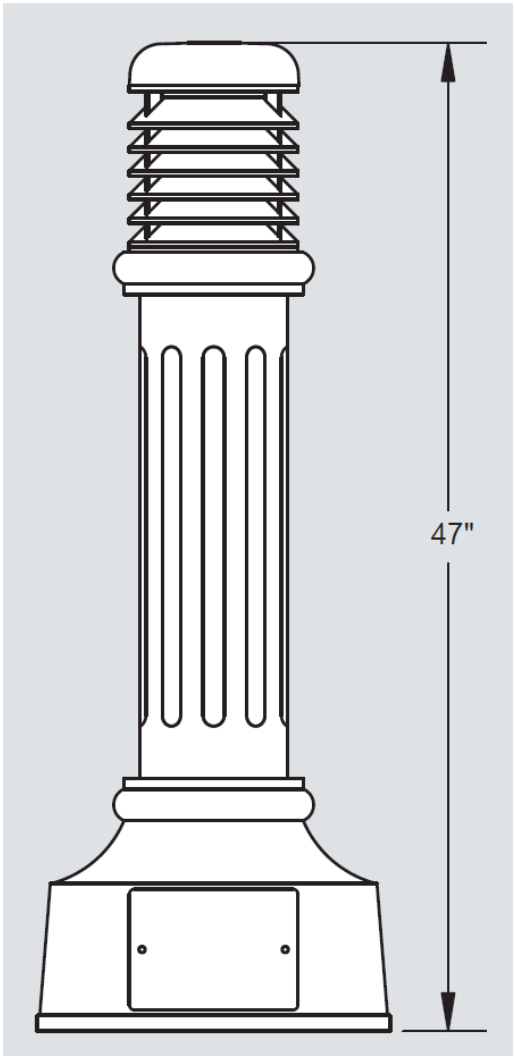
See Attachment B for further details.

View of park from the intersection of 3rd Street and W. Webster Avenue, looking west.

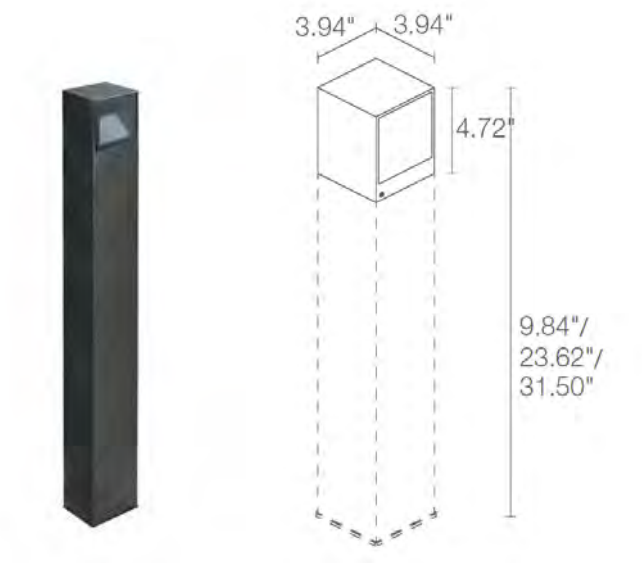
Examples of current outlets used in park.


Existing lights at Hackley Park (left) will remain, and match those at Hackley Public Library (right)


Round
Crowned
Square Flat
Square
Peaked
No Up-light
Optic
Diffuse Vertical Lens
Grille,
Clear Lens
Grille,
Diffuse Lens
NEMA 3R
Enclosure
3R Enclosure with
locking cover
Integral 2 Gang
Electrical Box
42" Round
Aluminum
42" Square
Aluminum
42" Square
Aluminum
24" Square
Aluminum
Model 1.



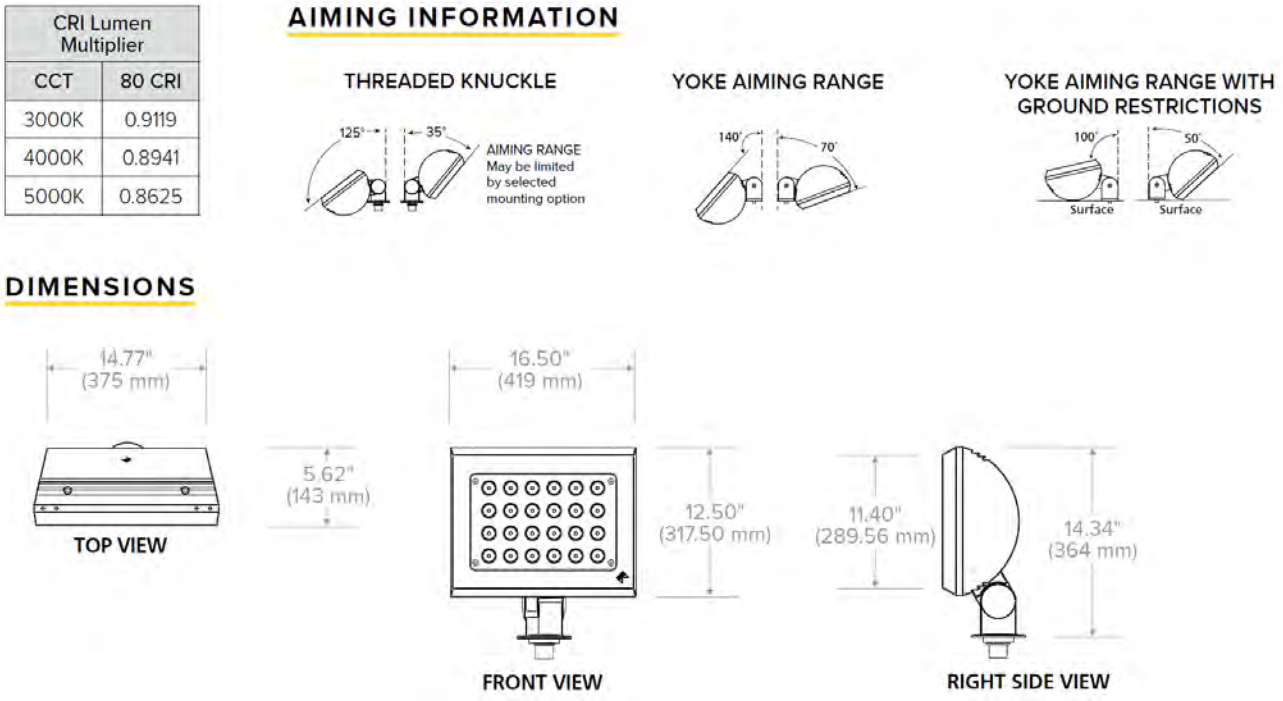

Model 2, with height dimensions. Model is also used at Hackley Library.




Model 3 with dimensions.

Existing lighting fixtures used on monument.

| CRI Lumen Multiplier | |
|---|---|
| CCT | 80 CRI |
| 3000K | 0.9119 |
| 4000K | 0.8941 |
| 5000K | 0.8625 |




Proposed ground-mounted lighting fixture for four corner statues.

## Standards

**From *Hackley Park: A Master Plan for Restoration* (1986):**

"Electrical receptacles are found in the moat area around the monument. They are fairly new and were not part of the original design. Little attempt was made to integrate these receptacles incomspicuously into the background. The style and placement of these are inappropriate to the site."

"Lamp standards – Electric lights were another of Mr. Hackley's gifts to the park. They were added in 1898, eight years after the completion of the park. The patent dates on the lights are 1890 and 1891.

Their original placement seems to support the theory that they were an early attempt to illuminate the monument at night. Unfortunately they were placed exactly in the middle of the four main visual sight lines to the monument thereby negating the primary design intent of Olof Benson's original park plan."

"Because everything was to be subordinate to the monument, fussy shrubs, evergreens and flower beds (anything taking the eye away from theat monument) were not part of the original plan. This idea of "subordination of detail to the whole effect" was paramount to the design principles of Frederick Law Olmsted who was designing parks all across America (including Chicago) at this time. Olof Benson was no doubt aware of this and incorporated that same thinking into his design for Hackley Park."

"Electrical outlet boxes are found in a couple of locations above grade and are very inadequate in meeting the present day electrical demand of the park and should be upgraded."

"The incongruent uses and special events must be accommodated in an unobtrusive manner so as to not distract from the historical integrity of the park."

"All wires should be placed underground with service junction boxes discretely placed.

The historical fixtures should be rewired with electrical outlets mounted discretely in the base for regular 110 service. Perimeter lights should be designed with the same option in mind…

The monument and the four statues should receive ground mounted fixtures to light these features at night."

## Deliberation

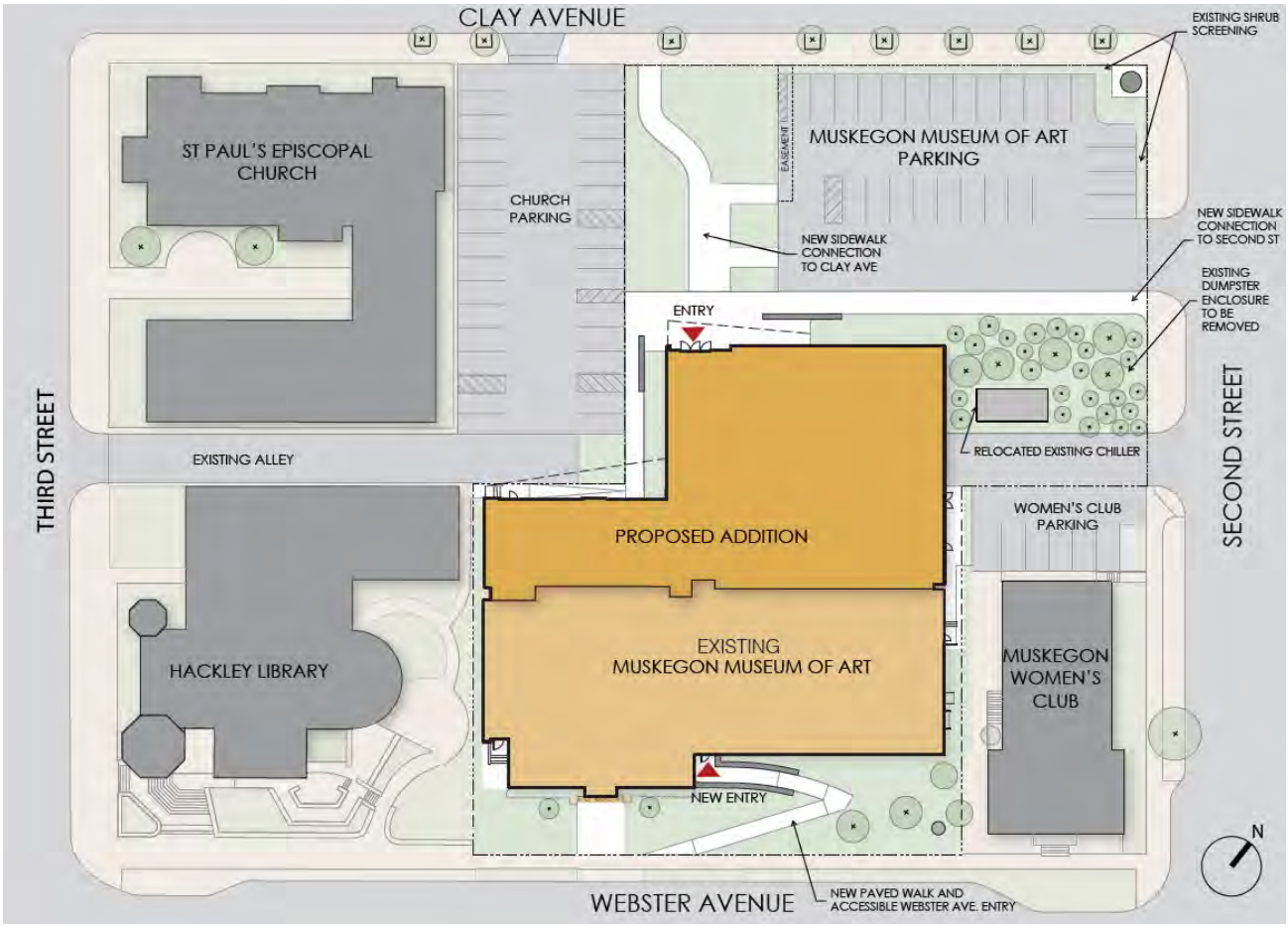
I move that the HDC (approve/deny) the request to install 36, Model (1/2/3/Other), lighted bollards containing electrical outlets and installed at the intersections of the park's walkways in the locations presented in the January 12, 2022 HDC Staff Report and supporting documents, and to install one light fixture within the landscaping at the base of each of the park's four corner statues with the beam focused on the front side of the statue as long as the work meets all zoning requirements and the necessary permits are obtained.

**Case 2022-02 – 296 W. Webster – Addition**
**Applicant: Muskegon Museum of Art**
**District: National Register/Downtown Structures**
**Current Function: Institutional**

## Discussion

The applicant is seeking approval to construct a new, two-story addition to the north of the Muskegon Museum of Art's existing building, install a new south entrance on W. Webster Avenue where a window currently exists, and create a landscaped plaza connecting the new addition's north entrance to W. Clay Avenue. The footprint of the new construction is proposed to span two current parcels (269 W. Webster and 315 W. Clay) as well as portion of the vacated alley in this block, space which is completely or partially located in two local historic districts. The building addition is proposed to contain new large and small galleries, event space, a roof terrace, the museum store, classroom and activity space, mechanical space/loading dock, support space, and collections management space. Additional information will be provided at the meeting as well as provided in Attachment A.

Bird's-eye view rendering of proposed building addition from W. Clay Avenue, looking south. Existing museum building visible behind addition.




Proposed site plan showing location of current building, building addition, new south entry, and landscaped plaza.

Current view of the original museum building (left) and its 1980s addition (right) from W. Webster Avenue, looking west.

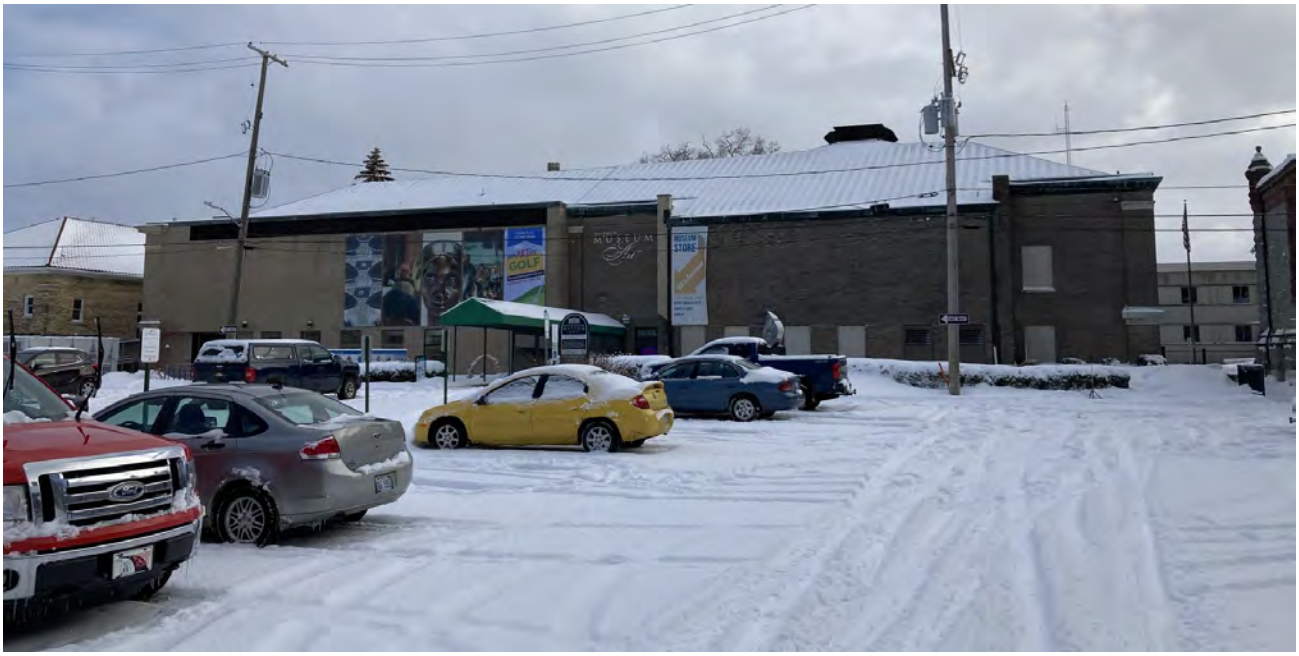
Rendering of same view depicting the proposed new south entrance to the building.

Current museum building's south entrance


Current connection between original museum building and past building addition. Window on left is proposed to be replaced with a new entry door.

Current view of north entrance and alley, looking east.


View from approximately the same location as above photo. Building addition is built over vacated alley (obscuring view of existing building).



View of existing north elevation from W. Clay Avenue.


View from approximately the same location as above photo. Building addition extends toward and faces Clay, and a new landscaped plaza provides a pedestrian connection from the sidewalk and locations for future public art pieces.

## Standards

### DESIGN GUIDELINES FOR NEW CONSTRUCTION

Although a significant amount of the Commission's work is centered on historic structures, the construction of new structures on vacant lots within historic districts is permitted and encouraged. However, those professionals designing new structures should strive for excellence in design whether small individual infill construction within the existing historic district blocks, or larger independently sited projects. New structures should be in keeping with the existing historical character of the neighborhood or district with a design that is compatible with the size, scale, material, and color of the surrounding buildings and landscaping. Good design which responds positively to its surroundings can be done in several different ways; therefore, it is impossible to develop specific interpretations which will apply in all cases. Every site has its own design opportunities.

The following design recommendations shall be used by the Historic District Commission in evaluating requests for new construction within the districts. These basic criteria should be a part of any proposed design brought before the Commission for approval.

**Recommended**

Height - Relating the overall height of new construction to that of adjacent structures. As a general rule, construct new buildings to a height roughly equal to the average height of existing buildings from the historic period on and across the street.

Scale - Relating the size and proportions of new structures to the scale of adjacent buildings. Although a building may be much larger than its neighbors in terms of square footage, it should maintain the same scale and rhythm as the existing buildings.

Massing - Breaking up uninteresting box-like forms into smaller, varied masses such as are common on most buildings from the historic period. Variety of form and massing are elements essential to the character of the streetscape in historic districts. For example, if an infill site is large, the mass of the facade can be broken into a number of small bays.

Directional Expression - Relating the vertical, horizontal, or non-directional facade character of new buildings to the predominant directional expression of nearby buildings. Horizontal buildings can be made to relate to the more vertical adjacent structures by breaking the facade into smaller masses that conform to the primary expression of the

**Not Recommended**

Height - Introducing new construction that varies greatly in height (too high or too low) from older buildings in the vicinity. Extreme differences in building heights will have a detrimental visual effects on the appearance of surrounding property.

Scale - Creating buildings that in height, width, or massing violate the existing scale of the area. The new building should not disrupt the scale and rhythm of the streetscape, although it might be appropriate in a different location.

Massing - Introducing single, monolithic forms that are not relieved by variations in massing. Box-like facades and forms are intrusive when placed in a streetscape of older buildings that have varied massing and facade articulation.

Directional Expression - Creating strongly horizontal or vertical facade expressions unless compatible with the character of structures in the immediate area. A new building that does not relate well to its neighbors or to the rhythm of the streetscape because of an

streetscape.

Setback - Maintaining the historic facade lines of streetscape by locating front walls of new buildings in the same plane as the facades of adjacent buildings. If exceptions are made, buildings should be set back into the lot rather than closer to the street. If existing setbacks vary, new buildings should conform to historic siting patterns.

Sense of Entry - Articulating the main entrances to the building with covered porches, porticos, and other pronounced architectural forms. Entries were historically raised a few steps above the grade of the property and were a prominent visual feature of the street elevation of the building.

Roof Shapes - Relating the roof forms of the new buildings to those found in the area. Although not entirely necessary, duplication of the existing or traditional roof shapes, pitches, and materials on new construction is one way of making new structures more visually compatible.

Rhythm of Openings - Respecting the recurrent alteration of wall areas with door and window elements in the facade. Also considering the width-to-height ratio of bays in the facade. The placement of openings with respect to the facade's overall composition, symmetry or balanced symmetry should be carefully studied.

Design Expression - Composing the materials, textures and colors of the new building facade to compliment adjacent facades and relating details and decorations of the new building to those of existing surrounding buildings.

Imitations - Accurate restoration of or visually compatible additions to existing buildings and former construction, contemporary architecture that well represents our own time yet, enhances the nature and character of the historic district.

unbroken horizontal facade should be avoided.

Setback - Violating the existing setback pattern by placing a new building in front of or behind the historic facade line. Placing buildings at odd angles to the street, unless in an area where diverse siting already exists, even if property setback is maintained, should be avoided.

Sense of Entry - Introducing facades with no strong sense of entry. Side entries or entries not defined by a porch or similar transitional element result in an incompatible "flat" first-floor facade.

Roof Shapes - Introducing roof shapes, pitches, or materials not traditionally used in the area.

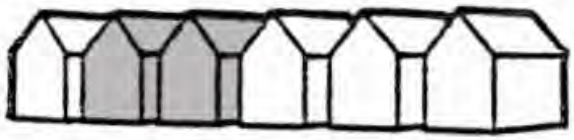
Rhythm of Openings - Introducing incompatible facade patterns that upset the rhythm of openings established in surrounding structures. For example, glass walls and window and door shapes and locations which are disrespectful to the adjoining buildings.

Design Expression - Violating the existing character of the district by introducing non-compatible materials, textures, colors, details, and decoration on new buildings.

Imitations - Replicating or imitating the styles, motif, or details of older periods. Such attempts detract from the character of the district by compromising what is truly historic.

**Recommended**

Height



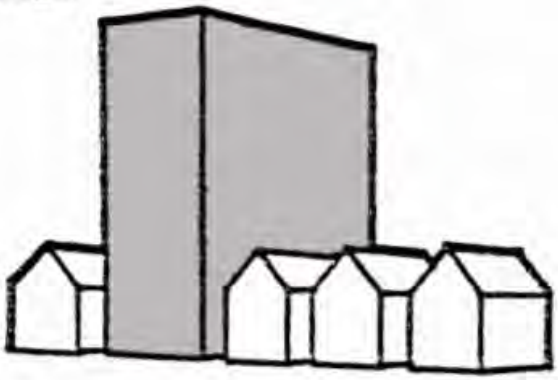
Scale

Massing

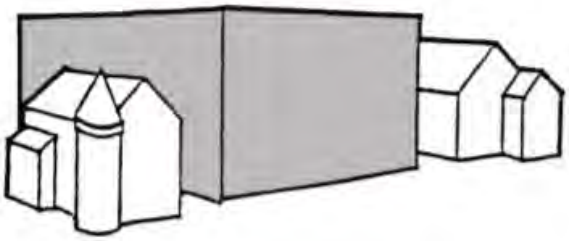
Directional Expression

**Not Recommended**

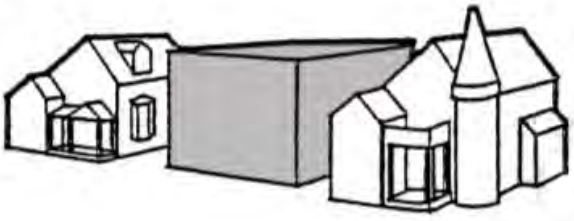
Height



Scale



Massing

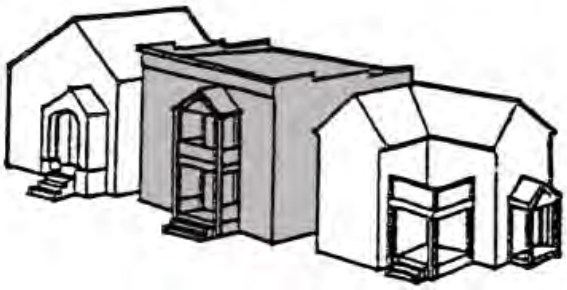


Directional Expression

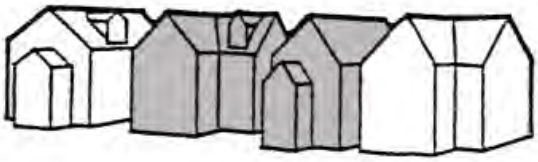
**Recommended**

Setback

Sense of Entry



Roof Shapes

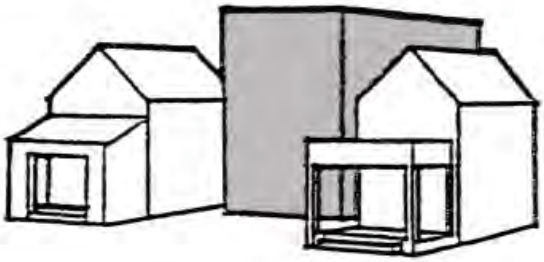


Rhythm of Openings

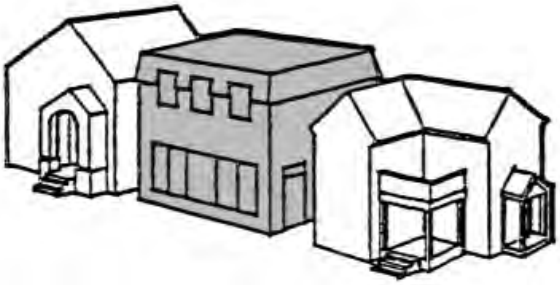
Imitations

**Not Recommended**

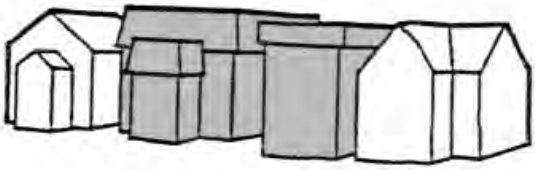
Setback



Sense of Entry

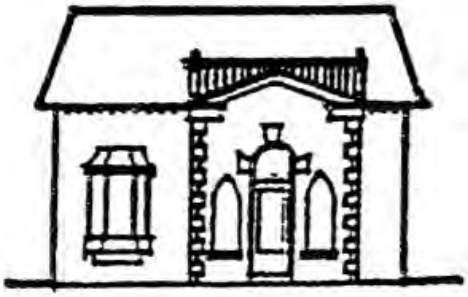


Roof Shapes



Rhythm of Openings

Imitations



**Deliberation**

I move that the HDC (approve/deny) the request to construct a new, two-story addition to the north of the Muskegon Museum of Art's existing building, install a new south entrance on W. Webster Avenue where a window currently exists, and create a landscaped plaza connecting the new addition's north entrance to W. Clay Avenue as presented in the January 12, 2022 HDC Staff Report and supporting documents as long as the work meets all zoning requirements and the necessary permits are obtained.

**Case 2022-03 – 238 Houston – Demolition**
**Applicant: City of Muskegon (SAFEbuilt Inspection Services)**
**District: Houston**
**Current Function: Commercial**

## Discussion

The applicant is seeking approval to demolish the structure. A fire occurred at the property in May 2020. In December 2020, a case was presented to the HDC to review the property owner's plans to rehabilitate the structure. The Housing Board of Appeals (HBA) has since determined that the structure is unsafe, substandard, a public nuisance and that it be demolished. The City Commission has concurred with the HBA's findings.

View of house from Houston Avenue, looking north.

## Standards

No standards apply.

## Deliberation

I move that the HDC (approve/deny) the request to demolish the structure as long as the work meets all zoning requirements and the necessary permits are obtained.

**Case 2022-04 – 1500 Clinton – Siding**
**Applicant: Belinda Spray**
**District: Clinton-Peck**
**Current Function: Residential**

**Discussion**

The applicant is seeking approval to install vinyl siding over the existing wood siding on the house and remove one second-story window on the east elevation. Work was started in mid-December without proper review or approvals and a stop work order was issued at that time.

View of house from Clinton Street, looking northeast. Vinyl siding being installed on attached garage visible at right.

View of house from E. Grand Avenue, looking southwest (photo from October 2019)

Current view of house from E. Grand, looking southwest. New vinyl siding being installed on the house and attached garage as well as a window that was removed from the second story are visible.

North elevation with vinyl siding being installed on the first floor.

**Standards**

**RESIDING AND TRIM CLADDING GUIDELINES**

**General**

The Muskegon Historic District Commission does not endorse the residing of structures within the Historic districts. It is the policy of this Commission that the original fabric of the building should be repaired or replaced where necessary with the original building material.

In cases where the repair or replacement with like materials is impractical or where it can be demonstrated that the original materials will no longer hold paint or that the original materials are so badly deteriorated that they can no longer be reasonably repaired, the residing standards below shall strictly be adhered to.

**Definitions**

For the purpose of this statement, the terms "residing materials" and "trim cladding" shall be understood to encompass the use of any residing materials such as aluminum, vinyl, steel, hardboard, wood, masonry, or molded urethane which is designed to replace or cover all, or any part, of an exterior wall, trim work or other building element or a structure within a designated historic district.

**Purpose**
The Commission shall review all applications for Certificates of Appropriateness proposing the installation of residing materials or trim cladding as individual cases. Each application shall be decided on its own merit. No person should interpret any Commission approval for residing or trim cladding as being precedent setting. Unrestricted use of residing materials or trim cladding will not be allowed.

In any case where residing materials or trim cladding are proposed for use by a property owner or siding contractor, the property owner shall be required to submit a signed letter stating in detail the intent and scope of the proposed residing or trim cladding installation. Such a letter is to also include the identification of any deterioration or problems occurring relative to the existing siding or exterior building fabric. If known, the cause and extent of this deterioration must be clearly stated.

The following conditions of installation shall be met by all proposals for residing or trim cladding:

1. All existing deterioration shall be made structurally sound and its causes, insofar as possible, shall be corrected prior to the installation of residing materials or trim cladding.

2. Any installation of residing materials shall simulate the appearance of the original building material that it is intended to cover. This simulation shall take into account the size, shape or profile, texture, and linear direction of the original building material.

    a. The residing material shall be similar in appearance and dimension to the original siding. The exposure to the weather of the new siding shall range within one inch of the nominal dimension of the original siding. The Historic District Commission shall have the authority to waive this requirement in the event that they believe a different design or dimension siding would be more appropriate to the architectural character of the Historic District.

    b. A proposed color shall be appropriate as determined by the Commission.

    c. Generally, wood grain textures are not approved by the Commission. However, the appropriateness of a specific siding texture shall be determined on an individual case basis.

3. Any installation of trim cladding shall adhere to the following guidelines for the treatment for architectural trim elements.

    a. Existing cornice or building trim elements shall not be covered or replaced without Commission approval. Commission approval will depend upon how closely the trim cladding or new trim elements duplicate the appearance of the existing building trim elements.

    b. The wall siding material shall not extend over the existing trim members such as window and door trim, sills, facias, soffits, frieze members and boards, brackets, aprons, corner boards, trim boards, skirt boards, or any other characteristic moldings or architectural features.

    c. If the above mentioned trim members are to be clad, they shall be covered with custom formed cladding which shall closely approximate the shapes and contours of the existing moldings or trim. Distinctive or unusual trim or architectural elements shall not be clad without prior consideration and Commission approval.

d. No building trim elements or architectural features are to be removed or altered to facilitate the installation of the new siding or trim cladding without approval of the Historic District Commission.

In most cases the soffit cladding material shall run parallel and not perpendicular to the plane of the wall.

**WINDOW, DOOR, AND EXTERIOR WOODWORK STANDARDS AND GUIDELINES (Abbreviated)**

**General**
These guidelines pertain only to proposed changes to the structure and do not affect existing construction.

These guidelines are primarily directed toward the front and side elevations of the structure. Greater variances and more leniency may be extended toward proposed changes to the rear elevation of the building by the Commission. All desired or proposed changes should be referred to the Historic District Commission for consideration. Extenuating circumstances, the effect upon the architecture of the particular structure together with the general effect upon the surrounding structures, variables in architectural design, or the effect upon usage and viability of the structure could dictate a variance from these guidelines.

No exterior doors, windows, or exterior woodwork shall be altered, removed, relocated, or added without Historic District Commission approval.

Existing exterior window or door casings, sills, and caps shall not be altered from the original design or appearance. Damaged or deteriorated wood shall be repaired as a first course of action. When repair is not possible, elements shall be replaced with matching wood members. Damaged or deteriorated wood elements may be replaced or covered with formed aluminum or vinyl, subject to Commission approval and provided that the original profile of the woodwork is not altered or changed.

**Primary Windows**
Existing damaged or deteriorating window frames and sash shall be repaired as a first course of action. When repair is not possible, elements shall be replaced with matching wood members. Metal or vinyl replacement windows may be acceptable provided they match the original windows in design and type and that they consist of or are painted an appropriate color. Bare metal finishes generally will not be acceptable.

The size of glass lites and muntin arrangements shall not be altered without Commission approval. Special glazing, such as stained or leaded art glass, shall not be removed without Commission approval. Unusual decorative windows such as Palladian windows, oriels, bays, Gothic arch or segment tops, etc. shall not be removed or altered.

**Deliberation**

I move that the HDC (approve/deny) the request to install vinyl siding over the existing wood siding on the house and to remove one second-story window on the east elevation as long as the work meets all zoning requirements and the necessary permits are obtained.

**Case 2022-05 – 1314 Peck – Siding**
**Applicant: April and Bryan Nulf**
**District: McLaughlin**
**Current Function: Residential**

## Discussion

The applicant is seeking approval to remove the existing, damaged wood siding and reside the house with new wood siding. The house currently contains three different patterns of wood siding, and the replacement siding would match the most common siding pattern currently found on the house.

View of house from Peck Street, looking east.

View of house from Peck Street, looking northeast.

Three types of siding patterns visible on the house.

Examples of deteriorated wood siding on the house.

**Standards**

See Residing and Trim Cladding Guidelines in Case 2022-04, above.

**Deliberation**

I move that the HDC (approve/deny) the request to remove the existing, damaged wood siding and reside the house with new wood siding to match the most common siding pattern currently found on the house as long as the work meets all zoning requirements and the necessary permits are obtained.

**Case 2022-06 – 339 Houston – Addition**
**Applicant: Danielle Bos**
**District: Houston**
**Current Function: Residential**

## Discussion

The applicant is seeking approval to construct an addition to the house that extends the garage eight (8) feet toward the front property line and adds second story living space above the garage. The addition will utilize the same siding, windows, and roofing materials used on the rest of the house. Additional information and drawings will be provided at the meeting.

View of house and attached garage from Houston Avenue, looking east.

## Standards

See Design Guidelines for New Construction in Case 2022-02, above.

## Deliberation

I move that the HDC (approve/deny) the request to construct an addition to the house that extends the garage eight (8) feet toward the front property line and adds second story living space above the garage utilizing the same siding, windows, and roofing materials used on the rest of the house as long as the work meets all zoning requirements and the necessary permits are obtained.

## V. OTHER BUSINESS

**HDC Openings** – Following the most recent term expiration and reappointment process, the HDC now has two openings. The board's composition requirements call for the open positions to be filled by a registered architect and a member of a local preservation society.

**2021 Staff Approval Update #3** – Since the last update in July 2021, Staff has approved 18 projects, those bolded were discussed with the HDC chairperson prior to approval:

- 609 W. Western – 6'-tall wood privacy fence for dumpster screening at rear alley
- 1247 Terrace – Reroof house
- 241 W. Muskegon – Tuck point two chimneys
- **511 W. Clay – Pour 3 concrete steps on rear porch and install handrails on either side**
- 263 W. Muskegon – Replace 14 vinyl windows with new vinyl windows
- 486 W. Clay – Tuck point bricks and repair chimney
- 85 W. Southern – Driveway expansion
- 325 Houston – Landscaping mechanicals container/cover in rear yard
- 1715 Jefferson – Reroof house and garage
- 413 W. Webster – Reroof house
- 1244 Ransom – Reroof house
- **1163 Terrace – Replace wood windows on first floor with vinyl windows with simulated divided lights matching the dimensions and mullion patterns of the originals**
- 362 W. Muskegon – 4'-tall black metal fencing in side yards with two gates (black chain link approved on a temporary basis due to delays with supplies)
- 1593 Jefferson – Reroof rear of house and install engineered wood lap siding on dormers over rear garage. Install new, custom wood storm windows to match existing original
- 486 W. Clay – Reroof house
- 1391 Jefferson – Replace damaged vinyl picture window and two surrounding, double hung vinyl windows with new vinyl windows in the same size and configuration
- 416 W. Muskegon – 6'-tall wood privacy fence around back half of property
- 85 W. Southern – Construct 4'-tall wood picket fence around perimeter of property

## VI. ADJOURN

Attachment A

# APPLICATION FOR A CERTIFICATE OF APPROPRIATENESS

Historic District Commission
City of Muskegon
933 Terrace Street
Muskegon, Michigan 49440
(231) 724-6702 - Fax (231) 724-6790

DATE SUBMITTED: 11/24/2021

APPLICATION NUMBER (to be filled in by staff):
20___ - ____

PROPERTY ADDRESS IN HISTORIC DISTRICT:
Hackley Park

*Please type or print all information.*

NAME OF APPLICANT/PROPERTY OWNER:
City of Muskegon - DPW

APPLICANT MAILING ADDRESS + ZIP CODE:
1350 East Keating Ave
Muskegon, MI 49442

APPLICANT PHONE NUMBER:
(231) 724-6920

APPLICANT EMAIL ADDRESS:
Leo.Evans@shorelinecity.com

Name and phone number of person to be contacted on matters involving this application, if other than applicant listed at left:
Leo Evans

Alternate phone number:
( )

HISTORIC DISTRICT NAME:

TYPE OF APPLICATION:
- ☐ New Construction
- ☐ Rehabilitation/Restoration
- ☐ Demolition
- ☒ Addition
- ☐ Other (specify) _____

PRESENT USE OF PROPERTY:
- ☐ Residential
- ☐ Commercial
- ☐ Institutional
- ☒ Other (specify) Park

PROPOSED WORK START DATE:
Spring 2022

PROPOSED WORK COMPLETION DATE:
Summer 2022

CONTRACTOR/BUILDER (name, address, phone number):
TBD

DESCRIPTION OF WORK PROPOSAL (Be specific and describe each project and materials to be used separately. Use back of form or additional sheets if necessary):
Overall electric upgrades. Reusing light poles w/no changes. Adding lighted Bollards to walkways 3' Adding up lighting to Monuments.

Space below for Staff Comments:

☒ I certify that on or before the date of completion of proposed work, my building will have a code compliant smoke detector or fire alarm system.

*If a site plan or architect drawings are submitted that are larger than 8.5" x 11", applicant must submit 8 copies with this application.

APPLICANT'S SIGNATURE: _____

*PROCEDURE AND REQUIREMENTS:*

Properties within one of the nine Muskegon Historic Districts are subject to the Historic District Ordinance of the City of Muskegon (Chapter 38, Sections 101-123 of the Code of Ordinances). The purpose of the ordinance is to preserve and protect our historic resources. The Historic District Commission (HDC) is established by the Ordinance, and has the authority to review and approve all work permit applications and plans for exterior property improvements within these districts. Regular building maintenance is permitted and encouraged; however, a work permit is required for all alterations, significant repairs, new construction, demolition, moving of buildings, and all other activities affecting the exterior appearance of buildings and properties within these districts. Please consult the HDC local standards for specific details on permissible work.

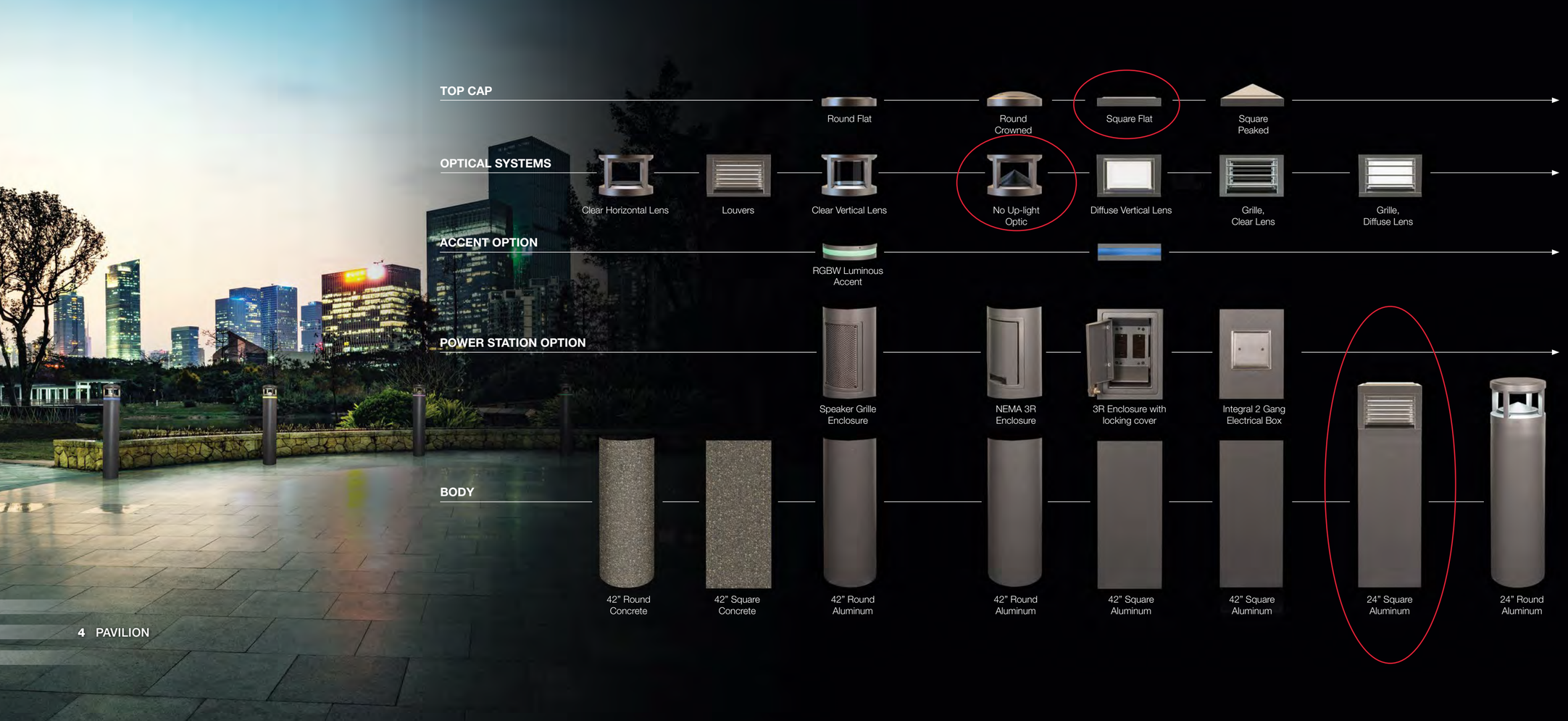
*This application must be received by the Planning Department no less than 13 days prior to regularly scheduled monthly HDC meeting*. The meeting is held every first Tuesday of the month at 4:00 p.m. in the City Commission Chambers, City Hall. Applicants are strongly encouraged to conduct a preliminary discussion with staff and attend the meeting to explain the proposed work.

**The following information should be included with this application. Additional information may be requested.**

- Current photo of the structure as seen from the street and where proposed work is to take place.
- Sketch, drawing or plans and/or elevations of proposed work. Provide dimensions and where this work is in relation to the main structure.
- Drawings to show details and specifications of ornamental features.
- Where appropriate, plan showing property lines for fencing, projected view of structure for signs, perspective drawing for new additions, etc.

Note: Information contained in this application, as well as supporting documents, may be subject to review by the public if a Freedom of Information Act request is filed.

*Use this space for additional project information if needed*



**TOP CAP**

- Round Flat
- Round Crowned
- Square Flat
- Square Peaked

**OPTICAL SYSTEMS**

- Clear Horizontal Lens
- Louvers
- Clear Vertical Lens
- No Up-light Optic
- Diffuse Vertical Lens
- Grille, Clear Lens
- Grille, Diffuse Lens

**ACCENT OPTION**

- RGBW Luminous Accent

**POWER STATION OPTION**

- Speaker Grille Enclosure
- NEMA 3R Enclosure
- 3R Enclosure with locking cover
- Integral 2 Gang Electrical Box

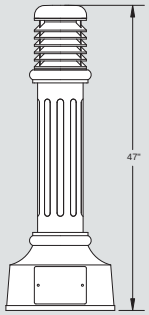
**BODY**

- 42" Round Concrete
- 42" Square Concrete
- 42" Round Aluminum
- 42" Round Aluminum
- 42" Square Aluminum
- 42" Square Aluminum
- 24" Square Aluminum
- 24" Round Aluminum

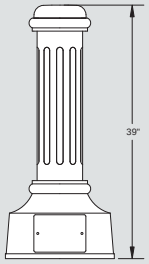
# Creative Illumination

Every site is unique and the lighting should echo the design intent of the architect or lighting designer. Pavilion can be configured with traditional elements or optimized LED optics to achieve the desired environmental illumination.

Styling configuration starts with 168 different combinations of the optic, top cap and body. Receptacle outlet capability adds the next level of customization. The RGBW luminous accent brings the final level of user personalization with a mobile device app for on-demand color changing.



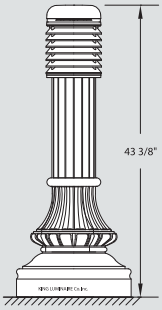

Lighted Bollard



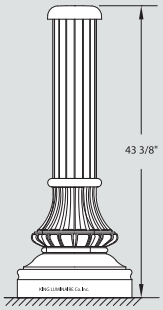

Nonlighted Bollard

## The Colonial ▶

Like the pole family that bears the same name, the appearance of the Colonial has a decidedly traditional flavor. Made of rugged cast aluminum and finished in any of the wide variety of KingCoat™ colors, the Colonial will add luster to any project on which it is used.




Lighted Bollard




Nonlighted Bollard

## ◀ The Washington

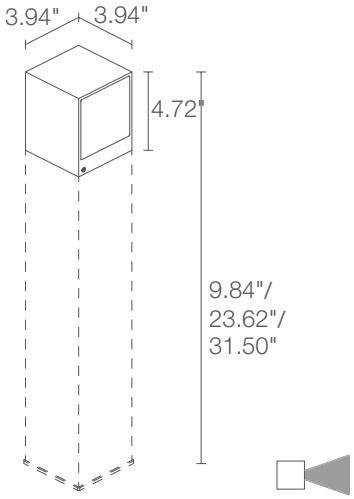
Constructed of heavy duty cast aluminum, the popular Washington style will complement any street or landscaping project. Also available as a spun concrete bollard and matching concrete pole, this bollard is suitable in cases where a metal finish is preferred. It is finished in any of the high quality KingCoat™ colors.

# LINEAR 2.1

datasheet

Linear are a series of bollards for outdoor use, available in different heights and ideal for gardens and small paths. Linear 2 features 1, 2, 3 and 4 beam options, asymmetric optics, and 3 standard finishes.

Fixture Dimensions




## TECHNICAL DATA

| | |
|---|---|
| **Wattage / Input** | 4W, 8.5W (120VAC) |
| **Power Supply** | Integral |
| **Construction** | Body: Aluminum alloy EN AW 6060<br>Lens: Serigraphed, transparent and tempered extra-clear glass |
| **CCT** | 2700K, 3000K, 4000K |
| **CRI** | >80 |
| **Delivered Lumens** | 100 lm (3000K, 4W)<br>284 lm (3000K, 8.5W) |
| **Efficacy** | 25 lm/W (3000K, 4W)<br>33.4 lm/W (3000K, 8.5W) |
| **Optics** | Asymmetrical |
| **Finishes** | 3 Standard, Custom RAL (see below) |
| **Fixture Dimensions** | 3.94” l x 3.94” w x 4.72” / 9.84” / 23.62” / 31.50” h |
| **Fixture Weight** | 3.53 lbs, 4.41 lbs, 5.95 lbs, 6.83 lbs |
| **LED Source** | 1 Power LED (4W)<br>1 High Intensity LED (8.5W) |
| **Lumen Maintenance** | L90, B10 >50,000hrs (Ta 25°C) |
| **Color Consistency** | 1/4 ANSI BIN (4W)<br>3-Step MacAdam (8.5W) |
| **Operating Temp.** | -4°F to +113°F |
| **IP Rating** | IP65 |
| **IK Rating** | IK07 |

## ORDERING INFORMATION

***Example: CL21105AF. Accessories ordered separately.***

| | | | | |
|---|---|---|---|---|
| **CL211** | | | **A** | |
| **Model No.** | **Wattage** | **CCT** | **Optics** | **Finish** |
| **CL211** | **0** - 4W<br>**1** - 8.5W | **F** - 2700K<br>**5** - 3000K<br>**9** - 4000K | **A** - Asymmetrical | **F** - Gray<br>**H** - Anthracite<br>**T** - Corten<br>**C** - Custom RAL<br>*(consult factory for “C”)* |

*Job Name/Date:*

*Fixture Type Designation:*

**sales@designplan.com**
www.designplan.com

**79 Trenton Avenue, Frenchtown NJ 08825**

Published: October 20, 2021
**P: 908-996-7710**
**F: 908-996-7042**

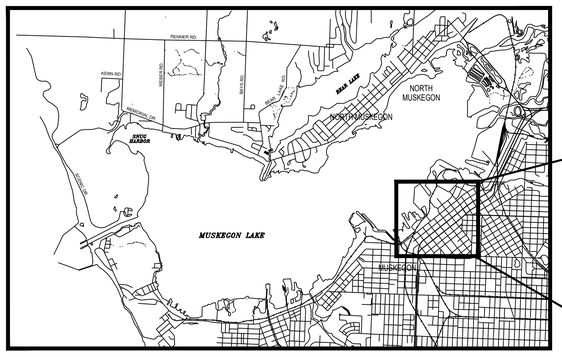
## DEPARTMENT OF LEISURE SERVICES

**MUSKEGON, MICHIGAN**

# HACKLEY PARK RELIGHTING

SHEET INDEX

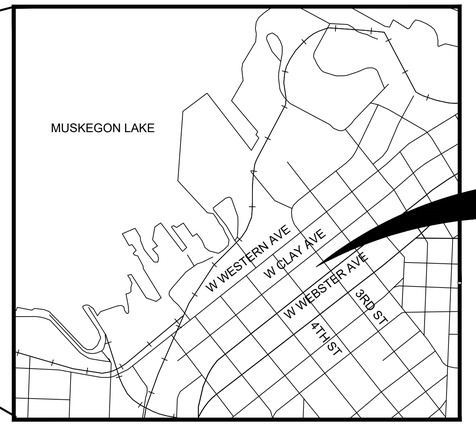





LOCATION MAP

MUSKEGON COUNTY - MUSKEGON MICHIGAN

NORTH




PROJECT LOCATION

350 W. WEBSTER AVE., MUSKEGON, MI 49440

UTILITY LOCATIONS ARE DERIVED FROM ACTUAL MEASUREMENTS OR AVAILABLE RECORDS. THEY SHOULD NOT BE INTERPRETED TO BE EXACT LOCATIONS NOR SHOULD IT BE ASSUMED THAT THEY ARE THE ONLY UTILITIES IN THIS AREA.

Know what's Below Call before you dig.

**75% REVIEW**
**12-3-21**

| GEOTECH |
|---|
| PROFESSIONAL PERSON IN RESPONSIBLE CHARGE OF THE PROJECT |
| SHEETS: 1- 10 |
| NAME OF LICENSEE: GHASSAN G. GHAREEB |
| NUMBER: 6201045744 |

DATE: ISSUED FOR:

HACKLEY PARK RELIGHTING
DEPARTMENT OF LEISURE SERVICES
MUSKEGON, MICHIGAN

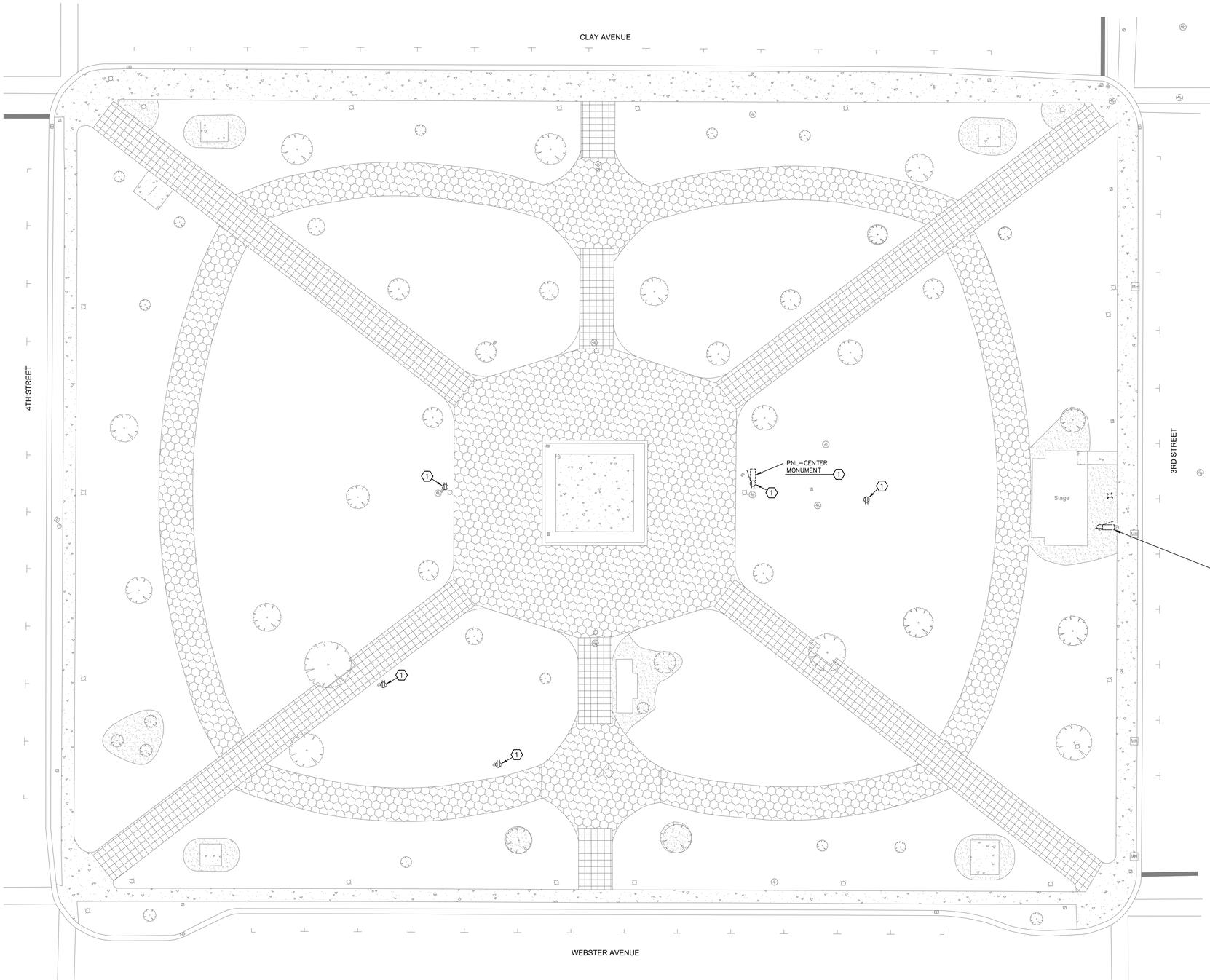


Geotech, Inc. Engineered Systems
4900 Cascade Road, S.E., Grand Rapids, Michigan 49546
616.949.3340
www.geotech-inc.com

PROJECT #: 689-001

SHEET TITLE: ELECTRICAL COVER SHEET

SHEET #: E0




**GENERAL NOTES:**

1. LOCATE EXISTING UNDERGROUND UTILITIES BEFORE DIGGING.
2. EXISTING LIGHTING WITH ASSOCIATED ELECTRICAL SHALL REMAIN AND SHALL BE RECONNECTED TO THE NEW ELECTRICAL DISTRIBUTION SYSTEM.
3. COORDINATE WITH CONSUMERS ENERGY TO REMOVE THE EXISTING POWER METER/SERVICE AND UPGRADE THE NEW ELECTRICAL SYSTEM.

**KEYED ELECTRICAL DEMOLITION NOTES:**

1. REMOVE WITH ASSOCIATED ELECTRICAL BACK TO SOURCE. RESTORE DISTURBED GROUND AREA TO MATCH EXISTING CONDITIONS.
2. REFER TO DETAIL #2 ON THIS SHEET – PHOTO OF EXISTING MAIN SERVICE CABINET – FOR ITEMS TO BE RELOCATED WHICH INCLUDE: "THE OPTIC ARTS" STAGE LIGHT DRIVERS, THE IRRIGATION CONTROLLER AND IT'S POWER SUPPLY. ASSOCIATED WIRING SHALL REMAIN AND BE EXTENDED TO THE NEW ELECTRICAL SERVICE PANEL.
3. THE FOLLOWING CIRCUITS/WIRING OF PNL–A AND SUB–PNL–A SHALL REMAIN AND BE RELOCATED TO THE NEW ELECTRICAL SERVICE PANEL:
   A. STAGE PLUGS
   B. STAGE LIGHTS
   C. OPTIC ARTS STAGE LIGHTS
   D. SITE CENTER LIGHTS
   E. SPRINKLER SYSTEM
4. REMOVE EXISTING CONCRETE PAD.

## SYMBOL LEGEND

- HANDHOLE
- LIGHT POLE
- POWER POLE
- DUPLEX RECEPTACLE
- ELECTRICAL SERVICE CABINET


811 Know what's below Call before you dig.

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## 1 ELECTRICAL DEMOLITION PLAN

SCALE: 1"=20'–0"

**75% REVIEW**
**12-3-21**

| DATE: | ISSUED FOR: |
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# HACKLEY PARK RELIGHTING
DEPARTMENT OF LEISURE SERVICES
MUSKEGON, MICHIGAN

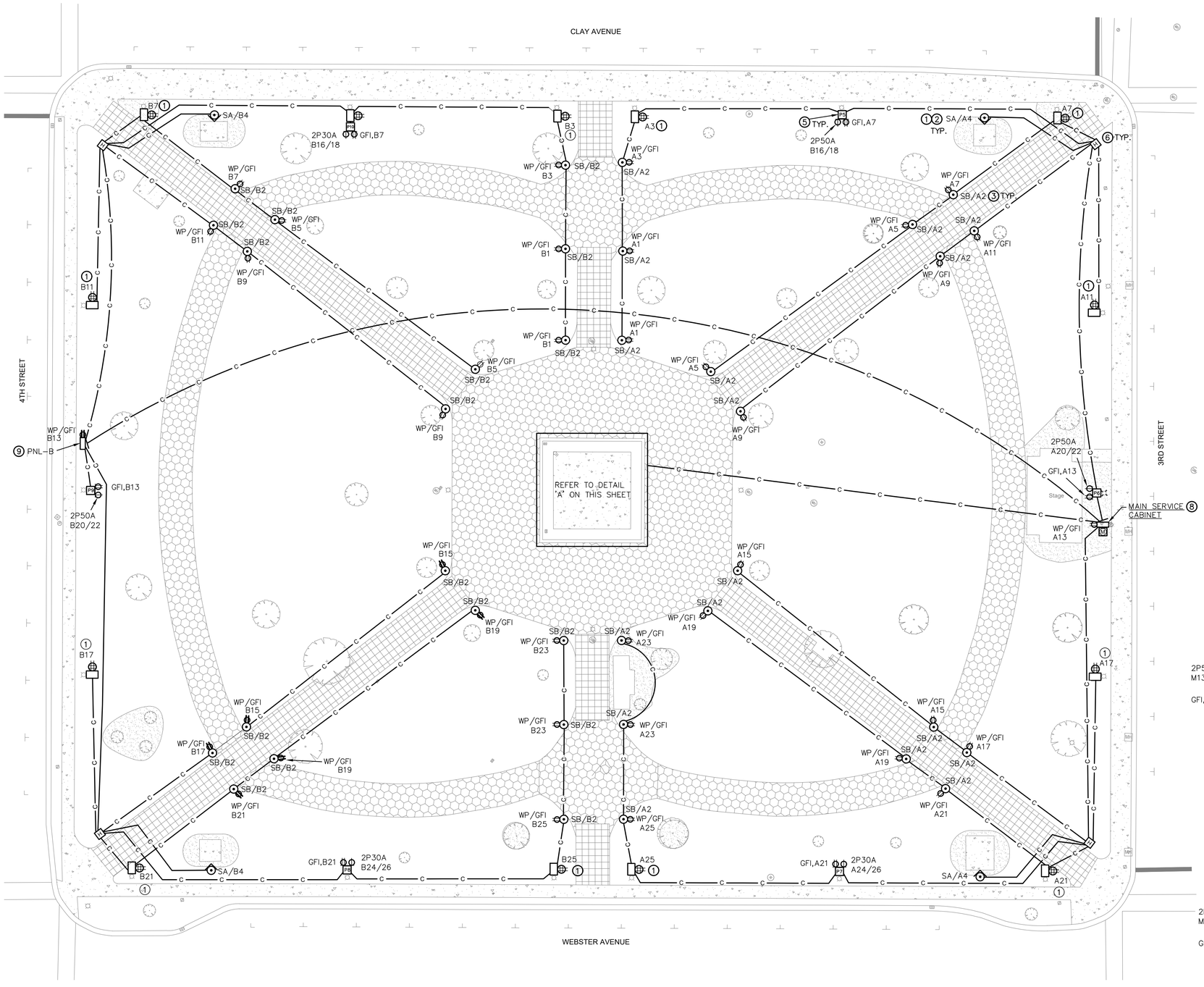


Geotech, Inc. Engineered Systems
4900 Cascade Road, S.E., Grand Rapids, Michigan 49546
616.949.3340
www.geotech-inc.com

PROJECT #: 689-001

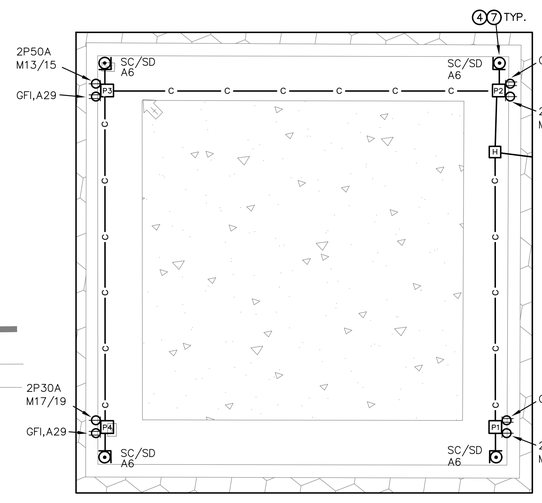
SHEET TITLE: ELECTRICAL DEMOLITION SITE PLAN

SHEET #: E1




1 **ELECTRICAL SITE PLAN**

SCALE: 1"=20'-0"




2 **DETAIL 'A'**

SCALE: 1"=5'-0"

**75% REVIEW**
**12-3-21**

811 Know what's **below** **Call** before you dig.

UTILITY LOCATIONS ARE DERIVED FROM ACTUAL MEASUREMENTS OR AVAILABLE RECORDS. THEY SHOULD NOT BE INTERPRETED TO BE EXACT LOCATIONS NOR SHOULD IT BE ASSUMED THAT THEY ARE THE ONLY UTILITIES IN THIS AREA.

**GENERAL CONSTRUCTION NOTES:**

1. LOCATE EXISTING UNDERGROUND UTILITIES BEFORE DIGGING AND AVOID DAMAGING THEM DURING CONSTRUCTION.
2. INSTALL UNDERGROUND CONDUITS BY DIRECTIONAL BORING AND PATCH DISTURBED AREAS TO MATCH EXISTING.
3. UNDERGROUND CONDUITS SHALL BE SCHEDULE 40 AND BURIED AT 24" BELOW FINISHED GRADE.
4. INSTALL ALL EQUIPMENT PER MANUFACTURERS INSTRUCTIONS.

**KEYED CONSTRUCTION NOTES:**

1. THE QUADPLEX RECEPTACLE LOCATED IN THE OUTDOOR GROUND BOX SHALL BE PROTECTED BY THE GFI DUPLEX RECEPTACLE OF THE SAME CIRCUIT LOCATED IN THE BOLLARD TYPE – SB.
2. INSTALL FLUSH WITH THE FINISHED GRADE AND THE EDGE OF LIGHT FIXTURE AT 24" FROM THE BASE OF THE STATUE.
3. REFER TO LIGHT BOLLARD BASE DETAIL #1 ON SHEET E3.
4. REFER TO RAISED STANCHION MOUNTED FIXTURE DETAIL #2 ON SHEET E3.
5. OUTDOOR POWER PEDESTAL WITH (1) 1P20A GFI DUPLEX RECEPTACLE AND (1) 2P30A OR 2P50A RECEPTACLE AND WITH WEATHERPROOF HINGED AND LOCKABLE COVER. TYPES OF 2P30A AND 2P50A RECEPTACLES SHALL BE COORDINATED WITH THE OWNER. LEGRAND/WIREMOLD #XPP2GC30C-BK/ XPP2GPL-BK/XPPC-BK/BASE.
6. HANDHOLE. REFER TO DETAIL #3 ON SHEET E3.
7. AIM THE LIGHT FIXTURE IN COORDINATION WITH THE ENGINEER TO PROVIDE OPTIMUM LIGHT DISTRIBUTION.
8. REFER TO DETAIL #1 ON SHEET E4.
9. REFER TO DETAIL #2 ON SHEET E4.

## SYMBOL LEGEND

- H — HANDHOLE
- LIGHT POLE
- P — POWER POLE
- D — DUPLEX RECEPTACLE
- ELECTRICAL SERVICE CABINET
- OUTDOOR GROUND BOX WITH QUADPLEX RECEPTACLE (20A)
- P — POWER PEDESTAL
- M — POWER METER
- PROPOSED ROUTE FOR ELECTRICAL CONDUIT

NORTH

0' 10' 20'

SCALE: 1"=20'

| DATE: | ISSUED FOR: |
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# HACKLEY PARK RELIGHTING
DEPARTMENT OF LEISURE SERVICES
MUSKEGON, MICHIGAN

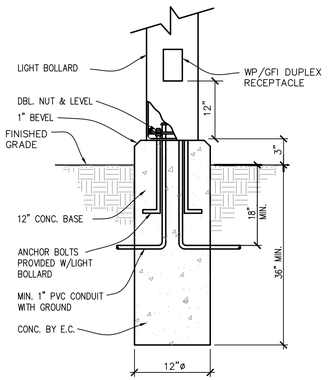


Geotech, Inc. Engineered Systems
4900 Cascade Road, S.E., Grand Rapids, Michigan 49546
616.949.3340 www.geotech-inc.com

PROJECT #: 689-001

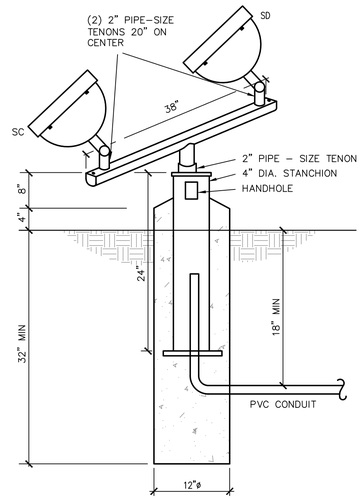
SHEET TITLE: ELECTRICAL SITE PLAN

SHEET #: E2



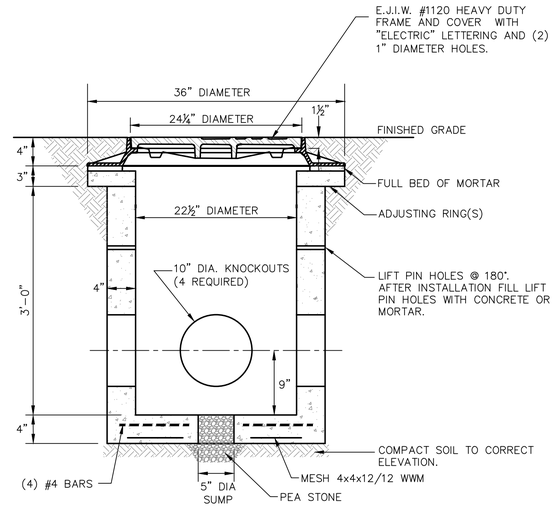

## 1 LIGHT BOLLARD BASE DETAIL (SB)

SCALE: N.T.S.




## 2 RAISED STANCHION MOUNTED FIXTURE DETAL (SC & SD)

SCALE: N.T.S.




## 3 HANDHOLE DETAIL

SCALE: N.T.S.

811 Know what's below Call before you dig.

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**75% REVIEW**
**12-3-21**

| DATE: | ISSUED FOR: |
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# HACKLEY PARK RELIGHTING
DEPARTMENT OF LEISURE SERVICES
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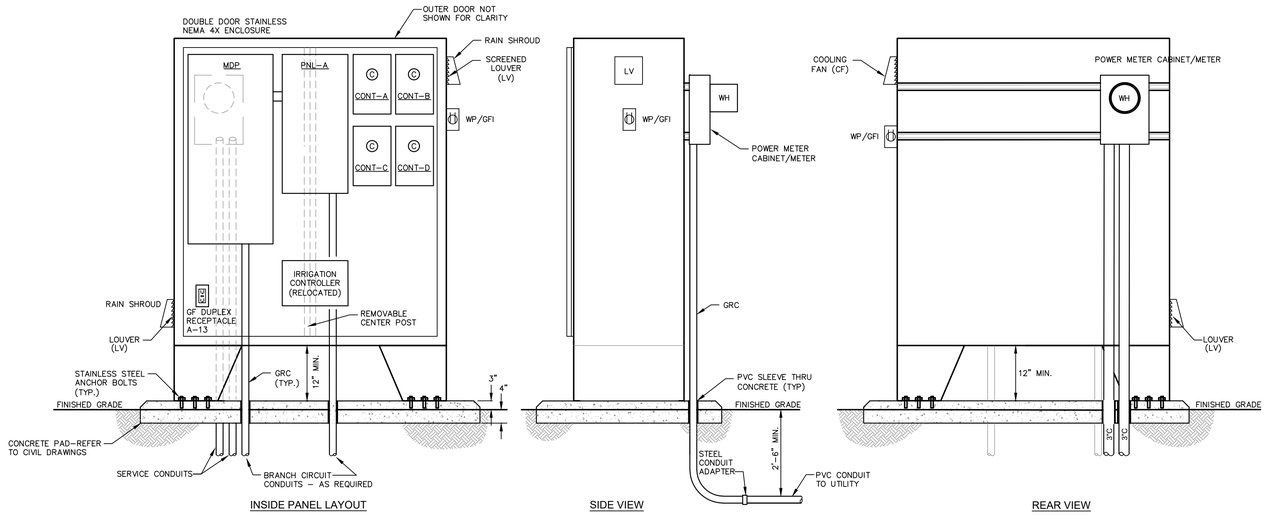
4900 Cascade Road, S.E., Grand Rapids, Michigan 49546
616.949.3340 www.geotech-inc.com

PROJECT #: 689-001

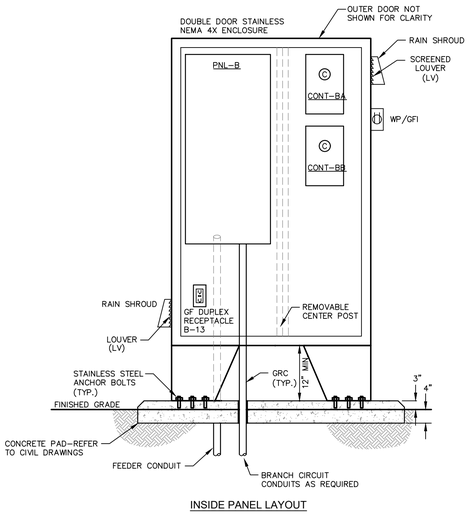
SHEET TITLE: ELECTRICAL DETAILS

SHEET #: E3




## 1 MAIN SERVICE CABINET DETAIL

SCALE: N.T.S.




## 2 PNL-B CABINET DETAIL

SCALE: N.T.S.

| PANEL COMPUTATION/RECORD SHEET | | | | | | PROJECT NAME: | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | 1-PHASE | | | | | | PANEL ID: PNL-MDP |
| CKT | LOAD - VOLT AMPERES | | | | DESCRIPTION | CKT | PH | CKT | DESCRIPTION | LOAD - VOLT AMPERES | | | | CKT |
| # | LTG | MTR | RCPT | OTHER | | P | T | P | T | | LTG | MTR | RCPT | OTHER | # |
| 1 | 1884 | 0 | 7800 | 24900 | PNL-A | 2 | 225 | A | 2 | 225 | 468 | 0 | 6900 | 21120 | 2 |
| 3 | | | | | X | X | X | B | X | X | | | | | 4 |
| 5 | | | | 4800 | 50A RV-PEDESTAL #1, MONUMENT, E | 2 | 50 | A | 2 | 50 | SPARE | | | | 6 |
| 7 | | | | 4800 | X | X | X | B | X | X | X | | | | 8 |
| 9 | | | | 2880 | 30A RV-PEDESTAL #3, MONUMENT, N | 2 | 30 | A | 2 | 30 | SPARE | | | | 10 |
| 11 | | | | 2880 | X | X | X | B | X | X | X | | | | 12 |
| 13 | | | | 4800 | 50A RV-PEDESTAL #5, MONUMENT, W | 2 | 50 | A | 2 | | SPACE | | | | 14 |
| 15 | | | | 4800 | X | X | X | B | X | | X | | | | 16 |
| 17 | | | | 2880 | 30A RV-PEDESTAL #6, MONUMENT, S | 2 | 30 | A | 2 | | SPACE | | | | 18 |
| 19 | | | | 2880 | X | X | X | B | X | | X | | | | 20 |
| 21 | | | | | | 2 | 30 | A | | | | | | | 22 |
| 23 | | | | | | X | X | B | | | | | | | 24 |
| 25 | | | | | | 2 | 90 | A | | | SPACE | | | | 26 |
| 27 | | | | | | X | X | B | 2 | 30 | INTEGRAL SPD 0100 KAI | | | | 28 |
| 29 | | | | | | 2 | 30 | A | X | X | X | | | | 30 |
| | 1884 | 0 | 7800 | 56680 | | SUBTOTALS | | | | | 468 | 0 | 6900 | 21120 | |
| | CONNECTED | | MULT | DIVERSIFIED (VA) | | NOTES: | | | | | | | | | |
| LTG | 2362 | | 1.25 | 2977 | | VOLTAGE: | | 240 | PHA KVA | 34 | SQUARE D / LINE WITH INTEGRAL | | | | |
| LMTR | 0 | | 1.25 | 0 | | MIN AMP: | | 384 | PHB KVA | 34 | SURGE PROTECTION DEVICE | | | | |
| MTR | 0 | | 1 | 0 | | MOUNTING: | SURFACE | | | | | | | | |
| RCPT | 14600 | | | 12500 | | MAIN LUG: | | | AIC 25KA | | | | | | |
| OTHER | 70800 | | 1 | 70800 | | MAIN CKT BKR: | | 600 | | | | | | | |
| TOTAL | 83763 | | | 126977 | | | | | | | PANEL ID: | PNL-MDP | | | |

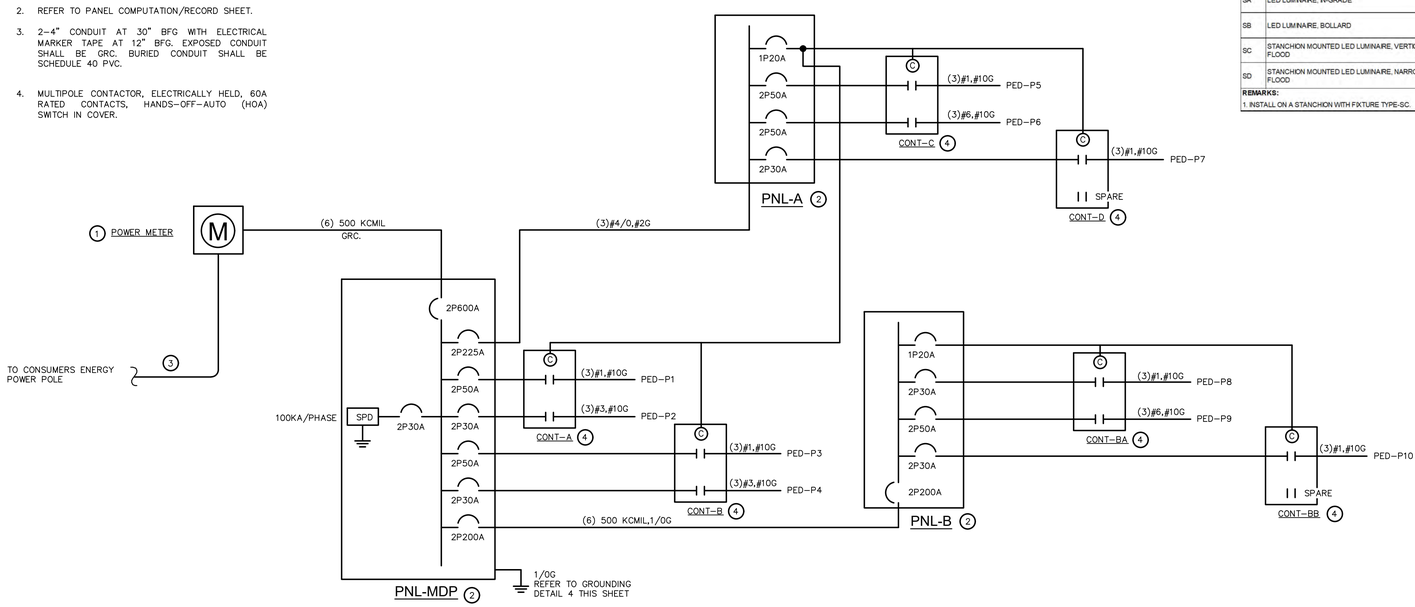
| PANEL COMPUTATION/RECORD SHEET | | | | | | PROJECT NAME: | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | 1-PHASE | | | | | | PANEL ID: PNL-A |
| CKT | LOAD - VOLT AMPERES | | | | DESCRIPTION | CKT | PH | CKT | DESCRIPTION | LOAD - VOLT AMPERES | | | | CKT |
| # | LTG | MTR | RCPT | OTHER | | P | T | CR | | | LTG | MTR | RCPT | OTHER | # |
| 1 | | | 400 | | RECEPTACLES | 1 | 20 | YES | A | 1 | 20 | YES | STATUS LIGHTS-EAST | 38 | | | | 2 |
| 3 | | | 600 | | RECEPTACLES | 1 | 20 | YES | B | 1 | 20 | YES | BOLLARD LIGHTS-EAST | 450 | | | | 4 |
| 5 | | | 400 | | RECEPTACLES | 1 | 20 | YES | A | 1 | 20 | YES | MONUMENT LIGHTS | 1406 | | | | 6 |
| 7 | | | 800 | | RECEPTACLES | 1 | 20 | YES | B | 1 | 20 | YES | SPARE | | | | | 8 |
| 9 | | | 400 | | RECEPTACLES | 1 | 20 | YES | A | 1 | 20 | YES | SPARE | | | | | 10 |
| 11 | | | 600 | | RECEPTACLES | 1 | 20 | YES | B | 1 | 20 | YES | SPARE | | | | | 12 |
| 13 | | | 400 | | RECEPTACLES | 1 | 20 | YES | A | 1 | 20 | YES | CONTROL FOR CONTACTOR BY RV-PED | | | | | 14 |
| 15 | | | 400 | | RECEPTACLES | 1 | 20 | YES | B | 2 | 50 | NO | 50A RV-PEDESTAL #1 | | | | 4800 | 16 |
| 17 | | | 600 | | RECEPTACLES | 1 | 20 | YES | A | X | X | X | X | | | | 4800 | 18 |
| 19 | | | 400 | | RECEPTACLES | 1 | 20 | YES | B | 2 | 50 | NO | 50A RV-PEDESTAL #3 | | | | 4800 | 20 |
| 21 | | | 800 | | RECEPTACLES | 1 | 20 | YES | A | X | X | X | X | | | | 4800 | 22 |
| 23 | | | 400 | | RECEPTACLES | 1 | 20 | YES | B | 2 | 30 | NO | 30A RV-PEDESTAL #5 | | | | 2880 | 24 |
| 25 | | | 600 | | RECEPTACLES | 1 | 20 | YES | A | X | X | X | X | | | | 2880 | 26 |
| 27 | | | | | SPARE | 1 | 20 | YES | B | 2 | 50 | NO | SPARE | | | | | 28 |
| 29 | | | | | SPARE | 1 | 20 | YES | A | X | X | X | X | | | | | 30 |
| 31 | | | | | SPARE | 1 | 20 | YES | B | 2 | 30 | NO | SPARE | | | | | 32 |
| 33 | | | | | SPARE | 1 | 20 | NO | A | X | X | X | X | | | | | 34 |
| 35 | | | | | SPARE | 1 | 20 | NO | B | 1 | | | SPACE | | | | | 36 |
| 37 | | | | | SPARE | 1 | 20 | NO | A | 1 | | | SPACE | | | | | 38 |
| 39 | | | | | SPARE | 1 | 20 | NO | B | 1 | | | SPACE | | | | | 40 |
| 41 | | | | | SPARE | 1 | 20 | NO | A | 1 | | | SPACE | | | | | 42 |
| | 0 | 0 | 6800 | 0 | | SUBTOTALS | | | | | | | | 1884 | 0 | 0 | 24960 | |
| | CONNECTED | | MULT | DIVERSIFIED (VA) | | NOTES: | | | | | | | | | | | | |
| LTG | 1894 | | 1.25 | 2367 | | VOLTAGE: | | | 240 | PHA KVA | 35 | SQUARE D NQ POWERLINK | | | | | | |
| LMTR | 0 | | 1.25 | 0 | | MIN AMP: | | | 146 | PHB KVA | 35 | CRV CONTROL RELAY | | | | | | |
| MTR | 0 | | 1 | 0 | | MOUNTING: | SURFACE | | | | | INTEGRATED EQUIPMENT | | | | | | |
| RCPT | 7800 | | | 7800 | | MAIN LUG: | | | 225 | AIC 25KA | | | | | | | | |
| OTHER | 24960 | | 1 | 24960 | | MAIN CKT BKR: | | | | | | | | | | | | |
| TOTAL | 34654 | | | 35127 | | | | | | | | PANEL ID | PNL-A | | | | | |

| PANEL COMPUTATION/RECORD SHEET | | | | | | PROJECT NAME: | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | 1-PHASE | | | | | | PANEL ID: PNL-B |
| CKT | LOAD - VOLT AMPERES | | | | DESCRIPTION | CKT | PH | CKT | DESCRIPTION | LOAD - VOLT AMPERES | | | | CKT |
| # | LTG | MTR | RCPT | OTHER | | P | T | CR | | | LTG | MTR | RCPT | OTHER | # |
| 1 | | | 400 | | RECEPTACLES | 1 | 20 | YES | A | 1 | 20 | YES | STATUS LIGHTS-WEST | 38 | | | | 2 |
| 3 | | | 600 | | RECEPTACLES | 1 | 20 | YES | B | 1 | 20 | YES | BOLLARD LIGHTS-WEST | 450 | | | | 4 |
| 5 | | | 400 | | RECEPTACLES | 1 | 20 | YES | A | 1 | 20 | YES | SPARE | | | | | 6 |
| 7 | | | 800 | | RECEPTACLES | 1 | 20 | YES | B | 1 | 20 | YES | SPARE | | | | | 8 |
| 9 | | | 400 | | RECEPTACLES | 1 | 20 | YES | A | 1 | 20 | YES | SPARE | | | | | 10 |
| 11 | | | 600 | | RECEPTACLES | 1 | 20 | YES | B | 1 | 20 | YES | SPARE | | | | | 12 |
| 13 | | | 400 | | RECEPTACLES | 1 | 20 | YES | A | 1 | 20 | YES | CONTROL FOR CONTACTOR BY RV-PED | | | | | 14 |
| 15 | | | 400 | | RECEPTACLES | 1 | 20 | YES | B | 2 | 30 | NO | 30A RV-PEDESTAL #9 | | | | 2880 | 16 |
| 17 | | | 600 | | RECEPTACLES | 1 | 20 | YES | A | X | X | X | X | | | | 2880 | 18 |
| 19 | | | 400 | | RECEPTACLES | 1 | 20 | YES | B | 2 | 50 | NO | 50A RV-PEDESTAL #8 | | | | 4800 | 20 |
| 21 | | | 800 | | RECEPTACLES | 1 | 20 | YES | A | X | X | X | X | | | | 4800 | 22 |
| 23 | | | 400 | | RECEPTACLES | 1 | 20 | YES | B | 2 | 30 | NO | 30A RV-PEDESTAL #8 | | | | 2880 | 24 |
| 25 | | | 600 | | RECEPTACLES | 1 | 20 | YES | A | X | X | X | X | | | | 2880 | 26 |
| 27 | | | | | SPARE | 1 | 20 | YES | B | 2 | 50 | NO | SPARE | | | | | 28 |
| 29 | | | | | SPARE | 1 | 20 | YES | A | X | X | X | X | | | | | 30 |
| 31 | | | | | SPARE | 1 | 20 | YES | B | 2 | 30 | NO | SPARE | | | | | 32 |
| 33 | | | | | SPARE | 1 | 20 | NO | A | X | X | X | X | | | | | 34 |
| 35 | | | | | SPARE | 1 | 20 | NO | B | 1 | | | SPACE | | | | | 36 |
| 37 | | | | | SPARE | 1 | 20 | NO | A | 1 | | | SPACE | | | | | 38 |
| 39 | | | | | SPARE | 1 | 20 | NO | B | 1 | | | SPACE | | | | | 40 |
| 41 | | | | | SPARE | 1 | 20 | NO | A | 1 | | | SPACE | | | | | 42 |
| | 0 | 0 | 6800 | 0 | | SUBTOTALS | | | | | | | | 468 | 0 | 0 | 21120 | |
| | CONNECTED | | MULT | DIVERSIFIED (VA) | | NOTES: | | | | | | | | | | | | |
| LTG | 468 | | 1.25 | 655 | | VOLTAGE: | | | 240 | PHA KVA | 28 | SQUARE D NQ POWERLINK | | | | | | |
| LMTR | 0 | | 1.25 | 0 | | MIN AMP: | | | 119 | PHB KVA | 28 | CRV CONTROL RELAY | | | | | | |
| MTR | 0 | | 1 | 0 | | MOUNTING: | SURFACE | | | | | INTEGRATED EQUIPMENT | | | | | | |
| RCPT | 6800 | | | 6800 | | MAIN LUG: | | | | AIC 25KA | | SLAVE TO PANEL-A | | | | | | |
| OTHER | 21120 | | 1 | 21120 | | MAIN CKT BKR: | | | 200 | | | | | | | | | |
| TOTAL | 28408 | | | 28520 | | | | | | | | PANEL ID | PNL-B | | | | | |

| LIGHTING FIXTURE SCHEDULE | | | | |
|---|---|---|---|---|
| MARK | DESCRIPTION | MANUFACTURER & CAT. NO. | LAMPS | REMARKS |
| SA | LED LUMINAIRE, IN-GRADE | KIM #LTVB2-FF-WW-18L-3K-UV-RCA82 | LED | |
| SB | LED LUMINAIRE, BOLLARD | AAL #PROB-Y2-2030-BLT-FS1-RD | LED | |
| SC | STANCHION MOUNTED LED LUMINAIRE, VERTICAL FLOOD | KIM #KFL3-80L175-3K7-VF-UNV-S-BL-BD-SF w/ SM2XX-BL(REFER TO MOUNTAING DETAIL)-M2B-BL | LED | |
| SD | STANCHION MOUNTED LED LUMINAIRE, NARROW FLOOD | KIM #KFL3-80L175-3K7-N-UNV-S-BL-BD-SF | LED | 1 |
| REMARKS: 1. INSTALL ON A STANCHION WITH FIXTURE TYPE-SC. | | | | |

◯ KEYED ELECTRICAL NOTES:

1. PROVIDE METERING CABINET PER CONSUMERS ENERGY REQUIREMENTS.
2. REFER TO PANEL COMPUTATION/RECORD SHEET.
3. 2-4" CONDUIT AT 30" BFG WITH ELECTRICAL MARKER TAPE AT 12" BFG. EXPOSED CONDUIT SHALL BE GRC. BURIED CONDUIT SHALL BE SCHEDULE 40 PVC.
4. MULTIPOLE CONTACTOR, ELECTRICALLY HELD, 60A RATED CONTACTS, HANDS-OFF-AUTO (HOA) SWITCH IN COVER.

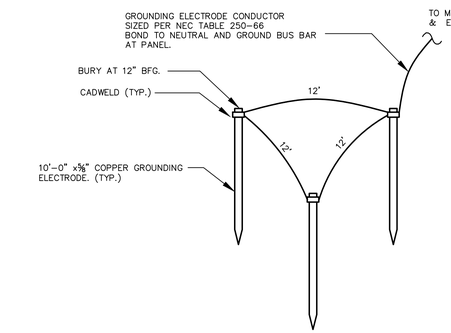



## 3 ELECTRICAL ONE-LINE DIAGRAM

240V/120V, 1Ø, 3 WIRE

SCALE: N.T.S.

**75% REVIEW**
**12-3-21**




## 4 ELECTRICAL SYSTEM GROUNDING DETAIL

SCALE: N.T.S.

| DATE: | ISSUED FOR: |
|---|---|
| | |
| | |
| | |
| | |
| | |
| | |

HACKLEY PARK RELIGHTING
DEPARTMENT OF LEISURE SERVICES
MUSKEGON, MICHIGAN



Geotech, Inc. Engineered Systems
4900 Cascade Road, S.E., Grand Rapids, Michigan 49546
616.949.3340
www.geotech-inc.com

PROJECT #: 689-001

SHEET TITLE: ELECTRICAL ONE-LINE DIAGRAM AND DETAILS

SHEET #: E4

KIM LIGHTING®

DATE: LOCATION:

TYPE: PROJECT:

CATALOG #:

# KFL3

ARCHITECTURAL FLOOD

Architectural
FLOODLIGHT COLLECTION

## FEATURES

- Lumen range from 10,000 to 20,000 lm
- Color Temperature 3000K, 4000K, 5,000K at 70 and 80 CRI
- Yoke and Threaded Knuckle, and Slipfitter Knuckle mounting options
- 6 beam distributions and beam angles including: Narrow 17°x17°, Medium 26°x26°, Medium Flood 62°x62°, Wide 80°x81°, Horizontal 53°x21°, and Vertical 21°x53°

c UL us LISTED IP66 DLC DLC QPL LISTED™

KFL3 White

## CONTROL TECHNOLOGY

NX DISTRIBUTED INTELLIGENCE

### RELATED PRODUCTS

Ouro Pavilion PGL8

## SPECIFICATIONS

### CONSTRUCTION

- One piece die-cast, low copper (<0.6% Cu) Aluminum Alloy 360 with vents and .100" minimum wall thickness
- Separate internal driver compartment rated for IP66 ingress protection
- Finish: fade and abrasion resistant, electrostatically applied, thermally cured, triglycidal isocyanurate (TGIC) polyester powdercoat.
- Standard colors include (BLS) Black Gloss Smooth, (BLT) Black Matte Textured, (DBS) Dark Bronze Gloss Smooth, (GTT) Graphite Matte Textured, (LGS) Light Gray Gloss Smooth, (PSS) Platinum Silver Smooth, (VGS) Verde Green Smooth, (WH) White, and (CC) Custom Color (Include RAL#).
- Lens is impact resistant 1/8" tempered glass with anti-reflective coating
- Lens has a one-piece extruded vulcanized silicone gasket
- Lens frame one piece die-cast, low copper (<0.6% Cu) Aluminum Alloy 360 and .100" minimum wall thickness
- Lens frame has a one-piece O-ring extruded vulcanized silicone gasket
- Mid-frame one piece die-cast, low copper (<0.6% Cu) Aluminum Alloy 360 and .100" minimum wall thickness
- Mid-frame secures to Lens Frame and housing by stainless steel recessed Allen-head screws
- Silicone gaskets throughout
- All external fasteners are stainless steel

### OPTICS

- LEDs mount to a metal printed circuit board assembly (MCPCB)
- Optical lenses are clear injection molded PMMA acrylic

### INSTALLATION

- Fixtures must be grounded in accordance with national, state and/or local electrical codes. Failure to do so may result in serious personal injury

### ELECTRICAL

- Universal voltage, 120 through 277V with a ±10% tolerance. Driver is Underwriters Laboratories recognized
- High voltage configurations, 347/480. Driver has a 0-10V dimming interface for multi-level illumination options. Driver is Underwriters Laboratories recognized
- "Thermal Shield", secondary side, thermistor provides protection for the sustainable life of LED module and electronic components
- Drivers shall have greater than a 0.9 power factor, less than 20% harmonic distortion, and be suitable for operation in -40°C to 40°C ambient environments
- Luminaire shall be capable of operating at 100% brightness in a 40°C environment. Both driver and optical array have integral thermal protection that will dim the luminaire upon detection of temperatures in excess of 85°C

### ELECTRICAL (CONTINUED)

- Dimming range from 10% to 100% through the use of standard 0-10V interface on the programmable driver
- Modular wiring harness in the service area provides user access to the dimming circuitry
- Optional factory programmed dimming profile
- Surge protection: 10,000k in parallel, 20,000k in series
- SF for 120, 277, 347 Line volts
  DF for 208, 240, 480 Line volts
- Wiring: No. 18AWM rated 105°C, wet rating.

### CERTIFICATIONS AND LISTINGS

- UL 1598 Standard for Luminaires.
- IP66 certified.
- RoHS compliant.

### WARRANTY

- 5 year warranty
- See HLI Standard Warranty for additional information

| KEY DATA | |
|---|---|
| Lumen Range | 9,411–21,710 |
| Wattage Range | 90–175 |
| Efficacy Range (LPW) | 100.3–125.8 |
| Reported Life (Hours) | L70/60,000 |
| Weight | 30 lbs 13.6 kg |
| EPA Front View / Side View | 1.85 / .60 |







HUBBELL® HUBBELL Lighting

KIM LIGHTING®

DATE: LOCATION:

TYPE: PROJECT:

CATALOG #:

# KFL3

ARCHITECTURAL FLOOD

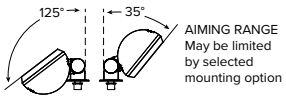
## DELIVERED LUMENS

| LEDs # | Nominal Watts | Nominal Lumens | Distribution | Beam Angles | 3000K 70CRI | | | 4000K 70CRI | | | 5000K 70CRI | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Lumen | Center Beam Candlepower | lm/w | Lumen | Center Beam Candlepower | lm/w | Lumen | Center Beam Candlepower | lm/w |
| 40L | 90 | 10,000 lm | N | 17° x 17° | 9447 | 82353 | 104.4 | 9710 | 84646 | 107.3 | 10080 | 87871 | 111.6 |
| | | | M | 27° x 28° | 9883 | 34135 | 109.2 | 10159 | 35088 | 112.2 | 10546 | 36425 | 116.5 |
| | | | MF | 62° x 63° | 9941 | 10543 | 109.8 | 10217 | 10835 | 112.9 | 10607 | 11249 | 117.1 |
| | | | WF | 81° x 81° | 10699 | 7957 | 118.2 | 10997 | 8178 | 121.5 | 11416 | 8490 | 125.8 |
| | | | HF | 53° x 21° | 9458 | 16271 | 104.5 | 9721 | 16724 | 107.4 | 10092 | 17362 | 111.6 |
| | | | VF | 21° x 53° | 9411 | 16308 | 104.0 | 9673 | 16762 | 106.9 | 10042 | 17401 | 111.1 |
| 60L | 135 | 15,000 lm | N | 17° x 17° | 13951 | 125164 | 104.7 | 14339 | 128645 | 107.6 | 14886 | 133553 | 111.6 |
| | | | M | 27° x 27° | 14488 | 50783 | 108.7 | 14891 | 52195 | 111.7 | 15459 | 54186 | 116.1 |
| | | | MF | 62° x 62° | 14753 | 16207 | 110.7 | 15164 | 16658 | 113.8 | 15742 | 17293 | 117.6 |
| | | | WF | 80° x 80° | 15738 | 11759 | 118.1 | 16176 | 12086 | 121.4 | 16793 | 12547 | 125.8 |
| | | | HF | 53° x 21° | 13709 | 23862 | 102.9 | 14091 | 24529 | 105.7 | 14628 | 25464 | 110.2 |
| | | | VF | 21° x 53° | 13610 | 23691 | 102.1 | 13990 | 24352 | 105.0 | 14523 | 25280 | 109.3 |
| 80L | 175 | 20,000 lm | N | 17° x 17° | 18241 | 164445 | 103.8 | 18749 | 169024 | 106.7 | 19464 | 175470 | 110.7 |
| | | | M | 26° x 26° | 18966 | 67733 | 107.9 | 19495 | 69623 | 111.0 | 20238 | 72276 | 115.0 |
| | | | MF | 62° x 62° | 19035 | 20901 | 108.3 | 19565 | 21483 | 111.4 | 20311 | 22302 | 115.5 |
| | | | WF | 80° x 81° | 20346 | 15200 | 115.8 | 20913 | 15624 | 119.0 | 21710 | 16219 | 123.7 |
| | | | HF | 53° x 21° | 17615 | 31364 | 100.3 | 18106 | 32238 | 103.0 | 18796 | 33467 | 107.1 |
| | | | VF | 21° x 53° | 17679 | 31509 | 100.6 | 18171 | 32386 | 103.4 | 18864 | 33621 | 107.5 |

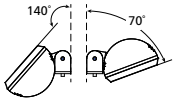
| CRI Lumen Multiplier | |
|---|---|
| CCT | 80 CRI |
| 3000K | 0.9119 |
| 4000K | 0.8941 |
| 5000K | 0.8625 |

## AIMING INFORMATION

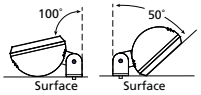
### THREADED KNUCKLE



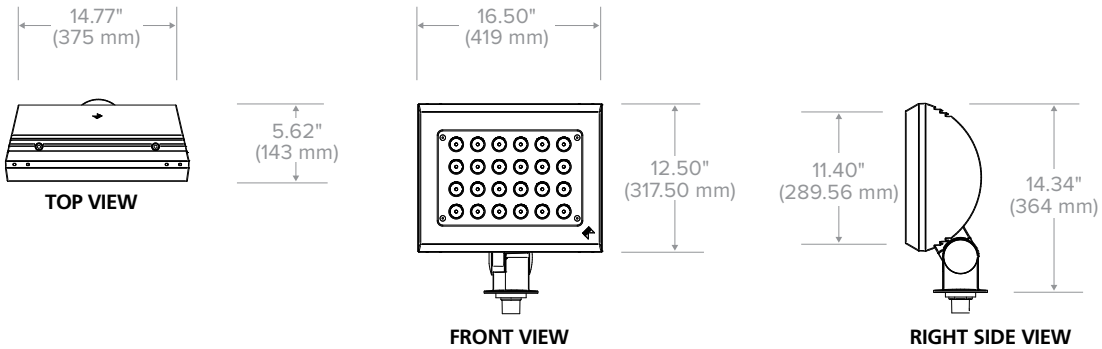

### YOKE AIMING RANGE




### YOKE AIMING RANGE WITH GROUND RESTRICTIONS




## DIMENSIONS








HUBBELL® Lighting

KIM LIGHTING®

DATE: LOCATION:

TYPE: PROJECT:

CATALOG #:

# KFL3

ARCHITECTURAL FLOOD

## PRODUCT EXCEPTIONS & DETAILS

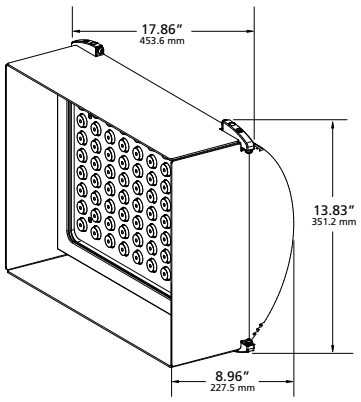
### OPTICAL OPTIONS

#### BARN DOORS (BD)

- Formed 3/32" thick aluminum. Each door is hinged to a cast, low copper (<0.6% Cu) aluminum frame, and locks by set screws. Doors are individually removable. Barn Door assembly mounts to predrilled door frame holes. Assembly will be painted to match fixture housing

#### CAUTION:

- Not recommended for ground mounted fixtures in vandal prone areas

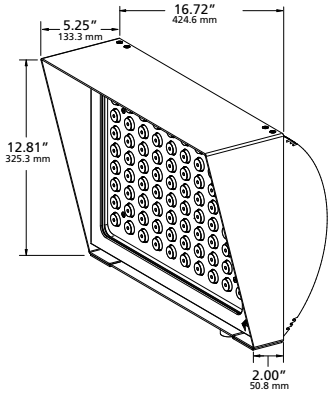



#### HALF GLARE SHIELD (HS)

- Formed 3/32" thick aluminum. Mounts to predrilled door frame holes. Can be mounted along the top or bottom of the fixture to shield the lamp and lens from view. Assembly will be painted to match fixture housing

#### CAUTION:

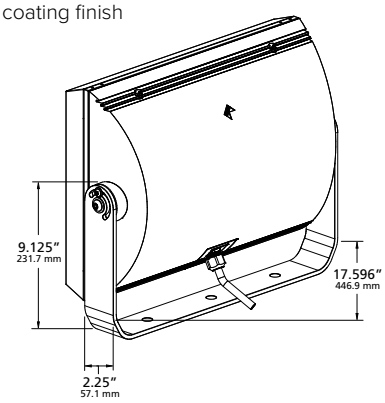
- Not recommended for ground mounted fixtures in vandal prone areas




### MOUNTING OPTIONS

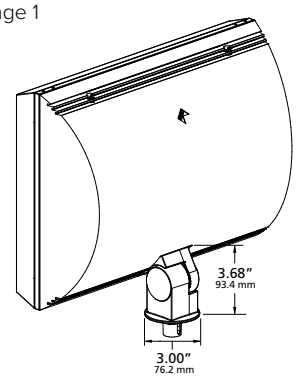
#### ARCHITECTURAL YOKE (Y)

- Architectural Yoke Mount used for surface mounting applications. Secured to surface using three 1/4" bolts
- Yoke is stainless steel material with powder coating finish




#### THREADED KNUCKLE (K)

- Threaded Knuckle is die-cast aluminum with integral locking teeth providing 5° adjustment intervals. Stainless steel allen-head screw with spring locking washer and 1/2" NPSM. Clear anodized prior to chromate conversion coating for added corrosion resistance
- Threaded Knuckle mounting used in conjunction with mounting accessories listed on page 1

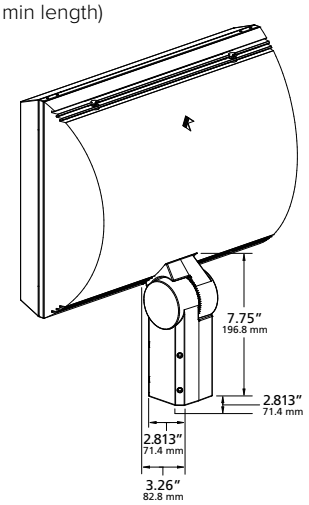



#### SLIPFITTER KNUCKLE (S)

- Slipfitter Knuckle is die-cast aluminum with integral locking teeth providing 5° adjustment intervals. Stainless steel hardware Allen-head screw with spring locking washer and four set screws. Clear anodized prior to chromate conversion coating for added corrosion resistance

#### NOTE:

- Slips over 2" pipe-size tenon (2 3/8" O.D. x 3 1/2" min length)








HUBBELL® HUBBELL Lighting

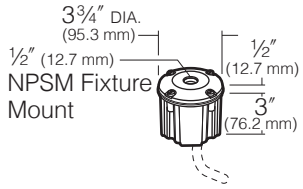
# KFL3
ARCHITECTURAL FLOOD

## PRODUCT EXCEPTIONS & DETAILS CONTINUED

### MOUNTING ACCESSORIES

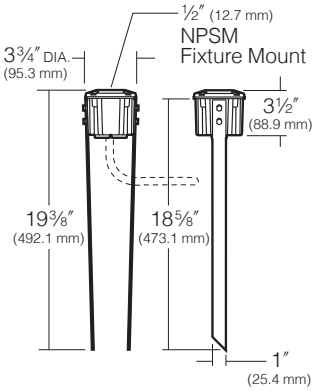
**BRASS IN-GRADE ARCHITECTURAL JUNCTION BOX (THREADED KNUCKLE MOUNT ONLY)**

- **JBR-2** (2) ½" NPT in bottom
- **JBR-3.** (2) 3/4" NPT in bottom
- **JBR21** (2) ½" NPT in sides (2) ½" NPT in bottom
- **JBR24** (4) ½" NPT in sides (2) ½" NPT in bottom
- Die-cast brass with 1/2" NPSM fixture mount and die-cast cover. Internal set screw provided for locking position. 21 cu in. internal volume. NOTE: All side taps provided with plugs. Creates a flush-mounted appearance. May be cast in concrete for increased stability. **CAUTION:** Fixture stem and swivel must not contact soil or standing water. Provide drainage away from junction box.




**BRASS IN-GRADE STAKED JUNCTION BOX (THREADED KNUCKLE MOUNT ONLY)**

- **JBR-30 (**2) ½" NPT in bottom, (2) 19" long stakes Brass In-Grade Staked Junction Box
- **JBR-32**. (2) 19" long stakes
- Die-cast brass with 1/2" NPSM fixture mount and die-cast cover. Internal set screw provided for locking position. 21 cu in. internal volume. Creates a flush-mounted appearance. May be cast in concrete for increased stability. **CAUTION:** To assure a rigid installation, Staked Junction Box must be set in concrete (by others). Fixture stem and swivel must not contact soil or standing water. Provide drainage away from junction box.

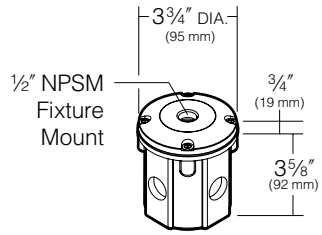



**COMPOSITE IN-GRADE ARCHITECTURAL JUNCTION BOX**

- **JBR-4** (2) ½" NPT knock-outs in bottom (4) ½" NPT knock-outs on sides at 90°
- **JBR-5** Same as above but with brass cover
- Composite box with ½" NPSM fixture mount and composite cover. Internal set screw provided for locking position. 19 cu in. internal volume.

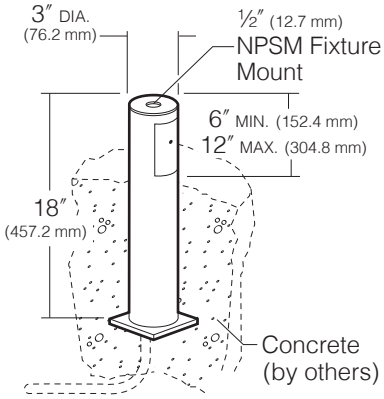
**NOTE:** May also be used to hard mount low voltage fixtures.

**CAUTION:** Fixture stem and swivel must not contact soil or standing water. Provide drainage away from junction box.



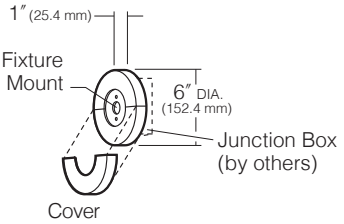

**STANCHION MOUNT (SM18) (THREADED KNUCKLE MOUNT ONLY)**

- 3" O.D. by .188" wall cast low copper (<0.6% Cu) aluminum with 1/2" NPSM fixture mount and hand hole with flush cover. Internal set screw fixture lock accessible through hand hole. Internal ground lug supplied with installed lead. **CAUTION:** To assure a rigid installation, stanchion must be set in concrete (by others).



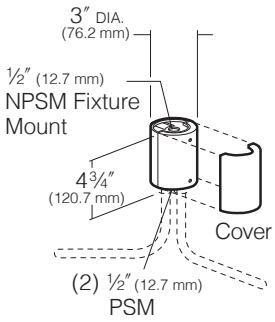

**WALL OR CEILING MOUNT (WM) (THREADED KNUCKLE MOUNT ONLY)**

- Electro zinc steel mounting plate adapts to standard 4" square or octagonal Junction Boxes. Fixture mounts to cast low copper (<0.6% Cu) aluminum upper cover which attaches to mounting plate. Lower cover half provides splice access. Dielectric sealing compound provided for wall interface.




**ARCHITECTURAL JUNCTION BOX (JB1) (THREADED KNUCKLE MOUNT ONLY)**

- Die-cast, low copper (<0.6% Cu) anodized aluminum with 1/2" NPSM fixture mount. Internal set screw provided for locking position. Two 1/2" NPSM in bottom, 17 cu in. internal volume. **CAUTION:** Junction Box must be installed high enough to avoid contact with soil or standing water.



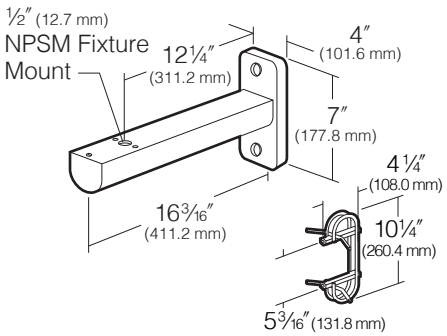
# KFL3
ARCHITECTURAL FLOOD

## PRODUCT EXCEPTIONS & DETAILS CONTINUED

### MOUNTING ACCESSORIES

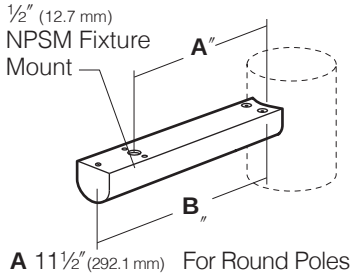
**WALL MOUNT (WM1)**
**(THREADED KNUCKLE MOUNT ONLY)**

- Extruded aluminum arm with a removable end cap for wiring access. Arm is welded to a cast aluminum plate with two 1/2" dia. mounting holes. Optional Wall Embedment Bracket (WEB) provides 3/8-16 bolt receptacles welded in a galvanized re-bar cage for casting into poured-in-place concrete walls. Bolt receptacles receive fixture attachment bolts. Component EPA: 0.3.




**SIDE POLE MOUNT (SPM-X)**
**(THREADED KNUCKLE MOUNT ONLY)**

- Available for Round and Square Poles. Extruded aluminum arm. Internal set screw fixture lock. Removable end cap for wiring access. For use with other Kim Site/Roadway Luminaires as an additional mid-pole floodlight. X in Side Pole Mount Cat. No. indicates 3", 3-1/2", 4", 5" or 6" pole dia. Example: SPM-4/BL is for 4" round pole with Black finish. For square poles, omit -X. NOTE: Field drilling of Poles is required. Component EPA: 0.3.

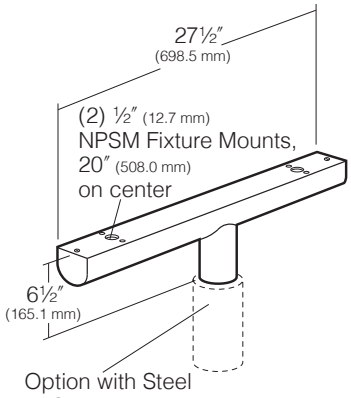



**A** 11½″ (292.1 mm) For Round Poles
12″ (304.8 mm) For Square Poles

**B** 15⅜″ (390.5 mm) For Round Poles
15⅞″ (403.2 mm) For Square Poles

**TWIN MOUNT (TM2)**
**(THREADED KNUCKLE MOUNT ONLY)**

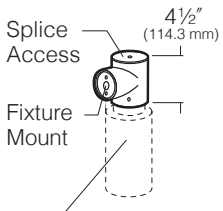
- Extruded aluminum arm. Internal set screw fixture locks. Can be mounted on a SM2, SMT, or Steel Kim Pole with steel 2" pipe-size tenon (2-3/8" O.D. x 3-1/2" min. length). Removable end caps for wiring access. CAUTION: Approved for mounting to poles with steel tenons only. Component EPA: 0.6.




Option with Steel
2″ Pipe-Size Tenon (50.8 mm)
**(SM2, SMT,** or **KIM Pole)**

**POST TOP MOUNT (PT)**
**(THREADED KNUCKLE MOUNT ONLY)**

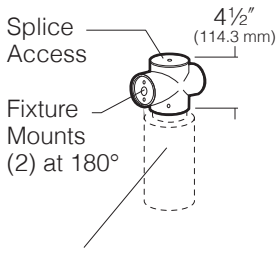
- Cast aluminum mount for pole or other mounting option with 2" pipe-size tenon (2-3/8" O.D. x 3-1/2" minimum length). Fixture attaches with concealed internal studs, mounting is with 1/4-20 allen set screws. Top cap provides splice access. Component EPA: 0.7.




Option with 2″ Pipe-Size Tenon (50.8 mm)
**(WM2, SMT, SM2, M2B, M3E,**
or **KIM Pole)**

**TWIN POST TOP MOUNT (PT2)**
**(THREADED KNUCKLE MOUNT ONLY)**

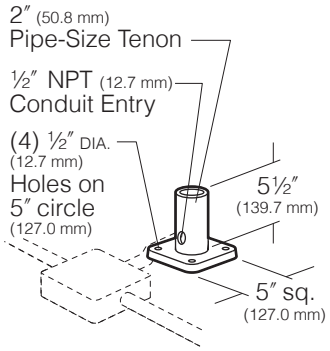
- Cast aluminum mount for pole or other mounting option with 2" pipe-size tenon (2-3/8" O.D. x 3-1/2" minimum length). Fixture attaches with concealed internal studs, mounting is with 1/4-20 allen set screws. Top cap provides splice access. NOTE: Not for use with SMT, SPT, WM2, M2B, or M3E options. Component EPA: 0.1.




Option with 2″ Pipe-Size Tenon (50.8 mm)
**(SM2** or **KIM Pole)**

**SURFACE MOUNT TENON (SMT/BL)**

- (2" tenon for optional heavy duty swivel mount only)
- 2" pipe-size tenon (2-3/8" O.D., 2" I.D.) welded to a cast aluminum plate. Plate has four 1/2" mounting holes, and tenon has one 1/2" NPT for side conduit entry. Black finish.
- NOTE: Not for use with PT2, M2B, or M3E options. May be wall mounted if horizontal fixture adjustment is not required. For wall mounting with horizontal fixture adjustment, use WM2.

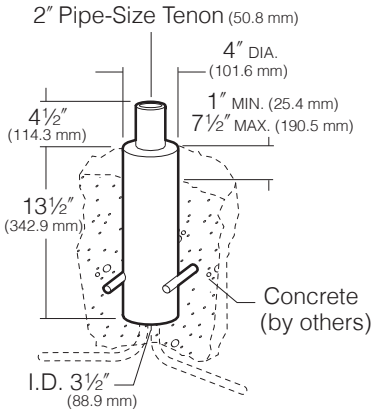


# KFL3
ARCHITECTURAL FLOOD

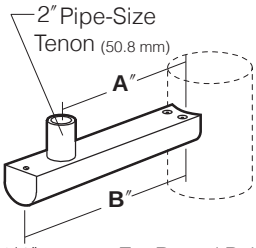
## PRODUCT EXCEPTIONS & DETAILS CONTINUED

### MOUNTING ACCESSORIES

#### STANCHION MOUNT TENON (SM2/BL)
- (2" tenon for optional heavy duty swivel mount only)
- 4" O.D. cast low copper (<0.6% Cu) aluminum stanchion with 2" pipe-size tenon (2-3/8" O.D., 1-3/8" I.D.) for mounting a single fixture or multiple top-mounts. Black finish.
- CAUTION: Multiple top-mounts must not be used in locations where people can climb on fixtures and mounting arms. To assure a rigid installation, stanchion must be set in concrete (by others).




#### SIDE POLE MOUNT TENON (SPT-X)
- (2" tenon for optional heavy duty swivel mount only)
- Available for Round and Square Poles. Extruded aluminum arm with one 2" pipe-size tenon (2-3/8" O.D., 2" I.D.). Removable end cap for wiring access. For use with other Kim Site/Roadway Luminaires as an additional mid-pole floodlight. X in Side Pole Mount Cat. No. indicates 3", 3-1/2", 4", 5" or 6" pole dia. Example: SPM-4/BL is for 4" round pole with Black finish. For square poles, omit -X. NOTE: Field drilling of Poles is required. Not for use with PT2 option. Component EPA: 0.3.

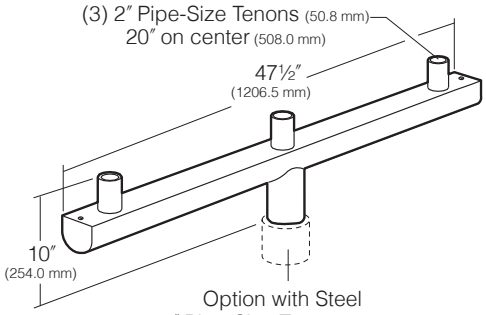



**A** 11½″ (292.1 mm) For Round Poles
12″ (304.8 mm) For Square Poles

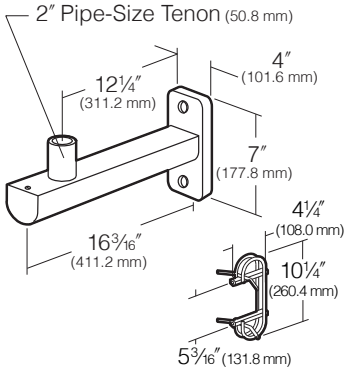
**B** 15⅜″ (390.5 MM) For Round Poles
15⅞″ (403.2 MM) For Square Poles

#### Triple Mount Tenon (M3E)
- (2" tenon for optional heavy duty swivel mount only)
- Extruded aluminum arm with three 2" pipe-size tenons (2-3/8" O.D., 2" I.D.). Can be mounted on a SM2, SMT, or Steel Kim Pole with steel 2" pipe-size tenon (2-3/8" O.D. x 3-1/2" min. length). Removable end caps for wiring access.

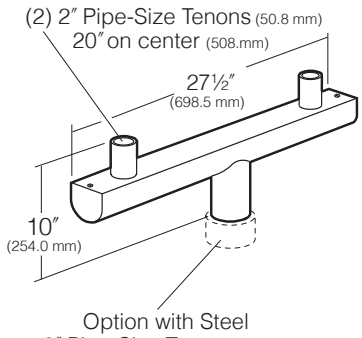
**CAUTION:** Approved for mounting to poles with steel tenons only. Not for use with PT2 option. Component EPA: 1.0.




#### WALL MOUNT TENON (WM2)
- (2" tenon for optional heavy duty swivel mount only)
- 2" pipe-size tenon (2-3/8" O.D., 2" I.D.) welded to an extruded aluminum arm with a removable end cap for wiring access. Arm is welded to a cast aluminum plate with two 1/2" mounting holes. Optional Wall Embedment Bracket (WEB) provides 3/8-16 bolt receptacles welded in a galvanized re-bar cage for casting into poured-in-place concrete walls. Bolt receptacles receive fixture attachment bolts. Component EPA: 0.3.




#### TWIN MOUNT TENON (M2B)
- (2" tenon for optional heavy duty swivel mount only)
- Extruded aluminum arm with two 2" pipe-size tenons (2-3/8" O.D., 2" I.D.). Can be mounted on a SM2, SMT, or Steel Kim Pole with a steel 2" pipe-size tenon (2-3/8" O.D. x 3-1/2" min. length). Removable end caps for wiring access. CAUTION: Approved for mounting to poles with steel tenons only. Not for use with PT2 option. Component EPA: 0.6.



**WIREMOLD®**

# Outdoor Power Pedestal

**Outdoor Power Pedestals offer new versatility to outdoor power applications**

## Provide Higher Power to Outdoor Locations

Designed to be used for high amperage outdoor applications, the Outdoor Power Pedestal can accommodate 15 to 60 amp devices. The pedestal is a durable solution to providing facility power to outdoor environments and applications such as food trucks, events or maintenance equipment. There are several configurations depending on the application requirements, including 1-gang, 2-gang or pin & sleeve device plates. Select configurations also include a hinged in-use cover that can be locked to prevent unauthorized access.

## Features & Benefits

- **Provides standard power for facilities:** Can accommodate up to (2) 15-20A weather-resistant devices that can be used with the integrated while-in-use cover or any 3rd party while-in-use cover available for a 1 or 2 gang opening.
- **Provides higher amp power for facilities:** Pedestals can also accommodate higher 30-60A NEMA and CS devices. Higher amp devices that are watertight can be mounted directly to the pedestal while all others must use an appropriate weatherproof cover.
- **Pin and Sleeve Devices:** Standard Pin and Sleeve plate supports 30A Pass & Seymour Pin and Sleeve devices. **Note:** Pin and Sleeve devices do not have standard mounting hole locations, custom plates may be needed for other brands and/or amperages.
- **Hinged cover with locking tab:** Cover closes automatically to meet while-in-use requirements for 15 and 20 amp devices and provides capability to lock cover when not in use to prevent unauthorized access.
- **Outdoor-rated construction:** Sheet metal form designed for durability in outdoor locations. UL listed to NEMA 3R requirements to ensure optimal performance.
- **Durable, premium finishes:** Available in two outdoor-rated finishes to complement your space design. Choose from black or silver to perfectly match your project.
- **UL Listed:** Standard 1773.
- **1 & 2 Gang Options:** Available in single or dual gang options with select configurations of dual gang including an internal divider for power and low voltage applications.

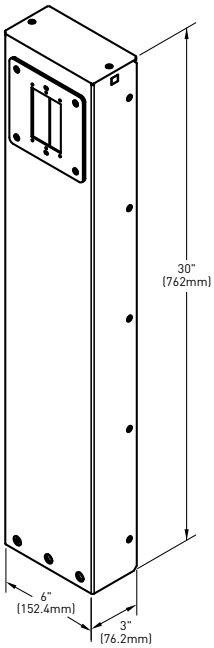
## Vertical Markets

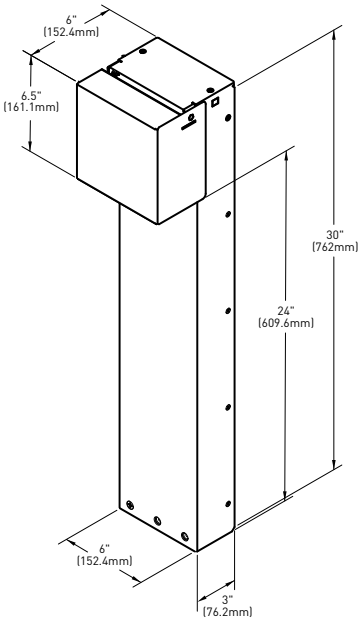
- **Commercial**
- **Entertainment**
- **Hospitality**
- **Parks**
- **Transit**

## Compliance

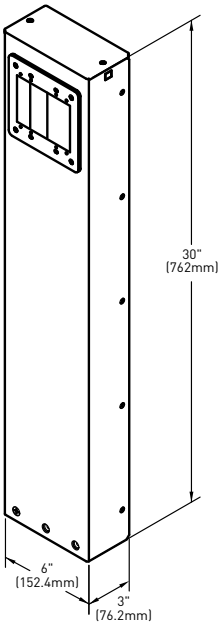
CULus Listed, File Number E479489, Guide PUPR
Outdoor Power Pedestals are UL Listed to meet NEMA 3R requirements for use in outdoor locations.
Outdoor Power Pedestals comply with ADA guidelines.

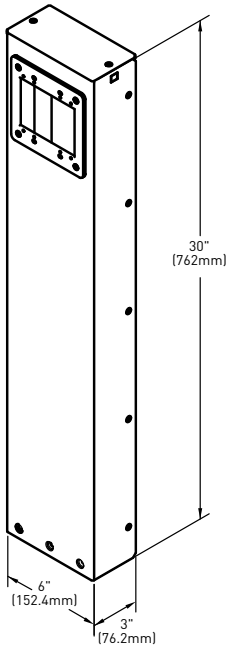
## Outdoor Power Pedestal Ordering Information

| Catalog No./Item | Description / Specifications |
|---|---|
| **XPP1G30-BK**<br>**XPP1G30-SV**<br>  | **30" Outdoor Power Pedestal, 1-Gang Device Plate –** Designed for outdoor environments with a sheet metal form ensuring optimal performance and UL listed to NEMA 3R requirements. Single gang device plate allows for mounting of devices. For 15-20A devices, weather-resistance devices must be used with an in-use cover. Devices that are 30-60A must be water-tight or fitted with a suitable weatherproof cover.<br>Available in a black finish (BK) or silver finish (SV).<br>**Country of Origin: USA** |

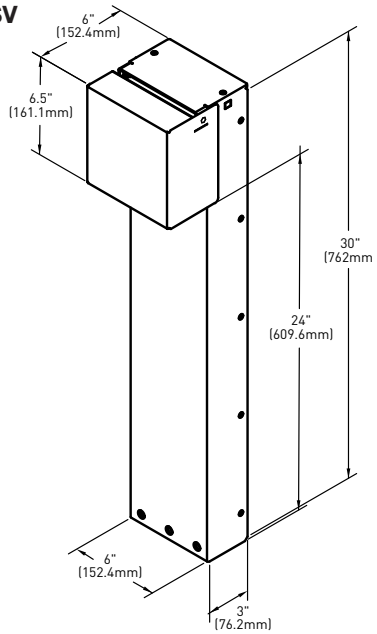
| Catalog No./Item | Description / Specifications |
|---|---|
| **XPP1G30C-BK**<br>**XPP1G30C-SV**<br>  | **30" Outdoor Power Pedestal, 1-Gang Device Plate with Hinged Cover –** Designed for outdoor environments with a sheet metal form ensuring optimal performance and UL listed to NEMA 3R requirements. Single gang device plate allows for mounting of devices. For 15-20A devices, weather-resistance devices must be used (included cover provides in-use protection). Devices that are 30-60A must be water-tight or fitted with a suitable weatherproof cover. The hinged cover also provides improved security with the ability to lock pedestal while not in-use.<br>Available in a black finish (BK) or silver finish (SV).<br>**Country of Origin: USA**<br>**Note:** Some water-tight weatherproof covers such as flip lid styles for 30-60A devices may fit under the provided hood. Hood is for aesthetics only when used with 30-60A devices. |

## Outdoor Power Pedestal Ordering Information

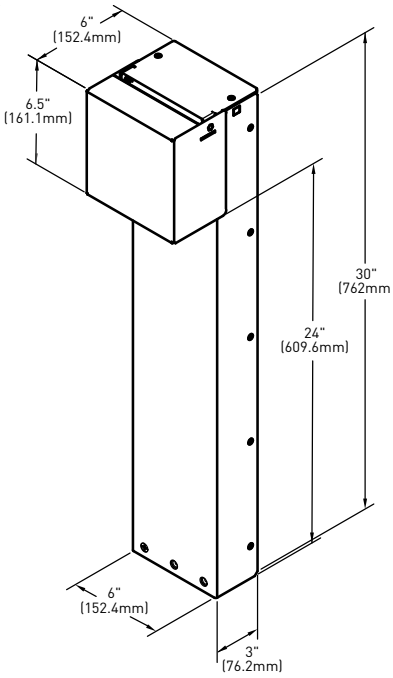
| Catalog No./Item | | Description / Specifications |
|---|---|---|
| **XPP2G30-BK**<br>**XPP2G30-SV** |  | **30" Outdoor Power Pedestal, 2-Gang Device Plate –** Designed for outdoor environments with a sheet metal form ensuring optimal performance and UL listed to NEMA 3R requirements. Dual gang device plate allows for mounting of multiple devices. For 15-20A devices, weather-resistance devices must be used with an in-use cover. Devices that are 30-60A must be water-tight or fitted with a suitable weatherproof cover.<br>Available in a black finish (BK) or silver finish (SV).<br>**Country of Origin: USA** |

| Catalog No./Item | | Description / Specifications |
|---|---|---|
| **XPP2G30D-BK**<br>**XPP2G30D-SV** |  | **30" Outdoor Power Pedestal, 2-Gang Device Plate with Internal Divider –** Designed for outdoor environments with a sheet metal form ensuring optimal performance and UL listed to NEMA 3R requirements. Dual gang device plate and internal divider allows for mounting of standard and low voltage devices. For 15-20A devices, weather-resistance devices must be used with an in-use cover. Devices that are 30-60A must be water-tight or fitted with a suitable weatherproof cover.<br>Available in a black finish (BK) or silver finish (SV).<br>**Country of Origin: USA** |

## Outdoor Power Pedestal Ordering Information

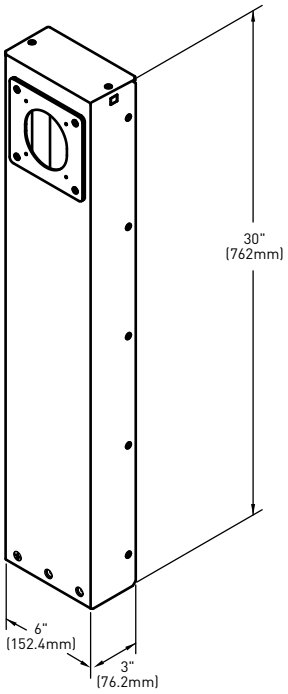
| Catalog No./Item | Description / Specifications |
|---|---|
| **XPP2G30C-BK**<br>**XPP2G30C-SV**  | **30" Outdoor Power Pedestal, 2-Gang Device Plate with Hinged Cover –** Designed for outdoor environments with a sheet metal form ensuring optimal performance and UL listed to NEMA 3R requirements. Dual gang device plate allows for mounting of multiple devices. For 15-20A devices, weather-resistance devices must be used (included cover provides in-use protection). Devices that are 30-60A must be water-tight or fitted with a suitable weatherproof cover. The hinged cover also provides improved security with the ability to lock pedestal while not in-use.<br>Available in a black finish (BK) or silver finish (SV).<br>**Country of Origin: USA**<br>**Note:** Some water-tight weatherproof covers such as flip lid styles for 30-60A devices may fit under the provided hood. Hood is for aesthetics only when used with 30-60A devices. |



| Catalog No./Item | Description / Specifications |
|---|---|
| **XPP2G30CD-BK**<br>**XPP2G30CD-SV**  | **30" Outdoor Power Pedestal, 2-Gang Device Plate with Hinged Cover and Internal Divider –** Designed for outdoor environments with a sheet metal form ensuring optimal performance and UL listed to NEMA 3R requirements. Dual gang device plate and internal divider allows for mounting of standard and low voltage devices. For 15-20A devices, weather-resistance devices must be used (included cover provides in-use protection). Devices that are 30-60A must be water-tight or fitted with a suitable weatherproof cover. The hinged cover also provides improved security with the ability to lock pedestal while not in-use.<br>Available in a black finish (BK) or silver finish (SV).<br>**Country of Origin: USA**<br>**Note:** Some water-tight weatherproof covers such as flip lid styles for 30-60A devices may fit under the provided hood. Hood is for aesthetics only when used with 30-60A devices. |

## Outdoor Power Pedestal Ordering Information

| Catalog No./Item | Description / Specifications |
|---|---|
| **XPPPS30-BK**<br>**XPPPS30-SV** | **30” Outdoor Power Pedestal, Pin & Sleeve Device Plate –** Designed for outdoor environments with a sheet metal form ensuring optimal performance and UL listed to NEMA 3R requirements. The pin and sleeve device plate is for use with Pass & Seymour 30A Pin and Sleeve devices.<br>Available in a black finish (BK) or silver finish (SV).<br>**Country of Origin: USA** |



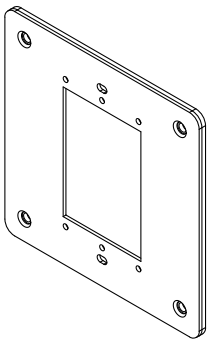
## Outdoor Power Pedestal Customization Information

The outdoor power pedestal is offered at a standard height of 30" but can be custom ordered for different heights to match your application from 16 – 48".

For custom orders and sizes, please contact your Legrand sales representative.

## Outdoor Power Pedestal Accessories Ordering Information

**XPP1GP-BK**
**XPP1GP-SV**

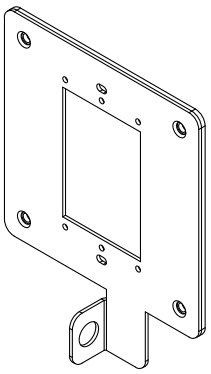


**Replacement 1-Gang Device Plate –** Replacement plate for 1-gang Outdoor Power Pedestal

Available in a black finish (BK) or silver finish (SV)

**Country of Origin: USA**

**XPP1GPL-BK**
**XPP1GPL-SV**

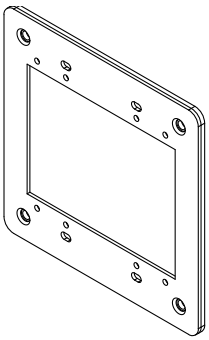


**Replacement 1-Gang, Locking Device Plate –** Replacement Plate for 1-gang Outdoor Power Pedestal with Hinged Cover.

Available in a black finish (BK) or silver finish (SV)

**Country of Origin: USA**

**XPP2GP-BK**
**XPP2GP-SV**

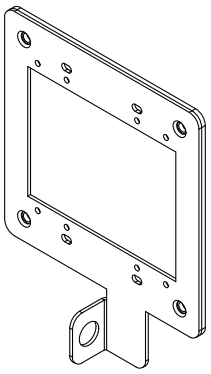


**Replacement 2-Gang Device Plate –** Replacement plate for 2-gang Outdoor Power Pedestal

Available in a black finish (BK) or silver finish (SV)

**Country of Origin: USA**

**XPP2GPL-BK**
**XPP2GPL-SV**

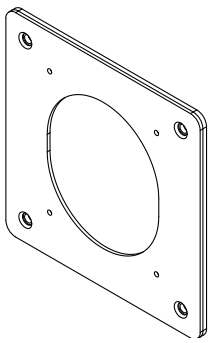


**Replacement 2-Gang Locking Device Plate –** Replacement plate for 2-gang Outdoor Power Pedestal with Hinged Cover

Available in a black finish (BK) or silver finish (SV)

**Country of Origin: USA**

**XPPPSP-BK**
**XPPPSP-SV**

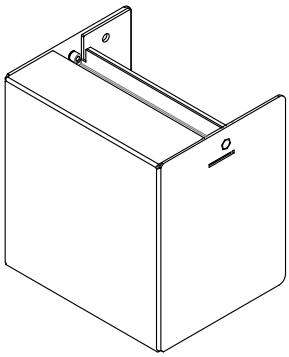


**Replacement Pin & Sleeve Device Plate –** Replacement plate for Pin & Sleeve Power Pedestal

Available in a black finish (BK) or silver finish (SV)

**Country of Origin: USA**

**XPPC-BK**
**XPPC-SV**



**Replacement Cover for Outdoor Power Pedestal –** Replacement hinged cover for Outdoor Power Pedestal

Available in a black finish (BK) or silver finish (SV)

**Country of Origin: USA**

Attachment B

January 12th | Historical District Comission Application Package

# Muskegon Museum of Art

Muskegon, Michigan 49440

N

Drawing Scale: NTS

ABA+MMA | MUSKEGON MUSEUM OF ART

January 12th, 2022 - Historical District Committee Application Materials

# EXISTING AERIAL

Muskegon Museum of Art (#21123)

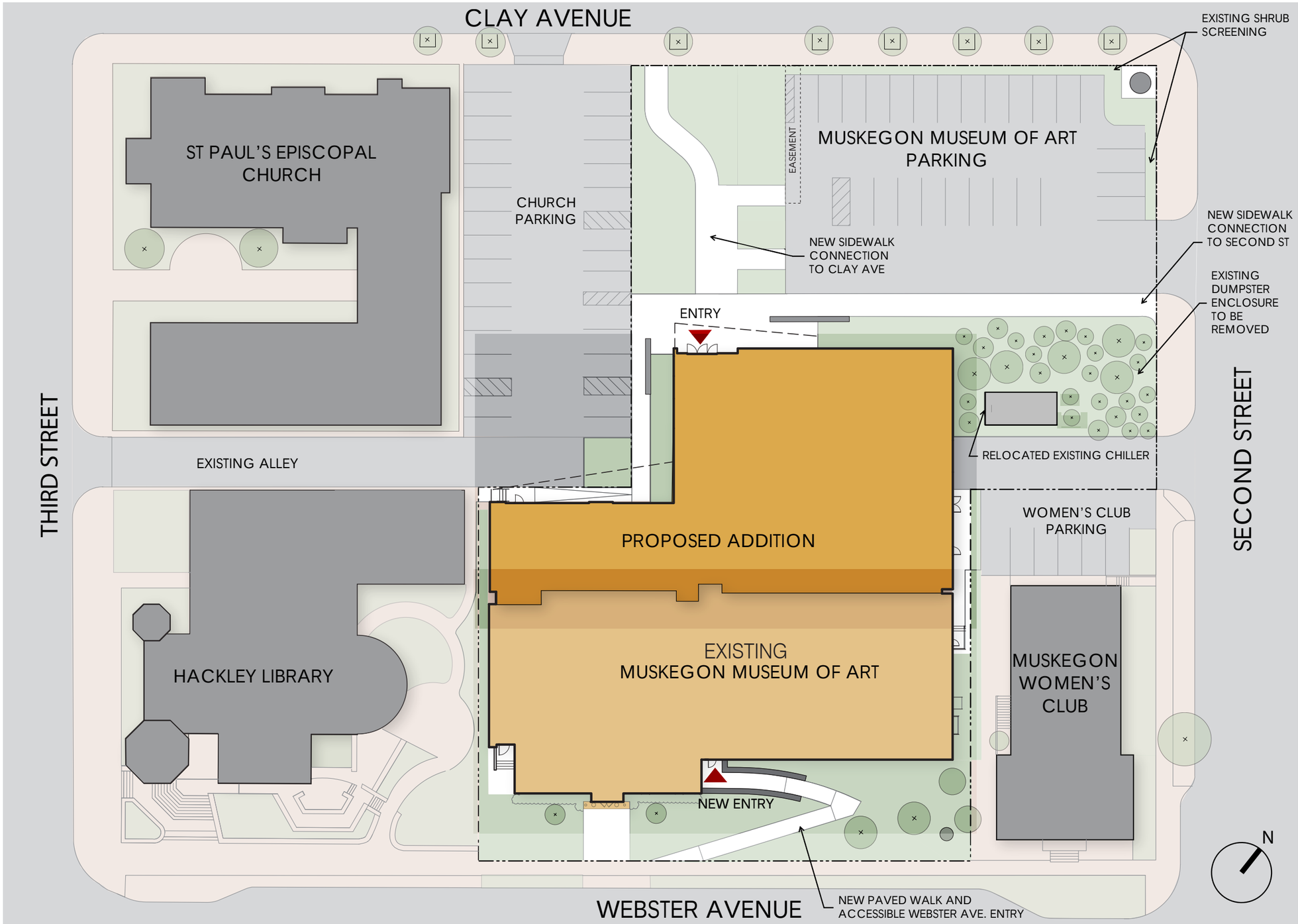

MUSKEGON MUSEUM OF ART


MUSKEGON MUSEUM OF ART
WELCOME
PLEASE USE BACK ENTRANCE
OPEN DAILY


Winter 2020
THE ART OF THE PEOPLE
Contemporary Anishinaabe Artists
HACKLEY ART GALLERY
MUSKEGON MUSEUM OF ART
PLEASE USE BACK ENTRANCE


MUSEUM
Art
MUSEUM
STORE
Welcome


MUSEUM
STORE




N

Drawing Scale: NTS

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**PROPOSED SITE PLAN**

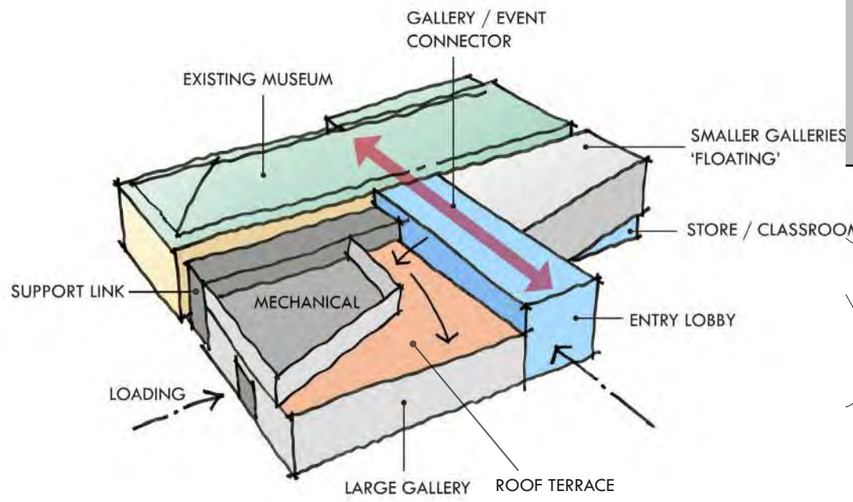
Muskegon Museum of Art (#21123)

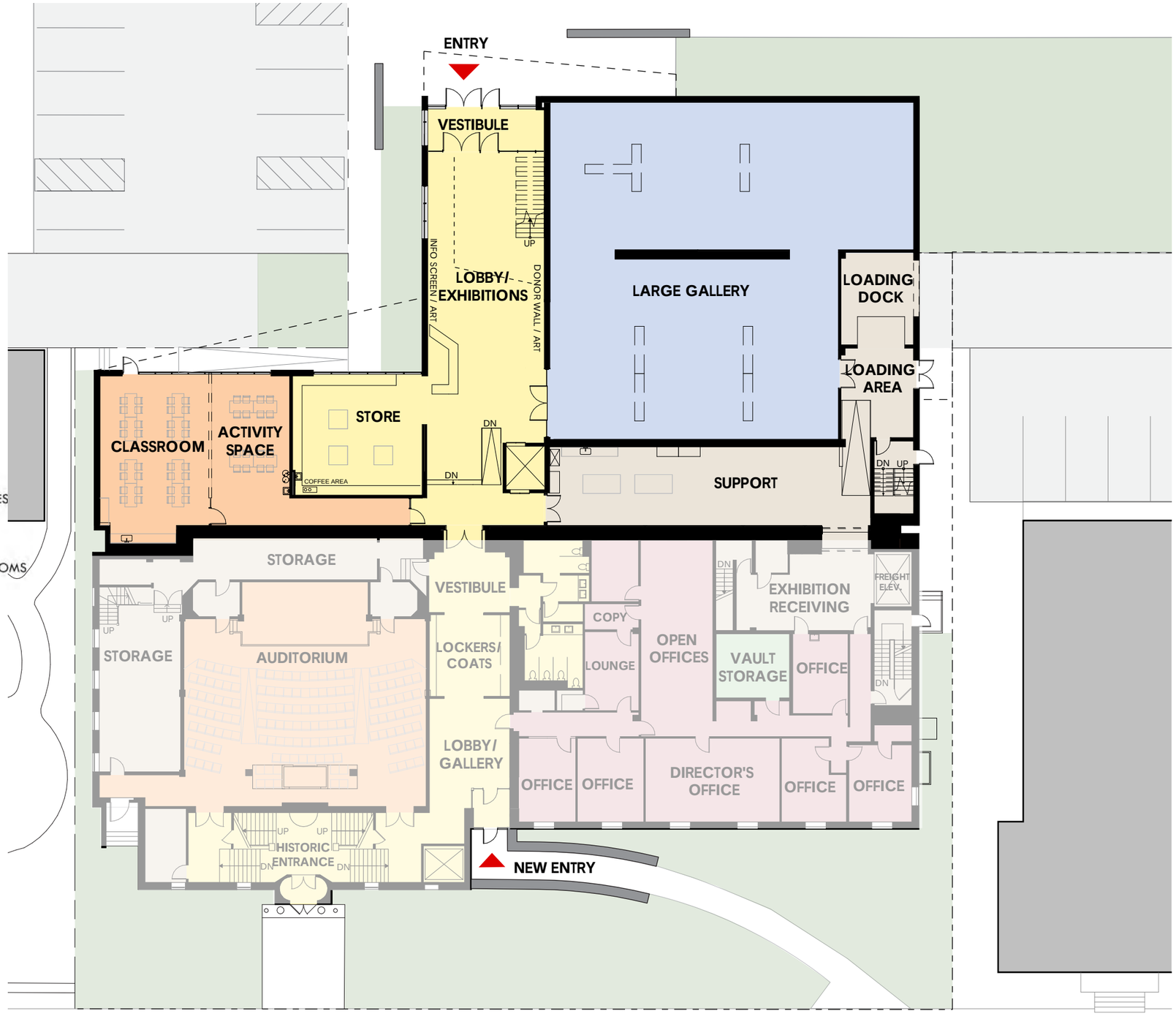
# GROUND FLOOR

## PROGRAMMED SPACE

Basement: 7,700 gsf
**Ground Floor: 12,500 gsf**
Second Floor: 6,400 gsf
Roof Terrace: 2,400 gsf

TOTAL: 29,000 gsf




N

Drawing Scale: NTS

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January 12th, 2022 - Historical District Committee Application Materials

**BUILDING PLAN - LEVEL 1**

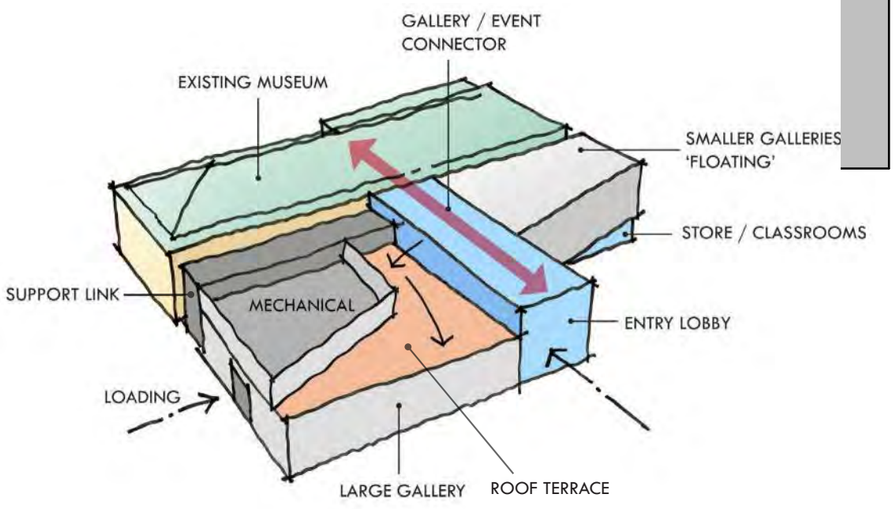
Muskegon Museum of Art (#21123)

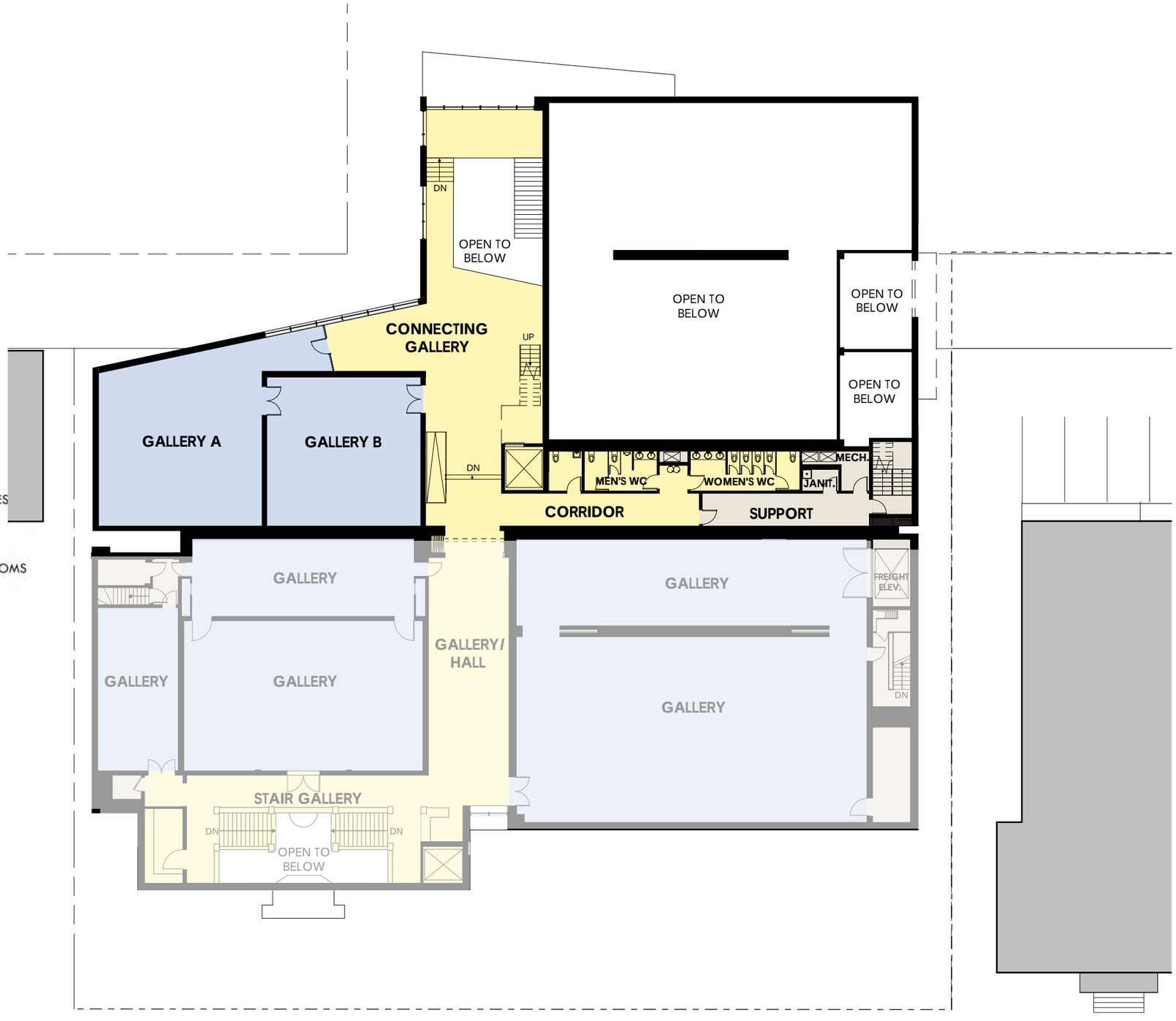
# SECOND FLOOR

## PROGRAMMED SPACE

Basement: 7,700 gsf
Ground Floor: 12,500 gsf
**Second Floor: 6,400 gsf**
Roof Terrace: 2,400 gsf

TOTAL: 29,000 gsf




N

Drawing Scale: NTS

ABA + MMA | MUSKEGON MUSEUM OF ART

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**BUILDING PLAN - LEVEL 2**

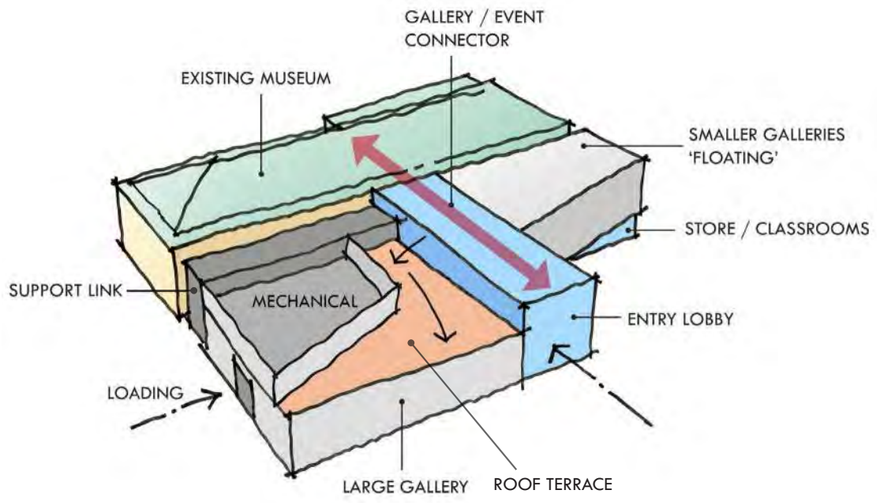
Muskegon Museum of Art (#21123)

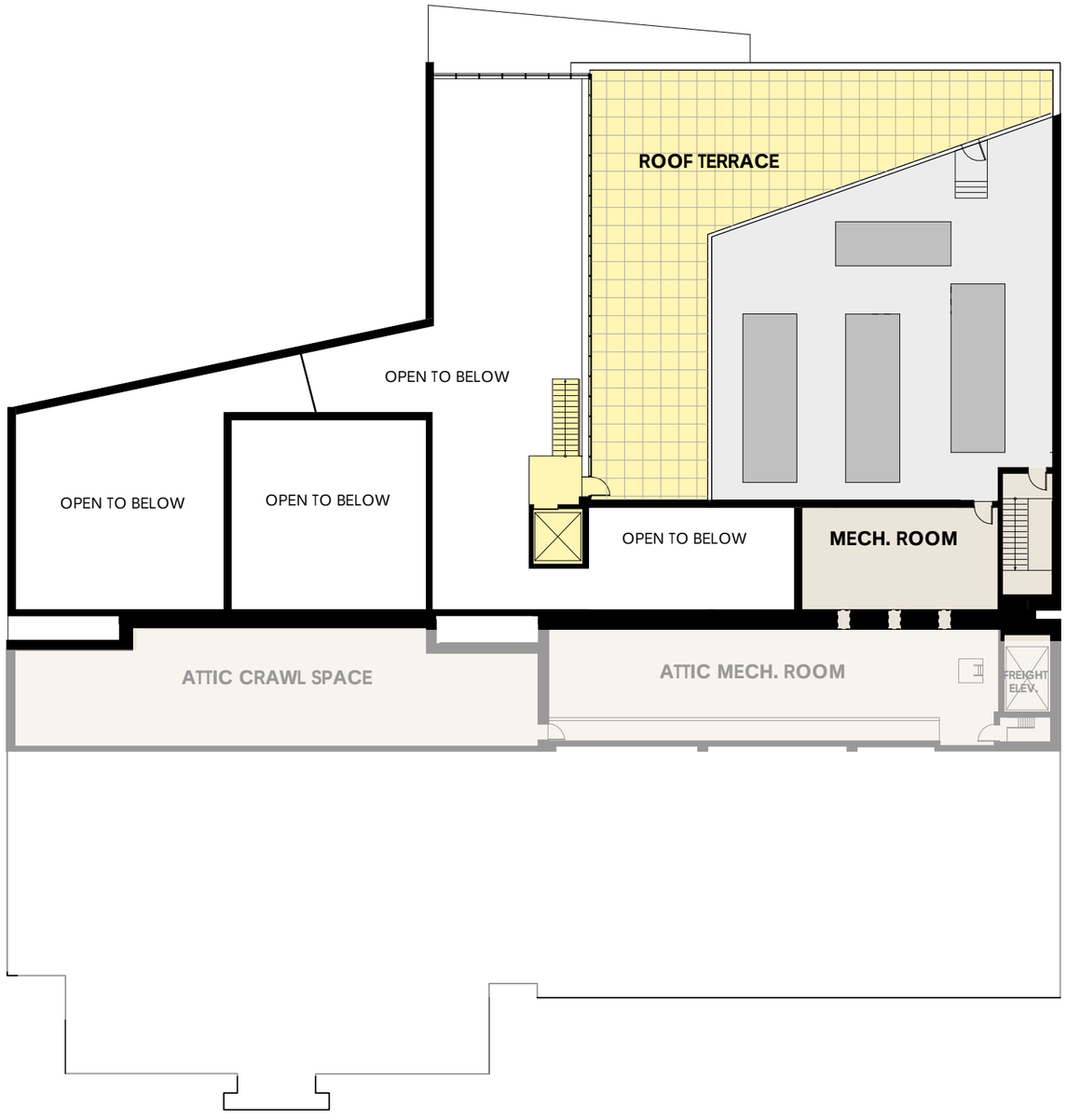
# ROOF TERRACE

## PROGRAMMED SPACE

Basement: 7,700 gsf
Ground Floor: 12,500 gsf
Second Floor: 6,400 gsf
**Roof Terrace: 2,400 gsf**

TOTAL: 29,000 gsf




N

Drawing Scale: NTS

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**BUILDING PLAN - LOWER LEVEL**

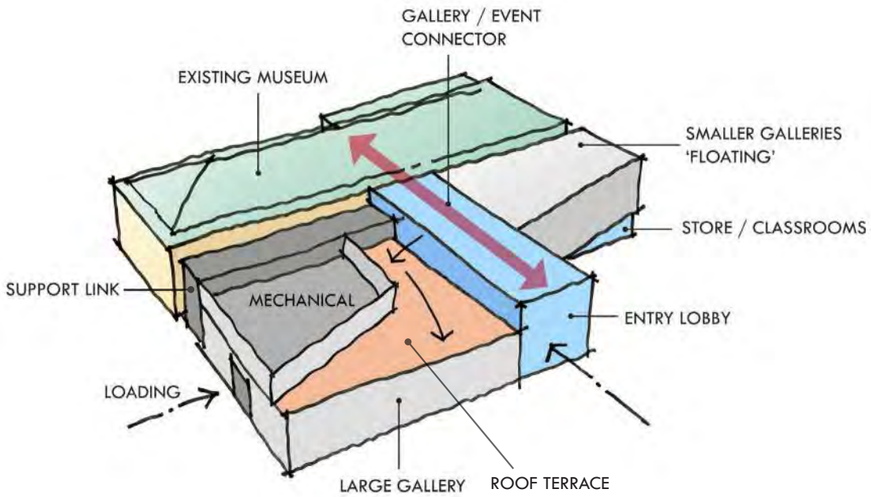
Muskegon Museum of Art (#21123)

# BASEMENT

## PROGRAMMED SPACE

**Basement: 7,700 gsf**
Ground Floor: 12,500 gsf
Second Floor: 6,400 gsf
Roof Terrace: 2,400 gsf

TOTAL: 29,000 gsf





N

Drawing Scale: NTS

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January 12th, 2022 - Historical District Committee Application Materials

**BUILDING PLAN - BASEMENT**

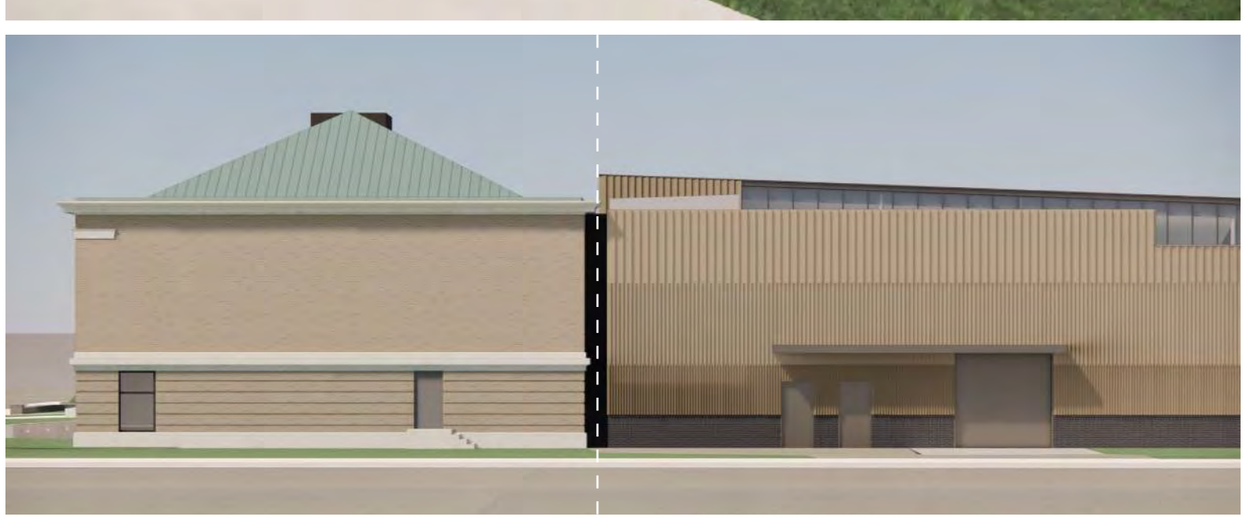
Muskegon Museum of Art (#21123)

A new addition to the rear of the existing historic building will reposition the museum for the future.

The new addition is intentionally different from the historic portion of the building to honor the future of the art museum and surrounding city.  In this way, all of the existing historically significant features on the exterior of the building will be honored.  The new metal cladding will only be used on the new addition.  The color pallate is influenced from the existing materials of the buidling.

Complementary material colors are used to honor the legacy of the original design while creating two unique facades.

Historic Facade



Original Facade | New Facade

New Facde

New Facade | Original Facade

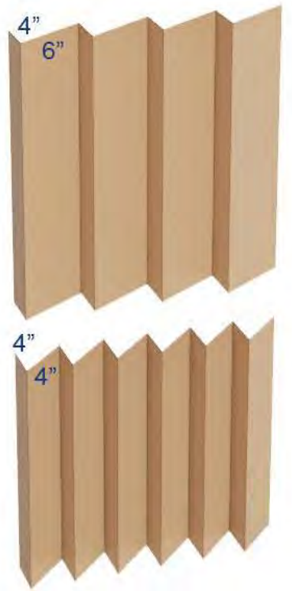
ABA+MMA | MUSKEGON MUSEUM OF ART

January 12th, 2022 - Historical District Committee Application Materials

**PROPOSED FENESTRATION**

Muskegon Museum of Art (#21123)


PANEL A




PANEL B




PANEL C

LIGHT BRONZE ANODIZED ALUMINUM

LIGHT BRONZE ANODIZED ALUMINUM

MEDIUM BRONZE ANODIZED ALUMINUM

BLACK IRONSPOT BRICK


New Facade