



Bridge Square

Northfield Heritage Preservation Commission
Meeting

December 4, 2024 | 6:00pm

Agenda



- Introductions
- HPC Review Purview
- Bridge Square
 - Background
 - 90% Plans Design Review
 - SHPO Response

Purpose



- “...the preservation, protection, perpetuation and use of areas, places, buildings, structures, and other objects having special historical interest of value is... in the interest of the health, safety, welfare and prosperity of the people.”
 - “... preserving sites and structures which reflect elements of the city’s cultural, social, economic, political, visual, or architectural history;”
 - “Protect and enhance the city’s appeal to residents, visitors, and tourists and serve as a support and stimulus to business and industry.”
 - “Foster civic pride in the beauty and notable accomplishments of the past; and,”
 - “Promote the preservation and continued use of historic sites and structures for the education and general welfare of the people of the city”

COA – Applicability



- **Major Work**

- Demolition in whole or in part,
- Moving of historic buildings, structures or objects.
- Remodeling, exterior alteration or rehabilitation that will change the exterior appearance including but not limited to painting, lighting, landscaping, and awnings.

Exemptions



- (4) A COA is not required for any physical improvements within public rights-of-way and immediately adjacent property affected by such work, including but not limited to: curb and gutter, street, utility reconstruction; routine maintenance, repair, or emergency work such as street patching; street overlays; driveway installations; boulevard tree planting; accessibility ramp improvements; utility repairs; or sidewalk repair or replacement.
- (i) For public street improvement projects exceeding an estimated cost of one million dollars as determined by the city engineer and located within the H-O District, the heritage preservation commission may, prior to the city council public improvement hearing on the project, provide written comments to the city council on the historic aspects of the project. Failure of the heritage preservation commission to timely provide written comments on or before the scheduled public improvement hearing on the project shall be deemed to have satisfied this provision.

Criteria



- (Required) For all applications, the proposed action fully complies with all applicable requirements of this LDC;
- harmony with the purpose of the H-O district;
- complement other structures within the H-O district;
- consistent with the Downtown Preservation Design Guidelines and consistent with the Secretary of the Interior's Standards for Treatment of Historic Properties;
- the amount and quality of original material and design remaining in the building or structure when applying criteria, guidelines and standards;
- For new construction, the building or addition should be compatible with:
 - scale, texture, materials, and other visual qualities of the surrounding buildings and neighborhoods;
 - the height, width, depth, massing and setback of the surrounding buildings; and

Criteria cont.



- For demolition:
 - that the structure could not be rehabilitated and used for a conforming purpose with reasonable efforts or whether the structure is without substantial historic or architectural significance;
 - the significance or architectural merit of the building itself
 - the present structural integrity of the building
 - the demolition is necessary to facilitate a defined public purpose

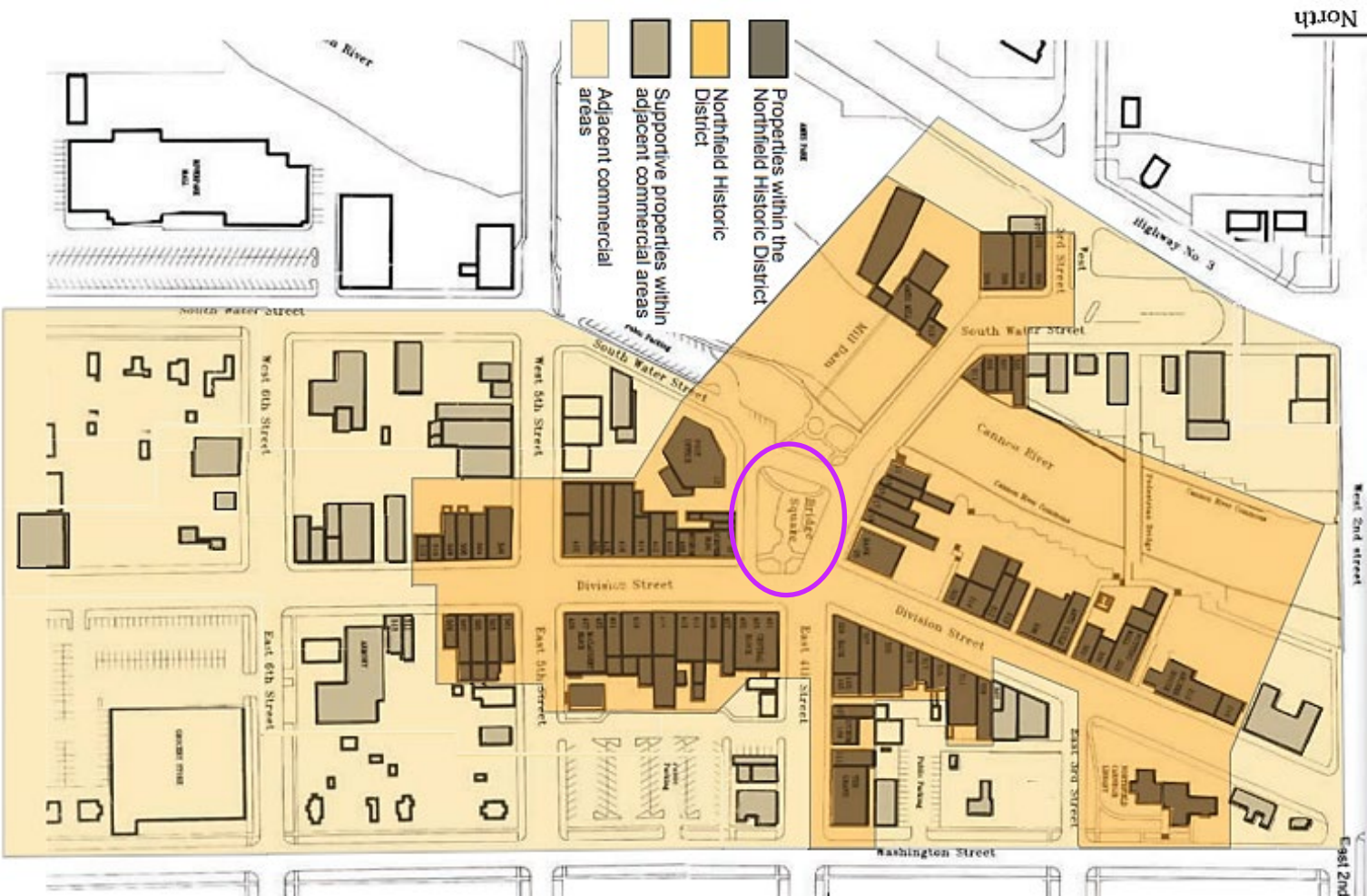
Northfield Commercial Historic District



- Criterion A, in the areas of Settlement, Industry, and Commerce
- Criterion C, in the area of Architecture
- Period of Significance: 1856–1966
- SHPO Review required in accordance with the Minnesota Historic Sites Act and Minnesota Field Archaeology Act



Northfield Commercial Historic District



Bridge Square

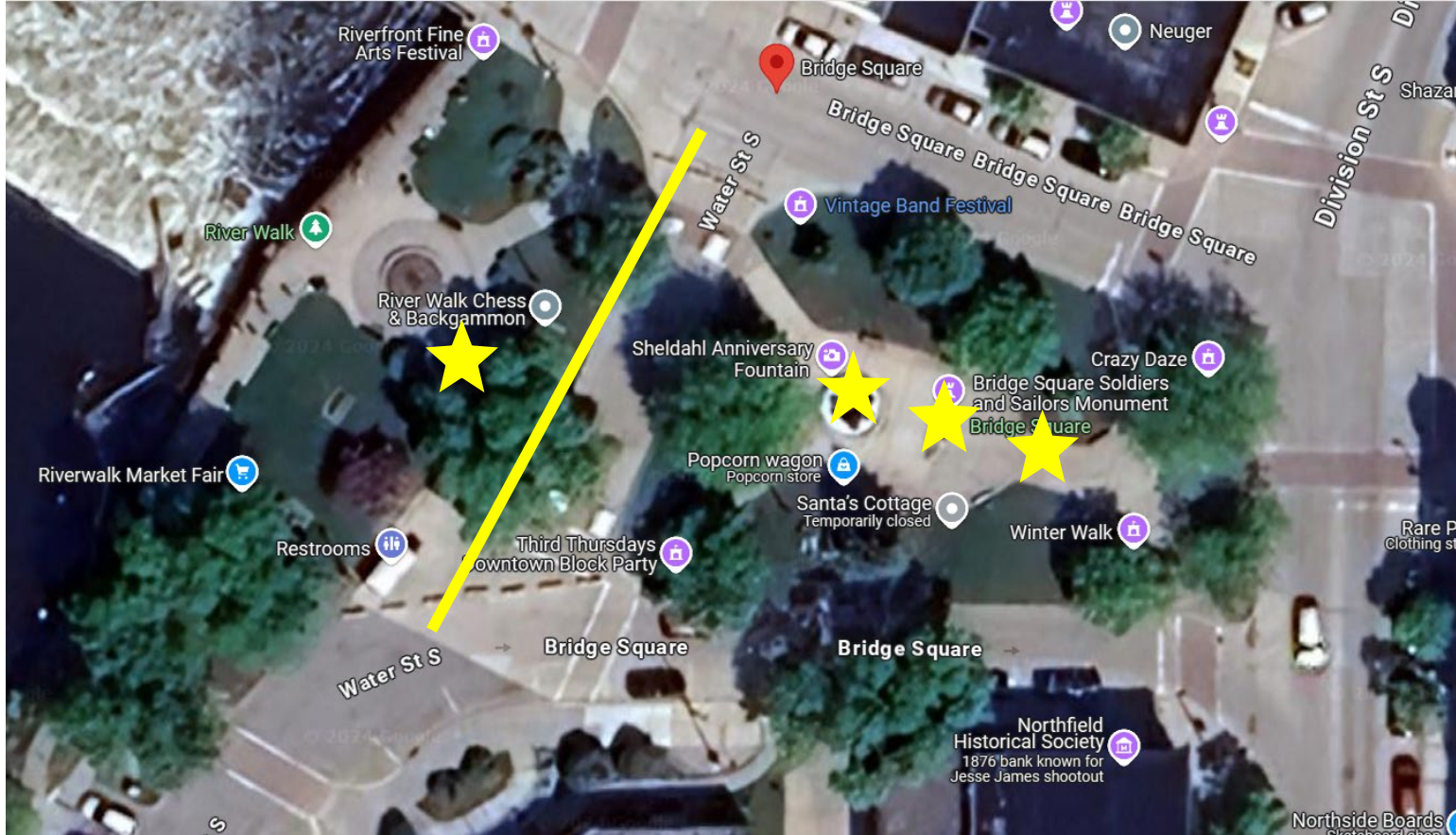


- **Contributing property with four individual resources:**
 - Bridge Square (a contributing site);
 - Riverside Park (a contributing site);
 - the Civil War Monument (a contributing structure);
 - and the fountain (a non-contributing structure due to period of significance)

Character-Defining Features



- Not explicitly defined in existing inventory forms or reports
- Elements considered in design:
 - Bridge Square
 - Riverside Park
 - Civil War Monument
 - Fountain
 - Extant Water Street corridor between Bridge Square and Riverside Park
 - Other features to consider: two large concrete planters, existing treescapes and vegetation, and topography and viewsheds



Bridge Square

SHPO Review: 60% Plans

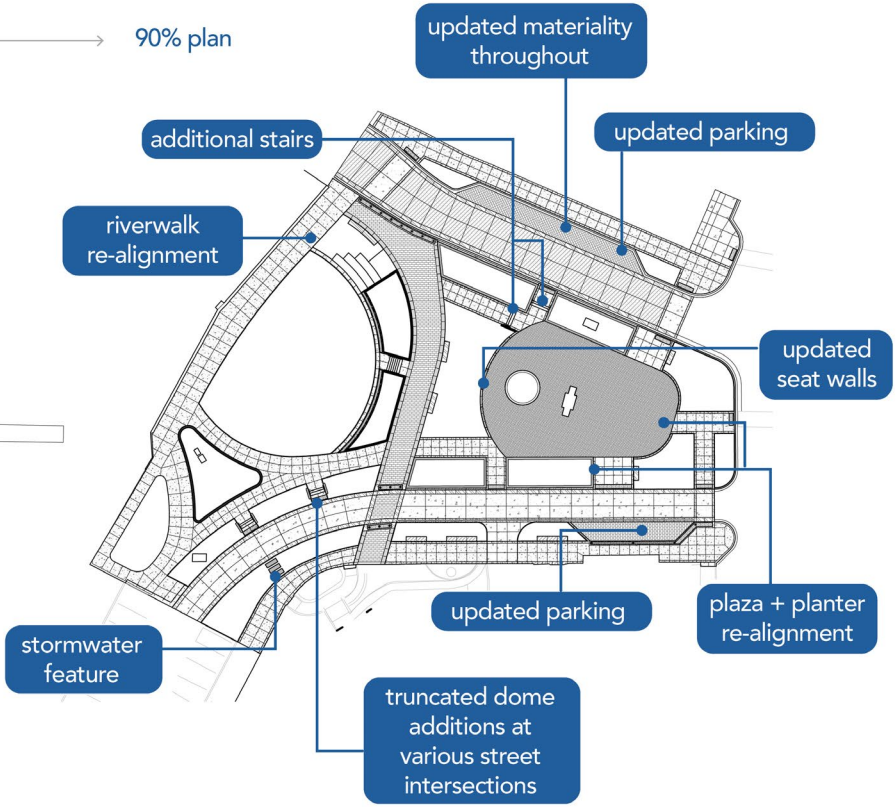
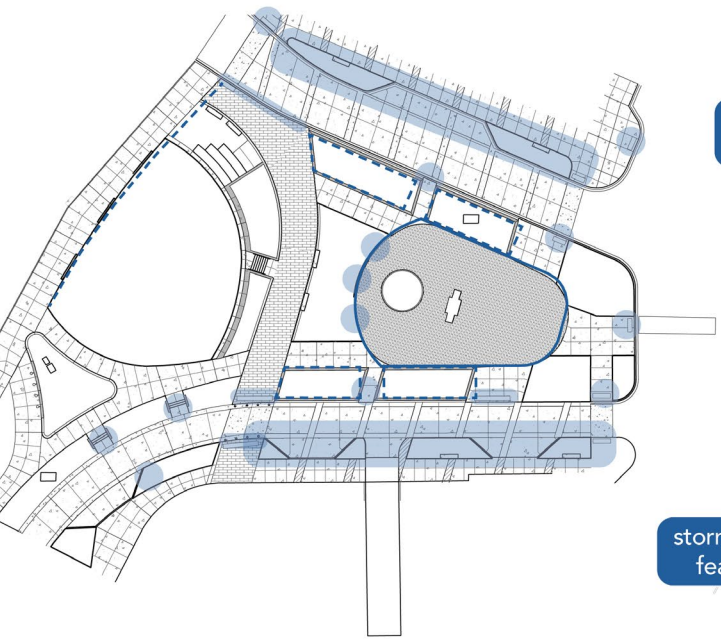


Based on our review of the submitted documentation, we are pleased to see that the **design has been refined in response to comments received from our office, the Northfield Heritage Preservation Commission, and Northfield community members.**

In our opinion, the current design is much more compatible with the forms of both Riverside Park and Bridge Square, and we have determined that **the project, as currently proposed in the 60% construction documents, has been designed in accordance with the SOI Standards.** We look forward to reviewing the 90% construction documents when they become available

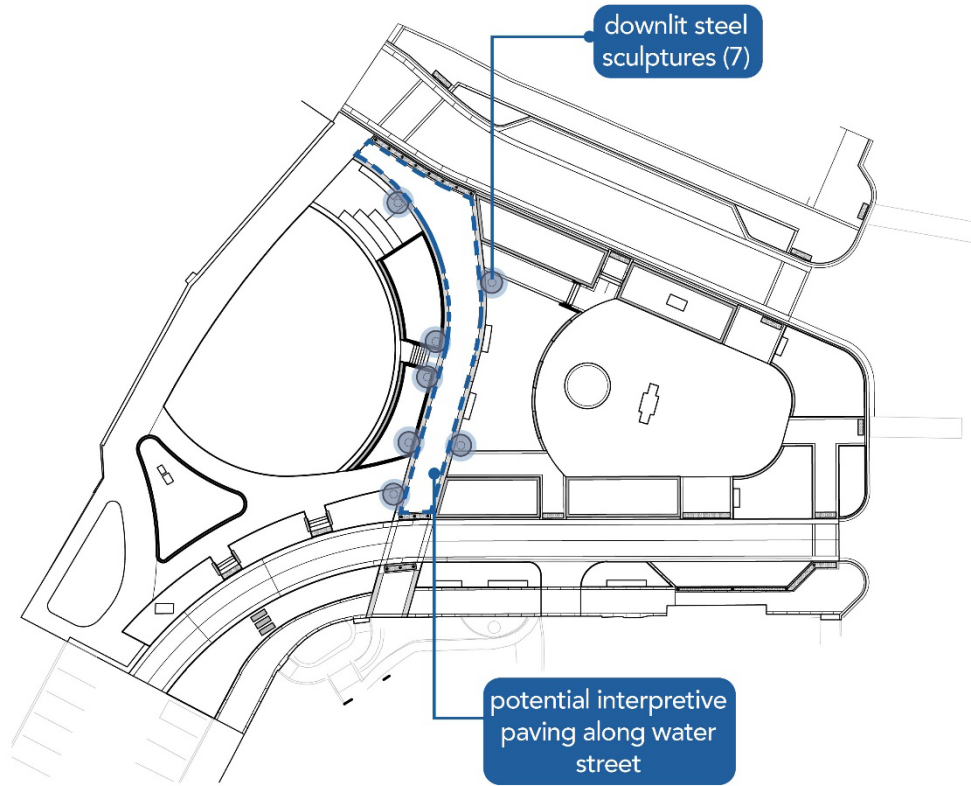
% plan

90% plan



60%
Plans
and 90%
plans

proposed public art



90%
Plans

SOI Standards for Rehabilitation



The historic character of a property will be retained and preserved. The removal of distinctive materials or alteration of features, spaces and spatial relationships that characterize a property should be avoided.

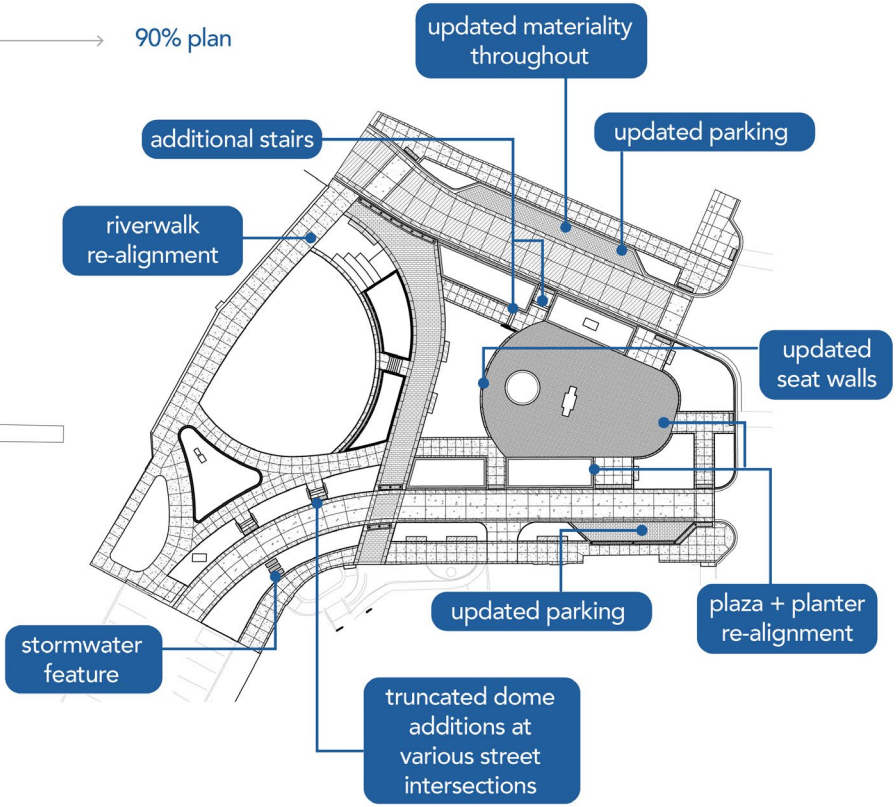
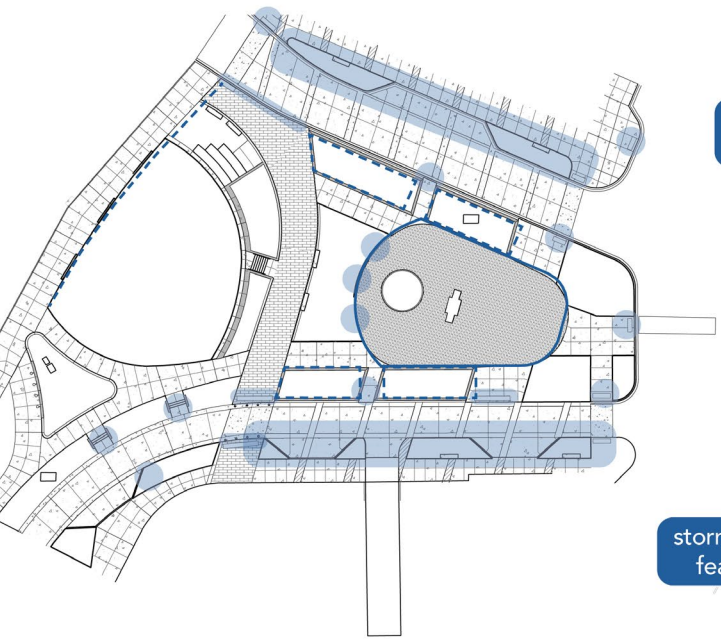
90% Plans: Architectural History



Nothing in the 90% plans requires the removal of distinctive materials or alteration of features, spaces, and spatial relationships that characterize Bridge Square

% plan

90% plan



60%
Plans to
90%
Plans

90% Plans: Architectural History



Retained and Preserved

- Water Street corridor
- Spatial relationship between Bridge Square and Riverside Park.
- Evolved teardrop shape of Bridge Square that began in 1916 and underwent alterations circa 1975
- Civil War monument
- The circulation system in the proposed design closely echoes the extant, circa 1975 circulation system and the mix of lawn, planting beds with low masses of plants.
- Softened contours of Riverside Park echo historic boundaries of that portion of the park.
- Both retained and newly planted trees proposed in the design will echo the historic mix of vegetation present throughout the evolution of Bridge Square.

SOI Standards for Rehabilitation



New additions, exterior alterations, or related new construction will not destroy historic materials, features, and spatial relationships that characterize the property. The new work will be differentiated from the old and will be compatible with historic materials, features, size, scale and proportion, and massing to protect the integrity of the property and its environment

90% Plans: Architectural History



90% Plan

- Retains historic materials, features, and spatial relationships
- Historic integrity of these features will not be diminished by new construction
- Minimal grading of some areas of the park, including the permanent tiered seating area of riverside park, which is intended to retain the overall grade of the park and keep open areas of the park relatively flat.

90% Plans: Architectural History



90% Plan

- Retains the characteristic slope of the site and existing viewshed from the district to the river.
- Proposed paving material will be stone or concrete pavers, in a color similar to the extant concrete
 - Echo surfacing materials used historically at the site but will be clearly differentiated from historic surfaces.
 - complimenting surrounding materials in the district but differentiated as modern materials.







90% Plans: Architectural History

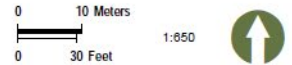


- Slight change in shape of the planting beds at the southwest edge of Bridge Square Plaza will not destroy existing materials, features, or spatial relationships.
- Additionally, the planting beds are designed, so that, per SOI Standards, if removed in the future “the essential form and integrity of the history property and its environment would be unimpaired.”

**Bridge Square -
Riverside Park Renovation
Phase I Archaeological
Investigation**

Northfield, Rice County, Minnesota

-  Study Area
-  Newly Identified Site
-  Positive Shovel Test
-  Negative Shovel Test
-  Excavation Unit
-  Estimated Location of the 1856 Grist Mill Footprint



Phase I Field Survey Results

Bridge Square - Riverside Park Renovation Phase I Archaeological Investigation

Northfield, Rice County, Minnesota

-  Study Area
-  Newly Identified Site
-  Construction Monitoring Recommended
-  No Further Archaeological Work Recommended



Recommendations

Figure 7

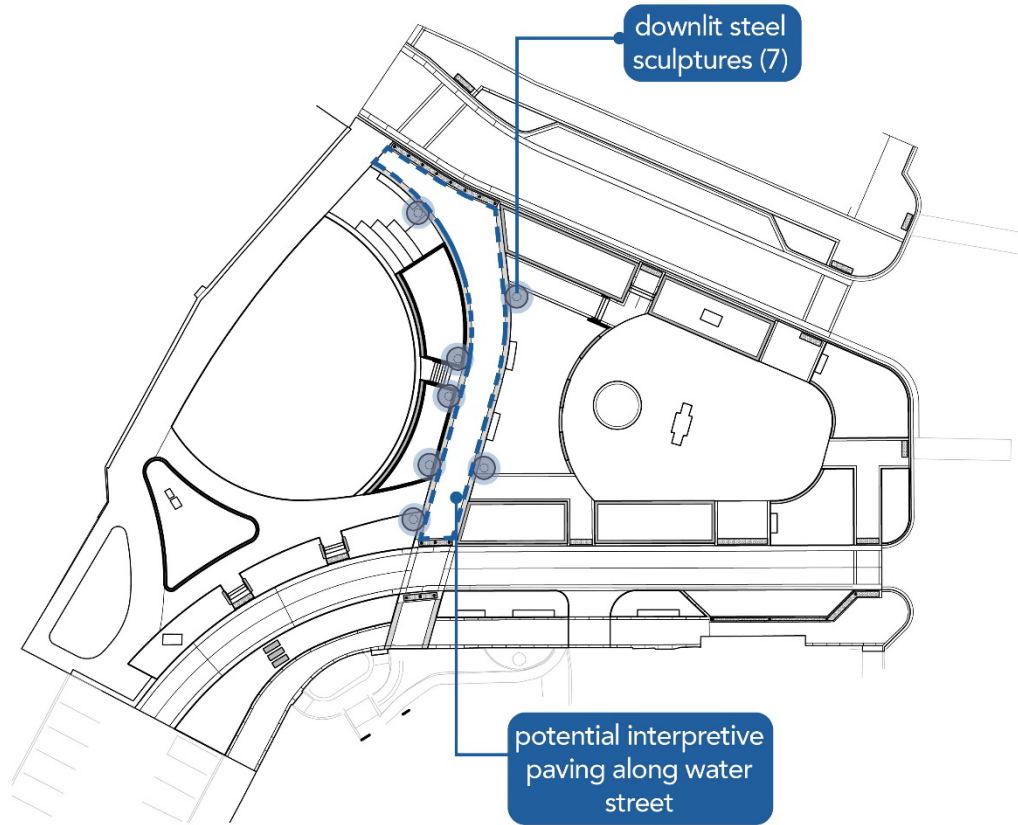
90% Plans: Archaeology



Archaeological Monitoring and Unanticipated Discoveries Plan

- Potential mitigation measures for any unanticipated discovery that occurs during construction of the current park designs and/or the installation of the proposed public art.
- For the purposes of the Archaeological Monitoring and Unanticipated Discoveries Plan, archaeological site 21RC0076 (historical surface of the 1856 Mill Square) will be considered both a contributing resource to the Northfield Commercial Historic District and a potential individually NRHP-significant resource.

proposed public art



90%
Plans

90% Plans: Public Art



- Per SOI for rehabilitation: primary focus is on viewsheds, materials, and installation
- Sculptures
 - Not nearly as tall as the existing trees located within the same area of the park in which they are proposed to be installed.
 - Lit in similar fashion to the lighting plan for the entire park, all of which is in accordance with the City of Northfield’s Land Development Code Outdoor Lighting Standards, which follow Minnesota Statute 16B.328, the state law regulating light pollution.
 - May require the installation of footings four feet in depth
 - Locations at the south are within the site boundaries of 21RC0076
 - Could potentially disturb resources if the footing is reaching a depth of more than four feet below the surface.
 - Monitoring Plan in place for the entire site.
 - These locations will not disturb the resources associated with the Grist Mill.

90% Plans: Public Art



- Per SOI for rehabilitation: primary focus is on viewsheds, materials, and installation
- Pavers
 - Will not adversely affect the existing landscape slope of the park or the existing, historic viewshed of the Cannon River from Bridge Square.
 - Will not disrupt the landscape slope or viewshed, nor remove or alter existing materials.

Project Review Submission to SHPO



- Design Review Memo
- Site Plan
- 90% Construction Documents
 - Hardscape plan
 - Tree plan
 - Understory plantings
 - Construction plan
 - Lighting plan (layout and fixture specifications)
- Public Art renderings and specification

SHPO Response 10/3/2024: Background



As stated in the correspondence, the City of Northfield is proposing improvements to Bridge Square and Riverside Park, which are contributing resources within the Northfield Commercial Historic District, a historic property which is listed in the National Register of Historic Places (NRHP).

Accordingly, in order for our office to determine that the project will not adversely affect the historic property, the proposed work must be designed in accordance with the Secretary of the Interior's Standards for the Treatment of Historic Properties and the Guidelines for the Treatment of Cultural Landscapes (SOI Standards).

SHPO Response 10/3/2024: Architectural History



Based on our review of the submitted documentation we agree that **the project**, as currently proposed in the 90% construction documents, **has been designed in accordance with the SOI Standards** and **will have no adverse effect on the historic property.**

SHPO Response 10/3/2024: Archaeology



One archaeological site, site 21RC0076, has been identified within the project area. We consider this site to be a contributing resource to the Northfield Commercial Historic District. The site may also have individual significance. We agree that **archaeological monitoring** should be conducted during project construction, as well as during installation of the proposed public art. We understand that the 106 Group will draft an **Archaeological Monitoring and Unanticipated Discoveries Plan** (Plan) that will include potential mitigation measures for any unanticipated discovery that occurs. We look forward to reviewing the Plan when it becomes available.

SHPO Response 10/3/2024: Public Art



Regarding the public art, we understand that the **Northfield Arts and Culture Commission approved** the public art elements in early July. Although the proposed structures are relatively tall, **we agree that their general scale and location within the park along Water Street should not adversely affect the historic landscape/viewsheds.** We also agree that the proposed **etched granite pavers will not adversely affect the historic property.**

Questions?

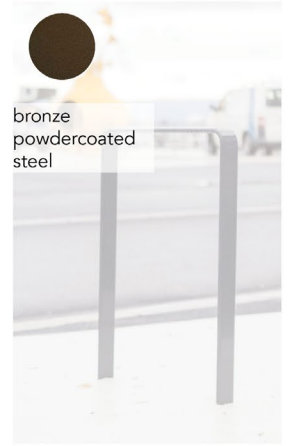
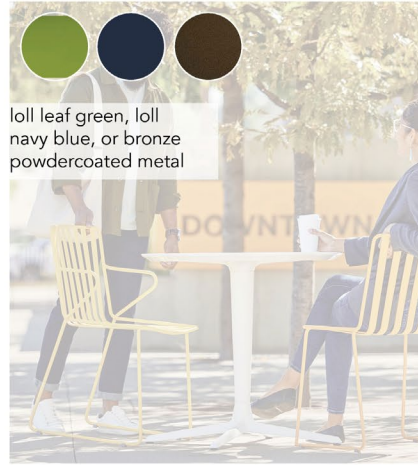
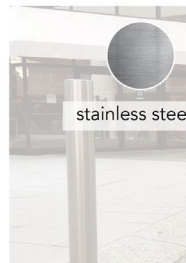


Thank you!

proposed site furnishing



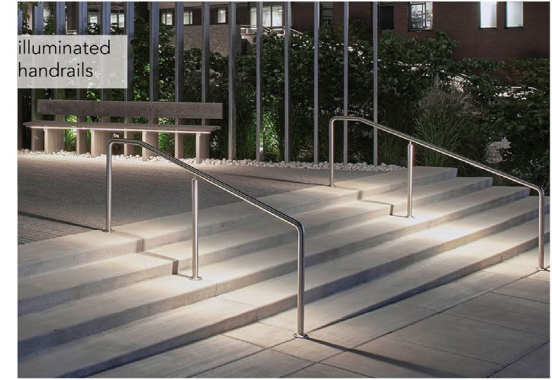
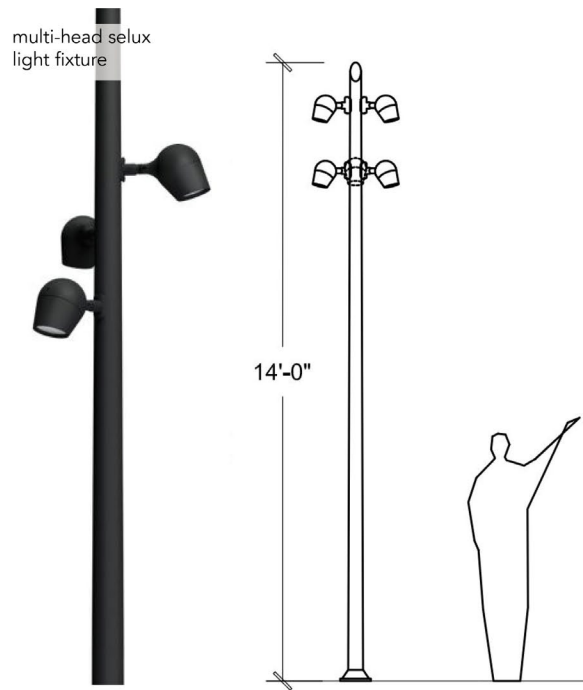
proposed site furnishing finishes



existing site lighting



proposed site lighting



proposed paving materials

concrete, standard gray, broom finish
4th St, sidewalk connections to Division St

concrete, decorative topcast surface retarder, level 03
pedestrian sidewalks, woonerf

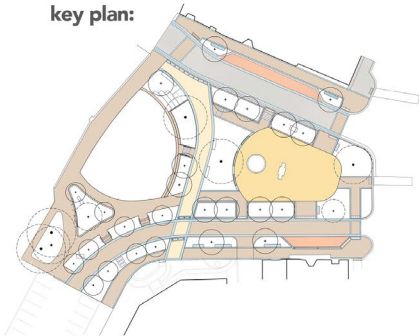
concrete, decorative banding sandblast, level 25
bands around sidewalks + historic Water St

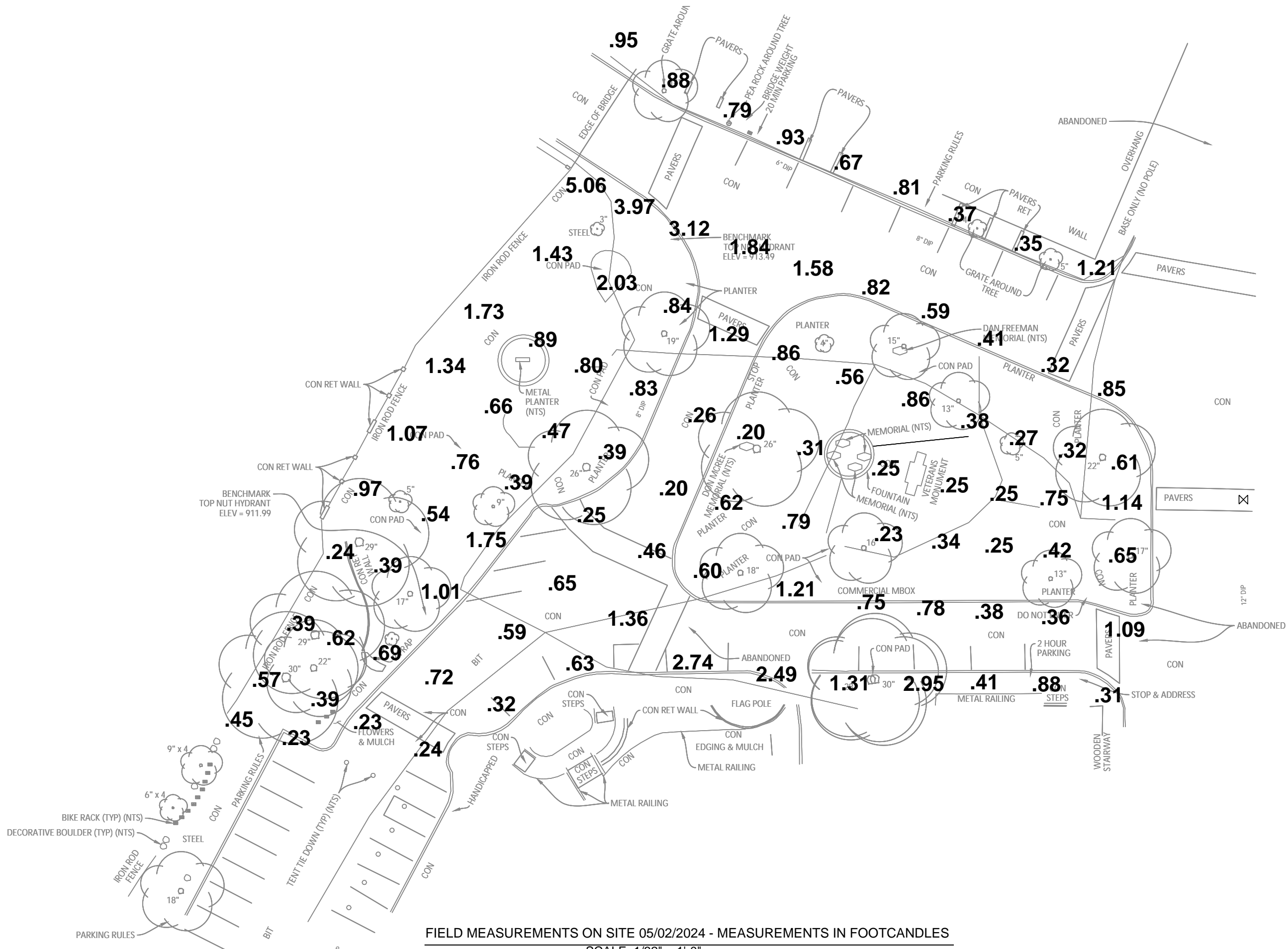
paver A 6" x 24" granite pavers
historic Water St

paver B 4" x 8" granite pavers
plaza area

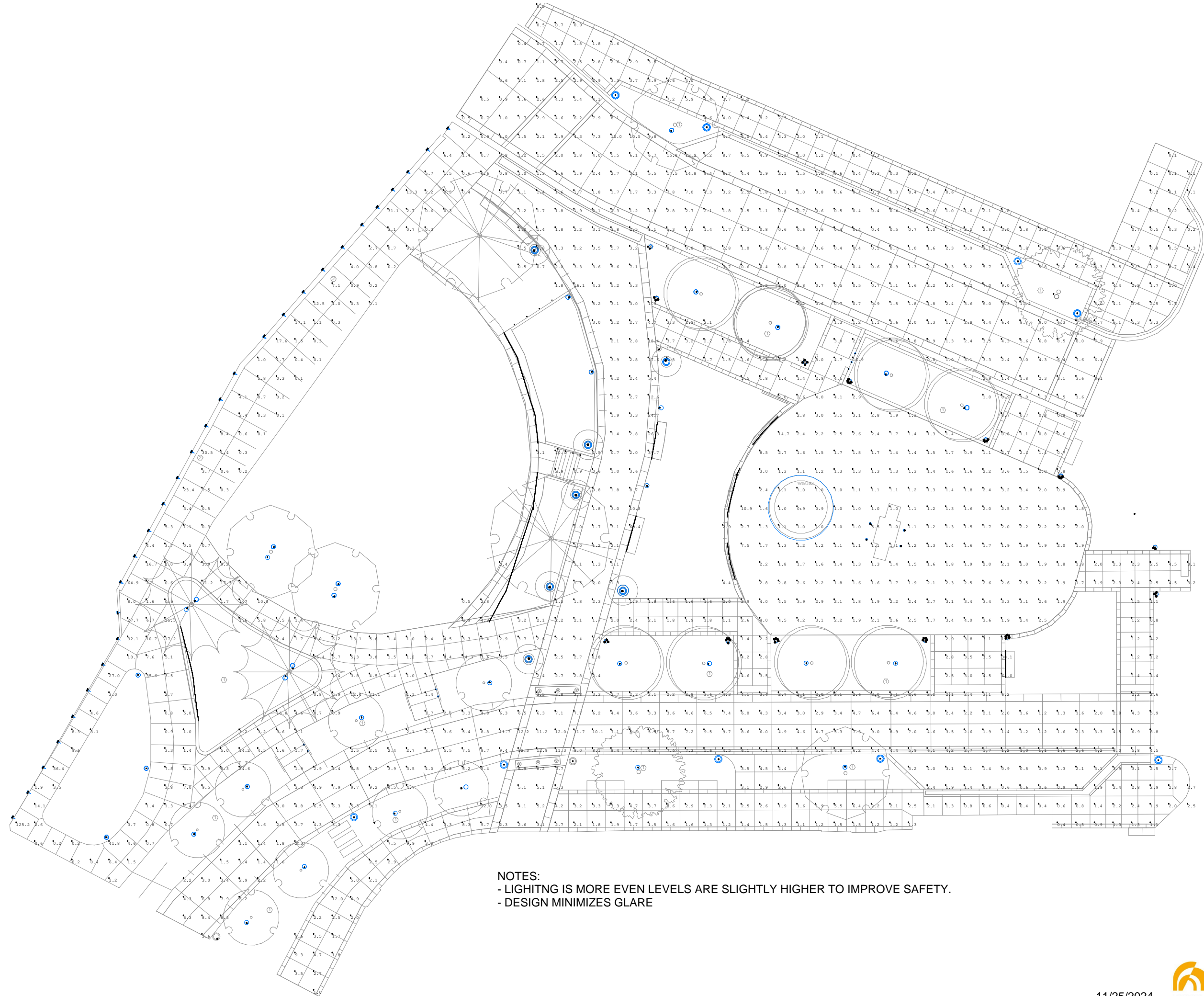
paver C concrete pavers
parallel parking bays

key plan:

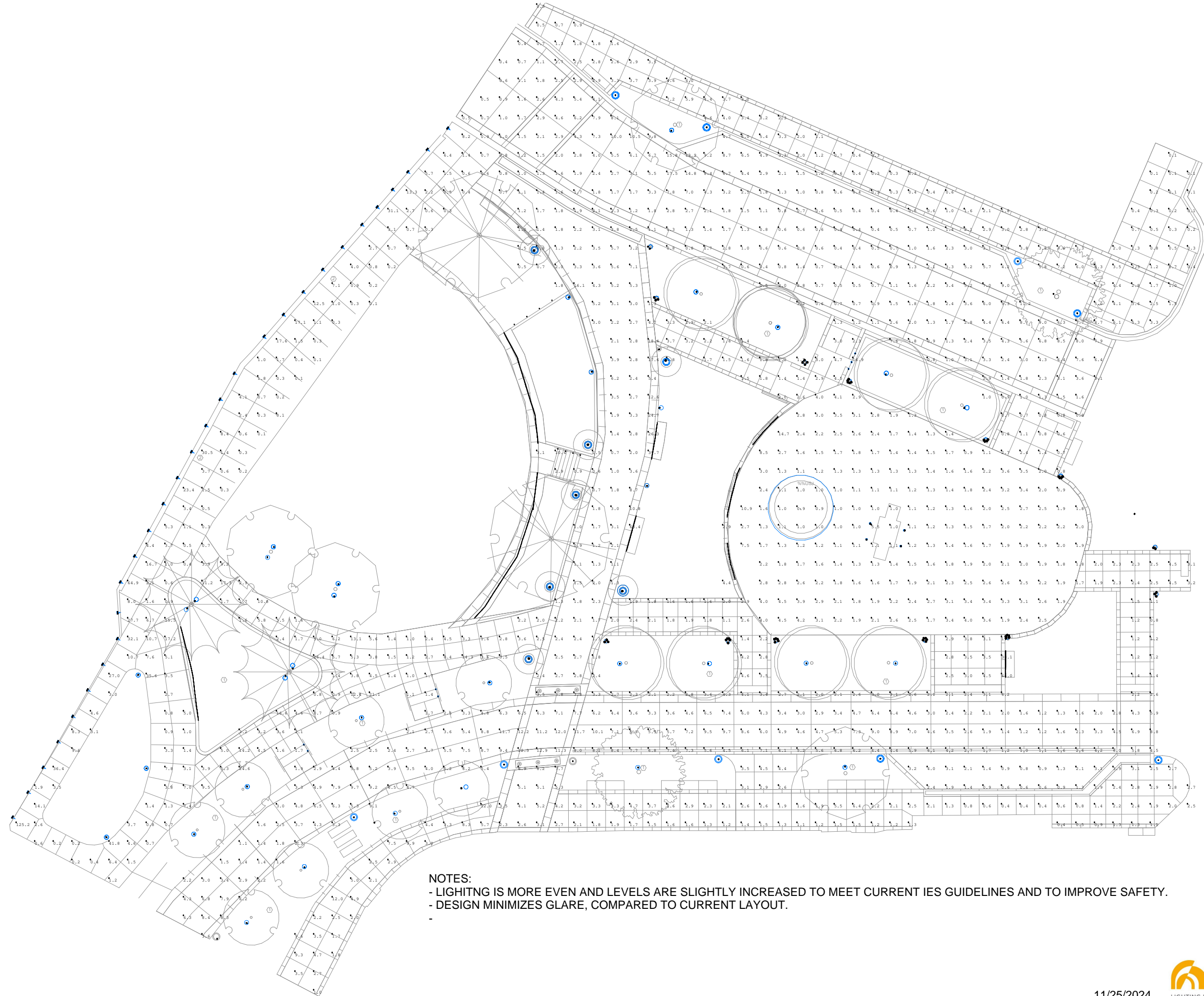




FIELD MEASUREMENTS ON SITE 05/02/2024 - MEASUREMENTS IN FOOTCANDLES
 SCALE: 1/32" = 1'-0"



NOTES:
 - LIGHTING IS MORE EVEN LEVELS ARE SLIGHTLY HIGHER TO IMPROVE SAFETY.
 - DESIGN MINIMIZES GLARE



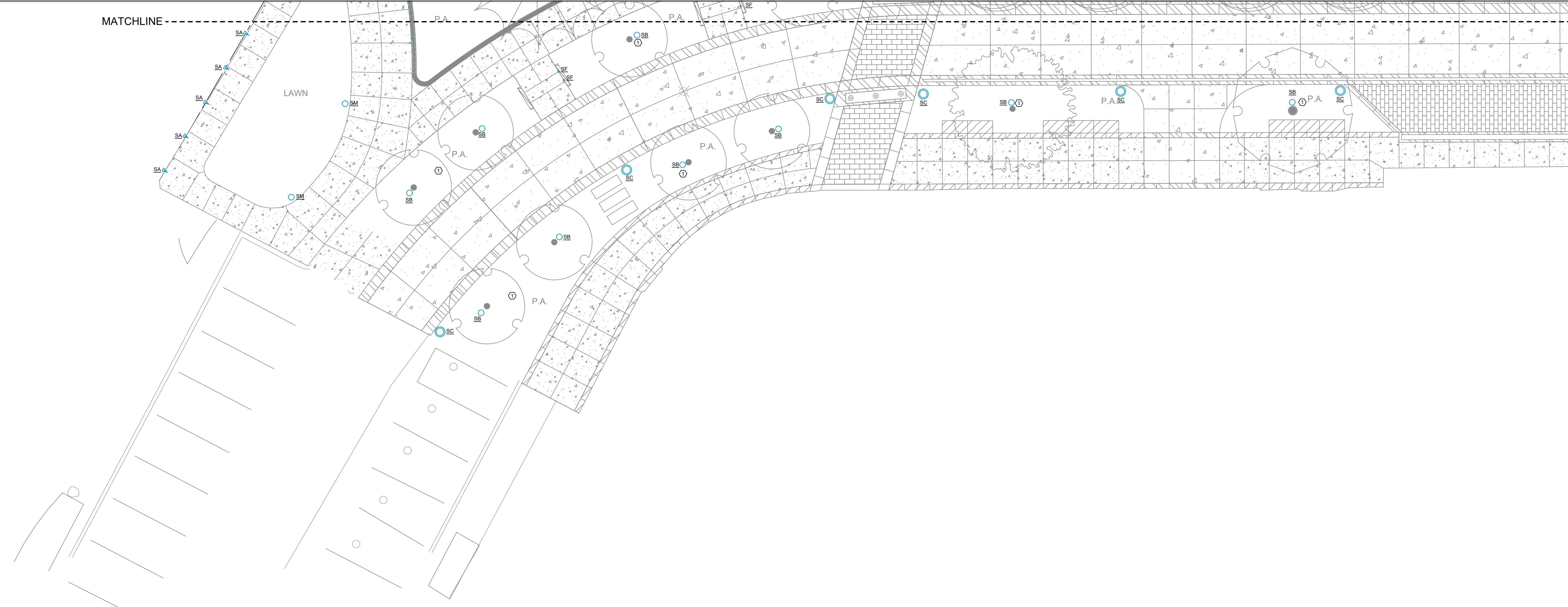
NOTES:
 - LIGHTING IS MORE EVEN AND LEVELS ARE SLIGHTLY INCREASED TO MEET CURRENT IES GUIDELINES AND TO IMPROVE SAFETY.
 - DESIGN MINIMIZES GLARE, COMPARED TO CURRENT LAYOUT.

THIS DRAWING INDICATES LIGHTING EQUIPMENT LAYOUT AND DESIGN OF LIGHTING SYSTEMS. REVIEW BY A QUALIFIED ENGINEER IS NECESSARY TO ASSURE SAFETY AND CODE COMPLIANCE.

FOR REFERENCE ONLY
REFER TO E-SERIES DRAWINGS FOR ELECTRICAL FEEDS, DISCONNECT SWITCHES, CONDUIT, AND WIRE FOR ALL LIGHTING EQUIPMENT. DIVISION 26 CONTRACTOR SHALL PROVIDE AND INSTALL ALL LIGHTING EQUIPMENT AND CONTROL WIRING FOR A COMPLETE AND OPERABLE SYSTEM.

PRELIMINARY
NOT FOR CONSTRUCTION

MATCHLINE



90% SHPO

NORTHFIELD BRIDGE SQUARE
NORTHFIELD, MN

I hereby certify that this document was prepared by me or under my direct supervision and that I am a duly licensed Landscape Architect under the laws of the State of Minnesota.

Name Rachel Blaseg
Registration# #####
Signature _____ Date 11/06/2024
DF/Project # 22-184
Scale AS SHOWN
Drawn/Checked ATP/PPW

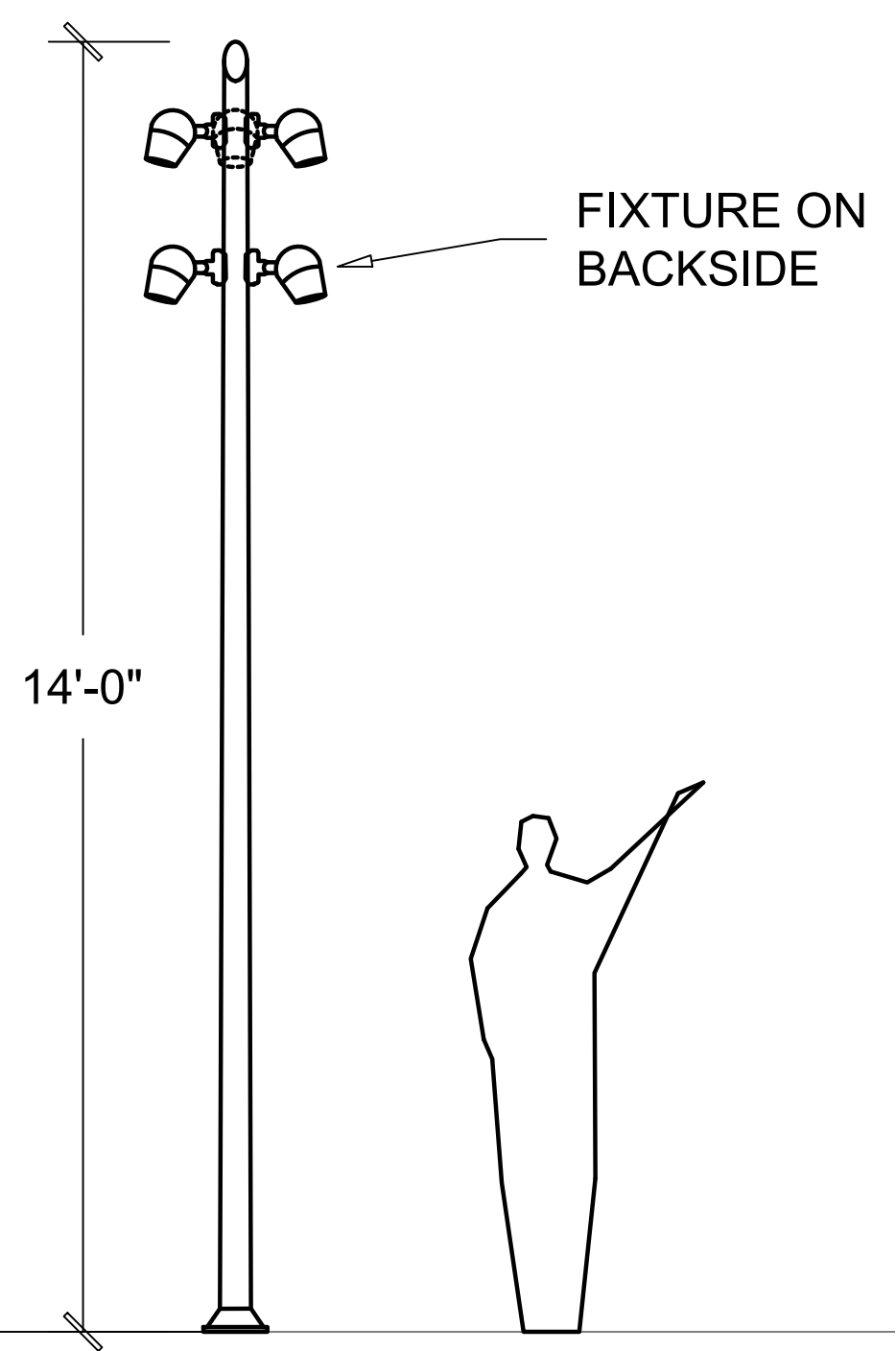
REVISION _____
NOT FOR CONSTRUCTION

1 SITE LIGHTING - LIGHTING LAYOUT
AL101 SCALE: 3/32" = 1'-0"

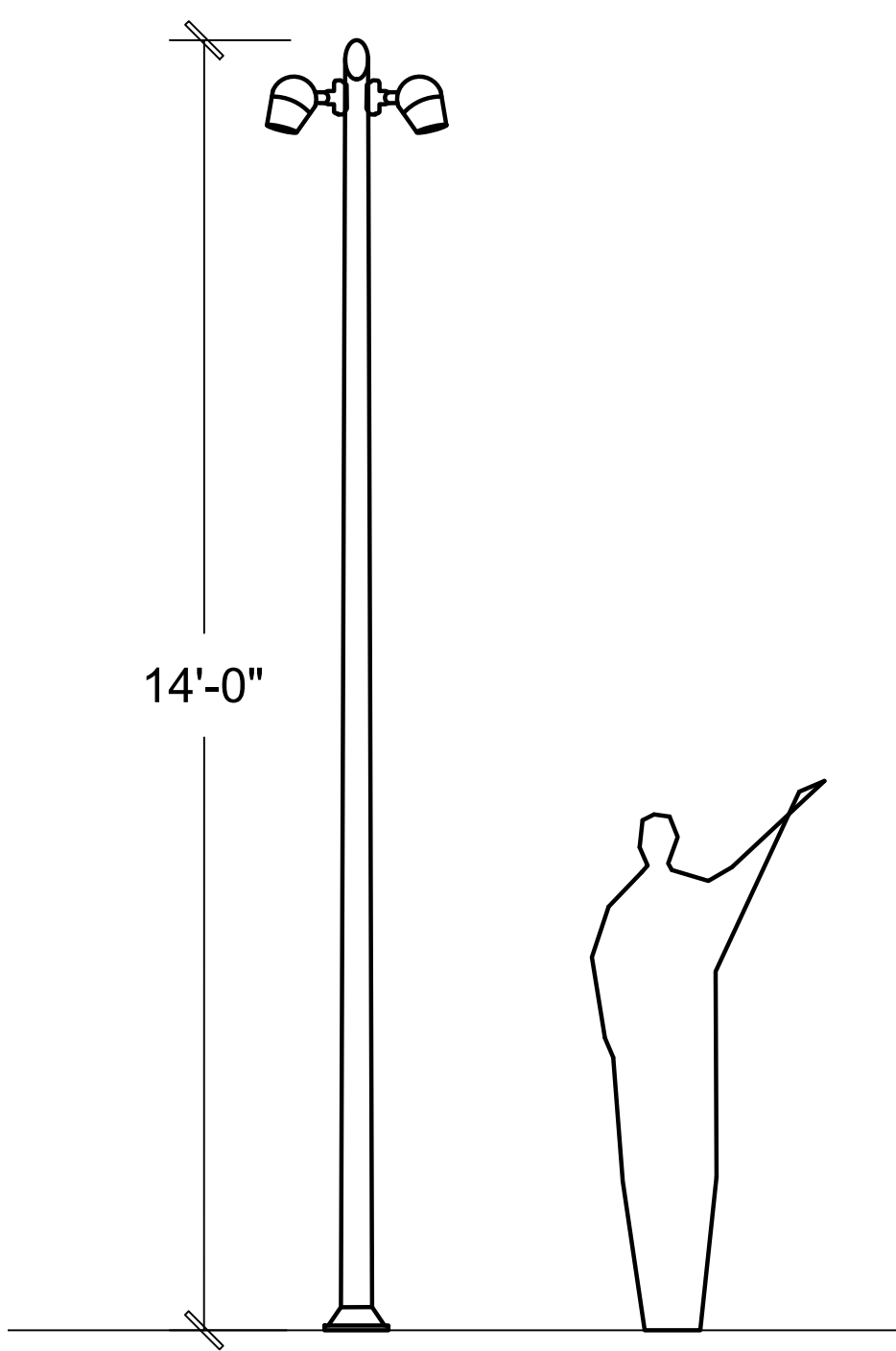
| TYPE | REV | FIXTURE DESCRIPTION | CATALOG NUMBER | VOLTS | WATT | CONTROL TYPE | DIMMING RANGE | DRIVER REMARKS | SOURCE | DELIVERED LUMENS | CCT | CRI | DISTRIBUTION | FIXTURE REMARKS |
|------|-----|--------------------------|--|-------|---------|--------------|---------------|----------------|--------|------------------|------|-----|--------------|------------------------------|
| SA | | STEP LIGHT | BEGA 24204 K3 BLX | 24 | 2.1 | NON-DIM | | | LED | 3000 | >90 | | | STEP LIGHT |
| SB | | TREE MOUNTED FLOODLIGHT | (2) BK LIGHTING DE-LED-168-FL-BL-12-11-45 / B-TS-TMC-BLP-19 / RM-DZ7NC-BL-P.MT. LOCATION OF REMOTE RIVER IN GROUND MOUNTED BOX TBD. | 240 | 27 | NON-DIM | | | LED | 1597 | 3000 | >90 | | TREE MOONLIGHT |
| SC | | SCULPTURE | SCULPTURE WITH INTEGRAL LIGHTING PROVIDED BY OTHERS. | 240 | 92 | NON-DIM | | | LED | 6200 | 2700 | >80 | | STREET POLES |
| SC1 | | POLE WITH MULTIPLE HEADS | SELUX OLP-L-F40-SB2-23360-30-BK-240-DS-0G-0S-0M-1G-1S-0-AT335-156-16-BK-RNS-BC3-REC2 | 240 | 70 | NON-DIM | | | LED | 6730 | 3000 | >80 | | PLAZA POLES |
| SC2 | | DECORATIVE POLE | DECORATIVE POLE TBD. | | | | | | | | | | | COLONADE POLE |
| SC3 | | POLE WITH MULTIPLE HEADS | SELUX OLP-L-F40-SB2-23360-30-BK-240-DS-0G-0S-0A-1S-1S-16-16-BK-RNS-BC3-REC2 | 240 | 28 | NON-DIM | | | LED | 6730 | 3000 | >80 | | PLAZA POLES |
| SC4 | | POLE WITH MULTIPLE HEADS | SELUX OLP-L-F40-SB2-23360-30-BK-240-DS-0G-0S-0M-0-AT335-156-16-BK-RNS-BC3-REC2 | 240 | 42 | NON-DIM | | | LED | 6730 | 3000 | >80 | | PLAZA POLES |
| SD | | COLUMN DOWNLIGHT | BK LIGHTING AR-LED-RM-63-SP-WMP-8-11-80-3"-WM / RM-NC-WHP-MT. Contractor is responsible for remote power supply, feeds, and fittings as required for a complete and operable system. | 240 | 10 | NON-DIM | | | LED | 1230 | 3000 | >80 | | PERGOLA COLUMN DOWNLIGHT |
| SE | | NOT USED | | | | | | | | | | | | |
| SF | | INTEGRAL HANDRAIL | ALPHABET 750S 27K VA IP68 OF. PROVIDE P70414 500 ECO DRIVERS AS REQUIRED. | 240 | 2.2W | NON-DIM | | | LED | 180 | 3000 | | | INTEGRAL HANDRAIL LIGHT |
| SG | | NOT USED | | | | | | | | | | | | |
| SH | | LINEAR SURFACE MOUNT LED | LUMINI KBL-SF-H-30K-EFP-REF-X-XXX MOUNT POWER SUPPLY UNDER BENCH. POWER SUPPLY LOCATION TBD AT FONTAIN. | 240 | 5W/FT | NON-DIM | | | LED | 335 LM/FT | 3000 | | | BENCH AND OUTER FOUNTAIN LED |
| SI | | NOT USED | | | | | | | | | | | | |
| SJ | | SUBMERSIBLE LINEAR | LUMINI KBL-SF-V-FL-30K-SBPF-SBPF-X-XXX MOUNT POWER SUPPLY UNDER BENCH. POWER SUPPLY LOCATION TBD. | 240 | 3.7W/FT | NON-DIM | | | LED | 178 | 3000 | | | FOUNTAIN SUBMERSIBLE LINEAR |
| SK | | INGRADE UPLIGHT | BK LIGHTING HP2-LED-TR-X44-FL-XXX-10-11-TC- | 240 | 34 | NON-DIM | | | LED | 2814 | 3000 | >80 | | MONUMENT UPLIGHT |
| SM | | BOLLARD | BEGA 84220 K3 BLX | 240 | 15 | NON-DIM | | | LED | 1475 | 3000 | >80 | | BOLLARD |

GENERAL NOTES:
 A. CONTRACTOR SHALL VERIFY ALL MOUNTING AND RECESS CONDITIONS PRIOR TO ORDERING FIXTURES
 B. CONTRACTOR SHALL PROVIDE ALL HARDWARE, BRACKETS, WIRING, TRANSFORMERS, REMOTE BOXES AND EQUIPMENT TO INSTALL A COMPLETE AND FUNCTIONAL SYSTEM
 C. NO SUBSTITUTIONS SHALL BE ACCEPTED WITHOUT PRIOR REVIEW AND WRITTEN APPROVAL BY SCHULER SHOOK
 D. LIGHT FIXTURE MANUFACTURERS AND ELECTRICAL CONTRACTORS TO VERIFY COMPATIBILITY OF ALL DIMMING TRANSFORMERS, DRIVERS AND BALLASTS WITH THE LIGHTING CONTROL SYSTEM.
 E. PRICES SHOWN ARE DISTRIBUTOR NET PRICING AND DO NOT INCLUDE TAXES, FREIGHT, MARK-UP (DISTRIBUTOR OR CONTRACTOR) OR INSTALLATION COST. PRICES ARE PER FIXTURE OR LINEAR FOOT.
 F. PRIOR TO ORDERING LUMINAIRES, CONTRACTORS SHALL VERIFY THE COMPATIBILITY OF ALL LED DRIVERS WITH THE CONTROLS BEING ORDERED. WHERE DIMMING IS REQUIRED, CONTROL DEVICES SHALL BE COMPATIBLE TO ACCESS THE FULL DIMMING CAPABILITY OF THE SPECIFIED LED FIXTURE AND DRIVER COMBINATION, WITH NO VISIBLE FLICKER OR STEPPING (CLARIFY STEPPING). FAILURE TO COORDINATE DIMMERS AND DRIVERS THAT RESULT IN POOR DIMMING PERFORMANCE, AS DETERMINED BY THE LIGHTING DESIGNER AND/OR OWNER OR ELECTRICAL ENGINEER, SHALL BE RECTIFIED BY THE CONTRACTOR AT NO COST TO THE OWNER.
 G. CONTRACTOR WILL FAMILIARIZE THEMSELVES WITH ADDRESSING OF LED FIXTURES AT BEGINNING OF PROJECT, PRIOR TO INSTALLATION. CONTRACTOR SHALL PROVIDE A SYSTEMS INTEGRATOR FOR ALL DIMMING SYSTEM.

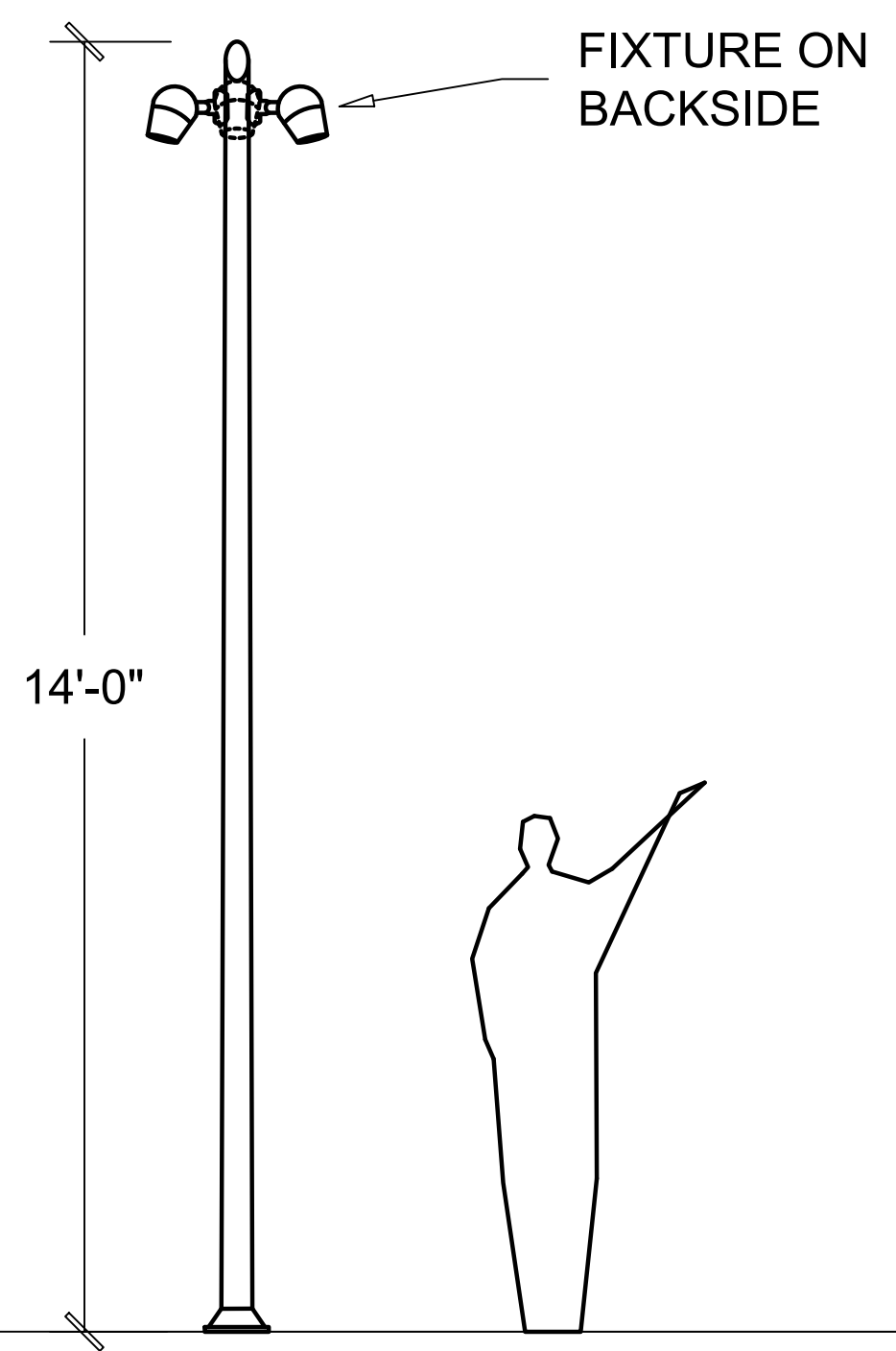
2 SITE LIGHTING - LIGHT FIXTURE SCHEDULE
AL101 SCALE: NO SCALE



3 SITE LIGHTING - TYPE SC1 FIXTURE ELEVATION
AL101 SCALE: NO SCALE



4 SITE LIGHTING - TYPE SC3 FIXTURE ELEVATION
AL101 SCALE: NO SCALE



5 SITE LIGHTING - TYPE SC4 FIXTURE ELEVATION
AL101 SCALE: NO SCALE

GENERAL NOTES:
 A. INSTALLATION SHALL CONFORM TO ALL APPLICABLE NEC, UL, STATE AND LOCAL CODES.
 B. ALL EMERGENCY EGRESS LIGHTING IS THE RESPONSIBILITY OF THE ELECTRICAL ENGINEER OR ELECTRICAL CONTRACTOR.
 C. ALL DIMMING CIRCUITS ARE TWO-WIRE. NO COMMON NEUTRALS SHALL BE USED.
 D. FIELD PAINT ALL CONDUIT, JUNCTION BOXES AND HARDWARE TO MATCH ADJACENT SURFACES.
 E. ELECTRICAL CONTRACTOR SHALL VERIFY ALL MOUNTING CONDITIONS AND MOUNTING HARDWARE REQUIRED PRIOR TO PURCHASE OF ANY LIGHTING FIXTURES.
 F. ELECTRICAL CONTRACTOR SHALL VERIFY MOUNTING HEIGHTS OF ALL FIXTURES WITH SCHULER SHOOK PRIOR TO INSTALLATION.
KEYWORD NOTES:
 1. PROVIDE DUPLEX IN PLANTER FOR SEASONAL LIGHTING.
 2. INTEGRATE FIXTURE INTO HANDRAIL. REFER TO LANDSCAPE DRAWINGS.

AL101

Date: _____ Customer: _____

Project: _____

Type: _____ Qty: _____



Olivio Piccolo LED
Sistema 2 Arm Mount



| | | | | | | | | | |
|--------------------|------------------|---------------|---------------|-----------------|---------------------|------------|---------------|----------------|----------------|
| Order Code: | #1 | OLPL | - | - | - | - | - | - | - |
| | #2 | OLPL | - | - | - | - | - | - | - |
| | #3 | OLPL | - | - | - | - | - | - | - |
| | #4 | OLPL | - | - | - | - | - | - | - |
| | Fixture # | Series | Optics | Mounting | Light Engine | CCT | Finish | Voltage | Options |

| | | | | | | | |
|-------------------------|--------|--------|--------|--------------------|---------|-------------------|--|
| Pole Order Code: | Series | Height | Finish | RN Rivnut Pairs | Options | *Rivnut Locations | *Refer to chart on page 5 for Rivnut locations |
| | OLPL | | | | | | |

| | | | | | | | |
|--------------|---|---|---|---|---|--|--|
| Series | OLPL Olivio Piccolo LED | | | | | | |
| Optics | S09 Spot, 11° | F40 Flood Medium, 45° | F80 Flood Wide, 74° | | | | |
| Mounting | SBx Specify Arm Locations (x = number of luminaires per pole) | | | | | | |
| Light Engine | 2G175 7W / 672lm | 2G350 14W / 1346lm | | | | | * Based on S09 distribution and 3000K CCT. |
| CCT | 27* 2700K | 30 ¹ 3000K | 35* 3500K | 40 4000K | 50* 5000K | ¹ Dark Sky approved with (ds) option only. * Consult factory | |
| Finish | WH White | BK Black | BL Semi-Matte Black | BZ Bronze | SV Silver | SP Specify Premium Color | |
| Voltage | UNV 120-277V | 120 120V | 208 208V | 240 240V | 277 277V | | |
| Options | DS ² Dark Sky 0° Tilt Option | SLH Spread Lens Horizontal (fixed) | SLV Spread Lens Vertical (fixed) | PC Photocell (consult factory) | HX ³ Micro Hexcell Honeycomb Louver | CF Color Filter (consult factory) | ² IDA approved with fixed mount (DS option) only and 3000K CCT. ³ Cannot be combined with SLH or SLV. |

Product Modifications

Please list modification requirements for review by factory:

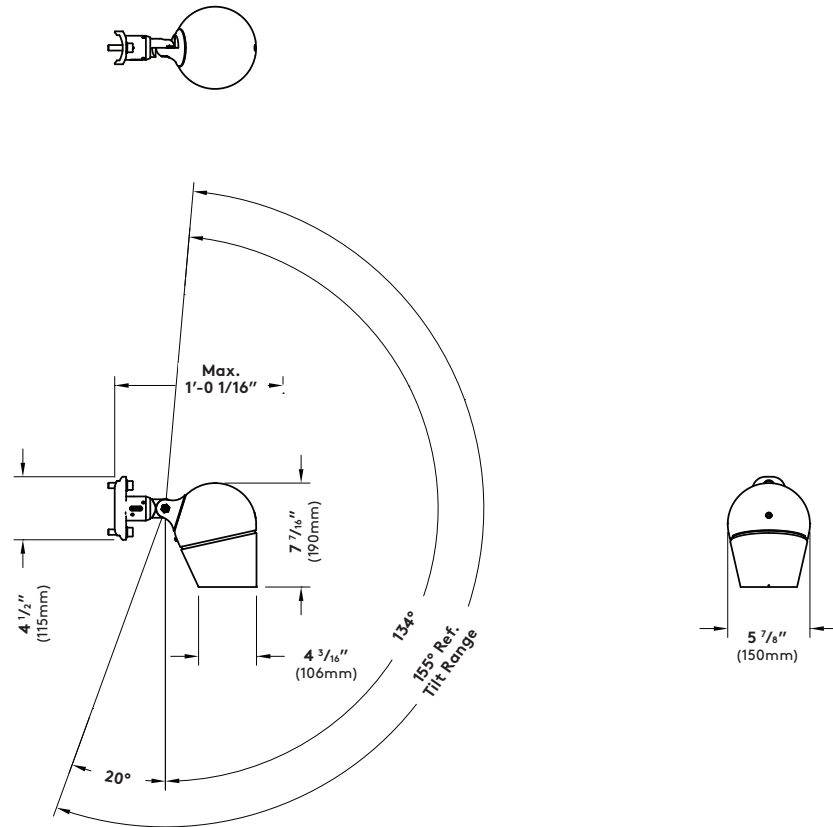
Approvals

Date:

Olivio Piccolo LED - Sistema 2 Arm Mount

selux

OLPL-SB1



Specifications

Luminaire Housing - Two-piece high-pressure die-cast housing, made of low-copper aluminum alloy. Single recessed captive screw allows easy access to light engine & gear tray components.

Gasketing - UV and ozone-resistant, silicone gasket between fixture housing and lens base provide IP67 level ingress protection. IP rated micro-membrane ensures pressure compensation.

Lens - Tempered clear glass lens.

LED Light Engine - Made from high flux COB and vacuum metalized aluminum reflectors. Selux is using brand name LED manufacturers. Available in 3000K and 4000K, CRI minimum 80. Reflectors made from high purity aluminum to ensure high efficiencies throughout lifetime. Complete light engine can be removed easily for future upgrade. LED light engine provides a reported lumen maintenance of 82.69% at 60,000 hours. L70 calculated greater than 60,000 hours.

LED Driver - Selux uses brand name high efficiency LED drivers. LEDs are driven by RoHS compliant high-efficiency driver. Excellent for cold temperature starting and instant on. Min. operating temperature -30°C/ -22°F.

Arm - Cast aluminum mounting arms for flexible pole mounting. Fixture head joint provides tilt-swivel range from 0° to 175°, and 360° rotation. Locks down with set screws.

Rivnuts - (2) Two rivnuts per pole required per Fixture Arm.

Power Cord - Pre-installed at factory and hidden through the luminaire hinge and hinge arm. Power cords are specified to fit the length of the pole specified with the luminaire.

Exterior Luminaire Finish - Selux utilizes a high quality Polyester Powder Coating. All Selux luminaires and poles are finished in our Tiger Drylac certified facility and undergo a five-stage intensive pretreatment process where product is thoroughly cleaned, phosphated and sealed. Selux powder coated products provide excellent salt and humidity resistance as well as ultraviolet resistance for color retention. All products are tested in accordance with test specifications for coatings from ASTM and PCI. Standard exterior colors are White (WH), Black (BK), Bronze (BZ), Semi-Matte Black (BL), and Silver (SV). Selux premium colors (SP) are available, please specify from your Selux color selection guide.

5 Year Limited LED Luminaire Warranty - Selux offers a 5 Year Limited Warranty to the original purchaser that the Olivio Piccolo LED luminaire shall be free from defects in material and workmanship for up to five (5) years from date of shipment. This limited warranty covers the LED driver and LED array when installed and operated according to Selux instructions. Fixture suitable for ambient temperature of 35° C (95° F).

Listings and Ratings: Tested to IESNA LM-79-08 and LM-80 test standards at 25° C ambient temperature. IP67.

OLIVIO LED suitable for ambient temperatures of 35°C (95°F). Minimum operating temperature of luminaire at -30°C (-22°F).

NRTL Listed for wet location (i.e. UL, CSA)

Visit selux.us for our LED End of Life recycling policy.

For Buy American compliance on poles, please consult the factory.

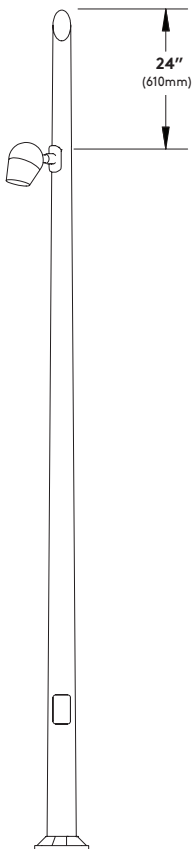
Olivio Piccolo LED - Sistema 2 Arm Mount

selux

Mounting

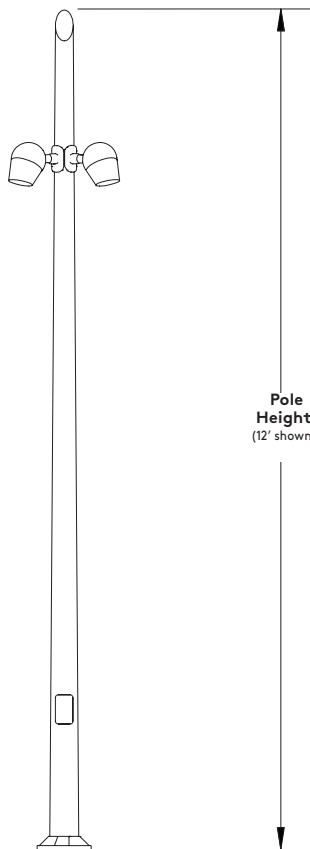
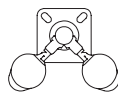
Mounting Details

Single
(Arm Location: 0D)



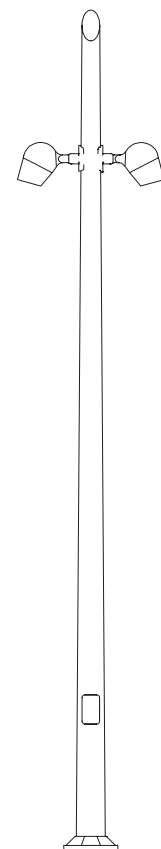
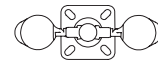
EPA = 0.2 ft² (0.019 m²)
Weight = 8 lbs. (4 kg)
Rivnuts = 1 pair (RN1)

Double at 90°
(Arm Locations: 0D-0V)



EPA = 0.5 ft² (0.050 m²)
Weight = 15 lbs. (7 kg)
Rivnuts = 2 pair (RN2)

Double at 180°
(Arm Locations: 0G-0S)



EPA = 0.5 ft² (0.050 m²)
Weight = 15 lbs. (7 kg)
Rivnuts = 2 pair (RN2)

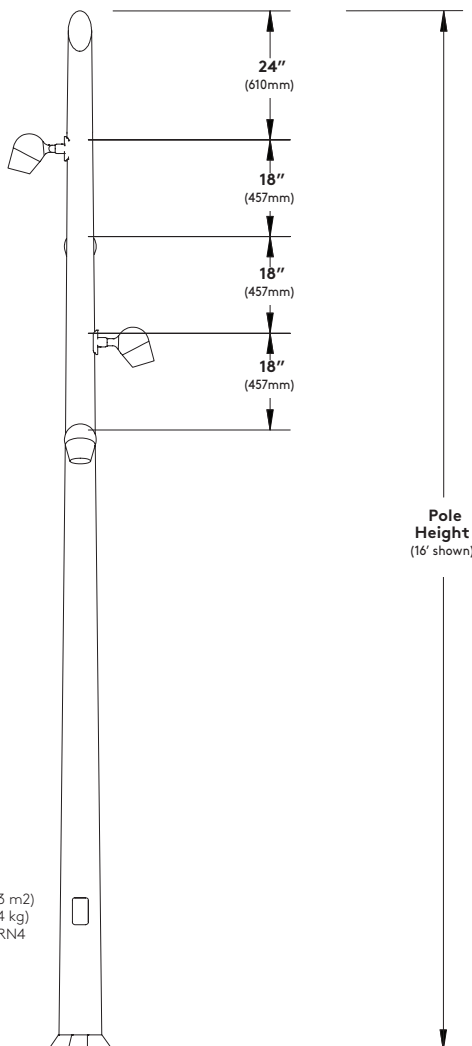
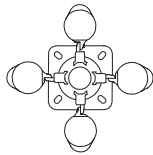
Olivio Piccolo LED - Sistema 2 Arm Mount



Mounting

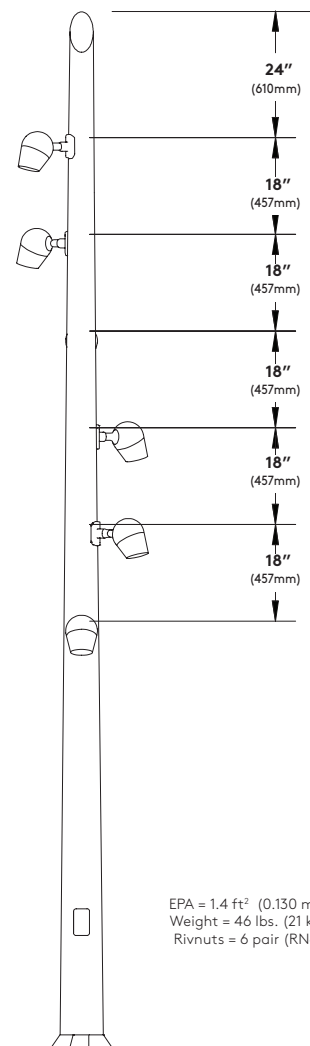
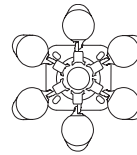
Mounting Details

**Quadruple Pole Arms
stepped at 90°**
(Arm Location: 0G-1M-2S-3A)



EPA = 0.9 ft² (0.083 m²)
Weight = 31 lbs. (14 kg)
Rivnuts = 4 pair (RN4)

**Sextuple Pole Arms
stepped at 60°**
(Arm Locations: 0E-1I-2M-3Q-4U-5A)



EPA = 1.4 ft² (0.130 m²)
Weight = 46 lbs. (21 kg)
Rivnuts = 6 pair (RN6)

Olivio Piccolo LED - Sistema 2 Arm Mount



Specify Mounting Configurations

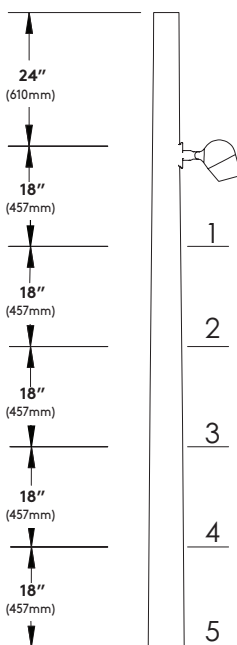
(Luminaire shown for illustrative purposes only - not to scale)

Use checkboxes provided in chart below. Columns #0 through #5 indicate heights starting with 2 feet (610mm) below top of pole and proceeding downwards in increments of 18 inches (457mm). Rows A through X indicate angular placement around pole starting with 0° at handhole and proceeding clockwise.

NOTE: Arms mounted at same height level must be spaced apart at 90° minimum. Arms mounted at adjacent height levels (18" apart) must be spaced apart at 45° minimum

HEIGHT CODE
DISTANCE FROM TOP OF POLE
CLOCKWISE FROM HANDHOLE
ANGULAR LOCATION CODE

| | | 0 | 1 | 2 | 3 | 4 | 5 |
|---|------|----|------|----|------|----|------|
| | | 2' | 3.5' | 5' | 6.5' | 8' | 9.5' |
| A | 0° | | | | | | |
| B | 15° | | | | | | |
| C | 30° | | | | | | |
| D | 45° | | | | | | |
| E | 60° | | | | | | |
| F | 75° | | | | | | |
| G | 90° | | | | | | |
| H | 105° | | | | | | |
| I | 120° | | | | | | |
| J | 135° | | | | | | |
| K | 150° | | | | | | |
| L | 165° | | | | | | |
| M | 180° | | | | | | |
| N | 195° | | | | | | |
| O | 210° | | | | | | |
| P | 225° | | | | | | |
| Q | 240° | | | | | | |
| R | 255° | | | | | | |
| S | 270° | | | | | | |
| T | 285° | | | | | | |
| U | 300° | | | | | | |
| V | 315° | | | | | | |
| W | 330° | | | | | | |
| X | 345° | | | | | | |



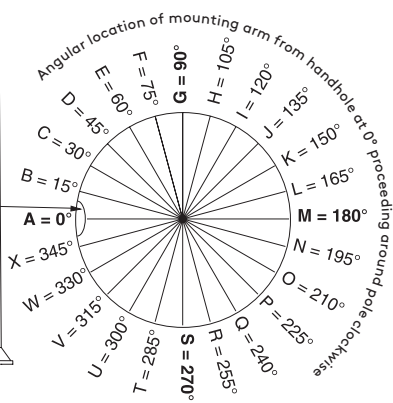
(NOTE: If using Adobe Acrobat to enter data (checks) in chart on right, the following instructions will be carried out automatically)

When specifying non-standard configurations, enter "SB+(total number of arms specified)" on configuration matrix on page 1 in the fixture Mounting field. Example: SB4 (specifying 4 mounting arms)

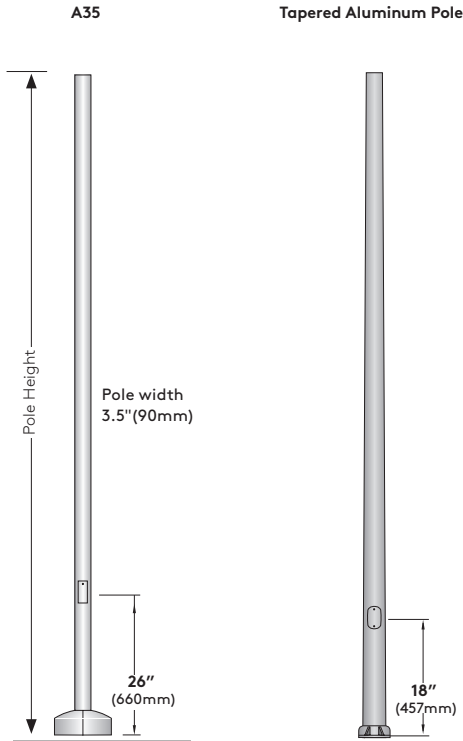
Build up the Mounting Arm Location Codes from chart on right ("Height Code" + "Angular Location Code") i.e. "4G" = 8 feet from top of pole, 90° clockwise from handhole.

Enter Mounting Arm Location Codes on page 1 in the blanks provided that follow the Pole Option blanks. Example: 3G-3P-4A-5S

(1) Pair of Rivnuts required per arm.

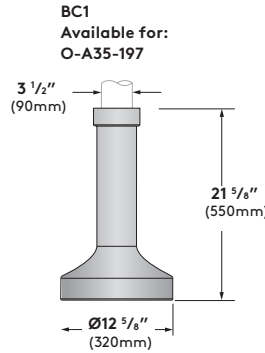


Olivio Piccolo LED - Sistema 2 Arm Mount

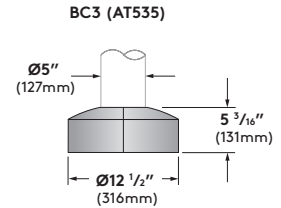


Optional Base Covers

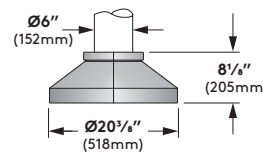
Die cast aluminum, two piece field installable base covers



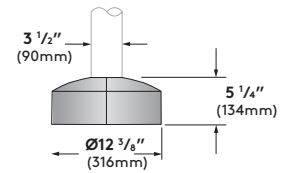
BC3 - Available for:
O-AT535-156



BC9 - Available for:
O-AT64-156
O-ST5936-11



BC5 - Standard with:
O-A35-197



Pole Data Chart

| Pole Series | Wall | EPA Information | | | | Height | Finish | Rivnut Pairs | Options |
|--|-------|-----------------|-------|--------|--------|-----------|--------------------------|--------------|---|
| | | 80mph | 90mph | 100mph | 110mph | | | | |
| O-A35-197 3.5" Straight Alum Pole | 0.197 | 7.3 | 5.4 | 4 | 3.1 | 12 12 ft. | WH White | RN1 1 Pair | BC1 Decorative Cast Aluminum Base Cover (see base cover details for pole compatibility) |
| O-AT535-156 5" to 3.5" Round Tapered Alum Pole | 0.156 | 14.4 | 10.9 | 8.6 | 6.9 | | BK Black | RN2 2 Pair | |
| O-A35-197 3.5" Round Straight Alum Pole | 0.197 | 5.8 | 4.2 | 3.0 | 2.2 | 14 14 ft. | BZ Bronze | RN3 3 Pair | BC3 Die-cast, Two-piece Aluminum Base Cover (see base cover details for pole compatibility) |
| O-AT535-156 5" to 3.5" Round Tapered Alum Pole | 0.156 | 9.4 | 7.1 | 5.5 | 4.4 | | SV Silver | RN4 4 Pair | |
| O-AT535-156 5" to 3.5" Round Tapered Alum Pole | 0.156 | 7.7 | 5.6 | 4.2 | 3.3 | 16 16 ft. | SP Specify Premium Color | RN5 5 Pair | BC5 Two-piece Cast Aluminum Base Cover (see base cover details for pole compatibility) |
| O-AT64-156 6"-4" Round Tapered Alum Pole | 0.156 | 14.1 | 10.8 | 8.6 | 7.0 | | | RN6 6 Pair | |
| O-ST5936-11 5.9"-3.6" Tapered Steel Pole | 11 ga | 19.3 | 15.1 | 12.2 | 10.0 | | | RN7 7 Pair | |
| | | | | | | | | RN8 8 Pair | BC9 Decorative Cast Aluminum Base Cover (see base cover details for pole compatibility) |

EPA values are calculated according to AASHTO 1994 with a 1.3 gust factor. Poles are calculated for an even distributed weight load of 200 lbs weight maximum. If the majority of the load is unevenly distributed, please consult factory for project specific EPA calculations

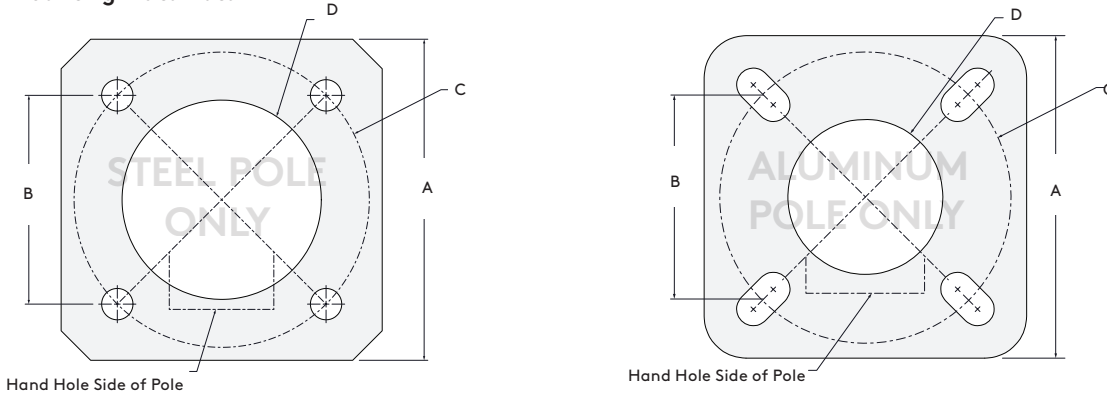
(1) Pair of Rivnuts is required for every mounting arm in pole mount applications.

Rivnut codes are denoted in pairs (1 pair Rivnuts = RN1, 2 pair Rivnuts = RN2, 3 pair Rivnuts = RN3, etc) and must be specified for all pole mount configurations.

Olvio Piccolo LED - Sistema 2 Arm Mount

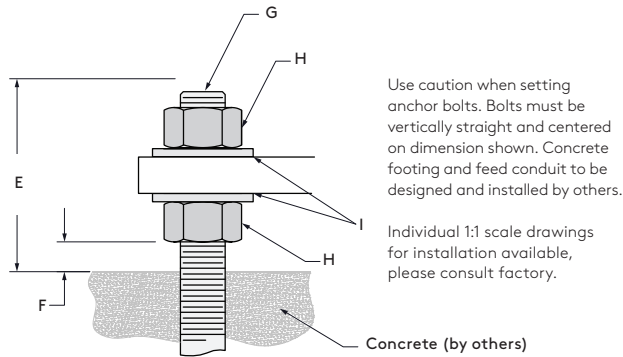


Mounting Plate Detail



| Mounting Plate Details | A Base Plate SQ | B Base Plate SQ | C Base Circle Ø | D Conduit Opening Ø |
|---|--------------------|--------------------|--------------------|------------------------|
| O-A35-197 3.5" Round Straight Alum Pole | 8" (203mm) | 5 1/2" (139mm) | 7 3/4" (197mm) | 3" (76mm) |
| O-AT535-156 5" to 3.5" Round Tapered Alum Pole | 9 5/8" (244mm) | 6 1/8" (155mm) | 8 5/8" (219mm) | 4 3/8" (117mm) |
| O-AT535-188 5" to 3.5" Round Tapered Alum Pole | 9 5/8" (244mm) | 6 1/8" (155mm) | 8 5/8" (219mm) | 4 3/8" (117mm) |
| O-AT64-156 6"-4" Round Tapered Alum Pole | 10 5/8" (262mm) | 6 3/4" (171mm) | 9 1/2" (241mm) | 5 1/2" (140mm) |
| O-ST5936-11 5.9"-3.6" Tapered Steel Pole | 10" (254mm) | 6 3/8" (162mm) | 9" (229mm) | 5 5/8" (143mm) |

Anchor Bolt Detail



All Hardware is Galvanized

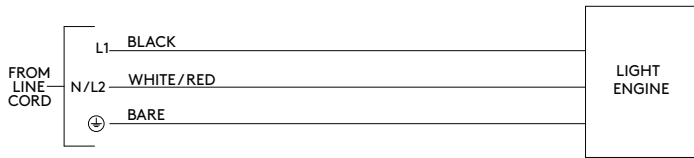
| Anchor Bolt Details | E Bolt Projection | F For Leveling | G Anchor Bolt | H Heavy Hex Nut | I Flat Washer |
|---|----------------------|-------------------|-------------------|--------------------|------------------|
| O-A35-197 3.5" Round Straight Alum Pole | 3 1/4" (82mm) | 1/2" (13mm) | 3/4"-10 UNC x 17" | 3/4"-10 UNC | 3/4" ID |
| O-AT535-156 5" to 3.5" Round Tapered Alum Pole | 3 1/4" (82mm) | 1/2" (13mm) | 3/4"-10 UNC x 17" | 3/4"-10 UNC | 3/4" ID |
| O-AT535-188 5" to 3.5" Round Tapered Alum Pole | 3 1/4" (82mm) | 1/2" (13mm) | 3/4"-10 UNC x 17" | 3/4"-10 UNC | 3/4" ID |
| O-ST5936-11 5.9"-3.6" Tapered Steel Pole | 4 1/8" (105mm) | 1/2" (13mm) | 1"-8 UNC x 36" | 1"-8 UNC | 1" ID |
| O-AT64-156 6"-4" Round Tapered Alum Pole | 3 1/2" (89mm) | 1/2" (13mm) | 3/4"-10 UNC x 17" | 3/4"-10 UNC | 3/4" ID |

Olivio Piccolo LED - Sistema 2 Arm Mount

selux

Wiring Diagram

Standard Wiring (120V-277V)



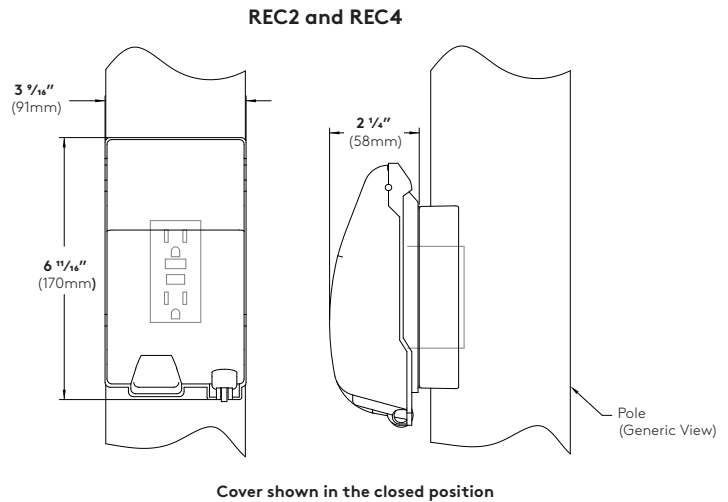
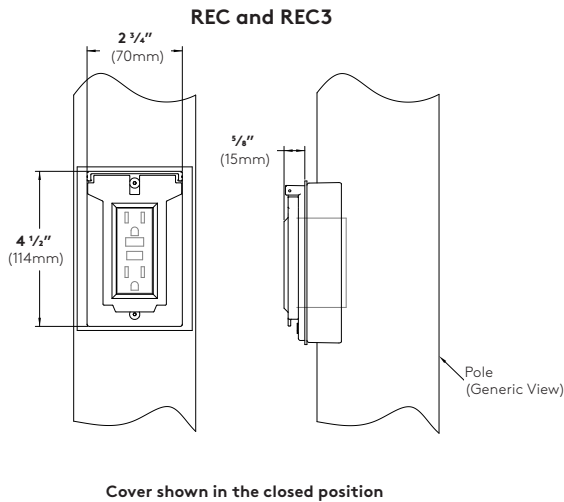
| Wire Designation Table | | |
|------------------------|------------|-------------------------------------|
| Source Voltage (VAC) | Wire Color | Wire Designation |
| 120V or 277V | Black | L1 |
| | White | Neutral |
| 208V or 240V | Black | L1 |
| | Red | L2 |
| UNV (120V-277V) | Black | L1 |
| | White | Neutral (120/277V) or L2 (208/240V) |

Olivio Piccolo LED - Sistema 2 Arm Mount



Optional Accessories

Dark Sky 0° Tilt Option (DS) - Luminaire head tilt angle preset and fixed at factory to comply with IDA Dark Sky and BUG U0 ratings. IDA Dark Sky compliant with 3000K CCT only.



GFCI Receptacle (REC) - 120V 15A GFCI duplex receptacle with weatherproof, self-closing cover; located 36" (915mm) o.c. from base of pole, in-line with hand hole. Receptacle is intended only for portable tools or other portable equipment to be connected to outlet only when attended by operating personnel (120V only).

USB & Duplex Receptacle (REC3) (not shown) - 120V 20A duplex receptacle with USB combination ports. (1) type A and (1) type C high power 5A, 5V USB outlets. With weatherproof, self-closing cover; located 36" (915mm) o.c. from base of pole, in-line with hand hole. Receptacle is intended only for portable tools or other portable equipment to be connected to outlet only when attended by operating personnel.

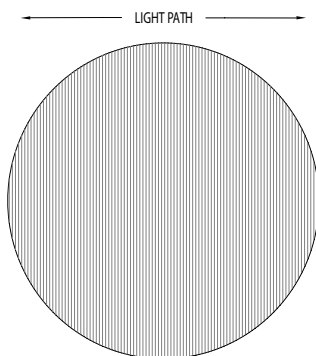
REC3 does not incorporate GFCI (Ground Fault Circuit Interrupter) protection, and shall be powered by a GFCI protected branch circuit (by others).

GFCI Receptacle (REC2) - 120V 15A GFCI duplex receptacle with weatherproof, self-closing, padlockable in-use cover; located 36" (915mm) o.c. from base of pole, in-line with hand hole. Receptacle is intended only for portable tools or other portable equipment to be connected to outlet only when attended by operating personnel (120V only).

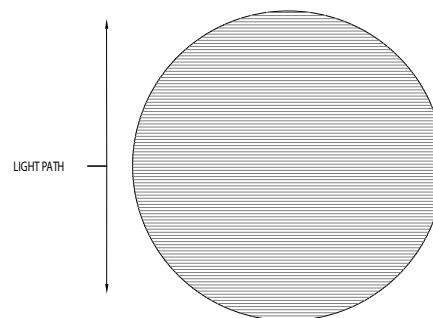
USB & Duplex Receptacle (REC4) (not shown) - 120V 20A duplex receptacle with USB combination ports. (1) type A and (1) type C high power 5A, 5V USB outlets. With weatherproof, self-closing padlockable in-use cover; located 36" (915mm) o.c. from base of pole, in-line with hand hole. Receptacle is intended only for portable tools or other portable equipment to be connected to outlet only when attended by operating personnel.

REC4 does not incorporate GFCI (Ground Fault Circuit Interrupter) protection, and shall be powered by a GFCI protected branch circuit (by others).

Horizontal Spread Lens (SLH) - Spread lens for horizontal light distribution. Replaces clear lens and intended to be used with reflectors for S09, F40 or F80 distribution. Preset and fixed at factory.



Vertical Spread Lens (SLV) - Spread lens for vertical light distribution. Replaces clear lens and intended to be used with reflectors for S09, F40 or F80 distribution. Preset and fixed at factory.



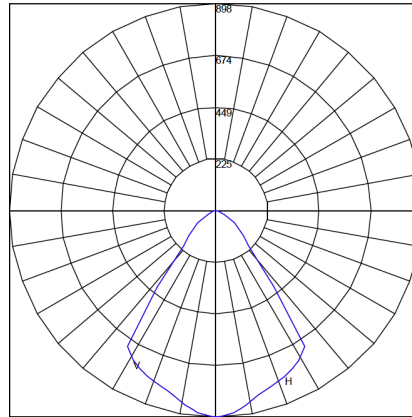
Olivio Piccolo LED - Sistema 2 Arm Mount



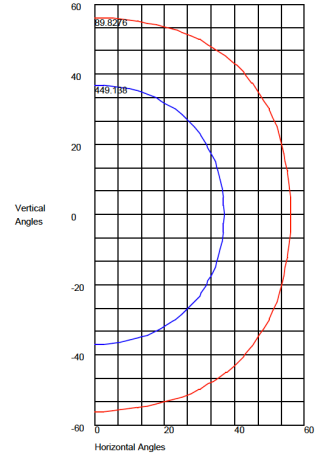
Photometry

F80 / 14W LED / 3000K CCT

Catalog #: OLPL-F80-X-2G350-30
Delivered Lumens: 1302
Input Watts: 14W
Maximum candela of 898.2
Maximum candela angle: 0H x 0V
NEMA Classification: 6H x 6V
Power Factor: 0.981
Total Harmonic Distortion: 7.99%



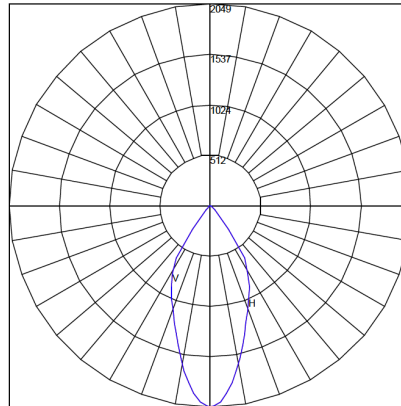
Maximum Candela = 898.276 Located At Horizontal Angle = 0, Vertical Angle = 0
H - Horizontal Axial Candela
V - Vertical Axial Candela



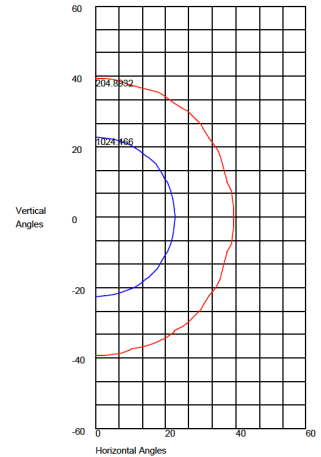
Maximum Candela = 898.276 Located At Horizontal Angle = 0, Vertical Angle = 0
50% Maximum Candela = 449.138
10% Maximum Candela = 89.8276

F40 / 14W LED / 3000K CCT

Catalog #: OLPL-F40-X-2G350-30
Delivered Lumens: 1341
Input Watts: 14W
Maximum candela of 2048.9
Maximum candela angle: 0H x 0V
NEMA Classification: 5H x 5V
Power Factor: 0.981
Total Harmonic Distortion: 7.99%



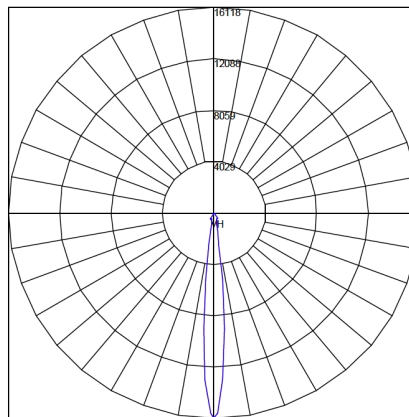
Maximum Candela = 2048.932 Located At Horizontal Angle = 0, Vertical Angle = 0
H - Horizontal Axial Candela
V - Vertical Axial Candela



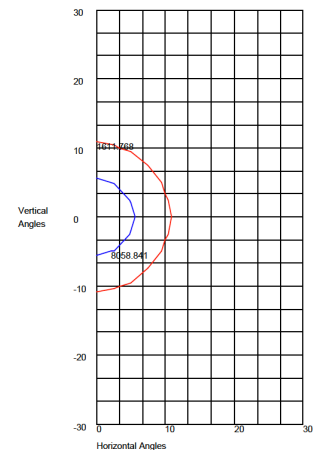
Maximum Candela = 2048.932 Located At Horizontal Angle = 0, Vertical Angle = 0
50% Maximum Candela = 1024.466
10% Maximum Candela = 204.8932

S09 / 14W LED / 3000K CCT

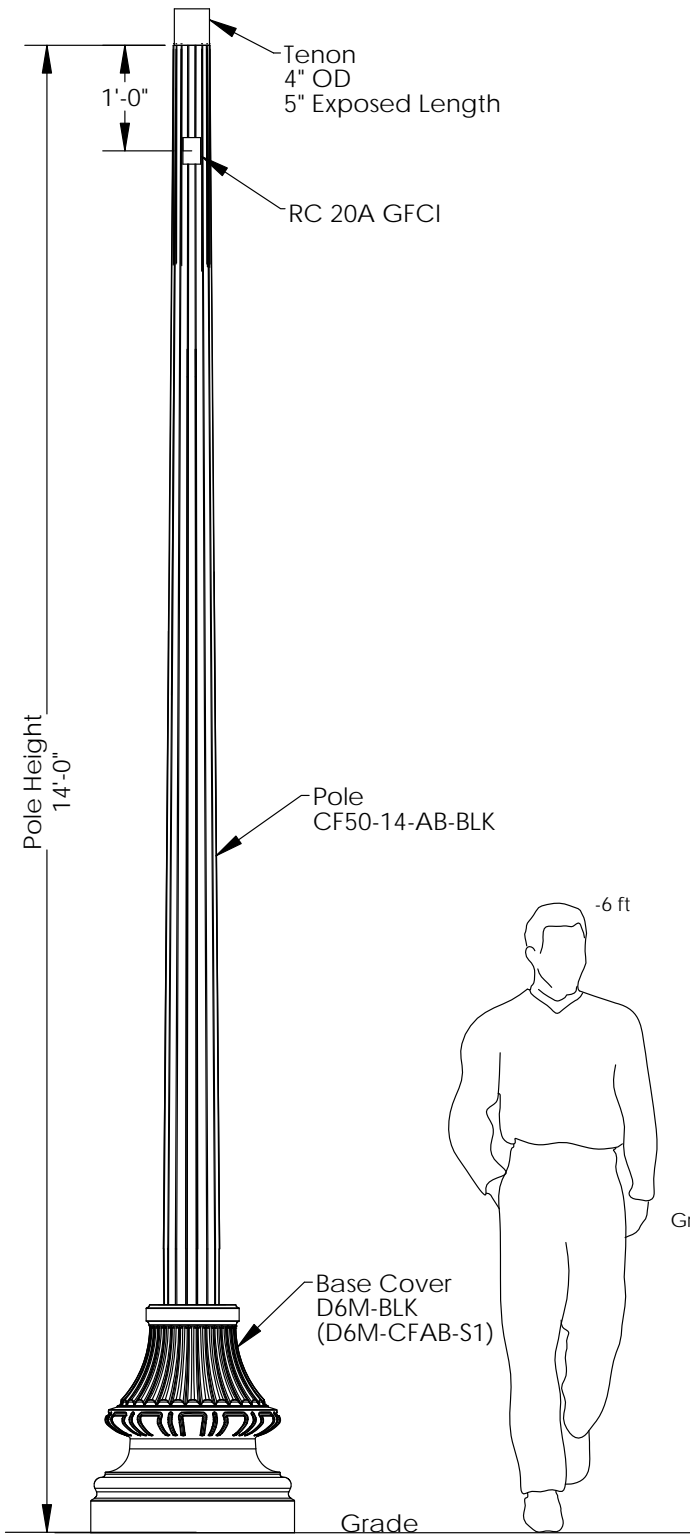
Catalog #: OLPL-S09-X-2G350-30
Delivered Lumens: 1346
Input Watts: 14W
Maximum candela of 1611.7
Maximum candela angle: 0H x 0V
NEMA Classification: 2H x 2V
Power Factor: 0.981
Total Harmonic Distortion: 7.99%



Maximum Candela = 1611.683 Located At Horizontal Angle = 0, Vertical Angle = 0
H - Horizontal Axial Candela
V - Vertical Axial Candela



Maximum Candela = 1611.683 Located At Horizontal Angle = 0, Vertical Angle = 0
50% Maximum Candela = 805.8415
10% Maximum Candela = 161.1683



AGENCY: Preferred Sales
PROJECT: City of Northfield
QUOTE#: PEF060519

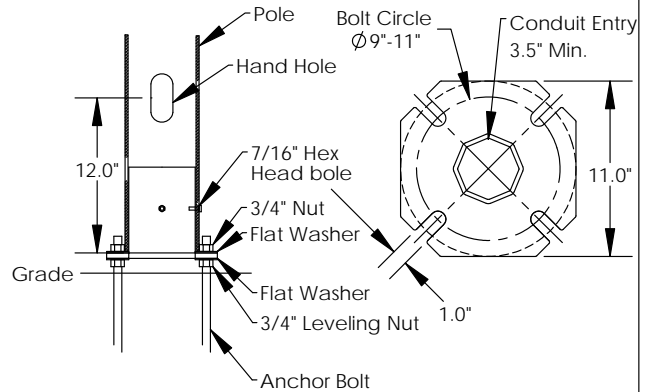
POLE

Model: CF50
Top Dia: 5.04"
Taper: .14"/ft
Construction: Centrifugal Cast Fiberglass Composite
Tenon: 4" OD 5" Exposed Length 6061-T6 Alum
Hand Hole: 2 1/2"x5"@12" above grade
Anchor Base: Plate-11"x11"x1/2" Hot Rolled Steel ASTM A36 Slots for 3/4" bolts
Tube- 6.25" OD Carbon Mech Steel 1/4" wall 8" length ASTM A513
Bolt Circle: 10"
Anchor Bolts: 3/4"x30"x3" Galvanized
Option: RC-20 amp GFCI kit Weather Proof metallic In-use Cover
Paint: UV & Cleaning chemical resistant
Color: Black
Pole Weight: 82 lbs approx
MAX Attachment Weight: 100 lbs
MAX EPA for Attachments: 11.8 @ 90 mph ANSI

BASE COVER

Model: D6M
Material: Elastomeric Urethane
Color: Black
Height: 27.5"
Width: 23"
Weight: 33.1 lbs approx

ANCHOR PLATE DETAIL & ORIENTATION



WHATLEY, INC. A Valmont Company
19845 US Highway 76
Newberry, SC. 29108
phone: (877) 959-7678
fax: (803) 276-8940
web: www.whatley.com

| REV | DESCRIPTION | DATE |
|-----|----------------------|---------|
| A | Revised Tenon Length | 5/16/18 |
| | | |
| | | |

PART NO. CF5014AB99 DESCRIPTION: CF50-D6M-14-AB-BLK-40-50-RC

SCALE: 1:20 SIZE: A REV. A Pole Assembly

MATERIAL: Noted

FINISH: Smooth

DO NOT SCALE DRAWING

| DOCUMENTATION | INITIAL | DATE |
|--------------------------|---------|---------|
| DRAWN | JTC | 8/28/19 |
| QUOTE REQUEST | | |
| TOOLING REQUEST | | |
| FIRST ARTICLE REQUEST | | |
| FIRST ARTICLE INSPECTION | | |
| PRODUCTION RELEASE | | |

UNLESS OTHERWISE NOTED:
DIMENSIONS ARE IN INCHES
TOLERANCES:
DECIMAL .XX ± .03
DECIMAL .XXX ± .010
ANGLE ± 1/2

PROPRIETARY AND CONFIDENTIAL
THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF WHATLEY, INC. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF WHATLEY, INC. IS PROHIBITED.