## AGENDA ITEM # \_\_\_\_\_ APPLICATION FOR **URBAN DESIGN COMMISSION** Project # \_\_\_\_\_ REVIEW AND APPROVAL Legistar # **Action Requested** DATE SUBMITTED: X Informational Presentation X Initial Approval and/or Recommendation UDC MEETING DATE: Final Approval and/or Recommendation PROJECT ADDRESS: 2906 Trace way ALDERMANIC DISTRICT: Bruer OWNER/DEVELOPER (Partners and/or Principals) ARCHITECT/DESIGNER/OR AGENT: City of Madison Water Utility TRAND ASSOCIATED INC 910 W. WINGER Dr. 119 East Olin Due. MADISONWI MADISONUT 53715 CONTACT PERSON: Andy Mullendore P.E: Address: MADISON WI 5375 Phone: 1008 2514843 LODE 2558655 Fax: E-mail address: andy. Mulledose @strandicom eric. urtes@strand.com Alan Larson, P.E MADISON WATERWHUTT TYPE OF PROJECT: (See Section A for:) Planned Unit Development (PUD) 2664653 allarson@Madisonwater.org General Development Plan (GDP) Specific Implementation Plan (SIP) Planned Community Development (PCD) General Development Plan (GDP) Specific Implementation Plan (SIP) Planned Residential Development (PRD) New Construction or Exterior Remodeling in an Urban Design District \* (A public hearing is required as well as a fee) School, Public Building or Space (Fee may be required) New Construction or Addition to or Remodeling of a Retail, Hotel or Motel Building Exceeding 40,000 Sq. Ft. Planned Commercial Site (See Section B for:) New Construction or Exterior Remodeling in C4 District (Fee required)

Other \_\_\_\_\_\_
\*Public Hearing Required (Submission Deadline 3 Weeks in Advance of Meeting Date)

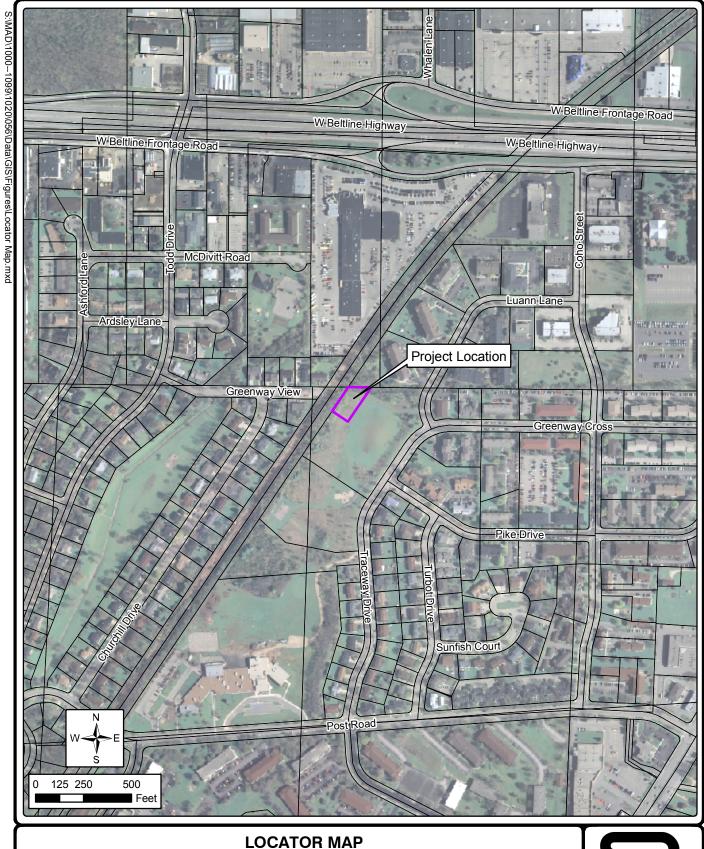
Where fees are required (as noted above) they apply with the first submittal for either initial or final approval of a project.

R.P.S.M. Parking Variance (Fee required)

Comprehensive Design Review\* (Fee required)
Street Graphics Variance\* (Fee required)

(See Section C for:)

(See Section D for:)



**BOOSTER STATION 118 MADISON WATER UTILITY** DANE COUNTY, WISCONSIN



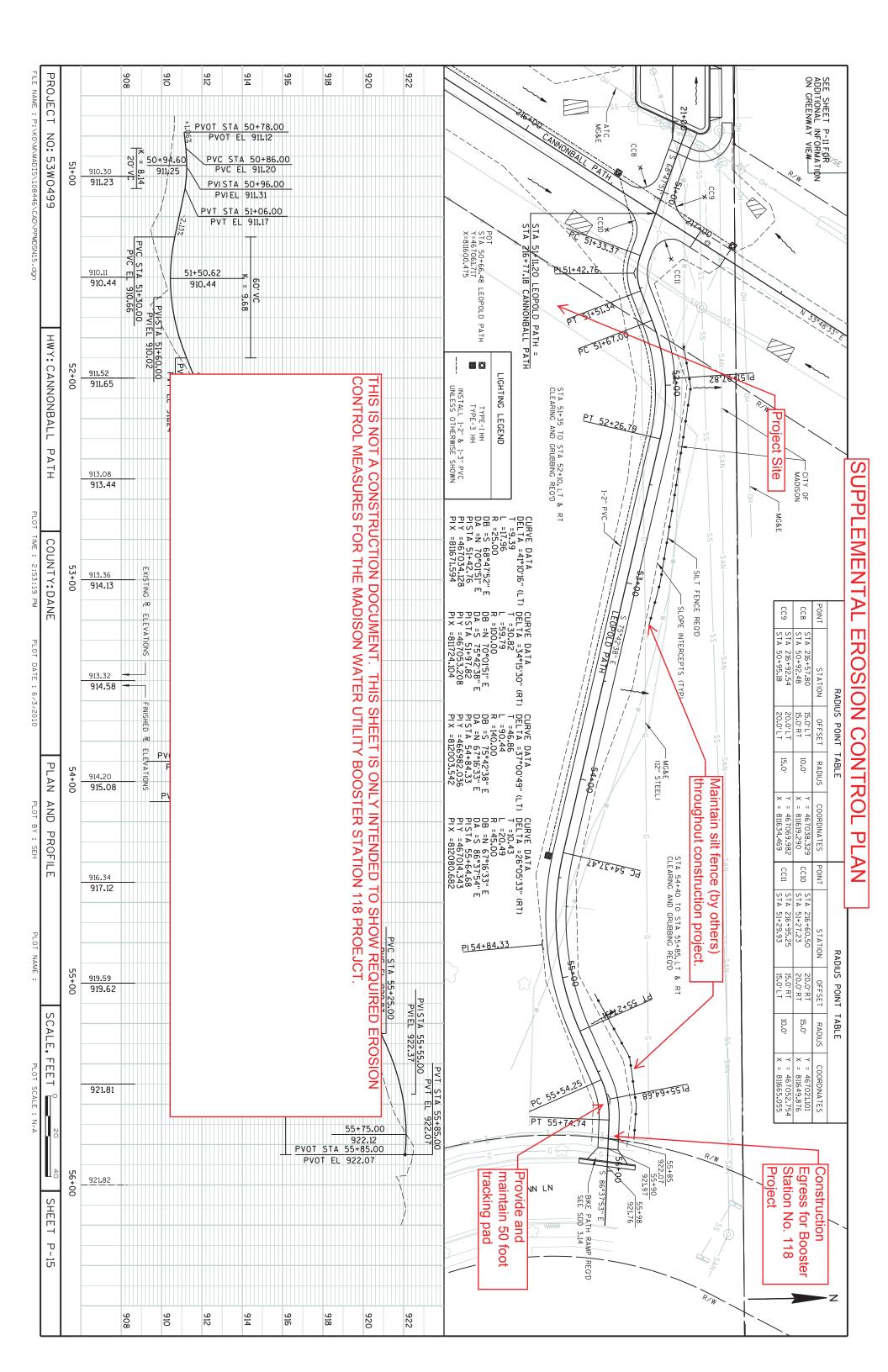
FIGURE 1 1020.056

# Narrative Description of the Project

The 2006 Madison Water Utility (MWU) Water Master Plan noted that supplemental fire flow supply was required in the Arbor Hills area. The first public meeting was held on May 27, 2009 to establish the project. A second public meeting was held on August 10, 2009 to examine alternatives to met the fire flow requirements. The alternative selected was constructing a pump station in conjunction with the cannonball trail water main extension.

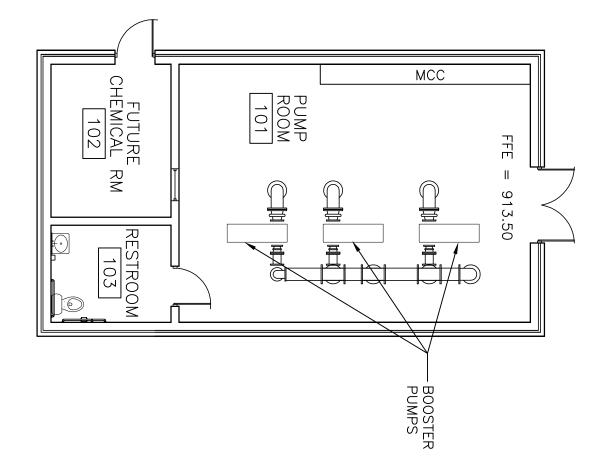
Preliminary design in conjunction was public and Citizen's Advisory Panel (CAP) meetings occurred between June 2010 and December 2010. It was decided that most the feasible site location for a pump station in the Arbor Hills area was an outlot in the northwest corner of Aldo Leopold Park.

The project design and construction at this site will include one building (approximately 25 feetwide by 45 feet-long by 10 feet-tall). The building exterior will be constructed with brick a it will have a pitched roof. The project will also include water main extension from the building, new booster pumps, chemical rooms, and associated HVAC and electrical equipment.











# **FLOOR PLAN LAYOUT**

NOILS NOS

## BOOSTER PUMP STATION NO. 118 **BENDEBED AIEMS**

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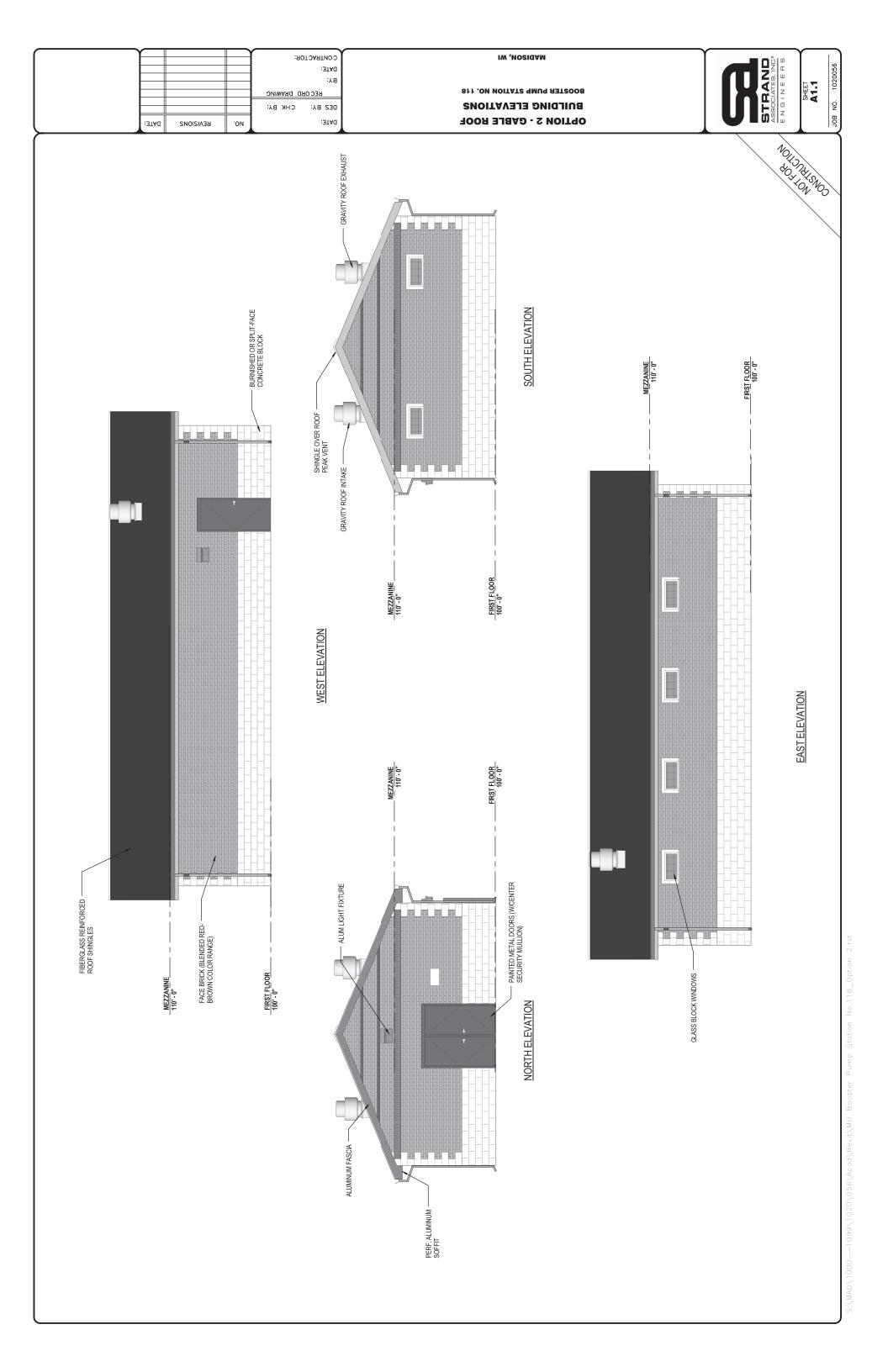
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**BEAISIONS** 

.ON





**DANE COUNTY, WISCONSIN** 

### DESCRIPTION

The IMPACT EliteTrapezoid cutoff wall luminaire makes an ideal complement to site design. Rugged construction and full cutoff classified optics provide facade and security lighting for light restricted zones surrounding schools, office complexes, apartments, and recreational facilities. U.L. and cUL Listed for wet locations in down mount applications and damp locations in up mounted applications.

# McGRAW-EDISON®

Catalog #	Туре
Cutalog "	
Project	
Comments	Date
Prepared by	

### SPECIFICATION FEATURES

#### Construction

Two-piece die-cast aluminum housing and removable hinged door frame nests securely for precise tolerance control and repeatability. Hinged door frame inset for clean mating with housing surface and secured via two [2] captive stainless steel fasteners. Optional tamper resistant torx head fasteners [TR] offer vandal resistant access to the electrical compartment. 1/8" clear, heat and impact resistant tempered flat glass lens combined with molded silicone gasket to seal the integrated optical assembly while ensuring peak optical performance.

### **Electrical**

DIMENSIONS

Integral hard mount electrical components are secured and grounded within the die-cast aluminum housing for optimal heat sinking and extended component life. Minimum starting temperatures are -40°C (-40°F) for

HPS and -30°C (-22°F) for MP. Compact fluorescent luminaires feature electronic universal 120-277V high efficiency 50/60Hz ballast with -18°C (-0°F) minimum starting. Available in 50-175W HID or 26-84W CF

#### Optical

Premium anodized 95% reflective aluminum optical assemblies provide high efficiency Type II distribution. Optional silk screened house side flat glass shield provides decreased wall brightness. All Impact Elite Wall Series luminaires classify as IESNA full cutoff in downlight applications. Available with 10% or 50% uplight options for architectural highlighting of building details.

### Mounting

Gasketed and zinc plated rigid steel mounting attachment fits directly to 4" j-box or wall with the Impact

Elite "Hook-N-Lock" system for fast installation and mounting in both traditional downlighting [wet location] or inverted uplighting [damp location] mounting positions. Secured via two [2] captive corrosion resistant allen head set screws concealed from view, but accessible from bottom of fixture.

#### Finish

Housing and door are protected with 5-stage premium TGIC polyester powder coat paint. Premium TGIC powder coat finishes withstand extreme climate changes while providing optimal color and gloss retention over the fixture's installed life. Standard colors include black, bronze, grey, white, dark platinum and graphite metallic. RAL and custom color matches available. Consult McGraw-Edison Architectural Colors Brochure for complete selection.



## IST IMPACT ELITE TRAPEZOID

50 - 175W Pulse Start Metal Halide Metal Halide High Pressure Sodium 26 - 84W

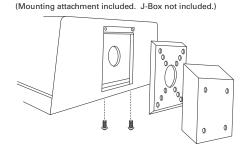
Compact Fluorescent

FULL CUTOFF WALL MOUNT LUMINAIRE



## NOTE: In downlight applications only.

## HOOK-N-LOCK MOUNTING



# *impact*

## TECHNICAL DATA

UL1598 Listed, CUL Listed 25°C Maximum Ambient Temperature External Supply Wiring 90°C Minimum Down Mounted—Wet Location Up Mounted—Damp Location

## **ENERGY DATA**

High Reactance Ballast Input Watts 50W HPS HPF (66 Watts)

50W MP HPF (72 Watts) 70W HPS HPF (91 Watts) 70W MP HPF (90 Watts) 100W HPS HPF (130 Watts) 100W MP HPF (129 Watts) 150W MP S HPF (190 Watts) 150W MP HPF (185 Watts)

## **Electronic Ballast Input Watts**

26W CF HPF (29 Watts) 32W CF HPF (36 Watts) 42W CF HPF (46 Watts) 52W CF HPF (55 Watts)

SHIPPING DATA
Approximate Net Weight:
18 lbs. (8 kgs.)







D

0.72

0.50

0.37

0.25

0.20

0.13

0.29

0.20

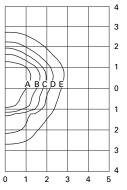
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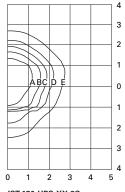
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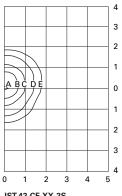
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0.06

## PHOTOMETRICS (Complete IES files available at www.cooperlighting.com)







Mounting Footcandle Values for Height Isofootcandle Lines Α В 150-MP / 150-HPS 7.20 2.88 1.44 10 12' 5.00 1.00 2.00 14 3.65 1.46 0.73 42-CF 18' 2.46 1.23 0.62 20' 2.00 1.00 0.50 25 1.28 0.64 0.32

elect mounting height and read across for

footcandle values of each isofootcandle line. Distance in units of mounting height.

Footcandle Table

IST-150-MP-XX-2S			
150-Watt MP			
14,000-Lumen Clear Lamp			

IST-150-HPS-XX-2S 150-Watt HP 16,000-Lumen Clear Lamp

480=480V

DT=Dual-Tap4

MT=Multi-Tap4

TT=Triple-Tap4

E1=Electronic 120-277V5

IST-42-CF-XX-2S 42-Watt CF 3,200-Lumen Lamp

## ORDERING INFORMATION

Sample Number: IST-100-MP-120-2S-GM 120V 2EM/SC/12V Lamp Wattage <sup>1</sup> **Product Family** Lamp Type Distribution Options IST=Impact Elite Small MP=Pulse Start Metal 2S=Type II Segmented F=Single Fuse (120, 277 or 347V)7 MP Trapezoid Halide 50=50W2 FF=Double Fuse (208, 240 or 480V)7 70=70W2 **HPS**=High Pressure Sodium Color 6 ■ =Lamp Included MH=Metal Halide1 AP=Grey 100=100W P=Button Type Photocontrol (120V, 208, 240, or 277V)7 **150**=150W CF=Compact Fluorescent BZ=Bronze TR=Tamper Resistant Fasteners BK=Black **HPS** UPL10=10% Uplight Voltage <sup>3</sup> 50=50W2 WH=White HS=House Side Shield Glass⁵ 120=120V 70=70W2 DP=Dark Platinum PI =Polycarbonate Lens5, 8 208=208V 100=100W GM=Graphite Metallic Q=Quartz Restrike T4 Lamp<sup>9</sup> 240=240V 150=150W FM=Emergency Quartz Restrike T4 Lamp w/ Time Delay Relay9 **277**=277V MH EM/SC=Emergency Separate Circuit T4 Lamp9, 10 175=175W1 **347**=347V

> 2EMMR=Emergency Quartz Restrike with (2) MR16 Lamps w/Time11, 12 Delay Relay **2EMMR/SC**=Emergency Quartz Restrike with Time Delay Relay (1)<sup>10, 11, 12</sup> MR16 and (1) MR16 Emergency Separate Circuit

EMMR=Emergency Quartz Restrike MR16 Lamp w/ Time Delay Relay11, 12

20MR/SC=Quartz Restrike (1) MR16 Lamp and (1) Emergency10, 11, 12 Separate Circuit MR16 Lamp

EM/SC/MR=Emergency Separate Circuit MR16 Lamp10, 11, 13

QMR=Quartz Restrike MR16 Lamp11, 12

2QMR=Quartz Restrike w/ (2) MR16 Lamps11, 12

2EM/SC/MR=Emergency Separate Circuit with (2) MR16 Lamps10, 11, 13

EM/SC/12V=Emergency Separate Circuit 12V Low Voltage (1) MR1610, 14

2EM/SC/12V=(2) Emergency Separate Circuit MR16 Lamps (12V)10, 14

EMI40=Emergency Cold Temperature (UL924 Listed) Power Pack -187, 15 degrees C / 0 degrees F, (1) CF Lamp

CFEM=Emergency CF Power Pack (UL924 Listed) (1) CF Lamps, 07, 16 Degrees C/32 Degrees F

- HID lamps are medium base. 175W MH is available for non-U.S. markets only. Notes: 1
  - 2
  - Products also available in non-US voltages and 50Hz for international markets. Consult your Cooper Representative for availability and ordering information. 3
  - Dual-Tap ballast is 120/277V wired 277V. Multi-Tap ballast is 120/208/240/277V wired 277V. Triple-Tap ballast is 120/277/347V wired 347V.
  - Available with CF Option only. In cold temperatures, compact fluorescent lamps produce lower illumination levels. 5
  - Add as suffix 6
  - Must specify voltage
  - Down lighting position only. 8
  - (1) 120W Lamp, 100W maximum quartz lamp. Utility power may need to cycle to allow HID lamp to cool in warm climates. Not available with CF Option. Lamp supplied by others. 9
  - Leads out of the back of the unit for auxillary power 10

CF

26=(1) 26W

32=(1) 32W

42=(1) 42W

**52**=(2) 26W

64=(2) 32W

84=(2) 42W

- (1) or (2) 120V Lamps. GU10 base, 50W maximum each. Lamps supplied by others. 11
- Not available with CF lamps 12
- Not available with 52, 64, 84 CF wattages. 13
- (1) or (2) 12V bi-pin lamp, socket GU5.3 base, 35W maximum.Power supplied by low voltage DC source (supplied by others). Lamp supplied by others. 14
- Specify 120 or 277V, (-18°C) minimum temperature, not available with UPL10. 15
- Specify 120 or 277V, (0°C) minimum temperature, not available with UPL10.



# Contextual Site Information



Picture 1
Facing east on Greenway View towards Cannonball Bikepath; Adjacent house is 2501 Greenway View.



**Picture 2**Facing northwest within Aldo Leopold Park towards proposed site location. House in Picture 1 shown in background.



Picture 3
Facing north within Aldo Leopold Park towards proposed site location. Apartment complex located at 2234 Luann Lane shown in background.



**Picture 4**Facing southeast within proposed site location towards Alldo Leopold park.

# Contextual Site Information



Picture 5
Facing south at the eastern end of Greenway View; house is 2501 Greenway View.



Picture 6
Facing east within Aldo Leopold Park within proposed site location. Brush-line generally follows future Leopold Bike Path.

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Picture 7
Facing east at the end of Greenway View. Start of future Leopold Bike Path is visible on the left side of the road.



Picture 8

Facing southwest between the end of greenway view and our proposed site location (at the intersection of the future Cannonball and Leopold Bike Paths). House 2501 Greenway View is in the background. Cannonball Path runs along the left edge of the picture.



910 West Wingra Drive Madison, WI 53715 Phone: 608-251-4843 Fax: 608-251-8655

March 15, 2011

## Office Locations

Madison, WI Joliet, IL Louisville, KY Lexington, KY Mobile, AL Columbus, IN Columbus, OH Indianapolis, IN Milwaukee, WI Cincinnati, OH Phoenix, AZ Madison Plan Commission 215 Martin Luther King Jr. Blvd–Room LL-100 PO Box 2985 Madison, WI 53701-2985

Re: Letter of Intent-Booster Station No. 118

Dear Plan Commission:

www.strand.com

This letter serves as the Letter of Intent for the Booster Station No. 118 project for the City of Madison Water Utility. The following describes the project.

- 1. Project Name: Booster Station No. 118
- 2. Preliminary Construction Schedule

Advertisement Date	May 15, 2011
Bid Date	June 15, 2011
Notice to Proceed	August 1, 2011
Substantial Completion	May 1, 2012
Final Completion including landscaping	June 1, 2012

- 3. Description of Existing Conditions: The proposed site is located in the northwest corner of Aldo Leopold park. The land is relatively flat. Water, sewer, gas, and overhead electric are located on the northern portion of the proposed outlot. The construction project is being proposed in conjunction with the Cannonball Trail bike path water main extension project that is being completed this year.
- 4. Names of People Involved: Andy Mullendore is the project manager for Strand Associates, Inc.<sup>®</sup>. Strand Associates will serve as the surveyor and engineer. Al Larson is the project manager for the Madison Water Utility (MWU). Al Larson and Andy Mullendore will share project coordinator responsibilities. This project will be bid, so the contractor is unknown at this time. The property is currently owned by the Madison Parks department.
- 5. Uses: The building will be used by the MWU as a booster station to pump water from one pressure zone to another pressure zone. The project is intended to improve local water system pressures, increase available fire flow, and improve the system flexibility and reliability. The building will be one story.



## Madison Plan Commission Page 2 March 15, 2011

- 6. Gross Square Footage: Approximately 1,200 square feet.
- 7. The booster station is designed to run automatically through the MWU Supervisory Control and Data Acquisition system without any on-site employees needed. Standard operating procedure calls for an operator to visit the site on a daily basis during normal business hours (7 A.M. through 4 P.M.). This will consist of a single vehicle.
- 8. Capacity: Not applicable. The facility is not staffed.
- 9. Hours of Operation: See description in Item 7 above.
- 10. Square Footage of Site: 18,271 square feet (0.42 acres).
- 11. Number of Dwelling Units: Not applicable
- 12. Number of Bedrooms per Dwelling Unit: Not applicable.
- 13. Potential School Children: Zero
- 14. Trash Removal and Storage, Snow Removal, and other Maintenance Equipment Requirements: The Rounder who visits the site on a daily basis removes trash as necessary. Snow removal is by Water Utility staff.

If any additional information is required, please contact Andy Mullendore or Al Larson.

Sincerely,

STRAND ASSOCIATES, INC.®

Andy L. Mullendore, P.E.

c: Al Larson, MWU