

**APPLICATION FOR
URBAN DESIGN COMMISSION
REVIEW AND APPROVAL**

AGENDA ITEM # _____
Project # _____
Legistar # 19544

DATE SUBMITTED: Aug 15, 2012 **Action Requested**
 informational Presentation
 Initial Approval and/or Recommendation
UDC MEETING DATE: Aug 22, 2012 Final Approval and/or Recommendation

PLEASE PRINT!

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PROJECT ADDRESS: 5702 FEMRITE DRIVE

ALDERMANIC DISTRICT: 9

OWNER/DEVELOPER (Partners and/or Principals)
CITY OF MADISON POLICE
CPT TOM SNYDER
RANDALL WIESNER

ARCHITECT/DESIGNER/OR AGENT:
CITY ENGINEERING GREG FRIES
CITY ENGINEERING R. WIESNER
CITY ENGINEERING R. PHILLIPS

CONTACT PERSON: RANDALL WIESNER
Address: CITY ENGINEERING
210 MLK JR BLVD
Phone: 267-8679
Fax: 264-9275
E-mail address: rwiesner@cityofmadison.com

CITY PARKS
SARAH LEARNER

TYPE OF PROJECT:

(See Section A for:)

- Planned Unit Development (PUD)
 - 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) ** Modification to a previously approved plan.*
- 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)

(See Section C for:)

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

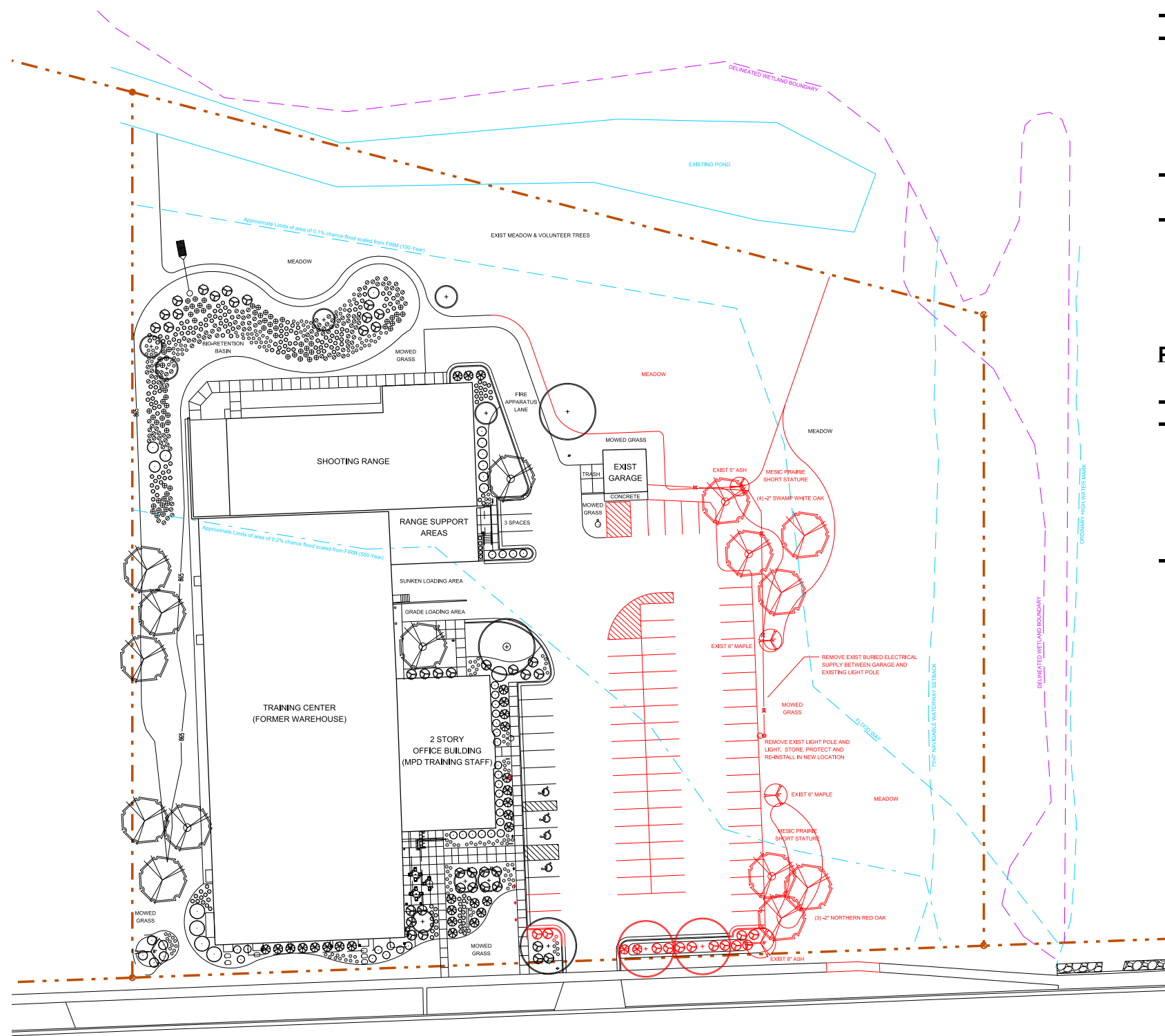
(See Section D for:)

- Comprehensive Design Review* (Fee required)
- Street Graphics Variance* (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.



FEMRITE DR

EXISTING SITE PLAN w/ PROPOSED DEMOLITION

SCALE for 11x17: NOT TO SCALE
 SCALE for 24x36: 1" = 30'

BACKGROUND INFORMATION

- PURCHASED FORMER FOUR LAKES LABELING IN 2009
- CONSTRUCTED PHASES 1 AND 2 IN 2011
 - INSERVICE CLASS ROOM (CAPACITY 40)
 - ACADEMY CLASS ROOM (CAPACITY 32)
 - COMBINED CLASSROOM CAPACITY = 80
 - RANGE AREAS
 - SCENARIO/SIMULATION TRAINING SPACE
- EXISTING PARKING WAS MODIFIED BUT STALL COUNT REMAINED THE SAME (74 INCL 4 HC & 4 LOW EMISSION)
- SINCE JAN 2, 2012
 - 18 DIFFERENT LAW ENFORCEMENT AGENCIES HAVE RECEIVED TRAINING
 - 900 SWORN OFFICERS HAVE TRAINED

PHASE 3 CONSTRUCTION

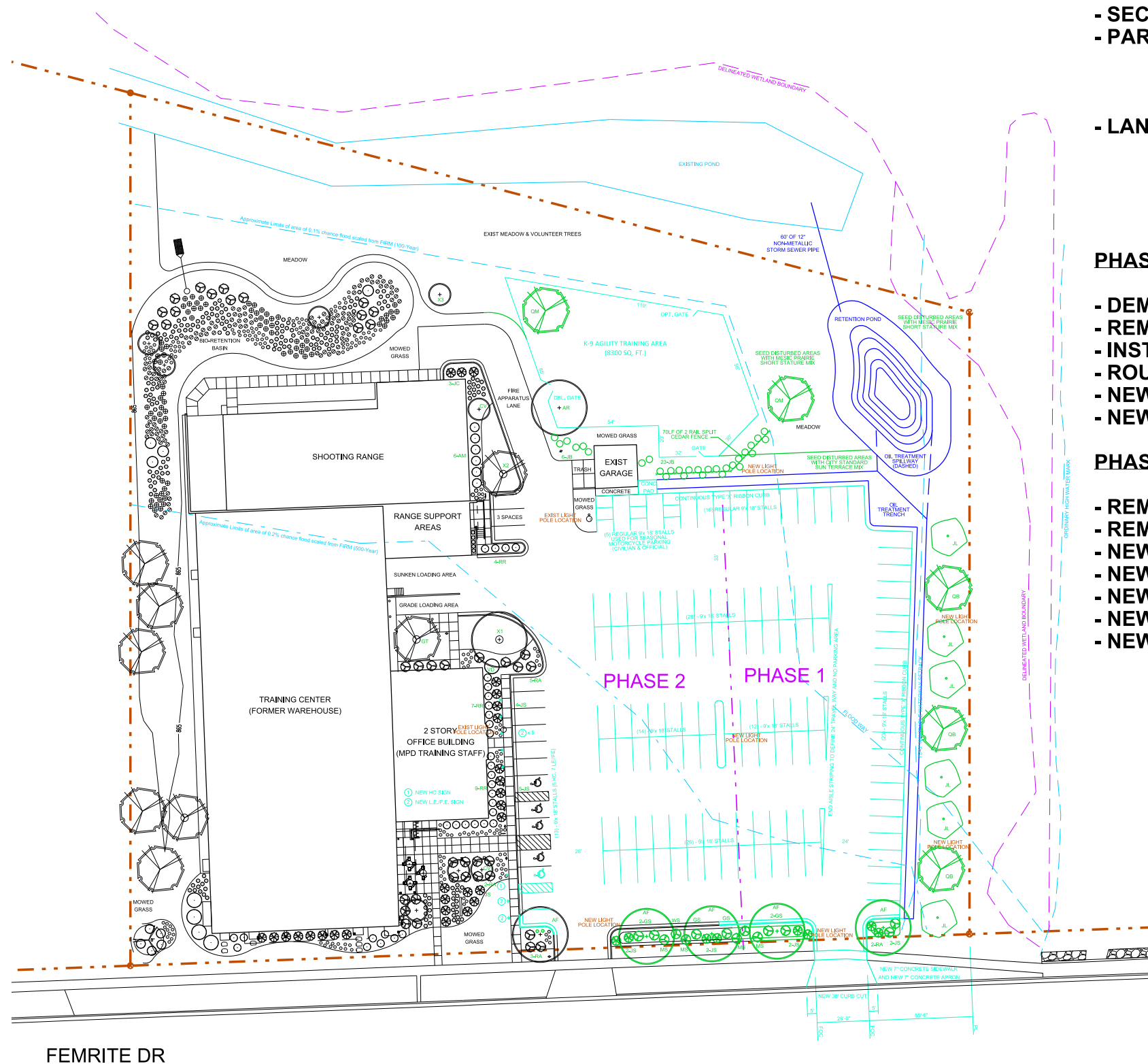
- OCTOBER 2012 THROUGH MARCH 2013
- COMPLETES INTERIOR BUILDOUT
 - 140 SEAT AUDITORIUM
 - 26 SEAT COMPUTER TRAINING AREA
 - DEFENSE AND TACTICS TRAINING AREA
 - DRIVING SIMULATOR (RISK MANAGEMENT)
 - FINISH COMMON SPACES
- ESTIMATED TOTAL CAPACITY IS 372 OFFICERS/STAFF

**Madison Police Department
 Training Center**

5702 Femrite Drive

Parking Lot Expansion

Project 53W1439 - Contract 6895



PROPOSED PLAN

- SECOND CURB CUT TO EAST SIDE OF PROPERTY
- PARKING INCREASES TO 135 STALLS
 - 5 HC STALLS
 - 7 LOW EMISSION/FUEL EFFICIENT STALLS
 - CALENDER PARKING FOR DUTY/PERSONAL MOTOR CYCLE PKG.
- LANDSCAPING REQUIREMENTS FOR THIS SITE PLAN
 - 10 CANOPY TREES **ACHIEVED
 - 135 STALLS = 595 POINTS
 - LOADING AREAS (2 EACH) = 150 POINTS
 - TOTAL POINTS REQUIRED = 745 POINTS **EXCEEDED (817)

PHASE 1 BY CITY ENGINEERING - FALL 2012

- DEMOLITION AS NOTED ON PREVIOUS PLAN
- REMOVAL OF SOILS TO DESIGN DEPTH
- INSTALLATION OF BREAKER AND CRUSHED BASE MATERIALS
- ROUGH CUT FOR POND
- NEW CURB CUT, APRON, AND SIDEWALK
- NEW LIGHTING BASES & FIXTURES INSTALLED (TE)

PHASE 2 BY BOARD OF PUBLIC WORKS CONTRACT - SPRING 2013

- REMOVE EXISTING ASPHALT SURFACES
- REMOVE/INSTALL BASE MATERIALS AS NEEDED PER DESIGN
- NEW ASPHALT SURFACE
- NEW PAINT STRIPING
- NEW CONCRETE CURB, GUTTER, SIDEWALK AS NEEDED
- NEW STORMWATER MANAGEMENT FEATURES INSTALLED/PLANTED
- NEW LANDSCAPING INSTALLED

FEMRITE DR

PROPOSED SITE PLAN & LANDSCAPING PLAN

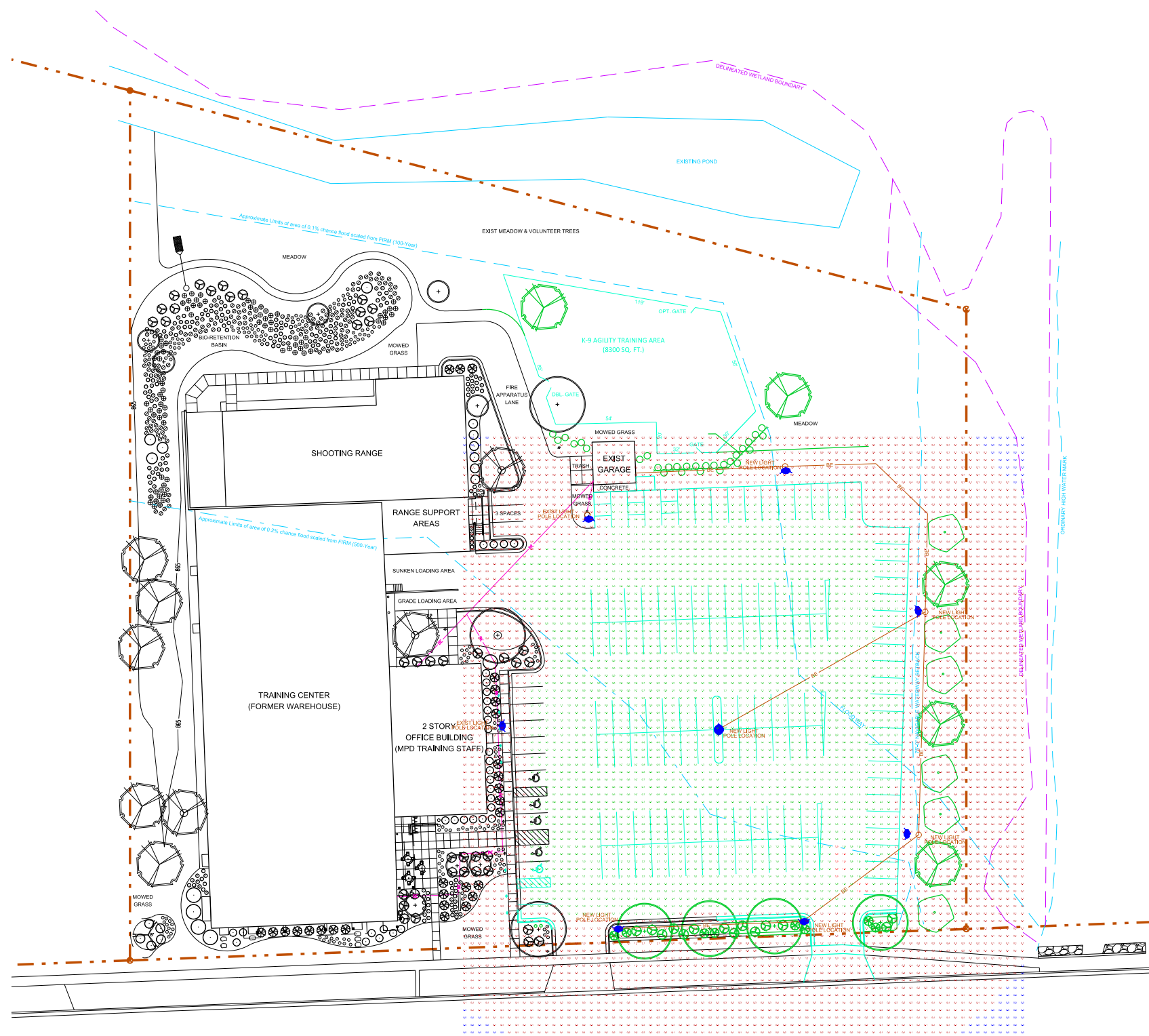
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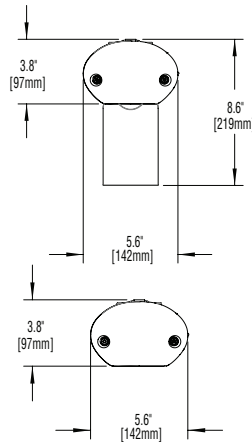
FEMRITE DR

PROPOSED LIGHTING PLAN AND PHOTOMETRICS
 SCALE for 11x17: NOT TO SCALE
 SCALE for 24x36: 1" = 30'

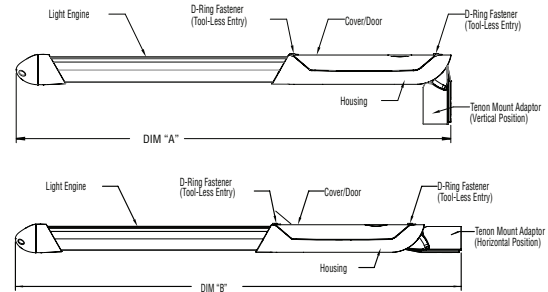
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Notes:



# of LEDs	Dim. "A"	Dim. "B"
20	33.48" [850mm]	38.38" [975mm]
30	38.28" [972mm]	43.18" [1097mm]
40	43.51" [1105mm]	48.41" [1230mm]
50	48.31" [1227mm]	53.21" [1362mm]
60	53.10" [1349mm]	58.0" [1473mm]



Product	Family	Optic	Mounting	# of LEDs (x 10)	LED Series	Voltage	Color Options	Drive Current	Factory-Installed Options
STR	SLM66	3M ¹	HV ²	02 03 04 05 06	D	UL Universal 120-277V UH Universal 347-480V	SV Silver ³ (Standard) SE Silver ⁴ BK Black ³ BE Black ⁴ BZ Bronze ³ ZE Bronze ⁴ PB Platinum Bronze ³ PE Platinum Bronze ⁴ WH White ³ WE White ⁴	1000 1 Amp ^{5,6} 700 700mA (Standard) 525 525mA	Please type additional options in manually on the lines provided above. 40K 4000K Color Temperature ⁷ CD Cord ⁸ DIM 0-10V Dimming ^{9,10,11} F Fuse ^{6,12,13} ML Multi-Level (75/525) ¹⁴ R NEMA Photocell Receptacle ^{12,15,16} UTL Utility ¹⁷

Footnotes

- IESNA Type III Medium distribution
- Horizontal/vertical tenon mount
- Light engine extrusion is not painted and will remain natural aluminum
- Light engine extrusion is painted to match housing
- Available on fixtures with 20-40 LEDs
- Not available when UH voltage is selected
- Color temperature per fixture; 5700K standard; minimum 70 CRI
- 24" (610mm) cord for ease of installation
- Control by others
- Refer to dimming spec sheet for availability and additional information
- Can't exceed specified drive current. Consult factory if exceeding the drive current is necessary.
- Not available with all multi-level options. Refer to multi-level spec sheet for availability and additional information.
- When code dictates fusing use time delay fuse
- Refer to multi-level spec sheet for availability and additional information
- Intended for horizontal mounting
- Photocell by others
- Includes exterior wattage label that reflects watts for the drive current selected. The ability to exceed the selected drive current will be disabled.

LED PERFORMANCE SPECS

# of LEDs	Initial Delivered Lumens – Type III Medium @ 5700K	B U G			Initial Delivered Lumens – Type III Medium @ 4000K	B U G			System Waits 120-480V	Total Current @ 120V	Total Current @ 208V	Total Current @ 240V	Total Current @ 277V	Total Current @ 347V	Total Current @ 480V	L ₇₀ Hours* @ 25° C (77° F)	50K Hours Lumen Maintenance Factor* @ 15° C (59° F)
		Rating**				Rating**											
525mA Fixture Operating at 25° C (77° F)																	
20	2,607 (02)	1	0	1	2,402 (02)	1	0	1	38	0.32	0.20	0.19	0.18	0.12	0.10	> 150,000	93%
30	3,893 (03)	1	0	1	3,588 (03)	1	0	1	55	0.45	0.28	0.25	0.23	0.16	0.13	148,000	
40	5,181 (04)	2	0	2	4,775 (04)	2	0	2	70	0.58	0.35	0.31	0.28	0.21	0.16	145,000	
50	6,460 (05)	2	0	2	5,954 (05)	2	0	2	88	0.74	0.43	0.38	0.34	0.26	0.19	145,000	
60	7,743 (06)	2	0	2	7,136 (06)	2	0	2	106	0.89	0.52	0.46	0.40	0.31	0.23	145,000	
700mA (Standard) Fixture Operating at 25° C (77° F)																	
20	3,351 (02)	1	0	1	3,089 (02)	1	0	1	52	0.43	0.27	0.24	0.22	0.15	0.12	131,000	91%
30	5,005 (03)	2	0	2	4,613 (03)	2	0	2	74	0.62	0.37	0.33	0.29	0.22	0.16	127,000	
40	6,661 (04)	2	0	2	6,139 (04)	2	0	2	94	0.79	0.46	0.41	0.36	0.28	0.20	126,000	
50	8,306 (05)	2	0	2	7,655 (05)	2	0	2	118	0.99	0.58	0.51	0.45	0.34	0.25	124,000	
60	9,955 (06)	3	0	3	9,175 (06)	3	0	3	142	1.20	0.69	0.60	0.53	0.41	0.30	124,000	
1 Amp Fixture Operating at 25° C (77° F)																	
20	4,375 (02)	2	0	2	4,033 (02)	1	0	1	74	0.63	0.37	0.33	0.30	N/A	N/A	95,000	87%
30	6,535 (03)	2	0	2	6,023 (03)	2	0	2	111	0.94	0.54	0.48	0.42	N/A	N/A	89,000	
40	8,696 (04)	3	0	3	8,015 (04)	2	0	2	141	1.19	0.68	0.60	0.52	N/A	N/A	87,000	

*For recommended lumen maintenance factor data see TD-13

**For more information on the IES BUG (Backlight-Uplight Glare) Rating visit www.iesna.org/PDF/Erratas/TM-15-11BugRatingsAddendum.pdf



General Description

Luminaire housing is all aluminum construction. Standard luminaire utilizes terminal block for power input suitable for #2-#14 AWG wire. Drive current is field switchable. Luminaire is designed to mount to 2" (51mm) IP (2.38" [61mm] O.D.) tenons, but will accommodate tenons up to 2.5" (64mm) in diameter. Adaptor kit (XA-SLMFTRKIT) required when mounting to 1.25" (32mm) IP (1.66" [42mm] O.D.) tenon. Fitter is capable of mounting to both vertical and horizontal tenons and can be tilted +/- 5°. Two axis T-level included to ensure level installation when desired. Luminaire carries a limited five year warranty.

Electrical

Modular design accommodates varied lighting output from high power, white, 5700K (+/- 500K per full fixture), minimum 70 CRI, long life LED sources. Optional 4000K (+/- 300K per full fixture) also available. 120-277V 50/60 Hz, Class 1 LED drivers are standard. 347-480V 50/60 Hz option is available. LED drivers have power factor >90% and THD <20% at full load. Units provided with integral 10kV surge suppression protection standard. Surge protection tested in accordance with IEEE/ANSI C62.41.2.

Finish

Exclusive Colorfast DeltaGuard® finish features an E-Coat epoxy primer with an ultra-durable silver powder topcoat, providing excellent resistance to corrosion, ultraviolet degradation and abrasion. Bronze, black, white and platinum bronze powder topcoats are also available. The finish is covered by our 10 year limited warranty.

Luminaire and finish are endurance tested to withstand 5,000 hours of elevated ambient salt fog conditions as defined in ASTM Standard B 117.

Testing & Compliance

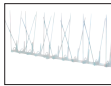
UL listed in the U.S. and Canada for wet locations and enclosure rated IP66 per IEC 60529. Dark Sky Friendly. IDA Approved. RoHS Compliant.



Patents

U.S. and international patents granted and pending. BetaLED is a division of Ruud Lighting, Inc. For a listing of Ruud Lighting, Inc. patents, visit www.uspto.gov.

Field-Installed Accessories

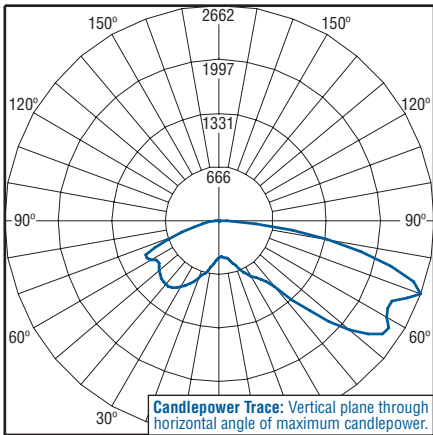


Bird Spikes for Light Engine
 XA-BRDSPKSM20
 (for use with 20 LED fixture)
 XA-BRDSPKSM50
 (for use with 30-50 LED fixture)
 XA-BRDSPKSM60
 (for use with 60 LED fixture)

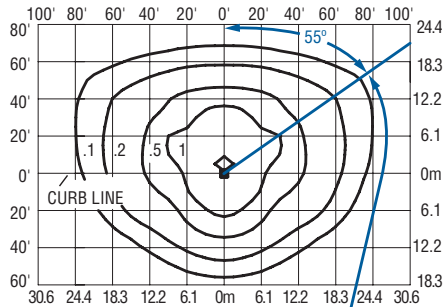
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1.25" (32mm) IP Pipe Sealing Kit
 XA-SLMFTRKIT

Photometrics



Candlepower Trace: Vertical plane through horizontal angle of maximum candlepower.



Position of vertical plane of maximum candlepower.

Independent Testing Laboratories certified test. Report No. ITL64365. Candlepower trace of 6000K, 40 LED LEDway Streetlight luminaire with IESNA Type III Medium distribution. Luminaire with 6,267 initial delivered lumens operating at 700mA. All published luminaire photometric testing performed to IESNA LM-79-08 standards.

Isofootcandle plot of 5700K, 40 LED LEDway SLM Streetlight luminaire with IESNA Type III Medium distribution mounted at 25' (7.6m) A.F.G. Luminaire with 8,696 initial delivered lumens operating at 1000mA. Initial FC at grade.

LEDway® SLM EPA & Weight Calculations

# of LEDs	Approximate Weight 120-480V	Mounting Configurations				
		Single	2@ 180°	2@ 90°	3@ 90°	4@ 90°
Tenon Mount @ 180°						
20	20.9lbs (9.5kg)	1.36	2.72	1.46	2.82	2.92
30	22.2lbs (10.1kg)	1.40	2.79	1.50	2.89	2.99
40	23.7lbs (10.8kg)	1.46	2.92	1.56	3.02	3.12
50	25.0lbs (11.4kg)	1.50	2.99	1.60	3.09	3.19
60	26.4lbs (12.0kg)	1.54	3.07	1.64	3.17	3.27
Tenon Mount @ 90°						
20	20.9lbs (9.5kg)	1.36	2.72	1.62	2.98	3.24
30	22.2lbs (10.1kg)	1.40	2.79	1.66	3.05	3.31
40	23.7lbs (10.8kg)	1.46	2.92	1.72	3.18	3.44
50	25.0lbs (11.4kg)	1.50	2.99	1.76	3.25	3.51
60	26.4lbs (12.0kg)	1.54	3.07	1.80	3.33	3.59



PROPOSED LANDSCAPING SCHEDULE FOR MPD TRAINING CENTER PARKING LOT EXPANSION AT 5702 FEMRITE DRIVE

SYMBOL	BOTANICAL NAME	COMMON NAME	INSTALLED SIZE	ROOT	MATURE SIZE	QTY. NEW	QTY. EXIST	RAW POINTS	POINTS NEW	POINTS EXIST
TREES: LARGE AND SMALL WITHIN THE 20' AND 50' REQUIREMENTS PER Ch 28.04(12(b)) of MGO										
AF	<i>Acer x freemanii 'Sienna'</i>	Sienna Glen Freeman Maple	2" Cal.	B.B.	50' H x 35' W	2**	3**	35	0	0
AR	<i>Acer rubrum 'Autumn Spire'</i>	Autumn Spire Red Maple	2" Cal.	B.B.	50' H x 35' W	0	1	35	0	35
CV	<i>Chionanthus</i>	White Fringetree	5' High Multistem	B.B.	12' H x 12' W	0	1	15	0	15
GT	<i>Gleditsia triacanthos var. inemis 'Skyline'</i>	Skyline Honeylocust	2" Cal.	B.B.	50' H x 35' W	0	1	35	0	35
QB	<i>Quercus bicolor</i>	Swamp White Oak	2" Cal.	B.B.	50' H x 35' W	0	3**	35	0	0
QM	<i>Quercus rubra</i>	Northern Red Oak	2" Cal.	B.B.	50' H x 35' W	0	2**	35	0	0
X1		Pre phase 1 Maple relocated	3" Cal.			0	1	35	0	35
X2		Pre phase 1 Honey Locust relocated				0	1	15	0	15
X3		Pre phase 1 Crabapple relocated				0	1	15	0	15
JL	<i>S. reticulata 'Ivory Silk'</i>	Ivory silk Japanese Tree Lilac			15' H x 25' W	6	0	15	90	0
JB	<i>J. virginiana 'Blue Arrow'</i>	Blue Arrow Juniper	4-5' High	5 Gallon	10-12' H x 3-4' W	24	0	15	360	0
SHRUBS: WITHIN THE 20' REQUIREMENTS PER Ch 28.04(12(b)) of MGO										
AM	<i>Aronia melanocarpa 'Elata'</i>	Glossy Black Choke Cherry	3' H	Container	5' H x 5' W	0	6	2	0	12
JC	<i>Juniperus chinensis 'Kallay Compact'</i>	Kallay Compact Juniper	4-5 Gallon	Container	4' H x 4' W	0	3	3	0	9
JS	<i>Juniperus sabina 'Buffalo'</i>	Buffalo Savin Juniper	12-18" High	Container	18" H x 5' W	0	12	3	0	36
RA	<i>Rhus aromatica 'Gro Low'</i>	Gro Low Fragrant Sumac	18-24" High	2-4 Gallon	2-3' H x 5-6' W	0	12	2	0	24
RR	<i>Rosa rugosa 'Purple Pavement'</i>	Purple Pavement Rugosa Rose	2-3 Gallon	Container	3.5' H x 3' W	0	21	3	0	63
VD	<i>Vibumum dentatum 'Ralph Senior'</i>	Autumn Jazz Arrowwood Vibumum	3-4' High	5 Gallon	8' H x 8' W	0	1	2	0	2
GS	<i>S. japonica 'Goldmound'</i>	Goldmound Spirea	1' H	Container	2' H x 2'W	6	0	2	12	0
MS	<i>S. x japonica 'Magic Carpet'</i>	Magic Carpet Spirea	1' H	Container	2' H x 2'W	4	0	2	8	0
WS	<i>S. albiflora</i>	Japenese White Spirea	1' H	Container	2' H x 2'W	2	0	2	4	0
OTHER: WITHIN THE 20' REQUIREMENTS PER Ch 28.04(12(b)) of MGO										
Earth Berm	Avg Ht = 15"	2 pts per 10 L.F. (61 LF existing, 50 LF new)				5	6	2	10	12
Split Rail Fence		per 10 L.F. (50 LF within limits, 70 LF total)				5	0	5	25	0
**NOTE: FULL POINTS NOT TAKEN FOR MANDATORY CANOPY TREE REQUIREMENT (10)								TOTALS	509	308
								GRAND TOTAL	817	