



690 Chesterfield Pkwy W • Chesterfield MO 63017-0760  
Phone: 636-537-4000 • Fax 636-537-4798 • [www.chesterfield.mo.us](http://www.chesterfield.mo.us)

October 11, 2007

Planning Commission  
City of Chesterfield  
690 Chesterfield Parkway West  
Chesterfield, MO 63017

The Planning Commission agenda for **October 22, 2007** will include the following item for your consideration:

**West Valley Plaza (17670 Chesterfield Airport Road):** A Site Development Plan, Landscape Plan, Lighting Plan and Architectural Elevations for a 2.05 acre parcel located at 17670 Chesterfield Airport Road, west of the intersection of Long Road and Chesterfield Airport Road.

Dear Planning Commission:

Brandon Harp, of Civil Engineering Design Consultants, Inc., has submitted, on behalf of the Spirit 40 Group, a Site Development Plan, Landscape Plan, Lighting Plan and Architectural Elevations for the above referenced project. The Department of Planning and Public Works has reviewed this request and submits the following report.

### **BACKGROUND**

May 21, 2007 the City approved Ordinance Number 2362 rezoning the property from a "NU" Non-Urban District to a "PC" Planned Commercial District.

### **SUBMITTAL INFORMATION**

The request is for a retail center, located on a 2.05 acre parcel zoned "PC" Planned Commercial District. The exterior building materials will be comprised of masonry, glass and EIFS. The roof will be a flat roof of modified bitumen. A Landscape Plan and a Lighting Plan have also been submitted for approval. Both plans have been reviewed by Staff and have been found to be in compliance with City requirements.

### **ARB RECOMMENDATIONS**

This project was reviewed by the Architectural Review Board on September 20, 2007. The ARB voted, by a vote of 6-1, to forward the Site Development Plan, Architectural Elevations, Lighting Plan and Landscape Plan to the Planning Commission with the following recommendations:

- 1.) Provide a roof parapet that screens the HVAC units
- 2.) Addition of varied evergreens to the landscape plan
- 3.) Architectural detailing added to the north elevation more in keeping with precedents set in the surrounding context

The Board took a separate vote regarding the materials for the trash enclosure. The petitioner had proposed to use sight-proof vinyl fencing for the trash enclosure so that the enclosure would be allowed within the development's structure setbacks. The Board made a motion that the trash enclosure materials be of the same materials as the building. The motion passed by a vote of 7-0.

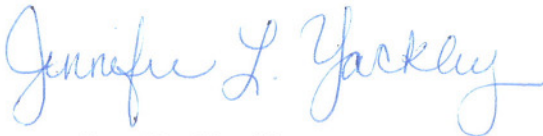
In response to the Architectural Review Board's concerns the petitioner has made the following changes:

1. The rear elevation has been changed to more adequately screen the HVAC units.
2. Three Norway spruce trees have been added.
3. The trash enclosure will be of the same materials as the building.

#### **DEPARTMENTAL INPUT**


The submittal was reviewed and is in compliance with all City of Chesterfield ordinances. The Department of Planning and Public Works requests approval of the Site Development Plan, Landscape Plan, Lighting Plan and Architectural Elevations.

Respectfully submitted,



Jennifer Yackley  
Project Planner

Respectfully submitted,



Aimee Nassif  
Senior Planner

Cc: City Administrator  
City Attorney  
Director of Planning and Public Works

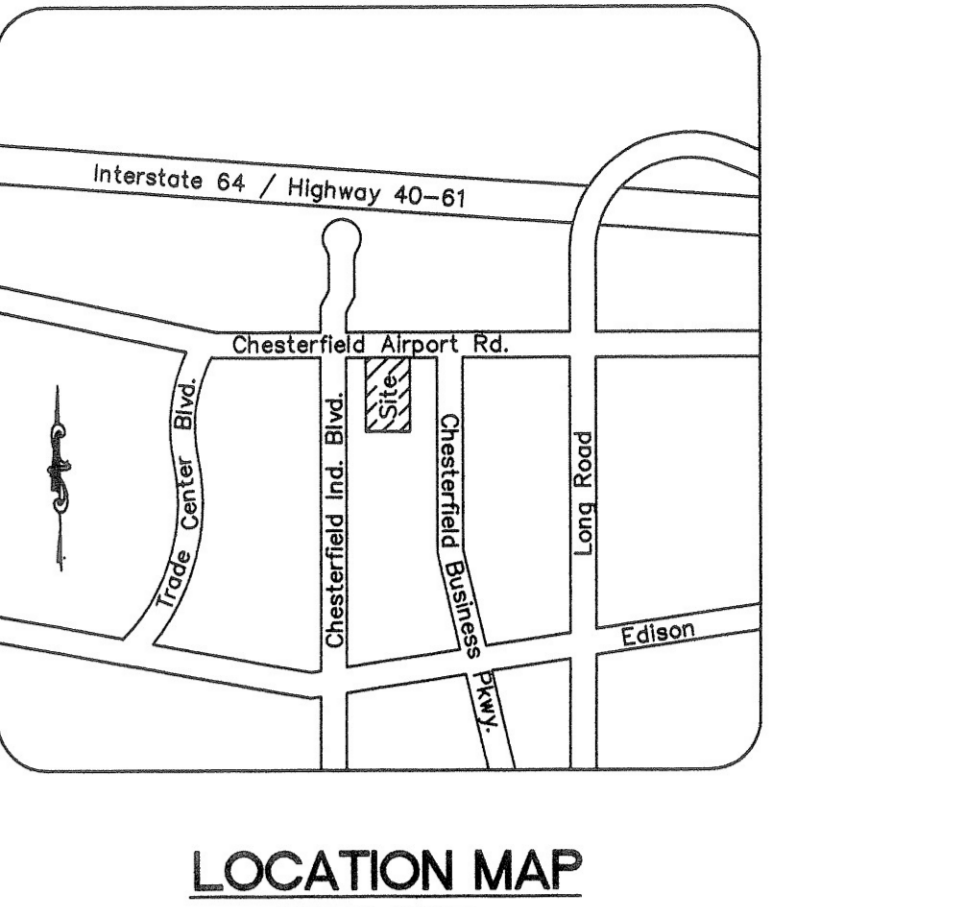
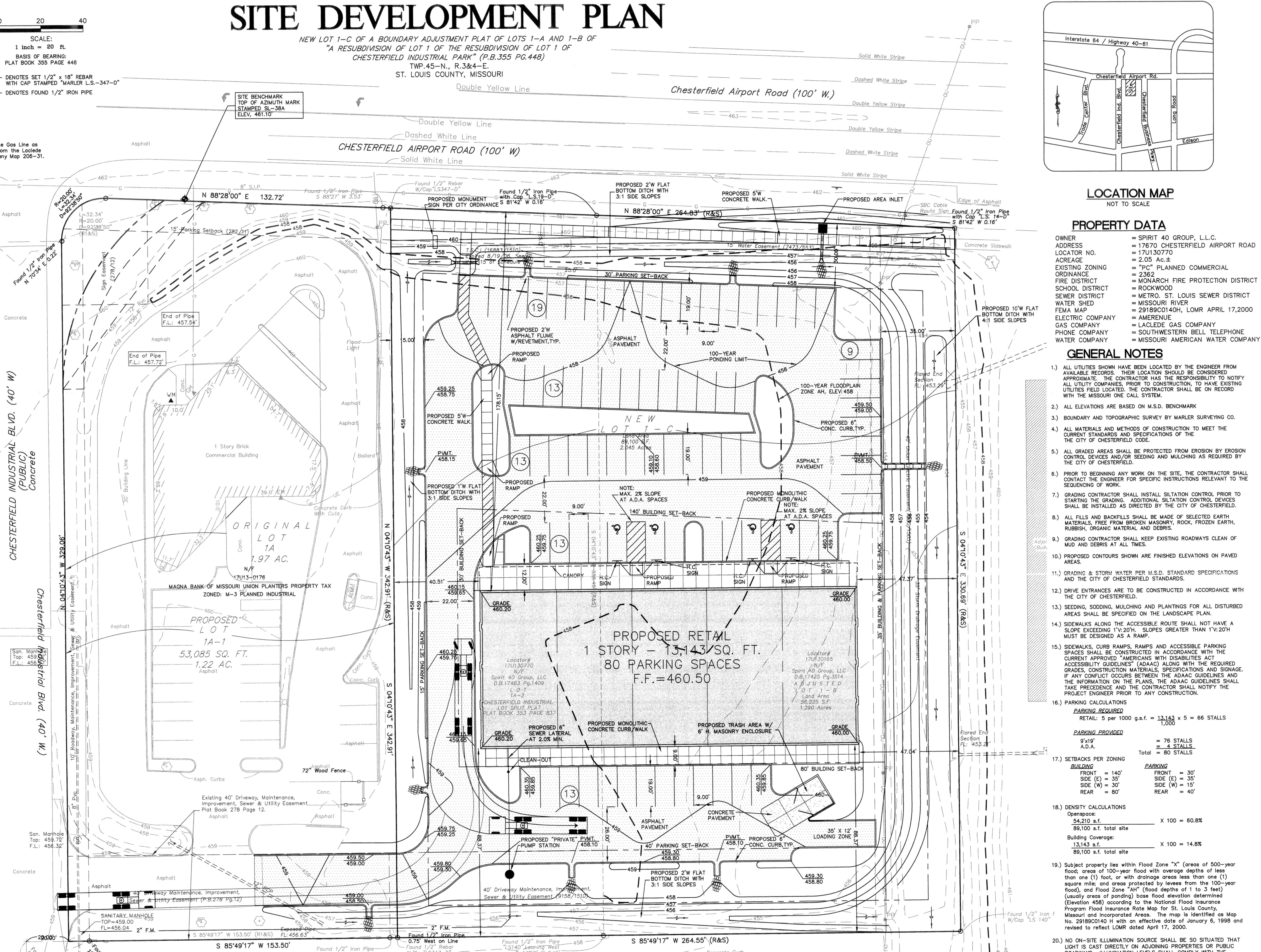
Attachments:  
Site Development Plan  
Landscape Plan  
Lighting Plan  
Architectural Elevations

# SITE DEVELOPMENT PLAN

NEW LOT 1-C OF A BOUNDARY ADJUSTMENT PLAT OF LOTS 1-A AND 1-B OF  
"A RESUBDIVISION OF LOT 1 OF THE RESUBDIVISION OF LOT 1 OF  
CHESTERFIELD INDUSTRIAL PARK" (P.B. 355 P.448)  
TWP. 45-N., R. 3&4-E.  
ST. LOUIS COUNTY, MISSOURI

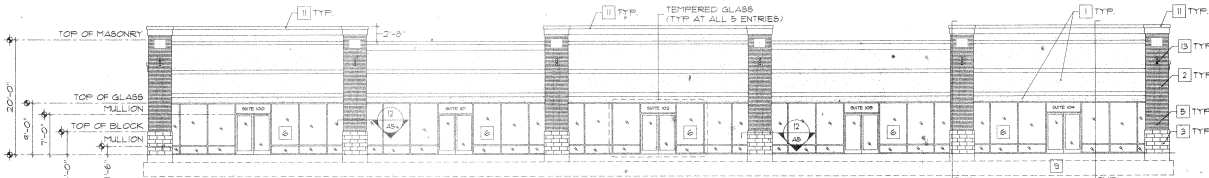
LEGEND	SYMBOLS
EXISTING CONTOURS	433
PROPOSED CONTOURS	433
EXISTING STORM SEWER	---
PROPOSED STORM SEWER	---
EXISTING SANITARY SEWER	---
PROPOSED SANITARY SEWER	---
RIGHT-OF-WAY	---
EASEMENT	---
CENTERLINE	---
EXISTING TREE	---
EXISTING SPOT ELEVATION	433.28
PROPOSED SPOT ELEVATION	433.28
SWALE/DRAINAGE PATH	---
TO BE REMOVED	T.B.R.
TO BE REMOVED & RELOCATED	T.B.R. & R.
TO BE USED IN PLACE	U.I.P.
TO BE ADJUSTED	T.B.A.
BACK OF CURB	B.C.
FACE OF CURB	F.C.
WATER MAIN	W
GAS MAIN	G
UNDERGROUND TELEPHONE	T
OVERHEAD WIRE	O.H.
UNDERGROUND ELECTRIC	E
FIRE HYDRANT	---
POWER POLE	---
WATER VALVE	---

ABBREVIATIONS	
N	NORTH
S	SOUTH
E	EAST
W	WEST
CONC	CONCRETE
ASPH	ASPHALT
DB	DEED BOOK
PL	PLAT
FP	FIRE PLUG
FF	FINISH FLOOR
EL	ELEVATION
AC	ACRES
FT	FEET
PVC	POLYVINYL CHLORIDE PIPE
RM	REINFORCED CONCRETE PIPE
STM	STORM
SAN	SANITARY
SAVE	SAVE
REMOVE	REMOVE

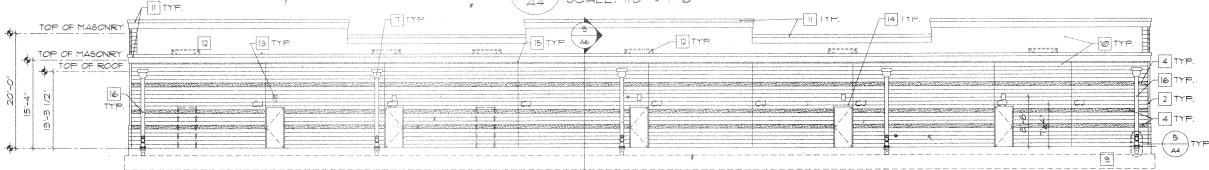


PROPERTY DATA	
OWNER	= SPIRIT 40 GROUP, L.L.C.
ADDRESS	= 17670 CHESTERFIELD AIRPORT ROAD
LOT OR PARCEL NO.	= 17U130770
ACREAGE	= 2.035 AC.±
EXISTING ZONING	= "PC" PLANNED COMMERCIAL
ORDINANCE	= 2362
FIRE DISTRICT	= MONARCH FIRE PROTECTION DISTRICT
SCHOOL DISTRICT	= ROCKWOOD
SEWER DISTRICT	= METRO, ST. LOUIS SEWER DISTRICT
WATER SERVICE	= METRO, ST. LOUIS WATER DISTRICT
FEMA MAP	= 29189C0140H, LOMR APRIL 17, 2000
ELECTRIC COMPANY	= AMERENUE
GAS COMPANY	= GAS COMPANY OF MISSOURI
PHONE COMPANY	= SOUTHWESTERN BELL TELEPHONE
WATER COMPANY	= MISSOURI AMERICAN WATER COMPANY

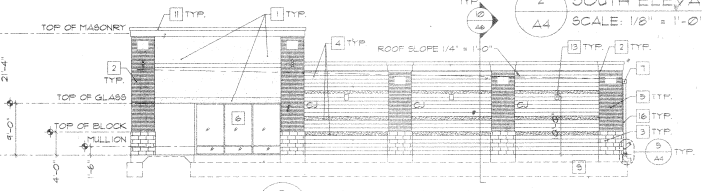
- ### GENERAL NOTES
- 1) ALL UTILITIES SHOWN HAVE BEEN LOCATED BY THE ENGINEER FROM AVAILABLE RECORDS. THEIR LOCATION SHOULD BE CONSIDERED APPROXIMATE. THE CONTRACTOR SHALL BE RESPONSIBLE TO NOTIFY ALL UTILITY COMPANIES PRIOR TO CONSTRUCTION TO HAVE EXISTING UTILITIES FIELD LOCATED. THE CONTRACTOR SHALL NOT BE ON RECORD WITH THE MISSOURI ONE CALL SYSTEM.
  - 2) ALL ELEVATIONS ARE BASED ON U.S. BENCHMARK.
  - 3) BOUNDARY AND TOPOGRAPHIC SURVEY BY MARLER SURVEYING CO.
  - 4) ALL MATERIALS AND METHODS OF CONSTRUCTION TO MEET THE CURRENT STANDARDS AND SPECIFICATIONS OF THE CITY OF CHESTERFIELD.
  - 5) ALL GRADED AREAS SHALL BE PROTECTED FROM EROSION BY EROSION CONTROL DEVICES AND/OR SEEDING AND MULCHING AS REQUIRED BY THE CITY OF CHESTERFIELD.
  - 6) PRIOR TO BEGINNING ANY WORK ON THE SITE, THE CONTRACTOR SHALL CONTACT THE



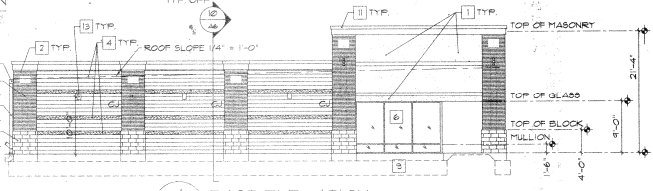
1 NORTH ELEVATION  
SCALE: 1/8" = 1'-0"



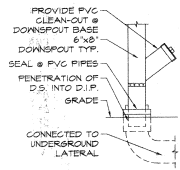
2 SOUTH ELEVATION  
SCALE: 1/8" = 1'-0"



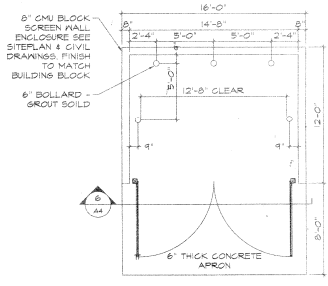
3 WEST ELEVATION  
SCALE: 1/8" = 1'-0"



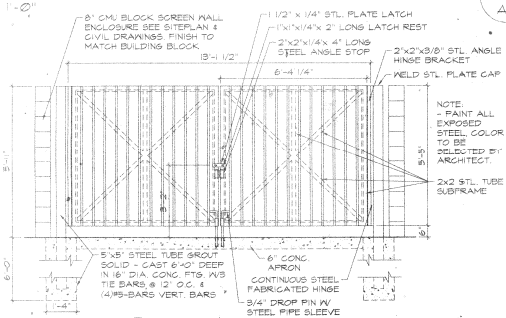
4 EAST ELEVATION  
SCALE: 1/8" = 1'-0"



5 DOWNSPOUT TRANSITION  
SCALE: 3/4" = 1'-0"



5 DUMPSTER PLAN  
SCALE: 1/4" = 1'-0"



6 DUMPSTER ELEVATION  
SCALE: 1/4" = 1'-0"

ELEVATION KEY NOTES	
1	EIFS FINISH W/ACCENT BAND
2	BRICK VENEER
3	SPLIT FACE BLOCK
4	SPLIT FACE BLOCK ACCENT STRIP
5	MASONRY ACCENT
6	ALUMINUM ANODIZED SYSTEM
7	PREFINISHED METAL SCUPPER
8	MODIFIED BITUMEN ROOFING SYSTEM
9	FOOTING AND FOUNDATION - SEE FOUNDATION PLAN
10	PARAPET WALL
11	EIFS CAP
12	RTU
13	DECORATIVE WALL MOUNTED LIGHT FIXTURE
14	(2) 3-1/2"x8-1/2"x3/8" LINTEL ABOVE DOOR SEE 14/A/B
15	CONTROL JOINT (TYPICAL) SEE 14/A/B
16	6"x8" METAL DOWNSPOUT W/CONNECTION TO LATERAL UNDERGROUND PVC DRAINAGE SYSTEM

**STUDIO ONE**  
architecture inc.  
4871 HIGHWAY Z  
WENTZVILLE, MISSOURI 63385  
PH: 636.398.8182  
WWW.STUDIOONEARCHITECTURE.COM

**West Valley Plaza**  
17670 Chesterfield Airport Road  
Chesterfield Industrial Park  
Chesterfield, MO 63017

REVISIONS:  
Elevation C  
ARB Char

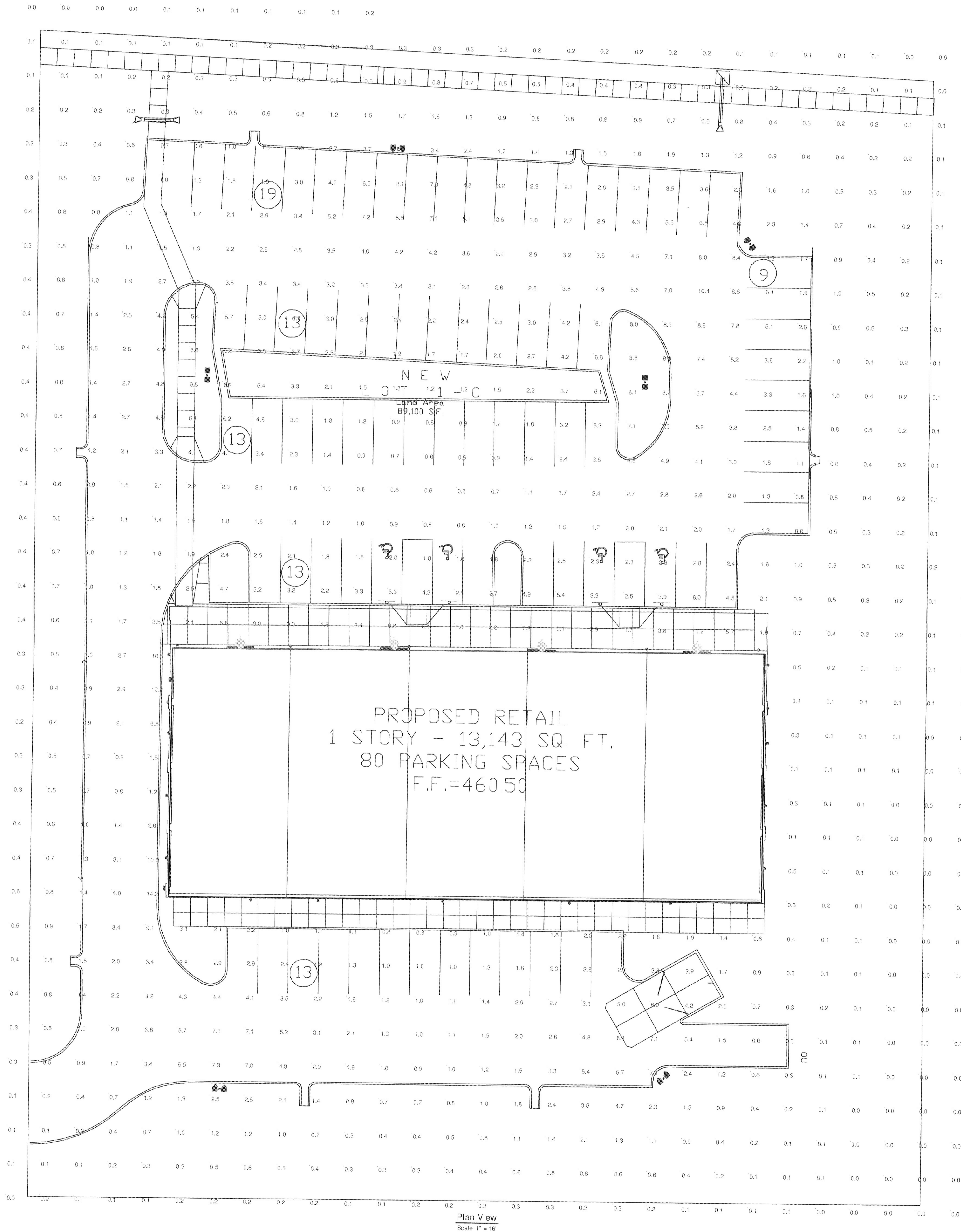
ISSUE  
May

STATISTICS						
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Calc Zone #2		1.8 fc	14.2 fc	0.0 fc	N/A	N/A

LUMINAIRE SCHEDULE									
Symbol	Label	Qty	Catalog Number	Description	Lamp	File	Lumens	LLF	Watts
■	B	2	KAD 400M R4	DIE-CAST TYPE IV SHORT CUTOFF LUMINAIRE	400 WATT METAL HALIDE - HORIZONTAL BURN	91110101 IES	32000	0.75	910
■	C	4	KAD 400M R4 HS	DIE-CAST CUTOFF LUMINAIRE WITH HOUSE HALIDE SIDE SHIELD	400 WATT METAL HALIDE	92061101 IES	32000	0.75	910
●	A	21	DU7-8-Y4-P-NARROW	DUO PRISM DN CLOSED TOP ELLIPTICAL SHAPE DIE CAST ALUMINUM ADJUSTABLE BEAM SPREAD CLEAR TEMPERED GLASS LENS	100 WATT T8 G12 BI-PIN VENTURE 88867 LUMENS=9000	DU7-8-Y4-P-NARROW IES	9000	0.75	126
■	D	2	TWH 250M FS	GENERAL PURPOSE BUILDING MOUNTED LUMINAIRE, 250W MH, CLEAR LAMP, W FULL SHIELD.	ONE 250-WATT CLEAR ED-28 METAL HALIDE, HORIZONTAL POSITION.	LTL11484 IES	20000	0.75	287
—	E	4	P2-SSW-496T5HO-30SS-30W-X-STD	EXTRUDED METAL HOUSING WITH SEMI-SPECULAR INTERIOR FINISH AND FABRICATED WHITE PAINTED METAL END PLATES, WHITE PLASTIC WIREWAY COVER, EXTRUDED WHITE PAINTED METAL FORWARD REFLECTOR, OPEN TOP.	TWO 54-WATT T-5 SYLVANIA P184R65HO LINEAR FLUORESCENT.	H53344-06	10000	0.75	61

NOTES

1. Mounting height of poles 30'
2. Mounting height of decorative fixtures 12'
3. Mounting height of wall packs 15'
4. Mounting height of canopy light 10' 8"
5. Metal halide lights will be fully shielded and enclosed
6. All decorative lighting will be fully shielded with cut-off optics and will have a flat lens





## FEATURES & SPECIFICATIONS

### INTENDED USE

Ideal for parking areas, street lighting, walkways and car lots.

### CONSTRUCTION

Rugged, die-cast, soft corner aluminum housing with 0.12" nominal wall thickness. Die-cast door frame has impact-resistant, tempered, glass lens that is fully gasketed with one-piece tubular silicone.

### FINISH

Standard finish is dark bronze (DDB) polyester powder finish, with other architectural colors available.

### OPTICAL SYSTEM

Anodized, aluminum hydroformed reflectors: IES full cutoff distributions R2 (asymmetric), R3 (asymmetric), R4 (forward throw) and R5S (square) are interchangeable. High-performance anodized, segmented aluminum reflectors IES full cutoff distributions SR2 (asymmetric), SR3 (asymmetric) and SR4SC (forward throw, sharp cutoff). Segmented reflectors attach with tool-less fasteners and are rotatable and interchangeable.

### ELECTRICAL SYSTEM

Ballast: High reactance, high power factor for 70-150W. Constant wattage autotransformer for 175-400W. Metal halide 150W and below are standard with pulse-start ignitor technology; super CWA pulse-start ballast required for 200W, 320W and 350W (SCWA option). Ballast is copper-wound and 100% factory-tested.

Socket: Porcelain, horizontally oriented medium base socket for 70-150W and mogul base socket for 175W and above, with copper alloy, nickel-plated screw shell and center contact. UL listed 1500W, 600V.

### LISTING

UL Listed (standard). CSA Certified (see Options). UL listed for 25°C ambient and wet locations. IP65 rated in accordance with standard IEC 529.

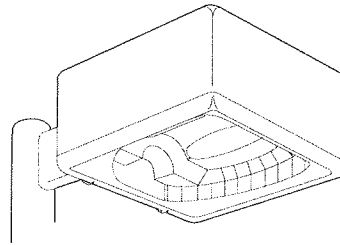
Specifications subject to change without notice.

Catalog Number	
Notes	Type



Soft Square Cutoff Lighting

# KAD



METAL HALIDE

70W-400W

HIGH PRESSURE SODIUM

70W-400W

20' to 35' Mounting

### Specifications

EPA: 1.2 ft<sup>2</sup>

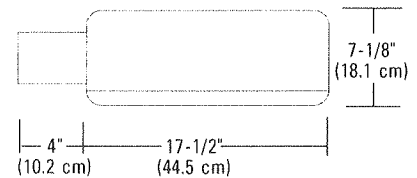
\*Weight: 35.9 lbs (16.28 kg)

Length: 17-1/2" (44.5 cm)

Width: 17-1/2" (44.5 cm)

Depth: 7-1/8" (18.1 cm)

\*Weight as configured in example below.



## ORDERING INFORMATION

For shortest lead times, configure product using **standard options (shown in bold)**.

Example: KAD 400M R3 TB SPD04 LPI

### KAD

Series	Wattage	Voltage	Mounting	Ballast	Options	Lamp <sup>19</sup>
KAD	Metal halide	120	Type	(blank) <b>Magnetic ballast</b>	Shipped installed in fixture	LPI <b>Lamp included</b>
	High pressure sodium <sup>1</sup>	208 <sup>7</sup>	SPD___ <b>Square pole</b>	CWI Constant wattage isolated	SF Single fuse 120, 277, 347V <sup>14</sup>	L/LP <b>Less lamp</b>
	70M <sup>1,2,3</sup>	240 <sup>7</sup>	04 4" arm	<b>Pulse Start</b>	DF Double fuse 208, 240, 480 <sup>14</sup>	Finish <sup>18</sup>
	100M <sup>1</sup>	277	06 6" arm	SCWA Super CWA pulse start ballast	PD Power tray <sup>15</sup>	(blank) <b>Dark bronze</b>
	150M <sup>3</sup>	347	09 9" arm		PER NEMA twist-lock receptacle only (no photocontrol)	DWH <b>White</b>
	175M <sup>1</sup>	480 <sup>7</sup>	12 12" arm		QRS Quartz restrick system <sup>16</sup>	DBL <b>Black</b>
	200M <sup>4</sup>	TB <sup>8</sup>	WBD___ Wall bracket		QRSTD QRS time delay <sup>10,16</sup>	DMB <b>Medium bronze</b>
	250M	TBV <sup>9</sup>	WWD___ Wood pole or wall		WTB Terminal wiring block <sup>15</sup>	DNA <b>Natural aluminum</b>
	250M	23050HZ <sup>10</sup>	DAD12P Degree arm (pole) <sup>12</sup>		HS House-side shield	
	320M <sup>4</sup>		DAD12WB Degree arm (wall) <sup>12</sup>		CSA CSA Certified	
	350M <sup>4</sup>		WBA Decorative wall bracket <sup>12,13</sup>		Shipped separately <sup>17</sup>	
	400M <sup>5</sup>		KMA Mast arm external fitter		PE1 NEMA twist-lock PE (120, 208, 240V)	
		KTMB Twin mounting bar		PE3 NEMA twist-lock PE (347V)		
				PE4 NEMA twist-lock PE (480V)		
				PE7 NEMA twist-lock PE (277V)		
				SC Shortening cap for PER option		
				VG Vandal guard		
				WG Wire guard		

### Distribution

#### Hydroformed reflectors

- R2 IES type II asymmetric<sup>6</sup>
- R3 IES type III asymmetric<sup>6</sup>**
- R4 IES type IV forward throw<sup>6</sup>**

R5S IES type V square

#### Segmented reflectors

- SR2 IES type II asymmetric<sup>6</sup>
- SR3 IES type III asymmetric<sup>6</sup>

SR4SC IES type IV forward throw

#### NOTES:

- Not available with SCWA.
- Not available with 480V.
- Not available with TBV.
- Must be ordered with SCWA.
- Reduced jacket ED28 required for SR2, SR3 and SR4SC optics.
- House-side shield available.
- Must specify CWI for use in Canada.
- Optional multi-tap ballast (120, 208, 240, 277V; in Canada: 120, 277, 347V).

- Optional five-tap ballast (120, 208, 240, 277, 480V).
- Consult factory for available wattages.
- 9" arm is required when two or more luminaires are oriented on a 90° drilling pattern.
- Ships separately.
- Available with SPD04 and SPD09.
- Must specify voltage. N/A with TB.
- Only available with SR2, SR3, & SR4SC optics.
- Max allowable wattage lamp included.
- May be ordered as an accessory.
- See [www.lithonia.com/archolors](http://www.lithonia.com/archolors) for additional color options.
- Must be specified.
- Must use RPD09

### Accessories

Order as separate catalog number.

#### Tenon Mounting Slipfitter

Number of fixtures

Tenon O.D.	One	Two@180°	Two@90°	Three@120°	Three@90°	Four@90°
2-3/8"	T20-190	T20-280	T20-290 <sup>20</sup>	T20-320 <sup>20</sup>	T20-390 <sup>20</sup>	T20-490 <sup>20</sup>
2-7/8"	T25-190	T25-280	T25-290 <sup>20</sup>	T25-320	T25-390 <sup>20</sup>	T25-490 <sup>20</sup>
4"	T35-190	T35-280	T35-290 <sup>20</sup>	T35-320	T35-390 <sup>20</sup>	T35-490 <sup>20</sup>

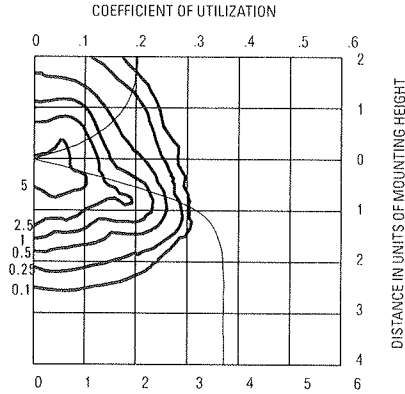
KADVG Vandal guard

KADWG Wire guard

# KAD 400M Arm-mounted Soft Square Cutoff

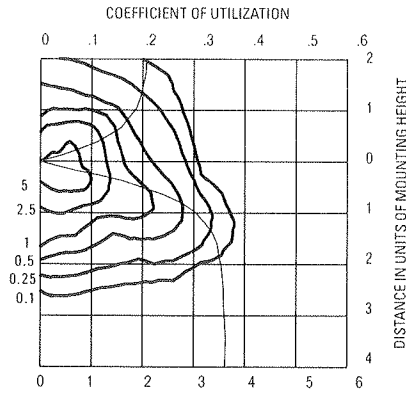
Coefficient of Utilization \_\_\_\_\_  
 Initial Footcandles \_\_\_\_\_

## KAD R2 Test no. 1193083101



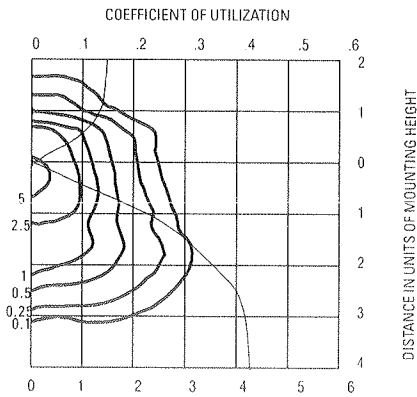
400W Metal Halide lamp, 32,000 rated lumens,  
 Footcandle values based on 30' mounting height,  
 Distribution Type II, cutoff.

## KAD R3 Test no. 1192040902



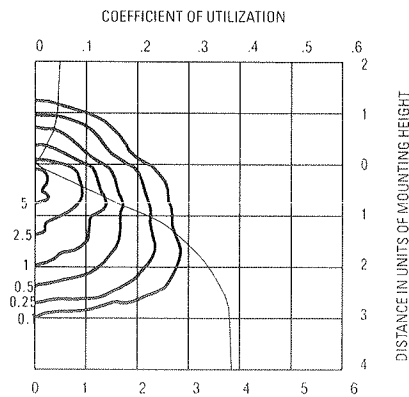
400W Metal Halide lamp, 32,000 rated lumens,  
 Footcandle values based on 30' mounting height,  
 Distribution Type III, cutoff.

## KAD R4 Test no. 1191110101



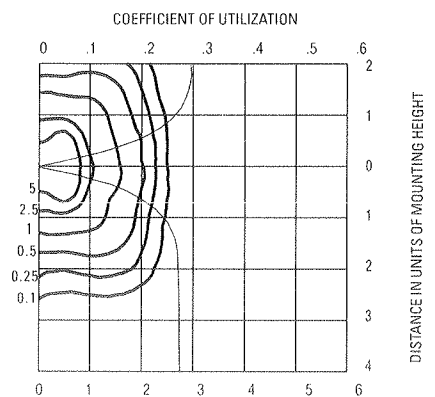
400W Metal Halide lamp, 32,000 rated lumens,  
 Footcandle values based on 30' mounting height,  
 Distribution Type IV, cutoff.

## KAD R4HS Test no. 1192061101



400W Metal Halide lamp, 32,000 rated lumens,  
 Footcandle values based on 30' mounting height,  
 Distribution Type IV, cutoff.

## KAD R5S Test no. 1193111901



400W Metal Halide lamp, 32,000 rated lumens,  
 Footcandle values based on 30' mounting height,  
 Distribution Type V, cutoff.

### Electrical Characteristics

Wattage/ballast	Primary	Line current	Primary	Input	Power	Regulation
	voltage	(Amps)	dropout			
	Start/Operating	Start/Operating	voltage	watts	factor (%)	Line V = Lamp lumens
400CWA	120	2.50/4.00	55	455	90+	±10% = ±10%
Peak-lead	208	1.45/2.30	95			
Autotransformer	240	1.25/2.00	110			
	277	1.10/1.75	125			
	480	.73/1.00	225			

Tested to current IES and NEMA standards under stabilized laboratory conditions. Various operating factors can cause differences between laboratory data and actual field measurements. Dimensions and specifications on this sheet are based on the most current available data and are subject to change without notice.

#### NOTES:

1 Photometric data for other distributions can be accessed from [www.lithonia.com](http://www.lithonia.com).

### Mounting Height Correction Factor

(Multiply the fc level by the correction factor)

25 ft. = 1.44

35 ft. = 0.73

40 ft. = .56

$$\left( \frac{\text{Existing Mounting Height}}{\text{New Mounting Height}} \right)^2 = \text{Correction Factor}$$



Consistent with LEED® goals  
 & Green Globes™ criteria  
 for light pollution reduction





## FEATURES & SPECIFICATIONS

### INTENDED USE

Outdoor storage areas, warehouse and factory perimeters and loading docks.

### CONSTRUCTION

Rugged, corrosion-resistant, die-cast aluminum. Corrosion-resistant external hardware includes slotted hex-head fasteners.

### FINISH

Standard finish is electrostatically-applied, oven-cured, dark bronze (DDB) corrosion-resistant polyester powder paint.

### OPTICAL SYSTEM

Reflector is specular anodized aluminum. Refractor is prismatic borosilicate glass which is sealed and gasketed to inhibit the entrance of outside contaminants.

### ELECTRICAL SYSTEM

Electrical components are mounted in hinged front cover that includes primary and secondary electrical disconnect.

Ballast: High reactance, high power factor for 35W and 70-150W. Constant wattage autotransformer for 175-400W. Metal halide 150W and below are standard with pulse-start ignitor technology; super CWA pulse-start ballast required for 200W, 320W and 350W (SCWA option). Ballast is copper-wound and 100% factory-tested.

Socket: Porcelain, horizontally oriented, single-ended bayonet base socket for 35W low pressure sodium; medium base socket for 70-150W; and mogul base socket for 175W and above, with copper alloy, nickel-plated screw shell and center contact. UL listed 1500W, 600V.

### INSTALLATION

Back housing is separated from front housing, eliminating ballast weight and promoting easy handling. Top 3/4" threaded wiring access. Back access through removable 3/4" knock-out. Feed-thru wiring can be achieved by using a conduit tee. Mount on any vertical surface. **Not recommended in applications where a sprayed stream of water can come in direct contact with glass lens.**

### LISTING

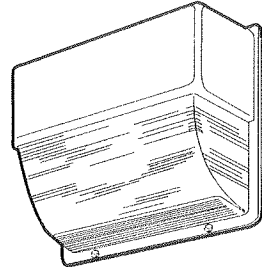
UL Listed (standard). CSA or NOM Certified (see Options). UL listed for 25°C ambient and suitable for wet locations. IP65 rated (250 watt and below) or IP54 rated (400 watt) in accordance with IEC Standard 529.

Specifications subject to change without notice.

Catalog Number	
Notes	Type

Wall-Packs

# TWH



**METAL HALIDE**

70W -- 400W

**HIGH PRESSURE SODIUM**

70W -- 400W

**LOW PRESSURE SODIUM**

35W

8' to 25' Mounting

### Specifications

Height: 15-3/4" (40cm)

Width: 16-1/4" (42.6cm)

Depth: 8" (20.3cm)

\*Weight: 29.95 (13.59kg)

\*Weight as configured in example below.

## ORDERING INFORMATION

For shortest lead times, configure product using **standard options (shown in bold)**.

Example: TWH 175M TB LPI

Series	Voltage	Ballast	Options	Finish <sup>16</sup>	Lamp <sup>18</sup>
TWH	120	(blank) Magnetic ballast	<b>Shipped installed in fixture</b>	(blank) <b>Dark bronze</b>	<b>LPI Lamp included</b>
	208 <sup>7</sup>	CWI Constant wattage isolated	SF Single fuse (120, 277, 347V) <sup>11</sup>	<b>DNA Natural aluminum</b>	<b>L/LP Less lamp</b>
	240 <sup>7</sup>	<b>Pulse Start</b>	DF Double fuse (208, 240, 480V) <sup>11</sup>	<b>DBL Black</b>	
	277	SCWA Super CWA ballast	EC Emergency circuit <sup>12</sup>	<b>DMB Medium bronze</b>	
	347		QRS Quartz restrike system <sup>12</sup>	<b>DWH White</b>	
	480 <sup>7</sup>		QRSTD Quartz restrike with time delay <sup>10,12</sup>	CR Enhanced corrosion resistance	
<b>Low pressure sodium<sup>1,2</sup></b>	70M <sup>1,2,4</sup>		PE Photoelectric cell -- button type <sup>4,11,13</sup>	CRT Non-stick protective coating <sup>17</sup>	
<b>35L</b>	<b>70M<sup>1,2,4</sup></b>		PER NEMA twist-lock receptacle <sup>14</sup>		
<b>High pressure sodium<sup>1</sup></b>	100M <sup>1</sup>		FS Full shield		
<b>70S<sup>2</sup></b>	150M <sup>2</sup>		TP Tamper proof screws		
<b>100S</b>	<b>175M<sup>1</sup></b>		CSA Listed and labeled to comply with Canadian Standards		
<b>150S<sup>2,3</sup></b>	200M <sup>5</sup>		NOM NOM Certified (consult factory)		
<b>200S</b>	320M <sup>5</sup>		<b>Shipped separately<sup>15</sup></b>		
<b>250S</b>	350M <sup>5</sup>		PE1 NEMA twist-lock photocontrol (120V/208V/240V)		
<b>400S</b>	<b>400M<sup>5</sup></b>		PE3 NEMA twist-lock photocontrol (347V)		
			PE4 NEMA twist-lock photocontrol (480V)		
			PE7 NEMA twist-lock photocontrol (277V)		
			SC Shorting cap for PER option		
			VG Vandal guard		
			WG Wireguard		

### NOTES:

1 Not available with SCWA.

2 Not available with five-tap ballast.

3 Operates 55V lamp.

4 Not available with 480V.

5 Must be ordered with SCWA.

6 Requires T-15, ED or BT28 reduced jacket lamp.

7 Must specify CWI for use in Canada.

8 Optional multi-tap ballast (120, 208, 240, 277V); in Canada (120, 277, 347V).

9 Optional five-tap ballast (120, 208, 240, 277, 480V).

10 Consult factory for available wattages.

11 Must specify voltage. Not available with TB or TBV.

12 Max allowable wattage lamp included.

13 Not available with 347V.

14 Photocell not included.

15 May be ordered as an accessory.

16 See [www.lithonia.com/archcolors](http://www.lithonia.com/archcolors) for additional color options.

17 Black finish only.

18 Must be specified.

19 Requires field modification when ordered as an accessory.

### Accessories

Order as separate catalog number.

TWHVG Vandal guard<sup>19</sup>

TWHWG Wire guard<sup>19</sup>

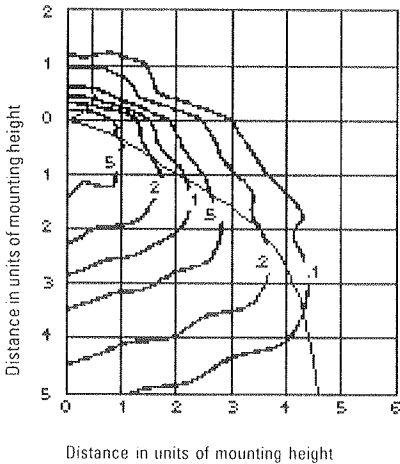


# TWH Metal Halide Wall-Packs

Coefficient of Utilization \_\_\_\_\_  
 Initial Footcandles \_\_\_\_\_

## TWH 175M Test report no. 94121101

Coefficients of utilization

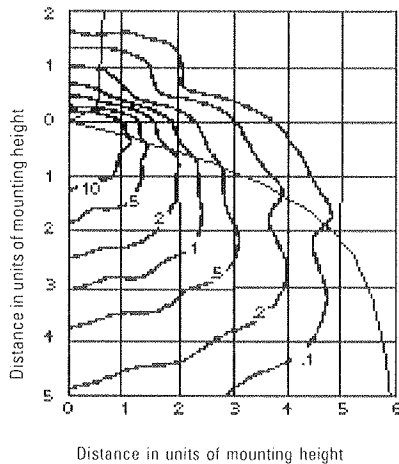


Distance in units of mounting height

175W, metal halide lamp, horizontal lamp orientation, 12' mounting height, 14,000 rated lumens. Total fixture efficiency: 60.6%

## TWH 250M Test report no. 95011902

Coefficients of utilization

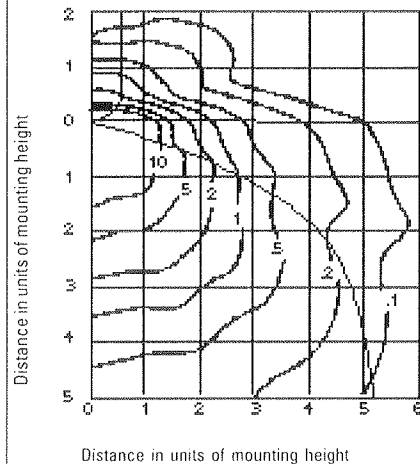


Distance in units of mounting height

250W, metal halide lamp, horizontal lamp orientation, 12' mounting height, 20,500 rated lumens. Total fixture efficiency: 76.9%

## TWH 400M Test report no. 94121202

Coefficients of utilization

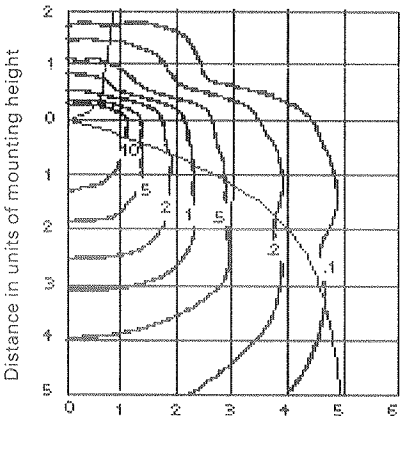


Distance in units of mounting height

400W, metal halide, E-18 lamp, horizontal lamp orientation, 12' mounting height, 36,000 rated lumens. Total fixture efficiency: 70%

## TWH 250S Test report no. 94121002

Coefficients of utilization

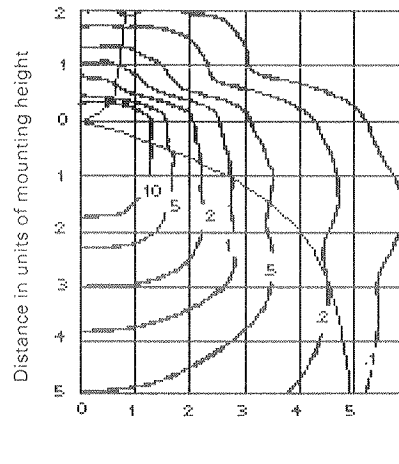


Distance in units of mounting height

250W, high pressure sodium lamp, horizontal lamp orientation, 12' mounting height, 27,500 rated lumens. Total fixture efficiency: 70.9%

## TWH 400S Test report no. 94121001

Coefficients of utilization

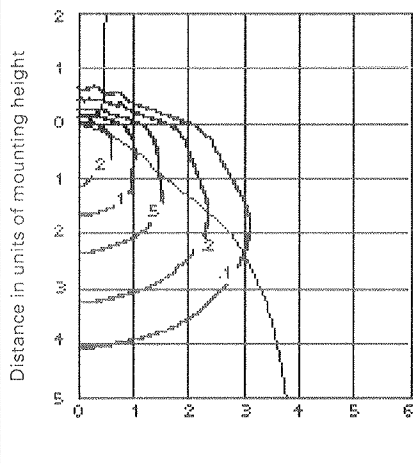


Distance in units of mounting height

400W, high pressure sodium lamp, horizontal lamp orientation, 12' mounting height, 50,000 rated lumens. Total fixture efficiency: 70.9%

## TWH 35L Test report no. 94121902

Coefficients of utilization



Distance in units of mounting height

35W, low pressure sodium lamp, horizontal lamp orientation, 12' mounting height, 4,800 rated lumens. Total fixture efficiency: 54.6%

### Mounting Height Correction Factor

(Multiply the fc level by the correction factor)

15 ft. = .64

20 ft. = .36

25 ft. = .23

$$\left( \frac{\text{Existing Mounting Height}}{\text{New Mounting Height}} \right)^2 = \text{Correction Factor}$$

### NOTES:

1 Photometric data for other distributions can be accessed from the Lithonia Lighting Web site. ([www.lithonia.com](http://www.lithonia.com))



An Acuity Brands Company

Lithonia Lighting

Outdoor Lighting

One Lithonia Way, Conyers, GA 30012

Phone: 770-922-9000 Fax: 770-918-1209

[www.lithonia.com](http://www.lithonia.com)

LAMP

SIZE

APPLICATION

TYPE

INDOOR | OUTDOOR

SURFACE WALL

SURFACE CEILING

SEMI-RECESSED

SURFACE LINEAR

COVE

PENDANT

CANTILEVER

BASE MOUNT

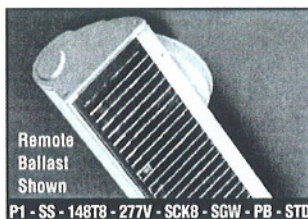
TRUSS

MODIFIED STANDARD

FINISHES

OPTIONS

TECHNICAL



**Profile** - P1 (basic): Anodized, extruded aluminum specular reflector with solid aluminum endcaps and stainless steel hardware. Extruded aluminum visors are combined with P1 basic profile to create P2, P3, P4 & \*P5 profiles.

**Type** - Small profile with smooth or ribbed detail.

**Indoor**; non-gasketed, captive extruded alum. hinge for lens and baffle options.

**Outdoor**; silicone gasketed lens, captive extruded alum. door with window cut-out for regressed lens.

**Lens**; open aperture is standard for indoor fixtures. Outdoor fixtures shall be equipped with clear acrylic lens option.

**Mounting** - Two standard mounts are fully adjustable and lockable.

**Remote Ballast**; a machined alum. knuckle connects profile to mounting plate standoff tubes to create a clean appearance.

**Integral Ballast**; an extruded alum. ballast housing incorporates a simple or deco yoke mount. Either wall or ceiling mounted.

**Performance** - Asymmetric distribution provides a concentration of light on target surface for smooth illumination.

**Ceiling**; maximum candlepower aimed 20° above nadir has less than 10% spill light within the 0-20° zone and less than 2% spill light within the 90-180° zone.

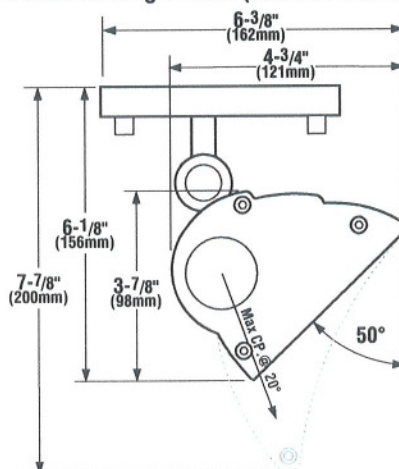
**Wall**; maximum candlepower aimed 120° above nadir has less than 15% spill light within the 0-120° zone and less than 3% spill light within the 180-270° zone.

**Electrical** - Electronic, HPF ballast, lamp protection circuit, Class P and thermally protected. The minimum number of ballasts will be used. Provide 90°C supply wire.

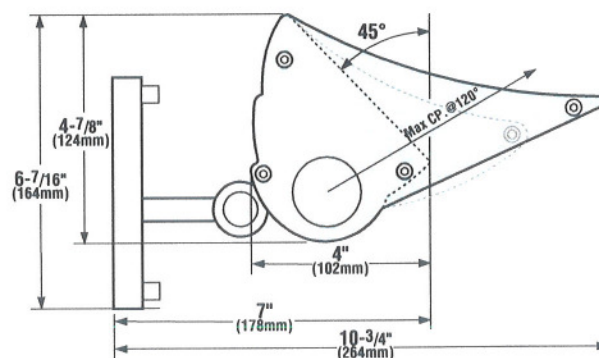
**Finishes** - An electrostatically applied wet paint system utilizes a multi-stage process to provide a durable acrylic enamel finish. Suitable for indoor and outdoor applications.

**Options** - For complete list and detailed descriptions, refer to Options Section.

## SCK8: Ceiling Mount (Remote Ballast)



## SCK1: Wall Mount (Remote Ballast)

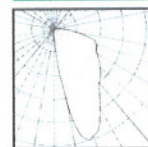


Refer to mounting codes below for how to specify single and multiple fixture applications.

## SPECIFICATIONS

PROFILE	TYPE	LAMPING	VOLTAGE	MOUNTING	FINISH	OPTIONS	CLASS
			120V or 277V				
	<b>Indoor Locations:</b> (damp label)	<b>Description</b> <b>Linear Fluorescent</b>		<b>Remote Ballast</b>	<b>SGW:</b> Semi-Gloss White	<b>X:</b> No Options	<b>STD:</b> Indicate only when specifying a standard.
	<b>SS:</b> Small Smooth	<b>T5 Single Lamp Cross Section:</b> F14T5 F21T5 F28T5 F35T5		<b>Ceiling Mount</b> SCK8 (Single) SCK8L (Left End) SCK8R (Right End) SCK8I (Intermediate)	<b>SGB:</b> Semi-Gloss Black	<b>SB:</b> Straight Blade Baffle (external mount for use with lens)	
	<b>SR:</b> Small Ribbed	<b>T5/HO Single or Two-Lamp Cross Section:</b> F24T5/HO F39T5/HO F54T5/HO F80T5/HO	<b>NEW</b>	<b>Wall Mount</b> SCK1 (Single) SCK1L (Left End) SCK1R (Right End) SCK1I (Intermediate)	<b>ALP:</b> Aluminum Paint (matte finish)	<b>PB:</b> Parabolic Blade Baffle (internal mount)	<b>MOD:</b> Indicate when specifying any modification.
	<b>Outdoor Locations:</b> (wet label)	<b>T8 Single Lamp Cross Section:</b> F17T8 F25T8 F32T8 F40T8		<b>Integral Ballast</b>	<b>LGP:</b> Light Gold Iridescent (gloss finish)	<b>EM:</b> (remote) Emergency Battery	
	<b>SSW:</b> Small Smooth Wet	<b>NOTE:</b> Refer to lamp chart page 69 to specify lamp code and catalog number.		<b>Ceiling Mount</b> SCS9 (Single) SCS9L (Left End) SCS9R (Right End) SCS9I (Intermediate)	<b>PBP:</b> Pale Bronze Paint (gloss finish)	<b>CA:</b> Clear Acrylic Lens	
	<b>SRW:</b> Small Ribbed Wet			<b>Wall Mount</b> SCS2 (Single) SCS2L (Left End) SCS2R (Right End) SCS2I (Intermediate)	<b>SPF:</b> (STD) Standard Painted Finish to be determined	<b>SO:</b> (MOD) Special Option	
					<b>CPF:</b> (MOD) Custom Painted Finish	<b>Options</b> - For complete list and detailed descriptions, refer to Options Section.	

### PHOTOMETRY



F54WT5/HO  
Refer to Technical Section for detailed Photometry Reports.  
Report #10943

**Note:** \*P5 (short visor) does not provide the same sightline shielding as the P2, P3 or P4 visors (see options section for details). T8, T5 and T5/HO lamps perform poorly in temperatures below 50°F.

winona

lighting

This catalog page is available online.

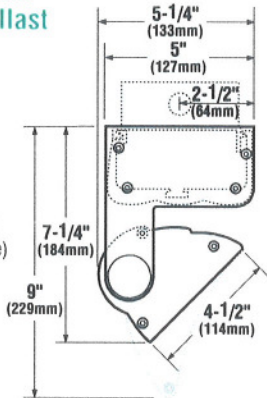
- All fixtures U.L. listed, (USA & Canada). © Copyright 2004  
Winona Lighting • 3760 West Fourth Street • P.O. Box 1205 • Winona, MN 55987-7205  
1-800-328-5291 • 507-454-5113 (MN) • FAX 507-452-8528 • [www.winonalighting.com](http://www.winonalighting.com)

SIZE	APPLICATION	LAMP
	INDOOR   OUTDOOR	

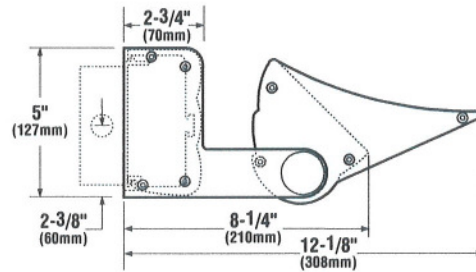
## MOUNTING STYLES

### Ceiling Mount Integral Ballast

- SCS9 (Single)
- SCS9L (Left End)
- SCS9R (Right End)
- SCS9I (Intermediate)



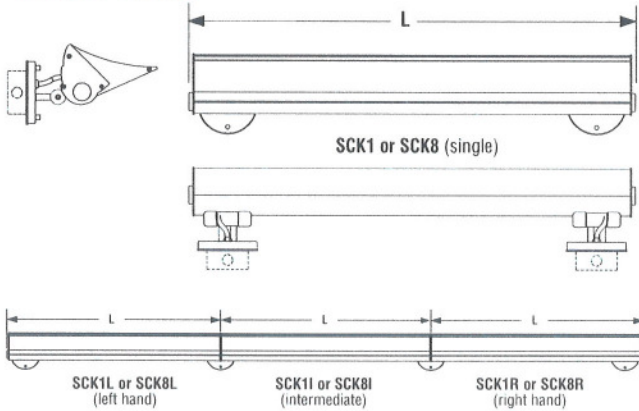
### Wall Mount Integral Ballast



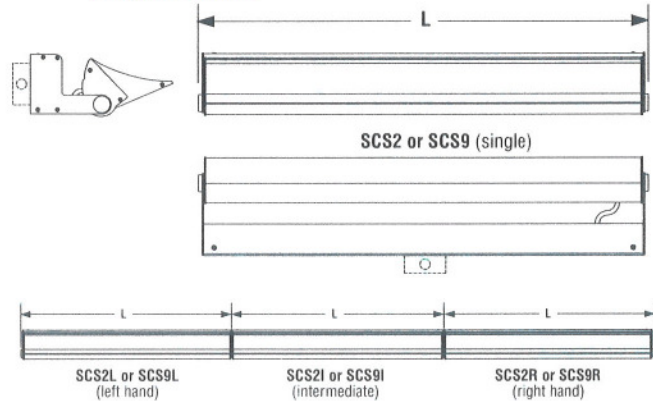
- SCS2 (Single)
- SCS2L (Left End)
- SCS2R (Right End)
- SCS2I (Intermediate)

## MOUNTING DETAILS

### Remote Ballast



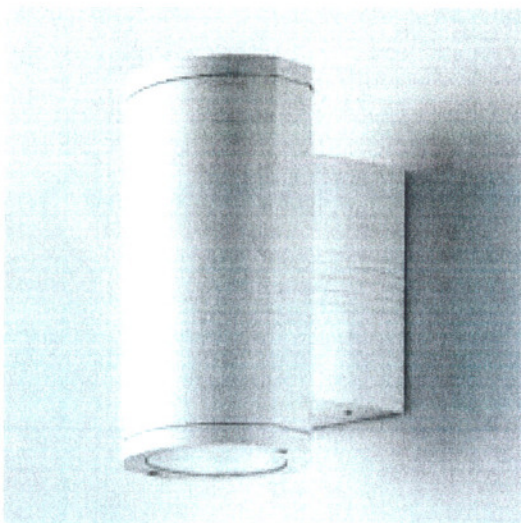
### Integral Ballast



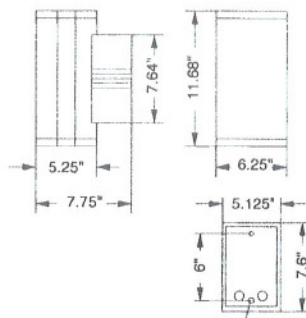
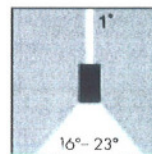
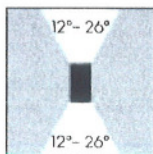
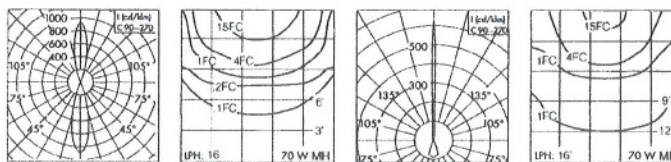
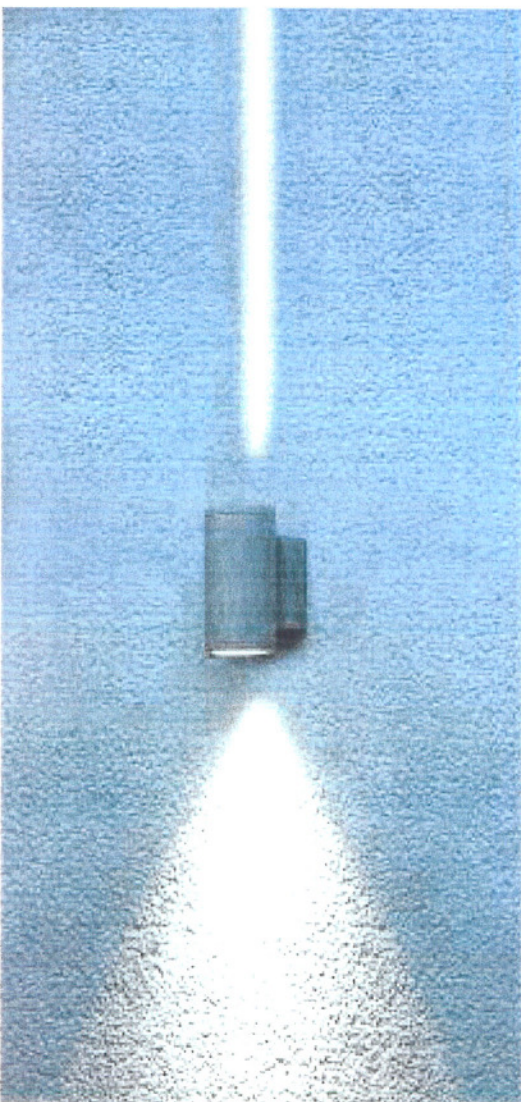
## LAMP CODES

LAMP X SECTION	LAMP SIZE	LAMP DESCRIPTION	LENGTH SCK1, SK8	REMOTE			INTEGRAL			WEIGHT LBS. REMOTE/INTEGRAL
				LENGTH SCK1LR, SCK8LR	LENGTH SCK1I, SCK8I	LENGTH SCS2, SCS9	LENGTH SCS2LR, SCS9LR	LENGTH SCS2I, SCS9I		
One Lamp (cross section)	124T8	1-17W/T8	25 <sup>7</sup> / <sub>8</sub> "	25 <sup>9</sup> / <sub>16</sub> "	25 <sup>1</sup> / <sub>4</sub> "	26 <sup>1</sup> / <sub>4</sub> "	25 <sup>15</sup> / <sub>16</sub> "	25 <sup>5</sup> / <sub>8</sub> "	8/13	
	136T8	1-25W/T8	37 <sup>7</sup> / <sub>8</sub> "	37 <sup>9</sup> / <sub>16</sub> "	37 <sup>1</sup> / <sub>4</sub> "	38 <sup>1</sup> / <sub>4</sub> "	37 <sup>15</sup> / <sub>16</sub> "	37 <sup>5</sup> / <sub>8</sub> "	10/19	
	148T8	1-32W/T8	49 <sup>7</sup> / <sub>8</sub> "	49 <sup>9</sup> / <sub>16</sub> "	49 <sup>1</sup> / <sub>4</sub> "	50 <sup>1</sup> / <sub>4</sub> "	49 <sup>15</sup> / <sub>16</sub> "	49 <sup>5</sup> / <sub>8</sub> "	16/26	
	160T8	1-40W/T8	61 <sup>7</sup> / <sub>8</sub> "	61 <sup>9</sup> / <sub>16</sub> "	61 <sup>1</sup> / <sub>4</sub> "	62 <sup>1</sup> / <sub>4</sub> "	61 <sup>15</sup> / <sub>16</sub> "	61 <sup>5</sup> / <sub>8</sub> "	19/32	
	272T8	2-25W/T8	74 <sup>13</sup> / <sub>16</sub> "	74 <sup>1</sup> / <sub>2</sub> "	74 <sup>3</sup> / <sub>16</sub> "	75 <sup>3</sup> / <sub>16</sub> "	74 <sup>7</sup> / <sub>8</sub> "	74 <sup>9</sup> / <sub>16</sub> "	20/38	
	296T8	2-32W/T8	98 <sup>13</sup> / <sub>16</sub> "	98 <sup>1</sup> / <sub>2</sub> "	98 <sup>3</sup> / <sub>16</sub> "	99 <sup>3</sup> / <sub>16</sub> "	98 <sup>7</sup> / <sub>8</sub> "	98 <sup>9</sup> / <sub>16</sub> "	32/52	
One Lamp (cross section)	select one	1-F14W/T5 or 24W/T5/HO	24 <sup>1</sup> / <sub>4</sub> "	23 <sup>15</sup> / <sub>16</sub> "	23 <sup>5</sup> / <sub>8</sub> "	24 <sup>5</sup> / <sub>8</sub> "	24 <sup>5</sup> / <sub>16</sub> "	24"	8/13	
	124T5 or 124T5/HO	1-F21W/T5 or 39W/T5/HO	36 <sup>1</sup> / <sub>16</sub> "	35 <sup>3</sup> / <sub>4</sub> "	35 <sup>7</sup> / <sub>16</sub> "	36 <sup>7</sup> / <sub>16</sub> "	36 <sup>1</sup> / <sub>8</sub> "	35 <sup>13</sup> / <sub>16</sub> "	10/19	
	136T5 or 136T5/HO	1-F28W/T5 or 54W/T5/HO	47 <sup>7</sup> / <sub>8</sub> "	47 <sup>9</sup> / <sub>16</sub> "	47 <sup>1</sup> / <sub>4</sub> "	48 <sup>1</sup> / <sub>4</sub> "	47 <sup>15</sup> / <sub>16</sub> "	47 <sup>5</sup> / <sub>8</sub> "	16/26	
	148T5 or 148T5/HO	1-F35W/T5 or 80W/T5/HO	59 <sup>11</sup> / <sub>16</sub> "	59 <sup>3</sup> / <sub>8</sub> "	59 <sup>1</sup> / <sub>16</sub> "	60 <sup>1</sup> / <sub>16</sub> "	59 <sup>3</sup> / <sub>4</sub> "	59 <sup>7</sup> / <sub>16</sub> "	19/32	
	160T5 or 160T5/HO	2-F21W/T5 or 39W/T5/HO	71 <sup>5</sup> / <sub>16</sub> "	71"	70 <sup>11</sup> / <sub>16</sub> "	71 <sup>11</sup> / <sub>16</sub> "	71 <sup>3</sup> / <sub>8</sub> "	71 <sup>1</sup> / <sub>16</sub> "	20/38	
	272T5 or 272T5/HO	2-F28W/T5 or 54W/T5/HO	94 <sup>15</sup> / <sub>16</sub> "	94 <sup>5</sup> / <sub>8</sub> "	94 <sup>5</sup> / <sub>16</sub> "	95 <sup>5</sup> / <sub>16</sub> "	95"	94 <sup>11</sup> / <sub>16</sub> "	32/52	
Two Lamp (cross section)	224T5/HO	2-24W/T5/HO	24 <sup>1</sup> / <sub>4</sub> "	23 <sup>15</sup> / <sub>16</sub> "	23 <sup>5</sup> / <sub>8</sub> "	24 <sup>5</sup> / <sub>8</sub> "	24 <sup>5</sup> / <sub>16</sub> "	24"	8/13	
	236T5/HO	2-39W/T5/HO	36 <sup>1</sup> / <sub>16</sub> "	35 <sup>3</sup> / <sub>4</sub> "	35 <sup>7</sup> / <sub>16</sub> "	36 <sup>7</sup> / <sub>16</sub> "	36 <sup>1</sup> / <sub>8</sub> "	35 <sup>13</sup> / <sub>16</sub> "	10/19	
	248T5/HO	2-54W/T5/HO	47 <sup>7</sup> / <sub>8</sub> "	47 <sup>9</sup> / <sub>16</sub> "	47 <sup>1</sup> / <sub>4</sub> "	48 <sup>1</sup> / <sub>4</sub> "	47 <sup>15</sup> / <sub>16</sub> "	47 <sup>5</sup> / <sub>8</sub> "	16/26	
	260T5/HO	2-80W/T5/HO	59 <sup>11</sup> / <sub>16</sub> "	59 <sup>3</sup> / <sub>8</sub> "	59 <sup>1</sup> / <sub>16</sub> "	60 <sup>1</sup> / <sub>16</sub> "	59 <sup>3</sup> / <sub>4</sub> "	59 <sup>7</sup> / <sub>16</sub> "	19/32	
	472T5/HO	4-39W/T5/HO	71 <sup>5</sup> / <sub>16</sub> "	71"	70 <sup>11</sup> / <sub>16</sub> "	71 <sup>11</sup> / <sub>16</sub> "	71 <sup>3</sup> / <sub>8</sub> "	71 <sup>1</sup> / <sub>16</sub> "	20/38	
	<b>NEW</b> 496T5/HO	4-54W/T5/HO	94 <sup>15</sup> / <sub>16</sub> "	94 <sup>5</sup> / <sub>8</sub> "	94 <sup>5</sup> / <sub>16</sub> "	95 <sup>5</sup> / <sub>16</sub> "	95"	94 <sup>11</sup> / <sub>16</sub> "	32/52	

- SURFACE WALL
- SURFACE CEILING
- SEMI-RECESSED
- SURFACE LINEAR
- COVE
- PENDANT
- CANTILEVER
- ROSE MOUNT
- TRUSS
- MODIFIED STANDARD
- FINISHES
- OPTIONS
- TECHNICAL



- Unique elliptical shape
- Low copper alloy die cast aluminum body
- UL, cUL listed wet label
- Field adjustable for beam spreads
- Available as: Reflector up and down  
 Reflector down only (closed top)  
 Reflector up only (closed bottom)  
 Reflector down prism up  
 Reflector up prism down  
 Prism up only (closed bottom)  
 Prism down only (closed top)  
 Prism up and down
- Clear tempered glass lens
- 39W, 70W and 100W are supplied with integral electronic ballast  
 150W is supplied with remote magnetic HPF ballast
- 39W, 70W and 150W are supplied with high color rendering  
 Master Color Metal Halide with CRI's of 80-85  
 100W is normal metal halide with a CRI of 65



**duo metal halide** half beam angles

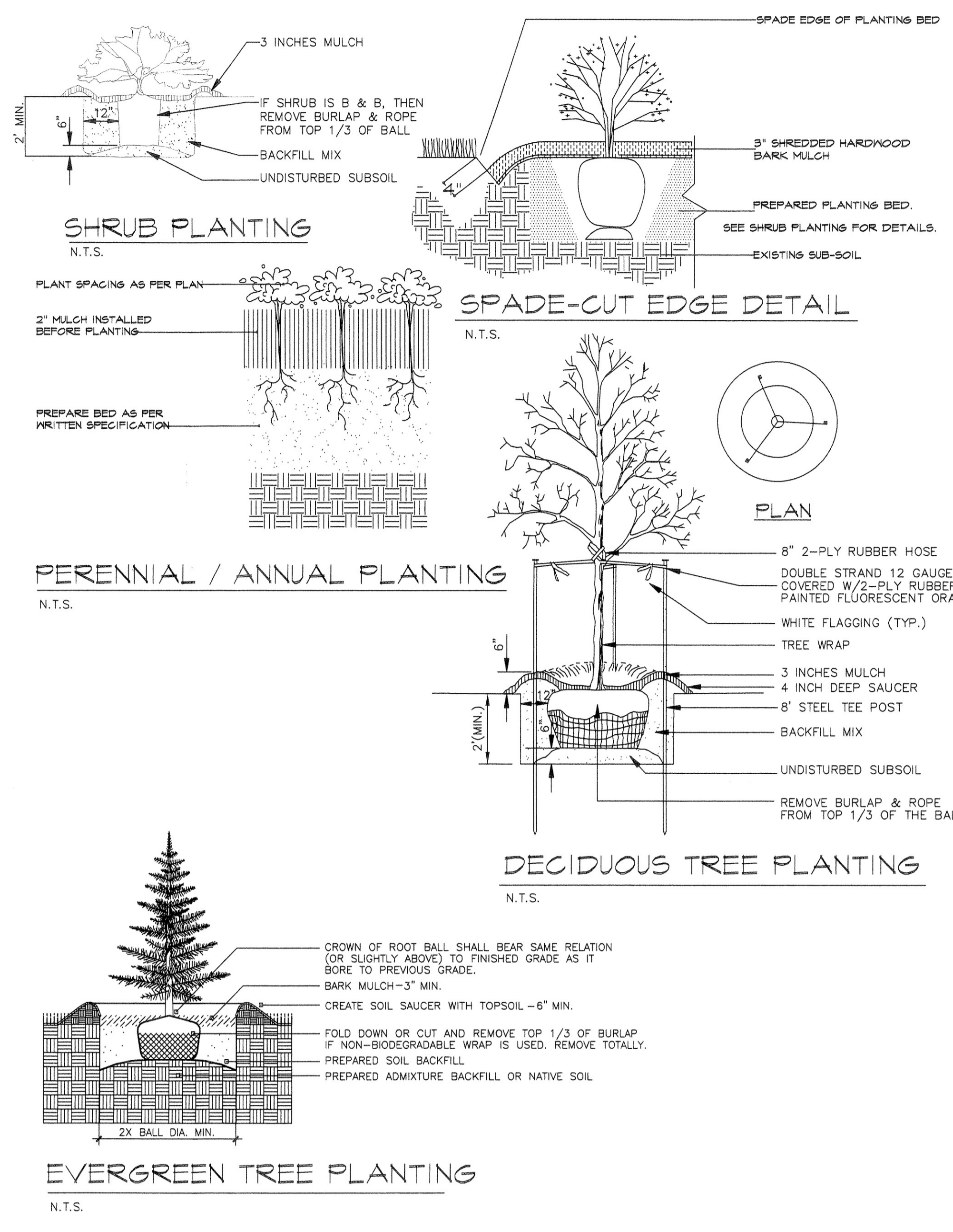
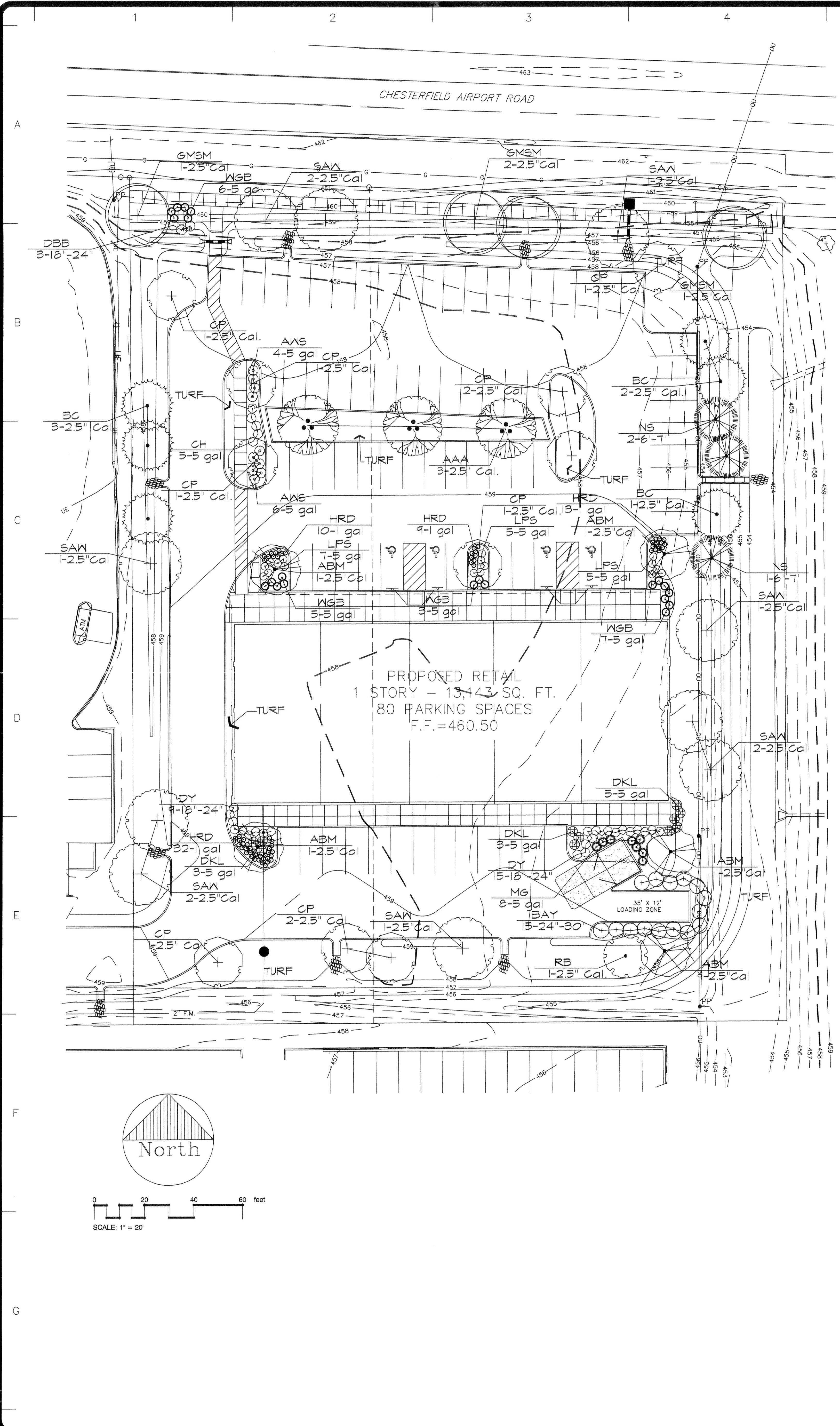
	REFLECTOR	PRISM
DOUBLE REFLECTOR	12° - 26°	
PRISM UP REFLECTOR DOWN	16° - 23°	1°
PRISM UP PRISM DOWN		1°

**duo/metal halide**

# duo/metal halide

## ORDERING CHART

SERIES	Prod ID XXX	Lamp Type X	Wattage XX	Body X	Finish XX	Grill X	Ballast X	Lens X	Options XX
DUO REFL. UP/DOWN	DU1	9 - HID	<b>T8</b> - 39W T6 S/E MASTER COLOR MH CRI 81 <b>R2</b> - 70W T6 S/E MASTER COLOR MH CRI 82 <b>Y4</b> - 100W T6 S/E NORMAL MH CRI 65 <b>U2</b> - 150W T6 S/E MASTER COLOR MH CRI 85	P - Wall Bracket	<b>10</b> - Matte Silver <b>78</b> - Text Black <b>EW</b> - Euro White <b>99</b> - Custom	0 - None	<b>0</b> - 120V Elect. <b>1</b> - 277V Elect. <b>R</b> - 120V/277V remote HPF magnetic	T - Clear Tempered Glass	0 - None
DUO REFL. DOWN CLOSED TOP	DU2								
DUO REFL. UP CLOSED BTM	DU3								
DUO REFL. DN PRISM UP	DU4								
DUO REFL. UP PRISM DOWN	DU5								
DUO PRISM UP CLOSED BTM	DU6								
DUO PRISM DN CLOSED TOP	DU7								
DUO PRISM UP AND DOWN	DU8								
<p><b>NOTE:</b> The 100W lamp is not a high color rendering lamp and should not be mixed with the 39W, 70W or 150W</p> <p><b>NOTE:</b> 39W, 70W and 100W are always 0 or 1 150W is always R</p>									



**SITE INFORMATION:**

- BOUNDARY AND TOPOGRAPHIC SURVEY BY CIVIL ENGINEERING DESIGN CONSULTANTS, INC.
  - AREA CALCULATIONS:  
BUILDING AREA: 13,443 S.F. = 14.8%  
PAVEMENT AREA: 21,747 S.F. = 24.4%  
OPEN SPACE: 54,210 S.F. = 60.8%
- SITE AREA: 89,400 S.F. = 100%

**PLANT SCHEDULE:**

TREES	QTY	BOTANICAL/COMMON	SIZE	MATURE HEIGHT	EVERGREEN/DECIDUOUS
ABM	5	Acer Freemanii 'Jeffersred' / Autumn Blaze Maple	2.5' Cal	45'+	DECIDUOUS
GMSM	4	Acer saccharum 'Green Mountain' / Green Mountain Sugar Maple	2.5' Cal	45'+	DECIDUOUS
AAA	3	Fraxinus americana 'Autumn Applause' / Autumn Applause Ash	2.5' Cal.	45'+	DECIDUOUS
SAN	10	Quercus acutisilva / Sawtooth Oak	2.5' Cal	45'+	DECIDUOUS
BC	6	Taxodium distichum / Bald Cypress	2.5' Cal.	45'+	DECIDUOUS
<b>EVERGREEN TREES</b>	<b>QTY</b>	<b>BOTANICAL/COMMON</b>	<b>SIZE</b>	<b>MATURE HEIGHT</b>	<b>EVERGREEN/DECIDUOUS</b>
NS	3	Picea abies / Norway Spruce	6'-7'	45'+	EVERGREEN
<b>FLOWERING TREES</b>	<b>QTY</b>	<b>BOTANICAL/COMMON</b>	<b>SIZE</b>	<b>MATURE HEIGHT</b>	<b>EVERGREEN/DECIDUOUS</b>
RB	1	Cercis canadensis / Redbud	2.5' Cal	25'-35'	DECIDUOUS
CP	10	Eryus calleryana 'Chanticleer' / Chanticleer Pear	2.5' Cal	15'-25'	DECIDUOUS
<b>SHRUBS</b>	<b>QTY</b>	<b>BOTANICAL/COMMON</b>	<b>SIZE</b>	<b>MATURE HEIGHT</b>	<b>EVERGREEN/DECIDUOUS</b>
WGB	21	Buxus microphylla 'Winter Gem' / Winter Gem Boxwood	5 gal		EVERGREEN
DBB	3	Evonymus alatus 'Compactus' / Compact Burning Bush	18"-24"		DECIDUOUS
CH	5	Ilex meserveae 'China Boy/Girl' TM / China Boy/Girl Holly	5 gal		EVERGREEN
BAY	15	Myrica pensylvanica / Northern Bayberry	24"-30"		EVERGREEN
AMS	10	Spiraea bumalda 'Anthony Waterer' / Anthony Waterer Spiraea	5 gal		DECIDUOUS
LPS	17	Spiraea japonica 'Little Princess' / Little Princess Spiraea	5 gal		DECIDUOUS
DKL	11	Syringa meyeri 'Palibin' / Dwarf Korean Lilac	5 gal		DECIDUOUS
DY	24	Taxus media 'Densiflora' / Dense Yew	18"-24"		EVERGREEN
<b>ANNUALS/PERENNIALS</b>	<b>QTY</b>	<b>BOTANICAL/COMMON</b>	<b>SIZE</b>	<b>EVERGREEN/DECIDUOUS</b>	
HRD	64	Hemerocallis hybrid 'Happy Returns' / Happy Returns Daylily	1 gal		DECIDUOUS
<b>GRASSES</b>	<b>QTY</b>	<b>BOTANICAL/COMMON</b>	<b>SIZE</b>	<b>EVERGREEN/DECIDUOUS</b>	
MG	8	Miscanthus sinensis 'Gracillimus' / Maiden Grass	5 gal		DECIDUOUS

**NOTES:**

- All natural vegetation shall be maintained where it does not interfere with construction or the permanent plan of operation. Every effort possible shall be made to protect existing structures or vegetation from damage due to equipment usage. Contractor shall at all times protect all materials and work against injury to public. The landscape contractor shall be responsible for any coordination with other site related work being performed by other contractors. Refer to architectural drawings for further coordination of work to be done.
- Underground facilities, structures and utilities must be considered approximate only. There may be others not presently known or shown. It shall be the landscape contractor's responsibility to determine or verify the existence of and exact location of the above (Call 1-800-DIG-RITE).
- Plant material are to be planted in the same relationship to grade as was grown in nursery conditions.
- All mulch to be shredded bark mulch at 3" depth over fabric (after compaction) unless otherwise noted. Mulch shall be clean and free of all foreign materials. Edge all beds with spade-cut edge unless otherwise noted.
- It shall be the landscape contractor's responsibility to:
  - Verify all existing and proposed features shown on the drawings prior to commencement of work.
  - Report all discrepancies found with regard to existing conditions or proposed design to the landscape architect immediately for a decision.
  - Stake the locations of all proposed plant material and obtain the approval of the owner's representative or landscape architect prior to installation.
- The landscape contractor is to receive the site graded to within 1/10 of a foot. Landscape contractor to obtain letter of grade certification from the general contractor prior commencement of work.
- All planting beds shall be cultivated to 6" depth minimum and graded smooth immediately before planting of plants. Plant perennials to within 15" of trunk of trees or shrubs planted within the area.
- All plant material (excluding ground cover, perennials and annuals) are to be warranted for a period of 12 months after installation at 100% of the installed price.
- All disturbed lawn areas to be seeded with a mixture of Turf-Type fescue (300# per acre) and bluegrass (18# per acre). Landscape contractor shall offer an alternate price for sod in lieu of seed. Lawn areas shall be unconditionally warranted for a period of 90 days from date of final acceptance. Bare areas more than one square foot per any 50 square feet shall be replaced.
- Items shown on this drawing take precedence over the material list. It shall be the landscape contractor's responsibility to verify all quantities and conditions prior to implementation of this plan. No substitutions of types or size of plant materials will be accepted without written approval from landscape architect.
- Siltation controls may be required to prevent run-off. Straw bales placed end-to-end shall be used, anchored with no less than two 3/8" X 36" reinforcing rods. Bales shall remain until all graded areas are seeded or sodded.
- The minimum setback is 30'-0" from the Chesterfield Airport Rd. right of way.
- A minimum of sixty percent (60%) of the deciduous trees must be of a species which matures at +35', evenly dispersed throughout the project.
- If the estimated materials cost of new landscaping indicated on the Site Development Plan, as required by the Planning Commission, exceeds one thousand (1,000) dollars, as determined by a plant nursery, the petitioner shall furnish a two (2) year bond or escrow sufficient in amount to guarantee the installation of said landscaping.
- Upon release of the landscape Installation Bond, a two (2) year Landscape Maintenance Bond shall be required.
- Protect the balls of all B&B plants at all times from drying out due to sun and wind exposure. Any B&B plants that can't be planted immediately upon delivery shall be set on ground and protected with soil, rock mulch, wet moss or other acceptable material and kept moist. Plants shall not be delivered to site more than seven (7) days prior to planting.
- All planting beds and lawn areas shall be irrigated with an automatic underground irrigation system (By Others).

REVISIONS	BY
AUG. 16, 2007	RVM
SEPT. 5, 2007	RVM

**landscape TECHNOLOGIES**  
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**PLANTING PLAN FOR THE PROPOSED West Valley Plaza**  
 CHESTERFIELD, MISSOURI

DRAWN	R. WARDIS
CHECKED	RVM
DATE	JULY 25, 2007
SCALE	1"=30'-0"
JOB NO.	2007-182
SHEET	