

STREETSCAPE & PARKING PLAN GUIDELINES

THE PROMENADE AT CRABTREE

MIXED - USE DEVELOPMENT PROPOSED PLANNED DEVELOPMENT DISTRICT



OWNER DEVELOPER:
CRABTREE AVENUE INVESTMENT GROUP, LLC.

CONSULTANTS:

Lacy H. Reaves - Attorney
Rivers & Associates, Inc. - Engineers Planners Surveyors
Strahan Associates - Architects
CH Engineers, Inc. - Transportation and Civil Engineers
Tim Newell - Landscape Architect
Light Keepers - Lighting Consultants

PREPARED BY:

RIVERS & ASSOCIATES, INC.
8410 FALLS OF THE NEUSE ROAD
SUITE D
RALEIGH, NC 27615
919-848-3347

STRAHAN ASSOCIATES
8410 FALLS OF THE NEUSE ROAD
SUITE D
RALEIGH, NC 27615
919-848-3347



TABLE OF CONTENTS

PROPOSED VIEW

VICINITY MAP

STREETSCAPE PLAN

STREETSCAPE MAINTENANCE PLAN

SIDEWALK

**TYPICAL STREET "A" SECTION AND
PEDESTRIAN BRIDGE @ CRABTREE VALLEY AVENUE**

PEDESTRIAN CROSSWALK

STREET FURNITURE

LIGHTING

STREET TREES / MEDIAN TREES

LANDSCAPE MANAGEMENT PLAN

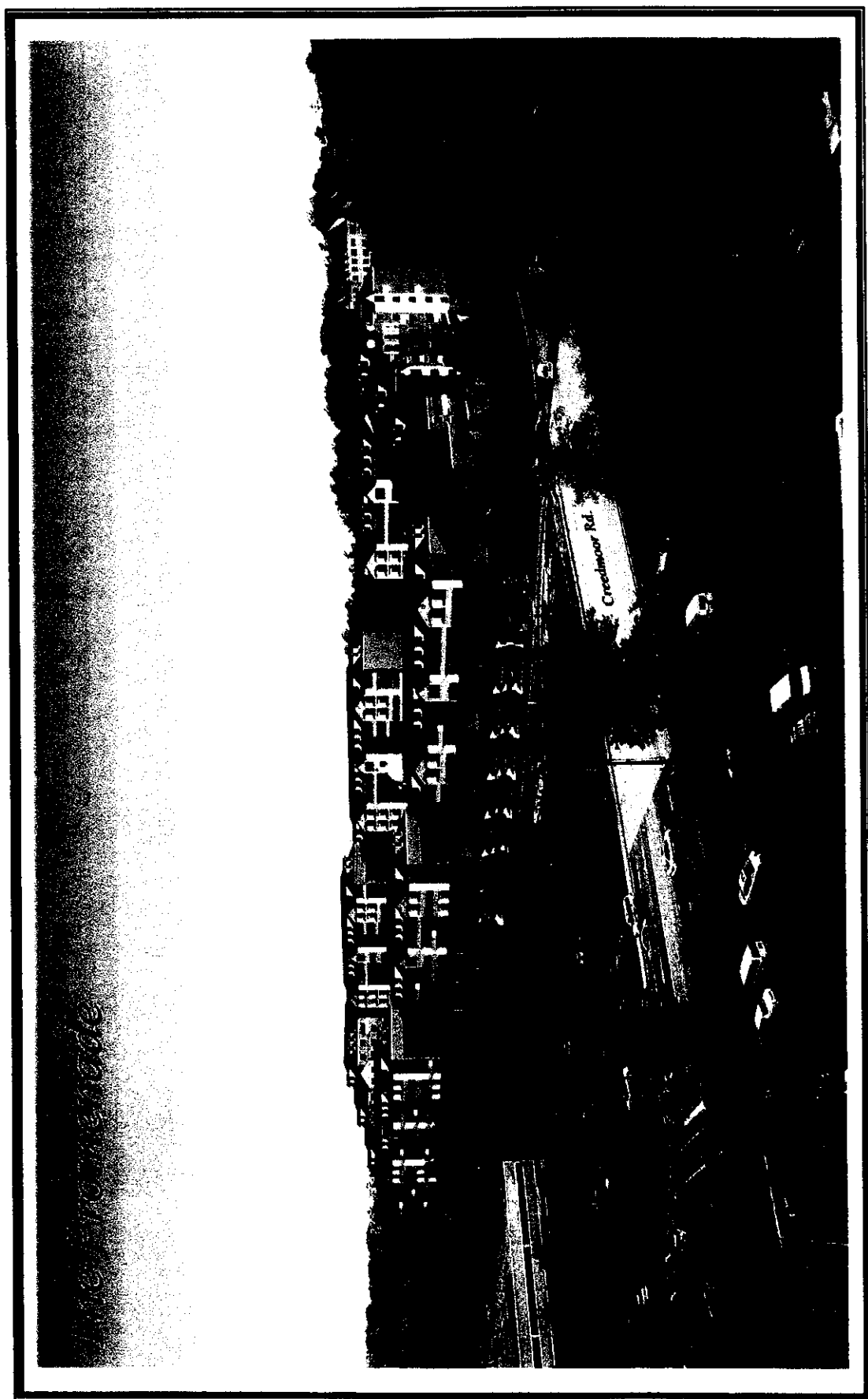
SIGNAGE

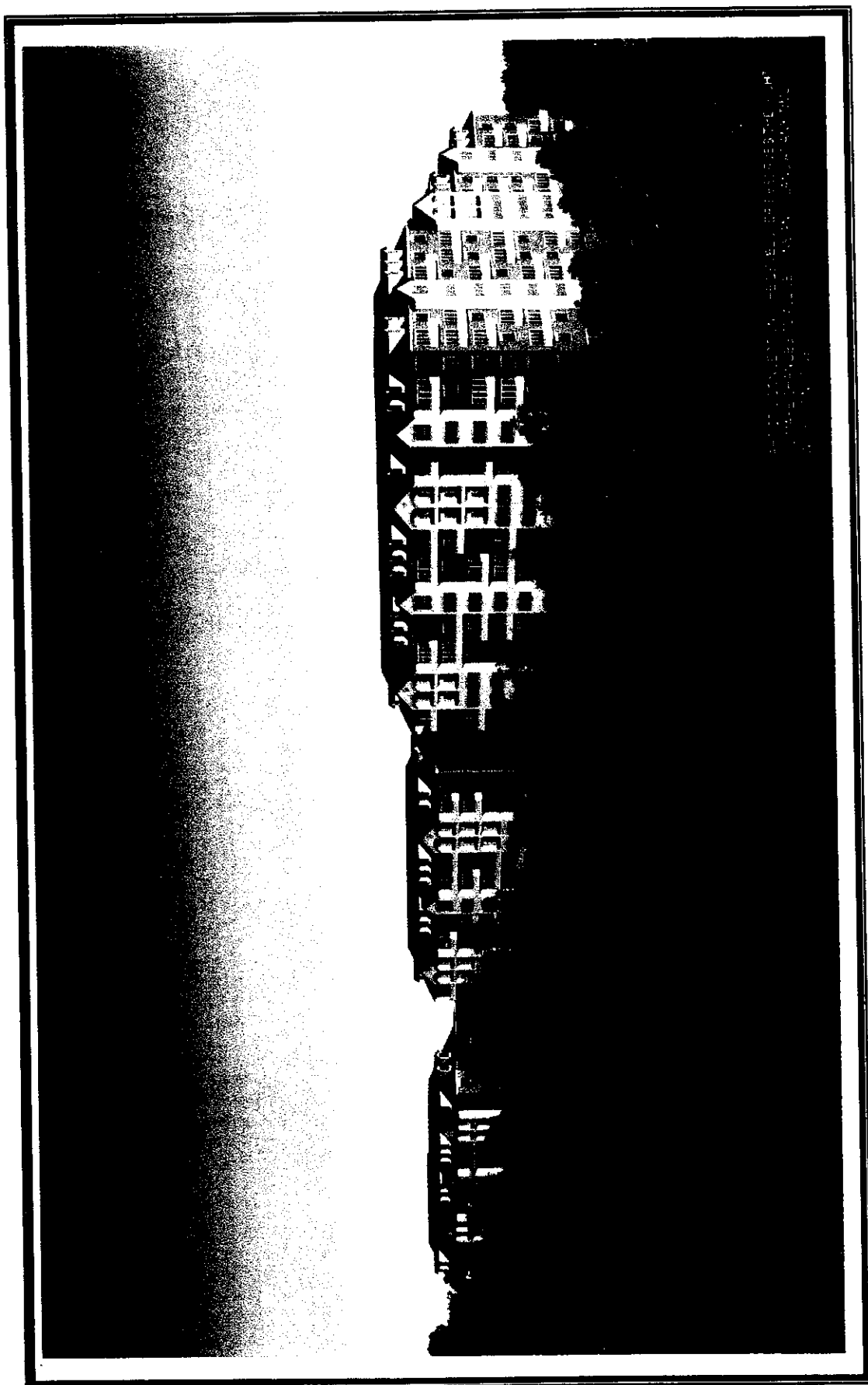
UTILITY LOCATIONS

PARKING

MAXIMUM HEIGHT LIMITATIONS

PROPOSED VIEWS





VICINITY MAP



VICINITY MAP
(NOT TO SCALE)

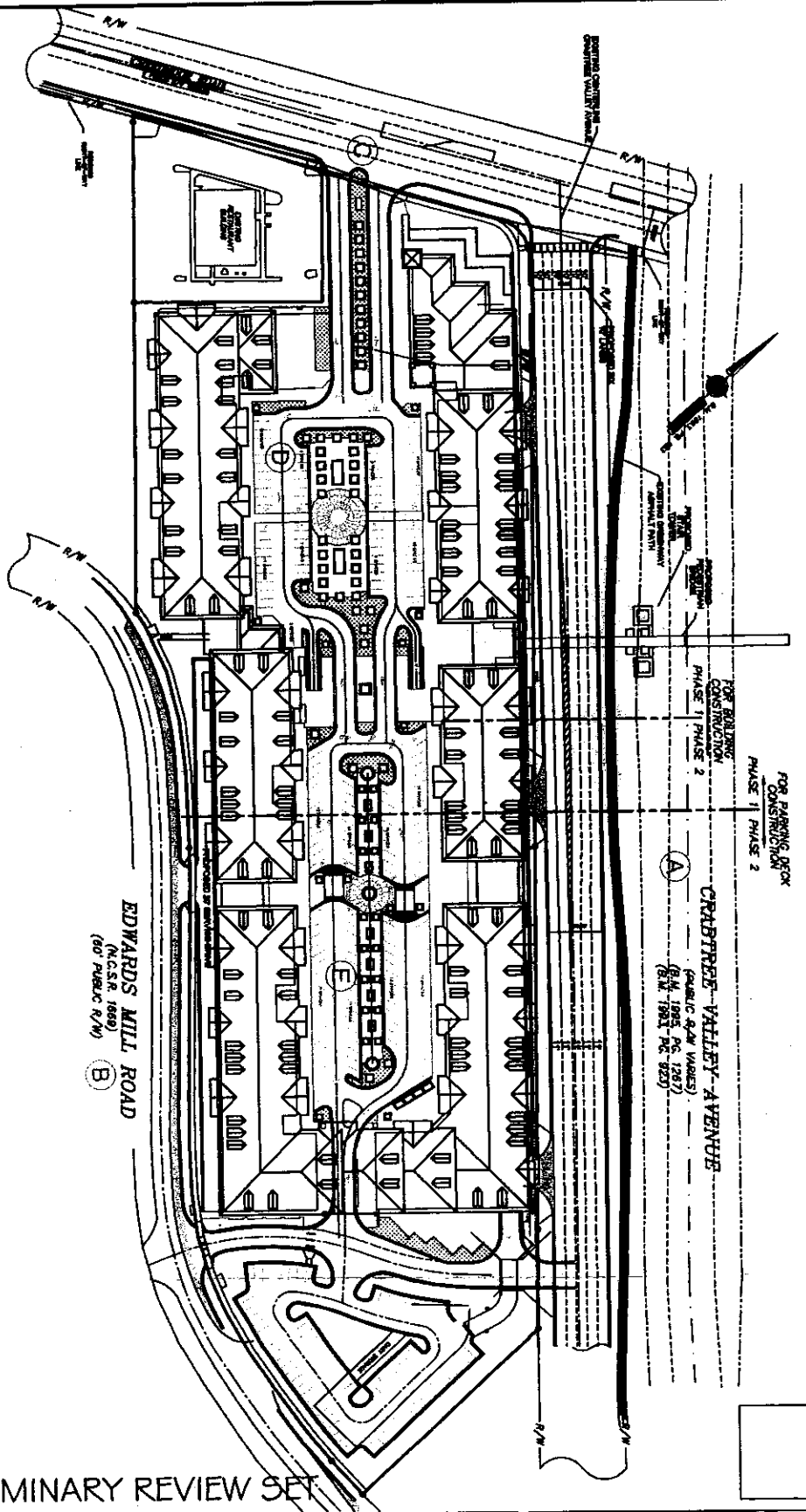
STREETSCAPE PLAN

PROPOSED SETBACKS

THE PROMENADE AT CRABTREE

Creedmoor Road	30 Feet
Crabtree Valley Avenue	0 Feet
CVM Holdings Property	15 Feet
Edwards Mill Road	15 Feet
Sunrise of Raleigh Property	20 Feet
David E. Rodger Property	0 Feet

STREETSCAPE WITH ROOF



PRELIMINARY REVIEW SET

REFERENCES:
 1. N.C.S.R. 1989
 2. B.M. 1985 PG. 1267
 3. B.M. 1981 PG. 927

NO.	REVISIONS
1	ISSUED FOR REVIEW
2	REVISED PER COMMENTS
3	REVISED PER COMMENTS
4	REVISED PER COMMENTS
5	REVISED PER COMMENTS
6	REVISED PER COMMENTS
7	REVISED PER COMMENTS
8	REVISED PER COMMENTS
9	REVISED PER COMMENTS
10	REVISED PER COMMENTS

DATE:	01/11/01
DRAWN BY:	MMW
CHECKED BY:	MMW
C13	

Rivers Associates
 10000 Old Highway 100
 Suite 100
 Raleigh, NC 27615
 Phone: 919.488.1100
 Fax: 919.488.1101
 Website: www.riversassociates.com

"THE PROMENADE"
 AT CRABTREE VALLEY
 OWNER: CRABTREE VALLEY INVESTMENT GROUP, LLC

Strahan Associates
 10000 Old Highway 100
 Suite 100
 Raleigh, NC 27615
 Phone: 919.488.1100
 Fax: 919.488.1101
 Website: www.strahanassociates.com

LEGEND

NUMBER DESCRIPTION

- # 1 LARGE TREE WELL PLANTER BOX
- # 2 MEDIUM TREE WELL PLANTER BOX
- # 3 LARGE RECTANGLE PLANTER BOX
- # 5 LIMESTONE PATTERN
- # 6 SMALL TREE WELL PLANTER
- # 7 SMALL RECTANGLE PLANTER
- # 8 LARGE FOUNTAIN
- # 9 SMALL FOUNTAIN
- # 10 COBBLESTONE
- # 11 BENCH WITH OUT BACK
- # 12 BENCH
- # 13 ASH URN
- # 14 TRASH RECEPTACLE
- # 15 PLANTER DETAIL
- # 16 PEDESTAL TABLE
- # 17 / 18 TABLE AND BENCHES
- # 19 MULTI - LOOP BIKE RACK
- # 20 ENTRANCE SIGN DETAIL (CREEDMOOR ROAD)
- # 21 ENTRANCE SIGN DETAIL (EDWARDS MILL ROAD)
- # 22 MODERN SCULPTURE

Strahan Associates
 10000 Strahan Road, Suite 100
 Dallas, Texas 75244
 Phone (214) 343-1111
 Telex 730000
 Fax (214) 343-1112

"THE PROMENADE"
 AT CRABTREE VALLEY
 OWNER: CRABTREE VALLEY INVESTMENT GROUP, LTD.

Architect
 10000 Strahan Road, Suite 100
 Dallas, Texas 75244
 Phone (214) 343-1111
 Telex 730000
 Fax (214) 343-1112

DATE: _____
 DRAWN BY: JAW
 CHECKED BY: _____
 SHEET NO. C14

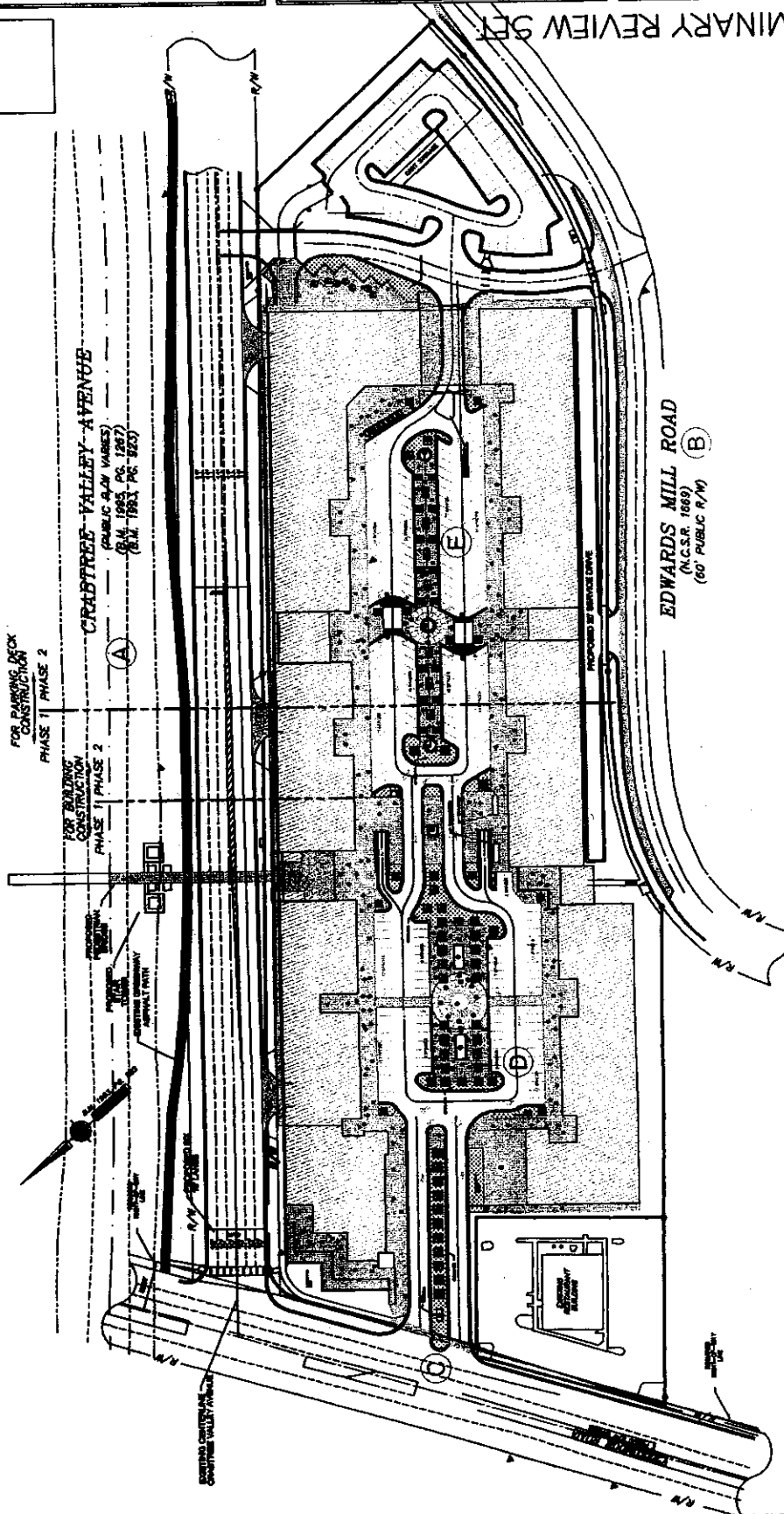
REVISIONS

NO.	DATE	DESCRIPTION
1	10/1/88	ISSUED FOR PERMITS

REFERENCES:

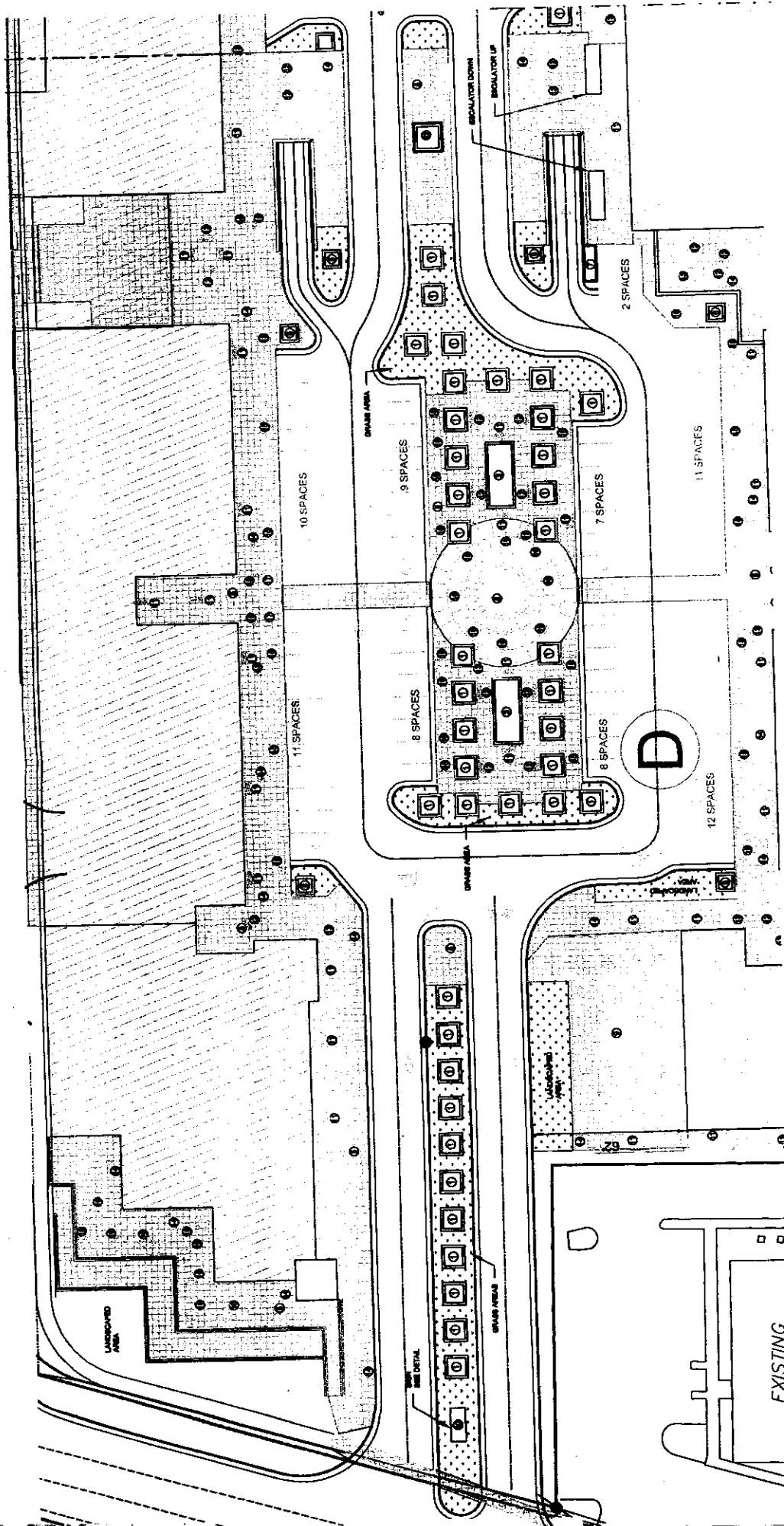
1	CRABTREE VALLEY SUBDIVISION
2	CRABTREE VALLEY SUBDIVISION
3	CRABTREE VALLEY SUBDIVISION
4	CRABTREE VALLEY SUBDIVISION
5	CRABTREE VALLEY SUBDIVISION
6	CRABTREE VALLEY SUBDIVISION
7	CRABTREE VALLEY SUBDIVISION
8	CRABTREE VALLEY SUBDIVISION
9	CRABTREE VALLEY SUBDIVISION
10	CRABTREE VALLEY SUBDIVISION
11	CRABTREE VALLEY SUBDIVISION
12	CRABTREE VALLEY SUBDIVISION
13	CRABTREE VALLEY SUBDIVISION
14	CRABTREE VALLEY SUBDIVISION
15	CRABTREE VALLEY SUBDIVISION
16	CRABTREE VALLEY SUBDIVISION
17	CRABTREE VALLEY SUBDIVISION
18	CRABTREE VALLEY SUBDIVISION
19	CRABTREE VALLEY SUBDIVISION
20	CRABTREE VALLEY SUBDIVISION

PRELIMINARY REVIEW SET



STREETSCAPE WITH OUT ROOF





STREETSCAPE PLAZA ONE PLAN

END

DESCRIPTION

1. TREE WELL PLANTER BOX

2. MEDIUM TREE WELL PLANTER BOX

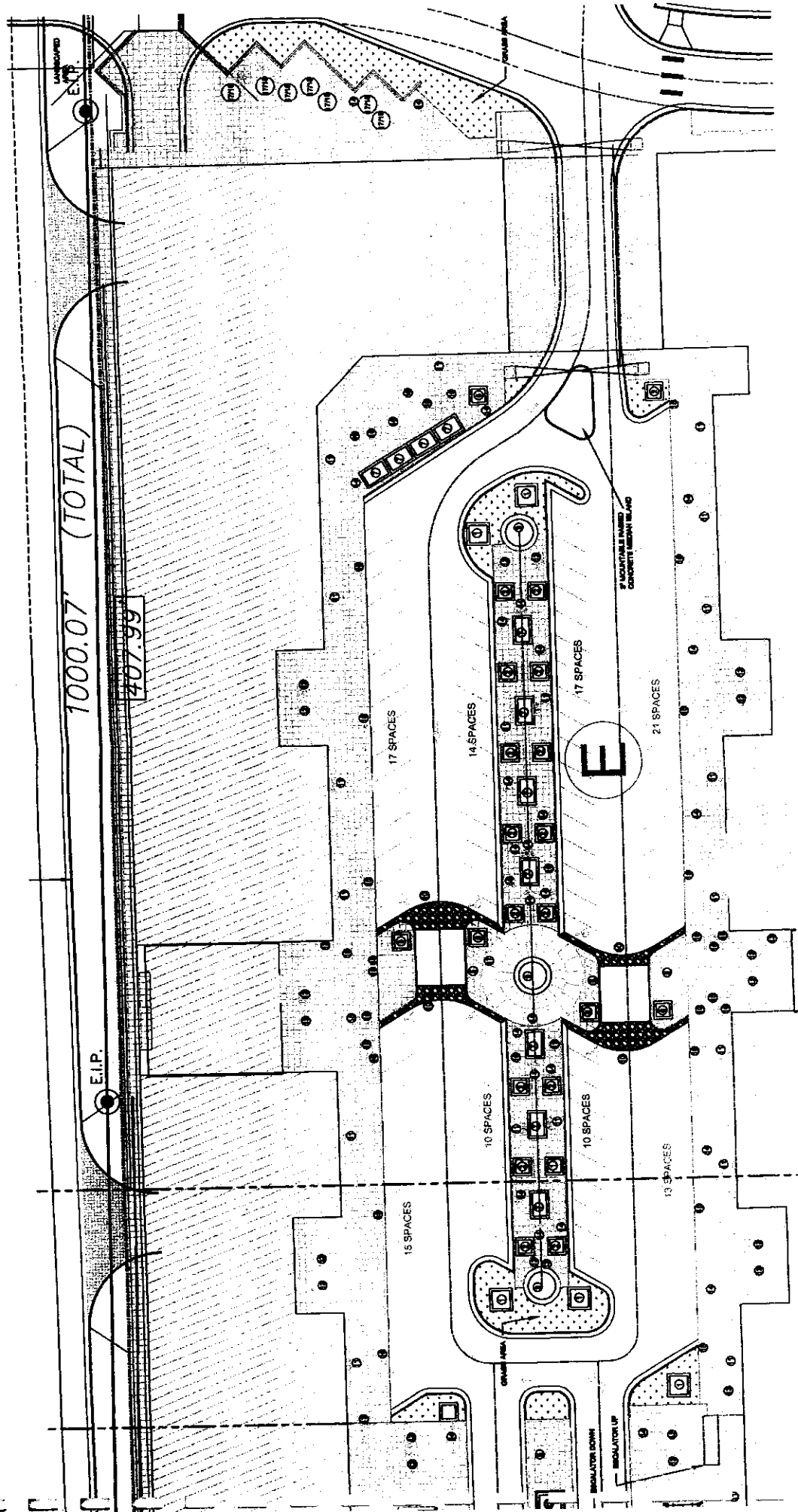
3. LARGE RECTANGLE PLANTER BOX

EXISTING PLANTER

LEGEND

NUMBER DESCRIPTION

- # 1 LARGE TREE WELL PLANTER BOX**
- # 2 MEDIUM TREE WELL PLANTER BOX**
- # 3 LARGE RECTANGLE PLANTER BOX**
- # 5 LIMESTONE PATTERN**
- # 6 SMALL TREE WELL PLANTER**
- # 7 SMALL RECTANGLE PLANTER**
- # 8 LARGE FOUNTAIN**
- # 9 SMALL FOUNTAIN**
- # 10 COBBLESTONE**
- # 11 BENCH WITH OUT BACK**
- # 12 BENCH**
- # 13 ASH URN**
- # 14 TRASH RECEPTACLE**
- # 15 PLANTER DETAIL**
- # 16 PEDESTAL TABLE**
- # 17 / 18 TABLE AND BENCHES**
- # 19 MULTI - LOOP BIKE RACK**
- # 20 ENTRANCE SIGN DETAIL (CREEDMOOR ROAD)**
- # 21 ENTRANCE SIGN DETAIL (EDWARDS MILL ROAD)**
- # 22 MODERN SCULPTURE**



STREETSCAPE PLAZA TWO PLAN

**STREETSCAPE
MAINTENANCE PLAN**

**The Promenade at Crabtree
Streetscape Maintenance Plan
12/19/2002**

1. General

- a. The Developer shall at all time maintain the Streetscape and its improvements thereon in a safe, clean, attractive and good state of condition and repair.
- b. The Developer's maintenance obligation shall include, but be limited to repairing, reconstruction, renewing of all non-standard dedicated improvements in the right of way.
- c. The Developer's maintenance shall also include the storage and prompt removal of all litter, trash, garbage and waste in accordance with applicable Legal Requirements.

2. Lighting

- a. CP&L Roadway light fixture will be maintained by CP&L
- b. The Developer shall maintain non city standard pole lights, fixture lights, bollards in the streetscape plan as follows:
 - 1. Lamp replacement
 - 2. Finish repair, including repainting of painted finishes

3. Furniture

- a. The Developer will maintain all streetscape furniture and ancillary fixtures as follows:
 - 1. Benches – painted as needed
 - 2. Ash/Trash receptacles
 - a. Painted as needed
 - b. Trash and ash receptacles clean and emptied everyday
 - 4. Bicycle racks – painted as needed

4. Landscaping

- a. The Developer will maintain all streetscapes landscaping as follows:
 - 1. Trimming of bushes and tree limbs as necessary to maintain a neat appearance
 - 2. Edging and cutting the grass – weekly as needed
 - 3. Planting of annuals and pots (if any) – 2 times per year
 - 4. Picking up of trash – daily
 - 5. Blowing leaves – weekly as needed
 - 6. Installing sod as needed
 - 7. Pine straw refurbishment – 2 times per year

8. Seasonal replacement of any dying tree or bush

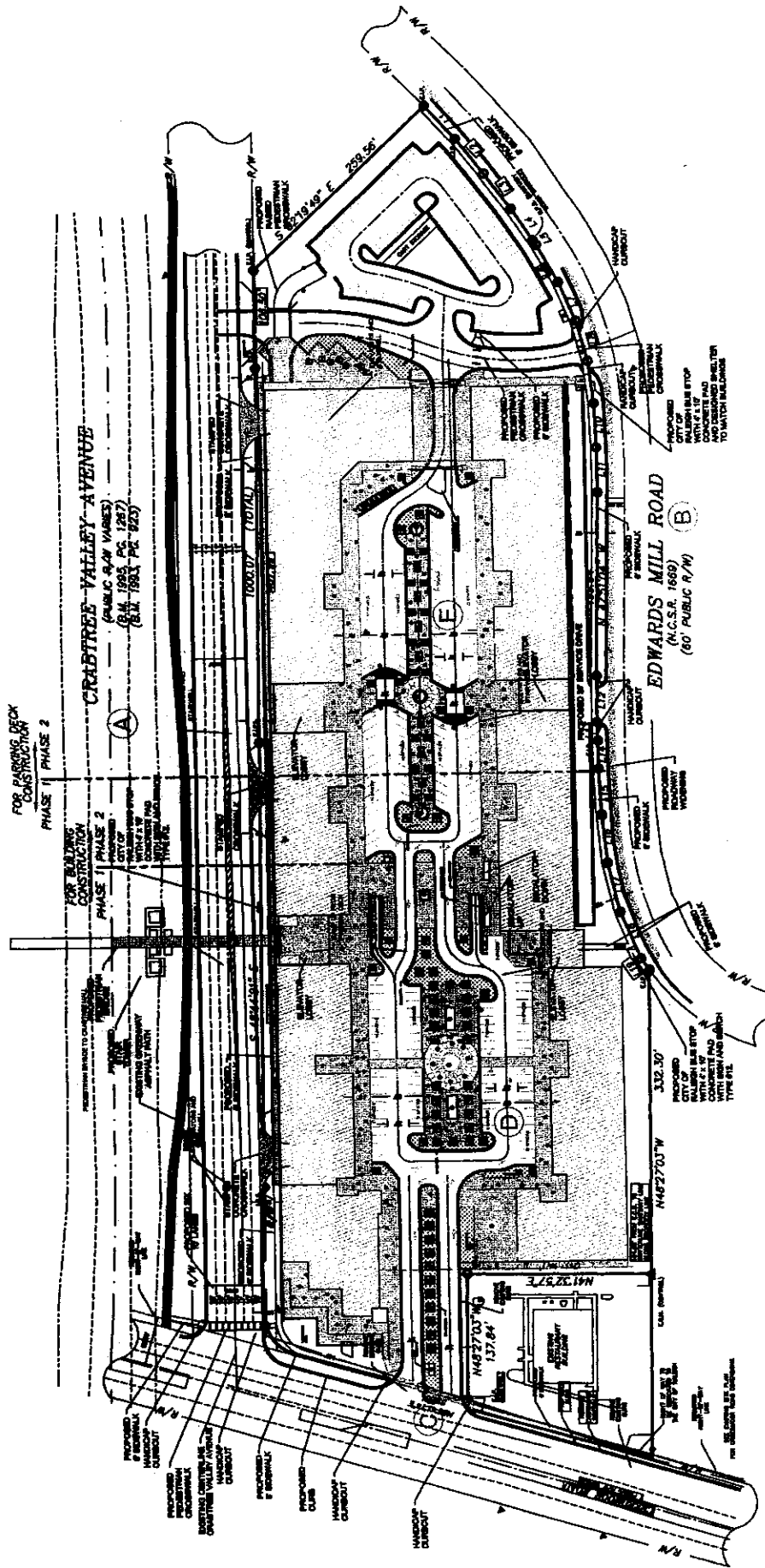
5. Paving and curbing

- a. The Developer will provide regular cleaning of Public Streets constructed in accordance with City of Raleigh standards:**
- b. The Developer will be responsible for complete maintenance and repair of all non-standard paving and curbing.**

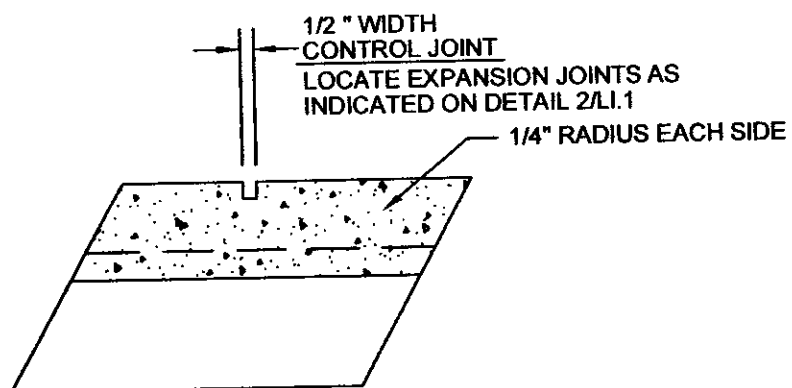
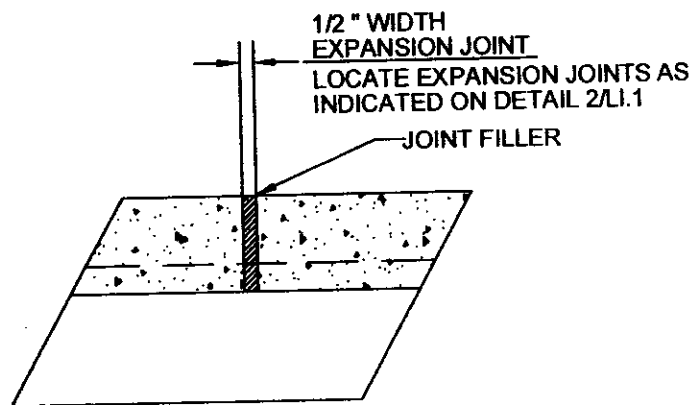
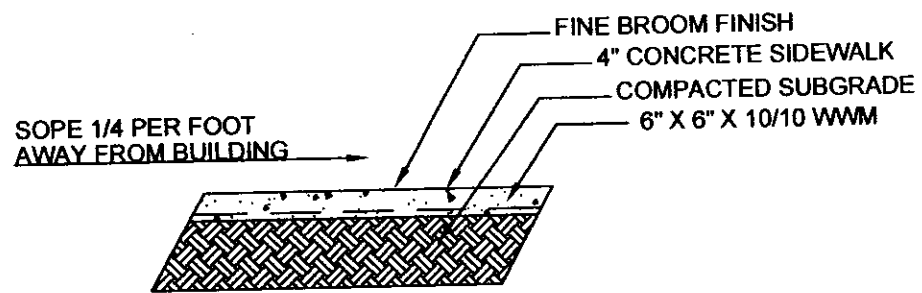
6. Signage

- a. The Developer will provide regular maintenance including the repair or replacement of damaged signage included in the Streetscape Plan including the following:**
 - 1. Clean signs to ensure that they are visible and readable and in good condition**
 - 2. Replace damage signs**

SIDEWALKS



MASTER PLAN



CONCRETE SIDEWALK DETAILS

PEDESTRIAN CROSSWALK

CRABTREE VALLEY AVENUE

STAMPED CONCRETE
6' CROSSWALK

HANDICAP CURB
CUT AND RAMP (TYP)

6'

SIDEWALK

SIDEWALK

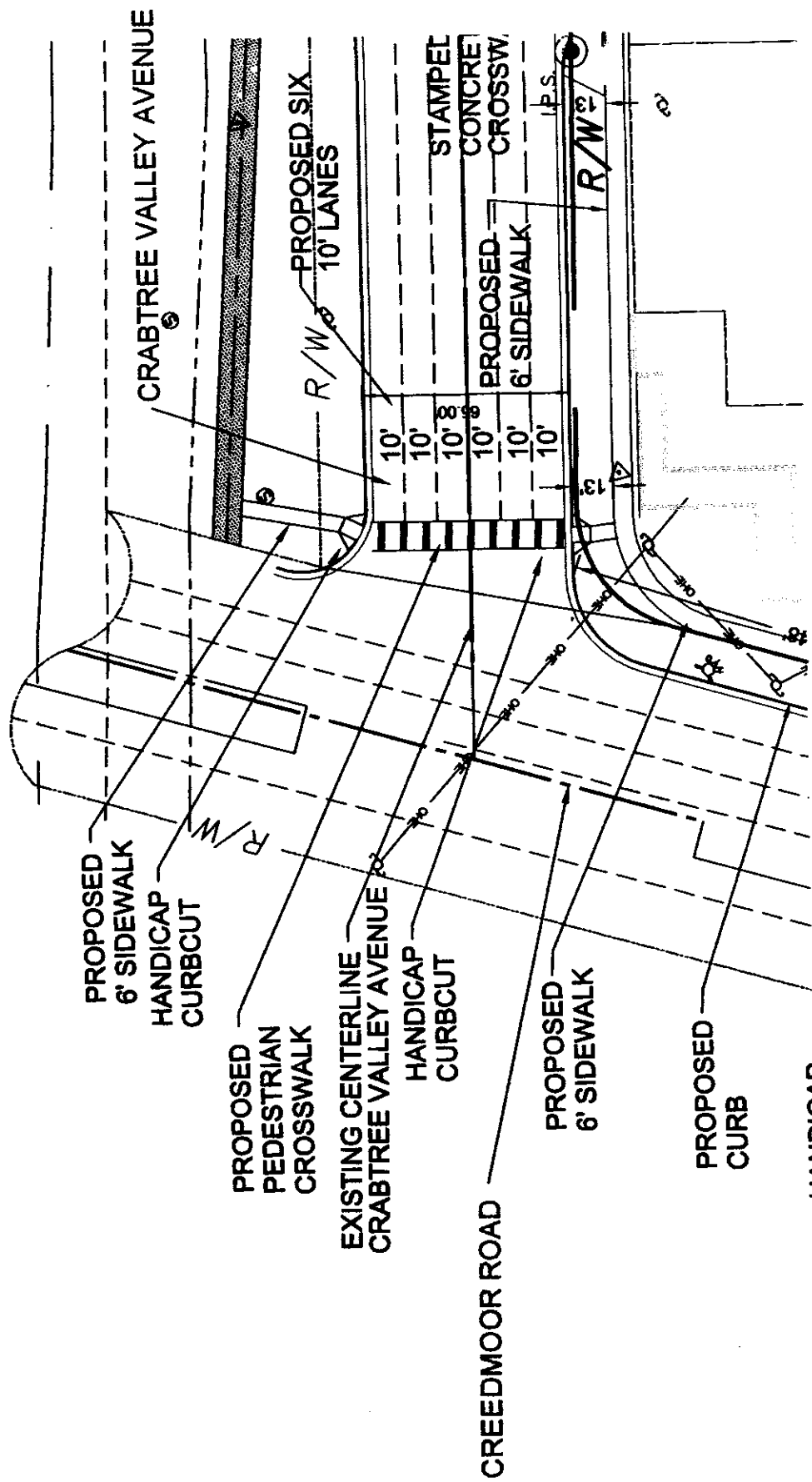
SIDEWALK

25'
BACK TO BACK
OF CURB

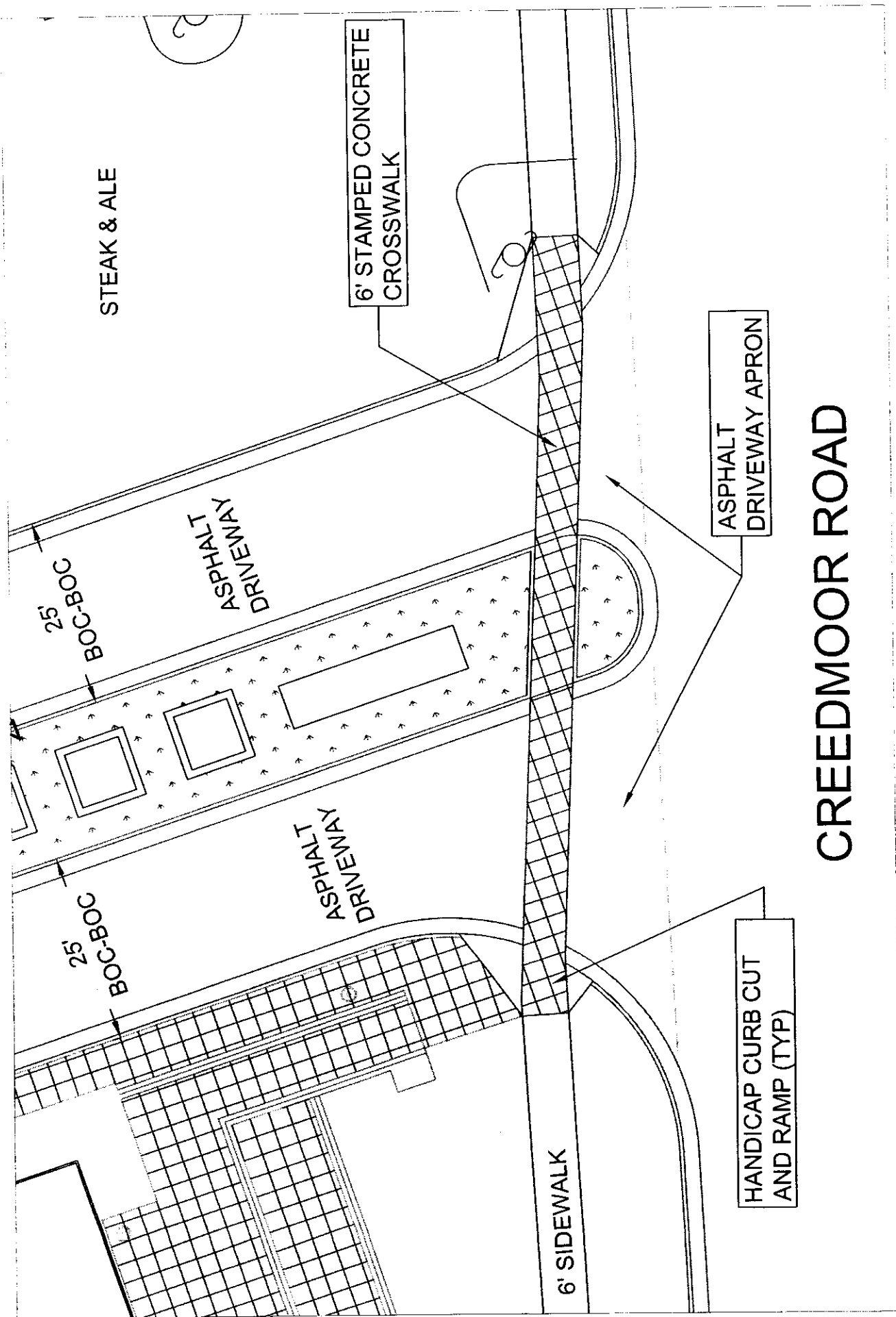
5'-6"

CROSSWALK AT PARKING STRUCTURE

NTS



PEDESTRIAN CROSSWALK



ELEVATOR LOBBY

PROPOSED BUILDING

PROPOSED BUILDING

20' BOC-BOC

ASPHALT SERVICE ROAD

HANDICAP CURB CUT
AND RAMP (TYP)

6' SIDEWALK

6' SIDEWALK

ASPHALT
DRIVEWAY APRON

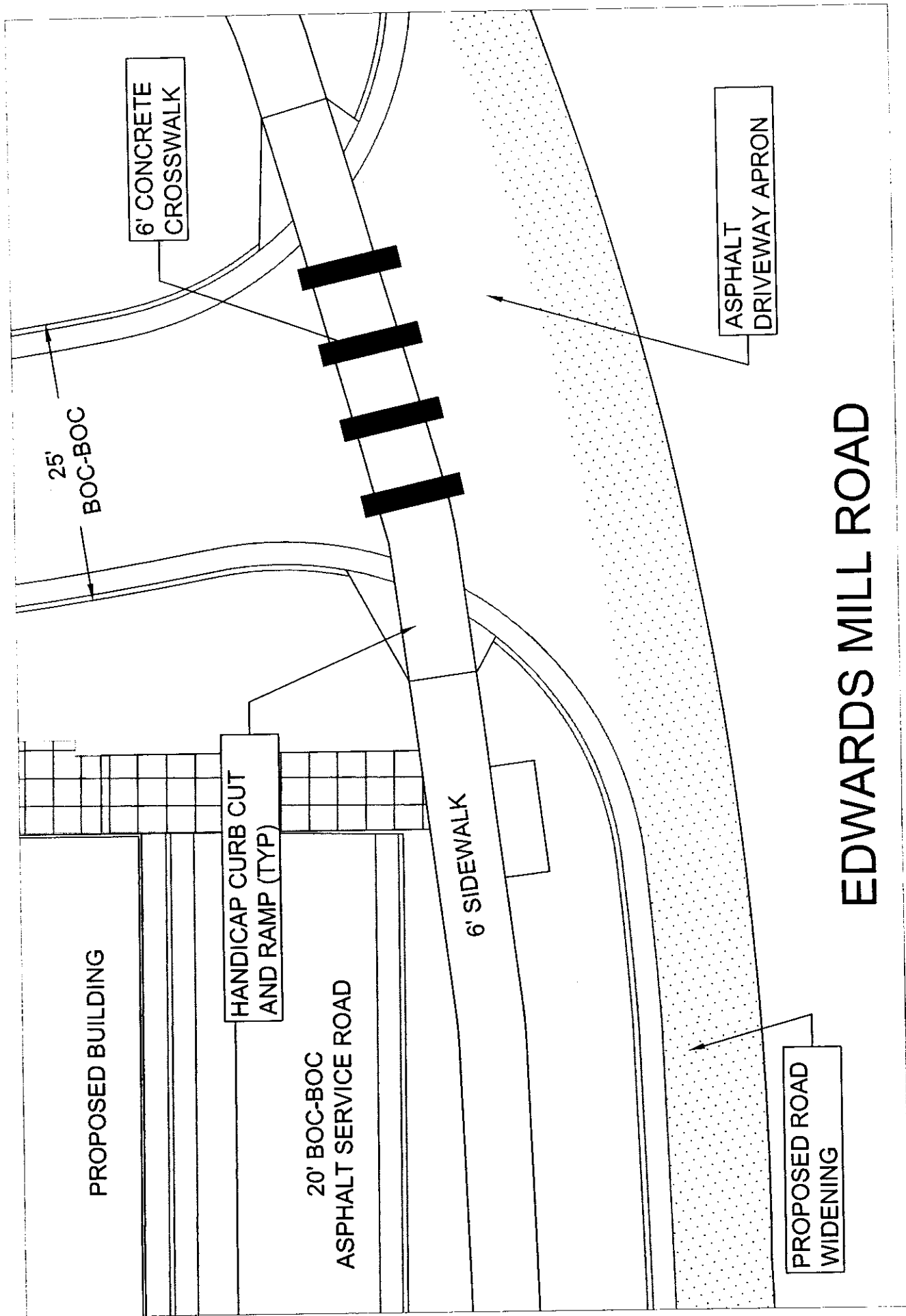
6' CONCRETE
CROSSWALK

PROPOSED ROAD
WIDENING

EDWARDS MILL ROAD

CROSSWALK AT SERVICE DRIVE

NTS



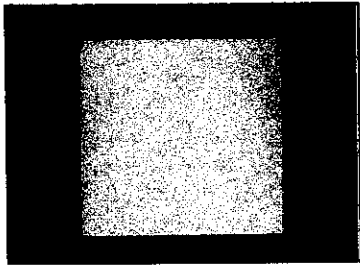
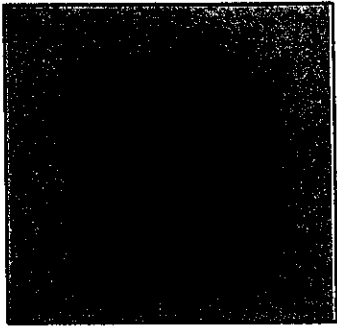
EDWARDS MILL ROAD

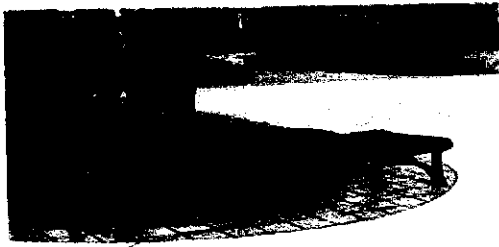

CROSSWALK AT SOUTH ENTRANCE

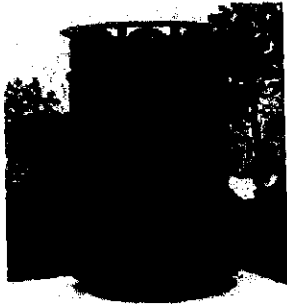
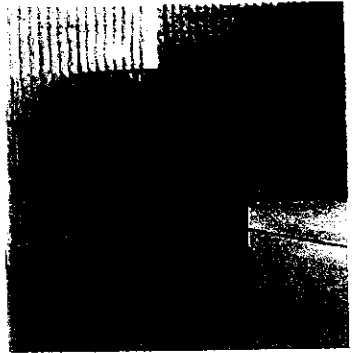
NTS


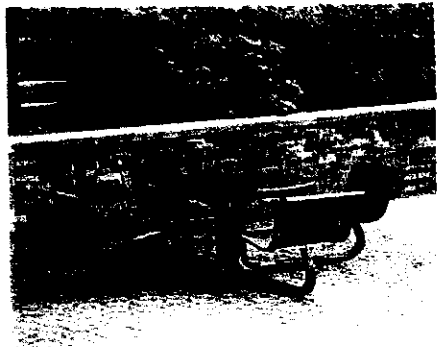
PEDESTRIAN BRIDGE / SECTION "A"
@ CRABTREE VALLEY AVENUE

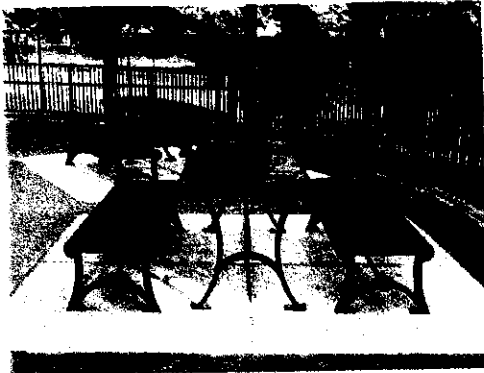

STREET FURNITURE

D E V S T R O P E M T E S N C T A P S T A & N D P A R K S I N G P L A N		LIMESTONE	COBBLESTONE
	"A" STREET YARD CRABTREE VALLEY AVENUE		
	"B" STREET YARD EDWARDS MILL ROAD		
	"C" STREET YARD CREEDMOOR ROAD		
	"D" PLAZA ONE	DURABLE, SLIP RESISTANT USED FOR WALKWAYS	DURABLE, SLIP RESISTANT USED FOR WALKWAYS
	"E" PLAZA TWO	DURABLE, SLIP RESISTANT USED FOR WALKWAYS	DURABLE, SLIP RESISTANT USED FOR WALKWAYS
		 # 5	 # 10

D E V E L O P M E N T S C T A P E T A & N D P A R K I N G P L A N		BENCH WITHOUT BACKS	BENCH
	"A" STREET YARD CRABTREE VALLEY AVENUE		
	"B" STREET YARD EDWARDS MILL ROAD		
	"C" STREET YARD CREEDMOOR ROAD		
	"D" PLAZA ONE	5/8" SEATING SURFACE POLYESTER POWER FINISH MANUFACTURER Du Mor SITE FURNISHINGS	5/8" SEATING SURFACE POLYESTER POWER FINISH MANUFACTURER Du Mor SITE FURNISHINGS
	"E" PLAZA TWO	5/8" SEATING SURFACE POLYESTER POWER FINISH MANUFACTURER Du Mor SITE FURNISHINGS	5/8" SEATING SURFACE POLYESTER POWER FINISH MANUFACTURER Du Mor SITE FURNISHINGS
		 <div># 11</div>	 <div># 12</div>

D E V E L O P M E N T S T A P E T A & N D P A R K I N G P L A N		ASH URN	TRASH RECEPTACLE
	"A" STREET YARD CRABTREE VALLEY AVENUE		
	"B" STREET YARD EDWARDS MILL ROAD		
	"C" STREET YARD CREEDMOOR ROAD		
	"D" PLAZA ONE	POLYESTER POWER FINISH MANUFACTURER Du Mor SITE FURNISHINGS	HINGED DOOR FOR EASY LINER REMOVAL POLYESTER POWER FINISH MANUFACTURER Du Mor SITE FURNISHINGS
	"E" PLAZA TWO	POLYESTER POWER FINISH MANUFACTURER Du Mor SITE FURNISHINGS	HINGED DOOR FOR EASY LINER REMOVAL POLYESTER POWER FINISH MANUFACTURER Du Mor SITE FURNISHINGS
		 # 13	 # 14

D E V E L O P M E N T S C A P E T A N D P A R K I N G P L A N		PLANTER	PEDESTAL TABLE
	"A" STREET YARD CRABTREE VALLEY AVENUE		
	"B" STREET YARD EDWARDS MILL ROAD		
	"C" STREET YARD CREEDMOOR ROAD		
	"D" PLAZA ONE		
	"E" PLAZA TWO	POLYESTER POWER FINISH MANUFACTURER Du Mor SITE FURNISHINGS	POLYESTER POWER FINISH MANUFACTURER Du Mor SITE FURNISHINGS
		 <div># 15</div>	 <div># 16</div>

D E V E L O P M E N T S T A P E T A & P A R K I N G P L A N		TABLE AND BENCHES	MULTI - LOOP BIKE RACK
	"A" STREET YARD CRABTREE VALLEY AVENUE		
	"B" STREET YARD EDWARDS MILL ROAD		
	"C" STREET YARD CREEDMOOR ROAD		
	"D" PLAZA ONE		POLYESTER POWER FINISH MANUFACTURER Du Mor SITE FURNISHINGS
	"E" PLAZA TWO	POLYESTER POWER FINISH MANUFACTURER Du Mor SITE FURNISHINGS	
		 <p># 17 - # 18</p>	 <p>#19</p>

LIGHTING

LIGHT KEEPERS

PRELIMINARY FIXTURE SPECIFICATIONS

**SCHEMATIC DESIGN PHASE
CITY ZONING SUBMITTAL**

THE PROMENADE

RALEIGH, NC

ISSUE DATE: DECEMBER 19, 2002

**39 PATTON AVENUE • ASHEVILLE, NC • 28801 • USA
PHONE: 828-232-1885 • FAX: 828-232-1859
E-MAIL: REBECCA@LIGHT-KEEPERS.COM**

FA



HOT-5™

WITH T5 HIGH-OUTPUT LAMP

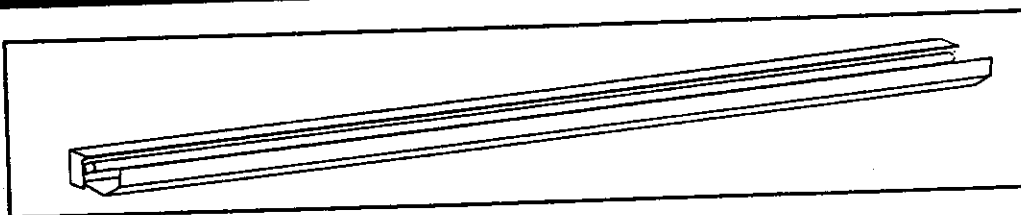
COVE

AVAILABLE FIXTURES



HCM5-1

SPECIFICATIONS



CONSTRUCTION

Housing pre-finished cold-rolled sheet steel forming a 6 3/32" x 1 7/8" rectangular channel.

REFLECTORS

Die-formed, white reflector with a minimum 85% reflectance. Optical system includes micro-prismatic, 100% virgin acrylic specular diffusing optical lens.

ELECTRICAL

Specify 120 volt or 277 volt. Pre-wired with prescribed circuits as specified. UL listed. Listed and labeled to comply with Canadian standards. For special circuiting, consult factory. T5 high-output lamps are included.

FIXTURE LENGTH

Available in nominal 2', 3', 4', and 8' sections only. Consult factory for additional lengths.

ORDERING LOGIC

Use guide below to order complete fixture run(s) of any length.

Quantity	Fixture	# of Lamps in Cross Section	Lamp Type	Nominal Fixture Length	Voltage	Ballast Type	Emergency Type ²	Lamp Color	Options
<input type="text"/>	HCM5	1	24T5HO 39T5HO 54T5HO 94T5HO	U2 (2') U3 (3') U4 (4') U8 (8')	120 277	GEB10- 10% THD Ballast			GLR- Fast Blow Fuse BMF- Slow Blow Fuse LALP- No lamp LP635- 3000K lamp LP635- 3500K lamp LP642- 4100K lamp

EL- Emergency Battery Pack
EC- Emergency Circuit

Notes: 1) Optional 2) Not available with 24T5HO and 39T5HO lamps.

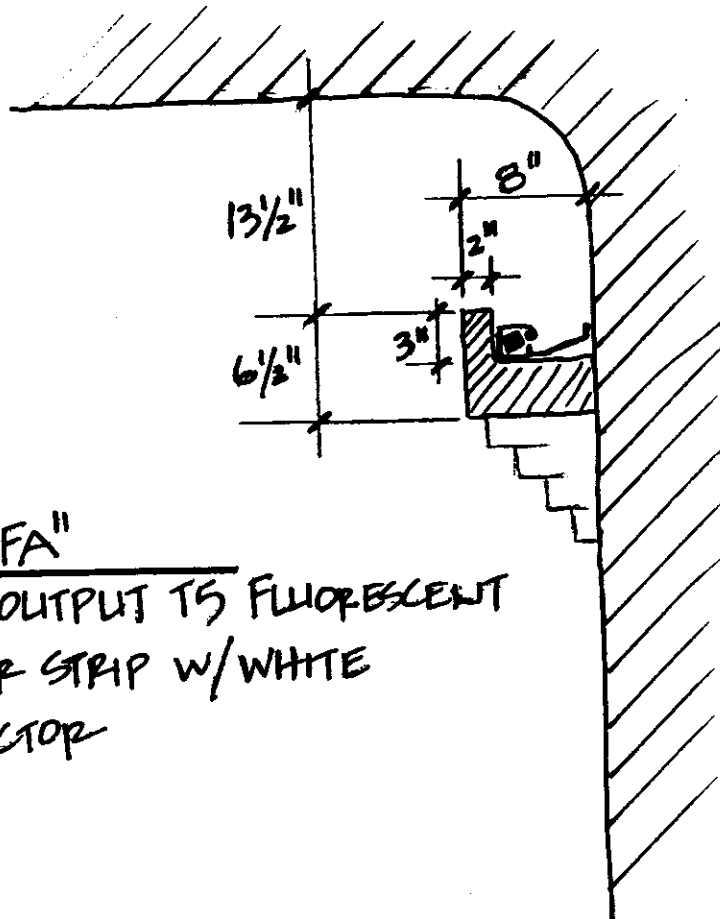
EXAMPLE:

Qty Fixture section
 4 HCM5 1 39T5HO U3 120 GEB10 LP635 GLR
 1 HCM5 1 54T5HO U8 277 GEB10 EC L/LP

Peerless Lighting Box 2556, Berkeley, CA 94702-0556 510.845-2760 Fax 510.845-2776 www.peerless-lighting.com

© 2000 www.peerless-lighting.com. All rights reserved. "Peerless" is a registered trademark and "Peerlite" and "HOT-5" are trademarks of www.peerless-lighting.com. These products may be covered by one or more U.S. Patents or Patents Pending. 1/00

PC-1



TYPE "FA"

HIGH-OUTPUT T5 FLUORESCENT
LINEAR STRIP W/WHITE
REFLECTOR

LIGHT KEEPERS

LSK 12.7

39 PATTON AVENUE
ASHEVILLE, NC 28801
PH: 828-232-1885
FAX: 828-232-1859
REBECCA@LIGHT-KEEPERS.COM

TITLE LIGHTING COVE @RETAIL WALK

DATE 16 DEC 02

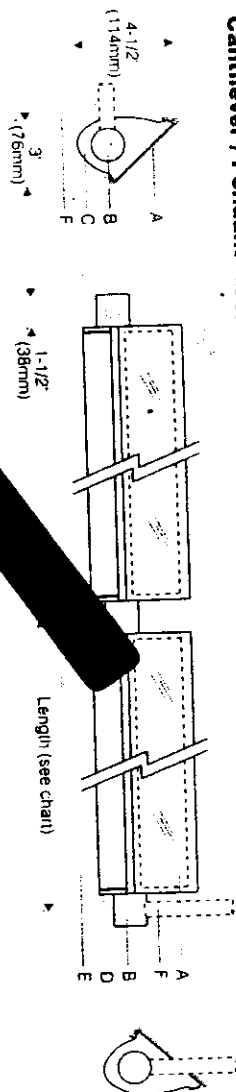
PROJECT: THE PROMENADE

SCALE 1" = 1'-0"

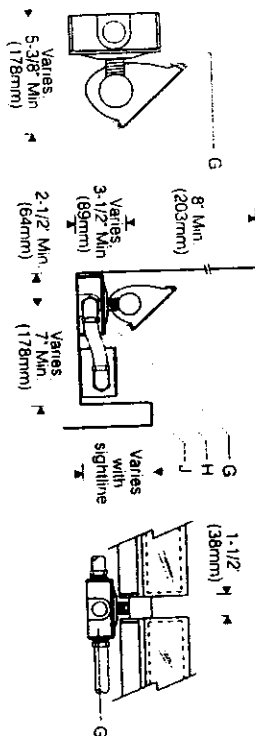
FB

Uplighting Small outdoor, remote

Cantilever / Pendant 1/8 Scale



Surface 1/8 Scale



Cove 1/12 Scale

Lamps (center to center of hubs)	Length
1 x 2	24-15/16" (633mm)
1 x 3	36-3/4" (933mm)
1 x 4	48-1/2" (1232mm)
1 x 5	60-1/2" (1537mm)
2 x 3	72-1/2" (1842mm)
2 x 4	96-1/2" (2451mm)
2 x 5	120-1/2" (3061mm)

T5 Fluorescent

Style 151

Specifications

- A** UV and impact resistant acrylic snap-on lens with EPDM gasket
- B** Machined aluminum mounting hubs with o-ring gaskets (black) (ordered separately)
- C** Die-cast aluminum end plates
- D** Aluminum reveal plates (black)
- E** Specular extruded aluminum reflector
- F** 1/2" rigid conduit cantilever or pendant supports (by others)
- G** Outlet boxes, liquid tight flexible conduit and fittings (by others)
- H** Remote ballast in weatherproof aluminum enclosure
- J** Architectural cove (for design guidance, see Applications Section)

Finish:

Exterior surfaces - 6 stage pretreatment and electrostatically applied thermoset polyester powder coating for a durable abrasion, fade and corrosion resistant finish. Choice of semi-gloss colors (see ordering information). Mounting hubs finished black.

Reflector - extruded high purity aluminum with clear anodized specular finish. All hardware and components - non corrosive stainless steel or aluminum.

Snap-on lens - composite of impact resistant and UV stabilized acrylic. EPDM gasket for watertight operation when facing upward.

Mounting:

Machined aluminum mounting hubs (ordered separately) with internal 1/2" NPT threaded entry 1/2" rigid conduit supports or fittings (by others). Allow 2.5 lbs/foot of reflector (example: 8' unit x 2.5 = 20 pounds).

Specify intermediate and end hubs. Reflector is adjustable about the hubs. Aiming is locked in position with set screws in the hubs.

Electrical:

Use 90°C wire for supply connections. Remote electronic HPF thermally protected class P ballast rated for 0°F/-18°C starting. Weatherproof aluminum enclosure includes three 7/8" diameter entries and one 3/8" liquidtight conduit connector.

7 (2 in) wire leads exit end of reflector. Maximum wire length between remote ballast and fixture is 7' for two-lamp reflectors and 12' for one-lamp reflectors.

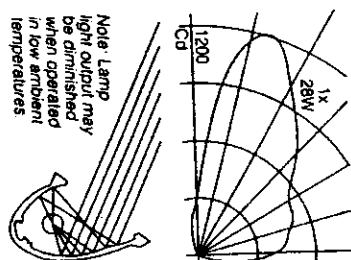
For complete ballast specifications, see Accessories Section. Standard: UL listed or CSA certified for wet locations.

Features

- T5 for precise optical control - unequaled uniformity for uplighting soffits, vaults, canopies from minimal setbacks
- Snap-on impact and UV resistant acrylic lens with EPDM gasket - watertight for uplighting orientations
- Durable aluminum construction - extruded reflector, die-cast end plates, machined hubs, powder coat finish

Performance

Two parabolic reflector sections drive light across the overhead plane from one edge. An elliptical section redirects its light to a parabola and shields the lamp. Asymmetry is maximized resulting in high beam efficiency and superior surface uniformity. The last "turbid" minimizes wasted spill light. Wide lateral distribution permits greater spacings.



For complete photometrics, see Outdoor Applications Section.

elliptipar



FB

Outdoor Footcandle Charts 15 Fluorescent

Styles:

F151



Lamp

28W T5 fluorescent
rated 2900 lumens
Small cross-section, nominal 48" long
with clear acrylic lens
Reflector aiming is adjustable

Reflector



Lamp

55W T5 high output fluorescent
rated 5000 lumens
Small cross-section, nominal 48" long
with clear acrylic lens
Reflector aiming is adjustable

Reflector

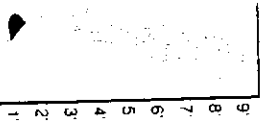
Charts illustrate the center section of a surface lighted
by a continuous row of 5 or more luminaires. Values
based on vertical and horizontal surface reflective
factors of 0.30/0.10

25 5.0 1 2.5 1

Ratio of maximum FC
to average FC (Max/Avg.)

Ratio of maximum FC
to minimum FC (Max/Min.)

Footcandles average initial,
perpendicular to wall (FCAl)



9	9	9	9	9
10	10	10	10	10
11	11	11	11	11
14	14	14	14	14
18	18	18	18	18
26	26	26	26	26
43	42	42	42	42
72	73	73	73	72
126	128	128	128	126

37 15.1 3.5 1

12' from wall

11	11	11	11	11
13	13	13	13	13
15	15	15	15	15
19	19	19	19	19
25	25	25	25	25
34	34	34	34	34
49	49	49	49	49
69	69	69	69	69
94	95	95	95	94

37 16.7 2.6 1

18' from wall

13	13	13	13	13
15	15	15	15	15
18	18	18	18	18
23	23	23	23	23
30	30	30	30	30
39	39	39	39	39
52	52	52	52	52
63	63	63	63	63
77	78	78	77	77

37 15.9 2.1 1

24' from wall

15	15	15	15	15
16	16	16	16	16
21	21	21	21	21
26	27	27	27	26
33	33	33	33	33
41	41	41	41	41
50	50	50	50	50
56	56	56	56	56
65	65	65	65	65

36 14.3 1.8 1

30' from wall

17	17	17	17	17
20	20	20	20	20
24	24	24	24	24
28	29	29	29	28
34	34	34	34	34
41	41	41	41	41
47	47	47	47	47
52	52	52	52	52
54	54	54	54	54

35 13.2 1.5 1

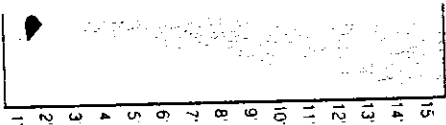
36' from wall

24' from surface

30' from surface

36' from surface

42' from surface



8	8	8	8	8
9	9	9	9	9
9	9	9	9	9
10	10	10	10	10
12	12	12	12	12
14	14	14	14	14
17	17	17	17	17
21	21	21	21	21
27	27	27	27	27
34	34	34	34	34
44	45	45	45	44
60	60	60	60	60
79	79	79	79	79
100	100	100	100	100
123	124	124	124	123

38 15.1 3.3 1

9	9	9	9	9
10	10	10	10	10
11	11	11	11	11
12	12	12	12	12
14	14	14	14	14
17	17	17	17	17
20	20	20	20	20
24	24	24	24	24
30	30	30	30	30
37	37	37	37	37
47	48	48	48	47
60	60	60	60	60
72	72	72	72	72
91	91	91	91	91
101	101	101	101	101

37 11.1 2.7 1

10	10	10	10	10
12	12	12	12	12
12	12	12	12	12
14	14	14	14	14
16	16	16	16	16
19	19	19	19	19
22	23	23	23	22
27	27	27	27	27
33	33	33	33	33
40	40	40	40	40
49	49	49	49	49
59	59	59	59	59
68	68	68	68	68
84	84	84	84	84
84	85	85	84	84

37 8.2 1.2 1

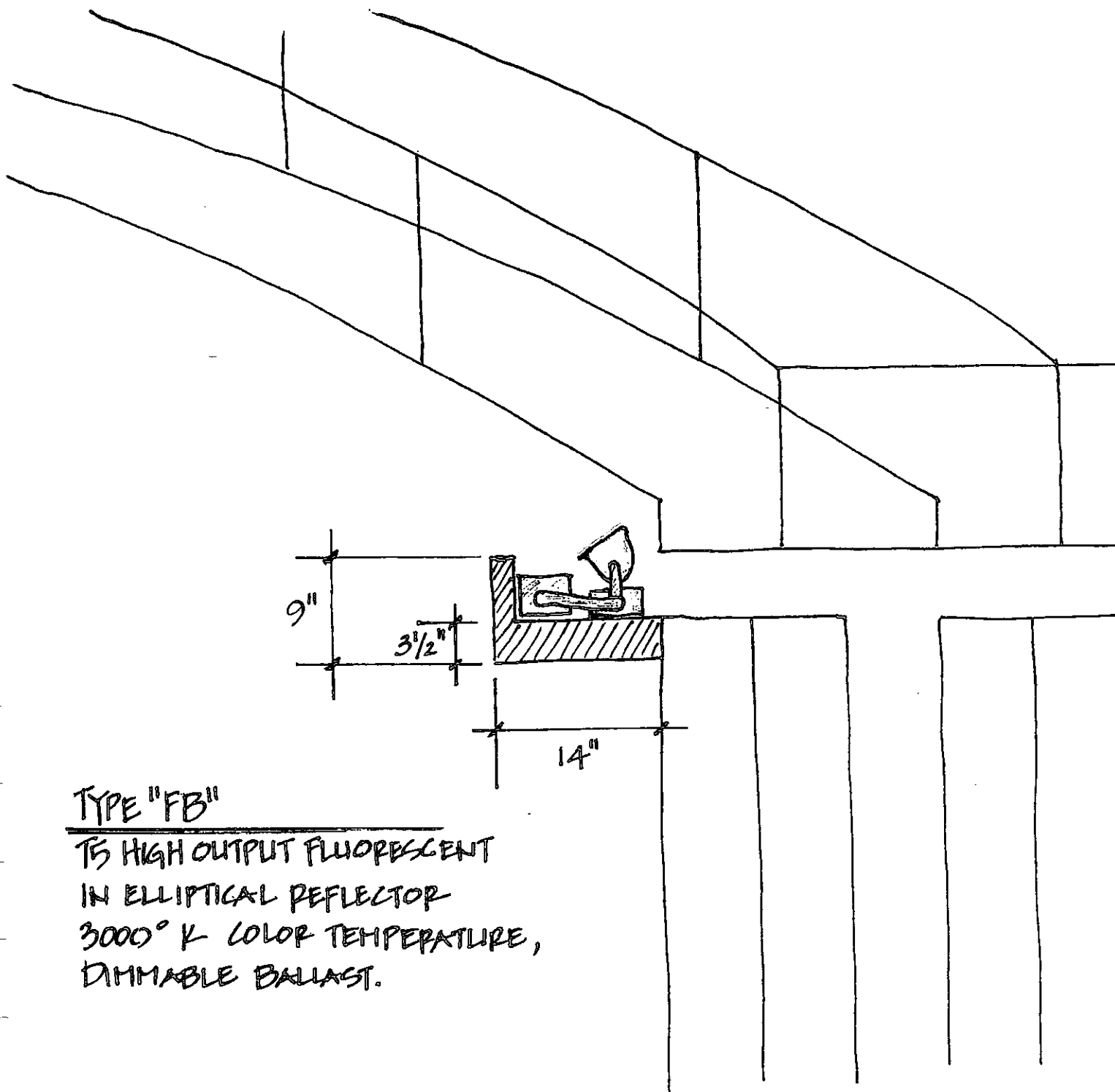
11	11	11	11	11
13	13	13	13	13
14	14	14	14	14
16	16	16	16	16
18	18	18	18	18
21	21	21	21	21
24	25	25	25	24
29	29	29	29	29
35	35	35	35	35
41	42	42	42	41
50	50	50	50	50
56	57	57	57	56
63	63	63	63	63
75	76	76	76	75
73	73	73	73	73

36 6.7 1.1 1

elliptipar

elliptipar
114 Orange Avenue West Haven, Connecticut 06516 U.S.A.
Voice 203/931-4455 • Fax 203/931-4464

The external shapes of the 30, 40, 60, 80, 100, 120, 150, 180, 240, 300, 360, 420, 480, 540, 600, 660, 720, 780, 840, 900, 960, 1020, 1080, 1140, 1200, 1260, 1320, 1380, 1440, 1500, 1560, 1620, 1680, 1740, 1800, 1860, 1920, 1980, 2040, 2100, 2160, 2220, 2280, 2340, 2400, 2460, 2520, 2580, 2640, 2700, 2760, 2820, 2880, 2940, 3000, 3060, 3120, 3180, 3240, 3300, 3360, 3420, 3480, 3540, 3600, 3660, 3720, 3780, 3840, 3900, 3960, 4020, 4080, 4140, 4200, 4260, 4320, 4380, 4440, 4500, 4560, 4620, 4680, 4740, 4800, 4860, 4920, 4980, 5040, 5100, 5160, 5220, 5280, 5340, 5400, 5460, 5520, 5580, 5640, 5700, 5760, 5820, 5880, 5940, 6000, 6060, 6120, 6180, 6240, 6300, 6360, 6420, 6480, 6540, 6600, 6660, 6720, 6780, 6840, 6900, 6960, 7020, 7080, 7140, 7200, 7260, 7320, 7380, 7440, 7500, 7560, 7620, 7680, 7740, 7800, 7860, 7920, 7980, 8040, 8100, 8160, 8220, 8280, 8340, 8400, 8460, 8520, 8580, 8640, 8700, 8760, 8820, 8880, 8940, 9000, 9060, 9120, 9180, 9240, 9300, 9360, 9420, 9480, 9540, 9600, 9660, 9720, 9780, 9840, 9900, 9960, 10020, 10080, 10140, 10200, 10260, 10320, 10380, 10440, 10500, 10560, 10620, 10680, 10740, 10800, 10860, 10920, 10980, 11040, 11100, 11160, 11220, 11280, 11340, 11400, 11460, 11520, 11580, 11640, 11700, 11760, 11820, 11880, 11940, 12000, 12060, 12120, 12180, 12240, 12300, 12360, 12420, 12480, 12540, 12600, 12660, 12720, 12780, 12840, 12900, 12960, 13020, 13080, 13140, 13200, 13260, 13320, 13380, 13440, 13500, 13560, 13620, 13680, 13740, 13800, 13860, 13920, 13980, 14040, 14100, 14160, 14220, 14280, 14340, 14400, 14460, 14520, 14580, 14640, 14700, 14760, 14820, 14880, 14940, 15000, 15060, 15120, 15180, 15240, 15300, 15360, 15420, 15480, 15540, 15600, 15660, 15720, 15780, 15840, 15900, 15960, 16020, 16080, 16140, 16200, 16260, 16320, 16380, 16440, 16500, 16560, 16620, 16680, 16740, 16800, 16860, 16920, 16980, 17040, 17100, 17160, 17220, 17280, 17340, 17400, 17460, 17520, 17580, 17640, 17700, 17760, 17820, 17880, 17940, 18000, 18060, 18120, 18180, 18240, 18300, 18360, 18420, 18480, 18540, 18600, 18660, 18720, 18780, 18840, 18900, 18960, 19020, 19080, 19140, 19200, 19260, 19320, 19380, 19440, 19500, 19560, 19620, 19680, 19740, 19800, 19860, 19920, 19980, 20040, 20100, 20160, 20220, 20280, 20340, 20400, 20460, 20520, 20580, 20640, 20700, 20760, 20820, 20880, 20940, 21000, 21060, 21120, 21180, 21240, 21300, 21360, 21420, 21480, 21540, 21600, 21660, 21720, 21780, 21840, 21900, 21960, 22020, 22080, 22140, 22200, 22260, 22320, 22380, 22440, 22500, 22560, 22620, 22680, 22740, 22800, 22860, 22920, 22980, 23040, 23100, 23160, 23220, 23280, 23340, 23400, 23460, 23520, 23580, 23640, 23700, 23760, 23820, 23880, 23940, 24000, 24060, 24120, 24180, 24240, 24300, 24360, 24420, 24480, 24540, 24600, 24660, 24720, 24780, 24840, 24900, 24960, 25020, 25080, 25140, 25200, 25260, 25320, 25380, 25440, 25500, 25560, 25620, 25680, 25740, 25800, 25860, 25920, 25980, 26040, 26100, 26160, 26220, 26280, 26340, 26400, 26460, 26520, 26580, 26640, 26700, 26760, 26820, 26880, 26940, 27000, 27060, 27120, 27180, 27240, 27300, 27360, 27420, 27480, 27540, 27600, 27660, 27720, 27780, 27840, 27900, 27960, 28020, 28080, 28140, 28200, 28260, 28320, 28380, 28440, 28500, 28560, 28620, 28680, 28740, 28800, 28860, 28920, 28980, 29040, 29100, 29160, 29220, 29280, 29340, 29400, 29460, 29520, 29580, 29640, 29700, 29760, 29820, 29880, 29940, 30000, 30060, 30120, 30180, 30240, 30300, 30360, 30420, 30480, 30540, 30600, 30660, 30720, 30780, 30840, 30900, 30960, 31020, 31080, 31140, 31200, 31260, 31320, 31380, 31440, 31500, 31560, 31620, 31680, 31740, 31800, 31860, 31920, 31980, 32040, 32100, 32160, 32220, 32280, 32340, 32400, 32460, 32520, 32580, 32640, 32700, 32760, 32820, 32880, 32940, 33000, 33060, 33120, 33180, 33240, 33300, 33360, 33420, 33480, 33540, 33600, 33660, 33720, 33780, 33840, 33900, 33960, 34020, 34080, 34140, 34200, 34260, 34320, 34380, 34440, 34500, 34560, 34620, 34680, 34740, 34800, 34860, 34920, 34980, 35040, 35100, 35160, 35220, 35280, 35340, 35400, 35460, 35520, 35580, 35640, 35700, 35760, 35820, 35880, 35940, 36000, 36060, 36120, 36180, 36240, 36300, 36360, 36420, 36480, 36540, 36600, 36660, 36720, 36780, 36840, 36900, 36960, 37020, 37080, 37140, 37200, 37260, 37320, 37380, 37440, 37500, 37560, 37620, 37680, 37740, 37800, 37860, 37920, 37980, 38040, 38100, 38160, 38220, 38280, 38340, 38400, 38460, 38520, 38580, 38640, 38700, 38760, 38820, 38880, 38940, 39000, 39060, 39120, 39180, 39240, 39300, 39360, 39420, 39480, 39540, 39600, 39660, 39720, 39780, 39840, 39900, 39960, 40020, 40080, 40140, 40200, 40260, 40320, 40380, 40440, 40500, 40560, 40620, 40680, 40740, 40800, 40860, 40920, 40980, 41040, 41100, 41160, 41220, 41280, 41340, 41400, 41460, 41520, 41580, 41640, 41700, 41760, 41820, 41880, 41940, 42000, 42060, 42120, 42180, 42240, 42300, 42360, 42420, 42480, 42540, 42600, 42660, 42720, 42780, 42840, 42900, 42960, 43020, 43080, 43140, 43200, 43260, 43320, 43380, 43440, 43500, 43560, 43620, 43680, 43740, 43800, 43860, 43920, 43980, 44040, 44100, 44160, 44220, 44280, 44340, 44400, 44460, 44520, 44580, 44640, 44700, 44760, 44820, 44880, 44940, 45000, 45060, 45120, 45180, 45240, 45300, 45360, 45420, 45480, 45540, 45600, 45660, 45720, 45780, 45840, 45900, 45960, 46020, 46080, 46140, 46200, 46260, 46320, 46380, 46440, 46500, 46560, 46620, 46680, 46740, 46800, 46860, 46920, 46980, 47040, 47100, 47160, 47220, 47280, 47340, 47400, 47460, 47520, 47580, 47640, 47700, 47760, 47820, 47880, 47940, 48000, 48060, 48120, 48180, 48240, 48300, 48360, 48420, 48480, 48540, 48600, 48660, 48720, 48780, 48840, 48900, 48960, 49020, 49080, 49140, 49200, 49260, 49320, 49380, 49440, 49500, 49560, 49620, 49680, 49740, 49800, 49860, 49920, 49980, 50040, 50100, 50160, 50220, 50280, 50340, 50400, 50460, 50520, 50580, 50640, 50700, 50760, 50820, 50880, 50940, 51000, 51060, 51120, 51180, 51240, 51300, 51360, 51420, 51



TYPE "FB"

TS HIGH OUTPUT FLUORESCENT
IN ELLIPTICAL REFLECTOR
3000° K COLOR TEMPERATURE,
DIMMABLE BALLAST.

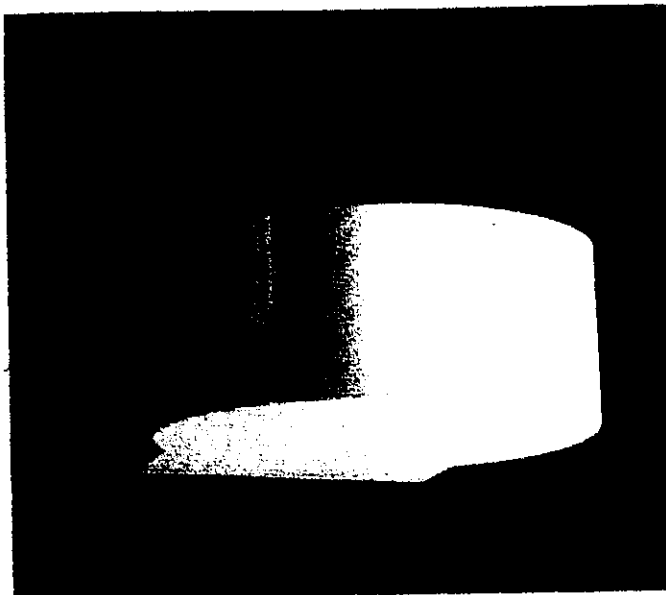
LIGHT KEEPERS

LSK 12.6

39 PATTON AVENUE
ASHEVILLE, NC 28801
PH: 828-232-1885
FAX 828-232-1859
REBECCA@LIGHT-KEEPERS.COM

TITLE LIGHTING COVE @ENTRY CANOPY DATE: 12 DEC 02
PROJECT: THE PROMENADE
SCALE: 1" = 1'-0"

SFG



The SFG is an indirect HID wall mount fixture that provides economical lighting for natatoriums, gymnasiums, clean manufacturing facilities and other large spaces with high ceilings. SFG fixtures may also be coupled and hung as a pendant. UL Listed for US and Canada, damp location.

Housing Construction: Housings are constructed of 18 gauge cold-rolled steel, formed into a one-piece, round unit, with no exposed screws or weld marks, "furniture grade" quality in appearance.

Reflector: The SFG houses a segmented, symmetrical indirect reflector fabricated from prefinished, 83% reflective specular aluminum sheet, riveted to a rigid steel frame and enclosed with a tempered glass lens. The reflector is designed to accommodate high output, horizontal burn, position oriented phosphor coated metal halide lamps.

Performance: The SFG is 75.8% efficient with wide distribution suitable for applications with minimum distance between ceiling and fixture.

Mounting: Standard fixture supplied with backplate for attachment over a 4 octagonal box. Auxiliary mounting required.

Ballast: integrally mounted CWA-HPF design for 120 volt operation (208, 240 & 277 volt optional) has pre-wired Mate-N-Lock plugs for quick connect or disconnect. The power tray is mounted on silicone cushions for quiet operation.

Standard Finish: All metal surfaces are thoroughly cleaned and treated prior to being coated with a 2 mil thickness of satin white thermoset polyester paint. For additional painted finishes consult the "Powder Coat Color Finishes" catalog page.

Accessories: **SAX 23:** Asymmetric kit to reduce wall brightness when it is necessary to place a fixture with a symmetrical optical system close to a wall or high panel surface.

SAK 66: Includes coupler, 1/2" IPS 66" long white painted stem and 45° swivel canopy with auxiliary mounting holes to make a dual cluster pendant.

WG: Wire guard.

F: Factory installed fuse option mounted to ballast assembly.

Q: (H.I.D. only) 100 W quartz lamp and switch relay. Provides temporary lighting, when power is on, until H.I.D. lamp reaches 30% of light output.

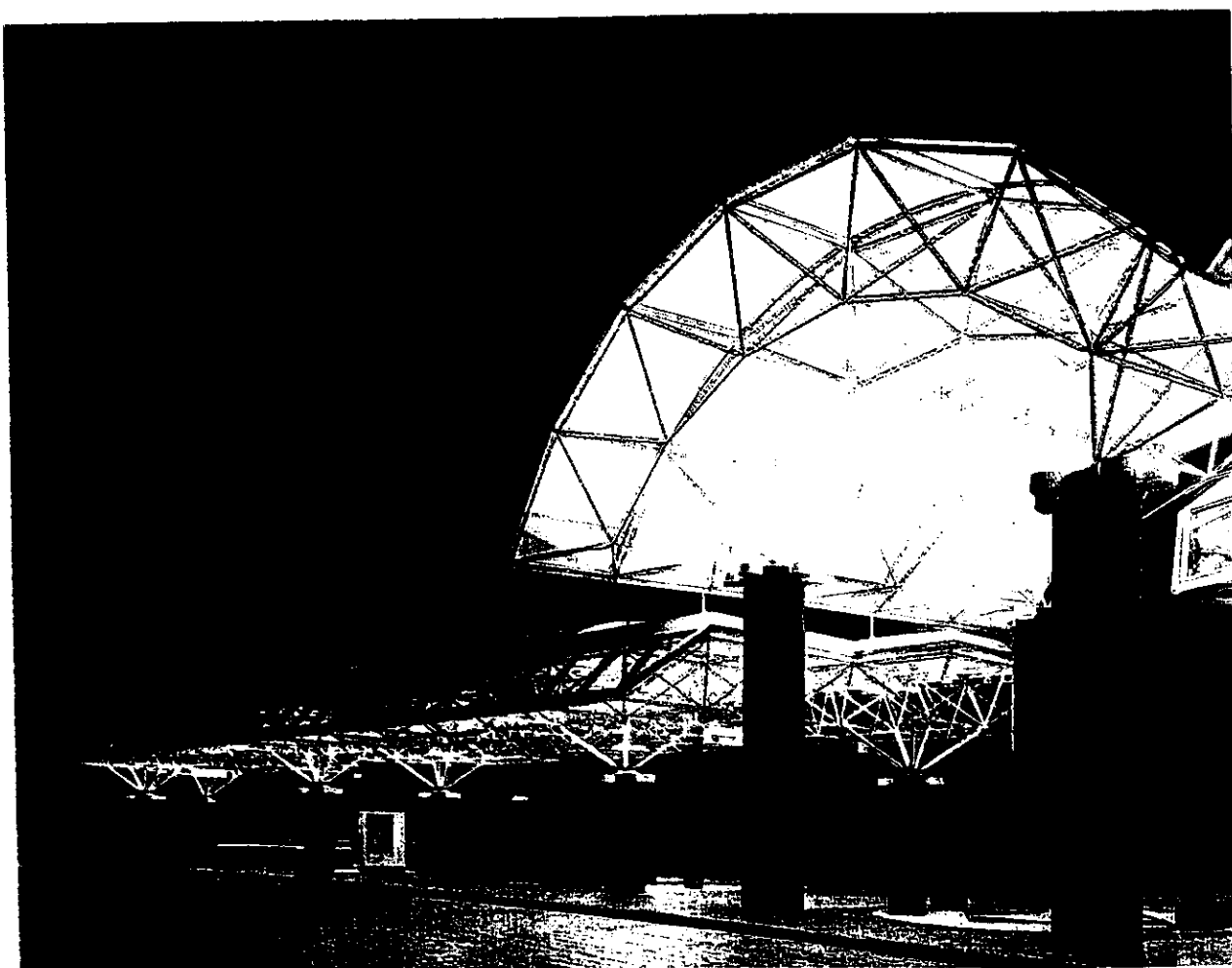


✓ In large spaces, SPI Lighting delivers a uniform light pattern without distracting and dangerous deep shadows.

When public access areas have SPI indirect lighting, they are interiors that the public will use. Again. And again.

12

13



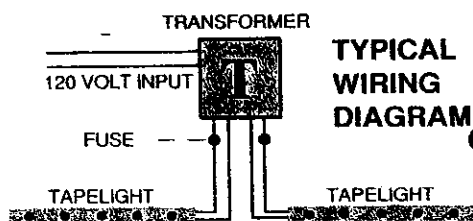
Transformers

GENERAL PURPOSE C-1 SERIES TRANSFORMERS

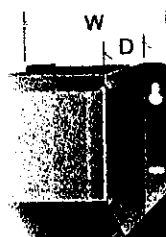
Tokistar's C-1 Series Transformers are UL Listed, and come in a wide range of sizes from 100 to 1,000 watts. These transformers are enclosed within a Rainproof Type 3R Enclosure. Primary can be wired for 120V or 240V/60 Hz, and secondary output can be 12V or 24V. Fuse holders and fuses are provided with transformer.

To select the proper size transformer, calculate the total number of lamps used in the system and select the transformer capacity from the chart below.

MAXIMUM LAMPS PER TRANSFORMER							
PART#	TB-101(a)	TB-105(a)	TB-106(a)	TB-201a	TB-102	BB-101	TB-401F
C1-100	100	50	32	140	250	125	60
C1-150	150	75	50	200	375	185	90
C1-250	250	125	82	350	625	310	150
C1-500	500	250	165	700	1,250	625	300
C1-750	750	375	250	1,040	1,875	935	450
C1-1000	1,000	500	330	1,350	2,500	1,250	600



NOTE:
MORE THAN ONE TAPELIGHT MAY BE FED TO AN INDIVIDUAL TRANSFORMER, AS LONG AS THE COMBINED LOAD OF THE TAPELIGHTS DOES NOT EXCEED THE TRANSFORMER'S CAPACITY.



APPROXIMATE SIZES & WEIGHTS				
PART#	D	H	W	WEIGHT
C1-100	3.5"	6.5"	5.5"	6 LBS
C1-150	4.5"	7.5"	6.5"	10 LBS
C1-250	4.5"	7.5"	6.5"	10 LBS
C1-500	5.0"	8.5"	7.0"	16 LBS
C1-750	5.5"	9.5"	8.0"	25 LBS
C1-1000	5.5"	9.5"	8.0"	25 LBS

CLASS 2 TRANSFORMERS

In some areas, local codes may require our products be operated from Class 2 transformers only. Primary input is 120 VAC/60 Hz. Secondary circuits are limited to 4 Amps (96 watts) @ 24 Volts, and 5 Amps (60 watts) @ 12 Volts. Smaller single output transformers and larger multiple output transformers are available. On multiple output transformers, consideration must be given to the loads of each independent output.



Tokistar Tapelighting is ETL Listed when operated from our CLASS 2 Transformers.

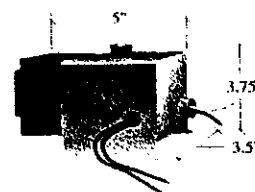
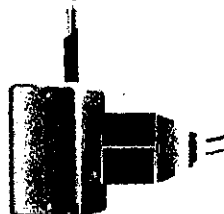


C2-50 (24 VOLTS)

The C2-50 transformer is a 50 Watt Class 2 transformer with a single 24 Volt output.

C2-60/12 (12 VOLTS)

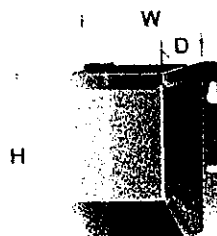
The C2-60/12 transformer is a 60 Watt Class 2 transformer with a single 12 Volt output.



MULTI-OUTPUT CLASS 2 TRANSFORMERS

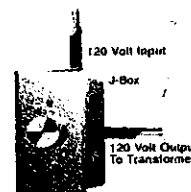
Larger capacity Class 2 transformers are available with multiple secondary outputs. Each output is limited to 96 watts @ 24 Volts, or 60 watts @ 12 Volts. We suggest loading outputs of these transformers to no more than 90% of their rating.

PART#	OUTPUTS	D	H	W	WEIGHT
C2-96-24V	1 @ 96 WATT/24V	5.0"	7.0"	5.0"	10 LBS
C2-192-24V	2 @ 96 WATT/24V	5.0"	7.0"	5.0"	16 LBS
C2-288-24V	3 @ 96 WATT/24V	5.0"	7.0"	6.0"	16 LBS
C2-480-24V	5 @ 96 WATT/24V	5.5"	8.0"	7.0"	20 LBS
C2-120-12V	2 @ 60 WATT/12V	5.0"	7.0"	5.0"	12 LBS
C2-180-12V	3 @ 60 WATT/12V	5.0"	7.0"	5.0"	16 LBS
C2-240-12V	4 @ 60 WATT/12V	5.0"	7.0"	5.0"	16 LBS
C2-300-12V	5 @ 60 WATT/12V	5.0"	7.0"	6.0"	16 LBS



DIMMERS

TOKISTAR's LVD Series Dimmers are UL Listed and wired on the 120 Volt Input to the transformer.



PART#	CAPACITY
LVD-600	UP TO 600 WATTS
LVD-1000	UP TO 1,000 WATTS

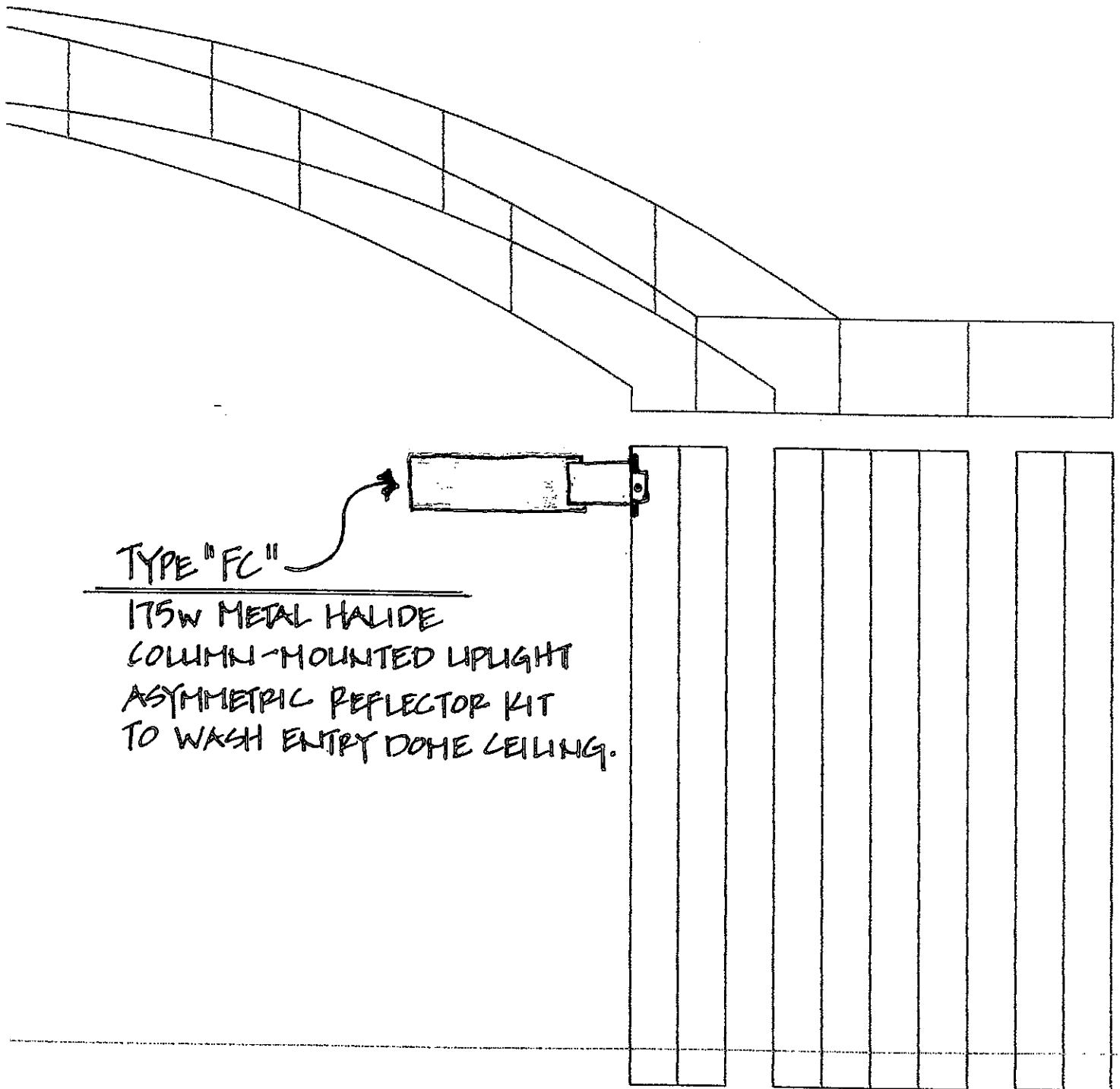


TOKISTAR LIGHTING™ INC.

1561 N. Gemini Place
Anaheim, California 92801

Tel: 714-772-7005 • Fax: 714-772-7014 • Toll Free: 877-340-7633

email: info@tokistar.com Internet: www.tokistar.com



TYPE "FC"

175W METAL HALIDE
COLUMN-MOUNTED UPLIGHT
ASYMMETRIC REFLECTOR KIT
TO WASH ENTRY DOME CEILING.

LIGHT KEEPERS

LSK 12.5

39 PATTON AVENUE
ASHEVILLE, NC 28801
PH: 828-232-1885
FAX: 828-232-1859
REBECCA@LIGHT-KEEPERS.COM

TITLE: UPLIGHTS @ENTRY CANOPY

DATE: 12 DEC 02

PROJECT: THE PROMENADE

SCALE: 1/2"=1'-0"

LS Series Tapelight

How To Specify

Specify LS Tapelight by
Color - Spacing - Lamp Type

LSC - 150 - 101a

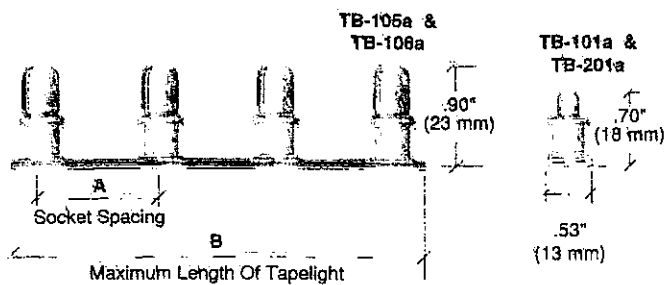
COLOR	MODEL	SPACING	LAMP	WATTS/VOLTS
C CLEAR	30*	1.2" (30mm)	101a	0.9/24
B DARK BROWN	50*	2.0" (50mm)	105a	1.8/24
W IVORY-WHITE	80*	3.1" (80mm)	106a	2.8/24
	100	4.0" (100mm)	201a	0.66/12
	150	6.0" (150mm)		
	300	12.0" (300mm)		

*Available Only In Ivory-White

Product Sizes And Maximum Lengths

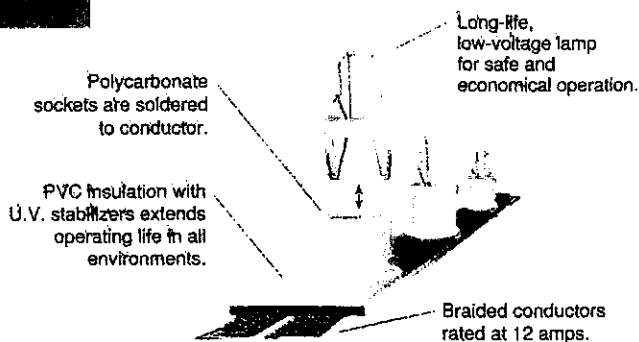
To minimize voltage drop and keep conductors safely within their rating, do not exceed the maximum lengths shown for each independent length of tapelight.

LS SERIES MAXIMUM LENGTH				
A SPACING	B LAMP STYLES			
	101a	105a	106a	201a
LS-30/1.2"	30'	15'	10'	16'
LS-50/2.0"	40'	26'	16'	24'
LS-80/3.1"	50'	34'	28'	28'
LS-100/4.0"	56'	40'	30'	33'
LS-150/6.0"	72'	48'	39'	40'
LS-300/12.0"	100'	72'	55'	56'



Specifications

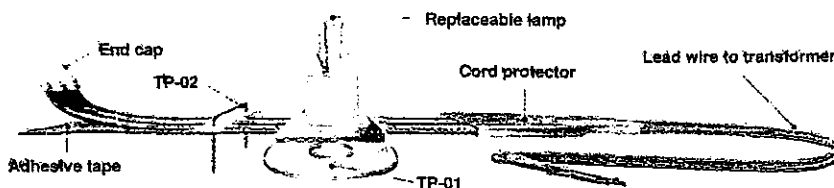
LAMP DATA				
PART#	TB-101a	TB-105a	TB-106a	TB-201a
WATTS	0.9	1.8	2.8	0.66
VOLTS	24	24	24	12
LUMENS	1.8	3.8	12	1.3
*KELVIN	2,000	2,000	2,200	2,000
LIFE (Hrs.)	15,000	10,000	5,000	20,000



Assembly

PART#	DESCRIPTION
WF-LS	Adhesive Tape/100' Roll
WFL-20	Adhesive Tape/20' Roll
TP-01	Clear Plastic Bracket
TP-02	Easy-Fit Staple

END CAPS		CORD PROTECTORS	
PART#	USE	PART#	USE
ECD-CL	LSC	ECL-CL	LSC
ECD-BK	LSB	ECL-BK	LSB
ECD-WH	LSW	ECL-WH	LSW



Transformers

GENERAL PURPOSE

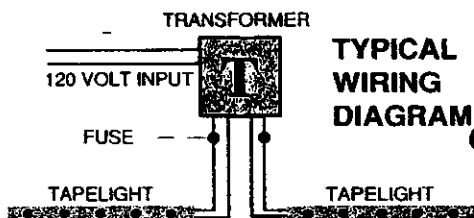
C-1 SERIES TRANSFORMERS

Tokistar's C-1 Series Transformers are UL Listed, and come in a wide range of sizes from 100 to 1,000 watts. These transformers are enclosed within a Rainproof Type 3R Enclosure. Primary can be wired for 120V or 240V/60 Hz, and secondary output can be 12V or 24V. Fuse holders and fuses are provided with transformer.

To select the proper size transformer, calculate the total number of lamps used in the system and select the transformer capacity from the chart below.

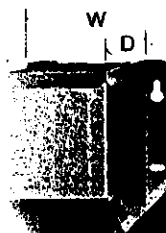
MAXIMUM LAMPS PER TRANSFORMER

PART#	TB-101(a)	TB-105(a)	TB-106(a)	TB-201a	TB-102	BB-101	TB-401F
C1-100	100	50	32	140	250	125	60
C1-150	150	75	50	200	375	185	90
C1-250	250	125	82	350	625	310	150
C1-500	500	250	165	700	1,250	625	300
C1-750	750	375	250	1,040	1,875	935	450
C1-1000	1,000	500	330	1,350	2,500	1,250	600



NOTE:
MORE THAN ONE TAPELIGHT MAY BE FED TO AN INDIVIDUAL TRANSFORMER, AS LONG AS THE COMBINED LOAD OF THE TAPELIGHTS DOES NOT EXCEED THE TRANSFORMER'S CAPACITY.

TYPICAL WIRING DIAGRAM



APPROXIMATE SIZES & WEIGHTS

PART#	D	H	W	WEIGHT
C1-100	3.5"	6.5"	5.5"	6 LBS
C1-150	4.5"	7.5"	6.5"	10 LBS
C1-250	4.5"	7.5"	6.5"	10 LBS
C1-500	5.0"	8.5"	7.0"	16 LBS
C1-750	5.5"	9.5"	8.0"	25 LBS
C1-1000	5.5"	9.5"	8.0"	25 LBS

CLASS 2 TRANSFORMERS

In some areas, local codes may require our products be operated from Class 2 transformers only. Primary input is 120 VAC/60 Hz. Secondary circuits are limited to 4 Amps (96 watts) @ 24 Volts, and 5 Amps (60 watts) @ 12 Volts. Smaller single output transformers and larger multiple output transformers are available. On multiple output transformers, consideration must be given to the loads of each independent output.



Tokistar Tapelighting is ETL Listed when operated from our CLASS 2 Transformers.

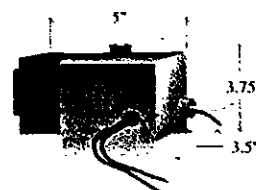
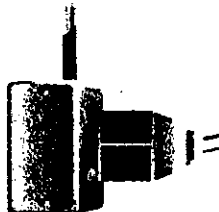


C2-50 (24 VOLTS)

The C2-50 transformer is a 50 Watt Class 2 transformer with a single 24 Volt output.

C2-60/12 (12 VOLTS)

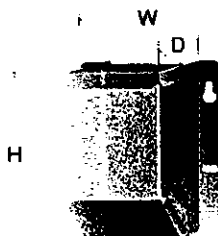
The C2-60/12 transformer is a 60 Watt Class 2 transformer with a single 12 Volt output.



MULTI-OUTPUT CLASS 2 TRANSFORMERS

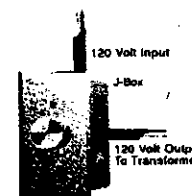
Larger capacity Class 2 transformers are available with multiple secondary outputs. Each output is limited to 96 watts @ 24 Volts, or 60 watts @ 12 Volts. We suggest loading outputs of these transformers to no more than 90% of their rating.

PART#	OUTPUTS	D	H	W	WEIGHT
C2-96-24V	1 @ 96 WATT/24V	5.0"	7.0"	5.0"	10 LBS
C2-192-24V	2 @ 96 WATT/24V	5.0"	7.0"	5.0"	16 LBS
C2-288-24V	3 @ 96 WATT/24V	5.0"	7.0"	6.0"	16 LBS
C2-480-24V	5 @ 96 WATT/24V	5.5"	8.0"	7.0"	20 LBS
C2-120-12V	2 @ 60 WATT/12V	5.0"	7.0"	5.0"	12 LBS
C2-180-12V	3 @ 60 WATT/12V	5.0"	7.0"	5.0"	16 LBS
C2-240-12V	4 @ 60 WATT/12V	5.0"	7.0"	5.0"	16 LBS
C2-300-12V	5 @ 60 WATT/12V	5.0"	7.0"	6.0"	16 LBS



DIMMERS

TOKISTAR's LVD Series Dimmers are UL Listed and wired on the 120 Volt Input to the transformer.

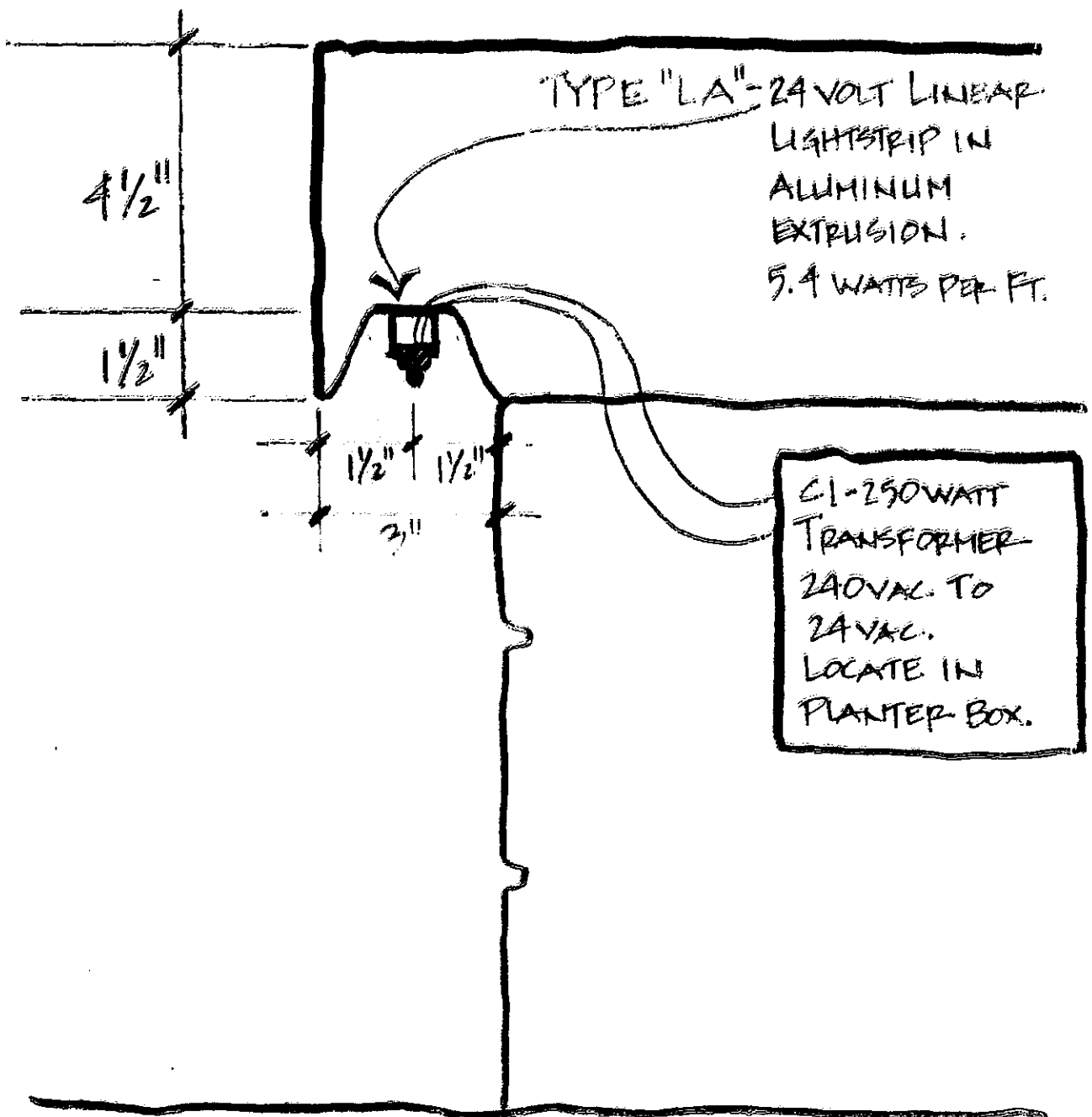


PART#	CAPACITY
LVD-600	UP TO 600 WATTS
LVD-1000	UP TO 1,000 WATTS



TOKISTAR LIGHTING™ INC.

1561 N. Gemini Place
Anaheim, California 92801
Tel: 714-772-7005 • Fax: 714-772-7014 • Toll Free: 877-340-7633
email: info@tokistar.com Internet: www.tokistar.com



LIGHT KEEPERS

LSK 12.1

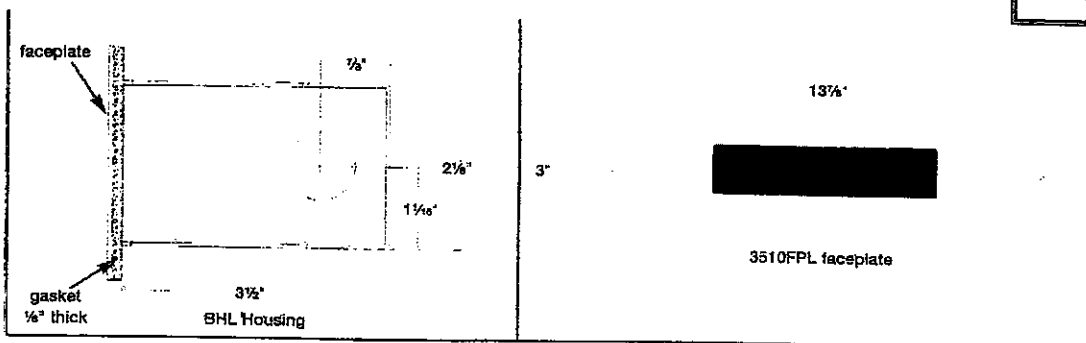
39 PATTON AVENUE
ASHEVILLE, NC 28801
PH: 828-232-1885
FAX: 828-232-1859
REBECCA@LIGHTKEEPERS.COM

TITLE: PLANTER LIGHTING SECTION

DATE: 12 DEC 02

PROJECT: THE PROMENADE

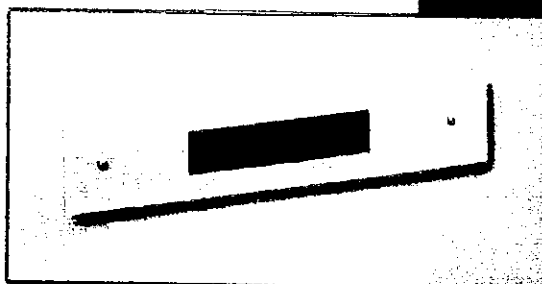
SCALE: 3/8" = 1"

SB

3510L Series

STEP & CORRIDOR LIGHT WITH PHOTOOSMATIC™ LENS
9 WATT, 13 WATT, 18 WATT QUAD & 26 WATT QUAD

- Housing Cutout (*nominal*):
12 5/8"W x 2 3/8"H x 3 1/2"D
- Compact Fluorescent Lamp Options:
 - 9 Watt (G23)
 - 13 Watt (GX23)
 - 18 Watt Quad (G24q-2)
 - 26 Watt Quad (G24q-3)
- Voltage Options:
 - 120 Volt
 - 277 Volt
- Standard Ballast Options:
 - High Power Factor (*120 volt only*)
 - Normal Power Factor (*120 volt only*)
 - Electronic (*120 volt and 277 volt*)
(*4 pin 18 watt and 26 watt quad lamps only*)
- UL and CUL Listed Damp Location Standard
Wet Location Kit Available # 3510LWL

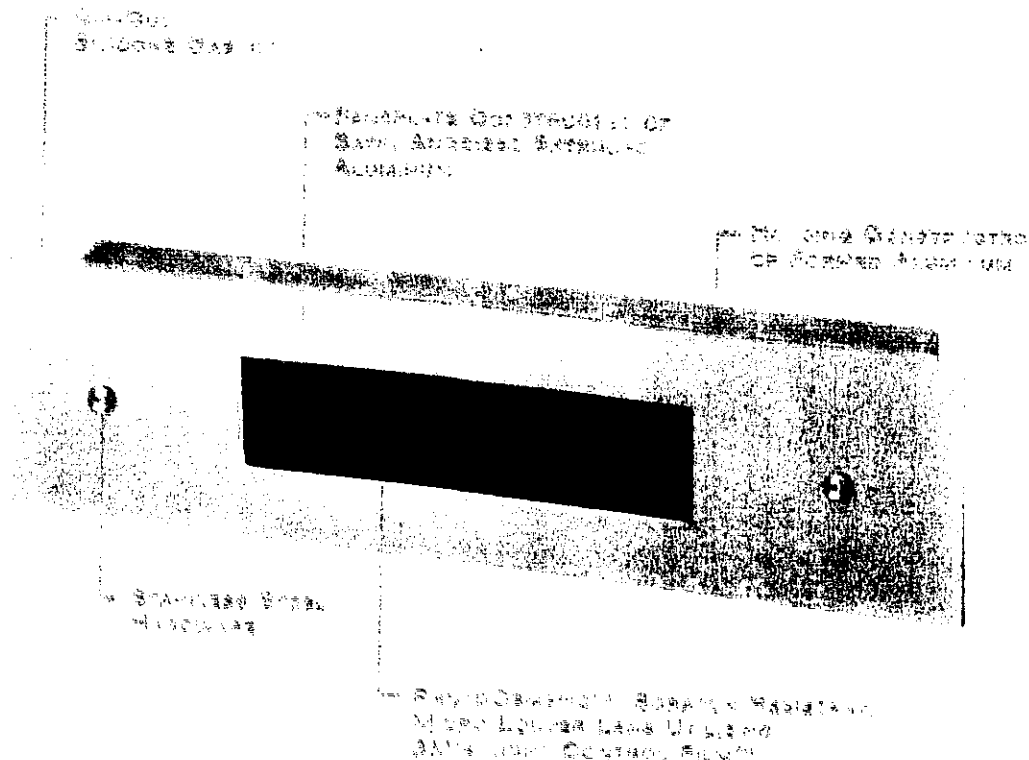


 LISTED
 DAMP LOCATION
 WET LOCATION KIT AVAILABLE

BELFER
 TEL: (732) 493-2666 • FAX: (732) 493-2941 • www.belfer.com

3510

ORIGINALLY DESIGNED FOR PATIENT ROOM LIGHTING, THIS UNOBTRUSIVE, GLARE FREE LUMINAIRE ALLOWS PATIENTS TO SLEEP WHILE MAINTAINING A WELL ILLUMINATED WALKWAY AREA IN HOSPITALS AND HEALTHCARE FACILITIES. NEARLY INVISIBLE AND EASY TO MAINTAIN, THE 3510 HAS FOUND APPLICATIONS IN THEATRES, NIGHTCLUBS, AUDITORIUMS, BANQUET FACILITIES AND CASINOS. ENERGY EFFICIENT COMPACT FLUORESCENT LAMPS PROVIDE LONG LIFE AND HIGH OUTPUT FROM THESE ADA APPROVED FIXTURES. POWERFUL, COMPACT AND FLUSH TO THE WALL, THE 3510 DRAWS ATTENTION TO THE WALKWAY SURFACE AND NOT ITSELF.



- SUITABLE FOR CONCRETE POUR
- CUSTOM FINISHES AVAILABLE, CONSULT FACTORY
- OPTIONAL TAMPER-PROOF HARDWARE KIT
ORDER # 3510TPK
- OPTIONAL GLR FUSE KIT
ORDER # GLR FUSE KIT
- UL AND CUL LISTED DAMP LOCATION
- UL AND CUL LISTED WET LOCATION KIT AVAILABLE
ORDER # 3510LWL OR 3510SWL


TEL: (732) 493-2866 . FAX: (732) 493-2941 . www.belfer.com

3510L Series

Ordering Format

Please specify both faceplate and housing. Choose one from each category

FACEPLATE	HOUSING	LAMP	VOLTAGE	BALLAST
3510FPL faceplate	BHL housing	9 9 watt compact fluorescent (G23)	1 120 volt	N normal power factor
		13 13 watt compact fluorescent (GX23)		H high power factor
		18Q 18 watt quad compact fluorescent (G24q-2)	1 120 volt	E electronic
		26Q 26 watt quad compact fluorescent (G24q-3)	2 277 volt	



 NO VOLTAGE
 LAMP LOCATION
 NOT LOCATION
 OR AVAILABLE

3510E Series

Ordering Format

Please specify both faceplate and housing. Choose one from each category

FACEPLATE	HOUSING	LAMP	VOLTAGE	BALLAST
3510FPS faceplate	BHS housing	5 5 watt compact fluorescent (G23)	1 120 volt	N normal power factor
		7 7 watt compact fluorescent (G23)		H high power factor
		9Q 9 Watt quad compact fluorescent (G23-2)		
		13Q 13 watt quad compact fluorescent (GX23-2)		
		13Q 13 watt quad compact fluorescent (G24q-1)	1 120 volt	E electronic
			2 277 volt	


 NO VOLTAGE
 LAMP LOCATION
 NOT LOCATION
 OR AVAILABLE

Strip Light Lamp Specifications

	LAMP NUMBER	DESCRIPTION	LENGTH (inches)	WATTAGE (watts)
For use with Housing BHL	CF9/35K	9W Twin Tube 3500°K G23 Base Compact Fluorescent	600	10,000
	CF13/35K	13W Twin Tube 3500°K GX23 Base Compact Fluorescent	900	10,000
	CF18Q/35K/4	18W Quad Tube 3500°K G24q-2 Base Compact Fluorescent	1,250	10,000
	CF26Q/35K/4	26W Quad Tube 3500°K G24q-3 Base Compact Fluorescent	1,800	10,000
For use with Housing BHS	CF5/35K	5W Twin Tube 3500°K G23 Base Compact Fluorescent	250	10,000
	CF7/35K	7W Twin Tube 3500°K G23 Base Compact Fluorescent	400	10,000
	CF9Q/35K	9W Quad Tube 3500°K G23-2 Base Compact Fluorescent	550	10,000
	CF13Q/35K/2	13W Quad Tube 3500°K GX23-2 Base Compact Fluorescent	950	10,000
	CF13Q/35K/4	13W Quad Tube 3500°K G24q-1 Base Compact Fluorescent	900	10,000



TYPE "SR"

RECESSED STEPLIGHT
W/32 W COMPACT
FLUORESCENT LAMP,
3000° K COLOR TEMP.
STAINLESS STEEL
REFLECTOR & TRIM.

TYPE "SB"

RECESSED STEPLIGHT
W/18W COMPACT FLUORESCENT
LAMP, 3000° K.
ALUMINUM HOUSING.
CUSTOM FINISH TO MATCH
BRICK.

LIGHT KEEPERS

LSK 12.4

39 PATTON AVENUE
ASHEVILLE, NC 28801
PH: 828-232-1885
FAX: 828-232-1859
REBECCA@LIGHT-KEEPERS.COM

TITLE: STEP LIGHTS @ ARCHES

DATE: 12 DEC 02

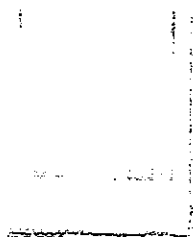
PROJECT: THE PROMENADE

SCALE: NTS

SR

Reflector & Trim Accessory Options

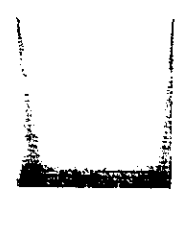
REFLECTOR OPTIONS



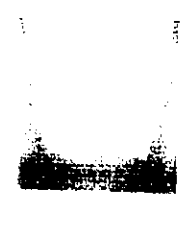
MWR
matte white



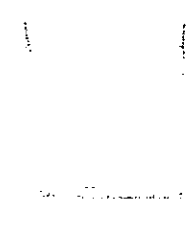
GWR
gloss white



SAR
satin anodized
aluminum



SSR
stainless steel

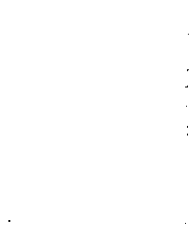


SHR
satin horizontal ribbed

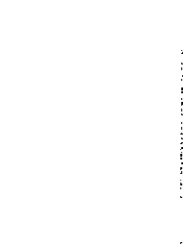
TRIM ACCESSORY OPTIONS



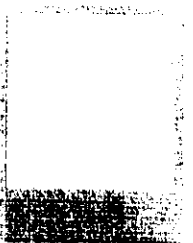
PGS
titanium shown



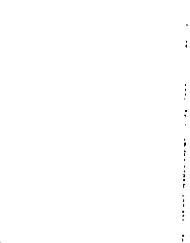
PDS
white shown



FGS
satin shown



DTS
titanium shown



DT1
white shown



DT2
stainless steel shown

Ordering Format for Trim Accessory Options

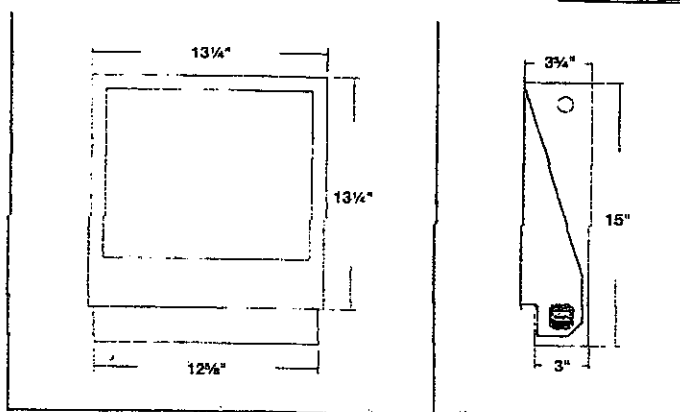
Use one from each category

TRIM	TRIM ACCESSORY	FINISH
1316A 10 1/4" w x 13 1/4" h	FGS 2 1/4" frosted glass	SA satin
1320A 10 1/4" w x 13 1/4" h	PDS Perforated diffuser with frosted glass insert	WH white
1330A 10 1/4" w x 13 1/4" h	PGS Full Solite™ panel with 3 1/4" frost	TT titanium
1341A 13 1/4" w x 13 1/4" h	(1320A, 1341A, 1342A & 1343A only)	
1342A 19 1/4" w x 13 1/4" h	TRIM ACCESSORY	FINISH
1343A 25 1/4" w x 13 1/4" h	DT6 Dimensional trim solid	SA satin
	DT1 Dimensional trim pattern one (vertical) with frosted glass insert	WH white
	DT2 Dimensional trim pattern two (horizontal) with frosted glass insert	TT titanium
		SS stainless steel
TRIM	TRIM ACCESSORY	FINISH
1351A 4" w x 10" h	DT6 Dimensional trim solid	SA satin
1352A 7 1/2" w x 10" h		WH white
1360A 6" w x 8 1/2" h		TT titanium
		SS stainless steel

ORDER LINE 1-800-451-1111

TEL: (732) 493-2666 . FAX: (732) 493-2941 . www.belfer.com

SR



1341 Reflex®

COMPACT FLUORESCENT RECESSED FIXTURE

- Order Housing and Trim Accessory Separately
 - 1341A Trim Accessory - 13 1/4"W x 13 1/4"H
- High Performance Compact Fluorescent Lamp Options:
 - 18 Watt Rapid Start (2G11)
 - 26 Watt Quad (G24q-3)
 - 32 Watt Hex/Triple (GX24q-3)
 - 42 Watt Hex/Triple (GX24q-4)

- Voltage Options:
 - 120 Volt
 - 277 Volt

1341 18W SHR SHOWN WITH
1341A DTS WH TRIM

- Ballast Options:
 - Electronic
 - Dimming*
 - Emergency**

Presently dimming ballasts are available using Lutron® Hi-Lume Compact™ Electronic Dimming Ballasts for 26 & 32 watt lamps only. Other ballasts are available, please consult factory.

*** Factory installed emergency ballasts are available, please consult factory.*

- Full Panel Glass Accessories Available (refer to page 26)

- Standard Reflector Options:

- High Reflectance Matte White
- High Reflectance Gloss White
- Satin Anodized Aluminum
- Stainless Steel
- Satin Horizontal Ribbed

1341 42W MWR SHOWN WITH
1341A PDS SA TRIM

- UL and CUL Listed Damp Location (non IC only)

Ordering Format for 1341 Housing

Choose one from each category

HOUSING	LAMP	VOLTAGE	BALLAST	REFLECTION	TRIM OPTIONS
1341 housing	18 18 watt rapid start	1 120 volt	E electronic	MWR high reflectance matte white	Order 1341A trim
	26 26 watt quad	2 277 volt	D dimming*	GWR high reflectance gloss white	See fold out
	32 32 watt hex/triple		(12 & 22 watt only)	SAR satin anodized aluminum	
	42 42 watt hex/triple			SSR stainless steel	
				SHR satin horizontal ribbed	



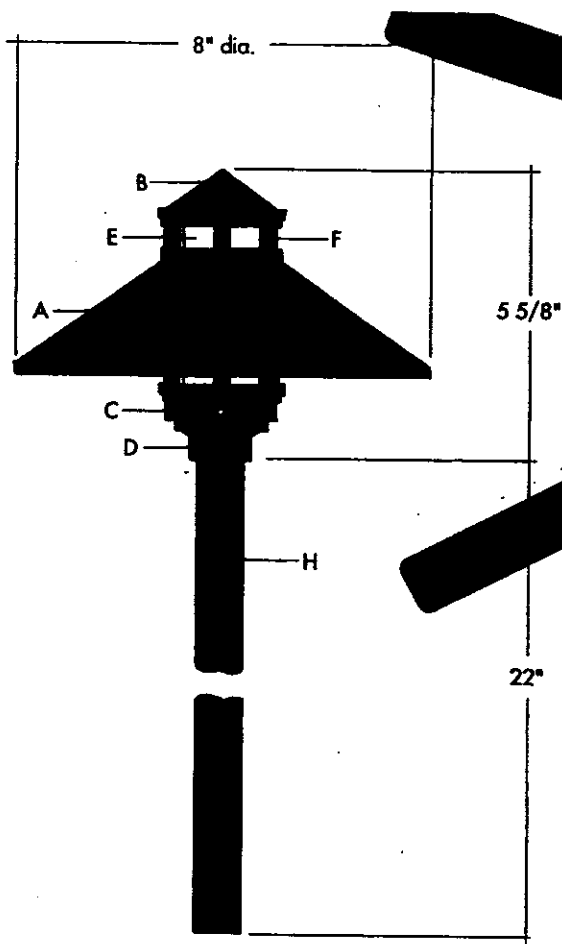
BELFER
TEL: (732) 493-2666 • FAX: (732) 493-2411 • www.belfer.com

TEKA

TEKA MEXICO



XB



PRODUCT #	LAMP	FINISH OPTION
MBP-2310/Natural	35W GY6.35	Brown Patina
MBP-2360/Nickel Plate	35W GY6.35	None

Note... A. Longer stem lengths up to 48" available at additional cost-specify
B. TEKA MBP series luminaries are suitable for use with either Halogen or Xenon type lamps up to 35W maximum
C. A long life "Xelogen" lamp is available at extra cost by ordering the following lamp options:

10W G-4 clear 20,000 hr. lamp, specify	TEKA cat# XE10C-20K
20W G-4 clear 10,000 hr. lamp, specify	TEKA cat# XE20C-10K
35W GY6.35 clear 10,000 hr. lamp, specify	TEKA cat# XE35C-10K

Description...Garden luminaire for G4 or GY6.35, 12V lamps

Materials/Construction...

- A. Heavy gage (.062) solid copper shade
- B. Machined, solid brass cap
- C. Machined, solid brass base
- D. Machined, solid brass stem cap
- E. Etched, tempered boro-silicate glass diffuser
- F. Machined, solid brass spacers
- G. All fasteners are 18-8 stainless steel
- H. Heavy wall, 7/8" O.D. copper tube stem
- I. Completely sealed with hi-temp, silicone "O" rings
- J. Supplied with 36" of #16AWG direct burial rated wire for remote 12V supply (or see other options on page TA-1)

Mounting...

- A. Specify #31 solid brass coupler with threaded nipple for mounting to any 1/2" IP threaded fitting
- B. Specify #20 Transformer Adapter Kit, cast bronze housing containing an electronic 11.6V output transformer for 120V supply (recommended for use with TEKA mounting kit #33)
- C. Specify #30 clamp-on stainless steel blades for direct burial in earth (includes 1 foot longer stem)

U.L. listed, suitable for wet locations

Report Number: ITL50282

Date: 08/07/00

Prepared For: Teka Illumination, Inc.

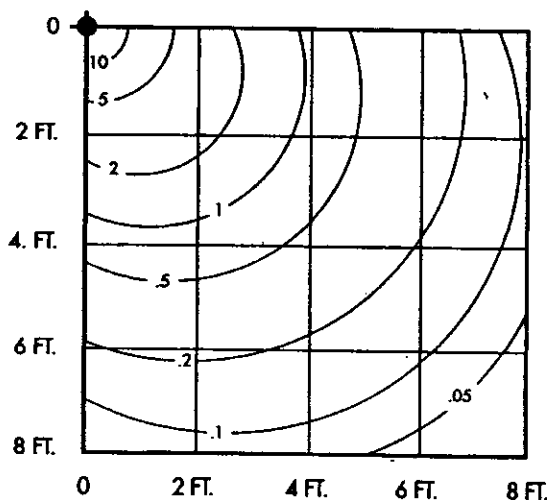
Catalog Number: MBP-2310/MBP

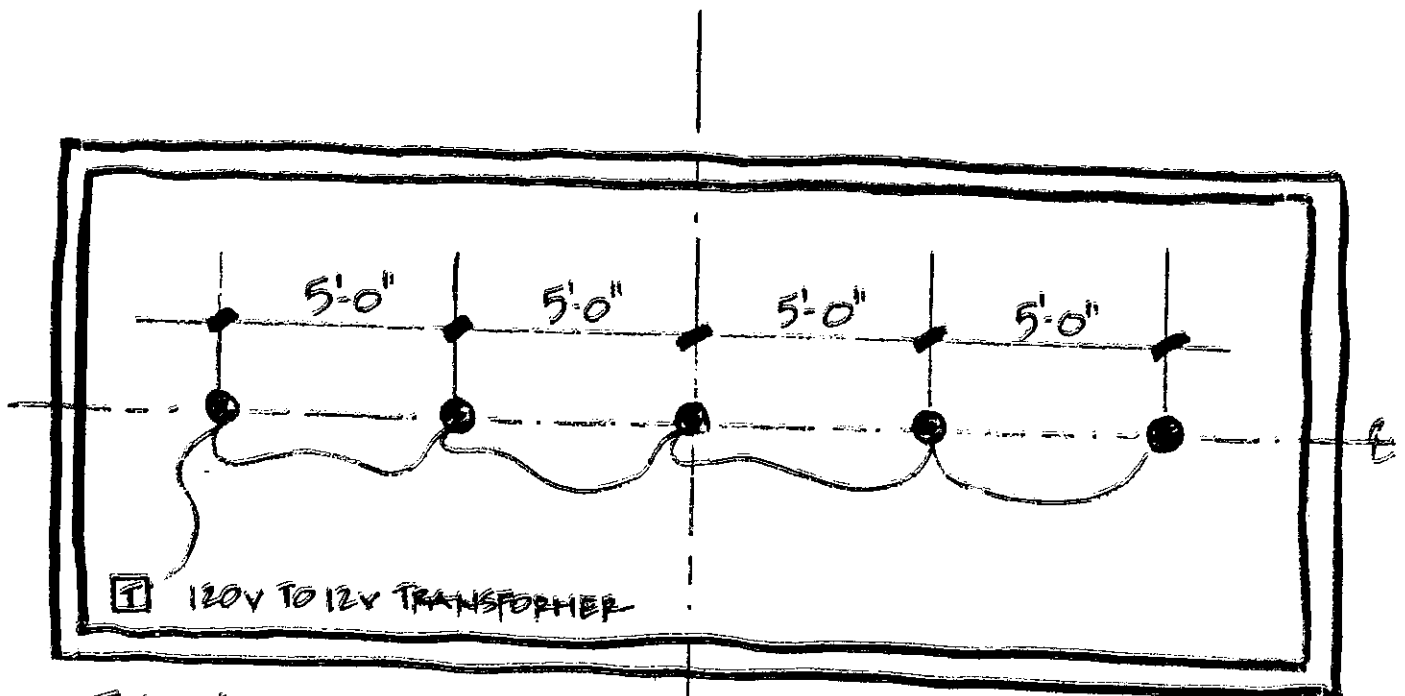
Luminaire: Cylindrical brass base assembly, conical diffuse copper metal reflector and conical brass metal cap, four brass posts and translucent frosted cylindrical glass lens.

Lamp: One 35-watt clear T-3 halogen

Mounting Height: 2 feet

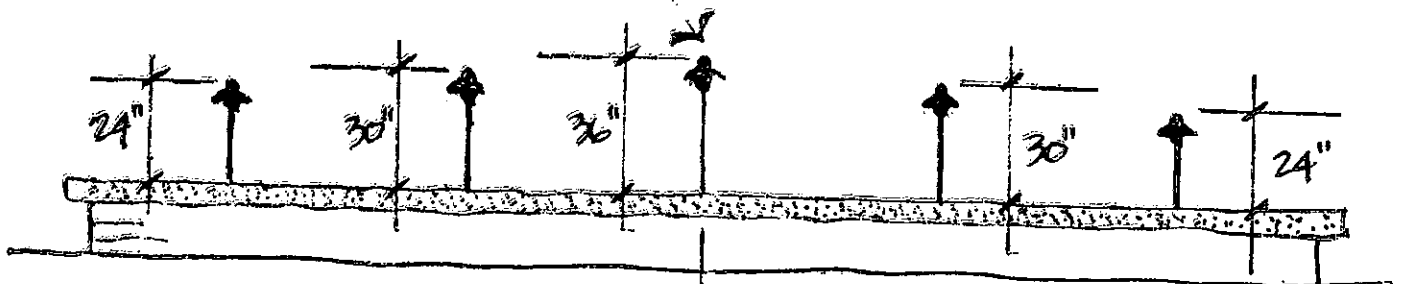
Report based on 550 lumens





TYPE "XB"
10W LOW-VOLTAGE
SOLID BRASS & COPPER
GARDEN LUMINAIRE

PLAN



ELEVATION

LIGHT KEEPERS

39 PATTON AVENUE
ASHEVILLE, NC 28801
PH: 828-232-1885
FAX 828-232-1859
REBECCA@LIGHT-KEEPERS.COM

TITLE ANNUALS PLANTER LIGHTING
PROJECT: THE PROMENADE

LSK 12.3

DATE: 12 DEC 02

SCALE: 1/4" = 1'-0"

XF

SUITABLE FOR WET LOCATIONS • IP67   

TYPE _____

MODEL #: _____

The M9400 Series Modular In-grade lights are multi-purpose units designed for flush mounting in a variety of substrates or materials. The M9400's are used to uplight architectural and landscape features. The units consist of a factory-sealed, thermally protected Lamp Module. An epoxy encapsulated Power Module is placed in a secured Rough-In Section (RIS) which includes channelled convective cooling, an integral junction box, and door assembly. The RIS provides high strength to meet drive over requirements. This unit features Aim-Lock™ to allow maintenance and relamping without reaiming. The M9400 has a small, 230mm (9 in.) footprint with a cylinder/vault configuration.

POWER MODULE: Ballast is encapsulated in a custom-heat dissipating epoxy resin to eliminate all moisture intrusion to the ballast. Provided with submersible rated cord/connector for connection to integral junction box and lamp module. Ballasts are magnetic. **THERMALLY PROTECTED.**

ELECTRICAL ENTRIES/JUNCTION BOX: Two PG 16 or two 3/4" NPT bottom openings, standard. One hole is provided with IP68 cord seal that accepts $\varnothing 10\text{mm}$ to $\varnothing 14\text{ mm}$ cable. Second hole plugged. Box suitable for through branch wiring. Splicing volume 410 cm³ (25 in³).

ACCESSORIES: Internal Glare Control, Internal Honeycomb Louvers, Rock Guards, Trim Rings, Re-entrable Potting Compound, Polycarbonate Covers, External Glare Shield are available.

NOTE: HYDREL RESERVES THE RIGHT TO CHANGE ANY SPECIFICATION WITHOUT NOTICE.

Any dimension on this sheet is to be assumed as a reference dimension
 *Used for information purposes only. It does not govern manufacturing or
 inspection requirements.* (ANSI Y14.5-1973)

DOOR FINISH: Cast aluminum, cast bronze, cast bronze with stainless perforated trim insert or Stainless Steel. Round or square with two stainless steel captive fasteners that lock the Lamp Module into the Rough-In Section.

ROUGH-IN SECTION: Injection molded polymer with integral junction box for branch wiring (410 ccm - 25 in²), U.V. stabilized, impact and corrosion resistant for use in all types of environments. Houses Power Module, Lamp Modules and finishing components. Adjustment ring provides 360° aim rotation with keyed section to receive Lamp Module. Ring locks into position with stainless steel fasteners. RIS has a cylinder/vault configuration.

LAMP MODULE: Stainless steel, sealed and purged of all moisture with silicone gaskets, stainless steel clamp band and single fastener. Electrical connection to Lamp Module is done through submersible connector with gold-plated contacts.

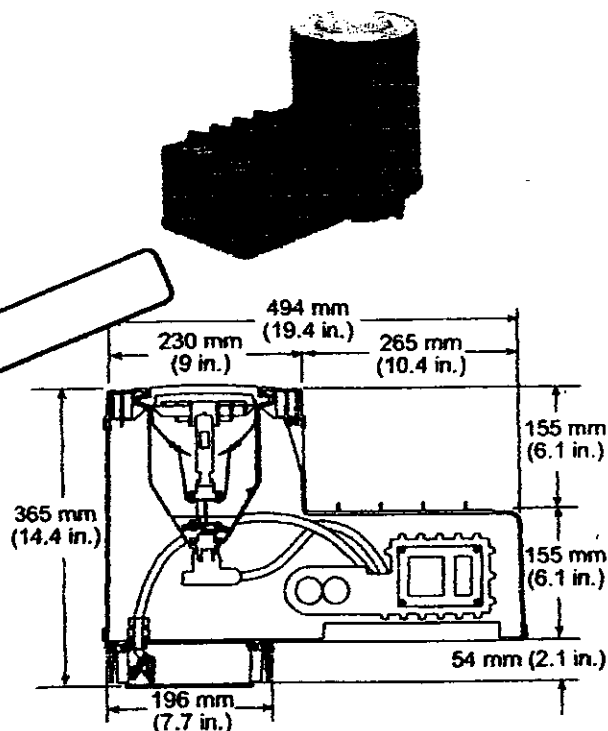
THERMALLY PROTECTED. LAMP INCLUDED

Type	Envelope	Watts
MH	T-6	35 (Color Corrected)
MH	T-6	70 (Color Corrected)
MH	PAR-30L, PAR-20	35 (Color Corrected)
MH	PAR-30L	70 (Color Corrected)

VOLTAGES: See ordering guide.

**NARROW SPOT
MEDIUM FLOOD**

Single Lens: Includes 360° Rotolock Module Support Ring and Door Assembly providing maintenance and relamping without re-aiming. Active lenses bend beam for tilted spot distribution (5°, 10° and 20°). Tilt lenses are available with spot distributions (specify tilt). Simple module rotation provides aiming. Spread lenses are provided for flood distributions. The lenses are clear tempered flat glass.



PATENT PENDING
ULCERAL
RATING: 87

HYDREL is a registered trademark of Lithonia Lighting

12881 BRADLEY AVENUE, SYLMAR, CALIFORNIA 91342 • PHONE: 818/362-9465 • FAX: 818/362-6548

HYDREL STANDARD DATA SHEETS/LTG-94HIDSING 11/2000

XF

HYDREL

SUITABLE FOR WET LOCATIONS • IP67 ◆

FIXTURE OPTIONS

Ordering and Specification Guide

M9410 A 35MT6 120 NSP 34BNPT STR

Model:

M9410 Round Single Lens
M9430 Square Single Lens*

Material:

A Aluminum
B Bronze
ABL Aluminum with black paint
ASP Aluminum with stainless steel
BBP Bronze with brass perf.*
BSP Bronze with stainless steel
SS Stainless steel

* ASP, BBP and BSP not available with M9430 (Square Single Lens Model)

Lamp Type: (Lamp Included)

	US	European
Metal Halide		
35MT6	T-6, G-12 base	T-6, G-12 base
70MT6	T-6, G-12 base	T-6, G-12 base
P2035CM SP	PAR-20, med. base	PAR-20, E27 base
P2035CM FL	PAR-20, med. base	PAR-20, E27 base
P3035CM SP	PAR-30, med. base	PAR-30, E27 base
P3035CM FL	PAR-30, med. base	PAR-30, E27 base
P3070CM SP	PAR-30, med. base	PAR-30, E27 base
P3070CM FL	PAR-30, med. base	PAR-30, E27 base

Note: All Standard Lamps included in fixtures are "color-corrected" lamps.

Voltage:

60HZ	50HZ
120	22050HZ
208	23050HZ
220	24050HZ
240	
277	
347	

Not all Voltage/Lamp combinations are available, consult factory for more information.

Distributions:

MFL Medium Flood (T-6 Lamps only)
NSP Narrow Spot (T-6 Lamps only)

Conduit Entries:

12BNPT 1/2" NPT bottom
12SNPT 1/2" NPT side
34BNPT 3/4" NPT bottom
34SNPT 3/4" NPT side
1BNPT 1" NPT bottom
PG16B PG16 bottom
PG16S PG16 side

Accessories:

FLC5 5° Axial Spread
GS Glare Shield**
IHL20 Internal Honeycomb Louver (PAR-20 Lamps)
IHL30 Internal Honeycomb Louver (PAR-30 Lamps)
IHL Internal Honeycomb Louver (Non-Adjustable)
ISS Internal Source Shield (T-6 lamps only)
LC Polycarbonate Protective Cover**
RG Rockguard**
STR Stainless Steel Trim Ring, Round
STS Stainless Steel Trim Ring, Square
FLC10 10° Tilt Lens
FLC20 20° Tilt Lens
PC 2112 20 cu. in. Re-enterable Potting Compound

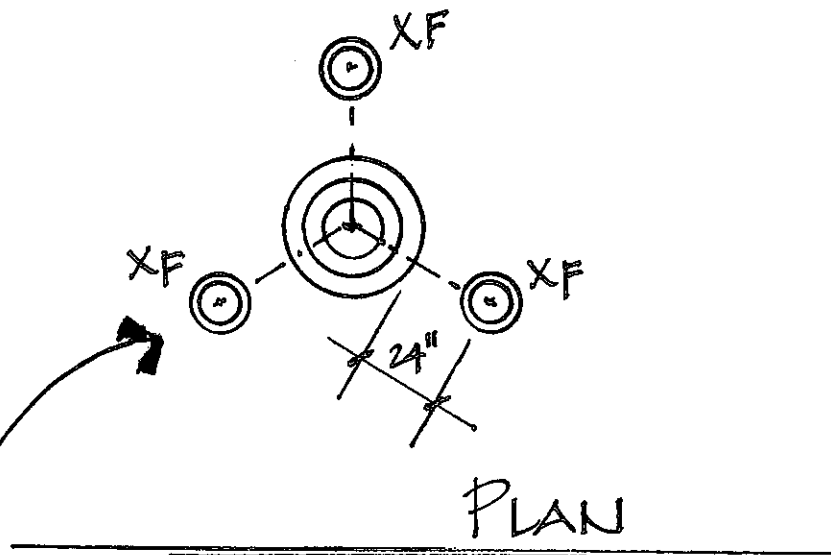
For Replacement Parts Consult Factory

HYDREL is a registered trademark of Lithonia Lighting

**Not available with Stainless Steel (SS) model

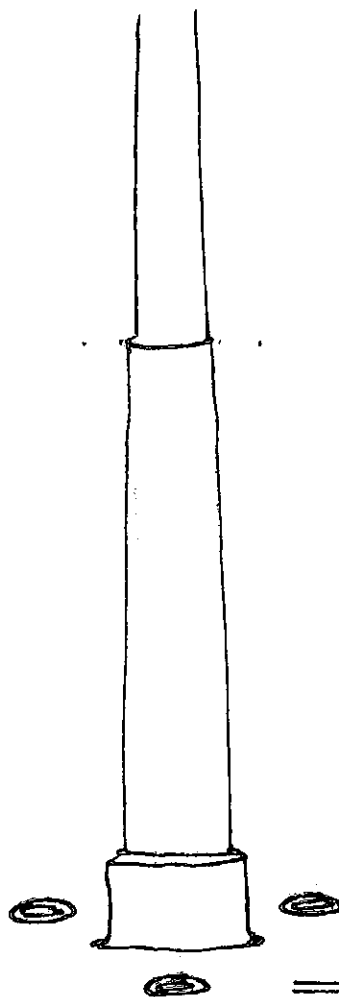
12881 BRADLEY AVENUE, SYLMAR, CALIFORNIA 91342 • PHONE: 818/382-9455 • FAX: 818/382-8548

HYDREL STANDARD DATA SHEETS/LTG-94HDSING 11/2000



TYPE "XF"

35W PAR 20 CM
METAL HALIDE SPOT
INGRADE LUMINAIRE.
CAST BRONZE W/BRASS
PERFORATED TRIM
INSERT.



ELEVATION

LIGHT KEEPERS

LSK 12.2

39 PATTON AVENUE
ASHEVILLE, NC 28801
PH: 828-232-1885
FAX: 828-232-1859
REBECCA@LIGHT-KEEPERS.COM

TITLE: FLAG POLE LIGHTING DETAIL

DATE: 12 DEC 02

PROJECT: THE PROMENADE

SCALE: NTS

XF

**American
Flagpole**

Spun Aluminum Flagpoles

American-made Architectural, Elite and Courtyard Series

We Set Industry Standards for Quality and Strength!

Flagpole Series | Custom Designs | Finishes

Experience:

For over 60 years American Flagpole has continually developed the skills and knowledge necessary to offer the correct pole for every installation. Our design experience ranges from recommendations for halyard configurations to working knowledge of materials, processes and special installations.

Engineering:

Appearance has little meaning if the flagpole doesn't meet wind and vibration criteria for each job. American Flagpole's engineering and manufacturing resources represent world leadership in tapered tubing design for virtually any application.

Manufacturing:

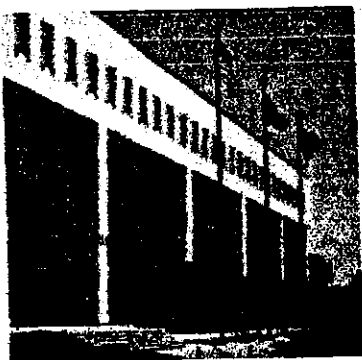
American Flagpole offers total tapered shaft capability. Aluminum, bronze, or stainless steel tubing is spun, tapered and finished in one seamless process.



Internal Halyard Flagpoles

Courtyard Series:

Courtyard Series are ideally suited for private residences, residential communities, apartment and/or condominium complexes, and small business applications.



**Bronze & Stainless Steel
Flagpoles**

Finishes:

Standard Finishes:

1. Aluminum: Satin Aluminum achieved by rotary sanding.
2. Stainless Steel: Directionally satin ground.
3. Bronze: Directional satin ground, with optional bronze statuary.

Optional Finishes:

1. Thermoset Powder Paint: standard colors are dark bronze, black, white, light gray and dark green. Special colors are virtually unlimited, supplied as specified.
2. Guaranteed Color Uniformity: The outdoor life of our standard thermoset powder coating (1.5 mil TGIC polyester thermoset powders) is rated at 15-plus years by the *National Association of Architectural Metal Manufacturers Metal Finishes Manual*.

Anodized Finish:

Limited to clear, black and various shades of bronze.

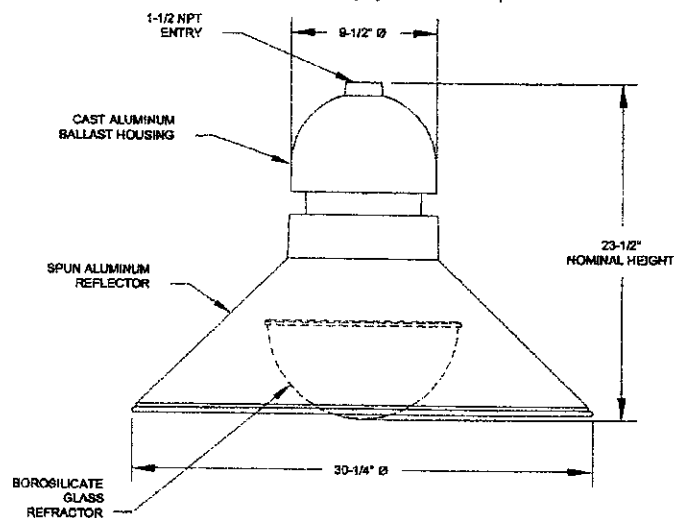
If you have a unique pole requirement, or have a question about a pole design possibility, let us assist you. You'll benefit from over 60 years of quality craftsmanship.

More items, designs, styles and materials are available. For more information on these and other items, quotations, finishes or simply to discuss your application, email us or phone/fax us at 440-835-0222. Call Toll-Free 877-281-8485.

XP**Glas WerksTM****Hallbrook[®] Extended Series Luminaire with
Bowl Prismatic Glass Optics**

Maximum weight - 31 lbs

Maximum effective projected area - 1.2 sq. ft.

**ORDERING INFORMATION**

EXAMPLE: HB 050HP 12 A E 72

**BALLAST TYPE
(MOGUL BASE)**
 350HP = 50W HPS (NOT AVAIL. W/ 347V)
 370HP = 70W HPS
 100HP = 100W HPS
 150HP = 150W 55V HPS
 175MH = 175W MH
 100MV = 100W MV
 175MV = 175W MV

**BALLAST TYPE
(MEDIUM BASE)**
 500HP = 50W HPS
 700HP = 70W HPS
 100HP = 100W HPS
 150HP = 150W 55V HPS
 700MH = 70W MH (NOT AVAIL. W/ 347V OR 480V)
 100MH = 100W MH (NOT AVAIL. W/ 347V OR 480V)
 150MH = 150W MH (NOT AVAIL. W/ 347V OR 480V)
 170MH = 175W MH

VOLTAGE
 12 = 120 VOLT
 20 = 208 VOLT
 24 = 240 VOLT
 27 = 277 VOLT
 34 = 347 VOLT
 48 = 480 VOLT
 MT = 120/208/
 240/277 VOLT

**HOUSING FINISH
COLOR**
 B = BLACK
 Z = BRONZE
 N = DARK GREEN
 A = AS SPECIFIED

**EXTENDED
REFLECTOR**

OPTICS
 72 = ASYMMETRIC GLASS REFRACTOR
 IES TYPE II DISTRIBUTION
 73 = ASYMMETRIC GLASS REFRACTOR
 IES TYPE III DISTRIBUTION
 75 = SYMMETRIC GLASS REFRACTOR
 IES TYPE IV DISTRIBUTION

OPTIONS

P = PROTECTED STARTER (HPS UNITS ONLY).

B = BUTTON STYLE PHOTOCONTROL IN BALLAST HOUSING (480 VOLT NOT AVAILABLE).

GWBANDX = DECORATIVE BAND, FACTORY INSTALLED BETWEEN HOUSING AND COVER, FOR "X" INSERT; B, Z, N OR A FOR COLOR.

ARCHITECTURAL OUTDOOR ORDER #:**TYPE:****DRAWING NO: US-3329**

THIS DRAWING, WHEN APPROVED, SHALL BECOME THE COMPLETE SPECIFICATION FOR THE MATERIAL TO BE FURNISHED BY HOLOPHANE ON THE ORDER NOTED ABOVE. A UNIT OF SIMILAR DESIGN MAY BE SUPPLIED, BUT ONLY AFTER APPROVAL BY THE CUSTOMER IN WRITING. ON POLE ORDERS AN ANCHOR BOLT TEMPLATE PRINT WILL BE SUPPLIED WITH EACH ANCHOR BOLT ORDER TO MATCH THE POLE PROVIDED.

THIS PRINT IS THE PROPERTY OF HOLOPHANE AND IS LOANED SUBJECT TO RETURN UPON DEMAND AND UPON EXPRESS CONDITION THAT IT WILL NOT BE USED DIRECTLY OR INDIRECTLY IN ANY WAY DETRIMENTAL TO OUR INTERESTS, AND ONLY IN CONNECTION WITH MATERIAL FURNISHED BY HOLOPHANE.

HOLOPHANE
 LEADER IN LIGHTING SOLUTIONS

Holophane

214 OAKWOOD AVENUE - NEWARK, OHIO 43055

Specifications**GENERAL DESCRIPTION**

The Euro styled luminaire consists of a prismatic glass optical assembly shielded by a flared cutoff reflector and a top mounted cast aluminum ballast assembly with a circumferential 1-1/2 inch reveal.

OPTICAL ASSEMBLY

The optical assembly consists of a thermal resistant annealed borosilicate glass refractor mechanically held in a formed aluminum door frame. The door frame is attached to the flared reflector assembly with three stainless steel screws. Three keyhole slots in the door frame and an internal safety cable allow easy removal for re-lamping. Light from a vertical lamp is distributed by precisely molded refracting prisms to maximize utilization, uniformity and luminaire spacing. The refractors are designed for asymmetric or symmetric distribution. This luminaire meets I.E.S. full cutoff classification.

BALLAST ASSEMBLY

The ballast housing, cast of 356 aluminum alloy, has a smooth domed contour and a 1-1/2 inch circumferential reveal. This housing has an integrally 1-1/2 inch NPT threaded entry with stainless steel set screw. A terminal block is provided with a quick disconnect receptacle. The unitized ballast assembly, containing the ballast and other electrical components, plugs into the quick disconnect receptacle. The ballast plate is key holed for ease of installation into the ballast housing. A nickel plated lamp grip socket of street lighting grade with a glazed porcelain body and the center contact backed by a coiled spring, is positioned mechanically to the ballast plate, placing the lamp at the light center of the prismatic glass refractor.

UL LISTING

This luminaire has earned the U.L. Listing mark. It is suitable for wet locations at a maximum of 25 ° C ambient temperature

BALLASTS

(Refer to the Ballast Handbook for specific operating characteristics)

50 - 100 watt 120 volt High Pressure Sodium (HPS) ballasts are High Power Factor Reactor type. All other HPS ballasts are High Power Factor Lag type.

175 watt Metal Halide (MH) ballasts are Peak Load Auto-transformer type. 70, 100 and 150 watt MH units are High Power Factor Lag type ballasts.

All Mercury Vapor (MV) ballasts are High Power Factor Constant Wattage Autotransformer (CWA) type.

FINISH

The luminaire is finished with polyester powder paint applied after a seven stage pretreatment process to insure maximum durability.

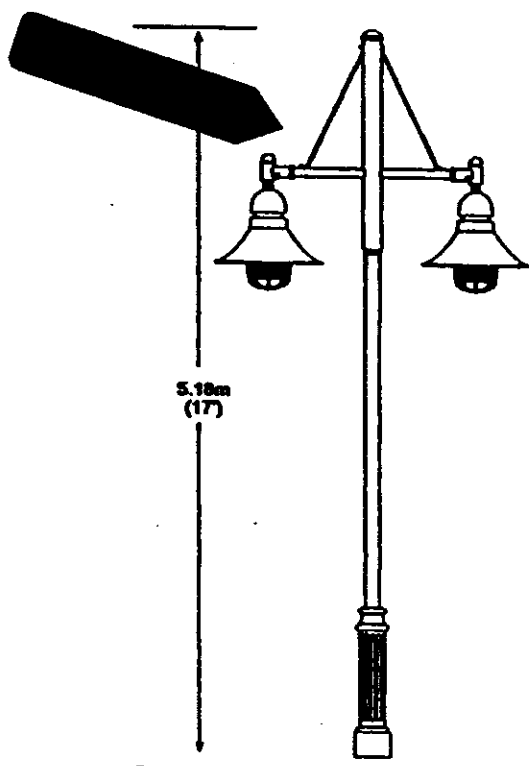
SCALE: N/A
 DRAWN: BHH
 APP'D:
 DATE: 10-09-01

XP

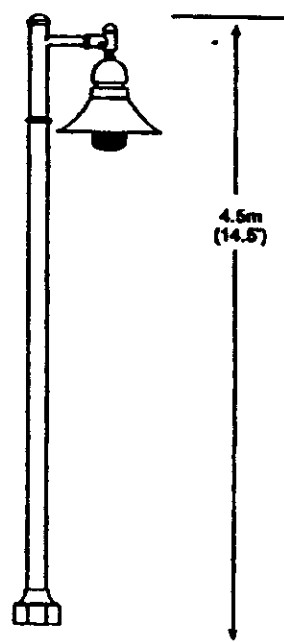
GlasWerks™ Styled Products

HOLOPHANE

Typical Configurations



Prague luminaires with vertical cast guards, Lisbon twin crossarm and Hamilton aluminum post



Prague luminaire with vertical cast guard on a single Stuttgart arm and Colorado aluminum post

XP



9c84b 1" x 8"

1. *Y.*

12
 13
 14
 15
 16
 17
 18
 19
 20
 21
 22
 23
 24
 25
 26
 27
 28
 29
 30
 31
 32
 33
 34
 35
 36
 37
 38
 39
 40
 41
 42
 43
 44
 45
 46
 47
 48
 49
 50
 51
 52
 53
 54
 55
 56
 57
 58
 59
 60
 61
 62
 63
 64
 65
 66
 67
 68
 69
 70
 71
 72
 73
 74
 75
 76
 77
 78
 79
 80
 81
 82
 83
 84
 85
 86
 87
 88
 89
 90
 91
 92
 93
 94
 95
 96
 97
 98
 99
 100
 101
 102
 103
 104
 105
 106
 107
 108
 109
 110
 111
 112
 113
 114
 115
 116
 117
 118
 119
 120
 121
 122
 123
 124
 125
 126
 127
 128
 129
 130
 131
 132
 133
 134
 135
 136
 137
 138
 139
 140
 141
 142
 143
 144
 145
 146
 147
 148
 149
 150
 151
 152
 153
 154
 155
 156
 157
 158
 159
 160
 161
 162
 163
 164
 165
 166
 167
 168
 169
 170
 171
 172
 173
 174
 175
 176
 177
 178
 179
 180
 181
 182
 183
 184
 185
 186
 187
 188
 189
 190
 191
 192
 193
 194
 195
 196
 197
 198
 199
 200
 201
 202
 203
 204
 205
 206
 207
 208
 209
 210
 211
 212
 213
 214
 215
 216
 217
 218
 219
 220
 221
 222
 223
 224
 225
 226
 227
 228
 229
 230
 231
 232
 233
 234
 235
 236
 237
 238
 239
 240
 241
 242
 243
 244
 245
 246
 247
 248
 249
 250
 251
 252
 253
 254
 255
 256
 257
 258
 259
 260
 261
 262
 263
 264
 265
 266
 267
 268
 269
 270
 271
 272
 273
 274
 275
 276
 277
 278
 279
 280
 281
 282
 283
 284
 285
 286
 287
 288
 289
 290
 291
 292
 293
 294
 295
 296
 297
 298
 299
 300
 301
 302
 303
 304
 305
 306
 307
 308
 309
 310
 311
 312
 313
 314
 315
 316
 317
 318
 319
 320
 321
 322
 323
 324
 325
 326
 327
 328
 329
 330
 331
 332
 333
 334
 335
 336
 337
 338
 339
 340
 341
 342
 343
 344
 345
 346
 347
 348
 349
 350
 351
 352
 353
 354
 355
 356
 357
 358
 359
 360
 361
 362
 363
 364
 365
 366
 367
 368
 369
 370
 371
 372
 373
 374
 375
 376
 377
 378
 379
 380
 381
 382
 383
 384
 385
 386
 387
 388
 389
 390
 391
 392
 393
 394
 395
 396
 397
 398
 399
 400
 401
 402
 403
 404
 405
 406
 407
 408
 409
 410
 411
 412
 413
 414
 415
 416
 417
 418
 419
 420
 421
 422
 423
 424
 425
 426
 427
 428
 429
 430
 431
 432
 433
 434
 435
 436
 437
 438
 439
 440
 441
 442
 443
 444
 445
 446
 447
 448
 449
 450
 451
 452
 453
 454
 455
 456
 457
 458
 459
 460
 461
 462
 463
 464
 465
 466
 467
 468
 469
 470
 471
 472
 473
 474
 475
 476
 477
 478
 479
 480
 481
 482
 483
 484
 485
 486
 487
 488
 489
 490
 491
 492
 493
 494
 495
 496
 497
 498
 499
 500
 501
 502
 503
 504
 505
 506
 507
 508
 509
 510
 511
 512
 513
 514
 515
 516
 517
 518
 519
 520
 521
 522
 523
 524
 525
 526
 527
 528
 529
 530
 531
 532
 533
 534

New Kidd 2 Promenade
Light Keepers

1011 MEDELSICK

2007 年 12 月

00000

பி.அ.ம.பி.பி.



HOLOPHANE

XP

LUMINAIRE SCHEDULE

Symbol	Label	Qty	Catalog Number	Description	Lamp	File	Lumens	LLF	Watts
●	A	12	HB100MH00XU51XHALLBROOK		100W CLEAR MH	49112.IES	9000	0.72	1

STATISTICS

Description	Avg	Max	Min	Max/Min	Avg/Min
Calc Zone #1	7 fc	10 fc	3 fc	3.3:1	2.3:1

LUMINAIRE LOCATIONS

No.	Label	Location		Z	MH	Orientation	Tilt	X	Y	Z
1	A	7.5	10.0	16.0	16.0	0.0	0.0	7.5	10.0	0.0
2	A	7.5	15.0	16.0	16.0	0.0	0.0	7.5	15.0	0.0
3	A	22.5	10.0	16.0	16.0	0.0	0.0	22.5	10.0	0.0
4	A	22.5	15.0	16.0	16.0	0.0	0.0	22.5	16.0	0.0
5	A	37.5	10.0	16.0	16.0	0.0	0.0	37.5	10.0	0.0
6	A	37.5	15.0	16.0	16.0	0.0	0.0	37.5	16.0	0.0
7	A	7.5	42.5	16.0	16.0	0.0	0.0	7.5	42.5	0.0
8	A	7.5	47.5	16.0	16.0	0.0	0.0	7.5	47.5	0.0
9	A	22.5	42.5	16.0	16.0	0.0	0.0	22.5	42.5	0.0
10	A	22.5	47.5	16.0	16.0	0.0	0.0	22.5	47.5	0.0
11	A	37.5	42.5	16.0	16.0	0.0	0.0	37.5	42.5	0.0
12	A	37.5	47.5	16.0	16.0	0.0	0.0	37.5	47.5	0.0

New Kidd 2 Promenade
Light Keepers

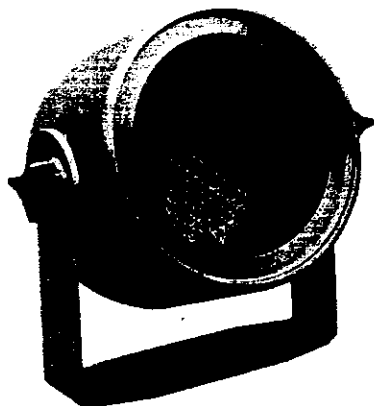


Designer
Tom Haberstock
Date
Dec 12 2002
Scale
Drawing No.



C-200 WATERCOLOR-U

POWERED BY CHROMACORE™



Color Kinetics C-200 WaterColor-U is the submersible version of the C-200 fixture family, the largest and brightest fixture in the C-Series. It is designed to operate in underwater locations up to three feet deep, including water treated with bromine or chlorine. C-200 WaterColor-U is perfect for fountains and theme park applications. This fixture projects a soft-edge beam of light at a 22° beam angle. Each C-200 WaterColor-U unit comes with a pre-programmed assortment of shows that can be varied by speed, direction, saturation, etc., or can be externally controlled by a DMX512 lighting console, a PC, or a Color Kinetics controller.

The C-200 WaterColor-U comes with a unified power and data cable to minimize wiring. For maximum ease of installation and operational versatility, Color Kinetics recommends using this fixture with the cMOPS power supply (model #: PWR-cMOPS-150). It can also be powered and controlled using a Power/Data Adapter (model #: ADP-PDA) and the C-Series Power Supply (model #: PWR-002).

The C-200 WaterColor-U is made from stainless steel, and comes equipped with a clear, tempered glass lens and mounting yoke.

C-200 WATERCOLOR-U SPECIFICATIONS

COLOR RANGE	16.7 million (24bit) additive RGB colors; continuously variable intensity output range
SOURCE	Variable intensity colored LEDs
BEAM ANGLE	22°
DATA INTERFACE	DMX512 (RS485) compatible; PC compatible with Smart Jack
CONTROL	Stand Alone or DMX512 (RS485)
HOUSING	Stainless steel
CONNECTORS	Unified power and data cable

DESCRIPTION OF SHOWS

FIXED COLOR	Static display of a single color
COLOR WASH	Colors transition gracefully from color to color, cycling through the entire color wheel
CROSS FADE	Colors cycle back and forth gracefully between two colors
RANDOM COLOR	Colors step or jump from one color to the next in random order
FIXED COLOR STROBE	A constant color appears in a rapid series of intense flashes of light
VARIABLE COLOR STROBE	A sequence of colors appear in a rapid series of intense flashes of light

SOURCE LIFE

The illumination generated by C-Series is based on LEDs whose predicted source life is rated at 100,000 elapsed time hours under normal operating conditions. [Temperature: -4°F to 104°F (-20°C to 40°C) Humidity: 0-95% non-condensing]. This equates to 11.4 years of continuous 24 hour a day usage. In addition, because C-Series utilizes solid state technology with no moving parts, the possibilities of mechanical failure are reduced.

MANUFACTURING DATA

To insure the highest level of product reliability, this Color Kinetics design endured accelerated life test conditions including an operating temperature span of 360°F and cyclic loading up to 60G.

Color Kinetics products are manufactured in the USA, Ireland, and China.

U.S. AND FOREIGN PATENTS AND PATENTS PENDING

Color Kinetics Incorporated grants the purchaser of its lighting products and controllers a personal and non-transferable license to use Chromacore™, its patented technology for networkable control of LED-based color-changing lighting fixtures for illumination, display and design. This license is granted only by Color Kinetics Incorporated, and may not be transferred except by the grantor. The design, duplication, manufacture, or sale of other products using networkable control of LED-based color-changing lighting may be prohibited and is not licensed hereunder. Other patents pending.

MODEL # C-200W-U

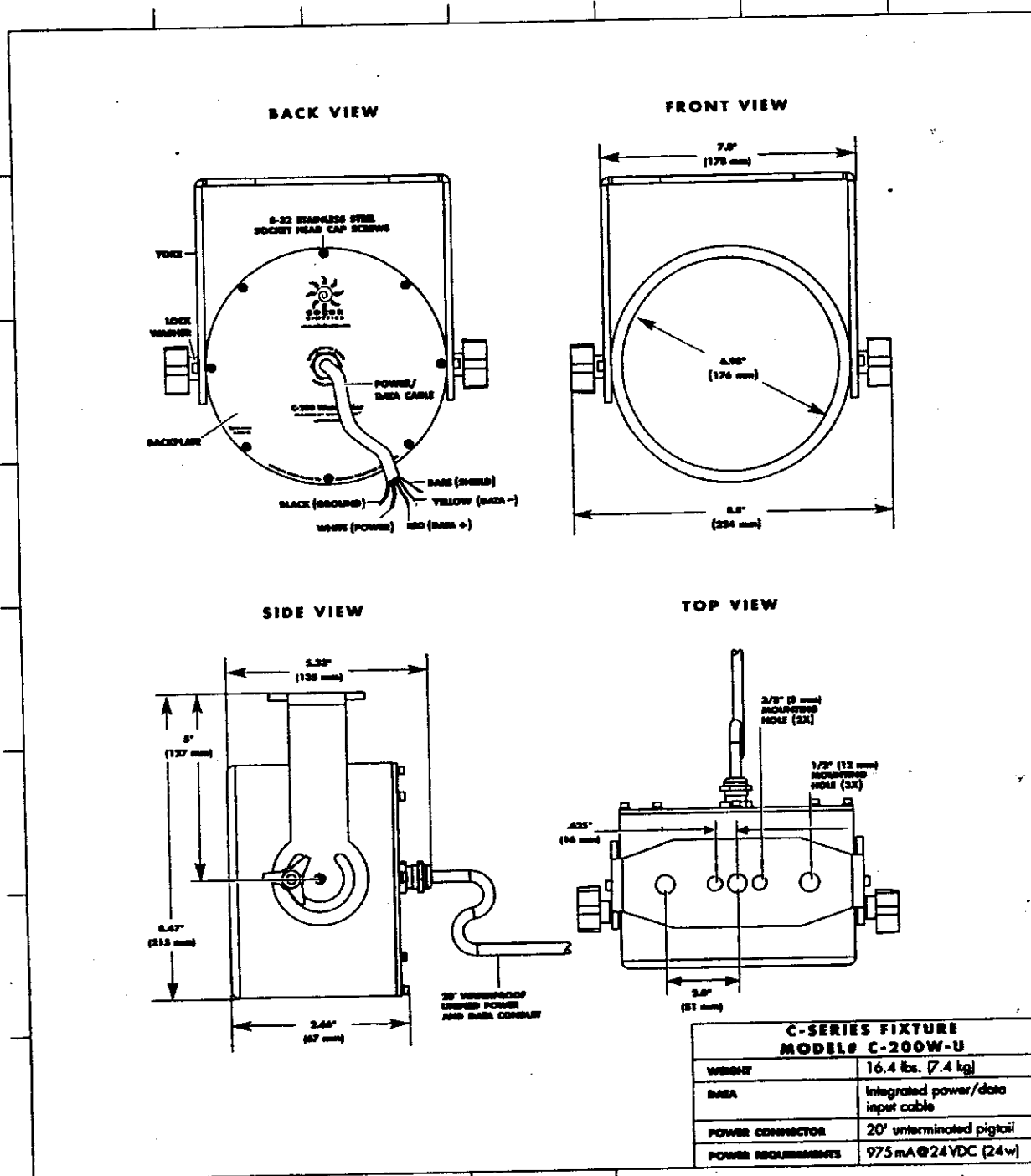
U.S. PATENTS 6,016,038 AND 6,150,774
OTHER PATENTS PENDING

©2000 Color Kinetics Incorporated. Color Kinetics is a registered trademark and Chromacore, ColorBlast, ColorPlay, iColor, iPlayer, and SmartSpace are trademarks of Color Kinetics Incorporated.
BRO043 Rev 03

Specifications subject to change without notice

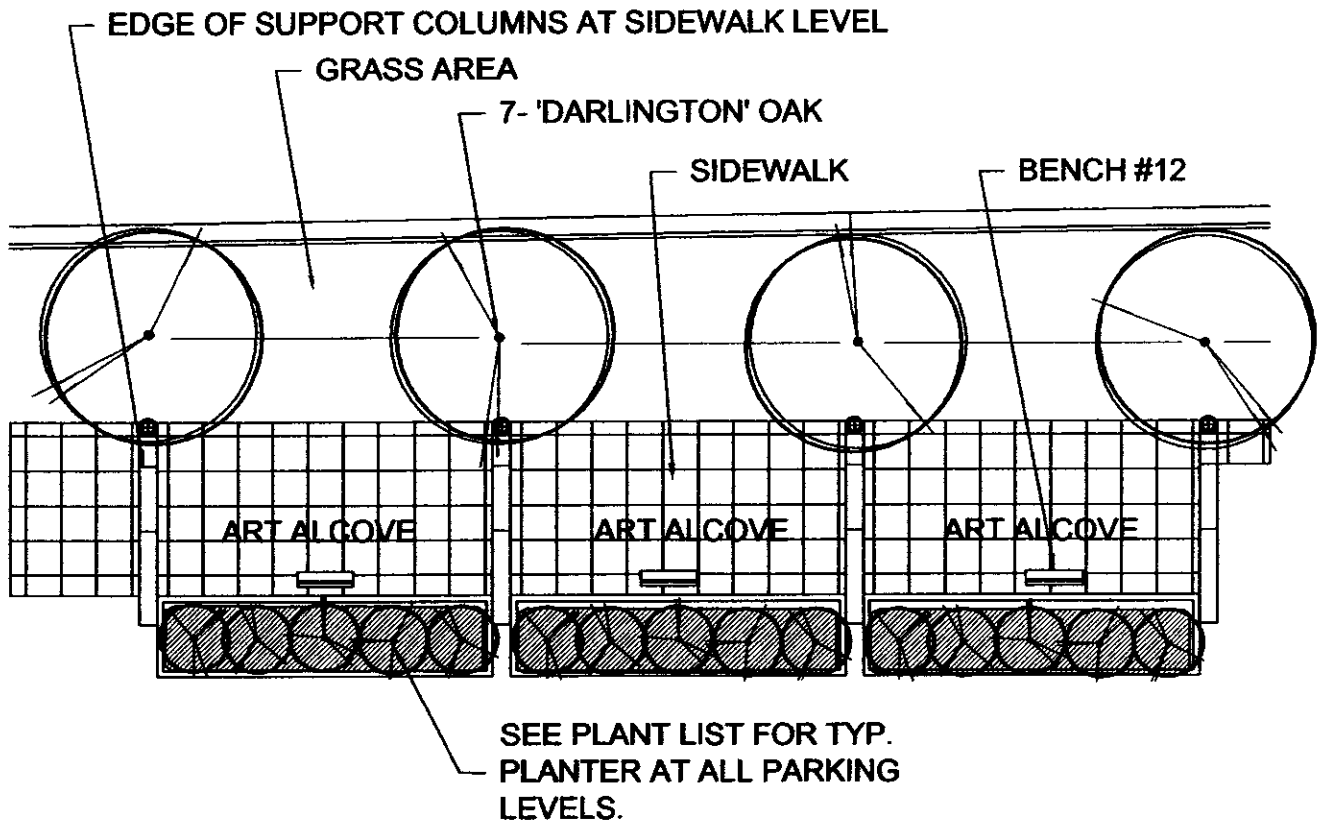
C-200 WATERCOLOR-U FIXTURE

PHYSICAL DIMENSIONS



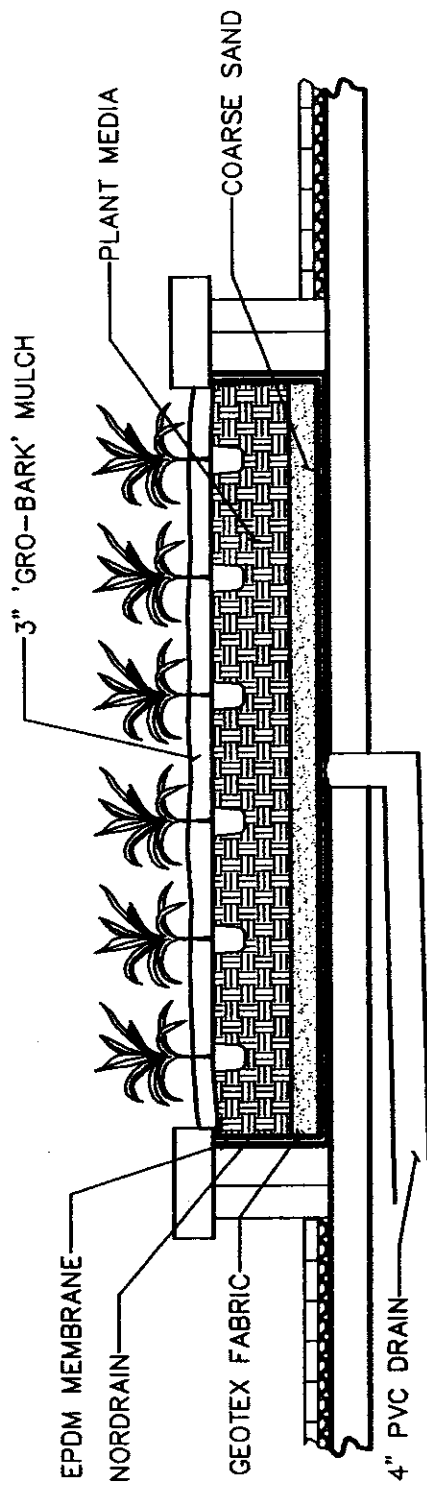
The Promenade
Preliminary Plant List

Quantity	Common Name	Scientific Name	Size	Root	Comment
Trees:					
16	Amur Maple	Acer ginnala	2-2 1/2'	B&B	
11	Japanese Maple	Acer palmatum dissectum (green)	6-8'	B&B	
13	Red Maple	Acer rubrum 'Red Sunset'	2-2 1/2"	B&B	
16	Service Berry	Amelanchier canadensis	10'-12'	B&B	
4	Red Bud	Cercis canadensis	10'-12'	B&B	
5	Kousa Dogwood	Cornus kousa	8'-10'	B&B	
3	Ginkgo (Columnar)	Ginkgo biloba 'Princeton Sentry'	2-2 1/2"	B&B	
5	Flame Tree	Koelreuteria bipinnata	2-2 1/2"	B&B	
6	Fruitless Sweetgum	Liquidambar styraciflua 'Rotundiloba'	4"	B&B	No Gumballs
12	Chinese Pistache	Pistacia chinensis	4"	B&B	
4	Weeping Cherry	Prunus subhirtella pendula	2-2 1/2"	B&B	
17	Darlington' Oak	Quercus laurifolia	4"	B&B	
8	Yoshino Cherry	Prunus yedoensis	8'-10'	B&B	
26	Willow Oak	Quercus phellos	4"	B&B	
11	Littleleaf Linden	Tilia cordata 'Greenspire'	4"	B&B	
7	Bald Cypress	Taxodium distichum	2-2 1/2"	B&B	
8	Chinese Elm	Ulmus parvifolia 'sempervirens'	4"	B&B	
9	Japanese Zelkova	Zelkova serrata	4"	B&B	
Shrubs					
	Compact Abelia	Abelia grandiflora 'Compacta'	3 gal.	container	
	Edward Goucher Abelia	Abelia x grandiflora 'Edward Goucher'	5 gal.	container	
	Sherwood Abelia	Abelia grandiflora 'Sherwood'	3 gal.	container	
	Aucuba	Aucuba japonica	5 gal.	container	
	Crimson Pygmy barberry	Berberis thunbergii 'Crimson Pygmy'	3 gal.	container	
	Forsythia	Forsythia x intermedia	3 gal.	container	
	Weeping Forsythia	Forsythia suspensa var. sieboldii	3 gal.	container	
	Oakleaf Hydrangea	Hydrangea quercifolia	3 gal.	container	
	Emily Brunner Holly	Ilex x 'Emily Brunner'	5'-6'	B&B	
	Dwarf Burford Holly	Ilex cornuta 'Burfordii nana'	3 gal.	container	
	Compact Holly	Ilex crenata 'Compacta'	3 gal.	container	
	Needlepoint Holly	Ilex cornuta 'Needlepoint'	10 gal.	container	
	Helleri Holly	Ilex crenata 'Helleri'	3 gal.	container	
	Lusterleaf Holly	Ilex latifolia	3 gal.	container	
	Winterberry Holly	Ilex verticillata 'Cardinal'	6-8'	B&B	
	Parsons Juniper	Juniperus davurica 'Expansa'	3 gal.	container	
	Leucothoe	Leucothoe axillaris	5 gal.	container	
	Nandina	Nandina domestica 'Royal Princess'	3 gal.	container	
	Harbor Dwarf Nandina	Nandina domestica 'Harbor Dwarf'	3 gal.	container	
	English Laurel	Prunus laurocerasus 'Otto Luyken'	3 gal.	container	
	English Laurel	Prunus laurocerasus 'Zabeliana'	3 gal.	container	
	Saccococca	Saccococca hookerana humilis	3 gal.	container	
	Vanhoutte Spiraea	Spiraea x vanhouttei	3 gal.	container	
Groundcover:					
	Japanese Sweet Flag	Acorus gramineus 'Variegatus'	4" pot	container	12" o.c.
	Wintercreeper	Euonymus fortunei 'Coloratus'	2 1/4"	container	12" o.c.
	English Ivy	Hedera helix 'English'	2 1/4"	container	12" o.c.
	English Ivy	Hedera helix 'Glacier'	4" pot	container	12" o.c.
	Hypericum	Hypericum calycinum	2 1/4"	container	12" o.c.
	Liriope	Liriope spicata	4" pot	container	12" o.c.
	Mondo Grass	Ophiopogon japonicus	4" pot	container	12" o.c.
	Thrift (white)	Phlox subulata	4" pot	container	12" o.c.
	Asiatic Jasmine	Trachelospermum asiaticum	4" pot	container	12" o.c.
	Turfgrass				
	Tall Fescue Blend	Festuca arundinacea		seed	



**TYPICAL LANDSCAPE PLAN AT STREET
LEVEL PARKING GARAGE**

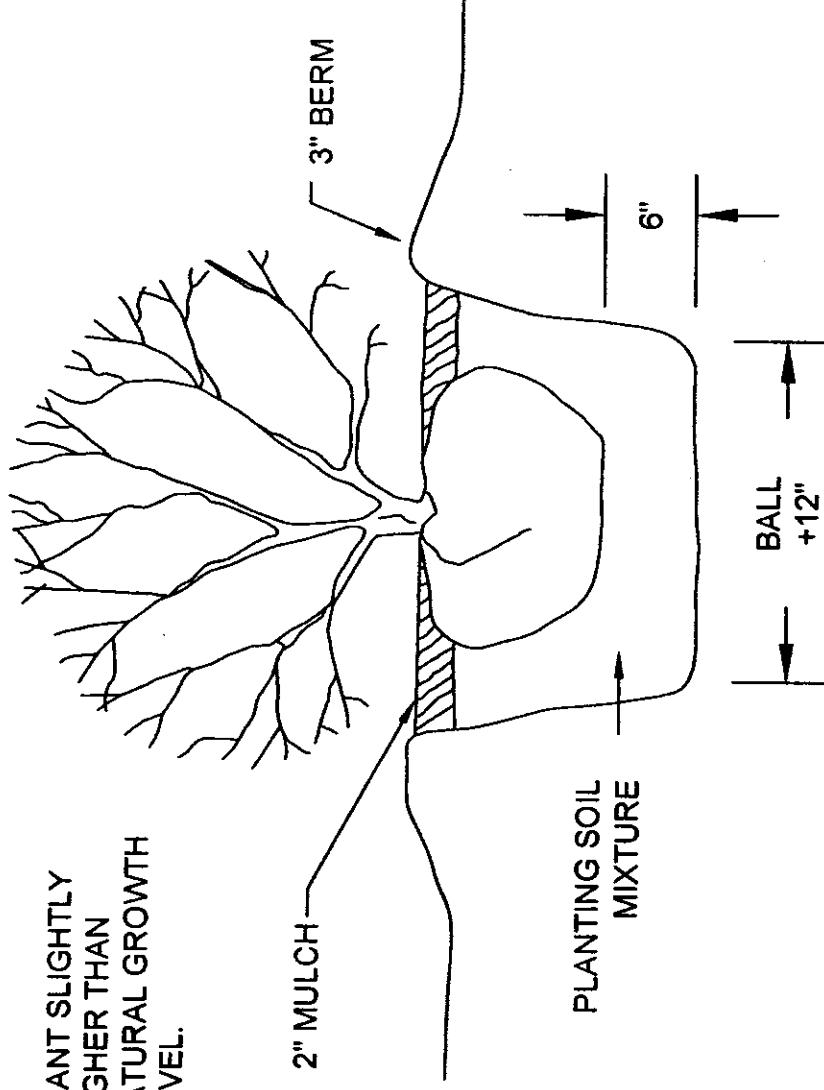
		LARGE RECTANGULAR PLANTER BOX	SMALL RECTANGULAR PLANTER
D E V E L O P M E N T S T A P E S & P A R K I N G P L A N	"A" STREET YARD CRABTREE VALLEY AVENUE		
	"B" STREET YARD EDWARDS MILL ROAD		
	"C" STREET YARD CREEDMOOR ROAD		
	"D" PLAZA ONE		
	"E" PLAZA TWO		
		# 3	# 7



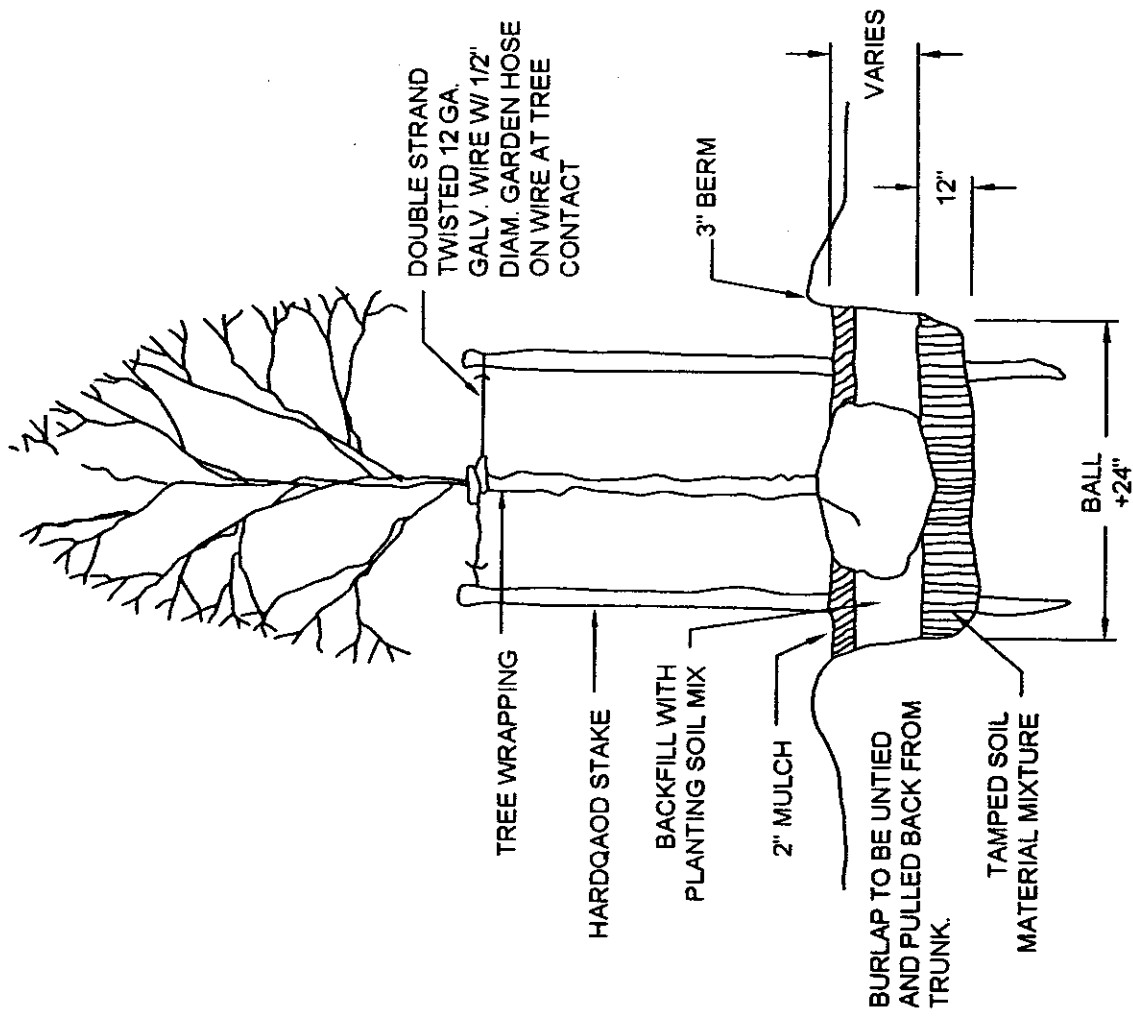
ANNUALS/GROUNDCOVER PLANTER DETAIL
 NTS

PRUNE AT LEAST 1/3 FROM
CENTER OF PLNATOUTWARD,
MAINTAINING CHARACTERISTIC
SHAPE.

PLANT SLIGHTLY
HIGHER THAN
NATURAL GROWTH
LEVEL.



SHRUB PLANTING DETAIL



TREE PLANTING DETAIL

LANDSCAPE MANAGEMENT PLAN

The PROMENADE LANDSCAPE MANAGEMENT PROGRAM

TECHNICAL SPECIFICATIONS

Article 1: GENERAL.

The landscape management objectives of these specifications are to follow sound horticultural practices that result in a landscape that is attractive throughout the year.

Article 2: TURFGRASS MANAGEMENT.

The following work items shall be accomplished to keep uniform and healthy Tall Fescue grass.

- 2.1 During the year, turfgrass shall be mowed weekly, except for the months of January and February. Mowing shall be done with a rotary mower. Mowing heights may be adjusted to accommodate the seasonal variation but shall never be less than three (3) inches and shall not exceed five (5) inches. Prior to mowing operations, mowers shall be leveled. Tire pressure and all mowing deck suspension points shall be checked. Mower blades shall be kept sharpened. No more than 1/3 of the grass blade shall be removed by each mowing. All lawn areas will be picked-up and holes filled before any mowing occurs. This means removing all paper, trash, twigs, and other undesirable materials.
- 2.2 Hard surfaced power edging operations (not string trimmer) shall be delivered with each mowing, March through December. Edging shall consist of uniformly removing grass 1/4 inch to 1/2 inch from any curbs, drives, and walks. Shrub beds and tree rings shall be edged once in March and October and shall consist of a cut edge 1.5-2 inches deep that will retain bed mulch; they will be mechanically confirmed as needed bi-weekly April – November. This includes bed-hard surfaced interfaces except where plants are intended to overgrow curbs, walls, etc.
- 2.3 Fertilization of grass areas shall be accomplished during appropriate seasons applying five (5) pounds of nitrogen and three (3) pounds of potassium respectively per thousand square feet annually. Iron applications will be appropriate. Coordination with the Landscape Manager is encouraged.
- 2.4 Soil chemistry adjustments will be made in turfgrass areas to maintain a soil pH range of 6.0 to 6.5. Pelletized Dolomitic limestone will be used when lime is indicated by the soil analysis. Lime will be applied at a rate of not more than 50 lbs. per 1000 sq. ft. per month until the correction is completed. Application will be started in time for completion in December each year. Some Mall soils may require the use of sulfur to reduce the pHs. Such applications will begin no earlier than April 1st and application rates per month shall not exceed three pounds per 1000 sq. ft. until the correction is completed. Discontinue treatment during months when soil temperatures are below 55+/-degrees F. The physical application of sulfur is not easy. Application followed by close observation is a must. A pause for random soil sampling subsequent to two monthly applications of sulfur is recommended. At that point, verify the effectiveness and soil chemistry activities resulting from the preceding sulfur applications. Sulfur applications adjustments may need to be made as a result of this information. Patience, perseverance and a higher art of observation are necessary. The Contractor will coordinate the pH adjustment program with the Landscape Manager.
- 2.5 Herbicide use shall be coordinated with the Landscape Manager prior to use on any turfgrass areas. Application of selective pre and post-emergent herbicides may be made to control weeds to include weeds in drives, parking lots and gutters. Weeds in established grass areas will be controlled to maintain the appearance of a "weed free" lawn. Herbicide

types and application timings shall be coordinated to ensure the most effective physiological compromise for use on individual grass and weed varieties. Pre-emergence treatment for summer annual weeds may be applied in the Spring before soil temperatures reach fifty-five (55) degrees F., and again two/three months later as may be appropriate for the herbicide used. A split application of fall pre-emergence herbicides for winter annuals will be initiated in August and/or September each year. Application of all herbicides will be by or under the direction of an on-site person licensed by the State of North Carolina to apply pesticides. The License of the Applicator shall be in good standing and valid, a copy of which shall be maintained within files in the office of the Landscape Manager.

- 2.6 Lawn obstacles shall be trimmed around mechanically and/ or chemically as necessary, to be consistent with the mowing schedule. Weed material will not be allowed to create an untidy look when compared to surrounding turf grass.
- 2.7 Mechanical aeration (core removal) shall be accomplished on all areas of grass in March and September. This operation will be coordinated with any application of pre-emergence herbicide.
- 2.8 Biological and other debris cleanup and removal shall be provided as necessary to ensure a clean look. Grass clippings shall be removed whenever they may cause an aesthetic distraction.
- 2.9 Grub controls when needed shall be applied in mid-August and early April.
- 2.10 Diseased grass shall not be allowed to become an aesthetic detraction. Chemicals approved by the Landscape Manager for use shall be applied as necessary to control grass diseases. Prevention is encouraged.
- 2.11 Turf shall be dethatched when the thatch layers exceed ½ inch.

Article 3: SHRUB, GROUNDCOVER, AND SHRUB BED MANAGEMENT

- 3.1 Newly planted (within the preceding year) shrubs and ground covers shall receive not less than four (4) pounds of nitrogen per thousand square feet each year, in not less than two applications of slow release fertilizer, analysis ratio of 3-1-2. Mature plantings, e.g. shrub borders, shall receive one (1) pound of nitrogen per thousand square feet in two applications. All such applications shall be made in April and June. An application of Potassium Magnesium Sulphate (0.0.22...potassium magnesium sulphate...K-Mag) will be applied in March and September at a rate of five (5) pounds per 1000 square feet.
- 3.2 All pruning shall be horticulturally sound, consistent with species form, enhance function and avoid the loss of blossoms, and/or other aesthetic qualities. Shrub pruning (except in the case of screens) shall include work that is necessary to encourage the shrubs natural shape. Screens shall be pruned and maintained at a height coordinated with the Landscape Manager. Deadhead (flower removal) and fertilize Crape Myrtles as blossoms mature. The use of Plant Growth Regulators (PGR) is encouraged and will be coordinated with the Landscape Manager. The Liriope groundcover shall be mowed at six (6) inches in late January each year. Coordinate the mowing of Mondo grass with the Landscape Manager.
- 3.3 Applications of pre and post-emergent herbicides may be used to control weeds. The Landscape Management Contractor will guarantee that the use of any herbicide will not significantly damage or kill desirable plants. If significant damage does occur, the Contractor will immediately replace the plant material with plants of like size without charge. If there exists a physiological reason to "bend" the "immediately" requirement concerning replacement, this shall be coordinated with the Landscape Manager. Application of all herbicides will be by or under the direction of an on-site person currently licensed by the State of North Carolina to apply herbicides. A copy of the license shall be on file with the Landscape Manager.
- 3.4 Insect/disease outbreaks will be controlled as they are detected. This work includes the Crape Myrtles. Integrated Pest Management practices shall be used.

- 3.5 Aesthetically significant plant debris, e.g. pine straw, sticks, cones, etc., shall be removed on a regular, not less than weekly basis, from plant surfaces to ensure positive plant aesthetics. Special events may require special removals.
- 3.6 Pine straw mulch in bed areas/planting rings is subject to decomposition from rain, wind, and foot traffic. Mulch in formal beds and on trails will be replenished as needed to maintain a minimum depth of three inches and a fresh appearance. Particularly sensitive times will be March, July, and November. Mulch shall never cover the crown of the plants nor be at so great a depth as to encourage shallow rooting in the mulch layer itself. Removal of decomposed mulch may be necessary.
- 3.7 Hand weeding as necessary will be scheduled throughout the year to keep the plant beds and pine straw areas aesthetically free of weeds.
- 3.8 Soils analysis. In September, soils testing shall be done. Close coordination with the Landscape Manager is invited. Lime/sulfur and fertilizer including trace elements shall be applied guided by the analysis. The results of this soils testing shall be sent, one copy to the landscape manager and one copy to the owner. The object is to keep the pH in the center of the satisfactory range. Pelletized dolomitic limestone will be used when lime is indicated. Lime will be applied at a rate of not more than 50 lbs. per 1000 square feet per month until the correction is completed. Application will be started in time for completion in December of each year. Soils may require the addition of sulfur to reduce pHs. See Para. 2.4 for more detailed instruction. Soil samples will be collected and reacted to yearly.

Article 4: SEASONAL COLOR

- 4.1 Two changes of seasonal color shall be provided as coordinated with the Landscape Manager each year. These annual plantings shall take place in late April and September.
- 4.2 Planter, planting pots, baskets, and beds shall be properly prepared to support the healthy growth and flowering of the color plantings. Coordinate these preparations with the Landscape Manager.
- 4.3 A fertilizer of a 1-1-1 or 1-2-1 ratio analysis will be applied ensuring a monthly release rate equaling one and one-half (1.5) pounds of Nitrogen per 1000 s.f. per month. Osmocote and/or liquid fertilizers may be used; however, the monthly nitrogen release rate shall be maintained. Micronutrients will need to be applied to plant material in planters, pots and baskets; rates shall be coordinated with the Landscape Manager.
- 4.4 Insect/Disease controls will be applied as necessary to control the pest population.
- 4.5 Transplants shall be plants of the size received in a well-grown, 4" cell pack (smaller cell-packs are permitted, smaller plants are not). Install these at a density of not less than 1.5 plants per square foot. Coordinate this program with the Landscape Manager prior to ordering and installation.

Article 5: PERENNIALS

- 5.1 Plant material shall be fertilized in April and June, ratio guided by the most recent soils analysis, applying one (1) pound of nitrogen in April and one-half (.5) pound of nitrogen in June per 1000 sq. ft. K-Mag (0.0.22) shall be applied in March and September at the rate of ten (10) pounds per 1000 sq. ft.
- 5.2 Soil Chemistry. A pH of 6.0-6.5 shall be maintained.
- 5.3 Perovskia, Verbena b., Sunflowers, Gladioli, Lilies and Asters shall be staked as needed to maintain an upright position.
- 5.4 Plant shaping, cut-back and deadheading shall be accomplished to maximize the aesthetic potential of these gardens throughout the year.
- 5.5 Compost shall be spread each year in March to a depth of one (1) inch; and maintained at that depth.
- 5.6 IPM pest control shall be utilized to ensure unimpeded aesthetic display.
- 5.7 Coordinate the above with the Landscape Manager.

- 5.8 Flower removal (deadheading) shall be carried out as positive aesthetics require. This activity includes annual color and perennials.

Article 6: TREES

- 6.1 Insect/disease controls shall be applied as is appropriate to control pests for each species of tree during the year.
- 6.2 A fertilizer program in addition to the lawn program will be provided for newly planted trees. During the first year, soluble fertilizer such as Peter's 20-20-20 shall be used. Apply ten (10) TBS [dry] of product in ten (10) gallons of water to each tree. Three monthly applications in the April - June time frame shall be made. In the second year, newly planted trees shall be fertilized in March using a fertilizer with a 3.1.1 analysis. Apply a quantity sufficient to deliver 1/2 pound of nitrogen per caliper inch of tree. After coordination with the Landscape Manager, these same trees may be fertilized again in November applying 1/4 lb. of nitrogen per caliper inch. The fertilizer ratio should be 3.1.1. These applications shall be applied by bored or soil injection method locating the fertilizer four to twelve (4 -12) inches below the soil surface and among the tree feeder roots.
- 6.3 Pruning (12 feet & under) shall be carried out during physiologically desirable times of the growing season to ensure health, function and aesthetic appeal. The Landscape Manager shall be coordinated with prior to pruning. Trees will be pruned, in a limited way, once during the first year after planting. The intent of this first pruning will be to deadwood and shape the plant material in minor ways only. All trees shall be pruned in accordance with guidance set down in the current edition of "Pruning Standards for Shade Trees" published by the International Society of Arboriculture and Tree Pruning by Shigo. Tree pruning shall include only work that is necessary to maintain the tree's normal growth form, removal of dead or dying portions, crossed branches, removal of undesirable suckers and/or water sprouts and the removal of old flower parts to ensure continuous flowering, e.g. Crape Myrtles. Crape Myrtles shall be maintained at or about the fifteen (15) foot level, ensuring that blooms are easily in view and within fragrance distance to any nearby person(s).
- 6.4 Plants that are staked and guyed shall be monitored and guy wires loosened as necessary to prevent girdling and /or weakened growth. The Contractor is responsible for the removal and disposal of all staking and guying material above grade. This shall occur not later than one year after planting and shall be coordinated with the Landscape Manager if recommended prior to that time.

Article 7: IRRIGATION

- 7.1 All grass/shrub/tree areas under automatic irrigation will be watered as necessary for healthy plant growth. The Contractor shall ensure that plant material receives not less than one and one-half inches of water each week (including drainage and rain). Exceptions will be coordinated with the Landscape Manager. Particular attention will be required. Special watering for new plantings will be applied, if necessary, in addition to water provided by the automatic irrigation system. A soil probe must be used in determining water application requirements.
- 7.2 The Contractor will maintain the irrigation system in operating condition. This includes cleaning and adjusting drip system filters monthly, and ensuring the integrity of the piping system.
- 7.3 Damages to the irrigation system resulting from the Contractor's operations will be repaired immediately without charge. Other repairs shall be identified to the Landscape Manager, made and billed in accordance with Article 10.
- 7.4 The irrigation system will be detail tested by the Contractor as necessary to ensure effective operation. Lateral lines and valves will be flushed, cleaned and checked in March, June and September.
- 7.6 Irrigations Controllers. Check the following:

- a. Operation; Progression; Station-to-Station: weekly
- b. Activation of the valves: monthly
- c. Station timing: as soil moisture needs change
- d. Proper time and day: weekly
- e. Fuses: weekly
- f. External appearance: Every three months

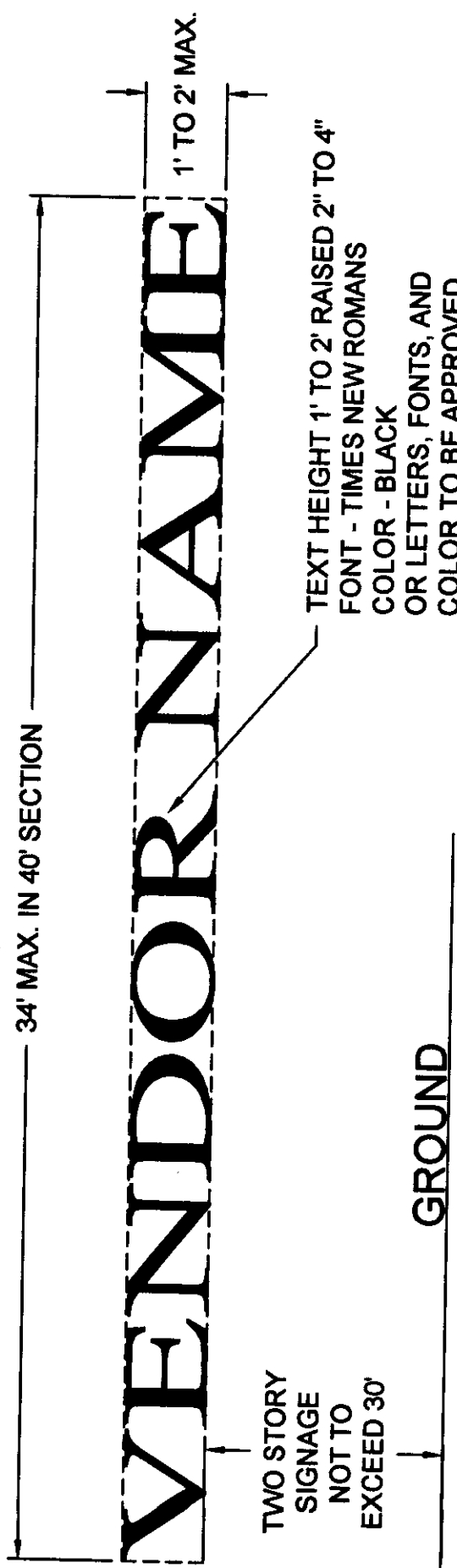
7.7 The Owner shall ensure timely and appropriate notification of, and coordination with the Contractor should there be a system malfunction, particularly any that could affect the health of plant material.

Article 8: ADDITIONAL ACTIVITIES.

- 8.1 Soils analysis. In September, soil testing shall be done. The Contractor shall coordinate with the Landscape Manager prior to collecting samples. Lime/sulfur and, fertilizer including trace elements shall be applied, guided by the analysis. The results of this soil testing shall be sent, one to the Landscape Manager and one to the Owner. Any proposed deviation from N. C. Department. of Agriculture's recommendations for treatment, and there may be some, shall be coordinated with the Landscape Manager.
- 8.2 The property, e.g. walks, drives, pathways, lawns, planting areas and beds shall be kept clean of debris on a regular basis. The property shall be clean by Friday afternoon of each week and for special events. Cleaning up debris from extreme weather conditions, i.e. tornadoes, hurricanes, ice storms, etc., shall be reimbursed on a time and materials basis. Prior to commencing such services, the Contractor shall coordinate with the Landscape Manager/ Owner. Coordination should occur prior to 9:00 a.m. on the day following such weather conditions.
- 8.3 Plant debris/grass clippings, etc., shall be chipped and composted on the site. Mature compost shall be kept separate from material in process. Appropriate fertilizers shall be added and composting piles turned each month until the composting process is complete. Minor debris masses may be disposed of with the city by curbside pick-up.
- 8.4 Garden fountains and pools are not part of this contract.
- 8.7 Drain ways and gutters shall be kept free of debris, rock, sand and/or soil on a daily basis.

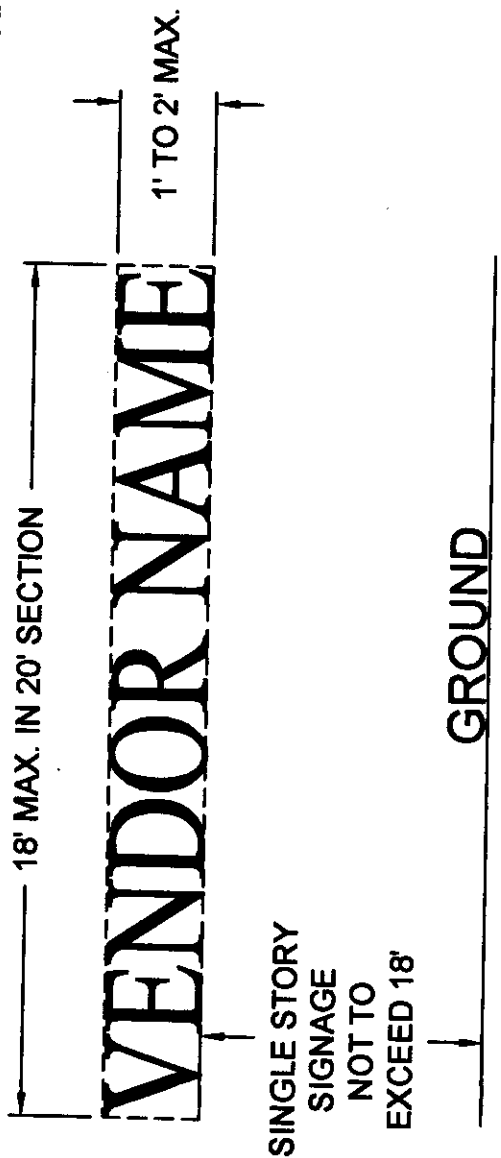
SIGNAGE

TYPICAL STORE FRONT SIGNAGE DETAIL

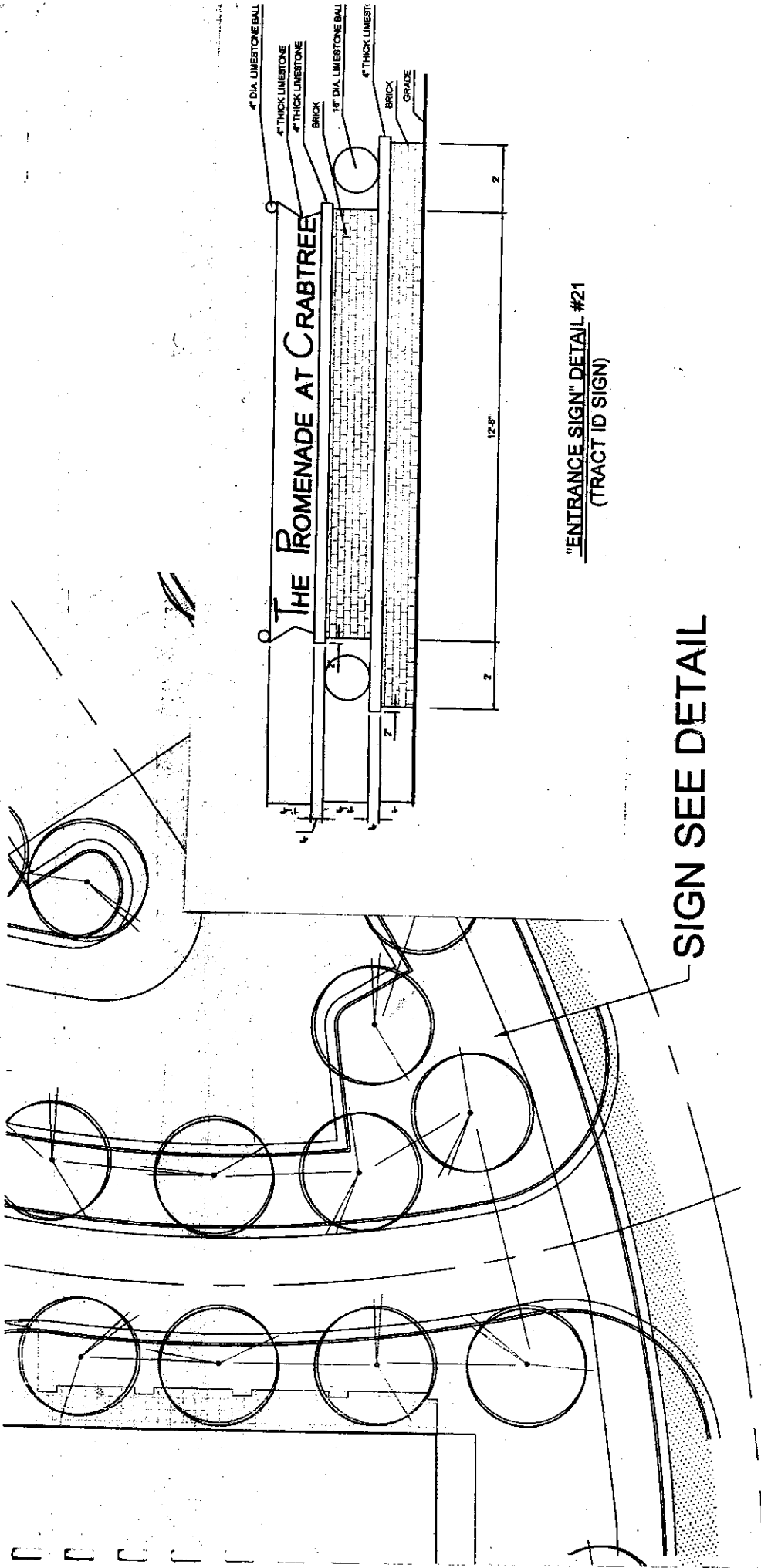


TWO STORY
SIGNAGE
NOT TO
EXCEED 30'

TEXT HEIGHT 1' TO 2' RAISED 2" TO 4"
FONT - TIMES NEW ROMANS
COLOR - BLACK
OR LETTERS, FONTS, AND
COLOR TO BE APPROVED
BY CRABTREE AVENUE
INVESTMENT GROUP, LLC
ARCHITECTURE REVIEW COMMITTEE



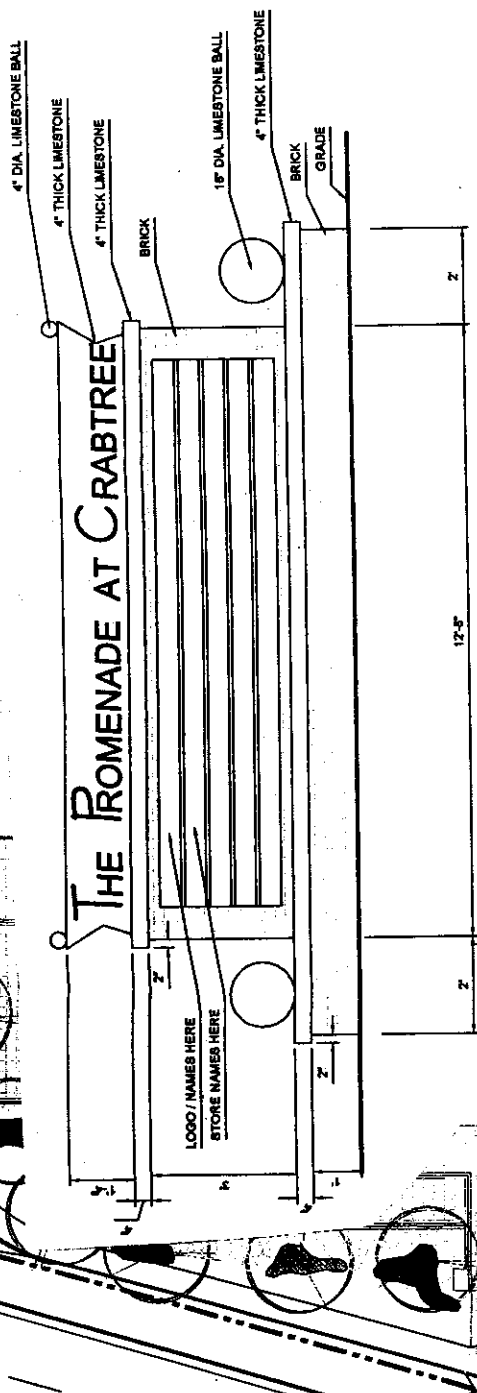
SINGLE STORY
SIGNAGE
NOT TO
EXCEED 18'



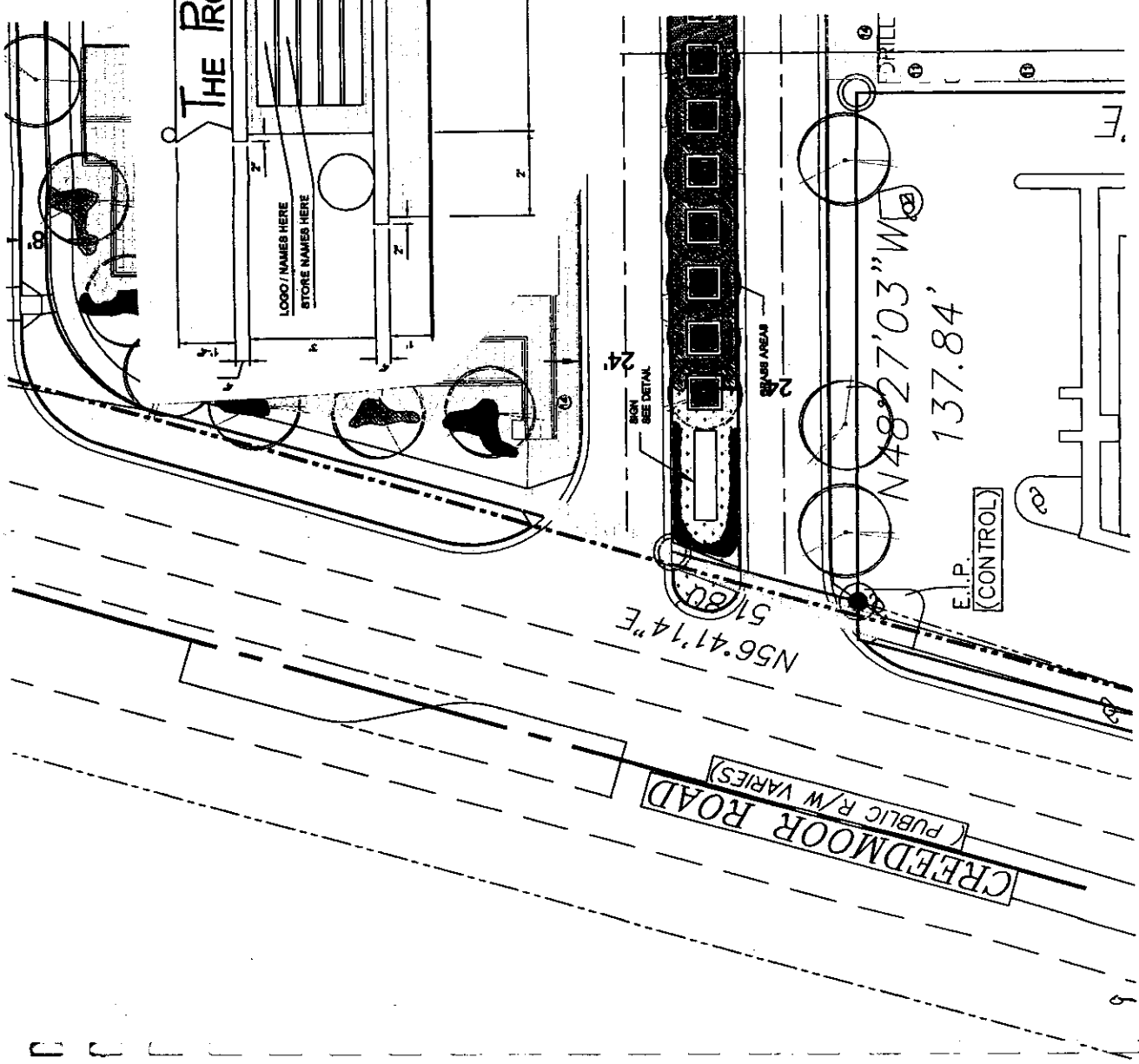
"ENTRANCE SIGN" DETAIL #21
(TRACT ID SIGN)

SIGN SEE DETAIL

EDWARDS MILL ROAD



"ENTRANCE SIGN" DETAIL #20



UTILITY LOCATIONS

PARKING

PARKING TOTALS

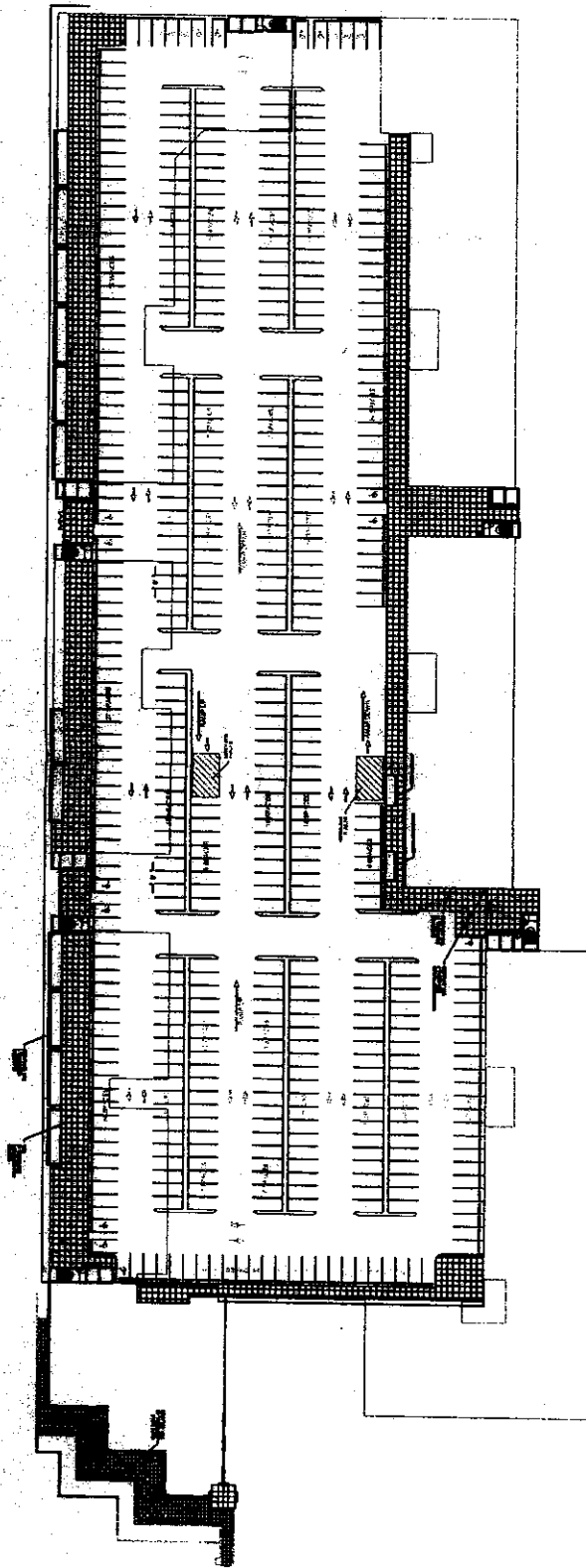
PROMENADE LEVEL UN-COVER PARKING	272 SPACES
PARKING DECK SUB LEVEL ONE	501 SPACES
PARKING DECK SUB LEVEL TWO	503 SPACES
PARKING DECK SUB LEVEL THREE	505 SPACES
TOTAL SPACES:	<u>1781 SPACES</u>

REQUIRED PARKING CALCULATION

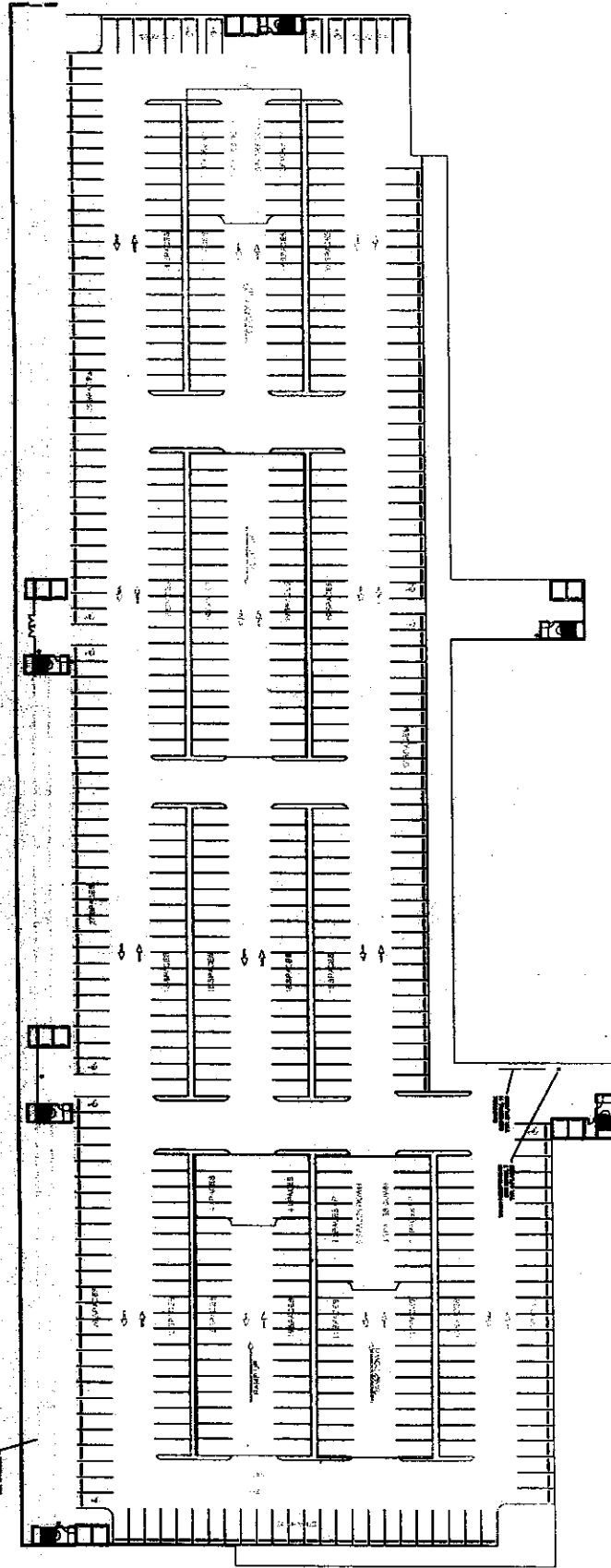
		<u>Factor</u>	<u>Required Spaces</u>
Retail Space (Maximum) = 226,000 s.f.	x	1/200	1130
Office Space (Maximum) = 150,000 s.f.	x	1/300	500
			Subtotal: <u>1630 Spaces</u>
Maximum Reduction Allowed			20% of Subtotal: 326 Spaces
Residential Units (Maximum) = 600 units	x	1	<u>600 Spaces</u>
Total Spaces Required (Before Reduction)			2230 Spaces
Total Spaces Required (After Reduction)			1904 Spaces

Note:

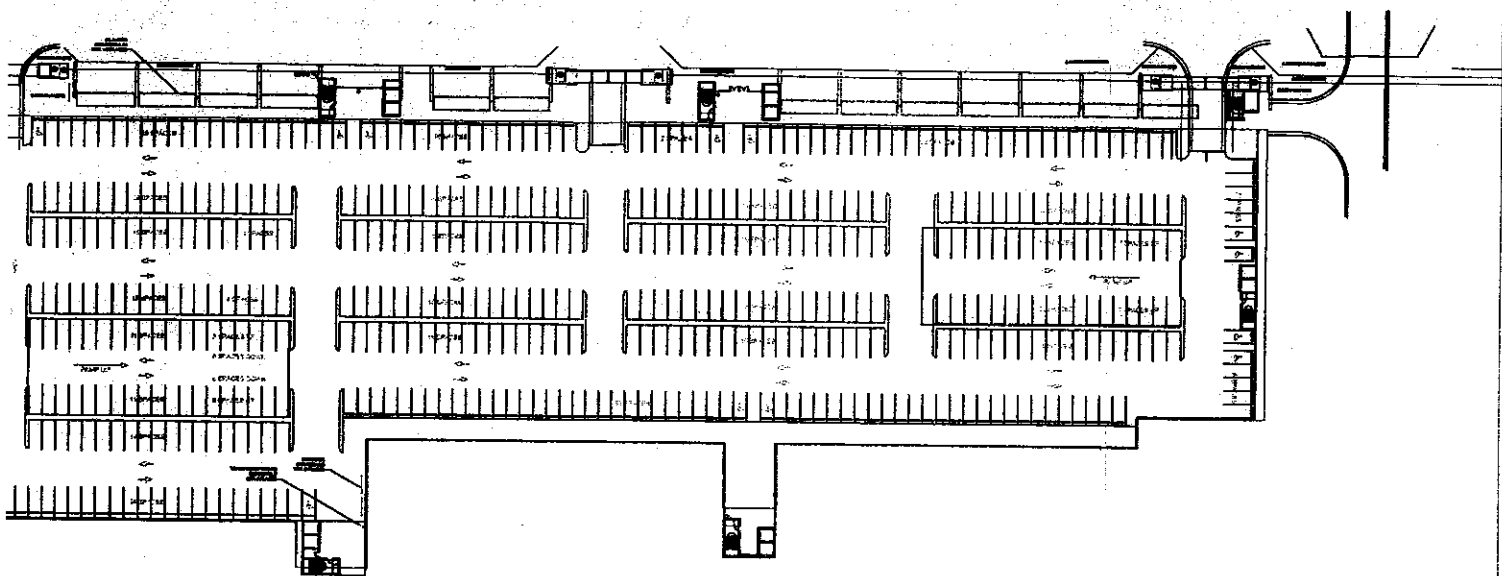
1. A minimum of 1888 parking spaces will be provided at maximum buildout.
2. Parking shall be provided for other combinations within the limits noted in the Master Plan Document, utilizing a maximum parking reduction of 20% of the required parking.



PARKING DECK SUB LEVEL 1



PARKING DECK SUB LEVEL 2



PARKING DECK SUB LEVEL 3