



CITY OF NORTHVILLE

Secondary Streets Design Standards

May 11, 2016



This page intentionally left blank



CONTENTS

Introduction	1	
Landscaping	5	
Pedestrian Lighting	7	
Street Furnishings	9	
Non-Motorized Transportation	11	
Sidewalks, Ramps and Curbs	13	
Intersection Illustration	15	
Road Segment Illustration	16	
Appendix	17	
A.1	Raised Beds	19
A.2	Trees/Grates	21
A.3	Street Lights	23
A.4	Benches	25
A.5	Trash Receptacles	27
A.6	Planters	29
A.7	Tables and Chairs	31
A.8	Fencing	33
A.9	Bollard	35
A.10	Drinking Fountains	37
A.11	Bike Racks	39
A.12	Sidewalks	41
B.1	Furnishing Frequency	43



This page intentionally left blank



INTRODUCTION



Downtown Northville is a great example of an architecturally significant, walkable, traditional retail core. The entire downtown is within the boundaries of a national, state, and locally designated Historic District. The City has long recognized the value of the downtown as a community asset and has successfully encouraged the redevelopment of downtown in a pattern that supports the historic form of the district.

To encourage and support the (re)development efforts, the City and Downtown Development Authority (DDA) recognized the need to update the public streets, parks and amenities that support its vital downtown and in 2006 prepared a Strategic Plan for Downtown Northville. One of the items that was featured prominently in the Strategic Plan was the need to update the City's aging streetscape. The City has recently begun the process of updating the 2006 Strategic Plan to provide a framework to guide future public and private investments.



In 1978-80 the City undertook an extensive redevelopment project of the downtown area called Main Street '78. The project provided a much needed upgrade to all of the major infrastructure in the Downtown area and really set the state for the revitalization effort that followed. In 2010, thirty-two years of active use of the streetscape, had caused the area to decline and was inadequate in meet today's transportation, safety, and economic needs. A Streetscape Enhancement Project, funded in part from a grant from the Michigan Department of Transportation, was developed to provide for the primary roads in the downtown that encompassed the four major blocks that intersect at Main and Center Streets. The Streetscape Enhancement Project was developed to provide:

- New sidewalks, curbs, and crosswalks that were safe, met current ADA standards, and were compatible in appearance with the existing Town Square project.
- New curb bump-outs to support pedestrian activities in downtown such as outdoor dining and to improve pedestrian safety at street crossings.



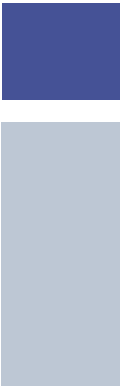
- Street amenities including benches, planters, and waste/recycling receptacles that are high quality, consistent in appearance and well distributed throughout the downtown.
- Healthy trees and other vegetation that were not thriving in the current conditions.
- Updated light sources for improved color rendering of the architecture and increased energy efficiency.
- Bicycle parking facilities throughout the downtown.
- Enhanced downtown gateways with banner poles and pedestrian and cyclist wayfinding signs.

The plan for improving the downtown streets was developed in a collaborative process with the community and represents the consensus of a number of concerned organizations and community members. When completed, the project significantly improved the visual character of downtown, enhanced the walkability of the community, and helped to retain the economic vitality of the core downtown area.

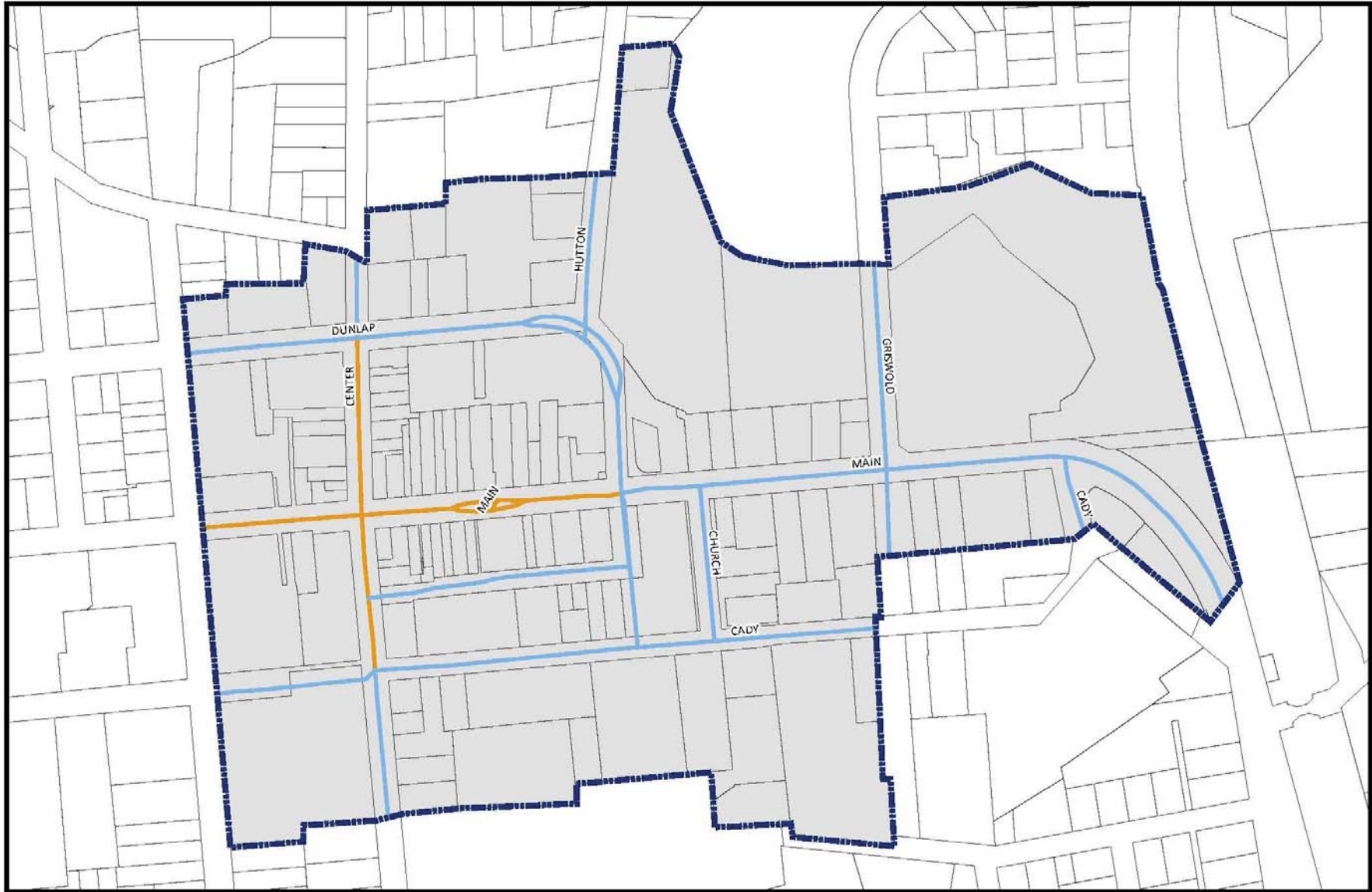
With the deficiencies of the core area of the downtown addressed, it is now time to address the issues facing the secondary areas of the downtown. The secondary areas of the downtown include all of the areas outside of the 4 block core area, not previously addressed as part of the Streetscape Enhancement Project of 2008. These Design Standards provide a common language of landscaping, lighting, paving and street furniture that will provide a strong visual cohesion to the larger downtown area as properties in these vital secondary areas leading into the core downtown are redeveloped.

These standards apply to the secondary streets in the Downtown Development Authority (DDA) District, as illustrated on the map on page 4. The Northville Zoning Ordinance also references these standards in the Cady Street Overlay District (along Cady St. between Wing & Main St.), and the Central Business District Overlay District (along N. Center St. between Randolph & Walnut). Note that the Central Business District Overlay is outside of the DDA boundaries; however, the ordinance still references these standards as applicable to the overlay district.

These standards illustrate required improvements for new development fronting the City's right of way. The standards may be waived or modified by the City of Northville Planning Commission or DPW Director for locations where the strict application of the standards may be impractical. The situations where the standards may be waived or modified include:

- 
- Sight visibility at intersections
 - Driveway clearance
 - Sidewalk obstruction/walkway clearance
 - Interference with underground or overhead utilities
 - Other similar site features

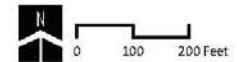
Illustrations showing how the various elements coordinate along a street or at an intersection are provided on pages 15 and 16.




DDA SECONDARY STREETS

City of Northville, Michigan

-  DDA Boundary
-  Primary Roads
-  Secondary Roads



Source: Wayne County GIS

Carlisle/Wortman Associates
February 29, 2016 

LANDSCAPING

Trees: Street trees are an important ingredient in a downtown streetscape. They provide shade and cool the pavement during the hot summer months, and as vertical elements they reduce the perceived width of the street thereby slowing traffic and resulting in a more pleasant pedestrian environment. It is important to select trees that do not block the window displays and signs of downtown businesses. When planting street trees, choose a variety of species to avoid noticeable gaps when one dies or is damaged. The current emerald ash borer impact on the ash tree population is a potent reminder that an entire species of street trees can be wiped out in a single growing season. For tree spacing, see the table in Appendix B.1 on page 43.

Some plants do better than others in such tough urban conditions. But, even the right plant can be sorely tested if not properly cared for or if placed in the improper setting. They need the right proportion of air, water and nutrients to survive in this relatively unnatural, harsh environment. Tree roots need oxygen, and this is achieved through proper aeration of the soil. They need an adequate, regular, but not excessive supply of water. And they require a balanced supply of nutrients, which often need to be supplemented by fertilization. Irrigation, properly managed, provides the best opportunity for trees to get the right amount of water and flushes out salt and fertilizer residue. Without these conditions, the plants suffer and they lend a shabby appearance to the downtown. Street trees that tolerate urban conditions that are recommended for inclusion in Downtown Northville include:

- *Gleditsia tiracanthos* 'Skyline' – Honeylocust
- *Liriodendron tulipifera* - Tuliptree
- *Tilia cordata* – Little Leaf Linden
- *Zelkova serrata* 'Green Vase' – Zelkova
- *Acer X freemanii* 'Celebration' – Maple
- *Syringa reticulata* 'Ivory Silk' – Lilac
- *Ulmus americana* 'Princeton' - Elm
- *Carpinus caroliniana* 'Hornbeam' - Birch

Trees should be planted in a sequence of two to three of the same species in a row to provide a consistent character for a segment of the street. Where conditions allow, planting trees across the street from one another should also be considered. The trees should be planted in a large enough caliper to survive the urban condition, a minimum of 2.0 - 3.0" is recommended.

In the core downtown along Main and Center Streets, raised planters constructed of Brussels Block stone are part of the streetscape. A variety of trees, listed above are planted in these raised planters, which are typically located at intersections where there are bumpouts in the pavement large enough to accommodate the planters. The planters average height is approximately 12", which allows them to also be used for a seating area. The height of the planters was dictated by the terms of the Department of Transportation Grant for the 2010 Streetscape Enhancement Project. Future planters may be installed at a more comfortable sitting height of 16 - 18". On secondary streets, raised planters may be used in areas where the pavement is large enough to accommodate them while allowing pedestrians to pass by easily. Trees may be placed in the planters, or in landscaped areas or tree grates, depending the conditions in the sidewalk area.

If tree grates are utilized, they should match the East Jordan grates installed in the core area (see Appendix for specifications). The tree grate should be able to meet the load bearing capacity and requirement of the surrounding sidewalk area. In addition, the grate system should be able to be removed and replaced with a larger opening grate in the event the tree trunk grows too large for the opening. The distance between the finished soil grade and the top of the tree grate may not be more than six inches in height.

Tree guards: Use of the metal tree guards should be discontinued. Though installed with good intentions to protect the street trees, they are negatively impacting the image of downtown and in some cases the health of the trees.

Window boxes and planters: Building owners, merchants, and residents should be encouraged to complement their buildings with appropriate flower boxes and pots. Quality material should be utilized. Including terra cotta, cedar, painted wood, and metal. Window boxes may require plastic liners to extend their life and to maintain moisture in the soil. They should be installed below the sill line of the windows. Authentic materials should be utilized and use of artificial flowers and greens avoided.

PEDESTRIAN LIGHTING

A well lit downtown creates an environment that feels safe, inviting and comfortable. Properly placed, streetlights extend downtown activity into the evening. The City of Northville has a signature light pole used consistently throughout the downtown. A more recent light pole was installed in downtown, and while it is similar to the traditional light pole, there are noticeable differences. Newly purchased light poles should match the model of the original downtown light pole, and eventually replace the different style pole, which could be relocated to areas outside of the DDA district. See the Appendix for light pole and fixture specifications.

Lighting levels are important. Lighting should be sufficient for people to see comfortably and correctly distinguish persons and objects in the street. However, lighting should not be so great as to create deep shadows or pronounced areas of light and dark. Street lights are important for daytime use as well. The verticality of the light poles helps to distinguish the curb line for the street and establishes a particular rhythm to the street edge. The light levels along a street should generally be between 0.4 to 1.7 foot-candles; while 2.4 foot-candles is recommended at intersections. The spacing of the streetlighting should be the closest near the Main and Center Street intersection and the spacing should decrease as you leave the central core.

The light source of the downtown light poles is a mixture of high-pressure sodium and induction lighting. High pressure sodium lighting is still evident in areas of the downtown including Cady Street. High pressure sodium lighting casts a yellowish-orange tint distorting the color of people, landscaping, buildings, and other elements.

During the recent streetscape enhancement project, the City began to retrofit the high pressure sodium lighting in the core downtown with induction lighting. Approximately 120 streetlights have been converted, with another 80 left to convert.

Downtown's historic lighting will continue to be retrofitted with an induction light source which is more energy efficient, requires less maintenance, and supplies a truer color rendering.

The pedestrian-scaled light fixtures are comprised of a pole by Herwig Lighting that is 12' tall and a Spring City head. The poles should be installed approximately 2 feet on center from the face of curb and spaced to match other poles in the area, approximately 25- 40 feet apart. Where needed, house side shields should be installed in the light head to minimize light shinning directly into residential areas.

Each new streetlight installed, should be fitted with banner arms and GFI receptacles located at the top of the pole.

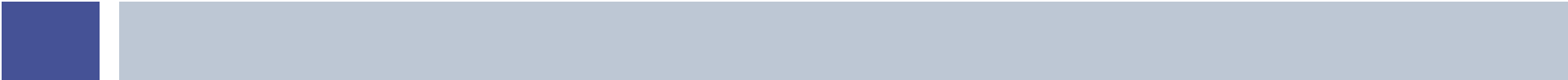
STREET FURNISHINGS

The Downtown Development Authority (DDA) has invested in a well-made family of furnishings from Canterbury International and Conceptual Site Furnishings. The receptacles, planters and drinking fountains are from the Pennsylvania series and are of cast aluminum and painted a gloss black. The furnishings are maintained by the DDA, with assistance from the Public Works Department. All of the street furnishings are further described in the Appendix.

Benches: Many of the benches were replaced during the Streetscape Enhancement Project. Additional benches are needed to retire the existing wooden benches and to populate underserved areas. Benches, placed facing the road and not obstructing the opening of cars doors, should be installed in each block of the downtown. The new downtown benches are fabricated by Conceptual Site Furnishings and are Kenton model. The DDA has retired the plaque program initiated during the first Streetscape project in 1978-80. As benches are retired, the plaques – and in some cases the bench- are returned to the original donor.

Receptacles: The downtown trash receptacles are fabricated by Canterbury International and are the Pennsylvania series in cast aluminum. As the community is becoming more pedestrian friendly, additional receptacles are needed to accommodate underserved areas. Temporary red barrels augment the receptacles on event days. The DDA has also been exploring the possibility of adding recycling receptacles for paper, bottle, glass and metal. The receptacles would be installed initially in central gathering places like Town Square, Old Church Square, Northville Square and Ford Field.

Cast aluminum planters: Almost one hundred cast aluminum Pennsylvania series planters by Canterbury International are scattered around the downtown area. The eighteen-inch tall pots are the most prevalent and are installed at the curb line throughout the downtown. Plantings within them are changed seasonally by the DDA. In addition, raised clusters of three planters varying in heights of twenty-four, thirty and thirty-six inches are grouped near corners and in areas with wider pavement. The installation of additional planters should be continued on the secondary streets as new development occurs.



The Appendix also provides specifications for additional street furnishings and site features that may or may not be needed for a particular site design. These elements include the following:

- Tables and chairs
- Fencing
- Bollards
- Drinking Fountains

Site furnishings may be required for projects along secondary streets that are subject to site plan review by the Planning Commission. In these cases, the Planning Commission and Department of Public Works Director will determine if street furnishings are required by the zoning ordinance, and will work with the applicant to determine what is appropriate for a given project and location.

NON-MOTORIZED TRANSPORTATION



The downtown is home to several bicycle shops and is a center for local cycling activity; however there is not a systematic organization to cycling facilities such as bicycle parking areas. In the larger picture, the Secondary Street Design Standards is a bike friendly initiative, intended to connect to a City/Township joint design effort to provide non-motorized connections through the Township, Edwards Hines Park and the City of Northville.

Additional bicycle parking facilities, as well as pedestrian and cyclist wayfinding signage, will be placed throughout the downtown to address the needs of the many cyclists using Hines Park and the Northville community.

Bike racks and on-street bike facilities will be installed in community gathering areas that are large enough to accommodate the size of these facilities. Individual or clustered single-hoop bicycle racks should be installed throughout the downtown. Black hoops, preferably by Madrax, will be located in each block of the downtown.

A bike respite station has been recommended for the downtown area to allow a place for cyclists to put air in tires, make minor repairs, fill water bottles, and lock up bikes. Cady Street has been identified as the preferred location for the installation of the respite station.

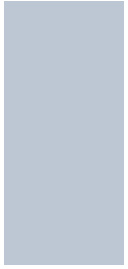


This page intentionally left blank



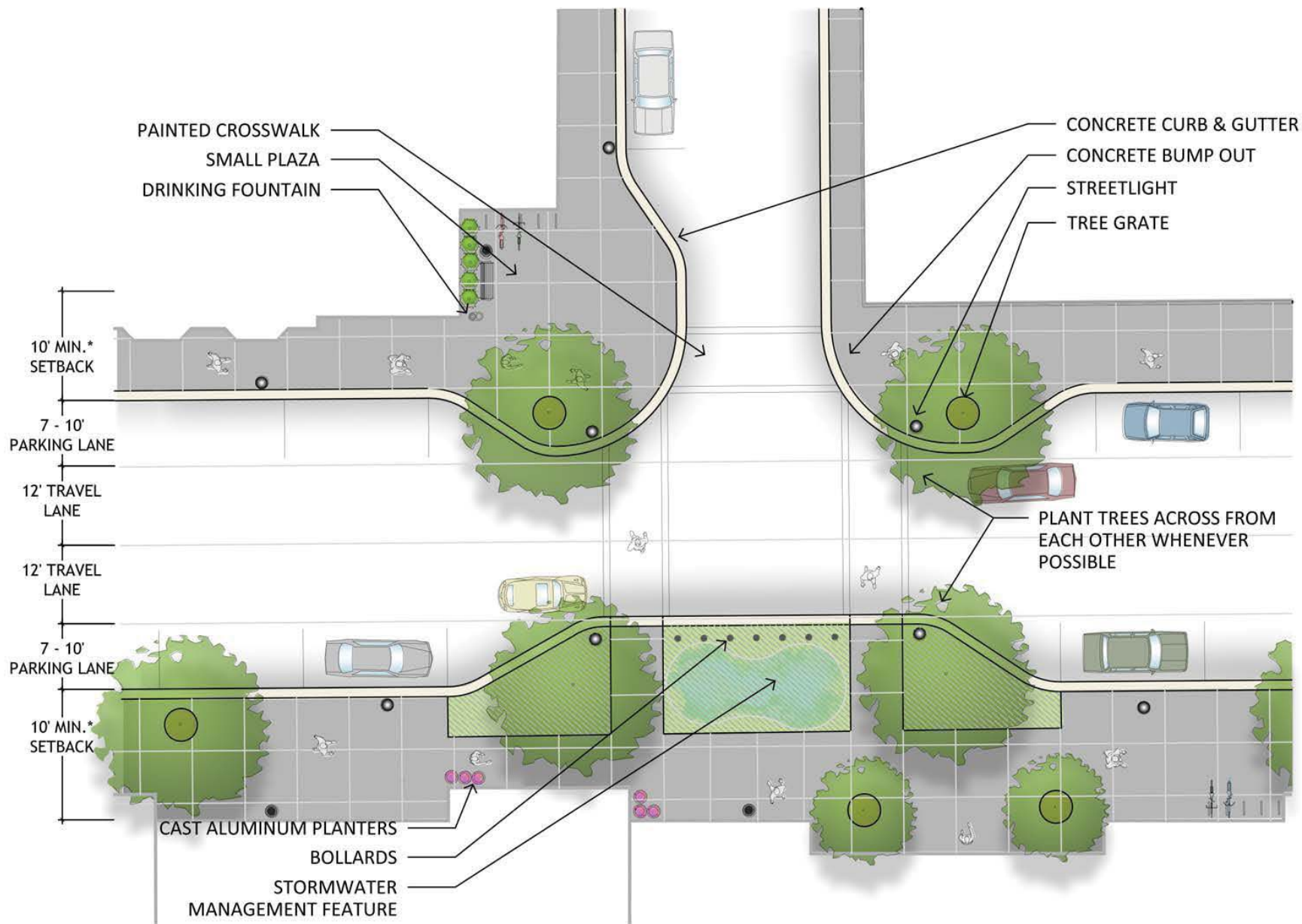
SIDEWALKS, RAMPS & CURBS

Sidewalks, ramps and curbs shall be poured of a standard concrete mix and meet all local, state and federal code requirements. Ramps shall have detectible warning surfaces. Sidewalks and curbs shall be the standard 4.0"-depth and ramps shall be 6.0"-depth poured concrete. Sidewalks shall be hand troweled. Bump outs that break up a long block visually shall be roughly every 4-5 parking spaces or 80 – 100 feet. The sidewalks must meet all ADA requirements with a minimum width of 5' and a minimum grade of 2%

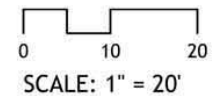


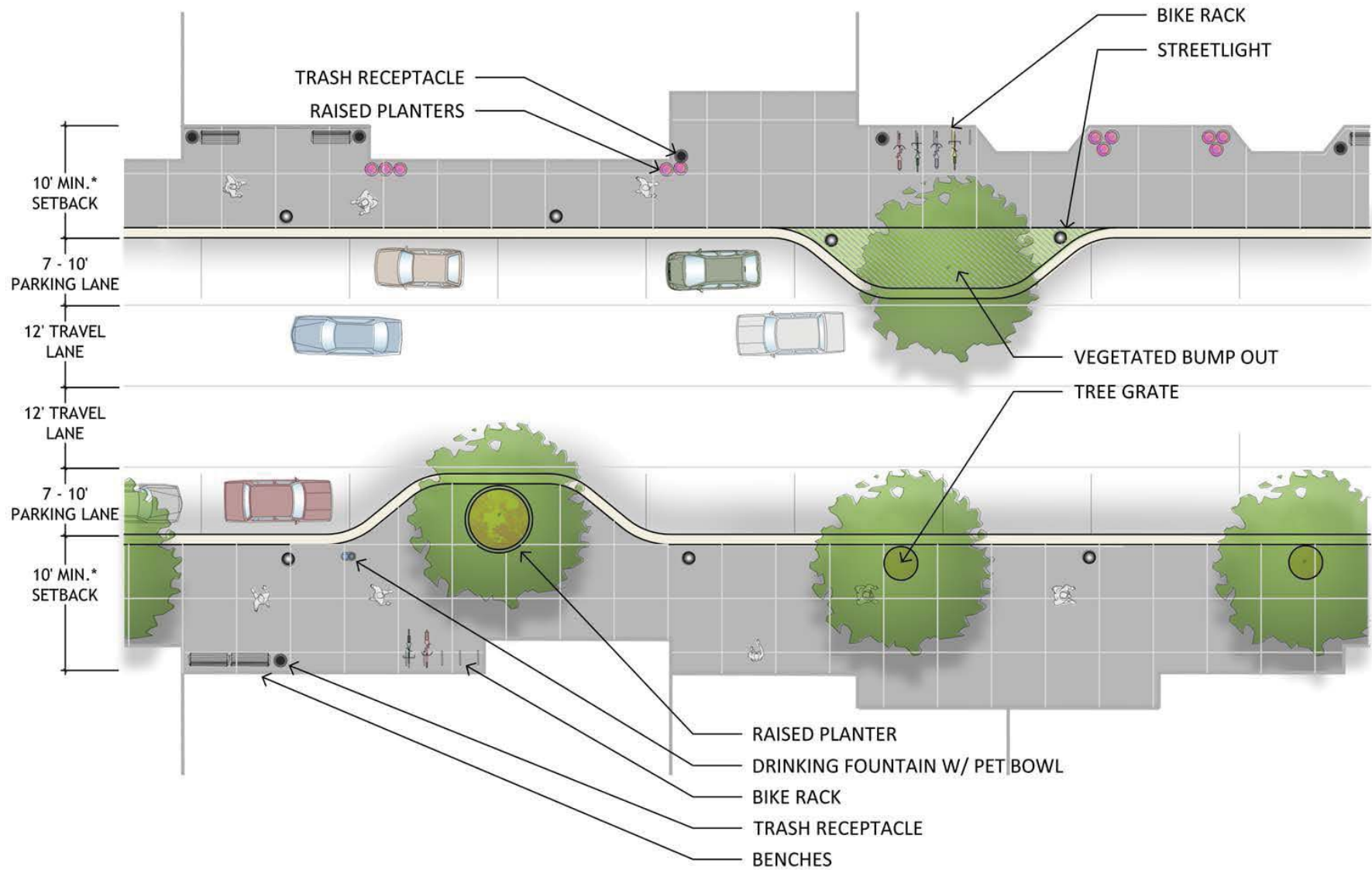
This page intentionally left blank



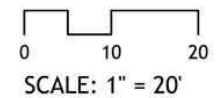


* Alternative setbacks apply to Cady Street overlay area
See Section 10.06 Cady Street Overlay of the City of Northville Zoning Ordinance

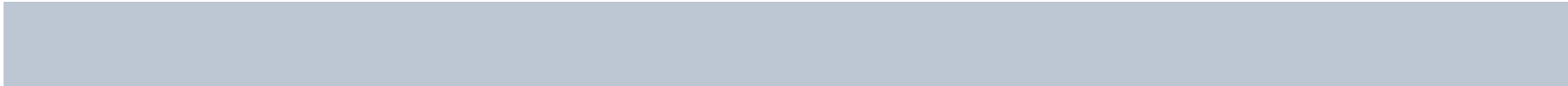




* Alternative setbacks apply to Cady Street overlay area
 See Section 10.06 Cady Street Overlay of the City of Northville Zoning Ordinance



APPENDIX



This page intentionally left blank





Specifications

Small Raised Planter Bed

Dimensions:

Diameter: 6'

Materials:

Planter Stone: "Brussels" by Unilock
Limestone Color to match existing

Manufacturer's standard concrete adhesive between stone layers and to concrete base

Planter Ring: 5' diameter

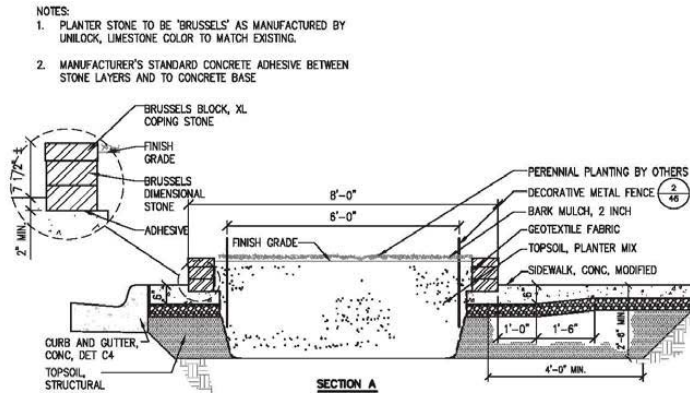
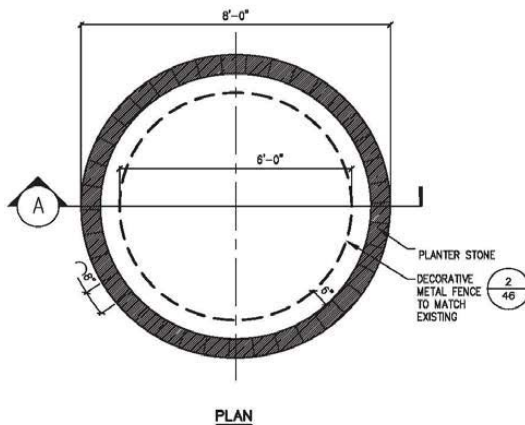
Galvanized steel, black

Company:

Planter Ring: Future Fence

Phone: (586) 755-7080

Website: www.futurefabricating.com



A.1 Raised Beds

Specifications

Large Raised Planter Bed

Dimensions:

Diameter: 13'

Materials:

Planter Stone: "Brussels" by Unilock
Limestone Color to match existing

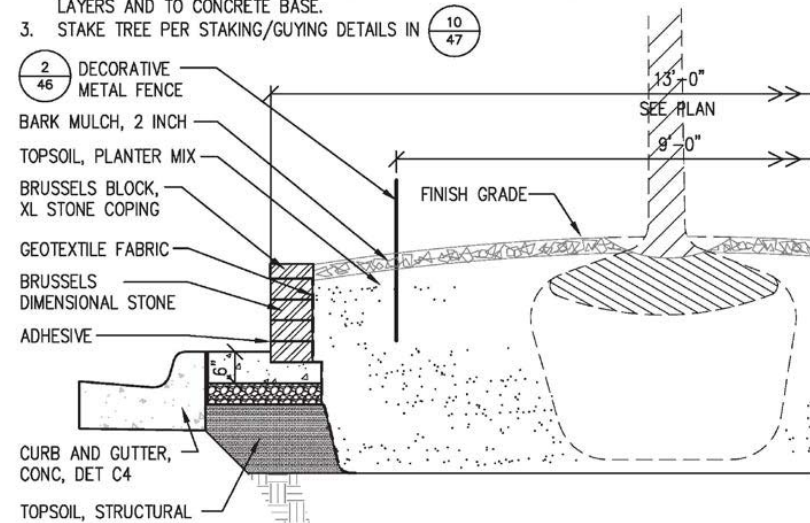
Manufacturer's standard concrete adhesive between stone layers and to concrete base

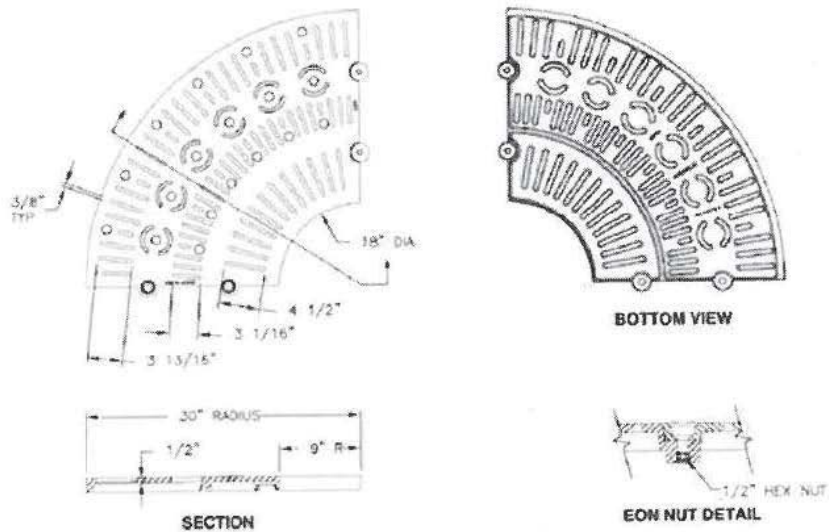
Planter Ring: 8' diameter
Galvanized steel, black



NOTES:

1. PLANTER STONE TO BE 'BRUSSELS' AS MANUFACTURED BY UNILOCK, LIMESTONE COLOR, TO MATCH EXISTING.
2. MANUFACTURER'S STANDARD CONCRETE ADHESIVE BETWEEN STONE LAYERS AND TO CONCRETE BASE.
3. STAKE TREE PER STAKING/GUYING DETAILS IN 10
47





Specifications

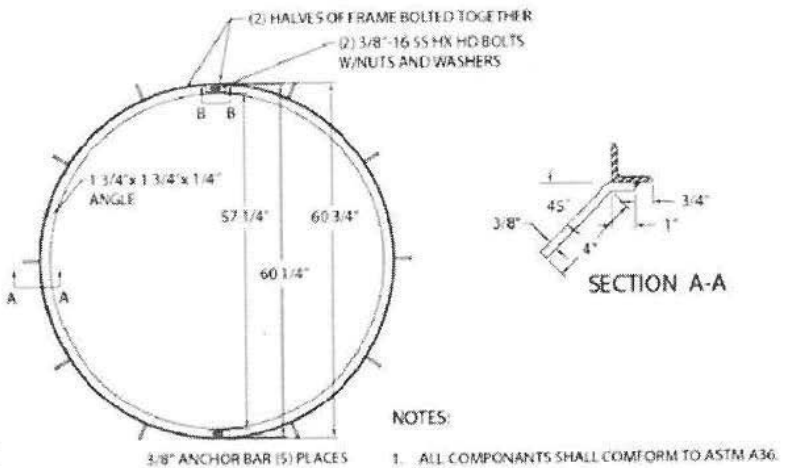
Orbit tree grate
Model number 8595

Dimensions:
60" round
18" tree opening

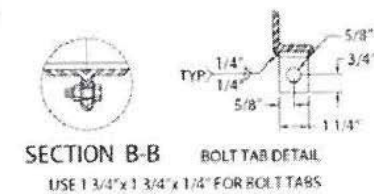
Materials:
Steel setting frame

Company:
East Jordan Iron Works
Phone: 1(800)874-4100

Website:
www.americas.ejco.com



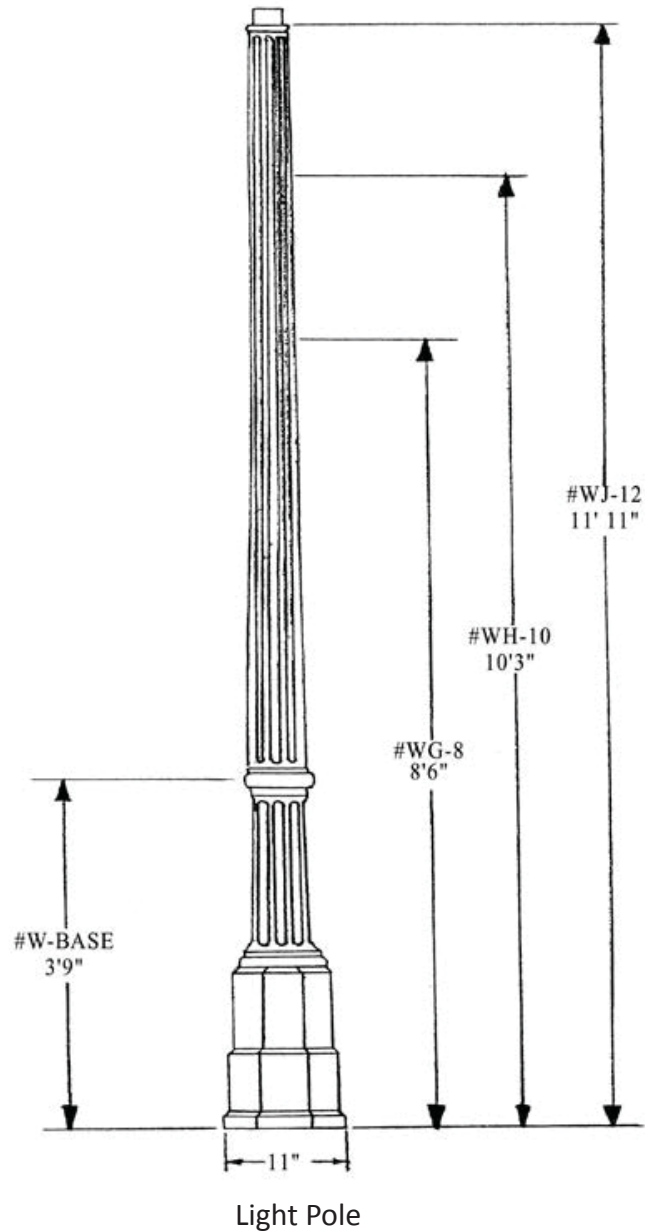
- NOTES:
1. ALL COMPONENTS SHALL CONFORM TO ASTM A36.
 2. FRAME WILL SUPPORT SAME LOADING CONDITIONS AS SURROUNDING CONCRETE WHEN PROPERLY CAST IN.
 3. ENTIRE FRAME SHALL BE TREATED PER MANUFACTURER'S RECOMMENDATION.
 4. PARTS TO HAVE PRODUCT NUMBER IDENTIFICATION.
 5. UNLESS OTHERWISE SPECIFIED AND/OR INDICATED, FABRICATION TOLERANCES SHALL BE +/- 1/16".





This page intentionally left blank





Specifications

Herwig WJ-12 Cast Post

Dimensions:

Diameter: 11"

Height: 11' 11"

Materials:

Cast Aluminum, black finish

Tapered and fluted shaft

Cast single box GFI receptacle with weatherproof cover

4 – 5/8" x 18" anchor bolts

Company:

Herwig

Phone: 1(800) 643-9523

Website: www.herwig.com

Current Pricing:

Please verify with company



A.3

Street Lights

Specifications

Edgewater – Medium Filter
85 Watt Induction Light Source
120 Volts
3000K color temp

Dimensions:

Diameter: 20"
Height: 34"

Materials:

Cast Aluminum Alloy #356
Frosted Seeded Acrylic
Stainless Steel Screws
Black Finish

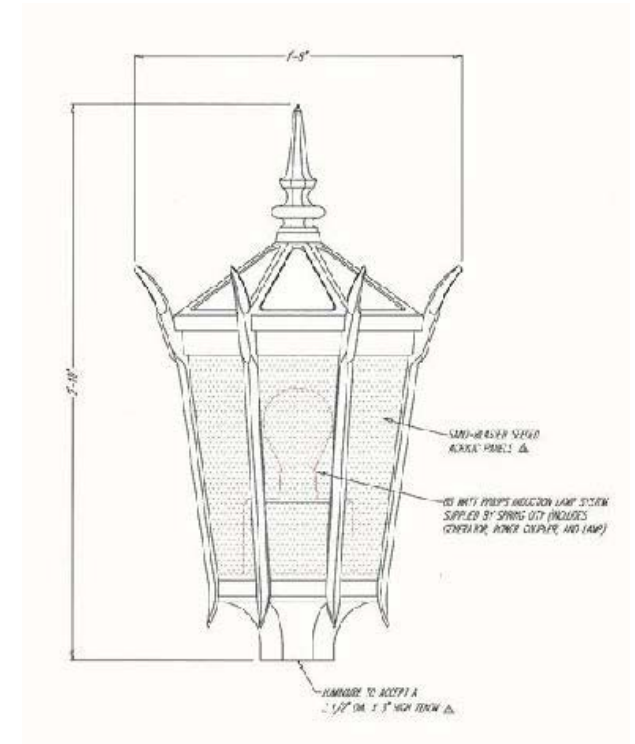
Company:

Spring City
Phone: 1(610) 948-4000
Website: sales@springcity.com

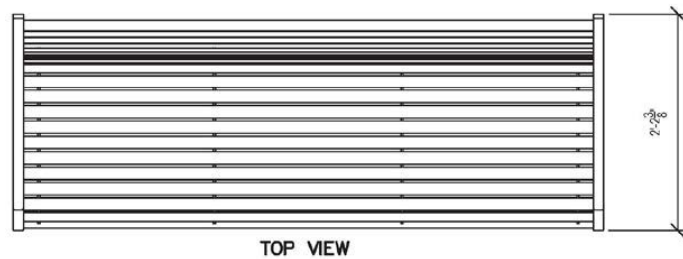
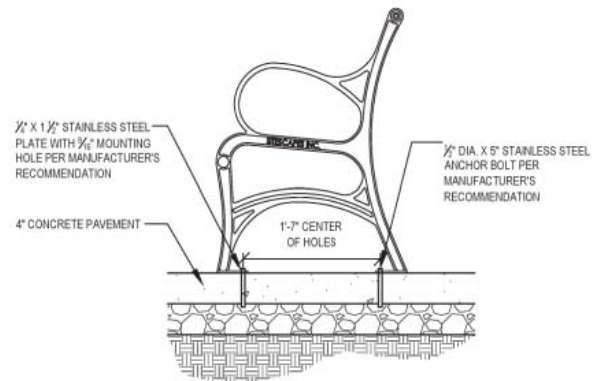
Current Pricing: \$1,425 per head
Please verify with company



Induction Head



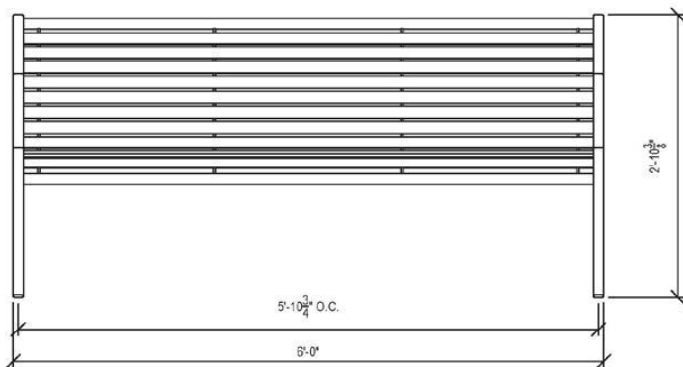
Bench Mounting Instructions



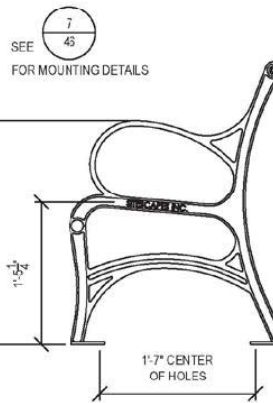
TOP VIEW

NOTE:

1. BENCH TO BE WESTPORT SERIES AS MANUFACTURED BY SITESCAPES, PLAINWELL SERIES AS MANUFACTURED BY LANDSCAPE FORMS, OR APPROVED EQUAL.
2. BENCH SHALL BE BACKED WITH HORIZONTAL SLATS.
3. BENCH SHALL BE 6' IN LENGTH.
4. BENCH SHALL BE BLACK IN COLOR.



FRONT VIEW



RIGHT SIDE VIEW

SEE  FOR MOUNTING DETAILS

Specifications

Kenton Bench

Dimensions: 72" L x 72" H x 25" D

Materials:

Seat and Back: Steel slats

Cast Aluminum end frames, steel support frames

Finish: Powder coat, black

Company: Conceptual Site Furnishings

Phone: (616) 940-9830

Website: www.conceptualsite.com

Current Pricing:

Please verify with company





This page intentionally left blank



Specifications

Pennsylvania Avenue Trash Receptacle Model 102, with side openings and hinged side door

Dimensions: 23 1/2" diameter and 37 1/2" high.

Materials:

Barrel – Cast Aluminum with welded construction

Liner – Removable rigid plastic

Top – Cast Aluminum

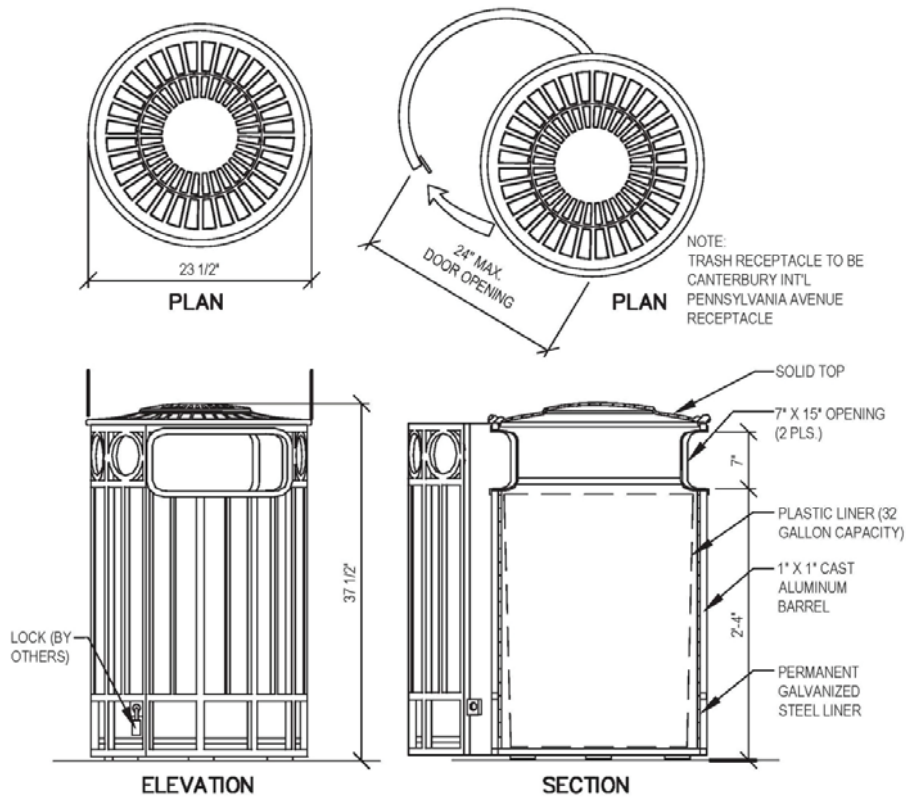
Company: Canterbury International

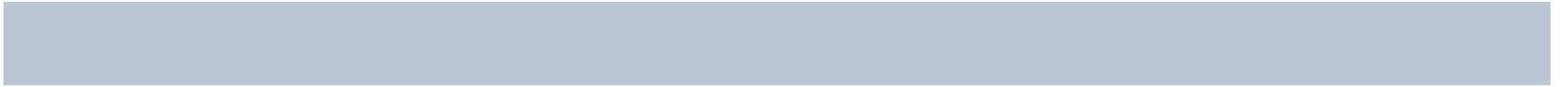
Phone: 1(800) 935-7111

Website: www.canterburyintl.com

Current Pricing:

Please verify with company





This page intentionally left blank



Specifications

Pennsylvania Avenue Planter

Dimensions:

Diameter: 23 1/2"

Height: 18", 24", 30", 36"

Materials:

Barrel Cast Aluminum with welded; construction liner - fiberglass

Finish: Std. Black

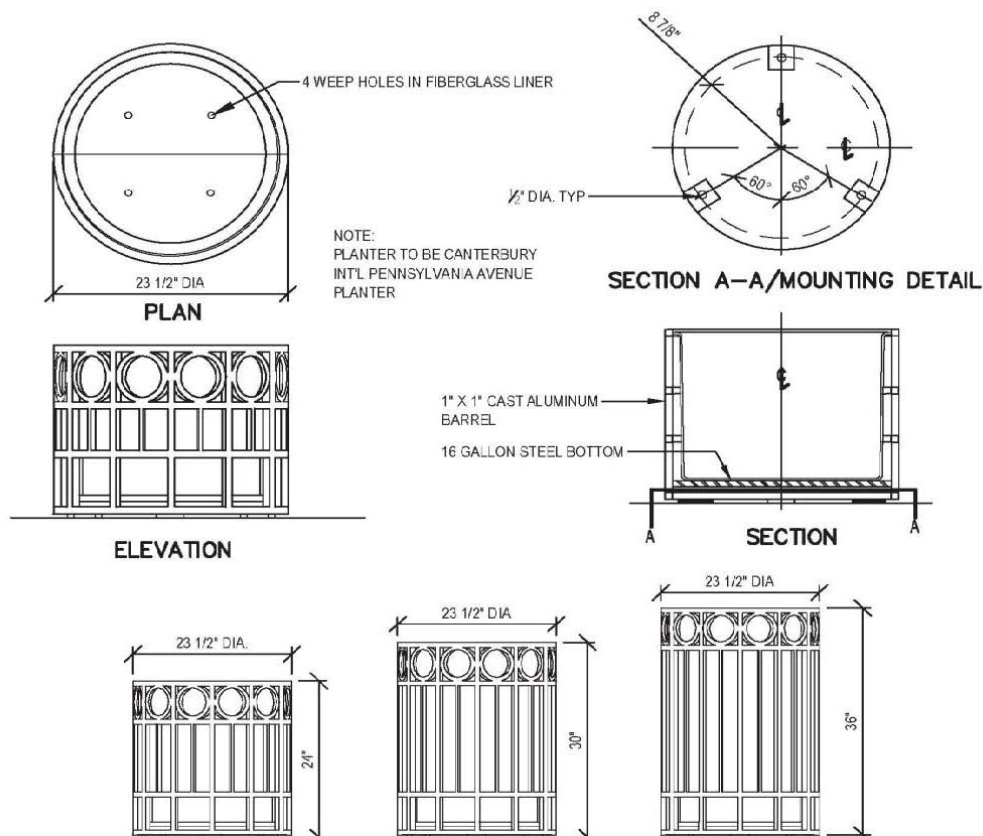
Company: Canterbury International

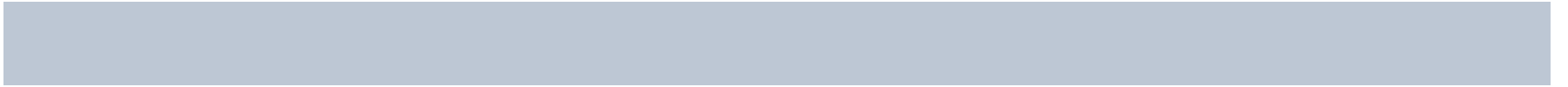
Phone: (800) 935- 7111

Website: www.canterburyintl.com

Current Pricing:

Please verify with company





This page intentionally left blank

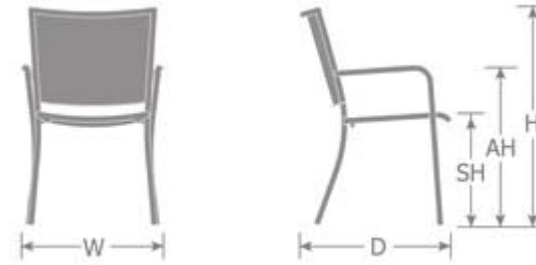




Specifications

Chair: Patio Outdoor/Indoor Stacking Chair

Dimensions:



H: 35.5" W: 23" D: 25" SH: 18" AH: 26" Lbs: 14

Materials:

Frame: Tubular Steel

Seat/Back: Small Interlace Steel Mesh

Finish: Powder coat, black

Company: Emu Contract

Phone: (800) 726-0368

Website: www.emuamericas.com

Current Pricing:

Please verify with company

A.7

Tables and Chairs

Specifications

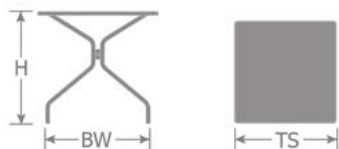
Table: Cambi Outdoor/Indoor Table

Current Pricing:

Please verify with company

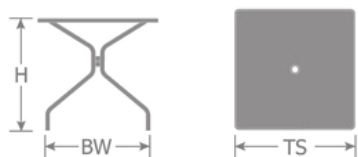
Dimensions:

Cambi #800- 24"



H: 29.5" BW: 20" TS: 24" Sq Lbs: 25

Cambi #802- 36"



H: 29.5" BW: 28" TS: 36" Sq Lbs: 37

Outdoor/Indoor Umbrella Table

Umbrella Hole Dia. 1 9/16"

Materials:

Top Thickness: 1 1/4"

Frame: Steel

Top: Extended Steel Mesh

Base: Tubular Steel Legs

Company: Emu Contract

Phone: (800) 726-0368

Website: www.emuamericas.com



Cambi #800 - 24"



Cambi #802 - 36"



Specifications

Montage plus Majestic 3-rail panel with flush bottom, standard 4" gap and rings at the top

Dimensions:

Width: 8' per panel

Height: 4'

Materials:

Metal

Black finish

Company:

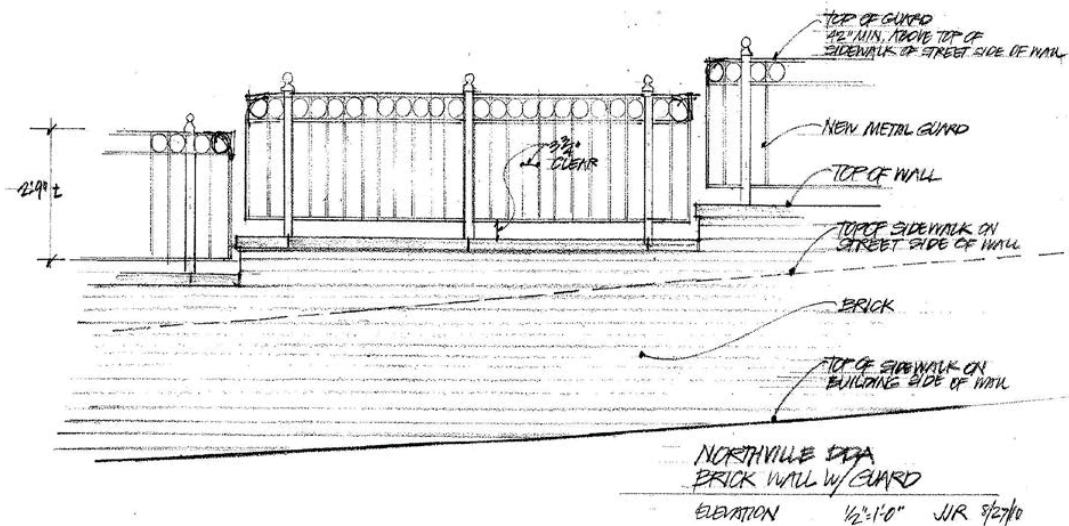
Planter Ring: Future Fence

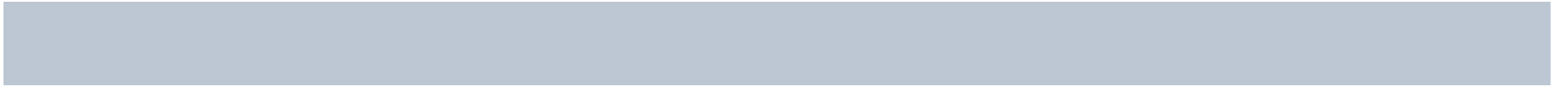
Phone: (586) 755-7080

Website: www.futurefabricating.com

Current Pricing:

Please verify with company





This page intentionally left blank



Specifications

Pantlind Bollard (plain or lit)

Dimensions:

Height: 43"

Materials:

Cast aluminum

Black finish

Lamp: PL13 fluorescent

Company:

Canterbury International

Phone: 1(800) 935-7111

Website: www.canterburyintl.com

Current Pricing: \$1,200

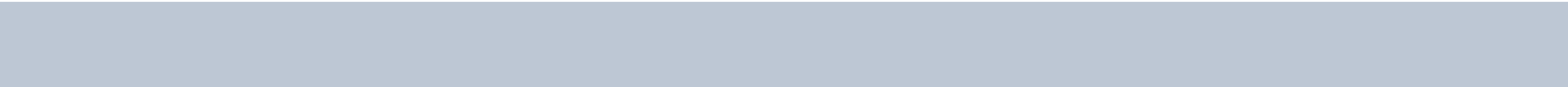
Please verify with company

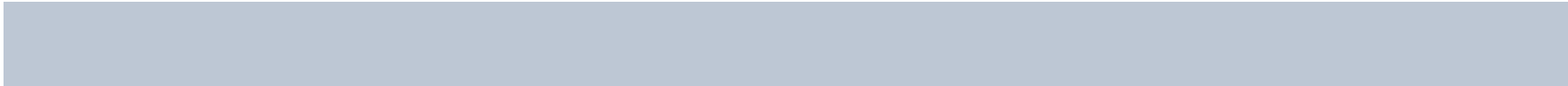




This page intentionally left blank







This page intentionally left blank



Specifications

Bike rack (with Northville Logo)

Dimensions: 126" in length

Height: 36 1/2"

Materials:

Metal

Black

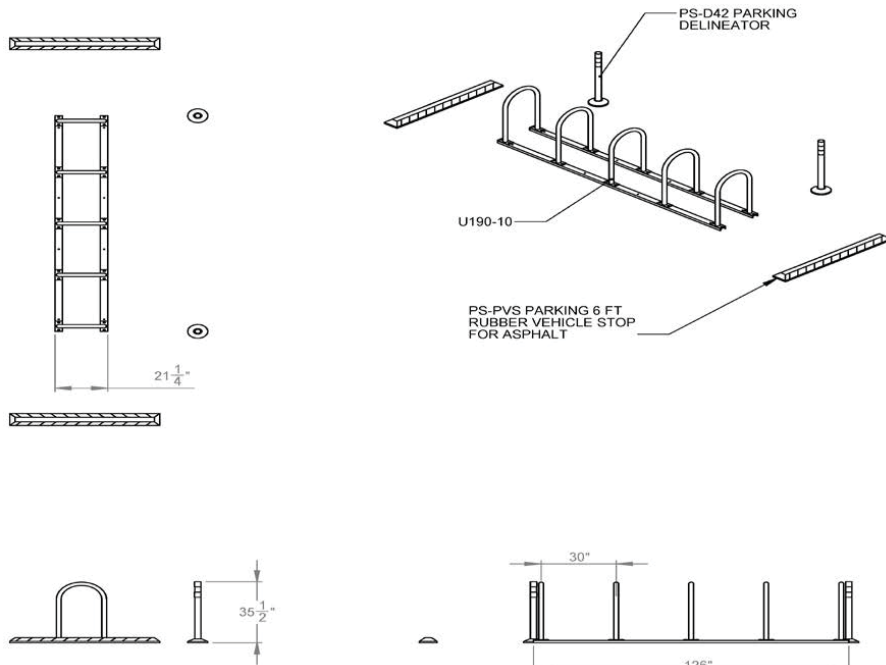
Company: Madrax

Phone: (608) 849-1080

Website: www.madrax.com

Current Pricing:

Please verify with company





This page intentionally left blank



Specifications

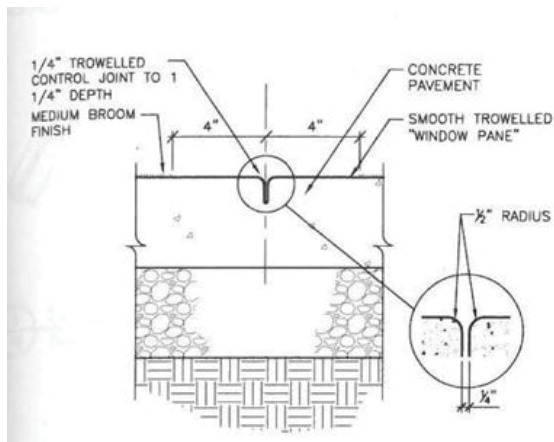
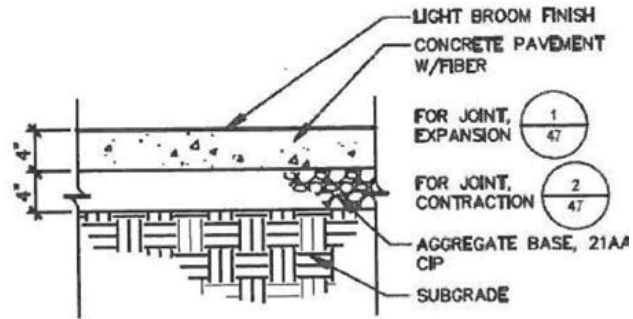
Sidewalk

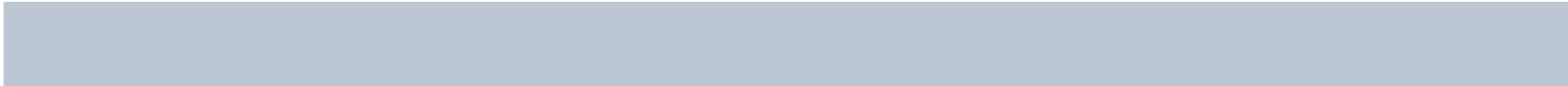
Materials:

P1 concrete, Hand-trowelled
4" thickness

Minimum of 5' wide

Meets ADA compliance





Furnishing Frequency

B.1

Street	Bump Outs	Stone Planters	Planting Beds	Planting Pots	Tree Grates	Street Trees	Benches	Refuse
North Center- Approx. 370'								
East Side	2	2		7 - 1 per 50'	3 - 1 per 123'	5 - 1 per 74'	2 - 1 per 185'	2 - 1 per 185'
West Side	3			6 - 1 per 61'	6 - 1 per 62'	6 - 1 per 62'	1 - 1 per 370'	3 - 1 per 123'
West Main- Approx. 356'								
North Side	4	2	3	4 - 1 per 89'	1 - 1 per 356'	5 - 1 per 60'	1 - 1 per 356'	2 - 1 per 178'
South Side	3		5	8 - 1 per 45'	2 - 1 per 178'	7 - 1 per 50'	1 - 1 per 356'	3 - 1 per 119'
East Main- Approx. 560'								
North Side	3	6		8 - 1 per 70'	4 - 1 per 140'	10 - 1 per 56'	3 - 1 per 186'	4 - 1 per 140'
South Side	4	4		8 - 1 per 70'	5 - 1 per 112'	9 - 1 per 62'	3 - 1 per 186'	4 - 1 per 140'
Bump outs occur roughly every 4-5 spaces								
Pots along Town Square are excluded								
Many of the pots are grouped								