



**CITY OF EVERETT**  
**Purchasing Department**  
484 Broadway, Room 14  
Everett, MA 02149  
allison.jenkins@ci.everett.ma.us

---

December 4, 2023

**24-25 66 Main Street Meadow**

**ADDENDUM 3**

The new bid due date is January 10, 2024 at 1 pm.

Attached are the revised plans for the Main Street Meadow.

Please be sure to indicate on your bid you have received 4 addendums.

Thank you.

# Bid Documents

*for*

## Main Street Meadow - 66 Main Street

Everett, MA

UPDATED November 29, 2023

Prepared For:

City of Everett



Prepared By:

neighborwaysdesign



SPEAKEASY  
GARDENS





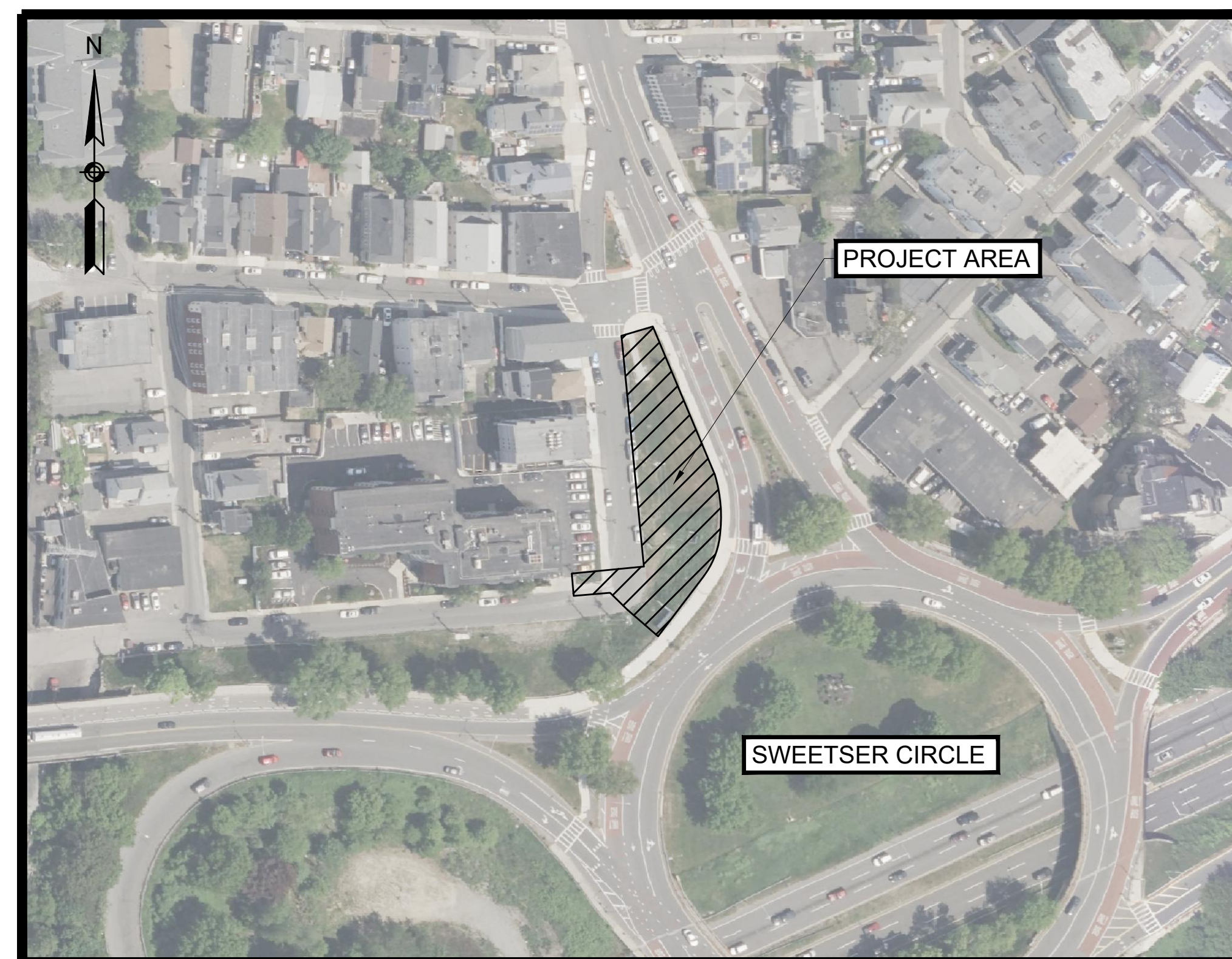
# MAIN STREET MEADOW 66 MAIN STREET

IN THE CITY OF  
EVERETT, MASSACHUSETTS  
MIDDLESEX COUNTY

THE MASSACHUSETTS HIGHWAY DEPARTMENT STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES DATED 2022, AS AMENDED, THE SUPPLEMENTAL SPECIFICATIONS DATED JUNE 30, 2022, THE MASSDOT HIGHWAY DIVISION CONSTRUCTION STANDARD DETAILS OCTOBER 2017, THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS WITH MASSACHUSETTS AMENDMENTS, WILL GOVERN.

## INDEX


SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	CONSTRUCTION PLAN
3	GRADING PLAN
4	UTILITY PLAN
5	SIGNING AND MARKING PLAN
6-7	CONSTRUCTION DETAILS




0 100 200 300 400  
SCALE: 1" = 100'

REV.	DESCRIPTION	BY:	DATE:

neighborwaysdesign

 **SPEAKEASY GARDENS**

 **MOYER**  
Transportation Engineering

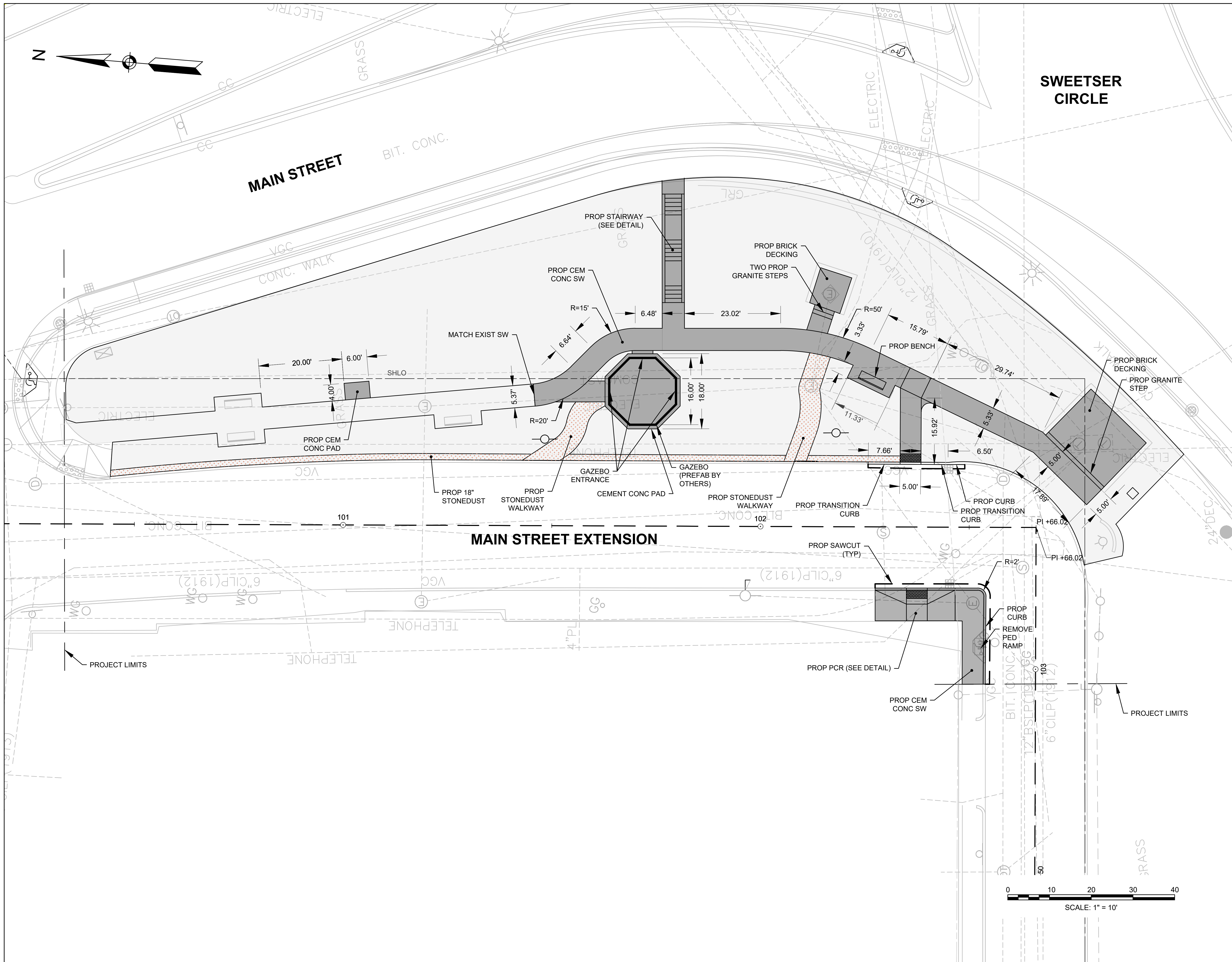
CLIENT: CITY OF EVERETT

SITE: 66 MAIN STREET  
EVERETT, MA 02149

TITLE: TITLE SHEET

SCALE: AS NOTED	DATE: 11/22/23	DRAWN: DM	CHECKED: DM
PROJECT NO: -	DRAWING NO: 1 OF 7	REVISION:	-





- NOTES:
- 1) EXISTING CONDITIONS SHOWN ON THIS PLAN ARE APPROXIMATE. INFORMATION IS BASED ON PREVIOUSLY OBTAINED SURVEY, AERIAL IMAGES, SITE OBSERVATIONS AND MEASUREMENTS.
  - 2) THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE APPROXIMATE AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT OCCUR BY THE CONTRACTOR'S FAILURE TO LOCATE EXACTLY AND TO PRESERVE ANY AND ALL UNDERGROUND UTILITIES. CALL "DIG-SAFE" 1-888-DIGSAFE (344-7233) AT LEAST 72 HOURS BEFORE COMMENCING CONSTRUCTION.
  - 3) WHERE AN EXISTING UNDERGROUND UTILITY IS FOUND TO CONFLICT WITH THE PROPOSED WORK, THE LOCATION, ELEVATION AND SIZE OF THE UTILITY SHALL BE ACCURATELY DETERMINED WITHOUT DELAY BY THE CONTRACTOR, AND THE INFORMATION FURNISHED TO THE ENGINEER FOR RESOLUTION OF THE CONFLICT.
  - 4) AREAS OUTSIDE THE LIMITS OF PROPOSED WORK DISTURBED BY THE CONTRACTOR'S OPERATIONS SHALL BE RESTORED BY THE CONTRACTOR TO THEIR ORIGINAL CONDITION AT THE CONTRACTOR'S EXPENSE.
  - 5) ALL DISTURBED AREAS NOT DESIGNATED TO BE PAVED SHALL HAVE LOAM BORROW PLACED AND SEEDED. THE LOAM BORROW SHALL HAVE A MINIMUM DEPTH OF 4 INCHES AND SHALL BE PLACED FLUSH WITH THE TOP OF THE ADJACENT CURB, OR SIDEWALK.
  - 6) ALL CASTINGS SHALL BE SET FLUSH WITH FINISHED GRADE.




REV: DESCRIPTION: BY: DATE:

neighborwaysdesign



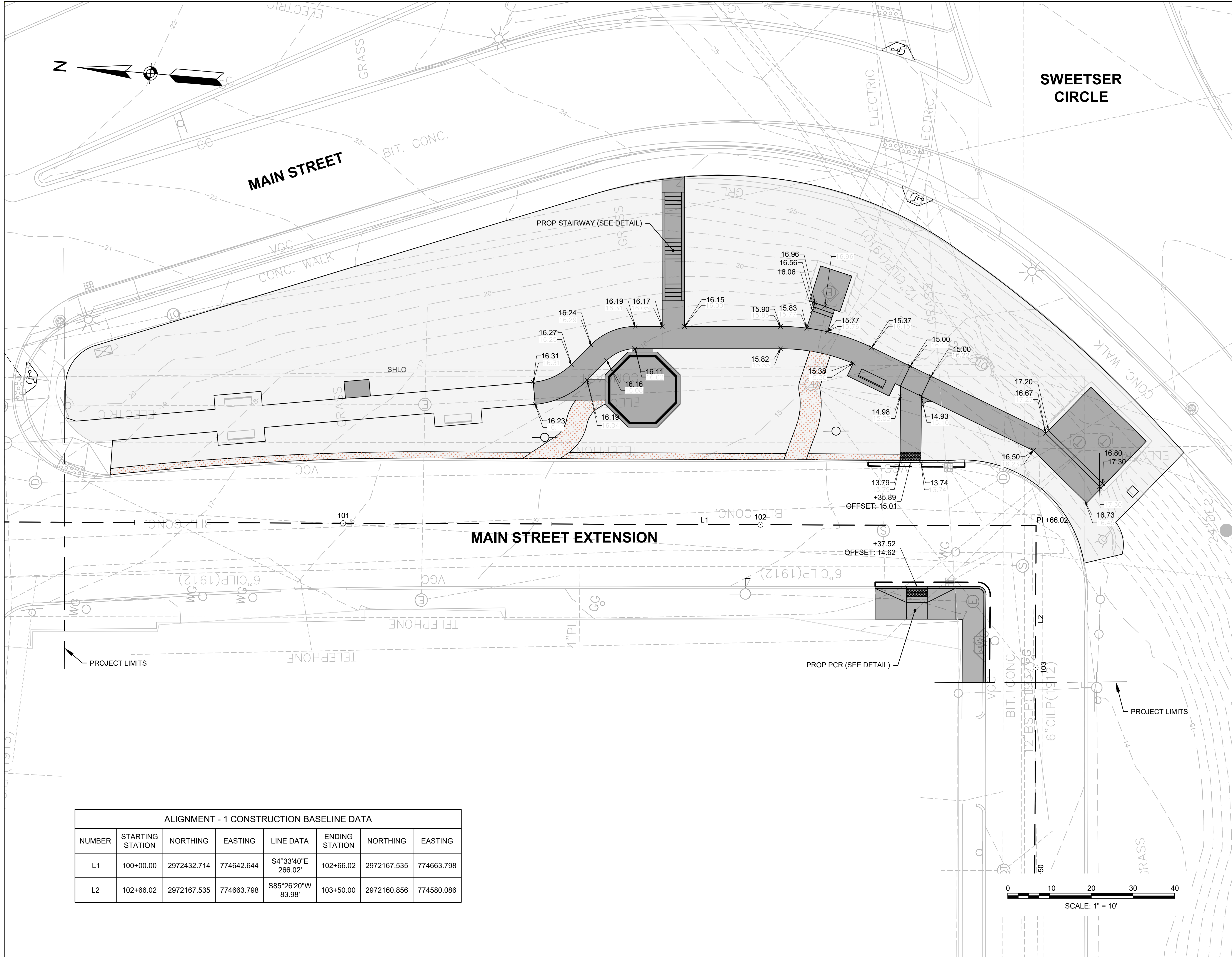
CLIENT: CITY OF EVERETT

SITE: 66 MAIN STREET  
EVERETT, MA 02149

TITLE: CONSTRUCTION PLAN

SCALE: AS NOTED	DATE: 11/22/23	DRAWN: -	CHECKED: -
PROJECT NO: -	DRAWING NO: 2 OF 7	REVISION: -	



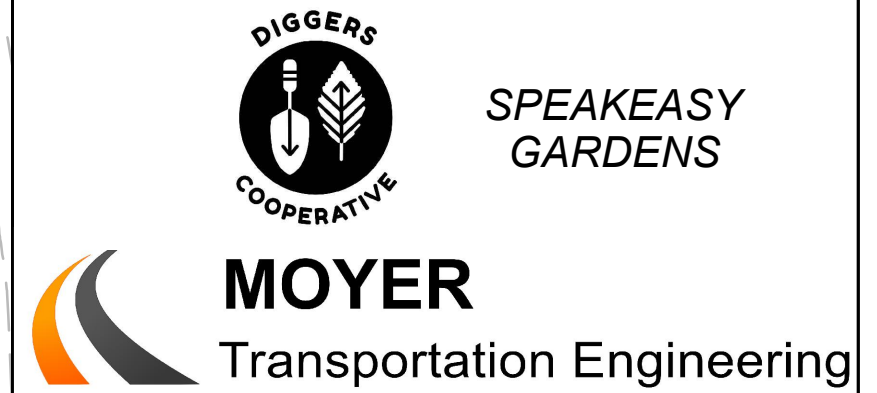


- NOTES:
- 1) EXISTING CONDITIONS SHOWN ON THIS PLAN ARE APPROXIMATE. INFORMATION IS BASED ON PREVIOUSLY OBTAINED SURVEY, AERIAL IMAGES, SITE OBSERVATIONS AND MEASUREMENTS.
  - 2) THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE APPROXIMATE AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT OCCUR BY THE CONTRACTOR'S FAILURE TO LOCATE EXACTLY AND TO PRESERVE ANY AND ALL UNDERGROUND UTILITIES. CALL "DIG-SAFE" 1-888-DIGSAFE (344-7233) AT LEAST 72 HOURS BEFORE COMMENCING CONSTRUCTION.
  - 3) WHERE AN EXISTING UNDERGROUND UTILITY IS FOUND TO CONFLICT WITH THE PROPOSED WORK, THE LOCATION, ELEVATION AND SIZE OF THE UTILITY SHALL BE ACCURATELY DETERMINED WITHOUT DELAY BY THE CONTRACTOR, AND THE INFORMATION FURNISHED TO THE ENGINEER FOR RESOLUTION OF THE CONFLICT.
  - 4) AREAS OUTSIDE THE LIMITS OF PROPOSED WORK DISTURBED BY THE CONTRACTOR'S OPERATIONS SHALL BE RESTORED BY THE CONTRACTOR TO THEIR ORIGINAL CONDITION AT THE CONTRACTOR'S EXPENSE.
  - 5) ALL DISTURBED AREAS NOT DESIGNATED TO BE PAVED SHALL HAVE LOAM BORROW PLACED AND SEEDED. THE LOAM BORROW SHALL HAVE A MINIMUM DEPTH OF 4 INCHES AND SHALL BE PLACED FLUSH WITH THE TOP OF THE ADJACENT CURB, OR SIDEWALK.
  - 6) ALL CASTINGS SHALL BE SET FLUSH WITH FINISHED GRADE.
  - 7) CONTRACTOR TO ENSURE ALL SIDEWALK SLOPES MEET ADA AND CITY OF EVERETT CONSTRUCTION STANDARDS.



REV.	DESCRIPTION	BY	DATE

neighborwaysdesign



CLIENT: CITY OF EVERETT

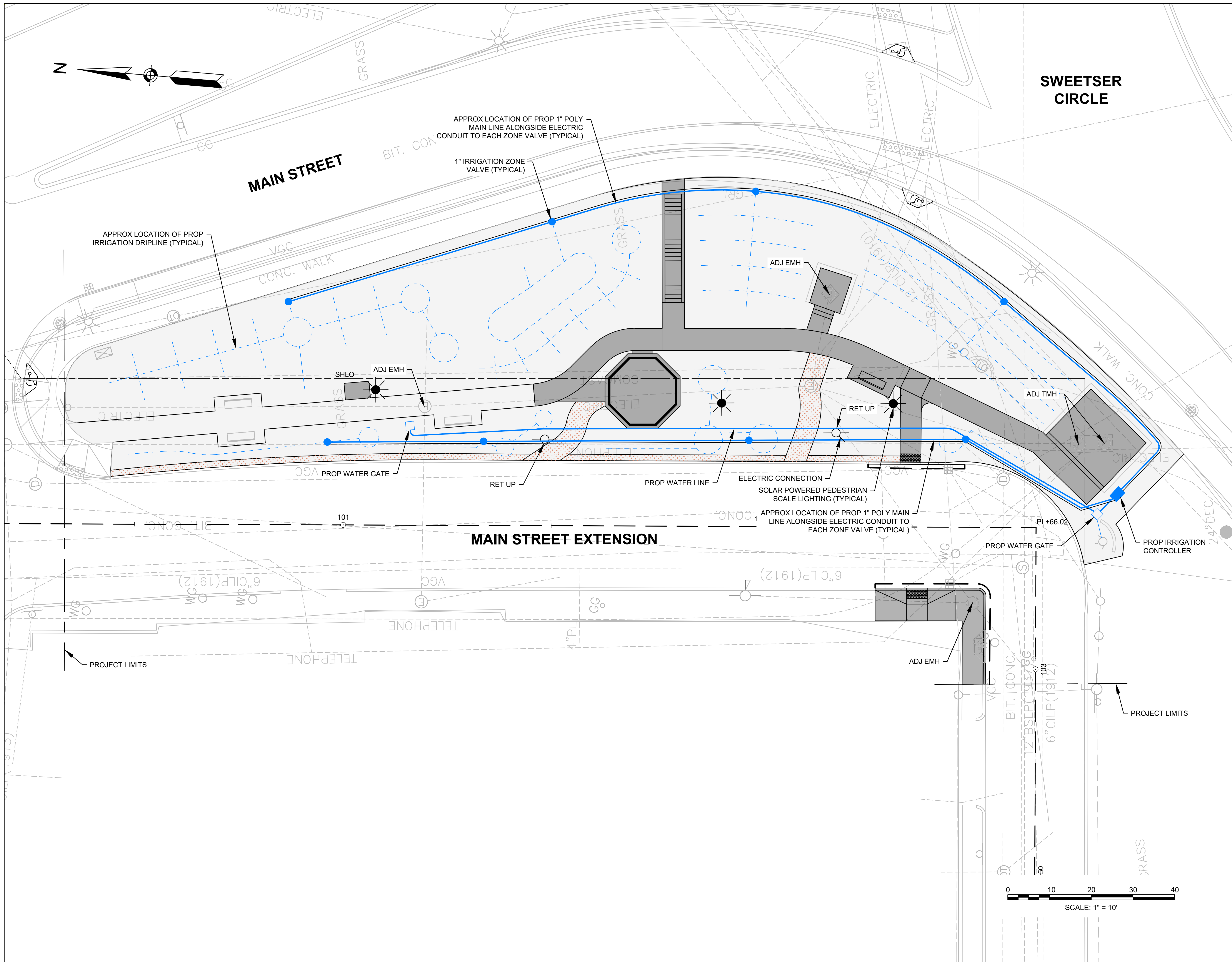
SITE: 66 MAIN STREET  
EVERETT, MA 02149

TITLE: GRADING PLAN

SCALE:	DATE:	DRAWN:	CHECKED:
AS NOTED	11/22/23	-	-
PROJECT NO:	DRAWING NO:	REVISION:	
-	3 OF 7	-	

NUMBER	STARTING STATION	NORTHING	EASTING	LINE DATA	ENDING STATION	NORTHING	EASTING
L1	100+00.00	2972432.714	774642.644	S4°33'40"E 266.02'	102+66.02	2972167.535	774663.798
L2	102+66.02	2972167.535	774663.798	S85°26'20"W 83.98'	103+50.00	2972160.856	774580.086





- NOTES:
- 1) EXISTING CONDITIONS SHOWN ON THIS PLAN ARE APPROXIMATE. INFORMATION IS BASED ON PREVIOUSLY OBTAINED SURVEY, AERIAL IMAGES, SITE OBSERVATIONS AND MEASUREMENTS.
  - 2) THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE APPROXIMATE AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT OCCUR BY THE CONTRACTOR'S FAILURE TO LOCATE EXACTLY AND TO PRESERVE ANY AND ALL UNDERGROUND UTILITIES. CALL "DIG-SAFE" 1-888-DIGSAFE (344-7233) AT LEAST 72 HOURS BEFORE COMMENCING CONSTRUCTION.
  - 3) WHERE AN EXISTING UNDERGROUND UTILITY IS FOUND TO CONFLICT WITH THE PROPOSED WORK, THE LOCATION, ELEVATION AND SIZE OF THE UTILITY SHALL BE ACCURATELY DETERMINED WITHOUT DELAY BY THE CONTRACTOR, AND THE INFORMATION FURNISHED TO THE ENGINEER FOR RESOLUTION OF THE CONFLICT.
  - 4) AREAS OUTSIDE THE LIMITS OF PROPOSED WORK DISTURBED BY THE CONTRACTOR'S OPERATIONS SHALL BE RESTORED BY THE CONTRACTOR TO THEIR ORIGINAL CONDITION AT THE CONTRACTOR'S EXPENSE.
  - 5) ALL DISTURBED AREAS NOT DESIGNATED TO BE PAVED SHALL HAVE LOAM BORROW PLACED AND SEEDED. THE LOAM BORROW SHALL HAVE A MINIMUM DEPTH OF 4 INCHES AND SHALL BE PLACED FLUSH WITH THE TOP OF THE ADJACENT CURB, OR SIDEWALK.
  - 6) ALL CASTINGS SHALL BE SET FLUSH WITH FINISHED GRADE.
  - 7) THE PROPOSED IRRIGATION LINE LOCATION IS APPROXIMATE. CONTRACTOR SHALL BE RESPONSIBLE FOR DESIGN OF THE IRRIGATION SYSTEM.
  - 8) THE PROPOSED LOCATION OF THE PEDESTRIAN LIGHTING IS APPROXIMATE. CONTRACTOR SHALL CONFIRM TYPE AND LOCATION OF PROPOSED LIGHTING WITH CITY PRIOR TO INSTALLATION.
  - 9) FLOW TEST TO BE PERFORMED FOLLOWING WATER METER INSTALLATION.
  - 10) EMITTERS TO BE SPACED EVERY 12 INCHES DELIVERY 0.9 GALLONS PER HOUR.
  - 11) LOCATION OF SYSTEM CONTROLLER TO BE DETERMINED.
  - 12) HARDSCAPE-SOFTSCAPE TRANSITIONS TO BE SLEEVED WITH 3-INCH CONDUIT.
  - 13) ALL PROPOSED DRIPLINE TO CONSIST OF RAIN BIRD XFS SUBSURFACE DRIPLINE WITH COPPER SHIELD TECHNOLOGY.

REV.	DESCRIPTION:	BY:	DATE:

**neighborwaysdesign**

**DIGGERS COOPERATIVE**

**SPEAKEASY GARDENS**

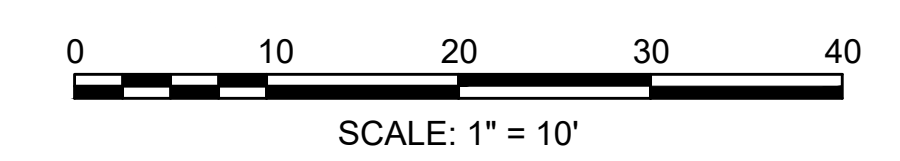
**MOYER**  
Transportation Engineering

CLIENT: CITY OF EVERETT

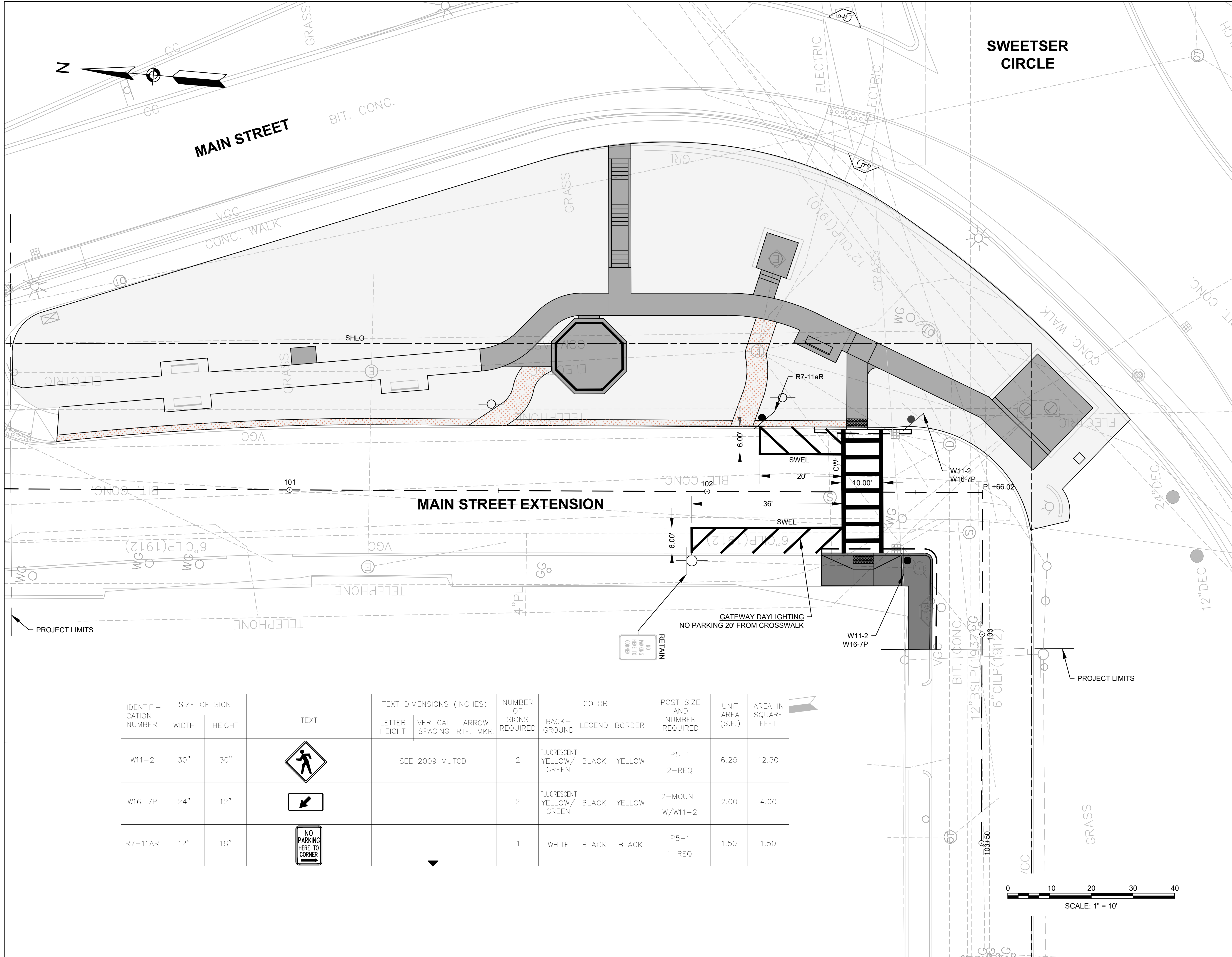
SITE: 66 MAIN STREET  
EVERETT, MA 02149

TITLE: UTILITY PLAN

SCALE: AS NOTED	DATE: 11/22/23	DRAWN: DM	CHECKED: DM
PROJECT NO: -	DRAWING NO: 4 OF 7	REVISION: -	







- NOTES:
- 1) EXISTING CONDITIONS SHOWN ON THIS PLAN ARE APPROXIMATE. INFORMATION IS BASED ON PREVIOUSLY OBTAINED SURVEY, AERIAL IMAGES, SITE OBSERVATIONS AND MEASUREMENTS.
  - 2) THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE APPROXIMATE AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT OCCUR BY THE CONTRACTOR'S FAILURE TO LOCATE EXACTLY AND TO PRESERVE ANY AND ALL UNDERGROUND UTILITIES. CALL "DIG-SAFE" 1-888-DIGSAFE (344-7233) AT LEAST 72 HOURS BEFORE COMMENCING CONSTRUCTION.
  - 3) WHERE AN EXISTING UNDERGROUND UTILITY IS FOUND TO CONFLICT WITH THE PROPOSED WORK, THE LOCATION, ELEVATION AND SIZE OF THE UTILITY SHALL BE ACCURATELY DETERMINED WITHOUT DELAY BY THE CONTRACTOR, AND THE INFORMATION FURNISHED TO THE ENGINEER FOR RESOLUTION OF THE CONFLICT.
  - 4) AREAS OUTSIDE THE LIMITS OF PROPOSED WORK DISTURBED BY THE CONTRACTOR'S OPERATIONS SHALL BE RESTORED BY THE CONTRACTOR TO THEIR ORIGINAL CONDITION AT THE CONTRACTOR'S EXPENSE.
  - 5) ALL DISTURBED AREAS NOT DESIGNATED TO BE PAVED SHALL HAVE LOAM BORROW PLACED AND SEEDED. THE LOAM BORROW SHALL HAVE A MINIMUM DEPTH OF 4 INCHES AND SHALL BE PLACED FLUSH WITH THE TOP OF THE ADJACENT CURB, OR SIDEWALK.
  - 6) ALL CASTINGS SHALL BE SET FLUSH WITH FINISHED GRADE.



REV:	DESCRIPTION:	BY:	DATE:

IDENTIFICATION NUMBER	SIZE OF SIGN		TEXT	TEXT DIMENSIONS (INCHES)			NUMBER OF SIGNS REQUIRED	COLOR			POST SIZE AND NUMBER REQUIRED	UNIT AREA (S.F.)	AREA IN SQUARE FEET
	WIDTH	HEIGHT		LETTER HEIGHT	VERTICAL SPACING	ARROW RTE. MKR.		BACK-GROUND	LEGEND	BORDER			
W11-2	30"	30"		SEE 2009 MUTCD			2	FLUORESCENT YELLOW/GREEN	BLACK	YELLOW	P5-1 2-REQ	6.25	12.50
W16-7P	24"	12"					2	FLUORESCENT YELLOW/GREEN	BLACK	YELLOW	2-MOUNT W/W11-2	2.00	4.00
R7-11AR	12"	18"					1	WHITE	BLACK	BLACK	P5-1 1-REQ	1.50	1.50

neighborwaysdesign

**SPEAKEASY GARDENS**

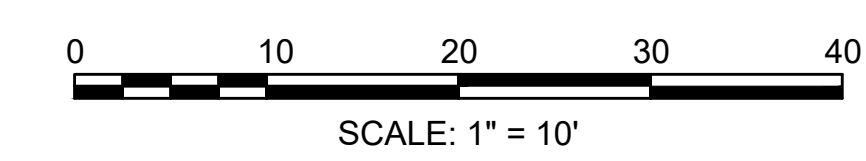
**MOYER**  
Transportation Engineering

CLIENT: CITY OF EVERETT

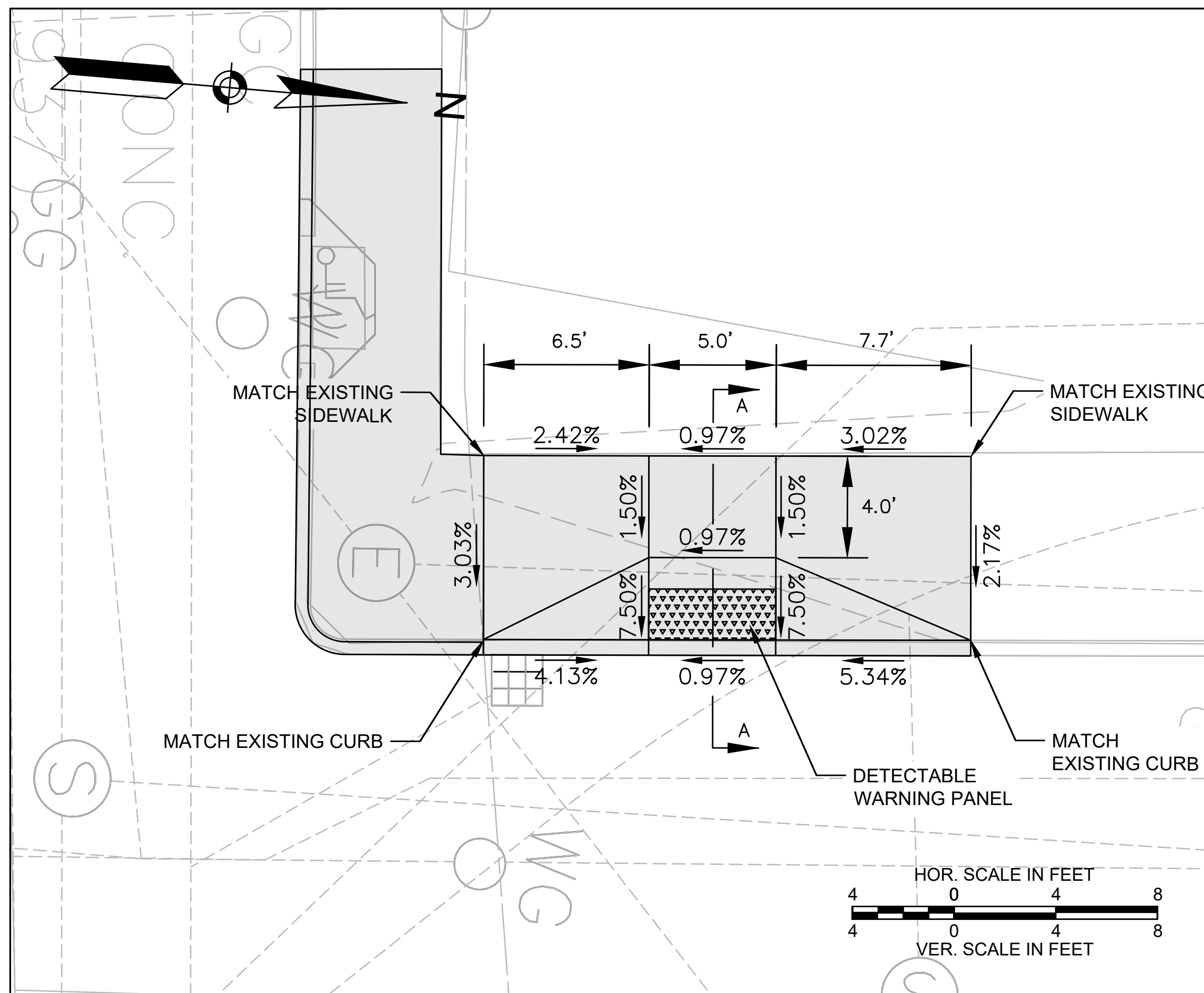
SITE: 66 MAIN STREET  
EVERETT, MA 02149

TITLE: SIGNING AND MARKING PLAN

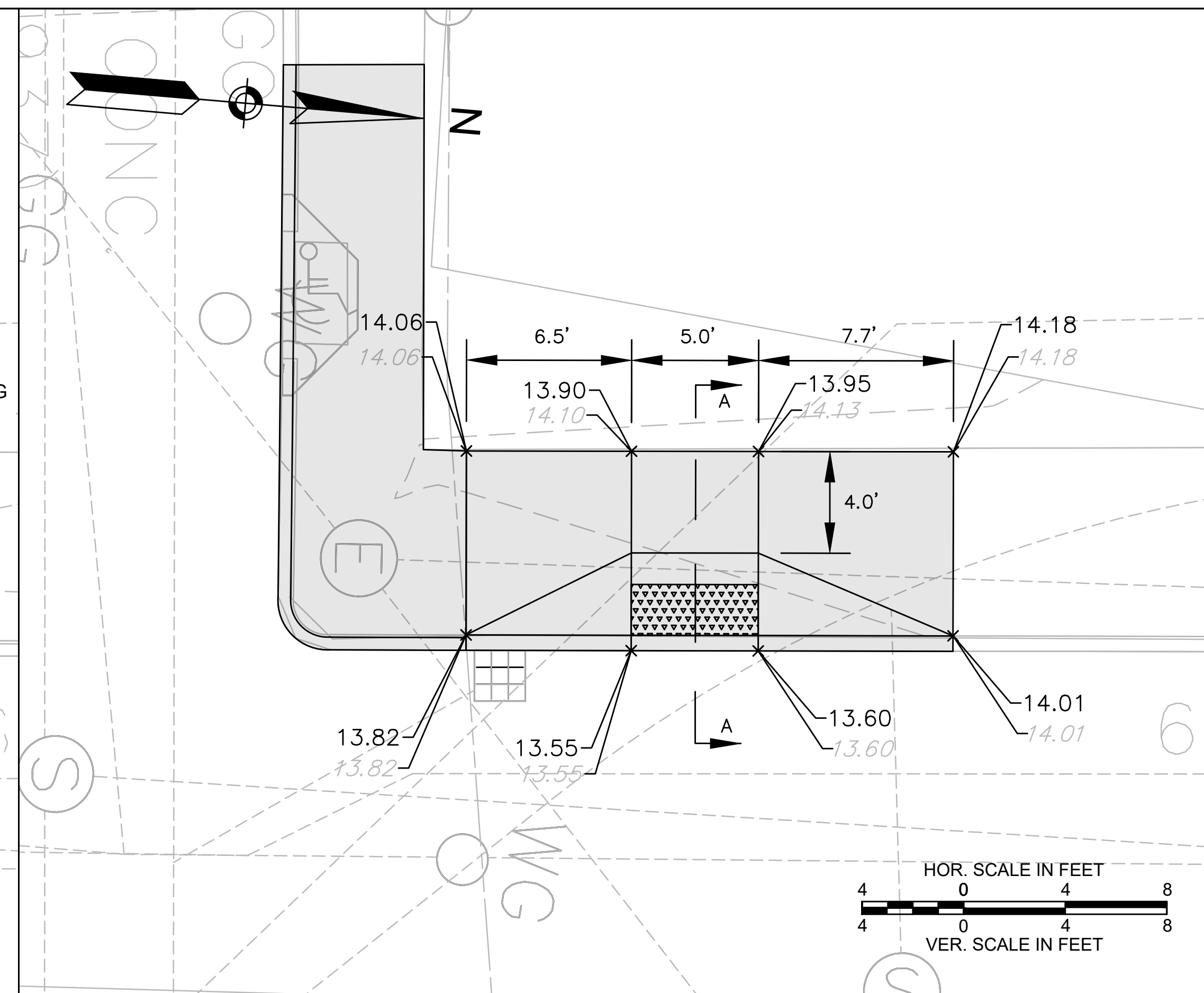
SCALE: AS NOTED	DATE: 11/20/23	DRAWN: DM	CHECKED: DM
PROJECT NO: -	DRAWING NO: 5 OF 7	REVISION: -	



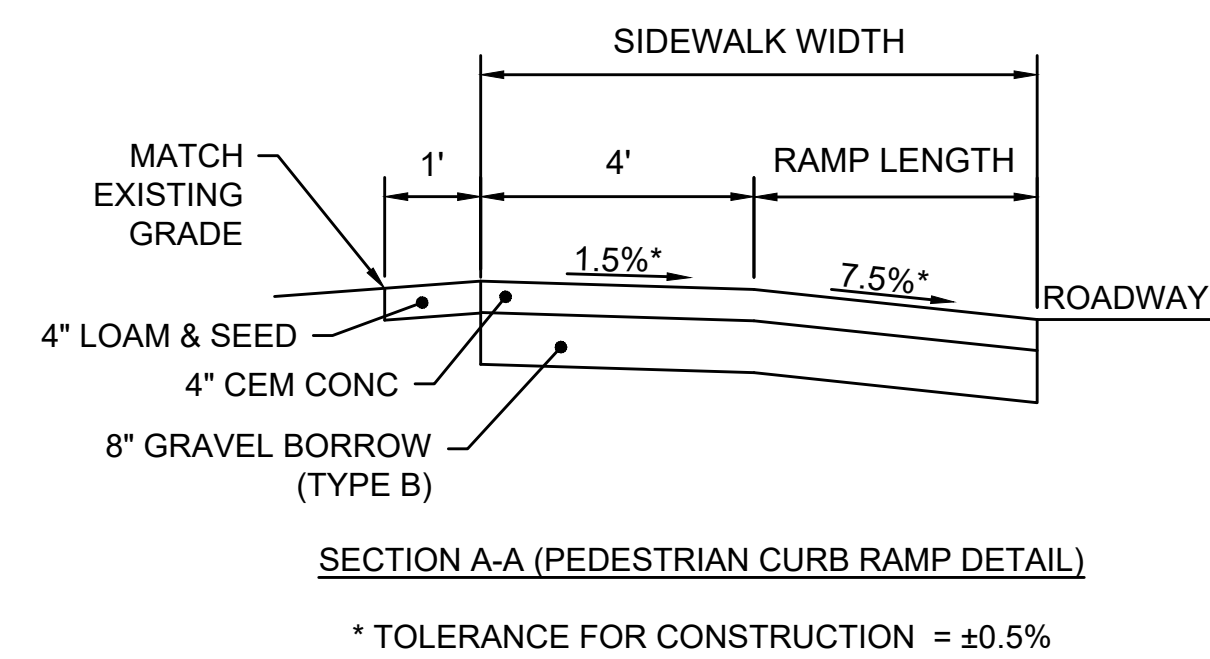




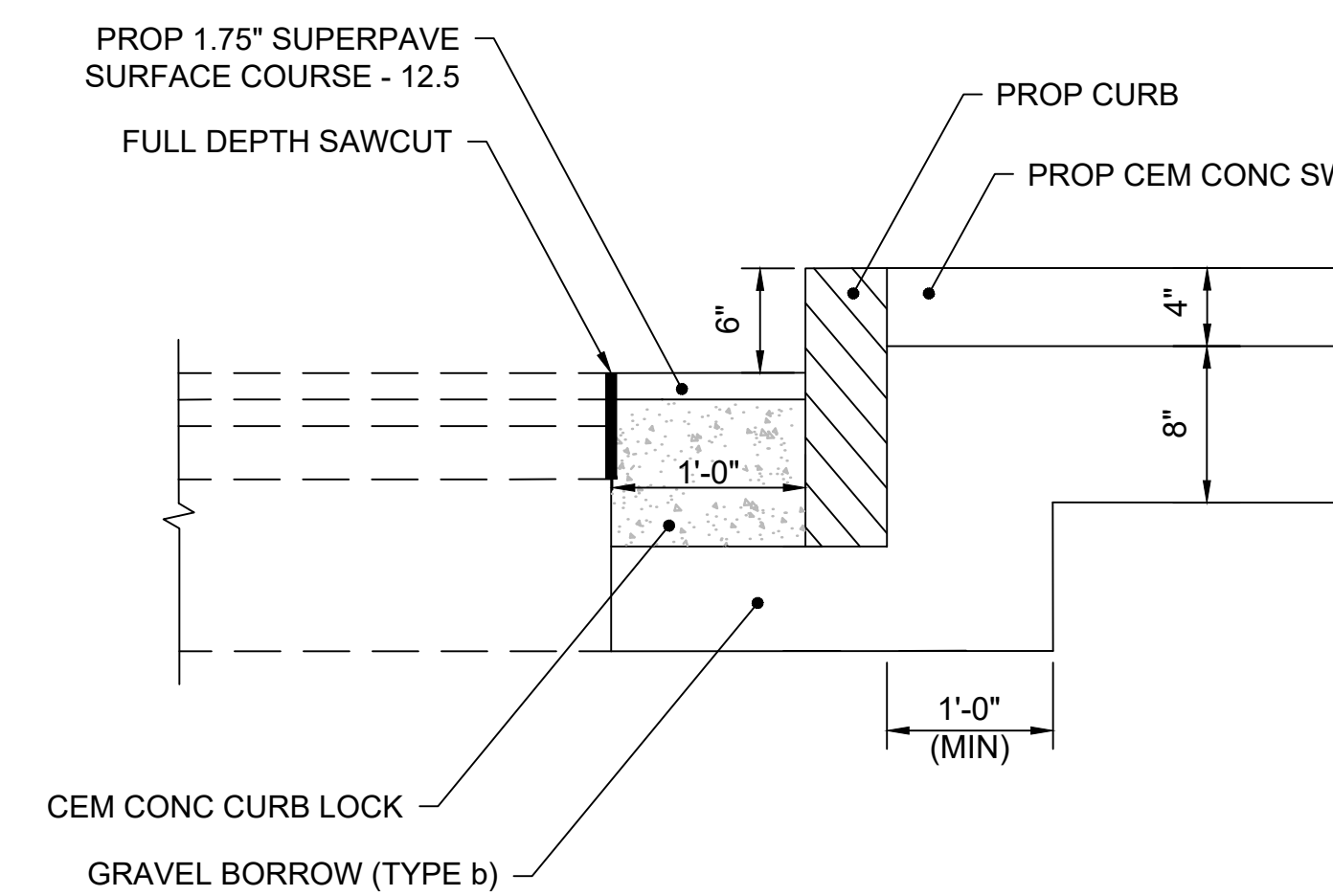
**CONSTRUCTION PLAN**



**ELEVATION PLAN**



**PEDESTRIAN CURB RAMP DETAIL**



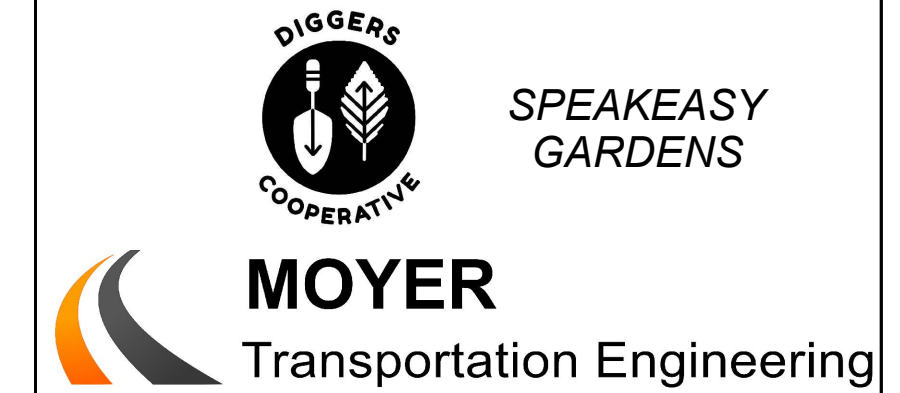
**CURB SETTING DETAIL**  
NOT TO SCALE

- NOTES:
- 1) EXISTING CONDITIONS SHOWN ON THIS PLAN ARE APPROXIMATE. INFORMATION IS BASED ON PREVIOUSLY OBTAINED SURVEY, AERIAL IMAGES, SITE OBSERVATIONS AND MEASUREMENTS.
  - 2) THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE APPROXIMATE AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT OCCUR BY THE CONTRACTOR'S FAILURE TO LOCATE EXACTLY AND TO PRESERVE ANY AND ALL UNDERGROUND UTILITIES. CALL "DIG-SAFE" 1-888-DIGSAFE (344-7233) AT LEAST 72 HOURS BEFORE COMMENCING CONSTRUCTION.
  - 3) WHERE AN EXISTING UNDERGROUND UTILITY IS FOUND TO CONFLICT WITH THE PROPOSED WORK, THE LOCATION, ELEVATION AND SIZE OF THE UTILITY SHALL BE ACCURATELY DETERMINED WITHOUT DELAY BY THE CONTRACTOR, AND THE INFORMATION FURNISHED TO THE ENGINEER FOR RESOLUTION OF THE CONFLICT.
  - 4) AREAS OUTSIDE THE LIMITS OF PROPOSED WORK DISTURBED BY THE CONTRACTOR'S OPERATIONS SHALL BE RESTORED BY THE CONTRACTOR TO THEIR ORIGINAL CONDITION AT THE CONTRACTOR'S EXPENSE.
  - 5) ALL DISTURBED AREAS NOT DESIGNATED TO BE PAVED SHALL HAVE LOAM BORROW PLACED AND SEED. THE LOAM BORROW SHALL HAVE A MINIMUM DEPTH OF 4 INCHES AND SHALL BE PLACED FLUSH WITH THE TOP OF THE ADJACENT CURB, OR SIDEWALK.
  - 6) CONTRACTOR TO ENSURE ALL RAMP SLOPES MEET ADA AND CITY OF EVERETT CONSTRUCTION STANDARDS.



REV:	DESCRIPTION:	BY:	DATE:

neighborwaysdesign



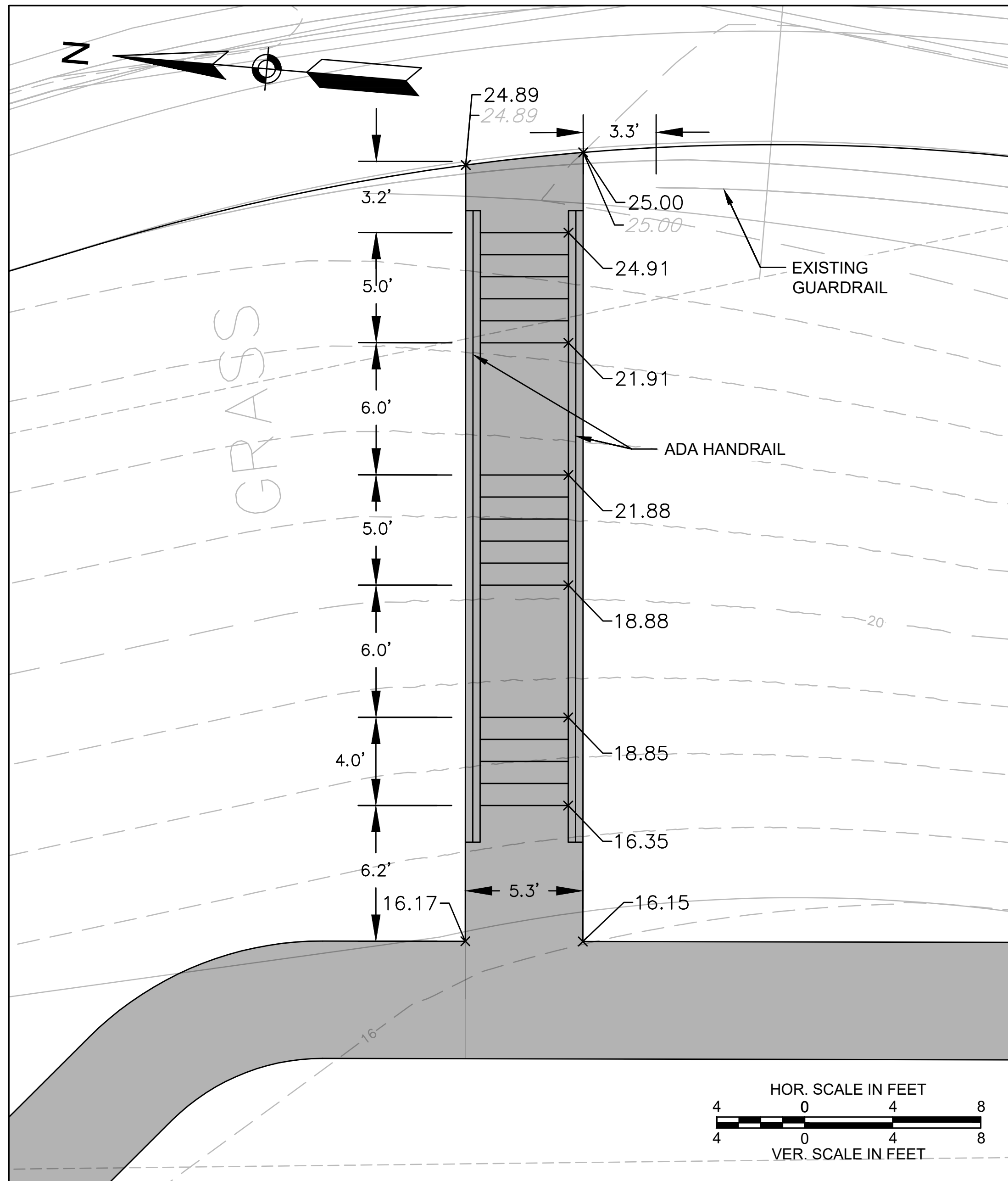
CLIENT: CITY OF EVERETT

SITE: 66 MAIN STREET  
EVERETT, MA 02149

TITLE: CONSTRUCTION DETAILS

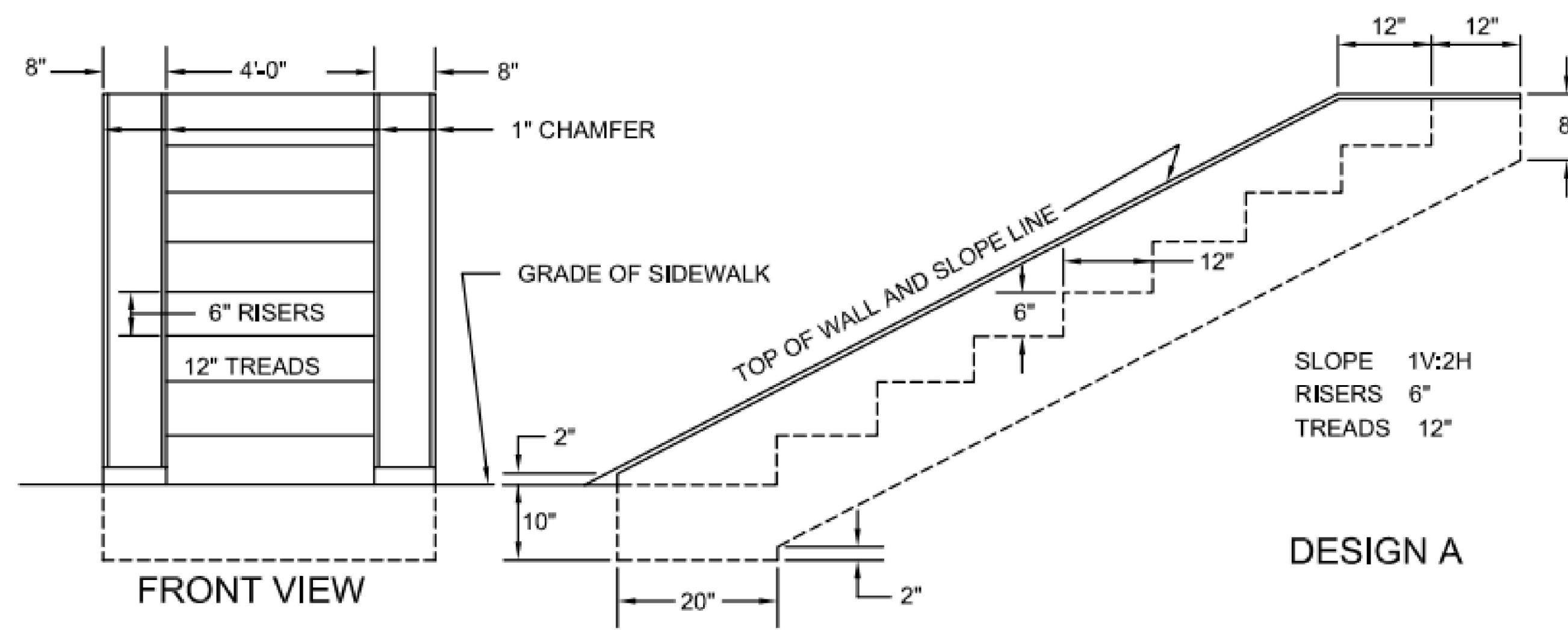
SCALE:	DATE:	DRAWN:	CHECKED:
AS NOTED	8/18/23	-	-
PROJECT NO:	DRAWING NO:	REVISION:	
-	6 OF 7	-	



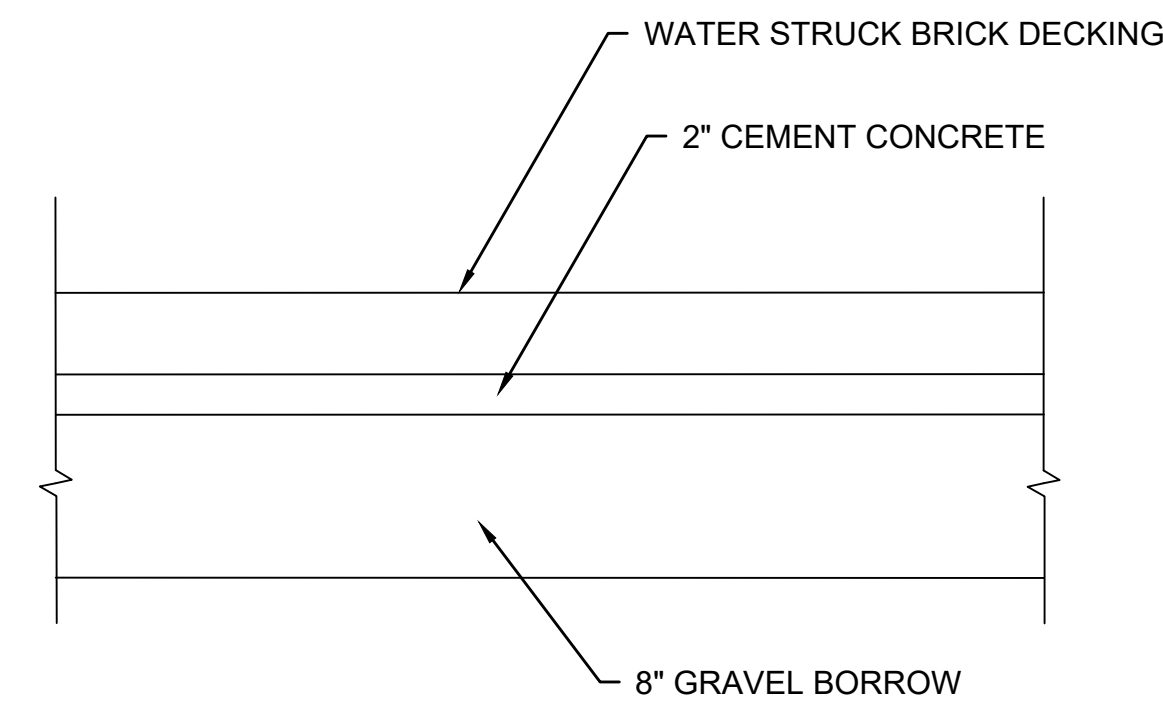


**CONSTRUCTION/ELEVATION PLAN**

CEMENT CONCRETE STEPS DETAIL



CEMENT CONCRETE STEPS DETAIL  
(PER MASSDOT DETAIL E 301.1.0)



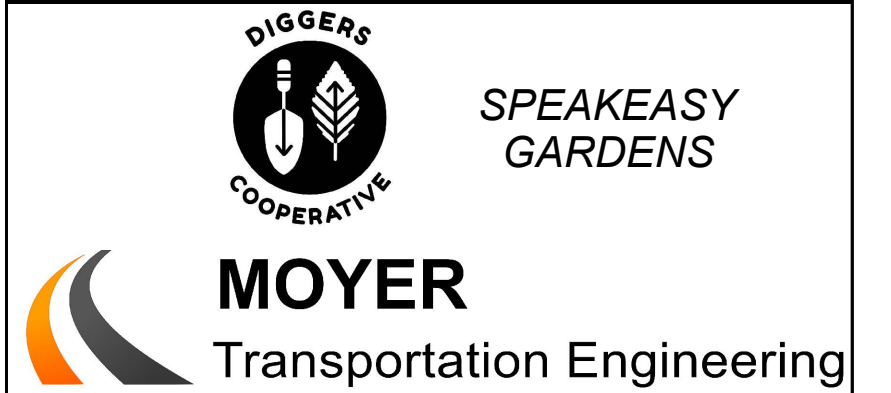
BRICK DECKING DETAIL  
NOT TO SCALE

- NOTES:
- 1) EXISTING CONDITIONS SHOWN ON THIS PLAN ARE APPROXIMATE. INFORMATION IS BASED ON PREVIOUSLY OBTAINED SURVEY, AERIAL IMAGES, SITE OBSERVATIONS AND MEASUREMENTS.
  - 2) THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE APPROXIMATE AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT OCCUR BY THE CONTRACTOR'S FAILURE TO LOCATE EXACTLY AND TO PRESERVE ANY AND ALL UNDERGROUND UTILITIES. CALL "DIG-SAFE" 1-888-DIGSAFE (344-7233) AT LEAST 72 HOURS BEFORE COMMENCING CONSTRUCTION.
  - 3) WHERE AN EXISTING UNDERGROUND UTILITY IS FOUND TO CONFLICT WITH THE PROPOSED WORK, THE LOCATION, ELEVATION AND SIZE OF THE UTILITY SHALL BE ACCURATELY DETERMINED WITHOUT DELAY BY THE CONTRACTOR, AND THE INFORMATION FURNISHED TO THE ENGINEER FOR RESOLUTION OF THE CONFLICT.
  - 4) AREAS OUTSIDE THE LIMITS OF PROPOSED WORK DISTURBED BY THE CONTRACTOR'S OPERATIONS SHALL BE RESTORED BY THE CONTRACTOR TO THEIR ORIGINAL CONDITION AT THE CONTRACTOR'S EXPENSE.
  - 5) ALL DISTURBED AREAS NOT DESIGNATED TO BE PAVED SHALL HAVE LOAM BORROW PLACED AND SEEDED. THE LOAM BORROW SHALL HAVE A MINIMUM DEPTH OF 4 INCHES AND SHALL BE PLACED FLUSH WITH THE TOP OF THE ADJACENT CURB, OR SIDEWALK.
  - 6) CONTRACTOR TO ENSURE ALL RAMP SLOPES MEET ADA AND CITY OF EVERETT CONSTRUCTION STANDARDS.



REV:	DESCRIPTION:	BY:	DATE:

**neighborwaysdesign**



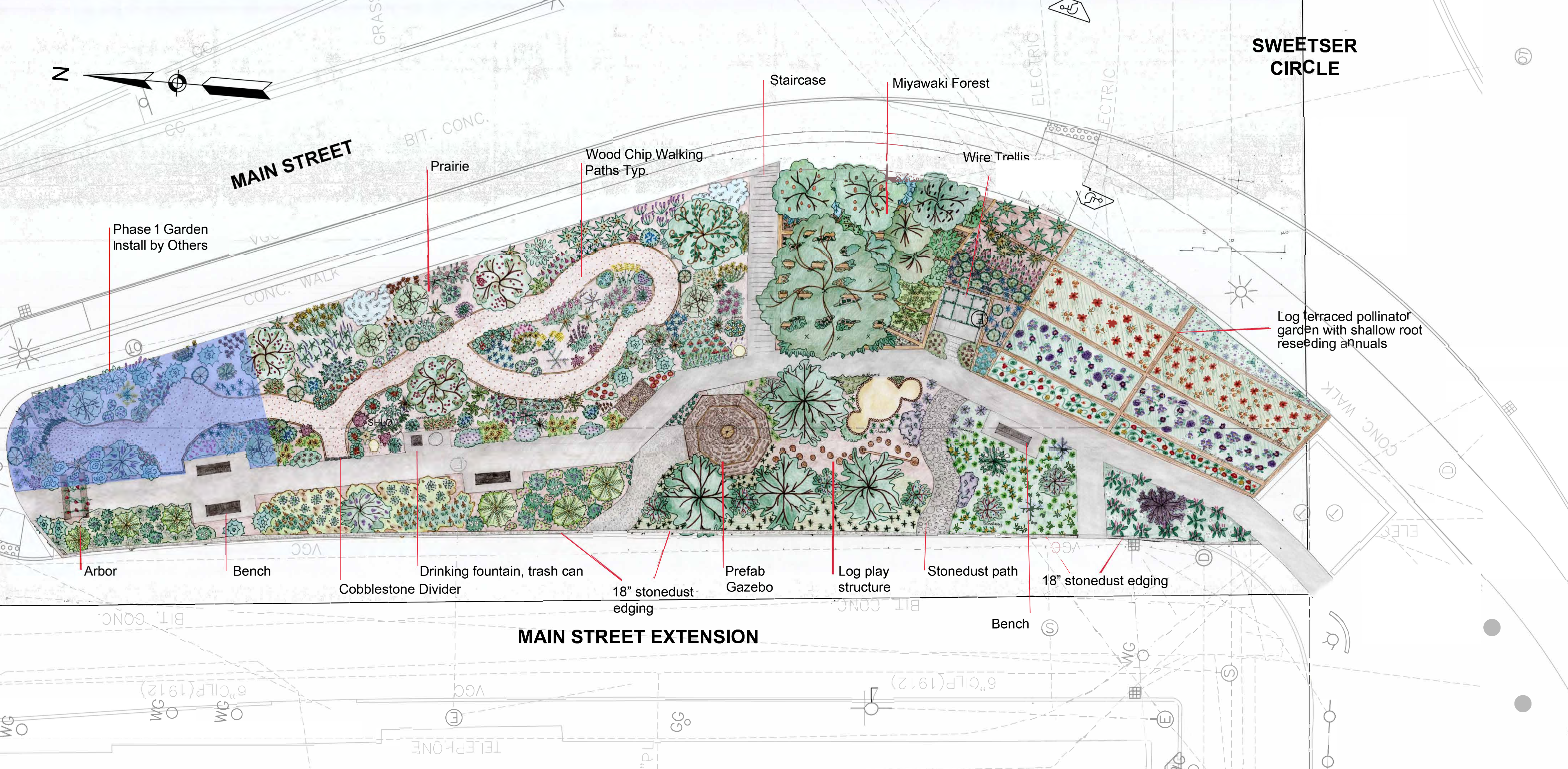
CLIENT: CITY OF EVERETT

SITE: 66 MAIN STREET  
EVERETT, MA 02149

TITLE: CONSTRUCTION DETAILS


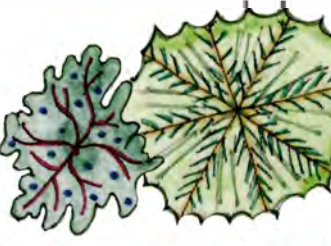




SCALE:	DATE:	DRAWN:	CHECKED:
AS NOTED	8/18/23	-	-
PROJECT NO:	DRAWING NO:	REVISION:	
-	7 OF 7	-	



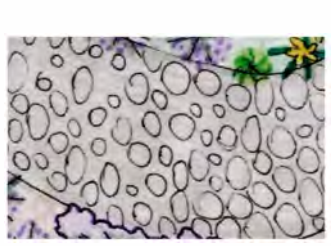


**LEGEND**





**PLANTINGS**

-  Tree
-  Shrubs
-  Landscaping w/ shrubs
-  Prairie
-  Miyawaki Forest
-  Log terraced beds w/ pollinators,

**SURFACES**

-  Sidewalk
-  Stonedust path
-  Wood chip path edged w/ wood
-  Cobblestone divider
-  Staircase


**AMENITIES**

-  Prefab Gazebo
-  Kiosk (installed by others)
-  Log play structure
-  Arbor
-  Sandbox edged with logs
-  Drinking fountain, trash bin
-  Light
-  Bench
-  Retaining wall with trellis
-  Phase 1 Garden Install by Others

- NOTES:
- 1) EXISTING CONDITIONS SHOWN ON THIS PLAN ARE APPROXIMATE. INFORMATION IS BASED ON PREVIOUSLY OBTAINED SURVEY, AERIAL IMAGES, SITE OBSERVATIONS AND MEASUREMENTS.
  - 2) THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE APPROXIMATE AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT OCCUR BY THE CONTRACTOR'S FAILURE TO LOCATE EXACTLY AND TO PRESERVE ANY AND ALL UNDERGROUND UTILITIES. CALL "DIG-SAFE" 1-888-DIGSAFE (344-7233) AT LEAST 72 HOURS BEFORE COMMENCING CONSTRUCTION.
  - 3) WHERE AN EXISTING UNDERGROUND UTILITY IS FOUND TO CONFLICT WITH THE PROPOSED WORK, THE LOCATION, ELEVATION AND SIZE OF THE UTILITY SHALL BE ACCURATELY DETERMINED WITHOUT DELAY BY THE CONTRACTOR, AND THE INFORMATION FURNISHED TO THE ENGINEER FOR RESOLUTION OF THE CONFLICT.
  - 4) AREAS OUTSIDE THE LIMITS OF PROPOSED WORK DISTURBED BY THE CONTRACTOR'S OPERATIONS SHALL BE RESTORED BY THE CONTRACTOR TO THEIR ORIGINAL CONDITION AT THE CONTRACTOR'S EXPENSE.
  - 5) ALL DISTURBED AREAS NOT DESIGNATED TO BE PAVED SHALL HAVE LOAM BORROW PLACED AND SEEDDED. THE LOAM BORROW SHALL HAVE A MINIMUM DEPTH OF 4 INCHES AND SHALL BE PLACED FLUSH WITH THE TOP OF THE ADJACENT CURB, OR SIDEWALK.


REV.	DESCRIPTION:	BY:	DATE:

**neighborwaysdesign**



**DIGGERS**  
COOPERATIVE

**SPEAKEASY GARDENS**



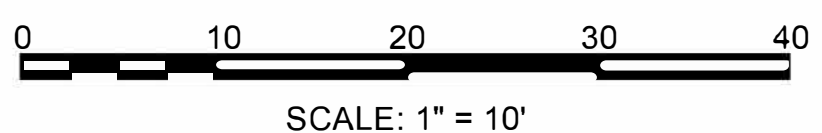
**MOYER**  
Transportation Engineering

CLIENT: CITY OF EVERETT

SITE: 66 MAIN STREET  
EVERETT, MA 02149

TITLE: LANDSCAPING PLAN

SCALE: AS NOTED	DATE: 11/27/23	DRAWN: -	CHECKED: -
PROJECT NO:	DRAWING NO:	REVISION:	





# Main Street Meadow EcoSystem Overview

## Project Description

The heat-island at 66 Main Street in Everett, MA will be transformed into an ecological space intended for community enjoyment. Merging ecosystems will guide visitors from one end of the pathway to the other, engaging the senses by way of immersion. Interactive kiosks will be put in place to provide information on the various species of plants. The kiosks will provide both the Latin and common names of the plants, directives on how to identify plant species, and information about each particular species. Further information on plant and pollinator species can be accessed via QR codes using a mobile device.

A combination of native and highly rugged species have been chosen to provide shade, wildlife refuge, carbon sequestration, cool temperatures, erosion prevention, and provide a healthy environment for both children and older adults to enjoy nature. The area will be low maintenance and self-sustaining after reaching maturity. As the space is filling in from infancy it will need to be kept free of weeds and watered.

There is an accessible sidewalk and elements such as a gazebo, children's play area, benches, stairwell, and a seating areas to provide all ages and abilities access to play, enjoy art, sit peacefully, learn about nature, and connect with the local community. This is a successive ecological restoration project. Because of this, no chemical use or synthetic fertilizers will be permitted. Soil quality, determined by its biological activity, will be the foundation of health within the space.

The merging ecosystems and ecological spaces are both connected and divided by a central paved pathway and broken down into the following:

## Prairie

The Prairie exists in the Northeastern Quadrant of the design and gets full sun exposure from the south. It is comprised of a wide selection of North American Prairie natives that thrive in exposed sunny areas. The space is broken up structurally by a mixture of native evergreen and deciduous trees that provide dappled shade and protection from extreme winds. The Prairie boasts 4 seasons of bloom, and a diverse arrangement of host plants for pollinators, birds, and beneficial insects. The space is a naturally planted hillside with a walking path running down the center.

Garden pathways are made of woodchips to keep down weeds, dust, and bolster fungal activity. The path is 4 feet wide minimum at all points. The buffer along the path is 12" black locust hardwood.

All perennials will be planted at installation as a mixture of landscape plugs and 6" potted plants. Trees will be planted a minimum of 2.5" caliper or larger.

# Main Street Meadow Ecosystem Overview

## Miyawaki Forest

A Miyawaki forest is designed for urban spaces named after Japanese Botanist Akira Miyawaki. It is intensively planted to create a miniature ecosystem: it feeds and waters itself and attracts native wildlife. Communities of plants and insects function as a protective 'immune system.' This forest creates a concentrated network of life, biology and succession.

Like the Avian grassland and pollinator garden it abuts, this forest will be terraced with naturally rot-resistant logs (12" Black locust). It will create flat areas that eliminate erosion and collect and store water. The canopy will provide ample shade and noise reduction. People will not be permitted to enter the Miyawaki forest, and can clearly observe it from the stairwell and main cemented pathway.

Trees should be mid-maturity so they may have time to grow into their symbiotic relationships. 1 Gallon pots would be a sufficient size of trees and shrubs for installation. Trees should be at least 5 feet tall at time of planting. Herbaceous plants and groundcovers may be 4- 6" pots. See Correlating spreadsheet for number and list of species.

## Pollinator Garden

The pollinator Garden is located in the Southeastern quadrant of the design and receives full sun exposure. The steep hillside is terraced with naturally rot-resistant logs (12" Black locust) buried 4" below . Terracing breaks up a hillside into flat, level sections that prevent erosion by capturing and absorbing rainwater. This will be beneficial to creating a space of self-sustaining plants, and prevent the washing of seeds, soil and mulch from eroding downhill.

Once established, they will both water and feed themselves whilst providing nectar for a variety of pollinators. All plants in this section are shallow rooted due to the abundance of underground utilities. Construction and soil preparation will likely need to build up the beds rather than digging down beyond 12" depth. The majority of plants consist of re- seeding annuals with a smaller arrangement of shallow perennials. The colors are compartmentalized by likeness to display the simple design technique of "grouping." Having swaths of like-colors allows the eye to better see details and arrangements. These beds will be planted at installation with a variety of Organic and heirloom seeds. See correlating spreadsheet for number and list of species.

## Avian Grassland

The Avian grassland is a small strip of Terraced hillside in the Southeastern quadrant. The terraced infrastructure is consistent with the rest of the design in that it utilizes 12" black locust logs as both its buffer and retainer. It is nestled between the Miyawaki forest and the pollinator garden. It is comprised of a mixture of native grasses and perennial flowers that provide seed heads and nesting areas for numerous types of native birds. The space also provides winter interest by assigning undisturbed natural structures. At the base of this zone is a pre-existing concrete retaining wall structure that has been reclaimed as a space for public seating and adorned in nature murals. Above this structure will be a wire trellis ornamented in clematis vine, so that people may watch the birds from a sun-protected space below. The wire trellis will run from the top of the concrete retaining wall, from one side to the other, creating a natural 'roof.' Plants in this area will be installed as landscape plugs and 6" pots.



# Main Street Meadow Ecosystem Overview

## North Gazebo

This North-Western quadrant of the design abuts the roadside and the paved pathway. The space is designed to be tidy, welcoming, and rugged. Paved areas can get quite hot in the summer and can shed salt, snow and ice in the winter. The plantings in this space will function as a buffer to the elements and abiotic factors. There is a combination of Grass-like perennials for autumn color, aromatic bloomers for spring color, a small everblooming shrub, and a short assortment of long-blooming summer flowers. There will also be some resilient, sweet smelling, ground covers within this strip to help with moisture retention. The soil in this space will be slightly concave to help collect rain water when it is available. The grade of soil abutting the sidewalk must be slightly lower than the sidewalk to prevent mulch from washing onto the walkways. From the benches in this area one will get a full view of the Prairie.

Plants will be installed as 6"-12" pots (half gallon - gallon) to help withstand foot traffic and environmental stress quicker. Those who enter this space will pass under a sturdy cedar Arbor climbing with native honeysuckle vines.

## South Gazebo

This is the South Western quadrant of the design. This will be a high traffic area for visitors. The space consists of a ground-level gazebo, and two pathways that connect from roadside to the main pathway, and a natural play space for children. The play space is intentionally simplistic and designed to promote strengthening of motor skills and engagement of the senses. There will be a series of large vertical sunken logs that function as 'balance beams' and a naturally shaped sand box for digging. The children will be able to step from one log to the next like stepping stones, or cross on a long single wooden balancing beam that runs from one log to another at the entry from the crushed stone pathway that connects the street to the cemented pathway. The sand box is surrounded by vertically sunken black locust logs to retain the sand. Outside of the logs are safe aromatic plants such as chives or lemon balm.

There are several large columnar oaks to provide mottled shade and companionship to the native blueberry shrubs surrounding the play area. Herbs will be planted from 3" pots, and shrubs will be from 1 gallon containers. Two varieties of blueberries will be planted for cross-pollination. There will be a mixture of tough native grasses and medium-sized perennials to soften the transition. These will be installed from landscape plugs.

In the southernmost space of this sector there will be everblooming flowers (6" pots), a black lace elderberry (1gallon), and a strip of soft textured grasses (landscape plugs). The soil in this space will also be slightly concave for water absorption and slightly lower than the abutting sidewalk to contain mulch. From the bench in this area one can view the pollinator garden, avian grassland, and Miyawaki forest.

<b>Vendor Abbreviations</b>	<b>Description</b>
BI	Botanical Interest Seeds: BI
FVB	Van Berkum Nursery: VB
GS	Fruition Seeds: FS
JS	Johnnys Seeds: JS
LCG	Lacy Creek Growers LLC: LCG
MN	Millican Nursery: MN
MO	Monrovia: MO
NCN	North Creek Nursery: NCN
OGW	One Green World: OGW
RH	Rhichters Herbs: RH
SB	Stark Brothers Trees: SB
<b>Plant Type Abbreviations</b>	<b>Description</b>
APF	Aromatic Perennial Flower
AR	Annual Reseeding
B	Bulb
BI	Biennial
FV	Flowering Vine
G	Grass
GC	Ground Cover
HP	Herbaceous Perennial
L	Logees Plant Nursery: L
PF	Perennial Flower
S	Shrub
T	Tree
<b>Units of measurement</b>	
Caliper: trunk diameter on a tree	
4,6,8" pot: diameter of the plant pot	
4,6,8,10 feet: height of a shrub or tree	
Gallon pot: depth of a plant pot	
Bare root: unplanted root system (some companies ship plants without-soil)	
Plug tray: 100-120 plugs	
*Note: Each vendor has their own unit of measurement in regards to the maturity of the plant material sold	



Location	Latin name	Common Name	Size	Qty	Rec Vendor	Type	Bloom	Light
Avian Grassland	Echinacea Pallida	Wild Coneflower	6" pot	10	VB	PF	Summer-Fall	Sun
Avian Grassland	Eryngium Planum 'Blue Glitter'	Sea Holly	6" pot	15	VB	PF	Summer	Sun
Avian Grassland	Phlox Subulata 'Emerald Pink'	Moss Phlox	6" pot	10	VB	PF	Spring	Sun-Part shade
Avian Grassland	Spigelia Marilandica	Indian Pink	6" pot	8	VB	PF	Summer	Part Shade
Avian Grassland	Calamagrostis Acutiflora 'Karl'	Feather Reed Grass	Plug tray	1	NCN	G	NA	Sun
Avian Grassland (Trellis)	Clematis Terniflora	Sweet Autumn Clematis	Any size	2	MO	FV	Summer-Fall	Sun
Avian Grassland + Miyawaki	Vitis labrusca 'Eastern Concord'	Concord Grape	8" pot or 1 gallon pot	2	MO	FV	Spring	Sun-Part shade
Avian Grassland + Prarie	Miscanthus Giganteus	Giant Silvergrass	Any size	12	LCG	G	NA	Sun
Avian Grassland + Prarie	Deschampsia Cespitosa	Tufted Hairgrass	Plug tray	1	NCN	G	NA	Sun
Avian Grassland + Prarie	Dipascus Sativus	Teasel	Plug tray	1	RH	BI	Summer	Sun-Part shade
Avian Grassland + Prarie	Festuca Glauca 'Beyond Blue'	Blue Fescue	Plug tray	1	NCN	G	NA	Sun
Miyawaki	Morus Nigra 'Dwarf Everbearing'	Dwarf Everbearing Mulberry	1 gallon or bare root	2	SB	T	Spring	Sun
Miyawaki	Clethera Alnifolia	Summer sweet	1 gallon pot	3	MN	S	Summer	Sun-Part shade
Miyawaki	Corylus Americana	Hazelnut	1 gallon pot	2	MN	T	Early Spring	Sun
Miyawaki	Fothergilla Major 'Mount Airy'	Witch Alder	1 gallon pot	2	MN	S	Spring	Part Shade
Miyawaki	Hamamelis Intermedia 'Jelena'	Witch Hazel	1 gallon pot	2 (5-6')	MN	T	Winter	Part Shade-Shad

Location	Latin name	Common Name	Size	Qty	Rec Vendor	Type	Bloom	Light
Miyawaki	Sambucus Canadensis	Elderberry	1 gallon pot	3	MN	S	Spring	Sun-Part shade
Miyawaki	Asarum Canadense	Canadian Wild Ginger	4-6" pot	24	RH	GC	Spring	Shade
Miyawaki	Corydalis Lutea	Yellow Fumitory	4-6" pot	8	VB	GC	Spring-Fall	Shade
Miyawaki	Mitchella Repens	Partridgeberry	4-6" pot	12	RH	GC	Spring	Shade
Miyawaki	Betula Nigra 'Heritage'	Heritage River Birch	5-6 feet, or 1 gallon	1	MN	T	Spring	Sun
Miyawaki	Arctostaphylos Uva Ursi	Bear Berry	6-8" pot	12	RH	GC	Spring	Sun-Part shade
Miyawaki	Cornus Canadensis	Bunchberry	6" pot	15	VB	GC	Spring	Shade
Miyawaki	Gaultheria Procumbens	Wintergreen	6" pot	20	VB	GC	Summer-Fall	Sun- Part shade
Miyawaki	Rhus Aromatica 'Grow Low'	Sumac	Any size	4	MN	S	Spring	Sun-Part shade
Miyawaki	Asimina Triloba 'KSU Chappell'	Paw Paw	Bare root	1	OGW	T	Spring	Part Shade
Miyawaki	Asimina Triloba 'KSU Benson'	Paw Paw	Bare root	2	OGW	T	Spring	Part Shade
Miyawaki	Diospyros Virginiana 'Meader'	American Persimmon	Tree pot or bare root	3	L	T	Spring	Sun
Miyawaki + Avian Grassland	Vitis labrusca 'Eastern Concord'	Concord Grape	8" or 1 gallon pot	2	MO	FV	Spring	Sun-Part shade
Miyawaki + Prairie	Hosta 'Humpback Whale'	Giant Blue Hosta	8" pot	5	VB	PF	Summer	Shade
North Gazebo	Syringa 'Bloomerang'	Lilac	1 gallon pots	2	MN	S	Everblooming	Sun
North Gazebo	Lonicera x brownii 'Dropmore Scarlet'	Scarlet Trumpet Honeysuckle	2 any size	2	Mo	FV	Summer	Sun-Part shade

Location	Latin name	Common Name	Size	Qty	Rec Vendor	Type	Bloom	Light
North Gazebo	Amsonia Hubrichtii	Blue star	6" pot	3	VB	PF	Spring	Sun-Part shade
North Gazebo	Amsonia Tabernaemontana	Blue Star	6" pot	3	VB	PF	Spring	Sun-Part shade
North Gazebo	Persicaria Inverleith	Smart Weed	6" pot	15	VB	PF	Summer	Sun-Part shade
North Gazebo	Scabiosa 'Butterfly Blue'	Pincushion Flower	6" pot	15	VB or NCN	PF	Summer-Fall	Sun
North Gazebo	Iris Germanica 'Immortality'	Bearded Iris	6" pots or Rhizomes	8	VB	PF	Spring	Sun
North Gazebo	Iris Germanica 'Sugar Blues'	Bearded Iris	6" pots or Rhizomes	8	VB	PF	Spring	Sun
North Gazebo	Narcissus 'Replete'	Daffodil	Bulbs	25	JS	B	Early Spring	Sun
North Gazebo	Allium 'Globemaster'	Onion Flower	Bulbs	25		BF	Spring	Sun
North Gazebo	Echinacea Paradoxa	Yellow Coneflower	Plug tray	1	NCN	PF	Summer-Fall	Sun
North Gazebo	Phlox Earlibeauty 'Rose Boquet'	Short Phlox	Plug tray	1	NCN	PF	Summer-Fall	Sun
North Gazebo	Sedum Rupestre 'Angelina'	Stonecrop	Plug tray	1	NCN	GC	Fall	Sun
North Gazebo	Thymus Praecox 'Purple Carpet'	Carpet Thyme	Plug tray	1	RH	HP	Summer	Sun
North Gazebo + Prairie	Juniperous Scopulorum	Columnar Juniper	6-7 feet	8	MN	S	NA	Sun
Pollinator	Calendula Officinalis	Pot Marigold	1 package, 100 seeds	1	JS	AR	Summer-Fall	Sun
Pollinator	Cosmos Sulphureus 'Bright Lights'	Orange Cosmos	1/4 lb Seed	1	JS	AR	Summer-Fall	Sun
Pollinator	Escholzia Californica	California Poppy	100g Seed	1	RH	AR	Summer-Fall	Sun



Location	Latin name	Common Name	Size	Qty	Rec Vendor	Type	Bloom	Light
Pollinator	Tropaeolum Majus	Nasturtium	100g Seed	1	RH	A	Summer-Fall	Sun
Pollinator	Borago Officinalis	Borage	10g Seed	1	RH	AR	Spring-Fall	Sun
Pollinator	Viola Cornuta 'King Henry'	Horned Pansy	10g Seed	1	RH	AR	Summer	Sun-part shade
Pollinator	Viola Tricolor	Heartsease	10g Seed	1	RH	AR	Spring	Sun-part shade
Pollinator	Trifolium Pratense	Red Clover	1kg Seed	1	RH	AR, GC	Spring - Fall	Sun
Pollinator	Agastache 'Rosie Posie'	Anise Hyssop	6" pot	20	VB	APF	Summer-Fall	Sun
Pollinator	Papaver 'Princess Victoria Louise'	Poppy	6" pot	6	VB	PF	Spring	Sun
Pollinator	Papaver Nudicaule 'Wonderland'	Poppy	6" pot	6	VB	PF	Spring	Sun
Pollinator	Filipendula Rubra 'Venusta'	Queen of The Prairie	6" pot	8	VB	PF	Summer	Sun
Pollinator	Heliopsis 'Punto Rosso'	False Sunflower	6" pot	4	VB	PF	Summer-Fall	Sun
Pollinator	Heuchera 'Forever Purple'	Coral Bells	6" pot	12	VB	PF	Summer	Sun-shade
Pollinator	Tarenaya Hassleriana	Cleome	Seed Package 600mg	2	BI	AR	Summer-Fall	Sun-part shade
Pollinator	Papaver Somniferum 'Black Swan'	Poppy	Seed Package, 400 mg	2	BI	AR	Summer	Sun
Prarie	Lupinus	Lupine	1/2 lb. Seed	1	JS	PF	Spring	Sun-Part Shade
Prarie	Liquidambar Styraciflua 'Slender	Columnar Sweetgum	2" caliper, 8-10 feet	4	MN	T	NA	Sun
Prarie	Cercidiphyllum Japonicum 'Pendula'	Weeping Katsura	2" caliper, or 6-10 feet	1	MN	T	Spring	Sun-Part Shade

Location	Latin name	Common Name	Size	Qty	Rec Vendor	Type	Bloom	Light
Prarie	Perovskia Antriplicifolia	Russian Sage	4-6" pot	6	VB	APF	Summer-Fall	Sun
Prarie	Dalea Purpurea	Prarie Clover	4" pot	20	VB	PF	Spring	Sun
Prarie	Malus 'Donald Wyman'	Crab Apple	6-8 feet	3	MN	T	Spring	Sun
Prarie	Panicum Vergatum 'Heavy Metal'	Blue Switchgrass	6-8" pots	8	VB	G	NA	Sun
Prarie	Sanguisorba Canadensis	Wild Burnet	6-8" pots	6	VB	PF	Summer	Sun
Prarie	Sanguisorba Canadensis 'Lilac	Purple Burnet	6-8" pots	3	VB	PF	Summer	Sun
Prarie	Sedum 'Xenox'	Sedum	6-8" pots	6	VB	PF	Fall	Sun
Prarie	Veronia Lettermanii 'Iron Butterfly'	Mini Ironweed	6-8" pots	3	VB	PF	Fall	Sun
Prarie	Veronia Noveboracensis	Ironweed	6-8" pots	4	VB	PF	Fall	Sun
Prarie	Agastache 'Blue Boa'	Anise Hyssop	6" pot	17	VB	PF	Summer-Fall	Sun-Part Shade
Prarie	Allium Thunbergii 'Ozawa'	Grass Chives	6" pot	8	VB	PF	Fall	Sun
Prarie	Asclepias Incarnata 'Ice Ballet'	Milk Weed	6" pot	15	VB	PF	Summer-Fall	Sun
Prarie	Aster Laevis 'Blue Bird'	Blue Aster	6" pot	6	VB	PF	Fall	Sun-Part Shade
Prarie	Aster Novae Angliae	New England Aster	6" pot	6	VB	PF	Fall	Sun
Prarie	Baptisia Australis	False Indigo	6" pot	3	VB	PF	Spring	Sun-Part Shade
Prarie	Coreopsis 'Guided Lace'	Tickseed	6" pot	3	VB	PF	Spring-Fall	Sun

Location	Latin name	Common Name	Size	Qty	Rec Vendor	Type	Bloom	Light
Prarie	Coreopsis Tripteris	Tall Tickseed	6" pot	5	VB	PF	Summer-Fall	Sun
Prarie	Crambe Maritima	Sea Kale	6" pot	5	VB	PF	Spring	Sun
Prarie	Dicentra Spectabilis	Bleeding Heart	6" pot	3	VB	PF	Spring	Shade
Prarie	Echinops Ritro	Globe Thistle	6" pot	12	VB	PF	Summer	Sun
Prarie	Eryngium Planum 'Big Blue'	Sea Holly	6" pot	14	VB	PF	Summer	Sun
Prarie	Eupatorium Coelestinum	Blue Mist Flower	6" pot	15	VB	PF	Fall	Sun
Prarie	Gaillardia 'Arizona Apricot'	Blanket Flower	6" pot	10	VB	PF	Summer	Sun
Prarie	Geum Avens 'Totally Tangerine'	Chocolate Root	6" pot	12	VB	PF	Spring	Sun
Prarie	Helianthus 'Lemon Queen'	Sunflower	6" pot	4	VB	PF	Fall	Sun
Prarie	Helianthus Salicifolius	Willow-leaved Sunflower	6" pot	5	VB	PF	Fall	Sun
Prarie	Hyssopus Officinalis	Hyssop	6" pot	3	VB	APF	Summer	Sun
Prarie	Iris Sibirica 'Cote D'Azure'	Siberian Iris	6" pot	10	VB	PF	Spring	Sun
Prarie	Monarda Fistulosa	Wild Bergamont	6" pot	3	VB	APF	Summer	Sun
Prarie	Nepeta '6 hills Giant'	Catmint	6" pot	6	VB	APF	Summer-Fall	Sun
Prarie	Rudbeckia Fulgida 'Deamii'	Black eyed Susan	6" pot	15	VB or NCN	PF	Summer-Fall	Sun
Prarie	Rudbeckia Nitida 'Herbstonne'	Autumn Sun	6" pot	10	VB	PF	Fall	Sun

Location	Latin name	Common Name	Size	Qty	Rec Vendor	Type	Bloom	Light
Prarie	Senna Hebecarpa	Wild Senna	6" pot	2	VB	PF	Summer	Sun
Prarie	Tiarella Cordifolia	Foam Flower	6" pot	8	VB	PF	Spring	Shade
Prarie	Verbascum Thapsus	Mullein	6" pot	12	RH	BF	Summer	Sun
Prarie	Veronicastrum Virginicam	Culver's Root	6" pot	6	VB	PF	Summer	Sun
Prarie	Veronicastrum Virginicam	Purple Culver's root	6" pot	<b>6</b>	<b>VB</b>	<b>PF</b>	<b>Summer</b>	<b>Sun</b>
Prarie	Caryopteris Clandonensis	Blue Mist Shrub	8" pot	3	VB	S	Summer	Sun
Prarie	Narcissus 'Late Set'	Daffodil	Bagged bulbs	25	JS	B	Spring	Sun
Prarie	Narcissus 'Early Set'	Daffodil	Bagged bulbs	25	JS	B	Early Spring	Sun
Prarie	Anemone Pulsatilla	Pasque Flower	Plug tray	1	RH	PF	Spring	Sun-Part Shade
Prarie	Aquilegia Canadensis	Wild Columbine	Plug tray	1	NCN	PF	Spring	Sun-Shade
Prarie	Asclepias Tuberosa	Butterfly Weed	Plug tray	1	NCN	PF	Summer	Sun
Prarie	Echinacea Purpurea 'Ruby Star'	Purple Cone Flower	Plug tray	1	NCN	PF	Summer-Fall	Sun-Part Shade
Prarie	Echinacea Purpurea 'White Swan'	White Cone Flower	Plug tray	1	NCN	PF	Summer-Fall	Sun-Part Shade
Prarie	Eryngium Yuccifolium	Rattlesnake Master	Plug tray	1	NCN	PF	Summer-Fall	Sun
Prarie	Eupatorium Maculatum 'Gateway'	Joe Pye Weed	Plug tray	1	NCN	PF	Summer-Fall	Sun-Part Shade
Prarie	Helenium 'Mardi Gras'	Sneezeweed	Plug tray	1	NCN	PF	Summer	Sun



Location	Latin name	Common Name	Size	Qty	Rec Vendor	Type	Bloom	Light
Prarie	Levesticum Officinale	Lovage	Plug tray	1	RH	BI	Summer	Sun
Prarie	Monarda 'Petite Delight'	Short Bee Balm	Plug tray	1	NCN	APF	Summer	Sun
Prarie	Pycnanthemum Muticum	Mountain Mint	Plug tray	1	NCN	APF	Summer	Sun
Prarie	Solidago Odora	Anise Scented Goldenrod	Plug tray	1	NCN	APF	Fall	Sun
Prarie + North Gazebo	Juniperous Scopulorum	Columnar Juniper	6-7 feet	8	MN	S	NA	Sun
Prarie + South Gazebo	Allium Schoenoprasum	Onion Chives	6" pot	17	RH	HP	Spring	Sun
Prarie + South Gazebo	Lavandula 'Phenomenal'	Lavender	6" pot	9	VB	APF	Summer	Sun
Prarie + South Gazebo	Persicaria Polymorpha	Fleece flower	8" pots	3	VB	PF	Summer-Fall	Sun
Prarie + Avian Grassland	Miscanthus Giganteus	Giant Silvergrass	6-8" pot	12	LCG	G	NA	sun
Prarie + Avian Grassland	Calamagrostis Acutiflora 'Karl'	Feather Reed Grass	Plug tray	1	NCN	G	NA	Sun
Prarie + Avian Grassland	Deschampsia Cespitosa	Tufted Hairgrass	Plug tray	1	NCN	G	NA	Sun- Part Shade
South Gazebo	Sambucus Nigra 'Black Lace'	Black Elderberry	1 gallon	1	MN	S	Spring	Sun-Part shade
South Gazebo	Vaccinum 'Blue Jay'	Mid season Blueberry	1 gallon	3	MN	S	Spring	Part shade
South Gazebo	Vaccinum 'Bluecrop'	Mid season Blueberry	1 gallon	4	MN	S	Spring	Part shade
South Gazebo	Trifolium Repens	White Clover	1kg Seed	1	RH	GC	Spring - Fall	Sun-Part shade
South Gazebo	Quercus Palustris 'Green Pillar'	Columnar Oak	2" caliper, or 8-10 feet	4	MN	T	NA	Sun

Location	Latin name	Common Name	Size	Qty	Rec Vendor	Type	Bloom	Light
South Gazebo	Thymus Vulgaris	English Thyme	6 pack or 2-4" pots	6	RH	HP	Summer	Sun
South Gazebo	Persicaria Speciosa	Smart Weed	6-8" pots	14	VB	PF	Summer	Sun
South Gazebo	Carex Appalachica	Appalachian Sedge	6" pot	15	VB	G	NA	Sun-shade
South Gazebo	Hemerocallis 'Big Time Happy'	Daylilly	6" pot	25	VB	PF	Summer	Sun
South Gazebo	Origanum 'Rosenkuppel'	Oregano	6" pot	8	VB	HP	Summer-Fall	Sun
South Gazebo	Perovskia 'Filigran'	Mini Russian Sage	6" pot	3	VB	APF	Summer-Fall	Sun
South Gazebo	Stachys 'Helen con Stein'	Lambs Ear	6" pot	3	VB	GC	Summer	Sun
South Gazebo	Muscari	Grape Hyacinth	Bulbs	400	Fedco seeds	B	Early Spring	Sun-Part shade
South Gazebo	Artemisia Dracunculus Sativa	French Tarragon	Plug tray	1	RH	HP	NA	Sun-Part shade
South Gazebo	Carex Pensylvanica	Oak Sedge	Plug tray	1	NCN	G	NA	Part shade
South Gazebo	Carex Vulpinoidea	Fox Sedge	Plug tray	1	NCN	G	NA	Part shade
South Gazebo	Chasmanthium Latifolium	Sea Oats	Plug tray	1	NCN	G	NA	Sun-Part shade
South Gazebo + Prairie	Persicaria Polymorpha	Fleece flower	6-8" pots	3	VB	PF	Summer-Fall	Sun- Part shade
South Gazebo + Prairie	Lavandula 'Phenomenal'	Lavender	6" pot	12	VB	APF	Summer	Sun
South Gazebo + Prairie	Allium Schoenoprasum	Onion Chives	6" pot	17	RH	HP	Spring	Sun

**SPECIAL PROVISIONS TO THE MASSACHUSETTS DEPARTMENT OF  
TRANSPORTATION STANDARD AND SUPPLEMENTAL SPECIFICATIONS**

**EVERETT**

MAIN STREET MEADOW – 66 MAIN STREET

**1. SCOPE OF WORK**

The Scope of Work shall include installation of sidewalk, stairway, ecological space, and other park elements at 66 Main Street in Everett, MA. Project limits are included on the title sheet of the plans.

The work consists of the installation of sidewalk, stairway, crosswalk, lighting, gazebo, arbor, landscape irrigation, soil remediation and other park elements as labeled on the design plans.

All work under this Contract shall be done in conformance with the *2021 Standard Specifications for Highways and Bridges*, the *Supplemental Specifications* contained in this book, the *2017 Construction Standard Details*, the *Traffic Management Plans and Detail Drawings*, *MassDOT Work Zone Safety Temporary Traffic Control*, the *1990 Standard Drawings for Signs and Supports*; the *2009 Manual on Uniform Traffic Control Devices (MUTCD)* with Massachusetts Amendments; *The American Standard for Nursery Stock*; the Plans and these Special Provisions.

All work shall be performed within, and accessed by, existing State, Town, or City roadway layouts, or property. No Rights to enter upon, or occupy, private properties have been acquired for this project.

**2. DEFINITIONS USED IN THESE SPECIAL PROVISIONS**

The "Municipality" and the "City" shall mean the City of Everett, the municipality in which the Contract work is to be performed.

"MassDOT", shall mean the Massachusetts Department of Transportation.

"Engineer" shall mean the authorized representative of the City of Everett.

**3. PERMITS**

The Contractor's attention is directed to the fact that the Scope of Work may be adjusted because of the MassDOT Access Permit. The permit is in process but not approved yet as of the date of this document. The contractor shall be responsible for coordinating all necessary updates with the Engineer and City in relation to the scope of work and this permit.



#### **4. NOTICE TO OWNERS OF UTILITIES**

Written notice shall be given by the Contractor to all public service corporations or officials owning or having charge of publicly or privately owned utilities of the Contractor's intention to commence operations affecting such utilities at least one (1) week in advance of the commencement of such operations in accordance with Chapter 82, Section 40 of the General Laws, as amended, and the Contractor shall at that time file a copy of such notice with the Engineer.

The Plans indicate the approximate location of known utilities in the vicinity of the work. The accuracy and completeness of the information is not guaranteed. Any damage to these utilities caused by negligence of the Contractor shall be repaired by the Contractor at their own expense and to the satisfaction of the Engineer. It is the intent of these Special Provisions that the Contractor having been given due notice hereof will safeguard the utilities during construction and shall assume liability for damage, relieving the City from any liability.

Utility structures not correctly adjusted to proper grade prior to paving or sidewalk installation or buried during construction shall be uncovered, repaired if necessary and reset to grade at Contractor's expense.

#### **5. PROTECTION OF UNDERGROUND FACILITIES**

The Contractor's attention is directed to the necessity of making his own investigation in order to ensure that no damage to existing structures, drainage lines, etcetera, will occur.

The Contractor shall notify Massachusetts DIG SAFE and procure a Dig Safe Number for each location prior to disturbing existing ground in any way. The telephone number of the Dig Safe Call Center is 811 or 1-888-344-7233.

#### **6. DISPOSAL OF SURPLUS MATERIALS**

All additional and existing materials not required or needed for use on the project, and not required to be removed and stacked, shall become the property of the Contractor and shall be removed from the site during the construction period and disposed of legally. No separate payment will be made for this work, but all costs in connection therewith shall be included in the prices bid for various Contract items.

## **7. ARCHITECTURAL ACCESS BOARD TOLERANCES**

The Contractor is hereby notified that they are ultimately responsible for constructing all project elements in strict compliance with the current AAB/ADA rules, regulations, and standards.

All construction elements in this project associated with sidewalks, walkways, wheelchair ramps and curb cuts are controlled by 521CMR - Rules and Regulations of the Architectural Access Board (AAB).

The AAB Rules and Regulations specify maximum slopes and minimum dimensions required for construction acceptance. There is no tolerance allowed for slopes greater than the maximum slope nor for dimensions less than the minimum dimensions.

Contractors shall establish grade elevations at all wheelchair ramp locations and shall set transition lengths according to the appropriate table in the Construction Standards (or to the details shown on the plans).

All wheelchair ramp joints and transition sections which define grade changes shall be formed, staked and checked prior to placing cement concrete. All grade changes are to be made at joints.

## **8. ACCESS TO SITE**

All access to the project site shall be from Main Street Extension (City of Everett roadway) on the west side of the project site. This includes all construction deliveries and staging. No work shall impact the Main Street mainline or MassDOT owned roadway.

**DRINKING FOUNTAIN****EACH**

DESCRIPTION: This work shall consist of installing one drinking fountain in accordance with this specification and as shown on the plans and/or as directed by the Engineer. Drinking fountain shall have one fountain, one (1) water bottle refiller, and one (1) pet station.

MATERIALS: Drinking Fountain shall be furnished by the City and provided to the contractor for installation.

**CONSTRUCTION METHODS:**

- Requires 1-1/2" PVC drain line (if applicable) and water supply line with a drainable shut off valve.
- The fountain must be mounted on a solid, flat surface with adequate strength to support 450 lbs.
- Installation of a trap on the water drain line may be necessary; check local plumbing codes.
- The fountain is rated for inlet water pressure of 20-105 PSI. A pressure reducing regulator should be used if the inlet water supply exceeds 105 PSI.

METHOD OF MEASUREMENT: This item of work shall be measured and paid at the contract unit price bid per each which price and payment shall constitute full compensation for labor equipment, tools, appurtenances, and incidentals necessary to satisfactorily complete this item of work, in place, and accepted by the Engineer.



**PARK BENCH**

**EACH**

DESCRIPTION: This work shall consist of installing one bench at the southern end of the project site across from the retaining walls in between the stone dust path and sidewalk. Refer to design plans for location of the bench.

MATERIALS: Standard Black Iron style park bench to match the three existing benches on site shall be furnished by the City and provided to the contractor for installation.

CONSTRUCTION METHODS:

The bench shall be anchored in concrete using ½” wedge anchor bolts as shown on the landscaping plans.

METHOD OF MEASUREMENT: This item of work shall be measured and paid at the contract unit price bid per each which price and payment shall constitute full compensation for labor equipment, tools, appurtenances, and incidentals necessary to satisfactorily complete this item of work, in place, and accepted by the Engineer.

**DESCRIPTION:** This work shall consist of the City furnishing a prefabricated Gazebo and providing it to the contractor for installation in accordance with this specification and as shown on the plans and/or as directed by the Engineer.

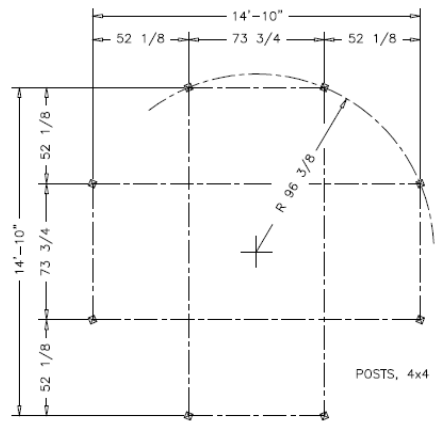
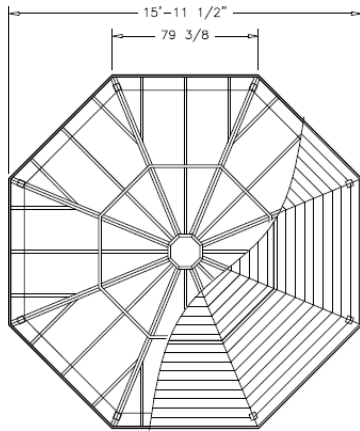
**MATERIALS:** Contractor shall install a prefabricated Gazebo provided by the City with the following criteria:

- a) Shall be of type and material as specified in the attached design drawing.
- b) Shall be 16 feet Cedar Octagon Double Roof Gazebo.
- c) Gazebo to be placed on cement concrete pad which is one foot beyond the footings and is flush with the cement concrete sidewalk and pathway at the entrances.
- d) Shall be ADA accessible.
- e) Shall be sheathed in white vinyl.
- f) Shall include straight fascia.
- g) Shall include 1 x 3 standard railings, and three entrances. Two entrances shall face the sidewalk to the east and north, and one facing the log play structure to the south.
- h) Shall include Goose Weathervane (23" Copper & Brass).
- i) Shall be constructed of Standard 4x4 Straight Posts.
- j) Shall include Cupola.
- k) Shall include hidden electrical wiring w/ 4 Receptacles & Switches.
- l) Shall include three built-in bench sections within Gazebo which are ADA accessible.

**CONSTRUCTION METHODS:** The Gazebo shall be constructed as shown on the plans and in accordance with these directions. All wiring and electrical connections shall be made by the Contractor.

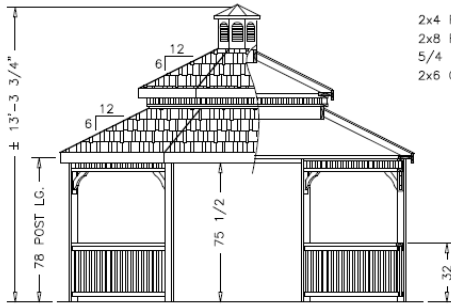
**METHOD OF MEASUREMENT:** This item of work shall be measured and paid at the contract unit price bid of lump sum which price and payment shall constitute full compensation for labor, equipment, tools, appurtenances, and incidentals necessary to satisfactorily complete this item of work in place, and accepted by the Engineer..





**ROOF FRAMING**

- 2x4 RAFTERS, 24" MAX C-C, DOUBLED AT HIPS
- 2x8 RAFTER PLATE
- 5/4 x 6" FASCIA BOARDS
- 2x6 COMPRESSION BOXES
- 1x6 T&G ROOF DECKING
- BUILDING PAPER
- ASPHALT SHINGLES



FOOTINGS, FLOOR BY OTHERS



DESCRIPTION: OCTAGON D.R. GAZEBO, CEDAR, 16R

GAZ.OCT.WOD.16R.NDK

DRN: BWD

RV: 00

SHEET: 1 of 1

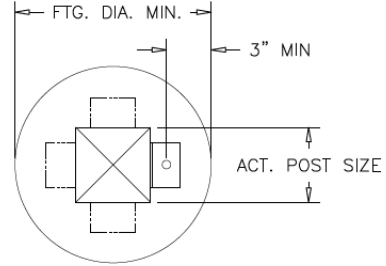
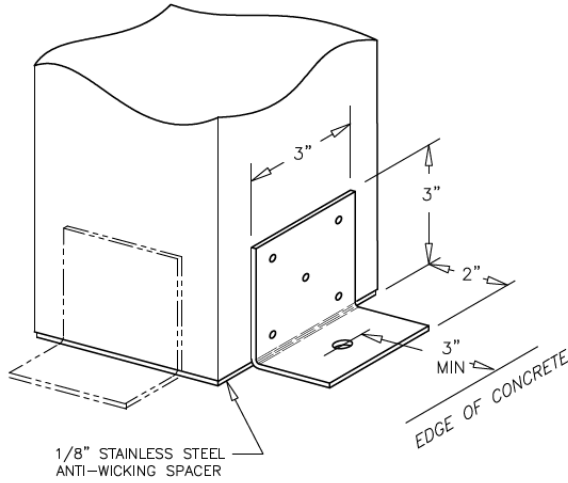
L BRACKETS ARE 1/8" MIN STEEL, POWDERCOATED OR STAINLESS STEEL IF SPECIFIED ON ORDER

NUMBER AND ARRANGEMENT OF L BRACKETS MAY VARY DEPENDING ON SITE CONDITIONS  
TYPICAL IS 2 BRACKET MINIMUM SET 90° APART

USE 1/2" WEDGE BOLTS OR SIMPSON TITEN SCREW ANCHORS WITH 3-1/2" MIN. EFFECTIVE EMBEDMENT INTO SOLID CONCRETE  
REFER TO MANUFACTURERS ENG. SHEET FOR MORE INFORMATION ON EFFECTIVE EMBEDMENT TERMINOLOGY IF NOT FAMILIAR

USE (5X) #8 SCREWS X L\*  
PER BRACKET. GALV. OR S.S. WHEN SPECIFIED

\*L= 2 1/2" OR (POST THICKNESS X .45)  
STAGGERING BRACKETS APPROX. 1/4" OFF C<sub>L</sub> WILL HELP PREVENT SCREW SELF-INTERFERENCE.



ACTUAL POST SIZE	FOOTING DIA. MIN.
3-1/2"	12"
5"	13"
5-1/2"	14"
7"	15"
7-1/2"	16"
8"	17"

1) EXISTING FOUNDATIONS/SUPPORTS MUST BE DESIGNED TO WITHSTAND RESULTANT FORCES TRANSMITTED BY THE STRUCTURE. CONSULT A REGISTERED PROFESSIONAL ARCHITECT OR ENGINEER LICENSED IN THE STATE WHERE STRUCTURE IS LOCATED.

2) FIFTHROOM.COM ASSUMES NO RESPONSIBILITY FOR THE DESIGN, CONSTRUCTION, OR STRUCTURAL INTEGRITY OF ANY EXISTING STRUCTURE OR MATERIALS SUPPLIED BY OTHERS.

3) FIFTHROOM.COM IS NOT RESPONSIBLE FOR IMPROPER USE OF THIS PRODUCT.



TITLE: STANDARD L-BRACKET POST MOUNTING REFERENCE

5R PROJECT# VARIOUS

DRN: BWD

RV: 06

SHEET: 1 of 1



**TREE INSTALLATION****LUMP SUM**

**DESCRIPTION:** This work shall consist of the City purchasing and providing all trees for the contractor to install on site as described on the landscaping plans and in the plant schedule.

**MATERIALS:** All trees listed below will be furnished by the City and provided to the contractor for installation.

Location	Latin name	Common Name	Size	Qty
Miyawaki	Morus Nigra 'Dwarf Everbearing'	Dwarf Everbearing Mulberry	1 gallon or bare root	2
Miyawaki	Corylus Americana	Hazelnut	1 gallon pot	2
Miyawaki	Hamamelis Intermedia 'Jelena'	Witch Hazel	1 gallon pot or 5-6 feet	2
Miyawaki	Betula Nigra 'Heritage'	Heritage River Birch	5-6 feet, or 1 gallon	1
Miyawaki	Asimina Triloba 'KSU Chappell'	Paw Paw	Bare root	1
Miyawaki	Asimina Triloba 'KSU Benson'	Paw Paw	Bare root	2
Miyawaki	Diospyros Virginiana 'Meader'	American Persimmon	Tree pot or bare root	3
Prairie	Liquidambar Styraciflua 'Slender Sillouette'	Columnar Sweetgum	2" caliper, 8-10 feet	4
Prairie	Cercidiphyllum Japonicum 'Pendula'	Weeping Katsura	2" caliper, or 6-10 feet	1
Prairie	Malus 'Donald Wyman'	Crab Apple	6-8 feet	3
South Gazebo	Quercus Palustris 'Green Pillar'	Columnar Oak	2" caliper, or 8-10 feet	4

**Total Trees      25**

CONSTRUCTION METHODS:

Conduct soil remediation as previously specified. Dig a shallow, broad planting hole. Holes should be 2–3 times wider than the root ball, but only as deep as the root ball. If wrapped, remove any cover from around the root ball and trunk to facilitate root growth. Inspect tree root ball for circling roots and straighten, cut, or remove them. Expose the trunk flare if necessary.

Place the tree at the proper height. When placing the tree in the hole, lift by the root ball, not the trunk. The majority of tree's roots develop in the top 12 inches (30 cm) of soil. Planting too deep can be harmful to the tree.

Straighten the tree in the hole. Before filling the hole, have someone examine the tree from several angles to confirm it is straight. Fill the hole with soil and amendments gently and firmly. to stabilize the tree and eliminate air pockets. Water periodically while backfilling. Avoid fertilizing at the time of planting.

If staking use three stakes to ensure the tree remains upright. Mulch the base of the tree. Place a 2–3 inch (5–7.5 cm) layer of wood chip mulch, and be sure not to pile much right against the trunk. A mulch-free area of 1–2 inches (2.5–5 cm) wide at the base of the tree will reduce moist bark and prevent decay. Ensure trunk flare is partially visible after the tree is planted. Remove excess soil prior to planting if flare is not visible.

METHOD OF MEASUREMENT: This item of work shall be measured and paid at the contract unit price bid lump sum which price and payment shall constitute full compensation for labor equipment, tools, appurtenances, and incidentals necessary to satisfactorily complete this item of work, in place, and accepted by the Engineer.



**SOLAR POWERED LIGHTS AND LUMINARIES**

**EACH**

**DESCRIPTION:** This work shall consist of furnishing and installing Solar Powered Street Lights and luminaries in accordance with this specification and as shown on the plans and/or as directed by the Engineer.

**MATERIALS:** Solar Powered Street Lights and Luminaries shall be type similar to the City standard style identified in attached image.

Solar Powered Street Lights shall be installed on concrete footings in compliance with manufacturers specifications. They shall be equipped with an external electrical outlet. Light poles shall have attachment for banners to be attached to the poles. LED lighting shall be used.

**SUBMITTALS:** The contractor shall submit product type to the City for approval prior to purchase and installation.

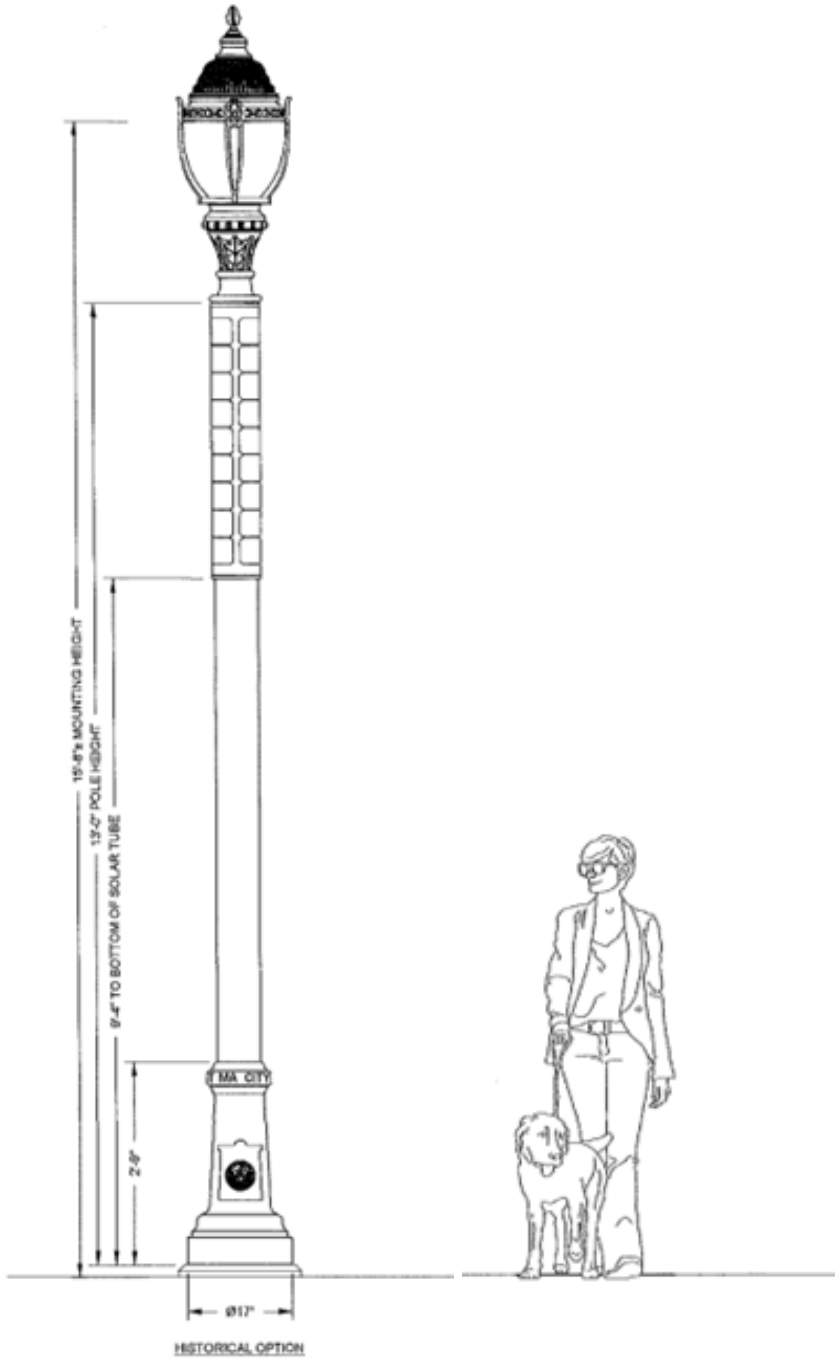
**CONSTRUCTION METHODS:** The Solar Powered Street Lights and Luminaries shall be constructed as shown on the plans and in accordance with the manufacturer's directions. All wiring and electrical connections shall be made by the Contractor.

Contractor shall confirm the exact locations of proposed lights with the City prior to installation.

**METHOD OF MEASUREMENT:** This item of work shall be measured and paid at the contract unit price bid per each which price and payment shall constitute full compensation for furnishing and installing all materials including light poles, luminaries, excavation, and placement of concrete light pole foundations including anchor bolts and all other materials, labor, equipment tools, appurtenances, and incidentals necessary to satisfactorily complete this item of work, in place, and accepted.

# SOLAR POWERED LIGHTS AND LUMINARIES (continued)

## Solar Light Pole Assemblies



Project:

Location:

Project No.:  
Drawing No.: SK1  
Version: 1  
Design By: Patrick

Sheets: 1 of 1  
Scale: N.T.S.  
Format: PDF, Size A  
Date: 12JUN2022



**TRASH COMPACTOR (BIGBELLY)**

**EACH**

**DESCRIPTION:** This item of work shall consist of furnishing and installing one Bigbelly Trash compactor in accordance with this specification and as shown on the plans and/or as directed by the Engineer.

**MATERIALS:** Trash compactor shall be produced by BigBelly, be fully enclosed, and 50 gallon capacity trash.

**CONSTRUCTION METHODS:** The trash receptacle shall be fabricated and installed as shown on the plans and in accordance with manufacturer's directions.

**METHOD OF MEASUREMENT:** This item of work shall be measured and paid at the contract unit price bid per each which price and payment shall constitute full compensation for materials, labor, equipment, tools, appurtenances, and incidentals necessary to satisfactorily complete this item of work, in place, and accepted by the Engineer.

**ARBOR****EACH**

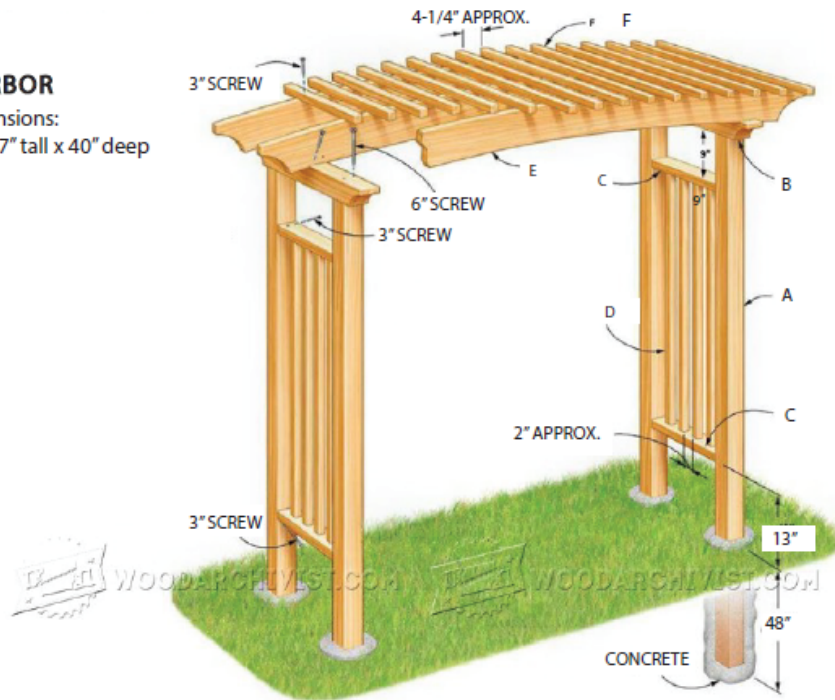
DESCRIPTION: This work shall consist of furnishing and installing an Arbor located over the sidewalk at the north end of Main Street Meadow for the purpose of supporting flowering and fruiting vines. The arbor shall be in accordance with this specification and as shown on the plans and/or as directed by the Engineer

MATERIALS AND CONSTRUCTION METHODS: The Arbor shall be constructed of Eastern Red Cedar and as identified in the specification drawing below.

METHOD OF MEASUREMENT: This item of work shall be measured and paid at the contract unit price bid per each which price and payment shall constitute full compensation for furnishing and installing all materials, labor, equipment, tools, appurtenances, and incidentals necessary to satisfactorily complete this item of work complete in place, and accepted by the Engineer.

## CEDAR ARBOR

Overall dimensions:  
107" wide x 87" tall x 40" deep



### Cutting List

KEY	QTY	SIZE & DESCRIPTION
A	4	3-1/2" x 3-1/2" x 8' posts
B	2	3-1/2" x 3-1/2" x 36" beams
C	4	1-1/2" x 3-1/2" x 18" rungs
D	8	1-3/8" x 1-3/8" x 47" side slats
E	3	1-1/2" x 10" x 107" arches
F	19	1-3/8" x 1-3/8" x 40"

### Materials List

ITEM	QTY
4 x 4 x 8'	5
2 x 4 x 8'	1
2 x 2 x 8'	14
2 x 12 x 10'	3
2 x 4 x 10' (for bracing)	3
Concrete Mix (80 lb bags)	4
Eight 6" screws, 2 lbs of 3" screws, two 4" screw hooks, exterior stain	



## IRRIGATION SYSTEM

## LUMP SUM

DESCRIPTION: This item addresses preparation and implementation of an irrigation system to ensure all trees, shrubs, and plantings are provided water via the subsurface irrigation. This work shall be conducted in accordance with this specification and as shown on the plans and/or as directed by the Engineer. All irrigation lines shall be installed by a professional insured irrigation installer.

MATERIALS: Contractor shall comply with Contract Drawings and the following criteria.

- Rain Bird wi-fi compatible Irrigation 8 Station Indoor/Outdoor 120V Controller or equivalent connected to the water service connection as specified on the following pages.
- Irrigation main lines shall be 1" black poly tubing,
- Drip irrigation lines shall be 1/2" ID Rain Bird XFS subsurface dripline with copper shield

CONSTRUCTION METHODS: The contractor shall install the irrigation system in accordance with these specs and the attached plan. Flow Test to be performed following water meter installation. Emitters to be spaced every 12". Delivery shall be .9 gallons per hour.

System controller to be mounted on south side of large retaining wall adjacent to fire hydrant and water main. Hardscape-softscape transitions to be sleeved with 3" conduit pipe.

METHOD OF MEASUREMENT: This item of work shall be measured and paid at the contract unit price as lump sum which price and payment shall constitute full compensation for furnishing and installing all materials, labor, equipment, tools, appurtenances, and incidentals necessary to satisfactorily complete this item of work in place, and accepted by the Engineer.

**DESCRIPTION:** The Contractor shall furnish and install water services to the site. This will require connecting into a 1” polyethylene tubing water service from city service to a proposed curb stop as indicated on the drawings and herein specified. The installation shall include the curb stop and box, polyethylene tubing, two lockable frost proof water spigots, a water meter to monitor water usage on site, and all other components to complete the service connection.

*\*Note an irrigation controller previously specified will be connected into the water service.*

**MATERIALS:** Service pipe shall be polyethylene tubing, cold flared, no unions, or couplings conforming to ASTM D2447-93. The name and trademark of the manufacturer shall be stamped along the pipe.

All pipe fittings and accessories shall conform to the requirements of the following standard specifications:

1. ANSI/AWWA Underground Service Line, Valves and Fittings (C800)
2. ASTM D2447-93 - Standard Specification for Polyethylene (PE) Plastic Pipe
3. 2 Lockable frost proof water spigots
4. The E-Series G2® Ultrasonic 1” water meter

Service boxes shall be cast iron or polyethylene. The boxes shall have housings of sufficient size to completely cover the service stop and shall be complete with identifying covers.

**CONSTRUCTION METHODS:**

Care shall be exercised in the placing and laying of polyethylene tubing to be sure that the pipe does not have kinks or sharp bends and to assure against it being in contact with sharp stones or ledge which would cause damage to the pipe. Softscape- hardscape transitions shall be placed inside 3” conduit pipe. At least 6” of selected fill shall be placed adjacent to and above the pipe and no stone shall be placed over the pipe until the depth of backfill above the latter is in excess of 12”.

An E-Series G2® Ultrasonic 1” water meter shall be installed according to manufacturer specifications. The meter shall be installed in line at water service connection. 1” polyethylene tubing shall be connected underground to the irrigation controller in-ground as well as on-site water spigots. See irrigation plan and construction plans for locations.

Services shall be flushed before activating to avoid meter clogging.

Two Lockable, frost proof water spigots shall be mounted into 18” square base concrete pads at locations identified on construction plans.

**METHOD OF MEASUREMENT:** This item of work shall be measured and paid at the contract unit price as lump sum which price and payment shall constitute full compensation for furnishing and installing all materials, labor, equipment, tools, appurtenances, and incidentals necessary to satisfactorily complete this item of work in place, and accepted by the Engineer.

## **SOIL REMEDIATION**

## **LUMP SUM**

**DESCRIPTION:** This work shall consist of amending the soil on site in order to create a healthier soil biome for the effective and safe cultivation of native and edible plant species. The process of remediation will be in accordance with the specifications detailed in the Comprehensive Soil Plan provided by the Contractor.

**MATERIALS:** The Contractor shall be responsible for the planning and implementation of soil remediation. The contractor shall comply with the following criteria.

- a) Dig topsoil 6" Deep: This will break up near surface compaction, remove unwanted weed species and their seed bank.
- b) Use a 3' drill bit to drill holes across the site. Deep drilled holes permit aeration and allow new soil amendments to penetrate more easily.
- c) Lay down 3" layer of carbon (wood chips/cardboard): Starting with carbon heavy material is ideal for promoting fungal communities. It also creates a soil texture with better water infiltration and aeration to avoid anaerobic pathogens.
- d) Treat carbon layer with Biocomplete Liquid Amendment or product of comparable microbial biodiversity: The carbon layer is the food and the liquid amendment delivers the desired populations to their food.
- e) Cover carbon layer with 3" of soil mixed with a fungal dominant compost blend: Soil and compost are mixed to become the medium for planting seeds, starts, and saplings. This layer also protects the nascent fungal communities.
- f) Seed with fast growing short cover crop and early successional plants.
- g) Mulch with straw.
- h) Apply additional soil drench of Biocomplete Liquid Amendment.

**CONSTRUCTION METHODS:** Soil Remediation shall be implemented as described in the comprehensive soil report and in accordance with best practices.

**METHOD OF MEASUREMENT:** This item of work shall be measured and paid at the contract unit price as lump sum which price and payment shall constitute full compensation for furnishing and installing all materials, labor, equipment, tools, appurtenances, and incidentals necessary to satisfactorily complete this item of work in place, and accepted by the Engineer.



## **LOG TERRACED BEDS**

**Lump Sum**

**DESCRIPTION:** This work shall consist of furnishing and installing log terraced beds in accordance with this specification and as shown on the plans and/or as directed by the Engineer. Refer to design plans for location of log terraced beds.

### **MATERIALS:**

- 12" black locust logs
- 20" long steel rebar - 5/8" diameter
- Loam
- Compost
- Wood chips

### **CONSTRUCTION METHODS:**

Logs shall be buried on contour to create raised garden beds terraced along the hillside. Logs will be stepped up the hillside in increments of 8" of height per level, with perpendicular logs tying the terrace walls back into the hillside. Logs will be drilled out to 5/8" diameter at 16" increments, anchored with steel rebar driven through the logs vertically into the ground. Terraced area to be divided evenly along the slope.

Excavation shall be done at a depth of 8" below the bottom of the log. Finished elevation of adjacent pathway downhill of each terrace is to be 4" above finished elevation of bottom of logs.

**METHOD OF MEASUREMENT:** This item of work shall be measured and paid at the contract unit price as lump sum which price and payment shall constitute full compensation for furnishing and installing all materials, labor, equipment, tools, appurtenances, and incidentals necessary to satisfactorily complete this item of work in place, and accepted by the Engineer.



## **STONE DUST PATHS**

**DESCRIPTION:** This work shall consist of furnishing and installing stone dust paths in accordance with this specification and as shown on the plans and/or as directed by the Engineer. Refer to plans for locations of stone dust paths

### **MATERIALS:**

- 3oz thick woven polypropylene landscape fabric
- ¾" Processed Gravel
- Stone Dust

### **CONSTRUCTION METHODS:**

Stone Dust paths will be installed as shown on the landscaping plans. Walking paths are 4' wide. An 18" stone dust edge will be installed between the curb and gardens next to parking. All stone dust paths will be constructed as follows:

- Excavate 12" below ground level matching slope of adjacent elevations
- Lay a 3oz thickness woven polypropylene landscape fabric
- Add 8" thick of ¾" processed gravel
- Top with 4" stone dust.
- Finished grade of stone dust paths shall be flush where it meets the concrete sidewalk, gardens, and existing granite curb.

**METHOD OF MEASUREMENT:** This item of work shall be measured and paid at the contract unit price as lump sum which price and payment shall constitute full compensation for furnishing and installing all materials, labor, equipment, tools, appurtenances, and incidentals necessary to satisfactorily complete this item of work in place, and accepted by the Engineer.

## WOOD CHIP WALKING PATHS

## LUMP SUM

DESCRIPTION: This work shall consist of furnishing and installing wood chip walking paths in accordance with this specification and as shown on the plans and/or as directed by the Engineer. Refer to design plans for locations of wood chip walking paths

### MATERIALS:

- 3oz thickness woven polypropylene landscape fabric
- 12" deep natural playground wood chips
- 7" to 10" diameter Black locust logs, 5ft to 8ft in length
- 3/8 inch steel rebar 18" long

### CONSTRUCTION METHODS:

Wood chip walking paths will be installed as shown on the landscaping plans. Lay a 3oz thick woven polypropylene landscape fabric and 12" of natural playground wood chips to create a level walking surface. Walking path cross slope shall not exceed 2%. 7" to 10" diameter Black locust logs will line the walking paths and define the garden spaces. Each log will have a hole drilled into the center and anchored in place with 18" steel rebar.

METHOD OF MEASUREMENT: This item of work shall be measured and paid at the contract unit price as lump sum which price and payment shall constitute full compensation for furnishing and installing all materials, labor, equipment, tools, appurtenances, and incidentals necessary to satisfactorily complete this item of work in place, and accepted by the Engineer.





**COBBLESTONE DIVIDER****LUMP SUM**

DESCRIPTION: This work shall consist of furnishing and installing Cobblestone Divider in accordance with this specification and as shown on the plans and/or as directed by the Engineer. Refer to design plans for location of cobblestone divider.

MATERIALS: The contractor shall comply with Contract Drawings and the following criteria.

- 4" x 4" x 8" - standard granite cobblestones
- High strength mortar mix for joints
- Cement
- ¾" processed gravel

CONSTRUCTION METHODS: The Cobblestone Divider shall be flush with the cement concrete sidewalk and the wood chip garden pathway. Cobblestones shall be approximately 4' wide and placed in one row between the cement concrete sidewalk where the wood chip walking path. Cobblestones shall be placed over a base of eight inches of gravel and two inches of cement concrete. Joints shall be filled with mortar not exceeding ¾ inch in width.

METHOD OF MEASUREMENT: This item of work shall be measured and paid at the contract unit price as lump sum which price and payment shall constitute full compensation for furnishing and installing all materials, labor, equipment, tools, appurtenances, and incidentals necessary to satisfactorily complete this item of work in place, and accepted by the Engineer.

## **LOG PLAY STRUCTURE**

**LUMP SUM**

**DESCRIPTION:** This work shall consist of furnishing and installing a log play structure in accordance with this specification and as shown on the plans and/or as directed by the Engineer. Refer to design plans for location of log play structure.

### **MATERIALS:**

- 18 Black Locust logs (10 to 12 inch diam) - size varies
- Black locust wooden balance beam - 10-14" wide by 6 - 8 ft long
- 12" timberlock screws
- See plans for log layout.

### **CONSTRUCTION METHODS:**

Logs shall be set upright and backfilled with cement concrete. Dig holes 2" wider than the diameter of the logs, and 2' deep. Place log (2 to 3.5 feet tall) upright in the hole and pour 6" of concrete. After concrete cures fill with 18" soil. Exposed logs shall vary in height from 6" to 18" above grade. Variations in height between adjacent logs shall be maximum 6". Spacing between logs shall be 12" to 18" on center in a zigzag pattern. Provide a minimum of 2' clearance from gazebo and sidewalk. See plans for log play structure location and layout.

For the balance beam, black locust posts shall be buried 8" below ground, protruding 8" above ground, with a milled and sanded log anchored on top using 12" timberlock screws countersunk into the log.

**METHOD OF MEASUREMENT:** This item of work shall be measured and paid at the contract unit price as lump sum which price and payment shall constitute full compensation for furnishing and installing all materials, labor, equipment, tools, appurtenances, and incidentals necessary to satisfactorily complete this item of work in place, and accepted by the Engineer.



**DESCRIPTION:** This work shall consist of furnishing and installing a wire trellis above the existing retaining wall in the middle of the site in accordance with this specification and as shown on the plans and/or as directed by the Engineer. Refer to landscaping plans for location of wire trellis.

**MATERIALS:**

- 2” Rectangular galvanized steel tubing trellis frame painted black with 1/8” galvanized steel cables spaced every 12” using turnbuckles and u bolts for tensioning
- 5/8” galvanized steel wedge anchor bolts
- 1/2” eye bolts

**CONSTRUCTION METHODS:**

The contractor will install a custom fabricated wire trellis, around top of each retaining wall. Constructed of 2” square steel tubing with flange feet mounted with wedge anchors on top of retaining walls. It will be anchored to the existing concrete wall, protruding 12” above the top of the retaining wall. continuing level over the entire retaining wall patio space. Using eye bolts spaced every 12” around the entire perimeter of the frame for mounting tension cables. Cables shall run every 12” up all sides and the top of the trellis.

**METHOD OF MEASUREMENT:** This item of work shall be measured and paid at the contract unit price as lump sum which price and payment shall constitute full compensation for furnishing and installing all materials, labor, equipment, tools, appurtenances, and incidentals necessary to satisfactorily complete this item of work in place, and accepted by the Engineer.





## **SANDBOX EDGED WITH LOGS**

**LUMP SUM**

**DESCRIPTION:** This work shall consist of furnishing and installing a sandbox edged with logs in accordance with this specification and as shown on the plans and/or as directed by the Engineer. Refer to the Landscaping Plans for the proposed location.

### **MATERIALS:**

- 3oz thickness woven polypropylene landscape fabric
- Black locust logs 8-10" diameter
- Play sand
- Cement Concrete

**CONSTRUCTION METHODS:** Sandbox shall be edged with Black Locust Vertical Logs (8"-10" diameter). Logs shall be set upright and backfilled with cement concrete. Logs shall be placed a max of 2" apart. The top of the logs shall be 2" above the play sand. Trench shall be dug two feet deep and 18" of play sand shall be placed over landscape fabric and 6" of cement concrete.

**METHOD OF MEASUREMENT:** This item of work shall be measured and paid at the contract unit price as lump sum which price and payment shall constitute full compensation for furnishing and installing all materials, labor, equipment, tools, appurtenances, and incidentals necessary to satisfactorily complete this item of work in place, and accepted by the Engineer.

