

SECTION 32 84 01

GENERAL DEVELOPMENT PLANTING IRRIGATION

PART 1 - GENERAL

1.1 DESCRIPTION

- A. This section is three total written pages plus associated documents.
 - 1. Refer to Lake Elmo Standard Details for more information.
 - 2. Refer to Lake Elmo City Code 50.40 Water Use Restrictions for more information.
 - 3. Refer to City of Lake Elmo Process for obtaining a water meter.
- B. This section specifies elemental materials and procedures based upon published and widely accepted industry best practices to design and construct landscape irrigation system(s).

1.2 SUBMITTAL

- A. Landscape irrigation design(s) shall be incorporated on the required landscape planting plan for the project using CAD-based software. Designs and supporting documents shall be furnished in reproducible electronic and hardcopy fashion to the City of Lake Elmo for approval. Scaled planting plans shall include the required items noted per 1.2 B. 1 & 2.
 - 1. No landscape irrigation installation work or the preparation for landscape irrigation shall commence without written consent of the City of Lake Elmo, MN.
- B. Landscape irrigation design(s) and supporting documents shall depict and describe the following components of the proposed landscape irrigation system including but, not limited to:
 - 1. Water supply and detail including proposed enclosures and slabs.
 - 2. Controls including proposed pedestal enclosures and weather-based appurtenances.

1.5 ELEMENTAL REQUIREMENTS

- A. Irrigation water supply shall primarily be derived of municipal source and it shall be metered and /or ground water.

PART 2 - PRODUCTS

2.5 BACKFLOW PREVENTER

- A. Use reduced pressure zone backflow prevention assembly sized according to minimum system performance specifications contained herein and as approved in writing by the City of Lake Elmo. Refer to Lake Elmo Standard Details.

2.6 WATER METER

- B. Use water meter brand and model specified by the City of Lake Elmo. Size meter according to minimum system performance specifications contained herein. Refer to City details or furnished and approved details submitted at the time of approval application.
- C. Refer to City of Lake Elmo Process for obtaining a water meter.

2.7 PLUMBING ENCLOSURE AND SLAB:

- A. The enclosure shall house the backflow prevention assembly, water meter and booster pump, if any. Enclosure shall be mounted on a concrete slab of minimum 4" depth with sleeve openings for water lines and booster pipe electrical wires, if applicable. The slab shall extend beyond the enclosure a minimum of 6". All piping in and out of the enclosure shall be copper and/or brass and/or threaded galvanized steel and/or Victaulic-grooved pipe and shall extend beyond the slab a minimum of 5 feet before converting to other pipe material. Refer to City details.
- B. Enclosure shall conform ASSE 5110, 5130 and related, for backflow prevention assembly clearances.
- C. Enclosure shall be constructed of 14 gauge all steel construction (minimum) and include the following:
 - 1. Gas shock supports for cover.
 - 2. Lockable Hasp
 - 3. Lift handles on cover.
 - 4. 2" flanges bent top and bottom.
 - 5. Louvers both ends for ventilation.
 - 6. Painted "Transformer Green".
 - 7. Stainless Steel hinges.
 - 8. Dimensions based on plumbing clearance requirements as defined by current Minnesota plumbing code and City of Lake Elmo code, if any. Shall have a minimum 2 foot working distance between plumbing and all enclosure walls.
- D. Provide 6" minimum clearance from all valves, meters, backflow prevention assembly, and piping for serviceability and conform to Item 2.7B above.
- E. Unless otherwise approved in writing by the City of Lake Elmo and prior to commencing design work or installation, only one water supply point of connection shall be permitted per development. If development is planned to be comprised of multiple phases of construction, all phases shall be master planned and sized for one water supply point of connection unless otherwise approved in writing by City of Lake Elmo.
- F. Water supply, slab and enclosure shall be placed within dimensional requirements of the City of Lake Elmo from curbs, walks, utilities and related and location(s) shall be approved in writing to accommodate rights-of-way clearance requirements during the design phase of work and prior to commencing installation. Refer to City of Lake Elmo road right-of-way guidance.

2.8 IRRIGATION CONTROLLER CABINET ENCLOSURE

- A. Use a standalone lockable stainless steel pedestal cabinet enclosure. Refer to Lake Elmo Standard Details.

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