
ADDENDUM NO. 2

PROJECT NAME: 12th Street Mall Extension
UNL PROJECT NUMBER: C904P158
BID INVITATION NUMBER: 2159-13-7200

CONSULTANT: The Clark Enersen Partners
ADDRESS: 1010 Lincoln Mall, Suite 200, Lincoln, NE 68508

DATE OF ISSUANCE: May 22, 2013
DATE OF BID OPENING: Tuesday, May 28, 2013, 10:00 AM (changed by this Addendum)

The bid documents Drawings dated May 1, 2013 and Project Manual dated May 3, 2013 for the above referenced project are amended by this addendum.

NOTICE: This Addendum is issued to all interested prospective bidders as an amendment to the project manual or other parts of the bidding (contract) documents for the above named project. Reference to this Addendum must be included in the Bid proposal. The information contained herein shall be fully incorporated into the contract documents as though originally included therein.

MODIFICATIONS TO THE SPECIFICATIONS:

Item #2-1: Contractor Questions

- a. Q?-Location & size of existing conduit from stadium panel? A- New conduit shall be provided for this work.
- b. Q?- What size of wire, due to the distance from panel to the farthest new light is 600ft minimum? A-Revise the wire size for all lighting circuits to #10 awg for phase wires and ground wires.
- c. Q?- Is there any information about the existing pole light to be removed? Size of wire & conduit? A- The size of the wire and conduit is unknown.
- d. Q?- Can we put in a junction box or do we reroute existing conduit and pull new wire to replace existing? A- Reroute existing conduit and pull new wire to replace the existing.
- e. Q?- On tree grates, are Neehan & Deeter both acceptable equals? A- Neehan and Deeter are acceptable manufacturers. Or equal substations of the grates must be submitted and approved in accordance with Specification Section 01 25 00- Substitution Procedures.
- f. Q?-The specs call for rebar dowels to be epoxy coated, the wire mesh is not, is the correct? A-There is no epoxy coated rebar nor is there any epoxy coated wire mesh.
- g. The project is being handled by "executive order" correct? A- All work shown on plans as executive order work shall be performed by the 12th street mall Contractor. The executive order permit application has been submitted to the City of Lincoln along with the permit application fee. The executive order work permit has not yet been issued.
- h. Q?- is there a soils report available? A- No.

ADDENDUM NO. 2
Project Name: 12th Street Mall Extension
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MODIFICATIONS TO THE PROJECT MANUAL:

Item #2-2 : Section 328400 Underground Sprinkler Systems

Section 328400 Underground Sprinkler Systems

- a. Replace this section in its entirety.

MODIFICATIONS TO THE DRAWINGS:

Item #2-3 :Refer to the Drawing No L1.01- Site Demolition Plan.

- a. note on drawing that reads "*WATER LINE AND HYDRANT TO BE RELOCATED AS PART OF ANOTHER CONTRACT, TYP*" to "*REFERANCE DRAWING C1.2 FOR WATER LINE RELOCATION, TYP*". Executive Order work is to be performed by the 12th Street Mall contractor.

Item #2-4 : Refer to the Drawing No. L2.02 – Site Layout and Silva Cell Layout Plan

- a. Add supplemental drawings SDL-02 and SDL-03 which is related to changes to the electrical vault box lids

Item #2-5 : Refer to the Drawing No. L4.01 – Site Planting Plan

- a. Replace this sheet in its entirety with new sheet attached.

Item #2-6 : Refer to the Drawing No. L5.01 – Site Irrigation Plan

- a. Replace this sheet in its entirety

Item #2-7 : Refer to the Drawing No.E1.01- Electrical Details, Schedules and Site Layout Plan

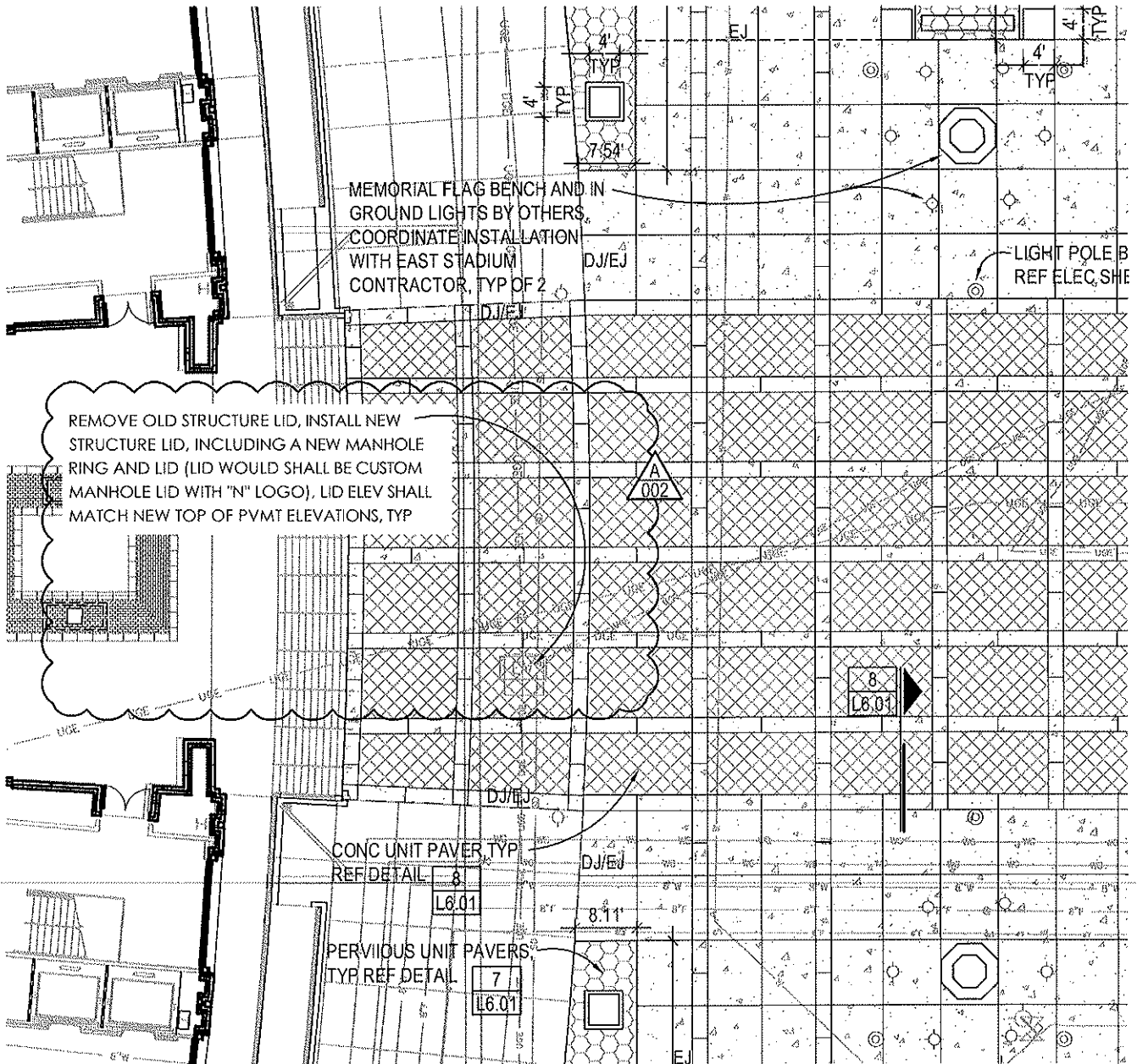
- a. Refer to the Electrical Site Layout Plan. Plan note #1 shall be modified to include #10 phase and ground conductors throughout all lighting circuits.

MISCELLANEROUS MODIFCATIONS AND CLARIFCATIONS:

Item # 2-8 :MISCELLANEOUS:

- a. Attached, please find the 12th street Mall pre-bid conference attendance sheet. Attendance was not mandatory.
- b. Addendum questions 3 & 4 related to project schedule is revised as follows:
 - i. The site will be available starting on June 25, 2013, but some work may be ongoing from the East Stadium improvements project. Work must be coordinates with the ESIP Contractor to insure that both projects have adequate access to perform the work.
 - ii. Substantial completion of all work must be by August 28, 2013 provided the concrete work must be completed by August 18, 2013 to allow 10 days of cure time for concrete work.

END OF ADDENDUM NO. 2



REVISED LAYOUT PLAN

SCALE: 1"=20'-0"



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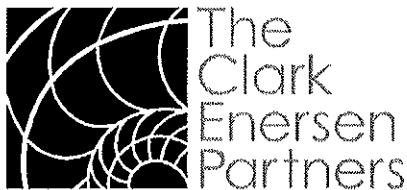
UNL 12th Street Mall Extension
Lincoln, Nebraska
TCEP Project No.: 018-196-13

Addendum #02
Supplemental Drawing: SDL-003
Revision of Sheet: I.2.02
Date: May 22, 2013



REVISED LAYOUT PLAN

SCALE: 1"=20'-0"



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UNL 12th Street Mall Extension
Lincoln, Nebraska
TCEP Project No.: 018-196-13

Addendum #02
Supplemental Drawing: SDL-002
Revision of Sheet: L2.02
Date: May 22, 2013

UNL Project No.: C904P158
TCEP Project No.: 018-196-13

SECTION 32 8400 - UNDERGROUND SPRINKLER SYSTEM

1. GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this section.
1. See Section 007300 "Supplementary Conditions", if included, for requirements relating to interpretation of the drawings and specifications.
 2. See Section 012100 "Allowances", if included, for use of allowances and what may and may not be included in them.

1.2 SUMMARY

- A. Scope of Work: Design, furnish and install the complete underground irrigation system specified herein, including all labor, materials, equipment, apparatus, and services for the testing, adjusting, retesting and readjusting as required to place the system in an approved operating condition.
- B. Arrange for, obtain, and pay for all necessary permits, bonds, and fees.
- C. Excavating and backfill and compaction for all work as specified, and are to include all machinery and labor.
- D. To complete underground irrigation system from the point of connection, throughout the site, including piping, fittings, valves, drains, sprinkler fittings, sprinkler heads, automatic controller(s) and any other necessary appurtenances.
- E. Complete irrigation system for all areas as shown on the drawings.
- F. To furnish and install all piping, fittings, valves, valve boxes, valve covers, electric valve wiring and appurtenances.
- G. To furnish and install all automatic control devices and connect controller to electric service.
- H. To test the entire piping and wiring systems.
- I. To furnish and install sprinkler heads.

UNL Project No.: C904P158
TCEP Project No.: 018-196-13

- J. To regulate and adjust all sprinkler heads, timed sequence control devices, sectional valves, rain override, etc.
- K. To furnish a qualified, sprinkler system technician to instruct the Owner's operating personnel in the maintenance and operation of the irrigation system.

1.3 PERFORMANCE REQUIREMENTS

- A. Irrigation zone control shall be automatic operation with controller and automatic control valves.
- B. Minimum Working Pressures: The following are minimum pressure requirements for piping, valves, and specialties unless otherwise indicated:
 - 1. Irrigation Main Piping: 200 psi
 - 2. Circuit Piping: 150 psi
- C. Location of Sprinklers and Specialties: Design location is approximate. Make minor adjustment necessary to avoid plantings and obstructions such as signs and light standards. Maintain 100 percent irrigation coverage of areas indicated.

1.4 SUBMITTALS

- A. Product Data: For each type of product indicated. Include rated capacities, operating characteristics, and furnished specialties and accessories.
- B. Shop drawings:
 - 1. Design of the complete underground irrigation system; include the following
 - a. Plan Layout, details illustrating location and type, valves, piping circuits, controls and accessories
 - b. Submit technical data supporting design, including individual circuit (section) GPM and pressure loss calculations.
- C. Wiring Diagrams: For power, signal, and control wiring.
- D. Qualification Data: For qualified Installer.
- E. Zoning Chart: Show each irrigation zone and its control valve.
- F. Controller Timing Schedule: Indicate timing settings for each automatic controller zone.
- G. Field quality-control reports.
 - 1. Pressure Test Results

UNL Project No.: C904P158
TCEP Project No.: 018-196-13

- H. Operation and Maintenance Data: For sprinklers controllers and automatic control valves to include in operation and maintenance manuals.
- I. Field Record Drawings
 - 1. Upon completion of the irrigation system, a complete "record drawing" will be submitted to the Owner or his agent. This drawing shall indicate thereon all pipe sizes, valve locations, dimensional data from building walls or column center lines, to the piping and valves, sprinkler heads, etc. Accompanying the record drawings shall be instruction sheets and parts lists, covering all operating equipment, bound into a folder.
- J. Copy of Contractors Certificate for CIC

1.5 QUALITY ASSURANCE

- A. Installer Qualifications: An employer of workers that include a Certified Irrigation Contractor (CIC) qualified by The Irrigation Association.
- B. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.
- C. **Pre-installation Conference: Before installing the irrigation, conduct conference at Project site with Landscape Architect, UNL Landscape Services and CM. Notify participants at least 5 working days in advance of meeting.**
- D. **Post-installation Conference: After installing the irrigation system, conduct a conference at Project site with Landscape Architect, UNL Landscape Services and CM for acceptance of work by the owner.**

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Deliver piping with factory-applied end caps. Maintain end caps through shipping, storage, and handling to prevent pipe-end damage and to prevent entrance of dirt, debris, and moisture.
- B. Store plastic piping protected from direct sunlight. Support to prevent sagging and bending.

2. PRODUCTS

2.1 ACCEPTABLE MANUFACTURERS

- A. Many materials chosen for the design of the sprinkler system have been specifically referred to by the manufacturer's name so as to enable the owner to establish the level of quality and performance required by the system design. Equipment by other manufacturers may be used only if approved by the owner. Acceptable manufacturers include but are not limited to:
 - 1. Hunter Industries
 - 2. Rainbird

UNL Project No.: C904P158
TCEP Project No.: 018-196-13

3. Netafim
4. Irritrol

2.2 COPPER PIPING

- A. Copper piping shall be Type K, hard copper, and will be used on all exposed pipe.
- B. Copper pipe fittings shall be wrought solder-type cast solder-joint fittings.

2.3 PVC PIPE

- A. All PVC pipe **for main lines and laterals** shall be virgin, high impact, polyvinyl chloride having a minimum working pressure rating of Class 200 or Schedule 40. All PVC pipe shall be continuously and permanently marked with manufacturer's name, material, size, and schedule of type. Pipe shall conform to U.S. Department of Commerce Commercial Standard CS 207-60, or latest revision. Material shall conform to all requirements of PVC 1120, ASTM D-1785, or latest revision.
- B. Priming and solvent welding shall cause complete leakproof plasticized joint upon evaporation. Solvent shall conform to U.S. Government Specification No. GS-256.63.

2.4 POLYETHYLENE PIPE

- A. ASTM 2239 flexible polyethylene pipe rated at 100 psi minimum working pressure. (For drip tubing only)

2.5 SPRINKLER RISER

- A. Standard PVC nipple.

2.6 GATE VALVES & DRAIN VALVE

- A. Manufacturer's standard of type and size required bass construction conforming to A.W.W.A. Specifications.

2.7 BOXES FOR AUTOMATIC CONTROL VALVES

- A. Plastic Boxes
 1. Manufacturer's standard of type and size required.
 - a. Armorcast Products Company
 - b. Carson Industries, LLC
 - c. Nationwide Plastics, Inc
 - d. NewBasis
 - e. Oldcastle, Inc

UNL Project No.: C904P158
TCEP Project No.: 018-196-13

f. Orbit Irrigation Products

2. Description: Box and cover, with open bottom and openings for piping; designed for installing flush with grade
 - a. Size and Shape: As required for valves and services

2.8 AUTOMATIC IRRIGATION CONTROLLER

1. There is an existing irrigation controller at Bessey Hall. Verify capacity prior to bid.
- B. Wiring: The controller to be installed and wired in accordance with the manufacturer's published instructions.
 1. Feeder-Circuit Cables: No. 12 AWG minimum, between building and controllers
 2. Low-Voltage, Branch-Circuit Cables: No. 14 AWG minimum, between controllers and automatic control valves; colors-coded different from feeder-circuit-cable jacket color, with jacket of different colors for multiple-cable installation in same trench.
 - a. Electric control wires from each controller to the automatic valves shall be direct burial UF wire of a different color than the black and white wires used on the 115 volt A.C. power. Ground wire shall be a different color than the control lines. A ground wire shall be required for each controller.
 - b. Provide 12" expansion coil at each valve and at 100 ft intervals.
 3. Splicing Materials: Manufacturer's packaged kit consisting of insulating, spring-type connector or crimped joint and epoxy resin moisture seal; suitable for direct burial.
- C. Construction: Controller shall be enclosed in a housing having a hinged cover with provision for locking. Controller shall be completely electric in operation and shall not employ hydraulic tubing, or otherwise introduce into the controller water or other fluids subject to freezing or leakage.
- D. Location of controller is indicated on drawings.

2.9 SPRAY SHRUB AND LAWN SPRINKLER HEADS

- A. Manufacture:
 1. Hunter Industries or approved equal during bidding period.
 - a. 25' or greater - I-20
 - b. Less than 25' – MP Rotator
- B. All full and part circle sprinkler bodies and nozzles. These sprinklers shall be of the pop-up type, gear or rotary drive type. Spacing of the heads shall not exceed the manufacturer's maximum recommendations.
- C. Matched precipitation will be required on all full and part circle sprinklers on the same zone.

UNL Project No.: C904P158
TCEP Project No.: 018-196-13

2.10 SUBSURFACE DRIP IRRIGATION FOR LAWN AND SHRUB AREAS

A. Manufacture:

1. Netafim USA or approved equal during bidding period.
 - a. Dripline:
 - 1) Techline CV per manufacture specifications
 - b. Fittings
 - 1) 17mm Standard Fittings per manufacture specifications
 - 2) 17mm Specialty Fittings per manufacture specifications

2.11 AUTOMATIC VALVES

A. Manufacture:

1. Irritrol Valves (700 Series) for spray heads or approved equal during bidding period.
2. Neafim (LVCZ Series) for drip irrigation or approved equal during bidding period.

B. Remote control valves shall be as indicated on the drawing. Valve shall be solenoid operated, diaphragm, globe-type having IPS threads and suitable for underground burial without protection.

C. Construction: Valve shall be packless, without sliding seals, and completely serviceable without removing body from pipeline. Design shall be normally closed requiring solenoid to be energized to open valve, thereby causing automatic closure in event of power failure. Solenoid shall comply with Class 2 National Electric Code and when operating require a maximum of 3.0 watts at 24 volts AC. Solenoid shall be coated in epoxy to form a corrosion and moisture proof unit with exposed metal components of non-corrosive material.

D. Operation: Solenoid shall be energized to open the valve hydraulically and de-energized to close. Pressure to the hydraulic chamber shall be supplied internally through a nonmetallic, corrosion-free orifice in the diaphragm. There shall be no external bleeding or external tubing to furnish actuating pressure. Valve shall operate in any position without water hammer at normal flow velocities. A manual bleed lever shall be included.

2.12 RAIN SHUT-OFF

A. N/A

2.13 QUICK COUPLING VALVES

A. Manufacture:

1. Rainbird Corporation (#44) or approved equal during bidding period.

UNL Project No.: C904P158
TCEP Project No.: 018-196-13

- B. Description: Factory-fabricated, bronze or brass, two-piece assembly. Include coupler water-seal valve; removable upper body with spring-loaded or weighted, rubber-covered cap; hose swivel with ASME B1.20.7, 3/4-11.NH threads for garden hose on outlet; and operating key
 - 1. Locking-Top: Vandal-resistant locking feature, Include (2) two matching keys.
- C. Quick coupling valves shall be installed where in a 4 inch dia. vault with cover.
 - 1. Fill: Clean soil free of stones larger than 2" diameter, foreign matter, organic matter and debris. Provide imported fill material as required to complete the work. Obtain rights and pay all costs for imported materials. Suitable excavated materials removed to accommodate the irrigation system work may be used as fill.
 - a. Drainage Backfill: Cleaned gravel or crushed stone, graded from 3" maximum to 3/4" minimum.
- D. Thrust Blocks: 2,500 psi concrete.

3. EXECUTION

3.1 SYSTEM DESIGN

- A. Inspection: Examine existing elevations and conditions at site. Do not begin system design until all existing conditions are satisfactorily understood.
- B. Design Pressures: Contractor to verify static water pressure available at connection to water supply. Actual working pressure in an individual circuit shall fall between manufacturer's recommended minimum and maximum operating pressures for the last sprinkler head in the circuit.
- C. Design Velocities: Velocity of water in sprinkler system should not exceed 5-6 fps.
- D. Location of Sprinkler Heads: Begin sprinkler head location at areas to be bordered (buildings, etc.). Fill in with sprinklers in the middle areas. Design for 100% radius overlap coverage. Locate sprinkler heads based on triangular spacing wherever possible. Locate sprinkler heads so that trees are approximately halfway between heads wherever possible. Do not spray buildings, or deck areas. Do not spray sidewalks.
- E. Sectioning of Irrigation System: Individual circuits shall be designed so that total GPM required per circuit does not exceed available GPM. System shall be designed so that areas irrigated by individual circuits exhibit compatible conditions, including soil type, plant material type and sun exposure. System shall be designed so that sprinkler head types and precipitation rates of sprinklers are compatible on same circuit. Design system so that circuits furthest from supply require lowest total GPM. Design system so that each section includes one quick coupling valve.
- F. Piping: Avoid following piping layout situations:

UNL Project No.: C904P158
TCEP Project No.: 018-196-13

1. Avoid piping layout along sides of structures.
2. Avoid odd angles in piping layout.
3. Avoid unbalanced friction losses.
4. Avoid high friction losses.
5. Avoid excessive trenching.

3.2 EXCAVATING AND BACKFILLING

- A. An excavation shall be considered unclassified excavation and include all materials encountered.
- B. Excavate trenches of sufficient depth and width to permit proper handling and installation of pipe and fittings.
- C. If the pulling method is used, the pipe "plow" shall be a vibratory type. Starting and finishing holes for pipe pulling shall not exceed a 1'-0" by 3'-0" opening.
- D. Excavate to depths required to provide 2" depth of earth fill or sand bedding for piping when rock or other unsuitable bearing material is encountered.
- E. Fill to match adjacent grade elevations with approved earth fill materials. Place and compact fill in layers not greater than 6" depth. Provide approved earth fill or sand to a point 4" above the top of pipe. Fill to within 6" of final grade with approved excavated or borrow fill materials free of lumps or rocks larger than 2" in any dimension. Provide clean topsoil free of rocks and debris for top 6" of fill. **Install irrigation lines with a minimum cover of 18" for main lines. 12" for laterals based on existing finished grades.**
- F. Excavate trenches and install piping and fill during the same working day. Do not leave trenches or partially filled trenches open overnight.
- G. Promptly notify the Architect of unexpected sub-surface conditions.

3.3 INSTALLATION

- A. Unless otherwise indicated, comply with requirements of Uniform Plumbing Code.
- B. Point of Connection: Point of connection is as shown on the drawings.
- C. Circuit Valves: Install in accordance to manufacturer's instructions. Install in valve box, arranged for easy adjustment and removal. Install valve access boxes on a suitable base of gravel to provide a level foundation at proper grade and to provide drainage of the access box. Provide union on downstream side. Seal threaded connections on pressure side of control valves with teflon tape or plastic joint type compound. Adjust automatic control valves to provide flow rate of rated operating pressure required for each sprinkler circuit.

UNL Project No.: C904P158
TCEP Project No.: 018-196-13

- D. Plastic Pipe: Install plastic pipe in dry weather when temperature is above 40 degrees F. in accordance with manufacturer's installation instructions. Provide for thermal expansion and contraction. Lay pipe on solid subbase, uniformly sloped without humps or depressions. For circuit piping, slope to drain valve at least 1/2" in 10' of lawn.
- E. Saw Cut Plastic Pipe: Use a square-in-sawing vice to insure a square cut. Remove burs and shavings at cut ends prior to installation.
- F. Make plastic to plastic joints in solvent weld joints or slip seal joints. Use only solvent recommended by the pipe manufacturer. Install plastic pipe fittings in accordance with pipe manufacturer's instructions. Owner shall make arrangements with pipe manufacturer for all necessary field assistance. Make plastic to metal joints with plastic male adapters. Make solvent weld joints in accordance with manufacturer's recommendations. Allow joints to set at least 24 hours at temperature above 40 degrees F. before pressure is applied to the system.
- G. Maintain pipe interiors free of dirt and debris. Close open ends of pipe by acceptable methods when pipe installation is not in progress.
- H. Install thrust blocks on distribution lines at locations that make an abrupt change of direction.
- I. Piping shall be located at the approximate location shown on the drawings.
- J. The pipe shall be installed and maintained at the proper lines and grades with joints centered and with fittings and other appurtenances at the required locations.
- K. All risers to heads shall be constructed of nipples or elbows to permit height adjustment of head. Install heads two inches back of any hard surface.
- L. All plantings and landscape material damaged or destroyed in the installation operation shall be replaced with planting materials, equal in type, size, age, and condition at the contractor's expense.
- M. The installation of all pipes shall be done by irrigation installers skilled in this work and under adequate and competent work supervision.

3.4 DRAINAGE

- A. Drain pits shall consist of two (2) cubic foot well, filled to capacity with crushed stone. Drain locations shall be determined on job site by the contractor. Provide manual drains at all low points in the branch piping and in the main at intervals not to exceed 300 feet of pipe. Install drain at the end of a 4" PVC pipe and valve cover. Furnish Owner with valve handle extension.
- B. Sprinkler Heads: Flush circuit lines with full head of water and install heads after hydrostatic test is completed. Install fittings, heads, risers and accessories in accordance with manufacturer's instructions. Set sprinkler heads perpendicular to finished grades at manufacturer's recommended heights.

UNL Project No.: C904P158
TCEP Project No.: 018-196-13

- C. Install quick coupling valves with an adjustable double swing joint riser assembled by the use of at least 3 standard 90 degree elbows. Fabricate double swing joint risers of Schedule 80 PVC nipples and Schedule 40 PVC elbows.
- D. Control Wiring: Install electric control cable in the piping trenches wherever possible. Place wire in trench adjacent to pipe. Install wire with slack to allow for thermal expansion and contraction. Expansion joints in wire may be provided at 100 foot intervals by making 5 or 6 turns of the wire around a piece of 1/2" pipe instead of slack. Where necessary to run wire in a separate trench, provide a minimum cover of 12".
- E. Provide sufficient slack at site connections at remote control valves in control boxes and at all wire splices to allow raising the valve bonnet or splice to the surface without disconnecting the wires when repair is required.
- F. Connect each remote control valve to one station of a controller except as otherwise indicated. Connect remote control valves to a common ground wire system independent of all other controllers. Make wire connections to remote control electric valves and splices of wire in the field, using wire connectors and sealing cement in accordance with manufacturer's recommendations.
- G. Provide tight joints to prevent leakage of water and corrosion build up on the joint.
- H. Flushing, Testing and Adjustment: After sprinkler piping and risers are installed and before sprinkler heads are installed, open control valves and flush out the system with fill head of water. **Pressure test all lines before joint areas are backfilled.** Backfill a portion of the trench area to maintain pipe stability during test period. All mainline piping shall be tested at a hydraulic pressure of 100 PSI Upon visual inspection of each joint and the ground, any leak detected shall be repaired. The line shall be re-tested until the necessary repairs made to put the system in good working order. After testing, the system shall be flushed with a minimum of 150% of the operation flow passing through each pipe, beginning with the larger mains and continuing through the smaller mains in sequence.
- I. Perform system testing upon completion of each section. Make necessary repairs and retest repaired sections as required.
- J. Adjust sprinklers after installation for proper and adequate distribution of the water over the coverage pattern. Adjust for the proper arc of coverage.
- K. Tighten nozzles on spray type sprinklers after installation. Adjust sprinkler adjusting screw on lateral line or circuit as required for proper radius. Interchange nozzles patterns to give best arc of coverage.
- L. Adjust all electric remote control valve pressure regulators and flow control stems for system balance and optimum performance.
- M. Test and demonstrate the controller by operating appropriate day, hour and station selection features as required to automatically start and shut down irrigation cycles to accommodate plant requirements and weather conditions.

UNL Project No.: C904P158
TCEP Project No.: 018-196-13

3.5 CLEANUP AND PROTECTION

- A. Perform cleaning during installation of the work and upon completion of the work. Remove from site all excess materials, soil, debris, and equipment. Repair damage resulting from irrigation system installation.
- B. Protect irrigation system and materials from damage due to performance of work, operations by other contractors, trades and trespassers. Maintain protection during installation and testing periods.
- C. The entire area shall be left clean and neat.
- D. The contractor shall be responsible for all damage caused by his operations to trees, shrubs, curbs, paving, structures, utilities, etc., on the site or adjacent to the site of the work and shall repair, replace or otherwise make good any damage caused by him.
- E. The contractor is to coordinate this work with other trades.
- F. The contractor shall check the system two weeks after acceptance and four weeks after acceptance. The Contractor shall drain the system in the Fall following installation, turn it on and completely checking it in the Spring following installation.

3.6 GUARANTEE

- A. The entire sprinkler system will be unconditionally guaranteed against defects in material and workmanship, including settling of backfilled areas below grade and adjusting heads to proper level for a period of one year from the date of acceptance.
- B. In addition to minor adjustments, any defective electrical controls, valves, sprinkler heads or other working parts will be repaired or replaced without cost to the Owner for a period of one year from the date of acceptance.
- C. Damage by others during, the one year guarantee period will be the Owner's responsibility.

END OF SECTION 32 8400

1:00 - 1:20

12th STREET Mall - Pre Bid

5/14/2013

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