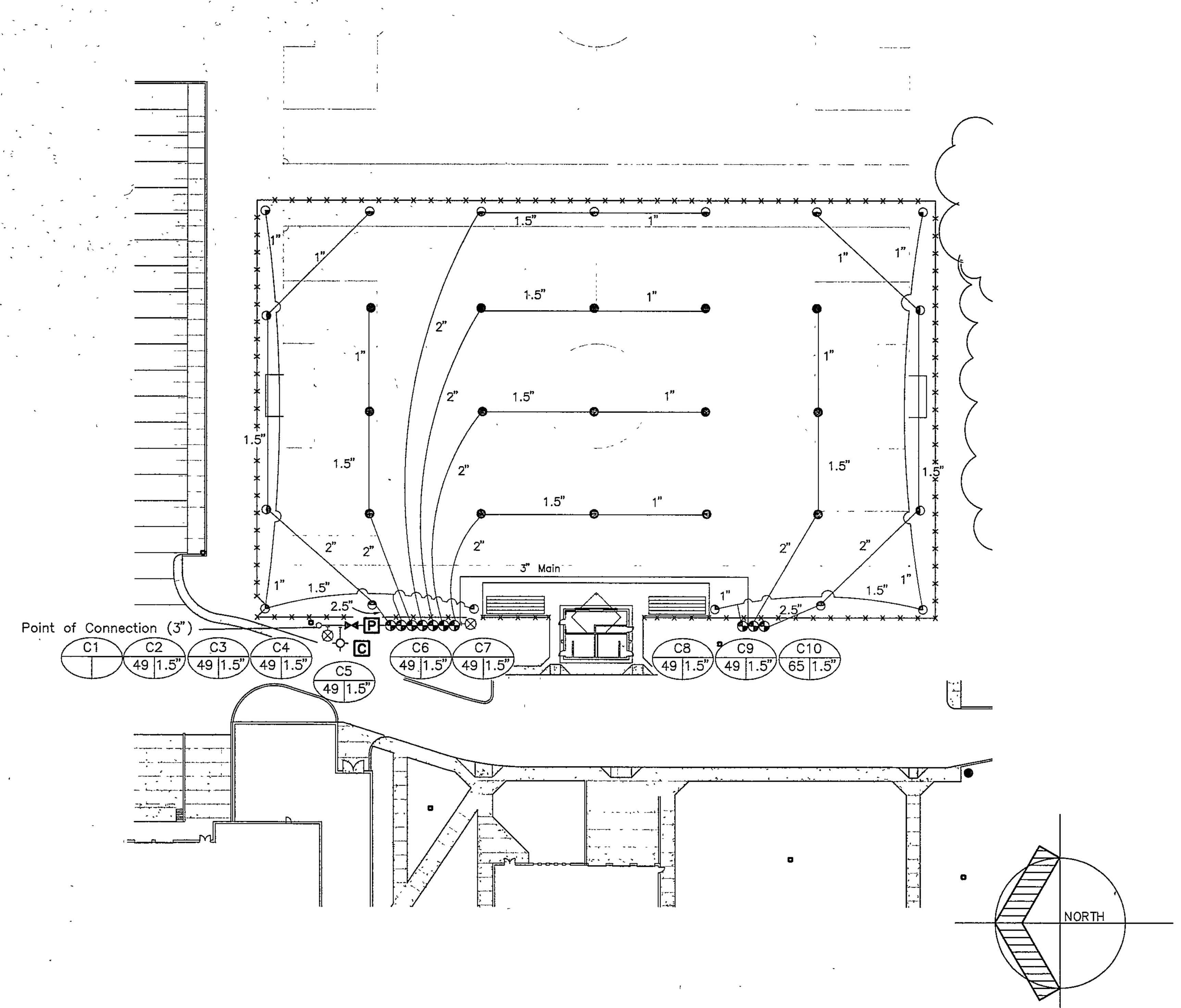
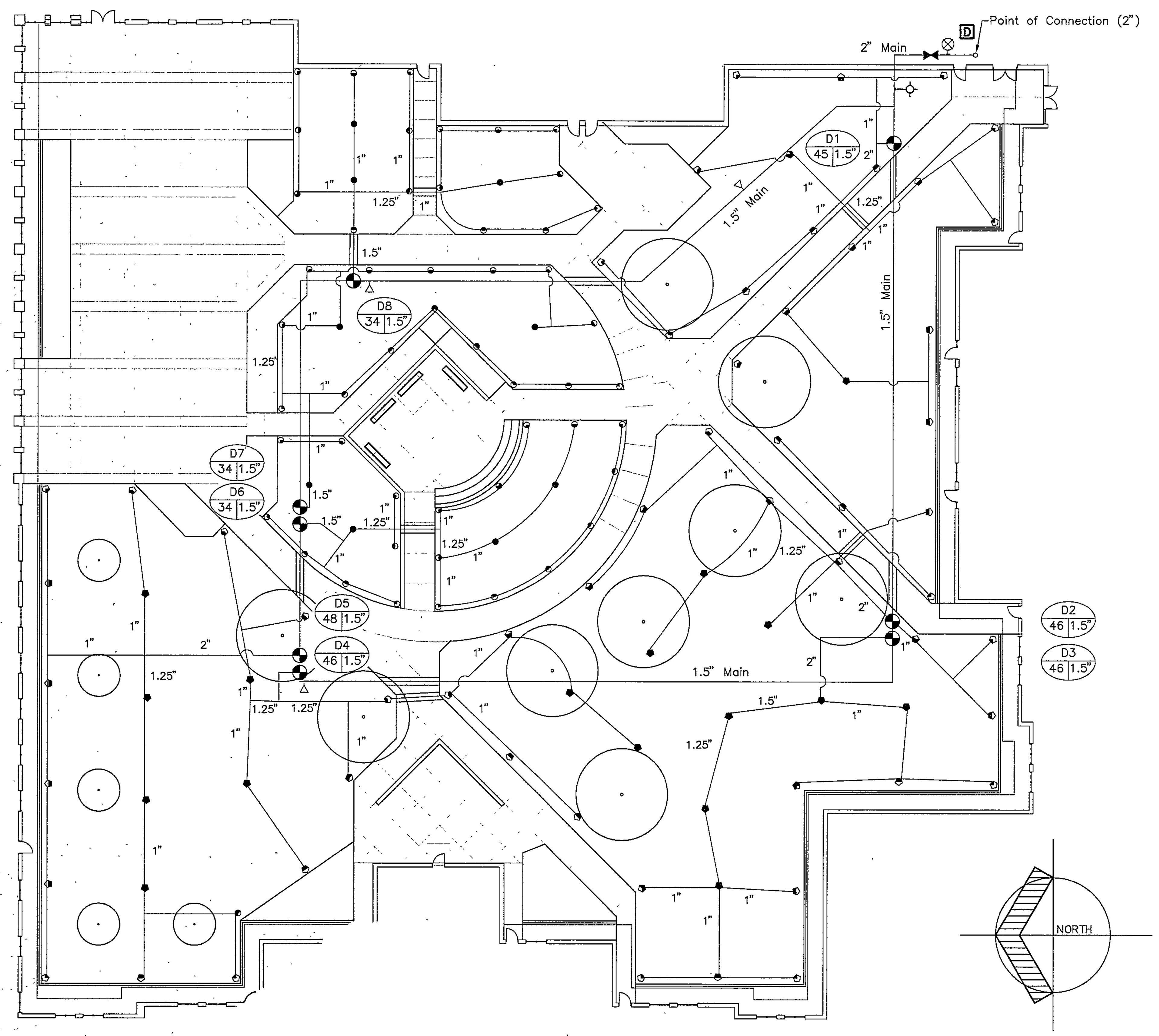


SOCCER FIELD IRRIGATION PLAN

SCALE: 1" = 50'-0"



'URTYARD IRRIGATION PLAN

SCALE: 1" 20'-0"

SOCCER FIELD GENERAL NOTES

1. This drawing is for diagrammatic purposes only. Actual layout of sprinkler heads, valves, controller and other equipment shall be determined on site.
2. Contractor is responsible for verifying location of all site utilities and making the necessary adjustments to accommodate the irrigation system as designed.
3. Contractor is responsible for installing a Toro rain switch in the controller vicinity, coordinate mounting of equipment, and its location, with owner.
4. All fittings are to be Schedule 40 PVC.
5. The mainline feeding the soccer field shall be a 3" diameter class 200 PVC pipe with glued fittings. The lateral lines within the The lateral lines within the field shall be Class 160 PVC. Sized as shown. The field heads (640's) shall be connected to the laterals by triple-elbow 1" Lasco swing joints. Each Toro 640 irrigation head shall be installed with the cap 1/2" below finished grade of the field.
6. All valves shall be installed in Carson valve-boxes; the bottom shall be filled with pea-gravel to pipe level. Lids shall be mounted at grade level.
7. All pop-up heads shall be installed with a clearance of 2" (minimum) from the edge of any paved or hardscape surface.
8. Depth of all pipe shall be 18" below finished grade for the mainline, and 12"-16" below grade for the laterals.
9. This irrigation system was designed assuming that the existing water supply can provide 65 gpm at 20 psi (at connection). After the backflow preventer, the contractor shall provide and install the specified pump to boost the water pressure from 9 psi to 73 psi.
10. Contractor is responsible for settling of trenches and heads for one year.
11. The irrigation controller shall be as noted in the Legend. The controller shall be mounted as directed by the owner, or representative. The owner shall provide 120V-AC power to the controller location. All electrical connections and installations shall be performed in accordance with local code requirements. All control wire shall be #14. The common wire shall be white and the station wires shall be of one other color.
12. The 1.5" coupling located at the irrigation water supply point shall provide a point of injection of compressed air (40 psi maximum) to purge the system of retained water in preparation for winter shut-down of the system.
13. The isolation valve (3" brass gate valve) shall be installed in a valve box with the lid mounted at ground level, in location indicated on the plan.
14. All lateral pipe (2" diameter and smaller) shall be pulled with a vibratory plow. The 'slit dome' shall be compacted to its original grade. Minimum lateral size to be 1" diameter.
16. Connection to existing supply line and installation of backflow preventer shall be by the irrigation contractor, and in the bid.
17. Contractor shall provide 'As-Built' drawing to the owner on reproducible vellum (30"x42").
18. Contractor shall conduct a training session with the owner (or representatives) demonstrating the operation of the system and the controller.
19. Contractor shall warranty the system for one full year from the date of final acceptance, which includes submittal of the 'As-Built' drawing.
20. Lateral pipe sizes shown are minimums. For ease of installation, contractor may choose to retain larger sized pipe than shown.

SOCCER FIELD LEGEND

- Mainline – 3" Class 200 PVC (solvent-weld)
- Laterals – Class 200 or 160 PVC (solvent-weld, sized as shown)
- P — Centrifugal Pump: Commercial Pump model #RCTT-65-75-3600-460 (7.5 HP/460 Volt three-phase) with CLA-valve.
- Reduced Pressure Backflow Preventer (Febco #825Y-2)
- C — Controller: Toro #LTC-56-03 / Weathermatic LMC-19 controller (with pedestal)
- NIBCO T113-IRR-300 (3") Bronze threaded gate valve
- 1.5" female-threaded coupling (for winter blow-out connection)
- Control Valve: Toro #252-26-06 or Weathermatic #21024E-20 (above 56 gpm), #21024E-15 (between 56-30 gpm)
- Toro 640 Check-O-Matic Turf Rotors (with nozzle #43 @ 65 psi = 16.3 gpm)
- Top = Station number on controller; Bottom Left = Gallons per minute; Bottom Right = Size of Toro valve

COURTYARD GENERAL NOTES

1. This drawing is for diagrammatic purposes only. Actual layout of sprinkler heads, valves, controller and other equipment shall be determined on site. Minor field adjustments shall be made at no additional cost to the owner.
2. Contractor is responsible for verifying location of all site utilities and fences and making the necessary adjustments to accommodate the irrigation system as designed.
3. Mainline shall be 2" and 1.5" diameter Class 200 PVC pipe. Lateral lines shall be Class 160 PVC, sized as shown on plan. Minimum lateral size shall be 1". (All solvent-weld pipe)
4. All zones shall be connected to the mainline with Class 200 PVC, sized as follows: 0-16 gpm use 1"; 17-28 gpm use 1.25"; 29-35 gpm use 1.5"; 36-55 gpm use 2". These shall be used through the valve until the first lateral/sprinkler.
5. All fittings are to be solvent weld Schedule 40 PVC.
6. Remote control valves shall be as noted in legend. All valves shall installed in valve boxes with the lid mounted at ground level. Valve boxes shall be Carson 12"x18" rectangular or 10" round types. All valve boxes shall contain 1/2" pea gravel from the bottom of the box up to the bottom of the pipe.
7. Quick coupling valves (1") shall be mounted on 1" triple elbow swing joints. One quick coupling key shall be provided with the system.
8. All pop-up irrigation heads shall be installed on FunnyPipe, or flexible cut-off risers , with a clearance of 2" (minimum) from the edge of any nearby paved surface.
9. Contractor is responsible for installing a Toro rain switch in vicinity of controller; coordinate mounting of equipment with owner.
10. All piping shall be installed: mainline at 18" below grade, laterals at 12"-16" below grade.
11. This irrigation system was designed assuming that at least 48 gpm will be available, at 40 PSI (55 PSI at the point of connection).
12. All lateral pipe shall be pulled with a vibratory plow. The 'slit-dome' shall be compacted to its original grade.
13. Contractor is responsible for settling of all trenches and sprinkler heads for a period of one year.
14. The irrigation controller shall be Toro's 12-station Vision II or Weathermatic's LMC-19. The controller shall be mounted as directed by the owner. The owner shall provide 120V-AC power to the controllers location. Electrical connections and installations shall be performed in accordance with local code requirements.
15. All control wire shall be #14. The common wire shall be colored white and the station wire shall be of one other color.
16. The 1" coupling located at the irrigation water supply point shall provide a point of injection of compressed air (40 psi maximum) to purge the system of retained water in preparation for winter shut-down of the system.
17. All sleeves shall be Schedule 40 PVC, twice the nominal size of the pipe to be carried. Sleeves to carry wire only shall be 2". Irrigation contractor shall place all sleeves according to site specs, as shown, unless otherwise directed.
18. All heads shall be 4" pop-ups.
19. Contractor shall warranty the system for one full year from the date of acceptance.
20. Contractor shall provide 'As-Built' drawings of the completed installation to the owner on reproducible vellum (30"x42").
21. Contractor shall conduct a training session with the owner (or representatives) demonstrating the operation of the system and the controller.

COURTYARD LEGEND

- Mainline – 2" and 1.5" Class 200 PVC (solvent-weld)
- Laterals – Class 160 or 200 PVC (solvent-weld, sized as shown.)
- Sleeves SCH 40 PVC (3")
- D — Toro Vision II 12-station Controller (189-06-01) or Weathermatic's LMC-14 controller
- Reduced Pressure Assembly backflow preventer (Febco #825Y-1.5)
- Line-size brass ball valves (Harvard #56-200 and #56-150) in valve boxes.
- 1" female-threaded coupling (for winter blow-out connection)
- Quick Coupler: Toro #474-00 or Weathermatic #V-100 on swing joints, in valve boxes.
- Control Valve: Toro #252-26-06 or Weathermatic #21024E-15
- Toro 300 Series Stream Rotors with 300-15 Omni Adjustable-Radius Nozzle (mounted on FunnyPipe or flexible cutoff riser):
- Spray Heads with MPR nozzles and special-pattern nozzles (with PC option, if available). Use Toro's 570Z spray heads (8,10,12 or 15' series), with appropriate special-pattern nozzles when necessary. Contractor is responsible for the appropriate nozzle selection and arc adjustment to provide 100% coverage of the conditions as they exist on site.
- Top = Zone/Controller station assignment; Bottom Left = Gallons per minute for that zone; Bottom Right = Size of Toro valve

97-C-47

THE NEW
CHESTERTON HIGH SCHOOL
FOR THE
DUNELAND SCHOOL CORPORATION
CHESTERTON, INDIANA

Fanning/Howey Associates, Inc.
Architects Engineers Consultants

IRRIGATION PLAN - SOUTH

DRAWN BY: NJK	COMM. NO.: 95067.00
CHECKED BY: JKP	DATE: APRIL 21, 1997
SU2.9	REVISIONS NO. DATE

CHESTERTON HIGH SCHOOL
95067.00 PHASE 2