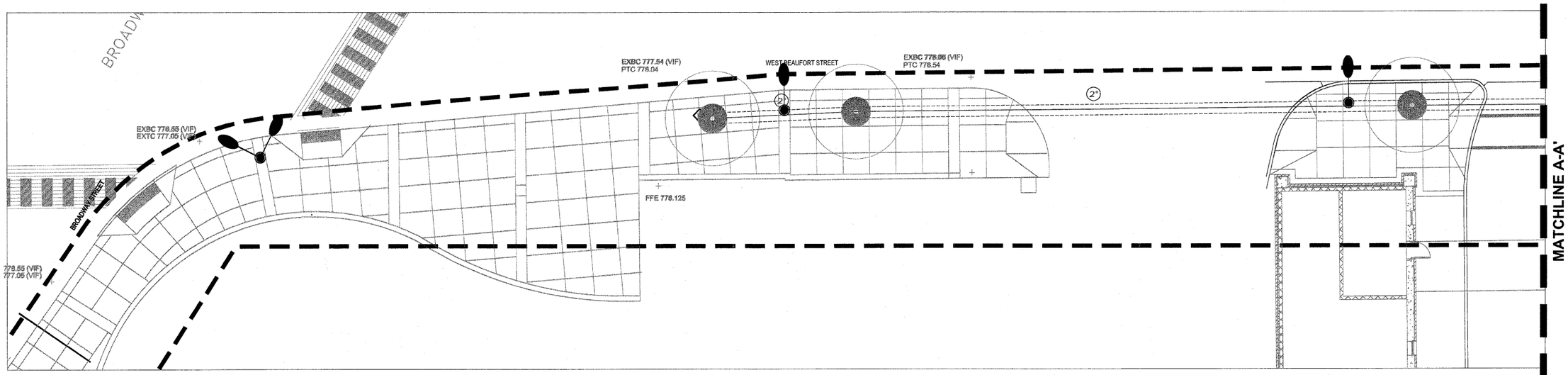

Notes

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 making the necessary adjustments to the irrigation system to accommodate the infrastructure.
3. Mainline shall be Class 200 PVC pipe, sized as shown on plan. Lateral lines shall be Class 160 PVC, sized as shown on plan. Minimum lateral size shall be 1". (All solvent-weld pipe)
4. Lateral lines shall be sized as follows: 0-16 gpm use 1"; 17-28 gpm use 1.25".
   All pipe on the upstream side of the control valve shall be Class 200 PVC. Pipe downstream of the valve shall be Cl. 160.
5. All fittings are to be solvent weld Schedule 40 PVC.
6. Remote control valves shall be as noted in legend.
   All valves shall be 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 3" (minimum) from the edge of any nearby paved area.
9. Contractor is responsible for installing a wireless rain sensor in vicinity of controller. Coordinate mounting of sensor 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 17 gpm will be available at a minimum of 60 PSI at the pump discharge.
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 as noted in the legend. The controller shall be mounted as directed by the owner. The owner shall provide 120V-AC power to the controller's location. Electrical connections and installations shall be performed in accordance with local code requirements.
15. All wire shall be #18 direct burial U.F. multi-cable.
16. A 1" Quick coupling valve shall be located at the irrigation water supply point (downstream of the backflow preventer) to provide a a point of injection for compressed air (40 psi maximum) to purge the system of retained water in preparation for winter shut-down of the system.
17. All sleeves 4" and smaller shall be Schedule 40 PVC. Sleeves 6" and larger shall be Class 200 PVC. All sleeves shall be twice the nominal size of the pipe to be carried. Sleeves to carry wire only shall be 2". Depth of the top of the sleeve shall be 18" below subgrade. Irrigation contractor shall place all sleeves as shown, unless directed otherwise.
18. Contractor shall warranty the system for one full year from the date of acceptance.
19. Contractor shall provide 'As-Built' drawings of the completed installation to the owner on reproducible vellum. As-built drawings shall be the same scale as the original drawings.
20. Contractor shall conduct a training session with the owner (or representatives) demonstrating the operation of the system and the controller. As part of this training, contractor shall provide one spring start-up and one fall shut-down of the system.
21. Contractor shall verify location of property lines, right-of-ways, and easements on the site. They shall confirm these locations with the owner, then obtain the necessary permits/approvals before installation commences.

Legend

- Mainline (1.25" Class 200 PVC)
- Laterals (Class 160 or 200 PVC); sized as shown on plan.
- Netafim Techline CV Drip Tubing #TLCV4-18xx (.4 gph emitter/18" emitter spacing)
- Sleeves (2" Sch. 40 PVC)
- (W) Flint & Walling Submersible Pump in Clearwater Solutions prefabricated Wet Well
- [C] Controller:
  Toro Intellisense (#TIS-06-OD)
  Weathermatic Smartline (#SL1600)
  Rainbird ESP-SMT (#ESP-SMT4)
- [PC] Pump Control and Pressure Tank
- Line-size brass ball valves (Matco-Norca #759T06), in valve boxes.
- Quick Coupling Valves:
  Toro #474-00
  Rainbird #5RC
  on swing joints, in valve boxes.
- Electric Control Valves:

Toro	#254-06-04
Weathermatic	#12024EF-10
Irritrol	#2500TF
Rainbird	#100-PGA

- Rainbird Drip Zone kit #XCZ-LF-100-PRF
- Netafim Manual Flush Valve #TLSOV
- MP Rotator nozzle on Spray Head body
  Contractor is responsible for the appropriate nozzle selection and arc adjustment to provide 100% coverage of the conditions as they exist on site and to minimize overspray onto unwatered areas.
- Top = Zone/Controller station assignment
  Bottom Left = Size of valve
  Bottom Right = Gallons per minute for that zone

A IRRIGATION PLAN- STREETSCAPE

SCALE: 1"=10'-0"

N

FILE NAME =	DESIGNED — P.L.S.	REVISED — 04-01-11	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	L5.1 - IRRIGATION PLAN	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	DRAWN — R.N.R	REVISED — 04-22-11			----	10-00243-02-LS	MCLEAN	40	39
PLOT DATE =	CHECKED — J.M.B.	REVISED —					CONTRACT NO. 91461		
	DATE — 3-11	REVISED —		SCALE : 1"=10'-0" SHEET NO. 39 OF 40 SHEETS STA. TO STA.	FED. ROAD DIST. NO. --	ILLINOIS	FED. AID PROJECT		

TOWN OF NORMAL SECTION NO. 10-00243-02-LS McLEAN COUNTY

N0240094