

**Massie & Associates**

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**IRRIGATION LEGEND**

- IRRIGATION MAIN LINE
- - - IRRIGATION LATERAL LINE
- ==== P.V.C. SLEEVE
- IRRIGATION HEAD
- ⊕ ISOLATION VALVE
- ZONE VALVE

**ENTIRE IRRIGATION SCHEDULE**

| UNITS                       | HEAD | DESCRIPTION                          | UNITS | HEAD | DESCRIPTION |
|-----------------------------|------|--------------------------------------|-------|------|-------------|
| <b>ZONE #1 (21.0 GPM)</b>   |      |                                      |       |      |             |
| 4                           | 20Q  | 20' R, 90 DEGREE ROTOR, 0.75 NOZ.    | 1.0   |      |             |
| 6                           | 20H  | 20' R, 180 DEGREE ROTOR, 1.5 NOZ.    | 1.7   |      |             |
| 2                           | 20F  | 20' R, 360 DEGREE ROTOR, 3.0 NOZ.    | 3.4   |      |             |
| <b>ZONE #2 (10.8 GPM)</b>   |      |                                      |       |      |             |
| 4                           | 20Q  | 20' R, 90 DEGREE ROTOR, 0.75 NOZ.    | 1.0   |      |             |
| 4                           | 20H  | 20' R, 180 DEGREE ROTOR, 1.5 NOZ.    | 1.7   |      |             |
| <b>ZONE #3 (- GPM)</b>      |      |                                      |       |      |             |
| 465'                        | DRIP | DRIP TUBING-18" O.C. EMITTER SPACING |       |      |             |
| <b>ZONE #4 (21.0 GPM)</b>   |      |                                      |       |      |             |
| 4                           | 20Q  | 20' R, 90 DEGREE ROTOR, 0.75 NOZ.    | 1.0   |      |             |
| 6                           | 20H  | 20' R, 180 DEGREE ROTOR, 1.5 NOZ.    | 1.7   |      |             |
| 2                           | 20F  | 20' R, 360 DEGREE ROTOR, 3.0 NOZ.    | 3.4   |      |             |
| <b>ZONE #5 (22.4 GPM)</b>   |      |                                      |       |      |             |
| 2                           | 20Q  | 20' R, 90 DEGREE ROTOR, 0.75 NOZ.    | 1.0   |      |             |
| 6                           | 20H  | 20' R, 180 DEGREE ROTOR, 1.5 NOZ.    | 1.7   |      |             |
| 3                           | 20F  | 20' R, 360 DEGREE ROTOR, 3.0 NOZ.    | 3.4   |      |             |
| <b>ZONE #6 (- GPM)</b>      |      |                                      |       |      |             |
| 1,085'                      | DRIP | DRIP TUBING-18" O.C. EMITTER SPACING |       |      |             |
| <b>ZONE #7 (13.08 GPM)</b>  |      |                                      |       |      |             |
| 12                          | 5H   | 5' R, 180 DEGREE SPRAY, MPR NOZ.     | 0.27  |      |             |
| 8                           | 15Q  | 15' R, 90 DEGREE SPRAY, MPR NOZ.     | 1.23  |      |             |
| <b>ZONE #8 (- GPM)</b>      |      |                                      |       |      |             |
| 310'                        | DRIP | DRIP TUBING-18" O.C. EMITTER SPACING |       |      |             |
| <b>ZONE #9 (24.1 GPM)</b>   |      |                                      |       |      |             |
| 2                           | 20Q  | 20' R, 90 DEGREE ROTOR, 0.75 NOZ.    | 1.0   |      |             |
| 7                           | 20H  | 20' R, 180 DEGREE ROTOR, 1.5 NOZ.    | 1.7   |      |             |
| 3                           | 20F  | 20' R, 360 DEGREE ROTOR, 3.0 NOZ.    | 3.4   |      |             |
| <b>ZONE #10 (21.0 GPM)</b>  |      |                                      |       |      |             |
| 4                           | 20Q  | 20' R, 90 DEGREE ROTOR, 0.75 NOZ.    | 1.0   |      |             |
| 6                           | 20H  | 20' R, 180 DEGREE ROTOR, 1.5 NOZ.    | 1.7   |      |             |
| 2                           | 20F  | 20' R, 360 DEGREE ROTOR, 3.0 NOZ.    | 3.4   |      |             |
| <b>ZONE #11 (22.4 GPM)</b>  |      |                                      |       |      |             |
| 2                           | 20Q  | 20' R, 90 DEGREE ROTOR, 0.75 NOZ.    | 1.0   |      |             |
| 6                           | 20H  | 20' R, 180 DEGREE ROTOR, 1.5 NOZ.    | 1.7   |      |             |
| 3                           | 20F  | 20' R, 360 DEGREE ROTOR, 3.0 NOZ.    | 3.4   |      |             |
| <b>ZONE #12 (- GPM)</b>     |      |                                      |       |      |             |
| 345'                        | DRIP | DRIP TUBING-18" O.C. EMITTER SPACING |       |      |             |
| <b>ZONE #13 (26.64 GPM)</b> |      |                                      |       |      |             |
| 1                           | 8TQ  | 8' R, 270 DEGREE SPRAY, MPR NOZ.     | 0.93  |      |             |
| 4                           | 10Q  | 10' R, 90 DEGREE SPRAY, MPR NOZ.     | 0.60  |      |             |
| 8                           | 10H  | 10' R, 180 DEGREE SPRAY, MPR NOZ.    | 0.99  |      |             |
| 3                           | 10TT | 10' R, 240 DEGREE SPRAY, MPR NOZ.    | 1.19  |      |             |
| 4                           | 12Q  | 12' R, 90 DEGREE SPRAY, MPR NOZ.     | 0.63  |      |             |
| 4                           | 12H  | 12' R, 180 DEGREE SPRAY, MPR NOZ.    | 1.55  |      |             |
| <b>ZONE #14 (- GPM)</b>     |      |                                      |       |      |             |
| <b>ZONE #15 (24.1 GPM)</b>  |      |                                      |       |      |             |
| 2                           | 20Q  | 20' R, 90 DEGREE ROTOR, 0.75 NOZ.    | 1.0   |      |             |
| 7                           | 20H  | 20' R, 180 DEGREE ROTOR, 1.5 NOZ.    | 1.7   |      |             |
| 3                           | 20F  | 20' R, 360 DEGREE ROTOR, 3.0 NOZ.    | 3.4   |      |             |
| <b>ZONE #16 (22.7 GPM)</b>  |      |                                      |       |      |             |
| 4                           | 20Q  | 20' R, 90 DEGREE ROTOR, 0.75 NOZ.    | 1.0   |      |             |
| 7                           | 20H  | 20' R, 180 DEGREE ROTOR, 1.5 NOZ.    | 1.7   |      |             |
| 2                           | 20F  | 20' R, 360 DEGREE ROTOR, 3.0 NOZ.    | 3.4   |      |             |
| <b>ZONE #17 (24.1 GPM)</b>  |      |                                      |       |      |             |
| 2                           | 20Q  | 20' R, 90 DEGREE ROTOR, 0.75 NOZ.    | 1.0   |      |             |
| 7                           | 20H  | 20' R, 180 DEGREE ROTOR, 1.5 NOZ.    | 1.7   |      |             |
| 3                           | 20F  | 20' R, 360 DEGREE ROTOR, 3.0 NOZ.    | 3.4   |      |             |
| <b>ZONE #18 (22.7 GPM)</b>  |      |                                      |       |      |             |
| 4                           | 20Q  | 20' R, 90 DEGREE ROTOR, 0.75 NOZ.    | 1.0   |      |             |
| 7                           | 20H  | 20' R, 180 DEGREE ROTOR, 1.5 NOZ.    | 1.7   |      |             |
| 1,125'                      | 20F  | 20' R, 360 DEGREE ROTOR, 3.0 NOZ.    | 3.4   |      |             |
| <b>ZONE #19 (- GPM)</b>     |      |                                      |       |      |             |
| <b>ZONE #20 (10.8 GPM)</b>  |      |                                      |       |      |             |
| 4                           | 20Q  | 20' R, 90 DEGREE ROTOR, 0.75 NOZ.    | 1.0   |      |             |
| 4                           | 20H  | 20' R, 180 DEGREE ROTOR, 1.5 NOZ.    | 1.7   |      |             |
| <b>ZONE #21 (- GPM)</b>     |      |                                      |       |      |             |
| 400'                        | DRIP | DRIP TUBING-18" O.C. EMITTER SPACING |       |      |             |
| <b>ZONE #22 (24.1 GPM)</b>  |      |                                      |       |      |             |
| 2                           | 20Q  | 20' R, 90 DEGREE ROTOR, 0.75 NOZ.    | 1.0   |      |             |
| 7                           | 20H  | 20' R, 180 DEGREE ROTOR, 1.5 NOZ.    | 1.7   |      |             |
| 3                           | 20F  | 20' R, 360 DEGREE ROTOR, 3.0 NOZ.    | 3.4   |      |             |
| <b>ZONE #23 (- GPM)</b>     |      |                                      |       |      |             |
| 555'                        | DRIP | DRIP TUBING-18" O.C. EMITTER SPACING |       |      |             |

**IRRIGATION NOTES**

Irrigation plan is Diagrammatic. Main and lateral lines can be combined in trenches. Zone valves can be in combination housings. Heads (typ.) to be 4" from all pavement edges.

**Design Pressure**  
Irrigation System is designed for a 60-70 GPM static water pressure and 50-55 GPM of backflow preventor discharge. Contractor is responsible to measure discharge and notify the landscape architect if pressure is plus or minus 5 GPM of discharge pressure.

**Irrigation Main Line**  
Main line to be 2" diameter-Class 200 PVC.

**Irrigation Lateral Lines**  
Lateral lines to be 1" diameter-Class 200 PVC.

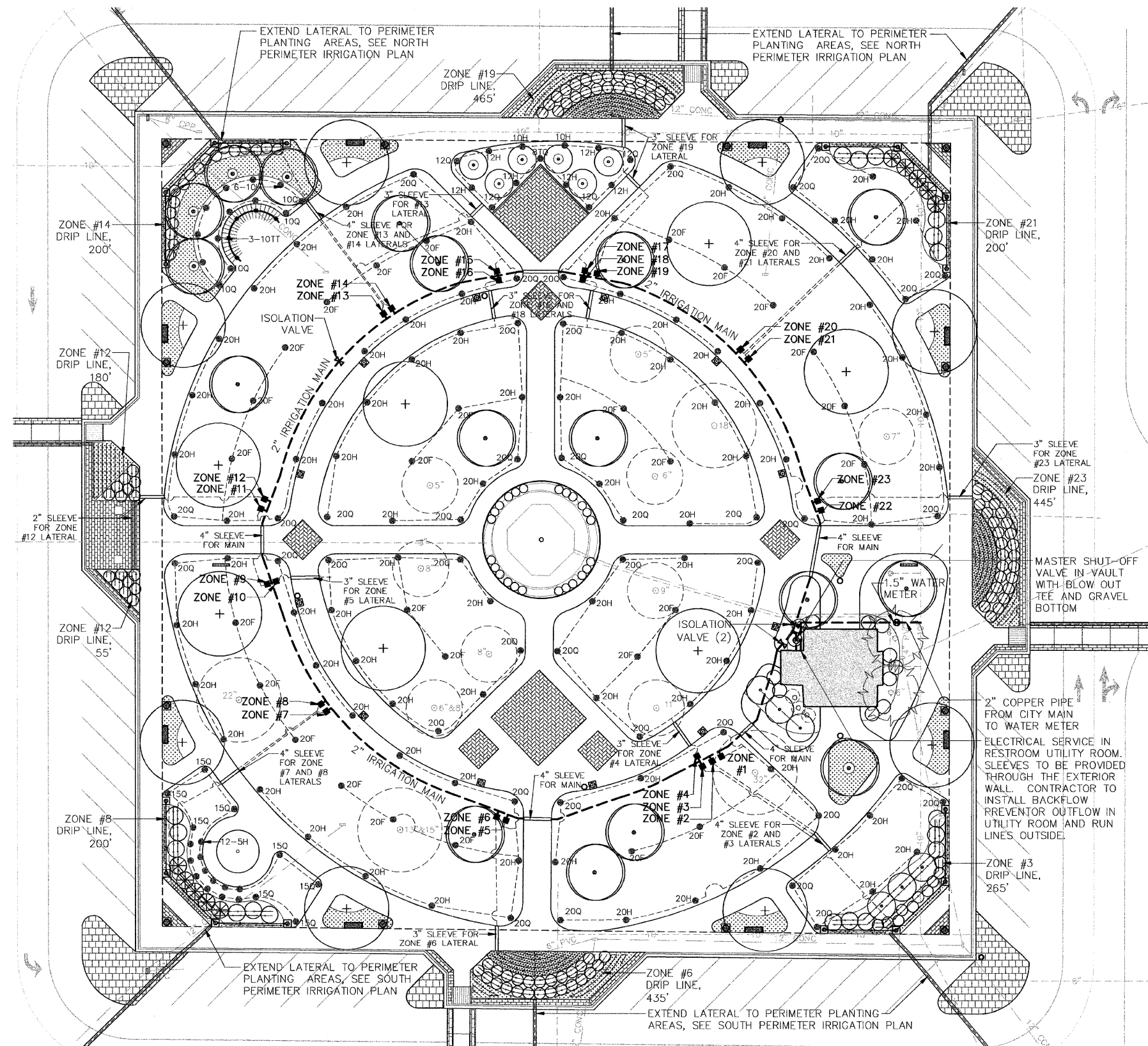
**Master Valve**  
Master valve to be 1 1/2". Valve to be mounted in valve box as shown on plan.

**Zone Valves**  
Zone valves to be the following:  
Model P-220-25-04 for rotor head zones.  
Model P-220-27-04 for spray zones.

**Controller**  
#TCC-M24. Controller to have 36 stations in a metal housing with metal lockable cover. Controller to be mounted on outside of building as directed by Engineer.

**Wireless Rain-Sensor**  
#WRS. The receiver to be mounted next to the controller. The sensor and transmitter to be mounted at/near a west facing wall within 200-250 ft. of the receiver.

**DripLines**  
Drip lines to be spaced 18" O.C. with 18" O.C. emitter spacing.



\*NOTE: CONTRACTOR SHALL TEST OUTFLOW OF BACKFLOW PREVENTOR PRIOR TO STARTING WORK. IF <30 GPM OR >40 PSI CONTRACTOR SHALL CONTACT ENGINEER TO DETERMINE IF ANY SYSTEM RE-DESIGN IS NEEDED.

|             |                      |                 |            |                                                           |                                                                                            |                                               |                |        |              |           |  |
|-------------|----------------------|-----------------|------------|-----------------------------------------------------------|--------------------------------------------------------------------------------------------|-----------------------------------------------|----------------|--------|--------------|-----------|--|
| FILE NAME = | USER NAME = \$USER\$ | DESIGNED -- SMM | REVISED -- | <b>STATE OF ILLINOIS<br/>DEPARTMENT OF TRANSPORTATION</b> | <b>CITY OF JACKSONVILLE DOWNTOWN PLAZA STREETS RECONSTRUCTION<br/>PARK IRRIGATION PLAN</b> | F.A. RTE.                                     | SECTION        | COUNTY | TOTAL SHEETS | SHEET NO. |  |
| \$FILE\$    |                      | DRAWN -- NFB    | REVISED -- |                                                           |                                                                                            | N/A                                           | 05-00121-00-PV | MORGAN | 74           | 44        |  |
|             |                      | CHECKED -- SMM  | REVISED -- |                                                           |                                                                                            | CONTRACT NO. 99504                            |                |        |              |           |  |
|             |                      | DATE -- 11-4-08 | REVISED -- |                                                           |                                                                                            | FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT |                |        |              |           |  |