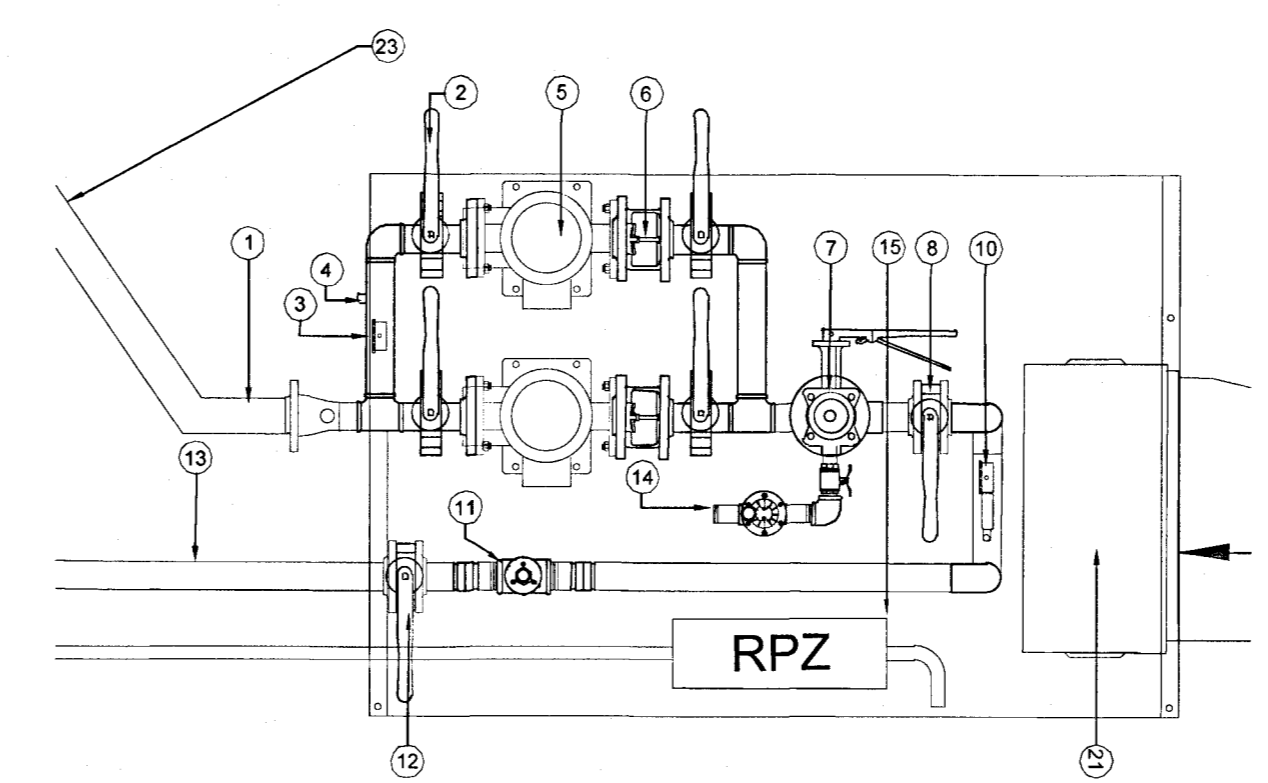


HARVESTING SYSTEM SECTION VIEW (NTS)

(SHOWN LINEARLY FOR CLARITY)



HARVESTING SYSTEM PLAN VIEW (NTS)

SKYHARVESTER SYSTEM LEGEND

- ① SUCTION PIPE
- ② 2" INTAKE ISOLATION VAVE
- ③ PSI/VAC GUUAGE, LIQUID FILLED
- ④ TEMP SENSOR
- ⑤ VERTICAL CENTRIFUGAL PUMP (1 OF 2)
- ⑥ CHECK VALVE
- ⑦ AUTOMATIC SELF-CLEANING FILTER W/ 100 MICRON SCREEN
- ⑧ FILTER ISOLATION VALVE
- ⑨ FILTER BY-PASS VALVE
- ⑩ PRESSURE TRANSDUCER WITH GAUGE
- ⑪ FLOW SENSOR
- ⑫ 2' DISCHARGE ISOLATION VALVE
- ⑬ DISCHARGE PIPE
- ⑭ FILTER FLUSH PIPE TO SEWER
- ⑮ RPZ - BACKFLOW
- ⑯ CITY FLOW SENSOR
- ⑰ POTABLE FILL VALVE WITH AIR GAP TO TANK(S)
- ⑱ PAINTED STEEL BASE
- ⑲ 20" GRAF XXL PRE FILTER W/ 350 MICRON SCREEN
- ⑳ CONNECTION FOR LEVEL SENSORS AND FLOAT WIRES
- ㉑ LEVEL SENSOR
- ㉒ CONTROL PANEL
- ㉓ 25,000 GALLON CORGAL STEEL WATER TANK 24' DIAMETER X 8' HIGH
- ㉔ PUMP FOOT VALVE
- ㉕ OVER FLOW TO STORM
- ㉖ 1" RAIN FILTER FLUSH PIPE FROM PUMP STATION

MINIMUM DESIGN CRITERIA FOR WET WELL AND PUMPS.

- A. PUMPS.
- (1) THE RETENTION BASIN MUST BE EMPTIED WITHIN 72-HOURS AFTER A RAIN EVENT ENDS. EMPTYING OF THE RETENTION BASIN MUST NOT BEGIN SOONER THAN 12 HOURS AFTER THE END OF THE RAINFALL EVENT. THE DDT WILL BE 48 HOURS FOR THIS PROJECT, SO THE DRAW-DOWN TIME NEEDS TO MEET THE MINIMUM 48 HOUR DDT CRITERIA. SHOW CALCULATIONS TO SHOW THAT THE PUMP RATE WILL BE ABLE TO ACHIEVE THIS DDT.
 - (2) PUMPS MUST BE CAPABLE OF DELIVERING THE REQUIRED VOLUME OF WATER AT THE NECESSARY RATE AND PRESSURE TO THE IRRIGATION SYSTEM IN THE DESIGNATED TIME PERIOD. PUMPS AND WET WELL MUST BE SIZED TO MINIMIZE THE NUMBER OF ON AND OFF-CYCLES OF THE PUMPS. THE RATE (Q 1) OF INFLOW FROM THE RETENTION POND INTAKE RISER (SEE 1.6.7(A)(3)(C)) TO THE WET WELL MUST EXCEED THE PUMP RATE (Q P).
 - (3) A DUAL PUMP SYSTEM MUST BE PROVIDED, WITH EACH PUMP CAPABLE OF DELIVERING 100PERCENT OF THE DESIGN CAPACITY.
 - (A) PLUG VALVES MUST BE LOCATED OUTSIDE THE WET WELL ON THE DISCHARGE SIDE OF EACH PUMP TO ISOLATE THE PUMPS FOR MAINTENANCE AND FOR THROTTLING IF NECESSARY. BUTTERFLY VALVES ANDGATE VALVES MUST NOT BE USED.
 - (B) CHECK VALVE(S) MUST BE PROVIDED TO PREVENT BACKFLOW FROM THE IRRIGATION SYSTEM BACK INTO THE PUMP WELL.
 - (C) PUMPS MUST BE SELECTED TO OPERATE WITHIN 20% OF THEIR BEST OPERATING EFFICIENCY.
 - (4) PUMP OPERATION.
 - (A) THE PUMPS MUST ALTERNATE ON START UP. THE CONTROL LOGIC MUST ALLOW THE SYSTEM TO OPERATE NORMALLY WITH ONLY ONE PUMP IN SERVICE.
 - (B) A MANUAL CONTROL MUST BE PROVIDED SO BOTH PUMPS CAN BE TURNED ON IF NECESSARY.
 - (C) A HIGH/LOW-PRESSURE PUMP SHUT OFF SYSTEM (TO DETECT LINE CLOGGING OR BREAKING) SHALL BE INSTALLED IN THE PUMP DISCHARGE PIPING. AS AN ALTERNATIVE, AN AMP DRAW (OVERLOADS) OR OTHER EQUIVALENT MONITORING DEVICE MAY BE USED.
 - (5) FLOAT CONTROLS OR SUBMERSIBLE TRANSDUCERS MUST BE PROVIDED TO CONTROL OPERATION OF THE PUMPS. THREE CONTROL SETTINGS MUST BE USED: (1) ONE FOR STARTING THE PUMP, (2) ONE FOR SHUTTING OFF THE PUMP AT THE NORMAL LOW WATER LEVEL, AND (3) ONE FOR BACK UP SHUT OFF OF THE PUMP IN CASE THE FIRST SHUT-OFF FAILS.
 - (6) AN ALARM SYSTEM SHALL BE PROVIDED CONSISTING OF A RED LIGHT LOCATED AT A HEIGHT OF AT LEAST FIVE FEET ABOVE THE GROUND LEVEL AT THE WET WELL. THE ALARM SHALL ACTIVATE WHEN:
 - (A) THE WATER LEVEL IS BELOW THE PRIMARY SHUTOFF FLOAT AND THE PUMP HAS NOT TURNED OFF.
 - (B) THE HIGH/LOW-PRESSURE PUMP SHUT OFF SWITCH HAS BEEN ACTIVATED.
 - (C) ANY OTHER PUMP FAILURES OR SYSTEM SHUT DOWN INDICATED BY CONTROL PANEL. THE ALARM MUST BE VANDAL PROOF AND WEATHER RESISTANT. IF THE SYSTEM IS TO BE PRIVATELY MAINTAINED, A SIGN MUST BE PLACED AT THE WET WELL LEARLY DISPLAYING THE NAME AND PHONE NUMBER OF A RESPONSIBLE PARTY THAT MAY BE CONTACTED IF THE ALARM IS ACTIVATED.
 - (7) A GREEN "PUMP RUN LIGHT" SHALL BE PROVIDED WHICH IS ACTIVATED ANY TIME A PUMP IS RUNNING. THE GREEN LIGHT SHOULD BE LOCATED DIRECTLY ADJACENT TO THE RED ALARM LIGHT.

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 Web: www.hinesinc.com



MAY 22, 2019

44 EAST
 44 EAST AVENUE
 AUSTIN, TRAVIS COUNTY, TEXAS 78701

IRRIGATION DETAILS

SHEET
IR5
 44 OF 72
 SP-2018-0472C

SITE PLAN APPROVAL SHEET OF _____

FILE NUMBER: SP-2018-0472C APPLICATION DATE: 10-5-18

APPROVED BY COMMISSION ON _____ UNDER SECTION 112 OF CHAPTER 25-B OF THE CITY OF AUSTIN CODE

EXPIRATION DATE (25-5-81, LDC) 9/27/22 CASE MANAGER: Johnson

DIRECTOR, DEVELOPMENT SERVICES DEPARTMENT
 RELEASED FOR GENERAL COMPLIANCE 9/27/19 ZONING C80

REV 1 _____ CORRECTION 1 _____
 REV 2 _____ CORRECTION 2 _____
 REV 3 _____ CORRECTION 3 _____

FINAL PLAT MUST BE RECORDED BY THE PROJECT EXPIRATION DATE, IF APPLICABLE. SUBSEQUENT SITE PLANS WHICH DO NOT COMPLY WITH THE CODE CURRENT AT THE TIME OF FILING, AND ALL REQUIRED BUILDING PERMITS AND/OR A NOTICE OF CONSTRUCTION (IF A BUILDING PERMIT IS NOT REQUIRED) MUST ALSO BE APPROVED PRIOR TO THE PROJECT EXPIRATION DATE.