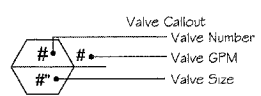


F.A.U. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1340	06-00048-00-RS	COOK	36	36
IRRIGATION PLAN/DETAILS/NOTES				
ILLINOIS				

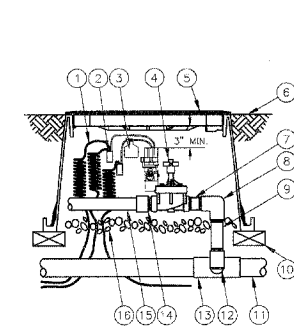
IRRIGATION SCHEDULE

MANUFACTURER/MODEL/DESCRIPTION	QTY	PSL
EST CST SST Rain Bird 1806-U-PRS 4' stnp Turf Spray 6' pop up with pressure regulator	147	30
Q T H F Rain Bird 1806-U-PRS 8' radius Turf Spray 6' pop up with pressure regulator	2	
MANUFACTURER/MODEL/DESCRIPTION		
Rain Bird XCZ-100-B-COM Drip 1" Rain Bird PESB valve, 2-1" filters and 2-40psi pressure regulators	2	
Rain Bird XCZ-150-COM High flow control zone kit w/ 1 1/2" PESB valve, 2-1" filters, and 2-40psi pressure regulators	1	
Area to receive drip line Rain Bird LD-C9-12 Landscape drip line with 0.92gph emitters at 12" apart, with emitters offset for triangular pattern	3,311	s.f.
MANUFACTURER/MODEL/DESCRIPTION		
Rain Bird PGA-NP-11AN Electric remote control valve with non-potable handle	6	
Rain Bird 3RC 3/4" Quick Coupler valve, one piece body	2	
A Rain Bird ESP-LXM-55 ESP-LXM in stainless steel pedestal as provided by RB5C	1	
BF Watts 909 2" Reduced pressure backflow preventer	1	
Irrigation lateral line: PVC class 200 Only lateral transition pipe sizes 1 1/2" and above are indicated on the plan, with all others being 1" in size	2,298	l.f.
Irrigation mainline: PVC class 200	1,379	l.f.
Pipe sleeve: PVC class 200 Typical pipe sleeve for irrigation pipe. Pipe sleeve size shall allow for irrigation piping and their related couplings to easily slide through sleeve material. Extend sleeves 18" beyond edges of paving or construction	1,377	l.f.



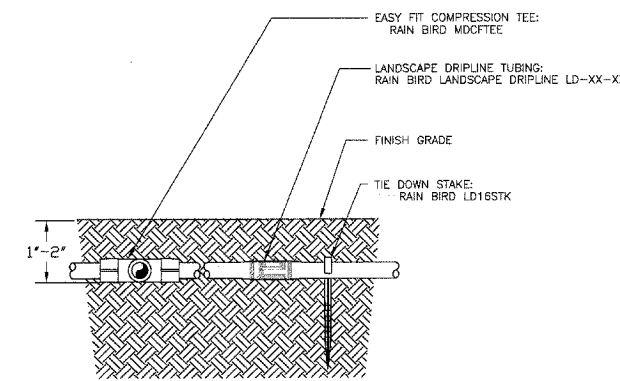
GENERAL IRRIGATION NOTES

- THIS IRRIGATION DESIGN IS DIAGRAMMATIC. ACTUAL LAYOUT OF PIPING, SPRINKLER HEADS, VALVES, CONTROLLERS AND RELATED EQUIPMENT SHALL BE DETERMINED ON SITE. MINOR FIELD ADJUSTMENTS SHALL BE MADE AT NO ADDITIONAL COST TO THE OWNER.
- IT IS THE RESPONSIBILITY OF THE IRRIGATION CONTRACTOR TO BE FAMILIAR WITH ALL GRADE DIFFERENCES, LOCATIONS OF WALLS, STRUCTURES AND UTILITIES AND MAKE THE NECESSARY ADJUSTMENTS TO ACCOMMODATE THE IRRIGATION SYSTEM AS DESIGNED. DO NOT WILLFULLY INSTALL THE IRRIGATION SYSTEM AS SHOWN ON THE DRAWINGS WHEN IT IS OBVIOUS IN THE FIELD THAT UNKNOWN AS WELL AS KNOWN OBSTRUCTIONS, GRADES OR DIMENSIONS EXIST THAT MIGHT NOT HAVE BEEN CONSIDERED IN THE ENGINEERING. SUCH OBSTRUCTIONS OR DIFFERENCES SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER'S AUTHORIZED REPRESENTATIVE. IN THE EVENT THAT THIS NOTIFICATION IS NOT PROVIDED, THE IRRIGATION CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ANY REVISIONS AND COSTS NECESSARY FOR THE UNOBSTRUCTED OPERATION OF THE SPRINKLER SYSTEM.
- THE IRRIGATION SYSTEM DESIGN IS BASED ON A MINIMUM OPERATING PRESSURE OF 50PSI AT THE POINT OF CONNECTION AND A MAXIMUM FLOW DEMAND OF 40GPM. THE IRRIGATION CONTRACTOR SHALL VERIFY WATER PRESSURES PRIOR TO CONSTRUCTION. REPORT DIFFERENCES BETWEEN REQUIREMENTS AND ACTUAL READINGS TO THE OWNER'S AUTHORIZED REPRESENTATIVE. THE FLOW DEMAND FOR INDIVIDUAL MAINLINES SHALL NOT EXCEED THE FOLLOWING GUIDELINES:
 2" CLASS 200=36-55GPM
- THE CONTRACTOR SHALL PROVIDE 120V-AC 3PHASE POWER SOURCE AT THE CONTROLLER LOCATION. THE IRRIGATION CONTRACTOR SHALL MAKE THE FINAL CONNECTION FROM THE ELECTRICAL SOURCE TO THE CONTROLLER.
- A RAIN SENSOR SHALL BE INSTALLED IN THE VICINITY OF THE CONTROLLER. SEE SPECIFICATIONS.
- A QUICK COUPLING VALVE SHALL BE LOCATED AT THE IRRIGATION WATER SUPPLY POINT OF CONNECTION TO PROVIDE FOR A POINT OF INJECTION OF COMPRESSED AIR TO PURGE THE SYSTEM OF RETAINED WATER FOR WINTERIZATION.
- PIPE SIZE SHALL CONFORM TO THOSE SHOWN ON DRAWINGS. NO SUBSTITUTIONS OF SMALLER PIPE SIZES SHALL BE PERMITTED, BUT SUBSTITUTIONS FOR LARGER SIZES MAY BE APPROVED. MINIMUM PIPE SHALL BE 1".
- ALL LATERAL ZONES SHALL BE CONNECTED TO THE MAINLINE WITH PVC PIPE AND SIZED AS FOLLOWS:
 1" CLASS 200=0-17GPM 1.25" CLASS 200=18-28GPM
 1.5" CLASS 200=29-35GPM 2" CLASS 200=36-55GPM
 2.5" CLASS 200=56-85GPM 3" CLASS 200=96-85GPM
- ALL SPRINKLER HEADS SHALL BE SET PERPENDICULAR AND FLUSH TO FINISH GRADE AND WITH A CLEARANCE OF 2" (MIN.) FROM THE EDGE OF ANY HARD SURFACE UNLESS OTHERWISE SPECIFIED.
- CHECK VALVES SHALL BE INSTALLED ON ALL IRRIGATION HEADS IN AREAS WHERE FINISH GRADE EXCEEDS 4:1, WHERE POST VALVE SHUTOFF DRAINING OF THE IRRIGATION HEAD OCCURS OR AS DIRECTED BY THE OWNER'S REPRESENTATIVE.
- ALL SPRINKLER HEADS AND VALVES SHALL BE FLUSHED AND ADJUSTED FOR OPTIMUM COVERAGE WITH MINIMUM OVER SPRAY ON WALKS, STREETS, WALLS, ETC.
- ALL WIRES/SPICES TO BE MADE IN VALVE BOX.
- ALL VALVE BOXES TO BE INSTALLED WITH METAL DETECTION IN VALVE BOX LID.
- INSTALL TWO SPARE WIRES PER CONTROLLER. WIRE TO BE RUN TO FURTHEST ZONE VALVE LOCATION FOR EACH CONTROLLER.
- ALL IRRIGATION EQUIPMENT NOT OTHERWISE DETAILED OR SPECIFIED SHALL BE INSTALLED AS PER MANUFACTURER'S RECOMMENDATIONS AND SPECIFICATIONS. INSTALL IRRIGATION SYSTEM IN ACCORDANCE WITH ALL LOCAL AND STATE GOVERNING CODES OF ILLINOIS.
- REFER TO THE SPECIFICATIONS FOR ADDITIONAL DETAILED INFORMATION.
- GENERAL CONTRACTOR TO INSTALL IRRIGATION SLEEVES AS SHOWN NO DEEPER THAN 24" WHEREVER POSSIBLE.
- GENERAL CONTRACTOR TO PROVIDE 120VAC TO IRRIGATION CONTROLLER.
- ALL IRRIGATION WORK (SHEETS 34-36) IS PAID FOR THE CONTRACT UNIT PRICE: IRRIGATION SYSTEM



- 30-INCH LINEAR LENGTH OF WIRE, COILED
- WATERPROOF CONNECTION: RAIN BIRD SPLICE-1 (1 OF 2)
- ID TAG: RAIN BIRD VID SERIES
- REMOTE CONTROL VALVE: RAIN BIRD PEB-PRS-D
- VALVE BOX WITH COVER: RAIN BIRD VB-STD
- FINISH GRADE/TOP OF MULCH
- PVC SCH 80 NIPPLE (CLOSE)
- PVC SCH 40 ELL
- PVC SCH 80 NIPPLE (LENGTH AS REQUIRED)
- BRICK (1 OF 4)
- PVC MAINLINE PIPE
- SCH 80 NIPPLE (2-INCH LENGTH, HIDDEN) AND SCH 40 ELL
- PVC SCH 40 TEE OR ELL
- PVC SCH 40 MALE ADAPTER
- PVC LATERAL PIPE
- 3.0-INCH MINIMUM DEPTH OF 3/4-INCH WASHED GRAVEL

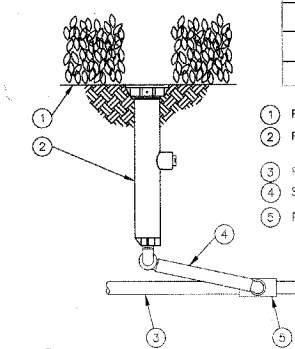
1 ELECTRIC REMOTE-CONTROL VALVE
N.T.S. PEB OR PESB SERIES 1-13-04



3 LANDSCAPE DRIPLINE 2" BELOW GRADE
N.T.S. WITH EASY FIT TEE - POTABLE SYSTEM 7-28-04

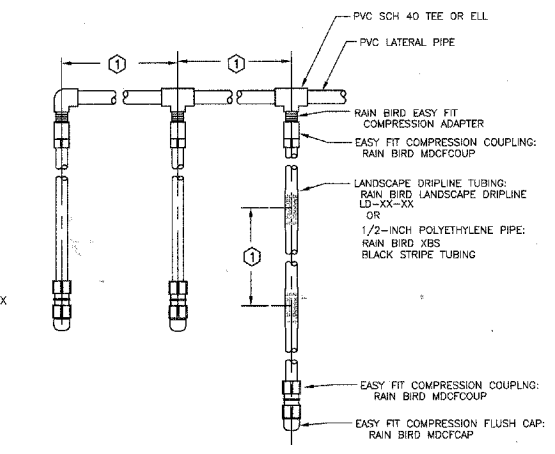
- TOP OF MULCH
- FINISH GRADE
- 30-INCH LINEAR LENGTH OF WIRE, COILED
- WATERPROOF CONNECTION: RAIN BIRD SPLICE-1 (1 OF 2)
- ID TAG: RAIN BIRD VID SERIES
- VALVE BOX WITH COVER: RAIN BIRD VB-JMB
- PVC SCH 80 NIPPLE, CLOSE (1 OF 3)
- PVC SCH 80 NIPPLE (LENGTH AS REQUIRED)
- PVC SCH 40 ELL
- PVC SCH 80 NIPPLE (2-INCH LENGTH, HIDDEN) AND PVC SCH 40 ELL
- PVC SCH 40 TEE OR ELL
- BRICK (1 OF 4)
- 3-INCH MINIMUM DEPTH OF 3/4-INCH WASHED GRAVEL
- PVC MAINLINE
- CONTROL ZONE KIT: RAIN BIRD MODEL: XCZ-100-COM
- PVC SCH 80 UNION FOR SERVICING ASSEMBLY
- PVC SCH 40 MALE ADAPTER
- PVC LATERAL PIPE

5 1" COMMERCIAL CONTROL ZONE KIT
N.T.S. WITH BASKET FILTER XCZ-100-B-COM 7-8-04

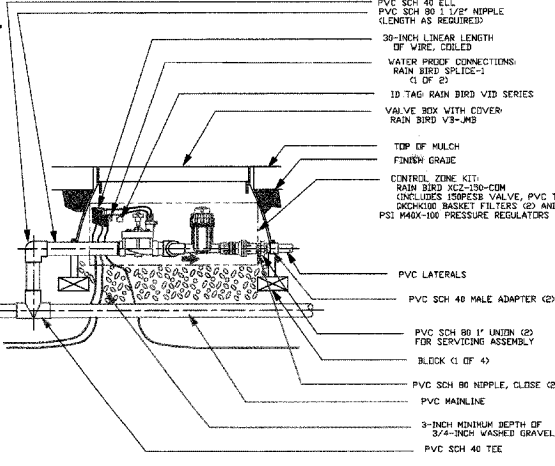
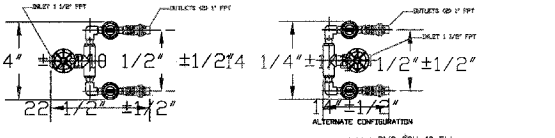


- FINISH GRADE/TOP OF MULCH
- POP-UP SPRAY SPRINKLER: RAIN BIRD 1806-PRS
- PVC LATERAL PIPE
- SWING ASSEMBLY: RAIN BIRD MODEL SA 6050
- PVC SCH 40 TEE OR ELL

2 POP-UP SPRAY SPRINKLER
N.T.S. 1806 WITH SWING PIPE 4-13-04



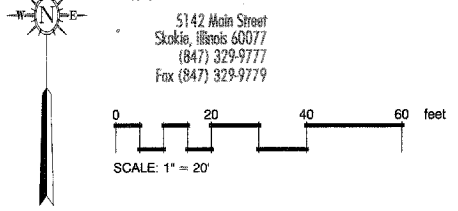
4 LANDSCAPE DRIPLINE LATERALS
N.T.S. POTABLE SYSTEM 7-28-04



6 1 1/2" COMMERCIAL CONTROL ZONE KIT
N.T.S. WITH 2 BASKET FILTERS XCZ-150-COM 11-8-04



SLEEVE SIZE	TOTAL LENGTH
0'-2"	657'-0"
0'-3"	458'-0"
0'-4"	100'-0"
0'-6"	188'-0"



PLANS PREPARED BY:
GEWALT HAMILTON ASSOCIATES, INC.
 Consulting Engineers & Surveyors
 650 Forest Ridge Drive
 Normal, Ill. 61701
 (847) 478-9700
 (847) 478-9700 Fax

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 IRRIGATION PLAN/DETAILS/NOTES

BUSINESS DISTRICT IMPROVEMENTS
 TOUHY AVE. AND CRAWFORD AVE.
 SECTION # 06 - 00048 - 00 -RS

SCALE: N.T.S.
 DATE: 11-2-06

DRAWN BY: TEB
 CHECKED BY: JCG