

CHATHAM COUNTY PURCHASING & CONTRACTING DEPARTMENT

ADDENDUM NO. 1 TO 20-0074-4

FOR: CHARLIE BROOKS PARK EXPANSION - PHASE 2

PLEASE SEE THE FOLLOWING FOR ADDITIONS, CLARIFICATIONS AND/OR CHANGES:

1. See attached REVISED Plan Sheets (5 sheets)

IR-1 of IR-5

IR-2 of IR-5

IR-3 of IR-5

IR-4 of IR-5

IR-5 of IR-5

2. See attached sheet (1 page) for Responses to Questions received and added suppliers.


3. The Bid Opening date/time has been extended to 2pm, Tuesday, October 13, 2020.

\$. Due to the bid opening extension, we will extend the receiving of additional question until 11am, October 6, 2020.

**BID OPENING HAS BEEN EXTENDED TO: 2PM, TUESDAY,
OCTOBER 13, 2020**

**THE PROPOSER IS RESPONSIBLE FOR MAKING THE NECESSARY CHANGES
AND MUST ACKNOWLEDGE RECEIPT OF ADDENDUM.**

10/1/20
DATE



ROBERT E. MARSHALL
SENIOR PROCUREMENT SPECIALIST
CHATHAM COUNTY

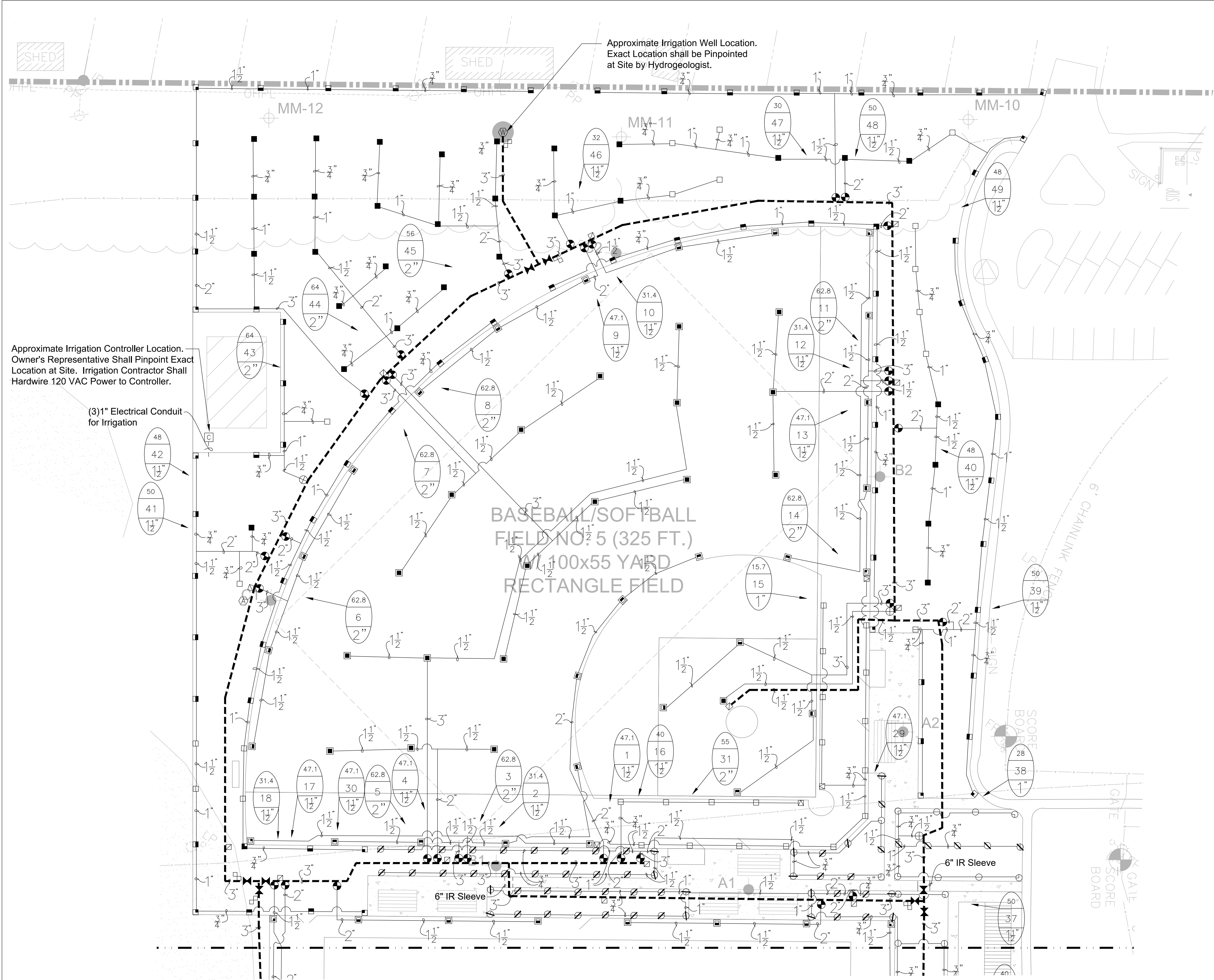
Addendum 1 for Bid No. 20-0074-4

Responses to Questions Received:

1. Q) If when drilling the well, the driller encounters land fill materials and is forced to move and start a new hole, who is responsible for costs incurred?
A) *If waste is present, it will be located at a fairly shallow depth. Explorations will be done at the well location prior to the beginning of drilling. If waste is encountered, then the well location will be adjusted to a place where it can be confirmed that there is no waste. The cost of the explorations should be included in the price of the well.*
2. Q) Is the design intent with the well to have an open hole limestone well, or a gravel-packed sand well with well screens?
A) *The intent is to have an open hole limestone well.*
3. Q) Section 3.4 on page 21 of the ITB mentions an extended warranty. What is the duration of the extended warranty?
A) *Only the Standard warranty is applicable for this contract (as indicated by an "X" on page 21 of the ITB)*

NOTE:

Shade Structure by Superior Recreational Products shall be added to the list of suppliers for the shade structure over bleachers. Sturdisteel Company shall be added to the approved list of suppliers of aluminum bleachers.



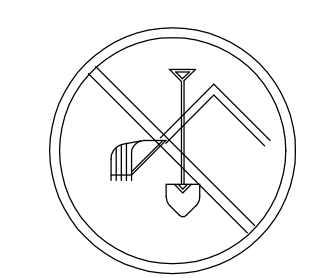
Approximate Irrigation Controller Location. Owner's Representative Shall Pinpoint Exact Location at Site. Irrigation Contractor Shall Hardwire 120 VAC Power to Controller.

(3)1" Electrical Conduit for Irrigation

Approximate Irrigation Well Location. Exact Location shall be Pinpointed at Site by Hydrogeologist.

NOTE:
SYSTEM IS DESIGNED SO THAT MULTIPLE ZONES CAN OPERATE AT A TIME SO LONG AS TOTAL SYSTEM DEMAND DOES NOT EXCEED TOTAL SYSTEM SUPPLY (65 GPM).

UTILITIES PROTECTION CENTER



CALL THREE WORKING DAYS BEFORE YOU DIG
THROUGHOUT GEORGIA
1-800-282-7411

- NOTES:
- ALL SPRINKLER TO BE MOUNTED ON MARLEX ELLS OR UNITIZED SWING JOINTS (AS SPECIFIED ON DETAILS).
 - CONTRACTOR TO UTILIZE A AUTOMATIC DRAIN CHECK VALVE DEVICE WHERE LOW HEAD DRAINAGE MAY OCCUR.
 - ALL TWO-WIRE CABLE TO BE MINIMUM SIZE OF 14-2 MAXI-CABLE
 - ALL TWO-WIRE CABLE TO BE INSTALLED IN 1" SCH 40 PVC ELECTRICAL CONDUIT.
 - ALL ELECTRICAL CONDUITS OPENINGS TO BE FOAM SEALED.
 - ALL WIRE SPLICES TO BE MADE WITH 3M DBR/Y-6 CONNECTORS MOUNTED IN A MINIMUM OF 10" CARSON VALVE BOX
 - ALL PIPING AND WIRING UNDER HARDTOPS WILL BE IN CLASS 200 PVC PIPE SLEEVE.
 - LSP-1 SURGE ARRESTORS SHALL BE INSTALLED EVERY 300' OR EVERY 6 DECODERS (WHICHEVER IS SHORTER) ALONG TWO-WIRE PATH. LSP-1 SURGE ARRESTORS SHALL ALSO BE INSTALLED AT ALL TERMINAL ENDS OF TWO-WIRE CABLE PATHS (STAR CONFIGURATION). REFER TO DETAIL-P.
 - INSTALLATION CONTRACTOR SHALL ADHERE TO ALL MANUFACTURER SPECIFICATIONS FOR TWO-WIRE CONTROL SYSTEM INSTALLATION (WIRE SIZING, WIRE LENGTH OF RUNS, GROUNDING, ETC).

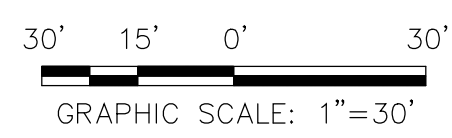


TYPICAL VALVE INDICATOR

GALLONS PER MIN.

STATION NUMBER

VALVE SIZE



IRRIGATION LEGEND

- IRRIGATION WELL AND WELL PUMP CONTROLS. REFER TO DETAIL-Q PRODUCING 65 GPM @ 100 PSI DISCHARGE. REQUIRES 460 VAC, 3 PHASE POWER.
- MANUAL DRAIN VALVE. SCH 80 PVC BALL VALVE. DETAIL-E.
- RAIN BIRD ESP-LXD CONTROLLER. 50 TOTAL STATIONS, 2-WIRE/DECODER BASED MODULAR CONTROLLER, FOUR PROGRAMS, PLASTIC, WALL MOUNTED. DETAIL-J,K,Q. IRRIGATION CONTRACTOR SHALL ALSO INSTALL A WIRELESS RAIN/FREEZE SENSOR FOR EACH CONTROLLER.
- NOTE: THERE ARE 49 ZONES SHOWN ON PLANS. IF ANY ZONES ARE ADDED DURING CONSTRUCTION, CONTRACTOR WILL NEED TO INSTALL A 75 STATION EXPANSION MODULE INTO CONTROLLER FOR ADDITIONAL VALVES.
- RAIN BIRD 150-EFB-CP-PRS OR 200-EFB-CP-PRS BRASS ELECTRIC REMOTE CONTROL VALVE, 1 1/2" OR 2" SIZE, MOUNTED WITH SCH 80 PVC TRUE UNION BALL VALVE AND PRESSURE REGULATION DEVICES. INSTALLED WITH RAIN BIRD SINGLE STATION DECODER. DETAIL-A.
- RAIN BIRD 100-EFB-CP-PRS BRASS ELECTRIC REMOTE CONTROL VALVE, 1" SIZE, MOUNTED WITH SCH 80 PVC TRUE UNION BALL VALVE AND PRESSURE REGULATION DEVICES. INSTALLED WITH RAIN BIRD SINGLE STATION DECODER. DETAIL-A.
- RAIN BIRD 1806-SAM, 6" POP-UP LAWN SPRAY SPRINKLER, 12' RADIUS, FULL-2.0 GPM, HALF-1.0 GPM, QUARTER-0.5 GPM, 30 PSI. DETAIL-C.
- RAIN BIRD 1806-SAM, 6" POP-UP LAWN SPRAY SPRINKLER, 15' RADIUS, FULL-4.0 GPM, HALF-2.0 GPM, QUARTER-1.0 GPM, 30 PSI. DETAIL-C.
- RAIN BIRD 1806-SAM, 6" LAWN POP-UP SIDE STRIP SPRAY SPRINKLER, 9' X 18' RADIUS, 1.5 GPM, 30 PSI. DETAIL-C.
- RAIN BIRD 1806-SAM, 6" LAWN SIDE STRIP SPRAY SPRINKLER, 4' X 30' RADIUS, 1.5 GPM, 30 PSI. DETAIL-C.
- RAIN BIRD 1806-SAM, 6" LAWN END STRIP SPRAY SPRINKLER, 4' X 15' RADIUS, 1.0 GPM, 30 PSI. DETAIL-C.
- RAIN BIRD 1812-SAM, 12" HI-POP SHRUB SPRAY SPRINKLER, 15' RADIUS, FULL-4.0 GPM, HALF-2.0 GPM, QUARTER-1.0 GPM, 30 PSI. DETAIL-D.
- RAIN BIRD 1812-SAM, 12" HI-POP SHRUB SPRAY SPRINKLER, 12' RADIUS, FULL-2.0 GPM, 30 PSI. DETAIL-D.
- RAIN BIRD 1812-SAM, 12" HI-POP SHRUB SIDE STRIP SPRAY SPRINKLER, 9' X 18' RADIUS, 1.5 GPM, 30 PSI. DETAIL-D.
- RAIN BIRD 1812-SAM, 12" HI-POP SHRUB SIDE STRIP SPRAY SPRINKLER, 4' X 30' RADIUS, 1.5 GPM, 30 PSI. DETAIL-D.
- RAIN BIRD 1812-SAM, 12" HI-POP SHRUB END STRIP SPRAY SPRINKLER, 4' X 15' RADIUS, 1.0 GPM, 30 PSI. DETAIL-D.
- HUNTER I-20 ADS LAWN ROTOR, 40' RADIUS, FULL-6.0 GPM, HALF-3.0 GPM, QUARTER-1.5 GPM, 40 PSI, DETAIL-B.
- HUNTER I-20 ADS LAWN ROTOR, 30' RADIUS, FULL-3.0 GPM, HALF-1.5 GPM, QUARTER-.75 GPM, 40 PSI, DETAIL-B.
- HUNTER INDUSTRIES MP ROTATOR SERIES 3000, MOUNTED ON RAIN BIRD 1806-SAM SPRINKLER IN LAWN, 30' RADIUS, FULL-4.0 GPM, HALF-2.0 GPM, QUARTER-1.0 GPM, 40 PSI, DETAIL-C.
- HUNTER INDUSTRIES MP ROTATOR SERIES 2000, MOUNTED ON RAIN BIRD 1806-SAM SPRINKLER IN LAWN, 20' RADIUS, FULL-2.0 GPM, HALF-1.0 GPM, QUARTER-0.5 GPM, 40 PSI, DETAIL-C.
- HUNTER I-40-06-SS, WITH #15 NOZZLE, SPORTS TURF CLOSED CASE ROTOR, FULL CIRCLE ARC, 55' RADIUS @ 15.7 GPM, 60 PSI, RUBBER COVER, STAINLESS STEEL RISER, UTILIZE LASCO 1" UNITIZED SWING JOINTS, DETAIL-N.
- HUNTER I-40-06-SS, WITH #15 NOZZLE, SPORTS TURF CLOSED CASE ROTOR, PART CIRCLE ARC, 55' RADIUS @ 15.7 GPM, 60 PSI, RUBBER COVER, STAINLESS STEEL RISER, UTILIZE LASCO 1" UNITIZED SWING JOINTS, DETAIL-N.
- RAIN BIRD #5 QUICK COUPLING VALVE 1" SIZE. CONTRACTOR TO SUPPLY TWO OCV KEYS AND MATCHING HOSE SWIVELS. DETAIL-L.
- MAINLINE ISOLATION GATE VALVE, DOMESTIC DUCTILE IRON GASKETED, DETAIL-M.
- AIR VENT VALVE, BERMAD #4420, 2" SIZE. INSTALLATION CONTRACTOR TO INSTALL (2) AIR VENT VALVE ASSEMBLIES AT HIGH POINTS OF IRRIGATION MAINLINE. NOTE: AIR VENT VALVE ASSEMBLIES ARE SHOWN ON PLANS FOR REFERENCE/ACCOUNTABILITY PURPOSES ONLY. INSTALLATION CONTRACTOR SHALL BE RESPONSIBLE TO FIELD ADJUST ACTUAL LOCATIONS AT SITE TO ACTUAL MAINLINE HIGH POINTS. DETAIL-F.
- MAINLINE PIPE: 3" SIZE IF NOT NOTED. CLASS 200 PVC. ALL PIPE 2-1/2" AND LARGER SHALL BE UNIBELL GASKETED PVC PIPE AND HARCO PVC GASKETED FITTINGS. THRUST BLOCKS AND RESTRAINTS TO BE UTILIZED AS PER MANUFACTURER'S RECOMMENDATIONS FOR PIPE TYPE, PIPE SIZE, AND LOCAL ENVIRONMENTAL CONDITIONS.
- IRRIGATION SLEEVE: CLASS 200 PVC, REFER TO SLEEVING PLAN. DETAIL-H.
- LATERAL LINE PIPE: CLASS 200 PVC, SIZE NOTED.
- 3" ELECTRICAL CONDUIT SLEEVE.

FOR BIDDING PURPOSES ONLY

ADDENDUM NO. 1 - REVISED SEPTEMBER 2020 - REDUCED PUMP CAPACITY

IRRIGATION PLAN NORTH			
IRRIGATION PLAN			
CHARLIE BROOKS PARK - PHASE 2			
FOR			
CHATHAM COUNTY BOARD OF COMMISSIONERS			
CHATHAM COUNTY, GEORGIA			
HHNT			
HODGES, HARBIN, NEWBERRY & TRIBBLE, INC.			
Consulting Engineers			
(912) 298-0230 (912) 298-0234 (FAX)		17 PARK OF COMMERCE BOULEVARD, SUITE 110 SAVANNAH, GEORGIA 31405	
PROJ. NO.	1705-038-01	DWG.	171116IE-R2
SCALE	1" = 30'	SHEET IR-1 OF IR-5	
DATE	JULY, 2020		

IRRIGATION LEGEND

- IRRIGATION WELL AND WELL PUMP CONTROLS. REFER TO DETAIL-Q
PRODUCING 65 GPM @ 100 PSI DISCHARGE. REQUIRES 460 VAC, 3
PHASE POWER.
- MANUAL DRAIN VALVE. SCH 80 PVC BALL VALVE. DETAIL-E.
- RAIN BIRD ESP-LXD CONTROLLER . 50 TOTAL STATIONS, 2-WIRE/DECODER
BASED MODULAR CONTROLLER, FOUR PROGRAMS, PLASTIC, WALL
MOUNTED. DETAIL-J,K,Q. IRRIGATION CONTRACTOR SHALL ALSO INSTALL A
WIRELESS RAIN/FREEZE SENSOR FOR EACH CONTROLLER.
NOTE: THERE ARE 49 ZONES SHOWN ON PLANS. IF ANY ZONES ARE ADDED
DURING CONSTRUCTION, CONTRACTOR WILL NEED TO INSTALL A 75
STATION EXPANSION MODULE INTO CONTROLLER FOR ADDITIONAL VALVES.
- RAIN BIRD 150-EFB-CP-PRS OR 200-EFB-CP-PRS BRASS ELECTRIC REMOTE
CONTROL VALVE. 1 1/2" OR 2" SIZE, MOUNTED WITH SCH 80 PVC TRUE
UNION BALL VALVE AND PRESSURE REGULATION DEVICES, INSTALLED
WITH RAIN BIRD SINGLE STATION DECODER. DETAIL-A.
- RAIN BIRD 100-EFB-CP-PRS BRASS ELECTRIC REMOTE CONTROL VALVE,
1" SIZE, MOUNTED WITH SCH 80 PVC TRUE UNION BALL VALVE AND
PRESSURE REGULATION DEVICES. INSTALLED WITH RAIN BIRD SINGLE
STATION DECODER. DETAIL-A.
- RAIN BIRD 1806-SAM, 6" POP-UP LAWN SPRAY SPRINKLER, 12' RADIUS, FULL-2.0
GPM, HALF-1.0 GPM, QUARTER-0.5 GPM, 30 PSI. DETAIL-C.
- RAIN BIRD 1806-SAM, 6" POP-UP LAWN SPRAY SPRINKLER, 15' RADIUS, FULL-4.0
GPM, HALF-2.0 GPM, QUARTER-1.0 GPM, 30 PSI. DETAIL-C.
- RAIN BIRD 1806-SAM, 6" LAWN POP-UP SIDE STRIP SPRAY SPRINKLER, 9' X 18'
RADIUS, 1.5 GPM, 30 PSI. DETAIL-C.
- RAIN BIRD 1806-SAM, 6" LAWN SIDE STRIP SPRAY SPRINKLER, 4' X 30'
RADIUS, 1.5 GPM, 30 PSI. DETAIL-C.
- RAIN BIRD 1806-SAM, 6" LAWN END STRIP SPRAY SPRINKLER, 4' X 15'
RADIUS, 1.0 GPM, 30 PSI. DETAIL-C.
- RAIN BIRD 1812-SAM, 12" HI-POP SHRUB SPRAY SPRINKLER, 15' RADIUS, FULL-4.0
GPM, HALF-2.0 GPM, QUARTER-1.0 GPM, THREE QUARTER-3.0 GPM, 30 PSI. DETAIL-D.
- RAIN BIRD 1812-SAM, 12" HI-POP SHRUB SPRAY SPRINKLER, 12' RADIUS, FULL-2.0
GPM, 30 PSI. DETAIL-D.
- RAIN BIRD 1812-SAM, 12" HI-POP SHRUB SIDE STRIP SPRAY SPRINKLER, 9' X 18'
RADIUS, 1.5 GPM, 30 PSI. DETAIL-D.
- RAIN BIRD 1812-SAM, 12" HI-POP SHRUB SIDE STRIP SPRAY SPRINKLER, 4' X 30'
RADIUS, 1.5 GPM, 30 PSI. DETAIL-D.
- RAIN BIRD 1812-SAM, 12" HI-POP SHRUB END STRIP SPRAY SPRINKLER, 4' X 15'
RADIUS, 1.0 GPM, 30 PSI. DETAIL-D.
- HUNTER I-20 ADS LAWN ROTOR, 40' RADIUS, FULL-6.0 GPM, HALF-3.0 GPM,
QUARTER-1.5 GPM, 40 PSI, DETAIL-B.
- HUNTER I-20 ADS LAWN ROTOR, 30' RADIUS, FULL-3.0 GPM, HALF-1.5 GPM,
QUARTER-.75 GPM, 40 PSI, DETAIL-B.
- HUNTER INDUSTRIES MP ROTATOR SERIES 3000, MOUNTED ON RAIN BIRD 1806-
SAM SPRINKLER IN LAWN, 30' RADIUS, FULL-4.0 GPM, HALF-2.0 GPM, QUARTER-
1.0 GPM, 40 PSI, DETAIL-C.
- HUNTER INDUSTRIES MP ROTATOR SERIES 2000, MOUNTED ON RAIN BIRD 1806-
SAM SPRINKLER IN LAWN, 20' RADIUS, FULL-2.0 GPM, HALF-1.0 GPM, QUARTER-
0.5 GPM, 40 PSI, DETAIL-C.
- HUNTER I-40-06-SS, WITH #15 NOZZLE, SPORTS TURF CLOSED CASE ROTOR,
FULL CIRCLE ARC, 55' RADIUS @ 15.7 GPM, 60 PSI, RUBBER COVER, STAINLESS
STEEL RISER, UTILIZE LASCO 1" UNITIZED SWING JOINTS, DETAIL-N.
- HUNTER I-40-06-SS, WITH #15 NOZZLE, SPORTS TURF CLOSED CASE ROTOR,
PART CIRCLE ARC, 55' RADIUS @ 15.7 GPM, 60 PSI, RUBBER COVER,
STAINLESS STEEL RISER, UTILIZE LASCO 1" UNITIZED SWING JOINTS, DETAIL-N.
- RAIN BIRD #5 QUICK COUPLING VALVE 1" SIZE. CONTRACTOR TO SUPPLY TWO QCV
KEYS AND MATCHING HOSE SWIVELS. DETAIL-L.
- MAINLINE ISOLATION GATE VALVE, DOMESTIC DUCTILE IRON GASKETED, DETAIL-M.
- AIR VENT VALVE, BERMAD #4420, 2" SIZE. INSTALLATION CONTRACTOR TO
INSTALL (2) AIR VENT VALVE ASSEMBLIES AT HIGH POINTS OF IRRIGATION
MAINLINE. NOTE: AIR VENT VALVE ASSEMBLIES ARE SHOWN ON PLANS FOR
REFERENCE/ACCOUNTABILITY PURPOSES ONLY. INSTALLATION CONTRACTOR
SHALL BE RESPONSIBLE TO FIELD ADJUST ACTUAL LOCATIONS AT SITE TO
ACTUAL MAINLINE HIGH POINTS. DETAIL-F.
- MAINLINE PIPE: 3" SIZE IF NOT NOTED, CLASS 200 PVC. ALL PIPE 2-1/2" AND LARGER
SHALL BE UNIBELL GASKETED PVC PIPE AND HARCO PVC GASKETED FITTINGS.
THRUST BLOCKS AND RESTRAINTS TO BE UTILIZED AS PER MANUFACTURER'S
RECOMMENDATIONS FOR PIPE TYPE, PIPE SIZE, AND LOCAL ENVIRONMENTAL
CONDITIONS.
- IRRIGATION SLEEVE: CLASS 200 PVC, REFER TO SLEEVING PLAN. DETAIL-H.
- LATERAL LINE PIPE: CLASS 200 PVC, SIZE NOTED.
- 3" ELECTRICAL CONDUIT SLEEVE.

FOR BIDDING PURPOSES ONLY

ADDENDUM NO. 1 - REVISED SEPTEMBER 2020 - REDUCED PUMP CAPACITY

IRRIGATION PLAN SOUTH		
IRRIGATION PLAN		
CHARLIE BROOKS PARK - PHASE 2		
FOR		
CHATHAM COUNTY BOARD OF COMMISSIONERS		
CHATHAM COUNTY, GEORGIA		
<div><div>H</div><div>H</div><div>N</div><div>T</div></div>		
HODGES, HARBIN, NEWBERRY & TRIBBLE, INC. Consulting Engineers		
(912) 298-0230 (912) 298-0234 (FAX)		
17 PARK OF COMMERCE BOULEVARD, SUITE 110 SAVANNAH, GEORGIA 31405		
PROJ. NO.	1705-038-01	DWG.
SCALE	1" = 30'	1711161E-R2
DATE	JULY, 2020	SHEET IR-2 OF IR-5

FIELD 6
100x60 YARDS
RECTANGLE FIELD

Irrigation Contractor shall Stub Up
Spare 36" Two-Wire Control Cable
Loop from Controller in 10" Carson
Valve Box.

NOTE:
SYSTEM IS DESIGNED SO THAT MULTIPLE ZONES CAN OPERATE AT A TIME SO LONG
AS TOTAL SYSTEM DEMAND DOES NOT EXCEED TOTAL SYSTEM SUPPLY (65 GPM).

- NOTES:
- ALL SPRINKLER TO BE MOUNTED ON MARLEX ELLS OR UNITIZED SWING JOINTS
(AS SPECIFIED ON DETAILS).
 - CONTRACTOR TO UTILIZE A AUTOMATIC DRAIN CHECK VALVE DEVICE
WHERE LOW HEAD DRAINAGE MAY OCCUR.
 - ALL TWO-WIRE CABLE TO BE MINIMUM SIZE OF 14-2 MAXI-CABLE
 - ALL TWO-WIRE CABLE TO BE INSTALLED IN 1" SCH 40 PVC
ELECTRICAL CONDUIT.
 - ALL ELECTRICAL CONDUITS OPENINGS TO BE FOAM SEALED.
 - ALL WIRE SPLICES TO BE MADE WITH 3M DBR/Y-6 CONNECTORS
MOUNTED IN A MINIMUM OF 10" CARSON VALVE BOX
 - ALL PIPING AND WIRING UNDER HARDTOPS WILL BE IN CLASS 200 PVC
PIPE SLEEVE.
 - LSP-1 SURGE ARRESTORS SHALL BE INSTALLED EVERY 300' OR EVERY 6
DECODERS (WHICHEVER IS SHORTER) ALONG TWO-WIRE PATH. LSP-1 SURGE
ARRESTORS SHALL ALSO BE INSTALLED AT ALL TERMINAL ENDS OF TWO-WIRE
CABLE PATHS (STAR CONFIGURATION). REFER TO DETAIL-P.
 - INSTALLATION CONTRACTOR SHALL ADHERE TO ALL MANUFACTURER
SPECIFICATIONS FOR TWO-WIRE CONTROL SYSTEM INSTALLATION (WIRE
SIZING, WIRE LENGTH OF RUNS, GROUNDING, ETC).

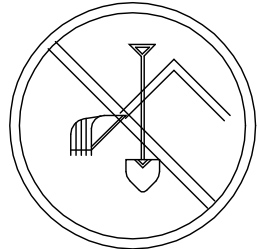
TYPICAL VALVE INDICATOR

- GALLONS PER MIN.
- STATION NUMBER
- VALVE SIZE

30' 15' 0' 30'

GRAPHIC SCALE: 1"=30'

UTILITIES PROTECTION CENTER



CALL THREE WORKING DAYS
BEFORE YOU DIG
THROUGHOUT GEORGIA
1-800-282-7411

IRRIGATION LEGEND

IRRIGATION WELL AND WELL PUMP CONTROLS. REFER TO DETAIL-Q PRODUCING 65 GPM @ 100 PSI DISCHARGE. REQUIRES 460 VAC, 3 PHASE POWER.

MANUAL DRAIN VALVE. SCH 80 PVC BALL VALVE. DETAIL-E.

RAIN BIRD ESP-LXD CONTROLLER . 50 TOTAL STATIONS, 2-WIRE/DECODER BASED MODULAR CONTROLLER, FOUR PROGRAMS, PLASTIC, WALL MOUNTED. DETAIL-J,K,Q. IRRIGATION CONTRACTOR SHALL ALSO INSTALL A WIRELESS RAIN/FREEZE SENSOR FOR EACH CONTROLLER. NOTE: THERE ARE 49 ZONES SHOWN ON PLANS. IF ANY ZONES ARE ADDED DURING CONSTRUCTION, CONTRACTOR WILL NEED TO INSTALL A 75 STATION EXPANSION MODULE INTO CONTROLLER FOR ADDITIONAL VALVES.

RAIN BIRD 150-EFB-CP-PRS OR 200-EFB-CP-PRS BRASS ELECTRIC REMOTE CONTROL VALVE, 1 1/2" OR 2" SIZE, MOUNTED WITH SCH 80 PVC TRUE UNION BALL VALVE AND PRESSURE REGULATION DEVICES, INSTALLED WITH RAIN BIRD SINGLE STATION DECODER. DETAIL-A.

RAIN BIRD 100-EFB-CP-PRS BRASS ELECTRIC REMOTE CONTROL VALVE, 1" SIZE, MOUNTED WITH SCH 80 PVC TRUE UNION BALL VALVE AND PRESSURE REGULATION DEVICES. INSTALLED WITH RAIN BIRD SINGLE STATION DECODER. DETAIL-A.

RAIN BIRD 1806-SAM, 6" POP-UP LAWN SPRAY SPRINKLER, 12' RADIUS, FULL-2.0 GPM, HALF-1.0 GPM, QUARTER-0.5 GPM, 30 PSI. DETAIL-C.

RAIN BIRD 1806-SAM, 6" POP-UP LAWN SPRAY SPRINKLER, 15' RADIUS, FULL-4.0 GPM, HALF-2.0 GPM, QUARTER-1.0 GPM, 30 PSI. DETAIL-C.

RAIN BIRD 1806-SAM, 6" LAWN POP-UP SIDE STRIP SPRAY SPRINKLER, 9' X 18' RADIUS, 1.5 GPM, 30 PSI. DETAIL-C.

RAIN BIRD 1806-SAM, 6" LAWN SIDE STRIP SPRAY SPRINKLER, 4' X 30' RADIUS, 1.5 GPM, 30 PSI. DETAIL-C.

RAIN BIRD 1806-SAM, 6" LAWN END STRIP SPRAY SPRINKLER, 4' X 15' RADIUS, 1.0 GPM, 30 PSI. DETAIL-C.

RAIN BIRD 1812-SAM, 12" HI-POP SHRUB SPRAY SPRINKLER, 15' RADIUS, FULL-4.0 GPM, HALF-2.0 GPM, QUARTER-1.0 GPM, THREE QUARTER-3.0 GPM, 30 PSI. DETAIL-D.

RAIN BIRD 1812-SAM, 12" HI-POP SHRUB SPRAY SPRINKLER, 12' RADIUS, FULL-2.0 GPM, 30 PSI. DETAIL-D.

RAIN BIRD 1812-SAM, 12" HI-POP SHRUB SIDE STRIP SPRAY SPRINKLER, 9' X 18' RADIUS, 1.5 GPM, 30 PSI. DETAIL-D.

RAIN BIRD 1812-SAM, 12" HI-POP SHRUB SIDE STRIP SPRAY SPRINKLER, 4' X 30' RADIUS, 1.5 GPM, 30 PSI. DETAIL-D.

RAIN BIRD 1812-SAM, 12" HI-POP SHRUB END STRIP SPRAY SPRINKLER, 4' X 15' RADIUS, 1.0 GPM, 30 PSI. DETAIL-D.

HUNTER I-20 ADS LAWN ROTOR, 40' RADIUS, FULL-6.0 GPM, HALF-3.0 GPM, QUARTER-1.5 GPM, 40 PSI, DETAIL-B.

HUNTER I-20 ADS LAWN ROTOR, 30' RADIUS, FULL-3.0 GPM, HALF-1.5 GPM, QUARTER-.75 GPM, 40 PSI, DETAIL-B.

HUNTER INDUSTRIES MP ROTATOR SERIES 3000, MOUNTED ON RAIN BIRD 1806-SAM SPRINKLER IN LAWN, 30' RADIUS, FULL-4.0 GPM, HALF-2.0 GPM, QUARTER-1.0 GPM, 40 PSI, DETAIL-C.

HUNTER INDUSTRIES MP ROTATOR SERIES 2000, MOUNTED ON RAIN BIRD 1806-SAM SPRINKLER IN LAWN, 20' RADIUS, FULL-2.0 GPM, HALF-1.0 GPM, QUARTER-.5 GPM, 40 PSI, DETAIL-C.

HUNTER I-40-06-SS, WITH #15 NOZZLE, SPORTS TURF CLOSED CASE ROTOR, FULL CIRCLE ARC, 55' RADIUS @ 15.7 GPM, 60 PSI, RUBBER COVER, STAINLESS STEEL RISER, UTILIZE LASCO 1" UNITIZED SWING JOINTS, DETAIL-N.

HUNTER I-40-06-SS, WITH #15 NOZZLE, SPORTS TURF CLOSED CASE ROTOR, PART CIRCLE ARC, 55' RADIUS @ 15.7 GPM, 60 PSI, RUBBER COVER, STAINLESS STEEL RISER, UTILIZE LASCO 1" UNITIZED SWING JOINTS, DETAIL-N.

RAIN BIRD #5 QUICK COUPLING VALVE 1" SIZE. CONTRACTOR TO SUPPLY TWO QCV KEYS AND MATCHING HOSE SWIVELS. DETAIL-L.

MAINLINE ISOLATION GATE VALVE, DOMESTIC DUCTILE IRON GASKETED, DETAIL-M.

AIR VENT VALVE, BERMAID #4420, 2" SIZE. INSTALLATION CONTRACTOR TO INSTALL (2) AIR VENT VALVE ASSEMBLIES AT HIGH POINTS OF IRRIGATION MAINLINE. NOTE: AIR VENT VALVE ASSEMBLIES ARE SHOWN ON PLANS FOR REFERENCE/ACCOUNTABILITY PURPOSES ONLY. INSTALLATION CONTRACTOR SHALL BE RESPONSIBLE TO FIELD ADJUST ACTUAL LOCATIONS AT SITE TO ACTUAL MAINLINE HIGH POINTS. DETAIL-F.

MAINLINE PIPE: 3" SIZE IF NOT NOTED, CLASS 200 PVC. ALL PIPE 2-1/2" AND LARGER SHALL BE UNIBELL GASKETED PVC PIPE AND HARCO PVC GASKETED FITTINGS. THRUST BLOCKS AND RESTRAINTS TO BE UTILIZED AS PER MANUFACTURER'S RECOMMENDATIONS FOR PIPE TYPE, PIPE SIZE, AND LOCAL ENVIRONMENTAL CONDITIONS.

IRRIGATION SLEEVE: CLASS 200 PVC, REFER TO SLEEVING PLAN. DETAIL-H.

LATERAL LINE PIPE: CLASS 200 PVC, SIZE NOTED.

3" ELECTRICAL CONDUIT SLEEVE.

FOR BIDDING PURPOSES ONLY

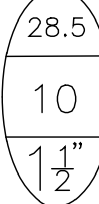
ADDENDUM NO. 1 - REVISED SEPTEMBER 2020 - REDUCED PUMP CAPACITY			
IRRIGATION GENERAL NOTES AND DETAILS			
IRRIGATION DETAILS			
CHARLIE BROOKS PARK - PHASE 2			
FOR			
CHATHAM COUNTY BOARD OF COMMISSIONERS			
CHATHAM COUNTY, GEORGIA			
<div><div>HHNT</div><div>HODGES, HARBIN, NEWBERRY & TRIBBLE, INC.</div><div>Consulting Engineers</div></div>			
(912) 298-0230 (912) 298-0234 (FAX)	17 PARK OF COMMERCE BOULEVARD, SUITE 110 SAVANNAH, GEORGIA 31405		
PROJ. NO.	1705-038-01	DWG.	171116IE-R2
SCALE	NOT TO SCALE	SHEET IR-3 OF IR-5	
DATE	JULY, 2020		

TYPICAL VALVE INDICATOR

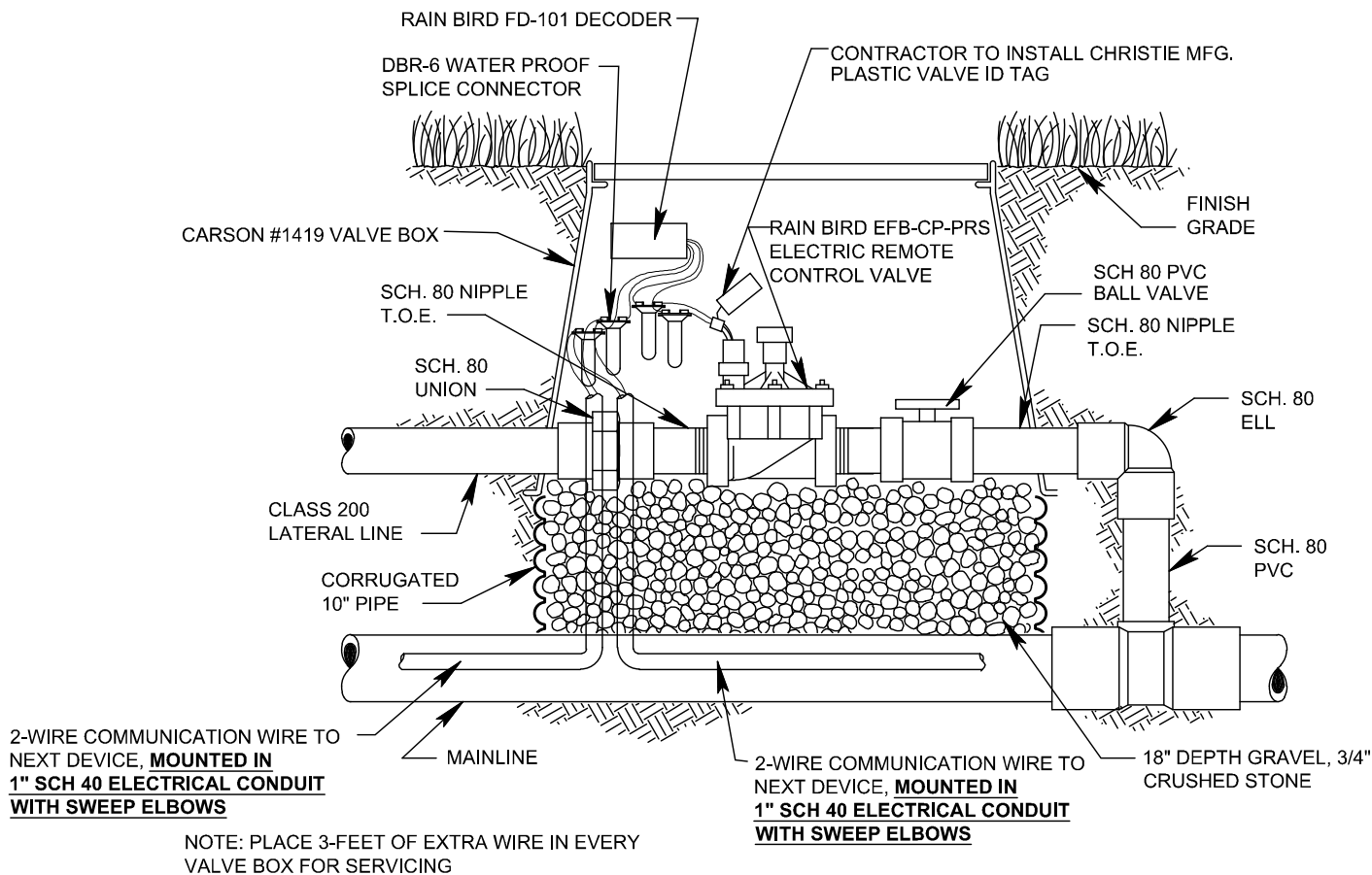
GALLONS PER MIN.

STATION NUMBER

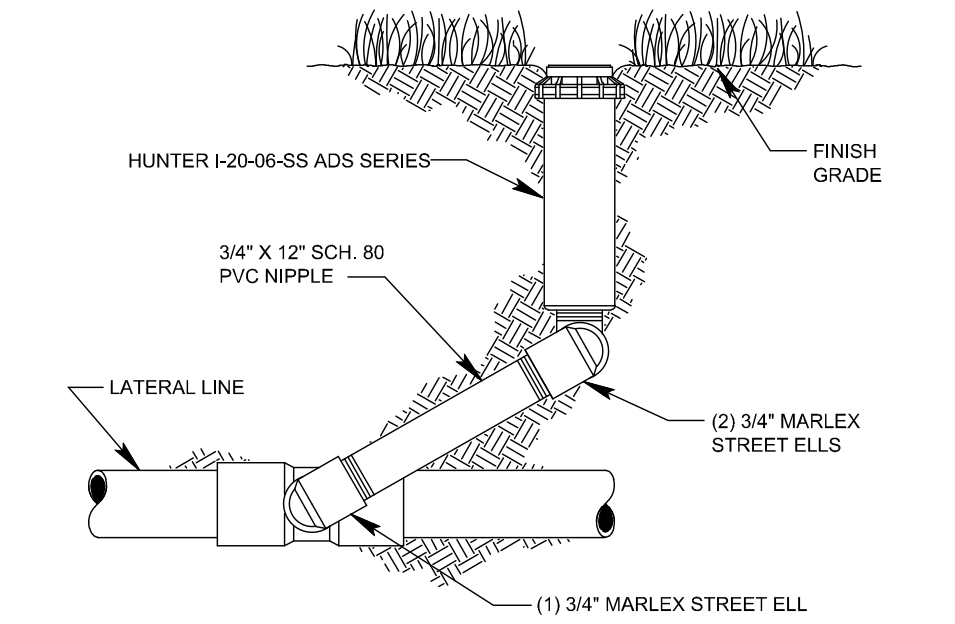
VALVE SIZE



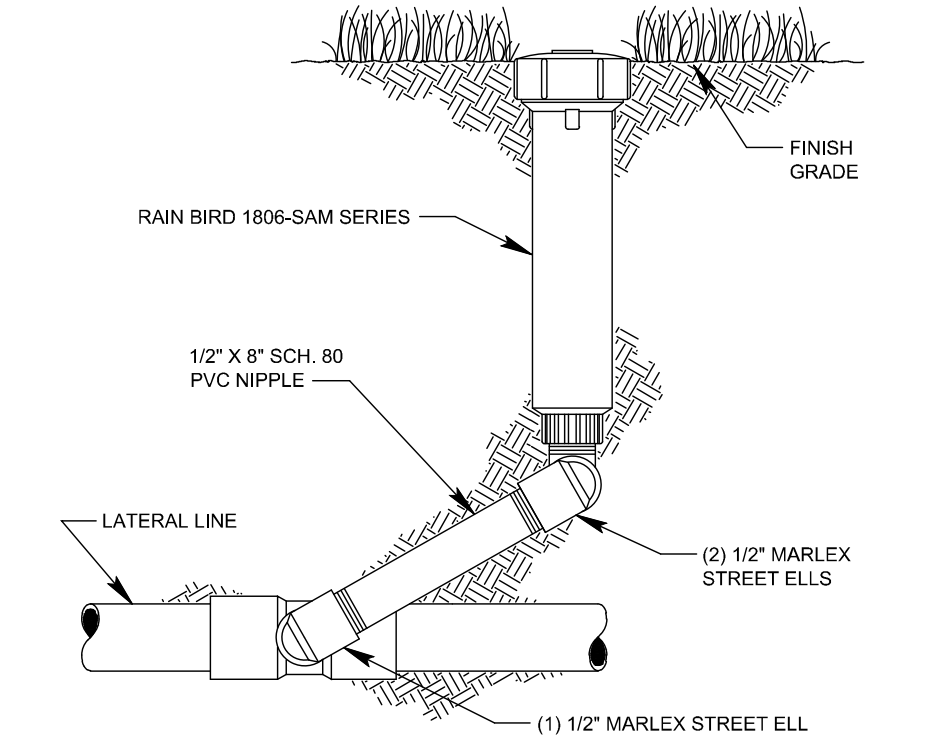
- NOTES:
- ALL SPRINKLER TO BE MOUNTED ON MARLEX ELLS OR UNITIZED SWING JOINTS (AS SPECIFIED ON DETAILS).
 - CONTRACTOR TO UTILIZE A AUTOMATIC DRAIN CHECK VALVE DEVICE WHERE LOW HEAD DRAINAGE MAY OCCUR.
 - ALL TWO-WIRE CABLE TO BE MINIMUM SIZE OF 14-2 MAXI-CABLE
 - ALL TWO-WIRE CABLE TO BE INSTALLED IN 1" SCH 40 PVC ELECTRICAL CONDUIT.
 - ALL ELECTRICAL CONDUITS OPENINGS TO BE FOAM SEALED.
 - ALL WIRE SPLICES TO BE MADE WITH 3M DBRY-Y-6 CONNECTORS MOUNTED IN A MINIMUM OF 10" CARSON VALVE BOX
 - ALL PIPING AND WIRING UNDER HARDTOPS WILL BE IN CLASS 200 PVC PIPE SLEEVE.
 - LSP-1 SURGE ARRESTORS SHALL BE INSTALLED EVERY 300' OR EVERY 6 DECODERS (WHICHEVER IS SHORTER) ALONG TWO-WIRE PATH. LSP-1 SURGE ARRESTORS SHALL ALSO BE INSTALLED AT ALL TERMINAL ENDS OF TWO-WIRE CABLE PATHS (STAR CONFIGURATION). REFER TO DETAIL-P.
 - INSTALLATION CONTRACTOR SHALL ADHERE TO ALL MANUFACTURER SPECIFICATIONS FOR TWO-WIRE CONTROL SYSTEM INSTALLATION (WIRE SIZING, WIRE LENGTH OF RUNS, GROUNDING, ETC).



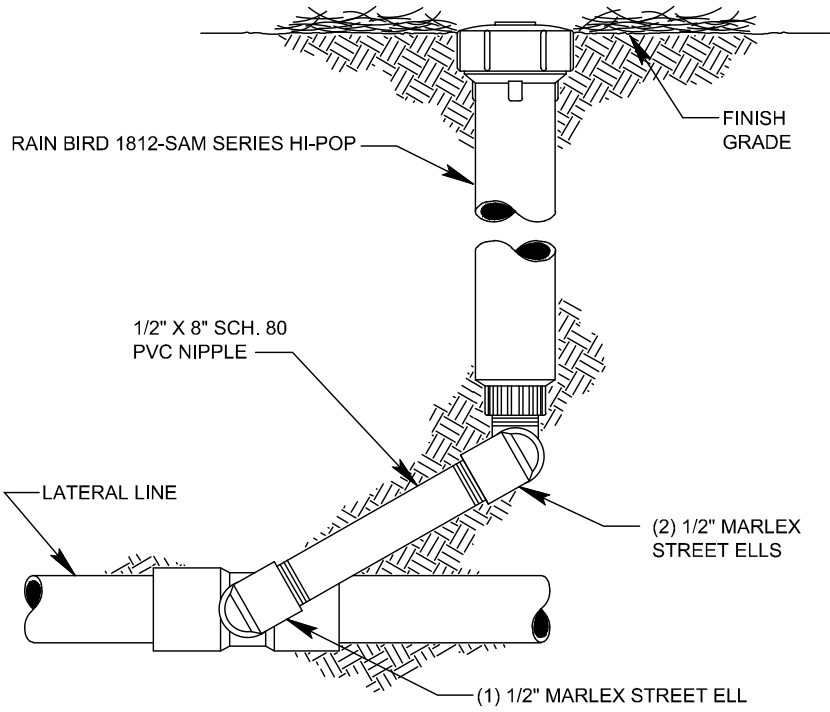
A CONTROL VALVE
NTS



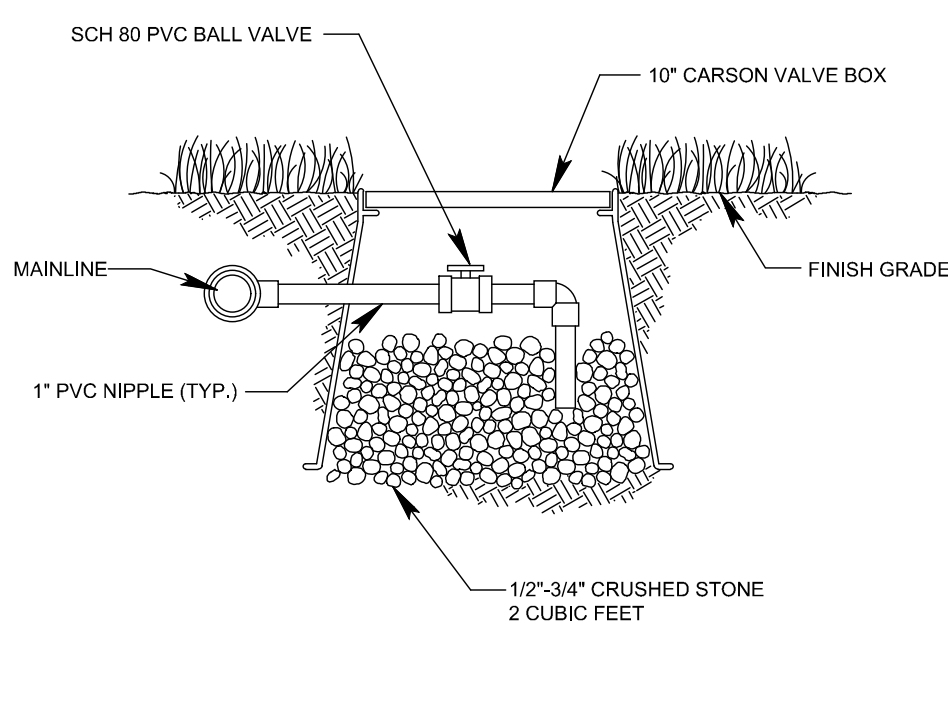
B LAWN ROTOR
NTS



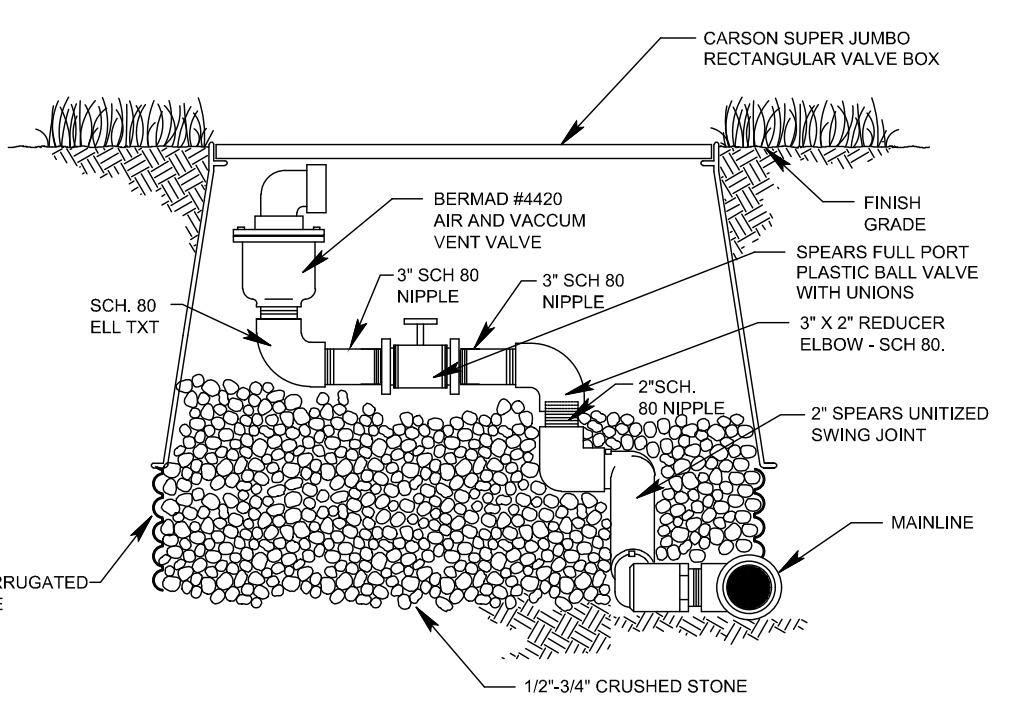
C LAWN SPRAY
NTS



D SHRUB SPRAY
NTS



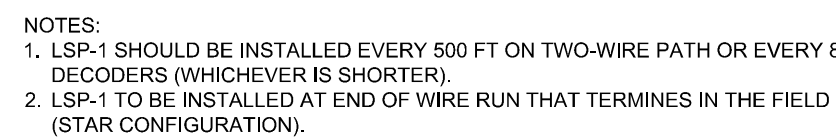
E MANUAL DRAIN VALVE
NTS



F AIR VENT ASSEMBLY
NTS

GENERAL NOTES

- ALL MAINLINES TO HAVE A MINIMUM OF 18" OF COVER. (CLASS 200 PVC PIPE, CLASS 200 PVC FOR 4" AND LARGER).
- ALL LATERAL AND SUB-MAIN PIPE TO HAVE A MINIMUM OF 12" OF COVER. (CLASS 200 PVC PIPE)
- NO ROCKS, BOULDER, OR OTHER EXTRANEOUS MATERIALS TO BE USED IN BACKFILLING OF TRENCH.
- ALL PIPE TO BE INSTALLED AS PER MANUFACTURERS' SPECIFICATIONS.
- ALL THREADED JOINTS TO BE COATED WITH TEFLON TAPE OR LIQUID TEFLON.
- ALL LINES TO BE THOROUGHLY FLUSHED BEFORE INSTALLATION OF SPRINKLER HEADS.
- SPRINKLER AND RELATED EQUIPMENT TO BE INSTALLED AS PER DETAILS.
- ALL ELECTRICAL JOINTS TO BE MADE USING WATERPROOF CONNECTIONS AS SHOWN ON DETAILS.
- ALL EQUIPMENT NOT SPECIFIED IN THE LEGEND SHALL BE DETERMINED AND FURNISHED BY THE CONTRACTOR.
- NO ELECTRICAL CONNECTIONS SHALL BE MADE IN THE FIELD EXCEPT AT A VALVE CONTROL BOX OR ANOTHER VALVE BOX SPECIFICALLY FOR CONNECTIONS.
- ANY DISCREPANCY BETWEEN THIS SHEET AND OTHERS IN THIS SET MUST BE REFERRED TO THE IRRIGATION CONSULTANT BY THE CONTRACTOR FOR CLARIFICATION BEFORE PROCEEDING WITH THE WORK.
- ALL TWO-WIRE CONTROL WIRES SHALL BE #14-2 MAXI CABLE, INSTALLED IN 1" SCH 40 PVC ELECTRICAL CONDUIT.
- CONTRACTOR TO BE RESPONSIBLE FOR PROPER COVERAGE OF AREAS TO BE WATERED. I.E. ADJUST HEADS WITH INSUFFICIENT COVERAGE DUE TO BLOCKAGE BY EXISTING OR PROPOSED SITE FEATURES.
- CONTRACTOR TO REFER TO LANDSCAPE PLAN TO KEEP SPRINKLER EQUIPMENT AND ACCESSORY MATERIAL FROM INTERFERING WITH PROPER PLANTING, I.E. VERIFY ROOT BALL SIZE FOR PLANTING.
- CONTRACTOR SHALL PROVIDE EXPANSION COILS AT EACH WIRE CONNECTION IN VALVE BOX (WRAP AROUND 3/4" PIPE 12 TIMES).
- CONTRACTOR TO UTILIZE APPROPRIATE AUTOMATIC DRAIN DEVICE WHERE LOW HEAD DRAINAGE MAY OCCUR.
- ALL SPRINKLERS TO BE INSTALLED AS DETAILED ON PLANS.
- CONTRACTOR SHALL UTILIZE VALVE I.D. TAGS ON ALL REMOTE CONTROL VALVES.
- 24 VOLT WIRE SHALL BE COLOR CODED PER SEPARATE WIRE RUNS.
- CONTRACTOR SHALL INSTALL MANUFACTURERS' RECOMMENDED GROUNDING EQUIPMENT FOR POWER SUPPLY AND VALVE OUTPUT WITH PAIGE WIRE GROUND PLATE ASSEMBLY.
- CONTRACTOR SHALL INSTALL MANUFACTURERS' RECOMMENDATION ON FAULT GROUND AND LIGHTNING PROTECTION.
- CONTROLLER GROUNDING MUST BE AS PER RAIN BIRD WIRE GROUNDING REQUIREMENTS
- ALL MATERIAL TO BE SUPPLIED BY CONTRACTOR TO OWNER:
 - TWO WRENCHES FOR DISASSEMBLING AND ADJUSTING EACH TYPE OF SPRINKLER HEADS AND VALVE SUPPLIED.
 - TWO KEYS FOR EACH OF THE AUTOMATIC CONTROLLERS.
 - TWO QUICK COUPLER KEYS WITH MATCHING HOSE SWIVELS.
- SYSTEM IS DIAGRAMMATIC TO IMPROVE CLARITY. ALL MAINLINE PIPING ELECTRIC VALVES AND WIRING ARE TO BE INSTALLED IN LANDSCAPE AREAS AND WITHIN PROPERTY BOUNDARIES. CONTRACTOR SHALL REFERENCE THE LANDSCAPE PLAN PRIOR TO THE INSTALLATION OF PIPING TO AVOID CONTACT WITH PLANT MATERIALS EXISTING OR NEW.
- CONTRACTOR TO ADD EXTENSION RISER TO POP-UP HEADS WHEN NEEDED FOR PROPER COVERAGE.
- CONTRACTOR SHALL INSTALL SPRINKLER EQUIPMENT 12" FROM FOUNDATIONS. ALSO INSTALL SPRINKLERS 4" FROM CURB OR WALKS.
- PRIOR TO BID IRRIGATION CONTRACTOR SHALL VERIFY RIGHT-OF-WAY AND BACKFLOW REQUIREMENTS. NO LATER THAN FIVE DAYS BEFORE BID SUBMITTALS CONTRACTOR SHALL NOTIFY CONSULTANT OF ANY CHANGES FROM PLANS AND SPECIFICATIONS.
- IRRIGATION CONTRACTOR SHALL PROVIDE THE OWNER AND LANDSCAPE ARCHITECT WITH A REPRODUCIBLE CROSS MEASURED AS-BUILT DRAWING OF THE INSTALLED IRRIGATION SYSTEM IN AUTOCAD 2010 FORMAT BEFORE FINAL ACCEPTANCE.
- A 1-YEAR WARRANTY PERIOD SHALL BE PROVIDED FOR SYSTEM AFTER SUBSTANTIAL COMPLETION IS ACCEPTED. START UP AND ADJUSTING OF SYSTEM IN SPRING TIME SHALL BE INCLUDED IN WARRANTY.
- PRIOR TO BID, CONTRACTOR SHALL VERIFY THAT ALL MATERIALS, INSTALLATION PARAMETERS AND OPERATIONS CONFORM TO ALL APPLICABLE CODES AND ORDINANCES. NO LATER THAN FIVE DAYS BEFORE BID SUBMITTALS CONTRACTOR SHALL NOTIFY IRRIGATION CONSULTANT/DESIGNER OF ANY CHANGES REQUIRED DUE TO CURRENT CODE OR ORDINANCE DISCREPANCIES. IF CONTRACTOR DOES NOT COMPLY TO THIS NOTIFICATION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL NECESSARY INSTALLATION CHANGE AND REDESIGN COSTS FOR NON-COMPLIANCE.
- UNLESS OTHERWISE NOTED, THE CONTRACTOR MUST COMPLETE 2 PRESSURE TESTS OF THE IRRIGATION SYSTEM MAINLINE (BOTH TO SHOW NO DROP IN PRESSURE DURING DURATION OF TEST.
 - 2-HOUR PRESSURE TEST AT 1.5 TIMES THE SYSTEM STATIC PRESSURE
 - 24-HOUR PRESSURE TEST AT THE SYSTEM STATIC PRESSURE
- IRRIGATION INSTALLATION CONTRACTOR SHALL PROVIDE OWNER WITH A COLOR-CODED ZONES DIAGRAM PLAN, 8-1/2"X11" LAMINATED SHEET(S), TO IDENTIFY CONTROLLER STATION TO THE CONTROL VALVE NUMBER FOR EACH CONTROLLER. TO BE LOCATED IN ADHESIVE POUCH ATTACHED INSIDE OF CONTROLLER(S).



NOTE

IF 10 OHMS OR LESS RESISTANCE CAN NOT BE ACHIEVED WITH THE GROUND GRID AND BARE WIRE TO THE IRRIGATED AREA, INSTALL 100mm PREPARED PIPE IN CENTER OF THE GROUNDING GRID AND FILL WITH CONCRETE TO SECURE THE GROUNDING. IDEALLY THE PIPE SHOULD BE AS DEEP AS THE GROUND RODS, BARE COPPER WIRE SHALL EXTEND AT LEAST 100' INTO IRRIGATION AREA.

GROUNDING TO BE INSTALLED AS PER BASIC GUIDELINES WITH GROUNDING PLATE.

FOR BIDDING PURPOSES ONLY

ADDENDUM NO. 1 - REVISED SEPTEMBER 2020 - REDUCED PUMP CAPACITY

IRRIGATION DETAILS

<p>IRRIGATION DETAILS</p> <p>CHARLIE BROOKS PARK - PHASE 2</p> <p>FOR</p> <p>CHATHAM COUNTY BOARD OF COMMISSIONERS</p> <p>CHATHAM COUNTY, GEORGIA</p>
--



HODGES, HARBIN,
NEWBERRY & TRIBBLE, INC.
Consulting Engineers

17 PARK OF COMMERCE
BOULEVARD, SUITE 11
SAVANNAH, GEORGIA 31401

(912) 298-0230
(912) 298-0234 (FAX)

PROJ. NO.	1705-038-01
-----------	-------------

SCALE	NOT TO SCALE
-------	--------------

SCORE	NOT TO SCORE
DATE	JULY 2020

DWG.	171116IE-R2
------	-------------

SHEET IR-4 OF IR-5
