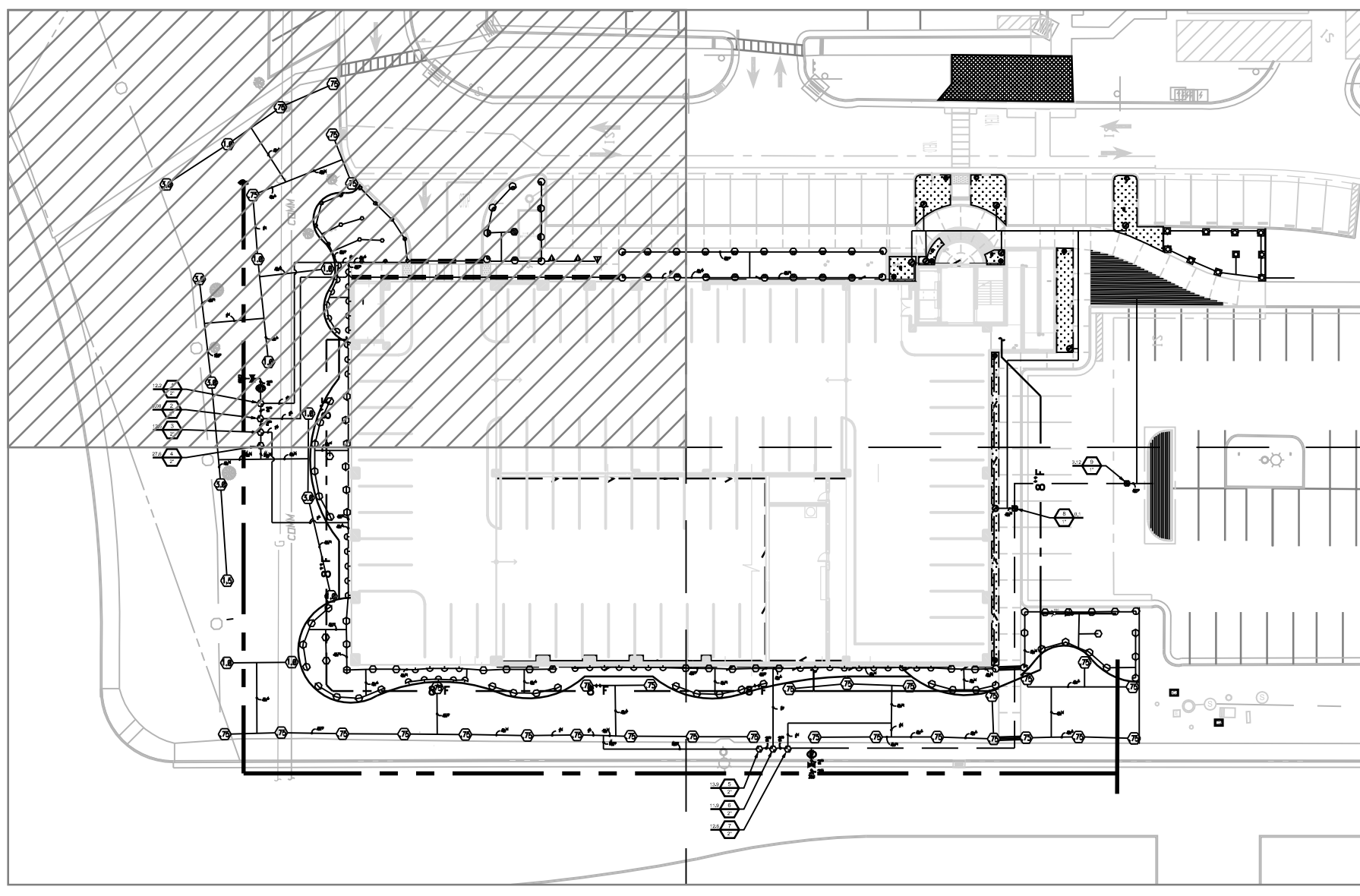
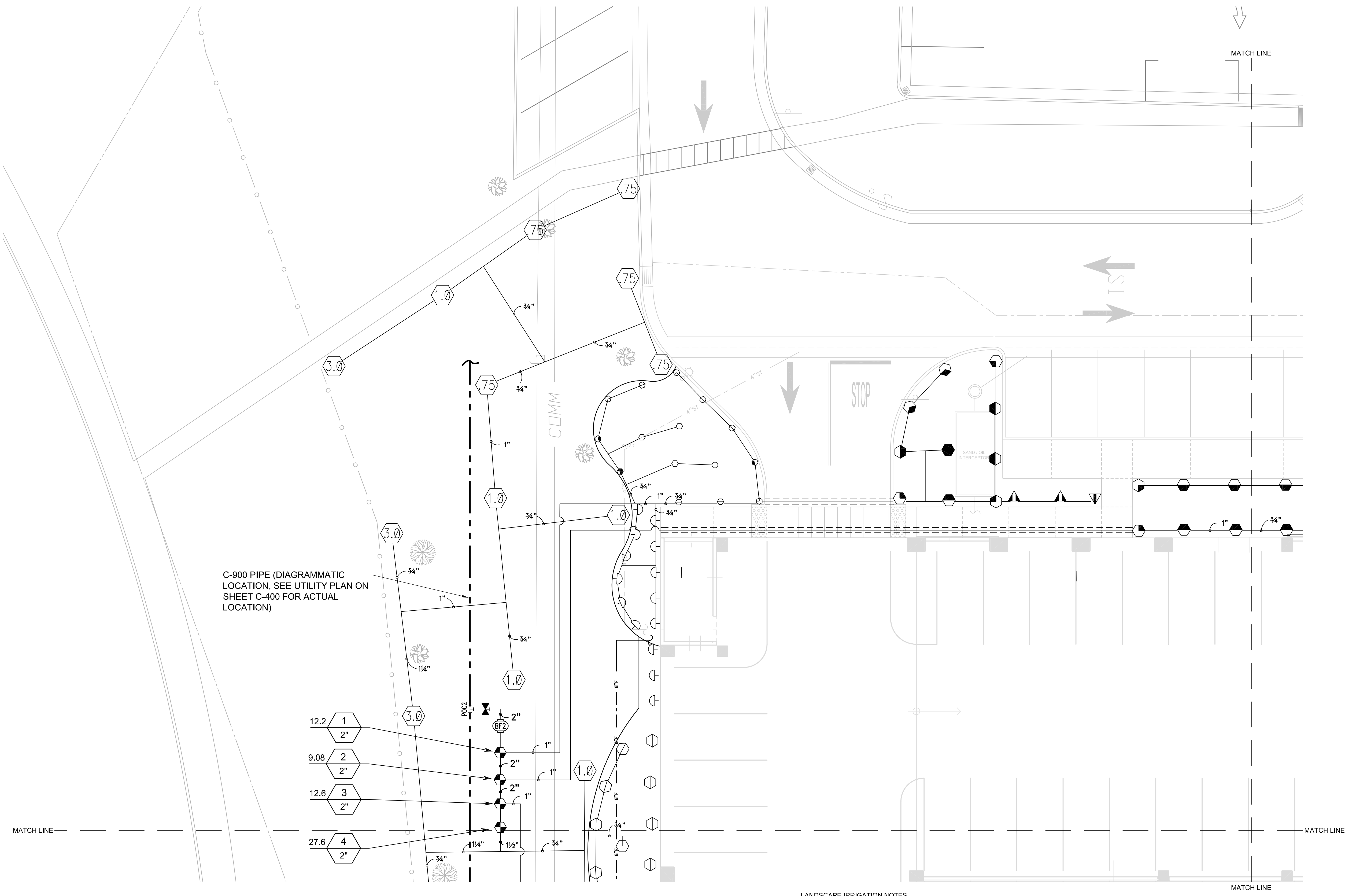


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IRRIGATION PLAN
SCALE 1"=10'

LANDSCAPE IRRIGATION NOTES

1. EXISTING IRRIGATION SYSTEM AND WATERING NOTE: THE CONTRACTOR IS RESPONSIBLE TO KEEP THE EXISTING IRRIGATION SYSTEM TO REMAIN OPERATIONAL TO IRRIGATE ALL LANDSCAPED AREAS. WHERE AUTOMATIC OPERATION OF EXISTING IRRIGATION SYSTEMS IS INTERRUPTED DUE TO CONSTRUCTION ACTIVITIES, THE CONTRACTOR IS RESPONSIBLE TO SUPPLY TEMPORARY IRRIGATION TO NEW AND/OR EXISTING AREAS THAT ARE AFFECTED BY THE SERVICE INTERRUPTION AS REQUIRED DUE TO PREVAILING WEATHER CONDITIONS. THE CONTRACTOR SHALL MAKE REPAIRS TO THE EXISTING SYSTEM AS NEEDED. THE CONTRACTOR IS TO ASSIST CAMPUS MAINTENANCE PERSONNEL AS NEEDED TO KEEP THE EXISTING LANDSCAPED AREAS IRRIGATED. AREAS AFFECTED BY NEW CONSTRUCTION ARE TO BE IRRIGATED BY THE CONTRACTOR. CONTRACTOR IS TO REPLACE ANY DEAD OR STRESSED PLANT MATERIALS (TO MATCH EXISTING) THAT WERE TO REMAIN THAT WERE DAMAGED DUE TO CONSTRUCTION ACTIVITIES.

2. EXISTING IRRIGATION SYSTEM TO BE REPLACED BY NEW IRRIGATION SYSTEM NOTE: THE CONTRACTOR IS TO REMOVE EXISTING SPRINKLERS, VALVES AND OTHER IRRIGATION IMPROVEMENTS VISIBLE AT THE SURFACE IN AREAS TO RECEIVE NEW IRRIGATION AND DELIVER SALVAGED PARTS, INCLUDING, BUT NOT LIMITED TO SPRINKLERS, VALVES, VALVE BOXES ETC., TO THE CAMPUS MAINTENANCE DEPARTMENT. PIPING IS TO BE REMOVED WHERE IT INTERFERES WITH CONSTRUCTION ACTIVITIES. OTHERWISE PIPING MAY BE ABANDONED BELOW GRADE. WHERE PIPING IS BROUGHT TO THE SURFACE, THE CONTRACTOR SHALL CUT IT OFF A MINIMUM OF 12" BELOW GRADE. DEPRESSIONS AND HOLES THAT ARE CREATED FROM REMOVING EXISTING IRRIGATION IMPROVEMENTS BEING REPLACED ARE TO BE FILLED WITH CLEAN TOPSOIL LEVEL WITH SURROUNDING GRADE AND COMPACTED. IRRIGATION SYSTEM AND BUILDING WATER ARE TO REMAIN INTACT AND OPERATIONAL.

3. IRRIGATION WATER AVAILABILITY NOTE: THE CONTRACTOR IS TO INSTALL ALL REROUTED MAIN PIPES WHILE LEAVING THE EXISTING IRRIGATION SYSTEM IN SERVICE DURING THE PROJECT. WHEN ALL PIPING AND WIRE REROUTING WORK IS COMPLETE THE CONTRACTOR MAY ARRANGE TO SHUT OFF THE WATER TO MAKE FINAL CONNECTIONS FOR A PERIOD OF TIME NOT TO EXCEED TWO DAYS. THE CAMPUS MAINTENANCE SUPERVISOR IS TO BE GIVEN A MINIMUM OF ONE WEEK WRITTEN NOTICE TO OVER-WATER THE CAMPUS AREAS IN QUESTION PRIOR TO SHUTTING OFF THE WATER TO MAKE FINAL CONNECTIONS. IF PREVAILING WEATHER CONDITIONS ARE OVER 95 DEGREES DAYTIME HIGH TEMPERATURES, THEN THE SHUT DOWN DURATION MAY BE LIMITED TO NO MORE THAN ONE DAY AS DECIDED BY CAMPUS MAINTENANCE SUPERVISOR.


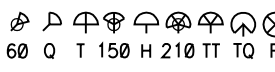
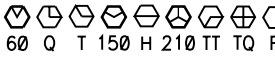
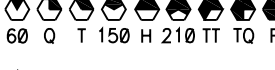
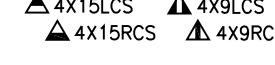








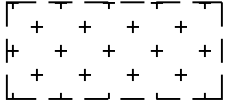
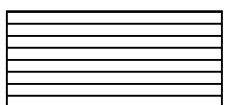






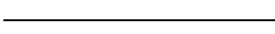
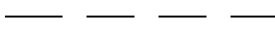
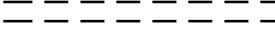
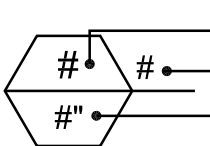
4. EXISTING TURF, PLANTS & TREES TO REMAIN & PROTECT NOTE: THE CONTRACTOR IS RESPONSIBLE TO REPLACE ANY EXISTING TURF, PLANT MATERIALS OR TREES THAT ARE TO REMAIN AND PROTECT. EXISTING TURF, PLANT MATERIAL OR TREES THAT ARE DAMAGED DUE TO CONSTRUCTION ACTIVITIES, VEHICLE DAMAGE, AND STRESS DUE TO LACK OF WATER OR OTHER DETERIORATION OF THE EXISTING AREAS TO REMAIN ARE TO BE RESTORED BY THE CONTRACTOR TO THE EXISTING CONDITION PRIOR TO THE PROJECT AT NO ADDITIONAL COST TO THE HOSPITAL. THIS INCLUDES DAMAGE THAT MAY OCCUR AT ANY AREA OF THE HOSPITAL CAMPUS.

5. CONTRACTOR IS RESPONSIBLE FOR REMOVAL AND DISPOSAL OF ANY VEGETATION WITHIN THE PROJECT AREA THAT IS NOT CALLED TO REMAIN AND PROTECT. ANY ADJACENT LANDSCAPE AREAS OUTSIDE THE PROJECT AREA THAT ARE TO REMAIN AND PROTECT THAT ARE DAMAGED, ARE TO BE REPAIRED AND RESTORED AT NO ADDITIONAL COST TO THE DISTRICT. CONTRACTOR IS TO VISIT THE SITE PRIOR TO BID TO VERIFY EXISTING CONDITIONS AND IMPROVEMENTS.

6. EXISTING IRRIGATION REMOTE CONTROL VALVES TO BE REMOVED NOTE: PRIOR TO ANY DEMOLITION WORK, CONTRACTOR IS TO FIELD VERIFY THAT ANY IRRIGATION SYSTEMS CONNECTED TO REMOTE CONTROL VALVES NOTED TO BE REMOVED HAVE NEW IRRIGATION PLANNED FOR THOSE AREAS. IF ANY IRRIGATION SYSTEM, OR PART THERE OF, IS LOCATED IN AN EXISTING AREA TO REMAIN & PROTECT, THE CONTRACTOR IS TO LEAVE THAT VALVE, OR A PORTION OF IT, IN SERVICE AS REQUIRED. NOTIFY THE LANDSCAPE ARCHITECT FOR DIRECTION. CONTRACTOR TO FIELD VERIFY.

7. PROVIDE TORRO TDC SERIES STATION DECODERS TO TIE IN TO MASTER CONTROLLER. CONTRACTOR TO COORDINATE WITH COTAR FOR LOCATION AND TIE-INS.

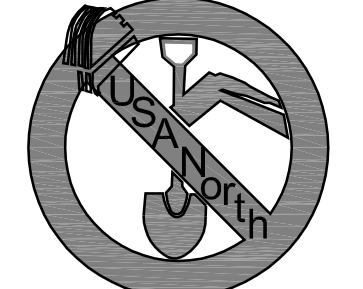
IRRIGATION SCHEDULE

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY	PSI		
	Toro 570Z-4P-E 10' radius Turf Spray, 4" popup with purple cap.	10	30		
	Toro O-T-570Z-6P 5 Series Shrub Spray, 6" popup, Precision Series spray nozzles.	45	30		
	Toro O-T-570Z-6P 8 Series Shrub Spray, 6" popup, Precision Series spray nozzles.	84	30		
	Toro O-T-570Z-6P 10 Series Shrub Spray, 6" popup, Precision Series spray nozzles.	30	30		
	Toro O-T-570Z-6P 4X Strip Spray Shrub Spray, 6" popup, Precision Series spray nozzles.	3	30		
SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY	PSI	GPM	RADIUS
	Toro MINIB-4P-CV Turf Rotor, 4" lawn popup, with check valve, stainless steel adjustment screw, 40-360 adjustable arc.	32	40	0.90	21'
	Toro MINIB-4P-CV Turf Rotor, 4" lawn popup, with check valve, stainless steel adjustment screw, 40-360 adjustable arc.	8	40	1.10	27'
	Toro MINIB-4P-CV Turf Rotor, 4" lawn popup, with check valve, stainless steel adjustment screw, 40-360 adjustable arc.	1	40	1.50	30'
	Toro MINIB-4P-CV Turf Rotor, 4" lawn popup, with check valve, stainless steel adjustment screw, 40-360 adjustable arc.	5	40	3.00	35'
SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY			
	Toro DZK-700-1-LF Drip zone valve kit, 1" 700 UltraFlow, in-line, low-flow	2			
	Pipe Transition Point Pipe transition point from PVC lateral to drip tubing with riser in drip box.	8			
	Toro T-FCH-H-FIPT Flush Valve, plumbed to flush manifold at low point.	9			
	Toro T-DPJ02-A-BLUE Single Outlet Emitter Single Outlet Emitter, 10 - 50 PSI, 0.5 GPH, pressure-compensating. 0.5 gph=Blue, 1.0 gph=Black, 2.0 gph=Red.	4			
	Area to Receive Drip Emitters Toro DPC-DC Single Outlet Emitter, 8 - 60 PSI, 0.5, 1.0, and 2.1 GPH. Self-flushing, pressure-compensating, with dust cap adapter. 0.5 gph=Blue, 1.0 gph=Black, 2.1 gph=Red.	1,127 s.f.			
	Area to Receive Dripline Toro RGP-218 (18) Landscape Dripline with Rootguard Protection and 0.53gph emitters at 18" o.c. Dripline lateral rows spaced at 18" apart, with emitters offset for triangular pattern.	709.0 s.f.			
SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY			
	Toro 220-26-08 Brass Electric Remote Control Valve, with 60 Hz SpikeGuard solenoid.	7			
	KBI WLT-S PVC Schedule 40 Ball Valve, Slip X Slip	2			
	Febco 825Y 2" Reduced Pressure Backflow Preventer	1			
	Febco 825Y 2" Reduced Pressure Backflow Preventer	1			
	Existing Irrigation Controller	1			
	Existing Irrigation Controller	1			
	Irrigation Lateral Line: PVC Schedule 40				
	Irrigation Mainline: PVC Schedule 40				
	Pipe Sleeve: PVC Schedule 40 Typical pipe sleeve for irrigation pipe. Pipe sleeve size shall allow for irrigation piping and their related couplings to easily slide through sleeving material. Extend sleeves 18 inches beyond edges of paving or construction.				
	Valve Callout Valve Number Valve Flow Valve Size				

VALVE SCHEDULE

NUMBER	MODEL	SIZE	TYPE	WIRE	PSI	PSI @ POC	GPM	PRECIP
1	Toro 220-26-08	2"	Shrub Spray	34.50	9.86	0.74 in/h		
2	Toro 220-26-08	2"	Shrub Spray	36.67	9.08	0.87 in/h		
3	Toro 220-26-08	2"	Shrub Spray	36.52	12.61	0.63 in/h		
4	Toro 220-26-08	2"	Turf Rotor	45.92	57.55	27.50	0.46 in/h	
5	Toro 220-26-08	2"	Turf Rotor	45.18	56.53	13.90	0.43 in/h	
6	Toro 220-26-08	2"	Shrub Spray	35.99	11.86	0.64 in/h		
7	Toro 220-26-08	2"	Turf Rotor	45.42	56.75	12.60	0.60 in/h	
8	Toro DZK-700-1-LF	1"	Area for Drip Emitters	32.00	0.02	Unknown		
9	Toro DZK-700-1-LF	1"	Area for Dripline	33.21	3.12	0.42 in/h		
	Common Wire			254.1				

Call USA at:
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AT LEAST 48 HOURS
BEFORE YOU DIG!

CONSTRUCTION DOCUMENTS FINAL SUBMISSION

CONSULTANTS:		ARCHITECT/ENGINEERS:		Drawing Title Irrigation Plan		Project Title VA Northern California Health Care Sys. Parking Structure		Project Number 612-CSI-102		Office of Construction and Facilities Management Department of Veterans Affairs	
				Approved Project Director		Location 10535 Hospital Way, Mather CA		Building Number -			
Revisions						Date 05/19/2011		Checked ECF		Drawing Number LS-201 Dwg. 27 of 122	