SCOPE OF WORK

IN GENERAL THE SCOPE OF WORK INCLUDES THE REPLACEMENT OF THE EXISTING IRRIGATION SYSTEM THE IN DESIGNATED AREAS AND REPLACED WITH NEW IRRIGATION WIRING, WIRE CONDUITS, IRRIGATION PIPING, VALVES, AND SPRINKLER HEADS. EXISTING TURF AREAS SHALL BE THATCHED, SANDED, AND OVER-SEEDED. SECTIONS OF EXISTING GRASS WILL BE RE-PLANTED WITH NEW SOD TURF.

APPLICABLE CODES & STANDARDS

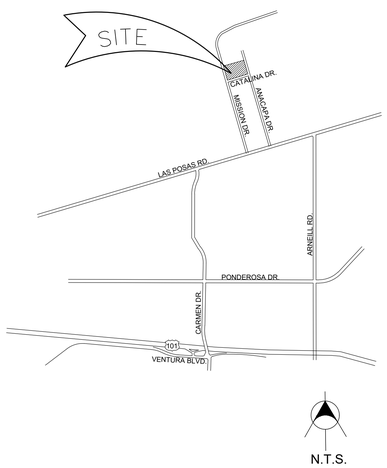
PART 1 - 2026 CALIFORNIA BUILDING STANDARD ADMINISTRATIVE CODE. TITLE 24 C.C.R.

PART 2 - 2026 CALIFORNIA BUILDING CODE - TITLE 24 C.C.R.

DEVELOPMENT CONSTRUCTION PROGRAM:

THE CONTRACTOR SHALL IMPLEMENT A CONSTRUCTION PROGRAM THAT PREVENTS ILLICIT CONSTRUCTION RELATED DISCHARGES OF POLLUTANTS INTO THE MS4, IMPLEMENTS AND MAINTAINS STRUCTURAL AND NON-STRUCTURAL BMPS TO REDUCE POLLUTANTS IN STORM WATER RUNOFF FROM THE CONSTRUCTION SITE, REDUCE CONSTRUCTION SITE DISCHARGES OF POLLUTANTS FROM THE MS4 TO THE MAXIMUM EXTENT PRACTICAL (MEP) AND PREVENTS CONSTRUCTION SITE DISCHARGES FROM THE MS4 FROM CAUSING OR CONTRIBUTING TO A VIOLATION OF WATER QUALITY STANDARDS.

VICINITY MAP



ABREVIATIONS

A.B.-	ANCHOR BOLT	GA-	GAUGE
BLKG.-	BLOCKING	GAL.	GALVANIZED
B.J.-	BALCONY JOISTS	HORZ.	HORIZONTAL
BLK.-	BLOCK	L.L.V.-	LONG LEG VERTICAL
BM.-	BEAM	L.L.H.-	LONG LEG HORIZONTAL
B.N.-	BOUNDRY NAIL	MAX-	MAXIMUM
(B)-	BOTTOM	MIN-	MINIMUM
CLR-	CLEAR	M.L.-	MACHINE BOLT
CMU-	CONCRETE MASONRY	(N)-	NEW
COL.-	COLUMN	NTS-	NOT TO SCALE
C.J.-	COLD JOINT	O.C.-	ON CENTER
CONC.-	CONCRETE	OPP.-	OPPOSITE
CONN.-	CONNECTION	R.J.-	ROOF JOIST
CONT.-	CONTINUOUS	R.B.-	ROOF BEAM
C TO C-	CENTER TO CENTER	REF.-	REFERENCE
CNTRSNK-	COUNTERSINK	P.R.T.-	PREFAB ROOF TRUSSES
DBL-	DOUBLE	P.O.T -	PATH OF TRAVEL
DIAM-	DIAMETER	REINF.-	REINFORCING STEEL
D.F.-	DOUGLAS FIR	SEL. STR.-	SELECT STRUCTURAL
DRWGS-	DRAWINGS	SHTG.-	SHEATHING
(E)-	EXISTING	STAG-	STAGGER
EA.-	EACH	SIM.-	SIMILAR
ELEV-	ELEVATION	S.L. -	SCORE LINE
FLG.-	FLANGE	STD.-	STANDARD
E.J. -	EXPANSION JOINT	STL-	STEEL
FL.-	FLOOR	TYP.-	TYPICAL
FIN-	FINISH	(T)-	TOP
F.F.-	FLOOR JOISTS	TOS-	TOP OF SHEATHING
FOM-	FACE OF MASONRY	T.S.-	TUBE SECTION
FOS-	FACE OF STUD	U.O.N.-	UNLESS OTHERWISE NOTED
FOC-	FACE OF CONCRETE	W or WF-	WIDE FLANGE SHAPE
HD-	SIMPSON HOLDOWN	W/O-	WITHOUT
HT.-	HEIGHT	VERT.-	VERTICAL

APPLICABLE CODES & STANDARDS

PART 1 -	2026 CALIFORNIA BUILDING STANDARD ADMINISTRATIVE CODE. TITLE 24 C.C.R.
PART 2 -	2026 CALIFORNIA BUILDING CODE - TITLE 24 C.C.R.
PART 11 -	2026 CALIFORNIA GREEN BUILDING STANDARDS CODE

SYMBOLS

DETAIL CALL-OUT

4 — DETAIL NUMBER

L2.1 — SHEET NUMBER

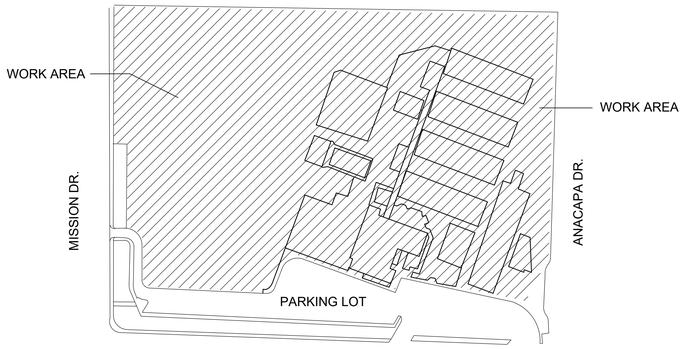
PLEASANT VALLEY SCHOOL DISTRICT

600 TEMPLE AVENUE
CAMARILLO, CA 93010

CAMARILLO HEIGHTS STEM ACADEMY LANDSCAPE IMPROVEMENTS

35 CATALINA DRIVE
CAMARILLO, CA 93010

CAMPUS MAP



SCALE: 1:100

SCHEDULE OF DRAWINGS

SHEET NO.	SHEET REFERENCE	SHEET TITLE
1	L1.1	COVER SHEET
2	L2.1	IRRIGATION PLAN
3	L2.2	IRRIGATION PLAN
4	L2.3	IRRIGATION LEGEND & NOTES
5	L3.1	PLANTING PLAN
6	L3.2	PLANTING PLAN
7	L4.1	LANDSCAPE DETAILS

JORDAN & BAIN
LANDSCAPE ARCHITECTS, INC.
459 NORTH VENTURA AVE., VENTURA CA 93001
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REGISTERED LANDSCAPE ARCHITECT
JAMES BAIN
No. 2414
04/2026
RENEWAL DATE
01/04/26
STATE OF CALIFORNIA

REVISIONS

NO.	DATE	BY	DESCRIPTION

CLIENT
PLEASANT VALLEY SCHOOL DISTRICT
600 TEMPLE AVENUE
CAMARILLO, CA. 93010

SHEET TITLE
COVER SHEET

PROJECT
CAMARILLO HEIGHTS STEM ACADEMY LANDSCAPE IMPROVEMENTS
35 CATALINA DRIVE
CAMARILLO, CA. 93010

DRAWN:	J. BAIN	
CHECKED:	J. BAIN	
PRINTED FOR:		
PLAN CHECK		02-04-26
BID		02-04-26
CONSTRUCTION		02-04-26

DRAWING
L1.1

SHEET 1 OF 7
PROJECT No. 25.40

JORDAN & BAIN
LANDSCAPE ARCHITECTS, INC.
430 NORTH VENTURA AVE., VENTURA CA 93001
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REGISTERED LANDSCAPE ARCHITECT
STUART BAIN
No. 2509
RENEWAL 08/31/2019
STATE OF CALIFORNIA

NO.	DATE	BY	DESCRIPTION

REVISIONS

CLIENT
PLEASANT VALLEY SCHOOL DISTRICT
600 TEMPLE AVENUE
CAMARILLO, CA. 93010

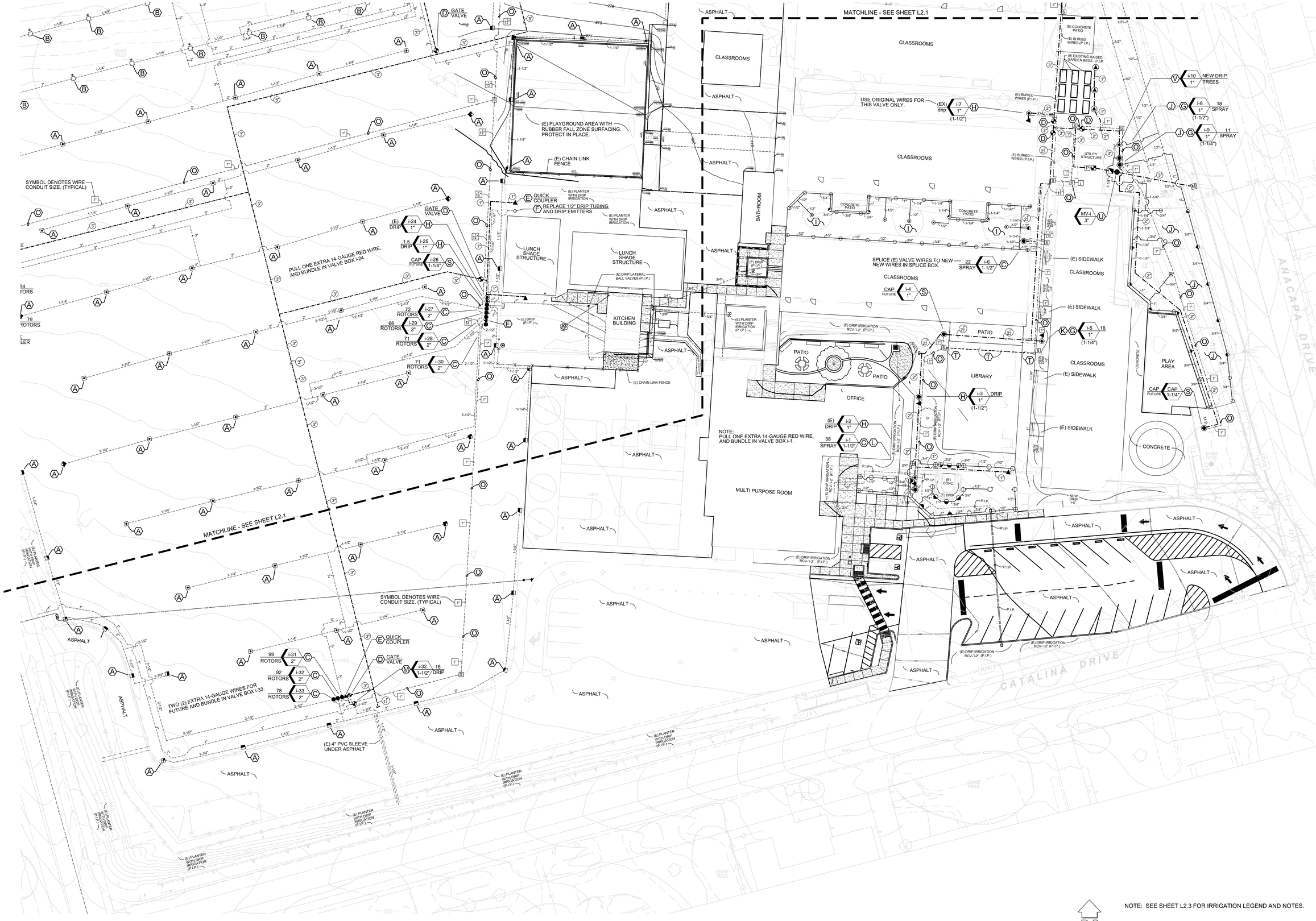
SHEET TITLE
IRRIGATION PLAN

PROJECT
CAMARILLO HEIGHTS STEM ACADEMY
LANDSCAPE IMPROVEMENTS
35 CATALINA DRIVE
CAMARILLO, CA. 93010

DRAWN:	J. BAIN
CHECKED:	J. BAIN
PRINTED FOR:	
PLAN CHECK	02-04-26
BID	02-04-26
CONSTRUCTION	02-04-26

DRAWING
L2.1
SHEET 2 OF 7
PROJECT No. 25.40




MATCHLINE - SEE SHEET L2.1
MATCHLINE - SEE SHEET L2.1
SYMBOL DENOTES WIRE CONDUIT SIZE. (TYPICAL)
PULL ONE EXTRA 14-GAUGE RED WIRE, AND BUNDLE IN VALVE BOX I-24.
(E) PLAYGROUND AREA WITH RUBBER FALL ZONE SURFACING. PROTECT IN PLACE.
(E) CHAIN LINK FENCE
QUICK COUPLER
REPLACE 1/2" DRIP TUBING AND DRIP EMITTERS
GATE VALVE
(E) DRIP I-24 1"
1.5 DRIP I-25 1"
CAP FUTURE I-26 1-1/4"
72 ROTORS I-27 2"
66 ROTORS I-29 2"
71 ROTORS I-28 2"
71 ROTORS I-30 2"
LUNCH SHADE STRUCTURE
LUNCH SHADE STRUCTURE
(E) DRIP LATERAL BALL VALVES (P.I.P.)
KITCHEN BUILDING
BATHROOM
(E) DRIP (P.I.P.)
(E) PLANTER WITH DRIP IRRIGATION
(E) CHAIN LINK FENCE
ASPHALT
CLASSROOMS
CLASSROOMS
CLASSROOMS
CLASSROOMS
CLASSROOMS
USE ORIGINAL WIRES FOR THIS VALVE ONLY.
(EX) drip I-7 1" (1-1/2")
(E) BURIED WIRES (P.I.P.)
(E) CONCRETE PATIO
(E) BURIED WIRES (P.I.P.)
(9) EXISTING RAISED GARDEN BEDS - P.I.P.
UTILITY STRUCTURE
NEW I-10 NEW DRIP TREES
I-8 18 SPRAY (1-1/2")
I-9 11 SPRAY (1-1/4")
MV-1 3"
CONCRETE PATIO
CONCRETE PATIO
SPLICE (E) VALVE WIRES TO NEW NEW WIRES IN SPLICE BOX.
22 SPRAY I-6 1-1/2"
CAP FUTURE I-4 1"
(E) DRIP IRRIGATION RCV-1/2" (P.I.P.)
(E) PLANTER WITH DRIP IRRIGATION (P.I.P.)
PATIO
PATIO
OFFICE
LIBRARY
I-3 DRIP 1" (1-1/2")
I-5 16 1" (1-1/4")
(E) SIDEWALK
(E) SIDEWALK
(E) SIDEWALK
PLAY AREA
CAP FUTURE CAP 1-1/4"
CONCRETE
NOTE: PULL ONE EXTRA 14-GAUGE RED WIRE, AND BUNDLE IN VALVE BOX I-1.
(E) DRIP I-2 1"
38 SPRAY I-1 1-1/2"
MULTI PURPOSE ROOM
(E) CONC.
NEW DRIP I-5
P.I.P.
ASPHALT
ASPHALT
ASPHALT

PROJECT KEY NOTES

SYMBOL	DESCRIPTION
A	REMOVE EXISTING I-40 TURF ROTOR WITH SWING JOINT TO LATERAL FITTING - REPLACE WITH NEW I-40 ROTOR ASSEMBLY: FIELD VERIFY THE EXACT LOCATION OF EXISTING HUNTER I-40 4" POP UP TURF ROTOR IN THE FIELD. EXCAVATE AND EXPOSE THE EXISTING TURF ROTOR INCLUDING THE EXISTING 1" PVC SWING JOINT ASSEMBLY TO THE EXISTING SCH. 40 PVC THREADED FITTING ON THE LATERAL PIPE. REMOVE AND DISPOSE OF THE EXISTING HUNTER 4" I-40 TURF ROTOR BODY AND COMPLETE 1" SWING JOINT ASSEMBLY TO EXISTING SCH. 40 PVC THREADED LATERAL FITTING. REPLACE WITH (1) 1" SCH. 40 PVC STREET ELBOW THREADED INTO EXISTING LATERAL FITTING, (1) 1" X 12" LONG SCH. 80 PVC NIPPLE, AND (2) 1" MARLEX STREET ELBOWS. THREAD (1) 1" MARLEX ELBOW ONTO THE SCH. 80 PVC NIPPLE AND THE OTHER THREADED INTO THE FIRST STREET ELBOW. THREAD THE OPEN MARLEX ELBOW INTO THE BASE OF THE 1" INLET OF THE HUNTER I-40 6" POP UP TURF ROTOR BODY. INSTALL SPECIFIED NOZZLE AND ADJUST HEIGHT OF POP UP TURF ROTOR TO BE INSTALLED ½" ABOVE EXISTING FINISH GRADE. COMPACT SOIL AROUND SWING JOINT ASSEMBLY AND NEW TURF ROTOR POP UP BODY TO ENSURE THAT THE SOIL WILL NOT SETTLE AND TO KEEP THE POP UP RISER PERPENDICULAR TO FINISH GRADE.
B	REMOVE EXISTING I-20 TURF OR PJP ROTOR WITH SWING JOINT TO LATERAL FITTING - REPLACE WITH NEW I-20 ROTOR ASSEMBLY: FIELD VERIFY THE EXACT LOCATION OF EXISTING HUNTER I-20 4" POP UP TURF ROTOR IN THE FIELD. EXCAVATE AND EXPOSE THE EXISTING TURF ROTOR INCLUDING THE EXISTING ¾" PVC SWING JOINT ASSEMBLY TO THE EXISTING SCH. 40 PVC THREADED FITTING ON THE LATERAL PIPE. REMOVE AND DISPOSE OF THE EXISTING HUNTER 4" I-20 TURF ROTOR BODY AND COMPLETE ¾" SWING JOINT ASSEMBLY TO EXISTING SCH. 40 PVC THREADED LATERAL FITTING. REPLACE WITH (1) ¾"ø SCH. 40 PVC STREET ELBOW INTO EXISTING LATERAL FITTING, (1) ¾" X 12" LONG SCH. 80 PVC NIPPLE, AND (2) ¾" MARLEX STREET ELBOWS THREAD (1) ¾" MARLEX ELBOW ONTO THE END OF THE SCH. 80 PVC NIPPLE AND THE OTHER ¾" MARLEX ELBOW THREAD INTO THE FIRST ¾" STREET ELBOW. THREAD OPEN ELBOW INTO THE BASE OF THE ¾"ø INLET OF THE HUNTER I-20 6" POP UP TURF ROTOR BODY. INSTALL SPECIFIED NOZZLE AND ADJUST HEIGHT OF POP UP TURF ROTOR TO BE INSTALLED ½" ABOVE EXISTING FINISH GRADE. COMPACT SOIL AROUND SWING JOINT ASSEMBLY AND NEW TURF ROTOR POP UP BODY TO ENSURE THAT THE SOIL WILL NOT SETTLE AND TO KEEP THE POP UP RISER PERPENDICULAR TO FINISH GRADE.
C	IRRIGATION POINT OF CONNECTION 'C' - REPLACE EX. REMOTE CONTROL VALVE WITH SAME SIZE NEW VALVE ASSEMBLY: LOCATE EXISTING REMOTE CONTROL VALVE IN A PLASTIC VALVE BOX IN LANDSCAPE PLANTER. EXCAVATE AROUND EXISTING REMOTE CONTROL VALVE AND VALVE BOX. REMOVE AND DISPOSE OF EXISTING VALVE BOX. REMOVE EXISTING REMOTE CONTROL VALVE WITH ALL EXISTING FITTINGS AND NIPPLES TO EXISTING MAINLINE. INSTALL NEW FITTINGS, NIPPLES, AND ALL COMPONENTS AS IDENTIFIED IN REMOTE CONTROL VALVE DETAIL TO REPLACE EXISTING VALVE WITH A NEW WEATHERMATIC 11024 SERIES REMOTE CONTROL VALVE. INSTALL NEW 3M WIRE CONNECTORS AND CONNECT NEW 14-GAUGE WIRES TO NEW REMOTE CONTROL VALVE SOLENOID. INSTALL NEW SCH. 40 PVC LATERAL SEGMENT TO RECONNECT TO EXISTING PVC LATERAL PIPING. REPLACE ALL EXISTING SPRINKLER HEADS AS PER PLAN. INSTALL NEW PLASTIC RECTANGULAR VALVE BOX WITH HEAT STAMPED STATION NUMBER ON VALVE BOX LID. INSTALL A NEW STANDARD YELLOW CHRISTY ID TAG ON VALVE SOLENOID. CONFIRM WITH P.V.S.D. REPRESENTATIVE THE EXACT VALVE STATION NUMBER DESIRED FOR EACH REMOTE CONTROL VALVE PRIOR TO PURCHASING CHRISTY ID TAGS AND HEAT STAMPING VALVE BOX LID.
D	IRRIGATION POINT OF CONNECTION 'D' - REMOVE GATE VALVE AND REPLACE WITH NEW LINE DUCTILE IRON FLANGED GATE VALVE: FIELD VERIFY THE EXACT LOCATION OF THE EXISTING BRASS GATE VALVE ATTACHED TO THE EXISTING IRRIGATION MAINLINE. REMOVE AND DISPOSE OF THE EXISTING VALVE BOX. EXCAVATE AND EXPOSE THE EXISTING GATE VALVE AND SURROUNDING PVC IRRIGATION MAINLINE. CUT PVC MAINLINE AND REMOVE THE EXISTING BRASS GATE VALVE. INSTALL A NEW LINE SIZE DUCTILE IRON FLANGED GATE VALVE TO REPLACE TO OLD BRASS GATE VALVE. INSTALL NEW LINE SIZE SCH. 80 PVC VANSTONE FLANGES, SCH. 80 PVC FITTINGS AS REQUIRED TO RECONNECT EXISTING MAINLINE TO NEW DUCTILE IRON FLANGED GATE VALVE AS PER GATE VALVE DETAIL. INSTALL A NEW STANDARD RECTANGULAR GREEN VALVE BOX WITH VALVE BOX EXTENSION OVER CENTER OF GATE VALVE TO PREVENT SOIL FROM COVERING GATE VALVE BODY AND OPERATING NUT.
E	IRRIGATION POINT OF CONNECTION 'E' - REMOVE QUICK COUPLER VALVE ASSEMBLY AND REPLACE WITH NEW UNIT: FIELD VERIFY THE EXACT LOCATION OF THE EXISTING 1" BRASS QUICK COUPLER IN THE FIELD. REMOVE AND DISPOSE OF EXISTING VALVE BOX. EXCAVATE AND EXPOSE THE ENTIRE EXISTING 1" QUICK COUPLER ASSEMBLY TO MAINLINE FITTING. REPLACE WITH NEW 1" BRASS NIPPLES AND FITTINGS AS PER QUICK COUPLER DETAIL ON IRRIGATION PLANS. INSTALL NEW 10" ROUND GREEN VALVE BOX OVER CENTER OF NEW 1" QUICK COUPLER ASSEMBLY. SECURE QUICK COUPLER IN PLACE WITH REBAR STAKE AND SECURE TO QUICK COUPLER WITH (2) STAINLESS STEEL CLAMPS AS PER IRRIGATION DETAIL. HEAT STAMP TOP OF QUICK COUPLER VALVE BOX LID WITH LETTERS 'QC'.
F	REPLACE (E) DRIP TUBING AND DRIP EMITTERS SUPPLYING WATER TO (E) SHRUBS DAMAGED DUE TO RECENT CAMPUS IMPROVEMENTS: FIELD VERIFY THE EXACT OCATION WHERE THE EXISTING 1-1/4" PVC LATERAL TRANSITIONS INTO ON-GRADE ½" SIZE POLYETHYLENE DRIP TUBING AT THE APPROXIMATE LOCATION SHOWN ON THE IRRIGATION PLAN. THE EXISTING ½" POLYETHYLENE DRIP TUBING STAPLED TO FINISH GRADE SUPPLYING WATER TO EXISTING SHRUBS IN THIS PLANTER HAS BEEN DAMAGED AS A RESULT OF RECENT CAMPUS IMPROVEMENTS. THERE IS APPROXIMATELY 100 LINEAR FEET OF ½" POLYETHYLENE DRIP TUBING THAT WILL NEED TO BE REPLACED. THERE ARE APPROXIMATELY (20) EXISTING PLANTS THAT WILL NEED (2) RAIN BIRD MODEL XB-20PC 2 GALLON PER HOUR DRIP EMITTERS EACH. THE NEW DRIP EMITTERS SHALL BE INSTALLED ON OPPOSITE SIDES OF THE PLANT ROOT BALL. SECURE THE DRIP TUBING TO FINISH GRADE USING 6" LONG GALVANIZED STEEL DRIP TUBING STAPLES SPACED 5'-0" O.C.
G	REPLACE EXISTING REMOTE CONTROL VALVE ASSEMBLY WITH NEW SMALLER 1" VALVE ASSEMBLY: LOCATE EXISTING REMOTE CONTROL VALVE IN A PLASTIC VALVE BOX IN LANDSCAPE PLANTER. EXCAVATE AROUND EXISTING REMOTE CONTROL VALVE AND VALVE BOX. REMOVE AND DISPOSE OF EXISTING VALVE BOX. REMOVE EXISTING REMOTE CONTROL VALVE WITH ALL EXISTING FITTINGS AND NIPPLES TO EXISTING MAINLINE. INSTALL NEW SCH. 80 PVC THREADED REDUCER BUSHING INTO EXISTING MAINLINE FITTING TO REDUCE OUTLET TO NEW 1" REMOTE CONTROL VALVE ASSEMBLY. INSTALL SCH. 80 PVC FITTINGS, NIPPLES, AND ALL COMPONENTS AS IDENTIFIED IN REMOTE CONTROL VALVE DETAIL TO REPLACE EXISTING VALVE WITH A NEW 1" WEATHERMATIC 11024 SERIES REMOTE CONTROL VALVE. INSTALL NEW 3M MODEL DBR-Y6 WIRE CONNECTORS AND CONNECT NEW 14-GAUGE WIRES TO NEW REMOTE CONTROL VALVE SOLENOID AS PER MANUFACTURER'S SPECIFICATIONS. INSTALL NEW SCH. 40 PVC LATERAL SEGMENT AND RECONNECT NEW REMOTE CONTROL VALVE TO EXISTING PVC LATERAL LINE. INSTALL NEW JUMBO PLASTIC RECTANGULAR VALVE BOX WITH HEAT STAMPED STATION NUMBER ON VALVE BOX LID. INSTALL A NEW STANDARD YELLOW CHRISTY ID TAG ON VALVE SOLENOID. CONFIRM WITH P.V.S.D. REPRESENTATIVE THE EXACT VALVE STATION NUMBER DESIRED FOR EACH REMOTE CONTROL VALVE PRIOR TO PURCHASING CHRISTY ID TAGS AND HEAT STAMPING VALVE BOX LID.
H	REPLACE EXISTING REMOTE CONTROL VALVE ASSEMBLY WITH NEW SMALLER OR 1" SIZE VALVE ASSEMBLY WITH A 1" DRIP FILTER: LOCATE EXISTING REMOTE CONTROL VALVE IN A PLASTIC VALVE BOX IN LANDSCAPE PLANTER. EXCAVATE AROUND EXISTING REMOTE CONTROL VALVE AND VALVE BOX. REMOVE AND DISPOSE OF EXISTING VALVE BOX. REMOVE EXISTING REMOTE CONTROL VALVE WITH ALL EXISTING FITTINGS AND NIPPLES TO EXISTING MAINLINE. IF EXISTING R.C.V. IS LARGER THAN 1", INSTALL NEW SCH. 80 PVC THREADED REDUCER BUSHING INTO EXISTING MAINLINE FITTING TO REDUCE OUTLET TO NEW 1" SIZE. AFTER THE FITTING OUTLET HAS BEEN CHANGED TO 1" SIZE, OR IF THE EXISTING R.C.V. IS ALREADY 1" SIZE, THEN INSTALL NEW SCH. 80 PVC FITTINGS, NIPPLES, AND ALL COMPONENTS AS IDENTIFIED IN DRIP REMOTE CONTROL VALVE DETAIL TO REPLACE EXISTING VALVE WITH A NEW 1" WEATHERMATIC 11024 SERIES REMOTE CONTROL VALVE WITH A 1" RAIN BIRD PRESSURE REGULATING DRIP FILTER MODEL PRB-QKCHK-100 FILTER. INSTALL NEW 3M MODEL DBR-Y6 WIRE CONNECTORS AND CONNECT NEW 14-GAUGE WIRES TO NEW REMOTE CONTROL VALVE SOLENOID AS PER MANUFACTURER'S SPECIFICATIONS. INSTALL NEW SCH. 40 PVC LATERAL SEGMENT AND RECONNECT NEW REMOTE CONTROL VALVE TO EXISTING LATERAL LINE. INSTALL NEW JUMBO PLASTIC RECTANGULAR VALVE BOX WITH HEAT STAMPED STATION NUMBER ON VALVE BOX LID. INSTALL A NEW STANDARD YELLOW CHRISTY ID TAG ON VALVE SOLENOID. CONFIRM WITH P.V.S.D. REPRESENTATIVE THE EXACT VALVE STATION NUMBER DESIRED FOR EACH REMOTE CONTROL VALVE PRIOR TO PURCHASING CHRISTY ID TAGS AND HEAT STAMPING VALVE BOX LID.
I	REPAIR EXISTING LAWN SPRINKLER SYSTEM AS A RESULT OF RECENTLY ADDED CONCRETE PATIO AREAS: TWO CONCRETE PATIO AREAS WITH FURNITURE HAVE BEEN INSTALLED INTO THE EXISTING TURF AREA. TRENCH AND INSTALL NEW 6" POP UP TURF SPRAY BODIES WITH ROTATING NOZZLES AND NEW SCH. 40 PVC LATERAL PIPING AS ILLUSTRATED ON PLAN TO IRRIGATE THE EXISTING TURF AREA WHILE MINIMIZING IRRIGATION OVER SPRAY ONTO CONCRETE SIDEWALKS, CONCRETE PATIOS, AND OUTSIDE FURNITURE.
J	REPAIR EXISTING LAWN SPRINKLER SYSTEM AS A RESULT OF RECENTLY RENOVATED KINDERGARTEN PLAY EQUIPMENT PROJECT: THE EXISTING IRRIGATION SYSTEM WITHIN THE KINDERGARTEN TURF PLAY AREA HAS BEEN COMPROMISED DUE TO RECENTLY INSTALLED NEW KINDERGARTEN PLAY EQUIPMENT. STARTING FROM THE NEW REMOTE CONTROL VALVE LOCATION, TRENCH AND INSTALL NEW SCH. 40 PVC LATERALS WITH NEW 6" POP UP TURF SPRAY BODIES WITH ROTATING NOZZLES AS ILLUSTRATED ON PLAN TO IRRIGATE THE EXISTING TURF AREA WHILE MINIMIZING IRRIGATION OVER SPRAY ONTO CONCRETE SIDEWALKS, NEW PLAY EQUIPMENT, AND NEW RUBBERIZED SAFETY FALL SURFACING.
K	CONVERT HYBRID IRRIGATION SYSTEM - 50% - 50% DRIP TO ALL DRIP IRRIGATION - REPLACE (E) RCV WITH NEW 1" DRIP R.C.V.: THE ORIGINAL IRRIGATION SYSTEM CONNECTED TO REMOTE CONTROL VALVE 'i-5' WAS ALL POP UP SPRAY HEADS. OVER TIME, SECTIONS OF THIS IRRIGATED AREA WERE CONVERTED TO DRIP IRRIGATION WHILE STILL OPERATING SPRAY HEADS. THE EXISTING PVC SLEEVES AND LATERAL PVC PIPE SIZES ARE NOTED ON THE PLAN. CONVERT THE ENTIRE IRRIGATION SYSTEM TO NOW BE ALL DRIP IRRIGATION. USE THE EXISTING BURIED PVC LATERAL PIPING LINES LOCATED UNDER THE SIDEWALKS AS WATER SOURCES FOR THE PLANTING AREAS. EACH EXISTING SHRUBS SHALL RECEIVE (2) 2 G.P.H. DRIP EMITTERS EACH ATTACHED TO ½" POLYETHYLENE DRIP TUBING SECURED TO FINISH GRADE USING DRIP TUBING STAKES SPACED 5'-0" O.C. THERE ARE APPROXIMATELY (40) EXISTING SHRUBS IN THE SERIES OF PLANTERS. CONTRACTOR TO FIELD VERIFY THE EXACT QUANTITY OF SHRUBS AND PROVIDE (2) 2 G.P.H. DRIP EMITTERS SPACED ON OPPOSITE SIDES OF EACH SHRUB.
L	REPAIR EXISTING LAWN SPRINKLER SYSTEM AS A RESULT OF RECENTLY RENOVATED CONCRETE SIDEWALK & FENCING PROJECT: THE EXISTING POP UP LAWN IRRIGATION SYSTEM LOCATED IN THE FRONT OF THE MAIN ENTRANCE HAS BEEN COMPROMISED DUE TO RECENTLY RE-CONFIGURED CONCRETE SIDEWALK AND FENCING WORK. STARTING FROM THE NEW REMOTE CONTROL VALVE 'i-1' LOCATION, TRENCH AND INSTALL NEW SCH. 40 PVC LATERALS WITH NEW 6" POP UP TURF SPRAY BODIES WITH SPRAY NOZZLES AS ILLUSTRATED ON PLAN TO IRRIGATE THE EXISTING TURF AREA WHILE MINIMIZING IRRIGATION OVER SPRAY ONTO CONCRETE SIDEWALKS, MASONRY WALLS, AND NEW TUBULAR STEEL FENCING.
M	EXISTING REMOTE CONTROL VALVE - PROTECT IN PLACE: THE EXISTING REMOTE CONTROL VALVE HAS RECENTLY BEEN REPLACED. PROTECT REMOTE CONTROL VALVE ASSEMBLY IN PLACE. EXCAVATE AND EXPOSE THE EXISTING REMOTE CONTROL VALVE ASSEMBLY AND CAREFULLY REMOVE EXISTING VALVE BOX SO IT CAN BE RE-INSTALLED. TRENCH AND INSTALL NEW SCH. 40 PVC ELECTRICAL CONDUIT WITH SWEEP ELBOW SO THAT IT IS WITHIN THE VALVE BOX CAVITY. INSTALL NEW ENGINEERING FABRIC TO PREVENT RODENT ACCESS INTO THE VALVE BOX. PULL NEW 14-GAUGE WIRES THROUGH THE NEW ELECTRICAL CONDUITS AND CONNECT TO EXISTING VALVE SOLENOID USING 3M MODEL DBR-Y6 WATERPROOF WIRE SPLICE CONNECTORS. RE-INSTALL EXISTING VALVE BOX OVER COMPLETED VALVE ASSEMBLY. HEAT STAMP NEW REMOTE CONTROL VALVE STATION NUMBER ON VALVE BOX LID. INSTALL NEW CHRISTY STANDARD YELLOW VALVE I.D. TAG ON VALVE WIRES NEAR SOLENOID.
N	EXISTING SPRINKLER HEAD RECENTLY INSTALLED ON PREVIOUS CAMPUS IMPROVEMENT PROJECTS - PROTECT IN PLACE: FIELD VERIFY THE EXACT LOCATION OF RECENTLY INSTALLED EXISTING SPRINKLER HEADS. PROTECT IN PLACE.

SYMBOL	DESCRIPTION
O	TRENCH AND INSTALLED NEW CONTINUOUS SCH. 40 PVC ELECTRICAL CONDUIT HOUSING NEW 14-GAUGE R.C.V. IRRIGATION WIRES: STARTING AT THE EXISTING AUTO CONTROLLER LOCATION, TRENCH AND INSTALL NEW CONTINUOUS SCH. 40 PVC ELECTRICAL CONDUIT, SIZED AS PER IRRIGATION PLAN, TO HOUSE NEW 14-GAUGE IRRIGATION WIRES. PULL QUANTITY OF NEW 14-GAUGE WIRES THROUGH SCH. 40 PVC ELECTRICAL CONDUITS TO SERVICE ALL NEW REMOTE CONTROL WIRES OR SPARE WIRES IDENTIFIED ON PLANS. THE CONDUIT SHALL BE TRENCHED A MINIMUM DEPTH OF 18" BELOW GRADE AS AS DIRECTED IN THE FIELD BY THE PVSD REPRESENTATIVE SHOULD CONFLICTS ARISE DURING CONSTRUCTION. INSTALL LINE SIZE SCH. 40 PVC SWEEP ELBOWS INTO AND OUT OF ALL WIRE SPLICE BOXES AND REMOTE CONTROL VALVE BOXES INSTALLED ON THIS PROJECT. ONCE ALL 14-GAUGE WIRES HAVE BEEN PULLED THROUGH CONDUITS SEAL OFF OPEN CONDUIT ENDS WITH DUCT PUTTY TO PREVENT WATER INTRUSION INTO OPEN CONDUITS. ALL 14-GAUGE WIRE SPLICES AND CONNECTIONS TO VALVE SOLENOIDS SHALL BE MADE USING 3M MODEL DBR-Y6 WATER PROOF WIRE SPLICE CONNECTORS. ALL SPARE WIRES PULLED FOR FUTURE SHALL BE RED COLORED 14-GAUGE WIRE. THE COMMON WIRES SHALL BE WHITE COLORED 14-GAUGE WIRE. CONTROL WIRES TO ALL REMOTE CONTROL VALVES SHALL BE SELECTED BY INSTALLING CONTRACTOR. ALL REMOTE CONTROL WIRES CONNECTED AT REMOTE CONTROL SOLENOID WITHIN VALVE BOX SHALL BE PROVIDED WITH A STANDARD CHRISTY YELLOW VALVE STATION ID TAG TO MATCH AUTO CONTROLLER STATION NUMBER ASSIGNED TO THE NEW VALVE.
P	EXISTING DIRECT BURIED 14-GAUGE WIRE POINT OF CONNECTION - BEGIN NEW REPLACEMENT WIRES HOUSED WITHIN PVC CONDUITS: THE EXISTING SITE CONDITIONS WILL NOT ALLOW THE REPLACEMENT WIRE RUN FROM BEGINNING AT THE EXISTING AUTO CONTROLLER. CAREFULLY EXCAVATE AND EXPOSE THE (E) DIRECT BURIED 14-GAUGE IRRIGATION WIRES AT THE APPROXIMATE LOCATION SHOWN ON THE PLANS. FIELD VERIFY THE EXACT LOCATION OF BURIED WIRE BUNDLE. THERE SHOULD BE APPROXIMATELY (27) 14-GAUGE CONTROL WIRES AND (1) WHITE COMMON WIRE. FIELD VERIFY THE EXACT QUANTITY OF EXISTING QUANTITY OF 14-GAUGE DIRECT BURIED WIRES. ONCE THE WIRES ARE EXPOSED, TONE ALL WIRES TO DETERMINE THE STATION NUMBER CONNECTED TO THE EXISTING AUTO CONTROLLER OR IF THEY ARE SPARE WIRES. LABEL ALL EXISTING WIRES WITH NUMBERED WIRE CHEVRON TAGS. THE EXISTING WIRES FROM THIS POINT FORWARD HAVE BEEN DESTROYED DUE TO RODENT ACTIVITY. CUT THE WIRES AT THIS LOCATION AND BEGIN TRENCHING OPERATIONS TO INSTALL NEW REPLACEMENT 14-GAUGE WIRES HOUSED IN CONTINUOUS SCH. 40 PVC ELECTRICAL WIRE CONDUITS, SIZES NOTED ON PLANS. INSTALL SCH. 40 PVC WIRE SWEEP ELBOWS INTO AND OUT OF ALL SPLICE BOXES AND REMOTE CONTROL VALVE BOXES. USE ON 3M MODEL DBR-Y6 WATER PROOF WIRE SPLICE CONNECTORS IN SPLICE BOXES AND VALVE BOXES AS WELL AS ON ALL NEW REMOTE CONTROL VALVE SOLENOID CONNECTIONS. PURCHASE AND INSTALL NEW STANDARD YELLOW CHRISTY VALVE I.D. TAGS FOR ALL WIRE SPLICE CONNECTIONS TO NEW REMOTE CONTROL VALVE SOLENOIDS. HEAT STAMP ALL NEW REMOTE CONTROL VALVE BOXES WITH CORRECTION AUTO CONTROLLER STATION NUMBERS. HEAT STAMP ALL WIRE SPLICE BOX LIDS WITH THE LETTERS 'SB'.
Q	INSTALL A SPLICE BOX AT LOCATION OUTSIDE OF UTILITY BUILDING WHERE (E) SPRINKLER WIRES EXIT WALL - USE AS A WIRE P.O.C.: CAREFULLY EXCAVATE AND EXPOSE THE EXISTING 14-GAUGE IRRIGATION WIRE BUNDLE AS THEY EXIST THE UTILITY BUILDING HOUSED IN A SCH. 40 PVC WIRE CONDUIT. TONE WIRES SO THAT REMOTE CONTROL VALVE STATION WIRES 'i-1', 'i-2', 'i-3', 'i-4', 'i-5', 'i-6', 'i-8', 'i-9' AND 'i-10' ARE IDENTIFIED. USE THIS LOCATION TO INSTALL A WIRE SPLICE BOX AND AS A NEW WIRE SPLICE POINT OF CONNECTION FOR THESE REMOTE CONTROL VALVES. LABEL 14-GAUGE WIRE SPLICES IN SPLICE BOX WITH NUMBERED WIRE CHERVON TAGS. TRENCH AND INSTALL NEW 1" SCH. 40 PVC ELECTRICAL CONDUIT AS ILLUSTRATED ON IRRIGATION PLAN AND PULL NEW 14-GAUGE IRRIGATION AND COMMON WIRES THROUGH THE CONDUITS TO THE NEW REMOTE CONTROL VALVES. INSTALL 1" SCH. 40 PVC ELECTRICAL SWEEP ELBOWS INTO AND OUT OF ALL VALVE BOXES. INSTALL CONDUIT DUCT PUTTY TO SEAL OFF ALL OPEN WIRE CONDUITS IN VALVE BOXES ONCE WIRES HAVE BEEN PULLED THROUGH TO PREVENT WATER INTRUSION INTO WIRE CONDUIT. USE ONLY 3M MODEL DBR-Y6 WATER PROOF WIRE CONNECTORS TO SPLICE WIRES TO SOLENOIDS. PURCHASE AND INSTALL STANDARD YELLOW CHRISTY I.D. TAGS FOR ALL REMOTE CONTROL VALVE SOLENOID WIRES.
R	REMOVE EXISTING 1" QUICK COUPLER FROM PVC MAINLINE - REPLACE WITH A NEW 1" UNIVERSAL AIR RELIEF VALVE IN A VALVE BOX: FIELD VERIFY THE EXACT LOCATION OF AN EXISTING 1" QUICK COUPLER IN A EXISTING VALVE BOX WITH A MANIFOLD OF EXISTING REMOTE CONTROL VALVES. EXCAVATE AND EXPOSE THE EXISTING VALVE BOX. REMOVE THE 1" QUICK COUPLER VALVE AND SWING JOINT FITTINGS TO THE EXISTING 3" PVC MAINLINE. INSTALL A NEW 1" CRISPIN AIR RELIEF VALVE USING THE EXISTING 1" MAINLINE FITTING AS A POINT OF CONNECTION. INSTALL AIR RELIEF VALVE AS PER IRRIGATION DETAIL AND COVER WITH A NEW STADARD RECTANGULAR VALVE BOX.
S	REMOVE EXISTING REMOTE CONTROL VALVE - CAP PVC VALVE SUPPLY LINE AND BUNDLE WIRES IN VALVE BOX FOR FUTURE USE: FIELD VERIFY THE EXACT LOCATION OF THE EXISTING REMOTE CONTROL VALVE IDENTIFIED ON THE PLAN THAT IS NO LONGER IN USE. EXCAVATE AND REMOVE THE EXISTING REMOTE CONTROL VALVE AND VALVE BOX. CAREFULLY DISCONNECT THE EXISTING 14-GAUGE CONTROL WIRE AND COMMON WIRE AND SECURE THE ENDS WITH A WATERPROOF WIRE SPLICE CONNECTOR. INSTALL A LINE SIZE SCH. 80 PVC SOLVENT WELD CAP OVER PVC LINE PREVIOUSLY SUPPLYING WATER TO THE REMOTE CONTROL VALVE TO BE USED AS A FUTURE POINT OF CONNECTION FOR POSSIBLE FUTURE VALVE INSTALLATION. COVER BOTH CAPPED MAINLINE AND SALVAGED CONTROL AND COMMON WIRES WITH A NEW RECTANGULAR VALVE BOX. HEAT STAMP THE WORK 'CAP' ON TOP OF THE VALVE BOX LID.
T	INSTALL 1" EMT STARTING FROM PEDESTRIAN SHADE PATHWAY POST AND CONTINUING OVER LIBRARY BUILDING ROOF TO HOUSE WIRES: TRENCH AND INSTALL NEW 14-GAUGE REPLACEMENT WIRES FROM EXISTING AUTO CONTROLLER TO THE EXISTING PEDESTRIAN SHADE PATHWAY SUPPORT POST IDENTIFIED ON IRRIGATION PLAN. INSTALL A WIRE PULL BOX AT THE BASE OF THE SUPPORT POST. WITHIN THE WIRE PULL BOX INSTALL TRANSITION FITTING TO BURIED SCH. 40 PVC WIRE CONDUIT TO 1" EMT METAL CONDUIT. RUN EMT CONDUIT UP THE SIDE OF THE POST AND THEN OVER PEDESTRIAN SHADE STRUCTURE OVER SIDEWALK AND CONTINUE 1" EMT CONDUIT OVER THE LIBRARY ROOF. CONTINUE 1" EMT CONDUIT FROM LIBRARY ROOF DOWN THE WEST SIDE OF THE BUILDING WALL AND INTO LANDSCAPE PLANTER. PULL A TOTAL OF (1) 14-GAUGE WHITE COMMON WIRE AND (5) 14-GAUGE CONTROL WIRES. BUNDLE (1) WIRE WITH CAPPED RCV 'i-4'. BUNDLE (1) SPARE WIRE IN VALVE BOX WITH RCV 'i-1'. ALL OTHER WIRES SHALL BE CONNECTED TO ACTIVE RCV'S 'i-1', 'i-2', AND 'i-3'. CONTRACTOR SHALL USE ALL REQUIRED 1" EMT FITTINGS AS NEEDED TO ADJUST TO ANY UNEVEN ROOF SURFACE OR OTHER OBSTACLE. INSTALL ANOTHER WIRE PULL BOX AT THE LOCATION WHERE THE NEW 1" EMT CONDUIT INTERSECTS THE LANDSCAPE PLANTER. TRANSITION FROM 1" EMT CONDUIT TO 1" SCH. 40 PVC BURIED ELECTRICAL CONDUIT WITHIN THE VALVE BOX. TRENCH AND INSTALL NEW BURIED 1" SCH. 40 PVC ELECTRICAL CONDUIT TO NEW REMOTE CONTROL VALVE LOCATIONS AND AS PER IRRIGATION PLAN.
U	REMOVE EXISTING 3" BRASS MASTER VALVE AND 2" FLOW SENSOR FROM MAINLINE - REPLACE WITH A NEW 3" BALL VALVE: FIELD VERIFY THE EXACT LOCATION OF AN EXISTING 3" BRASS NORMALLY OPEN MASTER VALVE AND 2" PLASTIC FLOW SENSOR INSTALLED ON THE (E) 3" PVC IRRIGATION MAINLINE. EXCAVATE AND EXPOSE BOTH MASTER VALVE AND FLOW SENSOR. CUT 3" PVC MAINLINE AND REMOVE BOTH COMPONENTS FROM THE MAINLINE. INSTALL NEW CLASS 315 PVC MAINLINE SEGMENTS WITH A NEW 3" DUCTILE IRON FLANGED GATE VALVE TO BE USE AS AN ISOLATION VALVE. INSTALL BALL VALVE ON MAINLINE AS PER IRRIGATION DETAILS.
V	REMOVE EXISTING 1" BRASS REMOTE CONTROL VALVE - REPLACE WITH NEW 1" DRIP REMOTE CONTROL VALVE TO IRRIGATE (E) TREES: FIELD VERIFY THE EXACT LOCATION OF AN EXISTING 1" REMOTE CONTROL VALVE. EXCAVATE AND EXPOSE THE EXISTING 1" VALVE AND REMOVE EXISTING VALVE BOX. REMOVE THE EXISTING 1" BRASS REMOTE CONTROL VALVE AND REPLACE WITH A NEW 1" REMOTE CONTROL VALVE ASSEMBLY WITH PRESSURE REGULATING FILTER AS PER DRIP REMOTE CONTROL DETAIL. INSTALL NEW ½" POLYETHYLENE DRIP TUBING ON GRADE TO IRRIGATED PROVIDE DRIP IRRIGATION TO APPROXIMATELY (25) EXISTING FRUIT TREES. INSTALL (2) 2 GALLON PER HOUR DRIP EMITTERS FOR EACH TREE. FIELD MEASURE THE EXACT QUANTITY OF ½" POLYETHYLENE TUBING REQUIRED TO IRRIGATE ALL TREES. SECURE TUBING TO FINISH GRADE USING GPH 'TOUGH AS NAILS' DRIP TUBING STAKES SPCED 5'-0" O.C. INSTALL NEW 14-GAUGE WIRES WITHIN 1" SCH. 40 PVC ELECTRICAL CONDUIT AND CONNECT TO SOLENOID AS PER PLANS AND SPECIFICATIONS.

IRRIGATION WIRE CONDUIT SCHEDULE

ALL CONDUITS TO BE INSTALLED AND SIZED AS PER PLAN.
USE WIRE CONDUIT SCHEDULE ONLY WHEN WIRE CONDUITS ARE NOT SPECIFICALLY CALLED ON ON IRRIGATION PLAN.

QUANTITY OF 14 GAUGE WIRES	SCH. 40 PVC ELECTRICAL SLEEVE SIZE
1 TO 7 WIRES	1" SCH. 40 PVC GRAY ELECTRICAL
8 TO 15 WIRES	1-1/4" SCH. 40 PVC GRAY ELECTRICAL
16 TO 22 WIRES	1-1/2" SCH. 40 PVC GRAY ELECTRICAL
23 TO 35 WIRES	2" SCH. 40 PVC GRAY ELECTRICAL
36 TO 45 WIRES	2-1/2" SCH. 40 PVC GRAY ELECTRICAL
45 TO 60 WIRES	3" SCH. 40 PVC GRAY ELECTRICAL

IRRIGATION SLEEVING SCHEDULE

ALL SLEEVES TO BE INSTALLED 24" BELOW GRADE

MAINLINE OR / LATERAL PIPE SIZE	SLEEVE SIZE REQUIRED
3/4" SCH. 40 PVC / SCH. 40 PVC	1-1/2" SCH. 40 PVC
1" SCH. 40 PVC / SCH. 40 PVC	2" SCH. 40 PVC
1-1/4" SCH. 40 PVC / SCH. 40 PVC	2-1/2" SCH. 40 PVC
1-1/2" SCH. 40 PVC / SCH. 40 PVC	3" CLASS 200 PVC
2" CLASS 315 / SCH. 40 PVC	4" CLASS 200 PVC
2-1/2" CLASS 315 / SCH. 40 PVC	4" CLASS 200 PVC
3" CLASS 315 / SCH. 40 PVC	6" CLASS 200 PVC
4" CLASS 315 / SCH. 40 PVC	6" CLASS 200 PVC
6" CLASS 315 / SCH. 40 PVC	6" CLASS 200 PVC

IRRIGATION CALCULATIONS

CALCULATIONS - VALVE i-31 99 GPM

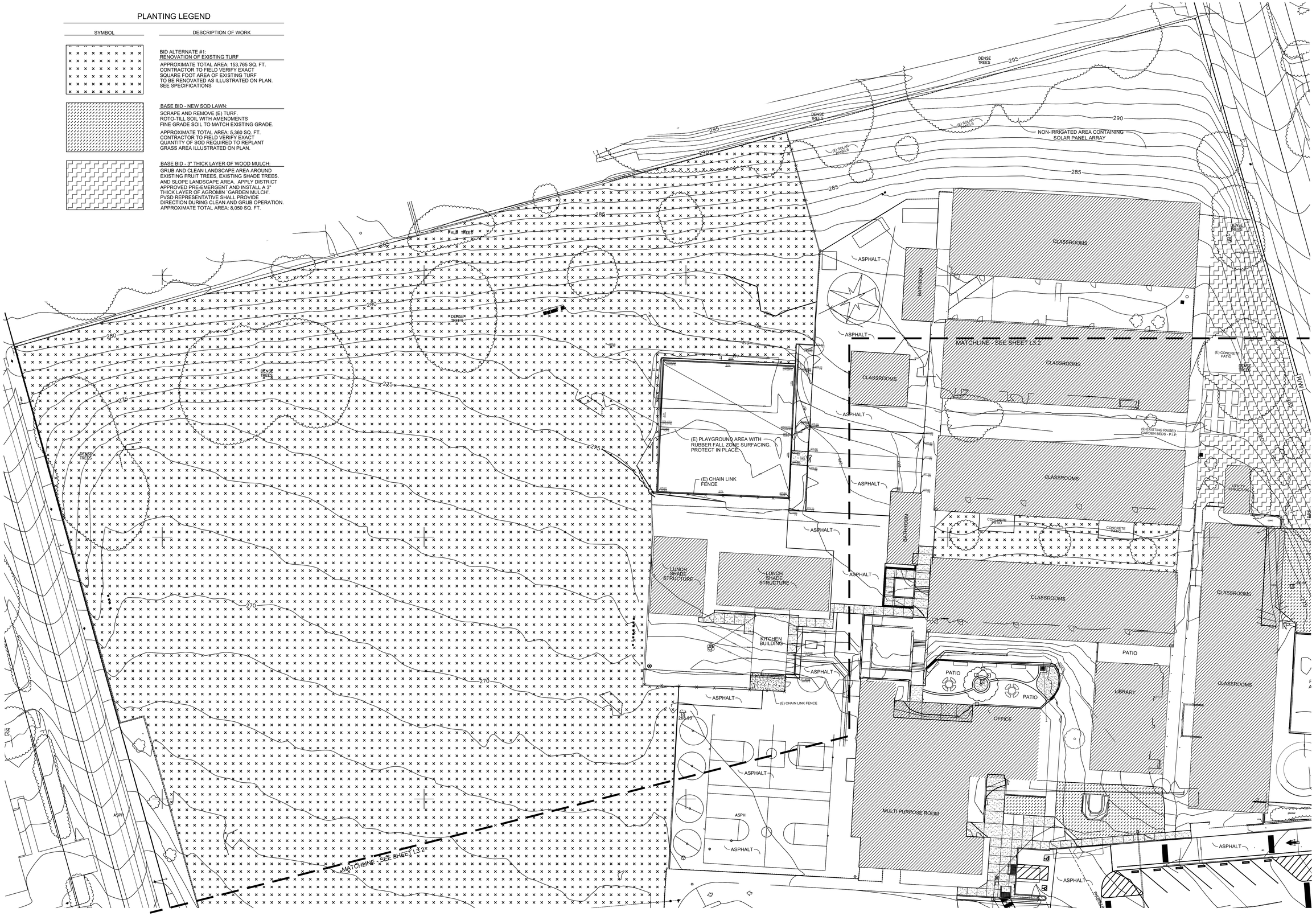
AVAILABLE WATER PRESSURE - VARIES	+50.0 PSI
LOSS @ WATER METER	-7.8 PSI
LOSS METER TO BACKFLOW DEVICE	-0.6 PSI
LOSS @ 3" REDUCED PRESSURE BACKFLOW	-12.0 PSI
LOSS @ MASTER VALVE / FLOW METER	-3.5 PSI
RESIDUAL PRESSURE @ INLET OF PUMP	+26.1 PSI
PRESSURE DISCHARGE AT BOOSTER PUMP	+85.0 PSI
LOSS FROM BOOSTER PUMP TO RCV	-9.0 PSI
LOSS @ REMOTE CONTROL VALVE	-5.2 PSI
LOSS REMOTE CONTROL VALVE TO LAST HEAD	-4.5 PSI
INCREASE - DUE TO ELEVATION CHANGE	+7.8 PSI
LOSS DUE TO FITTINGS & TURBULENCE	-2.5 PSI
TOTAL PRESSURE LOSS FROM PUMP	-13.4 PSI
OPERATING PSI	+71.6 PSI

IRRIGATION PROJECT NOTES

1. PRIOR TO BEGINNING ANY WORK, THE CONTRACTOR AND THE PLEASANT VALLEY SCHOOL DISTRICT (P.V.S.D.) REPRESENTATIVE SHALL PARTICIPATE IN A THOROUGH IRRIGATION SYSTEM REVIEW OF THE PROJECT SITE. ALL REMOTE CONTROL VALVES SHALL BE TURNED ON AND OBSERVED IN OPERATION BY BOTH THE CONT

PLANTING LEGEND

SYMBOL	DESCRIPTION OF WORK
	BID ALTERNATE #1: **RENOVATION OF EXISTING TURF** APPROXIMATE TOTAL AREA: 153,765 SQ. FT. CONTRACTOR TO FIELD VERIFY EXACT SQUARE FOOT AREA OF EXISTING TURF TO BE RENOVATED AS ILLUSTRATED ON PLAN. SEE SPECIFICATIONS
	BASE BID - NEW SOD LAWN: SCRAPE AND REMOVE (E) TURF. ROTO-TILL SOIL WITH AMENDMENTS FINE GRADE SOIL TO MATCH EXISTING GRADE. APPROXIMATE TOTAL AREA: 5,360 SQ. FT. CONTRACTOR TO FIELD VERIFY EXACT QUANTITY OF SOD REQUIRED TO REPLANT GRASS AREA ILLUSTRATED ON PLAN.
	BASE BID - 3" THICK LAYER OF WOOD MULCH: GRUB AND CLEAN LANDSCAPE AREA AROUND EXISTING FRUIT TREES, EXISTING SHADE TREES. AND SLOPE LANDSCAPE AREA. APPLY DISTRICT APPROVED PRE-EMERGENT AND INSTALL A 3" THICK LAYER OF AGROMIN 'GARDEN MULCH'. PVSD REPRESENTATIVE SHALL PROVIDE DIRECTION DURING CLEAN AND GRUB OPERATION. APPROXIMATE TOTAL AREA: 8,050 SQ. FT.



GRAPHIC SCALE

0 10 20 40 60

SCALE: 1"= 20'

JORDAN & BAIN
LANDSCAPE ARCHITECTS, INC.
459 NORTH VENTURA AVE., VENTURA CA 93001
(805) 642-3641 FAX. (805) 653-7874

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REGISTERED LANDSCAPE ARCHITECT
BRIAN GILBERT
No. 3994
04/2026
RENEWAL DATE
02/04/26
STATE OF CALIFORNIA

REVISIONS NO.	DATE	BY	DESCRIPTION

CLIENT
PLEASANT VALLEY SCHOOL DISTRICT
600 TEMPLE AVENUE
CAMARILLO, CA. 93010

SHEET TITLE
PLANTING PLAN

PROJECT
CAMARILLO HEIGHTS STEM ACADEMY
LANDSCAPE IMPROVEMENTS
35 CATALINA DRIVE
CAMARILLO, CA 93010

DRAWN:	J. BAIN		
CHECKED:	J. BAIN		
PRINTED FOR:			
PLAN CHECK:		02-04-26	
BID		02-04-26	
CONSTRUCTION		02-04-26	

DRAWING
L3.1

SHEET 5 OF 7
PROJECT No. 25.40



PLANTING LEGEND

SYMBOL	DESCRIPTION OF WORK
	BID ALTERNATE #1: RENOVATION OF EXISTING TURF APPROXIMATE TOTAL AREA: 153,765 SQ. FT. CONTRACTOR TO FIELD VERIFY EXACT SQUARE FOOT AREA OF EXISTING TURF TO BE RENOVATED AS ILLUSTRATED ON PLAN. SEE SPECIFICATIONS
	BASE BID - NEW SOD LAWN: SCRAPE AND REMOVE (E) TURF. ROTO-TILL SOIL WITH AMENDMENTS FINE GRADE SOIL TO MATCH EXISTING GRADE. APPROXIMATE TOTAL AREA: 5,360 SQ. FT. CONTRACTOR TO FIELD VERIFY EXACT QUANTITY OF SOD REQUIRED TO REPLANT GRASS AREA ILLUSTRATED ON PLAN.
	BASE BID - 3" THICK LAYER OF WOOD MULCH: GRUB AND CLEAN LANDSCAPE AREA AROUND EXISTING FRUIT TREES, EXISTING SHADE TREES. AND SLOPE LANDSCAPE AREA. APPLY DISTRICT APPROVED PRE-EMERGENT AND INSTALL A 3" THICK LAYER OF AGROMIN ' GARDEN MULCH'. PVSD REPRESENTATIVE SHALL PROVIDE DIRECTION DURING CLEAN AND GRUB OPERATION. APPROXIMATE TOTAL AREA: 8,050 SQ. FT.

GRAPHIC SCALE

0 10 20 40 60

SCALE: 1"= 20'

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Pleasant Valley School District PVSD

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REGISTERED LANDSCAPE ARCHITECT
JAMES GILBERT BAIN
No. 2497
04/2008
RENEWAL DATE
02/04/26
STATE OF CALIFORNIA

REVISIONS			
NO.	DATE	BY	DESCRIPTION

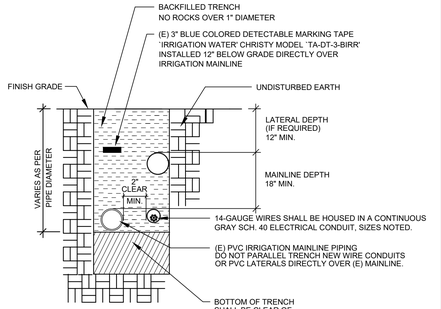
CLIENT
PLEASANT VALLEY SCHOOL DISTRICT
600 TEMPLE AVENUE
CAMARILLO, CA. 93010

SHEET TITLE
PLANTING PLAN

PROJECT
CAMARILLO HEIGHTS STEM ACADEMY
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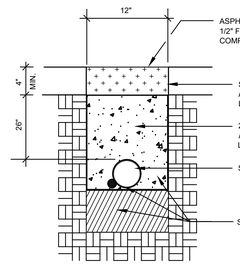
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PLAN CHECK		02-04-26
BID		02-04-26
CONSTRUCTION		02-04-26

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L3.2
SHEET 6 OF 7
PROJECT No. 25.40



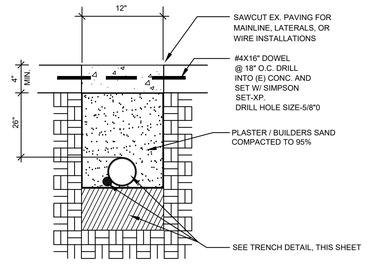
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1 IRRIGATION PIPING TRENCH SECTION



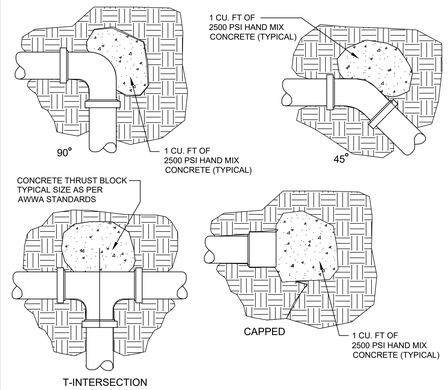
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2 IRRIGATION TRENCH SECTION WITH ASPHALT CUT



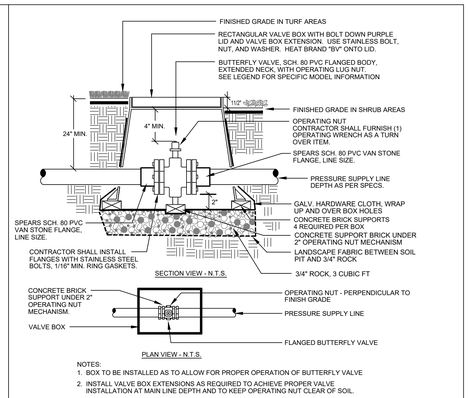
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3 IRRIGATION TRENCH SECTION WITH CONCRETE CUT



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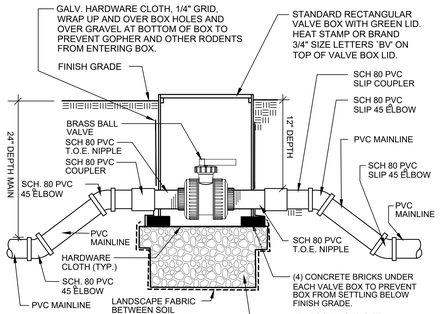
4 CONCRETE THRUST BLOCKS ON MAINLINE



NOTES:
1. BOX TO BE INSTALLED AS TO ALLOW FOR PROPER OPERATION OF BUTTERFLY VALVE
2. INSTALL VALVE BOX EXTENSIONS AS REQUIRED TO ACHIEVE PROPER VALVE INSTALLATION AT MAIN LINE DEPTH AND TO KEEP OPERATING NUT CLEAR OF SOIL.

NOT TO SCALE

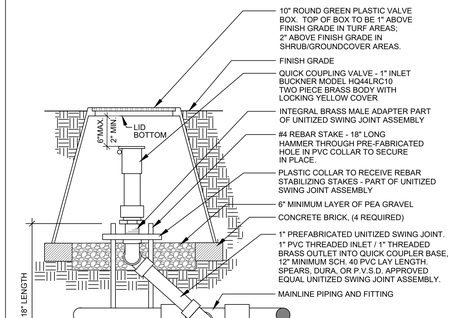
5 FLANGED GATE VALVE ON 2" MAINLINE SIZE OR LARGER



NOTES:
1. BOX TO BE INSTALLED AS TO ALLOW FOR PROPER OPERATION OF BALL VALVE INSTALL AT RIGHT ANGLE TO HARDSCAPE EDGE. INSTALL VALVE IN CENTER OF BOX.
2. INSTALL VALVE BOX EXTENSIONS AS REQUIRED TO ACHIEVE PROPER VALVE INSTALLATION AT MAIN LINE DEPTH.
3. HARDWARE CLOTH: GALVANIZED WELDED STEEL, MESH SHAPE SQUARE 1/4" x 1/4" IN SIZE, GAUGE 23 (MINIMUM THICKNESS SIZE).

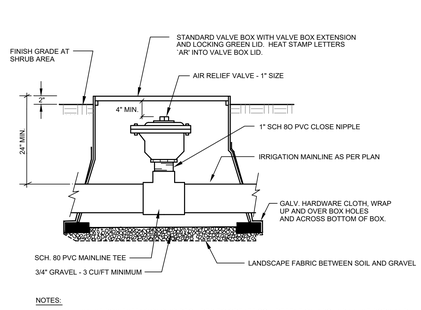
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6 SCH. 80 PVC BALL VALVE ON 1-1/2" PVC MAINLINE OR LESS



NOT TO SCALE

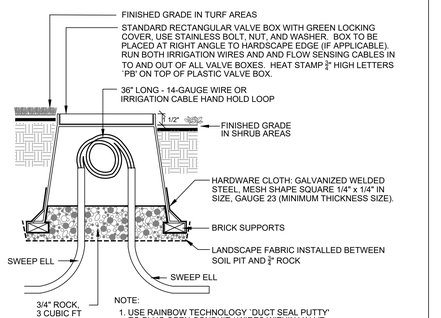
7 QUICK COUPLER



NOTES:
1. INSTALL VALVE BOX EXTENSIONS AS REQUIRED TO CREATE SOIL RETENTION AROUND VALVE BODY AND PIPING TO MAIN LINE DEPTH.
2. HARDWARE CLOTH: GALVANIZED WELDED STEEL, MESH SHAPE SQUARE 1/4" X 1/4" IN SIZE, GAUGE 23 (MINIMUM THICKNESS SIZE).

NOT TO SCALE

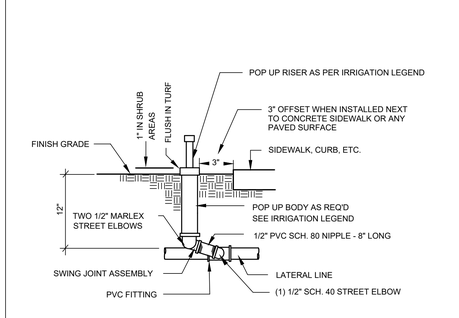
8 IRRIGATION MAINLINE - UNIVERSAL AIR RELEASE VALVE



NOTE:
1. USE RAINBOW TECHNOLOGY 'DUCT SEAL PUTTY' TO PLUG OPEN CONDUIT / WIRES WITHIN VALVE BOX TO PREVENT WATER FROM ENTERING CONDUIT OPENING.
2. USE 3M MODEL DBR-Y6 WATER PROOF WIRE SPLICE CONNECTORS FOR ALL WIRE SPLICES.
3. INSTALL STANDARD YELLOW CHRISTY NUMBERED ID TAGS ON ALL RCV WIRE SPLICE CONNECTIONS.

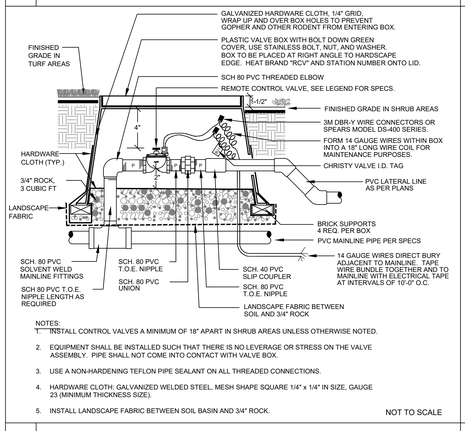
NOT TO SCALE

9 IRRIGATION WIRE PULL OR SPLICE BOX



NOT TO SCALE

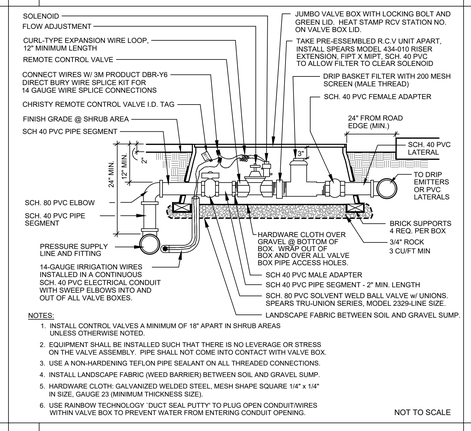
10 POP UP SPRAY HEAD



NOTES:
1. INSTALL CONTROL VALVES A MINIMUM OF 18" APART IN SHRUB AREAS UNLESS OTHERWISE NOTED.
2. EQUIPMENT SHALL BE INSTALLED SUCH THAT THERE IS NO LEVERAGE OR STRESS ON THE VALVE ASSEMBLY. PIPE SHALL NOT COME INTO CONTACT WITH VALVE BOX.
3. USE A NON-HARDENING TEFLON PIPE SEALANT ON ALL THREADED CONNECTIONS.
4. HARDWARE CLOTH: GALVANIZED WELDED STEEL, MESH SHAPE SQUARE 1/4" x 1/4" IN SIZE, GAUGE 23 (MINIMUM THICKNESS SIZE).
5. INSTALL LANDSCAPE FABRIC BETWEEN SOIL BASIN AND 3/4" ROCK.

NOT TO SCALE

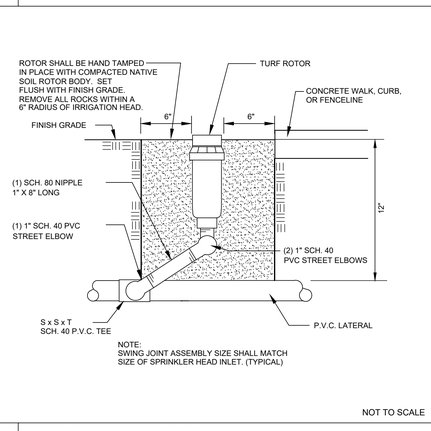
11 REMOTE CONTROL VALVE ASSEMBLY



NOTES:
1. INSTALL CONTROL VALVES A MINIMUM OF 18" APART IN SHRUB AREAS UNLESS OTHERWISE NOTED.
2. EQUIPMENT SHALL BE INSTALLED SUCH THAT THERE IS NO LEVERAGE OR STRESS ON THE VALVE ASSEMBLY. PIPE SHALL NOT COME INTO CONTACT WITH VALVE BOX.
3. USE A NON-HARDENING TEFLON PIPE SEALANT ON ALL THREADED CONNECTIONS.
4. INSTALL LANDSCAPE FABRIC (WEED BARRIER) BETWEEN SOIL AND GRAVEL SUMP.
5. HARDWARE CLOTH: GALVANIZED WELDED STEEL, MESH SHAPE SQUARE 1/4" x 1/4" IN SIZE, GAUGE 23 (MINIMUM THICKNESS SIZE).
6. USE RAINBOW TECHNOLOGY 'DUCT SEAL PUTTY' TO PLUG OPEN CONDUIT/WIRES WITHIN VALVE BOX TO PREVENT WATER FROM ENTERING CONDUIT OPENING.

NOT TO SCALE

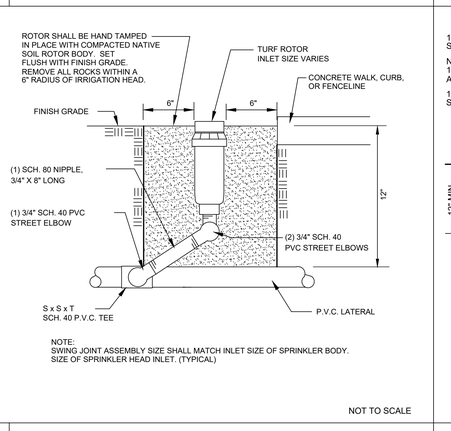
12 DRIP REMOTE CONTROL VALVE ASSEMBLY



NOTE:
SWING JOINT ASSEMBLY SIZE SHALL MATCH
SIZE OF SPRINKLER HEAD INLET. (TYPICAL)

NOT TO SCALE

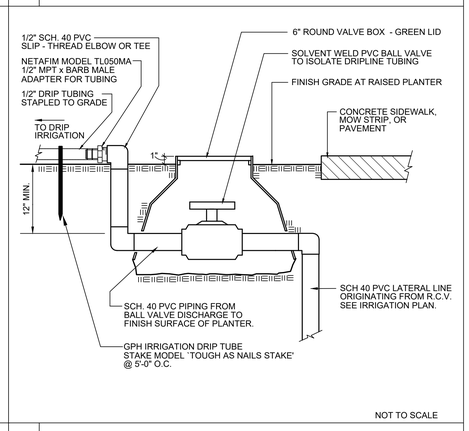
13 i-40 POP UP TURF ROTORS - 1" INLET



NOTE:
SWING JOINT ASSEMBLY SIZE SHALL MATCH INLET SIZE OF SPRINKLER BODY.
SIZE OF SPRINKLER HEAD INLET. (TYPICAL)

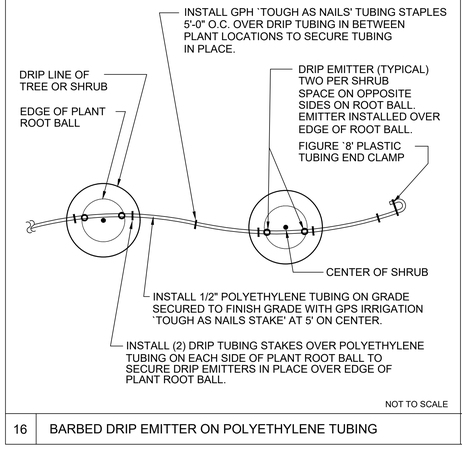
NOT TO SCALE

14 i-20 POP UP TURF ROTORS - 3/4" INLET



NOT TO SCALE

15 SCH. 40 PVC DRIP TUBE ISOLATION VALVE



NOT TO SCALE

16 BARBED DRIP EMITTER ON POLYETHYLENE TUBING

17 NOT USED

18 NOT USED

19 NOT USED

20 NOT USED

JORDAN & BAIN
LANDSCAPE ARCHITECTS, INC.
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Pleasant Valley School District

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CALL : TOLL FREE
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REGISTERED LANDSCAPE ARCHITECT
JAMES BAIN
No. 2604
04/2026
RENEWAL DATE
02/04/26
STATE OF CALIFORNIA

REVISIONS

NO.	DATE	BY	DESCRIPTION

CLIENT
PLEASANT VALLEY
SCHOOL DISTRICT
600 TEMPLE AVENUE
CAMARILLO, CA. 93010

SHEET TITLE
LANDSCAPE DETAILS

PROJECT
CAMARILLO HEIGHTS
STEM ACADEMY
LANDSCAPE IMPROVEMENTS
35 CATALINA DRIVE
CAMARILLO, CA. 93010

DRAWN:	J. BAIN	
CHECKED:	J. BAIN	
PRINTED FOR:		
PLAN CHECK		02-04-26
BID		02-04-26
CONSTRUCTION		02-04-26

DRAWING
L4.1
SHEET 7 OF 7
PROJECT No. 25.40

SPECIFICATIONS

FOR THE

LANDSCAPE IMPROVEMENTS

AT

CAMARILLO HEIGHTS STEM ACADEMY
35 CATALINA DRIVE
CAMARILLO, CALIFORNIA 93010

FOR:

PLEASANT VALLEY SCHOOL DISTRICT
600 TEMPLE AVENUE
CAMARILLO, CA 93010

FEBRUARY 4, 2026

PREPARED BY:

JORDAN & BAIN
LANDSCAPE ARCHITECTS, INC.
459 NORTH VENTURA AVENUE
VENTURA, CA 93001



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LANDSCAPE IMPROVEMENTS AT
CAMARILLO HEIGHTS STEM ACADEMY

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Section 32 84 23	Irrigation System
Section 32 90 00	Turf Renovation – BID ALTERNATE NO. 1
Section 32 93 30	Sod Lawn Planting
Section 32 94 60	Landscape Maintenance

SECTION 01 10 20
FENCING AND PROTECTION

PART 1 GENERAL

1.01 SECTION INCLUDES

This section includes requirements for temporary fencing and protection of the work area.

1.02 SUBMITTALS

Submit for approval, all catalog cuts and/or specification sheet for all fencing products.

1.03 QUALITY ASSURANCE

Fencing shall be installed by a qualified fence company with experience in the installation of temporary fencing.

PART 2 PRODUCTS

2.01 TEMPORARY FENCING – BASE BID FOR SOD LAWN INSTALLATION

Temporary fencing shall be 5 feet high orange polyethylene barricade with manufacturer's approved stakes attached to post and frames installed in a a secure manner. Chain link fencing, barb wire and/or razor wire is not allowed. Fencing shall be kept in place during the construction period and maintenance period. Fencing shall be removed only when written authorization is provided by the District. The fence shall become the property of PVSD and shall be removed by PVSD once the sod is established.

PART 3 EXECUTION

3.01 FENCE LAYOUT

Contractor shall submit to the District for approval a schematic fence layout showing the location of fence panels and method of attachment of panels and post. This plan must be approved by the District prior to start of the work.

3.02 FENCE INSTALLATION

A. Install fencing and post so that no damage occurs to the existing underground conduits or paving. Immediately repair all damage to the existing conditions that may occur as a result of the fence installation.

B. If fencing panels have post with a horizontal support frame, make sure they are visually apparent to prevent any trip hazard.

3.03 FENCE REPAIR

Immediately repair any damage to the fencing that may occur.

END OF SECTION 01 10 20

SECTION 31 11 00
CLEAR AND GRUB PLANTER

PART 1 GENERAL

1.01 SECTION INCLUDES

This section includes general requirements to clear and grub existing naturalized landscape area and remove debris from site.

1.02 RELATED SECTIONS

Section 32 84 23 – Irrigation Systems
Section 32 93 30 – Sod Lawn Planting

1.03 SUBMITTALS

Furnish material invoices indicating the quantities of District approved pre-emergent herbicide, mulch, and all materials required to complete the Work. Certificates shall be prepared by the supplier or distributor and shall indicate the quantities and qualities of materials used.

1.04 PROTECTION

Contractor shall check or locate existing structures, electric cables or conduits, utility lines and other existing features or conditions above or below ground level that might be damaged as a result of the operation. Questions or conflicts arising out of such examination prior to or during operation shall be immediately directed to the attention of the District for necessary action or decisions before resuming operation. Contractor shall be responsible for repair or replacement at no cost to the District for features or conditions damaged through failure to comply with the above procedures.

1.05 ALTERNATES

Alternates will not be permitted, except where indicated, and as approved by the Landscape Architect.

PART 2 PRODUCTS

2.01 MATERIALS – LANDSCAPE

A. Mulch shall be Agromin “Garden Mulch” or equal.

B. Pre-Emergent herbicide – product ‘Dimension’.

PART 3 EXECUTION

3.01 SITE CONDITION

Review existing conditions with PVSD Representatives. Clear and grub and remove specific unwanted vegetation and debris from site. Protect in place all existing fruit trees and raised garden beds.

3.02 PRE-EMERGENT HERBICIDE

Broadcast pre-emergent herbicide product ‘Dimension’ over surface of exposed soil in shrub planters at rate per Manufacturer’s specifications. Herbicide shall be applied prior to wood mulch installation.

3.03 MULCH

Install three-inch layer of mulch throughout shrub areas without groundcover. Finish grade shrub areas to a smooth uniform surface to receive mulch. Keep mulch away from tree and shrub crown. Dress mulch areas to present a clean uniform appearance when complete.

END OF SECTION 31 11 00

SECTION 32 84 23
IRRIGATION SYSTEM

PART 1 GENERAL

1.01 SECTION INCLUDES

This section includes requirements for the installation of the Irrigation System.

1.02 RELATED SECTIONS

Section 32 92 00 – Turf Renovation
Section 32 93 30 – Sod Lawn Planting

1.03 REQUIREMENTS OF REGULATORY AGENCIES

Secure all permits and licenses necessary for the work. Give all notices and comply with all laws, ordinances, rules, and regulations concerning the installation of the sprinkler system as drawn and specified.

1.04 SITE CONDITIONS

A. Prior to beginning any work, the Contractor and the District Inspector shall participate in a thorough irrigation system review of the project site. All remote control valves shall be turned on and observed in operation by both the Contractor and PVSD Representative. Any existing defects will be listed in detail identifying the specific valve station number and describing the exact broken or non-functioning irrigation component noted during the site review. At the conclusion of the irrigation review, the Contractor shall generate a summary of the items identified by both parties listing all remote control valves operated, identifying if the valve performed without any defects or specifically identifying any observed defects or non-functioning components, such as broken heads, clogged nozzles, non-operating valve solenoids, broken piping, or other noted defects. The completed summary of items noted shall be listed on a document called 'Existing Irrigation System Observations.' This document shall be signed by the Contractor and submitted to the PVSD Representative for a confirming signature. The mutually signed 'Existing Irrigation System Observations' document shall be sent to the attention of the Landscape Architect for inspection purposes at the conclusion of the construction work. If requested by the PVSD Representative, the Contractor shall provide a list of the existing defective irrigation components noted with a detailed written proposal to repair each item identified on the list. A copy of this proposal will be sent to the Landscape Architect. This additional work proposal must be reviewed and approved in writing by the PVSD and formally presented to the General Contractor before the Landscape Subcontractor can begin any additional repair work. The mutually signed 'Existing Irrigation System Observation' document shall be used as a guide to identify any collateral damage caused to the existing irrigation system as a result of new construction performed on site by the Contractors. Any damage caused to the existing irrigation system not specifically identified on the 'Existing Irrigation System Observation' document shall be repaired or replaced at the Contractor's expense. In the event that the

Contractor does not participate or perform the existing irrigation site review, any existing irrigation equipment or components damaged on the project site noted by the Landscape Architect during the final irrigation system review shall be repaired or replaced by the Contractor at their expense to the satisfaction of PVSD.

B. Do not willfully install the sprinkler system as indicated on the drawing when it is obvious in the field that unknown obstructions or grade differences exist that might not have been considered in the engineering. Such obstructions or differences should be brought to the attention of the District Inspector.

C. Before excavating for sprinkler lines, locate all underground utility lines so that the proper precautions may be taken to avoid damage to such utilities. In the event of a conflict between underground lines, promptly notify the District who will arrange for the relocation of one or the other. Failure to follow this procedure places the responsibility upon the Contractor for making any and all repairs for damage of any kind at his own expense.

D. Provide necessary safeguards and exercise caution against injury or defacement of any existing site improvements. Contractor shall be responsible for any damage resulting from his operations and shall repair or replace such damage at his own expense. No trucks or vehicles of any kind shall be allowed to pass over sidewalks, curbs, etc., unless adequate protection is provided.

E. Existing Trees
   1. Exercise all possible care and precautions to avoid injury to tree roots, trunks, and branches. All excavating within drip line of trees shall be done very carefully and by hand pick and shovel if it appears that large roots are within trenching zones.
   2. Alter alignment of pipe to avoid large tree roots, 2-inch and larger in diameter.
   3. Wrap exposed and bridging tree roots with several layers of burlap and keep moist. Close all trenches within drip lines, within 24 hours.
   4. All severed roots 1-inch and larger shall be hand pruned with sharp tools and painted with acceptable horticultural seal.

1.05 MATERIAL LIST

Submit to the District for acceptance five (5) copies of all materials and equipment, including Manufacturer's names and catalog numbers, to be furnished and installed under this contract within 10 days after the award of the contract.

1.06 RECORD DRAWINGS

A. Provide and record daily a complete record set of prints on bond which shall be corrected to show changes from the original drawings and specifications and the exact installed locations, sizes, and kinds of equipment. Prints for this purpose may be obtained from the District. Keep this set of drawings on the site and use only as a record set.

B. Use these drawings as work progress sheets. Make neat and legible annotations thereon as the work proceeds, showing the work as actually installed. Keep these drawings available at all times for inspection and in a location designated by the District.

C. Before the date of the final inspection, transfer all information from the record prints to a clean set of prints procured from the District. Make work neat, in ink and subject to review and acceptance of the District. District will scan final drawings into a permanent electronic record document.

D. Dimension from two permanent points of reference such as building corners, sidewalks or road intersections, the location of:
   1. Connection to existing water lines.
   2. Connection to existing electrical power.
   3. Gate valves.
   4. Routing of sprinkler pressure lines and control wiring.
   5. Electric control valves.
   6. Quick coupling valves.
   7. Other related equipment as directed by District.

1.07 TESTS AND SITE OBSERVATIONS

A. All tests shall be made in the presence of the District; at least forty-eight (48) hours' notice shall be given for tests.

B. Record drawings must be current and shall be verified by the District at the time of all observations.

C. Site observations for all items pertaining to the work of this Section shall be performed by the District.

D. Specific site observations for valve assemblies, sprinkler coverage, control wires and splices and any other observations deemed necessary by the District shall be performed by the District.

E. An open trench main line check for pipe quality and depths shall be performed by the District.

F. Head Layout - using flag marker layout all drip emitter, tree flood bubblers, and spray heads in field prior to trenching. Review head layout with District and Landscape Architect and make adjustments in fields as directed prior to installing irrigation.

G. Center load pipe with small amount of backfill to prevent arching and whipping under pressure. Leave joints exposed for observation during pressure test. No water shall be permitted in the pipe until the above has been accomplished and a period of at least 24 hours has elapsed for solvent weld setting and curing.

Main lines to be tested up to valve at 125 pounds pressure and there shall be no leaks. Furnish force pump and pressure gauge. Lateral lines of system to be tested at line pressure with risers capped. Tests have to be for a 2 hour period and verified by the District.

H. Backfill quality and compaction of trenches shall be verified by the District. Do not backfill trenches until all tests have been completed and accepted.

I. Perform a coverage test in the presence of the District to determine if the water coverage for planting areas is complete and adequate. Furnish materials and perform all work required to correct any inadequacies of coverage due to deviations from drawings, or where the system has been willfully installed as indicated on the drawings when it is obviously inadequate, without bringing this to the attention of the District.

J. The coverage test shall be completed, and the irrigation system modified if necessary and accepted, prior to the start of the planting operations.

K. The entire system shall be checked out thoroughly and completely by the Contractor five (5) days prior to the final observation. All heads shall be properly aligned and adjusted for coverage and cleared of any foreign materials. All valves shall be properly adjusted. Sprinkler controller valve chart shall be checked for accuracy.

L. At the end of the Maintenance Period, a final observation shall be made by the Contractor and District to check out the entire system.

M. Final inspection prior to acceptance:
   1. Operate each system in its entirety for the District at time of final inspection. Rework any items deemed not acceptable to the District.
   2. Deliver to the District all accessories, charts, record drawings, and equipment as required before final inspection.

1.08 GUARANTEE

A. The entire sprinkler system shall be guaranteed for a period of one (1) year from date of final acceptance.

B. Should any portion of the irrigation system malfunction due to poor workmanship or defective materials, corrections shall be promptly made by the Contractor at his own expense.

C. Any damage to paving, plating, or other developments due to the settlements of improperly compacted trench soil, shall also be promptly repaired at the Contractor's expense, to the satisfaction of the District.

PART 2 PRODUCTS

2.01 GENERAL

A. Irrigation materials shall be as listed on the Irrigation Legend and in these specifications.

B. The irrigation products specified on the drawings in these specifications are selected to match existing products in use. Substitutions are permitted only when product name is followed by or equal.

C. Use only new materials of brands and types as noted on the drawings and as specified.

2.02 MATERIALS

A. PVC primer and solvents - as recommended by Manufacturer. John-Manville, Lasco, or Pacific Western.

B. Main Line Fittings - Schedule 0, PVC Type 1, Grade 1, Cell Classification 12454-B, side gated, Lasco Spears, or approved equal.

C. Lateral non-pressure line fittings - Schedule 40, PVC Type 1, Grade 1, Cell Classification 12454-B, side gated, Lasco or approved equal.

D. Nipples and Risers - PVC Schedule 80.

E. Pipe, Main Line shall be PVC Schedule 40 for size 1 ½" or less, solvent weld pipe in conformance with ASTM D-1785, D-1784. Mainline 2" and larger shall be Class 315 PVC.

F. Pipe, Lateral Non-Pressure Lines shall be PVC Schedule 40, solvent weld in conformance with ASTM D-1785, D-1784.

G. Thread Sealant shall be smooth, non-hardening sealant, compatible with the pipe materials specified. Do not use Teflon tape.

H. Electrical wire conduit shall be Schedule 40 PVC electrical gray colored electrical conduit with Schedule 40 PVC gray colored fittings.

I. EMT Electrical conduit shall be suitable for enclosing electrical wires exposed to elements on exterior buildings with EMT fittings.

PART 3 EXECUTION

3.01 WORKMANSHIP AND INSTALLATION.

A. Layout and Adjustments
1. The drawings are diagrammatic to the extent that many offsets, special fittings, and exact locations of the equipment are not shown. The locations of all valves, heads, lines, etc., shall be installed, however, as accurately as possible to the locations that are indicated on the drawings.
2. The locations of main lines that are indicated as bordering walks, curbs and fences shall be placed as close as possible. Locate lines within planting areas wherever possible.
3. All indicated locations of heads and equipment are placed with careful consideration to overlap, protection of the premises, lights, proposed tree locations, and general layout. Coordinate installation of sprinkler irrigation materials, including pipe, so there is no interference with utilities, other construction, or difficulty in planting trees and shrubs. Layout sprinkler heads and make any minor adjustments required due to differences between site and drawings. Adjustments shall be accomplished, maintaining proper sprinkler head coverage and overlap of sprinkler throws.

B. Connections
1. All connections shall be made into existing lines as indicated on the drawings.
2. Field verify existing line types in the field.

C. Cutting and Patching
1. When piping crosses concrete paving and asphalt paving, sawcutting is required. Cut AC paving and/or concrete with concrete sawcutting tools straight and in those locations approved by the District.
2. Remove concrete and/or AC, base, and soil to the required depth for mainlines.
3. Concrete walks shall be backfilled entirely with compacted sand. Compact to 95% and patched with new concrete.
4. AC paving shall be backfilled entirely with a 1-sac sand slurry mix. Compact to 95% and patch with new AC paving.
5. Concrete paving shall be received medium broom finish.
6. Remove from site any excavated soil.

D. Trenching and Backfilling
1. Trench and excavate as necessary to install the system. Excavated material shall be neatly arranged so as to cause a minimum of inconvenience to pedestrian and vehicular traffic. No soil shall be placed on concrete paving without an adequate moisture proof membrane to protect paving.
2. Trenches for all irrigation pipe and electrical conduits shall be open vertical construction with firm level bottom and sufficiently wide to provide free working space around the work installed and to provide ample space for backfilling and tamping.

3. Depth of trenches shall be sufficient to provide a minimum cover above the top of the pipe as follows:
   a) Mainline: 24-inches minimum cover.
   b) Electrical conduits housing irrigation wire: 18-inches minimum cover.
   c) PVC laterals: 12-inches minimum cover.
4. When two (2) pipes are to be placed in the same trench, provide a minimum of 6-inch horizontal clearance. Place pipe side by side; do not install one pipe on top of another.
5. After the installation is complete and the required tests and inspections have been made and approved, the excavations and trenches shall be backfilled with clean soil, free of rubbish, rocks, and pebbles larger than one-half inch.

E. Plastic Pipe
1. Do not install multiple assemblies on plastic lines. Provide each assembly with its own outlet.
2. Install assemblies specified herein in accordance with respective detail. In absence of detail drawings or specifications pertaining to specific items required to complete work, perform such work in accordance with best standard practice.
3. Clean PVC pipe and fittings before installation. For solvent weld pipe use installation and solvent welding methods as recommended by the pipe and fitting manufacturer. For gasketed pipe installation follow detailed assembly instructions furnished by the manufacturer.
4. On PVC to metal connections, work the metal connections first. Use non-hardening sealant on all threaded joints. Screw hand tight and ½ turn by wrench. Where threaded PVC connections are required, use threaded PVC adapters into which the pipe may be welded.
5. Pipe shall have a firm, uniform bearing, for the entire length of each pipeline, to prevent uneven settlement. Pipe shall be snaked from side to side of trench bottom to allow for expansion and contraction. One additional foot per 100 foot of pipe is the minimum allowance for snaking. Never lay PVC pipe when there is water in the trench or when the temperature is 32° F or below.
6. Use 45° fittings at all changes in depth of pipe. Coupling to be of same materials and wall thickness as pipe.

F. Sprinkler Controller – the irrigation controller is existing.

G. Sprinkler Heads
1. Prior to installing heads, flush laterals, and risers with full line pressure. Repeat whenever system is opened up for repairs or replacements. Start flushing operation at the highest point of delivery and work to the lowest.
2. Align all part circle heads so that no spray shall hit building walls or concrete paving.
3. Adjust all spray nozzles so that there will be no amount of overspray, and so that the entire set will be as evenly balanced as possible.
4. Install with each lawn area sprinkler head, a “Triple Swing” joint with Schedule 80 PVC nipples and threaded ells.

5. Install all tree bubblers and drip emitters on PVC flexible hose with two (2) solvent weld male adapters.

H. EMT Electrical conduit for irrigation wire on buildings – install EMT conduit and fittings and secure conduits as per CA Building Code.

3.02 FIELD QUALITY CONTROL

A. Adjustment to System
1. Flush and adjust all sprinkler heads for optimum performance and to prevent overspray onto walk, roadways, and buildings wherever possible.
2. Select the best degree of arc to fit existing site conditions.
3. Set all sprinkler heads perpendicular to finished grades unless other designated on the drawings.

3.03 TESTING AND INSPECTION

A. Do not allow or cause any work of this section to be covered up or enclosed until it has been inspected, tested, and approved by the District. Before backfilling the mainline, and with all new control valves pulled within Schedule 40 PVC electrical conduits in place, but before lateral pipes are connected, completely flush and test the mainline, and repair all leaks. Flush out each section of lateral pipe before emitters are attached.

B. Make all necessary provisions for thoroughly bleeding the line of air and debris. Before testing, fill the line with water for a period of at least 24 hours.

3.04 FINAL INSPECTION

Thoroughly clean, adjust and balance all systems. Demonstrate the entire system to the District proving that all remote control valves are properly balanced, that all emitters are properly flowing, and that the entire system is installed and is workable, clean, and efficient.

END OF SECTION 32 84 23

SECTION 32 92 00
TURF RENOVATION – BID ALTERNATE NO. 1

PART 1 GENERAL

1.01 DESCRIPTION

This section includes the requirements for the renovation of the existing turf area. This work includes verticutting, thatching, sanding, mowing, and fertilizing as indicated in these specifications and illustrated on the drawings.

1.02 REQUIREMENTS OF REGULATORY AGENCIES

Any required spraying work shall be done in accordance with governing agencies and according to the policies of the District.

1.03 SUBMITTALS

A. Furnish material invoices indicating the quantities of fertilizers and all materials delivered to the job site. Material invoices must be approved by the District Inspector prior to incorporating.

B. Certificates shall be prepared by the Supplier or Distributor and shall indicate the quantities and qualities of materials used.

1.04 PROTECTION

A. Contractor shall check or locate existing structures, electric cables or conduits, utility lines and other existing features or conditions above or below ground level that might be damaged as a result of the operation. Questions or conflicts arising out of such examination prior to or during operation shall be immediately directed to the attention of the District for necessary action or decisions before resuming operation. Contractor shall be responsible for repair or replacement, at no cost to the District, for features or conditions damaged through failure to comply with the above procedures.

B. Protect existing trees and tree roots from any damage that may be caused as a result of any lawn renovation work.

1.05 ALTERNATES

Alternates will not be permitted, except where indicated.

1.06 QUALITY ASSURANCE

Renovation work shall be performed by a Contractor with a valid California State License Classification C-27, Landscape Contractor.

PART 2 PRODUCTS

2.01 SAND

Sand for filling in low spots and or depressions shall be clean plaster sand. Contractor shall field verify exact quantity of sand required to infill turf area after thatching operations have been complete. This shall be included in the Base Bid.

2.02 FERTILIZER

Fertilizer shall be Best Triple Pro 15-15-15.

2.03 TEMPORARY FENCING FOR PROTECTON

Temporary fencing for protection shall be installed as directed by the District Inspector and shall comply with Fencing and Protection Section 01 10 20.

PART 3 EXECUTION

3.01 TURF LAWN RENOVATING

A. After all irrigation system improvements are approved by the District Inspector, the Turf Renovation work shall proceed.

B. Renovate lawn areas with “verticutter” machine as necessary to remove thatch and scarify soil surface to within ½” from soil level and sever existing turf stolons. Run the verticutter in two directions. Remove from the site all thatch created during this process.

C. After the renovation is approved by the District Inspector, mow lawn areas to uniform height.

D. Apply sand over uneven grade depressions as directed in the field. Level sanded areas flush with adjacent grades to create a smooth, uniform, playing surface.

E. Apply fertilizer at the rate of 4 pounds of nitrogen per 1,000 square feet evenly throughout the renovated turf area.

G. Once the turf renovation work is approved by the District, the District will take over the maintenance.

END OF SECTION 32 92 00

SECTION 32 93 30
SOD LAWN PLANTING

PART 1 GENERAL

1.01 SECTION INCLUDES

This section includes requirements for the installation of the plant material.

1.02 SUBMITTALS

Furnish material invoices indicating the quantities of fertilizers, soil amendments, and all materials delivered to the job site. Material invoices must be approved by the Landscape Architect prior to incorporating soil amendments. Certificates shall be prepared by the supplier or distributor and shall indicate the quantities and qualities of materials used.

1.03 PROTECTION

A. Contractor shall check or locate existing structures, electric cables or conduits, utility lines and other existing features or conditions above or below ground level that might be damaged as a result of the operation. Questions or conflicts arising out of such examination prior to or during operation shall be immediately directed to the attention of the District for necessary action or decisions before resuming operation. Contractor shall be responsible for repair or replacement at no cost to the District for features or conditions damaged through failure to comply with the above procedures.

B. Protect existing trees and tree roots from any damage that may be caused as a result of any planting or irrigation operations.

1.04 ALTERNATES

Alternates will not be permitted, except where indicated, and as approved by the Landscape Architect.

1.05 LANDSCAPE ON-SITE OBSERVATIONS

A. The Contractor shall notify the district and the Landscape Architect forty-eight (48) hours in advance for all required On-Site Observations. The final On-Site Observation shall require seven (7) days advance notice.

B. The Contractor shall submit for approval a complete work schedule indicating tentative dates for On-Site Observations.

C. Record drawings shall be current and present at the time of On-Site Observations and shall be updated on a weekly basis.

D. Landscape On-Site Observations shall be required for the following phases of Work:
   1. Job start meeting.
   2. Finish grading – when all fine grading work is complete, notify the Landscape Architect or District for approval prior to proceeding with the planting.
   3. Soil Preparation – furnish certificates for soil amendments at this time. Quantities must be reviewed by the Landscape Architect or District prior to incorporating into soil. When all soil preparation work is complete notify the Landscape Architect or District for approval prior to proceeding with the work.
   4. Irrigation System Review – see Irrigation Section.
   5. Review planting during the planting process.
   6. Review planting after installation for District approval.
   7. Maintenance – there is no maintenance period required for this project.

PART 2 PRODUCTS

2.01 MATERIALS – LANDSCAPE

A. Soil Amendments: Organic soil amendment shall be Agromin “Agromend,” or equal.

B. Backfill Material shall be:
   1. 1/3 organic soil amendment
   2. 2/3 existing site soil.
   3. Commercial Fertilizer (15-15-15), 1 lb./cu. yd.
   4. Iron, Zinc, Manganese, 1 oz. /cu. yd.

C. Soil preparation materials for sod lawn planting areas shall per 1,000 square feet:
   1. Three cubic yards of organic soil amendment
   2. Commercial Fertilizer (15-15-15), eight pounds

D. Lawn shall be sod, Marathon II as grown by Southland Sod Farms.

PART 3 EXECUTION

3.01 SITE CONDITION

No plant materials shall be planted until all operations in conjunction with the installation of the irrigation system have been approved by the District and the Landscape Architect. Final grades shall be established, and the planting areas shall be properly prepared and graded.

3.02 LAWN AREAS – NEW SOD

A. The existing lawn area shall be scrapped off and removed leaving only subgrade. This subgrade shall be graded for positive drainage to the existing drain grades. After the grading is approved by the District Inspector soil preparation materials shall be thoroughly and evenly incorporated into the top six inches of the soil then the entire area shall be fine graded to receive the new sod lawn.

B. Stones or rocks over 1” in size, construction refuse, and other deleterious material shall be removed from the site, safely and legally disposed of.

C. After soil prep and fine grading is complete roll lawn areas with a water ballast roller to create even surface. Soil should be moist to a depth of six inches.

D. To lay sod, select a starting point parallel to the longest straight boundary of the area. Stagger the strips and avoid overlapping edges. Avoid cutting the sod in short narrow strips. Butt edges and ends of sod so that they fit tightly, with no overlapping. Avoid standing or kneeling on sod while it is being laid. After sod is installed, roll lightly to squeeze out air pockets.

E. Follow all recommended sod planting procedures provided by sod grower, Southland Farms.

END OF SECTION 32 93 30

SECTION 32 94 60
LANDSCAPE MAINTENANCE

PART 1 GENERAL

1.01 MAINTENANCE PERIOD

There is no extended landscape maintenance period with this project. Once the PVSD Inspectors have accepted the irrigation and planting work as complete, the Contractor shall be released from the landscape scope of work.

END OF SECTION 32 94 60