



Business Services

Contracts Office

5735 47th Avenue • Sacramento, CA 95824

(916) 643-2464

Gerardo Castillo, Chief Business Officer

Jessica Sulli, Contract Specialist

ADDENDUM NO. 1

Date: March 28, 2018

Issued by: Sacramento City Unified School District

Project: Earl Warren, John Bidwell and Tahoe ES Irrigation Improvements

You are hereby notified of the following changes, clarifications, or modifications to the original Contract Documents, Specifications, and Drawings. This Addendum shall supersede the original project documents, and shall take precedence over anything to the contrary therein. All Addenda shall be acknowledged in the Bid Form. Failure to do so may result in disqualification of the bid. All other conditions remain unchanged.

1. DRAWINGS – L1.1A, L1.2A, L1.3A
 - a. Note added to demo the existing irrigation pump and controller to the legend
 - b. Note revised to ‘place’ aggregate.

2. DRAWING – L1.4A
 - a. Note added to demo the existing irrigation pump and controller to the legend
 - b. Note revised to ‘place’ aggregate.
 - c. Added callout identifying location of existing irrigation pump and controller
 - d. Added irrigation area at front of campus that needs to have existing irrigation removed.

3. DRAWING – L2.1A
 - a. Revised master valve model number.
 - b. Revised irrigation mainline pipe material in legend.
 - c. Added note to 1” steel conduit for two-wire cable in legend.
 - d. Added grounding rod assembly symbol to legend.
 - e. Added callout and symbol for ground rod assembly on plans
 - f. Added point of connection symbol on plans.

4. DRAWING – L2.2A
 - a. Revised sheet number from ‘4’ to ‘7’

- b. Revised master valve model number.
 - c. Revised irrigation mainline pipe material in legend.
 - d. Added note to 1” steel conduit for two-wire cable in legend.
 - e. Added grounding rod assembly symbol to legend.
5. DRAWING – L2.3A
- a. Revised master valve model number.
 - b. Revised irrigation mainline pipe material in legend.
 - c. Added note to 1” steel conduit for two-wire cable in legend.
 - d. Added grounding rod assembly symbol to legend.
 - e. Added pipe size to lateral lines connected to valve #25, and added a point of connection for valves #24-25, and renumbered valves #24, 25, 28.
6. DRAWING – L2.4A
- a. Revised master valve model number.
 - b. Revised irrigation mainline pipe material in legend.
 - c. Added note to 1” steel conduit for two-wire cable in legend.
 - d. Added grounding rod assembly symbol to legend.
 - e. Added a point of connection for valves #26-27, and renumbered valves #26, 27, 29.
7. DRAWINGS – L1.1B, L1.2B, L1.3B, L1.4B
- a. Added locations for asphalt/concrete saw cutting for new piping.
 - b. Note revised to ‘place’ aggregate.
 - c. Revised total sheet number count.
8. DRAWING – L2.1B
- a. Added information on Automatic Controller callout
 - b. Added callout for existing fence to remain.
 - c. Added symbols for Master Valve Assembly.
 - d. Revised master valve model number.
 - e. Revised irrigation mainline pipe material in legend.
 - f. Revised total sheet number count.
9. DRAWINGS – L2.2B, L2.3B
- a. Revised total sheet number count.
10. DRAWING – L2.4B
- a. Revised sheet note #13, to include L3.1
 - b. Revised total sheet number count.
11. DRAWING – L1.1C
- a. Removed a new concrete mowstrip from showing on this sheet
 - b. Added locations for asphalt/concrete saw cutting for new piping.
 - c. Note revised to ‘place’ aggregate.
 - d. Revised total sheet number count.



12. DRAWING – L1.2C

- a. Note revised to 'place' aggregate.
- b. Revised total sheet number count.

13. DRAWINGS – L1.3C, L1.4C

- a. Added locations for asphalt/concrete saw cutting for new piping.
- b. Note revised to 'place' aggregate.
- c. Revised total sheet number count.

14. DRAWINGS – L2.1C, L2.2C, L2.3C, L2.4C

- a. Revised irrigation mainline pipe material in legend.
- b. Revised total sheet number count.

15. DRAWING – L3.1

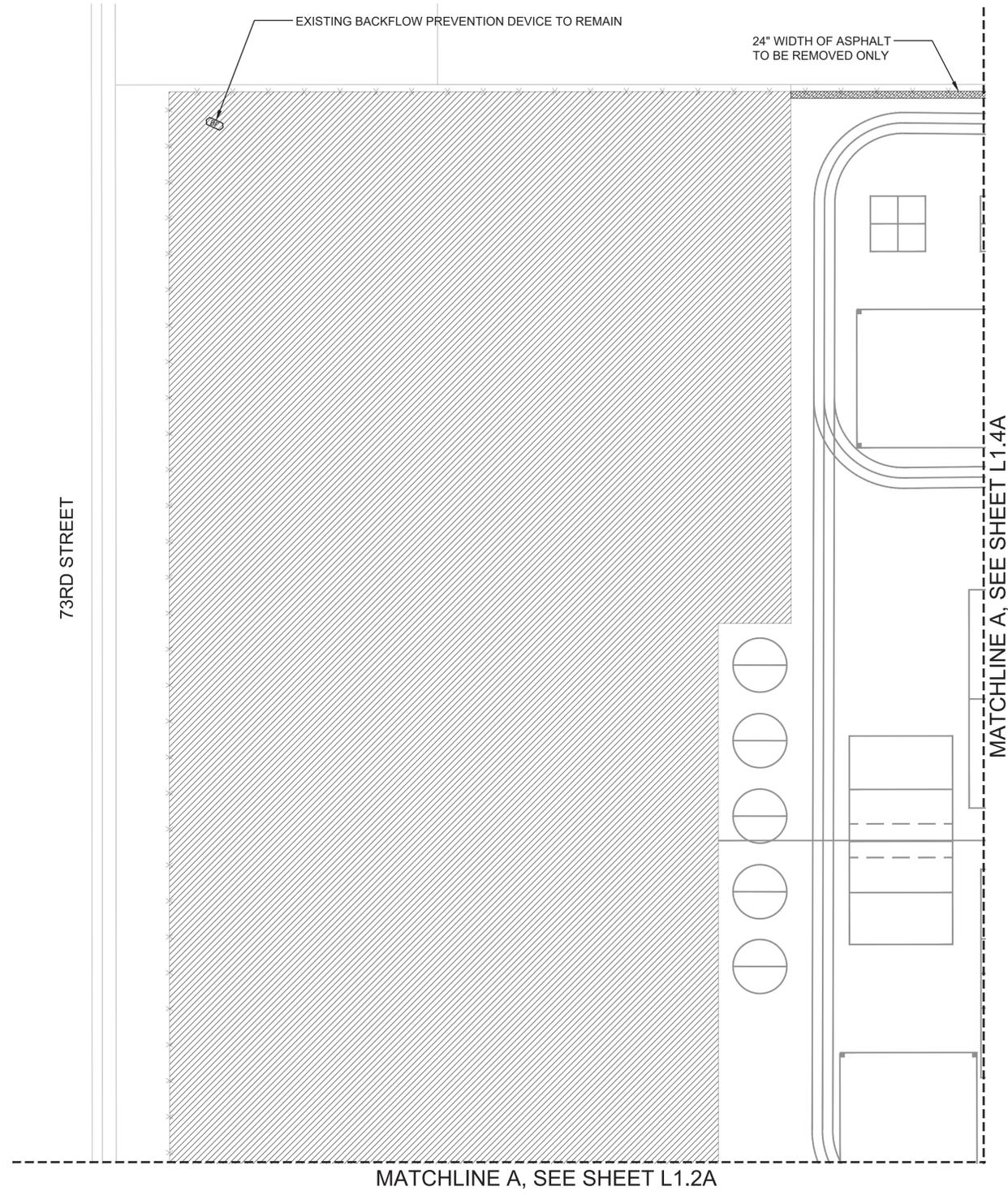
- a. Revised detail #4 to clarify that it is for Earl Warren and Tahoe ES.

16. DRAWING – L3.3

- a. Revised detail #6 to clarify compacted aggregate, subgrade compaction, concrete and compacted aggregate depth, and the use of concrete dobies to elevate the rebar.
- b. Added detail #9 for valve box locations in shrub beds. This was in response to an RFI.

END OF ADDENDUM NO. 1

Attachments



KEY

IRRIGATION DEMOLITION LEGEND

EXISTING BACKFLOW PREVENTION DEVICE TO REMAIN

EXISTING PUMP TO BE DEMOLISHED
PIPES ABOVE GROUND TO BE CUT AND CAPPED AND ELECTRICAL TO BE DISCONNECTED. EXISTING CHAIN LINK FENCE TO REMAIN

EXISTING LANDSCAPE IRRIGATION TO BE DEMOLISHED
SPRINKLER HEADS TO BE REMOVED, VALVE BOXES TO BE REMOVED, AND MAINLINE TO BE CAPPED. LATERAL LINES, MAINLINE AND WIRES TO BE ABANDONED.

ASPHALT/CONCRETE TO BE SAWCUT
ONCE NEW IRRIGATION LINES ARE INSTALLED, PLACE SUBBASE AGGREGATE AND FILL IN WITH APPROPRIATE PAVING MATERIAL (ASPHALT/CONCRETE) UNLESS OTHERWISE SPECIFIED.

NOTE:
CONTRACTOR TO IRRIGATE ALL TREES MANUALLY DURING CONSTRUCTION PROCESS

MTW group
LANDSCAPE ARCHITECTURE AND PLANNING
10411 Old Placerville Road
Suite 205
Sacramento, CA 95827
916 369-3990



Peter D. Larimer C-5284

The Landscape Architects do not represent that these plans or the specifications in connection therewith are suitable, whether or not modified for any other site than the one for which they were specifically prepared. The Landscape Architects disclaim responsibility for these plans and specifications if they are used in whole or in part at any other site.

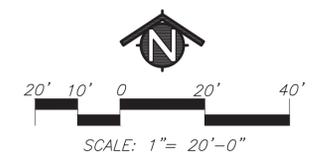
REVISIONS

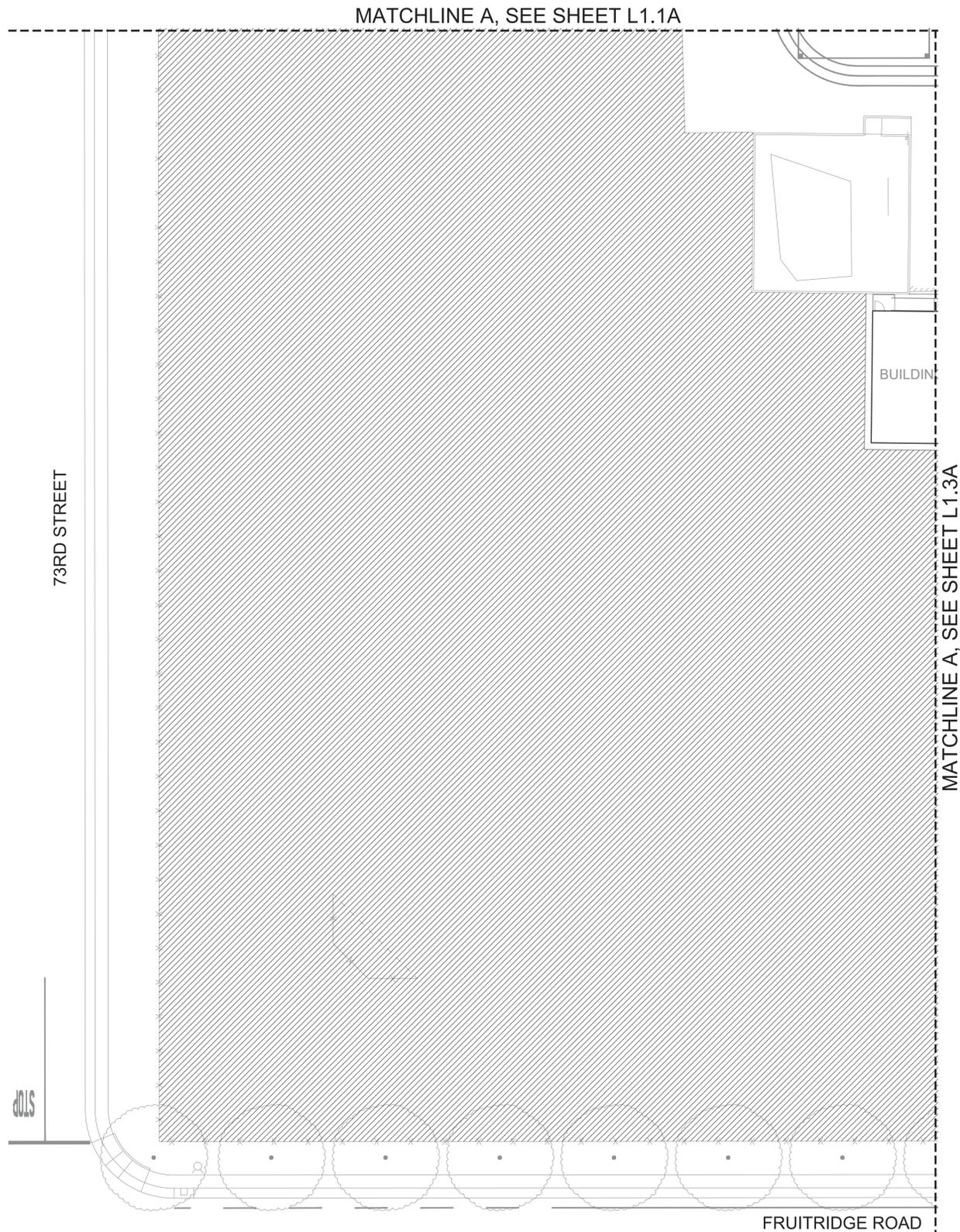
NO.	DESCRIPTION	DATE
1	ADDENDUM 1	3/27/18

EARL WARREN, JOHN BIDWELL AND TAHOE
ELEMENTARY SCHOOL
IRRIGATION IMPROVEMENTS
SACRAMENTO, CA 95820

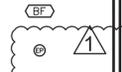
DATE 2/15/18
JOB NO. 17-68
SHEET TITLE
EARL WARREN ES
DEMOLITION
PLAN

SHEET NO.
L1.1A
SHEET 2 OF 35





KEY | **IRRIGATION DEMOLITION LEGEND**

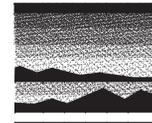
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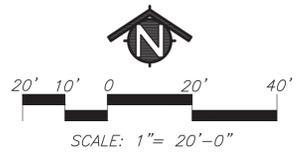
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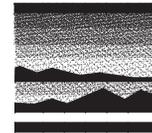
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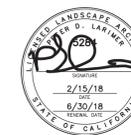
DATE 2/15/18
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 SHEET TITLE
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 PLAN

SHEET NO.
L1.2A
 SHEET 3 OF 35





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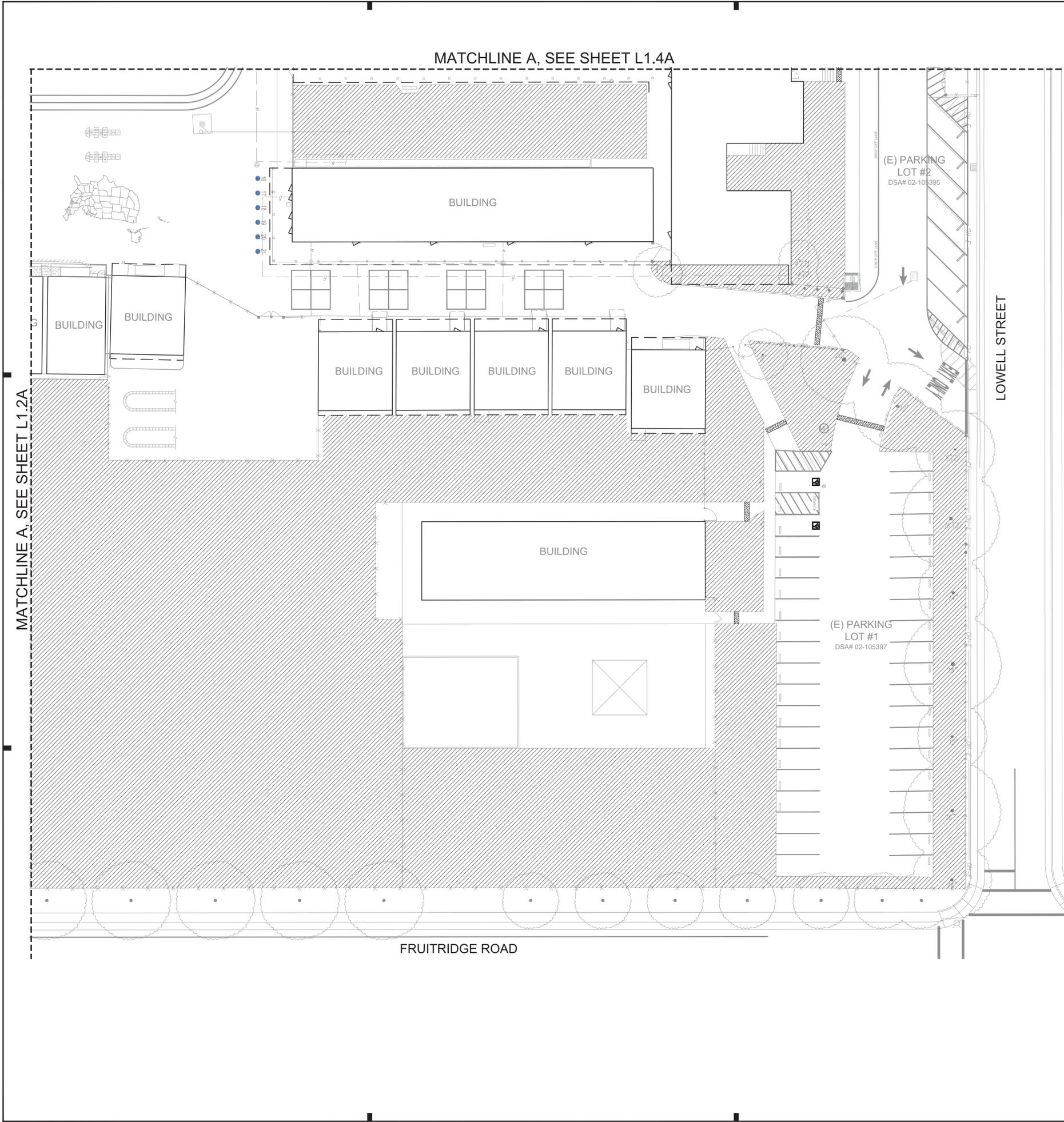
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SHEET NO.
L1.3A
 SHEET 4 OF 35

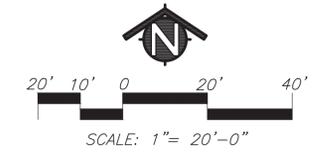


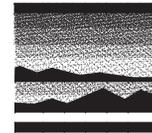
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IRRIGATION DEMOLITION LEGEND

- EXISTING BACKFLOW PREVENTION DEVICE TO REMAIN
- EXISTING PUMP TO BE DEMOLISHED
PIPES ABOVE GROUND TO BE CUT AND CAPPED AND ELECTRICAL TO BE DISCONNECTED. EXISTING CHAIN LINK FENCE TO REMAIN
- EXISTING LANDSCAPE IRRIGATION TO BE DEMOLISHED
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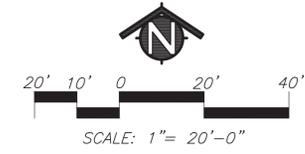
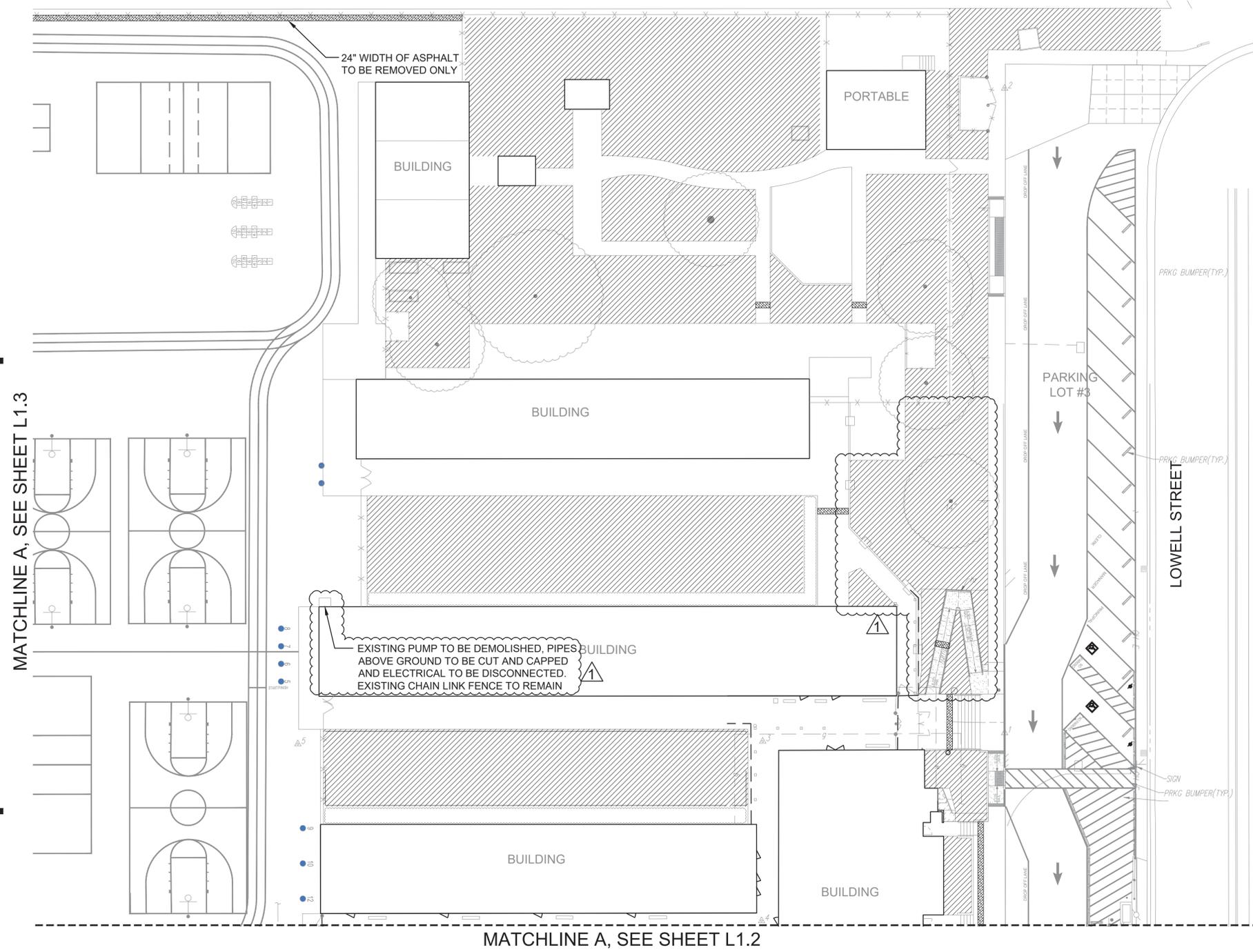
SHEET NO.
L1.4A
SHEET 5 OF 35

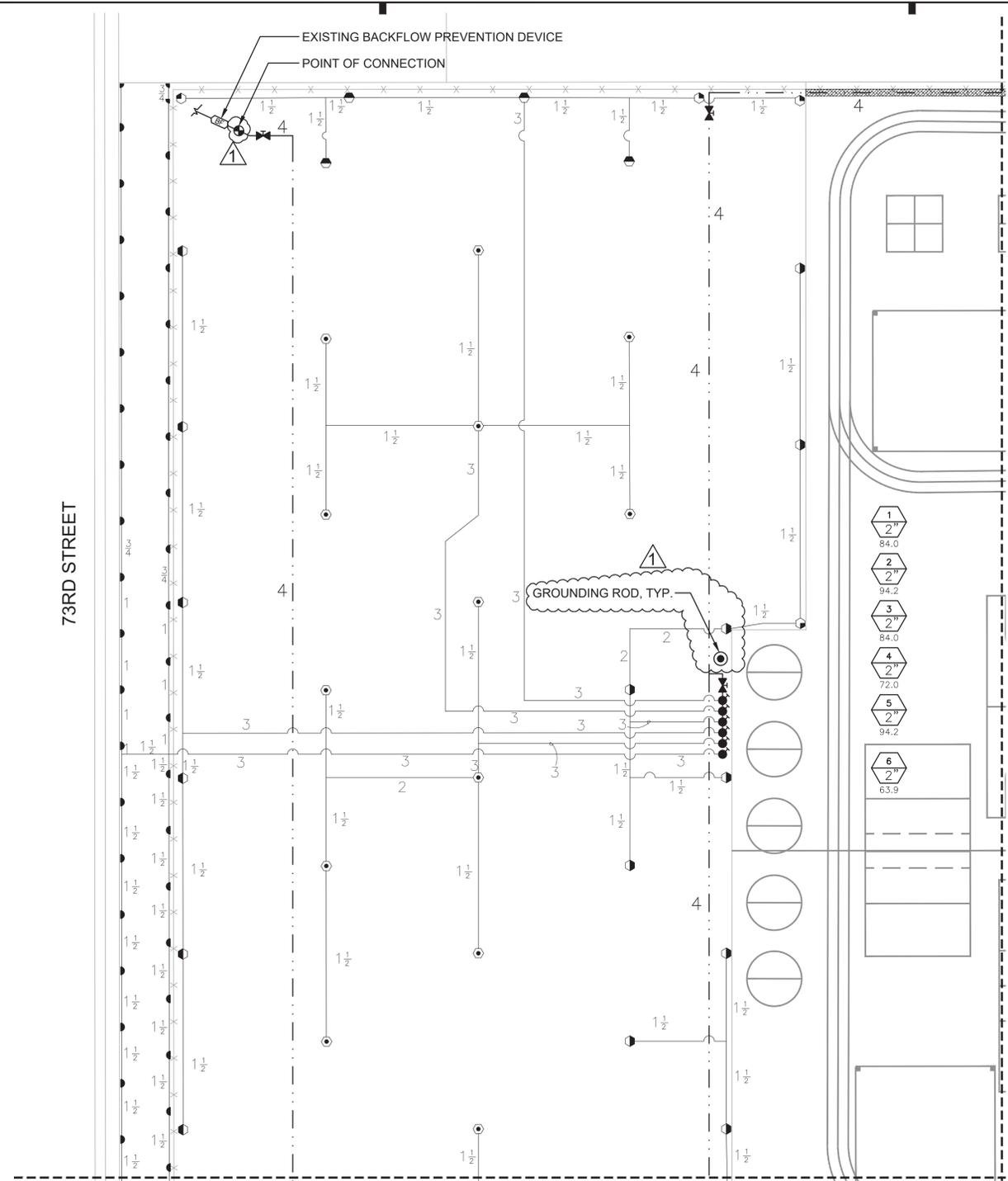
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LANDSCAPE IRRIGATION NOTES

- COMPOSITE BASE SHEET: PROPOSED IMPROVEMENTS SHOWN ON DRAWINGS ARE SUPERIMPOSED ON A COMPOSITE BASE SHEET. THE COMPOSITE BASE SHEET IS A COMPILATION OF ARCHITECTURAL, ENGINEERING, AND OTHER DATA THAT IS PROVIDED. THE LANDSCAPE ARCHITECT SHALL NOT BE HELD LIABLE FOR CHANGES, INACCURACIES, OMISSIONS, OR ERRORS PERTAINING TO THE COMPOSITE BASE SHEET. CONTRACTOR SHALL BE RESPONSIBLE FOR REVIEWING THESE DOCUMENTS. ANY DISCREPANCIES NEED TO BE BROUGHT TO THE ATTENTION OF THE DESIGN TEAM AND RESOLVED PRIOR TO CONTINUATION OF WORK.
- DESIGN PRESSURE SHOWN ON PLANS HAS BEEN FURNISHED BY WATER COMPANY OR WATER DISTRICT SERVING SITE. VERIFY PRESSURE ON-SITE PRIOR TO THE INSTALLATION OF ANY SPRINKLER IRRIGATION EQUIPMENT. IF THERE IS A DISCREPANCY, NOTIFY OWNER'S REPRESENTATIVE IMMEDIATELY IN WRITING SO ADJUSTMENTS CAN BE MADE BY LANDSCAPE ARCHITECT. FAILURE TO REPORT DISCREPANCIES AND CONTINUANCE OF WORK WILL RESULT IN ALL RE-DESIGN COSTS BEING CHARGED TO CONTRACTOR.
- DETERMINE LOCATION OF UNDERGROUND UTILITIES. DAMAGE CAUSED BY INSTALLATION OF THIS WORK SHALL BE REPAIRED TO SATISFACTION OF GOVERNING AGENCY OR OWNER AT NO ADDITIONAL COST TO THE CONTRACT.
- SPRINKLER OVER SPRAY SHALL NOT BE ALLOWED ON PUBLIC SIDEWALKS, BUILDING WALLS OR FENCES. MINIMUM OVERSPRAY MAY OCCUR IN PARKING AREAS. USE ADJUSTABLE NOZZLES WHENEVER POSSIBLE TO CONTROL SPRINKLER OVERSPRAY.
- ALL LOCAL CODES AND ORDINANCES SHALL BE COMPLIED WITH. IF THERE IS A CONFLICT, NOTIFY OWNER'S REPRESENTATIVE IMMEDIATELY.
- TESTING:
 - PRESSURE TEST ALL UNDERGROUND PIPING AS FOLLOWS:
 - MAIN LINE - AT 100 PSI FOR 4 HOURS.
 - LATERAL LINES - AT 100 PSI FOR 2 HOURS.
 - COVERAGE TEST:
 - NOTE: PRIOR TO REQUESTING COVERAGE TEST, INSURE ALL HEADS ARE SET PLUMB, NOZZLES ARE ADJUSTED PROPERLY AND SYSTEM HAS BEEN CHECKED FOR AUTOMATION.
 - REQUEST OWNER'S REPRESENTATIVE'S PRESENCE ON-SITE WHEN SPRINKLER SYSTEM IS COMPLETELY INSTALLED AND FULLY AUTOMATIC. PROVIDE ADEQUATE PERSONNEL AT THIS MEETING TO ADJUST AND FINE TUNE SYSTEM TO SATISFACTION OF OWNER'S REPRESENTATIVE.
- LAYOUT ALL WORK PRIOR TO TRENCHING OPERATIONS TO DETERMINE IF MINOR MODIFICATIONS OR ADJUSTMENTS WILL BE REQUIRED.
- INSTALL ALL SPRINKLER HEADS PERPENDICULAR TO SLOPES OR GRADE.
- CONTROL WIRE SHALL BE HUNTER TWO-WIRE DECODER CABLE. SPLICES SHALL BE PERMITTED AT VALVE BOX LOCATIONS ONLY.
- PROVIDE AND INSTALL AUTOMATIC CONTROLLER AND TWO-WIRE CABLE. ELECTRICAL SUBCONTRACTOR SHALL PROVIDE 110V SERVICE AND SERVICE HOOKUP FROM POWER SOURCE TO AUTOMATIC CONTROLLER.
- COORDINATE ALL WORK WITH OTHER TRADES SO PROGRESS OF WORK IS NOT INTERRUPTED AND CAN BE COMPLETED IN A TIMELY MANNER.
- NO PLANTING SHALL BE STARTED UNTIL ALL SPRINKLER WORK HAS BEEN TESTED AND APPROVED IN PRESENCE OF OWNER'S REPRESENTATIVE.
- FOR SPRINKLER IRRIGATION INSTALLATION DETAILS, SEE SHEET NO. L3.1, L3.2 AND L3.3.

**AFTER IRRIGATION INSTALLATION IS COMPLETE:
ALL SHRUB BEDS TO BE GRADED SMOOTH, AND
LAWN AREAS TO BE GRADED SMOOTH AND SLIT
SEEDED PER LANDSCAPE SPECIFICATIONS.**

**FOR PRE-CONSTRUCTION SPRINKLER
IRRIGATION NOTES SEE SHEET L2.2A**

KEY

- INDICATES CONTROL VALVE AND STATION NUMBER
- INDICATES CONTROL VALVE SIZE
- INDICATES GALLONS PER MINUTE

LANDSCAPE IRRIGATION LEGEND

AUTOMATIC CONTROLLER:
HUNTER CONTROL SYSTEM - 99 STATION TWO-WIRE DECODER CONTROLLER #C46-HUS-99D/LPP/ACC-COM-LAN/WSS/ROAM-WH/FAN-16
HUNTER ACC-99 IN STAINLESS TOP ENTRY ENCLOSURE WITH ETHERNET MODEM, WIRELESS SOLAR SYNC KIT, AND ROAM SMART PORT.

SURGE PROTECTOR FOR AUTOMATIC CONTROLLER AND GROUNDING ROD/PLATE TO BE INSTALLED AS PER THE GROUNDING DETAIL.
CONTACT JIM WELLER, SITE ONE GREENTECH, AT 925-451-1610 FOR PRICING
COORDINATE 110V SERVICE AND POWER CONNECTION AND ETHERNET CONNECTION WITH ELECTRICAL SUB-CONTRACTOR.

EXISTING BACKFLOW PREVENTION

BOOSTER PUMP:
BOOSTER PUMP SHALL BE BY CUSTOM PUMP, INC. MODEL # 190MTW 01312018-1/ 10 VFD
CONTACT MIKE PIRILO AT 916-429-9729

INLET PRESSURE: 30 PSI
OUTLET PRESSURE: 75 PSI
MIN/MAX WATER DEMAND: 60GPM/190GPM
POWER INPUT: 208V, 3 PHASE

MASTER VALVE ASSEMBLY:

COMPONENTS:
 (M) MASTER VALVE = 4" NORMALLY CLOSED GRISWOLD #200P.
 (F) FLOW SENSOR = DATA INDUSTRIAL 220SS, 2" SIZE SADDLE INSERT IN 4" STEEL PIPE.

FLOW SENSOR TO BE CONNECTED TO AUTOMATIC CONTROLLER WITH UF-14 WIRES IN 1" CONDUIT.
EACH MASTER VALVE TO BE CONNECTED TO AUTOMATIC CONTROLLER WITH UF-14 WIRES IN 1" CONDUIT.

POINT OF CONNECTION:
THIS SPRINKLER IRRIGATION SYSTEM IS DESIGNED TO OPERATE AT 80 PSI DYNAMIC WATER PRESSURE WITH A MAXIMUM FLOW OF 190 GPM.

GATE VALVE:

TYPE:
LEEMCO GATE VALVE WITH A NON-RIISING STEM AND OPERATING NUT.
GATE VALVE TO BE LINE SIZE.

GATE VALVE INSTALLED IN A VALVE BOX WITH TOP OF BOX SET FLUSH TO FINISH GRADE.
GATE VALVE TO BE LINE SIZE.

PRESSURE MAIN LINE:

TYPE:
ASTM D2241 SDR 21, 200 PSI, RUBBER GASKETED WITH LEEMCO FITTINGS.

TRENCH DEPTH:
IN PLANTED AREAS: 24" MINIMUM COVER.
UNDER PAVED AREAS: 24" MINIMUM COVER.
PVC SCHEDULE 40 SLEEVES ARE REQUIRED FOR ALL PIPING UNDER PAVEMENT.

LATERAL LINE:

TYPE:
PVC SCHEDULE 40, SOLVENT WELD ALL UNSIZED PIPE SHALL BE 3/4" SIZE.

TRENCH DEPTH:
IN PLANTED AREAS:
POP-UP SPRAY HEADS - 12" MINIMUM COVER.
ROTOR HEADS - 18" MINIMUM COVER.
UNDER PAVED AREAS: 24" MINIMUM COVER.
PVC SCHEDULE 40 SLEEVES ARE REQUIRED FOR ALL PIPING UNDER PAVEMENT.

AUTOMATIC CONTROL VALVE:
HUNTER ICV-AS-ADJ SERIES WITH HUNTER ICD-100 DECODER

LAWN POP-UP ROTOR HEADS:

FULL CIRCLE HALF CIRCLE
HUNTER: I-40-04-SS-15 HUNTER: I-40-04-SS-13

THREE QUARTER QUARTER CIRCLE
HUNTER: I-40-04-SS-13 HUNTER: I-40-04-SS-13

LAWN POP-UP SPRAY HEADS:
HUNTER: PROS-06 WITH CHECK VALVE SERIES WITH MP ROTATOR 2000 SERIES
FULL, HALF, QUARTER AND THREE QUARTER SPRAY PATTERNS.

LAWN POP-UP SPRAY HEADS:
HUNTER: PROS-06 WITH CHECK VALVE SERIES WITH MP ROTATOR 1000 SERIES
FULL, HALF, QUARTER AND THREE QUARTER SPRAY PATTERNS.

LAWN POP-UP SPRAY HEADS:
HUNTER: PROS-06-PRS40 WITH CHECK VALVE SERIES WITH MP ROTATOR 800 SERIES
FULL, HALF, QUARTER AND THREE QUARTER SPRAY PATTERNS.

SHRUB POP-UP SPRAY HEADS:
HUNTER: PROS-06-PRS40 WITH CHECK VALVE SERIES WITH MP ROTATOR 800 SERIES
FULL, HALF, QUARTER AND THREE QUARTER SPRAY PATTERNS.

SHRUB POP-UP STRIP SPRAY HEADS:
HUNTER: PROS-06 WITH CHECK VALVE SERIES WITH MP STRIP SERIES
LEFT CORNER, RIGHT CORNER, AND SIDE STRIPS SPRAY PATTERNS.

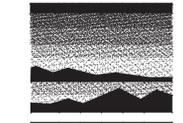
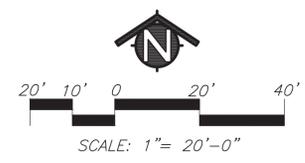
SHRUB POP-UP CORNER SPRAY HEADS:
HUNTER: PROS-06 WITH CHECK VALVE SERIES WITH MP CORNER SERIES

1" STEEL CONDUIT FOR TWO-WIRE CABLE
CONDUIT PATHWAY TO BE REVIEWED AND APPROVED BY SCHOOL DISTRICT PRIOR TO INSTALLATION

GROUNDING ROD ASSEMBLY:
TO BE INSTALLED ALONG THE TWO-WIRE PATH EVERY 500' AND AT TERMINATION OF LINE.

BROOM FINISH CONCRETE

6' TALL CHAIN LINK FENCE



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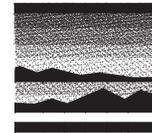
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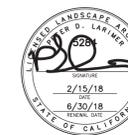
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SHEET NO.
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SHEET 6 OF 35



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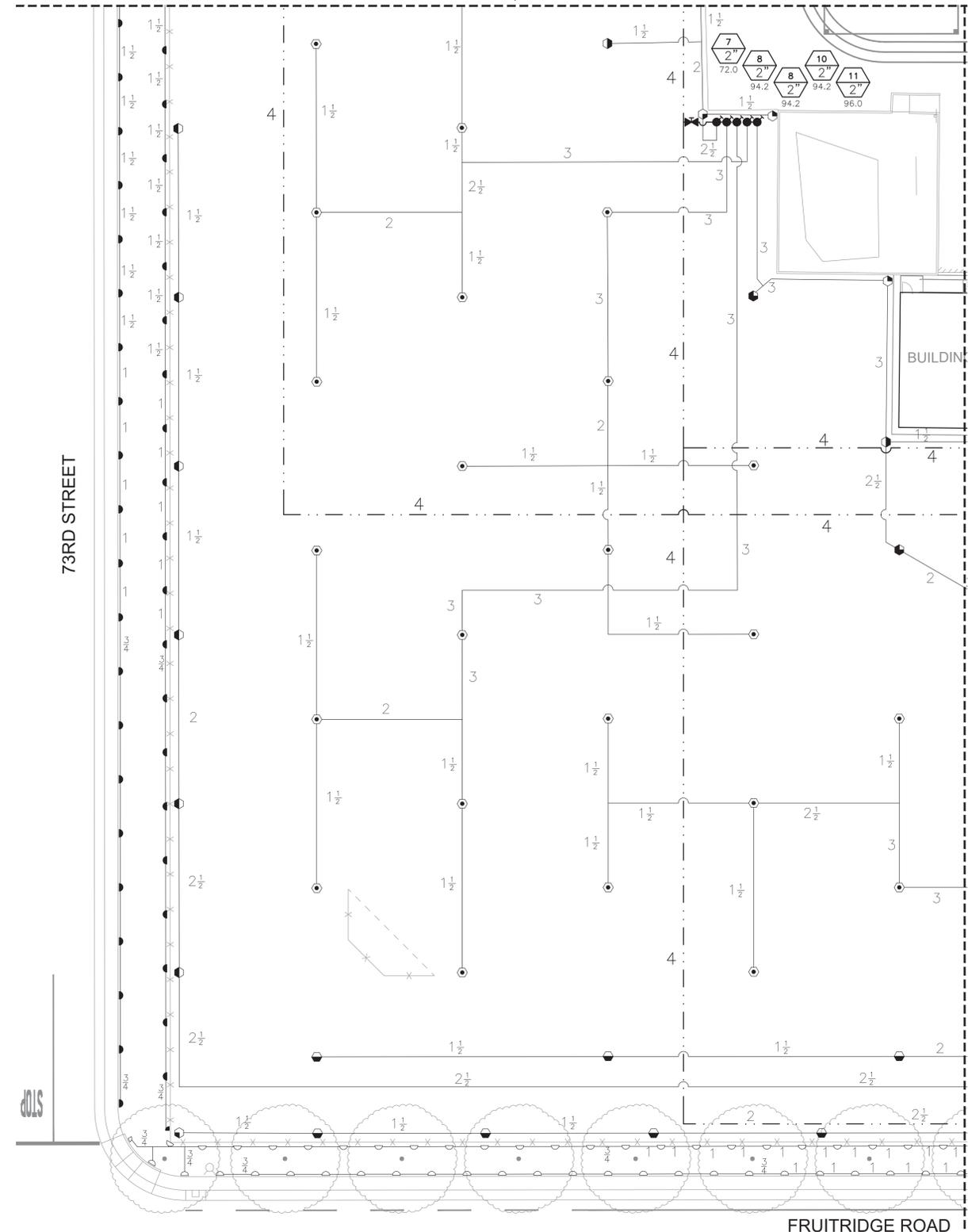
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 SACRAMENTO, CA 95820

DATE 2/15/18
 JOB NO. 17-68
 SHEET TITLE
**EARL WARREN ES
 LANDSCAPE
 IRRIGATION
 PLAN**

SHEET NO.
L2.2A
 SHEET 7 OF 35

MATCHLINE A, SEE SHEET L2.1A



PRE-CONSTRUCTION SPRINKLER IRRIGATION NOTES

- PRIOR TO START OF CONSTRUCTION CONTRACTOR REQUIRED TO CONTACT NAME, TITLE: JEFF BOZEMAN PHONE NUMBER: TO SET UP A MEETING ON SITE TO OPERATE THE EXISTING SPRINKLER IRRIGATION SYSTEM AND DISCUSS THE MODIFICATIONS THAT ARE TO BE MADE TO THE EXISTING SYSTEM TO ACCOMMODATE FOR THE NEW CONSTRUCTION.
- CONTRACTOR TO OPERATE AND PROGRAM EXISTING SPRINKLER IRRIGATION SYSTEM THAT IS TO REMAIN IN ORDER TO PROVIDE WATER TO THE EXISTING LANDSCAPE TO REMAIN.
- CONTRACTOR TO REMOVE ALL EXISTING PIPE AND SPRINKLER HEADS WHEN THEY ARE IN NEW PLANTING AREAS.
- CONTRACTOR TO RESTORE AND REPAIR ANY EXISTING SPRINKLER IRRIGATION SYSTEM OR EXISTING LANDSCAPE WHICH IS IN AREAS TO REMAIN THAT IS DAMAGED BY NEW WORK.
- ALL WORK TO EXISTING SPRINKLER IRRIGATION SYSTEM TO BE COMPLETED PRIOR TO SITE DEMOLITION.

KEY



LANDSCAPE IRRIGATION LEGEND

AUTOMATIC CONTROLLER:
 HUNTER CONTROL SYSTEM: 99 STATION TWO-WIRE DECODER CONTROLLER #C&B-HUS-99D/LP/ACC-COM-LAN/WSS/ROAM-WI/FAN-16
 HUNTER ACC-99 IN STAINLESS TOP ENTRY ENCLOSURE WITH ETHERNET MODEM, WIRELESS SOLAR SYNC KIT, AND ROAM SMART PORT.
 SURGE PROTECTOR FOR AUTOMATIC CONTROLLER AND GROUNDING ROD/PLATE TO BE INSTALLED AS PER THE GROUNDING DETAIL.
 CONTACT JIM WELER, SITE ONE GREENTECH, AT 925-451-1610 FOR PRICING
 COORDINATE 110V SERVICE AND POWER CONNECTION AND ETHERNET CONNECTION WITH ELECTRICAL SUB-CONTRACTOR.

EXISTING BACKFLOW PREVENTION

BOOSTER PUMP:
 BOOSTER PUMP SHALL BE BY CUSTOM PUMP, INC. MODEL # 190MTW 01312018-1/ 10 VFD CONTACT MIKE PIRILO AT 916-429-9729
 INLET PRESSURE: 30 PSI
 OUTLET PRESSURE: 75 PSI
 MIN/MAX WATER DEMAND: 60GPM/190GPM
 POWER INPUT: 208V, 3 PHASE

MASTER VALVE ASSEMBLY:
 COMPONENTS:
 (M) MASTER VALVE = 4" NORMALLY CLOSED GRISWOLD #2000P
 (F) FLOW SENSOR = DATA INDUSTRIAL Z20SS, 2" SIZE SADDLE INSERT IN 4" STEEL PIPE.
 FLOW SENSOR TO BE CONNECTED TO AUTOMATIC CONTROLLER WITH UF-14 WIRES IN 1" CONDUIT. EACH MASTER VALVE TO BE CONNECTED TO AUTOMATIC CONTROLLER WITH UF-14 WIRES IN 1" CONDUIT.

POINT OF CONNECTION:
 THIS SPRINKLER IRRIGATION SYSTEM IS DESIGNED TO OPERATE AT 80 PSI DYNAMIC WATER PRESSURE WITH A MAXIMUM FLOW OF 190 GPM.

GATE VALVE:
 TYPE:
 LEEMCO GATE VALVE WITH A NON-RISING STEM AND OPERATING NUT.
 GATE VALVE TO BE LINE SIZE.
 GATE VALVE INSTALLED IN A VALVE BOX WITH TOP OF BOX SET FLUSH TO FINISH GRADE.
 GATE VALVE TO BE LINE SIZE.

PRESSURE MAIN LINE:
 TYPE:
 ASTM D2241 SDR 21, 200 PSI, RUBBER GASKETED WITH LEEMCO FITTINGS.
 TRENCH DEPTH:
 IN PLANTED AREAS: 24" MINIMUM COVER.
 UNDER PAVED AREAS: 24" MINIMUM COVER.
 PVC SCHEDULE 40 SLEEVES ARE REQUIRED FOR ALL PIPING UNDER PAVEMENT.

LATERAL LINE:
 TYPE:
 PVC SCHEDULE 40, SOLVENT WELD ALL UNSIZED PIPE SHALL BE 3/4" SIZE.
 TRENCH DEPTH:
 IN PLANTED AREAS:
 POP-UP SPRAY HEADS - 12" MINIMUM COVER.
 ROTOR HEADS: - 18" MINIMUM COVER.
 UNDER PAVED AREAS: 24" MINIMUM COVER.
 PVC SCHEDULE 40 SLEEVES ARE REQUIRED FOR ALL PIPING UNDER PAVEMENT.

AUTOMATIC CONTROL VALVE:
 HUNTER ICV-AS-ADJ SERIES WITH HUNTER ICD-100 DECODER

LAWN POP-UP ROTOR HEADS:
 FULL CIRCLE HUNTER: I-40-04-SS-15 HALF CIRCLE HUNTER: I-40-04-SS-13
 THREE QUARTER HUNTER: I-40-04-SS-13 QUARTER CIRCLE HUNTER: I-40-04-SS-13

LAWN POP-UP SPRAY HEADS:
 HUNTER: PROS-06 WITH CHECK VALVE SERIES WITH MP ROTATOR 2000 SERIES FULL, HALF, QUARTER AND THREE QUARTER SPRAY PATTERNS.

LAWN POP-UP SPRAY HEADS:
 HUNTER: PROS-06 WITH CHECK VALVE SERIES WITH MP ROTATOR 1000 SERIES FULL, HALF, QUARTER AND THREE QUARTER SPRAY PATTERNS.

LAWN POP-UP SPRAY HEADS:
 HUNTER: PROS-06-PRS40 WITH CHECK VALVE SERIES WITH MP ROTATOR 800 SERIES FULL, HALF, QUARTER AND THREE QUARTER SPRAY PATTERNS.

SHRUB POP-UP SPRAY HEADS:
 HUNTER: PROS-06-PRS40 WITH CHECK VALVE SERIES WITH MP ROTATOR 800 SERIES FULL, HALF, QUARTER AND THREE QUARTER SPRAY PATTERNS.

SHRUB POP-UP STRIP SPRAY HEADS:
 HUNTER: PROS-06 WITH CHECK VALVE SERIES WITH MP STRIP SERIES LEFT CORNER, RIGHT CORNER, AND SIDE STRIPS SPRAY PATTERNS.

SHRUB POP-UP CORNER SPRAY HEADS:
 HUNTER: PROS-06 WITH CHECK VALVE SERIES WITH MP CORNER SERIES

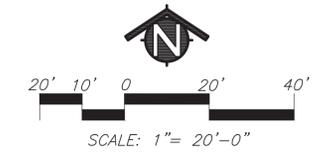
1" STEEL CONDUIT FOR TWO-WIRE CABLE
 CONDUIT PATHWAY TO BE REVIEWED AND APPROVED BY SCHOOL DISTRICT PRIOR TO INSTALLATION

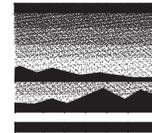
GROUNDING ROD ASSEMBLY:
 TO BE INSTALLED ALONG THE TWO-WIRE PATH EVERY 500' AND AT TERMINATION OF LINE.

INDICATES CONTROL VALVE AND STATION NUMBER
 INDICATES CONTROL VALVE SIZE
 INDICATES GALLONS PER MINUTE

BROOM FINISH CONCRETE
 6" TALL CHAIN LINK FENCE

SEE L2.1 FOR LANDSCAPE IRRIGATION NOTES





MTW group
 LANDSCAPE ARCHITECTURE
 AND PLANNING
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 Suite 205
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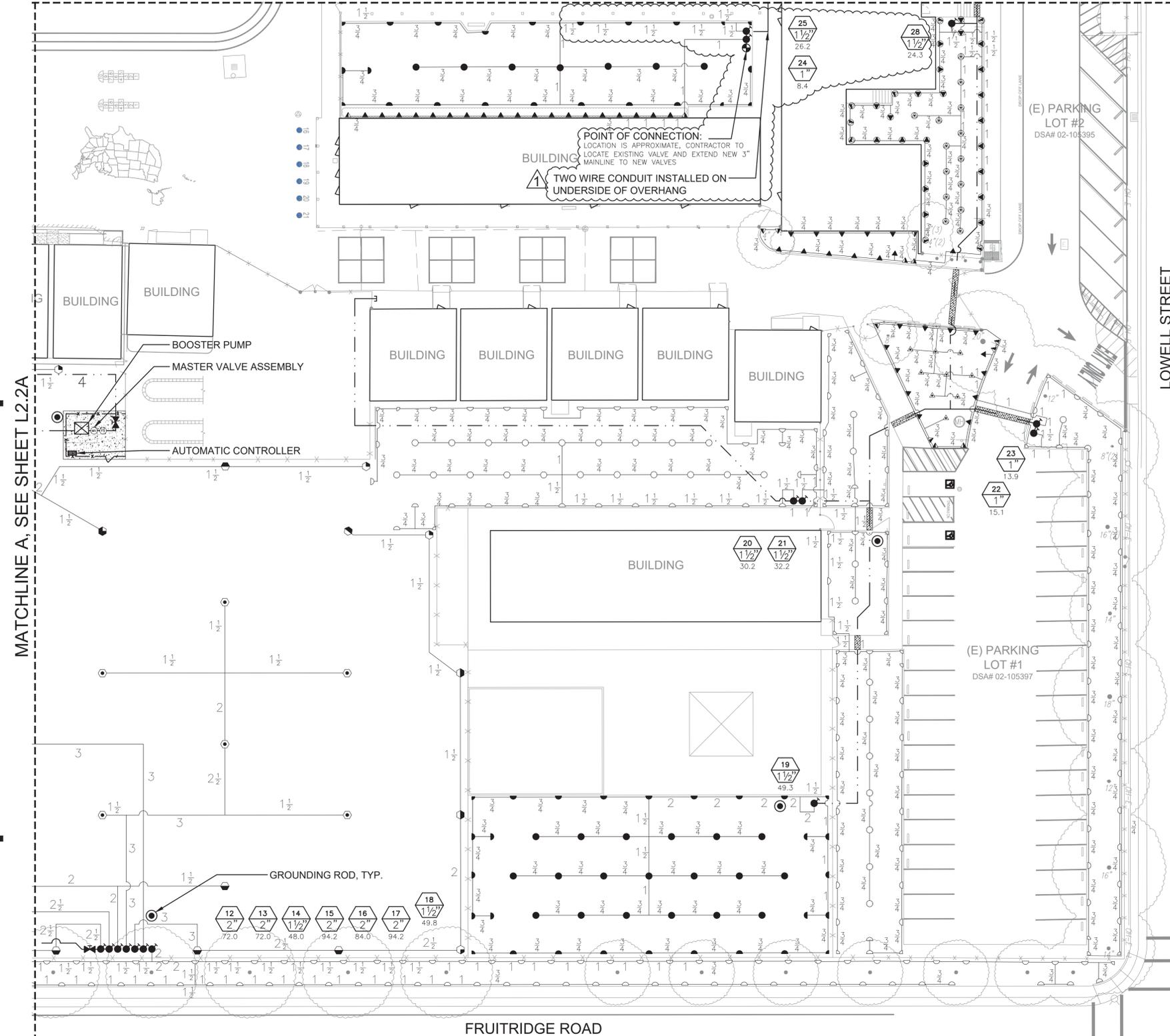
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REVISIONS		
NO.	DESCRIPTION	DATE
1	ADDENDUM 1	3/27/18

EARL WARREN, JOHN BIDWELL AND TAHOE
 ELEMENTARY SCHOOL
 IRRIGATION IMPROVEMENTS
 SACRAMENTO, CA 95820

DATE	2/15/18
JOB NO.	17-68
SHEET TITLE	
EARL WARREN ES LANDSCAPE IRRIGATION PLAN	
SHEET NO.	
L2.3A	
SHEET 8 OF 35	

MATCHLINE A, SEE SHEET L2.4A



PRE-CONSTRUCTION SPRINKLER IRRIGATION NOTES

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- ALL WORK TO EXISTING SPRINKLER IRRIGATION SYSTEM TO BE COMPLETED PRIOR TO SITE DEMOLITION.

KEY

- INDICATES CONTROL VALVE AND STATION NUMBER
- INDICATES CONTROL VALVE SIZE
- INDICATES GALLONS PER MINUTE
- BROOM FINISH CONCRETE
- 6' TALL CHAIN LINK FENCE

LANDSCAPE IRRIGATION LEGEND

AUTOMATIC CONTROLLER:
 HUNTER CONTROL SYSTEM: - 99 STATION TWO-WIRE DECODER CONTROLLER
 #CA6-HU5-99D/LPP/ACC-COM-LAN/WSS/ROAM-WH/FAN-16
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 COORDINATE 110V SERVICE AND POWER CONNECTION AND ETHERNET CONNECTION WITH ELECTRICAL SUB-CONTRACTOR.

EXISTING BACKFLOW PREVENTION

BOOSTER PUMP:
 BOOSTER PUMP SHALL BE BY CUSTOM PUMP, INC. MODEL # 190MTW 01312018-1/ 10 VFD
 CONTACT MIKE PIRILO AT 916-429-9729
 INLET PRESSURE: 30 PSI
 OUTLET PRESSURE: 75 PSI
 MIN/MAX WATER DEMAND: 60GPM/190GPM
 POWER INPUT: 208V, 3 PHASE

MASTER VALVE ASSEMBLY:
 COMPONENTS:
 (M) MASTER VALVE = 4" NORMALLY CLOSED GRISWOLD #200DP
 (S) FLOW SENSOR = DATA INDUSTRIAL 220SS, 2" SIZE SADDLE INSERT IN 4" STEEL PIPE.
 FLOW SENSOR TO BE CONNECTED TO AUTOMATIC CONTROLLER WITH UF-14 WIRES IN 1" CONDUIT.
 EACH MASTER VALVE TO BE CONNECTED TO AUTOMATIC CONTROLLER WITH UF-14 WIRES IN 1" CONDUIT.

POINT OF CONNECTION:
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GATE VALVE:
 TYPE:
 LEEMCO GATE VALVE WITH A NON-RISING STEM AND OPERATING NUT.
 GATE VALVE TO BE LINE SIZE.
 GATE VALVE INSTALLED IN A VALVE BOX WITH TOP OF BOX SET FLUSH TO FINISH GRADE.
 GATE VALVE TO BE LINE SIZE.

PRESSURE MAIN LINE:
 TYPE:
 ASTM D2241 SDR 21, 200 PSI, RUBBER GASKETED WITH LEEMCO FITTINGS.
 TRENCH DEPTH:
 IN PLANTED AREAS: 24" MINIMUM COVER.
 UNDER PAVED AREAS: 24" MINIMUM COVER.
 PVC SCHEDULE 40 SLEEVES ARE REQUIRED FOR ALL PIPING UNDER PAVEMENT.

LATERAL LINE:
 TYPE:
 PVC SCHEDULE 40, SOLVENT WELD ALL UNSIZED PIPE SHALL BE 3/4" SIZE.
 TRENCH DEPTH:
 IN PLANTED AREAS:
 POP-UP SPRAY HEADS - 12" MINIMUM COVER.
 ROTOR HEADS: - 18" MINIMUM COVER.
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LAWN POP-UP SPRAY HEADS:
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LAWN POP-UP SPRAY HEADS:
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SHRUB POP-UP STRIP SPRAY HEADS:
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SHRUB POP-UP CORNER SPRAY HEADS:
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1" STEEL CONDUIT FOR TWO-WIRE CABLE
 CONDUIT PATHWAY TO BE REVIEWED AND APPROVED BY SCHOOL DISTRICT PRIOR TO INSTALLATION

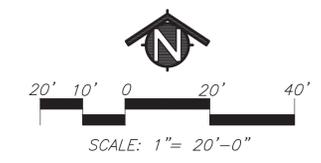
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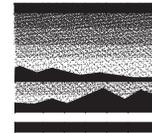
MATCHLINE A, SEE SHEET L2.2A

LOWELL STREET

FRUITRIDGE ROAD

SEE L2.1A FOR LANDSCAPE IRRIGATION NOTES





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SACRAMENTO, CA 95820

DATE 2/15/18

JOB NO. 17-68

SHEET TITLE
**EARL WARREN ES
 LANDSCAPE
 IRRIGATION
 PLAN**

SHEET NO.

L2.4A

SHEET 9 OF 35

LANDSCAPE IRRIGATION LEGEND

AUTOMATIC CONTROLLER:
 HUNTER CONTROL SYSTEM: - 99 STATION TWO-WIRE DECODER CONTROLLER
 #CA6-HUS-99D/LPP/ACC-COM-LAN/WSS/ROAM-WH/FAN-16
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 OUTLET PRESSURE: 75 PSI
 MN/MAX WATER DEMAND: 60GPM/190GPM
 POWER INPUT: 208V, 3 PHASE

MASTER VALVE ASSEMBLY:
 COMPONENTS:
 (1) MASTER VALVE = 4" NORMALLY CLOSED GRISWOLD #2000P
 (2) FLOW SENSOR = DATA INDUSTRIAL 220SS, 2" SIZE SADDLE INSERT IN 4" STEEL PIPE.

FLOW SENSOR TO BE CONNECTED TO AUTOMATIC CONTROLLER WITH UF-14 WIRES IN 1" CONDUIT.
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GATE VALVE:
 TYPE:
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 GATE VALVE TO BE LINE SIZE.

GATE VALVE INSTALLED IN A VALVE BOX WITH TOP OF BOX SET FLUSH TO FINISH GRADE.
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AUTOMATIC CONTROL VALVE:
 HUNTER ICV-AS-ADJ SERIES WITH HUNTER ICD-100 DECODER

LAWN POP-UP ROTOR HEADS:
 FULL CIRCLE HALF CIRCLE
 HUNTER: I-40-04-SS-15 HUNTER: I-40-04-SS-13

THREE QUARTER QUARTER CIRCLE
 HUNTER: I-40-04-SS-13 HUNTER: I-40-04-SS-13

LAWN POP-UP SPRAY HEADS:
 HUNTER: PROS-06 WITH CHECK VALVE SERIES WITH MP ROTATOR 2000 SERIES FULL, HALF, QUARTER AND THREE QUARTER SPRAY PATTERNS.

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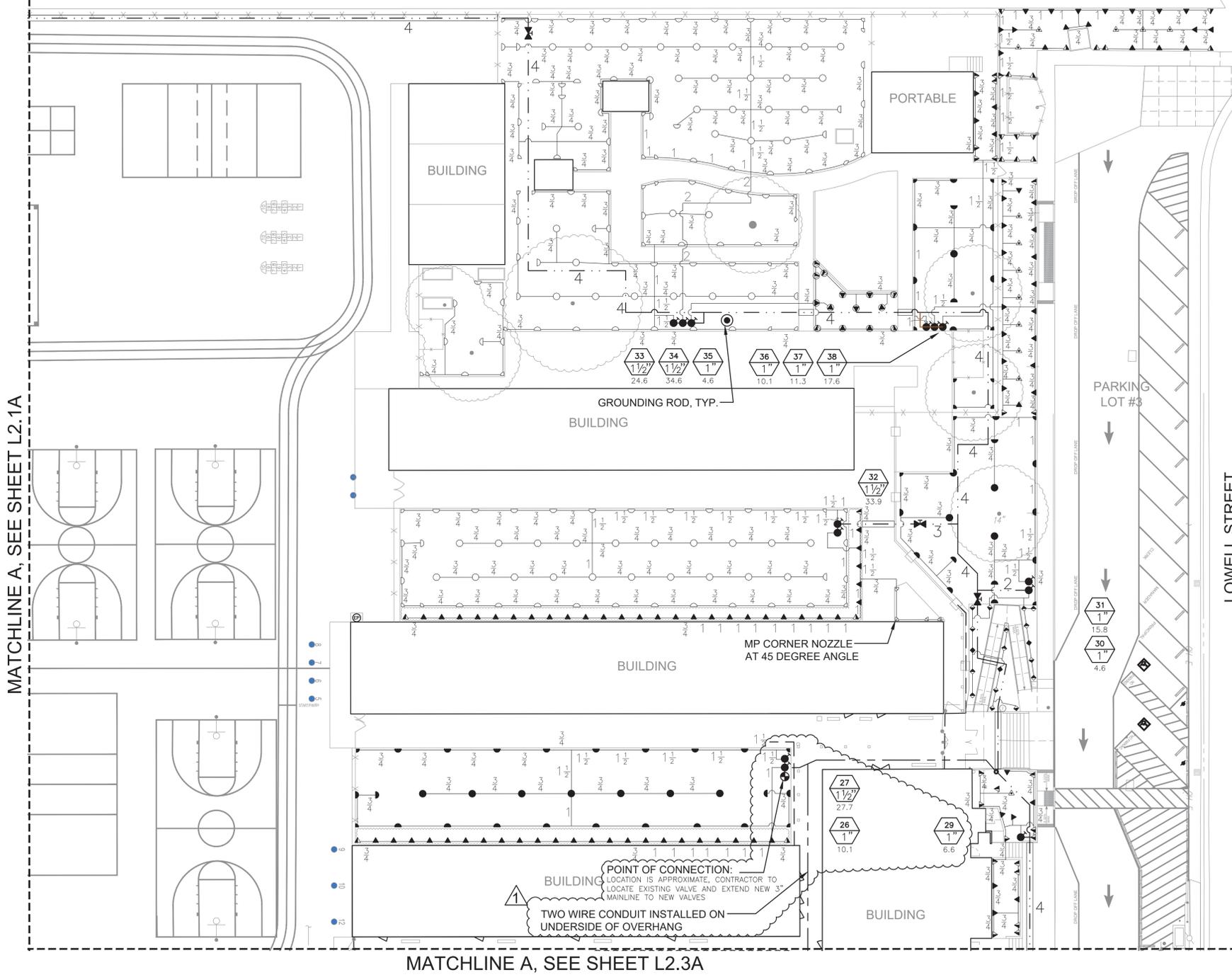
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 CONDUIT PATHWAY TO BE REVIEWED AND APPROVED BY SCHOOL DISTRICT PRIOR TO INSTALLATION

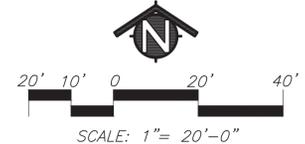
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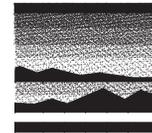


LANDSCAPE IRRIGATION NOTES

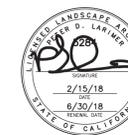
- COMPOSITE BASE SHEET: PROPOSED IMPROVEMENTS SHOWN ON DRAWINGS ARE SUPERIMPOSED ON A COMPOSITE BASE SHEET. THE COMPOSITE BASE SHEET IS A COMPILED OF ARCHITECTURAL, ENGINEERING, AND OTHER DATA THAT IS PROVIDED. THE LANDSCAPE ARCHITECT SHALL NOT BE HELD LIABLE FOR CHANGES, INACCURACIES, OMISSIONS, OR ERRORS PERTAINING TO THE COMPOSITE BASE SHEET. CONTRACTOR SHALL BE RESPONSIBLE FOR REVIEWING THESE DOCUMENTS. ANY DISCREPANCIES NEED TO BE BROUGHT TO THE ATTENTION OF THE DESIGN TEAM AND RESOLVED PRIOR TO CONTINUATION OF WORK.
- DESIGN PRESSURE SHOWN ON PLANS HAS BEEN FURNISHED BY WATER COMPANY OR WATER DISTRICT SERVING SITE. VERIFY PRESSURE ON-SITE PRIOR TO THE INSTALLATION OF ANY SPRINKLER IRRIGATION EQUIPMENT. IF THERE IS A DISCREPANCY, NOTIFY OWNER'S REPRESENTATIVE IMMEDIATELY IN WRITING SO ADJUSTMENTS CAN BE MADE BY LANDSCAPE ARCHITECT. FAILURE TO REPORT DISCREPANCIES AND CONTINUANCE OF WORK WILL RESULT IN ALL RE-DESIGN COSTS BEING CHARGED TO CONTRACTOR.
- DETERMINE LOCATION OF UNDERGROUND UTILITIES. DAMAGE CAUSED BY INSTALLATION OF THIS WORK SHALL BE REPAIRED TO SATISFACTION OF GOVERNING AGENCY OR OWNER AT NO ADDITIONAL COST TO THE CONTRACTOR.
- SPRINKLER OVER SPRAY SHALL NOT BE ALLOWED ON PUBLIC SIDEWALKS, BUILDING WALLS OR FENCES. MINIMUM OVERSPRAY MAY OCCUR IN PARKING AREAS. USE ADJUSTABLE NOZZLES WHENEVER POSSIBLE TO CONTROL SPRINKLER OVERSPRAY.
- ALL LOCAL CODES AND ORDINANCES SHALL BE COMPLIED WITH. IF THERE IS A CONFLICT, NOTIFY OWNER'S REPRESENTATIVE IMMEDIATELY.
- TESTING:
 A. PRESSURE TEST ALL UNDERGROUND PIPING AS FOLLOWS:
 MAIN LINE - AT 100 PSI FOR 4 HOURS.
 LATERAL LINES - AT 100 PSI FOR 2 HOURS.
 B. COVERAGE TEST:
 NOTE: PRIOR TO REQUESTING COVERAGE TEST, INSURE ALL HEADS ARE SET PLUMB, NOZZLES ARE ADJUSTED PROPERLY AND SYSTEM HAS BEEN CHECKED FOR AUTOMATION.
 REQUEST OWNER'S REPRESENTATIVE'S PRESENCE ON-SITE WHEN SPRINKLER SYSTEM IS COMPLETELY INSTALLED AND FULLY AUTOMATIC. PROVIDE ADEQUATE PERSONNEL AT THIS MEETING TO ADJUST AND FINE TUNE SYSTEM TO SATISFACTION OF OWNER'S REPRESENTATIVE.
- LAYOUT ALL WORK PRIOR TO TRENCHING OPERATIONS TO DETERMINE IF MINOR MODIFICATIONS OR ADJUSTMENTS WILL BE REQUIRED.
- INSTALL ALL SPRINKLER HEADS PERPENDICULAR TO SLOPES OR GRADE.
- CONTROL WIRE SHALL BE HUNTER TWO-WIRE DECODER CABLE. SPLICES SHALL BE PERMITTED AT VALVE BOX LOCATIONS ONLY.
- PROVIDE AND INSTALL AUTOMATIC CONTROLLER AND TWO-WIRE CABLE. ELECTRICAL SUBCONTRACTOR SHALL PROVIDE 110V SERVICE AND SERVICE HOOKUP FROM POWER SOURCE TO AUTOMATIC CONTROLLER.
- COORDINATE ALL WORK WITH OTHER TRADES SO PROGRESS OF WORK IS NOT INTERRUPTED AND CAN BE COMPLETED IN A TIMELY MANNER.
- NO PLANTING SHALL BE STARTED UNTIL ALL SPRINKLER WORK HAS BEEN TESTED AND APPROVED IN PRESENCE OF OWNER'S REPRESENTATIVE.
- FOR SPRINKLER IRRIGATION INSTALLATION DETAILS, SEE SHEET NO. L3.1, L3.2 AND L3.3.

**AFTER IRRIGATION INSTALLATION IS COMPLETE:
 ALL SHRUB BEDS TO BE GRADED SMOOTH, AND
 LAWN AREAS TO BE GRADED SMOOTH AND SLIT
 SEEDED PER LANDSCAPE SPECIFICATIONS.**





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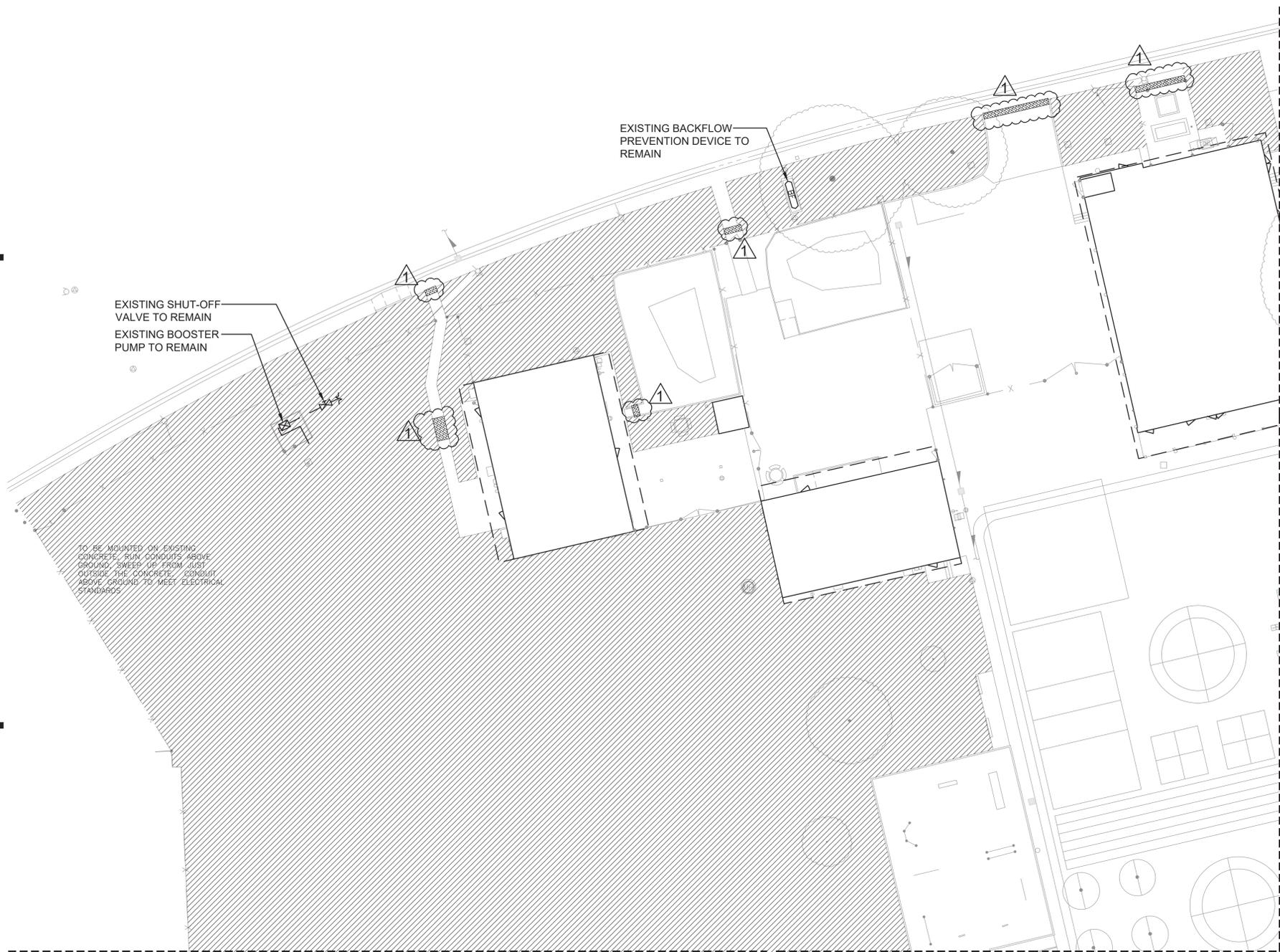
SHEET TITLE
 JOHN BIDWELL ES
 DEMOLITION
 PLAN

SHEET NO.

L1.1B

SHEET 10 OF 35

1



KEY

- EXISTING LANDSCAPE IRRIGATION TO BE REMOVED
- ASPHALT/CONCRETE TO BE SAWCUT
- EXISTING AUTOMATIC CONTROLLER TO BE DISCONNECTED AND REMOVED
- EXISTING BACKFLOW PREVENTION DEVICE TO REMAIN
- EXISTING PRESSURE MAIN LINE
- EXISTING SHUT-OFF VALVE TO REMAIN

IRRIGATION DEMOLITION LEGEND

EXISTING LANDSCAPE IRRIGATION TO BE REMOVED

ASPHALT/CONCRETE TO BE SAWCUT
 ONCE NEW IRRIGATION LINES ARE INSTALLED, PLACE SUBBASE AGGREGATE AND FILL IN WITH APPROPRIATE PAVING MATERIAL (ASPHALT/CONCRETE) UNLESS OTHERWISE SPECIFIED.

NOTE:
 CONTRACTOR TO IRRIGATE ALL TREES MANUALLY DURING CONSTRUCTION PROCESS

EXISTING AUTOMATIC CONTROLLER TO BE DISCONNECTED AND REMOVED

EXISTING BACKFLOW PREVENTION DEVICE TO REMAIN

EXISTING PRESSURE MAIN LINE

EXISTING SHUT-OFF VALVE TO REMAIN

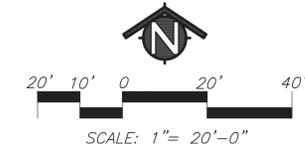
EXISTING SHUT-OFF VALVE TO REMAIN
 EXISTING BOOSTER PUMP TO REMAIN

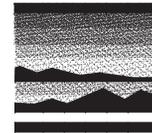
EXISTING BACKFLOW PREVENTION DEVICE TO REMAIN

TO BE MOUNTED ON EXISTING CONCRETE. RUN CONDUITS ABOVE GROUND. SWEEP UP FROM JUST OUTSIDE THE CONCRETE. CONDUIT ABOVE GROUND TO MEET ELECTRICAL STANDARDS.

MATCH LINE, SEE SHEET L1.2B

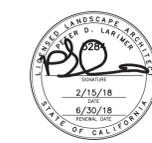
MATCH LINE, SEE SHEET L1.4B





MTW group

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1	ADDENDUM 1	3/27/18

EARL WARREN, JOHN BIDWELL AND TAHOE
ELEMENTARY SCHOOL
IRRIGATION IMPROVEMENTS
SACRAMENTO, CA 95820

DATE 2/15/18
JOB NO. 17-69
SHEET TITLE
JOHN BIDWELL ES
DEMOLITION
PLAN

SHEET NO.
L1.2B
SHEET 11 OF 35



MATCH LINE, SEE SHEET L1.1B

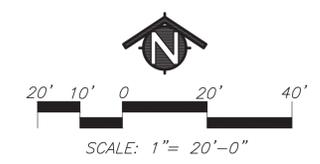
MATCH LINE, SEE SHEET L1.3B

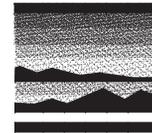
KEY

- EXISTING LANDSCAPE IRRIGATION TO BE REMOVED
- ASPHALT/CONCRETE TO BE SAWCUT
ONCE NEW IRRIGATION LINES ARE INSTALLED, PLACE SUBBASE AGGREGATE AND FILL IN WITH APPROPRIATE PAVING MATERIAL (ASPHALT/CONCRETE) UNLESS OTHERWISE SPECIFIED.
- EXISTING AUTOMATIC CONTROLLER TO BE DISCONNECTED AND REMOVED
- EXISTING BACKFLOW PREVENTION DEVICE TO REMAIN
- EXISTING PRESSURE MAIN LINE
- EXISTING SHUT-OFF VALVE TO REMAIN

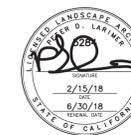
IRRIGATION DEMOLITION LEGEND

NOTE:
CONTRACTOR TO IRRIGATE ALL TREES MANUALLY DURING CONSTRUCTION PROCESS





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 ELEMENTARY SCHOOL
 IRRIGATION IMPROVEMENTS**

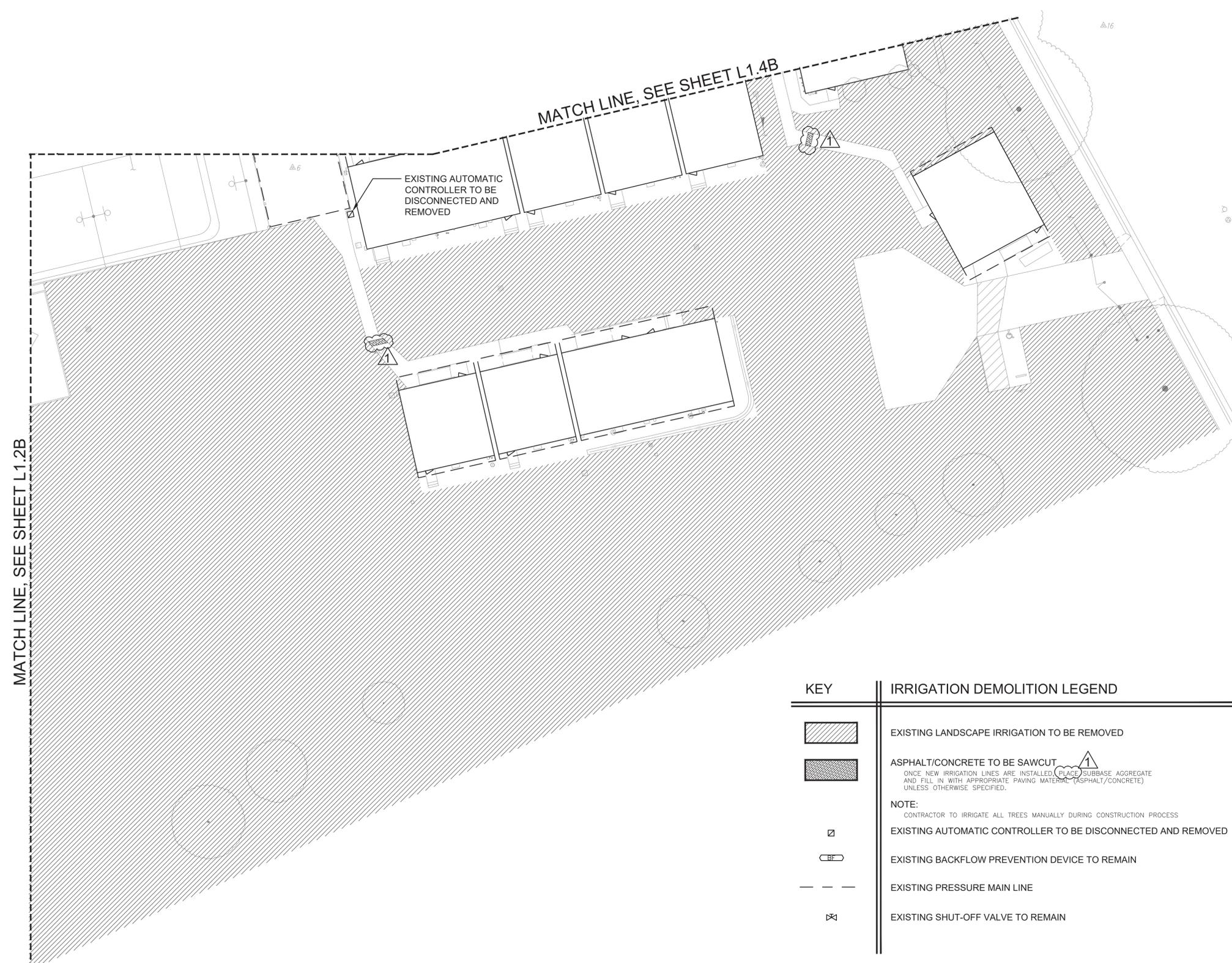
SACRAMENTO, CA 95820

DATE 2/15/18
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**JOHN BIDWELL ES
 DEMOLITION
 PLAN**

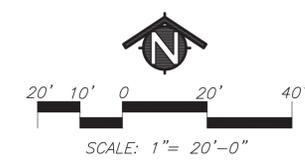
SHEET NO.

L1.3B

SHEET 12 OF 35



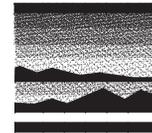
KEY	IRRIGATION DEMOLITION LEGEND
	EXISTING LANDSCAPE IRRIGATION TO BE REMOVED
	ASPHALT/CONCRETE TO BE SAWCUT <small>ONCE NEW IRRIGATION LINES ARE INSTALLED, PLACE SUBBASE AGGREGATE AND FILL IN WITH APPROPRIATE PAVING MATERIAL (ASPHALT/CONCRETE) UNLESS OTHERWISE SPECIFIED.</small>
	NOTE: CONTRACTOR TO IRRIGATE ALL TREES MANUALLY DURING CONSTRUCTION PROCESS
	EXISTING AUTOMATIC CONTROLLER TO BE DISCONNECTED AND REMOVED
	EXISTING BACKFLOW PREVENTION DEVICE TO REMAIN
	EXISTING PRESSURE MAIN LINE
	EXISTING SHUT-OFF VALVE TO REMAIN



MATCH LINE, SEE SHEET L1.2B

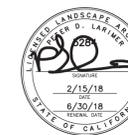
MATCH LINE, SEE SHEET L1.4B

EXISTING AUTOMATIC CONTROLLER TO BE DISCONNECTED AND REMOVED



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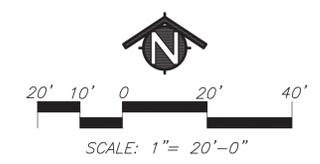
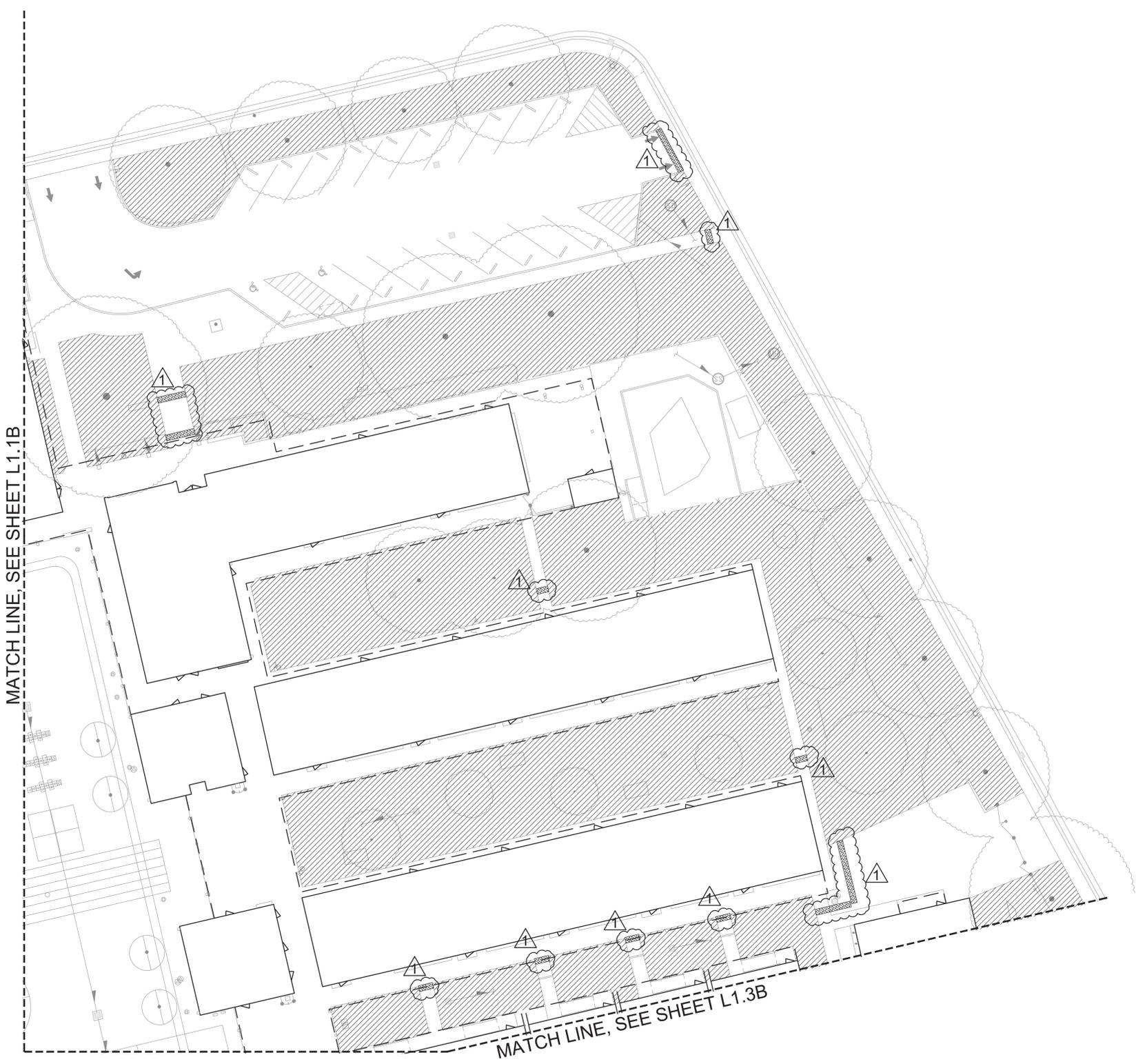
SHEET NO.
L1.4B
SHEET 13 OF 35

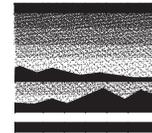
KEY

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DATE 2/15/18
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**JOHN BIDWELL ES
 LANDSCAPE
 IRRIGATION
 PLAN**

SHEET NO.

L2.1B

SHEET 14 OF 35



KEY

LANDSCAPE IRRIGATION LEGEND

- **AUTOMATIC CONTROLLER:**
 HUNTER CONTROL SYSTEM: - 99 STATION TWO-WIRE DECODER CONTROLLER #CA6-HU5-99D/LPP/ACC-COM-LAN/WSS/ROAM-WH/FAN-16
 HUNTER ACC-99 IN STAINLESS TOP ENTRY ENCLOSURE WITH ETHERNET MODEM, WIRELESS SOLAR SYNC KIT, AND ROAM SMART PORT.

 SURGE PROTECTOR FOR AUTOMATIC CONTROLLER AND GROUNDING ROD/PLATE TO BE INSTALLED AS PER THE GROUNDING DETAIL.
 CONTACT JIM WELLER, SITE ONE GREENTECH, AT 925-451-1610 FOR PRICING
 COORDINATE 110V SERVICE AND POWER CONNECTION AND ETHERNET CONNECTION WITH ELECTRICAL SUB-CONTRACTOR.
- ☒ **EXISTING BOOSTER PUMP**
- ⊗ **MASTER VALVE ASSEMBLY:**
 COMPONENTS:
 ⊗ MASTER VALVE = 4" NORMALLY CLOSED GRISWOLD #200P.
 ⊗ FLOW SENSOR = DATA INDUSTRIAL 220PVC5, 2" SIZE SADDLE INSERT IN 4" PVC TEE.

 FLOW SENSOR TO BE CONNECTED TO AUTOMATIC CONTROLLER WITH UF-14 WIRES IN 1" CONDUIT.
 EACH MASTER VALVE TO BE CONNECTED TO AUTOMATIC CONTROLLER WITH UF-14 WIRES IN 1" CONDUIT.
- ⊕ **POINT OF CONNECTION:**
 THIS SPRINKLER IRRIGATION SYSTEM IS DESIGNED TO OPERATE AT 75 PSI DYNAMIC WATER PRESSURE WITH A MAXIMUM FLOW OF 190 GPM.
- ⊗ **GATE VALVE:**
 TYPE:
 LEEMCO GATE VALVE WITH A NON-RISING STEM AND OPERATING NUT.
 GATE VALVE TO BE LINE SIZE.

 GATE VALVE INSTALLED IN A VALVE BOX WITH TOP OF BOX SET FLUSH TO FINISH GRADE.
 GATE VALVE TO BE LINE SIZE.

KEY

LANDSCAPE IRRIGATION LEGEND

- — — — — **PRESSURE MAIN LINE:**
 TYPE:
 ASTM D2241 SDR 21, 200 PSI, RUBBER GASKETED WITH LEEMCO FITTINGS.

 TRENCH DEPTH:
 IN PLANTED AREAS: 24" MINIMUM COVER.
 UNDER PAVED AREAS: 24" MINIMUM COVER.
 PVC SCHEDULE 40 SLEEVES ARE REQUIRED FOR ALL PIPING UNDER PAVEMENT.
- — — — — **EXISTING PRESSURE MAIN LINE**
- — — — — **LATERAL LINE:**
 TYPE:
 PVC SCHEDULE 40, SOLVENT WELD ALL UNSIZED PIPE SHALL BE 3/4" SIZE.

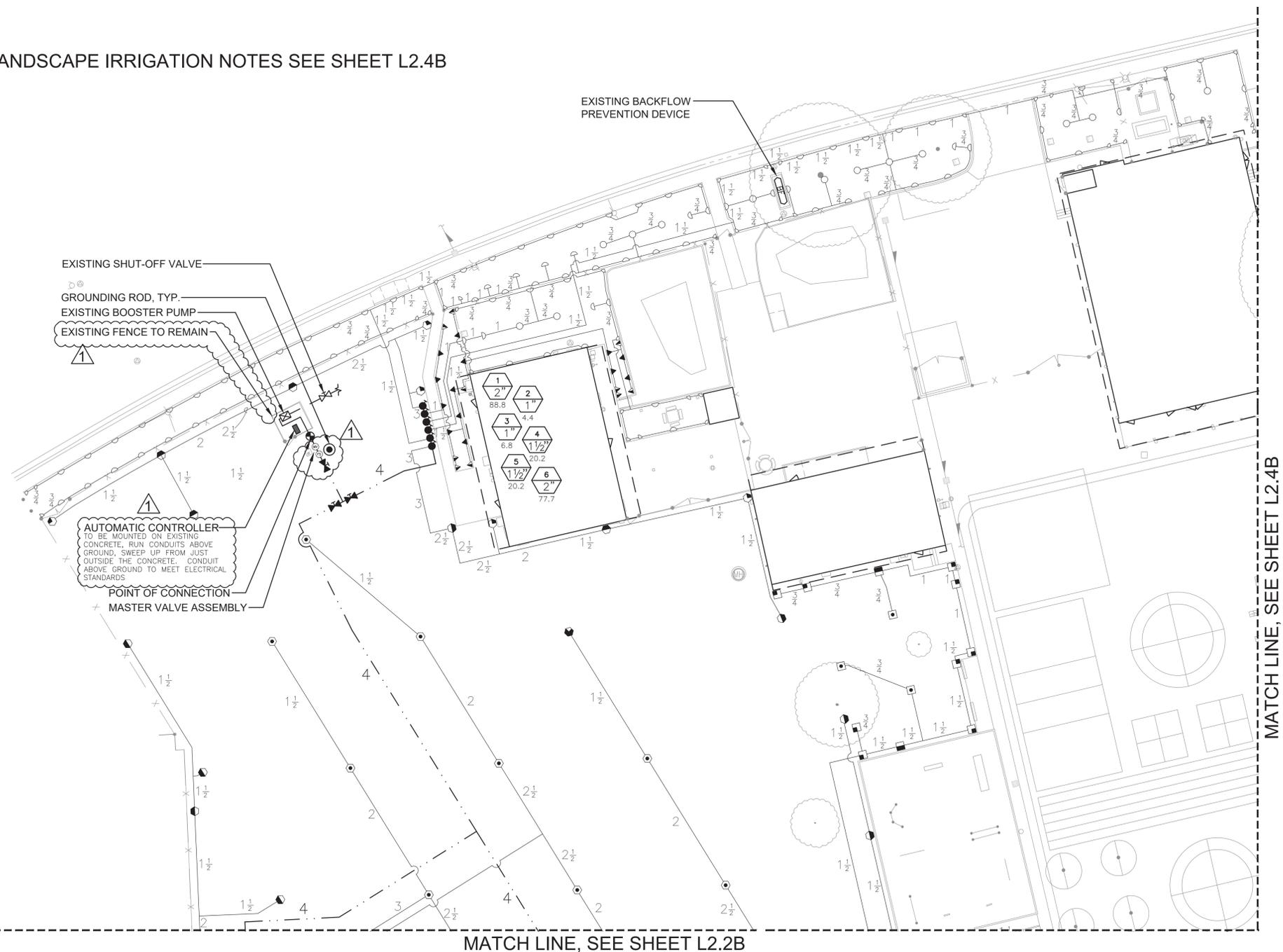
 TRENCH DEPTH:
 IN PLANTED AREAS:
 POP-UP SPRAY HEADS - 12" MINIMUM COVER.
 ROTOR HEADS: - 18" MINIMUM COVER.
 UNDER PAVED AREAS: 24" MINIMUM COVER.
 PVC SCHEDULE 40 SLEEVES ARE REQUIRED FOR ALL PIPING UNDER PAVEMENT.
- ⊕ **AUTOMATIC CONTROL VALVE:**
 HUNTER ICV-101G-AS-ADJ WITH HUNTER ICD-100 DECODER
- ⊕ **LAWN POP-UP ROTOR HEADS:**
 FULL CIRCLE HUNTER: 1-40-04-SS-15 HALF CIRCLE HUNTER: 1-40-04-SS-13
 THREE QUARTER HUNTER: 1-40-04-SS-13 QUARTER CIRCLE HUNTER: 1-40-04-SS-13
- ⊕ **LAWN POP-UP SPRAY HEADS:**
 HUNTER: PROS-06 WITH CHECK VALVE SERIES WITH MP ROTATOR 3000 SERIES
 FULL, HALF, QUARTER AND THREE QUARTER SPRAY PATTERNS.

KEY

LANDSCAPE IRRIGATION LEGEND

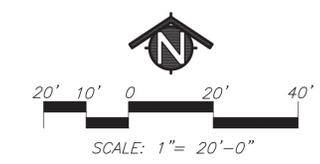
- ● ● ● ● **LAWN POP-UP SPRAY HEADS:**
 HUNTER: PROS-06 WITH CHECK VALVE SERIES WITH MP ROTATOR 2000 SERIES
 FULL, HALF, QUARTER AND THREE QUARTER SPRAY PATTERNS.
- ○ ○ ○ ○ **LAWN POP-UP SPRAY HEADS:**
 HUNTER: PROS-06 WITH CHECK VALVE SERIES WITH MP ROTATOR 1000 SERIES
 FULL, HALF, QUARTER AND THREE QUARTER SPRAY PATTERNS.
- ▲ ▲ ▲ **SHRUB POP-UP SPRAY HEADS:**
 HUNTER: PROS-06-PRS40 WITH CHECK VALVE SERIES WITH MP ROTATOR 800 SERIES
- — — — — **PVC SCHEDULE 40 SLEEVE**
- ⊕ **GROUNDING ROD ASSEMBLY:**
 RAINMASTER LIGHTNING ARRESTOR: TW-LA-1 WITH GR-K GROUND KIT. TO BE INSTALLED ALONG THE TWO-WIRE PATH EVERY 500' AND AT TERMINATION OF LINE.
- ⊕ **INDICATES CONTROL VALVE AND STATION NUMBER**
- ⊕ **INDICATES CONTROL VALVE SIZE**
- ⊕ **INDICATES GALLONS PER MINUTE**

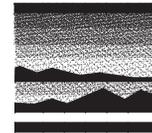
NOTE:
 1. FOR LANDSCAPE IRRIGATION NOTES SEE SHEET L2.4B



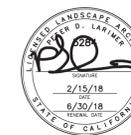
MATCH LINE, SEE SHEET L2.4B

MATCH LINE, SEE SHEET L2.2B





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 ELEMENTARY SCHOOL
 IRRIGATION IMPROVEMENTS**

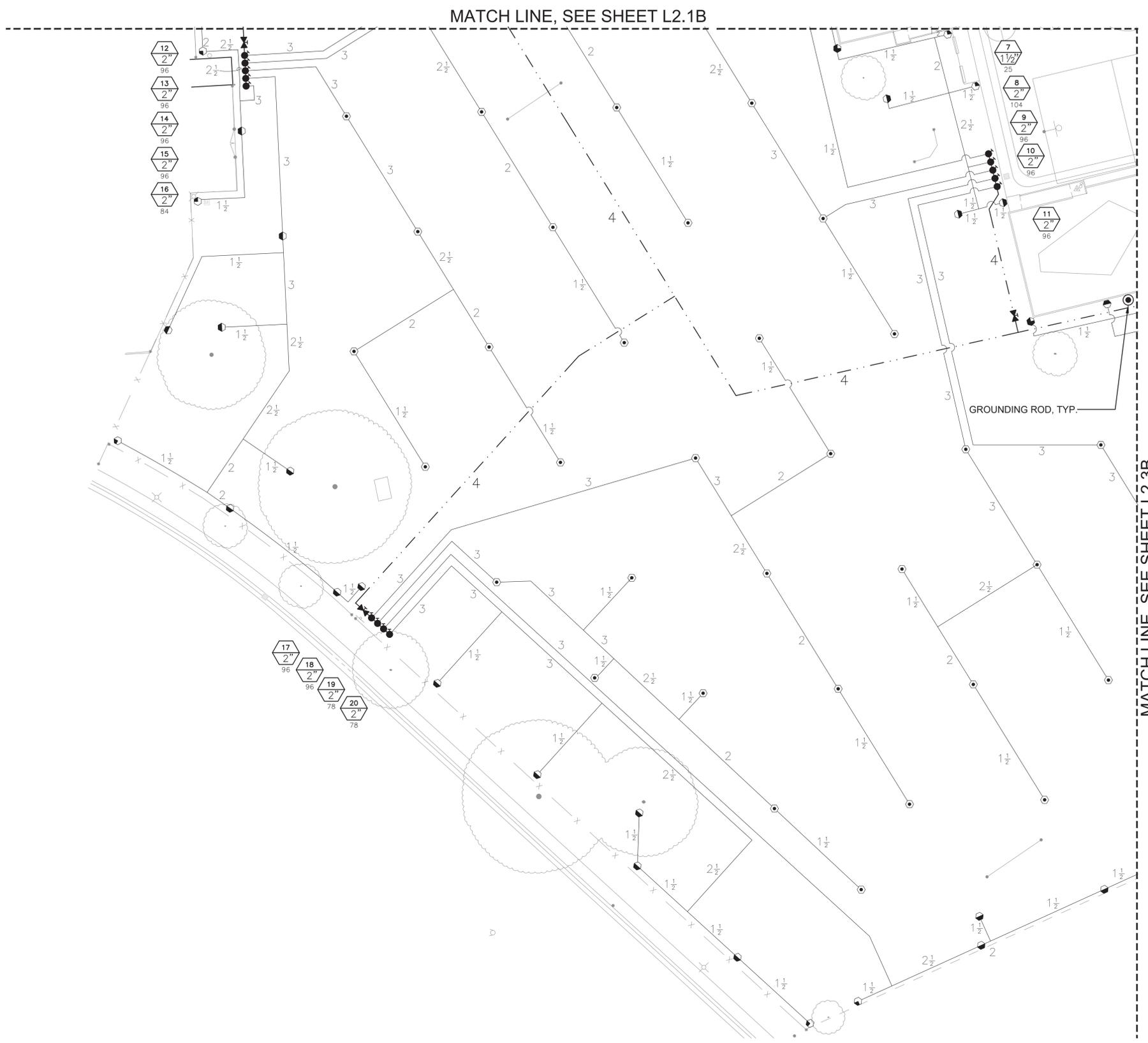
SACRAMENTO, CA 95820

DATE 2/15/18
 JOB NO. 17-69
 SHEET TITLE
**JOHN BIDWELL ES
 LANDSCAPE
 IRRIGATION
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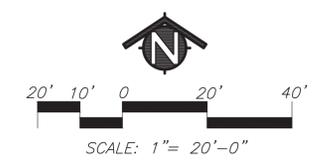
SHEET NO.

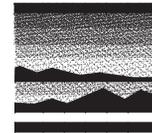
L2.2B

SHEET 15 OF 35



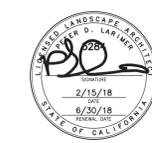
- NOTE:**
- FOR LANDSCAPE IRRIGATION LEGEND SEE SHEET L2.1B
 - FOR LANDSCAPE IRRIGATION NOTES SEE SHEET L2.4B





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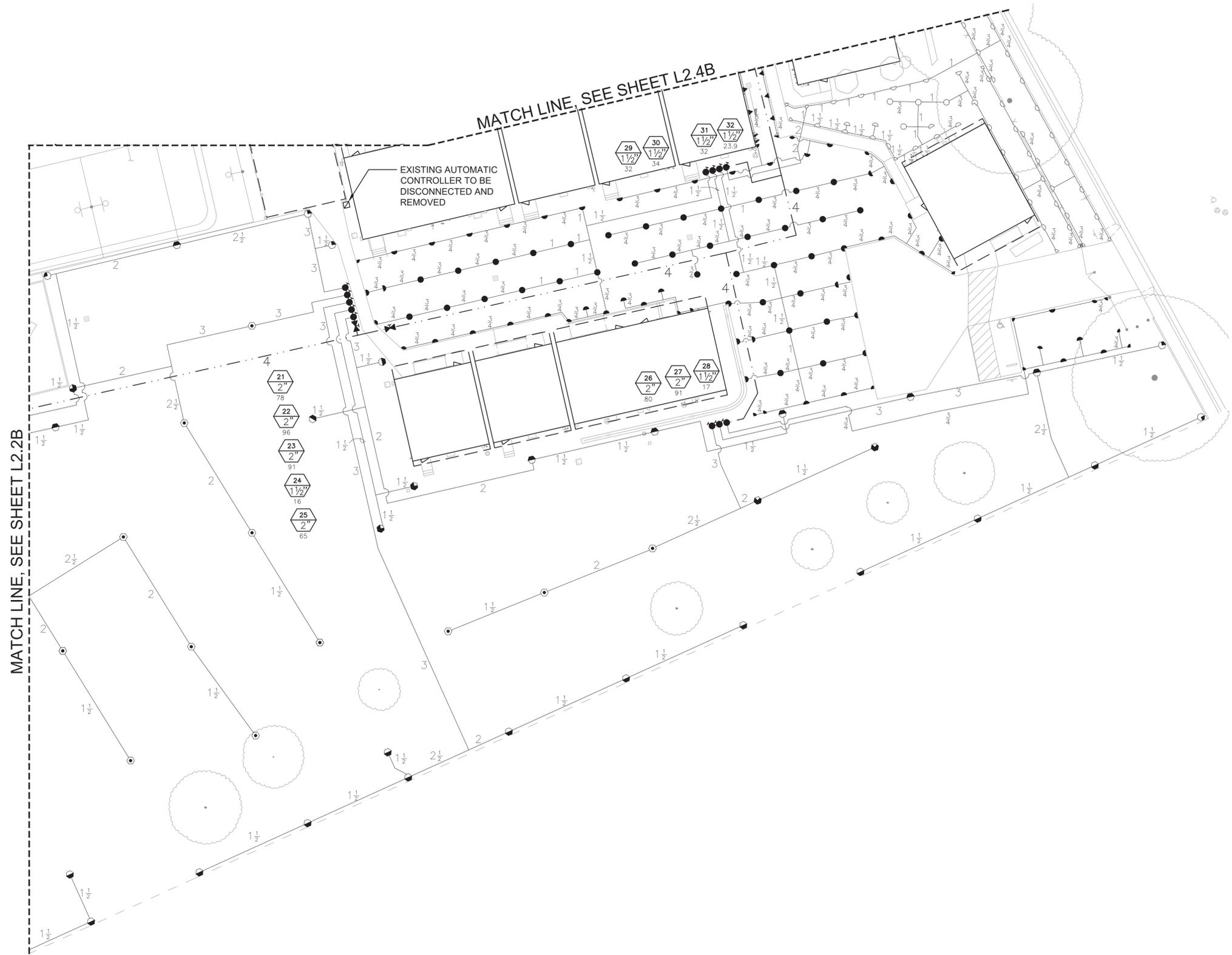
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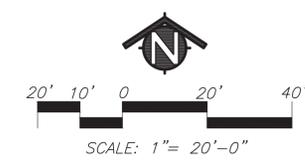
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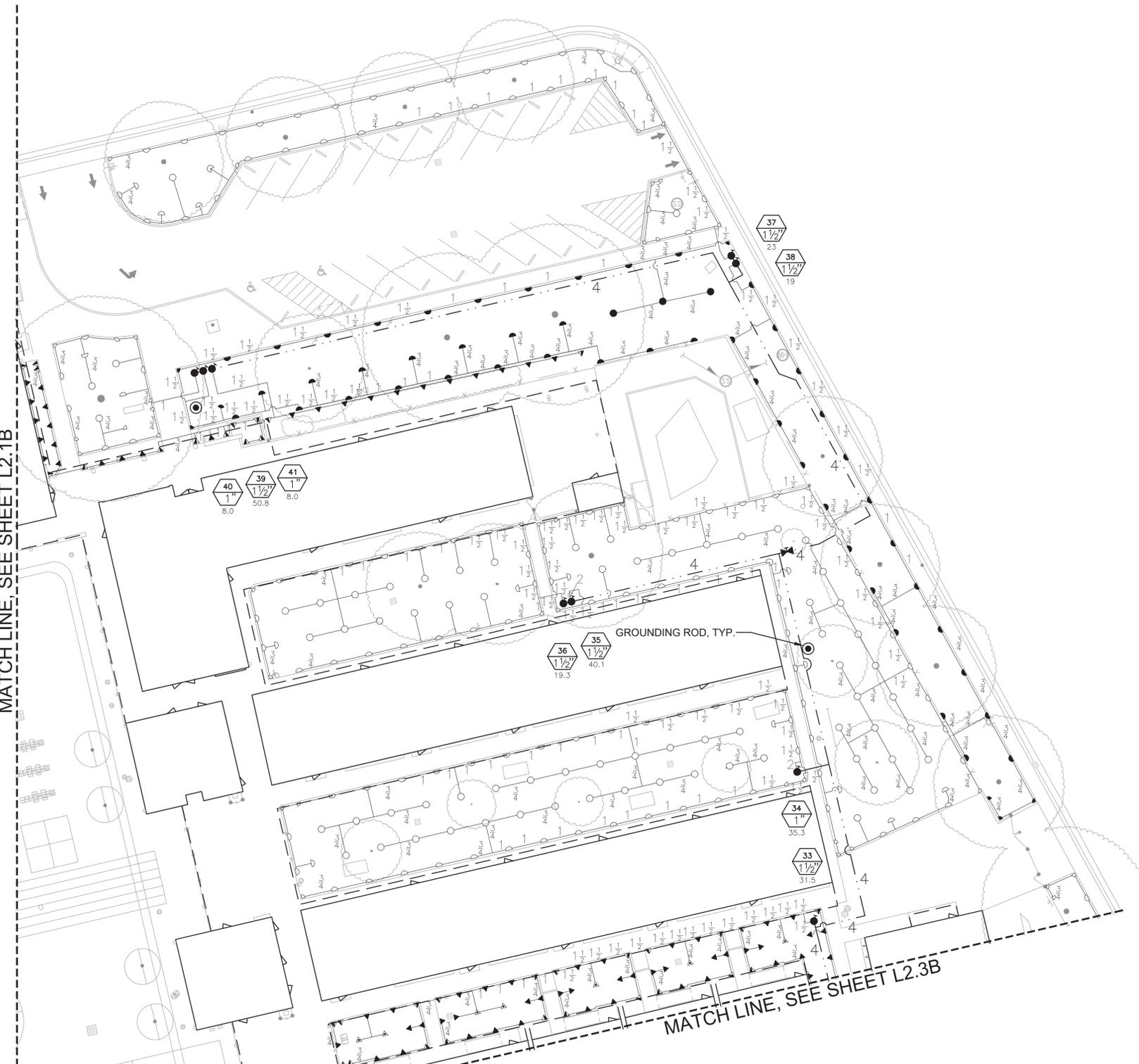
SHEET NO.
L2.3B
SHEET 16 OF 35



- NOTE:
- FOR LANDSCAPE IRRIGATION LEGEND SEE SHEET L2.1B
 - FOR LANDSCAPE IRRIGATION NOTES SEE SHEET L2.4B



MATCH LINE, SEE SHEET L2.1B



LANDSCAPE IRRIGATION NOTES

- COMPOSITE BASE SHEET: PROPOSED IMPROVEMENTS SHOWN ON DRAWINGS ARE SUPERIMPOSED ON A COMPOSITE BASE SHEET. THE COMPOSITE BASE SHEET IS A COMPILATION OF ARCHITECTURAL, ENGINEERING, AND OTHER DATA THAT IS PROVIDED. THE LANDSCAPE ARCHITECT SHALL NOT BE HELD LIABLE FOR CHANGES, INACCURACIES, OMISSIONS, OR ERRORS PERTAINING TO THE COMPOSITE BASE SHEET. CONTRACTOR SHALL BE RESPONSIBLE FOR REVIEWING THESE DOCUMENTS. ANY DISCREPANCIES NEED TO BE BROUGHT TO THE ATTENTION OF THE DESIGN TEAM AND RESOLVED PRIOR TO CONTINUATION OF WORK.
- DESIGN PRESSURE SHOWN ON PLANS HAS BEEN FURNISHED BY WATER COMPANY OR WATER DISTRICT SERVING SITE. VERIFY PRESSURE ON-SITE PRIOR TO THE INSTALLATION OF ANY SPRINKLER IRRIGATION EQUIPMENT. IF THERE IS A DISCREPANCY, NOTIFY OWNER'S REPRESENTATIVE IMMEDIATELY IN WRITING SO ADJUSTMENTS CAN BE MADE BY LANDSCAPE ARCHITECT. FAILURE TO REPORT DISCREPANCIES AND CONTINUANCE OF WORK WILL RESULT IN ALL RE-DESIGN COSTS BEING CHARGED TO CONTRACTOR.
- DETERMINE LOCATION OF UNDERGROUND UTILITIES. DAMAGE CAUSED BY INSTALLATION OF THIS WORK SHALL BE REPAIRED TO SATISFACTION OF GOVERNING AGENCY OR OWNER AT NO ADDITIONAL COST TO THE CONTRACTOR.
- SPRINKLER OVER SPRAY SHALL NOT BE ALLOWED ON PUBLIC SIDEWALKS, BUILDING WALLS OR FENCES. MINIMUM OVERSPRAY MAY OCCUR IN PARKING AREAS. USE ADJUSTABLE NOZZLES WHENEVER POSSIBLE TO CONTROL SPRINKLER OVERSPRAY.
- ALL LOCAL CODES AND ORDINANCES SHALL BE COMPLIED WITH. IF THERE IS A CONFLICT, NOTIFY OWNER'S REPRESENTATIVE IMMEDIATELY.
- TESTING:
 - PRESSURE TEST ALL UNDERGROUND PIPING AS FOLLOWS:
 MAIN LINE - AT 100 PSI FOR 4 HOURS.
 LATERAL LINES - AT 100 PSI FOR 2 HOURS.
 - COVERAGE TEST:
 NOTE: PRIOR TO REQUESTING COVERAGE TEST, INSURE ALL HEADS ARE SET PLUMB, NOZZLES ARE ADJUSTED PROPERLY AND SYSTEM HAS BEEN CHECKED FOR AUTOMATION.
 REQUEST OWNER'S REPRESENTATIVE'S PRESENCE ON-SITE WHEN SPRINKLER SYSTEM IS COMPLETELY INSTALLED AND FULLY AUTOMATIC. PROVIDE ADEQUATE PERSONNEL AT THIS MEETING TO ADJUST AND FINE TUNE SYSTEM TO SATISFACTION OF OWNER'S REPRESENTATIVE.
- LAYOUT ALL WORK PRIOR TO TRENCHING OPERATIONS TO DETERMINE IF MINOR MODIFICATIONS OR ADJUSTMENTS WILL BE REQUIRED.
- INSTALL ALL SPRINKLER HEADS PERPENDICULAR TO SLOPES OR GRADE.
- CONTROL WIRE SHALL BE HUNTER TWO-WIRE DECODER CABLE. SPLICES SHALL BE PERMITTED AT VALVE BOX LOCATIONS ONLY.
- PROVIDE AND INSTALL AUTOMATIC CONTROLLER AND TWO-WIRE CABLE. ELECTRICAL SUBCONTRACTOR SHALL PROVIDE 110V SERVICE AND SERVICE HOOKUP FROM POWER SOURCE TO AUTOMATIC CONTROLLER.
- COORDINATE ALL WORK WITH OTHER TRADES SO PROGRESS OF WORK IS NOT INTERRUPTED AND CAN BE COMPLETED IN A TIMELY MANNER.
- NO PLANTING SHALL BE STARTED UNTIL ALL SPRINKLER WORK HAS BEEN TESTED AND APPROVED IN PRESENCE OF OWNER'S REPRESENTATIVE.
- FOR SPRINKLER IRRIGATION INSTALLATION DETAILS, SEE SHEET NO. L3.1, L3.2 AND L3.3.

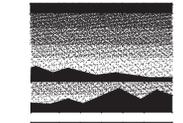
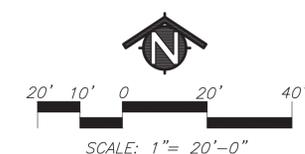
AFTER IRRIGATION INSTALLATION IS COMPLETE:
 ALL SHRUB BEDS TO BE GRADED SMOOTH, AND
 LAWN AREAS TO BE GRADED SMOOTH AND SLIT
 SEEDED PER LANDSCAPE SPECIFICATIONS.

PRE-CONSTRUCTION SPRINKLER IRRIGATION NOTES

- PRIOR TO START OF CONSTRUCTION CONTRACTOR REQUIRED TO CONTACT
 NAME: TITLE: JEFF BOZEMAN
 PHONE NUMBER: 916-715-1044
 TO SET UP A MEETING ON SITE TO OPERATE THE EXISTING SPRINKLER IRRIGATION SYSTEM AND DISCUSS THE MODIFICATIONS THAT ARE TO BE MADE TO THE EXISTING SYSTEM TO ACCOMMODATE FOR THE NEW CONSTRUCTION.
- CONTRACTOR TO OPERATE AND PROGRAM EXISTING SPRINKLER IRRIGATION SYSTEM THAT IS TO REMAIN IN ORDER TO PROVIDE WATER TO THE EXISTING LANDSCAPE TO REMAIN.
- CONTRACTOR TO REMOVE ALL EXISTING PIPE AND SPRINKLER HEADS WHEN THEY ARE IN NEW PLANTING AREAS.
- CONTRACTOR TO RESTORE AND REPAIR ANY EXISTING SPRINKLER IRRIGATION SYSTEM OR EXISTING LANDSCAPE WHICH IS IN AREAS TO REMAIN THAT IS DAMAGED BY NEW WORK.
- ALL WORK TO EXISTING SPRINKLER IRRIGATION SYSTEM TO BE COMPLETED PRIOR TO SITE DEMOLITION.

NOTE:

- FOR LANDSCAPE IRRIGATION LEGEND SEE SHEET L2.1B



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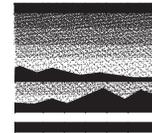
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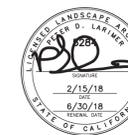
L2.4B

SHEET 17 OF 35





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REVISIONS

NO.	DESCRIPTION	DATE
1	ADDENDUM 1	3/27/18

EARL WARREN, JOHN BIDWELL AND TAHOE
 ELEMENTARY SCHOOL
 IRRIGATION IMPROVEMENTS

SACRAMENTO, CA 95820

DATE 2/15/18

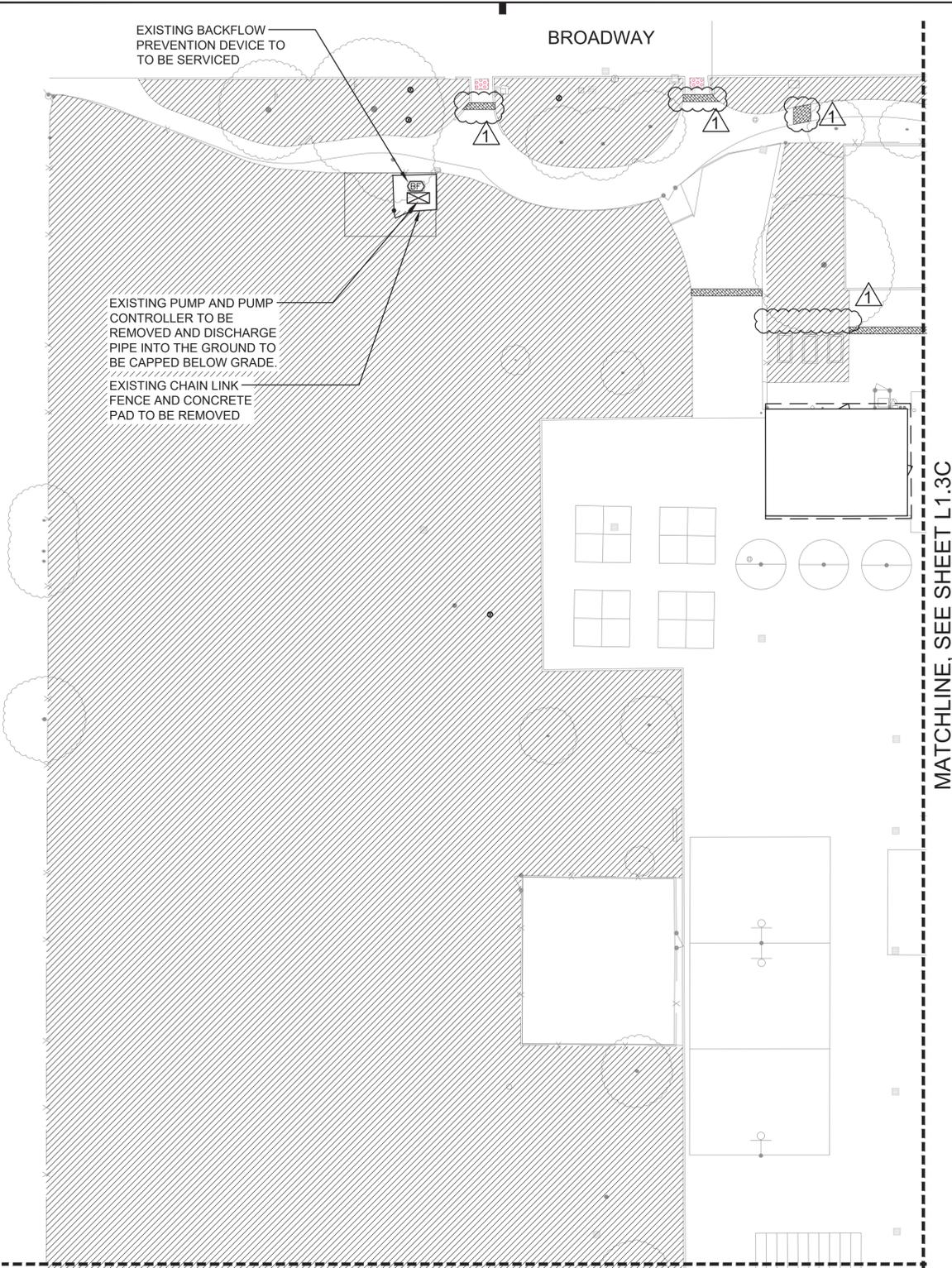
JOB NO. 17-70

SHEET TITLE
 TAHOE ES
 DEMOLITION
 PLAN

SHEET NO.

L1.1C

SHEET 18 OF 35



KEY

- EXISTING AUTOMATIC CONTROLLER TO BE REMOVED
- EXISTING BACKFLOW PREVENTION DEVICE TO BE SERVICED
- EXISTING VALVE BOXES TO BE REMOVED
- EXISTING AUTOMATIC CONTROL VALVES TO BE DISCONNECTED AND REMOVED. EXISTING SPLICE WIRES TO BE BURIED
- EXISTING LANDSCAPE IRRIGATION TO BE DEMOLISHED
- ASPHALT/CONCRETE TO BE SAWCUT

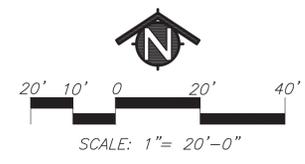
IRRIGATION DEMOLITION LEGEND

- EXISTING LANDSCAPE IRRIGATION TO BE DEMOLISHED
 SPRINKLER HEADS TO BE REMOVED, VALVE BOXES TO BE REMOVED, AND MAINLINE TO BE CAPPED. LATERAL LINES, MAINLINE AND WIRES TO BE ABANDONED.
- ASPHALT/CONCRETE TO BE SAWCUT
 ONCE NEW IRRIGATION LINES ARE INSTALLED, PLACE SUBBASE AGGREGATE AND FILL IN WITH APPROPRIATE PAVING MATERIAL (ASPHALT/CONCRETE) UNLESS OTHERWISE SPECIFIED.

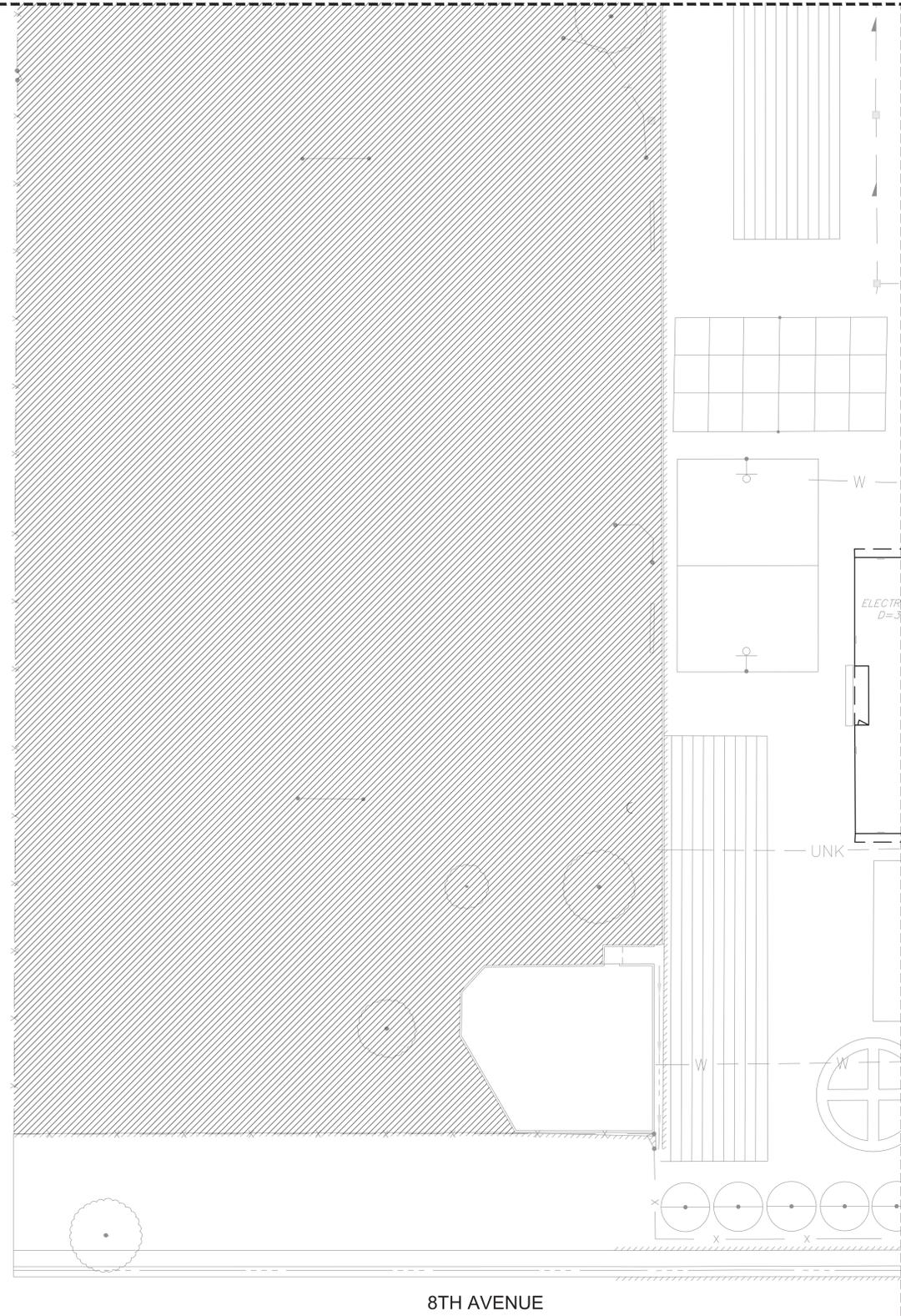
NOTE:
 CONTRACTOR TO IRRIGATE ALL TREES MANUALLY DURING CONSTRUCTION PROCESS

MATCHLINE, SEE SHEET L1.3C

MATCHLINE, SEE SHEET L1.2C



MATCHLINE, SEE SHEET L1.1C

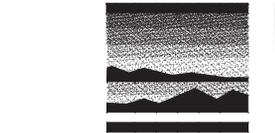


MATCHLINE, SEE SHEET L1.4C

8TH AVENUE

KEY IRRIGATION DEMOLITION LEGEND

- ☒ EXISTING AUTOMATIC CONTROLLER TO BE REMOVED
 - Ⓟ EXISTING BACKFLOW PREVENTION DEVICE TO BE SERVICED
 - EXISTING VALVE BOXES TO BE REMOVED
 - EXISTING AUTOMATIC CONTROL VALVES TO BE DISCONNECTED AND REMOVED.
EXISTING SPLICE WIRES TO BE BURIED.
 - ▨ EXISTING LANDSCAPE IRRIGATION TO BE DEMOLISHED
SPRINKLER HEADS TO BE REMOVED, VALVE BOXES TO BE REMOVED,
AND MAINLINE TO BE CAPPED. LATERAL LINES, MAINLINE AND WIRES TO
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 - ▩ ASPHALT/CONCRETE TO BE SAWCUT
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- NOTE:
CONTRACTOR TO IRRIGATE ALL TREES MANUALLY DURING CONSTRUCTION PROCESS



MTW group
LANDSCAPE ARCHITECTURE
AND PLANNING
10411 Old Placerville Road
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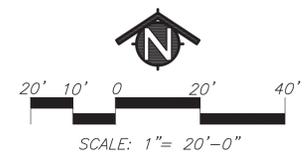
REVISIONS

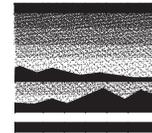
NO.	DESCRIPTION	DATE
1	ADDENDUM 1	3/27/18

EARL WARREN, JOHN BIDWELL AND TAHOE
ELEMENTARY SCHOOL
IRRIGATION IMPROVEMENTS
SACRAMENTO, CA 95820

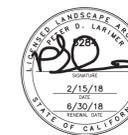
DATE 2/15/18
JOB NO. 17-70
SHEET TITLE
TAHOE ES
DEMOLITION
PLAN

SHEET NO.
L1.2C
SHEET 19 OF 35





MTW group
 LANDSCAPE ARCHITECTURE
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DATE 2/15/18

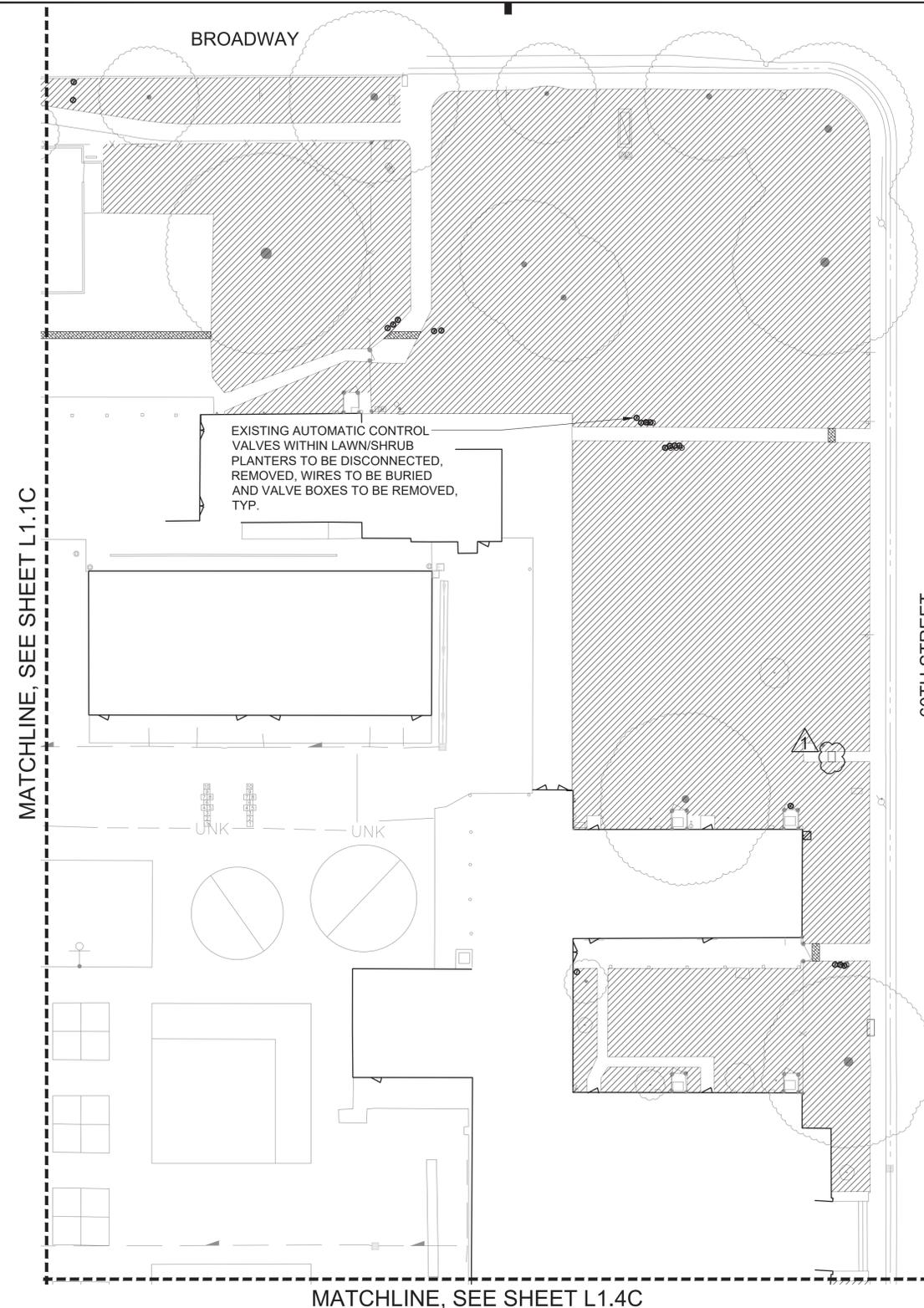
JOB NO. 17-70

SHEET TITLE
 TAHOE ES
 DEMOLITION
 PLAN

SHEET NO.

L1.3C

SHEET 20 OF 35



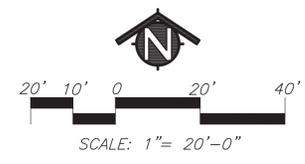
MATCHLINE, SEE SHEET L1.1C

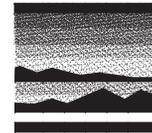
MATCHLINE, SEE SHEET L1.4C

KEY

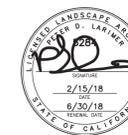
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- EXISTING VALVE BOXES TO BE REMOVED
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EXISTING SPLICE WIRES TO BE BURIED
- EXISTING LANDSCAPE IRRIGATION TO BE DEMOLISHED
SPRINKLER HEADS TO BE REMOVED, VALVE BOXES TO BE REMOVED,
AND MAINLINE TO BE CAPPED. LATERAL LINES, MAINLINE AND WIRES TO
BE ABANDONED.
- ASPHALT/CONCRETE TO BE SAWCUT
ONCE NEW IRRIGATION LINES ARE INSTALLED, PLACE SUBBASE AGGREGATE
AND FILL IN WITH APPROPRIATE PAVING MATERIAL (ASPHALT/CONCRETE)
UNLESS OTHERWISE SPECIFIED.

NOTE:
 CONTRACTOR TO IRRIGATE ALL TREES MANUALLY DURING CONSTRUCTION PROCESS





MTW group
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 SACRAMENTO, CA 95820

DATE 2/15/18

JOB NO. 17-70

SHEET TITLE
 TAHOE ES
 DEMOLITION
 PLAN

SHEET NO.

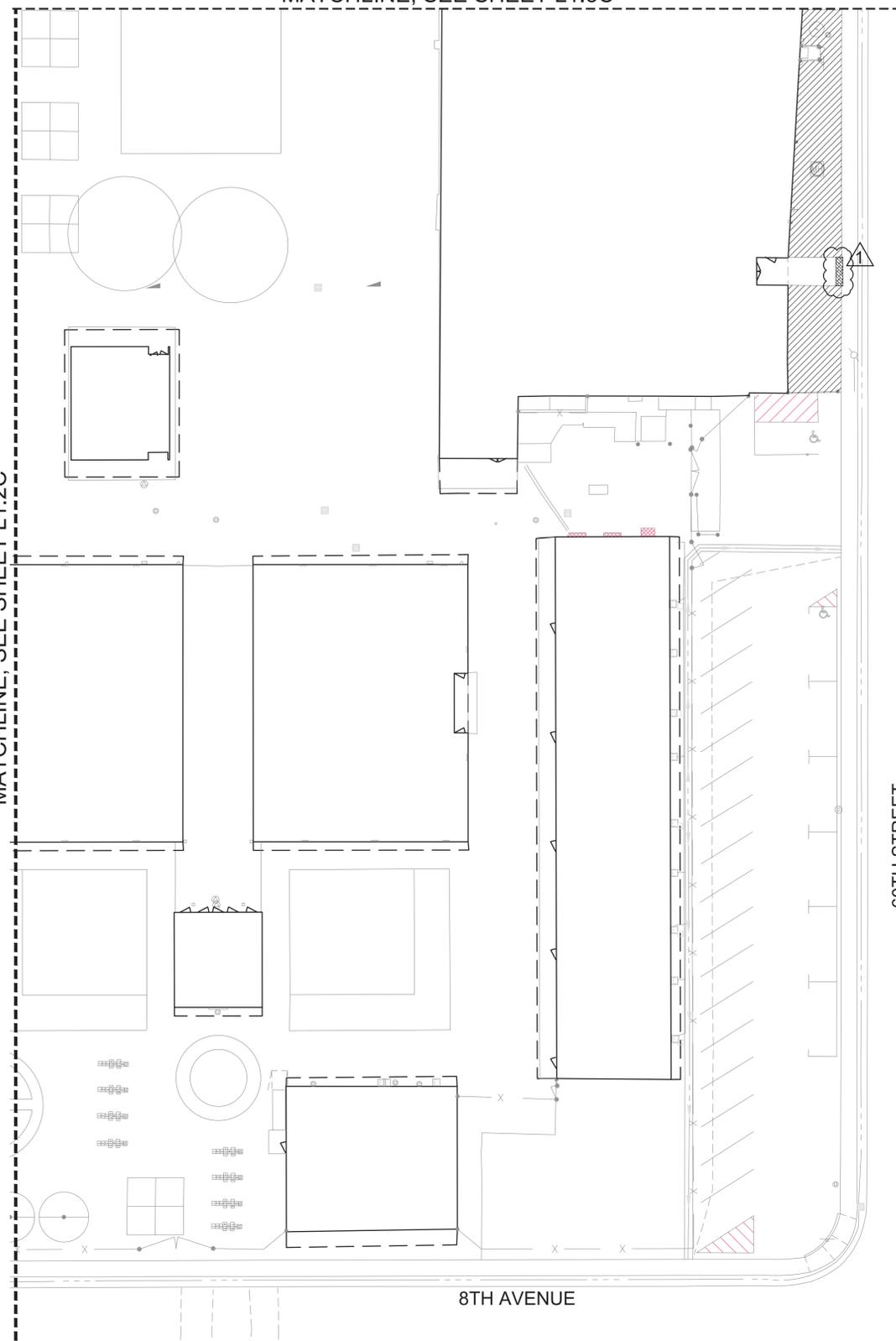
L1.4C

SHEET 21 OF 35

1

MATCHLINE, SEE SHEET L1.2C

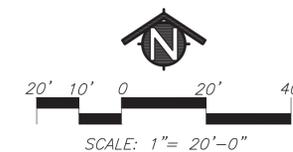
MATCHLINE, SEE SHEET L1.3C

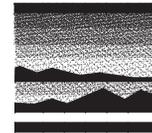


- KEY**
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60TH STREET

8TH AVENUE





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 SACRAMENTO, CA 95820

DATE 2/15/18
 JOB NO. 17-70

SHEET TITLE
**TAHOE ES
 LANDSCAPE
 IRRIGATION
 PLAN**

SHEET NO.

L2.1C

SHEET 22 OF 35



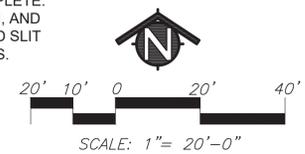
KEY LANDSCAPE IRRIGATION LEGEND

- AUTOMATIC CONTROLLER:**
 HUNTER CONTROL SYSTEM: -- 99 STATION TWO-WIRE DECODER CONTROLLER
 #CA6-HU5-99D/LPP/ACC-COM-LAN/WSS/ROAM-WH/FAN-16
 HUNTER ACC-99 IN STAINLESS TOP ENTRY ENCLOSURE WITH ETHERNET MODEM,
 WIRELESS SOLAR SYNC KIT, AND ROAM SMART PORT.
 SURGE PROTECTOR FOR AUTOMATIC CONTROLLER AND GROUNDING ROD/PLATE
 TO BE INSTALLED AS PER THE GROUNDING DETAIL.
 CONTACT JIM WELLER, SITE ONE GREENTECH, AT 925-451-1610 FOR PRICING
 COORDINATE 110V SERVICE AND POWER CONNECTION AND ETHERNET CONNECTION
 WITH ELECTRICAL SUB-CONTRACTOR.
- EXISTING BACKFLOW PREVENTION DEVICE**
- EXISTING BOOSTER PUMP**
 BOOSTER PUMP SHALL BE BY CUSTOM PUMP, MODEL # 110 MTW 02092018-1/5 VFD
 CONTACT MIKE PIRILO AT 916-429-9729
- INLET PRESSURE: 28 PSI
 OUTLET PRESSURE: 75 PSI
 MAX WATER DEMAND: 110GPM
 POWER INPUT: 208V, 3 PHASE
- MASTER VALVE ASSEMBLY:**
 COMPONENTS:
 MASTER VALVE = 3" NORMALLY CLOSED GRISWOLD #2000N.
 FLOW SENSOR = DATA INDUSTRIAL 220SS, 2" SIZE SADDLE INSERT IN 3" STEEL PIPE.
 FLOW SENSOR TO BE CONNECTED TO AUTOMATIC CONTROLLER WITH UF-14 WIRES IN 1" CONDUIT.
 EACH MASTER VALVE TO BE CONNECTED TO AUTOMATIC CONTROLLER
 WITH UF-14 WIRES IN 1" CONDUIT.
- POINT OF CONNECTION:**
 THIS SPRINKLER IRRIGATION SYSTEM IS DESIGNED TO OPERATE AT
 80 PSI DYNAMIC WATER PRESSURE WITH A MAXIMUM FLOW OF 110 GPM.
- GATE VALVE:**
 TYPE:
 LEEMCO GATE VALVE WITH A NON-RISING STEM AND OPERATING NUT.
 GATE VALVE TO BE LINE SIZE.
 GATE VALVE INSTALLED IN A VALVE BOX WITH TOP OF BOX SET FLUSH TO FINISH GRADE.
 GATE VALVE TO BE LINE SIZE.
- PRESSURE MAIN LINE:**
 TYPE:
 3" SIZE, ASTM D2241 SDR 21, 200 PSI, RUBBER GASKETED WITH LEEMCO FITTINGS.
 TRENCH DEPTH:
 IN PLANTED AREAS: 24" MINIMUM COVER.
 UNDER PAVED AREAS: 24" MINIMUM COVER.
 PVC SCHEDULE 40 SLEEVES ARE REQUIRED FOR ALL PIPING UNDER PAVEMENT.
- LATERAL LINE:**
 TYPE:
 PVC SCHEDULE 40, SOLVENT WELD ALL UNSIZED PIPE SHALL BE 3/4" SIZE.
 TRENCH DEPTH:
 IN PLANTED AREAS:
 POP-UP SPRAY HEADS - 12" MINIMUM COVER.
 ROTOR HEADS - 18" MINIMUM COVER.
 UNDER PAVED AREAS: 24" MINIMUM COVER.
 PVC SCHEDULE 40 SLEEVES ARE REQUIRED FOR ALL PIPING UNDER PAVEMENT.
- AUTOMATIC CONTROL VALVE:**
 HUNTER ICY-101C-AS-ADJ WITH HUNTER ICD-100 DECODER
- LAWN POP-UP ROTOR HEADS:**
 FULL CIRCLE HUNTER: 1-25-04-SS-7 HALF CIRCLE HUNTER: 1-25-04-SS-5
 THREE QUARTER HUNTER: 1-25-04-SS-5 QUARTER CIRCLE HUNTER: 1-25-04-SS-5
- LAWN POP-UP SPRAY HEADS:**
 HUNTER: PROS-06 WITH CHECK VALVE SERIES WITH MP ROTATOR 3000 SERIES
 FULL, HALF, AND QUARTER SPRAY PATTERNS.
- LAWN POP-UP SPRAY HEADS:**
 HUNTER: PROS-06 WITH CHECK VALVE SERIES WITH MP ROTATOR 2000 SERIES
 FULL, HALF, AND QUARTER SPRAY PATTERNS.
- LAWN POP-UP SPRAY HEADS:**
 HUNTER: PROS-06 WITH CHECK VALVE SERIES WITH MP ROTATOR 1000 SERIES
 FULL, HALF, AND QUARTER SPRAY PATTERNS.
- SHRUB AND LAWN POP-UP SPRAY HEADS:**
 HUNTER: PROS-06-PRS40 WITH CHECK VALVE SERIES WITH MP ROTATOR 800 SERIES FOR LAWN
 FULL, HALF, AND QUARTER SPRAY PATTERNS.
- SHRUB AND LAWN POP-UP SPRAY HEADS:**
 HUNTER: PROS-06-PRS40 WITH CHECK VALVE SERIES WITH MP ROTATOR 800 SERIES FOR LAWN
 FULL, HALF, AND QUARTER SPRAY PATTERNS.
- SHRUB POP-UP STRIP SPRAY HEADS:**
 HUNTER: PROS-06 WITH CHECK VALVE SERIES WITH MP STRIP SERIES
 LEFT CORNER, RIGHT CORNER, AND SIDE STRIPS SPRAY PATTERNS.
- GROUNDING ROD ASSEMBLY:**
 TO BE INSTALLED ALONG THE TWO-WIRE PATH
 EVERY 500' AND AT TERMINATION OF LINE.
- INDICATES CONTROL VALVE AND STATION NUMBER
 INDICATES CONTROL VALVE SIZE
 INDICATES GALLONS PER MINUTE
 6' TALL CHAIN LINK FENCE
 BROOM FINISH CONCRETE

MATCHLINE, SEE SHEET L2.3C

LANDSCAPE IRRIGATION NOTES

- COMPOSITE BASE SHEET: PROPOSED IMPROVEMENTS SHOWN ON DRAWINGS ARE SUPERIMPOSED ON A COMPOSITE BASE SHEET. THE COMPOSITE BASE SHEET IS A COMPILATION OF ARCHITECTURAL, ENGINEERING, AND OTHER DATA THAT IS PROVIDED. THE LANDSCAPE ARCHITECT SHALL NOT BE HELD LIABLE FOR CHANGES, INACCURACIES, OMISSIONS, OR ERRORS PERTAINING TO THE COMPOSITE BASE SHEET. CONTRACTOR SHALL BE RESPONSIBLE FOR REVIEWING THESE DOCUMENTS. ANY DISCREPANCIES NEED TO BE BROUGHT TO THE ATTENTION OF THE DESIGN TEAM AND RESOLVED PRIOR TO CONTINUATION OF WORK.
 - DESIGN PRESSURE SHOWN ON PLANS HAS BEEN FURNISHED BY WATER COMPANY OR WATER DISTRICT SERVING SITE. VERIFY PRESSURE ON-SITE PRIOR TO THE INSTALLATION OF ANY SPRINKLER IRRIGATION EQUIPMENT. IF THERE IS A DISCREPANCY, NOTIFY OWNER'S REPRESENTATIVE IMMEDIATELY IN WRITING SO ADJUSTMENTS CAN BE MADE BY LANDSCAPE ARCHITECT. FAILURE TO REPORT DISCREPANCIES AND CONTINUANCE OF WORK WILL RESULT IN ALL RE-DESIGN COSTS BEING CHARGED TO CONTRACTOR.
 - DETERMINE LOCATION OF UNDERGROUND UTILITIES. DAMAGE CAUSED BY INSTALLATION OF THIS WORK SHALL BE REPAIRED TO SATISFACTION OF GOVERNING AGENCY OR OWNER AT NO ADDITIONAL COST TO THE CONTRACTOR.
 - SPRINKLER OVER SPRAY SHALL NOT BE ALLOWED ON PUBLIC SIDEWALKS, BUILDING WALLS OR FENCES. MINIMUM OVERSPRAY MAY OCCUR IN PARKING AREAS. USE ADJUSTABLE NOZZLES WHENEVER POSSIBLE TO CONTROL SPRINKLER OVERSPRAY.
 - ALL LOCAL CODES AND ORDINANCES SHALL BE COMPLIED WITH. IF THERE IS A CONFLICT, NOTIFY OWNER'S REPRESENTATIVE IMMEDIATELY.
 - TESTING:
 A. PRESSURE TEST ALL UNDERGROUND PIPING AS FOLLOWS:
 MAIN LINE - AT 100 PSI FOR 4 HOURS.
 LATERAL LINES - AT 100 PSI FOR 2 HOURS.
 B. COVERAGE TEST:
 NOTE: PRIOR TO REQUESTING COVERAGE TEST, INSURE ALL HEADS ARE SET PLUMB, NOZZLES ARE ADJUSTED PROPERLY AND SYSTEM HAS BEEN CHECKED FOR AUTOMATION.
 REQUEST OWNER'S REPRESENTATIVE PRESENCE ON-SITE WHEN SPRINKLER SYSTEM IS COMPLETELY INSTALLED AND FULLY AUTOMATIC. PROVIDE ADEQUATE PERSONNEL AT THIS MEETING TO ADJUST AND FINE TUNE SYSTEM TO SATISFACTION OF OWNER'S REPRESENTATIVE.
 - LAYOUT ALL WORK PRIOR TO TRENCHING OPERATIONS TO DETERMINE IF MINOR MODIFICATIONS OR ADJUSTMENTS WILL BE REQUIRED.
 - INSTALL ALL SPRINKLER HEADS PERPENDICULAR TO SLOPES OR GRADE.
 - CONTROL WIRE SHALL BE HUNTER TWO-WIRE DECODER CABLE. SPLICES SHALL BE PERMITTED AT VALVE BOX LOCATIONS ONLY.
 - PROVIDE AND INSTALL AUTOMATIC CONTROLLER AND DECODER CABLE. ELECTRICAL SUBCONTRACTOR SHALL PROVIDE 110V SERVICE AND SERVICE HOOKUP FROM POWER SOURCE TO AUTOMATIC CONTROLLER.
 - COORDINATE ALL WORK WITH OTHER TRADES SO PROGRESS OF WORK IS NOT INTERRUPTED AND CAN BE COMPLETED IN A TIMELY MANNER.
 - NO PLANTING SHALL BE STARTED UNTIL ALL SPRINKLER WORK HAS BEEN TESTED AND APPROVED IN PRESENCE OF OWNER'S REPRESENTATIVE.
 - FOR SPRINKLER IRRIGATION INSTALLATION DETAILS, SEE SHEET NO. L3.1, L3.2 AND L3.3.
- AFTER IRRIGATION INSTALLATION IS COMPLETE:
 ALL SHRUB BEDS TO BE GRADED SMOOTH, AND
 LAWN AREAS TO BE GRADED SMOOTH AND SLIT
 SEEDED PER LANDSCAPE SPECIFICATIONS.



NEW IRRIGATION YARD
 SEE DETAIL L3.2-2 FOR
 ENLARGEMENT

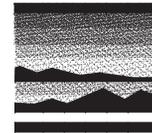
BROADWAY

CONCRETE MOWSTRIP

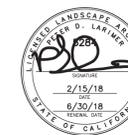
MATCHLINE, SEE SHEET L2.2C

PRE-CONSTRUCTION SPRINKLER IRRIGATION NOTES

- PRIOR TO START OF CONSTRUCTION CONTRACTOR REQUIRED TO CONTACT NAME, TITLE: JEFF BOZEMAN PHONE NUMBER: 916-715-1044 TO SET UP A MEETING ON SITE TO OPERATE THE EXISTING SPRINKLER IRRIGATION SYSTEM AND DISCUSS THE MODIFICATIONS THAT ARE TO BE MADE TO THE EXISTING SYSTEM TO ACCOMMODATE FOR THE NEW CONSTRUCTION.
- CONTRACTOR TO OPERATE AND PROGRAM EXISTING SPRINKLER IRRIGATION SYSTEM THAT IS TO REMAIN IN ORDER TO PROVIDE WATER TO THE EXISTING LANDSCAPE TO REMAIN.
- CONTRACTOR TO REMOVE ALL EXISTING PIPE AND SPRINKLER HEADS WHEN THEY ARE IN NEW PLANTING AREAS.
- CONTRACTOR TO RESTORE AND REPAIR ANY EXISTING SPRINKLER IRRIGATION SYSTEM OR EXISTING LANDSCAPE WHICH IS IN AREAS TO REMAIN THAT IS DAMAGED BY NEW WORK.
- ALL WORK TO EXISTING SPRINKLER IRRIGATION SYSTEM TO BE COMPLETED PRIOR TO SITE DEMOLITION.



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**EARL WARREN, JOHN BIDWELL AND TAHOE
 ELEMENTARY SCHOOL
 IRRIGATION IMPROVEMENTS**

SACRAMENTO, CA 95820

DATE 2/15/18

JOB NO. 17-70

SHEET TITLE
**TAHOE ES
 LANDSCAPE
 IRRIGATION
 PLAN**

SHEET NO.

L2.2C

SHEET 23 OF 35



LANDSCAPE IRRIGATION LEGEND

KEY

AUTOMATIC CONTROLLER:

HUNTER CONTROL SYSTEM: - 99 STATION TWO-WIRE DECODER CONTROLLER
 #CA6-HUS-99D/LPP/ACC-COM-LAN/WSS/ROOM-WH/FAN-16
 HUNTER ACC-99 IN STAINLESS TOP ENTRY ENCLOSURE WITH ETHERNET MODEM,
 WIRELESS SOLAR SYNC KIT, AND ROAM SMART PORT.
 SURGE PROTECTOR FOR AUTOMATIC CONTROLLER AND GROUNDING ROD/PLATE
 TO BE INSTALLED AS PER THE GROUNDING DETAIL.
 CONTACT JIM WELLS, SITE ONE GREENTECH, AT 925-451-1610 FOR PRICING
 COORDINATE 110V SERVICE AND POWER CONNECTION AND ETHERNET CONNECTION
 WITH ELECTRICAL SUB-CONTRACTOR.

EXISTING BACKFLOW PREVENTION DEVICE

EXISTING BOOSTER PUMP

BOOSTER PUMP SHALL BE BY CUSTOM PUMP, MODEL # 110 MTW 02092018-1/5 VFD
 CONTACT MIKE PIRILO AT 916-429-9729
 INLET PRESSURE: 28 PSI
 OUTLET PRESSURE: 75 PSI
 MAX WATER DEMAND: 110GPM
 POWER INPUT: 208V, 3 PHASE

MASTER VALVE ASSEMBLY:

COMPONENTS:
 MASTER VALVE = 3" NORMALLY CLOSED GRISWOLD #200N.
 FLOW SENSOR = DATA INDUSTRIAL 220SS, 2" SIZE SADDLE INSERT IN 3" STEEL PIPE.
 FLOW SENSOR TO BE CONNECTED TO AUTOMATIC CONTROLLER WITH UF-14 WIRES IN 1" CONDUIT.
 EACH MASTER VALVE TO BE CONNECTED TO AUTOMATIC CONTROLLER
 WITH UF-14 WIRES IN 1" CONDUIT.

POINT OF CONNECTION:

THIS SPRINKLER IRRIGATION SYSTEM IS DESIGNED TO OPERATE AT
 80 PSI DYNAMIC WATER PRESSURE WITH A MAXIMUM FLOW OF 110 GPM.

GATE VALVE:

TYPE:
 LEEMCO GATE VALVE WITH A NON-RISING STEM AND OPERATING NUT.
 GATE VALVE TO BE LINE SIZE.
 GATE VALVE INSTALLED IN A VALVE BOX WITH TOP OF BOX SET FLUSH TO FINISH GRADE.
 GATE VALVE TO BE LINE SIZE.

PRESSURE MAIN LINE:

TYPE:
 3" SIZE, ASTM D2241 SDR 21, 200 PSI, RUBBER GASKETED WITH LEEMCO FITTINGS.
 TRENCH DEPTH:
 IN PLANTED AREAS: 24" MINIMUM COVER.
 UNDER PAVED AREAS: 24" MINIMUM COVER.
 PVC SCHEDULE 40 SLEEVES ARE REQUIRED FOR ALL PIPING UNDER PAVEMENT.

LATERAL LINE:

TYPE:
 PVC SCHEDULE 40, SOLVENT WELD ALL UNSIZED PIPE SHALL BE 3/4" SIZE.
 TRENCH DEPTH:
 IN PLANTED AREAS:
 POP-UP SPRAY HEADS - 12" MINIMUM COVER.
 ROTOR HEADS - 18" MINIMUM COVER.
 UNDER PAVED AREAS: 24" MINIMUM COVER.
 PVC SCHEDULE 40 SLEEVES ARE REQUIRED FOR ALL PIPING UNDER PAVEMENT.

AUTOMATIC CONTROL VALVE:

HUNTER ICV-101G-AS-ADJ WITH HUNTER ICD-100 DECODER

LAWN POP-UP ROTOR HEADS:

FULL CIRCLE HUNTER: 1-25-04-SS-7 HALF CIRCLE HUNTER: 1-25-04-SS-5
 THREE QUARTER HUNTER: 1-25-04-SS-5 QUARTER CIRCLE HUNTER: 1-25-04-SS-5

LAWN POP-UP SPRAY HEADS:

HUNTER: PROS-06 WITH CHECK VALVE SERIES WITH MP ROTATOR 3000 SERIES
 FULL, HALF, AND QUARTER SPRAY PATTERNS.

LAWN POP-UP SPRAY HEADS:

HUNTER: PROS-06 WITH CHECK VALVE SERIES WITH MP ROTATOR 2000 SERIES
 FULL, HALF, AND QUARTER SPRAY PATTERNS.

LAWN POP-UP SPRAY HEADS:

HUNTER: PROS-06 WITH CHECK VALVE SERIES WITH MP ROTATOR 1000 SERIES
 FULL, HALF, AND QUARTER SPRAY PATTERNS.

SHRUB AND LAWN POP-UP SPRAY HEADS:

HUNTER: PROS-06-PRS40 WITH CHECK VALVE SERIES WITH MP ROTATOR 800 SERIES FOR LAWN
 FULL, HALF, AND QUARTER SPRAY PATTERNS.

SHRUB AND LAWN POP-UP SPRAY HEADS:

HUNTER: PROS-06-PRS40 WITH CHECK VALVE SERIES WITH MP ROTATOR 800 SERIES FOR LAWN
 FULL, HALF, AND QUARTER SPRAY PATTERNS.

SHRUB POP-UP STRIP SPRAY HEADS:

HUNTER: PROS-06 WITH CHECK VALVE SERIES WITH MP STRIP SERIES
 LEFT CORNER, RIGHT CORNER, AND SIDE STRIPS SPRAY PATTERNS.

GROUNDING ROD ASSEMBLY:

TO BE INSTALLED ALONG THE TWO-WIRE PATH
 EVERY 500' AND AT TERMINATION OF LINE.

INDICATES CONTROL VALVE AND STATION NUMBER

INDICATES CONTROL VALVE SIZE

INDICATES GALLONS PER MINUTE

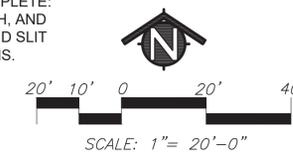
6' TALL CHAIN LINK FENCE

BROOM FINISH CONCRETE

LANDSCAPE IRRIGATION NOTES

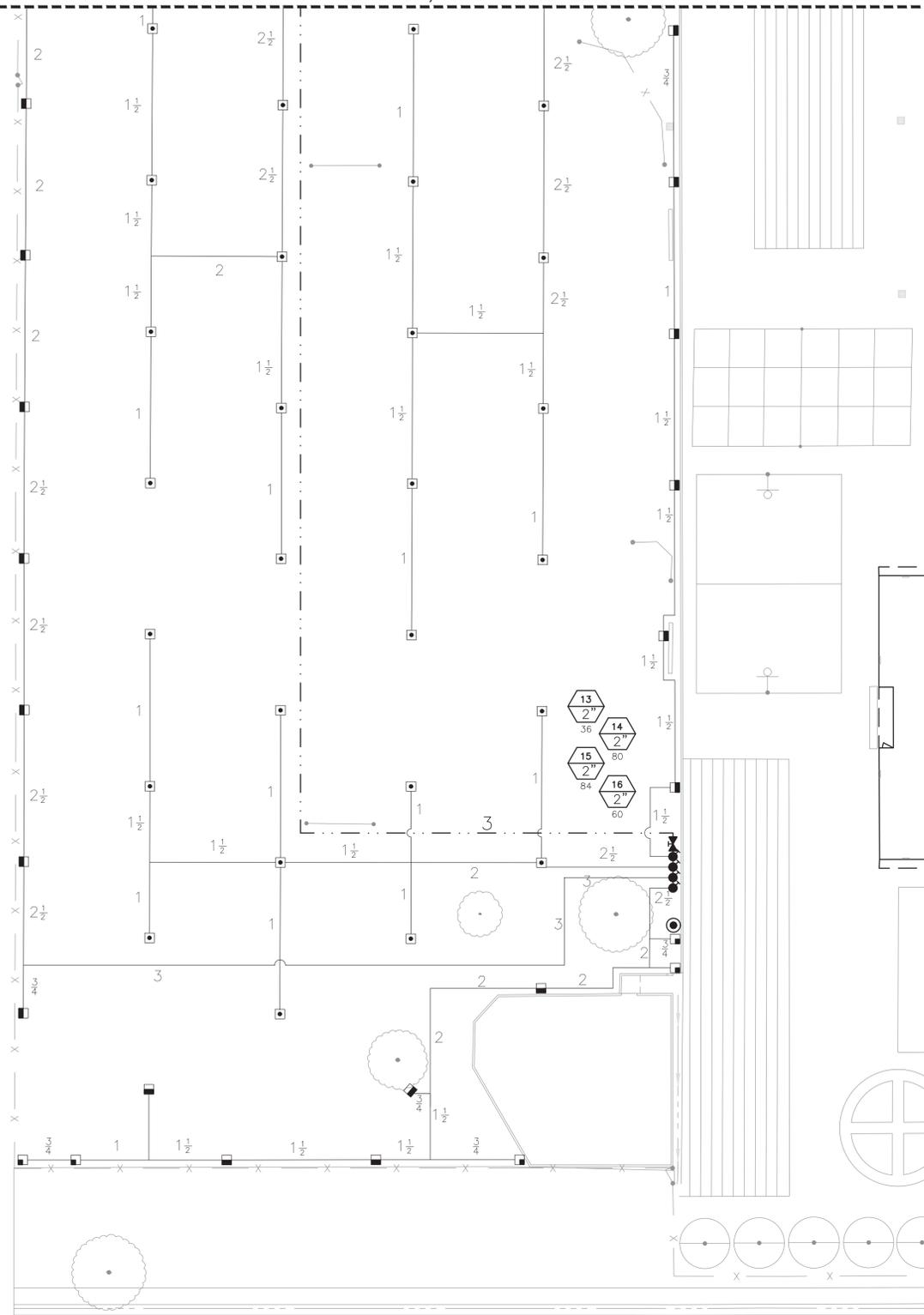
- COMPOSITE BASE SHEET, PROPOSED IMPROVEMENTS SHOWN ON DRAWINGS ARE SUPERIMPOSED ON A COMPOSITE BASE SHEET. THE COMPOSITE BASE SHEET IS A COMPILATION OF ARCHITECTURAL, ENGINEERING, AND OTHER DATA THAT IS PROVIDED. THE LANDSCAPE ARCHITECT SHALL NOT BE HELD LIABLE FOR CHANGES, INACCURACIES, OMISSIONS, OR ERRORS PERTAINING TO THE COMPOSITE BASE SHEET. CONTRACTOR SHALL BE RESPONSIBLE FOR REVIEWING THESE DOCUMENTS. ANY DISCREPANCIES NEED TO BE BROUGHT TO THE ATTENTION OF THE DESIGN TEAM AND RESOLVED PRIOR TO CONTINUATION OF WORK.
- DESIGN PRESSURE SHOWN ON PLANS HAS BEEN FURNISHED BY WATER COMPANY OR WATER DISTRICT SERVING SITE. VERIFY PRESSURE ON-SITE PRIOR TO THE INSTALLATION OF ANY SPRINKLER IRRIGATION EQUIPMENT. IF THERE IS A DISCREPANCY, NOTIFY OWNER'S REPRESENTATIVE IMMEDIATELY IN WRITING SO ADJUSTMENTS CAN BE MADE BY LANDSCAPE ARCHITECT. FAILURE TO REPORT DISCREPANCIES AND CONTINUANCE OF WORK WILL RESULT IN ALL RE-DESIGN COSTS BEING CHARGED TO CONTRACTOR.
- DETERMINE LOCATION OF UNDERGROUND UTILITIES. DAMAGE CAUSED BY INSTALLATION OF THIS WORK SHALL BE REPAIRED TO SATISFACTION OF GOVERNING AGENCY OR OWNER AT NO ADDITIONAL COST TO THE CONTRACT.
- SPRINKLER OVER SPRAY SHALL NOT BE ALLOWED ON PUBLIC SIDEWALKS, BUILDING WALLS OR FENCES. MINIMUM OVERSPRAY MAY OCCUR IN PARKING AREAS. USE ADJUSTABLE NOZZLES WHENEVER POSSIBLE TO CONTROL SPRINKLER OVERSPRAY.
- ALL LOCAL CODES AND ORDINANCES SHALL BE COMPLIED WITH. IF THERE IS A CONFLICT, NOTIFY OWNER'S REPRESENTATIVE IMMEDIATELY.
- TESTING:
 A. PRESSURE TEST ALL UNDERGROUND PIPING AS FOLLOWS:
 MAIN LINE - AT 100 PSI FOR 4 HOURS.
 LATERAL LINES - AT 100 PSI FOR 2 HOURS.
 B. COVERAGE TEST:
 NOTE: PRIOR TO REQUESTING COVERAGE TEST, INSURE ALL HEADS ARE SET PLUMB, NOZZLES ARE ADJUSTED PROPERLY AND SYSTEM HAS BEEN CHECKED FOR AUTOMATION.
 REQUEST OWNER'S REPRESENTATIVE'S PRESENCE ON-SITE WHEN SPRINKLER SYSTEM IS COMPLETELY INSTALLED AND FULLY AUTOMATIC. PROVIDE ADEQUATE PERSONNEL AT THIS MEETING TO ADJUST AND FINE TUNE SYSTEM TO SATISFACTION OF OWNER'S REPRESENTATIVE.
- LAYOUT ALL WORK PRIOR TO TRENCHING OPERATIONS TO DETERMINE IF MINOR MODIFICATIONS OR ADJUSTMENTS WILL BE REQUIRED.
- INSTALL ALL SPRINKLER HEADS PERPENDICULAR TO SLOPES OR GRADE.
- CONTROL WIRE SHALL BE HUNTER TWO-WIRE DECODER CABLE. SPLICES SHALL BE PERMITTED AT VALVE BOX LOCATIONS ONLY.
- PROVIDE AND INSTALL AUTOMATIC CONTROLLER AND DECODER CABLE. ELECTRICAL SUBCONTRACTOR SHALL PROVIDE 110V SERVICE AND SERVICE HOOKUP FROM POWER SOURCE TO AUTOMATIC CONTROLLER.
- COORDINATE ALL WORK WITH OTHER TRADES SO PROGRESS OF WORK IS NOT INTERRUPTED AND CAN BE COMPLETED IN A TIMELY MANNER.
- NO PLANTING SHALL BE STARTED UNTIL ALL SPRINKLER WORK HAS BEEN TESTED AND APPROVED IN PRESENCE OF OWNER'S REPRESENTATIVE.
- FOR SPRINKLER IRRIGATION INSTALLATION DETAILS, SEE SHEET NO. L3.1, L3.2 AND L3.3.

**AFTER IRRIGATION INSTALLATION IS COMPLETE:
 ALL SHRUB BEDS TO BE GRADED SMOOTH, AND
 LAWN AREAS TO BE GRADED SMOOTH AND SLIT
 SEEDED PER LANDSCAPE SPECIFICATIONS.**



MATCHLINE, SEE SHEET L2.1C

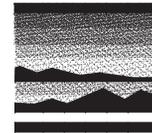
MATCHLINE, SEE SHEET L2.4C



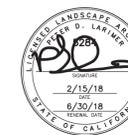
8TH AVENUE

PRE-CONSTRUCTION SPRINKLER IRRIGATION NOTES

- PRIOR TO START OF CONSTRUCTION CONTRACTOR REQUIRED TO CONTACT NAME, TITLE: JEFF BOZEMAN PHONE NUMBER: 916-715-1044 TO SET UP A MEETING ON SITE TO OPERATE THE EXISTING SPRINKLER IRRIGATION SYSTEM AND DISCUSS THE MODIFICATIONS THAT ARE TO BE MADE TO THE EXISTING SYSTEM TO ACCOMMODATE FOR THE NEW CONSTRUCTION.
- CONTRACTOR TO OPERATE AND PROGRAM EXISTING SPRINKLER IRRIGATION SYSTEM THAT IS TO REMAIN IN ORDER TO PROVIDE WATER TO THE EXISTING LANDSCAPE TO REMAIN.
- CONTRACTOR TO REMOVE ALL EXISTING PIPE AND SPRINKLER HEADS WHEN THEY ARE IN NEW PLANTING AREAS.
- CONTRACTOR TO RESTORE AND REPAIR ANY EXISTING SPRINKLER IRRIGATION SYSTEM OR EXISTING LANDSCAPE WHICH IS IN AREAS TO REMAIN THAT IS DAMAGED BY NEW WORK.
- ALL WORK TO EXISTING SPRINKLER IRRIGATION SYSTEM TO BE COMPLETED PRIOR TO SITE DEMOLITION.



MTW group
 LANDSCAPE ARCHITECTURE
 AND PLANNING
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 Suite 205
 Sacramento, CA 95827
 916 369-3990



Peter D. Larimer C-5284

The Landscape Architects do not represent that these plans or the specifications in connection therewith are suitable, whether or not modified for any other site than the one for which they were specifically prepared. The Landscape Architects disclaim responsibility for these plans and specifications if they are used in whole or in part at any other site.

REVISIONS

NO.	DESCRIPTION	DATE
1	ADDENDUM 1	3/27/18

EARL WARREN, JOHN BIDWELL AND TAHOE
 ELEMENTARY SCHOOL
 IRRIGATION IMPROVEMENTS
 SACRAMENTO, CA 95820

DATE 2/15/18

JOB NO. 17-70

SHEET TITLE
**TAHOE ES
 LANDSCAPE
 IRRIGATION
 PLAN**

SHEET NO.

L2.3C

SHEET 24 OF 35



KEY

LANDSCAPE IRRIGATION LEGEND

AUTOMATIC CONTROLLER:

HUNTER CONTROL SYSTEM: - 99 STATION TWO-WIRE DECODER CONTROLLER
 #CAB-HUS-99D/LPP/ACC-COM-LAN/WSS/ROAM-WH/FAN-16
 HUNTER ACC-99 IN STAINLESS TOP ENTRY ENCLOSURE WITH ETHERNET MODEM,
 WIRELESS SOLAR SYNC KIT, AND ROAM SMART PORT.
 SURGE PROTECTOR FOR AUTOMATIC CONTROLLER AND GROUNDING ROD/PLATE
 TO BE INSTALLED AS PER THE GROUNDING DETAIL.
 CONTACT JIM WELLS, SITE ONE GREENTECH, AT 925-451-1610 FOR PRICING
 COORDINATE 110V SERVICE AND POWER CONNECTION AND ETHERNET CONNECTION
 WITH ELECTRICAL SUB-CONTRACTOR.

EXISTING BACKFLOW PREVENTION DEVICE

EXISTING BOOSTER PUMP

BOOSTER PUMP SHALL BE BY CUSTOM PUMP, MODEL # 110 MTW 02092018-1/5 VFD
 CONTACT MIKE PIRILO AT 916-429-9729

INLET PRESSURE: 28 PSI
 OUTLET PRESSURE: 75 PSI
 MAX WATER DEMAND: 110GPM
 POWER INPUT: 208V, 3 PHASE

MASTER VALVE ASSEMBLY:

COMPONENTS:
 (M) MASTER VALVE = 3" NORMALLY CLOSED GRISWOLD #200N.
 (S) FLOW SENSOR = DATA INDUSTRIAL 220SS, 2" SIZE SADDLE INSERT IN 3" STEEL PIPE.

FLOW SENSOR TO BE CONNECTED TO AUTOMATIC CONTROLLER WITH UF-14 WIRES IN 1" CONDUIT.
 EACH MASTER VALVE TO BE CONNECTED TO AUTOMATIC CONTROLLER
 WITH UF-14 WIRES IN 1" CONDUIT.

POINT OF CONNECTION:

THIS SPRINKLER IRRIGATION SYSTEM IS DESIGNED TO OPERATE AT
 80 PSI DYNAMIC WATER PRESSURE WITH A MAXIMUM FLOW OF 110 GPM.

GATE VALVE:

TYPE:
 LEEMCO GATE VALVE WITH A NON-RISING STEM AND OPERATING NUT.
 GATE VALVE TO BE LINE SIZE.

GATE VALVE INSTALLED IN A VALVE BOX WITH TOP OF BOX SET FLUSH TO FINISH GRADE.
 GATE VALVE TO BE LINE SIZE.

PRESSURE MAIN LINE:

TYPE:
 3" SIZE, ASTM D2241 SDR 21, 200 PSI, RUBBER GASKETED WITH LEEMCO FITTINGS.

TRENCH DEPTH:
 IN PLANTED AREAS: 24" MINIMUM COVER.
 UNDER PAVED AREAS: 24" MINIMUM COVER.
 PVC SCHEDULE 40 SLEEVES ARE REQUIRED FOR ALL PIPING UNDER PAVEMENT.

LATERAL LINE:

TYPE:
 PVC SCHEDULE 40, SOLVENT WELD ALL UNSIZED PIPE SHALL BE 3/4" SIZE.

TRENCH DEPTH:
 IN PLANTED AREAS:
 POP-UP SPRAY HEADS - 12" MINIMUM COVER.
 ROTOR HEADS - 18" MINIMUM COVER.
 UNDER PAVED AREAS: 24" MINIMUM COVER.
 PVC SCHEDULE 40 SLEEVES ARE REQUIRED FOR ALL PIPING UNDER PAVEMENT.

AUTOMATIC CONTROL VALVE:

HUNTER ICV-101G-AS-ADJ WITH HUNTER ICD-100 DECODER

LAWN POP-UP ROTOR HEADS:

FULL CIRCLE HUNTER: I-25-04-SS-7 HALF CIRCLE HUNTER: I-25-04-SS-5

THREE QUARTER HUNTER: I-25-04-SS-5 QUARTER CIRCLE HUNTER: I-25-04-SS-5

LAWN POP-UP SPRAY HEADS:

HUNTER: PRS-06 WITH CHECK VALVE SERIES WITH MP ROTATOR 3000 SERIES
 FULL, HALF, AND QUARTER SPRAY PATTERNS.

LAWN POP-UP SPRAY HEADS:

HUNTER: PRS-06 WITH CHECK VALVE SERIES WITH MP ROTATOR 2000 SERIES
 FULL, HALF, AND QUARTER SPRAY PATTERNS.

LAWN POP-UP SPRAY HEADS:

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 FULL, HALF, AND QUARTER SPRAY PATTERNS.

SHRUB AND LAWN POP-UP SPRAY HEADS:

HUNTER: PRS-06-PRS40 WITH CHECK VALVE SERIES WITH MP ROTATOR 800 SERIES FOR LAWN
 FULL, HALF, AND QUARTER SPRAY PATTERNS.

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SHRUB POP-UP STRIP SPRAY HEADS:

HUNTER: PRS-06 WITH CHECK VALVE SERIES WITH MP STRIP SERIES
 LEFT CORNER, RIGHT CORNER, AND SIDE STRIPS SPRAY PATTERNS.

GROUNDING ROD ASSEMBLY:

TO BE INSTALLED ALONG THE TWO-WIRE PATH
 EVERY 500' AND AT TERMINATION OF LINE.

INDICATES CONTROL VALVE AND STATION NUMBER

INDICATES CONTROL VALVE SIZE

INDICATES GALLONS PER MINUTE

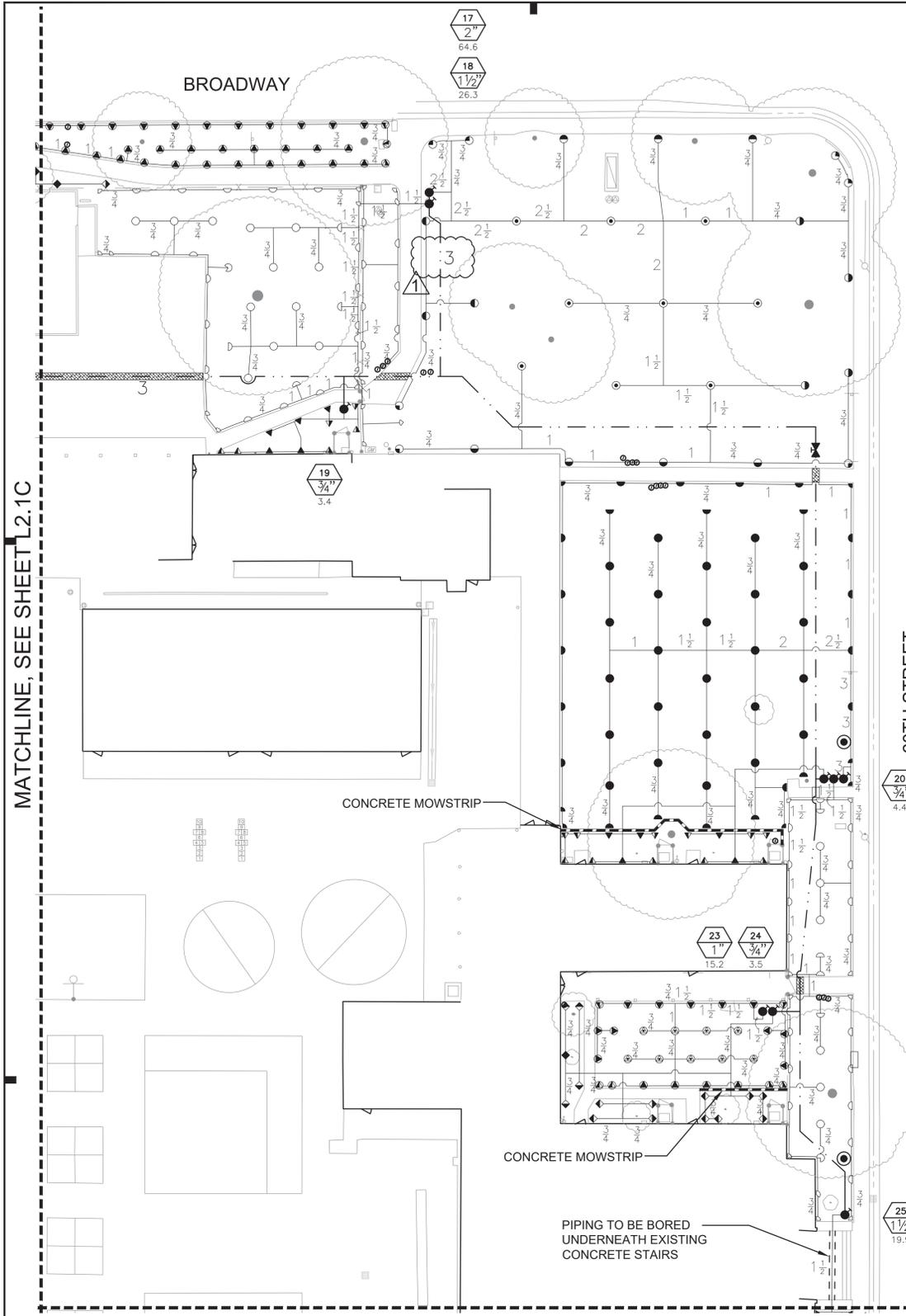
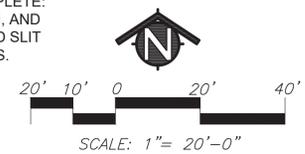
6' TALL CHAIN LINK FENCE

BROOM FINISH CONCRETE

LANDSCAPE IRRIGATION NOTES

- COMPOSITE BASE SHEET, PROPOSED IMPROVEMENTS SHOWN ON DRAWINGS ARE SUPERIMPOSED ON A COMPOSITE BASE SHEET. THE COMPOSITE BASE SHEET IS A COMPILATION OF ARCHITECTURAL, ENGINEERING, AND OTHER DATA THAT IS PROVIDED. THE LANDSCAPE ARCHITECT SHALL NOT BE HELD LIABLE FOR CHANGES, INACCURACIES, OMISSIONS, OR ERRORS PERTAINING TO THE COMPOSITE BASE SHEET. CONTRACTOR SHALL BE RESPONSIBLE FOR REVIEWING THESE DOCUMENTS. ANY DISCREPANCIES NEED TO BE BROUGHT TO THE ATTENTION OF THE DESIGN TEAM AND RESOLVED PRIOR TO CONTINUATION OF WORK.
- DESIGN PRESSURE SHOWN ON PLANS HAS BEEN FURNISHED BY WATER COMPANY OR WATER DISTRICT SERVING SITE. VERIFY PRESSURE ON-SITE PRIOR TO THE INSTALLATION OF ANY SPRINKLER IRRIGATION EQUIPMENT. IF THERE IS A DISCREPANCY, NOTIFY OWNER'S REPRESENTATIVE IMMEDIATELY IN WRITING SO ADJUSTMENTS CAN BE MADE BY LANDSCAPE ARCHITECT. FAILURE TO REPORT DISCREPANCIES AND CONTINUANCE OF WORK WILL RESULT IN ALL RE-DESIGN COSTS BEING CHARGED TO CONTRACTOR.
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- TESTING:
 A. PRESSURE TEST ALL UNDERGROUND PIPING AS FOLLOWS:
 MAIN LINE - AT 100 PSI FOR 4 HOURS.
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- INSTALL ALL SPRINKLER HEADS PERPENDICULAR TO SLOPES OR GRADE.
- CONTROL WIRE SHALL BE HUNTER TWO-WIRE DECODER CABLE. SPLICES SHALL BE PERMITTED AT VALVE BOX LOCATIONS ONLY.
- PROVIDE AND INSTALL AUTOMATIC CONTROLLER AND DECODER CABLE. ELECTRICAL SUBCONTRACTOR SHALL PROVIDE 110V SERVICE AND SERVICE HOOKUP FROM POWER SOURCE TO AUTOMATIC CONTROLLER.
- COORDINATE ALL WORK WITH OTHER TRADES SO PROGRESS OF WORK IS NOT INTERRUPTED AND CAN BE COMPLETED IN A TIMELY MANNER.
- NO PLANTING SHALL BE STARTED UNTIL ALL SPRINKLER WORK HAS BEEN TESTED AND APPROVED IN PRESENCE OF OWNER'S REPRESENTATIVE.
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AFTER IRRIGATION INSTALLATION IS COMPLETE:
 ALL SHRUB BEDS TO BE GRADED SMOOTH, AND
 LAWN AREAS TO BE GRADED SMOOTH AND SLIT
 SEEDED PER LANDSCAPE SPECIFICATIONS.



MATCHLINE, SEE SHEET L2.1C

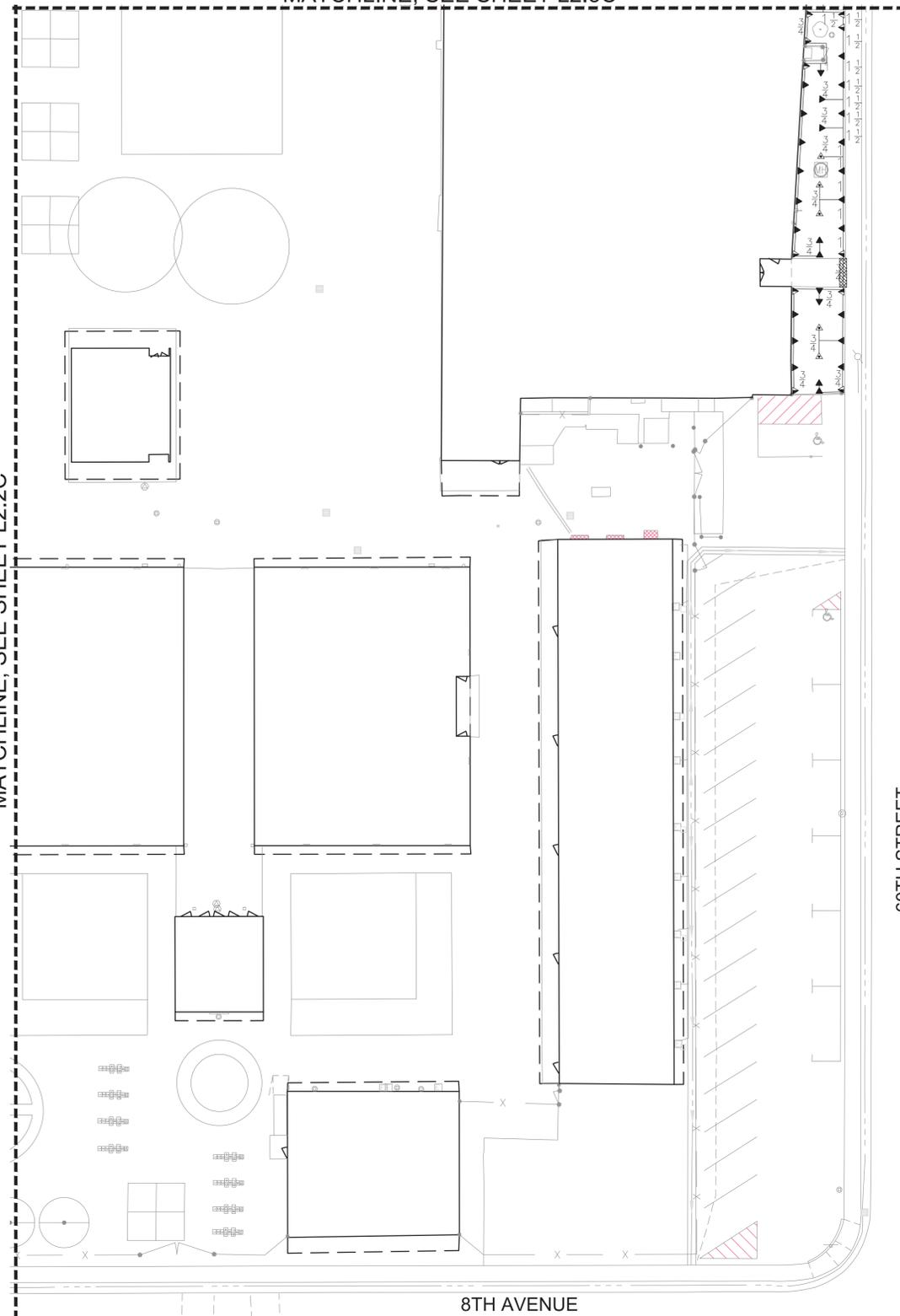
MATCHLINE, SEE SHEET L2.4C

PRE-CONSTRUCTION SPRINKLER IRRIGATION NOTES

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- CONTRACTOR TO OPERATE AND PROGRAM EXISTING SPRINKLER IRRIGATION SYSTEM THAT IS TO REMAIN IN ORDER TO PROVIDE WATER TO THE EXISTING LANDSCAPE TO REMAIN.
- CONTRACTOR TO REMOVE ALL EXISTING PIPE AND SPRINKLER HEADS WHEN THEY ARE IN NEW PLANTING AREAS.
- CONTRACTOR TO RESTORE AND REPAIR ANY EXISTING SPRINKLER IRRIGATION SYSTEM OR EXISTING LANDSCAPE WHICH IS IN AREAS TO REMAIN THAT IS DAMAGED BY NEW WORK.
- ALL WORK TO EXISTING SPRINKLER IRRIGATION SYSTEM TO BE COMPLETED PRIOR TO SITE DEMOLITION.

MATCHLINE, SEE SHEET L2.3C

MATCHLINE, SEE SHEET L2.2C



8TH AVENUE

60TH STREET

PRE-CONSTRUCTION SPRINKLER IRRIGATION NOTES

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- ALL WORK TO EXISTING SPRINKLER IRRIGATION SYSTEM TO BE COMPLETED PRIOR TO SITE DEMOLITION.

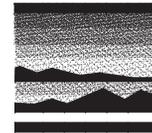
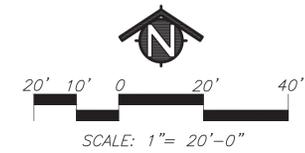
KEY

LANDSCAPE IRRIGATION LEGEND

- AUTOMATIC CONTROLLER:**
 HUNTER CONTROL SYSTEM: - 99 STATION TWO-WIRE DECODER CONTROLLER
 #CA6-HU5-99D/LPP/ACC-COM-LAN/WSS/ROAM-WH/FAN-16
 HUNTER ACC-99 IN STAINLESS TOP ENTRY ENCLOSURE WITH ETHERNET MODEM, WIRELESS SOLAR SYNC KIT, AND ROAM SMART PORT.
 SURGE PROTECTOR FOR AUTOMATIC CONTROLLER AND GROUNDING ROD/PLATE TO BE INSTALLED AS PER THE GROUNDING DETAIL.
 CONTACT JIM WELLER, SITE ONE GREENTECH, AT 925-451-1610 FOR PRICING COORDINATE 110V SERVICE AND POWER CONNECTION AND ETHERNET CONNECTION WITH ELECTRICAL SUB-CONTRACTOR.
- EXISTING BACKFLOW PREVENTION DEVICE**
- EXISTING BOOSTER PUMP**
 BOOSTER PUMP SHALL BE BY CUSTOM PUMP, MODEL # 110 MTW 02092018-1/5 VFD CONTACT MIKE PIRILO AT 916-429-9729
 INLET PRESSURE: 28 PSI
 OUTLET PRESSURE: 75 PSI
 MAX WATER DEMAND: 110GPM
 POWER INPUT: 208V, 3 PHASE
- MASTER VALVE ASSEMBLY:**
 COMPONENTS:
 (C) MASTER VALVE = 3" NORMALLY CLOSED GRISWOLD #2000N.
 (C) FLOW SENSOR = DATA INDUSTRIAL 220SS, 2" SIZE SADDLE INSERT IN 3" STEEL PIPE.
 FLOW SENSOR TO BE CONNECTED TO AUTOMATIC CONTROLLER WITH UF-14 WIRES IN 1" CONDUIT. EACH MASTER VALVE TO BE CONNECTED TO AUTOMATIC CONTROLLER WITH UF-14 WIRES IN 1" CONDUIT.
- POINT OF CONNECTION:**
 THIS SPRINKLER IRRIGATION SYSTEM IS DESIGNED TO OPERATE AT 80 PSI DYNAMIC WATER PRESSURE WITH A MAXIMUM FLOW OF 110 GPM.
- GATE VALVE:**
 TYPE: LEMCO GATE VALVE WITH A NON-RISING STEM AND OPERATING NUT.
 GATE VALVE TO BE LINE SIZE.
 GATE VALVE INSTALLED IN A VALVE BOX WITH TOP OF BOX SET FLUSH TO FINISH GRADE.
 GATE VALVE TO BE LINE SIZE.
- PRESSURE MAIN LINE:**
 TYPE: 3" SIZE, ASTM D2241 SDR 21, 200 PSI, RUBBER GASKETED WITH LEMCO FITTINGS.
 TRENCH DEPTH:
 IN PLANTED AREAS: 24" MINIMUM COVER.
 UNDER PAVED AREAS: 24" MINIMUM COVER.
 PVC SCHEDULE 40 SLEEVES ARE REQUIRED FOR ALL PIPING UNDER PAVEMENT.
- LATERAL LINE:**
 TYPE: PVC SCHEDULE 40, SOLVENT WELD ALL UNSIZED PIPE SHALL BE 3/4" SIZE.
 TRENCH DEPTH:
 IN PLANTED AREAS:
 POP-UP SPRAY HEADS - 12" MINIMUM COVER.
 ROTOR HEADS: - 18" MINIMUM COVER.
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 HUNTER ICV-101G-AS-ADJ WITH HUNTER ICD-100 DECODER
- LAWN POP-UP ROTOR HEADS:**
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- SHRUB AND LAWN POP-UP SPRAY HEADS:**
 HUNTER: PROS-06-PRS40 WITH CHECK VALVE SERIES WITH MP ROTATOR 800 SERIES FOR LAWN FULL, HALF, AND QUARTER SPRAY PATTERNS.
- SHRUB POP-UP STRIP SPRAY HEADS:**
 HUNTER: PROS-06 WITH CHECK VALVE SERIES WITH MP STRIP SERIES LEFT CORNER, RIGHT CORNER, AND SIDE STRIPS SPRAY PATTERNS.
- GROUNDING ROD ASSEMBLY:**
 TO BE INSTALLED ALONG THE TWO-WIRE PATH EVERY 500' AND AT TERMINATION OF LINE.
- INDICATES CONTROL VALVE AND STATION NUMBER**
- INDICATES CONTROL VALVE SIZE**
- INDICATES GALLONS PER MINUTE**
- 6' TALL CHAIN LINK FENCE**
- BROOM FINISH CONCRETE**

LANDSCAPE IRRIGATION NOTES

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 - DETERMINE LOCATION OF UNDERGROUND UTILITIES. DAMAGE CAUSED BY INSTALLATION OF THIS WORK SHALL BE REPAIRED TO SATISFACTION OF GOVERNING AGENCY OR OWNER AT NO ADDITIONAL COST TO THE CONTRACT.
 - SPRINKLER OVER SPRAY SHALL NOT BE ALLOWED ON PUBLIC SIDEWALKS, BUILDING WALLS OR FENCES. MINIMUM OVERSPRAY MAY OCCUR IN PARKING AREAS. USE ADJUSTABLE NOZZLES WHENEVER POSSIBLE TO CONTROL SPRINKLER OVERSPRAY.
 - ALL LOCAL CODES AND ORDINANCES SHALL BE COMPLIED WITH. IF THERE IS A CONFLICT, NOTIFY OWNER'S REPRESENTATIVE IMMEDIATELY.
 - TESTING:
 A. PRESSURE TEST ALL UNDERGROUND PIPING AS FOLLOWS:
 MAIN LINE - AT 100 PSI FOR 4 HOURS.
 LATERAL LINES - AT 100 PSI FOR 2 HOURS.
 B. COVERAGE TEST:
 NOTE: PRIOR TO REQUESTING COVERAGE TEST, INSURE ALL HEADS ARE SET PLUMB, NOZZLES ARE ADJUSTED PROPERLY AND SYSTEM HAS BEEN CHECKED FOR AUTOMATION. REQUEST OWNER'S REPRESENTATIVE'S PRESENCE ON-SITE WHEN SPRINKLER SYSTEM IS COMPLETELY INSTALLED AND FULLY AUTOMATIC. PROVIDE ADEQUATE PERSONNEL AT THIS MEETING TO ADJUST AND FINE TUNE SYSTEM TO SATISFACTION OF OWNER'S REPRESENTATIVE.
 - LAYOUT ALL WORK PRIOR TO TRENCHING OPERATIONS TO DETERMINE IF MINOR MODIFICATIONS OR ADJUSTMENTS WILL BE REQUIRED.
 - INSTALL ALL SPRINKLER HEADS PERPENDICULAR TO SLOPES OR GRADE.
 - CONTROL WIRE SHALL BE HUNTER TWO-WIRE DECODER CABLE. SPLICES SHALL BE PERMITTED AT VALVE BOX LOCATIONS ONLY.
 - PROVIDE AND INSTALL AUTOMATIC CONTROLLER AND DECODER CABLE. ELECTRICAL SUBCONTRACTOR SHALL PROVIDE 110V SERVICE AND SERVICE HOOKUP FROM POWER SOURCE TO AUTOMATIC CONTROLLER.
 - COORDINATE ALL WORK WITH OTHER TRADES SO PROGRESS OF WORK IS NOT INTERRUPTED AND CAN BE COMPLETED IN A TIMELY MANNER.
 - NO PLANTING SHALL BE STARTED UNTIL ALL SPRINKLER WORK HAS BEEN TESTED AND APPROVED IN PRESENCE OF OWNER'S REPRESENTATIVE.
 - FOR SPRINKLER IRRIGATION INSTALLATION DETAILS, SEE SHEET NO. L3.1, L3.2 AND L3.3.
- AFTER IRRIGATION INSTALLATION IS COMPLETE:**
 ALL SHRUB BEDS TO BE GRADED SMOOTH, AND LAWN AREAS TO BE GRADED SMOOTH AND SLIT SEEDED PER LANDSCAPE SPECIFICATIONS.



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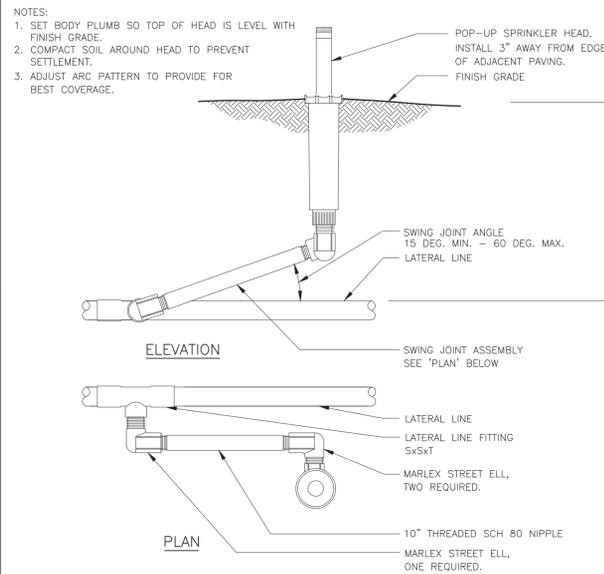
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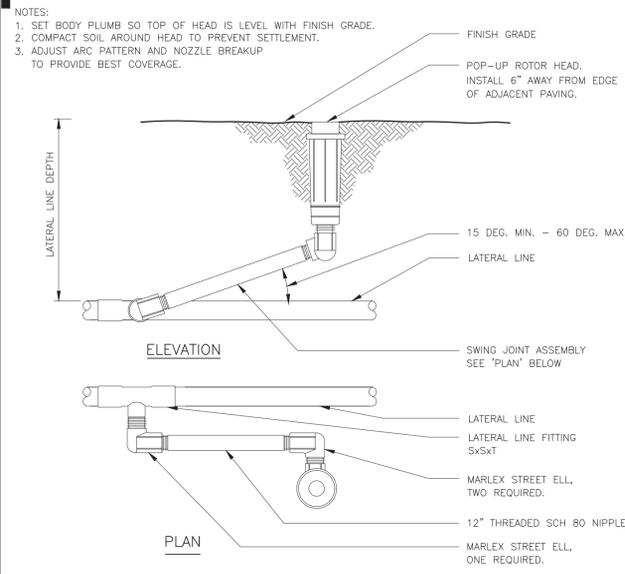
REVISIONS		
NO.	DESCRIPTION	DATE
1	ADDENDUM 1	3/27/18

**EARL WARREN, JOHN BIDWELL AND TAHOE
 ELEMENTARY SCHOOL
 IRRIGATION IMPROVEMENTS**
 SACRAMENTO, CA 95820

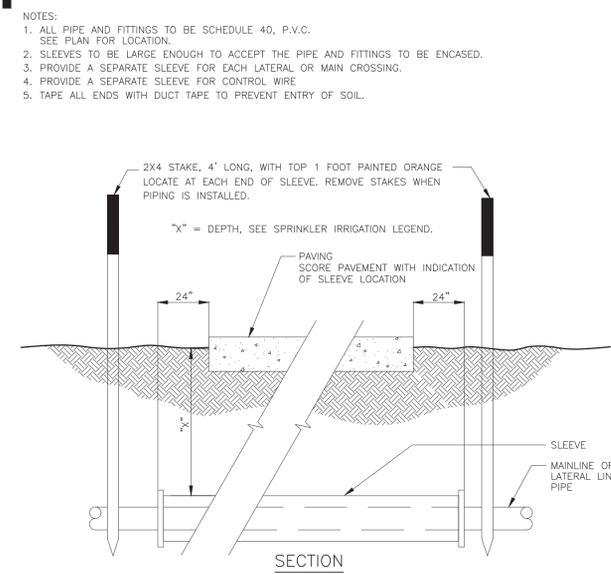
DATE 2/15/18
 JOB NO. 17-70
 SHEET TITLE
**TAHOE ES
 LANDSCAPE
 IRRIGATION
 PLAN**
 SHEET NO.
L2.4C
 SHEET 25 OF 35



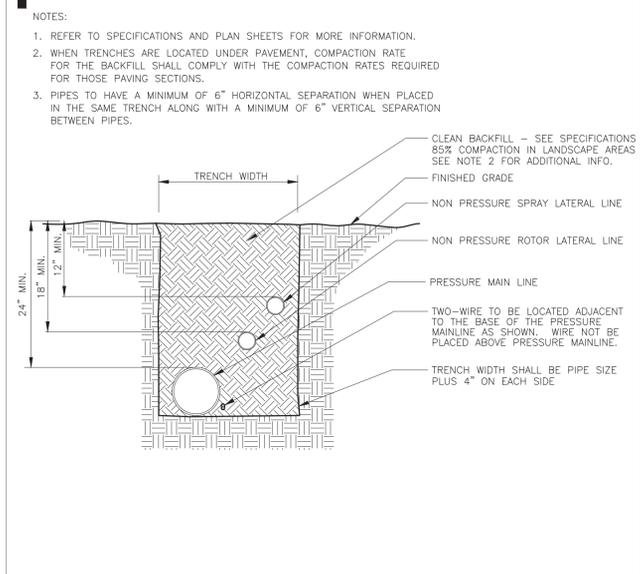
1 POP-UP SPRINKLER HEAD DETAIL



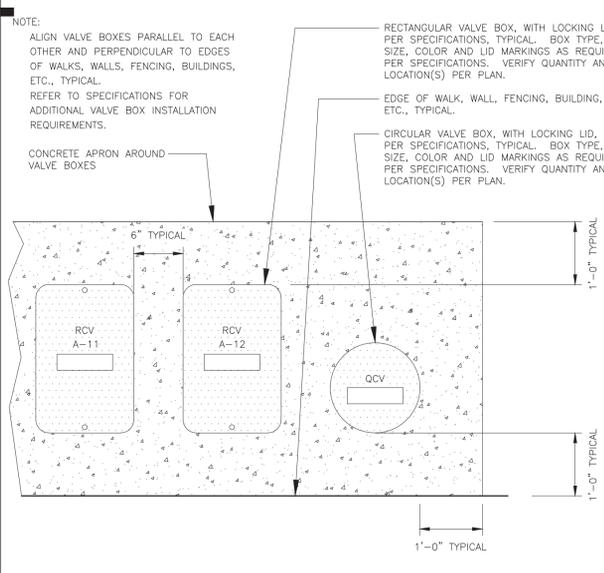
2 POP-UP ROTOR HEAD DETAIL



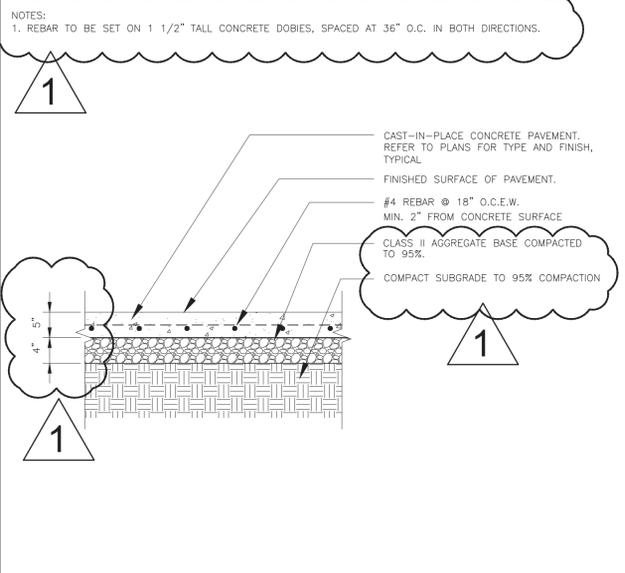
3 SLEEVE DETAIL



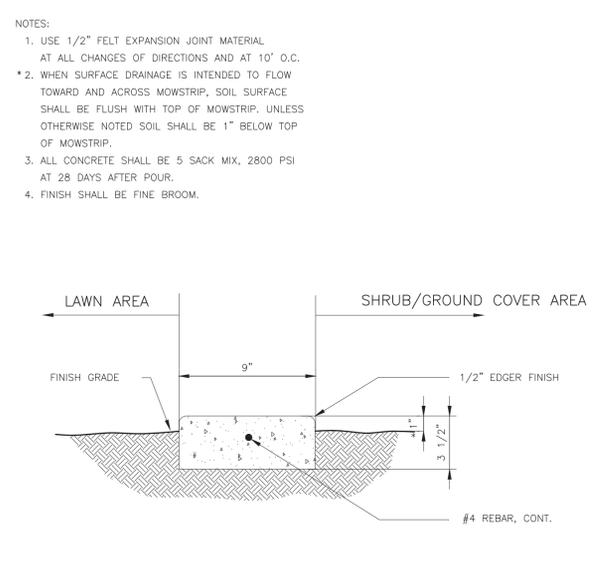
4 PIPE TRENCH DETAIL



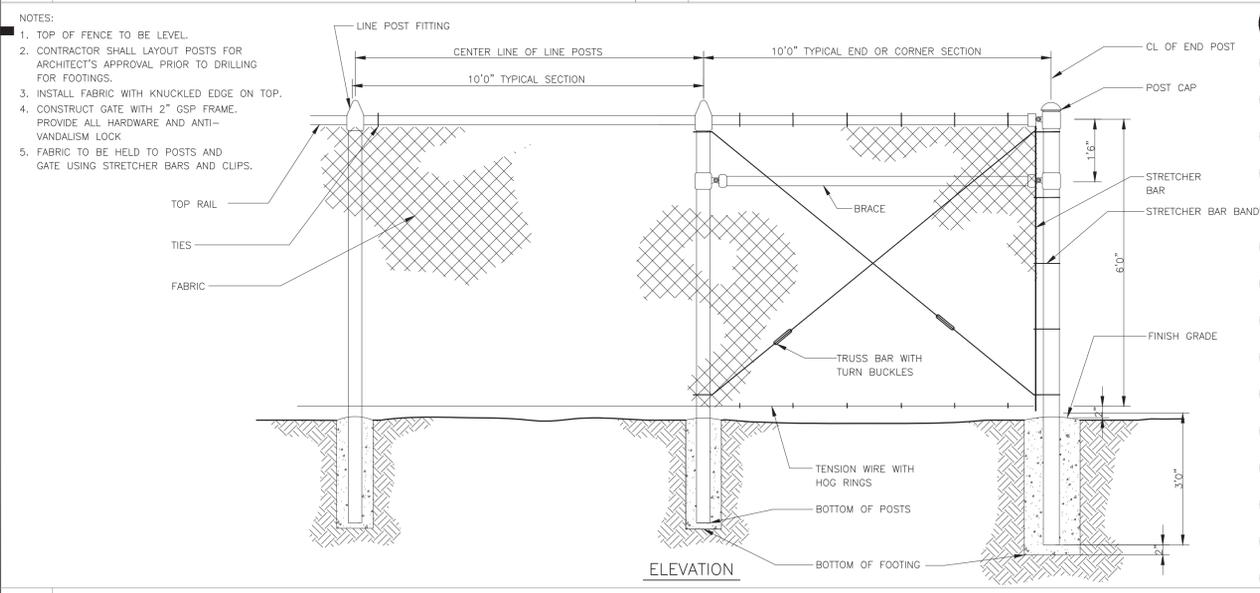
5 TYPICAL VALVE BOX LAYOUT



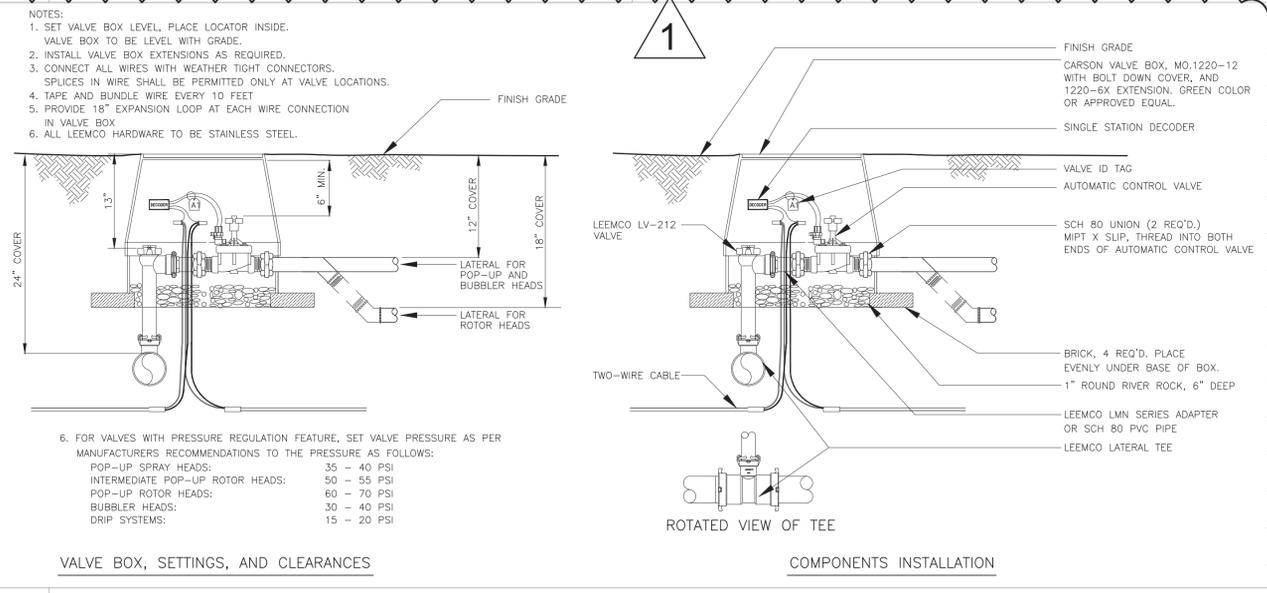
6 CAST-IN-PLACE CONCRETE PAVING



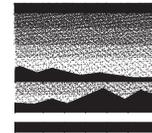
7 9" CONCRETE MOWSTRIP DETAIL



8 6' HIGH CHAIN LINK FENCE



9 AUTOMATIC CONTROL VALVE/LEEMCO ANGLE VALVE DETAIL - FOR BOXES LOCATED IN SHRUB BEDS



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SACRAMENTO, CA 95820

DATE 2/15/18
 JOB NO. 17-68
 SHEET TITLE
**EARL WARREN ES
 LANDSCAPE
 IRRIGATION AND
 CONSTRUCTION
 DETAILS**

SHEET NO.
L3.3
 SHEET 28 OF 35