MOYER RESIDENCE
NEW SINGLE FAMILY DWELLING
516 LAKE MEAD WAY, EMERALD HILLS, CA
NOTE:
FOR CONSTRUCTION STAKING
SCHEDULING OR QUOTATIONS
PLEASE CONTACT ALEX ABAYA
AT LEA & BRAZE ENGINEERING
(510) 887-4086 EXT 116.
aabaya@leabraze.com

CUBIC YARDS
 WITHIN BUILDING FOOTPRINT
 DRIVEWAY
 LANDSCAPE
 RETENTION
 POOL
 TOTAL CUBIC YARDS
 CUT
 FILL
 EXPORT

120
815

MAIN HOUSE PLANS
516 LAKEMEAD WAY
REDWOOD CITY, CALIFORNIA

RETAINING WALL NOTES
1. TYPICAL RETAINING WALL MATERIAL IS 12" ADHESIVE SHEETED GUNITE OR REBAR-FILLED CONCRETE SHEETING AS SHOWN.
2. EXISTING RETAINING WALLS ARE TO BE DEMOLISHED AND REPLACED AS SHOWN.
3. CONSTRUCTION NOT TO EXCEED 4' HIGH.
NOTE: FOR CONSTRUCTION STAKING SCHEDULING OR QUOTATIONS PLEASE CONTACT ALEX ABAYA AT LEA & BRAZE ENGINEERING (510)887-4086 EXT 116. aabaya@leabraze.com

REQUIRED DRAINAGE INSPECTIONS
THE COUNTY OF SAN MATEO REQUIRES LEA & BRAZE ENGINEERING, INC. TO INSPECT ALL STORM DRAINAGE AS IT IS INSTALLED. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT LEA & BRAZE ENGINEERING, INC. PRIOR TO START OF CONSTRUCTION TO SET UP A PRE-CONSTRUCTION MEETING, AND TO CALL AT LEAST 48 HOURS IN ADVANCE OF ANY INSPECTIONS. PIPES ARE TO REMAIN UNCOVERED UNTIL AN INSPECTION OCCURS.

POINT OF CONTACT: PETER CARLINO LEA & BRAZE ENGINEERING, INC. (510)887-4086 pcarlino@leabraze.com
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CONTRACTOR TO CONTACT US 48 HOURS PRIOR TO CONSTRUCTION.

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UTILITY PLAN
UTILITY PLAN
UTILITY PLAN


Erosion Control

1. Purpose

   The purpose of this plan is to prevent excessive erosion and sedimentation of water caused by sheetwash due to construction activity. The plan includes erosion control measures that are to be implemented at the site to reduce and control the amount of sediment movement and erosion.

2. Scope

   The scope of this plan includes the following:
   - Erosion control measures to be implemented during construction.
   - Monitoring and maintenance of erosion control measures.
   - Issuance of erosion control permits as required by local regulations.

3. Erosion Control Measures

   The following erosion control measures are to be implemented:
   - Sedimentation basins
   - Silt fences
   - Vegetative barriers
   - Contouring
   - Sedimentation ponds

4. Periodic Maintenance

   Periodic maintenance of erosion control measures is required to ensure their effectiveness. Maintenance activities include:
   - Check the condition of erosion control measures regularly.
   - Repair or replace damaged or ineffective erosion control measures.
   - Ensure that erosion control measures are maintained in compliance with local regulations.

5. Conclusion

   Implementation of the erosion control measures outlined in this plan will help minimize the potential for erosion and sedimentation during construction. It is the responsibility of the contractor to ensure that all erosion control measures are installed and maintained in accordance with this plan and local regulations.
Construction Best Management Practices (BMPs)

Construction projects are required to implement the stormwater best management practices (BMP) on this page, as they apply to your project, all year long.

Materials & Waste Management
- Non-Hazardous Materials:
  - Do not apply pesticides, herbicides, or similar materials to lawns, streets, sidewalks, or roofs.
  - Store hazardous materials in appropriate containers and safe locations, away from sources of water.
- Hazardous Materials:
  - Label all hazardous materials and store in safe locations.
  - Store construction materials and waste in safe locations.

Equipment Management & Spill Control
- Spill Prevention and Control:
  - Use spill kits and absorbents to control spills.
  - Do not use water to control spills.

Painting & Paint Removal
- Rust paint from exposed rebar or concrete.
- Stain paint from exposed rebar or concrete.

Paving/Asphalt Work
- Avoid paving and seal coating in wet weather or when most is forecast, or prevent material that has not soaked from contacting stormwater runoff.
- Seal pavement requesting permits in advance of construction.

Concrete, Grout & Mortar Application
- Avoid spilling concrete or grout water from storm drains or waterways, and on pavement before or during the project.

Painting Cleanup and Removal
- Remove clear brushes or rinse paint containers into a storm drain.
- Paint spills and other non-hazardous dry-stripping and sandblasting may be swept up or collected in plastic drop cloths and disposed of at a convenient location.

Leak seal paint removal requires a specially certified contractor.

Storm drain polluters may be liable for fines of up to $10,000 per day!
"Check valves or anti-drain valves are required on all sprinkler heads where low point drainage could occur."

"A diagram of the irrigation plan showing hydrozones shall be kept with the irrigation controller for subsequent management purposes."

"A Certificate of Completion shall be filled out and certified by either the designer of the landscape plans, irrigation plans or the licensed landscape contractor."

"An irrigation audit report shall be completed at the time of final inspection."

"Reinforcing water systems shall be used for water features."

"A minimum 3-inch layer of mulch shall be applied on all exposed soil surfaces of planting areas except turf areas, creeping or rooting groundcovers, or direct seeding applications where mulch is contraindicated."

"For soils less than 6% organic matter in the top 6" of soil, compost at a rate of a minimum of four cubic yards per 1,000 square feet of permeable area shall be incorporated to a depth of six inches into the soil."

"Pressure regulating devices are required if water pressure is below or exceeds the recommended pressure of the specified irrigation devices."

"INSTALL ALL MAINLINE & LATERAL LINES IN PLANTER AREAS WITHIN THE SITE PROPERTY BOUNDARIES AND SET BACK EACH MAINLINE LATERAL LINES TEN FEET FROM ANY PATHS, ROADS OR OTHER HARDSCAPE AREAS. THE PROPOSED IRRIGATION PIPE LOCATIONS ARE DIAGRAMATIC TYP.

San Mateo County Notes:

John & Carolyn Moyer
Residence
611 Lime Creek Way
Emerald Hills, CA 94803
A LANDSCAPE IRRIGATION AUDIT IS REQUIRED. THIS AUDIT MUST BE COMPLETED BY A CERTIFIED LANDSCAPE IRRIGATION AUDITOR, NOT THE DESIGNER OR INSTALLER. IN ANY WAY WITHOUT PRIOR AUTHORIZATION THE CONTRACTOR WILL ASSUME ALL RESPONSIBILITY FOR THE INSTALLING CONTRACTOR CHANGE OR MODIFY THE APPROVED IRRIGATION LAYOUT. THE AUDIT MUST BE SUBMITTED TO THE BUILDING DEPARTMENT, WITH A CERTIFICATE OF COMPLETION. ALL SPECIFIED FLOW SENSORS AND MASTER VALVES MUST BE INSTALLED AND OPERATIONAL. AN AS BUILT DIAGRAM OF THE INSTALLED IRRIGATION SHOWING NUMBERED VALVES, SYSTEMS AND ALL COSTS ASSOCIATED WITH OVER WATER USAGE. A CERTIFICATE OF COMPLETION SHALL BE COMPLETED BY EITHER THE OWNER, ARCHITECTURAL DRAWINGS FOR LOCATION). LANDSCAPE CONTRACTOR TO VERIFY SIZE AND LOCATION IS DIFFERENT INDICATE ON AS BUILT PLANS. CONTRACTOR TO VERIFY SIZE AND LOCATION IS DIFFERENT INDICATE ON AS BUILT PLANS. CONTRACTOR CANNOT USE ANY MECHANICAL EQUIPMENT FOR INSTALLATION, ETC. CONTRACTOR CAN ONLY USE HAND TOOLS. CONTRACTOR TO VERIFY SIZE AND LOCATION IS DIFFERENT INDICATE ON AS BUILT PLANS. UNLESS OTHERS ARE SPECIFIED, ALL FIRE HYDRANTS LOCATED WITHIN 30’ OF THE MAIN WATER LINE. INSTALL AIR RELIEF VALVE- FOR ALL SHRUB AND TREE RINGS INSTALL IN A.parentElement:valve Location is Different Indicate on As Built Plans. REFER TO ORIGINAL PLANS."
AND INSTALL MULCH OR TOP DRESS AS SPECIFIED.

8. MAINLINE. (SEE IRRIGATION PLANS FOR SIZE AND MODEL).

4. ALL JOINTS TO BE SOLVENT WELDED AND WATERTIGHT.

3. MECHANICALLY TAMPER TO 95% PROCTOR.

2. DO NOT SCALE DRAWINGS.

1. LOCK ALL VALVE BOXES WITH BOLT PROVIDED (PURPLE)

NOTE:

DETAIL LEGEND:

THREADED SCH 80 PVC OR BRASS, AS REQUIRED FOR PROJECT.

SADDLES).

WEATHERPROOF WIRE CONNECTOR

CURLS WITH 3M DBYR CONNECTORS.

SCH 80 PVC FEMALE ADAPTER.

CONTROLLER WIRES WITH 12" MIN. EXPANSION SADDLES)

AND CONTROLLER WIRE FOR SHRUBS (RED). (SEE SPECIFICATIONS FOR 2-WIRE CONTROLLERS).

SCH 80 PVC 45 DEGREE ELBOW (S X S) TO

SCH 80 PVC 45 DEGREE ELBOW (S X S) TO

PRESSURIZED LINE (MAINLINE).

NON-PRESSURIZED LINE (LATERAL LINE).

BACKFILL WITH 6" OF #2 SAND.

BACKFLOW FEBCO 825YA PREVENTER

(22" X 16" X 12")

WATER SERVICE SHUT OFF VALVE

(18" X 12" X 12")

CORED HOLE FOR WATER SERVICE CONNECTION

(10" D)

COMMON BRICK

COLOR FROM CONTROL/COMMON WIRE.

SPECIFIED SOIL COVER (SEE LEGEND)

WEATHERPROOF WIRE CONNECTOR

TWO WIRES TO FLOW SENSOR TERMINALS

4" MIN. CLEARANCE ABOVE FINISHED GRADE.

1 1/2" = 1'-0"

4" - 8"

DITCH 18" MIN.

PAVING 24" MIN.

PLOT PLAN

DEPTH AS PER SPECIFICATIONS

WIDTH VARIES

DETAIL

PAVEMENT.

NOTES:

1. LOWER MAIN LINE TO PROPER DEPTH (SIZE FOR LARGER MAIN LINE AS NEEDED)

2- SEE BACKFLOW PREVENTION DEVICE DETAIL FOR REFERENCE.

4- DETECTABLE LOCATOR TAPE SHALL BE LOCATED SIX INCHES (6") ABOVE THE ENTIRE MAINLINE RUN.

3- VALVE BOXES SHALL BE CENTERED ABOVE VALVE ASSEMBLIES TO FACILITATE ACCESS AND MAINTENANCE.

5- VALVE BOXES SHALL BE LOCATED IN PLANTING AREAS.

7- VALVE BOXES SHALL BE CENTERED ABOVE VALVE ASSEMBLIES TO FACILITATE ACCESS AND MAINTENANCE.

6- FLOW METER CONNECTS TO HUNTER HC CONTROLLER SERIES ONLY.

8. MAINLINE. (SEE IRRIGATION PLANS FOR SIZE AND MODEL).

4. ALL JOINTS TO BE SOLVENT WELDED AND WATERTIGHT.

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PLOT PLAN

DEPTH AS PER SPECIFICATIONS

WIDTH VARIES

DETAIL

PAVEMENT.
**HOSE BIB INSTALLATION**

**POST**

In a self-adjusting weather or soil moisture sensing mode.

**NOTE:** Contractor and property owner to maintain this controller as per MWELO guidelines. It is the responsibility of the electrical codes.

1/2" diameter rigid finished grade unless ground as per MFG. steel conduit for 110 specifications.

Securely bolt controller to set controller 60" above wall. Install backup vac electrical source.

**FINISHED GRADE**

18

3/4" galvanized steel conduit for 110...
IRRIGATION CAP.

NOTE: INSTALL INDICATOR HEAD 24" MAX FROM THE EDGE OF PAVING OR THE PLANTER EDGE. INSTALLATION RECOMMENDATIONS MANUFACTURER'S SPECIFICATIONS.

2. DO NOT SCALE DRAWINGS.

3. ALL DIMENSIONS ARE CONSIDERED TRUE AND REFLECT MANUFACTURER'S SPECIFICATIONS.

NOTES:

Pavement or the edge of planted area served by drip tubing

3

Hunter Eco-ID-12 drip indicator off of drip line

3

Drip line grid below grade

Finish grade, depth of tubing per specifications

3

Toro loc-eze tee

5

Drip line tree detail

PVC supply line to drip line transition detail

PVC supply manifold from drip zone kit.

Center feed drip header

Drain line tree ring detail

Drain end feed header

Sub surface header installation

1" drip valve and filter

Drip flush valve
FROM HARDSCAPE, AREA.

73

PVC MAINLINE. REGULATOR. DRIP VALVE / FILTER / END FEED EXAMPLE

DRIP LINE LAYOUT AROUND TREE

TYPICAL DRIPLINE REQUIREMENTS

DRIP LAYOUT IN ODD SHAPED PLANTER

DRIP HEADER DETAIL

DRIP IRRIGATION IN PLANTER LAYOUT

TYPICAL DRIPLINE REQUIREMENTS

STAGGERED DRIP LINE EMITTER PATTERN

DRIP LINE LAYOUT AROUND TREE

AIR RELIEF VALVE

STAGGERED EMITTERS. SPECIFIED DRIP LINE GRID PATTERN WITH

GRID PRECIPITATION RATES (IN/HR)

LATERAL FLOW PER 100 FT (GPM)

INLET PRESSURE psi

POLY PIPE HEADER SIZE

MAXIMUM FLOW PER ZONE

EMITTER FLOW RATE GPH

EMITTER LATERAL SPACING  SPACING   SPACING

POLYETHYLENE OR PVC LATERAL INDICATED.

HIGH POINT, IF NOTED. TIE DOWN 3' O.C. AT LOAM, OR 2' O.C. AT SAND.

STAKE AT ALL TEES, ELLS, AND AT 4' O.C. AT CLAY, DRIPLINE INDICATOR NOTED.

FLUSH VALVE OR CAP AT LOW END, AS DRIPLINE SPACING AS

" POLYETHYLENE OR PVC MANIFOLD LINE.

PVC SUPPLY MANIFOLD WITH

BARB X BARB INSERT EL, TEE OR CROSS SUB-SURFACE DRIPLINE PIPE:

TREE BUBBLER(S) OR TREE RINGS - REFER TO LAYOUT PLANS

" AIR RELIEF VALVE: SEE DETAILS FOR AIR RELIEF INSTALLATION

TREE (TYPICAL) SEE IRRIGATION LEGEND FOR TREE

INLET PRESSURE psi

10" ROUND VALVE BOX

AIR/VACUUM RELIEF VALVE

RAIN BIRD MODEL: OPERIND

PRE-INSTALLED BARB FITTING IF USING QF OPERATION INDICATOR

QF-SUPPLY HEADER/PVC OR BLANK DRIP TUBING

STAGGERED DRIP LINE EMITTER PATTERN

NOTES:

1. DISTANCE BETWEEN LATERAL ROWS AND EMITTER SPACING TO BE BASED ON SOIL TYPE, PLANT MATERIALS AND CHANGES IN ELEVATION.

2. LENGTH OF LONGEST DRIPLINE LATERAL SHOULD NOT EXCEED THE MAXIMUM SPACING

3. NORMAL SPACING WITHIN THE TOP CENTER FEED EXAMPLE

4. WHEN ELEVATION CHANGE IS 10 FT OR MORE, ZONE THE BOTTOM SLOPED CONDITION NOTE:

5. WHEN ELEVATION CHANGE IS 10 FT OR MORE, ZONE THE BOTTOM SLOPED CONDITION NOTE:

FLOW     SPACING       SPACING         SPACING

EMITTER    12"      18"       24"

0.9 GPH  1.5 GPM       1.0 GPM         0.75 GPM

0.6 GPH  1.0 GPM      0.67 GPM        0.50 GPM

EMITTER  LATERAL

SPACING  SPACING

18       18

FLOW PER 100 FT (GPM)

0.6    0.9

POLYETHYLENE OR PVC LATERAL INDICATED.

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GENERAL IRRIGATION NOTES

1. All pop-up type sprinkler heads installed in shrub or groundcover areas shall be installed so that the top of the sprinkler head is flush with adjacent ground or curb.

2. All sprinkler heads shall be positioned to prevent drainage from one area to be irrigated unless otherwise specified on the plans.

3. All sprinkler heads shall be installed with a twist angle to prevent drainage from one area to be irrigated unless otherwise specified on the plans.

4. ALL PIPE MATERIALS AND EQUIPMENT AS SHOWN IN THE DETAILS. USE TEFLON TAPE OR EQUIPMENT AS SHOWN IN THE DETAILS. USE TEFLON TAPE OR 13. INSTALL ALL DRIP FLUSH VALVES AND DRIP INDICATORS AT HIGHEST POINT IN DRIP SYSTEM TO AVOID FREEZING.

5. The sprinkler system design is based on the minimum equipment operating pressure as specified in the project specifications. The sprinkler system design is based on the minimum equipment operating pressure as specified in the project specifications.

6. 120 VOLT ELECTRICAL POWER OUTLET AT THE AUTOMATIC CONTROLLER LOCATION SHALL BE INSTALLED SO THAT THE TOP OF THE SPRINKLER HEAD IS 2" ABOVE FINISH GRADE.

7. ALL AUTOMATIC CONTROLLERS WILL BE PROGRAMMED TO APPLY WATER DURING HOURS AS PERMITTED BY LOCAL WATER DISTRICT. (USE WUCOLS REFERENCE FOR PLANT WATERING NEEDS). IN THE EVENT OF ESTABLISHING WATERING DURING UNPROTECTED TIMES, LANDSCAPE MAINTENANCE CONTRACTOR SHALL USE A SOIL PROBE TO EXAMINE THE FIRST 6-12" OF THE SOIL PROFILE. IF THE SOIL IS COOL, DAMP AND HOLDS ITS SHAPE, WATERING IS NOT NECESSARY. PLANT MATERIALS SHOULD BE WATERED TO INCREASE HUMIDITY AND ENCOURAGE DEEPER ROOTING.

8. ACTIVATE IRRIGATION SYSTEM IN SPRING (OR WHEN WEATHER PERMITS). CHARGE MAINLINE IN FEBRUARY OR MARCH.

9. IRRIGATION SYSTEM WINTERIZATION

10. ALL TURF AREAS SHALL BE MONITORED TO DETERMINE THE NEED FOR SUPPLEMENTAL IRRIGATION. FREQUENCY AND DURATION OF IRRIGATION WILL BE DEPENDENT ON WEATHER CONDITIONS. TO DETERMINE THE NEED FOR SUPPLEMENTAL IRRIGATION, THE LANDSCAPE MAINTENANCE CONTRACTOR SHALL USE A SOIL PROBE TO EXAMINE THE FIRST 6-12" OF THE SOIL PROFILE. IF THE SOIL IS COOL, DAMP AND HOLDS ITS SHAPE, WATERING IS NOT NECESSARY. PLANT MATERIALS SHOULD BE WATERED TO INCREASE HUMIDITY AND ENCOURAGE DEEPER ROOTING.

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12. CHECK THAT ALL WEATHER SENSORS ARE FUNCTIONING AND REPLACE BATTERIES AS NEEDED.

13. REMOVE AND CLEAN ALL FILTERS AND REPLACE ANY DAMAGED FILTERS.

14. INSTALL ALL PIPE MATERIALS AND EQUIPMENT AS SHOWN IN THE DETAILS. USE TEFLON TAPE OR 13. INSTALL ALL DRIP FLUSH VALVES AND DRIP INDICATORS AT HIGHEST POINT IN DRIP SYSTEM TO AVOID FREEZING.

SYSTEM PERFORMANCE VERIFICATION

1. PROVIDE ONE CONTROLLER CHART FOR EACH AUTOMATIC CONTROLLER INSTALLED.

2. ALL IRRIGATION REPAIRED OR REPLACED MUST BE IN ACCORDANCE WITH THE ORIGINAL IRRIGATION DESIGN, LOCAL CODES AND SPECIFICATIONS. PROVIDE A TABLE OF CONTENTS OF ALL SUBMITTED ITEMS.

3. CLEARLY IDENTIFY EACH SUBMITTED SHEET BY UNDERLINING OR HIGHLIGHTING (ON EACH COPY) THE SPECIFIC ISSUE BEING SUBMITTED.

4. CHECK THE STORMWATER BASED AUTOMATING SYSTEM PROGRAMMING, FLOW MONITOR AND MALFUNCTION DETECTION TO COMPLY WITH THE ORIGINAL CONTRACT DOCUMENT.

5. ENSURE THAT ALL SUBMITTED WORK IS IN COMPLIANCE WITH THE ORIGINAL CONTRACT DOCUMENT.

6. IRRIGATION CONTRACTOR SHALL VERIFY WATER DEMAND. (USE WUCOLS REFERENCE FOR PLANT WATERING NEEDS). IN THE EVENT OF ESTABLISHING WATERING DURING UNPROTECTED TIMES, LANDSCAPE MAINTENANCE CONTRACTOR SHALL USE A SOIL PROBE TO EXAMINE THE FIRST 6-12" OF THE SOIL PROFILE. IF THE SOIL IS COOL, DAMP AND HOLDS ITS SHAPE, WATERING IS NOT NECESSARY. PLANT MATERIALS SHOULD BE WATERED TO INCREASE HUMIDITY AND ENCOURAGE DEEPER ROOTING.

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12. CHECK THAT ALL WEATHER SENSORS ARE FUNCTIONING AND REPLACE BATTERIES AS NEEDED.

IRRIGATION SYSTEM REPAIR

1. ACTIVATE IRRIGATION SYSTEM IN SPRING (OR WHEN WEATHER PERMITS). CHARGE MAINLINE IN FEBRUARY OR MARCH.

2. ALL IRRIGATION REPAIRED OR REPLACED MUST BE IN ACCORDANCE WITH THE ORIGINAL IRRIGATION DESIGN, LOCAL CODES AND SPECIFICATIONS. PROVIDE A TABLE OF CONTENTS OF ALL SUBMITTED ITEMS.

3. CLEARLY IDENTIFY EACH SUBMITTED SHEET BY UNDERLINING OR HIGHLIGHTING (ON EACH COPY) THE SPECIFIC ISSUE BEING SUBMITTED.

4. CHECK THE STORMWATER BASED AUTOMATING SYSTEM PROGRAMMING, FLOW MONITOR AND MALFUNCTION DETECTION TO COMPLY WITH THE ORIGINAL CONTRACT DOCUMENT.

5. ENSURE THAT ALL SUBMITTED WORK IS IN COMPLIANCE WITH THE ORIGINAL CONTRACT DOCUMENT.

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8. ACTIVATE IRRIGATION SYSTEM IN SPRING (OR WHEN WEATHER PERMITS). CHARGE MAINLINE IN FEBRUARY OR MARCH.

9. IRRIGATION SYSTEM WINTERIZATION

10. ALL TURF AREAS SHALL BE MONITORED TO DETERMINE THE NEED FOR SUPPLEMENTAL IRRIGATION. FREQUENCY AND DURATION OF IRRIGATION WILL BE DEPENDENT ON WEATHER CONDITIONS. TO DETERMINE THE NEED FOR SUPPLEMENTAL IRRIGATION, THE LANDSCAPE MAINTENANCE CONTRACTOR SHALL USE A SOIL PROBE TO EXAMINE THE FIRST 6-12" OF THE SOIL PROFILE. IF THE SOIL IS COOL, DAMP AND HOLDS ITS SHAPE, WATERING IS NOT NECESSARY. PLANT MATERIALS SHOULD BE WATERED TO INCREASE HUMIDITY AND ENCOURAGE DEEPER ROOTING.

11. ALL AUTOMATIC CONTROLLERS WILL BE PROGRAMMED TO APPLY WATER DURING HOURS AS PERMITTED BY LOCAL WATER DISTRICT. (USE WUCOLS REFERENCE FOR PLANT WATERING NEEDS). IN THE EVENT OF ESTABLISHING WATERING DURING UNPROTECTED TIMES, LANDSCAPE MAINTENANCE CONTRACTOR SHALL USE A SOIL PROBE TO EXAMINE THE FIRST 6-12" OF THE SOIL PROFILE. IF THE SOIL IS COOL, DAMP AND HOLDS ITS SHAPE, WATERING IS NOT NECESSARY. PLANT MATERIALS SHOULD BE WATERED TO INCREASE HUMIDITY AND ENCOURAGE DEEPER ROOTING.

12. CHECK THAT ALL WEATHER SENSORS ARE FUNCTIONING AND REPLACE BATTERIES AS NEEDED.
**Irrigation Monitoring/Landscape Watering**

- Irrigation Monitoring:
  - Irrigation Activation
  - Irrigation/Watering Responsibility
  - Irrigation System Winterization
  - Irrigation System Repair

- Irrigation Activation:
  - By the manufacturer's certified technician.

- Irrigation System Winterization:
  - Turn off backflow preventers, open gate valves and activate booster pump if installed.
  - Service, clean and adjust weather sensor system. This is critical to guarantee full operational and efficient performance of repaired systems.
  - Where applicable, shut off and drain irrigation system(s) at the end of the irrigation season. Turn off all main supply valves, open all manual drain valves, and bleed valves on backflow prevention devices. Perform flow tests on all valves and pipe work.

- Irrigation System Repair:
  - All damaged and repaired pipe MUST be flushed of all debris.
  - Repair and/or replacement of any damaged pipe MUST be conducted by a trained certified backflow technician.
  - All damaged and repaired pipe MUST be in accordance with the original irrigation design, local city or county guidelines and must correspond to variable watering requirements. Check for coverage and needed areas. Realtime irrigation scheduling is verified and will only promote shallow rooting and require excessive water waste.

- Irrigation Maintenance:
  - Turn on backflow preventers, open gate valves and activate booster pump if installed.
  - Service, clean and adjust weather sensor system. This is critical to guarantee full operational and efficient performance of repaired systems.
  - Check that all weather sensors are functioning and replace batteries as needed.

- Precipitation Rates:
  - Precipitation rates must be dependent on local weather conditions. To determine the need for watering, landscape maintenance contractor shall use a root zone meter or a visually estimated depth of the root zone. This will allow a more even distribution of water and also reduce water waste.

- Soil Intake Rates:
  - Soil intake rates must be dependent on local weather conditions. To determine the need for watering, landscape maintenance contractor shall use a root zone meter or a visually estimated depth of the root zone. This will allow a more even distribution of water and also reduce water waste.

- The Importance of the Maintenance Contractor:
  - It is the responsibility of the Maintenance Contractor to guarantee full operational and efficient performance of repaired systems.
  - Repair and/or replacement of any damaged pipe MUST be conducted by a trained certified backflow technician.
  - All damaged and repaired pipe MUST be flushed of all debris.
  - Repair and/or replacement of any damaged pipe MUST be conducted by a trained certified backflow technician.
  - All damaged and repaired pipe MUST be in accordance with the original irrigation design, local city or county guidelines and must correspond to variable watering requirements. Check for coverage and needed areas. Realtime irrigation scheduling is verified and will only promote shallow rooting and require excessive water waste.

- Watering Scheduling:
  - Watering frequencies may be adjusted.
  - All turf areas shall be monitored to determine the need for watering. Use WUCOLS reference for plant material irrigation demand. (Use WUCOLS reference for plant material irrigation demand.

- Restaurant & Landscape Irrigation:
  - Restaurant & landscape irrigation systems are not included in this document. Please refer to the original irrigation design and local city or county guidelines for more information.

- Rain Watering:
  - Rain water should be the primary source of supplemental irrigation. Frequency and duration of each watering will be dependent on local weather conditions.

- Cycle Soak:
  - It is recommended that restaurants follow Cycle Soak scheduling when applicable. It is the responsibility of the Maintenance Contractor to operate the irrigation system based on local municipal guidelines.

- Root Irrigation:
  - Frequent shallow irrigation scheduling is ineffective and will only promote shallow rooting and require excessive water waste.

- Cycle Soak:
  - It is recommended that restaurants follow Cycle Soak scheduling when applicable. It is the responsibility of the Maintenance Contractor to operate the irrigation system based on local municipal guidelines. Frequent shallow irrigation scheduling is ineffective and will only promote shallow rooting and require excessive water waste.