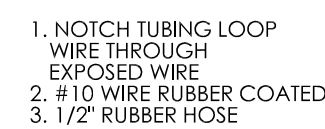
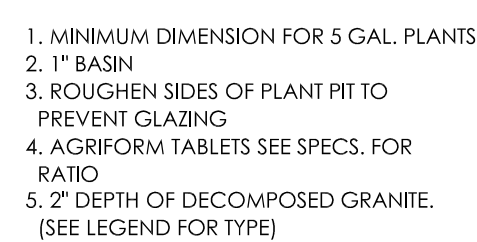


DOUBLE S
NOT TO SCALE
©

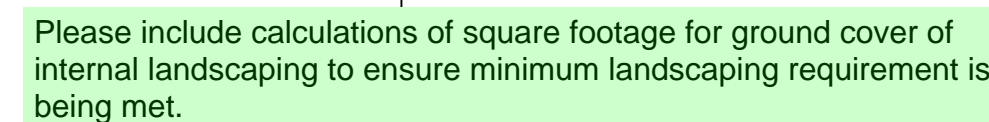


TJM TREE GUY
NOT TO SCALE



BACKFILL PLANT PIT WITH SOIL MIXED WITH 10% PHX MAG SUPPLEMENT.

TJM SHRUB PL
NOT TO SCALE



Please also include calculations for number of trees provided versus what is required.

ACER TARTICUM 'GARANN'
HOT WINGS MAPLE
2" CALIP. 6'T, 4.5'W (MULTI) (13)

POTENTILLA FRUTICOSA 'GOLD FINGER'
GOLD FINGER POTENTILLA
5 GALLON (61)

JUNIPERUS SABINA 'BUFFALO'
BUFFALO JUNIPER
5 GALLON (25)

JUNIPERUS HORIZONTALIS 'BLUE CHIP'
BLUE CHIP JUNIPER
5 GALLON (68)

PANICUM VIRGATUM 'SHENANDOAH'
RED SWITCH GRASS
1 GALLON (49)

ACHILLEA MILLEFOLEUM 'PAPRIKA'
PAPRIKA YARROW
1 GALLON (52)

SALVIA SYLVESTRIS 'MAINACHT'
MAY NIGHT SALVIA
1 GALLON (108)

ROCK COBBLE MULCH (TO MATCH ADJACENT)
25%-75% ARKANSAS RIVER ROCK
3" DEPTH IN ALL LANDSCAPE AREAS

14 GAGE, 4" HIGH, 1/8" THICK (BLACK)
STEEL EDGING
TO MATCH ADJACENT DEVELOPMENTS

XERISCAPE SEED MIX
GRASS SEED
TO MATCH ADJACENT DEVELOPMENTS

0' 10' 20' 40'

SCALE: 1"=20'-00"

EMAIL: timmcqueen@tjmla.net

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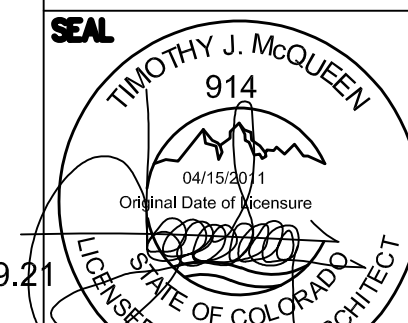


Know what's **below**.
Call before you dig.

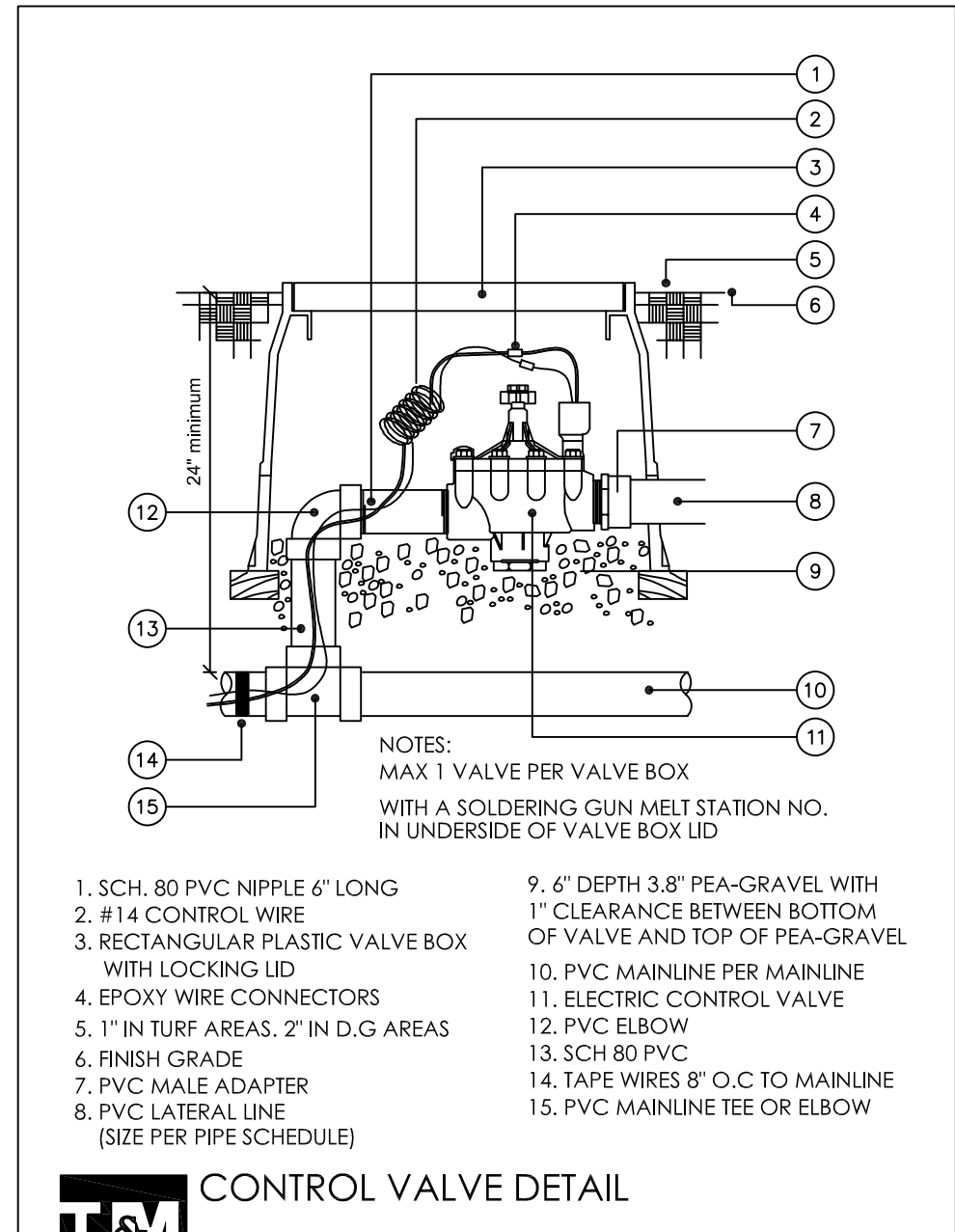
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SUPER STAR CAR WASH - FALCON MARKETPLACE LOT 10
SITE DEVELOPMENT PLAN

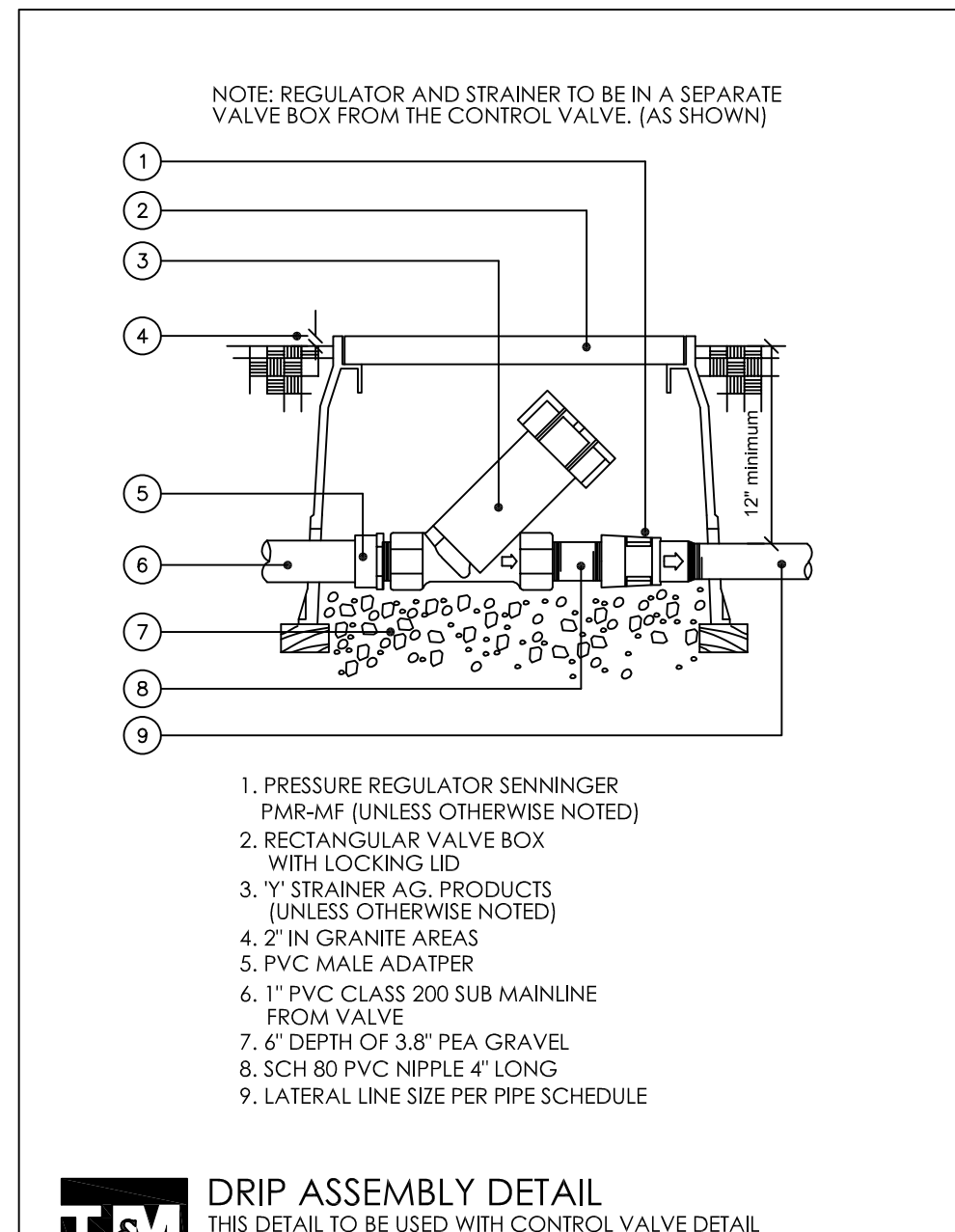
EL PASO COUNTY



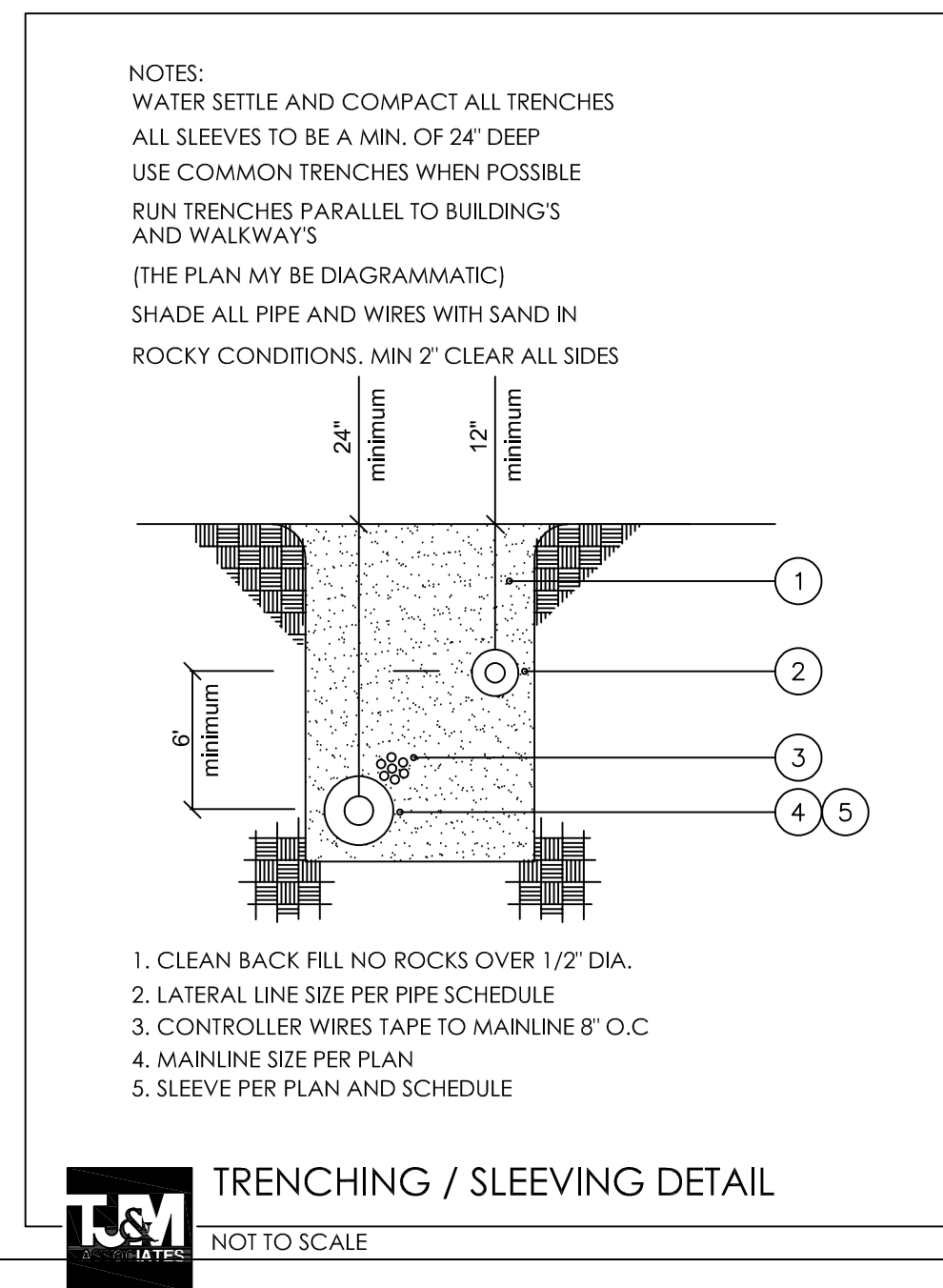
DESIGN SWK	DRAWN SWK	CHECKED TOP
SCALE	H: V:	
JOB No.	020441-01-001	
DATE :	02/05/2021	
SHEET La.01		



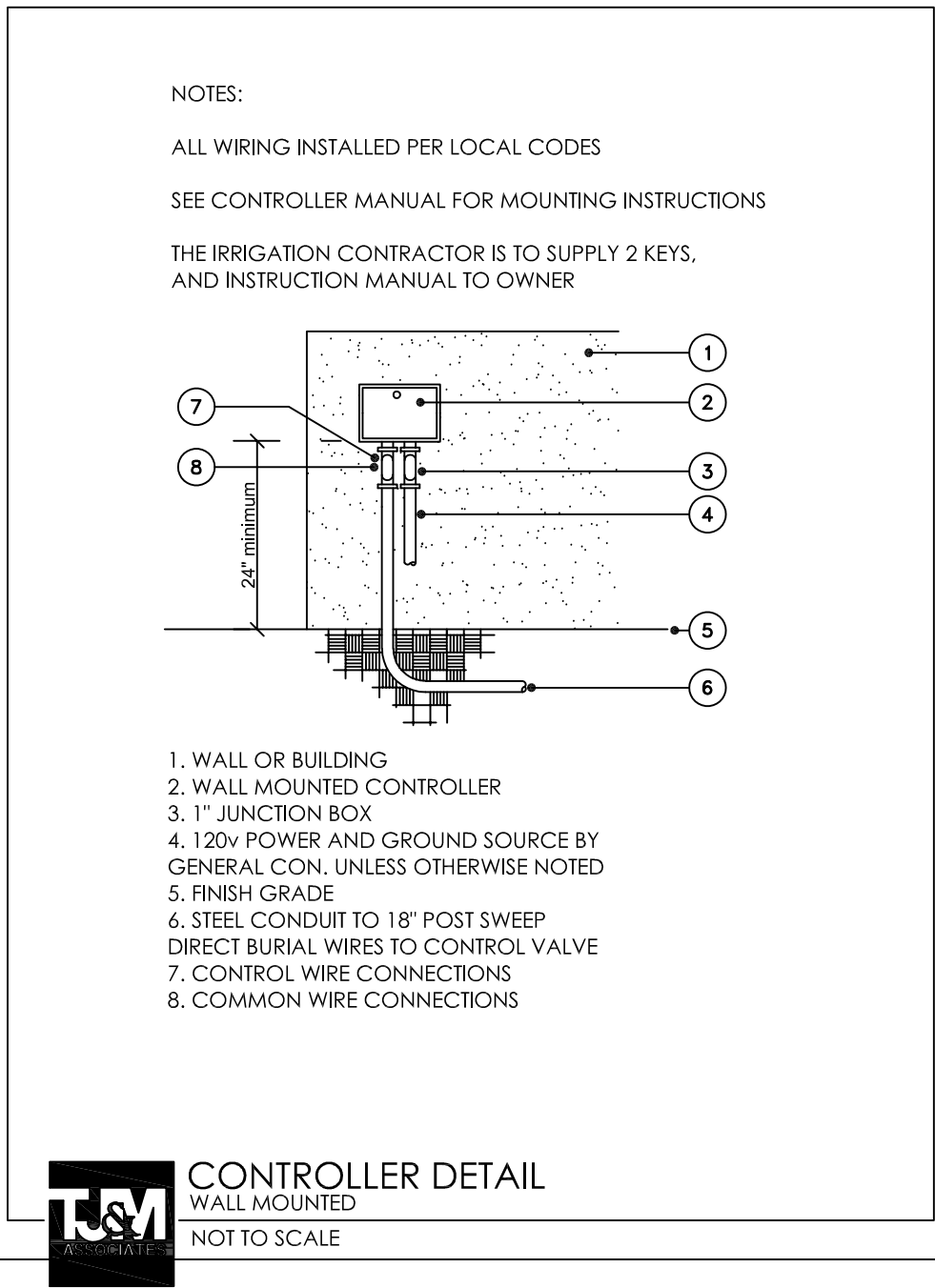
CONTROL VALVE DETAIL
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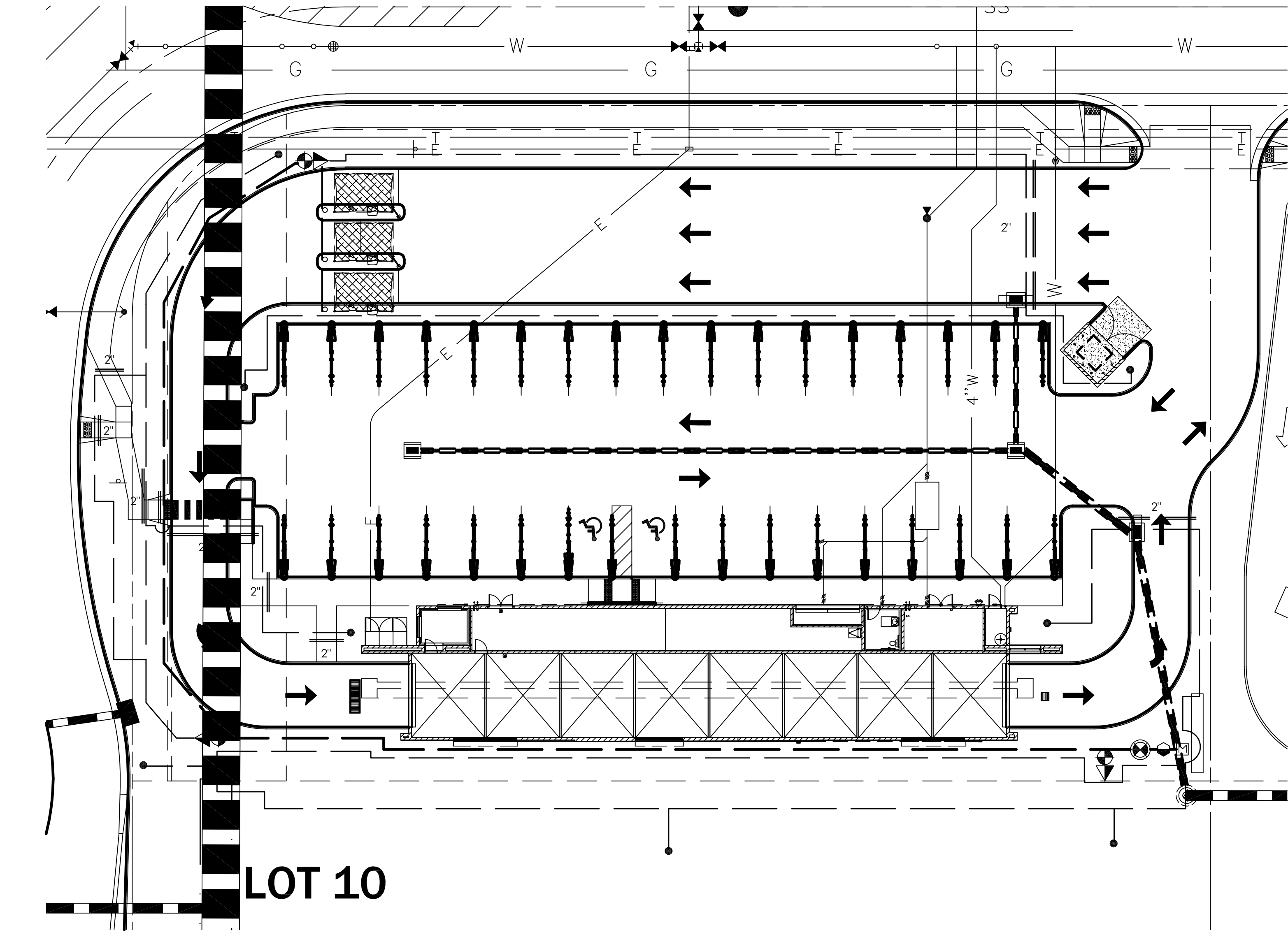
DRIP ASSEMBLY DETAIL
THIS DETAIL TO BE USED WITH CONTROL VALVE DETAIL
NOT TO SCALE



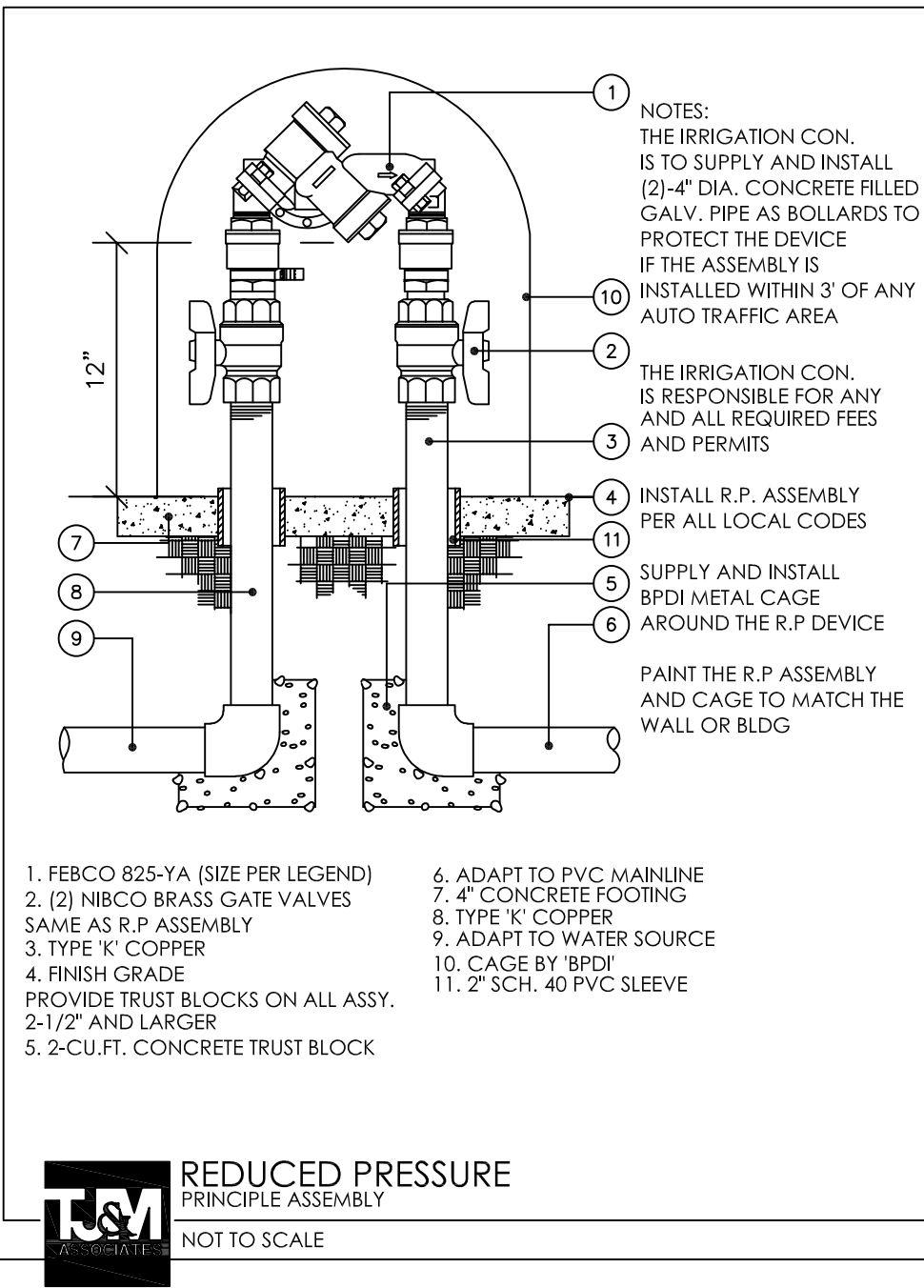
TRENCHING / SLEEVING DETAIL
NOT TO SCALE



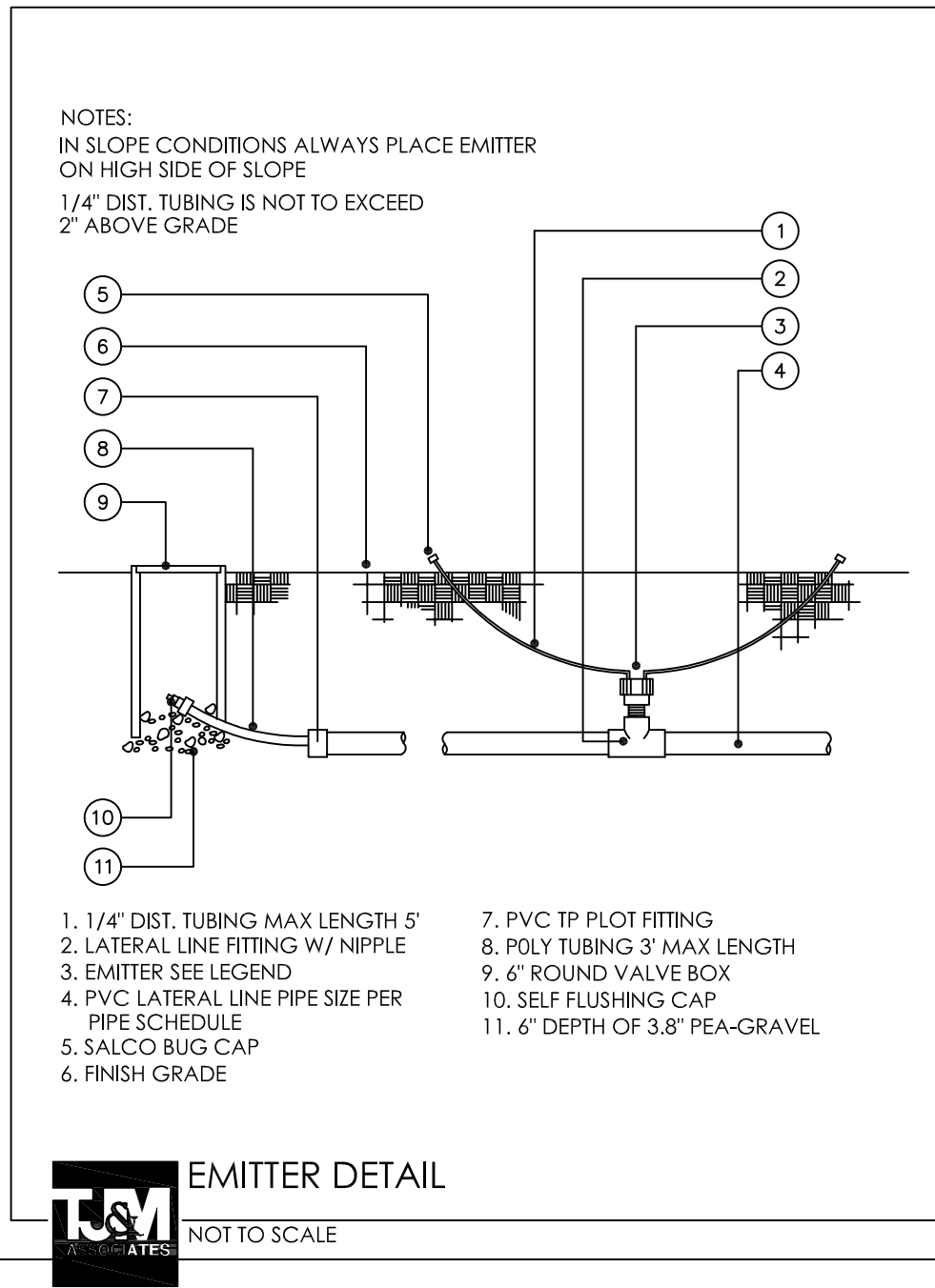
CONTROLLER DETAIL
WALL MOUNTED
NOT TO SCALE



COLD WEATHER CLIMATE:
THE IRRIGATION CONTRACTOR IS TO SUPPLY AND INSTALL ANY REQUIRED EQUIPMENT FOR SEASONAL SHUT-DOWN AND FREEZE PROTECTION, INCLUDING HUBBLE "HOT-BOX", DRAIN LINES AND ANY REQUIRED LOW POINT DRAINS TO PREVENT SYSTEM DAMAGE.
POWER TO THE "HOT-BOX" BY THE GENERAL CONTRACTOR.



REDUCED PRESSURE PRINCIPLE ASSEMBLY
NOT TO SCALE



EMITTER DETAIL
NOT TO SCALE

CLARITY NOTE:
FOR GRAPHIC CLARITY THE EMITTERS HAVE NOT BEEN SHOWN
VERIFY EMITTER COUNT WITH PLANT COUNT AND EMITTER SCHEDULE.

FOR GRAPHIC CLARITY THE SLEEVES HAVE NOT BEEN SHOWN. THE IRRIGATION CONTRACTOR IS RESPONSIBLE FOR ALL SLEEVES PER THE FOLLOWING SCHEDULE.

SLEEVING SCHEDULE:
WIRES 2" SCH. 40 PVC (QTY AS REQUIRED)
MAIN LINE 4" SCH. 40 PVC (OR DBL THE MAINLINE SIZE)
DRIP LATERAL 2" SCH. 40 PVC
TURF LATERAL 3" SCH. 40 PVC (OR DBL THE LATERAL LINE SIZE)

PLANT SIZE	GA. PER HR.	EMITTER SIZE
36" BOX	6	(1) HUNTER MPE-20
24" BOX	4	(1) HUNTER MPE-20
15 GALLON	4	(1) HUNTER MPE-10
5 GALLON	1	(1) HUNTER HEB-10
1 GALLON	1	(1) HUNTER HEB-10

NOTES:
EMITTER SIZING AND QUANTITIES MAY VARY DEPENDING ON SOIL TYPE AND CLIMATE CONDITIONS VERIFY PRIOR TO BID. ALL NON-METALIC WATER AND IRRIGATION PIPING LARGER THAN 2" REQUIRE MIN. 18 AWA INSULATED COPPER TRACER WIRE SUITABLE FOR DIRECT BURIAL

THE IRRIGATION CONTRACTOR MAY SUBSTITUTE
(1) MULTI EMITTER FOR (6) SINGLE EMITTERS IN GROUND AREAS AS LONG AS DIST. TUBING DOES NOT EXCEED 5 FT

FOUNDATION NOTE:
NO END CAPS ARE TO BE PLACED WITHIN 15' OF ANY FOUNDATION OR FOOTING. ADJUST LAYOUT AS REQUIRED.
NO HIGH WATER USE, OR HIGH FLOW PRODUCTS ARE TO BE USED WITHIN 15' OF ANY FOUNDATION OR FOOTING. THE IRRIGATION IS TO BE MONITORED ON A REGULAR BASIS TO AVOID SOIL SATURATION AROUND FOUNDATIONS AND FOOTINGS. THIS IRRIGATION PLAN IS DIAGRAMMATIC ADJUST LAYOUT AS REQUIRED.

- IRRIGATION LEGEND**
- 1" LANDSCAPE METER
 - FEBCO 825-YA-1" R.P. ASSY. W/ GUARDSHACK CAGE PAINTED TO MATCH BUILDING
 - HUNTER ICV-(SIZE PER MAINLINE) MASTER VALVE INSTALL IN VALVE BOX ADJACENT TO BACKFLOW
 - HUNTER DRIP CONTROL ZONE KIT PCZ-101-25 (30gph to 600gph) (.5gpm to 10gpm) ICZ-101-25 (601gph to 1,200gph) (10gpm to 20gpm)
 - HUNTER I-CORE-1C-600-M (MODULES AS REQUIRED) 6 STATION CONTROLLER (POWER PER GENERAL CONTRACTOR)
 - HUNTER HEB-10 (1/2" THREADED) PRESSURE COMP. SINGLE PORT EMITTER
 - HUNTER MPE-(SIZE PER SCHEDULE) (1/2" THREADED) PRESSURE COMP. MULTI PORT EMITTER
 - 1.5" MAINLINE (SCH40)
 - CLASS 200-3/4" DRIP LATERAL LINE
 - AG. PRODUCTS SELF FLUSHING ENDCAP (SEE FOUNDATION NOTE)
 - SCH 40 PVC SLEEVE (SEE SLEEVING SCHEDULE)

PIPE SIZE	GPM	PIPE CLASS
1/2"	0-5	315
3/4"	6-10	200
1"	11-15	200
1 1/4"	16-25	200
1 1/2"	26-35	200
2"	36-60	200

T.J. McQUEEN & ASSOCIATES, INC.
LANDSCAPE ARCHITECTURE
URBAN DESIGN
SITE PLANNING
10450 N. 74th Street, Suite 120
Scottsdale, Arizona 85258
P. (602)265-0320

EMAIL: timmqueen@tjmla.net



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REVISIONS

REVISION	DESCRIPTION	DATE

SUPER STAR CAR WASH - FALCON MARKETPLACE LOT 10
SITE DEVELOPMENT PLAN

COLORADO

EL PASO COUNTY

SEAL

TIMOTHY J. McQUEEN

914

04/15/2011

Original Date of Issuance

02/05/2021

02/05/2021

RENEWED DATE OF EXPIRATION

LEARNED LANDSCAPE ARCHITECT

DESIGN	DRAWN	CHECKED
SWK	SWK	TOP

SCALE: 1/8" = 1'

JOB No. 020441-01-001

DATE: 02/05/2021

SHEET
La.02

UNDERGROUND SPRINKLER SYSTEM			operating system.			only. Verify plant counts with plan. In case of discrepancy, plan shall govern.			4. Roll and sand sod when required to remove minor depressions or irregularities.		
Part 1 – General			B. All electrical work shall be done in accordance with the National Electrical Code and local ordinances.			H. Each plant shall be properly identified with legible waterproof tags securely fastened. Tags shall remain on the plants until after final acceptance and then be promptly removed by the Contractor.			5. Control growth of weeds in sod. When using herbicides, apply in accordance with manufacturer's instructions. Remedy damage resulting from negligent or improper use of herbicides.		
1.01 WORK INCLUDED			C. All wire connections, at remote control valves (either direct buried or in control boxes) and at all wire splices, shall be left with sufficient "slack" so that in case of repair the valve bonnet or splice may be brought to the surface without disconnecting the wires.			PART 3 – INSTALLATION			6. Immediately repair or replace any sodded areas which show deterioration or bare spots.		
A. The work included under these specifications shall consist of the furnishing of all labor, materials, permits, tools, and equipment necessary for the complete installation of a sprinkler irrigation system in accordance with the following specifications and accompanying drawings.			D. Each remote control valve or group of remote control valves, which are to be connected to one station of a controller, shall have wire sizes as shown in the wiring diagrams on the drawings or as specified. All remote control valves, which are to be connected to the same controller, shall be connected to a common ground wire to size as shown on the drawings or as specified. Each individual controller shall have a separate common ground wire system entirely independent of the common ground wire system of all other controllers. Only those remote control valves which are being controlled by one specific controller shall be connected to that controller's common ground wire system.			3.01 INSPECTION OF PLANT MATERIAL			3.09 INSPECTION FOR ACCEPTANCE		
B. It is the intent of these drawings and specifications to form a guide for a complete installation, and although some items may not be specifically noted, but are reasonably necessary for a complete installation, they shall be furnished under this contract. Sprinklers shall be located and spaced so that adequate overlapping of the spray will provide uniform head to head(100%) coverage. The system shall efficiently and evenly irrigate all areas, and shall be complete in every respect, ready for operation by the Owner.			3.09 TESTING			A. Plants shall be subject to inspection and approval by Landscape Architect at place of growth and upon delivery. Written request for inspection of plant materials at place of growth shall be submitted to Landscape Architect at least ten (10) calendar days prior to delivery. This written request shall state place of growth and quantity of plants to be inspected. Landscape Architect reserves the right to waive inspection. Such approval shall not impair the right of inspection and rejection upon delivery at the project site or during the progress of the work for size and condition of balls or roots, diseases, insects, and latent defects or injuries. Rejected plants must be immediately removed from the project site.			A. Inspection of the landscaping work to determine completion of contract work, exclusive of the possible replacement of plants, will be made by the Landscape Architect at the conclusion of the maintenance period.		
C. It is the responsibility of the Irrigation Contractor to provide 100% coverage to all landscape areas.			A. After all supports, anchors, and thrust blocks are in place, the line shall be tested at a pressure of 150 psi for 30 minutes. Should any leaks be found, they shall be repaired and the line retested until satisfactory. Zone lines shall be tested at 80 psi in like manner. After testing, the system shall be thoroughly flushed out before the heads may be installed. Upon completion, an operating test shall be performed to visually check the coverage of the system. Any heads, which do not function according to the manufacturer's data shall be replaced with sprinklers that do or the installation shall be otherwise corrected to provide satisfactory performance. Final adjustment to the sprinkler heads and automatic equipment will be done by the Contractor upon completion of the installation to the satisfaction of the Landscape Architect. Minor adjustment from then on shall be made by the Owner's Maintenance Staff.			B. Certificates of inspection of plant materials as may be required by Federal, State or other authorities to accompany shipments and be furnished to Owner upon completion of project.			B. Acceptance: After inspection, the Contractor will be notified in writing by the Landscape Architect of acceptance of all work of this Section, exclusive of the possible replacement of plants subject to reinspection and guarantee, or if there are any deficiencies of the requirements for completion of the work.		
1.02 CONTRACTOR'S QUALIFICATIONS			3.10 DRAWINGS OF RECORD			3.02 DIGGING AND HANDLING			C. Upon acceptance made by the Landscape Architect, the Contractor maintenance is terminated and the guarantee period begins.		
A. Installers shall be licensed irrigation contractors with experience in the installation of automatic underground lawn sprinkling systems. All work shall be performed in a professional workmanlike manner by mechanics skilled in the trade.			A. The Contractor shall provide and keep up to date a complete "as-built" record set of mylar sepals which shall be corrected to show any changes from the original drawings. These record drawings shall show location of all control lines, valves, valve boxes, main lines, flush caps, controllers, and any substitutions as well as any deviation in piping or location of buried valves, etc. with accurate dimensions indicated.			A. Digging shall be done the same season of planting and shall be done by hand as to not injure plants and to meet size requirements. No plant other than the required samples shall be dug or earth to the site until the required inspections have been made and the plants or samples approved.			3.10 PLANT GUARANTEE AND REPLACEMENT/FINAL ACCEPTANCE		
B. The Contractor shall be responsible for any damage to any covered by these specifications, under his care and custody, until final acceptance of his work.			B. After completion of the sprinkler installation, the Contractor shall deliver to the Owner three prints of the correct and completed "as-built" set of drawings, along with three bound instruction folders covering the equipment installed. Contractor shall present the above information as a condition precedent to his completion payment.			B. Dig balled and burlapped (BB) plants with firm, unbroken natural balls of earth, of sufficient diameter and depth to include the fibrous and feeding roots. No synthetic or mudded in balls will be accepted. No plants moved with a ball will be accepted if the ball is cracked or broken before or during planting operations.			A. The guarantee is for a period of one year from date of acceptance by the Landscape Architect. The guarantee is for all new plant material, lawns, transplants, and existing plant material.		
C. The Contractor shall obtain all permits from, pay required fees to, and arrange any necessary inspections by any government agency having jurisdiction over the work.			3.11 GUARANTEE			3.03 FERTILIZING SOD SUBSOIL			B. At the end of the guarantee period, the Landscape Architect shall reinspect all guaranteed work for Final Acceptance upon written request of Contractor. Request shall be received at least ten (10) calendar days before anticipated date for final inspection.		
1.03 VERIFICATION OF DRAWINGS AND SPECIFICATIONS			A. Within ten (10) days after the Contractor's notification that the sprinkler installation is complete, the Landscape Architect will inspect the system and, if necessary, submit a "punch list" to the Contractor. Acceptance by the Landscape Architect of these corrections will signify final acceptance by the Owner.			A. Apply fertilizer at a rate recommended by manufacturer. Apply after fine grading and prior to compaction. Mix thoroughly into upper two (2) inches of topsoil.			C. Portions of lawns and/or plantings may be accepted in part upon Landscape Architect's approval.		
A. It shall be the Contractor's responsibility to carefully examine the drawings and specifications, and to visit the site in order to check existing conditions prior to bidding. Any conflict or errors shall be immediately brought to the attention of the Landscape Architect for interpretation or instructions. Otherwise, any changes necessary to meet existing conditions, shall be made at the Contractor's expense.			B. The entire sprinkler system shall be guaranteed for a period of one year from this final acceptance date. The Contractor shall promptly replace, without cost to the Owner, any defective materials of faulty workmanship which may develop within this guarantee period, including restoration of any properly damaged during repairs. He shall also be responsible for damages resulting from leaks which may occur in the piping system installed by him, and he shall repair, at his expense, all damage so caused, in a manner satisfactory to the Owner. However the Contractor shall not be held liable for damages occasioned by strikes, fire, weather, violence or theft, acts of God, acts of other contractors, or by any other caused beyond the control of the Contractor.			B. Lightly water to aid the breakdown of fertilizer.			PART 4 – MISCELLANEOUS AND GENERAL NOTES		
B. It is the Irrigation Contractor's responsibility to verify water pressure, water source, and size in the field prior to construction. Should a discrepancy exist between design pressure and the field pressure the Landscape Architect shall be notified immediately.			C. It will be the Owner's responsibility to maintain the system in working order during the guarantee period, performing necessary minor maintenance, keeping grass from obstructing the sprinkler heads, protecting against vandalism and preventing damage during the landscape maintenance operation.			C. Apply fertilizer within 48 hours before laying sod.			4.01 FINISH GRADING AND GRADING		
1.04 WORKING CONDITIONS			D. The Contractor shall service the system at the Owner's request during the guarantee period, and shall be paid for work performed which is not covered by the guarantee, in accordance with a predetermined schedule of fees.			A. Lay sod as soon as possible after delivery to prevent deterioration.			A. The General Contractor to provide Landscape Contractor finish grade within + 0.1 of a foot as shown on the civil grading plan and landscape plan.		
A. The Contractor shall confine his operations to the areas allotted to him by the Owner, for his work for material and equipment storage.			LANDSCAPING			B. Lay sod closely joint together with no open joints visible, and pieces not overlapped. Lay smooth and flush with adjoining grass areas. Finish grade to be one and a half inches (1-1/2") below paving and top of surface curbs.			B. All mounding, berms and finish grading to be approved by the Landscape Architect prior to planting or irrigation work.		
B. The Contractor shall continuously maintain a competent superintendent, satisfactory to the Owner, on the work during progress, with authority to act for the Contractor in all matters pertaining to the work.			PART 1 – GENERAL			C. Immediately water sodded areas after installation. Water in sufficient amounts to saturate sod and upper four (4) inches of soil.			A. The Landscape Contractor at his own expense shall procure all permits, certificates, and licenses required of him by law for the execution of this work. He shall comply with all state, county, and local laws, ordinances, rules or regulations relating to the performance of this work. All deductions or additions will be made through a change order issued by the Architect. Changes made with a change order are not considered part o the contract and payment cannot be guaranteed.		
C. The Contractor shall not assign nor sublet any portion of this work without written approval by the Owner.			1.01 WORK INCLUDED			D. After sod and soil has dried sufficiently to prevent damage, roll sodded areas to ensure good bone between sod and soil and to remove minor depressions and irregularities. Ensure rolling equipment weight not over 250 lbs. or less than 150 lbs.			B. The Contractor shall visit and inspect site to thoroughly inform himself of all existing conditions. Any discrepancies between existing conditions and those shown on drawings should immediately be brought to the attention of the Landscape Architect.		
D. The Contractor shall be responsible for staking out the system from the drawings, using the property lines and building dimensions as a guide.			A. The work included under these specifications shall consist of the furnishing of all labor, material, permits, tools, and equipment necessary for the complete installation of the landscaping materials as shown on the drawings and as described in the following specifications.			3.05 TIME OF PLANTING			NOTES:		
E. The Contractor shall coordinate his work with that of the other trades, so as to avoid any conflict, and carry the installations to a rapid completion without any unnecessary delays.			1.02 QUALITY ASSURANCE			A. The contractor shall notify the Landscape Architect in writing when other divisions of the work have progressed sufficiently to commence landscaping work, including placing of topsoil to finish grade. Thereafter, conduct planting operations under favorable weather conditions.			1. Locate all irrigation equipment in landscape areas – some lines are schematic.		
PART 2 – PRODUCTS			A. For standard products, the manufacturer's analysis will be acceptable. For all other materials, analysis shall be by a recognized laboratory.			B. Any plant material installed during typical off seasons (hot summer months or freezing winter months) shall be done at the Contractor's expense and the Contractor shall be held responsible for replacement of any plant material damaged due to these adverse conditions.			2. Coordinate programs to avoid station overlap.		
2.01 PIPING			B. Analysis shall be made in accordance with the current methods of the Association of Official Agricultural Chemists.			3.06 PLANTING OPERATIONS			3. Reduce radius as necessary to prevent overspray on turf and shrub sprays.		
A. All pressure main piping, on the supply side of the zone valves, shall be class 200 PVC with integrally formed bell–tite joint couplers. All fittings shall be solvent welded, schedule 40 PVC.			C. Soils shall be analyzed for their composition and fertility in sustaining plant growth and health.			A. General			4. Size and provide Schedule 40 PVC sleeves (approx. twice diameter of pipe) under all walkways, kooldeck, curbs & drives as necessary on all irrigation equipment, at a depth of 24" below grade.		
B. All lateral piping, on the discharge side of the zone valves, two inches (2") and under, shall be class 200 PVC. Fittings shall be schedule 40 PVC material. 1/2" pvc to be class 315			D. All plants furnished under this specification shall be from nursery grown stock, and they shall meet the ARIZONA NURSERY ASSOCIATION of the American Association of Nurserymen, Inc. requirements as to sizing, grading, and quality. Plant materials specified shall conform with the nomenclature of STANDARDIZED PLANT NAMES, Second Edition. The Landscape Architect reserves the right to refuse plant material based on overall appearance and quality regardless of specifications.			1. The Contractor shall coordinate all aspects of a the landscape operations with all aspects of the site construction. The work shall proceed as the indicated portions of the site become available, consistent with the seasonal limitations for landscape planting.			5. Contractor shall install all equipment as per manufacturer's specifications and as per city codes.		
C. All plastic to metal shall be made with PVC schedule 40 male adapters or PVC schedule 80 nipples. Joint compound for such connections shall be Permatex Type II teflon tape or a prior approved equivalent.			E. Plants of the species specified shall be furnished in the variety, size, grade and quality indicated. Specifications and planting plans shall be strictly adhered to and no changes or substitutions will be allowed prior to bidding without written permission of the Landscape Architect, Owner, or Owner's Representative.			2. The Contractor shall be responsible for any damage to utilities construction, sitework construction, and underground sprinkler systems and shall bear the full cost to repair the damage. Accomplishment of repairs shall be equal to the original installation prior to damage. Any damage shall be immediately reported to the Landscape Architect and repairs shall be approved by him before it is buried.			6. Any substitutions are to be approved by the Landscape Architect.		
D. Where pipes are installed under roads, drives, parking areas or walks, schedule 40 PVC sleeves shall be provided for the lines. In planting areas, where cultivation might damage shallow plastic piping, protective sleeves must be provided, unless copper tubing is installed. Risers in flower beds and shrubbery shall be schedule 80 PVC.			F. By submitting a proposal and accepting award of the Contract, the Contractor acknowledges that he has investigated the supply of planting stock available and has obtained firm commitments from his suppliers assuring delivery of the specific plant materials as required for completion of the project.			3. Maintain all trench or grade stakes for work under other Sections until their removal is approved by the Landscape Architect.			7. Length of poly to be no greater than five (5) feet from PVC lateral (typical for all rigid drip systems).		
2.02 SPRINKLER HEADS			G. All plants shall be freshly dug. No heeled in plant or plants from cold storage will be accepted. Plants shall be typical of their species or variety and have normal habits of growth, be healthy and vigorous, well branched and have dense foliage when in leaf. All plants, including root systems, shall be free of disease, disfiguring knots, sunscald, insect pests, eggs or larvae, dead or broken branches, bark abrasions, and have healthy well developed root systems. The root system of container grown plants shall be sufficiently developed to hold the earth intact upon removal of the container.			4. The Contractor shall stake plant location, shrub pits and other planting areas and secure the Landscape Architect's approval before starting excavation of same, making adjustments as necessary.			8. Install vacuum breaker twelve (12) inches above highest head or lateral pipe in system. Install per local plumbing codes.		
A. Emitter heads shall be on PVC laterals, or prior approved equivalent.			H. All plants shall be freshly dug. No heeled in plant or plants from cold storage will be accepted. Plants shall be typical of their species or variety and have normal habits of growth, be healthy and vigorous, well branched and have dense foliage when in leaf. All plants, including root systems, shall be free of disease, disfiguring knots, sunscald, insect pests, eggs or larvae, dead or broken branches, bark abrasions, and have healthy well developed root systems. The root system of container grown plants shall be sufficiently developed to hold the earth intact upon removal of the container.			5. Unless otherwise directed by Landscape Architect, indication of plant drawings is to be interpreted as including digging of hole, furnishing plant of specified size, work of planting, mulching, guying, staking, wrapping and watering.			9. Contractor shall guarantee 100% coverage in all landscape areas.		
2.03 AUTOMATIC CONTROLLER			I. Planting, sodding and seeding shall be performed by personnel familiar with planting procedures and under the supervision of a qualified planting foreman.			B. Plant Pits and Beds			10. Contour or berm planter areas to achieve adequate coverage from flood bubblers.		
A. Unit features shall include mechanical time control design, adjustable time setting up to 60 minutes per station, 24–hour clock, 14–day calendar, and automatic rapid advance. Unit shall be UL listed and shall operate on 120 volt, 1 phase, 60 Hertz power. General Contractor to bring power to controller. Irrigation Contractor to hardwire to controller, see detail.			J. All plants shall be freshly dug. No heeled in plant or plants from cold storage will be accepted. Plants shall be typical of their species or variety and have normal habits of growth, be healthy and vigorous, well branched and have dense foliage when in leaf. All plants, including root systems, shall be free of disease, disfiguring knots, sunscald, insect pests, eggs or larvae, dead or broken branches, bark abrasions, and have healthy well developed root systems. The root system of container grown plants shall be sufficiently developed to hold the earth intact upon removal of the container.			1. Plant pits shall be excavated with vertical sides, large enough to allow twelve (12) inches of space around the ball in all directions. Adjust depth as necessary to permit a minimum of twelve (12) inches planting soil under the ball when the plant is set at the proper depth.			11. All heads to be adjusted so that there is minimum overthrow onto pavement, walls and buildings.		
2.04 QUICKCOUPLING VALVES			K. All plants shall be freshly dug. No heeled in plant or plants from cold storage will be accepted. Plants shall be typical of their species or variety and have normal habits of growth, be healthy and vigorous, well branched and have dense foliage when in leaf. All plants, including root systems, shall be free of disease, disfiguring knots, sunscald, insect pests, eggs or larvae, dead or broken branches, bark abrasions, and have healthy well developed root systems. The root system of container grown plants shall be sufficiently developed to hold the earth intact upon removal of the container.			2. Planting pit backfill for all trees and shrub shall be as follows:			12. All pits and palms to be on a separate valve.		
A. Furnish and install where shown on the drawings quick–coupler with swivel and hose bib, 3/4" size or prior approved equivalent. They shall be mounted on one inch (1") copper swing joint risers, and the tops shall be set flush with the top of the planters. Furnish and deliver to the Owner double–lug coupler key complete with one inch (1") hose swivel for connecting to the above valves. Also furnish two (2) locktop cover key.			L. All plants shall be freshly dug. No heeled in plant or plants from cold storage will be accepted. Plants shall be typical of their species or variety and have normal habits of growth, be healthy and vigorous, well branched and have dense foliage when in leaf. All plants, including root systems, shall be free of disease, disfiguring knots, sunscald, insect pests, eggs or larvae, dead or broken branches, bark abrasions, and have healthy well developed root systems. The root system of container grown plants shall be sufficiently developed to hold the earth intact upon removal of the container.			1. 2/3 parts by volume of native soil.			13. Contractor to receive a minimum 48 hour notice prior to sleeving.		
2.05 ELECTRICAL CONTROL CABLE			M. All plants shall be freshly dug. No heeled in plant or plants from cold storage will be accepted. Plants shall be typical of their species or variety and have normal habits of growth, be healthy and vigorous, well branched and have dense foliage when in leaf. All plants, including root systems, shall be free of disease, disfiguring knots, sunscald, insect pests, eggs or larvae, dead or broken branches, bark abrasions, and have healthy well developed root systems. The root system of container grown plants shall be sufficiently developed to hold the earth intact upon removal of the container.			2. 1/3 parts by volume forest mulch.			14. Mainline to have a minimum of twenty four (24) inches of cover. Lateral lines to have a minimum twelve (12) inches of cover.		
A. All electrical control and ground wire shall be irrigation control cable of size as required. All wiring to be used for connecting the automatic remote control valve to the automatic controllers shall be Type "UF", 600 volt, stranded, or solid copper, single conductor wire with PVC insulation and bear UL approval for direct underground burial feeder cable.			N. All plants shall be freshly dug. No heeled in plant or plants from cold storage will be accepted. Plants shall be typical of their species or variety and have normal habits of growth, be healthy and vigorous, well branched and have dense foliage when in leaf. All plants, including root systems, shall be free of disease, disfiguring knots, sunscald, insect pests, eggs or larvae, dead or broken branches, bark abrasions, and have healthy well developed root systems. The root system of container grown plants shall be sufficiently developed to hold the earth intact upon removal of the container.			3. One pound 16–20–0 per cubic yard of mix.			15. All drawings to be bid per plan. No value engineering or substitutions will be accepted during bidding.		
B. All control or "hot" wires shall be on one color and all common or "ground" wire shall be or another color(white).			O. All plants shall be freshly dug. No heeled in plant or plants from cold storage will be accepted. Plants shall be typical of their species or variety and have normal habits of growth, be healthy and vigorous, well branched and have dense foliage when in leaf. All plants, including root systems, shall be free of disease, disfiguring knots, sunscald, insect pests, eggs or larvae, dead or broken branches, bark abrasions, and have healthy well developed root systems. The root system of container grown plants shall be sufficiently developed to hold the earth intact upon removal of the container.			Planting pits shall be backfilled with prepared backfill and be water settled to a grade sufficient that in the setting of the plant, the finish grade level after settlement will be the same as at which plants were grown. Agriform tablets to be used with each planting (six for 36–inch box, three for 15 gallon, two for 5 gallon, and one for 1 gallon).					
C. Verifications of wire types and installation procedures shall be checked to conform to local codes.			P. All plants shall be freshly dug. No heeled in plant or plants from cold storage will be accepted. Plants shall be typical of their species or variety and have normal habits of growth, be healthy and vigorous, well branched and have dense foliage when in leaf. All plants, including root systems, shall be free of disease, disfiguring knots, sunscald, insect pests, eggs or larvae, dead or broken branches, bark abrasions, and have healthy well developed root systems. The root system of container grown plants shall be sufficiently developed to hold the earth intact upon removal of the container.			C. Installations					
D. All electric control cable shall be of size as determined by the equipment manufacturer and shall be installed in the piping trenches wherever possible and in the manner recommended by the manufacturer, leaving slack in the wire. Expansion joints in the wire may be provided at 200–foot intervals by making 5 or 6 turns of the wire around a piece of 1/2 inch pipe. Where it is necessary to run wire in a separate trench, the wire shall be a minimum cover of twelve (12) inches.			Q. All plants shall be freshly dug. No heeled in plant or plants from cold storage will be accepted. Plants shall be typical of their species or variety and have normal habits of growth, be healthy and vigorous, well branched and have dense foliage when in leaf. All plants, including root systems, shall be free of disease, disfiguring knots, sunscald, insect pests, eggs or larvae, dead or broken branches, bark abrasions, and have healthy well developed root systems. The root system of container grown plants shall be sufficiently developed to hold the earth intact upon removal of the container.			1. Set plants in center of pits, plumb and straight and at such a level that after settlement the crown of the plant shall be two (2) inches below the finish grade and forming a shallow trough directly over the ball of earth and slightly smaller than the pit to facilitate watering. Space all plants as shown.					
PART 3 – INSTALLATION			R. All plants shall be freshly dug. No heeled in plant or plants from cold storage will be accepted. Plants shall be typical of their species or variety and have normal habits of growth, be healthy and vigorous, well branched and have dense foliage when in leaf. All plants, including root systems, shall be free of disease, disfiguring knots, sunscald, insect pests, eggs or larvae, dead or broken branches, bark abrasions, and have healthy well developed root systems. The root system of container grown plants shall be sufficiently developed to hold the earth intact upon removal of the container.			2. Set balled and burlapped plants upon a well tamped layer of planting soil. Backfill around ball with planting soil in six to eight (6 – 8) inch lifts, each thoroughly tamped and puddled to top of pit. Avoid air pockets. Remove all ropes and wires from tops and sides of balls. No burlap shall be pulled out from under the balls.					
3.01 PROTECTION OF UTILITIES, IRRIGATION SYSTEM, ETC.			S. All plants shall be freshly dug. No heeled in plant or plants from cold storage will be accepted. Plants shall be typical of their species or variety and have normal habits of growth, be healthy and vigorous, well branched and have dense foliage when in leaf. All plants, including root systems, shall be free of disease, disfiguring knots, sunscald, insect pests, eggs or larvae, dead or broken branches, bark abrasions, and have healthy well developed root systems. The root system of container grown plants shall be sufficiently developed to hold the earth intact upon removal of the container.			3. Plants supplied under this specification shall be installed immediately upon being removed from their containers. Removal of plants from containers shall be in a manner that will not disturb the root system of the soil in which they were planted. Under no conditions shall the plant be removed from the containers by pulling on the main stem or plant growth. No plants shall be installed with their containers remaining attached.					
A. The Contractor shall verify the location of all utilities and note location of utilities, irrigation piping and underground obstructions. The Contractor shall be responsible for the cost of repairing buried conduit, cables or pipelines damaged during the installation of the irrigation system.			T. All plants shall be freshly dug. No heeled in plant or plants from cold storage will be accepted. Plants shall be typical of their species or variety and have normal habits of growth, be healthy and vigorous, well branched and have dense foliage when in leaf. All plants, including root systems, shall be free of disease, disfiguring knots, sunscald, insect pests, eggs or larvae, dead or broken branches, bark abrasions, and have healthy well developed root systems. The root system of container grown plants shall be sufficiently developed to hold the earth intact upon removal of the container.			4. Before install bare root plants, planting soil shall be placed and compacted to a depth of twelve (12) inches in the bottom of the plant pit. The plants shall be installed with their roots evenly distributed and spread in their natural position, with the planting soil being carefully placed and compacted around the roots so as to leave no air space.					
B. The Contractor shall clearly make and maintain markers showing locations of irrigation system wiring and piping installed in order that other contractors may avoid damaging this work.			U. All plants shall be freshly dug. No heeled in plant or plants from cold storage will be accepted. Plants shall be typical of their species or variety and have normal habits of growth, be healthy and vigorous, well branched and have dense foliage when in leaf. All plants, including root systems, shall be free of disease, disfiguring knots, sunscald, insect pests, eggs or larvae, dead or broken branches, bark abrasions, and have healthy well developed root systems. The root system of container grown plants shall be sufficiently developed to hold the earth intact upon removal of the container.			5. Unless otherwise directed by Landscape Architect, indication of plant drawings is to be interpreted as including digging of hole, furnishing plant of specified size, work of planting, mulching, guying, staking, wrapping and watering.					
C. The Contractor shall take necessary precautions to protect site conditions and plant materials which are to remain. Should damage be incurred, Contractor shall repair damage to its original condition or furnish and install equal replacement at his expense.			V. All plants shall be freshly dug. No heeled in plant or plants from cold storage will be accepted. Plants shall be typical of their species or variety and have normal habits of growth, be healthy and vigorous, well branched and have dense foliage when in leaf. All plants, including root systems, shall be free of disease, disfiguring knots, sunscald, insect pests, eggs or larvae, dead or broken branches, bark abrasions, and have healthy well developed root systems. The root system of container grown plants shall be sufficiently developed to hold the earth intact upon removal of the container.			B. Plant Pits and Beds					
D. The Contractor shall coordinate with the Landscape Architect to provide irrigation to existing materials.			W. All plants shall be freshly dug. No heeled in plant or plants from cold storage will be accepted. Plants shall be typical of their species or variety and have normal habits of growth, be healthy and vigorous, well branched and have dense foliage when in leaf. All plants, including root systems, shall be free of disease, disfiguring knots, sunscald, insect pests, eggs or larvae, dead or broken branches, bark abrasions, and have healthy well developed root systems. The root system of container grown plants shall be sufficiently developed to hold the earth intact upon removal of the container.			1. Pruning					
E. Contact blue stake prior to digging.			X. All plants shall be freshly dug. No heeled in plant or plants from cold storage will be accepted. Plants shall be typical of their species or variety and have normal habits of growth, be healthy and vigorous, well branched and have dense foliage when in leaf. All plants, including root systems, shall be free of disease, disfiguring knots, sunscald, insect pests, eggs or larvae, dead or broken branches, bark abrasions, and have healthy well developed root systems. The root system of container grown plants shall be sufficiently developed to hold the earth intact upon removal of the container.			2. Pruning will occur only at time of planting and according to standard horticultural practice and at the direction of the Landscape Architect. Amount of pruning shall be limited and is not to exceed thirty–three percent (33%) of total plant material necessary to remove dead or injured twigs and branches and to compensate for root loss resulting from transplanting. Do not cut leaders.					
3.02 EXCAVATION			Y. All plants shall be freshly dug. No heeled in plant or plants from cold storage will be accepted. Plants shall be typical of their species or variety and have normal habits of growth, be healthy and vigorous, well branched and have dense foliage when in leaf. All plants, including root systems, shall be free of disease, disfiguring knots, sunscald, insect pests, eggs or larvae, dead or broken branches, bark abrasions, and have healthy well developed root systems. The root system of container grown plants shall be sufficiently developed to hold the earth intact upon removal of the container.			3. Remove all dead wood, suckers, and broken or badly bruised branches.					
A. The Contractor shall do all necessary excavation for the proper installation of his work. Machine trenchers used on the site shall be of an approved type to cut smooth–bottom trenches on uniform slopes. Trenches shall be no wider than necessary to lay the pipe, except where necessary to make joints. Over excavating shall be backfilled and carefully tamped to provide a smooth and firm bearing surface for laying the pipe. When necessary, Contractor must provide barricades and lights for public protection. Minimum depth of cover shall be at least twenty four (24) inches for the main piping, and at least twelve (12) inches for the lateral branch lines.			Z. All plants shall be freshly dug. No heeled in plant or plants from cold storage will be accepted. Plants shall be typical of their species or variety and have normal habits of growth, be healthy and vigorous, well branched and have dense foliage when in leaf. All plants, including root systems, shall be free of disease, disfiguring knots, sunscald, insect pests, eggs or larvae, dead or broken branches, bark abrasions, and have healthy well developed root systems. The root system of container grown plants shall be sufficiently developed to hold the earth intact upon removal of the container.			4. Cuts over 1/2 inch diameter shall be pointed over with approved tree paint. Paint shall cover all exposed wood surfaces as well as other exposed living tissue. Injured cambium and bruises and scors shall be tracked back to living tissue and removed. Smooth and shave wounds so as not to retain water. Treat wound with paint.					
3.03 PIPE INSTALLATION			AA. All plants shall be freshly dug. No heeled in plant or plants from cold storage will be accepted. Plants shall be typical of their species or variety and have normal habits of growth, be healthy and vigorous, well branched and have dense foliage when in leaf. All plants, including root systems, shall be free of disease, disfiguring knots, sunscald, insect pests, eggs or larvae, dead or broken branches, bark abrasions, and have healthy well developed root systems. The root system of container grown plants shall be sufficiently developed to hold the earth intact upon removal of the container.			5. Staking and Guying					
A. All pipe lines shall be installed in the locations and of the sizes indicated, and of the materials specified. Parallel piping may be installed in the same trench. Piping shall be laid accurately to the line and grade required, with full uniform bearing on the trench bottom. No piping shall be laid on soft fill or other unstable material. No direct contact, with other piping or structures, will be permitted at crossing. Interior of piping shall be kept clear of foreign matter before installation and shall be kept clean by means of plugged or capped ends after lowering into the trench. The supply main lines shall be flushed out and tested for leaks, with control valves in place, before backfilling the joints. All lateral piping sections shall be flushed out before sprinkler heads are attached. All pipe shall be installed in strict accordance with recommendations of the manufacturer. This shall apply to thrust blocking, handling, storage, depth of cover, expansion allowance, testing, etc.			AB. All plants shall be freshly dug. No heeled in plant or plants from cold storage will be accepted. Plants shall be typical of their species or variety and have normal habits of growth, be healthy and vigorous, well branched and have dense foliage when in leaf. All plants, including root systems, shall be free of disease, disfiguring knots, sunscald, insect pests, eggs or larvae, dead or broken branches, bark abrasions, and have healthy well developed root systems. The root system of container grown plants shall be sufficiently developed to hold the earth intact upon removal of the container.			a. Stake or guy all trees per detail. Trees which blow down, away excessively, or are otherwise injured because of improper bracing shall be replaced at Contractor's expense.					
B. Under existing drives or sidewalks, the Contractor shall either saw cut concrete and replace it to the former condition or install the pipe by boring or jacking under the area. pvc sleeves to be at a 24" depth			AC. All plants shall be freshly dug. No heeled in plant or plants from cold storage will be accepted. Plants shall be typical of their species or variety and have normal habits of growth, be healthy and vigorous, well branched and have dense foliage when in leaf. All plants, including root systems, shall be free of disease, disfiguring knots, sunscald, insect pests, eggs or larvae, dead or broken branches, bark abrasions, and have healthy well developed root systems. The root system of container grown plants shall be sufficiently developed to hold the earth intact upon removal of the container.			3. Spraying					
3.04 BACKFILLING			AD. All plants shall be freshly dug. No heeled in plant or plants from cold storage will be accepted. Plants shall be typical of their species or variety and have normal habits of growth, be healthy and vigorous, well branched and have dense foliage when in leaf. All plants, including root systems, shall be free of disease, disfiguring knots, sunscald, insect pests, eggs or larvae, dead or broken branches, bark abrasions, and have healthy well developed root systems. The root system of container grown plants shall be sufficiently developed to hold the earth intact upon removal of the container.			a. All ground cover and non–lawn areas shall be treated with pre–emergent.					
A. As soon as the work has been installed, inspected and accepted, all excavations and trenches shall be filled and water settled with fine earth materials, free from clods, rocks, or other unsuitable substances. Trenches must be left flush with adjacent finished grade after compacting to the original density of the soil. Flooding of trenches will be permitted downstream of zone valves. Care shall be taken to place any previously filled and fertilized soil in the top portion of the trench, and subsoil will not be allowed in the top six (6) inches of the backfill.			AE. All plants shall be freshly dug. No heeled in plant or plants from cold storage will be accepted. Plants shall be typical of their species or variety and have normal habits of growth, be healthy and vigorous, well branched and have dense foliage when in leaf. All plants, including root systems, shall be free of disease, disfiguring knots, sunscald, insect pests, eggs or larvae, dead or broken branches, bark abrasions, and have healthy well developed root systems. The root system of container grown plants shall be sufficiently developed to hold the earth intact upon removal of the container.			4. Decomposed Granite					
73.05 SPRINKLER HEADS			AF. All plants shall be freshly dug. No heeled in plant or plants from cold storage will be accepted. Plants shall be typical of their species or variety and have normal habits of growth, be								