Requesting Department:

Development Services



TO: Planning and Zoning Commission

THRU: Brett Burningham, Development Services Director

- FROM: Steven Ester, Planner I
- RE: Discussion and Possible Approval of SITE PLAN P18-0204 EWING HARDSCAPE SUPPLY, a request by Paul Sanchez (Bowman Consulting) for a Site Plan to allow the renovation of an existing 1,013 square foot building on-site repurposed as a hardscape materials sales facility on a 7.71 acre site located at the southeast corner of Crismon and Ocotillo roads.

DATE: May 8, 2019

STAFF RECOMMENDATION

Staff recommends approval of SITE PLAN P18-0204 EWING HARDSCAPE SUPPLY, subject to the Conditions of Approval outlined in this report.

PROPOSED MOTION

Move to recommend approval of SITE PLAN P18-0204 EWING HARDSCAPE SUPPLY, subject to the Conditions of Approval outlined in this report

RELEVANT COUNCIL GOAL

Secure Future

SUMMARY

This proposal consists of a request by Paul Sanchez (Bowman Consulting) for a Site Plan to allow the renovation of an existing 1,013 square foot building on-site repurposed as a hardscape materials sales facility on a 7.71 acre site located at the southeast corner of Crismon and Ocotillo roads.

HISTORY

June 4, 2003: Town Council approved the "Howe Industrial Park" PAD Rezone (RZ10-02) and Preliminary Plat (S09-02).

DISCUSSION

This request is for site plan, building architecture, and landscaping approval for Ewing Hardscape Supply. Currently, there is an existing 1,013 square foot building on-site that will be renovated and repurposed as a hardscape materials sales facility. The sales office is located adjacent to Ocotillo Road, with the hardscape materials stored and sold near the rear of the site within a screened, outdoor area. The initial phase of development is proposed on 7.71 acres of the overall 10.49 acre parcel. As additional space is needed, the rear yard area of the site may be expanded as Phase II to allow for more storage.

Access is provided from a single entrance off Ocotillo Road. The driveway location and curb cuts were determined and installed by the Town with previous Ocotillo Road improvements.

Project Information				
Project Name	Ewing Hardscape Supply			
Site Location	SEC Crismon & Ocotillo roads			
Current Zoning	EMP-A/PAD (Light Industrial)			
General Plan Designation	Industrial			
Surrounding Zoning Designations:				
North	R1-7/PAD (Urban Development Type A District)			
South	R1-43 (Rural Estate District)			
Fast	EMP-A/PAD (Light Industrial)			
East	EMP-B (General Industrial)			
West	EMP-A/PAD (Light Industrial)			
Site Area	7.71 Acres			
Parking Required	4			
Parking Provided	4			
Landscaping Required	10% (33,568 square feet)			
Landscaping Provided	12.5% (42,000 square feet)			
Building Square Footage	1,013			
Building Height	13' (allowed 48')			

ANALYSIS

General Plan Review: The 2018 General Plan Land Use Designation for this project is Industrial. The proposed project is in compliance with the General Plan and fits the characteristics of the Industrial designation.

Zoning Review: The zoning designation of the property is EMP-A/PAD (Light Industrial). The applicant is proposing no change to the zoning, as outdoor sales operations are permitted with conditions in the EMP-A zoning district. The proposed project is in compliance with the Zoning Ordinance and meets all applicable conditions of Section 4.6.D.5.

Engineering and Traffic Review: The project has been reviewed by the Engineering and Traffic Divisions. The location of the site's access point was previously installed with Ocotillo Road improvements. All applicable standards of the Zoning Ordinance are met.

Site Plan Review: The site plan meets the Zoning Ordinance requirements for site planning and design. Adequate parking and access for vehicular ingress and egress are provided. The hardscape materials being sold are kept in a gated storage area near the rear of the site screened by an eight (8') tall screen wall around its perimeter. Notably, the site contains a functional weight scale on the east side of the building that will be recalibrated and used for future sales. All applicable standards of the Zoning Ordinance are met.

Building Elevation Review: The existing building on-site is vacant, but will be updated to incorporate new stone veneer around the building, metal roofing over the east bay window, and a small entry awning with wood columns and matching stone near the bases. Additionally, the existing structure will be repainted and reshingled with a new fascia board installed. Mechanical equipment currently located on top of the roof will be relocated to ground-level and screened behind a stucco CMU screen wall. Existing windows will be replaced. The proposed building elevations meet the Town Design Standards.

Landscape / Wall Plan Review: The overall landscaping and walls meet the Town's standards as set forth in the Zoning Ordinance. A total of 12.5% open space is provided, where Industrial developments are required to provide a minimum of 10% open space. The project features Red Push Pistache trees as a street tree theme and a multi-use trail ranging in width from five (5') to ten (10') feet along the site's Ocotillo Road frontage. As part of the conditions required for outdoor sales operations in the EMP-A zoning district, an eight (8') foot tall wall is provided around the perimeter of the hardscape materials storage area at the rear of the site for screening. The site wall features a split face CMU cap, fluted CMU banding, and smooth face CMU painted to complement the proposed building colors.

PUBLIC COMMENTS

Staff has received no public input on the project to date.

CONDITIONS OF APPROVAL

- 1. This project shall be developed in accordance with the plans attached to this case and all the provisions of the Zoning Ordinance applicable to this case.
- 2. Monument signage and building signage will be reviewed and approved under a separate permit.

- 3. Mechanical equipment, electrical meter and service components, and similar utility devices whether ground level, wall mounted, or roof mounted, shall be screened from view.
- 4. Stored items shall not project above the proposed eight (8') screen wall around the perimeter of the site.
- 5. A water and sewer report/statement shall be provided with final Construction Documents.

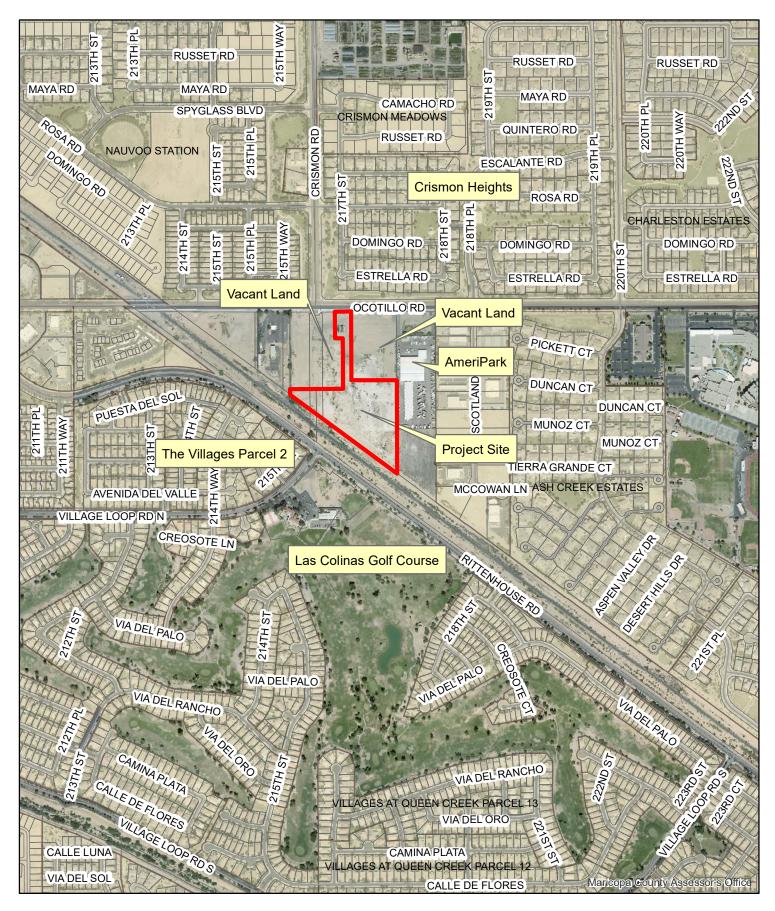
ATTACHMENTS

- 1. Aerial Photo Exhibit
- 2. General Plan Exhibit
- 3. Zoning Map Exhibit
- 4. Site Plan
- 5. Landscape Plan
- 6. Building Elevations

Project Name: Ewing Hardscape Supply Aerial Exhibit

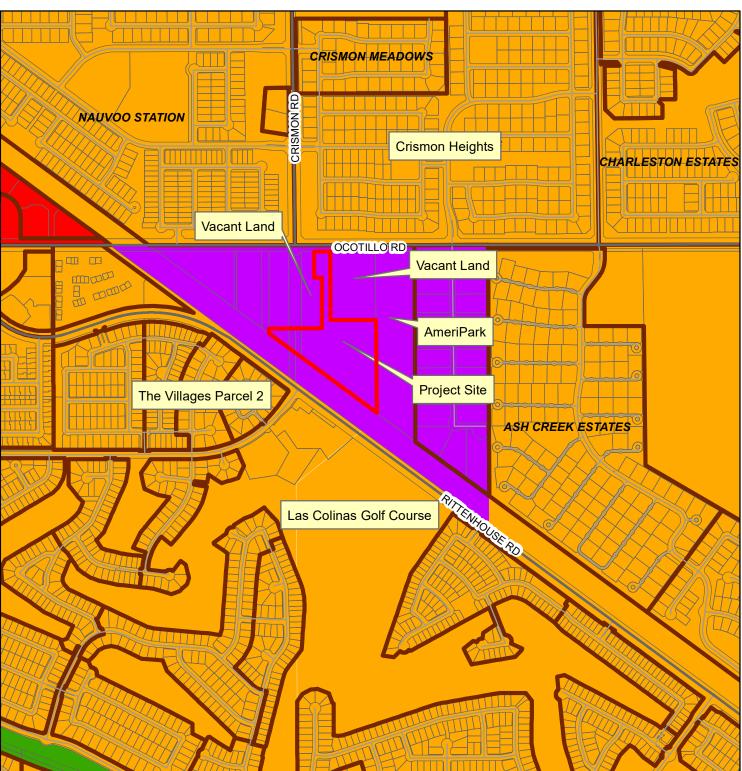
Case Numbers: P18-0204

Hearing Date: May 8, 2019 (Planning Commission)



Case Numbers: P18-0204

Hearing Date: May 8, 2019 (Planning Commission)



General Plan Land Use

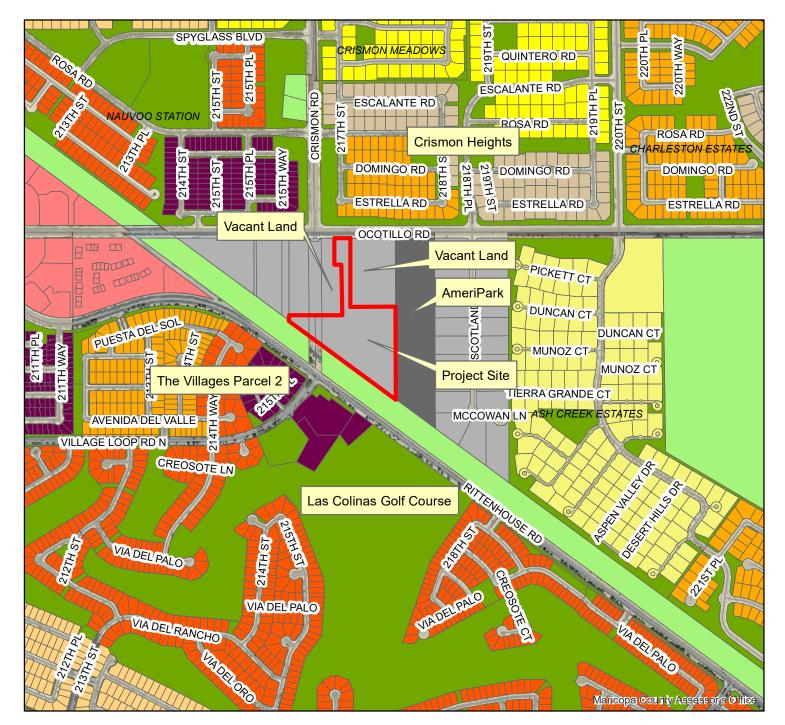
Rural Neighborhood Urban

- Commercial Industrial Open Space
- Special District 1Special District 2Special District 3

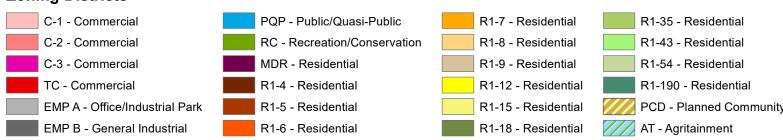


Case Numbers: P18-0204

Hearing Date: May 8, 2019 (Planning Commission)







PROJECT DESCRIPTION

CONSTRUCTION OF HARDSCAPE/LANDSCAPE IMPROVEMENTS TO 7.63 AC OF 10.49 AC SITE. EXISTING BUILDING ON SITE WILL RECEIVE MINOR IMPROVEMENTS TO INTERIOR AND EXTERIOR CONSTRUCTION TO BEGIN IN SPRING OF 2019.

PROJECT ADDRESS

PROPERTY OWNER

TWO BITS PROPERTIES 44222 W. SEDONA MARICOPA, AZ EMAIL: CGNBO@GMAIL.COM PHONE: 719.588.0207 CONTACT:CLINTON BETENBOUGH

APPLICANT

BOWMAN CONSULTING 1295 W. WASHINGTON ST., SUITE 108 **TEMPE, AZ 85281** EMAIL:PSANCHEZ@BOWMANCONSULTING.COM PHONE: 480.629.8830 CONTACT: PAUL SANCHEZ

PROPERTY TENANT

EWING IRRIGATION & SUPPLY 3441 E. HARBOUR DR. PHOENIX, AZ 85034 CONTACT: DAVID SAWYERS EMAIL: dsawyers@ewinghardscape.com

PARCEL NUMBERS

304-64-863A 304-64-861B 304-65-019N 304-65-019P

ZONING EXISTING

ADJACENT ZONING NORTH SOUTH EAST WEST

LAND USE

NORTH

SOUTH

EAST

WEST

GENERAL PLAN CLASSIFICATION EMPLOYMENT INDUSTRIAL EXISTING NO USE

PROPOSED ADJACENT LAND USE

WATER & SEWER

WATER AND SEWER ARE PROVIDED BY QUEEN CREEK.



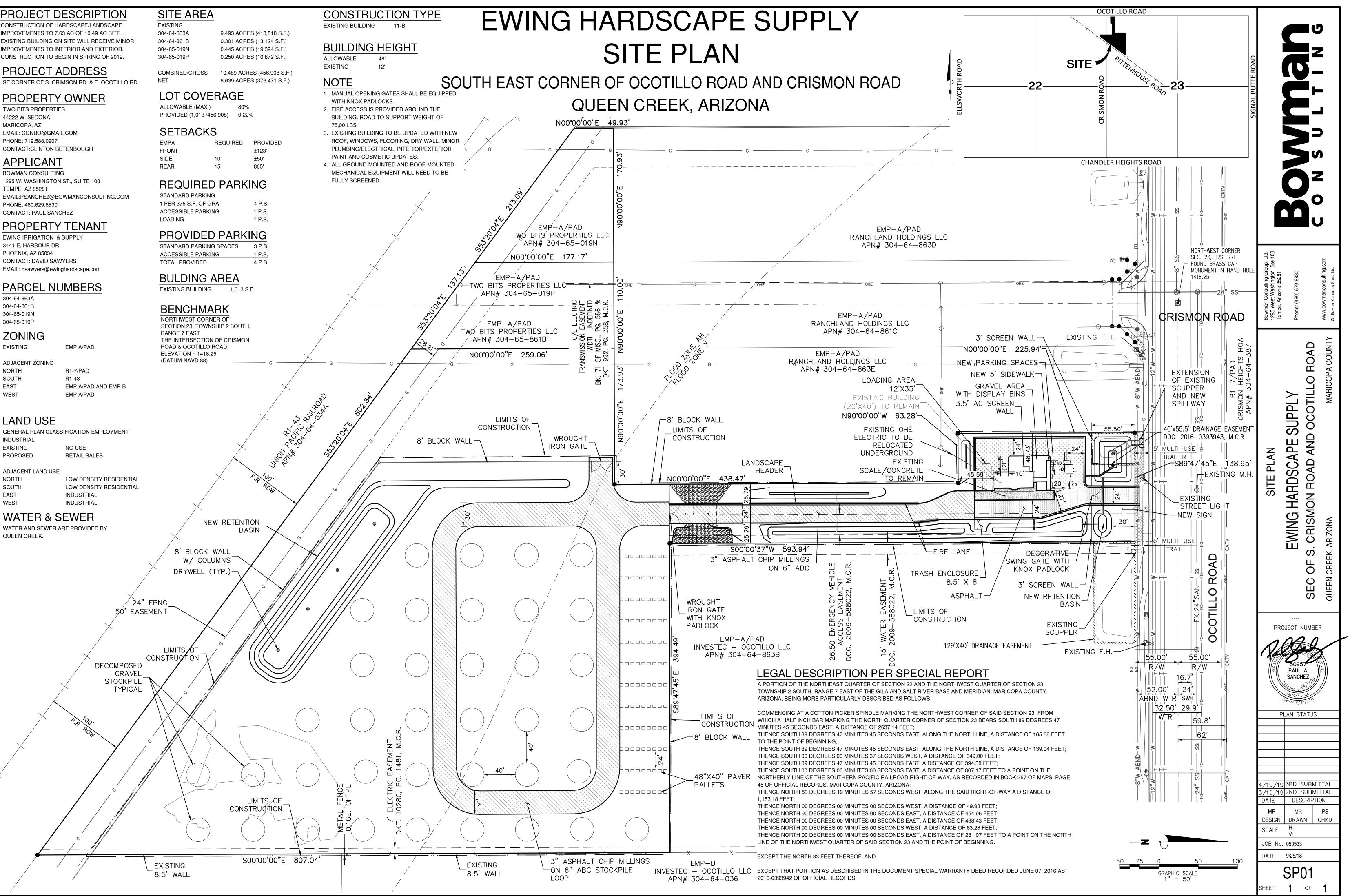
10.489 ACRES (456,908 S.F.)

ALLOWABLE (MAX.)	80%
PROVIDED (1,013 /456,908)	0.22

EMPA	REQUIRED	PROVIDED
FRONT		±123'
SIDE	10'	±50'
REAR	15'	865'

STANDARD PARKING	
1 PER 375 S.F. OF GRA	
ACCESSIBLE PARKING	
LOADING	

- WITH KNOX PADLOCKS
- 75,00 LBS
- PAINT AND COSMETIC UPDATES.
- MECHANICAL EQUIPMENT WILL NEED TO BE FULLY SCREENED.



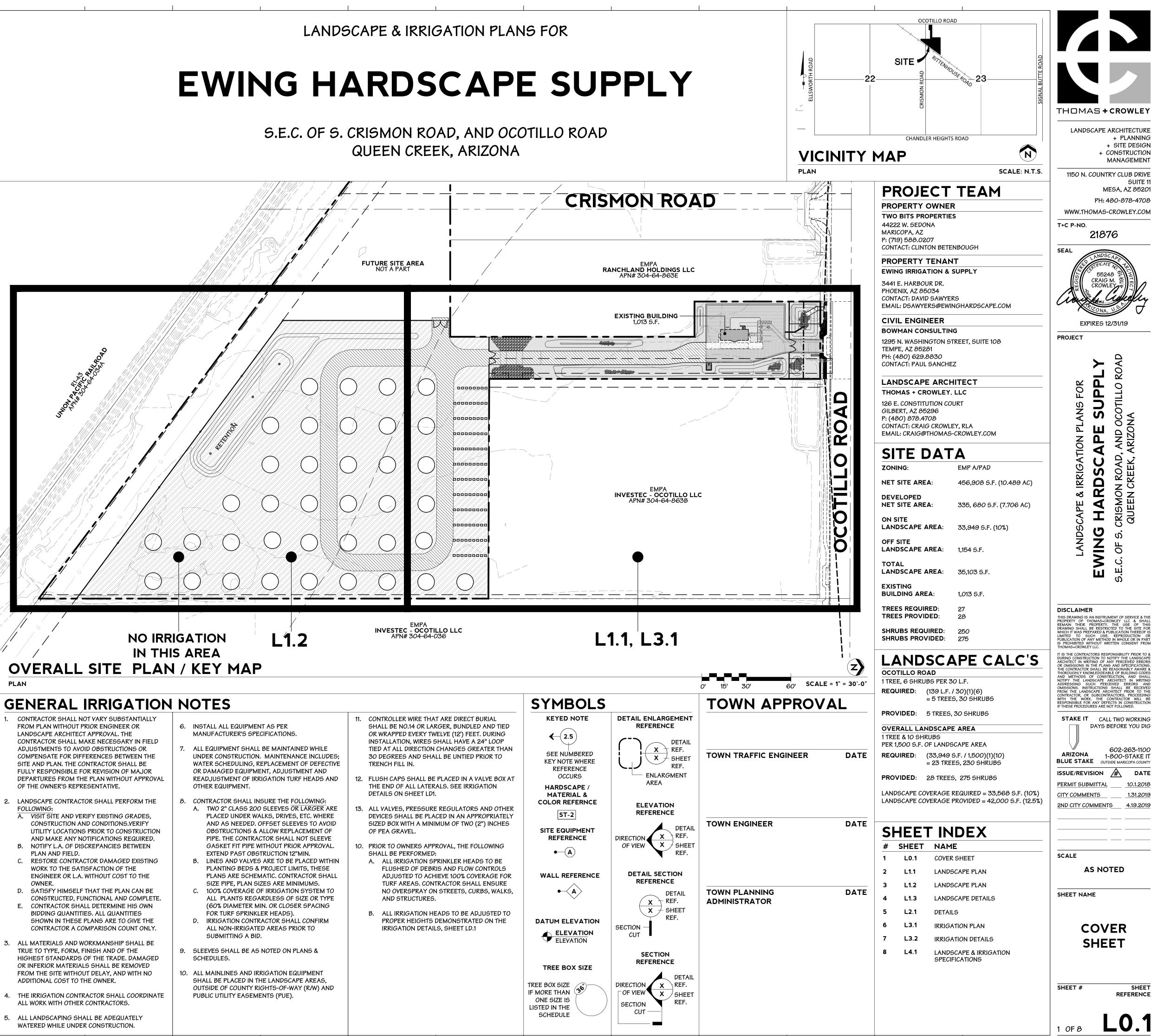
CAD FILE NAME: P:\050533 - SEC Crismon and Ocotillo Roads\050533-01-001 (ENG)\Engineering\Engineering Plans\Site Plan\050533-Site Plan.dwg 04/22/2019

GENERAL CONST. NOTES

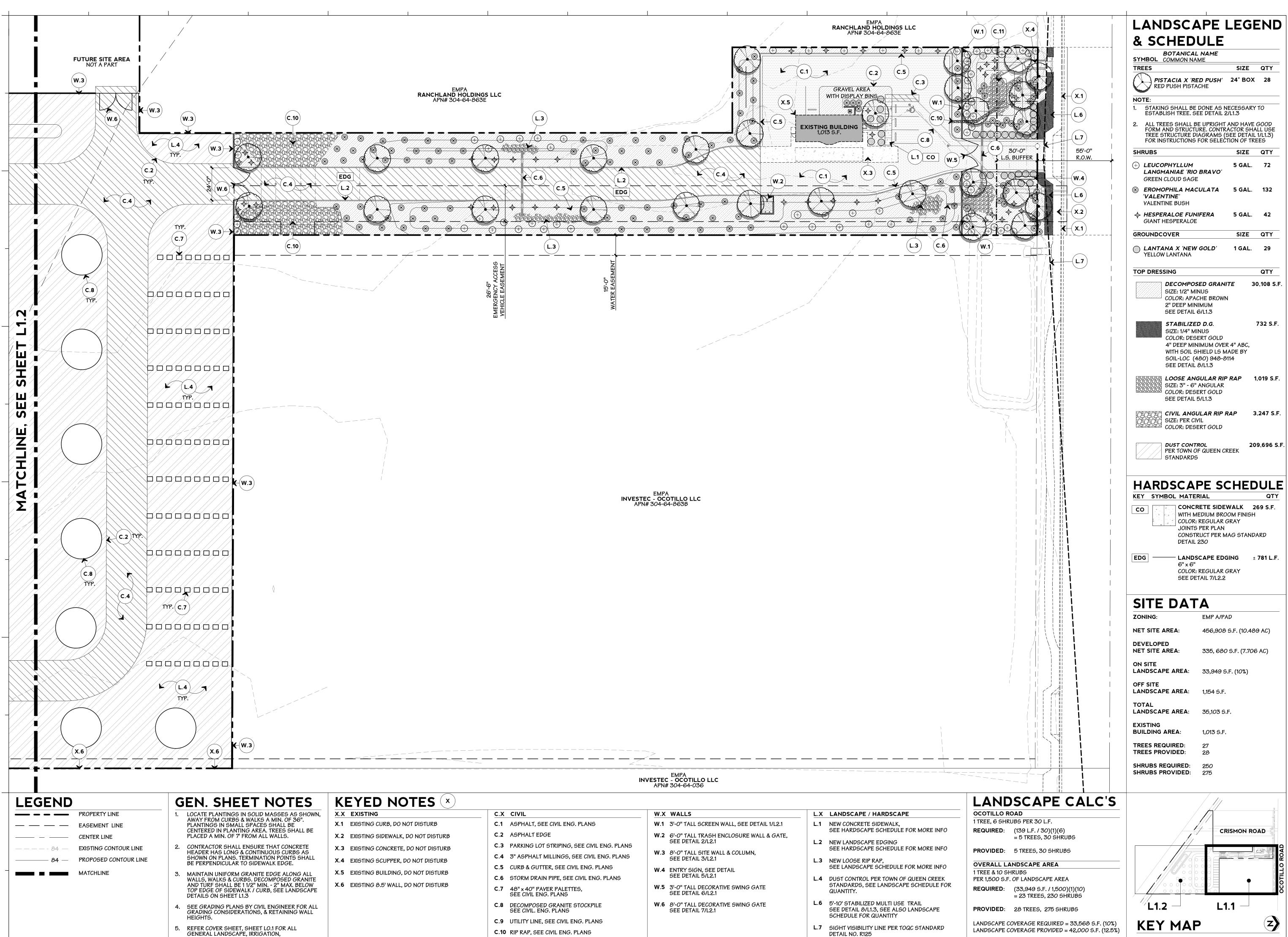
- THE DRAWINGS, SPECIFICATIONS, AND ADDENDA DESCRIBING WORK FOR LANDSCAPE, HARDSCAPE AND IRRIGATION PORTIONS OF THE PROJECT SHALL BE REFERRED TO AS THE LANDSCAPE **ARCHITECTURAL & IRRIGATION CONSTRUCTION** DOCUMENTS.
- COMPLIANCES A. PROVIDE WORK PER LANDSCAPE CONSTRUCTION DOCUMENTS IN ACCORDANCE WITH APPLICABLE LOCAL STANDARDS., SPECIFICATIONS, AND DETAILS OTHERWISE NOT A PART OF THESE LANDSCAPE AND **IRRIGATION CONSTRUCTION DOCUMENTS. BE** FAMILIAR WITH THESE STANDARDS, SPECIFICATIONS AND DETAILS PRIOR TO **BIDDING WORK COVERED BY THESE PLANS** AND SPECIFICATIONS.
- CONFORM TO APPLICABLE CODES AND **ORDINANCES OF GOVERNING AUTHORITIES** HAVING JURISDICTION (FEDERAL, STATE, LOCAL AND HEALTH DEPARTMENTS).
- CONTRACTOR RESPONSIBILITIES: A. INSPECT JOB SITE AND BECOME FAMILIAR WITH EXISTING CONDITIONS THAT COULD AFFECT INSTALLATION PRIOR TO SUBMITTING A BID
- CONTRACTOR IS RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, COORDINATION, AND SEQUENCING OF WORK.
- REVIEW PROJECT AND CONSTRUCTION SEQUENCE MILESTONE DATES WITH OWNER'S REPRESENTATIVE PRIOR TO STARTING WORK.
- D. SCHEDULE A PRE-CONSTRUCTION CONFERENCE WITH THE OWNER'S REPRESENTATIVE PRIOR TO COMMENCING WORK.
- E. OBTAIN PERMITS AND COMPLY WITH REQUIREMENTS TO COMPLETE THE WORK.
- THE CONTRACTOR IS RESPONSIBLE FOR DAMAGE TO EXISTING WALKS, WALLS, DRIVES, CURBS, UTILITIES, AND OTHER IMPROVEMENTS.
- G. PROTECT (IN PLACE) EXISTING TREES & PLANT MATERIALS DESIGNATED TO REMAIN. SURROUND WITH PROTECTIVE FENCING BEFORE EARTH MOVING EQUIPMENT IS MOVED ONTO SITE AND BEFORE SALVAGE CLEARING AND GRUBBING TAKES PLACE. REPLACE IN KIND PLANT MATERIAL DAMAGED OR DESTROYED DURING CONSTRUCTION AT NO EXPENSE TO OWNER.
- H. COORDINATE WORK WITH OTHER TRADES ON SITE AS NECESSARY TO ENSURE ORDERLY AND EFFICIENT COMPLETION OF WORK.
- BE RESPONSIBLE TO HAULING AND LEGALLY DISPOSING OF MATERIALS DESIGNATED TO BE REMOVED.
- PROVIDE OWNER WITH WARRANTY INFORMATION, OPERATIONS AND MAINTENANCE INSTRUCTION MANUALS. AND PRODUCT INFORMATION FOR EQUIPMENT OR MACHINERY INSTALLED ON SITE, WITHIN TWO WEEKS AFTER SUBSTANTIAL COMPLETION.
- 4. QUESTIONS, DISCREPANCIES, MODIFICATIONS A. IF QUESTIONS ARISE REGARDING LANDSCAPE CONSTRUCTION DOCUMENTS. CONTACT THE LANDSCAPE ARCHITECT & OWNER'S REPRESENTATIVE FOR CLARIFICATION BEFORE PROCEEDING FURTHER WITH WORK.
- B. REPORT DISCREPANCIES BETWEEN PLANS AND SITE CONDITIONS IMMEDIATELY IN WRITING TO LANDSCAPE ARCHITECT & OWNER'S REPRESENTATIVE.
- C. DO NOT MAKE DESIGN MODIFICATIONS WITHOUT WRITTEN APPROVAL FROM THE LANDSCAPE ARCHITECT & OWNERS REPRESENTATIVE.
- 5. LOCATE UNDERGROUND UTILITIES PRIOR TO STARTING CONSTRUCTION. PROTECT FROM DAMAGE DURING CONSTRUCTION. CALL BLUE STAKE (811) PRIOR TO EXCAVATION. EXISTING UNDERGROUND SERVICES SHALL NOT BE DISTURBED OR REMOVED UNLESS SPECIFICALLY NOTED OTHERWISE ON DRAWINGS OR WITHOUT WRITTEN APPROVAL OF OWNER'S REPRESENTATIVE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGE TO UTILITIES AND/OR FACILITIES CAUSED DURING CONSTRUCTION OPERATIONS, WITH NO ADDITIONAL COST TO THE OWNER.
- 6. LAYOUT INFORMATION IS APPROXIMATE AND MUST BE VERIFIED WITH OWNER'S REPRESENTATIVE AND LANDSCAPE ARCHITECT IN FIELD. PRESENT CONFLICTS OR ADJUSTMENTS GRAPHICALLY TO OWNER'S REPRESENTATIVE FOR APPROVAL PRIOR TO COMMENCEMENT OF WORK.
- QUANTITIES AND SITE CONDITIONS SHOWN ON PLANS ARE FOR INFORMATIONAL PURPOSES ONLY. VERIFY ACTUAL QUANTITIES AND SITE CONDITIONS PRIOR TO BIDDING WORK.
- 8. ROUGH AND FINE GRADING TO ESTABLISH UNIFORM SMOOTH GRADE IS INCLUDED WITHIN THIS PROJECT.
- 9. PROVIDE GENERAL SITE GRADING TO WITHIN ± .10 FOOT OF PROPOSED GRADING. LANDSCAPE AREAS SHALL NOT EXCEED 4:1 MAXIMUM SLOPE AND TURF AREAS SHALL NOTE EXCEED 5:1 MAXIMUM SLOPE. VERIFY AND ACCEPT ROUGH GRADES PRIOR TO STARTING LANDSCAPE AND IRRIGATION WORK. PROTECT DRAINAGE FLOWS AND MAINTAIN THROUGHOUT LANDSCAPE AND IRRIGATION CONSTRUCTION.
- 10. WORK AND MATERIALS AS PART OF THIS PROJECT SHALL BE OF A GRADE & QUALITY CONSISTENT WITH THE INTENDED USE AS APPROVED BY **OWNER'S REPRESENTATIVE. WORK & MATERIALS** NOT IN CONFORMANCE WITH LANDSCAPE CONSTRUCTION DOCUMENTS, OR THEIR INTENDED USE, ARE SUBJECT TO REMOVAL AND REPLACEMENT AT CONTRACTORS EXPENSE.
- PROVIDE EQUIPMENT & MATERIALS NOT SPECIFICALLY IDENTIFIED BUT REQUIRED FOR A COMPLETE & FUNCTIONING INSTALLATION AS PART OF WORK WITHOUT ADDITIONAL COST TO THE OWNER.
- 12. KEEP SITE CLEAN AT ALL TIMES. PROVIDE TRASH BINS. AT COMPLETION OF CONSTRUCTION, PROJECT SHALL BE CLEAN OF DEBRIS OR SPOIL **RESULTING FROM CONSTRUCTION. TURN OVER SITE** TO OWNER IN BROOM OR RAKED CLEAN CONDITION.

GENERAL LANDSCAPE NOTES

- LANDSCAPE CONTRACTOR SHALL NOT VARY FROM PLAN WITHOUT PRIOR LANDSCAPE ARCHITECT. OWNER'S REPRESENTATIVE AND TOWN APPROVAL
- THE LANDSCAPE ARCHITECT & OWNER'S **REPRESENTATIVE RESERVES THE RIGHT TO** REFUSE ANY PLANT MATERIALS DEEMED UNACCEPTABLE (SEE SPECS)
- THE LANDSCAPE ARCHITECT & OWNER'S REPRESENTATIVE IS TO APPROVE ANY AND ALL SUBSTITUTIONS.
- LANDSCAPE CONTRACTOR SHALL PERFORM THE FOLLOWING: A.) VISIT THE SITE AND VERIFY EXISTING CONDITIONS.
- B.) VERIFY UTILITY LOCATIONS PRIOR TO CONSTRUCTION. C.) NOTIFY LANDSCAPE ARCHITECT OF DISCREPANCIES BETWEEN PLAN AND FIELD CONDITIONS. D.) BE RESPONSIBLE FOR DAMAGE TO EXISTING
- WORK AND UTILITIES (CALL BLUE STAKE - 811).
- ALL PLANTS SHALL BE QUALITY MATERIAL HAVING A GROWTH HABIT WHICH IS NORMAL FOR THE SPECIES AND SHALL BE SOUND, VIGOROUS, HEALTHY, AND FREE FROM INSECTS AND INJURY.
- CONTRACTOR SHALL COORDINATE ALL LANDSCAPE WORK WITH OTHER CONTRACTORS
- MAINTAIN ALL LANDSCAPING WHILE UNDER CONSTRUCTION INCLUDING, WATERING, TRIMMING, WEEDING AND BED CULTIVATION.
- CONTRACTOR SHALL DETERMINE ALL LANDSCAPE AND IRRIGATION BID QUANTITIES SHOWN ON THE PLANS. QUANTITIES LISTED IN SCHEDULES ARE FOR A COMPARISON COUNT ONLY.
- PLANT MATERIAL TO BE GUARANTEED AFTER FINAL ACCEPTANCE AS FOLLOWS: TREES - ONE YEAR; SHRUBS AND GROUNDCOVER - 90 DAYS. CONTRACTOR SHALL PROVIDE ANY AND ALL **GUARANTEES REQUIRED BY THE OWNER'S** REPRESENTATIVE AND THE TOWN OF QUEEN CREEK.
- 10. DOUBLE STAKE ALL 15 GALLON TREES. DOUBLE STAKE 24" BOX TREES AND LARGER AS REQUIRED SEE LANDSCAPE DETAILS, SHEET LD1 FOR ALL PLANTING AND STAKING DETAILS.
- ALL AREAS TO RECEIVE DECOMPOSED GRANITE. AND RIP RAP SHALL BE SPRAYED A MINIMUM OF TWO TIMES, 15 TO 20 DAYS BETWEEN EACH APPLICATION WITH WEED KILLER "ROUND UP OR EQUAL" PRIOR TO GRANITE INSTALLATION. TWO APPLICATIONS OF PRE-EMERGENT HERBICIDE "SURFLAN OR EQUAL" SHALL BE MADE PER MANUFACTURER'S RECOMMENDATIONS. ONE PRIOR AND ONE AFTER GRANITE/ROCK PLACEMENT.
- PLACE GRANITE/CRUSHED ROCK A MIN. 2" DEPTH IN ALL BEDS EXTENDING UNDER TREES, SHRUBS, & GROUNDCOVER.
- 13. FINISH GRADE OF PLANTING BEDS, TURF, AND GRANITE/CRUSHED ROCK AREAS TO BE $\frac{1}{2}$ " BELOW ADJACENT PAVING, UNLESS OTHERWISE NOTED ON DRAWINGS. PROVIDE SOIL LEVEL $2\frac{1}{2}$ " BELOW CURBS OR SIDEWALKS FOR AREAS RECEIVING GRANITE/CRUSHED ROCK.
- 14. GRADING INCLUDES ALL EXCAVATION, HANDLING, IMPORT, SETTLEMENT, & DISPOSAL NECESSARY TO MEET PLAN FINISH GRADE.
- 15. ALL EARTHWORK IS TO INCLUDE GRADING WHICH PROVIDES POSITIVE DRAINAGE OF WATER AWAY FROM ALL STRUCTURES, WALLS AND WALKS. SEE LANDSCAPE DETAILS SHEET LD.1
- 16. A PLANTING MIX OF 1/3 MULCH, 2/3 NATIVE SOIL MIXED THOROUGHLY IS TO BE USED AS PLANT BACKFILL.
- PROVIDE AGRIFORM TABLETS AS FOLLOWS: SIX/36" BOX: FOUR/24" BOX; THREE/15 GAL; TWO/5 GAL: ONE/1 GAL. SEE SHEET LD1 FOR ALL PLANTING SPECIFICATIONS & DETAILS.
- 18. LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR "TOP SOIL" FILL MATERIAL FOR ALL RAISED PLANTERS.
- 19. WATER TEST ALL TREE PLANTING HOLES PRIOR TO PLANTING. IF TREE HOLE DOES NOT DRAIN WITHIN 24 HOURS, DO NOT PLANT, USE HARD PAN DRAIN (SEE TREE TREE & SHRUB PLANTING DETAIL ON SHEET LD1). HOLE DRAINAGE SHALL BE APPROVED BY OWNER'S REPRESENTATIVE AND LANDSCAPE ARCHITECT. CONTRACTOR SHALL NOTIFY OWNERS REPRESENTATIVE & LANDSCAPE ARCHITECT BY EMAIL (WITH DAY AND TIME) A MIN. OF 2 DAYS IN ADVANCE OF PLANTING HOLE WATER TEST. THIS PROCEDURE SHALL BE FOLLOWED EACH TIME WATER TEST OCCURS.
- 20. ALL LANDSCAPE IN FRONT OF EACH WALL OR BUILDING WILL BE INSTALLED AFTER THE COMPLETION OF EACH WALL TYPE OR BUILDING STRUCTURE.
- 21. DECOMPOSED GRANITE SHALL MEET THE FOLLOWING: NATIVE, LOCAL DESERT STONE FREE OF LOAM, SAND, CLAY AND OTHER FOREIGN SUBSTANCES. SIZE RANGE, AND COLOR SHALL BE AS INDICATED WITH NO MORE THAN 30% MEASURING BELOW 1/16". GRANITE SHALL BE FREE OF ORGANIC MATTER AND OTHER DEBRIS, COLOR AS INDICATED.
- 22. TREES MUST BE PLACED A MINIMUM OF 5' FROM SIDEWALKS, PUBLIC ACCESS WAYS OR REAR OF FIRE HYDRANTS. SHRUBS MUST BE, AT MATURITY 7' FROM THE REAR OF A FIRE HYDRANT.
- 23. TREES PLACED WITHIN 7' OF A SIDEWALK, WALL OR ANY OTHER CONCRETE STRUCTURE SHALL HAVE A ROOT BARRIER INSTALLED ADJACENT TO THE STRUCTURE. CONTRACTOR SHALL SUBMIT CUT SHEETS OF ROOT BARRIER TO OWNER'S REPRESENTATIVE AND LANDSCAPE ARCHITECT FOR APPROVAL.



PLAN

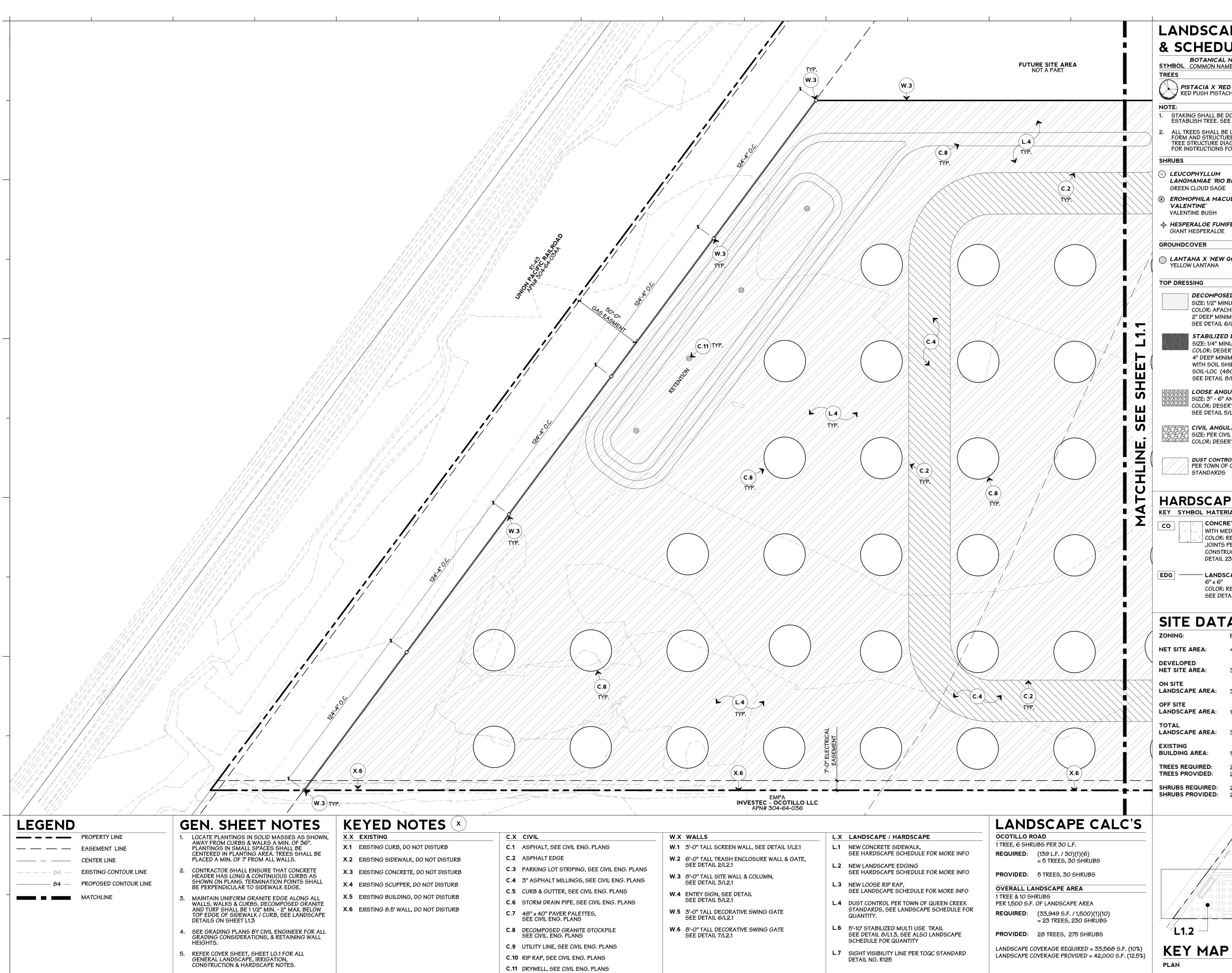


		EMPA NVESTEC - OCOTILLO LLC APN# 304-64-036		
X				
	C.X CIVIL	W.X WALLS	L.X	LANDSCAPE / HARDSCAPE
	C.1 ASPHALT, SEE CIVIL ENG. PLANS	W.1 3'-0" TALL SCREEN WALL, SEE DETAIL 1/L2.1	L.1	NEW CONCRETE SIDEWALK,
TURB	C.2 ASPHALT EDGE	W.2 6'-0" TALL TRASH ENCLOSURE WALL & GATE,		SEE HARDSCAPE SCHEDULE FOR MORE INFO
TURB	C.3 PARKING LOT STRIPING, SEE CIVIL ENG. PLANS	SEE DETAIL 2/L2.1	L.2	NEW LANDSCAPE EDGING SEE HARDSCAPE SCHEDULE FOR MORE INFO
	C.4 3" ASPHALT MILLINGS, SEE CIVIL ENG. PLANS	W.3 8'-0" TALL SITE WALL & COLUMN, SEE DETAIL 3/L2.1		
URB	C.5 CURB & GUTTER, SEE CIVIL ENG. PLANS		L.3	NEW LOOSE RIP RAP, SEE LANDSCAPE SCHEDULE FOR MORE INFO
URB	C.6 STORM DRAIN PIPE, SEE CIVIL ENG. PLANS	W.4 ENTRY SIGN, SEE DETAIL SEE DETAIL 5/L2.1		DUST CONTROL PER TOWN OF QUEEN CREEK
URB	C.7 48" x 40" PAVER PALETTES, SEE CIVIL ENG. PLANS	W.5 3'-O" TALL DECORATIVE SWING GATE SEE DETAIL 6/L2.1		STANDARDS, SEE LANDSCAPE SCHEDULE FOR QUANTITY.
	C.8 DECOMPOSED GRANITE STOCKPILE SEE CIVIL. ENG. PLANS	W.6 8'-0" TALL DECORATIVE SWING GATE SEE DETAIL 7/L2.1	L.6	5'-10' STABILIZED MULTI USE TRAIL SEE DETAIL 8/L1.3, SEE ALSO LANDSCAPE SCHEDULE FOR QUANTITY
	C.9 UTILITY LINE, SEE CIVIL ENG. PLANS			
	C.10 RIP RAP, SEE CIVIL ENG. PLANS		L.7	SIGHT VISIBILITY LINE PER TOQC STANDARD DETAIL NO. R125

C.11 DRYWELL, SEE CIVIL ENG. PLANS

CONSTRUCTION & HARDSCAPE NOTES.



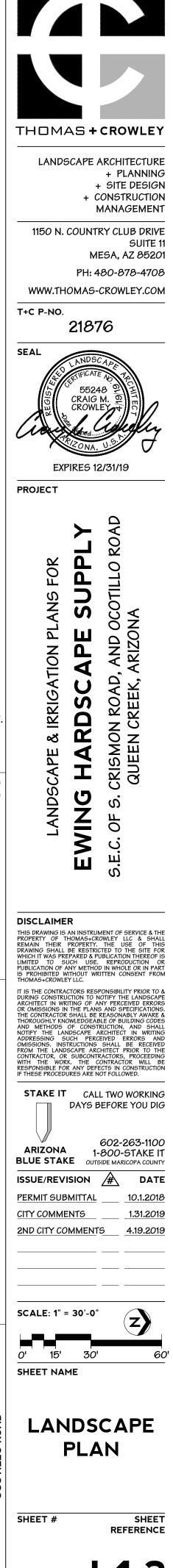


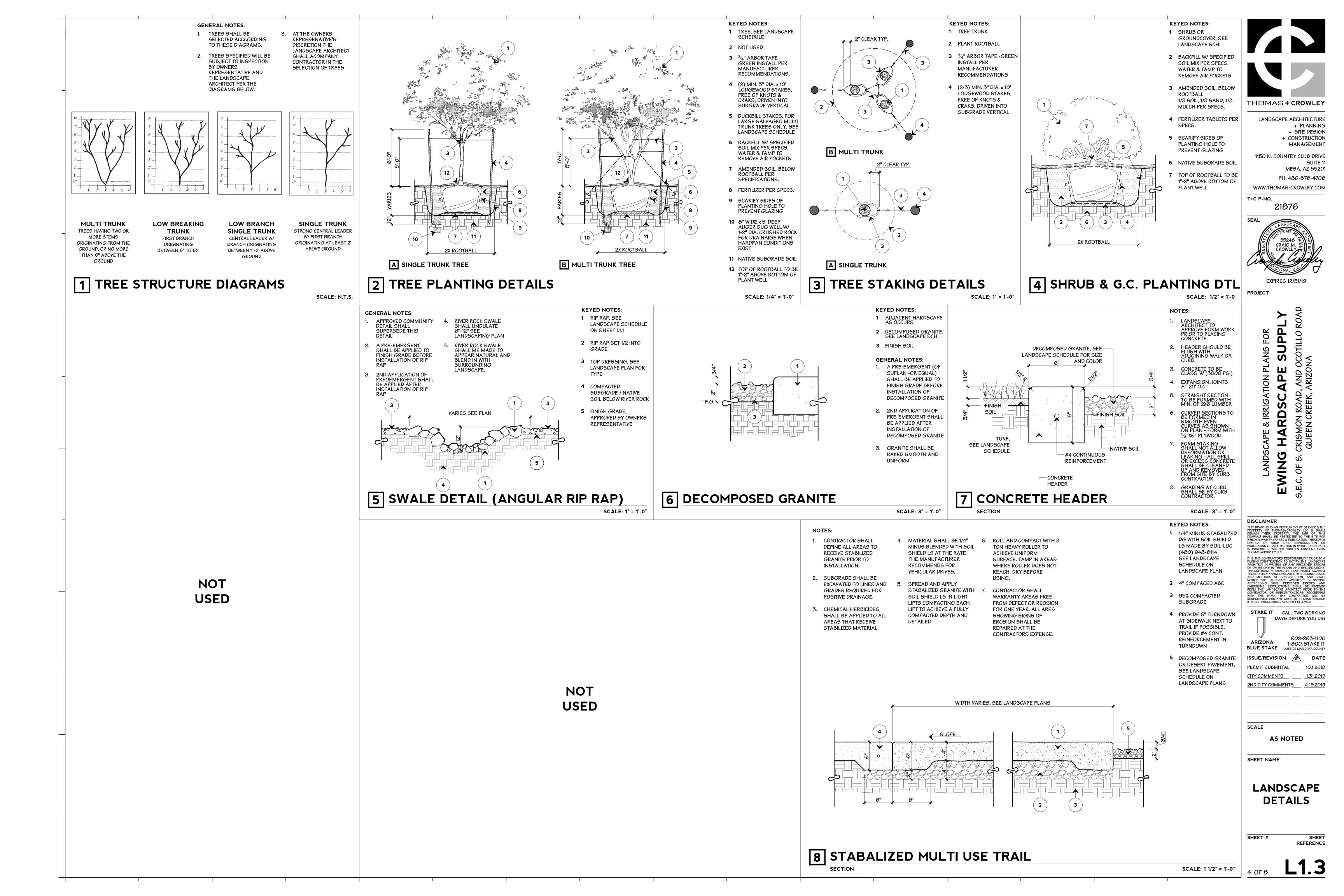
		LEGI	END	
CHED				
BOTANICAL COMMON NAM		SIZE	QTY	
PISTACIA X 'RE RED PUSH PISTA(
AKING SHALL BE I TABLISH TREE. SE	E DETAIL 2	2/L1.3		
. TREES SHALL BE RM AND STRUCTU EE STRUCTURE DIA R INSTRUCTIONS F	RE. CONTR. AGRAMS (S	ACTOR SHA SEE DETAIL	ALL USE _ 1/L1.3)	LAN
s JCOPHYLLUM		SIZE 5 GAL.	QTY 72	1150
NGMANIAE 'RIO EEN CLOUD SAGE OMOPHILA MAC		5 GAL.	132	
L ENTINE ' ENTINE BUSH				WWW. T+C P-N
SPERALOE FUNI NT HESPERALOE	FERA	5 GAL.		
DCOVER		SIZE	QTY 29	SEAL
LOW LANTANA	GOLD	I GAL.	29	EGISTER
		75 3		a
SIZE: 1/2" MIN COLOR: APAC 2" DEEP MINI	IUS HE BROWN		0,100 3.1.	
SEE DETAIL &			732 S.F.	PROJECT
SIZE: 1/4" MIN COLOR: DESE 4" DEEP MIN	RT GOLD	2 4" 480		
WITH SOIL SH SOIL-LOC (4) SEE DETAIL &	HELD LS M 80) 948-8	ADE BY		aOa
SIZE: 3" - 6" / COLOR: DESE	ULAR RIP ANGULAR	RAP	1,019 S.F.	ANS ANS
SEE DETAIL E	ILAR RIP F	RAP 3	3,247 S.F.	
COLOR: DESE	POL)9,696 S.F.	& IRPIGATION
PER TOWN OF STANDARDS	F QUEEN CF	REEK		
RDSCAP		CHEC	DULE	ANDSCAPE
WITH ME COLOR: 1 JOINTS	EDIUM BRO REGULAR (PER PLAN UCT PER M	WALK 2 OM FINISH GRAY IAG STAND	I	
6" x 6" COLOR: 1	CAPE EDO REGULAR (AIL 7/L2.2	BING ± GRAY	: 781 L.F.	DISCLAII THIS DRAWING PROPERTY O REMAIN THE DRAWING SH
	•			WHICH IT WAS LIMITED TO PUBLICATION IS PROHIBITE THOMAS+CRO
	A EMP A/PA			IT IS THE CON DURING CONS ARCHITECT IN OR OMISSION THE CONTRAC
ΓΕ AREA:		S.F. (10.48	9 AC)	THOROUGHLY AND METHOU NOTIFY THE ADDRESSING OMISSIONS. FROM THE L
OPED FE AREA:	335, 680	9 S.F. (7.700	6 AC)	CONTRACTOR, WITH THE RESPONSIBLE IF THESE PROD
E CAPE AREA:	33,949 S	.F. (10%)		
E CAPE AREA:	1,154 S.F.			
CAPE AREA:	35,103 S.	F.		ISSUE/RE
NG AREA:	1,013 S.F.			CITY COM 2ND CITY
REQUIRED: PROVIDED:	27 28			
s required: s provided:	250 275			
	/ 1//			SCALE:
				0' 1! SHEET N
	CR	RISMON RO		
/	000		ŏ	

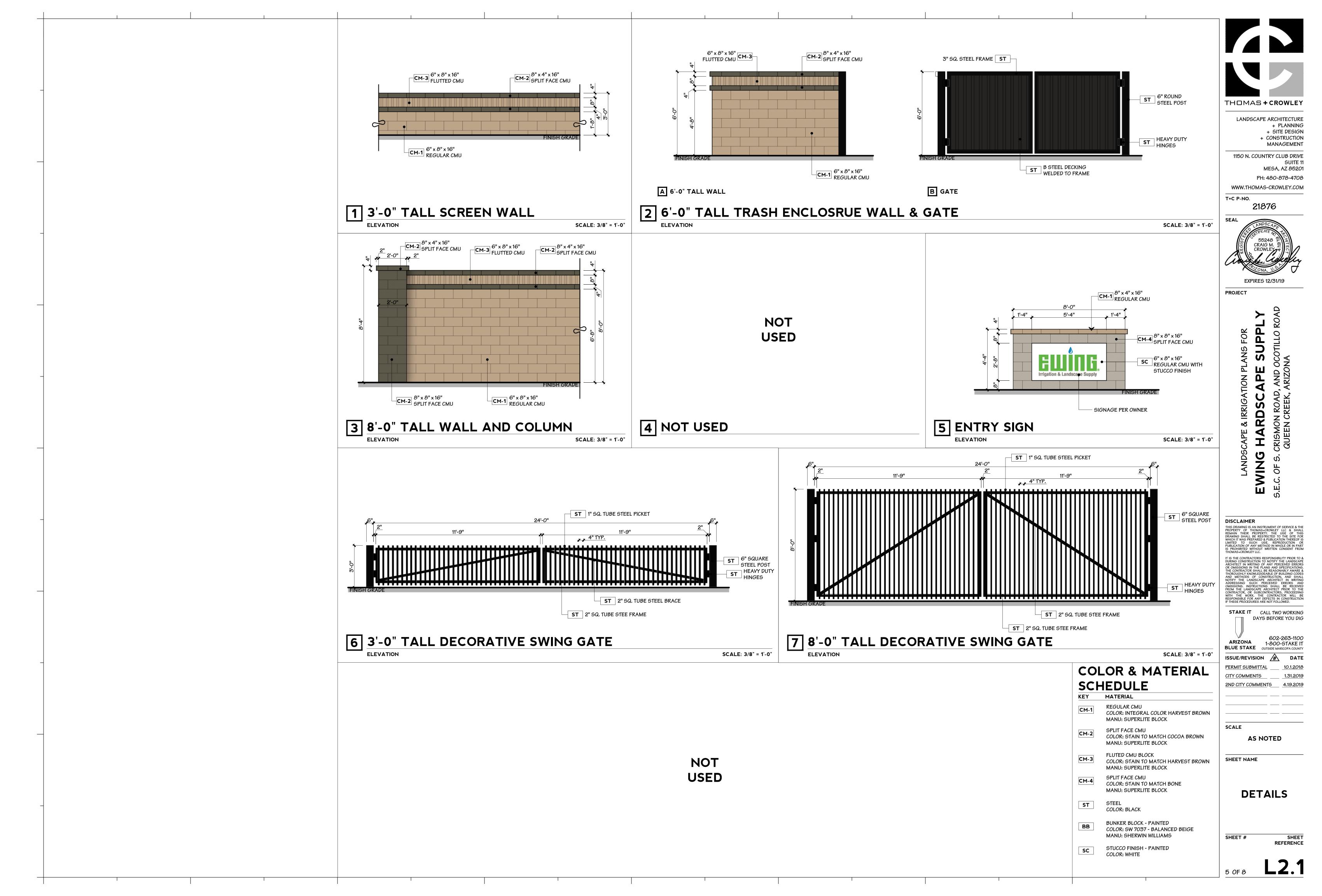
L1.1

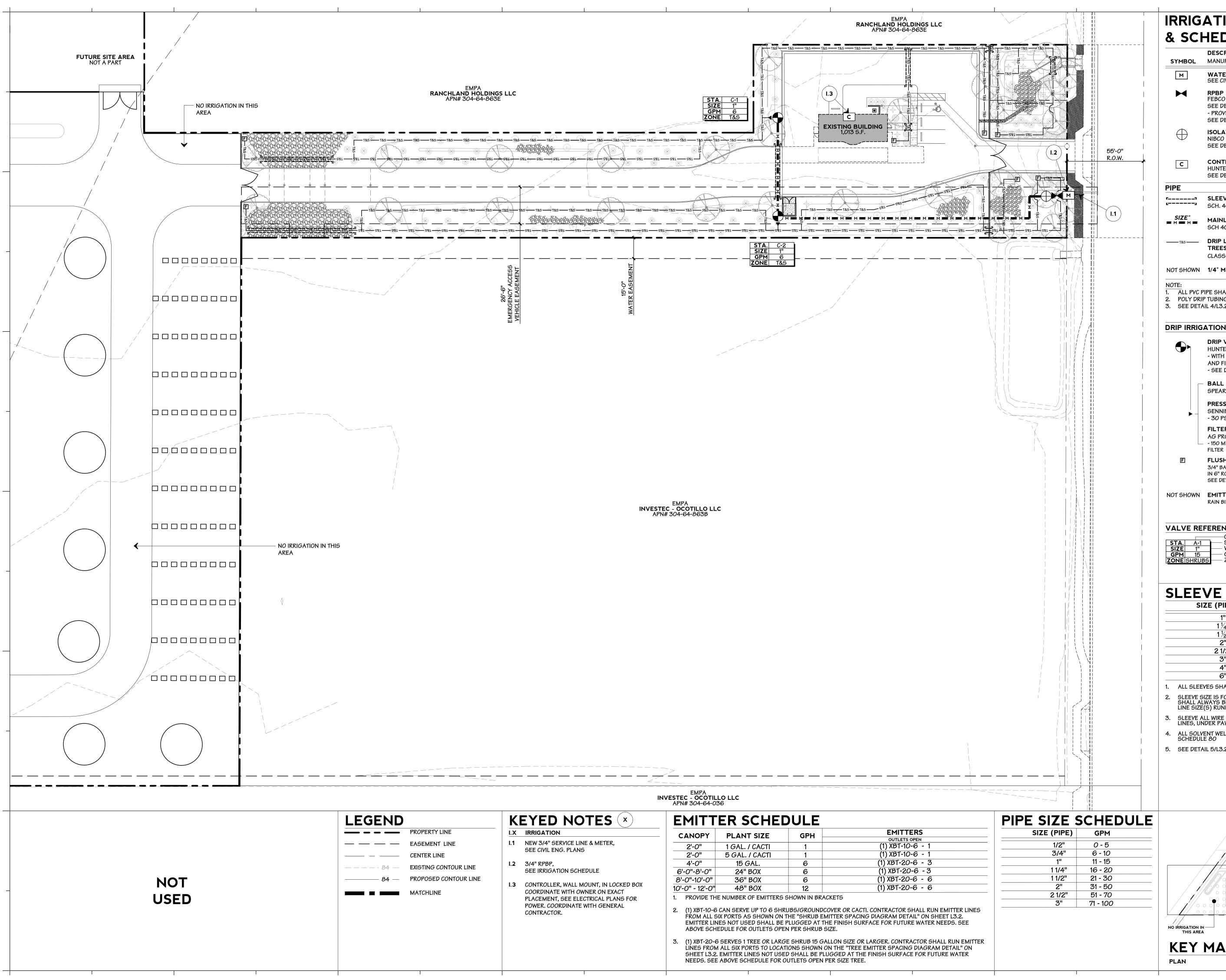
N.T.S.

3 OF 8



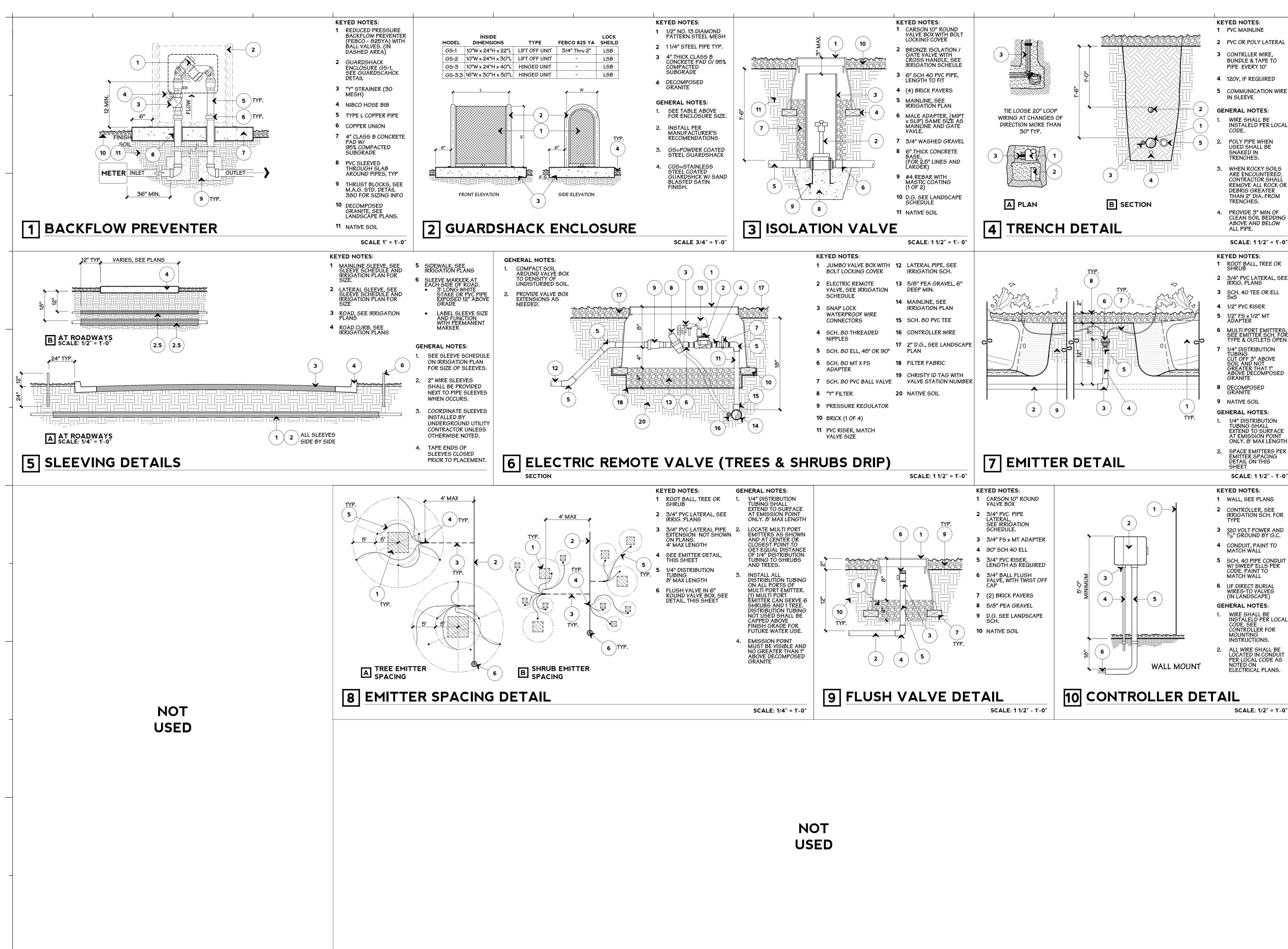






		EMPA INVESTEC - OCOTILL APN# 304-64-030			
	KEYED NOTES ×	EMITT		DULE	
	I.X IRRIGATION	CANOPY	PLANT SIZE	GPH	EMITTERS
	I.1 NEW 3/4" SERVICE LINE & METER,				OUTLETS OPEN (1) XBT-10-6 - 1
	SEE CIVIL ENG. PLANS	2'-0"	1 GAL. / CACTI		(1) XBT-10-6 - 1
		2'-0"	5 GAL. / CACTI		(1) XBT-20-6 - 3
LINE	1.2 3/4" RPBP,	4'-0"	15 GAL.	6	· · · ·
	SEE IRRIGATION SCHEDULE	6'-0"-8'-0"	24" BOX	6	(1) XBT-20-6 - 3
JR LINE	I.3 CONTROLLER, WALL MOUNT, IN LOCKED BOX	8'-0"-10'-0"	36" BOX	6	(1) XBT-20-6 - 6
	COORDINATE WITH OWNER ON EXACT	10'-0" - 12'-0"	48" BOX	12	(1) XBT-20-6 - 6
PLACEMENT, SEE ELECTRICAL PLANS FOR		1. PROVIDE THE NUMBER OF EMITTERS SHOWN IN BRACKETS			
	POWER. COORDINATE WITH GENERAL				
CONTRACTOR.		 (1) XBT-10-6 CAN SERVE UP TO 6 SHRUBS/GROUNDCOVER OR CACTI. CONTRACTOR SHALL RUN EMITTER LINES FROM ALL SIX PORTS AS SHOWN ON THE "SHRUB EMITTER SPACING DIAGRAM DETAIL" ON SHEET L3.2. 			
					ISH SURFACE FOR FUTURE WATER NEEDS. SEE
		ABOVE SCHE	DULE FOR OUTLETS OPE	N PER SHRUB SIZE.	

1017	N LEG	END	
DU	LE		
SCRIPTIC NUFACTU	DN RER / MODEL	SIZE	
TER ME CIVIL PL/		3/4" 3/4"	
CO 825 \ DETAIL 1	I/L2.2 UARD SHACK EI		THOMAS + CROWLEY
LATION	VALVE VALVE: 4770	1"	LANDSCAPE ARCHITECTURE + PLANNING + SITE DESIGN + CONSTRUCTION MANAGEMENT
NTROLL NTER - I.C DETAIL 1	ORE - IC600PL	6 STATIONS	1150 N. COUNTRY CLUB DRIVE SUITE 11 MESA, AZ 85201
E VE 1. 40 PVC	SEE SLEEVI THIS	E SCHEDULE PAGE	PH: 480-878-4708 WWW.THOMAS-CROWLEY.COM
I NLINE I 40 PVC :	SOLVENT WELD	1-1/4"	т+с р-NO. 21876
P LINE EES & SH SS 200 F		SEE PLAN 3/4" MIN.	SEAL
MICRO	TUBING	1/4"	CRAIG M. OUTEC
ING SHA	CRESLINE (O.E. LL BE AG PROD ALL PIPE DEPTH	UCTS (O.E.)	EXPIRES 12/31/19
N			PROJECT
	V-101G ILATOR, BALL VA (SEE BELOW)	SEE PLAN ALVE	IDSCAPE & IRRIGATION PLANS FOR IG HARDSCAPE SUPPLY S. CRISMON ROAD, AND OCOTILLO ROAD QUEEN CREEK, ARIZONA
LL VALV ARS (O.E	/E	MATCH VALVE	SUI SUI
•	REGULATOR		N PLA
TER PRODUC1 MESH PL		3/4"	RIGATIC SCA COAD, A EEK, AI
	.VE WITH TWIST O /ALVE BOX	SEE PLAN FF CAP	DSCAPE & IRRIGATION PLANS FOR G HARDSCAPE SUPP 6. CRISMON ROAD, AND OCOTILLO QUEEN CREEK, ARIZONA
TTERS I BIRD: XEI		SEE EMITTER SCHEDULE THIS PAGE	LANDSCA 'ING H OF S. CRI QL
	COLLER TYPIC	 `Al	LAN EVIN J.E.C. OF
- STATIC - VALVE - GPM - ZONE	ON ZONE	S CALLOUTS	θ. H
	T&S : SHRL	= TREES & JBS	DISCLAIMER THIS DRAWING IS AN INSTRUMENT OF SERVICE & THE PROPERTY OF THOMAS+CROWLEY LLC & SHALL
	ZE SC	Н.	REMAIN THEIR PROPERTY. THE USE OF THIS DRAWING SHALL BE RESTRICTED TO THE SITE FOR WHICH IT WAS PREPARED & PUBLICATION THEREOF IS LIMITED TO SUCH USE. REPRODUCTION OR PUBLICATION OF ANY METHOD IN WHOLE OR IN PART
PIPE) 1"	SLEEVE SIZ	ZE	IS PROHIBITED WITHOUT WRITTEN CONSENT FROM THOMAS+CROWLEY LLC. IT IS THE CONTRACTORS RESPONSIBILITY PRIOR TO & DURING CONSTRUCTION TO NOTIFY THE LANDSCAPE
1 ¹ ⁄4" 1 ¹ ⁄2"	3" 4"		ARCHITECT IN WRITING OF ANY PERCEIVED ERRORS OR OMISSIONS IN THE PLANS AND SPECIFICATIONS. THE CONTRACTOR SHALL BE REASONABLY AWARE & THOROUGHLY KNOWLEDGEABLE OF BUILDING CODES AND METHODS OF CONSTRUCTION, AND SHALL NOTIFY THE LANDSCAPE ARCHITECT IN WRITING
2" 1/2"	4" 6"		NOTIFY THE LANDSCAPE ARCHITECT IN WRITING ADDRESSING SUCH PERCEVED ERRORS AND OMISSIONS. INSTRUCTIONS SHALL BE RECEIVED FROM THE LANDSCAPE ARCHITECT PRIOR TO THE CONTRACTOR, OR SUBCONTRACTORS, PROCEEDING WITH THE WORK. THE CONTRACTOR WILL BE
3" 4"	6" 8"		RESPONSIBLE FOR ANY DEFECTS IN CONSTRUCTION IF THESE PROCEDURES ARE NOT FOLLOWED.
6" HALL BE	8" SCHEDULE 40	PVC	STAKE IT CALL TWO WORKING DAYS BEFORE YOU DIG
5 FOR SIN 3 BE TWIC UNNING RE SEPAI	IGLE PIPE RUNG CE THE DIAMETE THROUGH IT. RATLEY FROM V	9. PIPE SIZE Er of the	ARIZONA BLUE STAKE 602-263-1100 1-800-STAKE IT OUTSIDE MARICOPA COUNTY
PAVING. VELD MAI	Inline fittings	6 SHALL BE	ISSUE/REVISION /# DATE PERMIT SUBMITTAL 10.1.2018
.3.2 FOR	MORE INFO		CITY COMMENTS 1.31.2019 2ND CITY COMMENTS 4.19.2019
		(J) 14	SCALE: 1" = 30'-0"
	CRISMON		SHEET NAME
			LANDSCAPE PLAN
ΔΡ	L3.1 –	(z)	SHEET # SHEET REFERENCE
~ I		N.T.S.	6 OF 8 L3.1



KEYED NOTES: 1 PVC MAINLINE

- 2 PVC OR POLY LATERAL **3** CONTRLLER WIRE,
- BUNDLE & TAPE TO PIPE EVERY 10'
- 4 120V, IF REQUIRED 5 COMMUNICATION WIRE
- IN SLEEVE
- **GENERAL NOTES:** WIRE SHALL BE INSTALELD PER LOCAL CODE.

THOMAS + CROWLEY

LANDSCAPE ARCHITECTURE

1150 N. COUNTRY CLUB DRIVE

WWW.THOMAS-CROWLEY.COM

21876

CRAIG M

CROWLEY

EXPIRES 12/31/19

Ω

Ω

S

Ω

4

S

R

4

Т

ш

THIS DRAWING IS AN INSTRUMENT OF SERVICE & THE PROPERTY OF THOMAS+CROWLEY LLC & SHALL REMAIN THEIR PROPERTY. THE USE OF THIS DRAWING SHALL BE RESTRICTED TO THE SITE FOR WHICH IT WAS PREPARED & PUBLICATION THEREOF IS LIMITED TO SUCH USE. REPRODUCTION OR PUBLICATION OF ANY METTHOD IN WHOLE OR IN PART IS PROHIBITED WITHOUT WRITTEN CONSENT FROM THOMAS+CROWLEY LLC.

IT IS THE CONTRACTORS RESPONSIBILITY PRIOR TO & DURING CONSTRUCTION TO NOTIFY THE LANDSCAPE ARCHITECT IN WRITING OF ANY PERCEIVED ERRORS OR OMISSIONS IN THE PLANS AND SPECIFICATIONS. THE CONTRACTOR SHALL BE REASONABLY AWARE & THOROUGHLY KNOWLEDGEABLE OF BUILDING CODES AND METHODS OF CONSTRUCTION, AND SHALL NOTIFY THE LANDSCAPE ARCHITECT IN WRITING APDRESSING SUCH PERCEIVED ERRORS AND OMISSIONS. INSTRUCTIONS SHALL BE RECEIVED FROM THE LANDSCAPE ARCHITECT PRIOR TO THE CONTRACTOR, OR SUBCONTRACTORS, PROCEEDING

ONTRACTOR, OR SUBCONTRACTORS, PROCEEDIN VITH THE WORK. THE CONTRACTOR WILL E ESPONSIBLE FOR ANY DEFECTS IN CONSTRUCTIO THESE PROCEDURES ARE NOT FOLLOWED.

STAKE IT CALL TWO WORKING

DAYS BEFORE YOU DIG

0

ш

Ω

O ī

N C N

T+C P-NO.

SEAL

PROJECT

FOR

Φ

N

প্র

Γ

DISCLAIMER

+ PLANNING

+ SITE DESIGN

MANAGEMENT

MESA, AZ 85201

PH: 480-878-4708

SUITE 11

+ CONSTRUCTION

- POLY PIPE WHEN USED SHALL BE
- SNAKED IN TRENCHES.
- WHEN ROCKY SOILS ARE ENCOUNTERED, CONTRACTOR SHALL REMOVE ALL ROCK OF DEBRIS GREATER THAN 2" DIA. FROM TRENCHES.
- PROVIDE 3" MIN OF CLEAN SOIL BEDDING ABOVE AND BELOW ALL PIPE.

SCALE: 1 1/2" = 1'-0"

- **KEYED NOTES:**
- 1 ROOT BALL, TREE OR SHRUB
- 2 3/4" PVC LATERAL, SEE IRRIG. PLANS
- 3 SCH. 40 TEE OR ELL SxS
- 4 1/2" PVC RISER 1/2" FS x 1/2" MT ADAPTER
- MULTI PORT EMITTERS, SEE EMITTER SCH. FOR TYPE & OUTLETS OPEN
- 1/4" DISTRIBUTION TUBING CUT OFF 3" ABOVE SOIL AND NOT GREATER THAT 1" ABOVE DECOMPOSED GRANITE
- DECOMPOSED GRANITE

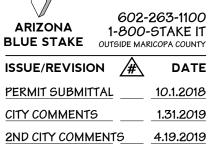
9 NATIVE SOIL

- **GENERAL NOTES:** 1/4" DISTRIBUTION TUBING SHALL EXTEND TO SURFACE AT EMISSION POINT ONLY. 8' MAX LENGTH
- SPACE EMITTERS PER EMITTER SPACING DETAIL ON THIS SHEET

KEYED NOTES:

- 1 WALL, SEE PLANS 2 CONTROLLER, SEE IRRIGATION SCH. FOR TYPE
- 3 120 VOLT POWER AND $\frac{5}{6}$ " GROUND BY G.C.
- 4 CONDUIT, PAINT TO MATCH WALL
- 5 SCH. 40 PIPE CONDUIT W/ SWEEP ELLS PER CODE. PAINT TO MATCH WALL
- 6 UF DIRECT BURIAL WIRES-TO VALVES (IN LANDSCAPE) **GENERAL NOTES:**
- WIRE SHALL BE INSTALELD PER LOCAL CODE. SEE CONTROLLER FOR MOUNTING INSTRUCTIONS.
- ALL WIRE SHALL BE LOCATED IN CONDUIT PER LOCAL CODE AS NOTED ON ELECTRICAL PLANS.

ARIZONA BLUE STAKE OUTSIDE MARICOPA COUNTY ISSUE/REVISION # DATE PERMIT SUBMITTAL CITY COMMENTS



SCALE

AS NOTED

SHEET NAME

IRRIGATION DETAILS

SHEET #

SHEET REFERENCE

7 OF 8

L3.2

LANDSCAPE SPECIFICATIONS

SECTION 1 - GENERAL 1.01 - DESCRIPTION

- A. WORK INCLUDED 1. PROVIDE ALL LABOR, MATERIALS, EQUIPMENT AND SERVICES AS NECESSARY TO COMPLETE ALL LANDSCAPING WORK AS SHOWN ON THE DRAWINGS AND AS SPECIFIED AND SHOWN ON THESE PLANS. CODES, RULES, AND SAFTEY CODES
- ALL WORK AND MATERIALS TO BE IN FULL ACCORDANCE WITH THE LATEST RULES AND REGULATIONS OF SAFETY ORDERS OF DIVISION OF INDUSTRIAL SAFTEY, THE UNIFORM BUILDING CODE, AND OTHER APPLICABLE LAWS AND REGULATIONS, INCLUDING ALL CITY CODES, NOTHING IN THESE SPECIFICATIONS IS TO BE CONSIDERED TO PERMIT WORK NOT CONFORMING TO THESE CODES, SHOULD THE CONTRACT DOCUMENTS BE CONCONSISTENT WITH THE AFOREMENTIONED RULES AND REGULATIONS, THE CONTRACTOR SHALL NOTIFY THE LANDSCAPE ARCHITECT IN WRITING. INSTRUCTRIONS SHALL BE RECIEVED FROM THE LANDSCAPE ARCHITECT BEFORE PRECEDING WITH THE WORK REFERENCED IN WRITING FROM THE LANDSCAPE ARCHITECT.

1.02 - QUALITY ASSURANCE & GUARANTEE A. WORKMANSHIP

- 1. ALL PLANTING WORK SHALL BE DONE IN STRICT ACCORDANCE WITH BEST MANAGEMENT PRACTICES OF STANDARD ARIZONA NURSERY CARE AND TAKE INTO CONSIDERATION THE TIME OF YEAR AND AMBIENT AIR TEMPERATURES & SHALL INCLUDE MAINTENANCE AND WATERING OF ALL PLANT MATERIALS UNTIL FINAL ACCEPTANCE BY THE CITY, OWNER, OR OWNERS REPRESENTATIVE
- 2. PAVED SURFACES ADJACENT TO WORK AREAS SHALL BE KEPT BROOM CLEAN DAILY DURING PLANTING OPERATION. PLANT CONTAINERS, EMPTY FERTILIZER BAGS. CONTAINERS. TRASH AND DEBRIS ARE TO BE PICKED UP AND DISPOSED OF DAILY. CONTRACTOR'S TRASH SHALL BE REMOVED FROM THE SITE AT THE COMPLETION OF WORK EACH DAY. ANY DAMAGE TO PAVED SURFACES OR CURBS SHALL BE REPAIRED OR, IF NECESSARY, REPLACED AFTER INSPECTION BY ENGINEER OR LANDSCAPE ARCHITECT. PLANT MATERIALS:
- ALL PLANT MATERIALS SHALL HAVE BEEN GROWN IN NURSERIES WHICH HAVE BEEN APPROVED BY THE STATE OF ARIZONA DEPARTMENT OF AGRICULTURE AND SHALL BE TAGGED WITH CORRECT NAMES. ALL PLANT MATERIALS SHALL BE INSPECTED BY THE ENGINEER OR LANDSCAPE ARCHITECT PRIOR TO DELIVERY, AND ALL UNACCEPTABLE PLANT MATERIAL SHALL BE REJECTED. CONTRACTOR SHALL, AT HIS OWN EXPENSE, REPLACE REJECTED PLANT MATERIAL WITH MATERIAL OF SPECIES AND VARIETY THAT MEET SPECIFICATION REQUIREMENTS.
- 2. PLANTS SHALL BE QUALITY MATERIAL. HAVING A STANDARD UNIFORM HABIT AND GROWTH WHICH IS NORMAL FOR THE SPECIES; VIGOROUS, HEALTHY, FREE FROM INSECTS, PLANT DISEASES AND/OR INJURY.
- PLANT GUARANTEE & REPLACEMEN PRIOR TO FINAL ACCEPTANCE, THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER OR LANDSCAPE ARCHITECT A WRITTEN GUARANTEE FOR A PERIOD OF ONE YEAR. THE GUARANTEE SHALL STIPULATE THE FOLLOWING:
- a. All trees and shrubs shall be guaranteed to take root and grow aand thrive through the guarantee period, after acceptance by the Landscape architect.
- b. Any plant materials that die back or lose the form and size originally specified shall be replaced, even though they have taken root and are growing after the die-back.
- c. At any time during construction, during the maintenance period, or at the end of the guarantee period, any plant required under this specification which is dead, or otherwise not acceptable and not in a satisfactory growing condition in the opinion of the Landscape Architect, shall be removed from the site and replaced with a suitable plant as specified within fifteen (15) days.

1.03 - PRODUCT DELIVERY, STORAGE & HANDLING

- A. MANUFACTURED MATERIALS SHALL BE DELIVERED IN ORIGINAL CONTAINERS WITH BRAND AND MANUFACTURER'S NAME CLEARLY MARKED. MATERIALS IN BROKEN CONTAINERS OR SHOWING EVIDENCE OF DAMAGE WILL BE REJECTED AND MUST BE REMOVED IMMEDIATELY FROM THE SITE. ODOROUS MATERIALS SHALL NOT BE BROUGHT TO THE SITE UNTIL THEY ARE TO BE INSTALLED. STORE FERTILIZERS AND ALL OTHER MOISTURE SENSITIVE MATERIALS IN A
- DRY PLACE AND PROTECT FROM ANY AND ALL INTRUSION OF MOISTURE. PROTECT PLANT MATERIAL AT ALL TIMES DURING HANDLING, SHIPPING, STORAGE AND PLANTING FROM EXTREME WEATHER CONDITIONS. WIND DRYING ROOTS AND ROOT BALLS AND INJURY
- ALWAYS SUPPORT ROOT SYSTEMS OF A CONTAINER OF PLANT MATERIAL
- WHEN LIFTING AND MOVING TO MINIMIZE INJURY TO ROOT BALL. PLANT MATERIAL SHOWING DAMAGE FROM SHIPPING, WHILE IN STORAGE OR DURING PLANTING. MAY BE REJECTED BY THE ENGINEER OR LANDSCAPE ARCHITECT. REJECTED PLANT MATERIAL SHALL BE REMOVED AND REPLACED BY THE CONTRACTOR AT HIS OWN EXPENSE.

1.04 - INSPECTIONS A. PERIODIC INSPECTION

- 1. DURING THE COURSE OF CONSTRUCTION, THE LANDSCAPE ARCHITECT MAY VISIT THE SITE AND INSPECT WORK IN PROGRESS AT HIS SOLE DISCRETION.
- SCHEDULED INSPECTIONS 1. THE CONTRACTOR MUST NOTIFY THE LANDSCAPE ARCHITECT OR ENGINEER FOR INSPECTION A MINIMUM OF 48 HOURS PRIOR TO EACH ANTICIPATED INSPECTION DATE.
- 2. THE FOLLOWING INSPECTION WILL BE REQUIRED:
- a. Finish Grading Prior to install of sod, seed, or decomposed granite. b. Inspection and approval of all plant materials upon delivery to the site. The plant material shall be assembled for this inspection. c. Inspection of irrigation system fittings before backfilling trenches and
- pressure test. d. Inspection of applications of pre-emeraent herbicide.
- FINAL PLANTING INSPECTION FOR ACCEPTANCE:
- FINAL ACCEPTANCE OF TREES AND SHRUBS SHALL BE MADE ON SUCH DATE WHEN ALL OTHER PROJECT IMPROVEMENTS AND CORRECTIVE WORK HAS BEEN COMPLETED.
- 2. PRIOR TO THE TIME OF FINAL INSPECTION, THE FOLLOWING WORK SHALL HAVE BEEN COMPLETED.
- a. All weeds shall be removed from all planted areas. b. All errant trash and debris shall be removed from all planted areas.
- c. all components of irrigation system shall be operable and in proper working order. d. all work completed per plans and specifications in a industry standard
- professional and orderly condition.

1.05 - SUBMITTALS SAMPLES:

- SUBMITT DUPLICATE SAMPLES AND MANUFACTURER'S GUARANTEED ANALYSIS OF THE FOLLOWING ITEMS AND SUCH OTHER MATERIALS AS MAY BE REQUESTED BY THE ENGINEER OF LANDSCAPE ARCHITECT, AND OBTAIN WRITTEN APPROVAL THEREOF BEFORE BEGINNING FABRICATION OR DELIVERY OF MATERIAL TO THE PROJECT SITE. FINISHED SITE WORK SHALL MATCH APPROVED SAMPLES
- **INSPECTION & ANALYSIS CERTIFICATES** SUBMIT PLANT MATERIAL INSPECTION CERTIFICATES REQUIRED BY STATE AND FEDERAL LAWS WITH RESPECT TO INSPECTION FOR PLANT DISEASE AND INSECT INFESTATION SHALL ACCOMPANY EACH SHIPMENT OF PLANT MATERIALS PRIOR TO OR UPON DELIVERY OF THE MATERIALS TO THE SITE

SECTION 2 - PRODUCTS

2.01 - GENERAL A. QUALITY:

- GENERALLY, THESE SPECIFICATIONS DEFINE MINIMUM ACCEPTABLE QUALITY. MATERIALS INSTALLED SHALL BE AS LISTED IN THIS SECTION, ON THE DRAWINGS, BY MANUFACTURER'S NAME AND MODEL NUMBER, OR BY DESCRIPTION OF ATTRIBUTES, PERFORMANCE OR OTHER STANDARDS.
- SUBSTITUTIONS NO MATERIAL SUBSTITUTIONS SHALL BE ACCEPTED UNLESS REQUEST IS SUBMITTED IN WRITING TO THE LANDSCAPE ARCHITECT FOR APPROVAL PRIOR TO COMMENCING WORK ON THIS SECTION. ANY SUBSTITUTED MATERIAL INSTALLED WITHOUT PRIOR APPROVAL MAY BE REJECTED BY THE LANDSCAPE ARCHITECT, AND IF REJECTED, SHALL BE REMOVED AND REPLACED TO THE SATISFACTION OF THE LANDCSCAPE ARCHITECT AT NO ADDITIONAL COST TO THE OWNER.

2.02 - PLANT MATERIALS

- A. THE CONTRACTOR SHALL FURNISH AND PLANT ALL PLANTS SHOWN ON THE DRAWING AND AS SPECIFIED.
- B. ALL PLANTS SHALL BE HEALTHY, SHAPELY AND WELL ROOTED IN THEIR CONTAINERS WITHOUT BEING ROOT-BOUND.
- GENUS, SPECIES, AND VARIETY: QUANTITY, SIZE AND CONDITION AS INDICATED ON THE DRAWINGS AND PLANT MATERIAL LISTING. NO SUBSTITUTION WITHOUT PRIOR WRITTEN APPROVAL OF LANDSCAPE

ARCHITECT

- D. PLANT MATERIAL SHALL BE NURSERY STOCK, FULL FOLIAGED WHEN IN LEAF, FREE FROM DISEASE, INJURY, INSECTS, ALL WEEDS, GRASSES AND FOREIGN ROOTS. PLANT SHALL BE IN ACCORDANCE WITH THE AMERICAN NURSERYMEN
- ASSOCIATION STANDARDS IN ALL WAYS (SEE AMERICAN STANDARD FOR NURSERY STOCK SPONSORED BY AMERICAN ASSOCIATION FOR NURSERYMEN, INC., CURRENT EDITION).
- COLD STORAGE PLANTS ARE NOT ACCEPTABLE POTTED AND CONTAINER STOCK SHALL BE WELL ROOTED & FREE OF EXCESSIVE ROOT-BOUND CONDITIONS. VIGOROUS ENOUGH TO ENSURE SURVIVAL AND HEALTHY GROWTH
- CONTAINER PLANTS, ONE GALLON SIZE AND LARGER, SHALL HAVE GROWN THEREIN A MINIMUM OF SIX MONTHS AND A MAXIMUM OF TWO YEARS, WITH ROOTS FILLING THE CONTAINERS BUT NOT SHOWING EVIDENCE OF BEING OR HAVING BEEN RESTRICTED, DEFORMED OR ROOT-BOUND.
- TREES SHALL BE UNTAPPED, SYMMETRICAL FOR STANDARD AND MULTIPLE TRUNK TREES. PLANT MATERIAL SHALL BE FREE FROM DISFIGURING KNOTS.
- SUNSCALD INJURIES, BARK ABRASIONS, EVIDENCE OF IMPROPER PRUNING, AND OTHER OBJECTIONABLE OR UNHEALTHY DISFIGUREMENTS.
- TREES SHALL HAVE WELL-DEVELOPED BRANCH SYSTEMS STANDARD FOR EACH GENUS AND SPECIES. ACCEPTANCE OR REJECTION OF PLANT MATERIAL WILL BE
- DETERMINED BY THE CITY, OWNER, OR THE OWNER'S REPRESENATIVE ON THE PROJECT SITE. PLANTS ARE SUBJECT TO INSPECTION AND APPROVAL OR REJECTION AT ANY TIME BEFORE OR DURING PROGRESS OF WORK FOR SIZE, VARIETY, CONDITION, LATENT DEFECTS, AND INJURIES. REJECTED PLANTS SHALL BE REMOVED FROM THE PROJECT SITE IMMEDIATELY.
- M. THIN, WEAK AND LEGGY PLANTS WILL BE REJECTED BY THE LANDSCAPE ARCHITECT
- ALL PLANT MATERIAL SHALL BE LEGIBLY TAGGED BY SPECIES AND VARIETY WITH MINIMUM OF ONE TAG PER TEN TREES. PLANT MATERIALS NOT MEETING THESE REQUIREMENTS SHALL BE
- REMOVED FROM THE SITE AND REPLACED TO THE SATISFACTION OF THE LANDSCAPE ARCHITECT.
- ALL PLANTS SHALL CONFORM TO THE MEASUREMENTS SPECIFIED IN THE PLANT LIST. EXCEPTIONS ARE AS FOLLOWS: PLANTS LARGER THAN SPECIFIED IN THE PLANT LIST MAY BE USED IF APPROVED BY THE LANDSCAPE ARCHITECT. BUT USE OF SUCH PLANTS SHALL NOT INCREASE THE CONTRACT PRICE. IF THE USE OF LARGER PLANTS IS APPROVED, THE SPREAD OF ROOTS OR BALL OF EARTH SHALL BE INCREASED IN PROPORTION TO THE SIZE OF THE PLANT.

2.03 - TREE STAKING & GUYING TREE STAKES

- TWO INCH DIAMETER NEW LODGEPOLE PINE TREATED WITH COPPER NEPTHENATE OR APPROVED EQUAL. LENGTH OF STAKE AS REQUIRED FOR MAXIMUM SUPPORT OF TREE AND PER TREE STAKING DETAILS.
- WIRE & RUBBER TIES #12 GUAGE ANNEALED, GALVANIZED STEEL INSERTED THROUGH NEW OR USED $\frac{1}{2}$ INCH BLACK RUBBER GARDEN HOSE. STAKING PROCEDURE SUBJECT TO APPROVAL.

2.04 - SOIL AMENDMENTS A. FERTILIZERS

- 1. FERTILIZERS SHALL BE IN CONFORMANCE WITH THE STATE AGRICULTURAL CODE. 2. FERTILIZER FOR PLANT PITS SHALL BE AGRIFORM (21 GRAM) WITH A
- GUARANTEED ANALYSIS OF 20% NITROGEN, 10% AVAILABLE PHOSPHORIC ACID, 5% POTASH, 2% COMBINED CALCIUM, 1.5% SULFUR, .36% IRON, .43% ZINC. AND .18% MANGANES 3. ALL PLANTS TO RECIEVE AGRIFORM (20-10-5) PLANT TABS AT THE
- FOLLOWING RATES: 1 GALLON 1 - 21 GRAM TABLET 2 - 21 GRAM TABLETS 5 GALLONS

e en Elenne	
15 GALLONS	4 - 21 GRAM TABLETS
24" BOX	6 - 21 GRAM TABLETS
36" BOX & ABOVE	8 - 21 GRAM TABLETS

- MULCH USED IN PLANT BACKFILL MIX AND SOIL PREPARATION IN LAWN AREAS SHALL BE FOREST MULCH AS PRODUCED BY WESTERN AGRICULTURAL PRODUCTS CO., PHOENIX, AZ OR APPROVED EQUAL. WELL-ROTTED WOOD FIBER, COMMERCIALLY PREPARED AND PROCESSED FOR NINETY-EIGHT (98) PERCENT ORGANIC CONTENT AND COMPOSTED TO SUPPORT BACTERIAL CULTURES; pH RANGE TO BE 6.8-7.2. MULCH SHALL CONTAIN A MINIMUM OF 1.0 PERCENT NITROGEN ON A DRY WEIGHT BASIS.
- PLANT BACKFILL MIX PLANTING BACKFILL SHALL BE A THOROUGHLY BLENDED MIXTURE OF SOIL AND SOIL AMENDMENTS AT THE FOLLOWING MIXTURE RATIOS: MULCH 1/3 TOPSOIL

2/3

2.05 - APPROVED TOPSOIL

A. TOPSOIL CONTENT

20-45% SILT, 14-20% CLAY, AND 30-60% SAND WITH A MINIMUM OF 5% ORGANIC MATERIAL (NATURAL OR ADDED). THE pH SHALL NOT BE LOWER THAN 6.0 NOR HIGHER THAN 7.8. SOLUBLE SALTS SHALL NOT EXCEED 1200 PPM.

TOPSOIL QUALITY SCREENED, RETILE, FRIABLE SOIL FROM WELL DRAINED ARABLE LAND AND FREE FROM NUTGRASS, REFUSE, ROOTS, HEAVY CLAY, NOXIOUS WEEDS, OR ANY MATERIAL TOXIC TO PLANT GROWTH, PROVIDE THE LANDSCAPE ARCHITECT WITH A SOIL ANALYSIS BY AN INDEPENDENT TESTING LABORATORY FOR VERIFICATION PRIOR TO HAVING TOPSOIL DELIVERED TO SITE. SOIL ANALYSIS SHALL BE AT THE EXPENSE OF THE CONTRACTOR.

2.06 - WEED CONTROL CHEMICALS APPLICATION

- THE APPLICATOR OF ALL WEED CONTROL MATERIALS SHALL BE LICENSED BY THE STATE OF ARIZONA AS A PEST CONTROL OPERATOR AND A PEST CONTROL ADVISOR IN ADDITION TO HOLDING ANY SUBCONTRACTOR LICENSES THAT ARE REQUIRED.
- 2. PRIOR TO THE APPLICATION OF ANY WEED CONTROL MATERIALS. THE PEST CONTROL ADVISOR SHALL SUBMIT TO THE LANDSCAPE ARCHITECT A LIST OF THE WEED CONTROL MATERIALS AND QUANTITIES PER ACRE INTENDED FOR USE IN CONTROLLING THE WEED TYPES PREVALENT AND EXPECTED ON THE SITE. PEST CONTROL ADVISOR SHALL FURNISH DATA TO DEMONSTRATE THE COMPATIBILITY OF THE WEED CONTROL MATERIALS AND METHODS WITH THE INTENDED PLANTING VARIETIES.
- 3. WEED CONTROL SHALL ELIMINATE ALL NUT GRASS, JOHSON GRASS, BURR CLOVER, SPURGE, AND OTHER INVASIVE WEEDS COMMON TO THE ARFA
- 4. NO MATERIAL OR METHOD SHALL AFFECT THE LANDSCAPE PLANTING OR HYDROSPRIG GERMINATION AND ESTABLISHMENT. MATERIALS AND METHODS MUST CONFORM TO FEDERAL, STATE, AND LOCAL REGULATIONS.
- 5. WEED CONTROL SHALL BE APPLIED TO ALL LAWN AND PLANTING AREAS WITH ADEQUATE TIME TO MEET MANUFACTURER'S RECOMMENDATIONS. IF WEEDS REAPPEAR AFTER PLANTING, ADDITIONAL WEED CONTROL SHALL BE APPLIED IN A MANNER NOT TO DAMAGE OR RETARD THE GROWTH OF PLANT MATERIAL. ANY PLANT MATERIAL DAMAGED OR KILLED DURING THIS PROCESS OR IS A RESULT OF THE APPLICATION OF WEED CONTROL MATERIAL, SHALL BE REPLACED AT NO COST TO THE OWNER.
- SELECTIVE CONTACT POST-EMERGENT HERBICIDES 1. COMPATIBLE WITH EXISTING PLANT MATERIAL TO REMAIN AND HAVING NO RESIDUAL. USE IN QUANTITIES AND STRENGTHS RECOMMENDED BY MANUFACTURER.
- PRE EMERGENT HERBICIDES USE PRE - EMERGENT HERBICIDES COMPATIBLE WITH NEWLY PLANTED MATERIALS IN QUANTITIES AND STRENGTHS RECOMMENDED BY THE MANUFACTURER. USE ONLY APPROVED WEED CONTROL MATERIALS AND LICENSED APPLICATORS.

SECTION 3 - EXECUTION 3 01 - SITE PREPARATION

- PROTECTION TAKE CARE IN PERFORMING WORK OF THE SECTION TO AVOID CONDITIONS WHICH WILL CREATE HAZARDS. POST SIGNS OR BARRIERS AS REQUIRED.
- INSPECTION OF SITE CONDITIONS EXAMINE SITE FOR CONDITIONS THAT WILL ADVERSELY AFFECT EXECUTION, PERMANENCE, QUALITY OF WORK AND SURVIVAL OF PLANT MATERIAL. ADVISE LANDSCAPE ARCHITECT OF ANY CONCERNS, PRIOR TO

COMMENCING WORK OR DURING THE PERIOD OF THE INSTALLATION.

CLEARING, GRUBBING AND SOIL LOOSENING ALL PLANTING SHALL BE CLEARED OF ALL BRUSH, WEEDS, DEBRIS, AND ROCKS OVER ONE INCH IN SIZE PRIOR TO ANY SOIL PREPARATION. NOXIOUS BRUSH WEEDS AND GRASSES SHALL BE REMOVED BY THE ROOTS WHEREVER THEY ARE FOUND AT ANY STAGE OF THE WORK. 2. ALL GROUNDCOVER PLANTING AREAS SHALL BE GRUBBED AND CULTIVATED TO A DEPTH OF 12 INCHES. WATER SHALL BE ADDED TO SOIL AND RIPPING OR CULTIVATING SHALL BE CONTINUED UNTIL THE ENTIRE 12 INCH DEPTH IS LOOSE AND FRIABLE. ALL DEBRIS AND ROCKS OVER ONE INCH IN SIZE SHALL BE REMOVED IN A MANNER ACCEPTABLE TO THE LANDSCAPE ARCHITECT. ROCKS AND DEBRIS SHALL BE REMOVED FROM THE SITE AND DISPOSED OF IN AN OFFSITE LANDFILL OR EQUAL.

3.02 - FINISH GRADING COORDINATE W/ ROUGH GRADING

- PROVIDE AND PLACE ADDITIONAL SPECIFIED TOPSOIL AS REQUIRED TO FACILITATE DRAINAGE PATTERNS AND TO CONSTRUCT MOUNDS, SWALES, & BASING AS SHOWN ON LANDSCAPE AND CIVIL ENGINEERING DRAWINGS. SEE CIVIL ENGINERRING DRAWINGS FOR ALL CONTOURS, ELEVATIONS, & GRADING NOT SHOWN ON LANDSCAPE PLANS. FINISH GRADING
- GRADES NOT OTHERWISE INDICATED SHALL BE UNIFORM LEVELS OR SLOPES BETWEEN POINTS WHERE ELEVATIONS ARE GIVEN, OR BETWEEN POINTS ESTABLISHED BY PAVING OR CURBS. FINISH GRADES SHALL BE SMOOTH, EVEN AND ON A UNIFORM PLANE WITH NO ABRUPT CHANGES OR SURFACE. MINOR ADJUSTMENTS OF FINISH GRADES SHALL BE MADE AT THE DIRECTION OF THE ENGINEER OR LANDSCAPE ARCHITECT, AS REQUIRED
- 2. DIRECT SURFACE DRAINAGE IN MANNER INDICATED ON GRADING AND DRAINAGE DRAWING PROVIDED BY THE CIVIL ENGINEER BY MOLDING SURFACE TO FACILITATE NATURAL RUN-OFF WATER. FILL LOW SPOTS AND POCKETS WITH TOPSOIL AND GRADE TO DRAIN PROPERLY. 3. TOPS AND TOPS OF ALL SLOPES SHALL BE ROUNDED TO PRODUCE A
- GRADUAL AND NATURAL APPEARING TRANSITION BETWEEN RELATIVELY LEVEL AREAS AND SLOPES. 4. TOP FOUR INCHES SHALL BE FREE OF ROCKS OR OTHER INERT MATERIALS OVER 1/2" INCH AT GREATEST DIMENSION.

3.03 - PLANT MATERIALS

- EXAMINATION BEFORE PROCEEDING WITH WORK, CHECK AND VERIFY DIMENSIONS AND QUANTITIES. REPORT VARIATIONS BETWEEN DRAWINGS AND SITE TO LANDSCAPE ARCHITECT BEFORE PROCEEDING WITH WORK, ALL PLANTING INDICATED ON DRAWINGS IS REQUIRED UNLESS OTHERWISE INDICATED. PROTECTION
- 1. TAKE CARE IN PREPARATION AND WORK TO AVOID CONDITIONS WHICH WILL CREATE HAZARDS. POST SIGNS OR BARRIERS AS REQUIRED. PROVIDE ADEQUATE MEANS FOR PROTECTION FROM DAMAGE THROUGH EXCESSIVE EROSION, FLOODING, HEAVY RAINS, ETC. REPLACE OR REPAIR DAMAGED AREAS AS REQUIRED AT NO COST TO THE OWNER.
- INSTALLATION 1. DO NOT PLANT TREES, SHRUBS, AND GROUND COVER MATERIALS UNTIL MAJOR CONSTRUCTION OPERATION ARE COMPLETED, SOIL PREPARATION IS COMPLETE, AND IRRIGATION SYSTEM IS FULLY OPERATIONAL.
- 2. LAYOUT INDIVIDUAL TREE LOCATIONS AND AREAS OF MULTIPLE SHRUB AND GROUNDCOVER PLANTINGS. STAKE LOCATIONS AND SECURE ACCEPTANCE FROM LANDSCAPE ARCHITECT BEFORE PLANTING. MAKE ADJUSTMENTS AS REQUESTED IN FINAL FIELD LOCATIONS OF PLANT MATERIALS.
- 3. EXCAVATE PLANT PITS TO MINIMUM DIMENSIONS DETAILED ON DRAWINGS 4. REMOVE PLANT FROM CONTAINER AND PLACE IMMEDIATELY IN PLANT HOLE OVER COMPACTED BACKFILL MIX. PLACE TREES. SHRUBS. AND
- GROUND COVERS IN HOLES TO CONFORM TO PLANTING DETAILS ON DRAWINGS 5. BACKFILL WITH HOMOGENEOUS MIXTURE OF SPECIFIED BACKFILL. ADD
- FERTILIZER TABLETS IN PLANT PITS IN QUANTITIES SPECIFIED ON DRAWINGS 6. SETTLE BY FIRMING AND IMMEDIATELY WATER TO BRING SOILS DOWN TO
- PROPER LEVEL AS SHOWN ON DRAWINGS. DO NOT USE MUDDY SOIL FOR BACKFILLING. MAKE ADJUSTMENTS IN POSITIONS OF PLANTS AS DIRECTED. ALL TREES SHALL BE IN AN UPRIGHT PERPENDICULAR PLANE TO LEVEL

7. THOROUGHLY WATER PLANTS IMMEDIATELY AFTER PLANTING.

3.04 - TREE STAKING & GUYING SUPPORT FOR TREES

- 1. IN PLANTING TREES 36-INCH BOX AND SMALLER, INCLUDE PLACEMENT OF TREE STAKES IN PLANT PITS OUTSIDE OF PLANT ROOT BALL. DRIVE STAKES INTO UNDISTURBED SOIL & MINIMUM OF 12 INCHES BEFORE BACKFILLING SO TREE ROOTS ARE NOTE DAMAGED. LODGE POLE STAKES SHALL BE INSTALLED IN A VERTICAL POSITIONS WITH TOPS OF STAKES AT THE SAME LEVEL. WIRE TIES
- TIE TREE TO STAKES AS DETAILED ON DRAWINGS. INSTALL SINGLE STRAND OF GALVANIZED WIRE THROUGH SECTION OF RUBBER HOSE. LENGTH OF HOSE SHALL BE LONG ENOUGH TO PROTECT TREE TRUNK FROM WIRE. SECURE WIRE TO STAKE BY STAPLING AND REMOVE EXCESS WIRE ENDS. TREE PROTECTION
- TREES LOCATED IN TURF AREAS SHALL RECEIVE "TREE BOOTS", "ARBOR GUARD", OR EQUAL, TO PREVENT DAMAGE TO TREE FROM LINE TRIMMERS OR LAWN MOWERS. INSTALL PER MANUFACTURER'S INSTRUCTIONS.

3.06 - DECOMPOSED GRANITE INSTALLATION PROVIDE SMOOTH FINISH GRADES AND SLOPE AWAY FROM BUILDING FOUNDATIONS AND SIDEWALKS A MINIMUM GRADE OF 5% FOR 10' OR AS

SPECIFIED IN GEO-TECHNICAL REPORT APPLY PRE-EMERGENT HERBICIDE TO SUB-GRADE AS SPECIFIED AND INSTALL 2" DEPTH OF GRANITE, RAKE SMOOTH WITHOUT UNDULATIONS. AFTER RAKING, APPLY FINAL COAT OF PRE-EMERGENT HERBICIDE TOP COAT TO ALL GRANITE AREAS.

3.07 - FINISH APPEARANCE A. CLEAN UP AND REPAIR

- . CLEAN ALL SIDEWALKS, WALLS, AND PLANTING AREAS OF DEBRIS, SOIL AND CHEMICAL STAINS, AND EXCESS WASTE MATERIALS AND DEBRIS. FINISH APPEARANCE
- PRIOR TO FINAL ACCEPTANCE OF LANDSCAPING BY OWNER, ALL NEW AND TRANSPLANTED PLANT MATERIAL SHALL BE IN A HEALTHY STATE OF GROWTH, PLANTER AND LAWN AREAS SHALL BE WEED FREE, SEEDED AND SODDED AREAS ARE ESTABLISHED, TREES HAVE BEEN STAKED AS DETAILED, AND ALL LANDSCAPING, HEADERS, AND PLANTER TOP DRESSING HAVE BEEN INSTALLED AS PER CONTRACT DOCUMENTS.

3.08 - LANDSCAPE MAINTENANCE

- A. GENERAL 1. CONTRACTOR WILL BE RESPONSIBLE FOR THE HEALTH AND GROWTH OF ALL NEW AND TRANSPLANTED LANDSCAPING FOR 90 DAYS FROM PRELIMINARY ACCEPTANCE OF LANDSCAPE WORK BY OWNER OR OWNER'S REPRESENTATIVE.
- 2. REPLACE LANDSCAPING THAT IS DEAD OR APPEARS DEAD AS DIRECTED BY LANDSCAPE ARCHITECT. MAKE REPLACEMENTS WITHIN 10 WORKING
- DAYS OF NOTIFICATION. IRRIGATION 1. SPRINKLER HEADS AND NOZZLES SHALL BE ADJUSTED TO ACHIEVE FULL,
- EVEN COVERAGE WITHOUT EXCESSIVE SPRAYING ONTO BUILDINGS, SIDEWALKS, OR WALLS. LAWN
- 1. MAINTAIN LAWN AREAS UNTIL LAWN COMPLIES WITH SPECIFIED REQUIREMENTS CONTAINED HEREIN AND THROUGHOUT MAINTENANCE PFRIOD.
- 2. WATER LAWN AREAS IN SUFFICIENT QUANTITIES AND AT REQUIRED FREQUENCY TO MAINTAIN HEALTHY LAWN GROWTH. 3. MOWING OF GRASS WILL BE PROVIDED BY CONTRACTOR'S PERSONNEL DURING 90 DAY MAINTENANCE PERIOD.
- 4. APPLY SELECTIVE WEED KILLER WHEN BROADLEAF WEEDS START DEVELOPING IN COMPETITION WITH GRASS. APPLY WEED KILLER IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS DURING CALM WEATHER WHEN AIR TEMPERATURE IS ABOVE 50 DEGREES F. 5. AT END OF 30 DAYS OF 90 DAY MAINTENANCE PERIOD, FERTILIZE LAWN
- AREAS WITH AMMONIUM PHOSPHATE (21-0-0) AT THE RATE OF 10 LGS. PER 1.000 SQ. FT. TREES, SHRUBS, AND PLANTS
- MAINTAIN BY PRUNING, CULTIVATING, AND WEEDING AS REQUIRED FOR HEALTHY GROWTH AND BEST MANAGEMENT PRACTICES FOR SPECIES AND AS SPECIFIED HEREIN.

IRRIGATION SPECIFICATIONS

SECTION 1 - GENERAL

1.01 SUMMARY - WHEN INDICATED ON THE DRAWINGS, CONTRACTOR IS TO PROVIDE MATERIAL AND INSTALLATION OF A COMPLETE AUTOMATICALLY CONTROLLED UNDERGROUND IRRIGATION SYSTEM. THE SYSTEM SHALL INCLUDE THE FOLLOWING: BACKFLOW PREVENTER, PIPING, VALVES, CONTROL WIRE, CONTROLLERS, ELECTRICAL CONNECTIONS, CONNECTIONS TO MAINLINE AND ALL NECESSARY ACCESSORIES NECESSARY TO COMPLETE THE SYSTEM AND THE SYSTEM TO BE FULLY OPERATIONAL AS INTENDED BY THESE DRAWINGS AND SPECIFICATIONS. SUBMITTAL OF AN AS-BUILT LAYOUT PLAN AND DETAILS ILLUSTRATING THE LOCATION AND TYPE OF HEADS, VALVES, PIPING

CIRCUITS, CONTROLLERS AND ACCESSORIES IS REQUIRED. 1.02 ALL PROVISIONS OF GENERAL AND SPECIAL CONDITIONS APPLY TO THIS SECTION.

SECTION 2 - SCOPE OF WORK

- 2.01 IRRIGATION SYSTEMS SHALL BE CONSTRUCTED IN ACCORDANCE WITH ALL SIZES, GRADES AND LOCATION SHOWN ON PLANS. LOCATIONS OF ALL MATERIALS ON THESE PLANS ARE DIAGRAMMATIC AND IT IS THE CONTRACTOR'S RESPONSIBILITY TO PLACE LINES AND HEADS PER SPECIFICATIONS. DETAILS AND BEST MANAGEMENT PRACTICES. FINAL LOCATIONS OF ALL POP-UP AND ROTOR HEADS, BUBBLER, AND EMITTERS, ARE TO BE ESTABLISHED BY THE CONTRACTOR AT THE TIME OF CONSTRUCTION. TYPICAL SPACING OF THE ALL IRRIGATION HEADS ARE SHOWN ON THE PLANS AND SHOULD NOT BE EXCEEDED.
- 2.02 UNLESS NOTED OTHERWISE, THE CONSTRUCTION OF ALL IRRIGATION SYSTEMS SHALL INCLUDE THE FURNISHING, INSTALLING AND TESTING OF ALL NECESSARY EQUIPMENT, THE REMOVAL AND/OR RESTORATION OF EXISTING IMPROVEMENTS. EXCAVATION AND BACKFILL, AND ALL OTHER WORK IN ACCORDANCE WITH PLANS AND SPECIFICATIONS.
- 2.03 THE SYSTEM SHALL BE A COMPLETE, OPERATIVE SYSTEM COVERING 100% OF ALL PLANTED AND TURF AREAS. THE SYSTEM SHOULD BE PROPERLY ADJUSTED TO AVOID OVERSPRAY ONTO WALKS OR OTHER STRUCTURES.

SECTION 3 - VERIFICATION OF DRAWINGS AND SITE

3.01 IT IS THE CONTRACTOR'S RESPONSIBILITY TO REPORT TO THE OWNER'S REPRESENTATIVE OF THE LANDSCAPE ARCHITECT ANY DEVIATIONS BETWEEN THE DRAWINGS AND SPECIFICATIONS AND THE ACTUAL SITE BEING INSTALLED WITH THE IRRIGATION SYSTEM. IF THE CONTRACTOR FAILS TO DO SO PRIOR TO THE INSTALLING OF EQUIPMENT, THE RESULTING RELOCATION AND/OR REPLACEMENT OF THE EQUIPMENT AND LABOR WILL BE DONE AT THE CONTRACTORS SOLE EXPENSE.

SECTION 4 - MATERIALS

4.01 MATERIALS THROUGHOUT THE SYSTEM SHALL BE AS SHOWN ON THE DRAWINGS AND SPECIFICATIONS SHALL BE NEW AND IN PERFECT WORKING CONDITION. DEVIATIONS FROM THE MATERIALS SHOWN ON DRAWINGS OR IN THE SPECIFICATIONS WILL NOT BE ALLOWED WITHOUT PRIOR WRITTEN APPROVAL FROM THE OWNER'S REPRESENTATIVE OF LANDSCAPE ARCHITECT. THE DECISION OF THE LANDSCAPE ARCHITECT OR OWNER'S REPRESENTATIVE SHALL BE FINAL. ANY CHANGES SHALL BE ISSUED IN WRITING SHOULD SUBSTITUTIONS OR ALTERATIONS FROM THE PLANS OR SPECIFICATIONS BE REQUESTED BY THE CONTRACTOR.

SECTION 5 - CHANGES IN SCOPE OF WORK

5.01 CHANGES IN THE QUANTITY OF WORK AS SET FORTH IN THESE DRAWINGS OR SPECIFICATIONS MAY BE ORDERED BY THE OWNER'S REPRESENTATIVE, OR THE LANDSCAPE ARCHITECT AFTER THE CONTRACT PRICE HAS BEEN ADJUSTED ACCORDINGLY TO THE SATISFACTION OF BOTH THE CONTRACTOR AND THE OWNER. A WRITTEN CHANGE ORDER SHALL BE ISSUED BY CONTRACTOR TO THE OWNER FOR APPROVAL. ANY AND ALL CHANGES MADE WITHOUT WRITTEN CHANGE ORDERS AND NOT CONSIDERED PART OF THE CONTRACT AND THUS PAYMENT WILL NOT BE GUARANTEED.

SECTION 6 - PERMITS AND INSPECTIONS

- 6.01 ALL REQUIRED PERMITS FOR THE INSTALLATION OR CONSTRUCTION OF ANY OF THE WORK INCLUDED UNDER THIS CONTRACT SHALL BE OBTAINED AND PAID FOR BY THE CONTRACTOR. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ALSO ARRANGE FOR AND PAY ALL COSTS IN CONNECTION WITH ANY INSPECTIONS AND EXAMINATIONS.
- 6.02 WHEN INSPECTION OF THE IRRIGATION SYSTEM IS REQUIRED BY THE LANDSCAPE ARCHITECT. THE CONTRACTOR SHALL NOTIFY THE LANDSCAPE ARCHITECT AT LEAST 48 HOURS IN ADVANCE OF THE TIME WHEN THE INSPECTION IS REQUESTE

SECTION 7 - PLASTIC PIPE

- 7.01 PLASTIC PIPE SHALL BE AS SPECIFIED ON THE DRAWINGS. IT IS TO BE UNPLASTICIZED PVC EXTRUDED FROM VIRGIN PARENT MATERIALS OF THE SIZE AND TYPE DESCRIBED ON THE DRAWINGS AND SPECIFICATIONS. THE PIPE IS TO BE HOMOGENEOUS THROUGHOUT AND FREE FROM VISIBLE CRACKS, HOLES, FOREIGN MATERIALS, BLISTER, WRINKLES, DENTS OR OTHER DEFECTS. IT IS TO BE MANUFACTURED BY SWANSON CO., CABOT, OR ANOTHER APPROVED EQUAL.
- 7.02 ALL PIPE SHALL BE CONTINUOUSLY MARKED WITH THE FOLLOWING INFORMATION: MANUFACTURERS' NAME OR TRADEMARK, SIZE, SCHEDULE, TYPE OF PIPE, WORKING PSI AT 73F AND NATIONAL SANITATION FOUNDATION (NSF) APPROVAL.

SECTION 8 - PLASTIC PIPE FITTINGS AND CONNECTIONS 8.01 ALL PLASTIC PIPE FITTINGS TO BE INSTALLED SHALL BE MOLDED FITTINGS

- MANUFACTURED OF THE SAME MATERIALS AS THE PIPE AND SHALL BE SUITABLE FOR EITHER SOLVENT WELD OR SCREWED FITTING CONNECTIONS. FITTINGS SHALL BE MARKED WITH MANUFACTURER'S NAME. SIZE AND SCHEDULE INFORMATION. NO FITTINGS MADE OF OTHER MATERIALS ARE TO BE USED. UNLESS OTHERWISE SPECIFIED, ALL PLASTIC FITTINGS SHALL BE OF SCHEDULE 40 PVC MATERIAL
- 8.02 ALL PLASTIC TO METAL JOINTS TO BE MADE WITH PVC SCHEDULE 40 MALE ADAPTERS OR PVC SCHEDULE 80 NIPPLES. JOINT COMPOUND FOR SUCH CONNECTIONS SHALL BE PERMATEX TYPE II OR TEFLON TAPE.
- 8.03 PRIMER AND SOLVENT FOR SOCKET CONNECTIONS OF PVC MATERIAL ARE TO BE COMPATIBLE WITH MATERIAL TO BE WELDED AS RECOMMENDED BY THE PLASTIC MATERIAL MANUFACTURER.

SECTION 9 & 10 RESERVED - POLYETHYLENE

SECTION 11 - COPPER PIPE AND FITTINGS

11.01 COPPER PIPE SHALL BE TYPE K HARD TEMPER, AS SPECIFIED BY MANUFACTURER.

11.02 FITTINGS SHALL BE OF COPPER OR BRASS MATERIAL. SOLDER JOINTS WITH 50-50 TIN-LEAD AND ROSIN TYPE FLUX. JOINTS BETWEEN DISSIMILAR METALS SHALL BE MADE WITH AN INSULATING FITTING. CONNECTION WITH PLASTIC PIPE SHALL BE MADE WITH A THREADED FEMALE COUPLING. PVC MALE SHALL HAVE PERMATEX TYPE II OR TEFLON TAPE.

SECTION 12 - IRRIGATION HEADS AND RISERS 12.01 IRRIGATION HEAD ARE TO BE OF THE TYPES AND SIZES WITH NOZZLE SIZES

AS SHOWN ON THE PLANS 12.02 ALL IRRIGATION HEADS WITH A SIMILAR TYPE OF FUNCTION IN THE SYSTEM ARE TO BE OF THE SAME MANUFACTURER AND SHALL BE MARKED WITH THE MANUFACTURER'S NAME AND IDENTIFICATION IN SUCH A POSITION THAT THEY CAN BE IDENTIFIED EASILY AND WITHOUT BEING REMOVED FROM THE

SECTION 13 - VALVE BOXES

SYSTEM.

13.01 VALVE BOXES FOR EQUIPMENT SET BELOW FINISH GRADE SHALL BE PLASTIC IRRIGATION VALVE BOXES, THE TYPE AND SIZE BEING DETERMINED BY THE VOLUME OR SIZE OF THE EQUIPMENT TO BE ENCLOSED.

13.02 VALVE BOXES SHALL BE AS MANUFACTURED BY BROOKS OR APPROVED EQUAL. BOXES TO BE THE COLOR SPECIFIED ON PLANS.

SECTION 14 - EQUIPMENT

- 14.01 CONTROLLERS SHALL BE AS SPECIFIED ON THE CONSTRUCTION DRAWINGS. CONTRACTOR SHALL TAKE SPECIAL NOTE OF INFORMATION ON PLANS REGARDING ANY DUAL PROGRAMMING CAPABILITIES. 14.02 ALL VALVES, BACKFLOW PREVENTERS, FILTERS, AND ANY FERTILIZE
- APPLICATORS SHALL BE AS SPECIFIED ON THE CONSTRUCTION DRAWINGS.

SECTION 15 - IRRIGATION WIRE

15.01 ALL WIRING TO BE USED FOR CONNECTING THE AUTOMATIC CONTROLLER TO THE REMOTE CONTROL VALVE IS TO BE #14 TYPE 4F-600V SOLID COPPER, PVC INSULATION SINGLE CONDUCTOR, 4L APPROVED UNDERGROUND FEEDER CABLE.

15.02 ALL WIRE CONNECTIONS SHALL BE CRIMPED WATER TIGHT PREFILLED

- CONNECTIONS. 15.03 ALL PILOT OR HOT WIRES TO BE ONE COLOR (DRIP VALVE WIRES SHALL BE SHALL BE THE COLOR WHITE.
- 15.04 IF MULTIPLE CONTROLLERS ARE UTILIZED, AND WIRE PATHS OF DIFFERENT VALVE BOX AND NOTED ON THE AS-BUILT DRAWINGS. 15.05 ALL WIRES NOT ROUTED ALONG MAINLINE TO BE A MINIMUM OF 18 INCHES
- BELOW FINISH GRADE.

SECTION 16 - TRENCHING

A COMPACTION TEST ON THE LOCATION OF THE IRRIGATION LINES.

SECTION 17 - INSTALLATION OF PLACTIC PIPE AND FITTINGS 17.01 ALL PLASTIC PIPE SHALL BE INSTALLED TO PROVIDE FOR EXPANSION AND CONTRACTION AS RECOMMENDED BY THE MANUFACTURER. 17.02 ALL PLASTIC PIPE SHALL BE CUT WITH A BAND SAW OR HACK SAW IN A

- SQUARE TO THE PIPE.
- 17.03 SOLVENT WELDED CONNECTIONS ARE TO BE MADE USING PRIMER AND/OR DURING FAST CURE TIME.
- 17.04 PIPE SIZES 2-1/2" OR LARGER SHALL BE GASKETED RING PIPE WITH DUCTILE BLOCKS AS SHOWN ON THE PLANS.
- 17.06 THREADED PVC JOINTS ARE TO BE APPLIED WITH SEALING COMPOUND AS
- REPLACED BY THE CONTRACTOR. PERMISSION TO CUT OR REMOVE
- PLANTED AREA, ALONG THE EDGE.
- WITH 2" BELOW AND 2" ABOVE PIPE DIAMETER AT A MINIMUM COVER.

SECTION 18 - RESERVED - POLYETHYLENE

- SECTION 19 INSTALLATION OF COPPER PIPE 19.01 ALL TUBING IS TO BE CUT ACCURATELY TO MEASUREMENTS ESTABLISHED
- BE USED AT ALL CHANGES OF DIRECTION.
- DEPTH SEATED OF THE FITTING AND THEN SOLDERED.
- SECTION 20 INSTALLATION OF CONTROLLERS 20.01 ALL CONTROLLERS ARE TO BE INSTALLED AS SHOWN ON THE DETAIL SHEET

SECTION 21 - FLUSHING AND TESTING OF PLASTIC PVC PIPE

OWNER OR REPRESENTATIVE TO INSPECT PRESSURE TEST OF MAINLINE.

INSTALLED.

SECTION 23 - BACKFILLING

AND/OR WATERTIGHT INTEGRITY OF ALL PIPE AND FITTINGS SOLELY AT THE

CONTRACTOR'S EXPENSE. 23.02 CONTRACTOR SHALL WATER SETTLE TRENCHES AND PROVIDE ROUGH SETTLING OVER 1" TO BE CORRECTED AT CONTRACTOR'S EXPENSE.

RISERS

GALLONAGE.

INSTALLED AS SHOWN ON THE DETAILS.

OF THE IRRIGATION CONTRACTOR.

AFTER FLUSHING AND PRIOR TO INSTALLATION.

25.02 EMITTERS ARE NOT TO BE ATTACHED TO THE RISER UNTIL FLUSHING IS

25.03 COORDINATION OF EMITTERS WITH ALL PLANTING IS MANDATORY. IN

COMPLETE. EXTREME CARE SHALL BE TAKEN PRIOR TO EMITTER

INSTALLATION AND ALL PIPE SHALL BE KEPT FREE OF FOREIGN MATERIAL

CASES WHERE IRRIGATION AND PLANTING ARE CONTRACTED TO SEPARATE

CONTRACTORS, FINAL COORDINATION OF EMITTERS IS THE RESPONSIBILITY

CONNECTOR- DS-400 OR EQUAL. CONTRACTOR TO ENSURE CRIMPED WATER TIGHT DIELECTRIC SILICONE SEALANT AT ALL SPLICES AND/OR

DIFFERENT COLOR THAN TURF VALVE WIRES) AND ALL COMMON WIRES

CONTROLLERS CROSS EACH OTHER, BOTH COMMON AND CONTROL WIRES FROM EACH CONTROLLER SHALL BE DIFFERENT COLORS. NO WIRE SPLICES ARE PERMITTED BETWEEN CONTROLLER AND REMOTE CONTROL VALVE. IF WIRE SPLICES ARE NECESSARY, THEY MUST BE LOCATED IN A 6" ECONOMY

16.01 UNLESS OTHERWISE INDICATED ON THE WORKING DRAWINGS, ALL MAINLINE 34" TO 2-1/2" IN DIAMETER SHALL HAVE A MINIMUM COVER OF 18 INCHES BELOW FINISH GRADE. ALL PIPES 2-1/2 INCHES OR GREATER TO HAVE A MINIMUM COVER OF 24 INCHES BELOW FINISH GRADE. ALL LATERAL LINES SHALL BE INSTALLED WITH A MINIMUM COVER OF 12 INCHES BELOW FINISH GRADE. IRRIGATION LINES CONNECTING ROTOR OR POP-UP IRRIGATION HEADS SHALL BE INSTALLED WITH A MINIMUM COVER OF 18 INCHES BELOW FINISH GRADE. ALL PVC LINES INSTALLED UNDER A.C. PAVING SHALL HAVE

MANNER SO AS TO ENSURE A SQUARE CUT. BURRS AT CUT ENDS ARE TO BE REMOVED PRIOR TO INSTALLATION SO THAT SMOOTH FLOW WILL BE ACHIEVED. MECHANICAL CUTTING IS ALLOWED ON LINES OF 1-1/2" OR SMALLER DIAMETER. REMOVE ALL BURRS AS NEEDED AND CUTS SHALL BE

SOLVENT COMPATIBLE WITH THE TYPE OF PIPE USED. PIPE SIZES UP TO AND INCLUDING 1: DIAMETER ARE TO BE SOLVENT WELDED. PIPE SIZE 1-1/4" DIAMETER AND LARGER ARE TO BE PRIMED PRIOR TO THE APPLICATION OF THE SOLVENT. PIPE IS TO BE FULL INSERTED INTO THE SOCKETS AND HELD

IRON FITTINGS WITH APPROVED MECHANICAL CONNECTIONS/THRUST

17.05 PIPING SHALL BE BEDDED IN AT LEAST 2 INCHES OF FINELY GRADED NATIVE SOIL OR SAND TO AT LEAST 2 INCHES COVER OVER THE TOP OF THE PIPE. PER MANUFACTURER'S RECOMMENDATION. JOINTS SHALL THEN BE HAND TIGHTENED, PLUS TWO TURNS. DO NOT US TEFLON TAPE OR LIKE MATERIAL. 17.07 ALL PIPING UNDER PAVED AREAS SHALL BE PLACED IN PVC SLEEVES. ALL SLEEVES SHALL BE SCHEDULE 40, AS SHOWN ON THE CONSTRUCTION DRAWINGS. WHEN ANY CUTTING OR BREAKING OF SIDEWALKS AND/OR CONCRETE WORK IS NECESSARY. ALL PAVING IS TO BE REMOVED AND

SIDEWALKS AND/OR CONCRETE IS TO BE OBTAINED BY OWNER'S REPRESENTATIVE. WHERE PIPING ON THE DRAWINGS IS SHOWN UNDER PAVED AREAS, BUT RUNNING PARALLEL AND ADJACENT TO PLANTING AREAS THE INTENT OF THE DRAWING IS TO INSTALL THE PIPING IN THE

17.08 ALL PIPE IN ROCKY SOIL IS TO BE BURIED IN SAND OR APPROVED TOP SOIL

BY THE CONTRACTOR AND SHALL BE WORKING INTO PLACE WITHOUT SPRINGING OR FORCING. PROVISIONS SHALL BE MADE FOR EXPANSION AND CONTRACTION OF ALL COPPER TUBE LINES. PROPER FITTINGS SHALL

19.02 ALL COPPER TUBING IS TO BE CUT WITH SQUARE ENDS AND ALL BURRS REMOVED TUBING SHALL BE HANDLED CAREFULLY AND ALL TUBING CUT DENTED, OR OTHERWISE DAMAGED IS TO BE REPLACED WITH NEW TUBING. THE ENDS OF THE TUBING AND INSIDE OF ALL FITTINGS ARE TO BE CLEANED WITH A WIRE BRUSH AND/OR ABRASIVE CLOTH SAND PAPER. FLUX IS TO BE APPLIED TO THE OUTSIDE SURFACE OF TUBING ENDS AND ON THE RECESS INSIDE FITTINGS. TUBING SHALL BE INSERTED TO A FULL

AND PER MANUFACTURER RECOMMENDATIONS. UPON COMPLETION OF ALL WIRING, THE AREAS BEING IRRIGATED BE EACH STATION SHALL BE NOTED, ON PAPER, INDIVIDUALLY BY DESCRIPTIVE LOCATION OR AREA THAT VALVE OPERATES. (SEE ALSO IRRIGATION WIRE SPECIFICATIONS, SECTION 15)

21.01 MAIN IRRIGATION LINES SHALL BE TESTED IN PLACE PRIOR TO ANY BACKFILLING FOR A PERIOD OF 24 HOURS UNDER FULL PRESSURE. ALL FITTINGS TO BE EXPOSED SO VISUAL INSPECTION CAN BE PERFORMED BY OWNER OR OWNER'S REPRESENTATIVE. CONTRACTOR SHALL CONTACT

21.02 PRIOR TO THE INSTALLATION OF ANY IRRIGATION HEADS, AFTER ALL NEW IRRIGATION PIPING AND RISERS ARE INSTALLED, CONNECTED AND ALL NECESSARY WORK HAS BEEN COMPLETED, EACH CONTROL VALVE SHOULD BE OPENED ONE AT A TIME AND A FULL HEAD OF WATER USED TO FLUSH OUT EACH VALVE AND LATERALS/RISERS. AFTER WATER IS CLEAR AND SYSTEM IS FULLY FLUSHED, IRRIGATION HEADS SHALL THEN BE

SECTION 22 - RESERVED - POLYETHYLENE

23.01 BEFORE BACKFILLING TRENCHES, THE MAINLINE SHALL BE TESTED AS OUTLINED IN SECTION 21. BACKFILLING OF ANY TRENCHES PRIOR TO TESTING SHALL BE COMPLETED AT THE CONTRACTOR'S RISK. THE LANDSCAPE ARCHITECT OR OWNER RESERVE THE RIGHT OR HAVE ANY OR ALL PIPE EXCAVATED AS IS REQUIRED TO DETERMINE THE SIZE, QUALITY

GRADE TO MATCH THE GRADE CONDITION PRIOR TO THE WORK. ANY

SECTION 24 - INSTALLATION OF IRRIGATION HEADS AND

24.01 ALL IRRIGATION HEADS SHALL BE SET PERPENDICULAR TO GRADE. NO ANGLING OF HEADS TO INCREASE OR DECREASE HEAD COVERAGE. 24.02 ALL IRRIGATION HEADS ADJACENT TO EXISTING WALKS, CURBS, OR OTHER PAVED AREAS ARE TO BE SET TO GRADE AS SHOWN IN THE DETAILS. ROTOR AND POP-UP IRRIGATION HEADS TO BE INSTALLED IN THE TURF AREAS AS SHOWN IN THE DETAILS AND SHALL NOT BE FLUSH WITH FINE

GRADING OF DIRT/SOIL, IF SOD IS TO BE INSTALLED. CONTRACTOR TO 24.03 ALL IRRIGATION HEADS CONTAINING ADJUSTABLE NOZZLES ARE TO HAVE

INSTALL EXACTLY AS SHOWN IN DETAILS.

THE PINS OR HEX KEYS ADJUSTED FOR PROPER ARC, RADIUS AND

25.01 ALL EMITTERS, SWING JOINTS, AND RISER ASSEMBLIES ARE TO BE

SECTION 25 - INSTALLATION OF EMITTERS AND RISERS

SHEET #

SCALE

ARIZONA

PERMIT SUBMITTAL

CITY COMMENTS

LANDSCAPE & IRRIGATION SPECIFICATIONS

AS NOTED

SHEET NAME

O Z

প্র

THIS DRAWING IS AN INSTRUMENT OF SERVICE & THE PROPERTY OF THOMAS+CROWLEY LLC & SHALL REMAIN THEIR PROPERTY. THE USE OF THIS DRAWING SHALL BE RESTRICTED TO THE SITE FOR WHICH IT WAS PREPARED & PUBLICATION THEREOF IS LIMITED TO SUCH USE. REPRODUCTION OR PUBLICATION OF ANY METHOD IN WHOLE OR IN PART IS PROHIBITED WITHOUT WRITTEN CONSENT FROM THOMAS+CROWLEY LLC.

IT IS THE CONTRACTORS RESPONSIBILITY PRIOR TO & DURING CONSTRUCTION TO NOTIFY THE LANDSCAPE ARCHITECT IN WRITING OF ANY PERCEIVED ERRORS OR OMISSIONS IN THE PLANS AND SPECIFICATIONS. THE CONTRACTOR SHALL BE REASONABLY AWARE & THOROUGHLY KNOWLEDGEABLE OF BUILDING CODES AND METHODS OF CONSTRUCTION, AND SHALL NOTIFY THE LANDSCAPE ARCHITECT IN WRITING ADDRESSING SUCH PERCEIVED ERRORS AND OMISSIONS. INSTRUCTIONS SHALL BE RECEIVED FROM THE LANDSCAPE ARCHITECT FINERORS THE CONTRACTOR, OR SUBCONTRACTORS, PROCEEDING WITH THE LANDSCAPE ARCHITECT FRORT OT THE CONTRACTOR, OR SUBCONTRACTORS, PROCEEDING WITH THE WORK. THE CONTRACTOR WILL BE RESPONSIBLE FOR ANY DEFECTS IN CONSTRUCTION IF THESE PROCEDURES ARE NOT FOLLOWED.

STAKE IT CALL TWO WORKING

BLUE STAKE OUTSIDE MARICOPA COUNTY

ISSUE/REVISION /# DATE

2ND CITY COMMENTS 4.19.2019

DAYS BEFORE YOU DIG

602-263-1100

10.1.2018

1.31.2019

SHEET

REFERENCE

1-800-STAKE IT

DISCLAIMER

S

EXPIRES 12/31/ PROJECT 0R

LANDSCAPE ARCHITECTURE + PLANNING + SITE DESIGN + CONSTRUCTION MANAGEMENT

1150 N. COUNTRY CLUB DRIVE SUITE 11 MESA, AZ 85201

PH: 480-878-4708

WWW.THOMAS-CROWLEY.COM

T+C P-NO. 21876 SEAL

THOMAS + CROWLEY

SECTION 26 - GUARANTEE OF WORK 26.01 THE CONTRACTOR SHALL GUARANTEE ALL WORK AGAINST DEFECTIVE MATERIAL AND WORKMANSHIP FOR A PERIOD OF ONE YEAR FROM THE DATE OF FINAL ACCEPTANCE OF THE CONTRACT WORK. OWNER MAY MODIFY THE LENGTH OF THE GUARANTEE, IF PROVIDED IN WRITING BY

OWNER. 26.02 DEFECTIVE WORK THAT REQUIRES REPLACING OR REPAIR SHALL BE DONE IMMEDIATELY BY THE CONTRACTOR AT HIS OWN EXPENSE. IN THE CASE OF THE CONTRACTOR'S FAILURE TO MAKE SUCH CHANGES OR REPLACEMENTS. THE OWNER CAN WITHHOLD FROM THE CONTRACTOR ANY MONEY DUE UNDER HIS CONTRACT IN AN AMOUNT EQUAL TO THE EXPENSE TO CURE THE DEFECTIVE WORKMANSHIP AND MATERIALS.

26.03 REPLACEMENT AND/OR REPAIR ACTION BY THE OWNER MAY TAKE PLACE WITHIN 5 DAYS AFTER WRITTEN NOTICE BY THE OWNER OR LANDSCAPE ARCHITECT TO THE CONTRACTOR WHEN NO ACTION HAS BEEN SHOWN BY THE CONTRACTOR.

SECTION 27 - MAINTENANCE

SYSTEM.

- 27.01 THE CONTRACTOR SHALL MAINTAIN THE IRRIGATION SYSTEM IN PROPER WORKING ORDER TO SUSTAIN ALL NEW PLANT MATERIALS AND TURF AREAS UNTIL THE DATE OF FINAL ACCEPTANCE. THE CONTRACTOR SHALL REQUEST A RELEASE OF FINAL ACCEPTANCE BY THE OWNER OF THE IRRIGATION SYSTEM IN WRITING
- 27.02 MAINTENANCE SHALL INCLUDE THE ADJUSTMENTS AND SETTINGS OF IRRIGATION HEADS AND EMITTERS TO PROPER FINISH GRADE, AND
- LOCATIONS, AS SHOWN IN THE IRRIGATION CONSTRUCTION DETAILS. 27.03 THE CONTRACTOR SHALL INSTRUCT AND PROVIDE VALVE CHARTS. AS-BUILTS, AND SUGGESTED RUN TIMES OF EACH VALVE, TO THE OWNER'S MAINTENANCE PERSONNEL IN THE PROPER OPERATION OF THE IRRIGATION

