## Lofts on Edison

### Maricopa, Arizona

#### PROJECT NOTES

1. ALL WORK SHALL BE COMPLETED IN ACCORDANCE WITH THESE PLANS, DETAILS AND SPECIFICATIONS AND CONFORM TO ALL LOCAL CODES AND REQUIREMENTS.

THESE DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY AND COPYRIGHT OF JDP LAND DESIGN. THESE DRAWINGS SHALL NOT BE

USED ON ANY OTHER PROJECT EXCEPT BY WRITTEN AUTHORIZATION FROM JDP LAND DESIGN. 2. JDP LAND DESIGN SHALL NOT BE HELD RESPONSIBLE FOR FOR THE ACCURACY OF AND/OR ERRORS IN ANY AND ALL DIGITAL BASE DRAWINGS, INCLUDING BUT NOT LIMITED TO, ALTA SURVEYS, TOPOGRAPHIC SURVEYS, ARCHITECTURAL AND/OR CIVIL BACKGROUNDS PROVIDED BY OUTSIDE CONSULTANTS FOR USE BY JDP LAND DESIGN AS BASE DRAWING BACKGROUNDS TO PRODUCE HARDSCAPE, PLANTING, IRRIGATION AND ALL OTHER DRAWINGS CONTAINED IN THIS CONSTRUCTION DOCUMENT PACKAGE.

3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE QUANTITIES SHOWN ON THE PLANS AND CONDUCT THEIR OWN QUANTITY TAKE-OFFS FOR BIDDING PUPROSES.

4. WRITTEN DIMENSIONS TAKE PREFERENCE OVER SCALED DIMENSIONS AND SHALL BE FIELD VERIFIED ON SITE WITH ANY DISCREPANCIES BEING BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT PRIOR TO THE COMMENCEMENT OF WORK. 5. THE CONTRACTOR SHALL CAREFULLY INSPECT THE SITE AND VERIFY ALL CONDITIONS AND DIMENSIONS PRIOR TO PROCEEDING WITH

ANY WORK DESCRIBED ON THESE PLANS AND SPECIFICATIONS. THE CONTRACTOR SHALL NOTIFY THE LANDSCAPE ARCHITECT OF ANY DISCREPANCIES WITH THESE DOCUMENTS PRIOR TO BEGINNING OF ANY CONSTRUCTION. 6. THE CONTRACTOR SHALL CARRY ALL WORKER'S COMPENSATION, PUBLIC LIABILITY AND PROPERTY DAMAGE INSURANCE AS REQUIRED

BY THE LOCAL MUNICIPALITY OR BY THE OWNER AND APPLY, OBTAIN AND PAY FOR ALL REQUIRED PERMITS TO COMPLETE THE SCOPE OF

7. THE LANDSCAPE ARCHITECT SHALL DECIDE ALL QUESTIONS RELATING TO THE INTERPRETATION(S) OF THE DRAWINGS AND THE ACCEPTABLE FULFILLMENT OF THE CONTRACT.

8. THE CONTRACTOR SHALL MAINTAIN THE PREMISES CLEAN AND FREE OF EXCESS EQUIPMENT, MATERIALS AND RUBBISH (INCIDENTAL OF THIS PROJECT'S WORK) AT ALL TIMES DURING THE CONSTRUCTION OF THE PROJECT. ALL RUBBLE, TRASH EXCESS SOIL AND DISPOSABLE ITEMS RESULTING FROM THE DEMOLITION AND CONSTRUCTION SHALL BE DISPOSED OF IN A LEGAL, LAWFUL AND SAFE MANNER TO AN APPROVED DISPOSAL SITE. SEE DEMOLITION NOTES ON LANDSCAPE SPECIFICATION SHEET.

9. HOLD HARMLESS AND INDEMNIFICATION CLAUSE - THE CONTRACTOR SHALL AGREE THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES. THE CONTRACTOR SHALL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY TO ALL PERSONS AND PROPERTY. THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS AND THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE LANDSCAPE ARCHITECT HARMLESS FROM ANY AND ALL LIABILITY; REAL OR ALLEGED IN CONNECTION WITH THE PERFORMANCE OF WORK ON THE PROJECT, EXCEPT FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE

10. DAMAGE RESPONSIBILITY - CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ANY DAMAGES IMPOSED INTENTIONALLY OR ACCIDENTALLY, TO EXISTING UTILITIES, BUILDINGS OR OTHER AMENITIES DUE TO THE ACTIONS OF THE CONTRACTOR, CONTRACTORS EMPLOYEES AND/OR CONTRACTOR'S SUBCONTRACTORS. THE CONTRACTOR SHALL AT ALL TIMES PROTECT WORK FROM DAMAGE AND THEFT AND REPLACE ALL DAMAGED OR STOLEN PARTS AT THE CONTRACTORS EXPENSE UNTIL THE WORK IS ACCEPTED IN WRITING FROM THE OWNER.

11. UNAUTHORIZED CHANGES TO PLANS - THE LANDSCAPE ARCHITECT PREPARING THESE PLANS SHALL NOT BE RESPONSIBLE OR LIABLE FOR UNAUTHORIZED CHANGES TO OR USES OF THESE PLANS. ALL CHANGES TO THE PLANS MUST BE IN WRITING AND MUST BE

APPROVED BY THE LANDSCAPE ARCHITECT PRIOR TO THE COMMENCEMENT OF ANY WORK. 12. TRADE COORDINATION - CONSTRUCTION AND INSTALLATION OF ALL ITEMS WITHIN THESE DOCUMENTS SHALL REQUIRE CLOSE COORDINATION BETWEEN TRADES INVOLVED IN UNDERGROUND AND UTILITY INSTALLATION AND TREE LOCATION. CONTRACTOR SHALL BE RESPONSIBLE TO INSURE PROPER COORDINATION BETWEEN TRADES TO INSURE AND AVOID CONSTRUCTION DELAYS OR DAMAGE TO

13. THE CONTRACTOR SHALL NOTIFY BLUESTAKE 48 HOURS PRIOR TO DIGGING AT 1-800-STAKE-IT AND SHALL EXERCISE EXTREME CARE IN WORKING NEAR EXISTING UTILITIES. THE CONTRACTOR SHALL FIELD VERIFY THE LOCATION AND CONDITION OF ALL UTILITIES PRIOR TO

14. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING THE MUNICIPAL REPRESENTATIVE AT LEAST 48 HOURS IN ADVANCE PRIOR TO ANY REQUIRED MUNICIPAL INSPECTION.

15. THE CONTRACTOR SHALL NOTIFY THE LANDSCAPE ARCHITECT AT LEAST 48 HOURS IN ADVANCE PRIOR TO ANY REQUIRED OR DESIRED INSPECTION (480) 629-8064.

16. ALL NOTES SHOWN ON COVER SHEET (EXCLUDING COP GENERAL LANDSCAPE NOTES) ARE SHOWN FOR INFORMATION ONLY AND ARE NOT PART OF COP LANDSCAPE APPROVAL.

#### HARDSCAPE NOTES

#### 1. ALL CONCRETE CONSTRUCTION MUST COMPLY WITH THE CEMENT CONCRETE PAVING SECTION OF THE SPECIFICATIONS AND

CONFORM TO ALL LOCAL BUILDING CODES AND SOILS REPORT. 2. CONTRACTOR IS RESPONSIBLE TO COORDINATE ALL THE NECESSARY UNDERGROUND POOL, SPA, LIGHTING AND IRRIGATION PIPING

AND SLEEVING WITH ALL HARDSCAPE ELEMENTS. 3. CONTRACTOR SHALL COORDINATE ALL SIDEWALK CONSTRUCTION WITH THE CIVIL ENGINEER'S SITE ACCESSIBILITY PLAN. SHOULD A

DISCREPANCY EXIST BETWEEN THE PLANS, THE CONTRACTOR SHALL NOTIFY THE LANDSCAPE ARCHITECT IMMEDIATELY. ALL FINISH FLOOR ELEVATIONS, WALKWAY ELEVATIONS, TOP OF WALL AND TOP OF FOOTING ELEVATIONS AND ACCESSIBILITY PLANS HAVE BEEN PROVIDED BY OTHERS. ALL VERTICAL CONTROLS ASSOCIATED WITH THE PROJECT ARE THE RESPONSIBILITY OF THE CIVIL ENGINEER. 4. PROVIDE POSITIVE DRAINAGE AWAY FROM BUILDINGS, WATER FEATURES, POOLS, SPA'S, ETC. INTO LANDSCAPE AREAS AND/OR SURFACE DRAINS WHICH CONNECT INTO A SUB-SURFACE DRAINAGE SYSTEM PER CIVIL PLANS TO ENSURE WATER PONDING DOES NOT

OCCUR ON ANY FINISHED PROJECT SURFACE. 5. ALL FORM WORK FOR WALKWAYS SHALL BE APPROVED BY THE LANDSCAPE ARCHITECT OR THE OWNER'S REPRESENTATIVE PRIOR TO

6. ALL CURVILINEAR WALKS TO BE SMOOTH WITH EVEN RADII, VOID OF POINTS AND FLAT SPOTS.

7. SUBMIT COLOR SAMPLES OF ALL INTEGRAL COLOR HARDSCAPE ELEMENTS TO LANDSCAPE ARCHITECT REPRESENTATIVE FOR APPROVAL PRIOR TO CONSTRUCTION.

8. ALL STUCCO TO BE HARD TROWELL, SMOOTH FINISH UNLESS OTHERWISE INDICATED ON PLANS.

9. CONTRACTOR TO SUBMIT WALLS AND SHADE STRUCTURES AS SHOP DRAWINGS FOR APPROVAL UNDER SEPARATE PERMIT. 10. APPLY WATERPROOFING, NECESSARY WEEP HOLES, AND GRADED BACKFILL TO ALL VERTICAL RETAINING WALLS. APPLY

WATERPROOFING MATERIAL TO WITHIN 3" MAX OF FINISHED GRADE.

11. SHOULD PLANTING POTS OCCUR ON PLANS AND UNLESS OTHERWISE INDICATED, SUPPLY DRIP IRRIGATION TO ALL PLANTING POTS AND ENSURE POTS HAVE A PVC IRRIGATION AND DRAIN SYSTEM, NECESSARY SOIL MIX, PROPER FILTER FABRIC AND ADEQUATE WATERPROOFING INSIDE AND AT BASE SO LEAKING ONTO DECK SURFACE DOES NOT OCCUR. INSTALL IRRIGATION AND DRAIN PVC UP THROUGH BOTTOM OF POT PER THE POT MANUFACTURER SPECIFICATIONS. COORDINATE BASE SAUCER SIZE AND TYPE WITH

MANUFACTURER. 12. PROVIDE GAS AND A MANUAL ON/OFF SWITCH TO BBQ AND FIREPLACE (SHOULD SAID AMENITIES OCCUR ON PLANS). 13. IF VEHICULAR ENTRY GATES ARE PRESENT, PROVIDE A STROBE SENSOR AND KNOX ENTRY ACCESS SYSTEM WHICH INCLUDES A KNOX KEY BOX, KEY CYLINDER, AND AN OVERRIDE & PER-EMPTION STROBE SWITCH FOR AUTOMATIC GATES.

#### ADA/FH NOTES

REQUIREMENTS PER THE FAIR HOUSING AMENDMENTS ACT OF 1998:

1. CONTRACTOR IS RESPONSIBLE FOR CONSTRUCTING SIDEWALKS THAT MEET ALL STATE AND FEDERAL REQUIREMENTS INCLUDING, BUT NOT LIMITED TO, THE AMERICANS WITH DISABILITIES ACT AND THE FAIR HOUSING GUIDELINES.

2. AN ACCESSIBLE ROUTE SHALL BE PROVIDED FROM ALL GROUND FLOOR ADAPTABLE APARTMENT UNITS TO ALL PUBLIC AND COMMON USE AREAS SUCH AS RECREATION AREAS, CLUBHOUSE, OFFICE BUILDING, POOL AREAS, CITY SIDEWALKS, BUS STOPS.

3. THE MAXIMUM ALLOWED SLOPE OF ALL ACCESSIBLE ROUTES SHALL NOT EXCEED 5 PERCENT (1' IN 20'). ANY WALK THAT IS STEEPER SHALL BE DESIGNED AS A RAMP.

4. MAXIMUM CROSS SLOPE OF ALL ACCESSIBLE ROUTES IS 2% (1' IN 48')

5. ACCESSIBLE ROUTE SIDEWALKS, ADJACENT TO VEHICULAR OVERHANGS, SHALL BE A MIN. OF 36" CLEAR.

6. RAMPS SHALL NOT EXCEED A SLOPE OF 8.33%

7. RAMPS WHICH EXTEND A RUN GREATER THAN SIX FEET IN LENGTH MUST HAVE HANDRAILS ON EACH SIDE. 8. RAMPS SHALL NOT EXCEED A SINGLE RUN VERTICAL GRADE DIFFERENCE OF 30 INCHES.

9. ALL RAMPS SHALL HAVE A 5 FOOT CLEAR LANDING WITH A MAX. OF 2% SLOPE AT THE TOP AND BOTTOM OF RAMP.

10. ACCESSIBLE PARKING SPACES SHALL BE 8' WIDE WITH AN 5' WIDE ADJACENT AISLE FOR VAN'S. TWO SPACES MAY SHARE ONE ACCESSIBLE AISLE.

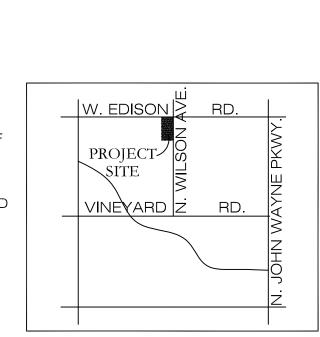
11. SPACES AND AISLES SHALL NOT EXCEED A 2% SLOPE IN ANY DIRECTION.

12. CURB RAMPS MUST CONNECT TO ACCESS AISLE (AS OPPOSED TO PARKING SPACE ITSELF).

13. CURB RAMP SHALL NOT EXTEND INTO ACCESS AISLE. FLAIR SIDES OF CURB RAMP MUST BE 8.33% (1' IN 48') MAXIMUM. 14. PROVIDE APPROPRIATE PAINTED ACCESSIBLE SYMBOL IN SPACE AND 45 DEGREE STRIPING WITHIN ADJACENT ACCESS AISLE.

15. PROVIDE A POLE MOUNTED SIGN AT EACH SPACE WITH THE INTERNATIONAL SYMBOL OF ACCESSIBILITY PER CITY/COUNTY STANDARD 16. A CURB RAMP MUST BE PROVIDED AT EACH END OF AN ACCESSIBLE CROSSWALK. MAXIMUM SLOPE OF CURB RAMP SHALL BE 8.33%

AND A MAXIMUM SLOPE OF FLARED SIDES SHALL ALSO BE 8.33% 17. CROSSWALK SHOULD BE AS CLOSE TO PERPENDICULAR (90 DEGREES) TO THE DRIVEWAY AS POSSIBLE.



SITE REQUIREMENTS:

AT INSTALLATION

\*GROUNDCOVER: 40% COVERAGE

SPECIFICATIONS LATEST EDITION.

CITY OF MARICOPA NOTES



#### OVERALL SITE KEY PLAN (NTS)

PHOENIX, AZ 85044

LE2.10 &

L6.40

LI<u>3.10</u> & -

L 7.10

#### PLANT MATERIAL PROJECT SITE DATA CALCULATIONS ...GREAT WESTERN DEVELOPERS 13404 S. 33RD COURT

ROW.: EXISTING ZONING.... .. GR (MU-H) 1 TREE EVERY 25 LF GROSS LOT AREA... ON-SITE: 1 TREE & 6 SHRUBS PER 650 SF NET LOT AREA.... . 35,342 SF **BUFFER AREAS:** 

THE DEVELOPMENT, IN ACCORDANCE WITH THE APPROVED LANDSCAPE PLAN.

POOL NOTES & BARRIER GUIDELINES

SIDE OF THE BARRIER THAT FACES AWAY FROM THE SWIMMING POOL.

SIDE OF THE BARRIER THAT FACES AWAY FROM THE SWIMMING POOL.

7. GATES MUST MEET SAME BARRIER REQUIREMENTS AS FENCING LISTED ABOVE.

OPEN TOWARD THE SIDE OF THE BARRIER THAT FACES AWAY FROM THE SWIMMING POOL.

(1-3/4") BETWEEN ANY HORIZONTAL OF VERTICAL MEMBERS.

IF NOT SELF-CLOSING / SELF-LATCHING.

POOL EDGE

FROM THE DATE THAT THE ASSOCIATION OR PROPERTY OWNER IS NOTIFIED BY THE CITY.

BLDG. AREA.... 1 TREE & 2 SHRUBS PER 25 LF R.O.W. LANDSCAPE AREA.... .. 3.584 SF \*TREES: 50% TO BE 24" BOX OTHER LANDSCAPE AREA... ..... 15,203 SF TOTAL LANDSCAPE AREA...... 18,787 SF AT INSTALLATION \* SHRUBS: 50% TO BE 5 GAL

1. INDIVIDUAL PROPERTY OWNERS, AND/OR PROPERTY OWNER'S ASSOCIATION SHALL PROPERLY MAINTAIN ALL

3. ALL TREES SHALL MEET GROWTH DIMENSIONS OF ARIZONA NURSERY ASSOCIATION RECOMMENDED TREE

1. THE POOL/SPA AND/OR SPLASH PAD CONTRACTOR SHALL PROVIDE SHOP DRAWINGS AND ALL NECESSARY

SAFETY HANDRAIL AND LADDER DESIGN AND LOCATION AND ALL LIFE SAFETY ITEMS PER LOCAL CODE.

INCHES (2"), MEASURED ON THE SIDE OF THE BARRIER THAT FACES AWAY FROM THE SWIMMING POOL.

CONTRUCTION DETAILS AND SPECIFICATIONS TO THE LANDSCAPE ARCHITECT FOR REVIEW AND APPROVAL PRIOR TO

2. THE TOP OF THE POOL BARRIER SHALL BE AT LEAST FIVE FEET (5') IN HEIGHT ABOVE GRADE AS MEASURED FROM THE

CONSTRUCTION (SHOULD SAID AMENITIES OCCUR ON PLANS). POOL CONTRACTOR RESPONSIBLE FOR FINAL STAIR,

3. THE MAXIMUM VERTICAL CLEARANCE BETWEEN GRADE AND THE BOTTOM OF THE POOL BARRIER SHALL BE TWO

4. WHEN DECORATIVE HORIZONTAL MEMBERS ARE INCORPORATED, A MINIMUM OF FIFTY INCHES (50") BETWEEN THE

VERTICALLY. SAID HORIZONTAL MEMBERS SHALL BE LOCATED/WELDED TO THE INTERIOR/POOL SIDE OF THE FENCE

6. IF A BARRIER IS COMPOSED OF A COMBINATION OF CMU AND STEEL FENCING, THE FENCING PORTION SHALL BE

MOUNTED TO THE BLOCK SO THAT THERE IS A CONTINUOUS PLANE ON THE SIDE OF THE BARRIER THAT FACES AWAY

8. GATES AND OTHER OPENINGS TO SWIMMING POOL AREA SHALL BE SELF-CLOSING, SELF-LATCHING DEVICES WHICH

9. GATE LATCHING/LOCKING DEVICES SHOULD BE MOUNTED A MIN. OF 54" ABOVE FINISH GRADE AS MEASURED ON THE

10. NON-PEDESTRIAN GATES OVER FOUR FEET (4') WIDE SUCH AS DOUBLE GATES FOR VEHICLES, MUST BE PADLOCKED

11. MAINTAIN 4' CLEAR DECK SPACE AROUND PERIMETER OF POOL AND 20' CLEAR BETWEEN PLANTERS ADJACENT TO

FROM THE SWIMMING POOL. THE SPACE BETWEEN THE FENCE AND CMU SHALL NOT EXCEED ONE HALF INCH (1/2").

TOP SURFACE OF THE BOTTOM HORIZONTAL MEMBER AND THE NEXT HIGHER HORIZONTAL MEMBER, WHEN MEASURED

5. WHEN STEEL WIRE MESH IS INCORPORATED, THE ARE NO OPENINGS GREATER THAN ONE AND THREE-QUARTER INCH

LANDSCAPE MATERIALS AND LANDSCAPED AREAS. INCLUDING THAT WITHIN THE PUBLIC RIGHTS-OF-WAY, ADJACENT TO

2. REPLACEMENT OF DEAD TREES ALONG ARTERIAL, COLLECTOR AND LOCAL STREETS SHALL BE BY THE INDIVIDUAL

PROPERTY OWNERS AND THE HOMEOWNER'S ASSOCIATION AND SHALL BE COMPLETED WITHIN THREE (3) MONTHS

#### SHEET INDEX

L2.10 PLANTING PLAN L3.10 PLANTING PLAN L5.10 HARDSCAPE DETAILS

. 128,875 SF (2.95 AC) L6.10 IRRIGATION PLAN .. 97,588 SF (2.24 AC L7.10 IRRIGATION PLAN L8.10 LANDSCAPE DETAILS

L9.10 LANDSCAPE SPECIFICATIONS L10.10 IRRIGATION SPECIFICATIONS

L4.10 ENLARGED POOL PLAN & DETAILS

L1.10 COVER

GUARANTEED FOR A MINIMUM PERIOD OF 90 DAYS FROM THE DATE OF FINAL APPROVAL BY THE CITY/OWNER. ANY PLANT MATERIALS NOT APPROVED BY CITY/OWNER PRIOR TO OCTOBER 1 OF THE CALENDER YEAR IN WHICH THEY ARE INSTALLED SHALL BE FURTHER GUARANTEED UNTIL MAY 20TH OF THE FOLLOWING CALENDAR YEAR. 22. TREES, SHRUBS, VINES, GROUNDCOVERS AND TURF WHICH HAVE TO BE REPLACED UNDER THE TERMS OF THE GUARANTEE SHALL BE GUARANTEED FOR AN ADDITIONAL 90 DAYS FROM THE DATE OF REPLACEMENT.

23. LOCATE ALL NEW SHRUBS, ACCENTS, GROUNDCOVER, ETC. TO ENSURE THAT NO PART OF THE PLANT ENCROACHES ONTO ANY HARDSCAPE AREAS WHEN MATURE DIAMETER IS REACHED.

1. CONTRACTOR IS RESPONSIBLE TO VERIFY ALL SITE CONDITIONS AND UNDERGROUND UTILITIES PRIOR TO THE START OF

3. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL FINISHED GRADES AND FOR MAINTAINING POSITIVE DRAINAGE

4. QUANTITES ON PLAN ARE PROVIDED FOR BIDDING PURPOSES ONLY. CONTRACTOR SHALL VERIFY ALL MATERIAL QUANTITIES

TREE HEIGHT AND CALIPER SHALL COMPLY WITH 'ARIZONA NURSERY ASSOCIATION SPECIFICATIONS' FOR THAT TYPE AND SIZE

7. LANDSCAPE ARCHITECT, OWNER AND LOCAL MUNICIPALITY RESERVES THE RIGHT TO REJECT ANY PLANT MATERIAL THAT IS

9. ALL TREE LOCATIONS TO BE STAKED BY THE LANDSCAPE CONTRACTOR AND APPROVED BY THE LANDSCAPE ARCHITECT

10. UNDER NO CIRCUMSTANCE SHALL ANY TREE BE PLANTED WITHIN 6' OF ANY BUILDING WITHOUT THE EXPRESS WRITTEN

12. SHRUBS, AT MATURITY, TO BE A MIN. OF 6' FROM ANY SIDE OF A FIRE HYDRANT. CONFIRM ALL HYDRANT LOCATION WITH

15. ALL AREAS DISTURBED DURING CONSTRUCTION ARE TO BE FINE GRADED AND TREATED TO BLEND NATURALLY WITH ALL

17. CONTRACTOR SHALL PROVIDE A 2 LB SAMPLE OF THE PROPOSED DECOMPOSED GRANITE FOR REVIEW AND APPROVAL BY

18. CONTRACTOR, AT NO ADDITIONAL COST TO THE OWNER, SHALL SUSPEND PLANTING DURING PERIODS OF NEAR FREEZING /

19. ALL SITE IMPROVEMENTS, INCLUDING LANDSCAPE AND SITE CLEAN UP MUST BE COMPLETED PRIOR TO FINAL APPROVAL OR

20. ALL LANDSCAPE AREAS AND MATERIALS, INCLUDING THOSE IN RIGHTS-OF-WAY, SHALL BE MAINTAINED IN A HEALTHY, NEAT

FROST DANGER. CONTRACTOR TO BE LIABLE FOR FROST DAMAGE TO STOCK PLANTED PRIOR, DURING, OR AFTER A FROST

CLEAN, WEED-FREE CONDITION. THIS SHALL BE THE RESPONSIBILITY OF THE OWNER UNTIL THE COMMUNITY ASSOCIATION

21. ALL TREES TO BE UNCONDITIONALLY GUARANTEED FOR ONE YEAR AFTER INSTALLATION. ALL OTHER PLANTS SHALL BE

16. ALL BOULDERS ARE TO BE GRANITE 'SURFACE SELECT', SIZED PER PLAN, AND BURIED 1/3 BELOW SOIL FINISH GRADE

14. FOR ALL TREE PLANTING THAT ENCOUNTERS HARDPAN/CALICHE PROVIDE SEPARATE UNIT PRICE TO INSTALL TREES WITH AN

2. CONTRACTOR IS RESPONSIBLE TO REPAIR AND/OR REPLACE ANY DAMAGES MADE TO EXISTING PLANT MATERIAL,

AWAY FROM ALL BUILDINGS. ALL FINISHED GRADES TO BE APPROVED BY THE LANDSCAPE ARCHITECT PRIOR TO THE

5. NO PLANT SUBSTITUTIONS ALLOWED UNLESS APPROVED IN WRITING BY LANDSCAPE ARCHITECT AND THE LOCAL

6. PLANT MATERIAL TO BE APPROVED BY THE LANDSCAPE ARCHITECT PRIOR TO DELIVERY TO SITE (TWO WEEK NOTICE).

8. ALL TREES SHALL BE UPRIGHT STANDARD OR HIGH-BREAKING MULTI-TRUNK. LOW BREAKING TREES SHALL NOT BE

11. TREES AND SHRUBS SHALL BE PLACED A MINIMUM OF 6' FROM PUBLIC ACCESSWAYS, UTILITY CABINETS AND FIRE

13. TREES ADJACENT TO PEDESTRIAN WALKWAYS SHOULD HAVE A MINIMUM CANOPY CLEARANCE OF 6'-8".

CONSTRUCTION AND NOTIFY LANDSCAPE ARCHITECT AND OWNER OF ANY DISCREPENCIES.

INSTALLATION OF ANY PLANT MATERIAL. SLOPES NOT TO EXCEED 4:1.

DETERMINED TO NOT SATISFY THE OVERALL PROJECT DESIGN INTENT.

ILLUSTRATED ON PLANS PRIOR TO BIDDING PROJECT.

MUNICIPALITY WHERE WHICH PLANS ARE APPROVED.

UNDERGROUND UTILITIES, IRRIGATION LINES, ELECTRICAL LINES, ETC. AT HIS OR HER EXPENSE

#### **IRRIGATION NOTES**

TAKES OVER MAINTENANCE.

LANDSCAPE NOTES

APPROVED OR INSTALLED.

PRIOR TO ANY HOLES BEING DUG.

THE CIVIL ENGINEERING PLANS.

NEW CONSTRUCTION.

APPROVAL OF THE LANDSCAPE ARCHITECT.

THE LANDSCAPE ARCHITECT AND OWNER.

EPISODE OR FORECAST HAS OCCURRED.

1. CONTRACTOR IS REPSONSIBLE FOR VERIFYING THE LOCATION OF ALL EXISTING UNDERGROUND UTILITIES AND SHALL BE RESPONSIBLE FOR ALL DAMAGES WHICH OCCUR DURING NEW CONSTRUCTION

2. ALL MAJOR EQUIP., VALVES AND PIPING, ETC. ARE DIAGRAMMATIC AND NOT TO SCALE TO ENSURE GRAPHIC CLARITY. CONTRACTOR SHALL BE RESPONSIBLE FOR PROPER PLACEMENT OF SYSTEM COMPONENTS.

3. THE IRRIGATION PLAN IS DIAGRAMMATIC AND APPROXIMATE AND IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE WATER SUPPLY AND PRESSURE IN THE FIELD. ADJUST PIPE SIZE SHOWN ON PLANS AS NECESSARY TO ACHIEVE PROPER FLOW AND PRESSURE TO ALL TURF SPRAY HEADS AND DRIP EMITTERS AND ADJUST THE LOCATION OF OR WATERING RATE OF ANY HEAD OR DRIP EMMITER AS NECESSARY TO PROVIDE FULL AND ADEQUATE COVERAGE. ADD ADDITIONAL HEADS AS

NECESSARY TO ENSURE 100% COVERAGE TO TURF AND OPTIMUM GROWING CONDITIONS FOR ALL PLANT MATERIAL. CONTRACTOR TO ASSUME LIABIILITY FOR INSUFFICIENT IRRIGATION. 4. EXACT QUANTITIES OF EQUIPMENT REMAIN THE RESPONSIBILITY OF THE CONTRACTOR. CONTRACTOR TO PROVIDE MATERIALS

TAKE-OFF LIST. NO ADDITIONAL COSTS TO THE OWNER WILL BE ACCEPTED FOLLOWING THE BIDDING OF THIS PROJECT. 5. SUBMIT SHOP DRAWINGS OF PROPOSED SYSTEM, LAYOUT AND ANY PRE-AGREED UPON EQUIPMENT AND/OR LAYOUT MODIFICATION FOR LA APPROVAL PRIOR TO INSTALLATION. MAINTAIN 'AS-BUILT' PLANS ON A DAILY BASIS NOTING ALL

MODIFICATIONS TO INSTALLATION OF ENTIRE SYSTEM THAT DIFFERS FROM PRE-AGREED UPON PLAN. ALL EQUIPMENT BID "AS EQUAL" MUST BE APPROVED BY OWNER AND/OR OWNER'S REP. CONTRACTOR TO SUBMIT EQUIPMENT MANUALS, VALVE SCHEDULE, KEYS AND ONE REPRODUCIBLE SET OF 'AS-BUILT' MYLAR PLANS TO OWNER PRIOR TO FINAL ACCEPTANCE. 6. THE METER AND BACKFLOW PREVENTER ASSEMBLY SHALL BE A MANUF. AND MODEL APPROVED BY THE LOCAL, STATE

7. THE BACKFLOW PREVENTION ASSEBLY SHALL BE TESTED AND APPROVED BY A CERTIFIED TECHNICIAN REGISTERED WITH THE LOCAL MUNICIPALITY, PRIOR TO THE REQUEST FOR FINAL INSPECTION.

8. IN ACCORDANCE WITH A.A.C. R18-4-119, ALL MATERIALS ADDED AFTER JAN. 1, 1993 WHICH MAY COME IN CONTACT WITH DRINKING WATER, SHALL CONFORM TO NATIONAL SANITATION FOUNDATION STANDARDS 60 AND 61. 9. ALL IRRIGATION PIPING LOCATED UNDER IMPERVIOUS SURFACE MATERIAL SHALL BE PLACED PRIOR TO PAVING AND

REGARDLESS OF SIZE AND CLASS, SHALL BE ENCASED IN A SCH 40 PVC PIPE SLEEVE A MIN. OF TWICE THE DIAM. OF THE PIPE RUNNING THROUGH THE SLEEVE. EXTEND SLEEVES INTO PLANTING AREAS A MIN. OF 3 FEET BEYOND EDGE OF HARDSCAPE PAVEMENT. PROVIDE SEPERATE SLEEVE FOR WIRE AT EACH SLEEVE LOCATION.

10. CONTRACTOR IS RESPONDSIBLE TO PROVIDE POWER TO THE IRRIGATION CONTROLLER.

11. CONTROLLERS ARE TO BE PROGRAMMED TO ALLOW SUFFICIENT FLOW RATES ARE MAINTAINED THROUGHOUT THE SYSTEM. 12. ALL VALVE BOXES (IRRIGATION, GATE VALVES, FLUSH CAP, WATER FEATURES, CONTROL WIRE ETC.) ARE TO BE TAN IN COLOR AND PLACED IN DECOMPOSED GRANITE/PLANTING AREAS INSIDE THE PROPERTY LINE ONLY. UNDER NO CIRCUMSTANCES ARE THE VALVE BOXES TO PLACED IN A LAWN OR HARDSCAPE AREA.

13. SCREEN SERVICE EQUIPMENT WITH LANDSCAPE MATERIAL FROM VIEW OF STREETS, WALKWAYS AND ADJACENT PROPERTIES.

14. 24 VOLT WIRING TO BE #14 UFUL DIRECT BURIAL-SOLID COPPER.

15. INSTALL METALLIC LOCATOR TAPE APPROXIMATELY BELOW GRADE, ABOVE ALL SLEEVE AND MAINLINE LOCATIONS, 16. WIRE SLEEVE TO BE 2" CLASS 200 PVC (MIN.)

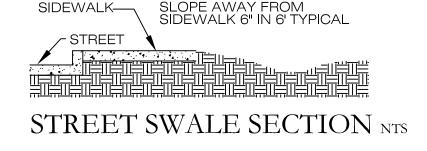
17. EXTEND (2) ADDITIONAL CONTROL WIRES TO FURTHEST VALVE BOX, WIRE TO CONTROLLER, COIL WIRE AND LABEL STATION

18. SUBMIT AS-BUILT RECORD DRAWINGS ILLUSTRATING COMPLETE IRRIGATIONS SYSTEM TO LA/OWNER REP. AT TIME OF COMPLETION OF CONSTRUCTION AND PRIOR TO FINAL PAYMENT.

19. CONTRACTOR TO LOCATE TURF SPRAY HEADS 6" FROM ALL HARDSCAPE SURFACES THAT ABUT TURF AND USE HIS/HER BEST PROFESSIONAL JUDGEMENT WHEN INSTALLING LAWN AND TURF SPRAY HEADS TO ENSURE SPRAY IS NOT BLOCKED BY BERMS, TREES OR OTHER STRUCTURES.

20. ALL EMISSION POINTS TO BE LOCATED ON THE UPHILL SIDE OF PLANT MATERIAL. ONE EMISSION POINT TO BE LOCATED AT THE EDGE OF PLANT ROOTBALL, WITH ADDITIONAL POINTS SPACED EQUALLY AROUND THE PERIMTER EDGE OF PLANTING PIT. 21. SCREEN ENCLOSURE TO BE GUARDSHACK AS MANUFACTURED BY BACKFLOW PREVENTION DEVICE ENCLOSURES INC., OR APPROVED EQUAL. FINISH: POWDER COAT, COLOR: DESERT TAN. PROVIDE 4" THICK CONCRETE SLAB FOR ENCLOSURE

22. PALMS, TREES, TREES IN TURF, SHRUBS/GROUNDCOVERS AND TURF AREAS SHALL BE VALVED SEPARATELY. PALMS ARE TO BE PLACED ON A SEPERATE IRRIGATION VALVE WITH A MINIMUM OF 3 MULTI-PORT EMITTERS.







7296 east paradise drive scottsdale, arizona 85260 phone: 602.790.7247 email: jeffd7171@gmail.com

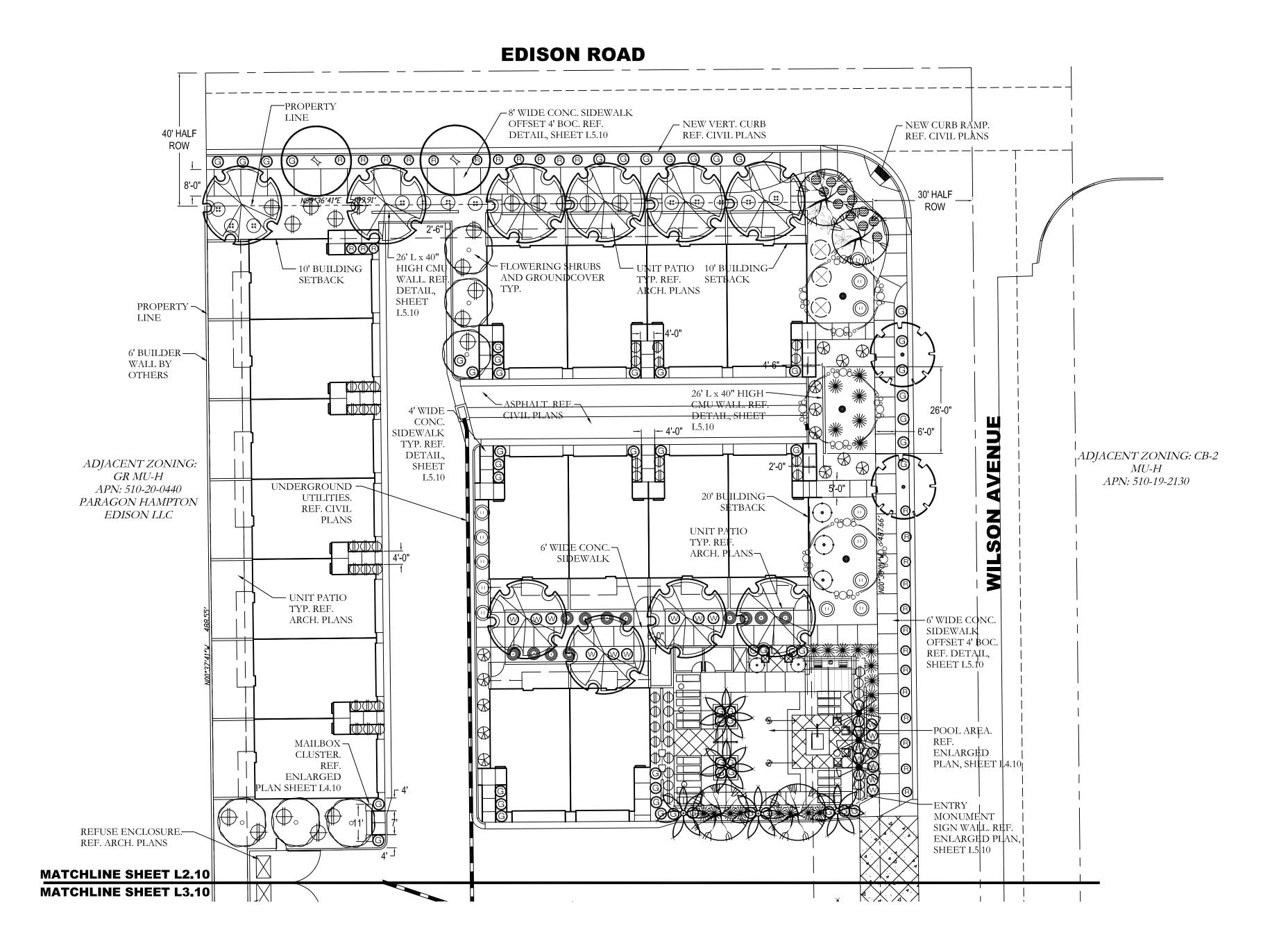
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22-114 Original Submittal Date:

Project No.

Project Phase & Revisions: **PRELIM: April 12, 2022** CD'S #1: Aug. 19, 2022

COVER SHEET



#### PLANT MATERIAL SCHEDULE

SYMBOL SPECIES	SIZE / QTY.
TREES AND PALMS	
ULMUS PARVIFOLIA CHINESE ELM	24" BOX / 11
ACACIA SALICINA WILLOW ACACIA	24" BOX / 9
ACACIA SMALLII SWEET ACACIA	24" BOX / 2
JACARANDA MIMOSIFOLIA JACARANDA	24" BOX / 10
PISTACIA 'RED PUSH' RED PUSH PISTACHE	24" BOX / 11
FRAXINUS VELUTINA ARIZONA ASH	24" BOX / 14
PHOENIX DACTYLIFERA DATE PALM	20' HT. / 7
SYAGRUS ROMANZOFFIANUM QUEEN PALM	24" BOX / 3

ALL TREES LOCATED IN PARKING LOT ISLANDS OR ADJACENT TO HARDSCAPE AND/OR PEDESTRIAN AREAS SHALL BE SINGLE-TRUNK, STANDARD VARIETIES.

#### SHRUBS, SUCCULENTS & CACTI

	RUELLIA PENINSULARIS	5 GAL / 28
	BAJA RUELLIA	
$(\searrow)$	TECOMA STANS V. ANGUSTATA	5 GAL / 9
\\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	YELLOW BELLS	
	TECOMA STANS 'HYBRID'	5 GAL / 10
	ORANGE JUBILEE	
	CALLIANDRA CALIFORNICA	5 GAL / 17
	BAJA RED FAIRY DUSTER	
	MUHLENBERGIA RIGENS	5 GAL / 51
	DEER GRASS	
$(\parallel)$	SENNA ARTEMISIOIDES	5 GAL / 37
$\Psi_{\mathcal{H}}$	GREEN FEATHERY SENNA	
	DIETES VEGETA	5 GAL / 96
$\mathcal{A}^{\mathbb{W}}$	FORTNIGHT LILY	E O A L / 44
(+)	BOUGAINVILLEA SPP. TORCH GLOW	5 GAL / 41
		E CAL / 20
(( 11 ))	LEUCOPHYLLUM CANDIDUM VIOLET SILVERLEAF	5 GAL / 39
		E C A L / C
	HESPERALOE FUNIFERA GIANT HESPERALOE	5 GAL / 9
200	GIANT FILST LITALUL	

#### GROUNDCOVER

G	LANTANA MONTEVIDENSIS NEW GOLD	1 GAL / 11
	LANTANA MONTIVIDENSIS TRAILING WHITE	1 GAL / 33
(R)	LANTANA MONTEVIDENSIS TRAILING RED	1 GAL / 53
	RUELLIA BRITONIANA 'KATIE' DWARF PURPLE RUELLIA	1 GAL / 32

#### MATERIALS

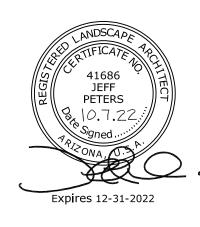
NO 3/4" LANDSCAPE ROCK 2" DEPTH IN ALL
SYMBOL NON-HARDSCAPE AREAS. COLOR: MTN. VISTA
BROWN PER CITY OF MARICOPA. SUBMIT SAMPLES
FOR PRIOR APPROVAL.

# KEY MAP

0 10 20



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# **Z O**

20390 N. Wilson Ave Maricopa, Arizona 85

Project No. **22-114** 

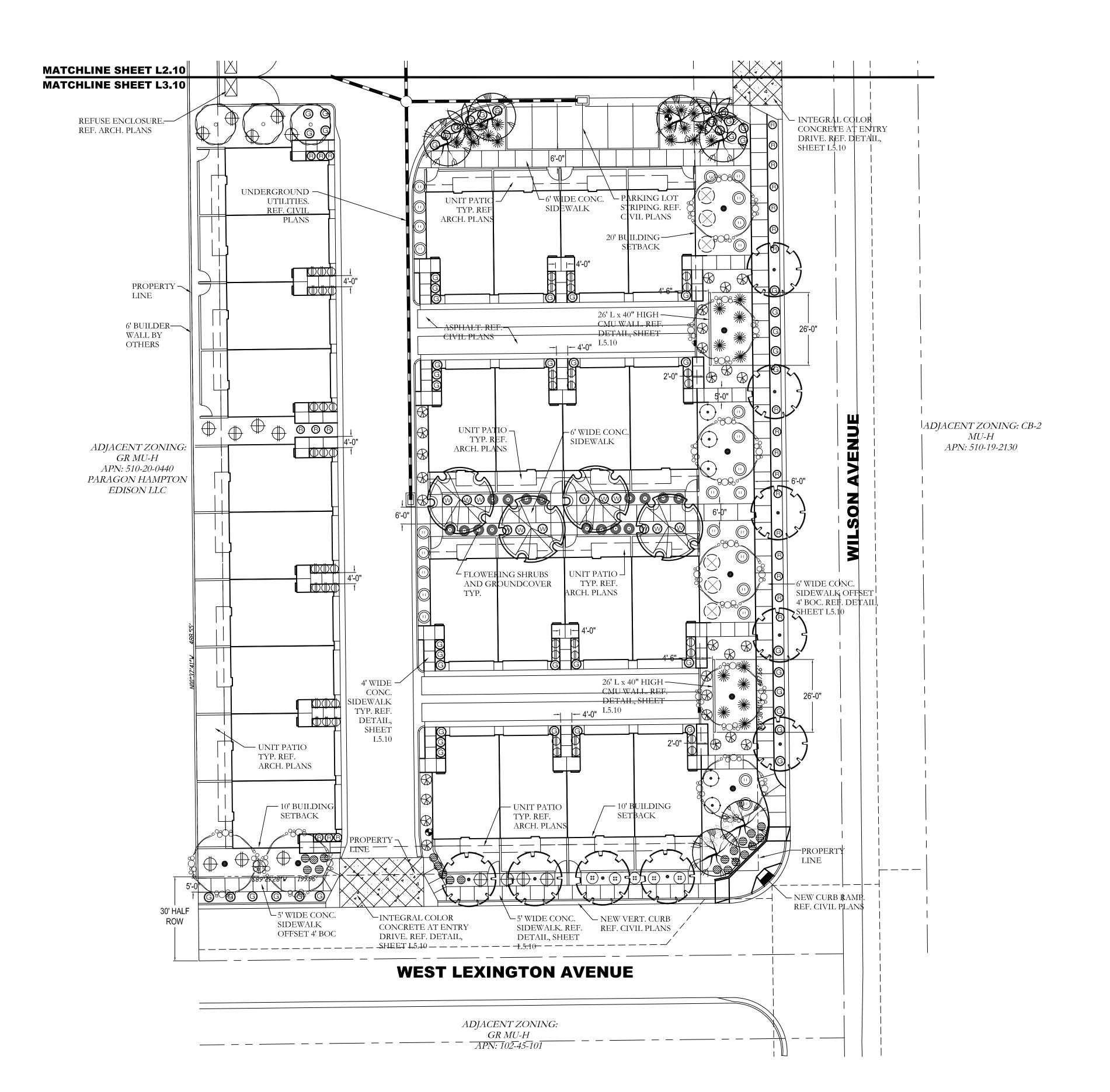
Original Submittal Date:

Project Phase & Revisions: PRELIM: April 12, 2022 CD'S #1: Aug. 19, 2022

> PLANTING PLAN

SHEET NO.

L2 of 1 C



#### PLANT MATERIAL SCHEDULE

SYMBOL SPECIES	SIZE / QTY.
TREES AND PALMS	
× 9508	
ULMUS PARVIFOLIA CHINESE ELM	24" BOX / 11
ACACIA SALICINA WILLOW ACACIA	24" BOX / 9
ACACIA SMALLII SWEET ACACIA	24" BOX / 2
JACARANDA MIMOSIFOLIA JACARANDA	24" BOX / 10
PISTACIA 'RED PUSH' RED PUSH PISTACHE	24" BOX / 11
FRAXINUS VELUTINA ARIZONA ASH	24" BOX / 14
PHOENIX DACTYLIFERA DATE PALM	20' HT. / 7
SYAGRUS ROMANZOFFIANUM QUEEN PALM	24" BOX / 3

ALL TREES LOCATED IN PARKING LOT ISLANDS OR ADJACENT TO HARDSCAPE AND/OR PEDESTRIAN AREAS SHALL BE SINGLE-TRUNK, STANDARD VARIETIES.

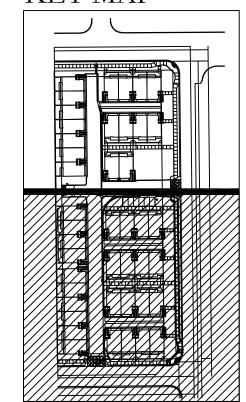
( <del>+</del> )	RUELLIA PENINSULARIS BAJA RUELLIA	5 GAL / 28
$(\widehat{\times})$	TECOMA STANS V. ANGUSTATA YELLOW BELLS	5 GAL / 9
•	TECOMA STANS 'HYBRID' ORANGE JUBILEE	5 GAL / 10
	CALLIANDRA CALIFORNICA BAJA RED FAIRY DUSTER	5 GAL / 17
	MUHLENBERGIA RIGENS DEER GRASS	5 GAL / 51
	SENNA ARTEMISIOIDES GREEN FEATHERY SENNA	5 GAL / 37
	DIETES VEGETA FORTNIGHT LILY	5 GAL / 96
	BOUGAINVILLEA SPP. TORCH GLOW	5 GAL / 41
	LEUCOPHYLLUM CANDIDUM VIOLET SILVERLEAF	5 GAL / 39
	HESPERALOE FUNIFERA GIANT HESPERALOE	5 GAL / 9
	2 COLUMN	

#### GROUNDCOVER

G	LANTANA MONTEVIDENSIS NEW GOLD	1 GAL / 119
	LANTANA MONTIVIDENSIS TRAILING WHITE	1 GAL / 33
(R)	LANTANA MONTEVIDENSIS TRAILING RED	1 GAL / 53
	RUELLIA BRITONIANA 'KATIE' DWARF PURPLE RUELLIA	1 GAL / 32

NO 3/4" LANDSCAPE ROCK 2" DEPTH IN ALL SYMBOL NON-HARDSCAPE AREAS. COLOR: MTN. VISTA

#### KEY MAP







SYMBOL	SPECIES	SIZE / Q
TREES A	ND PALMS	
9808		
•	ULMUS PARVIFOLIA CHINESE ELM	24" BOX /
80%	ACACIA SALICINA WILLOW ACACIA	24" BOX /
<b>\( \rightarrow\)</b>	ACACIA SMALLII SWEET ACACIA	24" BOX /
	JACARANDA MIMOSIFOLIA JACARANDA	24" BOX /
	PISTACIA 'RED PUSH' RED PUSH PISTACHE	24" BOX /
	FRAXINUS VELUTINA ARIZONA ASH	24" BOX /
	PHOENIX DACTYLIFERA DATE PALM	20' HT. / 7
	SYAGRUS ROMANZOFFIANUM QUFEN PALM	24" BOX /

#### SHRUBS, SUCCULENTS & CACTI

( <del>+</del> )	RUELLIA PENINSULARIS BAJA RUELLIA	5 GAL / 28
$(\widehat{\times})$	TECOMA STANS V. ANGUSTATA YELLOW BELLS	5 GAL / 9
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	HESPERALOE FUNIFERA GIANT HESPERALOE	5 GAL / 9
V		

ONG CIND CO VEN		
G	LANTANA MONTEVIDENSIS NEW GOLD	1 GAL /
	LANTANA MONTIVIDENSIS TRAILING WHITE	1 GAL / :
(R)	LANTANA MONTEVIDENSIS TRAILING RED	1 GAL / !
	RUELLIA BRITONIANA 'KATIE' DWARF PURPLE RUELLIA	1 GAL /

#### MATERIALS

BROWN PER CITY OF MARICOPA. SUBMIT SAMPLES FOR PRIOR APPROVAL.



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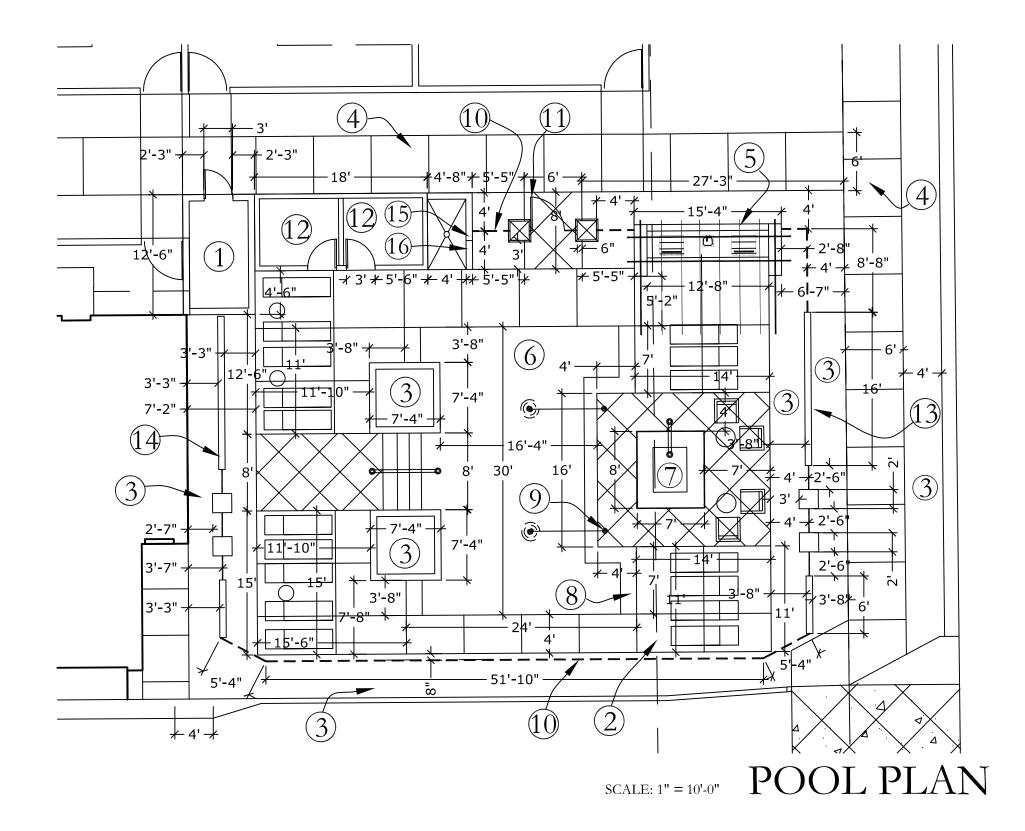
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Project No. 22-114

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> PLANTING PLAN



#### POOL AREA KEY NOTES

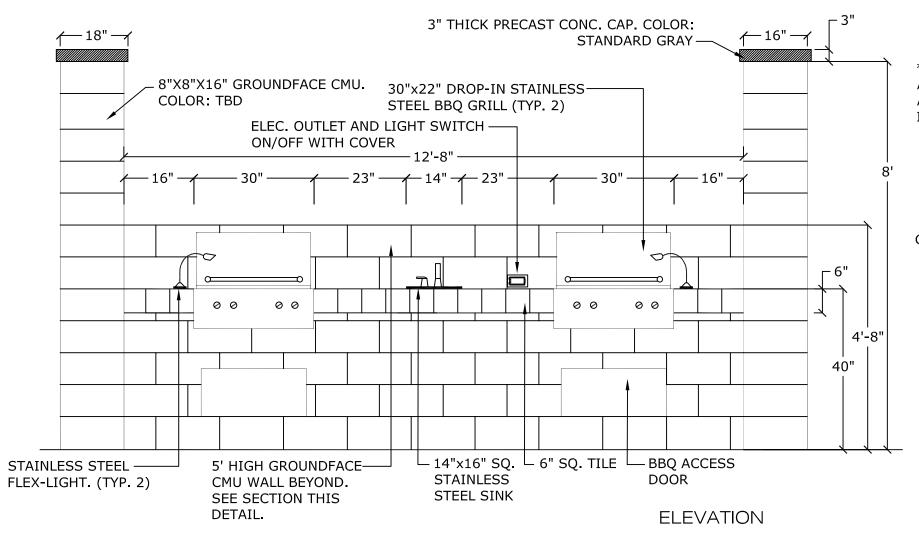
- 1) POOL EQUIPMENT AREA SURROUNDED BY A 6' HIGH CMU WALL AND 3' WIDE ACCESS GATE. GATE TO MATCH OVERALL POOL ENTRY GATE DESIGN.
- (2) KOOL DECK SURFACING OVER CONCRETE.
- (3) PLANTING AREA. REF. LANDSCAPE PLANS
- (4) 4" THICK CONCRETE. SEE DETAIL, SHEET L5.10
- (5) SHADE TRELLIS AND BUILT-IN BBQ. REF. DETAIL THIS SHEET
- (6) POOL. ACRYLIC ENHANCED PLASTER BY POOL CONTRACTOR
- (7) SPA. ACRYLIC ENHANCED PLASTER BY POOL CONTRACTOR
- (8) 20" WIDE BENCH SEAT IN POOL (TYP).
- (9) SPRAY JET AT SLAB GRADE BY POOL CONTRACTOR
- (10) 5' HIGH POOL FENCE. REF. DETAIL, SHEET L5.10
- (11) POOL ENTRY GATE. REF. DETAIL, SHEET L5.10
- (12) RESTROOMS. REF. ARCH. PLANS
- (13) ENTRY MONUMENT SIGN WALL. REF. DETAIL, SHEET L5.10
- (14) DECORATIVE WALL TO MATCH ENTRY MONUMENT SIGN WALL (NO COMMUNITY NAME OR ADDRESS AT THIS LOCATION). REF. DETAIL, SHEET L5.10
- (15) 6' HIGH CMU WALL POOL BARRIER PORTION AT SHOWER. REF. DETAIL, SHEET L5.10
- (16) 4' HIGH CMU WALL PORTION AT SHOWER. REF. DETAIL, SHEET L5.10

#### GENERAL NOTES

1. CONTRACTOR TO COORDINATE ALL POOL, SPA, IRRIGATION AND LIGHTING SLEEVING / UNDERGROUND PIPE WITH HARDSCAPE ELEMENTS.

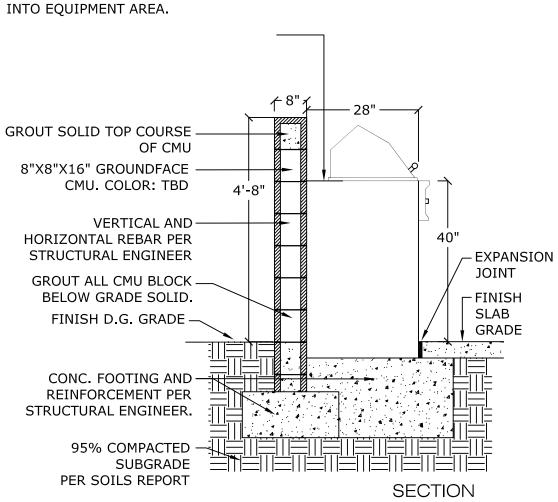
2. SUBMIT SHOP DRAWINGS OF POOL AND ALL ASSOCIATED ELEMENTS, INDLUDING COLOR SAMPLES TO OWNER REPRESENTATIVE FOR APPROVAL PRIOR TO CONSTRUCTION. 3. PROVIDE POSITIVE DRAINAGE AWAY FROM POOL AND BUILDING INTO SURFACE DRAINS PER GRADING PLANS 4. SITE FURNISHINGS BY OTHERS.

5. SHADE STRUCTURE TO BE SUBMITTED AS SHOP DRAWINGS AND APPROVED UNDER SEPARATE PERMIT. 6. LANDSCAPE ARCHITECT TO APPROVE ALL HARDSCAPE FORMWORK PRIOR TO THE POURING OF CONCRETE. 7. PROVIDE GAS AND A MANUAL ON/OFF SWITCH TO BBQ. 8. CONSTRUCT A 5' SCREEN WALL TO SURROUND POOL EQUIPMENT, MAINTAINING EQUIPMENT CLEAR ZONES AND WITH A MINIMUM 3' OPENING ON 1 SIDE FOR ACCESS.



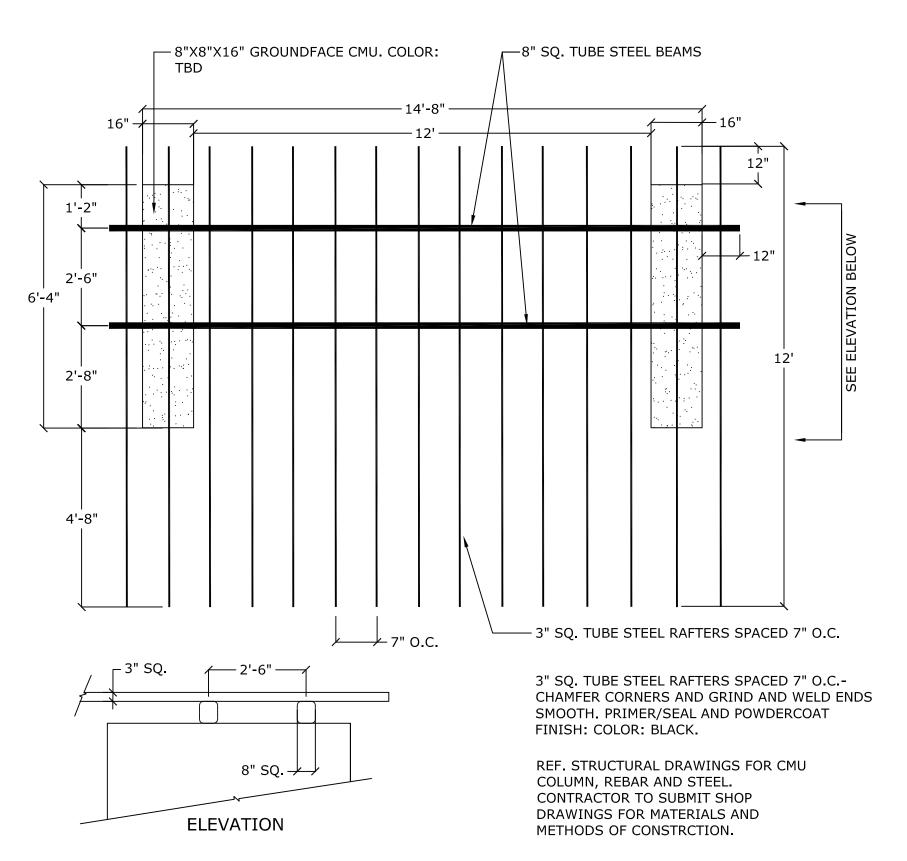
BBQ GRILL BY DYNAMIC COOKING SYSTEMS (DCS), FIRE MAGIC OR APPROVED EQUAL. SUBMIT SHOP DRAWING TO OWNER'S REPRESENTATIVE FOR FINAL APPROVAL. INSTALL ALL OUTDOOR APPLIANCES PER MANUF. SPECS. COORDINATE GAS FEED WITH PLUMBING CONTRACTOR.

\* TOP OF WALL/POOL BARRIER SHALL BE AT LEAST FIVE FEET (5') IN HEIGHT ABOVE GRADE AS MEASURED FROM THE SIDE OF THE BARRIER THAT FACES AWAY FROM THE SWIMMING POOL. REF. POOL GATE DETAIL ACCESS GATE



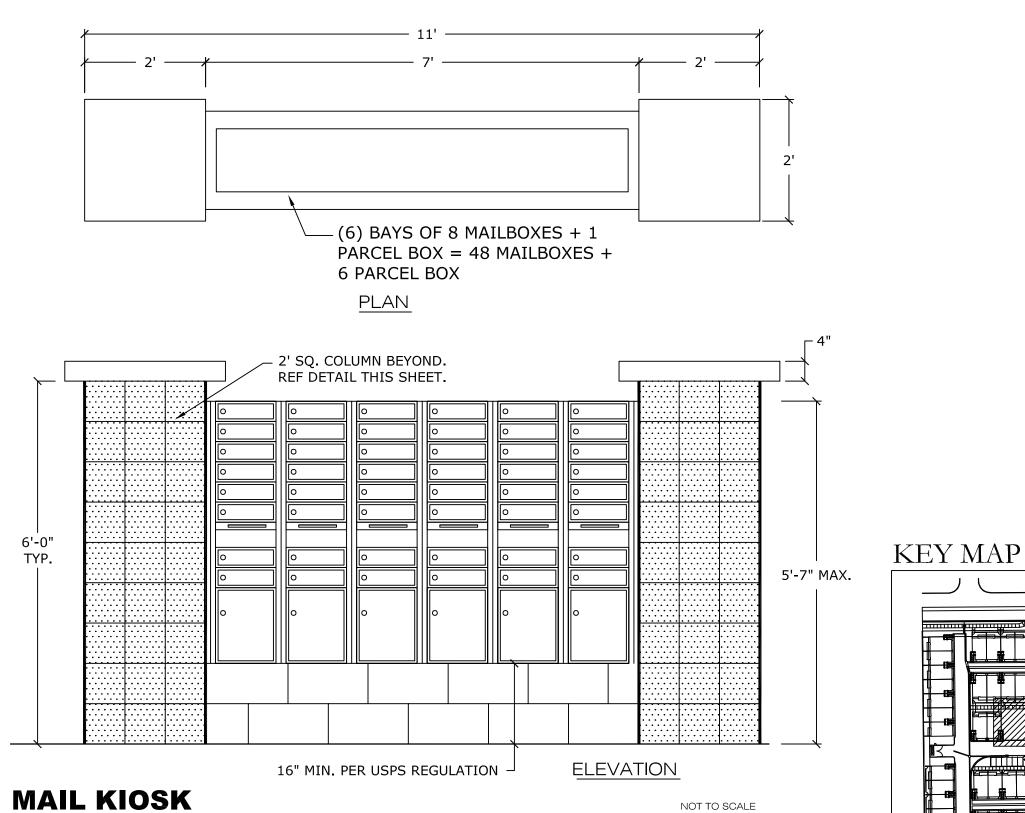
#### GAS BBQ AND OUTDOOR KITCHEN AT POOL

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



#### SHADE TRELLIS AT POOL AREA

NOT TO SCALE



ALL STRUCTURES INCLUDING BUT NOT LIMITED TO FIREPLACES, BARBEQUES, WATER FEATURES, POOLS, SPAS, FENCES, WALLS AND COLUMNS, ARE SHOWN FOR COLOR AND MATERIAL FINISH ONLY. SEE STRUCTURAL DRAWINGS FOR ALL INSTALLATION DETAILS, APPROVALS AND PERMITS. SUBMIT SHOP DRAWINGS TO LANDSCAPE ARCHITECT OR OWNER REPRESENTATIVE PRIOR TO CONSTRUCTION





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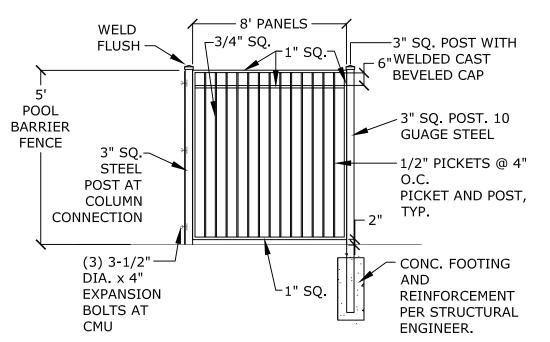
Project Phase & Revisions: PRELIM: April 12, 2022 CD'S #1: Aug. 19, 2022

ENLARGED POOL PLAN & DETAILS

NOT TO SCALE

\* REFERENCE POOL NOTES & BARRIER GUIDELINES ON COVER SHEET

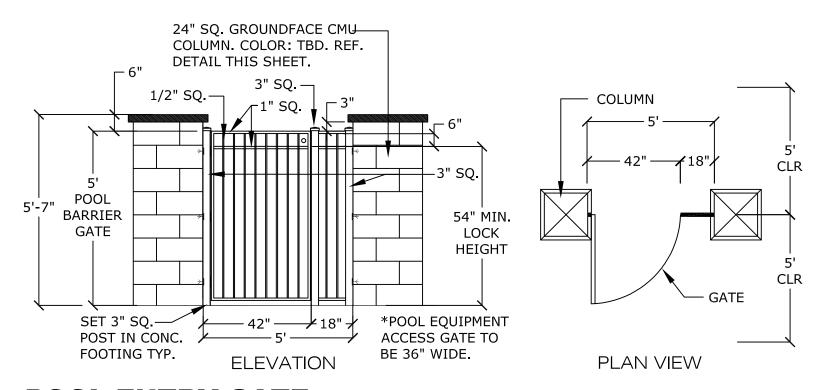
WELD & GRIND SMOOTH ALL JOINTS. A PRIMER COAT SHALL BE APPLIED TO ALL SURFACES FOLLOWED BY A TOUCH UP COAT ON ALL CONNECTIONS, WELDS OR ANY DAMAGED OR RUSTED AREAS. A SECOND COAT SHALL BE APPLIED, FOLLOWED BY (2) COATS OF PAINT AS APPROVED BY THE OWNER. FENCING & GATES SHALL MEET ALL CITY & COUNTY HEALTH DEPT. REQUIREMENTS. SUBMIT SHOP DRAWINGS FOR APPROVAL PRIOR TO CONSTRUCTION.



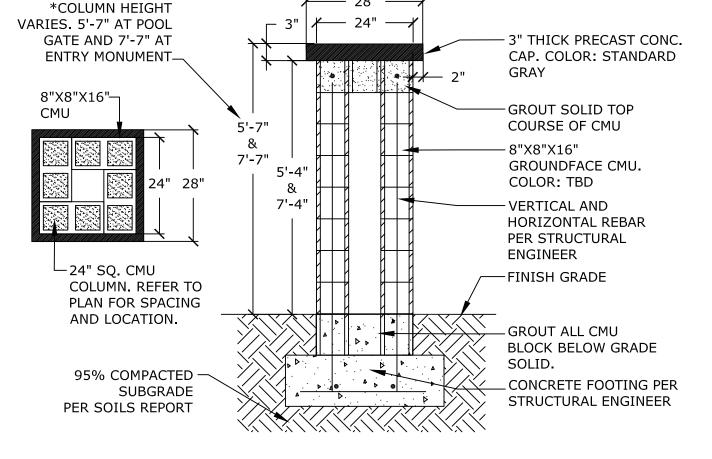
**POOL FENCE** NOT TO SCALE

#### \*REFERENCE POOL NOTES & BARRIER GUIDELINES ON COVER SHEET

SELF-CLOSING & LATCHING 42" WIDE WROUGHT IRON GATE AND FENCE. PROVIDE DBL DEADBOLT LOCK & H.D. HINGES. MOUNT GATE TO 3" STEEL POST WITH (3) 3-1/2" DIA. x 4" EXPANSION BOLTS. PROVIDE SHOP DRAWINGS OF GATE AND FENCE CONSTRUCTION FOR APPROVAL PRIOR TO CONSTRUCTION.



**POOL ENTRY GATE** 



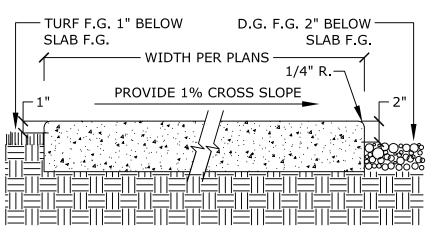
24" SQ. COLUMN

GROUT SOLID TOP COURSE ~\*WALL HEIGHT VARIES. 40" 8"X8"X16" GROUNDFACE **SCREENWALL &** CMU. COLOR: TBD PORTION OF POOL SHOWER, 6' SURROUNDING HORIZONTAL REBAR PER POOL EQUIP. & PORTION OF STRUCTURAL ENGINEER POOL SHOWER, GROUT ALL CMU BLOCK — 6'-8" AT ENTRY BELOW GRADE SOLID. MONUMENT & FINISH D.G. GRADE -SURROUNDING CONC. FOOTING AND -REINFORCEMENT PER STRUCTURAL ENGINEER. 95% COMPACTED SUBGRADE PER SOILS REPORT

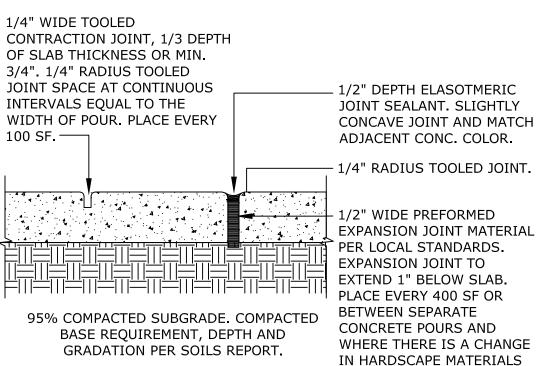
**CMU WALL** 

NOT TO SCALE

INTEGRAL CONCRETE COLOR: "TERRA COTTA" BY DAVIS COLOR. MED. BROOM FINISH.

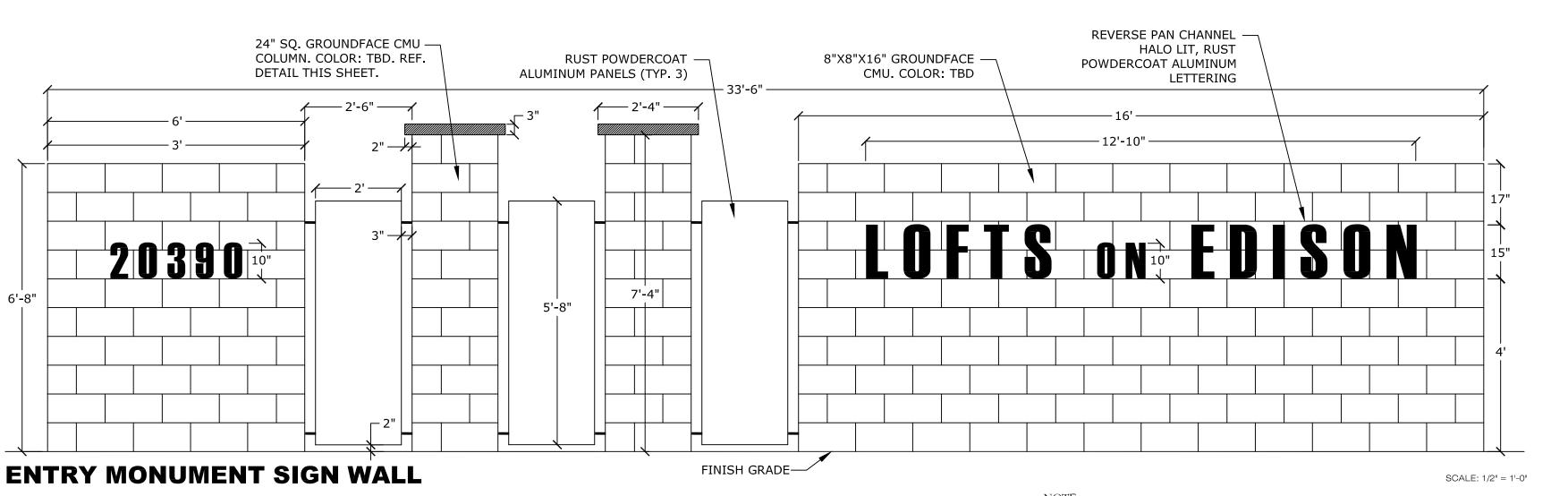


CONCRETE SLAB THICKNESS (4" PEDESTRIAN SIDEWALKS; 6" VEHICULAR RATED) AND CLASS PER MAG DETAILS AND SPECIFICATIONS. REINFORCEMENT PER STRUCTURAL ENGINEER. SEE HARDSCAPE KEY NOTES FOR THICKNESS.



**CONCRETE SECTION AND SCORING** 

NOT TO SCALE



NOT TO SCALE

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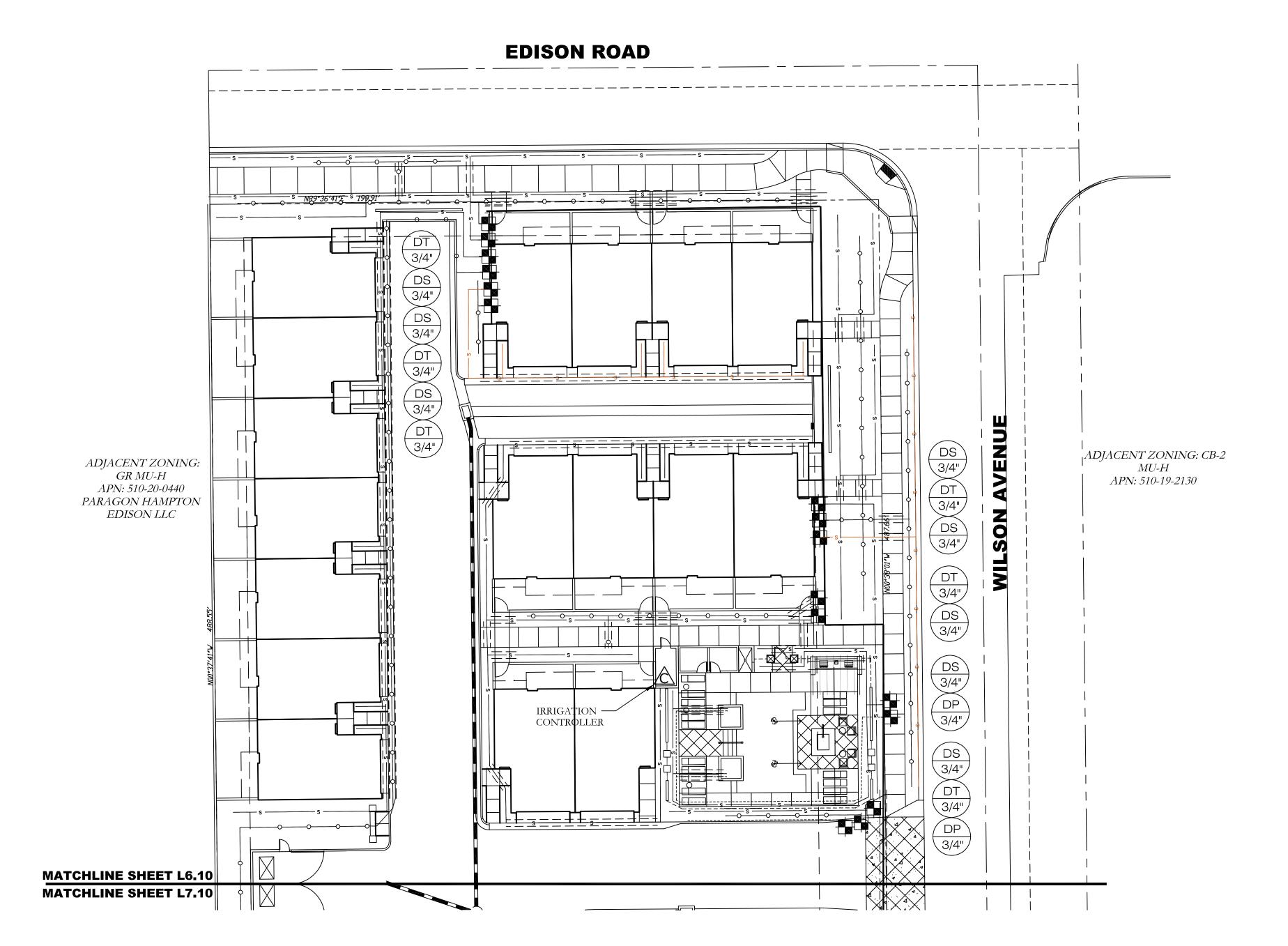
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HARDSCAPE DETAILS

SHEET NO.

L5 of 10





#### IRRIGATION SCHEDULE

#### EQUIPMENT

- T TAP INTO DOMESTIC WATER LINE
- WATER METER (SIZE PER PLANS). REFERENCE CIVIL DRAWINGS AND INSTALL PER ALL LOCAL CODES AND SPECS.
- FEBCO 825YA REDUCED PRESSURE BACKFLOW PREVENTER (SIZE PER PLANS). PLACE INSIDE GUARDSHACK LOCKING **ENCLOSURE**
- NIBCO BRASS GATE VALVE (SIZE SAME AS MAINLINE) - INSTALL PER ALL LOCAL CODES AND SPECS.
- RAINBIRD QUICK COUPLER VALVE PLACE IN 10" ROUND CARSON VALVE BOX 10" ROUND CARSON VALVE BOX.
- IRRITROL RAINDIAL ELECTRONIC CONTROLLER (PROVIDE ADEQUATE NUMBER OF STATIONS) -MOUNT PER OWNER'S DIRECTION

#### EMITTER SCHEDULE

ENITTER SCIEDULE			
PLANT TYPE	EMITTER RATE (GPH)	NO. OF EMITTERS	TOTA (GPH
GROUNDCOVER	1	1	1
SHRUBS	1	2	2
15 GALLON	2	3	6
24" BOX	2	4	8
30" BOX	2	4	8
36" BOX	2	6	12
42" BOX	2	8	16
48" BOX	2	8	16
54" BOX	2	8	16
60" BOX	2	8	16

1. TREES TO RECEIVE MULTI-PORT EMITTERS. REF. ABOVE FOR QTY. BASED ON TREE SIZE.

2. PROVIDE APPROPRIATE WATERING SYSTEM FOR ANNUAL AND PERENNIAL BEDS BASED ON DENSITY OF PLANTING SCHEDULE

#### PIPE LEGEND

SCH 40 MAIN LINE	SIZE	GPM RANGE
(SIZE PER PLANS)	1/2"	0 - 5 GPM
3/4" SCH. 40 PVC	3/4"	6 - 10 GPM
DRIP LATERALS:	1"	11 - 15 GPM
–s–s– SHRUB & G.C.	1-1/4"	
- <b>o-o</b> -TREE	· · · · · · · · · · · · · · · · · · ·	26 - 35 GPM
PALMS	2"	36 - 55 GPM
	_	56 - 80 GPM
SCH. 40 TURF LATERAL	_S 3"	81 - 120 GPN
IIII SLEEVES - SCHD. 40		

SLEEVE DIAM. 2X SIZE OF PIPE PASSING THROUGH MIN., OR SIZED TO ACCOMODATE MULTIPLE IRRIGATION LINES. SEPARATE SLEEVE FOR ELECTRICAL

ADJUST PIPE SIZE SHOWN ON PLANS AS NECESSARY TO ACHIEVE PROPER WORKING FLOW TO EMITTERS AND TURF SPRAY HEADS TO ENSURE PLANT AND TURF WATER DEMAND.

#### DT=TREE; DS=SHRUBS; T=TURF; VALVE SIZE X

#### DRIP SYSTEM

RAINBIRD PEB SERIES ELECTRIC REMOTE CONTROL DRIP VALVE WITH AN MX SERIES HYDRO RAIN WYE STRAINER AND PRESSURE REGULATOR (SIZE PER PLANS).

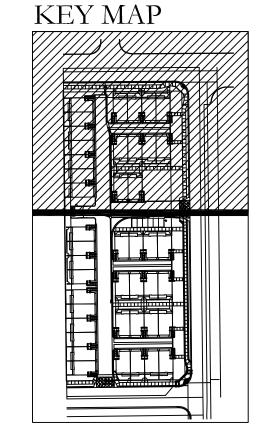
RAINBIRD FLUSH VALVE - 1 PER VALVE TO BE PLACED AT END OF LONGEST LATERAL RUN.

ALL EMITTERS TO BE BOWSMITH SINGLE AND MULTI-PORT SERIES; SPACE EQUALLY AROUND PLANT MATERIAL CANOPY.

#### NOTES:

1. ALL IRRIGATION PARTS ARE SHOWN ON PLANS FOR GRAPHIC PURPOSES ONLY AND IN THEIR APPROXIMATE LOCATIONS. CONTRACTOR TO VERIFY EXACT LOCATIONS PRIOR TO INSTALLATION. 2. AVOID RUNNING IRRIGATION LINES AND ASSOCIATED SLEEVING UNDER BUILDINGS OR BUILT VERTICAL STRUCTURES AND FOOTINGS. 3. COORDINATE WITH CIVIL PLANS FOR LANDSCAPE METER TAP AND BACKFLOW PREVENTER LOCATION. FIELD VERIFY AVAILABLE PSI & GPM AND ADJUST UNDERGROUND PIPE SIZES AND/OR VALVE SIZES / QUANTITIES AS NECESSARY TO ENSURE ALL INDIVIDUAL PLANT WATER REQUIREMENTS ARE

0 10 20





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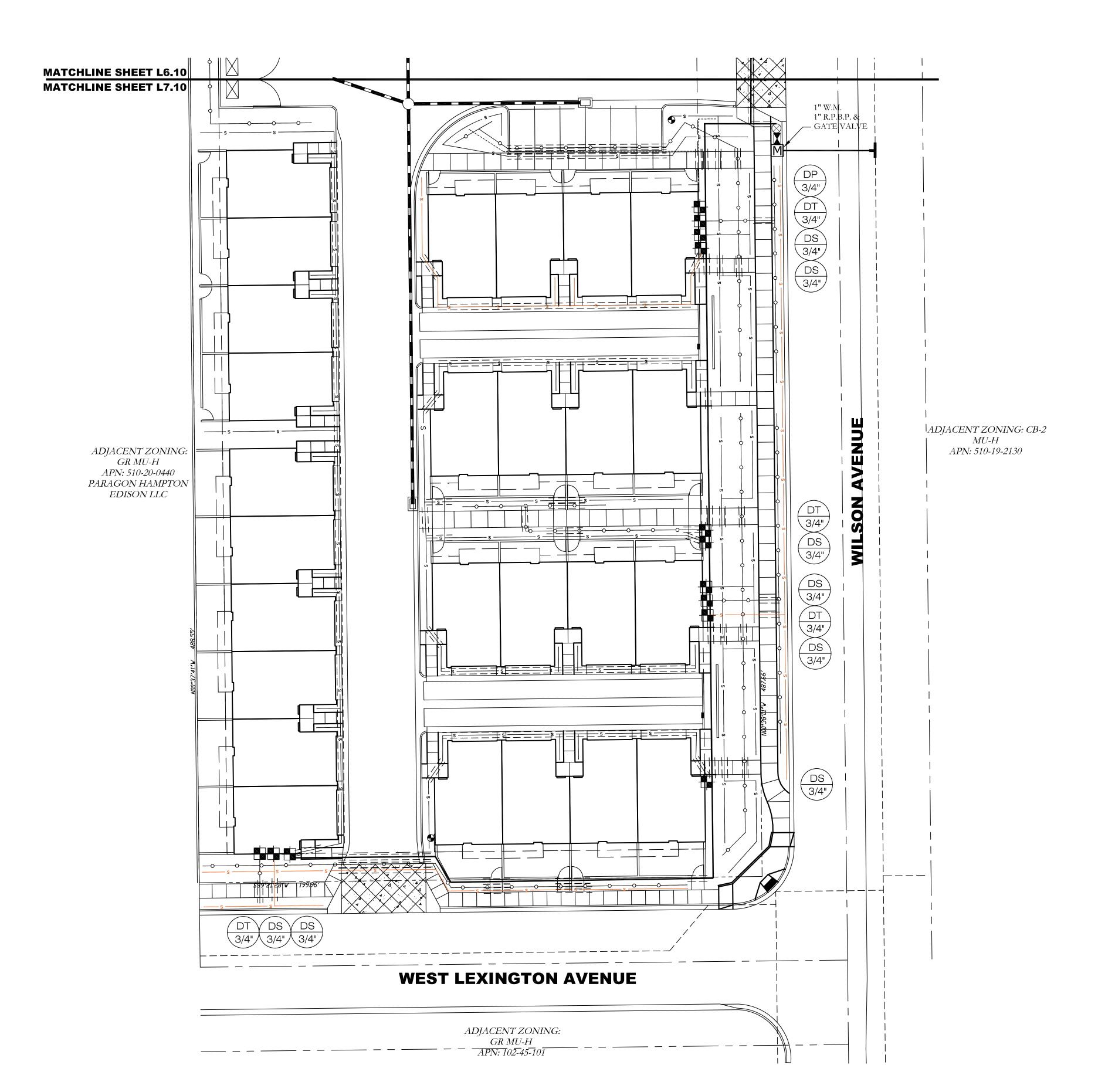
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IRRIGATION PLAN



#### IRRIGATION SCHEDULE

#### **EQUIPMENT**

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- WATER METER (SIZE PER PLANS). REFERENCE CIVIL DRAWINGS AND INSTALL PER ALL LOCAL CODES AND SPECS.
- FEBCO 825YA REDUCED PRESSURE BACKFLOW PREVENTER (SIZE PER PLANS). PLACE INSIDE GUARDSHACK LOCKING **ENCLOSURE**
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#### EMITTER SCHEDULE

EMITTERCOTTEDCE			
PLANT TYPE	EMITTER RATE (GPH)	NO. OF EMITTERS	TOTA (GPH
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42" BOX	2	8	16
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60" BOX	2	8	16

1. TREES TO RECEIVE MULTI-PORT EMITTERS. REF. ABOVE FOR QTY. BASED ON TREE SIZE.

2. PROVIDE APPROPRIATE WATERING SYSTEM FOR ANNUAL AND PERENNIAL BEDS BASED ON DENSITY OF PLANTING SCHEDULE

#### PIPE LEGEND

SCH 40 MAIN LINE	SIZE	GPM RANGE
(SIZE PER PLANS)	1/2"	0 - 5 GPM
3/4" SCH. 40 PVC	3/4"	6 - 10 GPM
DRIP LATERALS:	1"	11 - 15 GPM
−s—s—SHRUB & G.C.	•	16 - 25 GPM
- <b>o-o</b> -TREE		26 - 35 GPM
PALMS	2"	36 - 55 GPM
		56 - 80 GPM
SCH. 40 TURF LATERALS	3"	81 - 120 GPM
==== SLEEVES - SCHD. 40		

SLEEVE DIAM. 2X SIZE OF PIPE PASSING THROUGH MIN., OR SIZED TO ACCOMODATE MULTIPLE IRRIGATION LINES. SEPARATE SLEEVE FOR ELECTRICAL

ADJUST PIPE SIZE SHOWN ON PLANS AS NECESSARY TO ACHIEVE PROPER WORKING FLOW TO EMITTERS AND TURF SPRAY HEADS TO ENSURE PLANT AND TURF WATER DEMAND.

#### DT=TREE; DS=SHRUBS; T=TURF; VALVE SIZE X

#### DRIP SYSTEM

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RAINBIRD FLUSH VALVE - 1 PER VALVE TO BE PLACED AT END OF LONGEST LATERAL RUN.

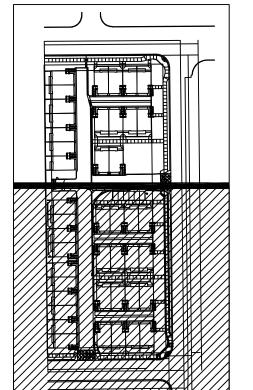
ALL EMITTERS TO BE BOWSMITH SINGLE AND MULTI-PORT SERIES; SPACE EQUALLY AROUND PLANT MATERIAL CANOPY.

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0 10 20

#### KEY MAP







PLANNING • LANDSCAPE ARCHITECTURE



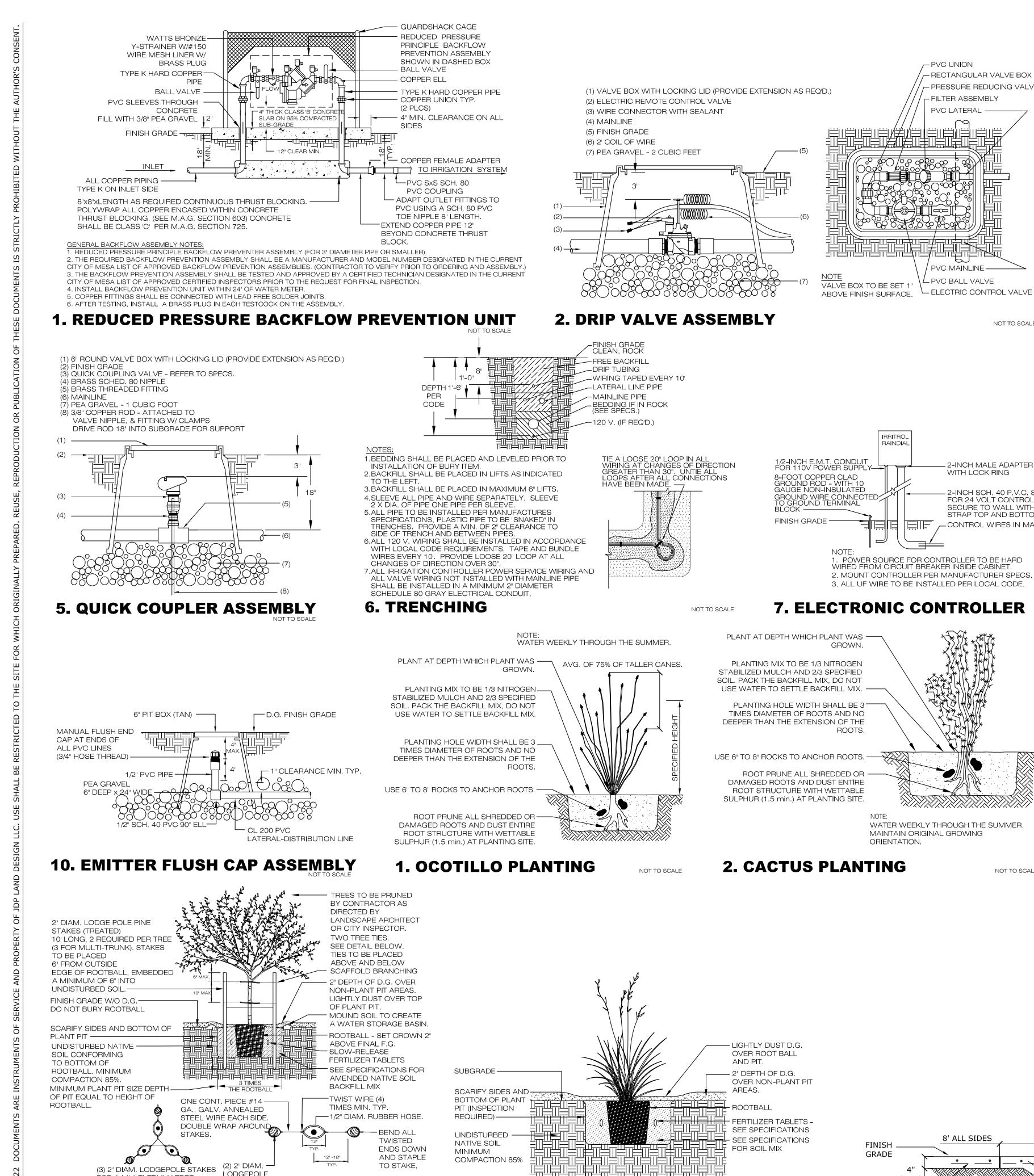
7296 east paradise drive scottsdale, arizona 85260 phone: 602.790.7247 email: jeffd7171@gmail.com

Project No. 22-114

Original Submittal Date:

Project Phase & Revisions: PRELIM: April 12, 2022 CD'S #1: Aug. 19, 2022

IRRIGATION PLAN



FOR A MULTI-TRUNK TREE.

WITH TURF FINISH GRADE

**5. TREE PLANTING** 

1. PLANTS DELIVERED WITH CRACKED OR BROKEN CONTAINERS

3.TREE TRUNK SHALL BE CAPABLE OF MOVEMENT IN ALL DIRECTIONS

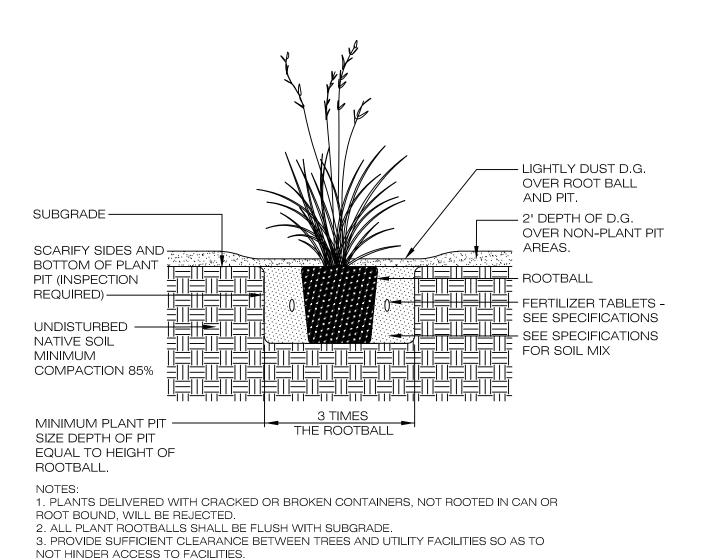
4. PROVIDE SUFFICIENT CLEARANCE BETWEEN TREES AND UNITLITY FACILITIES SO

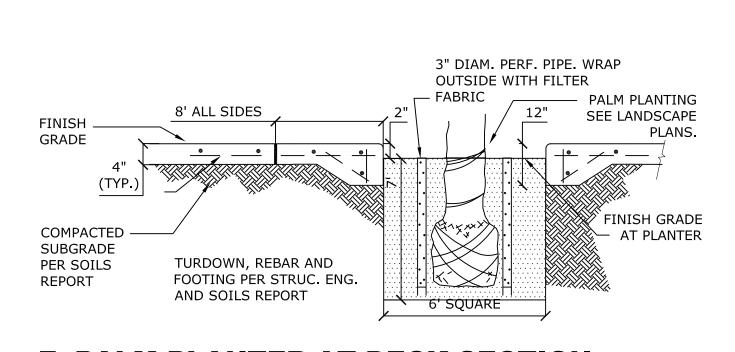
AS TO NOT HINDER ACCESS TO FACILITIES. INSTALL TREE DRAINS WITH 4" CALIPER

5. TREE DRAINS (IF NECCESARY) TO BE 4" DIAM. PERFORATED PVC (2 PER TREE).

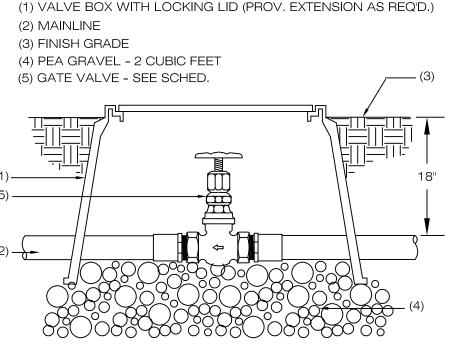
WRAP WITH SOIL SCREEN FABRIC. SET 1" ABOVE D.G. FINISH GRADE AND FLUSH

2. NOT ROOTED IN CAN OR ROOT BOUND WILL BE REJECTED.





#### 7. PALM PLANTER AT DECK SECTION NOT TO SCALE





SHRUB EMITTER 5' MAX.

**∽**ROOT BALL

NOT TO SCALE

3 BACKFILL WITH DRY SITE SOIL

4 EXCAVATE GRADE THREE TO

FIVE TIMES THE WIDTH AND

SAME DEPTH AS ROOTBALL

• ROOT PRUNE ALL SHREDDED

• ENSURE ALL WOUNDS TO THE

DUSTING SULFUR TO ALL

• 75% OF TAPROOT MUST BE

AREAS BELOW GRADE.

DAMAGE-FREE.

ROOT SYSTEM ARE CLEAN CUT BEFORE PLANTING. APPLY

NOT TO SCALE

OR DAMAGED ROOTS.

-BOWSMITH SL SERIES

— 1/2" CLASS 200 PVC — 3/4" CLASS 200 PVC LATERAL

8. SINGLE-PORT EMITTERS

SINGLE PORT EMITTER

1 3" MOUND

2 FINISH GRADE

FOR SLOPED

WELL

DISTRABUTION

CONDITIONS PLACE

POINT AT THE HIGH

POINT OF PLANTING

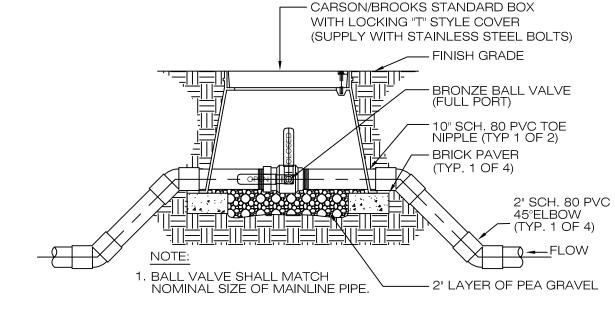
1/2" SCH. 40 PVC

3 TO 5 TIMES

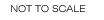
ROOTBALL

THE WIDTH OF

3. ACCENT PLANTING



4. MAINLINE BALL VALVE



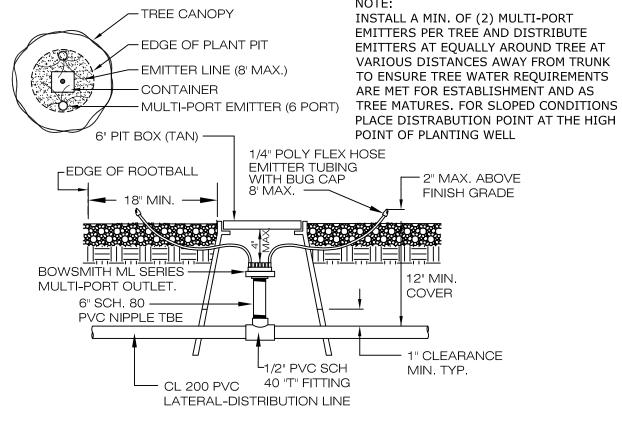
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7296 east paradise drive

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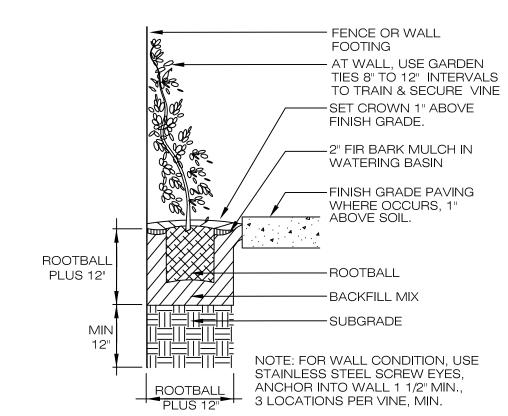
phone: 602.790.7247

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#### 9. MULTI-PORT EMITTERS





#### 4. VINE PLANTING

NOT TO SCALE

#### **PLANTING NOTES**

	NATIVE PLANTING BACKFILL MIX:	MIX SHALL CONSIST OF NATIVE SITE SOIL (NO CALICHE IN BACKFILL). REMOVE ALL INORGANIC MATERIAL GREATER THAN 1" IN SIZE. SOIL MIX SHALL BE WATER SETTLED WITHOUT POOLING
	AMENDED PLANTING BACKFILL MIX:	MIX SHALL CONSIST OF:  1/2 PART 'NATIVE SITE SOIL (NO CALICHE IN BACKFILL) & 1/2 PART MULCH (*HUMUS) *NATURAL FERTILE, FRIABLE SOIL THOROUGHLY MIXED PRIOR TO BACKFILLING PIT. REMOVE ALL INORGANIC MATERIAL GREATER THAN 1" IN SIZE. SOIL BACKFILLING SHALL BE ACCOMPLISHED IN 6" LIFTS. EACH LIFT SHALL BE WATER SETTLED WITHOUT POOLING.
	FERTILIZER TABLETS:	FERTILIZER TABLETS SHALL BE AGRIFORM OR EQUAL (21 GRAM 20-20-5) SLOW RELEASE. TABLETS SHALL BE PLACED AT 1/2 THE DEPTH OF THE ROOTBALL AT THE FOLLOWING RATES.
		1 TABLET PER 1 GALLON CONTAINER 2 TABLETS PER 5 GALLON CONTAINER 3 TABLETS PER 15 GALLON

CONTAINER

DEPTH.

4 TABLETS PER 24" BOX

AND AT A RATE OF 1 TABLET FOR

ARE REQUIRED, THEY SHALL BE

EACH ADDITIONAL 6" BOX SIZE. WHEN

MULTIPLE QUANTITIES OF TABLETS

EQUALLY SPACED AT THE SPECIFIED

#### Project No.

22-114

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LANDSCAPE & **IRRIGATION DETAILS** 

SHEET NO.

**6. SHRUB PLANTING** 

-PVC UNION

FILTER ASSEMBLY

PVC LATERAL ----

PVC MAINLINE —

PVC BALL VALVE

LECTRIC CONTROL VALVE

2-INCH MALE ADAPTER

2-INCH SCH. 40 P.V.C. SLEEVE

FOR 24 VOLT CONTROL WIRE.

STRAP TOP AND BOTTOM.

SECURE TO WALL WITH CONDUIT

\_CONTROL WIRES IN MAINLINE TRENCH

NOT TO SCALE

NOT TO SCALE

WITH LOCK RING

1. POWER SOURCE FOR CONTROLLER TO BE HARD

3. ALL UF WIRE TO BE INSTALLED PER LOCAL CODE.

2. MOUNT CONTROLLER PER MANUFACTURER SPECS.

WATER WEEKLY THROUGH THE SUMMER.

MAINTAIN ORIGINAL GROWING

ORIENTATION.

WIRED FROM CIRCUIT BREAKER INSIDE CABINET.

NOT TO SCALE

VALVE BOX TO BE SET 1"

ABOVE FINISH SURFACE.

GROWN.

ROOTS.

- RECTANGULAR VALVE BOX

- PRESSURE REDUCING VALVE

#### - PRIOR TO BID THE CONTRACTOR SHALL VISIT THE SITE TO DETERMINE THE EXTENT OF THE DEMOLITION REQUIRED AND FIELD VERIFY USING A LOCATOR

SERVICE ALL UTILITIES PRIOR TO THE COMMENCEMENT OF WORK. - THE CONTRACTOR SHALL PROVIDE A COMPLETE INVENTORY OF ALL ITEMS SALVAGED FROM THE SITE TO THE LANDSCAPE ARCHITECT AND OWNER. - THE OWNER SHALL HAVE FIRST RIGHT OF REFUSAL ON EVERYTHING SALVAGED FROM THIS SITE. ALL OTHER MATERIALS NOT DESIGNATED TO REMAIN SHALL BECOME THE CONTRACTOR(S) PROPERTY AND SHALL BE REMOVED FROM THE PROPERTY - ALL EQUIPMENT TO BE SAVED SHALL BE STORED IN A LOCATION ON SITE, TO BE DETERMINED BY THE

- THE CONTRACTOR(S) SHALL MINIMIZE INTERFERENCE WITH ADJOINING ROADS, STREETS, WALKS AND OTHER ADJACENT OCCUPIED OR USED FACILITIES DURING THE DEMOLITION OPERATIONS. DO NOT CLOSE OR OBSTRUCT STREETS, WALKS, OR OTHER ADJACENT OCCUPIED OR USED FACILITIES WITHOUT PERMISSION FROM OWNER AND

AUTHORITIES HAVING JURISDICTION. PROVIDE ALTERNATE ROUTES AROUND CLOSED OR OBSTRUCTED TRAFFIC WAYS IF REQUIRED BY AUTHORITIES HAVING JURISDICTION. - PREPARATION OF SITE BY THE CONTRACTOR SHALL INCLUDE THE FOLLOWING: PROTECTING AND MAINTAINING BENCHMARKS AND SURVEY CONTROL POINTS FROM DEMOLITION. PROVIDING EROSION CONTROL TO PREVENT SOIL EROSION AND DISCHARGE OF SOIL BEARING WATER RUNOFF OR AIRBORNE DUST TO ADJACENT PROPERTIES, ROADS AND WALKWAYS. LOCATING AND CLEARLY FLAGGING OF TREES AND VEGETATION TO REMAIN OR TO BE RELOCATED. PROTECT EXISTING SITE IMPROVEMENT TO REMAIN FROM DAMAGE DURING DEMOLITION. - TREE PROTECTION SHALL BE PROVIDED BY THE CONTRACTOR BY A TEMPORARY FENCE AROUND THE DRIP LINE OF INDIVIDUAL TREES OR AROUND PERIMETER OF DRIP LINE OF GROUPS OF TREES TO REMAIN. THE FENCE SHALL BE REMOVED WHEN CONSTRUCTION IS COMPLETE. DO NOT STORE DEMOLISHED OR CONSTRUCTION MATERIALS WITHIN THE DRIP LINE OF TREES TO REMAIN. DO NOT PERMIT VEHICLES, EQUIPMENT OR FOOT TRAFFIC WITHIN DRIP LINE OF TREES TO REMAIN. DO NOT EXCAVATE WITHIN DRIP LINE OF TREES, UNLESS OTHERWISE INDICATED. WHERE DEMOLITION IS REQUIRED WITHIN DRIP LINE OF TREES, THE CONTRACTOR(S) SHALL HAND CLEAR AND EXCAVATE TO MINIMIZE DAMAGE TO ROOT SYSTEMS. USE NARROW-TINE SPADING FORKS TO COMB SOIL AND EXPOSE ROOTS SO CLEAN CUTS CAN BE MADE AS CLOSE TO THE EXCAVATION AS POSSIBLE. COVER ANY EXPOSED ROOTS WITH BURLAP AND WATER REGULARLY. THE CONTRACTOR(S) SHALL TEMPORARILY SUPPORT THE TREE AND ROOTS AND PROTECT UNTIL THEY ARE PERMANENTLY RELOCATED AND COVERED WITH SOIL IF MORE THAN A QUARTER OF THE ROOT SYSTEM IS DAMAGED DURING DEMOLITION THE CONTRACTOR(S) SHALL EMPLOY A QUALIFIED ARBORIST TO REMOVE PORTIONS OF THE TREE TO PREVENT STRESS AND DIE

VIBRATION SHALL BE PRE-APPROVED AND COORDINATED WITH THE OWNER. - THE CONTRACTOR SHALL REMOVE ALL EXISTING ABOVE AND BELOW GROUND HARDSCAPE AS INDICATED AND NECESSARY TO FACILITATE THE NEW CONSTRUCTION. UNLESS EXISTING FULL-DEPTH JOINTS COINCIDE WITH LINE OF DEMOLITION, NEATLY SAW-CUT LENGTH OF EXISTING HARDSCAPE TO REMAIN BEFORE REMOVING. SAW-CUT FACES

BACK ON THE TREE. ANY PLANT MATERIAL FLAGGED

TO REMAIN THAT IS DESTROYED DURING DEMOLITION

SHALL BE REPLACE IN KIND BY THE CONTRACTOR(S).

- COORDINATE ALL DEMOLITION EFFORTS WITH

LANDSCAPE ARCHITECT/OWNER. EVERY EFFORT

AND WORKERS SAFETY. EXCESSIVE NOISE OR

SHALL BE MADE TO MINIMIZE DISRUPTION TO ANY

ADJACENT STRUCTURE AND TO PROVIDE OCCUPANTS

VERTICALLY. - UTILITY DISCONNECTING, CAPPING AND SEALING THAT SERVE EXISTING STRUCTURES AND SITE UTILITIES SHUT OFF SHALL BE ARRANGED AND COORDINATED WITH THE OWNER PRIOR TO THE DEMOLITION OF THE SITE. THE CONTRACTOR(S) SHALL EXCAVATE AND REMOVE UNDERGROUND UTILITIES INDICATED TO BE REMOVED. - WHILE PROCEEDING WITH WORK, CARE SHALL BE TAKEN TO AVOID DISCONNECTING SERVICES WHICH MAY HAVE CONNECTION TO OTHER STRUCTURES NEARBY. IF A REQUIRED SERVICE IS DISCONNECTED OR DISTURBED THE CONTRACTOR(S) SHALL REPAIR AND/OR REPLACE THOSE DAMAGED SERVICES IMMEDIATELY AT THE CONTRACTOR(S) EXPENSE. -CLEARING, GRUBBING AND REMOVAL OF OBSTRUCTIONS, TREES, SHRUBS, GRASS AND OTHER VEGETATION SHALL INCLUDE THE DIGGING OUT STUMPS, OBSTRUCTIONS AND ROOTS TO A MINIMUM DEPTH OF 18 INCHES BELOW EXPOSED SUBGRADE. FILL ALL DEPRESSIONS CAUSED BY CLEARING AND GRUBBING WITH EXISTING SOIL OR SATISFACTORY IMPORTED SOILS IN 8" LIFTS AND COMPACT EACH LAYER TO A DENSITY EQUAL TO ADJACENT ORIGINAL GROUND. THE CONTRACTOR SHALL REMOVED SOD AND GRASS BEFORE STRIPPING OF TOPSOIL FOR STORAGE AND STRIP SURFACE OF UNSUITABLE TOPSOIL INCLUDING TRASH, DEBRIS, WEEDS, ROOTS AND OTHER WASTE MATERIALS. THE STOCKPILING OF TOPSOIL SHALL BE LIMITED TO 72 INCHES AND BE PLACED AWAY FROM THE EDGE OF EXCAVATION AND DRIP LINE OF TREES AND SHAPED TO DRAIN SURFACE WATER AND COVERED TO PREVENT WINDBLOWN

- UPON COMPLETION OF THE DEMOLITION WORK, THE DEMOLISHED AREAS AND THE MARKED PORTIONS OF SIDEWALKS, PLANTERS, CURBS AND DESIGNATED ITEMS REMOVED SHOULD BE FREE ALL PLANT AND MATERIALS INCLUDING STRUCTURE, CONCRETE SLABS, FOOTINGS, FOUNDATIONS AND ASPHALT. ROUGH GRADE ENTIRE DEMOLISHED AREAS TO A SMOOTH WORKABLE SURFACE. REMOVE SURPLUS SOIL MATERIAL, UNSUITABLE TOPSOIL, OBSTRUCTIONS, DEMOLISHED AND WASTE MATERIALS INCLUDING TRASH AND DEBRIS. THE DISPOSAL OF ALL ITEMS SCHEDULED TO BE REMOVED SHALL BE CONDUCTED PROPERLY OFF SITE IN ACCORDANCE WITH ALL APPLICABLE CITY, COUNTY, STATE. AND FEDERAL REGULATIONS COVERING THE DISPOSAL OF MATERIALS.

#### LANDSCAPE SPECIFICATIONS

#### 1.0 GENERAL CONDITIONS

1.1 CONTRACTOR SHALL VISIT AND INSPECT SITE AND THOROUGHLY INFORM THEMSELVES OF ALL EXISTING CONDITIONS PRIOR TO THE BID. DISCREPANCIES BETWEEN EXISTING CONDITIONS AND THOSE SHOWN ON DRAWINGS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION. 1.2 "PROJECT COMPLETION" SHALL BE DEFINED ON THE LETTER OF ACCEPTANCE AS THE DATE CONSTRUCTION IS COMPLETE AND THE MAINTENANCE PERIOD BEGINS. 1.3 "GUARANTEE PERIOD" SHALL BE DEFINED AS ANY TIME ATTACHED TO THESE DOCUMENTS DURING WHICH THE CONTRACTOR IS RESPONSIBLE FOR THE HEALTH AND

REPLACEMENT OF PLANT MATERIAL 1.4 THE LANDSCAPE CONTRACTOR, WITH THEIR BID SUBMITTAL SHALL PROVIDE WRITTEN VERIFICATION OF THREE (3) YEARS DEMONSTRATIVE ABILITY TO PERFORM THE WORK SPECIFIED HEREIN. PAST WORK SHALL BE OF SIMILAR TYPE, SCALE AND QUALITY.

1.5 THE "FLAIR" OF PLANT MATERIAL REFERS TO THE BASE OF THE PLANT WERE THE STEM MEETS THE TOP OF THE ROOTBALL.

#### 2.0 WORK SPECIFIED HEREIN

2.1 THE WORK SPECIFIED WITHIN THIS SECTION SHALL INCLUDE ALL LABOR, MATERIALS, EQUIPMENT AND SERVICES NECESSARY TO COMPLETE ALL THE LANDSCAPING AS DETAILED AND SPECIFIED, INCLUDING THE FOLLOWING WORK REASONABLY INCIDENTAL THERETO.

2.2 THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE FOLLOWING WORK UNLESS OTHERWISE SPECIFIED ON THE PLANS. 2.2.1 COORDINATION OF ALL THE IRRIGATION WORK TO INSURE SUCCESSFUL INTEGRATION WITH THE LANDSCAPING. 2.2.2 ACCEPTING THE FINISHED GRADE PROVIDED, +/- 0.1 OF A FOOT AS SHOWN ON THE GRADING PLAN. 2.2.3 SOIL CONDITION AND FINE RAKE PRIOR TO PLANTING, GROUNDCOVER, SEEDING AND DECOMPOSED GRANITE INSTALLATION.

#### 3.0 SAMPLES & TESTS

3.1 THE ARCHITECT RESERVES THE RIGHT TO TAKE AND ANALYZE SAMPLES OF MATERIALS FOR CONFORMITY TO SPECIFICATIONS AT ANY TIME. CONTRACTOR SHALL FURNISH SAMPLES UPON REQUEST BY ARCHITECT. REJECTED MATERIALS SHALL BE IMMEDIATELY REMOVED FROM THE SITE AND REPLACED AT THE CONTRACTOR'S EXPENSE. COST OF TESTING OF MATERIALS NOT MEETING SPECIFICATION SHALL BE PAID BY CONTRACTOR. 3.2 THE CONTRACTOR SHALL PROVIDE A 2 LBS SAMPLE OF ANY MINERAL MULCH OR BARK MULCH, THAT WILL BE USED ON THIS PROJECT, PRIOR TO DELIVERY TO THE SITE FOR APPROVAL BY THE LANDSCAPE ARCHITECT.

#### 4.0 COORDINATION AND RESPONSIBILITY

4.1 COORDINATE AND COOPERATE WITH OTHER TRADES WORKING ON THE SITE FOR SUCCESSFUL COMPLETION OF THE PROJECT. 4.2 BEFORE COMMENCING WORK ON THE SITE, BECOME THOROUGHLY ACQUAINTED WITH LAYOUT OF ALL UNDERGROUND UTILITIES AND STRUCTURES OVER THE ENTIRE SITE. ALL REQUISITE REPAIRS TO CORRECT DAMAGE CAUSED BY WORK OF THIS SECTION SHALL BE AT THE CONTRACTOR'S EXPENSE.

4.3 ALL EXISTING PLANT MATERIAL AND ASSOCIATED ELEMENTS NOT INDICATED FOR REMOVAL SHALL BE FENCED AT THE DRIP LINE OF PLANT MATERIAL, PROTECTED AND MAINTAINED AS NECESSARY TO ENSURE SURVIVAL AND PER DEMOLITION NOTES. 4.4 PRECONSTRUCTION CONFERENCE:

A PRECONSTRUCTION CONFERENCE TO DISCUSS THE LANDSCAPE PROJECT WORK SHALL BE HELD AT A TIME AGREED UPON. THE CONTRACTOR, TOGETHER WITH REPRESENTATIVES OF HIS IRRIGATION SUBCONTRACTOR, SHALL ATTEND, AS WILL THE OWNER'S REPRESENTATIVE AND ARCHITECT. THE PURPOSE OF THIS CONFERENCE IS TO DISCUSS THE PROJECT IN DETAIL, INCLUDING SCHEDULING OF WORK, SITE PREPARATION, INTERPRETATION OF DOCUMENTS AND TO ANSWER QUESTIONS THAT MAY ARISE. UNLESS FOLLOWED UP IN WRITING, VERBAL AUTHORIZATIONS OR ACKNOWLEDGEMENT BY ANYONE PRESENT SHALL NOT BE BINDING.

**5.0 STANDARDS** 5.1 QUANTITY: QUANTITIES ON PLANT LIST, IF SHOWN, ARE FOR REFERENCE PURPOSES ONLY. CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING ALL PLANT MATERIALS SHOWN ON THE PLANS. IF SHOWN, QUANTITIES ARE PROVIDED FOR ESTIMATING OR CITY APPROVAL PURPOSES ONLY, AND ARE NOT TO BE CONSIDERED ACCURATE FOR BIDDING. WHEN GROUND COVER OR GRANITE IS SPECIFIED IN ONE SECTION OF A PLANTER BED, IT SHALL BE ASSUMED THE GROUND COVER EXTENDS THROUGHOUT SAID BED, BELOW ALL 1, 5, 15 GALLON AND LARGER PLANTS. ALL SIGNIFICANT DIFFERENCES BETWEEN THE SITE AND THE DRAWINGS SHALL BE REPORTED TO THE LANDSCAPE ARCHITECT IMMEDIATELY UPON DETERMINING SAID DISCREPANCIES. FAILURE TO DO SO MAY REQUIRE THE CONTRACTOR TO MAKE ADDITIONAL PLANTINGS TO FILL SPACES, OR OTHER CHANGES AS DETERMINED BY THE LANDSCAPE ARCHITECT AT THE CONTRACTOR'S EXPENSE. 5.2 PLANT MATERIAL SUBSTITUTION: AT THE TIME OF BIDDING, THE CONTRACTOR SHALL VERIFY THE ABILITY TO PURCHASE ALL PLANT MATERIALS REQUIRED TO COMPLETE THIS WORK. UPON AWARD OF BIDS, THE CONTRACTOR SHALL MAKE ARRANGEMENTS WITH HIS SUPPLIERS FOR ADEQUATE AND PROPERLY SIZED MATERIALS AS SPECIFIED ON THE PLANS. IF PERCEIVED SHORTAGE IS DETERMINED EITHER AT TIME OF BIDDING, OR UPON AWARD OF CONTRACT, THE SUPPLIER MAY EMPLOY ONE OF THE FOLLOWING METHODS. 5.2.1 CONTRACT GROWING OF MATERIALS: WHEN REQUIRED ON THE CONSTRUCTION DOCUMENTS, AND SUFFICIENT LEAD TIME ALLOWS, PLANTS MAY BE CONTRACT GROWN. SPECIFIED MINIMUM TIME OF 6 MONTHS PER CONTAINER, PRIOR TO MOVING INTO LARGER SIZES, SHALL BE WAIVED, PROVIDED ADEQUATE ROOTS DEVELOP THROUGHOUT THE CONTAINER TO HOLD THE SOIL TOGETHER UPON REMOVAL FROM THE CONTAINER. COST FOR CONTRACT GROWING SHALL BE STIPULATED TO AND AGREED UPON AS A SEPARATE CONTRACT COST WITH THE OWNER PRIOR TO COMMENCING ANY WORK TOWARD CONTRACT GROWING. 5.2.2 SUBSTITUTION OF MATERIALS: IF THE ABOVE METHOD PROVES INADEQUATE, AND UPON APPROVAL OF THE OWNER/ARCHITECT, PLANT SUBSTITUTIONS WILL BE CONSIDERED. THE CONTRACTOR SHALL MAKE RECOMMENDATIONS TO THE LANDSCAPE ARCHITECT, IN WRITING, FOR CONSIDERATION. THE SUBSTITUTE SHALL MATCH THE ORIGINAL PLANT MATERIAL SPECIFIED AS CLOSELY AS POSSIBLE IN MATURE SIZE, GENERAL APPEARANCE, SOIL CONDITIONS, CLIMATE REQUIREMENT, LIGHT TOLERANCES, AND OTHER DATA. SUBSTITUTIONS MUST BE APPROVED PRIOR TO BIDDING. THE CONTRACTOR SHALL MAKE EVERY EFFORT TO PROVIDE THE SPECIFIED MATERIALS PRIOR TO ASKING FOR A SUBSTITUTION. 5.3 NOMENCLATURE: FOR IDENTIFICATION PURPOSES AND INSPECTIONS, TAGS SHALL BE DURABLE, LEGIBLE PLASTIC LABELS SECURELY ATTACHED TO AT LEAST 25% OF ALL PLANT TYPES, STATING THE BOTANICAL NAME AND SIZE OF THE PLANT MATERIALS. NAMES OF PLANT MATERIALS ON THE PLANS ARE IN

ACCORDANCE WITH SUNSET'S NEW WESTERN GARDEN BOOK,

LATEST EDITION, AND/OR AS SPECIFIED IN THE PLANT LIST.

5.4 QUALITY & SIZE: THE QUALITY AND SIZE OF ALL PLANT MATERIALS SHALL BE BASED UPON THE AMERICAN NURSERY ASSOCIATION ACCEPTED STANDARDS FOR SIZE, SHAPE AND CALIPER UNLESS SPECIFIED OTHERWISE ON THE PLANS. ALL REJECTED MATERIALS SHALL BE REMOVED FROM THE SITE, AND REPLACED IMMEDIATELY (THE DECISION OF THE CONTRACT ADMINISTRATOR SHALL BE FINAL). CONTAINER GROWN PLANTS SHALL HAVE BEEN GROWN IN POTS, CANS, TUBS OR BOXES FOR A MINIMUM OF SIX MONTHS, EXCEPT WHEN THE PLANTS SHALL HOLD THE ENTIRE ROOTBALL TOGETHER UPON REMOVAL FROM THE CONTAINERS, WITHOUT BEING ROOT-BOUND. ALL NON-ARIZONA GROWN PLANTS SHALL BE "CLIMATIZED" FOR AT LEAST FOUR WEEKS IN PARTIAL SHADE, DURING THE SUMMER MONTHS, PRIOR TO DELIVERY TO THE SITE. TREES SHALL HAVE STRAIGHT TRUNKS THROUGHOUT THEIR HEIGHT, EXCEPT MULTI-TRUNKED SPECIFIED MATERIAL. ANY TREE WITH WEAK TRUNKS INCAPABLE OF SUPPORTING ITS FULL GROWTH SHALL BE DOUBLE-STAKED, WHETHER CALLED FOR IN THE SPECIFICATIONS OR NOT.

5.5 PLANT MATERIAL PROCUREMENT: ALL TREES, CACTI AND SUCCULENTS SHALL BE PURCHASED BY THE CONTRACTOR WITHIN 30 DAYS OF CONTRACT AWARD BY THE OWNER. WRITTEN VERIFICATION THAT THIS HAS TAKEN PLACE SHALL BE FORWARDED TO THE OWNER AND ARCHITECT FOR THEIR FILES. ALL STORAGE AND MAINTENANCE COSTS SHALL BE BORNE BY THE 5.6 INSPECTION: ALL PLANT MATERIALS ARE SUBJECT TO ACCEPTANCE OR

REJECTION BY THE CONTRACT ADMINISTRATOR. NOTIFY THE LANDSCAPE

ARCHITECT AFTER DELIVERY OF PLANT MATERIALS. THE LANDSCAPE ARCHITECT WILL VISIT THE SITE, DETERMINE THE QUALITY OF STORED MATERIALS, AND NOTIFY THE CONTRACT ADMINISTRATOR OF ALL REJECTED MATERIALS. THE CONTRACT ADMINISTRATOR WILL NOTIFY CONTRACTOR. 5.7 PRODUCT DELIVERY, STORAGE & HANDLING: ALL PLANT MATERIALS DELIVERED TO THE SITE SHALL BE PLANTED AS SOON AS PRACTICAL, AFTER INSPECTION AND APPROVAL. KEEP ALL SUN SENSITIVE PLANT MATERIALS OUT OF FULL SUN DURING SUMMER MONTHS. PROTECT FROM DRYING WINDS AND DUST STORMS. DELIVERY, MAINTENANCE AND INSTALLATION OF ALL PLANT MATERIALS IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR, AND THEY SHALL MAKE ALL ARRANGEMENTS FOR PROPER LABOR TO AVOID DELAYS AND REJECTION OF PLANT MATERIALS WHICH HAVE BEEN ON-SITE TOO LONG WITHOUT PLANTING OR INSTALLATION.

6.1 MANURE: SHALL BE WELL-ROTTED, UNBLEACHED STEER MANURE, NOT LESS THAN 8 MONTHS NOR MORE THAN 2 YEARS OLD. REASONABLY FREE OF WOOD SHAVINGS, SAWDUST OR REFUSE, AND SHALL NOT CONTAIN MORE THAN 10% STRAW OR OTHER FOREIGN MATERIALS BY VOLUME. 6.2 MULCH: SHALL BE WELL-ROTTED, DECOMPOSED WOOD FIBER, OR COTTON STUBBLE-DERIVED MATERIALS WITH NO FILLERS OR AGENTS SAVE FOR THE BALANCE OF NITROGEN-ADDING INGREDIENTS. PH SHALL RANGE FROM 6.8 TO 7.2; MOISTURE CONTENT SHALL BE 30 TO 40% BY WEIGHT, AND NUTRIENTS SHALL COMPLY WITH THE FOLLOWING MINIMUM REQUIREMENTS BY VOLUME: NITRATE NITROGEN - 1.5%; ORGANIC NITROGEN - 3.65%; PHOSPHORUS - 1.14%; POTASSIUM - 1.19%; IRON - 0.84%. DELIVERY TO SITE SHALL BE EITHER BULK OR MARKED BAGS. ACCEPTABLE PRODUCTS ARE "GREENWORLD MULCH", "COM-PEL SOIL CONDITIONER", AND NATURAL "PEAT MOSS".

6.3 SAND: SHALL BE COURSE, GRANULAR CONCRETE SAND OR GROUT SAND (NOT MORTAR OR SILICA SAND), CONFORMING TO ASTM C-33, THOROUGHLY AND UNIFORMLY WASHED, ENTIRELY FREE OF OIL OR OTHER DELETERIOUS SUBSTANCES.

6.4 FERTILIZER TABLETS: SHALL BE "AGRIFORM"OR "ZIM" (IN PILL OR TABLET FORM). PLACE 4" TO 10" DEEP AND 2" OUTSIDE OF THE ROOTBALL AT THE FOLLOWING RATES: ONE TABLET PER 1-GAL; TWO PER 5- GAL; ONE TABLET PER EACH 1/2" OF TRUNK DIAMETER. OR ONE PER EACH 24" OF HEIGHT. WHICHEVER IS GREATER.

6.5 TOPSOIL: SHALL BE SCREENED, FERTILE, FRIABLE SOIL FROM WELL-DRAINED ARABLE LAND FREE FROM NON-ORGANIC REFUSE, NOXIOUS WEEDS, NUT GRASS, THORNY CLAY, CLODS, ROOTS AND ALL MATERIAL TOXIC TO PLANT GROWTH. TOPSOIL SHALL COMPLY WITH MAG SPECIFICATIONS 795.2. TOPSOIL SHALL BE BLENDED ONSITE WITH 25% SAND BY VOLUME PRIOR TO INSTALLATION UNDER TURF AREAS. 6.6 PLANTING PIT BACKFILL FOR ALL TREES AND SHRUBS SHALL BE AS

6 PARTS BY VOLUME ON SITE FERTILE SOIL

4 PARTS BY VOLUME CLEAN MASON SAND 2 PARTS BY VOLUME ORGANIC TOP SOIL 1 POUND 16-20-0 FERTILIZER PER CUBIC YARD OF MIX GROUNDCOVER PLANTING MIX SHALL BE AS STATED ON THE PLANS.

6.7 TREE STAKING, GUYING & BRACING: ALL 15-GAL. AND LARGER TREES SHALL BE STAKED AS SHOWN ON THE PLANS. STAKES SHALL BE A 2" DIAMETER ROUND KNOT FREE PINE "LODGE POLE", LENGTH AS REQUIRED BELOW, AND INSTALLED AS FOLLOWS: STAKES SHALL BE PLACED IMMEDIATELY ADJACENT TO, BUT IN NO CASE THROUGH, THE ROOT BALL, PENETRATING AT LEAST 8" INTO UNDISTURBED SOIL, AND ALIGNED VERTICALLY. THE STAKE SHALL BE POINTED AT ONE END, AND ALIGNMENT SHOULD NOT INTERFERE WITH THE EXISTING BRANCH STRUCTURE OF THE TREE. INSTALL ALL STAKES AS FOLLOWS: 15-GAL. - 2 EA. 8' LONG POLE; 24" AND 30" BOX SIZE - 2 EA. 12' LONG STAKES; 36" BOX AND LARGER SIZE -THREE GUY WIRES (8 GAUGE STEEL) WITH GROUND STAKES. WIRE FOR FASTENING TREES TO STAKES SHALL BE #12 GAUGE GALVANIZED STEEL. WIRE FOR GUYING SHALL BE #8 GAUGE GALVANIZED STEEL, ATTACHED TO A 1" DIAMETER BY 36" LONG STEEL GROUND STAKE BY DRILLING A HOLE COMPLETELY THROUGH THE GROUND STAKE, AND SECURING THE WIRE WITH TWO MECHANICAL CLAMPS PER WIRE. ALL WIRE ATTACHED TO THE TREES SHALL BE DONE AT THE LOWEST BRANCHES, ENCASED WITH RUBBER HOSES, AND CLAMPED WITH AT LEAST TWO CLAMPS. HOSE MAY BE EITHER NEW OR OLD RUBBER, BUT NOT PLASTIC. ALLOW 1" CLEARANCE AROUND THE TRUNKS OF 36" BOX TREES OR LARGER (UNLESS SPECIFIED OTHERWISE ON THE PLANS) WHEN FORMING THE HOSE-ENCASED WIRE RING. FORM A COMPLETE RING OF HOSE-ENCASED WIRE FOR EACH OF THE TREE GUYS, APPROXIMATELY 120 DEGREES APART. SET THE GROUND STAKES AN APPROPRIATE DISTANCE FROM THE TREE TO PROVIDE AN APPROXIMATE ANGLE OF 45 DEGREES BETWEEN THE GROUND AND WIRE. 6.8 HEADERS: SEE PLANS AND DETAILS FOR TYPE OF HEADER AND INSTALLATION SPECIFICATIONS. HEADERS SHALL BE USED TO SEPARATE TWO INCOMPATIBLE USES SUCH AS TURF/PLANTERS/DECOMPOSED GRANITE/GROUND COVER AREAS. ALL HEADERS SHALL BE MOUNTED WITH THEIR TOPS FLUSH WITH SIDEWALKS, GENERALLY KEPT 1 1/2" ABOVE FINISHED GRADES, AND SHALL NOT HAVE MORE THAN A 6:1 SLOPE. REDWOOD OR PLASTIC HEADERS SHALL NOT BE ALLOWED. 6.9 DECOMPOSED GRANITE: UNLESS OTHERWISE NOTED ALL LANDSCAPE AREAS SHALL BE TOPDRESSED WITH A MIXTURE OF 1/2" SCREENED

DECOMPOSED GRANITE. THE COLOR SHALL BE "DESERT BROWN" AND SHALL MATCH AS CLOSELY AS POSSIBLE, THE NATURAL COLOR OF THE DESERT. SAMPLES SHALL BE SUBMITTED FOR LANDSCAPE ARCHITECT'S APPROVAL PRIOR TO DELIVERY. THE GRANITE SHALL BE FREE OF LUMPS AND FOREIGN SUBSTANCES. GRANITE SHALL BE INSTALLED TO A DEPTH OF 2" AND SHALL BE MEASURED AFTER COMPACTION AND ROLLING.

6.10 TOPDRESSING OF REVEGETATION AREAS: ALL REVEGETATION AREAS SHALL BE TOPDRESSED WITH A MINIMUM OF 2" OF DECOMPOSED GRANITE AND COBBLES SALVAGED FROM ONSITE BY THE GRADING CONTRACTOR SEE SECTION 02200 3.02. THIS MATERIAL SHALL BE SCREENED BY THE LANDSCAPE CONTRACTOR PRIOR TO INSTALLATION IN ORDER TO REPRODUCE THE TEXTURE AND APPEARANCE OF THE NATURAL DESERT. LANDSCAPE CONTRACTOR SHALL PLACE A 200 SQUARE FOOT MINIMUM AREA OF TOPDRESSING FOR APPROVAL BY LANDSCAPE ARCHITECT PRIOR TO

INSTALLATION OF THE BALANCE OF THE SITE. 6.11 WEED CONTROL: REMOVE ALL WEEDS BY MECHANICAL METHODS OR BY SPRAYING WITH "ROUND-UP" OR EQUAL. ALL LANDSCAPE AREAS EXCEPT REVEGETATION AREAS SHALL BE TREATED WITH A PRE-EMERGENT SUCH AS "DACTHAL" OR EQUAL PER MANUFACTURER'S RECOMMENDATIONS. PLASTIC LINERS SHALL NOT BE ALLOWED.

#### 7.0 LAYOUT AND EXCAVATION OF PLANTING AREAS

7.1 CONTRACTOR SHALL STAKE TREE LOCATIONS AS SHOWN ON DRAWINGS. THE LANDSCAPE ARCHITECT SHALL FIELD CHECK THE LAYOUT LOCATION OF PLANTS AND WILL DIRECT THE CONTRACTOR TO ADJUST TO EXACT POSITION BEFORE EXCAVATION BEGINS. NOTIFY THE LANDSCAPE ARCHITECT AT LEAST 48 HOURS PRIOR TO SCHEDULING WORK.

7.2 NOTIFY THE ARCHITECT OF ROCK CALACHE, HARD PAN CLAY, AND OTHER OBSTRUCTIONS WHICH ARE ENCOUNTERED IN THE EXCAVATION OF PLANT PITS. ALTERNATIVE PLANTING LOCATIONS MAY BE SELECTED BY ARCHITECT.

7.3 DIG PLANTING PITS WITH PERPENDICULAR SIDES 1-1/2 TIMES THE SIZE OF THE ROOT BALL. BACKFILL PIT WITH PLANTING MIXTURE TO 1/3 DEPTH BEFORE SETTING SHRUBS AND TREES. 7.4 PUDDLE PLANTING MIXTURE WHEN PIT IS 2/3 FULL OF MIX. CONTINUE BACKFILLING TO WITHIN 1" OF THE SURROUNDING FINISH

7.5 CUT PLANT CONTAINER (CANS) ON TWO SIDES WITHOUT INJURING ROOT BALL AND CAREFULLY REMOVE THE PLANT. DO NOT CUT CONTAINER WITH SPADE. ANY PLANT INJURED OR ROOT BALL BROKEN DURING PLANTING OPERATIONS WILL BE REJECTED. 7.6 ALL GROUND COVER AND DECOMPOSED GRANITE AREAS, EXCEPT REVEGETATION AREAS, SHALL BE TREATED WITH A PRE-EMERGENT AS OUTLINED IN SECTION 6.11. 7.7 GENERALLY, FINISHED GRADE SHALL BE 1-1/2" BELOW TOPS OF

HEADER, WALKS, ETC. 7.8 SIDEWALKS AND PAVING SHALL BE BROOMED DAILY DURING PLANTING OPERATION. PLANT CONTAINERS, EMPTY FERTILIZER BAGS AND SEED BAGS AND CONTAINER ARE TO BE PICKED UP AND DISPOSED OF DAILY. CONTRACTOR'S TRASH SHALL BE REMOVED FROM THE SITE AT THE COMPLETION OF WORK.

#### 8.0 INSTALLATION

8.1 SOIL PREPARATION: THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR REMOVING ALL ABC, ROCKS OR FOREIGN OBJECTS LARGER THAN 1/2" FROM ALL PLANTED AREAS. THE CONTRACTOR SHALL VISIT THE SITE, AND WORK WITH THE GENERAL CONTRACTOR TO ASSURE THEMSELVES THIS PROVISION IS COMPLIED WITH. IN AREAS WHERE TURF WILL NOT BE PLANTED, THEY SHALL TAKE PROPER PRECAUTIONS FOR THE REMOVAL OF ANY EXISTING TURF AND OTHER AGGRESSIVE WEEDS 8.2 SHRUBS & TREES: SHALL BEINSTALLED IN ACCORDANCE WITH THE FOREGOING SPECIFICATIONS AND THE DETAILS SHOWN ON THE PLANS. PLANT PITS SHALL ALWAYS PROVIDE ADEQUATE GROWTH VOLUMES FOR NEW ROOTS, AND SHALL MEET THE FOLLOWING MINIMUM STANDARDS, WHICH MAY BE INCREASED ON THE DETAILS: 1 GAL. MATERIALS, 8" CLEARANCE SIDES AND BOTTOM; 5 GAL. MATERIALS, 12" CLEAR ALL SIDES AND BOTTOM; 15 GAL. AND LARGER, 18" CLEARANCE ON SIDES, 12" CLEARANCE ON BOTTOM. BACKFILL THESE AREAS WITH "PREPARED BACKFILL" (SEE SECTION 6.6).

8.3 APPLICATION OF SEED MIXES: 8.3.1. SITE PREPARATION: THE CONTRACTOR SHALL PREPARE ALL AREAS RECEIVING SEED MIXES BY: 1) REMOVING ALL EXISTING WEEDS BY PULLING, TILLING UNDER, APPLYING A GENERAL HERBICIDE SUCH AS ROUND-UP, OR BY A COMBINATION OF THESE METHODS; 2) THOROUGHLY IRRIGATING THE AREAS TO ENCOURAGE GERMINATION OF WEED SEEDS NEAR SURFACE FOR A MINIMUM OF 2 WEEKS; 3) REMOVE ALL NEW GROWTH WITHOUT TILLING AND 4) MECHANICALLY TRACKING ALL SLOPES PERPENDICULAR TO SLOPE TO PROVIDE ROUGHENED SURFACE TO "CATCH" SEEDS.

8.3.2. TOPDRESS AREA PER 6.10 OF THIS SECTION. 8.3.3. HYDROSEEDING: SEED MIXES TO BE HYDROSEEDED SHALL BE APPLIED AT THE SPECIFIED RATE IN A SLURRY CONTAINING 2,100 LBS/AC GOLDSTAR WOOD FIBER MULCH, 100 LBS/AC M-TAC TACKIFIER AND 100 LBS/AC AMMONIUM PHOSPHATE 16-20-0 FERTILIZER. ALL SEED SHALL BE APPLIED FIRST WITH ONLY 5-10% OF THE ABOVE SPECIFIED SLURRY/MULCH MIX, AND THE BALANCE OF THE SLURRY/MULCH SHALL BE APPLIED AS A SECOND STEP. THE CONTRACTOR SHALL MINIMIZE THE AMOUNT OF TIME THAT THE SEED IS CIRCULATED THROUGH PUMPS OR PADDLES PRIOR TO APPLICATION.

8.3.4. DRY SEED APPLICATION: AT THE CONTRACTOR'S OPTION, SOME OR ALL OF THE SPECIFIED SEED MAYBE APPLIED DRY, HOWEVER, THE CONTRACTOR SHALL REMAIN RESPONSIBLE FOR ACCEPTABLE GERMINATION AND ESTABLISHMENT. SEE "8.4.5." BELOW. SEED MIXES TO BE APPLIED DRY SHALL FIRST BE MIXED WITH 10 PARTS SOIL AND SAND MATRIX TO 1 PART SEED AND THEN EVENLY SCATTERED AT THE RATES

8.3.5. ESTABLISHMENT: CONTRACTOR SHALL BE RESPONSIBLE FOR WATERING ALL SEEDED AREAS TO ESTABLISH AN ACCEPTABLE RATE OF GERMINATION AND FOR REMOVING ANY WEEDS SUCH AS TUMBLEWEED, AND DESERT BROOM THAT MAY APPEAR. 8.4 BERMS/GRADING: EARTH BERMS SHALL BE FORMED AS INDICATED ON THE PLANS. GRADING RESPONSIBILITY SHALL BE WORK OF THE MASS GRADING CONTRACTOR UNLESS SPECIFIED OTHERWISE ON THE CONSTRUCTION DOCUMENTS. THE ARCHITECT SHALL APPROVE ALL GRADING BASED ON AESTHETICS PRIOR TO ANY TREE IRRIGATION AND SITE IMPROVEMENTS. THE CIVIL ENGINEER SHALL APPROVE ALL GRADING BASED UP ON DRAINAGE. APPROVALS MUST BE OBTAINED IN WRITING PRIOR TO COMMENCING LANDSCAPE WORK. NOTIFY LANDSCAPE ARCHITECT AT LEAST 5 DAYS PRIOR TO SCHEDULED WORK. 8.5 CACTI: ALL CACTI SHALL BE INSTALLED PER DETAILS PROVIDED IN THE DRAWINGS. ALL CACTI SHALL BE WARRANTIED FOR A PERIOD OF 1 YEAR FROM THE DATE OF FINAL ACCEPTENCE. ALL CACTI SHALL BE PLACED ON

#### A SEPARATE IRRIGATION VALVE. 9.0 PRUNING AND REPAIR

9.1 UPON COMPLETION OF THE WORK OF THIS SECTION, ALL TREES AND SHRUBS SHALL HAVE BEEN PRUNED IF REQUIRED OR DIRECTED BY THE CONTRACT ADMINISTRATOR, AND ALL INJURIES REPAIRED. LIMIT AMOUNT OF PRUNING TO THE MINIMUM NECESSARY TO REMOVE DEAD AND INJURED TWIGS AND BRANCHES.

#### 10.0 GUARANTEE AND REPLACEMENT

10.1 GUARANTEE ALL PLANTING FOR A PERIOD OF 90 DAYS FROM THE DATE OF INSTALLATION, UNLESS OTHERWISE NOTED. ALL PLANTING SHALL BE ALIVE AND IN SATISFACTORY GROWTH AT THE END OF THE GUARANTEE PERIOD.

10.2 DURING THE GUARANTEE PERIOD, ALL PLANTS SHALL BE IN A HEALTHY, VIABLE CONDITION. REPLACE ANY PLANT NOT IN A HEALTHY CONDITION WHEN NOTIFIED BY THE LANDSCAPE ARCHITECT. SHOULD ANY DIFFERENCE OF OPINION ARISE OVER REPLACEMENT, THE LANDSCAPE ARCHITECT'S DECISION IS FINAL.

10.3 GUARANTEE REPLACEMENTS OF ALL PLANT MATERIAL FOR A PERIOD OF 90 DAYS FROM THE DATE OF INSTALLATION UNLESS SPECIFICALLY NOTED OTHERWISE IN THESE SPECIFICATIONS. 10.4 THE GUARANTEE PERIOD FOR DECIDUOUS TREES SHALL BE IN EFFECT

UNTIL ALL ARE SHOWING NEW GROWTH THE SPRING FOLLOWING PLANTING PROVIDED THE TREE WAS INSTALLED JUST PRIOR TO ITS DORMANT STAGE.

#### 11.0 ACCEPTANCE OF WORK

11.1 AFTER COMPLETION OF ALL WORK AND BEFORE THE BEGINNING OF THE MAINTENANCE PERIOD, THE CONTRACTOR SHALL NOTIFY THE CONTRACT ADMINISTRATOR FOR THE PURPOSE OF SCHEDULING THE MAINTENANCE INSPECTION. THE CONTRACTOR SHALL PREPARE, AND HAVE ON-SITE, A COMPLETE SET OF RECORD FOR CONTRACT ADMINISTRATOR OR CITY REVIEW DURING THE MAINTENANCE INSPECTION. 11.2 BEFORE SCHEDULING THE MAINTENANCE INSPECTION, THE CONTRACTOR SHALL INSURE THAT ALL TESTS AND WORK RELATED TO IRRIGATION IS COMPLETED. THE CONTRACT ADMINISTRATOR SHALL BE NOTIFIED (14) DAYS PRIOR TO SCHEDULING INSPECTION.

11.3 INSURE THAT ALL PLANT MATERIAL EXHIBITS NORMAL GROWTH CHARACTERISTICS AND IS SUBSTANTIALLY VIGOROUS. IN ADDITION, ALL PLANT MATERIAL SHALL MEET ACCEPTED NURSERY STANDARDS FOR SIZE, TRUNK CALIPER AND FORM.

11.4 INSURE THAT TREE, SHRUB AND GROUND COVER QUANTITIES ARE ACCORDING TO PLAN AND AT CORRECT SPACINGS. 11.5 INSURE THAT A FULLY-FUNCTIONAL, AUTOMATIC SPRINKLER SYSTEM IS PROPERLY INSTALLED TO PROVIDE ADEQUATE COVERAGE.

11.6 SHOULD THE LANDSCAPE ARCHITECT OR OWNER'S REPRESENTATIVE DETERMINE THE SITE TO BE SUFFICIENTLY INCOMPLETE OR POORLY INSTALLED, THEY RESERVE THE RIGHT TO POSTPONE OR EXTEND THE MAINTENANCE PERIOD UNTIL THE PROJECT IS IN ACCEPTABLE CONDITION.

#### 12.0 MAINTENANCE

12.1 MAINTENANCE SHALL BE FOR A PERIOD OF 90 DAYS, UNLESS NOTED

12.2 GROUNDCOVER AREAS SHALL BE MAINTAINED WEEKLY FOR FIRST THIRTY DAYS, BI-WEEKLY DURING THE REMAINING DAYS, REMOVING ALL WEEDS AND GRASSES, AND FINE-TUNING THE IRRIGATION SYSTEM TO ENSURE ADEQUATE COVERAGE WHILE MINIMIZING OVERSPRAY. 12.3 DURING THE ENTIRE MAINTENANCE PERIOD. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL WEEDING, SPRAYING, FERTILIZING, MOWING. RAKING, SWEEPING, MULCHING, REPLANTING AND WATERING AREAS WITH PROPER AMOUNTS OF WATER TO ASSURE PROPER GROWTH OF ALL PLANTED MATERIALS.

12.4 THE MAINTENANCE PERIOD MAY BE EXTENDED BY THE CONTRACT ADMINISTRATOR OR CITY IF IN THEIR OPINION THE PROJECT IS NOT BEING PROPERLY MAINTAINED DURING THE DESIGNATED PERIOD. 12.5 SHOULD THE MAINTENANCE PERIOD OCCUR DURING A TRANSITIONAL PERIOD (MARCH, APRIL, MAY, SEPTEMBER, OCTOBER, NOVEMBER), THE CONTRACTOR SHALL BE RESPONSIBLE FOR OVERSEEDING WITH RYE AS SPECIFIED IN SECTION 9.4.

13.1 THE CONTRACTOR SHALL NOTIFY THE CONTRACT ADMINISTRATOR AT LEAST 14 DAYS IN ADVANCE OF THEIR FINAL INSPECTION. THE SITE MUST BE IN PERFECT CONDITION, WITH ALL PLANTED AREAS FREE FROM WEEDS/GRASSES, ALL REFUSE REMOVED FROM PLANTED AREAS, ALL WALKS AND DRIVES CLEAN AND DRY, AND THE CONTRACTOR SHALL OPERATE ALL REMOTE CONTROL VALVES FROM THE CONTROLLER, IN SEQUENCE, AND PROVIDE ENOUGH TIME FOR THE CITY TO INSPECT ALL AREAS BEING WATERED. THE CONTRACTOR SHALL INSTRUCT THE OWNER, OR THEIR REPRESENTATIVE ON THE SUGGESTED WATERING TIMES AND CYCLES OF ALL SPRINKLER IRRIGATED AREAS. IF ALL IS IN ORDER, OR CAN BE MADE SO WITHIN 24 HOURS, THE SITE WILL BE ACCEPTED VERBALLY AT THIS TIME, OR EXTENDED UNTIL SUCH TIME AS THE SITE CAN BE ACCEPTED. SHOULD THE PROJECT REQUIRE ADDITIONAL MAINTENANCE, THE CONTRACT ADMINISTRATOR SHALL NOTIFY THE INVOLVED PARTIES AT THIS

\*\*\*END OF SECTION \*\*\*



PLANNING • LANDSCAPE ARCHITECTURE



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Project No. 22-114

Original Submittal Date:

Project Phase & Revisions: PRELIM: April 12, 2022 CD'S #1: Aug. 19, 2022

LANDSCAPE **SPECIFICATIONS** 

#### 1.0 GENERAL CONDITIONS

1.1 CONTRACTOR SHALL VISIT AND INSPECT SITE AND BE THOROUGHLY INFORMED OF ALL EXISTING CONDITIONS PRIOR TO THE BID. DISCREPANCIES BETWEEN EXISTING CONDITIONS AND THOSE SHOWN ON DRAWINGS SHALL BE BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT FOR CLARIFICATION.

1.2 "PROJECT COMPLETION" SHALL BE DEFINED AS THE DATE CONSTRUCTION IS COMPLETE AND THE MAINTENANCE PERIOD BEGINS. 1.3 THE IRRIGATION CONTRACTOR, WITH THEIR BID SUBMITTAL SHALL PROVIDE WRITTEN VERIFICATION OF THREE (3) YEARS DEMONSTRATIVE ABILITY TO PERFORM THE WORK SPECIFIED HEREIN. PAST WORK SHALL BE OF SIMILAR TYPE, SCALE AND QUALITY.

#### 2.0 WORK SPECIFIED HEREIN

2.1 THE WORK SPECIFIED WITHIN THIS SECTION SHALL INCLUDE ALL LABOR, MATERIALS, EQUIPMENT AND SERVICES NECESSARY TO COMPLETE ALL THE IRRIGATION AS DETAILED AND SPECIFIED, INCLUDING THE FOLLOWING WORK REASONABLY INCIDENTAL THERETO. 2.2 THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE FOLLOWING WORK

UNLESS OTHERWISE SPECIFIED ON THE PLANS. 2.2.1 COORDINATION OF ALL THE IRRIGATION WORK TO INSURE SUCCESSFUL INTEGRATION WITH THE LANDSCAPING.

2.2.2 ACCEPTING THE FINISHED GRADE PROVIDED, +/- 0.1 OF A FOOT AS SHOWN ON THE GRADING PLAN.

#### 3.0 SAMPLES & TESTS

3.1 THE LANDSCAPE ARCHITECT RESERVES THE RIGHT TO TAKE AND ANALYZE SAMPLES OF MATERIALS FOR CONFORMITY TO SPECIFICATIONS AT ANY TIME. CONTRACTOR SHALL FURNISH SAMPLES UPON REQUEST BY LANDSCAPE ARCHITECT. REJECTED MATERIALS SHALL BE IMMEDIATELY REMOVED FROM THE SITE AND REPLACED AT THE CONTRACTOR'S EXPENSE. COST OF TESTING OF MATERIALS NOT MEETING SPECIFICATION SHALL BE PAID BY CONTRACTOR.

3.2 UNLESS OTHERWISE SPECIFIED, THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING AND PASSING ALL CITY REQUIRED INSPECTIONS, TESTING AND PERFORMANCE VERIFICATION OF THE SYSTEM REPRESENTED ON THESE PLANS.

3.3 REQUIREMENTS OF REGULATORY AGENCIES: 3.3.1. ALL WORK AND MATERIALS SHALL BE IN FULL ACCORDANCE WITH LATEST RULES AND REGULATIONS OF SAFETY ORDERS OF DIVISION OF INDUSTRIAL SAFETY, THE UNIFORM PLUMBING CODE, AND OTHER APPLICABLE LOCAL LAWS OR REGULATIONS.

3.3.2. SHOULD THE CONTRACT DOCUMENTS BE A VARIANCE WITH REGULATORY REQUIREMENTS, NOTIFY LANDSCAPE ARCHITECT AND RECEIVE INSTRUCTIONS BEFORE PROCEEDING WITH WORK AFFECTED.

3.4.1. PRELIMINARY REVIEW OF COMPLETED INSTALLATION WILL BE MADE BY LANDSCAPE ARCHITECT PRIOR TO BACKFILLING OF TRENCHES AND DURING HYDROSTATIC TESTING.

3.4.2. FINAL REVIEW WILL BE MADE IN CONJUNCTION WITH THE FINAL REVIEW OF GROUNDCOVER, SHRUBS, AND TREE PLANTING.

#### 4.0 COORDINATION AND RESPONSIBILITY

4.1 COORDINATE AND COOPERATE WITH OTHER TRADES WORKING ON THE SITE FOR SUCCESSFUL COMPLETION OF THE PROJECT. 4.2 BEFORE COMMENCING WORK ON THE SITE, BECOME THOROUGHLY ACQUAINTED WITH LAYOUT OF ALL UNDERGROUND UTILITIES AND STRUCTURES OVER THE ENTIRE SITE. ALL REQUISITE REPAIRS TO CORRECT DAMAGE CAUSED BY WORK OF THIS SECTION SHALL BE AT THE CONTRACTOR'S EXPENSE.

4.3 ALL EXISTING PLANT MATERIAL AND ASSOCIATED ELEMENTS NOT INDICATED FOR REMOVAL SHALL BE PROTECTED AND MAINTAINED AS NECESSARY TO ENSURE SURVIVAL. SHOULD A TEMPORARY IRRIGATION SYSTEM BE REQUIRED TO ENSURE SURVIVAL, THE CONTRACTOR SHALL PROVIDE SUCH SYSTEM AS PART OF THIS CONTRACT. COORDINATE WORK WITH GENERAL CONTRACTOR.

4.4 A PRECONSTRUCTION CONFERENCE TO DISCUSS THE IRRIGATION PROJECT WORK SHALL BE HELD AT A TIME AGREED UPON. THE CONTRACTOR, TOGETHER WITH REPRESENTATIVES OF HIS LANDSCAPE SUBCONTRACTOR, SHALL ATTEND, AS WILL THE OWNER'S REPRESENTATIVE AND LANDSCAPE ARCHITECT. THE PURPOSE OF THIS CONFERENCE IS TO DISCUSS THE PROJECT IN DETAIL, INCLUDING SCHEDULING OF WORK, SITE PREPARATION, INTERPRETATION OF DOCUMENTS AND TO ANSWER QUESTIONS THAT MAY ARISE. UNLESS FOLLOWED UP IN WRITING, VERBAL AUTHORIZATIONS OR ACKNOWLEDGMENT BY ANYONE PRESENT SHALL NOT BE BINDING.

#### 5.0 STANDARDS

5.1 EXISTING CONDITIONS: THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING ANY DAMAGE OR BREAKAGE TO EXISTING EQUIPMENT. AND RETURNING IT TO ITS EXISTING CONDITION (INCLUDING PIPE, FIXED STRUCTURES, OR LANDSCAPING), BEING SURE TO FLUSH AND CLEAN OUT ALL VALVES AND IRRIGATION LINES AS IS NECESSARY. THE CONTRACTOR SHALL REFER TO THE DRAWINGS PROVIDED, AND CONSULT THE PROJECT SUPERINTENDENT TO AVOID DAMAGE TO EXISTING FEATURES AND UTILITIES. REFER TO DEMOLITION NOTES ON LANDSCAPE SPECIFICATIONS SHEET. 5.2 MATERIALS: ALL MATERIALS TO BE INCORPORATED IN THIS SYSTEM SHALL BE NEW AND WITHOUT FLAWS OR DEFECTS AND OF QUALITY AND PERFORMANCE AS SPECIFIED WITHIN THE CONSTRUCTION DOCUMENTS. WHENEVER MATERIAL IS SPECIFIED BY NAME OR NUMBER, SUCH SPECIFICATIONS SHALL BE DEEMED TO FACILITATE A DESCRIPTION OF THE MATERIAL; NO SUBSTITUTIONS OF MATERIAL SHALL BE PERMITTED UNLESS SPECIFICALLY APPROVED BY THE CITY IN WRITING. NO SUBSTITUTIONS OF SMALLER PIPE SIZES MAY BE APPROVED. ALL PIPE DAMAGED OR REJECTED BECAUSE OF DEFECTS SHALL BE REMOVED FROM THE SITE. 5.3 RECORD DRAWINGS: THE OWNER SHALL FURNISH THE CONTRACTOR WITH ONE (1) SET OF BOND PLOTS, SHOWING ALL SPRINKLER WORK REQUIRED UNDER THIS CONTRACT, FOR THE PURPOSE OF HAVING THE CONTRACTOR RECORD ON THESE PRINTS ALL CHANGES THAT MAY BE MADE DURING THE ACTUAL INSTALLATION OF THE SYSTEM. IMMEDIATELY UPON INSTALLATION OF ANY PIPING, VALVES, WIRING, ETC., IN LOCATIONS OTHER THAN SHOWN ON THE ORIGINAL DRAWINGS, OR OF SIZES OTHER THAN INDICATED, THE CONTRACTOR SHALL CLEARLY INDICATE SUCH CHANGES ON THE SET OF DRAWINGS WITH DIMENSIONS OF MAIN LINE FITTINGS, GATE VALVES, AND MAIN LINE ROUTING EVERY 100'. (AFTER FINAL ACCEPTANCE OF THE COMPLETED INSTALLATION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR HAVING COMPLETE DRAWINGS PREPARED SHOWING ALL SUCH CHANGES AND THESE SHALL BE TURNED OVER TO THE OWNER'S REPRESENTATIVE FOR RECORDING PURPOSES, WITH THE REST OF THE MYLARS AT THE END OF THE JOB).

5.4 MATERIAL STORAGE AND CLEAN UP: THE CONTRACTOR SHALL KEEP THE PREMISES FREE FROM RUBBISH AND DEBRIS AT ALL TIMES AND SHALL ARRANGE HIS MATERIAL STORAGE SO AS NOT TO INTERFERE WITH THE CONSTRUCTION OF THE PROJECT BY OTHER TRADES. ALL UNUSED MATERIAL, RUBBISH AND DEBRIS SHALL BE REMOVED FROM THE SITE PER DEMOLITION NOTES ON LANDSCAPE SPECIFICATIONS 5.5 EQUIPMENT, TOOLS AND LABOR: THE CONTRACTOR SHALL FURNISH ALL SUCH EQUIPMENT, TOOLS, AND LABOR NECESSARY TO COMPLETE WORK IN AN EFFICIENT AND ACCEPTABLE MANNER. THIS CONTRACT IS

BASED ON THE CONTRACTOR FURNISHING AND USING HIS OWN EQUIPMENT,

A FIRST CLASS MANNER, UNLESS OTHERWISE HEREIN SPECIFIED.

5.6 THE INSTALLATION

THE CONTRACTOR SHALL UNDERSTAND THAT THESE DRAWINGS ARE DIAGRAMMATIC AND THE CONTRACTOR SHALL BE RESPONSIBLE TO ACHIEVE 100% COVERAGE WITHOUT EXCESSIVE OVERSPRAY. IN ALL SITUATIONS THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING A SAFE AND EFFICIENT IRRIGATION SYSTEM. WEATHER CALLED OUT ON THE DRAWINGS OR NOT, ALL CACTI SHALL BE VALVED SEPARATELY. COORDINATE WITH THE LANDSCAPE CONTRACTOR. 5.7 SUBMITTALS

5.7.1. FURNISH REQUIRED COPIES OF MANUFACTURER'S LITERATURE, CERTIFICATIONS, AND OPERATING INSTRUCTIONS FOR THE COMPLETE LIST OF MATERIALS, FOR THE FOLLOWING ITEMS:

A. IRRIGATION CONTROLLER. B. BACKFLOW PREVENTOR, IF APPLICABLE.

C. GATE VALVES.

D. PIPE AND FITTINGS. E. REMOTE-CONTROL VALVES.

F. VALVE BOXES. G. QUICK-COUPLING VALVES AND MANUAL VALVES.

H. DRIP EMITTERS, AND BUBBLERS. I. LOW VOLTAGE WIRES AND CONNECTORS.

J. PRESSURE REGULATOR DEVICE.

K. FILTER DEVICE. L. AIR RELIEF VALVE.

5.8.1. IN ADDITION TO MANUFACTURER'S WARRANTIES, WORK SHALL BE WARRANTED AND GUARANTEED FOR 1 YEAR FROM THE DATE OF COMPLETION AGAINST DEFECTS IN MATERIAL, EQUIPMENT, AND WORKMANSHIP

WARRANTY/GUARANTY SHALL ALSO COVER REPAIR OF DAMAGE TO ANY PART OF PREMISES RESULTING FROM LEAKS OR OTHER DEFECTS IN MATERIALS, EQUIPMENT, AND WORKMANSHIP, TO THE SATISFACTION OF THE OWNER. 5.8.2. CONTRACTOR SHALL NOT BE HELD RESPONSIBLE FOR FAILURES DUE TO NEGLECT BY OWNER, VANDALISM, ETC., DURING WARRANTY/GUARANTY PERIOD. REPORT SUCH CONDITIONS TO THE OWNER IN WRITING.

5.8.3. CONTRACTOR SHALL NOT ALLOW NOR CAUSE ANY OF HIS WORK TO BE COVERED OR ENCLOSED UNTIL IT HAS BEEN INSPECTED, TESTED AND ACCEPTED BY THE AUTHORIZED PERSONNEL. SHOULD ANY OF HIS WORK BE ENCLOSED OR COVERED BEFORE SUCH INSPECTION AND TEST, HE SHALL UNCOVER THE WORK AT HIS OWN EXPENSE AND AFTER IT HAS BEEN INSPECTED, TESTED AND ACCEPTED, SHALL MAKE ALL REPAIRS WITH LIKE MATERIALS NECESSARY TO RESTORE ALL HIS WORK AND THAT OF OTHER CONTRACTORS TO ITS ORIGINAL CONDITION, AT NO ADDITIONAL COST TO THE OWNER.

#### **6.0 EXCAVATION WORK**

6.1 EXCAVATION AND BACKFILL

PIPE TRENCHES SHALL BE EXCAVATED OF SUFFICIENT DEPTH AND WIDTH TO PERMIT PROPER HANDLING AND INSTALLATION OF THE PIPE AND FITTINGS. THE BACKFILL SHALL BE THOROUGHLY COMPACTED AND EVENED OFF WITH THE ADJACENT SOIL LEVEL IN A MANNER WHICH MINIMIZES TRENCH SETTLING. SELECTED FILL DIRT OR SAND SHALL BE USED IF SOIL CONDITIONS ARE ROCKY. IN ROCKY AREAS, THE TRENCHING DEPTH SHALL BE (2) INCHES BELOW NORMAL TRENCH DEPTH TO ALLOW FOR BEDDING. THE FILL DIRT OR SAND SHALL BE USED IN FILLING FOUR (4) INCHES ABOVE THE PIPE. THE REMAINDER OF THE BACKFILL SHALL CONTAIN NO LUMPS OR ROCKS LARGER THAN (3) INCHES. THE TOP SIX (6) INCHES OF BACKFILL SHALL BE FREE OF ROCKS OVER (1) INCH, SUBSOIL OR TRASH. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COMPACTING TRENCHED AREAS UNDER PAVED AREAS PER SECTION 02220 AND 85% UNDER PLANTED AREAS.

6.2 EXISTING UTILITIES AND STRUCTURES 6.2.1 THE EXACT LOCATION OF ALL EXISTING UTILITIES AND STRUCTURES AND UNDERGROUND UTILITIES, WHETHER INDICATED ON THE DRAWINGS OR NOT, SHALL BE IDENTIFIED BY THE CONTRACTOR AND THEY SHALL CONDUCT THEIR WORK SO AS TO PROTECT EXISTING STRUCTURES AND UTILITY SERVICES AND SHALL BE RESPONSIBLE FOR THEIR REPLACEMENT IF DAMAGED. REFER TO DEMOLITION NOTES ON LANDSCAPE SPECIFICATIONS,

6.2.2 MINOR ADJUSTMENTS IN THE SYSTEM SHALL BE PERMITTED TO CLEAR EXISTING FIXED OBSTRUCTIONS; SUBJECT TO THE APPROVAL OF THE OWNER'S REPRESENTATIVE. GENERAL CONTRACTOR SHALL PROVIDE POWER TO ALL POINTS SHOWN ON PLANS. THE GENERAL CONTRACTOR SHALL MAKE APPLICATION WITH THE LOCAL UTILITY FOR DRAWINGS AND PERMITS TO COMPLETE THE ABOVE WORK.

#### 7.0 PIPE AND TUBE

7.1 GENERAL: UNLESS OTHERWISE SPECIFIED OR SHOWN ON THE DRAWINGS, THE CONSTRUCTION OF DRIP LINES AND INSTALLATION OF CONTROL WIRING AND/OR CONTROL LINES SHALL INCLUDE EXCAVATION AND BACKFILL, THE FURNISHINGS, INSTALLING AND TESTING OF DRIP PIPE, TUBE AND FITTINGS, AND THE REMOVAL AND/OR RESTORATION OF EXISTING IMPROVEMENTS AND ALL OTHER WORK IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS.

7.1.1 UNLESS OTHERWISE INDICATED ON THE DRAWINGS, ALL PIPE SHALL BE INSTALLED WITH A MINIMUM COVER OF TWELVE (12) INCHES BELOW FINISHED GRADE.

7.1.2 GENERALLY, PIPING UNDER CONCRETE OR ASPHALT SHALL BE INSTALLED PRIOR TO ANY SURFACE WORK. JACKING, BORING OR HYDRAULIC DRIVING SHALL BE AN ACCEPTABLE METHOD TO INSTALL PIPE UNDER EXISTING CONCRETE OR ASPHALT. WHERE ANY CUTTING OR BREAKING OF SIDEWALKS, CONCRETE WORK AND/OR ASPHALT IS NECESSARY, IT SHALL BE REMOVED AND REPLACED BY THE CONTRACTOR. PERMISSION TO CUT OR BREAK SIDEWALKS, CONCRETE AND/OR ASPHALT SHALL BE OBTAINED FROM THOSE HAVING PROPER JURISDICTION.

7.1.3 ALL IRRIGATION PIPE LESS THAN 4" DIAMETER INSTALLED UNDER CONCRETE OR PAVEMENT SHALL BE SLEEVED WITHIN A SCHEDULE 40 PVC PIPE TWICE THE DIAMETER OF THE IRRIGATION LINE BEING SLEEVED. SLEEVE SHALL BE OF SUFFICIENT LENGTH TO PERMIT A MINIMUM OF 12" EXTENDING BEYOND EDGE OF CONCRETE OR PAVEMENT. ALL IRRIGATION PIPE 4" OR GREATER IN DIAMETER SHALL BE UNSLEEVED SCHEDULE 40 PVC.

7.2 PLASTIC PIPE LINES PLASTIC PIPE SHALL BE RIGID, UNPLASTICIZED PVC; SIZE AND PRESSURE RATING OR SCHEDULE AS SHOWN ON THE PLANS, EXTRUDED FROM VIRGIN PARENT MATERIAL OF THE TYPE SPECIFIED ON THE DRAWINGS. THE PIPE SHALL BE HOMOGENEOUS THROUGHOUT AND FREE FROM VISIBLE CRACKS, HOLES, FOREIGN MATERIALS, BLISTERS, DELETIONS, WRINKLES, AND DENTS.

7.3 PLASTIC PIPE FITTINGS AND CONNECTIONS ALL PLASTIC PIPE FITTINGS TO BE INSTALLED SHALL BE MOLDED FITTINGS MANUFACTURED OF THE SAME MATERIAL AS THE PIPE AND SHALL BE SUITABLE FOR SOLVENT WELD, SLIP JOINT, RING TIGHT SEAL, OR SCREWED CONNECTIONS. NO FITTINGS MADE OF OTHER MATERIAL SHALL BE USED EXCEPT BRASS SADDLE TEES AND CROSSES AS HEREINAFTER SPECIFIED.

SLIP FITTING SOCKET TAPER SHALL BE SO SIZED THAT A DRY UNSOFTENED PIPE END, CONFORMING TO THESE SPECIAL PROVISIONS, CAN BE INSERTED NO MORE THAN HALFWAY INTO THE SOCKET. PLASTIC SADDLE AND FLANGE FITTINGS SHALL NOT BE PERMITTED. ONLY SCHEDULE 80 PIPE SHALL BE THREADED. WHEN CONNECTION IS PLASTIC TO METAL, PLASTIC SOLVENT WELD MALE ADAPTERS SHALL BE USED. THE MALE ADAPTER SHALL BE HAND TIGHTENED, PLUS ONE TURN WITH A STRAP WRENCH. JOINT COMPOUND SHALL BE TEFLON TAPE. 7.4 IDENTIFICATION

ALL PIPE SHALL BE CONTINUOUSLY AND PERMANENTLY MARKED WITH THE FOLLOWING INFORMATION: MANUFACTURER'S NAME OR TRADEMARK. SIZE SCHEDULE AND TYPE OF PIPE, WORKING PRESSURE AT 73 DEGREES F. AND NATIONAL SANITATION FOUNDATION (N.S.F.) APPROVAL. ALL PIPE CARRYING TREATED EFFLUENT (NON-POTABLE WATER) SHALL BE LABELED IN SUCH A TOOLS AND LABOR WHICH ARE SUITABLE TO CARRY OUT THIS CONTRACT IN MANNER TO IDENTIFY IT AS DIFFERENT FROM POTABLE WATER BY COLOR AND WRITTEN IDENTIFICATION ORIGINATING AT THE MANUFACTURER.

7.5 DELIVERY: PLASTIC PIPE SHALL BE DELIVERED TO THE SITE IN UNBROKEN BUNDLES, ROLLS, OR PACKAGES IN SUCH A MANNER AS TO PROVIDE ADEQUATE PROTECTION FOR THE PIPE ENDS, EITHER THREADED OR PLAIN. PLASTIC PIPE SHALL BE COVERED TO PROVIDE PROTECTION FROM THE SUN'S RAYS.

7.6 INSTALLATION OF PLASTIC PIPE 7.6.1 PLASTIC PIPE SHALL BE INSTALLED IN A MANNER SO AS TO PROVIDE FOR EXPANSION AND CONTRACTION AS RECOMMENDED BY

THE MANUFACTURER. 7.6.2 PLASTIC PIPE SHALL BE CUT SQUARE IN A LOCALLY ACCEPTABLE MANNER. BURRS AT CUT ENDS SHALL BE REMOVED PRIOR TO INSTALLATION SO THAT A SMOOTH UNOBSTRUCTED FLOW IS OBTAINED 7.6.3 ALL PLASTIC TO PLASTIC JOINTS SHALL BE SOLVENT WELD JOINTS OR SLIP SEAL JOINTS. ONLY THE SOLVENT RECOMMENDED BY THE PIPE MANUFACTURER SHALL BE USED. ALL PLASTIC PIPE AND FITTINGS SHALL BE INSTALLED AS OUTLINED AND INSTRUCTED BY THE PIPE MANUFACTURER AND IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO MAKE ARRANGEMENTS WITH THE PIPE MANUFACTURER FOR ANY FIELD ASSISTANCE THAT IS NECESSARY. THE CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR THE CORRECT INSTALLATION. 7.6.4 ALL PLASTIC-TO-METAL JOINTS SHALL BE MADE WITH SOLVENT WELD PLASTIC MALE ADAPTER OR SLIP SEAL JOINTS. ONLY THE SOLVENT RECOMMENDED BY THE PIPE MANUFACTURER SHALL BE USED. ALL PLASTIC PIPE AND FITTINGS SHALL BE INSTALLED AS OUTLINED AND INSTRUCTED BY THE PIPE MANUFACTURER AND IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO MAKE ARRANGEMENTS WITH THE PIPE MANUFACTURER FOR ANY FIELD ASSISTANCE THAT IS NECESSARY FOR THE CORRECT INSTALLATION.

7.6.5 THE SOLVENT WELD JOINTS SHALL BE MADE IN THE FOLLOWING MANNER: 1. THOROUGHLY CLEAN THE MATING PIPE AND FITTINGS WITH A CLEAN,

2. APPLY A UNIFORM COAT OF PRIMER TO THE OUTSIDE OF THE PIPE WITH A NON SYNTHETIC BRISTLE BRUSH. 3. APPLY PRIMER TO THE FITTING IN A SIMILAR MANNER.

4. APPLY A UNIFORM COAT OF SOLVENT TO THE OUTSIDE OF THE PIPE WITH A NON-SYNTHETIC BRISTLE BRUSH. 5. APPLY SOLVENT TO THE FITTING IN A SIMILAR MANNER. 6. RE-APPLY A LIGHT COAT OF SOLVENT TO THE PIPE AND QUICKLY

INSERT IT INTO THE FITTING. 7. GIVE THE PIPE OR FITTING A QUARTER TURN TO INSURE EVEN DISTRIBUTION OF THE SOLVENT AND MAKE SURE THE PIPE IS INSERTED

TO THE FULL DEPTH OF THE FITTING SOCKET. 8. HOLD IN POSITION FOR FIFTEEN (15) SECONDS. 9. WIPE OFF EXCESS SOLVENT THAT APPEARS AT THE OUTER SHOULDER OF THE FITTING.

10. CARE SHALL BE TAKEN SO AS NOT TO USE AN EXCESS AMOUNT OF SOLVENT, THEREBY CAUSING A BURR OR OBSTRUCTION TO FORM ON THE INSIDE OF THE PIPE. 11. THE JOINTS SHALL BE ALLOWED TO SET AT LEAST 24 HOURS

BEFORE PRESSURE IS APPLIED TO THE SYSTEM ON PVC PIPE.

7.7 FLUSHING AND TESTING: AFTER ALL NEW PIPING AND RISERS ARE IN PLACE AND CONNECTED, FOR A GIVEN SECTION, AND ALL NECESSARY DIVISION WORK HAS BEEN COMPLETED AND PRIOR TO INSTALLATION OF ALL CONTROL VALVES SHALL BE OPENED AND A FULL HEAD OF WATER USED TO FLUSH OUT THE SYSTEM. THE SYSTEM SHALL BE RUN UNDER FULL LOAD OF IRRIGATION DEMAND AS THE FINAL TEST.

7.8 STEEL PIPE AND FITTINGS: STEEL PIPE SHALL BE NEW, SCALE-FREE, MILD STEEL PIPE AND SHALL BE STANDARD WEIGHT SCHEDULE 40. 7.8.1 STEEL PIPE FITTINGS SHALL BE HEAVY PATTERN, BANDED. GALVANIZED MALLEABLE IRON, EPOXY COATED, THREADED PIPE FITTINGS. ALL NIPPLES SHALL BE OF THE SAME MATERIAL AS THE PIPE. BUSHINGS, CLOSE NIPPLES AND CROSSES SHALL NOT BE INSTALLED. STREET ELBOWS SHALL BE INSTALLED ONLY AS PART OF THE DRAIN VALVE ASSEMBLY.

7.8.2 PIPE SHALL BE CAREFULLY CLEANED BEFORE INSTALLATION. THE ENDS OF ALL THREADED PIPE SHALL BE REAMED OR FULL SIZE. JOINTS IN ALL SCREWED PIPING SHALL BE MADE BY APPLYING AN APPROVED OIL BASE THREAD LUBRICANT ON THE MALE THREAD ONLY. 7.9 MAIN LINE FITTINGS: FITTINGS, BENDS, TEES AND CROSSES IN THE MAIN LINES SHALL BE IN ACCORDANCE WITH AWWA DUCTILE IRON TYPE. ALL MAIN LINE FITTINGS SHALL BE DUCTILE IRON TYPE FOR PVC PIPE AS PER PLAN AND DETAILS INCLUDING TAPS TO ELECTRIC VALVES. CONTRACTOR SHALL FURNISH FITTINGS, ALL ADAPTERS, REDUCERS AND APPURTENANCE OF THE SIZE AND TYPE NECESSARY FOR THE COMPLETION OF THE PIPELINE. WHERE TAPS MUST BE MADE IN EXISTING MAIN LINE PIPE, USE ROMAC # 202-N DOUBLE STRAP SADDLE FITTINGS.

#### 9.0 DRIP IRRIGATION

DRY CLOTH.

8.1 ELECTRIC CONTROL VALVES: CONTROL VALVES SHALL BE THE TYPE INDICATED ON THE DRAWINGS AND BE CAPABLE OF OPERATING AT 10 G.P.M.S.

8.2 Y-FILTERS: FILTERS SHALL BE "Y" BODY TYPE AND SHALL BE CONSTRUCTED FROM GLASS REINFORCED POLYPROPYLENE WITH 150 MESH SCREENS OR AS INDICATED ON THE DRAWINGS. 8.3 PRESSURE REGULATORS: PRESSURE REGULATORS SHALL BE FACTORY PRE-SET AT 25 PSI AND SHALL BE THE ADJUSTABLE, TYPE AS

INDICATED ON THE DRAWINGS. 8.4 DRIP IRRIGATION PIPING: DRIP IRRIGATION PIPING SHALL BE CLASS 315 OR 200 PVC, NOMINAL SIZE OF 1/2" OR LARGER 8.5 MICRO EXTENSION TUBING: MICRO-TUBING SHALL MEET EMITTER MANUFACTURER'S RECOMMENDATIONS. BOWSMITH EMMITTER WITH TUBING SHALL NOT EXCEED 5' IN LENGTH AND SHALL HAVE AN EMITTER OUTLET CHECK VALVE (BUG CAP) ATTACHED TO THE END. 8.6 FLUSH CAP: END CAPS AND END CAP CONNECTORS (MINIMUM OF

8.7 OTHER MATERIALS: PROVIDE OTHER MATERIALS WHICH MAY NOT BE CALLED OUT IN THE SPECIFICATIONS BUT ARE CALLED OUT IN THE DRAWINGS AND INSTALL AS PER MANUFACTURER'S RECOMMENDATIONS.

#### 9.0 VALVES AND KEYS

TWO PER STATION OR AS PER DETAIL).

9.1 GENERALI: UNLESS OTHERWISE SPECIFIED, THE INSTALLATION OF ALL VALVES SHALL INCLUDE THE EXCAVATION AND BACKFILL, THE FURNISHING, INSTALLING AND TESTING OF RISERS, FITTINGS, AND VALVES, AND THE REMOVAL AND/OR RESTORATION OF EXISTING IMPROVEMENTS AND ALL OTHER WORK IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS AND AS REQUIRED FOR THE COMPLETED INSTALLATION.

9.1.1 IF SHOWN ON THE PLANS, ALL DRAIN VALVE ASSEMBLIES SHALL BE INSTALLED WITH A LENGTH OF 2" PVC PLASTIC PIPE OF LENGTH REQUIRED TO EXTEND FROM THE TOP OF THE VALVE TO FINISH GRADE LINE. A RAINBIRD LOCKING TYPE VALVE MARKER OR EQUAL, SHALL BE INSTALLED IN THE TOP OF THE 2" PIPE FOR EASY LOCATION OF THE VALVE AND FOR ACCESS FOR OPERATION OF THE VALVE.

9.1.2 IF SHOWN ON THE PLANS THE 2" DRAIN VALVE SHALL BE PROVIDED WITH PROPER GRAVEL SUMP AT THE OUTLET, OF SUFFICIENT SIZE TO PROVIDE PROPER DRAINAGE OR IF CONDITIONS ARE SUCH, THE OUTLET SHALL BE PIPED TO A DRAINAGE TILE, DRAINAGE DITCH OR POND AS DESIRED TO PROVIDE PROPER DRAINAGE.

9.1.3 WHERE REQUIRED BY LOCAL OR STATE CODE, AN ATMOSPHERIC OR PRESSURE TYPE ANTI-SIPHON OR BACKFLOW PREVENTION TYPE VALVE SHALL BE INSTALLED IN ACCORDANCE WITH SAID CODE. BACKFLOW PREVENTION ASSEMBLY SHALL BE TESTED AND APPROVED BY THE PROPER AUTHORITIES PRIOR TO ACCEPTANCE.

9.1.4 ALL QUICK-COUPLING VALVES SHALL BE INSTALLED WITH AN ADJUSTABLE SWING JOINT RISER ASSEMBLY UNIT (DOUBLE SWING JOINT RISER) ASSEMBLED BY THE USE OF AT LEAST THREE (3) 90 DEGREE ELLS OR TEES. THESE DOUBLE SWING JOINT RISERS SHALL BE OF SCHEDULE 80 PVC NIPPLES AND SCHEDULE 80 PVC FITTINGS OR UNLESS OTHERWISE DESIGNATED ON THE DRAWINGS. THE SWING JOINT RISER SHALL BE OF PROPER PIPE SIZE AS SHOWN ON THE DRAWINGS. (FACTORY PRE-ASSEMBLED UNITS MAY BE USED). 9.2 KEYS AND QUICK COUPLING VALVES: THE QUICK-COUPLING VALVES, WHERE INDICATED ON THE DRAWINGS, SHALL BE TWO PIECE BODY QUICK COUPLER TURF VALVES CONSTRUCTED OF HIGHEST GRADE HEAVY DUTY BRONZE CASTING BODIES

9.2.1 BODY SHALL BE OF TWO PIECE CONSTRUCTION CONSISTING OF A LOWER AND UPPER PIECE BODY. THE UPPER VALVE BODY SHALL BE EASILY REMOVABLE FOR MAINTENANCE. THE VALVE PARTS SHALL BE REPLACEABLE AND EACH VALVE SHALL HAVE THREE (3) STOPS, OR OPEN POSITIONS TO PROVIDE REGULATION OF FLOW. VALVE COVER SHALL BE OF HEAVY, CAST IRON WITH CADMIUM PLATE PROTECTIVE

9.2.2 THE QUICK-COUPLING VALVES SHALL BE THREE QUARTER (3/4) INCH QUICK-COUPLING OR AS INDICATED ON THE DRAWINGS, AND SHALL HAVE 3/4-INCH SIZE BOTTOM FEMALE PIPE THREAD CONNECTION. VALVES SHALL BE COMPLETE WITH STANDARD TOP. 9.2.3 THE CONTRACTOR SHALL SUPPLY THE OWNER WITH SIX (6) RAINBIRD #33 K QUICK-COUPLER WITH HOSE SWIVEL ELLS. 9.3 GATE VALVES (STANDARD): ALL ZONE SHUT-OFF OR OTHER VALVES, NOT INDICATED AS MANUAL ANGLE CONTROL VALVES, OF SIZES TWO (2) INCH AND SMALLER SHALL BE ALL BRONZE DOUBLE DISC WEDGE TYPE WITH INTEGRAL TAPER SEATS AND WITH NON-RISING STEM. ALL GATE VALVES LARGER THAN 2" SHALL BE IRON BODY, BRASS TRIMMED, DOUBLE DISC WEDGE TYPE WITH INTEGRAL TAPER SEATS AND WITH NON-RISING STEMS. GATE VALVES SHALL FUNCTION AND BE EQUAL TO WATEROUS SERIES 500 OR EQUAL. GATE VALVES 4" OR LARGER SHALL HAVE A 2" SQUARE NUT FOR FLOW CONTROL. ALL VALVES SHALL BE PLACED IN A VALVE BOX (TYPICALLY).

9.4 AUTOMATIC, REMOTE CONTROL VALVES, ELECTRIC SOLENOID TYP: ALL AUTOMATIC REMOTE CONTROL VALVES SHALL BE PER PLANS AND SPECIFICATIONS OR EQUAL SERIES. IN ADDITION, PLANS MAY REQUIRE ELECTRIC VALVE FOR WASTEWATER AND DIRTY WATER APPLICATIONS. THE SOLENOID ELECTRICAL OPERATING RANGE SHALL BE 20 TO 30 VAC 50-60 HZ MEAN SOLENOID VOLT-AMP RATING SHALL BE 8.5 VA AT 24 VAC, 60 HZ. SOLENOID COIL D.C. RESISTANCE SHALL BE 15 PLUS OR MINUS 3 OHMS.

9.5 AUTOMATIC DRAIN VALVES: AT ALL LOCATIONS INDICATED ON THE DRAWINGS INSTALL AUTOMATIC DRAIN VALVES, IF SHOWN ON PLANS. THE AUTOMATIC DRAIN VALVES SHALL BE OF THE BALL-CHECK TYPE CONSTRUCTED OF HIGHEST GRADE MACHINE BRASS AND WITH STAINLESS STEEL BALL. VALVE SHALL POSITIVELY SEAL OFF AT 3 PSI PRESSURE IN THE LINE. VALVES SHALL HAVE 1/2-INCH MALE PIPE THREAD CONNECTION.

9.5.1 INSTALL A MAXIMUM OF 2 CONTROL VALVES PER VALVE BOX UNLESS OTHERWISE NOTED ON THE DRAWINGS.

#### 10.0 CONTROLS

10.1 CONTROL CABLE: ALL ELECTRICAL CONTROL AND GROUND WIRE SHALL BE COPPER IRRIGATION CONTROL CABLE OF SIZE AS INDICATED BY MANUFACTURER'S SPECS. ALL WIRING USED FOR CONNECTING THE AUTOMATIC REMOTE CONTROL VALVES TO THE AUTOMATIC CONTROLLERS SHALL BE TYPE "UF", 600 VOLT; 7 STRAND OR SOLID COPPER, SINGLE CONDUCTOR WIRE WITH PVC INSULATION AND BEARING UL APPROVAL FOR DIRECT UNDERGROUND BURIAL FEEDER CABLE. ALL PILOT OR "HOT" WIRES SHALL BE OF ONE COLOR AND ALL "COMMON" WIRES ARE TO BE OF ANOTHER.

10.1.1INSULATION SHALL BE FOUR-SIXTY-FOURTHS (4/64) INCH THICK MINIMUM COVERING OF ICC-100 COMPOUND FOR POSITIVE WATERPROOFING PROTECTION. SIZES FOURTEEN (14), TWELVE (12), TEN (10), AND EIGHT (8) SHALL BE SINGLE CONDUCTOR SOLID COPPER WIRE AND SIZES SIX (6), FOUR (4), AND TWO (2) SHALL BE STRANDED COPPER WIRE. ALL CONTROL OR "HOT" WIRES SHALL BE OF ONE (1) COLOR (BLACK) AND ALL COMMON OR "GROUND" WIRES SHALL BE OF ONE COLOR (WHITE). VERIFICATION OF WIRE TYPES AND INSTALLATION PROCEDURES SHALL BE MADE TO CONFORM TO LOCAL CODES.

10.2 ELECTRICAL WIRE CONNECTIONS WIRE CONNECTIONS TO REMOTE CONTROL ELECTRIC VALVES AND SPLICES OF WIRE IN THE FIELD SHALL BE MADE IN THE FOLLOWING MANNER, USING RAINBIRD PEN-TITE WIRE CONNECTORS AND SEALING CEMENT (OR APPROVED EQUAL):

THE BASE SOCKET. 2. TWIST WIRES TOGETHER AND MECHANICALLY BOND TOGETHER USING CRIMP SLEEVE AND CRIMP PLIERS. 3. PULL WIRE CONNECTION BACK INTO BASE SOCKET AS FAR AS IS

1. STRIP ENDS OF WIRES AND PUSH WIRES THROUGH THE HOLES OF

4. APPLY SOLVENT CEMENT TO OUTSIDE OF SEALING PLUG AND THEN FILL CAVITY OF SEALING PLUG COMPLETELY WITH SOLVENT CEMENT. 5. PUSH SEALING PLUG INTO BASE SOCKET, USING SLIGHT TWISTING MOTION, UNTIL IT BOTTOMS. 6. PUSH WIRES DOWN INTO BASE PLUG AS FAR AS THEY WILL GO,

WITHOUT UNSEATING SEALING PLUG. 10.2.1 THIS ASSURES CEMENT COMPLETELY SEALING AROUND WIRE

INSULATION AND WATERPROOFING THE CONNECTION. 10.2.2 IT IS IMPORTANT THAT THE JOINT BE ABSOLUTELY WATERPROOF SO THAT THERE IS NO CHANCE FOR LEAKAGE OF WATER AND

CORROSION BUILD-UP ON THE JOINT. 10.3 AUTOMATIC CONTROLLERS: THE CONTRACTOR SHALL PROVIDE ADEQUATE PERSONNEL TO ASSIST THE OWNER TO PROGRAM THE CONTROLLER IN THE FIELD AND REVIEW THE OPERATION OF EACH STEP AFTER INSTALLATION. CONTRACTOR SHALL PROVIDE A WRITTEN STATEMENT TO SHOW WHICH GROUP OF VALVES IS TO WHICH CLOCK PROGRAM AND WATERING TIMES FOR EACH PROGRAM. 10.4 DO NOT PREPARE CHARTS UNTIL RECORD DRAWINGS HAVE BEEN

APPROVED BY THE LANDSCAPE ARCHITECT/OWNER'S REPRESENTATIVE. PROVIDE ONE CONTROLLER CHART PER CONTROLLER. 1. CHART MAY BE A REPRODUCTION OF THE RECORD DRAWING, IF THE SCALE PERMITS FITTING THE CONTROLLER DOOR. IF PHOTO REDUCTION PRINTS ARE REQUIRED, KEEP REDUCTION TO MAXIMUM SIZE POSSIBLE

TO RETAIN FULL LEGIBILITY. 2. CHART SHALL BE BLACKLINE PRINT OF THE ACTUAL SYSTEM, SHOWING THE AREA COVERED BY THAT CONTROLLER. IDENTIFY THE AREA OF COVERAGE OF EACH REMOTE CONTROL VALVE, USING A DISTINCTLY DIFFERENT PASTEL COLOR, DRAWN OVER THE

ENTIRE AREA OF COVERAGE. FOLLOWING APPROVAL OF CHARTS BY THE LANDSCAPE ARCHITECT/OWNER'S REPRESENTATIVE, THEY SHALL BE HERMETICALLY SEALED BETWEEN TWO LAYERS OF 20 MIL THICK PLASTIC SHEET. CHARTS MUST BE COMPLETED AND APPROVED PRIOR TO FINAL ACCEPTANCE OF THE IRRIGATION SYSTEM. COORDINATE WITH CITY FORCES AS TO THE VALVE STATIONING OF THE

NEW AREAS TO BE PROGRAMMED INTO THE EXISTING CONTROLLER.

10.5 INSTALLATION OF CONTROL CABLE: ALL ELECTRIC CONTROL CABLE SHALL BE OF SIZES SHOWN ON MANUFACTURER'S SPECS AND SHALL BE INSTALLED IN THE PIPING TRENCHES WHEREVER POSSIBLE. PIPE TRENCH SHALL BE PARTIALLY BACKFILLED TO PROVIDE THREE (3) TO FOUR (4) INCHES OF COVER OVER THE PIPE BEFORE WIRE IS INSTALLED WIRE SHALL THEN BE PLACED IN THE TRENCH TO ONE SIDE OF THE PIPE WIRE SHALL BE PLACED IN THE TRENCH AS LOOSELY AS POSSIBLE TO ALLOW FOR EXPANSION AND CONTRACTION OF THE WIRE; EXPANSION COILS (5-6 TURNS OF WIRE WRAPPED AROUND A PIECE OF 1/2" PVC PIPE) AT 200' INTERVALS, ALSO SHALL BE ACCEPTABLE. WHERE IT IS NECESSARY TO RUN WIRE IN A SEPARATE TRENCH, THE WIRE SHALL HAVE A MINIMUM COVER OF TWELVE (12) INCHES. ALL WIRE UNDER CONCRETE OR PAVEMENT SHALL BE PLACED IN A SCHEDULE 40 PVC

10.5.1 ALL WIRE CONNECTIONS AT REMOTE CONTROL VALVES, EITHER DIRECT BURIAL OR IN CONTROL BOXES, SHALL HAVE SUFFICIENT WIRE WHICH CAN BE BROUGHT TO THE SURFACE WITHOUT DISCONNECTING THE WIRES.

SLEEVE. THE DIAMETER SHALL BE SUFFICIENT TO ACCOMMODATE THE

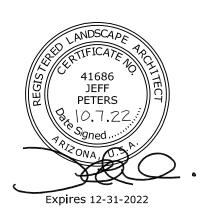
10.5.2 EACH REMOTE CONTROL VALVE OR GROUP OF REMOTE CONTROL VALVES, WHICH ARE TO BE CONNECTED TO ONE STATION OF A CONTROLLER, SHALL HAVE WIRES AS SHOWN IN THE WIRING DIAGRAMS ON THE DRAWINGS OR AS SPECIFIED. ALL REMOTE CONTROL VALVES, WHICH ARE TO BE CONNECTED TO THE SAME CONTROLLER, SHALL BE CONNECTED TO A COMMON GROUND WIRE OF A SIZE AS SHOWN ON THE DRAWINGS OR AS SPECIFIED.

10.6 VALVE BOXES: ALL REMOTE CONTROL VALVES, MANUAL CONTROL VALVES, ZONE SHUT-OFF VALVES, GATE VALVES OR BUTTERFLY VALVES, UNLESS OTHERWISE INDICATED, SHALL BE INSTALLED IN SUITABLE VALVE ACCESS BOXES OF PROPER SIZE AS REQUIRED FOR EASY ACCESS TO THE VALVE. ACCESS BOXES ON THE DRAWINGS, OR OTHERWISE INDICATED OR SPECIFIED SHALL BE INSTALLED USING VALVE MARKERS, SHALL NOT REQUIRE VALVE ACCESS BOXES. LOCKING AND/OR HINGED COVERS FOR ACCESS BOXES SHALL BE REQUIRED. ALL VALVE BOXES SHALL BE IMPRINTED WITH THE VALVE STATION IN A PERMANENT AND LEGIBLE MANNER FOR EASY REFERENCE.

WIRE BUNDLE.



PLANNING • LANDSCAPE ARCHITECTURE



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Project No. 22-114

Original Submittal Date:

Project Phase & Revisions: **PRELIM: April 12, 2022** CD'S #1: Aug. 19, 2022

IRRIGATION