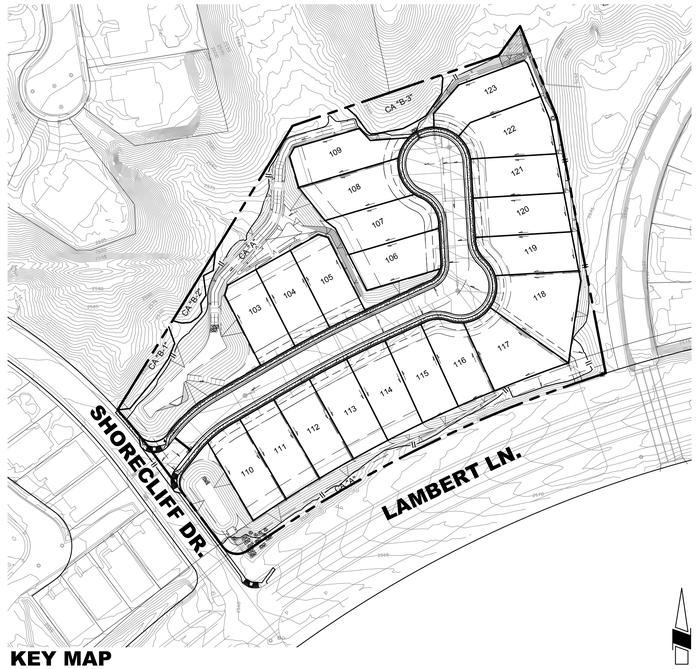
# FINAL LANDSCAPE PLAN FOR:

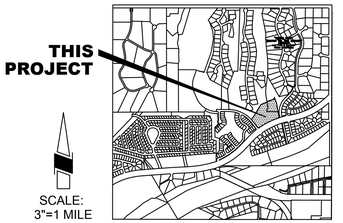
# RIVER'S EDGE
# LOTS 103-123

**1901060**




**KEY MAP**

SCALE: 1" = 100'




## LOCATION MAP

A PORTION OF SECTION 12, T 11 S, R 13 E
G & SRM TOWN OF ORO VALLEY,
PIMA COUNTY, ARIZONA

## GENERAL NOTES

1. THE GROSS AREA OF THIS DEVELOPMENT IS 6.46 ACRES
2. TOTAL UNDISTURBED AREA IS 0.2 ± ACRE
3. REQUIRED PERIMETER/SITE SETBACKS PER CR-5:
   FRONT YARD = 20'
   SIDE YARD = 10'
   REAR YARD = 10'

   PROVIDED PERIMETER/SITE SETBACKS:
   FRONT YARD = 20'
   SIDE YARD = 10'
   REAR YARD = 10'
4. COMMON AREAS / OPEN SPACE SHALL BE OWNED AND MAINTAINED BY THE H.O.A.
5. EXISTING ZONING IS PAD (TR, CR-2, CR-5).
6. BUFFERYARD TYPES: TYPE 'C' (PER PIMA COUNTY STANDARDS AS DICTATED BY THE MELCOR/RIVER'S EDGE PAD)
7. ASSURANCES FOR LANDSCAPING AND RE-VEGETATION BONDS MUST BE POSTED PRIOR TO ISSUANCE OF GRADING PERMITS.
8. PROPERTY OWNER SHALL MAINTAIN BUFFERYARD PLANTINGS TO ENSURE UNOBSTRUCTED VISIBILITY TO MOTORISTS. ALL SHRUBS, ACCENTS, AND GROUNDCOVERS SHALL NOT EXCEED THIRTY (30) INCHES IN HEIGHT WITHIN SITE VISIBILITY TRIANGLES. TREES WITHIN SITE VISIBILITY TRIANGLES WILL BE MAINTAINED TO ENSURE THAT BRANCHES / FOLIAGE IS NOT BELOW A HEIGHT OF SIX (6') FEET.
9. IN THE EVENT OF ABANDONMENT OF THE SITE AFTER GRADING / DISTURBANCE OF NATURAL AREAS, DISTURBED AREAS SHALL BE RE-VEGETATED WITH A NON-IRRIGATED HYDRO SEED MIX FROM OVZCR ADDENDUM D: APPROVED REVEGETATION SEED MIX.
10. ALL PLANT MATERIAL SHALL MEET THE MINIMUM STANDARDS CONTAINED IN THE CURRENT EDITIONS OF THE ARIZONA NURSERY ASSOCIATION'S GROWERS COMMITTEE RECOMMENDED TREE SPECIFICATIONS AND THE AMERICAN ASSOCIATION OF NURSERYMEN AS TO SIZE, CONDITION AND APPEARANCE.
11. PROPERTY OWNER IS RESPONSIBLE FOR MAINTAINING THE TEMPORARY IRRIGATION SYSTEM AS LONG AS NECESSARY IN ORDER TO TRANSITION PLANTS OVER TO NATURAL SOURCES. ANY PLANT MATERIALS THAT DIE IN TRANSITION, FOR ANY REASONS, SHALL BE REPLACED IN ACCORDANCE WITH SECTION 27.6.E.4., MAINTENANCE.
12. LANDSCAPE SHALL CONFORM TO ORO VALLEY LANDSCAPE CODE.
13. MITIGATION OF SURVEYED PLANTS IN THE NATIVE PLANT PRESERVATION PLAN WILL BE INCORPORATED INTO THE LANDSCAPE DESIGN.
14. ALL PLANTS TO BE IRRIGATED WITH AN UNDERGROUND AUTOMATIC DRIP IRRIGATION SYSTEM.
15. THE DEVELOPER SHALL REPLACE REMOVED OR DAMAGED PLANT MATERIAL WITH LIKE SIZE AND SPECIES, AND SHALL MAINTAIN AND GUARANTEE (IN ACCORDANCE WITH SECTION 26.6.C AND I) THE REPLACEMENT PLANT MATERIALS FOR A PERIOD OF (3) YEARS.
16. LANDSCAPE AREAS THAT ARE SUSCEPTIBLE TO DAMAGE BY PEDESTRIAN OR AUTO TRAFFIC SHALL BE PROTECTED BY APPROPRIATE CURBS, TREE GUARDS OR OTHER DEVICES.
17. CURB-WAY CONSISTING OF INORGANIC GROUNDCOVER OR PLANTS NOT EXCEED TYPE 2 WATER USE SHALL BE PROVIDED BETWEEN CURB AND ALL SIDEWALKS.
18. LANDSCAPE SHALL BE DESIGNED TO MINIMIZE SEDIMENT, SAND, AND GRAVEL BEING CARRIED INTO THE STREETS BY STORM WATER OR OTHER RUNOFF.
19. LANDSCAPE DESIGN ENABLES ADEQUATE PLANT SPACING TO ENSURE SURVIVABILITY AT PLANT MATURITY. ALL LANDSCAPED AREAS SHALL BE FINISHED WITH A NATURAL TOPPING MATERIAL OF AT LEAST TWO (2) INCHES IN DEPTH.
20. TREES AND LARGE SHRUBS SHALL BE ADEQUATELY SUPPORTED WHEN PLANTED.
21. SLOPES SHALL BE NO STEEPER THAN THREE TO ONE (3:1) UNLESS OTHERWISE SPECIFIED IN A SITE-SPECIFIC SOILS REPORT PREPARED BY A REGISTERED CIVIL ENGINEER AND APPROVED BY THE TOWN ENGINEER.
22. DEEP ROOTED VEGETATION AND TREES SHALL NOT BE PLANTED CLOSER THAN 7.5 FEET FROM A PUBLIC WATER LINE. EXCEPTIONS FOR ALTERNATIVE DESIGN SOLUTIONS SUCH AS ROOT BARRIERS SHALL BE CONSIDERED ON A CASE BY CASE BASIS.
23. PLANTS IN FRONT YARDS, BUFFERYARDS AND COMMON AREAS THAT REQUIRE IRRIGATION MAY NOT BE ESTABLISHED IN AREAS THAT ARE SHAPED IN A MANNER NOT TO ENABLE PARTIAL CONTAINMENT OF IRRIGATION OR RAINWATER.

## LANDSCAPE BUFFERYARD TABLE

| BUFFER | BUFFER TYPE | WIDTH | BUFFER LENGTH | TREES REQ'D | TREES PROVIDED | SHRUBS REQ'D | SHRUBS PROVIDED | ACCENTS REQ'D | ACCENTS PROVIDED |
|---|---|---|---|---|---|---|---|---|---|
| LAMBERT LN. | C * | 12.5' | 575 LF | 12 | 23 | 12 | 23 | 24 | 46 |
| SHORE CLIFF DR. | C * | 12.5' | 200 LF | 4 | 7 | 4 | 8 | 8 | 16 |
| NORTH | N/A | N/A | | | | | | | |
| EAST | N/A | N/A | | | | | | | |

* PER PIMA COUNTY STANDARDS AS DICTATED BY THE MELCOR/RIVER'S EDGE PAD

## SYMBOL LEGEND

- PROPERTY BOUNDARY
- LOT LINE
- BUILDING SETBACK
- EASEMENT
- TOP/TOE OF SLOPE
- GRADING LIMIT
- WATERSHED BOUNDARY
- PROPOSED SEWER LINE AND MANHOLE
- PROPOSED SEWER LINE AND CLEANOUT
- PROPOSED WATER LINE AND VALVE
- PROPOSED FIRE HYDRANT
- PROPOSED WATER METER

Received
Date 10/17/19 rflores

## APPROVAL

PLANNING AND ZONING ADMINISTRATOR — DATE

OV1801921
OV1600944, OV12-03-20
RIVERS EDGE (MELCOR) PLANNED AREA DEVELOPMENT #7

SCALE: 1" = 30'
0' 15' 30' 60'

**L-01**

## PROJECT DIRECTORY:

### OWNER/DEVELOPER

MELCOR DEVELOPMENTS ARIZONA, INC.
6930 E CHAUNCEY LANE, SUITE 153
PHOENIX, AZ 85054
PHONE: 480-699-4687
CONTACT: RYAN MOTT
EMAIL: RMOTT@MELCOR.CA

### LANDSCAPE ARCHITECT

RICK ENGINEERING CO.
3945 E. FORT LOWELL ROAD, SUITE 111
TUCSON, AZ 85712
CONTACT PERSON: MARK FELLINGER
PHONE: 520-795-1000
E-MAIL: mfellinger@rickengineering.com

### CIVIL ENGINEER

RICK ENGINEERING COMPANY
6150 NORTH 16TH STREET
PHOENIX, AZ 85016
PHONE: 602-957-3350
CONTACT: CHRIS PATTON, P.E.
EMAIL: CPATTON@RICKENGINEERING.COM

## SHEET INDEX



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| NO. | BY | DATE | REVISION | APPR | DATE |
|---|---|---|---|---|---|
| | | | | | |

REGISTERED LANDSCAPE ARCHITECT — CERTIFICATE NO. 36734 — MARK E. FELLINGER — 10/17/19 — Date Signed — ARIZONA, USA

M. Fellinger

JN: 4191A


RICK ENGINEERING COMPANY
Tucson
3945 EAST FORT LOWELL ROAD - SUITE 111
TUCSON, AZ 85712
520.795.1000
(FAX)520.322.6956
000
rickengineering.com
Phoenix - San Diego - Sacramento - Riverside - Orange - San Luis Obispo - Bakersfield


| DESIGNED BY: MEF | DATE: 10/19 | CHECKED BY: | DATE: |
|---|---|---|---|
| DRAWN BY: MEF | DATE: 10/19 | APPROVED BY: | DATE: |

FINAL LANDSCAPE PLAN FOR:
RIVER'S EDGE
LOTS 103-123

LOTS 103-123 AND COMMON AREAS "A" & "B-1 - B-3"
BEING A PORTION OF THE SOUTHEAST QUARTER OF SECTION 12,
TOWNSHIP 12 SOUTH, RANGE 13 EAST, GILA & SALT RIVER MERIDIAN,
TOWN OF ORO VALLEY, PIMA COUNTY, ARIZONA.

1901060

SCALE: HORIZ : 1" = 30'
VERT : N/A

SHEET 1 OF 12

**SEE SHEET L-03 FOR PLANTING LEGEND**

NOTE: FOR LOTS WITH FULLY GRADED FRONT YARDS, CATCHMENT AREAS TO UTILIZE RAINWATER MUST BE ESTABLISHED FOR PLANT USE. AT A MINIMUM, DEPRESSIONS AND/OR WELLS MUST BE ESTABLISHED FOR ALL TREES.




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0' 15' 30' 60'

OV1801921
OV1600944, OV12-03-20
RIVERS EDGE (MELCOR) PLANNED AREA DEVELOPMENT #7

**L-02**

| NO. | BY | DATE | REVISION | APPR | DATE |
|---|---|---|---|---|---|

REGISTERED LANDSCAPE ARCHITECT
CERTIFICATE NO.
36734
MARK E. FELLINGER
10/17/19
Date Signed
ARIZONA, USA

JN: 4191A

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3945 EAST FORT LOWELL ROAD - SUITE 111
TUCSON, AZ 85712
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| DESIGNED BY: MEF | DATE: 10/19 | CHECKED BY: | DATE: |
|---|---|---|---|
| DRAWN BY: MEF | DATE: 10/19 | APPROVED BY: | DATE: |

**FINAL LANDSCAPE PLAN FOR:**

# RIVER'S EDGE LOTS 103-123

LOTS 103-123 AND COMMON AREAS "A" & "B-1 - B-3"
BEING A PORTION OF THE SOUTHEAST QUARTER OF SECTION 12, TOWNSHIP 12 SOUTH, RANGE 13 EAST, GILA & SALT RIVER MERIDIAN, TOWN OF ORO VALLEY, PIMA COUNTY, ARIZONA.

1901060

SCALE: HORIZ : 1" = 30'
VERT : N/A

SHEET 2 OF 12

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# PLANT MATERIAL LEGEND

| SYMBOL | BOTANICAL NAME / COMMON NAME | QTY. | SIZE | H x W (CALIPER) | WATER USE TYPE | ADWR ANNUAL USE (GAL.) | ANNUAL USE (GAL.) | MONTHLY USE (GAL.) |
|---|---|---|---|---|---|---|---|---|
| TREES | | | | | | | | |
| + | PARKINSONIA FLORIDA<br>BLUE PALO VERDE | 2 | 15 GAL. | 6' x 2' (.75") | 2 | 5,702 | 11,404 | 950 |
| ⊕ | PARKINSONIA FLORIDA<br>BLUE PALO VERDE | 3 | - | TRANSPLANT<br>PER NPPP | 2 | 5,702 | 17,106 | 1,426 |
| + | PARKINSONIA MICROPHYLLA<br>FOOTHILLS PALO VERDE | 5<br>4<br>4 | 15 GAL.<br>36" BOX<br>48" BOX | 4' x 2' (.5")<br>4' x 2' (.5")<br>4' x 2' (.5") | 1<br>1<br>1 | 1,754<br>1,754<br>1,754 | 8,770<br>7,016<br>7,016 | 731<br>585<br>585 |
| ⊕ | PARKINSONIA MICROPHYLLA<br>FOOTHILLS PALO VERDE | 18 | - | TRANSPLANT<br>PER NPPP | 1 | 1,754 | 31,572 | 2,631 |
| & | PROSOPIS VELUTINA<br>VELVET MESQUITE | 5 | 15 GAL. | 5.5' x 3' (.5") | 2 | 5,702 | 29,510 | 6,177 |
| ⊕ | PROSOPIS VELUTINA<br>VELVET MESQUITE | 1 | - | TRANSPLANT<br>PER NPPP | 2 | 5,702 | 5,702 | 475 |
| | | | | | TOTAL AT MATURITY (GAL.) | | 118,096 | 9,841 |

| SYMBOL | BOTANICAL NAME / COMMON NAME | QTY. | SIZE | WATER USE TYPE | ADWR ANNUAL USE (GAL.) | ANNUAL USE (GAL.) | MONTHLY USE (GAL.) |
|---|---|---|---|---|---|---|---|
| SHRUBS AND ACCENTS | | | | | | | |
| | ACACIA CONSTRICTA<br>WHITETHORN ACACIA | 3 | 5 GAL. | 1 | 1,754 | 5,262 | 439 |
| ⊕ | ACACIA CONSTRICTA<br>WHITETHORN ACACIA | 14 | TRANSPLANT<br>PER NPPP | 1 | 1,754 | 24,556 | 2,046 |
| | ACACIA GREGGII<br>CATCLAW ACACIA | 7 | 5 GAL. | 1 | 1,754 | 12,278 | 1,023 |
| ⊕ | ACACIA GREGGII<br>CATCLAW ACACIA | 1 | TRANSPLANT<br>PER NPPP | 1 | 1,754 | 1,754 | 146 |
| | CALLIANDRA ERIOPHYLLA<br>FAIRY DUSTER | 29 | 5 GAL. | 1 | 70 | 2,030 | 169 |
| | CARNEGIA GIGANTEA<br>SAGUARO | 6 | 3' SPEAR | 1 | 2,741 | 16,446 | 1,371 |
| | CARNEGIA GIGANTEA<br>SAGUARO | 1 | TRANSPLANT<br>PER NPPP | 1 | 2,741 | 2,741 | 228 |
| ▶ | CELTIS PALLIDA<br>DESERT HACKBERRY | 5 | 5 GAL. | 2 | 634 | 3,170 | 264 |
| ⊕ | CELTIS PALLIDA<br>DESERT HACKBERRY | 3 | TRANSPLANT<br>PER NPPP | 2 | 634 | 1,902 | 159 |
| ✳ | DASYILIRION WHEELERI<br>DESERT SPOON | 9 | 5 GAL. | 1 | 110 | 990 | 83 |
| ⊙ | ENCELIA FARINOSA<br>BRITTLE BUSH | 59 | 5 GAL. | 1 | 39 | 2,301 | 192 |
| O | ERICAMERIA LARICIFOLIA<br>TURPENTINE BUSH | 19 | 5 GAL. | 1 | 70 | 1,330 | 111 |
| ⊡ | FEROCACTUS WISLIZENII<br>BARREL CACTUS | 14 | TRANSPLANT<br>PER NPPP | 1 | 10 | 140 | 12 |
| ✳ | HESPERALOE PARVIFLORA<br>RED YUCCA | 27 | 5 GAL. | 1 | 70 | 1,890 | 158 |
| ⬠ | JUSTICIA CALIFORNICA<br>CHUPAROSA | 35 | 5 GAL. | 2 | 158 | 5,530 | 461 |
| ✳ | MUHLENBERGIA EMERSLEYI<br>BULL GRASS | 38 | 5 GAL. | 1 | 110 | 4,180 | 348 |
| ✿ | OPUNTIA VIOLACEA VAR. SANTA RITA<br>SANTA RITA PRICKLY PEAR CACTUS | 11 | 5 GAL. | 1 | 158 | 1,738 | 145 |
| ✳ | OPUNTIA BIGELOVII<br>TEDDY BEAR CHOLLA | 7 | 5 GAL. | 1 | 158 | 1,106 | 92 |
| | | | | TOTAL AT MATURITY (GAL.) | 88,564 | | 7,380 |

# SIGNIFICANT VEGETATION MITIGATION

SIGNIFICANT VEGETATION: 2,530 SF GROUND COVER AREA
AMOUNT OF SV DISTURBED: 2,285 SF (90%)

SV TREES TO BE DESTROYED: (4)

REQUIRED MITIGATION (2:1): (4) 36" BOX TREES
(4) 48" BOX TREES
(40) UNDERSTORY PLANTS

| SPECIES BOTANICAL/COMMON NAME | TOTAL # VIABLE | TOTAL # NON-VIABLE | DISPOSITION | | | # OF MITIGATION PLANTS REQ'D. | | # OF SUPPLEMENTAL PLANTS REQ'D. |
|---|---|---|---|---|---|---|---|---|
| | | | PIP | TOS | RFS | 36" BOX | 48" BOX | |
| | | | | | | | | |
| CERCIDIUM MICROPHYLLUM/FOOTHILLS PALO VERDE | 5 | 3 | 1 | 0 | 4 | 4 | 4 | 40 |

# NON-SIGNIFICANT VEGETATION MITIGATION CALCULATION TABLES

| SPECIES BOTANICAL/COMMON NAME | TOTAL # NON-VIABLE/ NON-SALVAGEABLE | TOTAL # VIABLE/ SALVAGEABLE | DISPOSITION | | | # OF MITIGATION PLANTS REQ'D. | # OF SUPPLEMENTAL PLANTS REQ'D. |
|---|---|---|---|---|---|---|---|
| | | | PIP | TOS | RFS | | |
| ACACIA CONSTRICTA/WHITETHORN ACACIA | 44 | 17 | 0 | 14 | 3 | 3 | 15 |
| ACACIA GREGGII/CATCLAW ACACIA | 25 | 2 | 0 | 1 | 1 | 1 | 5 |
| CARNEGIEA GIGANTEA/SAGUARO | 0 | 1 | 0 | 1 | 0 | 0 | 0 |
| CELTIS PALLIDA/DESERT HACKBERRY | 32 | 6 | 0 | 3 | 3 | 3 | 15 |
| CERCIDIUM FLORIDUM/BLUE PALO VERDE | 16 | 3 | 0 | 3 | 0 | 0 | 0 |
| CERCIDIUM MICROPHYLLUM/FOOTHILLS PALO VERDE | 49 | 22 | 0 | 18 | 4 | 4 | 20 |
| FEROCACTUS WISLEZENII/BARREL CACTUS | 2 | 14 | 0 | 14 | 0 | 0 | 0 |
| PROSOPIS VELUTINA/VELVET MESQUITE | 12 | 1 | 0 | 1 | 0 | 0 | 0 |
| TOTALS: | 180 | 66 | 0 | 55 | 11 | 11 | 55 |

INORGANIC GROUNDCOVER

A MIN. 2" DEPTH LAYER OF DECORATIVE ROCK SHALL BE PLACED IN ALL PLANTING AREAS INDICATED ON THE PLANS. DO NOT PLACE DECORATIVE ROCK IN BASIN BOTTOMS. SIZE SHALL BE 3/4" SCREENED. COLOR SHALL BE 'DESERT GOLD' AVAILABLE THROUGH KALAMAZOO MATERIALS (520-575-9601), OR AS APPROVED BY OWNER.

LANDSCAPE BOULDER SCHEDULE

BOULDERS SHALL BE PIT RUN 'APACHE BROWN' AS AVAILABLE THROUGH KALAMAZOO MATERIALS, OR AS APPROVED BY OWNER.

| | W x H x L | QTY. |
|---|---|---|
| | 3' x 3' x 3' | 3 |
| | 2' x 2' x 2' | 26 |

NON-IRRIGATED HYDROSEED MIX

| SPECIES | PLS RATE LBS./ACRE |
|---|---|
| AMBROSIA DELTIODEA, TRIANGLE LEAF BURSAGE | 2.0 |
| ARISTIDA PURPUREA, PURPLE THREE-AWN | 1.0 |
| ATRIPLEX CANESCENS, FOUR-WING SALTBUSH | 2.0 |
| BAHIA ABSINTHIFOLIA, DESERT BAHIA | 1.0 |
| BAILEYA MULTIRADIATA, DESERT MARIGOLD | 1.5 |
| BOTHRIOCHLOA BARBINODIS, CANE BEARDGRASS | 1.0 |
| BOUTELOUA CURTIPENDULA, SIDE-OATS GRAMA | 1.0 |
| BOUTELOUA BARBATA, SIX WEEKS GRAMA | 1.0 |
| ENCELIA FARINOSA, BRITTLEBUSH | 2.0 |
| HAPLOPAPPUS LARICIFOLIUS, TURPENTINE BUSH | 1.0 |
| KALLSTROEMIA GRANDIFLORA, ARIZONA POPPY | 1.0 |
| LEPTOCHLOA DUBIA, GREEN SPRANGLETOP | 1.0 |
| LUPINUS SPARSIFLORUS, DESERT LUPINE | 1.0 |
| PENSTEMON PARRYI, DESERT PENSTEMON | 1.5 |
| PLANTAGO INSULARIS, INDIAN WHEAT | 1.5 |
| PROBOSCIDEA PARVIFLORA, DEVIL'S CLAW | 1.0 |
| SENNA COVESII, DESERT SENNA | 1.0 |
| SPHAERALCEA AMBIGUA, DESERT GLOBE-MALLOW | 2.0 |
| SPOROBOLUS CRYPTANDRUS, SAND DROPSEED | 1.0 |
| TOTAL LBS./ACRE: | 24.5 TOTAL |

NOTES:
SLURRY MIX FOR NATIVE SEED APPLICATION SHALL CONSIST OF THE FOLLOWING:
SEED =LBS/ACRE PER SEED MIX
WOOD FIBER MULCH =2000 LBS/ACRE
AMMONIUM PHOSPHATE FERTILIZER (16-20-0) =200 LBS/ACRE

AREA TO BE SEEDED SHALL BE THOROUGHLY TILLED PRIOR TO APPLICATION OF SLURRY MIX. TILLING OPERATIONS SHALL BE PERFORMED SO AS NOT TO DISTURB ADJACENT AREAS OF NATIVE VEGETATION.

THIS SEED MIX WILL NOT BE IRRIGATED. APPLICATION OF SEED MIX SHALL COINCIDE WITH PERIODS OF SEASONAL RAIN (JULY-AUGUST OR NOVEMBER-DECEMBER) IN ORDER TO ENCOURAGE GERMINATION.

| TOTAL WATER USE AT MATURITY | ANNUAL USE (GAL.) | MONTHLY USE (GAL.) |
|---|---|---|
| TREES | 118,096 | 9,841 |
| SHRUBS | 89,344 | 7,445 |
| TOTAL | 207,440 | 17,286 |

SCALE: 1" = 30'
0' 15' 30' 60'

OV1801921
OV1600944, OV12-03-20
RIVERS EDGE (MELCOR) PLANNED AREA DEVELOPMENT #7

**L-03**

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| NO. | BY | DATE | REVISION | APPR | DATE |
|---|---|---|---|---|---|

REGISTERED LANDSCAPE ARCHITECT
CERTIFICATE NO. 36734
MARK E. FELLINGER
10/17/19
Date Signed
ARIZONA, U.S.A.

M. Fellinger

RICK ENGINEERING COMPANY
Tucson
3945 EAST FORT LOWELL ROAD - SUITE 111
TUCSON, AZ 85712
520.795.1000
(FAX)520.322.6956
rickengineering.com
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JN 4191A

| DESIGNED BY: MEF | DATE: 10/19 | CHECKED BY: | DATE: |
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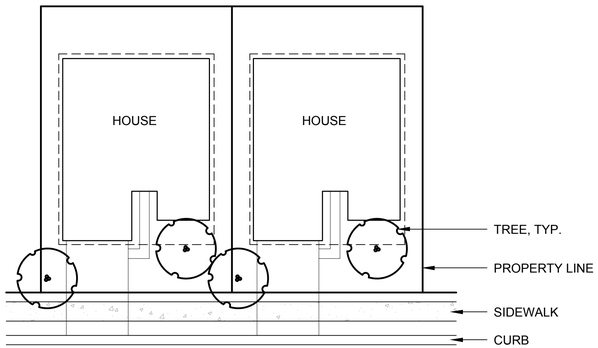
LOTS 103-123 AND COMMON AREAS 'A' & 'B-1 - B-3'
BEING A PORTION OF THE SOUTHEAST QUARTER OF SECTION 12,
TOWNSHIP 12 SOUTH, RANGE 13 EAST, GILA & SALT RIVER MERIDIAN,
TOWN OF ORO VALLEY, PIMA COUNTY, ARIZONA.

1901060

SCALE: HORIZ : N/A
VERT : N/A

SHEET 3 OF 12

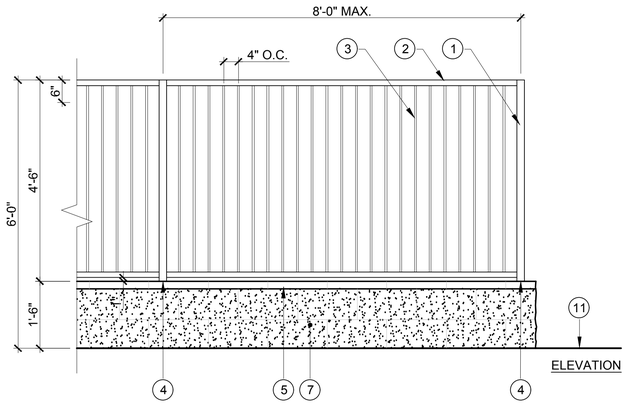



TWO TREES, TYPE 1 OR 2 WATER USE AND A MINIMUM OF 24" BOX SIZE, SHALL BE INSTALLED IN THE FRONT YARD OF EACH RESIDENTIAL LOT. LOCATION OF TREES TO BE DETERMINED BY HOME OWNER OR DEVELOPER. (ALTERNATE FRONT YARD LANDSCAPE SCHEMES PER ZONING CODE SECTION 27.6.C.2.c. MAY ALSO BE UTILIZED AT THE DEVELOPER'S DISCRETION)

FOR LOTS WITH FULLY GRADED FRONT YARDS, CATCHMENT AREAS TO UTILIZE RAINWATER MUST BE ESTABLISHED FOR PLANT USE. AT A MINIMUM, DEPRESSIONS AND/OR WELLS MUST BE ESTABLISHED FOR ALL TREES.

DETAIL SHOWN FOR GRAPHIC PURPOSES ONLY. HOUSE AND LOT CONFIGURATION MAY VARY.

## FRONT YARD TREE PLANTING




1. 2" SQ. TUBULAR STEEL POSTS.
2. 1-1/2" SQ. TUBULAR STEEL HORIZONTAL RAILS.
3. 1/2" SQ. TUBULAR STEEL PICKETS.
4. 4" x 4" x 3/8" THICK STEEL PLATE WITH (1) #5 REBAR J-HOOK WELDED TO BOTTOM, EMBEDDED IN WALL. FINISH SHALL MATCH VIEW FENCE.
5. 2" THICK, 8" WIDE SOLID CMU TOP CAP.
6. #5 CONTINUOUS IN 8" DEEP GROUTED BOND BEAM.
7. 6x8x16 INTEGRALLY COLORED CMU.
9. VERT. #5 AT 48" O.C., FULLY GROUT CELLS. BEND IN FOOTING AS SHOWN.
10. SOLID GROUT BELOW GRADE.
11. FINISH GRADE.
12. 3 - #4 CONTINUOUS.
13. CONCRETE FOOTING 2500 PSI AT 28 DAYS.
14. 95% COMPACTED SUBGRADE.

## PARTIAL VIEW FENCE

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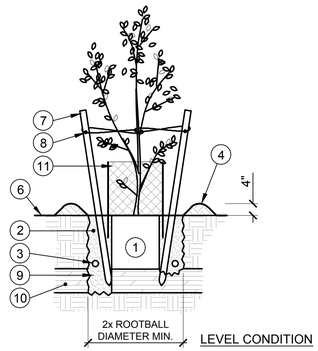
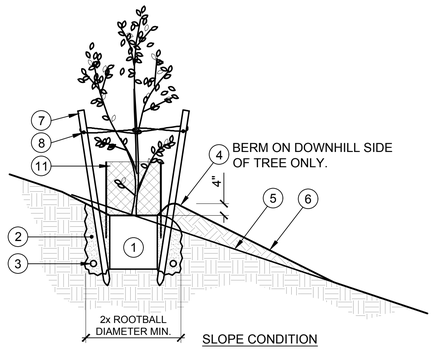


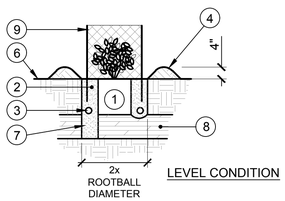

1. ROOTBALL. PLACE ON UNDISTURBED NATIVE SOIL AT BOTTOM OF PLANT PIT.
2. AMENDED BACKFILL MIX.
3. FERTILIZER TABLETS.
4. 4" HIGH EARTH BERM / MICROBASIN (NOT REQUIRED FOR LEVEL CONDITION IF TREE IS LOCATED IN A DEPRESSED WATER HARVESTING AREA; ALWAYS REQUIRED FOR SLOPE CONDITION.)
5. SLOPE GRADE PRIOR TO PLANTING.
6. FINISH GRADE.
7. (2) 2" DIA. LODGE POLE STAKES. PLACE OUTSIDE OF ROOTBALL.
8. BLACK PLASTIC CINCH-TIE WITH ONE TWIST NAILED TO STAKE, OR APPROVED EQUAL. (WIRE TIES WITH RUBBER HOSE IS NOT ACCEPTABLE).
9. DRILL 8" DIAMETER CHIMNEY DRAINAGE HOLE AT BOTTOM OF PLANT PIT IF HARDPAN OR CALICHE SOIL LAYER IS ENCOUNTERED.
10. HARDPAN OR CALICHE SOIL LAYER.
11. BROWSE CAGE. SEE NOTE 6.

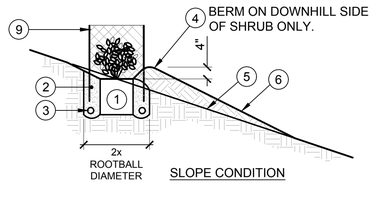



NOTES:

1. TREE STAKES ARE NOT REQUIRED FOR 5 GAL. TREES.
2. TREE STAKES MAY BE OMITTED IF TREE IS ABLE TO SUPPORT ITSELF UPRIGHT WITHOUT LEANING OR BENDING.
3. WHEN STAKES ARE INSTALLED, TIES SHOULD BE PLACED AS LOW AS POSSIBLE WHILE STILL PROVIDING NECESSARY SUPPORT. CUT STAKE APPROX. 6" ABOVE TIE TO AVOID BRANCHES RUBBING ON STAKE.
4. ALL NURSERY STAKES ARE TO BE REMOVED REGARDLESS OF PLANT SIZE.
5. SCARIFY SIDES OF PLANT PIT TO ELIMINATE SMOOTH SHOVEL CUTS PRIOR TO PLACEMENT OF TREE IN PIT.
6. CONTRACTOR SHALL INCLUDE BROWSE CAGES FOR ALL TREES AS AN ADDITIVE ALTERNATE IN THE BID. CONTRACTOR SHALL CLOSELY MONITOR TREES FOR WILDLIFE DAMAGE DURING THE MAINTENANCE PERIOD, AND SHALL IMMEDIATLEY MAKE A RECOMMENDATION FOR A CORRECTIVE COURSE OF ACTION TO THE OWNER IF WILDLIFE DAMAGE OCCURS OR IS SUSPECTED. SUBMIT BROWSE CAGE SHOP DRAWING FOR APPROVAL PRIOR TO INSTALLATION.

## A TREE PLANTING
NOT TO SCALE

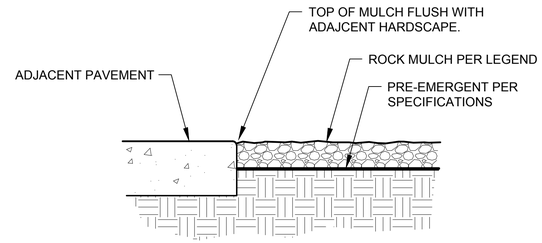


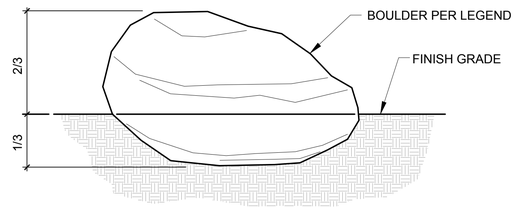

1. ROOTBALL. PLACE ON UNDISTURBED NATIVE SOIL AT BOTTOM OF PLANT PIT.
2. AMENDED BACKFILL MIX.
3. FERTILIZER TABLETS.
4. 4" HIGH EARTH BERM / MICROBASIN (NOT REQUIRED FOR LEVEL CONDITION IF TREE IS LOCATED IN A DEPRESSED WATER HARVESTING AREA; ALWAYS REQUIRED FOR SLOPE CONDITION.)
5. SLOPE GRADE PRIOR TO PLANTING.
6. FINISH GRADE.
7. DRILL CHIMNEY DRAINAGE HOLE AT BOTTOM OF PLANT PIT IF HARDPAN OR CALICHE SOIL LAYER IS ENCOUNTERED.
8. HARDPAN OR CALICHE SOIL LAYER.
9. BROWSE CAGE. SEE NOTE.

NOTE: CONTRACTOR SHALL INCLUDE BROWSE CAGES FOR ALL SHRUBS AS AN ADDITIVE ALTERNATE IN THE BID. CONTRACTOR SHALL CLOSELY MONITOR SHRUBS FOR WILDLIFE DAMAGE DURING THE MAINTENANCE PERIOD, AND SHALL IMMEDIATLEY MAKE A RECOMMENDATION FOR A CORRECTIVE COURSE OF ACTION TO THE OWNER IF WILDLIFE DAMAGE OCCURS OR IS SUSPECTED. SUBMIT BROWSE CAGE SHOP DRAWING FOR APPROVAL PRIOR TO INSTALLATION.

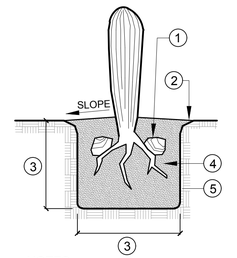
## B SHRUB PLANTING
NOT TO SCALE




## C ROCK MULCH PLACEMENT
NOT TO SCALE




## D BOULDER PLACEMENT
NOT TO SCALE




1. SUPPORT CACTI BY PLACING 2-4 ROCKS (1 CU. FT. MIN) ON ROOTS
2. FINISH GRADE
3. 18" MINIMUM
4. BACKFILL (1/2 SCREENED NATIVE SOIL AND 1/2 CLEAN SAND)
5. UNDISTURBED NATIVE SOIL

NOTES:
1. SET MAIN STEM OF CACTI PLUMB AS VIEWED FROM ALL SIDES.
2. DO NOT CREATE A BASIN AT BASE OF CACTUS. SLOPE BACKFILL AWAY FROM STEM.
3. TREAT ALL BARE ROOTS WITH POWDERED SULFUR.
4. PLANT NO DEEPER THAN 3" BELOW ORIGINAL SOIL LINE.
5. FOR TRANSPLANTS, PLANT WITH THE SAME NORTH-SOUTH ORIENTATION AS PRIOR TO SALVAGE.

## E SAGUARO PLANTING
NOT TO SCALE

| NO. | BY | DATE | REVISION | APPR | DATE |
|---|---|---|---|---|---|

REGISTERED LANDSCAPE ARCHITECT
CERTIFICATE NO.
36734
MARK E. FELLINGER
10/17/19
Date Signed
ARIZONA, USA

M. Fellinger

RICK ENGINEERING COMPANY
Tucson
3945 EAST FORT LOWELL ROAD - SUITE 111
TUCSON, AZ 85712
520.795.1000
(FAX)520.327.6956
rickengineering.com
Phoenix - San Diego - Sacramento - Riverside - Orange - San Luis Obispo - Bakersfield

JN 4191A

| | | | |
|---|---|---|---|
| DESIGNED BY: MEF | DATE: 10/19 | CHECKED BY: | DATE: |
| DRAWN BY: MEF | DATE: 10/19 | APPROVED BY: | DATE: |

**FINAL LANDSCAPE PLAN FOR:**

# RIVER'S EDGE LOTS 103-123

LOTS 103-123 AND COMMON AREAS "A" & "B-1 - B-3"
BEING A PORTION OF THE SOUTHEAST QUARTER OF SECTION 12, TOWNSHIP 12 SOUTH, RANGE 13 EAST, GILA & SALT RIVER MERIDIAN, TOWN OF ORO VALLEY, PIMA COUNTY, ARIZONA.

1901060

SCALE: HORIZ : N/A
VERT : N/A

SHEET 4 OF 12

OV1801921
OV1600944, OV12-03-20
RIVERS EDGE (MELCOR) PLANNED AREA DEVELOPMENT #7

**L-04**



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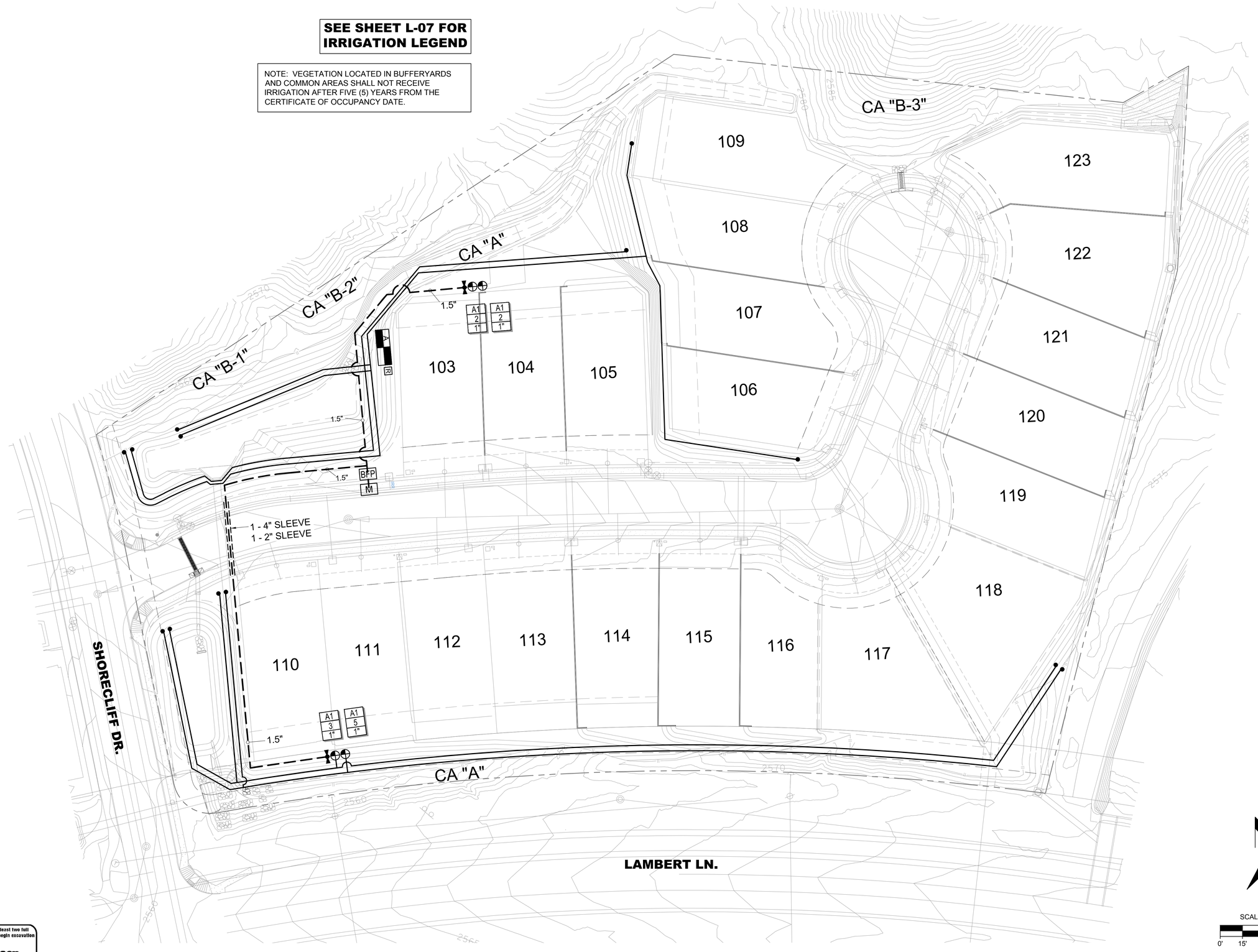
**SEE SHEET L-07 FOR IRRIGATION LEGEND**

NOTE: VEGETATION LOCATED IN BUFFERYARDS AND COMMON AREAS SHALL NOT RECEIVE IRRIGATION AFTER FIVE (5) YEARS FROM THE CERTIFICATE OF OCCUPANCY DATE.




SCALE: 1" = 30'
0' 15' 30' 60'

OV1801921
OV1600944, OV12-03-20
RIVERS EDGE (MELCOR) PLANNED AREA DEVELOPMENT #7

**L-05**

Contact Arizona 811 at least two full working days before you begin excavation
ARIZONA811 BLUE STAKE, INC.
Call 811 or click Arizona811.com



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| NO. | BY | DATE | REVISION | APPR | DATE |
|---|---|---|---|---|---|

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| | | | |
|---|---|---|---|
| DESIGNED BY: MEF | DATE: 10/19 | CHECKED BY: | DATE: |
| DRAWN BY: MEF | DATE: 10/19 | APPROVED BY: | DATE: |

**FINAL LANDSCAPE PLAN FOR:**

# RIVER'S EDGE LOTS 103-123

LOTS 103-123 AND COMMON AREAS "A" & "B-1 - B-3"
BEING A PORTION OF THE SOUTHEAST QUARTER OF SECTION 12,
TOWNSHIP 12 SOUTH, RANGE 13 EAST, GILA & SALT RIVER MERIDIAN,
TOWN OF ORO VALLEY, PIMA COUNTY, ARIZONA.

1901060

SCALE: HORIZ : 1" = 30'
VERT : N/A

SHEET 5 OF 12

## RICK ENGINEERING IRRIGATION NOTES:

ANY CHANGES MADE TO THE PLANS AND DETAILS SHOWN ON THESE DOCUMENTS WHICH ARE NOT APPROVED BY THE LANDSCAPE ARCHITECT RELEASES RICK ENGINEERING OF ANY LIABILITY INCURRED AS A RESULT OF SAID CHANGES.

A. THESE IRRIGATION DRAWINGS ARE DIAGRAMMATIC. CONTRACTOR TO FOLLOW AS CLOSELY AS PRACTICAL. INSTALL PIPING AND EQUIPMENT IN PLANTER AREAS WHENEVER POSSIBLE WITH A MINIMUM OF 10' FEET CLEAR FROM TREE ROOT BALLS WHEN POSSIBLE. EQUIPMENT SHOWN ON PAVED AREAS IS FOR DESIGN CLARITY ONLY. IRRIGATION EQUIPMENT SHOWN OUTSIDE OF MAINTENANCE RESPONSIBILITY AREAS FOR CLARITY ONLY. ALL MAINTAINED AREA EQUIPMENT SHALL BE INSTALLED WITHIN THE LIMIT OF WORK LINES. DO NOT MAKE CHANGES OR ALTERATIONS TO PLANS WITHOUT PRIOR APPROVAL OF THE OWNERS REPRESENTATIVE. THE QUANTITIES AND CONDITIONS SHOWN ON THESE PLANS ARE FOR INFORMATIONAL PURPOSES ONLY. THE CONTRACTOR SHALL VERIFY THE ACTUAL QUANTITIES AND SITE CONDITIONS PRIOR TO BIDDING THE WORK.

B. IF ANY UTILITIES CONFLICT WITH THE ORIGINAL PLACEMENT OF INTENDED PLANT MATERIAL ON SITE THE LANDSCAPE ARCHITECT WILL AID THE CONTRACTOR IN THE RELOCATION OR SHIFTING OF PLANT MATERIAL ON SITE. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY TYPE AND LOCATION OF UTILITIES AS NECESSARY TO AVOID DAMAGE THERETO. ALL UTILITIES SHALL BE LOCATED AND VERIFIED PRIOR TO ANY EXCAVATION. THE LOCATIONS OF UTILITIES, STRUCTURES AND SERVICES SHOWN ON THESE PLANS ARE APPROXIMATE ONLY. ANY DISCREPANCIES BETWEEN THESE PLANS AND ACTUAL FIELD CONDITIONS SHALL BE REPORTED TO THE OWNERS REPRESENTATIVE IMMEDIATELY. PRIOR TO COMMENCEMENT OF ANY WORK, THE CONTRACTOR SHALL CONTACT CALL BEFORE YOU DIG 1 800 227-2600 TO VERIFY LOCATIONS AND DEPTHS OF UNDERGROUND UTILITIES THAT MAY BE AFFECTED BY THIS WORK, AND SHALL BE RESPONSIBLE FOR DAMAGES TO SUCH UTILITIES CAUSED AS A RESULT OF THE WORK.

C. THE CONTRACTOR SHALL COMPLY WITH ALL LAWS, RULES AND REGULATION OF ALL AUTHORITIES HAVING JURISDICTION OVER THE PREMISES. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS FOR THIS WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING AND COMPLYING WITH ALL PERMITS REQUIRED TO COMPLETE THE WORK COVERED BY THESE PLANS AND SPECIFICATIONS.

D. DO NOT WILLFULLY INSTALL ANY EQUIPMENT AS SHOWN ON THE PLANS WHEN IT IS OBVIOUS IN THE FIELD THAT UNKNOWN CONDITIONS EXIST THAT WERE NOT EVIDENT AT THE TIME THESE PLANS WERE PREPARED. ANY SUCH CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF THE OWNERS REPRESENTATIVE PRIOR TO ANY WORK OR THE IRRIGATION CONTRACTOR SHALL ASSUME RESPONSIBILITY FOR ANY FIELD CHANGES.

E. DO NOT INSTALL IRRIGATION MAINLINE THROUGH THE MIDDLE OF PLANTER WHERE POTENTIAL CONFLICTS WITH TREES ARE EXISTING AND/OR PROPOSED. COORDINATE WITH PLANTING PLAN TO AVOID CONFLICTS.

F. VALVE MANIFOLDS, BALL VALVES, RCV'S, QUICK COUPLERS, ETC SHALL BE LOCATED WITHIN SHRUB PLANTING AREAS. VERIFY ACTUAL LOCATIONS IN THE FIELD WITH OWNERS REPRESENTATIVE PRIOR TO INSTALLATION.

G. THE CONTRACTOR SHALL VERIFY AVAILABLE WATER PRESSURE AT POC AND PROVIDE TO OWNER AND OWNERS REPRESENTATIVE WITH TESTING RESULTS IN WRITING PRIOR TO BEGINNING WORK.

H. THE SPRINKLER SYSTEM DESIGN IS BASED ON THE MINIMUM PRESSURE AND THE MAXIMUM FLOW DEMAND SHOWN ON THE IRRIGATION DRAWINGS AT THE POINT OF CONNECTION (P.O.C.). THE IRRIGATION CONTRACTOR SHALL VERIFY THE WATER PRESSURE PRIOR TO CONSTRUCTION. REPORT ANY DIFFERENCE BETWEEN THE WATER PRESSURE INDICATED ON THE DRAWINGS AND THE ACTUAL PRESSURE READING AT THE IRRIGATION POC TO THE OWNERS REPRESENTATIVE. IN THE EVENT PRESSURE DIFFERENCES ARE NOT REPORTED PRIOR TO START OF CONSTRUCTION, THE IRRIGATION CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ANY REVISIONS AND COSTS ASSOCIATED WITH SAID REVISIONS.

I. THE CONTRACTOR SHALL FURNISH AN IRRIGATION SYSTEM THAT PROVIDES COMPLETE COVERAGE TO ALL INTENDED AREAS. CONTRACTOR SHALL MAKE ALL REQUIRED ADJUSTMENTS TO ASSURE ADEQUATE SYSTEM COVERAGE AND DISTRIBUTION EFFICIENCY. CONTRACTOR SHALL ADJUST ALL HEADS, LATERALS AND MAINLINE AS REQUIRED TO ACCOMMODATE ANY HORIZONTAL OBSTRUCTIONS THAT MAY OCCUR INCLUDING BUT NOT LIMITED TO FLATWORK, LIGHT POLES, FIRE HYDRANTS, TRANSFORMERS, ETC. ADD ADDITIONAL SPRINKLER HEADS, BUBBLERS, EMITTERS, ETC. AND ADJUST ALL EXISTING AND PROPOSED EQUIPMENT WITHIN THE PROJECT LIMITS OF WORK FOR OPTIMUM COVERAGE AND MINIMUM OVERSPRAY. ALL ADJUSTMENTS SHALL BE MADE AT NO ADDITIONAL COST TO THE OWNER.

J. THE CONTRACTOR IS TO HAVE ACTUAL LOCATIONS OF THE CCU'S AND AUTOMATIC CONTROLLERS APPROVED IN THE FIELD BY THE OWNERS REPRESENTATIVE PRIOR TO INSTALLATION.

K. IT SHALL BE THE RESPONSIBILITY OF THE IRRIGATION CONTRACTOR TO COORDINATE ELECTRICAL SERVICE WITH THE GENERAL CONTRACTOR AND SHALL MAKE THE FINAL CONNECTION FROM THE ELECTRICAL SOURCE TO THE CONTROLLER.

L. SHOULD FIELD CONDITIONS REQUIRE PIPE INSTALLATION OTHER THAN THAT SHOWN ON PLANS, THE CONTRACTOR SHALL LIMIT EXCESS FLOW AND SIZE ALL PIPE NOT TO EXCEED A VELOCITY OF 5 FEET PER SECOND (FPS) IN PVC PIPE. FLOW THROUGH ANCILLARY EQUIPMENT, COPPER PIPE SHALL NOT EXCEED 7.5 FPS. ALL ADJUSTMENTS SHALL BE MADE AT NO ADDITIONAL COST TO THE OWNER.

M. BACKFILL OVER MAINLINES SHALL OCCUR ONLY AFTER INSPECTION OF MAINLINES. PROVIDE 4" OF ROCK FREE SOIL OR SAND IMMEDIATELY AROUND PIPE.

N. INSTALL ALL IRRIGATION PIPING AND WIRES IN SCH 40 PVC SLEEVE WHEN ROUTED UNDER PAVEMENT OR STRUCTURES PER THE SPECIFICATIONS. WIRES ARE TO BE PLACED IN AN INDEPENDENT SLEEVE, SEPARATE FROM THE IRRIGATION PIPING. ALL SLEEVES TO EXTEND 12" MINIMUM PAST THE EDGE OF PAVEMENT AT THE PROPER DEPTH, SEE IRRIGATION DETAILS. CONTRACTOR SHALL INSTALL ALL SLEEVING BASED ON THE SLEEVE SIZING SCHEDULE UNLESS OTHERWISE NOTED ON PLANS.

O. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT ADJACENT PROPERTIES FROM DAMAGE THROUGHOUT CONSTRUCTION.

P. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CONSTRUCTION MEANS AND METHODS, COORDINATION AND SEQUENCING DURING CONSTRUCTION UNLESS SPECIFICALLY ADDRESSED OTHERWISE IN THESE PLANS AND SPECIFICATIONS.

Q. THE CONTRACTOR SHALL VERIFY AND ACCEPT ALL SITE CONDITIONS AND ROUGH GRADES PRIOR TO STARTING ANY WORK. ALL DRAINAGE FLOWS SHALL BE PROTECTED AND MAINTAINED THROUGHOUT CONSTRUCTION.

## TOWN OF ORO VALLEY IRRIGATION NOTES

1. IRRIGATION AND/OR WATERING PLANS SHALL MEET THE MINIMUM STANDARDS OF THE AMERICAN SOCIETY OF IRRIGATION CONSULTANTS.
2. IF DESERT LANDSCAPING IS USED WHICH WILL ULTIMATELY RELY ON NATURAL WATER SOURCES, A TEMPORARY DRIP IRRIGATION SYSTEM SHALL BE EMPLOYED UNTIL SUCH TIME AS THE PLANT MATERIALS ARE SUSTAINED BY NATURAL WATER SOURCES
3. THE PROPERTY OWNER IS RESPONSIBLE FOR MAINTAINING THE TEMPORARY SYSTEM AS LONG AS NECESSARY IN ORDER TO TRANSITION PLANTS OVER TO NATURAL SOURCES. ANY PLANT MATERIALS THAT DIE IN TRANSITION, FOR ANY REASON, SHALL BE REPLACED IN ACCORDANCE WITH SEC. 27.6.E.4., MAINTENANCE.
4. IRRIGATION SYSTEMS CONNECTED TO POTABLE WATER MAINS (PUBLIC OR PRIVATE) SHALL BE EQUIPPED WITH BACKFLOW PREVENTERS.
5. THE ANNUAL WATER USE FOR A PROJECT SHALL NOT EXCEED THE ANNUAL LANDSCAPE WATER PLAN.
6. IRRIGATION METER READINGS SHALL BE USED TO DETERMINE COMPLIANCE WITH THE LANDSCAPE WATER PLAN. NON-COMPLIANCE IS SUBJECT TO PENALTIES UNDER ORO VALLEY TOWN CODE.
7. METER READINGS SHALL BE TAKEN, AT A MINIMUM, ON AN ANNUAL BASIS. MONTHLY READINGS MAY BE REQUIRED, AT THE DISCRETION OF THE PLANNING AND ZONING ADMINISTRATOR, IN ORDER TO ADDRESS NON-COMPLIANCE WITH THE WATER PLAN
8. AN INITIAL METER READING SHALL BE TAKEN PRIOR TO THE ISSUANCE OF THE CERTIFICATE OF OCCUPANCY AND RECORDED FOR REFERENCE AS PART OF THE WATER PLAN.
9. IRRIGATION WATER SHALL NOT LEAVE THE LANDSCAPED AREAS AND FLOW ONTO ROADS, PARKING AREAS OR SIDEWALKS.
10. SPRINKLER HEADS SHALL BE INSTALLED AT LEAST EIGHT (8) INCHES AWAY FROM IMPERMEABLE SURFACES.
11. VEGETATION LOCATED IN BUFFERYARDS SHALL NOT RECEIVE IRRIGATION AFTER FIVE (5) YEARS FROM THE CERTIFICATE OF OCCUPANCY DATE.
12. IRRIGATION SHALL BE PROVIDED TO TRANSPLANT SPECIMENS IN THE TEMPORARY NURSERY AS NEEDED TO ENSURE SURVIVAL.

## LANDSCAPE WATER PLAN

| JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **YEAR 3:** Continue to increase irrigation water use as needed as plants mature up to, but not exceeding, 100% ADWR value by end of year. (average monthly water use = 55,600 gal/month) | | | | | | | | | | | | |
| 9,053 | 11,674 | 18,583 | 24,777 | 30,495 | 32,401 | 27,875 | 24,539 | 22,157 | 17,630 | 11,197 | 7,862 | **TOTAL (100% ADWR) 238,244** |
| **YEAR 4:** Begin gradually decreasing irrigation to buffer, median, and ROW areas in order to reach zero irrigation in those areas by end of year 5. (to reach 75% ADWR by end of year, average monthly water use = 41,000 gal/month) | | | | | | | | | | | | |
| 6,790 | 8,755 | 13,937 | 18,583 | 22,871 | 24,301 | 20,906 | 18,404 | 16,618 | 13,223 | 8,398 | 5,897 | **TOTAL (75% ADWR) 178,683** |
| **YEAR 5:** Continue decreasing irrigation to buffer, median, and ROW areas. By end of year 5, irrigation to buffer, median, and ROW areas must be zero, and total amount of water used at site must meet 50% of ADWR maturity value. (average monthly water use = 27,300 gal/month) | | | | | | | | | | | | |
| 4,527 | 5,837 | 9,292 | 12,389 | 15,248 | 16,201 | 13,937 | 12,270 | 11,078 | 8,815 | 5,599 | 3,931 | **TOTAL (50% ADWR) 119,122** |

SCALE: 1" = 30'

0' 15' 30' 60'

OV1801921
OV1600944, OV12-03-20
RIVERS EDGE (MELCOR) PLANNED AREA DEVELOPMENT #7

**L-06**

Contact Arizona 811 at least two full working days before you begin excavation
ARIZONA811 BLUE STAKE, INC.
Call 811 or click Arizona811.com



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| NO. | BY | DATE | REVISION | APPR | DATE |
|---|---|---|---|---|---|
| | | | | | |

REGISTERED LANDSCAPE ARCHITECT
CERTIFICATE NO.
36734
MARK E. FELLINGER
10/17/19
Date Signed
ARIZONA, USA

M. Fellinger

JN 4191A

RICK ENGINEERING COMPANY
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|---|---|---|---|
| DESIGNED BY: MEF | DATE: 10/19 | CHECKED BY: | DATE: |
| DRAWN BY: MEF | DATE: 10/19 | APPROVED BY: | DATE: |

**FINAL LANDSCAPE PLAN FOR:**

# RIVER'S EDGE LOTS 103-123

LOTS 103-122 AND COMMON AREAS "A" & "B-1 - B-3"
BEING A PORTION OF THE SOUTHEAST QUARTER OF SECTION 12,
TOWNSHIP 12 SOUTH, RANGE 13 EAST, GILA & SALT RIVER MERIDIAN,
TOWN OF ORO VALLEY, PIMA COUNTY, ARIZONA.

1901060

SCALE: HORIZ : 1" = 30'
VERT : N/A

SHEET 6 OF 12

## IRRIGATION EQUIPMENT LEGEND

| SYMBOL | DESCRIPTION | MANUFACTURER / MODEL | REMARKS |
|---|---|---|---|
| M | NEW 3/4" WATER METER | | |
| A | AUTOMATIC CONTROLLER | HUNTER XC HYBRID 6-STATION WITH SOLAR PANEL KIT | POST MOUNT ON HUNTER XCHSPOLE WITH SS SOLAR OUTDOOR ENCLOSURE |
| R | RAIN SENSOR | HUNTER RAIN-CLIK (WIRED) | INSTALL PER MANUFACTURER RECOMMENDATIONS |
| BFP | BACKFLOW PREVENTION ASSEMBLY | 1" FEBCO 825Y | INSTALL AS DETAILED, WITH GUARDSHACK ENCLOSURE (TAN) |
| | PVC BALL VALVE | NIBCO, OR EQUAL | LINE SIZE, INSTALL AS DETAILED |
| | DRIP REMOTE CONTROL VALVE ASSEMBLY | RAINBIRD CONTROL ZONE KIT XCZ-100-PRB-LC | INSTALL AS DETAILED |
| | PVC MAINLINE PIPE | AS APPROVED | PVC SCH 40; SIZE PER PLAN |
| | PVC SLEEVE | AS APPROVED | PVC SCH 40 |
| | 3/4" POLYETHYLENE LATERAL | AS APPROVED | EXTEND FROM PRESSURE REGULATORS TO WITHIN 10' OF EACH TREE AND SHRUB. |
| NOT SHOWN | SINGLE OUTLET EMITTER | RAINBIRD XERI-BUG, OR EQUAL | INSTALL AS DETAILED |
| NOT SHOWN | MULTI-OUTLET EMITTER | RAINBIRD XERI-BUG, OR EQUAL | INSTALL AS DETAILED |
| ● | FLUSH VALVE | AS DETAILED | INSTALL IN 6" ROUND VALVE BOX |

## LANDSCAPE WATER PLAN BASE IRRIGATION SCHEDULE

| PLANT TYPE | YEAR | AVERAGE # OF IRRIGATION DAYS PER MONTH | RUN TIME PER IRRIGATION DAY | AVERAGE TOTAL WATER USE PER MONTH | AVERAGE TOTAL WATER USE PER YEAR |
|---|---|---|---|---|---|
| TREES | 3 | 8 | 120 MIN. | 11,520 GAL. | 138,240 GAL. |
| SHRUBS | | 16 | 60 MIN. | | |
| TREES | 4 | 4 | 120 MIN. | 6,960 GAL. | 83,520 GAL. |
| SHRUBS | | 12 | 60 MIN. | | |
| TREES | 5 | 2 | 120 MIN. | 4,080 GAL. | 48,960 GAL. |
| SHRUBS | | 8 | 60 MIN. | | |

## EMITTER SCHEDULE - TREES

| SPECIES | EMITTER FLOW (GPH) | # OF EMITTERS PER PLANT |
|---|---|---|
| 48" BOX TREE | 1.0 | 18 |
| 36" BOX TREE | 1.0 | 12 |
| 24" BOX TREE | 1.0 | 12 |
| 15 GAL. TREE | 1.0 | 6 |
| 15 GAL. TREE | 1.0 | 6 |
| TRANSPLANTED TREE | 1.0 | 12 |

## EMITTER SCHEDULE - SHRUBS

| SPECIES | EMITTER FLOW (GPH) | # OF EMITTERS PER PLANT |
|---|---|---|
| BARREL CACTUS | - | 0 |
| BRITTLE BUSH | 1.0 | 1 |
| BULL GRASS | 1.0 | 1 |
| CATCLAW ACACIA | 1.0 | 2 |
| DESERT HACKBERRY | 1.0 | 2 |
| DESERT SPOON | 1.0 | 1 |
| FAIRY DUSTER | 1.0 | 1 |
| RED YUCCA | 1.0 | 1 |
| SAGUARO | - | 0 |
| SANTA RITA PRICKLY PEAR CACTUS | 0.5 | 1 |
| TEDDY BEAR CHOLLA | - | 0 |
| TEXAS RANGER | 1.0 | 1 |
| TURPENTINE BUSH | 1.0 | 1 |
| WHITETHORN ACACIA | 1.0 | 2 |

Contact Arizona 811 at least two full working days before you begin excavation
ARIZONA811 BLUE STAKE, INC.
Call 811 or click Arizona811.com



OV1801921
OV1600944, OV12-03-20
RIVERS EDGE (MELCOR) PLANNED AREA DEVELOPMENT #7

**L-07**

| NO. | BY | DATE | REVISION | APPR | DATE |
|---|---|---|---|---|---|
| | | | | | |

REGISTERED LANDSCAPE ARCHITECT
CERTIFICATE NO. 36734
MARK E. FELLINGER
10/17/19
Not Valid Unless Signed
ARIZONA, U.S.A.

M. Fellinger

JN 4191A

RICK ENGINEERING COMPANY
Tucson
3945 EAST FORT LOWELL ROAD - SUITE 111
TUCSON, AZ 85712
520.795.1000
(FAX)520.322.6956
rickengineering.com
Phoenix - San Diego - Sacramento - Riverside - Orange - San Luis Obispo - Bakersfield

DESIGNED BY: MEF | DATE: 10/19 | CHECKED BY: | DATE:
DRAWN BY: MEF | DATE: 10/19 | APPROVED BY: | DATE:

**FINAL LANDSCAPE PLAN FOR:**

# RIVER'S EDGE
# LOTS 103-123

LOTS 103-123 AND COMMON AREAS "A" & "B-1 - B-3"
BEING A PORTION OF THE SOUTHEAST QUARTER OF SECTION 12,
TOWNSHIP 12 SOUTH, RANGE 13 EAST, GILA & SALT RIVER MERIDIAN,
TOWN OF ORO VALLEY, PIMA COUNTY, ARIZONA.

1901060

SCALE: HORIZ : N/A
VERT : N/A

SHEET 7 OF 12

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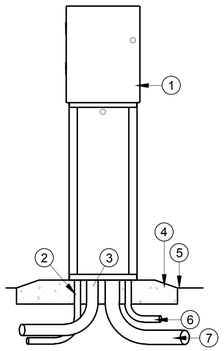
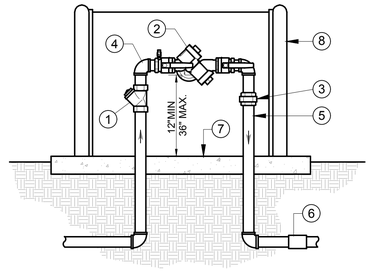


1. ENCLOSURE AND AUTOMATIC CONTROLLER PER IRRIGATION LEGEND
2. 3/4" POWER CONDUIT: SIZE, TYPE, DEPTH PER LOCAL CODE
3. GROUND WIRE CONDUIT, MIN. 1-1/2". GROUND PER ASIC GUIDELINES
4. 6" THICK FORMED AND POURED-IN-PLACE CONCRETE BASE
5. FINISH GRADE
6. CONDUIT FOR GCBL WIRING
7. CONDUIT FOR DECODER WIRES

NOTES:
1. SEE INSTRUCTION MANUAL FOR MOUNTING INSTRUCTIONS.
2. ALL WIRING SHALL BE INSTALLED PER LOCAL CODES.
3. 120 VOLT POWER TO BE SUPPLIED BY OWNER.

## A IRRIGATION CONTROLLER

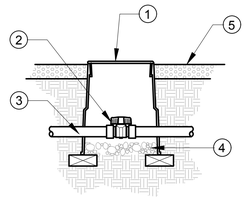
NOT TO SCALE




1. BRASS WYE STRAINER (LINE SIZE).
2. REDUCED PRESSURE BACKFLOW DEVICE WITH 2 BALL VALVES, REFER TO PLAN FOR TYPE AND SIZE
3. BRASS UNION
4. BRASS ELL (TYPICAL)
5. BRASS NIPPLE, TYPICAL
6. PVC MALE ADAPTER
7. 3" THICK CONCRETE PAD. WRAP PIPES W/ 10 MIL. TAPE. SATURATE AND COMPACT SUB-GRADE TO 90% PRIOR TO POUR.
8. ENCLOSURE PER LEGEND.

## B BACKFLOW PREVENTION DEVICE

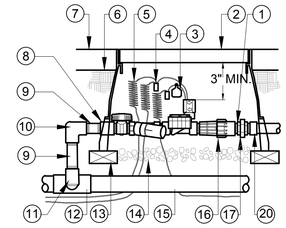
NOT TO SCALE



1. 6" ROUND VALVE BOX
2. BALL VALVE PER LEGEND
3. LATERAL LINE
4. 3" MIN. DEPTH OF 3/4" WASHED GRAVEL
5. FINISH GRADE OF DG.

## C PVC BALL VALVE

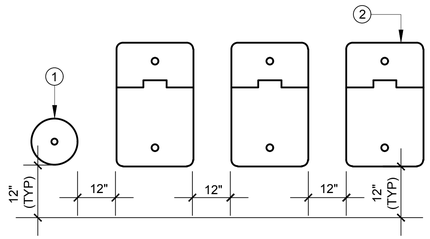
NOT TO SCALE




1. PVC SCH. 80 NIPPLE (CLOSE)
2. VALVE BOX W/ COVER: 24" SIZE
3. ID TAG
4. WATER PROOF CONNECTION (1 OF 2)
5. 30-INCH LINEAR LENGTH OF WIRE, COILED
6. FINISH GRADE
7. TOP OF MULCH
8. PVC SCH. 40 COUPLING
9. PVC SCH. 80 NIPPLE (LENGTH AS REQ'D)
10. PVC SCH. 40 ELL
11. PVC SCH. 80 NIPPLE (2" LENGTH, HIDDEN) AND PVC SCH. 40 ELL
12. PVC SCH. 40 TEE OR ELL
13. BRICK (1 OF 4)
14. 3" MIN. DEPTH OF 3/4" WASHED GRAVEL
15. PVC MAINLINE, SIZE PER PLANS
16. DRIP VALVE ASSEMBLY PER LEGEND
17. PVC SCH. 80 UNION FOR SERVICING ASSEMBLY
20. PVC SCH. 40 MALE ADAPTER

## D REMOTE CONTROL VALVE (DRIP)

NOT TO SCALE

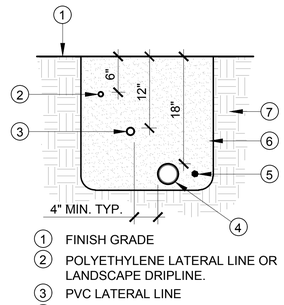



1. QUICK COUPLING VALVE BOX (TYP)
2. RECTANGULAR VALVE BOX (TYP)

NOTES:
1. VALVE BOXES SHALL BE LABELED BY HOT IRON BRANDING OR ALUMINUM ASPHALT BASED WATERPROOF PAINT.
2. CONTROL VALVES SHALL BE INSTALLED TO ALLOW ORDERLY ARRANGEMENT OF VALVE BOXES.
3. LOCATE VALVE ASSEMBLIES IN SHRUB OR GROUND COVER AREAS WHEN POSSIBLE.
4. LOCATION OF VALVE ASSEMBLIES SHALL BE STAKED FOR APPROVAL BY LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.
5. CENTER VALVE BOXES OVER VALVE ASSEMBLE TO FACILITATE ACCESS AND MAINTENANCE.
6. SET VALVE BOXES AT EQUAL ELEVATIONS WITH TOPS AT FINISH GRADE IN TURF AREAS OR 3" ABOVE FINISH GRADE IN SHRUB/GROUND COVER AREAS.
7. VALVE BOXES SHALL BE SET PARALLEL TO EACH OTHER AND PERPENDICULAR TO EDGE OF AREA.
8. DO NOT DEFORM OR COLLAPSE VALVE BOX BY EXCESSIVE SOIL COMPACTING AROUND BOX.
9. ON RECYCLED SYSTEMS ALL VALVE BOXES AND QUICK COUPLING VALVES SHALL BE CLEARLY COLORED PURPLE.

## E VALVE BOX LAYOUT

NOT TO SCALE

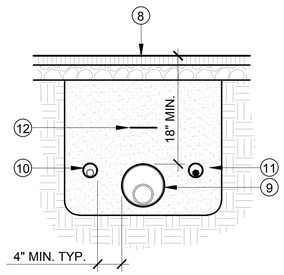


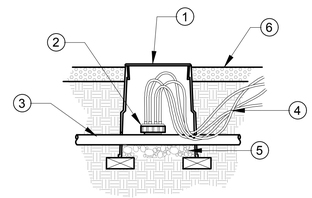

1. FINISH GRADE
2. POLYETHYLENE LATERAL LINE OR LANDSCAPE DRIPLINE.
3. PVC LATERAL LINE
4. PVC MAINLINE
5. DIRECT BURIAL LOW VOLTAGE CONTROL WIRES, BUNDLE AT 10 FT. O.C., BURY AT SAME DEPTH AS MAINLINE
6. CLEAN BACKFILL, SATURATE AND COMPACT TO 90%
7. UNDISTURBED SOIL
8. PAVED SURFACE
9. MAIN LINE SLEEVE
10. LATERAL LINE SLEEVE
11. CONTROL WIRE SLEEVE
12. MARKING TAPE

NOTE: EXTEND SLEEVE ENDS 24" BEYOND BACK OF CURB, WALK, OR PAVEMENT EDGE. A CONTINUOUS MAGNETIC MARKING TAPE SHALL BE PLACED 12 INCHES BELOW FINISHED GRADE ABOVE THE SLEEVE. AT ROAD CROSSINGS, THE CURB SHALL BE MARKED BY A STAMPED LABEL "I" (IRRIGATION SYSTEM). SLEEVE ENDS SHALL BE COVERED WITH HEAVY DUTY TAPE TO PREVENT SOIL FROM ENTERING SLEEVES UPON BACK FILLING.

## F TRENCHING AND SLEEVING

NOT TO SCALE

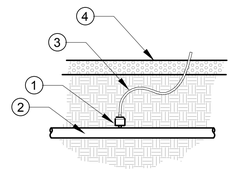


1. 6" ROUND VALVE BOX
2. MULTI-OUTLET DRIP EMITTER PER LEGEND
3. 3/4" POLYETHYLENE LATERAL
4. 1/4" DISTRIBUTION TUBING
5. 3" MIN. DEPTH OF 3/4" WASHED GRAVEL
6. FINISH GRADE

## G MULTI-OUTLET DRIP EMITTER

NOT TO SCALE



1. SINGLE OUTLET DRIP EMITTER PER LEGEND
2. 3/4" POLYETHYLENE LATERAL
3. 1/4" DISTRIBUTION TUBING
4. FINISH GRADE

## H SINGLE OUTLET DRIP EMITTER

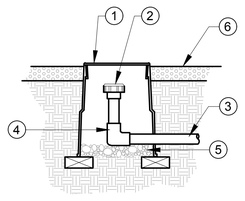
NOT TO SCALE




1. MULTI-OUTLET DRIP EMITTER
2. 3/4" POLYETHYLENE LATERAL
3. 1/4" DISTRIBUTION TUBING
4. DISCHARGE POINT, TO BE 1" ABOVE FINISH GRADE
5. TREE TRUNK

## I EMITTER PLACEMENT @ TREES

NOT TO SCALE



1. 6" ROUND VALVE BOX
2. FLUSH CAP
3. 3/4" POLYETHYLENE LATERAL
4. COMPRESSION FIT ELBOW
5. 3" MIN. DEPTH OF 3/4" WASHED GRAVEL
6. FINISH GRADE

## J END FLUSH CAP

NOT TO SCALE

Contact Arizona 811 at least two full working days before you begin excavation
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| NO. | BY | DATE | REVISION | APPR | DATE |
|---|---|---|---|---|---|
| | | | | | |

REGISTERED LANDSCAPE ARCHITECT CERTIFICATE NO. 36734 MARK E. FELLINGER 10/17/19 Date Signed ARIZONA, U.S.A.

M. Fellinger

RICK ENGINEERING COMPANY
Tucson
3945 EAST FORT LOWELL ROAD - SUITE 111
TUCSON, AZ 85712
520.795.1000
(FAX)520.322.6956
rickengineering.com
Phoenix - San Diego - Sacramento - Riverside - Orange - San Luis Obispo - Bakersfield

JN 4191A

| DESIGNED BY: MEF | DATE: 10/19 | CHECKED BY: | DATE: |
|---|---|---|---|
| DRAWN BY: MEF | DATE: 10/19 | APPROVED BY: | DATE: |

**FINAL LANDSCAPE PLAN FOR:**

# RIVER'S EDGE LOTS 103-123

LOTS 103-123 AND COMMON AREAS "A" & "B-1 - B-3"
BEING A PORTION OF THE SOUTHEAST QUARTER OF SECTION 12, TOWNSHIP 12 SOUTH, RANGE 13 EAST, GILA & SALT RIVER MERIDIAN, TOWN OF ORO VALLEY, PIMA COUNTY, ARIZONA.

1901060

SCALE: HORIZ : N/A
VERT : N/A

OV1801921
OV1600944, OV12-03-20
RIVERS EDGE (MELCOR) PLANNED AREA DEVELOPMENT #7

**L-08**

SHEET 8 OF 12

# IRRIGATION SPECIFICATIONS

SECTION 02810 - IRRIGATION
PART 1 - GENERAL

1.1. RELATED DOCUMENTS:

1.1.1. DRAWINGS AND GENERAL PROVISIONS OF CONTRACT, INCLUDING GENERAL AND SUPPLEMENTARY CONDITIONS AND DIVISION-1 SPECIFICATION SECTIONS, APPLY TO WORK OF THIS SECTION.

1.2. REQUIREMENTS:

1.2.1. ALL WORK AND MATERIALS SHALL BE IN ACCORDANCE WITH THE UNIFORM PLUMBING CODE PUBLISHED BY THE WESTERN PLUMBING OFFICIALS ASSOCIATION, ALL STATE AND LOCAL CODES AND REGULATIONS. SHOULD THE CONSTRUCTION DOCUMENTS OR INSTRUCTIONS BE AT VARIANCE WITH THE AFOREMENTIONED RULES AND REGULATIONS, NOTIFY THE MUNICIPAL WATER DISTRICT AND AWAIT THEIR INSTRUCTIONS BEFORE PROCEEDING WITH THE WORK EFFECTED.

1.2.2. MANUFACTURER'S DIRECTIONS: MANUFACTURER'S DIRECTIONS AND DETAILED DRAWINGS SHALL BE FOLLOWED IN ALL CASES WHERE THE MANUFACTURER OR ARTICLES USED IN THIS CONTRACT FURNISH DIRECTIONS COVERING POINTS NOT SHOWN IN THE DRAWINGS AND SPECIFICATIONS.

1.2.3. MANUFACTURER'S WARRANTIES: MANUFACTURER'S WARRANTIES SHALL NOT RELIEVE LIABILITIES UNDER GUARANTEE.

1.2.4. ALL WORK CALLED FOR ON THE DRAWINGS BY NOTES SHALL BE FURNISHED AND INSTALLED WHETHER OR NOT SPECIFICALLY NOTED IN THE SPECIFICATIONS. DO NOT WILLFULLY INSTALL THE SPRINKLER SYSTEM AS INDICATED ON THE DRAWINGS WHEN IT IS OBVIOUS IN THE FIELD THAT UNKNOWN OBSTRUCTIONS OR GRADE DIFFERENCES EXIST THAT MIGHT NOT HAVE BEEN CONSIDERED IN THE IRRIGATION DESIGN, OR IF DISCREPANCIES IN THE CONSTRUCTION DETAILS, LEGEND, OR SPECIFIC NOTES ARE DISCOVERED. ALL SUCH OBSTRUCTIONS OR DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT. IN THE EVENT THAT THIS IS NOT DONE, THE CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR THE NECESSARY REVISIONS.

1.2.5. DUE TO THE SCALE OF DRAWINGS, IT IS NOT POSSIBLE TO INDICATE ALL OFFSETS, FITTINGS, SLEEVES, ETC. WHICH MAY BE REQUIRED. THE CONTRACTOR SHALL CAREFULLY INVESTIGATE THE STRUCTURAL AND FINISHED CONDITIONS AFFECTING ALL OF HIS WORK AND PLAN HIS WORK ACCORDINGLY, FURNISHING SUCH FITTINGS, ETC., AS MAY BE REQUIRED TO MEET SUCH CONDITIONS. DRAWINGS ARE GENERALLY DIAGRAMMATIC AND INDICATIVE OF THE WORK TO BE INSTALLED. THE WORK SHALL BE INSTALLED IN SUCH A MANNER AS TO AVOID CONFLICTS BETWEEN IRRIGATION SYSTEMS, PLANTING AND ARCHITECTURAL FEATURES.

1.3. PROTECTION AND DAMAGE:

1.3.1. PROTECT WORK AND MATERIALS FROM DAMAGE DURING CONSTRUCTION AND STORAGE. PVC PIPE AND FITTINGS SHALL BE PROTECTED FROM DIRECT SUNLIGHT.

1.3.2. ASSUME ALL RESPONSIBILITY FOR DAMAGE TO EXISTING CONSTRUCTION AND RESTORE TO ITS ORIGINAL CONDITION SHOULD DAMAGE OCCUR AS A RESULT OF THIS WORK.

1.3.3. CONTRACTOR SHALL SECURELY COVER OPENINGS INTO SYSTEM AND COVER APPARATUSES, EQUIPMENT, AND APPLIANCES BOTH BEFORE AND AFTER BEING SET IN PLACE TO PREVENT OBSTRUCTION IN THE PIPES AND PREVENT BREAKAGE, MISUSE, OR DISFIGUREMENT OF THE APPARATUSES, EQUIPMENT OR APPLIANCES.

1.4. DESCRIPTION OF WORK:

1.4.1. THE WORK CONSISTS OF FURNISHING LABOR, TOOLS, MACHINERY, MATERIALS, AND PROCESSES REQUIRED TO COMPLETE THE SPRINKLER IRRIGATION SYSTEM DESCRIBED HEREIN AND SHOWN ON THE DRAWINGS.

1.4.2. THE INTENT OF THE DRAWINGS AND SPECIFICATIONS IS TO INDICATE AND SPECIFY A COMPLETE SPRINKLER SYSTEM, INSTALLED READY FOR USE WITHOUT FURTHER COST IN LABOR OR MATERIALS TO THE OWNER.

1.5. QUALITY ASSURANCE:

1.5.1. SUBCONTRACT WORK TO A SINGLE FIRM SPECIALIZING IN IRRIGATION WORK. CONTRACTOR SHALL POSSESS ALL LICENSES AND PERMITS REQUIRED TO PERFORM THE WORK OF THIS CONTRACT INCLUDING AN A-21 LANDSCAPING LICENSE.

1.6. SUBMITTALS:

1.6.1. THE CONTRACTOR SHALL FURNISH THE ARTICLES, EQUIPMENT, MATERIALS OR PROCESSES SPECIFIED BY NAME IN THE DRAWINGS AND SPECIFICATIONS. NO SUBSTITUTION WILL BE ALLOWED WITHOUT PRIOR WRITTEN APPROVAL BY THE LANDSCAPE ARCHITECT, OR THE OWNER'S AUTHORIZED REPRESENTATIVE.

1.6.2. THE CONTRACTOR SHALL SUBMIT TO THE LANDSCAPE ARCHITECT CATALOG DATA AND FULL DESCRIPTIVE LITERATURE FOR APPROVAL OF ITEMS DIFFERENT THAN THOSE SPECIFIED.

1.6.3. EQUIPMENT OR MATERIALS INSTALLED OR FURNISHED WITHOUT THE PRIOR APPROVAL OF THE LANDSCAPE ARCHITECT MAY BE REJECTED AND THE CONTRACTOR MAY BE REQUIRED TO REMOVE SUCH MATERIALS FROM THE SITE AT HIS OWN EXPENSE.

1.6.4. APPROVAL OF ANY ITEM, ALTERNATE OR SUBSTITUTE INDICATES ONLY THAT THE PRODUCT(S) APPARENTLY MEET THE REQUIREMENTS OF THE DRAWINGS AND SPECIFICATIONS ON THE BASIS OF THE INFORMATION OR SAMPLES SUBMITTED.

1.6.5. MANUFACTURER'S WARRANTIES SHALL NOT RELIEVE THE CONTRACTOR OF HIS LIABILITY UNDER THE GUARANTEE. SUCH WARRANTY SHALL ONLY SUPPLEMENT THE GUARANTEE.

1.7. GUARANTEE:

1.7.1. FURNISH GUARANTEE IN ACCORDANCE WITH THE GENERAL CONDITIONS, FOR A PERIOD OF ONE (1) YEAR FROM THE DATE OF FINAL ACCEPTANCE - AT THE CONCLUSION OF THE MAINTENANCE PERIOD - ON COMPLETE WATER IRRIGATION SYSTEM, INCLUDING NON-SETTLING OF THE BACKFILL IN TRENCHES, WHICH, IF OCCURS, SHALL BE CORRECTED, INCLUDING REPAIRS AND/OR REPLACEMENT OF ANY MATERIAL DAMAGED THEREBY OR THERE FROM.

1.7.2. MANUFACTURER'S WARRANTIES SHALL NOT RELIEVE THE CONTRACTOR OF HIS LIABILITY UNDER THE GUARANTEE. SUCH WARRANTY SHALL ONLY SUPPLEMENT THE GUARANTEE.

PART 2 - PRODUCTS

2.1. MATERIALS:

2.1.1. PRESSURE PIPE: COMPLY WITH FOLLOWING:

2.1.1.1. PVC PLASTIC PRESSURE LINES: FOR PIPING UPSTREAM OF REMOTE CONTROL VALVES AND QUICK COUPLERS. ALL TWO (2) INCHES AND LARGER SHALL BE CLASS 315 POLYVINYL CHLORIDE (PVC) SIMPSON OR APPROVED EQUAL. ALL ONE AND ONE-HALF (1-1/2) INCHES AND SMALLER SHALL BE TYPE I, GRADE 2, DESIGNATED AS PVC 1220, SCHEDULE 40.

2.1.1.2. NON-PRESSURE PIPE: (DOWNSTREAM FROM REMOTE CONTROL VALVES): COMPLY WITH FOLLOWING:

2.1.2. PLASTIC NON-PRESSURE LINES: FOR PIPING DOWNSTREAM OF REMOTE CONTROL VALVES, TYPE 1, GRADE 2 (IMPACT MODIFIED), AS DESIGNATED AS PVC 1220, CLASS 200, (SDR21), CONFORMING TO COMMERCIAL STANDARDS CS256-63.

2.1.3. POLYETHYLENE NON-PRESSURE TUBING: FOR PIPING DOWNSTREAM OF REMOTE CONTROL DRIP VALVES, CONFORMING TO ASTM D-2239 REQUIREMENTS FOR SIDR 19, NSF LISTED.

2.1.4. PIPE SLEEVES SHALL BE PVC SCHEDULE 40.

2.1.5. IDENTIFICATION: FURNISH PLASTIC PIPE CONTINUOUSLY AND PERMANENTLY MARKED WITH FOLLOWING INFORMATION: MANUFACTURER'S NAME OR TRADE MARK, SIZE, CLASS AND TYPE OF PIPE, WORKING PRESSURE AT 73.4 DEGREES F., AND NATIONAL SANITATION FOUNDATION (NSF) RATING.

2.1.6. BRASS PIPE: BRASS PIPE SHALL BE IPS STANDARD WEIGHT 125 POUNDS, 85% RED BRASS.

2.1.7. PIPE FITTINGS AND CONNECTIONS: COMPLY WITH FOLLOWING:

2.2. FITTINGS AND CONNECTIONS:

2.2.1. POLYVINYL CHLORIDE PIPE FITTINGS AND CONNECTIONS: TYPE II, GRADE 1, SCHEDULE 40, HIGH IMPACT MOLDED FITTINGS, MANUFACTURED FROM VIRGIN COMPOUNDS AS SPECIFIED FOR PIPING TAPERED SOCKET OR MOLDED THREAD TYPE, SUITABLE FOR EITHER SOLVENT WELD OR SCREWED CONNECTIONS. MACHINE THREADED FITTINGS AND PLASTIC SADDLE AND FLANGE FITTINGS ARE NOT ACCEPTABLE. FURNISH FITTINGS PERMANENTLY MARKED WITH FOLLOWING INFORMATION: NOMINAL PIPE SIZE, TYPE AND SCHEDULE OF MATERIAL, AND NATIONAL SANITATION FOUNDATION (NSF) SEAL OF APPROVAL. PVC FITTING SHALL CONFORM TO ASTM D2464 AND D2466.

2.2.1.1. ALL PVC THREADED NIPPLES SHALL BE STANDARD WEIGHT SCHEDULE 80 WITH MOLDED THREADS AND SHALL CONFORM TO ASTM D1785:

2.2.2. BRASS PIPE FITTINGS AND CONNECTIONS: STANDARD 125 POUND CLASS 85% RED BRASS FITTINGS AND CONNECTIONS.

2.2.3. FLEXIBLE TUBING SHALL BE OF LINE SIZE IPS, PVC PLASTIC BARB ADAPTORS SECURELY HELD TO HEAVY-DUTY PVC FLEX TUBING, PRESSURE RATED TO 150 POUND MINIMUM. HUNTER OR APPROVED EQUAL.

2.2.4. SOLVENT CEMENTS SHALL COMPLY WITH ASTM D2564. SOCKET JOINTS SHALL BE MADE PER RECOMMENDED PROCEDURES FOR JOINING PVC PLASTIC PIPE AND FITTINGS WITH PVC SOLVENT CEMENT BY THE PIPE AND FITTING MANUFACTURER AND PROCEDURES OUTLINED IN THE APPENDIX OF ASTM D2564.

2.2.5. THREAD LUBRICANT SHALL BE TEFLON RIBBON-TYPE, OR APPROVED EQUAL, SUITABLE FOR THREADED INSTALLATIONS AS PER MANUFACTURER'S RECOMMENDATIONS.

2.3. VALVES: MANUFACTURER'S STANDARD, OF TYPE AND SIZE INDICATED, AND AS FOLLOWS:

2.3.1. REMOTE CONTROL VALVES SHALL BE OF THE MANUFACTURER SIZE, AND TYPE INDICATED ON THE PLANS. VALVE SHALL BE OPERABLE MANUALLY WITHOUT ELECTRICITY.

2.3.2. DRIP VALVE ASSEMBLY SHALL BE OF THE MANUFACTURER SIZE, AND TYPE INDICATED ON THE PLANS AND SHALL CONSIST OF A REMOTE CONTROL VALVE, WYE FILTER, AND PRESSURE REGULATING DEVICE.

2.4. BACKFLOW PREVENTER ASSEMBLY:

2.4.1. BACKFLOW PREVENTERS SHALL BE BRASS, BRONZE, OR EPOXY COATED CAST IRON BODIES WITH ALL BRONZE OR STAINLESS STEEL TRIM AND ALL MOVING PARTS OF NON-CORROSIVE MATERIALS, AND SHALL COMPLETELY AND POSITIVELY PREVENT BACK-SIPHONING OF WATER. THE BACKFLOW PREVENTER ASSEMBLY SHALL INCLUDE INLET AND DISCHARGE SHUTOFF GATE VALVES WITH ALL RISERS, CONNECTORS, AND APPURTENANCES OF CLASS 1 RED BRASS PIPE, CONFORMING TO WW-P-351, AND RED BRASS FITTINGS WITH PRESSURE RATING 1 CONFORMING TO WW-P-460. BACKFLOW PREVENTERS SHALL BE OF THE TYPE AND SIZE DESIGNATED ON THE DRAWINGS AND INSTALL IN ACCORDANCE WITH REQUIREMENTS SET FORTH IN THE LOCAL CODES AND AGENCIES.

2.5. VALVE BOXES:

2.5.1. FOR REMOTE CONTROL VALVES: TAN STANDARD 12" NOM. PLASTIC VALVE BOX SHALL BE MANUFACTURED BY ARMOR (PART# 170106)

2.5.2. FOR DRIP ASSEMBLY VALVE: TAN JUMBO PLASTIC VALVE BOX SHALL BE MANUFACTURED BY ARMOR (PART# 190106)

2.5.3. FOR MULTI-OUTLET DRIP EMITTER: TAN 6" DIAMETER VALVE BOX SHALL BE MANUFACTURED BY ARMOR (PART# 182101)

2.6. CONCRETE THRUST BLOCK AND SUPPORTS:

2.6.1. ALL CONCRETE WORK SHALL BE 2,000 PSI MINIMUM COMPRESSIVE STRENGTH AT TWENTY-EIGHT (28) DAYS, 5 SACK MIX, TOOL FINISHED ON EXPOSED SURFACES.

2.7. AUTOMATIC CONTROL SYSTEM:

2.7.1. GENERAL: FURNISH LOW VOLTAGE SYSTEM MANUFACTURED EXPRESSLY FOR CONTROL OF AUTOMATIC CIRCUIT VALVES OF UNDERGROUND IRRIGATION SYSTEMS. PROVIDE UNIT OF CAPACITY TO SUIT NUMBER OF CIRCUITS AS INDICATED.

2.7.2. AUTOMATIC CONTROLLER:

2.7.2.1. CONTROLLER SHALL BE FURNISHED AND INSTALLED COMPLETE WITH ALL ELECTRICAL CONNECTIONS, READY FOR OPERATION.

2.7.2.2. CONTROLLER SHALL BE THE LATEST MODEL OF THE PARTICULAR MANUFACTURER SUPPLIED.

2.7.2.3. UNIT SHALL HAVE AN INPUT OF 110/120 VOLT, 60 CYCLE AND BE COMPLETELY AUTOMATIC.

2.7.3. IRRIGATION CONTROLLER ENCLOSURE SHALL BE OF THE MANUFACTURER SIZE, AND TYPE INDICATED ON THE PLANS.

2.7.4. IRRIGATION ASSEMBLY AND OPTIONS SHALL BE OF THE MANUFACTURER SIZE, AND TYPE INDICATED ON THE PLANS.

2.8. AUTOMATIC CONTROL WIRE:

2.8.1. ELECTRIC WIRING RUNS FROM CONTROLLER TO THE AUTOMATIC CONTROL VALVES SHALL BE SOLID, SINGLE CONDUCTOR, COPPERWIRE, 4/64 IN. INSULATION, 4/64 IN. NEOPRENE JACKET, STYLE DB (DIRECT BURIAL) OR EQUAL, COLOR CODE WIRES TO EACH VALVE, COMMON WIRE SHALL BE BLACK. (EXCEPT AS NOTED ON DRAWINGS FOR CITY STANDARD REQUIREMENTS). WIRES SHALL CONFORM TO FEDERAL SPECIFICATION JC-30.

2.9. DRIP IRRIGATION EMITTERS

2.9.1. SINGLE OUTLET EMITTERS SHALL HAVE A 1/2 INCH FEMALE NATIONAL PIPE THREAD (FNPT) INLET FOR CONNECTING TO THE PIPING SYSTEM OR A 1/4 INCH BARBED INLET FOR CONNECTING TO THE PIPING SYSTEM, AS SPECIFIED ON THE PLANS AND SHALL HAVE AN OUTLET PORT THAT IS BARBED TO RETAIN 1/4 INCH DRIP EMITTER TUBING PROVIDING A LEAK-FREE COMPRESSION FIT..

2.9.2. MULTI-OUTLET EMITTERS SHALL HAVE A 1/2 INCH FEMALE NATIONAL PIPE THREAD (FNPT) INLET FOR CONNECTING TO THE PIPING SYSTEM OR A 1/4 INCH BARBED INLET FOR CONNECTING TO THE PIPING SYSTEM, AS SPECIFIED ON THE PLANS AND SHALL HAVE SIX OUTLET PORTS THAT ARE BARBED TO RETAIN 1/4 INCH DRIP EMITTER TUBING PROVIDING A LEAK-FREE COMPRESSION FIT.

2.9.3. THE EMITTER SHALL OPERATE WITHIN A PRESSURE RANGE OF 5-50 PSI.

2.9.4. THE EMITTER BODY SHALL BE CONSTRUCTED OF DURABLE HEAT-RESISTANT ACETYL PLASTIC (UV RESISTANT). THE FLOW REGULATING DIAPHRAGM SHALL BE OF SILICONE RUBBER.

2.9.5. PRODUCTS: THE EMITTER SHALL BE THE MANUFACTURER SIZE, AND TYPE INDICATED ON THE PLANS.

2.10. DRIP EMITTER TUBING

2.10.1. DRIP EMITTER TUBING SHALL BE 1/4 INCH POLYETHYLENE TUBING MADE FROM EXTRUDED LINEAR LOW-DENSITY POLYETHYLENE RESIN.

2.10.2. INSIDE DIAMETER SHALL BE SUCH THAT A LEAK-FREE SEAL IS ACHIEVED WITH THE BARBED FITTINGS OF THE SPECIFIED EMITTERS.

2.11. DRIP WYE FILTER

2.11.1. WYE FILTER SHALL BE OF THE MANUFACTURER SIZE AND TYPE INDICATED ON THE PLANS.

2.12. DRIP PRESSURE REGULATOR

2.12.1. PRESSURE REGULATOR SHALL BE OF THE MANUFACTURER SIZE AND TYPE INDICATED ON THE PLANS.

2.13. DRIP FLUSH VALVE

2.13.1. FLUSH VALVE SHALL BE OF THE MANUFACTURER SIZE AND TYPE INDICATED ON THE PLANS.

2.13.2. FLUSH VALVE SHALL OPERATE AUTOMATICALLY WITH THE OPERATION OF THE CONTROL VALVE.

PART 3 - EXECUTION

3.1 SYSTEM DESIGN:

3.1.1. ALL SCALED DIMENSIONS ARE APPROXIMATE. THE CONTRACTOR SHALL CHECK AND VERIFY ALL DIMENSIONS ON THE SITE PRIOR TO PROCEEDING WITH WORK UNDER THIS CONTRACT.

3.1.2. THE CONTRACTOR SHALL LOCATE AND MARK ALL EXISTING UTILITIES SUCH AS POWER, TELEPHONE, DOMESTIC WATER, WATER, AND TILE DRAINS. EXTREME CARE SHALL BE TAKEN BY THE CONTRACTOR WHEN EXCAVATING OR WORKING IN THESE AREAS, AND COORDINATION AND COOPERATION BETWEEN THE OWNER'S REPRESENTATIVE AND THE CONTRACTOR IS REQUIRED AS THE WORK PROGRESSES TO THE AREA. CONTRACTOR SHALL GIVE 24 HOURS NOTICE TO REPRESENTATIVE AS WORK PROGRESSES OF UNDERGROUND UTILITY AREAS. CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGE TO ANY UTILITIES.

3.1.3. SHOULD UTILITIES NOT LOCATED OR MARKED BE FOUND DURING EXCAVATION, THE CONTRACTOR SHALL PROMPTLY NOTIFY THE OWNER AND SHALL DISCONTINUE WITH WORK IN THE AREA, EXCEPT FOR NECESSARY EMERGENCY WORK, TO REPAIR OR PREVENT DAMAGE UNTIL INSTRUCTIONS ARE GIVEN TO THE CONTRACTOR BY THE OWNER'S REPRESENTATIVE.

3.1.4. FAILURE TO NOTIFY THE OWNER OF DISCOVERY OF SUCH UTILITIES OR DAMAGE THERETO WILL RESULT IN THE CONTRACTOR BEING LIABLE FOR ANY AND ALL DAMAGE CAUSED TO THE UTILITIES AS A RESULT OF HIS ACTIONS.

3.1.5. THE CONTRACTOR SHALL, BEFORE STARTING WORK ON THE SPRINKLER SYSTEM, CAREFULLY NOTE ALL FINISH GRADES IN ORDER TO SATISFY HIMSELF THAT HE MAY PROCEED WITH THE WORK, AND TO RESTORE FINISH GRADES TO ORIGINAL CONTOURS BEFORE COMPLETION.

3.1.6. THE INSTALLATION OF ALL IRRIGATION MATERIALS, INCLUDING PIPE, SHALL BE COORDINATED WITH THE LANDSCAPE DRAWINGS TO AVOID INTERFERING WITH THE TREES, SHRUBS, OR OTHER PLANTING.

3.1.7. LAY OUT EQUIPMENT AND MAKE ANY MINOR ADJUSTMENTS REQUIRED DUE TO DIFFERENCE BETWEEN SITE AND DRAWINGS. ANY SUCH DEVIATIONS IN LAYOUT SHALL BE WITHIN THE INTENT OF THE ORIGINAL DRAWINGS, AND WITHOUT ADDITIONAL COST TO THE OWNER. WHEN DIRECTED BY THE OWNER, THE LAYOUT SHALL BE APPROVED BEFORE INSTALLATION.

3.1.8. DO NOT WILLFULLY INSTALL THE IRRIGATION SYSTEM AS INDICATED ON THE DRAWING WHEN IT IS OBVIOUS IN THE FIELD THAT PREVIOUSLY UNKNOWN OBSTRUCTIONS OR GRADE DIFFERENCES EXIST, THAT MIGHT NOT HAVE BEEN CONSIDERED IN THE ENGINEERING. SUCH OBSTRUCTIONS OR DIFFERENCES SHOULD BE BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT.

3.1.9. WATER SUPPLY: THE CONTRACTOR SHALL CONNECT TO THE WATER SOURCE AS INDICATED ON THE DRAWINGS. THE CONTRACTOR SHALL VERIFY STATIC PRESSURE AS STATED ON THE PLANS PRIOR TO BEGINNING WORK. IF STATIC PRESSURE OR POINT OF CONNECTION DIFFER FROM THAT SHOWN ON THE PLANS, THE CONTRACTOR WILL PROMPTLY NOTIFY LANDSCAPE ARCHITECT BEFORE STARTING WORK.

3.1.10. WORKMANSHIP AND PROCEDURE: THE ROUTING OF THE PRESSURE SUPPLY LINES AS INDICATED ON THE DRAWINGS IS DIAGRAMMATIC. LOCATE ALL PRESSURE SUPPLY LINES IN PLANTING AREAS. CROSS PERPENDICULAR UNDER PAVEMENT IN A SLEEVE AS DESCRIBED IN THESE SPECIFICATIONS.

3.2 INSTALLATION:

3.2.1. GENERAL: UNLESS OTHERWISE INDICATED, COMPLY WITH REQUIREMENTS OF UNIFORM PLUMBING CODE.

3.2.1.1. EXCAVATION OF TRENCHES: EXCAVATE TRENCHES, PREPARE SUBGRADE, AND BACKFILL TO LINE AND GRADE WITH SUFFICIENT ROOM FOR PIPE FITTINGS, TESTING AND INSPECTING OPERATIONS. DO NOT BACKFILL UNTIL THE PIPE SYSTEM HAS BEEN SUBJECTED TO A HYDROSTATIC TEST AS SPECIFIED.

3.2.1.2. DEPTH OF TRENCH:

| | |
|---|---|
| 3.2.1.2.1. POLYVINYL CHLORIDE PRESSURE LINE | 18" MIN. |
| 3.2.1.2.2. POLYVINYL CHLORIDE NON-PRESSURE LINE | 12" MIN. |
| 3.2.1.2.3. POLYETHYLENE NON-PRESSURE LINE | 8" MIN. |

3.2.1.3. SUBSOIL SHALL BE FREE OF ALL ROCKS OVER ONE (1) INCH DIAMETER, DEBRIS, AND LITTER PRIOR TO USE AS BACKFILL.

3.2.1.4. REPAIR ANY LEAKS AND REPLACE ALL DEFECTIVE PIPE OR FITTINGS UNTIL LINES MEET TEST REQUIREMENTS. DO NOT COVER ANY LINES UNTIL THEY HAVE BEEN CHECKED AND APPROVED FOR TIGHTNESS, QUALITY OF WORKMANSHIP AND MATERIALS.

3.2.1.5. BACKFILL TRENCHES, AFTER APPROVAL OF PIPING, WITH SUITABLE AND APPROVED MATERIAL, TAMPING SOIL AROUND PIPE AND THOROUGHLY COMPACTING ALL TRENCH FILLS UNTIL 90% COMPACTION HAS BEEN ACHIEVED.

3.2.1.6. BACKFILL MATERIAL SHALL BE AN APPROVED SOIL, FREE FROM ROCKS AND CLODS. PROVIDE BACKFILL UNDER, AROUND AND ABOVE TOP OF PIPE FOR PVC PLASTIC PIPE AND BRASS PIPING.

Contact Arizona 811 at least two full working days before you begin excavation
ARIZONA811 BLUE STAKE, INC.
Call 811 or click Arizona811.com



OV1801921
OV1600944, OV12-03-20
RIVERS EDGE (MELCOR) PLANNED AREA DEVELOPMENT #7

**L-09**

| NO. | BY | DATE | REVISION | APPR | DATE |
|---|---|---|---|---|---|
| | | | | | |

REGISTERED LANDSCAPE ARCHITECT
CERTIFICATE NO. 36734
MARK E. FELLINGER
10/17/19
Not Valid Without Signature
ARIZONA, U.S.A.

M. Fellinger

RICK ENGINEERING COMPANY
Tucson
3945 EAST FORT LOWELL ROAD - SUITE 111
TUCSON, AZ 85712
520.795.1000
(FAX)520.322.6956
rickengineering.com
Phoenix - San Diego - Sacramento - Riverside - Orange - San Luis Obispo - Bakersfield

JN 4191A

| | | | |
|---|---|---|---|
| DESIGNED BY: MEF | DATE: 10/19 | CHECKED BY: | DATE: |
| DRAWN BY: MEF | DATE: 10/19 | APPROVED BY: | DATE: |

**FINAL LANDSCAPE PLAN FOR:**

# RIVER'S EDGE
# LOTS 103-123

LOTS 103-123 AND COMMON AREAS "A" & "B-1 - B-3"
BEING A PORTION OF THE SOUTHEAST QUARTER OF SECTION 12,
TOWNSHIP 12 SOUTH, RANGE 13 EAST, GILA & SALT RIVER MERIDIAN,
TOWN OF ORO VALLEY, PIMA COUNTY, ARIZONA.

1901060

SCALE: HORIZ : N/A
VERT : N/A

SHEET 9 OF 12

3.2.1.7. PIPES INSTALLED IN COMMON TRENCH SHALL HAVE A 4" MINIMUM SPACE BETWEEN PIPES.

3.2.2. INSTALLATION OF POLYVINYL CHLORIDE PIPE:

3.2.2.1. BECAUSE OF THE NATURE OF PLASTIC PIPE AND FITTINGS, EXERCISE CAUTION IN HANDLING, LOADING AND STORING, TO AVOID DAMAGE.

3.2.2.2. THE PIPE AND FITTINGS SHALL BE STORED UNDER COVER UNTIL USING, AND SHALL BE TRANSPORTED IN A VEHICLE WITH A BED LONG ENOUGH TO ALLOW THE LENGTH OF PIPE TO LAY FLAT SO AS NOT BE SUBJECTED TO UNDUE BENDING OR CONCENTRATED EXTERNAL LOAD AT ANY POINT.

3.2.2.3. ANY PIPE THAT HAS BEEN DENTED OR DAMAGED SHALL BE DISCARDED UNLESS SUCH DENT OR DAMAGED SECTION IS CUT OUT AND PIPE REJOINED WITH A COUPLING.

3.2.2.4. TRENCH DEPTH SHALL BE AS SPECIFIED ABOVE FROM THE FINISH GRADE TO THE TOP OF THE PIPE. THE BOTTOM OF THE TRENCH SHALL BE FREE OF ROCKS, CLODS, AND OTHER SHARP-EDGED OBJECTS.

3.2.2.5. PIPE ENDS AND FITTINGS SHALL BE WIPED WITH "MEK" PRIMER, OR APPROVED EQUAL, BEFORE WELDING SOLVENT IS APPLIED. WELDED JOINTS SHALL BE GIVEN A MINIMUM OF 15 MINUTES TO SET BEFORE MOVING OR HANDLING. ALL FIELD CUTS SHALL BE BEVELED TO REMOVE BURRS AND EXCESS MATERIAL BEFORE FITTING AND GLUING TOGETHER.

3.2.2.6. PIPE SHALL BE SNAKED FROM SIDE-TO-SIDE OF TRENCH BOTTOM TO ALLOW FOR EXPANSION AND CONTRACTION.

3.2.2.7. CENTER LOAD PIPE WITH SMALL AMOUNT OF BACKFILL TO PREVENT ARCHING AND SLIPPING UNDER PRESSURE. LEAVE JOINTS EXPOSED FOR SITE OBSERVATION DURING TESTING.

3.2.2.8. NO WATER SHALL BE PERMITTED IN THE PIPE UNTIL SITE OBSERVATION HAS BEEN COMPLETED AND A PERIOD OF AT LEAST 24 HOURS HAS ELAPSED FOR SOLVENT WELD SETTING AND CURING.

3.2.2.9. PLASTIC TO METAL JOINTS SHALL BE MADE WITH PLASTIC MALE ADAPTERS, METAL NIPPLE HAND TIGHTENED, PLUS ONE TURN WITH A STRAP WRENCH.

3.2.2.10. ALL THREADED PLASTIC TO PLASTIC CONNECTIONS SHALL BE ASSEMBLED USING TEFLON TAPE.

3.2.2.11. SOLVENT-WELD JOINTS: ASSEMBLE PER MANUFACTURER'S RECOMMENDATIONS.

3.2.2.12. PIPE SLEEVE UNDER EXISTING OR FUTURE PAVING SHALL BE INSTALLED PRIOR TO PAVING OR RE-PAVING AND SHALL EXTEND 12" BEYOND EACH SIDE OF PAVING EDGE. SLEEVE SHALL BE A MINIMUM OF TWO TIMES THAN PIPE OR WIRE BUNDLE IT ENCLOSES. INSTALL ONLY ONE PIPE PER SLEEVE.

3.2.3.3. TRENCH DEPTH SHALL BE AS SPECIFIED ABOVE FROM THE FINISH GRADE TO THE TOP OF THE PIPE. THE BOTTOM OF THE TRENCH SHALL BE FREE OF ROCKS, CLODS AND SHARP-EDGED OBJECTS.

3.2.4. INSTALLATION OF METAL PIPE:

3.2.4.1. CUT BRASS PIPING BY POWER HACKSAW, CIRCULAR CUTTING MACHINE USING AN ABRASIVE WHEEL, OR HAND HACKSAW. CUT NO PIPING WITH METALLIC WHEEL CUTTER OF ANY DESCRIPTION. REAM AND REMOVE ROUGH EDGES OF BURRS SO SMOOTH AND UNOBSTRUCTED FLOW IS OBTAINED.

3.2.4.2. CAREFULLY AND SMOOTHLY PLACE THREAD LUBRICANT ON MALE THREAD ONLY. TIGHTEN SCREWED JOINTS WITH TONGS OR WRENCHES. CAULKING IS NOT PERMITTED.

3.2.5. REMOTE CONTROL WIRING:

3.2.5.1. DIRECT BURIAL CONTROL WIRE SIZES: AS SHOWN AND SPECIFIED HEREIN BEFORE.

3.2.5.2. PROVIDE ONE CONTROL WIRE AND ONE COMMON GROUND WIRE TO SERVICE EACH VALVE IN SYSTEM. PROVIDE 4 FOOT MINIMUM EXPANSION LOOP AT EACH VALVE TO PERMIT REMOVAL AND MAINTENANCE OF VALVES.

3.2.5.3. INSTALL CONTROL WIRES AT LEAST 12" BELOW FINISH GRADE AND MINIMUM OF 4" FROM ANY PIPE OR FITTINGS EXCEPT AT TERMINAL POINTS. ALL WIRE SHALL FOLLOW THE PRESSURE MAIN INSOFAR AS POSSIBLE.

3.2.5.4. INSTALL CONTROL WIRES AND IRRIGATION PIPING IN COMMON TRENCHES WHEREVER POSSIBLE.

3.2.5.5. IN CASE OF DAMAGE TO ANY COMMON OR CONTROL WIRE, CONTRACTOR IS TO RUN AN EXTRA COMMON AND CONTROL WIRE ON EACH LEG OF MAINLINE TO THE FARTHEST RCV BACK TO THE CONTROLLER.

3.2.5.6. CONTROL WIRE SPLICES: ALLOW ONLY ON RUNS OF MORE THAN 300-FEET, SPLICES AS FOLLOWS:

3.2.5.6.1. STRIP OFF MINIMUM OF 2-1/2" OF INSULATION FROM EACH WIRE.

3.2.5.6.2. TWIST ON SCOTCHLOK ELECTRICAL SPRING CONNECTOR, MINIMUM FOUR COMPLETE TURNS.

3.2.5.6.3. SEAL CONNECTOR IN EPOXY RESIN.

3.2.5.6.4. TAPE COMPLETED SPLICE WITH SCOTCH 33 ELECTRICAL TAPE.

3.2.5.7. NUMBERING AND TAGGING: IDENTIFY DIRECT BURIAL CONTROL WIRES FROM AUTOMATIC VALVES TO TERMINAL STRIPS OF CONTROLLER AT TERMINAL STRIP BY TAGGING WIRE WITH NUMBER OF CONNECTED VALVES.

3.2.6. AUTOMATIC CONTROLLER:

3.2.6.1. AUTOMATIC CONTROLLER SHALL BE INSTALLED AS SHOWN AND AS DETAILED ON THE PLANS. CONTROLLER SHALL BE TESTED WITH COMPLETE ELECTRICAL CONNECTIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TEMPORARY POWER TO THE CONTROLLER FOR OPERATION AND TESTING PURPOSES.

3.2.6.2. CONNECTIONS TO CONTROL WIRING SHALL BE MADE WITHIN AUTOMATIC CONTROLLER ENCLOSURE.

3.2.6.3. ELECTRICAL WIRING SHALL BE ON A RIGID PVC PLASTIC CONDUIT FROM CONTROLLER TO ELECTRICAL OUTLET. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING ALL WIRING TO THE SUB-PANELS, CLOCKS, OR ELSEWHERE AS REQUIRED, IN ORDER TO COMPLETE THIS INSTALLATION.

3.2.6.4. CONTRACTOR SHALL SUPPLY AND INSTALL BATTERY IN CONTROLLER TO PREVENT LOSS OF PROGRAM.

3.2.6.5. IRRIGATION CONTROLLER ENCLOSURE SHALL BE INSTALLED AS SHOWN ON PLANS AND PER THE MANUFACTURER'S REQUIREMENTS.

3.2.6.6. IRRIGATION CONTROLLER ASSEMBLY SHALL BE INSTALLED AS SHOWN ON PLANS AND PER THE MANUFACTURER'S REQUIREMENTS.

3.2.7. REMOTE CONTROL VALVES:

3.2.7.1. INSTALL REMOTE CONTROL VALVES IN LOCATIONS APPROXIMATELY AS SHOWN ON THE DRAWINGS, WITH A COVER OF 8 INCHES MINIMUM OVER TOP OF FLOW CONTROL STEM. FIT WITH PLASTIC VALVE BOX AND COVER.

3.2.8. VALVE BOX:

3.2.8.1. INSTALL VALVE BOXES AS SHOWN ON DETAIL. INSTALL NO MORE THAN ONE VALVE PER BOX. VALVE BOXES SHALL BE LOCATED IN SHRUBS AREAS WHEREVER POSSIBLE.

3.2.9. OTHER VALVES:

3.2.9.1. INSTALL DRIP VALVE ASSEMBLY AS DETAIL AND SHOWN ON PLANS.

3.2.10. BACKFLOW PREVENTER:

3.2.10.1. BACKFLOW PREVENTER ASSEMBLY SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS, LOCATED AND AS DIRECTED ON DRAWINGS, AND SHALL CONFORM TO ALL APPLICABLE CODE AND ORDINANCE REQUIREMENTS.

3.2.10.2. EXACT LOCATION AND POSITIONING SHALL BE VERIFIED ON THE SITE.

3.2.11. THRUST BLOCKS AND FOOTINGS:

3.2.11.1. THRUST BLOCKS AND FOOTINGS SHALL BE PLACED ON NINETY-PERCENT (90%) MINIMUM COMPACTED OR UNDISTURBED SUBGRADE. CONSTRUCT TO SHAPES SPECIFIED AND PARALLEL TO WALKWAYS. TOOL FINISH EXPOSED SURFACE.

3.2.12. DRIP IRRIGATION EMITTERS:

3.2.12.1. INSTALL DRIP IRRIGATION EMITTER AS DETAILED AND SHOWN ON PLANS.

3.3 FLUSHING AND TESTING OF SYSTEMS:

3.3.1. AFTER PIPING AND RISERS ARE IN PLACE, BUT PRIOR TO THE INSTALLATION OF THE SPRINKLER HEADS, A FULL HEAD OF WATER SHALL BE USED TO FLUSH OUT THE SYSTEM. AFTER SYSTEM IS THOROUGHLY FLUSHED, CAP ALL RISERS:

3.3.2. PRESSURE TEST:

3.3.2.1. ALL PRESSURE LINES SHALL BE TESTED UNDER HYDROSTATIC PRESSURE OF 125 LBS. PER SQUARE INCH AND ALL NON-PRESSURE LINES SHALL BE TESTED UNDER THE EXISTING STATIC PRESSURE AND BOTH BE PROVEN WATERTIGHT. (CONTRACTOR TO SUPPLY ALL EQUIPMENT NEEDED FOR TESTING.) .

3.3.2.2. PRESSURE SHALL BE SUSTAINED IN THE LINES FOR NOT LESS THAN FOUR HOURS. IF LEAKS DEVELOP, THE JOINTS SHALL BE REPLACED AND THE TEST REPEATED UNTIL THE ENTIRE SYSTEM IS PROVEN WATERTIGHT.

3.4 RECORD DRAWINGS:

3.4.1. BEFORE FINAL ACCEPTANCE OF WORK, THE CONTRACTOR SHALL PROVIDE A "REDLINE" RECORD SET OF DRAWINGS SHOWING THE SPRINKLER SYSTEM WORK:

3.4.2. ANY CHANGES IN LOCATION OF ITEMS OR TYPE OF INSTALLATIONS FROM THAT SHOWN ON DRAWINGS SHALL BE SO INDICATED ON THE RECORD DRAWINGS:

3.4.3. VALVES SHALL BE NUMBERED AND CORRESPONDING NUMBERS SHALL BE SHOWN ON THE RECORD DRAWINGS:

3.4.4. ALL REMOTE CONTROL VALVES, SHUT-OFF VALVES, QUICK COUPLER VALVES SHALL BE LOCATED BY MEASURED DIMENSIONS. DIMENSIONS SHALL BE GIVEN TO PERMANENT OBJECTS AND SHALL BE TO THE NEAREST ONE-HALF FOOT:

3.4.5. ON THE INSIDE SURFACE OF THE COVER OF EACH AUTOMATIC CONTROLLER, PREPARE AND MOUNT A COLOR-CODED CHART SHOWING THE VALVES, MAINLINE, AND SPRINKLER HEADS SERVICED BY THAT PARTICULAR CONTROLLER. ALL VALVES SHALL BE NUMBERED TO MATCH THE OPERATION SCHEDULE AND THE DRAWINGS. ONLY THOSE AREAS CONTROLLED BY THAT CONTROLLER SHALL BE SHOWN. THIS CHART SHALL BE A PLOT PLAN, ENTIRE OR PARTIAL, SHOWING BUILDING, WALKS, ROADS AND WALLS. A PHOTOSTATIC PRINT OF THIS PLAN, REDUCED AS NECESSARY AND LEGIBLE IN ALL DETAILS, SHALL BE MADE TO A SIZE THAT WILL FIT INTO THE CONTROLLER COVER. THIS PRINT SHALL BE APPROVED BY THE LANDSCAPE ARCHITECT AND SHALL BE HERMETICALLY SEALED BY PLASTIC. THIS PLAN SHALL THEN BE SECURED TO THE BACK OF THE ENCLOSURE DOOR:

3.4.6. IMMEDIATELY UPON THE INSTALLATION OF ANY BURIED PIPE OR EQUIPMENT, THE CONTRACTOR SHALL INDICATE ON THE DRAWINGS THE LOCATIONS OF SAID EQUIPMENT. DIMENSIONS SHALL BE GIVEN FROM PERMANENT OBJECTS SUCH AS BUILDINGS, SIDEWALKS, CURBS AND DRIVEWAYS:

END OF SECTION 02810





OV1801921
OV1600944, OV12-03-20
RIVERS EDGE (MELCOR) PLANNED AREA DEVELOPMENT #7

**L-10**

| NO. | BY | DATE | REVISION | APPR | DATE |
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REGISTERED LANDSCAPE ARCHITECT
CERTIFICATE NO.
36734
MARK E. FELLINGER
10/17/19
Date Signed
ARIZONA, U.S.A.

M. Fellinger

RICK ENGINEERING COMPANY
Tucson
3945 EAST FORT LOWELL ROAD - SUITE 111
TUCSON, ARIZONA 85712
520.795.1000
(FAX)520.322.6956
Phoenix - San Diego - Sacramento - Riverside - Orange - San Luis Obispo - Bakersfield
rickengineering.com

JN 4191A

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| DESIGNED BY: MEF | DATE: 10/19 | CHECKED BY: | DATE: |
| DRAWN BY: MEF | DATE: 10/19 | APPROVED BY: | DATE: |

**FINAL LANDSCAPE PLAN FOR:**

# RIVER'S EDGE LOTS 103-123

LOTS 103-123 AND COMMON AREAS "A" & "B-1 - B-3"
BEING A PORTION OF THE SOUTHEAST QUARTER OF SECTION 12,
TOWNSHIP 12 SOUTH, RANGE 13 EAST, GILA & SALT RIVER MERIDIAN,
TOWN OF ORO VALLEY, PIMA COUNTY, ARIZONA.

1901060

SCALE: HORIZ : N/A
VERT : N/A

SHEET 10 OF 12

# PLANTING SPECIFICATIONS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

1.1.1 DRAWINGS AND GENERAL PROVISIONS OF CONTRACT, INCLUDING GENERAL AND SUPPLEMENTARY CONDITIONS AND DIVISION 1 SPECIFICATION SECTIONS, APPLY TO THIS SECTION.

1.2. SUMMARY
1.2.1. THIS SECTION INCLUDES PROVISIONS FOR THE FOLLOWING ITEMS:

1.2.1.1. TREES
1.2.1.2. SHRUBS
1.2.1.3. GROUNDCOVER
1.2.1.4. SOIL AMENDMENTS
1.2.1.5. FINISH GRADING
1.2.1.6. MAINTENANCE PERIOD

1.2.2. RELATED SECTIONS AND REFERENCE DOCUMENTS: THE FOLLOWING SECTIONS AND REFERENCE DOCUMENTS CONTAIN REQUIREMENTS THAT RELATE TO THIS SECTION.

1.2.3. UNDERGROUND IRRIGATION SYSTEM IS SPECIFIED IN DIVISION 2 SECTION 02810, "IRRIGATION SYSTEM."

1.2.4. REFERENCE DOCUMENTS:

1.2.4.1. AMERICAN JOINT COMMITTEE ON HORTICULTURE NOMENCLATURE (AJCHN), STANDARDIZED PLANT NAMES, LATEST EDITION.

1.2.4.2. AMERICAN ASSOCIATION OF NURSERYMEN, INC. (AAN), AMERICAN STANDARD FOR NURSERY STOCK, LATEST EDITION.

1.2.4.3. STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION.

1.3. QUALITY ASSURANCE

1.3.1. SUBCONTRACT LANDSCAPE WORK TO A SINGLE FIRM SPECIALIZING IN LANDSCAPE WORK. THE CONTRACTOR SHALL POSSESS ALL LICENSES AND PERMITS REQUIRED TO PERFORM THE WORK INCLUDING A A-21 LANDSCAPING LICENSE.

1.3.2. SOURCE QUALITY CONTROL:

1.3.2.1. GENERAL: SHIP LANDSCAPE MATERIALS WITH CERTIFICATES OF INSPECTION REQUIRED BY GOVERNING AUTHORITIES. COMPLY WITH REGULATIONS APPLICABLE TO LANDSCAPE MATERIALS.

1.3.2.2. DO NOT MAKE SUBSTITUTIONS. IF SPECIFIED LANDSCAPE MATERIAL IS NOT OBTAINABLE, SUBMIT PROOF OF NON-AVAILABILITY TO LANDSCAPE ARCHITECT, TOGETHER WITH PROPOSAL FOR USE OF EQUIVALENT MATERIAL.

1.3.2.3. ANALYSIS AND STANDARDS: PACKAGE STANDARD PRODUCTS WITH MANUFACTURER'S CERTIFIED ANALYSIS. FOR OTHER MATERIALS, PROVIDE ANALYSIS BY RECOGNIZED LABORATORY MADE IN ACCORDANCE WITH METHODS ESTABLISHED BY THE ASSOCIATION OF OFFICIAL AGRICULTURE CHEMISTS, WHEREVER APPLICABLE.

1.3.2.4. TREES, SHRUBS, AND PLANTS: PROVIDE TREES, SHRUBS, AND PLANTS OF QUANTITY, SIZE, GENUS, SPECIES, AND VARIETY SHOWN AND SCHEDULED FOR LANDSCAPE WORK AND COMPLYING WITH RECOMMENDATIONS AND REQUIREMENTS OF ANSI Z60.1 "AMERICAN STANDARD FOR NURSERY STOCK". PROVIDE HEALTHY, VIGOROUS STOCK, GROWN IN RECOGNIZED NURSERY CONTAINER SIZES, IN ACCORDANCE WITH GOOD HORTICULTURAL PRACTICE AND FREE OF DISEASE, INSECTS, EGGS, LARVAE, AND DEFECTS SUCH AS KNOTS, SUN-SCALD, INJURIES, ABRASIONS, OR DISFIGUREMENT.

1.3.2.5. LABEL EACH TREE AND SHRUB WITH SECURELY ATTACHED WATERPROOF TAG BEARING LEGIBLE DESIGNATION OF BOTANICAL AND COMMON NAME.

1.3.2.6. WHERE FORMAL ARRANGEMENTS OR CONSECUTIVE ORDER OF TREES OR SHRUBS ARE SHOWN, SELECT STOCK FOR UNIFORM HEIGHT AND SPREAD, AND LABEL WITH NUMBER TO ASSURE SYMMETRY IN PLANTING.

1.3.2.7. SELECTION: THE LANDSCAPE ARCHITECT MAY CHECK TREES AND SHRUBS EITHER AT PLACE OF GROWTH OR AT SITE BEFORE PLANTING, FOR COMPLIANCE WITH REQUIREMENTS FOR GENUS, SPECIES, VARIETY, SIZE, AND QUALITY. THE CONTRACTOR SHALL SUBMIT PHOTOGRAPHS TO LANDSCAPE ARCHITECT OF TYPICAL TREES (15 GAL. AND LARGER CONTAINER SIZES) FOR LANDSCAPE WORK. LANDSCAPE ARCHITECT RETAINS RIGHT TO FURTHER CHECK TREES AND SHRUBS FOR SIZE AND CONDITION OF ROOT BALL ROOT SYSTEMS, INSECTS, INJURIES AND LATENT DEFECTS, AND TO REJECT UNSATISFACTORY OR DEFECTIVE MATERIAL AT ANY TIME DURING PROGRESS OF WORK. CONTRACTOR SHALL REMOVE REJECTED TREES OR SHRUBS IMMEDIATELY FROM PROJECT SITE UPON REQUEST.

1.4. SUBMITTALS

1.4.1. GENERAL: SUBMIT THE FOLLOWING IN ACCORDANCE WITH CONDITIONS OF CONTRACT AND DIVISION 1 SPECIFICATION SECTIONS.

1.4.2. PLANT AND MATERIAL CERTIFICATIONS:

1.4.2.1. CERTIFICATES OF INSPECTION AS REQUIRED BY LOCAL MUNICIPALITY AND/OR GOVERNMENTAL AUTHORITIES.

1.4.2.2. MANUFACTURER'S OR VENDOR'S CERTIFIED ANALYSIS FOR SOIL AMENDMENTS AND FERTILIZER MATERIALS.

1.4.2.3. LABEL DATA SUBSTANTIATING THAT PLANTS, TREES, SHRUBS AND PLANTING MATERIALS COMPLY WITH SPECIFIED REQUIREMENTS.

1.4.2.4. SEED VENDOR'S CERTIFIED STATEMENT FOR EACH SEED MIXTURES REQUIRED, STATING BOTANICAL AND COMMON NAME, PERCENTAGES BY WEIGHT, AND PERCENTAGES OF PURITY, GERMINATION, AND WEED SEED FOR EACH SEED SPECIES.

1.5. DELIVERY, STORAGE AND HANDLING

1.5.1. PACKAGED MATERIALS: DELIVER PACKAGED MATERIALS IN CONTAINERS SHOWING WEIGHT, ANALYSIS, AND NAME OF MANUFACTURER. PROTECT MATERIALS FROM DETERIORATION DURING DELIVERY AND WHILE STORED AT SITE.

1.5.2. TREES AND SHRUBS: DO NOT PRUNE PRIOR TO DELIVERY UNLESS OTHERWISE APPROVED BY LANDSCAPE ARCHITECT. DO NOT BEND OR BIND-TIE TREES OR SHRUBS IN SUCH MANNER AS TO DAMAGE BARK, BREAK BRANCHES, OR DESTROY NATURAL SHAPE. PROVIDE PROTECTIVE COVERING DURING DELIVERY.

1.5.3. DO NOT REMOVE CONTAINER-GROWN STOCK FROM CONTAINERS UNTIL PLANTING TIME.

1.5.4. CONTRACTOR SHALL PROVIDE COMPLETE CARE TO ALL ON-SITE STORAGE OF CONTAINER-GROWN STOCK. ALL CONTAINER-GROWN STOCK FOUND TO BE DAMAGE DURING STORAGE SHALL BE REMOVED AND REPLACED AT NO ADDITIONAL COST.

1.6. JOB CONDITIONS

1.6.1. UTILITIES: DETERMINE LOCATION OF UNDERGROUND UTILITIES AND PERFORM WORK IN A MANNER, WHICH WILL AVOID POSSIBLE DAMAGE. HAND EXCAVATE, AS REQUIRED. MAINTAIN GRADE STAKES SET BY OTHERS UNTIL REMOVAL IS MUTUALLY AGREED UPON BY PARTIES CONCERNED.

1.6.2. EXCAVATION: WHEN CONDITIONS DETRIMENTAL TO PLANT GROWTH ARE ENCOUNTERED, SUCH AS RUBBLE FILL, ADVERSE DRAINAGE CONDITIONS, OR OBSTRUCTIONS, NOTIFY LANDSCAPE ARCHITECT BEFORE PLANTING.

1.7. SEQUENCING AND SCHEDULING

1.7.1. PLANTING TIME: PROCEED WITH, AND COMPLETE LANDSCAPE WORK AS RAPIDLY AS PORTIONS OF SITE BECOME AVAILABLE, AND SHALL BE PERFORMED DURING THOSE PERIODS WHEN WEATHER AND SOIL CONDITIONS ARE SUITABLE IN ACCORDANCE WITH LOCALLY ACCEPTED HORTICULTURAL PRACTICE.

1.8. SPECIAL PROJECT WARRANTY

1.8.1. WARRANTY SHRUBS FOR A PERIOD OF 90 DAYS AFTER DATE OF FINAL ACCEPTANCE.

1.8.2. WARRANTY TREES, FOR A PERIOD OF ONE YEAR AFTER DATE OF FINAL ACCEPTANCE AGAINST DEFECTS, INCLUDING DEATH, EXCEPT FOR DEFECTS RESULTING FROM NEGLECT BY OWNER, ABUSE OR DAMAGE BY OTHERS, OR UNUSUAL PHENOMENA OR INCIDENTS, WHICH ARE BEYOND LANDSCAPE INSTALLER'S CONTROL.

1.8.3. CONTRACTOR SHALL REMOVE AND REPLACE TREES, SHRUBS, OR OTHER PLANTS FOUND TO BE DEAD OR IN AN UNHEALTHY CONDITION DURING WARRANTY PERIOD. MAKE REPLACEMENTS WITHIN 14 CALENDAR DAYS. REPLACE TREES AND SHRUBS, WHICH ARE IN DOUBTFUL CONDITION AT END OF WARRANTY PERIOD; UNLESS, IN OPINION OF LANDSCAPE ARCHITECT, IT IS ADVISABLE TO EXTEND WARRANTY PERIOD FOR A FULL GROWING SEASON.

1.8.4. ANOTHER WARRANTY SITE OBSERVATION VISIT WILL BE CONDUCTED AT END OF EXTENDED WARRANTY PERIOD, IF ANY, TO DETERMINE ACCEPTANCE OR REJECTION. REPLACEMENT SHALL BE THE PLANTS USED FOR SAME KIND AND SIZE AS SPECIFIED FOR LANDSCAPE WORK. REPLACEMENTS SHALL BE FURNISHED, AND PLANTED AS ORIGINALLY SPECIFIED BY THE CONTRACTOR.

PART 2 - PRODUCTS

2.1 SOIL AMENDMENTS

2.2.1. COMMERCIAL FERTILIZER: COMPLETE FERTILIZER OF NEUTRAL CHARACTER, WITH SOME ELEMENTS DERIVED FROM ORGANIC SOURCES AND CONTAINING THE FOLLOWING PERCENTAGES OF AVAILABLE PLANT NUTRIENTS:

2.2.1.1. PRE-PLANT FERTILIZER: PROVIDE FERTILIZER WITH NOT MORE THAN 6 PERCENT TOTAL NITROGEN; AND NOT LESS THAN 20 PERCENT AVAILABLE PHOSPHORIC ACID AND 20 PERCENT SOLUBLE POTASH.

2.2.1.2. POST-PLANT FERTILIZER: PROVIDE FERTILIZER WITH PERCENTAGE OF NITROGEN REQUIRED TO PROVIDE NOT LESS THAN 6 POUNDS OF ACTUAL NITROGEN, 2 PERCENT PHOSPHORIC ACID, 4 PERCENT POTASSIUM, 5 PERCENT SULFUR, 20% HUMIC ACIDS (FROM LEONARDARDITE) AND 75% HUMATE (MINERALS/ORGANIC MATTER/CARBON). POST-PLANT FERTILIZER SHALL BE TRI-C 6-2-4 OR APPROVED EQUAL.

2.2.1.3. PLANT TABLETS, AGRIFORM (20-10-5-) BLUE CHIP TABLETS 21 GRAM.

2.2.2. SOIL SULPHUR, SHALL BE ELEMENTAL SULPHUR (99.5%) COMMERCIALLY MANUFACTURED SO THAT A PURE SULPHUR PRODUCT IS USED.

2.2.3. ORGANIC SOIL CONDITIONER, SHALL BE A PRODUCT THAT AIDS THE STRUCTURE OF THE SOIL CONSISTING OF RAPIDLY DECAYING SLOWLY DECAYING, AND NON-DECAYING MATERIAL. NITROGEN (ORGANIC OR AMMONIC) 0.5% TO 0.8%, PH BETWEEN 5.5 TO 6.5 SALINITY (ECE X 103 AT 25° C) = 2.5, ORGANIC MATTER MORE THAN 87% (DRY WEIGHT BASIS). THE COMMERCIAL GRADE PRODUCT USED SHALL BE NUMEX LIF, LOAMEX, OR FOREST HUMUS OR APPROVED EQUAL BY LANDSCAPE ARCHITECT.

2.2.4. SOIL CONDITIONER, GRANULAR, TRI-C HUMATE PLUS, SHALL CONTAIN 25% HUMIC ACIDS. IT SHALL BE FREE FLOWING, SUITABLE FOR APPLICATION WITH APPROVED EQUIPMENT AND SHALL CONTAIN THE MINIMUM AVAILABLE PERCENTAGES OF 7% CALCIUM AND 5% SULPHUR.

2.2.5. PLANTING BACKFILL, SHALL BE A THOROUGHLY BLENDED MIXTURE OF EXCAVATED SOIL FROM THE PITS AND SOIL AMENDMENTS AT THE FOLLOWING MIXTURE SOIL CONDITIONER:

2.2.5.1. ORGANIC SOIL CONDITIONER 1/3
2.2.5.2. ON SITE SOIL 2/3
2.2.5.3. SOIL CONDITIONER 8 LBS PER CUBIC YARD MIX
2.2.5.4. PRE-PLANT FERTILIZER 2 LBS PER CUBIC YARD MIX

2.3. PLANT MATERIALS

2.3.1. QUALITY: PROVIDE TREES, SHRUBS, AND OTHER PLANTS OF SIZE, GENUS, SPECIES, AND VARIETY SHOWN AND SCHEDULED FOR LANDSCAPE WORK AND COMPLYING WITH RECOMMENDATIONS AND REQUIREMENTS OF ANSI Z60.1 "AMERICAN STANDARD FOR NURSERY STOCK."

2.3.2. CONTAINER STOCK (1 GAL., 5 GAL., 15 GAL., BOXES) SHALL HAVE BEEN GROWN IN CONTAINER FOR AT LEAST SIX MONTHS, BUT NOT OVER TWO YEARS. NO CONTAINER PLANTS THAT HAVE CRACKED OR BROKEN BALLS OF EARTH WHEN TAKEN FROM THE CONTAINER SHALL BE PLANTED, EXPECT UPON SPECIAL APPROVAL. NO TREES WITH DAMAGED ROOTS OR BROKEN BALLS SHALL BE PLANTED.

2.3.3. TREES: PROVIDE TREES OF HEIGHT AND WIDTH SCHEDULED OR SHOWN AND WITH BRANCHING CONFIGURATION RECOMMENDED BY ANSI Z60.1 FOR TYPE AND SPECIES REQUIRED, UNLESS OTHERWISE SPECIFIED QUANTITIES SHALL BE FURNISHED AS NEEDED TO COMPLETE WORK SHOWN ON DRAWINGS. PROVIDE SINGLE STEM TREES EXCEPT WHERE SPECIAL FORMS ARE SHOWN OR LISTED.

2.3.4. SHRUBS: PROVIDE SHRUBS OF THE HEIGHT AND WIDTH SHOWN OR LISTED AS REQUIRED BY ANSI Z60.1 FOR TYPE AND HEIGHT OF SHRUB REQUIRED.

2.4. MISCELLANEOUS LANDSCAPE MATERIALS

2.4.1. STAKING MATERIAL: STAKES SHALL BE OF LODGEPOLE PINE. THESE SHALL BE STRAIGHT SHAFTS, SHAVED AND CUT CLEAN AND BARE OF BRANCHES AND STUBS, OF UNIFORM THICKNESS WITH A MINIMUM DIAMETER OF 2 INCHES, FREE OF LOOSE KNOTS, SPLITS OR BENDS. STAKES SHALL BE NO LESS THAN TEN (10) FEET IN LENGTH. TREE TIES SHALL BE V.I.T. CINCH-TIE OR APPROVED EQUAL.

2.5. WEED CONTROL

2.5.1. PRE-PLANTING HERBICIDE: ROUNDUP OR EQUAL

2.5.2. PRE-EMERGENT WEED CONTROL: RONSTAR-G, TREFLAN, EPTAM, VEGITEX, OR EQUAL, AS RECOMMENDED BY LICENSED PEST CONTROL APPLICATOR.

PART 3 - EXECUTION

3.1 PREPARATION - GENERAL

3.1.1 LAY OUT PLANTING AREAS SHALL MEAN ALL AREAS TO BE PLANTED WITH TREES, SHRUBS, GROUNDCOVERS AND AREAS FOR MULTIPLE PLANTINGS. STAKE LOCATIONS AND OUTLINE AREAS AND SECURE LANDSCAPE ARCHITECT'S ACCEPTANCE BEFORE START OF PLANTING WORK. MAKE MINOR ADJUSTMENTS AS MAY BE REQUIRED.

3.1.2 ALL ROCK AND OTHER GROWTH OR DEBRIS ACCUMULATED DURING THE DURATION OF THE PROJECT SHALL BE REMOVED FROM THE SITE. UPON COMPLETION OF ALL GRADING OPERATIONS, SOIL SAMPLES (3 LOCATIONS MIN.) WITH IDENTIFY REFERENCE SHALL BE TAKEN BY THE CONTRACTOR AND ANALYZED BY A SOIL LABORATORY. THE RESULTS OF THESE TESTS ARE TO BE REVIEWED BY THE LANDSCAPE ARCHITECT FOR ANY REQUIRED MODIFICATIONS TO SPECIFIED SOIL PREPARATION.

3.1.3 GRADING AND SOIL PREPARATION WORK SHALL BE PERFORMED ONLY DURING THE PERIOD WHEN BENEFICIAL AND OPTIMUM RESULTS MAY BE OBTAINED. IF THE MOISTURE CONTENT OF THE SOIL SHOULD REACH SUCH A LEVEL THAT WORKING IT WOULD DESTROY SOIL STRUCTURE, SPREADING AND GRADING OPERATIONS SHALL BE SUSPENDED UNTIL THE MOISTURE CONTENT IS INCREASED OR REDUCED TO ACCEPTABLE LEVELS AND THE DESIRED RESULTS ARE LIKELY TO BE OBTAINED.

3.1.4 ALL SCALED DIMENSIONS ARE APPROXIMATE. BEFORE PROCEEDING WITH ANY WORK, CAREFULLY CHECK AND VERIFY ALL DIMENSIONS AND IMMEDIATELY INFORM THE LANDSCAPE ARCHITECT OF ANY DISCREPANCY BETWEEN THE DRAWINGS AND/OR SPECIFICATIONS AND ACTUAL CONDITIONS.

3.1.5 QUANTITIES FOR PLANT MATERIALS ARE SHOWN FOR CONVENIENCE ONLY, AND NOT GUARANTEED. CHECK AND VERIFY COUNT AND SUPPLY SUFFICIENT NUMBER TO FULFILL INTENT OF DRAWINGS. CERTIFY ANY CLARIFICATIONS WITH THE LANDSCAPE ARCHITECT. ADEQUATELY STAKE, BARRICADE, AND PROTECT ALL IRRIGATION EQUIPMENT, MANHOLES, UTILITY LINES, AND OTHER EXISTING PROPERTY DURING ALL PHASES OF THE SOIL AMENDING PLANTING AND GRADING OPERATIONS.

3.1.6 UPON DELIVERY OF MATERIAL AND/OR COMPLETION OF ALL SOIL CONDITIONING AND GRADING BUT PRIOR TO INITIATING PLANTING OPERATIONS, THE LANDSCAPE ARCHITECT WITH THE HERETOFORE SPECIFIED SIGNED COPIES OF REQUIRED CERTIFICATES, TRIP SLIPS, AND INVOICES FOR SOIL PREPARATION MATERIALS, SHALL INVOICE SUCH MATERIAL, COMPARING THE TOTAL QUANTITIES OF EACH MATERIAL FURNISHED AGAINST THE TOTAL AREA TO EACH OPERATION. IF THE MINIMUM RATES OF APPLICATION HAVE NOT BEEN MET, THE LANDSCAPE ARCHITECT WILL REQUIRE THE DISTRIBUTION OF ADDITIONAL QUANTITIES OF THESE MATERIALS TO FULFILL THE MINIMUM APPLICATION REQUIREMENTS SPECIFIED AT NO COST TO OWNER.

3.2 FINISH GRADING

3.2.1 FINISH GRADING: FINISH GRADES SHALL BE AS INDICATED ON THE CIVIL ENGINEER'S DRAWINGS AND LANDSCAPE DRAWINGS.

3.2.2 FINISH GRADES SHALL BE MEASURED AS THE FINAL WATER COMPACTED AND SETTLED SURFACE GRADES; AND SHALL BE WITHIN PLUS OR MINUS 0.1 FOOT OF THE SPOT ELEVATIONS AND GRADE LINES INDICATED ON THE DRAWING.

3.2.3 FINISH GRADES SHALL BE MEASURED AT THE TOP SURFACE OF SURFACE MATERIALS.

3.2.4 MOLDING AND ROUNDING OF THE GRADES SHALL BE PROVIDED AT ALL CHANGES IN SLOPE.

3.2.5 ALL UNDULATIONS AND IRREGULARITIES IN THE PLANTING SURFACES RESULTING FROM TILLAGE, ROTOTILLING AND ALL OTHER OPERATIONS SHALL BE LEVELED AND FLOATED OUT BEFORE PLANTING OPERATIONS ARE INITIATED.

3.2.6 THE CONTRACTOR SHALL TAKE EVERY PRECAUTION TO PROTECT AND AVOID DAMAGE TO SPRINKLER HEADS, IRRIGATION LINES, AND OTHER UNDERGROUND UTILITIES DURING HIS GRADING AND CONDITIONING OPERATIONS.

3.2.7 FINAL FINISH GRADES SHALL INSURE POSITIVE DRAINAGE OF THE SITE WITH ALL SURFACE DRAINAGE AWAY FROM BUILDINGS, WALLS, AND TOWARD ROADWAYS, DRAINS AND CATCH BASINS.

3.2.8 FINAL GRADES SHALL BE ACCEPTABLE TO THE LANDSCAPE ARCHITECT BEFORE PLANTING OPERATIONS WILL BE ALLOWED TO BEGIN.

3.2.9 PLANTING SURFACES SHALL BE GRADED WITH NO LESS THAN 2 PERCENT SURFACE SLOPE FOR POSITIVE DRAINAGE UNLESS OTHERWISE NOTED ON PLANS.

3.3 DEEP WATERING AND WEED CONTROL:

3.3.1 AFTER COMPLETE INSTALLATION AND TESTING OF THE IRRIGATION SYSTEM AND PREPARATION OF PLANTING AREAS, ALL PLANTING AREAS SHALL BE DEEP WATERED AND COMPACTED AND SETTLED BY CONTINUOUS APPLICATION OF IRRIGATION WATER UNTIL THE SOIL IS MOIST TO A MINIMUM DEPTH OF 8".

3.3.2 CARE SHALL BE TAKEN THAT THE RATE OF APPLICATION OF WATER DOES NOT CAUSE EROSION OR SLOUGHING OF SOILS.

3.3.3 ALL DEPRESSIONS, VOIDS, EROSION SCARS AND SETTLED TRENCHES GENERATED BY THE DEEP WATERING SHALL BE FILLED WITH CONDITIONED TOPSOIL AND BROUGHT TO FINISH GRADE.

3.3.4 WEED CONTROL:

3.3.4.1 MANUALLY REMOVE ALL EXISTING WEEDS AND GRASSES AND REMOVE FROM SITE.

3.3.4.2 APPLY 200 LBS/ACRE COMMERCIAL FERTILIZER TO ALL PLANTING AREAS. IRRIGATE 4 TIMES PER DAY DURING THE SUMMER SEASON AND 2 TIMES PER DAY DURING OTHER SEASONS FOR 3 WEEKS TO GERMINATE SEEDS.

3.3.4.3 DISCONTINUE IRRIGATION FOR 2 DAYS AND APPLY A NON-SELECTIVE CONTACT HERBICIDE, PER MANUFACTURER'S DIRECTION, TO ERADICATE GERMINATED WEEDS AND GRASSES. ALLOW HERBICIDE TO KILL WEEDS AND GRASSES. MANUALLY REMOVE WEEDS AND GRASSES FROM SITE. MINIMIZE SOIL DISTURBANCE ON SLOPED AREAS OF THE SITE.

Contact Arizona 811 at least two full working days before you begin excavation
ARIZONA811 BLUE STAKE, INC.
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OV1801921
OV1600944, OV12-03-20
RIVERS EDGE (MELCOR) PLANNED AREA DEVELOPMENT #7

L-11

| NO. | BY | DATE | REVISION | APPR | DATE |
|---|---|---|---|---|---|

REGISTERED LANDSCAPE ARCHITECT
CERTIFICATE NO. 36734
MARK E. FELLINGER
10/17/19
Not Valid Unless Signed
ARIZONA, U.S.A.

JN 4191A

RICK ENGINEERING COMPANY
Tucson
3945 EAST FORT LOWELL ROAD - SUITE 111
TUCSON, AZ 85712
520.795.1000
(FAX)520.322.6956
rickengineering.com
Phoenix - San Diego - Sacramento - Riverside - Orange - San Luis Obispo - Bakersfield

| | | | |
|---|---|---|---|
| DESIGNED BY: MEF | DATE: 10/19 | CHECKED BY: | DATE: |
| DRAWN BY: MEF | DATE: 10/19 | APPROVED BY: | DATE: |

**FINAL LANDSCAPE PLAN FOR:**

RIVER'S EDGE
LOTS 103-123

LOTS 103-123 AND COMMON AREAS "A" & "B-1 - B-3"
BEING A PORTION OF THE SOUTHEAST QUARTER OF SECTION 12,
TOWNSHIP 12 SOUTH, RANGE 13 EAST, GILA & SALT RIVER MERIDIAN,
TOWN OF ORO VALLEY, PIMA COUNTY, ARIZONA.

1901060

SCALE: HORIZ : N/A
VERT : N/A

SHEET 11 OF 12

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3.3.4.4 IF WEEDS AND GRASSES STILL EXIST, IRRIGATE 2 OR 4 TIMES PER DAY, AS ABOVE, FOR 2 WEEKS OR UNTIL NEW GROWTH APPEARS. REAPPLY HERBICIDE PER MANUFACTURER'S DIRECTION. ALLOW HERBICIDE TO KILL WEEDS AND GRASSES. MANUALLY REMOVE WEEDS AND GRASSES FROM THE SITE.

3.3.4.5 NO PRE-EMERGENT HERBICIDE SHALL BE USED IN LANDSCAPE AREAS TO BE SEEDED.

3.3.4.6 CONTRACTOR SHALL OBTAIN APPROVAL BY THE OWNER TO APPLY ANY HERBICIDE, INSECTICIDE, FUNGICIDE, OR OTHER CHEMICALS TO BE USED ONSITE. CONTRACTOR SHALL ABIDE BY ALL APPLICABLE GOVERNMENTAL STANDARDS REGULATING THE APPLICATION OF ANY CHEMICALS, AND SHALL FOLLOW ALL MANUFACTURER'S RECOMMENDATIONS. ALL WORKERS APPLYING SUCH CHEMICALS SHALL BE LICENSED IF REQUIRED BY LAW.

3.4 EXCAVATION FOR TREES AND SHRUBS

3.4.1 CONTAINER GROWN STOCK IN CANS SHALL BE CUT ON TWO SIDES WITH AN APPROVED CAN CUTTER. STOCK GROWN IN BOXES SHALL HAVE BOTTOMS REMOVED. ALL USED CONTAINERS SHALL BE REMOVED TO THE STORAGE AREAS OR FROM THE SITE. EACH TREE AND SHRUB SHALL BE PLACED IN THE CENTER OF THE HOLE AND SHALL BE SET PLUMB, REMOVE SIDES OF BOXES WHERE REQUIRED, AND HELD RIGIDLY IN POSITION UNTIL THE PLANTING BACKFILL HAS BEEN TAMPED FROM AROUND EACH ROOT BALL.

3.4.1.1 FOR CONTAINER GROWN STOCK, EXCAVATE AS SPECIFIED FOR SIZE OF CONTAINER WIDTH AND DEPTH.

3.4.1.2 DISPOSE OF EXCESS SUBSOIL REMOVED FROM PLANTING EXCAVATIONS.

3.4.1.3 FILL EXCAVATIONS FOR TREES AND SHRUBS WITH WATER AND ALLOW WATER TO PERCOLATE OUT PRIOR TO PLANTING.

3.5 PLANTING TREES AND SHRUBS

3.5.1 SET CONTAINER GROWN STOCK AS SPECIFIED, CUT CANS ON 2 SIDES WITH AN APPROVED CAN CUTTER; REMOVE BOTTOMS OF WOODEN BOXES AFTER PARTIAL BACKFILLING SO AS NOT TO DAMAGE ROOT BALLS. ALL USED CONTAINERS SHALL BE REMOVED TO THE STORAGE AREAS OR FROM THE SITE. EACH TREE AND SHRUB SHALL BE PLACED IN THE CENTER OF THE HOLE AND SHALL BE SET PLUMB AND HELD RIGIDLY IN POSITION UNTIL THE PLANTING BACKFILL HAS BEEN TAMPED FROM AROUND EACH ROOT BALL.

3.5.2 ALL PLANTS SHALL BE SET AT SUCH A LEVEL THAT AFTER SETTLING, THEY BEAR THE SAME RELATIONSHIP TO THE SURROUNDING FINISH GRADE AS THEY BORE TO THE SOIL LINE GRADE IN THE CONTAINER.

3.5.3 PLANTING TABLETS SHALL BE PLACED IN EACH TREE PLANTING HOLE AT THE FOLLOWING RATE:

3.5.3.1 1-21 GRAM TABLET PER 1 GALLON CONTAINER.
3.5.3.2 3-21 GRAM TABLETS PER 5 GALLON CONTAINER.
3.5.3.3 4-21 GRAM TABLETS PER 15 GALLON CONTAINER.
3.5.3.4 1-21 GRAM TABLET PER EACH 4 INCH OF BOX SIZE

3.5.4 NO PLANT WILL BE ACCEPTED IF THE ROOT BALL IS BROKEN OR CRACKED; EITHER BEFORE, DURING OR AFTER THE PROCESS OF INSTALLATION.

3.5.5 WATER BASIN SHALL BE FORMED AROUND EACH TREE AND SHRUB PER DETAIL. ALL PLANTS SHALL BE THOROUGHLY WATERED INTO THE FULL DEPTH OF EACH PLANT HOLE IMMEDIATELY AFTER PLANTING.

3.5.6 PRUNE, THIN OUT, AND SHAPE TREES AND SHRUBS IN ACCORDANCE WITH STANDARD HORTICULTURAL PRACTICE. PRUNE TREES TO RETAIN REQUIRED HEIGHT AND SPREAD. UNLESS OTHERWISE DIRECTED BY LANDSCAPE ARCHITECT, DO NOT CUT TREE LEADERS, AND REMOVE ONLY INJURED OR DEAD BRANCHES FROM FLOWERING TREES, IF ANY. PRUNE TREES AND SHRUBS TO RETAIN NATURAL CHARACTER.

3.5.7 REMOVE AND REPLACE EXCESSIVELY PRUNED OR MALFORMED STOCK RESULTING FROM IMPROPER PRUNING.

3.5.8 GUY AND STAKE TREES IMMEDIATELY AFTER PLANTING, AS INDICATED. ALL TREES, 36" BOX AND SMALLER SHALL BE STAKED (OR GUYED) AS INDICATED ON DRAWINGS. THE STAKES SHALL BE DRIVEN IN PLUMB AND SECURE. SPECIAL CARE SHALL BE TAKEN THAT THE DRIVING IN OF THE STAKE DOES NOT DAMAGE THE TREE ROOTS OR ROOT BALL. TREE TIES SHALL BE FASTENED PER DETAIL.

3.7 POST FERTILIZATION

3.7.1 POST FERTILIZATION FOR ALL LAWN AND GROUND COVER AREAS (TRI-C 6-2-4) SHALL OCCUR 45 DAYS AFTER PLANTING AT A RATE OF 10 LBS. PER 1,000 SQ. FT.

3.7.2 POST FERTILIZATION FOR ALL SHRUBS AND TREES (TRI-C 6-2-4) SHALL OCCUR 45 DAYS AFTER PLANTING AT A RATE OF 10 LBS. PER 1,000 SQ. FT.:

3.7.2.1 SHRUBS: SPRINKLE ¼ CUP EVENLY AROUND DRIPLINE AND WORK INTO TOP 1 INCH OF SOIL.

3.7.2.2 TREES: APPLY ½ LB. PER 1 INCH OF TRUNK DIAMETER. DISTRIBUTE EVENLY UNDER BRANCHES OUT TO DRIPLINE.

3.8 MAINTENANCE PERIOD

3.8.1 THE MAINTENANCE PERIOD BEGINS ON THE FIRST DAY AFTER ALL LANDSCAPE AND IRRIGATION WORK AND ALL OTHER INDICATED OR SPECIFIED WORK ON THIS PROJECT IS COMPLETE, CHECKED, ACCEPTED AND WRITTEN APPROVAL FROM THE LANDSCAPE ARCHITECT IS GIVEN TO BEGIN THE MAINTENANCE PERIOD.

3.8.2 THE CONTRACTOR SHALL CONTINUOUSLY MAINTAIN ALL INVOLVED AREAS OF THE CONTRACT DURING THE PROGRESS OF THE WORK AND DURING THE MAINTENANCE PERIOD UNTIL THE FINAL ACCEPTANCE OF THE WORK.

3.8.3 REGULAR PLANTING MAINTENANCE OPERATIONS SHALL BEGIN IMMEDIATELY AFTER EACH PLANT OR LAWN IS PLANTED. PLANTS AND LAWNS SHALL BE KEPT IN A HEALTHY, GROWING CONDITION AND IN A VISUALLY PLEASING APPEARANCE BY WATERING, PRUNING, MOWING, ROLLING, TRIMMING, EDGING, FERTILIZING, RE-STAKING, PEST AND DISEASE CONTROL, SPRAYING, WEEDING, CLEANING-UP AND ANY OTHER NECESSARY OPERATION.

3.8.4 THE MAINTENANCE PERIOD SHALL CONTINUE UNTIL FINAL ACCEPTANCE, BUT UNDER NO CIRCUMSTANCES LESS THAN FOLLOWING PERIOD:

3.8.4.1 60 DAYS AFTER SUBSTANTIAL COMPLETION OF PLANTING.

3.8.5 THE CONTRACT COMPLETION DATE OF THE CONTRACT MAINTENANCE PERIOD WILL BE EXTENDED WHEN IN THE OPINION OF THE LANDSCAPE ARCHITECT, IMPROPER MAINTENANCE AND/OR POSSIBLE POOR OR UNHEALTHY CONDITION OF PLANTED MATERIAL OR UNESTABLISHED, NON-COVERING LAWNS ARE EVIDENT AT THE TERMINATION OF THE SCHEDULED MAINTENANCE PERIOD. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADDITIONAL MAINTENANCE OF THE WORK AT NO CHANGE IN CONTRACT PRICE UNTIL ALL OF THE WORK IS COMPLETED AND ACCEPTABLE.

3.8.6 THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ADEQUATE PROTECTION OF THE AREAS. DAMAGED AREAS SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE.

3.8.7 MAINTAIN TREES, SHRUBS, AND OTHER PLANTS BY PRUNING, CULTIVATING, AND WEEDING AS REQUIRED FOR HEALTHY GROWTH. RESTORE PLANTING WATER BASINS. TIGHTEN AND REPAIR STAKE AND GUY SUPPORTS AND RESET TREES AND SHRUBS TO PROPER GRADES OR VERTICAL POSITION AS REQUIRED. SPRAY AS REQUIRED TO KEEP TREES AND SHRUBS FREE OF INSECTS AND DISEASE.

3.8.8 PERMANENT POST CONSTRUCTION BMP DEVICES SHALL NOT BE REMOVED OR MODIFIED WITHOUT THE APPROVAL OF THE LANDSCAPE ARCHITECT.

3.9 CLEANUP AND PROTECTION

3.9.1 DURING LANDSCAPE WORK, KEEP PAVEMENTS CLEAN AND WORK AREA IN AN ORDERLY CONDITION.

3.9.2 PROTECT LANDSCAPE WORK AND MATERIALS FROM DAMAGE DUE TO LANDSCAPE OPERATIONS, OPERATIONS BY OTHER CONTRACTORS AND TRADES, AND TRESPASSERS. MAINTAIN PROTECTION DURING INSTALLATION AND MAINTENANCE PERIODS. TREAT, REPAIR, OR REPLACE DAMAGED LANDSCAPE WORK AS DIRECTED.

3.9.3 CONTRACTOR SHALL PROVIDE AND INCORPORATED ALL BEST MANAGEMENT PRACTICES (BMP), STORM WATER POLLUTION PREVENTION PLAN (SWPPP) AND EROSION AND SEDIMENT CONTROL AS DESCRIBED IN THE PROJECT CONDITIONS OR REQUIRED BY LOCAL AND STATE REQUIREMENT.

3.10 SITE OBSERVATION VISITS:

3.10.1 SITE OBSERVATION VISITS HEREIN SPECIFIED SHALL BE MADE BY THE LANDSCAPE ARCHITECT. THE CONTRACTOR SHALL REQUEST SITE OBSERVATION A MINIMUM OF 24 HOURS IN ADVANCE.

3.10.2 SITE OBSERVATION WILL BE REQUIRED FOR THE FOLLOWING PARTS OF THE WORK:

3.10.2.1 INCORPORATION OF SOIL CONDITIONER AND FERTILIZER INTO THE SOIL

3.10.2.2 UPON COMPLETION OF FINISH GRADING PRIOR TO PLANTING

3.10.2.3 APPROVAL OF PLANT MATERIALS

3.10.2.4 WHEN TREES AND SHRUBS ARE SPOTTED IN PLACE FOR PLANTING, BUT BEFORE PLANTING HOLES ARE EXCAVATED.

3.10.2.5 WHEN PLANTING, AND ALL OTHER INDICATED OR SPECIFIED WORK, EXCEPT THE MAINTENANCE PERIOD, HAS BEEN COMPLETED. ACCEPTANCE AND WRITTEN APPROVAL SHALL ESTABLISH BEGINNING OF THE MAINTENANCE PERIOD.

3.10.2.6 FINAL SITE OBSERVATION VISIT AT THE COMPLETION OF THE MAINTENANCE PERIOD. THIS SITE OBSERVATION VISIT SHALL ESTABLISH THE BEGINNING DATE FOR THE WARRANTY PERIOD OF PLANT MATERIAL.

3.10.3 ACCEPTANCE: UPON COMPLETION OF THE FINAL SITE OBSERVATION VISIT AND THE WORK OF THIS SECTION, THE CONTRACTOR WILL BE NOTIFIED IN WRITING (1) WHETHER THE WORK IS ACCEPTABLE; (2) OF ANY REQUIREMENTS NECESSARY FOR COMPLETION AND ACCEPTANCE.

3.10.4 THIS CONTRACTOR OR HIS AUTHORIZED REPRESENTATIVE SHALL BE ONSITE AT THE TIME OF EACH SITE OBSERVATION VISIT BY THE LANDSCAPE ARCHITECT.

END OF SECTION 02900







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| NO. | BY | DATE | REVISION | APPR | DATE |
|---|---|---|---|---|---|

REGISTERED LANDSCAPE ARCHITECT
CERTIFICATE NO.
36734
MARK E. FELLINGER
10/17/19
Date Signed
ARIZONA, USA

M. Fellinger

JN 4191A

RICK ENGINEERING COMPANY
Tucson
3945 EAST FORT LOWELL ROAD - SUITE 111
TUCSON, AZ 85712
520.795.1000
(FAX)520.322.6956
rickengineering.com
Phoenix - San Diego - Sacramento - Riverside - Orange - San Luis Obispo - Bakersfield

| | | |
|---|---|---|
| DESIGNED BY: MEF | DATE: 10/19 | CHECKED BY: DATE: |
| DRAWN BY: MEF | DATE: 10/19 | APPROVED BY: DATE: |

**FINAL LANDSCAPE PLAN FOR:**

# RIVER'S EDGE
# LOTS 103-123

LOTS 103-123 AND COMMON AREAS "A" & "B-1 - B-3"
BEING A PORTION OF THE SOUTHEAST QUARTER OF SECTION 12,
TOWNSHIP 12 SOUTH, RANGE 13 EAST, GILA & SALT RIVER MERIDIAN,
TOWN OF ORO VALLEY, PIMA COUNTY, ARIZONA.

1901060

SCALE: HORIZ : N/A
VERT : N/A

SHEET 12 OF 12