1. MOW CURB WITH MEDIUM BROOM FINISH
2. FINISH GRADE - REFER TO NOTE # C
3. # 3 REBAR CONTINUOUS WITH 18-INCH LAPS MIN.
4. 1/2-INCH RADIUS TOOLED EDGES
5. CONTROL JOINT - REFER TO NOTE A BELOW
6. 90% COMPACTED SUBGRADE

NOTES:
A. WEAKENED PLANE JOINT - 10 FEET O.C. MAXIMUM. CUT CONCRETE WITH TROWEL EDGE TO DEPTH OF REBAR. TOOL FINISH JOINT USING GROOVER WITH 1.5-INCH DEEP BIT.
B. ISOLATION / EXPANSION JOINT - PLACE AT ENDS OF MOW CURB ABUTTING OTHER IMPROVEMENTS (TYP.).
C. FINISH GRADE SHALL BE 1-INCH IN LAWN AREAS AND 3 INCHES IN PLANTING AREAS (BELOW TOP OF MOW CURB).
D. CONCRETE SHALL BE CLASS 560-C-3250
1. PLANTING AREA WITH MULCH
2. CONCRETE MOW CURB PER CITY STANDARD DETAIL 1302 / (EACH SIDE OF TRAIL)
3. STABILIZED DECOMPOSED GRANITE - 4 INCHES THICK (MIN.) PLACE AND COMPACT IN 2-INCH LIFTS - PER SPECIFICATIONS
4. FINISH GRADE - LAWN 1-INCH AND SHRUB PLANTING AREA 3 INCHES
5. COMPACTED SUBGRADE - 95% REL. DENSITY

NOTE:
A. APPLY PRE-EMERGENT HERBICIDE TO SUBGRADE PRIOR TO PLACING D.G. MATERIAL - PER SPECIFICATIONS.
1. 2 RAIL 5.5-INCH MIN. HDPE POST @ 8' O.C. MAX. (IF SPECIFIED)
2. POST CAP / SECURE WITH STAINLESS STEEL TAP SCREWS (4)
3. 3-RAIL 5.5-INCH MIN. HDPE POST @ 8' O.C. MAX.
4. FINISH GRADE 1-INCH BELOW CURB FOR TURF AND 2 INCHES BELOW CURB FOR PLANTERS
5. 2500 PSI CONCRETE FOOTING 12-INCH DIAMETER X 3-INCH BELOW POST
6. UNDISTURBED NATIVE SOIL
7. #3 REBAR / 2 INCHES FROM POST EDGE
8. CONCRETE MOW CURB (8-INCH) / 3250 PSI
9. HOLES IN BOTTOM OF POST TO LOCK POST INTO CONCRETE

NOTES:
A. OMIT FENCING WITHIN SIGHT DISTANCE RESTRICTED ZONES.
B. WHERE FENCING IS ADJACENT TO TRAIL, TURF, OR PROJECT BOUNDARY, INSTALL CONCRETE MOW CURB ALONG FENCE LINE.
C. FENCING MANUFACTURER, COLOR, AND TEXTURE SHALL BE REVIEWED / APPROVED BY CITY.
D. CONCRETE SHALL BE CLASS 560-C-3250.
E. POST & RAIL MATERIAL : HDPE / WALL THICKNESS: 0.25"
1. POST CAP / GLUED AND SECURE WITH STAINLESS STEEL TAP SCREWS (4)
2. 3 RAIL POST @ 8' O.C. MAX.
3. 1-1/2-INCH X 5-1/2-INCH RAIL TYP.
4. #3 REBAR / 2 INCHES FROM POST EDGE
5. UNDISTURBED NATIVE SOIL
6. FINISH GRADE 1-INCH ABOVE GRADE FOR TURF AND 3 INCHES FOR PLANTERS
7. CONCRETE FOOTING (2500 PSI) / CROWN TOP OF FOOTING TO DRAIN
8. HOLES IN BOTTOM OF POST TO LOCK POST INTO CONCRETE

NOTES:
A. OMIT FENCING WITHIN SIGHT DISTANCE RESTRICTED ZONES.
B. WHERE FENCING IS ADJACENT TO TRAIL, TURF, OR PROJECT BOUNDARY, INSTALL CONCRETE MOW CURB ALONG FENCE LINE.
C. FENCING MANUFACTURER, COLOR, AND TEXTURE SHALL BE REVIEWED / APPROVED BY CITY.
D. CONCRETE SHALL BE CLASS 560-C-3250.
E. POST & RAIL MATERIAL : HDPE / WALL THICKNESS: 0.25"
1. 1 1/2-INCH X 5 1/2-INCH RAILS ATTACHED TO POSTS, ROUTE RAIL SLOTS ON POSTS AS REQUIRED TO ALLOW FOR ELEVATION CHANGES BETWEEN POSTS.
2. POST CAP / GLUE AND ATTACH TO POSTS WITH STAINLESS STEEL TAP SCREWS ON ALL SIDES (4)
3. 2 RAIL POST @ 8' O.C. MAX.
4. FINISH SURFACE
5. CONCRETE FOOTING (2500 PSI) / CROWN TOP OF FOOTING TO DRAIN
6. CONCRETE MOW CURB
7. HOLES IN BOTTOM OF POST TO LOCK POST INTO CONCRETE

NOTES:
A. OMIT FENCING WITHIN SIGHT DISTANCE RESTRICTED ZONES.
B. WHERE FENCING IS ADJACENT TO TRAIL, TURF, OR PROJECT BOUNDARY, INSTALL CONCRETE MOW CURB ALONG FENCE LINE.
C. FENCING MANUFACTURER, COLOR, AND TEXTURE SHALL BE REVIEWED / APPROVED BY CITY.
D. CONCRETE SHALL BE CLASS 560-C-3250.
E. POST & RAIL MATERIAL: HDPE / WALL THICKNESS: 0.25"
1. 1-3/8-INCH MIN. ROUND TUBULAR STEEL
2. STANDARD METAL POST CAP
3. 2-INCH MIN. SQUARE POST / 14 GAUGE
4. 3/4-INCH MIN. SQUARE PICKETS / 16 GAUGE
5. 6-INCH X 8-INCH CONCRETE MOW CURB PER STANDARD PLAN NO. 1302
6. 6-INCH X 8-INCH CONCRETE MOW CURB PER STANDARD PLAN NO. 1302
7. 2500 PSI CONCRETE FOOTING - 8-INCH DIA. X 30 INCHES DEEP
8. 2-INCH X 2-INCH POST
9. CAULK JOINT W/CLEAR SILICON
10. FENCE RAIL SLIPS OVER POST ASSEMBLY

NOTES:
A. ALL PANELS AND POST SHALL BE BLACK POWDER COATED.
B. ALL WELDS FOR GATE HINGES SHALL HAVE ONE COAT EPOXY PRIMER & TWO COATS OF EXTERNAL ENAMEL.
C. TOP OF FOOTING SHALL BE AT ELEVATION TO ACCOMMODATE 6-INCH DEEP FORM BOARDS AND CONCRETE MOW CURB TO BE Poured AFTER FOOTING AND POST INSTALLATION ALONG FENCING.
D. VERTICAL PICKETS SHALL BE AT 4-1/2-INCHES O.C. 2-INCH MAX. OPENING WHEN USED AT DOG PARKS.
E. BOTTOM RAIL TO BE 4 INCHES FROM TOP OF MOW CURB.
F. BOTTOM RAIL TO BE 2 INCHES FOR DOG PARKS.

CITY OF MENIFEE
TUBULAR STEEL FENCE

STANDARD PLAN NO. 1308 SHEET 1 OF 2

APPROVED BY:

DIRECTOR OF PUBLIC WORKS DATE
JONATHAN GEORGE SMITH 4/24/15

REVISION BY: APPROVED DATE
1 GH. J.S. 08/15/18
1. 1-3/8-INCH MIN. ROUND TUBULAR STEEL
2. STANDARD METAL POST CAP
3. 2-INCH MIN. SQUARE POST / 14 GAUGE
4. 3/4-INCH MIN. SQUARE PICKETS / 16 GAUGE
5. LOCKING LATCH W/PADLOCK
6. STEEL H.D. GRADE HINGE
7. DROP PIN WITH SLEEVE
8. 8-INCH WIDE X 8-INCH DEEP MOW CURB (TAPER TO FINISH GRADE)
9. 1-1/2-INCH MIN. 14 GAUGE RAIL SET BOTTOM RAIL 4 INCHES ABOVE MOW CURB
10. 2500 PSI CONCRETE FOOTING 8-INCH DIA. X 30 INCHES DEEP MIN.
11. 6-INCH X 8-INCH CONCRETE MOW CURB PER STANDARD PLAN NO. 1302

NOTES:
A. ALL PANELS AND POST SHALL BE BLACK POWDER COATED. ALL WELDS FOR GATE HINGES SHALL HAVE ONE COAT EPOXY PRIMER & TWO COATS OF EXTERNAL ENAMEL.
B. TOP OF FOOTING SHALL BE AT ELEVATION TO ACCOMMODATE 6-INCH DEEP FORM BOARDS AND CONCRETE MOW CURB TO BE POURED AFTER FOOTING AND POST INSTALLATION ALONG FENCING.
C. VERTICAL PICKETS SHALL BE AT 4-1/2-INCHES O.C. 2-INCH MAX. OPENING WHEN USED AT DOG PARKS.
D. BOTTOM RAIL TO BE 4 INCHES FROM TOP OF MOW CURB. BOTTOM RAIL TO BE 2 INCHES FOR DOG PARKS.
1. Finish grade for planter or turf
2. Boulder (location and size per plan)
3. 80% thickness of boulder
4. 20% thickness of boulder
5. Undisturbed soil / amended soil

NOTES:
A. Boulder size and type shall be approved prior to purchase of material.
B. All boulder locations shall be approved by the city.

SECTION
NO SCALE

CITY OF MENIFEE
BOULDER PLACEMENT

DIRECTOR OF PUBLIC WORKS
JONATHAN GEORGE SMITH

4/24/15

[Signature]

61253

STANDARD PLAN NO. 1310
SHEET 1 OF 1
1. ARTIFICIAL GRASS FIBER (100% POLYETHYLENE MONOFILAMENT) WITH SECONDARY THATCH FIBER AND BACKING (SEE NOTE F)
2. PERMEABLE GEOTEXTILE WEED BARRIER
3. CRUSHED AGGREGATE BASE, CLASS II (COMPACT 90 %) / 3/4-INCH MINUS WITH FINES
4. 2 X 4 NAILER BOARD / RECYCLED COMPOSITE OR TREATED LUMBER
5. NATIVE SUBGRADE - LEVEL (COMPACT 90 %)
6. SCREWS TO ATTACH TURF TO NAILER (1-IN LENGTH MIN.)
7. CONCRETE CURB OR HARDSCAPE EDGE - TYP.
8. SPIKES AT 3 FEET O.C. TRIANGULAR SPACING
9. DOWEL NAILER BOARD TO CONCRETE (OR OTHER APPROVED CONNECTION)
10. INFILL (SEE NOTE C)

NOTES:
A. TURF SHALL BE INSTALLED AND SEAMED WITH ADJACENT PIECES RUNNING IN THE SAME DIRECTION. ALL SEAMS SHALL HAVE SEAMING GLUE & 6-INCH WIDE SEAMING TAPE.
B. SECURE TURF ON BASE W 6-INCH 60D FLAT HEAD GALV. NAILS 3 FEET ON INT. FIELD. USE 1-INCH TARPON SCREWS @ 12 INCHES O.C. ALONG PERIMETER NAILER.
C. INFILL SHALL BE IN ACCORDANCE W/MANUFACTURER'S SPECIFICATIONS - WASHED SILICA SAND & CRYOGENIC RUBBER.
D. POWER BROOMING IS THE LAST STAGE OF TURF INSTALLATION.
E. MINIMUM PRODUCT WARRANTY SHALL BE 8 YEARS, WITH MIN. 15 YEAR LIFE EXPECTANCY.
F. TURF BACKING SHALL BE 100 % PERMEABLE (NON-ABSORBENT).
G. TURF SHALL BE FIRE RETARDANT, AND 100 % RECYCLABLE.
H. INSTALLATION SHALL BE COMPLETED IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS AND CITY DEVELOPMENT CODE REQUIREMENTS.
1. CONCRETE BAND (IF SPECIFIED) WITH A SCORE JOINT EVERY 10 FEET OR MATCH WITH CURB AND GUTTER
2. (2) #3 REBAR (HORIZ.) CONT. WITH 12" OVERLAP
3. COLD-JOINT
4. 6-TO 12-INCH RANDOM COBBLE PAVING WITH 1/4-TO 1/2-INCH JOINTS. COBBLE SHALL BE SET IN CONCRETE (3250 PSI) MORTAR MIX
5. CONCRETE BASE (3250 PSI)
6. COMPACTED SUBGRADE PER STRUCTURAL SOILS REPORT (90% MINIMUM)

NOTES:
A. SPACE BETWEEN ROCK SHALL NOT EXCEED 1-INCH. EXPOSED COBBLE HEIGHT SHALL NOT EXCEED 1.5-INCHES.
B. GENERAL APPEARANCE SHALL BE UNIFORM CROWNED PLANE WITHOUT PEAKS AND VALLEYS.

PERCENTAGE OF COBBLE ROCK TO BE INSTALLED:

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Size</th>
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<tbody>
<tr>
<td>40%</td>
<td>12&quot;</td>
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<tr>
<td>30%</td>
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<td>20%</td>
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NO IRON IS ALLOWED IN COBBLE ROCK
1. COBBLE STONE - 'SIERRA COBBLE' FROM SOUTHWEST BOULDER & STONE, (6-INCH TO 8-INCH DIAMETER), SET TIGHTLY SPACED IN MORTAR BED. DRY PACK JOINTS & WATER-IN TO CURE
2. CURB - PER CIVIL ENGINEERING PLANS
3. STREET SECTION PER CIVIL ENGINEERING PLANS
4. COMPACTED SUBGRADE
5. 4-INCH THICK MORTAR SUB-BASE
6. CLASS II BASE 6-INCH THICK (MIN.)

NOTE:
A. CROWN COBBLE MATERIAL W/1%-2% VARIABLE SLOPE FOR DRAINAGE
1. FINISH GRADE (18 INCHES HEIGHT ABOVE SUMP)
2. UNDISTURBED NATIVE SOIL
3. INSTALL FILTER FABRIC AT PERIMETER OF SUMP PER SPECIFICATIONS
4. SUMP WITH 3/4-INCH CRUSHED ROCK
5. DRAIN LINE (TYP.) - SIZE PER PLAN
6. INVERT ELEVATION (MAINTAIN 2% SLOPE (MIN.) FROM DRINKING FOUNTAIN)
7. 6-INCH PERFORATED DRAINLINE (TYP.)
8. 8-INCH ROUND VALVE BOX AT FINISH GRADE - PLACE ON 3 BRICK SUPPORTS
9. COMPACT SOIL ABOVE SUMP TO DENSITY OF ADJACENT UNDISTURBED SOIL
1. DOME ANTENNA, AS REQUIRED (SEE SPECIFICATIONS)
2. CONTROLLER W / STAINLESS STEEL ENCLOSURE
3. PISTON CONNECTED TO FLIP TOP
4. LOUVERED VENT
5. 30 INCHES BY 26 INCHES CONCRETE BASE (8 INCHES THICK) / TAPER 2 INCHES FROM FINISH GRADE
6. 3-INCH MINIMUM SCHEDULE 40 PVC SWEEP FOR CONTROL WIRING
7. FINISH GRADE
8. 3/4-INCH PVC SCHEDULE 40 CONDUIT AND SWEEP FOR 120 VAC POWER
9. GROUND ROD (INSTALL PER MANUFACTURER SPECIFICATIONS)
10. 1-INCH SCHEDULE 40 PVC CONDUIT AND SWEEP - ONE CONDUIT EACH FOR MASTER CONTROL VALVE AND FLOW SENSOR WIRES.

NOTES:
A. CUT ALL PVC CONDUIT 2 INCHES ABOVE THE CONCRETE PAD.
B. INSTALL 1-INCH SCHEDULE 40 PVC CONDUIT AND SWEEP FOR FUTURE USE. CAP ONE END OF CONDUIT AT 24 INCHES FROM CONTROLLER.
C. CONTROLLER COMPONENTS SHALL BE CERTIFIED BY CALSENSE.
D. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING AND INSTALLATION OF REQUIRED CONTROLLER COMMUNICATIONS. CONTACT CALSENSE FOR PROJECT REQUIREMENTS.
E. CONDUIT SHALL BE GRAY SCH. 40 PVC ELECTRICAL SWEEP.
1. CONTROLLER WITH STAINLESS STEEL ENCLOSURE AND DOME ANTENNA (SEE SPECS.)
2. FLIP TOP IN OPEN POSITION
3. GFCI OUTLET & SWITCH
4. TRANSIENT PROTECTION BOARD
5. GROUNDING WIRE (#6 / SOLID COPPER) CONNECTED TO GROUND LUG
6. 120 VAC JUNCTION BOX
7. MOUNTING BOLTS AS REQUIRED
8. 3/4-INCH GROUNDING ROD SLEEVE - PVC SCHEDULE 40
9. GROUNDING ROD - 5/8-INCH X 8 FEET COPPER
10. CONDUIT FOR 120 VAC POWER
11. CONDUITS FOR MASTER CONTROL VALVE, FLOW SENSOR, AND SPARE (EMPTY) / FUTURE
12. CONTROLLER PANEL MOUNTED FLUSH ON FACE OF ENCLOSURE

NOTE:
A. CONTRACTOR SHALL ADJUST ALL IRRIGATION TO PREVENT OVER SPRAY ON CONTROLLER ENCLOSURE.
B. CONTROLLER COMPONENTS SHALL BE CERTIFIED BY CALSENSE.
C. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION AND INSTALLATION OF REQUIRED CONTROLLER COMMUNICATIONS. CONTACT CALSENSE FOR PROJECT REQUIREMENTS.
1. Close-coupled end suction centrifugal pump, cast iron bronze fitted, back pullout design, mechanical seal, ODP motor with a variable frequency drive system.
2. NEMA 4 enclosed control panel, with circuit breaker, magnetic starter, HOA switch, and components for automatic booster pump control.
3. Marine grade aluminum enclosure / hinged design with venting.
4. Cast iron elastomer lined full lug wafer style butterfly valve.
5. Pressure gauge, 2 1/2" dia. liquid filled, stainless case, 0-200 P.S.I.
6. Flow switch, bronze, paddle style non-adjustable, 100 P.S.I. rated (optional).
7. Type "L" copper (size varies).
8. 150 pound ANSI rated brass output flange.
10. 6-inch concrete pad, ASTM C-94, ACI STD. 318-83 design mix, 2500 P.S.I. rated.
11. Double P.V.C. tape wrapped brass pipe and ell.
12. P.V.C. Sch. 80 brass companion flange connection.
13. Concrete thrust block 4 cu. ft. minimum.
14. Main power conduit.
15. Irrigation controller signal conduit.
16. CIBF diaphragm actuated pressure regulating valve - see specifications.
17. Finish grade.
18. Brass ell.

NOTES:
A. All conduit shall be routed through concrete pad to interior of pump enclosure.

CITY OF MENIFEE
BOOSTER PUMP

4/24/15
JONATHAN GEORGE SMITH
DIRECTOR OF PUBLIC WORKS

REVISION 1
DATE 08/15/16

61253

1403
SHEET 1 OF 1
1. FINISH GRADE
2. PLASTIC RECTANGULAR VALVE BOX WITH BOLT DOWN COVER, USE STAINLESS BOLT, NUT, AND WASHER. BOX TO BE PLACED AT RIGHT ANGLE TO HARDSCAPE EDGE. HEAT BRAND "MV" ONTO LID.
3. FINISHED GRADE 3 INCHES IN SHRUB AREAS AND 1-INCH IN LAWN
4. MASTER CONTROL VALVE (REFER TO LEGEND)
5. 24-INCH WIRE LOOP - SEE NOTE E
6. PVC SCH. 80 NIPPLES
7. PVC SCH. 80 PIPE TO FLOW SENSOR (PIPE PER SPECS)
8. PVC SCH 80 FEMALE ADAPTER - S X T
9. PVC SCH. 80 UNION
10. BRICK SUPPORTS (4 REQUIRED)
11. FILTER FABRIC - SEE NOTE C
12. BRASS PIPE FROM FILTER, PUMP, OR BACKFLOW PREVENTER (PER SPECS.)
13. REFER TO SPEC. FOR PIPE DEPTH
14. 3/4-INCH CRUSHED ROCK - 1 CU. FT. MIN.
15. BRASS 80 FITTING 45° (TYP.)
16. 1-INCH PVC SCH. 40 WIRE CONDUIT TO CONTROLLER
17. BRASS NIPPLE - LENGTH AS REQUIRED (TYP.)

NOTES:
A. USE 45° ELLS TO ACHIEVE MAINLINE DEPTH FROM UP-STREAM SIDE OF THE MASTER VALVE ASSEMBLY.
B. CLOSE NIPPLES SHALL NOT BE INSTALLED IN VALVE ASSEMBLY.
C. WRAP BOTTOM AND SIDES OF VALVE BOX WITH FILTER FABRIC TO COVER OPENING (TYP.).
D. ALL CONDUITS SHALL BE SEALED WATER TIGHT WITH EXPANDING FOAM.
E. CONNECT CONTROL WIRES TO VALVE W/WATERPROOF CONNECTORS.
1. Finish Grade
2. Plastic rectangular valve box with bolt down cover, use stainless bolt, nut, and washer. Box to be placed at right angle to hardscape edge. Heat brand "FS" onto lid.
3. Waterproof wire connectors
4. Flow sensor (see legend and specifications)
5. Finish Grade (3 inches in shrub areas and 1-inch in lawn)
6. PVC mainline pipe per specification
7. PVC Sch. 40 fittings - see note B
8. Landscape fabric to cover opening
9. 3/4-inch crushed rock, 1 cu. ft. min.
10. PVC Sch. 80 pipe from master control valve and sensor (per specs)
11. Gray Sch. 40 PVC conduit and sweep (1-inch size) to controller
12. Control wire - install in conduit between flow sensor and controller / provide 24-inch loop in valve box
13. 10 times pipe dia. (min.) upstream from sensor - no fittings.
14. 5 times pipe dia. (min.) downstream from sensor - no fittings.
15. Brick supports (4 req'd.).

Notes:
A. Install flow meter as per the manufacturer's recommendations, wire to irrigation controller.
B. Use 45 degree ell's to achieve mainline depth on the down-stream side of the flow meter.
1. 10-INCH DIA. PLASTIC VALVE BOX - SEE NOTE A BELOW
2. QUICK COUPLER WITH LOCKING RUBBER CAP - REFER TO LEGEND
3. FINISH GRADE
4. PVC SCH. 80 RISER
5. 3/4-INCH CRUSHED ROCK / 8-INCH MIN.
6. STANDARD BRICKS (4 REQ'D)
7. PVC SCH. 80 NIPPLE - LENGTH AS REQUIRED
8. PVC SCH. 80 ELL OR TEE (CONNECT TO MAINLINE) - S X S X T
9. PVC SCH. 80 STREET ELL
10. REBAR (#4 X 36") STAKE WITH (2) STEEL CLAMPS
11. 1" MIPT X FIPT SCH. 80 PVC ELL (2 REQ'D.)
12. PRESSURE MAINLINE (SEE PLAN FOR SIZE)
13. 3 INCHES IN SHRUB AREAS, 1-INCH IN LAWN

NOTES:
A. HEAT BRAND "QC" ON VALVE BOX LID IN 2-INCH HIGH LETTERS.
1. 12-INCH MIN./18 INCHES MAX.
2. PLASTIC VALVE BOX WITH LOCKING COVER - SEE NOTE D BELOW
3. WATERPROOF WIRE CONNECTORS AT SOLENOID
4. INSTALL BUSHING IF REQ'D (TYP.)
5. REMOTE CONTROL WIRE, MAY BE SMALLER THAN LINE SIZE
6. CONTROL WIRES ADJACENT TO MAIN LINE
7. PVC SCH. 80 TEE OR ELL
8. 3/4-INCH CRUSHED ROCK - 1 CU. FT. MIN.
9. TOP OF BOX TO BE 3 INCHES ABOVE GRADE FOR GROUND COVER AREA
   AND 1-INCH FOR LAWN
10. WALK, WALL, CURB, OR PAVING
11. EXPANSION COILS BEFORE WIRE SPLICES - 24 INCHES LENGTH MIN.
12. PVC SCH. 40 ELL - LATERAL LINE SIZE (TYP.) / S X T
13. PVC SCH. 80 NIPPLE (TYP.) - LENGTH AS REQUIRED
14. PVC SCH. 80 UNION - LATERAL LINE SIZE
15. INSTALL BOX LEVEL ON FOUR STANDARD BRICK SUPPORTS
16. LATERAL LINE TO SPRINKLERS - PVC SCH. 40
17. PIPE DEPTH PER SPECIFICATIONS
18. 1-INCH MIN. CLEARANCE BETWEEN PIPE AND KNOCKOUT
19. PVC SCH. 80 PIPE - CUT TO LENGTH
20. PRESSURE MAIN LINE

NOTES:
A. BUNDLE CONTROL WIRES WITH TAPE AT 10 FEET O.C. / PLACE ADJACENT TO MAIN LINE ON
   ONE SIDE ONLY.
B. USE TEFLO ON ALL THREADED JOINTS.
C. ATTACH PLASTIC TAGS WITH VALVE NO. TO CONTROL WIRE IN BOX.
D. HEAT BRAND BOX COVER W/VALVE STATION NO. IN 2-INCH HIGH NUMBERS/LETTERS.
E. NO CLOSE NIPPLES SHALL BE INSTALLED IN VALVE ASSEMBLY.
F. WRAP BOTTOM AND SIDES OF VALVE BOX WITH FILTER FABRIC
   TO COVER OPENINGS (TYP.).
1. HEAT BRAND "PR" ON LID IN 2-INCH HIGH LETTERS
2. 10-INCH ROUND PLASTIC VALVE BOX W/LOCKING LID
3. FINISH GRADE
4. PVC MAINLINE FROM POC PER IRRIGATION LEGEND.
5. PRESSURE REGULATING VALVE PER IRRIGATION LEGEND
6. PVC MAINLINE TO SYSTEM PER LEGEND
7. VALVE BOX EXTENSION (S) AS REQUIRED
8. COMMON BRICK - 4 REQUIRED
9. 3/4-INCH CRUSHED ROCK / 1 CU. FT. MIN.
10. 1-INCH IN TURF AREAS AND 3 INCHES IN SHRUB AREAS
11. REFER TO SPECIFICATIONS FOR PIPE DEPTH
12. 1-INCH MINIMUM CLEARANCE BETWEEN PIPE AND KNOCKOUT
13. 2 INCHES MINIMUM

NOTES:
A. WRAP BOTTOM AND SIDES OF VALVE BOX WITH FILTER FABRIC TO COVER OPENINGS (TYP.).
B. USE TEFLO TAPE ON ALL MALE PIPE THREADS.
1. HEAT BRAND "BV" ON LID IN 2-INCH HIGH LETTERS
2. 10-INCH ROUND PLASTIC VALVE BOX W/LOCKING LID
3. FINISH GRADE
4. BALL VALVE PER IRRIGATION LEGEND
5. SCH 40 PVC FEMALE ADAPTER - 2 REQUIRED
6. MAINLINE PIPING PER IRRIGATION PLAN
7. VALVE BOX EXTENSION - AS REQUIRED
8. COMMON BRICK - 4 REQUIRED
9. 3/4-INCH CRUSHED ROCK / 1 CU. FT. MIN.
10. 1-INCH IN TURF AREAS AND 3 INCHES IN SHRUB AREAS
11. REFER TO SPEC. FOR PIPE DEPTH
12. 1-INCH MINIMUM CLEARANCE BETWEEN PIPE AND KNOCKOUT

NOTES:
A. WRAP BOTTOM AND SIDES OF VALVE BOX WITH FILTER FABRIC TO COVER OPENINGS (TYP.).
B. USE TEFON TAPE ON ALL MALE PIPE THREADS.
1. HEAT BRAND "BV" ON LID IN 2-INCH HIGH LETTERS
2. 10-INCH ROUND PLASTIC VALVE BOX W/LOCKING LID
3. FINISH GRADE
4. BALL VALVE PER IRRIGATION LEGEND
5. SCH 80 PVC UNION
6. PVC SCH 80 NIPPLES
7. SCH 80 PVC FEMALE ADAPTER - 2 REQUIRED
8. MAINLINE PIPING PER IRRIGATION PLAN
9. VALVE BOX EXTENSION AS REQUIRED
10. COMMON BRICK - 4 REQUIRED
11. 3/4-INCH CRUSHED ROCK / 1 CU. FT. MIN.
12. 1-INCH IN TURF AREAS AND 3 INCHES IN SHRUB AREAS
13. REFER TO SPEC FOR PIPE DEPTH
14. 1-INCH MINIMUM CLEARANCE BETWEEN PIPE AND KNOCKOUT

NOTES:
A. WRAP BOTTOM AND SIDES OF VALVE BOX WITH FILTER FABRIC TO COVER OPENINGS (TYP.).
B. USE TEFLOM TAPE ON ALL MALE PIPE THREADS.
1. HEAT BRAND "BV" ON LID IN 2-INCH HIGH LETTERS
2. 10-INCH ROUND PLASTIC VALVE BOX W/LOCKING LID
3. FINISH GRADE
4. PVC BLOCKED TRUE UNION BALL VALVE PER IRRIGATION LEGEND
5. SCH 80 PVC FEMALE ADAPTER - 2 REQUIRED
6. MAINLINE PIPING PER IRRIGATION PLAN
7. VALVE BOX EXTENSION AS REQUIRED
8. COMMON BRICK - 4 REQUIRED
9. 3/4-INCH CRUSHED ROCK / 1 CU. FT. MIN.
10. 1-INCH IN TURF AREAS AND 3 INCHES IN SHRUB AREAS
11. REFER TO SPEC. FOR PIPE DEPTH
12. 1-INCH MINIMUM CLEARANCE BETWEEN PIPE AND KNOCKOUT

NOTES:
A. WRAP BOTTOM AND SIDES OF VALVE BOX WITH FILTER FABRIC TO COVER OPENINGS (TYP.).
B. USE TEFLON TAPE ON ALL MALE PIPE THREADS.
1. EDGE OF PAVING
2. S X S PVC SCH. 80 ELL AT TOP OF PVC SCH. 80 RISER TO VALVE
3. MANIFOLD PRESSURE SUPPLY LINE PER PLAN - SAME DEPTH AS MAIN SUPPLY LINE
4. REMOTE CONTROL VALVE PER PLAN AND LEGEND
5. PRESSURE SUPPLY LINE PER PLAN
6. S X T PVC SCH. 80 TEE OR ELL AS REQUIRED
7. MANIFOLD PRESSURE SUPPLY LINE (1-INCH FOR QUICK COUPLER)
8. QUICK COUPLER BALL VALVE PER LEGEND
9. QUICK COUPLER PER LEGEND AND DETAILS
10. 12 INCHES MIN. / 18 INCHES MAX.
11. MANIFOLD BALL VALVE PER LEGEND AND DETAILS

NOTE:
A. NO MORE THAN 5 REMOTE CONTROL VALVES ARE TO BE INSTALLED PER MANIFOLD. ALL MANIFOLDS ARE TO BE INSTALLED IN PLANTER AREAS PER SPECIFICATIONS.
B. HEAT BRAND ALL VALVE BOXES PER MANUFACTURERS SPECIFICATIONS.
C. MANIFOLD PRESSURE SUPPLY LINE TO CONTROL VALVES SHALL BE THE SAME SIZE AS LARGEST VALVE IN MANIFOLD (1.25" MIN.)
1. FINISH GRADE
2. CLEAN BACKFILL (REFER TO SPECIFICATIONS FOR MATERIALS AND COMPACTION)
3. NON-PRESSURE LATERAL LINE PER LEGEND
4. PRESSURE SUPPLY LINE PER LEGEND
5. CONTROL WIRES - INSTALL ADJACENT TO PRESSURE SUPPLY LINE
6. PROVIDE 3 INCHES OF CLEAN SAND BELOW PRESSURE MAINLINE
7. REFER TO SPECIFICATIONS FOR PIPE DEPTH AND CLEARANCE
8. DETECTABLE MARKING TAPE ABOVE PRESSURE SUPPLY LINE

NOTES:
A. WIRE SHALL BE PLACED ON SAME SIDE OF PRESSURE SUPPLY LINE FOR ENTIRE LENGTH OF WIRE RUN.

SECTION
NO SCALE

4/24/15

DIRECTOR OF PUBLIC WORKS
JONATHAN GEORGE SMITH

61253

CITY OF MENIFEE
TRENCHING AND PIPE INSTALLATION

STANDARD PLAN NO. 1413
SHEET 1 OF 1
1. PAVING AND BASE MATERIAL (TYPICAL)
2. CLEAN BACKFILL - COMPACTION PER GEOTECHNICAL REPORT
3. CLEAN SAND (TYPICAL) REFER TO SPECIFICATIONS
4. NON-PRESSURE LATERAL LINE / SLEEVE (SIZE PER NOTES)
5. CONTROL WIRE SLEEVE ADJACENT TO MAINLINE SLEEVE (SIZE PER PLAN)
6. PRESSURE SUPPLY LINE / SLEEVE (SIZE PER NOTE A)
7. REFER TO SPECIFICATIONS FOR PIPE DEPTH AND CLEARANCE
8. DETECTABLE MARKING TAPE ABOVE PRESSURE SUPPLY LINE
9. FINISH SURFACE

NOTES:
A. PVC SLEEVES TO BE TWICE THE DIAMETER OF THE PIPE OR WIRE BUNDLE CARRIED.
B. DETAIL ALSO FOR PIPE INSTALLED IN ROCKY SOIL.
1. MAINLINE TEE PER SPECS.
2. CONCRETE THRUST BLOCK TYP.
3. COMPACTED BACKFILL TYP.
4. MAINLINE ELL 45° PER SPECS.
5. MAINLINE PER SPECS. TYP.
6. MAINLINE ELL 90° PER SPECS.
7. UNDISTURBED NATIVE SOIL TYP.

NOTES:
A. SUPPLY LINES 2.5-INCH TO 3-INCH IN DIAMETER SHALL RECEIVE CONCRETE THRUST BLOCKS
B. SUPPLY LINES OVER 3 INCHES SHALL HAVE IRON DUCTILE RESTRAINT SYSTEM.
C. A MINIMUM OF 6 INCHES OF CONCRETE SHALL BE POURED ON UNDISTURBED OR COMPACTED SOIL.
D. WHERE CONCRETE AND PVC ARE IN CONTACT, PVC PIPE SHALL BE PROTECTED WITH PIPE WRAP.
1. TRACT BLOCK WALL (TYP.)
2. STREET SIDEWALK (TYP.)
3. STREET CURB (TYP.)
4. IRRIGATION SLEEVES AS REQ'D / EXTEND 24 INCHES BEYOND EDGE OF CURB RADIUS AND 7 FT.- 6 IN. FROM THE STREET CURB TYP.
5. BLOCK PILASTER TYP.
6. PROVIDE SEPARATE SLEEVE FOR WIRING PER SPECS. (4-INCH MIN.)
7. TYPICAL PLANTER/MONUMENT ENTRANCE
8. 24 INCHES BEYOND B.C.R. (BEGIN CURB RADIUS) TYP.
9. 18 INCHES FROM BACK OF SIDEWALK TYP. (7 FT.- 6 IN. FROM CURB FACE)
10. ISOLATION VALVE PRIOR TO STREET CROSSING PER DETAILS
11. MAINLINE PER PLAN, SPECS AND DETAILS. INSTALL 18 INCHES FROM BACK OF SIDEWALK

NOTES:
A. PIPING SHALL BE 4 INCHES MIN. FROM EACH OTHER AND 24 INCHES FROM OTHER UTILITY LINES.
B. SLEEVES SHALL BE SCH. 40 2X THE SIZE OF THE LINE SIZE.
C. SLEEVES SHALL HAVE A MIN. COVER OF 24 INCHES AND NO DEEPER THAN 36 INCHES.
NOTES:
A. PROVIDE BLUE SEALANT IN ADDITION TO PRE-FILLED CONNECTOR.
B. PROVIDE WIRE CONNECTORS FOR ALL CONTROL WIRE SPLICES.
C. PROVIDE WIRE CONNECTORS AT ENDS OF ALL EXTRA WIRES.
D. WIRE SPLICES SHALL BE INSIDE VALVE BOXES AT VALVES OR FOR RUNS OVER 2500 FEET.
E. PROVIDE #12 CONTROL WIRE & #10 COMMON WIRE FOR RUNS OVER 2500 FEET.
F. SOLDER WIRE SPLICES FOR MASTER VALVE AND FLOW METER CONNECTIONS.
G. WIRE CONNECTORS SHALL BE 3M DBR-6 PER SPECS OR APPROVED EQUAL.
H. INSTALL WIRING PER DETAILS AND SPECIFICATIONS.

PLAN
NO SCALE

WIRE CONNECTOR
(LOW VOLTAGE)
NOTES:
A.  ALL WIRING MUST CONFORM TO LOCAL CODES.
B.  PROVIDE 24 INCHES EXPANSION COILS AT EACH WIRE CONNECTION.
C.  PROVIDE 3-INCH CLEARANCE BETWEEN WIRES AND BOX.
D.  EPOXY ALL GAPS BETWEEN WIRE AND CONDUIT AT EXPOSED SWEEP ENDS.
E.  PROVIDE 4 EA. CONCRETE BRICKS UNDER VALVE BOX (TYP.).
F.  NO WIRE SPLICES SHALL BE ALLOWED UNLESS APPROVED BY THE CITY
G.  ALL SPARE WIRES FOR END RUN SHALL BE IN A PULL BOX TYP. AND SHALL BE LABELED IN BOX
AND AT CONTROLLER.
H.  PROVIDE PULL BOX FOR ALL WIRE SPLICES FOR RUNS OVER 2500 FEET OR AS APPROVED BY CITY.

1.  FINISH GRADE IN PLANTER 3 INCHES BELOW BOX
2.  RECTANGULAR VALVE BOX W/LOCKING SS BOLT - HEAT BRAND "PB" ON LID
3.  APPROVED WIRE CONNECTORS
4.  36-INCH EXPANSION COILS
5.  FINISH GRADE IN TURF 1 INCH BELOW BOX
6.  NATIVE SOIL COMPACTED TO ORIGINAL DENSITY
7.  PVC CONDUIT SWEEP FOR IRRIGATION CONTROL WIRING (WHEN SPECIFIED)
8.  3 CU. FT. 3/4-INCH GRAVEL

SECTION
NO SCALE
1. POP-UP ROTOR HEAD WITH CHECK VALVE BODY PER LEGEND
2. PVC SCHEDULE 80 NIPPLE
3. PVC SCHEDULE 40 STREET ELL - T X T
4. MARLEX STREET ELL - T X T
5. PVC SCHEDULE 40 LATERAL LINE FITTING (TEE OR ELL) - S X S X T
6. LATERAL LINE PER LEGEND
7. FINISH GRADE (TOP OF HEAD 2 INCHES ABOVE F.G. IN PLANTER, 3/4-INCH ABOVE GRADE IN TURF)
8. REFER TO SPECIFICATIONS FOR PIPE DEPTH
9. REFER TO PLANS AND SPECIFICATIONS FOR SPACING
10. HARDSCAPE - TYP.

NOTES:
A. INSTALL 12-INCH POP-UP ROTORS FOR TURF AREAS WITHIN BOTTOM OF DETENTION BASINS.
B. INSTALL HEADS PLUMB TO FINISH GRADE.
1. ROTOR SHRUB HEAD
2. STAINLESS STEEL HOSE CLAMPS OR APPROVED SUBS. (2 REQUIRED)
3. ANTI-DRAIN CHECK VALVE, AS REQUIRED
4. FINISH GRADE
5. SCHEDULE 80 PVC RISER - LENGTH AS REQUIRED
6. SCHEDULE 40 PVC 90 DEGREE ELL
7. MARLEX STREET ELL (2)
8. SCHEDULE 80 PVC NIPPLE (TYP.)
9. SCHEDULE 40 PVC FITTING (TEE OR ELL - S X S X T
10. PVC NON-PRESSURE LATERAL PIPING (SIZED PER PLAN)
11. #4 REBAR SUPPORT (30-INCH LENGTH MIN.)
12. REFER TO SPECIFICATIONS FOR PIPE DEPTH

NOTES:
A. CONTRACTOR SHALL INSTALL ANTI-DRAIN VALVES, AS REQUIRED, TO PREVENT LOW HEAD DRAINAGE.
B. INSTALL SPRINKLER HEADS A MINIMUM OF 8 INCHES FROM WALLS AND FENCES.
C. USE 3/4-INCH FITTINGS AND RISERS WHEN SPRINKLER INLET IS 3/4-INCH.
D. INSTALL POP-UP ROTORS WITHIN 8 FEET OF SIDEWALKS, CURBS, TRAILS, PAVING, AND TURF.
E. INSTALL HEADS PLUMB TO FINISH GRADE.
1. POP-UP SPRAY HEAD WITH CHECK VALVE BODY PER LEGEND
2. PVC SCHEDULE 80 NIPPLE
3. PVC SCHEDULE 40 STREET ELL - T X T
4. MARLEX STREET ELL - T X T
5. PVC SCHEDULE 40 LATERAL LINE FITTING (TEE OR ELL) - S X S X T
6. NON PRESSURE LATERAL LINE PER LEGEND
7. FINISH GRADE (TOP OF HEAD 2 INCHES ABOVE F.G. IN PLANTER, 3/4-INCH ABOVE GRADE IN TURF)
8. REFER TO SPECIFICATIONS FOR PIPE DEPTH
9. REFER TO PLANS AND SPECIFICATIONS FOR SPACING
10. HARDSCAPE TYP.

NOTES:
A. ALL HEADS ADJACENT TO CONCRETE SURFACE SHALL BE FLUSH TO TOP OF CONCRETE.
B. INSTALL HEADS / RISERS PLUMB TO FINISH GRADE.
1. WALL OR FENCE
2. GRADE IN PLANTER
3. V.I.T. SPRINKLER TIE (2 PLACES) USE RATCHET TOOL TO SECURE
4. SHRUB ADAPTER W / NOZZLE PER LEGEND AND SPECS.
5. 1/2-INCH MT X FT CHECK VALVE AS REQUIRED
6. SCHEDULE 80 RISER
7. NATIVE SOIL COMPACTED TO ORIGINAL DENSITY
8. 1/2-INCH SCHEDULE 40 STREET ELL TYP. 3X
9. 1/2-INCH X 12-INCH SCHEDULE 80 NIPPLE
10. SCHEDULE 40 TEE SLIP X FT
11. LATERAL LINE PER SPECS.
12. #4 X 30-INCH REBAR

NOTES:
A. USE 3/4-INCH TEFLOM TAPE FOR ALL THREADED FITTINGS.
B. INSTALL HEADS / RISERS PLUMB TO FINISH GRADE.
C. INSTALL RISERS 12 INCHES FROM WALL OR FENCE.
D. ADJUST ALL NOZZLES TO PREVENT OVERSPRAY ONTO HARDSCAPE.
E. USE POP-UP SPRAY HEADS WITHIN 8 FEET OF SIDEWALK, TURF, OR CURBING.
1. ROTOR TYPE SPRINKLER - INSTALL SPRINKLER AT ANGLE FOR MAX. RADIUS WHEN IRRIGATING SLOPES
2. INDICATES LOCATION OF CHECK VALVE AS REQUIRED IN FIELD TO ELIMINATE LOW HEAD DRAINAGE
3. SECURE RISERS FOR ROTOR-TYPE SPRINKLERS WITH #4 x 30-INCH REBAR STAKE
4. 2-INCH "PUNCH LOK" CLAMPS OR APPROVED SUBSTITUTION (USED W/RE-BAR)
5. 12-INCH MIN. FROM TOP AND TOE OF SLOPE OR PAVING, WALLS, AND FENCES (TYP.)
6. TOP OF SLOPE
7. PVC SCH. 80 RISER - LENGTH AS REQUIRED
8. TOE OF SLOPE
9. FINISH GRADE
10. REFER TO SPEC. FOR PIPE DEPTH
11. PVC SCHEDULE 40 STREET ELLS
12. NON-PRESSURE PVC LATERAL LINE AND FITTINGS (TEE OR ELL) S X S X T

NOTES:
A. RISER / SPRINKLER ASSEMBLY SHALL NOT BE BLOCKED BY VEGETATION - ADJUST PLANT PLACEMENT AS REQUIRED.
B. DO NOT LOCATE HEADS ON RISERS CLOSER THAN 8 FEET TO TURF, SIDEWALKS, CURBS, AND ROADWAYS.
1. SPRAY TYPE SPRINKLER - INSTALL SPRINKLER AT ANGLE FOR MAX. RADIUS WHEN IRRIGATING SLOPES
2. INDICATES LOCATION OF CHECK VALVE AS REQUIRED IN FIELD TO ELIMINATE LOW HEAD DRAINAGE
3. SECURE RISERS FOR ROTOR-TYPE SPRINKLERS WITH #4 x 30-INCH REBAR STAKE
4. 2-INCH PUNCH LOK* CLAMPS OR APPROVED SUBSTITUTION (USED W/RE-BAR)
5. 12-INCH MIN. FROM TOP AND TOE OF SLOPE OR PAVING (TYP.)
6. TOP OF SLOPE
7. PVC SCH. 80 RISER - LENGTH AS REQUIRED
8. TOE OF SLOPE
9. FINISH GRADE
10. REFER TO SPEC. FOR PIPE DEPTH
11. PVC SCHEDULE 40 STREET ELLS
12. NON-PRESSURE PVC LATERAL LINE AND FITTINGS (TEE OR ELL) S X S X T

NOTES:
A. RISER / SPRINKLER ASSEMBLY SHALL NOT BE BLOCKED BY VEGETATION - ADJUST PLANT PLACEMENT AS REQUIRED.
B. DO NOT LOCATE HEADS ON RISERS CLOSER THAN 8 FEET TO TURF, SIDEWALKS, CURBS, AND ROADWAYS.

CITY OF MENIFEE
SHRUB SPRAY ON RISER (ON SLOPE )

4/24/15
JONATHAN GEORGE SMITH
DIRECTOR OF PUBLIC WORKS

APPROVED BY:
1. EXPANSION COILS BEFORE WIRE SPLICES - 24 INCHES LENGTH MINIMUM
2. WATERPROOF WIRE SPLICES AT SOLENOID
3. REMOTE CONTROL VALVE PER LEGEND
4. FINISH GRADE - 3 INCHES IN SHRUB AREAS, 1-INCH IN LAWN
5. RECTANGULAR PLASTIC VALVE BOX WITH LOCKING COVER - JUMBO SIZE (MIN.)
6. PVC SCH. 80 NIPPLE - S X T
7. PVC SCH. 80 ELL OR TEE - LINE SIZE
8. INSTALL VALVE BOX LEVEL ON FOUR STANDARD BRICK SUPPORTS
9. 3/4-INCH CRUSHED ROCK - 3 CU FT. MINIMUM
10. PRESSURE - REGULATING VALVE PER LEGEND (PRE-SET)
11. PVC SCH. 80 UNION
12. FILTER PER LEGEND
13. 1-INCH MINIMUM CLEARANCE BETWEEN PIPE AND KNOCKOUT
14. PVC SCH. 40 ADAPTER

NOTES:
A. BUNDLE CONTROL WIRES WITH TAPE AT 10-FEET O.C.
B. USE TEFLON TAPE ON ALL THREADED JOINTS.
C. ATTACH PLASTIC TAGS WITH VALVE STATION NO. IN 2-INCH HIGH LETTERS / NUMBERS.
D. HEAT BRAND BOX COVER W/VALVE STATION ID IN 2-INCH HIGH LETTERS / NUMBERS.
E. WRAP BOTTOM AND SIDES OF VALVE BOX WITH FILTER FABRIC TO COVER OPENINGS (TYP.).
1. REMOTE CONTROL VALVE AT TOP OF SLOPE (ONLY WHEN NECESSARY)
2. SCHEDULE 40 UVR PVC PER SPECS. - SIZE PER PLAN
3. SENNINGER INLINE PRESSURE REGULATOR
4. SCHEDULE 40 UVR PVC FROM VALVE - SIZE PER PLAN
5. PVC SWING CHECK VALVE
6. SCHEDULE 40 UVR PVC FROM VALVE WHEN INSTALLED AT TOP OF SLOPE
7. 3/4-INCH X 6-INCH SCHEDULE 80 NIPPLE USE CUT NIPPLE FOR TOP OF LINE WHERE TEE IS SLIP X SLIP
8. SCHEDULE 40 UVR PVC TEE - LINE SIZE BY 3/4-INCH S X S X T
9. EPOXY COATED REBAR J-HOOK @ 8' SPACING
10. UVR PVC LATERAL TO FILTER AND VALVE
11. BASKET FILTER
12. REMOTE CONTROL VALVE AT TOE OF SLOPE (TYPICAL CONFIGURATION)

NOTES:
A. FLUSH LATERAL LINES COMPLETELY BEFORE INSTALLATION OF PRESSURE REGULATORS.
B. ALL PIPING SHALL BE PRIMED PRIOR TO GLUE APPLICATION PER SPECS.
C. ALL PIPING SHALL BE BURIED 4 INCHES MIN.

4/24/15

CITY OF MENIFEE
CHECK VALVE & PRESSURE REG.
1. Piping elevation shall not exceed 18 inches of elevation change
2. Vine emitter @ 10' O.C. spacing, or per plan
3. Flush valve end cap - 200 feet max per detail
4. Swing check valve below each horz. line
5. Epoxy coated J-hooks per specs.
6. Emitter assembly per detail 1428
7. 9-inch PVC coated galv. staple
8. Schedule 80 ball valve typ. - line size
10. Pressure regulator per detail 1426
11. UVR ells for slope grade transition when applicable
12. Remote control valve per detail 1407 / 12 inches from sidewalk
13. Filter
14. Mainline per specs.

Notes:
A. All piping for point to point laterals shall be buried 4 inches deep. Piping shall be UVR PVC and have J-hooks per details and specs.
B. All UVR pipe joints and fittings below grade and above grade shall be primed.

City of Menifee
Point to Point Irrigation
Below Grade Laterals

Plan
No Scale

Approved by: 4/24/15

Jonathan George Smith
Director of Public Works
1. UVR S X S X T TEE
2. UVR S X S X T TEE
3. UVR PVC LATERAL LINE
4. EPOXY COATED REBAR J-HOOK PER SPECS.
5. 1/2-INCH SALCO OR GPH TUBING RISER PER SPECS.
6. 9-INCH PVC COATED GALV. STAPLE
7. SALCO OR GPH RISER ASSEMBLY PER SPECS.
8. SALCO OR GPH 2 GPH EMITTER PER SPECS.

NOTES:
A. ALL PIPE AND FITTINGS SHALL BE PVC SCH. 40 UV-RESISTANT.
B. ALL PIPING SHALL BE BURIED 4 INCHES MIN.

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<th>PLANT SPACING</th>
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1. CONNECTION TO PVC LATERAL LINE WITH PVC SCHEDULE 40 UVR PVC TEE (SLIP X SLIP)
2. 3/4-INCH MINIMUM SCHEDULE 40 UVR PVC LATERAL LINE, INSTALL PARALLEL TO FACE OF SLOPE WITH NO ELEVATION CHANGE OVER 18 INCHES
3. EPOXY COATED REBAR J-HOOK PER SPECIFICATIONS
4. 1/2-INCH SCHEDULE 40 UVR PVC PIPING AS REQ'D. INSTALL PERPENDICULAR TO SLOPE
5. SCHEDULE 40 UVR PVC ELL SLIP X FT
6. SCHEDULE 40 UVR PVC TEE SLIP X FT
7. 1/2-INCH X 12 INCHES SALCO OR GPH FLEXIBLE TUBING RISER ASSEMBLY WITH MALE ADAPTERS ON EACH END.
8. 9-INCH PVC COATED GALVANIZED STAPLE
9. TREE PLANTING PER PLANTING PLANS
10. 1/2-INCH SALCO OR GPM FLEXIBLE TUBING RISER ASSEMBLY WITH MALE ADAPTERS ON EACH END. LENGTH AS REQ'D. TO CENTER EMMITTER AROUND ROOTBALL
11. LOW VOLUME DRIP EMMITTER PER SPECS. AND PLAN - SEE DRIP SCHEDULE BELOW

NOTES:
A. ALL TREES SHALL RECEIVE THE NUMBER OF DRIP EMITTERS SHOWN BELOW.
   5 AND 15 GALLON TREES - 4 DRIP EMITTERS
   24" BOX TREES - 4 DRIP EMITTERS
   36" BOX TREES - 5 DRIP EMITTERS
   48" BOX TREES - 6 DRIP EMITTERS
B. DRIP EMITTERS SHALL BE PLACED DIRECTLY ADJACENT TO TREE ROOTBALL.
C. ALL IRRIGATION SHALL BE COMPLETELY INSTALLED PRIOR TO PLANTING.
D. ALL PIPE AND FITTINGS SHALL BE PVC SCH. 40 UV-RESISTANT.
E. ALL PIPING SHALL BE BURIED 4 INCHES MIN.
1. SALCO OR GPH 2 GPH EMITTER PER SPECS. EMITTER TO BE LOCATED AT REAR OF PLANT ROOTBALL
2. BARK MULCH - 3 INCHES THICK
3. 1/2-INCH SALCO OR GPH TUBING PER SPECS.
4. 9-INCH PVC COATED GALV. STAPLE
5. GPH OR SALCO BLACK UVR MALE ADAPTER
6. EMITTER TO BE LOCATED AT EDGE OF PLANT ROOTBALL
7. PVC SCHEDULE 40 LATERAL LINE / BURY 4 INCHES DEPTH MIN.
1. TREE BASIN PER SPECS.
2. TREE ROOTBALL TYP. (1-INCH MIN. ABOVE FINISH GRADE)
3. 4-INCH FLAT DRAIN CAP WITH VANDAL PROOF SCREW
4. FINISH GRADE
5. PVC LATERAL PER SPECS.
6. TRIPLE SWING JOINT
7. ROOT WATER SYSTEM (RWS) - PLACE AT EDGE OF ROOTBALL
8. NATIVE SOIL COMPACTED TO ORIGINAL DENSITY
9. TREE STAKE PER PLANTING DETAILS.
10. MULCH PER SPECIFICATIONS
11. 12 INCHES MIN.

NOTES:
A. ROOT WATERING SYSTEMS SHALL ONLY BE USED WHEN POINT TO POINT IRRIGATION IS NOT USED.
B. PROVIDE TWO RWS PER TREE WITH 1 GPM BUBBLER EACH.
C. PROVIDE PERFORATED PVC PIPE IN ADDITION TO RWS.
D. CLEAR MULCH 6 INCHES MIN. FROM TREE TRUNKS (TYP.)
1. FINISH GRADE
2. AMENDED TOPSOIL-REFER TO SPECS.
3. MULCH - REFER TO SPECIFICATIONS FOR DEPTH
4. 4-INCH DEPTH MIN.
5. DRIPPERLINE TUBING -REFER TO IRRIGATION LEGEND
6. DRIPPERLINE TUBING LATERAL SPACING - REFER TO LEGEND FOR SPACING
7. TUBING STAKE (6-INCH LENGTH MIN.) REFER TO SPECIFICATIONS FOR SPACING
1. Line flushing valve plumbed to PVC at low point / each end of drip circuit
2. Dripperline start connection - typ.
3. PVC supply header - typ. / size per plan
4. Dripperline spacing per plan / legend
5. Dripperline start connection - typ.
6. Disc filter and PRV (separate box and assembly, if required)
7. Remote control valve / low volume
8. Area perimeter / edge of hardscape
9. Dripperline tubing lateral
10. Air/vacuum relief valve at high point (as req'd - refer to legend)
11. Perimeter laterals 2 inches to 4 inches from edge
12. PVC exhaust header - typ. - (1-inch max.)

Notes:
A. Refer to legend for dripperline design pressure and maximum tubing run.
1. LINE FLUSHING VALVE PLUMBED TO PVC AT LOW POINT / EACH END OF DRIP CIRCUIT
2. DRIPPERLINE SPACING PER PLAN / LEGEND
3. 1-INCH MAX. PVC EXHAUST HEADER - TYP.
4. PVC SUPPLY HEADER - TYP. / SIZE PER PLAN
5. DRIPPERLINE START CONNECTION - TYP.
6. DISC FILTER AND PRV (SEPARATE BOX AND ASSEMBLY, IF REQUIRED)
7. REMOTE CONTROL VALVE / LOW VOLUME
8. AREA PERIMETER / EDGE OF HARDSCAPE
9. DRIPPERLINE TUBING LATERAL
10. AIR/VACUUM RELIEF VALVE AT HIGH POINT (AS REQ'D - REFER TO LEGEND)
11. PERIMETER LATERALS 2 INCHES TO 4 INCHES FROM EDGE

NOTES:
A. REFER TO LEGEND FOR DRIPPERLINE DESIGN PRESSURE
   AND MAXIMUM TUBING RUN.
1. Minimum of 18-inch length of 1/2-inch rubber hose or blank tubing
2. 10-inch round valve box. Refer to specs. (do not cut additional holes in box)
3. Finish grade 3 inches in shrub area
4. 1-inch in turf
5. Clean backfill material
6. Filter fabric. Wrap 1 layer around box, covering holes
7. Sch. 40 PVC 3/4-inch x 1/2-inch barb hose adapter
8. Sch 40 PVC 3/4-inch threaded nipple
9. Sch 40 PVC 45 degree ell
10. End of PVC header / refer to plan for size
11. Base and sump / 3/4-inch crushed rock (compact rock for box base), fill rock to bottom of valve (18-inch depth min.)
12. Refer to specifications for pipe depth
13. Brick supports / 4 required

Notes:
A. Heat brand "FV" on valve box lid.
1. FINISH GRADE
2. 6-INCH ROUND VALVE BOX - SEE NOTE A
3. AIR/VACUUM RELIEF VALVE - REFER TO LEGEND
4. 1/2-INCH PVC COUPLING (T x T) / SCH 40
5. 1/2-INCH SCH 80 PVC RISER (LENGTH AS REQUIRED)
6. BRICK SUPPORTS (THREE)
7. 3/4-INCH CRUSHED ROCK SUMP (ONE CU.FT. MIN.)
8. PVC PIPE AND FITTINGS - REFER TO SPECIFICATIONS FOR DEPTH
9. 1-INCH IN LAWN, 3 INCHES IN SHRUB AREAS
10. 2 INCHES
11. SEE SPECIFICATIONS FOR DEPTH

NOTE:
A. HEAT BRAND "AR" ON VALVE BOX LID.
1. Finish Grade
2. 6-Inch Round Valve Box
3. Air/Vacuum Relief Valve - Refer to Legend
4. PVC Schedule 40 Comp X FIPT X Comp Tee
5. Brick Supports (Three)
6. 3/4-Inch Crushed Rock Sump (1 Cu. Ft. Min.)
7. Subsurface Tubing - See Specifications
8. 1-Inch in Lawn, 2 Inches in Shrub Areas
9. 2 Inches
10. See Specifications for Depth
1. Finish Grade
2. 180-Degree Two-Way Tee
3. Drip Tubing - Refer to Legend
4. 3/4-Inch Schedule 80 PVC Nipple
5. PVC Schedule 40 (S X S X T)
6. PVC Schedule 40 Lateral Piping

SECTION
NO SCALE

SEE SPECS.

SEE SPECS.
1. Flush Assembly
2. Flange (2 Req'd) - Size Varies
3. Filter (Yardney or Approved Substitution) - Per Specs.
4. Brass Union (1 Req'd) - Line Size
5. Brass Nipples / Risers - Length Varies (5 Req'd) - Line Size
6. Brass / Bronze Ball Valve (1 Req'd) - Line Size
7. Stainless Steel Strainer Enclosure (D&M Manuf. W / Padlock)
8. Pre Fabricated Quickpad and Mounting Hardware
9. Finish Grade (3 Inches Below Top of Pad)
10. Brass / Copper Mainline to Master Valve and Flow Sensor
11. Brass Elbows T X T (3 Req'd - Line Size)
12. Brass / Copper Mainline from Water Source
13. Pea Gravel
14. Recycled Water Warning Tag - Per Local Standards (If Using Recycled Water)
15. Concrete Thrust Block - 2 C.F. Min.
16. Polar Barrier Cover - Size Per Filter

Notes:
A. Obtain EMWD Approval Prior to Installation.
B. Locate Backflow / Filter in Planter Where Possible.
C. All Exposed Piping Shall Be Brass.
D. All Ball Valves and Unions Must Be 4 Inches Min. Above Pad.
1. GRADE IN PLANTER 3 INCHES BELOW BOX
2. 10-INCH ROUND VALVE BOX W/LOCKING SS BOLT / HEAT BRAND "BV" ON LID
3. 8-INCH PVC CLASS 160 PIPE
4. SELF-RESTRAINED RESILIENT WEDGE GATE VALVE - PER SPECS.
5. GRADE IN TURF 2 INCHES BELOW BOX
6. 3 CU. FT. 3/4-INCH GRAVEL (MIN.)
7. 1/2-INCH GALV. WIRE MESH BELOW BOX
8. MAINLINE BELL AND GASKET PVC
9. IRON DUCTILE RESTRAINT - SEE SPECIFICATIONS
10. ROUNDED PEA GRAVEL OVER DOUBLE WRAPPED PIPING AND VALVE
11. 12-INCH X 16-INCH X 4-INCH CONCRETE SUPPORT
12. STEEL POWDER COATED VALVE STAND (2X PER VALVE)
13. MIRAFI FILTER FABRIC
14. NATIVE SOIL COMPACTED TO 90% RELATIVE DENSITY

NOTES:
A. CONTRACTOR SHALL PROVIDE 5 FOOT TEE WRENCH WITH 2-INCH SQUARE NUT FOR BUTTERFLY VALVE OPERATION.
B. PROVIDE CONCRETE BRICKS UNDER VALVE BOX (TYP.) - 3 EACH
1. 10-INCH ROUND VALVE BOX W/ LOCKING SS BOLT (SEE SPECIFICATIONS) - DO NOT CUT ADDITIONAL HOLES INTO BOX
2. FINISH GRADE
3. 8-INCH PVC CLASS 160 SLEEVE - TO REST ON TOP OF EDGE OF VALVE ASSEMBLY
4. ISOLATION GATE VALVE WITH 2-INCH SQUARE OPERATING NUT - SEE SPECIFICATIONS
5. 3/4-INCH CRUSHED ROCK UNDER VALVE BOX - FILL TO TOP OF VALVE BOX HOLES
6. INSTALL FILTER FABRIC AROUND GRAVEL SUMP AND VALVE BOX
7. FLG X SLP SCH. 80 PVC FLANGE (2 REQUIRED)
8. PRESSURE SUPPLY LINE - REFER TO PLAN FOR SIZE
9. CONCRETE BRICK SUPPORTS - 3 EACH
10. 1/2-INCH GALV. WIRE MESH BELOW BOX
1. FINISH GRADE IN PLANTER - 4 INCHES BELOW BOX
2. UVR/PVC LATERAL LINE - DEPTH PER SPECS.
3. STD. RECTANGLE VALVE BOX WITH LOCKING SS BOLT
   (HEAT BRAND "F" FOR FILTER)
4. PVC SCH 80 UNION
5. 1/2-INCH GALV. WIRE MESH BELOW BOX
6. PVC SCH 80 NIPPLE 24-INCH MIN. LENGTH
7. PVC SCH 80 FEMALE COUPLING
8. BASKET FILTER (VALVE SIZE) USE 2 FILTERS FOR
   FLOWS OVER 20.0 GPM / PROVIDE 75/100 MESH SCREEN
9. PVC SWING CHECK VALVE (AS REQUIRED)

NOTES:
A. REFER TO DETAIL 1407 FOR ALL RCV REQUIREMENTS.
1. BACKFLOW PER EMWD STANDARD B-597A

2. THEFT PREVENTION DEVICES SHALL BE INSTALLED FOR BRONZE ASSEMBLIES ALLOWING ADEQUATE ACCESS TO THE ASSEMBLY FOR TESTING, MAINTENANCE, AND PROPER DRAINAGE.

NOTES:

A. BACKFLOW CERTIFICATION TESTING IS REQUIRED ANNUALLY AT A MINIMUM BUT MAY BE MORE FREQUENT AS DEEMED NECESSARY BY EMWD. CERTIFICATION TESTING IS REQUIRED IMMEDIATELY AFTER AN ASSEMBLY IS RELOCATED, REPAIRED, NEW INSTALLATION ACCEPTANCE AND WATER DELIVERY PER EMWD ORD. 69 PRIOR TO INSTALLATION ACCEPTANCE AND WATER DELIVERY.

B. PARALLEL INSTALLATIONS OF THE SAME TYPE OF BACKFLOW PREVENTION ASSEMBLIES ARE STRONGLY RECOMMENDED FOR ALL FACILITIES REQUIRING UNINTERRUPTED WATER SUPPLY, SUCH AS HOSPITALS AND SCHOOLS.

C. FREEZE PROTECTION IS RECOMMENDED, BUT THE RELIEF VALVE MUST BE ABLE TO VENT FREELY AND TESTCOCK OPENINGS SHALL BE LEFT EXPOSED.

D. SUBMIT PRODUCT CUT SHEETS TO CITY OF MENIFEE FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION.
# PLANT SPACING SCHEDULE

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## Notes:
1. PLANTER EDGE (TYP.) - VARIES
2. TRIANGULAR SPACING (TYP.)

### Plan

**NO SCALE**

1. PLANET EDGE (TYP.) - VARIES
2. TRIANGULAR SPACING (TYP.)

### Notes:

A. ALL GROUND COVER AREAS SHALL RECEIVE MULCH (1.5-INCH DEPTH MIN.) - REFER TO SPECIFICATIONS.
B. PLANTING AREAS, EXCEPT GROUND COVER FROM FLATS, SHALL BE MULCHED AT 3-INCH DEPTH (MIN.) - REFER TO SPECIFICATIONS.
C. ALIGN PLANTING ROWS WITH LONGEST DIMENSION OF PLANTING AREA (TYP.)
D. 3-FOOT SETBACK (MAX.) - VERIFY IN FIELD

---

**CITY OF MENIFEE**

**PLANT SPACING**

(FLATS OR CONTAINERS)

**APPROVED BY:**

4/24/15

**DIRECTOR OF PUBLIC WORKS**

JONATHAN GEORGE SMITH

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1. SHRUB
2. ROOT CROWN SET 1-INCH (MIN.) ABOVE FINISH GRADE
3. TEMPORARY WATERING BASIN AND BERM - 3 INCHES HIGH
4. FINISH GRADE
5. ROOT BALL - SET ON FIRM NATIVE SOIL
6. FERTILIZER TABLETS - REFER TO SPECIFICATIONS
7. BACKFILL MIX - REFER TO SPECIFICATIONS
8. PLANT PIT - SCARIFY SIDES AND BOTTOM
9. TWO TIMES DIAMETER OF ROOTBALL
10. DEPTH OF ROOT BALL (MINUS 1-INCH)
11. MULCH (3-INCH DEPTH MIN.) - REFER TO SPECIFICATIONS FOR MATERIAL

NOTES:
A. SLASH ROOT BALL VERTICALLY ON FOUR SIDES (1-INCH DEEP) PRIOR TO PLANTING.
B. TAMP BACKFILL MIX LIGHTLY TO REMOVE AIR POCKETS IN THE SOIL.
C. MAINTAIN 6-INCH RADIUS (MIN.) AROUND PLANT TRUNK CLEAR OF MULCH.
D. FOR NATIVE SPECIES, ELIMINATE MULCH IN PLANT PIT AREA.
1. TREE OR SHRUB
2. ORIGINAL SLOPE
3. ROOT CROWN
4. PERMANENT BERM / 3-INCH HEIGHT
5. 1:1 SLOPE (MAXIMUM)
6. BACKFILL MIX - REFER TO SPECIFICATIONS
7. ROOT BALL - SET ON FIRM NATIVE SOIL
8. FERTILIZER TABLETS - REFER TO SPECIFICATIONS. (8-INCH DEPTH MAXIMUM)
9. SLOPE BOTTOM OF PLANT PIT
10. TWO TIMES DIAMETER OF ROOT BALL (MINIMUM)
11. DEPTH OF ROOT BALL (MINUS 1-INCH)
12. MULCH (3-INCH DEPTH MIN.) - REFER TO SPECIFICATIONS FOR MATERIAL

NOTES:
A. SLASH ROOTBALL VERTICALLY ON FOUR SIDES (1-INCH DEEP) PRIOR TO PLANTING.
B. TAMP BACKFILL MIX LIGHTLY TO REMOVE AIR POCKETS IN THE SOIL.
C. MAINTAIN 6-INCH RADIUS (MIN.) AROUND PLANT TRUNK CLEAR OF MULCH.
D. FOR NATIVE SPECIES, ELIMINATE MULCH IN PLANT PIT AREA.
1. FACE OF WALL OR FENCE
2. VINE / SPREAD ON WALL & SECURE W/ ANCHORS (REFER TO SPECS)
3. REMOVE NURSERY STAKE
4. SET ROOT BALL TIGHT TO FOOTING, REMOVE ANY EXCESS TRASH, CONC. AT PLANTING HOLE
5. MAINTAIN FREE AREA 3 INCHES FROM TRUNK
6. 3-INCH HIGH WATERING BASIN
7. FINISH GRADE
8. 1 X ROOT BALL (MINUS 1-INCH)
9. 2 X ROOT BALL
10. FERTILIZER TABLETS - REFER TO SPECS. (8-INCH DEPTH MAX.)
11. PLANTING BACKFILL - REFER TO SPECIFICATIONS
12. ALL PLANTING AREAS, INCLUDING BASINS SHALL RECEIVE A 3-INCH LAYER OF APPROVED MULCH.

NOTES:
A. SLASH ROOTBALL VERTICALLY ON FOUR SIDES (1-INCH DEEP) PRIOR TO PLANTING.
B. TAMP BACKFILL MIX LIGHTLY TO REMOVE AIR POCKETS IN THE SOIL.
C. MAINTAIN 6-INCH RADIUS (MIN.) AROUND PLANT TRUNK CLEAR OF MULCH.
D. FOR NATIVE SPECIES, ELIMINATE MULCH IN PLANT PIT AREA.

SECTION NO SCALE
1. VINYL TREE TIES - NAIL TO TREE STAKES (4 REQUIRED)
2. TREE TRUNK
3. LODGEPOLE STAKES (2) - 10 FEET LONG X 2-INCH DIAMETER (MIN.)
4. ROOT CROWN SET 1-INCH ABOVE FINISH GRADE (MIN.)
5. TEMPORARY WATERING BASIN AND BERM
6. FINISH GRADE
7. ROOT BALL - SET ON FIRM NATIVE SOIL
8. BACKFILL MIX - REFER TO SPECIFICATIONS
9. FERTILIZER TABLETS - REFER TO SPECIFICATIONS (8-INCH DEPTH MAX.)
10. PLANT PIT - SCARIFY SIDES AND BOTTOM
11. TWO TIMES DIAMETER OF ROOT BALL (MINIMUM)
12. 12 INCHES DEPTH (MIN.) INTO NATIVE SOIL BELOW ROOTBALL
13. DEPTH OF ROOT BALL - MINUS 1-INCH
14. MULCH - REFER TO SPECIFICATIONS (3-INCH DEPTH MIN.)

NOTES:
A. REMOVE WATERING BASIN PRIOR TO END OF MAINTENANCE PERIOD.
B. SLASH ROOT BALL VERTICALLY ON FOUR SIDES (1-INCH DEEP) PRIOR TO PLANTING.
C. SINGLE STAKE 5 GALLON TREES DOUBLE STAKE 15 GALLON TREES.
D. TAMP BACKFILL MIX LIGHTLY TO REMOVE AIR POCKETS IN SOIL.
E. IN AREAS WITH HIGH WINDS, 3-INCH DIAMETER STAKES AND / OR V.I.T. TWIST BRACES MAY BE REQUIRED - REFER TO SPECIFICATIONS.
F. MAINTAIN 6" CLEARANCE (MIN.) AROUND TREE TRUNK CLEAR OF MULCH.
1. LODGEPOLE STAKE (2-INCH DIAMETER)
2. TREE TRUNK
3. VINYL TREE TIE (NAIL TO STAKE)
4. 6 INCHES MINIMUM CLEARANCE
5. LODGEPOLE STAKES, 10 FEET LONG (2 REQUIRED)
6. VINYL TREE TIE WITH FIGURE 8 LOOP BETWEEN STAKE AND TREE (4 REQUIRED) - REFER TO SPECIFICATIONS
7. 4-INCH FLAT DRAIN CAP, LEVEL WITH MULCH SURFACE
8. 3/4-INCH CRUSHED ROCK (1 CU. FT. MIN.) - 12 INCHES X 12 INCHES
   SUMP BELOW TREE PIT (2 PER TREE)
9. 1 X ROOT BALL (MINUS 2 INCHES)
10. 4-INCH PERFORATED PVC PIPE - WRAP IN FILTER FABRIC SOCK (2 PER TREE ON OPPOSITE SIDES OF ROOT BALL)
11. 2 X ROOT BALL (MINIMUM)
12. ROOT CROWN - 2 INCHES ABOVE FINISH GRADE (MINIMUM)
13. MAINTAIN MULCH-FREE AREA 6 INCHES FROM TRUNK
14. MULCH - REFER TO SPECIFICATIONS (3-INCH DEPTH MIN.)
15. 6-INCH BASIN IN GROUND COVER & SHRUBS / 3-INCH BASIN IN LAWN
16. FINISH GRADE
17. FERTILIZER TABLETS (8-INCH DEPTH MAXIMUM) REFER TO SPECIFICATIONS
18. PLANTING BACKFILL (REFER TO SPECIFICATIONS) - TAMP LIGHTLY TO REMOVE AIR
19. NATIVE SUBGRADE SOIL
20. PLACE STAKES OUTSIDE ROOT BALL - REFER TO NOTE "B"

NOTES:
A. SET ROOT BALL ON FIRM NATIVE SUBGRADE AT BOTTOM OF PLANTING PIT. SCARIFY SIDES AND BOTTOM OF PLANT PIT PRIOR TO BACKFILLING. SLOPE BOTTOM OF PIT TO PERFORATED PIPE.
B. STAKES SHALL NOT BE DRIVEN THROUGH, OR OTHERWISE CAUSE INJURY TO ROOT BALL. STAKES SHALL EXTEND 12 INCHES (MINIMUM) INTO NATIVE SUBGRADE (BELOW ROOTBALL).
C. STAKE TREE PERPENDICULAR TO DIRECTION OF PREVAILING WIND.
D. IN AREAS WITH HIGH WINDS, 3-INCH DIAMETER STAKES AND / OR V.I.T. TWIST BRACES MAY BE REQUIRED - REFER TO SPECIFICATIONS

SECTION
NO SCALE

9/18/15

CITY OF MENIFEE
TREE PLANTING
AND STAKING
(24-INCH TO 36-INCH BOX)

STANDARD PLAN NO. 1506
SHEET 1 OF 1
1. 4-INCH ROUND DRAIN GRATE CAP, FLUSH WITH MULCH SURFACE
2. 3 TREE TIES, INSTALL AT END OF WIRES AT POINT OF CONTACT WITH TREE TRUNK, PLACE SEGMENT OF RUBBER HOSE OVER WIRE LOOP TO PROTECT TRUNK. INSTALL 1/2-INCH WHITE PVC PIPE OVER WIRE FOR VISUAL WARNING (SEE SPECS.)
3. DEADMAN ANCHOR FOR HOLDING GUY WIRE (REFER TO SPECIFICATIONS)
4. SET TOP OF ROOTBALL 2 INCHES ABOVE FINISH GRADE
5. 3-INCH DEPTH MULCH, PROVIDE 6-INCH CLEARANCE FROM TRUNK (REFER TO SPECIFICATIONS)
6. 6-INCH HIGH MIN. WATERING BERM (3-INCH HIGH BERM IN LAWN)
7. FINISH GRADE
8. PLANTING BACKFILL (REFER TO SPECIFICATIONS)
9. SLOPE PLANTING HOLE TO CORNERS WITH DRAIN PIPES
10. 4-INCH PVC SCH. 40 PERF. PIPE WRAPPED IN FILTER SOCK FILLED WITH 3/4-INCH CRUSHED ROCK (2 PER TREE)
11. 2 CU FT. OF 3/4-INCH CRUSHED ROCK (REFER TO SPECIFICATIONS) - 12-INCH DIA. X 24 INCHES DEEP SUMP BELOW ROOTBALL (2 PER TREE)
12. FERTILIZER TABLETS (REFER TO SPECIFICATIONS) - 8-INCH DEPTH MAX.

NOTES:
A. SET ROOT BALL ON FIRM NATIVE SUBGRADE AT BOTTOM OF PLANTING PIT. SCARIFY SIDES AND BOTTOM OF PLANT PIT PRIOR TO BACKFILLING. SLOPE BOTTOM OF PIT TO PERFORATED PIPE.
B. IN AREAS WITH HIGH WINDS, 3-INCH DIAMETER STAKES AND / OR V.I.T. Twist Braces may be required - refer to specifications

CITY OF MENIFEE
TREE GUYING
(48-INCH BOX TREES)

4/24/15

DIRECTOR OF PUBLIC WORKS
JONATHAN GEORGE SMITH

STANDARD PLAN NO. 1507
SHEET 1 OF 1
1. TREE TRUNK - EQUIDISTANCE FROM BOTH ENDS OF ROOT BARRIER
2. FINISH GRADE
3. HARDSCAPE OR DECOMPOSED GRANITE TRAIL (TYP.)
4. ROOT BARRIER: 18-INCH DEPTH MINIMUM ADJACENT TO CURB
5. BACKFILL MIX
6. ROOT BALL
7. CURB AND GUTTER (TYP.)
8. ROOT BARRIER: 24-INCH DEPTH MINIMUM ADJACENT TO CURB
9. REFER TO NOTE E BELOW

NOTES:
A. ROOT BARRIER SHALL BE PLACED IN LINEAR INSTALLATION PARALLEL TO EDGE OF HARDSCAPE (NOT ENCIRCLING ROOT BALL) - 16 FEET MINIMUM LENGTH CENTERED ON TRUNK OF EACH TREE.
B. TOP OF ROOT CONTROL BARRIER SHALL BE 1/2-INCH BELOW ADJACENT FINISH SURFACE.
C. PLASTIC ROOT BARRIER SHALL BE INSTALLED WITH RAISED ROOT DIVERTERS FACING TOWARD TREE ROOT BALL.
D. DEPTH SHALL BE 18 INCHES MINIMUM FOR ROOT CONTROL BARRIER CONSISTING OF NODULES ATTACHED TO PERMEABLE GEOTEXTILE FABRIC.
E. ROOT BARRIER IS REQUIRED WHERE TREE IS SIX FEET OR LESS FROM EDGE OF HARDSCAPE.
1. PALM TREE PER PLAN
2. 3-INCH DEPTH BARK MULCH INSIDE BASIN - TAPER TO 1-INCH DEPTH AT ROOT CROWN
3. EARTH WATERING BASIN (TO REMAIN)
4. FINISH GRADE (SET TOP OF ROOTBALL 4 INCHES ABOVE FINISH GRADE)
5. PALM FERTILIZER SPIKES (1 EA. PER 4 INCHES OF TRUNK DIA.)
6. WASHED SAND BACKFILL - REFER TO SPECIFICATIONS
7. 4-INCH PERF. SDR 35 VERT. DRAIN PIPE W/FILTER SOCK (SEE PLAN VIEW ABOVE) - 6 INCHES FROM ROOTBALL
8. UNDISTURBED NATIVE SOIL (TYP.)
9. 27 INCH DEPTH (3/4-INCH CRUSHED ROCK)
10. 4-INCH PERF HORIZ. SDR 35 DRAIN PIPE W/FILTER SOCK (SEE PLAN VIEW ABOVE)
11. 4-INCH RUBBER JIM CAP W/S.S. CLAMP
12. 4-INCH DRAIN TEE
13. 4-INCH DRAIN ELL (4X)

NOTES:
1. ALL BACKFILL TO BE WATER JETTED DURING PLANTING.
2. ALL FRONDS TO BE BUNDLED W/ BIODEGRADABLE TWINE PRIOR TO PLANTING.
3. ALL BREATHER AND BUBBLER TUBES SHALL HAVE FILTER WRAP.
1. TURF PER PLAN
2. 3-INCH LAYER MULCH MATERIAL, PROVIDE 6-INCH CLEARANCE FROM TRUNK (REFER TO SPECIFICATIONS)
3. TREE TRUNK
4. TREE BOX / ROOTBALL
5. MULCH RING - MINIMUM 36-INCH DIAMETER (DIAMETER OF RING SHALL ACCOMMODATE TREE BREATHER TUBES)
6. BREATHER / DRAIN TUBE PER DETAIL (REFER TO SPECIFICATIONS)
1. DRIVEWAY, COMMERCIAL OR RESIDENTIAL
2. CURB / GUTTER
3. LANDSCAPE RESTRICTED ZONE (TYP.) - SEE NOTE A

NOTE:
A. NO LANDSCAPE MATERIALS OVER 30 INCHES HEIGHT PERMITTED WITHIN ZONE (PLANT HEIGHTS MEASURED AT MATURITY).