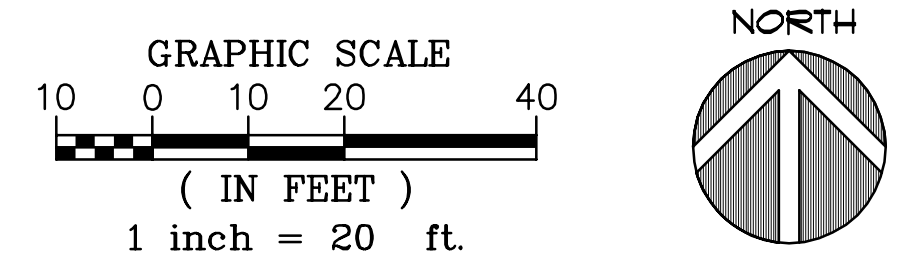


1 SITE PLAN
1" = 20'-0"



BUILDING DATA

OCCUPANCY:	A2 (RESTAURANT)
FIRE SPRINKLERED:	YES
CONSTRUCTION TYPE:	V-B
SITE AREA:	53,458 S.F.
BUILDING AREA:	4,704 S.F.
FAR:	.08
ZONING:	COMMERCIAL MIXED USE

CFA PARKING

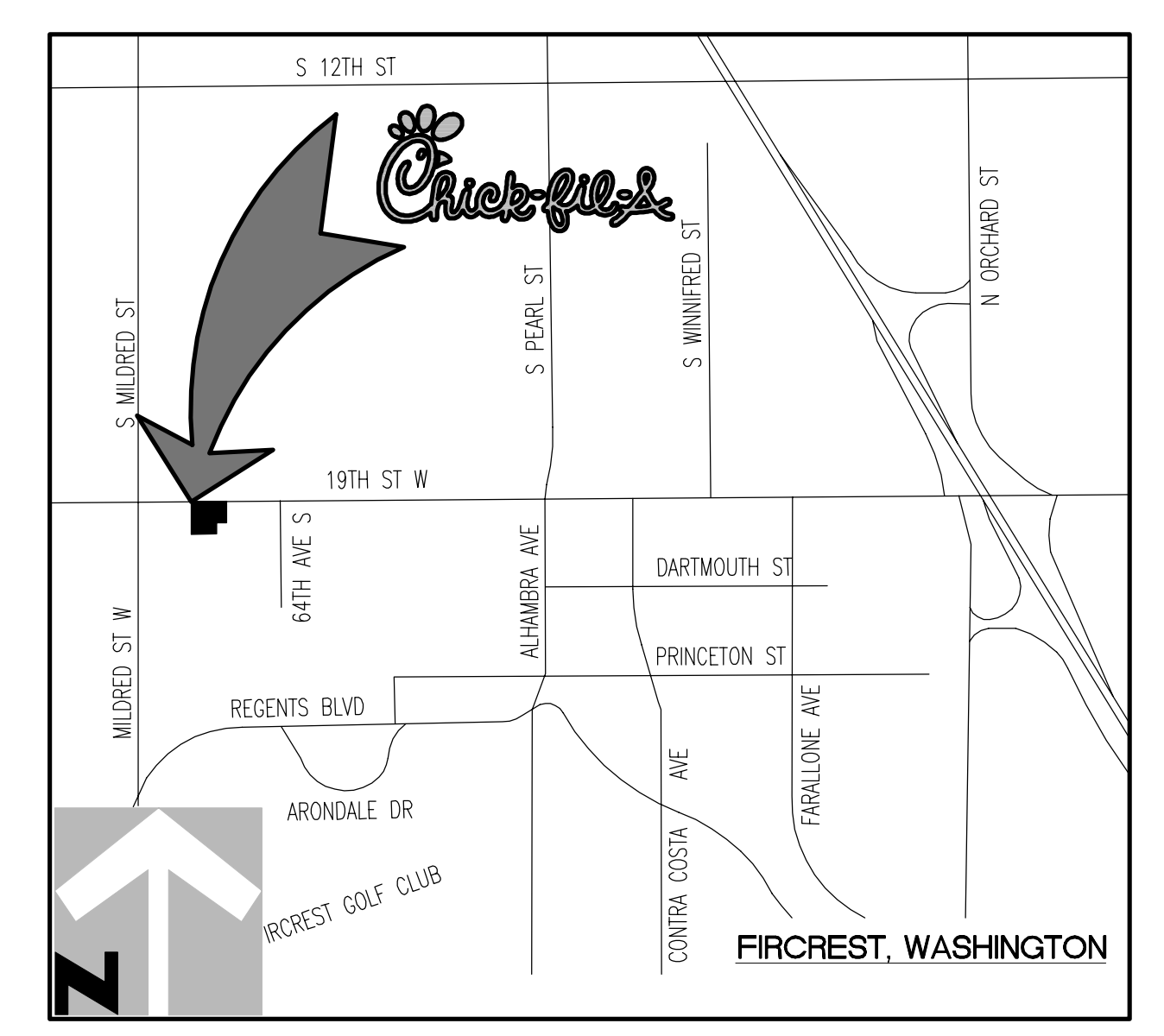
STANDARD SPACES REQUIRED:	MIN. 1 / 150 S.F. OF DINING & PATIO AREA
TOTAL BUILDING & PATIO AREA:	2,509 + 964 = 3,473
TOTAL SPACES REQUIRED:	3,473 / 150 = 24 SPACES MIN. 24 X 2.0 = 48 SPACES MAX.

PARKING PROVIDED

TOTAL SPACES PROVIDED:	48 SPACES PROVIDED
STANDARD STALLS:	24 STALLS (50%)
COMPACT STALLS:	24 STALLS (50%)
BICYCLE PARKINGS PROVIDED:	4 SPACES PROVIDED

PERVIOUS/IMPERVIOUS AREA

IMPERVIOUS SURFACE (SF)	39,280 SF (73.5%)
PERVIOUS SURFACE (SF)	14,178 SF (26.5%)
TOTAL AREA:	53,458 SF (100%)



2 VICINITY MAP
NTS



Chick-fil-ly

5200 Buffington Rd.
Atlanta Georgia,
30349-2998

Revisions:

Mark	Date	By
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Seal

crho
ARCHITECTS
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phone 714.832.1834

STORE
FIRCREST FSR

6520 19TH ST WEST
FIRCREST, WA

SHEET TITLE
PRELIMINARY
SITE PLAN

VERSION: SQ-C V7
ISSUE DATE: 02-2017

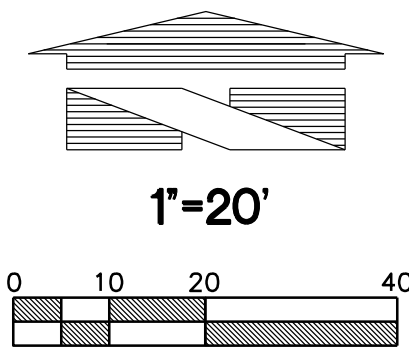
Job No. : 16-199
Store : 04046
Date : 7-11-18
Drawn By : AL
Checked By: RH

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SP-1

TREE RETENTION, LANDSCAPE and IRRIGATION SET
FOR
CHICK-FIL-A FIRCREST

SECTION 11, TWP. 20 N., RGE 2 EAST, W. M.
CITY OF FIRCREST, PIERCE COUNTY, STATE OF WASHINGTON



LEGEND

- EXISTING EVERGREEN TREE TO BE RETAINED (DASHED LINE IS DRIPLINE)
- EXISTING HEDGE TO BE RETAINED

ZONING CODE SUMMARY

PER 22.62.004.k, TREE CALIPER IS MEASURED 6" ABOVE FINISH GRADE

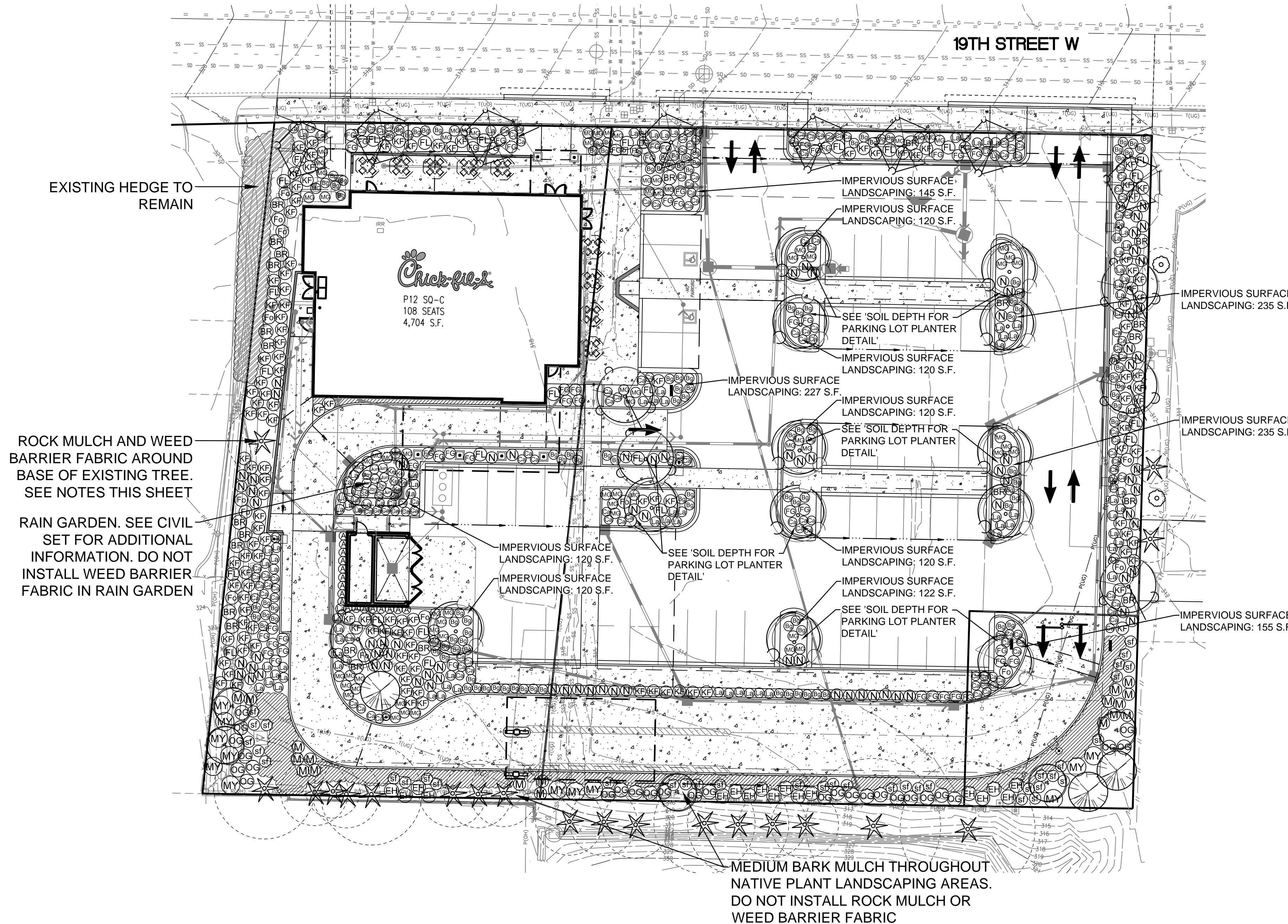
PER 22.62.004.e, GENERALLY, AT LEAST 25 PERCENT OF THE AREA TO BE LANDSCAPED SHALL BE PLANTED WITH SPECIES NATIVE TO THE COASTAL REGION OF THE PACIFIC NORTHWEST. THE MIX OF NATIVE PLANTS SHALL INCLUDE TREES, SHRUBS, AND GROUND COVERS. APPROXIMATELY 9,151 SQUARE FEET OF LANDSCAPE AREA SHOWN
14,178 SQ FT x 25% = 3,545 SQUARE FEET OF NATIVE LANDSCAPING REQUIRED
3,646 SQUARE FEET PROVIDED

ONE DECIDUOUS CANOPY TREE PER FOUR PARKING SPACES
48 STALLS PROPOSED / 4 = 12 TREES REQUIRED
12 DECIDUOUS CANOPY TREES SHOWN

PER 22.62.007, FOR EACH 300 SQUARE FEET OF IMPERVIOUS SURFACE LANDSCAPING:
ONE 2" CALIPER DECIDUOUS TREE OR ONE 5' HEIGHT EVERGREEN TREE, AND
FIVE 5-GALLON SHRUBS, AND GROUND COVER
TOTAL IMPERVIOUS SURFACE LANDSCAPING: 1,719 SQUARE FEET
1,719 / 300 = 6 TREES REQUIRED
(1,719 / 300) x 5 = 29 5-GALLON SHRUBS REQUIRED

PLANT SCHEDULE

SYMBOL	BOTANICAL / COMMON NAMES	SIZE CONDITION	SPACING	QUANTITY	REMARKS
TREES:					
	ACER GRISEUM / PAPERBARK MAPLE	2" CAL. B & B	30' O.C.	8	STAKE & GUY ONE GROWING SEASON; NURSERY GROWN FOR STREET TREE USE, BRANCHED AT 5'
	ACER CIRCINATUM / VINE MAPLE*	6'-8' HT. B & B	AS SHOWN	5	STAKE & GUY ONE GROWING SEASON; MIN. 3 STEMS
	PARROTIA PERSICA 'RUBY VASE' / PERSIAN PARROTIA	2" CAL. B & B	AS SHOWN	6	STAKE & GUY ONE GROWING SEASON; NURSERY GROWN FOR STREET TREE USE, BRANCHED AT 5'
	THUJA PLICATA 'EXCELSA' / COLUMNAR WESTERN RED CEDAR*	6'-7' HT. B & B	AS SHOWN	3	STAKE & GUY ONE GROWING SEASON; SINGLE, UN-CUT LEADER
	CERCIDIPHYLLUM JAPONICUM / KATSURA	2" CAL. B & B	AS SHOWN	12	STAKE & GUY ONE GROWING SEASON; NURSERY GROWN FOR STREET TREE USE, BRANCHED AT 5'
SHRUBS:					
(A)	THUJA OCCIDENTALIS 'SMARAGO' / 'EMERALD GREEN' ARBORVITAE	5'-6' HT.	AS SHOWN	18	FULL AND BUSHY
(K)	CALAMAGROSTIS ACUTIFLORA 'KARL FOERSTER' / KARL FORESTER FEATHER REED GRASS	1 GALLON	AS SHOWN	127	FULL AND BUSHY
(E)	PENNISETUM ALOPECUROIDES 'HADELN' / FOUNTAIN GRASS	1 GALLON	AS SHOWN	52	FULL AND BUSHY
(N)	NANDINA DOMESTICA 'MOON BAY' / MOON BAY HEAVENLY BAMBOO	1 GALLON	AS SHOWN	82	FULL AND BUSHY, 3 CANES MINIMUM
(L)	LAVANDULA ANGSTIFOLIA 'HIDCOTE' / ENGLISH LAVENDER	1 GALLON	AS SHOWN	98	FULL AND BUSHY
(FL)	PHORMIUM TENAX 'LEMON WAVE' / NEW ZEALAND FLAX	5 GALLON	AS SHOWN	25	FULL AND BUSHY
(B)	HELICTOTRICHON SEMPERVIRENS 'SAPPHIRE' / BLUE OAT GRASS	1 GALLON	AS SHOWN	120	FULL AND BUSHY
(M)	MISCANTHUS SINENSIS 'LITTLE MISS' / MAIDEN GRASS	1 GALLON	AS SHOWN	71	FULL AND BUSHY
(F)	FOTHERGILLA X INTERMEDIA 'BLUE SHADOW' / DWARF WITCH ALDER	5 GALLON	AS SHOWN	13	FULL AND BUSHY
(BR)	BERBERIS THUNBERGII 'CONCORDE' / REDLEAF BARBERRY	1 GALLON	AS SHOWN	23	FULL AND BUSHY
(C)	CAREX TESTACEA 'PRAIRIE FIRE' / COPPER SEDGE	1 GALLON	AS SHOWN	136	FULL AND BUSHY
(M)	MAHONIA NERVOSA / LOW OREGON GRAPE*	1 GALLON	AS SHOWN	18	FULL AND BUSHY
(OG)	MAHONIA AQUIFOLIUM / TALL OREGON GRAPE*	1 GALLON	AS SHOWN	27	FULL AND BUSHY
(SF)	POLYSTICHUM MUNIUM / SWORD FERN*	1 GALLON	AS SHOWN	37	FULL AND BUSHY
(EH)	VACCINIUM OVATUM / EVERGREEN HUCKLEBERRY*	1 GALLON	AS SHOWN	17	FULL AND BUSHY
(MY)	MYRTICA CALIFORNICA / PACIFIC WAX MYRTLE*	1 GALLON	AS SHOWN	12	FULL AND BUSHY
RAIN GARDEN PLANTS:					
(K)	CORNUS KELSEYI / DWARF REDTWIG DOGWOOD*	1 GALLON	AS SHOWN	6	FULL AND BUSHY
(S)	CAREX OBLIQUA / SLOUGH SEDGE*	1 GALLON	AS SHOWN	3	FULL AND BUSHY
(J)	JUNCUS PATENS 'ELK BLUE' / CALIFORNIA GRAY RUSH	1 GALLON	AS SHOWN	9	FULL AND BUSHY
GROUND COVER:					
	GAULTHERIA SHALLON / SALAL*	1 GALLON	24" O.C.	AS REQ'D	HOLD 12" FROM BORDERS, SHRUBS, AND TREES
*DENOTES PLANT NATIVE TO COASTAL PUGET SOUND REGION					
MULCH:					
3"-4" DEPTH OF 2" DIAMETER WASHED COBBLE OVER WEED BARRIER FABRIC IN ALL LANDSCAPE BEDS. STAPLE FABRIC IN PLACE, 1 STAPLE/48" ON-CENTER. OVERLAP FABRIC ENDS AND SIDES MINIMUM 6". TAPER MULCH DOWN TO BASE OF PLANTS. DO NOT COVER STEMS OR TRUNKS OF PLANTS WITH ROCK MULCH. SEE ADDITIONAL MULCH NOTE THIS SHEET. DO NOT INSTALL WEED BARRIER FABRIC IN RAIN GARDEN					
HATCH NOT SHOWN					



5200 Buffington Rd.
Atlanta Georgia,
30349-2998

Revisions:

Mark	Date	By
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KENT, WA 98032
(425)251-6222
(425)251-8782 FAX
CIVIL ENGINEERING, LAND PLANNING,
SURVEYING, ENVIRONMENTAL SERVICES



STORE
FIRCREST FSR

6520 19TH ST WEST
TACOMA, WA

SHEET TITLE
LANDSCAPE
PLAN

VERSION:
ISSUE DATE:

Job No. : 16-199
Store : ---
Date : 3-10-17
Drawn By : JMV
Checked By: JMV

Sheet
2.0



Know what's below.
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CITY OF FIRCREST FILE NO.
XXX-XXXXXXX-XX
APPROVED FOR CONSTRUCTION
BY _____
CITY ENGINEER
DATE _____

TREE RETENTION, LANDSCAPE and IRRIGATION SET FOR **CHICK-FIL-A FIRCREST**

SECTION 11, TWP. 20 N., RGE 2 EAST, W. M.
CITY OF FIRCREST, PIERCE COUNTY, STATE OF WASHINGTON

LANDSCAPE PLANTING NOTES AND MATERIALS

SCOPE OF WORK

FURNISH ALL MATERIALS, LABOR, EQUIPMENT AND RELATED ITEMS NECESSARY TO ACCOMPLISH TOPSOIL, TREATMENT AND PREPARATION OF SOIL, FINISH GRADING, PLACEMENT OF SPECIFIED PLANT MATERIALS, FERTILIZER, STAKING, MULCH, CLEAN-UP, DEBRIS REMOVAL, AND 90-DAY MAINTENANCE.

QUALIFICATIONS:
LANDSCAPE CONTRACTOR TO BE SKILLED AND KNOWLEDGEABLE IN THE FIELD OF WORK AND HAVE A MINIMUM OF FIVE (5) YEAR'S EXPERIENCE INSTALLING SIMILAR WORK. CONTRACTOR TO BE LICENSED TO PERFORM THE WORK SPECIFIED WITHIN THE PRESIDING JURISDICTION.

JOB CONDITIONS:
IT IS THE CONTRACTOR'S RESPONSIBILITY TO REVIEW THE SITE AND REPORT ANY DISCREPANCIES TO THE OWNER OR THE OWNER'S REPRESENTATIVES. ALL PLANT MATERIAL AND FINISH GRADES ARE SUBJECT TO APPROVAL BY THE OWNER.

PROTECTION:
SAVE AND PROTECT ALL EXISTING PLANTINGS SHOWN TO REMAIN. DO NOT PLANT UNTIL OTHER CONSTRUCTION OPERATIONS WHICH CONFLICT HAVE BEEN COMPLETED. IF AN IRRIGATION SYSTEM IS TO BE INSTALLED DO NOT PLANT UNTIL THE SYSTEM HAS BEEN INSTALLED, TESTED, AND APPROVED BY THE OWNER. HANDLE PLANTS WITH CARE - DO NOT DAMAGE OR BREAK ROOT SYSTEM, BARK, OR BRANCHES. REPAIR AND/OR REPLACE ITEMS DAMAGED AS A RESULT OF WORK, OR WORK NOT IN COMPLIANCE WITH PLANS AND SPECIFICATIONS, AS DIRECTED BY OWNER AT NO ADDITIONAL COST TO THE OWNER.

REPAIR OF EXISTING PLANTINGS:
DURING THE COURSE OF WORK, REPAIR ALL EXISTING PLANTING AREAS BY PRUNING DEAD GROWTH, RE-ESTABLISHING FINISH GRADE AND RE-MULCHING TO SPECIFIED DEPTH.

REPAIR OF IRRIGATION SYSTEM:
DURING THE COURSE OF WORK, REPAIR ANY DAMAGE TO THE IRRIGATION SYSTEM TO MATCH CONDITIONS PRIOR TO THE DAMAGE.

GUARANTEE:
GUARANTEE ALL PLANT MATERIAL FOR A PERIOD OF ONE YEAR FROM DATE OF FINAL ACCEPTANCE OF THE JOB BY OWNER.

90-DAY MAINTENANCE:
CONTRACTOR TO PROVIDE OWNER WITH A SCOPE OF WORK AT TIME OF INITIAL PROJECT BID TO PROVIDE LANDSCAPE AND IRRIGATION MAINTENANCE FOR 90 DAYS FOLLOWING COMPLETION OF PROJECT (ACCEPTANCE) OF FACILITY BY OWNER. WORK TO INCLUDE MAINTENANCE AS DESCRIBED BELOW, IN PLANTING AND IRRIGATION MAINTENANCE.

SUBMITTALS:
SUBMIT FIVE (5) COPIES THE FOLLOWING TO THE LANDSCAPE ARCHITECT FOR REVIEW AND APPROVAL PRIOR TO THE START OF ANY WORK:

- A) DOCUMENTATION THAT ALL PLANT MATERIAL HAS BEEN ORDERED.
- B) TOPSOIL ANALYSIS AND RECOMMENDED AMENDMENTS.
- C) TREE STAKING AND GUYING MATERIALS.
- D) ONE (1) QUART SIZE OF TOPSOIL AND MULCH.
- E) PLANTING SCHEDULE INCLUDING DATES AND TIMES.
- F) MAINTENANCE INSTRUCTIONS FOR ONE (1) FULL YEAR.

MATERIALS:

PLANT MATERIALS:
PLANT MATERIALS TO BE GRADE NO. 1, SIZED IN ACCORDANCE WITH (AAN) AMERICAN STANDARDS FOR NURSERY STOCK (ANSI Z60.1-2004). PRUNE PLANTS RECEIVED FROM THE NURSERY ONLY UPON AUTHORIZATION BY THE LANDSCAPE ARCHITECT. "B & B" INDICATES BALLED AND BURLAPPED; "CONT." INDICATES CONTAINER; "BR" INDICATES BARE ROOT; "GAL" INDICATES GALLON.

- A) SPECIFIED PLANT CANOPY SIZE OR CALIPER IS THE MINIMUM ACCEPTABLE CONTAINER OR BALL SIZE AND ESTABLISHES MINIMUM PLANT CONDITION TO BE PROVIDED.
- B) QUALITY:
PLANT MATERIAL TO COMPLY WITH STATE AND FEDERAL LAWS FOR DISEASE INSPECTION, PLANTS TO BE FULLY LIVE, VIGOROUS, WELL FORMED, WITH WELL DEVELOPED FIBROUS ROOT SYSTEMS. ROOT BALLS OF PLANTS TO BE SOLID AND FIRMLY HELD TOGETHER, SECURELY CONTAINED AND PROTECTED FROM INJURY AND DESICCATION. PLANTS DETERMINED BY LANDSCAPE ARCHITECT TO HAVE BEEN DAMAGED; HAVE DEFORMITIES OF STEM, BRANCHES, OR ROOTS; LACK SYMMETRY, HAVE MULTIPLE LEADERS OR "Y" CROTCHES LESS THAN 30 DEGREES IN TREES, OR DO NOT MEET AMERICAN STANDARDS WILL BE REJECTED. PLANT MATERIAL TO BE FROM A SINGLE NURSERY SOURCE FOR EACH SPECIFIED SPECIES/HYBRID. NURSERY SOURCES TO BE THOSE LOCATED IN THE SAME REGION AS THE JOB SITE.
- C) SUBSTITUTION:
NO SUBSTITUTION OF PLANT MATERIAL, SPECIES OR VARIETY, WILL BE PERMITTED UNLESS WRITTEN EVIDENCE IS SUBMITTED TO THE OWNER FROM TWO QUALIFIED PLANT BROKERAGE OFFICES. SUBSTITUTIONS WHICH ARE PERMITTED TO BE IN WRITING FROM THE OWNER AND LANDSCAPE ARCHITECT. THE SPECIFIED SIZE, SPECIES AND NEAREST VARIETY, AS APPROVED, TO BE FURNISHED. SUBSTITUTIONS MAY REQUIRE SUBMITTAL TO REVISED LANDSCAPE PLAN TO CITY FOR APPROVAL.
- D) LABEL AT LEAST ONE (1) TREE, SHRUB, AND GROUNDCOVER OF EACH VARIETY WITH A SECURELY ATTACHED WATERPROOF TAG BEARING LEGIBLE DESIGNATION OF BOTANICAL AND COMMON NAMES.
- E) DELIVER PLANT MATERIAL AFTER PREPARATION OF PLANTING AREAS HAVE BEEN COMPLETED AND PLANT IMMEDIATELY. IF PLANTING IS DELAYED MORE THAN SIX (6) HOURS AFTER DELIVERY, SET MATERIAL IN SHADE, PROTECT FOR WEATHER AND MECHANICAL DAMAGE, AND KEEP ROOT BALLS MOIST BY COVERING WITH MULCH, BURLAP OR OTHER ACCEPTABLE MEANS OF RETAINING MOISTURE.

SOIL PREPARATION:
TOPSOIL, AMENDMENT, AND BACKFILL ARE GENERAL REQUIREMENTS FOR ALL LANDSCAPE AREAS, UNLESS NOTED OTHERWISE ON THE PLANS. SOIL AMENDMENTS AND FERTILIZER NOTED BELOW ARE TO BE USED FOR BID PRICE BASIS ONLY. SPECIFIC AMENDMENTS AND FERTILIZERS WILL BE MADE AFTER SOIL SAMPLES ARE LABORATORY TESTED BY THE CONTRACTOR. PROVIDE CHANGE ORDER FOR ADDITIONAL OR REDUCTION OF MATERIALS REQUIRED OR NOT REQUIRED BY THE SOILS REPORT.

SOIL FERTILITY AND AGRICULTURAL SUITABILITY ANALYSIS:
AFTER ROUGH GRADING AND PRIOR TO SOIL PREPARATION, CONTRACTOR TO OBTAIN TWO REPRESENTATIVE SOIL SAMPLES, FROM LOCATIONS AS DIRECTED BY THE LANDSCAPE ARCHITECT, TO A SOIL TESTING LABORATORY. SUBMIT RESULTS TO LANDSCAPE ARCHITECT FOR REVIEW. TESTS TO INCLUDE FERTILITY AND SUITABILITY ANALYSIS WITH WRITTEN RECOMMENDATIONS FOR SOIL AMENDMENT, FERTILIZER, CONDITIONERS, APPLICATION RATES, AND POST-CONSTRUCTION MAINTENANCE PROGRAM. TESTS TO BE CONTRACTED WITH AND PAID FOR BY THE CONTRACTOR.

- A) TOPSOIL:
CONTRACTOR IS RESPONSIBLE FOR SUPPLYING ALL TOPSOIL AND FOR DETERMINING THE VOLUME OF TOPSOIL REQUIRED PER THE INFORMATION ON PLANS AND NOTED HERE-IN. CONTRACTOR IS RESPONSIBLE FOR ANY NECESSARY WEED CONTROL RESULTING FROM CONTAMINATED OFF SITE SOURCES.
- B) TOPSOIL TO CONSIST OF WINTER MIX AS PRODUCED AND REMIXED BY PACIFIC TOPSOILS, INC. WINTER MIX TO CONSIST OF 1/3 BY VOLUME SANDY LOAM, 1/3 BY VOLUME COMPOSTED GARDEN MULCH, AND 1/3 BY VOLUME COARSE WASHED SAND OR EQUIVALENT. AT MINIMUM, TOPSOIL PRODUCTS BROUGHT ON SITE TO CONTAIN AMENDMENTS AS LISTED IN "C".
- C) TOPSOIL TO INCLUDE THE FOLLOWING AMENDMENTS AS NECESSARY:
THE FOLLOWING AMOUNT PER 1,000 SQUARE FEET:
1. 6-CUBIC YARDS ORGANIC COMPOST. COMPOST TO BE FREE OR NON-FARM ANIMAL SOURCES, NOR TO BE FROM SOURCES CONTAINING REDWOOD OR CEDAR PRODUCTS.
2. 30-POUNDS NITROFORM (38-0-0)
3. 5-POUNDS AMMONIUM SULFATE
4. 40-POUNDS CALCIUM CARBONATE LIMESTONE
5. 40-POUNDS DOLOMITE LIMESTONE
6. 5-OUNES BORON (AS BORAX)
ALL AMENDMENTS TO BE THOROUGHLY MIXED PRIOR TO INCORPORATION INTO TOPSOIL.

D) PLANTING BACKFILL FOR ALL TREES, SHRUBS, AND GROUNDCOVERS:

1. 0.6-CUBIC YARDS PER VOLUME TOPSOIL
2. 0.4-CUBIC YARDS ORGANIC COMPOST.
3. 3-POUNDS NITROFORM (38-0-0)
4. 1-POUNDS AMMONIUM SULFATE
5. 2-POUNDS CALCIUM CARBONATE LIMESTONE
6. 2-POUNDS DOLOMITE LIMESTONE

E) TOPSOIL PREPARATION AND INSTALLATION:

1. VERY SUBGRADE TO -7" INCHES IN LANDSCAPE AREAS AND -18/24 INCHES IN PARKING LOT ISLANDS BELOW FINISH ELEVATION, OR AS INDICATED ON PLANS. THIS ACCOMMODATES, TOPSOIL, AMENDMENTS, AND MULCH.
2. ERADICATE ANY SURFACE VEGETATION ROOTED IN THE SUB-GRADE PRIOR TO SUB-GRADE PREPARATION
3. THOROUGHLY SCARIFY AND RIP ALL LANDSCAPE SUB-GRADES WHICH HAVE BECOME COMPACTED TO A DEPTH OF 12 INCHES WITH MULTIPLE PASSES, 90 DEGREES TO EACH OTHER. SCARIFY AREAS INACCESSIBLE TO MECHANIZED EQUIPMENT AND AROUND EXISTING PLANTINGS NOTED TO REMAIN WITH HAND TOOLS.
4. REMOVE SOIL LUMPS, ROCK, VEGETATION AND/OR DEBRIS LARGER THAN 2 INCHES FROM ALL SUB-GRADE PRIOR TO PLACEMENT OF SPECIFIED TOPSOIL.
5. REMOVE ANY ASPHALT EXTENDING BEYOND 6 INCHES FROM CURBS INTO ADJACENT LANDSCAPE AREAS.
6. PARKING LOT PLANTER ISLANDS TO BE OVER EXCAVATED BY BACKHOE. REMOVE PAVING WASTE, GRAVEL BASE MATERIAL AND UNDERLYING SUBSOIL TO 18 INCHES BELOW TOP OF PAVING. SCARIFY AND OVER EXCAVATE PLANT PIT BOTTOM 12 INCHES TO MINIMIZE STRUCTURAL COMPACTION.

F) TOPSOIL PLACEMENT:

1. PROVIDE A TOTAL FINISH COURSE OF 4 INCHES OF TOPSOIL FOR LANDSCAPE AREAS AND 18/24 INCHES IN PARKING LOT ISLANDS.
2. IN ALL LANDSCAPE AREAS, PLACE 2 INCHES (6 INCHES IN PARKING LOT ISLANDS) OF TOPSOIL MIX WITH AMENDMENTS OVER THE PREPARED SUB-GRADE AND THOROUGHLY ROTOTILL WITH MULTIPLE PASSES INTO THE TOP 6 INCHES OF SUB-GRADE FOR A TOTAL DEPTH OF 8 INCHES IN LANDSCAPE AREAS (12 INCHES IN PARKING LOT ISLANDS). PLACE AN ADDITIONAL 2 INCH LIFT OF TOPSOIL, IN ALL LANDSCAPE AREAS AND A MINIMUM 12 INCH LIFT IN ALL PARKING LOT ISLANDS, FOR THE FINAL TOPSOIL DEPTH OF 4 INCHES IN LANDSCAPE AREAS AND 18/24 INCHES IN PARKING LOT ISLANDS.
3. PLACE ADDITIONAL TOPSOIL AND SOIL MIX AS REQUIRED TO MEET FINISH ELEVATIONS.

MULCH (TOPDRESSING):

2"-3" DIAMETER WASHED COBBLE, ROUNDED AND NOT ANGULAR. IN ADDITION, MEDIUM HEM-FIR BARK MULCH TO BE INSTALLED IN AREAS SHOWN TO RECEIVE NATIVE LANDSCAPING.

STAKES:

2"-INCH DIAMETER BY 8-FOOT MINIMUM LODGEPOLE PINE STAKES.

GUY MATERIAL:

1"-INCH WIDE POLYETHYLENE CHAIN LOCK TYPE TIES; OR, 3/8" DIAMETER RUBBER. NO WIRE.

HERBICIDE:

HERBICIDE IS NOT RECOMMENDED FOR THE FIRST YEAR AFTER INSTALLATION.

ANTI-DESICCANT:

"WILT-PROOF," 48 HOURS PRIOR TO SHIPMENT TO SITE FROM JUNE 1 THROUGH SEPTEMBER. THOROUGHLY ROOT WATER PLANTS PRIOR TO DELIVERY. PLANT MATERIAL DELIVERED TO SITE TO BE KEPT CONTINUALLY MOIST THROUGH INSTALLATION.

EXECUTION:

CONTAMINANTS:
VERIFY THAT ALL SOIL CONTAMINANTS (E.G., PAINT, SEALANTS, SOLVENTS, OILS, GREASES, CONCRETE/ASPHALT SPOILS, ETC.) HAVE BEEN SATISFACTORILY REMOVED FROM ALL PLANTING AREAS. DO NOT BEGIN WORK UNTIL UNSATISFACTORY CONDITIONS HAVE BEEN CORRECTED.

FINISH GRADES:

FINE GRADE AND REMOVE ROCKS, DEBRIS, AND FOREIGN OBJECTS OVER 2 INCHES DIAMETER FROM TOP SURFACE LANDSCAPE AREAS. FINISH ELEVATIONS TO BE DEFINED AS 2 INCHES BELOW CURBS, WALKS AND/OR OTHER ADJACENT HARDSCAPE FOR ALL PLANTING BED AREAS AND 1-INCH BELOW CURBS, WALKS AND/OR OTHER ADJACENT HARDSCAPE FOR ALL LAWN AREAS. FINISH GRADE REFER TO GRADES PRIOR TO INSTALLATION OF MULCH OR LAWN. ALL FINISH GRADES TO BE SMOOTH EVEN GRADES, LIGHTLY COMPACTED, AS SHOWN ON THE PLAN AND DETAILED. PROVIDE POSITIVE DRAINAGE AWAY FROM BUILDINGS AND STRUCTURES. SITE CIVIL DRAWINGS IDENTIFY FINAL ELEVATIONS. MOISTEN PREPARE AREAS BEFORE PLANTING IF SOIL IS DRY. WATER THOROUGHLY AND ALLOW SURFACE TO DRY BEFORE PLANTING. DO NOT CREATE MUDDY SOIL.

TREES AND SHRUBS:

ARRANGE TREES AND SHRUBS ON SITE IN PROPOSED LOCATIONS PER DRAWINGS. EXCAVATE PIT, PLANT AND STAKE OR GUY, AS CALLED OUT AND DETAILED. ALL TREES, SHRUBS, AND SUPPORTS TO STAND VERTICAL. BACKFILL SHALL BE PIT SPOILS. SETTLE BACKFILL USING WATER ONLY. NO MECHANICAL COMPACTION.

GROUNDCOVERS:

EXCAVATE PITS TO A MINIMUM OF 3 INCHES BELOW, AND TWICE THE ROOT BALL DIAMETER. WATER THOROUGHLY AND TAKE CARE TO ENSURE THAT ROOT CROWN IS AT PROPER GRADE, AS DETAILED.

MULCH:

MULCH ALL LANDSCAPE AREAS NOT COVERED BY LAWN AND/OR SEED. APPLY SUFFICIENT QUANTITY TO PROVIDE A 3-4-INCH DEPTH OF THE ROCK MULCH. INSTALL WEED BARRIER FABRIC AS NOTED IN THIS SET. FOR THE NATIVE LANDSCAPE AREAS, INSTALL 2"-3" DEPTH OF BARK MULCH.

UTILITY CLEARANCES:

FIELD ADJUST PLANT LOCATIONS FOR 8-FOOT SEPARATION OF TREES/SHRUBS AND 2-FOOT SEPARATION FOR GROUNDCOVER FROM FIRE HYDRANTS AND UTILITY VAULTS.

CLEANUP AND PROTECTION:

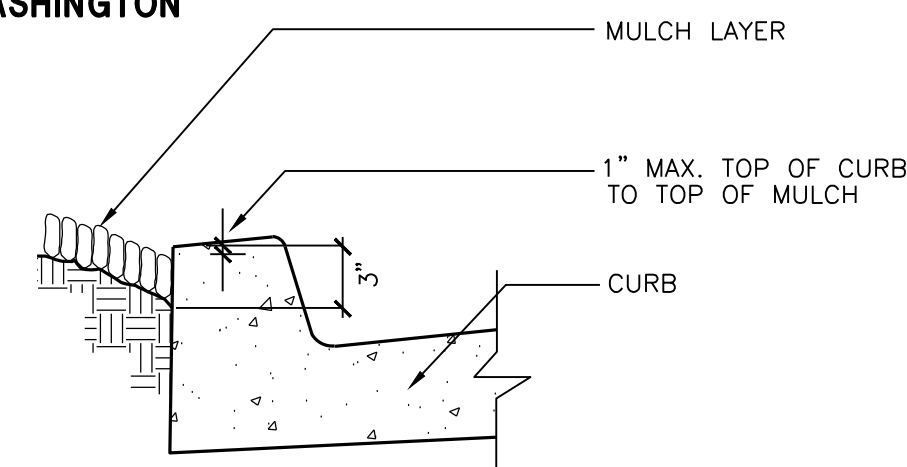
DURING LANDSCAPE WORK, KEEP ALL PAVEMENT CLEAN AND WORK AREAS IN AN ORDERLY CONDITION. PROTECT LANDSCAPE WORK AND MATERIALS FROM DAMAGE DUE TO LANDSCAPE OPERATIONS AND TRESPASSERS. MAINTAIN PROTECTION DURING INSTALLATION AND MAINTENANCE PERIOD. TREAT, REPAIR, OR REPLACE DAMAGE LANDSCAPE WORK AS DIRECTED BY THE OWNER.

PLANTING MAINTENANCE:

PROVIDE FULL MAINTENANCE BY SKILLED EMPLOYEES OF LANDSCAPE INSTALLERS. CONTRACTOR TO MAINTAIN PLANTINGS THROUGH COMPLETED INSTALLATION, AND UNTIL ACCEPTANCE OF LANDSCAPE INSTALLATION. PLANTING MAINTENANCE TO INCLUDE WATERING, WEEDING, CULTIVATING, TIGHTENING AND REPAIRING OF TREE GUYS, RESETTling PLANTS TO PROPER GRADES OR POSITION, RE-ESTABLISHING SETTLED GRADES; AND MOWING LAWNS WEEKLY AFTER LAWN ESTABLISHMENT. HERBICIDE IS NOT RECOMMENDED FOR ONE YEAR FOLLOWING LANDSCAPE INSTALLATION. INCLUDED IS REPLACEMENT OF DEAD PLANTS AND PLANTS SHOWING LOSS OF 40 PERCENT OR MORE OF CANOPY.

IRRIGATION MAINTENANCE:

THE IRRIGATION SYSTEM TO BE MAINTAINED INCLUDING ADJUSTMENTS FOR BALANCED WATER DISTRIBUTION AND PRECIPITATION. FAILED OR MALFUNCTIONING EQUIPMENT SHALL BE REPLACED AND/OR CORRECTED. PLANTING AND IRRIGATION MAINTENANCE TO INCLUDE THOSE OPERATIONS NECESSARY TO THE PROPER GROWTH AND SURVIVAL OF ALL PLANT MATERIALS. CONTRACTOR TO PROVIDE THIS WORK IN ADDITION TO SPECIFIC WARRANTY/GUARANTEES.



MULCH AT CURB DETAIL

NOT TO SCALE

PRUNE DAMAGED TWIGS AFTER PLANTING

PLACE IN VERT. POSITION: DOUBLE LEADERS WILL BE REJECTED

NOTE:

KEEP ROOTBALL MOIST AND PROTECTED AT ALL TIMES. HOLD CROWN OF ROOTBALL AT OR JUST ABOVE FINISH GRADE. PROTECT TRUNK AND LIMBS FROM INJURY. BACKFILL TO BE SETTLED USING WATER ONLY - NO MECHANICAL COMPACTION. REMOVE ALL WRAP, TIES & CONTAINERS, REGARDLESS OF MATERIAL.

(2) LODGEPOLE STAKES, PLUMB WITH ELASTIC CHAIN-LOCK TYPE OR RUBBER GUYS TIED IN FIGURE EIGHT; REMOVE AFTER ONE GROWING SEASON

PROTECTIVE WRAPPING DURING SHIPMENT TO SITE AND INSTALLATION REMOVE AT COMPLETION OF PLANTING

LAWN PLANTING; PROVIDE 3' Ø "NO GRASS" TREE RING AND 2" DEEP MULCH LAYER IN WELL. HOLD BACK FROM TRUNK 8" TO 10"

FINISH GRADE

PREPARE PLANTING BED PER SPEC'S; AT MIN. LOSSEN AND MIX SOIL TO 18" OR DEPTH OF ROOTBALL AND 2 TIMES BALL DIAMETER

REMOVE ALL WRAP, TIES, AND CONTAINERS SCORE ROOTBALL AND WORK NURSERY SOIL AWAY FROM PERIMETER ROOTS

SET BALL ON UNDISTURBED BASE OR COMPACTED MOUND UNDER BALL

PENETRATION TO SUBBASE (+) 24"

DECIDUOUS TREE PLANTING/STAKING DETAIL

NOT TO SCALE

(2) LODGEPOLE STAKES; TIE AT APPROX. 1/3 TO 1/2 HEIGHT OF TREE WITH FLEXIBLE RUBBER TIE IN FIGURE EIGHT PATTERN. STAKES AND TREE TO BE PLUMB

3" DEEP SAUCER FOR WATER

MULCH LAYER. SEE SHEET L-1

REMOVE ALL TIES, WRAP & CONTAINERS. FREE PERIMETER ROOTS FROM NURSERY BALL

EXCAVATE TREE PIT AT A MIN. OF 2 TIMES DIA. OF ROOTBALL AT BALL CENTER, TAPERING PIT GRADE TO FINISH GRADE

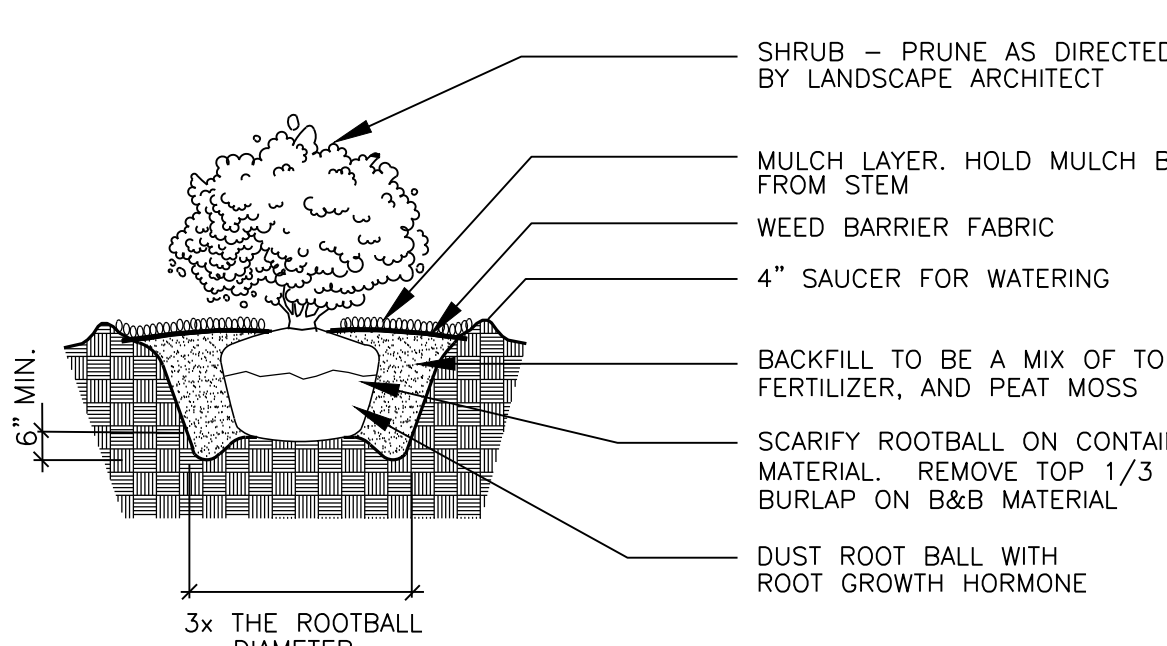
PIT SPOILS, NURSERY BALL WASTE BACKFILL SET BALL ON UNDISTURBED SUBGRADE, OR COMPACTED SOIL.

NOTE:

LIGHT FERTILIZER OVER PLANTING BED AFTER BACKFILL ONLY; NO FERTILIZER IN PLANTING PIT. WORK PERIMETER ROOTS FREE OF NURSERY BALL. BALL & PIT TO BE COARSELY SCARIFIED.

EVERGREEN TREE PLANTING/STAKING DETAIL

NOT TO SCALE



NOTE:

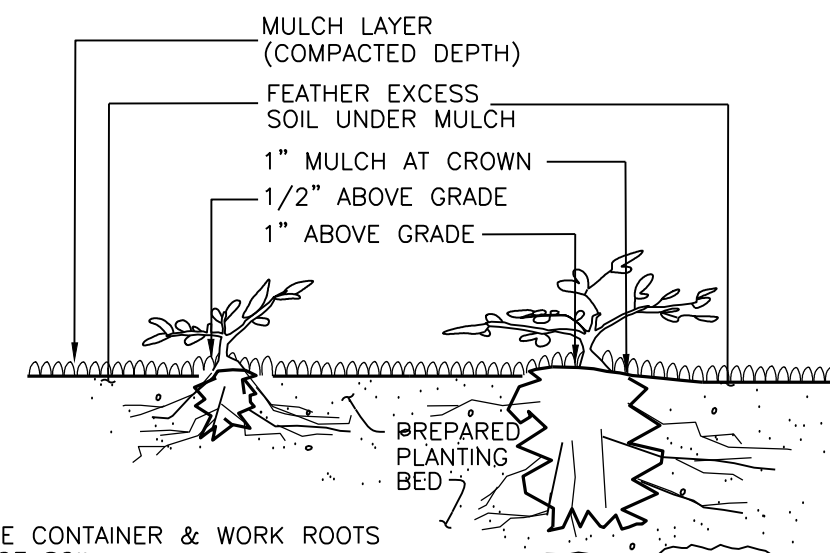
APPLY ADDITIONAL 4 OZ. 8-32-16 FERTILIZER INTO TOP 2" OF PLANTING MIX.

PLANT SHRUB HIGH ENOUGH TO ALLOW POSITIVE DRAINAGE AWAY FROM ROOTBALL. ROUGHEN ALL SURFACES OF PIT.

CUT AND REMOVE BURLAP FROM ROOT BALL

SHRUB PLANTING DETAIL

NOT TO SCALE

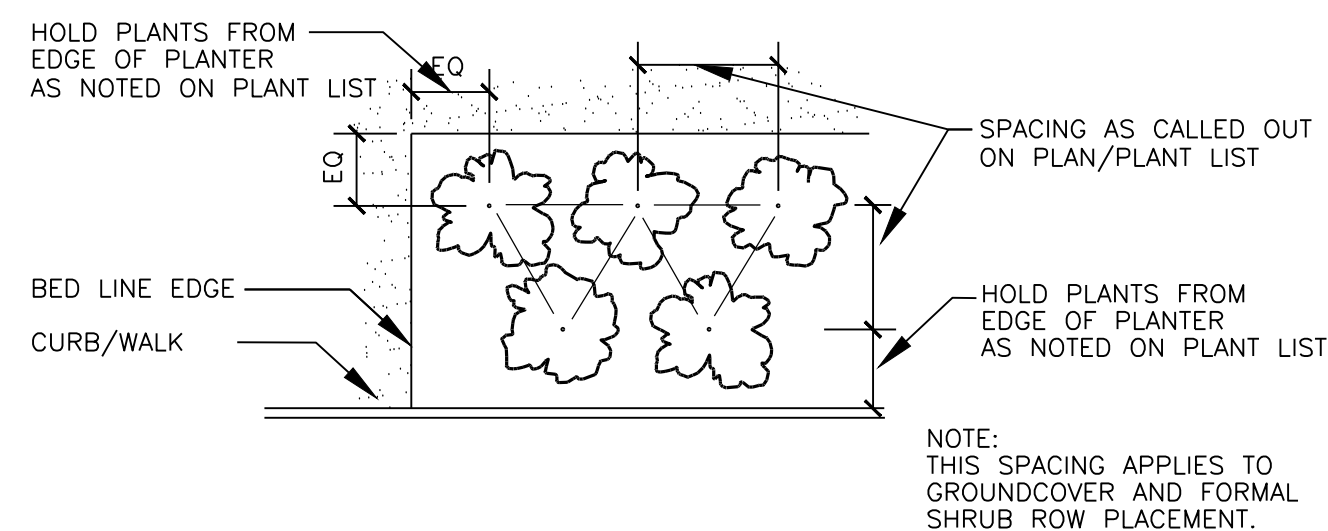


NOTE:
REMOVE CONTAINER & WORK ROOTS FREE OF SOIL. BACKFILL TO BE SETTLED USING WATER ONLY. SEE PLANT LIST FOR PLANT SPACING

LESS THAN 1 GAL. (PLANTED BEFORE MULCH) | 1 GAL. CONTAINER and LARGER (PLANTED BEFORE MULCH)

GROUNDCOVER PLANTING DETAIL

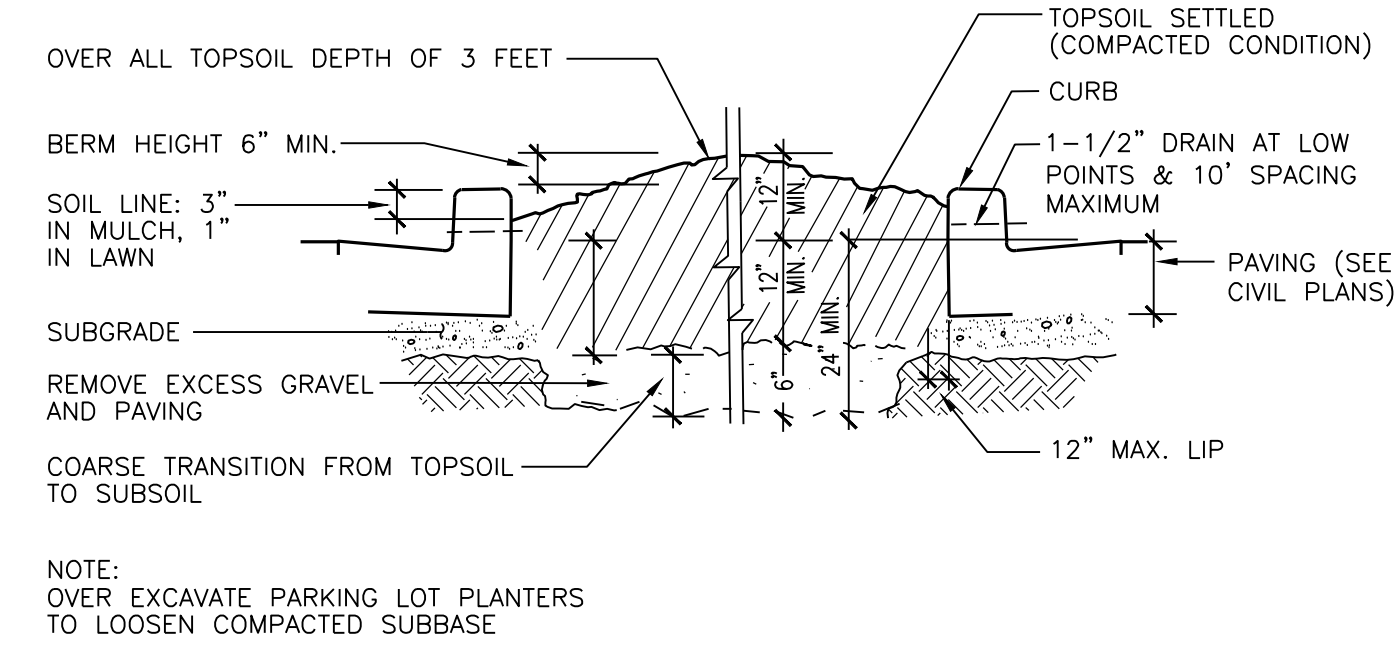
NOT TO SCALE



NOTE:
THIS SPACING APPLIES TO GROUNDCOVER AND FORMAL SHRUB ROW PLACEMENT.

PLANT MATERIAL SPACING DETAIL

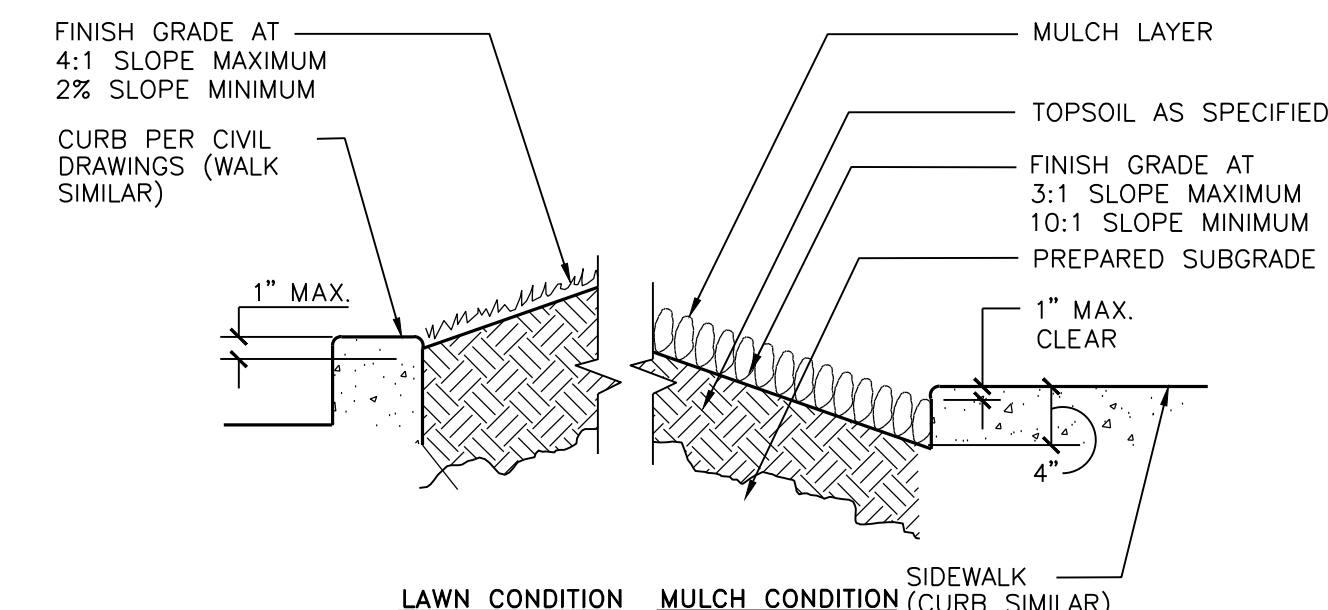
NOT TO SCALE



NOTE:
OVER EXCAVATE PARKING LOT PLANTERS TO LOOSEN COMPACTED SUBBASE

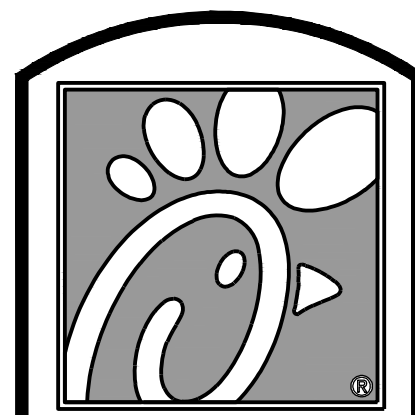
SOIL DEPTH FOR PARKING LOT PLANTER DETAIL

NOT TO SCALE



PLANTER SECTION DETAIL

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LANDSCAPE
NOTES and
DETAILS

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Job No. : 16-199

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Checked By : JMV

Sheet

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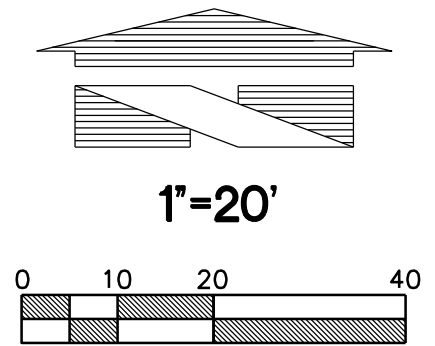
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TREE RETENTION, LANDSCAPE and IRRIGATION SET
FOR
CHICK-FIL-A FIRCREST

SECTION 11, TWP. 20 N., RGE 2 EAST, W. M.
CITY OF FIRCREST, PIERCE COUNTY, STATE OF WASHINGTON



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SHEET TITLE
IRRIGATION
PLAN

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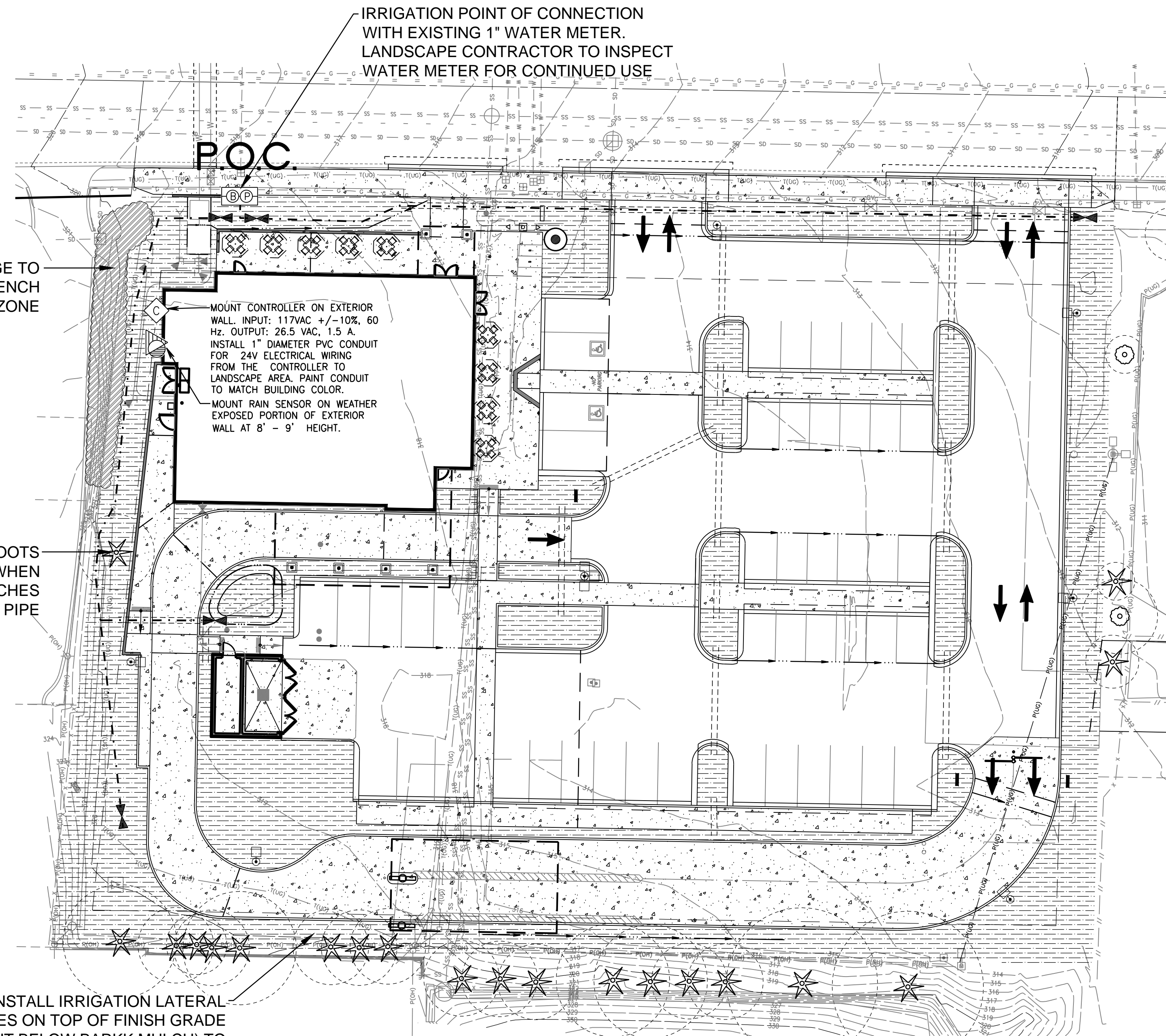
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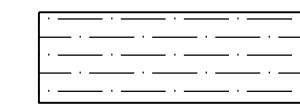
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IRRIGATION LEGEND

SYMBOL DRIP EMITTER



HUNTER LANDSCAPE DRIPLINE COMPONENTS WITH HUNTER COMPRESSION FITTINGS AND ADAPTERS ICZ-101-LF WITH 40 PSI PRESSURE REGULATOR
PLD-04-18-250 DRIP EMITTER TUBING 0.40 GALLONS PER HOUR FLOW, EMITTERS 18" O.C.
AIR/VACUUM RELIEF RELIEF VALVE KIT, IN VALVE BOX
GALVANIZED TIE-DOWN STAKES, AT 3' ON CENTER

SYMBOL MANUFACTURER



DRIP IRRIGATION:
HUNTER ICZ-101-LF VALVE
ONE VALVE PER BOX



HUNTER SOLAR SYNC WIRED RAIN SENSOR. COORDINATE RAIN SENSOR LOCATION WITH ARCHITECT. INSTALL EXPOSED TO WEATHER



HUNTER PRO-C 12-STATION (HARDWIRE CONNECTION); PROVIDE GROUND AND BATTERIES PER MFR. SPECS. EXTERIOR MOUNT TO BUILDING. COORDINATE LOCATION WITH GENERAL CONTRACTOR, AND ELECTRICIAN



HUNTER 3/4" QUICK COUPLING VALVE, IN VALVE BOX, WITH (2) KEYS AND SWIVELS



PLASTIC BALL VALVE, MATCH LINE SIZE, IN VALVE BOX

P.O.C.

IRRIGATION POINT OF CONNECTION: CONNECTION TO EXISTING 1" WATER METER WITH A WILKINS 950 XLT- 1" DOUBLE CHECK VALVE (STATE APPROVED); TEST AND CERTIFICATION BY LICENSED BACKFLOW TESTER. WILKINS 850 - BALL VALVE, SIZE TO MATCH PIPE

--- MAINLINE - SCH 40 PVC (18" COVER); SIZE PER PLAN, 1-1/2" SIZE MINIMUM

--- LATERAL - SCH 40 PVC (12" COVER); SIZE PER PLAN, 3/4" SIZE MINIMUM

--- SLEEVE - CLASS 200 PVC; 24" MINIMUM COVER AT VEHICLE CROSSINGS, TWICE THE SIZE OF INSERT PIPE AND/OR WIRES, 4" SIZE MINIMUM

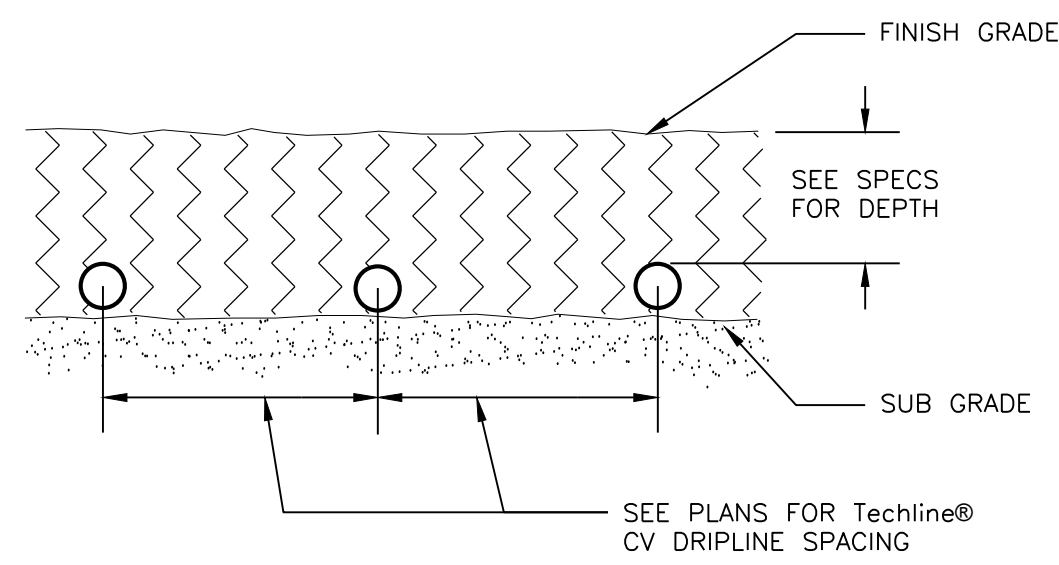
IRRIGATION SHOWN DIAGRAMATICALLY FOR PLAN CLARITY. COMMON TRENCH AND PLACE EQUIPMENT IN LANDSCAPE; MANIFOLD GROUPED VALVES IN ADJACENT SHRUB AREAS WHERE FEASIBLE.

ALL IRRIGATION CONNECTIONS AND FITTINGS SHALL BE LEAD-FREE

SCH 40 PIPE SIZING CHART

PIPE SIZE	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"
FLOW GPM	1-8	8.1-13	13.1-23	23.1-32	32.1-53	53.1-74 GPM (MAX.)

INSTALL IRRIGATION LATERAL LINES ON TOP OF FINISH GRADE (BUT BELOW BARK MULCH) TO AVOID DAMAGE TO TREE ROOTS



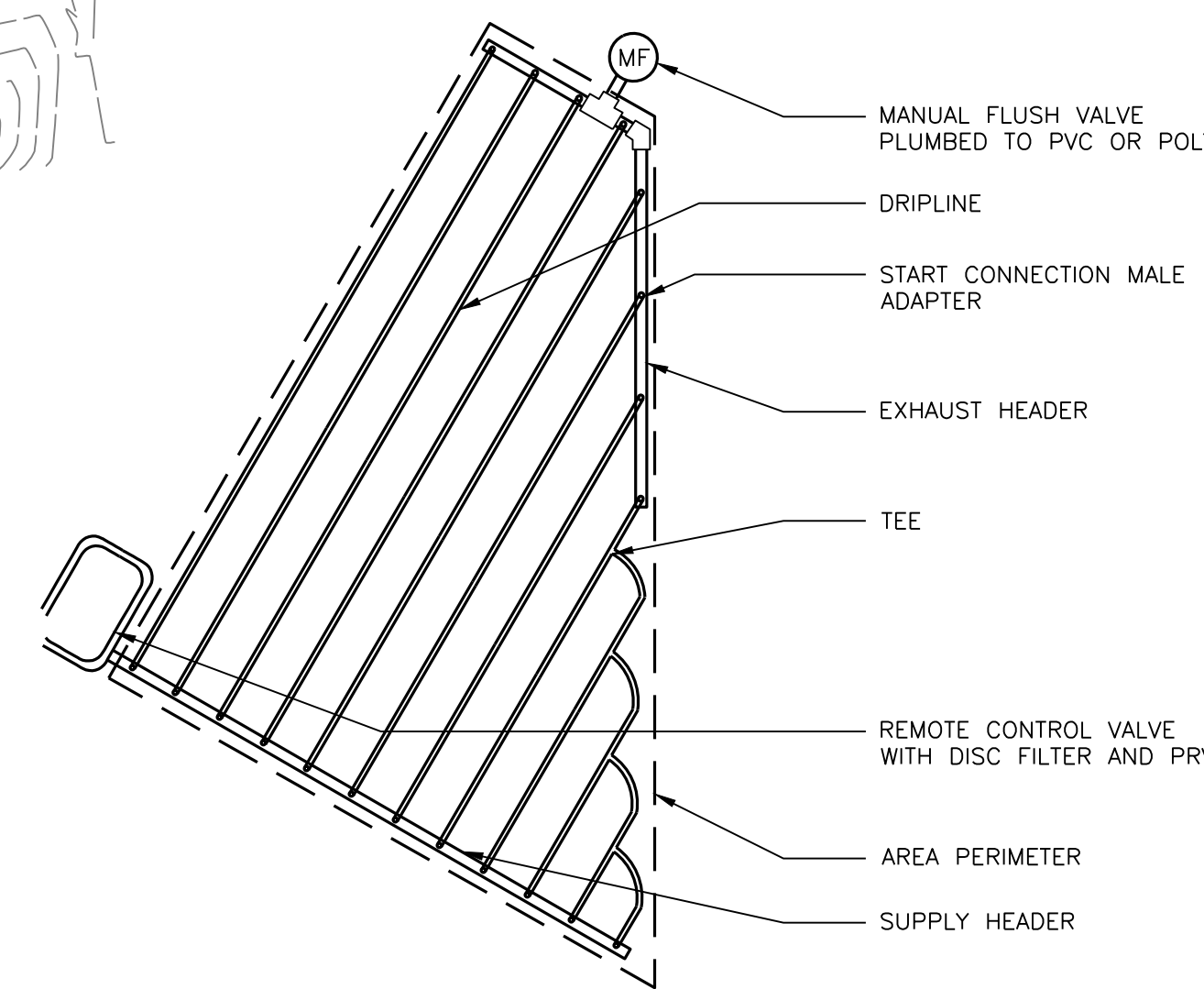
SUBGRADE INSTALLATION

NOT TO SCALE

NOTE:
1. SEE PLANS AND LEGEND FOR ALL DIMENSIONS AND DRIPLINE SPACING.
2. RATIO OF DRIPLINES TO START CONNECTIONS IS SHOWN AT 2:1, BUT MAY VARY PER HYDRAULIC DEMAND ON START CONNECTIONS. SEE PLANS AND LEGEND.

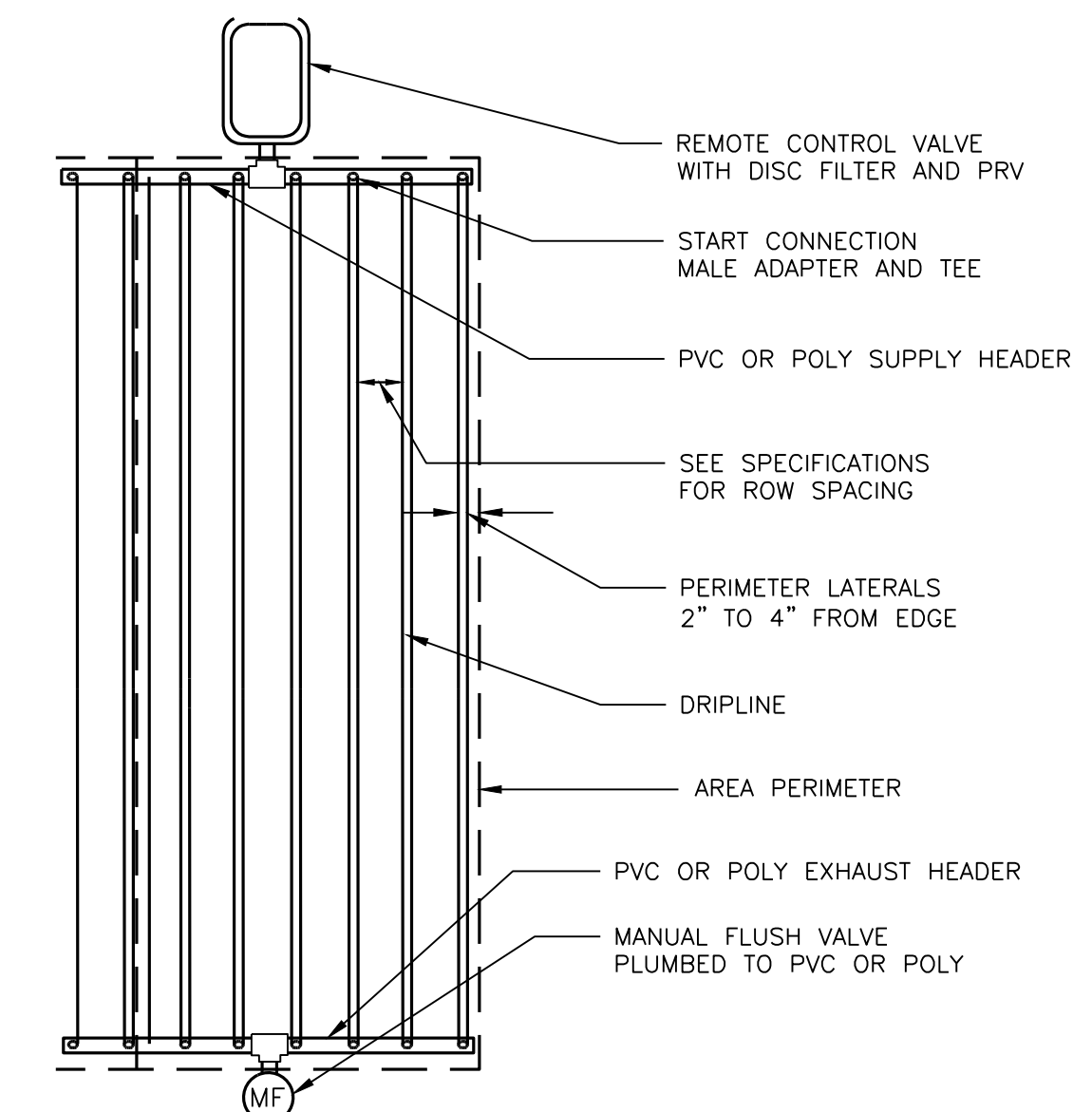
SUB-HEADER INSTALLATION

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IRREGULAR AREAS: Triangular

NOT TO SCALE



DRIPLINE FEED LAYOUT

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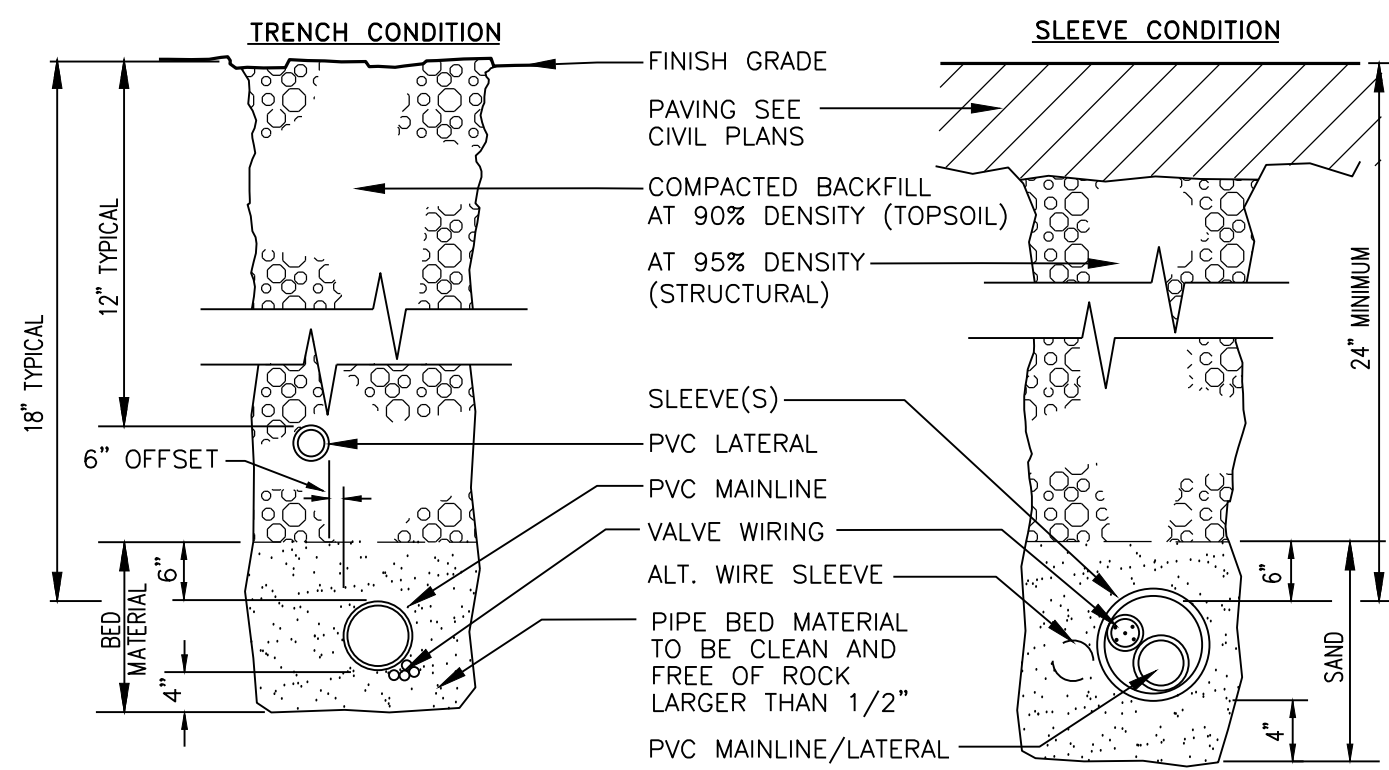
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CITY ENGINEER

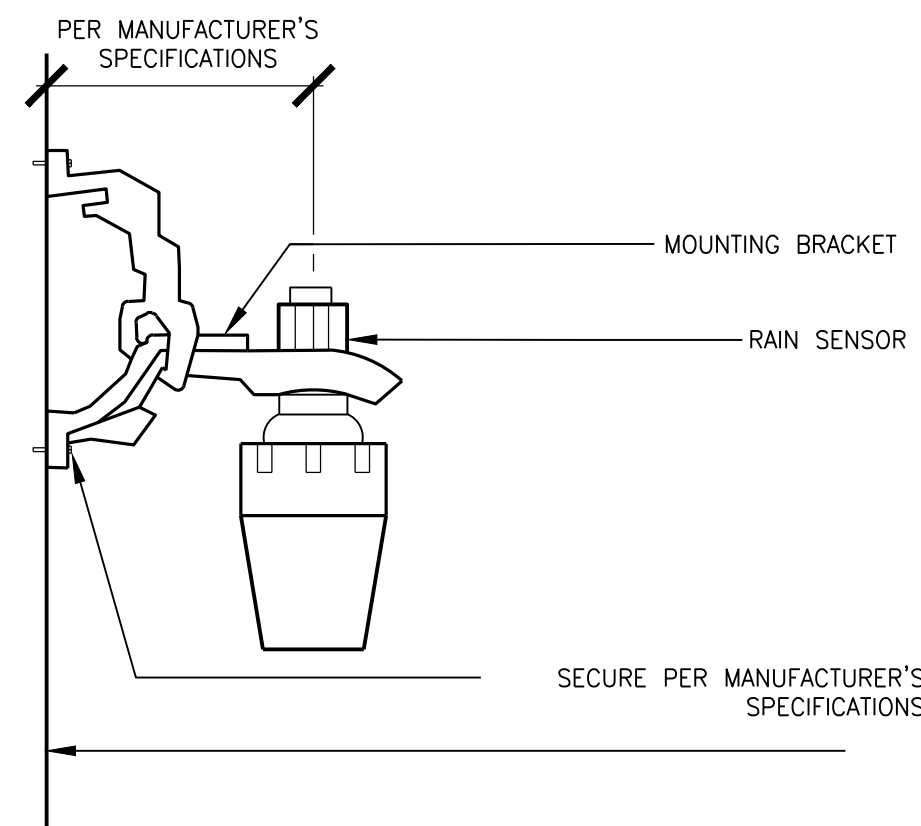
DATE _____

TREE RETENTION, LANDSCAPE and IRRIGATION SET
FOR
CHICK-FIL-A FIRCREST

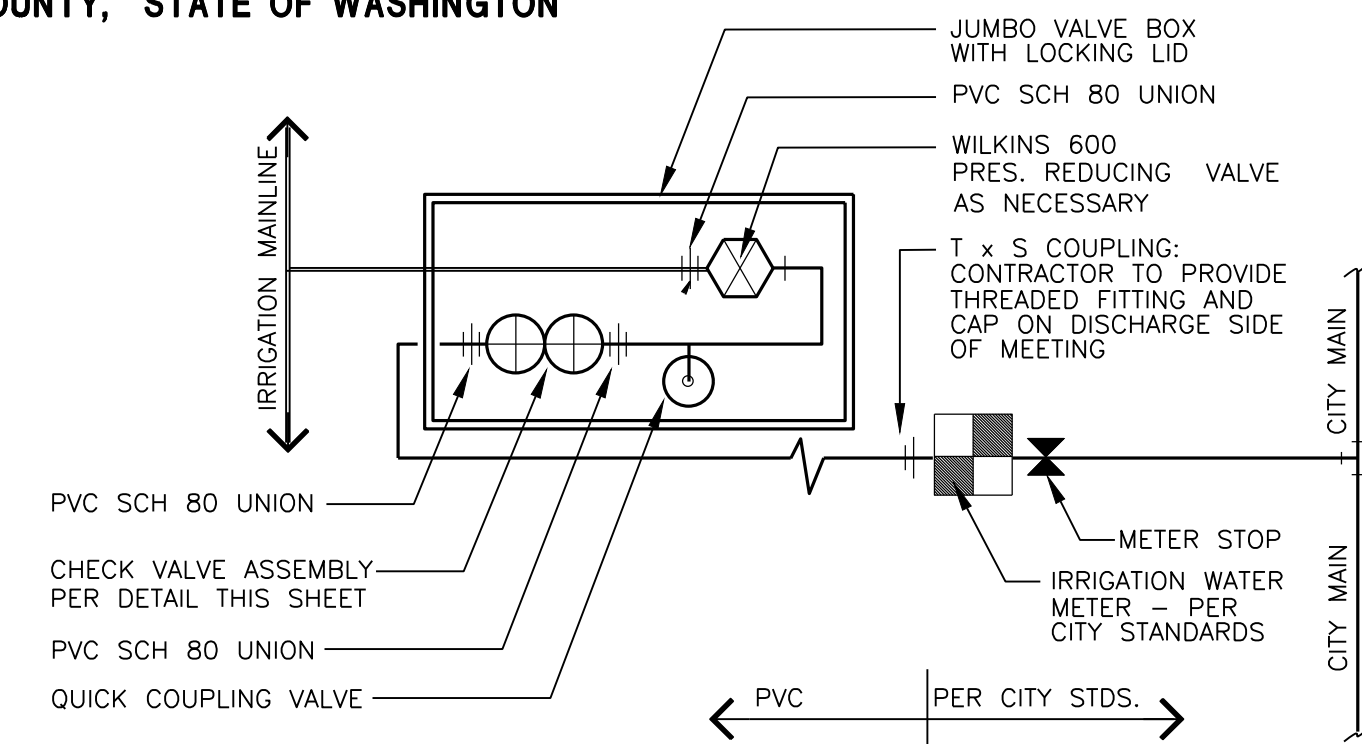
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NOTE:
DIMENSIONS ARE MINIMUM CLEARANCES.
ALL IRRIGATION SLEEVING TRENCH BACKFILL MATERIAL TO BE CLASS "B" OR BETTER (MAX. OF 10% PASSING NO.40 SCREEN) AND BE COMPACTED TO MIN. 95% OPTIMUM DENSITY PER ASTM D-1557-70 (MODIFIED PROCTOR)



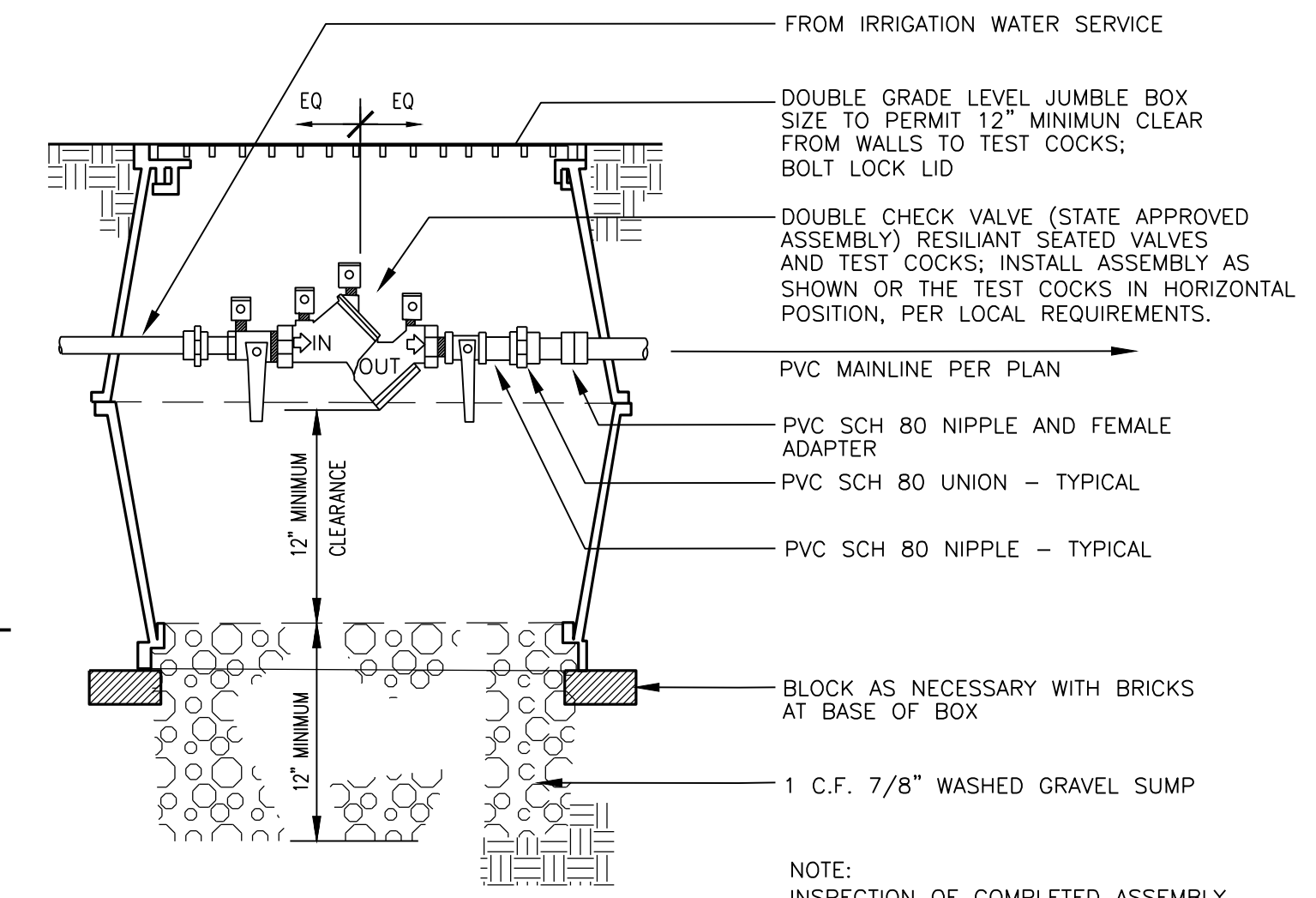
NOTE:
MOUNT ON WEATHER EXPOSED WALL 8\"/>



NOTE:
THE BACKFLOW DEVICE TO HAVE 6\"/>

POINT OF CONNECTION (P.O.C.) DETAIL

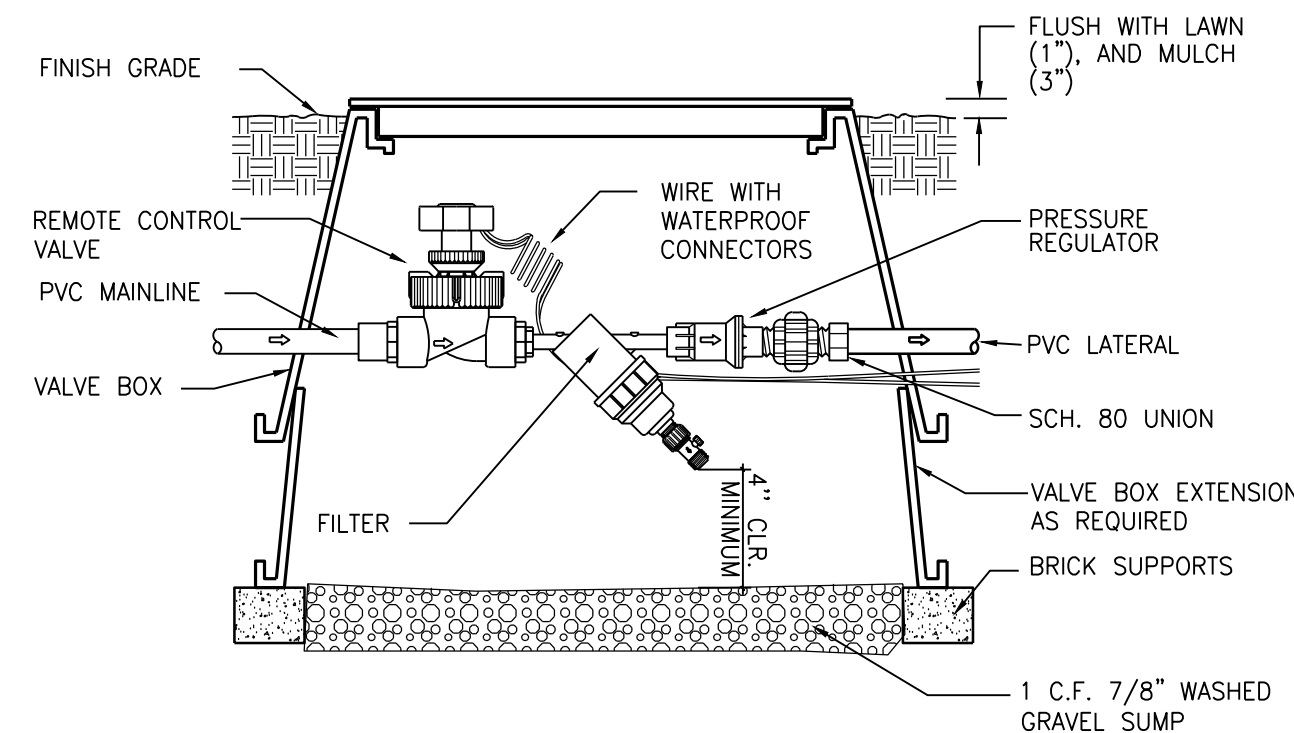
NOT TO SCALE



NOTE:
INSPECTION OF COMPLETED ASSEMBLY BY CERTIFIED TESTER REQUIRED.

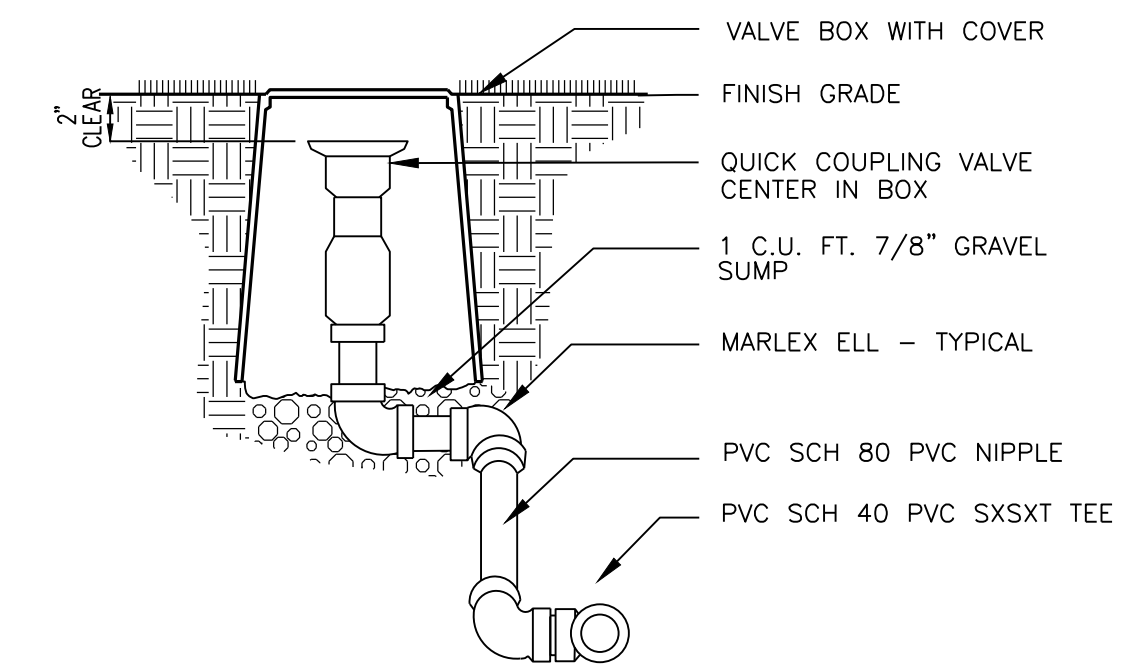
DOUBLE CHECK VALVE ASSEMBLY

NOT TO SCALE



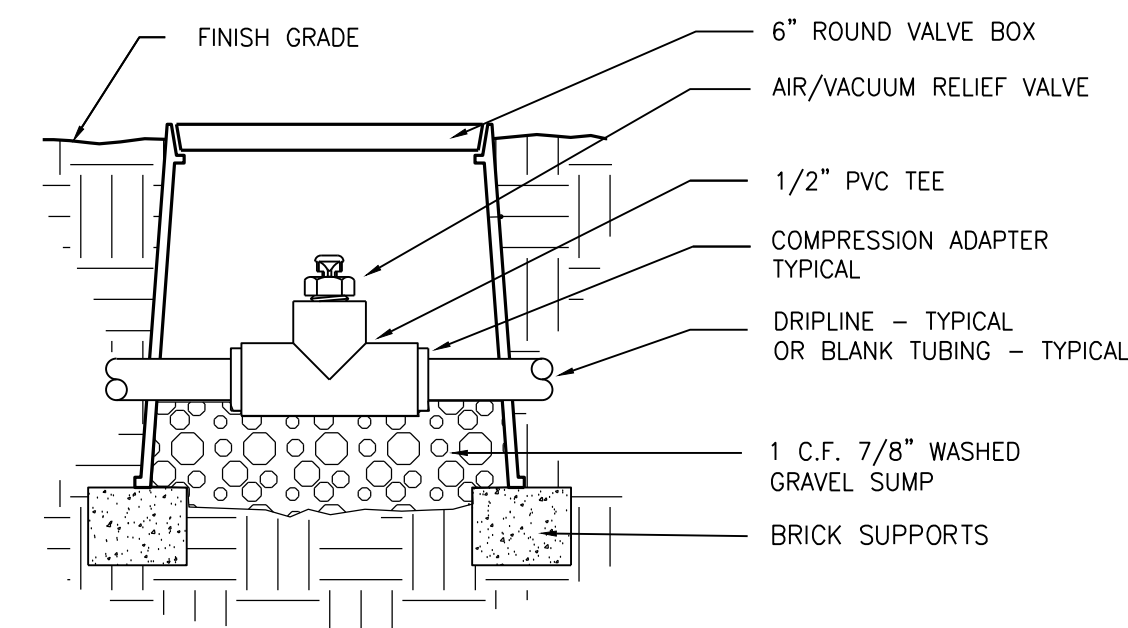
REMOTE CONTROL VALVE, PRESSURE REGULATOR AND FILTER DETAIL

NOT TO SCALE



QUICK COUPLING VALVE ASSEMBLY

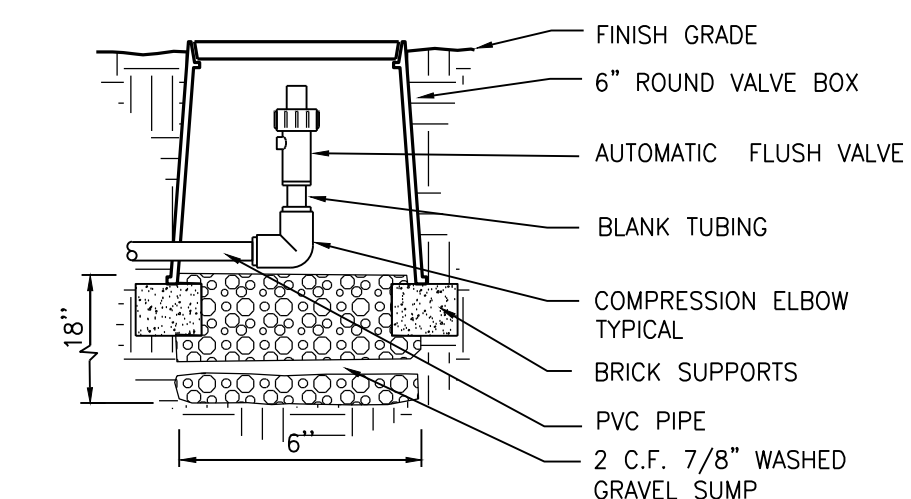
NOT TO SCALE



NOTE:
AIR/VACUUM RELIEF VALVE CANNOT BE CONNECTED LOWER THAN DRIPLINE LATERALS. FOR USE ON ZONES OF 7 GPM OR LESS ONLY (PLUMBED TO TUBING).

1/2\"/>

NOT TO SCALE



AUTOMATIC FLUSH VALVE DETAIL

NOT TO SCALE

SLEEVE/TRENCHING DETAIL

NOT TO SCALE

LANDSCAPE IRRIGATION NOTES

1. GENERAL CONTRACTOR AND LANDSCAPE CONTRACTOR TO COORDINATE:
 - A) INSTALLATION OF 110V ELECTRICAL SERVICE FROM ELECTRICAL SOURCE TO AUTOMATIC CONTROLLER, INCLUDING WIRE HOOK-UP INTO MOUNTED CONTROLLER. IRRIGATION CONTRACTOR WILL MOUNT CONTROLLER PER DESIGN AND COORDINATE WITH GENERAL CONTRACTOR.
 - B) INSTALLATION OF IRRIGATION/SERVICE METER AND STUB TO IRRIGATION POINT OF CONNECTION. PER UTILITY PLAN(S), UNLESS AN EXISTING METER IS USED. PROVIDE STANDARD THREADED STUB-OUT WITH THREADED CAP ON DISCHARGE SIDE OF METER. STUB-OUT TO BE INSTALLED APPROXIMATELY 18 INCHES BELOW FINISH GRADE.
 - C) VERIFICATION OF STATIC WATER PRESSURE AT POINT-OF-CONNECTION (P.O.C.) CONTRACTOR SHALL NOTIFY OWNER AND BARGHAUSEN CONSULTING ENGINEERS, INC., OF ANY VARIATION IN STATIC PRESSURE OVER 5 PSI GREATER/LESS THAN DESIGN PRESSURE.
 - D) INSTALLATION OF SLEEVING.
2. PROVIDE ALL LABOR, MATERIALS, TRANSPORTATION, AND SERVICES NECESSARY TO FURNISH AND INSTALL A COMPLETE IRRIGATION SYSTEM AS INDICATED ON THE DRAWINGS AND/OR NOTES. PROVIDE A ONE (1) YEAR WARRANTY/GUARANTEE FROM FINAL ACCEPTANCE AGAINST ALL DEFECTS IN MATERIALS, EQUIPMENT, AND WORKMANSHIP.
3. COORDINATE IRRIGATION INSTALLATION WITH GENERAL CONTRACTOR, ELECTRICAL CONTRACTOR, LANDSCAPE CONTRACTOR, OWNER, ARCHITECT, AND LANDSCAPE ARCHITECT.
4. LANDSCAPE CONTRACTOR TO TEST AVAILABLE WATER PRESSURE PRIOR TO BEGINNING ANY WORK. PROVIDE LANDSCAPE ARCHITECT WITH WRITTEN PSI RESULTS.
5. ALL WORK PER LOCAL CODE. INSTALLATION PER MANUFACTURER'S WRITTEN SPECIFICATIONS.
6. CONTRACTOR TO OBTAIN AND PAY FOR ALL PERMITS, FEES, AND REQUIRED CITY INSPECTIONS.
7. SUBMITTALS:
 - A) SUBMIT FIVE (5) COPIES OF EACH ITEM LISTED BELOW FOR LANDSCAPE ARCHITECT'S REVIEW AND APPROVAL.
 - B) PRODUCT DATA: FOR EACH TYPE OF PRODUCT INDICATED.
 - C) CONTROL WIRING PATH DIAGRAM.
 - D) "AS-BUILT" DRAWINGS.
 - E) OPERATION AND MAINTENANCE MANUALS.
8. PROVIDE AND KEEP UP TO DATE A COMPLETE "AS-BUILT" RECORD SET OF PRINTS WHICH ARE TO BE CORRECTED DAILY AND SHOW EVERY CHANGE FROM THE ORIGINAL DRAWINGS AND NOTES AND EXACT "AS-BUILT" LOCATIONS, SIZES AND KIND OF EQUIPMENT. THIS SET OF DRAWINGS ARE TO BE KEPT ON SITE AND ARE TO BE USED ONLY AS THE RECORD SET. ALL WORK IS TO BE NEAT AND LEGIBLE ANNOTATIONS THEREON DAILY AS THE WORK PROCEEDS, SHOWING WORK AS ACTUALLY INSTALLED.
 - A) CONNECTION TO WATER LINES (P.O.C.).
 - B) CONNECTIONS TO ELECTRICAL POWER.
 - C) GATE VALVE, QUICK COUPLERS, AND REMOTE CONTROL VALVE.
 - D) ROUTING OF MAINLINE (DIMENSION MAXIMUM 100' ALONG ROUTING).
 - E) ROUTING OF CONTROL WIRING.
 - F) OTHER RELATED EQUIPMENT AS DIRECTED BY THE LANDSCAPE ARCHITECT.
9. PREPARE AND PROVIDE PRIOR TO COMPLETION OF CONSTRUCTION, A THREE RING BINDER CONTAINING THE FOLLOWING INFORMATION:
 - A) INDEX SHEET STATING CONTRACTOR'S ADDRESS, TELEPHONE NUMBER, FAX, E-MAIL AND A LIST OF EQUIPMENT WITH NAME AND ADDRESS OF LOCAL MANUFACTURER'S REPRESENTATIVES.
 - B) CATALOG AND PARTS SHEETS ON EVERY MATERIAL AND EQUIPMENT INSTALLED UNDER THIS CONTRACT.
 - C) GUARANTEE STATEMENT.
 - D) COMPLETE OPERATING AND MAINTENANCE INSTRUCTIONS ON ALL MAJOR EQUIPMENT.
 - E) CONSTRUCTION DETAILS FROM THE PROJECT.
 - F) COMPLETE TROUBLE-SHOOTING GUIDE TO COMMON IRRIGATION PROBLEMS.
 - G) WINTERIZATION AND SPRING START-UP PROCEDURES.
 - H) CHART OF APPROXIMATE WATERING TIMES FOR SPRING, SUMMER, AND FALL.
 - I) A COPY OF THE "AS-BUILT" DRAWINGS AND CONTROLLER CHART.
10. ALL VALVES TO BE PLACED IN "CARSON" GRADE LEVEL BOXES WITH BOLT-LOCK LIDS (OR APPROVED EQUIVALENT). SET BOXES 2 INCHES HIGHER THAN FINISH GRADE IN MULCH AREAS AND FLUSH WITH FINISH GRADE IN LAWN AREAS. JUMBO BOX FOR CHECK VALVE, 10" ROUND BOX FOR GATE/QUICK COUPLER/WIRE SPLICES, AND 12" STANDARD FOR CONTROL VALVES. PROVIDE BOX EXTENSIONS AS REQUIRED.
11. MAINLINE PIPE TO BE BURIED 18 INCHES, LATERALS 12 INCHES, AND SLEEVES 24" INCHES BELOW FINISH GRADE. NO ROCK OR DEBRIS TO BE BACKFILLED OVER PIPE.
12. HEAD AND LINE POSITIONING IS DIAGRAMMATIC ON PLAN. ADJUST IN FIELD AS NECESSARY FOR 100 PERCENT COVERAGE. VALVES TO BE POSITIONED ADJACENT TO PAVEMENT/CURBS/IN SHRUB BEDS WHERE POSSIBLE.
13. FAMILIARIZE OWNERS FACILITY OPERATOR WITH IRRIGATION SYSTEM FUNCTION, CONTROLLER PROGRAMMING, SYSTEM OPERATION AND MAINTENANCE REQUIREMENTS.
14. SPRINKLERS ON RISERS WILL NOT BE ALLOWED UNLESS NOTED ON PLANS.
15. RADIUS REDUCTION TO BE MADE BY USE OF PRESSURE ADJUSTMENT, SCREENS, AND/OR ALTERNATE NOZZLES. IN-NOZZLE ADJUSTMENT IS LIMITED TO 10 PERCENT FOR SPRAY HEADS AND PER MANUFACTURER'S LIMITS FOR OTHER SPRINKLERS. SPRINKLER SPACING NOT EXCEED 60% OF THE DIAMETER OF THE PUBLISHED DATA.
16. ALL CONTROL WIRE SPLICES TO BE MADE AT VALVE BOXES WITH WATER TIGHT ELECTRICAL SPLICES, 3M, SCOTT'S LOCK SEAL TACK 3576-78, OR EQUIVALENT.
17. EACH VALVE BOX TO CONTAIN A MINIMUM OF TWO (2) SPARE ORANGE CONTROL WIRES FOR JACKETED WIRE. ROUTE SPARE WIRES FROM THE CONTROLLER TO THE LAST VALVE OF EACH MAINLINE BRANCH. COMMON WIRE TO BE WHITE. SINGLE STRAND WIRE TO BE A MINIMUM OF 14 GAUGE.
18. ALL ELECTRICAL EQUIPMENT TO BE U.L. TESTED AND APPROVED, AND BEAR THE U.L. LABEL.
19. CROSS CONNECTION PROTECTION INSPECTION REQUIRED. THE BACKFLOW DEVICE TO BE TESTED UPON THE ORIGINAL INSTALLATION. THE TESTING TO BE PERFORMED BY A PERSON HOLDING A CURRENT CERTIFICATE AS A BACKFLOW TESTER. THE TEST REPORT TO BE SUBMITTED TO THE LOCAL WATER DISTRICT, OR PURVEYOR, AND OWNER WITH A COPY TO BARGHAUSEN CONSULTING ENGINEERS, INC. CONTRACTOR TO INCLUDE TESTING IN THE SCOPE OF WORK. OWNER IS RESPONSIBLE FOR ANNUAL INSPECTIONS AFTER THE INITIAL INSPECTION.
20. CONTRACTOR TO PROVIDE SYSTEM WINTERIZATION/SPRING SERVICE WHEN INSTALLATION HAS BEEN COMPLETED WITHIN 90 DAYS OF NOVEMBER 1 FOR WINTERIZATION, OR MAY 15 FOR SPRING SERVICE. SERVICE TO BE PERFORMED AS NEAR AS PRACTICAL TO THE ABOVE DATES, OR AS FREEZE/PRECIPIATION CONDITIONS DETERMINE SERVICE NEED.
21. IRRIGATION SCHEDULING: THE IRRIGATION CONTROLLER CONTAINS A WATER BUDGET FEATURE. PERIODIC (WEEKLY) ADJUSTMENT OF THE WATER SCHEDULE IS INTENDED TO BE MADE VIA BUDGET ADJUSTMENT. RE-ADJUST WATERING DAYS AT 100 PERCENT BUDGET WHEN ADJUSTMENT EXCEEDS 30%. SET CONTROLLER FOR HIGHEST ET_o WATER SCHEDULE, BASED ON PUBLISHED LOCAL EVAPOTRANSPIRATION DATA. SYSTEM HAS BEEN DESIGNED FOR 50 TO 80 PERCENT DISTRIBUTION UNIFORMITY. LAWN ZONES SHOULD BE SCHEDULED FOR 100 PERCENT REPLACEMENT FACTOR ON A TYPICAL MINIMUM 3-DAY CYCLE. SHRUB ZONES SHOULD BE PROGRAMMED AT 40 TO 70 PERCENT OF THE MONTHLY LAWN WATER REQUIREMENT ON A ONCE PER WEEK CYCLE. ALL WATERING IN EXCESS OF THE LOCAL ET_o ("FIELD RECHARGE") TO BE COMPLETED DURING THE CONSTRUCTION PHASE WHILE THE CONTRACTOR IS ON THE JOB SITE. OVER WATERING OF LANDSCAPE DUE TO CONTROLLER SCHEDULING TO BE GROUNDS FOR CONTRACTOR TO REPAIR ANY RESULTANT DAMAGES AT CONTRACTOR'S OWN EXPENSE.
22. SUBSTITUTION OF IRRIGATION MATERIAL/EQUIPMENT TO BE MADE ONLY UPON WRITTEN APPROVAL OF OWNER'S REPRESENTATIVE.
23. ALL ZONES TO PASS A MINIMUM DISTRIBUTION UNIFORMITY OF 62 PERCENT, AS TESTED THROUGH AN IRRIGATION ASSOCIATION CERTIFIED WATER AUDIT.
24. CLEANUP AND PROTECTION: DURING IRRIGATION WORK, KEEP ALL PAVEMENT CLEAN AND WORK AREAS IN AN ORDERLY CONDITION. PROTECT IRRIGATION WORK AND MATERIALS FROM DAMAGE DUE TO LANDSCAPE AND IRRIGATION OPERATIONS AND TRESPASSERS. MAINTAIN PROTECTION DURING INSTALLATION AND MAINTENANCE PERIOD. TREAT, REPAIR, OR REPLACE DAMAGE LANDSCAPE AND IRRIGATION WORK AS DIRECTED BY THE OWNER.



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