

GATES & ASSOCIATES
 LANDSCAPE ARCHITECTURE
 LAND PLANNING URBAN DESIGN

2671 CROW CANYON RD., SAN RAMON, CA. 94583
 TEL: 925.736.8176 FAX: 925.838.8901
 WWW.DGATES.COM

**HINDU COMMUNITY
 & CULTURAL CENTER**
 1200 ARROWHEAD AVE.

LIVERMORE, CA

REVISION: DESCRIPTION: DATE:



PROJECT NAME: HCCC
 PROJECT NUMBER: P3995
 PROJECT FILE:
 DRAWN: SH, JC
 CHECK: DG
 DATE: 09/11/2010

SCALE: 1" = 30'

SITE MASTER PLAN

GENERAL NOTES

- EXCAVATIONS SHALL BE ADEQUATELY SHORED, BRACED AND SHEETED SO THAT THE EARTH WILL NOT SLIDE OR SETTLE AND SO THAT ALL EXISTING IMPROVEMENTS OF ANY KIND WILL BE FULLY PROTECTED FROM DAMAGE. ANY DAMAGE RESULTING FROM A LACK OF ADEQUATE SHORING, BRACING AND SHEETING SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND HE SHALL EFFECT NECESSARY REPAIRS OR RECONSTRUCTION AT HIS OWN EXPENSE. WHERE THE EXCAVATION FOR A CONDUIT TRENCH, AND/OR STRUCTURE IS FIVE FEET OR MORE IN DEPTH, THE CONTRACTOR SHALL PROVIDE ADEQUATE SHEETING, SHORING AND BRACING OR EQUIVALENT METHOD, FOR THE PROTECTION OF LIFE, OR LIMB, WHICH SHALL CONFORM TO THE APPLICABLE CONSTRUCTION SAFETY ORDERS OF THE DIVISION OF INDUSTRIAL SAFETY OF THE STATE OF CALIFORNIA, THE CONTRACTOR SHALL ALWAYS COMPLY WITH OSHA REQUIREMENTS.
- THE CONTRACTOR SHALL TAKE EFFECTIVE ACTION TO PREVENT THE FORMATION OF AN AIRBORNE DUST NUISANCE AND SHALL BE RESPONSIBLE FOR ANY DAMAGE RESULTING FROM HIS FAILURE TO DO SO.
- THE CONTRACTOR SHALL PROVIDE FOR INGRESS AND EGRESS FOR PRIVATE PROPERTY ADJACENT TO WORK THROUGHOUT THE PERIOD OF CONSTRUCTION.
- THE CONTRACTOR SHALL PROVIDE ALL LIGHTS, SIGNS, BARRICADES, FLAGGERS OR OTHER DEVICES NECESSARY TO PROVIDE FOR SAFETY.
- STATIONING HEREON IS ALONG CONSTRUCTION CENTERLINE UNLESS OTHERWISE SHOWN OR INDICATED.
- ALL RETURN RADIUS AND CURB DATA ARE TO FACE OF CURB.
- WHenever BOTTOM OF WALL (BW) ELEVATION IS GIVEN, IT IS FINISH PAVEMENT OR GRADE ELEVATION AT FACE OF WALL.
- ALL EXISTING UTILITIES AND IMPROVEMENTS THAT BECOME DAMAGED DURING CONSTRUCTION SHALL BE COMPLETELY RESTORED TO THE SATISFACTION OF THE OWNER OR UTILITY AGENCY REPRESENTATIVE, AT THE CONTRACTOR'S SOLE EXPENSE.
- ANY RELOCATION OF PUBLIC UTILITIES SHALL BE CONDUCTED IN ACCORDANCE WITH ANY AND ALL REQUIREMENTS OF THE UTILITY COMPANY REPRESENTATIVE INCLUDING FEES, BONDS, PERMITS AND WORKING CONDITIONS, ETC. THIS WORK SHALL BE DONE AT NO EXPENSE TO THE UTILITY COMPANY. THE OWNER SHALL PAY THE COST OF ALL SUCH RELOCATION WORK INCLUDING FEES, BONDS, PERMITS, ETC.
- DURING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PUBLIC SAFETY AND SAFETY OF EXISTING STRUCTURES. THE CONTRACTOR SHALL PROVIDE ADEQUATE BARRICADES, TRAFFIC CONTROL, SHORINGS, BRACING AND GUYS IN ACCORDANCE WITH ALL NATIONAL, STATE SPECS AND LOCAL SAFETY ORDINANCES.
- ALL LANDSCAPE PLANTING SHALL BE MAINTAINED FOR A PERIOD OF 6 MONTHS FROM DATE OF COMPLETION OF CONTRACT.

LAYOUT NOTES

- CONTRACTOR SHALL VERIFY ALL GRADES, EXISTING CONDITIONS AND DIMENSIONS IN THE FIELD PRIOR TO COMMENCING WORK. ALL DISCREPANCIES OR QUESTIONS SHALL BE BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT FOR RESOLUTION.
- ALL WRITTEN DIMENSIONS SUPERSEDE ALL SCALED DISTANCES AND DIMENSIONS. DIMENSIONS SHOWN ARE FROM THE FACE OF THE BUILDING, WALL, BACK OF CURB, EDGE OF WALK, PROPERTY LINE, OR CENTERLINE OF COLUMN UNLESS OTHERWISE NOTED ON THE DRAWINGS.
- ALL DIMENSIONS AT BUILDING ARE TO FACE OF BUILDING. ALL DIMENSIONS AT ROADWAY ARE TO FACE OF CURB.
- ALL ANGLES ARE 45 DEGREE, 90 DEGREE, OR 135 DEGREE UNLESS OTHERWISE NOTED.
- ALL CURVES AND ALL TRANSITIONS BETWEEN CURVES AND STRAIGHT EDGES SHALL BE SMOOTH.
- SEE IRRIGATION SCHEMATIC FOR GENERAL SYSTEM REQUIREMENTS AND FOR LOCATION OF IRRIGATION MAINLINE PIPING. SLEEVES TO ACCOMMODATE IRRIGATION PIPING, SIZED AS NEEDED, SHALL BE IN PLACE UNDER AND THROUGH SLABS AND WALLS, PRIOR TO POURING.
- SCORE LINES IN SIDEWALKS SHALL BE SPACED TO EQUAL THE WIDTH OF THE WALKWAY, UNLESS OTHERWISE SHOWN. EXPANSION JOINTS IN SIDEWALKS SHALL BE 30" ON CENTER MAXIMUM AND SHALL OCCUR AT ALL BUILDING EDGES, WALLS, CURBS, HANDICAPPED RAMPS, AND PLANTERS.
- EXPANSION JOINTS IN CONCRETE WALLS SHALL BE AT 40' O.C. MAXIMUM. CONTROL JOINTS SHALL BE AT 20' O.C. MAXIMUM.
- SIDEWALK PATTERNS, WALLS, GRADING AND DRAINAGE IS BASED ON DRAWINGS PREPARED BY THE CIVIL ENGINEER.
- SEE ELECTRICAL ENGINEER'S PLANS AND LIGHTING PLAN FOR ADDITIONAL INFORMATION.
- CONTRACTOR TO PROVIDE ONE 12"x12" PANEL OF EACH CONCRETE COLOR AND FINISH POURED IN PLACE TO BE APPROVED BY LANDSCAPE ARCHITECT.
- CONTRACTOR TO SANDBLAST ALL EXISTING LANDSCAPE PLANTER WALLS ON SITE ADJACENT TO AREAS OF CONSTRUCTION PER THE DIRECTION OF THE OWNER.

PLANTING NOTES

- ALL WORK SHALL BE PERFORMED BY PERSONS FAMILIAR WITH PLANTING WORK AND UNDER THE SUPERVISION OF A QUALIFIED PLANTING FOREMAN.
- PLANT MATERIAL LOCATIONS SHOWN ARE DIAGRAMMATIC AND MAY BE SUBJECT TO CHANGE IN THE FIELD BY THE LANDSCAPE ARCHITECT. PLANT LOCATIONS ARE TO BE ADJUSTED IN THE FIELD AS NECESSARY TO SCREEN UTILITIES BUT NOT TO BLOCK WINDOWS, SIGNS NOR IMPEDE ACCESS.
- THE DESIGN INTENT OF THE PLANTING PLAN IS TO ESTABLISH AN ATTRACTIVE MATURE LANDSCAPE APPEARANCE. FUTURE PLANT GROWTH WILL NECESSITATE TRIMMING, SHAPING, AND IN SOME CASES REMOVAL OF TREES AND SHRUBS AS AN ON-GOING MAINTENANCE PROCEDURE.
- PLANT COUNT IS FOR THE CONVENIENCE OF THE CONTRACTOR. IN CASE OF DISCREPANCIES, THE PLAN SHALL GOVERN.
- THE LANDSCAPE ARCHITECT RESERVES THE RIGHT TO MAKE SUBSTITUTIONS, ADDITIONS, AND DELETIONS IN THE PLANTING SCHEME AS THEY FEEL NECESSARY WHILE WORK IS IN PROGRESS UPON APPROVAL BY THE OWNER. SUCH CHANGES ARE TO BE ACCOMPANIED BY EQUITABLE ADJUSTMENTS IN THE CONTRACT PRICE IF WHEN NECESSARY.
- ALL TREES ARE TO BE STAKED AS SHOWN ON THE TREE STAKING /GUYING DIAGRAMS. BRANCHING HEIGHT OF TREES SHALL BE A 6'-0" MINIMUM ABOVE FINISH GRADE. ALL TREES IN A FORMAL GROUP PLANTING SHALL BE MATCHING IN SIZE AND SHAPE. LANDSCAPE ARCHITECT SHALL BE CONSULTED REGARDING ORIENTATION OF TREES PRIOR TO PLANTING AND/OR BACKFILLING.
- PLANT TREES 3'-0" MINIMUM FROM FACE OF CURB AT PARKING, AND FROM EDGES OF PAVING. ALL TREES WITHIN 5' OF PAVING AREAS SHALL HAVE DEEP ROOT BARRIERS INSTALLED. SEE ROOT BARRIER DETAIL. DEEP ROOT BARRIER MODEL NO. UB242. (415) 344-1464. INSTALL PER MANUFACTURER'S SPECIFICATIONS.
- ON GRADE PLANTING BACKFILL MIX SHALL CONSIST OF 2 PARTS NATIVE TOPSOIL AND 1 PART NITRIFIED REDWOOD SOIL CONDITIONER.
- THE LANDSCAPE CONTRACTOR SHALL REPAIR ANY DAMAGE TO THE WATERPROOF MEMBRANES CAUSED BY HIS OPERATIONS TO THE SATISFACTION OF THE OWNER'S REPRESENTATIVE WITHOUT ANY ADDITIONAL CHARGE.
- ALL SLOPES GREATER THAN 25:1 SHALL BE COVERED WITH EROSION CONTROL NETTING PER THE MANUFACTURER'S SPECIFICATIONS. OVERLAP ALL EDGES A MINIMUM OF 12" AND SECURE AS REQUIRED WITH METAL STAPLES. EROSION CONTROL NETTING TO BE WESTERN EXCELSIOR, EXCEL C8-3 OR APPROVED EQUAL. AVAILABLE FROM REED & GRAHAM 888-381-0800.
- PROVIDE 4" BERM AROUND TREE FOR WATER BASIN. SEE TREE STAKING DETAIL. BERM TO BE REMOVED IN LAWN AREA AFTER INITIAL WATERING. MULCH TREE WELL WITH 3" LAYER OF RECYCLED BARK. KEEP MULCH AWAY FROM TREE TRUNK. IN LAWN AREAS, HOLD LAWN 2" DIA CLEAR AROUND TREES.
- EACH PLANT SHALL RECEIVE AGRIFORM SLOW RELEASE PLANT TABLETS. 20-10-5 COMPOSITION. APPLY PER MANUFACTURER'S SPECIFICATIONS. PLACE ADJACENT TO ROOTBALL:
 - 6 FOR 24" BOX TREES - 2 BELOW AND 4 ON SIDES OF ROOTBALL.
 - 5 FOR 15 GALLON CAN TREES - 1 BELOW AND 4 ON SIDES OF ROOTBALL.
 - 4 FOR 5 GALLON CAN TREES - 1 BELOW AND 3 ON SIDES OF ROOTBALL.
- TREES MUST HAVE AN UNCUIT LEADER THAN HAS A UNIFORM TAPER FROM BASE TO TIP. TREES MUST MEET AT LEAST NORMAL CALIPER AND HEIGHT FOR CONTAINER SIZE. OVERGROWN OR ROOT BOUND TREES ARE NOT ACCEPTABLE.
- GROUND COVER SHALL BE PLANTED AS SHOWN ON THE PLAN, INCLUDING UNDER SHRUBS AND IN TREE WATERING BASINS.
- CONTRACTOR SHALL EXCAVATE ALL LIME-TREATED SOILS FROM ALL PLANTING AREAS AND TREE PLANTING FITS.
- CONTRACTOR SHALL REVIEW ALL TREE LOCATIONS AND GRADES PRIOR TO PLANTING. IF ANY TREES ARE LOCATED WITHIN SWALES OR LOW POINTS, NOTIFY THE LANDSCAPE ARCHITECT FOR RELOCATIONS.
- CONTRACTOR SHALL REVIEW ALL PLANS PRIOR TO THE BEGINNING OF CONSTRUCTION AND MAINTAIN THE FOLLOWING CLEARANCES FOR ALL TREE PLANTINGS. NOTIFY LANDSCAPE ARCHITECT OF ANY CONFLICTS. FIRE HYDRANTS AND PVS. 3' MINIMUM LIGHT POLES. 10' MINIMUM BUILDINGS. 15' MINIMUM.
- CONTRACTOR SHALL INSTALL HEADER BETWEEN ALL PLANTING AREAS, LAWN AREAS, COBBLE BANDS, AND ALL UNDEVELOPED AREAS.
- ALL PLANTERS IN AREAS WHICH HAVE BEEN COMPACTED, SUCH AS ADJACENT TO BUILDINGS AND IN PARKING LOTS, SHALL BE DE-COMPACTED TO THE FOLLOWING DEPTHS: PLANTERS LESS THAN THREE (3) FEET WIDE SHALL HAVE COMPACTION RELIEVED TO A MINIMUM DEPTH OF TWENTY-FOUR (24) INCHES BELOW SUBGRADE; PLANTERS THREE TO TEN (3-10) FEET WIDE SHALL HAVE COMPACTION RELIEVED TO A MINIMUM DEPTH OF 18" BELOW SUBGRADE. PLANTERS MORE THAN 10' WIDE SHALL HAVE COMPACTION RELIEVED TO A MINIMUM DEPTH OF 12" BELOW SUBGRADE.
- CONTRACTOR TO REVIEW ALL EXISTING & PROPOSED UTILITY PLANS PRIOR TO CONSTRUCTION.
- CONTRACTOR TO TAKE PRECAUTION IN EXCAVATION OF ALL TREE PLANTING FITS. CONTRACTOR TO NOTIFY LANDSCAPE ARCHITECT OF ANY CONFLICTS FOUND DURING CONSTRUCTION.
- PER SOILS REPORT, SUBMITTED 8/11/2009, TOP 3' OF TOPSOIL IS AVAILABLE AND SUITABLE FOR VEGETATION.

LAYOUT LEGEND

	PEDESTRIAN CONCRETE PAVING FINISH: BROOM COLOR: STANDARD GREY
	SPECIAL PEDESTRIAN PAVING FINISH: 12" X 12" QUARRY TILE COLOR: TBD MFR: TBD
	6" BENCH COUNT: 6
	BIKE RACK CAPACITY: 5 BIKES COUNT: 10
	EXPANSION JOINT LOCATE AS SHOWN, AT ALL JOINTS BETWEEN PAVING & WALLS, AND AT ALL CHANGES IN PAVING MATERIAL.
	SCORELINE, LOCATE AS SHOWN. SPACE EQUALLY & SQUARE
S.C.D.	SEE CIVIL DRAWINGS
S.A.D.	SEE ARCHITECTURAL DRAWINGS
S.E.D.	SEE ELECTRICAL DRAWINGS
S.S.D.	SEE STRUCTURAL DRAWINGS
S.P.D.	SEE PLUMBING CONSULTANT DRAWINGS
TYP.	TYPICAL
FA	PLANTING AREA
MFR	MANUFACTURER
TBD	TO BE DETERMINED
SP	SPACING
	POINT OF BEGINNING
F.O.B.	FACE OF BUILDING
EQ	EQUAL
SIM	SIMILAR
	ALIGN
—	CENTER LINE
IE	PROPERTY LINE
ES	EQUAL SPACES
SB	SAND BLAST
L5B	LIGHT SANDBLAST
MED	MEDIUM
MB	MEDIUM BROOM
M5B	MEDIUM SANDBLAST
O.C.	ON CENTER
E.W.	EACH WAY
R	RADIUS
SQ	SQUARE
CMU	CONCRETE MASONRY UNIT
BW	BOTH WAYS
SS	STAINLESS STEEL
OFOI	OWNER FURNISHED, OWNER INSTALLED
BFP	BACK FLOW PREVENTER
T	TREAD

PLANT LIST

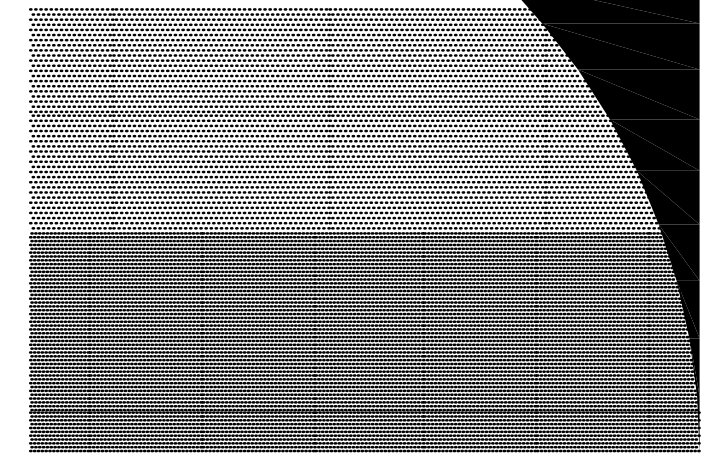
SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE	SPACING	WATER USE	COUNT
TREES						
AM	ARBUTUS 'MARINA'	STRAWBERRY TREE	15 GAL	A8 SHOWN	LOW	10
AR	ACER RUBRUM 'OCTOBER GLORY'	RED MAPLE	24" BOX	A8 SHOWN	MOD	38
CD	CEDRUS DEODARA	DEODAR CEDAR	24" BOX	A8 SHOWN	MOD	20
CT	X CHITALPA TASHKENTENSIS	CHITALPA	24" BOX	A8 SHOWN	MOD	6
LI	LAGERSTROEMIA INDICA 'TUSCARORA'	CRABE MYRTLE	15 GAL	A8 SHOWN	MOD	30
OE	OLEA EUROPAEA 'SIUAN HILL'	FRUITLESS DWARF EUR. OLIVE	24" BOX	A8 SHOWN	MOD	8
PA	PLATANUS ACERIFOLIA 'COLUMBIA'	LONDON PLANE TREE	15 GAL	A8 SHOWN	MOD	9
PD	PHOENIX DACTYLIFERA	DATE PALM	16' TALL	A8 SHOWN	LOW	9
QR	QUERCUS ROBUR	ENGLISH OAK	15 GAL	A8 SHOWN	LOW	25
QF	QUERCUS ROBUR FASTIGIATA	UPRIGHT ENGLISH OAK	24" BOX	A8 SHOWN	LOW	20
QW	QUERCUS WBLIZENII	INTERIOR LIVE OAK	24" BOX	A8 SHOWN	LOW	9
ZS	ZELKOVA SERRATA	SAWLEAF ZELKOVA	24" BOX	A8 SHOWN	MOD	9
SHRUBS						
AH	ARCTOSTAPHYLOS 'HOWARD MCHINN'	VINE HILL MANZANITA	5 GAL	4'-0" O.C.	LOW	1250
CF	CISTUS X PURPUREUS	ORCHID ROCKROSE	5 GAL	3'-0" O.C.	LOW	98
HB	HEPEROCALLIS HYBRID 'BITSY'	EVERGREEN DAYLILY	1 GAL	2'-6" O.C.	MOD	138
MC	MYRTICA CALIFORNICA	PACIFIC WAX MYRTLE	5 GAL	4'-0" O.C.	LOW	131
PF	PHORNIUM C. PLATT'S BLACK	MOUNTAIN FLAX	5 GAL	3'-0" O.C.	LOW	245
PZ	PRUNUS LAUROCERASUS 'ZABELIANA'	ZABEL LAUREL	5 GAL	4'-0" O.C.	MOD	19
RC	RHAMNUS CALIFORNICA 'EVE CASE'	COFFEEBERRY	5 GAL	3'-6" O.C.	LOW	235
RM	ROSA 'MIDLAND'	'MIDLAND ROSE	2 GAL	3'-0" O.C.	MOD	184
RS	RHODOCHLOPS INDICA 'SPRING RAFTURE'	INDIAN HAWTHORN	5 GAL	3'-6" O.C.	LOW	65
VT	VIORNIUM TINUS 'SPRING BOUQUET'	LAURINTIUS	5 GAL	3'-6" O.C.	MOD	42
GROUND COVER						
CT	CAREX TUMULICOLA	BERKELEY SEDGE	1 GAL	18" O.C.	MOD	6,438
NT	NASSELLA TENUSOIMA	MEXICAN FEATHER GRASS	1 GAL	2'-0" O.C.	LOW	481
SA	STIPA ARUNDINACEA	PHEASANT'S TAIL GRASS	1 GAL	2'-0" O.C.	MOD	990
MP	MYOPORUM PARVIFOLIUM 'BURGUNDY CARPET'	MYOPORUM	1 GAL	12" O.C.	MOD	18,110
SEED MIX A						
MOUN, IRRIGATED HYDROSEED LAWN DURATION TALL FESCUE BLEND @ 10 LB./1000 SQ. FT.						
SEED MIX B						
UNMOUN, NON-IRRIGATED EROSION CONTROL						
SYMBOL	BOTANICAL NAME	COMMON NAME	LB./ACRE			
AS	ASCLEPIAS FABICULARIS	NARROW-LEAVED MILKWOOD	2 LB.			
ME	HORDEUM BRACHYANTHERUM	MEADOW BARLEY	10 LB.			
HA	DESCHAMPSIA ELONGATA	HAIRGRASS	4 LB.			
CA	LATHENIA GLABRATA	CALIFORNIA GOLDFIELDS	3 LB.			
SP	ELBOCHARIS MACROSTACHYA	SPIKERUSH SEED	6 LB.			
LU	LUPINUS BICOLOR	MINIATURE LUPINE	4 LB.			

PLANTING LEGEND

	TREE NAME QUANTITY	SEE PLANT LIST FOR ADDTL. INFO.		
	SHRUB NAME QUANTITY	SEE PLANT LIST FOR ADDTL. INFO.		
	GROUND COVER QUANTITY	SEE PLANT LIST FOR ADDTL. INFO.		
	VINE NAME QUANTITY	SEE PLANT LIST FOR ADDTL. INFO.		
	LAWN FROM 60D			
	GROUND COVER			
	VINE SYMBOL			

SHEET INDEX

L1.0	SITE MASTER PLAN
L1.1	NOTES, LEGEND AND PLANT LIST
L1.2	EXISTING LANDSCAPE CONDITIONS
L1.3	LAYOUT AND FENCING PLAN
L1.4	PLANTING PLAN
L1.5	HYDROZONE PLAN
L1.6	DETAILS
L1.7	DETAILS
L2.1	IRRIGATION PLAN
L2.2	IRRIGATION NOTES AND LEGEND
L2.3	IRRIGATION DETAILS
L2.4	IRRIGATION DETAILS
L2.5	SCHEDULE AND WATER CALCULATIONS
L2.6	SCHEDULE AND WATER CALCULATIONS
L3.1	PHOTOMETRICS DIAGRAM



GATES & ASSOCIATES

LANDSCAPE ARCHITECTURE
LAND PLANNING URBAN DESIGN

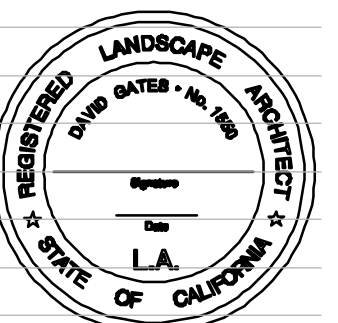
2671 CROW CANYON RD, SAN RAMON, CA. 94583
TEL: 925.736.8176 FAX: 925.838.8901
WWW.DGATES.COM

HINDU COMMUNITY & CULTURAL CENTER

1200 ARROWHEAD AVE.

LIVERMORE, CA

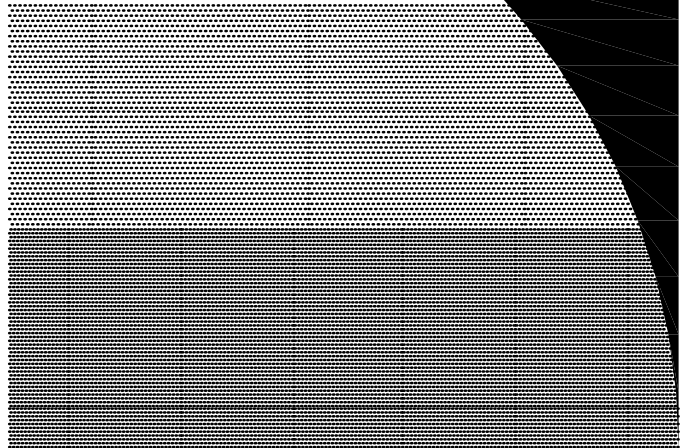
REVISION: DESCRIPTION: DATE:



PROJECT NAME: HCCC
PROJECT NUMBER: P3995
PROJECT FILE:
DRAWN: SH, JC
CHECK: DG
DATE: 09/11/2010

SCALE:

COVER SHEET



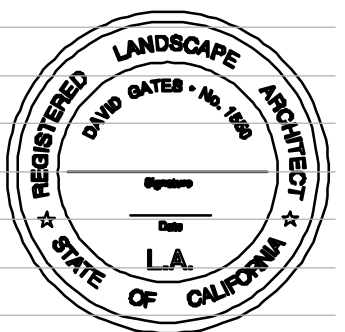
GATES & ASSOCIATES
 LANDSCAPE ARCHITECTURE
 LAND PLANNING URBAN DESIGN

2671 CROW CANYON RD. SAN RAMON, CA. 94583
 TEL: 925.736.8176 FAX: 925.838.8901
 WWW.DGATES.COM

**HINDU COMMUNITY
 & CULTURAL CENTER
 1200 ARROWHEAD AVE.**

LIVERMORE, CA

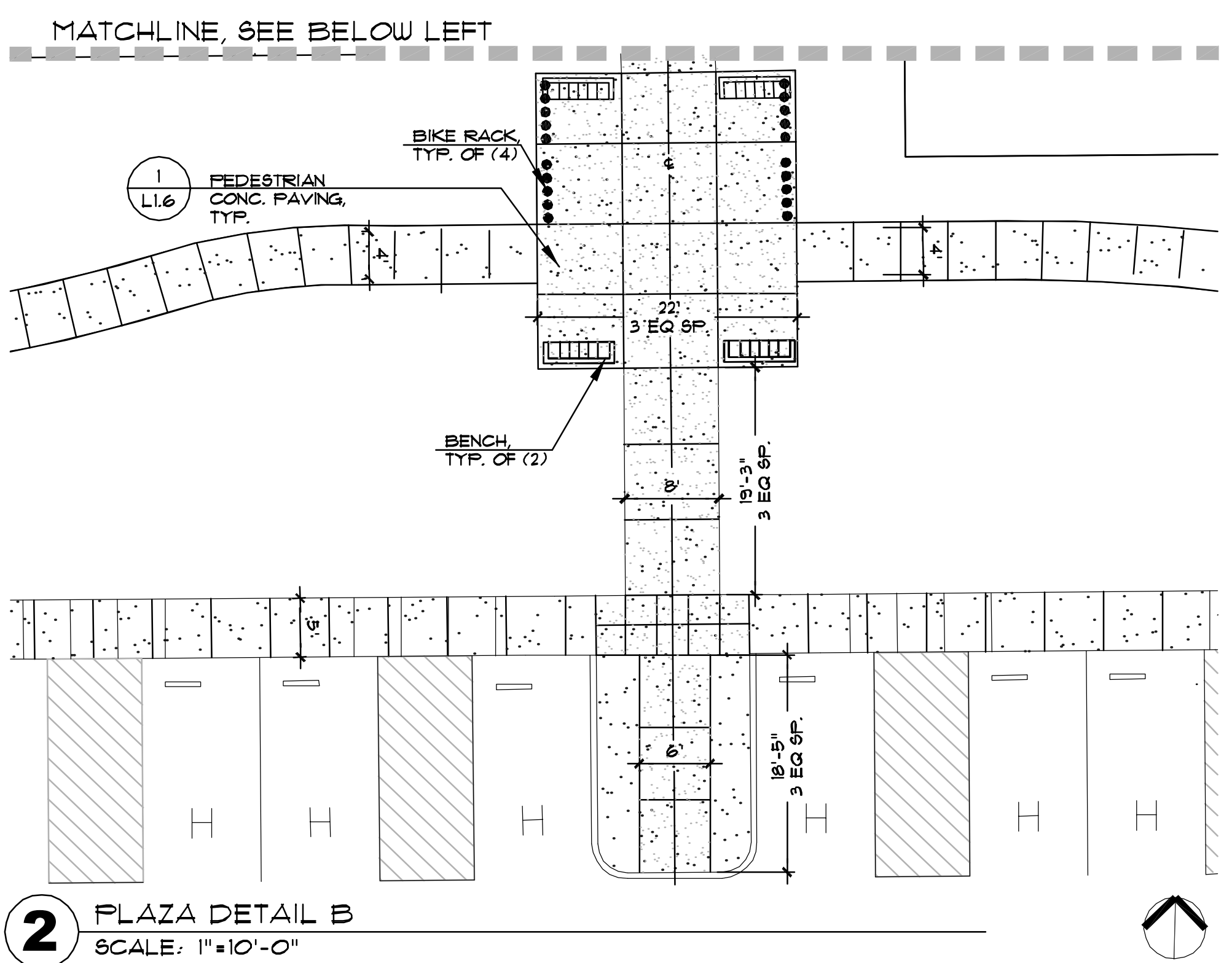
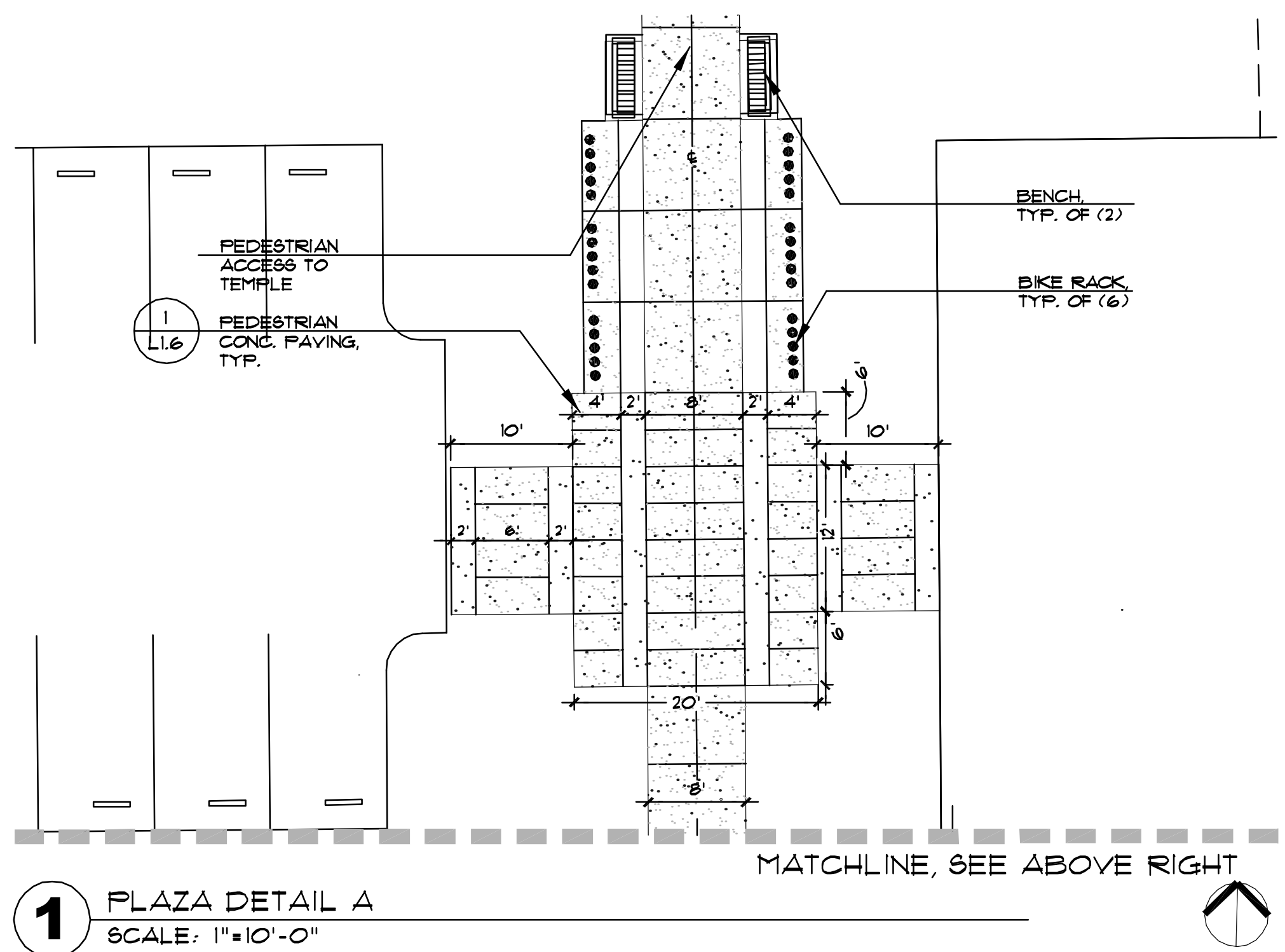
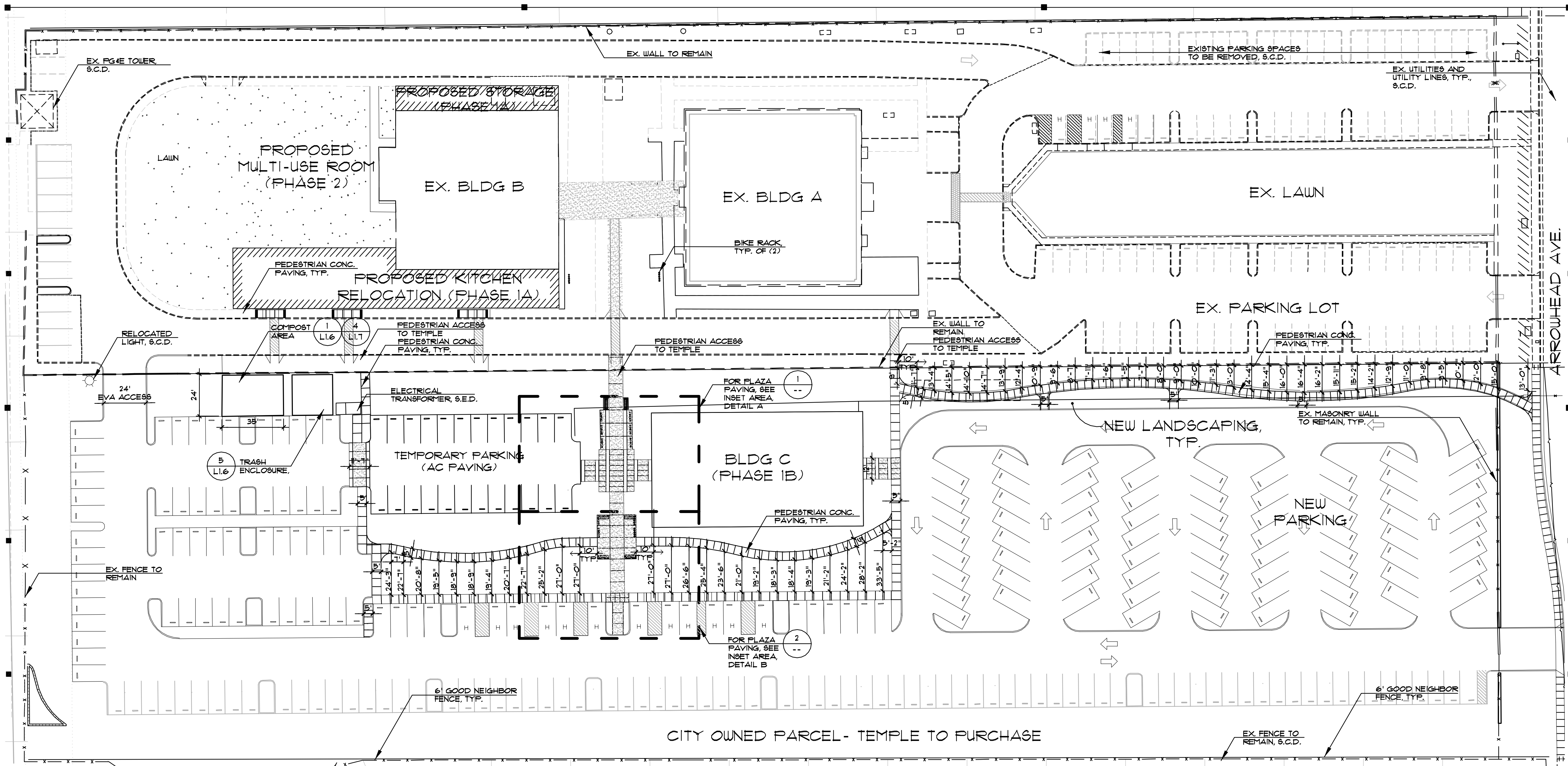
REVISION: DESCRIPTION: DATE:



PROJECT NAME: HCCC
 PROJECT NUMBER: P3995
 PROJECT FILE:
 DRAWN: SH, JC
 CHECK: DG
 DATE: 09/11/2010

SCALE: N.T.S.

EXISTING LANDSCAPE
 CONDITIONS



GATES & ASSOCIATES
LANDSCAPE ARCHITECTURE
LAND PLANNING URBAN DESIGN

2671 CROW CANYON RD., SAN RAMON, CA. 94583
TEL: 925.736.8176 FAX: 925.838.8901
WWW.DGATES.COM

HINDU COMMUNITY & CULTURAL CENTER
1200 ARROWHEAD AVE.

LIVERMORE, CA

REVISION:	DESCRIPTION:	DATE:
1	response to city comments	8/1/10

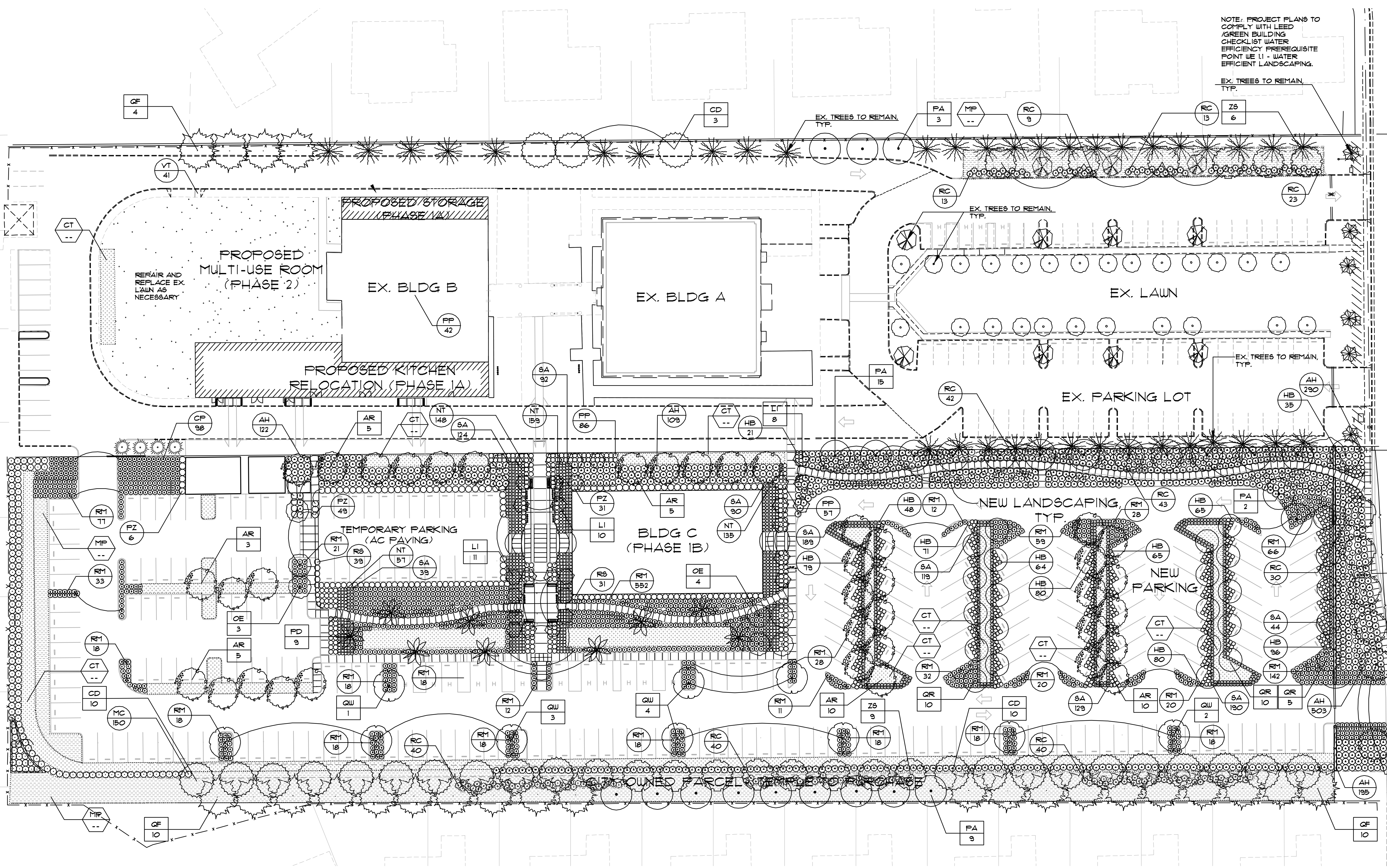


PROJECT NAME: HCCC
PROJECT NUMBER: P3995
PROJECT FILE:
DRAWN: SH, JC
CHECK: DG
DATE: 09/11/2010

SCALE: 1" = 30'

LAYOUT AND FENCING PLAN

L1.3
PROJECT NORTH OF SHEETS



GATES & ASSOCIATES
 LANDSCAPE ARCHITECTURE
 LAND PLANNING URBAN DESIGN

2671 CROW CANYON RD. SAN RAMON, CA. 94583
 TEL: 925.736.8176 FAX: 925.838.8901
 WWW.DGATES.COM

HINDU COMMUNITY & CULTURAL CENTER
 1200 ARROWHEAD AVE.

LIVERMORE, CA

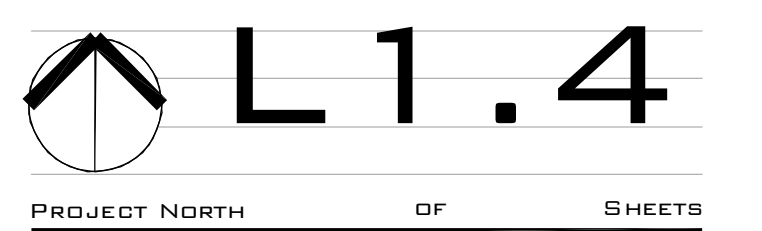
REVISION: DESCRIPTION: DATE:



PROJECT NAME: HCCC
 PROJECT NUMBER: P3995
 PROJECT FILE:
 DRAWN: SH, JC
 CHECK: DG
 DATE: 09/11/2010

SCALE: 1" = 30'

PLANTING PLAN



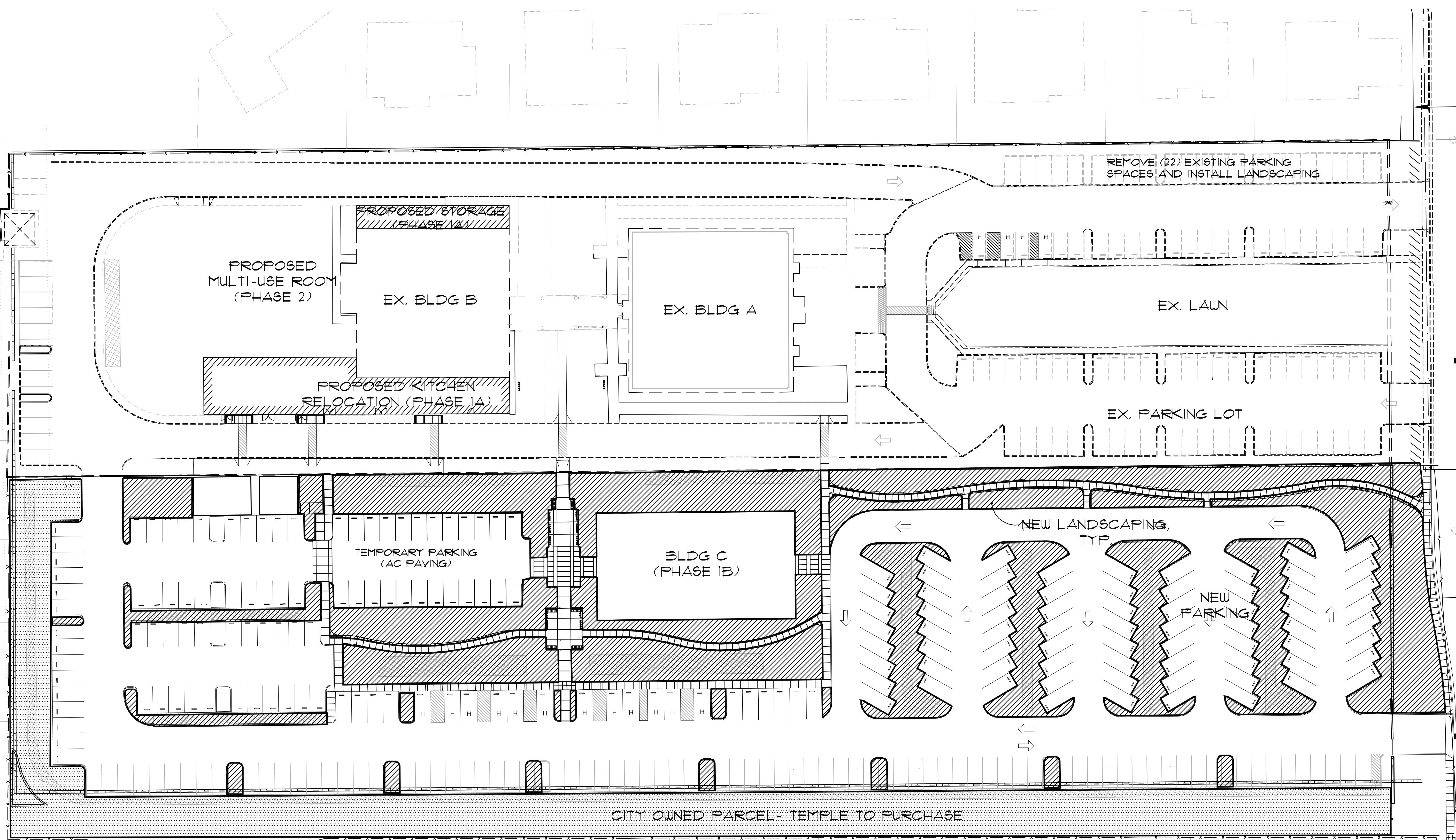
GROUNDCOVER LEGEND

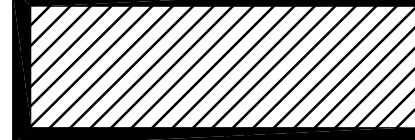
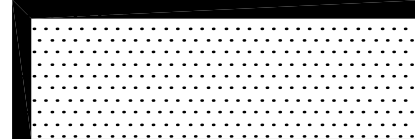


VEGETATED AREA SQUARE FOOTAGE CALCULATIONS

TOTAL SITE SQUARE FOOTAGE: 343,682 SQ. FT.
 20% OF TOTAL SITE INCLUDING BUILDINGS: 68,737 SQ. FT.
 TOTAL NEW NATIVE/ADAPTED VEGETATED AREAS (PHASE 1A): 13,216 SQ.FT.

NOTE: THIS PERCENTAGE OF TOTAL SITE SATISFIES REQUIREMENTS OF LEED SS CREDIT 5.1 - PROTECT OR RESTORE HABITAT.



 DRIP IRRIGATION HYDROZONE
 MP ROTATOR SPRAY IRRIGATION HYDROZONE

GATES & ASSOCIATES
 LANDSCAPE ARCHITECTURE
 LAND PLANNING URBAN DESIGN

2671 CROW CANYON RD. SAN RAMON, CA. 94583
 TEL: 925.736.8176 FAX: 925.838.8901
 WWW.DGATES.COM


**HINDU COMMUNITY
 & CULTURAL CENTER**
 1200 ARROWHEAD AVE.

LIVERMORE, CA

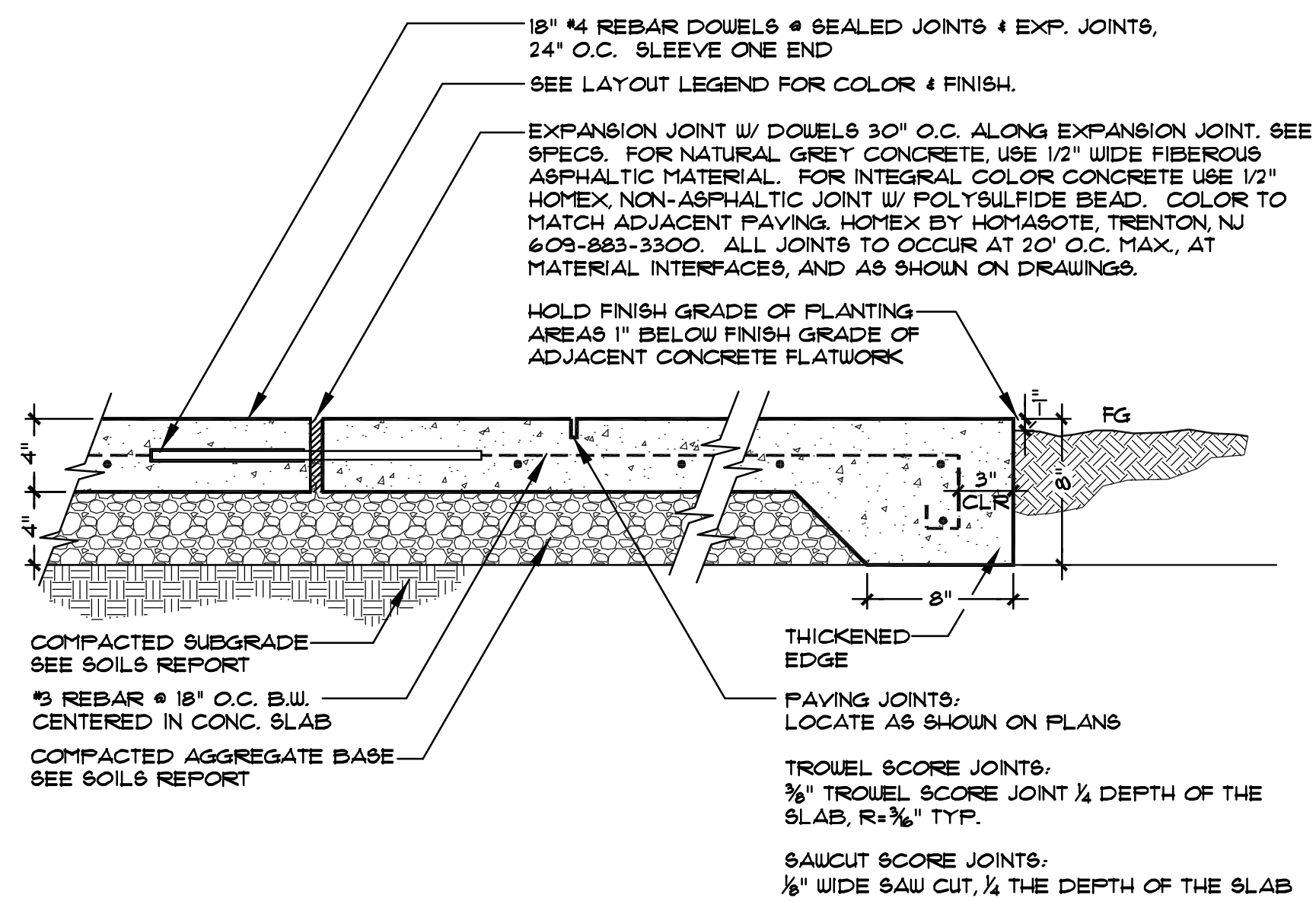
REVISION: DESCRIPTION: DATE:



PROJECT NAME: HCCC
 PROJECT NUMBER: P3995
 PROJECT FILE:
 DRAWN: SH, JC
 CHECK: DG
 DATE: 09/11/2010

SCALE: 1" = 30' 

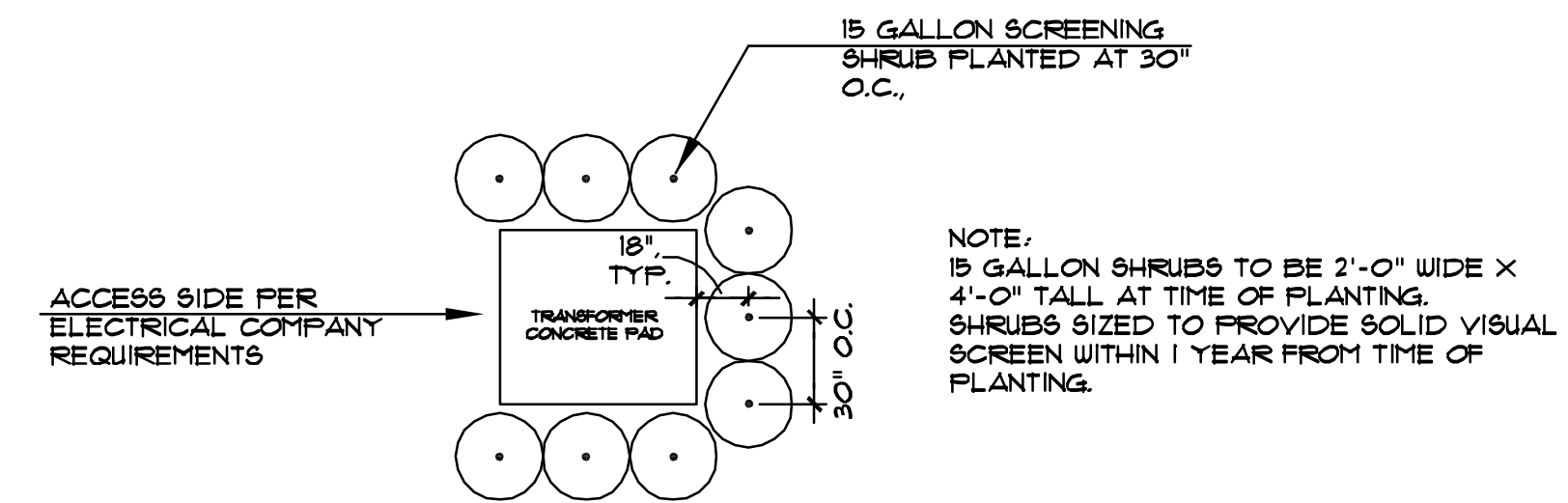
HYDROZONE PLAN



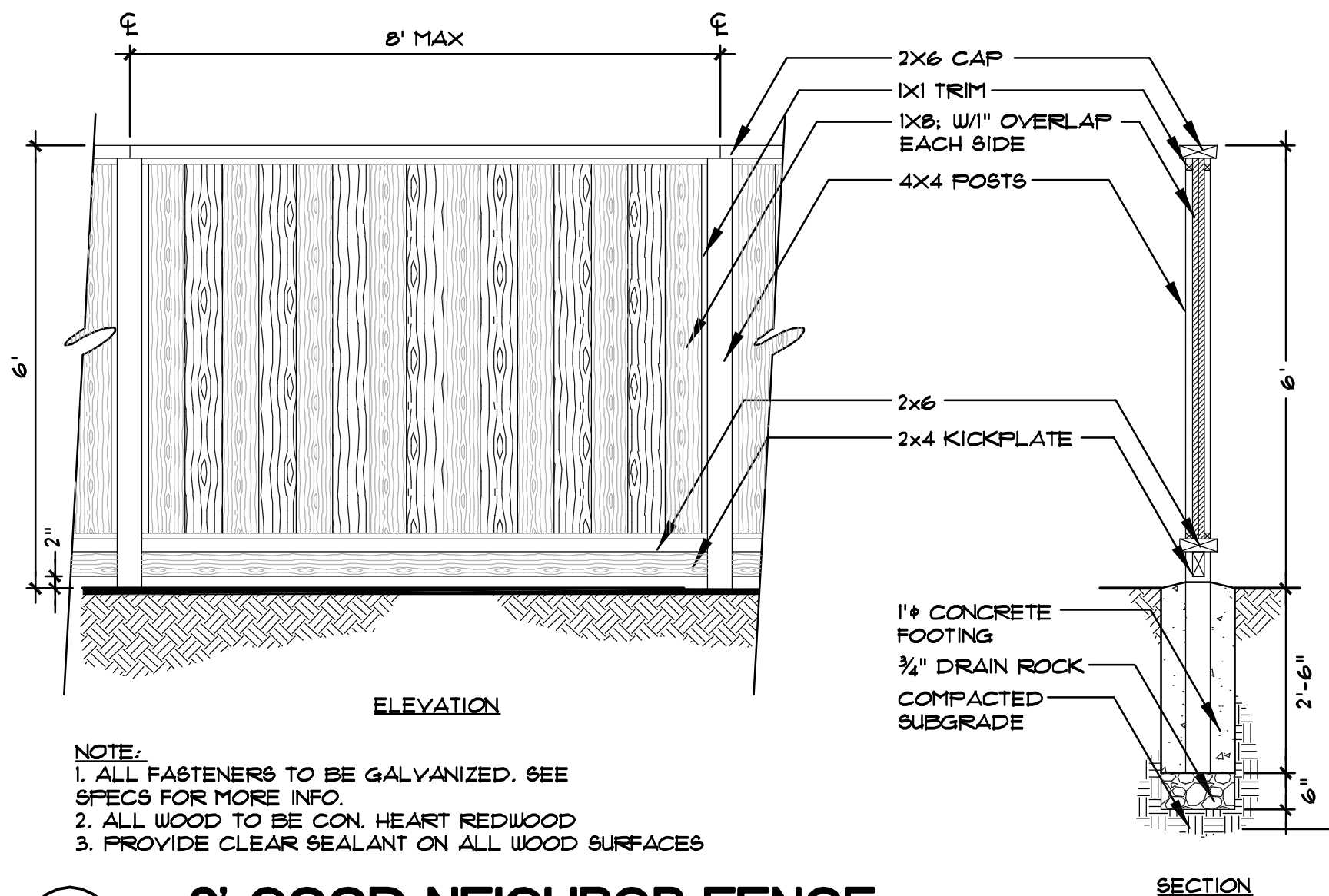
1 CONCRETE PAVING ON GRADE
SCALE: 1 1/2" = 1'-0"



4 EXISTING WALL TO REMAIN
SCALE: 3/8" = 1'-0"

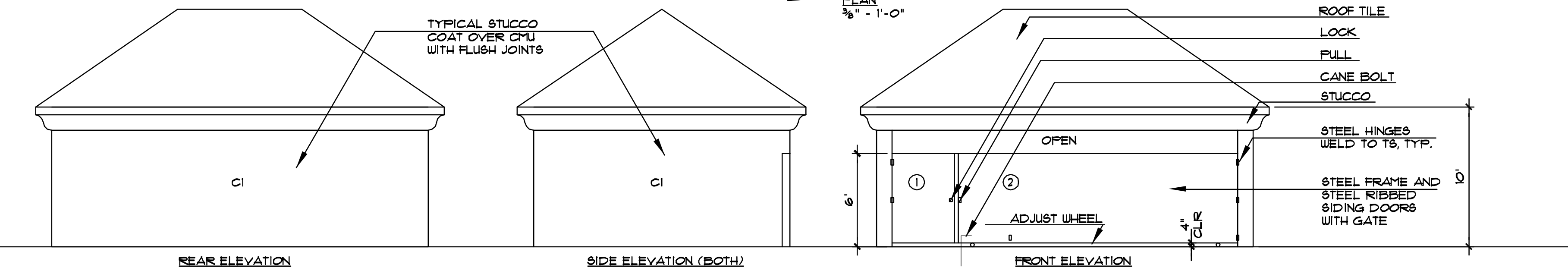


7 ELECTRICAL TRANSFORMER SCREEN PLANTING
SCALE: 3/16" = 1'-0"



2 6' GOOD NEIGHBOR FENCE
SCALE: 1/2" = 1'-0"

NOTE: TRASH ENCLOSURE EXTERIOR WALLS TO MATCH BUILDING CAD. ROOF TO MATCH BUILDING E. FOR ADDITIONAL MATERIALS INFORMATION SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION S.A.D., S.C.D., S.S.D.

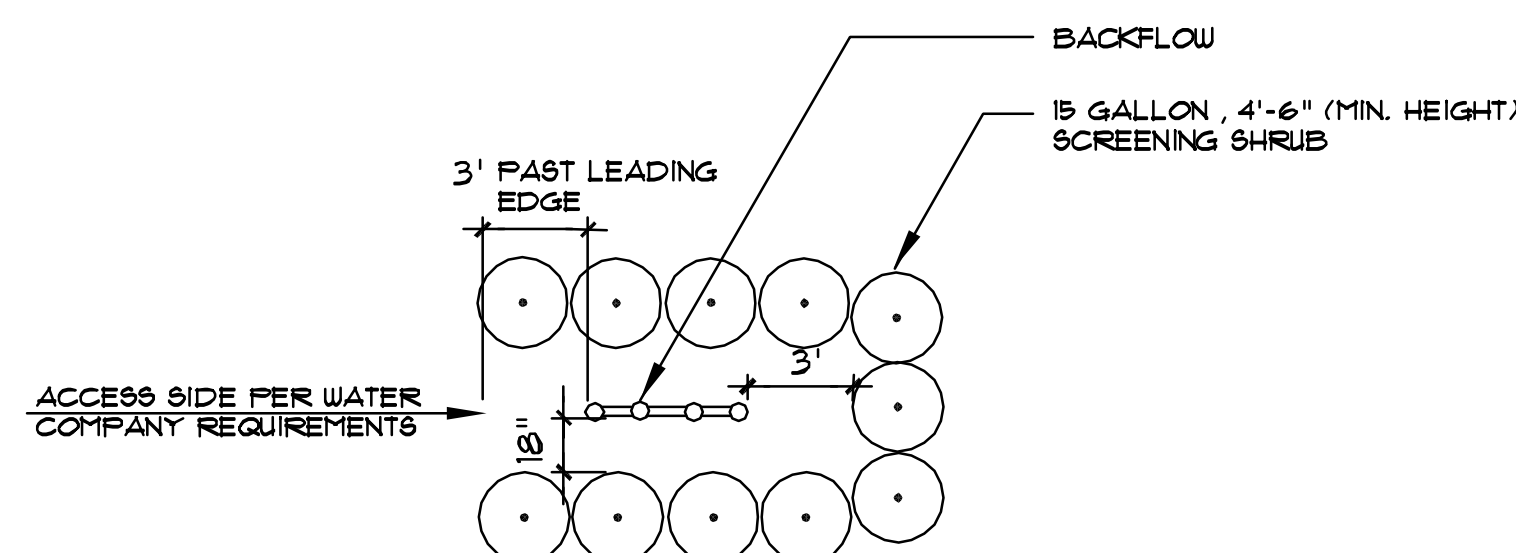


5 TRASH ENCLOSURE
SCALE: 3/16" = 1'-0"



MFR: STREETWORKS BY COOPER LIGHTING
POLE HEIGHT: 18' MAXIMUM, INCL. CONCRETE BASE
MODEL NAME: TRU TRIBUTE
FINISH: TO MATCH EXISTING

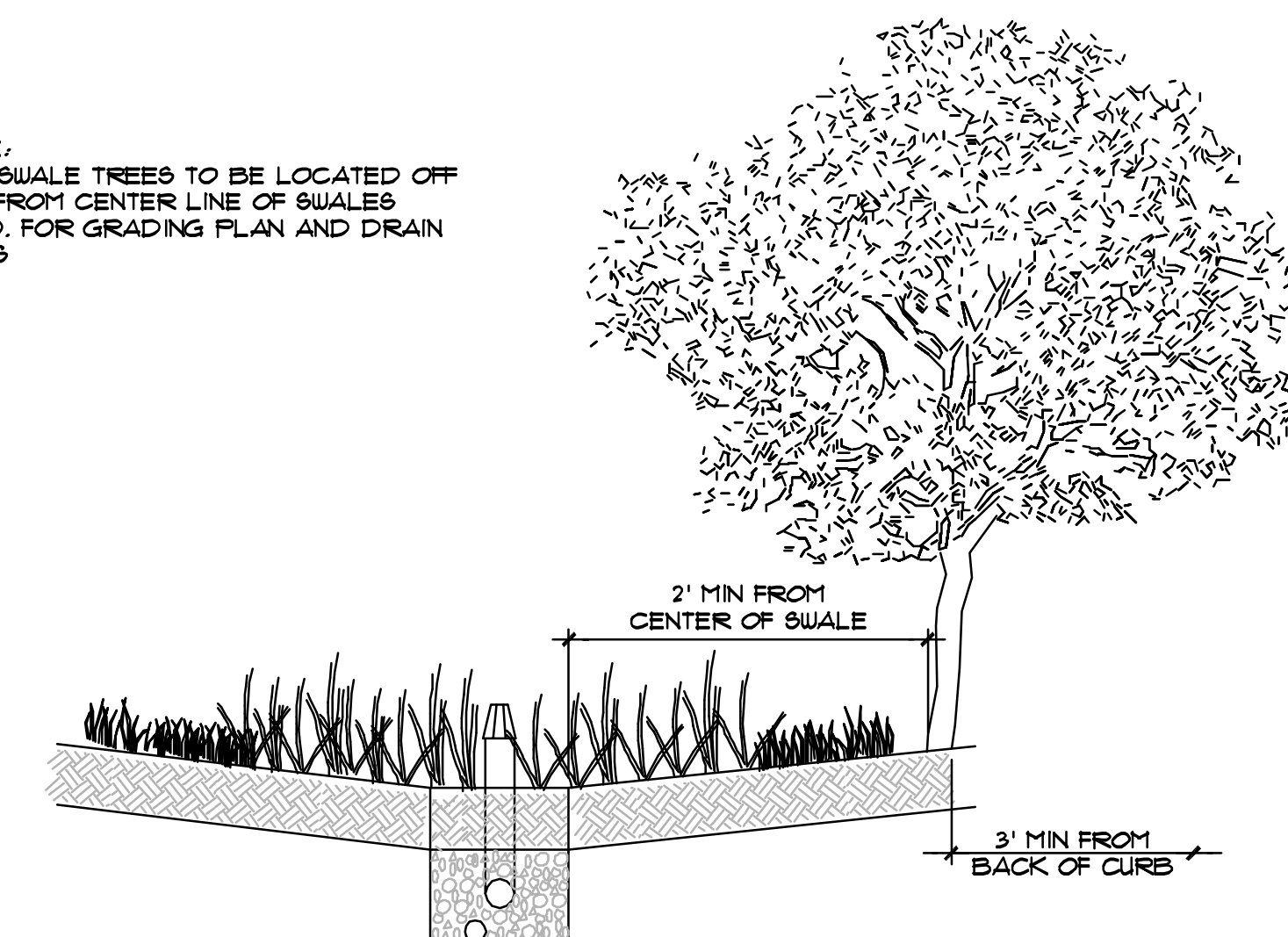
3 PARKING LOT LIGHT FIXTURE
SCALE: 3/8" = 1'-0"



NOTE: 15 GALLON SHRUBS TO BE 2'-0" WIDE X 4'-6" TALL AT TIME OF PLANTING. SHRUBS SIZED TO PROVIDE SOLID VISUAL SCREEN WITHIN 1 YEAR FROM TIME OF PLANTING.

6 BACKFLOW/UTILITY PLANTING SCREEN, TYPICAL
SCALE: 3/16" = 1'-0"

NOTE: BIO-SWALE TREES TO BE LOCATED OFF SET FROM CENTER LINE OF SWALES S.C.D. FOR GRADING PLAN AND DRAIN LINES



8 BIOSWALE PLANTING
SCALE: NTS

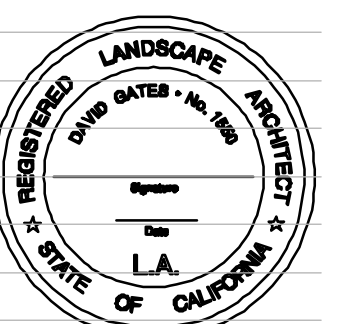
GATES & ASSOCIATES
LANDSCAPE ARCHITECTURE
LAND PLANNING URBAN DESIGN

2671 CROW CANYON RD., SAN RAMON, CA. 94583
TEL: 925.736.8176 FAX: 925.838.8901
WWW.DGATES.COM

HINDU COMMUNITY
& CULTURAL CENTER
1200 ARROWHEAD AVE.

LIVERMORE, CA

REVISION: DESCRIPTION: DATE:

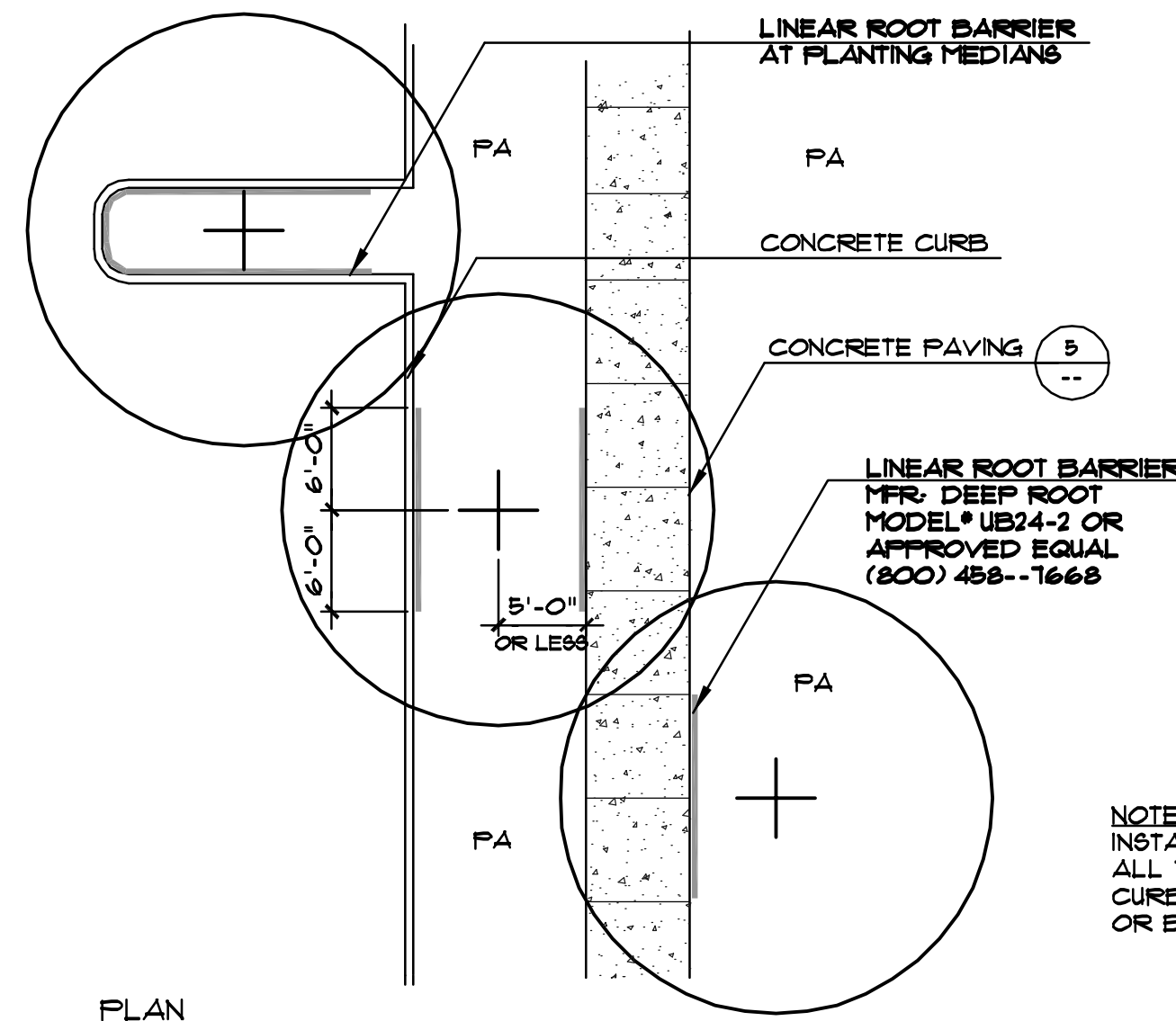


PROJECT NAME: HCCC
PROJECT NUMBER: P3995
PROJECT FILE:
DRAWN: SH, JC
CHECK: DG
DATE: 09/11/2010

SCALE: VARIES

DETAILS

L1.6
PROJECT NORTH OF SHEETS



NOTE:
INSTALL ROOT BARRIERS AT ALL TREES WITHIN 5' OF ALL CURBS, SIDEWALKS, ROADS OR BUILDINGS.

PLAN

1 LINEAR ROOT BARRIER
SCALE: 1" = 10'-0"



6' BENCH
MANF. DUMOR
MODEL: 169
COLOR: BLACK
CONTACT: 800-598-4018
WWW.DUMOR.COM

SEE MANF. SPECIFICATIONS FOR INSTALLATION DETAILS

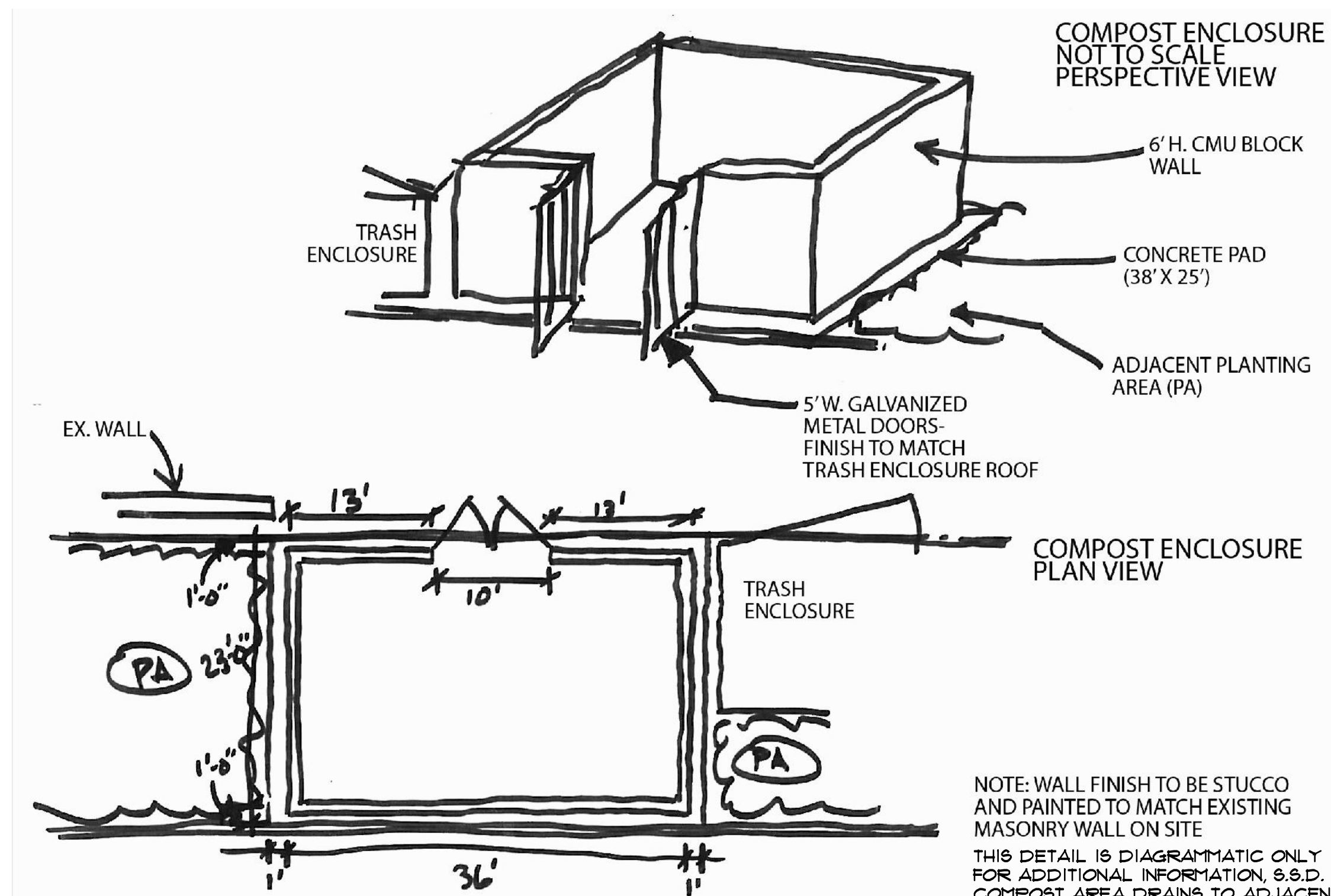
2 BENCH
SCALE: N.T.S.



BIKE RACK
MANF. DUMOR
MODEL: 125-20
COLOR: BLACK
CONTACT: 800-598-4018
WWW.DUMOR.COM

SEE MANF. SPECIFICATIONS FOR INSTALLATION DETAILS

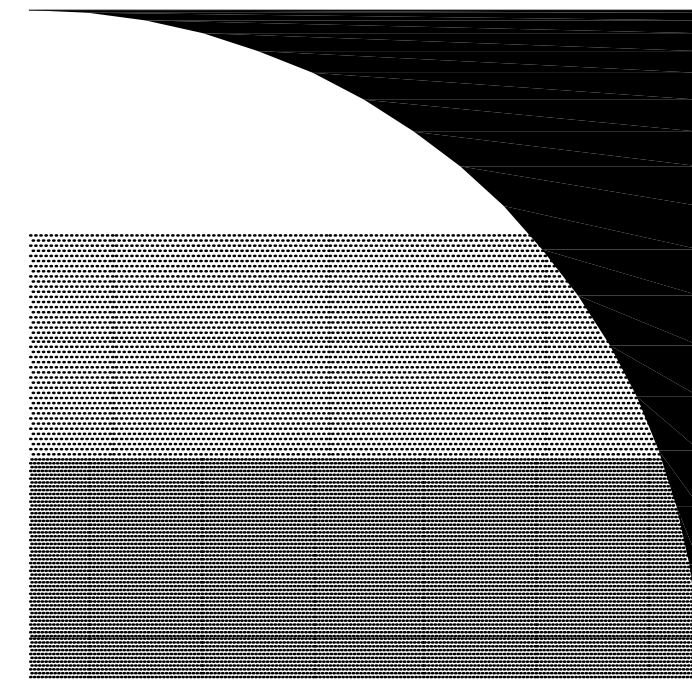
3 BIKE RACK
SCALE: N.T.S.



NOTE: WALL FINISH TO BE STUCCO AND PAINTED TO MATCH EXISTING MASONRY WALL ON SITE

THIS DETAIL IS DIAGRAMMATIC ONLY FOR ADDITIONAL INFORMATION, S.S.D. COMPOST AREA DRAINS TO ADJACENT LANDSCAPE AREAS, NOT TO STORM OR SANITARY SEWER SYSTEMS, FOR GRADING AND DRAINAGE, S.C.D.

4 COMPOST AREA
SCALE: 1" = 10'



GATES & ASSOCIATES
LANDSCAPE ARCHITECTURE
LAND PLANNING URBAN DESIGN

2671 CROW CANYON RD., SAN RAMON, CA. 94583
TEL: 925.736.8176 FAX: 925.838.8901
WWW.DGATES.COM

**HINDU COMMUNITY
& CULTURAL CENTER**
1200 ARROWHEAD AVE.

LIVERMORE, CA

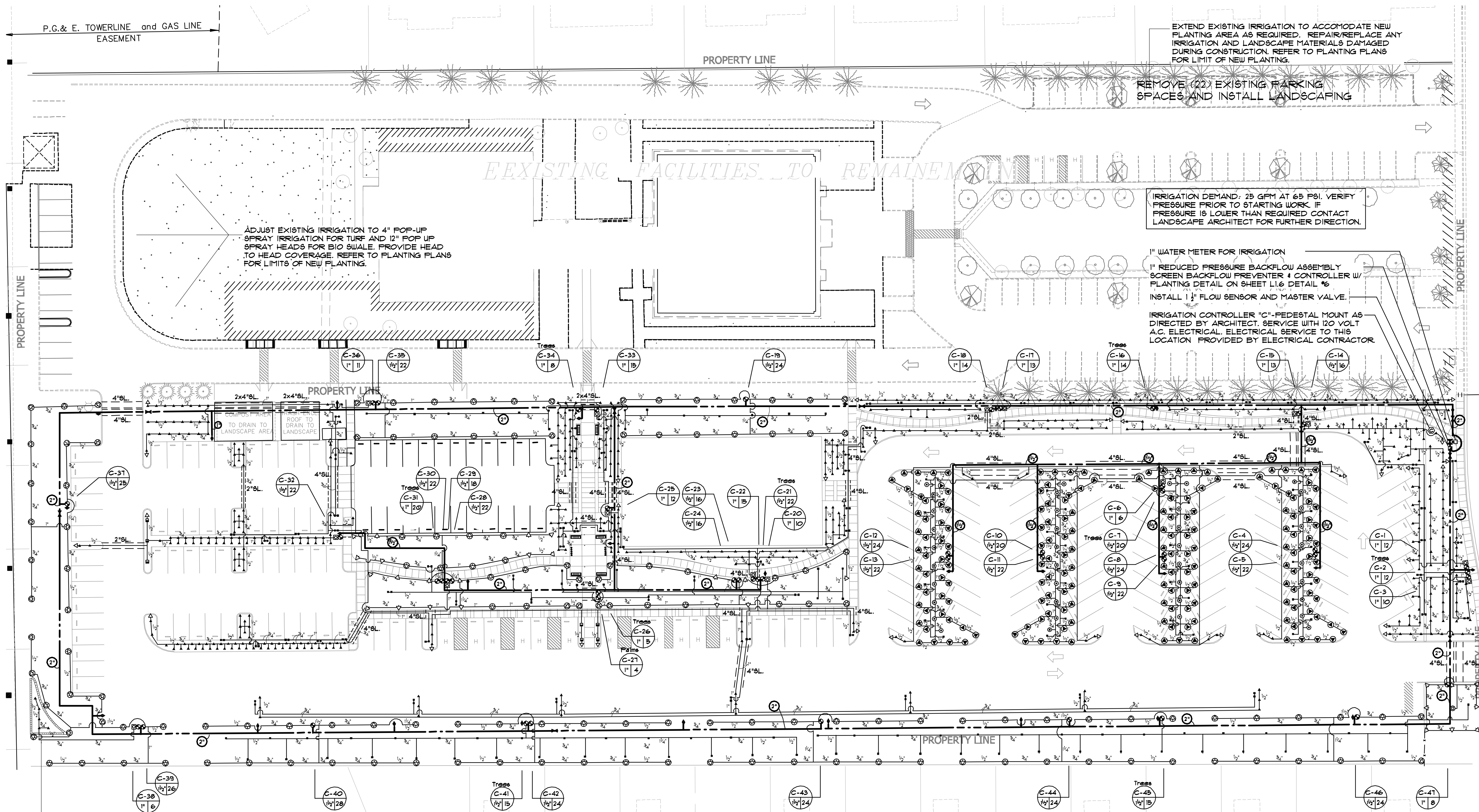
REVISION: DESCRIPTION: DATE:



PROJECT NAME: HCCC
PROJECT NUMBER: P3995
PROJECT FILE:
DRAWN: SH, JC
CHECK: DG
DATE: 09/11/2010

SCALE: VARIES

DETAILS



P.G. & E. TOWERLINE and GAS LINE EASEMENT

PROPERTY LINE

EXTEND EXISTING IRRIGATION TO ACCOMMODATE NEW PLANTING AREA AS REQUIRED. REPAIR/REPLACE ANY IRRIGATION AND LANDSCAPE MATERIALS DAMAGED DURING CONSTRUCTION. REFER TO PLANTING PLANS FOR LIMIT OF NEW PLANTING.

REMOVE (22) EXISTING PARKING SPACES AND INSTALL LANDSCAPING

EXISTING FACILITIES TO REMAIN

ADJUST EXISTING IRRIGATION TO 4" POP-UP SPRAY IRRIGATION FOR TURF AND 12" POP-UP SPRAY HEADS FOR BIO SWALE. PROVIDE HEAD TO HEAD COVERAGE. REFER TO PLANTING PLANS FOR LIMITS OF NEW PLANTING.

IRRIGATION DEMAND: 25 GPM AT 65 PSI. VERIFY PRESSURE PRIOR TO STARTING WORK. IF PRESSURE IS LOWER THAN REQUIRED CONTACT LANDSCAPE ARCHITECT FOR FURTHER DIRECTION.

1" WATER METER FOR IRRIGATION

1" REDUCED PRESSURE BACKFLOW ASSEMBLY SCREEN BACKFLOW PREVENTER & CONTROLLER W/ PLANTING DETAIL ON SHEET L1.6 DETAIL 16
INSTALL 1" FLOW SENSOR AND MASTER VALVE.

IRRIGATION CONTROLLER "C"-PEDESTAL MOUNT AS DIRECTED BY ARCHITECT. SERVICE WITH 120 VOLT A.C. ELECTRICAL. ELECTRICAL SERVICE TO THIS LOCATION PROVIDED BY ELECTRICAL CONTRACTOR.

INSTALL 3/4" PVC INSIDE 2" SLEEVE THRU WALL AND EXTEND PIPE UP TO RAISED PLANTING AREA.

WATER CONSERVATION CONCEPT STATEMENT

- 1) THE IRRIGATION SYSTEM SHALL BE DESIGNED WITH WATER CONSERVATION IN MIND WHILE ACHIEVING THE GOAL OF EFFECTIVELY AND EFFICIENTLY PROVIDING THE LANDSCAPE WITH WATER BY MEANS OF SPRAY IRRIGATION AT A MINIMUM OF 8' WIDE AND DRIP IRRIGATION TO SHRUBS/GROUND COVER AREAS LESS THAN 8' WIDE AND BUBBLERS TO THE TREES.
- 2) THE SPRAY SYSTEM SHALL BE HUNTER MP ROTATOR SPRAY HEADS WITH PRESSURE COMPENSATING NOZZLES AND TORO'S HIGH EFFICIENCY SPRAY NOZZLES IN A HEAD TO HEAD LAYOUT TO ACHIEVE AN EVEN LEVEL OF PRECIPITATION THROUGHOUT THE IRRIGATION SYSTEM.
- 3) A STATE-OF-THE-ART ET IRRIGATION CONTROLLER SHALL BE SPECIFIED FOR THIS PROJECT TO CONTROL THE WATER ALLOCATED TO EACH VALVE GROUPED PER INDIVIDUAL HYDROZONE (BASED ON PLANT TYPE AND EXPOSURE).
- 4) PROJECT SHALL FOLLOW LIVERMORE'S WATER EFFICIENT LANDSCAPE ORDINANCE REQUIREMENTS AND CHECKLIST FOR THE LANDSCAPE PROFESSIONAL.

GATES & ASSOCIATES
LANDSCAPE ARCHITECTURE
LAND PLANNING URBAN DESIGN

2671 CROW CANYON RD. SAN RAMON, CA. 94583
TEL: 925.736.8176 FAX: 925.838.8901
WWW.DGATES.COM

HINDU COMMUNITY & CULTURAL CENTER
1200 ARROWHEAD AVE.

LIVERMORE, CA

REVISION:	DESCRIPTION:	DATE:



PROJECT NAME: HCCC
PROJECT NUMBER: P3995
PROJECT FILE:
DRAWN: SH, JC
CHECK: DG
DATE: 09/11/2010



IRRIGATION PLAN

IRRIGATION NOTES

1. THIS DESIGN IS DIAGRAMMATIC. ALL PIPING, VALVES, ETC. SHOWN WITHIN PAVED AREAS IS FOR DESIGN CLARIFICATION ONLY AND SHALL BE INSTALLED IN PLANTING AREAS WHERE POSSIBLE. AVOID ANY CONFLICTS BETWEEN THE SPRINKLER SYSTEM, PLANTING AND ARCHITECTURAL FEATURES.
2. DO NOT WILLFULLY INSTALL THE SPRINKLER SYSTEM AS SHOWN ON THE DRAWINGS WHEN IT IS OBVIOUS IN THE FIELD THAT OBSTRUCTIONS, GRADE DIFFERENCES OR DIFFERENCES IN THE AREA DIMENSIONS EXIST THAT MIGHT NOT HAVE BEEN CONSIDERED IN THE ENGINEERING. SUCH OBSTRUCTIONS OR DIFFERENCES SHOULD BE BROUGHT TO THE ATTENTION OF THE OWNER'S AUTHORIZED REPRESENTATIVE. IN THE EVENT THAT THIS NOTIFICATION IS NOT PERFORMED, THE IRRIGATION CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ANY REVISIONS NECESSARY.
3. IT IS THE RESPONSIBILITY OF THE IRRIGATION CONTRACTOR TO FAMILIARIZE HIMSELF WITH ALL GRADE DIFFERENCES, LOCATION OF WALLS, RETAINING WALLS, ETC. HE SHALL COORDINATE HIS WORK WITH THE GENERAL CONTRACTOR AND OTHER SUBCONTRACTORS FOR THE LOCATION AND THE INSTALLATION OF PIPE SLEEVES THROUGH WALLS, UNDER ROADWAYS, PAVING, STRUCTURES, ETC.
4. DUE TO THE SCALE OF THE 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. THEN WORK SHALL BE INSTALLED IN SUCH A MANNER AS TO AVOID CONFLICTS BETWEEN IRRIGATION SYSTEMS, PLANTING, AND ARCHITECTURAL FEATURES.
5. ELECTRICAL CONTRACTOR TO SUPPLY 120 VOLT A.C. (2.5 AMP) SERVICE TO CONTROLLER LOCATION. IRRIGATION CONTRACTOR TO MAKE FINAL CONNECTION FROM ELECTRICAL STUB-OUT TO CONTROLLER.
6. EACH CONTROLLER SHALL HAVE ITS OWN INDEPENDENT GROUND WIRE.
7. VALVE LOCATIONS SHOWN ARE DIAGRAMMATIC. INSTALL IN GROUND COVER/SHRUB AREAS WHERE POSSIBLE (NOT IN LAWN AREA).
8. SPLICING OF 24 VOLT WIRES WILL NOT BE PERMITTED EXCEPT IN VALVE BOXES. LEAVE A 24" COIL OF EXCESS WIRE AT EACH SPLICE AND 100 FEET ON CENTER ALONG WIRE RUN. TAPE WIRE IN BUNDLES 10 FEET ON CENTER. NO TAPING PERMITTED INSIDE SLEEVES.
9. INSTALL FOUR (4) SPARE CONTROL WIRES OF A DIFFERENT COLOR ALONG THE ENTIRE MAIN LINE. LOOP 36" EXCESS WIRE INTO EACH SINGLE VALVE BOX AND INTO ONE VALVE BOX IN EACH GROUP OF VALVES.
10. THE IRRIGATION CONTRACTOR SHALL FLUSH AND ADJUST ALL SPRINKLER HEADS FOR OPTIMUM PERFORMANCE AND TO PREVENT OVERSPRAY ONTO WALKS, ROADWAYS AND/OR BUILDINGS AS MUCH AS POSSIBLE. THIS SHALL INCLUDE SELECTING THE BEST DEGREE OF ARC TO FIT THE EXISTING SITE CONDITIONS AND TO THROTTLE THE FLOW CONTROL AT EACH VALVE TO OBTAIN THE OPTIMUM OPERATING PRESSURE FOR EACH SYSTEM.
11. NOTIFY ARCHITECT OF ANY ASPECTS OF LAYOUT WHICH WILL PROVIDE INCOMPLETE OR INSUFFICIENT WATER COVERAGE OF PLANT MATERIAL AND DO NOT PROCEED UNTIL HIS INSTRUCTIONS ARE OBTAINED.
12. ALL SPRINKLER HEADS SHALL BE SET PERPENDICULAR TO FINISH GRADE OF THE AREA TO BE IRRIGATED UNLESS OTHERWISE DESIGNATED ON THE PLANS.
13. INSTALL A VALCON 5000 SERIES SPRING LOADED CHECK VALVE BELOW THOSE SPRINKLERS WHERE LOW HEAD DRAINAGE WILL CAUSE EROSION AND EXCESS WATER.
14. IN BIOSWALE PLANTING AREAS, INSTALL DRIP BUBBLERS ON HIGHER GROUND AT EDGE OF CURB.
15. INSTALL VALVE BOXES 12" FROM AND PERPENDICULAR TO WALK, CURB, BUILDING OR LANDSCAPE FEATURE. AT MULTIPLE VALVE BOX GROUPS, EACH BOX SHALL BE AN EQUAL DISTANCE FROM THE WALK, CURB, ETC. AND EACH BOX SHALL BE 12" APART. SHORT SIDE OF VALVE BOX SHALL BE PARALLEL TO WALK, CURB, LAWN, ETC.
16. THE SPRINKLER SYSTEM DESIGN IS BASED ON THE MINIMUM OPERATING PRESSURE SHOWN ON THE IRRIGATION DRAWINGS. THE IRRIGATION CONTRACTOR SHALL VERIFY WATER PRESSURE PRIOR TO CONSTRUCTION. REPORT ANY DIFFERENCE BETWEEN THE WATER PRESSURE INDICATED ON THE DRAWINGS AND THE ACTUAL PRESSURE READING AT THE IRRIGATION POINT OF CONNECTION TO THE OWNER'S AUTHORIZED REPRESENTATIVE.
17. OPERATE IRRIGATION CONTROLLER(S) BETWEEN THE HOURS OF 10:00 PM AND 7:00 AM.
18. IRRIGATION CONTRACTOR TO NOTIFY ALL LOCAL JURISDICTIONS FOR INSPECTION AND TESTING OF INSTALLED BACKFLOW PREVENTION DEVICE.
19. PRIOR TO TRENCHING, CALL UNDERGROUND SERVICE ALERT, (1-800) 642-2444 FOR NORTHERN CALIFORNIA
20. WHEN VERTICAL OBSTRUCTIONS (STREET LIGHTS, TREES, FIRE HYDRANTS, ETC.) INTERFERE WITH THE SPRAY PATTERN OF THE HEADS SO AS TO PREVENT PROPER COVERAGE, THE IRRIGATION CONTRACTOR SHALL FIELD ADJUST THE SPRINKLER SYSTEM BY INSTALLING A QUARTER, THIRD OR HALF CIRCLE HEAD AT THE SIDES OF THE OBSTRUCTION SO AS TO PROVIDE PROPER COVERAGE. ALL ADJUSTMENTS SHALL BE MADE AT NO ADDITIONAL COST TO THE OWNER.
21. ENGRAVE OR HOT STAMP REMOTE CONTROL VALVE BOXES WITH CONTROLLER STATION NUMBERS.
22. PROVIDE PLASTIC LAMINATED COLOR-CODED IRRIGATION LAYOUT DIAGRAMS.
23. PROVIDE TWO (2) SETS OF Q.C. KEYS AND CONTROLLER.
24. SOILS REPORT (SUBMITTED 8-17-09) CONFIRMS THAT TOP 3' OF TOPSOIL IS HOSPITABLE FOR IRRIGATION.

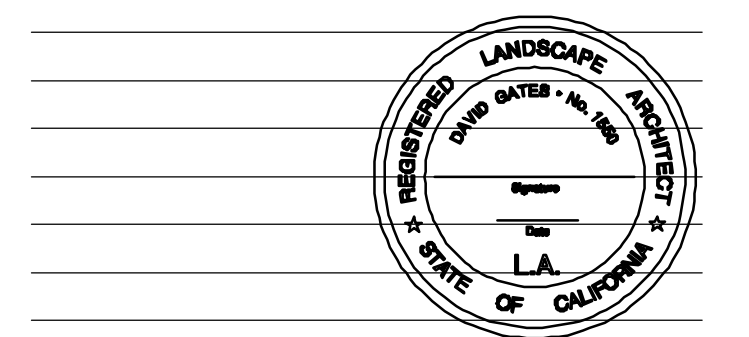
IRRIGATION LEGEND

SYMBOL	MODEL NUMBER	DESCRIPTION	PSI	GPM	RADIUS
	MPR40-12-CV-MP3000-90	HUNTER 12" MP ROTATOR SPRAY HEAD	40	2.12-2.73	22'-30'
	MPR40-12-CV-MP3000-90	HUNTER 12" MP ROTATOR SPRAY HEAD	40	.86-2.12	22'-30'
	MPR40-12-CV-MP2000-360	HUNTER 12" MP ROTATOR SPRAY HEAD	40	.75	13'-21'
	MPR40-12-CV-MP2000-90	HUNTER 12" MP ROTATOR SPRAY HEAD	40	.20-.50	13'-21'
	570Z-12P-PRX-OT-10F,H,Q	TORO 12" SPRAY HEAD W/PRECISION SERIES NOZZLES	30	1.0, .50, .25	10'
	OCT816	PEPCO OCTA BUBBLER-SHRUBS	30	2 GPH	-
	1633	PEPCO QUADRA BUBBLER-SHRUBS	30	2 GPH	-
	RWG-02	RAINBIRD DEEP WATERING TUBE	30	.50	-
	M64/AP100	SPEARS FLUSHING END PLUG - LOCATE AT ENDS OF DRIP LATERAL LINE			
	T-113-K	NIBCO GATE VALVE WITH CROSS HANDLE (LINE SIZE) IN ROUND BOX			
	44 DRC	RAIN BIRD QUICK COUPLING VALVE			
	1-1201-1151-8130 PMR-MF-30-1"	AMIAD 1" FILTER WITH 130 MESH SCREEN WITH SENNINGER 1" IN-LINE PRESSURE REDUCING VALVE (1-22 GPM)			
	700 SERIES ULTRAFLOW	IRRITROL SYSTEMS ULTRAFLOW SERIES REMOTE CONTROL VALVE			
	825Y-BV-1 1/2" SBBC-30	FEBCO REDUCED PRESSURE BACKFLOW ASSEMBLY INSIDE STRONG BOX ENCLOSURE			
	TFS-150/3100	TORO 1 1/2" FLOW SENSOR WITH SUPERIOR 1 1/2" 3100 NORMALLY OPEN MASTER VALVE			
	TIS-48-PED-TMR1-TFS-TRS	TORO INTELLISENSE 48 STATION ET CONTROLLER, PEDESTAL MOUNTED WITH RAINSENSOR AND MAINTENANCE REMOTE			
	C-1	STATION NUMBER			
	1/2" 15	GALLONS PER MINUTE			
		VALVE SIZE			
		MAINLINE: 1120-SCHEDULE 40 PVC PLASTIC PIPE WITH SCHEDULE 40 PVC SOLVENT WELD FITTINGS. 18" COVER.			
		LATERAL LINE: 1120-200 PSI PVC PLASTIC PIPE W/SCHEDULE 40 PVC PLASTIC FITTINGS. 12" COVER.			
		SLEEVE: 1120-200 PSI PVC PLASTIC PIPE W/SCHEDULE 40 PVC PLASTIC FITTINGS. 18" COVER.			

GATES & ASSOCIATES
 LANDSCAPE ARCHITECTURE
 LAND PLANNING URBAN DESIGN
 2671 CROW CANYON RD. SAN RAMON, CA. 94583
 TEL: 925.736.8176 FAX: 925.898.8901
 WWW.DGATES.COM

**HINDU COMMUNITY
 & CULTURAL CENTER**
 1200 ARROWHEAD AVE.
 LIVERMORE, CA

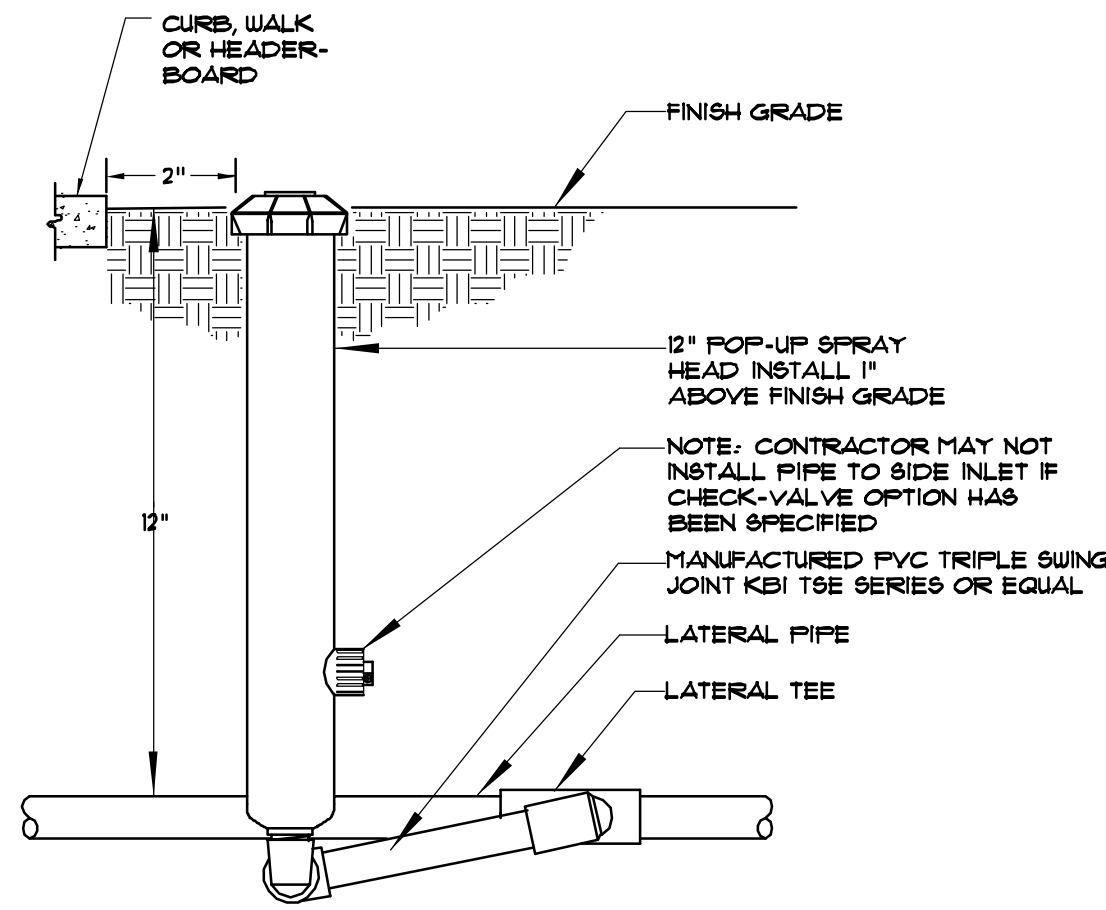
REVISION: DESCRIPTION: DATE:



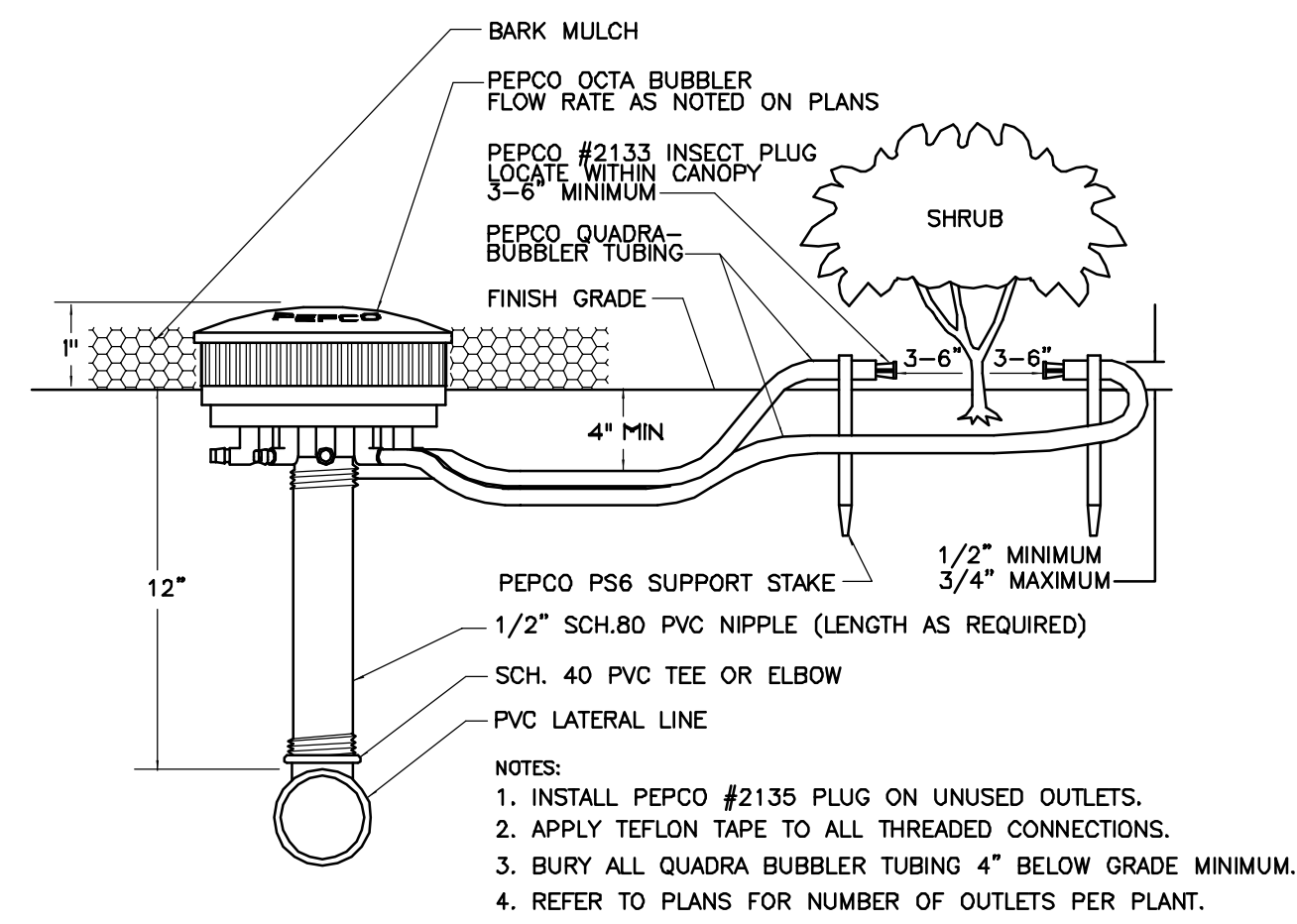
PROJECT NAME: HCCC
 PROJECT NUMBER: P3995
 PROJECT FILE:
 DRAWN: SH, JC
 CHECK: DG
 DATE: 09/11/2010

SCALE: NTS

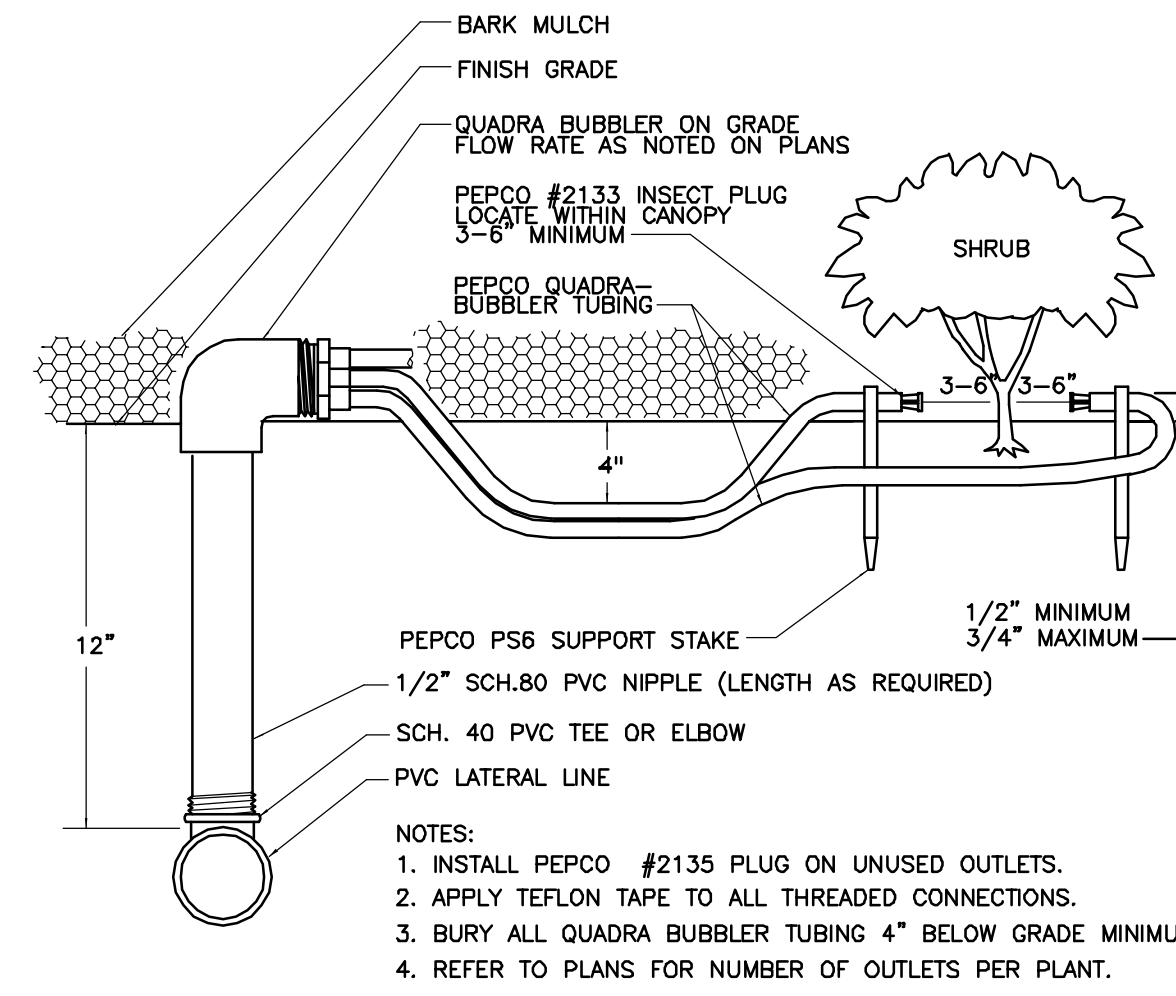
NOTES AND LEGEND



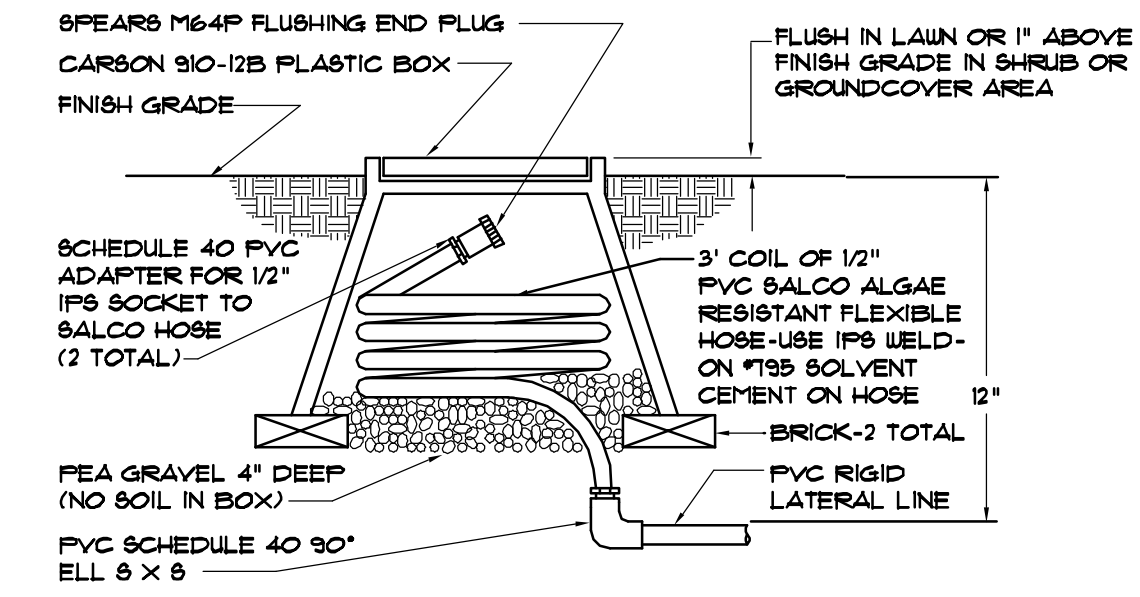
13 POP-UP 12' SPRAY HEAD INSTALLATION
NTS



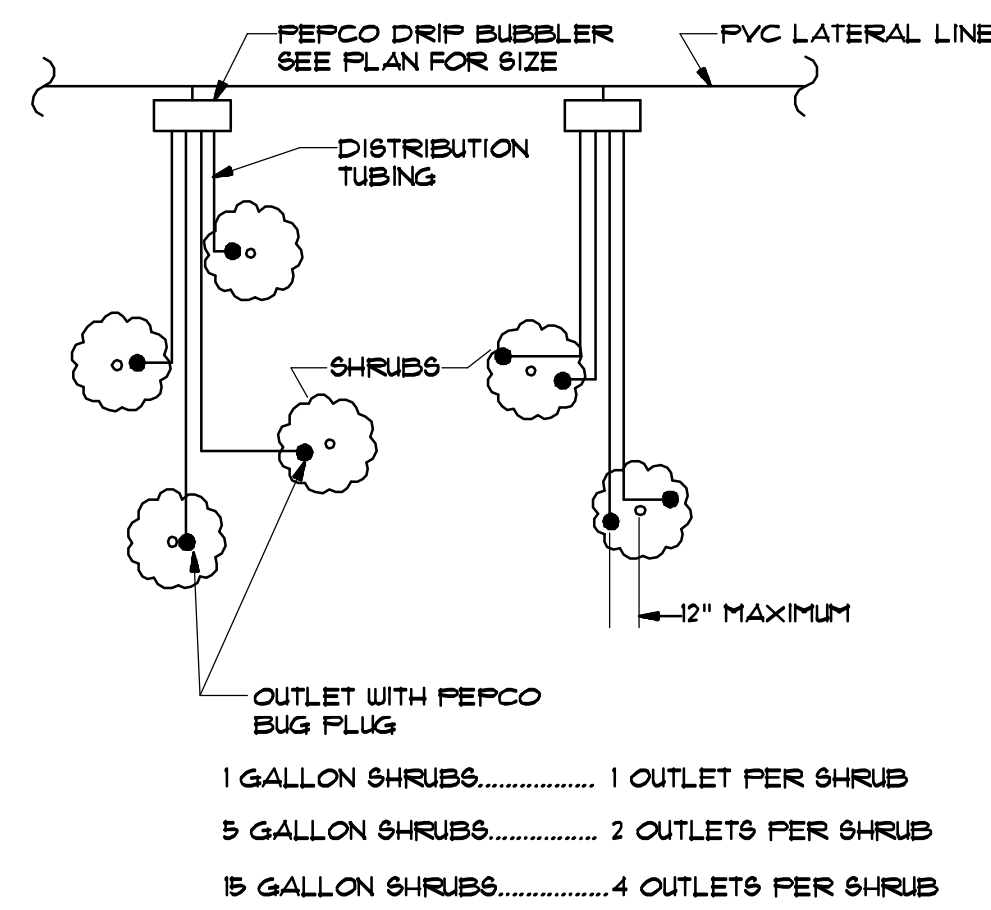
14 OCTA-BUBBLER DETAIL
NTS



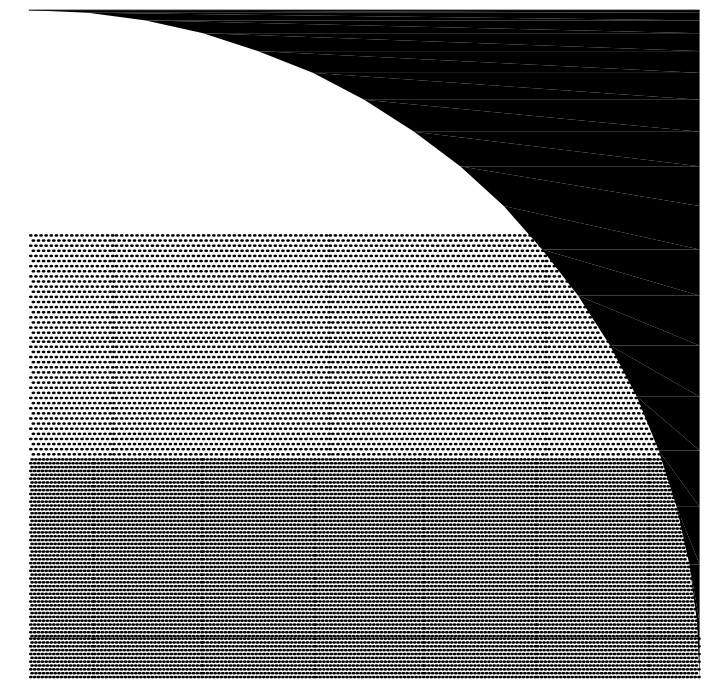
15 DRIP BUBBLER INSTALLATION
NTS



16 FLUSHING END PLUG INSTALLATION
NTS



17 TYPICAL DRIP BUBBLER LAYOUT
NTS



GATES & ASSOCIATES
LANDSCAPE ARCHITECTURE
LAND PLANNING URBAN DESIGN
2671 CROW CANYON RD. SAN RAMON, CA. 94583
TEL: 925.736.8176 FAX: 925.838.8901
WWW.DGATES.COM

HINDU COMMUNITY & CULTURAL CENTER
1200 ARROWHEAD AVE.
LIVERMORE, CA

REVISION: DESCRIPTION: DATE:



PROJECT NAME: HCCC
PROJECT NUMBER: P3995
PROJECT FILE:
DRAWN: SH, JC
CHECK: DG
DATE: 09/11/2010

SCALE: NTS

IRRIGATION DETAILS

Irrigation Audit Schedule:

1. Irrigation Audits shall be done in accordance with the Landscape Irrigation Auditor handbook published by the Irrigation Association.
2. Irrigation Audits shall be conducted by a Certified Landscape Irrigation Auditor certified by the Irrigation Association.
3. Irrigation Audits shall be done one every five years as required by the state model water efficiency requirements. Results shall be submitted to the local water purveyor for review.

IRRIGATION SYSTEM MAINTENANCE

A. General:

1. It is the City's objective to actively pursue water conservation within publicly-owned landscape areas. The CONTRACTOR can expect the administration of this irrigation specification to be closely monitored. Implementation of the Water Conservation Program will be carried out as stated in the City's Water Efficient Landscape Ordinance.
2. The CONTRACTOR shall have full responsibility to ensure watering requirements are met within each landscaped area. The CONTRACTOR shall be capable of performing repairs, installations and modifications to the existing irrigation system to adequately irrigate all landscaped areas.
3. If any part of the irrigation system is vandalized or stolen, the CONTRACTOR shall immediately repair or replace the affected component. If the component cannot be repaired immediately, the CONTRACTOR shall initiate a program of manual watering for all affected areas until the system is fully functional or install a loaner unit.

B. Maintenance and repair:

1. As part of the maintenance obligation, the CONTRACTOR shall regularly inspect the operation of the complete irrigation system, including periodic manual checks of the operation of each station. If a damaged component is discovered, the CONTRACTOR shall promptly repair the damage using replacement parts which are compatible with the original parts.
2. All rotors and spray heads shall operate efficiently and without obstruction. The pop-up extension shall glide smoothly to a fully extended position when in operation, and shall retract completely when the watering cycle ends. The nozzles shall spray with the proper arc and trajectory, and the orifice shall remain unobstructed. The screen within each head shall be periodically cleaned. Replacement parts shall be compatible with the existing equipment, and shall be installed in accordance with the manufacturer's recommendations.
3. If required by the Architect, the rotor or spray head at the end of the lateral line for each station shall be removed so the system can be flushed with water. Said flushing shall be performed until the water flows clean. The rotor or spray head shall then be carefully reinstalled.
4. All remote control valves shall close consistently and completely at the conclusion of each station cycle. Main-line irrigation leaks shall be promptly repaired.
5. The cleaning or replacement of wye filters for the drip system shall be performed periodically by the CONTRACTOR. The system will not be accepted for permanent maintenance until all filters are clean.
6. Any pressure regulators shall be adjusted by the CONTRACTOR to ensure optimum water delivery to the emitters. Any in-line filters shall be cleaned on a quarterly basis.
7. The controller shall be inspected weekly to assure that the system programming is appropriate and efficient. The CONTRACTOR shall replace any controller which does not perform to the manufacturer's specifications.
8. All spray heads, bubblers, emitters, and rotors shall be adjusted to eliminate clogs or over spray onto the streets, walkways, buildings, walls, signs, or other features that may be damaged or stained by irrigation water.
9. The CONTRACTOR shall conduct any necessary backflow prevention assembly testing.

C. Watering:

1. Seasonal programming of the controller shall be performed by the CONTRACTOR according to the schedules shown on the irrigation plans, and per the evapotranspiration rates for different months of the year and the plant's crop coefficient factor. The time and duration of watering for each station shall be adjusted regularly to account for seasonal temperature and precipitation changes. The irrigation shall be shut-off during weeks of heavy rain, or if the spray may turn to ice on the streets or walkways.
2. Manual watering shall be performed only to supplement the irrigation water provided to particular plants or areas by the automatic irrigation system. Manual watering shall not be performed to disguise a deficiency in the automatic irrigation system. If the automatic irrigation system fails to adequately distribute water to all landscaped areas or plants, the CONTRACTOR shall modify the irrigation system as necessary to achieve complete coverage.
3. Following planting and initial watering, the CONTRACTOR shall assure that the irrigation system provides water for all plants and planted areas as necessary to keep the ground moist from the surface to well below the root systems.

**Hindu Community and Cultural Center
MAWA Water Calculations**

Maximum Applied Water Allowance (MAWA)

MAWA = (LA) (20.5)

MAWA = Maximum Applied Water Allowance (gallons per year)
LA = Landscaped area (square feet)
20.5 = conversion factor (to gallons per square foot per year) The conversion factor is made up of the reference evapotranspiration (47.2) x ET adjustment factor (0.7) x .62 to convert square feet to gallons per square foot per year.

MAWA = (75,158) (20.5)

MAWA = 1,540,739 Gallons per year

Estimated Water Use Calculations (EWU)

EWU = (Eto)(PF)(HA)(0.62)/IE]

EWU = Estimated Water Use (Per year)
ETO = Reference Evapotranspiration (inches per year)
PF = Plant Factors
IE = Irrigation System Efficiency in decimal form
HA = Hydrozone area (square feet)
.62 = Conversion factor (to gallons per square foot)

Medium water use shrubs & groundcover w/ MP Rotator spray irrigation

EWU: = 47.2 (0.62) [(0.4)(65,919)/.75]]

= 1,028,829 Gallons per year

Medium water use shrubs & groundcover w/ drip irrigation

EWU: = 47.2 (0.62) [(0.4)(9,239)/.90]]

= 120,164 Gallons per year

Total EWU = 1,148,993 gallons per year

Mid Summer Baseline Case Water Calculations (LEED)

Estimated Applied Water Use (EWU) gallons Per year

EWU = (HA x (ETo x KL / IE)) x 0.6233

EWU = Estimated Applied Water Use (EWU) (gallons per year)
ETO = Reference Evapotranspiration (inches per year/month)
KL = Landscape Coefficient
IE = Irrigation System Efficiency in decimal form
HA = Hydrozone area (square feet)
0.6233 = conversion factor (to gallons per square foot)

Turf field with spray irrigation

EWU: = 52,610 x (47.2 x 0.70 / .625) x 0.6233

= 1,733,506 Gallons per year

Groundcover with spray irrigation

EWU: = 22,548 x (47.2 x 0.65 / .625) x 0.6233

= 689,891 Gallons per year

Total EWU = 2,423,397 gallons per year

Design Case Water Calculations (LEED)

Estimated Applied Water Use (EWU) gallons Per year

EWU = (HA x (ETo x KL / IE)) x CE x 0.6233

EWU = Estimated Applied Water Use (EWU) (gallons per year)
ETO = Reference Evapotranspiration (inches per year/month)
KL = Landscape Coefficient (Ks x Kd x Kmc)
Ks = species factor
Kd = density factor
Kmc = microclimate factor
IE = Irrigation System Efficiency in decimal form
HA = Hydrozone area (square feet)
0.6233 = conversion factor (to gallons per square foot)
CE = ET controller efficiency (0.8)

**Area 1 – Bio swale no mow fescue / High efficiency spray irrigation
KL = Ks 0.4, Kd 1.0, Kmc 1.0**

EWU: = 9,709 x (47.2 x 0.4 / 0.7) x 0.8 x 0.6233

= 130,577 Gallons per year

**Area 2 – Low to moderate water use shrubs and groundcover / with MP Rotator stream spray irrigation
KL = Ks 0.4, Kd 1.0, Kmc 1.0**

EWU: = 56,210 x (47.2 x 0.4 / .75) x .80 x 0.6233

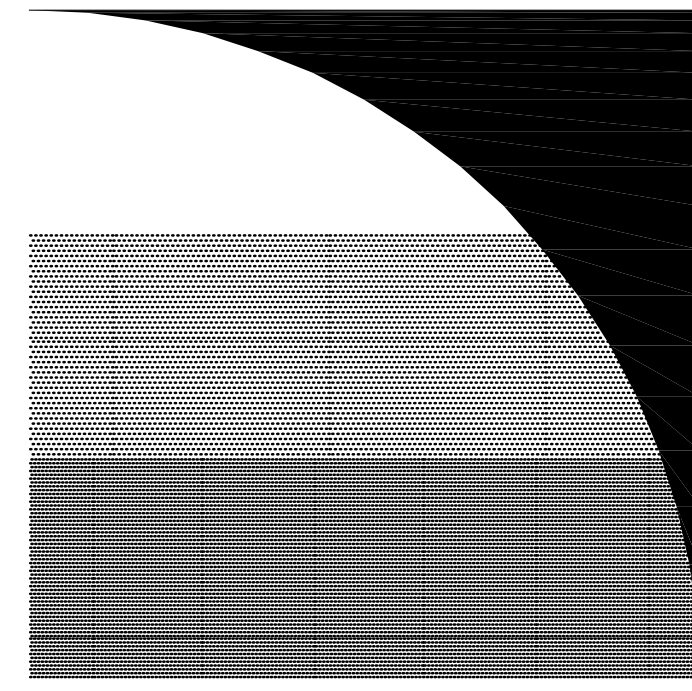
= 705,572 Gallons per year

**Area 3 – Low to moderate water use shrubs and groundcover / drip irrigation
KL = Ks 0.4, Kd 1.0, Kmc 1.0**

EWU: = 9,239 x (47.2 x 0.4 / 0.8) x .80 x 0.6233

= 96,643 Gallons per year

TOTAL EWU = 1,490,605 (REDUCTION OF 61.5% OF BASELINE CALCULATIONS)



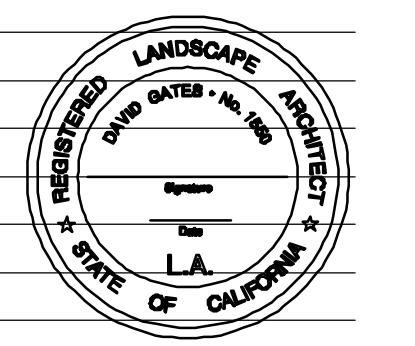
GATES & ASSOCIATES
 LANDSCAPE ARCHITECTURE
 LAND PLANNING URBAN DESIGN

2671 CROW CANYON RD, SAN RAMON, CA. 94583
 TEL: 925.736.8176 FAX: 925.838.8901
 WWW.DGATES.COM

**HINDU COMMUNITY
& CULTURAL CENTER**
 1200 ARROWHEAD AVE.

LIVERMORE, CA

REVISION: DESCRIPTION: DATE:



PROJECT NAME: HCCC
 PROJECT NUMBER: P3995
 PROJECT FILE:
 DRAWN: SH, JC
 CHECK: DG
 DATE: 09/11/2010

SCALE: NTS

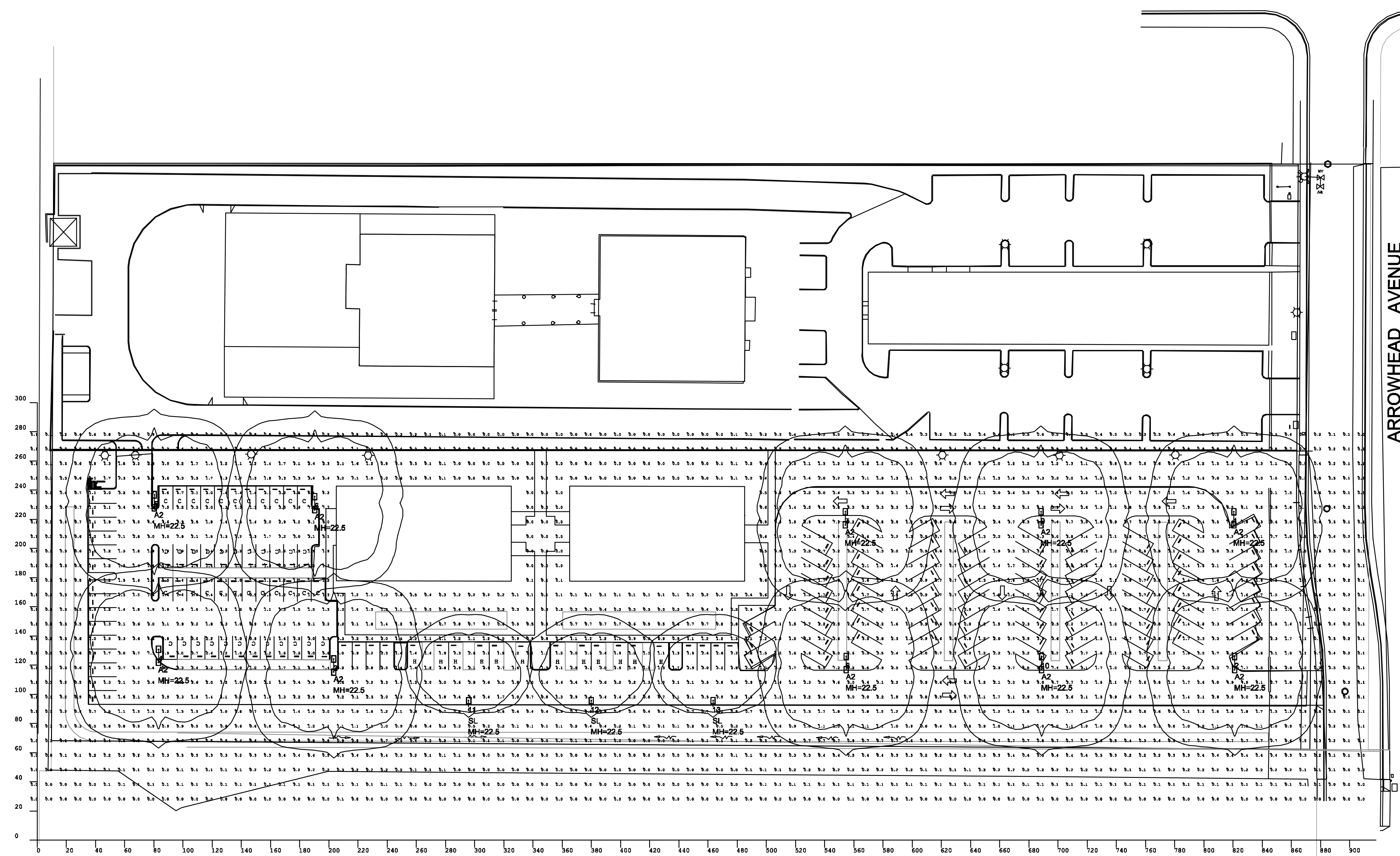
WATERING CALCULATIONS

L2.6
 PROJECT NORTH OF SHEETS

The lighting calculations provided in this report approximate the light levels expected within the space as defined and are based on the information provided to Cal Lighting. Please verify the data to assure the accuracy of the report. Cal Lighting is not responsible for light output of lamps and ballasts, or design variables.

Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min	Description
CalcPcs	Illuminance	Fc	1.23	8.2	0.0	N/A	N/A	Grade
Parking	Illuminance	Fc	2.22	8.2	0.5	4.44	16.40	Grade

Symbol	Qty	Label	Arrangement	Lumens	LLF	Description
	10	A2	BACK-BACK	22000	0.760	MPTR-SS-260
	3	SL	SINGLE	22000	0.760	MPTR-SL-260



ARROWHEAD AVENUE

LumNo	Label	X	Y	Z	Orient	Tilt
1	A2	820.64	220.693	22.5	90	0
2	A2	821.168	121.455	22.5	90	0
3	A2	203.389	119.753	22.5	90	0
4	A2	83.13	126.401	22.5	90	0
5	A2	80.221	232.352	22.5	90	0
6	A2	190.327	231.105	22.5	90	0
7	A2	554.072	220.693	22.5	90	0
8	A2	554.6	121.455	22.5	90	0
9	A2	688.267	220.693	22.5	90	0
10	A2	688.795	121.455	22.5	90	0
11	SL	295.875	91.264	22.5	90	0
12	SL	379.971	91.264	22.5	90	0
13	SL	463.402	91.264	22.5	90	0

CAL
Lighting

CAL Lighting - Patrick London
6111 Bollinger Canyon Road, Suite 110
San Ramon, CA 94583
Tel: 925.242.0111
Fax: 925.242.1001

Hindu Cultural Center

SpecifierN/A

Date: 8/7/2009

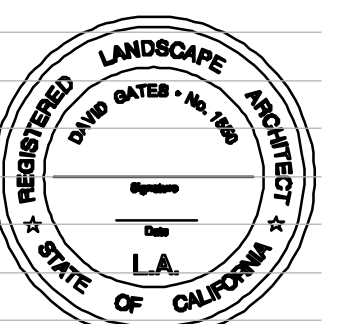
GATES & ASSOCIATES
LANDSCAPE ARCHITECTURE
LAND PLANNING URBAN DESIGN

2671 CROW CANYON RD, SAN RAMON, CA. 94583
TEL: 925.736.8176 FAX: 925.838.8901
WWW.DGATES.COM

HINDU COMMUNITY
& CULTURAL CENTER
1200 ARROWHEAD AVE.

LIVERMORE, CA

REVISION: DESCRIPTION: DATE:



PROJECT NAME: HCCC
PROJECT NUMBER: P3995
PROJECT FILE:
DRAWN: SH, JC
CHECK: DG
DATE: 09/11/2010

SCALE: VARIES

PHOTOMETRIC DIAGRAM