

DEPARTMENT OF VETERANS AFFAIRS

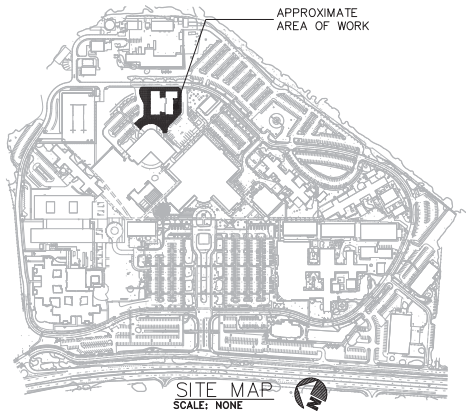
PALO ALTO HEALTH CARE SYSTEM
3801 MIRANDA AVE., PALO ALTO, CA 94304

LANDSCAPE NORTH CAMPUS LOOP ROAD

PROJECT No. 640-16-126

SITE PLAN

INDEX OF DRAWINGS

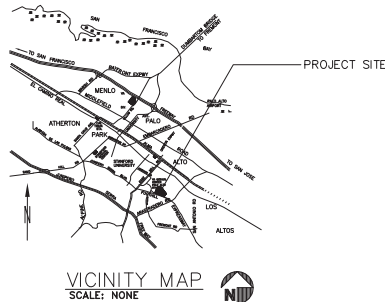


DWG. NO.	DESCRIPTION	SHT. # OF #
G1000	COVER SHEET	1 8
LS101	SITE PLAN	2 8
LS301	CONSTRUCTION DETAILS	3 8
LP101	PLANTING PLAN	4 8
LP301	PLANTING DETAILS	5 8
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LI302	IRRIGATION DETAILS	8 8

VICINITY PLAN

REFERENCE NOTES:

SCOPE OF WORK:



THE SCOPE OF THIS PROJECT IS TO IMPROVE THE NORTH LOOP ROAD LANDSCAPE INCLUDING PROVIDE NEW PLANTING AND IRRIGATION ASSOCIATED WITH BUILDING 105 & SIM CENTER, INSTALL NEW CONCRETE WALK WAY AND CONCRETE STAIRCASE PER BID SET. THE IRRIGATION MAINLINE FOR THE PROJECT AREA HAS BEEN INSTALLED UNDER A SEPARATE CONTRACT.

CONSULTANTS:

ARCHITECT/ENGINEERS:

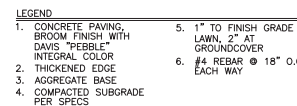
Drawing Title COVER SHEET	Project Title LANDSCAPE NORTH CAMPUS LOOP ROAD	Project Number 640-16-126	Office of Facility Planning and Development VAPAHS
Approved Project Director	Location Veterans Affairs Palo Alto Health Care System 3801 Miranda Ave, Palo Alto, CA 94304	Building Number 105	
VAPAHS PLANNING AND ENGINEERING	Date 09-22-2016	Drawing Number G1000 Dwg. 1 of 8	



KEYED NOTES

- call: 1/16⁸-1¹-0⁸

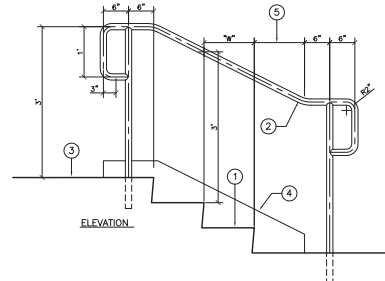
VA FORM 08-6231



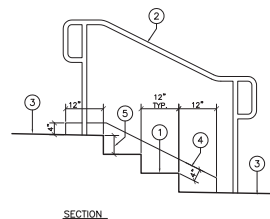
③ **CONCRETE SIDEWALK**
1'-1/2"=1'-0"



5 SITE STEP HANDRAIL
1"=1'-0"



4 CONCRETE STEPS
1"=1'-0"

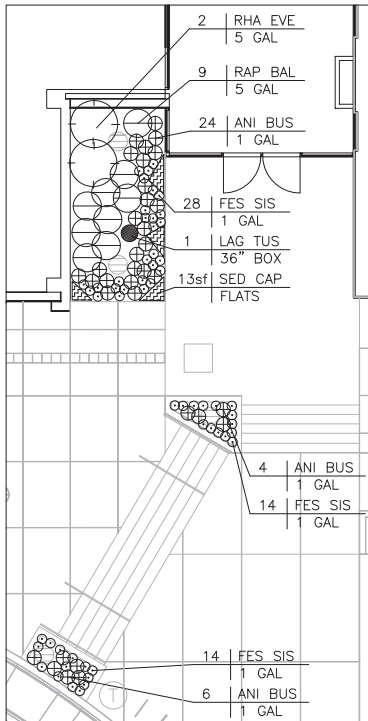


1. CONCRETE STEPS ————— 4
2. HANDRAIL ————— 5
3. CONCRETE WALK ————— 3
4. 6" WIDE CHEEK WALL
5. 6" RISER HEIGHT. ADJUST IF NECESSARY TO SUIT EXISTING GRADES (5" MIN., 7" MAX.) ALL RISERS SHALL BE EQUAL HEIGHT.

10 MAINTENANCE ACCESS STEPS
3/4"=1'-0"

VA FORM 08-6231

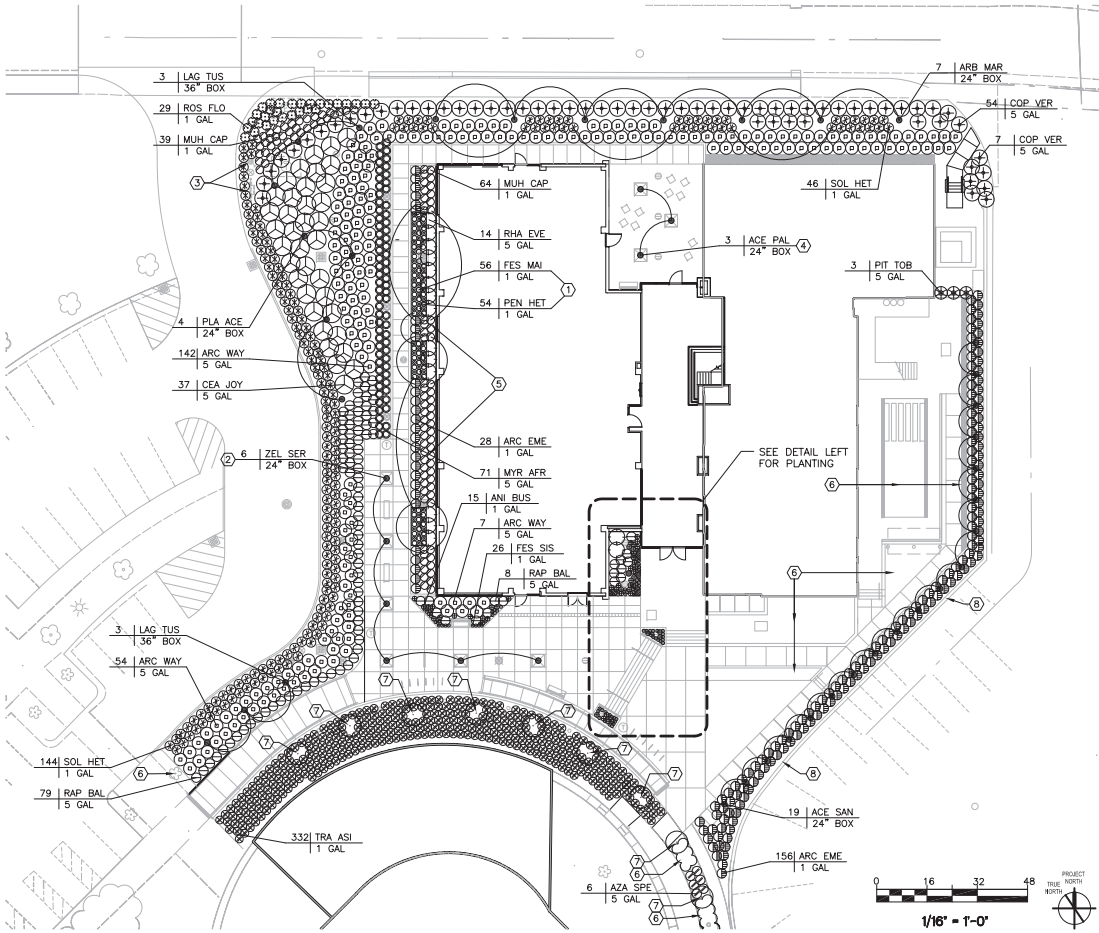
three inches = one foot
one and one half inches = one foot
one inch = one foot
three quarters inch = one foot
one half inch = one foot
three eighths inch = one foot
one eighth inch = one foot
one sixteenth inch = one foot
Project V001 L001 Plan LP101 Planting.dwg 7-25-16 02:24:08 PM tim



SCALE 3/16" = 1'-0"

PLANT LIST

SYMB	ABBREV	BOTANICAL NAME	COMMON NAME	SIZE	HEIGHT	WIDTH	CALIPER	H2O	NOTES
TREES									
●	ACE PAL	ACER PALMATUM 'SANGO KAKU'	JAPANESE MAPLE	24" BOX	9"	3"	1.25"	M	STANDARD
●	ACE SAC	ACER SACHARUM 'APOLLO'	APOLLO SUGAR MAPLE	24" BOX	8'-9"	3"	2"	M	STANDARD
●	ARB MAR	ARBUTUS x 'MARINA'	NCN	24" BOX	8"	3"	2"	L	STANDARD
●	LAG TUS	LAGERSTROEMIA x 'TUSCADERA'	CRABE MYRTLE	36" BOX	12"	5"	1.5"	L	STANDARD
●	PLA ACE	PLATANUS ACERIFOLIA 'YARWOOD'	LONDON PLANE TREE	24" BOX	10'	4'	1.5"	M	STANDARD
●	ZEL SER	ZELKOVA SERRATA	JAPANESE ZELKOVA	24" BOX	9"	3"	1.25"	M	STANDARD
SHRUBS									
○	ARC WAY	ARCTOSTAPHYLOS HOOKERI 'WAYSIDE'	WAYSIDE MANZANITA	5 GAL	4' O.C.			L	
○	AZA SPE	AZALEA 'FIELDER'S WHITE'	WHITE SUN AZALEA	5 GAL	3' O.C.			M	
○	CEA JOY	CEANOTHUS 'JOYCE COULTER'	J. COULTER WILD LILAC	5 GAL	6' O.C.			L	
○	COP VER	COPROSMA PETRIE 'VERDE VISTA'	NCN	5 GAL	5' O.C.			L	
○	MYR AFR	MYRSINE AFRICANA	AFRICAN BOXWOOD	5 GAL	30" O.C.			L	
○	PIT TOB	PITTIOSPORUM TOBIRA	TOBIRA	5 GAL	4' O.C.			L	
○	RAP BAL	RAPHIOLEPIS INDICA 'BALLERINA'	BALLERINA INDIA HAWTHORN	5 GAL	3' O.C.			L	
○	RHA EVE	RHAMNUS CALIFORNICA 'EVE CASE'	CALIFORNIA COFFEEBERRY	5 GAL	5' O.C.			L	
GROUND COVERS									
○	ARC EME	ARCTOSTAPHYLOS 'EMERALD CARPET'	EMERALD CARPET MANZANITA	1 GAL	3' O.C.			L	
○	SOL HET	SOLLIVA HETEROPHYLLA	AUSTRALIAN BLUEBELL	1 GAL	3' O.C.			L	
○	TRA ASI	TRACHELOSPERMUM ASIATICUM	ASIAN JASMINE	1 GAL	30" O.C.			M	
GRASSES									
○	FES MAI	FESTUCA MAIREI	ATLAS FESCUE	1 GAL	30" O.C.			L	
○	FES SIS	FESTUCA IDAHOENSIS 'SISKIYOU BLUE'	FESCUE 'SISKIYOU BLUE'	1 GAL	12" O.C.			VL	
○	MUH CAP	MUHLBERGIA CAPILLARIS	PINK MUHLY	1 GAL	30" O.C.			L	
ACCENT PLANTS									
●	ANI BUS	ANGOSTAPHYLOS x 'BUSH PEARL'	KANGAROO PAW, PINK	1 GAL	18" O.C.			L	
●	PEN HET	PENSTEMON HETER. 'MARGARITA BOP'	BLUE BEDDER PENSTEMON	1 GAL	18" O.C.			L	
●	ROS FLO	ROSA 'FLORAL CARPET WHITE'	WHITE CARPET ROSE	1 GAL	3' O.C.			M	
■	SED CAP	SEDUM SPATHULIFOLIUM 'CAPE BLANCO'	SEDUM	FLATS	9" O.C.			L	



KEYED SHEET NOTES

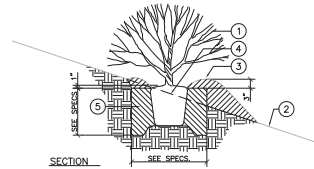
- PLANT A MIX OF 50% HEL SEM AND 50% PEN MAR IN BLOCKS WHERE INDICATED. ALTERNATE SPECIES WITHIN EACH ROW.
- PLANT ZEL SER IN TREE GRATES ACCORDING TO DETAIL
- EXISTING FIRE BACKFLOW UNIT AND VALVES
- PLANT ACE SAN IN TREE GRATES ACCORDING TO DETAIL
- FLOW THROUGH PLANTER: FILLED WITH BIOSWALE PLANTER SOIL MIX.
- EXISTING PLANTING TO REMAIN
- EXISTING TREE TO REMAIN
- EXISTING ROSES ESPALIERED ON WALL TO REMAIN IN PLACE

CONSULTANTS:		ARCHITECT/ENGINEERS:		Drawing Title PLANTING PLAN		Project Title LANDSCAPE NORTH CAMPUS LOOP ROAD		Project Number 940-19-08		Office of Facility Planning and Development	
Approved Project Director		VAPAHS PLANNING AND ENGINEERING		Approved Project Director		Location Veterans Affairs Palo Alto Health Care System 3801 Miranda Ave, Palo Alto, CA 94304		Building Number 325		Drawing Number LP101	
Date 09-22-2008		Checked JF/NNV		Drawn TD		Date 09-22-2008		Checked JF/NNV		Drawn TD	
Scale: 1/16" = 1'-0"								Page 4 of 8		VAPAHS	

three inches = one foot
one and one half inches = one foot
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one eighth inch = one foot
Project: V001 LAND PLAN LP301 Plant Details 3-22-18 02:54:44 PM Jim

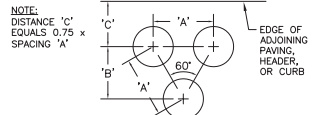
GENERAL PLANTING NOTES

- A. ALL PLANTING SHALL BE DONE IN ACCORDANCE WITH DETAILS AND PROJECT SPECIFICATIONS. IT IS THE RESPONSIBILITY OF THE PLANTING AND IRRIGATION CONTRACTOR(S) TO OBTAIN SPECIFICATIONS IF NOT PROVIDED INITIALLY WITH THESE DRAWINGS.
- B. SANDY LOAM IMPORT SOIL ACCORDING TO SPECIFICATION SECTION 32 90 00 IS REQUIRED IN ALL AREAS OF NEW LANDSCAPE PLANTING EXCEPT THE FLOW-THROUGH PLANTER. IMPORT SOIL DEPTH SHALL BE 6" AFTER SETTLEMENT, PLACED OVER SCARIFIED SUBSOIL. SUBMIT IMPORT SOIL SAMPLE AND LAB ANALYSIS PER SPEC. IF IMPORT SOIL DOES NOT MEET MINIMUM SPEC REQUIREMENTS, AMENDMENTS AND FERTILIZERS MAY BE INCORPORATED ACCORDING TO LAB RECOMMENDATIONS, EITHER PRIOR TO DELIVERY OR AFTER PLACEMENT ON SITE.
- C. ALL LANDSCAPED AREAS EXCEPT FLOW-THROUGH PLANTER AREAS SHALL RECEIVE A 3" DEEP LAYER OF RECYCLED WOOD MULCH PER SPECIFICATION SECTION 32 90 00. SHREDDED REDWOOD IS NOT ACCEPTABLE. ALL MULCHED AREAS SHALL RECEIVE AN APPLICATION OF PRE-EMERGENT HERBICIDE.
- D. ALL ROCK AND DEBRIS 1-1/2 INCHES AND LARGER SHALL BE REMOVED FROM THE TOP 6" OF PLANTING AREAS AND THEN FROM THE SITE.
- E. INSTALL LINEAR TYPE ROOT BARRIERS ADJACENT TO CURB, WALK, OR PAVING. INSTALL DIRECTLY ADJACENT AND PARALLEL TO PAVEMENT OR CURB TO BE PROTECTED. DO NOT ENCIRCLE ROOTBALL. REFER TO DETAIL 2 ON SHEET L0402. APPLICABILITY: ANY TREE WITHIN 6' OF PAVEMENT OR CURB.
- F. FOR THE PURPOSE OF PAVEMENT QUANTITY VERIFICATION, PLANT SYMBOLS TAKE PRECEDENCE OVER CALL OUTS.



- LEGEND
1. TREE OR SHRUB
 2. FINISH GRADE
 3. WATERING BASIN
 4. EXISTING GRADE
 5. SEE APPLICABLE TREE OR SHRUB PLANTING DETAIL FOR BACKFILL, STAKING, AND OTHER REQUIREMENTS

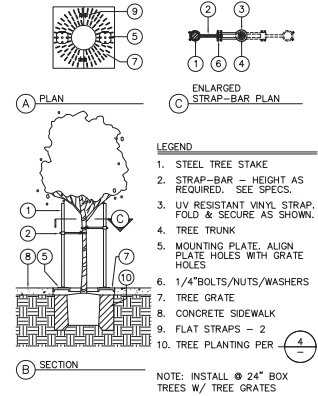
8 TREE OR SHRUB ON SLOPE
N.T.S.



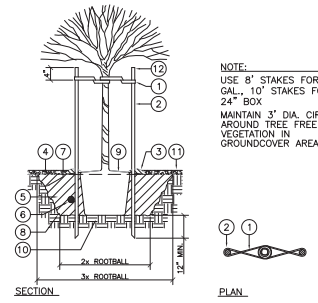
NOTE: DISTANCE 'C' EQUALS 0.75 x SPACING 'A'

PLANT SPACING ('A')	ROW SPACING ('B')
6 IN. O.C.	5 IN. O.C.
8 IN. O.C.	7 IN. O.C.
12 IN. O.C.	10-12 IN. O.C.
18 IN. O.C.	16 IN. O.C.
24 IN. O.C.	21 IN. O.C.
30 IN. O.C.	26 IN. O.C.
3 FT. O.C.	30 IN. O.C.
42 IN. O.C.	36 IN. O.C.
4 FT. O.C.	42 IN. O.C.
5 FT. O.C.	54 IN. O.C.
6 FT. O.C.	60 IN. O.C.
8 FT. O.C.	84 IN. O.C.

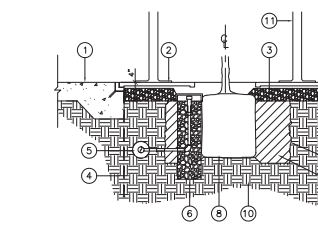
7 TRIANGULAR SPACING
N.T.S.



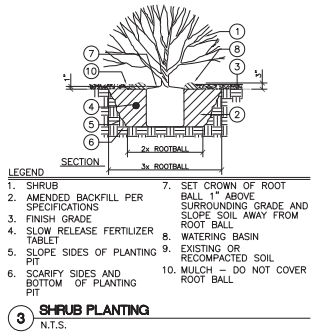
6 TREE STAKE AT TREE GRATE
N.T.S.



5 TREE PLANTING: DOUBLE STAKE
N.T.S.



4 TREE PLANTING AT TREE GRATE
1"=1'-0"



3 SHRUB PLANTING
N.T.S.

- LEGEND
1. SHRUB
 2. AMENDED BACKFILL PER SPECIFICATIONS
 3. FINISH GRADE
 4. SLOW RELEASE FERTILIZER TABLET
 5. SLOPE SIDES OF PLANTING PIT
 6. SCARIFY SIDES AND BOTTOM OF PLANTING PIT
 7. SET CROWN OF ROOT BALL 1" ABOVE SURROUNDING GRADE AND SLOPE SOIL AWAY FROM ROOT BALL
 8. WATERING BASIN
 9. EXISTING OR RECOMPACTED SOIL
 10. MULCH - DO NOT COVER ROOT BALL

- LEGEND
1. ADJOINING PAVING
 2. TREE GRATE (NIC)
 3. PEA GRAVEL-2" DEPTH
 4. ROOT BARRIER 24" DEEP LINEAR PANEL TYPE BARRIER AT EDGE OF PAVEMENT
 5. IRRIGATION SLEEVE, SEE PLAN
 6. TREE BUBBLER(S) SEE IRRIGATION PLANS FOR QTY PER TREE & DETAIL SCHEDULE
 7. PLANTING HOLE; SCARIFY WALLS; SEE SCHEDULE
 8. ROOTBALL- SET 2" ABOVE SURROUNDING SOIL
 9. AMENDED BACKFILL MIX- SEE SPECS
 10. UNDISTURBED SOIL DIRECTLY BELOW ROOTBALL.
 11. METAL STAKES PER 6

CONSULTANTS:		ARCHITECT/ENGINEERS:		Drawing Title PLANTING NOTES AND DETAILS		Project Title LANDSCAPE NORTH CAMPUS LOOP ROAD		Project Number 040-09-08		Office of Facility Planning and Development VA PAHCS Patriot Health Care System	
				Approved Project Director YAPAHCS PLANNING AND ENGINEERING		Location Veterans Affairs Palo Alto Health Care System 3801 Miranda Ave, Palo Alto, CA 94304		Building Number 150			
Date						Date 09-22-2008		Checked JF/NVBY		Draw TD	
								Drawing Number LP301		Page 5 of 8	

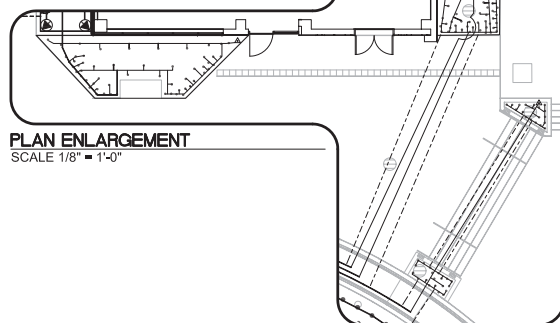
IRRIGATION LEGEND

SYMBOL	MODEL NUMBER	DESCRIPTION	FLOW (GPM)
●	PROS-12-PRS30-CV-8-H.Q	HUNTER POP-UP SPRAY SPRINKLER (SHRUB)	0.5,0.25
●	SL220	BOWSMITH SINGLE OUTLET EMITTER (2 GPH)	0.033
●	PCB-25	HUNTER BUBBLER (TREE)	0.25
●	RZWS-18-25-CV	HUNTER ROOT ZONE BUBBLER ASSEMBLY AND CHECK VALVE. (TREE)	0.25
■	PRB-QKCHK-200M & LT-T	RAIN BIRD PRESSURE REGULATING, QUICK CHECK BASKET FILTER WITH 200 STAINLESS STEEL SCREEN AND SCHEDULE 80 PVC FULL PORT BALL VALVE	
▲	SEE DETAIL	EMITTER FLUSH VALVE ASSEMBLY	
⊙	EXISTING	SUPERIOR NORMALLY CLOSED MASTER CONTROL VALVE	
⊞	EXISTING	CREATIVE SENSOR TECHNOLOGY FLOW SENSOR WITH PAIGE SHIELDED COMMUNICATION CABLE	
⊕	IBV-FS-SERIES	HUNTER FILTER SENTRY BRASS REMOTE CONTROL VALVE	
⊖	EXISTING	REMOTE CONTROL VALVE	
+	EXISTING	STUB-OUT FOR FUTURE REMOTE CONTROL VALVE	
◆	HQ-33DR	HUNTER QUICK COUPLING VALVE	
×	EXISTING	NIBCO GATE VALVE (LINE SIZE)	
×	T-113	NIBCO GATE VALVE (LINE SIZE)	
⊙	EXISTING	WeatherTRAK ET Pro2 CONTROLLER WITH FIVE YEAR WIRELESS DATA SERVICE, RAINMASTER RECEIVER, AND UNIVERSAL ADAPTOR AND CABLES (MOUNT IN STRONG BOX ENCLOSURE)	
■	EXISTING	RAIN SENSOR ATTACHED TO CONTROLLER ENCLOSURE	

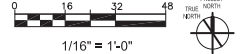
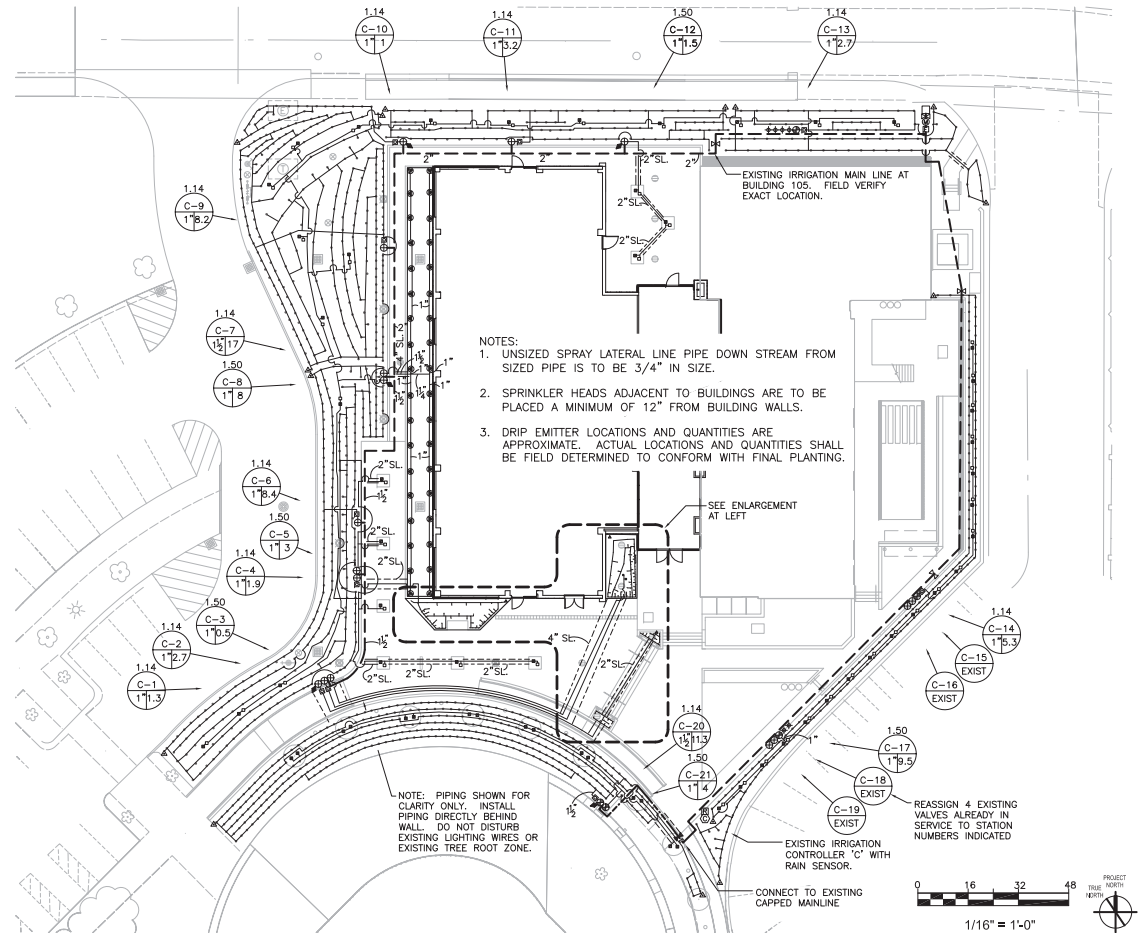
SYMBOL	DESCRIPTION
	PRECIPITATION RATE
	CONTROLLER & STATION NUMBER
	APPROXIMATE FLOW (GPM)
	REMOTE CONTROL VALVE SIZE
	MAIN LINE: 1120-SCHEDULE 40 PVC PLASTIC PIPE WITH SCHEDULE 40 PVC SOLVENT-WELD FITTINGS. 18" COVER.
	EXISTING MAIN LINE
	LATERAL LINE: 1120-SCHEDULE 40 PVC PLASTIC PIPE WITH SCHEDULE 40 PVC SOLVENT-WELD FITTINGS. 12" COVER.
	EXISTING SLEEVING
	SLEEVING: 1120-SCHEDULE 40 PVC PLASTIC PIPE. 18" COVER. 24" UNDER VEHICULAR PAVING.

EMITTER LATERAL SIZING

NUMBER OF EMITTER OUTLETS	PIPE SIZE
1 - 60	3/4"
61 - 100	1"
101 - 200	1 1/4"
201 +	1 1/2"



PLAN ENLARGEMENT
SCALE 1/8" = 1'-0"



CONSULTANTS:

ARCHITECT/ENGINEERS:

Drawing Title
IRRIGATION PLAN

Approved Project Director

VAPAHS PLANNING AND ENGINEERING

Project Title
LANDSCAPE NORTH CAMPUS LOOP ROAD

Location
Veterans Affairs Palo Alto Health Care System
3801 Miranda Ave, Palo Alto, CA 94304

Date
09-22-2008

Project Number
040-19-08

Building Number
105

Drawing Number
LI101

Day 6 of 8

Office of
Facility Planning and
Development

VAPAHS
VETERANS AFFAIRS PLANNING AND ENGINEERING

Scale: 1/16" = 1'-0"

IRRIGATION NOTES

1. THESE IRRIGATION DRAWINGS ARE DIAGRAMMATIC AND INDICATIVE OF THE WORK TO BE INSTALLED. ALL PIPING, VALVES, ETC. SHOWN WITHIN PAVED AREAS IS FOR CLARITY ONLY AND ARE TO BE INSTALLED WITHIN PLANTING AREAS WHERE POSSIBLE. DUE TO THE SCALE OF THE DRAWINGS, IT IS NOT POSSIBLE TO INDICATE ALL OFFSETS, FITTINGS, SLEEVES, ETC. WHICH MAY BE REQUIRED. THE CONTRACTOR IS REQUIRED TO INVESTIGATE THE STRUCTURAL AND FINISHED CONDITIONS AFFECTING ALL OF THE CONTRACT WORK INCLUDING OBSTRUCTIONS, GRADE DIFFERENCES OR AREA DIMENSIONAL DIFFERENCES WHICH MAY NOT HAVE BEEN CONSIDERED IN THE ENGINEERING. IN THE EVENT OF FIELD DIFFERENCES, THE CONTRACTOR IS REQUIRED TO PLAN THE INSTALLATION WORK ACCORDINGLY BY NOTIFICATION AND APPROVAL OF THE OWNER'S AUTHORIZED REPRESENTATIVE AND ACCORDING TO THE CONTRACT SPECIFICATION. THE CONTRACTOR IS ALSO REQUIRED TO NOTIFY AND COORDINATE WITH THE LANDSCAPE CONTRACTOR WORK WITH ALL APPLICABLE CONTRACTORS FOR THE LOCATION AND INSTALLATION OF PIPE, CONDUIT OR SLEEVES THROUGH OR UNDER WALLS, ROADWAYS, PAVING, STRUCTURE, ETC., BEFORE CONSTRUCTION. IN THE EVENT THESE NOTIFICATIONS ARE NOT PERFORMED, THE CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ALL REQUIRED REVISIONS.

2. THE EXISTING MAIN LINE SHOWN ON THE DRAWINGS IS DIAGRAMMATIC. CONTRACTOR TO VERIFY AND LOCATE EXISTING MAIN LINE IN FIELD. ANY DEVIATION OF EXISTING MAIN LINE LOCATION AS SHOWN ON THE DRAWINGS IS TO BE REPORTED TO ARCHITECT FOR REVIEW AND POSSIBLE REVISION.

3. THE CONTRACTOR SHALL EXERCISE CARE IN LOCATING PIPING AS TO NOT CONFLICT WITH OTHER UTILITIES. DO NOT INSTALL IRRIGATION PIPING PARALLEL TO AND DIRECTLY OVER OTHER UTILITIES.

4. THE INTENT OF THIS IRRIGATION SYSTEM IS TO PROVIDE THE MINIMUM AMOUNT OF WATER REQUIRED TO SUSTAIN GOOD PLANT HEALTH.

5. IT IS THE RESPONSIBILITY OF THE LANDSCAPE MAINTENANCE CONTRACTOR AND/OR OWNER TO PROGRAM THE IRRIGATION CONTROLLERS TO PROVIDE THE MINIMUM AMOUNT OF WATER NEEDED TO SUSTAIN GOOD PLANT HEALTH. THIS INCLUDES MAKING ADJUSTMENTS TO THE PROGRAM FOR SEASONAL WEATHER CHANGES, PLANT MATERIAL, WATER REQUIREMENTS, MOUNDING AND SLOPES, SUN, SHADE, AND WIND EXPOSURES.

6. AT THE END OF THE REQUIRED MAINTENANCE PERIOD OF THE CONTRACTOR, THE OWNER SHALL PROVIDE REGULAR MAINTENANCE OF THE IRRIGATION SYSTEM TO ENSURE THE EFFICIENT USE OF WATER. MAINTENANCE SHALL INCLUDE BUT NOT BE LIMITED TO CHECKING, ADJUSTING, AND REPAIRING IRRIGATION EQUIPMENT AND CONTROL SYSTEM.

7. THIS IRRIGATION SYSTEM INTERFACES WITH AN EXISTING IRRIGATION SYSTEM WHICH IS TO REMAIN IN SERVICE. THE EXISTING UNDERGROUND IRRIGATION EQUIPMENT AND OTHER UTILITIES HAVE NOT BEEN FIELD VERIFIED UNDER THE CONSTRUCTION DOCUMENT PHASE OF WORK. THE CONTRACTOR IS TO FIELD VERIFY THE LOCATION OF EXISTING IRRIGATION MAIN LINE PIPING, LATERAL LINE PIPING, LOW VOLTAGE AND HIGH VOLTAGE WIRE, COMMUNICATION CABLE, AND VALVES BEFORE CONSTRUCTION IS STARTED. DAMAGE TO THE EXISTING IRRIGATION SYSTEM AND OTHER VARIOUS UTILITIES SHALL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL EXPENSE TO THE OWNER. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING THE CURRENT OPERATION OF THE EXISTING IRRIGATION SYSTEM WHICH SERVICES AREAS OUTSIDE OF THE CONTRACT WORK AREA. DO NOT SHUT DOWN GATE VALVES, SEWER MAIN OR LATERAL PIPING, AND/OR SEWER WIRE WHICH ORIGINATES IN OR TRAVELS THROUGH THIS CONTRACT WORK AREA UNLESS SPECIFICALLY DIRECTED TO DO SO BY THE CONTRACT DOCUMENTS OR BY WRITTEN APPROVAL FROM THE ARCHITECT. LANDSCAPE STRESS OUTSIDE OF THIS CONTRACT AREA WILL REQUIRE FULL REPLACEMENT OF THE LANDSCAPE DAMAGED UNDER THIS CONTRACT WORK AT NO ADDITIONAL EXPENSE TO THE OWNER. IF THE CONTRACTOR IS NOT AGREEABLE TO THIS CONDITION THEN THE CONTRACTOR MUST STATE THIS IN THE BID PROPOSAL DOCUMENTS.

8. CONTRACTOR SHALL PROGRAM THE IRRIGATION CONTROLLER TO PROVIDE IRRIGATION TO ALL PLANTING WITHIN THE ALLOWED WATERING WINDOW OF TIME AS REQUIRED. THE CONTRACTOR SHALL CREATE CONTROLLER PROGRAMING THAT WILL NOT EXCEED THE MAXIMUM GALLONS PER MINUTE FLOW RATE STATED ON THE DRAWINGS, AND NOT EXCEED THE CAPACITY OF ANY MAIN LINE PIPING.

9. IRRIGATION CONTROL WIRES SHALL BE COPPER WITH U.L. APPROVAL FOR DIRECT BURIAL IN GROUND, SIZE #14-1, COMMON GROUND WIRE SHALL HAVE WHITE INSULATING JACKET. CONTROL WIRE SHALL HAVE INSULATING JACKET OF COLOR OTHER THAN WHITE. SPLICE SHALL BE MADE WITH 3M-DBR/Y-6 SEAL PACKS.

10. INSTALL SIX 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. MINIMUM OF ONE SPARE WIRE PER CONTROLLER.

11. SPLICING OF 24 VOLT WIRES IS NOT PERMITTED EXCEPT IN VALVE BOXES. SEAL WIRE SPLICES WITH 3M-DBR/Y-6 SPLICE SEALING DEVICES OF SIZE COMPATIBLE WITH WIRE SIZE. LEAVE A 36" LONG, 1" DIAMETER COIL OF EXCESS WIRE AT EACH SPLICE AND A 36" LONG EXPANSION LOOP EVERY 100 FEET ALONG WIRE RUN. TAPE WIRES TOGETHER EVERY TEN FEET. TAPING WIRES IS NOT REQUIRED INSIDE SLEEVES.

12. PLASTIC VALVE BOXES ARE TO BE BLACK IN COLOR WITH BOLT DOWN, NON-HINGED COVER MARKED "IRRIGATION". BOX BODY SHALL HAVE KNOCK OUTS. MANUFACTURER SHALL BE CARSON INDUSTRIES.

13. INSTALL REMOTE CONTROL VALVE BOXES 12" FROM WALK, CURB, LAWN, HEADER BOARD, BUILDING, OR LANDSCAPE FEATURE. AT MULTIPLE VALVE BOX GROUPS, EACH BOX SHALL BE AN EQUAL DISTANCE FROM THE WALK, CURB, LAWN, ETC. AND EACH BOX SHALL BE 12" APART. SHORT SIDE OF RECTANGULAR VALVE BOXES SHALL BE PARALLEL TO WALK, CURB, ETC.

14. VALVE LOCATIONS SHOWN ARE DIAGRAMMATIC. INSTALL IN GROUND COVER/SHRUB AREAS WHERE POSSIBLE (NOT IN LAWN AREA).

15. INSTALL A SCHEDULE 80 THREADED FULL PORT BALL VALVE TO ISOLATE EACH REMOTE CONTROL VALVE OR GROUP OF REMOTE CONTROL VALVES. SIZE SHALL BE SAME AS LARGEST REMOTE CONTROL VALVE IN MANIFOLD.

16. THE IRRIGATION CONTRACTOR SHALL FLUSH AND ADJUST ALL SPRINKLER HEADS FOR OPTIMUM PERFORMANCE AND TO PREVENT OVER SPRAY 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.

17. ALL SPRINKLER HEADS SHALL BE SET PERPENDICULAR TO FINISH GRADE OF THE AREA TO BE IRRIGATED UNLESS OTHERWISE NOTED ON THE DRAWINGS.

18. LOCATE BUBBLERS AND EMITTERS ON UP-HILL SIDE OF PLANT OR TREE.

19. INSTALL A VALCON 5000 SERIES SPRING LOADED CHECK VALVE BELOW THOSE SPRINKLERS WHERE LOW HEAD DRAINAGE WILL CAUSE EROSION AND/OR EXCESS WATER.

20. WHERE IT IS NECESSARY TO EXCAVATE ADJACENT TO EXISTING TREES, THE CONTRACTOR SHALL USE ALL POSSIBLE CARE TO AVOID INJURY TO TREES AND TREE ROOTS. EXCAVATION IN AREAS WHERE TWO (2) INCH AND LARGER ROOTS OCCUR SHALL BE DONE BY HAND. TRENCHES ADJACENT TO TREE SHOULD BE CLOSED WITHIN TWENTY-FOUR (24) HOURS, AND WHERE THIS IS NOT POSSIBLE, THE SIDE OF THE TRENCH ADJACENT TO THE TREE SHALL BE KEPT SHADED WITH BURLAP OR CANVAS.

21. IRRIGATION CONTRACTOR TO NOTIFY ALL LOCAL JURISDICTIONS FOR INSPECTION AND TESTING OF EXISTING BACKFLOW PREVENTION DEVICE. REPAIR OR REPLACE AS TEST RESULTS INDICATE.

22. PRESSURE TEST PROCEDURE. THE CONTRACTOR SHALL:

- NOTIFY ARCHITECT AT LEAST THREE (3) DAY IN ADVANCE OF TESTING.
- PERFORM TESTING AT HIS OWN EXPENSE.
- CENTER LOAD PIPING WITH SMALL AMOUNT OF BACKFILL TO PREVENT ARCHING OR SLIPPING UNDER PRESSURE. NO FITTING SHALL BE COVERED.
- APPLY THE FOLLOWING TESTS AFTER WELD PLASTIC PIPE JOINTS HAVE CURED AT LEAST 24 HOURS.

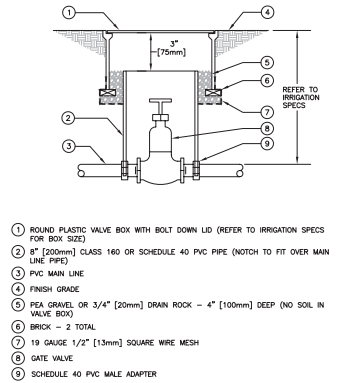
1. TEST LIVE (CONSTANT PRESSURE) AND QUICK COUPLER LINE HYDROSTATICALLY AT 125 PSI. MINIMUM. LINES WILL BE APPROVED IF TEST PRESSURE IS MAINTAINED FOR SIX (6) HOURS. THE LINE WILL BE APPROVED OR NOT APPROVED AS SUCH RESULTS MAY INDICATE. THE CONTRACTOR SHALL MAKE TESTS AND REPAIRS AS NECESSARY UNTIL TEST CONDITIONS ARE MET.

2. TEST RCV CONTROLLED LATERAL LINES WITH WATER AT LINE PRESSURE AND VISUALLY INSPECT FOR LEAKS. RETEST AFTER CORRECTING DEFECTS.

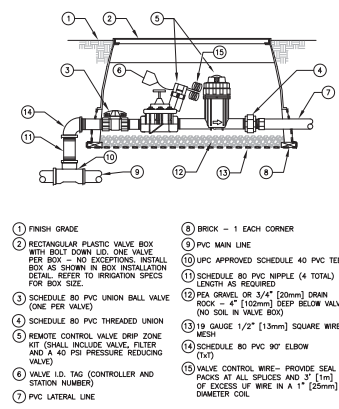
26. THE SPRINKLER SYSTEM DESIGN IS BASED ON THE MINIMUM OPERATING PRESSURE SHOWN ON THE IRRIGATION DRAWINGS. THE IRRIGATION CONTRACTOR SHALL VERIFY WATER PRESSURE PRIOR TO CONSTRUCTION. REPORT ANY DIFFERENCE BETWEEN THE WATER PRESSURE INDICATED ON THE DRAWINGS AND THE ACTUAL PRESSURE READING AT THE IRRIGATION POINT OF CONNECTION TO THE OWNER'S AUTHORIZED REPRESENTATIVE.

27. IRRIGATION DEMAND: 2.3 GPM AT 55 PSI STATIC PRESSURE AT IRRIGATION POINT OF CONNECTION. FIELD VERIFY WATER PRESSURE PRIOR TO CONSTRUCTION. IF ACTUAL WATER PRESSURE DIFFERS FROM THE STATED PRESSURE CONTACT ARCHITECT FOR DIRECTION AND POSSIBLE REVISION.

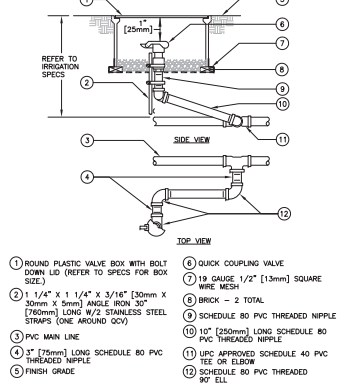
28. PIPE THREAD SEALANT COMPOUND SHALL BE RECTOR SEAL T+2, CHRISTY'S ULTRA SEAL, OR APPROVED EQUAL.



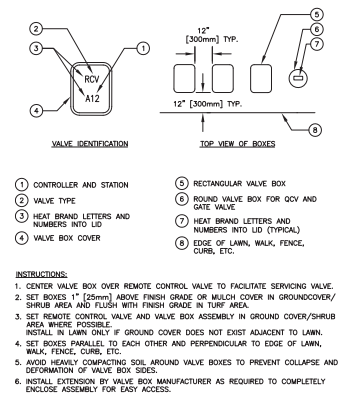
1 GATE VALVE - 3" (75mm) AND SMALLER



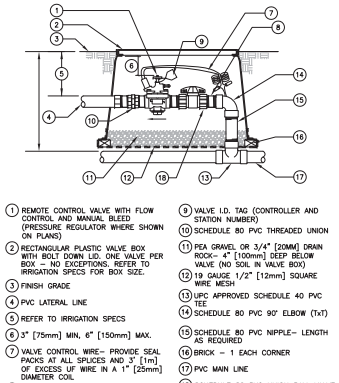
4 REMOTE CONTROL VALVE - DRIP ZONE



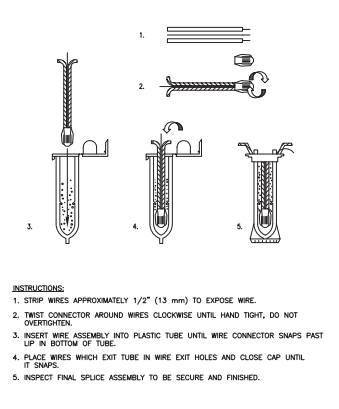
2 QUICK COUPLER VALVE (QCV)



5 VALVE BOX INSTALLATION

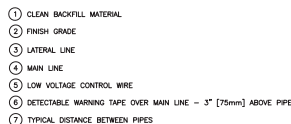


3 REMOTE CONTROL VALVE

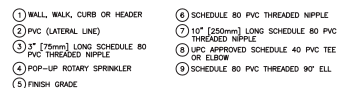


6 WEATHER-PROOF WIRE SPLICE ASSEMBLY

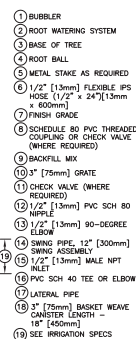
		CONSULTANTS:				ARCHITECT/ENGINEERS:		Drawing Title IRRIGATION DETAILS		Project Title LANDSCAPE NORTH CAMPUS LOOP ROAD		Project Number 040-10-100		Office of Facility Planning and Development VA & PAHCS Veterans Affairs Palo Alto Health Care System 3801 Miranda Ave, Palo Alto, CA 94304
												Building Number 100		
								Approved Project Director		Location Veterans Affairs Palo Alto Health Care System 3801 Miranda Ave, Palo Alto, CA 94304		Drawing Number LI 301		
								YAPHCS PLANNING AND ENGINEERING		Date 09-22-2008		Checked JF/PAH/SH		
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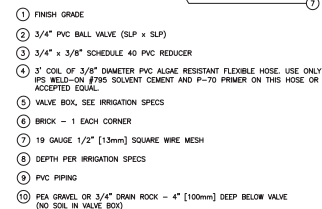


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1. EMITTER (TO BE INSTALLED ON TOP OF ROOTBALL)
2. 1/2" [13mm] SCH 40 MALE ADAPTER (GRAY) NO WHITE ADAPTERS ALLOWED IN THIS LOCATION
3. 6" [150mm] STEEL STAPLE
4. FINISH GRADE
5. ROOTBALL
6. 1/2" [13mm] IPS FLEXIBLE PVC USE ONLY IPS WELD-ON #795 SOLVENT WELD CEMENT WITH P-70 PRIMER ON THIS HOSE
7. PVC TEE (SST), ELBOW (ST) OR FEMALE ADAPTER
8. PVC LATERAL LINE
9. EDGE OF ROOTBALL

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