600 ELLIS (465 FAIRCHILD DRIVE) THE SOBRATO ORGANIZATION

FORMAL APPLICATION REV 02 - SEPTEMBER 01, 2020



VIEW FROM THE NORTHEAST













BUILDING GROSS SQUARE FOOTAGE

LEVEL 1	34,739	SF
LEVEL 2	45,663	SF
LEVEL 3	50,241	SF
LEVEL 4	50,244	SF
LEVEL 5	42,312	SF
LEVEL 6	35,896	SF

PROPOSED BUILDING 1 TOTAL AREA: 259,095 SF



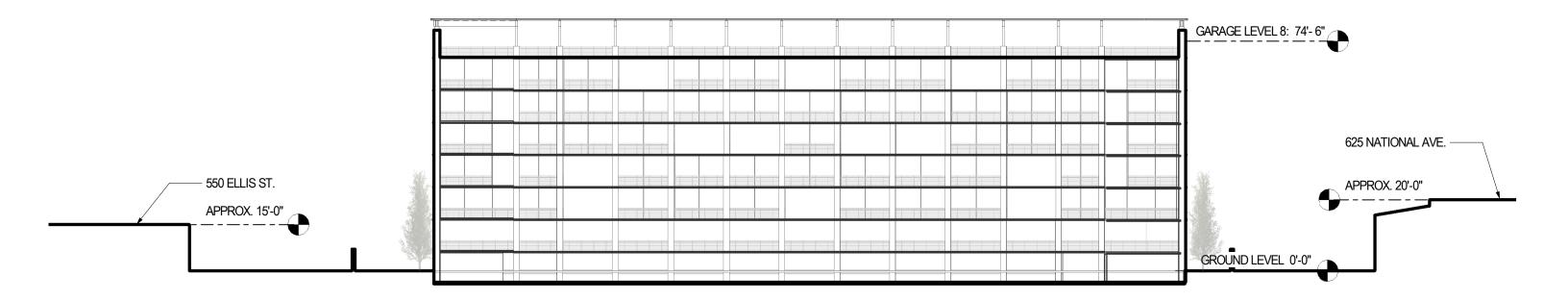




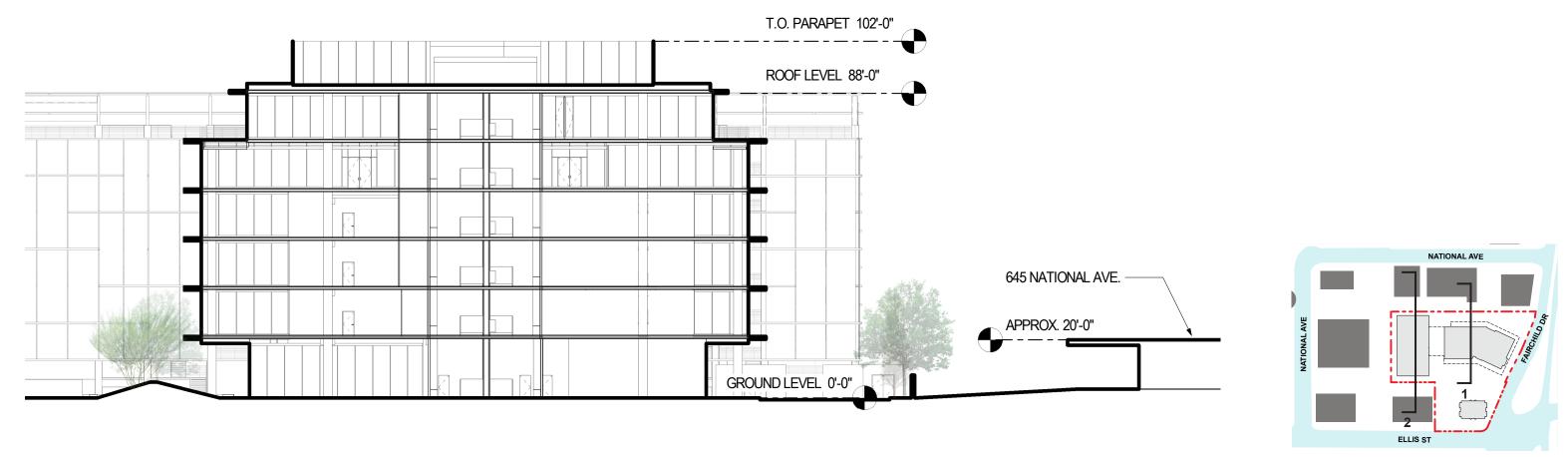








2 - PARKING GARAGE



1 - 645 NATIONAL AVE.





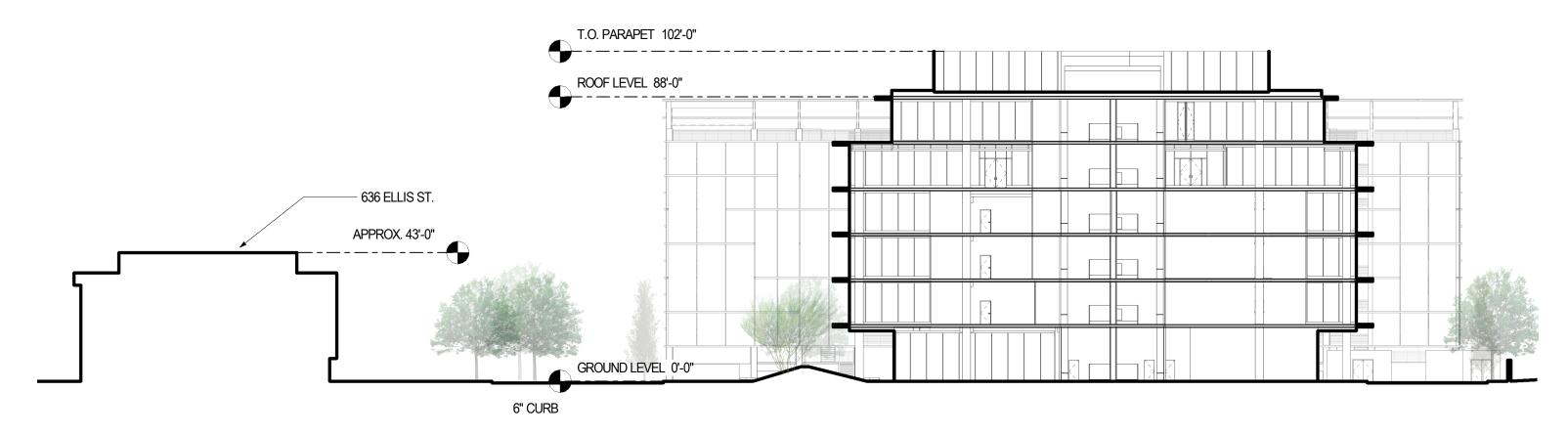




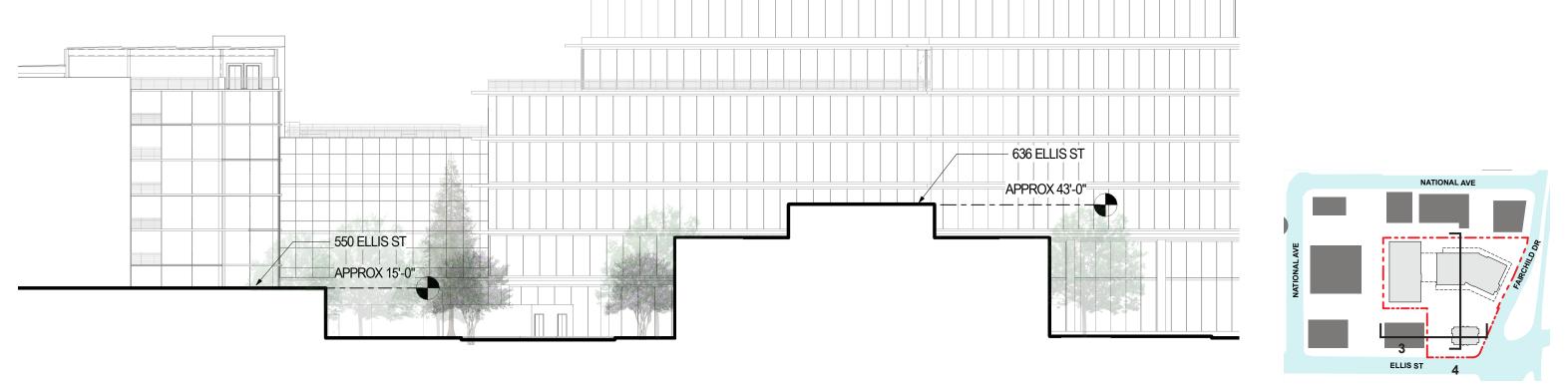








4 - 636 ELLIS ST.



3 - ELLIS ST. ENTRANCE

SITE SECTIONS

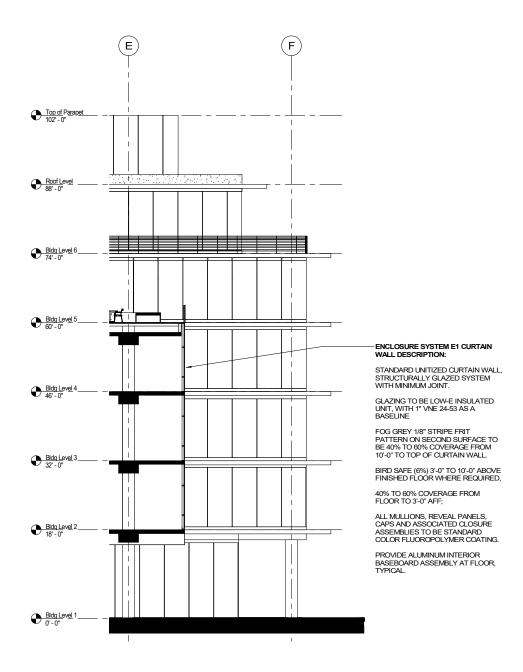


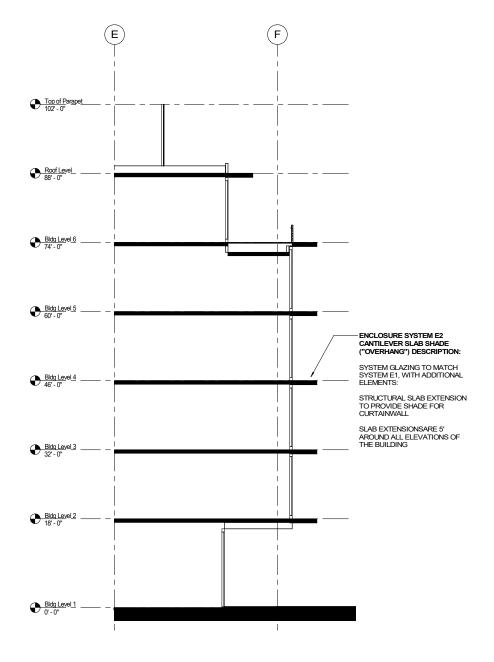








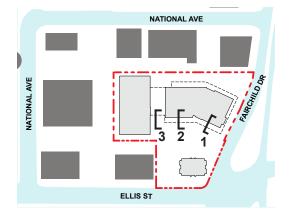




 $\overline{\mathsf{M}}$ Top of Parapet 102' - 0" Roof Level _____ Bldg Level 6 74' - 0" Bldg Level 5 60' - 0" - ENCLOSURE SYSTEM E2 CANTILEVER SLAB SHADE ("OVERHANG") DESCRIPTION: SYSTEM GLAZING TO MATCH SYSTEM E1, WITH ADDITIONAL ELEMENTS: Bldg Level 4 46' - 0" STRUCTURAL SLAB EXTENSION TO PROVIDE SHADE FOR CURTAINWALL SLAB EXTENSIONSARE 5' AROUND ALL ELEVATIONS OF THE BUILDING Bldg Level 3 32' - 0" Bldq Level 2 18' - 0" Bldg Level 1

2 - E2 ENCLOSURE SYSTEM

1 - E3 ENCLOSURE SYSTEM



ENCLOSURE DESCRIPTIONS



3 - E1 ENCLOSURE SYSTEM









APPLICABLE CODES

- THE 2019 CALIFORNIA BUILDING CODE (CBC) WITH MOUNTAIN VIEW AMENDMENTS
- THE 2019 CALIFORNIA FIRE CODE (CFC) WITH MOUNTAIN VIEW AMENDMENTS
- THE 2019 CALIFORNIA ELECTRICAL CODE
- THE 2019 CALIFORNIA MECHANICAL CODE
- THE CALIFORNIA ENERGY CODE (2019 EDITION)
- CALIFORNIA ELEVATOR SAFETY ORDERS, INCLUDING ASME A17.1 13, AS ADOPTED AND AMENDED BY THE STATE OF CALIFORNIA.
- NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) STANDARDS AS REFERENCED BY THE ABOVE CODES AND STANDARDS, INCLUDING, BUT NOT LIMITED TO:
- NFPA 13, STANDARD FOR THE INSTALLATION OF SPRINKLER SYSTEMS, 2019 EDITION.
- NFPA 14, STANDARD FOR THE INSTALLATION OF STANDPIPE AND HOSE SYSTEMS, 2019 EDITION.
- NFPA 17, STANDARD FOR DRY CHEMICAL EXTINGUISHING SYSTEMS, 2021 EDITION.
- NFPA 20, STANDARD FOR THE INSTALLATION OF STATIONARY PUMPS FOR FIRE PROTECTION, 2019 EDITION.
- NFPA 24, STANDARD FOR THE INSTALLATION OF PRIVATE FIRE SERVICE MAINS AND THEIR APPURTENANCES, 2019 EDITION.
- NFPA 30, FLAMMABLE AND COMBUSTIBLE LIQUIDS CODE, 2018 EDITION.
- NFPA 70, ELECTRICAL CODE, 2020 EDITION.
- NFPA 72, NATIONAL FIRE ALARM CODE, 2019 EDITION.
- NFPA 80, STANDARD FOR FIRE DOORS AND OTHER OPENING PROTECTIVES, 2019
- NFPA 110, STANDARD FOR EMERGENCY AND POWER SYSTEMS, 2019 EDITION.

OCCUPANCY CLASSIFICATION (CBC CHAPTER 3)

CLASSIFICATION	OCCUPANCIES

B OFFICE AND MEETING/CONFERENCE ROOMS WITH OC-

CUPANT LOAD LESS THAN 50

A-3 MEETING/CONFERENCE ROOMS WITH AN OCCUPANT

LOAD OF 50 OR MORE

S-2 PARKING GARAGE

ACCESSORY SMALL MECHANICAL AND ELECTRICAL ROOMS

ACCESSORY STORAGE ROOMS < 100 SF

CONSTRUCTION TYPE (503 AND 504)

THE PROPOSED CONSTRUCTION TYPE OF THE OFFICE AND PARKING STRUCTURES WILL BE TYPE IB.

AN AUTOMATIC FIRE SPRINKLER SYSTEM WILL BE PROVIDED THROUGHOUT ALL BUILD-INGS IN ACCORDANCE WITH NFPA 13, 2019 EDITION AND AN EMERGENCY VOICE/ALARM COMMUNICATION SYSTEM.

ALLOWABLE AREA

REQUIRED:

FOR THE OCCUPANCY GROUPS IN THE PROJECT, A TYPE IB CONSTRUCTION PERMITS UNLIMITED AREAS.

PROPOSED:

BUILDING: 259,095 GSF PARKING GARAGE: 247,904 SF

NOTE: OPEN PARKING GARAGE AND OFFICE BUILDING TO BE CONSIDERED A SINGLE BUILDING

ALLOWABLE HEIGHT (NOT A HIGH-RISE BUILDING)

OCCUPANCY GROUP B	ALLOWABLE HEIGHT (FEET) 180	PROPOSED HEIGHT (FEET) 88
GROUP A	160	88
GROUP S-2	180	74.5
<u>OCCUPANCY</u>	ALLOWABLE STORIES	PROPOSED STORIES
GROUP B	12	6
GROUP A	11	6
GROUP S-2	12	8

OCCUPANCY SEPARATION

GROUP B AND GROUP S-2:1 HOUR
GROUP A AND GROUP S-2:NO SEPARATION REQUIREMENT

STRUCTURAL FRAME (CBC 602)

THE REQUIRED FIRE-RESISTANCE RATING OF THE COLUMNS SUPPORTING FLOORS IS REQUIRED TO BE 2 HOURS.

THE REQUIRED FIRE-RESISTANCE RATING OF THE COLUMNS SUPPORTING ROOFS IS REQUIRED TO BE 1 HOUR.

LOAD-BEARING WALLS ARE TO COMPLY WITH THE REQUIREMENTS FOR PRIMARY STRUCTURAL FRAMES.

STRUCTURE THAT SUPPORTS ONLY STAIR TREADS AND STAIR LANDINGS WITHIN A 2-HOUR FIRE-RESISTANCE-RATED SHAFT ENCLOSURE ARE NOT REQUIRED TO HAVE FIRE-RESISTANCE-RATING.

EXTERIOR WALLS (CBC 705)

EXTERIOR WALLS ARE REQUIRED TO BE OF 1-HOUR FIRE-RESISTANCE-RATED CONSTRUCTION IF THE FIRE SEPARATION DISTANCE (MEASURED FROM THE BUILDING FACE TO THE CLOSEST INTERIOR LOT LINE OR CENTERLINE OF ADJACENT STREET) IS LESS THAN 20 FEET.

MAXIMUM AREA OF PROTECTED AND UNPROTECTED EXTERIOR WALL OPENINGS IN PERCENTAGE OF THE EXTERIOR WALL IN ANY STORY ARE LIMITED PER TABLE 2.

FIRE SEPARATION DISTANCE

<3 FEET

NOT PERMITTED

 $3 \le X < 5$ FEET 15 PERCENT $5 \le X < 10$ FEET 25 PERCENT $10 \le X < 15$ FEET 45 PERCENT $15 \le X < 20$ FEET 75 PERCENT ≥ 20 FEET NO LIMIT

IF THE EXTERIOR WALL IS NOT REQUIRED TO HAVE A FIRE-RESISTANCE RATING BASED ON FIRE SEPARATION DISTANCE, THERE IS NO LIMIT ON OPENINGS.

FLOOR CONSTRUCTION AND FLOOR OPENINGS (CBC 602 AND CBC 712-713)

SUPPORTING BEAMS AND JOISTS, OTHER THAN THE PRIMARY STRUCTURAL FRAME, ARE CONSIDERED PART OF THE FLOOR CONSTRUCTION AND REQUIRE A 2-HOUR FIRE-RESISTANCE RATING

OPENINGS THE FLOOR ASSEMBLIES ARE REQUIRED TO BE PROTECTED BY SHAFTS OR FIRE DAMPERS EXCEPT AS PERMITTED FOR:

- TWO STORY OPENINGS WITH OR WITHOUT A CIRCULATION STAIR.
- MEZZANINES
- DRIVEWAYS AND ELEVATORS IN PARKING GARAGES.
- DUCTED EXHAUST AND SUPPLY SYSTEMS IN PARKING GARAGES.
- EXIT ACCESS STAIRWAYS AND ESCALATOR FLOOR OPENINGS RESTRICTED IN SIZE PER CBC 712 AND PROTECTED IN ACCORDANCE WITH NFPA 13. (IF SERVING OTHER THAN GROUP B, THE FLOOR OPENINGS ARE LIMITED TO 4 STORIES.)

OPENINGS IN THE FLOOR ASSEMBLIES ARE OTHERWISE REQUIRED TO BE PROTECTED BY SHAFTS OR FIRE DAMPERS.

ROOF CONSTRUCTION (CBC 602)

BEAMS AND JOISTS SUPPORTING THE ROOF, OTHER THAN THE PRIMARY STRUCTURAL FRAME, ARE CONSIDERED PART OF THE ROOF CONSTRUCTION.

REQUIRED FIRE-RESISTANCE RATING OF THE ROOF IS 1-HOUR.

SKYLIGHTS AND OTHER PENETRATIONS THROUGH THE ROOF DECK ARE PERMITTED TO BE UNPROTECTED, PROVIDED THAT THE STRUCTURAL INTEGRITY OF THE ROOF CONSTRUCTION IS MAINTAINED.







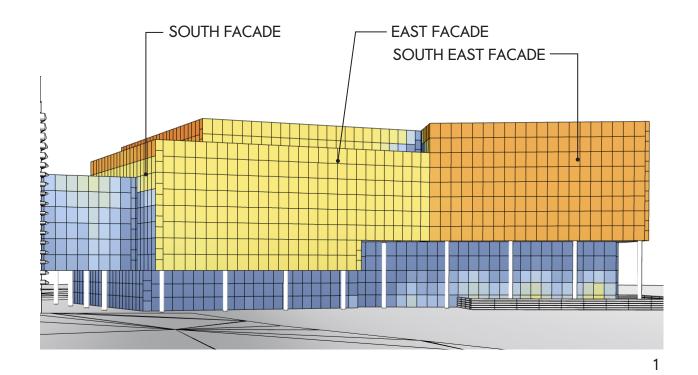


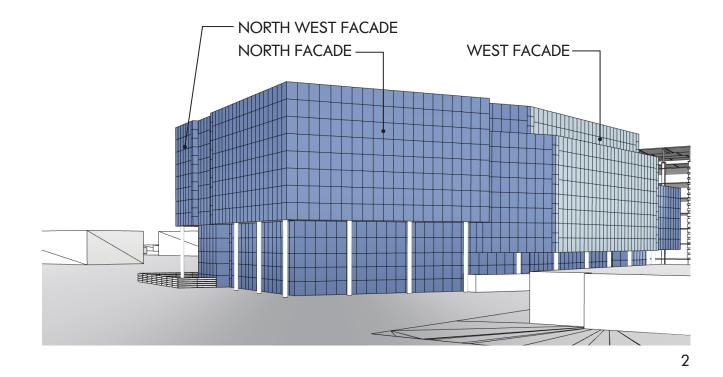


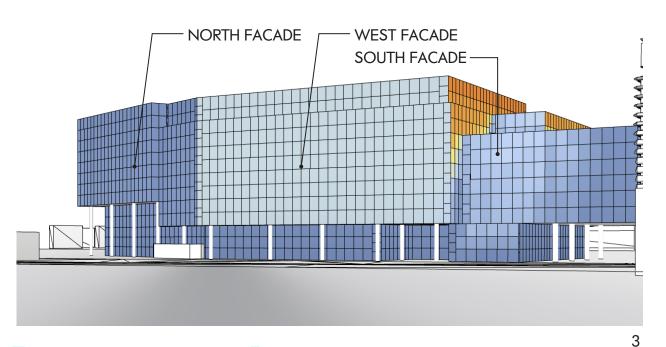


CONCEPTUAL FIRE LIFE SAFETY CODE REPORT

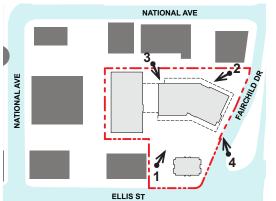


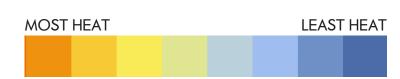














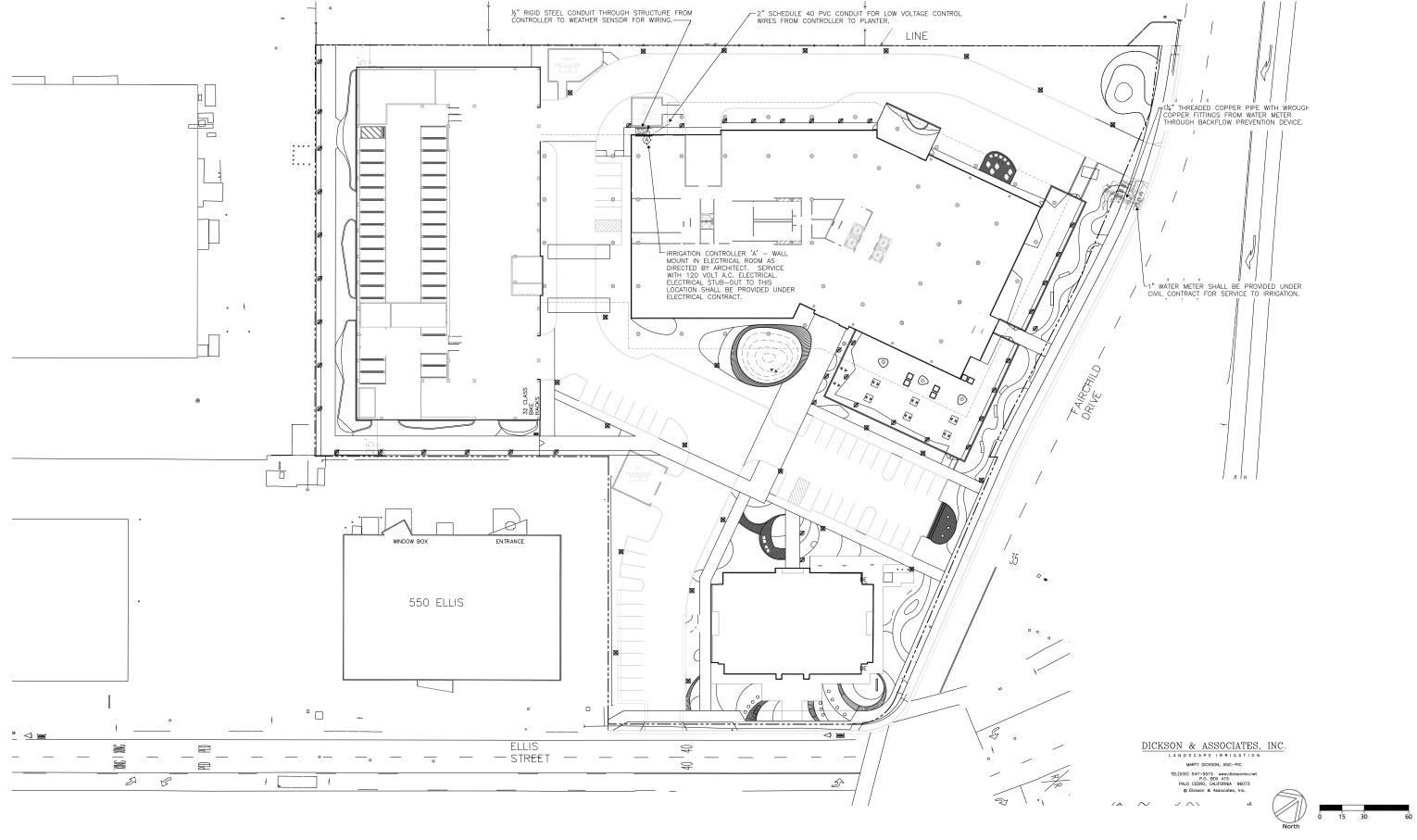














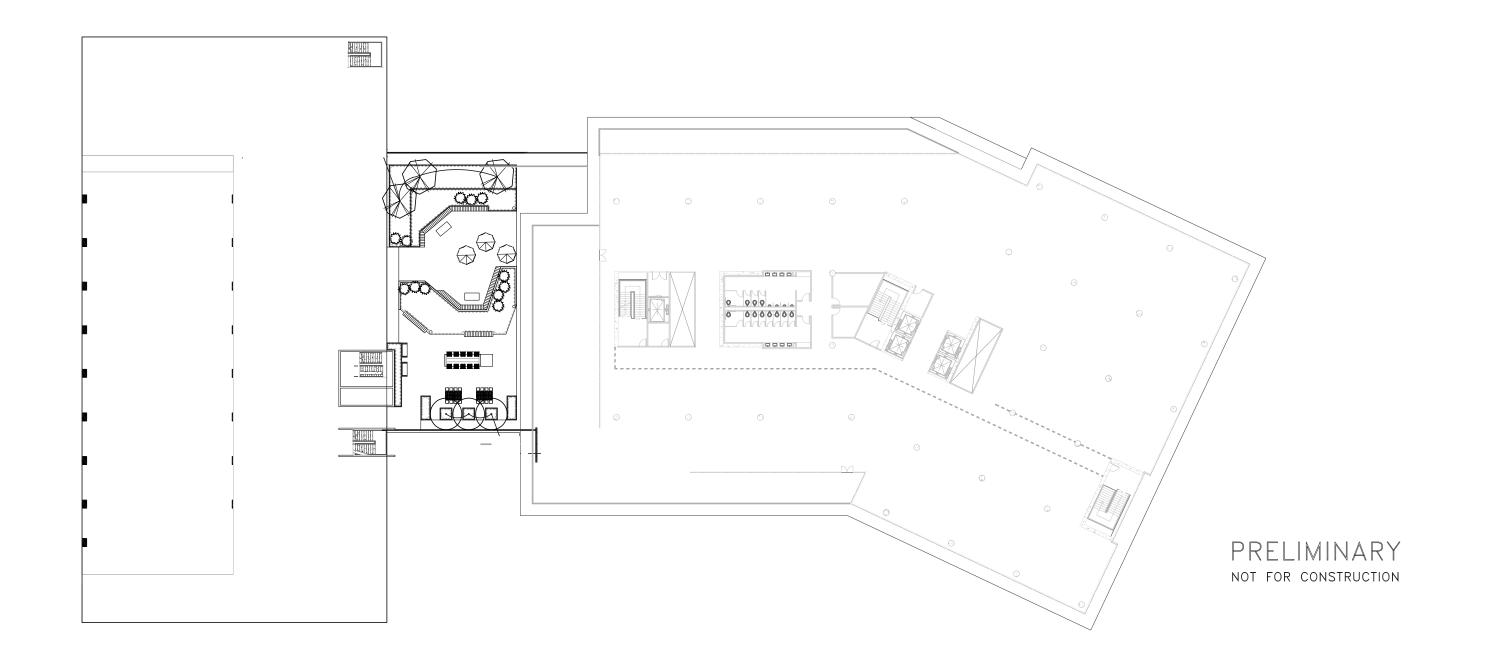












DICKSON & ASSOCIATES, INC.

LANDSCAPE IRRIGATION

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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 CONTRACTOR SHIFLOW MAY NOT HAVE BEEN CONSIDERED IN THE ENGINEERING. IN THE EVENT OF FILE OF THE CONTRACT WORK ACCORDINGLY BY NOTHING MAY AND HEAVE BEEN CONSIDERED IN THE ENGINEERING. IN THE EVENT OF FILE DIFFERENCES, THE CONTRACTOR IS REQUIRED TO PLAN THE INSTALLATION WORK ACCORDINGLY BY NOTHINGTON AND APPROVAL OF THE OWNER'S AUTHORIZED REPRESENTATIVE AND ACCORDING TO THE CONTRACT SPECIFICATION. THE CONTRACTOR IS ALSO REQUIRED TO NOTHEY AND COORDINATE IRRIGATION CONTRACT 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 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.
- 3. THE INTENT OF THIS IRRIGATION SYSTEM IS TO PROVIDE THE MINIMUM AMOUNT OF WATER REQUIRED TO SUSTAIN GOOD PLANT HEALTH.
- 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, MOUNDS AND SLOPES, SUIN, SHADE, AND
- 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.
- 120 VOLT A.C. (2.5 AMP DEMAND) ELECTRICAL SERVICE TO IRRIGATION CONTROLLER LOCATION TO BE PROVIDED UNDER ELECTRICAL CONTRACT WORK. IRRIGATION CONTRACTOR TO MAKE FINAL CONNECTION FROM ELECTRICAL STUB-OUT TO CONTROLLER AND PROVIDE PROPER GROUNDING PER CONTROLLER MANUFACTURER'S INSTRUCTIONS.
- IRRIGATION CONTROLLER TO HAVE ITS OWN INDEPENDENT 24 VOLT COMMON GROUND WIRE.
- 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 MAINLINE PIPING.
- 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. FLOW SENSOR CABLE SHALL BE A SOLID COPPER SHIELDED PAIR CABLE, SIZE #16. NO SPLICES ALLOWED.
- INSTALL SPARE CONTROL WIRE OF A DIFFERENT COLOR ALONG THE ENTIRE MAINLINE. 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
- 12. 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
- 13. 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 RAIN BIRD.
- 14. INSTALL REMOTE CONTROL VALVE BOXES 12" FROM WALK, CURB. HEADER BOARD, BUILDING, OR LANDSCAPE FEATURE. AT MULTIPLE VALVE BOX GROUPS, EACH BOX SHALL BE AN EQUIAL DISTANCE
- 15. VALVE LOCATIONS SHOWN ARE DIAGRAMMATIC. INSTALL IN GROUND COVER/SHRUB AREAS WHERE POSSIBLE (NOT IN LAWN AREA).
- THE IRRIGATION CONTRACTOR SHALL FLUSH ALL SYSTEMS FOR OPTIMUM PERFORMANCE AND COVERAGE OF THE LANDSCAPE AREA. THIS SHALL INCLUDE ADJUSTING THE FLOW CONTROL AT EACH VALVE TO OBTAIN THE OPTIMUM OPERATING PRESSURE FOR EACH SYSTEM.
- 17. ALL IRRIGATION PIPING THAT IS NOT A DIRECT LINE TO TREES SHALL BE A MINIMUM FIVE (5) FEET FROM CENTER OF TREE.
- 19. INSTALL A FLO CONTROL (NDS) 1002 SERIES SPRING LOADED CHECK VALVE BELOW THOSE BUBBLERS 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) NCH 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 INSTALLED BACKFLOW PREVENTION DEVICE.
- - A. NOTIFY ARCHITECT AT LEAST THREE (3) DAY IN ADVANCE OF TESTING.

 - A NOTIFY ARCHITECT AT LEAST INFACE (3) DAY IN ADVANCE OF TESTING.

 B. PERFORM TESTING AT HIS OWN EXPENSE.

 C. CENTER LOAD PIPING WITH SMALL AMOUNT OF BACKFILL TO PREVENT ARCHING OR SLIPPING UNDER PRESSURE. NO FITTING SHALL BE COVERED.

 D. APPLY THE FOLLOWING TESTS AFTER WELD PLASTIC PIPE JOINTS HAVE CURED AT LEAST 24 HOURS.

 T. TEST LAVE (CONSTANT PRESSURE) NO DUICK COUPLER LINE HYDROSATICALLY 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.
- 23. 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
- 24. IRRIGATION DEMAND: -- GPM AT __ 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.
- 25. PIPE THREAD SEALANT COMPOUND SHALL BE RECTOR SEAL T+2, CHRISTY'S ULTRA SEAL, OR APPROVED EQUAL.
- 26. SUB-SURFACE DRIP IRRIGATION AREAS MUST BE HAND WATERED TO INCREASE SOIL MOISTURE PRIOR TO PLANTING. AFTER PLANTING, THE SUB-SURFACE DRIP SYSTEMS MUST BE OPERATED ON A FREQUENT BASIS TO MAINTAIN SOIL MOISTURE CONTENT. USE CAUTION WHEN PROBING SOIL. DO NOT DAMAGE SUB-SURFACE DRIP TUBING
- 27. RECORD DRAWINGS:
 - A THE CONTRACTOR SHALL MAINTAIN IN GOOD ORDER IN THE FIELD OFFICE ONE COMPLETE SET OF BLACK LINE PRINTS OF ALL SPRINKLER DRAWINGS WHICH FORM A PART OF THE CONTRACT, SHOWING ALL WATER LINES, SPRINKLERS, VALVES, CONTROLLERS AND STUB—OUTS. IN THE EVENT ANY WORK IS NOT INSTALLED AS INDICATED ON THE DRAWINGS, SUCH WORK SHALL BE CORRECTED AND DIMENSIONED ACCURATELY FROM THE BUILDING WALLS.

 B. ALL UNDERGROUND STUB—OUTS FOR FUTURE CONNECTIONS AND VALVES SHALL BE LOCATED AND DIMENSIONED ACCURATELY FROM THE GROWNINGS.
 - C. UPON COMPLETION OF THE WORK, OBTAIN REPRODUCIBLE PRINTS FROM ARCHITECT AND NEATLY CORRECT THE PRINTS TO SHOW THE AS-BUILT CONDITIONS.
- 28. FINE TUNE IRRIGATION SYSTEM TO PROVIDE COMPLETE AND UNIFORM COVERAGE OF THE LANDSCAPE WHILE AVOIDING RUNOFF OF WATER ONTO NON-IRRIGATED AREAS, PAVED AND OTHERWISE. THIS INCLUDES PROGRAMMING THE CONTROLLER RUN TIMES FOR OPTIMIZING SOIL INFILTRATION WITH OUT PUDDLING OR RUNOFF.
- - A. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO FILL AND REPAIR ALL NECESSARY PLANTING DUE TO THE SETTLEMENT OF IRRIGATION TRENCHES FOR ONE YEAR FOLLOWING
 - COMPLETION AND ACCEPTANCE OF THE JOB.

 B. THE CONTRACTOR SHALL ALSO WARRANTY ALL MATERIALS, EQUIPMENT AND WORKMANSHIP FURNISHED BY HIM TO BE FREE OF ALL DEFECTS OF WORKMANSHIP AND MATERIALS, AND SHALL AGREE TO REPLACE AT HIS EXPENSE, AT ANY TIME WITHIN ONE YEAR AFTER INSTALLATION IS ACCEPTED, ANY AND ALL DEFECTIVE PARTS THAT MAY BE FOUND.

IRRIGATION LEGEND

MBOL	MODEL NUMBER	DESCRIPTION	N			
A	XBT-10-6	RAIN BIRD MU	LTI-OUTLET EMITTER (1 GPH PER OUTLET)			
•	1401	RAIN BIRD BU	BBLER (TREE)			
W)	2030-1"	GRISWOLD NO	RMALLY CLOSED MASTER CONTROL VALVE			
FSI-T10-001-1"/P7162D-A (PART OF CONTROLLER EQUIPMENT PACKAGE)		CREATIVE SENSOR TECHNOLOGY FLOW SENSOR WITH PASHIELDED COMMUNICATION CABLE (SEE CONTROLLER DESCRIPTION)				
•	PESB-SERIES		MOTE CONTROL VALVE			
•	XCZ-100-PRB-COM	RAIN BIRD CONTROL ZONE KIT — PVC BALL VALVE, VALVE AND 1" PRESSURE REGULATING (40 PSI) QU CHECK BASKET FILTER (200 MESH)				
•	33DRC	RAIN BIRD QU	ICK COUPLING VALVE			
×	T-113-LF	NIBCO GATE V	ALVE - LEAD FREE (LINE SIZE)			
æ	LT-S	FLUSH VALVE FULL PORT BA	(SEE DETAIL) – KBI SCHEDULE 80 PVC ALL VALVE (SLIP X SLIP) (LINE SIZE)			
₫	ARV050	RAIN BIRD AIR	RELEASE & VACUUM RELIEF VALVE			
	OPERIND - (SEE SUB-SURFACE DRIP LAYOUT DETAILS)	RAIN BIRD DR	IP SYSTEM OPERATION INDICATOR			
×	975XL2-1"	WILKINS REDU	CED PRESSURE BACKFLOW ASSEMBLY			
©	CA16-HU6-12/HSSE-200X/LPP/ CTFS-100/P7162D-A	SHOONE GREEN TECH CONTROLLER ASSEMBLY WINDOWN THE CONTROLLER, PRIMARY LINE PROPERTY OF THE PRO				
SS]	SOLAR SYNC-SEN (PART OF CONTROLLER EQUIPMENT PACKAGE)	HUNTER SOLAF	R SYNC SENSOR			
		PRECIPITATION	RATE			
•		CONTROLLER &	: STATION NUMBER			
·		APPROXIMATE FLOW (GPM)				
\mathbf{L}		REMOTE CONTR	POL VALVE SIZE			
		PLANT TYPE/WATER REQUIREMENT/HYDROZONE LH — LAWN/HIGH WATER LL — LAWN/LOW WATER SH — SHRUB & GROUNDCOVER/HIGH WATER SL — SHRUB & GROUNDCOVER/LOW WATER TH — TREE/HIGH WATER TM — TREE/CHIGH WATER TM — TREE/COBEATE WATER TL — TREE/LOW WATER MAINLINE: 1120—SCHEDULE 40 PVC PLASTIC PIPE SCHEDULE 40 PVC SQLVENT—WELD FITTII SHEDOVER 2 40 PVC SQLVENT—WELD FITTII SH				
		LATERAL LINE:	PAVING. 1120-SCHEDULE 40 PVC PLASTIC PIPE WITH SCHEDULE 40 PVC SOLVENT-WELD FITTINGS 12" COVER. 24" COVER UNDER VEHICULAR PAVING.			
		COPPER PIPE:	TYPE 'K' COPPER PIPE WITH WROUGHT COPPER SOLDER JOINT FITTINGS. ROUTING AND INSTALLATION SHALL BE PROVIDED UNDER PLUMBING CONTRACT.			
		SUB-SURFACE DRIP BOUNDARY:				
		XBT-10-6 1401 2030-1" FSI-T10-001-1"/P7162D-A (PART OF CONTROLLER EQUIPMENT PACKAGE) PESB-SERIES XCZ-100-PRB-COM 330RC T-113-LF LT-S ARV050 OPERIND - (SEE SUB-SURFACE DRIP LAYOUT DETAILS) 975XL2-1" CA16-HUB-12/HSSE-200X/LPP/ CTFS-100/P7162D-A SSI SOLAR SYNC-SEN (PART OF CONTROLLER EQUIPMENT PACKAGE)	## XBT-10-6 1401 1401 RAIN BIRD MU RAIN BIRD MU RAIN BIRD BU 2030-1" GRISWOLD NOI RAIN BIRD BU RAIN BIRD BU RAIN BIRD GU RAIN BIRD GU RAIN BIRD CO DESCRIPTION) PESB-SERIES RAIN BIRD REI RAIN BIRD CO RAIN BIRD CO VALVE AND 1" CHECK BASKE RAIN BIRD OU VALVE AND 1" CHECK BASKE RAIN BIRD OU VALVE AND 1" CHECK BASKE FULL PORT BU RAIN BIRD DR ARVO50 RAIN BIRD AIR RAIN BIR			

PRELIMINARY NOT FOR CONSTRUCTION

DICKSON & ASSOCIATES, INC.

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IRRIGATION LEGEND AND NOTES





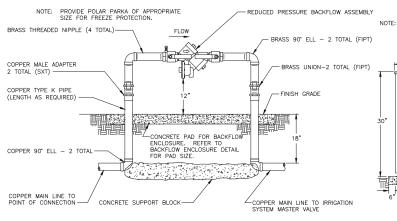




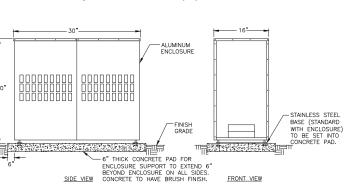




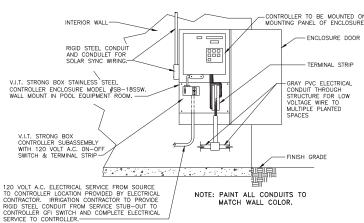




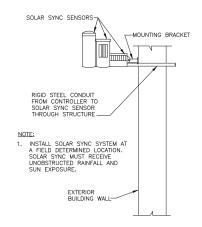
NOTE: IRRIGATION CONTRACTOR SHALL PROVIDE AND INSTALL BACKFLOW ENCLOSURE MODEL #SBBC-30AL BY STRONG BOX. (800) 729-1314.



BACKFLOW PREVENTER ENCLOSURE NOT TO SCALE







SOLAR SYNC SENSOR NOT TO SCALE

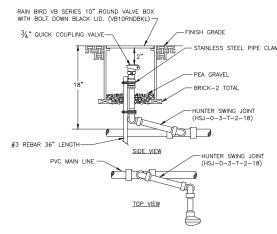
- RAIN BIRD VB SERIES RECTANGULAR VALVE BOX (VBSTDBKL)

RAIN BIRD VB SERIES
10" ROUND VALVE BOX
WITH BOLT DOWN BLACK
LID. (VB10RNDBKL)



- -EDGE OF LAWN, WALK, FENCE, CURB, ETC. TOP VIEW 1. CENTER VALVE BOX OVER REMOTE CONTROL VALVE TO FACILITATE SERVICING VALVE.
- 2. SET BOXES 1" ABOVE FINISH GRADE OR MULCH COVER IN GROUND COVER/SHRUB AREA AND FINISH GRADE IN TURF AREA.
- 3. SET RCV AND VALVE BOX ASSEMBLY IN GROUND COVER/SHRUB AREA WHERE POSSIBLE. INSTALL IN LAWN ONLY IF GROUND COVER DOES NOT EXIST ADJACENT TO LAWN.
- SET BOXES PARALLEL TO EACH OTHER AND PERPENDICULAR TO EDGE OF LAWN, WALK, FENCE, CURB, ETC.
- AVOID HEAVILY COMPACTING SOIL AROUND VALVE BOXES TO PREVENT COLLAPSE AND DEFORMATION OF VALVE BOX SIDES.
- INSTALL EXTENSION BY VALVE BOX MANUFACTURER AS REQUIRED TO COMPLETELY ENCLOSE ASSEMBLY FOR EASY ACCESS.





QUICK COUPLING VALVE DICKSON & ASSOCIATES, INC

LANDSCAPE IRRIGATION MARTY DICKSON, ASIC-PIC TEL(530) 547-5515 www.dicksoninc.net P.O. BOX 415 PALO CEDRO, CALIFORNIA 96073 © Dickson & Associates. Inc.

REDUCED PRESSURE BACKFLOW ASSEMBLY NOT TO SCALE

RAIN BIRD VB SERIES RECTANGULAR PLASTIC VALVE BOX WITH BOLT DOWN LID. (VBSTDBKL STANDARD MODEL WITH BLACK LID) ONE VALVE PER BOX - NO EXCEPTIONS. INSTALL BOX AS SHOWN IN BOX INSTALLATION DETAIL.

REMOTE CONTROL VALVE FOR BUBBLERS

NOT TO SCALE

BRICK - 1 EACH CORNER

PEA GRAVEL - 4" DEEP BELOW VALVE (NO SOIL IN VALVE BOX)

SCHEDULE 80 PVC THREADED UNION -

- COPPER IRRIGATION MAIN LINE FROM BACKFLOW PREVENTION DEVICE

- PVC LATERAL LINE

RAIN BIRD VB SERIES RECTANGULAR PLASTIC VALVE BOX WITH

BOLT DOWN LID. (VBSTDBKL STANDARD MODEL WITH BI INSTALL BOX AS SHOWN IN BOX INSTALLATION DETAIL.

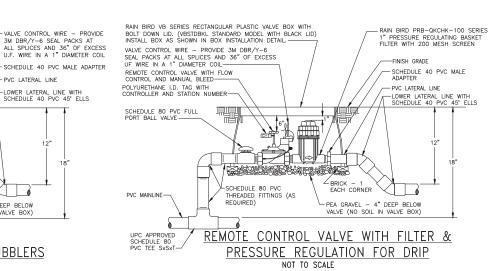
FINISH GRADE

REMOTE CONTROL VALVE WITH FLOW CONTROL AND MANUAL BLEED

THREADED FITTINGS (AS

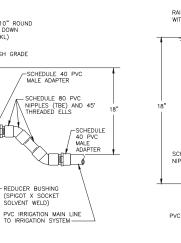
SCHEDULE 80 PVC

REQUIRED)



FLOW SENSOR

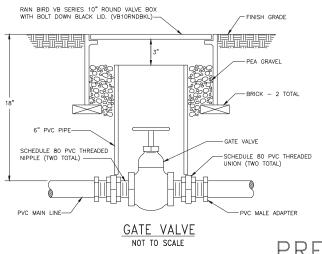
' A A



INSTRUCTIONS

- 1. USE 3M-DBR/Y-6 WEATHER PROOF SPLICE.
- 2. STRIP WIRES APPROXIMATELY 1/2" (12.7 MM) TO EXPOSE WIRE.
- 3. TWIST CONNECTOR AROUND WIRES CLOCKWISE UNTIL HAND TIGHT, DO NOT OVERTIGHTEN
- 4. INSERT WIRE ASSEMBLY INTO PLASTIC TUBE UNTIL WIRE CONNECTOR SNAPS PAST LIP IN BOTTOM OF TUBE.
- 5. PLACE WIRES WHICH EXIT TUBE IN WIRE EXIT HOLES AND CLOSE CAP UNTIL IT SNAPS
- 6. INSPECT FINAL SPLICE ASSEMBLY TO BE SECURE AND FINISHED.

WEATHERPROOF SPLICE ASSEMBLY NOT TO SCALE



PRELIMINAR' NOT FOR CONSTRUCTION

SOBRATO





SCHEDULE 40 PVC COUPLING -

REDUCER BUSHING

(SPIGOT X SOCKET SOLVENT WELD) —

24 VOLT CONTROL WIRE — PROVIDE WEATHERPROOF SPLICE PACKS AT ALL SPLICES AND 36" OF EXCESS WIRE COILED TO 1" DIAMETER.

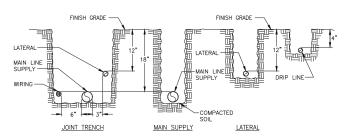
MASTER VALVE / FLOW SENSOR

NOT TO SCALE









- NOTES:

 1. ALL PLASTIC PIPING SHALL BE INSTALLED IN THE TRENCH IN A SERPENTINE MANNER AS PER THE MANUFACTURER'S SPECIFICATIONS.

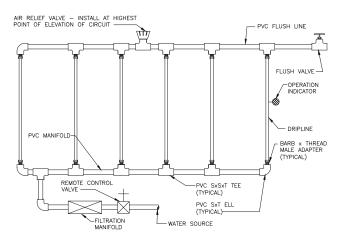
 2. ALL SUPPLY LINES TO BE INSTALLED AS PER MANUFACTURER'S SPECIFICATIONS.

 3. TAPE, AND BUNDLE TUBING OR WIRING AT 10 FEET INTERVALS.

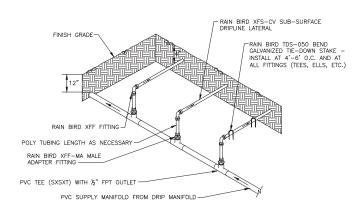
 4. ALL 120 VOLT WIRING IN CONDUIT TO BE INSTALLED IN ACCORDANCE WITH ALL APPLICABLE CODES.

 5. BACKFILL MATERIAL SHALL BE THE EARTH EXCAVATED FROM THE TRENCHES, FREE FROM ROCKS, CONCRETE CHUNKS, AND OTHER FOREIGN OR COARSE MATERIALS. CAREFULLY SELECT BACKFILL THAT IS TO BE PLACED NEXT TO PLASTIC PIPE TO AVOID ANY SHARP OBJECTS WHICH MAY DAMAGE THE PIPE.

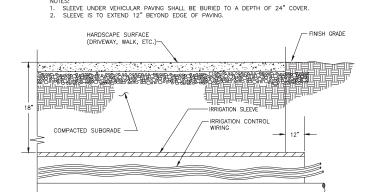
TRENCHING DETAIL NOT TO SCALE



SUB-SURFACE INSTALLATION LAYOUT-ENDFEED NOT TO SCALE

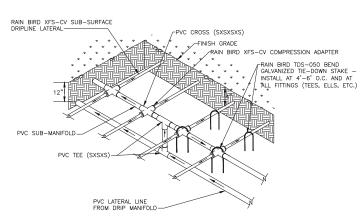


MANIFOLD END FEED NOT TO SCALE



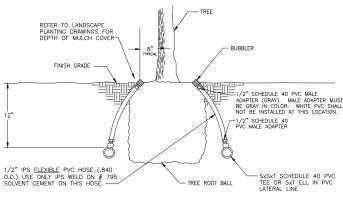
PVC LATERAL OR MAINLINE-

- PVC FLUSH LINE INDICATOR - DRIPLINE - BARB x THREAD MALE ADAPTER (TYPICAL) REMOTE CONTROL VALVE - PVC MANIFOLD -PVC SxSxT TEE (TYPICAL) PVC SxT ELL (TYPICAL — - WATER SOURCE SUB-SURFACE INSTALLATION LAYOUT

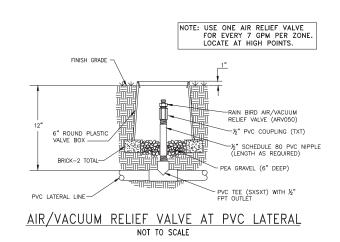


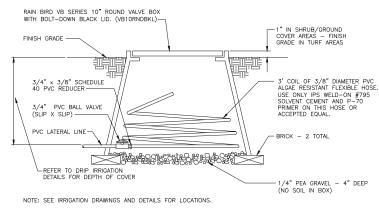
NOT TO SCALE

SUB-MANIFOLD CENTER FEED NOT TO SCALE



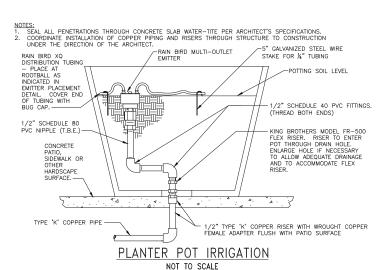
TREE BUBBLERS NOT TO SCALE

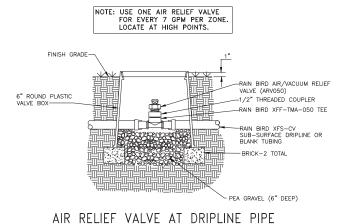


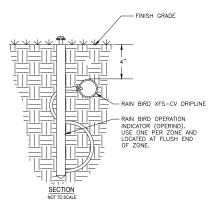


DRIP LINE FLUSH VALVE NOT TO SCALE

PRELIMINARY NOT FOR CONSTRUCTION







POP-UP OPERATION INDICATOR NOT TO SCALE

DICKSON & ASSOCIATES, INC. LANDSCAPEIRRIGATION

TEL(530) 547-5515 www.dicksoninc.net P.O. BOX 415 PALO CEDRO, CALIFORNIA 96073 © Dickson & Associates, Inc.



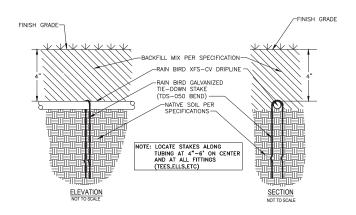




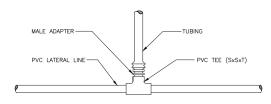




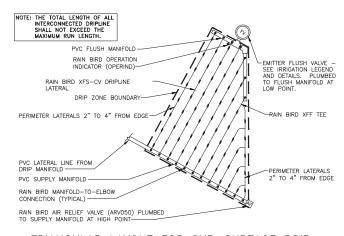




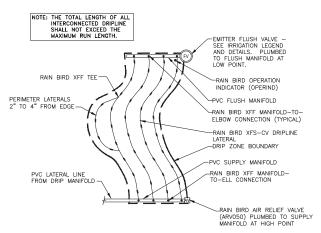
GALVANIZED TIE-DOWN STAKE



TUBING TO PVC CONNECTION



TRIANGULAR LAYOUT FOR SUB-SURFACE DRIP NOT TO SCALE



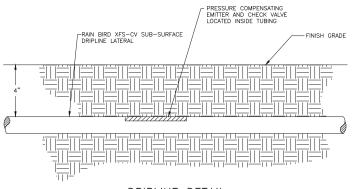
ODD CURVES LAYOUT FOR SUB-SURFACE DRIP

DICKSON & ASSOCIATES, INC.

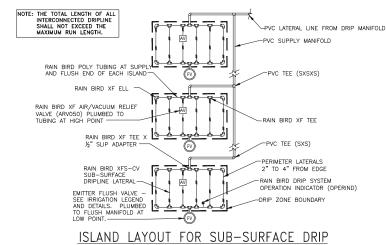
MARTY DICKSON, ASIC-PIC

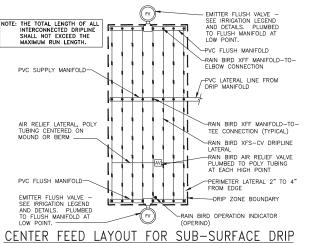
TEL(530) 547–5515 www.dicksoninc.ne
P.O. BOX 415
PALO CEDRO, CALIFORNIA 96073

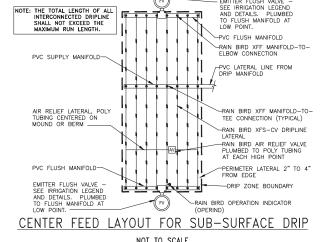
PRELIMINARY NOT FOR CONSTRUCTION

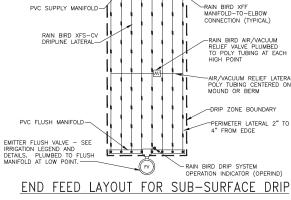


DRIPLINE DETAIL









DRIPLINE SUB-SURFACE INSTALLATION 12" O.C.

-RAIN BIRD XFS-CV SUB-SURFACE DRIPLINE (TYPICAL)

FINISH GRADE -

NOTE: THE TOTAL LENGTH OF ALL INTERCONNECTED DRIPLINE SHALL NOT EXCEED THE MAXIMUM RUN LENGTH.

-TOPSOIL TO FINISH GRADE

PVC LATERAL LINE FROM DRIP MANIFOLD

NOT TO SCALE



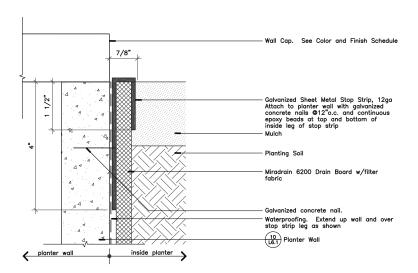




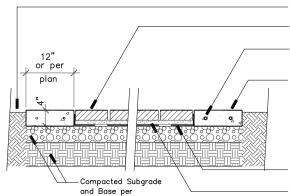








Planter Wall: Drain Board Stop Strip



Pedestrian Accent Paving On Grade

Geotechnical Report

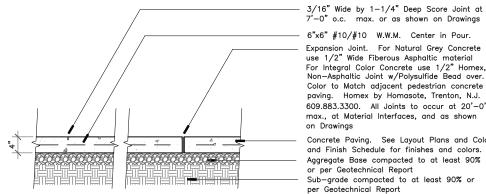
See Plans for Adjacent Conditions

Interlocking Unit Pavers. See Color and Finish Schedule for Paver Specifications

(2) #4 Rebar, Cont. Centered in Pour as Shown. Use (1) #4 Rebar if Band Width Less Than 12".

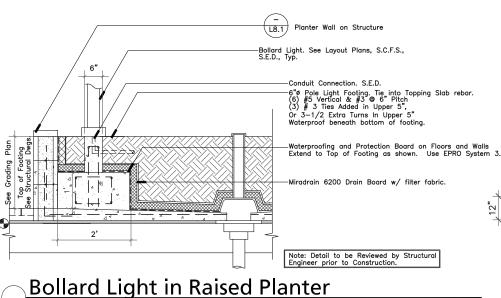
See Color and Finish Schedule. Provide Expansion Joints at material or structural interface and Score Joints as shown on plans and details For Natural Grey Concrete use 1/2" Wide Fiberous Asphaltic Material. For Integral Color Concrete use 1/2" Homex, Non-Asphaltic Joint w/Polysulfide Bead over. Color to match adjacent Paving. Homex by Homasote, Trenton, NJ 609.883.3300

Mirafi Filter Fabric, #140N, Continuous. Install per Mfr's Specifications. Turn Up Edges at Concrete Bands. Sand Setting Bed. 1" Max. Depth of Plaster or Mortar Sand. Do Not Use Concrete Sand



6"x6" #10/#10 W.W.M. Center in Pour. Expansion Joint. For Natural Grey Concrete use 1/2" Wide Fiberous Asphaltic material For Integral Color Concrete use 1/2" Homex, Non-Asphaltic Joint w/Polysulfide Bead over. Color to Match adjacent pedestrian concrete paving. Homex by Homasote, Trenton, N.J. 609.883.3300. All Joints to occur at 20'-0" o.c. max., at Material Interfaces, and as shown on Drawings

Concrete Paving. See Layout Plans and Color and Finish Schedule for finishes and colors. Aggregate Base compacted to at least 90% or per Geotechnical Report Sub-grade compacted to at least 90% or per Geotechnical Report



12" or per plan Sub-base compacted to atleast 90% relative compaction

See Plans for Adjacent Conditions Concrete Band. Provide expansion joints at material or structural interface and Score Joints @ 60"0.C. or as shown on plans and details. For Natural Grey Concrete use 1/2" Wide Fiberous Asphaltic Material For Integral Color Concrete use 1/2" Homex, Non-Asphaltic Joint w/Polysulfide Bead over. Color per Plans. See Color & Finish Schedule. Homex by Homasote, Trenton, NJ 609.883.3300 (2) #4 Rebar, Cont. Centered in Pour as Shown. Use (1) #4 Rebar if Band Width Less Than 12". Interlocking Unit Pavers. See Color and Finish Schedule for Paver Specifications - StructurEdge 3/16" x 1 5/8" Paving Restraint
Manufactured by Permaloc 1 (800) 356-9660. Install
Per Manufacturers Recommendations. See Layout Plans to Install
T/slat

Mirafi Filter Fabric, #140N, Continuous. Install per Mfr's Specifications. Turn Up Edges at Concrete Bands. 12" of non-expansive fill compacted to atleast 90% relative compaction

Sand Setting Bed. 1" Max. Paving. See Layout Plans

Pedestrian Concrete Paving

- CMU Wall, S.S.D. for Reinforcement.
Fill all cell voids full of
concrete. See Color and Finish Schedule for block size
and finish. Pre—cast Concrete Wall Cap. See Color and
Finish Schedule

Planter Wall: Drain Board Stop Strip

4" Dia. PVC Pipe at each planter drain except those located in lawn. Cap Top at Soil Level. Paint all exposed surfaces black. Not Attached to Drain. - Waterproofing on Floors and Walls. Extend to bottom of wall cap as shown. Use E-Pro System 3. - On-Structure Planter Soil Mix. See Notes and Legends

 MiraDrain 6200 Drain Board on Walls. Attach per Manufacturer's specifications. Wrap fabric cloth over terminal end and per manufacturers specifications. 2" Thick Geotech Drain Board with Filter Fabric.

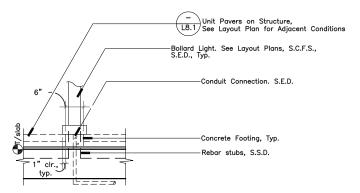
Bottom Exit Planter Drain: Atrium Grade. Coordinate pipe size with plumbing. Connect to storm drain line. S.P.D., S.M.D., & S.S.D.

Concrete planter bottom, S.S.D. for reinforcement. Slope to Drains.

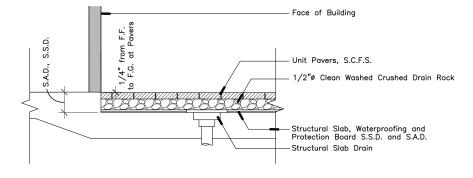
- Structural Slab (S.S.D.) and Waterproofing (S.A.D.) and Drain Mat (S.A.D.). - Drain Line. S.M.D., S.P.D., S.S.D.

Note: Detail to be Reviewed by Structural Engineer prior to Construction. Planter Wall On-Structure

Unit Pavers on Grade







Pedestrian Unit Paving on Structure

Bollard Light on Structure

Note: Detail to be Reviewed by Structura Engineer prior to Construction.













Symbol	Qty	Label	[MANUFAC]	CAT#	Description	Lum. Watts	Lum. Lumens	LLF	Filename
Ø	38	S1	Landscape Forms	AG-400L4-035F-35K-UV1	FGP Path Light, Type IV, 3500K, 120-277VAC	7.644	336	0.950	LF_FGP_PathLight_AG400L4-35K.ies
38	19	S2	Landscape Forms	AG-500L3-046F-35K-UV1-14-TW1	FGP Area Light, Type III, 3500K, 120-277VAC, 14ft Lens Height, with Twist Lock Receptacle	47.74	2769	0.950	LF_FGP_AreaLight_AG500L3-35K.ies
36	4	S3	Landscape Forms	AG-500L5-056F-35K-UV1-14-TW1	FGP Area Light, Type V, 3500K, 120-277VAC, 14ft Lens Height, with Twist Lock Receptacle	56.26	3933	0.950	LF_FGP_AreaLight_AG500L5-35K.ies

Calculation Summary								
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min	
MIDDLE DRIVE & SIDEWALK	Illuminance	Fc	0.92	3.8	0.1	9.20	38.00	
N_DRIVE	Illuminance	Fc	0.99	3.8	0.1	9.90	38.00	
N_PATHWAY	Illuminance	Fc	1.25	3.2	0.1	12.50	32.00	
OUTDOOR SEATING	Illuminance	Fc	0.56	3.6	0.1	5.60	36.00	
S_DRIVE	Illuminance	Fc	1.07	3.8	0.1	10.70	38.00	
W_PATHWAY	Illuminance	Fc	0.78	3.0	0.1	7.80	30.00	











