# **Attachment No. PC 10**

Project Plans

WIENTIONALLY BLANK PACE



## 2741 OCEAN RESIDENCE

**ABBREVIATIONS** LEGEND CLG. HT. X'-X" CEILING HEIGHT ELEVATION DATUM LINE BUILDING SECTION INTERIOR ELEVATION SECTION DETAIL INDICATOR PLAN DETAIL INDICATOR KEY NOTE ALIGN DIMENSION TO CENTER LINE

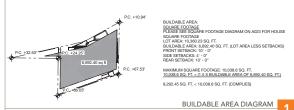
### FLOOR AREA & BUILDING HT. CALCULATIONS

		EXISTING FLOOR AREA	NEW FLOOR AREA	DEMO FLOOR AREA	NET NEW FLOOR AREA	TOTAL FLOOR AREA
FIRST FLOOR:	FLOOR AREA GARAGE	 1,536.00 SF	125.56 SF	=	125.56 SF —	125.56 SF 1,536.00 SF
SECOND FLOOR:	FLOOR AREA	-	423.00 SF	-	423.00 SF	423.00 SF
THIRD FLOOR:	FLOOR AREA	767.00 SF	1,194.73 SF	83.16 SF	1,111.57 SF	1,878.57 SF
FOURTH FLOOR:	FLOOR AREA	1,687.00 SF	467.77 SF	98.98 SF	368.79 SF	1,785.98 SF
FIFTH FLOOR:	FLOOR AREA	1,791.00 SF	702.39 SF	219.86 SF	482.53 SF	2,273.53 SF
		5,781.00 SF *	2,913.45 SF	402.00 SF	2,511.45 SF	8,292.45 SF
* SEE SHEET A022	FOR CITY APPR	ROVED EXISTING	SQUARE FOOTAG	E DIAGRAMS		
LIVABLE FLOOR A	REA:	6,756.4	15 SF			
GARAGE FLOOR	DE4	1.536.0				

PERCENTAGE NET FLOOR AREA ADDITION: 2,511.45 SF / 5,781.00 SF = 0.4344 
0.4344 X 100 = 43.44% 
43.44% < 50.00% (COMPLIES)

### PROJECT SUMMARY

PROJECT ADDRESS:	2741 OCEAN BLVD CORONA DEL MAR, CA 92625
APN:	052-046-07
LEGAL DESCRIPTION:	BLOCK: 033 LOT: PCL B
PROJECT DESCRIPTION:	REMODEL AND ADDITION OF AN EXISTING 5-STORY SINGLE FAMILY RESIDENCE WITH ATTACHED GARAGE AND NEW POOL/ SPA UNDER SEPARATE PERMIT
ZONE:	R-1
OCCUPANCY:	R3/ U
BUILDING TYPE:	SINGLE FAMILY RESIDENTIAL
CONSTRUCTION TYPE:	TYPE VB, FULLY SPRINKLERED NFPA-13D
NUMBER OF STORIES:	3 STORIES WITH BASEMENT
LOT AREA:	10360.23 SF
BUILDABLE AREA	6,692.40 SQ. FT. (SEE DIAGRAM BELOW)
FLOOR AREA LIMIT (F.A.L.)	6,692.40 SF X 1.5 = 10,038.6 SF
MAIN STRUCTURE SETBACKS:	FRONT YARD: 10°-0° SIDE 'YARD: 4°-0° BACK YARD: 10°-0° ALL SETBACKS DIMENSIONED FROM PROPERTY LINE TO FACE OF FINISH
PARKING:	PROVIDED: 3 CODE COMPLIANT SPACES (2 CAR GARAGE AND 1 CAR GARAGE) 2 GARAGE SPACES THAT DON'T MEET MINIMUM SIZE



VICINITY MAP

### PROJECT CONTACTS

LANDSCAPE ARCHITECT:

SHEET INDEX

SURVEY & SITE PLANS

SECOND FLOOR PLANS

FOURTH FLOOR PLANS

AE110 FIRST FLOOR EXISTING / DEMO PLAN A110 FIRST FLOOR PLAN

AE120 SECOND FLOOR EXISTING / DEMO PL A120 SECOND FLOOR PLAN

AE130 THIRD FLOOR EXISTING / DEMO PLAN A130 THIRD FLOOR PLAN

AE150 FIFTH FLOOR EXISTING / DEMO PLAN A150 FIFTH FLOOR PLAN AE160 ROOF FLOOR EXISTING / DEMO PLAN A160 ROOF PLAN

CONSULTANT DRAWINGS:



EVENS

KAA Design Group



2741 OCEAN RESIDENCE

19103 A000

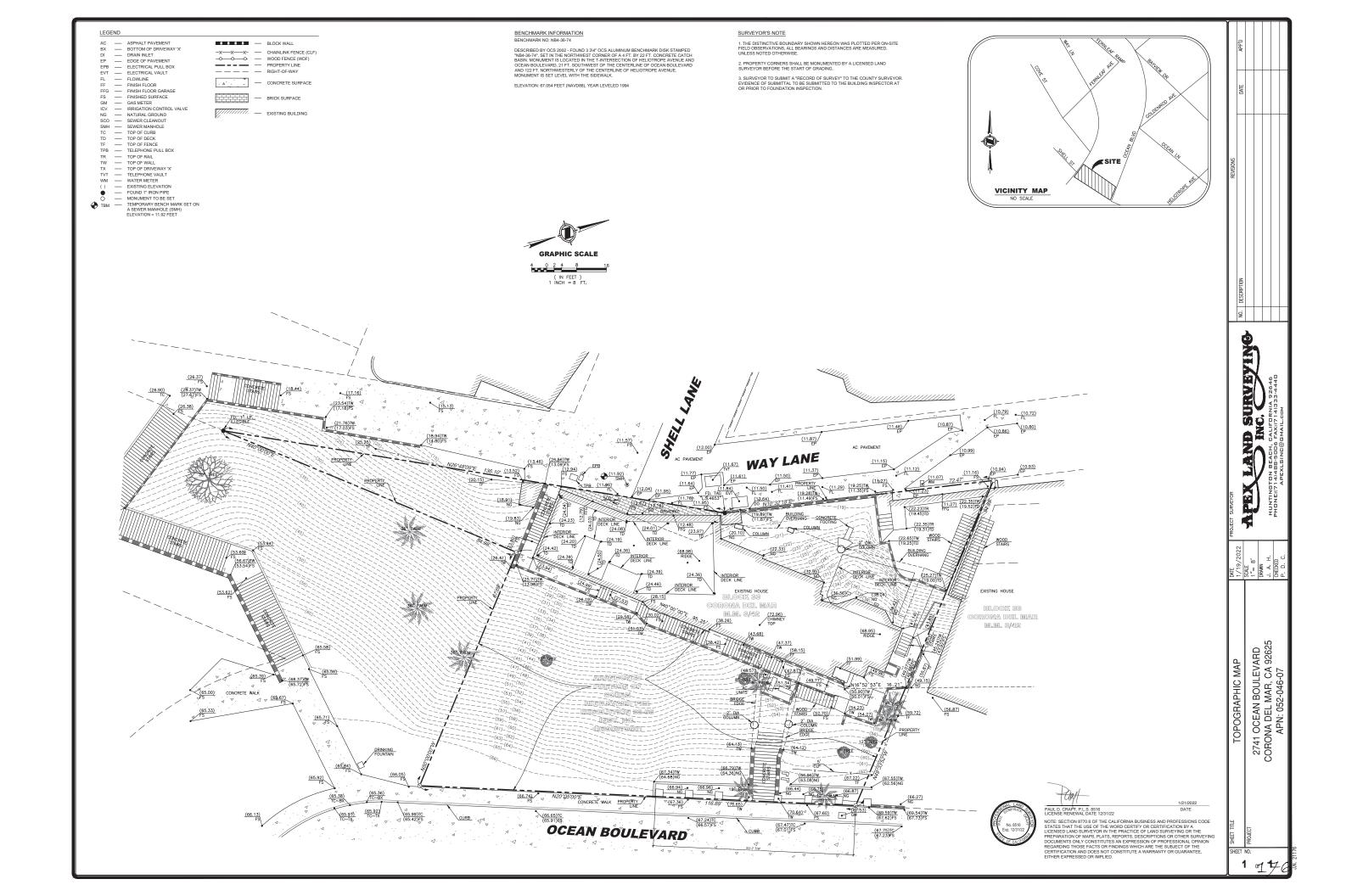
COVER SHEET-CDP

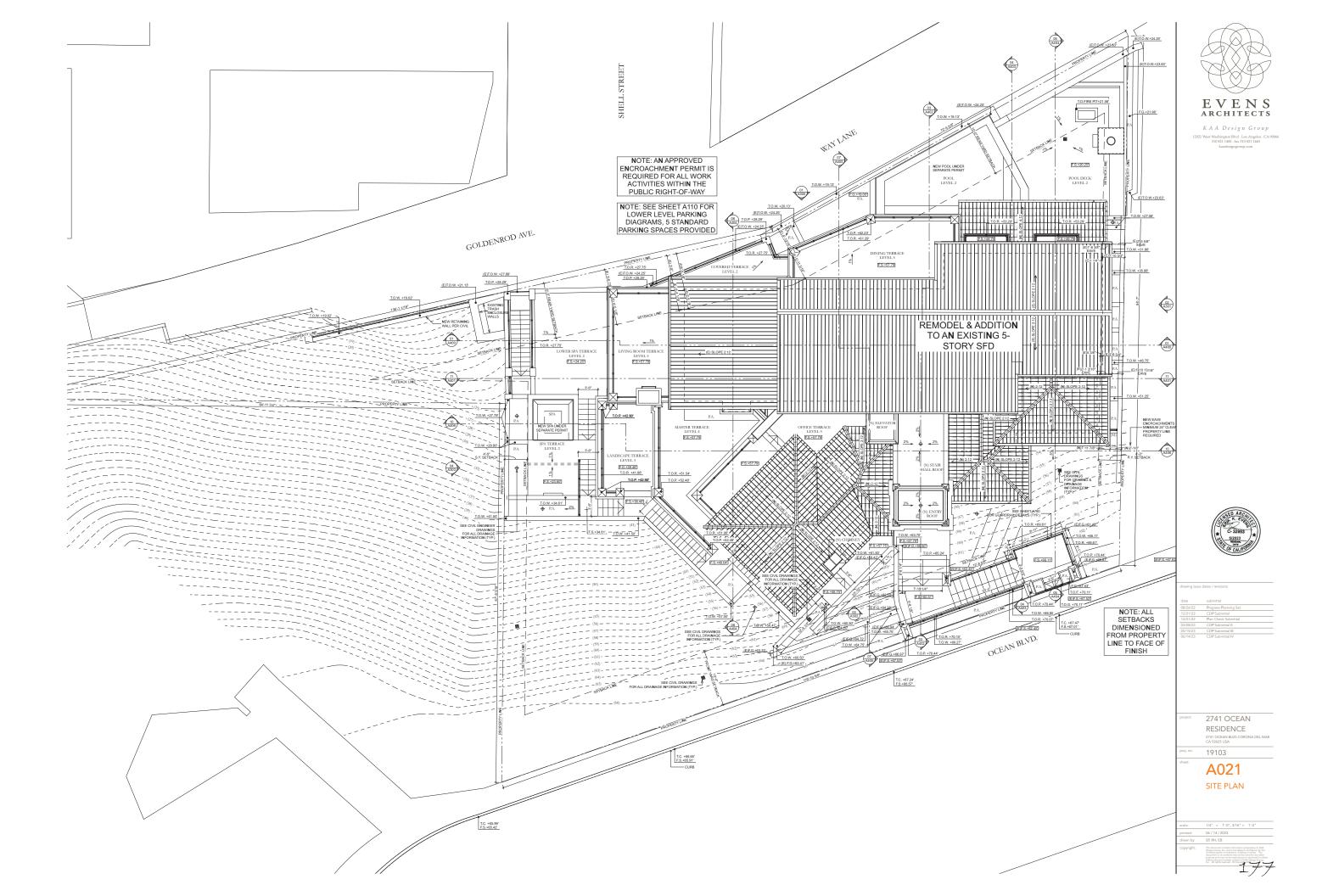
L500 PLANTING PLAN L501 PLANTING EXHIBIT HARDSCAPE DETAILS

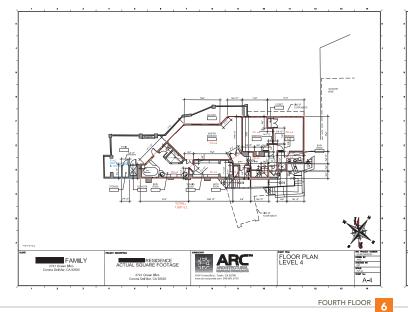
L700 PAVING DETAILS

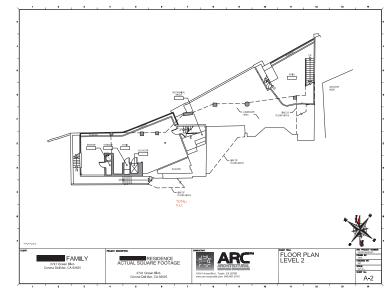
### APPLICABLE CODES

### SEPARATE PERMITS:





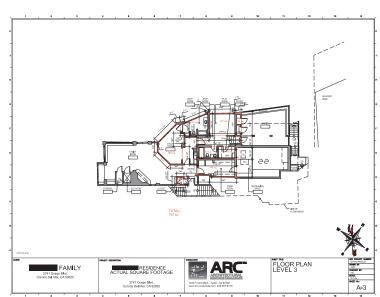






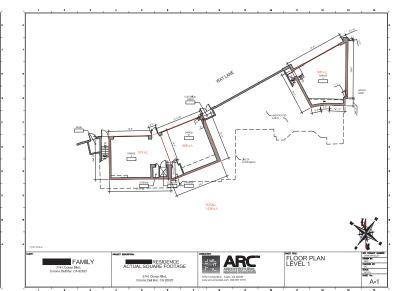
SECOND FLOOR

FLOOR 2

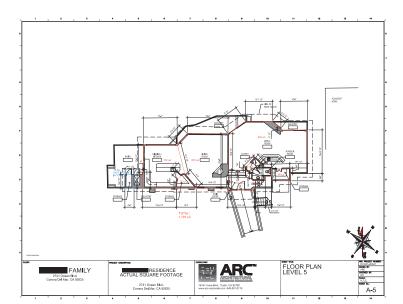


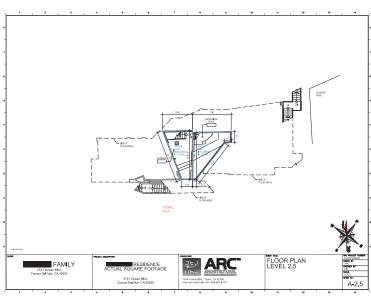
THIRD FLOOR 5

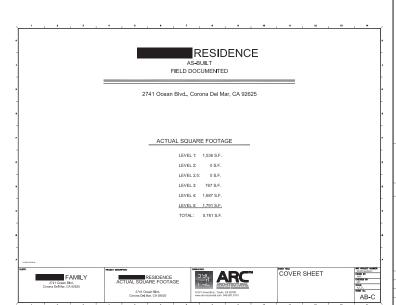
SECOND FLOOR 4











	sheet:	A022
٠	proj. no.	19103
-		2741 OCEAN BLVD CORONA DEL CA 92625 USA
		RESIDENCE
-	project:	2741 OCEAN
,		
ľ		

A022
EXISTING SQUARE FOOTAGE DIAGRAMS





















2741 OCEAN RESIDENCE

19103

A024 NEW VS EXISTING - STREET VIEWS

180

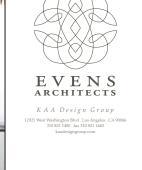
VIEW 1 FROM OCEAN BLVD - EXISTING



















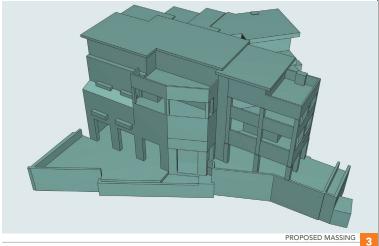
2741 OCEAN RESIDENCE

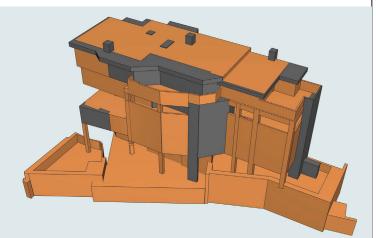
19103

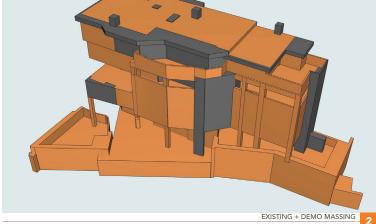
A025 NEW VS EXISTING - STREET VIEWS

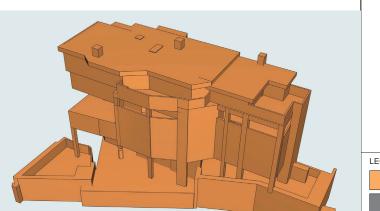


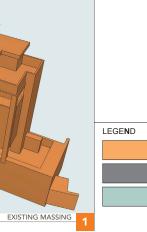
















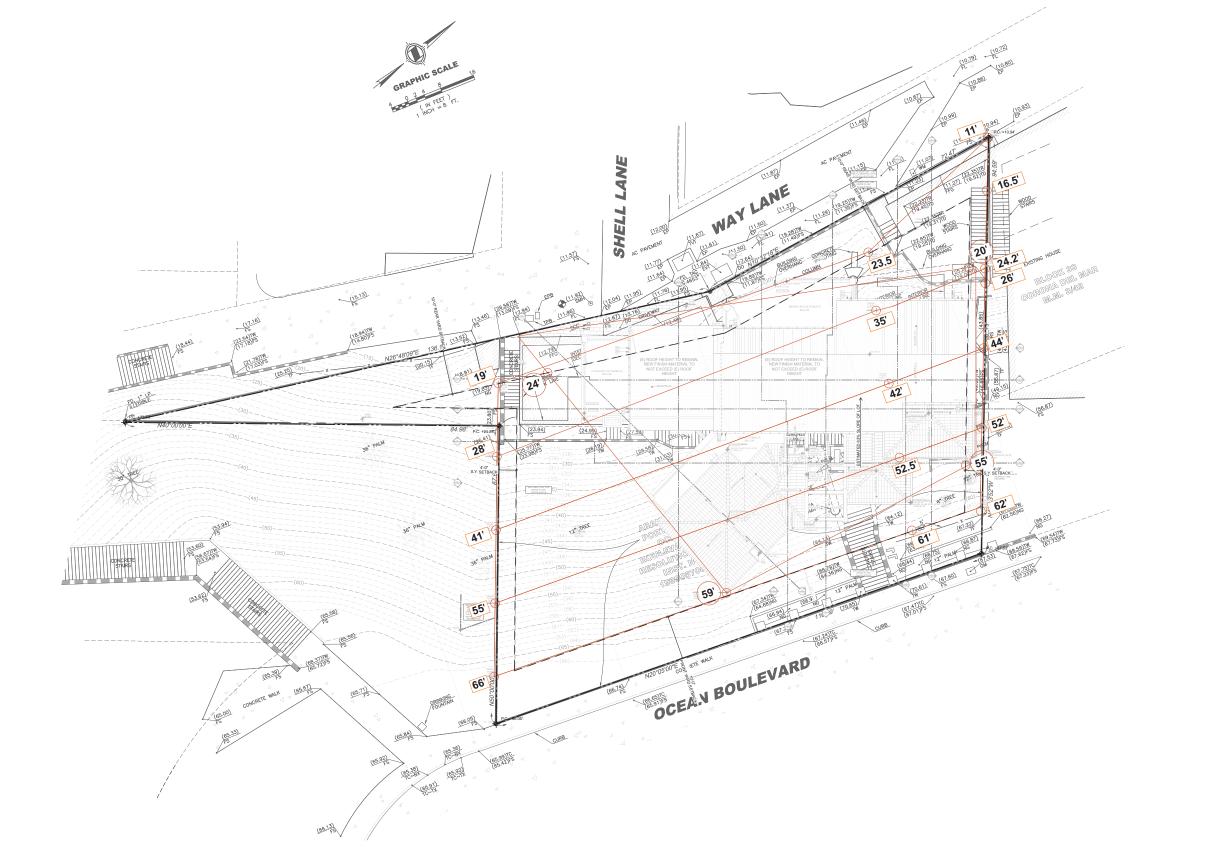
2741 OCEAN RESIDENCE

19103

A026

NEW VS EXISTING - MASSING MODEL EXHIBIT







# EVENS ARCHITECTS

K A A Design Group

12921 West Washington Blvd. Los Angeles . CA 90
310 821 1400 . fax 310 821 1440
kaadesigngroup.com



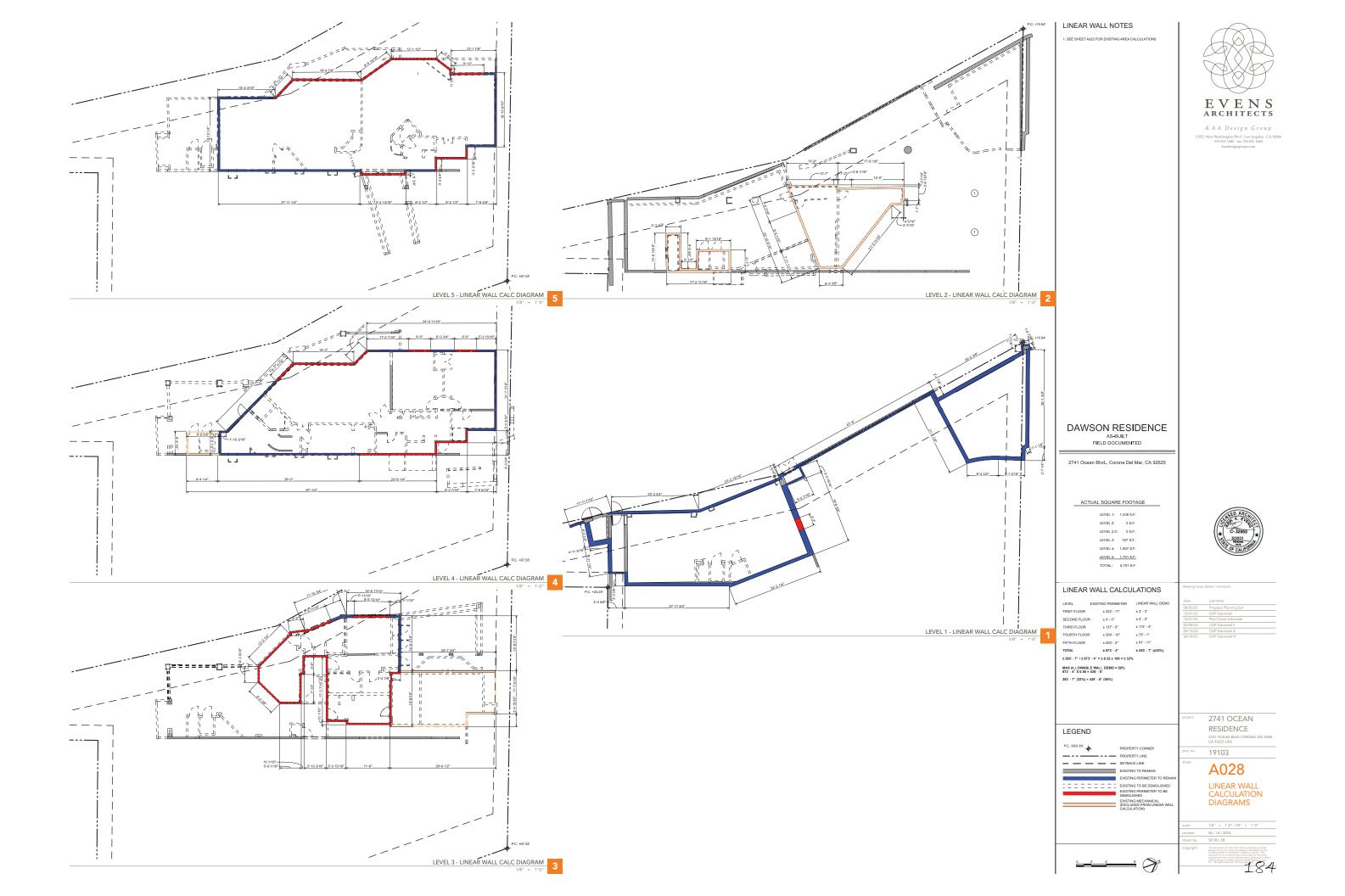
date	submittal
08/26/22	Progress Planning Set
12/21/22	CDP Submittal
12/21/22	Plan Check Submittal
03/08/23	CDP Submittal II
05/15/23	CDP Submittal III
06/14/23	CDP Submittal IV

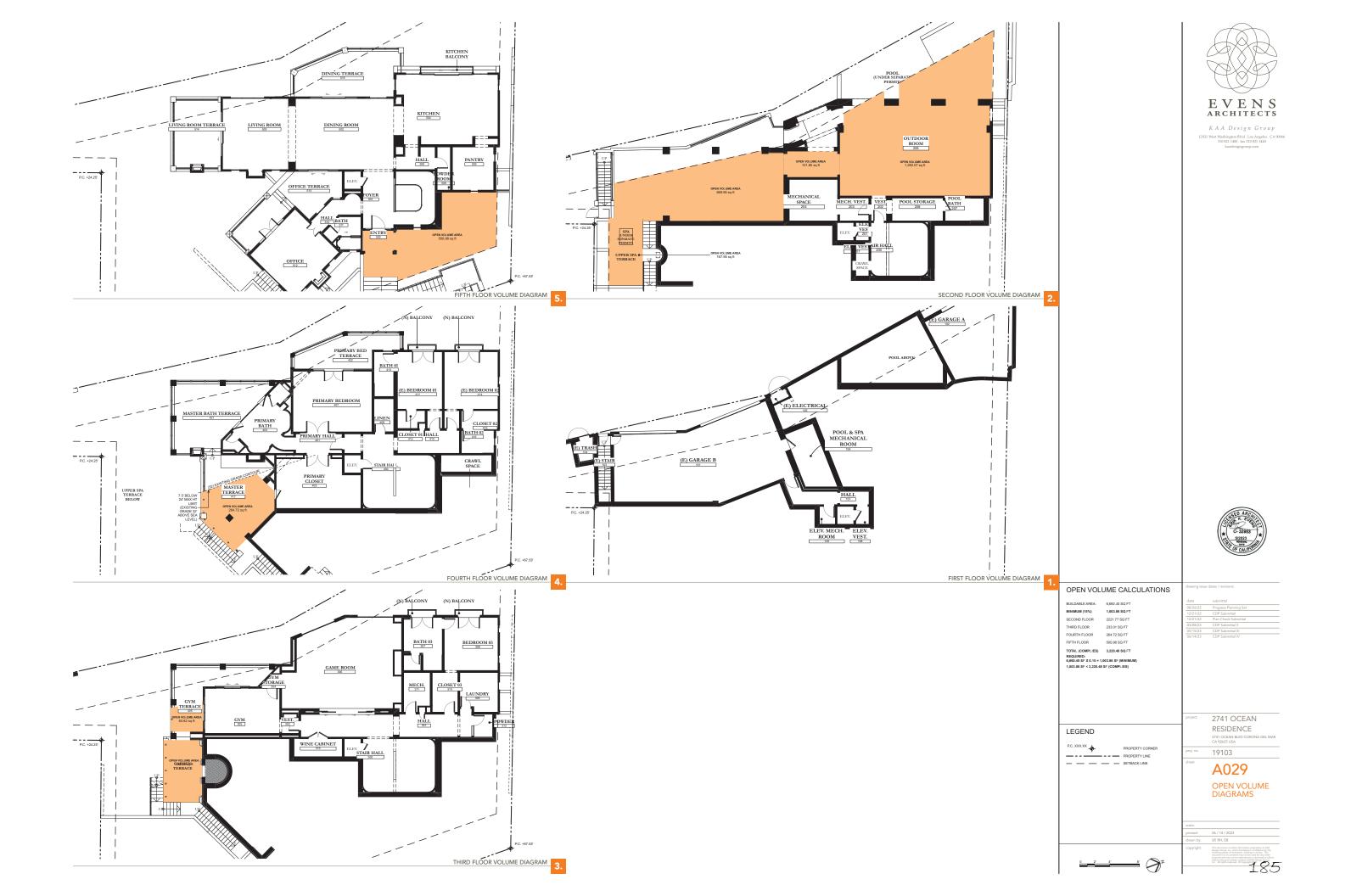
2741 OCEAN RESIDENCE 19103

A027

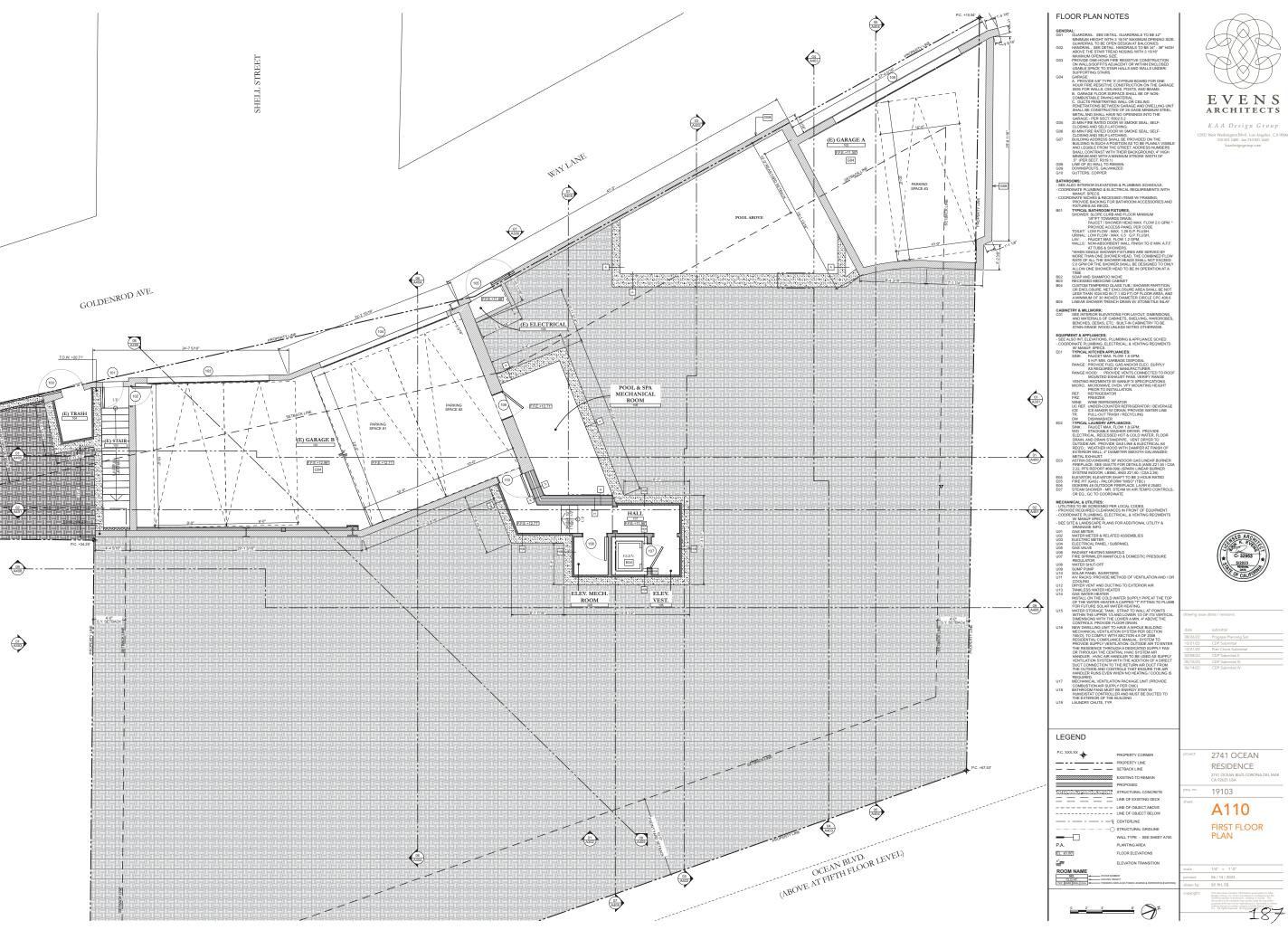
GRADE PLANE EXHIBIT

scale:	1/4" = 1'-0", 1/8" = 1'-0",
printed:	1/16" = 1'.0", 1' = 1'.0" 06 / 14 / 2023
drawn by:	SP, RH, EB
copyright:	This document contains information proprietary to KAA Dakigs Geoup, Inc., and is furnished in confidence for the limited purpose of evaluation, bidding or review. This document or its contents may not be used for any other purpose and may not be reproduced or disclosed to oth without the prior sentence consent of IAAC cought for. All rights reserved. O Copyright 2011.

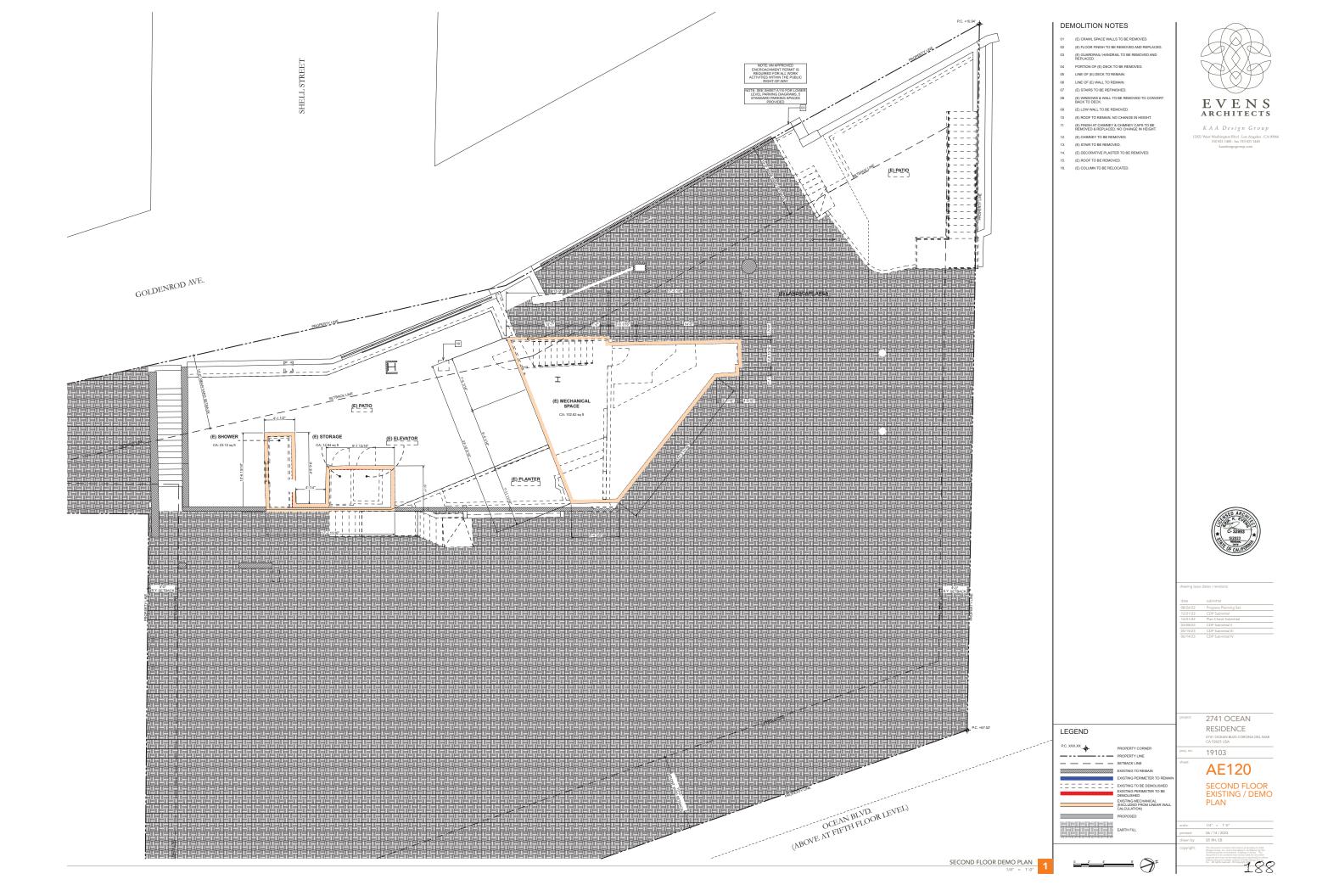


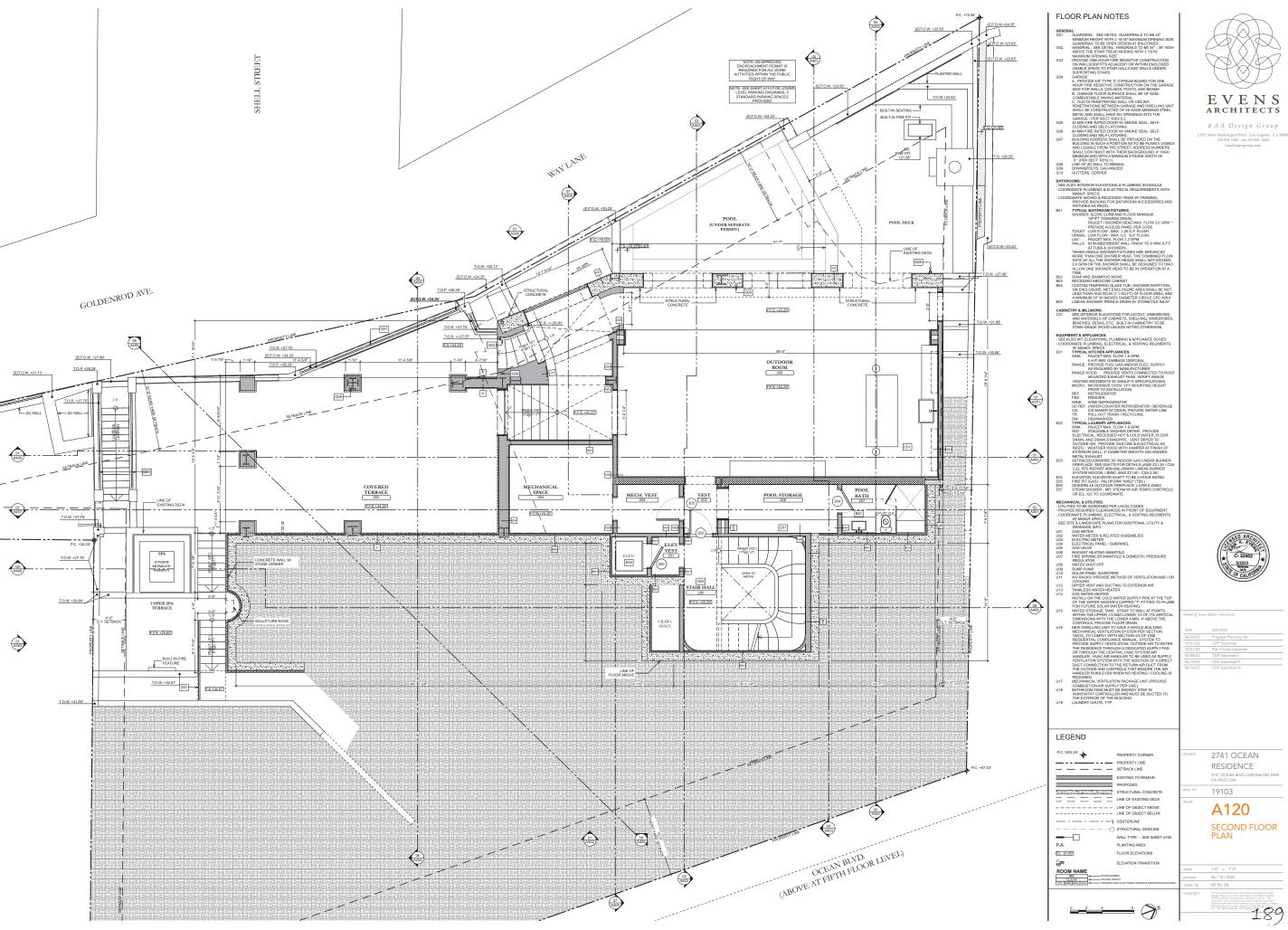




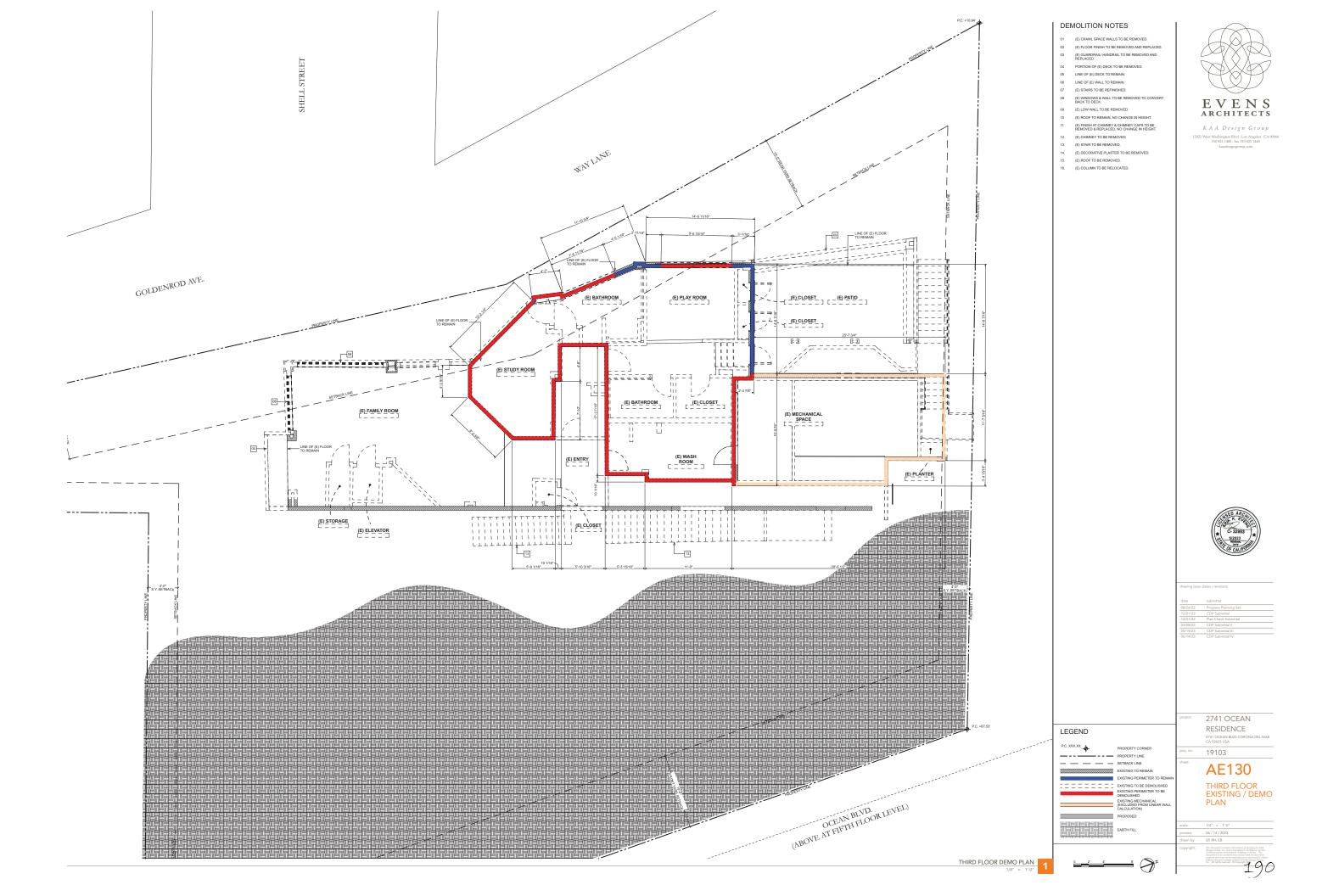


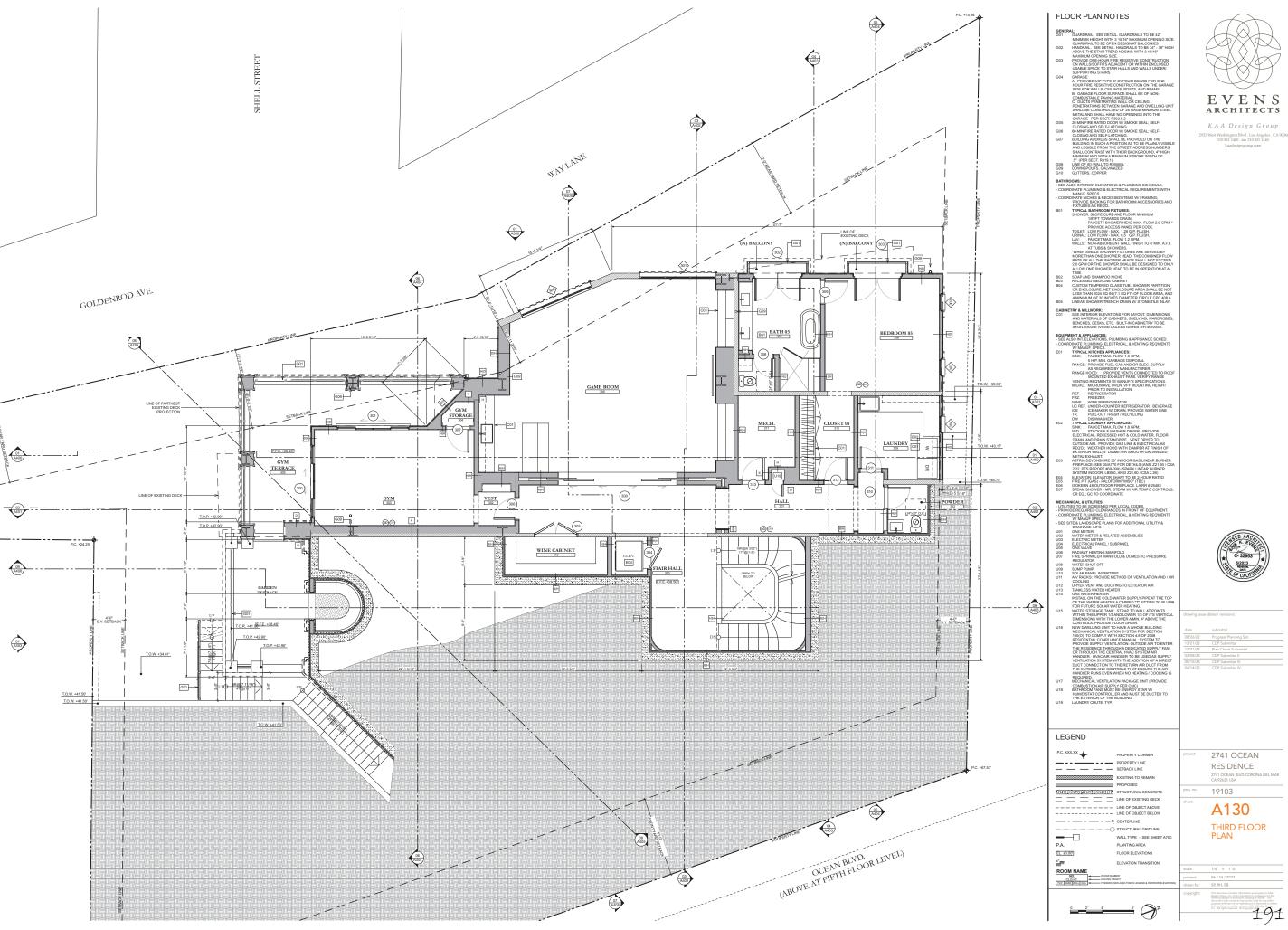
	submittal
/22	Progress Planning Set
/22	CDP Submittal
/22	Plan Check Submittal
	CDP Submittal II
/23	CDP Submittal III

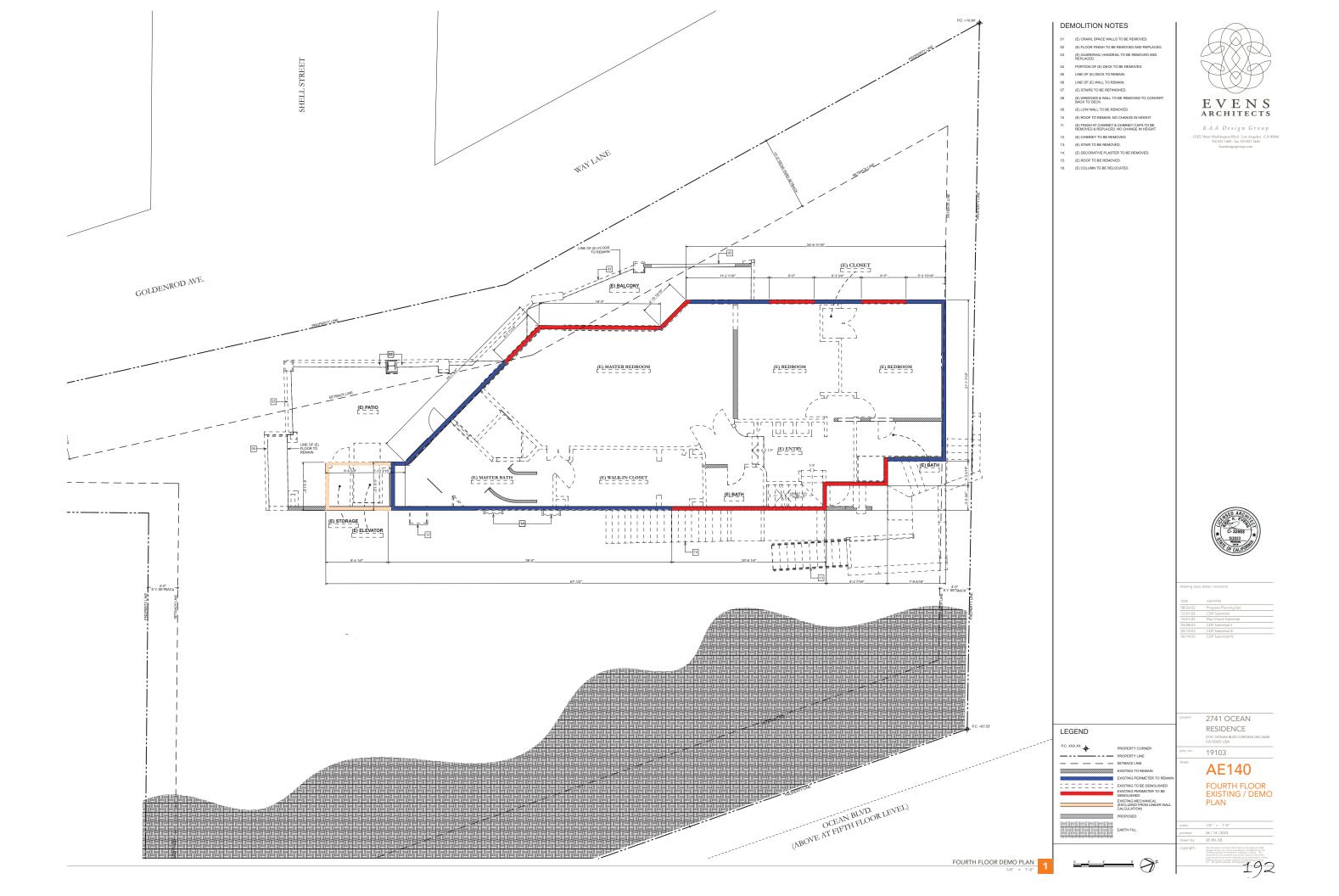


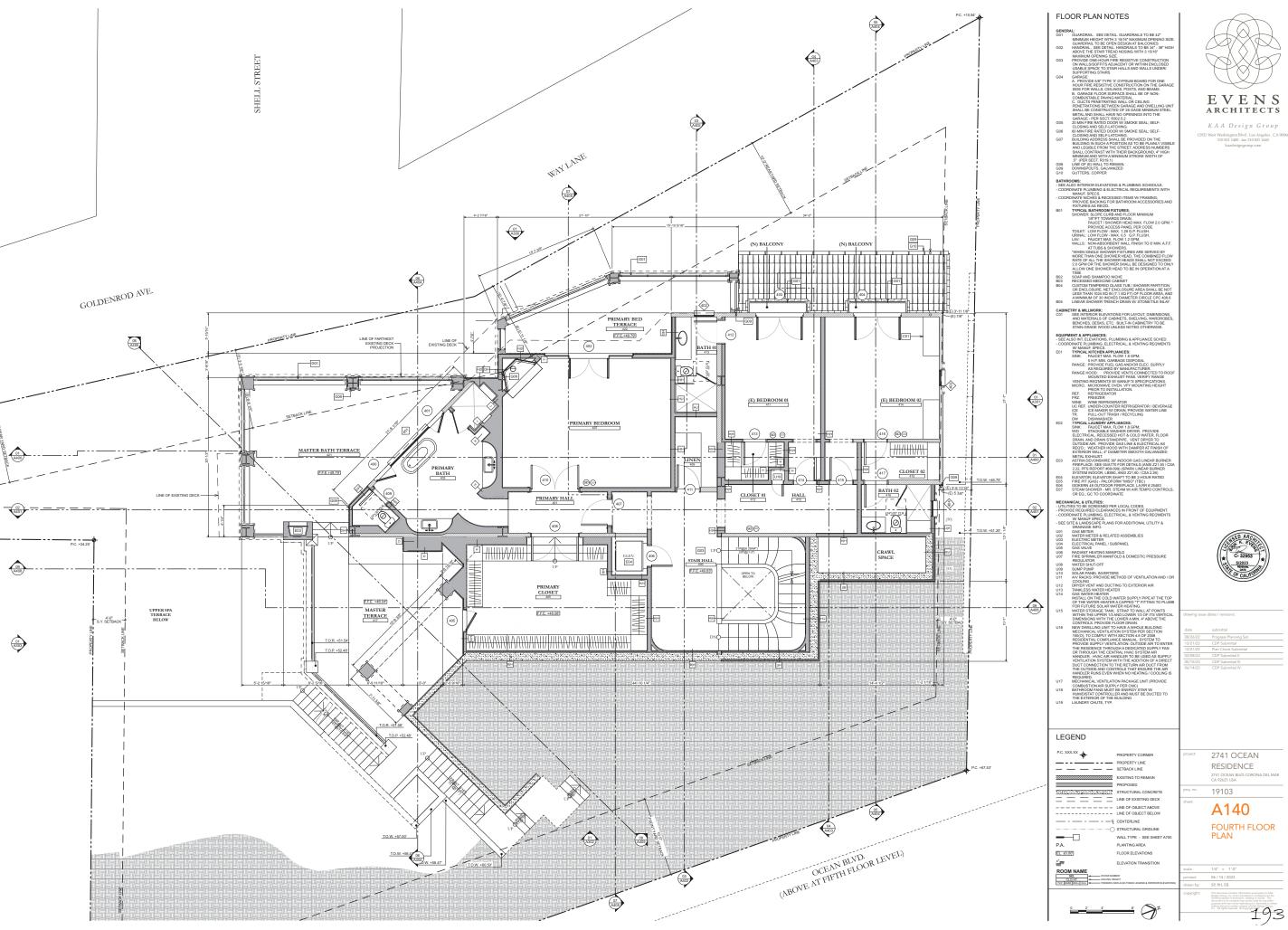


	submittal
22	Progress Planning Set
	CDP Submittal
22	Plan Check Submittal
	CDP Submittal II
	CDP Submittal III

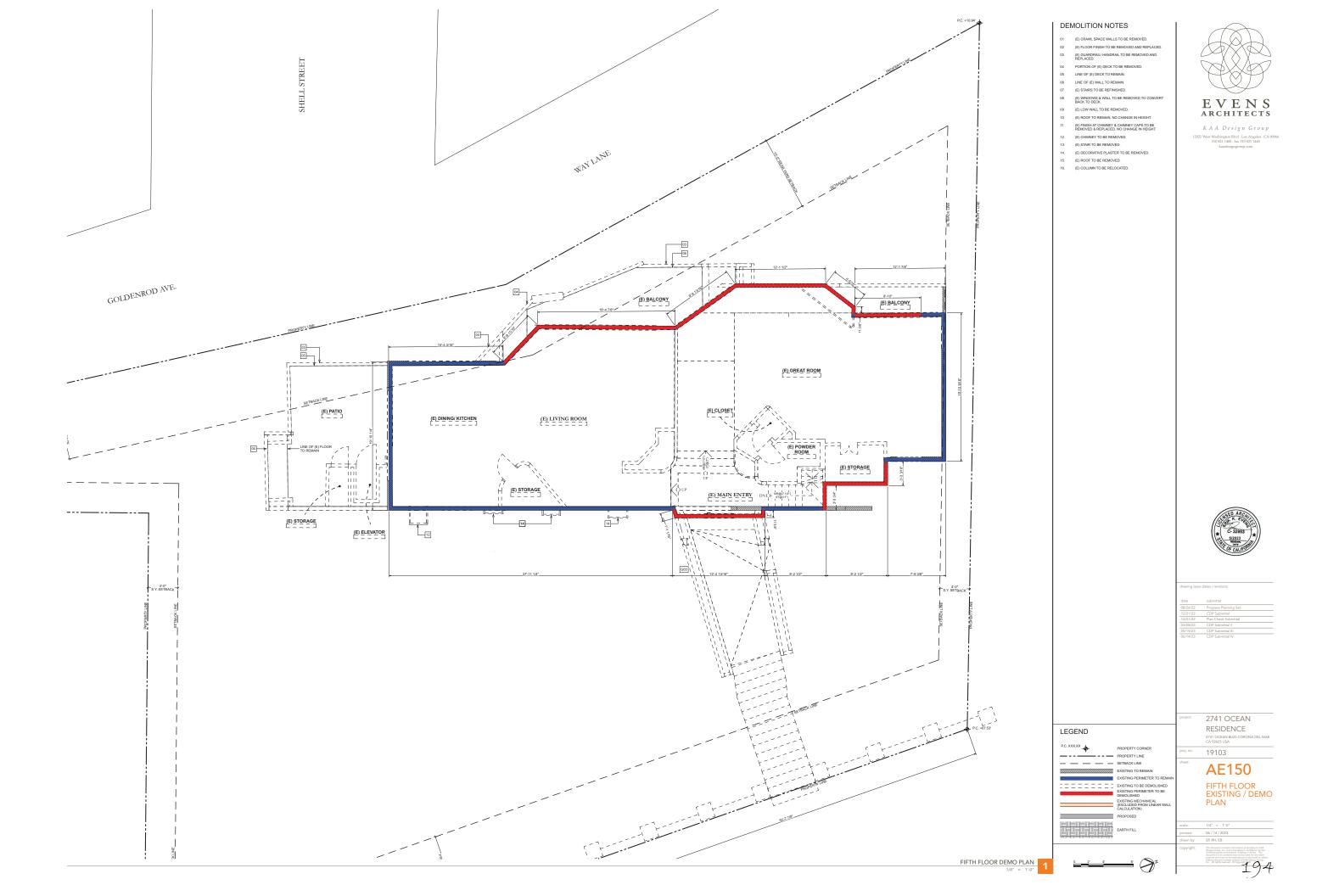


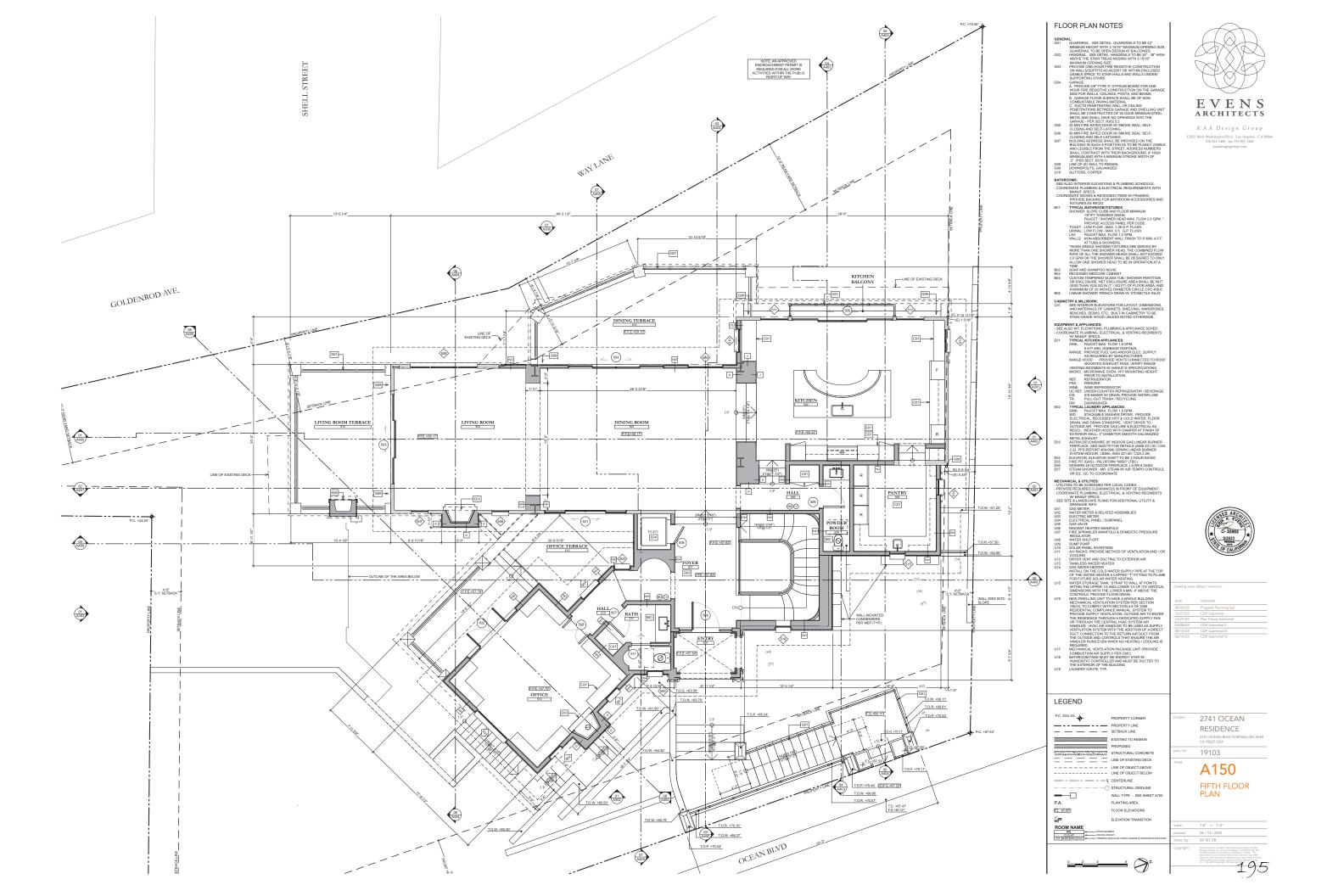


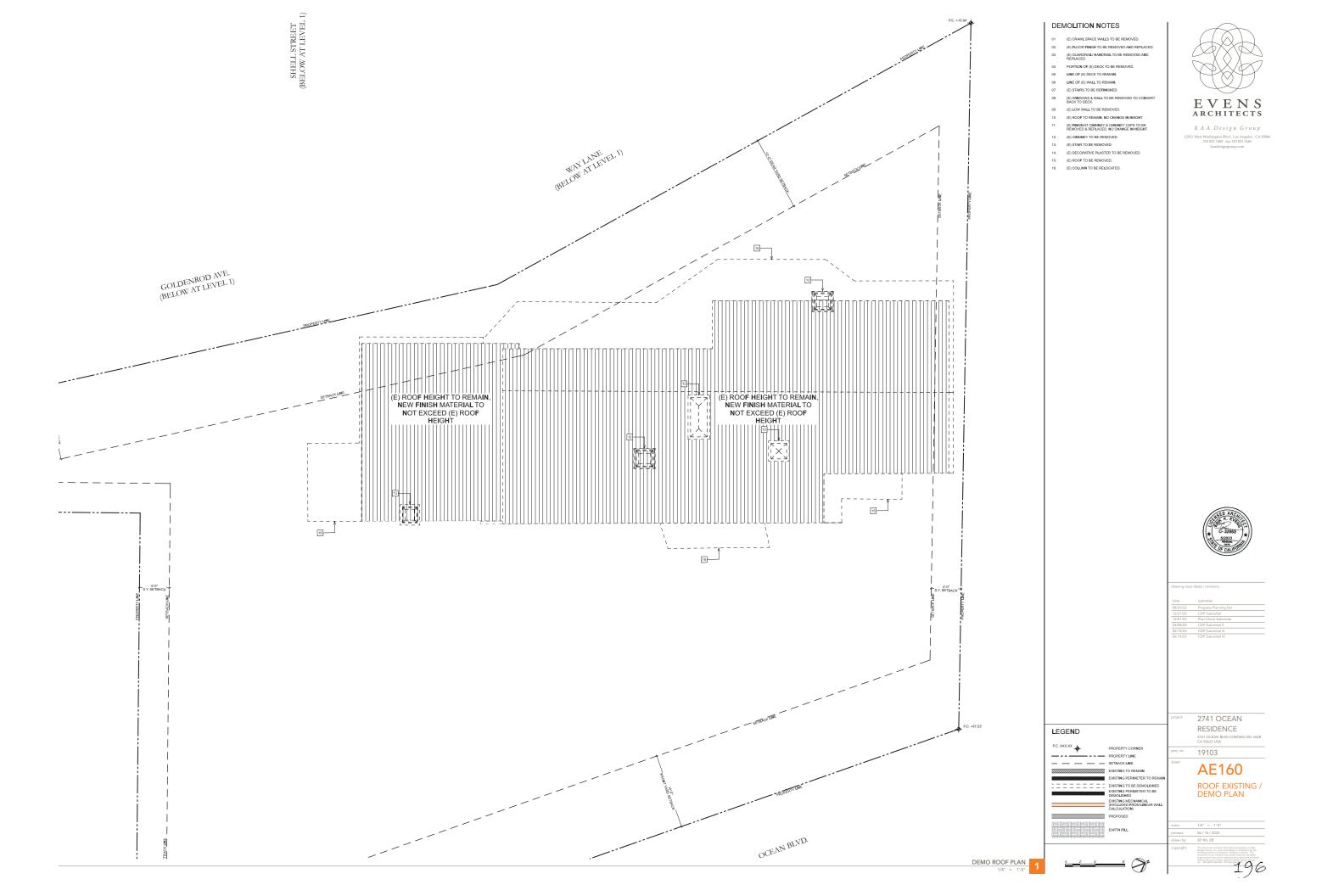


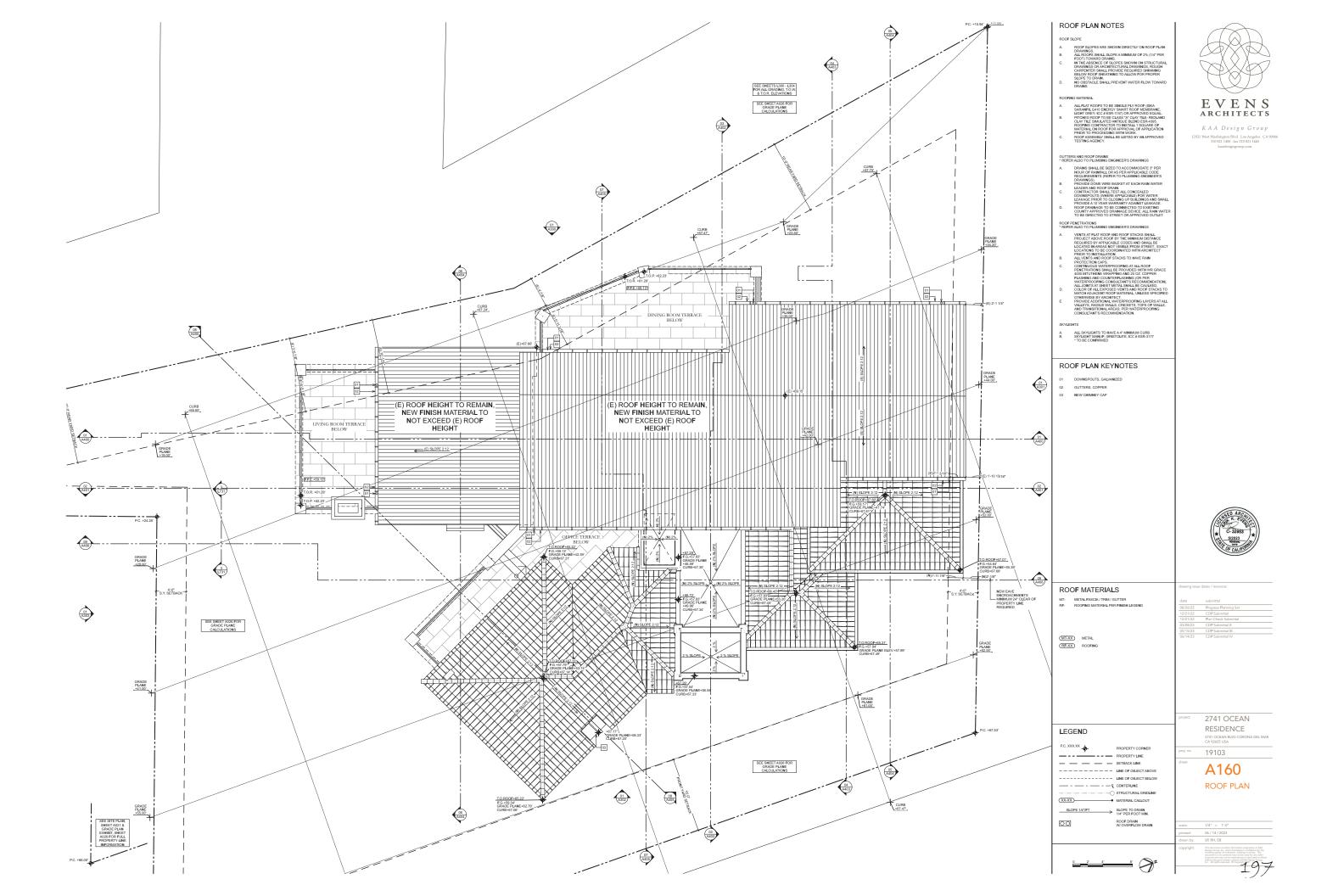


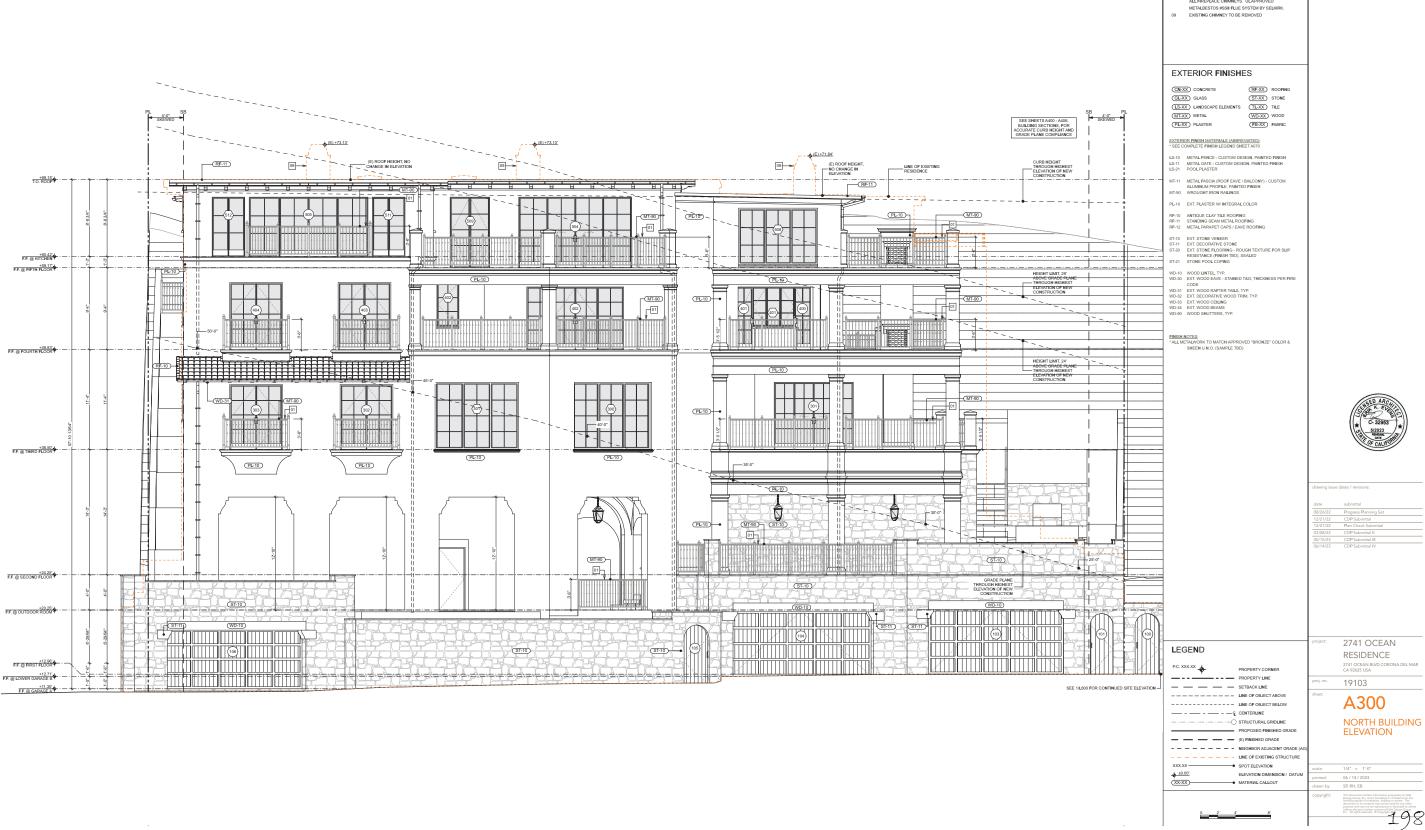
	submittal
/22	Progress Planning Set
/22	CDP Submittal
/22	Plan Check Submittal
	CDP Submittal II
/23	CDP Submittal III







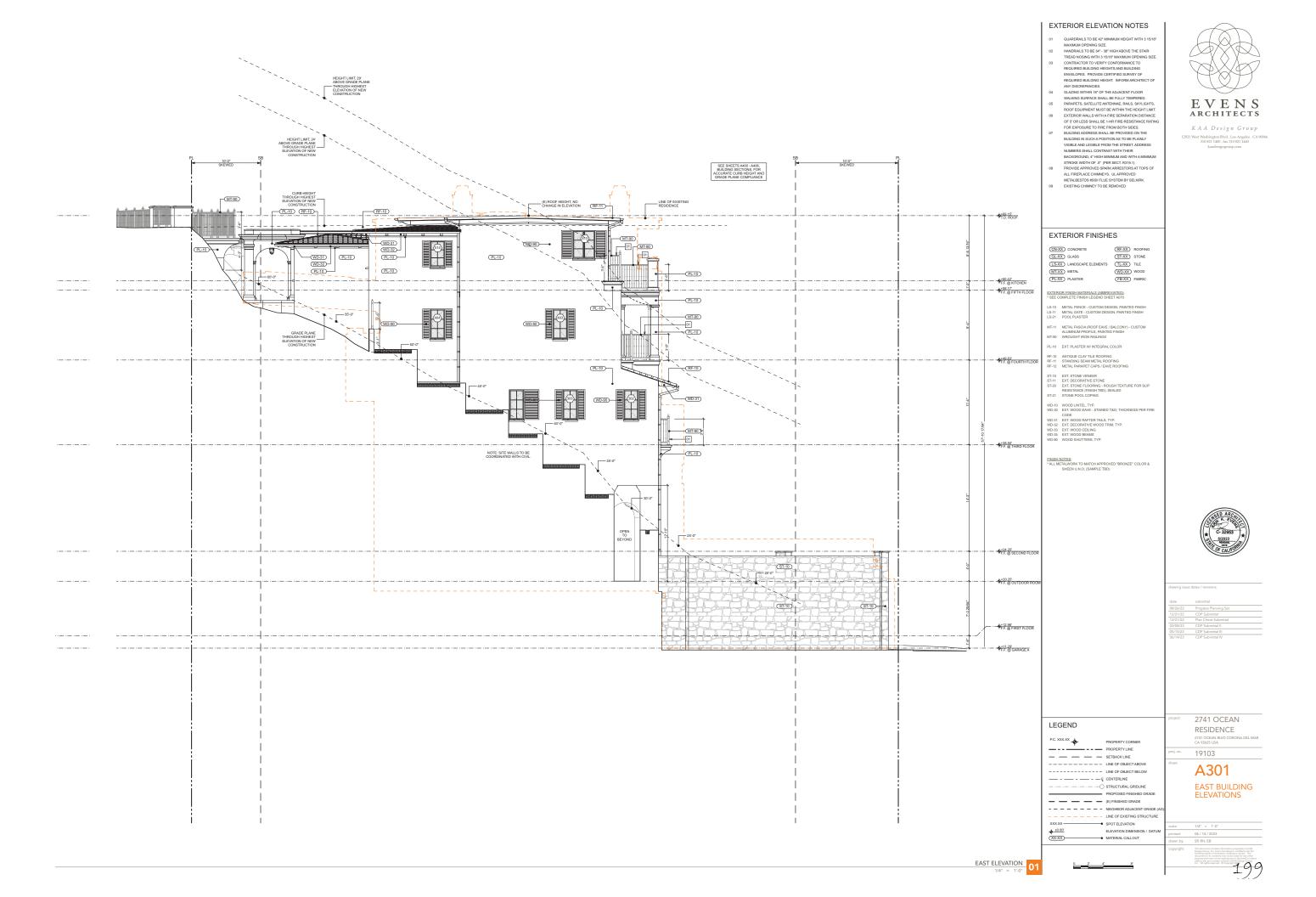


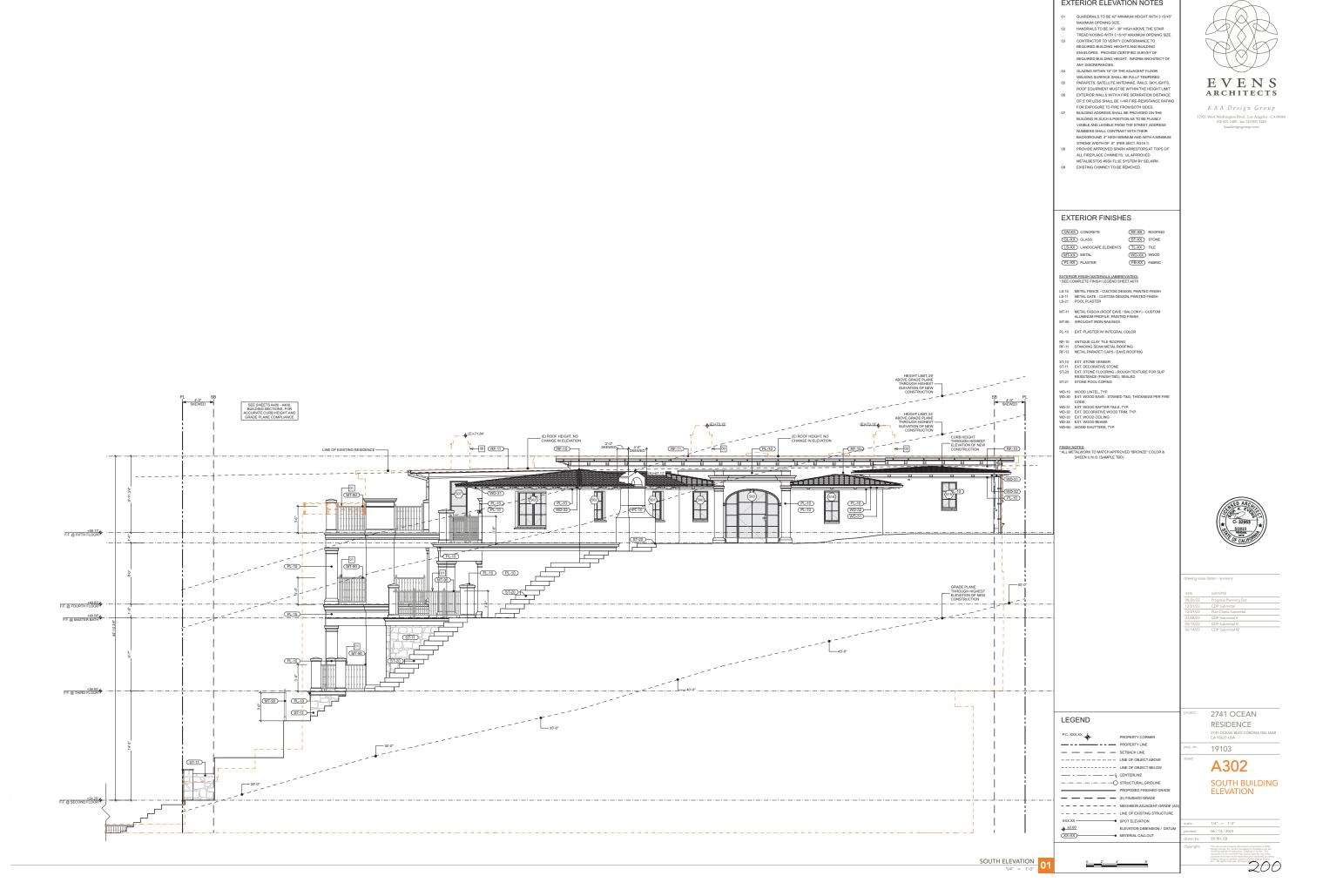


## EXTERIOR ELEVATION NOTES

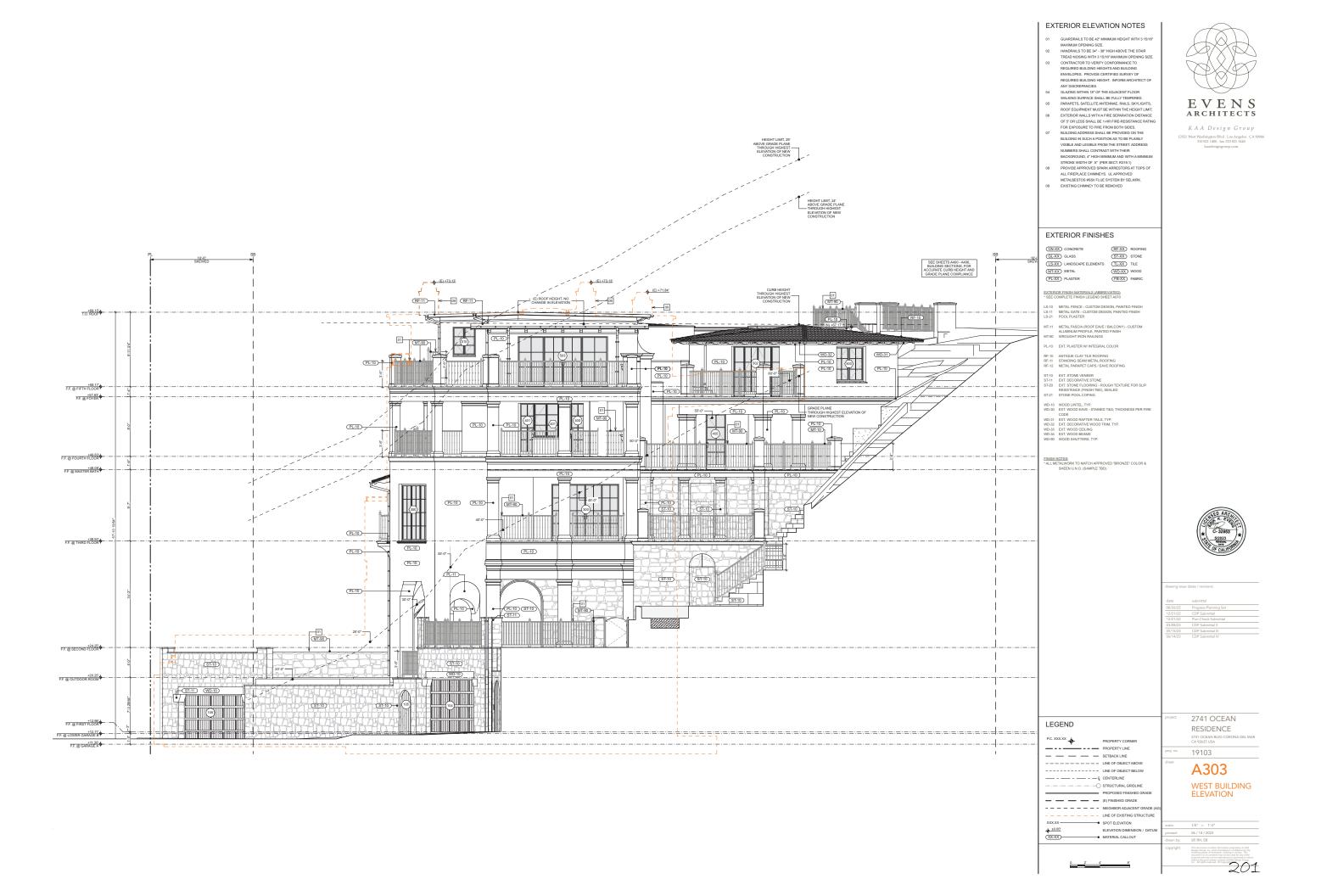
EVENS ARCHITECTS

KAA Design Group 12921 West Washington Blvd . Los Angeles . CA 90066 310 821 1400 . fax 310 821 1440 kaadesigngroup.com

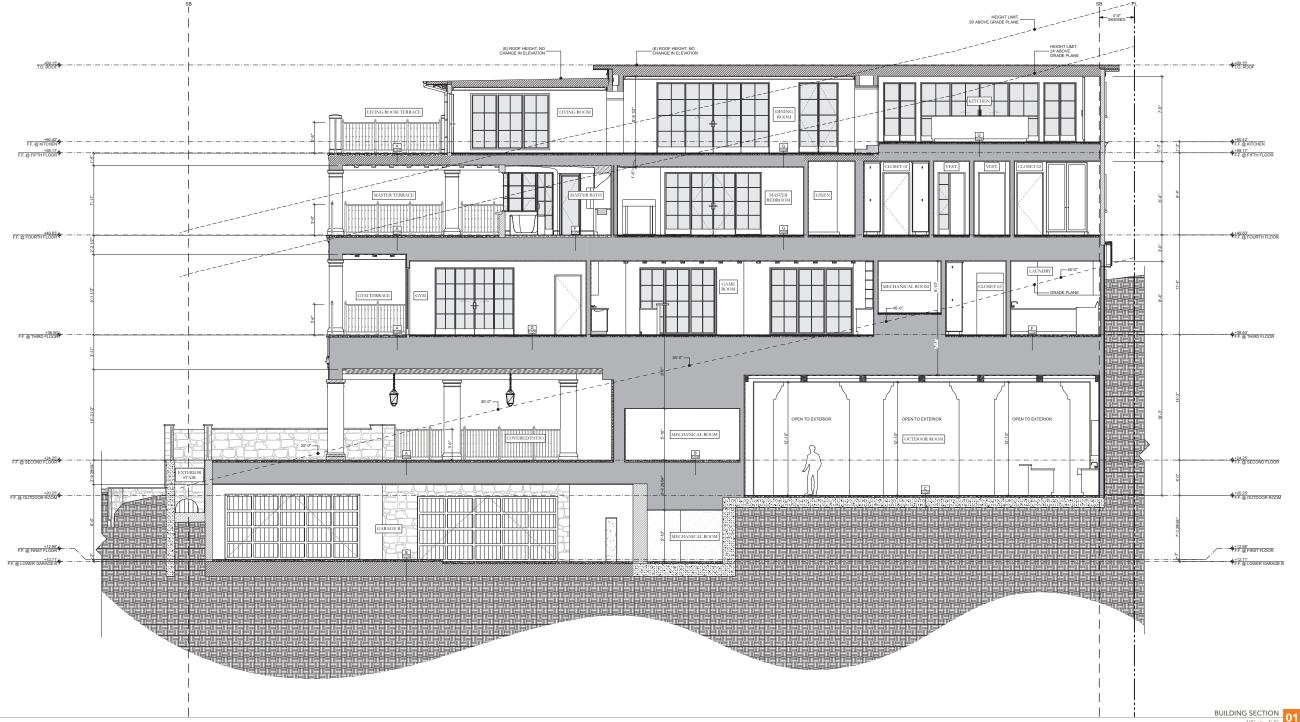




EXTERIOR ELEVATION NOTES









drawing issue dates / revi

2741 OCEAN
RESIDENCE
2741 OCEAN BLVD CORONA DEL

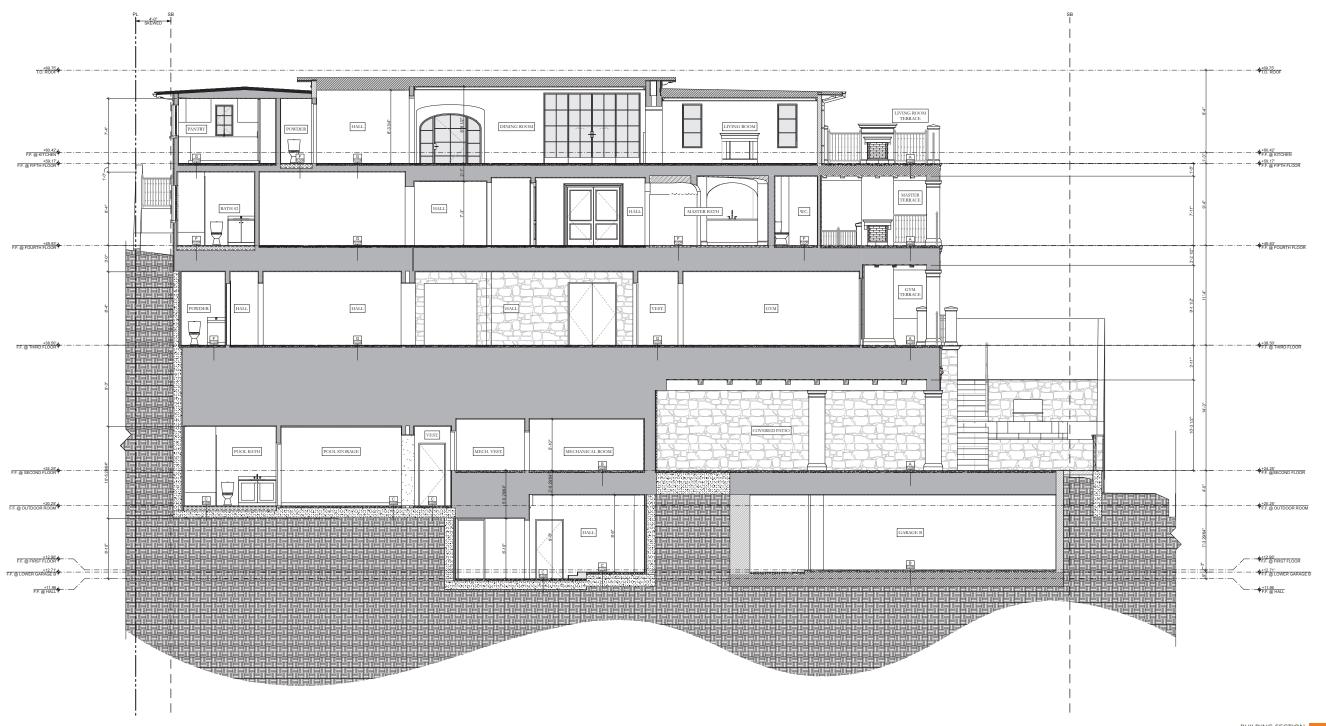
CA 92625 USA

proj. no. 19103

A400

BUILDING SECTIONS







drawing issue dates / revision

date submittal
08/26/22 Progress Planning Set
1/27/1/22 CDP Submittal
1/27/1/22 Plan Check Submittal
03/08/23 CDP Submittal II
05/15/23 CDP Submittal III

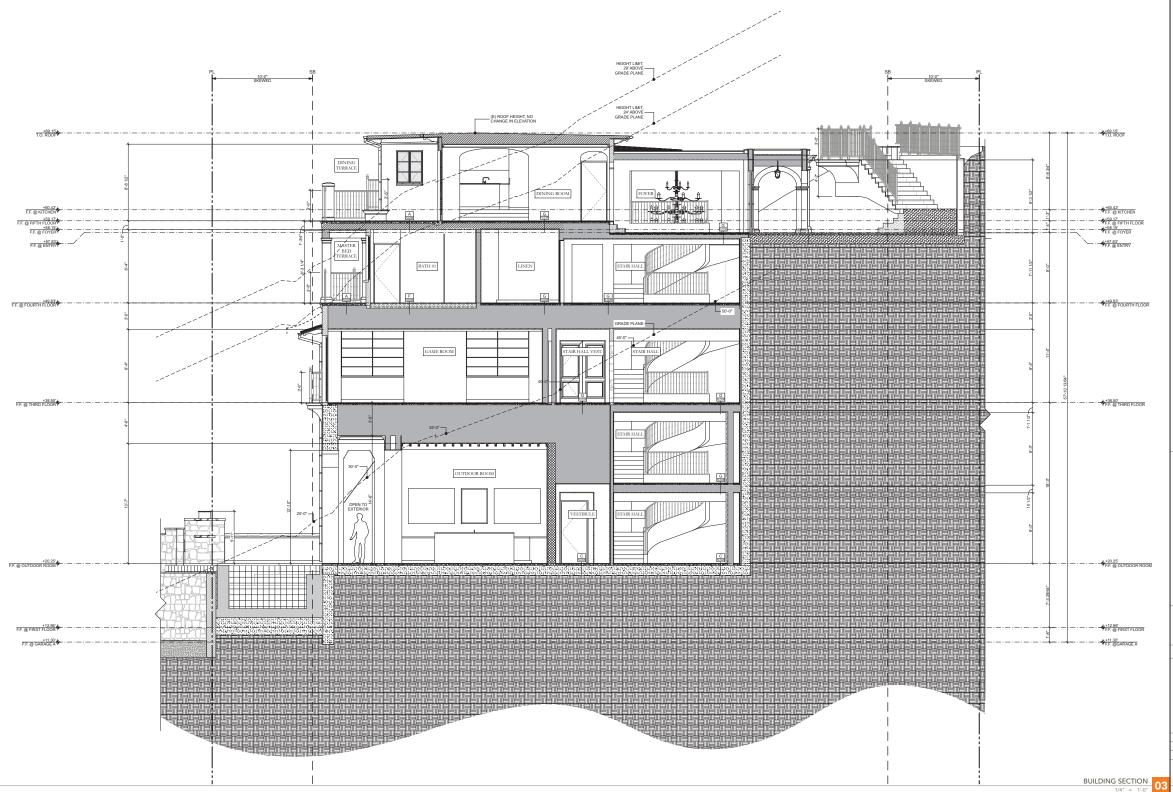
70 Project: 2741 OCEAN
RESIDENCE
2741 OCEAN BLVD CORONA DEL
CA 92625 USA

proj. no. 19103 sheet: A401

BUILDING SECTIONS

ION 02







drawing issue dates / revisi

date	submittal
08/26/22	Progress Planning Set
12/21/22	CDP Submittal
12/21/22	Plan Check Submittal
03/08/23	CDP Submittal II
05/15/23	CDP Submittal III

2741 OCEAN
RESIDENCE

2741 OCEAN BLVD CORONA DEL MAI CA 92625 USA Proj. no. 19103

sheet: A402

BUILDING SECTIONS

scale: 1/4" = 1'.0"

printed: 06 / 14 / 2023

drawn by: SP, RH, EB

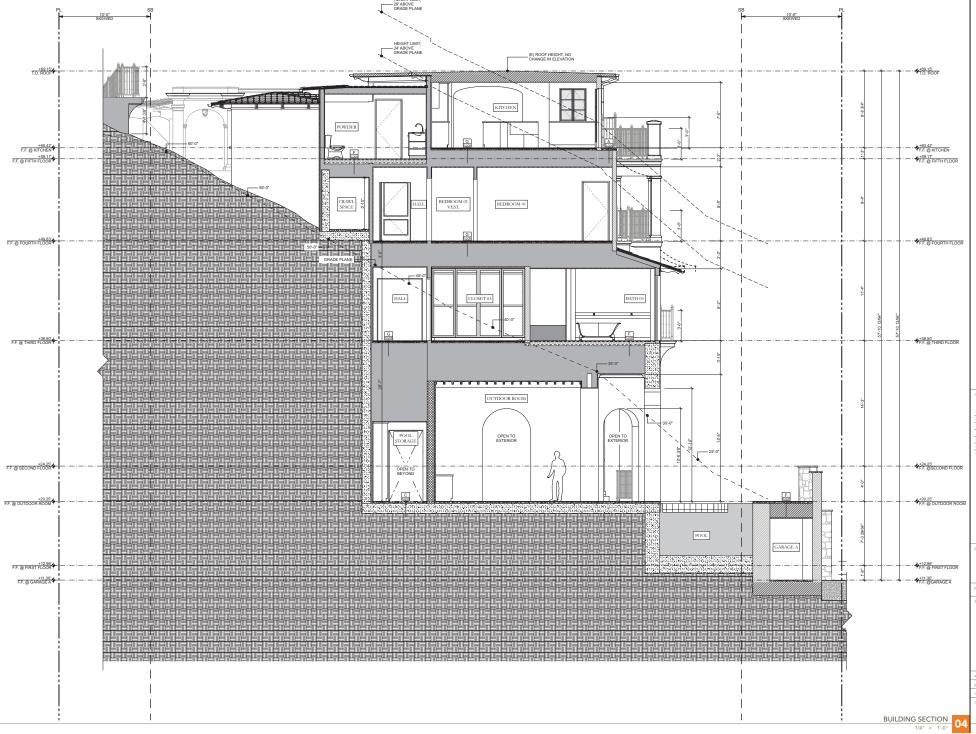
copyright: Sea downers consent elementary properties to EAA

fine downers consent elementary properties to EAA

fine downers consent elementary properties to EAA

fine downers consent elementary properties. The







date	submittal
08/26/22	Progress Planning Set
12/21/22	CDP Submittal
12/21/22	Plan Check Submittal
03/08/23	CDP Submittal II
	CDP Submitted III

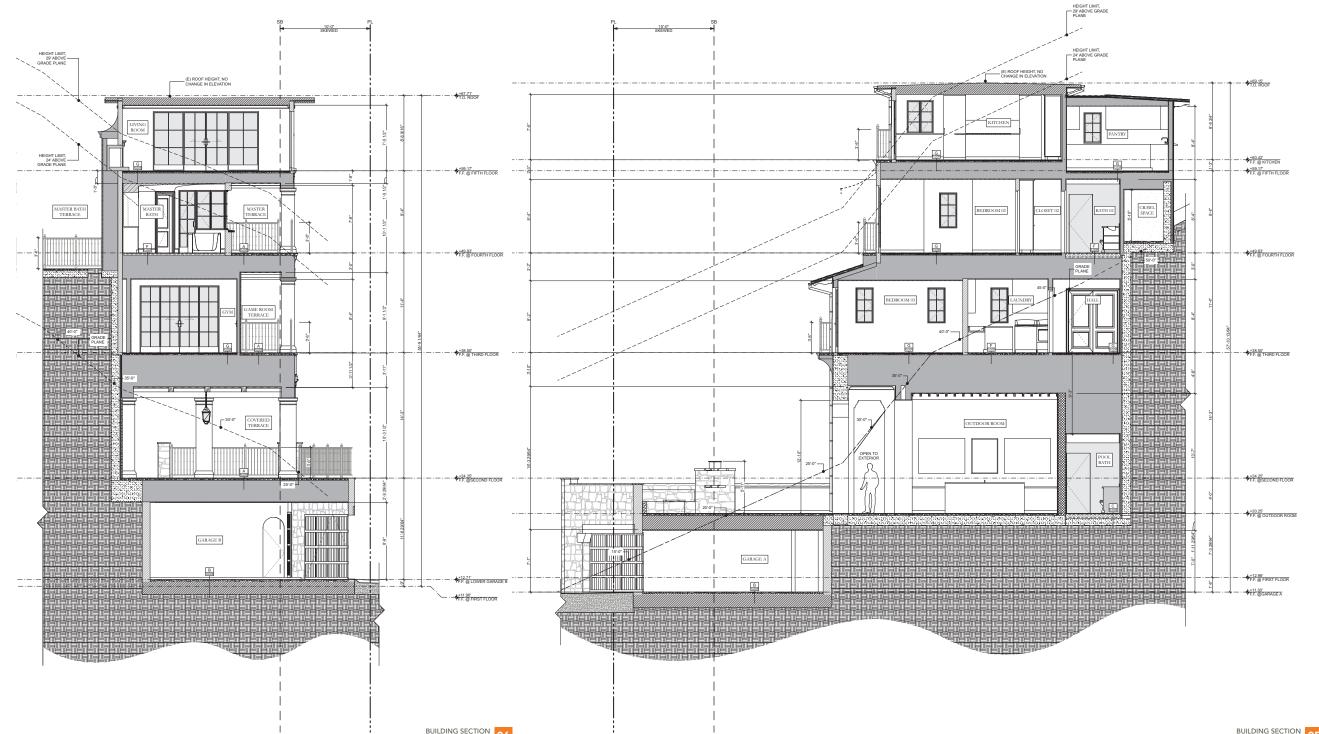
project:	2741 OCEAN
	RESIDENCE
	2741 OCEAN BLVD CORONA DEL MAR

19103 sheet: A403

BUILDING SECTIONS

scale:	1/4" = 1'-0"
printed:	06 / 14 / 2023
drawn by:	SP, RH, EB
copyright:	This document contains information proprietary to ICAA Design Group, Inc., and is furnished in confidence for the limited purpose of evaluation, bidding or review. This document or its contents may not be used for any other purpose and may not be regoladured or disclosed to oth without the prior written consent of ICAA Design Group, Inc. All right reserved. © Copyrigh.







drawing issue dates / revi

date submittal
08/26/22 Progress Planning Set
12/21/22 CDP Submittal
12/21/22 Plan Check Submittal
03/08/23 CDP Submittal II
05/15/23 CDP Submittal III

2741 OCEAN
RESIDENCE
2741 OCEAN BLVD CORONA

CA 92625 USA

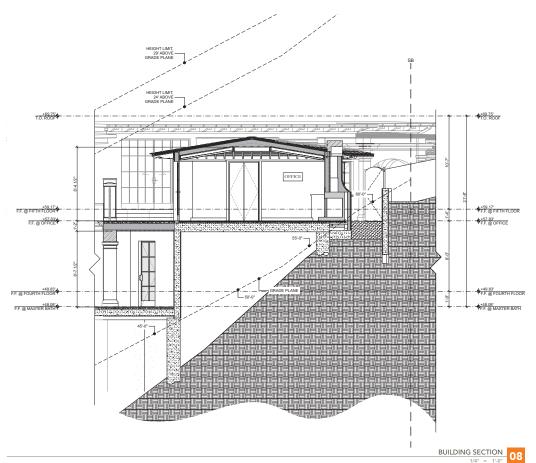
proj. no. 19103

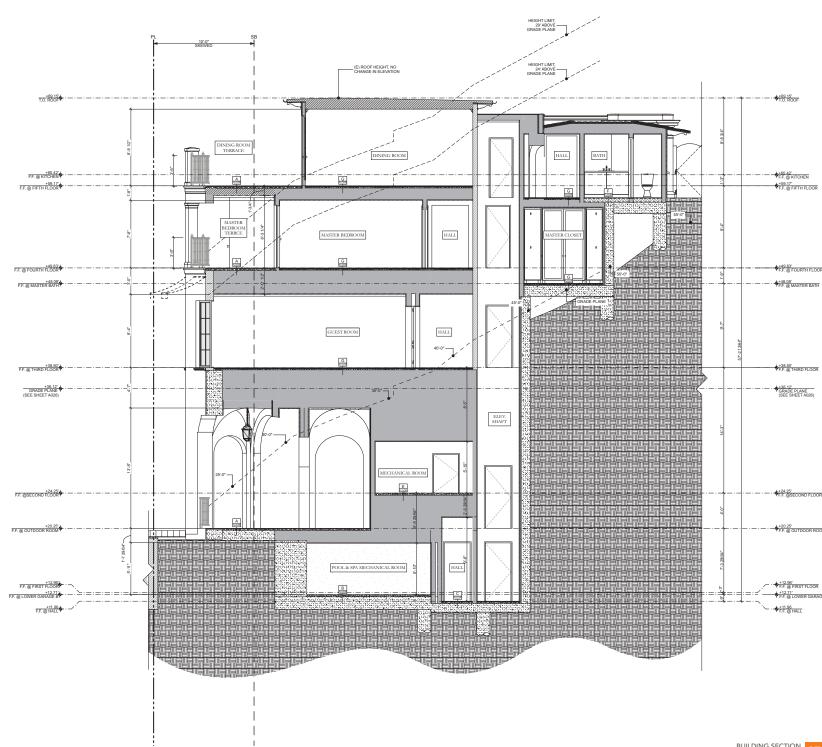
A404

BUILDING SECTIONS

pulpose and may not on improduction of consocious to others without the prior and consect of the AD being Group, loc. All rights reserved. If Copyright AD being Group,









drawing issue dates / revision

date	submittal
08/26/22	Progress Planning Set
12/21/22	CDP Submittal
12/21/22	Plan Check Submittal
03/08/23	CDP Submittal II
05/15/23	CDP Submittal III
06/14/23	CDP Submitted IV

2741 OCEAN RESIDENCE

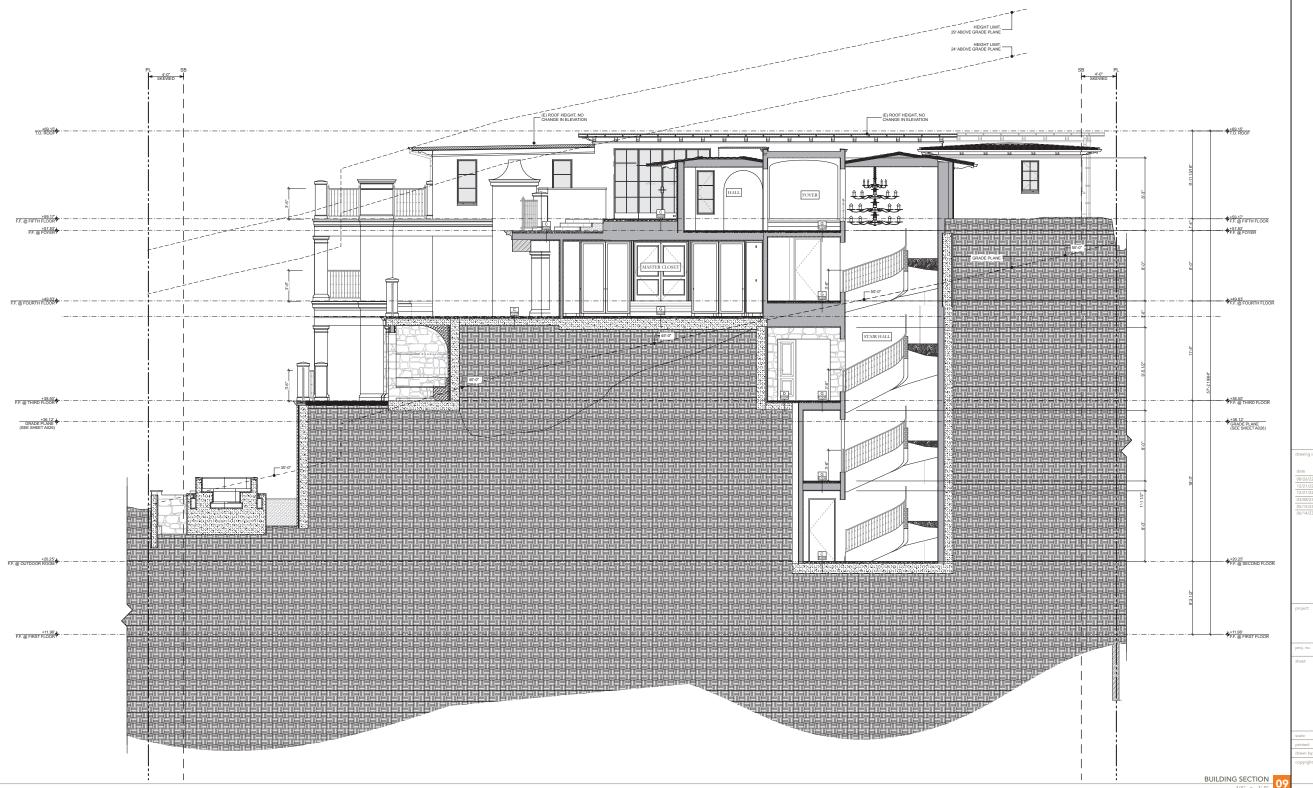
2741 OCEAN BLVD CORONA DEL CA 92625 USA Proj. no. 19103

A405

BUILDING SECTIONS

scale: 1/4" = 1'-0" printed: 06/14/2023 drawn by: SP, RH, EB







drawing issue dates / revisi

2741 OCEAN RESIDENCE

2741 OCEAN BLVD CORONA DE CA 92625 USA

Proj. no. 19103

A406

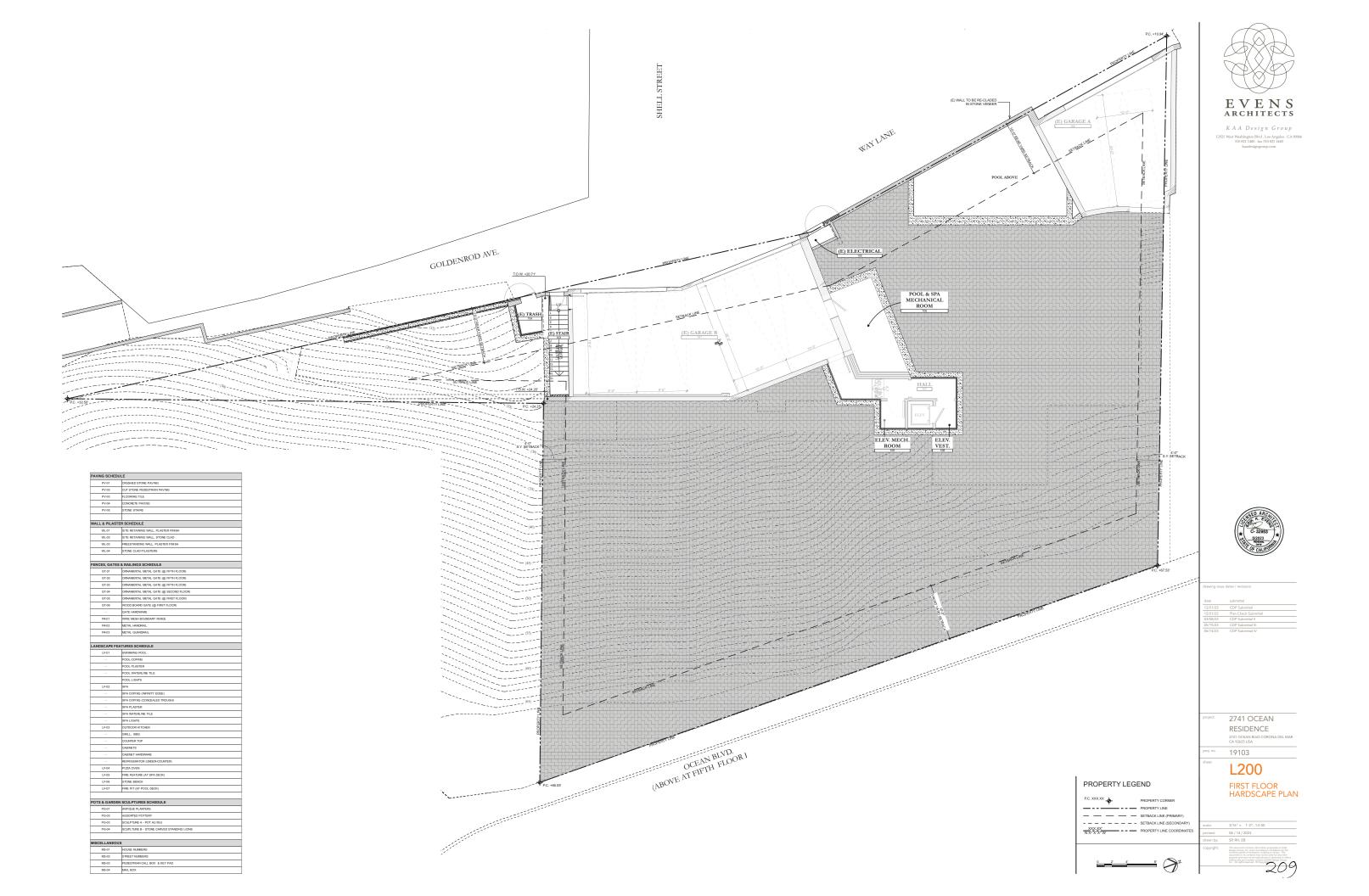
BUILDING SECTIONS

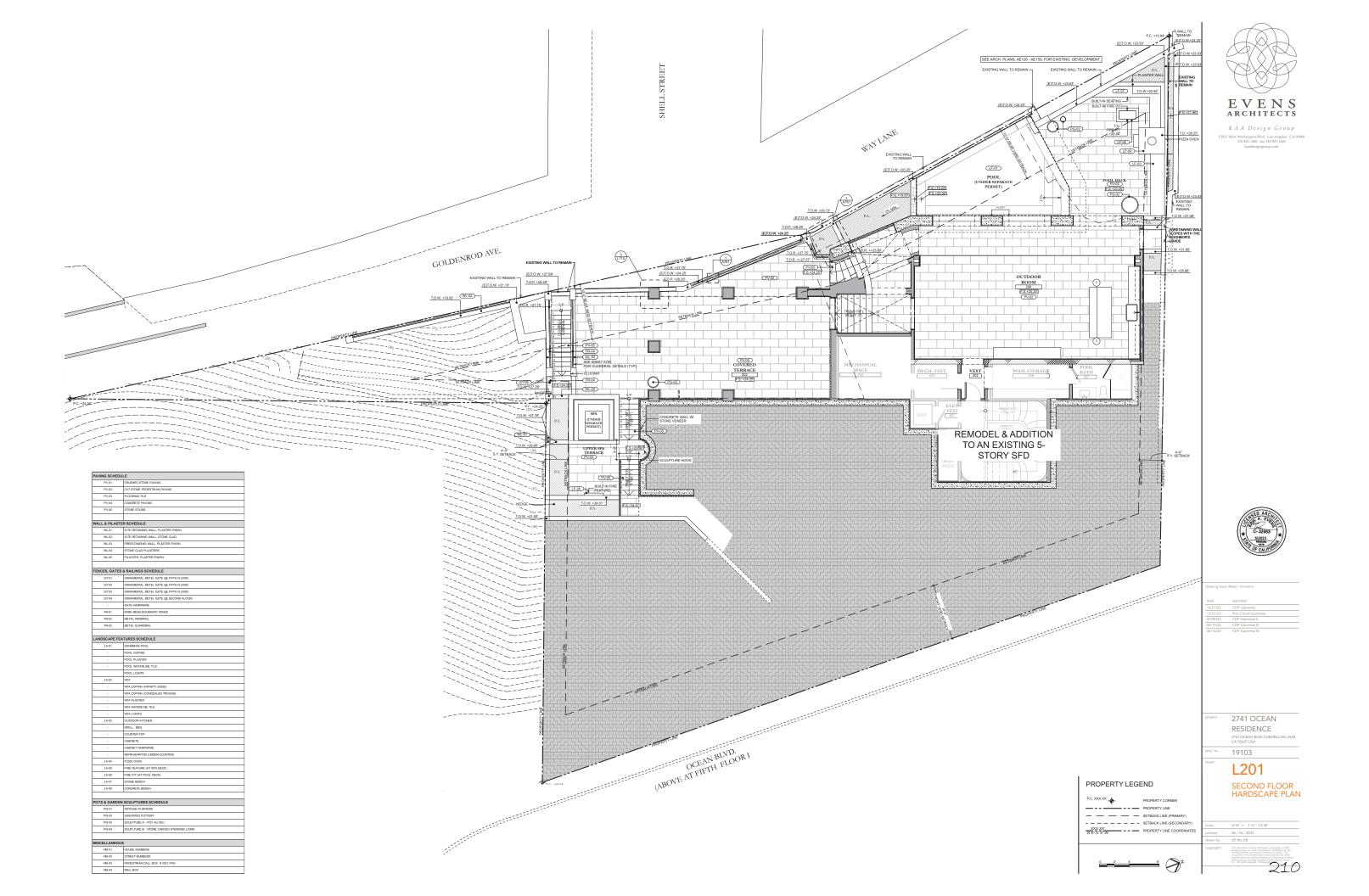
scale: 1/4\* = 11-0\*

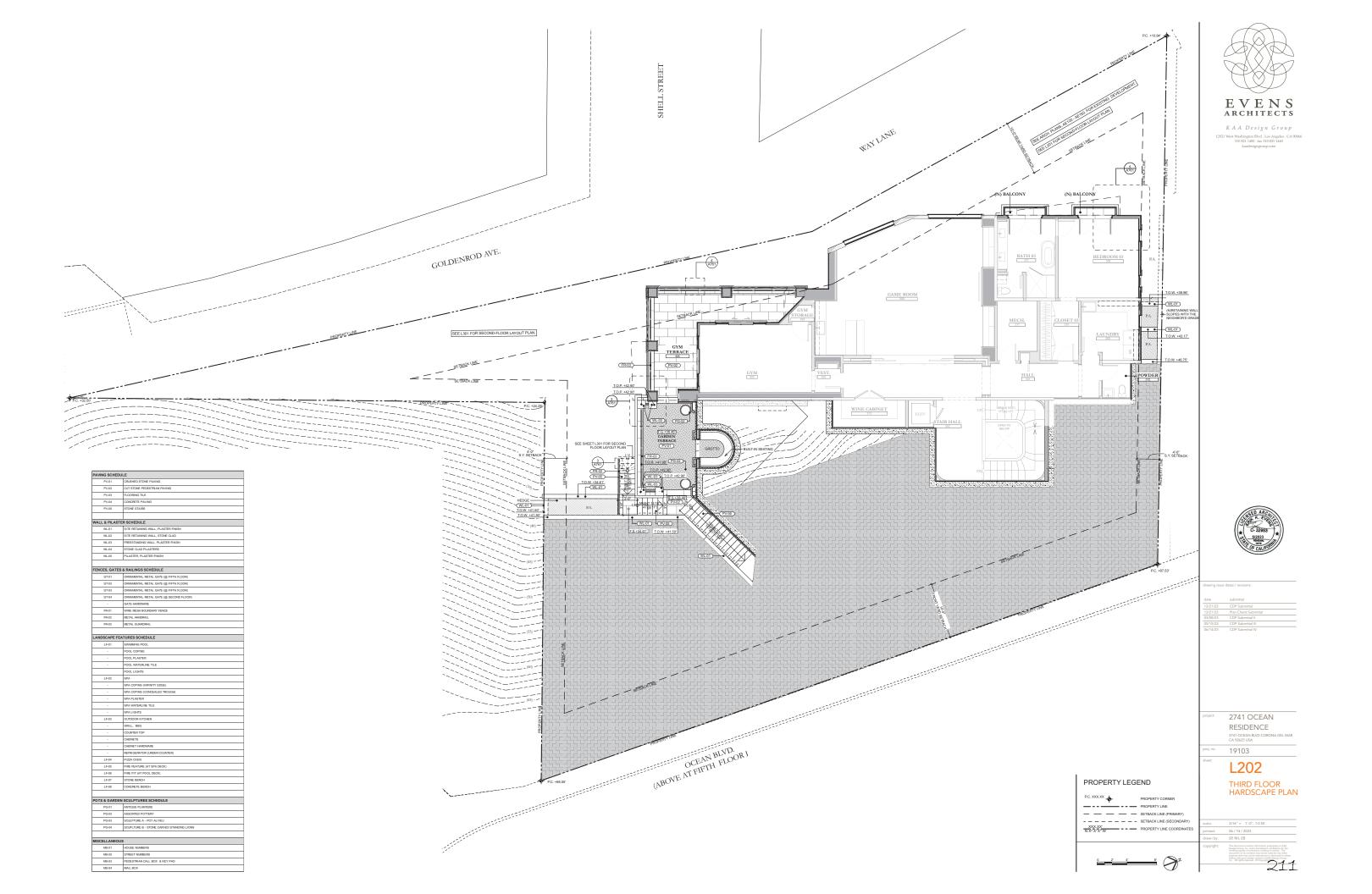
printed: 06 / 14 / 2023

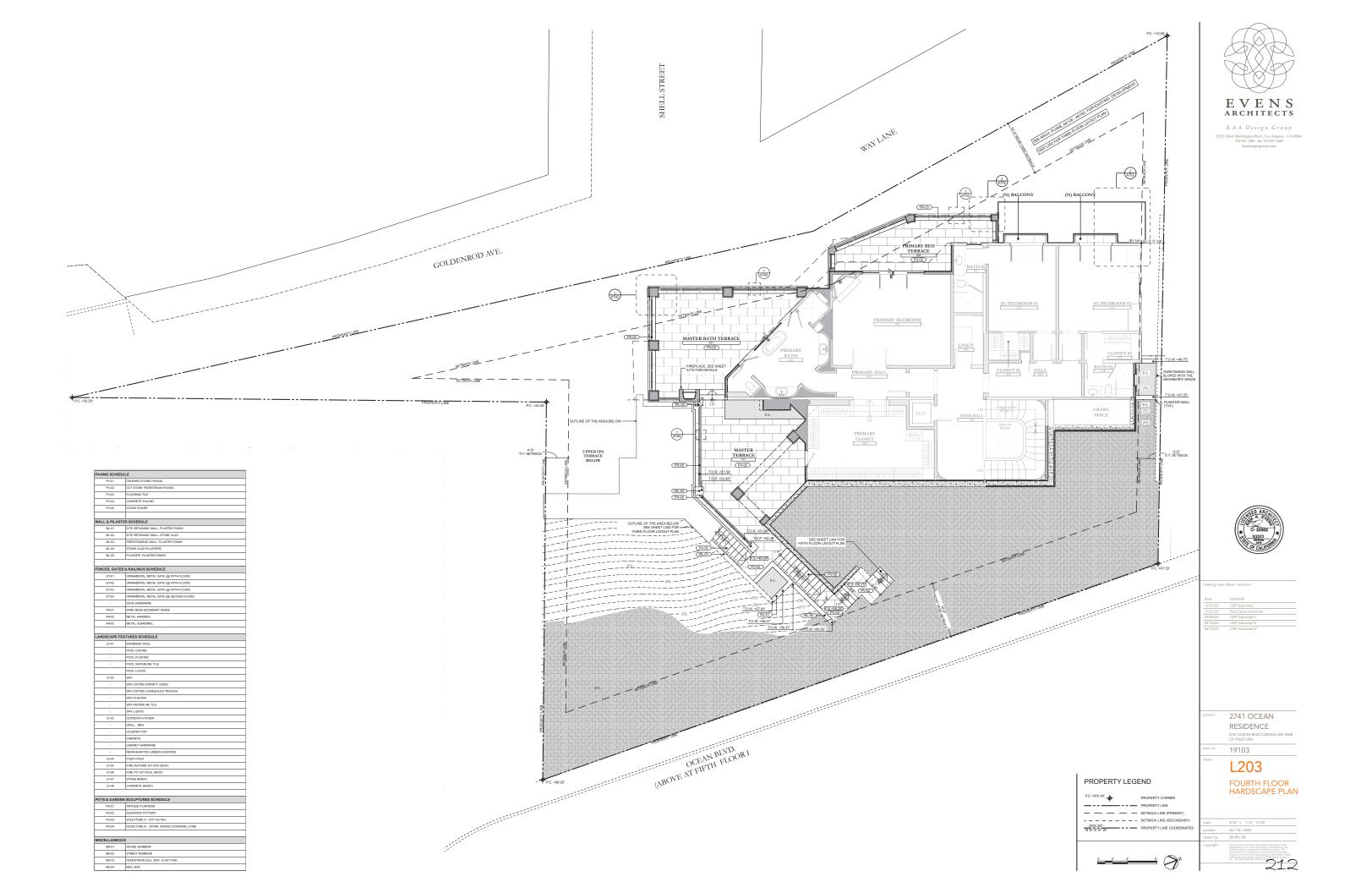
drawn by: 5P, RH, EB

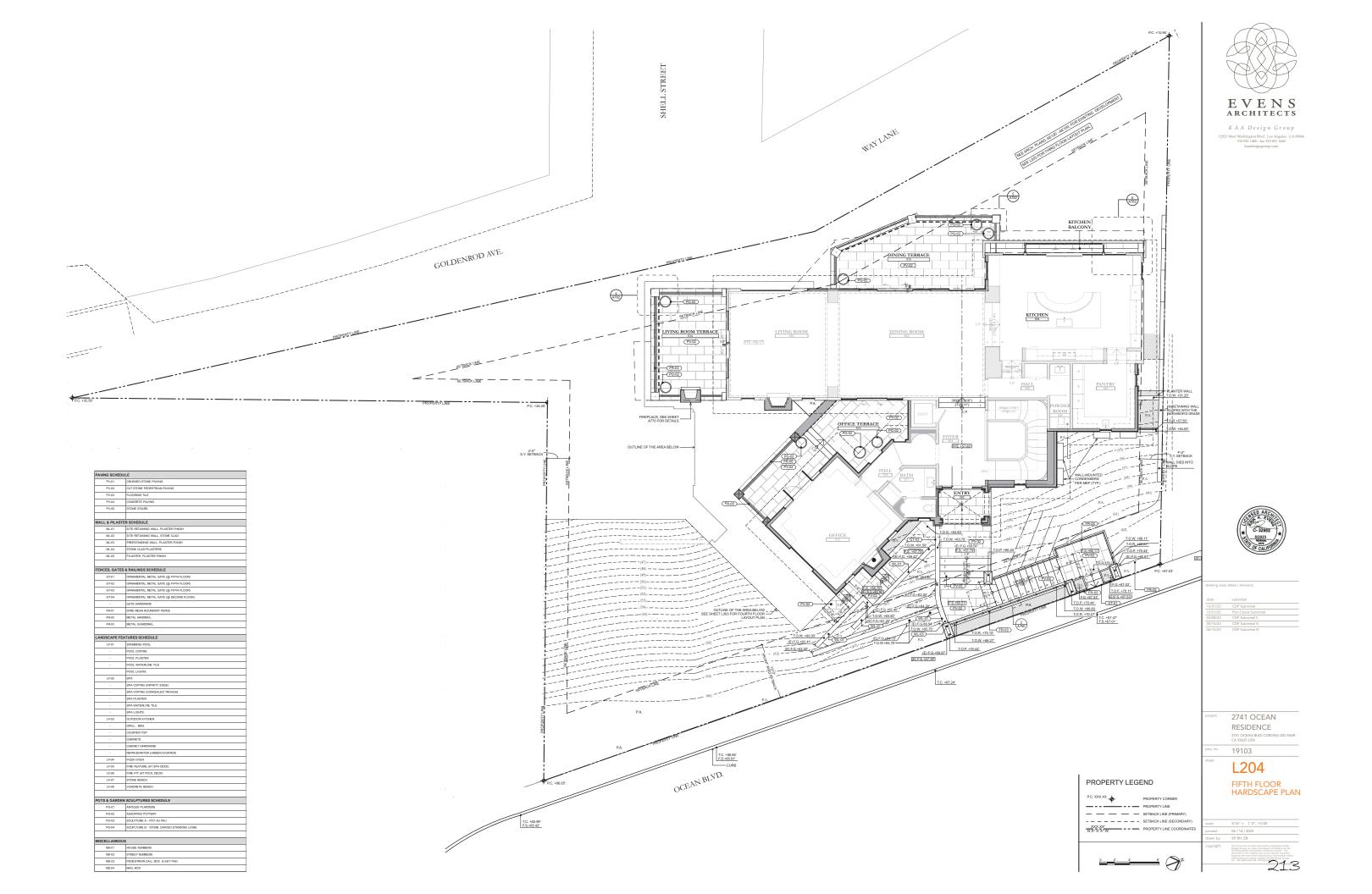
Copyright: The document combine of formation properties y to a feet of the combine of th

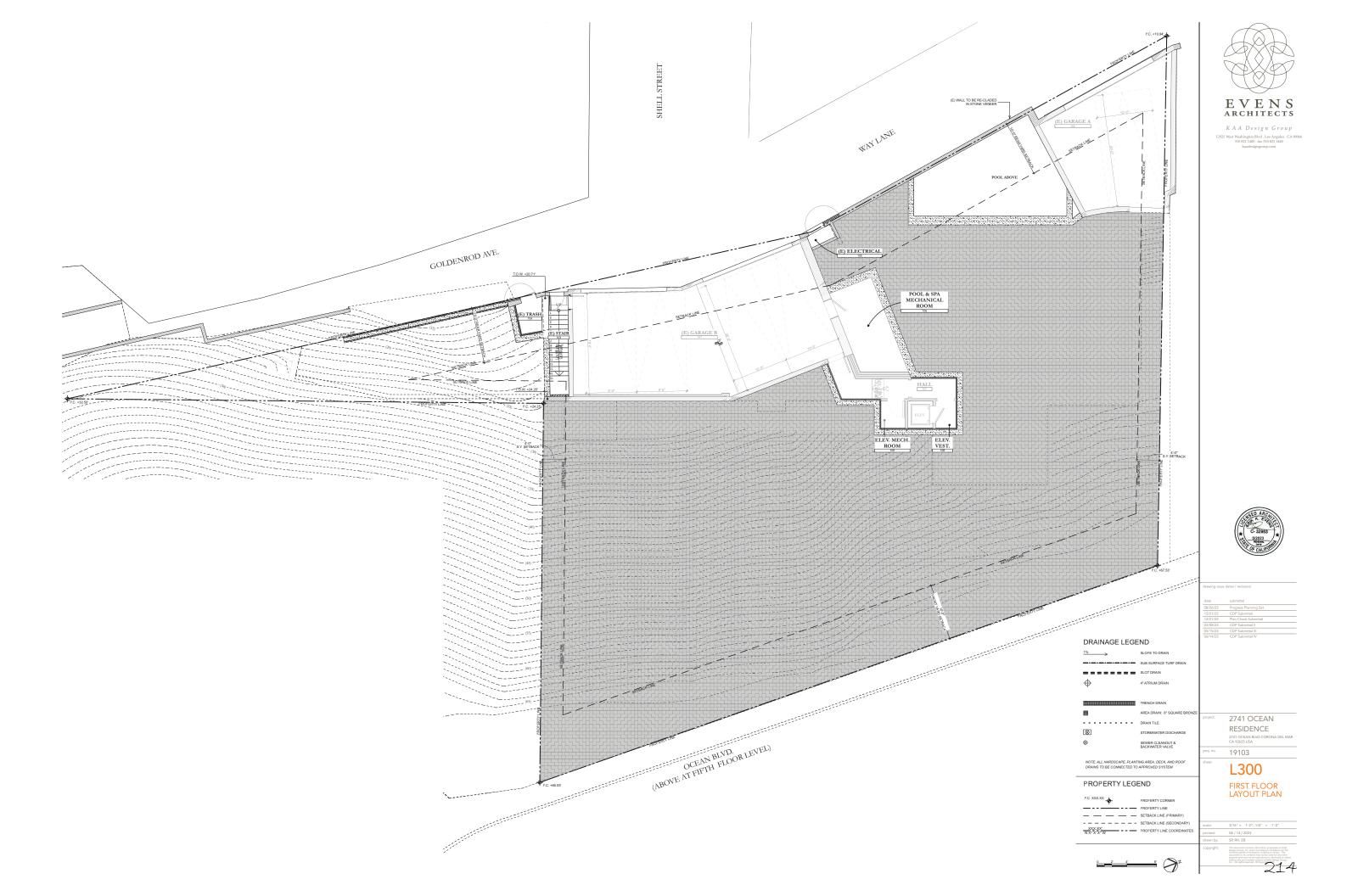


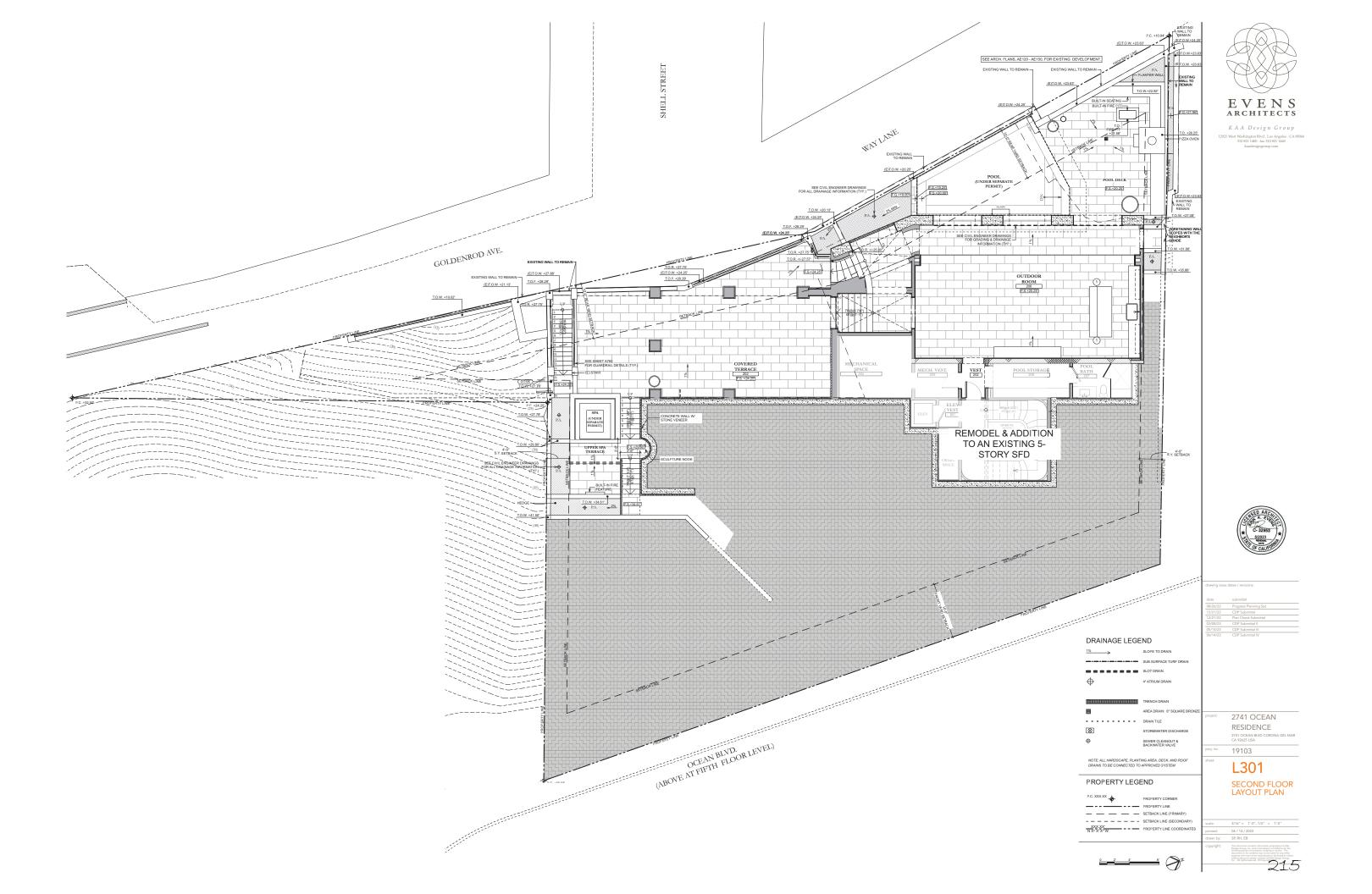


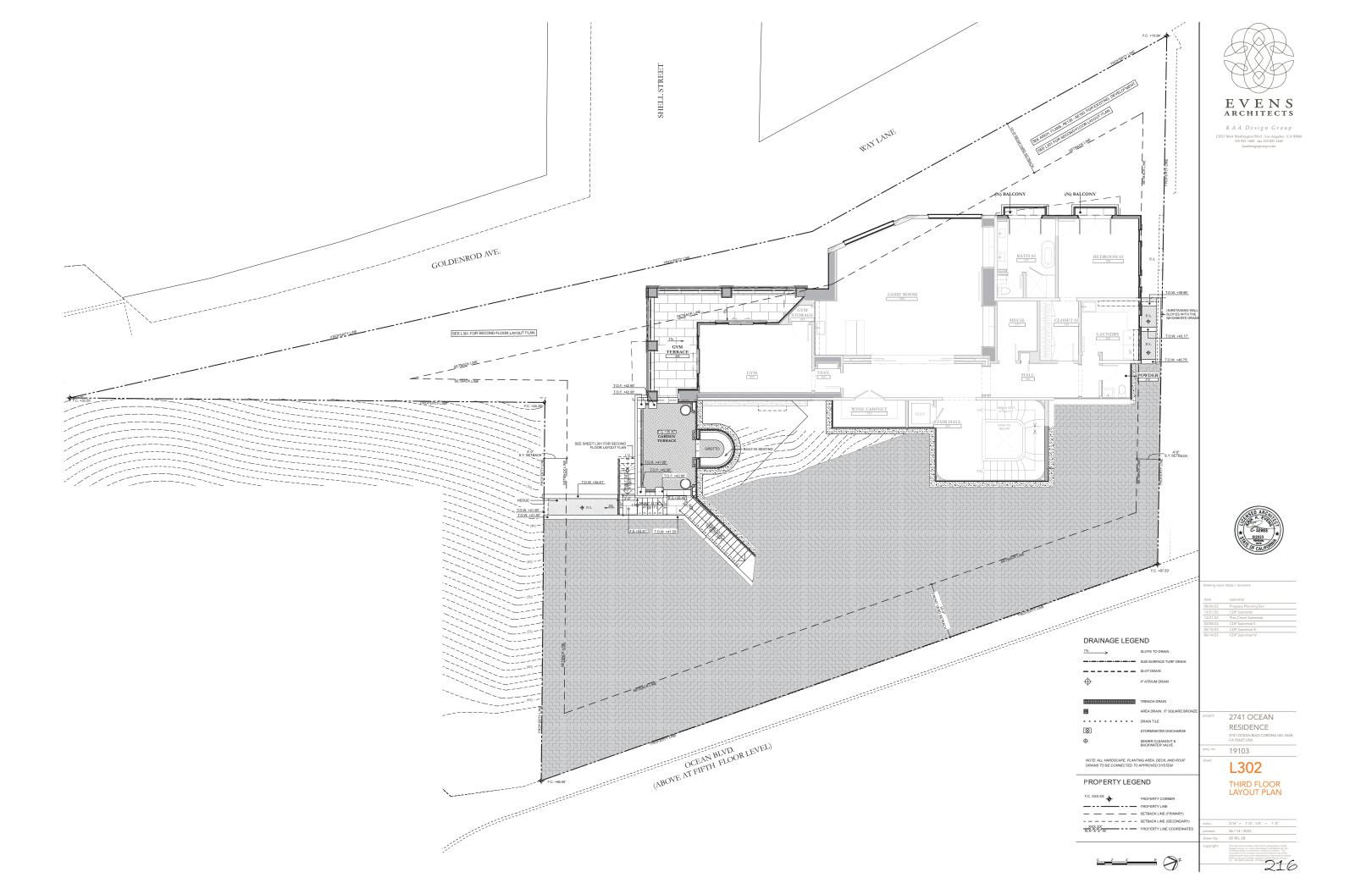


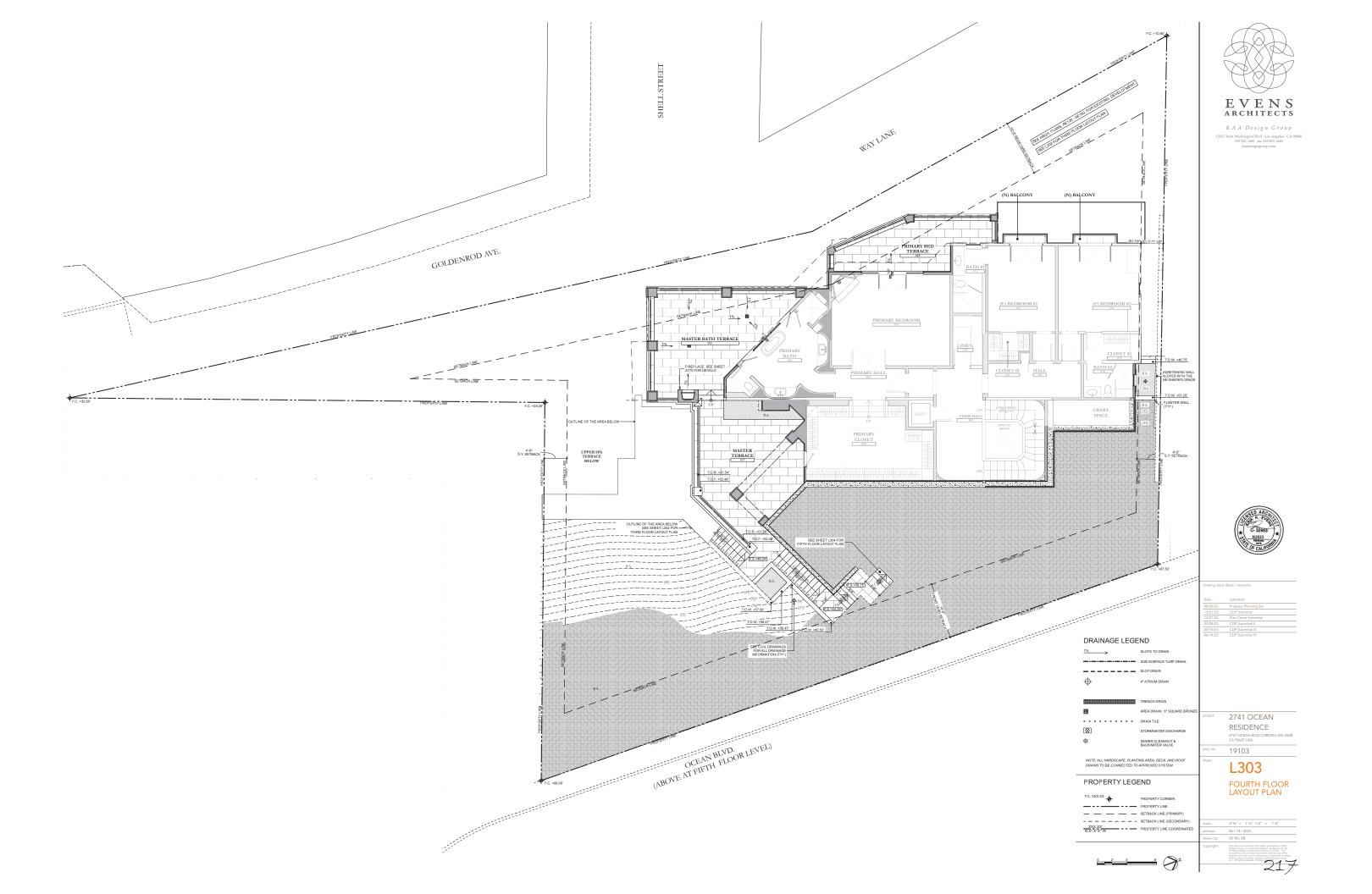


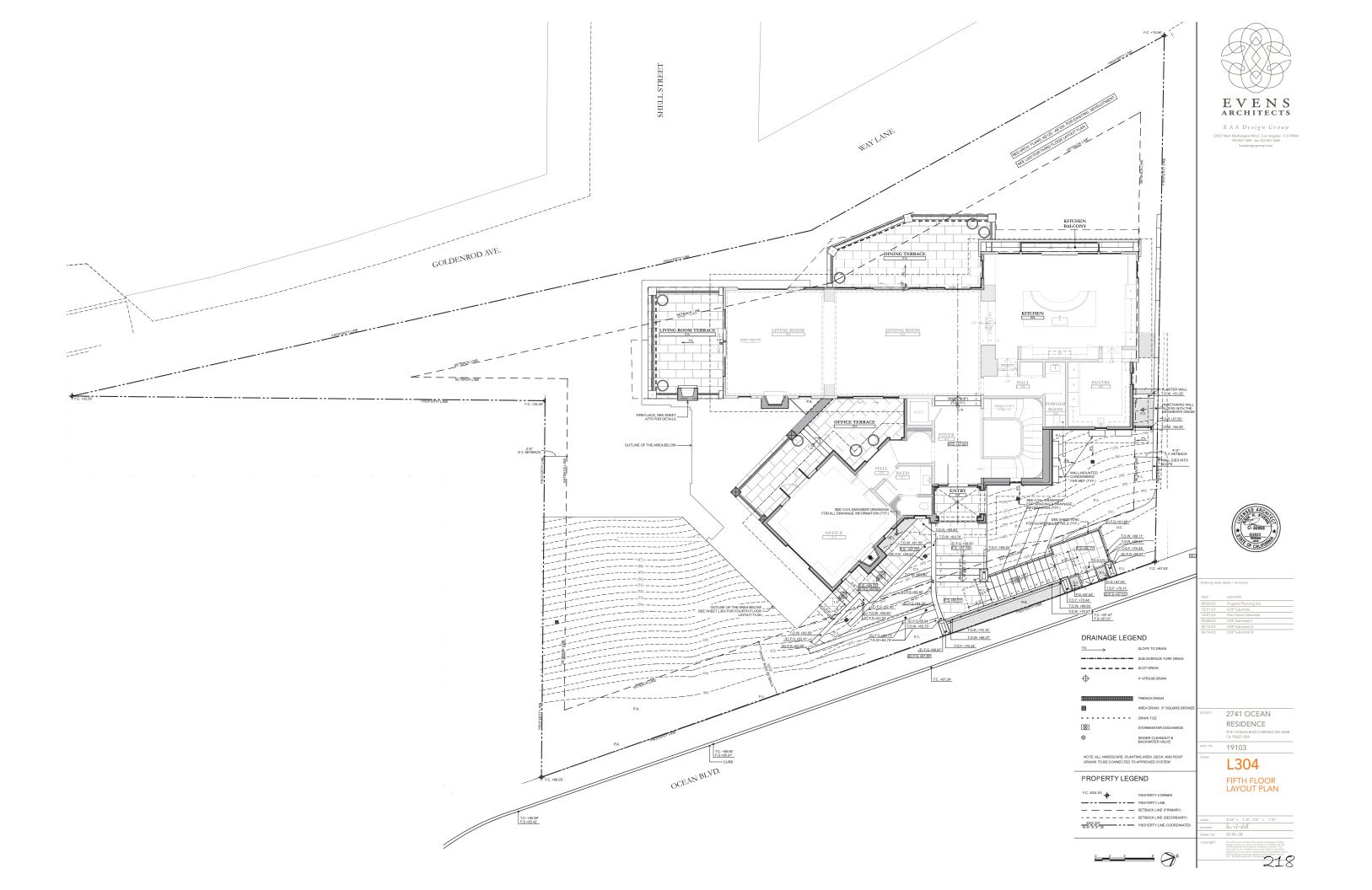












## IRRIGATION NOTES (AS APPLICABLE)

- 1. GENERAL ALL WORK SHALL BE IN ACCORDANCE WITH APPLICABLE CODES AND THESE PLANS. THE CONTRACTOR SHALL APPLY FOR ALL MILIS AND PAY SAME. THE CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS SHOWN ON THE PLANS AT THE SITE PRIOR TO COMMENCEMENT OF ANY WORK UNDER THIS CONTRACT.
- OF ANY WORK UNDER THIS CONTRACT.

  1.B. THE CONTRACTOR SHALL CARRY ALL WORKERS COMPENSATION, PUBLIC LIABILITY AND PROPERTY DAMAGE INSURANCE, AS REQUIRED BY THE OWNER AND/OR GOVERNING AGENCY.
- REQUIRED BY THE OWNER AND/OR GOVERNING AGENCY.

  SOPE OF WORK UNLESS OTHERWISE SPECIFIED, THE CONSTRUCTION OF IRRIGATION SYSTEMS SHALL INCLUDE THE FURNISHING, INSTALLING AND TESTING OF ALL POINTS OF CONNECTION, BACKFLOW DEVICES, AND MAINLINE, AND THE FURNISHING AND INSTALLING OF CONTROLLERS, ELECTRIC CONTROL, VALVES, OTHER SPECIFIED VALVES, LATERAL LINES, RISERS AND FITTINGS, SPRINKER, HEADS, AND DRIP LINES, AND EXCAVATION AND BACKFLLAND HOTES. THE CONTRACTOR SHALL FURNISH ALL LABOR, MATERIAL, EQUIPMENT PROPERTY, TRANSPORTATION, AND PERFORM ALL OPERATIONS REQUIRED FOR A COMPLETE AND OPERAGE IRRIGATION SYSTEM AS INDICATED ON, OR RESPONMENT IMPLED THE DRAWINGS, REQUIRED FOR A COMPLETE AND OPERAGE IRRIGATION SYSTEM AS INDICATED ON, OR RESPONMENT IMPLED THE DRAWINGS, REQUIRED FOR A COMPLETE AND OPERAGE INFORMATION FOR THE PROPERTY. THE REPORT OF THE PROPERTY OF THE PRO
- CHECK AND VERIFY ALL SITE CONDITIONS AND UTILITY LOCATIONS PRIOR TO ANY SITE WORK. IF IT IS FOUND THAT THE SITE VARIES FROM THE DRAWINGS, NOTIFY THE LANDSCAPE ARCHITECT. THE LANDSCAPE ARCHITECT SHALL DECIDE ALL QUESTIONS RELATING TO THE INTERPRETATION OF THE DRAWINGS AND THE ACCEPTABLE PULPILLMENT OF THE CONTRACT.
- 4. COORDINATE ALL IRRIGATION WORK WITH PLANTING AND GRADING OPERATIONS TO AVOID ANY CONFLICT WITH PLANTING PITS, DRAINAGE SWALES, ETC.
- 5. PIPING SHOWN ON THE PLANS IS ESSENTIALLY DIAGRAMMATIC. CONTRACTOR SHALL ROUTE PIPING TO AVOID CONFLICT WITH STATIONARY ELEMENTS AND IN SUCH A MANNER AS TO CONFORM WITH THE VARIOUS BETAILS AND DESIGN INTENT OF THESE PLANS. WHERE TREES LIGHT STANDARDS, OR OTHER PHYSICAL OBSTRUCTIONS EXIST, THE PIPING AND SPRINKLER HEAD LOCATIONS SHALL BE ADJUSTED AND / OR RELOCATED AS NECESSARY TO OBTAIN FULL COVERAGE WITH MINIMAL OVER SPRAY.
- THE CONTRACTOR SHALL AT ALL TIMES PROTECT HIS WORK FROM DAMAGE AND THEFT AND REPLACE ALL DAMAGED OR STOLEN PARTS
  AT HIS EXPENSE UNTIL THE WORK IS ACCEPTED IN WRITING BY THE OWNER AND/OR GOVERNING AGENCY.
- 7. EXTREME CARE SHALL BE EXERCISED IN EXCAVATING AND WORKING NEAR EXISTING UTILITIES. CONTRACTOR SHALL VERIPY THE LOCATION AND CONDITION OF ALL UTILITIES AND BE RESPONSIBLE FOR ANY DAMAGE. CONTRACTOR SHALL CONTACT UNDERGROUND SERVICE ALERT A MINIMUM OF TWO WORKING DAYS PRIOR TO DIGGING.
- 8. THE CONTRACTOR SHALL KEEP THE PREMISES CLEAN AND FREE OF EXCESS EQUIPMENT, MATERIALS, AND RUBBISH INCIDENTAL TO HIS
- 9. THE IRRIGATION DESIGN IS BASED ON THE METER AND/OR POINT OF CONNECTION SIZE AND WATER PRESSURE INDICATED ON THE WATER SOURCE / POINT OF CONNECTION NOTE ON THE PLANS. CONTRACTOR SHALL VERIFY THE PRESSURE PRIOR TO CONSTRUCTIO SHOULD A DISCREPANCY EXIST, NOTIFY THE LANDSCAPE ARCHITECT PRIOR TO BEGINNING CONSTRUCTION. DO NOT PROCEED WITH ANY IRRIGATION INSTALLATION WORK UNTIL ANY AND ALL WATER SUPPLY AND PRESSURE ISSUES HAVE BEEN RESOLVED.
- 10. CONTRACTOR SHALL MAKE POINT(S) OF CONNECTION (POC) AS NOTED ON THE PLANS. ALL FEES AND LOCAL REQUIREMENTS SHALL BE THE RESPONSIBILITY OF THE LANDSCAPE CONTRACTOR.
- IRRIGATION CONTRACTOR SHALL COORDINATE 120V AC POWER TO FINAL CONTROLLER LOCATION WITH GENERAL CONTRACTOR AND ELECTRICAL CONTRACTOR AS NECESSARY. IRRIGATION CONTRACTOR SHALL PAY ALL ASSOCIATED FEES FOR ELECTRICAL SERVICE. IRRIGATION CONTRACTOR SHALL BE RESPONSIBLE FOR MAKING ALL FINAL CONTROLLER CONNECTIONS PER LOCAL CODES.
- 12. CONTRACTOR SHALL PROVIDE ALL EQUIPMENT REQUIRED TO PERFORM A MAINLINE PRESSURE TEST. THE HYDROSTATIC TEST SHALL HOLD A MINIMUM OF 150 PSI FOR 3 HOURS OR MORE. CONTRACTOR SHALL CONTACT THE OWNER'S REPRESENTATIVE A MINIMUM OF 48 HOURS IN ADVANCE OF THE TEST FOR CERTIFICATION.
- 13. CONTRACTOR SHALL THOROUGHLY FLUSH THE ENTIRE MAINLINE PRIOR TO INSTALLING REMOTE CONTROL VALVES. ALL LATERAL LINES SHALL BE COMPLETELY FLUSHED PRIOR TO INSTALLING HEADS AND NOZZLES. FOR DRIP SYSTEMS, ALL PIPING / TUBING DOWNSTREAM OF THE CONTROL VALVE SHALL BE THOROUGHLY FLUSHED PRIOR TO 'CLOSING' SYSTEM (FOR GRID SYSTEMS), OR BEFORE INSTALLING FLUSH VALVES.
- 14. ALL WIRES SHALL BE SOLID COPPER, PLASTIC INSULATED, U.F. DIRECT BURIAL WIRE. ALL COMMON WIRE SHALL BE AWG #12 WHITE; ALL CONTROL WIRES SHALL BE AWG #14 RED OR BLACK. CONTROL WIRES SHALL HAVE SEPARATE COLOR CODED COMMON WIRES AND CONTROL WIRES WHEN TWO OR MORE CONTROLLERS AND ON THE PROJECT.
- 15. ALL CONTROL WIRES AND IRRIGATION PIPING THAT RUNS UNDER HARDSCAPE / PAVING SHALL BE ENCASED IN PVC SLEEVES PER THE LEGEND. SLEEVES SHALL BE STRAIGHT RUNS OF PVC PIPE WITH NO FITTINGS INSTALLED UNDER HARDSCAPED AREAS. IF WIDTH OF HARDSCAPE EXCEEDS A FULL LENGTH OF PIPE, USE BELLED END CONNECTION OR COUPLER WITHIN SLEEVE, ENSURING SLEEVE IS LARGE ENCOUGH FOR THE ADDED DIAMETER OF THE
- 16. THE FINAL LOCATION FOR CONTROL VALVES AND QUICK COUPLERS SHALL BE APPROVED IN THE FIELD BY THE LANDSCAPE ARCHITECT OR THE OWNER'S AUTHORIZED REPRESENTATIVE. ALL VALVES AND QUICK COUPLERS SHALL BE LOCATED IN SHRUB AREAS WHEREVER POSSIBLE.
- 17. THE CONTRACTOR SHALL HEAT BRAND VALVE NUMBERS OR OTHER MARKINGS AS CALLED FOR IN THE IRRIGATION DETAILS ON INSIDE AND OUTSIDE OF ALL VALVE BOX LIDS.
- 18. ALL BRASS OR GALVANIZED CONNECTIONS SHALL BE COATED WITH ITERLON TAPE OR APPROPRIATE PIPE JOINT COMPOUND. ALL PVC TO PVC THEADED CONNECTIONS SHALL BE COATED WITH TEFLICN TAPE. NO PIPE DOPE IS ALLOWED AT VALVE OR SPRINLER HEAD CONNECTIONS. ANY PVC TO METAL CONNECTIONS SHALL BE MADE WITH A MALE THREADED PVC FITTING AND A FEMALE THREADED METAL FITTING.
- ALL PVC SOLVENT-WELD CONNECTIONS SHALL BE MADE WITH SOLVENT-WELD MATERIALS AS RECOMMENDED BY THE PIPE MANUFACTURER. SOLVENT-WELD PRIMER SHALL BE APPLIED AT ALL CONNECTIONS.
- 21. ALL PRESSURE SUPPLY LINES AND CONTROL WIRES TO HAVE 18"-24" MINIMUM COVER. ALL LATERAL LINES TO HAVE 12" MINIMUM COVER. FOR RECYCLED WATER SYSTEMS, PIPE DEPTH TO BE DETERMINED BY THE LOCAL GOVERNING AGENCY.
- 22. MAINLINE AND WIRE SLEEVING TO HAVE 24" MINIMUM COVER FROM TOP OF SLEEVE TO BOTTOM OF AGGREGATE BASE. MAINLINE AND WIRE SLEEVING LINDER ALL VEHICULAR ACCESS WAYS TO HAVE 38" MINIMUM COVER FROM TOP OF SLEEVE TO BOTTOM OF AGGREGAT BASE. LATERAL LINE. SLEEVING OF THE WAY TO THE ACCESS WAYS TO HAVE 38" MINIMUM COVER FROM TOP OF SLEEVE TO BOTTOM OF AGGREGATE EAS CONTRACTOR SHALL INSTALL SLEEVING LINDER ALL VEHICULAR ACCESS WAYS TO HAVE 38" MINIMUM COVER FROM TOP OF SLEEVE TO BOTTOM OF AGGREGATE BAS CONTRACTOR SHALL INSTALL SLEEVING LINDER ALL HAVE AGGREGATE WINDER OR GREATER OLD TO GRAPHIC CLARITY, NOT ALL SLEEVES MAY BE SHOWN ON THE PLANS. CONTRACTOR SHALL INSTALLAL SLEEVING PRIOR TO HARDSCAPE AND PAVING INSTALLATION.
- 23. THE RADIUS OF EACH HEAD IS TO BE ADJUSTED SO THAT HEAD-TO-HEAD COVERAGE IS MAINTAINED. BUT OVER SPRAY ON BUILD WALKS, WALLS, AND OTHER HARD SURFACES IS MINIMIZED. THIS SHALL INCLUDE, BUT NOT BE LIMITED TO USING THE BEST NOZZLE RADIUS AND PATTERN USING PRESSURE COMPENSATING DEVICES FOR NOZZLES, USING ADJUSTABLE NOZZLES, OR USING THE RADIUS ADJUST ASREY ON INDIVIDUAL NOZZLES.
- 24. FINE TUNE EACH CONTROL VALVE FOR OPTIMUM OPERATION. THIS SHALL BE DONE BY TURNING DOWN THE FLOW CONTRO. VALVE UNTIL SYSTEM PERFORMANCE STARTS TO SUFFER. AT THAT POINT, OPEN UP VALVE FLUOR CONTROL ABOUT ONE-HUNTIL THE VALVE IS JUST OPEN ENDUGH FOR DESIRED OPERATION.
- 25. CONTRACTOR SHALL INSTALL 2 EXTRA WIRES FROM CONTROLLER(S) TO EACH END OF THE MAINLINE. WIRES SHALL COME UP INTO ALL VALVE BOXES ALONG THE MAINLINE ARTH WITH 30" EXPANSION COILS IN EACH BOX. SPARE WIRES SHALL BE COLOR-CODED DIFFERENTLY THAN OTHER CONTROL WIRES FOR EACH CONTROLLER.
- 26. UPON COMPLETION OF THE PROJECT, THE CONTRACTOR IS TO TURN OVER TO THE OWNER THE FOLLOWING:
  26.a. A REPRODUCIBLE SET OF "AS-BUILT" DRAWINGS AND CONTROLLER CHART.
  26.b. 2 KEYS FOR EACH CONTROLLER F (CONTROLLER ENCLOSURE (AS APPLICABLE).
  26.c. 2 QUICK COUPLER KEYS AND MATCHING HOSE SWIVELS.
  26.d. 4 OF EACH SPRINKLER HEAD SPECIFIED (AS APPLICABLE).
  26.d. 100' OF EACH DRIP LINE TUBING SPECIFIED (AS APPLICABLE).
  26.f. 100' OF EACH DRIP LINE TO HEAD SPECIFIED (AS APPLICABLE).

- RECORD DRAWINGS THE CONTRACTOR SHALL PROVIDE AND KEEP UP TO DATE A COMPLETE RECORD SET OF PRINTS WHICH SHALL E CORRECTED DAILY AND SHOW EVERY CHANGE FROM THE ORIGINAL DRAWINGS. PRIOR TO FINAL INSPECTION, THE CONTRACTOR SHALL PROMED FROM THE RECORD SET TO A BLOCK-LINE PRINT PROCURED FROM THE OWNER. ALL UNDERSHALD HE OWNER, ALL DE NEAT AND LEGIBLE. LOCATING THE FOLLOWING TEMS FROM PERMANENT FOINTS OF REFERENCE: SHLT-OFF VALVES, MAINLURA CONTROLL WIRE ROUTING, POCK A BOOKER OF THE POLYCE, CONTROL LIVER, QUICK COUPTING VALVES, AND OTHER PERTINE
- 28. "CONTROLLER CHART" UPON APPROVAL OF THE FINAL RECORD DRAWINGS, PROVIDE ONE CHART FOR EACH CONTROLLER INSTALLED.
  28.A. THE CHART IS TO BE A REDUCED COPY OF THE APPROVED RECORD DRAWING (A BLACK-LINE PRINT REDUCED TO THE MAXIMUM SIZE
  THE CONTROLLER DOOR WILL ALLOW, COLORED WITH A DIFFERENT COLOR FOR EACH VALYE STATION'S AREA OF COVERAGE,
  28.B. WHEN COMPLETED AND APPROVED, THE CHART SHALL BE LAMINATED BETWEEN TWO (2) PIECES OF 20 MIL. CLEAR PLASTIC AND
  MOUNTED ON THE INSIDE OF THE CONTROLLER DOOR USING VELCEN TAPE OR EQUAL.

- 29. DRIP LINE IRRIGATION
  29. A DRIP LINE TRIGATION
  29.4. RIPI DIE TUBING IS SHOWN ON THE PLANS IN THE SUGGESTED LAYOUT. CONTRACTOR SHALL ADJUST LAYOUT AS DETERMINED NECESSARY IN THE FIELD TO MATCH THE ACTUAL SITE CONDITIONS, DIMENSIONS, ETC.
  28.8. ALL DRIP LINE SYSTEMS SHALL ES INSTALLED PET THE MANUPLACTURERS RECOMMENDATIONS AND DIRECTIONS. THIS SHALL INCLUDE, BUT NOT BE LIMITED TO SOIL TYPE CONSIDERATION, PLANT TYPE CONSIDERATION, SLOPES, TYPICAL TUBING LAYOUT, SUPPLY HEADERS, LIVEN HEADERS, AIR-RELEASE VALVES, FLUSH NALVES, SOIL STAPLES, AND OPERATION INDICATORS, ETC.
  29.C. EACH DRIP LINE SYSTEM SHALL HAVE A DRIP ZONE VALVE ASSEMBLY THAT INCLUDES A PRESSURE REGULATOR AND IN-LINE FILTER PER THE IRRIGATION LEGEND.

- 29. C. PACH DRIF LINES SYSTEM SHAPE A DRIF ZONE VALVE ASSEMBLY THAI INCLUDES A PRESSURE REGULATOR AND IN-LINE FILLER

  29. EXTEND POVE LATERAL LINE PIPPIN PER IRRIGATION LEGEND FROM THE DRIP ZONE VALVE WITO THE PLANTING AREAS, ALL SUPPLY
  HEADERS AND FLUSH HEADERS SHALL BE PVC PIPPING OR DRIP LINE TUBING AS SPECIFIED ON THE DRAWINGS.
  20. CONNECT THE DRIP LINE TUBING INTO THE PVC / POLY TUBING NEADERS PER THE MANUFACTURERS DIRECTIONS, USING TITTINGS
  AS SUPPLIED BY THE MANUFACTURER OF THE DRIP LINE TUBING.
  20. F. DRIP LINE TUBING RINES SHALL BE SPACED AT APPROXIMATELY 12" O.C. OR AS NOTED ON THE PLANS.
  20. G. TUBING SHALL RIN GENERALLY PARALLEL TO THE LONG AXIS OF THE PLANTING AREAS. THE EXCEPTION TO THIS WOULD BE SLOPED

  20. G. TUBING SHALL RIN GENERALLY PARALLEL TO THE LONG AXIS OF THE PLANTING AREAS. THE EXCEPTION TO THIS WOULD BE SLOPED

  20. G. TUBING SHALL RIN GENERALLY PARALLEL TO THE LONG AXIS OF THE PLANTING AREAS. THE EXCEPTION TO THIS WOULD BE SLOPED

  21. FLUSH WAY MES SHALL BE INSTALLED A THE TERMINAL ENDS ANDIOR LOW POINTS OF ZOACH ZONE. REFER TO THE

  MANUFACTURERS DIRECTIONS FOR THE COUNTITY OF FLUSH YALVES AND RIR RELEASE

  VALVES, WHERE REQUIRED FOR BURIED SYSTEMS, SHALL BE INSTALLED AT THE HIGH POINTS OF ZOACH ZONE. REFER TO THE

  MANUFACTURERS DIRECTIONS FOR THE COUNTITY OF FLUSH YALVES AND RIR RELEASE FOR THE PLANTING AND REPRESSED FOR EACH ZONE.

  20. DRIP LINE TUBING SHALL BE SCRATCHED INTO FINISH GRADE 2"-3" DEEP, STAPLED DOWN, BACKFILLED, AND COVERED WITH MULCH

  PER THE PLANTING THE PLA

- PER THE PLANTING PLAN.
  29. LEACH DRIP LINE ZONE SHALL INCLUDE AN OPERATION INDICATOR. THE OPERATION INDICATOR SHALL BE INSTALL AT THE FARTHEST POINT AWAY FROM THE ZONE DRIP VALVE ASSEMBLY.
  29. K. ALF HITINGS USED FOR DRIP LINE TUBING CONNECTIONS AND DRIP LINE TUBING TO PVC CONNECTIONS SHALL BE AS PRODUCED AND SUPPLIED BY THE MANUFACTURER OF THE DRIP LINE TUBING.

	EQUIPMENT LEGEND		
SYMBOL	MANUFACTURER / MODEL NUMBER	SIZE	DETAIL
M	LOT WATER METER - VERIFY IN THE FIELD AND ADJUST AS NECESSARY	3/4"	N/A
BP	FEBCO LF825YA SERIES REDUCED PRESSURE BACKFLOW PREVENTER - INSTALL IN 'OUT OF VIEW' LOCATION - WITH REGULATOR AND STRAINER PER DETAIL - PER ALL LOCAL CODES	3/4"	А
MV	SUPERIOR 3200-100 SERIES NORMALLY CLOSED BRASS MASTER CONTROL VALVE	1"	В
FS	FLOMEC QS-200-10 ULTRASONIC FLOW SENSOR IN SCH 80 PVC TEE	1"	С
C	HUNTER A2C-1200-SS + (2) A2M-200 + A2C-WIFI AUTOMATIC WEATHER-BASED CONTROLLER WITH ET / RAIN SENSOR LISTED BELOW - WALL MOUNT - DETERMINE FINAL LOCATION IN FIELD	24 STATION	D
ET	HUNTER SOLAR SYNC WIRELESS ET SENSOR / RAIN SENSOR FOR 'SMART' OPERATION	N/A	E
NOT SHOWN	UF DIRECT BURIAL CONTROL WIRE WITH WATERPROOF CONNECTIONS	14 GA UF	F
NOT SHOWN	HUNTER 'ROAM' REMOTE CONTROL SYSTEM - PROVIDE TO OWNER / MAKE AVAILABLE FOR ALL IN	ISPECTIONS	
H	NIBCO T-580-70 TWO-PIECE BRONZE BALL VALVE - FULL PORT	LINE SIZE	G
•	HUNTER HQ-33D-LRC QUICK COUPLING VALVE WITH LOCKING YELLOW VINYL COVER	3/4"	Н
€	HUNTER ICV-101G-FS ELECTRIC CONTROL VALVE WITH FILTER SENTRY / FLOW CONTROL	1"	- 1
0	HUNTER ICZ-101-LF-40 ELECTRIC CONTROL DRIP VALVE ASSEMBLY WITH 1" ICV VALVE AND 1" PRESSURE REGULATING FILTER (PRESSURE REGULATOR IS 40 PSI AND FILTER IS 150 MESH)	1"	J
	BRASS OR COPPER IRRIGATION LINE BETWEEN WATER METER AND POC EQUIPMENT	1"	К
100 JUL 300 JU	SCH 40 PVC IRRIGATION MAINLINE (1 1/2" AND SMALLER) - 18" MINIMUM COVER	1"	К
	PURPLE SCH 40 PVC NON-PRESSURE LATERAL LINE - 12" MINIMUM COVER	CHART SIZE	К
=====	PURPLE SCH 40 PVC PIPE SLEEVING - EXTEND 6" PAST EDGE OF HARDSCAPE - 18" MIN. COVER	CHART SIZE	L
	PURPLE SCH 40 PVC WIRE SLEEVING - EXTEND 6" PAST EDGE OF HARDSCAPE - 18" MIN. COVER	CHART SIZE	L
	NETAFIM TLHCVXR-RW7-12xx DRIP LINE TUBING WITH 0.77 GPH EMITTERS AT 12" O.C ROWS OF AT 12"-14" O.C BURY TUBING 2"-3" DEEP - STAPLE DOWN BEFORE BACKFILL - CHECK VALVE+CC		M/N/O
	FIELD FABRICATED MANUAL FLUSH VALVE / OPERATION INDICATOR	1/2"	0
•	RAIN BIRD 1806-SAM-PRS SPRINKLER WITH RAIN BIRD SQ-HLF NOZZLE - 2 PER TREE	0.2 GPM	Р
SWI	SPARE WIRE STUB-OUT - LOCATE (2) 14 UF WIRES IN VALVE BOX - SEPARATE COLOR THAN ALL O	THER WIRES	Q

3/4" PIPE 1 1/4" SLEEVE 1-8 WIRES 1/	ATERAL PIPE SIZING	SCH 40 PVC SLEEVING CHART
11/4 PIPE	1 1" PIPE 1 1 1/4" PIPE 1 1 1/2" PIPE 1 2 1/2" PIPE 1 2 1/2" PIPE 1 3" PIPE 1 4" PIPE 1 6" PIPE	1/2" SLEEVE 9-16 WIRES 3/4 SLEEVE 17-26 WIRES 1 1/12" SLEEVE 27-38 WIRES 1 11/4 SLEEVE 39-54 WIRES 1 17 SLEEVE 55-100 WIRES 5 SLEEVE 100+ WIRES 3 SLEEVE N/A 4

PE PE PE PE PE	Underground Service Alert
PE	227-2600
PΕ	
PE PE	TWO WORKING DAYS BEFORE YOU DIG

				HYDROZONE INFORM	IATION MATE	XIX			
Hydrozone Number	Station Number	Area (sq. ft.)	Percent of Area	Description / Plant Type	Plant Factor (WUCOLS)	Irrigation Type	Zone Flow (GPM)	Precipitation Rate (in./hr.)	Zone Pressur
1	1	55	3.8%	Level 2 Planters	Low	Drip Line	1	1.00	25 psi
1	2	95	6.6%	Level 2 Planters	Low	Drip Line	1	1.00	25 psi
1	3	95	6.6%	Level 2 Planters	Low	Drip Line	1	1.00	25 psi
Trees	4	0	0.0%	Supplemental Tree Sprinkler	Low	Spray	1	1.50	25 psi
2	5	25	1.7%	Level 3 Planters	Low	Drip Line	1	1.00	25 psi
2	6	35	2.4%	Level 3 Planters	Low	Drip Line	1	1.00	25 psi
3	7	20	1.4%	Level 4 Planters	Low	Drip Line	1	1.00	20 psi
3	8	15	1.0%	Level 4 Planters	Low	Drip Line	1	1.00	20 psi
Trees	9	0	0.0%	Supplemental Tree Sprinkler	Low	Spray	4	1.50	20 psi
4	10	565	39.5%	Level 5 Planters	Low	Drip Line	6	1.00	20 psi
4	11	140	9.8%	Level 5 Planters	Low	Drip Line	2	1.00	20 psi
Trees	12	0	0.0%	Supplemental Tree Sprinkler	Low	Spray	2	1.50	20 psi
Trees	13	0	0.0%	Supplemental Tree Sprinkler	Low	Spray	2	1.50	20 psi
5	n/a	385	26.9%	Pool / Spa	High	Direct Fill	n/a	n/a	n/a
	TOTAL =	1,430	100.0%			Peak Flow =	6		

Reference Evapotranspiration (ETo) 44.9		(CORONA DEL MAR) MAW			A = Eto X 0.62 X (0.55 X LA)		
Hydrozone Number	Plant Factor (PF)	Irrigation Method	Irrigation Efficiency (IE)	(PF/IE)	Landscape Area (sq. ft.)	(PF/IE) x Area	Estimated Total Water Use (ETWU)
REGULAR LANDSCAPE AREAS							
HZ 1 level 2	0.25	Drip Line	0.81	0.31	245	76	2,105
HZ 2 Level 3	0.25	Drip Line	0.81	0.31	60	19	516
HZ 3 Level 4	0.25	Drip Line	0.81	0.31	35	11	301
HZ 4 Level 5	0.25	Drip Line	0.81	0.31	705	218	6,057
HZ 5 Pool / Spa	1.00	n/a	1.00	1.00	385	385	10,718
				Total	1,430	708	
						ETWU TOTAL	19,696
				ΜΑΧΙΜΙΙΜ ΑΡΡ	LIED WATER ALLO	WANCE (MAWA)	21.895

POINT OF CONNECTION

MAKE IRRIGATION POINT OF CONNECTION AT LOT WATER METER. VERIFY EXACT LOCATION IN THE FIELD AND ADJUST AS NECESSARY. INSTALL

SHUT-OFF VALVE AT POC FOR IRRIGATION SYSTEM ISOLATION. INSTALL REDUCED PRESSURE BACKFLOW PREVENTER DOWNSTREAM OF

SHUT-OFF VALVE PER ALL LOCAL CODES. FINAL BACKFLOW PREVENTER LOCATION TO BE APPROVED IN THE FIELD BY THE OWNER OR

SHOT OFF VALVE PER ALL COLAL CODES. FINAL BACKFLOW PREVENTER LOCATION TO BE APPROVED IN THE FIELD BY THE OWNER OR

SHEED THE SAME AS THE MANINE SYZE DOWNSTREAM OF THE POC EQUIPMENT. INSTALL PRESSURE REGULATOR WITH BACKFLOW

PREVENTER IF STATIC PRESSURE IS GREATER THAN 100 PSILEXTEND 1\* MAINLINE FROM BACKFLOW PREVENTER TO SYSTEMS AS SHOWN ON

THE PLANS, INSTALL BLOW SENSOR DOWNSTREAM OF BACKFLOW PREVENTER AND WIRE TO CONTROLLER PER MANUFACTURERS DIRECTIONS.

MAXIMUM DEMAND IDS GOFM. MINIMUM DESIGN PRESSURE AT NETER IS 8D PSIL CONTRACTOR SHALL VERFY STATIC PRESSURE AT METER

PRIOR TO START OF WORK AND NOTIFY THE LANDSCAPE ARCHITECT IN WIRTHOU RETURN IN STALL VERFY STATIC PRESSURE AT METER

PRIOR TO START OF WORK AND NOTIFY THE LANDSCAPE ARCHITECT IN WIRTHOU REPORT AND SHALL SHAPP AND SHAPP AN

CONTROLLER
INSTALL REPRESENTED CONTROLLER OUTSIDE OF POOL EQUIPMENT ROOM AS SHOWN ON THE PLANS, FINAL CONTROLLER LOCATION TO BE APPROVED IN THE FIELD BY THE OWNERS OR AUTHORIZED REPRESENT ATIVE. THE IRRIGATION CONTRACTOR SHALL COORDINATE 120Y ACPOWER TO THE FINAL CONTROLLER LOCATION WITH GENERAL CONTRACTOR SHALL MAKE ALL FINAL CONNECTIONS FER LOCAL CODGES MOUNT, GROUND, AND WIRE ALL THE CONTROL EQUIPMENT PER THE MANIFACTURERS DIRECTIONS. THESE PLANS, AND PER ALL LOCAL CODE CONTRACTOR TO PROVIDE TO OWNER A COMPLETE HAND-HELD MAINTENANCE REMOTE CONTROLLER HAS AND PER ALL LOCAL CODE.

WEATHER SENSOR IET SENSOR (ARM SHUTLOFF DEVICE)

MISTALL THE WEATHER SENSOR IN THE APPROXIMATE LOCATION SHOWN ON THE PLANS. LOCATE AND MOUNT PER MANUFACTURERS'
DIRECTIONS. FINAL WEATHER SENSOR LOCATION TO BE DETERMINED IN THE FIELD AND PRE-APPROVED BY THE OWNER ANDIOR ARCH
PRIOR TO MOUNTING. ENSURE THE SENSOR IS LOCATED WITHIN WIRELESS RANGE OF THE RIREGATION CONTROLLER. TEST THE SIGNAL
STRENGTH OF THE OWNERLESS COMMUNICATION PRIOR TO MOUNTING. IT IS SUGGESTED TO NOT USE THE AUTOMATIC ET ADJUSTING
FUNCTIONS OF THE CONTROL SYSTEM UNIT. THE PLANT MATERIAL IS FULLY SETABLISHED.

SLEEVING
MAINLINE AND VALVES MAY BE SHOWN OUTSIDE OF PLANTED AREAS FOR CLARITY ONLY. INSTALL ALL IRRIGATION EQUIPMENT IN ADJACENT
PLANTED AREAS EXCEPT WHERE SLEEVING IS SHOWN ON THE PLANS. ALL PIPES AND WIRES THAT MUST RUN UNDER HARDSCAPE TO BE
SLEEVED IN PVC SLEEVES ACCORDING TO THE LEGEND AND SLEEVING CHART, OR AS NOTED ON THE PLANS.

## DRIP LINE SYSTEMS SHRUB AREAS AS SHOWN SHALL BE IRRIGATED WITH DRIP LINE IRRIGATION, INSTALL ALL DRIP LINE SYSTEMS PER THE MANUFACT HE MANUFACT THE MANUFACTURER'S REPRESENTATIVE PRIOR TO START OF WORK FOR ON-SITE PRODUCT AND INSTALLATION TRAINING

TREE BUBBLES
TREE BUBBLES TO BE PROVIDED TO ALL NEW TREES (2 EACH) AND / OR AS NOTED ON THE PLANS. ADJUST FINAL LOCATION OF TREE
BUBBLERS TO MATCH FINAL TREE PLANTING IN THE FIELD. RELOCATE, ADD, AND / OR REMOVE BUBBLERS AS NECESSARY.

GROUNDING RODS
TO AVOID CONTRO! WITH HIGH VOLTAGE POWER CABLES, GAS LINES, WATER LINES, OR DATA CABLES, PLEASE CONTACT THE OWNER'S
REPRESENTATIVE AND DIG ALERT! (OR EQUAL) TO IDENTIFY POSSIBLE MAZARDS BELOW THE SURFACE. CONTACT WITH SUCH HAZARDS COULD
RESULT IN SEVERE INJURY OR DEATH. CONTRACTOR SHALL PROVIDE WRITTEN PROOF TO OWNER SUCH PREEMPTIVE ACTION WAS TAKEN
PRIOR TO STRAT OF WORK.

EVENS ARCHITECTS

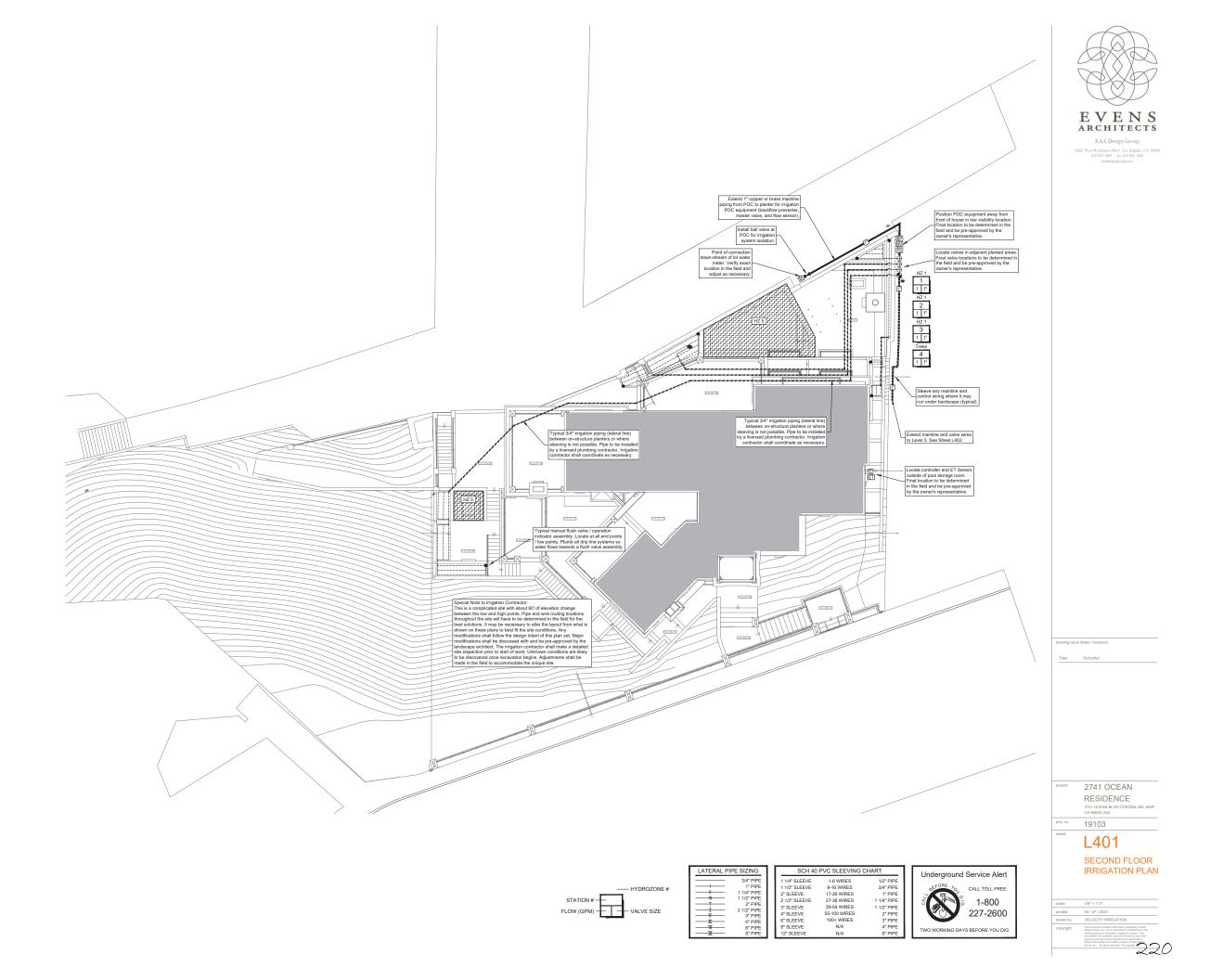
KAA Design Group

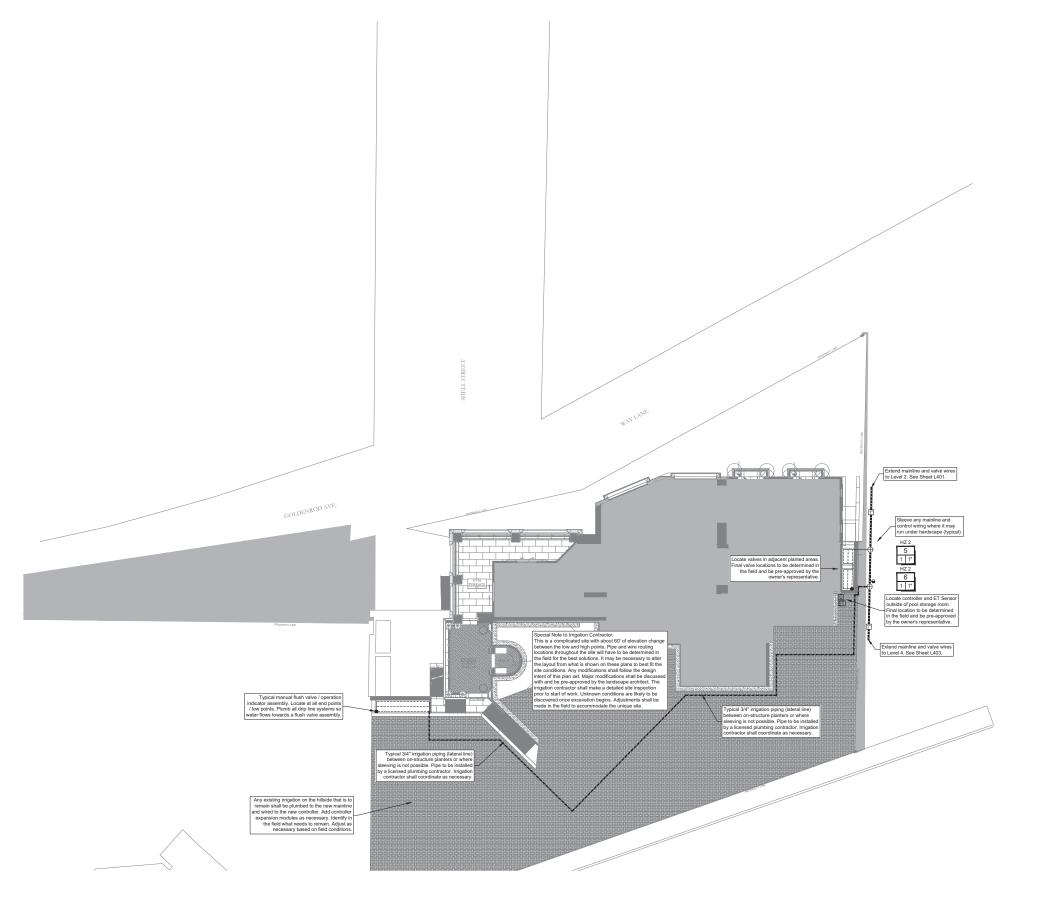
2741 OCEAN RESIDENCE

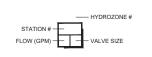
19103

L400

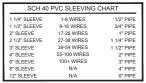
**IRRIGATION** SCHEDULES















12921 West Washington Blvd . Los Angeles . CA 90066 310 821 1400 . fax 310 821 1440 kaadesigngroup.com

project: 2741 OCEAN RESIDENCE

proj. no. 19103

L402

THIRD FLOOR IRRIGATION PLAN

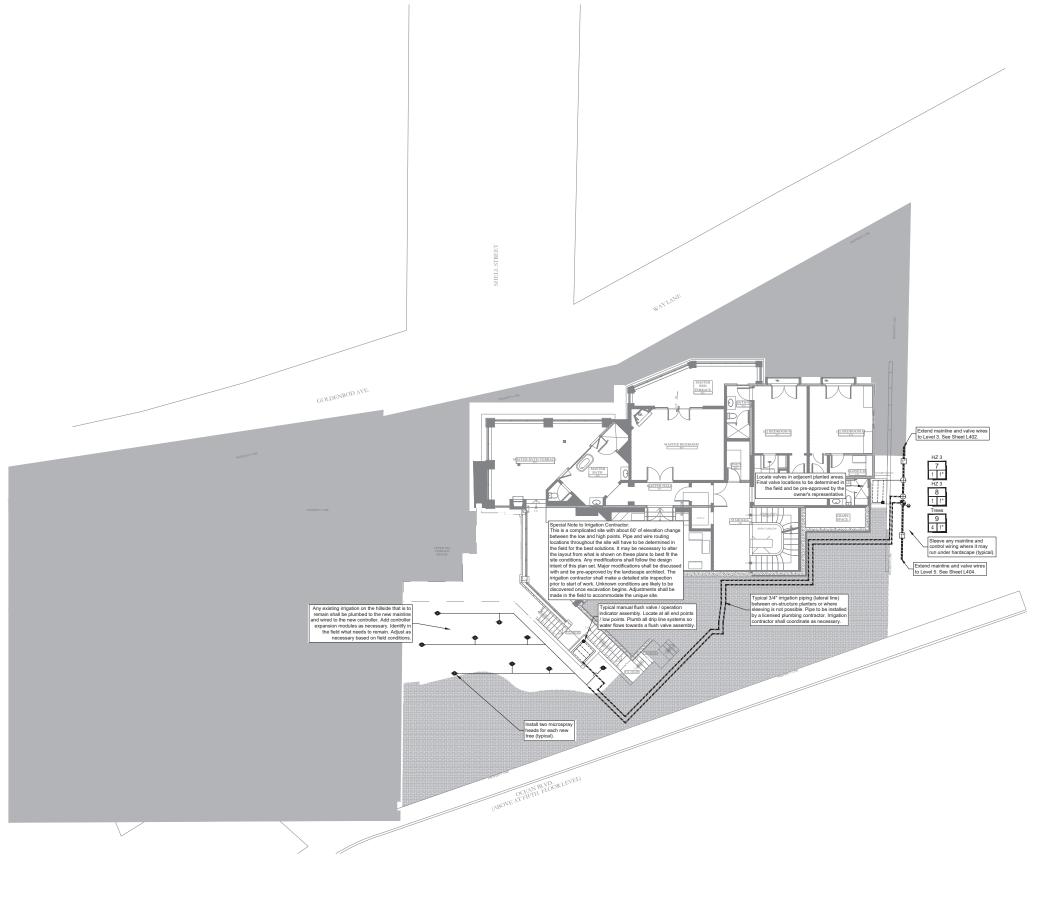
scale: 187 = 11-07

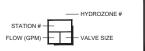
printed: 03 / 07 / 2023

drawn by: VELOCITY IRROGATION

Copyright: Na assumer contains behaviour province to NA.

Selection of the Copyright of the Copyrigh













KAA Design Group 12921 West Washington Blvd. Los Angeles. CA. 90066 310 821 1400 . fax 310 821 1440 kaadesigngroup.com

drawing issue dates / re

Date S

2741 OCEAN
RESIDENCE

proj. no. 19103

L403

FOURTH FLOOR IRRIGATION PLAN

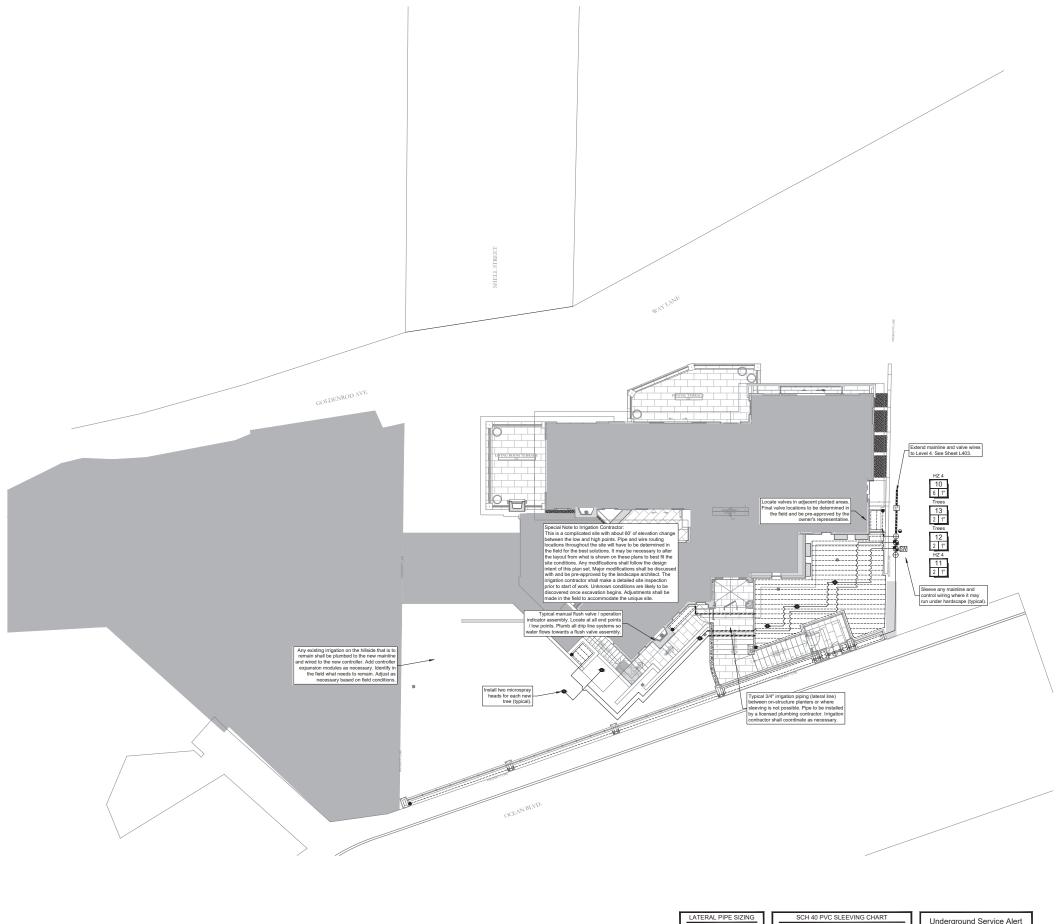
coale: 1/6" = 1'-0"

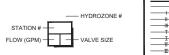
Writinet. 03 / 07 / 2023

Brawn by: VELOCITY IRRIGATION

Wellow of the examination defining property to Kidney

For the examination of the exami





LATERAL PIPE SIZING	SCH 40 PVC SLEEVING CHART
3/4" PIPE	114" SLEEVE 1-8 WIRES 12" PIPE 1 12" SLEEVE 1-10 WIRES 34" PIPE 2 SLEEVE 1-10 WIRES 1 1" PIPE 2 12" SLEEVE 1"-30 WIRES 1 1" PIPE 3" SLEEVE 27-38 WIRES 1 112" PIPE 4" SLEEVE 55-100 WIRES 2" PIPE 6" SLEEVE 100+ WIRES 3" PIPE 6" SLEEVE NA 4" PIPE 12" SLEEVE NA 6" PIPE 12" SLEEVE NA 6" PIPE



1-800 227-2600 TWO WORKING DAYS BEFORE YOU DIG

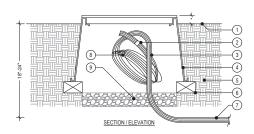


2741 OCEAN RESIDENCE

19103

L404 FIFTH FLOOR IRRIGATION PLAN

archand to all the control of KAA Davier 2223



9. FILL BASE OF BOX WITH PEA GRAVEL - 2
CU. FT. MIN.
\* 1/2" IN TURF AREAS, 2" IN SHRUB AREAS

NOTES:
WIRE SPLICES ARE ONLY ALLOWED WITH PRE
APPROVAL FROM LANDSCAPE ARCHITECT
AND / OR OWNER. ALL CONTROL WIRE
SPLICES SHALL BE INSTALLED IN PULL BOXES.
ALL SPLICES SHALL BE MADE WITH
WATER/RPOOF WIRE CONNECTORS.

- FINISH GRADE

  TAPE END OF WIRES TOGETHER WITH

  ELECTRICANST APE

  CONTROL WIRES I COMMON WIRES PER

  CONTROL WIRES I COMMON WIRES PER

  RECTANGULAR PLASTIC VALVE BOX WITH

  LOCKING LID NOS #814BCB) HEAT BRAND

  SWF ON LID IN 2\* HIGH BLOCK LETTERS

  NATIVE SOIL

  COMMON BRICK SUPPORTS (4 REQUIRED)

  WIRES TO I FROM LANDSCAPED AREAS

  COLI WIRES IN SOX. MINIMUM SE' COLI

# Q SPARE WIRE STUB-OUT

## IRRIGATION MAINTENANCE SCHEDULE

THE IRRIGATION MAINTENANCE SCHEDULE TASKS LISTED BELOW ARE INTENDED AS MINIMUM STANDARDS AND MORE FREQUENT ATTENTION MAY BE REQUIRED DEPENDING ON THE PARTICULAR SITE CONDITIONS.

FREQUENCY	MAINTENANCE TASK				

CONTROLLER CABINET - OPEN CABINET AND CLEAN OUT DEBRIS AND REPLACE BATTERY AS NECESSARY. CHECK WIRING AND REPAIR AS NEEDED AND CHECK CLOCK AND RESET IF NECESSARY. QUARTERLY

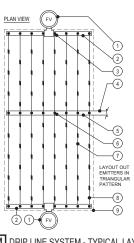
MONTHLY IRRIGATION SCHEDULE - ADJUST SCHEDULE FOR SEASONAL VARIATIONS AND OTHER CONDITIONS WHICH MAY AFFECT THE AMOUNT OF WATER NEEDED TO MAINTAIN PLANT HEALTH. ADJUST AS NECESSARY.

REMOTE CONTROL VALVES, ISOLATION VALVES AND QUICK COUPLER VALVES - VISUALLY INSPECT FOR LEAKS, SETTLEMENT, WIRE CONNECTIONS AND PRESSURE SETTINGS. REPAIR OR ADJUST AS NEEDED. QUARTERLY

INCORRECT ARC, INADEQUATE COVERAGE OR OVER-SPRAY AND LOW HEAD DRAINAGE. REPAIR AS

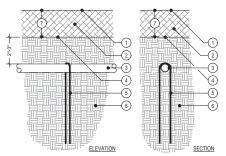
FILTERS AND STRAINERS - VISUALLY CHECK FOR LEAKS, BROKEN FITTINGS. CLEAN AND FLUSH SCREENS.

PRES	SURE LOS	S CALCU	LATIONS	
	VALVE :	#10 - 6 GPN	1	
WORST CASE HY	DRAULIC CO	ONDITION:	HIGHEST /	FARTHEST
MINI	MUM DESIG	N PRESSUR	E AT POC :	80
EQUIPMENT	SIZE	LENGTH	LOSS	Remaining PSI
Service Line	3/4"	50'	2.8	77.2
Water Meter	3/4"	-	0.7	76.5
Copper Line to R/P	1"	50'	0.7	75.8
Pressure Entering B	ackflow Pro	eventer Ass	embly	75.8
Backflow Preventer	3/4"	-	12.0	63.8
Master Valve	1"	-	1.0	62.8
Flow Sensor	1"	-	1.0	61.8
Sch 40 PVC Main	1 1/2"	200'	2.0	59.8
Elecric Control Valve	1"	-	3.0	56.8
Lateral Lines	Misc.	Misc	3.0	53.8
Misc. Losses (10%)	n/a		2.6	51.2
	SUBTOTAL	PRESSURE A	VAILABLE :	51.2
Elevation Losses	Feet:	60	0.433	26.0
PRESSURE AVAILABL	E AT SPRINK	LER HEAD /	EMITTER:	25.2
PRESSURE REQUIRE	D AT SPRINK	LER HEAD /	EMITTER:	25.0
		RESIDUAL	. PRESURE :	0.2



# I. MANUAL FLUSH VALVE / OPERATION INDICATOR PLUMBED TO FLUSH MANIFOLD AT LOW POINT AND ALL END POINTS PVC EYMAUST HEADER PER IRRIGATION LEGEND TO TUBING CONNECTION—TECHLINE MALE ADAPTER PVC LATERAL LIME FROM DRIP ZONE VALVE PER IRRIGATION LEGEND PVC SUPPLY HEADER PER PVC SUPPLY HEADER PER TO TUBING CONNECTION—TYPICAL EDGE 9. AREA PERIMETER

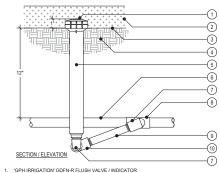
# M DRIP LINE SYSTEM - TYPICAL LAYOUT



- FINISH GRADE OF MULCH LAYER
  MULCH TOP DRESSING PER PLANTING PLAN
  POLY TUBING PER IRRIGATION LEGEND
  FINISH GRADE
  STEEL TUBING-SOIL STAPLE (NETAFIM TLS6 OR APPROVED EQUAL)
- NATIVE SOIL
  DEPTH OF MULCH PER PLANTING PLAN OR SPECIFICATIONS

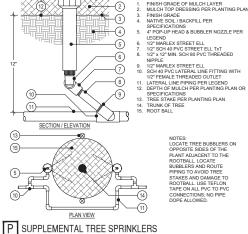
LOCATE STAPLES ALONG TUBING AT ABOUT 5' O.C. AND AT ALL FITTINGS (TEES ELLS, ETC.) AND CHANGES IN DIRECTION OF TUBING. BURY TUBING PER THE IRRIGATION PLAN / NOTES.

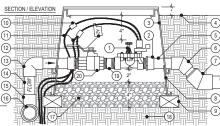
# N DRIP LINE SYSTEM - TUBING



- MULCH LATER. SELECTIONS OF THIS PROSTICATIONS OF THE PROSTICATION OF THE PROSTI
- HUNTER PROS-12-CV 12º HI-POP SPRAY HEAD FLUSH HEADER PPIND FOR LEGEND 12º MRAILEX STREET ELL FLUSH HEADER FITTING WITH 12º FEMALE THREADED OUTLET ADAPT AS NECESSARY 12º SCH 40 PPC STREET ELL TX 12º SCH 40 PPC STREET ELL TX
- NOTES:
  USE TEFLON TAPE ON ALL PVC TO
  PVC CONNECTIONS; NO PIPE DOPE
  ALLOWED. ADAPT TO ORIP SYSTEM
  AS REQUIRED (POLY OR PVC).
  ONLY USE BOTTOM INLET OF
  SPRINNLER HEAD. IF POSSIBLE,
  LOCATE FLUSH / INDICATOR
  ASSEMBLY IN APEA WITH EASY
  ACCESS FOR MAINTENANCE.

# O DRIP LINE SYSTEM - FLUSH VALVE ASSEMBLY



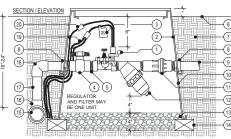


- REMOTE CONTROL VALVE PER IRRIGATION LEGEND
- FINISH GRADE PVC LATERAL LINE PER IRRIGATION
- PVC LATERAL LINE PER IRRIGATION
  LEGEND (VALVES SIZE)
  SCH 409 PVC 45 SIZE)
  RECTANGULAR PLASTIC VALVE BOX
  SCHENBION AS REQUIRED
  COMMON BRICK SUPPORTS (4 REQUIRED)
  WATER PRODO WIRE COMNECTORS (2 REQUIRED)
- LEGEND (VALVE SIZE)

  15. SCH 80 PVC TEE (OUTLET TO BE VALVE SIZE)

  16. MAINLINE PIPING PER IRRIGATION
- 16. MAINLINE PIPING PER IRRIGATION
  LEGEND (PLAN SIZE)
  17. FILL BASE OF BOX WITH PEA GRAVEL
  18. NATIVE SOIL
  19. SCH 80 PVC THERADED NIPPLE (3°)
  20. BALL VALVE PER IRRIGATION LEGEND
  (SAME SIZE AS RCV)
  1/2" IN TURF AREAS, 2" IN SHRUB AREAS

# I ELECTRIC CONTROL VALVE ASSEMBLY



- 6. FINISH GRADE

  7. NATIVE SOL ALLE ADAPTER

  8. SCH 40 PVC MILLE ADAPTER

  9. PVC PIPING TO SYSTEM (CONNECT AND AADAPT AS NECESSARY)

  10. RECTANGULAR PLASTIC VALVE BOX USED AS EXTENSION AS RECUIRED TO PRESSURE REGULATOR PER LEGEND
- 3. FILL BASE OF BOX WITH PEA GRAVEL
  4. COMMON BRICK SUPPORTS
  (4 REQUIRED)
  5. MAINLINE PIPING PER IRRIGATION
  LEGEND (PLAN SIZE)
  6. SCH 80 PVC MAINLINE FITTING WITH 1'
- (LENGTH AS REQUIRED)

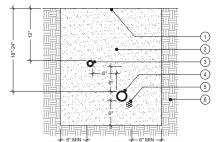
  18. 1" SCH 40 PVC ELL

  19. #14 UF WIRES TO CONTROLLER
  (COLOR CODED)

  20. WATERPROOF WIRE CONNECTOR
  (2 REQUIRED)

  1/2" IN TURF AREAS, 2" IN SHRUB AREAS

# J DRIP ZONE CONTROL VALVE ASSEMBLY



- SECTION / ELEVATION
- FINISH GRADE

  CLEAN BACKFILL WITH ALL ROCKS 1" OR LARGER REMOVED 90% COMPACTION REQUIRED SEE SPECS

  NON-PRESSURE LATERAL LINE PER LEGEND (SNAKE IN TRENCH)
  PRESSURE MANILINE PER LEGEND (SNAKE IN TRENCH)

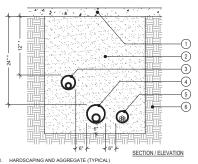
  CONTROL WIRES INSTALL BELOW PRESSURE MAINLINE

  UNDISTLINEED NATIVE SOIL

  UNDISTLINEED NATIVE SOIL

NOTES: BUINDLE AND TAPE WIRES AT 10" O.C. PIGTAIL AND LOOP WIRES AT ALL CHANGES IN DIRECTION. SPLICING OF WIRE RUNS IS NOT PERMITTED WITHOUT PRIOR APPROVAL FROM OWNER AND LANDSCAPE ARCHITECT. PUN CONTROL WIRES IN SAME TERMON'S AMAILINE WHERE POSSIBLE. INSTALL 12"x12"x12" CONDRETE THRUST BLOCKS AT ALL CHANGES IN DIRECTION OF PRESSURE MAINLEN (458, 405, TEES, ETC.) AND AT ALL TERMINAL POINTS.

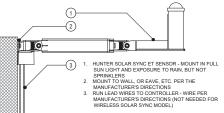
## K TRENCHING



HARDSCAPING AND AGGREGATE (TYPICAL)
CLEAN SAND BACKFILL - COMPACT TO MATCH DENSITY OF NATIVE SOIL
LATERAL LINE IN SCH 40 PVC SLEEVE
PRESSURE MAINLINE IN SCH 40 PVC SLEEVE
CONTROL WIRES IN SCH 40 PVC SLEEVE

SIZE ALL SLEEVES PER THE IRRIGATION PLANS. EXTEND SLEEVES 6" MINIMUM BEYOND EDGE OF HARDSCAPE (AT EACH END) INTO THE PLANTING AREAS. SLEEVING UNDER ALL VEHICULAR ACCESS WAYS TO HAVE 36" MINIMUM COVER FROM TOP OF SLEEVE TO BOTTOM OF AGGREGATE BASE.

L SLEEVING

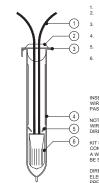


- A. INSTALL, MOUNT, AND WIRE THE SENSOR PER THE MANUFACTURER'S DIRECTIONS.
  B. FINAL SENSOR LOCATION TO BE DETERMINED IN THE FIELD AND
- POSSIBLE.

  E. THE SENSOR HAS AN INTEGRATED BRACKET FOR MOUNTING. USE ANY COMBINATION OF ADAPTERS / FITTINGS AS MAY BE REQUIRED TO MOUNT IN THE SPECIFIC LOCATION FOR THIS SITE.

  F. ALL WIRING FROM THE STATION TO THE CONTROLLER SHALL BE IN CONDUIT.

# E ET SENSOR / RAIN SENSOR



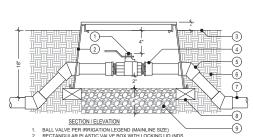
2. WIRES PASS THROUGH GROOVES I TUBE LID TO ALLOW LID TO CLOSE
3. CLOSE TUBE LID AFTER WIRE IS
NEWTONE DEPOSIT OF THE TO AFTER WIRE IS
WATERPROOF GEL
WATERPROOF GEL
ONCE CONNECTOR IS INSERTED
ONCE CONNECTOR IS INSERTED
CONNECTOR. WIRES SHALL BE
PRESSTRUMED OF JET OF THEM
ON THE SHALL BE
PRESSTRUMED OF JET OF THEM
ON THEM
ON THE SHALL BE
PRESSTRUMED OF JET OF THEM
ON THEM
ON THEM
OF THEM
ON THEM THE CONNECTOR - TWIST CONNECTO ONTO WIRES TO SEAT FIRMLY

KIT SHALL INCLUDE A SCOTCHLOK SPRING CONNECTOR, A POLYPROPYLENE TUBE AND A WATERPROOF SEALING GEL. TUBE SHALL BE SUPPLIED PRE-FILLED WITH GEL.

DIRECT BURY SPLICE KIT SHALL BE USED TO ELECTRICALLY CONNECT 2-3 #14 OR 2 #12 PRE-STRIPPED COPPER WIRES. LARGER OR

# F WATERPROOF WIRE CONNECTOR

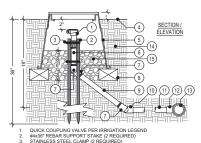
SECTION / ELEVATION



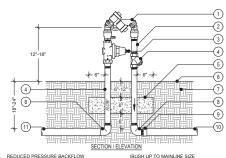
BALL VALVE PER IRRIGATION LEGEND (MAINLINE SIZE)
RECTANGULAR PLASTIC VALVE BOX WITH LOCKING LID (NIDS
83 14BCB) HEAT BRAND "BY" ON LID IN 2" HIGH BLOCK LETTERS
FINISH GRADE
SCHOOL STATE OF THE STATE OF THE STATE OF THE S

FILL BASE OF BOX WITH PEA GRAVEL 1/2" IN TURF AREAS, 2" IN SHRUB AREAS

# G BALL VALVE



- 8. COMMON BRICK SUPPORTS (3 REQUIRED)
  9.34'x12' SCH 80 PVC NIPPL
  10. 34'x SCH 40 PVC LINET
  10. 34'x SCH 40 PVC LINET
  10. 34'x SCH 40 PVC LINET
  11. SCH 80 PVC MAINLINE FITTING (TEE OR ELL) WITH 34' SLIP OUTLET
  13. MAINLINE PIPING PER RRIGATION LEGEND (PLAN SIZE)
  14. NATIVE SOL
  15. FILL BASE OF BOX WITH PEA GRAVEL
  12' IN TURK PAEAS, 2' IN SHRUB AREAS
- H QUICK COUPLING VALVE

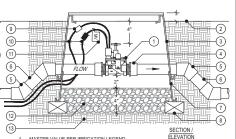


BRASS NIPPLE(S) (R/P SIZE)
WILKINS 500XL SERIES PRESSURE
REGULATOR (R/P SIZE)

(BUSH UP TO MAINLINE SIZE
WHERE RIP DEVICE IS SMALLER THAN
MANILINE SIZE)
10. MAINLINE PIPING PER IRRIGATION LEGEND
(TO SYSTEM)
11. COPPER OR BRASS MAINLINE PIPING (FROM
P.O.C.)

NOTES: INSTALL PER ALL LOCAL CODES. FINAL LOCATION TO BE APPROVED IN THE FIELD BY THE LANDSCAPE ARCHITECT AND/OR OWNER. INSTALL REGULATOR UPSTREAM OF ALL EQUIPMENT.

A BACKFLOW PREVENTER ASSEMBLY



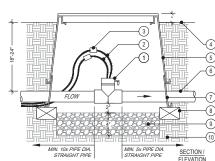
MASTER VALVE PER IRRIGATION LEGEND

- MASTER VALVE PER IRRIGATION LEGEND

  LECTALLAN
  FINISH GRADE
  RECTANGULARI-AST CVANUE DO WITH LOCKING LID (INDS 871-86CB) HEAT
  RECTANGULARI-AST CVANUE DO WITH LOCKING LID (INDS 871-86CB) HEAT
  RECTANGULARI-AST CVANUE DO WITH LOCKING ADAPTERS WHERE
  MANINIE IS LARGER THAN VALVE
  MANINIE IS LARGER THAN VALVE
  MANINIE PIPMG PER RIRICATION LEGEND (IPLAN SIZE)
  RECTANGULARI PLASTIC VALVE BOD XCTENSION AS REQUIRED
  WATERPROOF WIRE CONNECTORS (2 REQUIRED)

  WATERPROOF WIRE CONNECTORS (2 REQUIRED)
  \*\*411-BY WIRES TO CONTROLLER (COLOR CODE DIFFERENTLY THAN COMMON
- WATERPROOF WINE CONTROLLER (COLOR CODE DIFFERENTLY THAN COMMON WIRE, CONTROL WIRES, AND FLOW SENSOR WIRES)
   11. I.D. TAG WITH "MAY PRINTED ON IT (CHRISTY'S BID-STD-Y1) FILL BASE OF BOX WITH PEA GRAVE NATIVE SOIL
   1/2" IN TURF AREAS, 2" IN SHRUB AREAS

# B MASTER CONTROL VALVE



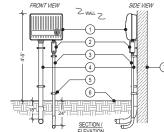
FLOW SENSOR PER IRRIGATION LEGEND
#14 UF WIRES TO CONTROLLER (COLOR CODE DIFFERENTLY THAN COMMON WIRE, CONTROL WIRES, AND MASTER VALVE WIRES)
WATERPROOF WIRE CONNECTORS (2 REQUIRED)

3. WATERPROOF WIRE CONNECTORS (2 REQUIRED)
4. FINISH GRAD FLASTIC VALVE BOX WITH LOCKING LID (NDS #314BCB) HEAT
5. RECTANGULAR PLASTIC VALVE BOX WITH LOCKING LID (NDS #314BCB) HEAT
5. BRAND 1-5° ON LID IN 2° HIGH BLOCK LETTERS

6. MARILINE PIPHOS PER IRRIGATION LEGEND (SENSOR SIZE)
7. RECTANGULAR PLASTIC VALVE BOX EXTENSION AS REQUIRED

6. COMMON BRICK SUPPORTS (4 REQUIRED)
7. NATIVE SOR WITH PEA GRAVEL
7. NATIVE SOR WITH PEA GRAVEL
7. 12° IN TURF AREAS, 2° IN SHRUB AREAS

# C FLOW SENSOR



AUTOMATIC CONTROLLER PER LEGEND - MOUNT TO WALL PER
MANUFACTURER'S DIRECTIONS
 MANUFACTURER'S DIRECTIONS
 CONTROLLER PER LECTRICAL JUNCTION BOX FOR 115V AC POWER CONNECTION
 SCHAP DVC COMBUTE FOR SOME WIRES TO POWER SOURCE
 SCHAP DVC COMBUTE FOR SOME WIRES TO POWER SOURCE
 SCHAP DVC COMBUTE FOR SOME OWNERS
 SECUISE ALL CONDUITS TO WALL WITH "C" CLAMP IN A MINIMUM OF TWO PLACES (TYP)
 FINISH GRADE
WALL

WALL

D CONTROLLER - WALL MOUNT

EVENS ARCHITECTS KAA Design Group 12921 West Washington Blvd . Los Angeles . CA 90 310 821 1400 . fax 310 821 1440 kaadesigngroup.com

2741 OCEAN RESIDENCE 19103

> L405 **IRRIGATION DETAILS**

224

### 1 SCOPE OF WORK

- 1.1. THE WORK CONSISTS OF FURNISHING LABOR, TOOLS, MACHINERY, MATERIALS, AND PROCEDURE REQUIRED TO COMPLETE THE SPRINKLER SYSTEM, INSTALLED READY FOR USE WITHOUT FURTHER COST IN LABOR OR MATERIALS TO THE CITY/OWNER.
- WHEN NOT OTHERWISE SPECIFIED, WORKMANSHIP AND MATERIAL SHALL CONFORM TO THE LOCAL PLUMBING CODE.
- 1.3. THE CONTRACTOR SHALL APPLY FOR ALL NECESSARY PERMITS AND PAY FOR SAME
- 1.4 THE CONTRACTOR SHALL KEEP THE PREMISES CLEAN AND EREE OF EXCESS EQUIPMENT, MATERIALS AND RUBBISH INCIDENTAL TO THIS
- THE INTENT OF THE DRAWINGS AND SPECIFICATIONS IS TO INDICATE AND SPECIFY A COMPLETE SPRINKLER SYSTEM, INSTALLED AND READY FOR USE WITHOUT FURTHER COST IN LABOR OR MATERIALS TO
- ANY ITEM SHOWN OR WRITTEN ON THE DRAWINGS OR IN THESE SPECIFICATIONS SHALL BE CONSIDERED TO APPEAR ON BOTH.
- 1.7 IN THE EVENT OF "CONFLICT" BETWEEN THE DRAWINGS AND SPECIFICATIONS, THE LANDSCAPE ARCHITECT SHALL BE CONSULTED.
- PRIOR TO SUBMISSION OF HIS BID. THE CONTRACTOR SHALL EXAMINE THE SITE, THE COMPLETE DRAWINGS OF THE PROJECT AND THE SPECIFICATIONS OF SAME, IN ADDITION TO THE DRAWINGS AND SPECIFICATIONS FOR THE SPRINKLER IRRIGATION PORTION OF THE

## 2. REFERENCE SPECIFICATIONS AND STANDARDS

- THE INTENT OF THE DRAWING AND SPECIFICATIONS IS TO GRAPHICALLY NDICATE AND SPECIFY A COMPLETE AND EFFICIENT SPRINKLER
- 2.2. PLOT DIMENSIONS ARE APPROXIMATE. CONTRACTOR SHALL CAREFULLY CHECK AND VERIFY ALL DIMENSIONS AND SHALL REPORT ANY VARIATIONS TO THE LANDSCAPE ARCHITECT.
- 2.3. DUE TO THE SCALE OF THE DRAWINGS, IT IS NOT POSSIBLE TO INDICATE ALL OFFSETS, FITTINGS, ETC. WHICH MAY BE REQUIRED. CONTRACTOR SHALL CAREFULLY NIVESTIGATE THE STRUCTURAL AND FINISHED CONDITIONS AFFECTING ALL HIS WORK, AND PLAN HIS WORK ACCORDINGLY. DRAWINGS ARE GENERALLY DIAGRAMMATIC AND NDICATIVE OF THE WORK TO BE INSTALLED. THE WORK SHALL B NSTALLED IN THE MOST DIRECT AND WORKMANLIKE MANNER, S CONFLICTS BETWEEN SPRINKLER SYSTEMS, PLANTING AND ARCHITECTURAL FEATURES WILL BE AVOIDED.
- LANDSCAPE ARCHITECT/OWNER'S REPRESENTATIVE SHALL DECIDE ALL QUESTIONS RELATIVE TO THE QUALITY OF WORKMANSHIP AND MATERIALS FURNISHED.
- THE LANDSCAPE ARCHITECT SHALL DECIDE ALL QUESTIONS RELATING TO THE "INTERPRETATION" OF THE DRAWINGS AND SPECIFICATIONS AND THE ACCEPTABLE FULFILLMENT OF THE CONTRACT.

### 3. SUBSTITUTIONS

- THE CONTRACTOR SHALL FURNISH THE ARTICLES, EQUIPMENT OR MATERIALS SPECIFIED BY NAME IN THE DRAWNINGS AND SPECIFICATIONS. NO SUBSTITUTION WILL BE ALLOWED WITHOUT PRIOR WRITTEN APPROVAL BY THE LANDSCAPE ARCHITECT.
- 3.2. EQUIPMENT OR MATERIALS INSTALLED OR FURNISHED WITHOUT THE PRIOR APPROVAL OF THE LANDSCAPE ARCHITECT MAY BE REJECTED AND THE CONTRACTOR REQUIRED TO REMOVE SUCH MATERIALS FROM THE SITE AT THIS OWN EXPENSE.
- 3.3. APPROVAL OF ANY ITEM, ALTERNATE OR SUBSTITUTE, INDICATES ONLY THAT THE PRODUCT(S) APPARENTLY MEET THE REQUIREMENTS OF THE RAWINGS AND SPECIFICATIONS ON THE BASIS OF THE INFORMATION
- MANUFACTURER'S WARRANTIES SHALL NOT RELIEVE THE CONTRACTOR OF HIS LIABILITY UNDER THE GUARANTEE. SUCH WARRANTY SHALL ONLY SUPPLEMENT THE GUARANTEE.
- 3.5. THE LANDSCAPE ARCHITECT CAN, AT HIS OPTION. REQUIRE A MANUFACTURER'S WARRANTY ON ANY PRODUCT OFFERED FOR USE.

## 4. IRRIGATION GUARANTEE

- 4.1. THE ENTIRE SPRINKLER SYSTEM SHALL BE UNCONDITIONALLY GUARANTEED BY THE CONTRACTOR AS TO MATERIAL AND VORKMANSHIP, INCLUDING SETTLING OF BACK-FILED AREAS BELOW BRADE FOR A PERIOD OF ONE (1) YEAR FOLLOWING THE DATE OF FINAL ICCEPTANCE OF WORK.
- 4.2. IF, WITHIN ONE (1) YEAR FROM THE DATE OF FILING OF THE NOTICE OF COMPLETION, SETTLEMENT OCCURS AND ADJUSTMENTS IN PIPES, VALVES AND SPRINKLER HEADS. SOO OR PAVING IS NECESSARY TO BRING THE SYSTEM, SOD OR PAVING TO THE PROPER LEVEL OF THE PERMANENT GRADES, THE CONTRACTOR, AS PART OF THE WORK UNDER HIS CONTRACT, SHALL MAKE ALL ADJUSTMENTS WITHOUT COST TO THE CITY/OWNER, INCLUDING THE COMPLETE RESTORATION OF ALL DAMAGED PLANTING, PAVING, OR OTHER IMPROVEMENTS OF ANY KIND.
- SHOULD ANY OPERATIONAL DIFFICULTIES DEVELOP IN CONNECTION WITH THE SPECIFIED GUARANTEE PERIOD WHICH, IN THE OPINION OF THE CITY/OWNER, MAY BE DUE TO INFERIOR MATERIAL AND/OR WORKMANSHIP, SAID DIFFICULTIES SHALL BE IMMEDIATELY CORRECTED BY THE CONTRACTOR TO THE SATISFACTION OF THE CITY/OWNER AT NO ADDITIONAL COST TO THE CITY/OWNER, INCLUDING ANY AND ALL OTHER DAMAGE CAUSED BY SUCH DEFECTS.

5.1. THE CONTRACTOR SHALL LOCATE LINES, VALVES, AND OTHER UNDERGROUND UTILITIES, ETC., PRIOR TO EXCAVATING TRENCHES. THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ANY DAMAGE TO EXISTING UTILITIES.

## 6. RECORD DRAWINGS

- 6.1. LOCATIONS ON DRAWINGS ARE DIAGRAMMATIC AND APPROXIMATE ONLY, AND SHALL BE CHANGED AND ADJUSTED AS NECESSARY OR AS DIRECTED TO MEET EXISTING CONDITIONS AND TO FOLLOW THE INTENT OF THE DRAWINGS AND SPECIFICATIONS IN OBTAINING COMPLETE WATER COVERAGE. IT IS, THEREFORE, THE CONTRACTOR'S RESPONSIBILITY TO RECORD ANY CHANGES AS TO LOCATION OF EQUIPMENT ON "AS-BUILT" DRAWINGS.
- 6.2. PROCEDURE FOR "AS-BUILT" PREPARATION SHALL BE
- OBTAIN FROM THE LANDSCAPE ARCHITECT ONE (1) SET OF REPRODUCIBLE DRAWINGS, RECORD ACCURATELY ON THIS SET ALL CHANGES IN THE WORK CONSTITUTING DEPARTURES FROM THE ORIGINAL CONTRACT DRAWINGS.
- DIMENSION FROM TWO PERMANENT POINTS OF REFERENCE (BUILDINGS, MONUMENTS, SIDEWALKS, CURBS, PAYEMENT), POST INFORMATION ON "AS-BUILT D'ARAWINGS, DAY-TO-DAY, AS THE PROJECT IS INSTALLED. ALL DIMENSIONS NOTED ON DRAWINGS SHALL BE ONE-QUARTER (1/4) INCH IN SIZE.
- 6.2.3. SHOW DIMENSIONAL LOCATIONS AND DEPTHS OF THE FOLLOWING:

ALL POINT OF CONNECTION / CONTROL EQUIPMENT

- ROUTING OF SPRINKLER PRESSURE LINES (DIMENSION MAXIMUM OF ONE-HUNDRED (100) FEET ALONG ROUTING AND ALL BALL VALVES / GATE VALVES PRINKLER CONTROL VALVES (BURIED ONLY) QUICK COUPLING VALVES ROUTING OF CONTROL VALVE WIRING THER RELATED EQUIPMENT (AS MAY BE DIRECTED BY THE LANDSCAPE ARCHITECT)
- MAINTAIN "AS-BUILT" DRAWINGS ON SITE AT ALL TIMES.
- MAKE ALL CHANGES TO REPRODUCIBLE DRAWINGS IN INK (NO BALL-POINT PEN). USE ERADICATING FLUID WHEN REDOING DRAWINGS. MAKE CHANGES IN A MANNER EQUAL TO THE ORIGINAL

### 7. CONTROLLER CHARTS

- 7.1. "AS-BUILT" DRAWINGS SHALL BE APPROVED BY LANDSCAPE ARCHITECT OR LANDSCAPE COORDINATOR BEFORE CHARTS ARE PREPARED.
- 7.3 THE CHART SHALL BE A REDUCTION OF THE ACTUAL "AS-BUILT" SYSTEM DRAWING. IF THE CONTROLLER SEQUENCE IS NOT LEGIBLE WHEN THE DRAWINGS IS REDUCED, ENLARGE IT TO A SIZE THAT WILL BE READABLE WHEN REDUCED.
- 7.4. CHART SHALL BE BLACK-LINE PRINT AND A DIFFERENT PASTEL COLOR USED TO SHOW AREA OF COVERAGE FOR EACH STATION.
- WHEN COMPLETED AND APPROVED, HERMETICALLY SEAL THE CHAF BETWEEN TWO PIECES OF PLASTIC, EACH PIECE BEING A MINIMUM TWENTY (20) MIL THICKNESS.
- 7.6. CHARTS SHALL BE COMPLETED AND APPROVED PRIOR TO FINAL INSPECTION OF THE IRRIGATION SYSTEM.

## 8. OPERATION AND MAINTENANCE MANUALS

- PREPARE AND DELIVER TO THE LANDSCAPE ARCHITECT WITHIN TEN (10)
  CALENDAR DAYS PRIOR TO COMPLETION OF CONSTRUCTION, ALL
  REQUIRED AND NECESSARY DESCRIPTIVE MATERIAL IN COMPLETE
  DETAIL AND SUPFICIENT QUANTITY, PROPERLY PREPARED IN FOUR
  INDIVIDUALLY BOUND COPIES, DESCRIBE THE MATERIAL INSTALLED IN INDIVIDUALLY BOUND COPIES. DESCRIBE THE MATERIAL INSTALLED IN SUFFICIENT DETAIL TO PERMIT OPERATING PERSONNEL TO UNDERSTAND, OPERATE AND MAINTAIN ALL EQUIPMENT. INCLUDE SPARE PARTS LIST AND RELATED MANUFACTURER INFORMATION FOR EACH EQUIPMENT ITEM INSTALLED. EACH MANUAL SHALL INCLUDE THE FOLLOWING:
- INDEX SHEET STATING SUBCONTRACTOR'S ADDRESS AND TELEPHONE INDEX STIELS CONTINUED TO THE PERIOD.
  DURATION OF GUARANTEE PERIOD.
  LIST OF EQUIPMENT WITH NAMES AND ADDRESSES OF
  MANUFACTURER'S LOCAL REPRESENTATIVES.
  COMPLETE OPERATING AND MAINTENANCE INSTRUCTIONS ON ALL
- 8.2. IN ADDITION TO THE MAINTENANCE MANUALS, PROVIDE THE MAINTENANCE PERSONNEL WITH INSTRUCTIONS FOR MAJOR EQUIPMENT AND SHOW WRITTEN EVIDENCE AT THE END OF THE PROJECT THAT THIS SERVICE HAS BEEN RENDERED.
- LOOSE SPRINKLING EQUIPMENT, OPERATING KEYS AND SPARE PARTS WILL BE FURNISHED BY THE CONTRACTOR IN QUANTITIES AS SHOWN ON PLANS OR IN SPECIFICATIONS.

- 9.1. USE NEW MATERIALS OF THE BEST GRADE OF EACH RESPECTIVE KIND AND OF THE SAME MANUFACTURERS FOR ALL ITEMS OF ONE TYPE.
- 9.2. STEEL PIPE.
- STEEL PIPE AND STEEL FITTINGS WHERE INDICATED ON THE DRAWINGS OR SPECIFIED SHALL BE SCHEDULE 40 GALVANIZED MILD STEEL THREADED PIPE AND BEADED GALVANIZED MALLEABLE IRON THREADED FITTINGS, EXCEPT COUPLINGS WHICH SHALL BE A P.I. (AMERICAN PIPE INSTITUTE) STEEL COUPLINGS. THREAD ON PIPE
- ALL UNIONS TWO (2) INCHES AND SMALLER SHALL BE GROUND JOIN UNIONS, ALL FLANGED UNIONS SHALL BE PLACED WITH ONE-SIXTEENTH (1/16) INCH THICK ASBESTOS FIBER GASKETS RIGHT AND LEFT COUPLINGS SHALL BE USED INSTEAD OF GROUND JOINT UNIONS IN ALL UNDERGROUND LINES, EXCEPT AT VALVES.

## 9.3. PLASTIC PIPE

- PLASTIC PIPE SHALL BE EXTRUDED FROM VIRGIN PVC (POLYVINYL CHLORIDE) TYPE 1, GRADE 11 (CLASS 1220) AS MANUFACTURED BY LASCO INDUSTRIES, BALDWIN, PACIFIC WESTERN, JOHNS-MANVILLE OR EQUAL. CLASS SCHEDULE AS INDICATED IN THE LEGEND.
- ALL PLASTIC PIPE SHALL BE CONTINUOUSLY AND PERMANENTLY MARKED WITH THE FOLLOWING INFORMATION: MANUFACTURER'S NAME, NOMINAL PIPE SIZE, PVC 1220, S.D.R. (STANDARD DIMENSION RATIOS, OR THE PRESSURE RATING IN POUNDS PER SQUARE INCH) AND THE N.S.F. (NATIONAL SANITATION FOUNDATION).
- PLASTIC FITTINGS SHALL BE PVC 11, I.P.S., (INTERNATIONAL PIPE SOCIETY), SCHEDULE 40, N.S.F., SCHEDULE 80, N.S.F., AND SCHEDULE 80 THREADED FITTINGS AS SHOWN IN THE DETAILS AS MANUFACTURED BY SLOANE MANUFACTURING CO. SOLVENT AND PRIMER ARE TO BE PER PIPE MANUFACTURER'S
- PVC PRESSURE RATED PIPE TYPE 1220 (PVC CLASS 160, 200 & 315) AND TYPE 1120 (PVC SCHEDULE 40 & PVC SCHEDULE 80)
- 9.4.1. TYPE I GRADE II PRESSURE RATED PIPE.
- MATERIALS SHALL MEET THE REQUIREMENTS SET FORTH IN ASTM
- OUTSIDE DIAMETER OF PIPE SHALL BE THE SAME SIZE AS IRON PIPE
- PIPE SHALL BE MARKED AT INTERVALS WITH THE FOLLOWING INFORMATION (NOT TO EXCEED 5): MANUFACTURER'S NAME NOMINAL SIZE, PVC TYPE AND GRADE (I.E. PVC 122) SDR RATING CLASS, NSF APPROVAL AND COMMERCIAL STANDARD DESIGNATION
- PVC FITTINGS SHALL BE PVC TYPE II, SCHEDULE 40 NSF, SCHEDULE
- SOLVENT SHALL BE #175 GRAY NSF APPROVED AS MANUFACTURED BY INDUSTRIAL POLYCHEMICAL SERVICE, GARDENA CALIFORNIA.
- CAUTIONED SHALL BE UTILIZED IN HANDLING TYPE I PIPE DUE TO THE POSSIBILITY OF CRACKING OR OF SPLITTING WHEN DROPPED OR HANDLED CARELESSLY.
- WHEN CONNECTION IS PLASTIC TO METAL, MALE ADAPTERS SHALL BE HAND TIGHTENED, PLUS ONE TURN WITH A STRAP WRENCH. JOINT COMPOUND SHALL BE PERMATIX TYPE II.
- 9.5. SPRINKLER HEADS

9.5.1. SPRINKLER HEADS SHALL BE AS SHOWN ON PLAN

### 9.6 VALVES

- 9.6.1. REMOTE CONTROL VALVES - ELECTRIC REMOTE CONTROL VALVES SHALL BE AS SHOWN ON PLAN.
- QUICK COUPLING VALVES QUICK COUPLING VALVES SHALL BE AS INDICATED ON PLANS AND SHALL HAVE A LOCKING COVER EACH QUICK COUPLER VALVE SHALL HAVE A MOLDED VINIV. COVER, YELLOW IN COLOR, PURPLE WHERE CALLED FOR IN RECYCLED WATER (SYSTEMS), ALL QUICK COUPLER VALVES KEYS AND HOSE SWIVELS SHALL BE OF SAME MANUFACTURER AS THE QUICK 9.6.2.
- AUTOMATIC CONTROLLERS AUTOMATIC CONTROLLERS SHALL BE AS
- CONTROL WIRES FOR RCV'S ALL WIRING TO BE USED FOR CONNECTING THE AUTOMATIC CONTROLLER TO THE ELECTRICAL SOLENOID ACTUATED BY REMOTE CONTROL VALVE SHALL BE SOLID COPPER, PVC INSULATION, SINGLE CONDUCTOR, UL APPROVED UNDERG FEEDER CABLE. EACH PILOT OR "HOT" WIRE SHALL BE BLAC COLOR-CODED WITH THE COMMON WIRE BEING WHITE.
- 9.9. RUN TWO SPARE CONTROL WIRES TO THE FARTHEST VAI VE IN FACH AINLINE DIRECTION. SHOW ON AS-BUILTS. COLOR CODE DIFFERENT THAN PILOT AND COMMON WIRES.
- 9.10. WIRING FOR FLOW SENSORS AND MASTER VALVES SHALL BE AS RECOMMENDED BY THE MANUFACTURER AND SHALL BE COLOR CODED DIFFERENTLY THAN COMMON WIRE, CONTROL WIRES, AND SPARE
- VALVE BOXES ALL REMOTE CONTROL VALVES, SHUT-OFF VALVES, FLOW SENSORS, AND QUICK COUPLING VALVES SHALL BE INSTALLED IN SUTFABLE VALVE BOXES AS SHOWN IN DETAILS, COMPLETE WITH LOCKING COVERS. ALL SHALL BE N.D.S. OR APPROVED EQUAL AND SHALL BE IDENTIFIED ON THE LID WITH HEAT-BRANDED NUMBERS / LETTERS IN 2" HIGH BLOCK LETTERS AS SHOWN ON THE DETAILS. ALL BOXES SHALL HAVE GREEN COVERS (PURPLE FOR RECYCLED WATER
- 9.12. BACKFLOW PREVENTION UNITS THE BACKFLOW PREVENTION UNITS SHALL BE AS SHOWN ON PLANS AND DETAILS.
- 9.13. DRIP LINE AND INTEGRAL DRIP LINE COMPONENTS THE DRIP LINE SHALL BE TECHLINE HCVXR AS MANUFACTURED BY NETAFIM IRRIGA INC. DRIPPER FLOW RATE AND SPACING SHALL BE AS INDICATED ON
- 9.13.1. TECHLINE FITTINGS: ALL TECHLINE CONNECTIONS SHALL BE MADE WITH APPROVED TECHLINE INSERT FITTINGS.
- 9.13.2. SOIL STAPLES (TLS6): ALL TECHLINE INSTALLATIONS SHALL BE HELD IN PLACE WITH TECHLINE SOIL STAPLES SPACED EVENLY EVERY 3' 5' ON CENTER, AND WITH TWO STAPLES ON EACH CHANGE OF LOCATION.
- 9.13.3. LINE FLUSHING VALVES: ALL TECHLINE SYSTEMS SHALL BE INSTALLED WITH MANUAL FLUSHING VALVE AS INDICATED ON DRAWINGS. TECHLINE HCVAR ZONES DO NOT REQUIRE AN AUTOMATIC LINE FLUSHING VALVES, BUT MUST HAVE A MANUAL FL VALVE WOULD BE POSITIONED.
- 9.13.4. AIR/VACUUM RELIEF VALVES: EACH INDEPENDENT TECHLINE SUBSURRACE IRRICATION ZONE (TUBING WITHOUT CHECK VALVES), SHALL BE INSTALLED WITH AN AIR/VACUUM RELIEF VALVE AT THE ZONE'S HIGHEST POINT(S), TECHLINE HCVXR SUBSURFACE ZONES (TUBING WITH CHECK VALVES), DO NOT REQUIRE AN AIR/VACUUM RELIEF VALVE WHEN BURIED.
- 9.13.5. PRESSURE REGULATOR: A PRESSURE REGULATOR SHALL BE INSTALLED AT EACH ZONE VALVE OR ON THE MAIN LINE TO ENSURE OPERATING PRESSURES DO NOT EXCEED SYSTEM REQUIREMENTS. THE PRESSURE REGULATOR SHALL BE AS CALLED FOR ON THE
- 9.13.6. SYSTEM FILTER: A Y-FILTER OR DISC FILTER SHALL BE INSTALLED AT EACH ZONE VALVE AS CALLED FOR ON THE PLANS. A SYSTEM (MAIN LINE) FILTER SHALL ALSO BE INSTALLED TO ENSURE ADDED PROTECTION.
- 9.14. ANY OTHER EQUIPMENT NOT SPECIFICALLY NOTED HEREIN BUT REQUIRED BY THE PLANS, DETAILS, OR LEGENDS SHALL BE SUPPLIED AND INSTALLED IN STRICT ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS. IF ANY QUESTION ARISES AS TO PROPER PROCEDURE, IT SHALL BE RESOLVED WITH THE LANDSCAPE ARCHITECT

- 10.1.1. ALL SCALED DIMENSIONS ARE APPROXIMATE. THE CONTRACTOR ONS ON THE SITE PRIOR TO PROCEEDING WITH WORK UNDER THIS CONTRACT
- 10.1.2. EXTREME CARE SHALL BE EXERCISED IN EXCAVATING AND WORKING NEAR EXISTING UTILITIES. CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGE TO ANY FACILITIES.
- SHOULD UTILITIES NOT LOCATED OR MARKED BE FOUND DURING EXCAVATION, THE CONTRACTOR SHALL PROMPILY NOTIFY THE OWNER AND SHALL DISCONTINUE WITH WORK IN THE AREA, EXCEPT NECESSARY EMERGENCY WORK NECESSARY TO REPAIR OR PREVEND AMAGE UNTIL INSTRUCTIONS ARE RECEIVED.
- 10.1.4. FAILURE TO NOTIFY THE OWNER OF DISCOVERY OF SUCH UTILITIES OR DAMAGE THERETO WILL RESULT IN THE CONTRACTOR BEI LIABLE FOR ANY AND ALL DAMAGE CAUSED TO THE UTILITIES AS A
- 10.1.5. THE CONTRACTOR SHALL, BEFORE STARTING WORK ON THE SPRINKLER SYSTEM, CAREFULLY CHECK ALL FINISH GRADES TO SATISFY HIMSELF THAT HE MAY PROCEED WITH THE WORK.
- 10.2.1. THE CONTRACTOR SHALL ARRANGE FOR THE PROVISION OF THE WATER SUPPLY AND COORDINATE WITH THE OWNER AS NECESSARY.
- 10.2.2. THE CONTRACTOR SHALL CONNECT TO THE WATER SOURCE AS INDICATED ON THE DRAWINGS.
- THE OWNER SHALL ARRANGE FOR THE PROVISION OF THE ELECTRICAL SUPPLY, POWER SOURCES SHALL BE AS INDICATED (THE DRAWINGS. THE CONTRACTOR SHALL CONNECT AT THE POIN HOWN ON THE DRAWINGS
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAKING ELECTRICAL CONNECTIONS TO THE AUTOMATIC CONTROLLERS. ALL WIRING SHALL BE ROUTED AS SHOWN ON PLANS. ALL ELECTRICAL VORK SHALL BE IN ACCORDANCE WITH ALL LOCAL OR COUNTY ORDINANCES.
- 10.4. EXISTING UTILITIES THE CONTRACTOR SHALL LOCATE AND MARK ALL EXISTING UTILITIES SUCH AS POWER, TELEPHONE, DOMESTIC WATER AND TILE DRAINS. EXTREME CARE SHALL BE TAKEN BY THE CONTRACTOR WHEN EXCAVATING OR WORKING IN THESE AREAS AND COORDINATION AND COOPERATION WITH OTHER CONTRACTOR IS REQUIRED AS THE WORK PROGRESSES TO THESE AREAS.

- 10.5. TRENCHES IN GENERAL
- 10.5.1 TRENCHES SHALL BE DUG STRAIGHT, AND PIPE SHALL HAVE THE CONTINUOUS SUPPORT FOR THE DITCH BOTTOM AND SHALL BE LAID TO AN EVEN GRADE. TRENCHING EXCAVATION SHALL FOLLOW THE LAYOUT INDICATED ON THE DRAWINGS.
- 10.5.2. ALL PRESSURE SUPPLY LINES SHALL HAVE A MINIMUM DEPTH OF EIGHTEEN (18) INCHES MINIMUM UNLESS OTHERWISE NOTED.
- ALL NON-PRESSURE SUPPLY LINES SHALL HAVE A MINIMUM DEPTH OF TWELVE (12) INCHES MINIMUM AS SHOWN IN THE DETAILS.
- ALL LINES SHALL HAVE A MINIMUM CLEARANCE OF SIX (6) INCHES
- FROM EACH OTHER AND FROM LINES OF OTHER TRADES. 10.5.5. NO LINE SHALL BE INSTALLED DIRECTLY OVER ANOTHER LINE.
- 10.5.6. IF NECESSARY, CALL UNDERGROUND ALERT, OR SIMILAR COMPANY
- 10.6.1. BACKFILL FOR TRENCHING SHALL BE COMPACTED TO DRY DENSITY BACKFILL FOR THE ADJACENT UNDISTURBED SOIL, AND SHALL CONFORM FOUGLT OT THE ADJACENT UNDISTURBED SOIL, AND SHALL CONFORM TO THE ADJACENT GRADES WITHOUT DIPS, SUNKEN AREAS, HUMPS OR OTHER IRREGULARITIES. INITIAL BACKFILL ON ALL LINES SHALL BE OF A FINE GRANULAR MATERIAL WITH NO FOREIGN MATTER LARGER THAN ONE-HALF (1/2) INCH IN SIZE.
- 10.6.2. IF, IN THE OPINION OF THE CONTRACTOR/LANDSCAPE ARCHITECT, THE EXCAVATED MATERIAL IS NOT SATISFACTORY FOR USE AS BACKFILL, THE CONTRACTOR SHALL DISPOSE OF THIS UNSATISFACTORY MATERIAL.
- 10.6.3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY SETTLING OF
- 10.7.1. PVC PIPE SHALL BE INSTALLED IN A MANNER WHICH WILL PROVIDE FOR EXPANSION AND CONTRACTION AS RECOMMENDED BY THE PIPE MANUFACTURER.
- 10.7.3. THE JOINTS SHALL BE ALLOWED TO SET AT LEAST TWENTY-FOUR (24) HOURS BEFORE PRESSURE IS APPLIED TO THE SYSTEM ON PVC
- 10.7.4. AFTER ALL NEW SPRINKLER PIPING AND RISERS ARE IN PLACE AND CONNECTED, AND ALL NECESSARY WORK AS BEEN COMPLETED AND PRIOR TO THE INSTALLATION OF SPRINKLER HEADS, CONTROL VALVES SHALL BE OPENED AND A FULL HEAD OF WATER USED TO FLUSH OUT THE SYSTEM. AFTER THE SYSTEM IS THOROUGHLY FLUSHED, RISERS SHALL BE CAPPED OFF AND THE SYSTEM PRESSURE TESTED.
- SPRINKLER LINES SHALL BE TESTED IN PLACE BEFORE BACKFILLING FOR A PERIOD OF NOT LESS THAN TWENTY-FOUR (24) HOURS AND SHALL SHOW NO LEAKAGE OR LOSS OF PRESSURE. DURING THE TEST PERIOD. MINIMUM TEST PRESSURE AT THE HIGHEST POINT OF HE SECTION BEING TESTED, SHALL BE 100 POUNDS PER SQUARE
- AT THE CONCLUSION OF THE PRESSURE TEST, THE HEAD SHALL BE INSTALLED AND TESTED FOR OPERATION IN ACCORDANCE WITH DESIGN REQUIREMENTS UNDER NORMAL OPERATING PRESSURE, CONTRACTOR SHALL VERIFY HEAD PRESSURES WITH PITOT TUBE OR PRESSURE OCCUPIED AND ADJUST VALVE TO

## 10.8. SPRINKLERS

- 10.8.1. ALL POP-UP SPRINKLERS SHALL BE PROVIDED WITH SWING JOINTS AND SHALL BE ADJUSTED TO THE PROPER HEIGHT. ALL NOZZLES SHALL BE ADJUSTED FOR PROPER THROW RADIUS FOR EFFICIENT
- 10.8.2. SPRINKLER HEADS AND RISERS SHALL BE INSTALLED ACCORDING TO DETAILS.

# 10.9. DRIP LINE INSTALLATION

- 10.9.1. INSTALL ALL DRIP LINE AS INDICATED ON DRAWINGS. USE ONLY TEFLON TAPE ON ALL THREADED CONNECTIONS.
- CLAMP TECHLINE INSERT FITTINGS WITH OETIKER CLAMPS WHEN OPERATING PRESSURE EXCEEDS SPECIFIC DRIP LINE FITTING REQUIREMENTS.
- 10.9.3. WHEN INSTALLING TECHLINE, INSTALL SOIL STAPLES AS LISTED
  - SANDY SOIL ONE STAPLE EVERY THREE (3') FEET AND TWO (2) STAPLES ON EACH CHANGE OF DIRECTION (TEE, ELBOW, OR LOAM SOIL - ONE STAPLE EVERY FOUR (4') FEET AND TWO (2)
  - STAPLES ON EACH CHANGE OF DIRECTION (TEE, ELBOW, OR CLAY SOIL - ONE STAPLE EVERY FIVE (5') FEET AND TWO (2) STAPLES ON EACH CHANGE OF DIRECTION (TEE, ELBOW, OR
- CAP OR PLUG ALL OPENINGS AS SOON AS LINES HAVE BEEN INSTALLED TO PREVENT THE INTRUSION OF MATERIALS THAT WOULD OBSTRUCT THE PIPE. LEAVE IN PLACE UNTIL REMOVAL IS NECESSARY FOR COMPLETION OF INSTALLATION.
- 10.9.5. THOROUGHLY FLUSH ALL WATER LINES BEFORE INSTALLING VALVES AND OTHER HYDRANTS
- 10.9.6. TEST IN ACCORDANCE WITH HYDROSTATIC TESTS AS RECOMMENDED BY THE MANUFACTURER.

- 10.10.1. REMOTE CONTROL VALVES SHALL BE ADJUSTED SO THAT THE MOST REMOTE SPRINKLER HEADS OPERATE AT THE PRESSURE RECOMMENDED BY THE HEAD MANUFACTURER. REMOTE CONTROL VALVES SHALL BE ADJUSTED SO THAT A UNIFORM DISTRIBUTION OF WATER IS APPLIED BY THE SPRINKLER HEADS TO THE PLANTING AREAS FOR EACH INDIVIDUAL VALVE SYSTEM.
- 10.10.2. QUICK COUPLING VALVES SHALL BE SET IN VALVE BOXES APPROXIMITELY 12" FROM WALKS, CURSS, HEADER BOARDS, PAVED AREAS WHERE APPLICABLE VERTICAL POSITIONING OF OUICK COUPLING VALVES SHALL BE SUCH THAT SLEEVE TOP VB EF LUSH WITH THE SETTLED FINISH GRADE AS DETERMINED. THE TURF IS ESTABLISHED AND 2" ABOVE GRADE IN GROUND OF THE TURF IS ESTABLISHED AND 2" ABOVE GRADE IN GROUND OF THE TURF IS ESTABLISHED AND 2" ABOVE GRADE IN GROUND OF THE TURF IS ESTABLISHED AND 2" ABOVE GRADE IN GROUND OF THE TURF IS ESTABLISHED AND 2" ABOVE GRADE IN GROUND OF THE TURF IS ESTABLISHED AND 2" ABOVE GRADE IN GROUND OF THE TURF IS ESTABLISHED AND 2" ABOVE GRADE IN GROUND OF THE TURF IS ESTABLISHED AND 2" ABOVE GRADE IN GROUND OF THE TURF IS THE T

## 10.11. VALVE BOXES

- 10.11.1. VALVE BOXES SHALL BE SET ONE-HALF INCH (1/2") ABOVE THE DESIGNATED FINISH GRADE IN LAWN AREAS AND ONE INCH (1") ABOVE FINISH GRADE IN GROUND COVER AREAS.
- 10.12. AUTOMATIC CONTROLLER LOCATION AND INSTALLATION 10.12.1. THE AUTOMATIC CONTROLLER SHALL BE INSTALLED AT THE

- APPROXIMATE LOCATION SHOWN ON THE PLAN. VERIFY EXACT LOCATION WITH THE OWNER.
- 10.12.2. ALL LOCAL AND OTHER APPLICABLE CODES SHALL TAKE PRECEDENCE IN CONNECTING THE 110 VOLT ELECTRICAL SERVICE TO CONTROLLER. OWNER SHALL PROVIDE POWER TO CONTROLLER. CONTRACTOR SHALL COMPLETE HOOK-UP TO CONTROLLER.
- 10.12.3. THERE SHALL BE ADEQUATE COVERAGE OF EARTH (18" MINIMUM)
  OVER THE 24-VOLT CONTROL WIRE. INSTALL WIRE IN TRENCH AND
  TAPE TO MAIN LINES ON SIDE OF PIPE AT 10' INTERVALS.

- 10.13.1 ALL ELECTRICAL EQUIPMENT AND WIRING SHALL COMPLY WITH LOCAL AND STATE CODES AND BE INSTALLED BY THOSE SKILLED AND LICENSED IN THE TRADE.
- 10.13.2. CONNECTING AND SPLICING OF WIRE AT THE VALVES OR IN THE FIELD SHALL BE MADE USING A DRI-SPLICE CONNECTOR OR EQUAL.

### 10.14 PRESSURE TEST

- 10.14.1. ALL PRESSURE LINES SHALL BE TESTED UNDER PRESSURE WITH WATER AND AIR OF ONE-HUNDRED FIFTY (150) POUNDS PER SQUARE INCH, AND ALL NON-PRESSURE LINES SHALL BE TESTED UNDER THE EXISTING STATIC PRESSURE, AND BOTH BE PROVEN WATERTIGHT.
- PRESSURE SHALL BE SUSTAINED IN THE LINES FOR A 24 HOUR PERIOD. IF LEAKS DEVELOP, THE JOINTS SHALL BE REPLACED AND THE TEST REPEATED UNTIL THE ENTIRE SYSTEM IS PROVEN WATFERTIGHT
- 10.14.3. TEST SHALL BE OBSERVED AND APPROVED BY THE OWNER PRIOR
- 10.14.4. UPON COMPLETION OF EACH PHASE OF THE WORK, TH CONTRACTOR SHALL CHECK AND ADJUST EACH SPRINKLER HEAD TO MEETING THE SITE REQUIREMENTS.
- 10.15. COVERAGE TEST UPON COMPLETION OF ALL SYSTEMS, THE CONTRACTOR, IN THE PRESENCE OF THE ARCHITECT, SHALL PERFORM A COVERAGE TEST TO DETERMINE IF THE COVERAGE OF WATER AFFORDED ALL AREAS IS COMPLETE AND ADEQUATE. THE CONTRACTOR SHALL CHANGE ANY HEADS, NOZULES, OR ORIFICES AS MAY BE REQUIRED TO PROVIDE COVERAGE AS MODICATED ON THE DRAWINGS AND AS SPECIFIED
- 10.16. LOWERING OF HEADS UNLESS OTHERWISE NOTED. ALL SPRINKLERS LOWERING OF HEADS - UNLESS OTHERWISE NOTED, ALL SPRINKLERS INSTALLED IN LAWN AREAS SHALL BELOWERED TO FINISH GRADE WITHIN FIVE DAYS FOLLOWING NOTHIFICATION BY THE CITY/OWNER. THE TIME OF LOWERING HEADS, THE CONTRACTOR SHALL COMPLETELY CHECK AND ADJUST THE ENTIRE SYSTEM AND MAKE ANY REPAIRS THAT ARE NECESSARY TO COMPLETE THIS WORK TO THE SATISFACTION OF THE CITY/OWNER, LANDSCAPE ARCHITECT AND/OR OWNERS CHOSEN REPRESENTATIVE. THE CONTRACTOR SHALL MOTHEY THE OWNER IN

## 10 17. WORKMANSHIP AND PROCEDURE

- 10.17.1. THE ROUTING OF THE PRESSURE SUPPLY LINES AS INDICATED ON THE DRAWINGS IS DIAGRAMMATIC. THE CONTRACTOR SHALL INSTALL LINES IN A MANNER THAT CONFORMS WITH THE VARIOUS DETAILS, WITHOUT OFFSETTING THE VARIOUS ASSEMBLIES FROM THE PRESSURE SUPPLY LINE.
- 10 17 3 ALL ASSEMBLIES SPECIFIED HEREIN SHALL BE INSTALLED IN ACCORDANCE WITH THE RESPECTIVE DETAIL. IN THE ABSENCE OF DETAIL DRAWINGS OR SPECIFICATIONS PERTAINING TO THE DEFINIL DRAWNING OF SPECIFICATIONS FEB TRAINING OF THE SPECIFIC TEMS REQUIRED TO COMPLETE THE WORK, THE CONTRACTOR SHALL PERFORM SUCH WORK IN ACCORDANCE WITH THE BEST STANDARD PRACTICE AND TO THE SATISFACTION OF THE LANDSCAPE ARCHITECT/CONTRACTOR.

- 11.1. INSTALLATIONS AND OPERATIONS MUST BE APPROVED BY THE CITY/OWNER AND LANDSCAPE ARCHITECT. 11.2. PRIOR TO COMMENCING WORK, THE CONTRACTOR SHALL ARRANGE A MEETING WITH THE CITY/OWNER, AT WHICH TIME THE CONTRACTOR WILL BE INFORMED OF SPECIFIC INSPECTIONS REQUIRED AND THE METHOD OF CALLING FOR SUCH INSPECTIONS AS THE INDIVIDUAL WORK

REPRESENTATIVE.

- 12.1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL WORK TO BE PERFORMED UNDER THIS CONTRACT. NO CONTRACTOR SHALL BE RELIEVED OF HIS LIABILITY TO COMPLETE THE WORK SHOWN ON THE DRAWINGS AND INDICATED IN THE SPECIFICATIONS, UNLESS AUTHORIZED IN WRITING BY THE CITY/OWNER OR OWNER'S APPROVED
- 12.2. THE CONTRACTOR SHALL PROTECT HIS WORK FROM DAMAGE AND THEFT AT ALL TIME, AND REPLACE ALL DAMAGED OR STOLEN PARTS AT HIS EXPENSE UNTIL THE WORK IS ACCEPTED IN WRITING BY THE 12.3. THE CONTRACTOR SHALL PROTECT THE CITY/OWNER'S PROPERTY FROM INJURY OR LOSS, ALL DAMAGE TO EXISTING PROPERTY (BUILDINGS, UTILITIES, ETC.) OR PLANTING (TREES, SHRUBS, LAWNS OR GROUND COVERS) CAUSED BY THE CONTRACTOR DURING HIS OPERATION OR AS
- A RESULT OF MALFUNCTION OF INSTALLED WORK DURING THE SUARANTEE PERIOD SHALL BE REPAIRED AT THE CONTRACTOR'S 12.4. THE CONTRACTOR SHALL CAREFULLY NOTE ALL FINISH GRADE BEFORE COMMENCING WORK. ANY FINISH GRADE CHANGED DURING THE COURSE OF HIS WORK SHALL BE RESTORED TO THE ORIGINAL CONTOURS.
- 12.5. THE CONTRACTOR SHALL CAUSE MINIMUM INTERFERENCE WITH WORKMEN OR THE MATERIALS AND EQUIPMENT OF OTHER TRADES PEOPLE WORKING ON THE PROJECT.

## 13. COMPLETION CLEAN-UP

13.1. UPON COMPLETION OF WORK, THE CONTRACTOR SHALL REMOVE EXCESS MATERIALS, RUBBISH, DEBRIS, ETC., AND HIS CONSTRUCTION AND INSTALLATION EQUIPMENT FROM THE PREMISES.

14.1. UPON FINAL ACCEPTANCE BY THE CITY/OWNER, THE CONTRACTOR SHALL PROVIDE A NINETY (90) DAY MAINTENANCE SERVICE FOR THE ENTIRE IRRIGATION SYSTEM. THIS SHALL INCLUDE, BUT NOT BE LIMITED O BROKEN SPRINKLER REPAIR AND/OR REPLACEMENT, CLOGGED DRIF LINE REPAIR / REPLACEMENT, BROKEN PIPE REPAIR AND/OI REPLACEMENT, ADJUSTMENT OF HEADS, ADJUSTMENT OF CONTROLLER



EVENS ARCHITECTS

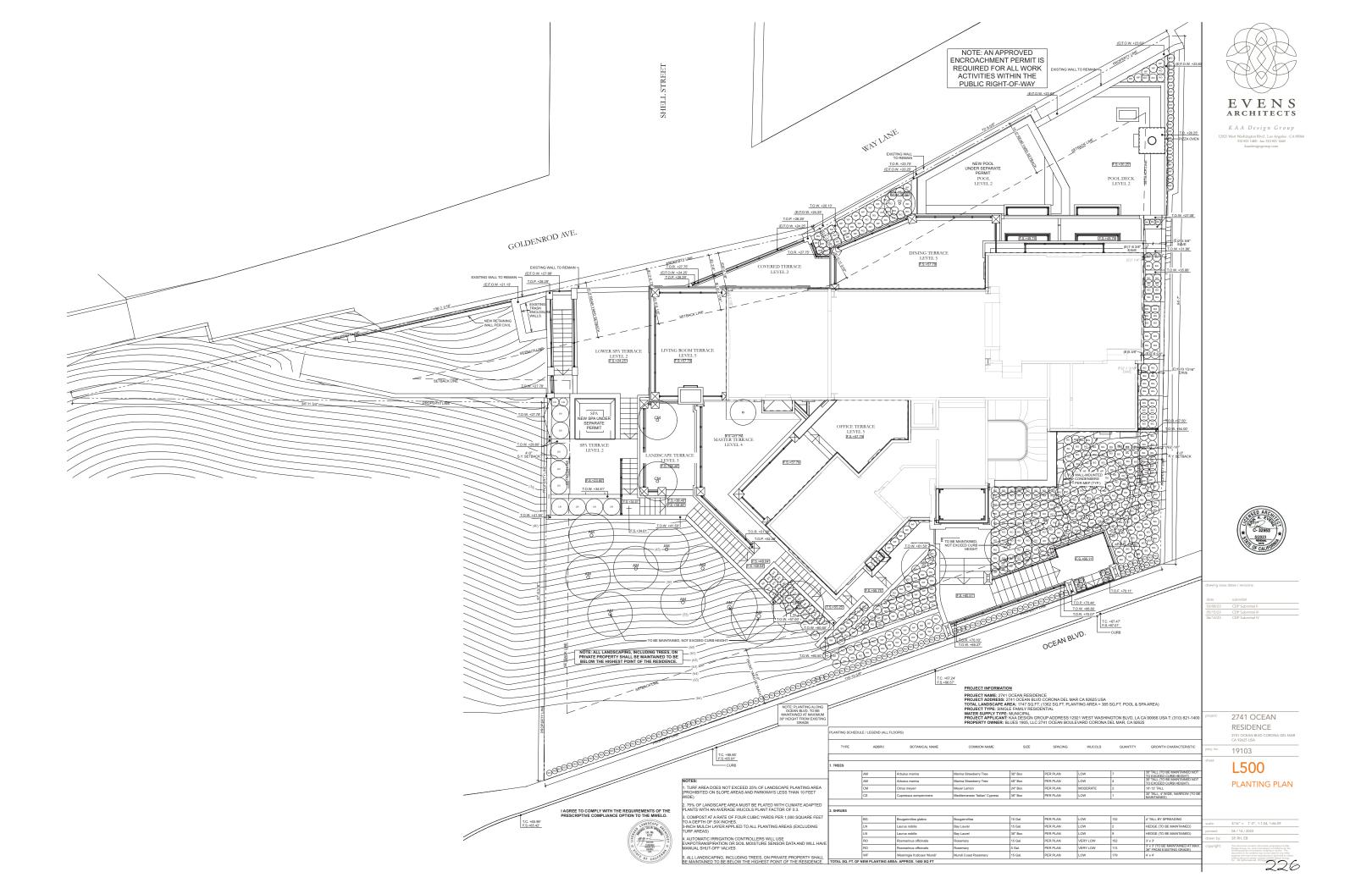
KAA Design Group

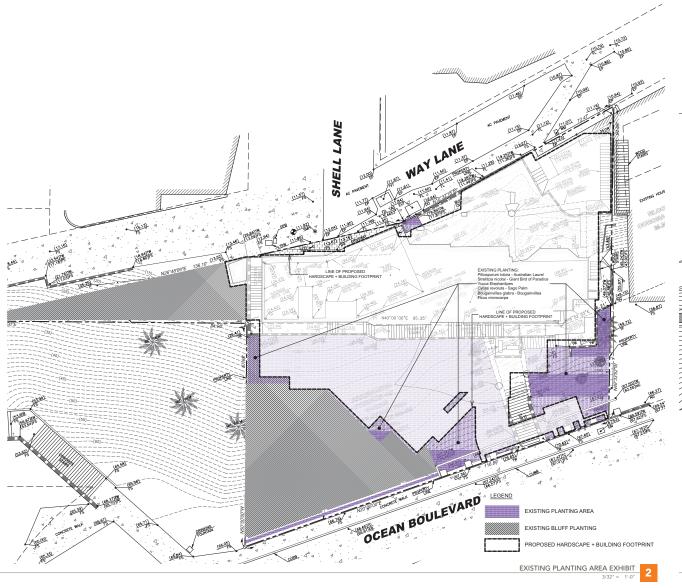
2741 OCEAN RESIDENCE

19103

L406 **IRRIGATION** 

**SPECIFICATIONS** 







PROJECT INFORMATION

PROJECT INFORMATION
PROJECT ANME: 7241 OCEAN RESIDENCE
PROJECT ADDRESS: 2741 OCEAN BLUD CORONA DEL MAR CA 92625 USA
TOTAL LANDSCAPE ARRE: 1747 SO ET. (1982 SQ.FT. PLANTING AREA + 385 SQ.FT. POOL & SPA AREA)
PROJECT TYPE: SINGEL FAMILY RESIDENTIAL
WATER SUPPLY TYPE: MINICIPAL
PROJECT APPLICANT: KAA DESIGN GROUP ADDRESS: 12921 WEST WASHINGTON BLVD, LA CA 90066 USA T. (310) 821-1400
PROJECT APPLICANT: KAA DESIGN GROUP ADDRESS: 12921 WEST WASHINGTON BLVD, LA CA 90066 USA T. (310) 821-1400
PROJECT APPLICANT: KAA DESIGN GROUP ADDRESS: 12921 WEST WASHINGTON BLVD, LA CA 90066 USA T. (310) 821-1400

	PLANT NAMES	WUCOLS
PROPOSED PLAN	NTING	
	Arbutus Marina - Marina Strawberry Tree	LOW
	Cupressus sempervirens - Medterranean Italian Cypress	LOW
	Bougainvillea glabra - Bougainvillea	LOW
	Laurus nobilis - Bay Laurel	LOW
	Olea europaea 'Little Ollie' - Little Ollie Dwarf Olive	LOW
	Westringia fruticosa 'Mundi' -Mundi Coast Rosemary	LOW
	TOTAL SQ.FT. OF NEW PLANTING AREA: APPROX. 1400 SQ.FT.	
EXISTING PLANT	ING	
	Pittosporum tobira - Australian Laurel	MODERATE
	Strelitzia nicolai - Giant Bird of Paradice	MODERATE
	Yucca Elephantipes	LOW
	Cycas revoluta - Sago Palm	MODERATE
	Bougainvillea glabra - Bougainvillea	LOW

THE PROPOSED PROJECT CONSIST OF REPLACEMENT PLANTINGS WITH EQUAL OR LOWER WATER NEEDS; AND THE IRRIGATION SYSTEM IS DESIGNED, OPERABLE AND PROGRAMMED TO COMPLY WITH THE CITY'S WATER CONSERVATION REGULATIONS.

## NOTES:

- 1. TURF AREA DOES NOT EXCEED 25% OF LANDSCAPE PLANTING AREA (PROHIBITED ON SLOPE AREAS AND PARKWAYS LESS THAN 10 FEET WIDE)
- 2. 75% OF LANDSCAPE AREA MUST BE PLATED WITH CLIMATE ADAPTED PLANTS WITH AN AVERAGE WUCCLS PLANT FACTOR OF 0.3.

  3. COMPOST AT A RATE OF FOUR CUBIC VARDS PER 1,000 SQUARE FEET TO A DEPTH OF SIX INCHES.

  3-INCH MULCH LAYER APPLIED TO ALL PLANTING AREAS (EXCLUDING TURF AREAS)
- 4. AUTOMATIC IRRIGATION CONTROLLERS WILL USE EVAPOTRANSPIRATION OR SOIL MOISTURE SENSOR DATA AND WILL HAVE MANUAL SHUT-OFF VALVES
- 5. ALL LANDSCAPING, INCLUDING TREES, ON PRIVATE PROPERTY SHALL BE MAINTAINED TO BE BELOW THE HIGHEST POINT OF THE RESIDENCE.







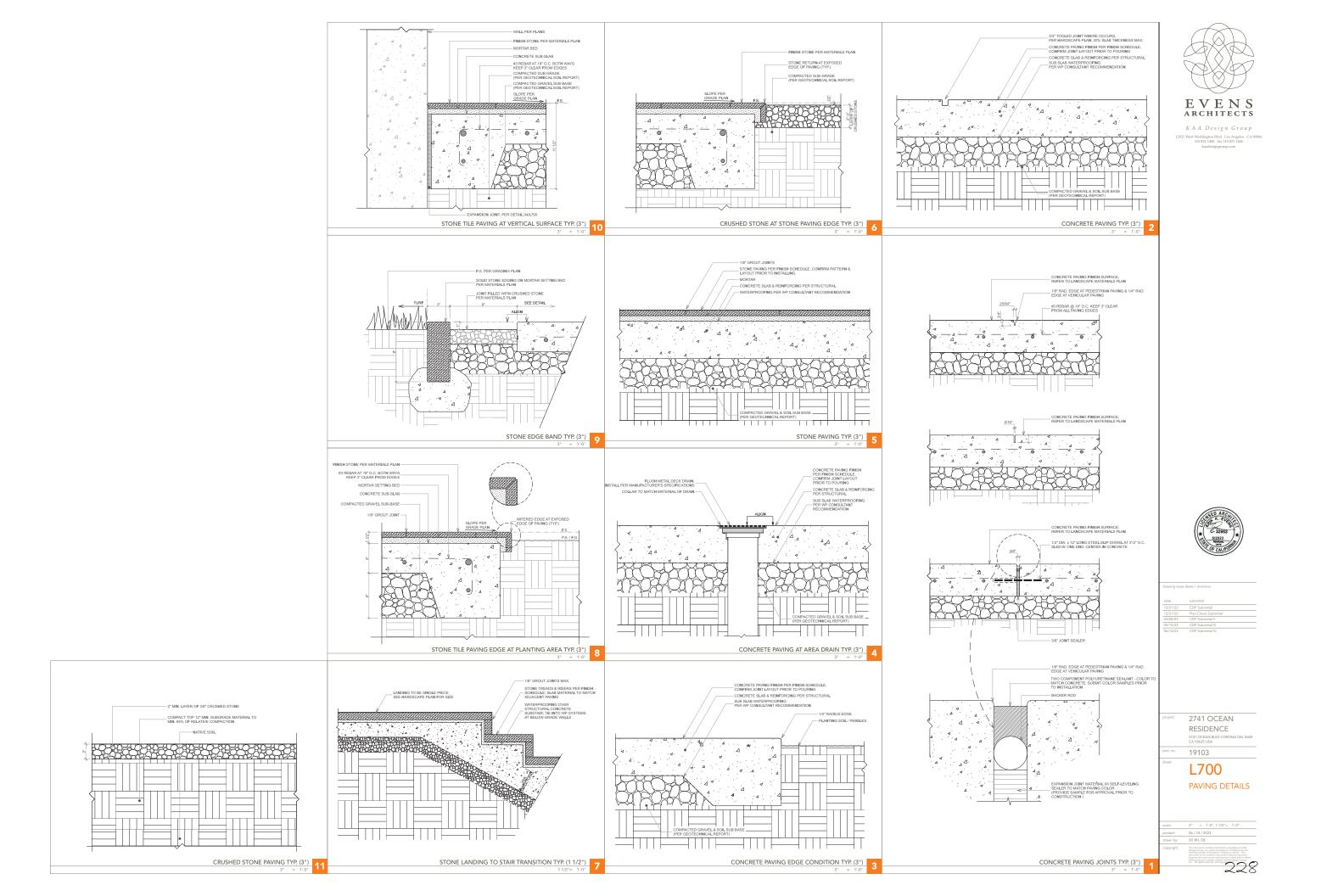
KAA Design Group

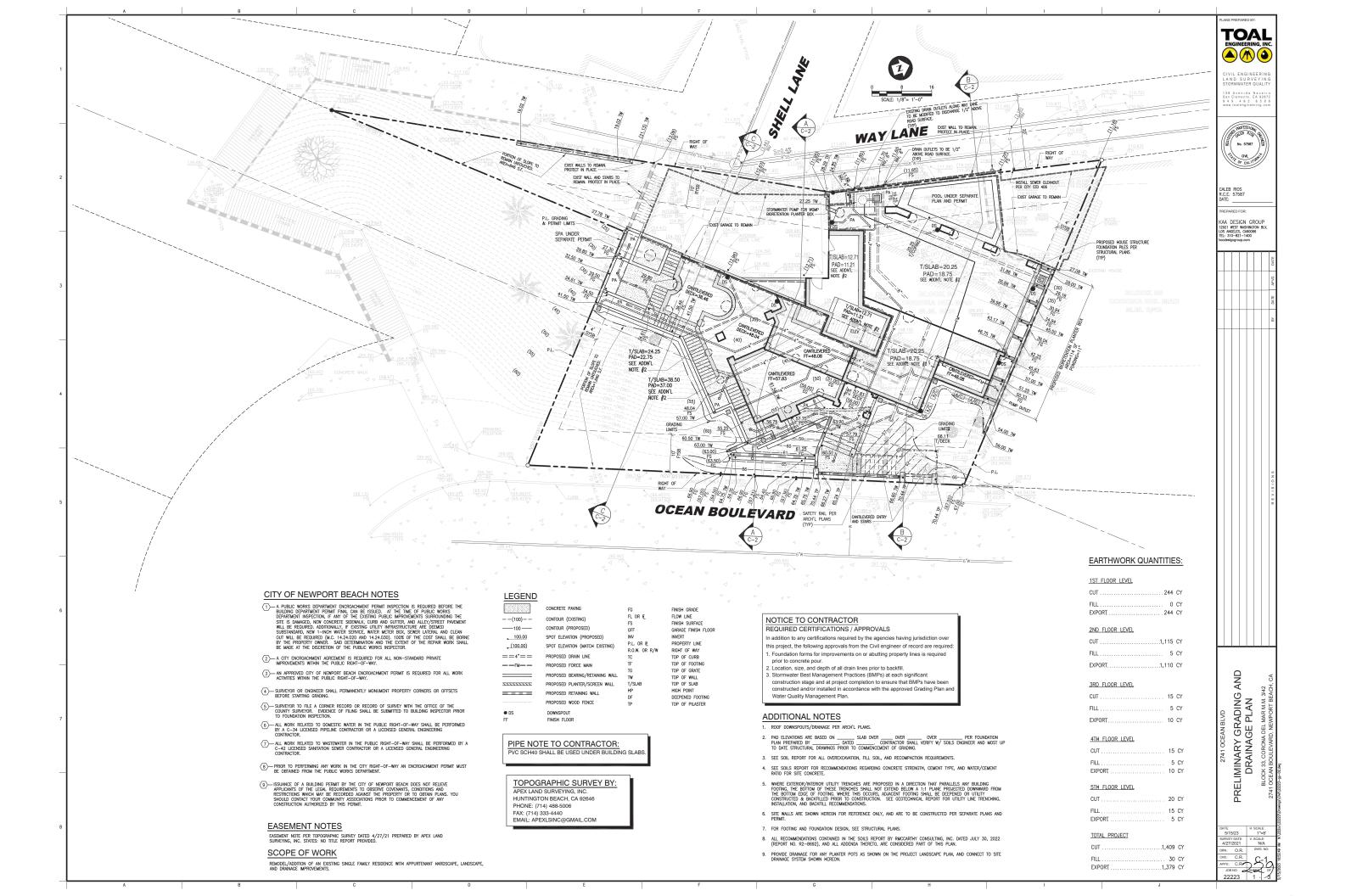


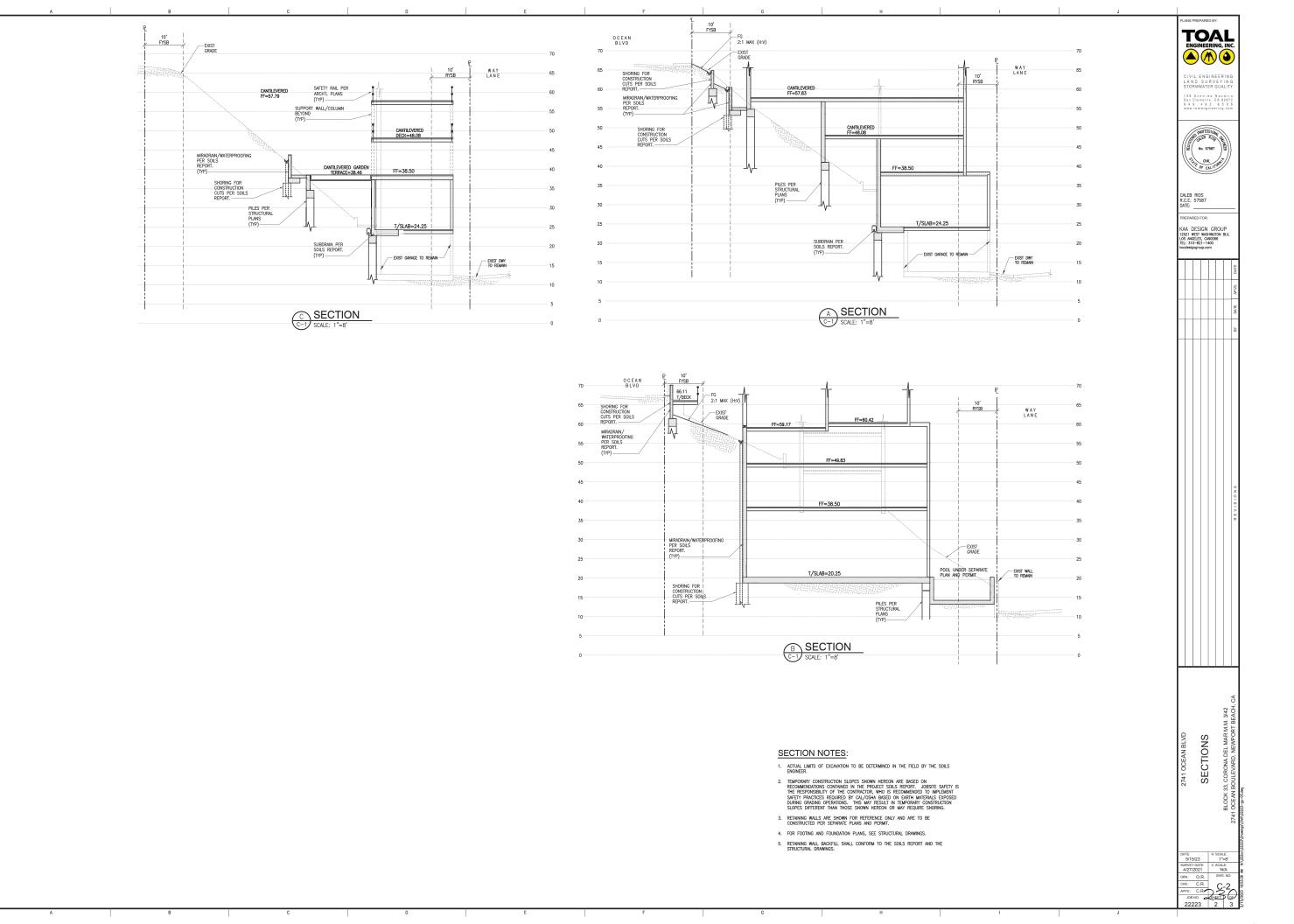
2741 OCEAN RESIDENCE 19103

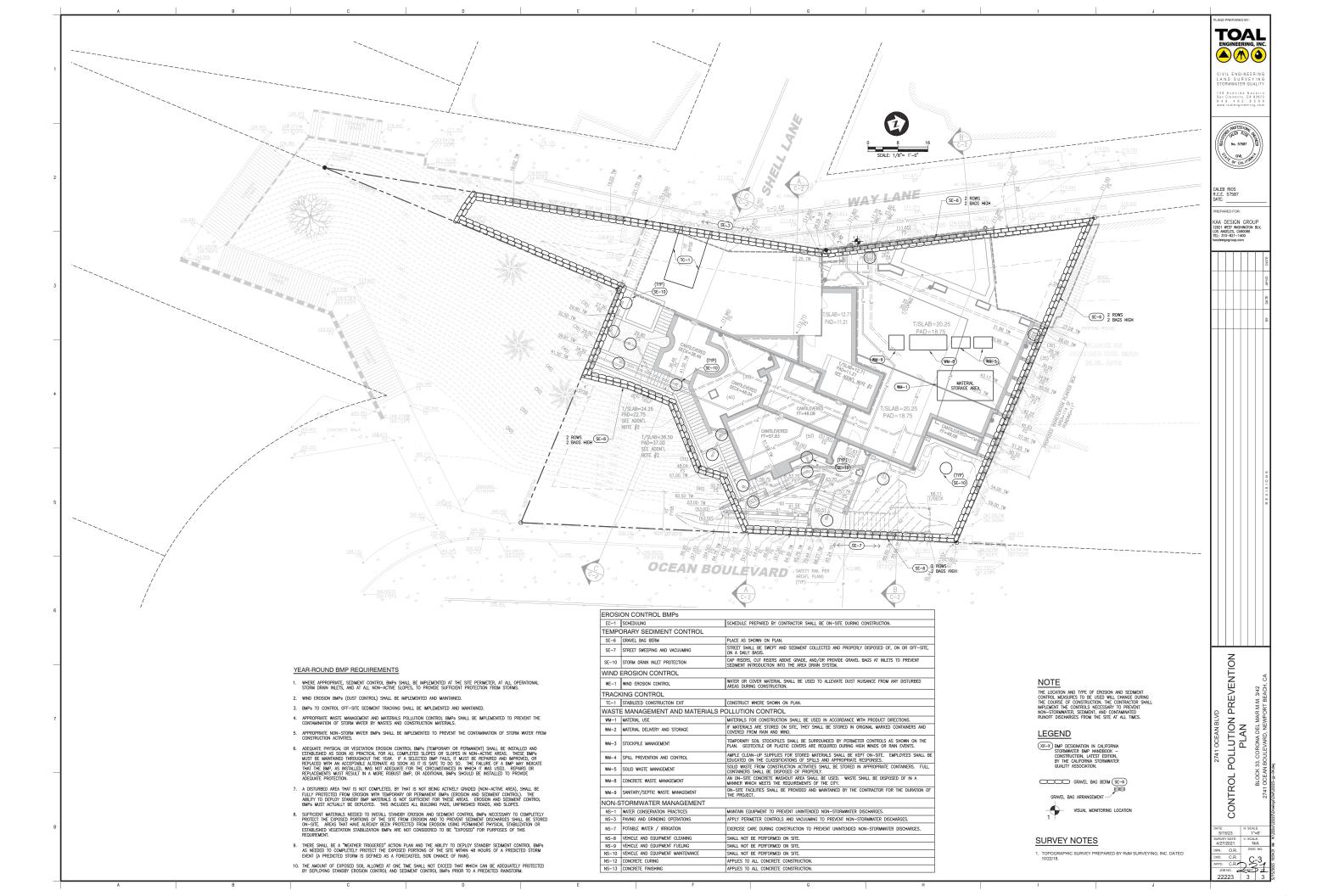
L501

PLANTING EXHIBIT









JOB 3 No.: 22223