COUNTY OF SAN MATEO PLANNING AND BUILDING DEPARTMENT

DATE: June 14, 2021

TO: Agricultural Advisory Committee

FROM: Camille Leung, Planning Staff, <u>cleung@smcgov.org</u>

SUBJECT: Consideration of a Planned Agricultural District Permit, Coastal Development Permit, and Grading Permit for a new 7,550 sq. ft. two-story single-family residence with 1,180 sq. ft. attached garage, 703 sq. ft. basement, and septic system; 5,205 sq. ft. two-story barn; 1,920 sq. ft. horse barn; driveway and fire truck turnaround; and one 706 sq. ft. Affordable Housing Unit (deed restricted) and septic system, on a 20.26acre property, located at 2450 Purisima Creek Road within the unincorporated North San Gregorio community of San Mateo County. Nineteen (19) trees are proposed for removal, including 6 significant trees. The project is appealable to the California Coastal Commission.

County File Number: PLN 2020-00133 (Simrock)

PROPOSAL

The applicant proposes to replace the existing 3,550 sq. ft. single-family residence with a new two-story single-family residence and septic system; a new driveway with a fire truck turnaround; a two-story barn; a horse barn; and an Affordable Housing Unit (AHU; deed restricted) and septic system. Grading for access road/fire truck turnaround and structures totals 3,200 cubic yards (1,600 cy cut; 1,600 cy fill). Nineteen (19) trees are proposed for removal, including 6 significant trees. The applicant proposes to plant additional screening landscaping, including twenty-two (22) 24-inch-36-inch box trees, to soften views from Purisima Creek Road. The applicant proposes to demolish a 915 sq. ft. horse barn, a 150 sq. ft. shed, a 2,300 sq. ft. barn and storage building, and a 296 sq. ft. horse stall. The property is not currently farmed; the applicant proposes to plant a non-commercial orchard on the east side of the property. The property is located within the Higgins-Purisima Road County Scenic Corridor.

DECISION MAKER

Planning Commission

QUESTIONS FOR THE AGRICULURAL ADVISORY COMMITTEE

1. Will the development, including a single-family residence, barn, horse barn, driveway, and Affordable Housing Unit (deed restricted) within the unincorporated

County area, have any negative effect on surrounding agricultural uses? If so, can any conditions of approval be recommended to minimize any such impact?

2. What position do you recommend that Planning staff take with respect to the application for this project?

BACKGROUND:

Report Prepared By: Camille Leung, Project Planner

Owner: Gregory R. Joswiak Trust

Location: 2450 Purisima Creek Road, North San Gregorio

APN: 066-230-050

Parcel Size: 20.26 acres

Existing Zoning: Planned Agricultural District / Coastal Development District (PAD/CD)

General Plan Designation: Agriculture

Local Coastal Plan Designation: Rural

Existing Land Use: Residential

Water Supply: On-site domestic well; Project includes an After-the-fact CDP for emergency domestic well replacement (emergency approved under PLN 2020-00109).

Sewage Disposal: On-site septic systems

Williamson Act: This parcel is not under a Williamson Act Contract.

Flood Zone: The project site is located in Flood Zones A (Areas subject to inundation by the 1-percent-annual-chance flood event) and X (Area of minimal flood hazard, usually depicted on FIRMs as above the 500-year flood level), per FEMA Flood Panel 06081C0267F, Effective Date: 08-02-2017. The Federal Emergency Management Agency (FEMA) has provided a Conditional Letter of Map Amendment, dated July 15, 2020, removing the area of the existing residence from Zone A and amending the map to designate the area as Flood Zone X. The area of the proposed residence is generally in the same location as the existing residence, only further upslope and away from the creek.

Environmental Evaluation: An Initial Study/Mitigated Negative Declaration (IS/MND) is being prepared by the Project Planner. The target release date for the IS/MND is late June 2021.

Setting: The parcel is located in a rural area located within the unincorporated North San Gregorio area of San Mateo County, approximately 2 miles east (as the crow flies) of Cabrillo Highway. The site is located along Purisima Creek and is accessed via a driveway from Purisima Creek Road. The parcel is located within the Purisima Creek Road County Scenic Corridor.

Chronology:

Date	Action
April 29, 2020 -	Application submitted
April 7, 2021 -	Deemed complete
June 14, 2021 -	Agricultural Advisory Committee

Will the project be visible from a public road?

As further discussed in Section 2.c of this report, the project consists of multiple buildings that will be visible from Purisima Creek Road. The project involves the removal of 19 trees, including 6 trees with a trunk circumference of 12-inch in diameter at breast height or larger, in the area of the proposed Main Residence, driveway, and Barn. The applicant proposes to plant additional screening landscaping, including twenty-two (22) 24-inch-36-inch box trees, to soften views from Purisima Creek Road as shown on Page L4.0 of the Irrigation Plan. The declining topography form the road and the proposed tree plantings would partially screen the new house, the new driveway to the house, the new barn, and new AHU, from viewing locations along Purisima Creek Road.

Will any habitat or vegetation need to be removed for the project?

The proposed buildings would be located outside of both the riparian corridor of Purisima Creek and the 50 feet minimum riparian buffer zone. No habitat or riparian vegetation would be removed. A Coastal Biological Resources Review report was prepared on April 7, 2020 for the project site by Dana Riggs Sol Ecology, Inc. and is based on a biological resources study and reconnaissance-level surveys for Sensitive Natural Communities as defined in the Local Coastal Program (LCP) performed on February 12, 2019 on and adjacent to the Project Site. Recommendations of the report will be incorporated as mitigation measures in the IS/MND, which will be included as project conditions of approval.

Is there prime soil on the project site?

There are no prime soils on the subject parcel.

DISCUSSION

A. <u>KEY ISSUES</u>

Planning staff has reviewed this proposal and has concluded the following:

1. <u>Compliance with Planned Agricultural District (PAD) Regulations</u>

The project complies with the applicable development standards and requirements, discussed below:

a. <u>Development Standards</u>

As shown in the table below, the project conforms to Sections 6458 and 6359 of the San Mateo County Zoning Regulations, which regulate the height and setbacks of structures.

	PAD Development Standard	Existing Residence	Proposed Residence
Minimum Lot Size	N/A	20.26 acres	20.26 acres
Minimum Front Setback	50 feet	232 feet	139 feet
Minimum Side Setbacks	20 feet	>300 feet	>300 feet
Minimum Rear Setback	20 feet	140 feet	140 feet
Maximum Residential Floor Area	N/A	3,550 sq. ft.	7,550 sq. ft
Maximum Building Height	36'	28'-30'	28'-6" (Ridge Peak)

b. PAD Permit Requirements

The project conforms to the substantive criteria for the issuance of a PAD Permit, as applicable and outlined in Section 6355 of the Zoning Regulations. As proposed and conditioned, the project conforms to the following applicable policies.

- (1) General Criteria
 - (a) The encroachment of all development upon land which is suitable for agricultural uses shall be minimized.

The new residence would be located within the same general area of the existing residence. The project includes the removal of the prominent driveway that leads to the existing house and bisects the property. A new driveway would be constructed on the east side of the property, which would provide greener views of the property from Purisima Creek Road and maintain more continuous open space for pasture land and potential future agricultural use.

(b) All development permitted on a site shall be clustered.

The proposed Main Residence and new Barn are clustered at the center of the property in the general location of the current residence. The proposed AHU is clustered with an existing barn and horse stable. The proposed 1,920 sq. ft. Horse Barn is not clustered with new or existing buildings, but is located adjacent to the horse pasture for ease of use. Staff is working with the applicant to identify locations for the Horse Barn such that is it clustered with a new or existing building to preserve additional farmland (see Potential Alternate Location for Horse Barn in Attachment D).

(c) Where possible, structural uses shall be located away from prime agricultural soils.

There are no prime soils on the property.

(2) <u>Water Supply Criteria</u>

Adequate and sufficient water supplies needed for agricultural production and sensitive habitat protection in the watershed are not diminished.

The project includes an After-the-fact CDP for emergency domestic well replacement (emergency approved under PLN 2020-00109). The domestic well has been reviewed and preliminarily approved by County Environmental Health Services.

(3) <u>Criteria for the Conversion of Lands Suitable for Agriculture and</u> Other Land

The PAD Regulations allow the conversion of lands suitable for agriculture with a PAD Permit when the following can be demonstrated:

(a) All agriculturally unsuitable lands on the parcel have been developed or determined to be undevelopable;

As discussed, the project parcel does not contain prime soils, nor are agricultural activities being conducted onsite. The proposed residence is largely in the same location as the existing residence and the re-designed driveway would preserve larger area of contiguous open space to accommodate potential future farming.

 (b) Continued or renewed agricultural use of the soils is not capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, and technological factors (Section 30108 of the Coastal Act);

While no agricultural operation currently exists at the property, the applicant proposes a non-commercial orchard use as a part of the larger project.

(c) Clearly defined buffer areas are provided between agricultural and non-agricultural uses;

The proposed orchard use would be located on the southeast portion of the property, bordered by the proposed house to the east, the driveway to the north, and the creek to the south.

(d) The productivity of an adjacent agricultural land is not diminished, including the ability of the land to sustain dry farming or animal grazing;

The project would not impact the agricultural productivity of any surrounding properties.

(e) Public services and facility expansions and permitted uses will not impair agricultural viability either through increased assessment costs or degraded air and water quality.

The project would rely on an on-site well and on-site septic systems and would not necessitate the expansion of public services or facilities.

2. Compliance with Local Coastal Program (LCP) Policies

The project complies with the following applicable LCP Policies:

a. <u>Development Component</u>

Policy 1.8 (*Land Uses and Development Densities in Rural Areas*) allows new development in rural areas only if it is demonstrated that it will not have significant adverse impacts, either individually or cumulatively, on coastal resources and will not diminish the ability to keep all prime agricultural land and other land suitable for agriculture in agricultural production.

The project does not pose a significant adverse impact on coastal resources or diminish agricultural productivity, as it is not located on prime soils or active agricultural lands. The project design, with changes recommended by staff for the relocation of the horse barn so that it is clustered with other buildings, would preserve as much farmland as feasible for potential future agricultural operations.

b. Agricultural Component

Policy 5.6 (*Permitted Uses on Lands Suitable for Agriculture Designated as Agriculture*) permits agricultural and agriculturally related development on land suitable for agriculture. The project parcel does not currently have agricultural activity, incorporates a new non-commercial orchard, and would preserve as much farmland as feasible for potential future agricultural operations.

c. Visual Component

Policy 8.31 (*Regulation of Scenic Corridors in Rural Areas*) applies Section 6325.1 (Primary Scenic Resources Areas Criteria) of the Resource Management (RM) Zoning District as specific regulations protecting scenic corridors in the Coastal Zone, including those listed below:

(1) Public views within and from Scenic Corridors shall be protected and enhanced, and development shall not be allowed to significantly obscure, detract from, or negatively affect the quality of these views. Policy 8.31 requires a minimum setback of 100 feet from the right-of-way line, and greater where possible; however, a 50-foot setback may be permitted when sufficient screening is provided to shield the structure(s) from public view. The property slopes down from Purisima Creek Road (at elevation 340 feet) towards the pads of the Barn (at elevation 335 feet), Horse Barn (at elevation 334 feet), and the AHU (at elevation 329 feet), where view of the structures would be partially obscured by the declining topography. The proposed Main Residence is located over 100 feet from Purisima Creek Road. The applicant proposes to plant additional screening landscaping, including twenty-two (22) 24inch-36-inch box trees, to soften views from Purisima Creek Road as shown in the Irrigation Plan of Attachment C. The proposed tree plantings would partially screen the Main Residence, the new driveway, the Barn, and the AHU, from viewing locations along Purisima Creek Road. Based on the topography and proposed landscaping, Staff would support a 50-foot setback for the Barn, Horse Barn, and AHU.

- (2) Curved approaches to Scenic Corridors shall be used in conjunction with native planting to screen access roads from view. The project includes a replacement driveway with a curved design with proposed screening landscaping, including 5 trees.
- (3) The number of access roads to a Scenic Corridor shall be minimized wherever possible. Development access roads shall be combined with the intent of minimizing intersections with scenic roads, prior to junction with a Scenic Corridor unless severely constrained by topography. Staff is working with the applicant to relocate the Horse Barn (see Potential Alternate Location for Horse Barn in Attachment D); this will eliminate an additional access road to Purisima Creek Road. The project would maintain a total of 2 driveways with access to Purisima Creek Road.

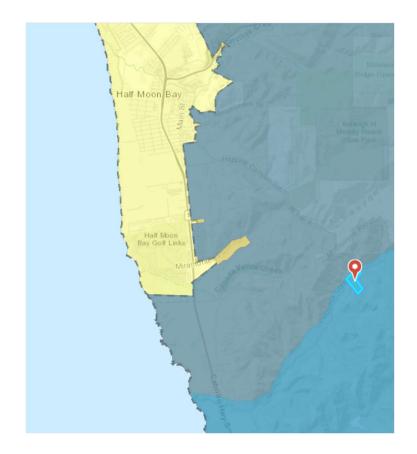
ATTACHMENTS

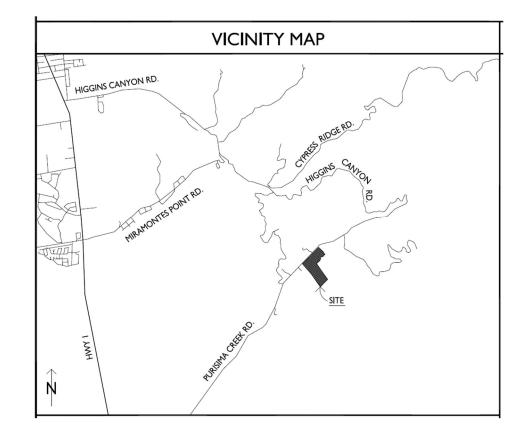
- A. Vicinity Map
- B. Project Plans
- C. Irrigation Plan showing Proposed Landscaping
- D. Potential Alternate Location for Horse Barn

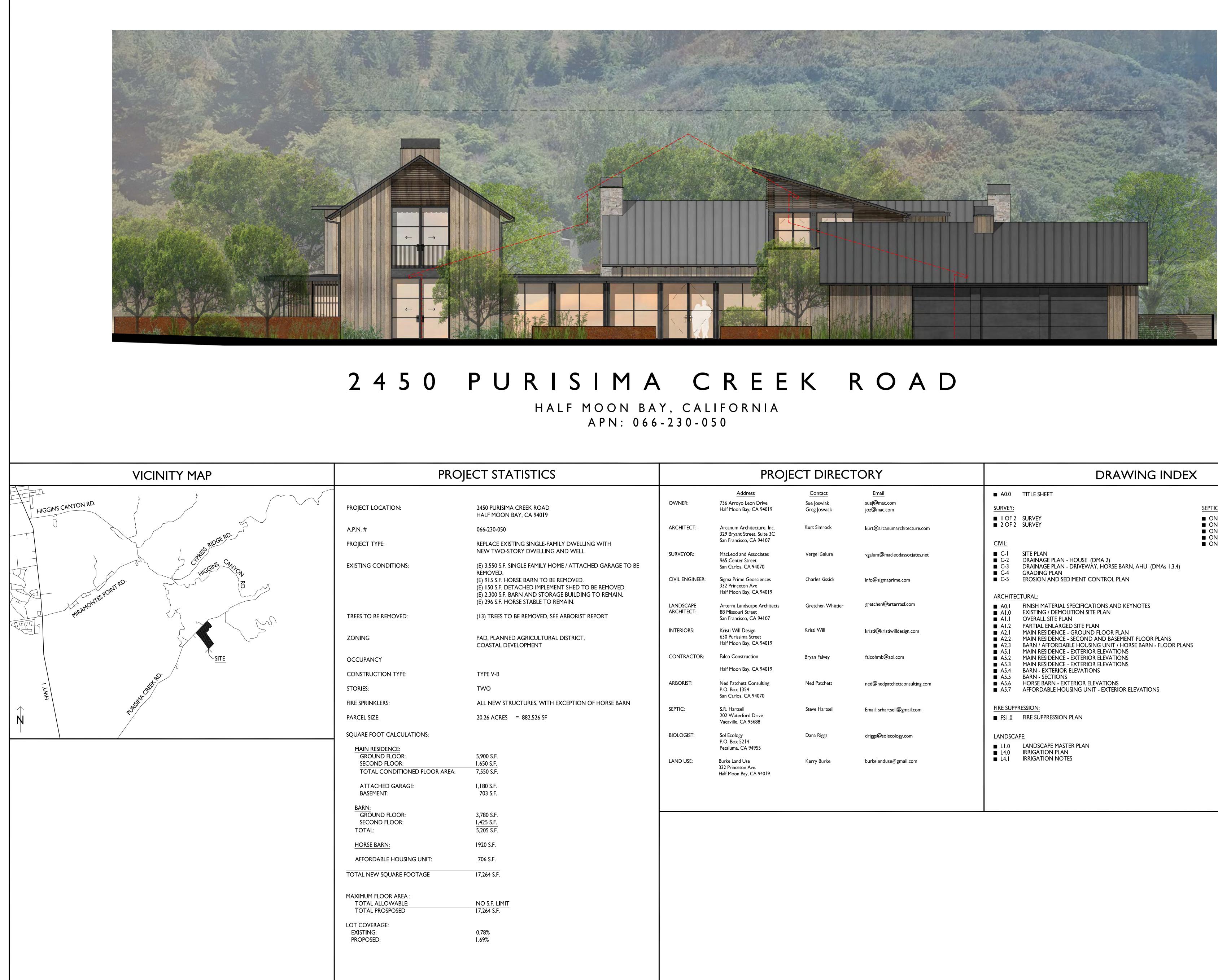
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Vicinity Map – PLN2020-00133 - Joswiak Residence, Affordable Housing Unit, and Barn and Horse Barn

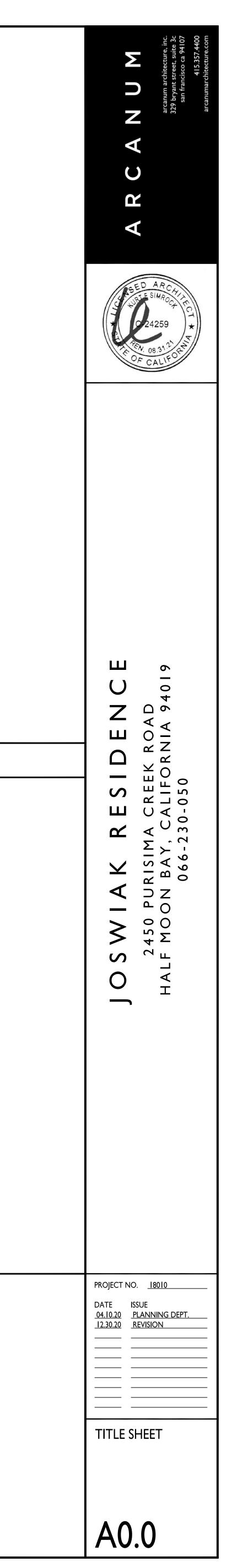
County of San Mateo – Planner: Camille Leung, Senior Planner April 16, 2021

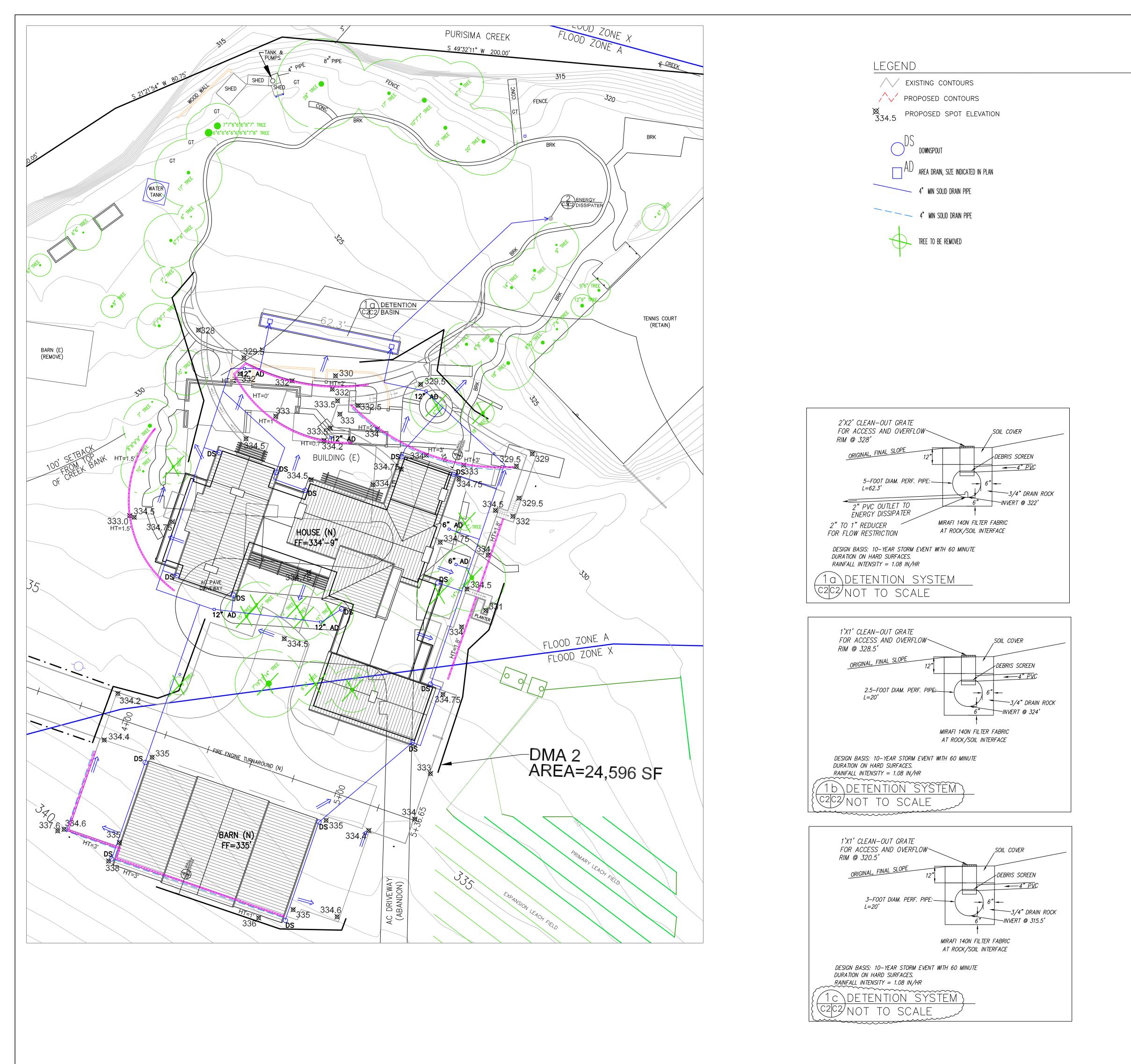






PRO	JECT STATISTICS		PROJE	ECT DIREC	FORY	DRAWING INDEX
			Address	Contact	Email	A0.0 TITLE SHEET
ATION:	2450 PURISIMA CREEK ROAD HALF MOON BAY, CA 94019	OWNER:	736 Arroyo Leon Drive Half Moon Bay, CA 94019	Sue Joswiak Greg Joswiak	suej@mac.com joz@mac.com	SURVEY: ■ I OF 2 SURVEY ■ ONSITE I
	066-230-050	ARCHITECT:	Arcanum Architecture, Inc. 329 Bryant Street, Suite 3C	Kurt Simrock	kurt@arcanumarchitecture.com	■ 2 OF 2 SURVEY ■ 2 OF 2 SURVEY ■ ONSITE 2 ■ ONSITE 3 ■ ONSITE 4
E:	REPLACE EXISTING SINGLE-FAMILY DWELLING WITH NEW TWO-STORY DWELLING AND WELL.	SURVEYOR:	San Francisco, CA 94107 MacLeod and Associates	Vergel Galura	vgalura@macleodassociates.net	<u>CIVIL:</u> ■ C-1 SITE PLAN
NDITIONS:	(E) 3,550 S.F. SINGLE FAMILY HOME / ATTACHED GARAGE TO BE REMOVED.		965 Center Street San Carlos, CA 94070			 C-2 DRAINAGE PLAN - HOUSE (DMA 2) C-3 DRAINAGE PLAN - DRIVEWAY, HORSE BARN, AHU (DMAs 1,3,4) C-4 GRADING PLAN
	 (E) 915 S.F. HORSE BARN TO BE REMOVED. (E) 150 S.F. DETACHED IMPLEMENT SHED TO BE REMOVED. (E) 2,300 S.F. BARN AND STORAGE BUILDING TO REMAIN. 	CIVIL ENGINEER:	Sigma Prime Geosciences 332 Princeton Ave Half Moon Bay, CA 94019	Charles Kissick	info@sigmaprime.com	C-5 EROSION AND SEDIMENT CONTROL PLAN ARCHITECTURAL:
REMOVED:	(E) 296 S.F. HORSE STABLE TO REMAIN. (13) TREES TO BE REMOVED, SEE ARBORIST REPORT	LANDSCAPE ARCHITECT:	Arterra Landscape Architects 88 Missouri Street San Francisco, CA 94107	Gretchen Whittier	gretchen@arterrasf.com	 A0.1 FINISH MATERIAL SPECIFICATIONS AND KEYNOTES A1.0 EXISTING / DEMOLITION SITE PLAN A1.1 OVERALL SITE PLAN
	PAD, PLANNED AGRICULTURAL DISTRICT, COASTAL DEVELOPMENT	INTERIORS:	Kristi Will Design 630 Purissima Street Half Moon Bay, CA 94019	Kristi Will	kristi@kristiwilldesign.com	 A1.2 PARTIAL ENLARGED SITE PLAN A2.1 MAIN RESIDENCE - GROUND FLOOR PLAN A2.2 MAIN RESIDENCE - SECOND AND BASEMENT FLOOR PLANS A2.3 BARN / AFFORDABLE HOUSING UNIT / HORSE BARN - FLOOR PLANS
		CONTRACTOR:	Falco Construction Half Moon Bay, CA 94019	Bryan Falvey	falcohmb@aol.com	 A5.1 MAIN RESIDENCE - EXTERIOR ELEVATIONS A5.2 MAIN RESIDENCE - EXTERIOR ELEVATIONS A5.3 MAIN RESIDENCE - EXTERIOR ELEVATIONS A5.4 BARN - EXTERIOR ELEVATIONS
ON TYPE:	TYPE V-B TWO	ARBORIST:	Ned Patchett Consulting P.O. Box 1354	Ned Patchett	ned@nedpatchettconsulting.com	 A5.5 BARN - SECTIONS A5.6 HORSE BARN - EXTERIOR ELEVATIONS A5.7 AFFORDABLE HOUSING UNIT - EXTERIOR ELEVATIONS
RS:	ALL NEW STRUCTURES, WITH EXCEPTION OF HORSE BARN	SEPTIC:	San Carlos. CA 94070 S.R. Hartsell 202 Waterford Drive	Steve Hartsell	Email: srhartsell@gmail.com	FIRE SUPPRESSION:
T CALCULATIONS:	20.26 ACRES = 882,526 SF	BIOLOGIST:	Vacaville. CA 95688 Sol Ecology P.O. Box 5214	Dana Riggs	driggs@solecology.com	■ FS1.0 FIRE SUPPRESSION PLAN LANDSCAPE:
DENCE: D FLOOR: 9 FLOOR:	5,900 S.F. I,650 S.F.	land use:	Petaluma, CA 94955 Burke Land Use	Kerry Burke	burkeland use @gmail.com	 LI.0 LANDSCAPE MASTER PLAN L4.0 IRRIGATION PLAN L4.1 IRRIGATION NOTES
CONDITIONED FLOOR AREA:	7,550 S.F.		332 Princeton Ave. Half Moon Bay, CA 94019			
IED GARAGE: NT:	I,180 S.F. 703 S.F.					
d Floor: 9 Floor:	3,780 S.F. 1,425 S.F. 5,205 S.F.					
<u>RN:</u>	1920 S.F.					
BLE HOUSING UNIT:	706 S.F.					
SQUARE FOOTAGE	17,264 S.F.					
DOR AREA : _OWABLE: DSPOSED	NO S.F. LIMIT 17,264 S.F.					
GE:	0.78% I.69%					





DRAINAGE NOTES

EXISTING ROOF AREAS = 6,024 SF EXISTING PAVED AREAS = 28,022 SF PROPOSED ROOF AREAS = 17,460 SF PROPOSED PAVED AREAS = 33,064 SF INCREASE IN ROOF AREAS = 11,436 SF INCREASE IN PAVED AREAS = 5042 SF TOTAL INCREASE IN IMPERVOUS SURFACES = 16,478 SF

1. DRAINAGE INTENT: IT IS THE INTENT OF THE DRAINAGE SYSTEM TO CONVEY ROOF RUNOFF TO A SAFE LOCATION, AND TO MINIMIZE EXCESSIVE MOISTURE AROUND FOUNDATIONS. DIRECT SLOPES SUCH THAT STORMWATER WILL NOT BE DIVERTED ONTO ADJACENT PROPERTIES.

2. DOWNSPOUT DRAIN LINES FROM MAIN HOUSE AND BARN SHALL LEAD TO DETENTION BASIN, AS SHOWN. THE DETENTION BASIN SHALL DRAIN TO A SUMP PUMP AND ENERGY DISSIPATER, AS SHOWN.

3. ALL ROOF DRAINAGE PIPES SHALL BE 4" DIAMETER MINIMUM SOLID PIPE, SLOPED AT 1% MINIMUM.

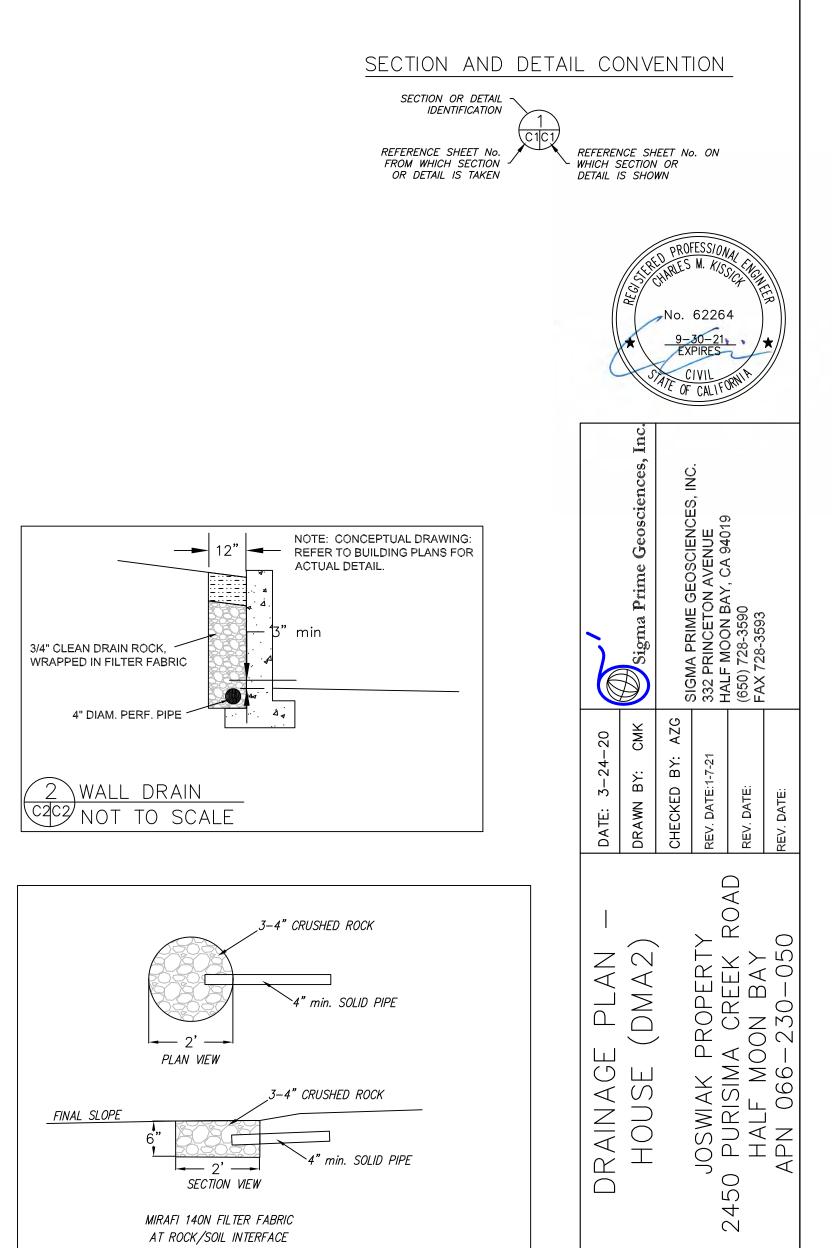
4. RUNOFF FROM THE DRIVEWAY SHALL BE DIRECTED TO THE THE ADJACENT LANDSCAPING AREA.

5. RUNOFF FROM THE ROOF OF THE HORSE BARN AND AHU SHALL BE DIRECTED TO DETENTION BASINS, AS SHOWN.

6. IT IS THE PROPERTY OWNER'S RESPONSIBILITY TO CHECK ON ALL STORMWATER FACILITIES SUCH AS ROOF GUTTERS, DOWNSPOUT LINES, AND THE DETENTION BASIN/ENERGY DISSIPATER TO BE SURE THAT THEY ARE CLEAR OF EXCESSIVE DEBRIS AND OPERATING EFFICIENTLY. THE FACILITIES SHALL BE CHECKED EVERY FALL AND PERIODICALLY DURING THE RAINY SEASON.

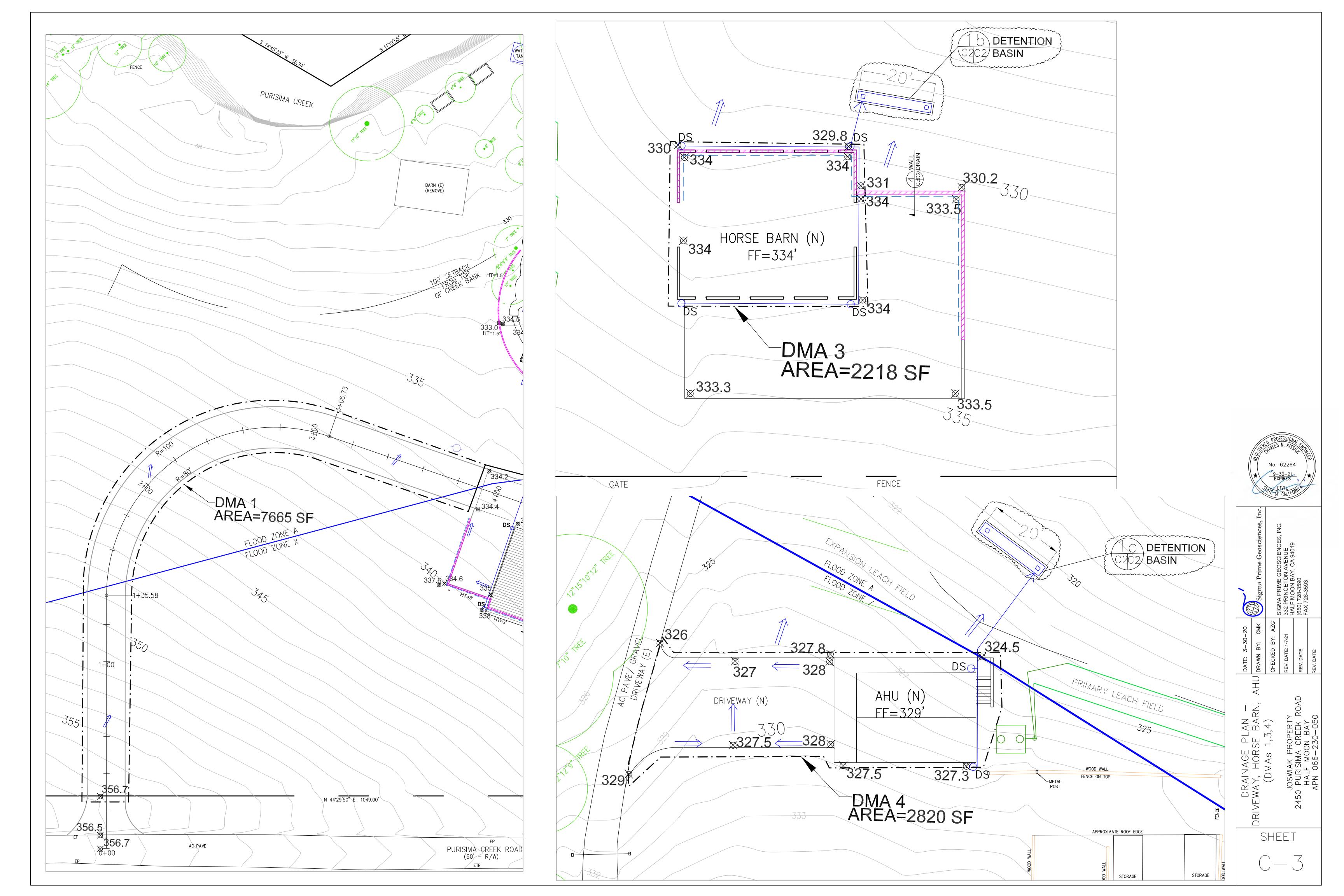
3 ENERGY DISSIPATER

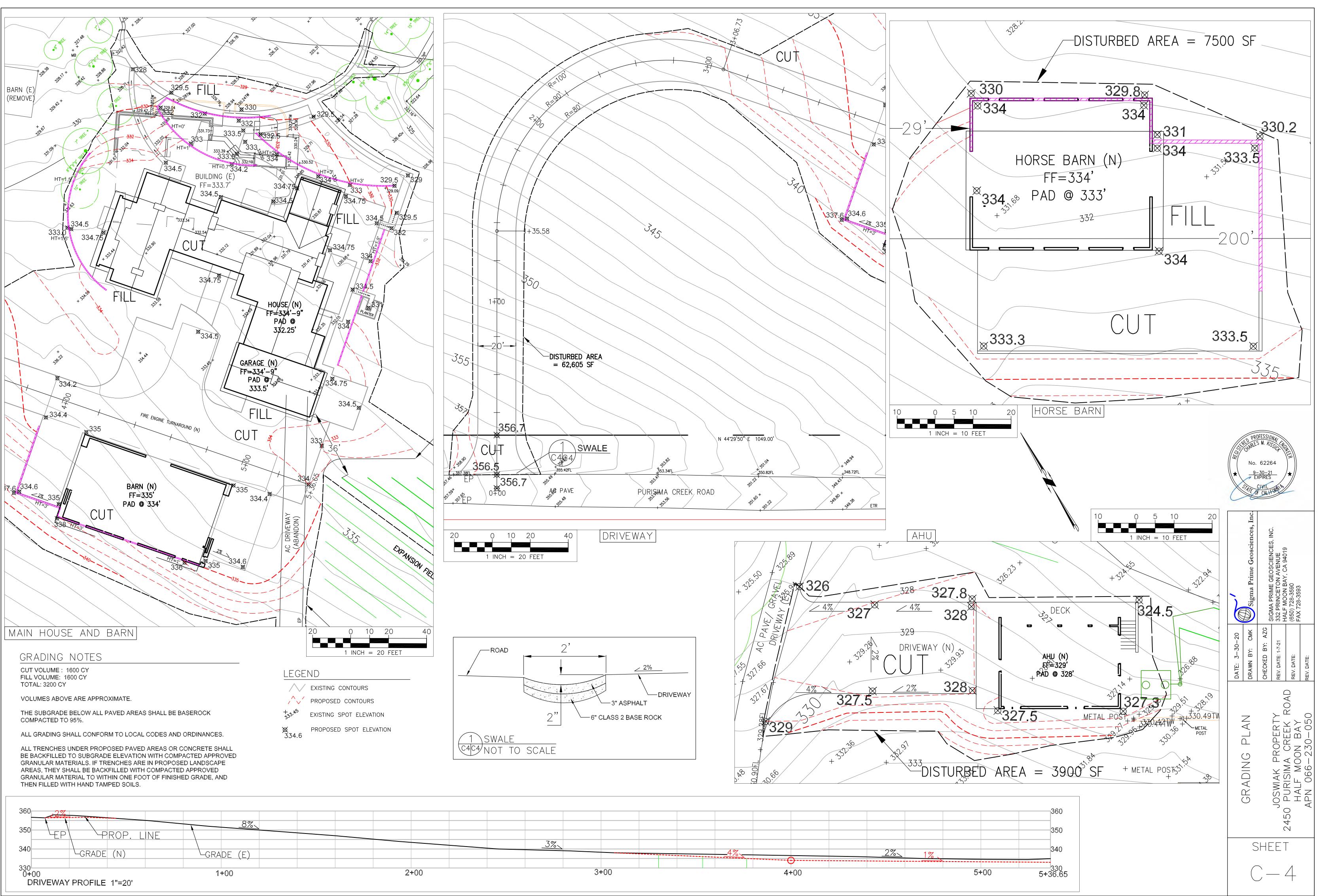
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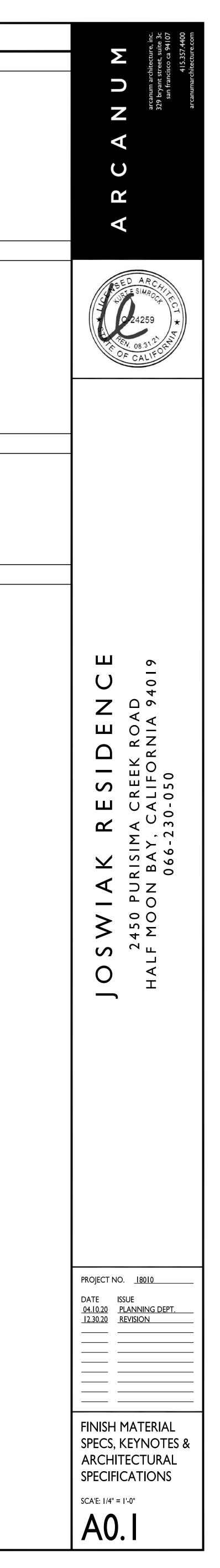
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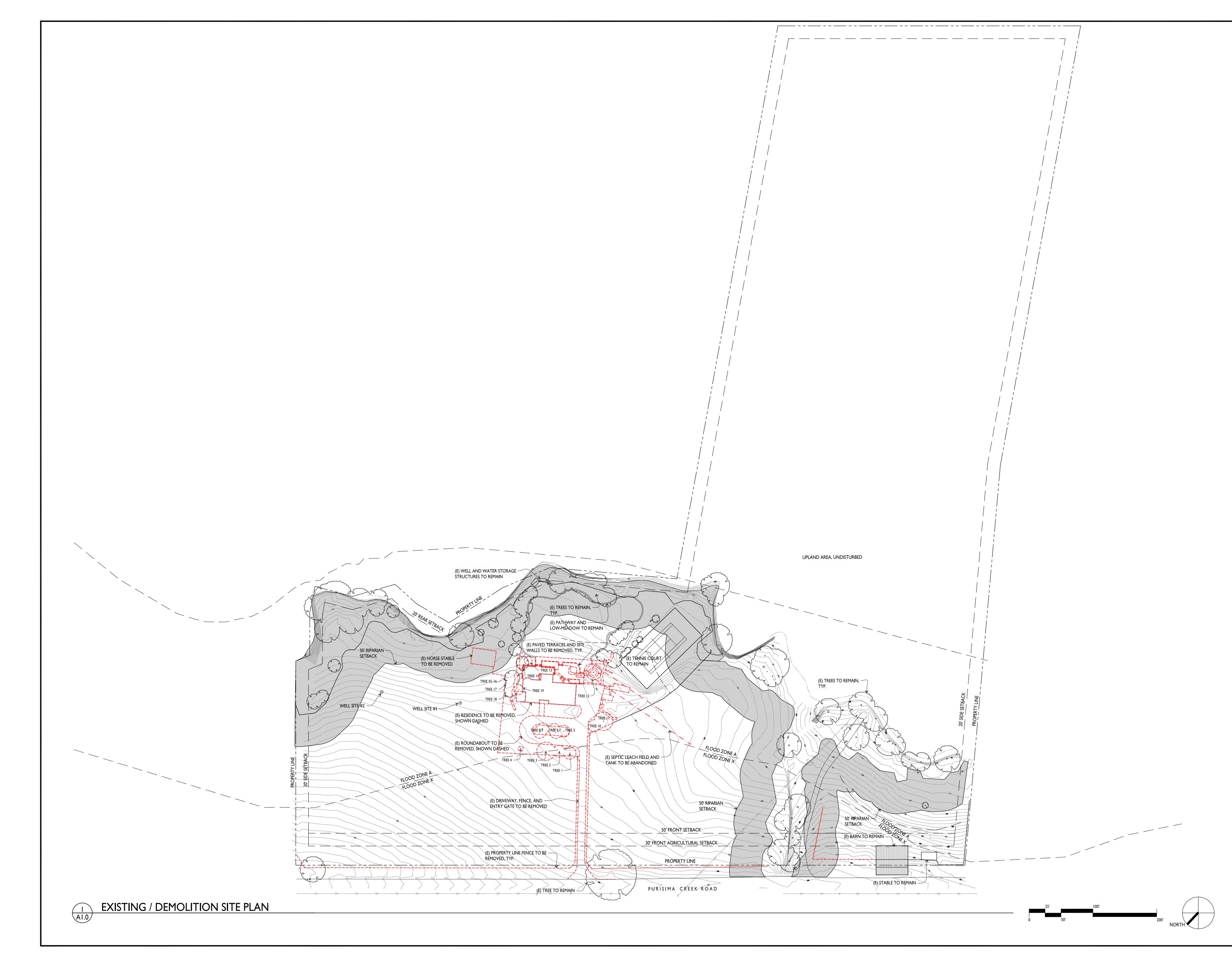
C - 2





FINISH MA	TERIAL SPECIFICATIONS	KEYNOTES			
PAINT TYPES	WOOD TYPES	I - GENERAL DATA	II - EQUIPMENT		
	NOTE:	I.I OUTLINE OF ROOF OVERHANG ABOVE SHOWN DASHED	II.I FLAT SCREEN T.V. IN NICHE, MOUNTED W/ SHALLOW TILT BRACKET, PROVIDE BLOCKING		
I. CAULK ALL JOINTS AND FILL NAIL HOLES AT INTERIOR AND EXTERIOR TRIM, TYP.	I. SET ALL NAILS AND FILL HOLES AND IMPERFECTIONS WITH WOOD PUTTY SANDING SEALER. SAND LIGHTLY BETWEEN COATS.	(1.2) EXISTING GRADE SHOWN DASHED	(11.2) UNDERCOUNTER DRINK REFRIGERATOR W/ CUSTOM WOOD OVERLAY PANEL (W-8)		
P-I INTERIOR GYP. BD. CEILINGS: MANUF.: BENJAMIN MOORE AURA INTERIOR WATERBORNE PAINT	2. ALL CABINETRY AND MILLWORK TO BE STAINED AND SEALED BY MILLWORK SUBCONTRACTOR AT SHOP.	I.3 PROPOSED GRADE	(11.3) ICE MACHINE (11.4) UNDERCOUNTER DISHWASHER W/ CUSTOM OVERLAY WOOD PANEL (W-8)		
COLOR: T.B.D. PAINT FINISH: MATTE	W-1 EXTERIOR & INTERIOR VERTICAL WOOD SIDING:	1.4 RAISED WOOD FLOOR FRAMING ON CONCRETE FOUNDATION	(11.5) AIR CONDITIONING UNIT		
CEILING TEXTURE: SMOOTH FINISH (LEVEL 5)	TYPE: CLEAR WESTERN RED CEDAR (RESAWN OR COMBED) FINISH: TWO COAT 'GRAY BROWN' BENJAMIN MOORE ARBORCOAT SEMI-SOLID	 (1.5) OUTLINE OF (E) HOUSE, GARAGE, AND HORSE BARN TO BE REMOVED (1.6) (E) TREES TO BE REMOVED, SHOWN DASHED 	(11.6) WASHER / DRYER		
APPLICATION: GYP. BD.: FIRST AND SECOND COATS AURA MATTE WATERBORNE PAINT 522	WATER-BASED STAIN COLOR: T.B.D.	(1.6) (e) Trees to be removed, showin dashed (1.7) (e) Tennis Court, to remain	II.7 INTEGRATED REFRIGERATOR W/ WOOD OVERLAY PANEL (W-8)		
P-2 LOCATION: EXTERIOR DECORATIVE METAL:	SIDING DIMENSION: I" (ACTUAL) T&G BOARDS W/ I/8" X 3/8" SQUARE REVEALS, MITER	(1.8) PROPOSED SEPTIC SYSTEM / LEACH FIELD. SEE SEPTIC DRAWINGS.	(11.8) GAS FIREPLACE (11.9) FREE STANDING RANGE / OVEN		
MANUF.: BENJAMIN MOORE COLOR: T.B.D.	OUTSIDE CORNERS (BOARD WIDTH VARIES, SEE PATTERN) PATTERN: (A) 7 I/4", (B) 5 I/2", (C) 3 I/2", (D) 5 I/2", REPEAT (SEE EXTERIOR ELEVATIONS FOR	(I.9) (E) TREE TO REMAIN, SEE ARBORIST REPORT	(11.1) BUILT-IN BBQ		
PAINT FINISH: LOW LUSTER APPLICATION: METAL	START POINT, PROVIDE MOCK-UP FOR REVIEW) NOTE: NO NAILS OR SCREWS IN FACE OF BOARDS, COLORED SCREWS BY FASTENMASTER	(1.10) 50' RIPARIAN SETBACK ZONE SHOWN SHADED			
TYPE: AURA WATERBORNE EXTERIOR PAINT-LOW LUSTRE 634 APPLICATION:	INSIDE REVEALS ONLY (MATCH FINISH)	(I.II) (E) FENCE	12 - FURNISHINGS		
METAL: FIRST, SECOND AND THIRD COATS AURA WATERBORNE EXTERIOR PAINT-LOW LUSTRE 364	W-2 EXTERIOR WOOD RAFTERS & DECKING: TYPE: CLEAR WESTERN RED CEDAR (SMOOTH)	(I.12) (E) LOW MEADOW	(12.1) UNDERCOUNTER WOOD CABINETS (W-8) W/ STONE COUNTERTOP (S-3)		
P-3 WET AREA WALL & CEILING LOCATIONS:	FINISH: BENJAMIN MOORE ARBORCOAT SEMI-TRANSPARENT WATER-BASED STAIN COLOR: T.B.D.	(I.I3) FIRE TRUCK TURNAROUND	 (12.2) BUILT-IN UPPER WOOD CABINETS (W-8) (12.3) BUILT-IN CLOSET (W-8) 		
MANUF.: AURA® BATH AND SPA MATTE FINISH COLOR: T.B.D.	DIMENSION: 5 1/2" X 5 1/2" (ACTUAL) RAFTERS AND 3/4" X 7 1/4" (ACTUAL) T&G DECKING	(I.14) NOT USED	(12.3) BOILT-IN CLOSET (VV-8) (12.4) OUTDOOR COUNTER / CABINET		
PAINT FINISH: MATTE	WITH 3/32" X 1/4" SQUARE REVEALS WUI NOTE: DECKING SHALL BE INSTALLED OVER LOUISIANA PACIFIC 1/2" LP FLAMEBLOCK	(1.15) OUTLINE OF PROPOSED BARN BEYOND	(12.5) BUILT-IN WOOD DESK (W-8)		
CEILING / WALL TEXTURE: SMOOTH FINISH (LEVEL 5) APPLICATION:	SHEATHING AT THE EXPOSED UNDERSIDE OF EAVES AS APPLICABLE (CAL-FIRE LISTING 8160-2027:0007).	2 - SITEWORK	(12.6) BUILT-IN BOOK SHELVES (W-8)		
GYP. BD.: FIRST AND SECOND COATS- AURA [®] BATH AND SPA MATTE FINISH 532	W-3 RAIN SCREEN & WOOD SCREEN / SIDING:	(2.1) CHIPSEAL DRIVEWAY, S.L.D.	BUILT-IN CABINET (W-8)		
MANUF.: BENJAMIN MOORE AURA INTERIOR WATERBORNE PAINT COLOR: T.B.D.	TYPE: WESTERN RED CEDAR (RESAWN) FINISH: BENJAMIN MOORE ARBORCOAT SEMI-TRANSPARENT WATER-BASED STAIN	(2.2) ENTRY GATE, S.L.D.	 (12.8) BUILT-IN SHELVING (W-9) (12.9) BUILT-IN LINEN CABINET (W-8) 		
PAINT FINISH: MATTE WALL TEXTURE: SMOOTH FINISH (LEVEL 5)	COLOR: T.B.D. DIMENSION: 1-1/2"x3-1/2" ACTUAL W/ 2" SPACE	2.3 TRASH ENCLOSURE, S.L.D.	(12.10) BUILT-IN CLOSET SYSTEM (W-8)		
APPLICATION: GYP. BD.: FIRST AND SECOND COATS AURA MATTE WATERBORNE PAINT 522	W-4 EXTERIOR WOOD DOORS:	2.4 OUTDOOR KITCHEN, S.L.D.			
P-5 INTERIOR WOOD BASEBOARD & PAINT GRADE CABINETS:	TYPE: CLEAR WESTERN RED CEDAR (SMOOTH) MANUF: CUSTOM (SELECTED BY CONTRACTOR)	(2.5) (N) FENCE	15 - MECHANICAL / PLUMBING		
MANUF.: AURA® SATIN INTERIOR WATERBORNE PAINT COLOR: T.B.D.	FINISH: BENJAMIN MOORE ARBORCOAT SEMI-SOLID WATER-BASED STAIN COLOR: T.B.D.	(N) PATHS / SITE WALLS, S.L.D.	(15.1) CURBLESS SHOWER W/ 1/2" FRAMELESS CLEAR STARFIRE TEMPERED GLASS ENCLOSURE AND DOOR		
PAINT FINISH: SATIN APPLICATION: (SPRAY, NOT BRUSH)	W-5 INTERIOR STAIR WOOD TREADS:	2.7 CHIPSEAL AT FIRE TRUCK TURNAROUND / PARKING, S.L.D.	(15.2) DRYING RACK W/ SHOWER DRAIN		
WOOD: FIRST, SECOND AND THIRD COATS AURA® SATIN INTERIOR WATERBORNE PAINT 526	MANUF: T.B.D. TYPE: SOLID I" THICK TREADS	2.8 VEGETABLE GARDEN, S.L.D.	(15.3) WATER STORAGE TANKS(15.4) PROPANE TANK		
	STYLE: TO MATCH W-10 STAIN: TO MATCH W-10	(2.9) RETAINING WALL, S.L.D.	(15.4) PROPANE TANK (15.5) (E) WATER STORAGE TANK		
TILE TYPES	FINISH: TO MATCH W-10	 (2.10) STEEL SITE WALLS, S.L.D. (2.11) A.C. ENCLOSURE 	(15.6) ELECTRICAL BOILER / STORAGE TANK		
T-I FLOOR (VARIES, COORDINATE W/ ARCHITECT AND INTERIOR DESIGNER): MANUF.: T.B.D.	W-6 INTERIOR WOOD CEILING, DECKING, RAFTERS: SEE W-2	(2.12) PLANTING/LANDSCAPE BED, S.L.D.			
STYLE: T.B.D.	W-7 INTERIOR WOOD DOORS: MANUF: CUSTOM (SELECTED BY CONTRACTOR)	(2.13) SOLAR ELECTRIC FENCE: 5' FROM FRONT PROPERTY LINE FENCE, AROUND SEPTIC SYSTEM / LEACH FIELD, 50'	I6 - ELECTRICAL		
COLOR: T.B.D. PATTERN: T.B.D.	TYPE: RIFT CUT WHITE OAK, 8' TALL w/ 3/32" X 1/8" DEEP SQUARE VERTICAL REVEALS FINISH: REACTIVE STAIN AND CERUSE PROCESS W/ LOW SHEEN SEALER	FROM RIPARIAN EDGE.			
DIMENSIONS: T.B.D. GROUT: T.B.D.	W-8 STAIN GRADE CABINETS AND INTERIOR WINDOW SILLS:	3 - CONCRETE	(16.2) 800 AMP MAIN ELECTRICAL PANEL (16.3) TELEPHONE / COMMUNICATION PANELS		
NOTE: SEE STRUCTURAL PLAN FOR LOCATIONS OF DEPRESSED SLAB/FLOOR FOR MORTAR BED.	MANUF: CUSTOM (SELECTED BY CONTRACTOR) TYPE: RIFT CUT WHITE OAK	3.1 CONCRETE / STONE PAVING, S.L.D.	(18.3) TELEPHOINE / COMMONICATION PANELS		
T-2 WALL (VARIES, COORDINATE W/ ARCHITECT AND INTERIOR DESIGNER): MANUF.: T.B.D.	FINISH: REACTIVE STAIN AND CERUSE PROCESS W/ LOW SHEEN SEALER	3.2 BOARD FORMED POURED IN PLACE CONCRETE WALL			
MANUF.: T.B.D. STYLE: T.B.D.	W-9 INTERIOR WOOD BASEBOARD & PAINT GRADE CABINETS: TYPE: POPLAR (PAINT GRADE SMOOTH)	3.3 CONCRETE PERIMETER FOUNDATION			
COLOR: T.B.D. PATTERN: T.B.D.	FINISH: PAINTED P-5	(3.4) OUTLINE OF BASEMENT MECHANICAL / STORAGE			
DIMENSIONS: T.B.D. GROUT: T.B.D.	SUPPLIER: T.B.D. TYPE: FRENCH OAK	4 - MASONRY			
	FINISH: LIGHT WIRE BRUSH STAIN: T.B.D.	(4.1) STONE WALL			
STONE TYPES	COLOR: T.B.D. DIMENSION: 7" WIDE (6' MINIMUM LENGTHS)	(4.2) BOULDER, S.L.D.			
S-I EXTERIOR WALLS:		Γ.ΜΓΤΑΙΟ			
TYPE: I" TO I.5" THICK STONE VENEER (RECTANGULAR) WITH SPLIT FACE AND CUSTOM 'L' SHAPED CORNERS		5 - METALS			
SUPPLIER: S.B.I. PATTERN: DRY STACK ASHLAR PATTERN		(5.1) 3" DIA. ROUND DOWNSPOUTS / 5" HALF-ROUND METAL GUTTERS			
(NO EXPOSED GROUT)		(5.2) METAL TRELLIS (M-2) (5.3) METAL CHIMNEY CAP			
S-2 STONE FLOORING: TYPE: T.B.D.		(5.4) STEEL FASCIA CONCEALING INTEGRATED GUTTER			
PATTERN: T.B.D. DIMENSION: T.B.D.	MANUF: CUSTOM-BUILT	(5.5) 42" TALL METAL FRENCH BALCONY / GUARDRAIL			
GROUT: T.B.D. FINISH: T.B.D. W/ PENETRATING FLAT SEALER	TYPE: 22 GAUGE SELECT SEAM I" NARROW BATTEN WITH I6" COVERAGE FINISH: VINTAGE	5.6 METAL WINDOW SURROUND			
S-3 COMPOSITE / STONE COUNTERTOP:	M-2 EXTERIOR METAL: TYPE: COLD ROLLED & HOT ROLLED NATURAL STEEL PLATE	5.7 STEEL STAIR AND GUARD / HANDRAIL W/ WOOD TREADS			
TYPE: 3/4" SLAB SUPPLIER: T.B.D.	FINISH: ALL WELDED JOINTS GROUNDED SMOOTH, PAINTED P-2	5.8 STEEL TRIM			
FINISH: T.B.D. NOSING: 1 3/4" SQUARE	M-3 METAL WINDOWS AND DOORS : MANUF: T.B.D.	5.9 METAL PANEL GARAGE DOORS			
	COLOR: BLACKENED STEEL / DARK BRONZE	(5.10) STEEL ACCENT PANEL			
	M-4 FLUE ENCLOSURES - CLASS 'A' FIRE RATED: TYPE: HEAVY GAUGE BONDERIZED, GALVANIZED SHEETMETAL	(5.11) 42" TALL METAL GUARDRAIL			
	FINISH: MATCH M-I	6 - WOODS and PLASTICS			
	M-5 EXTERIOR SHEET METAL: TYPE: HEAVY GAUGE BONDERIZED, GALVANIZED METAL W/ SOLDERED JOINTS	6.1 WOOD BARN DOOR / SHUTTER			
	NO CRIMPS ON ELBOWS (SEE SAMPLE DETAILS FOR GAUGE) FINISH: T.B.D. RAW OR PAINTED	6.2 WOOD SCREEN			
	M-6 INTERIOR STAIR GUARDRAIL, HANDRAIL, & DECORATIVE METAL:	6.3 WOOD FENCE, S.L.D.			
	TYPE: COLD ROLLED NATURAL STEEL FINISH: IRON OXIDE FINISH 'BLACKENED STEEL' W/ LOW SHEEN SEALER AND ALL	6.4 VERTICAL T&G WOOD SIDING			
	WELDED JOINTS GROUNDED SMOOTH (PROVIDE SAMPLES TO ARCHITECT FOR APPROVAL)	6.5 WOOD TRUSS			
C-I BOARD FORMED CONCRETE WALLS: TYPE: CONC. STRUCTURAL WALL (BOARD FORMED)	M-7 LANDSCAPE SITE WALL:	 (6.6) WOOD TRELLIS POSTS (6.7) WOOD FASCIA / RAFTER TAIL 			
COLOR/STAIN: NONE FINISH: MATTE SEALER	TYPE: CORTEN STEEL 1/4" THICK / S.L.D.	6.8 WOOD DECK			
DIMENSION: 7 1/4" TALL RESAWN FORMWORK BOARDS W/ EASED EDGES TIGHT JOINTS, NO GAPS	M-8 EXTERIOR ACCENT PANEL: TYPE: CORTEN STEEL	6.9 WOOD POST AT DECK			
C-2 CONCRETE STRUCTURAL SLAB:		7 - THERMAL and MOISTURE			
TEXTURE: STEEL TROWEL, I/4" TIGHT RADIUS MIN. CONTROL JOINTS TOOL. FILL JOINTS W/ GROUT TO MATCH CONCRETE	A.H.U. WINDOWS AND DOORS: MANUF: DUXTON	(7.1) SINGLE MEMBRANE FLAT ROOF (R-1)			
	FINISH: PAINTED COLOR: MATTE BLACK	(7.1) SINGLE MEMBRANE FLAT ROOF (R-1) (7.2) STANDING SEAM MTL. ROOF (R-2)			
		8 - DOORS and WINDOWS			
		8 - DOORS and WINDOWS (8.1) METAL DOORS AND WINDOWS, TYP.			
V-ICARPET: TYPE: T.B.D.	R-I FLAT ROOF: MANUF.: T.B.D.	(8.1) METAL DOORS AND WINDOWS, TTP. (8.2) DOGGIE DOOR			
MANUF: T.B.D.	FINISH: COVER W/ GRAY 3/8" WHITE BASALT, PROVIDE SAMPLE TO ARCHITECT FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION. BOND FIRST 12" OF ROCK AT ROOF EDGE TO	(8.2) DOGGIE DOOK (8.3) STEEL / GLASS ENTRY DOOR			
	SURFACE W/ ADHESIVE (PREVENTS ROCKS FROM WASHING AWAY).	8.4 OFFSET PIVOT METAL / GLASS DOOR			
	WUI NOTE: INSTALL OVER (I) LAYER I/4" DENSDECK FIBERGLASS BOARD FOR CLASS 'A' RATING (UL 790 CLASSIFICATION) PER ICC-ES 1463	8.5 DOUBLE PANE INSULATED FIBERGLASS WINDOWS AND PATIO DOORS			
	R-2 METAL ROOFING - CLASS 'A' FIRE RATED:	9 - FINISHES			
	MANUF.: A.E.P. SPAN TYPE: 22 GAUGE SELECT SEAM I" NARROW BATTEN W/ 16" CORRUGATION	9.1 STONE SLAB SHOWER NICHE (S-3)			
	COLOR: VINTAGE	9.2 STONE SLAB FLOATING BENCH SEAT			
	WUI NOTES: I. INSTALL OVER (I) LAYER 1/4" DENSDECK FIBERGLASS BOARD FOR CLASS 'A' RATING				
	(UL 790 CLASSIFICATION) 2. VALLEY FLASHING SHALL BE MINIMUM 26 GA. CORROSION RESISTANT GALVANIZED	10 - SPECIALTIES			
	SHEET METAL INSTALLED OVER ONE LAYER 72 POUND MINERAL-SURFACED	(10.1) BARN DOOR TRACK			
	NONPERFORATED CAP SHEET AT LEAST 36" WIDE RUNNING THE FULL LENGTH OF THE VALLEY PER CRC R337.5.3	(10.2) ISOKERN FIREBOX			
			-		
		(10.3) LAUNDRY CHUTE			
		(10.4) SHOWER DOOR / ENCLOSURE 1/2" FRAMELESS CLEAR STARFIRE TEMPERED GLASS			



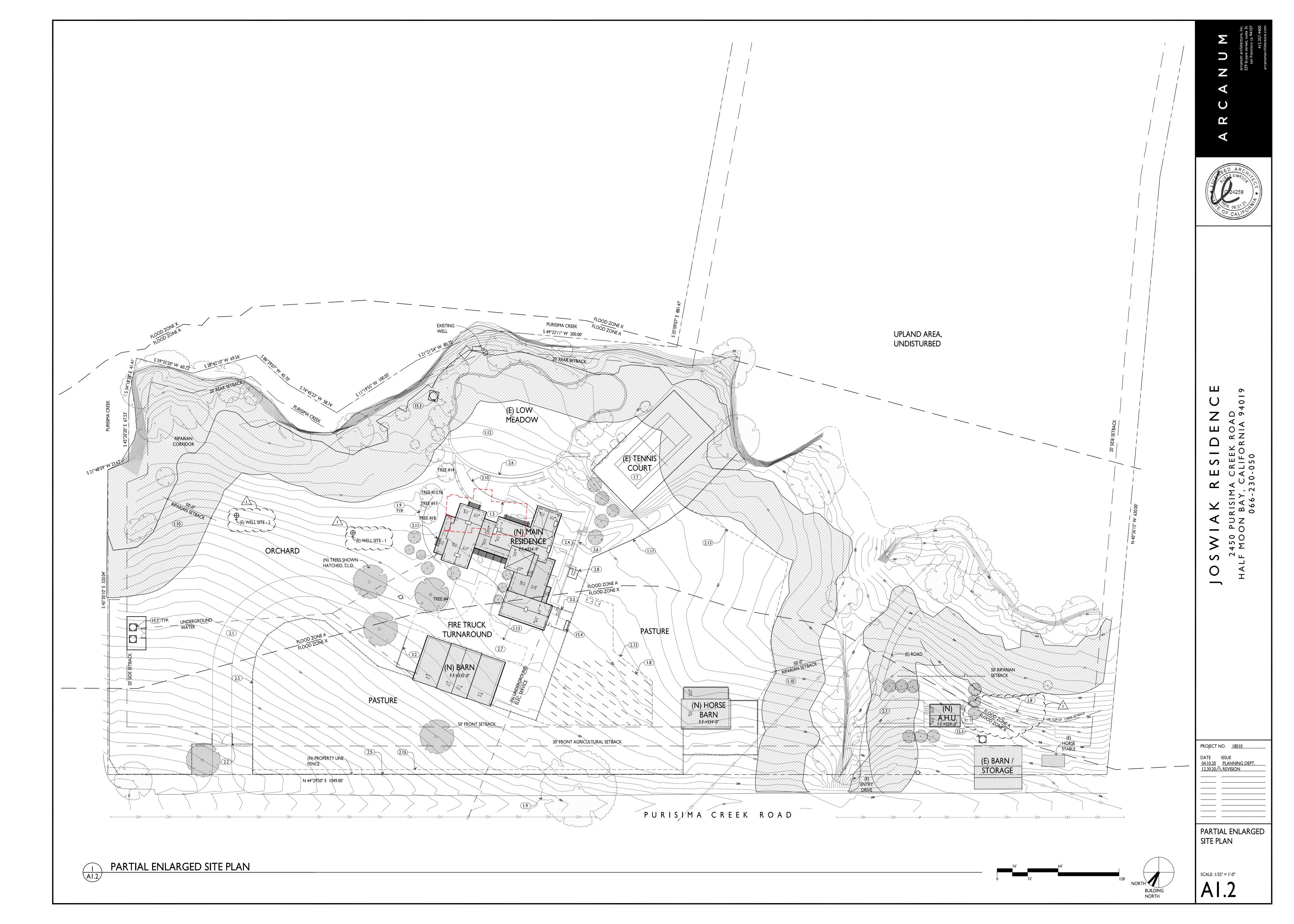




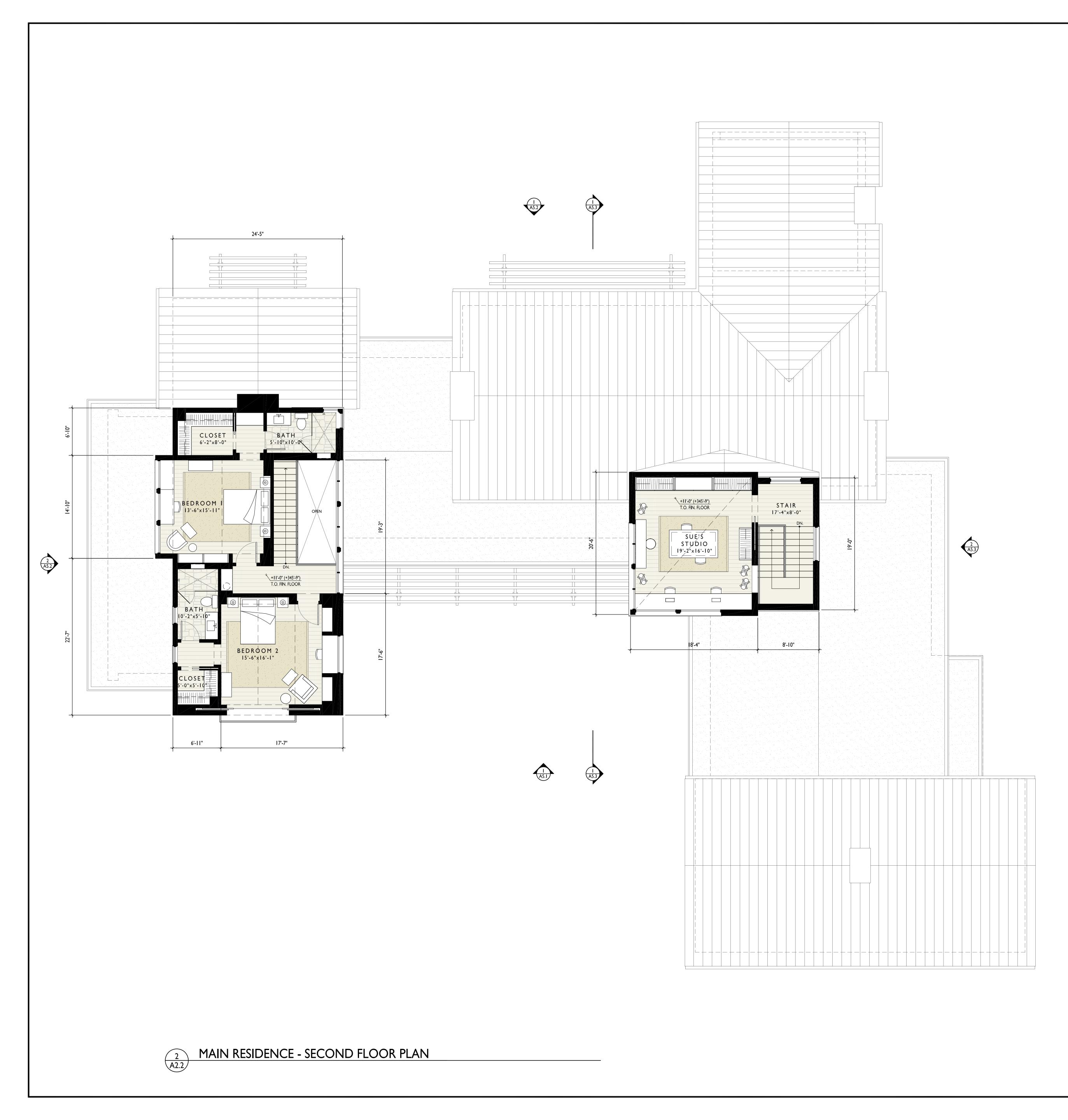


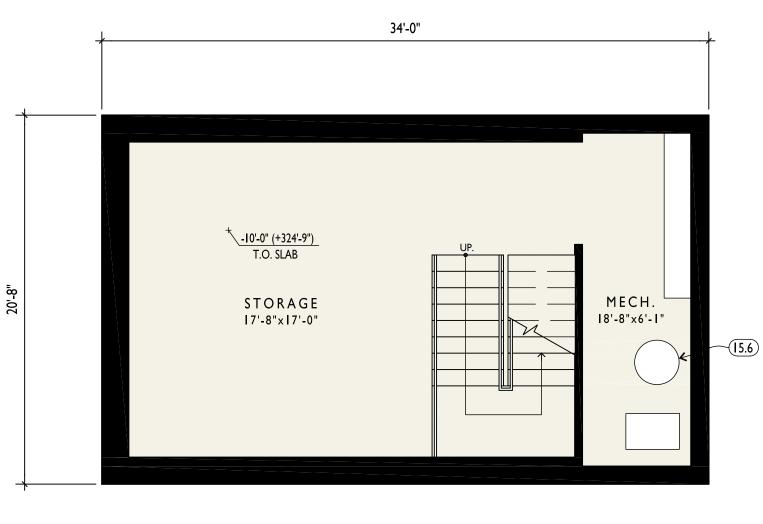






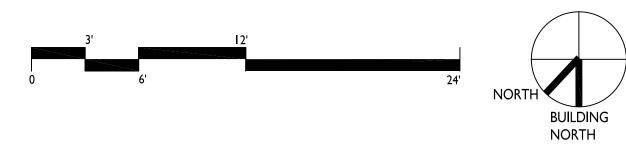






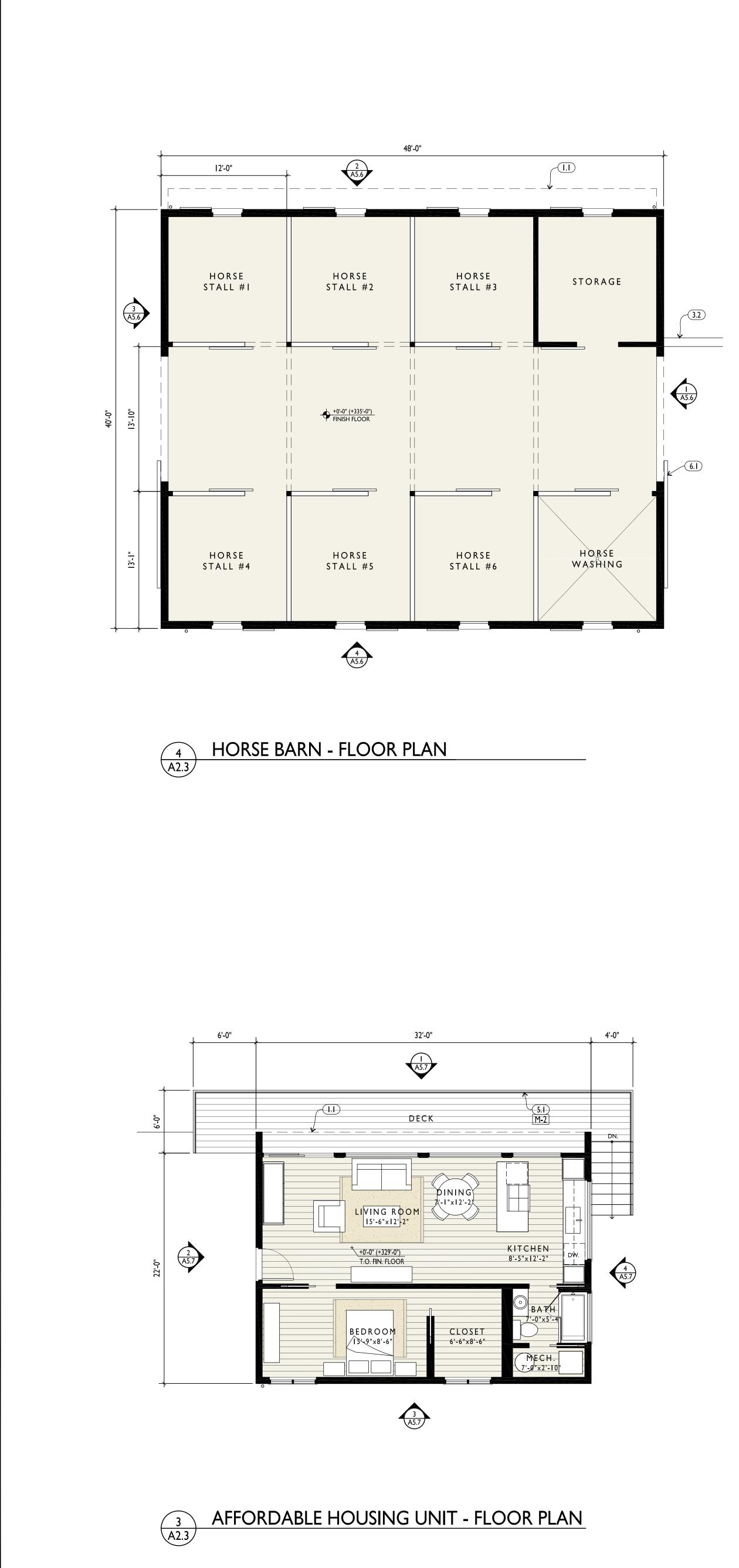
MAIN RESIDENCE - BASEMENT FLOOR PLAN

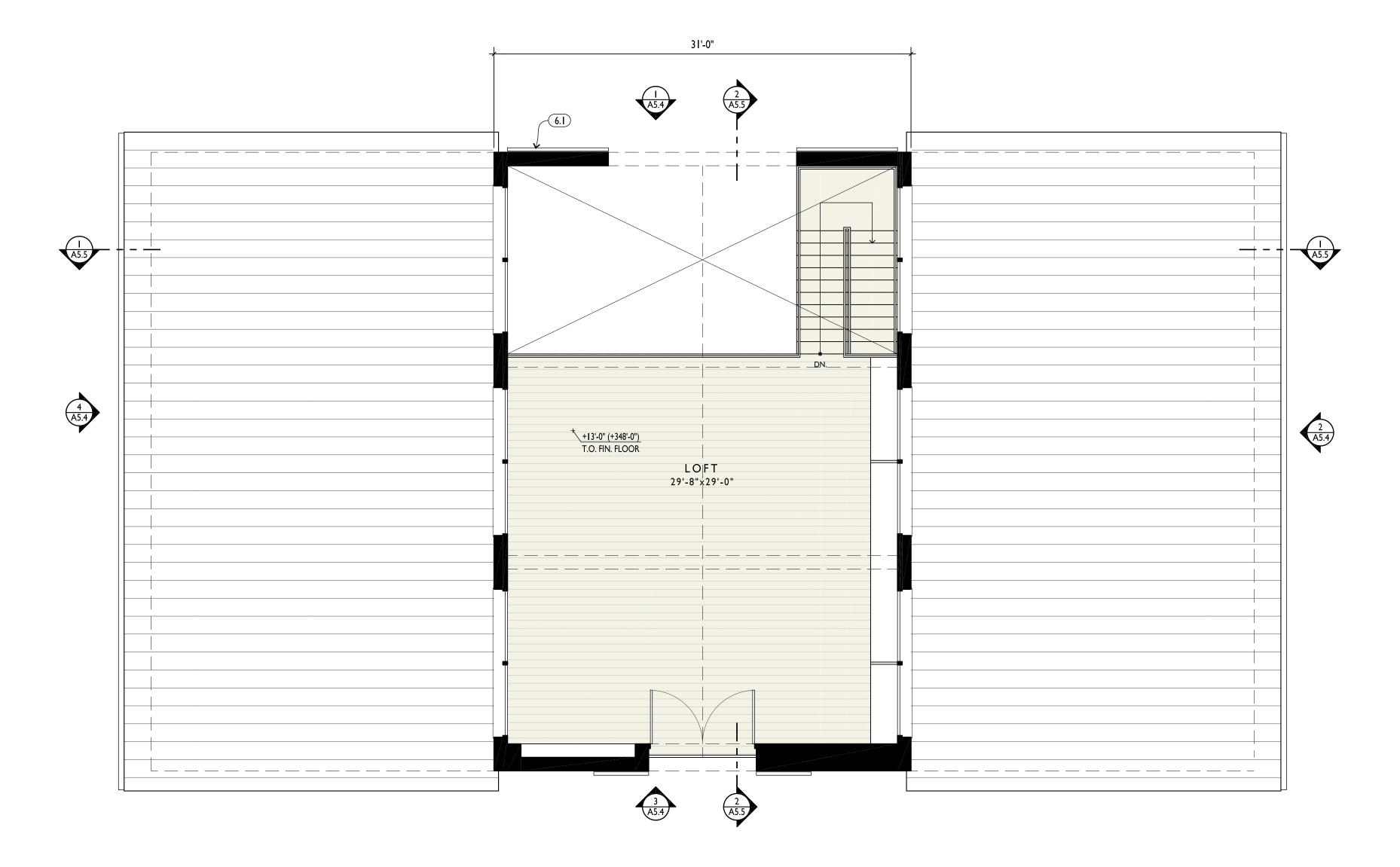
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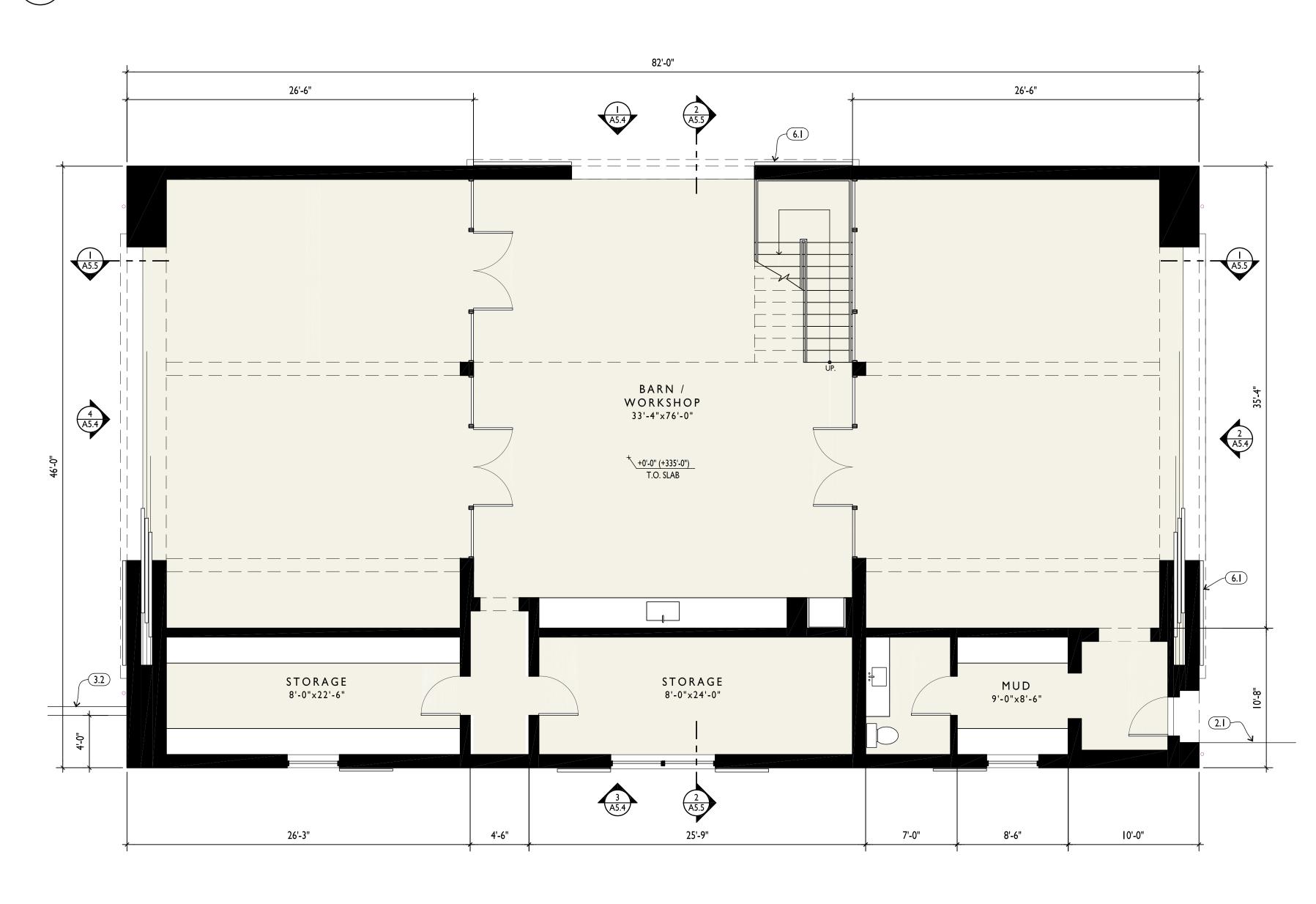










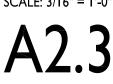


BARN - GROUND FLOOR PLAN L A2.3





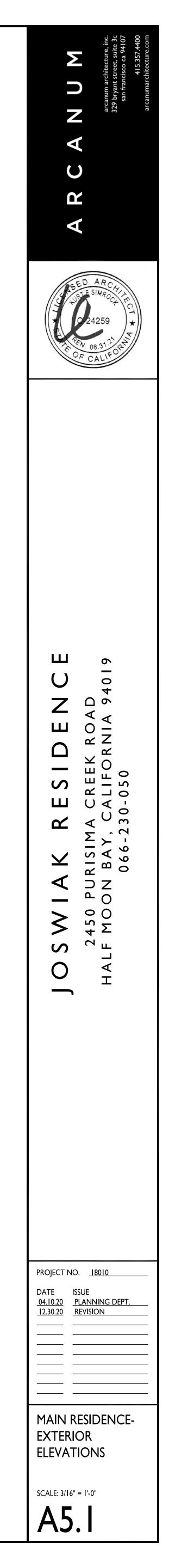








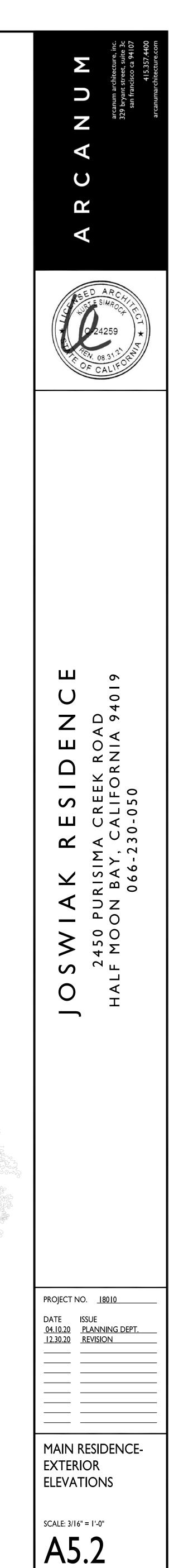
3' |2' 0 6' 24



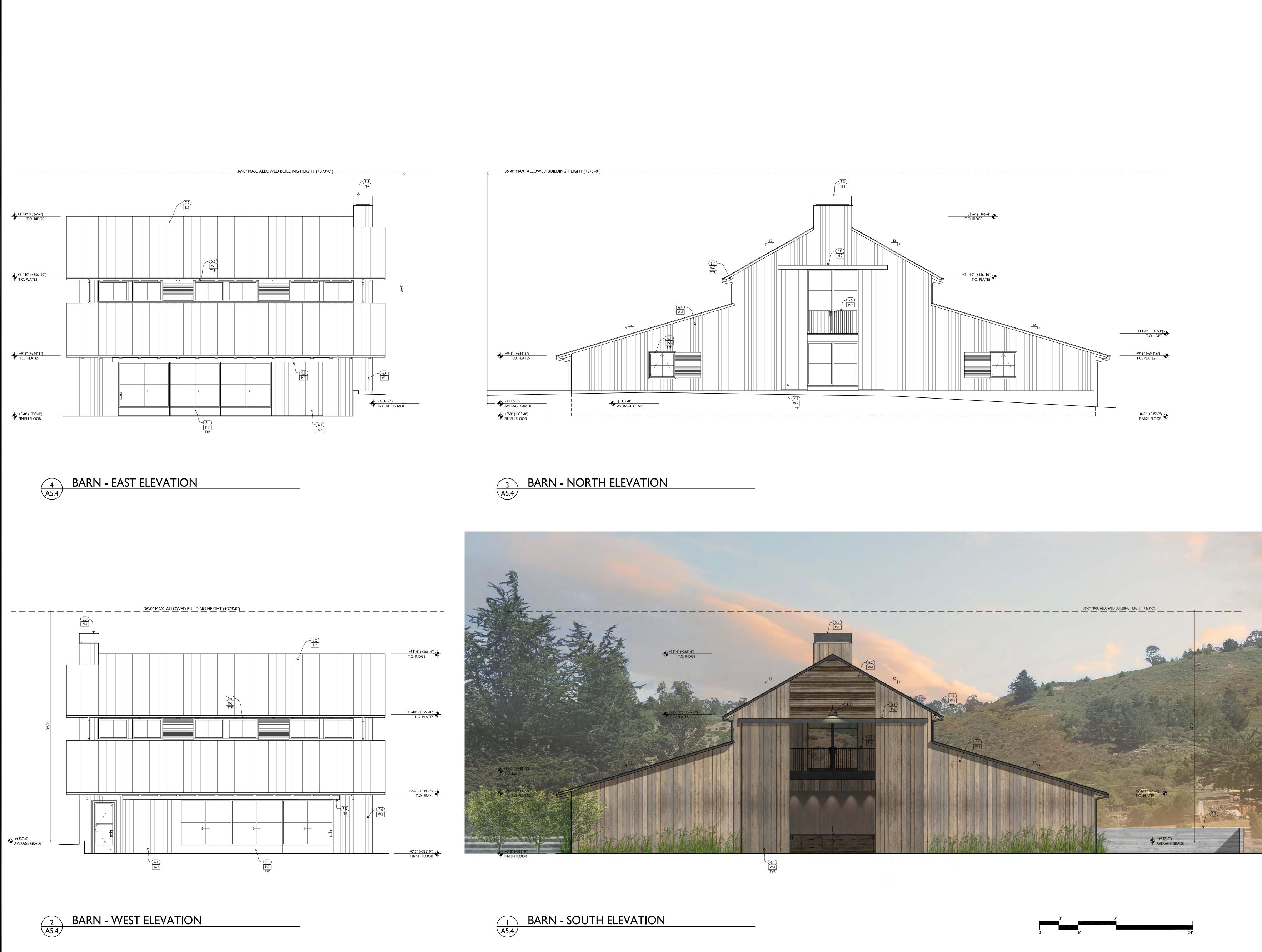




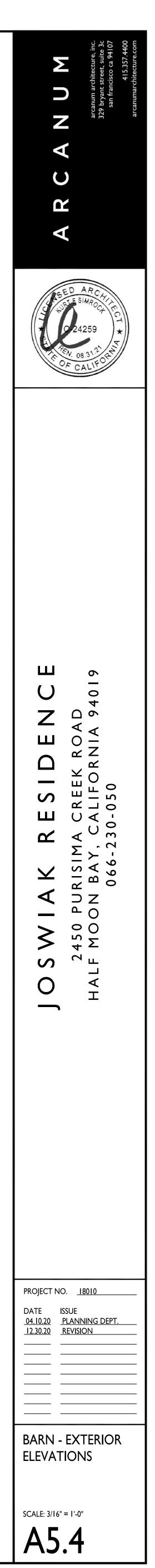


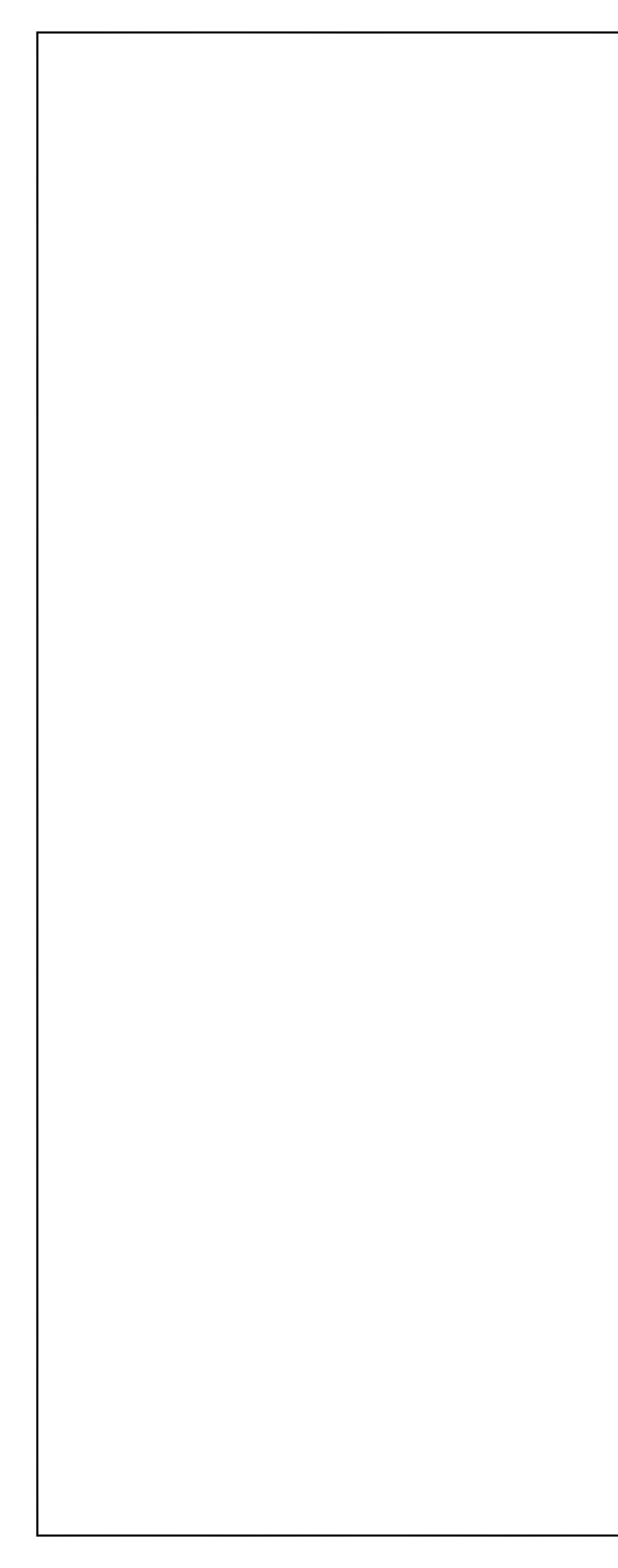


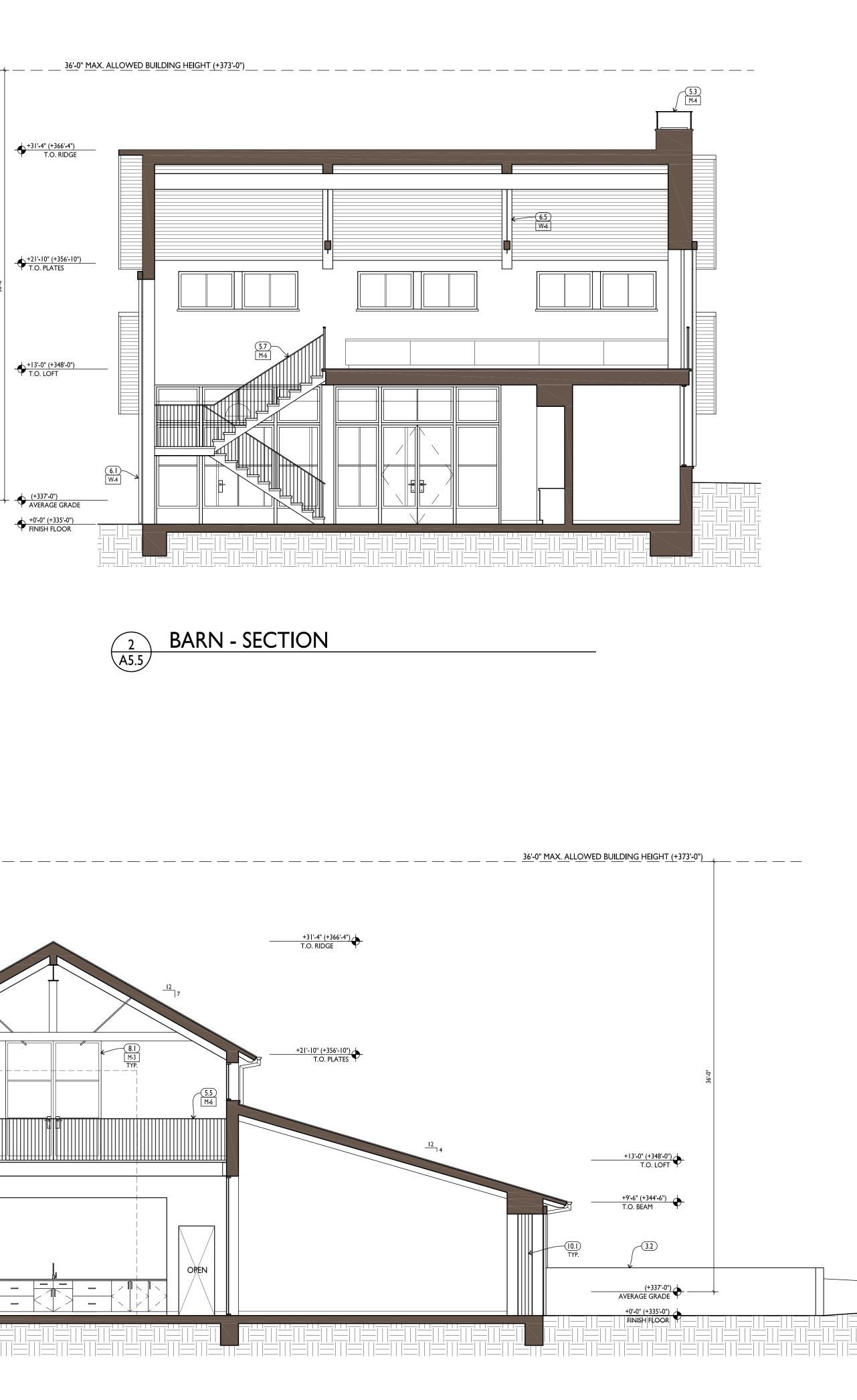


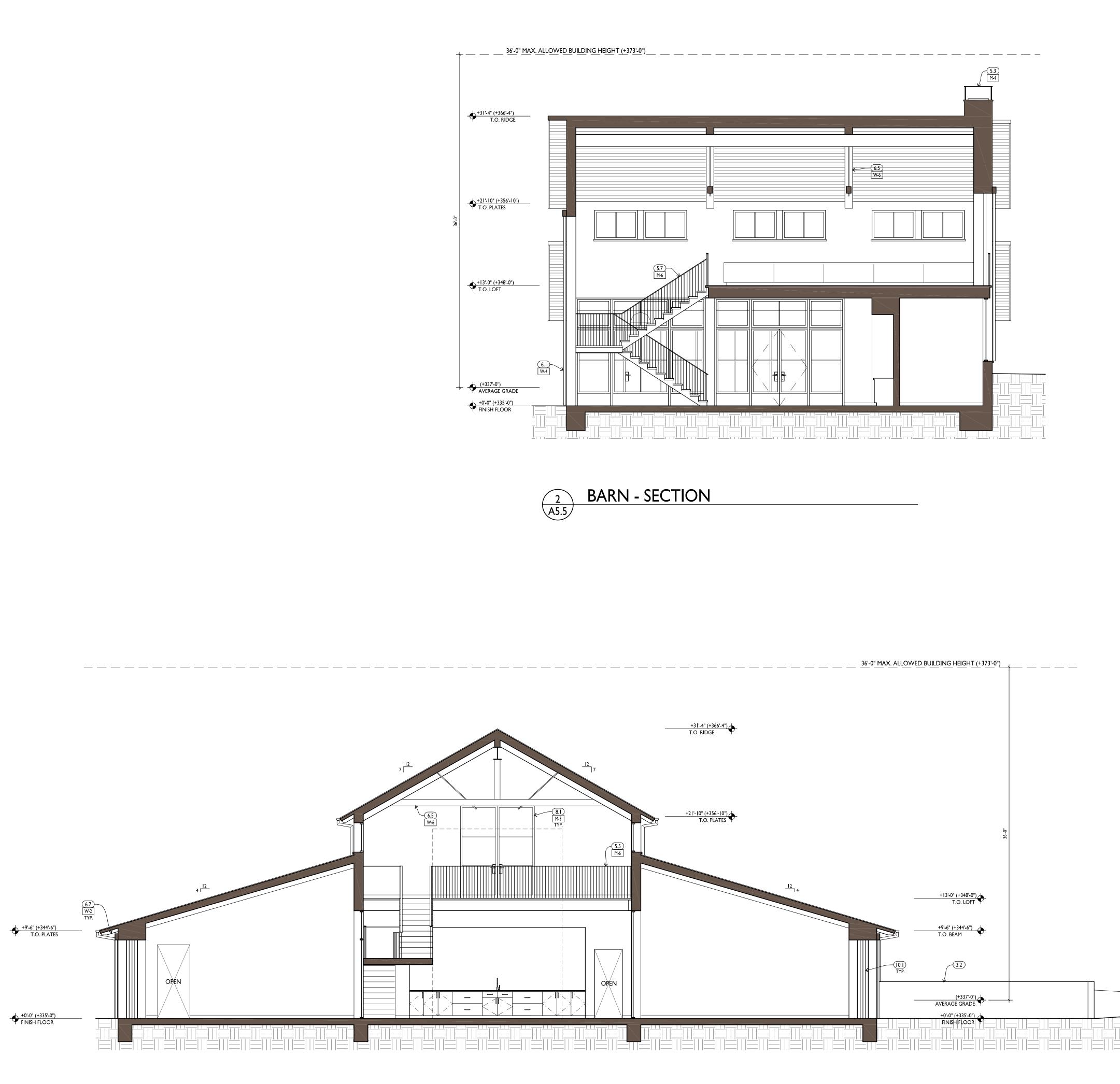






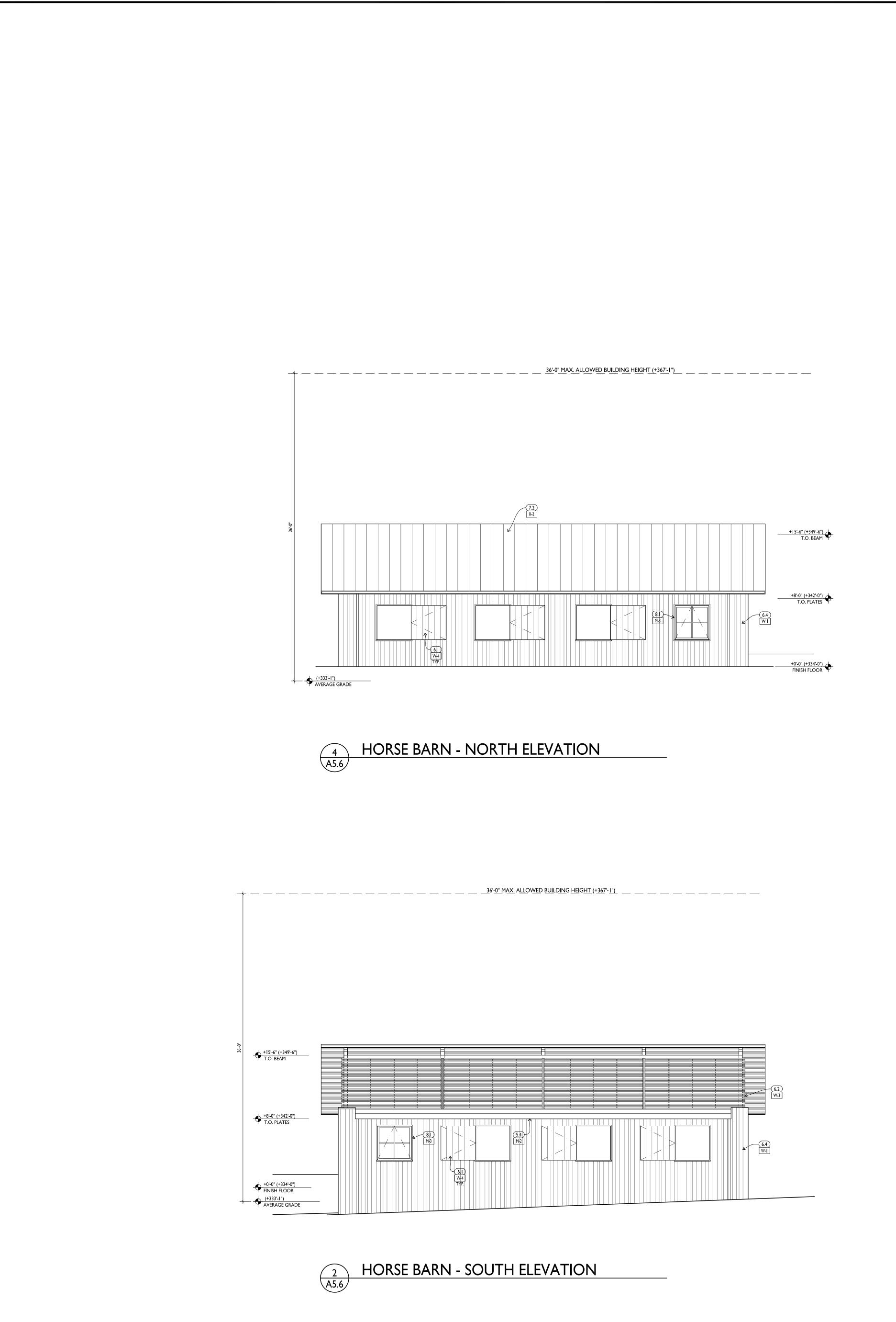


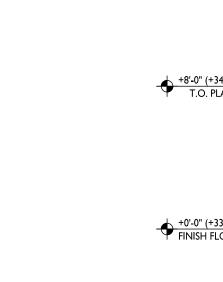


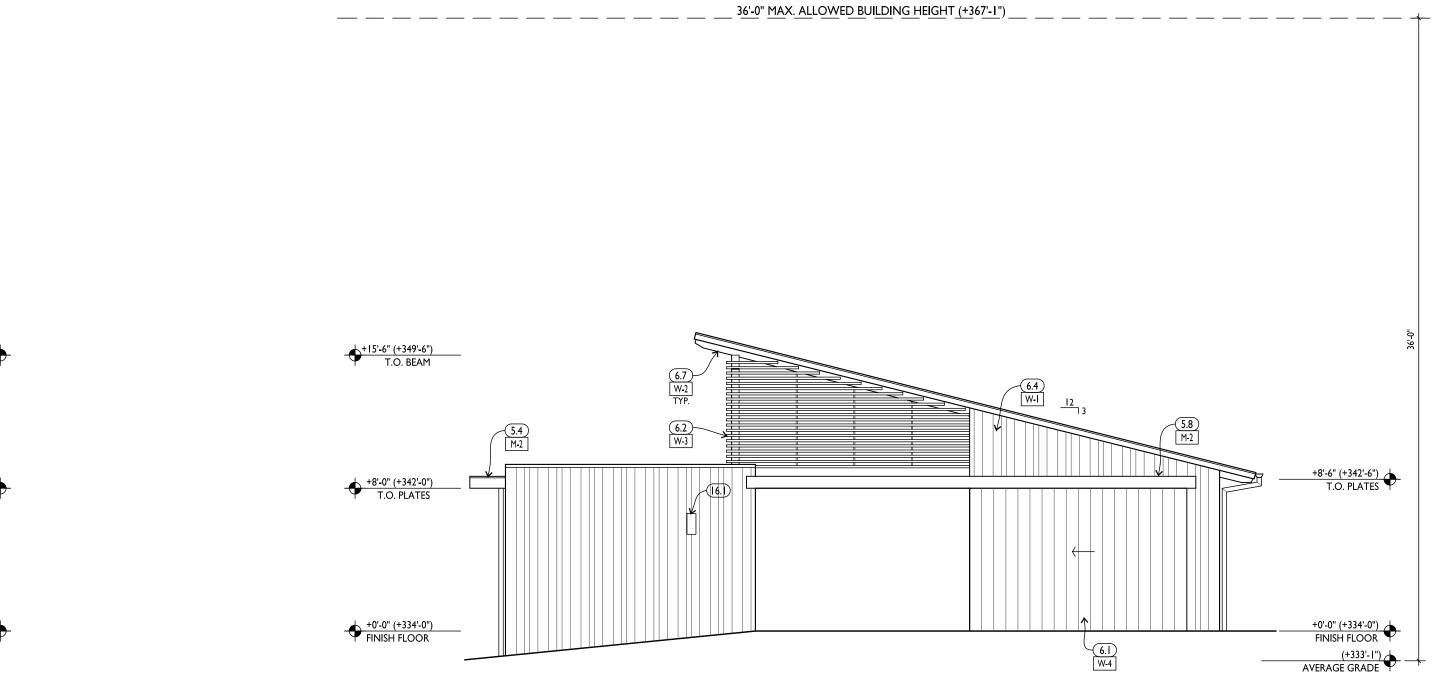






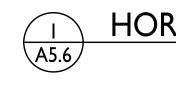






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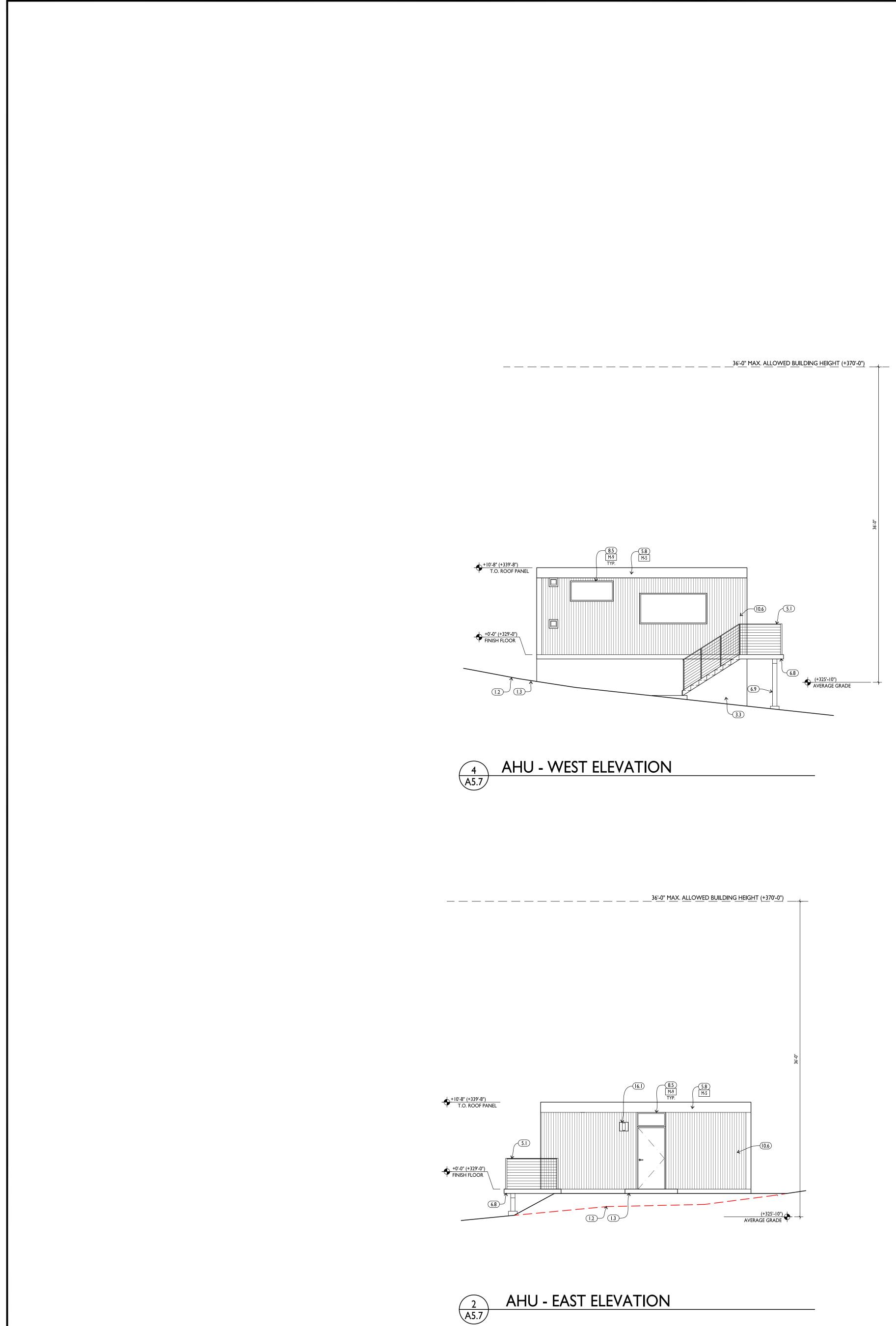


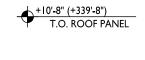


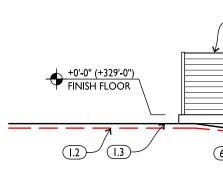


HORSE BARN - WEST ELEVATION





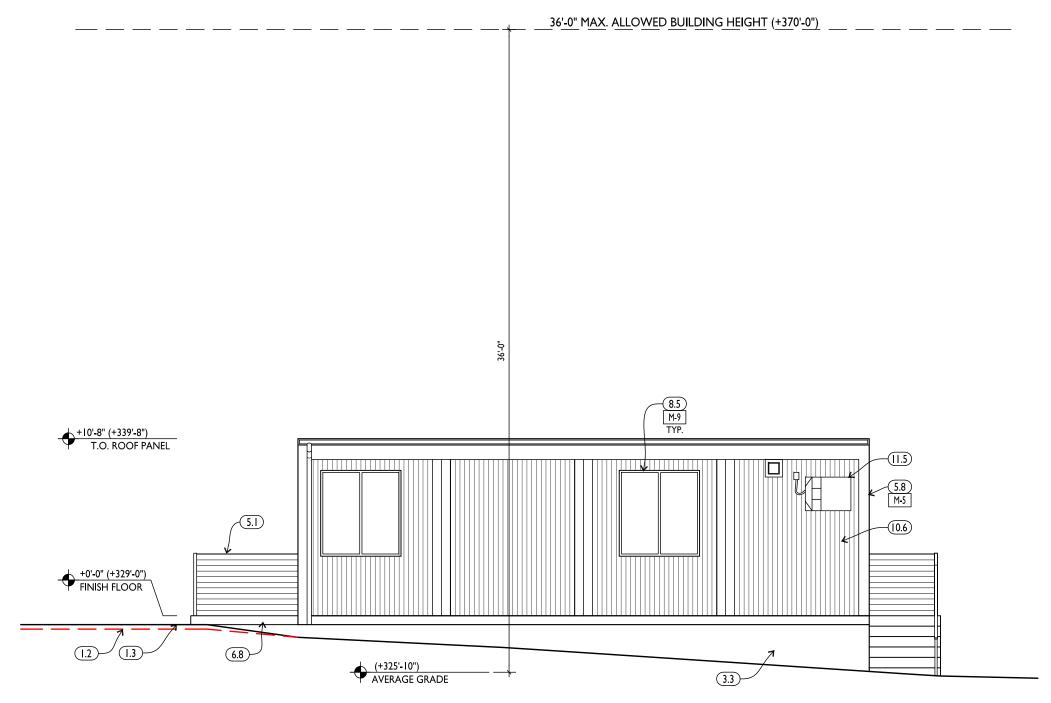










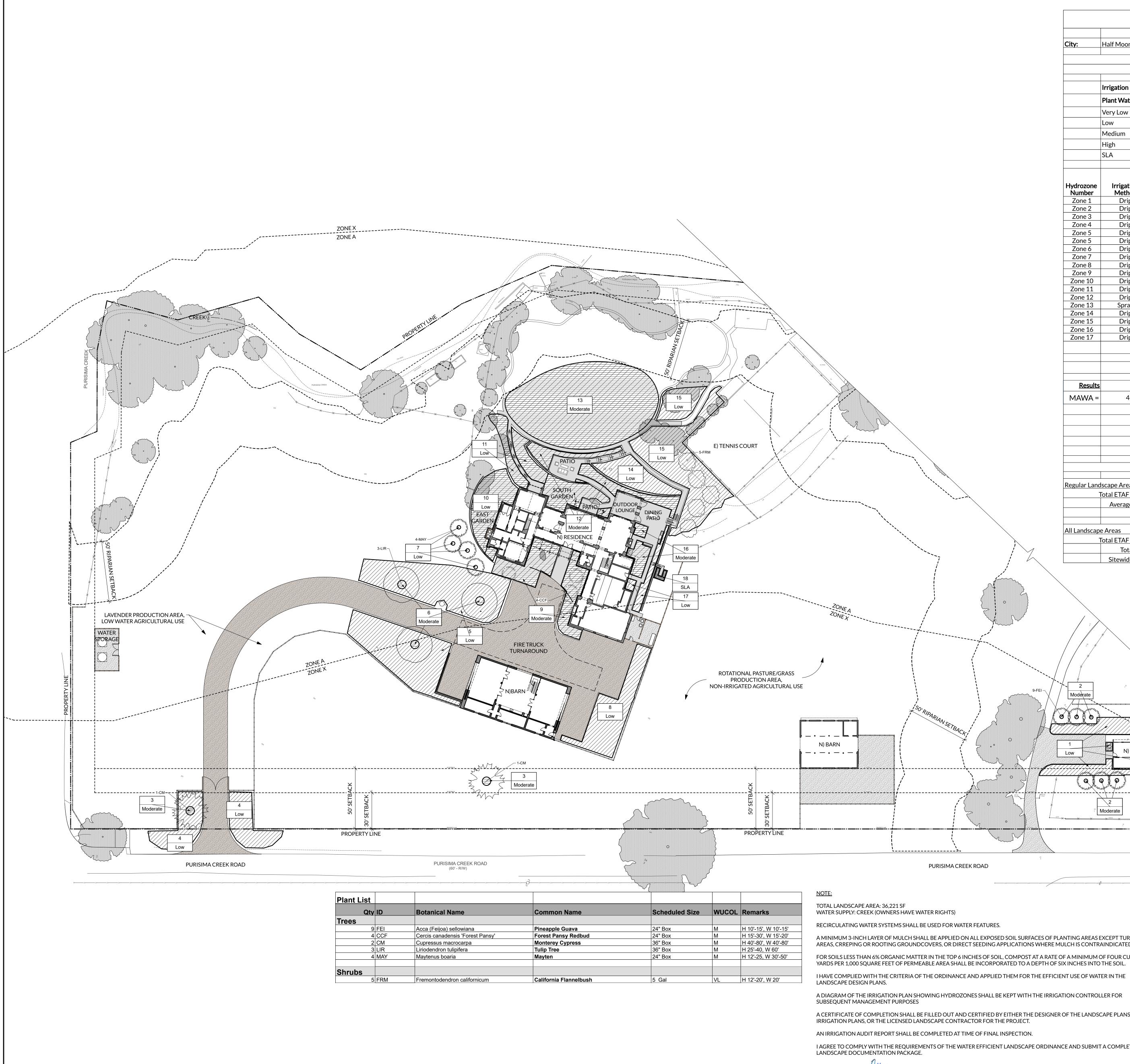


AHU - NORTH ELEVATION

AHU - SOUTH ELEVATION







	<u></u>				CAPE WORKSHEET		
	City:	Half Moon Bay	Reference ETo:	34			
		N/ ///			((PF x HA)/IE) + SLA] 5 x LA) + (1.0 - 0.55) X S	SI A)]	
					.81. Minimum IE is 0.7	1.	
		Plant Water Use Very Low	Туре		Plant Factor 0 - 0.1		
		Low			0.2 - 0.3		
		Medium			0.4 - 0.6		
		High SLA			0.7 - 1.0 1		
	Hydrozone Number	Irrigation Method	Plant Water Use Type	Plant Factor (PF)	Hydrozone Area (HA) without SLA (SF)	Irrigation Efficiency (IE)	ETAF x AREA (SF)
	Zone 1 Zone 2	Drip Drip	Low Moderate	0.30	<u>1,992</u> 63		738 47
	Zone 3	Drip	Moderate	0.60	76	0.81	56
	Zone 4 Zone 5	Drip Drip	Low Low	0.30	2,266 6,989		839 2589
	Zone 5	Drip	Moderate	0.60	0	0.81	0
	Zone 6 Zone 7	Drip Drip	Moderate Low	0.60 0.30	<u> 114</u> 28		<u>84</u> 10
	Zone 8	Drip	Low	0.30	1,990	0.81	737
	Zone 9 Zone 10	Drip Drip	Moderate Low	0.60 0.30	<u>1,949</u> 1,440		<u>1444</u> 533
	Zone 11	Drip	Low	0.30	1,019	0.81	377
	Zone 12 Zone 13		Moderate Moderate	0.60	2,108 7,012		<u> </u>
	Zone 14	Drip	Low	0.30	1,059	0.81	392
	Zone 15 Zone 16	Drip Drip	Low Moderate	0.30	4,253 3,026		1575 2241
	Zone 17	Drip	Low	0.30	667		247
				Total:	36051		19082
			SLA	1.00 Sum	49 36,100		
	Results						
	MAWA =	414,748	ETWU=				
					Cubic Feet HCF		
					Acre-feet		
				0.40	Millions of Gallons		
			ETWU compli	es with MAV	VA		
			E	TAF Calcula	tions		
	Regular Lanc	lscape Areas					
		Total ETAF x Area	19082				
		Average ETAF	0.53 ETAF is below				
<							
\mathbf{i}	All Landscap						
	-	Total ETAF x Area Total Area	<u>19081.82</u> 36100				
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RECIRCULATING WATER SYSTEMS SHALL BE USED FOR WATER FEATURES.

A MINIMUM 3-INCH LAYER OF MULCH SHALL BE APPLIED ON ALL EXPOSED SOIL SURFACES OF PLANTING AREAS EXCEPT TURF AREAS, CRREPING OR ROOTING GROUNDCOVERS, OR DIRECT SEEDING APPLICATIONS WHERE MULCH IS CONTRAINDICATED. FOR SOILS LESS THAN 6% ORGANIC MATTER IN THE TOP 6 INCHES OF SOIL, COMPOST AT A RATE OF A MINIMUM OF FOUR CUBIC YARDS PER 1,000 SQUARE FEET OF PERMEABLE AREA SHALL BE INCORPORATED TO A DEPTH OF SIX INCHES INTO THE SOIL.

A CERTIFICATE OF COMPLETION SHALL BE FILLED OUT AND CERTIFIED BY EITHER THE DESIGNER OF THE LANDSCAPE PLANS, IRRIGATION PLANS, OR THE LICENSED LANDSCAPE CONTRACTOR FOR THE PROJECT.

I AGREE TO COMPLY WITH THE REQUIREMENTS OF THE WATER EFFICIENT LANDSCAPE ORDINANCE AND SUBMIT A COMPLETE

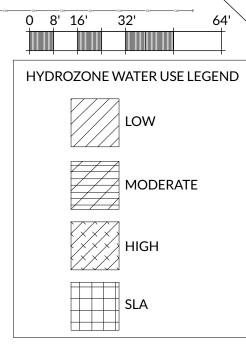
IMPERMEABLE HARDSCAPE LEGEND NEW STONE OR CONCRETE NEW CHIP SEAL NEW GRAVEL

TREE LEGEND

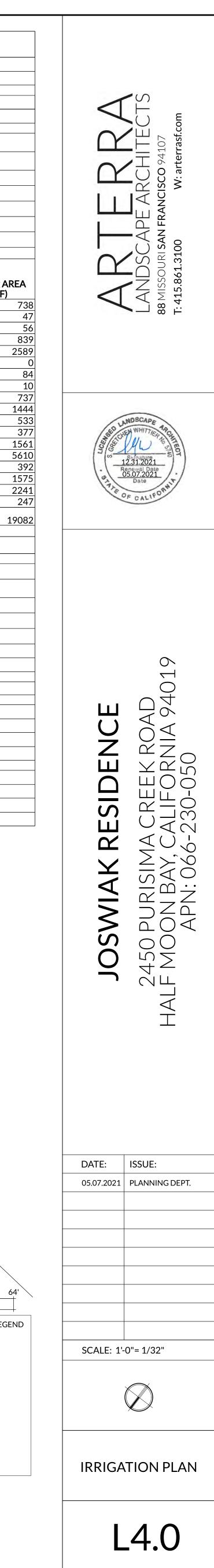
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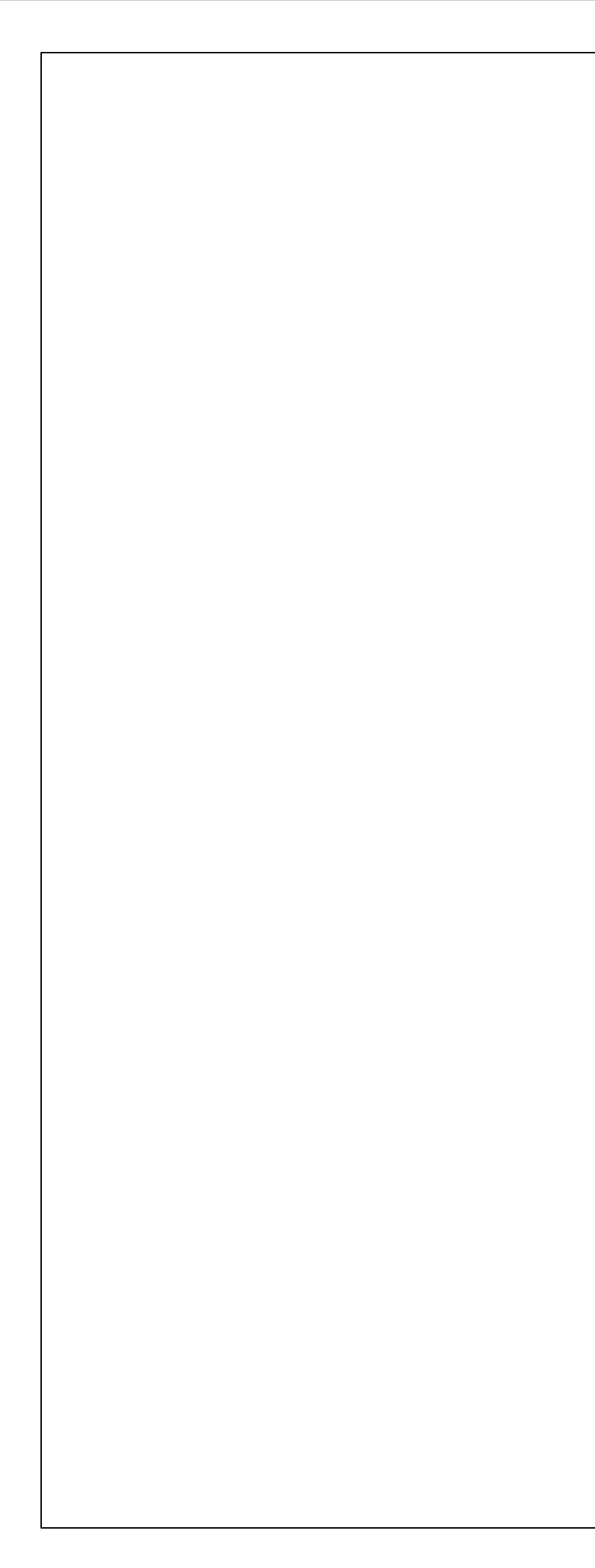
NEW TREE (SYMBOL VARIES)

E) TREES



DATE: <u>05/07/2021</u>





SECTION 1: GENERAL IRRIGATION NOTES

- This specification is to establish performance standards for a bidder-designed irrigation system.
- The irrigation system shall be installed in conformance with all applicable state and local codes and ordinances 3. (MWELO) by a licensed landscape contractor and experienced workmen. The contractor shall obtain all necessary permits and fees.
- 4. Install (10) hose bibs on irrigation main line. Confirm final locations on site with Landscape Architect (LA). The irrigation system shall be designed to operate according to the available static pressure at point of connection (p.o.c.) Contractor is responsible for verifying available static and dynamic pressure prior to construction and inform LA if static pressure is less than 65 psi.
- 6. If a soil report has not yet been generated, contractor shall gather a soil sample, send it to a lab for analysis, and base
- 7. Every irrigation valve manifold on the site shall have an isolation valve on the upstream side.
- Use only one type series head on any valve/circuit. Do not mix head types or manufacturers. All irrigation heads need 8. to have a built-in check valve and built in pressure regulation. All heads need to be set back 24" from non-permeable surfaces.
- 9. Irrigation equipment to be installed per manufacturer's instructions.
- 10. Areas of turf that are less than 8 feet wide and are adjacent to impermeable surfaces shall be irrigated by sub-surface drip.
- 11. Contractor to confirm location of existing utilities and underground structures prior to the excavation of trenches. Contractor shall repair any damage caused by, or during performance of his work at no additional cost to the owner. Call Underground Alert (811) for utility locations.
- 12. Contractor to guarantee complete and even coverage of irrigation in all planted areas. Lawn/spray system shall have complete, overlapping and even coverage, with valves hydrozoned to address different sun, shade and slope aspects.
- 13. The contractor shall size and locate all lines and sleeve as required. Parallel pipes may be installed in a common trench. Pipes shall have a six inch horizontal separation and are not to be installed directly above one another.
- 14. Backfill trenches with material free of rocks. Excavations to be backfilled to 90% compaction minimum. Contractor to repair settled trenches for one year after completion of work.
- 15. Install backflow preventer as per local code and according to manufacturer's specifications. Final location to be discreet and hidden from view. Confirm final location on site with LA. Backflow preventer shall be installed plumb and in alignment with adjacent pavement edges or structures.
- 16. Valve locations are diagrammatic. Locate in groundcover areas (not lawn). Locate 12" min. from walks, walls fences and parallel or perpendicular to them. Verify final locations with LA.
- as required by the manufacturer.
- schedule with manufacturer and coordinate with Gardener/Owner.
- 19. Install on-site weather station (sensor) in a southwest location free from any overhangs or trees. (Highest wind, sunniest). Confirm final location with LA.
- 20. Flush main supply lines prior to the installation of remote control valves. Pressurize mainline for a minimum of 24 hours to 100 psi prior to backfilling. Flush lateral lines prior to the installation of sprinkler heads or drip. Flush all lateral lines after installation of sprinkler heads and drip.
- Irrigation control wire shall be #14 UL approved for direct burial. Common wire to be white in color. Wires to individual 21. control valves to be a color other than white. Splices are to be made within a valve box using a crimp type copper wire connector with a heat-shrink waterproof jacket. In-line splices shall be soldered. Leave twenty four inches of wire coil at each remote control valve wire connection to allow valve bonnet removal without disconnecting control wires. Identify all station wires with a Chrusty ID tag located at each valve.
- 22. Install one (1) spare control wire for every six (6) stations on the controller along the entire main line. Spare wires shall be the same color (one with a white stripe) and of a different color than other control wires, loop 36" excess wire into each single valve box and into one valve box in each group of valves.
- 23. The irrigation contractor shall be responsible for the installation of sleeves and conduits of sufficient size under all paved areas. Minimum size to be 2".

24. Contractor shall warrant that the irrigation system will be free from defects in material and workmanship for a period of one year after completion of work.

SECTION 2: POINT OF CONNECTION COMPONENTS Order of components:

Manual shut-off valve (gate valve or ball valve) reduced pressure backflow preventer

Irrigation-only water meter or flow meter Flow Sensor

- 2. Contractor shall visit site and verify all conditions shown on plans prior to commencement of any work.
 - the drip emitter line grids and flow rate on the emitters on the soil type. See below in Section 5 for details.
- 17. Controller location is diagrammatic. Verify with LA. Contractor to supply power and internet connection to controller,
- 18. Set operation of irrigation controller between the hours of 10:00 pm and 7:00 am. Coordinate establishment irrigation

SECTION 3: PIPE SIZING

1. For sprinkler zones with a flow between 0gpm and 8 gpm, $\frac{3}{4}$ " schedule 40 PVC minimum pipe size.

2. For sprinkler zones with a flow between 8 gpm and 12 gpm, 1" schedule 40 PVC minimum pipe size.

- 3. For all zones larger than 12 gpm, consult with LA.
- **SECTION 4: COMPONENT SCHEDULE**
- BACKFLOW PREVENTER FEBCO #825Y-1" or approved equal
- <u>CONTROL VALVES</u> TORO Remote Control Valve, TPV Series
- MAIN LINES 1120 SCH.40 PVC Solvent weld pipe with SCH 40 PVC solvent
- WELD FITTINGS 18" Cover, min.
- LATERAL LINES 1120-200 PSI PVC solvent weld pipe with SCH 40 PVC solvent
- WELD FITTINGS 12" cover, min.
- <u>SLEEVES</u> 1120- CLASS 200 PVC plastic pipe. 24" cover, min.
- CONTROLLER HUNTER ACC2 with SOLAR SYNC. Mount in accessible are for landscape maintenance crew.
- WEATHER SENSOR SENSOR HUNTER SOLAR SYNC mounted on SW side of property
- <u>SPRAY HEADS</u> HUNTER PRO SPRAY or RAINBIRD SAM PRS. Min 6" pop up in turf, 12" pop up in shrub areas.
- VALVE BOXES CARSON, black plastic
- HOSE BIB CHAMPION or BUCKNER with vacuum breaker
- <u>GATE VALVE</u> NIBCO, (line size)
- NOTE:
- Contractor is responsible for submitting a full list/cut sheets of all irrigation equipment to LA for approval prior to purchase.

SECTION 5: DRIP SYSTEM SCHEDULE - EMITTERLINE TUBING IN-LINE EMITTER TUBING NETAFIM Techline CV

- <u>IN-LINE FILTER</u> TORO Drip Zone Kit with remote control valve, Wye filter with 150 MESH screen and 30 PSI PRESSURE REGULATOR/ KBI PVC BALL VALVE or similar. If site static pressure is less than 30 PSI, do not install a pressure regulator on drip zones. NETAFIM GRID SPECIFICATIONS
- Emitter flow, Emitter spacing and grid row spacing based on soil type of site:

Soil Type	Emitter Flow	Emitter Spacing	Row Spacing	Application Rate
Coarse Sand	0.9 gph	12"	16"	1.11 in/hr
Sand	0.6 gph	12"	16"	0.73 in/hr
Sandy Loam	0.6 gph	12"	16"	0.73 in/hr
Loam	0.4 gph	18"	18"	0.30 in/hr
Clay Loam	0.4 gph	18"	18"	0.30 in/hr
Clay	0.4 gph	18"	18"	0.30 in/hr
Clay	0.26 gph	18"	18"	0.19 in/hr

SECTION 6: DRIP SYSTEM SCHEDULE - POINT SOURCE EMITTERS The recommended drip method is emitter line tubing grids, as shown above.

When using individual emitters, use the following schedule:

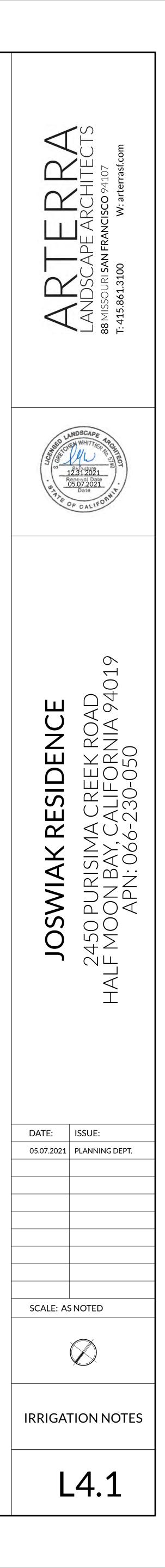
Container size	# of .5 gph Emitters	Total Flow	Configuration
4"	1 Emitter	.5 gph	On root ball
1 gallon	2 Emitters	1 gph	Opposite sides of root ball
2 gallon	2 Emitters	1 gph	Evenly around root ball
5 gallon	4 Emitters	2 gph	Evenly around root ball
15 gallon	5 Emitters	2.5 gph	Evenly around root ball
24" Box	10 Emitters	5 gph	Concentric rings
36" Box	18 Emitters	9 gph	Concentric rings
48" Box	27 Emitters	13.5 gph	Concentric rings

SECTION 7: DRIP SYSTEM NOTES 1. Locate in-line filter, pressure regulator and valve in valve boxes.

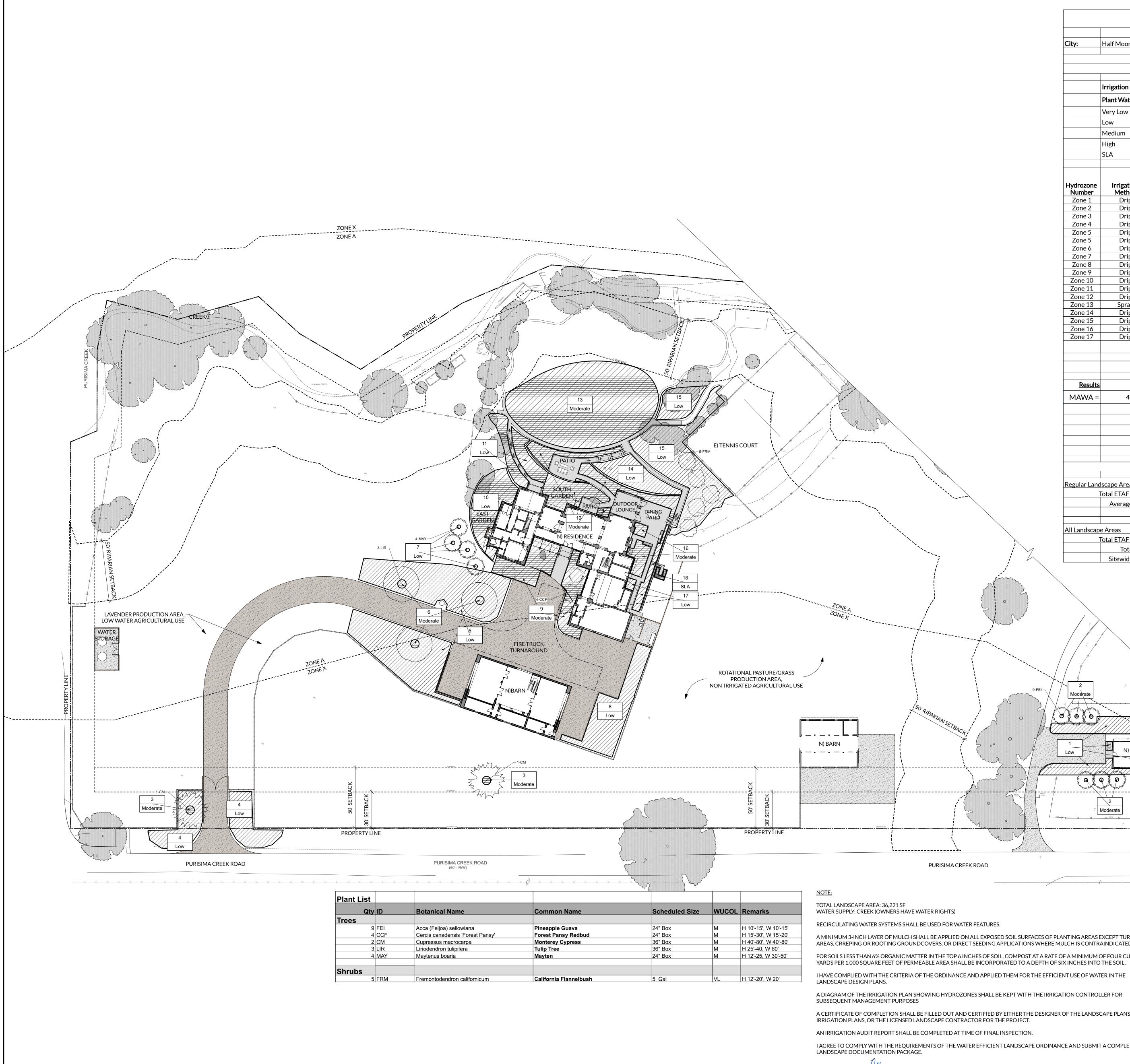
- 2. For drip zones with a flow of less than 4 gpm, $\frac{1}{2}$ " polyethylene tubing may be lead all the way from the value to the drip zone.
- 3. For drip zones with a flow between 4 gpm and 8 gpm, ³/₄" schedule 40 PVC shall run from the valve to the
- beginning of the zone.
- 4. For drip zones with a flow between 8 gpm and 12 gpm, 1" schedule 40 PVC shall be run from the valve to the beginning of the zone.
- 5. Locate emitter discharge within the watering basin of each plant. See planting plan for exact location and size of plants to determine location of emitters. Secure above grade emitter lines to finish grade with plastic or metal staples.
- 6. Install one manual flush valve for each drip sub-zone on the exhaust header at the hydraulic opposite end from the supply header.
- Install one drip zone flow indicator within 3 feet of the flush valve for each zone. 7.
- 8. If ¹/₄" inch tubing is used, install e.o.v.c. bug caps and tubing stakes at the discharge ends by 'salco'. ¹/₄" tubing lengths to be no greater than six feet.
- 9. In-line emitter tubing shall be installed as a closed loop grid system. All drip grids shall be situated on the contour of slopes and not perpendicular to the slope. Install tubing on top of finish grade and under mulch. Ensure that each plant has an emitter on its root ball to establish it.
- 10. Point source drip (button emitters, flag emitters, shrubblers, and vari-sprays) shall be avoided, if possible. Install an inline grid in all planted areas.

SECTION 8: PRESSURE AND FLOW RECORDING

- 1. Contractor shall maintain a set of 'as-built' drawings throughout the construction and prepare and deliver a legible copy of the plan to the LA/Owner upon completion of the work and before final payment. The irrigation plan shall indicate locations of all underground pipes, location of sleeves, location of valves and any other information necessary for long-term maintenance of the system. One laminated plan copy and one laminated valve zone schedule must be placed at the irrigation controller.
- Contractor shall include base flow reading in gallons per minute for each valve zone on the as-built irrigation drawing.
- Contractor shall note the static pressure on the as-built irrigation drawing. 3.
- 4. Contractor to provide one irrigation binder to the LA/Owners, at final walk through. Binder to include as-built irrigation drawing, valve map, manufacturer's operating instructions and warranty and repair information.
- 5. Contractor to provide an irrigation audit report (All projects under 2500sf can be conducted by the installing contractor. For all projects over 2500 sf, a qualified CLIA Irrigation Auditor must be hired.)







SIGNATURE: _

		M	VATER EFFICIE	ENT LANDS	CAPE WORKSHEET	<u> </u>	
	City:	Half Moon Bay	Reference ETo:	34			
			ETWU Equatior	 1: ETo x 0.62 x	((PF x HA)/IE) + SLA]		
		MAW	A Equation: (ETo)	x (0.62) x [(0.5	5 x LA) + (1.0 - 0.55) X	SLA)]	
		Irrigation Efficier	ncy for spray is 0.7	75 and drip is 0	.81. Minimum IE is 0.7	1.	
		Plant Water Use	Туре		Plant Factor		
		Very Low			0-0.1		
		Low Medium			0.2 - 0.3		
		High			0.7 - 1.0		
		SLA			1 Hydrozone Area	Irrigation	
	Hydrozone Number	Irrigation Method	Plant Water Use Type	Plant Factor (PF)	(HA) without SLA (SF)	Efficiency (IE)	ETAF x AREA (SF)
	Zone 1	Drip	Low	0.30	1,992	0.81	738
	Zone 2 Zone 3	Drip Drip	Moderate Moderate	0.60	63 76		
	Zone 4 Zone 5	Drip Drip	Low Low	0.30 0.30	2,266 6,989		
	Zone 5	Drip	Moderate	0.60	0	0.81	0
	Zone 6 Zone 7	Drip Drip	Moderate Low	0.60	114 28		
	Zone 8	Drip	Low	0.30	1,990	0.81	737
	Zone 9 Zone 10	Drip Drip	Moderate Low	0.60	1,949 1,440	+ +	
	Zone 11	Drip	Low	0.30	1,019	0.81	377
	Zone 12 Zone 13	Drip Spray	Moderate Moderate	0.60 0.60	2,108 7,012	. 0.75	5610
	Zone 14 Zone 15	Drip Drip	Low Low	0.30 0.30	1,059 4,253	0.81	392
	Zone 16	Drip	Moderate	0.60	3,026	0.81	2241
	Zone 17	Drip	Low	0.30	667		
			SLA	Total: 1.00	<u>36051</u> 49		19082
				Sum	36,100		
	Results	3					
	MAWA =		ETWU=	399,719	Gallons		
		, -			Cubic Feet		
				534	HCF		
					Acre-feet		
			ETWU compli		Millions of Gallons		
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		dscape Areas	10002				
``		Total ETAF x Area Average ETAF					
			ETAF is below				
	All Landscap	be Areas					
		Total ETAF x Area					
		Total Area Sitewide ETAF					
		JILEWIUELTAI	0.55			<u> </u>	
	*	*					
9-FEI	2 Moderate	en e					
P'RIPARIAN SETBACK			The Quart				
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PURISIMA CREEK ROAD			PURISIMA (60'-	CREEK ROAD RWI)		33 e e	-04
	01	d	<u></u>			01	

RECIRCULATING WATER SYSTEMS SHALL BE USED FOR WATER FEATURES.

A MINIMUM 3-INCH LAYER OF MULCH SHALL BE APPLIED ON ALL EXPOSED SOIL SURFACES OF PLANTING AREAS EXCEPT TURF AREAS, CRREPING OR ROOTING GROUNDCOVERS, OR DIRECT SEEDING APPLICATIONS WHERE MULCH IS CONTRAINDICATED. FOR SOILS LESS THAN 6% ORGANIC MATTER IN THE TOP 6 INCHES OF SOIL, COMPOST AT A RATE OF A MINIMUM OF FOUR CUBIC YARDS PER 1,000 SQUARE FEET OF PERMEABLE AREA SHALL BE INCORPORATED TO A DEPTH OF SIX INCHES INTO THE SOIL.

A CERTIFICATE OF COMPLETION SHALL BE FILLED OUT AND CERTIFIED BY EITHER THE DESIGNER OF THE LANDSCAPE PLANS, IRRIGATION PLANS, OR THE LICENSED LANDSCAPE CONTRACTOR FOR THE PROJECT.

I AGREE TO COMPLY WITH THE REQUIREMENTS OF THE WATER EFFICIENT LANDSCAPE ORDINANCE AND SUBMIT A COMPLETE

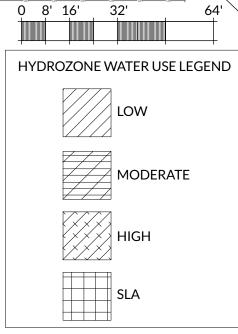
IMPERMEABLE HARDSCAPE LEGEND NEW STONE OR CONCRETE NEW CHIP SEAL NEW GRAVEL

TREE LEGEND

[.]

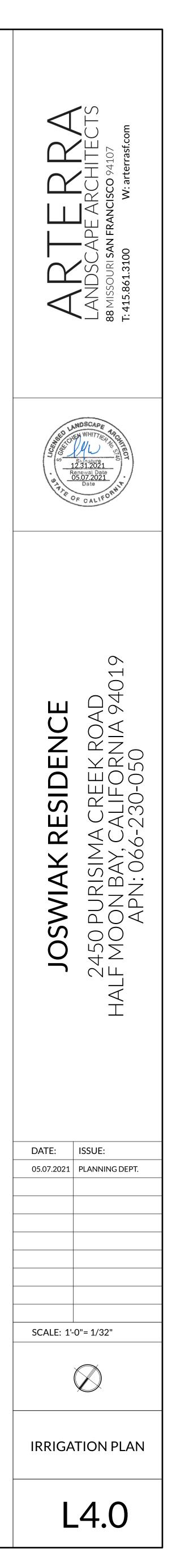
NEW TREE (SYMBOL VARIES)

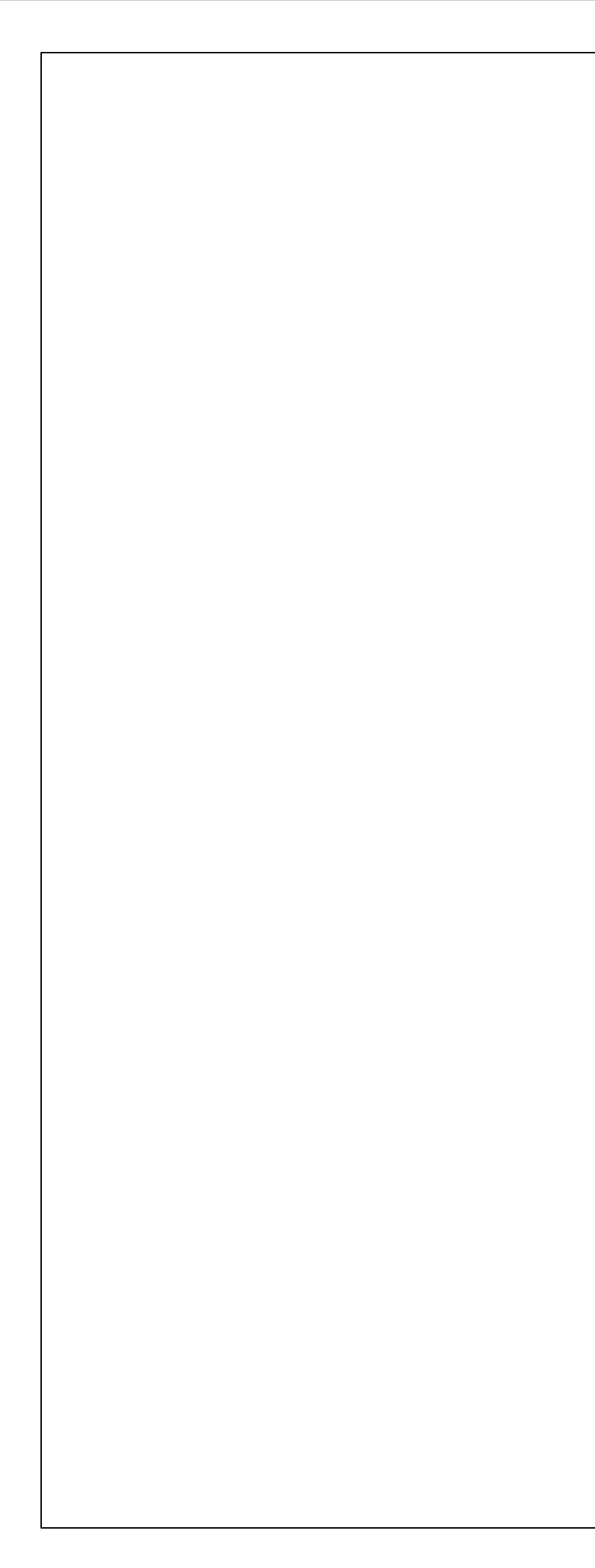
E) TREES



DATE: <u>05/07/2021</u>







SECTION 1: GENERAL IRRIGATION NOTES

- This specification is to establish performance standards for a bidder-designed irrigation system.
- The irrigation system shall be installed in conformance with all applicable state and local codes and ordinances 3. (MWELO) by a licensed landscape contractor and experienced workmen. The contractor shall obtain all necessary permits and fees.
- 4. Install (10) hose bibs on irrigation main line. Confirm final locations on site with Landscape Architect (LA). The irrigation system shall be designed to operate according to the available static pressure at point of connection (p.o.c.) Contractor is responsible for verifying available static and dynamic pressure prior to construction and inform LA if static pressure is less than 65 psi.
- 6. If a soil report has not yet been generated, contractor shall gather a soil sample, send it to a lab for analysis, and base
- 7. Every irrigation valve manifold on the site shall have an isolation valve on the upstream side.
- Use only one type series head on any valve/circuit. Do not mix head types or manufacturers. All irrigation heads need 8. to have a built-in check valve and built in pressure regulation. All heads need to be set back 24" from non-permeable surfaces.
- 9. Irrigation equipment to be installed per manufacturer's instructions.
- 10. Areas of turf that are less than 8 feet wide and are adjacent to impermeable surfaces shall be irrigated by sub-surface drip.
- 11. Contractor to confirm location of existing utilities and underground structures prior to the excavation of trenches. Contractor shall repair any damage caused by, or during performance of his work at no additional cost to the owner. Call Underground Alert (811) for utility locations.
- 12. Contractor to guarantee complete and even coverage of irrigation in all planted areas. Lawn/spray system shall have complete, overlapping and even coverage, with valves hydrozoned to address different sun, shade and slope aspects.
- 13. The contractor shall size and locate all lines and sleeve as required. Parallel pipes may be installed in a common trench. Pipes shall have a six inch horizontal separation and are not to be installed directly above one another.
- 14. Backfill trenches with material free of rocks. Excavations to be backfilled to 90% compaction minimum. Contractor to repair settled trenches for one year after completion of work.
- 15. Install backflow preventer as per local code and according to manufacturer's specifications. Final location to be discreet and hidden from view. Confirm final location on site with LA. Backflow preventer shall be installed plumb and in alignment with adjacent pavement edges or structures.
- 16. Valve locations are diagrammatic. Locate in groundcover areas (not lawn). Locate 12" min. from walks, walls fences and parallel or perpendicular to them. Verify final locations with LA.
- as required by the manufacturer.
- schedule with manufacturer and coordinate with Gardener/Owner.
- 19. Install on-site weather station (sensor) in a southwest location free from any overhangs or trees. (Highest wind, sunniest). Confirm final location with LA.
- 20. Flush main supply lines prior to the installation of remote control valves. Pressurize mainline for a minimum of 24 hours to 100 psi prior to backfilling. Flush lateral lines prior to the installation of sprinkler heads or drip. Flush all lateral lines after installation of sprinkler heads and drip.
- Irrigation control wire shall be #14 UL approved for direct burial. Common wire to be white in color. Wires to individual 21. control valves to be a color other than white. Splices are to be made within a valve box using a crimp type copper wire connector with a heat-shrink waterproof jacket. In-line splices shall be soldered. Leave twenty four inches of wire coil at each remote control valve wire connection to allow valve bonnet removal without disconnecting control wires. Identify all station wires with a Chrusty ID tag located at each valve.
- 22. Install one (1) spare control wire for every six (6) stations on the controller along the entire main line. Spare wires shall be the same color (one with a white stripe) and of a different color than other control wires, loop 36" excess wire into each single valve box and into one valve box in each group of valves.
- 23. The irrigation contractor shall be responsible for the installation of sleeves and conduits of sufficient size under all paved areas. Minimum size to be 2".

24. Contractor shall warrant that the irrigation system will be free from defects in material and workmanship for a period of one year after completion of work.

SECTION 2: POINT OF CONNECTION COMPONENTS Order of components:

Manual shut-off valve (gate valve or ball valve)

reduced pressure backflow preventer Irrigation-only water meter or flow meter Flow Sensor

- 2. Contractor shall visit site and verify all conditions shown on plans prior to commencement of any work.
 - the drip emitter line grids and flow rate on the emitters on the soil type. See below in Section 5 for details.
- 17. Controller location is diagrammatic. Verify with LA. Contractor to supply power and internet connection to controller,
- 18. Set operation of irrigation controller between the hours of 10:00 pm and 7:00 am. Coordinate establishment irrigation

SECTION 3: PIPE SIZING

1. For sprinkler zones with a flow between 0gpm and 8 gpm, $\frac{3}{4}$ " schedule 40 PVC minimum pipe size.

2. For sprinkler zones with a flow between 8 gpm and 12 gpm, 1" schedule 40 PVC minimum pipe size.

- 3. For all zones larger than 12 gpm, consult with LA.
- **SECTION 4: COMPONENT SCHEDULE**
- BACKFLOW PREVENTER FEBCO #825Y-1" or approved equal CONTROL VALVES
- TORO Remote Control Valve, TPV Series
- MAIN LINES 1120 SCH.40 PVC Solvent weld pipe with SCH 40 PVC solvent
- WELD FITTINGS 18" Cover, min.
- LATERAL LINES 1120-200 PSI PVC solvent weld pipe with SCH 40 PVC solvent
- WELD FITTINGS 12" cover, min.
- <u>SLEEVES</u> 1120- CLASS 200 PVC plastic pipe. 24" cover, min.
- CONTROLLER HUNTER ACC2 with SOLAR SYNC. Mount in accessible are for landscape maintenance crew.
- WEATHER SENSOR SENSOR HUNTER SOLAR SYNC mounted on SW side of property
- <u>SPRAY HEADS</u> HUNTER PRO SPRAY or RAINBIRD SAM PRS. Min 6" pop up in turf, 12" pop up in shrub areas.
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when using individual emitters, use the following schedule:						
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- 2. For drip zones with a flow of less than 4 gpm, ½" polyethylene tubing may be lead all the way from the valve to the drip zone.
- 3. For drip zones with a flow between 4 gpm and 8 gpm, ³/₄" schedule 40 PVC shall run from the valve to the
- beginning of the zone.
- 4. For drip zones with a flow between 8 gpm and 12 gpm, 1" schedule 40 PVC shall be run from the valve to the beginning of the zone.
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- Install one drip zone flow indicator within 3 feet of the flush valve for each zone. 7.
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