Appendix 5.1-1 Landscape Plan

Appendices

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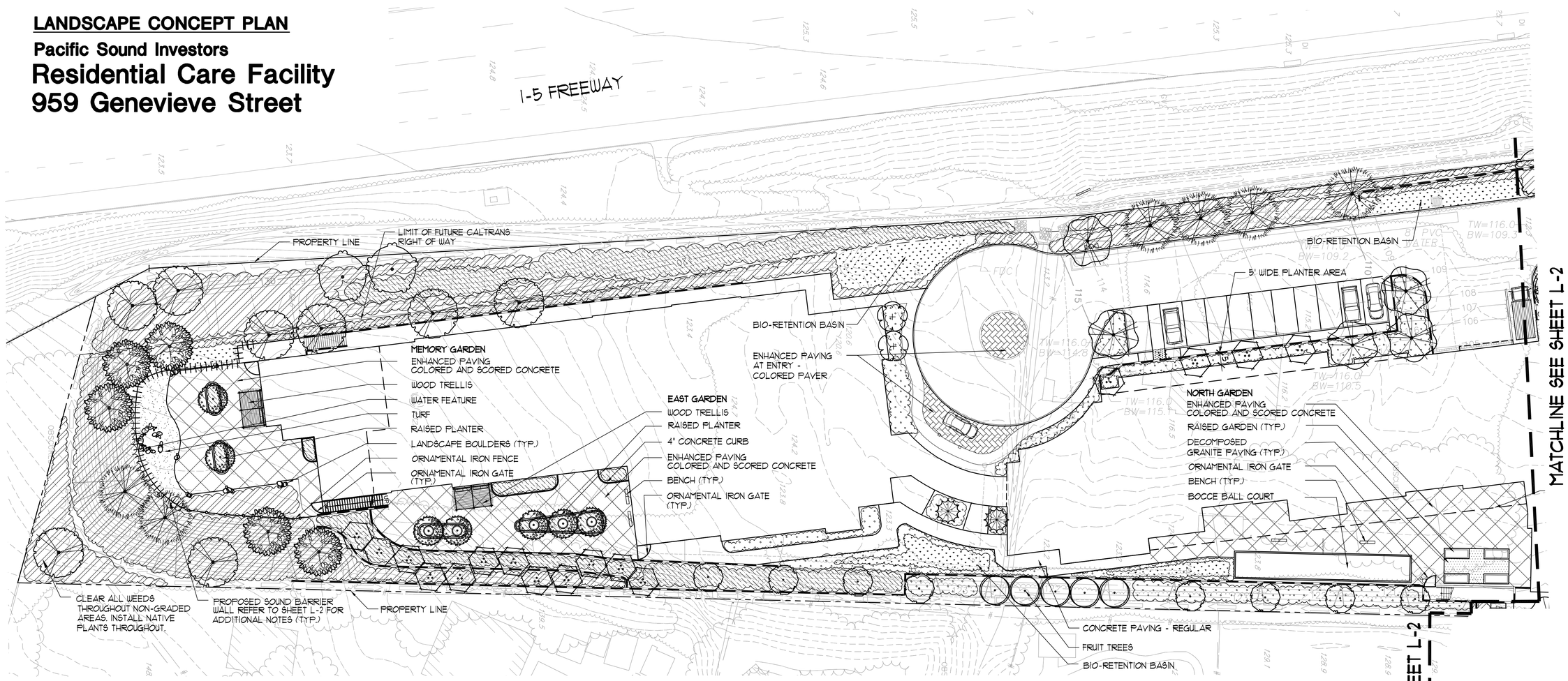
LANDSCAPE CONCEPT PLAN

Pacific Sound Investors

Residential Care Facility
959 Genevieve Street



PLANT MATERIAL LEGEND

TREES

SYM	BOTANICAL NAME / VARIETY	COMMON NAME	SIZE/SPACING/HEIGHT	WUCOLS VALUE
	PINUS TORREYANA	TORREY PINE	24" BOX /AS SHOWN 70' HEIGHT	LW
	PLATANUS RACEMOSA	CALIFORNIA SYCAMORE	24" BOX /AS SHOWN 40' HEIGHT	MW
	QUERCUS AGRIFOLIA	COAST LIVE OAK	24" BOX /AS SHOWN 70' HEIGHT	VLW
	QUERCUS TOMENTELLA	ISLAND OAK	24" BOX /AS SHOWN 40' HEIGHT	LW
	ARBUTUS 'MARINA'	MARINA MADRONE	15 GAL /AS SHOWN 30' HEIGHT	LW
	CERCIS OCCIDENTALIS	WESTERN REDBUD	15 GAL /AS SHOWN 18' HEIGHT	LW
	PHOENIX ROEBELENII	PIGMY DATE PALM	5 GAL /AS SHOWN 10' HEIGHT	MW
	ERIOBOTRYA DEFLEXA	BRONZE LOQUAT	15 GAL /AS SHOWN 30' HEIGHT	MW
	LYONOTHAMNUS FLORIBUNDUS	CATALINA IRONWOOD	15 GAL /AS SHOWN 35' HEIGHT	LW
	MAGNOLIA GRANDIFLORA 'LITTLE GEM'	SOUTHERN MAGNOLIA	15 GAL /AS SHOWN 15' HEIGHT	MW
	MAGNOLIA GRANDIFLORA 'MAJESTIC BEAUTY'	SOUTHERN MAGNOLIA	15 GAL /AS SHOWN 30'-45' HEIGHT	MW
	FRUIT/CITRUS TREES	-	15 GAL /AS SHOWN 20' HEIGHT	MW

BIOWSWALES & RETENTION BASINS

CAREX DIVULSA	BERKELEY SEDGE	1 GAL. / 18" O.C.	LW
CHONDROPETALUM TECTORUM	SMALL CAPE RUSH	1 GAL. / 18" O.C.	LW
JUNCUS PATENS	CALIFORNIA GRAY RUSH	1 GAL. / 18" O.C.	LW

TURF

TURF GRASS SOD - TURTLE TURF' OR EQ. CONTACT AGRONOTEC SEED CO. 1-800-543-4109 TURF GRASS SPECIES TO HAVE A WUCOLS IV PLANT FACTOR OF .55 OR LESS	LW

ENTRY WAY & NORTH GARDEN

SHRUBS (ALL AREAS TO RECEIVE A 3" LAYER OF ORGANIC MULCH)

SYM	BOTANICAL NAME / VARIETY	COMMON NAME	SIZE / SPACING	WUCOS VALUE
	CALLISTEMON VIMINALIS 'LITTLE JOHN'	DWARF BOTTLEBRUSH	5 GAL. / 3' O.C.	LW
	FESTUCA OVINA 'GLAUCA'	BLUE FESCUE	1 GAL. / 2' O.C.	LW
	HEMEROCALLIS HYBRIDS	DAYLILY	1 GAL. / 3' O.C.	MW
	HEUCHERA MAXIMA	ISLAND ALUM ROOT	1 GAL. / 2' O.C.	LW
	NANDINA D. 'GULF STREAM'	HEAVENLY BAMBOO	1 GAL. / 3' O.C.	LW
	NEPHROLEPIS CORDIFOLIA	SWORD FERN	1 GAL. / 3' O.C.	MW
	PHORMIUM MAORI MAIDEN'	NEW ZEALAND FLAX	5 GAL. / 5' O.C.	MW
	RHUS INTEGRIFOLIA	LEMONADE BERRY	5 GAL. / 6' O.C.	VLW
	ROSA 'BLUEBERRY HILL'	ROSE	5 GAL. / 5' O.C.	MW
	ROSA 'DREAM WEAVER'	ROSE	5 GAL. / 5' O.C.	MW
	ROSA 'EUREKA'	ROSE	5 GAL. / 5' O.C.	MW
	ROSA 'JUNE LAVER'	ROSE	5 GAL. / 5' O.C.	MW
	ROSA 'PLAYTIME'	ROSE	5 GAL. / 5' O.C.	MW

GROUNDCOVERS (ALL AREAS TO RECEIVE A 3" LAYER OF ORGANIC MULCH)

TRACHELOSPERMUM JASMINOIDES	STAR JASMINE	1 GAL. / 30" O.C.	MW
ROSMARINUS O. 'HUNTINGTON BLUE'	ROSEMARY	FLATS / 18" O.C.	LW

VINES

BOUGAINVILLEA 'SAN DIEGO RED'	BOUGAINVILLEA	5 GAL. / 10' O.C.	LW
VITIS CALIFORNICA 'ROGERS RED'	CALIFORNIA WILD GRAPE	5 GAL. / 10' O.C.	LW

OPEN SPACE & SLOPE AREAS

SHRUBS (ALL AREAS TO RECEIVE A 3" LAYER OF ORGANIC MULCH)

SYM	BOTANICAL NAME / VARIETY	COMMON NAME	SIZE / SPACING	WUCOS VALUE
	CALLIANDRA CALIFORNICA	BAJA FAIRY DUSTER	5 GAL. / 6' O.C.	VLW
	CAREX TUMULICOLA	BERKELEY SEDGE	FLATS / 18" O.C.	LW
	CEANOTHUS 'DARK STAR'	CALIFORNIA LILAC	5 GAL. / 6' O.C.	LW
	CEANOTHUS 'JOYCE COULTER'	CALIFORNIA LILAC	5 GAL. / 6' O.C.	LW
	COREOPSIS GIGANTEA	COREOPSIS	1 GAL. / 3' O.C.	VLW
	GALVEZIA SPECIOSA	ISLAND BUSH SNAPDRAGON	1 GAL. / 5' O.C.	VLW
	MUHLENBERGIA DUBIA	PINE MUHLY	1 GAL. / 3' O.C.	LW
	MUHLENBERGIA RIGENS	DEERGRASS	1 GAL. / 3' O.C.	LW
	PENSTEMON CENTRANTHIFOLIUS	SCARLET BUGLE	1 GAL. / 3' O.C.	LW
	PENSTEMON HETEROPHYLLA	MARGARITA BOP	1 GAL. / 3' O.C.	LW
	RIBES VIBURNIFOLIUM	CATALINA CURRANT	1 GAL. / 3' O.C.	VLW
SYM				
	ARCTOSTAPHYLOS DENSIFLORA 'HARMONY'	HARMONY MANZANITA	5 GAL. / 6' O.C.	LW
	HETEROMELES ARBUTIFOLIA	TOYON	5 GAL. / 6' O.C.	LW
	RHAMNUS CALIFORNICA 'EVE CASE'	COFFEEBERRY	5 GAL. / 6' O.C.	VLW
	RHUS INTEGRIFOLIA	LEMONADE BERRY	5 GAL. / 6' O.C.	VLW

GROUNDCOVERS (ALL AREAS TO RECEIVE A 3" LAYER OF ORGANIC MULCH)

ARCTOSTAPHYLOS 'PACIFIC MIST'	MANZANITA	FLATS / 18" O.C.	LW
BACCHARIS PILULARIS 'PIGEON POINT'	DWARF COYOTE BRUSH	FLATS / 18" O.C.	LW

MEMORY GARDEN & EAST GARDEN

SHRUBS (ALL AREAS TO RECEIVE A 3" LAYER OF ORGANIC MULCH)

SYM	BOTANICAL NAME / VARIETY	COMMON NAME	SIZE / SPACING	WUCOS VALUE
	AGAPANTHUS 'GETTY WHITE'	GETTY WHITE AGAPANTHUS	1 GAL. / 3' O.C.	MW
	CAMELLIA SASANQUA 'MINE-NO-YUKI'	CAMELLIA	5 GAL. / 6' O.C.	MW
	CAMELLIA JAPONICA 'ALBA PLENA'	CAMELLIA	5 GAL. / 6' O.C.	MW
	CAREX PANSA	CALIFORNIA MEADOW SEDGE	FLATS / 18" O.C.	MW
	CLIVIA MINIATA VAR. CITRINA 'SNOWBALL'	CLIVIA	1 GAL. / 3' O.C.	LW
	GARDENIA AUGUSTA 'KLEIN'S HARDY'	GARDENIA	5 GAL. / 3' O.C.	MW
	HEMEROCALLIS HYBRIDS	DAYLILY	1 GAL. / 3' O.C.	MW
	LAVANDULA STOECHAS	SPANISH LAVENDER	1 GAL. / 3' O.C.	LW
	PITTOSPORUM TENUIFOLIUM 'MARJORIE CHANNON'	VARIEGATED KOHUHU	5 GAL. / 6' O.C.	MW
	ROSA 'ICEBERG'	ROSE	5 GAL. / 5' O.C.	MW

GROUNDCOVERS (ALL AREAS TO RECEIVE A 3" LAYER OF ORGANIC MULCH)

LANTANA MONTEVIDENSIS 'WHITE LIGHTNING'	TRAILING LANTANA	1 GAL. / 30" O.C.	LW
ROSA X 'NOASCHNEE'	WHITE CARPET ROSE	1 GAL. / 30" O.C.	MW

0 20' 40' 60'

WATER EFFICIENT LANDSCAPE DECLARATION:

I AM FAMILIAR WITH THE REQUIREMENTS FOR LANDSCAPE AND IRRIGATION PLANS CONTAINED IN THE CITY'S WATER EFFICIENT LANDSCAPE REGULATIONS. I HAVE PREPARED THIS PLAN IN COMPLIANCE WITH THOSE REGULATIONS AND THE LANDSCAPE DESIGN MANUAL. I CERTIFY THAT THE PLAN IMPLEMENTS THOSE REGULATIONS TO PROVIDE EFFICIENT USE OF WATER.

BY: _____

PHONE NO: (760) 692-1924

REGISTRATION NO: 2916 EXPIRATION DATE: 10/31/2020

THE LIGHTFOOT PLANNING GROUP

PLANNING
SITE DESIGN
LANDSCAPE ARCHITECTURE

5900 PASTEUR COURT SUITE 110
CARLSBAD, CA 92008
(760) 692-1924
LIGHTFOOT@LIGHTFOOTPG.COM

LICENSED LANDSCAPE ARCHITECT
JAMES L. TAYLOR No. 2916
Signature
10/31/20
Renewal Date
Date
STATE OF CALIFORNIA

Pacific Sound Investors
Residential Care Facility
Solana Beach, California

Scale:	1"=20'
Date:	08/31/2015
Drawn By:	AC/EE
Revisions:	
	10/17/2016
	03/31/2017
	03/19/2019

Landscape Concept Plan

Job # 1054.08.5

L-1

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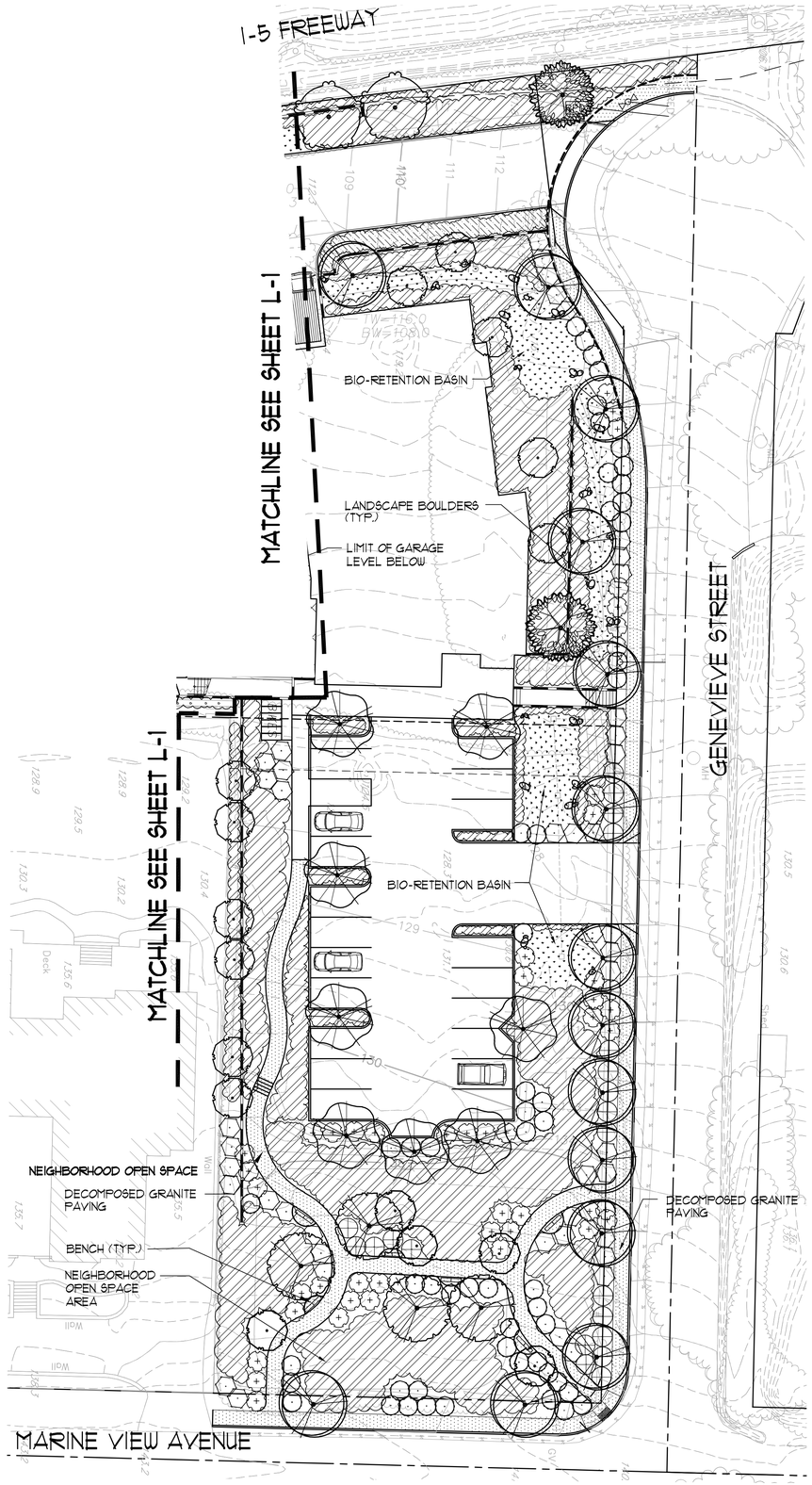
Pacific Sound Investors, Residential Care Facility 1054.08.5



GENERAL NOTES:
THIS CONCEPTUAL LANDSCAPE PLAN DIAGRAMMATICALLY SHOWS PLACEMENT OF PROPOSED PROJECT LANDSCAPING. FINAL LANDSCAPE PLANS SHALL ACCURATELY IDENTIFY AND SHOW PLACEMENT OF TREES, SHRUBS AND GROUND COVERS.
THE LANDSCAPE ARCHITECT IS AWARE OF THE CITY OF SOLANA BEACH POLICY WHICH PROHIBITS TREES AND STRUCTURES IN UTILITY EASEMENTS AND HAS CONCEPTUALLY DESIGNED THE PROJECT LANDSCAPE AND RESPECTIVE HARDSCAPE IN ACCORDANCE WITH THIS REQUIREMENT. ALL PERTINANT UTILITY EASEMENTS ARE DELINEATED ON THE PRELIMINARY CIVIL ENGINEERING SITE PLAN INFORMATION. THE FINAL LANDSCAPE PLAN SHALL SHOW ALL EASEMENTS THAT MAY AFFECT FINAL PLACEMENT OF PROJECT TREES AND SHRUBS, BASED ON THE EASEMENT AND UTILITY INFORMATION RECEIVED FROM THE PROJECT ENGINEER.
ALL REQUIRED LANDSCAPE AREAS SHALL BE MAINTAINED BY THE OWNER, UNLESS NOTED OTHERWISE. LANDSCAPE AREAS SHALL BE MAINTAINED PER THE CITY OF SOLANA BEACH REQUIREMENTS.

IRRIGATION NOTES: AN AUTOMATIC IRRIGATION SHALL BE INSTALLED AS REQUIRED TO PROVIDE COVERAGE FOR PLANTING AREAS SHOWN ON THE PLAN. LOW PRECIPITATION EQUIPMENT SHALL PROVIDE SUFFICIENT WATER FOR PLANT GROWTH WITH A MINIMUM WATER LOSS DUE TO WATER RUN-OFF. IRRIGATION SYSTEMS SHALL USE HIGH QUALITY, AUTOMATIC CONTROL VALVES, TIMERS AND OTHER NECESSARY EQUIPMENT FOR PROPER COVERAGE. ALL COMPONENTS SHALL BE OF NON-CORROSIVE MATERIAL AND ANY DRIP SYSTEMS SHALL BE ADEQUATELY FILTERED AND REGULATED PER THE MANUFACTURER GUIDELINES. CLASS 315 PRESSURE OR SCHEDULE 40 MAINLINE SHALL BE BURIED TO A MINIMUM DEPTH OF 18". PVC LATERAL LINES SHALL BE BURIED 12" MINIMUM BELOW FINISH GRADE. ALL MAINLINE SHALL BE INSTALLED PER MANUFACTURER GUIDELINES, SPECIFICATIONS, AND ADHERE TO CODES AND GUIDELINES. ALL LANDSCAPE AND IRRIGATION IMPROVEMENTS SHALL BE INSTALLED PER THE PROVISIONS OF CITY OF SOLANA BEACH LANDSCAPE DESIGN GUIDELINES AND SHALL BE CONSISTENT WITH CURRENT STORMWATER BMP'S.

PLANTING NOTES:
THE SELECTION OF PLANT MATERIAL IS BASED ON CULTURAL, AESTHETIC, ENVIRONMENTAL SENSITIVITY AND MAINTENANCE CONSIDERATIONS. ALL PLANTING AREAS SHALL BE PREPARED WITH APPROPRIATE SOIL AMENDMENTS, FERTILIZERS, AND SUPPLEMENTS BASED UPON THE AGRICULTURAL SOILS ANALYSIS REPORT FROM SOIL SAMPLE TAKEN FROM THE SITE. GROUND COVERS OR BARK MULCH SHALL FILL IN BETWEEN THE SHRUBS TO PROTECT THE SOIL FROM EXCESSIVE SOLAR EXPOSURE, EVAPOTRANSPIRATION AND SURFACE WATER RUNOFF. ALL PLANTING AREAS SHALL BE MULCHED TO A DEPTH OF 3" TO HELP CONSERVE WATER, LOWER THE SOIL TEMPERATURE AND REDUCE WEED GROWTH. SHRUBS SHALL BE ALLOWED TO GROW INTO THEIR NATURAL FORMS WITHOUT SHEARING UNLESS TOPIARY FORMS ARE A DESIGN ELEMENT OR REQUESTED BY OWNER. ALL LANDSCAPE IMPROVEMENTS SHALL CONFORM TO THE CURRENT CITY OF SOLANA BEACH GUIDELINES.

INSTALL REINFORCED STRAW MATTING ON ALL SLOPE AREAS (GRADES OF 2:1 OR GREATER) THAT ARE GRADED OR DISTURBED AS PART OF THIS PROJECT TO PROVIDE EFFECTIVE EROSION CONTROL.

PER MARISSA POTTER AT THE SANTA FE WATER DISTRICT, APRIL 20, 2016, RECYCLED WATER IS NOT CURRENTLY AVAILABLE AT THIS SITE, AND NOT PLANNED FOR IN THE SFWD CIP

SOUND BARRIER WALL NOTES:
SOUND BARRIER WALL SHALL COMPLY WITH THE CITY OF SOLANA BEACH'S NOISE STANDARDS AND THE NOISE ASSESSMENT PREPARED BY LDN CONSULTING, INC. DATED JULY 29, 2017. TOP OF THE SOUND BARRIER WALL MUST BE 12 FEET ABOVE FINISHED GRADE OF THE MEMORY GARDEN AND SHALL BE PLACED ALONG WESTERN AND SOUTHERN BOUNDARIES. THE BARRIER MUST BE CONSTRUCTED OF EITHER A NON-GAPPING MATERIAL CONSISTING OF MASONRY, 1/2 INCH THICK GLASS, EARTHEN BERM OR ANY COMBINATION OF THESE MATERIALS. SPECIFIC PLACEMENT AND MATERIAL SELECTION SHALL BE VERIFIED FOR COMPLIANCE WITH THESE CRITERIA PRIOR TO APPROVAL OF LANDSCAPE CONSTRUCTION PLANS.

0 20' 40' 60'

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CARLSBAD, CA 92008
(760) 692-1924
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LICENSED LANDSCAPE ARCHITECT
JAMES L. TAYLOR No. 2981
Signature
10/31/20
Renewal Date
Date
STATE OF CALIFORNIA

Pacific Sound Investors Residential Care Facility
Solana Beach, California

Scale:	1"=20'
Date:	08/31/2015
Drawn By:	AC/EE
Revisions:	
	10/17/2016
	03/31/2017
	03/19/2019

Landscape Concept Plan

Job # 1054.08.5

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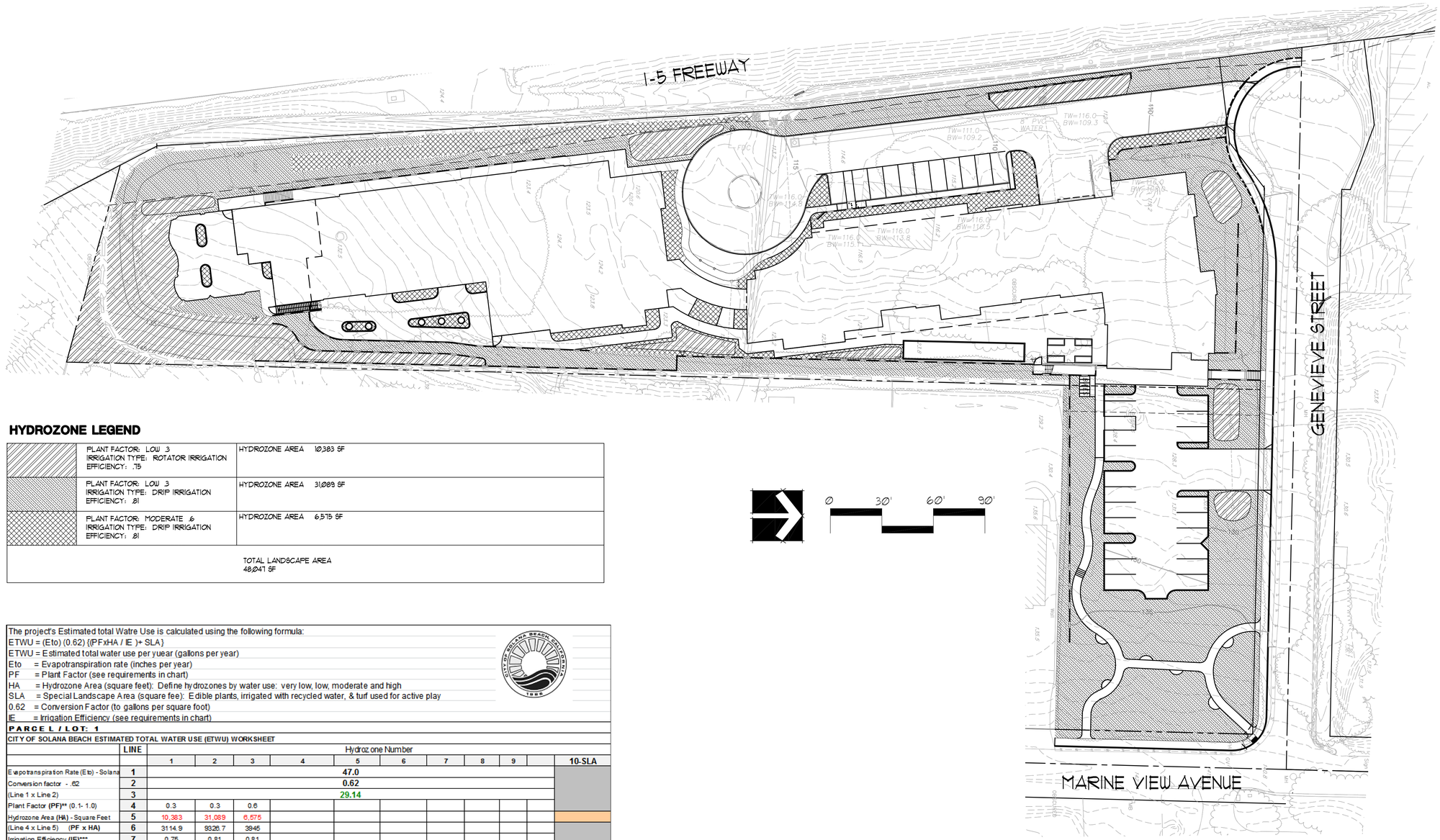
Pacific Sound Investors, Residential Care Facility 1054.08.5



HYDROZONE LEGEND

	PLANT FACTOR: LOW .3 IRRIGATION TYPE: ROTATOR IRRIGATION EFFICIENCY: .75	HYDROZONE AREA 10,383 SF
	PLANT FACTOR: LOW .3 IRRIGATION TYPE: DRIP IRRIGATION EFFICIENCY: .81	HYDROZONE AREA 31,089 SF
	PLANT FACTOR: MODERATE .6 IRRIGATION TYPE: DRIP IRRIGATION EFFICIENCY: .81	HYDROZONE AREA 6,575 SF
TOTAL LANDSCAPE AREA 48,047 SF		

The project's Estimated total Watre Use is calculated using the following formula:
ETWU = (Eto) (0.62) {(PFxHA / IE)+ SLA}
ETWU = Estimated total water use per yuear (gallons per year)
Eto = Evapotranspiration rate (inches per year)
PF = Plant Factor (see requirements in chart)
HA = Hydrozone Area (square feet): Define hydrozones by water use: very low, low, moderate and high
SLA = Special Landscape Area (square fee): Edible plants, irrigated with recycled water, & turf used for active play
0.62 = Conversion Factor (to gallons per square foot)
IE = Irrigation Efficiency (see requirements in chart)

PARCEL / LOT: 1

CITY OF SOLANA BEACH ESTIMATED TOTAL WATER USE (ETWU) WORKSHEET

	LINE	Hydrozone Number 1	2	3	4	5	6	7	8	9		10-SLA
Evapotranspiration Rate (Eto) - Solana	1	47.0										
Conversion factor - .62	2	0.62										
(Line 1 x Line 2)	3	29.14										
Plant Factor (PF)** (0.1- 1.0)	4	0.3	0.3	0.6								
Hydrozone Area (HA) - Square Feet	5	10,383	31,089	6,575								
(Line 4 x Line 5) (PF x HA)	6	3114.9	9326.7	3945								
Irrigation Efficiency (IE)***	7	0.75	0.81	0.81								
(Line 6 / Line 7) (PF X HA) / IE	8	4153.20	11514.44	4870.37								
Total Line 8 + (SLA) LINE 5	9	20,538.01	+	0.00	=	20,538.01						
(Line 3 x Line 9) Estimated Total Water Use- ETWU (gallons per year) Total shall not exceed MAWA below	10	598,477.75										

*Eto = Evapotranspiration rate = 41(West if I-5) / 47 (East of I-5)	** PF - Plant Factor (Water Use) - from WUCOLS	***IE - Irrigation Efficiency	A different IE maybe used if supported by documentation subjected to approval by the CityPlanner
	Select based on type of plants in hydrozone:	Spray= .55	
Average calculated from values in State Model Water Efficiency Landscape Ordinance Appendix A	0.1 = VLW - Very Low Water Use Plants	Rotators = .75	
	0.3 = LW - Low Water Use Plants	Rotor = .70	
	0.6 = MW - Moderate Water Use Plants	Bubbler = .75	
	1.0 = HW - High Water Use Plants	Drip & Micro-spray= .81	ETAF= Evapotranspiration adjustment factor (use .55 for residential, .45 non-residential)

MAXIMUM APPLIED WATER USE (MAWA) calculation

Total Landscape Area

29.14 [(ETAF x L.A.) + (1 - ETAF x Total SLA)]

29.140 [0.55 48,047.00) + [(1-.55) x 0.00)] = **MAWA 770,049.27**

ETWU = LANDSCAPE AREA (LA) EST. WATER USE = (Eto)(.62) (PFXHA / IE + SLA] = LINE 3 X LINE 9 = **ETWU GAL/YR**

[47.0 x 0.62] = 31.682 X (20,538.01) = 650,685.39

WATER CONSERVATION NOTES:

THE LANDSCAPE DESIGN AND IRRIGATION PLANS SHALL CONFORM TO THE SOLANA BEACH MUNICIPAL CODE 17.56 WATER EFFICIENT LANDSCAPE REGULATIONS AND CITY OF SOLANA BEACH LANDSCAPE MANUAL, DEVELOPMENT STANDARDS AND DESIGN GUIDELINES (ORD. 467, 2015, ORD. 430, 2011.)

THE LANDSCAPE DOCUMENTATION PACKAGE, IRRIGATION AND PLANTING PLANS SHALL BE IN CONFORMANCE TO THE CODE STANDARDS.

A MAWA AND THE ETWU FOR THE PLANS SHALL INCLUDE CALCULATIONS ON THE CITY FORM AND THE ETWU SHALL NOT EXCEED THE MAWA.

CONCEPTUAL ESTIMATED TOTAL WATER USE CALCULATION SUMMARY FROM TABLES AND WORKSHEET IS 650,685.39 GAL/YR

MAXIMUM APPLIED WATER ALLOWANCE CALCULATION SUMMARY FROM TABLES AND WORKSHEET IS 770,049.27 GAL/YR

ETWU SHALL NOT EXCEED THE MAWA AS ESTABLISHED BY CONSTRUCTION DRAWINGS.

THE LIGHTFOOT PLANNING GROUP

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LANDSCAPE ARCHITECTURE

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LICENSED LANDSCAPE ARCHITECT
JAMES L. TAYLOR No. 2561
Signature
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Renewal Date
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STATE OF CALIFORNIA

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Water Conservation Plan

Job # 1054.08.5

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Pacific Sound Investors, Residential Care Facility 1054.08.5