

## Landesign Group

LANDSCAPE ARCHITECTURE  
MASTER PLANNING

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(707) 829 - 2580

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CA # 2166

12/18/2017

### **Emerald Isle Assisted Care Facility**

Gullane Drive, Santa Rosa, CA  
APN 173-67-016

#### REVISED TREE REMOVAL MITIGATION REPORT (DUE TO FIRE)

#### **Total Replacement Trees Required for Entire Proposed Development:**

**742 - 15 gal. Size or Equivalent mitigation in larger sizes**

<b>Total Trees, Overall Site (Before Fire):</b>	<b>917</b>
<b>Trees Killed by Fire:</b>	<b><u>135</u></b>
<b>Total Trees, Overall Site (After Fire):</b>	<b>782</b>

<b>Total Trees to Remain:</b>	<b>597</b>
<b>Total Trees to be Removed:</b>	<b><u>185</u></b>
<b>Total Trees, Overall Site (After Fire):</b>	<b>782</b>

<b>Percentage of Trees to Remain:</b>	<b>69%</b>
<b>Percentage of Trees to be Removed:</b>	<b>31%</b>

#### **Total Replacement Trees Required: 742 – 15 gal. Size or Equivalent Planning Director Approved Mitigation Factor**

Equivalent mitigation for tree planting in larger sizes to be:

(3) 15 gal. trees = (1) 24" box size tree

(7) 15 gal. trees = (1) 36" box size tree

#### **Proposed Replacement Trees on Site: 742 – 15 gal. Size or Equivalent (77) 36" box, (68) 24" box. (145 Total Trees equivalent to 743, 15 gal.)**

The above accounts for 100% of work required for Project Completion.  
See attached Tree Replacement Mitigation calculations.

#### **Replacement Tree Planting Schedule: 917-138**

All Mitigation trees to be planted at time of overall project construction.

## OSL COMMUNITIES, LLC

City of Santa Rosa, CA

Emerald Isle

## TREE REPLACEMENT MITIGATION CALCULATION

APN 173-670-016

Per Chapter 17-24 existing trees over 4" in girth to be removed shall be replaced by (2) 15 gal. min. size trees for each 6 inches, or fraction thereof, of the diameter of the tree to be removed. Per 17-24-0.050(c) the same genus and species as the removed tree (or another species, if approved by the Director) shall be used.

For all of the multi trunk trees, total diameter is calculated by adding the multiple trunk areas together.  
(Per the Council of Tree & Landscape Appraisers Guide)

## EXISTING TREES TO BE REMOVED ARE AS FOLLOWS:

TREE	SPECIES	TRUNK DIAMETER (In.)
38	Valley Oak/ <i>Quercus lobata</i>	23"
238	Coast Live Oak/ <i>Quercus agrifolia</i>	25"
241	Coast Live Oak/ <i>Quercus agrifolia</i>	9"
243	Coast Live Oak/ <i>Quercus agrifolia</i>	8"
244	Coast Live Oak/ <i>Quercus agrifolia</i>	16/13"
247	Coast Live Oak/ <i>Quercus agrifolia</i>	26" @ 2'
249	Coast Live Oak/ <i>Quercus agrifolia</i>	17"
250	Coast Live Oak/ <i>Quercus agrifolia</i>	9"
251	Coast Live Oak/ <i>Quercus agrifolia</i>	14" @ 3'
256	Coast Live Oak/ <i>Quercus agrifolia</i>	10"
257A	Black Oak/ <i>Quercus kelloggi</i>	8"
263	California Bay/ <i>Umbellularia californica</i>	12" @ 3'
264	Black Oak/ <i>Quercus kelloggi</i>	14"
265	Coast Live Oak/ <i>Quercus agrifolia</i>	19"
289	California Bay/ <i>Umbellularia californica</i>	9" @ 2.5'
331	Coast Live Oak/ <i>Quercus agrifolia</i>	9"
332	Coast Live Oak/ <i>Quercus agrifolia</i>	13"
333	Coast Live Oak/ <i>Quercus agrifolia</i>	9"
335	Coast Live Oak/ <i>Quercus agrifolia</i>	19"
340	Coast Live Oak/ <i>Quercus agrifolia</i>	21"
341	California Bay/ <i>Umbellularia californica</i>	7/5/5"
342	Coast Live Oak/ <i>Quercus agrifolia</i>	7"
343	Coast Live Oak/ <i>Quercus agrifolia</i>	17"
346	California Bay/ <i>Umbellularia californica</i>	4/4/5/5/8"
347	California Bay/ <i>Umbellularia californica</i>	4/5/5/6/6"
348	California Bay/ <i>Umbellularia californica</i>	4/5/6"
349	Coast Live Oak/ <i>Quercus agrifolia</i>	17"
350	Coast Live Oak/ <i>Quercus agrifolia</i>	11"
351	Coast Live Oak/ <i>Quercus agrifolia</i>	10"
352	Coast Live Oak/ <i>Quercus agrifolia</i>	16"
353	Coast Live Oak/ <i>Quercus agrifolia</i>	15"
355	California Bay/ <i>Umbellularia californica</i>	5/19"
356	California Bay/ <i>Umbellularia californica</i>	15"
357	Coast Live Oak/ <i>Quercus agrifolia</i>	8"
358	Coast Live Oak/ <i>Quercus agrifolia</i>	11"
359	Coast Live Oak/ <i>Quercus agrifolia</i>	12"

\*\* Indicates a Dying Tree, Per the Project Arborist, Not Needing Mitigation

H Designates a Heritage Tree as defined in Chapter 17-24

TREE	SPECIES	TRUNK DIAMETER (In.)
360	Coast Live Oak/ <i>Quercus agrifolia</i>	19"
361	Coast Live Oak/ <i>Quercus agrifolia</i>	15"
362	Coast Live Oak/ <i>Quercus agrifolia</i>	17"
363	Coast Live Oak/ <i>Quercus agrifolia</i>	9"
364	California Bay/ <i>Umbellularia californica</i>	15"/10"/7"
365	Coast Live Oak/ <i>Quercus agrifolia</i>	23"
366	Valley Oak/ <i>Quercus lobata</i>	19"
368	Coast Live Oak/ <i>Quercus agrifolia</i>	17"
369	Coast Live Oak/ <i>Quercus agrifolia</i>	12"
370	Coast Live Oak/ <i>Quercus agrifolia</i>	17"
372	California Bay/ <i>Umbellularia californica</i>	6"
373	California Bay/ <i>Umbellularia californica</i>	7"
374	California Bay/ <i>Umbellularia californica</i>	5"/4"
375	Coast Live Oak/ <i>Quercus agrifolia</i>	17"
376	California Bay/ <i>Umbellularia californica</i>	6/6/7"
377	California Bay/ <i>Umbellularia californica</i>	5/6"
379	Coast Live Oak/ <i>Quercus agrifolia</i>	15"
380	Coast Live Oak/ <i>Quercus agrifolia</i>	4/5/11"
381	California Bay/ <i>Umbellularia californica</i>	6/7"
383	Coast Live Oak/ <i>Quercus agrifolia</i>	14"
384	Coast Live Oak/ <i>Quercus agrifolia</i>	14/16"
385	Coast Live Oak/ <i>Quercus agrifolia</i>	14"
389	Black Oak/ <i>Quercus kelloggii</i>	13" @ 3'
392	Black Oak/ <i>Quercus kelloggii</i>	15"
393	Coast Live Oak/ <i>Quercus agrifolia</i>	9"
394	California Bay/ <i>Umbellularia californica</i>	4/7/16"
395	Coast Live Oak/ <i>Quercus agrifolia</i>	8/19"
396	Coast Live Oak/ <i>Quercus agrifolia</i>	19" @ 3'
397	Coast Live Oak/ <i>Quercus agrifolia</i>	12"
398	California Bay/ <i>Umbellularia californica</i>	12"
400	Coast Live Oak/ <i>Quercus agrifolia</i>	11" @ 4'
401	Coast Live Oak/ <i>Quercus agrifolia</i>	20"
408	Coast Live Oak/ <i>Quercus agrifolia</i>	11" @ 4'
409	Coast Live Oak/ <i>Quercus agrifolia</i>	16"
410	Coast Live Oak/ <i>Quercus agrifolia</i>	13"
411	Coast Live Oak/ <i>Quercus agrifolia</i>	15"
419	Coast Live Oak/ <i>Quercus agrifolia</i>	9"
420	Coast Live Oak/ <i>Quercus agrifolia</i>	13"/22"
425	Coast Live Oak/ <i>Quercus agrifolia</i>	7"
426	Black Oak/ <i>Quercus kelloggii</i>	14"
428	Coast Live Oak/ <i>Quercus agrifolia</i>	18"
429	Coast Live Oak/ <i>Quercus agrifolia</i>	12"
430	Coast Live Oak/ <i>Quercus agrifolia</i>	19"
465	Valley Oak/ <i>Quercus lobata</i>	19"
466	Black Oak/ <i>Quercus kelloggii</i>	11"
468	Coast Live Oak/ <i>Quercus agrifolia</i>	8/11"
471	Valley Oak/ <i>Quercus lobata</i>	9"
482	Valley Oak/ <i>Quercus lobata</i>	12"
487	Valley Oak/ <i>Quercus lobata</i>	14"
488	Coast Live Oak/ <i>Quercus agrifolia</i>	9"
610	Coast Live Oak/ <i>Quercus agrifolia</i>	7"
613	Coast Live Oak/ <i>Quercus agrifolia</i>	13"
614	Coast Live Oak/ <i>Quercus agrifolia</i>	11"
615	Coast Live Oak/ <i>Quercus agrifolia</i>	14"

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TREE	SPECIES	TRUNK DIAMETER (In.)
616	Coast Live Oak/ <i>Quercus agrifolia</i>	5"
624	Coast Live Oak/ <i>Quercus agrifolia</i>	6"
625	Coast Live Oak/ <i>Quercus agrifolia</i>	12"
626	Coast Live Oak/ <i>Quercus agrifolia</i>	8"
627	Coast Live Oak/ <i>Quercus agrifolia</i>	6"
628	Coast Live Oak/ <i>Quercus agrifolia</i>	7"
629	Valley Oak/ <i>Quercus lobata</i>	22"
631	Coast Live Oak/ <i>Quercus agrifolia</i>	12"
632	Coast Live Oak/ <i>Quercus agrifolia</i>	20"
633	Coast Live Oak/ <i>Quercus agrifolia</i>	14"
634	Coast Live Oak/ <i>Quercus agrifolia</i>	9"
635	Coast Live Oak/ <i>Quercus agrifolia</i>	15"
636	Coast Live Oak/ <i>Quercus agrifolia</i>	16"
637	Coast Live Oak/ <i>Quercus agrifolia</i>	18"
638	Coast Live Oak/ <i>Quercus agrifolia</i>	13"
639	Black Oak/ <i>Quercus kelloggii</i>	16"
640	California Bay/ <i>Umbellularia californica</i>	15"
642	Coast Live Oak/ <i>Quercus agrifolia</i>	13"
643	California Bay/ <i>Umbellularia californica</i>	17"
644	Coast Live Oak/ <i>Quercus agrifolia</i>	21"
645	Coast Live Oak/ <i>Quercus agrifolia</i>	11"
646	Coast Live Oak/ <i>Quercus agrifolia</i>	13"
647	Black Oak/ <i>Quercus kelloggii</i>	16"
648	California Bay/ <i>Umbellularia californica</i>	11"
649	Coast Live Oak/ <i>Quercus agrifolia</i>	12"
650	Coast Live Oak/ <i>Quercus agrifolia</i>	13"
651	Coast Live Oak/ <i>Quercus agrifolia</i>	14"
652	Coast Live Oak/ <i>Quercus agrifolia</i>	14"
661	California Bay/ <i>Umbellularia californica</i>	4/5/5/5/6"
662	Coast Live Oak/ <i>Quercus agrifolia</i>	18"
663	Coast Live Oak/ <i>Quercus agrifolia</i>	16"
664	Coast Live Oak/ <i>Quercus agrifolia</i>	6"
665	Coast Live Oak/ <i>Quercus agrifolia</i>	16"
668	California Bay/ <i>Umbellularia californica</i>	5"
672	California Bay/ <i>Umbellularia californica</i>	5/6"
674	California Bay/ <i>Umbellularia californica</i>	5"/5"
678	Coast Live Oak/ <i>Quercus agrifolia</i>	10"
679	Coast Live Oak/ <i>Quercus agrifolia</i>	16"
681	Buckeye/ <i>Aesculus californica</i>	5"
682	Coast Live Oak/ <i>Quercus agrifolia</i>	11"
683	Black Oak/ <i>Quercus kelloggii</i>	11"
684	Coast Live Oak/ <i>Quercus agrifolia</i>	12"
686	Coast Live Oak/ <i>Quercus agrifolia</i>	7"
689A	Buckeye/ <i>Aesculus californica</i>	5"
741	Coast Live Oak/ <i>Quercus agrifolia</i>	12/13/15/16"
750	Coast Live Oak/ <i>Quercus agrifolia</i>	15"
751	Coast Live Oak/ <i>Quercus agrifolia</i>	17"
752	Coast Live Oak/ <i>Quercus agrifolia</i>	17"
797	Coast Live Oak/ <i>Quercus agrifolia</i>	12"
798	Black Oak/ <i>Quercus kelloggii</i>	16"
799	Coast Live Oak/ <i>Quercus agrifolia</i>	13"/13"
800	Coast Live Oak/ <i>Quercus agrifolia</i>	5/10/14/17"
801	Coast Live Oak/ <i>Quercus agrifolia</i>	17"
901	California Bay/ <i>Umbellularia californica</i>	5/9" @ 2'

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TREE	SPECIES	TRUNK DIAMETER (In.)
903	Coast Live Oak/ <i>Quercus agrifolia</i>	10"
904	Coast Live Oak/ <i>Quercus agrifolia</i>	6"
906	California Bay/ <i>Umbellularia californica</i>	6" (+ small stems)
910	California Bay/ <i>Umbellularia californica</i>	4"
912	California Bay/ <i>Umbellularia californica</i>	4/5/5"
914	California Bay/ <i>Umbellularia californica</i>	4/4"
919	California Bay/ <i>Umbellularia californica</i>	5"
921	California Bay/ <i>Umbellularia californica</i>	4/5/5"
928	California Bay/ <i>Umbellularia californica</i>	6"
931	California Bay/ <i>Umbellularia californica</i>	4/6/6"
932	California Bay/ <i>Umbellularia californica</i>	4" (+ small stems)
940	California Bay/ <i>Umbellularia californica</i>	5"
941	Buckeye/ <i>Aesculus californica</i>	4/5"
946	Buckeye/ <i>Aesculus californica</i>	5" @ 3'
949	Buckeye/ <i>Aesculus californica</i>	7"
951	Coast Live Oak/ <i>Quercus agrifolia</i>	8"
952	Coast Live Oak/ <i>Quercus agrifolia</i>	5"
956	California Bay/ <i>Umbellularia californica</i>	5"
957	California Bay/ <i>Umbellularia californica</i>	4" (+ small stems)
958	California Bay/ <i>Umbellularia californica</i>	5"
959	California Bay/ <i>Umbellularia californica</i>	5" (+ small stems)
960	California Bay/ <i>Umbellularia californica</i>	5" (+ small stems)
962	Coast Live Oak/ <i>Quercus agrifolia</i>	8"
963	California Bay/ <i>Umbellularia californica</i>	5/6"
967	Coast Live Oak/ <i>Quercus agrifolia</i>	4/4/7/9/10"
968	California Bay/ <i>Umbellularia californica</i>	4"
969	California Bay/ <i>Umbellularia californica</i>	6"
970	California Bay/ <i>Umbellularia californica</i>	5"
971	California Bay/ <i>Umbellularia californica</i>	4/4" (+ small stems)
972	California Bay/ <i>Umbellularia californica</i>	4/5" (+ small stems)
973	California Bay/ <i>Umbellularia californica</i>	5/5/6"
974	Coast Live Oak/ <i>Quercus agrifolia</i>	5"
975	Coast Live Oak/ <i>Quercus agrifolia</i>	6/9"
976	California Bay/ <i>Umbellularia californica</i>	5"
977	California Bay/ <i>Umbellularia californica</i>	4"
978	California Bay/ <i>Umbellularia californica</i>	6"
979	California Bay/ <i>Umbellularia californica</i>	4"
980	California Bay/ <i>Umbellularia californica</i>	4/4" (+ small stems)
981	California Bay/ <i>Umbellularia californica</i>	4" (+ small stems)
982	Coast Live Oak/ <i>Quercus agrifolia</i>	6"
984	Buckeye/ <i>Aesculus californica</i>	4

**Total Replacement Trees Required: (total trunk dia.)2225 / 6 = 371 x 2 = 742**

**Heritage Trees are defined per Chapter 17-24 as follows:**

<u>Species of Tree</u>	<u>Diameter</u>	<u>Circumference</u>
Valley Oak/ <i>Quercus lobata</i>	6"	19"
Coast Live Oak/ <i>Quercus agrifolia</i>	18"	57"
Black Oak/ <i>Quercus kelloggii</i>	18"	57"
California Bay/ <i>Umbellularia californica</i>	24"	75"

\*\* Indicates a Dying Tree, Per the Project Arborist, Not Needing Mitigation

H Designates a Heritage Tree as defined in Chapter 17-24



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BOUNDARY. . . . . \_\_\_\_\_

PARCEL. . . . . \_\_\_\_\_

CENTER. . . . . \_\_\_\_\_

EASEMENT. . . . . \_\_\_\_\_

STORM DRAIN . . . . .	24" SD	24" SD
WATER . . . . .	8" W	8" W
SEWER . . . . .	12" SS	12" SS
GAS . . . . .	3" G	
ELECTRICAL . . . . .	E	12KV E
TELEPHONE . . . . .	T	
TELEVISION . . . . .	TV	
JOINT TRENCH . . . . .	JT	

DROP INLET		
DROP INLET WITH SIDE OPENINGS		
WATER METER		
WATER VALVE		
BLOWOFF		
FIRE HYDRANT		
THRUST BLOCK		
GAS METER		
STORM DRAIN MANHOLE		
STORM DRAIN CATCH BASIN		
SEWER MANHOLE		
SEWER CLEANOUT		
JOINT POLE		
LIGHT STANDARD		
GUT/ANCHOR		
CURB & GUTTER		
AC DIKE		
FENCE		
CHAIN LINK FENCE		
DITCH/SWALE		
MONUMENT		
TREE PROTECTION		
TREE TO BE SAVED		
TREE TO BE REMOVED		
TREE TO BE REMOVED - KILLED BY FIRE		

1. PRIOR TO START OF CONSTRUCTION, PROJECT ARBORIST SHALL MEET WITH GENERAL CONTRACTOR AND PROJECT MANAGER TO DISCUSS TREE PROTECTION DURING CONSTRUCTION.
2. IF QUESTIONS ARISE DURING CONSTRUCTION RELATING TO PROTECTED TREES, THE PROJECT ARBORIST SHALL BE CONSULTED TO RECOMMEND APPROPRIATE PROCEDURES, OR ASKED TO MONITOR CONSTRUCTION ACTIVITIES EXPECTED TO IMPACT TREES. GENERALLY THE PROJECT OR MONITORING ARBORIST SHALL BE NOTIFIED TO BE PRESENT OR TO ADVISE DIRECTION WHEN CONSTRUCTION ACTIVITIES WILL BE OCCURRING WITHIN TREE PROTECTION ZONES (TPZ). THE TPZ IS DEFINED AS THE AREA WITHIN THE DRILPLENS OF TREES TO REMAIN.
3. MINIMUM 24 HOURS ADVANCE NOTICE SHALL BE GIVEN WHEN SCHEDULING SITE VISITS BY PROJECT ARBORIST.

TEMPORARY PROTECTIVE FENCING SHALL BE INSTALLED TO RESTRICT CONSTRUCTION ACTIVITY WITHIN THE DRIPLINES OF PROTECTED TREES. IT SHALL BE PLACED AT THE OUTER EDGE OF THE DRIPLINES OF TREES OR GROUPS OF TREES AND AS SHOWN AND DETAILED ON THE TREE PROTECTION PLAN. WHERE GRADING OR OTHER OPERATIONS MUST OCCUR WITHIN THE DRIPLINES, THE FENCING IS PLACED AS FAR AS POSSIBLE FROM THE TRUNKS, AT THE LIMIT OF REQUIRED ACCESS. FENCING LOCATIONS TO BE APPROVED ON SITE BY THE ARBORIST. PLACEMENT OF POSTS SHALL AVOID ROOTS IF ENCOUNTERED DURING INSTALLATION.

1. ANY PRUNING SHALL BE THE MINIMUM NECESSARY TO ACHIEVE HAZARD REDUCTION AND PUBLIC SAFETY, CONSTRUCTION CLEARANCE, AND TO IMPROVE TREE HEALTH.
2. ALL PRUNING SHALL BE DONE ACCORDING TO ISA OR ANSI-300 STANDARDS, BY QUALIFIED PERSONNEL.

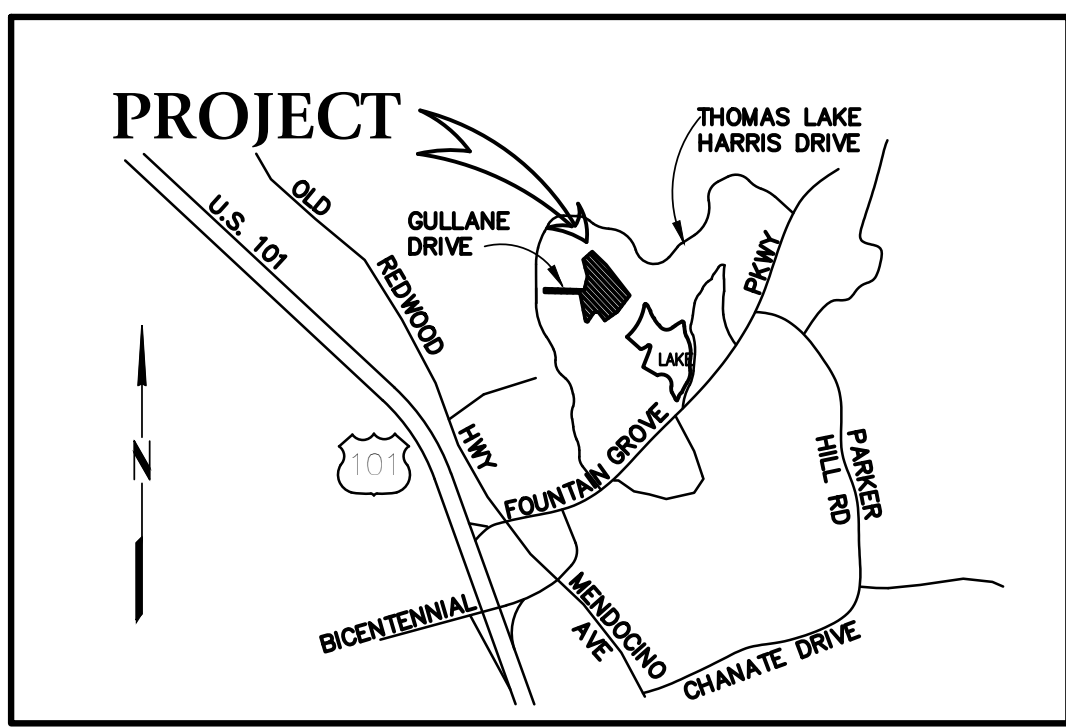
4. PRUNING FOR HAZARD REDUCTION SHALL INCLUDE THE REMOVAL OF DEAD BRANCHES, BRANCHES OF 2 INCHES OR MORE IN DIAMETER AND LARGE, BROKEN, WEAKLY-ATTACHED OR CROSSING BRANCHES.
5. PRUNING FOR CONSTRUCTION CLEARANCE SHALL BE THE MINIMUM NECESSARY FOR THE SAFE OPERATION OF EQUIPMENT AND CONSTRUCTION ACTIVITIES. BRANCHES SHALL BE CUT AT AN APPROPRIATE SIZED LATERAL OR THE PARENT STEM IF THE BRANCH IS DEAD, FLUSH CUTS, OR WOUNDS ON TRUNKS OR BRANCHES ARE ACCEPTABLE.
6. PRUNING SHALL OCCUR PRIOR TO START OF CONSTRUCTION ACTIVITIES NEAR TREES TO BE PRESERVED.
7. PROJECT ARBORIST SHALL MEET WITH TREE SERVICE CONTRACTOR PRIOR TO TREE REMOVAL AND PRUNING TO DETERMINE LIMITS AND GOALS OF CLEARANCE AND HAZARD REDUCTION PRUNING.

1. PROJECT ARBORIST (OR DESIGNATE) SHALL BE NOTIFIED IN ADVANCE TO BE PRESENT FOR GRADING OR TRENCHING. GRADING OR TRENCHING SHALL BE COMPLETED PRIOR TO ANY YIELDING. YIELDING TRENCING MUST OCCUR WITHIN ROOTZONES OF TREES TO BE PRESERVED. ENCOUNTERED ARBORIST SHALL BE PRESENT TO OBSERVE WORK. ROOTS 2" > SHALL BE PRESERVED. GRADING OR TRENCHING SHALL BE COMPLETED PRIOR TO ANY YIELDING. MONITORING DURING GRADING OR TRENCHING WHICH CANNOT BE PRESERVED, THEY SHALL BE CUT CLEANLY ACROSS THE FACE OF THE ROOT WITH A SHARP SAW, PAST ANY DAMAGED PORTION.
2. IN AREAS WHERE ROOTS ARE ENCOUNTERED AND BACKFILL WILL BE PLACED, ROOTS SHOULD BE LEFT EXPOSED AS SHORT A TIME AS POSSIBLE TO AVOID DRIVING OUT.
3. WHEREVER POSTS, PIERS OR POLES WILL BE INSTALLED WITHIN DRIPLINES OF PROTECTED TREES, THERE SHOULD BE ATTEMPT TO AVOID DAMAGING ROOTS. POST LOCATIONS SHALL BE SHIFTED TO AVOID ROOTS.

1. AT THE COMPLETION OF CONSTRUCTION ACTIVITIES THERE MAY BE AREAS AROUND PROTECTED TREES THAT REQUIRE TREATMENT TO INSURE FUTURE TREE HEALTH.
2. AREAS WITHIN TREE ROOTZONES WHERE SOIL HAS BECOME COMPACTED SHALL BE LOOSENED IF REQUIRED BY ARBORIST.
3. WHERE NEEDED, MULCH SHALL BE REAPPLIED AROUND TREES IN THE AREA OF RECENT CONSTRUCTION ACTIVITY.

1. TREE SURVEYS OF THIS SITE WERE CONDUCTED IN THE EARLY 1990'S IN CONJUNCTION WITH THE OAKS SUBDIVISION, AND WERE UPDATED IN THE EARLY 2000'S BY BRIELIE & ASSOCIATES, INC. (BRIELIE). THE LATEST SURVEY WAS CONDUCTED IN 2006. FOLLOWING THE OCTOBER 2017 TUBERS FIRE THE ARBOREST AGAIN SURVEYED THE AREA OF INTEREST. THIS SURVEY IDENTIFIED 100% OF THE TREES THAT WERE KILLED BY THE TUBERS FIRE. KILLED TREES HAVE BEEN IDENTIFIED ON THIS TREE PROTECTION PLAN WITH A UNIQUE SYMBOL.
2. TREES NEAR, AND OUTSIDE OF, THE LIMITS OF GRADING THAT ARE SHOWN TO BE PRESERVED HAVE BEEN CAREFULLY REVIEWED BY THE PROJECT ARBOREST AND CIVIL ENGINEER. CONSULTATIONS HAVE OCCURRED WITH THE PROJECT GEOTECHNICAL ENGINEER, AND THE PROJECT ARBOREST HAS DETERMINED THAT THE LIMITS OF GRADING ON THE PROPOSED SITE, KEYSWAY CAN BE MODIFIED IN DESIGN TO NOT PROJECT BEYOND THE EXISTING CLOSE PROXIMITY TO THE LIMITS OF GRADING CAN RELIABLY BE SHOWN TO BE PRESERVED.
3. THE PROJECT WILL BE DEVELOPED IN A SINGLE PHASE. IT IS PROPOSED THAT TREE REMOVALS WILL BE CONDUCTED IN A SINGLE PHASE. THEREFORE, THE LIMITS OF GRADING WHERE NESTING SURVEYS ARE REQUIRED, AS IDENTIFIED IN THE PROJECT INITIAL STUDY SURVEY, WILL BE CONSIDERED AS THE LIMITS OF GRADING FOR THE PROJECT. THERE ARE NO REMOVALS FOLLOWING REMOVAL OF THE DESIGNATED TREES, TREE PROTECTION FENCING WILL BE INSTALLED TO PROTECT THE REMAINING TREES. THEREFORE, THE LIMITS OF GRADING WILL BE MONITORED DURING ALL GRADING ACTIVITIES TO MONITOR FOR IMPACTS AND TO PRESCRIBE PROTECTIVE MEASURES AS NEEDED.
4. BECAUSE OF THE LARGE NUMBER OF TREES LOCATED OUTSIDE OF THE PROJECT IMPACT AREA, THE PROJECT ARBOREST HAS DETERMINED THAT TREES THAT ARE LOCATED WITHIN OR IMMEDIATELY ADJACENT TO THE LIMITS OF GRADING HAVE BEEN IDENTIFIED ON THE TREE PROTECTION PLAN. TREES LOCATED OUTSIDE OF THE LIMITS OF GRADING ON THE SITE THAT ARE NOT MARKED WITH A SYMBOL ARE INTENDED TO BE PRESERVED.
5. BECAUSE THE INITIAL SURVEYS OF THESE TREES OCCURRED A NUMBER OF YEARS AGO, THE PROJECT ARBOREST HAS DETERMINED THAT THE LIMITS OF GRADING FOR THE PROJECT PLAN, PLEASE REFER TO THE ARBOREST'S INVENTORY OF TREES FOR THE CURRENT SIZE AND SPECIES OF TREES. THE LIMITS OF GRADING ARE CONSISTENT BETWEEN THE TREE PROTECTION PLAN AND THE ARBOREST INVENTORY.

1. NO PARKING, STORAGE OF MATERIALS, DISPOSAL, OF ANY WASTE MATERIALS, OR UNNECESSARY OPERATION OF EQUIPMENT SHALL OCCUR WITHIN THE EPRIPINES OF TREES TO BE PRESERVED. PROJECT AREA SHALL BE KEPT CLEAR.
2. IF PRUNING FOR CLEARANCE IS REQUIRED ON ANY TREES TO REMAIN, IT SHOULD BE DONE BY TRAINED, QUALIFIED TREE WORKERS ACCORDING TO ISA AND ANSI PRUNING GUIDELINES. PRUNING SHALL BE DONE TO MAINTAIN CLEARANCE OF 10 FEET TO ALL ADJACENT TREES, REMOVAL OF DEADWOOD "2" AND LARGER, ETC., AND CLEARANCE. PROJECT ARBORIST SHALL MEET WITH TREE SERVICE CONTRACTOR PRIOR TO WORK TO DISCUSS LIMITS AND GOALS OF PROJECT.
3. CARE SHALL BE TAKEN TO AVOID DAMAGING TRUNKS OR BRANCHES OF PROTECTED TREES. WHERE NECESSARY, TRUNKS SHALL BE WRAPPED WITH THICK LAYERS OF BURLAP OR OTHER PROTECTIVE MATERIALS FOR PROTECTION.
4. PROJECT ARBORIST SHALL BE NOTIFIED A MINIMUM OF 24 HRS IN ADVANCE TO BE PRESENT ON SITE DURING ROUGH GRADING OR TRENCING WITHIN THE TREE PROTECTION ZONES (TPZ) OF TREES TO BE PRESERVED, AS DESIGNATED ON THE PLANS. TREE ARBORIST SHALL BE RESPONSIBLE FOR MARKING AND SETTING UP THE TREE PROTECTION AND MAINTAINED IN PLACE THROUGHOUT CONSTRUCTION.
5. IF ANY ROOTS LARGER THAN 1" ARE ENCOUNTERED WHICH CANNOT BE PRESERVED, THEY SHOULD BE CUT CLEANLY. THE FACE OF THE ROOT WITHIN 12" OF THE SAW, NO. 10, SHALL BE PROTECTED BY WRAPPING WITH BURLAP. THE EXPOSED CUT ROOTS SHALL BE DONE AS QUICKLY AS POSSIBLE TO PREVENT DESICCATION.
6. IN AREAS WHERE SOIL COMPACTION WITHIN ROOT ZONES OF PROTECTED TREES MAY OCCUR, THE CONTRACTOR SHALL BE RESPONSIBLE FOR MONITORING AND TO WALK THROUGH OF EACH AREA, CONSULT PROJECT MANAGER OR PROJECT ARBORIST FOR RECOMMENDATIONS OF TECHNIQUE.
7. ARBORMULCH, CHIPPED WOOD BARK AND FOLLAGE, LEAF-LYING MINIMUM SHALL BE SPREAD AND RETAINED UNDER PROTECTED TREES NEAR DISTURBED AREAS TO SERVE AS A PERMANENT TOP DRESSING AND MULCH. IT SHALL BE KEPT 6" FROM BASE OF TRUNK.
8. FOLIAGE OF PROTECTED TREES WITHIN CONSTRUCTION AREAS SHALL BE SPRAYED WITH WATER NEARLY DURING CONSTRUCTION; USE 1/2" HOSE WITH NOZZLE FROM SPRAYING EQUIPMENT. TRUNKS SHALL BE SPRAYED WITH WATER.



**LOCATION MAP**  
NOT TO SCALE

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GULLANE DRIVE  
SANTA ROSA, CALIFORNIA

REVISIONS		
NO.	DATE	DESCRIPTION

ON A FULL-SCALE DRAWING, LENGTH OF BAR BELOW IS 1-INCH. IF BAR MEASURES LESS THAN 1-INCH, THIS SHEET WAS PLOTTED AT A REDUCED SCALE, WHICH MAY REQUIRE ADJUSTMENT OF SCALE(S) SHOWN ON DRAWING.

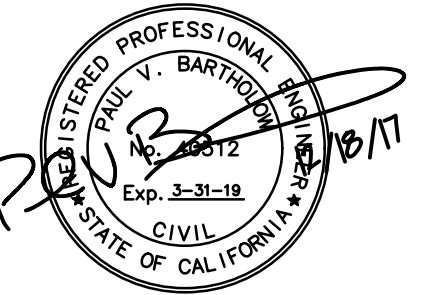
PROJECT 4081.03	DATE DECEMBER 2017
DRAWN BY J.C.H.	CHECKED BY PVB

TREE  
PROTECTION  
ABBREVIATIONS,  
LEGEND & NOTES

SHEET NO.

**1** OF **2**





GULLANE DRIVE  
SANTA ROSA, CALIFORNIA

GULLANE DRIVE  
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PROJECT 4081.03	DATE DECEMBER 2017
DRAWN BY J.C.H.	CHECKED BY PVB

## SHEET NO.

2 OF 2

