G1 FINANCIAL CORPORATION
1220 SODA CANYON ROAD

EROSION CONTROL PLAN
REVISED JANUARY 2021

PPI
ENGINEERING

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11910001

G1 FINANCIAL CORPORATION
1220 SODA CANYON ROAD

EROSION CONTROL PLAN

REVISED JANUARY 2021
ORIGINAL SUBMITTAL APRIL 2020

PREPARED BY:

PPI ENGINEERING
2800 JEFFERSON STREET
NAPA, CALIFORNIA 94558
(707) 253-1806

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G1 FINANCIAL CORPORATION
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EROSION CONTROL PLAN

NARRATIVE

1. The nature and purpose of the land disturbing activity and the amount of grading involved.

a) This ECP addresses the development of approximately 1.4 net acres (2.5 gross acres) of proposed vineyard located at 1220 Soda Canyon Road in Napa. The property is located at APN 039-150-091 which consists of approximately 10.01 acres per the Napa County Assessor's Office.

b) Activities to be accomplished include removal of trees within the proposed clearing limits, ripping, rock removal, cultivating the soil to prepare for planting, seeding cover crop, mulching, trenching for irrigation pipelines, installation of trellis system, laying out the vine rows, and installing erosion control measures.

2. General description of existing site conditions, including topography, vegetation and soils.

a) The site is located in the Hardman Creek Watershed.

b) The elevations in the vineyard area range from approximately 190 to 240 feet above mean sea level per topographic mapping. Ground slopes within the project boundary range between 6 and 19 percent. There are no areas with slopes over 30% in the development area.

c) Topographic mapping was provided by American Aerial Mapping, Inc. dated July 21, 1999. An assumed coordinate system was used. Supplemental ground topographic mapping was provided by PPI Engineering dated October 2020.

d) Existing vegetation consists of pasture and trees. Please see the biological report prepared by WRA dated February 2020.

e) There are structures on the property. Please see the cultural resources report prepared by Flaherty Cultural Resource Services dated December 16, 2019.

f) The property is currently deer fenced. No additional deer fence is proposed.

g) A site visit of the property was performed by Cody Corsetti and Rachel Rosasco of PPI Engineering on Wednesday, September 4, 2019 to evaluate the vineyard development area and to collect photographic documentation. Photographs of pre-project conditions can be found in Appendix A.

3. Natural and man-made features onsite including streams, lakes, reservoirs, roads, drainage, and other areas that may be affected by the proposed activity.

a) No natural or man-made features are expected to be adversely affected by this project. An unnamed blue line stream is in the vicinity but will not be affected by the project. The existing reservoir in the vicinity will also not be affected by the project.

b) An unnamed blue line stream on the property that meets the Napa County definition of a stream has the appropriate setbacks, determined by slope as outlined in Napa County Conservation Regulation 18.108.025, shown on Sheet 1. Prior to construction the Engineer shall stake the appropriate stream setbacks adjacent to vineyard blocks based on in-field determination of the top of bank and slope.

c) In this ECP, wetlands are substantially avoided with a minimum 50' buffer, which includes a 12' turnaround avenue and a 38' undisturbed filter strip. The 12' turnaround avenue will have the same percent vegetative cover as the adjacent block, and the 38' undisturbed filter strip will be located outside of the clearing limits and therefore undisturbed in its current condition.

d) There is an existing paved driveway from Soda Canyon Road that provides access to the proposed vineyard blocks. Please see Figure 1 in Appendix D for the existing driveway which will be used as primary access to the proposed vineyard blocks.

4. Location and source of water for irrigation or other uses.

a) The location of the existing well. The proposed water source, is shown on the Vicinity Map. Please see the WAA prepared by Richard C. Slade & Associates dated April 22, 2020.

5. Soil types/soil series identified in the Soil Conservation Service (SCS) Napa County Soil Survey.

a) The USDA – SCS Napa County Soil Survey maps the soil within the project boundary as Kidd Loam with 15 to 30 percent slopes and Sobrante Loam with 30 to 50 percent slopes.

6. Critical areas, if any, within the development site that have serious erosion potential or problems.

a) There are no areas with serious erosion potential or problems.

7. Erosion calculations

a) Universal Soil Loss Equation (USLE) spreadsheets for this project are in Appendix B of this report.

b) Please see pre-project versus post-project soil loss analysis prepared by PPI Engineering dated January 22, 2021.

8. Proposed erosion control methods including:

a) All drainage systems and facilities, walls, cribbing or other erosion protection devices to be constructed with, or as a part of the proposed work.

1. There is an existing inlet that is located near the proposed vineyard development area. All existing storm drainage inlets and pipelines serving the vineyard areas shall be inspected using closed-circuit video pipeline inspection equipment. Any damaged, plugged, or otherwise compromised areas shall be repaired or replaced as directed by the Engineer. Existing storm drain pipeline outlets shall also be located, inspected, and repaired as directed by the Engineer.

2. The final pass with disking equipment shall be performed across slopes to prevent channeling water downhill the first winter after development.

3. Straw wattles shall be installed the year of construction in the approximate locations shown on the Site Plan. Additional temporary erosion control measures shall be installed as needed.

b) Proposed vegetative erosion control measures including location, type and quantity of seed, mulch, fertilizer and irrigation, timing and methods of planting, mulching and maintenance of plant material and slopes until a specified percentage of plant coverage is uniformly established.

1. Disturbed areas shall be seeded as described below. Straw mulch shall be applied to all disturbed areas at a rate of 3,000 lbs/acre prior to October 15 of the year of construction.

2. A permanent cover crop strategy will be utilized. The permanent cover crop will be generated the first year by seeding with the following mix: Dwarf Barley at 50 lbs/acre, Blando Brome at 8 lbs/acre, Zorro Fescue at 12 lbs/acre, and Crimson Clover at 6 lbs/acre. A pre-approved alternative seed mix may be allowed.

The permanent cover crop will be managed each year such that any areas which have less than the percent vegetative cover specified below will be reseeded and mulched until adequate coverage is achieved. The permanent cover crop shall be mowed only and not disked.

Block with 80% vegetative cover: 4

Blocks with 90% vegetative cover: 1, 2, 3, 5A & 5B

3. The owner has the option of using a Dwarf Barley (or a pre-approved alternative) cover crop in the first three years that the block is planted to aid with vineyard establishment. If this option is used, seed shall be applied at a rate of 120 lbs/acre if broadcast or at a rate of 60 lbs/acre if drilled. The cover crop within the vineyard may be disked each spring after April 1 for the first three years. An alternative cover crop seed mix may be used upon prior approval. Each year the owner chooses to disk, the area shall be straw mulched at a rate of 3,000 lbs/acre and straw wattles shall be installed prior to October 15. The permanent seed mix will be seeded prior to October 15 of the fourth (or earlier) year.

4. No pre-emergent herbicides will be used for weed management. Contact or systemic herbicides may be applied in spring (no earlier than February 15 to ensure adequate vegetative cover in the spray strips for the remainder of the rainy season). The width of the spray strip shall be no wider than 1' in order to achieve 80% vegetative cover in Block 4. No strip spraying shall be performed in Blocks 1, 2, 3, 5A & 5B. Spot spraying of contact or systemic herbicides in spring (no earlier than February 15) will be allowed provided the 90% vegetative cover is achieved in Blocks 1, 2, 3, 5A & 5B. If the owner chooses to farm without herbicide, an alternative will be to hand-hoe around the base of the vine only, or other methods that do not result in a continuous bare strip.

5. Fertilizer shall be applied as necessary by vineyard management personnel for both the vineyard and to ensure specified percent vegetative cover crop is achieved. Site-specific soil analysis should be performed.

6. The vineyard avenues shall be mowed only and shall not be disked. Unless otherwise noted, all avenues shall conform to the natural grade. Vineyard avenues shall be seeded and mulched prior to October 15 of the year of construction and in subsequent years in bare or disturbed areas. The cover crop will be managed each year such that any avenues which have less than the percent vegetative cover specified below will be reseeded and mulched until adequate coverage is achieved. Seeding and mulching is not required on avenues and roads properly surfaced with gravel.

   Block with 80% vegetative cover: 4

   Blocks with 90% vegetative cover: 1, 2, 3, 5A & 5B

7. All Blocks will be hand-farmed. The proposed vine and row spacing is expected to be 1 meter by 1 meter. However, in areas where cross-slope exceeds 15% the owner shall increase the row spacing as needed to ensure there is adequate room for equipment. Width of tillage equipment shall be no more than 75% of row width to allow for bench formation and to minimize erosion.

8. The owner has the freedom to further subdivide vineyard blocks within the footprint of the proposed vineyard for irrigation and viticulture purposes. The proposed vinerow directions shall not be altered without an approved modification from Napa County.

9. Irrigation pipelines shall be located within existing roadways, vineyards and vineyard avenues, and/or within proposed clearing limits. Regardless of pipeline location, pipeline trenches located on ground slopes greater than 15% shall be backfilled using imported or select native granular material to a depth of 6 inches above the pipelines such that voids do not form below haunches of pipe. Backfill shall be wheel rolled or otherwise compacted to reduce settlement. Final grading over trenches shall be mounded and water-barred such that water is directed away from trenches.

10. As stated in the Napa County Protocol for Re-Planting/Renewal of Approved Non-Tilled Vineyard Cover Crops dated March 23, 2004, when it becomes necessary, either by routine or emergency, to re-establish or renew vineyard cover crop the following measures should be followed:
    - Seek professional consultation, including soil nutrient analysis, to determine the reasons for the original cover crop's failure. Adjust soil fertility, irrigation and seed selection accordingly.
    - When tillage is necessary, alternate rows should be tilled, seeded, and straw-mulched to effectively accomplish the re-establishment/renewal process over a two-year period.
    - Tillage and re-seeding should be conducted in the following manner:
        - In year 1, till to prepare seed bed and sow desired cover crop in every other row ("the evens"), leaving the alternate rows ("the odds") untilled and mowed only.
        - Mulch all tilled rows having an up and down hill (perpendicular to contour) row direction with 3,000 lbs./acre of loose straw, or approved equivalent, after seeding.
        - Tilled rows with cross-slope (parallel to contour) row direction and slope gradients less than 15% may not require straw mulch.
        - In year 2, till to prepare seed bed and sow desired cover crop in "odd" rows.
        - In year 2, leave "even" rows untilled and mowed only.
        - Mulch rows tilled in year 2 as specified above.
        - Put all re-establishment measures in place by October 15
        - In year 3, return all rows to non-tilled culture.

9. Stormwater stabilization measures, if the development of the site will result in increased peak rates of runoff that may cause flooding or channel degradation downstream.

a) No significant increase in quantity or rate of runoff is expected as a result of this project.

b) Please see hydrology report prepared by PPI Engineering dated April 13, 2020.

10. An implementation schedule showing the following:

a) The proposed clearing, grading, and/or construction schedule.

DATE	DESCRIPTION
April 1:	Commence clearing and tillage operations.
October 1:	All tillage and erosion control completed.
October 15:	All winterization complete, including seeding, straw mulching, and straw wattle installation.

b) The proposed schedule for winterizing the site (generally by October 15 of each year the permit is in effect.)

The site shall be winterized and all necessary erosion control measures described in the Erosion Control Plan shall be installed by October 15.

c) The proposed schedule of installation of all interim erosion and sediment control measures, including the stage of completion of such devices at the end of the grading season (generally October 15) of each year the permit will be in effect.

See Item 10a).

d) The schedule for installation of permanent erosion and sediment control devices where required.

See Item 10a).

11. The estimated cost of implementation of the erosion and sediment control measures.

Typical costs for installing erosion control measures as described in this plan range from $500 to $2,000 per acre.

G1 FINANCIAL CORPORATION
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EROSION CONTROL PLAN

S T A N D A R D P R O V I S I O N S

SECTION 1 - SCOPE OF WORK

These specifications cover the construction of the erosion control measures for approximately 1.4 acres of vineyard to be developed by G1 Financial Corporation Limited.

The drawing numbered 11910001B, Sheets 1 and 2, and these Specifications describe in detail the construction of the complete erosion control system. Requests for further information or clarification of the work to be done can be made to Jim Bushey or Matt Bueno at the Napa office of PPI Engineering, phone (707) 253-1806.

All costs for the complete construction of the erosion control system must be included in the bid items, since no other payment will be made outside of the bid items. This includes all costs for moving onto and off of the job site, all equipment, tools, materials, labor, fuel, taxes, and incidentals for furnishing and installing the erosion control system.

Surveying adequate for construction will be provided by the Owner, at the Owner's expense. The Contractor will be responsible for preserving construction survey stakes and markers for the duration of their intended use. Any restaking costs or additional survey work requested by the Contractor shall be deducted from the final payment to the Contractor. The Owner does not guarantee that the project being bid will be awarded. The Owner also reserves the right to change the quantities of actual work performed as needed with payment made according to the new quantities at the unit price bid.

SECTION 2 - AUTHORITY OF OWNER AND ENGINEER

The property is owned by G1 Financial Corporation Limited. G1 Financial Corporation Limited or the appointed representative shall have the final say in the event of a dispute with the Contractor.

The Owner shall appoint PPI Engineering (PPI) as the Engineer to perform periodic review of the work. PPI Engineering shall report any unsatisfactory work to the Owner. The Contractor shall be responsible for any engineering fees or repair costs associated with bringing the unsatisfactory work into compliance with the Plans and Specifications.

SECTION 3 - CHANGES IN WORK

Materials and the manner of performance of the work performed in this contract shall be according to the Plans and Specifications. Modifications to the Plans or Specifications shall be agreed upon in writing by the Contractor, Owner, and Engineer before the work in question is performed. Materials and construction methods shall be as specified on the Plans and Specifications. The burden of proof that a given material or method constitutes an equivalent to the one specified will rest with the Contractor.

SECTION 4 - UTILITIES

At least two working days prior to beginning any excavation on the project, the Contractor shall contact Underground Service Alert (USA) at 1-800-642-2444 and request field location of all existing utilities.

Certain facilities at the site are existing. The Contractor shall be careful to avoid damaging existing facilities and shall notify the Owner immediately if any damage does occur. The cost of repairing any damage shall be the sole responsibility of the Contractor.

SECTION 5 - PROSECUTION OF THE WORK

Unless otherwise provided, the contract time shall commence upon issuance of a Notice to Proceed by the Owner. The work shall start within ten days thereafter and be diligently prosecuted to completion within the time specified in the Contractor's bid. If weather conditions prevent completion of the project within the specified amount of time, the Owner may extend the completion date of the project.

SECTION 6 - RESPONSIBILITIES OF THE CONTRACTOR

The Contractor agrees that in accordance with generally accepted construction practices, Contractor will be required to assume sole and complete responsibility for job site conditions during the course of construction of the project, including the safety of all persons and property. This requirement shall be made to apply continuously and not be limited to normal working hours. Contractor further agrees to defend, indemnify and hold design professional harmless from any and all liability, real or alleged, in connection with the performance of the work on this project, excepting liability arising from the sole negligence of design professional.

The Contractor shall be responsible for controlling dust and mud generated from construction activities. The Contractor shall not allow dust or mud to obstruct vehicular traffic on County roads or State Highways. The Contractor shall be responsible for cleaning all vehicles prior to leaving the site as required by the California Highway Patrol. The Contractor, at their own expense, shall

provide adequate dust control and prevention of mud tracking on roads, and take other preventative measures as directed by the Owner.

The Contractor shall be responsible for following all safety laws that may be applicable. Of particular concern are the trench safety regulations issued by CAL-OSHA. The Contractor alone shall be responsible for the safety of their equipment and methods and for any damage or injury which may result from their failure, improper construction, maintenance, or operation.

The Contractor shall be responsible for installing necessary sediment retention measures to keep sediment from leaving the site if construction activities continue beyond October 1.

The Contractor shall keep the work site clean and free of rubbish and debris throughout the project. Materials and equipment shall be removed from the site as soon as they are no longer necessary or the project is completed.

The Contractor shall also be responsible for ensuring that all permits which are necessary for construction have been obtained and that copies of these permits are maintained onsite at all times.

The Contractor shall, at their own expense, furnish all necessary light, power, pumps, and water necessary for the work.

SECTION 7 - MEASUREMENT AND PAYMENT

Payment shall be made at the unit prices bid according to the actual quantities installed. Measurement of the final quantities shall be the responsibility of the Owner's Engineer.

The Engineer shall periodically observe the project during construction and upon completion of the project any unfinished or unacceptable work observed will be brought to the Contractor’s attention verbally and in writing. Final payment will be made upon satisfactory completion of all work items required by these Plans and Specifications.

SECTION 8 - GUARANTEE

In addition to the guarantees from suppliers, the Contractor shall guarantee the work he performs for a period of two years. Any repairs needed to the system within two years of completion due to faulty workmanship or materials shall be promptly repaired at no expense to the Owner. Any costs incurred by the Owner and/or Engineer within two years of completion due to rubbish or debris placed in a trench or other excavation shall be paid by the Contractor.

Unless otherwise provided in writing, payment by the Owner to the Contractor for installation of this system shall constitute acceptance of all provisions in this document by the Contractor.

G1 FINANCIAL CORPORATION
1220 SODA CANYON ROAD

EROSION CONTROL PLAN

S P E C I A L P R O V I S I O N S

SECTION 1 – CONCRETE DROP INLET

1.1 GENERAL:

Existing concrete drop inlet shall be inspected and repaired/replaced in the locations shown on the Plans as shown on Detail 2, Sheet 2.

1.2 MATERIALS:

Concrete drop inlet shall be Central Precast product or equivalent. Inlet shall be constructed of a precast, reinforced concrete box with drive grate. Box and grate shall be H-20 traffic rated.

Drop inlet shall be placed on an aggregate base pad consisting of Cal Trans Class II Aggregate Base. Connector pipes shall be single-wall solid corrugated polyethylene pipe of a size specified by the Engineer when the substitution is approved.

Wire mesh for the debris shield shall be ¼" x ¼" galvanized hardware cloth or an Engineer-approved alternative.

1.3 INSTALLATION:

Upon completion of the excavation for the drop inlet, a 2-inch thick pad of Class II Aggregate Base shall be placed on the bottom of the excavation. Aggregate base shall be compacted to 90% relative compaction. If approved by the Engineer, native material may be scarified, moisture conditioned as necessary, and compacted to 90% relative compaction.

The drop inlet shall be placed plumb and level and square with any adjacent fence or avenue. The lip of the inlet shall conform to the natural grade elevation or as directed in the field by the Engineer. Pipe connections and all other openings shall be grouted to form a watertight seal. Backfill around the inlet shall be water jetted or otherwise placed and compacted to prevent excess settlement of backfill. Earth berms around the drop inlets shall be moisture conditioned as necessary and compacted to 90% relative compaction.

A debris shield shall be constructed to help prevent loose debris and sediment from clogging the drop inlet grate. The shield shall be constructed as shown in Detail 2, Sheet 2. The shield shall be installed between the inlet grate and the concrete drop inlet frame. The wire mesh shall extend approximately 2 inches above the top of the inlet grate. This shield will not function after being driven over and is not intended for inlets in locations which receive traffic during the rainy season. It also should not be relied upon exclusively. Concrete drop inlets can be more

susceptible to plugging than other types of inlets, especially with straw, and therefore require diligent maintenance.

SECTION 2 - TEMPORARY MEASURES

2.1 GENERAL:

Temporary erosion control measures shall be constructed by the Owner. These measures can include water bars, straw wattles, straw mulching, straw bale dikes, and other practices as needed. The measures shall be constructed in conformance with the detail drawings and maintained in a functional condition throughout the rainy season.

SECTION 3 - MAINTENANCE

3.1 GENERAL:

The erosion control measures described in these Specifications and shown on the Plans and Details require regular maintenance in order to function as intended. Vineyard management personnel shall assure that the erosion control measures are monitored throughout the rainy season each year and necessary repairs and/or maintenance are performed immediately. Maintenance operations shall include, but not be limited to the following activities.

3.2 STRAW WATTLES:

Straw wattles shall be monitored and repaired as needed to ensure water does not run under the wattle or between adjacent wattles. Should excessive erosion cause the wattle to fill with sediment, this material shall be removed to a protected location and the source of the sediment located and protected as needed.

3.3 DROP INLETS:

Drop inlets are designed with trash racks at the ground surface. Debris shall be removed from trash racks after each storm event or as necessary to ensure a clear flow path for water entering the drop inlet. Damaged trash racks shall be repaired immediately in order to ensure that unacceptable quantities of debris do not enter the storm drainage piping system. Drop inlets shall also be inspected annually for any sediment that may have accumulated within the riser. Sediment shall be removed and spread in a safe location and protected as necessary.

3.4 PERMANENT COVER CROP:

All disturbed areas shall be fertilized and seeded in order to achieve a vegetated coverage as specified on the Plans. The cover crop shall be reseeded in subsequent years where necessary prior to the rainy season in order to maintain the required degree of coverage. The cover crop, including avenues, shall be mowed only and shall not be disked.

APPENDIX A

PHOTOGRAPHIC DOCUMENTATION

Photo 1

9/4/2019

Photo 2

9/4/2019

APPENDIX B

USLE CALCULATIONS

PPI Engineering

Napa County
Maximum Length of Slope
for a soil loss of 4 tons per acre

NAME: G1 Financial DATE: 1/31/19

Cover Type: Permanent Cover Crop
Soil Unit No. (100-182)--- 155 -K= 0.28
Soil Name Kidd -R= 45
-T= 2

Percent Cover		65% Up & Down Hill	70% Up & Down Hill	75% Up & Down Hill	80% Up & Down Hill	85% Up & Down Hill	90% Up & Down Hill
		C= 0.058 P= 1.0	C= 0.046 P= 1.0	C= 0.034 P= 1.0	C= 0.022 P= 1.0	C= 0.015 P= 1.0	C= 0.010 P= 1.0
PERCENT SLOPE	2	6,104,557	13,219,683	36,209,037	154,526,796	553,912,694	2,139,989,266
	4	69,402	123,894	263,783	783,225	2,040,400	5,622,682
	6	6,642	10,560	19,330	46,167	99,311	223,450
	8	3,059	4,863	8,901	21,260	45,732	102,896
	10	1,632	2,594	4,749	11,342	24,398	54,895
	12	988	1,570	2,874	6,864	14,765	33,221
	14	648	1,030	1,885	4,501	9,683	21,786
	16	451	716	1,311	3,132	6,737	15,158
	18	328	522	955	2,280	4,906	11,037
	20	248	394	721	1,722	3,704	8,333
	22	193	306	561	1,339	2,880	6,479
	24	153	244	447	1,067	2,295	5,163
	26	125	199	363	868	1,867	4,201
	28	103	164	301	719	1,547	3,480
	30	87	138	253	605	1,301	2,927
	32	74	118	216	516	1,110	2,497
	34	64	102	186	445	958	2,155
	36	56	89	163	388	836	1,880
	38	49	78	143	342	736	1,657
	40	44	70	127	304	654	1,472
	42	39	62	114	273	586	1,319
	44	35	56	103	246	529	1,190
	46	32	51	94	223	481	1,081
	48	29	47	86	204	439	988
	50	27	43	79	188	404	909

NOTES:
C=Cover and Management Factor
P=Practice Factor

PPI Engineering

Napa County
Maximum Length of Slope
for a soil loss of 4 tons per acre

NAME: G1 Financial DATE: 1/31/19

Cover Type: Permanent Cover Crop
Soil Unit No. (100-182)--- 155 -K= 0.28
Soil Name Kidd -R= 45
-T= 2

Percent Cover		65% Cross-Slope	70% Cross-Slope	75% Cross-Slope	80% Cross-Slope	85% Cross-Slope	90% Cross-Slope
		C= 0.058 P= 0.6	C= 0.046 P= 0.6	C= 0.034 P= 0.6	C= 0.022 P= 0.6	C= 0.015 P= 0.6	C= 0.010 P= 0.6
PERCENT SLOPE	2	33,508,058	72,563,149	198,752,257	848,201,220	3,040,439,814	11,746,451,435
	4	248,883	444,294	945,950	2,808,722	7,317,070	20,163,475
	6	18,451	29,333	53,693	128,243	275,864	620,695
	8	8,497	13,508	24,725	59,054	127,032	285,822
	10	4,533	7,206	13,191	31,505	67,771	152,486
	12	2,743	4,361	7,983	19,066	41,013	92,280
	14	1,799	2,860	5,235	12,503	26,896	60,517
	16	1,252	1,990	3,642	8,700	18,714	42,106
	18	911	1,449	2,652	6,335	13,626	30,660
	20	688	1,094	2,002	4,782	10,288	23,147
	22	535	851	1,557	3,719	7,999	17,998
	24	426	678	1,241	2,963	6,375	14,343
	26	347	552	1,010	2,411	5,187	11,670
	28	287	457	836	1,997	4,296	9,666
	30	242	384	703	1,680	3,614	8,132
	32	206	328	600	1,433	3,082	6,935
	34	178	283	518	1,237	2,660	5,986
	36	155	247	452	1,079	2,321	5,223
	38	137	217	398	951	2,045	4,602
	40	122	193	354	845	1,818	4,090
	42	109	173	317	757	1,629	3,664
	44	98	156	286	683	1,470	3,307
	46	89	142	260	621	1,335	3,004
	48	82	130	238	567	1,220	2,746
	50	75	119	218	521	1,122	2,524

NOTES:
C=Cover and Management Factor
P=Practice Factor

PPI Engineering

Napa County
Maximum Length of Slope
for a soil loss of 4 tons per acre

NAME: G1 Financial DATE: 1/31/19

Cover Type: Permanent Cover Crop
Soil Unit No. (100-182)--- 179 -K= 0.32
Soil Name Sobrante -R= 45
-T= 2

Percent Cover		65% Up & Down Hill	70% Up & Down Hill	75% Up & Down Hill	80% Up & Down Hill	85% Up & Down Hill	90% Up & Down Hill
		C= 0.058 P= 1.0	C= 0.046 P= 1.0	C= 0.034 P= 1.0	C= 0.022 P= 1.0	C= 0.015 P= 1.0	C= 0.010 P= 1.0
PERCENT SLOPE	2	3,911,541	8,470,611	23,201,212	99,014,205	354,923,718	1,371,214,188
	4	49,704	88,730	188,915	560,928	1,461,287	4,026,833
	6	5,086	8,085	14,799	35,347	76,035	171,079
	8	2,342	3,723	6,815	16,277	35,013	78,780
	10	1,249	1,986	3,636	8,684	18,679	42,029
	12	756	1,202	2,200	5,255	11,304	25,435
	14	496	788	1,443	3,446	7,413	16,680
	16	345	548	1,004	2,398	5,158	11,605
	18	251	399	731	1,746	3,756	8,451
	20	190	302	552	1,318	2,836	6,380
	22	147	234	429	1,025	2,205	4,961
	24	118	187	342	817	1,757	3,953
	26	96	152	278	665	1,430	3,217
	28	79	126	230	550	1,184	2,664
	30	67	106	194	463	996	2,241
	32	57	90	165	395	850	1,911
	34	49	78	143	341	733	1,650
	36	43	68	125	297	640	1,440
	38	38	60	110	262	564	1,268
	40	34	53	98	233	501	1,127
	42	30	48	87	209	449	1,010
	44	27	43	79	188	405	911
	46	25	39	72	171	368	828
	48	22	36	65	156	336	757
	50	21	33	60	144	309	696

NOTES:
C=Cover and Management Factor
P=Practice Factor

PPI Engineering

Napa County
Maximum Length of Slope
for a soil loss of 4 tons per acre

NAME: G1 Financial DATE: 1/31/19

Cover Type: Permanent Cover Crop
Soil Unit No. (100-182)--- 179 -K= 0.32
Soil Name Sobrante -R= 45
-T= 2

Percent Cover		65% Cross-Slope	70% Cross-Slope	75% Cross-Slope	80% Cross-Slope	85% Cross-Slope	90% Cross-Slope
		C= 0.058 P= 0.6	C= 0.046 P= 0.6	C= 0.034 P= 0.6	C= 0.022 P= 0.6	C= 0.015 P= 0.6	C= 0.010 P= 0.6
PERCENT SLOPE	2	21,470,539	46,495,383	127,352,001	543,491,300	1,948,184,637	7,526,626,944
	4	178,244	318,193	677,467	2,011,541	5,240,315	14,440,609
	6	14,127	22,458	41,109	98,186	211,209	475,219
	8	6,505	10,342	18,930	45,213	97,259	218,833
	10	3,470	5,517	10,099	24,121	51,887	116,747
	12	2,100	3,339	6,112	14,598	31,401	70,652
	14	1,377	2,190	4,008	9,573	20,593	46,333
	16	958	1,523	2,789	6,661	14,328	32,237
	18	698	1,109	2,031	4,850	10,433	23,474
	20	527	838	1,533	3,662	7,876	17,722
	22	410	651	1,192	2,847	6,124	13,780
	24	326	519	950	2,269	4,881	10,981
	26	266	422	773	1,846	3,971	8,935
	28	220	350	640	1,529	3,289	7,401
	30	185	294	539	1,286	2,767	6,226
	32	158	251	459	1,097	2,360	5,310
	34	136	217	396	947	2,037	4,583
	36	119	189	346	826	1,777	3,999
	38	105	167	305	728	1,566	3,523
	40	93	148	271	647	1,392	3,131
	42	83	133	243	580	1,247	2,805
	44	75	120	219	523	1,125	2,532
	46	68	109	199	475	1,022	2,300
	48	62	99	182	434	934	2,102
	50	57	91	167	399	859	1,932

NOTES:
C=Cover and Management Factor
P=Practice Factor

APPENDIX C

SLOPE CALCULATIONS

G1 FINANCIAL CORPORATION
1220 SODA CANYON ROAD

Average Slope Of Proposed Vineyard Blocks

Block	Gross Acres	Net Acres	Slope #1	Slope #2	Average Slope
1	0.5	0.3	18%	19%	19%
2	0.8	0.5	10%	10%	10%
3	0.3	0.2	6%	8%	7%
4	0.7	0.3	10%	13%	12%
5A	0.1	0.03	14%	N/A	14%
5B	0.1	0.05	10%	N/A	10%
Total	**2.5**	**1.4**			**12%**

Note: Individual estimates may not add to the totals due to rounding

APPENDIX D

SUPPORTING FIGURES

PPI ENGINEERING
2800 Jefferson Street
Napa, CA 94558
(707) 253-1806

G1 Financial Corporation
1220 Soda Canyon Road
Figure 1: Road Network
Revised January 2021

PPI ENGINEERING
2800 Jefferson Street
Napa, CA 94558
(707) 253-1806

G1 Financial Corporation
1220 Soda Canyon Road
Figure 2: Chemical Mixing Location
Revised January 2021

N
W E
S

Feet
0 50 100 200

Legend

Trees to be Avoided

Tree Survey

- Blue Oak
- Coastal Live Oak
- Foothill Pine
- Olive
- Dead

Proposed Block Boundaries

Proposed Clearing Limits

Approximate Property Line

2018 Napa County Aerial Photo

Block 1

Block 2

Block 3

Block 5A

Block 5B

Block 4

Trees to be Removed		
Map ID	**Species**	**DBH (in)**
1	Dead	9"
2	Dead	7"
3	Blue Oak	14"
4	Blue Oak	21"
5	Dead	7"
6	Blue Oak	24"
7	Blue Oak	16"
8	Blue Oak	33"
9	Blue Oak	30"
10	Dead	15"
11	Foothill Pine	11"
12	Blue Oak	30"
16	Blue Oak	18"
17	Dead	14"
18	Dead	28"
20	Blue Oak	23"
21	Blue Oak	14"
22	Blue Oak	11"
25	Olive	5"
26	Olive	6"

Trees to be Avoided		
Map ID	**Species**	**DBH (in)**
13	Blue Oak	20"
14	Blue Oak	28"
15	Blue Oak	12"
19	Blue Oak	24"
23	Coastal Live Oak	15"
24	Blue Oak	32"

PPI ENGINEERING
2800 Jefferson Street
Napa, CA 94558
(707) 253-1806

G1 Financial Corporation
1220 Soda Canyon Road
Figure 3: Tree Survey
Revised January 2021

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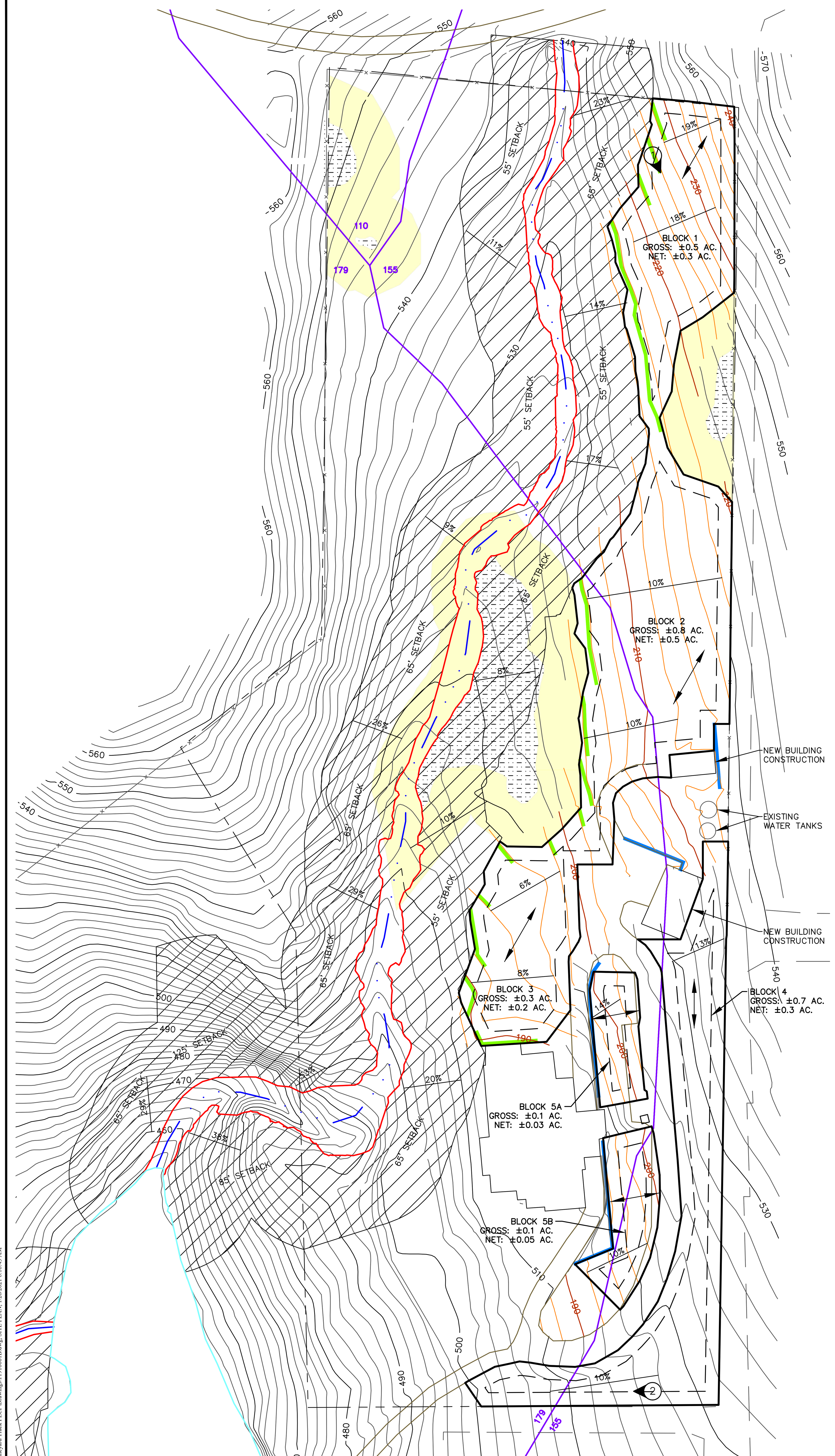
N
W
E
S
Feet
0
100
200
400
Legend
Existing Irrigation Mainlines, Approximate Location
Existing Water Storage Tank
Existing Well, Approximate Location
Existing Roads
Proposed Block Boundaries
Proposed Clearing Limits
Approximate Property Line
2018 Napa County Aerial Photo
Block 1
Block 2
Block 3
Block 5A
Block 5B
Block 4
PPI
ENGINEERING
2800 Jefferson Street
Napa, CA 94558
(707) 253-1806
G1 Financial Corporation
1220 Soda Canyon Road
Figure 4: Irrigation Infrastructure
Revised January 2021
1:49:07 PM 1/26/2021 R:\ROYROY\Images\Figures for ECP\11910001 Track I ECP 2021-01 Revised ECP Figure 4 Irrigation Infrastructure.mxd



TOPOGRAPHIC MAPPING SOURCE: AMERICAN AERIAL MAPPING, INC. CONTOURS, 2' CONTOUR INTERVAL, JULY 1999. ASSUMED COORDINATE SYSTEM WAS USED.
PPI ENGINEERING INC. CONTOURS, 2' CONTOUR INTERVAL, OCTOBER 2020.

GRAPHIC SCALE

60 0 30 60 120 240

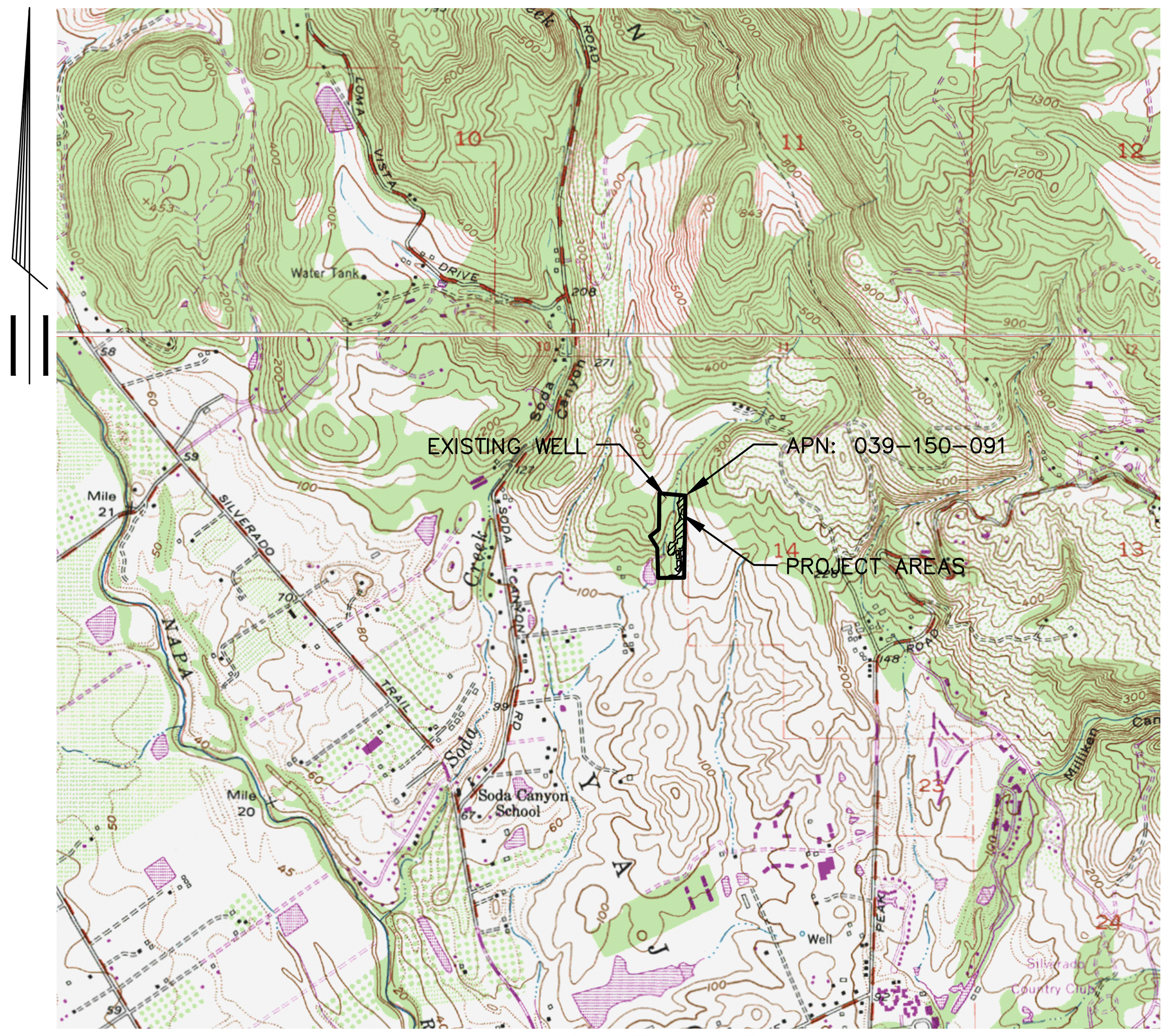
(IN FEET)
1 inch = 60 ft.

LEGEND

PPI ENGINEERING 10' INDEX CONTOUR
PPI ENGINEERING 2' INTERMEDIATE CONTOUR
AMERICAN AERIAL 10' INDEX CONTOUR
AMERICAN AERIAL 2' INTERMEDIATE CONTOUR
APPROXIMATE PROPERTY LINE LOCATION
U.S.G.S. BLUE LINE STREAM, MAPPED BY WRA
WETLAND, MAPPED BY WRA
TOP OF BANK, MAPPED BY WRA
NAPA COUNTY STREAM SETBACK
38' UNDISTURBED FILTER STRIP
EXISTING RESERVOIR
EXISTING VINEYARD AREA
EXISTING ROAD
EXISTING FENCE
EXISTING RETAINING WALL
EXISTING BUILDING
EXISTING CONCRETE DROP INLET, APPROXIMATE LOCATION, TO BE INSPECTED, REPAIRED/REPLACED, & MAINTAINED AS NEEDED (SEE DETAIL 2, SHEET 2)
PROPOSED VINEYARD CLEARING LIMITS
PROPOSED VINEYARD BLOCK BOUNDARY
PROPOSED STRAW WATTLE (SEE DETAIL 1, SHEET 2)
PROPOSED VINEROW DIRECTION
PHOTO POINT NUMBER & LOCATION (SEE APPENDIX A)
X% AVERAGE SURFACE SLOPE
110 / 155 SOIL TYPE BOUNDARY

USDA SOIL CLASSIFICATIONS:

110	BOOMER-FORWARD-FELTA COMPLEX, 30 TO 50 PERCENT SLOPES
155	KIDD LOAM, 15 TO 30 PERCENT SLOPES
179	SOBRANTE LOAM, 30 TO 50 PERCENT SLOPES



VICINITY MAP

USGS NAPA & YOUNTVILLE QUADRANGLE
TOWNSHIP 6 N., RANGE 4 W.
SCALE: 1" = ±2000'

NOTES:

1. OWNER: G1 FINANCIAL CORPORATION LIMITED
   SITE ADDRESS: 1220 SODA CANYON ROAD
   APN: 039-150-091
2. ACCESS TO THE PROJECT IS FROM SODA CANYON ROAD. THE SITE IS GATED AND LOCKED. ADMITTANCE IS AVAILABLE UPON REQUEST.
3. EXISTING VEGETATION CONSISTS OF PASTURE AND TREES.
4. DISTURBED AREAS SHALL BE SEEDED AS DESCRIBED BELOW. STRAW MULCH SHALL BE APPLIED TO ALL DISTURBED AREAS AT A RATE OF 3,000 LBS/ACRE PRIOR TO OCTOBER 15 OF THE YEAR OF CONSTRUCTION.
5. PERMANENT COVER CROP (NO-TILL):
   A PERMANENT COVER CROP STRATEGY WILL BE UTILIZED. THE PERMANENT COVER CROP WILL BE GENERATED THE FIRST YEAR BY SEEDING WITH THE FOLLOWING MIX:

VARIETY	RATE (LBS/ACRE)
DWARF BARLEY	50
BLANDO BROME	8
ZORRO FESCUE	12
CRIMSON CLOVER	6

   A PRE-APPROVED ALTERNATIVE SEED MIX MAY BE ALLOWED.

   THE PERMANENT COVER CROP WILL BE MANAGED EACH YEAR SUCH THAT ANY AREAS WHICH HAVE LESS THAN THE PERCENT VEGETATIVE COVER SPECIFIED BELOW WILL BE RESEEDED AND MULCHED UNTIL ADEQUATE COVERAGE IS ACHIEVED. THE PERMANENT COVER CROP SHALL BE MOWED ONLY AND NOT DISKED.

   BLOCK WITH 80% VEGETATIVE COVER: 4

   BLOCKS WITH 90% VEGETATIVE COVER: 1, 2, 3, 5A & 5B
6. THE OWNER HAS THE OPTION OF USING A DWARF BARLEY (OR A PRE-APPROVED ALTERNATIVE) COVER CROP IN THE FIRST THREE YEARS THAT THE BLOCK IS PLANTED TO AID WITH VINEYARD ESTABLISHMENT. IF THIS OPTION IS USED, SEED SHALL BE APPLIED AT A RATE OF 120 LBS/ACRE IF BROADCAST OR AT A RATE OF 60 LBS/ACRE IF DRILLED. THE COVER CROP WITHIN THE VINEYARD MAY BE DISKED EACH SPRING AFTER APRIL 1 FOR THE FIRST THREE YEARS. AN ALTERNATIVE COVER CROP SEED MIX MAY BE USED UPON PRIOR APPROVAL. EACH YEAR THE OWNER CHOOSES TO DISK, THE AREA SHALL BE STRAW MULCHED AT A RATE OF 3,000 LBS/ACRE AND STRAW WATTLES SHALL BE INSTALLED PRIOR TO OCTOBER 15. THE PERMANENT SEED MIX WILL BE SEEDED PRIOR TO OCTOBER 15 OF THE FOURTH (OR EARLIER) YEAR.
7. NO PRE-EMERGENT HERBICIDES WILL BE USED FOR WEED MANAGEMENT. CONTACT OR SYSTEMIC HERBICIDES MAY BE APPLIED IN SPRING (NO EARLIER THAN FEBRUARY 15 TO ENSURE ADEQUATE VEGETATIVE COVER IN THE SPRAY STRIPS FOR THE REMAINDER OF THE RAINY SEASON). THE WIDTH OF THE SPRAY STRIP SHALL BE NO WIDER THAN 1' IN ORDER TO ACHIEVE 80% VEGETATIVE COVER IN BLOCK 4. NO STRIP SPRAYING SHALL BE PERFORMED IN BLOCKS 1, 2, 3, 5A & 5B. SPOT SPRAYING OF CONTACT OR SYSTEMIC HERBICIDES IN SPRING (NO EARLIER THAN FEBRUARY 15) WILL BE ALLOWED PROVIDED THE 90% VEGETATIVE COVER IS ACHIEVED IN BLOCKS 1, 2, 3, 5A & 5B. IF THE OWNER CHOOSES TO FARM WITHOUT HERBICIDE, AN ALTERNATIVE WILL BE TO HAND-HOE AROUND THE BASE OF THE VINE ONLY, OR OTHER METHODS THAT DO NOT RESULT IN A CONTINUOUS BARE STRIP.
8. FERTILIZER SHALL BE APPLIED AS NECESSARY BY VINEYARD MANAGEMENT PERSONNEL FOR BOTH THE VINEYARD AND TO ENSURE SPECIFIED PERCENT VEGETATIVE COVER CROP IS ACHIEVED. SITE-SPECIFIC SOIL ANALYSIS SHOULD BE PERFORMED.
9. THE VINEYARD AVENUES SHALL BE MOWED ONLY AND SHALL NOT BE DISKED. UNLESS OTHERWISE NOTED, ALL AVENUES SHALL CONFORM TO THE NATURAL GRADE. VINEYARD AVENUES SHALL BE SEEDED AND MULCHED PRIOR TO OCTOBER 15 OF THE YEAR OF CONSTRUCTION AND IN SUBSEQUENT YEARS IN BARE OR DISTURBED AREAS. THE COVER CROP WILL BE MANAGED EACH YEAR SUCH THAT ANY AVENUES WHICH HAVE LESS THAN THE PERCENT VEGETATIVE COVER SPECIFIED BELOW WILL BE RESEEDED AND MULCHED UNTIL ADEQUATE COVERAGE IS ACHIEVED. SEEDING AND MULCHING IS NOT REQUIRED ON AVENUES AND ROADS PROPERLY SURFACED WITH GRAVEL.

   BLOCK WITH 80% VEGETATIVE COVER: 4

   BLOCKS WITH 90% VEGETATIVE COVER: 1, 2, 3, 5A & 5B
10. ALL BLOCKS WILL BE HAND FARMED. THE PROPOSED VINE AND ROW SPACING IS EXPECTED TO BE 1 METER BY 1 METER. HOWEVER, IN AREAS WHERE CROSS-SLOPE EXCEEDS 15% THE OWNER SHALL INCREASE THE ROW SPACING AS NEEDED TO ENSURE THERE IS ADEQUATE ROOM FOR EQUIPMENT. WIDTH OF TILLAGE EQUIPMENT SHALL BE NO MORE THAN 75% OF ROW WIDTH TO ALLOW FOR BENCH FORMATION AND TO MINIMIZE EROSION.
11. THE OWNER HAS THE FREEDOM TO FURTHER SUBDIVIDE VINEYARD BLOCKS WITHIN THE FOOTPRINT OF THE PROPOSED VINEYARD FOR IRRIGATION AND VITICULTURE PURPOSES. THE PROPOSED VINEROW DIRECTIONS SHALL NOT BE ALTERED WITHOUT AN APPROVED MODIFICATION FROM NAPA COUNTY.
12. THE LOCATION OF THE EXISTING WELL, THE PROPOSED WATER SOURCE, IS SHOWN ON THE VICINITY MAP.
13. THE PROJECT IS CURRENTLY DEER FENCED. NO ADDITIONAL DEER FENCE IS NEEDED FOR THE PROPOSED VINEYARD.
14. REQUESTS FOR FURTHER INFORMATION, CLARIFICATION OF WORK TO BE DONE, OR INSPECTION INFORMATION CAN BE MADE TO JIM BUSHEY OR MATT BUENO AT PPI ENGINEERING IN NAPA, (707) 253-1806.
15. PROPERTY LINES AS SHOWN ARE APPROXIMATE. OWNER SHALL BE RESPONSIBLE FOR SURVEYING PROPERTY LINE(S) AS NECESSARY PRIOR TO ANY SITE DISTURBANCE.
16. THE OWNER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS.
17. AT LEAST 48 HOURS PRIOR TO EXCAVATING, THE CONTRACTOR SHALL CALL UNDERGROUND SERVICES ALERT (U.S.A.) AT 1-800-642-2444 IN ORDER TO LOCATE EXISTING UTILITIES. IT IS THE OWNER'S RESPONSIBILITY TO LOCATE ANY ADDITIONAL UNDERGROUND UTILITIES THAT MAY HAVE BEEN INSTALLED "IN-HOUSE" OR BY PRIVATE CONTRACTORS AND THEREFORE MAY NOT BE LOCATED THROUGH UNDERGROUND SERVICE ALERT.
18. IT IS THE OWNER'S RESPONSIBILITY TO INSTALL ALL STRUCTURAL MEASURES AS SHOWN ON THE SITE PLAN AND DETAILS AND AS DESCRIBED IN THE SPECIFICATIONS WITHIN THE TIME FRAMES SPECIFIED FOR THIS PROJECT. ANY DEVIATION FROM THESE PLANS MUST BE REVIEWED AND APPROVED BY NAPA COUNTY PLANNING, BUILDING AND ENVIRONMENTAL SERVICES DEPARTMENT. IT IS THE OWNER'S RESPONSIBILITY TO INITIATE THIS MODIFICATION PROCESS. PPI ENGINEERING MUST BE NOTIFIED AT LEAST 48 HOURS IN ADVANCE OF CONSTRUCTION IN ORDER TO SCHEDULE A PRE-CONSTRUCTION MEETING WITH THE OWNER/MANAGER AND CONTRACTOR(S). FOR ONGOING MULTI-YEAR PROJECTS PPI ENGINEERING MUST BE NOTIFIED AT LEAST 48 HOURS IN ADVANCE OF RESUMING CONSTRUCTION EACH YEAR.

REGISTERED PROFESSIONAL ENGINEER
JAMES R. BUSHEY
No. 49931
EXPIRES 9-30-22
Civil
STATE OF CALIFORNIA

REV. NO.	DESCRIPTION	BY	DATE
1	THIS DRAWING SUPERSEDES DRAWING 11910001A. INCORPORATED CHANGES BASED ON NAPA COUNTY COMMENTS. ADJUSTED PROPOSED VINEYARD CLEARING LIMITS AROUND HOUSE CONSTRUCTION.	JCJ	1-26-21

PPI ENGINEERING
2800 JEFFERSON STREET
NAPA, CA 94558
707/253-1806 FAX 707/253-1604

JOB NO: 11910001
DWG. NO: 11910001B

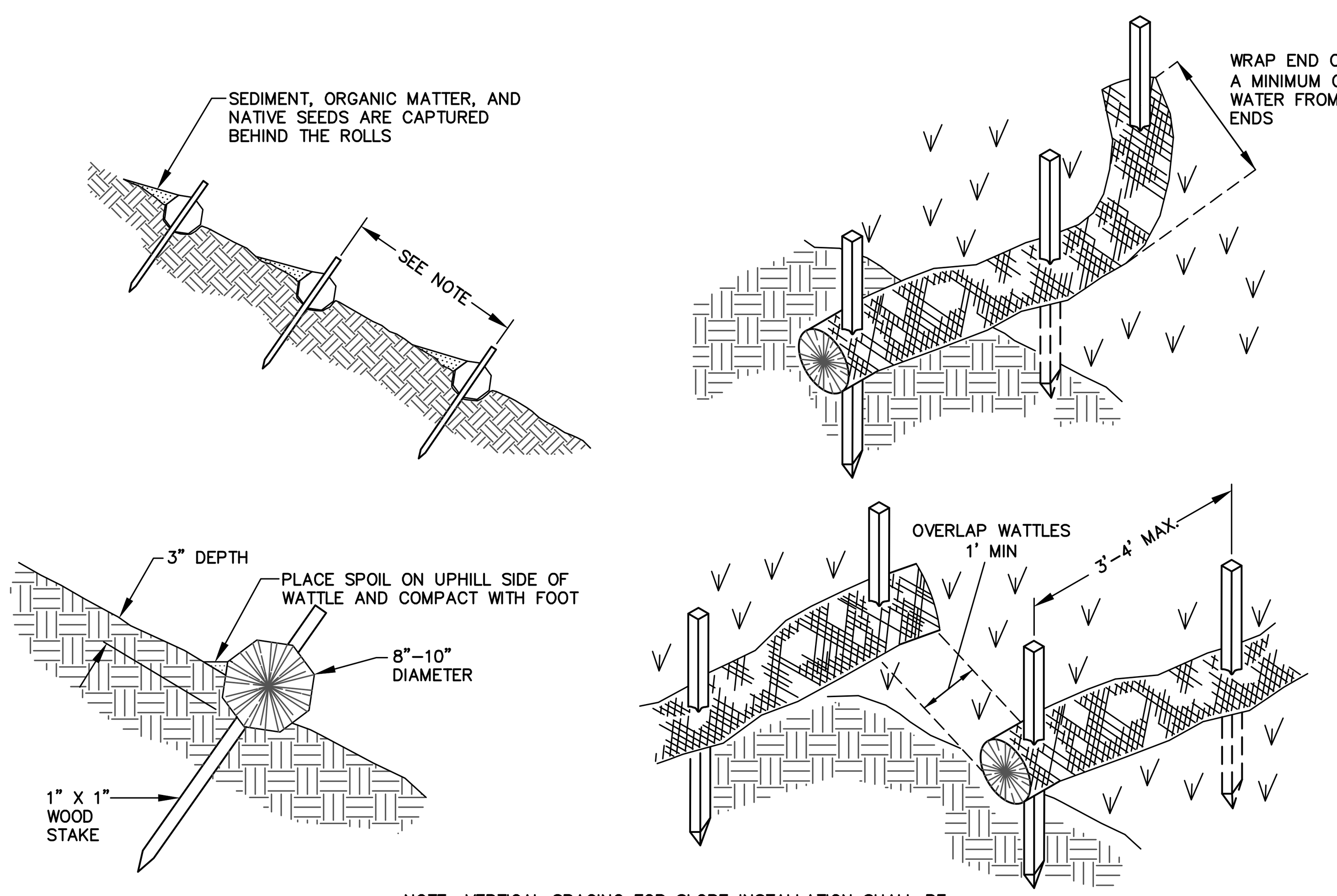
G1 FINANCIAL CORPORATION
1220 SODA CANYON ROAD

TRACK I ECP

SITE PLAN

DESIGN ENGINEER: J. BUSHEY, C. CORSETTI

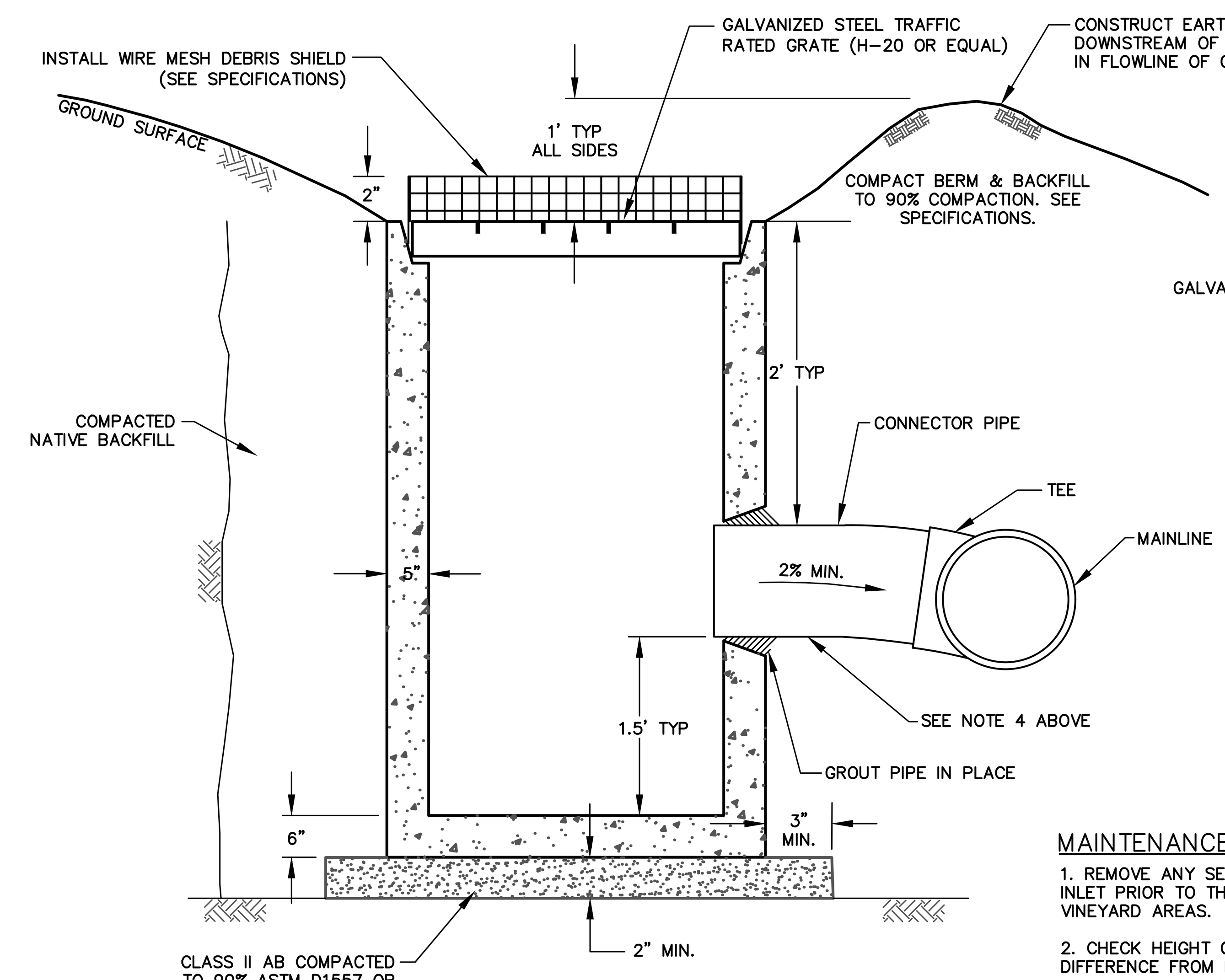
SCALE:	DRAWN BY:	DATE:	SHEET:
AS SHOWN	RR, JCJ	1-26-21	1 OF: 2



NOTE: VERTICAL SPACING FOR SLOPE INSTALLATION SHALL BE DETERMINED BY SITE CONDITIONS. WATTLE SPACING AND LOCATIONS SHALL BE DETERMINED IN THE FIELD BY THE ENGINEER.

1/2 STRAW WATTLE INSTALLATION

N.T.S.



SECTION

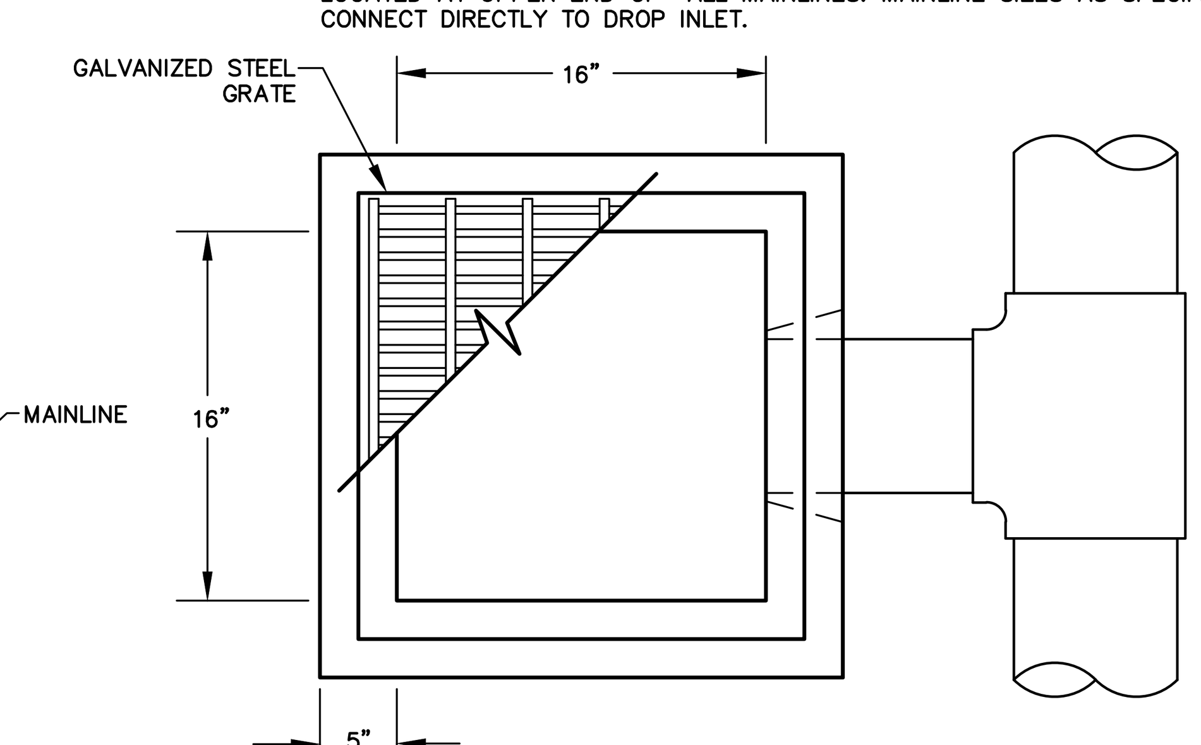
NOTES:

1. EXISTING CONCRETE DROP INLETS THAT REQUIRE REPAIR OR REPLACEMENT SHALL USE THE SAME SIZE AND TYPE OF MATERIAL AS THE EXISTING INFRASTRUCTURE UNLESS PRE-APPROVED OR OTHERWISE DIRECTED BY THE ENGINEER.

2. CONCRETE DROP INLETS MAY BE SUBSTITUTED FOR STANDARD DROP INLETS AT THE OWNERS DISCRETION AND WITH APPROVAL BY THE ENGINEER.

3. LOCATE DROP INLET IN VINEROW IF INLET IS LOCATED WITHIN THE VINEYARD. CONSTRUCT BERM TO DIRECT WATER TO DROP INLET.

4. NO ADDITIONAL CONNECTOR PIPE SHALL BE REQUIRED WHERE THE INLET IS LOCATED AT UPPER END OF ALL MAINLINES. MAINLINE SIZES AS SPECIFIED SHALL CONNECT DIRECTLY TO DROP INLET.



PLAN

MAINTENANCE NOTES:

1. REMOVE ANY SEDIMENT THAT HAS ACCUMULATED IN THE DROP INLET PRIOR TO THE RAINY SEASON AND SPREAD IN ADJACENT VINEYARD AREAS.

2. CHECK HEIGHT OF BERM TO ENSURE 1 FOOT OF ELEVATION DIFFERENCE FROM INLET AS SHOWN ON THE DETAIL. IF LESS THAN 1 FOOT IS MEASURED, THE BERM WILL BE REPAIRED/REBUILT IN ORDER TO ACHIEVE THE 1 FOOT MINIMUM HEIGHT AS DESCRIBED AND IN ACCORDANCE WITH THE SPECIAL PROVISIONS.

2/2 CONCRETE DROP INLET

N.T.S.

REGISTERED PROFESSIONAL ENGINEER JAMES R. BUSHEY No. 49931 EXPIRES: 9-30-22 Civil STATE OF CALIFORNIA

REV. NO.	DESCRIPTION	BY	DATE
1	THIS DRAWING SUPERSEDES DRAWING 11910001A. NO CHANGES WERE MADE TO THIS SHEET.	JCJ	1-26-21

PPI ENGINEERING
2800 JEFFERSON STREET
NAPA, CA 94558
707/253-1806 FAX 707/253-1604

JOB NO: 11910001
DWG. NO: 11910001B

G1 FINANCIAL CORPORATION
1220 SODA CANYON ROAD

TRACK I ECP

DETAILS

DESIGN ENGINEER: J. BUSHEY, C. CORSETTI

SCALE:	DRAWN BY:	DATE:	SHEET: 2
AS SHOWN	RR	1-26-21	OF: 2