



COUNTY OF HUMBOLDT
PLANNING AND BUILDING DEPARTMENT
CURRENT PLANNING DIVISION

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Phone: (707) 445-7541 Fax: (707) 268-3792

Hearing Date: May 6, 2021

To: Humboldt County Zoning Administrator

From: John H. Ford, Director of Planning and Building Department

Subject: **MCSD Hiller Solar Panel Array Coastal Development Permit and Conditional Use Permit Modification**
Case Number PLN-2021-16979
Assessor Parcel Number 510-271-015
675 and 795 Hiller Road, McKinleyville

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Please contact Tricia Shortridge, Planner at 268-3704 or by email at, if you have any questions about the scheduled public hearing item.

cc: Applicant, Agent, California Coastal Commission

AGENDA ITEM TRANSMITTAL

Hearing Date	Subject	Contact
May 6, 2021	Coastal Development Permit and Conditional Use Permit Modification	Tricia Shortridge

Project: A modification to previously approved Coastal Development Permit and Conditional Use Permit (CDP-14-074), to install a 65,000 sq. ft. ground mounted solar array micro-grid within the pond 5 basin of the wastewater treatment plant. The micro-grid would generate 500kW of power used by the wastewater treatment plant (WWTP). No power would be exported off-site. Work is expected to occur over a six-month period commencing in June 2021. Work hours would be Monday-Friday 7:00 a.m. to 7:00 p.m. and possibly an occasional Saturday. Vegetation removal involves the removal of bullrushes that were planted in the pond 5 basin in 2016.

Project Location: The project site is located in Humboldt County, in the McKinleyville area, north of Hiller Road, approximately 500 feet north east from the intersection of Ocean Drive with Hiller Road, on the property known as 675 and 795 Hiller Road.

Present Plan Designation: Residential Estates (RE) McKinleyville Area Plan (MCAP). Density: 0-2 dwelling units per acre. Slope: Relatively Stable.

Present Zoning: Public Facility-Urban with a combining zone for Alquist-Priolo Fault Hazard Area (PF1/G).

Case Number: PLN-2021-16979

Assessor Parcel Number: 510-271-015

Applicant

McKinleyville Community Services District
Greg Orsini, General Manager
PO Box 2037
McKinleyville, CA 95519

Owner(s)

same as applicant

Agent

Essential Engineering
Richard Ross
707 Aviation Blvd.
Santa Rosa, CA 95403

Environmental Review: As Lead Agency, *McKinleyville Community Services District* adopted a *Notice of Exemption* (NOE) on July 29, 2020 citing CEQA Categorical Exemption Sections 15301 (b), 15302 (c).

Pursuant to Section 15096 (Process for a Responsible Agency) of the CEQA Guidelines, Humboldt County Planning and Building Department, as the CEQA Responsible Agency, is obligated to make a CEQA determination regarding the activity that is proposed to be undertaken.

The project is exempt from environmental review under CEQA Exemptions: Class 1 15301(b), Class 2 15302(c).

Major Issues:

None

State Appeals Status:

Project is appealable to the California Coastal Commission

**MCSD Hiller Sewer Lift Station Upgrades
Coastal Development Permit and Conditional Use Permit Modification**

Case Number: PLN-2021-16979
Assessor Parcel Number: 510-271-015

Recommended Zoning Administrator Action

1. Describe the application as a public hearing,
2. Request that staff present the project,
3. Open the public hearing and receive testimony; and
4. Close the hearing and take the following action:

Adopt the resolution to take the following actions:

1. Find the project exempt from environmental review pursuant to California Environmental Quality Act (CEQA) Guidelines Exemptions, Class 1 15301(b), Class 2 15302(c).
2. Make the required findings for approval pursuant to Section 312-17.1 of the Humboldt County Code, and;
3. Approve the MCSD Coastal Development Permit and Conditional Use Permit modification.

Executive Summary:

As part of the implementation of a larger project for which MCSD received grant funding for, MCSD proposes to install a solar array microgrid within the pond 5 basin. This microgrid will not involve off-site power export and is accessory to the existing public facilities use. The solar energy generated from the microgrid would provide the power required to operate the wastewater ponds and related equipment. Battery storage would reserve approximately 24 hours of power in the event of a power outage.

The solar array microgrid project site is within the fully developed pond basin 5 which was previously approved as the McKinleyville Wastewater Treatment Plant expansion under Coastal Development Permit and Conditional Use Permit (CDP-14-074 and CUP-15-003). No naturally occurring habitats exist on this site. Site preparation involves the dewatering of the basin, clearing of the vegetation planted in 2016, grading the pond bottom to scrape out approximately 2 feet of surface soils and organic matter, and infill of the graded area with imported base rock. Water from the basin would be drained into the adjacent ponds through the drainage network within the waste treatment plant. Approximately 1,460 cubic yards of soil and organic material would be collected from the basin bottom and stored within a location of the pond 5 basin until a later date where it would be off-hauled to a compost facility. Base rock would be imported (1,5137 cubic yards) from a quarry in the Blue Lake area. Traffic control on Hiller Road will not be necessary given the small-scale nature and short duration of the project. Site preparation will also involve trenching for the installation of communications and power fiber utility lines inside conduit to connect the microgrid, microgrid controller, transformer, and battery storage system together. All of this equipment is proposed to be located within the existing equipment infrastructure that operates the waste water treatment plant. If the project is approved all work is scheduled to occur on over a two-month period commencing in June 2021. Hours of operation are anticipated to be from 7:00 a.m. to 7:00 p.m. Monday through Friday with an occasional Saturday.

The project parcel is located in western McKinleyville, east of the lower Mad River surrounded by residential neighborhoods on the north and south, Hiller Park on the east, and open space land and the lower Mad River to the West. Within the 68-acre project parcel, the wastewater treatment plant itself is surrounded on the north, south, east, and west by trees and vegetation.

The proposed project site is within the McKinleyville Coastal Area Plan (MCAP) and the land use designation of Residential Estates (RE). The RE designation does not specifically include wastewater treatment facilities as principally or conditionally permitted uses. Section 3.22B of the McKinleyville Area Plan, "Wastewater Treatment Facilities" indicates that the development of a wastewater treatment facility at this site is consistent with this plan."

The zoning is Public Facilities (Urban) (PF1) with a combining zone of Alquist-Priolo Fault Hazard (G). The wastewater treatment facility is considered an Extensive Impact Civic Use which is conditionally permitted in the PF1 zoning district. This solar array micro-grid project is considered to be part of the improvements within the previous approved facility expansion (CDP-14-074) and the power generated is for the exclusive use of the wastewater treatment plant. No power will be exported off-site. The purpose of the Alquist-Priolo Fault Hazard combining zone is to implement the provisions of the Alquist-Priolo Special Studies Zones Act (Public Resource Code, Section 2621 et seq.). The "Act" applies to all projects or structures intended for human occupancy. The proposed micro-grid project is not subject to the requirements of the "Act".

The project was also reviewed by the Blue Lake Rancheria, the Bear River Band of the Rohnerville Rancheria and the Wiyot Tribe who all concurred with the study results. The study recommended that the standard condition regarding inadvertent discovery be made a condition of approval. For the solar microgrid lift project, the Tribes have recommended the inadvertent discovery protocol language to be included as a condition of approval.

The pond is man-made and no natural habitats remain on this site. However, the site is located adjacent to parks and recreation areas and environmentally sensitive habitat areas. The applicant is proposing avoidance and minimization measures for protection of nesting birds and northern red-legged frogs in order to ensure consistency with the policies of the McKinleyville Area Plan related to development in areas adjacent to sensitive habitat areas and parks and recreation areas.

MCSD is the Lead Agency under CEQA determines that the project is Categorically Exempt from CEQA based on a statement of Environmental Clearance Survey (Transterra March 11, 2021). The survey found that even though a man-made treatment pond is not protected as sensitive habitat under any existing regulatory mechanisms, it is possible that Migratory Birds may utilize the pond on a seasonal basis. Other possible wildlife would include the Sensitive Species of Concern (Northern Red Legged Frog – NRLF). According to the survey the NRLF is more likely to utilize its preferred habitat outside of the treatment plant and within the naturally occurring riparian areas in the Lower Mad River Watershed. Due to the developed nature of the project site, it is not preferred habitat for this species and a survey of the pond did not result in any observances of the NRLF in pond 5. To ensure there are no impacts to wildlife and to ensure consistency with the McKinleyville Area Coastal Plan, conditions of approval include conservation and minimization measures that require pre-construction surveys and a timed work schedule around NRLF breeding season (typically late November to early April). Accordingly, the McKinleyville Community Services District, as Lead Agency under CEQA Guidelines Section 15367, has determined that the project, as proposed and conditioned, will not have a significant effect on the environment and is exempt from environmental review. The Planning Department is a Responsible Agency under CEQA Guidelines Section 15381 and must review and consider the Notice of Exemption adopted by the Lead Agency (McKinleyville Community Services District) and determines there is sufficient evidence to support the Exemption.

Staff Recommendation: Following an on-site inspection, a review of Planning Division reference sources, and a review of comments from all involved referral agencies, Planning staff believes that the applicant has submitted evidence in support of making all of the required findings for approving the Coastal Development Permit.

Alternatives: Three (3) alternatives may be considered: 1) The Zoning Administrator could elect not to hear this item and refer the application to the Planning Commission. Any decision to place this matter before the Planning Commission must be done before opening the public hearing on this project; 2) The Zoning Administrator could elect to add or delete conditions of approval or; 3) the

Zoning Administrator could deny approval of the requested permits if unable to make all of the required findings. Planning Division staff is confident that the required findings can be made based on the submitted evidence and subject to the recommended conditions of approval. Consequently, planning staff does not recommend further consideration of these alternatives.

**RESOLUTION OF THE Zoning Administrator
OF THE COUNTY OF HUMBOLDT
Resolution Number 21-
Record Number PLN-2021-16979
Assessor's Parcel Number: 510-271-015**

Resolution by the Zoning Administrator of the County of Humboldt certifying compliance with the California Environmental Quality Act and conditionally approving the McKinleyville Community Services District Coastal Development Permit and Conditional Use Permit modification.

WHEREAS, Essential Engineering, on behalf of McKinleyville Community Services District, submitted an application on January 29, 2021 requesting approval of a modification to Coastal Development Permit and Conditional Use Permit CDP-14-074 for the development of a 64,000 square foot solar array micro-grid within the pond 5 basin on APN 510-271-015; and

WHEREAS, the McKinleyville Community Services District, as Lead Agency under the CEQA, adopted a *Notice of Exemption* (NOE) citing the Categorical Exemptions Class 1 15301(b), Class 2 15302(c).

WHEREAS, the County of Humboldt, as Responsible Agency per Section 15096 of the CEQA Guidelines, is obligated to make a CEQA determination regarding the activity that is proposed to be undertaken; and

WHEREAS, the Humboldt County Zoning Administrator held a duly noticed public hearing on May 6, 2021, and reviewed, considered, and discussed the application for a Coastal Development Permit and Conditional Use Permit modification and reviewed and considered all evidence and testimony presented at the hearing.

Now, THEREFORE BE IT RESOLVED, that the Zoning Administrator makes all the following findings:

- 1. FINDING** **Project Description:** A modification to previously approved Coastal Development Permit (CDP-14-074), to install a 65,000 sq. ft. ground mounted solar array micro-grid within the pond 5 basin of the wastewater treatment plant. The micro-grid would generate 500kW of power used by the wastewater treatment plant (WWTP). No power would be exported off-site. Work is expected to occur over a six-month period commencing in June 2021. Work hours would be Monday-Friday 7:00 a.m. to 7:00 p.m. and possibly an occasional Saturday. Vegetation removal involves the removal of bullrushes that were planted in the pond 5 basin in 2016.

EVIDENCE a) Project File: PLN-2021-16979

- 2. FINDING** **CEQA.** The proposed project is statutorily exempt from the provisions of the California Environmental Quality Act (CEQA).

EVIDENCE a) The MCSD, as Lead Agency for the project under CEQA, adopted a Notice of Exemption (NOE) citing Categorical Exemptions Class 1 15301(B), Class 2 15302(c).

b) Humboldt County, as Responsible Agency per CEQA Section 15096, considered the NOE, and finds that the NOE is adequate, that no information of substantial importance that was known at the time as described by the Project Description. All work will be conducted within the existing pond 5 basin and is considered to be negligible or no expansion of use.

c)

The proposed project site is within the fully developed McKinleyville Wastewater Treatment Management plant. The pond is man-made and no naturally occurring habitat remains on this site. Pond 5 was originally created to be a polishing wetland that includes vegetation such as dense tule and cattails. The pond will be dewatered and vegetation removed. Condition of approval number 3 incorporates avoidance and minimization measures into the project and will ensure the project will have no impact on the Northern Red-legged Frog if any of this species is present in the pond. Pond 5 could be used as a nesting site for migratory bird species. Conservation measures have been incorporated into the project. Condition of approval number 2 and will ensure the project will have no impact on avian species.

d)

The Tribes have recommended the inadvertent discovery protocol language to be included as a condition of approval.

FINDINGS FOR COASTAL DEVELOPMENT PERMIT AND CONDITIONAL USE PERMIT

3. FINDING The project, as conditioned, is consistent with the development policies of the MCAP and the County General Plan.

EVIDENCE a) The solar array microgrid is accessory to the primary use of the property which is a wastewater treatment plant. Section 3.22B of the McKinleyville Area Plan, "Wastewater Treatment Facilities" indicates that the development of a wastewater treatment facility at this site is consistent with this plan.

4. FINDING The proposed microgrid is consistent with the purposes of the existing zone in which the site is located, and conforms with all applicable standards and requirements of these regulations.

EVIDENCE a) The subject parcel has been determined to be one legal parcel as described in Coastal Development Permit CDP-14-07, approved March 19, 2015 by the Humboldt County Planning Commission.

b) The microgrid is proposed to be located within pond 5 basin which is part of the existing development footprint of the WWTP. The parcel is zoned Public Facility-urban (PF/1) and the minimum yard setbacks are:

Minimum Yard	Location of development
Front: 20 feet	580 feet
Rear: 15 feet	95 feet
Side: 20 feet	over 100 feet

c) The project is for the installation of a solar microgrid to power the wastewater treatment plant. The development is accessory to the previously approved use and within the previously approved (CDP-14-074, CUP-15-003) development footprint of the wastewater treatment facility. The wastewater treatment facility is an extensive impact civic use which is conditionally permitted in the PF zone and which has received approval of a Conditional Use Permit (CUP-15-003).

5. FINDING The solar array microgrid and the conditions under which it may be operated or maintained will not be detrimental to the public health,

safety, or welfare or materially injurious to properties or improvements in the vicinity.

- EVIDENCE** a) The project involves ground disturbance all within the existing development footprint of the wastewater treatment plant and within the confines of pond basin 5. The power generated by the microgrid will be utilized by the WWTP and provide for backup power if there is a power outage.

6. FINDING The proposed development does not reduce the residential density for any parcel below that utilized by the Department of Housing and Community Development in determining compliance with housing element law.

- EVIDENCE** a) The parcel was not included in the housing inventory of Humboldt County's 2019 Housing Element but does have the potential to support one housing unit. The approval of cannabis cultivation on this parcel will not conflict with the ability for a residence to be constructed on this parcel.

DECISION

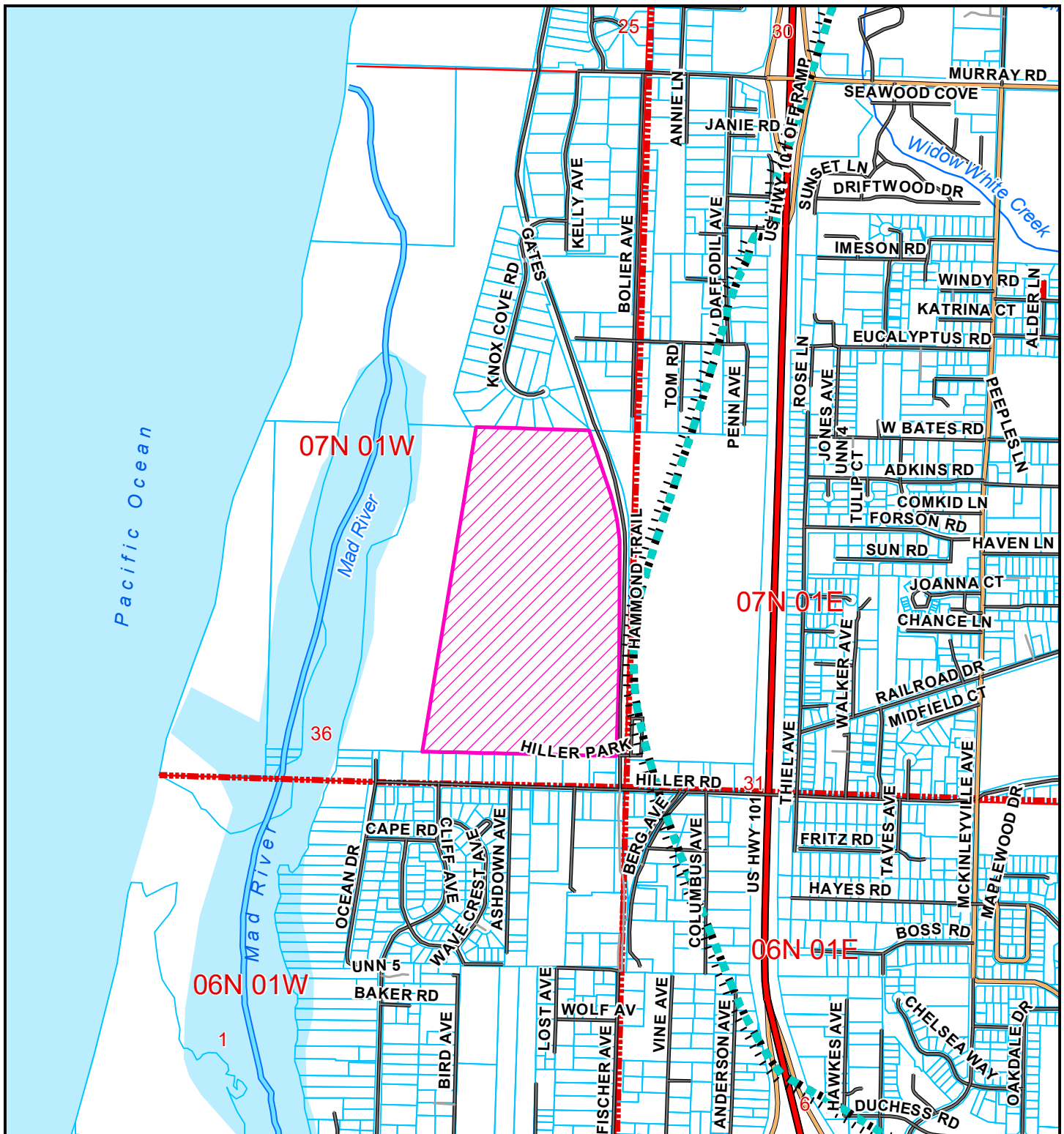
NOW, THEREFORE, based on the above findings and evidence, the Humboldt County Zoning Administrator does hereby:

- Adopt the findings set forth in this resolution; and
- Conditionally approves the modification to Coastal Development Permit and Conditional Use Permit PLN-2021-16979, based upon the Findings and Evidence and subject to the conditions of approval attached here to as Attachment 1 and incorporated herein by reference; and

Adopted after review and consideration of all the evidence on May 6, 2021.

I, John Ford, Zoning Administrator of the County of Humboldt, do hereby certify the foregoing to be a true and correct record of the action taken on the above entitled matter by said Zoning Administrator at a meeting held on the date noted above.

John H. Ford, Zoning Administrator
Planning and Building Department



LOCATION MAP

PROPOSED MCSD COASTAL DEVELOPMENT PERMIT MCKINLEYVILLE AREA

PLN-2021-16979

APN: 510-271-015


T07N R01W S36 HB&M (Arcata North)

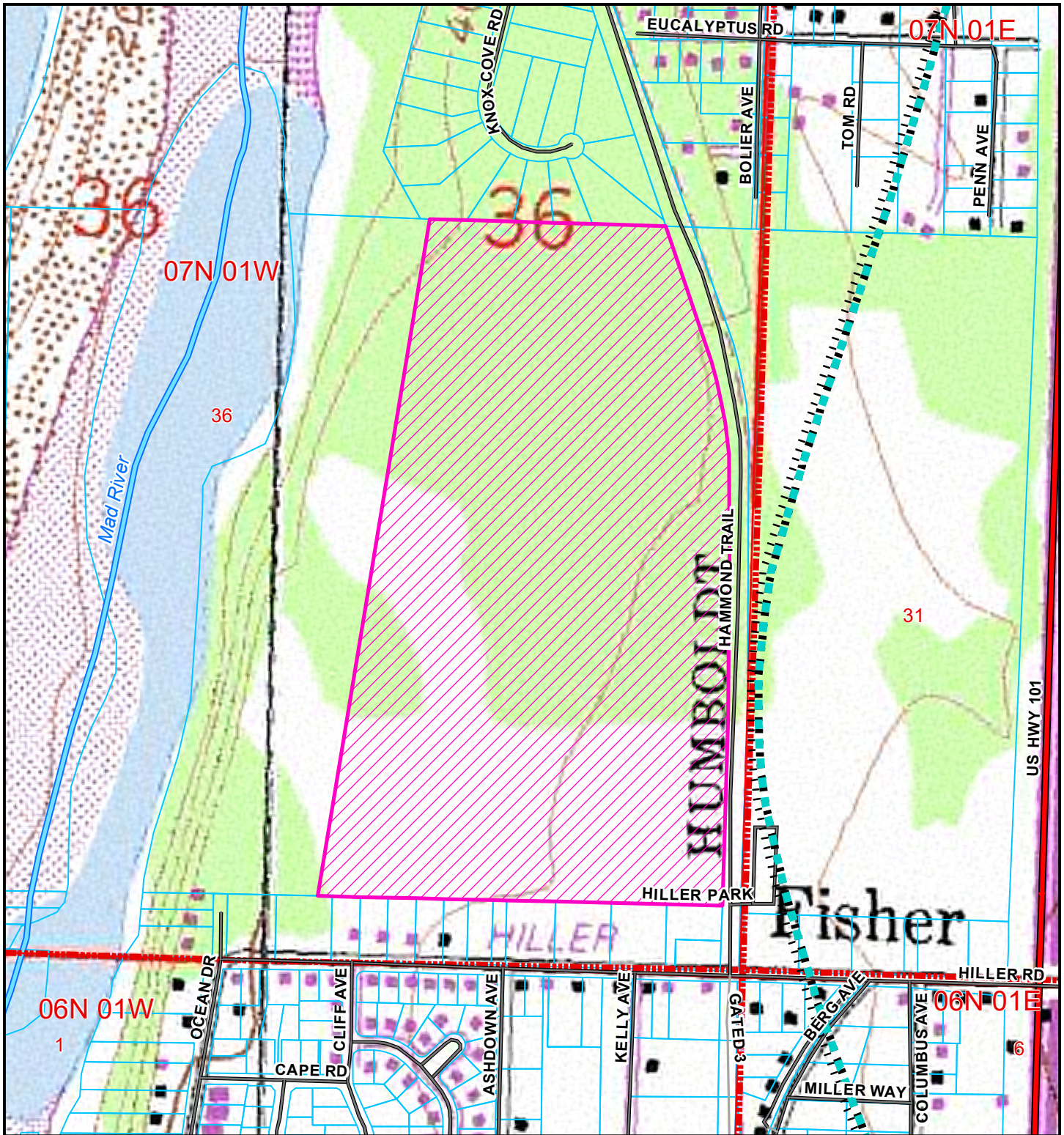
Project Area = 

Coastal Zone Boundary 

This map is intended for display purposes and should not be used for precise measurement or navigation. Data has not been completely checked for accuracy.



0 250 500 750 1,000 250
 Feet



TOPO MAP

PROPOSED MCSD COASTAL DEVELOPMENT PERMIT MCKINLEYVILLE AREA

PLN-2021-16979

APN: 510-271-015

T07N R01W S36 HB&M (Arcata North)

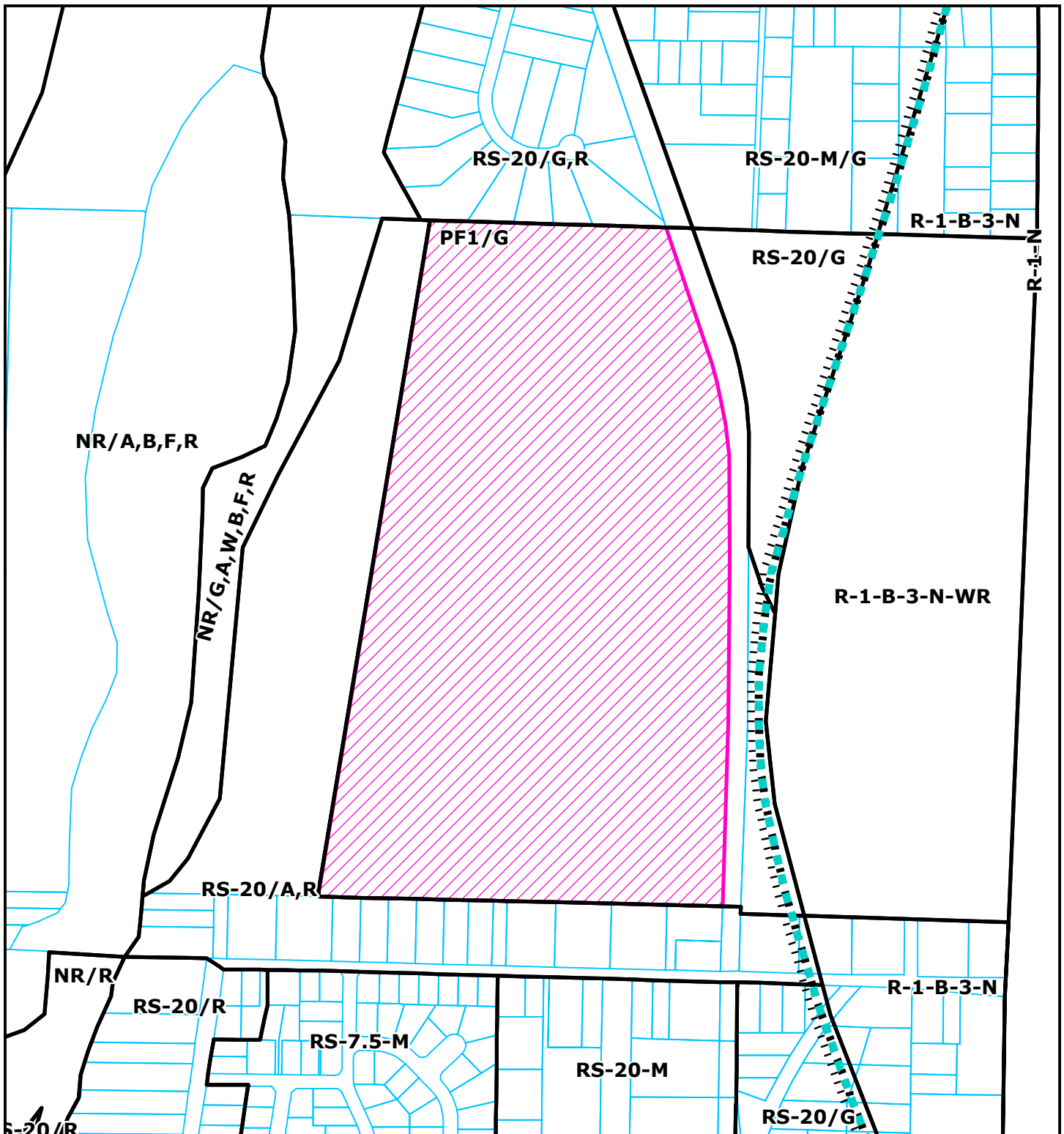
Project Area = 

Coastal Zone Boundary 

This map is intended for display purposes and should not be used for precise measurement or navigation. Data has not been completely checked for accuracy.



0 300 600 Feet



ZONING MAP

**PROPOSED MCSD
COASTAL DEVELOPMENT PERMIT
MCKINLEYVILLE AREA
PLN-2021-16979**

APN: 510-271-015

T07N R01W S36 HB&M (Arcata North)

Project Area = 

Coastal Zone Boundary 

This map is intended for display purposes and should not be used for precise measurement or navigation. Data has not been completely checked for accuracy.



0 300 600
Feet



AERIAL MAP

PROPOSED MCSD COASTAL DEVELOPMENT PERMIT MCKINLEYVILLE AREA

PLN-2021-16979

APN: 510-271-015

T07N R01W S36 HB&M (Arcata North)

Project Area = 

Coastal Zone Boundary 

This map is intended for display purposes and should not be used for precise measurement or navigation. Data has not been completely checked for accuracy.



0 100 200 300 400
Feet

Assessor's Map Bk. 510, Pg. 27
County of Humboldt, CA.

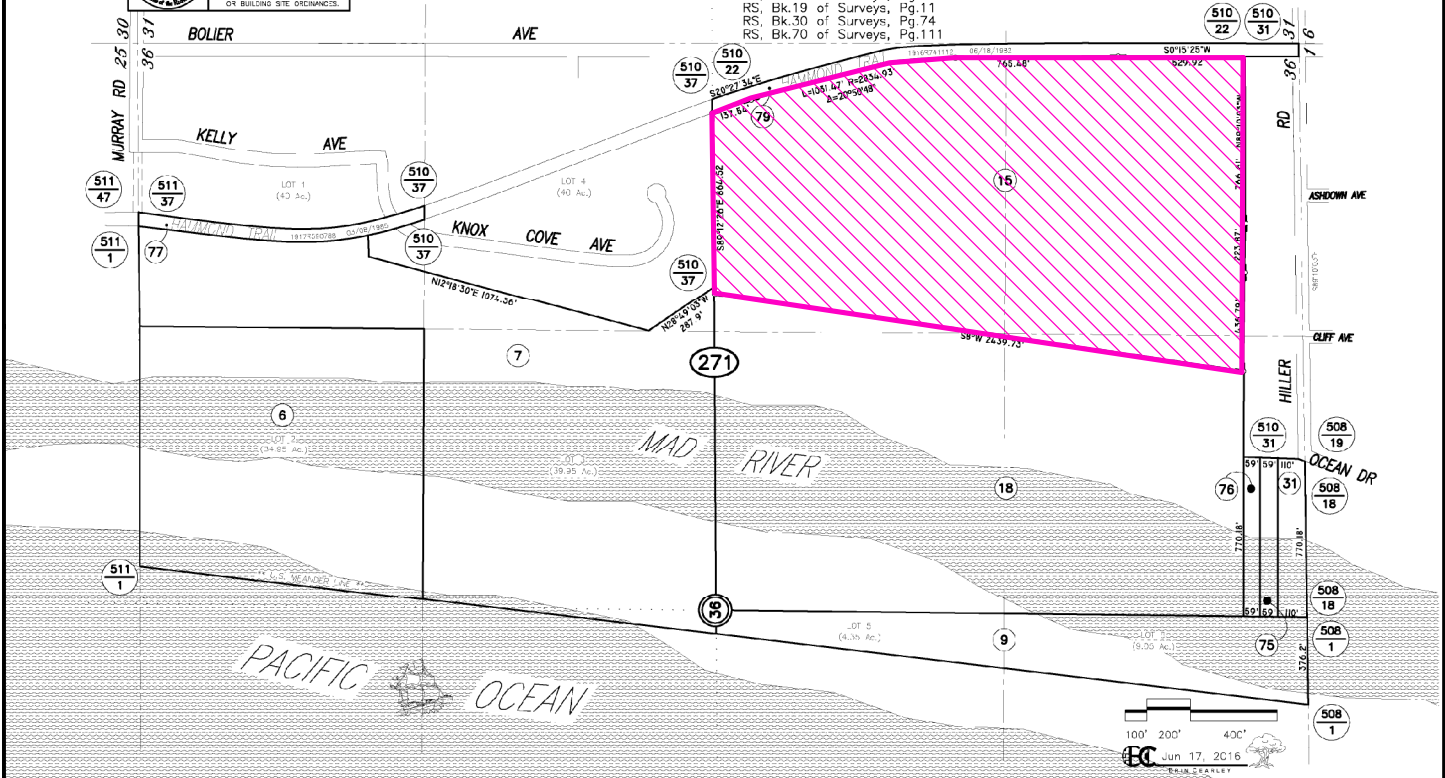
PTN SEC 36, T2N R1W, HB&M

510-27



NOTE - Assessor's Block Numbers Shown in Ellipses
Assessor's Parcel Numbers Shown in Small Circles

RS, Bk.10 of Surveys, Pg.64
RS, Bk.19 of Surveys, Pg.11
RS, Bk.30 of Surveys, Pg.74
RS, Bk.70 of Surveys, Pg.111



ASSESSOR PARCEL MAP

PROPOSED MCSD COASTAL DEVELOPMENT PERMIT MCKINLEYVILLE AREA

PLN-2021-16979

APN: 510-271-015

T07N R01W S36 HB&M (Arcata North)

Project Area =

Coastal Zone Boundary

This map is intended for display purposes and should not be used for precise measurement or navigation. Data has not been completely checked for accuracy.



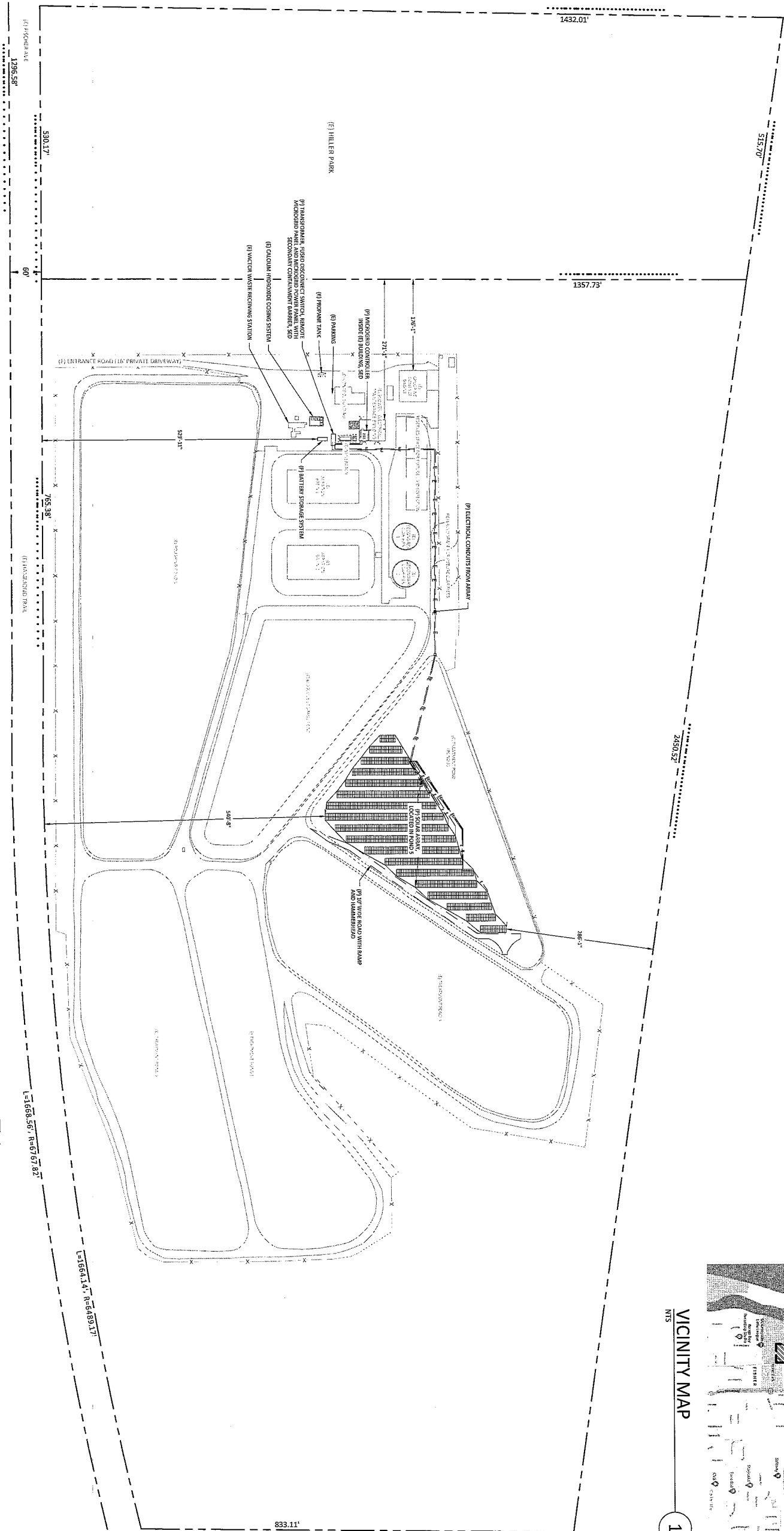
MAP NOT TO SCALE

1656 SUTTER ROAD/P.O. BOX 2037
MCKINLEYVILLE, CA 95519
(707) 839-3251
CONTACT: PAT KASPARI

1. NO SEPTIC TANKS OR LEACHFIELD ON THE WWP/P PARCEL.
2. NO WATER WELLS ON THE WWP/P PARCEL.
3. NO PROPOSED CHANGE TO EXISTING PARKING OR LOADING AREAS FOR WWP/P BUILDINGS.
4. BURLISTO IS TO BE REMOVED FROM POND 5 FOR PLACEMENT OF THE SOLAR ARRAY. NO EXISTING TREES WITHIN THE WWP/P PROPOSED WORK AREA.
5. NO EASEMENTS OF RECORD WITHIN THE WWP/P PROPOSED WORK AREA.
6. NO HAZARDOUS AREAS TO BE IMPACTED WITHIN THE WWP/P PROPOSED WORK AREA.
7. NO SENSITIVE HABITATS IDENTIFIED WITHIN THE WWP/P PROPOSED WORK AREA.
8. NO KNOWN HISTORICAL OR ARCHEOLOGICAL/PALAEONTOLOGICAL RESOURCES WITHIN THE WWP/P PROPOSED WORK AREA.
9. NO PROPOSED CHANGE TO EXISTING PARCEL LINES. EXISTING WWP/P PARCEL IS APPROXIMATELY 63.2 ACRES.

[illegible]

Essential
Engineering Services
707 AVIATION BLVD, SANTA ROSA, CA 95403
707-477-2590 RICHARD@ESSENG.NET



CDP-1

**MCKINLEYVILLE COMMUNITY
SERVICES DISTRICT**

**675 HILLER RD
MCKINLEYVILLE, CA 95519**

APN 510-271-015

MICROGRID PROJECT

**CDP APPLICATION
PLOT PLAN**

DESIGN BY: RR		
DRAWN BY: RR	REVIEWED BY: -	CLIENT PROJECT NO.: 066842000
SBMT BY: RR	PLOT DATE: January 11, 2021	
PLOT SCALE: AS SHOWN	6:37 PM	EES PROJECT NUMBER: 20003
FILE NAME: CDP_APP.DWG		

GRADING AND DRAINAGE NOTES

1. PERFORM GRADING AND DRAINAGE IMPROVEMENTS IN ACCORDANCE WITH APPLICABLE HUMBOLDT COUNTY REGULATIONS AND TO THE RECOMMENDATIONS OF THE SOILS ENGINEERING REPORT.
2. ALL WORK SHALL BE DONE IN COMPLIANCE WITH THE APPROVED PLANS AND SPECIFICATIONS. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER OF RECORD UPON DISCOVERING DISCREPANCIES, ERRORS, OR OMISSIONS IN THE PLANS. PRIOR TO PROCEEDING, THE CONTRACTOR SHALL HAVE THE PLANS REVISED TO CLARIFY IDENTIFIED DISCREPANCIES, ERRORS, OR OMISSIONS. THE APPROVED PLANS AND SPECIFICATIONS SHALL NOT BE CHANGED WITHOUT THE WRITTEN APPROVAL OF THE DISTRICT. PROPOSED MODIFICATIONS TO THE APPROVED PLANS AND SPECIFICATIONS SHALL BE SUBMITTED TO THE PERMIT AUTHORITY IN WRITING, TOGETHER WITH ALL NECESSARY TECHNICAL INFORMATION AND DESIGN DETAILS.
3. AN APPROVED COPY OF THE GRADING/DRAINAGE PLANS SHALL BE MAINTAINED ON THE PROJECT SITE BY AMERESCO THROUGHOUT THE DURATION OF CONSTRUCTION ACTIVITIES.
4. EXISTING DRAINAGE COURSES RECEIVING WATERS FROM THE SITE AND LOCATED THROUGHOUT THE SITE SHALL REMAIN OPEN AND CLEAR OF DEBRIS TO PROPERLY CONVEY STORM WATER. IF EXISTING DRAINAGE COURSES DUE TO OBSTRUCTING NATURAL DRAINAGE PATTERNS WITHIN THE AREA OF WORK FOR THIS PROJECT.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING WWP FACILITY STAFF AT LEAST TWO WORKING DAYS PRIOR TO EXCAVATION. IF PRACTICAL, THE CONTRACTOR SHALL ELUVIDATE WITH WHITE PAINT OR OTHER SUITABLE MARKINGS THE AREA TO BE EXCAVATED PRIOR TO NOTIFYING WWP STAFF. THE CONTRACTOR SHALL UNCOVER RELEVANT UTILITIES TO VERIFY THEIR LOCATION AND ELEVATION. IF UNEXPECTED OR CONFLICTING UTILITIES ARE ENCOUNTERED DURING EXCAVATION, NOTIFY THE UTILITY OWNER, AND/OR THE ENGINEER OF RECORD IMMEDIATELY. UTILITIES INCLUDE BUT ARE NOT LIMITED TO WATER, SEWER, ELECTRICAL, GAS, AND TELEPHONE.
6. IN THE EVENT CULTURAL RESOURCES (I.E., HISTORICAL, ARCHEOLOGICAL, AND PALEONTOLOGICAL RESOURCES, AND HUMAN REMAINS) ARE DISCOVERED DURING GRADING OR OTHER CONSTRUCTION ACTIVITIES, WORK SHALL IMMEDIATELY BE HALTED WITHIN THE VICINITY OF THE FIND. IF HUMAN BODILS OR HUMAN REMAINS ARE ENCOUNTERED, THE CONTRACTOR SHALL ALSO NOTIFY THE COUNTY CONSERVATOR.
7. SHOULD GRADING OPERATIONS ENCOUNTER HAZARDOUS MATERIALS, OR WHAT APPEAR TO BE HAZARDOUS MATERIALS, STOP WORK IMMEDIATELY IN THE AFFECTED AREA AND CONTACT 911 OR THE APPROPRIATE AGENCY FOR FURTHER INSTRUCTION.
8. EXCESS SOIL SHALL BE REMOVED FROM THE SITE UNLESS DIRECTED TO REMAIN ON SITE PER THE APPROVED PLAN. CONTRACTOR SHALL COORDINATE FOR MOVED VEGETATION TO BE COMPOSTED AT THE WES GREEN LANDSCAPE MANAGEMENT FACILITY IN ARCAVA, CA (OR EQUIVALENT). MIXED BIOSOLIDS THAT CANNOT BE TAKEN TO COMPOST SHALL BE HAULED TO THE LOCAL LANDFILL.
9. CONTOURS, ELEVATIONS, AND SHARES OF FINISHED SURFACES SHALL BE BLENDEN WITH ADJACENT NATURAL TERRAIN TO ACHIEVE A CONSISTENT GRADE AND NATURAL APPEARANCE. THE TOP OF CUT SLOPES SHALL BE ROUNDED OFF TO BLEND WITH THE NATURAL TERRAIN. BORDERS OF CUT SLOPES AND FILLS SHALL BE ROUNDED OFF TO A MINIMUM RADIUS OF 5 FEET TO BLEND WITH THE NATURAL TERRAIN.
10. AREAS TO BE GRADED SHOULD BE CLEARED OF VEGETATION, EXISTING STRUCTURES, AND DEBRIS. IF ANY, AFTER CLEARING, SURFACE SOILS THAT CONTAIN ORGANIC MATTER SHOULD BE STRIPPED. IN GENERAL, THE DEPTH OF REQUIRED STRIPPING MAY BE AS DEEP AS 2 FEET. DEEPER STRIPPING AND GRUBBING MAY BE REQUIRED TO REMOVE ISOLATED CONCENTRATIONS OF ORGANIC MATTER OR ROOTS. THE CLEARED MATERIALS SHOULD BE REMOVED FROM THE SITE, AS APPROPRIATE.
- AREAS TO BE RECEIVED FILL SHALL BE SCAPED TO A DEPTH OF 6 INCHES, MOISTURE CONDITIONED TO ACHIEVE OPTIMUM MOISTURE CONTENT, AND COMPACTED TO AT LEAST 90 PERCENT RELATIVE COMPACTION. FILL SHOULD BE PLACED IN LAYERS NOT EXCEEDING 12 INCHES IN LOOSE THICKNESS. MOISTURE CONDITIONED TO NEAR THE OPTIMUM MOISTURE CONTENT, AND COMPACTED TO AT LEAST 90 PERCENT RELATIVE COMPACTION.
- SELECT FILL SHOULD BE FREE OF ORGANIC MATERIAL, DEBRIS, AND/OR OTHER DELETERIOUS MATTER, CONTAIN ROCKS NO LARGER THAN 3 INCHES IN GREATEST DIMENSION, OR MORE THAN 15 PERCENT LARGER THAN 2 INCHES, AND CONFORM TO THE FOLLOWING REQUIREMENTS:
LIQUID LIMIT: LESS THAN 40 PERCENT
PLASTICITY INDEX: LESS THAN 15 PERCENT
PERCENT PASSING NO. 200 SIEVE: 50 (MAXIMUM), 5 (MINIMUM)
11. FILLS INTENDED TO SUPPORT STRUCTURES OR SURCHARGES SHALL BE COMPACTED AS DIRECTED BY THE GEOTECHNICAL ENGINEER. CONTRACTOR TO COORDINATE WITH THE SOILS ENGINEER.
12. SOILS SHALL BE PREPARED AND COMPACTED TO THE DENSITY NECESSARY FOR THE INTENDED USE AS DIRECTED BY THE SOILS ENGINEER. SEE THE GEOTECHNICAL RECOMMENDATIONS FOR MORE INFORMATION. A REPRESENTATIVE SECTION HAS BEEN SHOWN ON 4/CSD.0 FOR REFERENCE. CONTRACTOR SHALL FOLLOW GEOTECHNICAL RECOMMENDATIONS FOR ALL SITE PREPARATION AND FILL PLACEMENT ACTIVITIES.
13. ROCK PLACEMENT SHALL ALLOW FOR SLOPES AWAY FROM THE ACCESS ROAD TO ALLOW FOR ANY CONCENTRATED SURFACE FLOWS AND SUBSURFACE SEWAGE TO MOVE AWAY FROM THE PROPOSED RAMP AND ROAD.

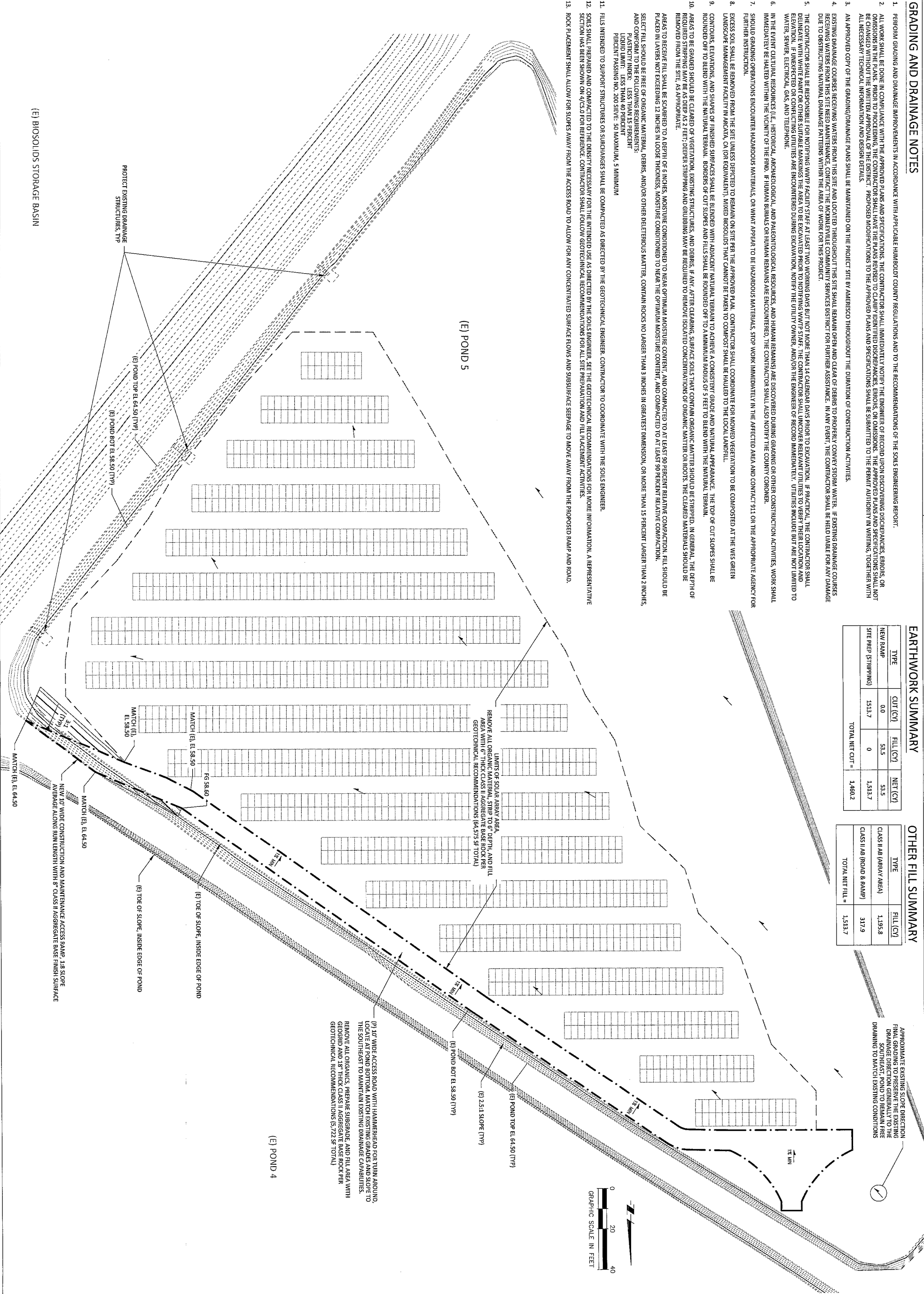
EARTHWORK SUMMARY

TYPE	CUT (CY)	FILL (CY)	NET (CY)
NEW RAMP	0.0	53.5	53.5
SITE PREP (STRIPPING)	1513.7	0	1,513.7
TOTAL NET CUT =			1,460.2

OTHER FILL SUMMARY

TYPE	FILL (CY)
CLASS II AB (ARRAY AREA)	1,195.8
CLASS II AB (ROAD & RAMP)	317.9
TOTAL NET FILL =	1,513.7

APPROXIMATE EXISTING SLOPE DIRECTION
FINAL GRADING TO PRESERVE THE EXISTING
DRAINAGE DIRECTION GENERALLY TO THE
SOUTHEAST. POND TO REMAIN FREE
DRAINING TO MATCH EXISTING CONDITIONS



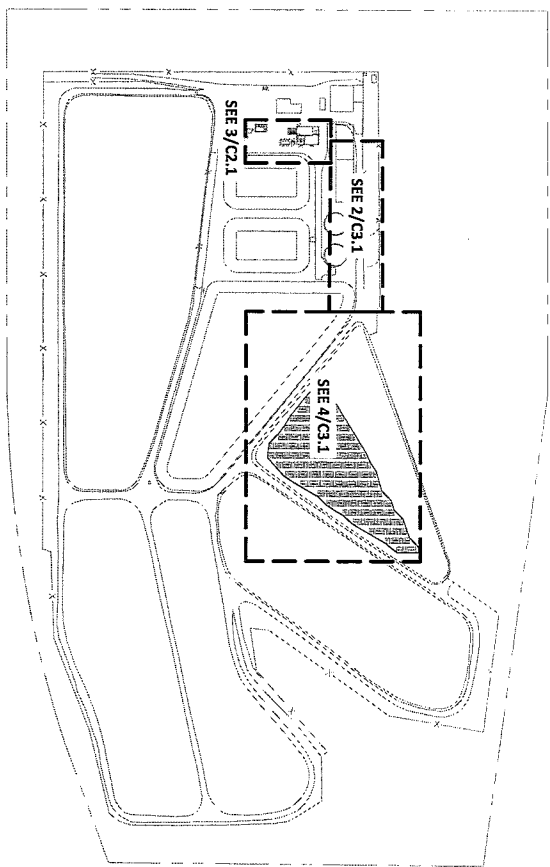
DESIGN BY:	RR	REVIEWED BY:	RR	CLIENT PROJECT NO.:	095842000
DRAWN BY:	RR	PLOT DATE:	December 11, 2020	EES PROJECT NUMBER:	20003
SBMT BY:	RR	PLOT SCALE:	1" = 20'	FILE NAME:	CIVIL.DWG
REV	DATE	DESCRIPTION			
B	12/11/20	90% ARRAY SUBMITTAL FOR MCSO REVIEW AND COMMENT			
A	10/22/20	80% ARRAY + 30% BATTERY SUBMITTAL FOR MCSO REVIEW AND COMMENT			

AMERESCO
Essential Engineering Services
707 AVIATION BLVD, SANTA ROSA, CA 95403
707-477-2590 RICHARD@ESSENG.NET

MICROGRID PROJECT	GRADING PLAN
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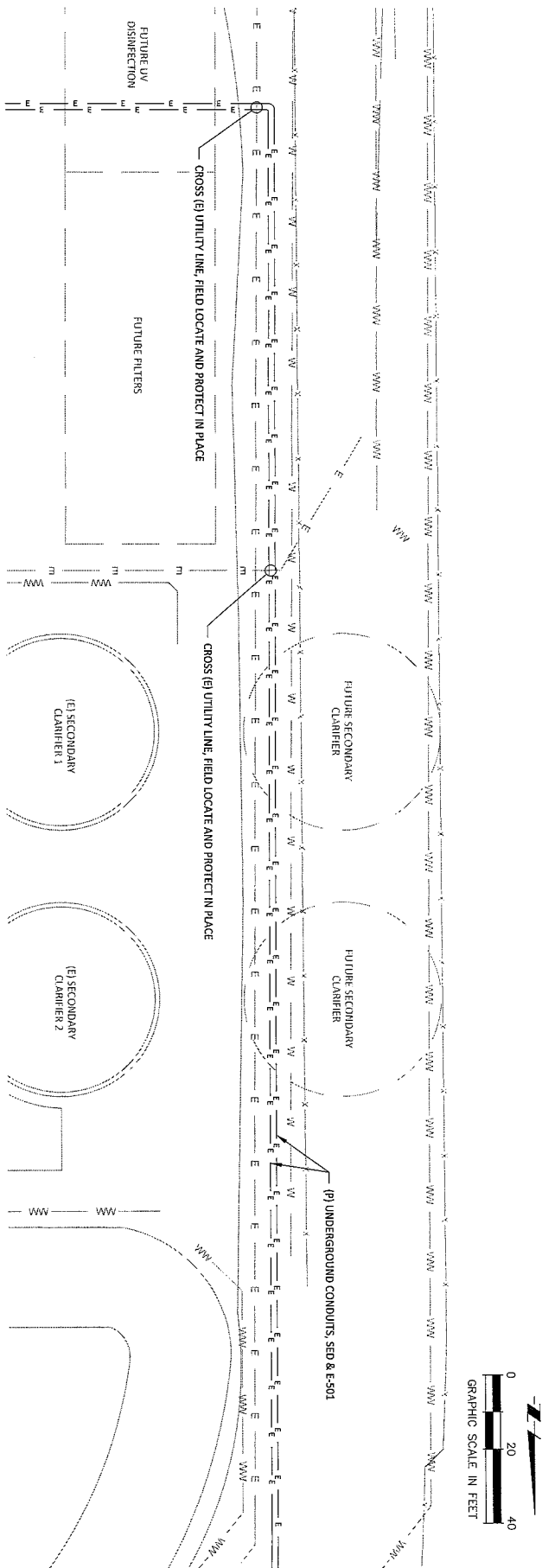
MCKINLEYVILLE COMMUNITY SERVICES DISTRICT
675 HILLER RD
MCKINLEYVILLE, CA 95519
APN 510-271-015

C3.0



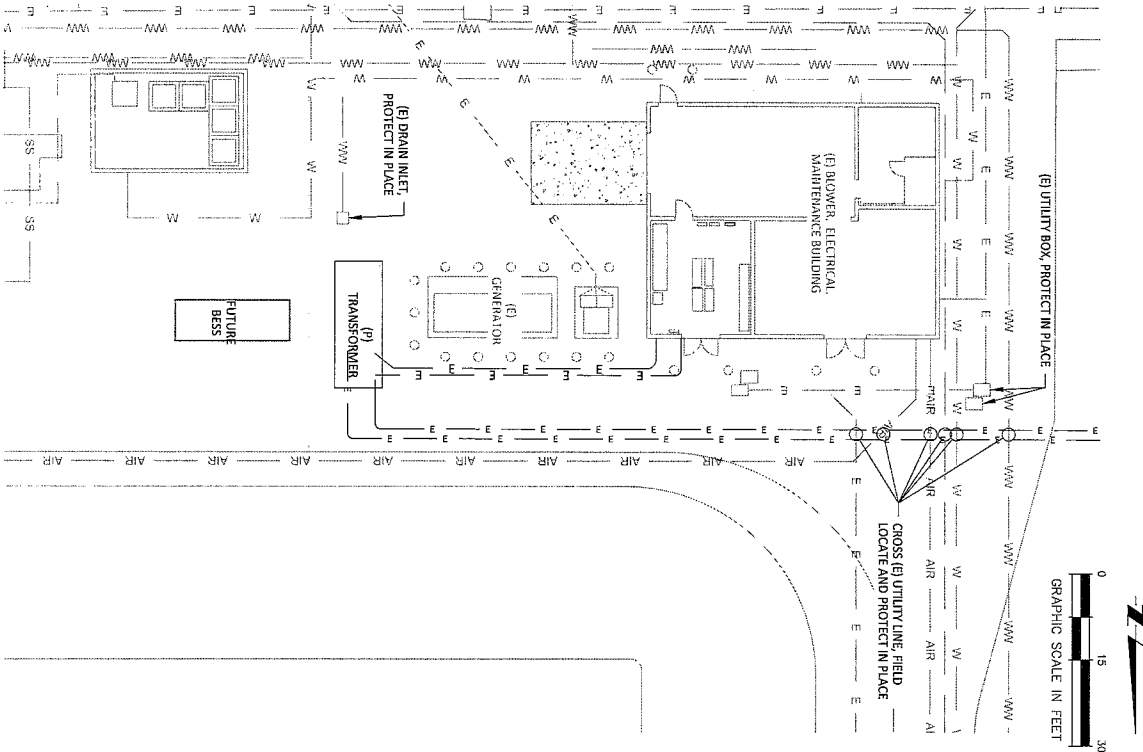
KEY MAP

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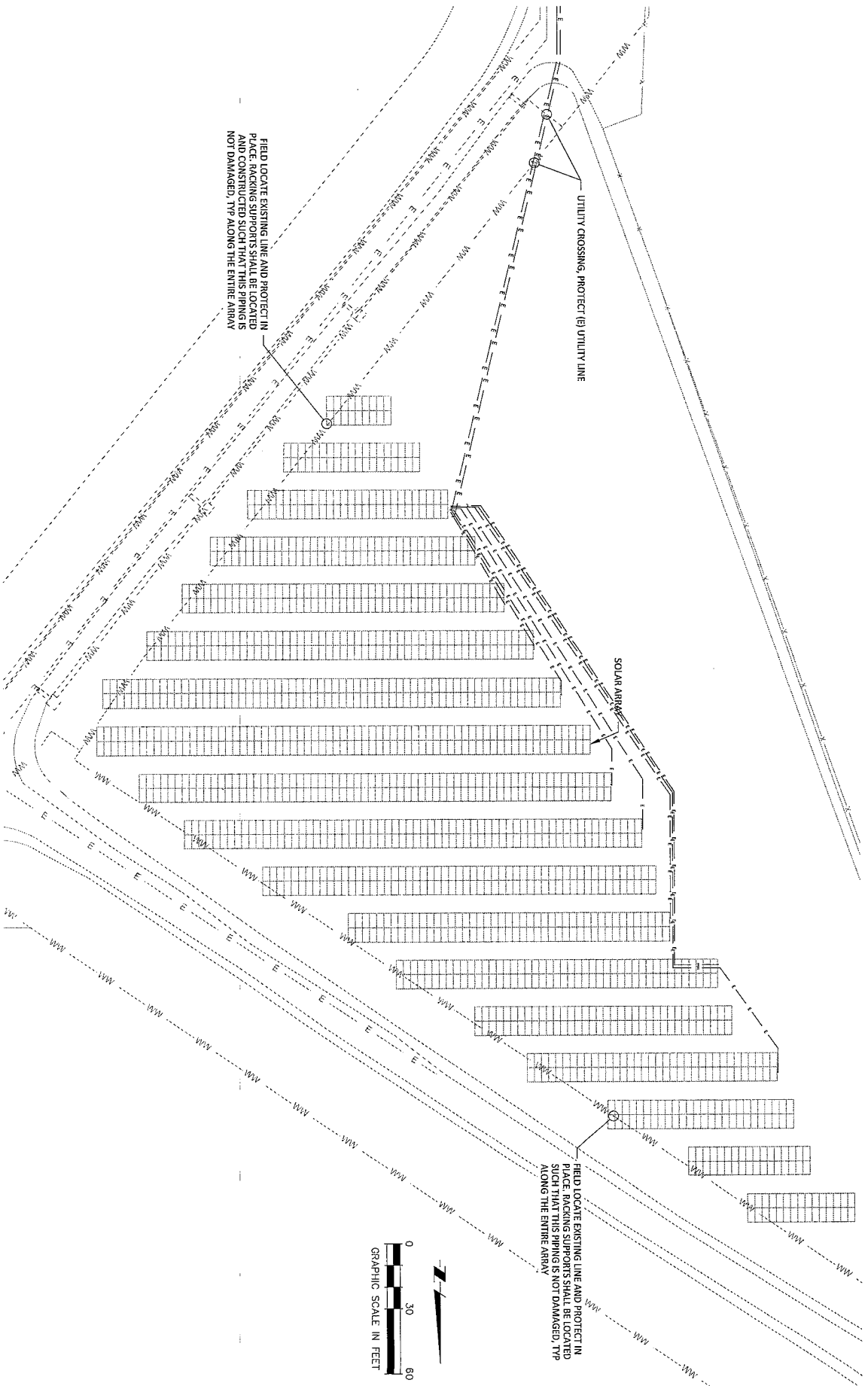
UTILITY PROTECTION PLAN

2



UTILITY PROTECTION PLAN

3



UTILITY PROTECTION PLAN

4

REV	DATE	DESCRIPTION
B	12/11/20	80% ARRAY SUBMITTAL FOR MCSO REVIEW AND COMMENT
A	10/29/20	60% ARRAY + 30% BATTERY SUBMITTAL FOR MCSO REVIEW AND COMMENT

AMERESCO

Essential
Engineering Services

707 AVIATION BLVD, SANTA ROSA, CA 95403
707-477-2590 RICHARD@ESSENG.NET

DESIGN BY: RR	REVIEWED BY:	CLIENT PROJECT NO.: 066842000
DRAWN BY: RR	PLOT DATE: December 11, 2020	EES PROJECT NUMBER: 20003
SBMT BY: RR	PLOT SCALE: AS SHOWN	FILE NAME: CIVIL.DWG

MICROGRID PROJECT

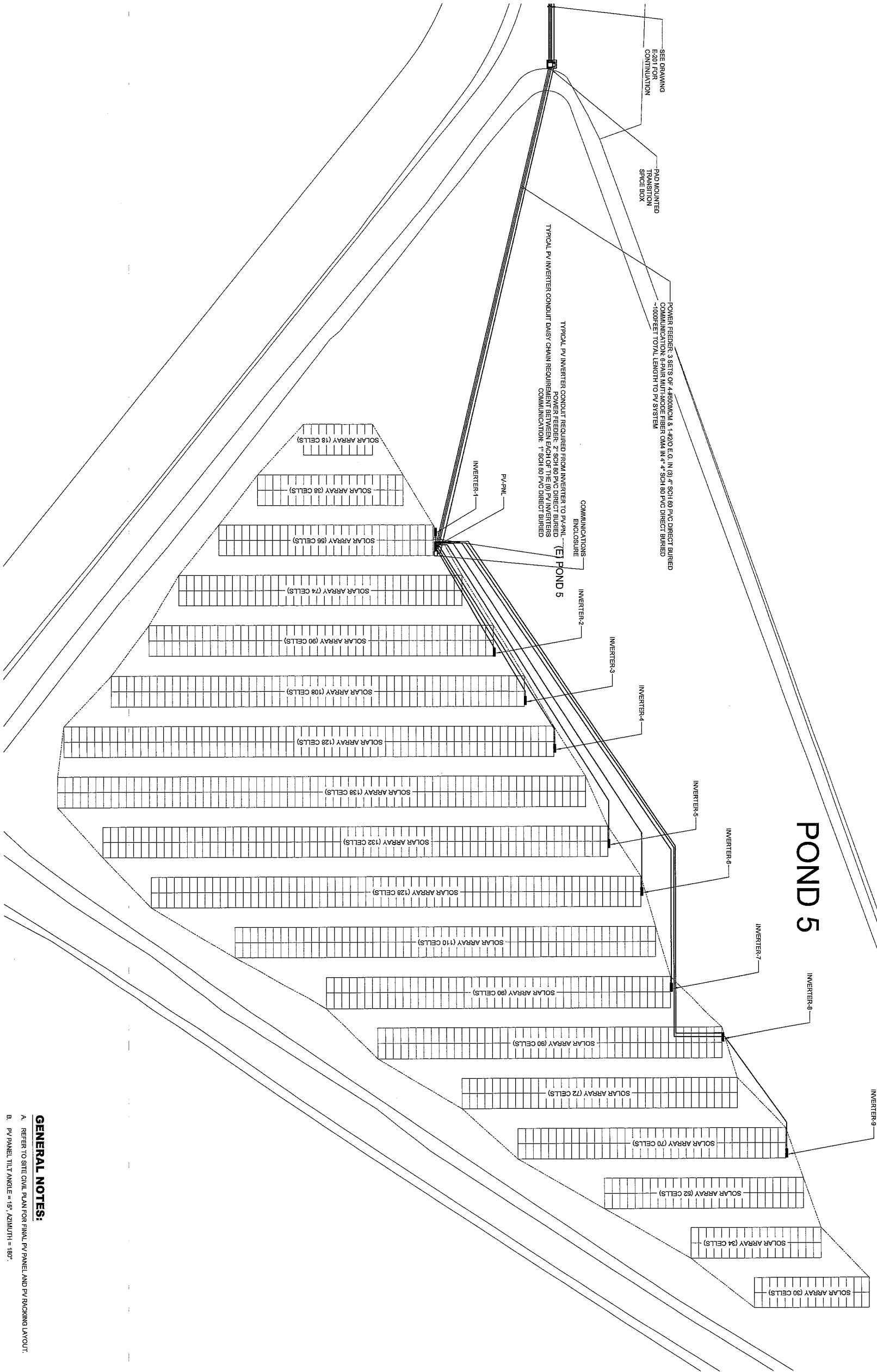
UNDERGROUND UTILITY PLAN

MCKINLEYVILLE COMMUNITY SERVICES DISTRICT

675 HILLER RD
MCKINLEYVILLE, CA 95519

APN 510-271-015

C3.1



POND 5

GENERAL NOTES:

- A. REFER TO SITE CIVIL PLAN FOR FINAL PV PANEL AND PV RACKING LAYOUT.
- B. PV PANEL TILT ANGLE = 16°, AZIMUTH = 180°
- C. PV INVERTERS SHALL BE MOUNTED TO END OF PV RACKING UTILIZING ALUMINUM STRUT CHANNEL AS NECESSARY.



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Combined Heat & Power,
Energy, Mechanical and
Electrical - Consultants

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CLIENT INFORMATION

AMERESCO
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(508) 661-2200

REVISIONS

NO.	DATE	DESCRIPTION
A	10/22/2020	60% PV SYSTEM, 50% BATTERY STORAGE
B	12/11/2020	90% PV SYSTEM, FUTURE BATTERY STORAGE

MCKINLEYVILLE COMMUNITY
SERVICES DISTRICT
PV AND ENERGY STORAGE
MICROGRID
675 HILLER ROAD
MCKINLEYVILLE, CA

PROJECT NAME

SCALE

ELECTRICAL PV SYSTEM
LAYOUT PLAN

DRAWING TITLE

SHEET & SUBMITTEE

DATE: 01/20/2020

PROJECT NO.: 20104

DRAWING NO.: IEC

CHK BY: AYC

INVO NO:

E-202.00

CADD FILE NAME: 41

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ADDITIONAL INFORMATION

STORAGE

1

KINLEYVILLE

DIAGRAM

CADO I
f:

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COORDINATE INS

LEGEND

— SWITCHGEAR

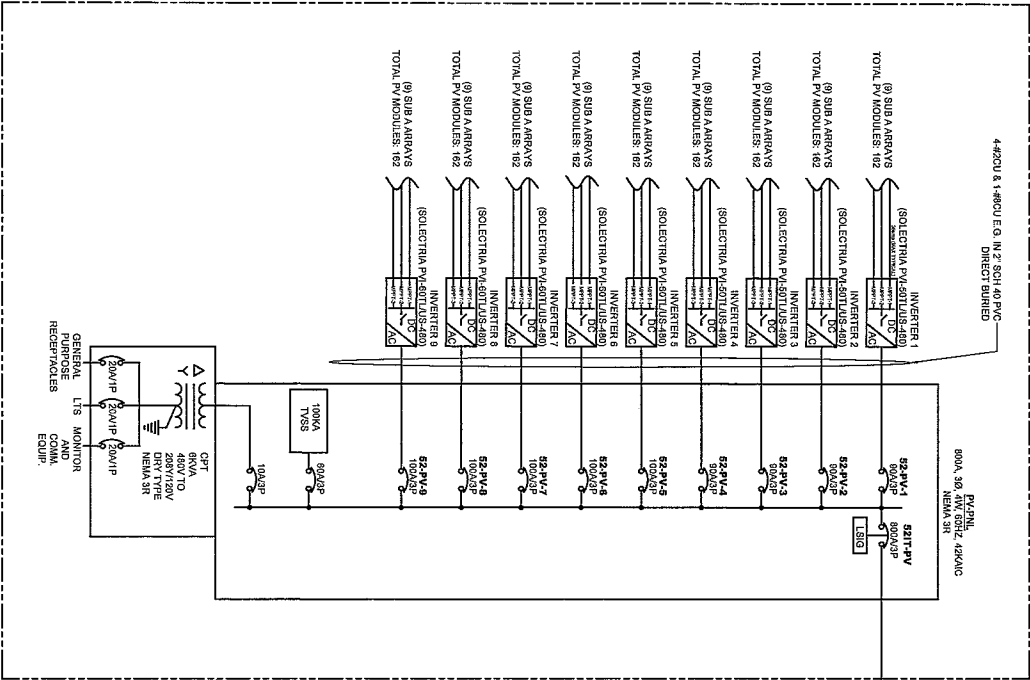
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GNOTES:

- ALL BE COPPER 6001

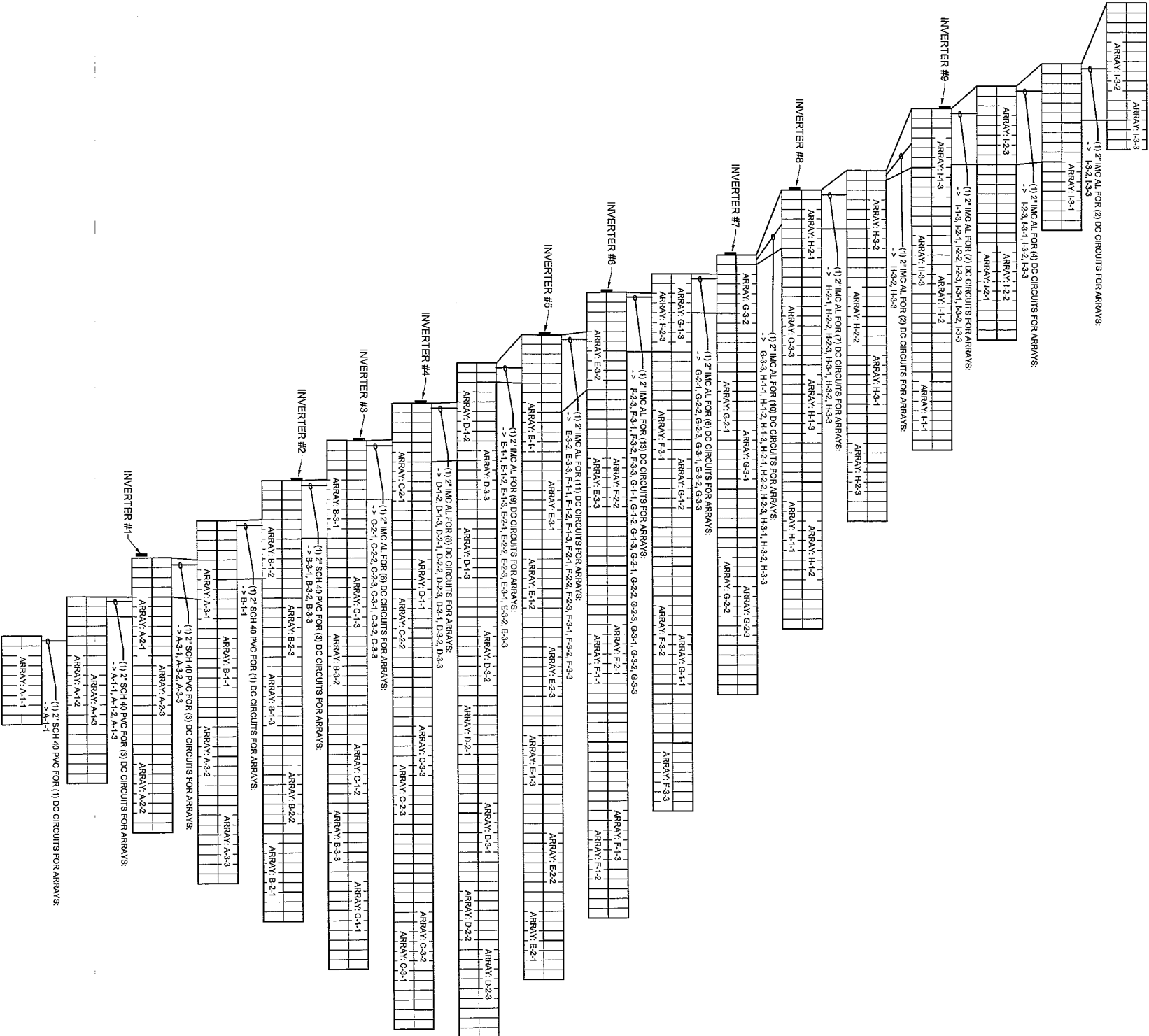
DAD (KVA)

NEW PV SOLAR SYSTEM
INVERTER QTY: (4) x 50 kW
DC VOLTAGE: 480V
DC VOLTAGE PER SUB ARRAY = 160V
DC VOLTAGE PER SUB ARRAY = 160V
DC VOLTAGE PER SUB ARRAY = 160V
QTY OF PV MODULES: 144



DC Voltage Drop Calculations

Inverter ID	Array ID	Chas Size (AWG)	Total length	DC Amps @ V	Nominal V @ DC	Voltage Drop	Voltage drop %	Voltage at inverter
1	A-11	12	231	9.6	750.6	3.41	0.45%	747.19
	A-12	12	227	9.6	750.6	3.41	0.45%	747.19
	A-13	12	227	9.6	750.6	3.46	0.46%	747.14
	A-21	12	137	9.6	750.6	2.08	0.28%	748.51
	A-22	12	204	9.6	750.6	3.11	0.41%	747.49
2	A-31	12	164	9.6	750.6	2.29	0.30%	748.31
	A-32	12	155	9.6	750.6	1.60	0.21%	749.00
	A-33	12	208	9.6	750.6	3.05	0.41%	747.55
	B-21	12	231	9.6	750.6	3.32	0.44%	747.28
	B-22	12	231	9.6	750.6	3.32	0.44%	747.28
3	B-31	12	79	9.6	750.6	1.20	0.16%	749.40
	B-32	12	101	9.6	750.6	1.55	0.21%	749.04
	B-33	12	228	9.6	750.6	3.36	0.45%	747.24
	C-21	12	228	9.6	750.6	4.40	0.59%	745.19
	C-22	12	171	9.6	750.6	2.61	0.35%	747.99
4	B-31	12	101	9.6	750.6	1.57	0.21%	749.03
	B-32	12	221	9.6	750.6	3.37	0.45%	747.23
	B-33	12	340	9.6	750.6	5.10	0.68%	745.02
	C-31	12	367	9.6	750.6	5.39	0.73%	744.61
	C-32	12	288	9.6	750.6	4.39	0.59%	746.01
5	C-31	12	110	9.6	750.6	2.59	0.35%	748.01
	C-32	12	108	9.6	750.6	1.85	0.25%	748.55
	C-33	12	225	9.6	750.6	3.45	0.46%	747.15
	D-31	12	344	9.6	750.6	5.24	0.70%	745.36
	D-32	12	449	9.6	750.6	6.84	0.91%	743.76
6	C-31	12	450	9.6	750.6	6.80	0.91%	743.76
	C-32	12	450	9.6	750.6	6.80	0.91%	743.76
	C-33	12	322	9.6	750.6	5.06	0.67%	745.54
	D-31	12	174	9.6	750.6	2.65	0.35%	747.95
	D-32	12	174	9.6	750.6	2.65	0.35%	747.95
7	D-31	12	137	9.6	750.6	2.05	0.28%	748.51
	D-32	12	255	9.6	750.6	3.88	0.52%	746.71
	D-33	12	372	9.6	750.6	5.60	0.75%	744.91
	E-31	12	486	9.6	750.6	7.10	0.95%	741.99
	E-32	12	453	9.6	750.6	6.01	0.80%	747.89
8	E-31	12	335	9.6	750.6	5.11	0.68%	745.49
	E-32	12	155	9.6	750.6	2.35	0.31%	748.24
	E-33	12	141	9.6	750.6	2.16	0.29%	748.44
	F-31	12	259	9.6	750.6	3.55	0.47%	746.65
	F-32	12	337	9.6	750.6	5.14	0.68%	745.46
9	F-31	12	453	9.6	750.6	6.94	0.93%	743.66
	F-32	12	480	9.6	750.6	7.13	0.95%	743.47
	F-33	12	330	9.6	750.6	5.34	0.71%	745.26
	G-31	12	222	9.6	750.6	3.54	0.47%	747.06
	G-32	12	146	9.6	750.6	2.23	0.29%	748.37
10	G-31	12	238	9.6	750.6	3.61	0.48%	746.97
	G-32	12	238	9.6	750.6	3.61	0.48%	746.97
	G-33	12	356	9.6	750.6	5.43	0.73%	745.17
	H-31	12	430	9.6	750.6	6.50	0.87%	744.04
	H-32	12	430	9.6	750.6	6.50	0.87%	744.04
11	H-31	12	179	9.6	750.6	1.97	0.26%	748.63
	H-32	12	246	9.6	750.6	3.25	0.43%	745.35
	H-33	12	354	9.6	750.6	5.55	0.75%	745.05
	I-31	12	239	9.6	750.6	3.83	0.51%	746.77
	I-32	12	356	9.6	750.6	5.43	0.73%	745.17
12	I-31	12	376	9.6	750.6	5.43	0.73%	745.17
	I-32	12	292	9.6	750.6	4.45	0.59%	746.15
	I-33	12	174	9.6	750.6	2.65	0.35%	747.95
	J-31	12	238	9.6	750.6	3.61	0.48%	746.97
	J-32	12	238	9.6	750.6	3.61	0.48%	746.97
13	J-31	12	318	9.6	750.6	4.85	0.65%	745.15
	J-32	12	336	9.6	750.6	5.12	0.68%	744.88
	J-33	12	252	9.6	750.6	3.24	0.43%	745.76
	K-31	12	166	9.6	750.6	2.33	0.31%	748.07
	K-32	12	166	9.6	750.6	2.33	0.31%	748.07
14	K-31	12	230	9.6	750.6	3.51	0.47%	747.11
	K-32	12	230	9.6	750.6	3.51	0.47%	747.11
	K-33	12	312	9.6	750.6	4.76	0.63%	745.84
	L-31	12	294	9.6	750.6	4.33	0.58%	746.27
	L-32	12	294	9.6	750.6	4.33	0.58%	746.27
15	L-31	12	250	9.6	750.6	3.81	0.51%	746.19
	L-32	12	250	9.6	750.6	3.81	0.51%	746.19
	L-33	12	286	9.6	750.6	4.56	0.61%	745.44
	M-31	12	245	9.6	750.6	3.74	0.50%	746.86
	M-32	12	197	9.6	750.6	3.01	0.40%	747.59
16	M-31	12	79	9.6	750.6	1.21	0.16%	749.39
	M-32	12	79	9.6	750.6	1.21	0.16%	749.39
	M-33	12	216	9.6	750.6	3.29	0.44%	747.11
	N-31	12	230	9.6	750.6	3.51	0.47%	747.09
	N-32	12	168	9.6	750.6	2.56	0.34%	748.04
17	N-31	12	212	9.6	750.6	3.23	0.43%	747.37
	N-32	12	244	9.6	750.6	3.72	0.50%	746.88
	N-33	12	256	9.6	750.6	3.90	0.52%	746.70
	O-31	12	256	9.6	750.6	3.90	0.52%	746.70
	O-32	12	256	9.6	750.6	3.90	0.52%	746.70



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Energy, Mechanical and
Electrical - Consultants

CLIENT INFORMATION

111 Speen Street, Suite 410
Framingham, MA 01701
(508) 661-2200

NO.	DATE	DESCRIPTION
A	10/22/2020	60% PV SYSTEM, 30% BATTERY STORAGE
B	12/11/2020	90% PV SYSTEM, FUTURE BATTERY STORAGE

MCKINLEYVILLE COMMUNITY SERVICES DISTRICT
PV AND ENERGY STORAGE MICROGRID
675 HILLER ROAD
MCKINLEYVILLE, CA

PROJECT NAME
SCALE
PHASE
PV SYSTEM - DC CIRCUIT DIAGRAM

DRAWING TITLE

DATE: 11/10/2020
PROJECT NO.: 20104
DRAWING BY: BEC
CHECK BY: ABC
DWG NO.: E-307.00
CROSS FILE NO.: 14

ATTACHMENT 1 RECOMMENDED CONDITIONS OF APPROVAL

Approval of the Coastal Development Permit modification is conditioned upon the following terms and requirements which must be fulfilled before the use is initiated.

1. The project shall be constructed and operated in substantial conformance with the project description, the statement of Environmental Clearance (Transterra, March 11, 2021), and these Conditions of Approval.
2. Vegetation clearing, and construction activities shall not occur within the bird breeding season (March 1st – August 31st). If work must be conducted during the bird nesting season, within 14 days of the start of construction activities, a qualified biologist shall thoroughly survey the project footprint and within 300 feet of the project footprint boundaries. Construction activities shall avoid nest sites within the project footprint and in consultation with a qualified biologist, these nest sites shall be flagged and avoided until the qualified biologist determines that the young have fledged, or nesting activity has ceased. If nests are documented outside the construction footprint, but within 300 feet of the construction area, buffers will be implemented if deemed appropriate. A buffer for common species is three (3) feet, the buffer for sensitive species is 300 feet, and the buffer for raptors is 500 feet. If development activities lapse for 15 days or longer, supplemental avian surveys shall be conducted within 7 days of recommencement of construction activities.
3. Dewatering, vegetation clearing, and grading activities dewatering shall not be conducted during the Northern Red Legged Frog (NRLF) breeding season (November 1 to March 31). Prior to dewatering, vegetation removal and ground disturbance Outside of the NRLF breeding season, no more than one week prior to the commencement of dewatering, vegetation clearing, and ground disturbance, a pre-construction survey for Northern Red-legged Frog shall be conducted by a qualified biologist. The survey shall include areas of work impact located within 50 feet of suitable Norther Red-legged Frog habitat (e.g., pools, riparian areas, damp meadows). If frogs are present, they shall be relocated to a suitable habitat.
4. Work hours shall be limited to Monday-Friday 7:00 a.m. to 7:00 p.m. and possibly an occasional Saturday.
5. If cultural resources are encountered during construction activities, the contractor on site shall cease all work in the immediate area and within a 50-foot buffer of the discovery location. A qualified archaeologist as well as the appropriate Tribal Historic Preservation Officer(s) are to be contacted to evaluate the discovery and, in consultation with the applicant and lead agency, develop a treatment plan in any instance where significant impacts cannot be avoided.

The Native American Heritage Commission (NAHC) can provide information regarding the appropriate Tribal point(s) of contact for a specific area; the NAHC can be reached at 916-653-4082. Prehistoric materials may include obsidian or chert flakes, tools, locally darkened midden soils, groundstone artifacts, shellfish or faunal remains, and human burials. If human remains are found, California Health and Safety Code 7050.5 requires that the County Coroner be contacted immediately at 707-445-7242. If the Coroner determines the remains to be Native American, the NAHC will then be contacted by the Coroner to determine appropriate treatment of the remains pursuant to PRC 5097.98. Violators shall be prosecuted in accordance with PRC Section 5097.99.

The applicant is responsible for ensuring compliance with this condition.

On-going Requirements/Development Restrictions Which Must be Satisfied for the Life of the Project:

1. Changes to the project, other than Minor Deviations to the Plot Plan as provided in Section 312-11.1 of the Humboldt County Code, shall require modification to the approved Coastal Development Permit.

Informational Notes:

1. The applicant is responsible for receiving all necessary permits and/or approvals from other state and local agencies.
2. This permit shall expire and become null and void at the expiration of one (1) year after all appeal periods have lapsed (see "Effective Date"); except where construction under a valid building permit or use in reliance on the permit has commenced prior to such anniversary date. The period within which construction or use must be commenced may be extended as provided by Section 312-11.3 of the Humboldt County Code.

ATTACHMENT 2

Applicant's Evidence In Support of the Required Findings

Attachment 3 includes a listing of all written evidence which has been submitted by the applicant in support of making the required findings. The following materials are on file with the Planning Division:

- Application Form [in file]
- Plot Plan/Tentative Map Checklist [in file]
- Transterra statement of Environmental Clearance [in file]
- Notice of Exemption [in file]

ATTACHMENT 3

Referral Agency Comments and Recommendation

Referral Agency	Response	Recommendation	Attached	On File
County Building Inspection Division	✓	Approval		✓
Department of Public Works	✓	Comments – does not affect any DPW maintained facilities		✓
Division of Environmental Health	✓	Approval		✓
McKinleyville Community Services District	✓	Approval		✓
California Coastal Commission	✓	No comment		
Blue Lake Rancheria	✓	Conditional Approval		✓
Wiyot Tribe	✓	Conditional Approval		✓
Bear River Band of the Rohnerville Rancheria	✓	Conditional Approval		✓