

#### electronic submittal



## **Technical Memorandum**

DATE:	February 16, 2021	PROJECT: 10-
TO:	Mr. Jason Smith, Teichert Aggregates (JSmith@teichert.com)	
FROM:	Till Angermann, Principal Hydrogeologist	
SUBJECT:	MINOR RECLAMATION MODIFICATION TEICHERT'S SCHWARZGRUBER PROPERTY, WOODLAND, YOLO CO	DUNTY

Luhdorff & Scalmanini Consulting Engineers (LSCE) previously evaluated potential effects of planned mining and reclamation activities at Teichert's Schwarzgruber property on groundwater levels and flow (LSCE 2011). The modifications in the revised reclamation plan (Exhibit A) do not affect any of the conclusions set forth in the previous evaluation.

#### References

Luhdorff and Scalmanini Consulting Engineers. 2011. Groundwater Conditions in the Vicinity of Planned Wet-Pit Mining Operations, Schwarzgruber Property. Report. April 25, 2011. LSCE file 10-1-074.

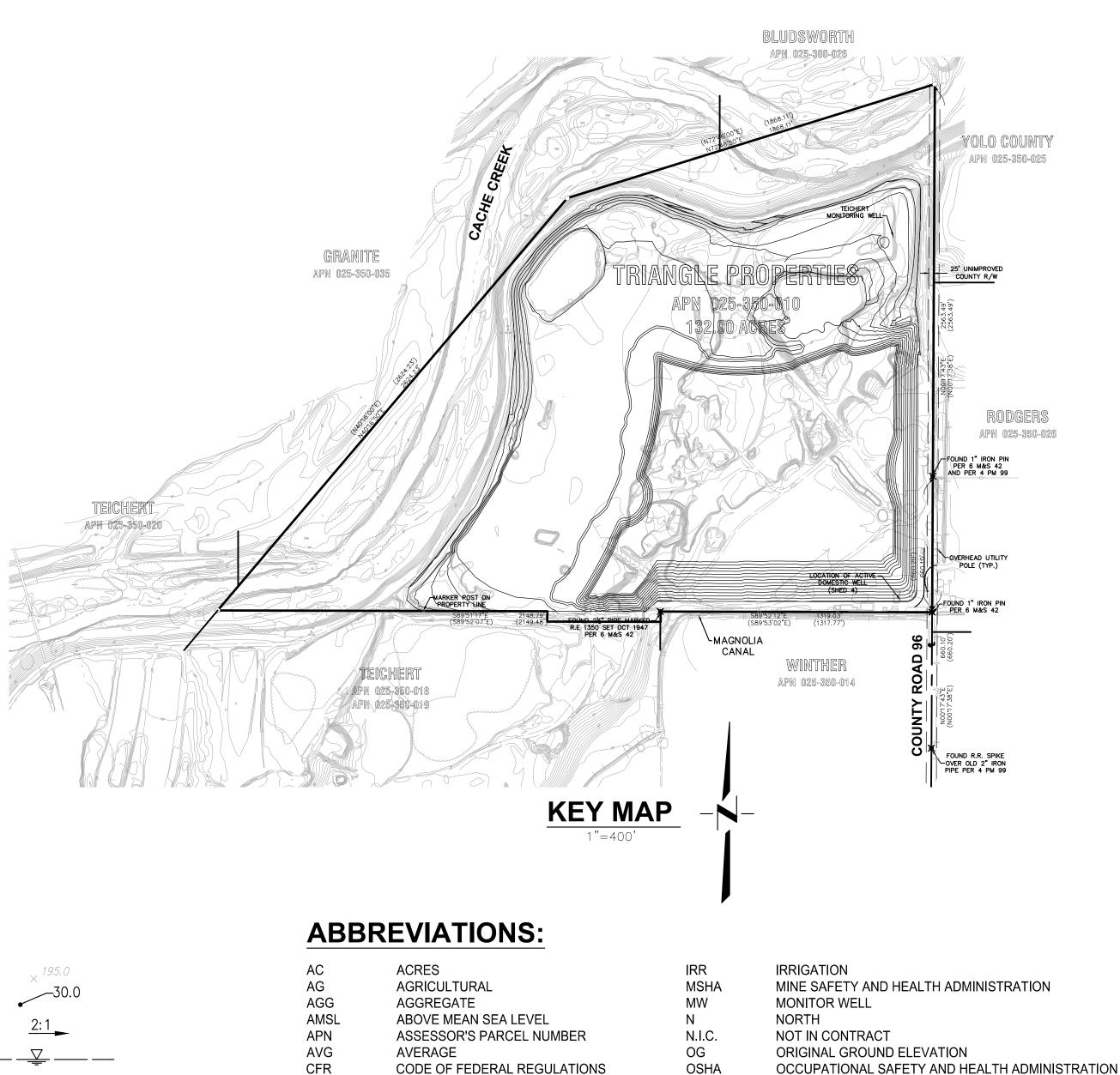
#### Exhibit

Exhibit A Conceptual Off-Channel Reclamation Plan – Schwarzgruber Property (January 2021)

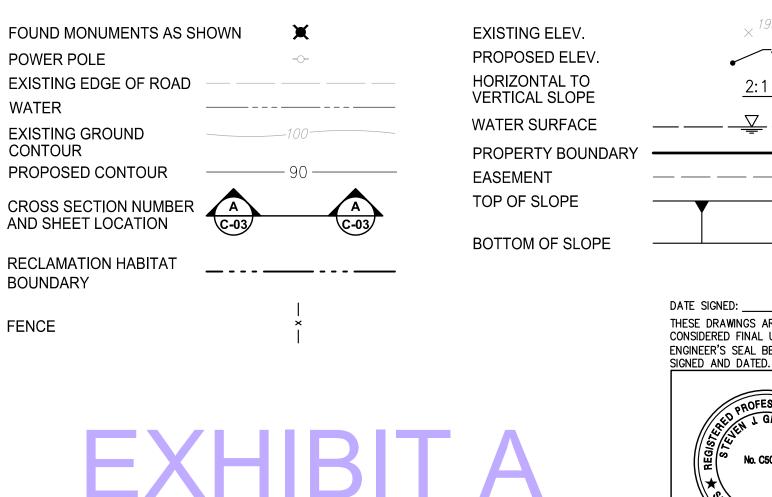
# **CONCEPTUAL OFF-CHANNEL RECLAMATION PLAN** FOR SCHWARZGRUBER PROPERTY

## **GENERAL NOTES:**

- ALL WORK SHALL CONFORM TO THE YOLO COUNTY SURFACE MINING RECLAMATION ORDINANCE (ORD. #1191), THE PROJECT SPECIFIC CONDITIONS OF APPROVAL, THE PROJECT STORM WATER POLLUTION PREVENTION PLAN (SWPPP), THE SURFACE MINING AND RECLAMATION ACT (SMARA), OSHA, MSHA, AND OTHER APPLICABLE LOCAL, STATE AND FEDERAL REGULATIONS.
- EXISTING TOPOGRAPHY BASED ON AERIAL TOPOGRAPHY FLOWN APRIL 2010; VERIFY 2. EXISTING CONDITIONS PRIOR TO COMMENCING MINING.
- ANY WORK THAT NEEDS TO BE PERFORMED WITHIN PG&E'S OR ANY OTHER UTILITY COMPANY'S EASEMENT WILL REQUIRE A CONSENT AGREEMENT FROM THE APPROPRIATE UTILITY COMPANY. USE CAUTION WHEN OPERATING ANY VEHICLES OR EQUIPMENT NEAR OVERHEAD AND UNDERGROUND ELECTRIC FACILITIES. COMPLY WITH ALL CONDITIONS LISTED IN THE CONSENT AGREEMENT.
- THE DEPTH OF MINING AND THE LIMIT-OF-MINING LINES ARE ONLY APPROXIMATE, AND ARE SUBJECT TO CHANGE BASED ON THE AMOUNT AND QUALITY OF MATERIAL UNCOVERED, AND THE ABILITY OF THE PRODUCER TO MEET THE RECLAMATION REQUIREMENTS. THE FORESEEABLE ESTIMATE OF VARIATION IS +/- 10' IN MINING DEPTH; AND +/-20% OF AREA FOR EACH TYPE OF RECLAMATION.
- HIGH AND LOW AVERAGE GROUNDWATER ELEVATIONS BASED ON "GROUNDWATER CONDITIONS IN VICINITY OF PLANNED WET-PIT MINING OPERATIONS-SCHWARZGRUBER PROPERTY", BY LUHDORFF & SCALMANINI CONSULTING ENGINEERS DATED APRIL 25, 2011.
- IF HUMAN SKELETAL REMAINS ARE ENCOUNTERED DURING EXCAVATION, ALL WORK 6. WITHIN SEVENTY-FIVE (75) FEET SHALL IMMEDIATELY STOP, AND THE COUNTY CORONER SHALL BE NOTIFIED WITHIN TWENTY-FOUR (24) HOURS. IF ANY CULTURAL RESOURCES, SUCH AS CHIPPED OR GROUND STONE, HISTORIC DEBRIS, BUILDING FOUNDATIONS, OR PALEONTOLOGICAL MATERIALS ARE ENCOUNTERED DURING EXCAVATION, THEN ALL WORK WITHIN SEVENTY-FIVE (75) FEET SHALL IMMEDIATELY STOP AND THE DIRECTOR SHALL BE NOTIFIED AT ONCE. ANY CULTURAL RESOURCES FOUND ON THE SITE SHALL BE RECORDED BY A QUALIFIED ARCHAEOLOGIST AND THE INFORMATION SHALL BE SUBMITTED TO THE COUNTY.
- DURING OPERATIONS, THE SITE SHALL BE KEPT FREE OF DEBRIS AND MAINTAINED IN A NEAT AND ORDERLY MANNER SO AS NOT TO CREATE ANY HAZARDOUS OR UNSIGHTLY CONDITIONS. OVERBURDEN SHALL BE STOCKPILED AND STUMPS, BRUSH, OR OTHER DEBRIS RESULTING FROM EXCAVATION AND/OR PROCESSING SHALL BE PROPERLY DISPOSED.
- UNNECESSARY PERSONNEL SHALL BE EXCLUDED FROM OFF-CHANNEL EXCAVATIONS. OPEN PITS SHALL BE FENCED WITH A FOUR STRAND BARBED WIRE FENCE OR THE EQUIVALENT, PRIOR TO THE COMMENCEMENT OF EXCAVATION. FENCING MAY ENCLOSE THE PROPERTY OF WHICH THE MINING SITE IS A PART, THE MINING SITE, OR BOTH. IN ADDITION, SIGNS SHALL BE INSTALLED AT THE PROJECT SITE BOUNDARIES AND ACCESS ROAD, INDICATING THAT THE EXCAVATION AREA IS A DANGER ZONE
- THE EXISTING CONDITIONS DEPICTED ON THIS PLAN ARE REFLECTIVE OF THE EXISTING PHYSICAL CONDITIONS ON THE PROJECT SITE AS OF APRIL 2010. THE PROJECT SITE IS THE SITE OF AN EXISTING, ON-GOING MINING OPERATION THAT IS NOT CURRENTLY UNDER THE DIRECT CONTROL OF THE PROJECT APPLICANT. THE PHYSICAL CONDITIONS DEPICTED IN THESE PLANS MAY CHANGE AS A RESULT OF ON-GUING MINING AND RECLAMATION ACTIVITIES CONDUCTED BY THE CURRENT MINING OPERATOR. THE CONDITIONS DEPICTED IN THESE PLANS COULD DIFFER FROM THE CONDITIONS ON THE SITE IMMEDIATELY PRIOR TO COMMENCEMENT OF THE MINING AND RECLAMATION ACTIVITIES CONTEMPLATED IN THIS APPLICATION.



# **LEGEND**:



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THESE DRAWINGS ARE NOT CONSIDERED FINAL UNTIL THE ENGINEER'S SEAL BELOW HAS BEEN



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CY

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CENTER LINE

CUBIC YARDS

**FINISH GRADE** 

**GRADE BREAK** 

HORIZONTAL

**GROUND WATER** 

ELEVATION

FLOW LINE

EAST

FEET

# YOLO COUNTY, CALIFORNIA **JANUARY 2021**

NO. DATE REVISIONS BY | APPD. CECWEST.COM 5/3/13 REVISE PER COUNTY COAs NC roject Planning 🔳 Civil Engineering 🔳 Landscape Architecture Sacramento Office Davis Office TEICHERT 2120 20th Street, Suite Three 2940 Spafford Street, Suite 200 Sacramento, CA 95818 Davis, CA 95618 AGGREGATES (916) 455-2026 (530) 758-2026

PROPERTY LINE

**RIGHT-OF-WAY** 

RECLAMATION

SAND AND GRAVEL

RADIUS

SLOPE

TYPICAL

VERTICAL

WEST

YEAR

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R

R/W

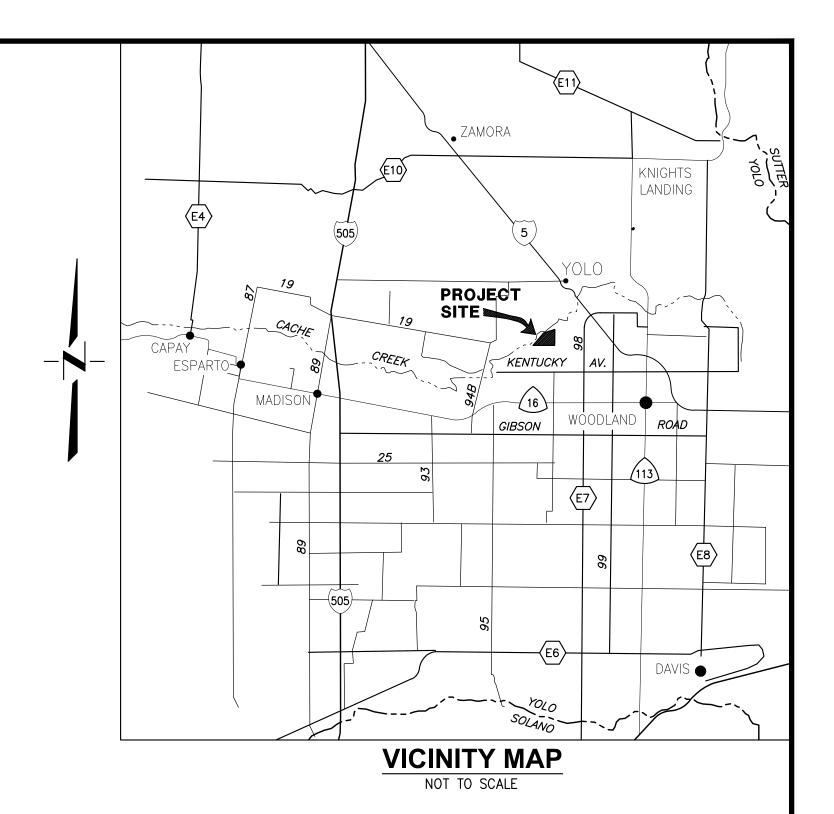
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## SHEET INDEX:

- **R-01 TITLE SHEET**
- R-02 SITE PLAN
- **R-03 CROSS SECTION A-A**
- **R-04 CROSS SECTION B-B**
- **R-05 CROSS SECTION C-C**
- R-06 CROSS SECTION D-D
- **R-07 CROSS SECTION E-E**

#### **BENCHMARK:**

EXISTING TOPOGRAPHY BASED ON AERIAL **TOPOGRAPHY FLOWN APRIL 30, 2010, PROVIDED BY** POINT CO. PHOTOGRAMMETRIC SERVICES. **AERIAL TARGETS SURVEYED BY LAUGENOUR** AND MEIKLE, WOODLAND. HORIZONTAL DATUM: CA NAD83 ZONE 2 **VERTICAL DATUM: NAVD 88** 

#### **ASSESSORS PARCEL NO:**

025-350-010

#### **PROPERTY OWNER:**

**TRIANGLE PROPERTIES INC.** P.O. BOX 15002 SACRAMENTO, CA 95851

#### **APPLICANT:**

**TEICHERT AGGREGATES** P.O. BOX 15002 SACRAMENTO, CA 95851 (916) 484-3319

## **CIVIL ENGINEER:**

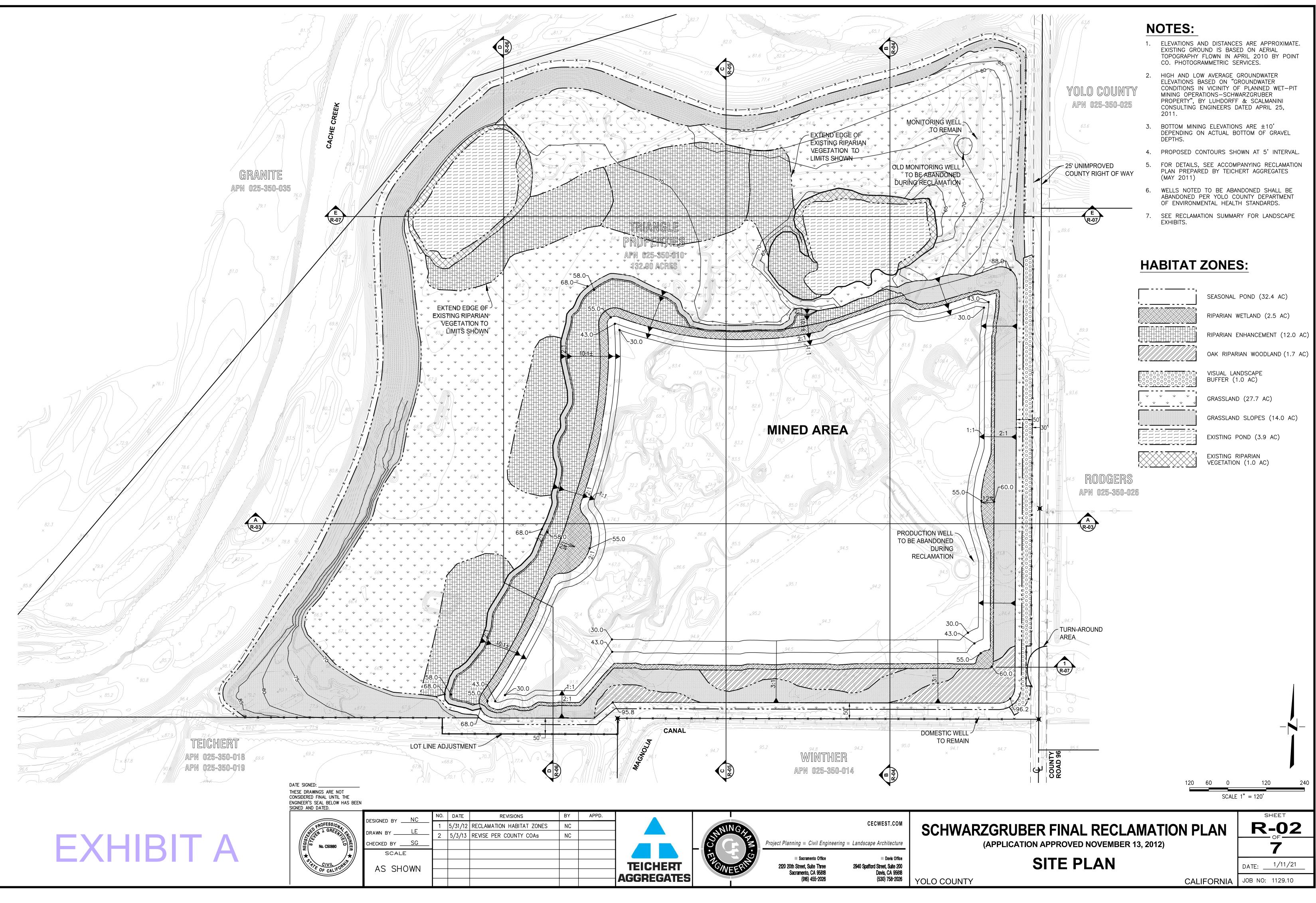
**CUNNINGHAM ENGINEERING** 2940 SPAFFORD STREET, SUITE 200 DAVIS, CALIFORNIA 95618 (530) 758-2026

## DRAWING STATUS:

- O PLAN REVIEW SET -NOT FOR CONSTRUCTION
- PERMIT SET

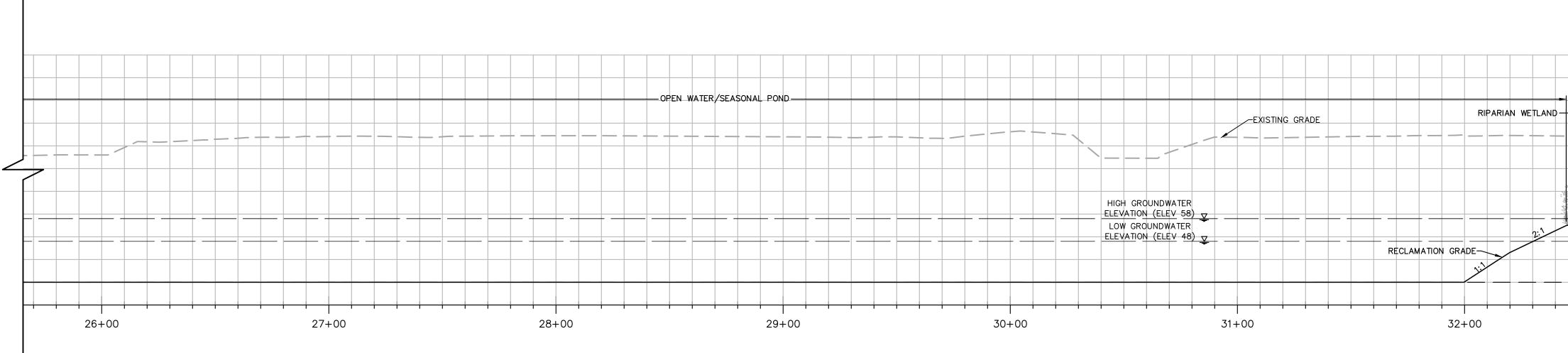


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							5	Sacramento Office Davis Office
					TEICHERT	GIAI	EIF	2120 20th Street, Suite Three 2940 Spafford Street, Suite 200
					AGGREGATES			Sacramento, CA 95818 Davis, CA 95618
					AGGREGATES			(916) 455-2026 (530) 758-2026

130 -120 -- GRASSLAND SLOPE -110 -EXISTING-FENCE 100 90 -APPROXIMATE 100-YR  $\leq$ WATER SURFACE LIMIT 80 TIO 70 Ϋ́ 60 ĹЦ ЦЦ 50 40 30 20 ++++ 12+00 14+00 13+00 11+50



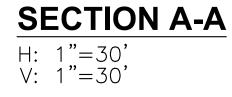
**EXHIBIT A** 

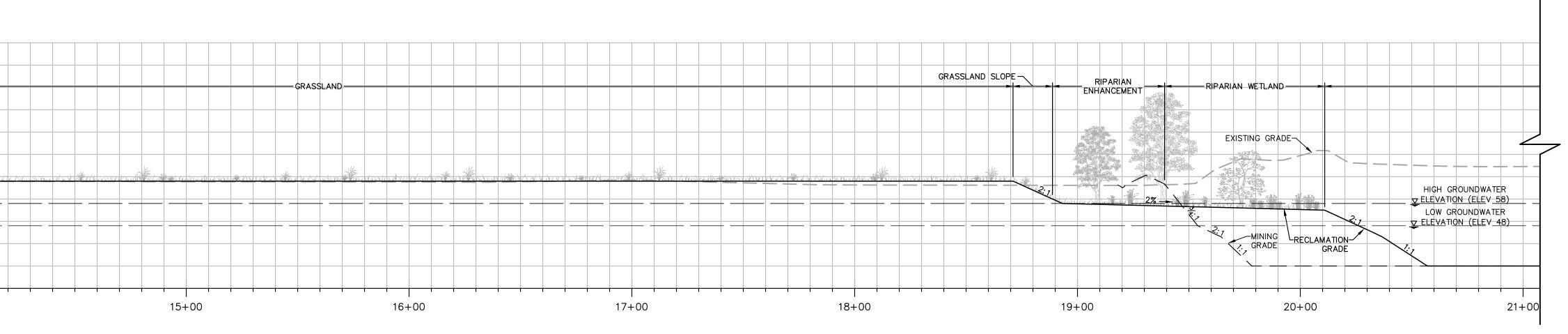
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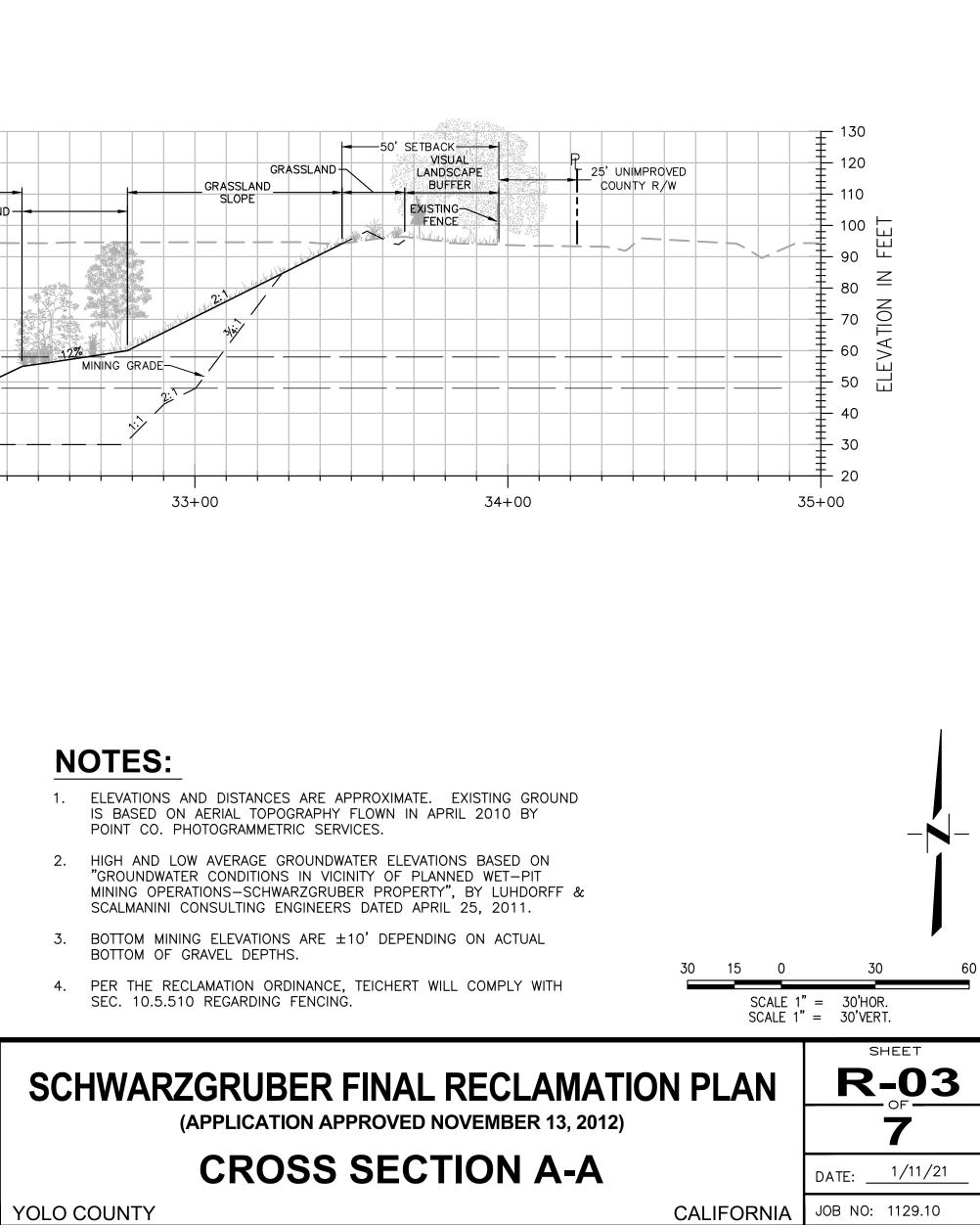
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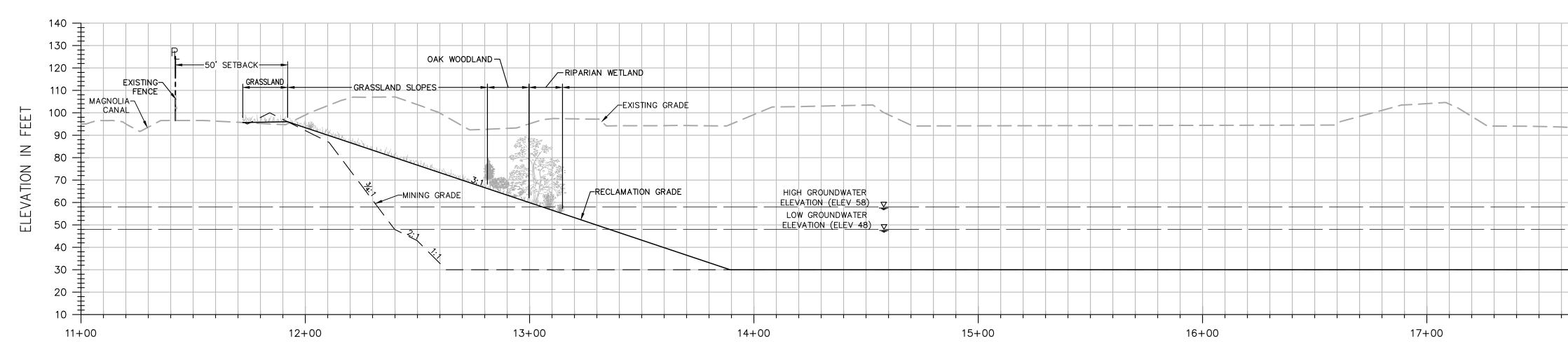
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							Sacramento Office	Davis Office
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					AGGREGATES			Davis, CA 95618 (530) 758-2026
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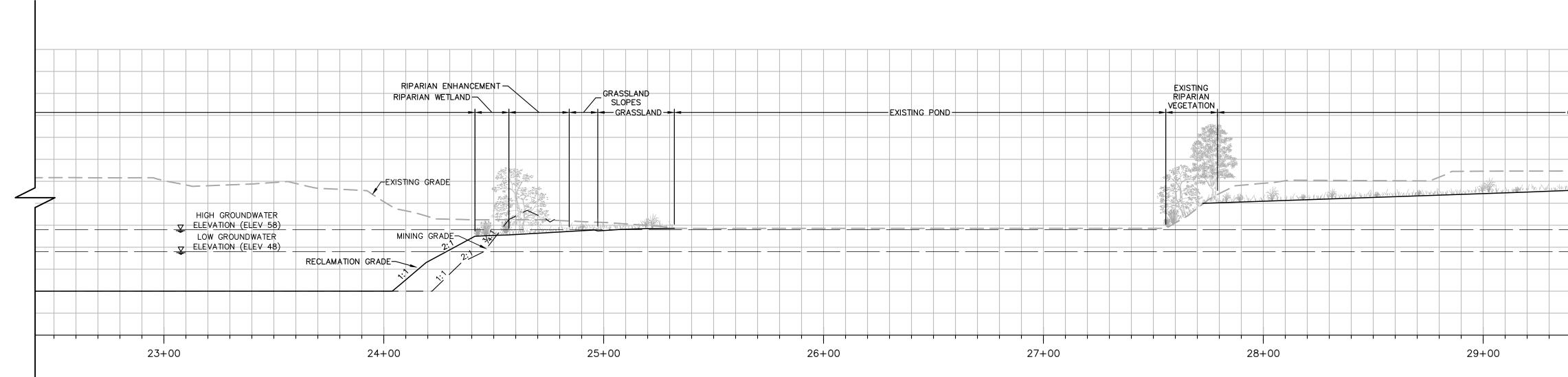


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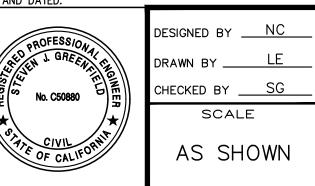
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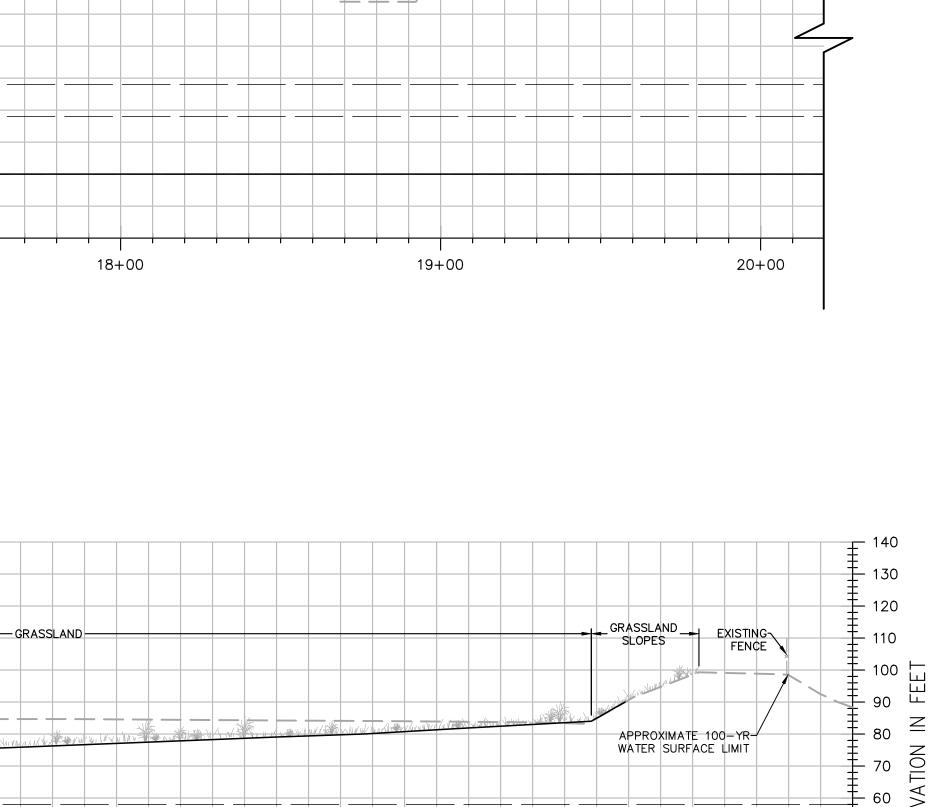
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					AGGREGATES		(916) 455-2026 (530) 758-202	



-OPEN WATER/SEASONAL POND-

## **NOTES:**

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1. ELEVATIONS AND DISTANCES ARE APPROXIMATE. EXISTING GROUND IS BASED ON AERIAL TOPOGRAPHY FLOWN IN APRIL 2010 BY POINT CO. PHOTOGRAMMETRIC SERVICES.

- HIGH AND LOW AVERAGE GROUNDWATER ELEVATIONS BASED ON "GROUNDWATER CONDITIONS IN VICINITY OF PLANNED WET-PIT MINING OPERATIONS-SCHWARZGRUBER PROPERTY", BY LUHDORFF & SCALMANINI CONSULTING ENGINEERS DATED APRIL 25, 2011.
- 3. BOTTOM MINING ELEVATIONS ARE  $\pm 10'$  DEPENDING ON ACTUAL BOTTOM OF GRAVEL DEPTHS.
- 4. PER THE RECLAMATION ORDINANCE, TEICHERT WILL COMPLY WITH SEC. 10.5.510 REGARDING FENCING.

## SCHWARZGRUBER FINAL RECLAMATION PLAN (APPLICATION APPROVED NOVEMBER 13, 2012)

# **CROSS SECTION B-B**

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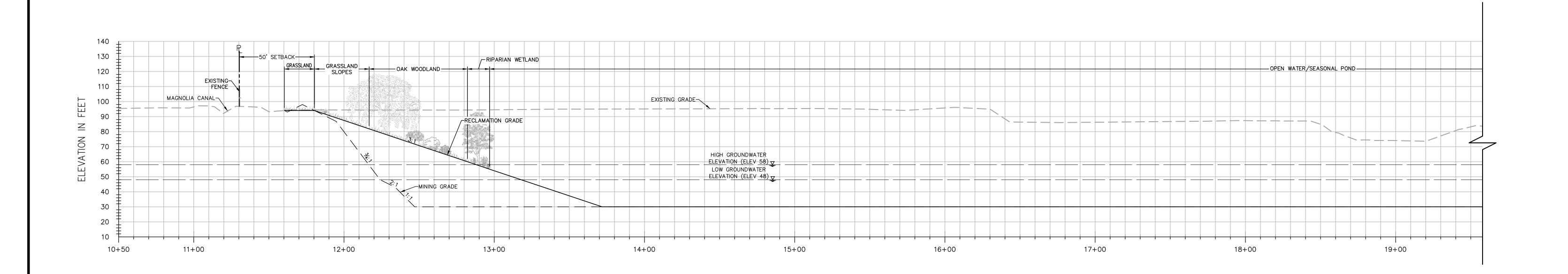
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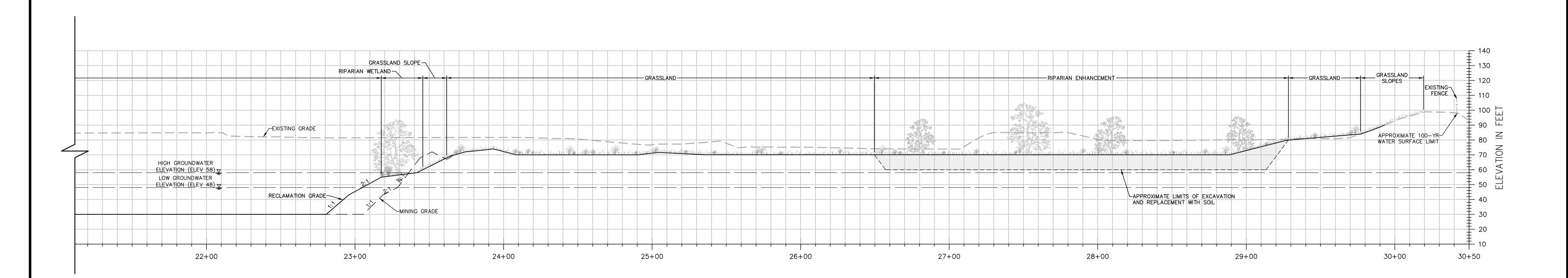
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**EXHIBIT A** 

DATE SIGNED: \_\_\_\_\_ THESE DRAWINGS ARE NOT CONSIDERED FINAL UNTIL THE ENGINEER'S SEAL BELOW HAS BEEN SIGNED AND DATED.

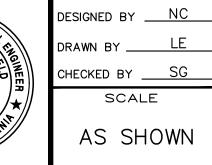
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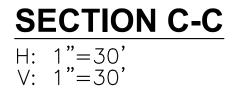
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# SCHWARZGRUBER FINAL RECLAMATION PLAN (APPLICATION APPROVED NOVEMBER 13, 2012)

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CALIFORNIA JOB NO: 1129.10

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DATE: 1/11/21

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EXHIBIT A

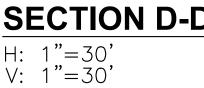
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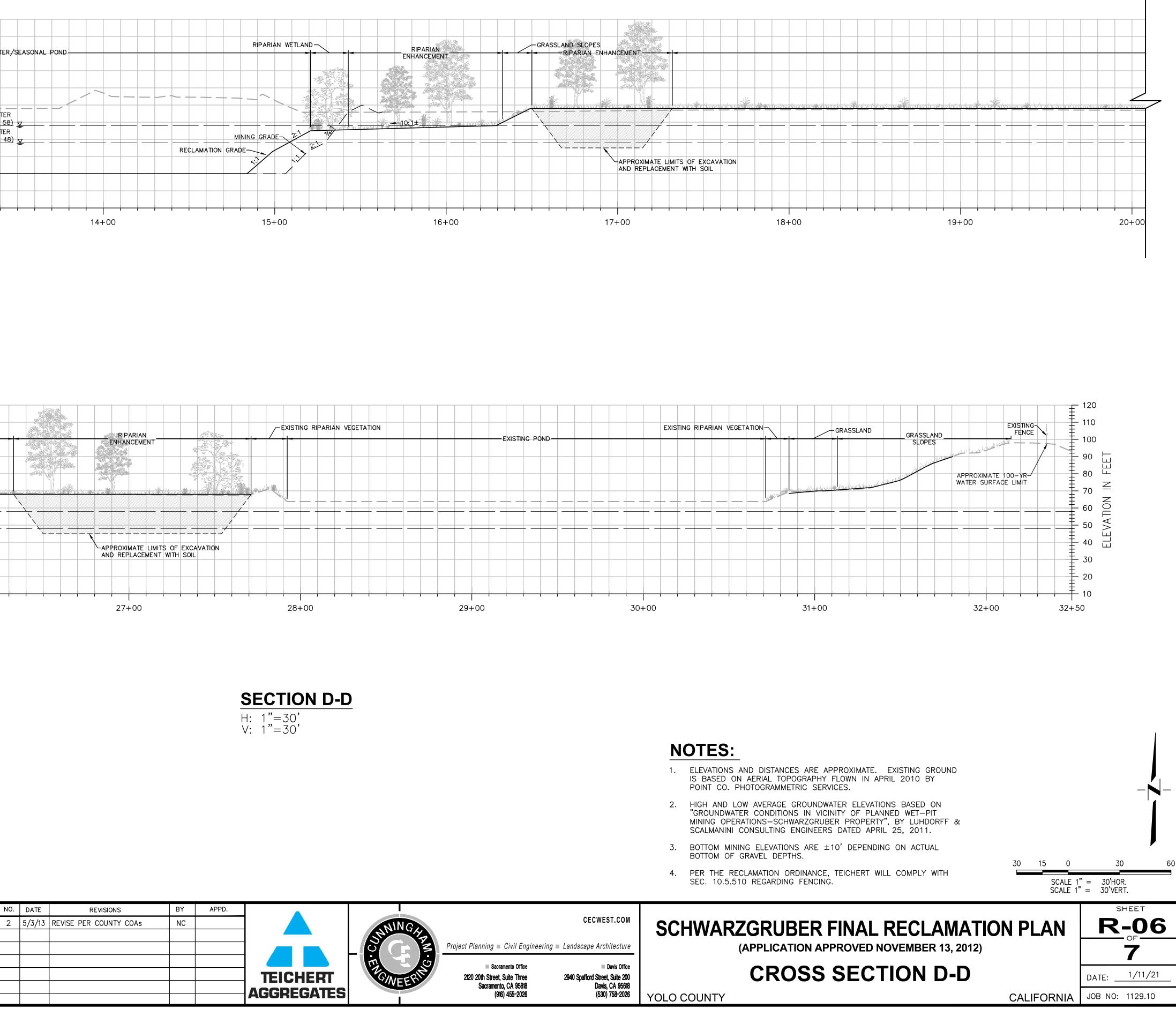
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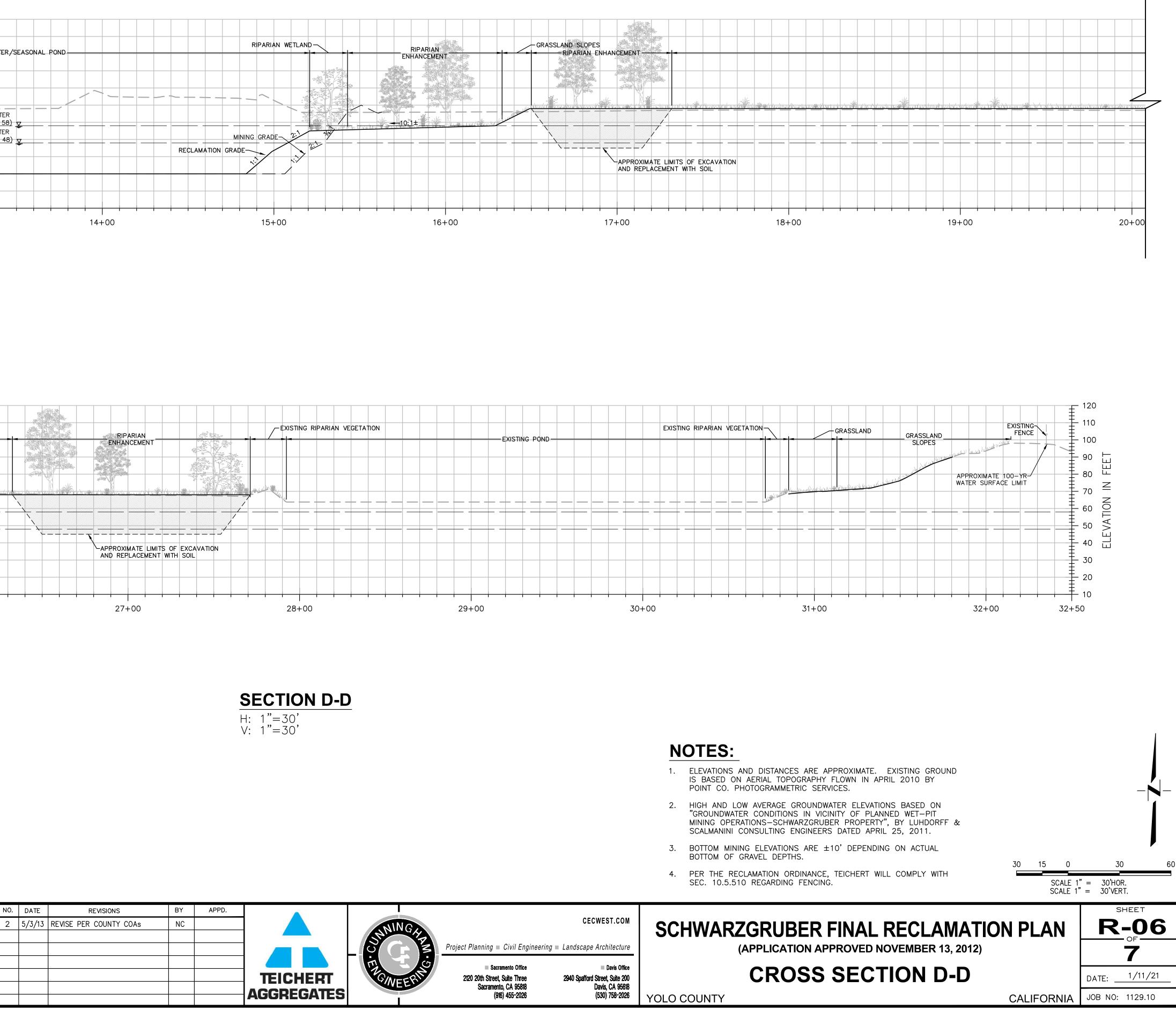
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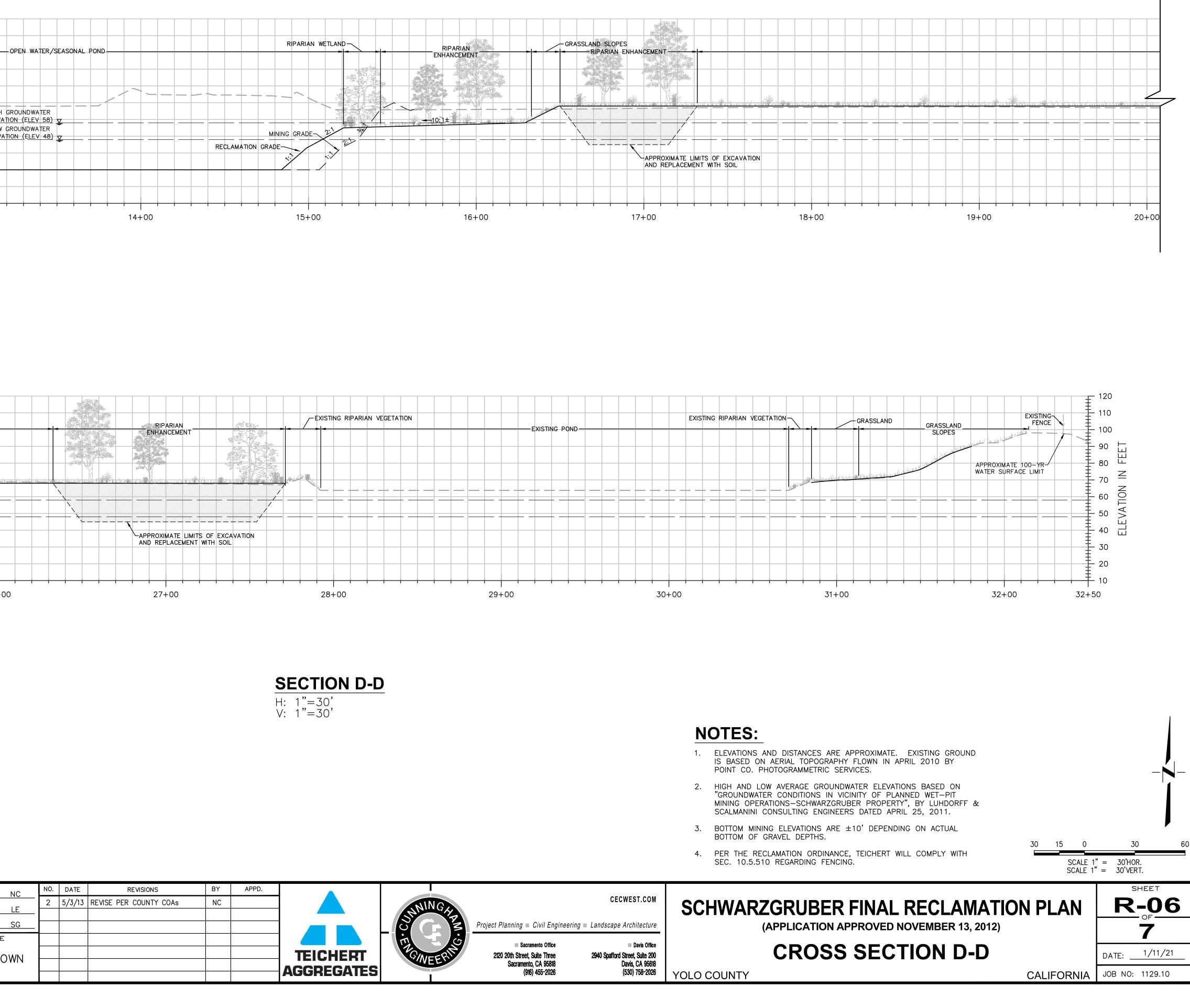
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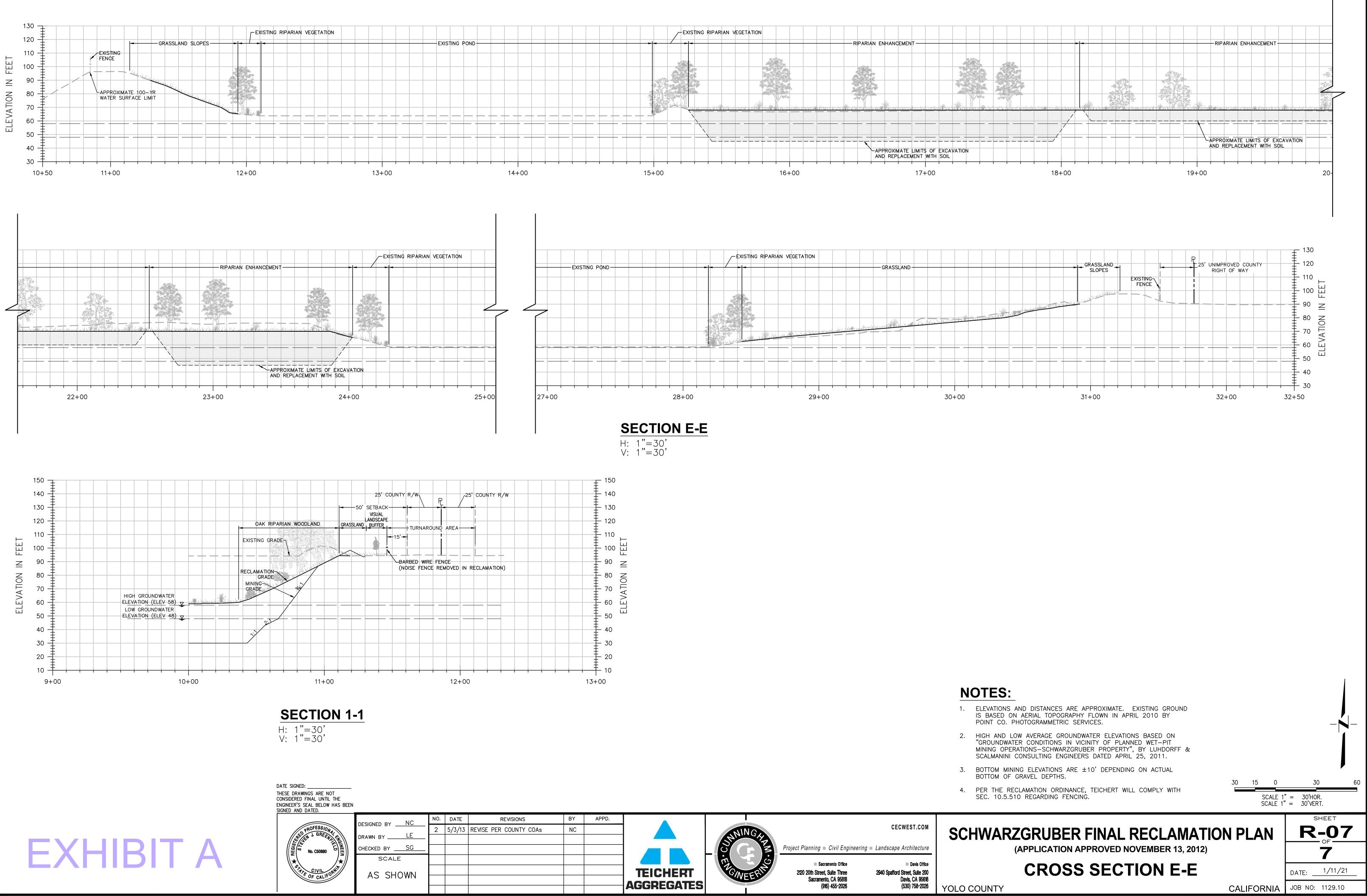
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						TEICHERT	WEER		Street, Suite 200 Davis, CA 95618
						AGGREGATES		(916) 455-2026	(530) 758-2026