

ESJ U.S.

Energia Sierra Juárez Gen-Tie Line Alternative Project San Diego County, California

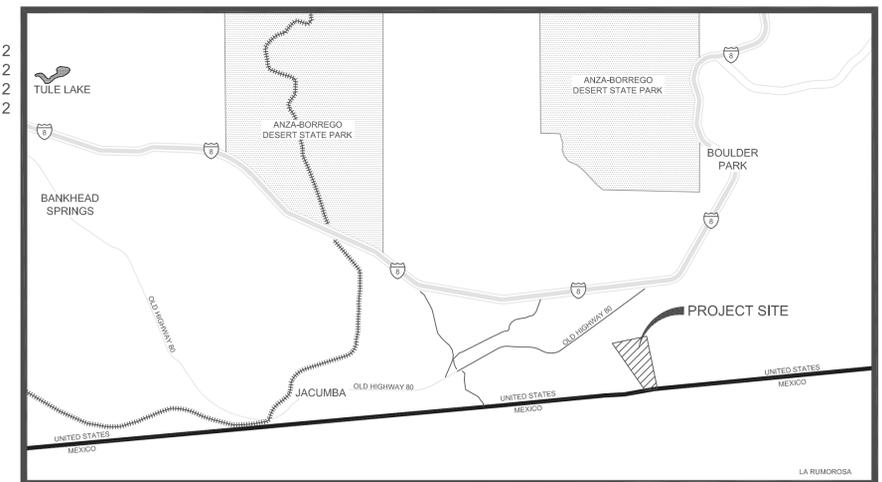
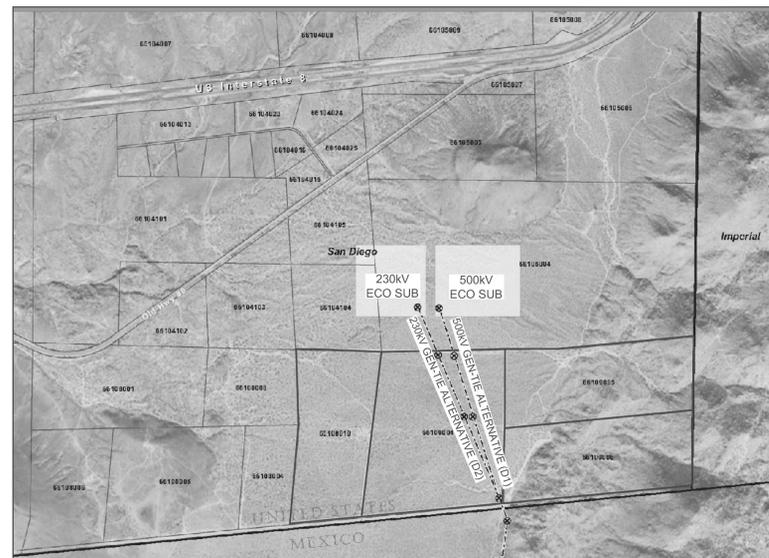
May 2010

52573

Preliminary Grading Plans

DRAWING LIST

| DWG. NO. | REVISION | TITLE |
|----------|----------|--|
| C09 | - | COVER-INDEX |
| C10 | - | OVERALL PRELIM. GRADING & EROSION CONTROL PLAN |
| C11 | - | 230KV ALTERNATIVE (D2) PRELIM. GRADING & EROSION CONTROL PLAN SHEET 1 OF 2 |
| C12 | - | 230KV ALTERNATIVE (D2) PRELIM. GRADING & EROSION CONTROL PLAN SHEET 2 OF 2 |
| C13 | - | 500KV ALTERNATIVE (D1) PRELIM. GRADING & EROSION CONTROL PLAN SHEET 1 OF 2 |
| C14 | - | 500KV ALTERNATIVE (D1) PRELIM. GRADING & EROSION CONTROL PLAN SHEET 2 OF 2 |
| C15 | - | GRADING & EROSION CONTROL DETAILS |
| C16 | - | PROJECT DRAINAGE MAP |



VICINITY MAP
N.T.S.



OWNER: ENERGIA SIERRA JUAREZ U.S. TRANSMISSION LLC. (ESJ U.S.)
101 ASH STREET
HQ #14
SAN DIEGO, CA 92101
(619) 696-2121

ENGINEER: BURNS & MCDONNELL
9400 WARD PARKWAY
KANSAS CITY, MO 64114
(816) 333-9400

PROJECT PARCEL #'s:
APN 661-090-04
APN 661-090-05
APN 661-090-06

ECO SUBSTATION PARCEL #'s:
APN 661-050-04
APN 661-041-04
APN 661-041-05

ACCESS PARCEL #'s:
APN 661-041-03
APN 661-041-02
APN 661-080-08
APN 661-080-10

**PRELIMINARY - NOT
FOR CONSTRUCTION**

NOTE:
DEPICTION OF SDG&E'S ECO SUBSTATION IS
APPROXIMATE AND SUBJECT TO FINAL DESIGN BY SDG&E.

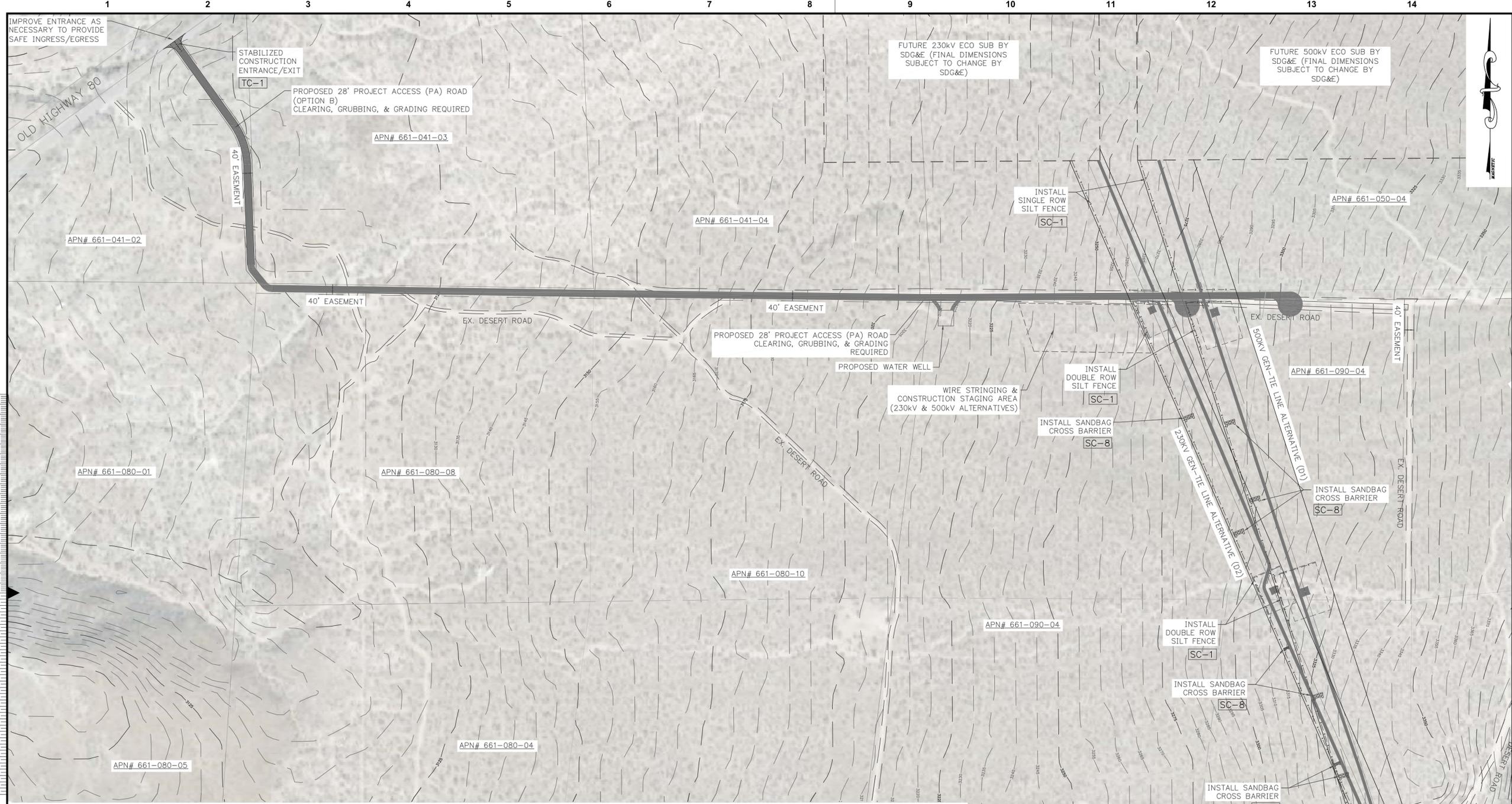
NOTE:
THESE REVISED PLANS ARE BASED ON THE ECO
SUBSTATION ALTERNATIVE LOCATIONS. THERE
ARE TWO SEPERATE GEN-TIE ALTERNATIVES
SHOWN WITHIN THESE PLANS, A 230KV
ALTERNATIVE AND A 500KV ALTERNATIVE. ONLY
ONE OF THE TWO OPTIONS IS TO BE
CONSTRUCTED UNDER THIS APPLICATION, BUT
THE FINAL ALTERNATIVE IS YET TO BE
DETERMINED. FUTURE PLANS WILL BE REVISED
TO ONLY INCLUDE THE ALTERNATIVE THAT IS TO
BE CONSTRUCTED.



C09

ESJ U.S. Gen-Tie Line Alternative Project
MUP 09-008
KIVA 09-0107420





SAN DIEGO COUNTY, CA

EROSION CONTROL LEGEND

| | | |
|------|-------|---------------------------------------|
| SC-1 | — x — | TEMPORARY SILT FENCE |
| WM-3 | | STOCKPILE MANAGEMENT |
| WE-1 | | WIND EROSION CONTROL |
| SC-8 | | SANDBAG CROSS BARRIER |
| TC-1 | | STABILIZED CONSTRUCTION ENTRANCE/EXIT |

*SEE SHEET C15 FOR GRADING & EROSION CONTROL DETAILS

NOTE:
THIS PLAN IS PROVIDED TO ALLOW FOR FULL AND ADEQUATE DISCRETIONARY REVIEW OF A PROPOSED DEVELOPMENT PROJECT. THE PROPERTY OWNER ACKNOWLEDGES THAT ACCEPTANCE OR APPROVAL OF THIS PLAN DOES NOT CONSTITUTE AN APPROVAL TO PERFORM ANY GRADING SHOWN HEREON, AND AGREES TO OBTAIN VALID GRADING PERMISSIONS BEFORE COMMENCING SUCH ACTIVITY.

EROSION CONTROL NOTES

1. SILT FENCE TO BE INSTALLED ON ALL RIGHT-OF-WAY LINES WHERE SILT MAY LEAVE PROJECT AREA. ALL SILT BARRIERS MUST BE PLACED AS ACCESS IS OBTAINED DURING CLEARING. NO GRADING SHALL BE PERFORMED UNTIL SILT BARRIER INSTALLATION IS COMPLETE.
2. CROSS BARRIERS TO BE INSTALLED EVERY 492 ft. (150 m) ALONG EACH REACH OF SILT FENCE.
3. LEAVE SILT FENCE IN PLACE UNTIL FINAL STABILIZATION ON PROJECT HAS OCCURRED.
4. ANY DISTURBED AREA LEFT EXPOSED FOR 14 DAYS SHALL BE STABILIZED WITH MULCH OR TEMPORARY SEEDING.
5. EROSION CONTROL MEASURES TO BE MAINTAINED AT ALL TIMES.
6. ALL SLOPES STEEPER THAN 3:1 SHALL BE COVERED WITH EROSION CONTROL BLANKET.
7. TO REDUCE WIND EROSION, ALL TEMPORARY DISTURBED AREAS SHALL BE WETTED AS NECESSARY.
8. ALL TEMPORARILY DISTURBED AREAS SHALL BE RE-VEGETATED AFTER CONSTRUCTION IN ACCORDANCE WITH THE STORMWATER POLLUTION PREVENTION PLAN, OR AS REQUIRED BY SAN DIEGO COUNTY. A 30' BUFFER WILL REMAIN UNVEGETATED AROUND EACH TOWER FOR FIRE PROTECTION.
9. ALL EROSION CONTROL MEASURES SHALL BE INSTALLED AND MAINTAINED AS SPECIFIED BY THE CALIFORNIA DEPARTMENT OF TRANSPORTATION CONSTRUCTION SITE BMP MANUAL.

GRADING NOTES

1. SITE TO BE ACCESSED VIA A 28' WIDE LEGAL PROJECT ACCESS ROAD (PA) (CLEARING, GRUBBING, & GRADING REQUIRED) TO BE INSTALLED AS SHOWN.
2. A 12' WIDE GEN-TIE ROAD SHALL BE INSTALLED WITHIN THE PERMANENT RIGHT OF WAY TO PROVIDE STRUCTURE ACCESS. MAJOR GRADING SHOULD NOT BE NEEDED FOR INSTALLATION OF GEN-TIE ACCESS ROADS.
3. ONLY MINOR GRADING SHOULD BE NECESSARY AT STRUCTURE LOCATIONS.
4. SEE EARTHWORK SUMMARY TABLE (THIS SHEET) FOR A SUMMARY OF THE PROJECT EARTHWORK.
5. TOPOGRAPHIC INFORMATION BASED ON U.S.G.S. NATIONAL ELEVATION DATA SET.

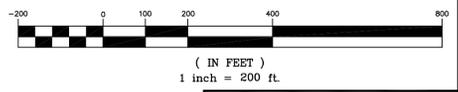
EARTHWORK SUMMARY

| TASK | 230 kV ALTERNATIVE (D2) | 500 kV ALTERNATIVE (D1) |
|-----------------------|--|--|
| PROJECT ACCESS ROAD | 13,168 CY (CUT) 1,889 CY (FILL) 11,279 CY (NET EXPORT) | 17,045 CY (CUT) 2,976 CY (FILL) 14,069 CY (NET EXPORT) |
| GEN TIE ROADS | BALANCED (NO NET IMPORT/EXPORT) | BALANCED (NO NET IMPORT/EXPORT) |
| PAD GRADING | 532 CY (IMPORT) | 361 CY (IMPORT) |
| FOUNDATION EXCAVATION | 180 CY (EXPORT) | 360 CY (EXPORT) |
| NET PROJECT EARTHWORK | 10,972 CY (EXPORT) | 14,068 CY (EXPORT) |

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101 ASH STREET HQ #14
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(619) 696-2121

24-HR CONTACT: TBD

PRELIMINARY - NOT FOR CONSTRUCTION



| no. | date | by | ckd | description |
|-----|------|----|-----|-------------|
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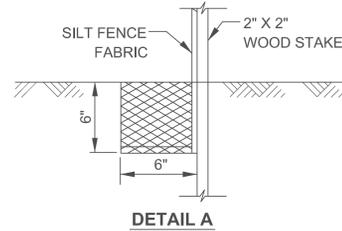
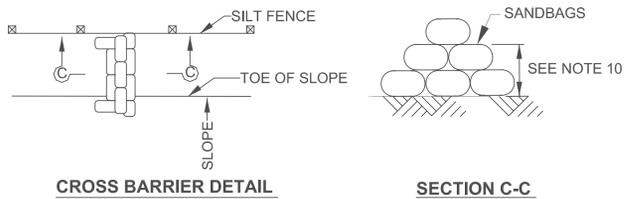
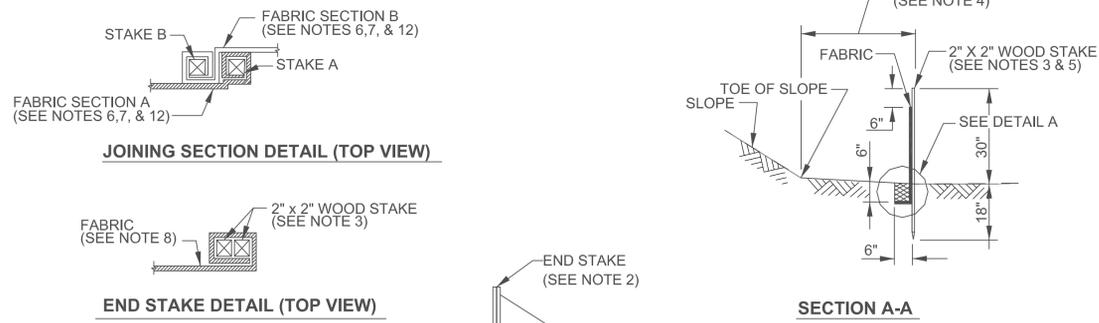
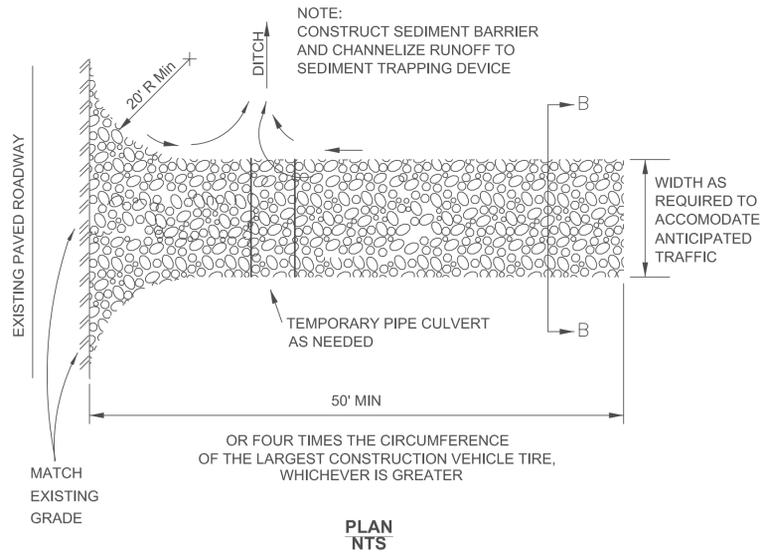
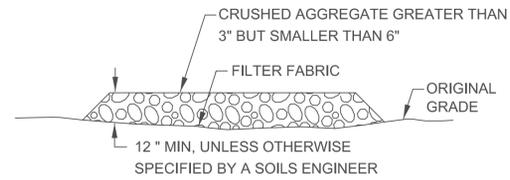
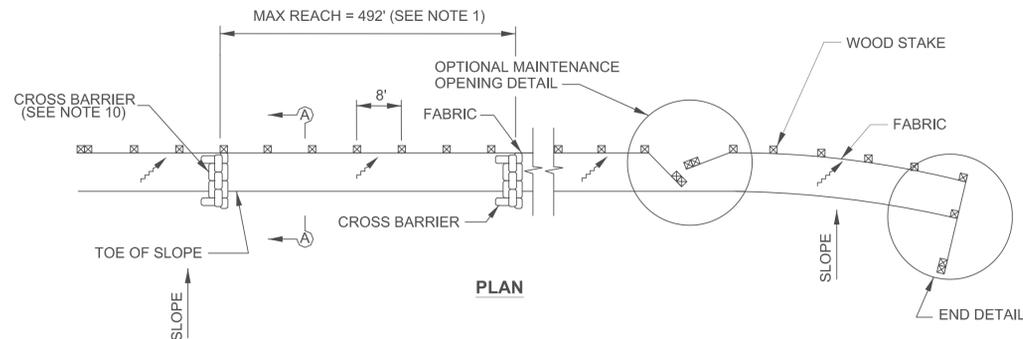
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|----------|--------------|----------|------------|
| date | MAY 14, 2010 | detailed | J. KANITZ |
| designed | J. KANITZ | checked | J. STAHLAK |

MUP 09-008
KIVA 09-0107420

ESJ U.S.
230kV & 500kV GEN-TIE LINE ALTERNATIVES
OVERALL PRELIMINARY GRADING
& EROSION CONTROL PLAN

| | | | |
|---------|--------------------------|----------|-----------|
| project | 52573 | contract | |
| drawing | C10 | rev. | |
| sheet | 10 | of | 16 sheets |
| file | ESJ-BASE14 ALT 3 & 4.DWG | | |

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STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

SC-1 **TEMPORARY LINEAR SEDIMENT BARRIER (TYPE SILT FENCE)**

NO SCALE

NOTES

- CONSTRUCT THE LENGTH OF EACH REACH SO THAT THE CHANGE IN BASE ELEVATION ALONG THE REACH DOES NOT EXCEED $\frac{1}{3}$ THE HEIGHT OF THE LINEAR BARRIER, IN NO CASE SHALL THE REACH LENGTH EXCEED 492'.
- THE LAST 8' OF FENCE SHALL BE TURNED UP SLOPE.
- STAKE DIMENSIONS ARE NOMINAL.
- DIMENSIONS MAY VARY TO FIT FIELD CONDITION.
- STAKES SHALL BE SPACED AT 8' MAXIMUM AND SHALL BE POSITIONED ON DOWNSTREAM SIDE OF FENCE.
- STAKES TO OVERLAP AND FENCE FABRIC TO FOLD AROUND EACH STAKE ONE FULL TURN. SECURE FABRIC TO STAKE WITH 4 STAPLES.
- STAKES SHALL BE DRIVEN TIGHTLY TOGETHER TO PREVENT POTENTIAL FLOW-THROUGH OF SEDIMENT AT JOINT. THE TOPS OF THE STAKES SHALL BE SECURED WITH WIRE.
- FOR END STAKE, FENCE FABRIC SHALL BE FOLDED AROUND TWO STAKES ONE FULL TURN AND SECURED WITH 4 STAPLES.
- MINIMUM 4 STAPLES PER STAKE. DIMENSIONS SHOWN ARE TYPICAL.
- CROSS BARRIERS SHALL BE A MINIMUM OF $\frac{1}{3}$ AND A MAXIMUM OF $\frac{1}{2}$ THE HEIGHT OF THE LINEAR BARRIER.
- MAINTENANCE OPENINGS SHALL BE CONSTRUCTED IN A MANNER TO ENSURE SEDIMENT REMAINS BEHIND SILT FENCE.
- JOINING SECTIONS SHALL NOT BE PLACED AT SUMP LOCATIONS.
- SANDBAG ROWS AND LAYERS SHALL BE OFFSET TO ELIMINATE GAPS.

TC-1 **STABILIZED CONSTRUCTION ENTRANCE/EXIT (TYPE I)**

NO SCALE

| no. | date | by | ckd | description |
|-----|------|----|-----|-------------|
|-----|------|----|-----|-------------|



| | | | |
|----------|--------------|----------|-------------|
| date | MAY 14, 2010 | detailed | J. KANITZ |
| designed | J. KANITZ | checked | J. STAHULAK |

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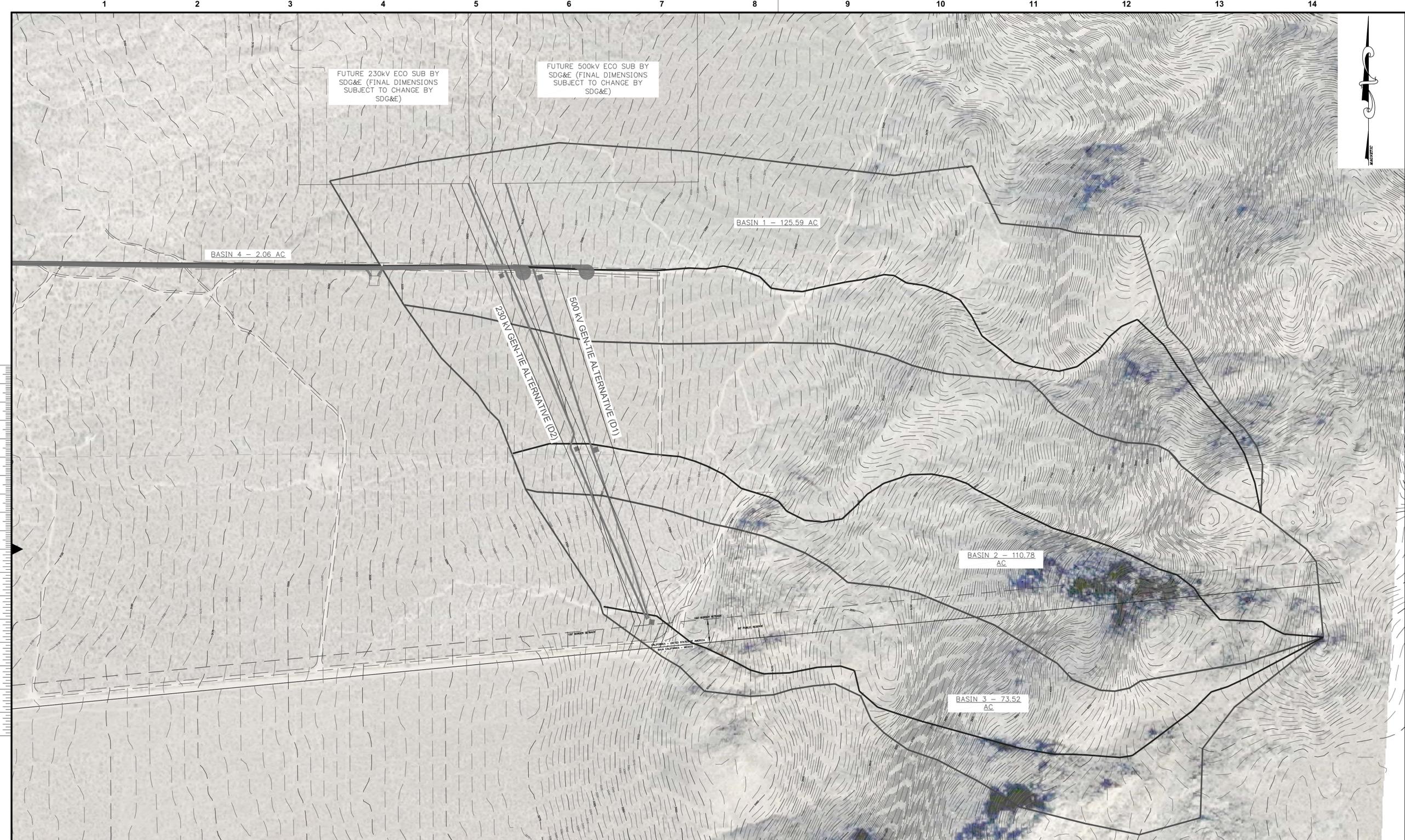
ESJ U.S.
GEN-TIE LINE ALTERNATIVE
GRADING & EROSION CONTROL DETAILS

| | | | |
|-------------------------------|------------|----------|----|
| project | 52573 | contract | |
| drawing | C15 | rev. | - |
| sheet | 15 | of | 16 |
| file ESJ-BASE14 ALT 3 & 4.DWG | | | |



5-20-10

Scale For Microlining
Millimeters
Inches



FUTURE 230kV ECO SUB BY SDG&E (FINAL DIMENSIONS SUBJECT TO CHANGE BY SDG&E)

FUTURE 500kV ECO SUB BY SDG&E (FINAL DIMENSIONS SUBJECT TO CHANGE BY SDG&E)

BASIN 4 - 2.06 AC

BASIN 1 - 125.59 AC

200 kV GEN-TIE ALTERNATIVE (D2)

500 kV GEN-TIE ALTERNATIVE (D1)

BASIN 2 - 110.78 AC

BASIN 3 - 73.52 AC

| no. | date | by | ckd | description |
|-----|------|----|-----|-------------|
|-----|------|----|-----|-------------|

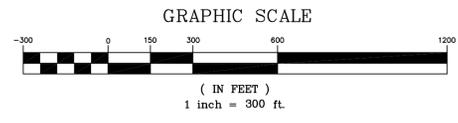
| | | | |
|----------|--------------|----------|------------|
| date | MAY 14, 2010 | detailed | J. KANITZ |
| designed | J. KANITZ | checked | J. STAHLAK |

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KIVA 09-0107420

ESJ U.S.
PROJECT DRAINAGE MAP

| | | | |
|---------|------------|----------|---|
| project | 52573 | contract | |
| drawing | C16 | rev. | - |

| | | | | |
|-------------------------------|----|----|----|--------|
| sheet | 16 | of | 16 | sheets |
| file ESJ-BASE14 ALT 3 & 4.DWG | | | | |



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SAN DIEGO COUNTY, CA

| BASIN ANALYSIS | | | | |
|----------------|----------|-------------|-------------------------------|--------------------------------|
| BASIN # | AREA(Ac) | Post Dev CN | 10 YR PRE-DEVELOPED Q (c.f.s) | 10 YR POST-DEVELOPED Q (c.f.s) |
| 1. | 146.01 | 64.3 | 10.04 | 10.04 |
| 2. | 159.53 | 72.5 | 40.03 | 40.03 |
| 3. | 92.27 | 75.8 | 34.62 | 34.62 |
| 4. | 2.06 | 67.3 | .049 | .197 |

NOTE: THE PROPOSED DEVELOPMENT HAS NO SIGNIFICANT DOWNSTREAM IMPACT. THE SMALL AMOUNT OF IMPERVIOUS SURFACE ADDED IS NOT LARGE ENOUGH TO AFFECT THE POST-DEVELOPED CN, AND THEREFORE DOES NOT INCREASE THE POST-DEVELOPED RUNOFF (Q). FOR FURTHER INFORMATION REFER TO THE FULL HYDROLOGY REPORT.

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