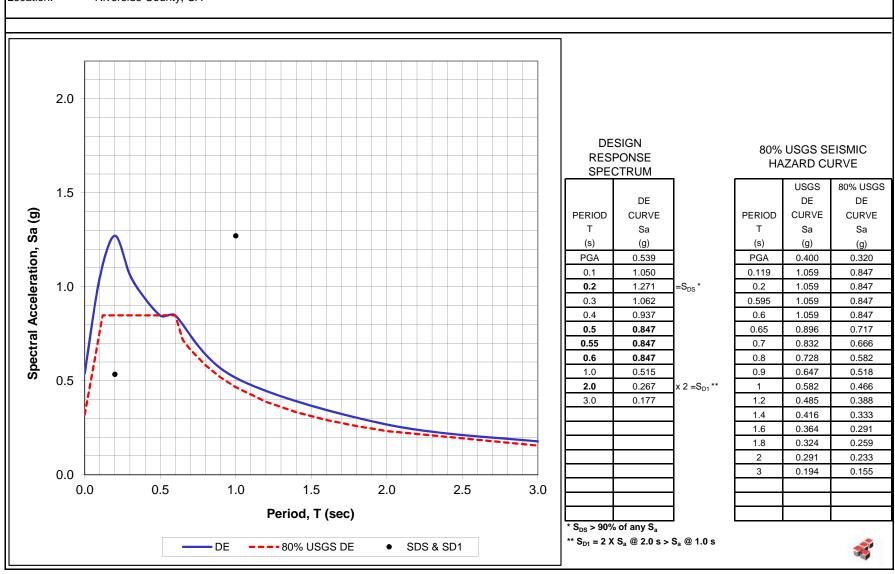
DESIGN RESPONSE SPECTRUM AND SITE SPECIFIC S_{DS} AND S_{D1}

Project: EDA SWJC Courts Relocation

Project Number: 10625.001

Location: Riverside County, CA

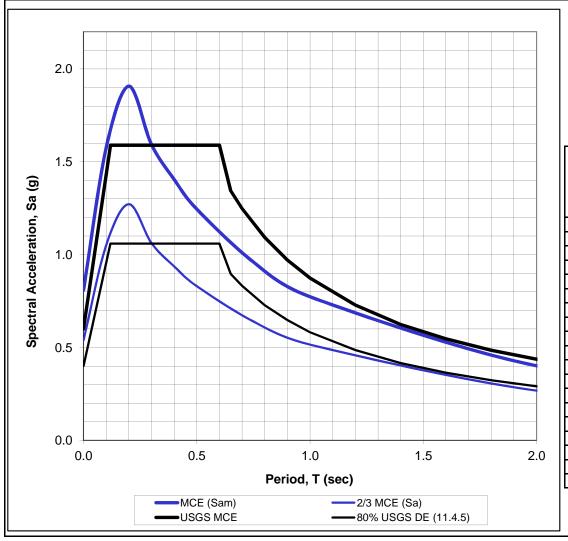


SITE MODIFIED MCE AND 2/3 SITE MODIFIED MCE RESPONSE SPECTRUM

Project: EDA SWJC Courts Relocation

Project Number: 10625.001

Location: Riverside County, CA



SITE MODIFIED MCE AND
2002 USGS
2/3 SITE MODIFIED MCE
RESPONSE SPECTRA
SITE MOD. 2/3 SITE
MCE MOD. MCE
SITE MOD. USGS
USGS
SEISMIC HAZARD
CURVE
SITE MOD. USGS
USGS MCE DESIGN

| | SITE MOD. | 2/3 SITE | | SITE MOD. | USGS |
|--------|-----------|----------|--------|-----------|--------|
| | MCE | MOD. MCE | | USGS MCE | DESIGN |
| PERIOD | CURVE | CURVE | PERIOD | CURVE | CURVE |
| Т | Sa | Sa | Т | Sa | Sa |
| (s) | (g) | (g) | (s) | (g) | (g) |
| PGA | 0.809 | 0.539 | PGA | 0.600 | 0.400 |
| 0.1 | 1.575 | 1.050 | 0.119 | 1.589 | 1.059 |
| 0.2 | 1.907 | 1.271 | 0.2 | 1.589 | 1.059 |
| 0.3 | 1.593 | 1.062 | 0.595 | 1.589 | 1.059 |
| 0.4 | 1.405 | 0.937 | 0.6 | 1.589 | 1.059 |
| 0.5 | 1.245 | 0.830 | 0.65 | 1.344 | 0.896 |
| 0.75 | 0.960 | 0.640 | 0.7 | 1.248 | 0.832 |
| 1.0 | 0.773 | 0.515 | 0.8 | 1.092 | 0.728 |
| 2.0 | 0.401 | 0.267 | 0.9 | 0.971 | 0.647 |
| 3.0 | 0.266 | 0.177 | 1 | 0.874 | 0.582 |
| | | | 1.2 | 0.728 | 0.485 |
| | | | 1.4 | 0.624 | 0.416 |
| | | | 1.6 | 0.546 | 0.364 |
| | | | 1.8 | 0.485 | 0.324 |
| | | | 2 | 0.437 | 0.291 |
| | | | 3 | 0.291 | 0.194 |
| | | | | | |
| | | | | | |
| | | | | | |

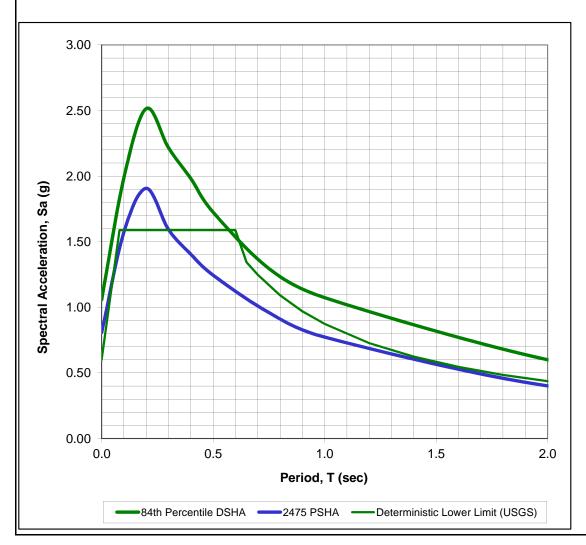


DETERMINISTIC AND PROBABILISTIC SEISMIC HAZARD ANALYSIS SUMMARY

Project: EDA SWJC Courts Relocation

Project Number: 10625.001

Location: Riverside County, CA



| SITE | | | | |
|---------|-----|--|--|--|
| FACTORS | | | | |
| $F_a =$ | 1 | | | |
| $F_v =$ | 1.3 | | | |
| | | | | |

DETERMINISTIC LOWER LIMIT

DSHA (21.2.2)

| | 84th | | 511 | | |
|--------|------------|--------|-------|--------|-------|
| | Percentile | | DLL | | |
| PERIOD | MRC | PERIOD | CURVE | PERIOD | MRC |
| Т | Sa | Т | Sa | Т | Sa |
| (s) | (g) | (s) | (g) | (s) | (g) |
| PGA | 1.059 | 0.00 | 0.600 | PGA | 0.809 |
| 0.1 | 1.989 | 0.1 | 1.589 | 0.1 | 1.575 |
| 0.2 | 2.515 | 0.2 | 1.589 | 0.2 | 1.907 |
| 0.3 | 2.216 | 0.3 | 1.589 | 0.3 | 1.593 |
| 0.4 | 1.981 | 0.4 | 1.589 | 0.4 | 1.405 |
| 0.5 | 1.725 | 0.5 | 1.589 | 0.5 | 1.245 |
| 0.75 | 1.296 | 0.6 | 1.589 | 8.0 | 0.960 |
| 1.0 | 1.074 | 0.65 | 1.344 | 1.0 | 0.773 |
| 2.0 | 0.600 | 0.7 | 1.248 | 2.0 | 0.401 |
| 3.0 | 0.322 | 0.8 | 1.092 | 3.0 | 0.266 |
| | | 0.9 | 0.971 | | |
| | | 1.0 | 0.874 | | |
| | | 1.2 | 0.728 | | |
| | | 1.4 | 0.624 | | |
| | | 1.6 | 0.546 | | |
| | | 1.8 | 0.485 | | |
| | | 2.0 | 0.437 | | |



PSHA (21.2.1)

Deterministic Spectra Results using EZ-FRISK 7.62 Build 001

Largest Amplitudes of Ground Motions Considering All Sources Calculated using Weighted Mean of Attenuation Equations

Amplitude Units: Acceleration (g)

| Fractile | : 0.5 | | | | | | | |
|------------|---------|-------------|--------|--------|--------------|-------|--------|------------|
| Per | riod | Amplitude | Magnit | ude | Closest | F | Region | 1 |
| Controllin | g Sour | ce | | | | | | |
| | | | | D | istance(kr | n) | | |
| F | GA | 5.844e-001 | 7.00 | Mw | 5.00 | USGS | 2008 | California |
| California | Gridd | ed | | | | | | |
| 0. | 05 | 7.557e-001 | 7.00 | Mw | 5.00 | USGS | 2008 | California |
| California | Gridd | .ed | | | | | | |
| C | .1 | 1.095e+000 | 7.00 | Mw | 5.00 | USGS | 2008 | California |
| California | Gridd | .ed | | | | | | |
| C | .2 | 1.386e+000 | 7.00 | Mw | 5.00 | USGS | 2008 | California |
| California | Gridd | .ed | | | | | | |
| C | .3 | 1.210e+000 | 7.00 | Mw | 5.00 | USGS | 2008 | California |
| California | Gridd | ed | | | | | | |
| C | .4 | 1.083e+000 | 7.00 | Mw | 5.00 | USGS | 2008 | California |
| California | Gridd | ed | | | | | | |
| - | .5 | 9.357e-001 | 7.00 | Mw | 5.00 | USGS | 2008 | California |
| California | | | | | | | | |
| | 75 | 6.916e-001 | 7.85 | Mw | 3.95 | USGS | 2008 | California |
| Elsinore | | | | | | | | |
| | 1 | 5.681e-001 | 7.85 | Mw | 3.95 | USGS | 2008 | California |
| Elsinore | | | | | | | | |
| | 2 | 3.062e-001 | 7.85 I | Mw | 3.95 | USGS | 2008 | California |
| Elsinore | | | | | | | | |
| | 3 | 2.163e-001 | 7.85 | Mw | 3.95 | USGS | 2008 | California |
| Elsinore | _ | | | | | | | |
| | 4 | 1.618e-001 | 7.85 | Mw | 3.95 | USGS | 2008 | California |
| Elsinore | | | | | | | | |
| B | - 0 04 | | | | | | | |
| Fractile | | | Ma | | 7 1 + | | | _ |
| Controllin | riod | Amplitude | Magnit | uae | Closest | | Region | 1 |
| Controllin | ig sour | ce | | _ |)istance(km | - \ | | |
| - | GA | 1.059e+000 | 7.00 | | 5.00 | • | 2000 | California |
| California | | | 7.00 | MW | 5.00 | USGS | 2008 | California |
| | 05 | 1.369e+000 | 7.00 | Mese | 5.00 | TTCCC | 2008 | California |
| California | | | 7.00 | r.T.M. | 3.00 | ರಶಿತರ | 2000 | Callionnia |
| | .1 | 1.989e+000 | 7.00 | Μτωτ | 5.00 | זופתפ | 2008 | California |
| | • - | T. 2026+000 | , | - AA | 3.00 | 2565 | 2000 | CALLECTIFA |



California Gridded

| 0.2 | 2.515e+000 | 7.00 Mw | 5.00 | USGS 2008 | California |
|--------------|------------|---------|------|-----------|------------|
| California G | ridded | | | | |
| 0.3 | 2.216e+000 | 7.00 Mw | 5.00 | USGS 2008 | California |
| California G | ridded | | | | |
| 0.4 | 1.981e+000 | 7.00 Mw | 5.00 | USGS 2008 | California |
| California G | ridded | | | | |
| 0.5 | 1.725e+000 | 7.00 Mw | 5.00 | USGS 2008 | California |
| California G | ridded | | | | |
| 0.75 | 1.296e+000 | 7.85 Mw | 3.95 | USGS 2008 | California |
| Elsinore | | | | | |
| 1 | 1.074e+000 | 7.85 Mw | 3.95 | USGS 2008 | California |
| Elsinore | | | | | |
| 2 | 6.003e-001 | 7.85 Mw | 3.95 | USGS 2008 | California |
| Elsinore | | | | | |
| 3 | 4.266e-001 | 7.85 Mw | 3.95 | USGS 2008 | California |
| Elsinore | | | | | |
| 4 | 3.215e-001 | 7.85 Mw | 3.95 | USGS 2008 | California |
| Elsinore | | | | | |

Largest Amplitudes of Ground Motions Considering Sources Calculated with Boore-Atkinson (2008) NGA USGS 2008 MRC

Amplitude Units: Acceleration (g)

| _ | | | | _ | _ |
|-----|-----|-----|--------|------|---|
| Fra | a+- | - I | \sim | - (1 | |
| Ŀта | | | | · | |

| Period | Amplitude | Magnitude | Closest | Regio | n |
|-----------------|------------|-----------|------------|-----------|------------|
| Controlling Sou | ırce | | | | |
| | | | Distance(k | m) | |
| PGA | 5.976e-001 | 7.00 Mw | 5.00 | USGS 2008 | California |
| California Grid | dded | | | | |
| 0.05 | 7.631e-001 | 7.00 Mw | 5.00 | USGS 2008 | California |
| California Grid | dded | | | | |
| 0.1 | 1.102e+000 | 7.00 Mw | 5.00 | USGS 2008 | California |
| California Grid | dded | | | | |
| 0.2 | 1.453e+000 | 7.00 Mw | 5.00 | USGS 2008 | California |
| California Grid | dded | | | | |
| 0.3 | 1.295e+000 | 7.00 Mw | 5.00 | USGS 2008 | California |
| California Grid | dded | | | | |
| 0.4 | 1.203e+000 | 7.00 Mw | 5.00 | USGS 2008 | California |
| California Grid | dded | | | | |
| 0.5 | 1.011e+000 | 7.00 Mw | 5.00 | USGS 2008 | California |
| California Grid | dded | | | | |
| 0.75 | 7.221e-001 | 7.00 Mw | 5.00 | USGS 2008 | California |
| California Grid | dded | | | | |
| 1 | 5.443e-001 | 7.00 Mw | 5.00 | USGS 2008 | California |
| | | | | | |

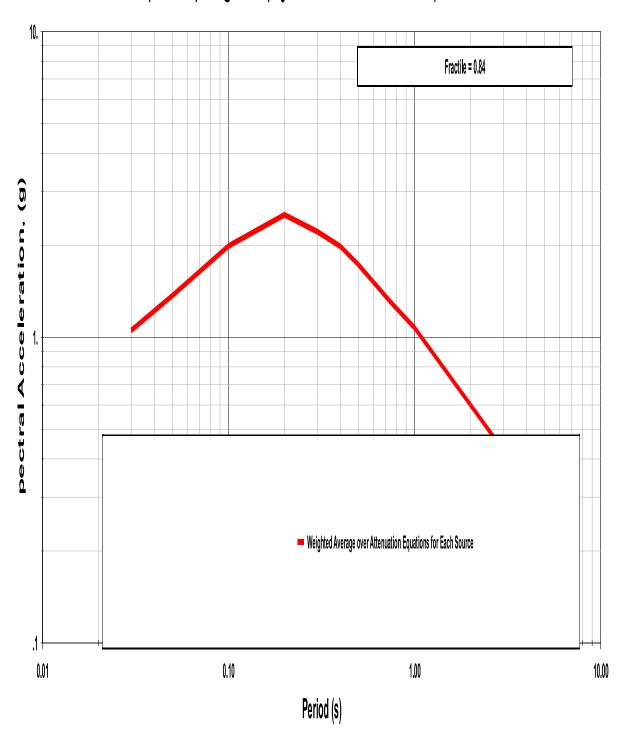
| California | Gridd | ed | | | | | | |
|-------------|------------|------------------|-----------|------|-------------|-------|--------|------------|
| | 2 | 3.104e-001 | 7.85 | Mw | 3.95 | USGS | 2008 | California |
| Elsinore | | | | | | | | |
| | 3 | 2.575e-001 | 7.85 | Mw | 3.95 | USGS | 2008 | California |
| Elsinore | | 1 056 001 | - 0- | | 2 05 | | 0000 | a 1 ' c ' |
| Elsinore | 4 | 1.956e-001 | 7.85 | MW | 3.95 | USGS | 2008 | California |
| EISTHOLE | | | | | | | | |
| Fractile | : 0.84 | | | | | | | |
| Per | iod | Amplitude | Magnit | tude | Closest | I | Region | n |
| Controlling | g Sour | ce | | | | | | |
| | | | | | Distance(kr | n) | | |
| | GA | 1.083e+000 | 7.00 | Mw | 5.00 | USGS | 2008 | California |
| California | | | | | | | | |
| 0.0 | | 1.383e+000 | 7.00 | Mw | 5.00 | USGS | 2008 | California |
| California | | | | | | | | ~ 116 1 |
| _ | | 2.017e+000 | 7.00 | MW | 5.00 | USGS | 2008 | California |
| California | - | ea 2.634e+000 | 7.00 | M | 5.00 | TTCCC | 2000 | California |
| California | | | 7.00 | иw | 3.00 | CDGD | 2008 | Callionnia |
| | . 3 | | 7.00 | Mw | 5.00 | USGS | 2008 | California |
| California | Gridd | ed | | | | | | |
| 0 | . 4 | 2.191e+000 | 7.00 | Mw | 5.00 | USGS | 2008 | California |
| California | Gridd | ed | | | | | | |
| 0 | . 5 | 1.864e+000 | 7.00 | Mw | 5.00 | USGS | 2008 | California |
| California | Gridd | ed | | | | | | |
| 0. | . • | 1.371e+000 | 7.00 | Mw | 5.00 | USGS | 2008 | California |
| California | - | | | | | | | |
| g-1464- | 1 | 1.036e+000 | 7.00 | Mw | 5.00 | USGS | 2008 | California |
| California | Grida 2 | ea 6.226e-001 | 7.85 | 34 | 3.95 | TTCCC | 2008 | California |
| Elsinore | 2 | 6.226e-UUI | 7.05 | MW | 3.95 | USGS | 2008 | California |
| HIBINOIE | 3 | 5.139e-001 | 7.85 | Μw | 3.95 | USGS | 2008 | California |
| Elsinore | • | 2.1030 001 | , , , , , | | 5.25 | 3200 | _000 | |
| | 4 | 3.917e-001 | 7.85 | Mw | 3.95 | USGS | 2008 | California |
| Elsinore | | | | | | | | |

Largest Amplitudes of Ground Motions Considering Sources Calculated with Campbell-Bozorgnia (2008) NGA USGS 2008 MRC Amplitude Units: Acceleration (g)

Fractile: 0.5

Period Amplitude Magnitude Closest Region Controlling Source

Deterministic Spectra
Spectral Response @ 5% Damping - Maximum Rotated Horizontal Component



Probabilistic Spectra results for EZ-FRISK 7.62 Build 001

ANNUAL FREQUENCY OF EXCEEDANCE: 4.041e-004

RETURN PERIOD: 2474.9

PROBABILITY OF EXCEEDENCE: 2.0% IN 50.0 YEARS

Column 1: Spectral Period

Column 2: Acceleration (g) for: Mean

Column 3: Acceleration (g) for: Boore-Atkinson (2008) NGA USGS 2008 MRC

Column 4: Acceleration (g) for: Campbell-Bozorgnia (2008) NGA USGS 2008 MRC

Column 5: Acceleration (g) for: Chiou-Youngs (2007) NGA USGS 2008 MRC

Column 6: Acceleration (g) for: Abrahamson-Silva (2008) NGA MRC

| 1 | 2 | 3 | 4 | 5 |
|--------------------|------------|------------|------------|------------|
| 6 | | | | |
| PGA | 8.089e-001 | 7.455e-001 | 7.907e-001 | 8.685e-001 |
| 5.288e-001 | | | | |
| 0.05 | 1.073e+000 | 9.308e-001 | 1.071e+000 | 1.168e+000 |
| 7.146e-001 | | | | |
| 0.1 | 1.575e+000 | 1.359e+000 | 1.518e+000 | 1.773e+000 |
| 1.108e+000 | | | | |
| 0.2 | 1.907e+000 | 1.692e+000 | 1.843e+000 | 2.046e+000 |
| 1.309e+000 | 1 -00 000 | 1 150 000 | 1 440 000 | 1 760 000 |
| 0.3 | 1.593e+000 | 1.478e+000 | 1.448e+000 | 1.768e+000 |
| 1.066e+000 | 1 405 .000 | 1 255 .000 | 1 056 .000 | 1 522 .000 |
| 0.4 | 1.405e+000 | 1.355e+000 | 1.276e+000 | 1.533e+000 |
| 8.733e-001 | 1 245-1000 | 1 171000 | 1 102-,000 | 1 244000 |
| 0.5 7.100e-001 | 1.245e+000 | 1.171e+000 | 1.193e+000 | 1.344e+000 |
| 7.100e-001 0.75 | 9.604e-001 | 9.193e-001 | 9.272e-001 | 1.022e+000 |
| 4.405e-001 | 9.004e-001 | 9.193e-001 | 9.2/2e-001 | 1.0226+000 |
| 1.403e-001 | 7.734e-001 | 7.359e-001 | 7.678e-001 | 8.176e-001 |
| 3.096e-001 | 7.7546-001 | 7.3396-001 | 7.0706-001 | 0.1706-001 |
| 2 | 4.007e-001 | 4.197e-001 | 4.073e-001 | 3.711e-001 |
| 9.777e-002 | 1.0076 001 | 1.1570 001 | 1.0750 001 | 3.7110 001 |
| 3 | 2.663e-001 | 2.981e-001 | 2.690e-001 | 2.274e-001 |
| 5.215e-002 | | | | |
| 4 | 1.993e-001 | 2.190e-001 | 2.081e-001 | 1.604e-001 |
| 3.223e-002 | | | | |
| | | | | |

ANNUAL FREQUENCY OF EXCEEDANCE: 1.026e-003

RETURN PERIOD: 974.8

PROBABILITY OF EXCEEDENCE: 5.0% IN 50.0 YEARS

Column 1: Spectral Period

Column 2: Acceleration (g) for: Mean

Column 3: Acceleration (g) for: Boore-Atkinson (2008) NGA USGS 2008

Column 4: Acceleration (g) for: Campbell-Bozorgnia (2008) NGA USGS 2008 MRC

Column 5: Acceleration (g) for: Chiou-Youngs (2007) NGA USGS 2008 MRC

Column 6: Acceleration (g) for: Abrahamson-Silva (2008) NGA MRC

1 2 3 4 5

| PGA | 5.661e-001 | 5.287e-001 | 5.550e-001 | 6.005e-001 |
|------------|------------|------------|------------|------------|
| 3.645e-001 | | | | |
| 0.05 | 7.497e-001 | 6.557e-001 | 7.525e-001 | 8.186e-001 |
| 4.880e-001 | | | | |
| 0.1 | 1.105e+000 | 9.686e-001 | 1.096e+000 | 1.205e+000 |
| 7.570e-001 | | | | |
| 0.2 | 1.289e+000 | 1.154e+000 | 1.279e+000 | 1.356e+000 |
| 9.022e-001 | | | | |
| 0.3 | 1.096e+000 | 1.021e+000 | 1.032e+000 | 1.179e+000 |
| 7.338e-001 | | | | |
| 0.4 | 9.774e-001 | 9.363e-001 | 9.022e-001 | 1.040e+000 |
| 6.016e-001 | | | | |
| 0.5 | 8.551e-001 | 8.056e-001 | 8.258e-001 | 9.088e-001 |
| 4.904e-001 | | | | |
| 0.75 | 6.351e-001 | 6.205e-001 | 6.171e-001 | 6.616e-001 |
| 3.057e-001 | | | | |
| 1 | 5.119e-001 | 5.012e-001 | 5.080e-001 | 5.261e-001 |
| 2.144e-001 | | | | |
| 2 | 2.601e-001 | 2.794e-001 | 2.633e-001 | 2.342e-001 |
| 6.755e-002 | | | | |
| 3 | 1.722e-001 | 1.952e-001 | 1.743e-001 | 1.423e-001 |
| 3.502e-002 | | | | |
| 4 | 1.270e-001 | 1.418e-001 | 1.336e-001 | 1.021e-001 |
| 2.242e-002 | | | | |

ANNUAL FREQUENCY OF EXCEEDANCE: 2.107e-003

RETURN PERIOD: 474.6

PROBABILITY OF EXCEEDENCE: 10.0% IN 50.0 YEARS

Column 1: Spectral Period

Column 2: Acceleration (g) for: Mean

Column 3: Acceleration (g) for: Boore-Atkinson (2008) NGA USGS 2008 MRC

Column 4: Acceleration (g) for: Campbell-Bozorgnia (2008) NGA USGS 2008 MRC

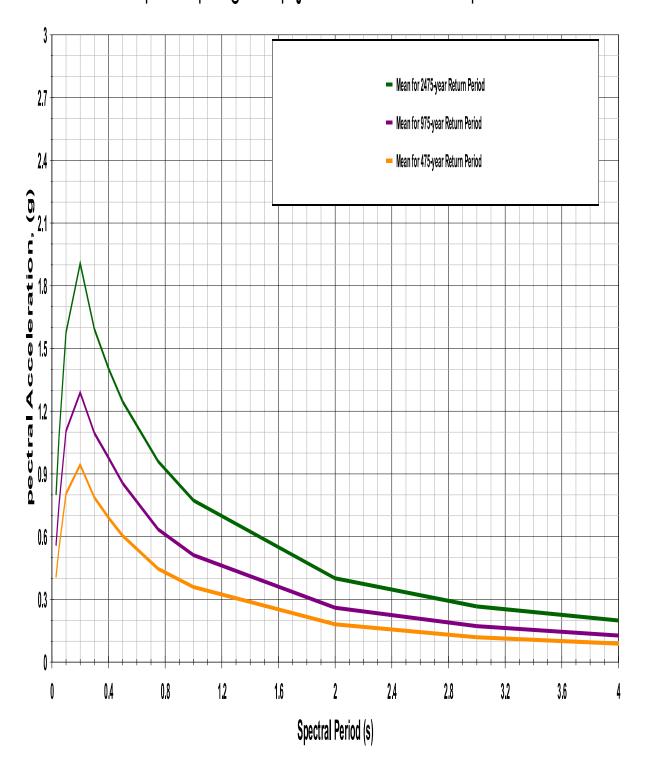
Column 5: Acceleration (g) for: Chiou-Youngs (2007) NGA USGS 2008 MRC

Column 6: Acceleration (g) for: Abrahamson-Silva (2008) NGA MRC

| 1 | 2 | 3 | 4 | 5 |
|------------|------------|------------|------------|------------|
| 6 | | | | |
| PGA | 4.138e-001 | 3.940e-001 | 4.065e-001 | 4.310e-001 |
| 2.623e-001 | | | | |
| 0.05 | 5.410e-001 | 4.854e-001 | 5.446e-001 | 5.829e-001 |
| 3.471e-001 | | | | |
| 0.1 | 8.053e-001 | 7.079e-001 | 8.156e-001 | 8.693e-001 |
| 5.364e-001 | | | | |
| 0.2 | 9.436e-001 | 8.398e-001 | 9.577e-001 | 9.776e-001 |
| 6.443e-001 | | | | |
| 0.3 | 7.878e-001 | 7.307e-001 | 7.517e-001 | 8.344e-001 |
| 5.306e-001 | | | | |
| 0.4 | 6.907e-001 | 6.662e-001 | 6.492e-001 | 7.198e-001 |
| 4.388e-001 | | | | |
| 0.5 | 6.042e-001 | 5.786e-001 | 5.884e-001 | 6.230e-001 |
| 3.577e-001 | | | | |
| 0.75 | 4.465e-001 | 4.469e-001 | 4.355e-001 | 4.491e-001 |
| 2.239e-001 | | | | |

| 1 | 3.590e-001 | 3.621e-001 | 3.555e-001 | 3.560e-001 |
|------------|------------|------------|------------|------------|
| 1.562e-001 | | | | |
| 2 | 1.808e-001 | 1.996e-001 | 1.820e-001 | 1.578e-001 |
| 4.953e-002 | | | | |
| 3 | 1.189e-001 | 1.359e-001 | 1.202e-001 | 9.686e-002 |
| 2.559e-002 | | | | |
| 4 | 8.855e-002 | 1.004e-001 | 9.358e-002 | 6.857e-002 |
| 1.624e-002 | | | | |

Uniform Hazard Spectra Spectral Response @ 5% Damping - Maximum Rotated Horizontal Component



USGS Design Maps Detailed Report

ASCE 7-10 Standard (33.5839°N, 117.1165°W)

Site Class C - "Very Dense Soil and Soft Rock", Risk Category I/II/III

Section 11.4.1 — Mapped Acceleration Parameters

Note: Ground motion values provided below are for the direction of maximum horizontal spectral response acceleration. They have been converted from corresponding geometric mean ground motions computed by the USGS by applying factors of 1.1 (to obtain S_s) and 1.3 (to obtain S_i). Maps in the 2010 ASCE-7 Standard are provided for Site Class B. Adjustments for other Site Classes are made, as needed, in Section 11.4.3.

| From Figure 22 | -1 | [1] |
|----------------|----|-----|
|----------------|----|-----|

 $S_s = 1.582 g$

From Figure 22-2 [2]

 $S_1 = 0.672 g$

Section 11.4.2 — Site Class

The authority having jurisdiction (not the USGS), site-specific geotechnical data, and/or the default has classified the site as Site Class C, based on the site soil properties in accordance with Chapter 20.

Table 20.3-1 Site Classification

| , Vs | $\overline{m{N}}$ or $\overline{m{N}}_{ch}$ | - Su |
|---------------------|---|--|
| >5,000 ft/s | N/A | N/A |
| 2,500 to 5,000 ft/s | N/A | N/A |
| 1,200 to 2,500 ft/s | >50 | >2,000 psf |
| 600 to 1,200 ft/s | 15 to 50 | 1,000 to 2,000 psf |
| <600 ft/s | <15 | <1,000 psf |
| | >5,000 ft/s 2,500 to 5,000 ft/s 1,200 to 2,500 ft/s 600 to 1,200 ft/s | >5,000 ft/s N/A 2,500 to 5,000 ft/s N/A 1,200 to 2,500 ft/s >50 600 to 1,200 ft/s 15 to 50 |

Any profile with more than 10 ft of soil having the characteristics:

- Plasticity index PI > 20,
- Moisture content $w \ge 40\%$, and
- Undrained shear strength $\bar{s}_{u} < 500 \text{ psf}$

F. Soils requiring site response analysis in accordance with Section 21.1

See Section 20.3.1

For SI: $1ft/s = 0.3048 \text{ m/s} 1 \text{lb/ft}^2 = 0.0479 \text{ kN/m}^2$

Section 11.4.3 — Site Coefficients and Risk–Targeted Maximum Considered Earthquake ($\underline{\text{MCE}}_{R}$) Spectral Response Acceleration Parameters

Table 11.4-1: Site Coefficient Fa

| Site Class | Mapped MCE R Spectral Response Acceleration Parameter at Short Period | | | | |
|------------|---|--------------|--------------|--------------|-----------------------|
| - | S _s ≤ 0.25 | $S_s = 0.50$ | $S_s = 0.75$ | $S_s = 1.00$ | S _s ≥ 1.25 |
| Α | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 |
| В | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| С | 1.2 | 1.2 | 1.1 | 1.0 | 1.0 |
| D | 1.6 | 1.4 | 1.2 | 1.1 | 1.0 |
| E | 2.5 | 1.7 | 1.2 | 0.9 | 0.9 |
| F | See Section 11.4.7 of ASCE 7 | | | | |

Note: Use straight-line interpolation for intermediate values of $\ensuremath{\mathsf{S}}_{\ensuremath{\mathsf{s}}}$

For Site Class = C and S_s = 1.582 g, F_a = 1.000

Table 11.4–2: Site Coefficient F_{ν}

| Site Class | Mapped MCE R Spectral Response Acceleration Parameter at 1-s Period | | | | |
|------------|---|--------------|--------------|--------------|-----------|
| | S₁ ≤ 0.10 | $S_1 = 0.20$ | $S_1 = 0.30$ | $S_1 = 0.40$ | S₁ ≥ 0.50 |
| Α | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 |
| В | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| С | 1.7 | 1.6 | 1.5 | 1.4 | 1.3 |
| D | 2.4 | 2.0 | 1.8 | 1.6 | 1.5 |
| E | 3.5 | 3.2 | 2.8 | 2.4 | 2.4 |
| F | See Section 11.4.7 of ASCE 7 | | | | |

Note: Use straight-line interpolation for intermediate values of S₁

For Site Class = C and S_1 = 0.672 g, F_v = 1.300

Equation (11.4-1):

 $S_{MS} = F_a S_S = 1.000 \times 1.582 = 1.582 g$

Equation (11.4-2):

 $S_{M1} = F_v S_1 = 1.300 \times 0.672 = 0.873 g$

Section 11.4.4 — Design Spectral Acceleration Parameters

Equation (11.4-3):

 $S_{DS} = \frac{2}{3} S_{MS} = \frac{2}{3} \times 1.582 = 1.055 g$

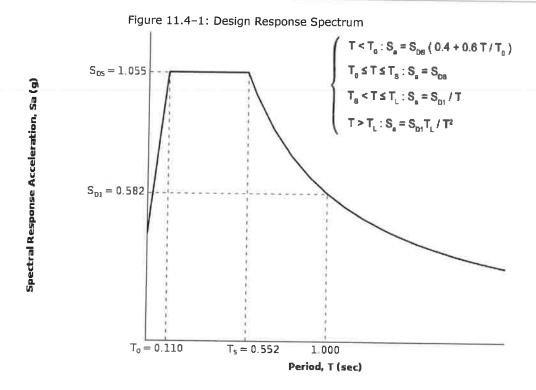
Equation (11.4-4):

 $S_{D1} = \frac{2}{3} S_{M1} = \frac{2}{3} \times 0.873 = 0.582 g$

Section 11.4.5 — Design Response Spectrum

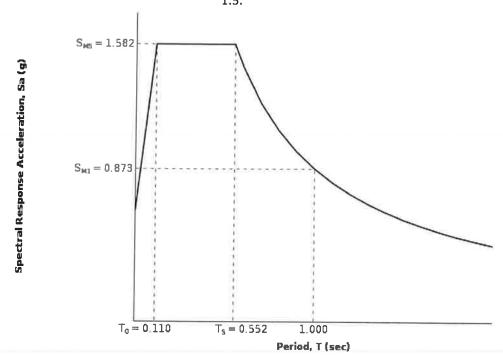
From Figure 22-12 [3]

 $T_L = 8$ seconds



Section 11.4.6 — Risk-Targeted Maximum Considered Earthquake (MCE_R) Response Spectrum

The MCE $_{R}$ Response Spectrum is determined by multiplying the design response spectrum above by 1.5.



Section 11.8.3 — Additional Geotechnical Investigation Report Requirements for Seismic Design Categories D through F

From Figure 22-7 [4]

PGA = 0.621

Equation (11.8-1):

 $PGA_{M} = F_{PGA}PGA = 1.000 \times 0.621 = 0.621 g$

Table 11.8-1: Site Coefficient FPGA

| Site | Mapped MCE Geometric Mean Peak Ground Acceleration, PGA | | | | |
|-------|---|---------------|-------------------|------------|---------------|
| Class | PGA ≤ 0.10 | PGA = 0.20 | PGA = 0.30 | PGA = 0.40 | PGA ≥ 0.50 |
| Α | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 |
| В | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| С | 1.2 | 1.2 | 1.1 | 1.0 | 1.0 |
| D | 1.6 | 1.4 | 1.2 | 1.1 | 1.0 |
| E | 2.5 | 1.7 | 1.2 | 0.9 | 0.9 |
| F | | See See | ction 11.4.7 of / | ASCE 7 | |

Note: Use straight-line interpolation for intermediate values of PGA

For Site Class = C and PGA = 0.621 g, $F_{\tiny PGA}$ = 1.000

Section 21.2.1.1 — Method 1 (from Chapter 21 – Site-Specific Ground Motion Procedures for Seismic Design)

From <u>Figure 22-17</u> [5]

 $C_{RS} = 1.004$

From Figure 22-18 [6]

 $C_{R1} = 0.992$

Section 11.6 — Seismic Design Category

Table 11.6-1 Seismic Design Category Based on Short Period Response Acceleration Parameter

| VALUE OF S _{DS} | RISK CATEGORY | | | |
|--------------------------------|---------------|-----|----|--|
| VALUE OF 3 _{DS} | I or II | III | IV | |
| S _{DS} < 0.167g | Α | А | А | |
| $0.167g \le S_{DS} < 0.33g$ | В | В | С | |
| $0.33g \le S_{DS} < 0.50g$ | С | С | D | |
| 0.50g ≤ S _{DS} | D | D | D | |

For Risk Category = I and S_{DS} = 1.055 g, Seismic Design Category = D

Table 11.6-2 Seismic Design Category Based on 1-S Period Response Acceleration Parameter

| VALUE OF C | | RISK CATEGORY | |
|------------------------------|---------|---------------|----|
| VALUE OF S _{D1} | I or II | III | IV |
| S _{D1} < 0.067g | Α | А | Α |
| $0.067g \le S_{D1} < 0.133g$ | В | В | С |
| $0.133g \le S_{D1} < 0.20g$ | С | С | D |
| 0.20g ≤ S _{D1} | D | D | D |

For Risk Category = I and $S_{D1} = 0.582$ g, Seismic Design Category = D

Note: When S_1 is greater than or equal to 0.75g, the Seismic Design Category is **E** for buildings in Risk Categories I, II, and III, and **F** for those in Risk Category IV, irrespective of the above.

Seismic Design Category \equiv "the more severe design category in accordance with Table 11.6-1 or 11.6-2" = D

Note: See Section 11.6 for alternative approaches to calculating Seismic Design Category.

References

- 1. Figure 22-1:
 - http://earthquake.usgs.gov/hazards/designmaps/downloads/pdfs/2010_ASCE-7_Figure_22-1.pdf
- 2. Figure 22-2:
 - http://earthquake.usgs.gov/hazards/designmaps/downloads/pdfs/2010_ASCE-7_Figure_22-2.pdf
- 3. Figure 22-12: http://earthquake.usgs.gov/hazards/designmaps/downloads/pdfs/2010_ASCE-7_Figure_22-12.pdf
- 4. Figure 22-7:
 - http://earthquake.usgs.gov/hazards/designmaps/downloads/pdfs/2010_ASCE-7_Figure_22-7.pdf
- 5. Figure 22-17: http://earthquake.usgs.gov/hazards/designmaps/downloads/pdfs/2010_ASCE-7_Figure_22-17.pdf
- 6. Figure 22-18: http://earthquake.usgs.gov/hazards/designmaps/downloads/pdfs/2010_ASCE-7_Figure_22-18.pdf

APPENDIX D

EARTHWORK AND GRADING SPECIFICATIONS

APPENDIX D

EARTHWORK AND GRADING SPECIFICATIONS

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| | STANDARD DETAI | ı c |
| | STANDARD DETAIL | LS |
| A - Ke | ying and Benching | Rear of Text |
| | ersize Rock Disposal | Rear of Text |
| D - Bu | ttress or Replacement Fill Subdrains | Rear of Text |
| E - Tra | Insition Lot Fills and Side Hill Fills | Rear of Text |
| Retaini | ing Wall | Rear of Text |

D-1.0 GENERAL

D-1.1 Intent

These Earthwork and Grading Guide Specifications are for grading and earthwork shown on the current, approved grading plan(s) and/or indicated in the Leighton Consulting, Inc. geotechnical report(s). These Guide Specifications are a part of the recommendations contained in the geotechnical report(s). In case of conflict, the project-specific recommendations in the geotechnical report shall supersede these Guide Specifications. Leighton Consulting, Inc. shall provide geotechnical observation and testing during earthwork and grading. Based on these observations and tests, Leighton Consulting, Inc. may provide new or revised recommendations that could supersede these specifications or the recommendations in the geotechnical report(s).

D-1.2 Role of Leighton Consulting, Inc.

Prior to commencement of earthwork and grading, Leighton Consulting, Inc. shall meet with the earthwork contractor to review the earthwork contractor's work plan, to schedule sufficient personnel to perform the appropriate level of observation, mapping and compaction testing. During earthwork and grading, Leighton Consulting, Inc. shall observe, map, and document subsurface exposures to verify geotechnical design assumptions. If observed conditions are found to be significantly different than the interpreted assumptions during the design phase, Leighton Consulting, Inc. shall inform the owner, recommend appropriate changes in design to accommodate these observed conditions, and notify the review agency where required. Subsurface areas to be geotechnically observed, mapped, elevations recorded, and/or tested include (1) natural ground after clearing to receiving fill but before fill is placed, (2) bottoms of all "remedial removal" areas, (3) all key bottoms, and (4) benches made on sloping ground to receive fill.

Leighton Consulting, Inc. shall observe moisture-conditioning and processing of the subgrade and fill materials, and perform relative compaction testing of fill to determine the attained relative compaction. Leighton Consulting, Inc. shall provide *Daily Field Reports* to the owner and the Contractor on a routine and frequent basis.

D-1.3 The Earthwork Contractor

The earthwork contractor (Contractor) shall be qualified, experienced and knowledgeable in earthwork logistics, preparation and processing of ground to receive fill, moisture-conditioning and processing of fill, and compacting fill. The Contractor shall review and accept the plans, geotechnical report(s), and these Guide Specifications prior to commencement of grading. The Contractor shall be solely responsible for performing grading and backfilling in accordance with the current, approved plans and specifications.

The Contractor shall inform the owner and Leighton Consulting, Inc. of changes in work schedules at least one working day in advance of such changes so that appropriate observations and tests can be planned and accomplished. The Contractor shall not assume that Leighton Consulting, Inc. is aware of all grading operations.

The Contractor shall have the sole responsibility to provide adequate equipment and methods to accomplish earthwork and grading in accordance with the applicable grading codes and agency ordinances, these Guide Specifications, and recommendations in the approved geotechnical report(s) and grading plan(s). If, in the opinion of Leighton Consulting, Inc., unsatisfactory conditions, such as unsuitable soil, improper moisture condition, inadequate compaction, adverse weather, etc., are resulting in a quality of work less than required in these specifications, Leighton Consulting, Inc. shall reject the work and may recommend to the owner that earthwork and grading be stopped until unsatisfactory condition(s) are rectified.

D-2.0 PREPARATION OF AREAS TO BE FILLED

D-2.1 Clearing and Grubbing

Vegetation, such as brush, grass, roots and other deleterious material shall be sufficiently removed and properly disposed of in a method acceptable to the owner, governing agencies and Leighton Consulting, Inc.. Care should be taken not to encroach upon or otherwise damage native and/or historic trees designated by the Owner or appropriate agencies to remain. Pavements, flatwork or other construction should not extend under the "drip line" of designated trees to remain.

Leighton Consulting, Inc. shall evaluate the extent of these removals depending on specific site conditions. Earth fill material shall not contain more than 3 percent of organic materials (by dry weight: ASTM D 2974-00). Nesting of the organic materials shall not be allowed.

If potentially hazardous materials are encountered, the Contractor shall stop work in the affected area, and a hazardous material specialist shall be informed immediately for proper evaluation and handling of these materials prior to continuing to work in that area. As presently defined by the State of California, most refined petroleum products (gasoline, diesel fuel, motor oil, grease, coolant, etc.) have chemical constituents that are considered to be hazardous waste. As such, the indiscriminate dumping or spillage of these fluids onto the ground may constitute a misdemeanor, punishable by fines and/or imprisonment, and shall not be allowed.

D-2.2 Processing

Existing ground that has been declared satisfactory for support of fill, by Leighton Consulting, Inc., shall be scarified to a minimum depth of 6 inches (15 cm). Existing ground that is not satisfactory shall be overexcavated as specified in the following Section D-2.3. Scarification

shall continue until soils are broken down and free of large clay lumps or clods and the working surface is reasonably uniform, flat, and free of uneven features that would inhibit uniform compaction.

D-2.3 Overexcavation

In addition to removals and overexcavations recommended in the approved geotechnical report(s) and the grading plan, soft, loose, dry, saturated, spongy, organic-rich, highly fractured or otherwise unsuitable ground shall be overexcavated to competent ground as evaluated by Leighton Consulting, Inc. during grading. All undocumented fill soils under proposed structure footprints should be excavated

D-2.4 Benching

Where fills are to be placed on ground with slopes steeper than 5:1 (horizontal to vertical units), (>20 percent grade) the ground shall be stepped or benched. The lowest bench or key shall be a minimum of 15 feet (4.5 m) wide and at least 2 feet (0.6 m) deep, into competent material as evaluated by Leighton Consulting, Inc.. Other benches shall be excavated a minimum height of 4 feet (1.2 m) into competent material or as otherwise recommended by Leighton Consulting, Inc.. Fill placed on ground sloping flatter than 5:1 (horizontal to vertical units), (<20 percent grade) shall also be benched or otherwise overexcavated to provide a flat subgrade for the fill.

D-2.5 Evaluation/Acceptance of Fill Areas

All areas to receive fill, including removal and processed areas, key bottoms, and benches, shall be observed, mapped, elevations recorded, and/or tested prior to being accepted by Leighton Consulting, Inc. as suitable to receive fill. The Contractor shall obtain a written acceptance (*Daily Field Report*) from Leighton Consulting, Inc. prior to fill placement. A licensed surveyor shall provide the survey control for determining elevations of processed areas, keys, and benches.

D-3.0 FILL MATERIAL

D-3.1 Fill Quality

Material to be used as fill shall be essentially free of organic matter and other deleterious substances evaluated and accepted by Leighton Consulting, Inc. prior to placement. Soils of poor quality, such as those with unacceptable gradation, high expansion potential, or low strength shall be placed in areas acceptable to Leighton Consulting, Inc. or mixed with other soils to achieve satisfactory fill material.

D-3.2 Oversize

Oversize material defined as rock, or other irreducible material with a maximum dimension greater than 6 inches (15 cm), shall not be buried or placed in fill unless location, materials and placement methods are specifically accepted by Leighton Consulting, Inc.. Placement operations

shall be such that nesting of oversized material does not occur and such that oversize material is completely surrounded by compacted or densified fill. Oversize material shall not be placed within 10 feet (3 m) measured vertically from finish grade, or within 2 feet (0.61 m) of future utilities or underground construction.

D-3.3 Import

If importing of fill material is required for grading, proposed import material shall meet the requirements of Section D-3.1, and be free of hazardous materials ("contaminants") and rock larger than 3-inches (8 cm) in largest dimension. All import soils shall have an Expansion Index (EI) of 20 or less and a sulfate content no greater than (≤) 500 parts-per-million (ppm). A representative sample of a potential import source shall be given to Leighton Consulting, Inc. at least four full working days before importing begins, so that suitability of this import material can be determined and appropriate tests performed.

D-4.0 FILL PLACEMENT AND COMPACTION

D-4.1 Fill Layers

Approved fill material shall be placed in areas prepared to receive fill, as described in Section D-2.0, above, in near-horizontal layers not exceeding 8 inches (20 cm) in loose thickness. Leighton Consulting, Inc. may accept thicker layers if testing indicates the grading procedures can adequately compact the thicker layers, and only if the building officials with the appropriate jurisdiction approve. Each layer shall be spread evenly and mixed thoroughly to attain relative uniformity of material and moisture throughout.

D-4.2 Fill Moisture Conditioning

Fill soils shall be watered, dried back, blended, and/or mixed, as necessary to attain a relatively uniform moisture content at or slightly over optimum. Maximum density and optimum soil moisture content tests shall be performed in accordance with the American Society of Testing and Materials (ASTM) Test Method D 1557.

D-4.3 Compaction of Fill

After each layer has been moisture-conditioned, mixed, and evenly spread, it shall be uniformly compacted to not less than 90 percent of maximum dry density as determined by ASTM Test Method D 1557. For fills thicker than 15 feet (4.5 m), the portion of the fill deeper than 15 feet below proposed finish grade shall be compacted to 95 percent of the ASTM D 1557 laboratory maximum density. Compaction equipment shall be adequately sized and be either specifically designed for soil compaction or of proven reliability to efficiently achieve the specified level of compaction with uniformity.

D-4.4 Compaction of Fill Slopes

In addition to normal compaction procedures specified above, compaction of slopes shall be accomplished by backrolling of slopes with sheepsfoot rollers at increments of 3 to 4 feet (1 to 1.2 m) in fill elevation, or by other methods producing satisfactory results acceptable to Leighton Consulting, Inc.. Upon completion of grading, relative compaction of the fill, out to the slope face, shall be at least 90 percent of the ASTM D 1557 laboratory maximum density.

D-4.5 Compaction Testing

Field-tests for moisture content and relative compaction of the fill soils shall be performed by Leighton Consulting, Inc.. Location and frequency of tests shall be at our field representative(s) discretion based on field conditions encountered. Compaction test locations will not necessarily be selected on a random basis. Test locations shall be selected to verify adequacy of compaction levels in areas that are judged to be prone to inadequate compaction (such as close to slope faces and at the fill/bedrock benches).

D-4.6 Compaction Test Locations

Leighton Consulting, Inc. shall document the approximate elevation and horizontal coordinates of each density test location. The Contractor shall coordinate with the project surveyor to assure that sufficient grade stakes are established so that Leighton Consulting, Inc. can determine the test locations with sufficient accuracy. Adequate grade stakes shall be provided.

D-5.0 EXCAVATION

Excavations, as well as over-excavation for remedial purposes, shall be evaluated by Leighton Consulting, Inc. during grading. Remedial removal depths shown on geotechnical plans are estimates only. The actual extent of removal shall be determined by Leighton Consulting, Inc. based on the field evaluation of exposed conditions during grading. Where fill-over-cut slopes are to be graded, the cut portion of the slope shall be made, evaluated, and accepted by Leighton Consulting, Inc. prior to placement of materials for construction of the fill portion of the slope, unless otherwise recommended by Leighton Consulting, Inc..

D-6.0 TRENCH BACKFILLS

D-6.1 Safety

The Contractor shall follow all OSHA and Cal/OSHA requirements for safety of trench excavations. Work should be performed in accordance with Article 6 of the *California Construction Safety Orders*, 2003 Edition or more current.

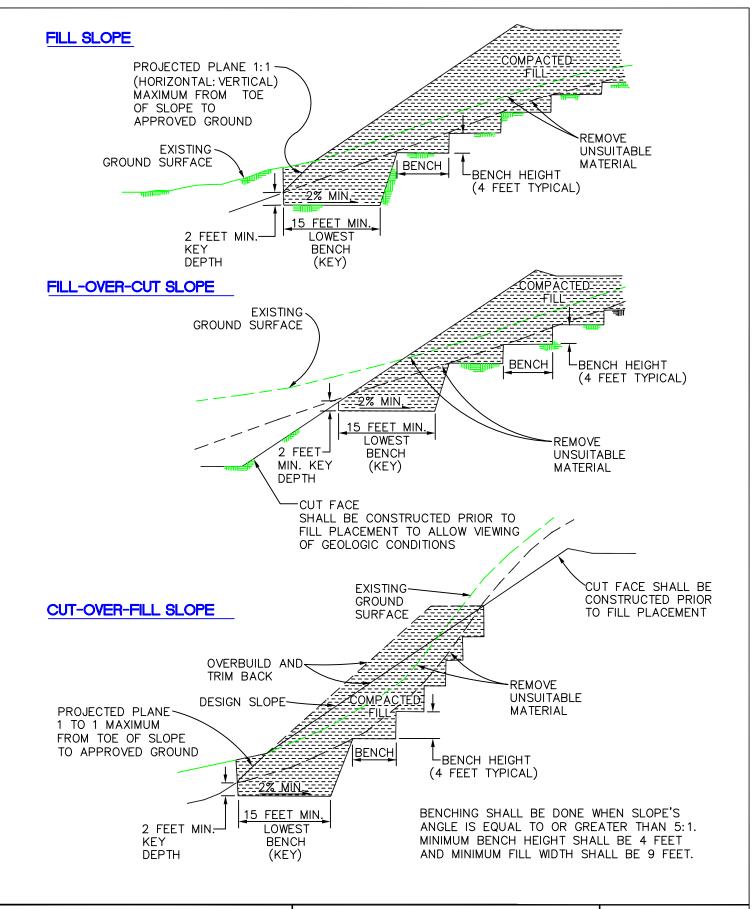
D-6.2 Bedding and Backfill

All bedding and backfill of utility trenches shall be performed in accordance with the applicable provisions of Standard Specifications of Public Works Construction. Bedding material shall

have a Sand Equivalent greater than 30 (SE>30). Bedding shall be placed to 1-foot (0.3 m) over the top of the conduit, and densified by jetting. Backfill shall be placed and densified to a minimum of 90 percent of relative compaction (ASTM D 1557) from 1 foot (0.3 m) above the top of the conduit to the surface. Jetting of the bedding around the conduits shall be observed by Leighton Consulting, Inc. and backfill above the pipe zone (bedding) shall be observed and tested by Leighton Consulting, Inc..

D-6.3 Lift Thickness

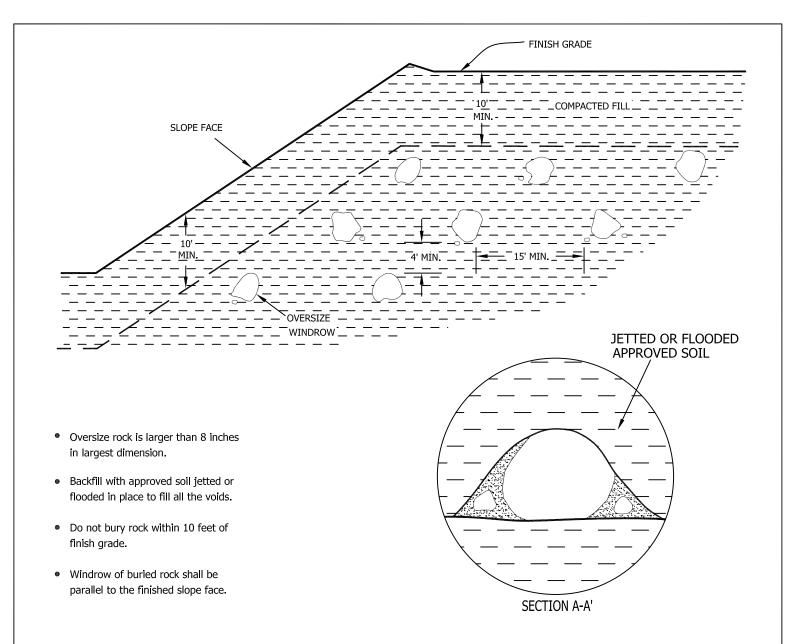
Lift thickness of trench backfill shall not exceed those allowed in the Standard Specifications of Public Works Construction unless the Contractor can demonstrate to Leighton Consulting, Inc. that the fill lift can be compacted to the minimum relative compaction by his alternative equipment and method, and only if the building officials with the appropriate jurisdiction approve.



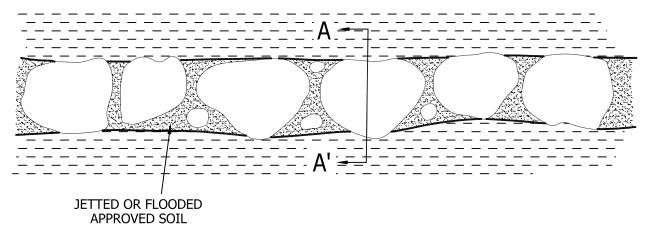
KEYING AND BENCHING

GENERAL EARTHWORK AND GRADING
SPECIFICATIONS
STANDARD DETAILS A





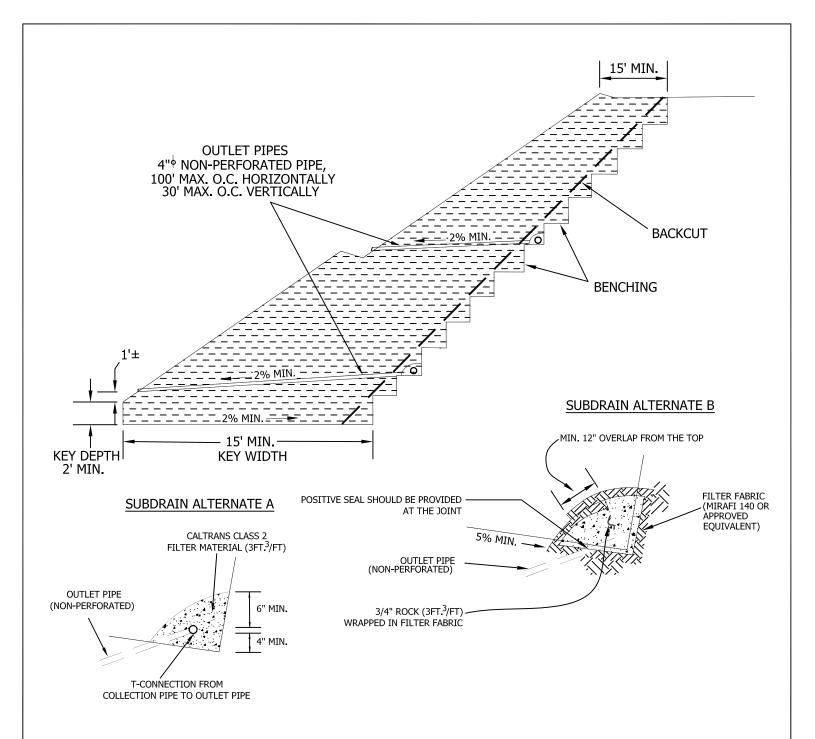
PROFILE ALONG WINDROW



OVERSIZE ROCK DISPOSAL

GENERAL EARTHWORK AND GRADING SPECIFICATIONS STANDARD DETAILS B





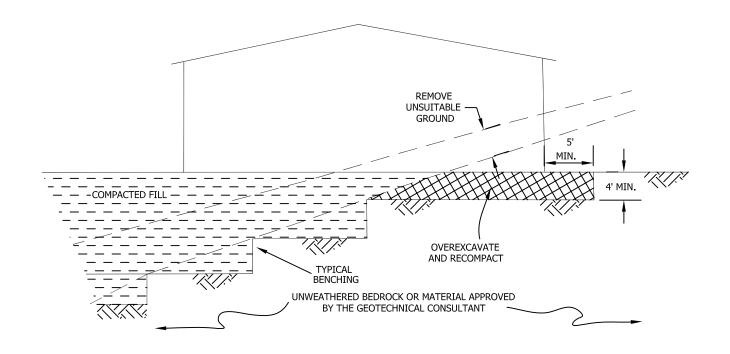
- SUBDRAIN INSTALLATION Subdrain collector pipe shall be installed with perforations down or, unless otherwise designated by the geotechnical consultant. Outlet pipes shall be non-perforated pipe. The subdrain pipe shall have at least 8 perforations uniformly spaced per foot. Perforation shall be 1/4" to 1/2" if drilled holes are used. All subdrain pipes shall have a gradient at least 2% towards the outlet.
- SUBDRAIN PIPE Subdrain pipe shall be ASTM D2751, ASTM D1527 (Schedule 40) or SDR 23.5 ABS pipe or ASTM D3034 (Schedule 40) or SDR 23.5 PVC pipe.
- All outlet pipe shall be placed in a trench and, after fill is placed above it, rodded to verify integrity.

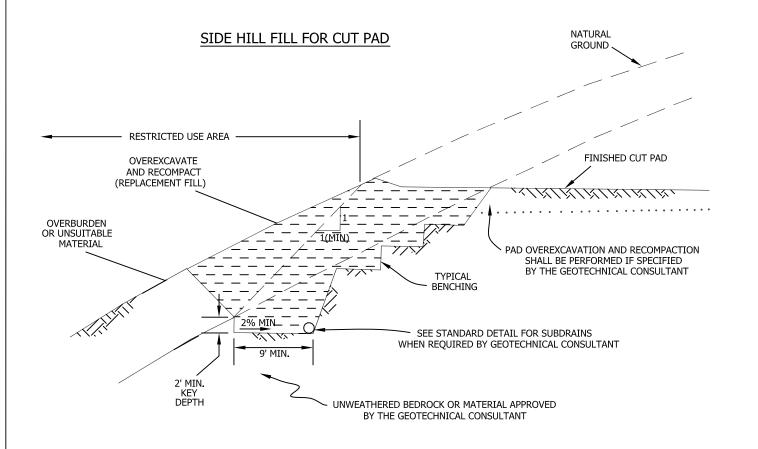
BUTTRESS OR REPLACEMENT FILL SUBDRAINS

GENERAL EARTHWORK AND GRADING SPECIFICATIONS STANDARD DETAILS D



CUT-FILL TRANSITION LOT OVEREXCAVATION



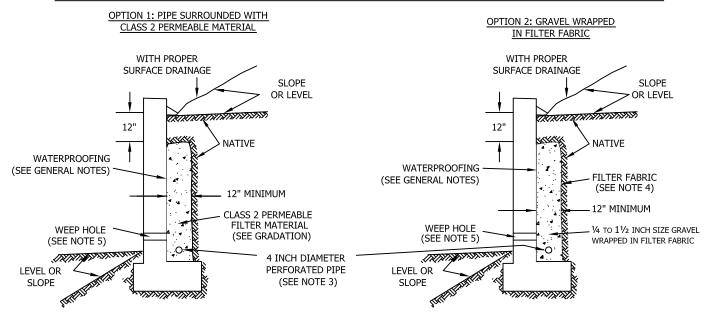


TRANSITION LOT FILLS AND SIDE HILL FILLS

GENERAL EARTHWORK AND GRADING
SPECIFICATIONS
STANDARD DETAILS E



SUBDRAIN OPTIONS AND BACKFILL WHEN NATIVE MATERIAL HAS EXPANSION INDEX OF ≤50



Class 2 Filter Permeable Material Gradation Per Caltrans Specifications

| Percent Passing |
|-----------------|
| 100 |
| 90-100 |
| 40-100 |
| 25-40 |
| 18-33 |
| 5-15 |
| 0-7 |
| 0-3 |
| |

GENERAL NOTES:

- * Waterproofing should be provided where moisture nuisance problem through the wall is undesirable.
- * Water proofing of the walls is not under purview of the geotechnical engineer
- * All drains should have a gradient of 1 percent minimum
- *Outlet portion of the subdrain should have a 4-inch diameter solid pipe discharged into a suitable disposal area designed by the project engineer. The subdrain pipe should be accessible for maintenance (rodding)
- *Other subdrain backfill options are subject to the review by the geotechnical engineer and modification of design parameters.

Notes:

- 1) Sand should have a sand equivalent of 30 or greater and may be densified by water jetting.
- 2) 1 Cu. ft. per ft. of 1/4- to 1 1/2-inch size gravel wrapped in filter fabric
- 3) Pipe type should be ASTM D1527 Acrylonitrile Butadiene Styrene (ABS) SDR35 or ASTM D1785 Polyvinyl Chloride plastic (PVC), Schedule 40, Armco A2000 PVC, or approved equivalent. Pipe should be installed with perforations down. Perforations should be 3/8 inch in diameter placed at the ends of a 120-degree arc in two rows at 3-inch on center (staggered)
- 4) Filter fabric should be Mirafi 140NC or approved equivalent.
- 5) Weephole should be 3-inch minimum diameter and provided at 10-foot maximum intervals. If exposure is permitted, weepholes should be located 12 inches above finished grade. If exposure is not permitted such as for a wall adjacent to a sidewalk/curb, a pipe under the sidewalk to be discharged through the curb face or equivalent should be provided. For a basement-type wall, a proper subdrain outlet system should be provided.
- 6) Retaining wall plans should be reviewed and approved by the geotechnical engineer.
- 7) Walls over six feet in height are subject to a special review by the geotechnical engineer and modifications to the above requirements.

RETAINING WALL BACKFILL AND SUBDRAIN DETAIL FOR WALLS 6 FEET OR LESS IN HEIGHT

WHEN NATIVE MATERIAL HAS EXPANSION INDEX OF ≤50



APPENDIX E

ASFE - IMPORTANT INFORMATION ABOUT YOUR GEOTECHNICAL REPORT

Important Information About Your

Geotechnical Engineering Report

Subsurface problems are a principal cause of construction delays, cost overruns, claims, and disputes.

The following information is provided to help you manage your risks.

Geotechnical Services Are Performed for Specific Purposes, Persons, and Projects

Geotechnical engineers structure their services to meet the specific needs of their clients. A geotechnical engineering study conducted for a civil engineer may not fulfill the needs of a construction contractor or even another civil engineer. Because each geotechnical engineering study is unique, each geotechnical engineering report is unique, prepared *solely* for the client. No one except you should rely on your geotechnical engineering report without first conferring with the geotechnical engineer who prepared it. *And no one — not even you —* should apply the report for any purpose or project except the one originally contemplated.

Read the Full Report

Serious problems have occurred because those relying on a geotechnical engineering report did not read it all. Do not rely on an executive summary. Do not read selected elements only.

A Geotechnical Engineering Report Is Based on A Unique Set of Project-Specific Factors

Geotechnical engineers consider a number of unique, project-specific factors when establishing the scope of a study. Typical factors include: the client's goals, objectives, and risk management preferences; the general nature of the structure involved, its size, and configuration; the location of the structure on the site; and other planned or existing site improvements, such as access roads, parking lots, and underground utilities. Unless the geotechnical engineer who conducted the study specifically indicates otherwise, do not rely on a geotechnical engineering report that was:

- not prepared for you,
- not prepared for your project,
- · not prepared for the specific site explored, or
- completed before important project changes were made.

Typical changes that can erode the reliability of an existing geotechnical engineering report include those that affect:

 the function of the proposed structure, as when it's changed from a parking garage to an office building, or from a light industrial plant to a refrigerated warehouse,

- elevation, configuration, location, orientation, or weight of the proposed structure,
- · composition of the design team, or
- project ownership.

As a general rule, *always* inform your geotechnical engineer of project changes—even minor ones—and request an assessment of their impact. *Geotechnical engineers cannot accept responsibility or liability for problems that occur because their reports do not consider developments of which they were not informed.*

Subsurface Conditions Can Change

A geotechnical engineering report is based on conditions that existed at the time the study was performed. *Do not rely on a geotechnical engineering report* whose adequacy may have been affected by: the passage of time; by man-made events, such as construction on or adjacent to the site; or by natural events, such as floods, earthquakes, or groundwater fluctuations. *Always* contact the geotechnical engineer before applying the report to determine if it is still reliable. A minor amount of additional testing or analysis could prevent major problems.

Most Geotechnical Findings Are Professional Opinions

Site exploration identifies subsurface conditions only at those points where subsurface tests are conducted or samples are taken. Geotechnical engineers review field and laboratory data and then apply their professional judgment to render an opinion about subsurface conditions throughout the site. Actual subsurface conditions may differ—sometimes significantly—from those indicated in your report. Retaining the geotechnical engineer who developed your report to provide construction observation is the most effective method of managing the risks associated with unanticipated conditions.

A Report's Recommendations Are *Not* Final

Do not overrely on the construction recommendations included in your report. *Those recommendations are not final*, because geotechnical engineers develop them principally from judgment and opinion. Geotechnical engineers can finalize their recommendations only by observing actual

subsurface conditions revealed during construction. The geotechnical engineer who developed your report cannot assume responsibility or liability for the report's recommendations if that engineer does not perform construction observation.

A Geotechnical Engineering Report Is Subject to Misinterpretation

Other design team members' misinterpretation of geotechnical engineering reports has resulted in costly problems. Lower that risk by having your geotechnical engineer confer with appropriate members of the design team after submitting the report. Also retain your geotechnical engineer to review pertinent elements of the design team's plans and specifications. Contractors can also misinterpret a geotechnical engineering report. Reduce that risk by having your geotechnical engineer participate in prebid and preconstruction conferences, and by providing construction observation.

Do Not Redraw the Engineer's Logs

Geotechnical engineers prepare final boring and testing logs based upon their interpretation of field logs and laboratory data. To prevent errors or omissions, the logs included in a geotechnical engineering report should *never* be redrawn for inclusion in architectural or other design drawings. Only photographic or electronic reproduction is acceptable, *but recognize that separating logs from the report can elevate risk*.

Give Contractors a Complete Report and Guidance

Some owners and design professionals mistakenly believe they can make contractors liable for unanticipated subsurface conditions by limiting what they provide for bid preparation. To help prevent costly problems, give contractors the complete geotechnical engineering report, but preface it with a clearly written letter of transmittal. In that letter, advise contractors that the report was not prepared for purposes of bid development and that the report's accuracy is limited; encourage them to confer with the geotechnical engineer who prepared the report (a modest fee may be required) and/or to conduct additional study to obtain the specific types of information they need or prefer. A prebid conference can also be valuable. Be sure contractors have sufficient time to perform additional study. Only then might you be in a position to give contractors the best information available to you, while requiring them to at least share some of the financial responsibilities stemming from unanticipated conditions.

Read Responsibility Provisions Closely

Some clients, design professionals, and contractors do not recognize that geotechnical engineering is far less exact than other engineering disciplines. This lack of understanding has created unrealistic expectations that

have led to disappointments, claims, and disputes. To help reduce the risk of such outcomes, geotechnical engineers commonly include a variety of explanatory provisions in their reports. Sometimes labeled "limitations" many of these provisions indicate where geotechnical engineers' responsibilities begin and end, to help others recognize their own responsibilities and risks. *Read these provisions closely.* Ask questions. Your geotechnical engineer should respond fully and frankly.

Geoenvironmental Concerns Are Not Covered

The equipment, techniques, and personnel used to perform a *geoenviron-mental* study differ significantly from those used to perform a *geotechnical* study. For that reason, a geotechnical engineering report does not usually relate any geoenvironmental findings, conclusions, or recommendations; e.g., about the likelihood of encountering underground storage tanks or regulated contaminants. *Unanticipated environmental problems have led to numerous project failures*. If you have not yet obtained your own geoenvironmental information, ask your geotechnical consultant for risk management guidance. *Do not rely on an environmental report prepared for someone else*.

Obtain Professional Assistance To Deal with Mold

Diverse strategies can be applied during building design, construction, operation, and maintenance to prevent significant amounts of mold from growing on indoor surfaces. To be effective, all such strategies should be devised for the express purpose of mold prevention, integrated into a comprehensive plan, and executed with diligent oversight by a professional mold prevention consultant. Because just a small amount of water or moisture can lead to the development of severe mold infestations, a number of mold prevention strategies focus on keeping building surfaces dry. While groundwater, water infiltration, and similar issues may have been addressed as part of the geotechnical engineering study whose findings are conveyed in this report, the geotechnical engineer in charge of this project is not a mold prevention consultant; none of the services performed in connection with the geotechnical engineer's study were designed or conducted for the purpose of mold prevention. Proper implementation of the recommendations conveved in this report will not of itself be sufficient to prevent mold from growing in or on the structure involved.

Rely, on Your ASFE-Member Geotechncial Engineer for Additional Assistance

Membership in ASFE/THE BEST PEOPLE ON EARTH exposes geotechnical engineers to a wide array of risk management techniques that can be of genuine benefit for everyone involved with a construction project. Confer with you ASFE-member geotechnical engineer for more information.



8811 Colesville Road/Suite G106, Silver Spring, MD 20910 Telephone: 301/565-2733 Facsimile: 301/589-2017 e-mail: info@asfe.org www.asfe.org

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FINAL INITIAL STUDY/MITIGATED NEGATIVE DECLARATION
RESPONSES TO COMMENTS ON INITIAL
STUDY/MITIGATED NEGATIVE DECLARATION
MITIGATION MONITORING AND REPORTING PROGRAM
FOR THE
SOUTHWEST JUSTICE CENTER JUVENILE COURTS
RELOCATION
EA 2016011

Prepared for:

County of Riverside Economic Development Agency

February 2016



Final Initial Study/Mitigated Negative Declaration

Responses to Comments Regarding the Initial Study/Mitigated Negative Declaration

Mitigation Monitoring and Reporting Program

for the

Southwest Justice Center Juvenile Courts Relocation

EA 201601I

Prepared by:



3403 10th Street, Suite 400 Riverside, CA 92501

Assisted by:

Albert A. WEBB Associates 3788 McCray Street Riverside, CA 92506

February 2016

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| Section 1 | Final Initial Study | //Mitigated | Negative Declaration |
|-----------|-------------------------|---------------|----------------------|
| OCCUPIT I | i iiiai iiiiciai ocaa j | , itiicipatea | regative Deciaration |

Section 2 Responses to Comments Regarding the Initial Study/Mitigated Negative Declaration

Section 3 Mitigation Monitoring and Reporting Program

INTRODUCTION TO THE FINAL CEQADOCUMENTS

In accordance with the California Environmental Quality Act (CEQA) (Public Resources Code Sections 21000–21177), this Initial Study has been prepared to determine potentially significant impacts upon the environment resulting from the construction and operation of the Southwest Justice Center Juvenile Courts Relocation (Project). In accordance with Section 15063 of the State CEQA Guidelines, this Initial Study is a preliminary analysis by the County of Riverside Economic Development Agency (EDA) to inform the Lead Agency (County of Riverside), other affected agencies, and the public of potential environmental impacts associated with the implementation of the proposed Project.

Organization of Final CEQA Documents

The final CEQA documents for the Project include the Initial Study Responses to Comments, and the Mitigation Monitoring and Reporting Program. These documents are organized as follows:

- **Introduction**, which provides the context for the review along, with applicable citation pursuant to CEQA and the State *CEQA Guidelines*.
- **Environmental Checklist Form**, which provides the Project Description, a brief discussion of the existing environmental setting, and an environmental impact assessment consisting of an environmental checklist and accompanying analysis for responding to checklist questions.
- References, which includes a list of reference sources.
- Responses to Comments Received, which includes copies of the comment letters received regarding
 the IS/MND. Although CEQA does not require EDA to respond to late comments, responses have
 nonetheless been prepared in order to provide EDA with additional information upon which to base
 their decision.

Where comments received on the IS/MND and EDA's responses resulted in changes to the text of the IS/MND, such changes are shown in the Final IS/MND text using the following conventions:

- > Text added to the Final IS/MND is shown as underline
- > Text deleted from the Final IS/MND is shown as strikethrough

The textual changes to the Final IS/MND do not constitute "substantial revision" as defined in State CEQA Guidelines Section 15073.5(b); therefore, recirculation of the IS/MND is not required.

SECTION 1

Final Initial Study/Mitigated Negative Declaration Southwest Justice Center Juvenile Courts Relocation EA 2016011

Prepared by:



3403 10th Street, Suite 400 Riverside, CA 92501

Assisted by:

Albert A. WEBB Associates 3788 McCray Street Riverside, CA 92506

February 2016

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- Appendix B.2 Southwest Justice Center Juvenile Hall Courts Relocation Project Narrow Endemic and Criteria Area Plant Species Survey
- Appendix B.3 Results of Burrowing Owl Focused Survey at SWJC
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ACRONYMS AND ABBREVIATIONS

Acronyms

ADT Average daily trips

APN Assessor's Parcel Number

AQMP Air Quality Management Plan

Basin South Coast Air Basin

BMPs Best Management Practices

CalEEMod California Emissions Estimator Model

CBC California Building Code

CDFW California Department of Fish and Wildlife

CEQA California Environmental Quality Act
CMP Congestion Management Program

DAMP Riverside County Drainage Area Management Plan —Santa Ana and Santa Margarita

Region

EA Environmental Assessment

EMWD Eastern Municipal Water District
FAR Federal Aviation Regulations

ran Federal Aviation Regulations

ITE Institute of Transportation Engineers

LST Localized Significance Threshold

MBTA Migratory Bird Treaty Act
MRZ Mineral Resource Zone

MSHCP Western Riverside County Multiple Species Habitat Conservation Plan

MWD Metropolitan Water District of Southern California

NCCP Natural Communities Conservation Plan

NPDES National Pollutant Discharge Elimination System

PRC Public Resources Code

RCA Western Riverside County Regional Conservation Authority

RCALUCP Riverside County Airport Land Use Compatibility Plan

RTA Riverside Transit Agency

SCAQMD South Coast Air Quality Management District

SRA Source Receptor Area

SWJC Southwest Justice Center

SWPPP Storm Water Pollution Prevention Plan SWRCB State Water Resources Control Board

TVRWRF Temecula Valley Regional Water Reclamation Facility

UBC Uniform Building Code

Acronyms

WQMP Water Quality Management Plan

Units of Measurement and Chemical Symbols

CH₄ Methane

CO₂ Carbon dioxide

CO₂E Carbon dioxide equivalents

GHG Greenhouse gas

MGD Million gallons per day

MTCO₂E Metric tonnes of carbon dioxide equivalent

N₂O Nitrous oxide

PM₁₀ Particulate matter 2.5 to 10 microns in diameter

INTRODUCTION TO THE FINAL INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

In accordance with the California Environmental Quality Act ("CEQA") (Public Resources Code Sections 21000 – 21177), this Initial Study has been prepared to determine potentially significant impacts upon the environment resulting from the development of the proposed Southwest Justice Center Juvenile Courts Relocation Project ("Project"). In accordance with Section 15063 of the State *CEQA Guidelines*, this Initial Study (IS) is a preliminary analysis prepared by the Riverside County Economic Development Agency ("EDA") for the County of Riverside, as the appropriate Lead Agency pursuant to CEQA, in consultation with other jurisdictional agencies, to inform the County decision makers, affected agencies, and the public of potential environmental impacts associated with the implementation of the proposed Project.

Organization of the Initial Study

The Initial Study is organized as follows:

- **Introduction**, which provides the context for the review along with applicable citation pursuant to CEQA and the State *CEQA Guidelines*.
- County of Riverside Environmental Assessment Form: Initial Study, which provides the project
 description, a brief discussion of the existing environmental setting, a discussion of the relationship of
 the Project to the County of Riverside General Plan, and an environmental impact assessment
 consisting of an environmental checklist and accompanying analysis for responding to checklist
 questions.
- **References,** which includes a list of reference sources.
- **List of Initial Study Preparers,** which identifies those responsible for preparation of this Initial Study and other parties contacted during the preparation of the Initial Study.

Environmental Process

The environmental process being undertaken as part of the proposed Project began with the initial project and environmental research. The Initial Study and Mitigated Negative Declaration will be subject to a 20-day public review period. During this review period, public and agency comments on the document relative to environmental issues should be addressed to:

Mike Sullivan, Senior Environmental Planner Riverside County Economic Development Agency 3403 10th Street, Suite 400 Riverside, California 92501

Comments received during that time will be considered as part of the Project's environmental review and will be included with the Initial Study document for consideration by the Riverside County Board of Supervisors ("Board"). If the Board determines that the Project will have no significant long-term, unmitigatable environmental effects, a Mitigated Negative Declaration will be adopted for the Project.

Where comments received on the IS/MND and EDA's responses resulted in changes to the text of the IS/MND, such changes are shown in the Final IS/MND text using the following conventions:

- > Text added to the Final IS/MND is shown as underline
- > Text deleted from the Final IS/MND is shown as strikethrough

The textual changes to the Final IS/MND do not constitute "substantial revision" as defined in State *CEQA Guidelines* Section 15073.5(b); therefore, recirculation of the IS/MND is not required.

Incorporation by Reference

Pertinent documents relating to this Initial Study have been cited and incorporated, in accordance with Sections 15148 and 15150 of the State *CEQA Guidelines*, to eliminate the need for inclusion of large planning documents within the Initial Study. Of particular relevance are those previous studies that present information regarding description of the environmental setting, future development-related growth, and cumulative impacts. The following documents are hereby identified as being incorporated by reference:

Riverside County General Plan, June 2003

Riverside County Integrated Project, General Plan Final Program Environmental Impact Report (SCH No. 20020511430), June 2003

Southwest Area Plan, County of Riverside General Plan, October 2003

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COUNTY OF RIVERSIDE

ENVIRONMENTAL ASSESSMENT FORM: INITIAL STUDY

Environmental Assessment (E.A.) Number: 2016011

Lead Agency Name: County of Riverside

Address: 4080 Lemon Street, Riverside, CA 92501

Contact Person: Mike Sullivan, Senior Environmental Planner

Telephone Number: (951) 955-8009 **Applicant's Name:** County of Riverside

Applicant's Address: 4050 Main Street, Riverside, CA 92501

I. PROJECT INFORMATION

A. Project Description:

The project entails the construction and operation of a building and execution of necessary agreements facilitating the addition of two juvenile courts and ancillary office space as well as additional surface parking areas, access roads, and walkways at the Southwest Justice Center (SWJC) in the unincorporated French Valley area of Riverside County (hereinafter the "Project"). Figure 1 – Regional Location Map shows the Project site's regional location. The SWJC is an existing campus environment consisting of improvements and buildings which are currently occupied by the Riverside County Division of the Superior Courts of California; Riverside County Departments of County Counsel, District Attorney, Economic Development Agency, Public Defender, Public Social Services, Probation, Purchasing/Fleet Services, and Sheriff; and the city of Temecula Police Department. Due to the loss of approximately 16,000 square feet of courthouse space (courtrooms, chambers, and clerk offices) in the city of Indio that were removed to facilitate the East County Detention Center project, the Riverside County Division of the Superior Courts of California has determined the SWJC must expand its existing courthouse services to provide for additional criminal or civil case types. In order for the existing SWJC courthouse to expand these case types, the two existing juvenile courtrooms will be relocated from the SWJC courthouse to the Project's proposed courthouse. The SWJC juvenile courts currently handle both dependency and delinquency cases, and these case types will be relocated to the Project's proposed courthouse. The Project's proposed courthouse will consist of two courtrooms. One courtroom will handle juvenile dependency cases and the other courtroom will handle juvenile delinquency cases.

Albert A. WEBB Associates

¹Juvenile dependency relates to the welfare of children and involves the protection of children who have been or are at risk of being abused, neglected, or abandoned. Juvenile delinquency involves minors under the age of 18 years who have allegedly committed a delinquent act, which would be a crime if committed by an adult.

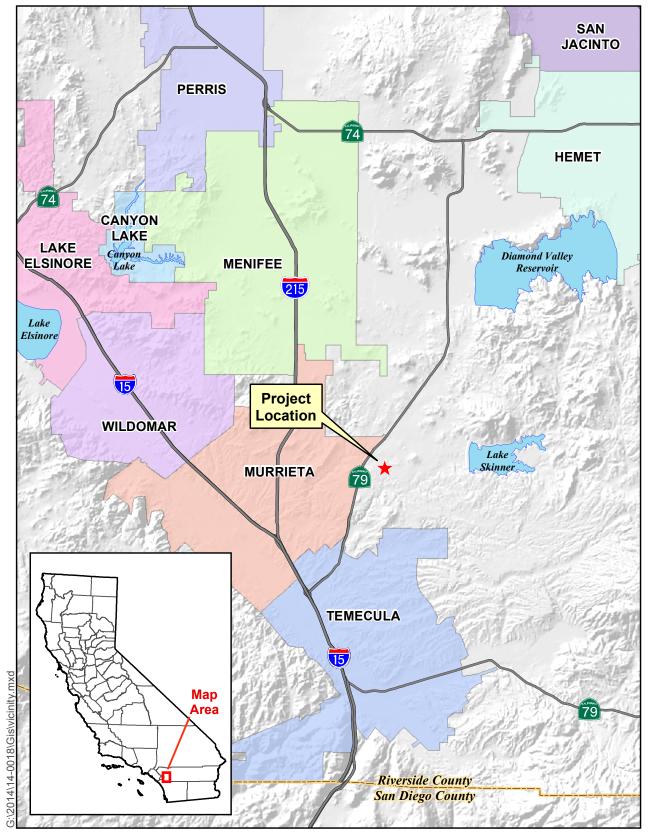


Figure 1 - Regional Location Map



The Project site, which encompasses approximately 3 acres, is located entirely within the approximately 48-acre parcel of the SWJC campus (see **Figure 2 – Aerial Photograph**). The SWJC campus is located at 30755 Auld Road and is generally bounded by Auld Road to the north, Leon Road to the east, undeveloped land to the south, and the French Valley Airport to the west. Specifically, the proposed Project will be in the northeast area of the existing parcel, which is currently disturbed undeveloped land. The Project site is located directly north of the existing Juvenile Detention Center at the SWJC campus. The assessor's parcel number (APN) for the Project site is 963-080-013 (which is the APN on which the existing SWJC facilities are located). The location of the proposed Project was chosen for its sufficient area, adjacency to the Juvenile Detention Center, and the existing northern parking lot.

The proposed building will encompass approximately 14,336 square feet and include the following areas:

- Court Sets / Judiciary
- Judiciary / Courtroom Support
- Juvenile Divisions and Administration
- Public Area
- Court Security Operations
- Court and Staff Support
- Children's Waiting Room
- In-Custody Holding—Adults
- In-Custody Holding—Juveniles
- Building Operations Support
- Judicial Parking and Sally Port

Although the Project will not be LEED certified, it will incorporate LEED-eligible sustainable design features such as water efficient landscaping and water use reduction. In addition, the Project will incorporate features intended to optimize energy performance and enhance refrigeration management. The Project will also support alternative transportation including public transportation access, and short-term and long-term bicycle parking. It will incorporate indoor environmental quality elements including increased ventilation, the use of low emitting materials, and daylight views. The Project design will include use of recycled materials and rapidly renewable materials.

Figures 3a through 3d – Proposed Project are a series of figures that includes the rendering of the main entrance, structural elevations, facility footprints, and courthouse floor plan. The proposed structure will consist of one level and will include the two courtrooms with conference space and chambers, lobby/waiting area, child waiting area, administration space with public counters, adult and juvenile holdings areas, security screening area, bathrooms, and an entry lobby. The exterior walls of the proposed structure will consist of masonry block and a standing seam roof will be located over the entry lobby. The height of the proposed structure from grade to the roof line will be approximately 26 feet. Accounting for the standing seam roof over the entry lobby, the height from grade will be approximately 33 feet.



Sources: County of Riverside GIS, 2014; Eagle Aerial, April 2012.



Figure 2 - Aerial Photograph

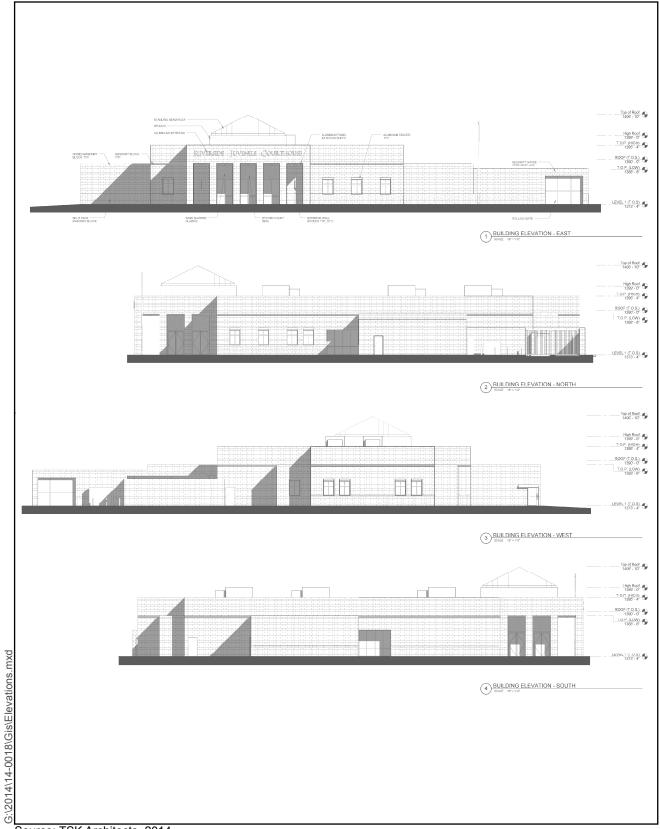




Source: TSK Architects, 2014

Figure 3a - Proposed Project: Entrance Rendering





Source: TSK Architects, 2014.

Figure 3b - Proposed Project: Elevations



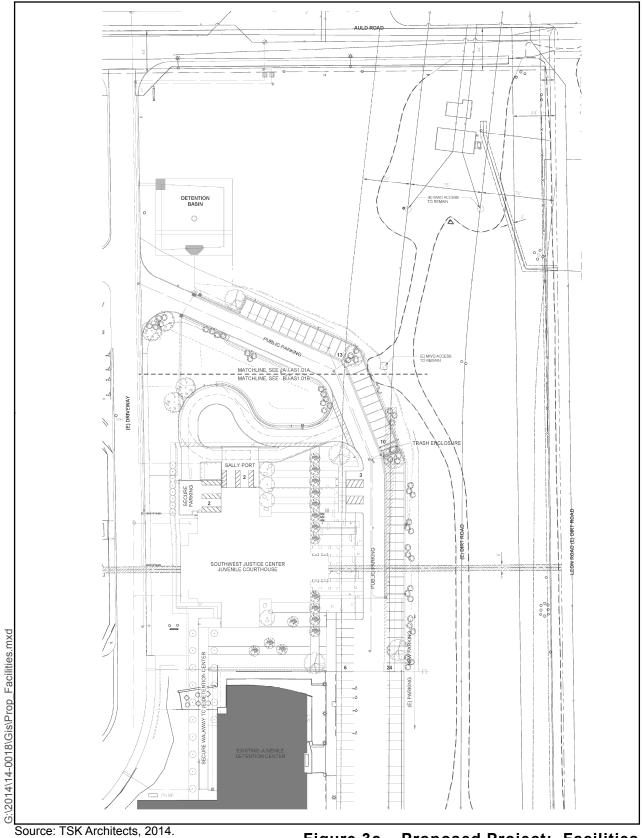
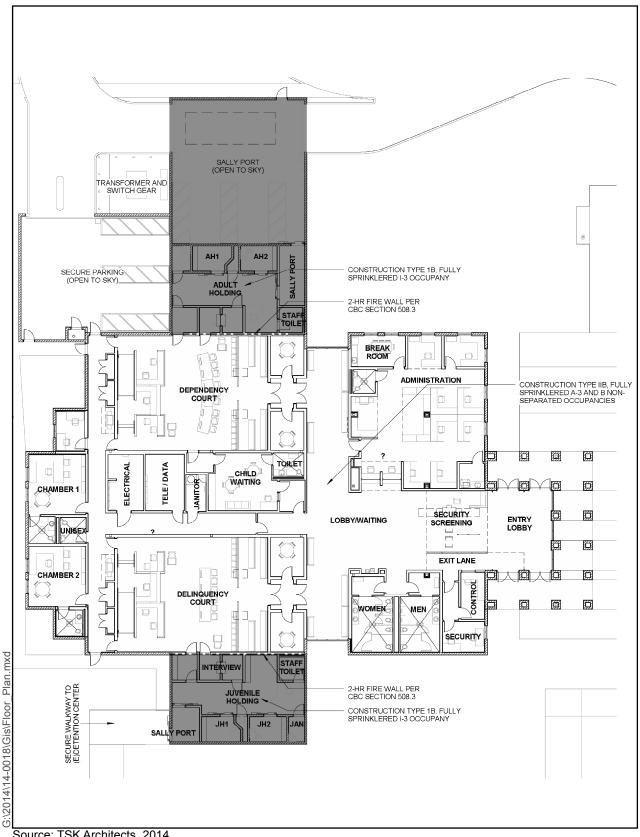


Figure 3c - Proposed Project: Facilities





Source: TSK Architects, 2014.

Figure 3d - Proposed Project: Floor Plan



Given the nature of the proposed use as courtrooms, strict security of the building will be provided, and security personnel will be afforded direct visibility to those being screened and those queuing to be screened. A high degree of visibility of all public areas and a distinct separation of public and restricted areas are included in the site plan. Restricted areas will not be accessible to the public, and the public will not have access to in-custody persons. The adult holding area to the north side of the proposed structure will be accessible from a secured, walled vehicular sally port with motorized rolling gates, and the juvenile holding area to the south of the proposed structure will be accessible from a secured walkway that connects the Juvenile Detention Center and proposed structure. This walkway will include an overhead cover and fenced wall enclosures for security purposes to transport in-custody juveniles to and from the delinquency courtroom. Currently, transfers of in-custody persons occur to and from the courtrooms and detention center by van. The proposed holding areas and secure walkway corridor will decrease these types of transfers.

The Project will also include an on-site detention basin to which Project stormwater runoff will be conveyed via storm drains. The detention basin is located north of the proposed on-site driveway, generally in the northwestern area of the Project site, will be 80 feet by 80 feet and include rip rap stabilizers, flow leveling berm, and a dry well with chimney inlet. The Project includes landscaped areas consisting of ground cover, shrubs, trees, and three bioretention areas. These bioretention areas will remove contaminants and sedimentation from stormwater runoff, and the landscaped areas will promote infiltration, further reducing runoff from the Project site.

The Project will provide an on-site public parking area with 55 parking spaces. There will also be a secured, walled parking area with motorized rolling gate located on the west side of the proposed structure and separate from the public parking area. The on-site public parking area will directly connect with an existing parking area to the east of the Juvenile Detention Center. Additionally, access to the Project site will be provided from existing internal driveways within the SWJC campus. The Project site will not be directly accessible from Auld Road or Leon Road. It should be noted that, since adequate infrastructure exists and all impacts will be mitigated to less than significant, no off-site improvements are required for the Project.

The Project will comply with standards set forth in the adopted *California Trial Court Facilities Standards* prepared by the Judicial Court of California. All design and construction of the Project facilities will be in accordance with good engineering practices, applicable government regulations, Riverside County Health Services Department, and California Department of Health Services, Cal OSHA, Standard Specifications for Public Works Construction, Uniform Building Code (UBC), National Electric Code, and Uniform Fire Code. The Project will comply with all applicable federal, state, and County ordinances, standards, and procedures for public facility design, construction, maintenance, and operation. Additionally, the Project will comply with all requirements to notify utility companies of impending construction, obtain relevant information regarding existing subsurface utilities, and if necessary, consult with utility companies regarding the preservation and/or relocation of such utilities.

Construction of the entire Project is anticipated to take approximately 14 months.

| В. | Type of Project: | Site Specific X; | Countywide | ; | Community | | ; Policy | | l. |
|----|------------------|------------------|------------|---|-----------|--|----------|--|----|
|----|------------------|------------------|------------|---|-----------|--|----------|--|----|

C. Total Project Area: 3 acres

Residential Acres: N/A

Commercial Acres: N/A

Lots: N/A

Sq. Ft. of Bldg. Area: N/A

Conter: Judicial Courtrooms

Lots: N/A

Lots: N/A

Sq. Ft. of Bldg. Area: N/A

Sq. Ft. of Bldg. Area: N/A

Sq. Ft. of Bldg. Area: 13,452

Est. No. of Employees: N/A

Sq. Ft. of Bldg. Area: 13,452

D. Assessor's Parcel No(s): 963-080-013

E. Street References: Southwest of the intersection of Auld Road and Leon Road

F. Section, Township & Range Description or reference/attach a Legal Description: Section 7, Township 7 South, Range 2 West as shown on USGS 7.5-minute *Bachelor Mountain, California* quadrangle

G. Brief description of the existing environmental setting of the project site and its surroundings: Currently, the Project site is undeveloped but disturbed land consisting of generally weedy vegetation. The Project site is bordered on the west by the existing SWJC, on the south by the existing Juvenile Hall facilities and undeveloped land, on the east by undeveloped land and rural residences, and on the north by undeveloped land. The area of the Project site where the courtroom structure is proposed is generally a ridge top with existing cut slopes descending (approximately 10 to 20 feet) along the southern and western sides to the existing driveway.

II. APPLICABLE GENERAL PLAN AND ZONING REGULATIONS

A. General Plan Elements/Policies:

- 1. Land Use: The Project site is primarily designated Business Park (BP), although a small sliver of the eastern portion of the site is designated Public Facilities (PF). The Project does not propose to amend these designations of the Project site or adjacent properties, and provides uses that are consistent with this designation and the existing SWJC use. The Project will not conflict with Land Use Element policies.
- 2. Circulation: To the north of the Project site is Auld Road and to the east is Leon Road. Both of these roadways are designated Secondary (100-foot right-of-way) in the Project area; however, Leon Road north of its intersection with Auld Road is designated Major (118-foot right-of-way). The Project does not propose to amend these designations or improve these roadways, and the Project will not conflict with Circulation Element policies.
- 3. Multipurpose Open Space: Regarding conservation, the Project site is designated Farmland of Local Importance, and the existing SWJC development is designated Urban/Built Up. The Project site is not actively used for agricultural purposes nor has the site been identified for such activity. Regarding preservation, the Project site is within a Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) Criteria Cell, Joint Project Review (JPR) 09-06-04-01 was

completed on June 17, 2009 and an updated biological habitat assessment and focused surveys for the Project site have been prepared.² Pursuant to Section 8.5.1 of the MSHCP Implementing Agreement, appropriate per acreage fees will be paid to the Western Riverside County Regional Conservation Authority for the public capital construction project. The Project will not conflict with Multipurpose Open Space Element policies; refer to the response to Item 27, Land Use / Planning below for further discussion.

- 4. Safety: The Project site is located within Compatibility Zone D of the French Valley Airport influence area as established under the Riverside County Airport Land Use Compatibility Plan (RCALUCP). The primary focus of RCALUCP is on broadly defined noise and safety impacts. Properties within Compatibility Zone D are subject to regulations governing such issues as development intensity, density, height of structures, and noise. These land use restrictions are fully set forth in Appendix L of the General Plan and summarized in the Southwest Area Plan on Table 4. Moreover, the Project will not conflict with Safety Element policies. Refer to Item 23, Airports, for further discussion on the Project and compliance with RCALUCP safety requirements. The Project will also comply with the following policy from the Southwest Area Plan:
 - SWAP 11.1 To provide for the orderly development of French Valley Airport and the surrounding area, comply with the Airport Land Use Compatibility Plan for French Valley Airport as fully set forth in Appendix L and as summarized in Table 4, as well as any applicable policies related to airports in the Land Use, Circulation, Safety and Noise Elements of the Riverside County General Plan.
- **5. Noise:** Noise would be generated during construction of the Project; therefore, the Project would be required to comply with the following policies:
 - N 12.1 Minimize the impacts of construction noise on adjacent uses within acceptable practices.
 - N 12.2 Ensure that construction activities are regulated to establish hours of operation in order to prevent and/or mitigate the generation of excessive or adverse noise impacts on surrounding areas.
 - N 12.4 Require that all construction equipment utilizes noise reduction features (e.g., mufflers and engine shrouds) that are no less effective than those originally installed by the manufacturer.

The following policies are relevant to nn-site noise generated by the Project during operations:

- *N 4.1 Prohibit facility-related noise, received by any sensitive use, from exceeding the following worst-case noise levels:*
 - a. 45 dBA-10-minute L_{eq} between 10:00 p.m. and 7:00 a.m.
 - b. 65 dBA-10-minute L_{ea} between 7:00 a.m. and 10:00 p.m.

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²The biological habitat assessment report, narrow endemic and criterial area plant species survey, and focused burrowing owl survey completed for the Project are included in Appendix B.

- N 4.8 Require that the parking structures, terminals, and loading docks of commercial or industrial land uses be designed to minimize the potential noise impacts of vehicles on the site as well as on adjacent land uses.
- N. 7.1 New land use development within Airport Influence Areas shall comply with airport land use noise compatibility criteria contained in the corresponding airport land use compatibility plan for the area (Southwest). Each Area Plan affected by a public-use airport includes one or more Airport Influence Areas, one for each airport. The applicable noise compatibility criteria are fully set forth in Appendix L and summarized in the Policy Area section of the Southwest Area Plan of the Riverside County General Plan.

The Project will not conflict with Noise Element policies.

- **6. Housing:** Implementation of the Project would not entail the displacement of existing housing nor would it create a need for new housing. The Project will not conflict with Housing Element policies.
- **7. Air Quality:** The Project includes site preparation and construction-related activities. The Project will comply with all applicable regulatory requirements to control fugitive dust during construction and grading activities. The Project would be compliant with the following polices:
 - AQ 4.9 Require compliance with SCAQMD Rules 403 and 403.1 and support appropriate future measures to reduce fugitive dust emanating from construction sites.

The Project will not conflict with policies in the General Plan Air Quality Element.

- **B.** General Plan Area Plan(s): The Project site is located within the Southwest Area Plan.
- **C.** Foundation Component(s): The Project site is located within a Community Development Foundation Component.
- **D.** Land Use Designation(s): The Project site is primarily designated BP (Business Park), with a small portion of the eastern side of the site is designated PF (Public Facilities).
- **E.** Overlay(s), if any: The Project site is not located within an overlay area.
- F. Policy Area(s), if any: The Project site is located within the Highway 79 Policy Area.

G. Adjacent and Surrounding Area Plan(s), Foundation Component(s), Land Use Designation(s), and Overlay(s) and Policy Area(s), if any:

| Item | Direction | Designation |
|-----------------------|--------------|---|
| Area Plans | North | Southwest Area Plan |
| | East | Southwest Area Plan |
| | South | Southwest Area Plan |
| | West | Southwest Area Plan |
| Foundation Components | North | Community Development |
| | East | Community Development |
| | South | Community Development |
| | West | Community Development |
| Existing Land Use | North | PF and BP |
| Designations | Northwest | PF, LI, and BP |
| | Northeast | CR and OS-C |
| | East | CO, BP, and MDR |
| | South | LI and OS-C |
| | Southwest | LI and PF |
| | Southeast | BP and MDR |
| | West | PF and LI |
| Policy Areas | North | Highway 79 Policy Area |
| | East | Highway 79 Policy Area |
| | South | Highway 79 Policy Area |
| | West | Highway 79 Policy Area |
| Overlays | There are no | o overlays in the vicinity of the Project site. |

H. Adopted Specific Plan Information

- **1. Name and Number of Specific Plan, if any:** The Project site is not located on a Specific Plan area, nor is the Project proposing a Specific Plan.
- **2. Specific Plan Planning Area, and Policies, if any:** The Project site is not located on a Specific Plan area, nor is the Project proposing a Specific Plan.
- **I. Existing Zoning:** A-1-10 (Light Agriculture 10-Acre Minimum)
- **J. Proposed Zoning, if any:** Project does not propose a change of zoning.

K. Adjacent and Surrounding Zoning:

| North: | M-SC (Manufacturing – Service Commercial), R-A2 ½ (Residential Agricultural), SP Zone (Specific Plan) |
|------------|---|
| Northwest: | M-SC (Manufacturing – Service Commercial), A-1-10 (Light Agriculture), SP Zone (Specific Plan) |
| Northeast: | C-P-S (Scenic Highway Commercial), R-5 (Open Area Combining Zone Residential Developments) |
| East: | C-P-S (Scenic Highway Commercial), A-1-5 (Light Agriculture) |
| South: | SP Zone (Specific Plan) |
| Southwest: | SP Zone (Specific Plan), M-SC (Manufacturing – Service Commercial) |
| Southeast: | A-1-5 (Light Agriculture) |
| West: | SP Zone (Specific Plan), M-SC (Manufacturing – Service Commercial) |

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III. ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

| The environmental factors checked below (x) would be potentially affected by this project, involving at least | | | | | | |
|--|--|--|--|--|--|--|
| one impact that is a "Potentially Signif | ficant Impact" or "Less than Significant | with Mitigation Incorporated" as | | | | |
| indicated by the checklist on the follow | wing pages. | | | | | |
| ☐ Aesthetics ☐ Agriculture & Forest Resources ☐ Air Quality ☐ Biological Resources ☐ Cultural Resources ☐ Geology / Soils ☐ Greenhouse Gas Emissions | Hazards & Hazardous Materials Hydrology / Water Quality Land Use / Planning Mineral Resources Noise Population / Housing Public Services | □ Recreation □ Transportation / Traffic □ Utilities / Service Systems □ Other: ☑ Mandatory Findings of Significance | | | | |
| IV. DETERMINATION | | | | | | |
| On the basis of this initial evaluation: | | | | | | |
| A PREVIOUS ENVIRONMENTAL IMPA | CT REPORT/NEGATIVE DECLARATION | WAS NOT PREPARED | | | | |
| I find that the proposed project Co | OULD NOT have a significant effect on | the environment, and a NEGATIVE | | | | |
| DECLARATION will be prepared. | | | | | | |
| I find that although the proposed | project could have a significant effect | on the environment, there will not | | | | |
| be a significant effect in this case beca | ause revisions in the project, described | in this document, have been made | | | | |
| or agreed to by the project proponent | . A MITIGATED NEGATIVE DECLARAT | ION will be prepared. | | | | |
| I find that the proposed project M | IAY have a significant effect on the env | vironment, and an | | | | |
| ENVIRONMENTAL IMPACT REPORT is | required. | | | | | |
| | | | | | | |
| | CT REPORT/NEGATIVE DECLARATION | | | | | |
| | project could have a significant effect | | | | | |
| ENVIRONMENTAL DOCUMENTATION | IS REQUIRED because (a) all potential | ly significant effects of the | | | | |
| proposed project have been adequate | ely analyzed in an earlier EIR or Negativ | e Declaration pursuant to | | | | |
| applicable legal standards, (b) all pote | ntially significant effects of the propos | sed project have been avoided or | | | | |
| mitigated pursuant to that earlier EIR | or Negative Declaration, (c) the propos | sed project will not result in any | | | | |
| new significant environmental effects | not identified in the earlier EIR or Neg | ative Declaration, (d) the proposed | | | | |
| project will not substantially increase | the severity of the environmental effe | cts identified in the earlier EIR or | | | | |
| Negative Declaration, (e) no considerably different mitigation measures have been identified and (f) no | | | | | | |
| mitigation measures found infeasible | have become feasible. | | | | | |
| I find that although all potentially | significant effects have been adequat | ely analyzed in an earlier EIR or | | | | |
| Negative Declaration pursuant to applicable legal standards, some changes or additions are necessary but none | | | | | | |
| of the conditions described in California Code of Regulations, Section 15162 exist. An ADDENDUM to a | | | | | | |
| previously-certified EIR or Negative Declaration has been prepared and will be considered by the approving | | | | | | |
| body or bodies. | | | | | | |

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| I find that at least one of the conditions described in Calif | ornia Code of Regulations, Section 15162 exist, |
|---|--|
| but I further find that only minor additions or changes are nec | essary to make the previous EIR adequately apply |
| to the project in the changed situation; therefore a SUPPLEM | ENT TO THE ENVIRONMENTAL IMPACT REPORT |
| is required that need only contain the information necessary t | o make the previous EIR adequate for the project |
| as revised. | |
| I find that at least one of the following conditions describ | ped in California Code of Regulations, Section |
| 15162, exist and a SUBSEQUENT ENVIRONMENTAL IMPACT R | EPORT is required: (1) Substantial changes are |
| proposed in the project which will require major revisions of t | he previous EIR or negative declaration due to |
| the involvement of new significant environmental effects or a | substantial increase in the severity of previously |
| identified significant effects; (2) Substantial changes have occur | urred with respect to the circumstances under |
| which the project is undertaken which will require major revis | ions of the previous EIR or negative declaration |
| due to the involvement of new significant environmental effec | cts or a substantial increase in the severity of |
| previously identified significant effects; or (3) New informatio | n of substantial importance, which was not |
| known and could not have been known with the exercise of re | easonable diligence at the time the previous EIR |
| was certified as complete or the negative declaration was ado | pted, shows any the following:(A) The project |
| will have one or more significant effects not discussed in the p | revious EIR or negative declaration;(B) |
| Significant effects previously examined will be substantially m | ore severe than shown in the previous EIR or |
| negative declaration;(C) Mitigation measures or alternatives | previously found not to be feasible would in fact |
| be feasible, and would substantially reduce one or more signif | icant effects of the project, but the project |
| proponents decline to adopt the mitigation measures or alternative | natives; or,(D) Mitigation measures or |
| alternatives which are considerably different from those analy | zed in the previous EIR or negative declaration |
| would substantially reduce one or more significant effects of t | he project on the environment, but the project |
| proponents decline to adopt the mitigation measures or alter | natives. |
| 20 111 | |
| | 2/40/46 |
| Signature | 2/18/16 |
| Signature | Date |
| Mike Sullivan | Senior Environmental Planner |
| Printed Name | Title |
| i inited italie | 11616 |

V. ENVIRONMENTAL ISSUES ASSESSMENT

In accordance with the California Environmental Quality Act (CEQA) (Public Resources Code Section 21000-21178.1), this Initial Study has been prepared to analyze the proposed project to determine any potential significant impacts upon the environment that would result from construction and implementation of the Project. In accordance with California Code of Regulations, Section 15063, this Initial Study is a preliminary analysis prepared by the Riverside County Economic Development Agency ("EDA") for the County of Riverside, as the appropriate Lead Agency pursuant to CEQA, in consultation with other jurisdictional agencies, to determine whether a Negative Declaration, Mitigated Negative Declaration, or an Environmental Impact Report is required for the proposed Project. The purpose of this Initial Study is to inform the decision-makers, affected agencies, and the public of potential environmental impacts associated with the implementation of the proposed Project.

AESTHETICS

| AESTHETICS Would the project | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less than Significant Impact | No Impact |
|--|--------------------------------------|---|------------------------------------|--------------|
| Scenic Resourcesa) Have a substantial effect upon a scenic highway corridor within which it is located? | | | | |
| b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings and unique or landmark features; obstruct any prominent scenic vista or view open to the public; or result in the creation of an aesthetically offensive site open to public view? | | | | |

Source: RCGP Figure C-7 "Scenic Highways;" SWAP; SWAP Figure 9 "Scenic Highways;" AMEC(a)

Findings of Fact:

- a) The Project site is located in the Southwest planning area, and according to the *Southwest Area Plan*, there are no Scenic Highways within that planning area. The nearest Scenic Highway is State Route 74, located 20 miles northwest of the Project site. However, three highways within the Southwest planning area have been nominated for Scenic Highway status. The portions of Interstate 215 and State Route 79 South (Temecula Parkway) that pass through the Southwest planning area are Eligible Scenic Highways. The Project site is located approximately 3.6 miles east of Interstate 215 and approximately 7.4 miles north of State Route 79 South (Temecula Parkway). As the Project site is a considerable distance from these facilities, development of the Project would not result in an impact to designated or eligible scenic highway corridors. Therefore, with regard to scenic highways, the Project will have no impact.
- b) The Project site does not contain scenic resources. The Project site is comprised of relatively flat surfaces; topographical elevations gently slope from approximately 1,370 feet above mean sea level at the northern boundary to approximately 1,390 feet above mean sea level in the west central portion of the site. The Project site does not contain trees, rock outcroppings, or unique or landmark features. The proposed structure will be generally consistent with the appearance of existing structures at the SWJC campus and have a relatively low-profile height above grade. Similar to the existing structures, the new structures will range in height from 26 to 33 feet, which will not substantially impact any existing views. Distant views of

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Potentially with Less Than
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the Project site are obscured by existing development in the vicinity. The *Southwest Area Plan* identifies the slopes and ridgelines, which define the valleys, as scenic vistas. Implementation of this Project will not impact slopes or ridgelines in the Southwest planning area. Further, Vail Lake and its surroundings have also been identified for its aesthetic value; however, as Project site is approximately 10 miles northwest of Vail Lake and not within the Vail Lake Policy Area, the Project will not impact the aesthetic or scenic value of Vail Lake or its surroundings. Therefore, with regard to potential impacts to scenic resources, the Project will have no impact.

Mitigation: None required

Monitoring: None required

2. Mt. Palomar Observatory a) Interfere with the nighttime use of the Mt. Palomar Observatory, as protected through Riverside County Ordinance No. 655?

Source: Project Description; RCLIS; Ord. No. 655 (Regulating Light Pollution)

Findings of Fact:

a) The Project will adhere to the requirements of Riverside County Ordinance No. 655 which regulates light pollution. According to the ordinance, the Mt. Palomar Observatory designates two radial zones, Zones A and B, around its location that define various lighting requirements and restrictions. The Project site is located approximately 21 miles northwest of the Mt. Palomar Observatory. At that distance, the Project site is within Zone B and will therefore be subject to the lighting limitations of this ordinance. The subject ordinance regulates lighting type, shielding, hours of operation, prohibitions, permanent exceptions, temporary exemptions, and other lighting-related topics according to the zone in which a Project is located. Compliance with the lighting requirements of Riverside County Ordinance No. 655 will reduce Project-specific impacts related to an interference with the nighttime use of the Mt. Palomar Observatory to less than significant.

Mitigation: None required

Monitoring: None required

| Initial Study/Mitigated Negative Declaration Southwest | Justice Cente | er Juvenile Court | ts Relocation | Project |
|---|---|--|---|-------------------|
| | | Less than | | |
| | | Significant | | |
| | Potentially | with | Less Than | |
| | Significant | Mitigation | Significant | No . |
| | Impact | Incorporated | Impact | Impact |
| | | | | |
| 3. Other Lighting Issues | | | \bowtie | |
| a) Create a new source of substantial light or glare which | | | | ш |
| would adversely affect day or nighttime views in the area? | | | | |
| b) Expose residential property to unacceptable light levels? | | | \boxtimes | |
| Source: Project Description; Ord. No. 655 (Regulating Light Pollution | on); FAA | | | |
| Findings of Fact: | | | | |
| a/b) As discussed under Project Construction and Design Features, of Riverside County Ordinance No. 655 which regulates light portion of Constructory, and as such, will also reduce Project-sourced light permanent lighting on the proposed structure will be shielded downward and into the Project site and immediate SWJC camp security of the site. | ollution in re t-related im from adjace ous in a man | elation to the N pacts. Any tem ent properties, ner that is agn | Mt. Palomar nporary or and directe reeable to th | ed ne |
| Glare has been defined by the Federal Aviation Administration produced by indirect reflection of sunlight or the reflection of the exterior walls of the proposed structure will consist of mas surface, the Project will not produce substantial amounts of glare related to new sources or unacceptable levels of light or glare. | the bright sk sonry block, are. Thus, po | ky surrounding which is not ar otential Projec | the sun. Be n overly refl t-specific in | ecause lective |
| Mitigation: None required | | | | |
| Monitoring: None required | | | | |
| AGRICULTURE & FOREST RESOURCES Would the project | | | | |
| 4. Agriculture | | | | |
| a) Convert Prime Farmland, Unique Farmland, or Farmland of | | | | \bowtie |
| Statewide Importance (Farmland) as shown on the maps prepared | | | | |
| pursuant to the Farmland Mapping and Monitoring Program of the | | | | |
| California Resources Agency, to non-agricultural use? | | | | |
| b) Conflict with existing agricultural zoning, agricultural use or | | | | |
| with land subject to a Williamson Act contract or land within a | | | \boxtimes | |
| Riverside County Agricultural Preserve? | | | | |
| c) Cause development of non-agricultural uses within 300 feet of | | | | |
| agriculturally zoned property (Ordinance No. 625 "Right-to-Farm")? | | | \bowtie | |

non-agricultural use?

d) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to

| | Less than | | |
|-------------|--------------|-------------|--------|
| | Significant | | |
| Potentially | with | Less Than | |
| Significant | Mitigation | Significant | No |
| Impact | Incorporated | Impact | Impact |

<u>Source:</u> RCGP Figure OS-2 "Agricultural Resources;" RCLIS; Project Description; Ord. No. 625; Zoning Ord.; RCGP OSE

Findings of Fact:

- a) Because the Project site is not located on land designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance there will be no impact.
- b) The Project site is currently vacant and not used for agricultural or any other use; however, it is zoned A-1-10 (Light Agriculture 10-Acre Minimum). It should be noted that the entire SWJC campus is zoned as A-1-10. Additionally, the Project site is not subject to a Williamson Act contract or within a Riverside County Agricultural Preserve. A change of zone is not required for the Project because Riverside County Zoning Ordinance Section 18.29(a)(3) permits government uses in any zone classification provided a public use permit is granted. The Project site and surrounding area are designated by the Riverside County General Plan for non-agricultural uses. For these reasons, impacts will be less than significant.
- c) The Project site and properties within 300 feet to the southeast of the site are zoned A-1 (Light Agriculture). Although the Project site and its surrounding properties are not currently utilized for agricultural use, implementation of the Project will expand an existing non-agricultural use on the SWJC campus. It should be noted, that the Project's uses are permitted under this zoning designation per Riverside County Zoning Ordinance Section 18.29(a)(3). Additionally, the Project will not conflict with the intent of Ordinance No. 625, which states: "It is the intent of Riverside County to conserve, protect, and encourage the development, improvement, and continued viability of its agricultural land and industries for the long-term production of food and other agricultural products, and for the economic well-being of the County's residents. It is also the intent of the County to balance the rights of farmers to produce food and other agricultural products with the rights of non-farmers who own, occupy, or use land within or adjacent to agricultural areas. It is the intent of this ordinance to reduce the loss to the County of its agricultural resources by limiting the circumstances under which agricultural operations may be deemed to constitute a nuisance." While the Project site and a parcel within 300 feet to the southeast are zoned for light agriculture, the Project site is within the existing larger parcel upon which the SWJC campus is located, where any future potential agricultural use would be highly unlikely. The Project site and the aforementioned off-site property to the southeast are both undeveloped yet disturbed and grubbed from regular discing activities. The Project area is primarily occupied by low- to medium-density residential uses to the east and an airport to the west, and thus, is not likely to support any substantial future agricultural uses. Nonetheless, in the unlikely event the aforementioned property within 300 feet of the Project site is utilized for agricultural uses in the future, the Project would not create a circumstance in which this hypothetical agricultural use would be deemed a nuisance. Therefore, impacts will be less than significant.

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d) As discussed for item 4.a) above, the Project site is not located on land currently utilized for existing farming and any future use of the site for farming would be unlikely. The Project does not entail any off-site uses or actions that will result in a conversion of Farmland to non-agricultural uses. Impacts will be less than significant.

Mitigation: None required.

Monitoring: None required.

| 5. Forest | | | \boxtimes |
|---|---|--|-------------|
| a) Conflict with existing zoning for, or cause rezoning of, forest | | | |
| land (as defined in Public Resources Code section 12220(g)), timberland | | | |
| (as defined by Public Resources Code section 4526), or timberland | | | |
| zoned Timberland Production (as defined by Govt. Code section | | | |
| 51104(g))? | | | |
| b) Result in the loss of forest land or conversion of forest land to | | | |
| non-forest use? | | | |
| c) Involve other changes in the existing environment which, due to | | | |
| their location or nature, could result in conversion of forest land to | Ш | | \bowtie |
| non-forest use? | | | |

Source: RCGP Figure OS-3 "Parks, Forests and Recreation Areas;" RCLIS; Project Description; RCGP; PRC

Findings of Fact:

a/b/c) The Project site is devoid of trees and is not characterized as forestland. Forestland, as defined in Public Resources Code (PRC) Section 12220(g), is land that can support 10 percent of native tree cover of any species under natural conditions and that allows for the management of one or more forest resources. Timberland, as defined in PRC Section 4526, means land other than land owned by the federal government and land designated as experimental forestland, which is capable of growing a crop of trees for any commercial species, including Christmas trees. The Project site does not contain forestland or timberland. The Project site and the adjacent surrounding properties are not zoned for forestland, timberland, or Timberland Production. Additionally, the Riverside County General Plan does not include the Project site or its surrounding properties in Figure OS-3, "Parks, Forests and Recreation Areas." Thus, no zoning conflict will exist, no existing forestland will be lost, and no existing off-site forestland will be converted to a non-forest use as a result of this Project. Therefore, no impact in this regard will occur.

Mitigation: None required

Monitoring: None required

| | | Less than Significant | | |
|---|-------------|--------------------------|-------------|-------------|
| | Potentially | with | Less Than | |
| | Significant | Mitigation | Significant | No |
| | Impact | Incorporated | Impact | Impact |
| | | | | |
| AIR QUALITY Would the project | | | | |
| 6. Air Quality Impacts | | | | \square |
| a) Conflict with or obstruct implementation of the applicable air | Ш | Ш | Ш | |
| quality plan? | | | | |
| b) Violate any air quality standard or contribute substantially to | | | \square | |
| an existing or projected air quality violation? | | | | Ш |
| c) Result in a cumulatively considerable net increase of any | | | \bowtie | |
| criteria pollutant for which the project region is non-attainment under | Ш | Ш | | Ш |
| an applicable federal or state ambient air quality standard (including | | | | |
| releasing emissions which exceed quantitative thresholds for ozone | | | | |
| precursors)? | | | | |
| d) Expose sensitive receptors which are located within 1 mile of | | | \bowtie | |
| the project site to project substantial point source emissions? | | | | |
| e) Involve the construction of a sensitive receptor located within | | | | \boxtimes |
| one mile of an existing substantial point source emitter? | | | | |
| f) Create objectionable odors affecting a substantial number of | | \bowtie | | |
| people? | | | | |
| | | | | |

Source: WEBB; Project Description; AQMP

Findings of Fact:

a) The Project site is located within SCAQMD's South Coast Air Basin ("Basin"). The Air Quality Management Plan (AQMP) for the Basin sets forth a comprehensive program that will lead the Basin into compliance with all federal and state air quality standards. The AQMP control measures and related emission reduction estimates are based upon emissions projections for a future development scenario derived from land use, population, and employment characteristics defined in consultation with local governments. Accordingly, conformance with the AQMP for development projects is determined by demonstrating compliance with local land use plans and/or population projections.

The Project site is primarily designated Business Park (BP), although a small sliver of the eastern portion of the site is designated Public Facilities (PF). Since the Project is compatible with the surrounding land uses and complementary to existing uses within the larger SWJC campus parcel wherein the Project site is located, the Project will not result in or facilitate future changes to the existing land use patterns in the Project area. The Project does not conflict with or obstruct implementation of the AQMP. Therefore, no impact will occur in this regard.

b/d) The Project consists of the construction, operation, and maintenance of a courthouse with associated parking lot. Air quality impacts can be described in a short- and long-term perspective. Short-term impacts relate to site grading and building construction. Long-term air quality impacts relate to operation of the Project. The Project's impacts to air quality were weighed against SCAQMD's regional significance thresholds and localized significance thresholds for criteria pollutants.

| | Less than | | |
|-------------|--------------|-------------|--------|
| | Significant | | |
| Potentially | with | Less Than | |
| Significant | Mitigation | Significant | No |
| Impact | Incorporated | Impact | Impact |

Regional Significance Threshold

The short-term construction and long-term operation emissions of criteria pollutants from this Project were modeled using the California Emissions Estimator Model (CalEEMod) version 2013.2.2. Maximum daily emissions during construction are estimated on the following table.

Table 1 — Maximum Estimated Daily Construction Emissions

| Activity /Voor | Peak Daily Emissions (lb/day) | | | | | | | |
|---|-------------------------------|-----------------|-------|-----------------|-------|--------|--|--|
| Activity/Year | voc | NO _x | СО | SO ₂ | PM-10 | PM-2.5 | | |
| SCAQMD Daily Construction Thresholds | 75 | 100 | 550 | 150 | 150 | 55 | | |
| 2015 ¹ | | | | | | | | |
| Grading | 3.91 | 40.70 | 27.81 | 0.03 | 8.64 | 5.51 | | |
| Building Construction | 4.33 | 34.96 | 25.62 | 0.04 3.07 | | 2.38 | | |
| | | 2016 | | | | | | |
| Building Construction | 4.01 | 33.03 | 24.86 | 0.04 | 2.90 | 2.22 | | |
| Architectural Coating | 27.75 | 3.39 | 3.31 | 0.00 | 0.40 | 0.30 | | |
| Paving | 2.35 | 22.14 | 16.30 | 0.02 | 1.56 | 1.28 | | |
| Maximum ² | 31.76 | 40.70 | 28.17 | 0.04 | 8.64 | 5.51 | | |
| Exceeds Threshold? | No | No | No | No | No | No | | |

Note: Maximum emissions reported above are the greater of summer or winter emissions and are subject to rounding from the CalEEMod output.

Source: Albert A. Webb Associates, Air Quality/Greenhouse Gas Analysis for Southwest Justice Center Juvenile Courts Relocation Project, Riverside County, California, December 5, 2014, Table 2. (Appendix A)

As shown, the short-term emissions do not exceed SCAQMD's regional thresholds in either 2015 or 2016.

Long-term emissions are evaluated at build-out of a project. Mobile source emissions refer to on-road motor vehicle emissions generated from the Project's traffic. Area source emissions from the Project include stationary combustion emissions of natural gas used for space and water heating (shown in a separate row as energy), yard and landscape maintenance, consumer use of solvents and personal care products, and an average building square footage to be repainted each year. The long-term operational emissions from the Project are shown on the following tables for the summer and winter seasons respectively.

¹ The 2015 year represents the worst case scenario because construction emissions after 2015 would be the same or less due to more stringent regulations and lower emission factors reflected in the CalEEMod model.

Maximum emissions are the greater of grading alone, paving alone, or the sum of building construction in 2016 and architectural coating in 2016 since those activities may overlap.

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Potentially with Less Than
Significant Mitigation Significant No
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Table 2 — Estimated Daily Project Operation Emissions (Summer)

| Source | Peak Daily Emissions (lb/day) | | | | | | |
|----------------------------|-------------------------------|-----------------|-------|-----------------|-------|--------|--|
| Source | VOC | NO _x | СО | SO ₂ | PM-10 | PM-2.5 | |
| SCAQMD Daily Thresholds | 55 | 55 | 550 | 150 | 150 | 55 | |
| Area | 3.19 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | |
| Energy | 0.00 | 0.01 | 0.01 | 0.00 | 0.00 | 0.00 | |
| Mobile | 3.45 | 8.81 | 32.66 | 0.07 | 5.05 | 1.43 | |
| Total | 6.64 | 8.82 | 32.68 | 0.07 | 5.05 | 1.43 | |
| Exceeds Threshold? | No | No | No | No | No | No | |

Note: Emissions reported as zero are rounded and not necessarily equal to zero.

Source: Albert A. Webb Associates, Air Quality/Greenhouse Gas Analysis for Southwest Justice Center Juvenile Courts Relocation Project, Riverside County, California, December 5, 2014, Table 3. (Appendix A)

Table 3 — Estimated Daily Project Operation Emissions (Winter)

| Source | | Peak Daily Emissions (lb/day) | | | | | | |
|----------------------------|------|-------------------------------|-------|------|-------|--------|--|--|
| Source | VOC | NO _x | СО | SO₂ | PM-10 | PM-2.5 | | |
| SCAQMD Daily Thresholds | 55 | 55 | 550 | 150 | 150 | 55 | | |
| Area | 3.19 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | | |
| Energy | 0.00 | 0.01 | 0.01 | 0.00 | 0.00 | 0.00 | | |
| Mobile | 3.38 | 9.16 | 31.21 | 0.07 | 5.05 | 1.43 | | |
| Total | 6.57 | 9.17 | 31.23 | 0.07 | 5.05 | 1.43 | | |
| Exceeds Threshold? | No | No | No | No | No | No | | |

Note: Emissions reported as zero are rounded and not necessarily equal to zero.

Source: Albert A. Webb Associates, Air Quality/Greenhouse Gas Analysis for Southwest Justice Center Juvenile Courts Relocation Project, Riverside County, California, December 5, 2014, Table 4. (Appendix A)

The long-term emissions do not exceed SCAQMD's regional thresholds during operations of the Project in either the summer or winter. Thus, the Project's construction and operation will not violate any regional air quality standards.

Localized Significance Thresholds

As part of the SCAQMD's environmental justice program, attention has been focused on localized effects of air quality. SCAQMD has developed localized significance threshold (LST) methodology that can be used by public agencies to determine whether or not a project may generate significant adverse localized air quality impacts (both short- and long-term). LSTs represent the maximum emissions from a project that will not cause or contribute to an exceedance of the state ambient air quality standard, and are developed based on the ambient concentrations of that pollutant for each source receptor area (SRA). The Project is located within SRA 26.

The LST thresholds are estimated using the maximum daily disturbed area (in acres) and the distance of the Project to the nearest sensitive receptors (in meters). The closest receptor is an existing single-family residence across Leon Road, approximately 538 feet (164 meters) east of the site. A receptor distance of

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100 meters (328 feet) was used to be conservative. The results are summarized below for the construction activity with the most heavy-duty construction equipment.

Table 4 — LST Results for Daily Construction Emissions

| Pollutant | Peak Daily Emissions (lb/day) | | | | | |
|--|-------------------------------|-------|-------|--------|--|--|
| Pollutant | NO _x | СО | PM-10 | PM-2.5 | | |
| LST Threshold for 1 acre at 100 meters | 292 | 2,176 | 30 | 8 | | |
| Grading | 42.7 | 26.3 | 3.0 | 2.2 | | |
| Building Construction | 32.5 | 21.7 | 1.8 | 1.6 | | |
| Paving & Architectural Coatings | 35.5 | 24.3 | 2.4 | 2.2 | | |
| Exceeds Threshold? | No | No | No | No | | |

Source: Albert A. Webb Associates, Air Quality/Greenhouse Gas Analysis for Southwest Justice Center Juvenile Courts Relocation Project, Riverside County, California, December 5, 2014, Table 5. (Appendix A)

As shown on the above table, short-term emissions from construction of the Project will be below the LST established by SCAQMD.

According to SCAQMD LST methodology, LSTs apply to the operational phase of a project if the project includes stationary sources or attracts mobile sources that may spend long periods queuing and idling at the site. The proposed Project does not include such uses. Therefore, due to the lack of stationary source emissions, no long-term LST analysis is needed.

Therefore, for the reasons stated above and as the Project will not violate any air quality standard or contribute to an existing air quality violation, impacts will be less than significant. Further, the Project will not expose sensitive receptors to substantial pollutant concentrations, and impacts in this regard will also be less than significant.

- c) The portion of the Basin, within which the Project is located, is designated as a non-attainment area for ozone and PM-2.5 under both state and federal standards and for PM-10 under state standards.
 - Since the Project does not conflict with planned land uses, it is in conformance with the AQMP. The Project's short- and long-term emissions do not exceed the SCAQMD-established thresholds of significance. In addition, the Project's net increase in criteria pollutant emissions, for which the Project region is non-attainment, is not cumulatively considerable; therefore, impacts in this regard are considered less than significant.
- e) The Project involves the construction of a courthouse within the larger existing SWJC campus. The Project site is surrounded by existing SWJC uses to the west and south, low-density rural residential to the east and largely undeveloped land to the north. Therefore, there are no substantial point sources within the vicinity of the Project, and the Project will not expose future uses of the courthouse to substantial point source emissions. No impacts are anticipated.

| <u> </u> | | | | | |
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f) The Project presents the potential for generation of objectionable odors in the form of diesel exhaust during construction in the immediate vicinity of the Project site. This is not anticipated to be substantial; nonetheless, Mitigation Measure MM AIR 1, which requires maintenance of construction vehicles to minimize exhaust emissions, will be implemented. Operation of the Project will not create an objectionable odor as the Project proposes a courthouse. Recognizing the temporary nature, short-term duration, and small quantity of emissions in the Project area, and the fact that the Project was within the SCAQMD LST thresholds for construction, the Project will result in a less than significant impact relating to objectionable odors.

Mitigation:

MM AIR 1: All construction equipment will be properly tuned and maintained in accordance with manufacturer's specifications and to the satisfaction of the EDA.

Monitoring: EDA, Project Construction Manager

| BIOLOGICAL RESOURCES Would the project | | | | |
|---|---|-------------|---|-----------|
| 7. Wildlife & Vegetation | | \square | | |
| a) Conflict with the provisions of an adopted Habitat | Ш | | Ш | Ш |
| Conservation Plan, Natural Conservation Community Plan, or other | | | | |
| approved local, regional, or state conservation plan? | | | | |
| b) Have a substantial adverse effect, either directly or through | | \square | | |
| habitat modifications, on any endangered, or threatened species, as | | | Ш | |
| listed in Title 14 of the California Code of Regulations (Sections 670.2 or | | | | |
| 670.5) or in Title 50, Code of Federal Regulations (Sections 17.11 or | | | | |
| 17.12)? | | | | |
| c) Have a substantial adverse effect, either directly or through | | \boxtimes | | |
| habitat modifications, on any species identified as a candidate, | | | Ш | Ш |
| sensitive, or special status species in local or regional plans, policies, or | | | | |
| regulations, or by the California Department of Fish and Wildlife or U. | | | | |
| S. Wildlife Service? | | | | |
| d) Interfere substantially with the movement of any native | | \boxtimes | | |
| resident or migratory fish or wildlife species or with established native | Ш | | Ш | Ш |
| resident or migratory wildlife corridors, or impede the use of native | | | | |
| wildlife nursery sites? | | | | |
| e) Have a substantial adverse effect on any riparian habitat or | | | | \square |
| other sensitive natural community identified in local or regional plans, | | | | |
| policies, regulations or by the California Department of Fish and | | | | |
| Wildlife or U. S. Fish and Wildlife Service? | | | | |
| f) Have a substantial adverse effect on federally protected | | | | \square |
| wetlands as defined by Section 404 of the Clean Water Act (including, | | | Ш | |
| but not limited to, marsh, vernal pool, coastal, etc.) through direct | | | | |
| removal, filling, hydrological interruption, or other means? | | | | |

| | Court | | | | | | |
|--|---|--------------------------|--------------------------|--------|--|--|--|
| | | Less than Significant | | | | | |
| | Potentially Significant | with Mitigation | Less Than Significant | No | | | |
| | Impact | Incorporated | Impact | Impact | | | |
| g) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinary. | - II | \boxtimes | | | | | |

Source: MSHCP; AMEC(a); AMEC(b); EPD; Project Description; SWAP; JPR 09-06-04-01

Findings of Fact:

a/g) The Project site is within the boundaries of the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP). The purpose of the MSHCP is to conserve habitat for selected species throughout western Riverside County. The MSHCP consists of several Criteria Areas and Criteria Cells that assist in facilitating the process by which individual properties are evaluated for inclusion and subsequent conservation in the MSHCP. A portion of the Project site is located in the northeast portion of MSHCP Criteria Cell 5879. Criteria Cell 5879 is within the French Valley/Lower Sedco Hills Subunit. Conservation within this Criteria Cell will be approximately 5 percent of the Criteria Cell focusing in the southern portion of the Cell. The Project site is not located within or near any MSHCP Special Linkage Area.

Because a portion of the Project site is within a Criteria Cell, it is subject to the Joint Project Review (JPR) process. JPR 09-06-04-01 was completed on June 17, 2009 for the entire Southwest Justice Center, including the Project site. The larger Southwest Justice Center was determined to be consistent with the MSHCP and the studies have been updated since the JPR was approved. The Project site is bordered on the west by the existing Southwest Justice Center, on the south by the existing Juvenile Hall facilities and undeveloped land, on the east by undeveloped land and rural residences, and on the north by undeveloped land. The Project site is a vacant, disturbed lot that shows signs of having been cleared in the past. No native plant communities exist onsite, save for a small stand of California buckwheat on the southwest corner of the site. The remainder of the site is dominated by non-native "weedy" plants with some native plant species dispersed throughout.

In addition to Criteria Cell requirements, the MSHCP requires consistency with Section 3.2.2 (Relationship to Reserve Assembly), Sections 6.1.2 (Protection of Species Associated within Riparian/Riverine Areas and Vernal Pools/Fairy Shrimp), 6.1.3 (Protection of Narrow Endemic Plant Species), 6.1.4 (Urban and Wildlands Interface), 6.3.2 (Additional Survey Needs and Procedures), Appendix C (Standard Best Management Practices), and Section 7.5.3 (Construction Guidelines). The MSHCP serves as a comprehensive, multi-jurisdictional Habitat Conservation Plan (HCP), pursuant to Section (a)(1)(B) of the Endangered Species Act as well as the Natural Communities Conservation Plan (NCCP) under the State NCCP Act of 2001. The following discussion analyzes the Project's consistency with the above-referenced sections of the MSHCP as based on the *Biological Habitat Assessment Report* prepared by AMEC in March 2014 for the Project (Appendix B).

MSHCP Section 3.2.2 (Project Relationship to Reserve Assembly)

The Project site is within the northeast portion of MSHCP Criteria Cell 5879. Conservation within this Cell will be approximately 5 percent of the Cell focusing in the southern portion of the Cell. The Project is not

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located within or near any MSHCP Special Linkage areas and will not interfere with goals for MSHCP Reserve Assembly. (AMEC(a), pp. 2-3) Therefore, the Project will not conflict with this section of the MSHCP.

MSHCP Section 6.1.2 (Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools/Fairy Shrimp)

Riparian/riverine areas are lands that contain habitat dominated by trees, shrubs, and persistent emergents, which occur close to or depend upon soil moisture from a nearby water source; or areas with fresh water flowing during all or a portion of the year. Unvegetated drainages (ephemeral streams) may be included if alterations to that drainage have the potential to affect Covered Species and Conservation Areas. The MSHCP requires focused surveys for sensitive riparian bird species when suitable riparian habitat is present and surveys for sensitive fairy shrimp species when vernal pools or other suitable habitat are present. (AMEC(a), pp. 2-3)

There is no habitat for any of the species associated with riparian/riverine/vernal pools in the study area. No vernal pools or areas suitable for vernal pool formation were observed in the study area. No features on the Project site meet the MSHCP definition of riparian/riverine areas, and there is no significant riparian vegetation present on the site. Thus, there is no need for a separate Determination of Biologically Equivalent or Superior Preservation, as the functions and values of this site at Project completion will be equivalent to the current functions and values. (AMEC(a), pp. 2-4) Therefore, the Project will not conflict with this section of the MSHCP.

MSHCP Section 6.1.3 (Protection of Narrow Endemic Plant Species)

The Project is within a Narrow Endemic Plant Species Survey Area. The Narrow Endemic Plant Species Survey Area includes the following species: Munz's onion, San Diego ambrosia, many-stemmed dudleya, spreading navarretia, California orcutt grass, and Wright's trichocoronis. (AMEC(a), pp. 2-4) As mentioned below under the subheading MSHCP Section 6.3.2 (Additional Survey Needs and Procedures), habitat for Munz's onion and many-stemmed dudleya may be present at the Project site. Therefore, a focused survey for these species was conducted by AMEC in May 2014. The results of this survey indicate these Narrow Endemic plant species are not present at the Project site and no impact will result from implementation of the Project. This focused survey is discussed in greater detail below.

MSHCP Section 6.3.2 (Additional Survey Needs and Procedures)

The proposed Project is within a Criteria Area Plant Species habitat assessment area for the following species (AMEC(a), pp. 2-4):

- Davidson's saltscale (habitat not present, species occurs in highly alkaline soils),
- Parish's brittlescale (habitat not present, species occurs in highly alkaline soils),
- Thread-leaved brodiaea (habitat may be present Bosanko clay soils),
- Smooth tarplant (habitat not present, species occurs in highly alkaline soils),
- Coulter's goldfields (habitat not present, species occurs in highly alkaline soils),

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- Little mousetail (habitat not present, species occurs in vernal pools and highly alkaline soils), and
- Round-leaved Filaree (habitat may be present Bosanko clay soils)

Of the above seven species, the thread-leaved brodiaea and round-leaved filaree may occur on the Project site as Bosanko clay soils, which may support these species, are present (AMEC(a), pp. 3-5).

The Project site is also within a Narrow Endemic Plant Species Survey Area for the following species (AMEC(a), pp. 3-5):

- Munz's onion (habitat may be present Bosanko clay soils),
- San Diego ambrosia (habitat not present, species occurs on floodplain terraces and in vernal pools),
- Many-stemmed dudleya (habitat may be present Bosanko clay soils),
- Spreading navarretia (habitat not present, species occurs in vernal pools),
- California orcutt grass (habitat not present, species occurs in vernal pools), and
- Wright's trichocoronis (habitat not present, species occurs in highly alkaline soils).

Of the above six species, the Munz's onion and many-stemmed dudleya may occur on the Project site as Bosanko clay soils, which may support these plant species are present. The other four plant species also have the potential to occur on the Project site due to the presence of Bosanko clay soils. San Diego ambrosia, spreading navarretia, and California orcutt grass occur in vernal pools. Because there are no vernal pools present on the Project site, suitable habitat for these species is not present. Habitat for Wright's trichocoronis is not present because this species occurs in highly alkaline soils and the Bosanko clay soils present on the Project sight are only slightly alkaline.

Because Bosanko clay soils are located in the northern quarter of the site, this portion of the Project site may support the thread-leaved brodiaea, round-leaved filaree, Munz's onion, and many-stemmed dudleya. Therefore, a focused survey for these plant species was undertaken by AMEC in May 2014 in compliance with MSHCP requirements (Appendix B). The survey was conducted on May 28, 2014, which is within the blooming season for the identified four species. The entire Project site was surveyed on foot by an AMEC biologist. All plant species observed were recorded in field notes and certain plant specimens were collected and taken to the curator of the University of California, Riverside, herbarium for identification (AMEC(b), p. 1). The focused survey determined that most of the northern quarter of the Project site, which contains the Bosanko clay soils, is heavily disturbed and appeared to have a substantial amount of gravel/pebbles covering much of it. No thread-leaved brodiaea, round-leaved filaree, Munz's onion, or many-stemmed dudleya were observed on the Project site during the focused survey (or during the previous survey in February as part of the March 2014 biological assessment), which may likely be due to the heavily disturbed nature of the Bosanko clay soil area (AMEC(b), p. 2). Further, in regard to the potential influence of existing drought conditions, the 2012-2013 rain season totals for the Project vicinity were over half of the average yearly rainfall for the Murrieta area. The 2014 rain season through May

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consisted of slightly better rainfall compared to the previous rain year. Despite the drought conditions, biologists were able to identify 31 plant species on the relatively small Project site, and after having surveyed the site twice in 2014 (once during the winter and again in the spring), no MSHCP Narrow Endemic or Criteria Area rare plant species were observed on the site, which is likely due to the disturbed and degraded state of the Project site (AMEC(b), p. 4). Based on the results of the focused survey, implementation of the Project will not impact MSHCP Criteria Area and Narrow Endemic plant species.

The Project site is within the burrowing owl habitat assessment area. California ground squirrels and their burrows were observed on the site during the February survey visits, which is notable as burrowing owls do not typically dig their own burrows but rely on the abandoned burrows of animals such as the prairie dog and ground squirrel as well as rock piles and manmade structures. Although no owls or owl sign (feathers, pellets, whitewash, etc.) were detected, suitable potential habitat is present on the site. (AMEC(a), pp. 3-5) As required by the MSHCP, a focused survey for burrowing owl was conducted by the Riverside County Environmental Programs Division in August 2014, which is during the species' nesting season (EPD, pp. 1-2). The Project site and a 500-foot buffer were searched for the presence of burrows, burrowing owls, and other signs of their presence. The survey was conducted in compliance with the Burrowing Owl Survey Instruction for the MSHCP (EPD, p. 2). Weather conditions during the survey were mild: clear to partly cloudy skies, with temperatures in the mid-60s to 70 degrees Fahrenheit, and little to no wind. Several small mammal burrows were located on the Project site; however, none were found to contain signs of active nesting or occupation (feathers, white wash, pellets, ornamental decorations, or egg shell fragments). No evidence of burrowing owl utilization was observed at the Project site or within the 500-foot buffer area (EPD, p. 2). Therefore, no impacts to burrowing owl are anticipated; however, in accordance with the Burrowing Owl Survey Instructions for the MSHCP and Burrowing Owl Species Objective 6, a 30-day pre-construction survey for burrowing owls shall be conducted by a qualified biologist prior to any grading, vegetation removal, or site disturbance and conducted according to the Burrowing Owl Survey Instructions for the MSHCP as required by Mitigation Measure MM BIO 1. This mitigation measure also identifies actions to be taken in the event burrowing owls are detected. Thus, compliance with Mitigation Measure MM BIO 1 will reduce potential impacts to burrowing owls to less than significant. Furthermore, pursuant to Section 8.5.1 of the MSHCP and Section 13.2 of the MSHCP Implementing Agreement, appropriate per acreage fees will be paid to the Western Riverside County Regional Conservation Authority for the public capital construction project.

MSHCP Section 6.1.4 (Guidelines Pertaining to the Urban/Wildlands Interface)

The guidelines provided in this section are intended to reduce edge effects to MSHCP conservation areas. The guidelines describe mitigation for a project's impacts to conservation areas related to drainage, toxics, lighting, noise, invasive species, barriers, grading, and land development.

The study area is not adjacent to any proposed or existing MSHCP conservation area lands; and as a result, MSHCP Section 6.1.4 Guidelines do not apply to this Project. (AMEC(a), pp. 3-5) Therefore, the Project will not conflict with this section of the MSHCP.

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MSHCP Section 7.5.3 (Construction Guidelines)

The MSHCP Construction Guidelines are intended to address construction effects in proximity to the MSHCP Conservation Area and Public/Quasi-Public Lands. These guidelines pertain to activities such as sediment and erosion control, timing of construction activities, stream diversions, footprint of disturbance areas, exotic species removal, training of construction personnel, equipment maintenance, and disposal of waste, dirt, rubble, or trash. The MSHCP Construction Guidelines germane to the Project will be addressed in the Project-specific SWPPP and erosion control BMPs. As such, the Project will not conflict with this section of the MSHCP.

MSHCP Appendix C (Standard Best Managements Practices)

The MSHCP Standard Best Management Practices pertain to the same types of activities as the MSHCP Construction Guidelines and will be addressed in the Project-specific SWPPP and erosion control BMPs. As such, the Project will not conflict with Appendix C of the MSHCP.

Other Local Policies of Ordinances

No tree species exist on the Project site. Riverside County aims to maintain and conserve superior examples of native trees, natural vegetation, stands of established trees for conservation purposes; and also to conserve the oak tree resources in the County. The Southwest planning area contains significant oak woodland areas that provide habitat and help maintain the area's distinct character. These oak woodlands can be found in many of the mountainous areas, such as the Santa Rosa Plateau, the Cleveland National Forest, Lake Skinner, and the Glen Oaks community (SWAP, p. 57). No such criterion of tree exists, including oak trees, on or adjacent to the Project, and thus, the Project will not conflict with the County's tree preservation policies.

For the reasons discussed in the preceding paragraphs, with incorporation of Mitigation Measure **MM BIO 1**, potential impacts related to conflicts with a conservation plan or conflicts with local policies or ordinances protecting biological resources will be less than significant.

b/c) AMEC performed an on-site habitat assessment on February 4, 2014, and again, as part of the focused survey for identified plant species, on May 28, 2014. All plant and vertebrate animal species detected were noted. The following tables list the observed animal and plant species, respectively.

Table 5 — Vertebrate Observed or Detected at the Project Site

| Reptiles | | |
|----------------------------------|--|--|
| Spiny and Horned Lizards | | |
| Great Basin Fence Lizard | | |
| Birds | | |
| Swans, Geese, and Ducks | | |
| Mallard | | |
| Kites, Eagles, Hawks, and allies | | |
| Red-tailed Hawk | | |
| Caracaras and Falcons | | |
| American Kestrel | | |

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| Pigeons and Doves | | | |
|---|--|--|--|
| Mourning Dove | | | |
| Swifts | | | |
| White-throated Swift | | | |
| Hummingbirds | | | |
| Anna's Hummingbird | | | |
| Tyrant Flycatchers | | | |
| Say's Phoebe | | | |
| Cassin's Kingbird | | | |
| Jays, Magpies, and Crows | | | |
| Common Raven | | | |
| Swallows | | | |
| Cliff Swallow | | | |
| Thrashers and Mockingbirds | | | |
| Northern Mockingbird | | | |
| Emberizids | | | |
| Lark Sparrow | | | |
| White-crowned Sparrow | | | |
| Icterids | | | |
| Western Meadowlark | | | |
| Fringilline and Cardueline Finches | | | |
| House Finch | | | |
| American Goldfinch | | | |
| Mammals | | | |
| Rabbits and Hares | | | |
| Desert Cottontail | | | |
| Squirrels, Chipmunks, and Marmots | | | |
| California ground squirrel | | | |
| Pocket Gophers | | | |
| Botta's pocket gopher | | | |
| Source: AMEC Southwest Justice Center Juvenile Hall Courts Relocation | | | |

Source: AMEC, Southwest Justice Center Juvenile Hall Courts Relocation Project Narrow Endemic and Criteria Area Plant Species Survey, June 4, 2014. (Includes the survey results from February 4, 2014, as well; available as Appendix B to this Initial Study)

Table 6 — Vascular Plants Observed on the Project Site

| Eudicot Flowering Plants | | |
|--------------------------|--|--|
| Amaranth Family | | |
| White pigweed* | | |
| Sunflower Family | | |
| Annual bur-sage | | |
| Tocalote* | | |
| California-aster | | |
| Paniculate tarplant | | |

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| Eudicot Flowering Plants | | | |
|--------------------------|--|--|--|
| Horseweed | | | |
| Sunflower | | | |
| Telegraph weed | | | |
| Common sowthistle* | | | |
| Borage Family | | | |
| Common fiddleneck | | | |
| Mustard Family | | | |
| Black mustard* | | | |
| Shortpod mustard* | | | |
| Charlock* | | | |
| Goosefoot Family | | | |
| Pitseed goosefoot | | | |
| Russian thistle* | | | |
| Stonecrop Family | | | |
| Pygmy-weed | | | |
| Spurge Family | | | |
| Dove weed | | | |
| Rattlesnake weed | | | |
| Pea Family | | | |
| Deerweed | | | |
| Burclover* | | | |
| Sourclover* | | | |
| Geranium Family | | | |
| Long-beaked filaree* | | | |
| Redstem filaree* | | | |
| Myrsine Family | | | |
| Scarlet pimpernel* | | | |
| Evening-Primrose Family | | | |
| Willowherb | | | |
| Buckwheat Family | | | |
| California buckwheat | | | |
| Curly dock* | | | |
| Nightshade Family | | | |
| Tree tobacco* | | | |
| Monocot Flowering Plants | | | |
| Grass Family | | | |
| Red brome* | | | |
| Rabbitfoot grass* | | | |
| Mediterranean schismus* | | | |

^{*} Denotes a nonnative species

Source: AMEC, Southwest Justice Center Juvenile Hall Courts Relocation Project Narrow Endemic and Criteria Area Plant Species Survey, June 4, 2014. (Includes the survey results from February 4, 2014, habitat assessment as well; available as Appendix B to this Initial Study)

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| Impact | Incorporated | Impact | Impact |

The on-site vegetation communities that occur in the study area include non-native grassland, which covers the vast majority of the site, and a small remnant of Riversidean upland sage scrub in the southwest corner of the Project site. The non-native grassland on site is dominated by red brome, tocalote, shortpod mustard, redstem filaree, and Mediterranean schismus. The shrub cover in the Riversidean upland sage scrub area is made up entirely of California buckwheat. Additionally, the site shows signs of relatively recent disturbance (discing and possibly rough grading) (AMEC(a), pp. 1-2). None of these species have protected status under the state or federal Endangered Species Act, nor are any of the plant species considered sensitive by the California Native Plant Society. However, as discussed above, suitable habitat on the Project site exists for burrowing owl, which is a state species of concern and a covered species under the MSHCP. Implementation of Mitigation Measure MM BIO 1 will reduce potential impacts to burrowing owls to less than significant. Therefore impacts with regard to directly or indirectly impacting state- or federal-listed endangered or threatened species; and impacts to species identified as a candidate, sensitive, or special status will be less than significant with mitigation and compliance with the MSHCP.

- d) The Project site is located within MSHCP Criteria Cell 5879, in the northeastern portion of that cell. Conservation within the cell is concentrated in the southern portion. Moreover, the Project site is not within or near any MSHCP Special Linkage areas. Thus, the Project site is not identified by the MSHCP as a wildlife corridor, and the Project will not impact wildlife movement through the area. However, birds occurring in Riverside County can nest in trees, shrubs, and on the ground. As there is this type of vegetation present on the Project site and within the vicinity, there is a likelihood of nesting birds being present during the nesting season (approximately February 15 through August 31).
 - Virtually all native bird species are protected by the federal Migratory Bird Treaty Act (MBTA). Impacts to these other bird species are not permitted in any part of the MSHCP area. A variety of birds which are protected by the MBTA occur and could nest in the proposed Project area. Impacts to nesting bird species must be avoided at all times, but the period from approximately February 15 to August 31 is the expected breeding season for bird species occurring in the Project area (AMEC(a), pp. 1-2). Thus, if construction activity occurs during the nesting season, a potentially significant impact may result. Implementation of Mitigation Measure **MM BIO 2**, which requires a pre-construction survey if construction will take place within the nesting season and the establishment of a buffer area (or areas) around any active nests, will reduce potential impacts to migratory bird species to less than significant.
- e) There are no riparian/riverine habitat or other sensitive natural communities on the Project site (AMEC(a), pp. 2-3 3-6). Moreover, no features on the Project site meet the MSHCP definition of riparian/riverine areas, and there is no significant riparian vegetation on site (AMEC(a), pp. 2-4). Therefore, the Project will not impact riparian habitat or other sensitive natural communities.
- f) There are no "waters of the United States," "waters of the State of California," or CDFW jurisdictional streambeds or habitat within the study area (AMEC, pp. 1-2). No wetlands exist within or around the

| Southwest Justice Center Juvenile Courts Relocation Project |
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Project site. No vernal pools or areas suitable for vernal pool formation were observed in the study area (AMEC(a), pp. 2-4). Therefore, regarding wetlands, no impact will occur.

Mitigation:

MM BIO 1: No sooner than 30 days prior to the commencement of any grading, vegetation removal, or site disturbance, a pre-construction survey for resident burrowing owls shall be conducted in accordance with the Burrowing Owl Survey Instructions for the Western Riverside County Multiple Species Habitat Conservation Plan by a qualified biologist. The pre-construction survey for burrowing owls shall remain valid for 30 days. If such ground-disturbing activities are delayed or suspended for more than 30 days after a pre-construction survey, the Project site shall be subsequently re-surveyed for burrowing owls. If burrowing owls are found at the time of the 30-day clearance, then a Burrowing Owl Relocation and Monitoring Plan shall be created by a qualified biologist with a current Memorandum of Understanding with Riverside County. The Western Riverside County Regional Conservation Authority (RCA) shall be consulted on whether to proceed with active or passive relocation. RCA will also be consulted on proper procedures and protocols for relocations. The Burrowing Owl Relocation and Monitoring Plan shall be submitted to RCA and Riverside County Environmental Programs Division for review and approval.

MM BIO 2: Potential impacts to nesting habitat from construction activities (i.e., clearing or removal of shrubs, etc.) shall be mitigated by restricting construction activity to occur when birds are less likely to be nesting (i.e., the non-breeding season, approximately September to February). If construction work or vegetation removal cannot be limited to the non-breeding season, a qualified biologist shall check for nesting birds no more than three (3) days prior to such activity. If active nests are found, a buffer of 100 feet to 500 feet shall be established depending on the bird species found to be occurring, and no construction activity or construction personnel shall be permitted within the buffer. The buffer shall remain in place until the nest is no longer active and the young have fledged. Establishment and release of the buffer shall be at the discretion of the qualified biologist.

Monitoring: EDA, Project Construction Manager; Qualified Biologist (if needed)

| CULTURAL RESOURCES Would the project | | | | | | |
|---|---|---|---|-----------|--|--|
| 8. Historic Resources | | | | \square | | |
| a) Alter or destroy an historic site? | Ш | | Ш | | | |
| b) Cause a substantial adverse change in the significance of a | | | | \square | | |
| historical resource as defined in California Code of Regulations, Section | Ш | Ш | Ш | | | |
| 15064.5? | | | | | | |

<u>Source</u>: RCGP Figure OS-6 "Historic Resources;" Figure 2 "Aerial Photograph;" AMEC; RCLIS; Project Description; AE; AAG(a); AAG(b); AAG(c)

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Findings of Fact:

a/b) The Project site is undeveloped, yet disturbed, from relatively recent discing or rough grading activity and includes weedy vegetation on site. Applied Earthworks, Inc. completed a cultural resources literature and records search at the Eastern Information Center (EIC) for the Project in November 2015. This records search determined that four surveys were previously conducted in the Project area during the late 1980s and 1990s for initial development of the Southwest Justice Center. None of these studies identified any cultural resources within or immediately adjacent to the Project area. Monitoring of the Southwest Justice Center site during initial ground disturbing activities was also conducted by Archaeological Advisory Group in 1990 and 1999; however, no new cultural resources were discovered during either of these times. Additionally, the Project site is not within an historic preservation district. Moreover, the Project does not include the demolition or modification of any structures as there are none on site. Therefore, no impact will occur.

Mitigation: None required

Monitoring: None required

| 9. Archaeological Resources | \square | | |
|---|-----------|---|-------------|
| a) Alter or destroy an archaeological site. | | Ш | |
| b) Cause a substantial adverse change in the significance of an | \square | | |
| archaeological resource pursuant to California Code of Regulations, | | Ш | Ш |
| Section 15064.5? | | | |
| c) Disturb any human remains, including those interred outside | \square | | |
| of formal cemeteries? | | Ш | Ш |
| d) Restrict existing religious or sacred uses within the potential | | | |
| impact area? | Ш | | \triangle |

<u>Source</u>: RCGP Figure OS-6 "Relative Archaeological Sensitivity of Diverse Landscapes;" AMEC; Project Description; AE; AAG(a); AAG(b); AAG(c)

Findings of Fact:

a/b) The Project site is undeveloped, yet disturbed, from relatively recent discing or rough grading activity and includes weedy vegetation on site. The Project site and the surrounding area are not identified for archaeological sensitivity in the Riverside County General Plan, nor is it a known archaeological site.

Applied Earthworks, Inc. completed a cultural resources literature and records search for the Project in November 2015 to determine whether any prehistoric or historical cultural resources had been previously recorded within a one-mile radius of the Project site. Sources consulted included based Eastern Information Center (EIC) base maps depicting all of the previous studies conducted in the vicinity of the Project area, and all of the resources that have been previously identified, as well as the listings of the

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National Register of Historic Places (NRHP); the *Office of Historic Preservation Archaeological Determinations of Eligibility* (ADOE); the *Office of Historic Preservation Historic Property Directory* (HPD); and the listing of *California Historical Landmarks* and *California Points of Historical Interest*. Historical maps consulted during the literature and records search include the Elsinore 30-minute U.S. Geological Survey (USGS) quadrangle dating to 1901, the Bachelor Mtn. 7.5-minute USGS quadrangle dating to 1953, and the Bachelor Mtn. quadrangle edition of 1978. According to records on file at the EIC, no cultural resources currently listed on the National Register of Historic Places (NRHP) or the California Register of Historical Resources (CRHR) are located within the Project area. In addition, no California Historical Landmarks or Points of Historical Interest are located within the Project area.

The results of the records search indicate that at least 44 cultural resource investigations have been completed within the Study area, including as many as four previous studies that together covered the entirety of the Project area. These four studies were conducted in the late 1980s and 1990s for development of the Southwest County Justice Center. None of these studies identified any cultural resources within or immediately adjacent to the Project area.

Four surveys were previously conducted in the Project area during the late 1980s and 1990s for initial development of the SJWC. The studies conducted within a one-mile radius of the larger SWJC site resulted in the identification and documentation of 42 cultural resources. The majority of these resources are prehistoric archaeological sites and isolated artifacts. At least 23 prehistoric bedrock milling sites have been identified in the vicinity, as well as six prehistoric lithic scatters, and four prehistoric habitation sites which contain a variety of features, artifacts, and/or midden deposits. Five historic period sites have been identified in the Study area, including three early twentieth century residential farmsteads and segments of Winchester Road/State Route 79 and Alba Road. The isolated artifacts included two prehistoric metates, one prehistoric mano, a historical horseshoe, and a segment of historical rock wall.

It is important to note that none of these studies identified any cultural resources within or immediately adjacent to the larger SWJC campus or the Project site. Additionally, monitoring of the initial ground disturbing activities during construction of the existing SWJC campus was conducted by Archaeological Advisory Group in 1990 and 1999; however, no new cultural resources were discovered during either of these times.

For these reasons, it is unlikely that implementation of the Project would adversely affect significant archaeological resources. However, in the unlikely event that archaeological material is discovered during construction, Mitigation Measures **MM CR 1** through **MM CR 6** shall be implemented.

In accordance with AB 52, the Pechanga and Soboba Bands of Luiseno Indians were notified about the Project and invited to consult on September 25, 2015. The initial consultation took place with Pechanga on November 5, 2015 and with Soboba on November 18, 2015. Additional consultation took place with

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Pechanga on January 15, 2016. Formal Consultation with Soboba concluded on December 17, 2016 and with Pechanga on January 20, 2016. As a result of the consultation both tribes recommended tribal monitoring during construction because of the presence of tribal cultural resources in the area and the potential for accidental discoveries. Mitigation Measures **MM CR 1** through **MM CR 6** were developed in coordination with the tribes to address concerns related to the accidental discovery of cultural resources. Compliance with these mitigation measures will reduce potential impacts from inadvertent discoveries to a less-than-significant level.

- c) The cultural resources literature and records search conducted by Applied Earthworks, Inc. in November 2015 did not identify any known formal or informal cemetery on-site. Ground disturbing activities were monitored during construction of the Southwest Justice Center adjacent to the Project site in 1990 and 1999 by Archaeological Advisory Group; however, no new formal or informal cemeteries were found during either of these times. No impacts to human remains, including those interred outside of formal cemeteries, are anticipated. In the event that unknown human remains are uncovered during construction activities, California Health and Safety Code Sections 7052 and 7050.5 require the Riverside County Coroner's Office to be contacted within 24 hours and all work to be halted until a clearance is given by that office and any other involved agencies. Further, in that event, Riverside County will comply with the requirements of Public Resources Code Section 5097.98, as amended. Thus, with adherence to existing laws and codes which is also required as Mitigation Measure MM CR 4, potential impacts with respect to disturbing human remains will be less than significant.
- d) The cultural resources literature and records search conducted by Applied Earthworks, Inc. in November 2015 did not identify any known religious or sacred uses within the Project area. Ground disturbing activities were monitored during construction of the Southwest Justice Center adjacent to the Project site in 1990 and 1999 by Archaeological Advisory Group; however, no new formal or informal cemeteries were found during either of these times. The Project is the relocation of existing juvenile courtrooms to a new structure located entirely within the SWJC campus parcel, and thus, would not introduce new uses that would have a potential to impact or restrict a religious or sacred use in the Project area. Therefore, with regard to restricting religious or sacred uses, the Project will have no impact.

Mitigation:

MM CR 1: Prior to the issuance of a grading permit, the Project Applicant shall retain a Riverside County qualified archaeological monitor in the event that any cultural resources are identified during earthmoving activities. Any newly discovered cultural resource deposits shall be subject to a cultural resources evaluation as outlined in **MM CR 3**. The Riverside County archaeologist shall also periodically check the grading activities on the project, as needed per terms of the Cultural Resources Treatment and Monitoring Agreement to assist with preparing a final Phase IV Monitoring Report for CEQA purposes.

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MM CR 2: At least 30 days prior to seeking a grading permit, the Project Applicant shall contact the Pechanga and Soboba Tribes to notify the Tribes of grading, excavation and the monitoring program, and to coordinate with the Tribe to develop a Cultural Resources Treatment and Monitoring Agreement. The Agreement shall address the treatment of known cultural resources, the designation, responsibilities, and participation of professional Native American Tribal monitor during grading, excavation and ground disturbing activities; project grading and development scheduling; terms of compensation for the monitors; and treatment and final disposition of any cultural resources, sacred sites, and human remains discovered on the site. The agreement shall also address the protocols and stipulations that the Developer, Tribes and Project archaeologist will follow in the event of inadvertent cultural resources discoveries.

MM CR 3: In accordance with the agreement required in **MM CR 2**, the Tribal Monitor shall have the authority to stop and redirect grading in order to identify and preliminary evaluate any cultural resource(s) discovered on the property. If the resource(s) is determined to hold potential significance, a 25 foot buffer shall be established and the project archeologist shall be immediately contacted by the project supervisor to come to the project site. The archeologist shall, in consultation with the Tribes, determine the significance of the resource(s) and whether full time archeological monitoring needs to occur.

MM CR 4: If human remains are encountered, California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the Riverside County Coroner has made the necessary findings as to origin. Further, pursuant to California Public Resources Code Section 5097.98(b) remains shall be left in place and free from disturbance until a final decision as to the treatment and disposition has been made. If the Riverside County Coroner determines the remains to be Native American, the Native American Heritage Commission must be contacted within 24 hours. The Native American Heritage Commission must then immediately identify the "most likely descendant(s)" of receiving notification of the discovery. The most likely descendant(s) shall then make recommendations within 48 hours, and engage in consultations concerning the treatment of the remains as provided in Public Resources Code 5097.98 and the Treatment Agreement described in MM CR 2.

MM CR 5: All cultural materials that are collected during the grading monitoring program with the exception of sacred items, burial goods and human remains which will be addressed in the Treatment Agreement required in MM CR 2, shall be professionally curated according to current professional repository standards. The collections and associated records shall be transferred, including title, to a qualified Riverside County curation facility which meets the standards set forth in 36 CRF Part 79 for federal repositories. All sacred sites, should they be encountered within the project area, shall be avoided and preserved as the preferred mitigation, if feasible. The Pechanga Tribe does have a curation facility that meets and exceeds Federal standards. However, if more than one Native American Group is involved with the project and cannot come to an agreement as to the disposition of cultural materials, they shall be curated at the Western Science Center by default.

| Southwest Justice Center | Juvenile | Courts | Relocation | Proj | ec1 |
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MM CR 6: If inadvertent discoveries of subsurface archaeological/cultural resources are discovered during grading, EDA, the project archaeologist, and the Tribes shall assess the significance of such resources and shall meet and confer regarding the mitigation for such resources. Pursuant to California Public Resources Code § 21083.2(b) avoidance is the preferred method of preservation for archaeological resources. If the EDA, the project archaeologist and the Tribes cannot agree on the significance or the mitigation for such resources, these issues will be presented to the Riverside County Archaeologist. The County Archaeologist shall make the determination based on the provisions of the California Environmental Quality Act with respect to archaeological resources and shall take into account the religious beliefs, customs, and practices of the Tribes.

Monitoring: EDA, Project Construction Manager, Tribal Monitor, Qualified Archaeologist (if needed)

| 10. Paleontological Resources | | \bowtie | | |
|--|---|-----------|---|---|
| a) Directly or indirectly destroy a unique paleontological | Ш | | Ш | Ш |
| resource, or site, or unique geologic feature? | | | | |

Source: RCGP Figure OS-7 "Paleontological Sensitivity;" RCLIS; AE; AAG(a); AAG(b); AAG(c)

Findings of Fact:

a) According to the Riverside County General Plan, the southern portion of the Project site is characterized with a high potential for paleontological resources; however, this is outside of the Project's development footprint. The Project proposes development on the northern portion of the site, which is characterized as having a low potential for paleontological resources. Applied Earthworks, Inc. completed a cultural resources literature and records search for the Project in November 2015. This records search determined that four surveys were previously conducted in the Project area during the late 1980s and 1990s for initial development of the Southwest Justice Center. None of these studies identified any cultural resources within or immediately adjacent to the Project area. Additionally, initial ground disturbing activities were monitored by Archaeological Advisory Group in 1990 and 1999; however, no new archaeological resources were discovered during either of these times. Thus, it is unlikely that implementation of that Project would adversely affect unknown and significant paleontological resources. However, in the unlikely event that paleontological material is discovered during construction, Mitigation Measure MM CR 7 shall be implemented. Compliance with Mitigation Measure MM CR 7 will reduce potential impacts to below the level of significance.

Mitigation:

MM CR 7: In the event that any paleontological resources are unintentionally discovered during Project construction, construction activities in the vicinity of the resource shall immediately halt and/or be moved to other parts of the Project site. A Riverside County-qualified paleontologist shall be retained by the County or their designee to determine the significance of the resource, if any. If the find is determined to be significant,

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avoidance or other appropriate measures including extraction and relocation, as recommended by the paleontologist, shall be implemented.

Monitoring: EDA, Project Construction Manager, Qualified Paleontologist (if needed)

| GEOLOGY AND SOILS Would the project | | | | | |
|--|---|-----------|---|---|--|
| 11. Alquist-Priolo Earthquake Fault Zone or County Fault Hazard | | \bowtie | | | |
| Zones | Ш | | Ш | ш | |
| a) Expose people or structures to potential substantial adverse | | | | | |
| effects, including the risk of loss, injury, or death? | | | | | |
| b) Be subject to rupture of a known earthquake fault, as | | \square | | | |
| delineated on the most recent Alquist-Priolo Earthquake Fault Zoning | | | Ш | Ш | |
| Map issued by the State Geologist for the area or based on other | | | | | |
| substantial evidence of a known fault? | | | | | |

Source: RCGP Figure S-2 "Earthquake Fault Study Zones," Leighton

Findings of Fact:

a/b) The Project site, like the rest of Southern California, is located within a seismically active region as a result of being located near the active margin between the North American and Pacific tectonic plates. The principal source of seismic activity is movement along the northwest-trending regional fault systems such as the San Andreas, San Jacinto, and Elsinore Fault Zones. Based on published geologic hazard maps, the project site is not located within a currently designated Alquist-Priolo Earthquake Fault Zone or County of Riverside Fault Zone. The nearest known active fault is the Elsinore-Temecula Fault Zone located approximately 6.5 miles southeast of the site. (Leighton, p. 6) Since no active faults are known to cross the site, the possibility of damage due to ground surface fault rupture is considered very low (Leighton, p. 8).

The Project will be designed according to current CBC and local building and construction standards that account for seismic activity through upgraded materials and strengthened design. As discussed under the Project Construction and Design Features subheading in Section I (Project Information) of this Initial Study, the site will be prepared and the Project will be constructed per the recommendations contained in the Project's *Geotechnical Exploration* prepared by Leighton Consulting, Inc. (included as Appendix C of this document). Because the Project will be constructed in accordance with the provisions of the CBC, County Ordinances, and incorporate the recommendations contained in the *Geotechnical Exploration*, and since the Project site is located outside of a fault zone, impacts with regard to exposing people or structures to potential substantial risk or being subject to rupture of a known earthquake fault will be less than significant with implementation of Mitigation Measure **MM GEO 1**.

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Mitigation:

MM GEO 1: The Project shall incorporate the recommendations regarding earthwork, foundation design, retaining walls, vapor retarder, soil corrosivity, pavement design, and infiltration rates contained in the Project's 2014 *Geotechnical Exploration*, or in a subsequent document approved by the County.

Monitoring: EDA, County Geologist

| 12. | Liquefaction Potential Zone | \square | |
|---------|---|-----------|--|
| a) | Be subject to seismic-related ground failure, including | | |
| liquefa | oction? | | |

<u>Source:</u> SWAP Figure 12 "Seismic Hazards"; RCLIS; Leighton

Findings of Fact:

Liquefaction is a process by which water-saturated materials (including soil, sediment, and certain types of volcanic deposits) lose strength and fail during strong ground shaking. Clayey material or dense bedrock is not adversely affected by ground shaking or other vibratory motion. Liquefaction is associated primarily with loose (low density), saturated, fine- to medium-grained, cohesionless soils (Leighton, p. 8). Due to the overall dense nature of the on-site soils and lack of groundwater 50 feet below the surface, the potential for liquefaction is considered very low (Leighton, p. 8). Additionally, the County also identifies the Project site as having a "low" susceptibility to liquefaction (SWAP, Figure 12). However, younger alluvium was generally encountered in the northern portion of the Project site, and these materials consist of loose to medium dense, silty to clayey sand and sandy clay, which are expected to possess medium collapse potential. Older alluvium deposits were encountered below the younger alluvium and mantle the granitic bedrock. Among the recommendations contained in the Geotechnical Exploration (Appendix C) prepared for the Project are recommendations for foundation design and the removal of near surface soils (including topsoil/colluvium and younger alluvium) to a depth extending into underlying dense older alluvium or granitic bedrock (Leighton, pp. 9-10, 16-17). Due to the dense underlying older alluvium and granitic bedrock and planned removal of younger alluvium, the post-development potential for liquefaction is considered very low. Because the Project shall be constructed in compliance with Mitigation Measure MM GEO 1 and meet state-mandated structural design requirements that account for soil types, potential impacts related to liquefaction will be reduced to a less-than-significant level.

Mitigation: **MM GEO 1** (see response to item 11)

Monitoring: EDA, County Geologist

| Riverside County Economic Development Agency Initial Study/Mitigated Negative Declaration Southwest Justice Center Juvenile Courts Relocation Project | | | | |
|--|---|---|--|--|
| | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
| 13. Ground-shaking Zone | | \boxtimes | | |
| Be subject to strong seismic ground shaking? Source: RCGP Figure S-2 "Earthquake Fault Study Zone Findings of Fact: a) Much of Southern California historically experience | · · | | | |
| however, according to available data, the Project's shaking and, as discussed in response to items 11.3 of any known faults (Leighton, p. 6). Since no active damage due to ground surface fault rupture is concomputer model was used as a part of the <i>Geotech</i> horizontal ground surface acceleration of 0.76g wire Because Project design and construction will be in the <i>Geotechnical Exploration</i> (Appendix C) and Mit requirements related to seismic-resistant structure induced ground shaking will be reduced to a less-the | te is not particularly sus /b), the Project site is not particularly sus /b), the Project site is not particularly are known to crosidered very low (Leightenical Exploration (Appeals a moment magnitude accordance with the recordance with the recordance MM GE design; potential impact | oceptible to su ot located on oss the site, th on, p. 8). The ndix C) to calc of 7.8 Mw fo commendation | or in the viole possibility EZ-FRISK culate the per this site. | cound cinity y of eak d in |
| Mitigation: MM GEO 1 (see response to item 11) Monitoring: EDA, County Geologist | | | | |
| 14. Landslide Risk a) Be located on a geologic unit or soil that is unstable, would become unstable as a result of the project, and potent in on- or off-site landslide, lateral spreading, collapse, or rock hazards? | ially result | | | |

Source: RCGP EIR; SWAP Figure 13 "Steep Slope"; SWAP Figure 14 "Slope Instability"; Leighton

Findings of Fact:

a) The Riverside County General Plan has cataloged and categorized areas within the County according to their slope angle. The County created four slope angle categories by which to rate properties: less than 15 percent, 15–25 percent, 25–30 percent, and 30 percent and greater. The Project site and its surrounding area are rated in the lowest of the categories indicating no substantial concerns related to slope-related landslide risks. Further, the Riverside County General Plan has cataloged and categorized areas within the County identified as being prone to slope instability. These areas are described in three categories: existing landslides; high susceptibility to seismically induced landslides and rockfalls; and low to locally moderate susceptibility to seismically induced landslides and rockfalls. The Project site and its

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surrounding area are not identified as being within any of the slope instability areas. Due to the relatively modest relief across the site and dense nature of subsurface soils, the risk of deep-seated slope failure on the Project site is considered very low (Leighton, p. 8). The Project site is also not considered susceptible to earthquake-induced landslides (Leighton, p. 8). Thus, impacts with regard to on- or off-site landslides and rockfall are considered less than significant.

Lateral spreading is a phenomenon in which large blocks of intact, non-liquefied soils moves down slope on a liquefied soil layer and is often a regional event (RCGP EIR, Section 4.10). Collapse refers to the potential settlement of a soil under stresses upon being wetted, due to the break-up of water soluble bonds between soil particles (RCGP EIR, Section 4.10). The potential for lateral spreading and collapse for the Project is considered very low due to the dense nature of the subsurface soils as well as the anticipated removal of the younger alluvium (Leighton, p. 8-10); thus, impacts associated with lateral spreading and collapse are considered less than significant.

For these reasons, potential impacts relative to landslide risk, lateral spreading, collapse, or rockfall hazards are considered less than significant.

| Mitigation: None required | | | |
|--|---|-----------|---|
| Monitoring: None required | | | |
| | | | |
| 15. Ground Subsidence | | \square | |
| a) Be located on a geologic unit or soil that is unstable, or that | Ш | | Ш |
| would become unstable as a result of the project, and potentially result | | | |
| in ground subsidence? | | | |

Source: RCLIS; RCGP EIR; Leighton

Findings of Fact:

Ground subsidence is typically a gradual settling or sinking of the ground surface with little or no horizontal movement, although fissures (cracks and separations) are common. Subsidence can range from small or local collapses to broad regional lowering of the earth's surface. Subsidence may be caused by: dewatering of peat or organic soils; dissolution in limestone aquifers; first-time wetting of moisture-deficient, low-density soils (hydrocompaction); natural compaction; liquefaction; crustal deformation; subterranean mining; and withdrawal of fluids (groundwater, petroleum, geothermal, etc.) (RCGP EIR, Section 4.10).

The Project site is identified as having a susceptibility to subsidence (RCLIS). As discussed under item 12.a) the potential for post-development liquefaction is considered low due to the dense nature of the on-site soils and lack of shallow groundwater (Leighton, p. 8). The Project does not propose any activities, such as

16. Other Geologic Hazards

a) Be subject to geologic hazards, such as seiche, mudflow, or volcanic hazard?

Source: RCGP EIR; SWAP Figure 13 "Steep Slope"; SWAP Figure 14 "Slope Instability"; Leighton

Findings of Fact:

Monitoring: None required

A seiche is a standing wave in an enclosed or partially enclosed body of water; seiches and seiche-related phenomena have been observed on lakes, reservoirs, swimming pools, bays, and seas. The Project site is located approximately 2.75 miles west from Lake Skinner; however, due to the distance, the possibility of seiches impacting the Project site is considered remote (Leighton, p. 8). Moreover, there are no hills or mountainsides near to the Project site that could contribute to or cause a mudflow and therefore will not be subject to the risk of mudflow (SWAP Figure 13). There are no known active or dormant volcanoes in the Project's vicinity and therefore will not be subject to the risk of volcanic activity. Therefore, with regard to other geologic hazards, impacts are considered less than significant.

Mitigation: None required

Monitoring: None required

| 17. Slopes | \square | |
|--|-------------|-------------|
| a) Change topography or ground surface relief features? | | |
| b) Create cut or fill slopes greater than 2:1 or higher than 10 feet? | \boxtimes | |
| c) Result in grading that affects or negates subsurface sewage disposal systems? | | \boxtimes |

Source: SWAP Figure 13 "Steep Slope"; SWAP Figure 14 "Slope Instability"; Ord. No. 457; Leighton

Findings of Fact:

a) The location of the proposed structure is generally a ridge top with existing cut slopes descending approximately 10 to 20 feet along the southern and western sides to the existing driveway (Leighton, p.

| | Less than Significant | | |
|-------------|--------------------------|-------------|--------|
| Potentially | with | Less Than | |
| Significant | Mitigation | Significant | No |
| Impact | Incorporated | Impact | Impact |

- 1). The building pad is expected to require cut and fill grading to achieve finish design grades, and a cut and fill transition subgrade condition is anticipated along the south side of the building due to existing cut slope and/or driveway (Leighton, p. 1). The Project will not result in a substantial change in topography. Compliance with Riverside County Ordinance No. 457 is required regardless of the Project's proposed changes to topography. Ordinance No. 457 will assure cut or fill slopes are constructed appropriately. Compliance with Ordinance No. 457, the UBC, and) and implementation of Mitigation Measure MM GEO 1 will reduce potential impacts to less than significant.
- Fill and cut slopes will be designed and constructed at 2:1 (horizontal to vertical) ratio to a maximum height of 20 feet. These slopes are considered grossly stable for static and pseudostatic conditions. Higher or steeper slopes (up to 1.5:1) in the granitic rock may be considered subject to further review and evaluation. Such slopes shall be observed by an engineering geologist during grading to verify jointing or fracture patterns and recommend remedial measures, if needed. The Project will implement this provision as it will comply with the recommendations set forth in the Geotechnical Exploration and comply with Mitigation Measure MM GEO 1. Moreover, per the recommendations set forth in the Geotechnical Exploration, where fills are to be placed on ground with slopes steeper than 5:1 ratio (greater than 20 percent grade), the ground shall be stepped or benched. The lowest bench or key shall be a minimum of 15 feet wide and at least 2 feet deep, into competent material. Other benches shall be excavated a minimum height of 4 feet into competent material or as otherwise recommended by the engineering geologist. Fill placed on ground sloping flatter than 5:1 (less than 20 percent grade), shall also be benched or otherwise over excavated to provide a flat subgrade for the fill. Further and also per the recommendation set forth in the Geotechnical Exploration where fill-over-cut slopes are to be graded, the cut portion of the slope shall be made, evaluated, and accepted by the engineering geologist prior to placement of materials for construction of the fill portion of the slope, unless otherwise recommendation by the engineering geologist. Therefore, with required compliance with building codes, Ordinance No. 457, and Mitigation Measure MM GEO 1, impacts will be reduced to a less-than-significant level.
- c) The Project does not propose or require a subsurface sewage disposal system, nor will implementation of the Project affect or negate any existing subsurface sewage system. Therefore, no impact will occur.

| Mitigation: | MM GEO | . (see res | sponse to | item 11) |
|-------------|--------|------------|-----------|----------|
|-------------|--------|------------|-----------|----------|

Monitoring: EDA

| 18. | Soils | | \square | |
|---------|---|-----------|-----------|---|
| a) | Result in substantial soil erosion or the loss of topsoil? | | | Ш |
| b) | Be located on expansive soil, as defined in Section 1802.3.2 of | \square | | |
| the Cal | ifornia Building Code (2007), creating substantial risks to life or | | Ш | Ш |
| proper | ty? | | | |

| miliai stady, wildbated wegative beclaration | Southwest Justice Cente | or saverine cour | to riciocation | ··oject |
|--|----------------------------|--|--------------------------|---------|
| | Potentially Significant | Less than Significant with Mitigation | Less Than Significant | No |
| | Impact | Incorporated | Impact | Impact |
| c) Have soils incapable of adequately supporting use of tanks or alternative waste water disposal systems where sew not available for the disposal of waste water? | • | | | |

Source: Leighton; SWRCB; Project Description

Findings of Fact:

- Construction of the Project could result in soil erosion and will result in the loss of topsoil, particularly in the northern area of the site where the Geotechnical Exploration recommends removing the topsoil/colluvium and younger alluvium as such soils may settle under the surcharge of fills or foundation loads (Leighton, pp. 9-10). The topsoil will be either reused in landscape surface areas or removed from the site (Leighton, p. 11). As the proposed structure will be located on a ridge top, significant water erosion is not anticipated during construction. Additionally, as the Project includes descending slopes at the southern and western sides, slope faces are inherently subject to erosion, particularly if exposed to rainfall and irrigation. Landscaping and slope maintenance will be conducted to increase long-term surficial stability. Berms will be provided at the top of fill slopes, and drainage directed such that surface runoff on the slope is minimized as per recommendations set forth in the Geotechnical Exploration. The Project is required by the Clean Water Act to comply with the provisions of the National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities, Order No. 2009-0009-DWQ (as amended by Order No. 2010-0014-DWQ and 2012-0006-DWQ), NPDES No. CAS000002 (the "General Permit"). As required by the General Permit, the proposed Project will prepare and implement an effective SWPPP that includes BMPs to reduce erosion during construction. Once construction is complete, the Project site will be landscaped and incorporate drainage features, post-construction BMPs, and a WQMP to minimize runoff and erosion. Therefore, impacts will be less than significant.
- b) Expansive soils are generally considered a threat because of the pressure that may be induced upon structures. In general, these types of soils include characteristics that may result in expansion or contraction when exposed to water. The extent of contraction (shrink) or expansion (swell) may be influenced by the amount and type of clay in the soil. As part of the *Geotechnical Exploration*, field explorations were undertaken consisting of the excavation of seven borings to provide basis for foundation design and construction of the proposed improvements. During exploration, in-situ undisturbed (Cal Ring) and disturbed/bulk samples were collected from the borings for further laboratory testing and evaluation. Laboratory tests were performed on representative bulk samples to provide a basis for development of remedial earthwork and geotechnical design parameters. The laboratory testing program included maximum dry density and optimum moisture, particle size, expansion index, swell or settlement potential, in-situ moisture, and density and soluble sulfate content. (Leighton, p. 3) The Project site is underlain by areas of relatively dense artificial fill associated with previous site grading, young to very old axial-channel deposits (older alluvium) and cretaceous-age granitic bedrock. In addition, more recent alluvial soils (younger alluvium) were also found overlaying the older alluvium. As encountered in

| | Less than | | |
|-------------|--------------|-------------|--------|
| | Significant | | |
| Potentially | with | Less Than | |
| Significant | Mitigation | Significant | No |
| Impact | Incorporated | Impact | Impact |

the exploratory excavations and based on the results of laboratory testing, the younger alluvium is expected to possess low expansion potential, and the older alluvium is expected to possess very low expansion potential (Leighton, pp. 4-5). Per the recommendations of the *Geotechnical Exploration*, the younger alluvium will be removed to a depth extending to the older alluvium or granitic bedrock (Leighton, pp. 9-10). Therefore, with implementation of Mitigation Measure **MM GEO 1**, potential risks to life or property associated with expansive soils are considered to be reduced to a less-than-significant level.

c) No septic tanks or alternative wastewater disposal systems are proposed to be constructed as a part of this Project. Therefore, no impacts will occur.

Mitigation: MM GEO 1 (see response to item 11)

Monitoring: EDA, Riverside County Geologist

| 19. Erosiona) Change deposition, siltation, or erosion that may modify the | | \boxtimes | |
|---|--|-------------|--|
| channel of a river or stream or the bed of a lake? | | | |
| b) Result in any increase in water erosion either on or off site? | | \boxtimes | |

Source: Google Maps; Ord. No. 754; Project Description

Findings of Fact:

- a) There are no river channels, streams, or lake bed in proximity to the Project to which the Project would result in a change of deposition, siltation, or erosion. As discussed in item 18.a), the Project will implement a SWPPP that incorporates erosion and sediment control BMPs during construction and a Project-specific WQMP during Project operations. Through implementation of BMPs identified in the SWPPP, WQMP, and adherence to applicable provisions of County Ordinance No. 754 (Stormwater/Urban Runoff Management and Discharge Controls), potential impacts to the modification of the channel of a river, stream, or lake bed are considered less than significant.
- b) During Project construction, the potential exists for an increase in erosion during grading and other site preparation activities. The Project will be required to comply with *Riverside County Drainage Area Management Plan Santa Ana and Santa Margarita Region* (DAMP), which describes a wide range of Best Management Practices (BMPs), including BMPs for the control of soil erosion which may include but are not limited to, soil binders, mulch, permanent seeding or sodding. Thus, through compliance with the DAMP, implementation of appropriate erosion and sediment control BMPs, identified in the Project's SWPPP, and adherence to applicable provisions of County Ordinance No. 754 (Stormwater/Urban Runoff

| Potentia Significa Impac | nnt Mitigation | Less Than Significant Impact | No Impact |
|--|---|---|-------------------------------|
| Management and Discharge Controls), potential impacts associated w than significant. | ith erosion will be | e reduced to | less |
| Mitigation: None required | | | |
| Monitoring: None required | | | |
| 20. Wind Erosion and Blowsand from project either on or off site. a) Be impacted by or result in an increase in wind erosion and blowsand, either on or off site? | | | |
| Source: RCGP Figure S-8 "Wind Erosion Susceptibility Map"; Ord. No. 484 | | | |
| Findings of Fact: | | | |
| a) The Project site is in an area susceptible to moderate wind erosion (RC area generally blows from the northeast to the southwest. During the 403 will be implemented to reduce the potential for wind erosion and matter into the air throughout the site. Rule 403 requires, among othe treated at least twice per day with water or chemical stabilizers, restri roads, reduced vehicle speeds during construction, vegetative covers earthwork, track-out pads (maintained), wheel washers, as well as the wind speeds exceed 25 miles per hour. Compliance with Rule 403 as we will reduce impacts to less than significant during the grading and construction properties of the Project, maintained landscaping and impacts associated with blowing sand during wind events to less-than- | construction phase the release of air er measures, that cted vehicle speed on inactive areas of cessation of grad well as County Ord struction phases of hardscaping will | se, SCAQMD borne partic exposed soi ds on un-par of exposed ling work wh inance No. 4 of the Project I reduce pot | Rule culate ls be ved nen 184 |
| Mitigation: None required | | | |
| Monitoring: None required | | | |
| GREENHOUSE GAS EMISSIONS Would the project | | | |
| 21. Greenhouse Gas Emissions a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment? | | | |
| b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases? | | \boxtimes | |

Source: WEBB

| | Less than | | |
|-------------|--------------|-------------|--------|
| | Significant | | |
| Potentially | with | Less Than | |
| Significant | Mitigation | Significant | No |
| Impact | Incorporated | Impact | Impact |

Findings of Fact:

a/b) GHG do not have adopted significance thresholds associated with them at this time. Several agencies, at various levels, have proposed draft GHG significance thresholds for use in CEQA documents. SCAQMD has been working on GHG thresholds for development projects as well. The most recent draft proposal included significance thresholds for residential, commercial, and mixed-use projects at 3,500, 1,400, and 3,000 metric tonnes of carbon dioxide equivalents per year (MTCO₂E/yr), respectively.

The CalEEMod output results for construction-related GHG emissions present the GHG emissions estimates for the Project for carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), and carbon dioxide equivalent (CO_2E). The CalEEMod model calculates GHG emissions from fuel usage by construction equipment and construction-related activities, like construction worker trips, for the Project. The following table shows the anticipated GHG emissions from Project construction.

Metric Tons per year (MT/yr) Year Total CO₂E^a Total CO₂ Total CH₄ Total N₂O 2015^b 0.00 183.30 0.04 184.17 2016 390.25 0.07 0.00 391.83 573.55 0.11 0.00 576.00 Total

Table 7 — Project Construction Equipment GHG Emissions

Notes:

Source: Albert A. Webb Associates, Air Quality/Greenhouse Gas Analysis for Southwest Justice Center Juvenile Courts Relocation Project, Riverside County, California, December 5, 2014, Table 6. (Appendix A)

Evaluation of the table above indicates that an estimated $576.00 \text{ MTCO}_2\text{E}$ will occur from Project construction equipment over the course of the estimated construction period. SCAQMD recommends that construction emissions be amortized for a project lifetime of 30 years to ensure that GHG reduction measures address construction GHG emissions as part of the operational reduction strategies. Therefore, the Project's GHG emissions were spread evenly over 30 years to yield an average of $19.20 \text{ MTCO}_2\text{E/yr}$.

Long-term GHG emissions include area source emissions, energy-related emissions, mobile source emissions, solid waste emissions, and water-related energy usage. The following table considers the amortized construction emissions for the Project as well as emission sources associated with the Project's operations to quantify the total Project GHG emissions.

Table 8 — Total Project-Related GHG Emissions

| Course | Metric Tons per year (MT/yr) | | | | |
|------------------------|------------------------------|------|------|-------------------------|--|
| Source | CO ₂ | CH₄ | N₂O | Total CO₂E ^a | |
| Amortized Construction | | | | 19.20 | |
| Area | 0.00 | 0.00 | 0.00 | 0.00 | |

The total carbon dioxide equivalent (CO₂E) is the sum of the total CO₂ emissions plus the total CH4 emissions multiplied by its global warming potential plus the total NO₂ emissions multiplied by its total global warming potential.

The 2015 year represents the worst case scenario because construction emissions after 2015 would be the same or less due to more stringent regulations and lower emission factors reflected in the CalEEMod model.

| | Less than | | |
|-------------|--------------|-------------|--------|
| | Significant | | |
| Potentially | with | Less Than | |
| Significant | Mitigation | Significant | No |
| Impact | Incorporated | Impact | Impact |

| Course | Metric Tons per year (MT/yr) | | | | | | |
|-------------|------------------------------|-----------------|------|--------------------------------------|--|--|--|
| Source | CO ₂ | CH ₄ | N₂O | Total CO ₂ E ^a | | | |
| Energy | 56.31 | 0.00 | 0.00 | 56.54 | | | |
| Mobile | 715.75 | 0.03 | 0.00 | 716.28 | | | |
| Solid Waste | 2.71 | 0.16 | 0.00 | 6.07 | | | |
| Water | 17.07 | 0.09 | 0.00 | 19.76 | | | |
| Total | 791.84 | 0.28 | 0.00 | 817.85 | | | |

Notes:

Source: Albert A. Webb Associates, Air Quality/Greenhouse Gas Analysis for Southwest Justice Center Juvenile Courts Relocation Project, Riverside County, California, December 5, 2014, Table 8. (Appendix A)

As shown, the total GHG emissions generated from the Project are approximately $817.85 \text{ MTCO}_2\text{E/yr}$, which includes construction-related emissions amortized over a typical project life of 30 years. Thus, the total GHG emissions from the Project are below the lowest SCAQMD recommended screening level of $1,400 \text{ MTCO}_2\text{E/yr}$. This threshold is notably one of the lowest and most conservative thresholds proposed in the State. Therefore, as the Project will not generate a significant amount of GHG emissions and the emissions are below recommended draft thresholds, impacts are less than significant.

Mitigation: None required

Monitoring: None required

| HAZARDS AND HAZARDOUS MATERIALS Would the project | | | | |
|---|---|---|-----------|-----------|
| 22. Hazards and Hazardous Materials | | | \square | |
| a) Create a significant hazard to the public or the environment | Ш | Ш | | |
| through the routine transport, use, or disposal of hazardous materials? | | | | |
| b) Create a significant hazard to the public or the environment | | | \bowtie | |
| through reasonably foreseeable upset and accident conditions | Ш | Ш | | |
| involving the release of hazardous materials into the environment? | | | | |
| c) Impair implementation of or physically interfere with an | | | \square | |
| adopted emergency response plan or an emergency evacuation plan? | Ш | Ш | | |
| d) Emit hazardous emissions or handle hazardous or acutely | | | | \square |
| hazardous materials, substances, or waste within one-quarter mile of | Ш | Ш | Ш | |
| an existing or proposed school? | | | | |
| e) Be located on a site which is included on a list of hazardous | | | | \square |
| materials sites compiled pursuant to Government Code Section | Ш | Ш | Ш | |
| 65962.5 and, as a result, would it create a significant hazard to the | | | | |
| public or the environment? | | | | |

Source: Project Description; TVUSD; Google Maps; EnviroStor; GeoTracker; Cortese List

The total carbon dioxide equivalent (CO_2E) is the sum of the total CO_2 emissions plus the total CH4 emissions multiplied by its global warming potential plus the total NO_2 emissions multiplied by its total global warming potential.

| | Less than | | |
|-------------|--------------|-------------|--------|
| | Significant | | |
| Potentially | with | Less Than | |
| Significant | Mitigation | Significant | No |
| Impact | Incorporated | Impact | Impact |

Findings of Fact:

a/b) Project construction will involve the transport of fuels, lubricants, and various other liquids for operation of construction equipment at the site. These materials will be transported to the Project site by equipment service trucks. In addition, workers will commute to the Project site via private vehicles and would operate construction vehicles and equipment on public streets and the Project site. Materials hazardous to humans, wildlife, and sensitive environments will be present during Project construction. These materials include diesel fuel, gasoline, equipment fuels, concrete, cleaning solutions and solvents, lubricant oils, adhesives, human waste, and chemical toilets. The potential exists for direct impacts to human health and the environment from accidental spills of small amounts of hazardous materials from construction equipment during Project construction.

Hazardous materials will be handled in accordance with federal, state, and County requirements. The construction contractor(s) will have *Constructions Safety Orders and General Industry Safety Orders*, which are issued by the California State Division of Industrial Safety, along with other required forms and plans at the work site and will comply with provisions of these and all other applicable laws, ordinances, and regulations. The construction contractor(s) will be responsible for implementing, administering, and maintaining a confided space entry program for trenching activities.

Operation and maintenance of the Project will require the use of ordinary types and quantities of hazardous materials that are commercially available including janitorial-type cleaning products, and chemicals such as fuel, oils, and lubricants used for machinery in the building. However, these materials will be used by SWJC staff or vendors in accordance with the manufacturers' specifications and state and federal laws. A *Material Safety Data Sheet* as described in Section 5194 of the *California Code of Regulations* will be retained from the manufacturer by the construction contractor(s), during construction, and by the operator of any businesses of any hazardous products that may be used at the Project site during construction or operation once construction is complete. A variety of state and federal laws govern the transport, generation, treatment, and disposal of hazardous wastes. The state and County have the authority to inspect the Project site during construction and once operational, and enforce state and federal laws governing the storage, use, transport and disposal of hazardous materials and wastes.

Because (i) there are no hazardous materials present on the Project site (e.g., asbestos-containing materials or lead-based paints) as the site is undeveloped/vacant and not used; (ii) hazardous materials will be used and stored on site in small quantities in accordance with the manufacturers specifications and state and federal laws; and (iii) these materials will be used by SWJC staff or vendors or contractors, in strict accordance with the manufactures' specifications and state and federal laws. Project construction and operation is not anticipated to present a significant hazard to the public or the environment through the routine transport, use or disposal of hazardous materials, or reasonably foreseeable upset and accident conditions. Impacts in this regard are considered less than significant.

Less than Significant Potentially with Less Than Significant Mitigation Significant No Impact Incorporated Impact Impact

- c) Access for emergency vehicles will be allowed at all times during the Project's temporary construction activities and post-construction operational activities. The proposed Project will not impair the implementation of, or physically interfere with, an emergency response plan and/or emergency evacuation plan. Further, the Project does not propose off-site improvements, nor will construction of the Project impact existing public roadways, such as Auld Road, with lane or street closures. Thus, neither construction nor operation of the Project will interfere with the use of Auld Road for evacuation purposes. Therefore, Project-specific impacts related to the impairment of, or physical interference with, an adopted emergency response or evacuation plan will be less than significant.
- d) The Project site and surrounding area is within the Temecula Valley Unified School District. The nearest school is French Valley Elementary School, located at 36680 Cady Road, approximately 1.4 miles northeast of the Project site. There are no private schools within a quarter-mile of the Project site. Additionally, as discussed under Air Quality, the project would not generate any toxic air contaminants or create significant localized air quality impacts that would cause a health risk to the surrounding community, including schools. No impact will occur.
- e) The Project site is not located on or in proximity to a hazardous materials site per EnviroStor and GeoTracker. There are 16 sites identified on the "Cortese" list in Riverside County; however, none of these sites are located in the Project's vicinity. Further, no impacts related to contaminated onsite soils are anticipated. Regardless, if contaminated soils are located during the course of construction, all standard hazardous material remediation and removal processes and procedures would be adhered to. No impact will occur.

Mitigation: None required

Monitoring: None required

| 23. Airportsa) Result in an inconsistency with an Airport Master Plan? | | \boxtimes |
|---|--|-------------|
| b) Require review by the Airport Land Use Commission? | | |
| c) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area? | | |
| d) For a project within the vicinity of a private airstrip, or heliport, would the project result in a safety hazard for people residing or working in the project area? | | |

-55-

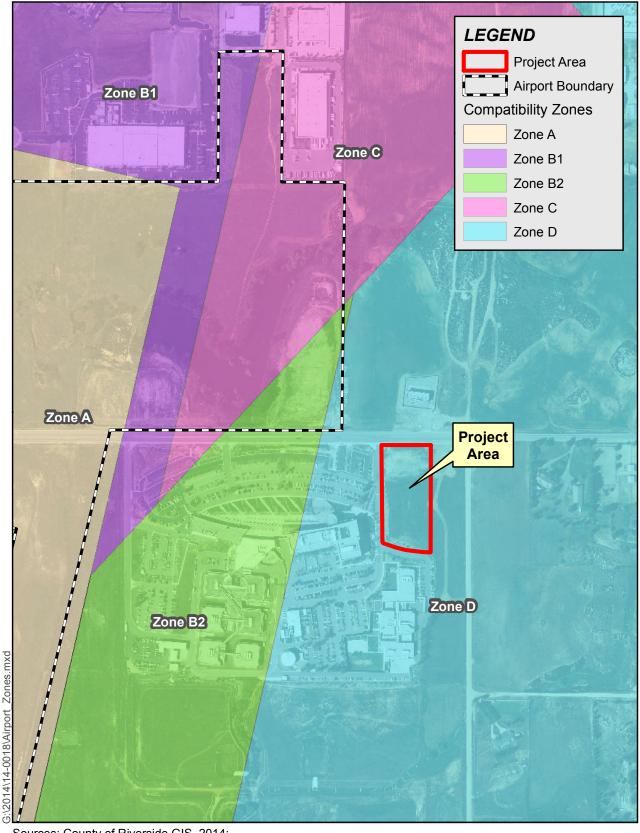
Source: RCLIS; FVAMP; RCALUCP; USDOT

| | Less than | | |
|-------------|--------------|-------------|--------|
| | Significant | | |
| Potentially | with | Less Than | |
| Significant | Mitigation | Significant | No |
| Impact | Incorporated | Impact | Impact |

Findings of Fact:

- The Project site is approximately one-third of a mile east of French Valley Airport, which is a County-owned public-use airport used primarily by single-engine airplanes. The Project represents an expansion of the existing SWJC with uses consistent with existing campus operations. Specifically, existing juvenile courtrooms will be "relocated" to the Project's proposed courthouse. Moreover, the Project site is within the same parcel as the SWJC campus. Even so, the Project will not result in an inconsistency with the French Valley Airport Master Plan. Therefore, no impact will occur.
- b/c) The Project site is entirely within Compatibility Zone D area of the French Valley Airport as shown on Figure 4 French Valley Airport Compatibility Zones. The basic compatibility criteria for Zone D as established under the Riverside County Airport Land Use Compatibility Plan (RCALUCP) is presented in the table on the page following Figure 4. The primary focus of RCALUCP is on broadly defined noise and safety impacts, as well as to make compatibility determinations for compliance of all proposed development around an airport.

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Sources: County of Riverside GIS, 2014; Eagle Aerial, April 2012.



Figure 4 – French Valley Airport Compatibility Zones

Southwest Justice Center Juvenile Courts Relocation Project

0 250 500 750 1,000 Feet

Section 3

MITIGATION MONITORING AND REPORTING PLAN (MMRP)

Southwest Justice Center Juvenile Courts Relocation INITIAL STUDY/MITIGATED NEGATIVE DECLARATION EA # 201601I



Riverside County, CA

Prepared By:

Economic Development Agency for the County of Riverside

3403 10th Street, 5th Floor Riverside, CA 92501 Contact Mike Sullivan 951.955.8009

MITIGATION MONITORING & REPORTING PROGRAM

The proposed Southwest Justice Center (SWJC) Juvenile Courts Relocation Project entails the construction and operation of a building and execution of necessary agreements facilitating the addition of two juvenile courts and ancillary office space as well as additional surface parking areas, access roads, and walkways at the SWJC in the unincorporated French Valley area of Riverside County. The Project includes construction and operation of:

- two additional juvenile courts and ancillary office space encompassing approximately 14,336 square feet on approximately 3 acres within the 48-acre parcel of the existing SWJC campus;
- additional surface parking areas, access roads, and walkways as needed;
- on-site detention basin and bioretention areas

hereinafter collectively referred to as the "Project."

Mitigation measures were incorporated into the Project to reduce environmental impacts, identified in the Project's Initial Study, to below the level of significance. Section 21081.6 of the California Public Resources Code requires a Lead Agency to adopt a reporting or monitoring program for the changes made to the project or conditions of project approval, adopted in order to mitigate or avoid significant effects on the environment. Section 15097 of the State CEQA Guidelines summarizes the criteria required for mitigation monitoring and/or reporting. This Mitigation Monitoring and Reporting Program (MMRP) has been compiled to verify implementation of adopted mitigation measures.

The County of Riverside Economic Development Agency (County) will have the responsibility for implementing the measures and various public agencies will have the primary responsibility for enforcing, monitoring, and reporting the implementation of the mitigation measures. The required mitigation measures are listed and categorized by impact area, with an accompanying identification of the following:

- Mitigation Measure
- Monitoring Phase the phase of the Project during which the mitigation measure shall be implemented and monitored:
 - Pre-Construction, including the design phase
 - Grading (Including Excavation) and/or Construction
 - Post-construction and Occupancy
- Enforcement Agency the agency with the authority to enforce the mitigation measure
- Monitoring Agency the agency to which reports involving feasibility, compliance, and implementation are made
- Action Indicating Compliance
- Verification of Compliance, which will be used during the reporting/monitoring

This MMRP is set up as a Compliance Report, with space for confirming that mitigation measures have been implemented.

Acronyms Used in the MMRP

The following acronyms are used in the MMRP:

CDFWS California Department of U.S. Fish & Wildlife

Service

County County of Riverside

EDA Riverside County Economic Development Agency

EPD Riverside County Environmental Programs

Division

RCA Western Riverside County Regional Conservation

Authority

| Impact Category and Mitigation | Monitoring | Enforcement | Monitoring | Action | Verifi | cation of Co | mpliance |
|--|---|-------------|---|--|----------|--------------|----------|
| Measures | Phase | Agency | Agency | Indicating Compliance | Initials | Date | Remarks |
| AIR QUALITY | | | | | | | |
| MM AIR 1: All construction equipment will be properly tuned and maintained in accordance with manufacturer's specifications and to the satisfaction of the EDA. | Construction | EDA | EDA, Project Construction Manager or Construction Inspector | Proof of maintenance records provided upon request | | | |
| BIOLOGICAL RESOURCES | - | | • | | | | |
| mm Bio 1: No sooner than 30 days prior to the commencement of any grading, vegetation removal, or site disturbance, a pre-construction survey for resident burrowing owls shall be conducted in accordance with the Burrowing Owl Survey Instructions Western Riverside County Multiple Species Habitat Conservation Plan by a qualified biologist. The pre-construction survey for burrowing owls shall remain valid for 30 days. If such ground-disturbing activities are delayed or suspended for more than 30 days after a pre-construction survey, the Project site shall be subsequently re-surveyed for burrowing owls. If burrowing owls are found at the time of the 30-day clearance, then a Burrowing Owl Relocation and Monitoring Plan shall be | Pre-Construction During Construction if ground- disturbing activities cease for more than 30 days after the pre-construction survey | EDA, RCA | RCA, EPD, EDA, Qualified Biologist (if needed) | Complete Burrowing Owl survey report Completion and approval of Burrowing Owl Relocation and Monitoring Plan (if needed) | | | |

| Impact Category and Mitigation | Monitoring | Enforcement | Monitoring | Action | Verifi | cation of Co | ompliance |
|--|--|-------------|---|---|----------|--------------|-----------|
| Measures | Phase | Agency | Agency | Indicating Compliance | Initials | Date | Remarks |
| created by a qualified biologist with a current Memorandum of Understanding with Riverside County. The Western Riverside County Regional Conservation Authority (RCA) shall be consulted on whether to proceed with active or passive relocation. RCA will also be consulted on proper procedures and protocols for relocations. The Burrowing Owl Relocation and Monitoring Plan shall be submitted to RCA and Riverside County Environmental Programs Department for review and approval. | | | | | | | |
| habitat from construction activities (i.e., clearing or removal of shrubs, etc.) shall be mitigated by restricting construction activity to occur when birds are less likely to be nesting (i.e., the non-breeding season, approximately September to February). If construction work or vegetation removal cannot be limited to the non-breeding season, a qualified biologist shall check for nesting birds no more than three (3) days prior to such activity. If active nests are found, a buffer of 100 feet to 500 feet shall be | Pre- Construction: three (3) days prior to construction work or vegetation removal between February 1 – August 31. During Construction if ground or vegetation disturbance | CDFW | EDA, Project Construction Manager, Qualified Biologist (if needed) | Completion of nesting bird survey, establishment of buffer zone if birds identified on-site | | | |

| Impact Category and Mitigation | Monitoring | Enforcement | Monitoring | Action | Verifi | cation of C | ompliance |
|---|--|-------------|--|---|----------|-------------|-----------|
| Measures | Phase | Agency | Agency | Indicating Compliance | Initials | Date | Remarks |
| established depending on the bird species found to be occurring, and no construction activity or construction personnel shall be permitted within the buffer. The buffer shall remain in place until the nest is no longer active and the young have fledged. Establishment and release of the buffer shall be at the discretion of the qualified biologist. | takes place between February 1 – August 31. | | | | | | |
| MM CR 1: Prior to issuance of a grading permit, the Project Applicant shall retain a Riverside County qualified archaeological monitor in the event that any cultural resources are identified during earthmoving activities. Any newly discovered cultural resource deposits shall be subject to a cultural resources evaluation as outlined in MM CR 3. The Riverside County archaeologist shall also periodically check the grading activities on the project, as needed per terms of the Cultural Resources Treatment and Monitoring Agreement to assist with preparing a final Phase IV Monitoring Report for CEQA purposes. | Pre-construction Grading and Construction | County, EDA | EDA, Tribal Monitor, Qualified Archaeologist (if needed) | Issuance of grading permit Compliance with terms of Cultural Resources Treatment and Monitoring Agreement | | | |

| Impact Category and Mitigation | Monitoring | Enforcement | Monitoring | Action | Verifi | cation of Co | ompliance |
|---|---|------------------------------------|--|--|----------|--------------|-----------|
| Measures | Phase | Agency | Agency | Indicating Compliance | Initials | Date | Remarks |
| MM CR 2: At least 30 days prior to seeking a grading permit, the Project Applicant shall contact the Pechanga and Soboba Tribes to notify the Tribes of grading, excavation and the monitoring program, and to coordinate with the Tribes to develop a Cultural Resources Treatment and Monitoring Agreement. The Agreement shall address the treatment of known cultural resources, the designation, responsibilities, and participation of professional Native American Tribal monitor during grading, excavation and ground disturbing activities; project grading and development scheduling; terms of compensation for the monitors; and treatment and final disposition of any cultural resources, sacred sites, and human remains discovered on the site. The agreement shall also address the protocols and stipulations that the Developer, Tribes and Project archaeologist will follow in the event of inadvertent cultural resources discoveries. | Pre-Construction: at least 30 days prior to grading permit issuance | EDA, Pechanga and Soboba Tribes | EDA, Tribal Monitor, Qualified Archaeologist (if needed) | Development and approval of Cultural Resources Treatment and Monitoring Agreement Issuance of grading permit | | | |

| Impact Category and Mitigation | Monitoring | Enforcement | Monitoring | Action | Verifi | cation of Co | ompliance |
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| Measures | Phase | Agency | Agency | Indicating Compliance | Initials | Date | Remarks |
| MM CR 3: In accordance with the agreement required in MM CR 2, the Tribal Monitor shall have the authority to stop and redirect grading in order to identify and preliminary evaluate any cultural resource(s) discovered on the property. If the resource(s) is determined to hold potential significance, a 25 foot buffer shall be established and the project archeologist shall be immediately contacted by the project supervisor to come to the project site. The archeologist shall, in consultation with the Tribes, determine the significance of the resource(s) and whether full time archeological monitoring needs to occur. | Grading | Pechanga or Soboba Tribe | Project Construction Manager, Tribal Monitor, Qualified Archaeologist (if needed) | Evaluation of cultural resource(s) discovered onsite Consultation with tribal monitor | | | |
| MM CR 4: If human remains are encountered, California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the Riverside County Coroner has made the necessary findings as to origin. Further, pursuant to California Public Resources Code Section 5097.98(b) remains shall be left in place and free from disturbance until a final decision | Grading and Construction | Riverside County Coroner Native American Heritage Commission | EDA, Riverside County Coroner, Project Construction Manager and Construction Contractor | Coroner's Report Report prepared by Native American Heritage Commission (if applicable) Compliance with Treatment | | | |

| Impact Category and Mitigation | Monitoring | Enforcement | Monitoring | Action | Verifi | cation of Co | ompliance |
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| Measures | Phase | Agency | Agency | Indicating Compliance | Initials | Date | Remarks |
| as to the treatment and disposition has been made. If the Riverside County Coroner determines the remains to be Native American, the Native American Heritage Commission must be contacted within 24 hours. The Native American Heritage Commission must then immediately identify the "most likely descendant(s)" of receiving notification of the discovery. The most likely descendant(s) shall then make recommendations within 48 hours, and engage in consultations concerning the treatment of the remains as provided in Public Resources Code 5097.98 and the Treatment Agreement described in MM CR 2. | | | | Agreement described in MM CR 2 | | | |
| MM CR 5: All cultural materials that are collected during the grading monitoring program with the exception of sacred items, burial goods and human remains which will be addressed in the Treatment Agreement required in MM CR 2, shall be professionally curated according to current professional repository standards. The collections and associated records shall be transferred, including title, to a | Grading | EDA | Project Construction Manager, Tribal Monitor, Qualified Archaeologist (if needed) | Compliance with Treatment Agreement described in MM CR 2 Professional curation of cultural materials discovered during grading | | | |

| Impact Category and Mitigation Measures | Monitoring E | Enforcement Agency | Monitoring Agency | Action Indicating Compliance | Verification of Compliance | | |
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| qualitied Riverside County curation facility which meets the standards set forth in 36 CRF Part 79 for federal repositories. All sacred sites, should they be encountered within the project area, shall be avoided and preserved as the preferred mitigation, if feasible. The Pechanga Tribe does have a curation facility that meets and exceeds federal standards. However, if more than one Native American Group is involved with the project and cannot come to an agreement as to the disposition of cultural materials, they shall be curated at the Western Science Center by default. | | | | | | | |
| MM CR 6: If inadvertent discoveries of subsurface archaeological/cultural resources are discovered during grading, EDA, the project archaeologist, and the Tribes shall assess the significance of such resources and shall meet and confer regarding the mitigation for such resources. Pursuant to California Public Resources Code § 21083.2(b) avoidance is the preferred method of preservation for archaeological resources. If the EDA, | Grading and Construction | EDA, Riverside County Archaeologist | EDA, Project Construction Manager, Tribal Monitor, Qualified Archaeologist (if needed) | Assessment of any discovered resources, agreement on mitigation or preservation strategy | | | |

| Impact Category and Mitigation Measures | 1 | Enforcement | Agency Agency | Action Indicating Compliance | Verification of Compliance | | |
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| the project archaeologist and the Tribes cannot agree on the significance or the mitigation for such resources, these issues will be presented to the Riverside County Archaeologist. The County Archaeologist shall make the determination based on the provisions of the California Environmental Quality Act with respect to archaeological resources and shall take into account the religious beliefs, customs, and practices of the Tribes. | | | | | | | |
| MM CR 7: In the event that any paleontological resources are unintentionally discovered during Project construction, construction activities in the vicinity of the resource shall immediately halt and/or be moved to other parts of the Project site. A Riverside County-qualified paleontologist shall be retained by the County or their designee to determine the significance of the resource, if any. If the find is determined to be significant, avoidance or other appropriate measures including extraction and relocation, as recommended by the paleontologist, | Grading and Construction | EDA | EDA, Project Construction Manager, Qualified Paleontologist (if needed) | Report from paleontologist | | | |

| Impact Category and Mitigation Measures | Monitoring Phase | Enforcement Agency | Monitoring Agency | Action Indicating Compliance | Verification of Compliance | | |
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| shall be implemented. | | | | | | | |
| GEOLOGY | 1 | 1 | • | 1 | | | |
| MM GEO 1: The Project shall incorporate the recommendations regarding earthwork, foundation design, retaining walls, vapor retarder, soil corrosivity, pavement design, and infiltration rates contained in the Project's 2014 Geotechnical Exploration, or in a subsequent document approved by the County. | Pre-Construction Grading and Construction | EDA | Geotechnician | Issuance of grading permit. Notes on grading plans. Notes on building plans. | | | |
| MM NOISE 1: To prevent construction-related noise from disturbing sensitive receivers within proximity to the Project site during evening hours no Project-related construction activities shall be undertaken between the hours of 6:00 p.m. and 6:00 a.m. during the months of June through September and between the hours of 6:00 p.m. and 7:00 a.m. during the months of October through May. | Grading and Construction | County | EDA, Construction Contractor | Project scheduling | | | |

| Impact Category and Mitigation Measures | Monitoring Er Phase | Enforcement | Monitoring Agency | Action Indicating Compliance | Verification of Compliance | | |
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| | | Agency | | | Initials | Date | Remarks |
| impacts resulting from poorly tuned or improperly modified vehicles and construction equipment, all vehicles and construction equipment shall maintain equipment engines in good condition and in proper tune per manufacturer's specifications and to the satisfaction of the Riverside County Economic Development Agency. All stationary construction equipment shall be placed so that emitted noise is directed away from noise sensitive receptors nearest to the Project site. Equipment maintenance records and equipment design specification data sheets shall be kept on site during construction. Compliance with this measure shall be subject to periodic inspections by the Riverside County Economic Development Agency. | Grading and Construction | EDA | EDA, Construction Contractor | Properly tuned construction equipment during periodic inspections by EDA Equipment maintenance records and equipment design specification data sheets kept on-site | | | |

| Impact Category and Mitigation Measures | ' ' ' ' | Enforcement | Monitoring Agency | Action Indicating Compliance | Verification of Compliance | | |
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| | | Agency | | | Initials | Date | Remarks |
| MM NOISE 3: To reduce noise impacts associated with temporary diesel- or gasoline-powered generators, electricity from power poles shall be used whenever feasible instead of temporary diesel- or gasoline-powered generators, as determined by Riverside County Economic Development Agency prior to issuance of a grading permit. | Pre-Construction Grading and Construction | EDA | EDA, Construction Contractor | Issuance of a grading permit | | | |
| MM NOISE 4: To minimize or eliminate diesel combustion or gasoline combustion motor-derived noise from construction equipment, contractors shall utilize construction equipment that is either low-emission propane powered or electric (i.e., forklifts), where practical and feasible. | During Project construction | EDA | EDA | Use of low- emission propane or electric powered equipment or justification for infeasibility | | | |