

Attachment 321-Road Fund Engineering

LABORATORY TEST RATES

County of Humboldt
 Department of Public Works
 Materials Testing Division
 2010-2011

| Caltrans Test Method | Type of Test | Weighted Average Hrs | Weighted Average Rates | Direct Labor | Indirect Costs (50%) | Rate Rounded To \$.50 |
|-------------------------|--|-------------------------|------------------------------|-----------------|-------------------------|-----------------------------|
| 201.1 | Sample Processing (Special) | 1.50 | 53.70 | 80.55 | 40.28 | 121.00 |
| 201.2 | Sample Processing (Routine) | 0.70 | 53.70 | 37.59 | 18.80 | 56.50 |
| 202.1 | Sieve Analysis (coarse/seal coat) | 0.80 | 53.70 | 42.96 | 21.48 | 64.50 |
| 202.2 | Sieve Analysis (fine) | 0.75 | 53.70 | 40.28 | 20.14 | 60.50 |
| 202.3 | Sieve Analysis (after asphalt extract) | 1.00 | 53.70 | 53.70 | 26.85 | 80.50 |
| 203 | Mechanical Analysis | 1.75 | 53.70 | 93.98 | 46.99 | 141.00 |
| 204 | Plasticity Index | 3.00 | 53.70 | 161.10 | 80.55 | 241.50 |
| 205 | % Crushed Particles | 1.70 | 53.70 | 91.29 | 45.65 | 137.00 |
| 206 | Sp. Gravity & Absorption (coarse) | 0.65 | 53.70 | 34.91 | 17.45 | 52.50 |
| 208 | Apparent Sp. Gravity (fine agg.) | 0.70 | 53.70 | 37.59 | 18.80 | 56.50 |
| 211 | LA Rattler Test | 1.40 | 53.70 | 75.18 | 37.59 | 113.00 |
| 212 | Unit Weight of Aggregate | 1.30 | 53.70 | 69.81 | 34.91 | 104.50 |
| 213 | Org. Impurities (concrete sand) | 0.35 | 53.70 | 18.80 | 9.40 | 28.00 |
| 214 | Sodium Sulfate/Soundness Test | 4.75 | 53.70 | 255.08 | 127.54 | 382.50 |
| 216.2 | Max. Density (moisture/density curve) | 2.50 | 53.70 | 134.25 | 67.13 | 201.50 |
| 216.3 | Maximum Density (1st core) | 0.40 | 53.70 | 21.48 | 10.74 | 32.00 |
| 217 | Sand Equivalent | 0.70 | 53.70 | 37.59 | 18.80 | 56.50 |
| 226 | Moisture % Soils (oven dry) | 0.20 | 53.70 | 10.74 | 5.37 | 16.00 |
| 227 | Cleanness Value | 1.25 | 53.70 | 67.13 | 33.56 | 100.50 |
| 229.1 | Durability Index (fine aggregate) | 0.75 | 53.70 | 40.28 | 20.14 | 60.50 |
| 229.2 | Durability Index (coarse aggregate) | 1.25 | 53.70 | 67.13 | 33.56 | 100.50 |
| 231 | Nuclear Density (per hole) | 0.30 | 53.70 | 16.11 | 8.06 | 24.00 |
| 301 | Resistance (R) Value | 3.75 | 53.70 | 201.38 | 100.69 | 302.00 |
| 303 | Centrifuge Kerosene Equivalent | 1.00 | 53.70 | 53.70 | 26.85 | 80.50 |
| 306 | Cohesimeter | 0.50 | 53.70 | 26.85 | 13.43 | 40.50 |
| 308 | Method B for Bulk Sp. Gravity | 0.20 | 53.70 | 10.74 | 5.37 | 16.00 |
| 310 | Hot Solvent Extr. (202.3 not inc.) | 1.25 | 53.70 | 67.13 | 33.56 | 100.50 |
| 366.1 | Stabilometer Value (control) | 1.50 | 53.70 | 80.55 | 40.28 | 121.00 |
| 366.2 | Stabilometer Value (design) | 6.25 | 53.70 | 335.63 | 167.81 | 503.50 |
| 367 | Optimum Bitumen Content | 0.75 | 53.70 | 40.28 | 20.14 | 60.50 |
| 375 | Asphalt Compaction | 0.50 | 53.70 | 26.85 | 13.43 | 40.30 |
| 379 | Asphalt % by Nuclear Gauge | 2.10 | 53.70 | 112.77 | 56.39 | 169.00 |
| 504 | Air Content Fresh Concrete (pressure) | 1.15 | 53.70 | 61.76 | 30.88 | 92.50 |
| 518 | Unit Weight of Concrete | 1.95 | 53.70 | 104.72 | 52.36 | 157.00 |
| 521 | Comp. Strength Molded Concrete | 0.35 | 53.70 | 18.80 | 9.40 | 28.00 |
| 533 | Kelly Ball Penetration | 0.25 | 53.70 | 13.43 | 6.71 | 20.00 |
| 556 | Slump Cone Test for Concrete | 0.25 | 53.70 | 13.43 | 6.71 | 20.00 |
| HUM CO DR-2 | Concrete and AC Diamond Bit Coring | 0.53 | 53.70 | 28.46 | 14.23 | 42.50 |