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CALIFORNIA



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August 10, 2012

Peter Jan, Waste Management Engineer
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PO Box 4025
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Sacramento, CA 95812-4025

LOPEZ CANYON LANDFILL (PERMIT NO. 19-AA-0820) – ADDITIONAL HYDROSEED INFORMATION

Dear Mr. Jan,

As a supplement to our letter dated July 16, 2012 stating that the Lopez Canyon Landfill closure construction was complete, attached are the additional hydro-seed information [plan and specifications] that you requested via email August 10, 2012.

If you have any further questions or concerns please contact John Hamilton at (213) 847-2700 or via email john.cobb.hamilton@LaCity.org.

Respectfully,

Khalil M. Gharios, P.E., Division Manager
Solid Resources Processing and Construction Division

Attachments:

C: Timmie DeRamos, BOS
David Thompson, LEA

Jonathan Zari, BOS
Doug Cross, CRWQCB

Paul Blount, BOS



DECK SEED DRILL APPLICATION NOTES

1. SEEDING OPERATIONS SHALL BE SCHEDULED BY THE ENGINEER TO TAKE ADVANTAGE OF THE RAINY SEASON, AND AS GRADING WORK IS COMPLETED. THE ENGINEER SHALL DETERMINE WHETHER TEMPORARY IRRIGATION WILL BE REQUIRED TO SUSTAIN SEED GERMINATION AND ESTABLISHMENT ON THE DECK AREAS
2. MECHANICALLY CLEAR WEED GROWTH AS NECESSARY TO EXPOSE BARE SOIL PRIOR TO SEEDING. THE ENGINEER MAY WAIVE THIS REQUIREMENT IF WEED GROWTH IS INSIGNIFICANT, OR IF EROSION MAY RESULT FROM REMOVAL OF EXISTING VEGETATION.
3. AFTER SOIL IS CLEARED, AND PRIOR TO SEEDING, PERFORM ONE 'GROW AND KILL' CYCLE TO ERADICATE AGGRESSIVE WEED SPECIES. THE GROW AND KILL CYCLE SHALL INCLUDE WATERING (IF IRRIGATION IS USED) AND FERTILIZING TO ENCOURAGE WEED GERMINATION, AND SUBSEQUENT APPLICATION OF BROAD SPECTRUM HERBICIDE TO ERADICATE THE WEED GROWTH.
4. UPON COMPLETION OF WEED REMOVAL TO THE ENGINEER'S SATISFACTION, PREPARE THE SEED BED BY LIGHTLY DISCING OR TILLING THE SOIL TO A DEPTH OF 3". APPLY A LIGHT APPLICATION OF IRRIGATION (IF IT IS USED) TO MOISTEN THE SEEDBED PRIOR TO SEEDBED PREPARATION.
5. APPLY SEED MIX TO DECK AREAS BY MECHANICAL SEED DRILL, WITH SEPARATE BOXES FOR LARGE, MEDIUM, AND SMALL SEED TYPES.
6. RE-APPLY SEED TO AREAS WITH POOR GERMINATION ONE TIME. ALLOW FOR 20% OF TOTAL DECK AREA TO BE RE-SEEDED.

DECK SEED MIX

| SPECIES | PURITY / GERMINATION | POUNDS PER ACRE |
|--------------------------|----------------------|-----------------|
| STIPA CERNUA (DE-AWNED) | 80/60 | 6 |
| STIPA PULCHRA (DE-AWNED) | 80/60 | 8 |
| MELICA CALIFORNICA | 90/60 | 6 |
| POA SCRABELLA | 80/60 | 4 |
| VULPIA MICROSTACHYS | 90/60 | 8 |
| HORDEUM CALIFORNICA | 90/80 | 8 |
| TRIFOLIUM GRACILENTUM | 90/80 | 4 |

SEED IS AVAILABLE THROUGH S&S SEEDS (805) 684-0436. SUBMIT CERTIFICATION OF PURITY AND GERMINATION, WITH ONE POUND OF SEED MIX TO ENGINEER.

SLOPE SEED HYDROMULCHING APPLICATION NOTES

1. SEEDING OPERATIONS SHALL BE SCHEDULED BY THE ENGINEER TO TAKE ADVANTAGE OF THE RAINY SEASON, AND AS GRADING WORK IS COMPLETED. COMPLETE IRRIGATION INSTALLATION AND TESTING TO THE ENGINEER'S SATISFACTION PRIOR TO BEGINNING SLOPE SEEDING
2. MECHANICALLY CLEAR WEED GROWTH AS NECESSARY TO EXPOSE BARE SOIL PRIOR TO SEEDING. THE ENGINEER MAY WAIVE THIS REQUIREMENT IF WEED GROWTH IS INSIGNIFICANT, OR IF EROSION MAY RESULT FROM REMOVAL OF GROWTH.
3. UPON COMPLETION OF WEED REMOVAL TO THE ENGINEER'S SATISFACTION, APPLY HYDROMULCH MATERIALS AS NOTED BELOW IN A TWO-STAGE PROCESS WITH AN APPROXIMATE 24 HOUR DRYING PERIOD BETWEEN STAGES

HYDROMULCH APPLICATION STAGE ONE:
SEED AND SOIL CONDITIONER APPLICATION

THOROUGHLY MIX, ACCORDING TO THE SPECIFICATIONS, THE FOLLOWING MATERIALS:

- 1) SLOPES SEED MIX AS NOTED ON THIS SHEET
- 2) HYDROBLEND SOIL CONDITIONER & FERTILIZER:

| PRODUCT | RATE |
|--|---------------------|
| HYDROBLEND SOIL ACTIVATOR (AVAILABLE FROM EARTHWORKS) (310) 322-9702 | 3,000 LBS. PER ACRE |

GRD-POWER CONTROLLED RELEASE 200 LBS PER ACRE

APPLY ACCORDING TO SPECIFICATIONS AND MANUFACTURER'S RECOMMENDATIONS. MIX SHALL BE ALLOWED TO DRY NO LESS THAN 24 HOURS BEFORE APPLYING HYDROMULCH STAGE TWO.

HYDROMULCH STAGE TWO: GERMINATION LAYER

APPLY, PER SPECIFICATIONS AND MANUFACTURERS SPECIFICATIONS, THE FOLLOWING MATERIALS:

| PRODUCT | RATE |
|------------------|---------------------|
| WOOD FIBER MULCH | 2,500 LBS. PER ACRE |
| M-BINDER | 120 LBS PER ACRE |

NO FERTILIZER OF ANY SORT SHALL BE INCORPORATED IN THE HYDROMULCH MIXES, OTHER THAN THE PRODUCTS SPECIFIED HEREIN.

SLOPES SEED MIX

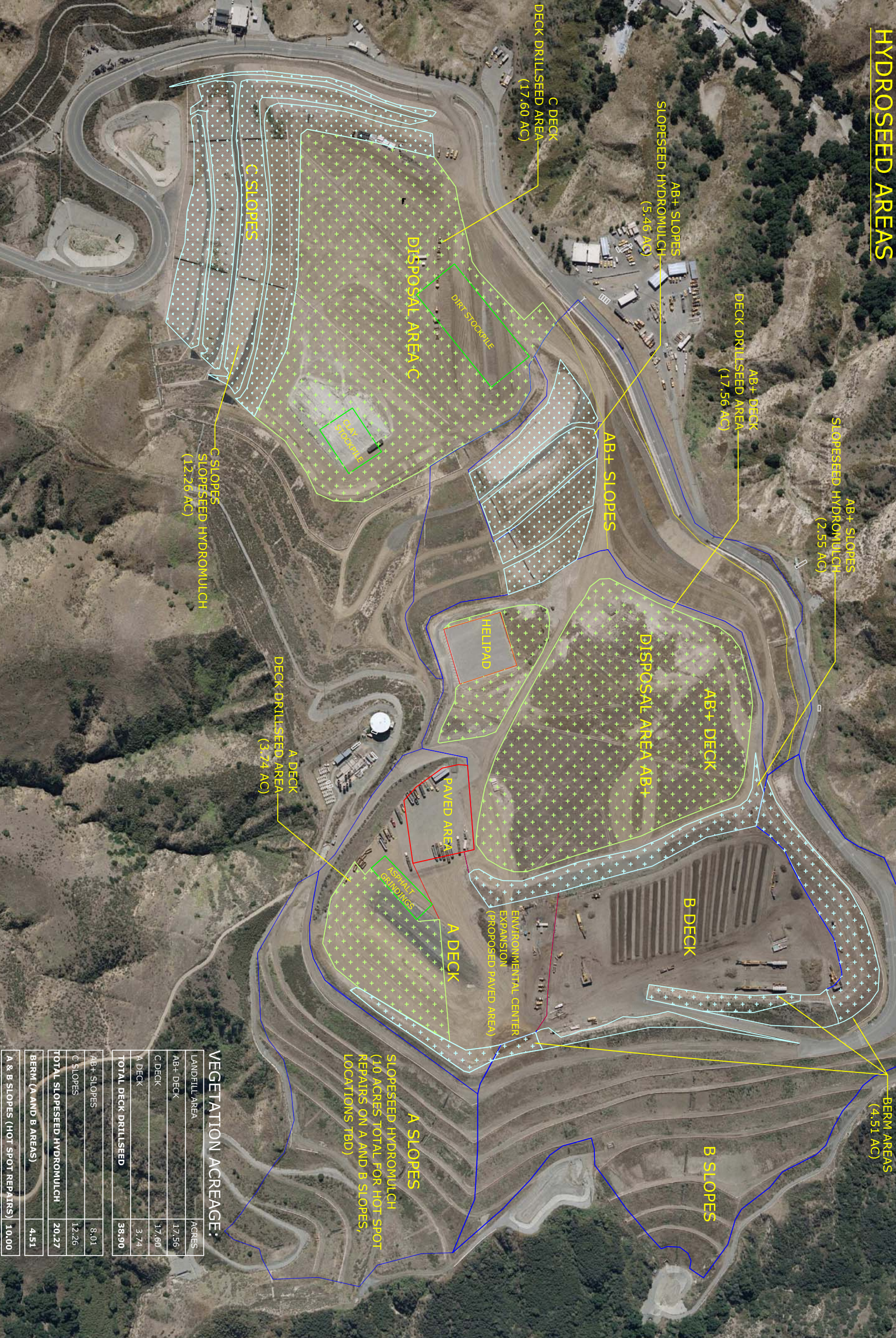
| SPECIES | PURITY / GERMINATION | POUNDS PER ACRE |
|---|----------------------|-----------------|
| ARTEMESIA CALIFORNICA | 15 / 60 | 2 |
| ENCELIA CALIFORNICA | 40 / 60 | 3 |
| ERIOGONUM CINEREUM | 50 / 10 | 4 |
| LOTUS SCOPARIUS | 90 / 60 | 6 |
| MIMULUS LONGIFLORIUS | 2 / 55 | 2 |
| SALVIA APIANA | 70 / 50 | 3 |
| SALVIA MELLIFERA | 85 / 50 | 2 |
| SALVIA LEUCOPHYLLA | 75 / 70 | 1 |
| TRIFOLIUM HIRTUM - (INNOCULATED HYCON) | 95 / 85 | 10 |
| VULPIA MICROSTACHYS | 90 / 80 | 3 |
| STIPA CERNUA | 80 / 60 | 6 |
| HORDEUM CALIFORNICA | 90 / 80 | 8 |
| BROMUS CARINATUS | 95 / 80 | 4 |
| ESCHSCHOLZIA CALIFORNICA | 98 / 75 | 2 |
| LUPINUS BICOLOR | 98 / 80 | 4 |

SEED IS AVAILABLE THROUGH S&S SEEDS (805) 684-0436. SUBMIT CERTIFICATION OF PURITY AND GERMINATION, WITH ONE POUND OF SEED MIX TO ENGINEER.

SEED APPLICATION LEGENDS AND NOTES

| | | | | | | |
|---|----------|-------------|---------|------------|--|------------------|
| DATE | 10JUN96 | 10JUN96 | 10JUN96 | 22AUG97 | R.C.E. NO. | R.C.E. NO. |
| DESIGNED | TB | MF / AT | CA | SUPERVISED | PROJECT ENGR. | DIV./DIST. ENGR. |
| DRAWN | | | | CHECKED | | |
|  | | | | | | |
|  | | | | | | |
| LOPEZ CANYON LANDFILL | | | | | | |
| NO. | REVISION | DESCRIPTION | ENGR. | DATE | | |
| | | | | | | |
| CITY OF LOS ANGELES | | | | | DATE 19 | |
| BUREAU OF SANITATION DELVIN A. BAGO, DIRECTOR | | | | | STEPHEN A. FORTUNE R.C.E. NO. 21737 DIV. DIST. ENGR. | |
| SCALE AS SHOWN | | | | | | |
| DWG. NO. PD-1 | | | | | | |
| FILE NO. 6005pd01. dgn | | | | | | |
| JOB NO. CE-1400 | | | | | | |

LOPEZ CANYON LANDFILL HYDROSEED AREAS



VEGETATION ACREAGE:

| LANDFILL AREA | ACRES |
|---------------------------------|-------|
| AB+ DECK | 17.56 |
| C DECK | 17.60 |
| A DECK | 3.74 |
| TOTAL DECK DRILLSEED | 38.90 |
| AB+ SLOPES | 8.01 |
| C SLOPES | 12.26 |
| TOTAL SLOPES HYDROMULCH | 20.27 |
| BERM (A AND B AREAS) | 4.51 |
| A & B SLOPES (HOT SPOT REPAIRS) | 10.00 |