NORCAL ENGINEERING
SOILS AND GEOTECHNICAL CONSULTANTS

Field Observation Memo

10641 HUMBOLT STREET
LOS ALAMITOS, CALIFORNIA 90720
PHONE 562.799.9469 • FAX 562.799.9459

Project: Boeing Realty Co.
Date: 2-5-01
Address: SW of Normandie & 190TH, Los Angeles
Project Number: 5935-96

Continued testing of demolished basement backfill (Bldg 1) to within ±9.0 ft below existing grade (easterly ±55-65 ft of area). Grader is importing backfill soils from Boeing property being developed on west side of Harbor Gate Way. All tests resulted in 90% or above of the lab standard.

Accepted by: Superintendent Not Available For Signature

NorCal Representative: [signature]

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10641 HUMBOLT STREET
LOS ALAMITOS, CALIFORNIA 90720
PHONE 562.799.9469 • FAX 562.799.9459

Project: Boeing Realty Co.
Date: 2-6-01
Address: SW of Normandie & 190TH, Los Angeles
Project Number: 5936-96
2 Trips

Inspected & Tested continued backfill of the previously demolished basement area of Block 1. Tested backfill of easterly ±55 to 65 ft to within ±5° to ±6° ft of existing grade. Approved bottom overexcavation of ±42 ft x ±227 ft section of the basement backfill located ±150 ft west of the east edge of the basement. Tested backfill of approved fill areas to within ±8° ft of existing grade. Grader is continuing to import fill soils and is placing onsite soils in approved areas. All tests resulted in 90% or above of the Lab Standard.

Accepted by: X
Superintendent Not Available For Signature

NorCal Representative: [signature]

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10641 HUMBOLT STREET
LOS ALAMITOS, CALIFORNIA 90720
PHONE 562.799.9469 • FAX 562.799.9459

Project: Boeing Realty Co

Date: 2-7-01

Address: SW of 190th & Normandy
Los Angeles

Project Number: 5936-96

Continues testing backfill at demo's basement at Bldg 1. Approved bottom overexcavation of additional section of the basement backfill (±230 ft by ±40 ft), tested backfill of approved fill areas from ±35 ft to ±90 ft below existing grade. All tests (or retests) resulted in 90% or above of the Lab Standard.

Accepted by

NorCal Representative

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10641 HUMBOLT STREET
LOS ALAMITOS, CALIFORNIA 90720
PHONE 562.799.9469 • FAX 562.799.9459

Project: Boeing Realty Co.
Date: 2-8-01
Address: SW of 190th & Normandie, Los Angeles
Project Number: 5936-96
2 Trips

Inspected & Tested continued backfill of the existing basement (demolished - Bldg 1). Approved bottom overexcavation of a ±45 ft x ±230 ft area and a ±125 ft x ±140 ft area of the basement. Tested backfill of approved fill areas from ±20 ft to ±100 ft below existing grade. All tests (on retests) resulted in 90% or above of the LAB standard.

Accepted by: X Superintendent Not Available for Signature

NorCal Representative: [signature]

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Field Observation Memo

10641 HUMBOLT STREET
LOS ALAMITOS, CALIFORNIA 90720
PHONE 562.799.9469 • FAX 562.799.9459

Project: Boeing Realty Co.
Date: 2-9-01
Address: SW of 190th & Normandie, Los Angeles
Project Number: 5936-96
2 Trips

Inspected & Tested continues backfill operations for demolished basement for Bldg 1. Continued testing of approved fill areas from ±10 ft to ±80 ft below existing grade. A concrete encased corrugated metal pipe was encountered ±110 ft north of the south basement bldg line & ±40 ft east of the west basement bldg line. The structure was removed to native soils (±28 ft below existing grade, and backfilled with the on-site soils to within ±12 ft below grade. All tests (or retests) resulted in 90% or above of the lab standard.

Accepted by: Superintendent Not Available for Signature

NorCal Representative: [signature]

NORCAL ENGINEERING
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Field Observation Memo

10641 HUMBOLT STREET
LOS ALAMITOS, CALIFORNIA 90720
PHONE 562.799.9469 • FAX 562.799.9459

Project: Boeing Realty Co.

Date: 2-21-01

Address: SW of Normandie & 190th, Los Angeles

Project Number: 5936.96

Inspected basement backfill area (Bldg 1) after recent series of rain storms. Grader is currently removing wet & saturated soils from the fill area. A moisture content test of the underlying fill soils resulted in 17.4% (optimum ranges from 10.5% to 12.5%). Recommend to continue to remove wet soils from the fill areas to competent ground and rip to aerate for remainder of the day. Fill operations may continue tomorrow providing suitable material is used as backfill. Please note: Rubber tires equipment is anticipated for use tomorrow and may cause pumping problems if over-wet soils are incorporated in the fill.

Accepted by

NorCal Representative

NORCAL ENGINEERING
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Field Observation Memo

10641 HUMBOLT STREET
LOS ALAMITOS, CALIFORNIA 90720
PHONE 562.799.9469 • FAX 562.799.9459

Project BOEING

Date 4-3-01

Address 190TH SC OF NORMANDIE

Project Number 5936-96

OBSERVED AND TESTED BACK FILL OPERATIONS FOR FORMER BUILDING #1. ALL AREAS TESTED TO 90% OR BETTER RELATIVE COMPACTION. IMPORT SOILS FROM OCEAN + PCH WERE REFUSED DUE TO HIGH LEVEL OF ORGANIC MATERIAL. IMPORT SOILS FROM ON SITE AND 7TH + CATALINA WERE APPROVED FOR FILL AND SAMPLE WAS TAKEN FOR LABORITORY ANALYSIS. BACK FILL OPERATION TO CONTINUE TOMMROW. RECOMMEND TO REMOVE ALL CONSTRUCTION DEBRIS IF ANY.

Accepted by

NorCal Representative

Rick Dayton

NORCAL ENGINEERING
SOILS AND GEOTECHNICAL CONSULTANTS

Field Observation Memo

10641 HUMBOLT STREET
LOS ALAMITOS, CALIFORNIA 90720
PHONE 562.799.9469 • FAX 562.799.9459

Project BOEING

Date 4-04-01

Address 190TH ST. SW OF NORMANDIE

Project Number 5936-96

OBSERVED AND TESTED BACKFILL OPERATIONS FOR EXCAVATION FORMER BUILDING #1, AT ABOVE ADDRES. SAMPLE SOIL OF 166TH ST + FALDA IMPORT WAS TAKEN FOR LABORATORY ANALYSIS. ALL AREAS TESTED TO 90% OF BETTER RELATIVE COMPACTION. RECOMMEND TO REMOVE ALL ORGANIC MATERIAL AND CONSTRUCTION DEBRIS IF ANY.

Accepted by

NorCal Representative