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 5-11-01

Address NW FRANCISCO + NORMANDIE LB.

Project Number 5936-96

OBSERVED AND TESTED GRADEING OPERATIONS FOR EXCAVATION #7 FOR PROPOSED HARBOR GATEWAY DEVELOPMENT AT ABOVE ADDRESS. TESTS RESULTED IN 90% OR BETTER RELATIVE COMPACTION.

Accepted by

NorCal Representative

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 5-3-01

Address NW FRANCISCO + NORMANDIE

Project Number 5936-96

OBSERVED AND TESTED GRADING OPERATIONS FOR PROPOSED HARBOR GATEWAY DEVELOPMENT. TESTS RESULTED IN 90% OR BETTER RELATIVE COMPACTION EXCAVATION #9.

Accepted by

NorCal Representative

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 5-4-01

Address NW FRANCISCO + NORMANDIE

Project Number 5936-96

OBSERVATION OF REMOVAL OF CONSTRUCTION DEBRIS FOR PROPOSED HARBORGATEWAY DEVELOPMENT AT ABOVE ADDRESS. EXCAVATION #9 REMOVAL OF CONCRETE + REBAR FROM STOCKPILE PRIOR TO BACKFILL.

Accepted by

NorCal Representative

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 5-1-01

Address FRANCISCO + NORMANDIE SW. LB. Project Number 5936-96

OBSERVED AND TESTED GRADING OPERATIONS AND BACKFILL OF EXCAVATION #7, FOR PROPOSED HARBOR GATEWAY DEVELOPEMENT. ALL TESTS RESULTED IN 90% OR BETTER RELATIVE COMPACTION.

Accepted by

NorCal Representative

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 4-30-01

Address FRANCISCO + NORMANDIE LB.

Project Number 5936-96

OBSERVED AND TESTED GRADING OPERATIONS FOR PROPOSED HARBOR GATE WAY DEVELOPMENT AT ABOVE ADDRESS. FOR EXCAVATIONS #6-7-8+9 BOTTOMS WERE FOUND AT 20'-25'-30'+30' BELOW GRADE INTO COMPITANT MATERIAL. TESTS RESULTED IN 90% OR BETTER RELATIVE COMPACTION.

Accepted by

NorCal Representative

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 4-28-01

Address FRANCISCO + NORMANDIE L.B. Project Number S936-96

OBSERVED AND TESTED GRADEING OPERATIONS FOR PROPOSED HARBOR GATEWAY DEVELOPMENT AT ABOVE ADDRESS. TESTS RESULTED IN 90% OR BETTER RELATIVE COMPACTION IN EXCUVATIONS #2-3-4+5. IN EXCUVATION #5 COMPITANT BOTTOM WAS AT 45', AND #6 FOUND COMPITANT BOTTOM AT 20'.

Accepted by

NorCal Representative

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 4-27-01

Address FRANCISCO + NORMANDIE

Project Number 5936-96

OBSERVED AND TESTED GRADING OPERATIONS FOR EXCAVATIONS #2-3-4. TESTS RESULTED IN 90% OR BETTER RELATIVE COMPACTION.

Accepted by

NorCal Representative

Rick Agle

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 227 225 Date 4-26-2001

Address NEC of Harborgate Way & Francisco st. Project Number 5936-96

Los Angeles, Calif.

Inspected and approved bottom for an excavation approximately 440 feet long (North-South) by approximately 60 feet wide (East-West) with depths ranging from 4 feet to 8 feet below existing grade. Compaction tests taken at this native bottom resulted over 90% of the laboratory standard and is suitable for placement of fill soils. All the backfill shall be inspected by this firm and tested to a minimum of 90% relative compaction.

Accepted by [signature]

NorCal Representative [signature] Javier Sanchez

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 4-26-01

Address FRANCISCO + NORMANDIE LB.

Project Number 5936-96

OBSERVED AND TESTED GRADING EXCAVATION BACK-FILL OPERATIONS #3+4 FOR PROPOSED HARBOR GATEWAY DEVELOPMENT AT ABOVE ADDRESS. TESTS RESULTED IN 90% OR BETTER RELATIVE COMPACTION.

Accepted by

NorCal Representative

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 4-24-01

Address 190TH ST. SW or NORMANDIE

Project Number ~~[illegible]~~ 5936-96

OBSERVED AND TESTED EXCAVATION BACKFILL OPERATIONS FOR PROPOSED DEMOLITION IMPROVEMENT DEVELOPMENT. ALL AREAS TESTED IN EXCAVATION #2 RESULTED IN 90% OR BETTER RELATIVE COMPACTION.

Accepted by [signature]

NorCal Representative [signature]

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 4-23-01

Address 190TH ST. SWC NORMANDIE LB. Project Number 5936-96

OBSERVED AND TESTED EXCAVATION BACKFILL OPERATIONS FOR PROPOSED DEMOLITION IMPROVEMENT DEVELOPMENT. AT ABOVE ADDRESS. BOTTOM EXCAVATION #2 TESTS RESULTED IN 90% OR BETTER RELATIVE COMPACTION.

Accepted by Dean Crist

NorCal Representative Rick Taylor

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 4-25-01

Address SW FRANCISCO AND NORMANDIE

Project Number 5936-96

OBSERVED AND TESTED EXCAVATION BACKFILL OPERATIONS FOR PROPOSED HARBOR GATEWAY DEVELOPMENT, AT ABOVE ADDRESS. ALL AREAS IN EXCAVATION #2 TESTS RESULTED IN 90% OR BETTER RELATIVE COMPACTION.

Accepted by

NorCal Representative

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 4-21-01

Address SW OF NORMANDIE + 190TH ST. LB. Project Number 5936-96

OBSERVED AND TESTED EXCAVATION BACKFILL OPERATIONS FOR EXCAVATION #2. ALL AREAS TESTED RESULTED IN 90% OR BETTER RELATIVE COMPACTION.

Accepted by

M. Gul Aga/a

NorCal Representative

[signature]

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 11-20-01

Address 190TH ST. SW of NORMANDIE

Project Number 5936-96

OBSERVED AND TESTED EXCAVATION #2 FOR EXCAVATION BACKFILL OPERATIONS AT ABOVE ADDRESS. ALL AREAS TESTED RESULTED IN 90% OR BETTER RELATIVE COMPACTION AT EXCAVATION #2 BOTTOM.

Accepted by

Miguel Avila

NorCal Representative

Rick Ayala

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 4-11-01

Address SW of NORMANDIE 190TH ST. LB, CA. Project Number 5936-96

OBSERVED AND TESTED EXCAVATION BACKFILL OPERATIONS FOR BASEMENT FORMER BUILDING #1. ALL AREAS TESTED TO 90% OR BETTER RELATIVE COMPACTION AT EXISTING GRADE.

Accepted by

NorCal Representative

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 4-10-01

Address SW OF NORMANDIE 190TH ST. LB, CA Project Number 5936-96

OBSERVED AND TESTED EXCAVATION BACK FILL OPERATION OF BASEMENT FORMER BUILDING #1. ALL AREAS TESTED TO 90% OR BETTER RELATIVE COMPACTION. IMPORTING SOILS AND BACK FILL OPERATIONS TO CONTINUE TOMORROW.

Accepted by Dean Crist

NorCal Representative Rick [illegible]

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 4-9-01

Address 190TH ST. SW of NORMANDIE LB CA. Project Number 5936-96

OBSERVED AND TESTED BACK FILL EXCAVATION OPERATIONS OF BASEMENT FORMER BUILDING #1. ALL AREAS TESTED TO 90% OR BETTER RELATIVE COMPACTION. RECOMMEND TO HAVE SITE GRADED.

Accepted by Dean Crist

NorCal Representative Rick Hayes

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 4-7-01

Address 190TH ST. SW OF NORMANDIE LB, CA. Project Number 5936-96

SHOWED TO SITE WITH DOWN POUR OF RAIN. JOB IS SHUT DOWN TILL MONDAY.

Accepted by

NorCal Representative

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 4-06-2001

Address S. of 190th st. W. of Normandie Ave Project Number 5936-96

Los Angeles, Calif.

Observation of import and backfill operations for excavation from removal basement at former building 1. All compaction done today was performed under the approval of this firm. The import and backfill operations will be continued tomorrow. This excavation was left at approximately 18" below existing grade.

Accepted by

Javier Sanchez
NorCal Representative

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 4-5-01

Address 190 TH ST. SW OF NORMANDIE LB, CA. Project Number 5936-96

OBSERVED AND TESTED BACK FILL OPERATIONS FOR FORMER BUILDING #1. ALL AREAS TESTED TO 90% OR BETTER RELATIVE COMPACTION. THIS EXCAVATION WAS LEFT AT APPROXAMATLY 2' BELOW EXISTING GRADE.

Accepted by

D. Boyer

NorCal Representative

Rick [signature]