Wang Engineering, Inc.

1145 N. Main Street, Lombard, IL 60148
☎ (630) 953-9928 Fax: (630) 953-9938

FIELD OBSERVATION REPORT

Sequence _____
Sheet 1 of 1

Date 10-01-08 WEI No. 450-01-01

Project Name Honeywell Celotex Main Site Cover Construction Arrive Time 9:00

Project Location Chicago, IL Depart Time 2:00

Client CH2MHILL Constructors, Inc. Total Hrs. on Job 5

Contractor HIS Construction, Inc. Travel Time 2

Mileage Start 34259 Mileage End 34294 Daily Mileage 35 Total Chargeable Hrs. 7

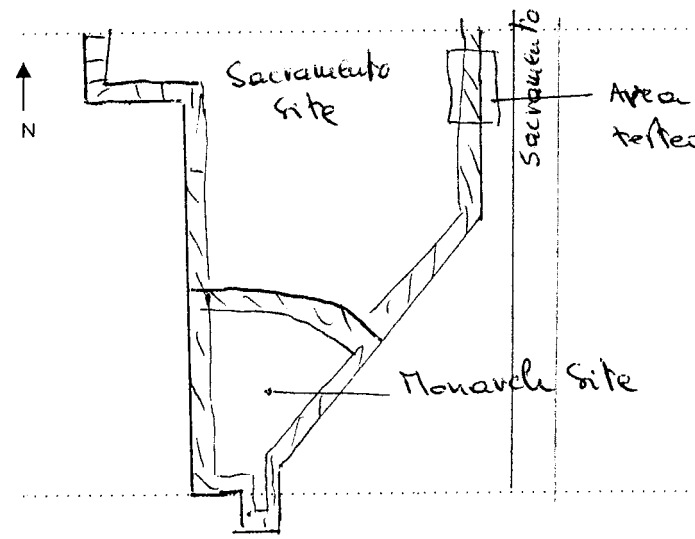
Summary of technical and/or engineering services performed including field test data (attach additional sheets as required).

Arrived at the Job Site at 9:00 AM - Met Robert Flood of Wang, Benny Vine and Michael Lehman of CH2MHILL - Discussed the testing procedures on swale along the perimeter of the site.

Ran several tests on compacted material (Brown Silty Clay Loam) placed on slope along a section of the site parallel to Sacramento Ave. The tests have not achieve the required 95% of Standard Proctor 114.6 PCF.

The Contractor (HIS Construction, Inc.) will compact the material using a Sheep foot Roller - The area will be tested again - Attached the data sheet of one test result.

SKETCH (Indicate Dimensions or Scale)



Attested _____ WEI Name Tayeb Farez

Company _____ WEI Signature Tayeb Farez

Date _____ WEI Reviewed _____

Note: All test data, locations, elevations, and depths, etc. are subject to office review.

Field Soil/Aggregate Compaction Worksheet
Nuclear Moisture/Density Gauge Method

Testing Firm	Wang Engineering, Inc.
Address	1145 N Main Street
	Lombard, Illinois 60148
Office Telephone No.	(630) 953 - 9928
Gauge# / Serial No.	3430 / 34651
Calibration Date	12-12-2007
M. Std / D. Std.	668 / 2760

Date	10-01-08
WEI Project No.	450-01-01
Client	CH2MHILL Constructors, Inc.
Project	Honeywell Celotex Main Site Cover Constru
Location	Chicago, IL
Contractor	HIS Construction, Inc.
Inspector Name	Tayeb Farez

1	Test Number	1						
2	Date	10-01-08						
3	Re-Test of Number							
4	Type of Construction	Construction of swale along perimeter of site						
5	Sample Number	#1-						
6	Material Source							
7	Material Type	Brown Silty Clay Loam						
8	Proctor Type	Standard	Standard	Standard	Standard	Standard	Standard	Standard
9	Max. Dry Density	114.6						
10	Optimum Moisture (%)	14.5						
11	Min. % of Proctor Density	95%	95%	95%	95%	95%	95%	95%
12	Test Location (Station/Offset)	E. of Sacramento site.						
13	Elevation	NA						
14	Probe Depth	6						
15	Test Wet Density (pcf)	126.5						
16	Test Dry Density (pcf)	106.5						
17	Test % Compaction	92.9						
18	Test % Moisture	18.8						
19	Test Moisture Count	236						
20	Test Density Count	2584						
21	Result (Pass or Fail)	Fail						
22	See Re-Test No.							

Comments:

Inspector: Tayeb Farez

Resident Engineer: _____

Wang Engineering, Inc.

1145 N. Main Street, Lombard, IL 60148
☎ (630) 953-9928 Fax: (630) 953-9938

FIELD OBSERVATION REPORT

Sequence _____
Sheet 1 of 1

Date 10-02-08 WEI No. 450-01-01

Project Name Honeywell Celotex Main Site Cover Construction Arrive Time 12:45

Project Location Chicago, IL Depart Time 5:30

Client CH2MHILL Constructors, Inc. Total Hrs. on Job 4.75

Contractor HIS Construction, Inc. Travel Time 2.0

Mileage Start 34335 Mileage End 34380 Daily Mileage 45 Total Chargeable Hrs. 6.75

Summary of technical and/or engineering services performed including field test data (attach additional sheets as required).

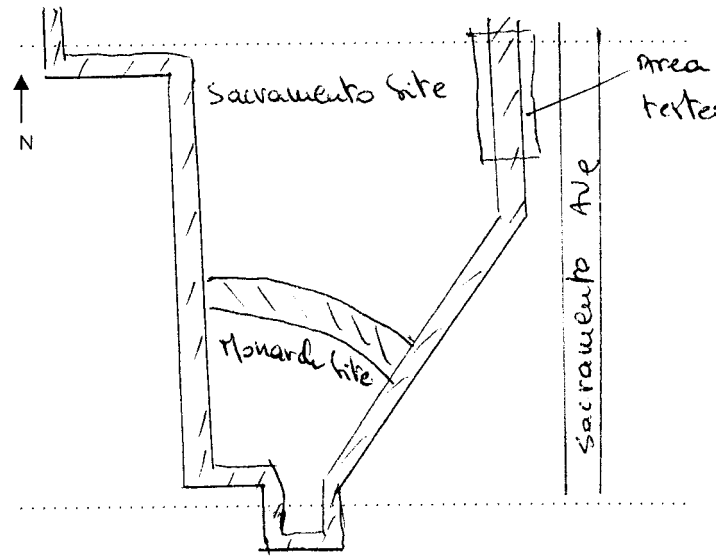
Arrived at 12:45 PM - Met Michael Lehman of CH2MHILL - Inturked the work compaction of the material along the perimeter of the site -

Performed several tests at various locations on slope parallel to Sacramento Ave - The results were not consistent, some passed, some failed, the moisture was high -

The Contractor is bringing to the site a sheepfoot roller to increase the compaction and lower the moisture -

Attached the Data Sheet for test results

SKETCH (Indicate Dimensions or Scale)



Attested _____ WEI Name Tayeb Farez

Company _____ WEI Signature Tayeb Farez

Date _____ WEI Reviewed _____

Note: All test data, locations, elevations, and depths, etc. are subject to office review.

Field Soil/Aggregate Compaction Worksheet
Nuclear Moisture/Density Gauge Method

Testing Firm	Wang Engineering, Inc.
Address	1145 N Main Street
	Lombard, Illinois 60148
Office Telephone No.	(630) 953 - 9928
Gauge# / Serial No.	3430 / 34651
Calibration Date	12-12-2007
M. Std / D. Std.	670 / 2757

Date	10-02-08
WEI Project No.	450-01-01
Client	CH2MHILL Constructors, Inc.
Project	Honeywell Celotex Main Site Cover Constru
Location	Chicago, IL
Contractor	HIS Construction, Inc.
Inspector Name	Tayeb Farez

1	Test Number	1	2	3	4	5	6	7
2	Date	10-02-08	→	→	→	→	→	→
3	Re-Test of Number				1	3		
4	Type of Construction	Construction of swale about perimeter of site.						
5	Sample Number	# 01	→	→	→	→	→	→
6	Material Source							
7	Material Type	Brown silty clay Loam	→	→	→	→	→	→
8	Proctor Type	Standard	Standard	Standard	Standard	Standard	Standard	Standard
9	Max. Dry Density	114.6	→	→	→	→	→	→
10	Optimum Moisture (%)	14.5	→	→	→	→	→	→
11	Min. % of Proctor Density	95%	95%	95%	95%	95%	95%	95%
12	Test Location (Station/Offset)	E. site shot nr: 50837	E. site shot nr: 50835	E. site shot nr: 50836	E. site shot nr: 50837	E. site shot nr: 50836	E. site of Sacramento site.	E. site of Sacramento site
13	Elevation	597.04	598.18	597.01	597.04	597.01	N/A	N/A
14	Probe Depth	6	6	6	6	6	6	6
15	Test Wet Density (pcf)	127.4	128.3	127.9	126.1	128.3	128.3	121.9
16	Test Dry Density (pcf)	107.4	109.9	107.8	106.8	108.5	108.9	103.4
17	Test % Compaction	93.7	95.9	94.1	93.2	94.7	95.0	90.2
18	Test % Moisture	18.6	16.8	18.6	18.1	18.2	17.8	17.8
19	Test Moisture Count	237	220	237	230	234	230	220
20	Test Density Count	2531	2485	2506	2603	2483	2485	2860
21	Result (Pass or Fail)	Fail	Pass	Fail.	Fail.	Fail.	Pass	Fail.
22	See Re-Test No.	4		5				

Comments:

Inspector: Tayeb

Resident Engineer: _____

Wang Engineering, Inc.

1145 N. Main Street, Lombard, IL 60148
☎ (630) 953-9928 Fax: (630) 953-9938

FIELD OBSERVATION REPORT

Sacramento _____

Sheet 1 of 1

Date 10-03-08

WEI No. 450-01-01

Project Name Honeywell Celotex Main Site Cover Construction

Arrive Time 11:30

Project Location Chicago, IL

Depart Time 3:00

Client CH2MHILL Constructors, Inc.

Total Hrs. on Job 3.5

Contractor HIS Construction, Inc.

Travel Time 2

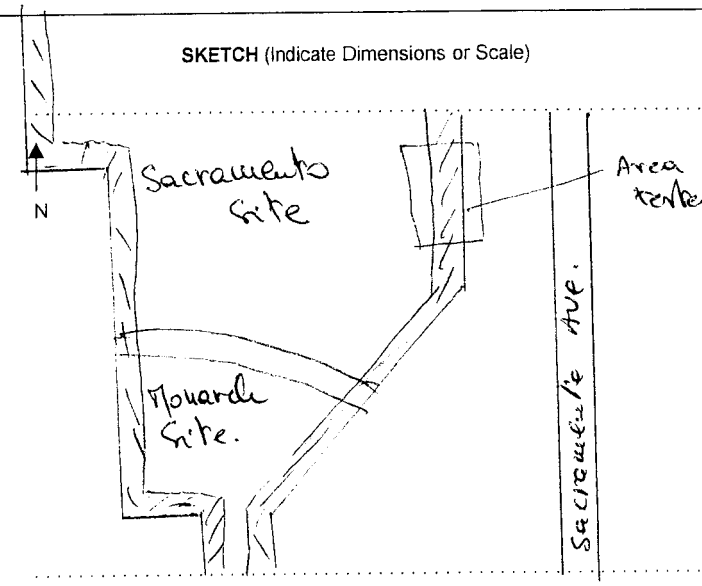
Mileage Start 34384 Mileage End 34424 Daily Mileage 40

Total Chargeable Hrs. 5.5

Summary of technical and/or engineering services performed including field test data (attach additional sheets as required).

Reached the job site at 11:30 - Met Michael Lehman of CH2MHILL -
Run various tests on swale (perimeter of site) along a section
of the site parallel to Sacramento Ave -
All tests passed the required specification of 95% -
Attached the datasheet for Test results.

SKETCH (Indicate Dimensions or Scale)



Attested _____

Company _____

Date _____

WEI Name Tayeb Farez

WEI Signature Tayeb Farez

WEI Reviewed _____

Note: All test data, locations, elevations, and depths, etc. are subject to office review.

Field Soil/Aggregate Compaction Worksheet
Nuclear Moisture/Density Gauge Method

Testing Firm	Wang Engineering, Inc.
Address	1145 N Main Street
	Lombard, Illinois 60148
Office Telephone No.	(630) 953 - 9928
Gauge# / Serial No.	3430 / 34651
Calibration Date	12-12-2007
M. Std / D. Std.	665 / 2761

Date	10-03-08
WEI Project No.	450-01-01
Client	CH2MHILL Constructors, Inc.
Project	Honeywell Celotex Main Site Cover Constru
Location	Chicago, IL
Contractor	HIS Construction, Inc.
Inspector Name	Tayeb Farez

1	Test Number	10	11	13	14			
2	Date	10-03-08	→	→	→			
3	Re-Test of Number		1					
4	Type of Construction	Construction of swale alongf perimeter of site.						
5	Sample Number	# 01	→	→	→			
6	Material Source							
7	Material Type	Brown Silty Clay Loam →						
8	Proctor Type	Standard	Standard	Standard	Standard	Standard	Standard	Standard
9	Max. Dry Density	114.6	→	→	→			
10	Optimum Moisture (%)	14.5	→	→	→			
11	Min. % of Proctor Density	95%	95%	95%	95%	95%	95%	95%
12	Test Location (Station/Offset)	Shot nr: 50990	50990	50991	50992			
13	Elevation	597.54	597.54	595.17	596.27			
14	Probe Depth	6	6	6	6			
15	Test Wet Density (pcf)	126.7	130.1	130.4	128.1			
16	Test Dry Density (pcf)	108.2	112.0	112.5	109.7			
17	Test % Compaction	94.4	97.7	98.1	95.7			
18	Test % Moisture	17.1	16.0	16.0	16.8			
19	Test Moisture Count	219	213	213	218			
20	Test Density Count	2577	2404	2379	2498			
21	Result (Pass or Fail)	Fail	Pass	Pass	Pass			
22	See Re-Test No.	2						

Comments:

Inspector: Tayeb Farez

Resident Engineer: _____

Wang Engineering, Inc.

1145 N. Main Street, Lombard, IL 60148
☎ (630) 953-9928 Fax: (630) 953-9938

FIELD OBSERVATION REPORT

Sequence _____

Sheet 1 of 1

Date 10-06-08

WEI No. 450-01-01

Project Name Honeywell Celotex Main Site Cover Construction

Arrive Time 12:40

Project Location Chicago, IL

Depart Time 5:15

Client CH2MHILL Constructors, Inc.

Total Hrs. on Job 4.75

Contractor HIS Construction, Inc.

Travel Time 2

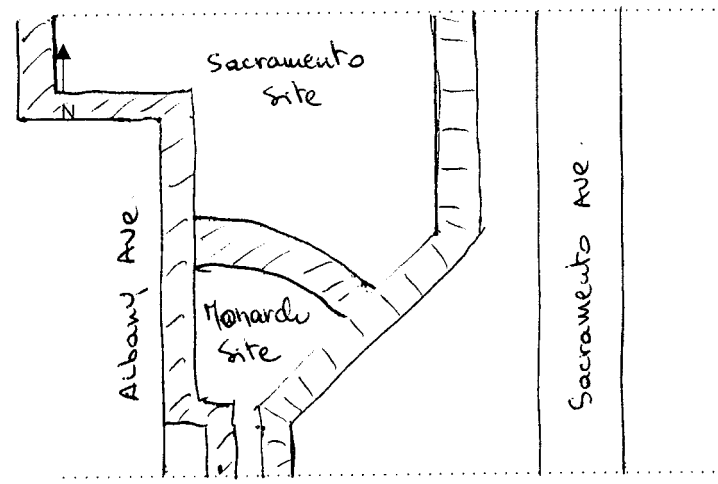
Mileage Start 34424 Mileage End 34480 Daily Mileage 56

Total Chargeable Hrs. 6.75

Summary of technical and/or engineering services performed including field test data (attach additional sheets as required).

Arrived at the Job Site at 12:40 - Met Michael Lehman of CH2MHILL -
Witnessed the work compaction on swale on Sacramento Ave -
Performed several tests at various locations, all tests passed the required specification of 95% -
Attached the datasheet for test results -

SKETCH (Indicate Dimensions or Scale)



Attested _____

Company _____

Date _____

WEI Name Tayeb Farez

WEI Signature Tayeb Farez

WEI Reviewed _____

Note: All test data, locations, elevations, and depths, etc. are subject to office review.

Field Soil/Aggregate Compaction Worksheet
Nuclear Moisture/Density Gauge Method

Testing Firm	Wang Engineering, Inc.
Address	1145 N Main Street
	Lombard, Illinois 60148
Office Telephone No.	(630) 953 - 9928
Gauge# / Serial No.	3430 / 33303
Calibration Date	12-20-2007
M. Std / D. Std.	674 / 2396

Date	10-6-08
WEI Project No.	450-01-01
Client	CH2MHILL Constructors, Inc.
Project	Honeywell Celotex Main Site Cover Constru
Location	Chicago, IL
Contractor	HIS Construction, Inc.
Inspector Name	Tayeb Farez

1	Test Number	1	2	3	4	5	6	7
2	Date	10-6-08	→	→	→	→	→	→
3	Re-Test of Number							
4	Type of Construction	Construction of swale along perimeter of site.			→	→	→	→
5	Sample Number	# 01	→	→	→	→	→	→
6	Material Source							
7	Material Type	Brown Silty Clay Loam	→	→	→	→	→	→
8	Proctor Type	Standard	Standard	Standard	Standard	Standard	Standard	Standard
9	Max. Dry Density	114.6	→	→	→	→	→	→
10	Optimum Moisture (%)	14.5	→	→	→	→	→	→
11	Min. % of Proctor Density	95%	95%	95%	95%	95%	95%	95%
12	Test Location (Station/Offset)	50989	50987	50986	50985	50984	50983	50982
13	Elevation	596.73	598.14	594.41	599.39	596.80	592.87	598.62
14	Probe Depth	6	6	6	6	6	6	6
15	Test Wet Density (pcf)	129.3	128.1	129.1	126.2	126.1	128.2	128.9
16	Test Dry Density (pcf)	112.6	113.8	112.1	110.5	109.1	111.7	112.2
17	Test % Compaction	98.2	99.3	97.8	96.4	95.2	97.4	97.9
18	Test % Moisture	14.9	12.6	15.2	14.2	15.6	14.8	14.9
19	Test Moisture Count	203	176	206	192	206	201	203
20	Test Density Count	2147	2212	2155	2300	2302	2199	2166
21	Result (Pass or Fail)	Pass	Pass	Pass	Pass	Pass	Pass	Pass
22	See Re-Test No.							

Comments:

Inspector: Tayeb Farez

Resident Engineer: _____

Field Soil/Aggregate Compaction Worksheet
Nuclear Moisture/Density Gauge Method

Testing Firm	Wang Engineering, Inc.
Address	1145 N Main Street
	Lombard, Illinois 60148
Office Telephone No.	(630) 953 - 9928
Gauge# / Serial No.	3430 / 33303
Calibration Date	12-20-2007
M. Std / D. Std.	674 / 2396

Date	10-6-08
WEI Project No.	450-01-01
Client	CH2MHILL Constructors, Inc.
Project	Honeywell Celotex Main Site Cover Constru
Location	Chicago, IL
Contractor	HIS Construction, Inc.
Inspector Name	Tayeb Farez

1	Test Number	8	9					
2	Date	10-6-08	→					
3	Re-Test of Number							
4	Type of Construction	Construction of swale along perimeter of site						
5	Sample Number	#01	→					
6	Material Source							
7	Material Type	Brown silty clay loam						
8	Proctor Type	Standard	Standard	Standard	Standard	Standard	Standard	Standard
9	Max. Dry Density	114.6	→					
10	Optimum Moisture (%)	14.5	→					
11	Min. % of Proctor Density	95%	95%	95%	95%	95%	95%	95%
12	Test Location (Station/Offset)	Shot nr: 50981	50988					
13	Elevation	593.92	594.63					
14	Probe Depth	6	6					
15	Test Wet Density (pcf)	128.0	127.2					
16	Test Dry Density (pcf)	110.2	111.2					
17	Test % Compaction	96.1	97.1					
18	Test % Moisture	16.2	14.4					
19	Test Moisture Count	215	195					
20	Test Density Count	2207	2249					
21	Result (Pass or Fail)	Pass	Pass					
22	See Re-Test No.							

Comments:

Inspector: Tayeb Farez

Resident Engineer: _____

Wang Engineering, Inc.

1145 N. Main Street, Lombard, IL 60148
☎ (630) 953-9928 Fax: (630) 953-9938

FIELD OBSERVATION REPORT

Sacramento

Sheet 1 of 1

Date 10-31-08

WEI No. 450-01-01

Project Name Honeywell Celotex Main Site Cover Construction

Arrive Time 10:00 AM

Project Location Chicago, IL

Depart Time 3:25 AM

Client CH2MHILL Constructors, Inc.

Total Hrs. on Job 5.5

Contractor HIS Construction, Inc.

Travel Time 2.0

Mileage Start 35675 Mileage End 35730 Daily Mileage 55

Total Chargeable Hrs. 7.5

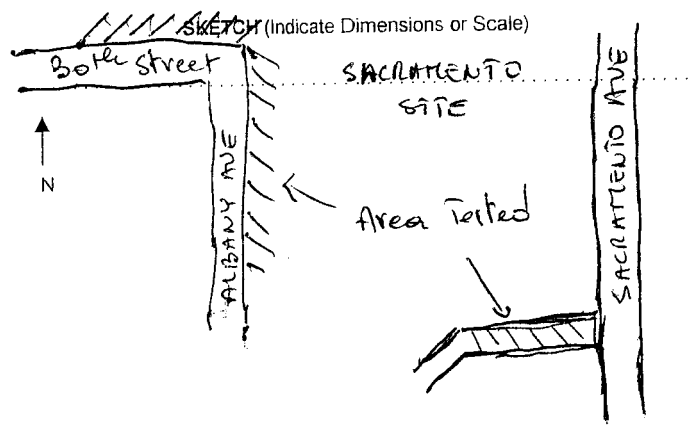
Summary of technical and/or engineering services performed including field test data (attach additional sheets as required).

I arrived at the job site at 10:00 AM - Met Michael Lehman of CH2MHILL - Discussed the work (Qc/QA) Compaction of the material used for the construction of the swale along the perimeter of the site - Tested for density at various locations, Albany Ave, 30th Street and South East Limit of Sacramento site.

All tests passed the required specification.

Attached the Datasheet for test results.

SKETCH (Indicate Dimensions or Scale)



Attested

Company

Date

WEI Name Tayeb Farez

WEI Signature Tayeb Farez

WEI Reviewed

Note: All test data, locations, elevations, and depths, etc. are subject to office review.

Field Soil/Aggregate Compaction Worksheet
Nuclear Moisture/Density Gauge Method

Testing Firm	Wang Engineering, Inc.
Address	1145 N Main Street
	Lombard, Illinois 60148
Office Telephone No.	(630) 953 - 9928
Gauge# / Serial No.	3430 / 33303
Calibration Date	12-20-08
M. Std / D. Std.	663 / 2410

Date	10-31-08
WEI Project No.	450-01-01
Client	CH2MHILL Constructors, Inc.
Project	Honeywell Celotex Main Site Cover Constru
Location	Chicago, IL
Contractor	HIS Construction, Inc.
Inspector Name	Tayeb Farez

1	Test Number	1	2	3	4	5	6	
2	Date	10-31-08	→	→	→	→	→	
3	Re-Test of Number						No 20 of 10-30-08	
4	Type of Construction	Bottom of swale	→	→	→	→	→	
5	Sample Number	#01	→	→	→	→	→	
6	Material Source							
7	Material Type	Brown sicty clay loam	→	→	→	→	→	
8	Proctor Type	Standard	Standard	Standard	Standard	Standard	Standard	Standard
9	Max. Dry Density	114.6	→	→	→	→	→	
10	Optimum Moisture (%)	14.5	→	→	→	→	→	
11	Min. % of Proctor Density	90%	90%	90%	90%	90%	90%	90%
12	Test Location (Station/Offset)	Shot Nr: 52240	Shot Nr: 52239	Shot Nr: 52238	Shot Nr: 52237	Shot Nr: 52236	Shot Nr: 52159	
13	Elevation	592.49	592.51	592.55	593.30	593.00	591.34	
14	Probe Depth	6	6	6	6	10	6	
15	Test Wet Density (pcf)	124.5	127.0	125.2	121.4	124.0	123.6	
16	Test Dry Density (pcf)	103.6	107.2	107.3	104.1	103.4	106.3	
17	Test % Compaction	90.4	93.5	93.6	90.9	90.2	92.8	
18	Test % Moisture	20.2	18.0	16.6	16.6	19.9	16.3	
19	Test Moisture Count	245	233	212	206	242	206	
20	Test Density Count	2393	2265	2364	2570	932	2447	
21	Result (Pass or Fail)	Pass	Pass	Pass	Pass	Pass	Pass	
22	See Re-Test No.							

Comments:

165' S. of Corner Albany Ave & 30th Street	110' S. of Corner Albany Ave & 30th Street	65' S. of Corner Albany Ave & 30th Street	Corner of Albany Ave & 30th St.	45' W. of Corner Albany Ave & 30th Street	175' W. of the Corner of Sacramento & S. limit of Sacramento Site	

Inspector: Tayeb

Resident Engineer: _____

[redacted]

Date 10-14-08

WEI No. 450-01-01

Project Name Honeywell Celotex Main Site Cover Construction

Arrive Time 8:00 AM

Project Location Chicago, IL

Depart Time 6:00 PM

Client CH2MHILL Constructors, Inc.

Total Hrs. on Job 9.5 (- 1/2 HR Lunch)

Contractor HIS Construction, Inc.

Travel Time 2

Mileage Start 34825 Mileage End 34875 Daily Mileage 50

Total Chargeable Hrs. 11.5

Summary of technical and/or engineering services performed including field test data (attach additional sheets as required).

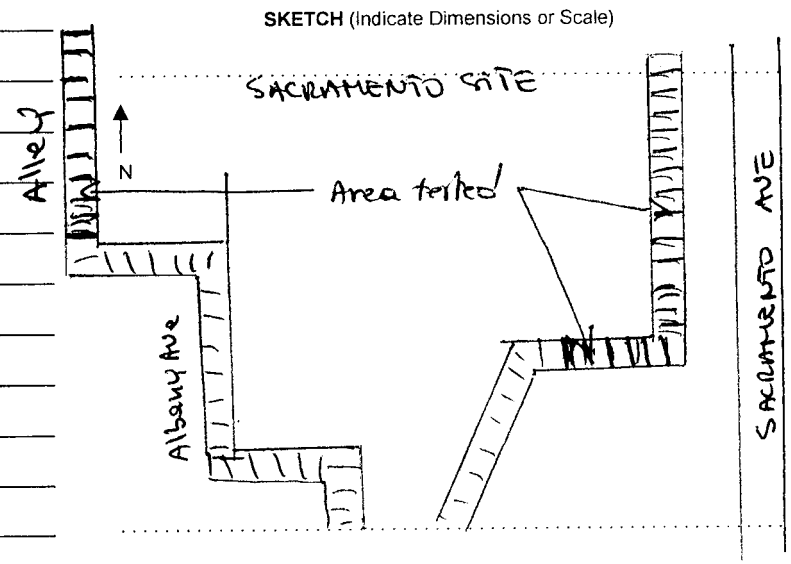
I arrived at the job site at 8:00 AM - met Michael LeRimaw of CH2MHILL - Discussed the work compaction of the material Brown silty, clay, loam used for the construction of swale along the perimeter of the site -

Tested for density, a section of swale along Sacramento Ave, a section of swale south of Sacramento site and a section of swale along the alley (west of Sacramento site) -

All tests passed the required spec of 95%, but the section of swale along the Alley needs more work (compaction) -

Attached the Data Sheet for test results -

SKETCH (Indicate Dimensions or Scale)



Attested

Company

Date

WEI Name Tayeb Farez

WEI Signature Tayeb Farez

WEI Reviewed

Note: All test data, locations, elevations, and depths, etc. are subject to office review.

Field Soil/Aggregate Compaction Worksheet
Nuclear Moisture/Density Gauge Method

Testing Firm	Wang Engineering, Inc.
Address	1145 N Main Street
	Lombard, Illinois 60148
Office Telephone No.	(630) 953 - 9928
Gauge# / Serial No.	3430 / 33303
Calibration Date	12-20-07
M. Std / D. Std.	661 / 2420

Date	10-14-08
WEI Project No.	450-01-01
Client	CH2MHILL Constructors, Inc.
Project	Honeywell Celotex Main Site Cover Constru
Location	Chicago, IL
Contractor	HIS Construction, Inc.
Inspector Name	Tayeb Farez

1	Test Number	1	2	3	4	5	6	7
2	Date	10-14-08	→	→	→	→	→	→
3	Re-Test of Number							
4	Type of Construction	Construction of swale along perimeter of site.	→	→	→	→	→	→
5	Sample Number	# 01	→	→	→	→	→	→
6	Material Source							
7	Material Type	Brown Silty Clay Loam						
8	Proctor Type	Standard	Standard	Standard	Standard	Standard	Standard	Standard
9	Max. Dry Density	114.6	→	→	→	→	→	→
10	Optimum Moisture (%)	14.5	→	→	→	→	→	→
11	Min. % of Proctor Density	95%	95%	95%	95%	95%	95%	95%
12	Test Location (Station/Offset)	Shot nr. 51357	Shot nr. 51362	Shot nr. 51363	Shot nr. 51364	Shot nr. 51365	Shot nr. 51366	Shot nr. 51367
13	Elevation	595.69	593.97	596.58	594.25	596.35	594.15	593.99
14	Probe Depth	6	6	8	6	6	6	6
15	Test Wet Density (pcf)	124.4	126.0	126.4	123.8	122.2	126.2	125.7
16	Test Dry Density (pcf)	108.5	109.5	109.7	106.1	108.6	109.9	112.7
17	Test % Compaction	94.7	95.5	95.7	92.6	94.7	95.9	98.4
18	Test % Moisture	14.6	15.1	15.2	16.6	12.5	14.8	11.5
19	Test Moisture Count	190	197	199	209	165	194	158
20	Test Density Count	2420	2333	1500	2450	2550	2326	2359
21	Result (Pass or Fail)	Fail	Pass	Pass	Fail	Fail	Pass	Pass
22	See Re-Test No.	11			10	9		

Comments:

Inspector: Tayeb Farez

Resident Engineer: _____

\\D5PTT911\NETPROJECTS\1190501\MAINLINE FIELD COMPACTION FORM.XLS

Field Soil/Aggregate Compaction Worksheet
Nuclear Moisture/Density Gauge Method

Testing Firm	Wang Engineering, Inc.
Address	1145 N Main Street
	Lombard, Illinois 60148
Office Telephone No.	(630) 953 - 9928
Gauge# / Serial No.	3430 / 33303
Calibration Date	12-20-07
M. Std / D. Std.	661 / 2420

Date	10-14-08
WEI Project No.	450-01-01
Client	CH2MHILL Constructors, Inc.
Project	Honeywell Celotex Main Site Cover Constru
Location	Chicago, IL
Contractor	HIS Construction, Inc.
Inspector Name	**Tayeb Farez**

1	Test Number	8	9	10	11			
2	Date	10-14-08	→	→	→			
3	Re-Test of Number		5	4	1			
4	Type of Construction	Construction of swale about perimeter of site						
5	Sample Number	#01	→	→	→			
6	Material Source							
7	Material Type	Brown Silty Clay Loam						
8	Proctor Type	Standard	Standard	Standard	Standard	Standard	Standard	Standard
9	Max. Dry Density	114.6	→	→	→			
10	Optimum Moisture (%)	14.5	→	→	→			
11	Min. % of Proctor Density	95%	95%	95%	95%	95%	95%	95%
12	Test Location (Station/Offset)	Shot nr. 51368	Shot nr. 51365	Shot nr. 51364	Shot nr. 51357			
13	Elevation	588.03	596.35	594.25	595.69			
14	Probe Depth	6	6	6	6			
15	Test Wet Density (pcf)	124.7	124.3	126.5	125.4			
16	Test Dry Density (pcf)	109.2	111.7	108.9	110.3			
17	Test % Compaction	95.3	97.4	95.0	96.3			
18	Test % Moisture	14.1	11.3	16.2	13.7			
19	Test Moisture Count	185	155	209	181			
20	Test Density Count	2407	2433	2305	2369			
21	Result (Pass or Fail)	Pass	Pass	Pass	Pass			
22	See Re-Test No.							

Comments:

Inspector: Tayeb Farez

Resident Engineer: _____

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Field Soil/Aggregate Compaction Worksheet
Nuclear Moisture/Density Gauge Method

Testing Firm	Wang Engineering, Inc.
Address	1145 N Main Street
	Lombard, Illinois 60148
Office Telephone No.	(630) 953 - 9928
Gauge# / Serial No.	3430 / 33303
Calibration Date	12-20-07
M. Std / D. Std.	661 / 2420

Date	10-14-08
WEI Project No.	450-01-01
Client	CH2MHILL Constructors, Inc.
Project	Honeywell Celotex Main Site Cover Constru
Location	Chicago, IL
Contractor	HIS Construction, Inc.
Inspector Name	**Tayeb Farez**

1	Test Number	1	2	3	4	5	6	7
2	Date	10-14-08	→	→	→	→	→	→
3	Re-Test of Number							
4	Type of Construction	Construction of swale along perimeter of site	→	→	→	→	→	→
5	Sample Number	#01	→	→	→	→	→	→
6	Material Source							
7	Material Type	Brown silty clay loam	→	→	→	→	→	→
8	Proctor Type	Standard	Standard	Standard	Standard	Standard	Standard	Standard
9	Max. Dry Density	114.6	→	→	→	→	→	→
10	Optimum Moisture (%)	14.5	→	→	→	→	→	→
11	Min. % of Proctor Density	95%	95%	95%	95%	95%	95%	95%
12	Test Location (Station/Offset)	51404 shot nr.	shot nr. 51406	shot nr. 51407	shot nr. 51408	shot nr. 51409	shot nr. 51410	shot nr. 51411
13	Elevation	597.85	597.46	599.13	595.22	597.65	597.69	596.32
14	Probe Depth	6	6	6	6	6	6	6
15	Test Wet Density (pcf)	128.7	128.0	128.1	126.2	127.3	128.6	129.1
16	Test Dry Density (pcf)	107.8	110.1	104.3	106.3	111.1	109.0	109.5
17	Test % Compaction	94.1	96.0	91.0	92.8	97.0	95.2	95.5
18	Test % Moisture	19.4	16.3	22.8	18.8	14.5	18.0	18.0
19	Test Moisture Count	244	212	276	234	193	230	231
20	Test Density Count	2189	2229	2207	2312	2268	2194	2169
21	Result (Pass or Fail)	F	P	F	F	P	P	P
22	See Re-Test No.	9						

Comments:

Inspector: Tayeb Farez

Resident Engineer: _____

\\DSPTT911\NETPROJECTS\1190501\MAINLINE FIELD COMPACTION FORM.XLS

Field Soil/Aggregate Compaction Worksheet
Nuclear Moisture/Density Gauge Method

Testing Firm	Wang Engineering, Inc.
Address	1145 N Main Street
	Lombard, Illinois 60148
Office Telephone No.	(630) 953 - 9928
Gauge# / Serial No.	3430 / 33303
Calibration Date	12-20-07
M. Std / D. Std.	661 / 2420

Date	10-14-08
WEI Project No.	450-01-01
Client	CH2MHILL Constructors, Inc.
Project	Honeywell Celotex Main Site Cover Constru
Location	Chicago, IL
Contractor	HIS Construction, Inc.
Inspector Name	**Tayeb Farez**

1	Test Number	8	9	10				
2	Date	10-14-08	→	→				
3	Re-Test of Number		1					
4	Type of Construction	Construction of swale alouf perimeter of site						
5	Sample Number	#01	→	→				
6	Material Source							
7	Material Type	Brown Silty clay loam						
8	Proctor Type	Standard	Standard	Standard	Standard	Standard	Standard	Standard
9	Max. Dry Density	114.6	→	→				
10	Optimum Moisture (%)	14.5	→	→				
11	Min. % of Proctor Density	95%	95%	95%	95%	95%	95%	95%
12	Test Location (Station/Offset)	Shot nr. 51412	Shot nr. 51404	Shot nr. 51405				
13	Elevation	594.02	597.46	597.69				
14	Probe Depth	6	6	6				
15	Test Wet Density (pcf)	128.5	128.2	128.3				
16	Test Dry Density (pcf)	108.7	108.0	109.9				
17	Test % Compaction	94.8	94.3	95.9				
18	Test % Moisture	18.2	18.6	16.7				
19	Test Moisture Count	232	236	217				
20	Test Density Count	2202	2215	2214				
21	Result (Pass or Fail)	F	F	P				
22	See Re-Test No.							

Comments:

Inspector: Tayeb Farez

Resident Engineer: _____

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[redacted] _____

Sheet 1 of 1

Date 10-16-08

WEI No. 450-01-01

Project Name Honeywell Celotex Main Site Cover Construction

Arrive Time 9:00

Project Location Chicago, IL

Depart Time 10:00

Client CH2MHILL Constructors, Inc.

Total Hrs. on Job 1

Contractor HIS Construction, Inc.

Travel Time 2

Mileage Start 34981 Mileage End 35007 Daily Mileage 26 Total Chargeable Hrs. 3

Summary of technical and/or engineering services performed including field test data (attach additional sheets as required).

Reached the job site at 9:00 AM - Met Michael Lehman of CH2MHILL - Michael informed me that the swale to be ~~the~~ retested for density is not ready - Left the job site at 10:00 AM - No test was taken

SKETCH (Indicate Dimensions or Scale)

N

Attested _____

Company _____

Date _____

WEI Name Tayeb Farez

WEI Signature Tayeb Farez

WEI Reviewed _____

Note: All test data, locations, elevations, and depths, etc. are subject to office review.

[redacted]

Date 10-20-08

WEI No. 450-01-01

Project Name Honeywell Celotex Main Site Cover Construction

Arrive Time 12:00

Project Location Chicago, IL

Depart Time 3:30

Client CH2MHILL Constructors, Inc.

Total Hrs. on Job 3.5

Contractor HIS Construction, Inc.

Travel Time 2

Mileage Start 35196 Mileage End 35244 Daily Mileage 48

Total Chargeable Hrs. 5.5

Summary of technical and/or engineering services performed including field test data (attach additional sheets as required).

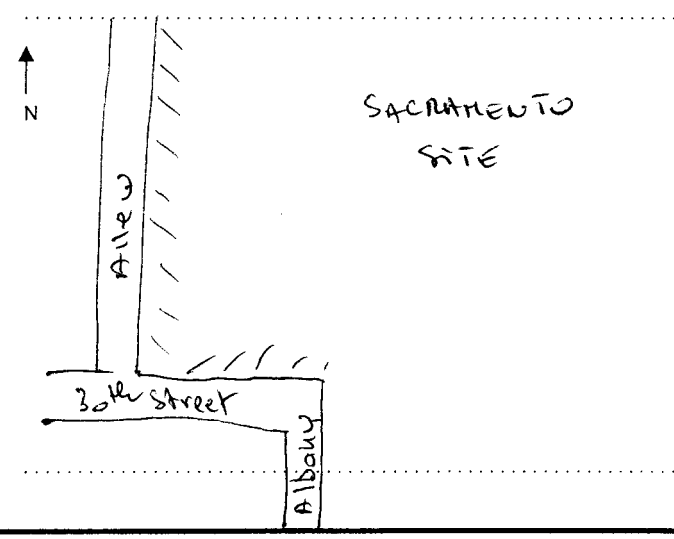
I arrived at the job site at 12:00PM. Met Michael LeFman of CH2MHILL - Discussed the work (Pc/PA) Compaction of the material Brown silty clay, loam used for the construction of swale along the perimeter of the site.

Performed 4 tests on Alley swale and 1 test North of 30th street swale, all tests passed the required spec.

Attached the Data Sheet for test results

Started raining hard at 2:30, the work compaction was cancelled. Left the job site at 3:30.

SKETCH (Indicate Dimensions or Scale)



Attested

Company

Date

WEI Name Tayeb Farez

WEI Signature Tayeb Farez

WEI Reviewed

lote: All test data, locations, elevations, and depths, etc. are subject to office review.

Field Soil/Aggregate Compaction Worksheet
Nuclear Moisture/Density Gauge Method

Testing Firm	Wang Engineering, Inc.
Address	1145 N Main Street
	Lombard, Illinois 60148
Office Telephone No.	(630) 953 - 9928
Gauge# / Serial No.	3430 / 33303
Calibration Date	12-20-08
M. Std / D. Std.	667 / 2391

Date	10-20-08
WEI Project No.	450-01-01
Client	CH2MHILL Constructors, Inc.
Project	Honeywell Celotex Main Site Cover Constru
Location	Chicago, IL
Contractor	HIS Construction, Inc.
Inspector Name	**Tayeb Farez**

1	Test Number	1	2	3	4	5		
2	Date	10-20-08	→	→	→	→		
3	Re-Test of Number							
4	Type of Construction	construction of swale along perimeter of site	→	→	→	→		
5	Sample Number	#01	→	→	→	→		
6	Material Source							
7	Material Type	Brown silty clay Loam	→	→	→	→		
8	Proctor Type	Standard	Standard	Standard	Standard	Standard	Standard	Standard
9	Max. Dry Density	114.6	→	→	→	→		
10	Optimum Moisture (%)	14.5	→	→	→	→		
11	Min. % of Proctor Density	95%	95%	95%	95%	95%	95%	95%
12	Test Location (Station/Offset)	51777	51776	51775	51774	51773		
13	Elevation	595.30	596.46	599.13	594.75	599.08		
14	Probe Depth	6	6	6	6	6		
15	Test Wet Density (pcf)	131.0	131.7	126.1	130.2	127.0		
16	Test Dry Density (pcf)	113.4	113.8	109.0	110.0	109.3		
17	Test % Compaction	98.9	99.3	95.1	96.0	95.4		
18	Test % Moisture	15.6	15.8	15.7	18.4	16.2		
19	Test Moisture Count	211	214	205	239	212		
20	Test Density Count	2059	2027	2298	2091	2250		
21	Result (Pass or Fail)	Pass	Pass	Pass	Pass	Pass		
22	See Re-Test No.							

Comments:

100' E. of the corner of 30th St. - Alley	150' N. of the corner of 30th St. - Alley	200' N. of the corner of 30th St. - Alley	250' N. of the corner of 30th St. - Alley	300' N. of the corner of 30th St. - Alley

Inspector: Tayeb

Resident Engineer: _____

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[redacted]

Sheet 1 of 1

Date 10-22-08

WEI No. 450-01-01

Project Name Honeywell Celotex Main Site Cover Construction

Arrive Time 8:30

Project Location Chicago, IL

Depart Time 5:10

Client CH2MHILL Constructors, Inc.

Total Hrs. on Job 8.25 (-½ HR Lunch)

Contractor HIS Construction, Inc.

Travel Time 2

Mileage Start 35244 Mileage End 35289 Daily Mileage 45 Total Chargeable Hrs. 10.25

Summary of technical and/or engineering services performed including field test data (attach additional sheets as required).

I arrived at the job site at 8:30 AM - Met Michael Lehman and Benny Vine of CH2MHILL - Inspected the work (Qc/QA) compaction of the material used for the construction of the swale along the perimeter of the site -

Tested for density at various locations, the alley swale and the North section of the Sacramento swale - All tests passed the required spec. of 95%.

Attached the Datasheet for test results-

SKETCH (Indicate Dimensions or Scale)

Attested

Company

Date

WEI Name Tayeb Farez

WEI Signature Tayeb Farez

WEI Reviewed

Note: *All test data, locations, elevations, and depths, etc. are subject to office review.*

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Field Soil/Aggregate Compaction Worksheet
Nuclear Moisture/Density Gauge Method

Testing Firm	Wang Engineering, Inc.
Address	1145 N Main Street
	Lombard, Illinois 60148
Office Telephone No.	(630) 953 - 9928
Gauge# / Serial No.	3430 / 33303
Calibration Date	12-20-07
M. Std / D. Std.	668 / 2402

Date	10-22-08
WEI Project No.	450-01-01
Client	CH2MHILL Constructors, Inc.
Project	Honeywell Celotex Main Site Cover Constru
Location	Chicago, IL
Contractor	HIS Construction, Inc.
Inspector Name	**Tayeb Farez**

1	Test Number	1	2	3	4	5	6	7
2	Date	10-22-08	→	→	→	→	→	→
3	Re-Test of Number							
4	Type of Construction	Construction of swale along perimeter of site	→	→	→	→	→	→
5	Sample Number	#01	→	→	→	→	→	→
6	Material Source	Brown silty clay Loam	→	→	→	→	→	→
7	Material Type	Brown silty clay, Loam	→	→	→	→	→	→
8	Proctor Type	Standard	Standard	Standard	Standard	Standard	Standard	Standard
9	Max. Dry Density	114.6	→	→	→	→	→	→
10	Optimum Moisture (%)	14.5	→	→	→	→	→	→
11	Min. % of Proctor Density	95%	95%	95%	95%	95%	95%	95%
12	Test Location (Station/Offset)	Shot No: 51848	Shot No: 51849	Shot No: 51851	Shot No: 51850	Shot No: 51868	Shot No: 51869	Shot No: 51870
13	Elevation	596.56	595.85	593.86	595.57	599.98	596.58	595.21
14	Probe Depth	6	0 (BS)	6	6	6	6	6
15	Test Wet Density (pcf)	125.4	129.2	128.7	129.3	130.6	132.3	129.0
16	Test Dry Density (pcf)	105.8	109.8	108.3	111.2	112.4	115.1	109.5
17	Test % Compaction	92.3	95.8	94.5	97.0	98.0	100.5	95.5
18	Test % Moisture	18.5	17.6	18.8	16.3	16.3	14.9	17.8
19	Test Moisture Count	232	230	241	217	218	206	232
20	Test Density Count	2341	893	2173	2147	2086	2013	2158
21	Result (Pass or Fail)	Fail	Pass	Fail	Pass	Pass	Pass	Pass
22	See Re-Test No.							

Comments:

1	2	3	4	5	6	7
100' S. of the Corner of Sacramento & 28th St.	100' S. of the Corner of Sacramento & 28th St.	55' S. of the Corner of Sacramento & 28th St.	85' S. of the Corner of Sacramento & 28th St.	Alley Swale 490' N. of the Corner of 28th St. & Alley	Alley Swale 440' N. of the Corner of 28th St. & Alley	Alley Swale 390' N. of the Corner of 28th St. & Alley

Inspector: Tayeb

Resident Engineer: _____

\\DSPTT911\NETPROJECTS\1190501\MAINLINE FIELD COMPACTION FORM.XLS

Field Soil/Aggregate Compaction Worksheet
Nuclear Moisture/Density Gauge Method

Testing Firm	Wang Engineering, Inc.
Address	1145 N Main Street
	Lombard, Illinois 60148
Office Telephone No.	(630) 953 - 9928
Gauge# / Serial No.	3630 / 33303
Calibration Date	12-20-07
M. Std / D. Std.	668 / 2402

Date	10-22-08
WEI Project No.	450-01-01
Client	CH2MHILL Constructors, Inc.
Project	Honeywell Celotex Main Site Cover Constru
Location	Chicago, IL
Contractor	HIS Construction, Inc.
Inspector Name	**Tayeb Farez**

1	Test Number	8	9	10	11	12	13	14
2	Date	10-22-08	→	→	→	→	→	→
3	Re-Test of Number					11		13
4	Type of Construction	Construction of swale alongside perimeter of site	→	→	→	→	→	→
5	Sample Number	#01						
6	Material Source							
7	Material Type	Brown silty clay, Loam	→	→	→	→	→	→
8	Proctor Type	Standard	Standard	Standard	Standard	Standard	Standard	Standard
9	Max. Dry Density	114.6	→	→	→	→	→	→
10	Optimum Moisture (%)	14.5	→	→	→	→	→	→
11	Min. % of Proctor Density	95%	95%	95%	95%	95%	95%	95%
12	Test Location (Station/Offset)	51871	51872	51873	51874		51875	
13	Elevation	599.58	597.15	594.34	596.47		596.42	
14	Probe Depth	6	6	6	6	6	6	6
15	Test Wet Density (pcf)	133.2	129.7	130.2	127.3	130.3	128.8	130.0
16	Test Dry Density (pcf)	113.4	109.9	113.4	108.4	111.9	107.4	108.9
17	Test % Compaction	99.0	95.9	98.9	94.6	97.6	93.7	95.0
18	Test % Moisture	17.5	18.0	14.8	17.3	16.5	19.9	19.4
19	Test Moisture Count	235	235	202	224	220	252	249
20	Test Density Count	1966	2126	2111	2247	2100	2167	2109
21	Result (Pass or Fail)	Pass	Pass	Pass	Fail	Pass	Fail	Pass
22	See Re-Test No.				12		14	

Comments:

Alley Swale 440' N. of the corner of 30th St. & Alley

Alley Swale 390' N. of the corner of 30th St. & Alley

Alley Swale 340' N. of the corner of 30th St. & Alley

Alley Swale 100' N. of the corner of 30th St. & Alley

See test Nr 11

Alley Swale 50' N. of the corner of 30th St. & Alley

See test Nr 13

Inspector: Tayeb

Resident Engineer:

[redacted]

Date 10-23-08

WEI No. 450-01-01

Project Name Honeywell Celotex Main Site Cover Construction

Arrive Time 12:30

Project Location Chicago, IL

Depart Time 6:00

Client CH2MHILL Constructors, Inc.

Total Hrs. on Job 5.5

Contractor HIS Construction, Inc.

Travel Time 2

Mileage Start 35289 Mileage End 35329 Daily Mileage 40 Total Chargeable Hrs. 7.5

Summary of technical and/or engineering services performed including field test data (attach additional sheets as required).

I arrived at the job site at 12:30 PM - met Michael Lehman of CH2MHILL - Discussed the work (Qc/QA) compaction of the material used for the construction of the swale along the perimeter of the site.

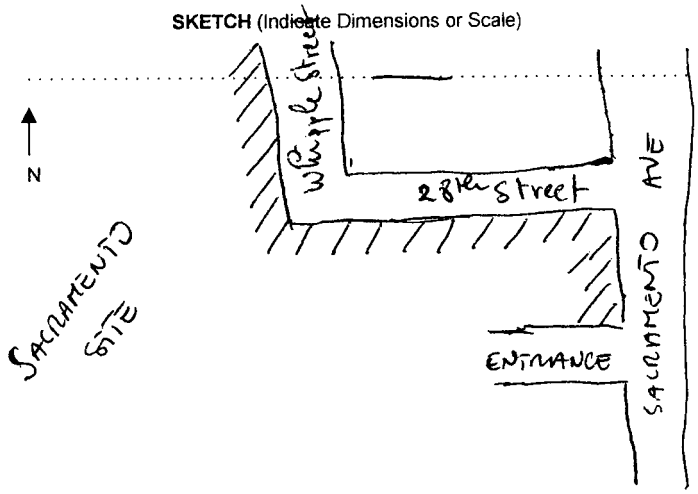
Run several tests at ~~the~~ various locations, 28th street swale and the corner of 28th street and Sacramento swale.

I also performed tests for compaction on Whipple Street swale.

All tests passed the required spec. of 95%.

Attached the DataSheet for test results.

SKETCH (Indicate Dimensions or Scale)



Attested

Company

Date

WEI Name Tayeb Farez

WEI Signature Tayeb

WEI Reviewed

lote: All test data, locations, elevations, and depths, etc. are subject to office review.

Field Soil/Aggregate Compaction Worksheet
Nuclear Moisture/Density Gauge Method

Testing Firm	Wang Engineering, Inc.
Address	1145 N Main Street
	Lombard, Illinois 60148
Office Telephone No.	(630) 953 - 9928
Gauge# / Serial No.	3430 / 33303
Calibration Date	12-20-07
M. Std / D. Std.	657 / 2402

Date	10-23-08
WEI Project No.	450-01-01
Client	CH2MHILL Constructors, Inc.
Project	Honeywell Celotex Main Site Cover Constru
Location	Chicago, IL
Contractor	HIS Construction, Inc.
Inspector Name	**Tayeb Farez**

1	Test Number	1	2	3	4	5	6	7
2	Date	10-23-08	→	→	→	→	→	→
3	Re-Test of Number							
4	Type of Construction	Construction of Swale along perimeter of site	→	→	→	→	→	→
5	Sample Number	#01	→	→	→	→	→	→
6	Material Source							
7	Material Type	Brown Silty Clay Loam	→	→	→	→	→	→
8	Proctor Type	Standard	Standard	Standard	Standard	Standard	Standard	Standard
9	Max. Dry Density	114.6	→	→	→	→	→	→
10	Optimum Moisture (%)	14.5	→	→	→	→	→	→
11	Min. % of Proctor Density	95%	95%	95%	95%	95%	95%	95%
12	Test Location (Station/Offset)	Shot No: 51898	Shot No: 51899	Shot No: 51900	Shot No: 51901	Shot No: 51902	Shot No: 51953	Shot No: 51954
13	Elevation	592.78	597.81	593.20	595.14	598.33	592.18	598.74
14	Probe Depth	6	6	6	6	6	6	6
15	Test Wet Density (pcf)	128.8	130.7	128.5	130.7	129.6	129.8	130.7
16	Test Dry Density (pcf)	110.4	111.7	111.3	113.6	113.3	109.8	111.5
17	Test % Compaction	96.3	97.5	97.1	99.1	98.8	95.8	97.3
18	Test % Moisture	16.8	17.0	16.4	15.1	14.5	18.2	17.3
19	Test Moisture Count	217	222	214	202	194	233	225
20	Test Density Count	2167	2081	2138	2085	2137	2121	2080
21	Result (Pass or Fail)	Pass	Pass	Pass	Pass	Pass	Pass	Pass
22	See Re-Test No.							

Comments:

1	2	3	4	5	6	7
50' S. of the corner of Sacramento & 28th St.	45' W. of the corner of Sacramento & 28th St.	100' W. of the corner of Sacramento & 28th St.	150' W. of the corner of Sacramento & 28th St.	200' W. of the corner of Sacramento & 28th St.	240' W. of the corner of Sacramento & 28th St.	280' W. of the corner of Sacramento & 28th St.

Inspector: Tayeb

Resident Engineer: _____

\\D5PTT911\NETPROJECTS\1190501\MAINLINE FIELD COMPACTION FORM.XLS

Field Soil/Aggregate Compaction Worksheet
Nuclear Moisture/Density Gauge Method

Testing Firm	Wang Engineering, Inc.
Address	1145 N Main Street
	Lombard, Illinois 60148
Office Telephone No.	(630) 953 - 9928
Gauge# / Serial No.	3430 / 33303
Calibration Date	12-20-07
M. Std / D. Std.	657 / 2402

Date	10-23-08
WEI Project No.	450-01-01
Client	CH2MHILL Constructors, Inc.
Project	Honeywell Celotex Main Site Cover Constru
Location	Chicago, IL
Contractor	HIS Construction, Inc.
Inspector Name	**Tayeb Farez**

1	Test Number	8	9	10	11			
2	Date	10-23-08	→	→	→			
3	Re-Test of Number							
4	Type of Construction	Construction of swale along perimeter of site						
5	Sample Number	#01	→	→	→			
6	Material Source							
7	Material Type	Brown Silty Clay Loam						
8	Proctor Type	Standard	Standard	Standard	Standard	Standard	Standard	Standard
9	Max. Dry Density	114.6	→	→	→			
10	Optimum Moisture (%)	14.5	→	→	→			
11	Min. % of Proctor Density	95%	95%	95%	95%	95%	95%	95%
12	Test Location (Station/Offset)	Shot No: 51951	Shot No: 51952	Shot No: 51953	Shot No: 52015			
13	Elevation	595.23	592.99	596.93	596.27			
14	Probe Depth	6	4	6	6			
15	Test Wet Density (pcf)	128.9	127.4	128.2	136.5			
16	Test Dry Density (pcf)	110.4	108.8	109.9	117.4			
17	Test % Compaction	96.3	95.0	95.9	102.5			
18	Test % Moisture	16.8	17.1	16.7	16.2			
19	Test Moisture Count	217	218	215	223			
20	Test Density Count	2167	2817	2202	1831			
21	Result (Pass or Fail)	Pass	Pass	Pass	Pass			
22	See Re-Test No.							

Comments:

Corner of 28th St. & Whipple St.	50' N. of the corner of 28th St. & Whipple St.	100' N. of the corner of 28th St. & Whipple St.	N.E corner of the Sacramento Entrance

Inspector: Tayeb Farez

Resident Engineer: _____

\\D5PTT911\NETPROJECTS\1190501\MAINLINE FIELD COMPACTION FORM.XLS

[redacted]

Sheet 1 of 1

Date 10-27-08

WEI No. 450-01-01

Project Name Honeywell Celotex Main Site Cover Construction

Arrive Time 1:00 PM

Project Location Chicago, IL

Depart Time 5:30PM

Client CH2MHILL Constructors, Inc.

Total Hrs. on Job 4.5

Contractor HIS Construction, Inc.

Travel Time 2

Mileage Start 35400 Mileage End 35450 Daily Mileage 50

Total Chargeable Hrs. 6.5

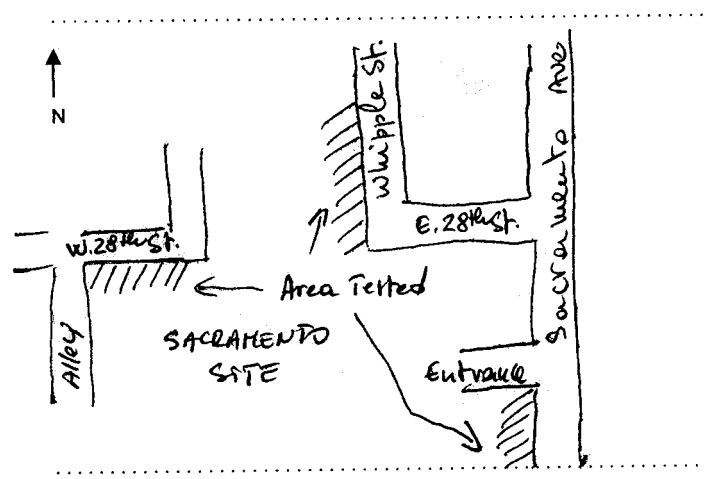
Summary of technical and/or engineering services performed including field test data (attach additional sheets as required).

I arrived at the Job Site at 1:00 PM - Met Michael Lehman of CH2MHILL - Discussed the work (Qc/QA) Compaction of the material used for the Construction of the swale along the perimeter of the Site - Run several tests at various locations, S. of Sacramento Entrance, W. 28th street and S. of Whipple Street.

All tests passed the required spec. of 95% -

Attached the Data Sheet for test results

SKETCH (Indicate Dimensions or Scale)



Attested

Company

Date

WEI Name Tayeb Farez

WEI Signature Tayeb Farez

WEI Reviewed

Note: All test data, locations, elevations, and depths, etc. are subject to office review.

Field Soil/Aggregate Compaction Worksheet
Nuclear Moisture/Density Gauge Method

Testing Firm	Wang Engineering, Inc.
Address	1145 N Main Street
	Lombard, Illinois 60148
Office Telephone No.	(630) 953 - 9928
Gauge# / Serial No.	3430 / 33303
Calibration Date	12-20-08
M. Std / D. Std.	672 / 2403

Date	10-27-08
WEI Project No.	450-01-01
Client	CH2MHILL Constructors, Inc.
Project	Honeywell Celotex Main Site Cover Constru
Location	Chicago, IL
Contractor	HIS Construction, Inc.
Inspector Name	Tayeb Farez

1	Test Number	1	2	3	4	5	6	7
2	Date	10-27-08	→	→	→	→	→	→
3	Re-Test of Number							
4	Type of Construction	construction of swale along perimeter of the site.	→	→	→	→	→	→
5	Sample Number	Bulk No: 1	→	→	→	→	#01	→
6	Material Source							
7	Material Type	Gray clay	→	→	→	→	Brown sandy clay loam	→
8	Proctor Type	Standard	Standard	Standard	Standard	Standard	Standard	Standard
9	Max. Dry Density	102.0	→	→	→	→	114.6	→
10	Optimum Moisture (%)	20.0	→	→	→	→	14.5	→
11	Min. % of Proctor Density	95%	95%	95%	95%	95%	95%	95%
12	Test Location (Station/Offset)	52024	52025	52026	52061	52060	52022	52021
13	Elevation	595.56	594.37	592.37	596.60	597.75	594.92	596.65
14	Probe Depth	4	4	4	4	4	6	6
15	Test Wet Density (pcf)	126.4	123.4	124.6	123.7	122.1	132.8	132.7
16	Test Dry Density (pcf)	105.2	102.0	102.7	100.8	100.5	113.4	113.0
17	Test % Compaction	103.2	100.0	100.7	98.9	98.5	99.0	98.6
18	Test % Moisture	20.1	21.0	21.3	22.7	21.6	17.1	17.4
19	Test Moisture Count	251	254	259	270	257	232	235
20	Test Density Count	2971	3143	3074	3123	3222	1984	1989
21	Result (Pass or Fail)	Pass	Pass	Pass	Pass	Pass	Pass	Pass
22	See Re-Test No.							

Comments:

35' S. of Sacramento Entrance	80' S. of Sacramento Entrance	130' S. of Sacramento Entrance	130' E. of the corner of Alley & 28th street	70' E. of the corner of Alley & 28th street	150' N. of the corner of Whipple st. & 28th st.	200' N. of the corner of Whipple st. & 28th st.	

Inspector: Tayeb

Resident Engineer: _____

Wang Engineering, Inc.

1145 N. Main Street, Lombard, IL 60148
☎ (630) 953-9928 Fax: (630) 953-9938

FIELD OBSERVATION REPORT

[redacted] _____

Sheet 1 of 1

Date 10-30-08 WEI No. 450-01-01

Project Name Honeywell Celotex Main Site Cover Construction Arrive Time 7:15 AM

Project Location Chicago, IL Depart Time 5:15 PM

Client CH2MHILL Constructors, Inc. Total Hrs. on Job 9.5 (-½ Hour Lunch)

Contractor HIS Construction, Inc. Travel Time 2

Mileage Start 35625 Mileage End 35675 Daily Mileage 50 Total Chargeable Hrs. 11.5

Summary of technical and/or engineering services performed including field test data (attach additional sheets as required).

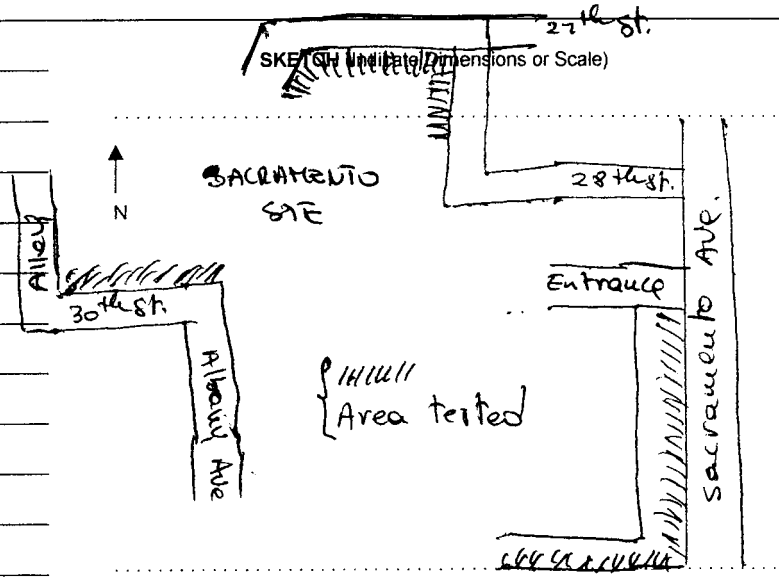
Arrived at the job site at 7:15 AM - Met Michael Lehman of CH2MHILL - Discussed the work (Re/Rn) Compaction of the material used for the Construction of the Swale along the perimeter of the Site -

Tested for density at various locations, N. of Whipple Street, 27th Street, S. of Sacramento Entrance, S.E Limit of Sacramento Site and 30th Street -

All tests passed the required specification, but one failed (Test Nr 20) on S.E Limit of Sacramento Site -

Attached the Datasheets for test results and Locations -

SKETCH (Indicate Dimensions or Scale)



Attested _____ WEI Name Tayeb Farez

Company _____ WEI Signature Tayeb Farez

Date _____ WEI Reviewed _____

Note: All test data, locations, elevations, and depths, etc. are subject to office review.

Field Soil/Aggregate Compaction Worksheet
Nuclear Moisture/Density Gauge Method

Testing Firm	Wang Engineering, Inc.
Address	1145 N Main Street
	Lombard, Illinois 60148
Office Telephone No.	(630) 953 - 9928
Gauge# / Serial No.	3430 / 33303
Calibration Date	12 - 20 - 08
M. Std / D. Std.	674 / 2408

Date	10-30-08
WEI Project No.	450-01-01
Client	CH2MHILL Constructors, Inc.
Project	Honeywell Celotex Main Site Cover Constru
Location	Chicago, IL
Contractor	HIS Construction, Inc.
Inspector Name	Tayeb Farez

1	Test Number	1	2	3	4	5	6	7
2	Date	10-30-08	→					→
3	Re-Test of Number							6
4	Type of Construction	Construction of swale along perimeter of site				→		→
5	Sample Number	# 01	→					→
6	Material Source							
7	Material Type	Brown, Silty Clay Loam		→				→
8	Proctor Type	Standard	Standard	Standard	Standard	Standard	Standard	Standard
9	Max. Dry Density	114.6	→					→
10	Optimum Moisture (%)	14.5	→					→
11	Min. % of Proctor Density	95%	95%	95%	95%	95%	95%	95%
12	Test Location (Station/Offset)	Shot Nr: 52147	Shot Nr: 52148	Shot Nr: 52149	Shot Nr: 52150	Shot Nr: 52151	Shot Nr: 52192	Shot Nr: 52192
13	Elevation	596.27	594.00	595.46	597.68	592.86	596.04	596.01
14	Probe Depth	6	6	6	6	6	6	6
15	Test Wet Density (pcf)	131.3	127.3	131.5	136.3	131.7	125.2	129.4
16	Test Dry Density (pcf)	113.5	110.1	115.4	119.8	111.6	108.1	111.8
17	Test % Compaction	99.1	96.1	100.7	104.5	97.4	94.4	97.6
18	Test % Moisture	15.7	15.6	14.0	13.8	18.0	15.8	15.7
19	Test Moisture Count	215	208	197	201	240	207	212
20	Test Density Count	2060	2253	2054	1846	2039	2360	2152
21	Result (Pass or Fail)	Pass	Pass	Pass	Pass	Pass	Fail	Pass
22	See Re-Test No.						7	

Comments:

385' N. of the corner of Whipple & 28th Street

435' N. of the corner of Whipple St. & 28th St.

485' N. of the corner of Whipple St. & 28th St.

535' N. of the corner of Whipple St. & 28th St.

585' N. of the corner of Whipple St. & 28th St.

40' W. of the corner of Whipple St. & 27th St.

80' W. of the corner of Whipple St. & 27th St.

Inspector: Tayeb Farez

Resident Engineer: _____

Field Soil/Aggregate Compaction Worksheet
Nuclear Moisture/Density Gauge Method

Testing Firm	Wang Engineering, Inc.
Address	1145 N Main Street
	Lombard, Illinois 60148
Office Telephone No.	(630) 953 - 9928
Gauge# / Serial No.	3430 / 33303
Calibration Date	12-20-08
M. Std / D. Std.	674 / 2408

Date	10-30-08
WEI Project No.	450-01-01
Client	CH2MHILL Constructors, Inc.
Project	Honeywell Celotex Main Site Cover Constru
Location	Chicago, IL
Contractor	HIS Construction, Inc.
Inspector Name	Tayeb Farez

1	Test Number	8	9					
2	Date	10-30-08	→					
3	Re-Test of Number							
4	Type of Construction	Construction of swale along perimeter of site						
5	Sample Number	#01	→					
6	Material Source							
7	Material Type	Brown silty clay loam						
8	Proctor Type	Standard	Standard	Standard	Standard	Standard	Standard	Standard
9	Max. Dry Density	114.6	→					
10	Optimum Moisture (%)	14.5	→					
11	Min. % of Proctor Density	95%	95%	95%	95%	95%	95%	95%
12	Test Location (Station/Offset)	Shot nr: 52191	Shot nr: 52190					
13	Elevation	534.02	538.56					
14	Probe Depth	6	6					
15	Test Wet Density (pcf)	131.9	127.6					
16	Test Dry Density (pcf)	113.7	110.9					
17	Test % Compaction	99.2	96.8					
18	Test % Moisture	16.0	15.0					
19	Test Moisture Count	219	202					
20	Test Density Count	2035	2242					
21	Result (Pass or Fail)	Pass	Pass					
22	See Re-Test No.							

Comments: 30' W. of the corner of Whipple St. & 27th St. | 20' S. of the corner of 27th St. & R.R.

Inspector: Tayeb Farez

Resident Engineer: _____

Field Soil/Aggregate Compaction Worksheet
Nuclear Moisture/Density Gauge Method

Testing Firm	Wang Engineering, Inc.
Address	1145 N Main Street
	Lombard, Illinois 60148
Office Telephone No.	(630) 953 - 9928
Gauge# / Serial No.	3430 / 33303
Calibration Date	12-20-08
M. Std / D. Std.	674 / 2408

Date	10-30-08
WEI Project No.	450-01-01
Client	CH2MHILL Constructors, Inc.
Project	Honeywell Celotex Main Site Cover Constru
Location	Chicago, IL
Contractor	HIS Construction, Inc.
Inspector Name	Tayeb Farez

1	Test Number	15	16	17	18	19	20	21
2	Date	10-30-08	→	→	→	→	→	→
3	Re-Test of Number							
4	Type of Construction	Bottom of swale	→	→	→	→	→	→
5	Sample Number	#01	→	→	→	→	→	→
6	Material Source							
7	Material Type	Brown silty clay loam	→	→	→	→	→	→
8	Proctor Type	Standard	Standard	Standard	Standard	Standard	Standard	Standard
9	Max. Dry Density	114.6	→	→	→	→	→	→
10	Optimum Moisture (%)	14.5	→	→	→	→	→	→
11	Min. % of Proctor Density	90%	90%	90%	90%	90%	90%	90%
12	Test Location (Station/Offset)	Shot Nr: 52154	Shot Nr: 52155	Shot Nr: 52156	Shot Nr: 52157	Shot Nr: 52158	Shot Nr: 52159	Shot Nr: 52235
13	Elevation	581.40	581.26	591.13	581.26	591.26	581.34	593.27
14	Probe Depth	6	6	6	6	6	6	6
15	Test Wet Density (pcf)	128.2	120.3	122.1	126.9	122.9	121.8	124.4
16	Test Dry Density (pcf)	111.0	103.3	103.4	111.3	103.7	102.1	104.0
17	Test % Compaction	96.8	90.1	90.2	97.2	90.5	89.1	90.7
18	Test % Moisture	15.5	16.5	18.0	14.0	18.5	19.3	19.7
19	Test Moisture Count	208	206	224	190	230	236	244
20	Test Density Count	2211	2635	2529	2279	2480	2540	2396
21	Result (Pass or Fail)	Pass	Pass	Pass	Pass	Pass	Fail	Pass
22	See Re-Test No.						Re-6 of 10-31-08	

Comments: 225'S. of Sacramento entrance; 350'S. of Sacramento Entrance; 480'S. of Sacramento Entrance; 525'S. of Sacramento entrance; 65'W. of the corner of Sacramento and S. Limit of the Site; 175'W. of the corner of Sacramento and S. Limit of the Site; 35'W. of the corner of Albany & 30th St.

Inspector: Tayeb Farez

Resident Engineer: _____

Wang Engineering, Inc.

1145 N. Main Street, Lombard, IL 60148
☎ (630) 953-9928 Fax: (630) 953-9938

FIELD OBSERVATION REPORT

[redacted] _____

Sheet 1 of 1

Date 11-03-08

WEI No. 450-01-01

Project Name Honeywell Celotex Main Site Cover Construction

Arrive Time 1:00

Project Location Chicago, IL

Depart Time 4:50

Client CH2MHILL Constructors, Inc.

Total Hrs. on Job 3.85

Contractor HIS Construction, Inc.

Travel Time 2

Mileage Start 35845 Mileage End 35898 Daily Mileage 53

Total Chargeable Hrs. 5.85

Summary of technical and/or engineering services performed including field test data (attach additional sheets as required).

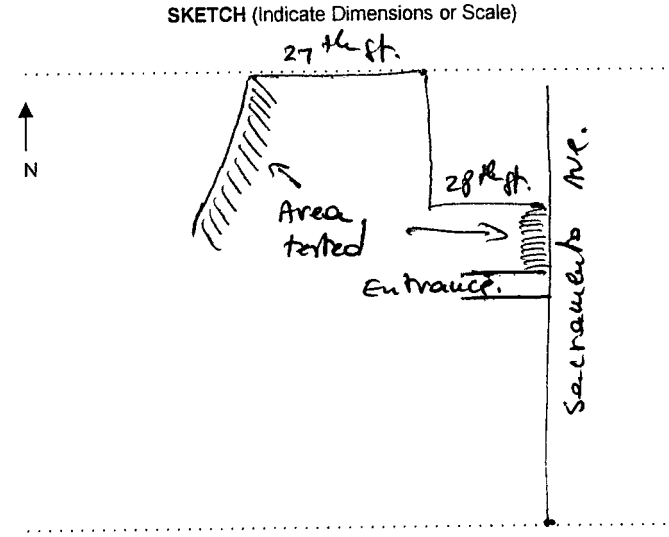
I arrived at the job site at 1:00 PM - Met Michael Lehman of CH2MHILL - Discussed the work (Qc/QA) compaction of the materials used for the construction of the swale along the perimeter of the site.

Performed 3 nuclear ~~test~~ density tests on N.W of the site and 1 nuclear density test N. of the Sacramento Entrance.

All tests meet the required spec. of 95%.

Attached the Data Sheet for test results

SKETCH (Indicate Dimensions or Scale)



Attested _____

Company _____

Date _____

WEI Name Tayeb Farez

WEI Signature Tayeb Farez

WEI Reviewed _____

Note: All test data, locations, elevations, and depths, etc. are subject to office review.

Field Soil/Aggregate Compaction Worksheet
Nuclear Moisture/Density Gauge Method

Testing Firm	Wang Engineering, Inc.
Address	1145 N Main Street
	Lombard, Illinois 60148
Office Telephone No.	(630) 953 - 9928
Gauge# / Serial No.	3430 / 33303
Calibration Date	12-20-08
M. Std / D. Std.	667 / 2414

Date	11-03-08
WEI Project No.	450-01-01
Client	CH2MHILL Constructors, Inc.
Project	Honeywell Celotex Main Site Cover Constru
Location	Chicago, IL
Contractor	HIS Construction, Inc.
Inspector Name	Tayeb Farez

1	Test Number	1	2	3	4	5		
2	Date	11-03-08	→			→		
3	Re-Test of Number		1					
4	Type of Construction	Construction of swale along perimeter of the site.				→		
5	Sample Number	#01	→		→	Bulk no. 1		
6	Material Source							
7	Material Type	Brown silty clay loam	→		→	Gray clay		
8	Proctor Type	Standard	Standard	Standard	Standard	Standard	Standard	Standard
9	Max. Dry Density	114.6	→		→	102		
10	Optimum Moisture (%)	14.5	→		→	20		
11	Min. % of Proctor Density	95%	95%	95%	95%	95%	95%	95%
12	Test Location (Station/Offset)	52331	52332		52333	52381		
13	Elevation	592.81	594.29		597.27	596.10		
14	Probe Depth	6	6	6	6	6		
15	Test Wet Density (pcf)	122.3	132.1	129.5	131.1	116.6		
16	Test Dry Density (pcf)	107.3	115.7	113.8	112.3	99.9		
17	Test % Compaction	93.7	100.9	99.3	98.0	98.0		
18	Test % Moisture	14.0	14.2	13.7	16.7	16.7		
19	Test Moisture Count	182	198	189	223	200		
20	Test Density Count	2530	2031	2158	2075	2870		
21	Result (Pass or Fail)	Fail	Pass	Pass	Pass	Pass		
22	See Re-Test No.	2						

Comments:

85' S. of the corner of 27th St. & R.R.

85' S. of the corner of 27th St. & R.R.

135' S. of the corner of 27th St. & R.R.

185' S. of the corner of 27th St. & R.R.

60' N. of Sacramento Entrance

Inspector: Tayeb

Resident Engineer: _____

Wang Engineering, Inc.

1145 N. Main Street, Lombard, IL 60148
☎ (630) 953-9928 Fax: (630) 953-9938

FIELD OBSERVATION REPORT

[redacted] _____

Sheet 1 of 1

Date 11-05-08

WEI No. 450-01-01

Project Name Honeywell Celotex Main Site Cover Construction

Arrive Time 8:00

Project Location Chicago, IL

Depart Time 3:30

Client CH2MHILL Constructors, Inc.

Total Hrs. on Job 7 (-1/2 Hour Lunch

Contractor HIS Construction, Inc.

Travel Time 2

Mileage Start 36044 Mileage End 36099 Daily Mileage 55

Total Chargeable Hrs. 9

Summary of technical and/or engineering services performed including field test data (attach additional sheets as required).

Reached the job site at 8:00 AM - Met Michael Lehman and Benny Vine of CH2MHILL - Insurted the work (QC/QA) compaction of the materials used for the construction of the swale along perimeter of the site -

Performed various nuclear density tests on N.W of the Sacramento site and on the residential yard -

2 tests failed the required spec. will be retested after the contractor will do more work -

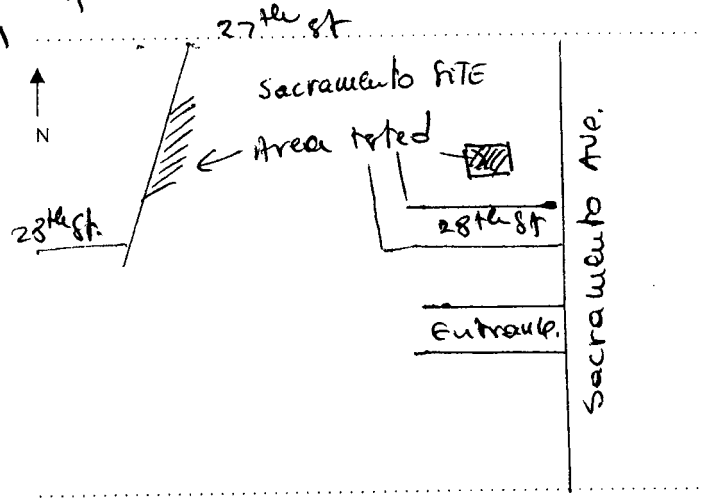
Please see the attached Datasheet for test results and locations.

Also I took 2 samples to the lab of:

(1) CA-06 proctor and gradation

(2) CA-01 gradation

SKETCH (Indicate Dimensions or Scale)



Attested _____

Company _____

Date _____

WEI Name Tayeb Farez

WEI Signature Tayeb Farez

WEI Reviewed _____

Note: All test data, locations, elevations, and depths, etc. are subject to office review.

Field Soil/Aggregate Compaction Worksheet
Nuclear Moisture/Density Gauge Method

Testing Firm	Wang Engineering, Inc.
Address	1145 N Main Street
	Lombard, Illinois 60148
Office Telephone No.	(630) 953 - 9928
Gauge# / Serial No.	3430 / 33303
Calibration Date	12-20-08
M. Std / D. Std.	676 / 2412

Date	11-05-08
WEI Project No.	450-01-01
Client	CH2MHILL Constructors, Inc.
Project	Honeywell Celotex Main Site Cover Constru
Location	Chicago, IL
Contractor	HIS Construction, Inc.
Inspector Name	Tayeb Farez

1	Test Number	1	2	3	4	5	6	7
2	Date	11-05-08	→	→	→	→	→	→
3	Re-Test of Number							4
4	Type of Construction	Bottom of swale	→	Construction of swale along perimeter of the site.				→
5	Sample Number	Bulk no. 1	→	#01	→	→	→	→
6	Material Source							
7	Material Type	Gray clay	→	Brown silty clay loam	→	→	→	→
8	Proctor Type	Standard	Standard	Standard	Standard	Standard	Standard	Standard
9	Max. Dry Density	102	→	114.6	→	→	→	→
10	Optimum Moisture (%)	20	→	14.5	→	→	→	→
11	Min. % of Proctor Density	95%	95%	95%	95%	95%	95%	95%
12	Test Location (Station/Offset)	Shot Nr: 52379	Shot Nr: 52378	—	Shot Nr: 52395	Shot Nr: 52396	Shot Nr: 52397	Shot Nr: 52395
13	Elevation	591.73	591.99	—	592.39	594.46	596.48	592.39
14	Probe Depth	10	10	6	6	6	6	6
15	Test Wet Density (pcf)	125.6	121.1	133.2	124.7	125.2	126.1	127.7
16	Test Dry Density (pcf)	100.6	100.1	115.5	103.4	104.7	105.2	109.0
17	Test % Compaction	98.6	98.2	100.8	90.3	91.4	91.8	95.0
18	Test % Moisture	24.9	21.0	15.3	20.6	19.6	19.9	17.4
19	Test Moisture Count	296	251	214	254	246	250	228
20	Test Density Count	885	1012	1981	2381	2354	2310	2234
21	Result (Pass or Fail)	Pass	Pass	Pass	Fail	Fail	Fail	Pass
22	See Re-Test No.				7	4 (11-06-08)	5 (11-06-08)	

Comments: 260' N. of the corner of 28th st. & W. side of the site. | 210' N. of the corner of 28th st. & W. side of the site | 235' S. of the corner of 27th st. & R.R. | 285' S. of the corner of 27th st. & R.R. | 335' S. of the corner of 27th st. & R.R. | 385' S. of the corner of 27th st. & R.R. | 285' S. of the corner of 27th st. & R.R.

Inspector: Tayeb

Resident Engineer: _____

Wang Engineering, Inc.

1145 N. Main Street, Lombard, IL 60148
☎ (630) 953-9928 Fax: (630) 953-9938

FIELD OBSERVATION REPORT

Sampling _____

Sheet ____ of ____

Date 11-06-08 | WEI No. 450-01-01

Project Name Honeywell Celotex Main Site Cover Construction | Arrive Time 9:00

Project Location Chicago, IL | Depart Time 2:00

Client CH2MHILL Constructors, Inc. | Total Hrs. on Job 5

Contractor HIS Construction, Inc. | Travel Time 2

Mileage Start 36099 Mileage End 36152 Daily Mileage 53 | Total Chargeable Hrs. 7

Summary of technical and/or engineering services performed including field test data (attach additional sheets as required).

Arrived at the Job Site at 9:00 AM - Met Michael Lehman and Benny Vine of CH2MHILL - Directed the work (Qc/QA) Compaction of the materials used for the Construction of the swale along the perimeter of the site, and the residential yard on Sacramento Ave -

Retested two failed tests from yesterday, both tests passed the required spec.

Performed various nuclear density tests on slope at Whipple Street and residential yard at Sacramento Ave - All tests meet the required specification -

I took 1 sample of CA-6 material from Vulcan to the lab, for Proctor & Gradation.

Please see the attached Datasheets for test results and locations -

SKETCH (Indicate Dimensions or Scale)

Attested _____ | WEI Name Tayeb Farez

Company _____ | WEI Signature Tayeb

Date _____ | WEI Reviewed _____

Note: All test data, locations, elevations, and depths, etc. are subject to office review.

Field Soil/Aggregate Compaction Worksheet
Nuclear Moisture/Density Gauge Method

Testing Firm	Wang Engineering, Inc.
Address	1145 N Main Street
	Lombard, Illinois 60148
Office Telephone No.	(630) 953 - 9928
Gauge# / Serial No.	3430 / 33303
Calibration Date	12 - 20 - 08
M. Std / D. Std.	671 / 2406

Date	11-06-08
WEI Project No.	450-01-01
Client	CH2MHILL Constructors, Inc.
Project	Honeywell Celotex Main Site Cover Constru
Location	Chicago, IL
Contractor	HIS Construction, Inc.
Inspector Name	Tayeb Farez

1	Test Number	1	2	3	4	5		
2	Date	11-06-08	→	→	→	→		
3	Re-Test of Number				5 (11-05-08)	6 (11-05-08)		
4	Type of Construction	Residential lot Embankment 2754 S. Sacramento			construction of swale along perimeter of site.			
5	Sample Number	#01	→	→	→	→		
6	Material Source							
7	Material Type	Brown silty clay loam	→	→	→	→		
8	Proctor Type	Standard	Standard	Standard	Standard	Standard	Standard	Standard
9	Max. Dry Density	114.6	→	→	→	→		
10	Optimum Moisture (%)	14.5	→	→	→	→		
11	Min. % of Proctor Density	95%	95%	95%	95%	95%	95%	95%
12	Test Location (Station/Offset)	—	—	—	Shot nr: 52396	Shot nr: 52397		
13	Elevation	4" BFG	4" BFG	4" BFG	594.46	596.48		
14	Probe Depth	10	10	10	6	6		
15	Test Wet Density (pcf)	124.0	126.5	125.0	128.8	128.0		
16	Test Dry Density (pcf)	106.2	106.4	105.5	110.6	109.7		
17	Test % Compaction	92.7	92.8	92.1	96.5	95.7		
18	Test % Moisture	16.8	18.9	18.4	16.4	16.7		
19	Test Moisture Count	214	239	232	218	219		
20	Test Density Count	934	868	906	2178	2219		
21	Result (Pass or Fail)	Pass	Pass	Pass	Pass	Pass		
22	See Re-Test No.							

Comments: 12' E. of the alley | 22' E. of the alley | 115' E. of the alley | 335' S. of corner of 27th St. & R.R. | 385' S. of corner of 27th St. & R.R.

Inspector: Tayeb Farez

Resident Engineer: _____

Field Soil/Aggregate Compaction Worksheet
Nuclear Moisture/Density Gauge Method

Testing Firm	Wang Engineering, Inc.
Address	1145 N Main Street
	Lombard, Illinois 60148
Office Telephone No.	(630) 953 - 9928
Gauge# / Serial No.	3430 / 33303
Calibration Date	12-20-08
M. Std / D. Std.	671 / 2406

Date	11-06-08
WEI Project No.	450-01-01
Client	CH2MHILL Constructors, Inc.
Project	Honeywell Celotex Main Site Cover Constru
Location	Chicago, IL
Contractor	HIS Construction, Inc.
Inspector Name	Tayeb Farez

1	Test Number	8	9	10	11	12	13	14
2	Date	11-06-08	→	→	→	→	→	→
3	Re-Test of Number							
4	Type of Construction	construction of swale along perimeter of the site	→	→	→	→	→	→
5	Sample Number	Bulk No: 1	→	→	→	→	→	→
6	Material Source							
7	Material Type	Gray clay	→	→	→	→	→	→
8	Proctor Type	Standard	Standard	Standard	Standard	Standard	Standard	Standard
9	Max. Dry Density	102.0	→	→	→	→	→	→
10	Optimum Moisture (%)	20.0	→	→	→	→	→	→
11	Min. % of Proctor Density	95%	95%	95%	95%	95%	95%	95%
12	Test Location (Station/Offset)	Shot nr: 52439	Shot nr: 52440	Shot nr: 52441	Shot nr: 52438	Shot nr: 52437	Shot nr: 52436	Shot nr: 52435
13	Elevation	596.87	596.38	596.76	598.42	596.51	597.20	598.22
14	Probe Depth	6	6	6	6	6	6	6
15	Test Wet Density (pcf)	114.0	113.0	119.4	122.0	120.5	119.5	120.0
16	Test Dry Density (pcf)	98.5	97.2	105.5	102.4	107.6	100.2	105.7
17	Test % Compaction	96.6	95.3	103.5	100.4	105.5	98.2	103.6
18	Test % Moisture	15.8	16.2	13.2	19.1	12.0	19.3	13.5
19	Test Moisture Count	189	191	171	233	160	231	175
20	Test Density Count	3032	3105	2693	2530	2631	2670	2660
21	Result (Pass or Fail)	Pass	Pass	Pass	Pass	Pass	Pass	Pass
22	See Re-Test No.							

Comments: 240' N of the corner of 28th St. & Whipple St. | 190' N of the corner of 28th St. & Whipple St. | 140' N of the corner of 28th St. & Whipple St. | 290' N of the corner of 28th St. & Whipple St. | 340' N of the corner of 28th St. & Whipple St. | 390' N of the corner of 28th St. & Whipple St. | 440' N of the corner of 28th St. & Whipple St.

Inspector: Tayeb Farez

Resident Engineer: _____

\\D5PTT911\NET\PROJECTS\1190501\MAINLINE FIELD COMPACTION FORM.XLS

Field Soil/Aggregate Compaction Worksheet
Nuclear Moisture/Density Gauge Method

Testing Firm	Wang Engineering, Inc.
Address	1145 N Main Street
	Lombard, Illinois 60148
Office Telephone No.	(630) 953 - 9928
Gauge# / Serial No.	3430 / 33303
Calibration Date	12-20-07
M. Std / D. Std.	671 / 2406

Date	11-06-08
WEI Project No.	450-01-01
Client	CH2MHILL Constructors, Inc.
Project	Honeywell Celotex Main Site Cover Constru
Location	Chicago, IL
Contractor	HIS Construction, Inc.
Inspector Name	Tayeb Farez

1	Test Number	15	16	17				
2	Date	11-06-08	→	→				
3	Re-Test of Number							
4	Type of Construction	Construction of swale along perimeter of the site.						
5	Sample Number	Batch 2 N01	→	→				
6	Material Source							
7	Material Type	Gray clay	→	→				
8	Proctor Type	Standard	Standard	Standard	Standard	Standard	Standard	Standard
9	Max. Dry Density	102.0	→	→				
10	Optimum Moisture (%)	20.0	→	→				
11	Min. % of Proctor Density	95%	95%	95%	95%	95%	95%	95%
12	Test Location (Station/Offset)	Shot Nr: 52443	Shot Nr: 52443	Shot Nr: 52442				
13	Elevation	599.36	598.09	599.10				
14	Probe Depth	6	6	6				
15	Test Wet Density (pcf)	126.3	125.7	124.7				
16	Test Dry Density (pcf)	108.5	108.1	107.2				
17	Test % Compaction	106.4	106.0	105.1				
18	Test % Moisture	16.3	16.3	16.4				
19	Test Moisture Count	213	212	211				
20	Test Density Count	2304	2332	2384				
21	Result (Pass or Fail)	Pass	Pass	Pass				
22	See Re-Test No.							

Comments: corner of 28th St. & Whipple St. | 50' N. of the corner of 28th St. & Whipple St. | 100' N. of the corner of 28th St. & Whipple St.

Inspector: Tayeb Farez

Resident Engineer: _____

Wang Engineering, Inc.

1145 N. Main Street, Lombard, IL 60148
☎ (630) 953-9928 Fax: (630) 953-9938

FIELD OBSERVATION REPORT

Sequence _____

Sheet 1 of 3

Date 11-10-08 WEI No. 450-01-01

Project Name Honeywell Celotex Main Site Cover Construction Arrive Time 1:00

Project Location Chicago, IL Depart Time 5:15

Client CH2MHILL Constructors, Inc. Total Hrs. on Job 4.25

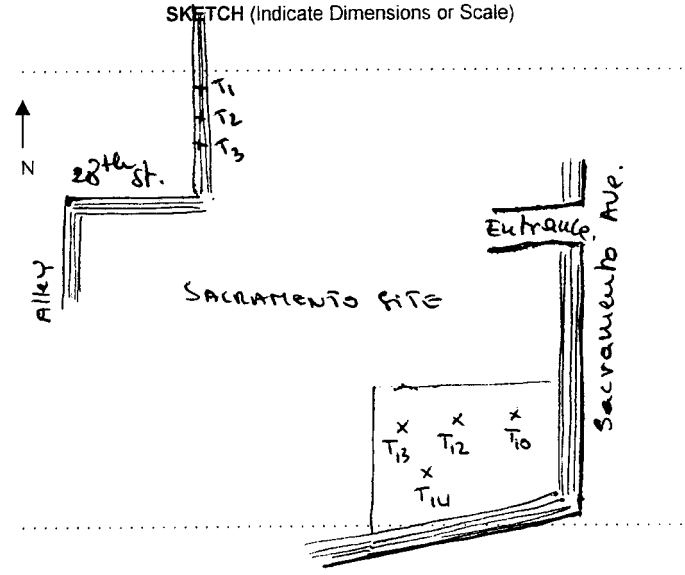
Contractor HIS Construction, Inc. Travel Time 2

Mileage Start 36349 Mileage End 36415 Daily Mileage 66 Total Chargeable Hrs. 6.25

Summary of technical and/or engineering services performed including field test data (attach additional sheets as required).

I arrived at the job site at 1:00 PM - Met Michael Lehman of CH2MHILL - Discussed the work (QC/QA) compaction of the materials used for the construction of the swale along the perimeter of the site and capping the main site surface -
Performed several nuclear density tests on slope at N.W of the Sacramento site (behind the ~~[illegible]~~ warehouse) and on main site (CA at S.E of the Sacramento site -
All tests passed the required specification -
Please see the attached Datasheets for test results and locatio

SKETCH (Indicate Dimensions or Scale)



Attested _____ WEI Name Tayeb Farez

Company _____ WEI Signature Tayeb Farez

Date _____ WEI Reviewed _____

Note: All test data, locations, elevations, and depths, etc. are subject to office review.

Field Soil/Aggregate Compaction Worksheet
Nuclear Moisture/Density Gauge Method

Testing Firm	Wang Engineering, Inc.
Address	1145 N Main Street
	Lombard, Illinois 60148
Office Telephone No.	(630) 953 - 9928
Gauge# / Serial No.	3430 / 33303
Calibration Date	12-20-07
M. Std / D. Std.	669 / 2391

Date	11-10-08
WEI Project No.	450-01-01
Client	CH2MHILL Constructors, Inc.
Project	Honeywell Celotex Main Site Cover Constru
Location	Chicago, IL
Contractor	HIS Construction, Inc.
Inspector Name	**Tayeb Farez**

1	Test Number	10	11	12	13	14		
2	Date	11-10-08	→	→	→	→		
3	Re-Test of Number		10					
4	Type of Construction	CA-6 aggregate capping main site surface	→	→	→	→		
5	Sample Number	CA-6 #1						
6	Material Source	Material Service Corporation	→	→	→	→		
7	Material Type	CA-6	→	→	→	→		
8	Proctor Type	Standard	Standard	Standard	Standard	Standard	Standard	Standard
9	Max. Dry Density	135	→	→	→	→		
10	Optimum Moisture (%)	6	→	→	→	→		
11	Min. % of Proctor Density	95%	95%	95%	95%	95%	95%	95%
12	Test Location (Station/Offset)	Shot Nr: 52523	Shot Nr: 52523	Shot Nr: 52522	Shot Nr: 52521	Shot Nr: 52563		
13	Elevation	599.67	599.67	598.60	597.15	597.48		
14	Probe Depth	6	6	6	6	6		
15	Test Wet Density (pcf)	130.6	139.3	142.1	143.0	137.5		
16	Test Dry Density (pcf)	124.3	131.3	134.3	135.9	130.9		
17	Test % Compaction	92.1	97.3	99.5	100.6	97		
18	Test % Moisture	5.1	6.0	5.8	5.2	5.0		
19	Test Moisture Count	87	105	104	96	90		
20	Test Density Count	2104	1735	1629	1599	1808		
21	Result (Pass or Fail)	Fail	Pass	Pass	Pass	Pass		
22	See Re-Test No.	11						

Comments:

Inspector: Tayeb Farez

Resident Engineer: _____

Field Soil/Aggregate Compaction Worksheet
Nuclear Moisture/Density Gauge Method

Testing Firm	Wang Engineering, Inc.
Address	1145 N Main Street
	Lombard, Illinois 60148
Office Telephone No.	(630) 953 - 9928
Gauge# / Serial No.	3430 / 33303
Calibration Date	12-20-08
M. Std / D. Std.	669 / 2391

Date	11-10-08
WEI Project No.	450-01-01
Client	CH2MHILL Constructors, Inc.
Project	Honeywell Celotex Main Site Cover Constru
Location	Chicago, IL
Contractor	HIS Construction, Inc.
Inspector Name	**Tayeb Farez**

1	Test Number	1	2	3				
2	Date	11-10-08	→	→				
3	Re-Test of Number			1				
4	Type of Construction	Construction of swale along perimeter of site						
5	Sample Number	#01	→	→				
6	Material Source							
7	Material Type	Brown silty clay loam	→	→				
8	Proctor Type	Standard	Standard	Standard	Standard	Standard	Standard	Standard
9	Max. Dry Density	114.6	→	→				
10	Optimum Moisture (%)	14.5	→	→				
11	Min. % of Proctor Density	95%	95%	95%	95%	95%	95%	95%
12	Test Location (Station/Offset)	—	—	—				
13	Elevation	—	—	—				
14	Probe Depth	6	6	6				
15	Test Wet Density (pcf)	128.0	128.1	126.3				
16	Test Dry Density (pcf)	108.3	109.5	108.8				
17	Test % Compaction	94.5	95.5	95.0				
18	Test % Moisture	18.2	17.1	16.1				
19	Test Moisture Count	234	223	210				
20	Test Density Count	2199	2193	2286				
21	Result (Pass or Fail)	F	Pass	Pass				
22	See Re-Test No.	3						

Comments: 150' N of the corner of 28th St. & warehouse | 150' N. of the corner of 28th St & warehouse | 150' N of the corner of 28th St & warehouse

Inspector: Tayeb Farez

Resident Engineer: _____

Wang Engineering, Inc.

1145 N. Main Street, Lombard, IL 60148
☎ (630) 953-9928 Fax: (630) 953-9938

FIELD OBSERVATION REPORT

[redacted] _____

Date 11-11-08 WEI No. 450-01-01

Project Name Honeywell Celotex Main Site Cover Construction Arrive Time 1:00

Project Location Chicago, IL Depart Time 5:30

Client CH2MHILL Constructors, Inc. Total Hrs. on Job 4.5

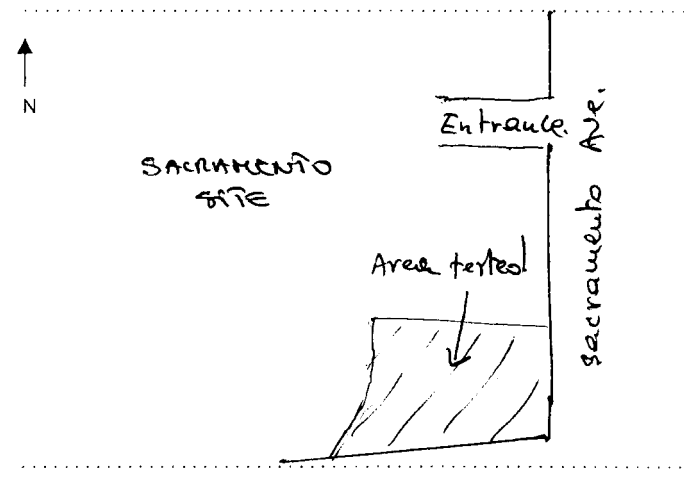
Contractor HIS Construction, Inc. Travel Time 2

Mileage Start 36145 Mileage End 36463 Daily Mileage 48 Total Chargeable Hrs. 6.5

Summary of technical and/or engineering services performed including field test data (attach additional sheets as required).

Arrived at the job site at 1:00 PM - Met Michael Lehman of CH2MHILL.
Directed the work (Qc/QA) compaction of the material used to cap the main site surface.
Performed several nuclear density tests at various locations on S.E of the Sacramento site.
All tests passed the required specification of 95%.
Attached the datasheets for test results and locations.

SKETCH (Indicate Dimensions or Scale)



Attested _____ WEI Name Tayeb Farez

Company _____ WEI Signature Tayeb Farez

Date _____ WEI Reviewed _____

Note: All test data, locations, elevations, and depths, etc. are subject to office review.

Field Soil/Aggregate Compaction Worksheet
Nuclear Moisture/Density Gauge Method

Testing Firm	Wang Engineering, Inc.
Address	1145 N Main Street
	Lombard, Illinois 60148
Office Telephone No.	(630) 953 - 9928
Gauge# / Serial No.	3430 / 33303
Calibration Date	12-20-08
M. Std / D. Std.	669 / 2391

Date	11-11-08
WEI Project No.	450-01-01
Client	CH2MHILL Constructors, Inc.
Project	Honeywell Celotex Main Site Cover Constru
Location	Chicago, IL
Contractor	HIS Construction, Inc.
Inspector Name	**Tayeb Farez**

1	Test Number	1	2	3	4	5	6	7
2	Date	11-11-08	→	→	→	→	→	→
3	Re-Test of Number						5	
4	Type of Construction	Capping main site surface with CA-6 Aggregate	→	→	→	→	→	→
5	Sample Number	CA-6 #01						
6	Material Source	Material Service Corporation	→	→	→	→	→	→
7	Material Type	CA-6						
8	Proctor Type	Standard	Standard	Standard	Standard	Standard	Standard	Standard
9	Max. Dry Density	135	→	→	→	→	→	→
10	Optimum Moisture (%)	6	→	→	→	→	→	→
11	Min. % of Proctor Density	95%	95%	95%	95%	95%	95%	95%
12	Test Location (Station/Offset)	Shot Nr: 52562	– 52561	– 52564	– 52586	– 52585	– 52585	– 52581
13	Elevation	596.87	597.81	597.45	599.72	599.41	599.41	598.69
14	Probe Depth	6	→	→	→	→	→	→
15	Test Wet Density (pcf)	138.2	143.0	143.1	139.5	133.7	137.8	140.9
16	Test Dry Density (pcf)	131.3	134.5	135.3	130.2	125.9	129.1	131.5
17	Test % Compaction	97.3	99.6	100.2	96.4	93.3	95.6	97.4
18	Test % Moisture	5.2	6.4	5.7	7.1	6.2	6.7	7.1
19	Test Moisture Count	93	112	103	120	103	113	121
20	Test Density Count	1779	1595	1595	1724	1963	1791	1672
21	Result (Pass or Fail)	Pass	Pass	Pass	Pass	Fail	Pass	Pass
22	See Re-Test No.					6		

Comments:

Inspector: Tayeb Farez

Resident Engineer: _____

Field Soil/Aggregate Compaction Worksheet
Nuclear Moisture/Density Gauge Method

Testing Firm	Wang Engineering, Inc.
Address	1145 N Main Street
	Lombard, Illinois 60148
Office Telephone No.	(630) 953 - 9928
Gauge# / Serial No.	3430 / 33303
Calibration Date	12-20-09
M. Std / D. Std.	669 / 2391

Date	11-11-08
WEI Project No.	450-01-01
Client	CH2MHILL Constructors, Inc.
Project	Honeywell Celotex Main Site Cover Constru
Location	Chicago, IL
Contractor	HIS Construction, Inc.
Inspector Name	**Tayeb Farez**

1	Test Number	8	9	10				
2	Date	11-11-08	→	→				
3	Re-Test of Number							
4	Type of Construction	Capping main site surface with CA-6 aggregate						
5	Sample Number	CA-6 #01	→	→				
6	Material Source	Material Service Corporation						
7	Material Type	CA-6	→	→				
8	Proctor Type	Standard	Standard	Standard	Standard	Standard	Standard	Standard
9	Max. Dry Density	135	→	→				
10	Optimum Moisture (%)	6	→	→				
11	Min. % of Proctor Density	95%	95%	95%	95%	95%	95%	95%
12	Test Location (Station/Offset)	Shotnor: 52584	– 52582	– 52583				
13	Elevation	598.62	599.05	598.62				
14	Probe Depth	6	→	→				
15	Test Wet Density (pcf)	140.9	137.5	142.1				
16	Test Dry Density (pcf)	132.3	128.3	133.5				
17	Test % Compaction	98.0	95.0	98.9				
18	Test % Moisture	6.6	7.2	6.5				
19	Test Moisture Count	113	119	113				
20	Test Density Count	1671	1808	1627				
21	Result (Pass or Fail)	Pass	Pass	Pass				
22	See Re-Test No.							

Comments:

Inspector: Tayeb Farez

Resident Engineer: _____

Wang Engineering, Inc.

1145 N. Main Street, Lombard, IL 60148
☎ (630) 953-9928 Fax: (630) 953-9938

FIELD OBSERVATION REPORT

Sample No. _____

Date 11-12-08 | WEI No. 450-01-01

Project Name Honeywell Celotex Main Site Cover Construction | Arrive Time 12:00

Project Location Chicago, IL | Depart Time 2:00

Client CH2MHILL Constructors, Inc. | Total Hrs. on Job 2

Contractor HIS Construction, Inc. | Travel Time 1.5

Mileage Start 36466 Mileage End 36508 Daily Mileage 42 | Total Chargeable Hrs. 3.5

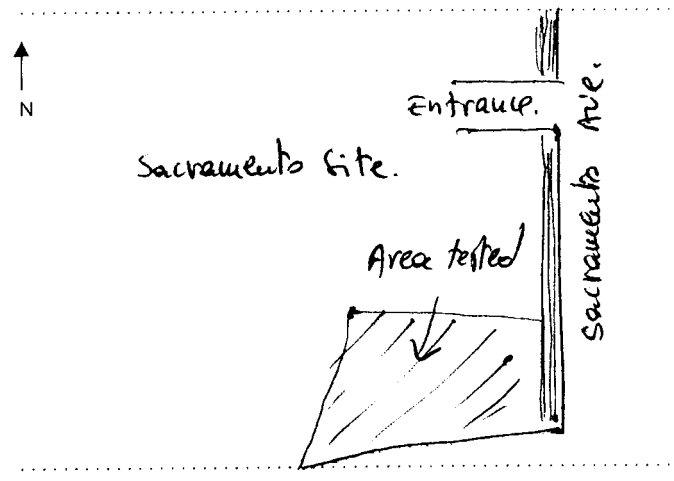
Summary of technical and/or engineering services performed including field test data (attach additional sheets as required).

I arrived at the job site at 12:00 PM - met Michael Lehman and Benny Vine of CH2MHILL - Inspected the work (Qc/QA) compaction of the material used to cap the main site surface.

Run several tests at various locations on S.E of the Sacramento site.

Please see attached datasheet for test results and locations.

SKETCH (Indicate Dimensions or Scale)



Attested _____

Company _____

Date _____

WEI Name Tayeb Farez

WEI Signature Tayeb Farez

WEI Reviewed _____

Note: All test data, locations, elevations, and depths, etc. are subject to office review.

Field Soil/Aggregate Compaction Worksheet
Nuclear Moisture/Density Gauge Method

Testing Firm	Wang Engineering, Inc.
Address	1145 N Main Street
	Lombard, Illinois 60148
Office Telephone No.	(630) 953 - 9928
Gauge# / Serial No.	3430 / 33303
Calibration Date	12-20-07
M. Std / D. Std.	672 / 2403

Date	11-12-08
WEI Project No.	450-01-01
Client	CH2MHILL Constructors, Inc.
Project	Honeywell Celotex Main Site Cover Constru
Location	Chicago, IL
Contractor	HIS Construction, Inc.
Inspector Name	Tayeb Farez

1	Test Number	1	2	3	4	5	6	
2	Date	11-12-08	→	→	→	→	→	
3	Re-Test of Number							
4	Type of Construction	Capping main site surface with CA-6 Aggregate	→	→	→	→	→	
5	Sample Number	CA-6 #01						
6	Material Source	Material Service Corporation	→	→	→	→	→	
7	Material Type	CA-6	→	→	→	→	→	
8	Proctor Type	Standard	Standard	Standard	Standard	Standard	Standard	Standard
9	Max. Dry Density	135	→	→	→	→	→	
10	Optimum Moisture (%)	6	→	→	→	→	→	
11	Min. % of Proctor Density	95%	95%	95%	95%	95%	95%	95%
12	Test Location (Station/Offset)	Shot Nr: 52591	– 52592	– 52593	– 52594	– 52595	– 52596	
13	Elevation	599.30	599.41	598.21	598.73	597.42	598.75	
14	Probe Depth	6	→	→	→	→	→	
15	Test Wet Density (pcf)	144.4	141.6	143.6	140.5	135.5	139.8	
16	Test Dry Density (pcf)	133.2	132.6	133.7	131.4	128.6	131.8	
17	Test % Compaction	98.7	98.2	99.0	97.3	95.2	97.6	
18	Test % Moisture	8.4	6.8	7.5	7.0	5.4	6.1	
19	Test Moisture Count	141	117	128	119	94	106	
20	Test Density Count	1551	1655	1579	1693	1899	1723	
21	Result (Pass or Fail)	Pass	Pass	Pass	Pass	Pass	Pass	
22	See Re-Test No.							

Comments:

Inspector: Tayeb

Resident Engineer: _____

Wang Engineering, Inc.

1145 N. Main Street, Lombard, IL 60148
☎ (630) 953-9928 Fax: (630) 953-9938

FIELD OBSERVATION REPORT

Sample _____

Date 11-13-08 WEI No. 450-01-01

Project Name Honeywell Celotex Main Site Cover Construction Arrive Time 11:30

Project Location Chicago, IL Depart Time 5:15

Client CH2MHILL Constructors, Inc. Total Hrs. on Job 5.75

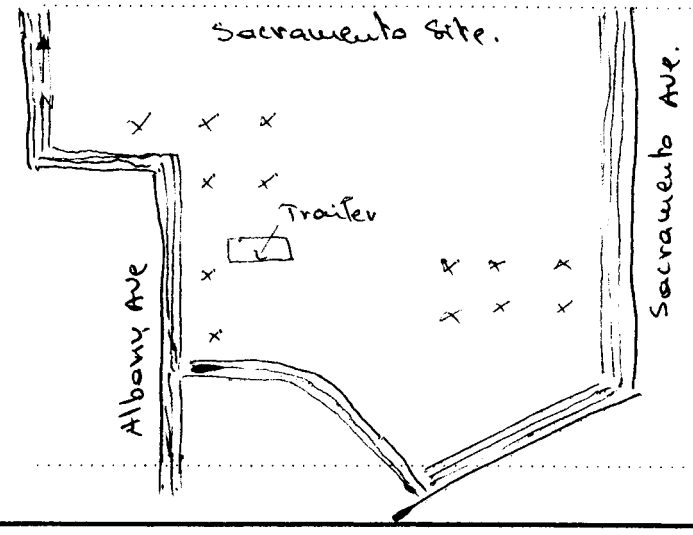
Contractor HIS Construction, Inc. Travel Time 2.25

Mileage Start 36508 Mileage End 36559 Daily Mileage 51 Total Chargeable Hrs. 8

Summary of technical and/or engineering services performed including field test data (attach additional sheets as required).

"I arrived at the Job site at 11:30 AM. Met Michael Lehman of CH2MHILL. Directed the work (Qc/QA) compaction of the materials used to cap the main site surface and backfill front yard residential on S. Sacramento. Performed several nuclear density tests at various locations on S.E and S.W of Sacramento site and on front yard of 2642 S. Sacramento Ave. All tests passed the required specification. Please see the attached datasheets for test results and locations.

SKETCH (Indicate Dimensions or Scale)



Attested _____ WEI Name Tayeb Farez

Company _____ WEI Signature Tayeb Farez

Date _____ WEI Reviewed _____

Note: All test data, locations, elevations, and depths, etc. are subject to office review.

Field Soil/Aggregate Compaction Worksheet
Nuclear Moisture/Density Gauge Method

Testing Firm	Wang Engineering, Inc.
Address	1145 N Main Street
	Lombard, Illinois 60148
Office Telephone No.	(630) 953 - 9928
Gauge# / Serial No.	3430 / 33303
Calibration Date	12-20-07
M. Std / D. Std.	664 / 2408

Date	11-13-08
WEI Project No.	450-01-01
Client	CH2MHILL Constructors, Inc.
Project	Honeywell Celotex Main Site Cover Constru
Location	Chicago, IL
Contractor	HIS Construction, Inc.
Inspector Name	**Tayeb Farez**

1	Test Number	1	2	3	4	5	6	7
2	Date	11-13-08	→	→	→	→	→	→
3	Re-Test of Number							
4	Type of Construction	Capping main site surface with CA-6 aggregate	→	→	→	→	→	→
5	Sample Number	CA-6 #01	→	→	→	→	CA-06 #02	→
6	Material Source	Material Service Corporation	→	→	→	→	Vulcan	→
7	Material Type	CA-6	→	→	→	→	CA-6	→
8	Proctor Type	Standard	Standard	Standard	Standard	Standard	Standard	Standard
9	Max. Dry Density	135	→	→	→	→	134	→
10	Optimum Moisture (%)	6	→	→	→	→	9	→
11	Min. % of Proctor Density	95%	95%	95%	95%	95%	95%	95%
12	Test Location (Station/Offset)	Shot Nr: 52614	—	—	—	—	—	—
			52615	52616	52617	52618	52619	52623
13	Elevation	599.38	598.39	597.92	599.23	597.26	597.70	597.98
14	Probe Depth	6	6	6	6	6	6	6
15	Test Wet Density (pcf)	142.3	147.2	136.6	141.7	138.6	144.6	141.9
16	Test Dry Density (pcf)	134.2	139.4	130.1	134.2	132.1	137.5	133.2
17	Test % Compaction	99.4	103.2	96.4	99.4	97.8	102.6	99.4
18	Test % Moisture	6.0	5.6	5.0	5.6	5.0	5.2	6.6
19	Test Moisture Count	106	103	89	100	89	95	113
20	Test Density Count	1635	1466	1855	1656	1775	1555	1646
21	Result (Pass or Fail)	Pass	Pass	Pass	Pass	Pass	Pass	Pass
22	See Re-Test No.							

Comments:

Inspector: Tayeb Farez

Resident Engineer: _____

Field Soil/Aggregate Compaction Worksheet
Nuclear Moisture/Density Gauge Method

Testing Firm	Wang Engineering, Inc.
Address	1145 N Main Street
	Lombard, Illinois 60148
Office Telephone No.	(630) 953 - 9928
Gauge# / Serial No.	3430 / 33303
Calibration Date	12-20-07
M. Std / D. Std.	664 / 2408

Date	11-13-08
WEI Project No.	450-01-01
Client	CH2MHILL Constructors, Inc.
Project	Honeywell Celotex Main Site Cover Constru
Location	Chicago, IL
Contractor	HIS Construction, Inc.
Inspector Name	**Tayeb Farez**

1	Test Number	8	9	10	11			
2	Date	11-13-08	→	→	→			
3	Re-Test of Number				9			
4	Type of Construction	Capping Main Site surface with CA-6 aggregate	→	→	→			
5	Sample Number	CA-06 #02	→	→	→			
6	Material Source	Vulcan Materials company	→	→	→			
7	Material Type	CA-6	→	→	→			
8	Proctor Type	Standard	Standard	Standard	Standard	Standard	Standard	Standard
9	Max. Dry Density	134	→	→	→			
10	Optimum Moisture (%)	9	→	→	→			
11	Min. % of Proctor Density	95%	95%	95%	95%	95%	95%	95%
12	Test Location (Station/Offset)	Shot Nr: 52625	—	—	— 52627			
13	Elevation	598.20	598.63	599.13	598.63			
14	Probe Depth	6	6	6	6			
15	Test Wet Density (pcf)	141.9	130.8	144.5	139.9			
16	Test Dry Density (pcf)	133.1	124.5	134.9	132.6			
17	Test % Compaction	99.3	92.9	100.7	98.9			
18	Test % Moisture	6.6	5.1	7.1	5.5			
19	Test Moisture Count	114	87	122	97			
20	Test Density Count	1646	2110	1554	1725			
21	Result (Pass or Fail)	Pass	Fail	Pass	Pass			
22	See Re-Test No.		11					

Comments:

Inspector: Tayeb Farez

Resident Engineer: _____

Field Soil/Aggregate Compaction Worksheet
Nuclear Moisture/Density Gauge Method

Testing Firm	Wang Engineering, Inc.
Address	1145 N Main Street
	Lombard, Illinois 60148
Office Telephone No.	(630) 953 - 9928
Gauge# / Serial No.	3430 / 33303
Calibration Date	12-20-07
M. Std / D. Std.	664 / 2408

Date	11-13-08
WEI Project No.	450-01-01
Client	CH2MHILL Constructors, Inc.
Project	Honeywell Celotex Main Site Cover Constru
Location	Chicago, IL
Contractor	HIS Construction, Inc.
Inspector Name	**Tayeb Farez**

1	Test Number	1	2					
2	Date	11-13-08	→					
3	Re-Test of Number							
4	Type of Construction	Backfill front yard	residential					
5	Sample Number	Top soil #02	→					
6	Material Source							
7	Material Type	Black sandy loam						
8	Proctor Type	Standard	Standard	Standard	Standard	Standard	Standard	Standard
9	Max. Dry Density	103.2	→					
10	Optimum Moisture (%)	17.9	→					
11	Min. % of Proctor Density	90%	90%	95%	95%	95%	95%	95%
12	Test Location (Station/Offset)	Residential Front yard 1	residential Front yard 2					
13	Elevation	FG	FG					
14	Probe Depth	12	12					
15	Test Wet Density (pcf)	119.2	124.3					
16	Test Dry Density (pcf)	100.2	104.6					
17	Test % Compaction	97.1	101.3					
18	Test % Moisture	19.0	18.9					
19	Test Moisture Count	225	233					
20	Test Density Count	614	520					
21	Result (Pass or Fail)	Pass	Pass					
22	See Re-Test No.							

Comments: Front yard of 2642 S. Sacramento

Inspector: Tayeb Farez

Resident Engineer: _____

Wang Engineering, Inc.

1145 N. Main Street, Lombard, IL 60148
☎ (630) 953-9928 Fax: (630) 953-9938

FIELD OBSERVATION REPORT

[redacted] _____

Date 11-14-08 WEI No. 450-01-01

Project Name Honeywell Celotex Main Site Cover Construction Arrive Time 9:00

Project Location Chicago, IL Depart Time 3:45

Client CH2MHILL Constructors, Inc. Total Hrs. on Job 6.75

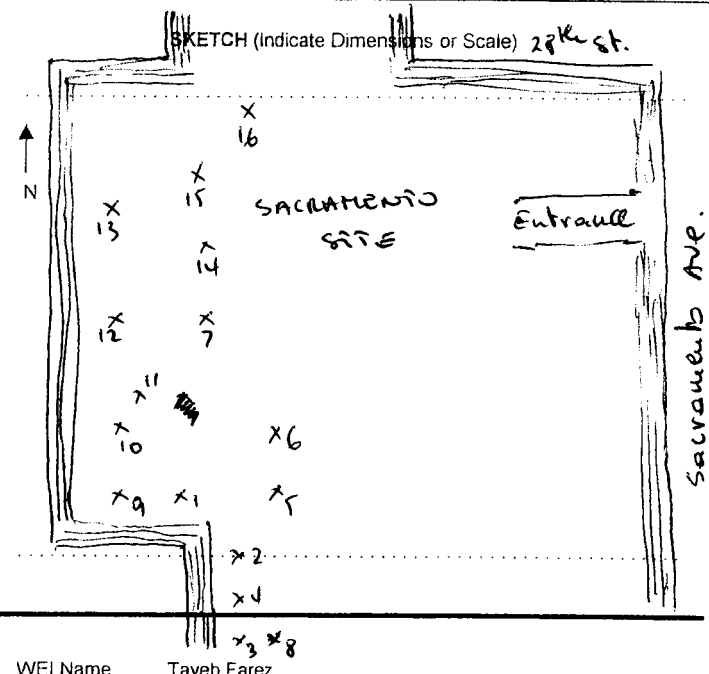
Contractor HIS Construction, Inc. Travel Time 2

Mileage Start 36559 Mileage End 36605 Daily Mileage 46 Total Chargeable Hrs. 8.75

Summary of technical and/or engineering services performed including field test data (attach additional sheets as required).

Reached the Job site at 9:00 AM - met Michael Lehman of CH2MHILL - Discussed the work (Qc/QA) compaction of the materials used to cap the main site surface and backfill the front yard residential on S. Sacramento - Run several tests at various locations on S.W of Sacramento site and on front yard of 2754 S. Sacramento Ave -
All test meet the required specifications.
Attached the datasheets for test results and locations.

SKETCH (Indicate Dimensions or Scale)



Attested _____ WEI Name Tayeb Farez

Company _____ WEI Signature Tayeb Farez

Date _____ WEI Reviewed _____

Note: All test data, locations, elevations, and depths, etc. are subject to office review.

Field Soil/Aggregate Compaction Worksheet
Nuclear Moisture/Density Gauge Method

Testing Firm	Wang Engineering, Inc.
Address	1145 N Main Street
	Lombard, Illinois 60148
Office Telephone No.	(630) 953 - 9928
Gauge# / Serial No.	3430 / 33303
Calibration Date	12-20-07
M. Std / D. Std.	664 / 2408

Date	11-14-08
WEI Project No.	450-01-01
Client	CH2MHILL Constructors, Inc.
Project	Honeywell Celotex Main Site Cover Constru
Location	Chicago, IL
Contractor	HIS Construction, Inc.
Inspector Name	**Tayeb Farez**

1	Test Number	1	2	3	4	5	6	7
2	Date	11-14-08	—					→
3	Re-Test of Number							
4	Type of Construction	Capping main site surface with CA-6 aggregate			—			→
5	Sample Number	CA-6 #02	—					→
6	Material Source	Vulcan Materials Company			—			→
7	Material Type	CA-6	—					→
8	Proctor Type	Standard	Standard	Standard	Standard	Standard	Standard	Standard
9	Max. Dry Density	134	—					→
10	Optimum Moisture (%)	9	—					→
11	Min. % of Proctor Density	95%	95%	95%	95%	95%	95%	95%
12	Test Location (Station/Offset)	Shot Nr: 52667	Shot Nr: 52661	— 52669	— 52659	— 52664	— 52665	— 52666
13	Elevation	599.91	598.66	598.14	598.39	598.69	598.72	599.60
14	Probe Depth	6	6	6	6	6	6	6
15	Test Wet Density (pcf)	140.4	141.6	141.4	137.6	144.6	140.6	146.8
16	Test Dry Density (pcf)	131.8	132.7	132.8	129.6	134.2	131.1	136.0
17	Test % Compaction	98.3	98.7	99.1	96.7	100.2	97.8	101.5
18	Test % Moisture	6.6	7.0	6.4	6.2	7.7	7.2	8.0
19	Test Moisture Count	112	119	111	105	131	121	136
20	Test Density Count	1702	1656	1667	1813	1548	1695	1473
21	Result (Pass or Fail)	Pass	Pass	Pass	Pass	Pass	Pass	Pass
22	See Re-Test No.							

Comments:

Inspector: Tayeb Farez

Resident Engineer: _____

Field Soil/Aggregate Compaction Worksheet
Nuclear Moisture/Density Gauge Method

Testing Firm	Wang Engineering, Inc.
Address	1145 N Main Street
	Lombard, Illinois 60148
Office Telephone No.	(630) 953 - 9928
Gauge# / Serial No.	3430 / 33303
Calibration Date	12-20-07
M. Std / D. Std.	664 / 2408

Date	11-14-08
WEI Project No.	450-01-01
Client	CH2MHILL Constructors, Inc.
Project	Honeywell Celotex Main Site Cover Constru
Location	Chicago, IL
Contractor	HIS Construction, Inc.
Inspector Name	**Tayeb Farez**

1	Test Number	8	9	10	11	12	13	14
2	Date	11-14-08	→	→	→	→	→	→
3	Re-Test of Number							
4	Type of Construction	Capping main tire surface with CA-6 aggregate.						
5	Sample Number	CA-6 #02	→	→	→	→	→	→
6	Material Source	Vulcan Materials Company	→	→	→	→	→	→
7	Material Type	CA-6						
8	Proctor Type	Standard	Standard	Standard	Standard	Standard	Standard	Standard
9	Max. Dry Density	134						
10	Optimum Moisture (%)	9						
11	Min. % of Proctor Density	95%	95%	95%	95%	95%	95%	95%
12	Test Location (Station/Offset)	Shot Nr: 52671	— 52668	— 52681	— 52682	— 52683	— 52701	— 52688
13	Elevation	598.65	599.10	600.10	600.14	601.12	601.25	588.71
14	Probe Depth	6	6	6	6	6	6	6
15	Test Wet Density (pcf)	139.0	144.6	148.5	140.4	146.4	134.9	146.8
16	Test Dry Density (pcf)	129.5	133.6	137.3	132.2	136.7	127.7	135.4
17	Test % Compaction	96.6	99.7	102.5	98.6	102	95.3	101.1
18	Test % Moisture	7.3	8.3	8.2	6.2	7.1	5.6	8.4
19	Test Moisture Count	121	138	140	107	124	96	141
20	Test Density Count	1755	1547	1419	1705	1488	1927	1475
21	Result (Pass or Fail)	Pass	Pass	Pass	Pass	Pass	Pass	Pass
22	See Re-Test No.							

Comments:

Inspector: Tayeb

Resident Engineer: _____

Field Soil/Aggregate Compaction Worksheet
Nuclear Moisture/Density Gauge Method

Testing Firm	Wang Engineering, Inc.
Address	1145 N Main Street
	Lombard, Illinois 60148
Office Telephone No.	(630) 953 - 9928
Gauge# / Serial No.	3430 / 133303
Calibration Date	12-20-07
M. Std / D. Std.	664 / 12408

Date	11-14-08
WEI Project No.	450-01-01
Client	CH2MHILL Constructors, Inc.
Project	Honeywell Celotex Main Site Cover Constru
Location	Chicago, IL
Contractor	HIS Construction, Inc.
Inspector Name	**Tayeb Farez**

1	Test Number	15	16					
2	Date	11-14-08	→					
3	Re-Test of Number							
4	Type of Construction	capping main line surface with CA-6						
5	Sample Number	CA-06 #02						
6	Material Source	Vulcan Materials Company						
7	Material Type	CA-6	→					
8	Proctor Type	Standard	Standard	Standard	Standard	Standard	Standard	Standard
9	Max. Dry Density	134	→					
10	Optimum Moisture (%)	9	→					
11	Min. % of Proctor Density	95%	95%	95%	95%	95%	95%	95%
12	Test Location (Station/Offset)	Stat nr: 52 689	– 52 690					
13	Elevation	600.27	600.48					
14	Probe Depth	6	6					
15	Test Wet Density (pcf)	135.3	141.0					
16	Test Dry Density (pcf)	128.1	133.0					
17	Test % Compaction	95.3	99.0					
18	Test % Moisture	5.6	6.0					
19	Test Moisture Count	96	105					
20	Test Density Count	1909	1680					
21	Result (Pass or Fail)	Pass	Pass					
22	See Re-Test No.							

Comments:

Inspector: Tayeb Farez

Resident Engineer: _____

\\D5PTT911\WETPROJECTS\1190501\MAINLINE FIELD COMPACTION FORM.XLS

Field Soil/Aggregate Compaction Worksheet
Nuclear Moisture/Density Gauge Method

Testing Firm	Wang Engineering, Inc.
Address	1145 N Main Street
	Lombard, Illinois 60148
Office Telephone No.	(630) 953 - 9928
Gauge# / Serial No.	3430 / 33303
Calibration Date	12-20-07
M. Std / D. Std.	664 / 2408

Date	11-14-08
WEI Project No.	450-01-01
Client	CH2MHILL Constructors, Inc.
Project	Honeywell Celotex Main Site Cover Constru
Location	Chicago, IL
Contractor	HIS Construction, Inc.
Inspector Name	**Tayeb Farez**

1	Test Number	1	2					
2	Date	11-14-08	→					
3	Re-Test of Number							
4	Type of Construction	Backfill Front	Residential Yard					
5	Sample Number	Top Soil #02	→					
6	Material Source							
7	Material Type	Black Sandy Loam						
8	Proctor Type	Standard	Standard	Standard	Standard	Standard	Standard	Standard
9	Max. Dry Density	103.2	→					
10	Optimum Moisture (%)	17.9	→					
11	Min. % of Proctor Density	95%	95%	95%	95%	95%	95%	95%
12	Test Location (Station/Offset)	Residential Front yard 1st lift	Residential Front yard 2nd lift					
13	Elevation	6" BFG	1" BFG					
14	Probe Depth	8"	8"					
15	Test Wet Density (pcf)	119.5	119.2					
16	Test Dry Density (pcf)	97.7	97.3					
17	Test % Compaction	94.7	94.3					
18	Test % Moisture	22.3	22.5					
19	Test Moisture Count	255	256					
20	Test Density Count	1769	1783					
21	Result (Pass or Fail)	Pass	Pass					
22	See Re-Test No.							

Comments: Front Yard of 2754 S. Sacramento Ave.

Inspector: Tayeb F

Resident Engineer: _____

Wang Engineering, Inc.

1145 N. Main Street, Lombard, IL 60148
☎ (630) 953-9928 Fax: (630) 953-9938

FIELD OBSERVATION REPORT

Sample [redacted]

Date 11-17-08 | WEI No. 450-01-01

Project Name Honeywell Celotex Main Site Cover Construction | Arrive Time 9:00

Project Location Chicago, IL | Depart Time 5:00

Client CH2MHILL Constructors, Inc. | Total Hrs. on Job 8

Contractor HIS Construction, Inc. | Travel Time 2

Mileage Start 36605 Mileage End 36653 Daily Mileage 48 | Total Chargeable Hrs. 10

Summary of technical and/or engineering services performed including field test data (attach additional sheets as required).

Arrived at the Job Site at 9:00 AM. Met Michael Lehman of CH2MHILL. Inspected the work (Qc/Qa) compaction of the materials used to cap the main site surface and backfill the back yard residential on S. Sacramento Ave.

Performed several nuclear density tests on Sacramento Site and back yard of 2642 S. Sacramento Ave.

All tests passed the required specifications

Please see the attached Datasheets for test results and locations.

SKETCH (Indicate Dimensions or Scale)

N

Attested

Company

Date

WEI Name Tayeb Farez

WEI Signature Tayeb Farez

WEI Reviewed

Note: All test data, locations, elevations, and depths, etc. are subject to office review.

Field Soil/Aggregate Compaction Worksheet
Nuclear Moisture/Density Gauge Method

Testing Firm	Wang Engineering, Inc.
Address	1145 N Main Street
	Lombard, Illinois 60148
Office Telephone No.	(630) 953 - 9928
Gauge# / Serial No.	3430 / 33303
Calibration Date	12 - 20 - 08
M. Std / D. Std.	674 / 2412

Date	11-17-08
WEI Project No.	450-01-01
Client	CH2MHILL Constructors, Inc.
Project	Honeywell Celotex Main Site Cover Constru
Location	Chicago, IL
Contractor	HIS Construction, Inc.
Inspector Name	**Tayeb Farez**

1	Test Number	1	2	3	4	5	6	7
2	Date	11-17-08	→	→	→	→	→	→
3	Re-Test of Number							
4	Type of Construction	Capping main site surface with CA-6 aggregate	→	→	→	→	→	→
5	Sample Number	CA-06 #02	→	→	→	→	→	→
6	Material Source	Vulcan Materials Company						
7	Material Type	CA-6	→	→	→	→	→	→
8	Proctor Type	Standard	Standard	Standard	Standard	Standard	Standard	Standard
9	Max. Dry Density	134	→	→	→	→	→	→
10	Optimum Moisture (%)	9	→	→	→	→	→	→
11	Min. % of Proctor Density	95%	95%	95%	95%	95%	95%	95%
12	Test Location (Station/Offset)	Shot Nr: 52706	— 52707	— 52713	— 52708	— 52710	— 52709	— 52714
13	Elevation	598.06	599.07	599.41	598.67	597.62	598.12	599.15
14	Probe Depth	6	6	6	6	6	6	6
15	Test Wet Density (pcf)	139.6	145.9	148.9	146.9	141.4	134.7	141.6
16	Test Dry Density (pcf)	132.4	138.4	139.8	138.6	133.6	128.0	133.4
17	Test % Compaction	98.8	103.2	104.3	103.4	99.9	95.5	99.6
18	Test % Moisture	5.5	5.4	6.5	5.9	5.8	5.2	6.1
19	Test Moisture Count	98	101	119	109	104	92	108
20	Test Density Count	1738	1513	1412	1479	1671	1940	1662
21	Result (Pass or Fail)	Pass	Pass	Pass	Pass	Pass	Pass	Pass
22	See Re-Test No.							
Comments:		F.G	F.G	F.G	F.G	F.G	F.G	F.G

Inspector: Tayeb Farez

Resident Engineer: _____

Field Soil/Aggregate Compaction Worksheet
Nuclear Moisture/Density Gauge Method

Testing Firm	Wang Engineering, Inc.
Address	1145 N Main Street
	Lombard, Illinois 60148
Office Telephone No.	(630) 953 - 9928
Gauge# / Serial No.	3430 / 33303
Calibration Date	12 - 20 - 07
M. Std / D. Std.	674 / 2412

Date	11-17-08
WEI Project No.	450-01-01
Client	CH2MHILL Constructors, Inc.
Project	Honeywell Celotex Main Site Cover Constru
Location	Chicago, IL
Contractor	HIS Construction, Inc.
Inspector Name	**Tayeb Farez**

1	Test Number	8	9	10	11	12	13	14
2	Date	11-17-08	→	→	→	→	→	→
3	Re-Test of Number							
4	Type of Construction	Capping Main site surface with CA-6 aggregate	→	→	→	→	→	→
5	Sample Number	CA-06 #02	→	→	→	→	→	→
6	Material Source	Vulcan Materials Company	→	→	→	→	→	→
7	Material Type	CA-6	→	→	→	→	→	→
8	Proctor Type	Standard	Standard	Standard	Standard	Standard	Standard	Standard
9	Max. Dry Density	134	→	→	→	→	→	→
10	Optimum Moisture (%)	9	→	→	→	→	→	→
11	Min. % of Proctor Density	95%	95%	95%	95%	95%	95%	95%
12	Test Location (Station/Offset)	Shot Nr: 52715	— 52717	— 52716	— 55754	— 52757	— 52756	— 52758
13	Elevation	599.11	598.33	599.16	600.65	599.52	600.91	600.60
14	Probe Depth	6	6	6	6	6	6	6
15	Test Wet Density (pcf)	146.7	145.8	138.8	139.4	143.0	140.1	139.1
16	Test Dry Density (pcf)	138.1	137.2	132.0	132.4	136.0	133.3	133.2
17	Test % Compaction	103.0	102.4	98.5	98.8	101.5	99.4	99.4
18	Test % Moisture	6.2	6.3	5.1	5.3	5.1	5.2	4.4
19	Test Moisture Count	113	113	93	95	95	94	83
20	Test Density Count	1485	1512	1769	1746	1613	1718	1761
21	Result (Pass or Fail)	Pass	Pass	Pass	Pass	Pass	Pass	Pass
22	See Re-Test No.							

Comments: F.G | F.G | F.G

Inspector: Tayeb Farez

Resident Engineer: _____

Field Soil/Aggregate Compaction Worksheet
Nuclear Moisture/Density Gauge Method

Testing Firm	Wang Engineering, Inc.
Address	1145 N Main Street
	Lombard, Illinois 60148
Office Telephone No.	(630) 953 - 9928
Gauge# / Serial No.	3430 / 33303
Calibration Date	12-20-08
M. Std / D. Std.	674 / 2412

Date	11-17-08
WEI Project No.	450-01-01
Client	CH2MHILL Constructors, Inc.
Project	Honeywell Celotex Main Site Cover Constru
Location	Chicago, IL
Contractor	HIS Construction, Inc.
Inspector Name	**Tayeb Farez**

1	Test Number	15	16	17				
2	Date	11-17-08	→	→				
3	Re-Test of Number							
4	Type of Construction	Capping main site surface under CA-6 asphalt						
5	Sample Number	CA-06 #02	→	→				
6	Material Source	Vulcan Materials Co.						
7	Material Type	CA-6	→	→				
8	Proctor Type	Standard	Standard	Standard	Standard	Standard	Standard	Standard
9	Max. Dry Density	134	→	→				
10	Optimum Moisture (%)	9	→	→				
11	Min. % of Proctor Density	95%	95%	95%	95%	95%	95%	95%
12	Test Location (Station/Offset)	Shot Nr: 52764	52806	52807				
13	Elevation	600.08	600.19	600.30				
14	Probe Depth	6	6	6				
15	Test Wet Density (pcf)	133.9	136.8	138.6				
16	Test Dry Density (pcf)	128.5	129.8	131.5				
17	Test % Compaction	95.9	96.9	98.1				
18	Test % Moisture	4.2	5.4	5.4				
19	Test Moisture Count	78	95	96				
20	Test Density Count	1976	1849	1778				
21	Result (Pass or Fail)	Pass	Pass	Pass				
22	See Re-Test No.							

Comments:

Inspector: Tayeb Farez

Resident Engineer: _____

Field Soil/Aggregate Compaction Worksheet
Nuclear Moisture/Density Gauge Method

Testing Firm	Wang Engineering, Inc.
Address	1145 N Main Street
	Lombard, Illinois 60148
Office Telephone No.	(630) 953 - 9928
Gauge# / Serial No.	3430 / 33303
Calibration Date	12-20-07
M. Std / D. Std.	674 / 2412

Date	11-17-08
WEI Project No.	450-01-01
Client	CH2MHILL Constructors, Inc.
Project	Honeywell Celotex Main Site Cover Constru
Location	Chicago, IL
Contractor	HIS Construction, Inc.
Inspector Name	**Tayeb Farez**

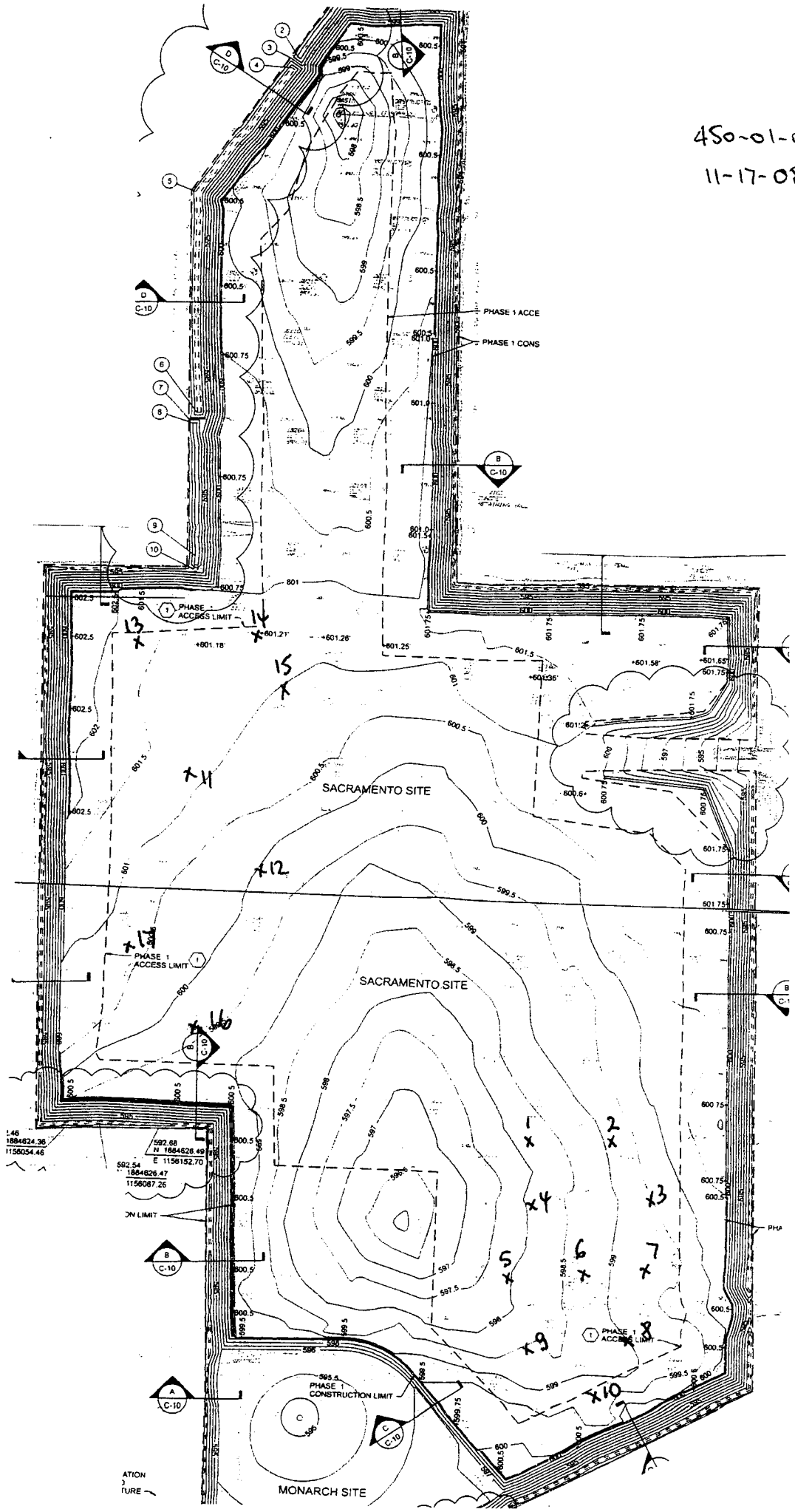
1	Test Number	1	2	3	4			
2	Date	11-17-08	→	→	→			
3	Re-Test of Number							
4	Type of Construction	Backfill residential back yard	→	→	→			
5	Sample Number	#01	→	Top Soil #02	→			
6	Material Source							
7	Material Type	Brown silty clay Loam	→	Black sandy loam	→			
8	Proctor Type	Standard	Standard	Standard	Standard	Standard	Standard	Standard
9	Max. Dry Density	114.6	→	103.2	→			
10	Optimum Moisture (%)	14.5	→	17.9	→			
11	Min. % of Proctor Density	90%	90%	90%	90%	95%	95%	95%
12	Test Location (Station/Offset)	16' W. of back door of the house	28' W. of back door of the house	10' W. of back door of the house	25' W. of back door of the house.			
13	Elevation	6" B.F.G	6" B.F.G	F.G	F.G			
14	Probe Depth	6	6	6	6			
15	Test Wet Density (pcf)	124.0	124.1	121.8	122.1			
16	Test Dry Density (pcf)	103.3	103.2	101.0	100.8			
17	Test % Compaction	90.1	90.1	97.8	97.7			
18	Test % Moisture	18.7	20.3	20.6	21.1			
19	Test Moisture Count	247	249	248	253			
20	Test Density Count	2419	2412	2541	2524			
21	Result (Pass or Fail)	Pass	Pass	Pass	Pass			
22	See Re-Test No.							

Comments: 2642 S. Sacramento Ave.

Inspector: Tayeb Farez

Resident Engineer: _____

450-01-01
11-17-08



Wang Engineering, Inc.

1145 N. Main Street, Lombard, IL 60148
☎ (630) 953-9928 Fax: (630) 953-9938

FIELD OBSERVATION REPORT

Summary _____

Sheet 1 of 4

Date 11-18-08 WEI No. 450-01-01

Project Name Honeywell Celotex Main Site Cover Construction Arrive Time 9:00

Project Location Chicago, IL Depart Time 3:30

Client CH2MHILL Constructors, Inc. Total Hrs. on Job 6.5

Contractor HIS Construction, Inc. Travel Time 2

Mileage Start 36653 Mileage End 36688 Daily Mileage 35 Total Chargeable Hrs. 8.5

Summary of technical and/or engineering services performed including field test data (attach additional sheets as required).

I arrived at the job site at 9:00 AM. met Michael Lehman of CH2MHILL. Discussed the work (QC/QA) compaction of the material used to cap the main site surface.

Ran several density tests at various locations.

All tests passed the required specifications.

Attached the datasheets for test results and locations

SKETCH (Indicate Dimensions or Scale)

N

Attested _____ WEI Name Tayeb Farez

Company _____ WEI Signature Tayeb Farez

Date _____ WEI Reviewed _____

Note: All test data, locations, elevations, and depths, etc. are subject to office review.

Field Soil/Aggregate Compaction Worksheet
Nuclear Moisture/Density Gauge Method

Testing Firm	Wang Engineering, Inc.
Address	1145 N Main Street
	Lombard, Illinois 60148
Office Telephone No.	(630) 953 - 9928
Gauge# / Serial No.	3430 / 33303
Calibration Date	12-20-07
M. Std / D. Std.	671 / 2398

Date	11-18-08
WEI Project No.	450-01-01
Client	CH2MHILL Constructors, Inc.
Project	Honeywell Celotex Main Site Cover Constru
Location	Chicago, IL
Contractor	HIS Construction, Inc.
Inspector Name	**Tayeb Farez**

1	Test Number	1	2	3	4	5	6	7
2	Date	11-18-08	→	→	→	→	→	→
3	Re-Test of Number							
4	Type of Construction	Capping Main site surface with CA-6 aggregate	→	→	→	→	→	→
5	Sample Number	CA-06 #02	→	→	→	→	→	→
6	Material Source	Vulcan Materials Company	→	→	→	→	→	→
7	Material Type	CA-6	→	→	→	→	→	→
8	Proctor Type	Standard	Standard	Standard	Standard	Standard	Standard	Standard
9	Max. Dry Density	134	→	→	→	→	→	→
10	Optimum Moisture (%)	9	→	→	→	→	→	→
11	Min. % of Proctor Density	95%	95%	95%	95%	95%	95%	95%
12	Test Location (Station/Offset)	Stat Nr: 52819	— 52825	— 52824	— 52823	— 52844	— 52838	— 52849
13	Elevation	599.94	598.76	598.70	598.11	600.27	599.53	599.00
14	Probe Depth	6	4	4	4	6	6	6
15	Test Wet Density (pcf)	134.3	137.2	139.7	138.2	138.2	145.8	138.6
16	Test Dry Density (pcf)	127.6	130.5	133.1	131.3	131.6	139.5	132.4
17	Test % Compaction	95.2	97.4	99.3	98.0	98.2	104.1	98.8
18	Test % Moisture	5.3	5.2	4.9	5.3	5.0	4.6	4.7
19	Test Moisture Count	92	92	90	94	90	88	87
20	Test Density Count	1946	2439	2327	2394	1785	1508	1768
21	Result (Pass or Fail)	Pass	Pass	Pass	Pass	Pass	Pass	Pass
22	See Re-Test No.							

Comments:

Inspector: Tayeb

Resident Engineer: _____

Field Soil/Aggregate Compaction Worksheet
Nuclear Moisture/Density Gauge Method

Testing Firm	Wang Engineering, Inc.
Address	1145 N Main Street
	Lombard, Illinois 60148
Office Telephone No.	(630) 953 - 9928
Gauge# / Serial No.	3430 / 33303
Calibration Date	12-20-07
M. Std / D. Std.	671 / 2399

Date	11-18-08
WEI Project No.	450-01-01
Client	CH2MHILL Constructors, Inc.
Project	Honeywell Celotex Main Site Cover Constru
Location	Chicago, IL
Contractor	HIS Construction, Inc.
Inspector Name	**Tayeb Farez**

1	Test Number	8	9					
2	Date	11-18-08	→					
3	Re-Test of Number							
4	Type of Construction	capping main site surface with CA-6 aggregate						
5	Sample Number	CA-06 #02	→					
6	Material Source	Vulcan Materials Co.						
7	Material Type	CA-6	→					
8	Proctor Type	Standard	Standard	Standard	Standard	Standard	Standard	Standard
9	Max. Dry Density	134	→					
10	Optimum Moisture (%)	9	→					
11	Min. % of Proctor Density	95%	95%	95%	95%	95%	95%	95%
12	Test Location (Station/Offset)	Shot Nr: 52850	- 52854					
13	Elevation	538.82	539.78					
14	Probe Depth	6	6					
15	Test Wet Density (pcf)	136.3	134.4					
16	Test Dry Density (pcf)	128.9	128.6					
17	Test % Compaction	97.0	96.0					
18	Test % Moisture	4.9	4.5					
19	Test Moisture Count	88	81					
20	Test Density Count	1862	1944					
21	Result (Pass or Fail)	Pass	Pass					
22	See Re-Test No.							

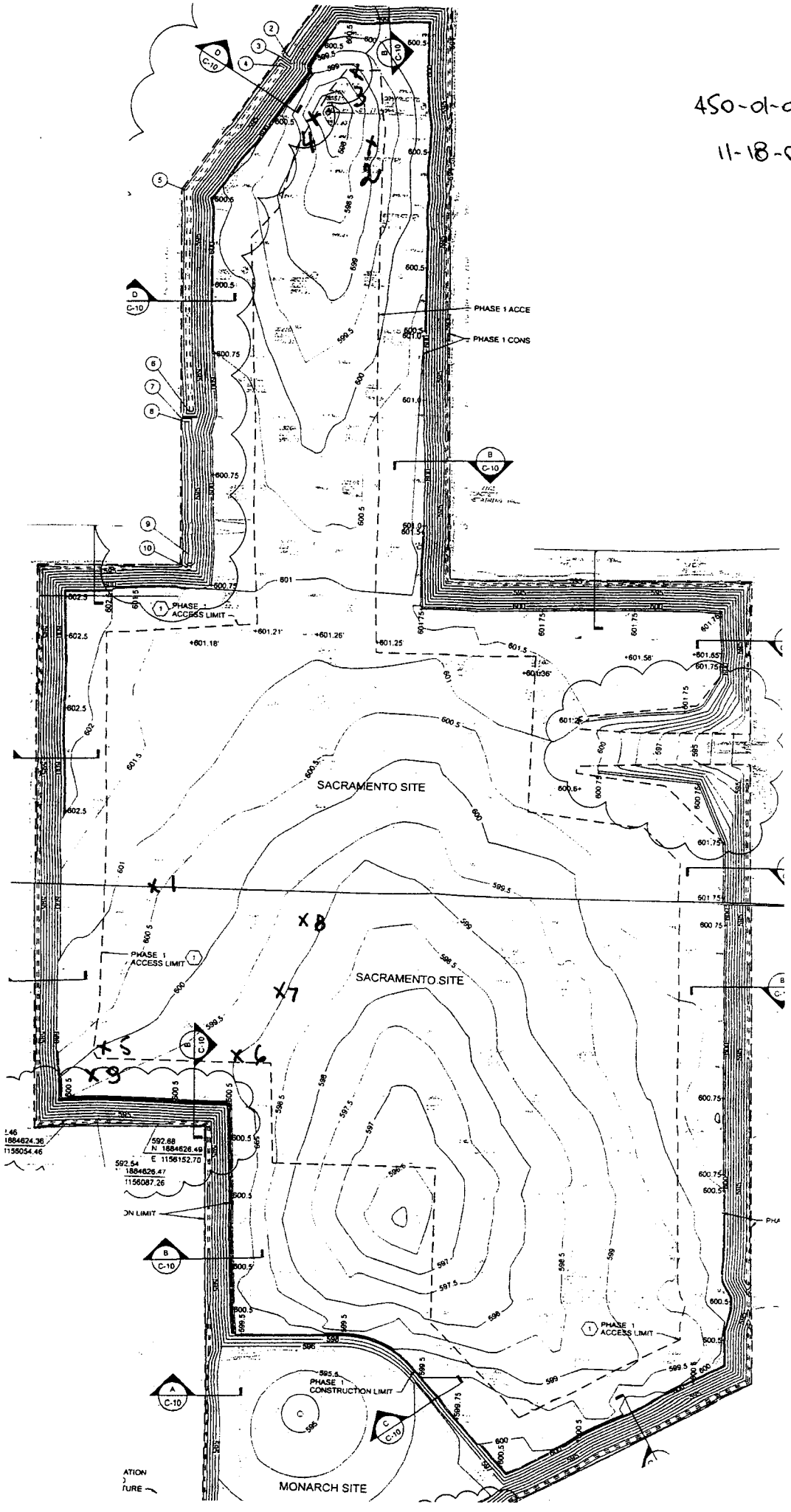
Comments:

Inspector: Tayeb Farez

Resident Engineer: _____

450-01-01

11-18-08



Wang Engineering, Inc.

1145 N. Main Street, Lombard, IL 60148

☎ (630) 953-9928 Fax: (630) 953-9938

FIELD OBSERVATION REPORT

Sequence

Sheet 1 of 5

WEI No. 450-01-01

Date 11-19-08

Arrive Time 9:00

Project Name Honeywell Celotex Main Site Cover Construction

Depart Time 4:30

Project Location Chicago, IL

Total Hrs. on Job 7.5

Client CH2MHILL Constructors, Inc.

Travel Time 2.5

Contractor HIS Construction, Inc.

Total Chargeable Hrs. 10

Mileage Start 36688 Mileage End 36743 Daily Mileage 55

Summary of technical and/or engineering services performed including field test data (attach additional sheets as required).

Reached the job site at 9:00 AM. Met Michael Lehman of CH2MHILL
Witnessed the work (Qc/QA) compaction of the material used to cap
the main site surface on Sacramento Site.
Performed several nuclear density tests at various locations.
All tests passed the required specification.
Please see the attached datasheets for test results and
locations.

SKETCH (Indicate Dimensions or Scale)

N

Attested

Company

WEI Name Tayeb Farez

WEI Signature Tayeb Farez

WEI Reviewed

Field Soil/Aggregate Compaction Worksheet
Nuclear Moisture/Density Gauge Method

Testing Firm	Wang Engineering, Inc.
Address	1145 N Main Street
	Lombard, Illinois 60148
Office Telephone No.	(630) 953 - 9928
Gauge# / Serial No.	3430 / 33307
Calibration Date	12-20-07
M. Std / D. Std.	677 / 2397

Date	11-19-08
WEI Project No.	450-01-01
Client	CH2MHILL Constructors, Inc.
Project	Honeywell Celotex Main Site Cover Constru
Location	Chicago, IL
Contractor	HIS Construction, Inc.
Inspector Name	**Tayeb Farez**

1	Test Number	1	2	3	4	5	6	7
2	Date	11-19-08	→	→	→	→	→	→
3	Re-Test of Number							
4	Type of Construction	Capping Main Site Surface with CA-6 aggregate	→	→	→	→	→	→
5	Sample Number	CA-06 #02	→	→	→	→	→	→
6	Material Source	Vulcan Materials Company	→	→	→	→	→	→
7	Material Type	CA-6	→	→	→	→	→	→
8	Proctor Type	Standard	Standard	Standard	Standard	Standard	Standard	Standard
9	Max. Dry Density	134	→	→	→	→	→	→
10	Optimum Moisture (%)	9	→	→	→	→	→	→
11	Min. % of Proctor Density	95%	95%	95%	95%	95%	95%	95%
12	Test Location (Station/Offset)	Shot Nr: 52876	– 52875	– 52880	– 52878	– 52879	– 52877	– 52884
13	Elevation	601.07	599.98	599.66	601.50	601.02	601.16	599.08
14	Probe Depth	6	6	6	6	6	6	4
15	Test Wet Density (pcf)	130.4	136.0	137.9	139.3	135.3	132.0	139.9
16	Test Dry Density (pcf)	124.3	130.2	129.9	132.3	128.9	125.9	133.6
17	Test % Compaction	92.8	97.1	96.9	98.7	96.2	93.9	99.7
18	Test % Moisture	4.8	4.5	6.2	5.3	5.0	4.9	4.7
19	Test Moisture Count	85	83	107	96	89	86	88
20	Test Density Count	2123	1873	1792	1738	1903	2048	2317
21	Result (Pass or Fail)	F	Pass	Pass	Pass	Pass	F	Pass
22	See Re-Test No.							

Comments:

Inspector: Tayeb

Resident Engineer: _____

Field Soil/Aggregate Compaction Worksheet
Nuclear Moisture/Density Gauge Method

Testing Firm	Wang Engineering, Inc.
Address	1145 N Main Street
	Lombard, Illinois 60148
Office Telephone No.	(630) 953 - 9928
Gauge# / Serial No.	3430 / 33303
Calibration Date	12-20-07
M. Std / D. Std.	677 / 2397

Date	11-19-08
WEI Project No.	450-01-01
Client	CH2MHILL Constructors, Inc.
Project	Honeywell Celotex Main Site Cover Constru
Location	Chicago, IL
Contractor	HIS Construction, Inc.
Inspector Name	**Tayeb Farez**

1	Test Number	8	9	10	11	12	13	14
2	Date	11-19-08	→	→	→	→	→	→
3	Re-Test of Number							
4	Type of Construction	Capping main site surface with CA-6 aggregate	→	→	→	→	→	→
5	Sample Number	CA-06 #02	→	→	→	→	→	→
6	Material Source	Vulcan Materials Company	→	→	→	→	→	→
7	Material Type	CA-6	→	→	→	→	→	→
8	Proctor Type	Standard	Standard	Standard	Standard	Standard	Standard	Standard
9	Max. Dry Density	134	→	→	→	→	→	→
10	Optimum Moisture (%)	9	→	→	→	→	→	→
11	Min. % of Proctor Density	95%	95%	95%	95%	95%	95%	95%
12	Test Location (Station/Offset)	Test Nr: 52883	– 52891	– 52890	– 52889	– 52888	– 52906	– 52911
13	Elevation	599.12	599.41	600.22	600.44	599.92	601.14	600.24
14	Probe Depth	4	6	6	6	6	6	6
15	Test Wet Density (pcf)	139.3	150.2	134.2	136.1	143.1	136.8	134.4
16	Test Dry Density (pcf)	132.6	142.8	128.6	130.5	135.9	130.1	129.3
17	Test % Compaction	98.9	106.6	95.9	97.4	101.4	97.1	96.5
18	Test % Moisture	5.1	5.2	4.4	4.3	5.3	5.1	3.9
19	Test Moisture Count	93	100	81	80	98	92	74
20	Test Density Count	2340	1367	1949	1871	1598	1840	1944
21	Result (Pass or Fail)	Pass	Pass	Pass	Pass	Pass	Pass	Pass
22	See Re-Test No.							
	Comments:		F.G	F.G	F.G	F.G	F.G	F.G

Inspector: Tayeb

Resident Engineer: _____

Field Soil/Aggregate Compaction Worksheet
Nuclear Moisture/Density Gauge Method

Testing Firm	Wang Engineering, Inc.
Address	1145 N Main Street
	Lombard, Illinois 60148
Office Telephone No.	(630) 953 - 9928
Gauge# / Serial No.	3430 / 33303
Calibration Date	12 - 20 - 07
M. Std / D. Std.	677 / 2397

Date	11-19-08
WEI Project No.	450-01-01
Client	CH2MHILL Constructors, Inc.
Project	Honeywell Celotex Main Site Cover Constru
Location	Chicago, IL
Contractor	HIS Construction, Inc.
Inspector Name	**Tayeb Farez**

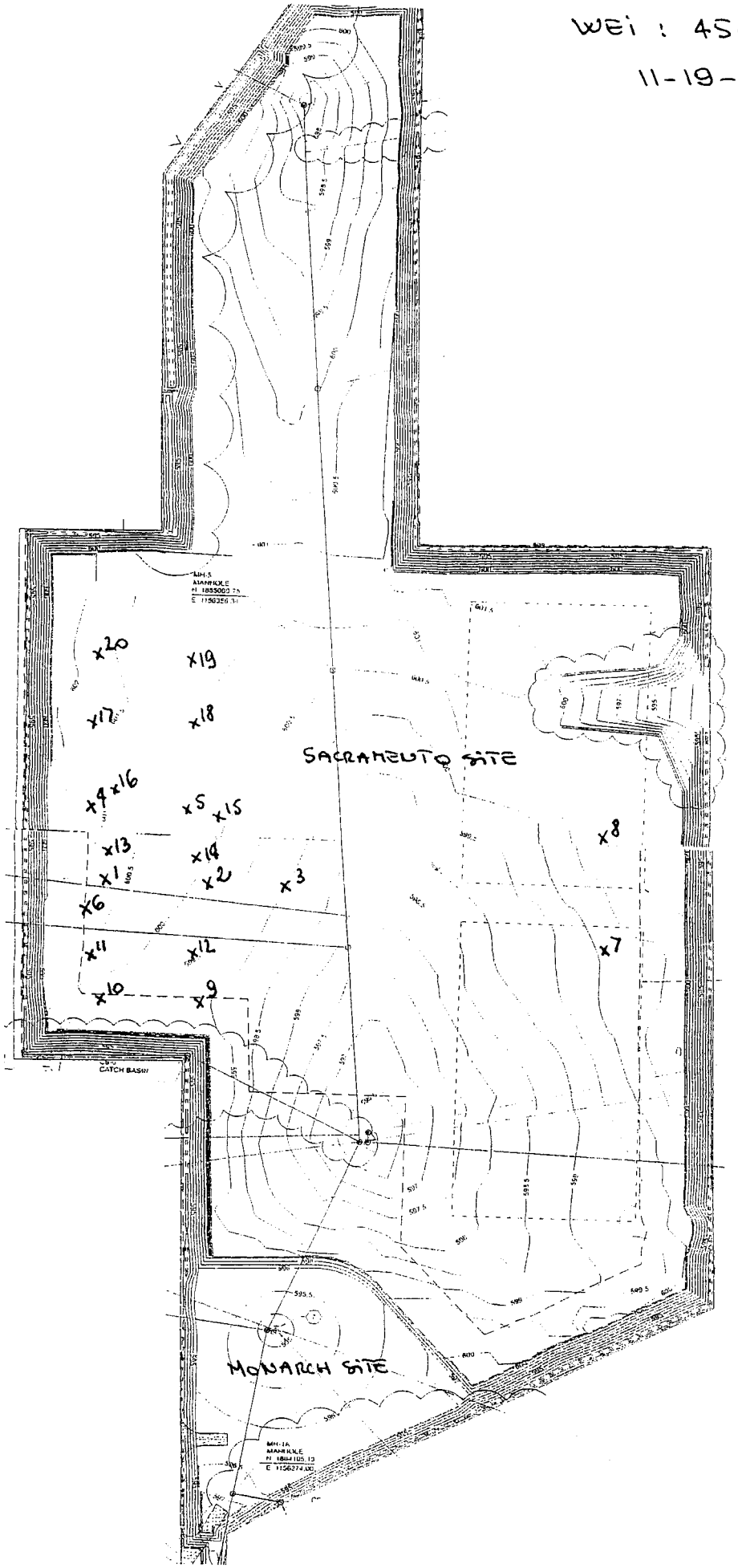
1	Test Number	15	16	17	18	19	20	
2	Date	11-19-08	→				→	
3	Re-Test of Number							
4	Type of Construction	Capping Main Site Surface with CA-6 aggregate	→				→	
5	Sample Number	CA-06 #02	→				→	
6	Material Source	Vulcan Materials Company	→				→	
7	Material Type	CA-6	→				→	
8	Proctor Type	Standard	Standard	Standard	Standard	Standard	Standard	Standard
9	Max. Dry Density	134	→				→	
10	Optimum Moisture (%)	9	→				→	
11	Min. % of Proctor Density	95%	95%	95%	95%	95%	95%	95%
12	Test Location (Station/Offset)	Slot Nr: 52816	– 52812	– 52813	– 52809	– 52808	– 52814	–
13	Elevation	600.13	601.16	601.51	600.75	601.31	601.45	
14	Probe Depth	6	6	6	6	6	6	
15	Test Wet Density (pcf)	134.2	134.1	136.6	140.7	136.6	139.6	
16	Test Dry Density (pcf)	129.4	129.1	130.0	134.1	131.5	132.9	
17	Test % Compaction	96.4	96.3	97.0	100.1	98.1	99.2	
18	Test % Moisture	3.9	3.9	5.1	4.9	3.9	5.0	
19	Test Moisture Count	74	74	92	91	75	92	
20	Test Density Count	1953	1956	1846	1687	1850	1729	
21	Result (Pass or Fail)	Pass	Pass	Pass	Pass	Pass	Pass	
22	See Re-Test No.							
	Comments:	F.G	F.G	F.G	F.G	F.G	F.G	

Inspector: Tayeb Farez

Resident Engineer: _____

WEI : 450-01-01

11-19-08



Wang Engineering, Inc.

1145 N. Main Street, Lombard, IL 60148
☎ (630) 953-9928 Fax: (630) 953-9938

FIELD OBSERVATION REPORT

Sacramento

Sheet 1 of 5

WEI No. 450-01-01

Date 11-20-08

Arrive Time 12:15

Project Name Honeywell Celotex Main Site Cover Construction

Depart Time 5:15

Project Location Chicago, IL

Total Hrs. on Job 5

Client CH2MHILL Constructors, Inc.

Travel Time 1.5

Contractor HIS Construction, Inc.

Total Chargeable Hrs. 6.5

Mileage Start 36768 Mileage End 36803 Daily Mileage 35

Summary of technical and/or engineering services performed including field test data (attach additional sheets as required).

Arrived at the job site at 12:15 PM - met Michael Lehman of CH2MHILL - Discussed the work (Qc/QA) compaction of the material used to cap the main site surface on Sacramento site and to build the slope and swale about the perimeter of the site.

Run several tests for density at various locations.

All tests passed the required specification.

Please see the attached data sheets for test results and locations

SKETCH (Indicate Dimensions or Scale)

N

Attested

Company

Date

WEI Name Tayeb Farez

WEI Signature Tayeb

WEI Reviewed

Note: All test data, locations, elevations, and depths, etc. are subject to office review.

Field Soil/Aggregate Compaction Worksheet
Nuclear Moisture/Density Gauge Method

Testing Firm	Wang Engineering, Inc.
Address	1145 N Main Street
	Lombard, Illinois 60148
Office Telephone No.	(630) 953 - 9928
Gauge# / Serial No.	3430 / 33303
Calibration Date	12-20-07
M. Std / D. Std.	666 / 2400

Date	11-20-08
WEI Project No.	450-01-01
Client	CH2MHILL Constructors, Inc.
Project	Honeywell Celotex Main Site Cover Constru
Location	Chicago, IL
Contractor	HIS Construction, Inc.
Inspector Name	Tayeb Farez

1	Test Number	1	2	3	4	5	6	7
2	Date	11-20-08	→					→
3	Re-Test of Number							
4	Type of Construction	Construction of slope along perimeter of the site	→					→
5	Sample Number	Bulk #1	→					→
6	Material Source							
7	Material Type	Gray clay	→					→
8	Proctor Type	Standard	Standard	Standard	Standard	Standard	Standard	Standard
9	Max. Dry Density	102	→					→
10	Optimum Moisture (%)	20	→					→
11	Min. % of Proctor Density	95%	95%	95%	95%	95%	95%	95%
12	Test Location (Station/Offset)	Shot Nr: 52923	– 52922	– 52921	– 52931	– 52930	– 52929	– 52928
13	Elevation	596.98	596.75	593.19	592.08	592.37	591.99	591.71
14	Probe Depth	6	6	6	6	6	6	6
15	Test Wet Density (pcf)	124.7	116.3	114.8	126.3	124.1	127.3	125.6
16	Test Dry Density (pcf)	104.2	99.7	97.0	103.7	103.2	106.3	104.4
17	Test % Compaction	102.2	97.8	95.1	101.7	101.1	104.3	102.3
18	Test % Moisture	19.6	16.6	18.4	21.7	20.3	19.7	20.4
19	Test Moisture Count	241	199	213	264	247	247	250
20	Test Density Count	2373	2871	2962	2286	2400	2236	2322
21	Result (Pass or Fail)	Pass	Pass	Pass	Pass	Pass	Pass	Pass
22	See Re-Test No.							

Comments:

Inspector: Tayeb Farez

Resident Engineer: _____

Field Soil/Aggregate Compaction Worksheet
Nuclear Moisture/Density Gauge Method

Testing Firm	Wang Engineering, Inc.
Address	1145 N Main Street
	Lombard, Illinois 60148
Office Telephone No.	(630) 953 - 9928
Gauge# / Serial No.	3430 / 33303
Calibration Date	12-20-08
M. Std / D. Std.	666 / 2400

Date	11-20-08
WEI Project No.	450-01-01
Client	CH2MHILL Constructors, Inc.
Project	Honeywell Celotex Main Site Cover Constru
Location	Chicago, IL
Contractor	HIS Construction, Inc.
Inspector Name	**Tayeb Farez**

1	Test Number	8A	7A	8	9	10	11	12
2	Date	11-20-08	→	→	→	→	→	→
3	Re-Test of Number							
4	Type of Construction	Construction of slope	capping north site surface with CA-6 aggregate	→	→	→	→	→
5	Sample Number	Bulk #1	CA-06 #02	→	→	→	→	→
6	Material Source		Vulcan Materials Company	→	→	→	→	→
7	Material Type	Gray clay	CA-6	→	→	→	→	→
8	Proctor Type	Standard	Standard	Standard	Standard	Standard	Standard	Standard
9	Max. Dry Density	102	134	→	→	→	→	→
10	Optimum Moisture (%)	20	9	→	→	→	→	→
11	Min. % of Proctor Density	95%	95%	95%	95%	95%	95%	95%
12	Test Location (Station/Offset)	Shot Nr: 52927	– 52924	– 52925	– 52933	– 52941	– 52940	
13	Elevation	591.71	598.95	599.47	599.45	599.36	600.61	
14	Probe Depth	6	4	6	6	6	6	6
15	Test Wet Density (pcf)	128.6	140.4	134.3	138.3	137.8	135.0	135.0
16	Test Dry Density (pcf)	109.4	133.2	127.2	132.0	130.9	129.3	129.0
17	Test % Compaction	107.2	99.4	95.8	98.5	97.7	96.5	96.3
18	Test % Moisture	17.6	5.4	5.6	4.8	5.3	4.5	46
19	Test Moisture Count	228	97	95	87	93	81	83
20	Test Density Count	2847	2292	1925	1780	1800	1916	1919
21	Result (Pass or Fail)	Pass	Pass	Pass	Pass	Pass	Pass	Pass
22	See Re-Test No.							

Comments:

Inspector: Tayeb Farez

Resident Engineer: _____

Field Soil/Aggregate Compaction Worksheet
Nuclear Moisture/Density Gauge Method

Testing Firm	Wang Engineering, Inc.
Address	1145 N Main Street
	Lombard, Illinois 60148
Office Telephone No.	(630) 953 - 9928
Gauge# / Serial No.	3430 / 33303
Calibration Date	12-20-09
M. Std / D. Std.	666 / 2400

Date	11-20-08
WEI Project No.	450-01-01
Client	CH2MHILL Constructors, Inc.
Project	Honeywell Celotex Main Site Cover Constru
Location	Chicago, IL
Contractor	HIS Construction, Inc.
Inspector Name	**Tayeb Farez**

1	Test Number	13	14	15	16			
2	Date	11-20-08	→	→	→			
3	Re-Test of Number							
4	Type of Construction	Capping main site surface with CA-6 aggregate →						
5	Sample Number	CA-06 #02						
6	Material Source	Vulcan Materials company →						
7	Material Type	CA-6	→	→	→			
8	Proctor Type	Standard	Standard	Standard	Standard	Standard	Standard	Standard
9	Max. Dry Density	134	→	→	→			
10	Optimum Moisture (%)	9	→	→	→			
11	Min. % of Proctor Density	95%	95%	95%	95%	95%	95%	95%
12	Test Location (Station/Offset)	Shotur: 52939	— 52936	— 52937	— 52938			
13	Elevation	600.90	598.85	598.99	599.99			
14	Probe Depth	6	6	4	6			
15	Test Wet Density (pcf)	141.1	136.0	134.9	136.2			
16	Test Dry Density (pcf)	133.3	130.3	128.5	129.2			
17	Test % Compaction	99.4	97.2	95.9	96.4			
18	Test % Moisture	5.9	4.4	4.9	5.5			
19	Test Moisture Count	103	81	87	95			
20	Test Density Count	1674	1874	2555	1864			
21	Result (Pass or Fail)	Pass	Pass	Pass	Pass			
22	See Re-Test No.							

Comments:

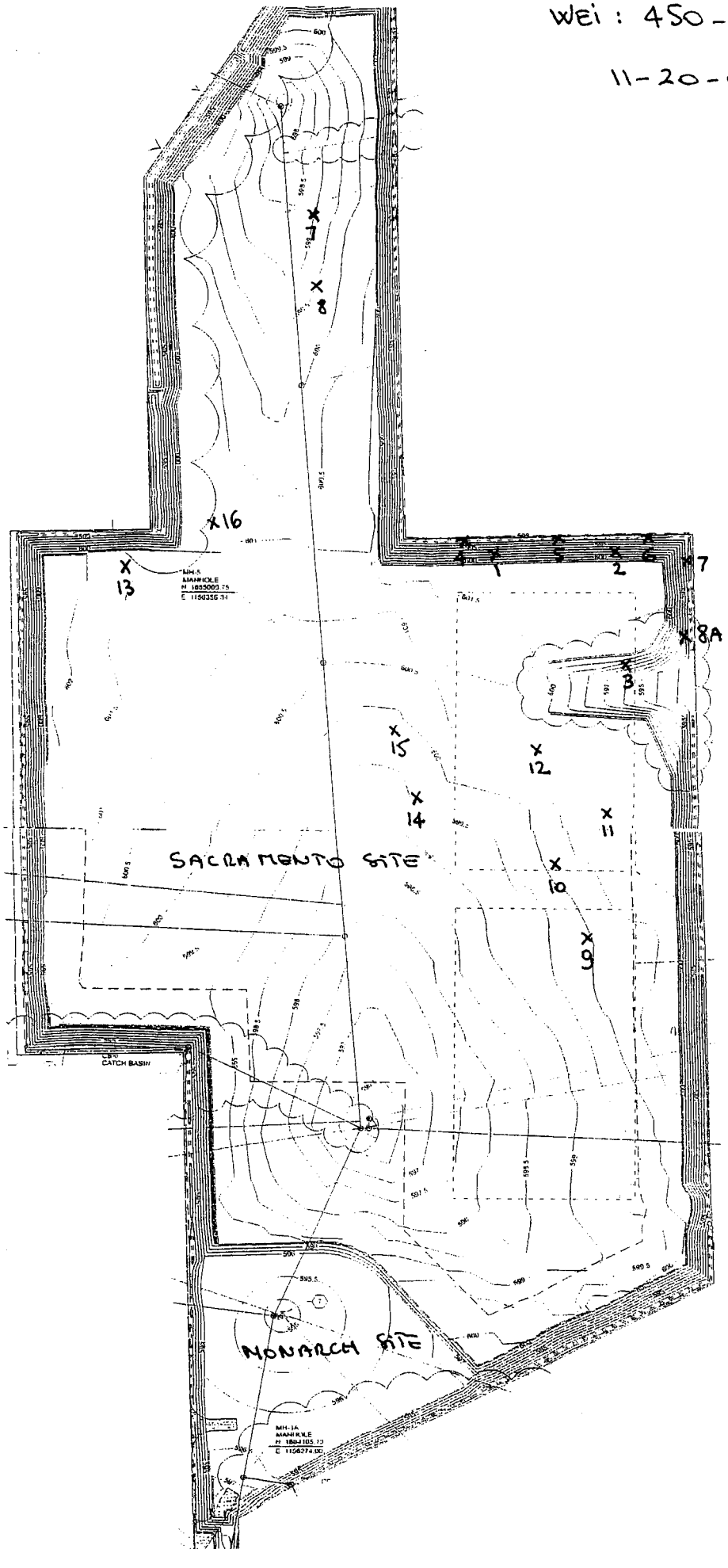
Inspector: Tayeb Farez

Resident Engineer: _____

CH2M HILL

WEI : 450-01-01

11-20-08



Wang Engineering, Inc.

1145 N. Main Street, Lombard, IL 60148
☎ (630) 953-9928 Fax: (630) 953-9938

FIELD OBSERVATION REPORT

Sequence _____
Sheet 1 of 4

Date 11-21-08 WEI No. 450-01-01

Project Name Honeywell Celotex Main Site Cover Construction Arrive Time 8:00

Project Location Chicago, IL Depart Time 3:00

Client CH2MHILL Constructors, Inc. Total Hrs. on Job 7

Contractor HIS Construction, Inc. Travel Time 2

Mileage Start 36803 Mileage End 36847 Daily Mileage 44 Total Chargeable Hrs. 9

Summary of technical and/or engineering services performed including field test data (attach additional sheets as required).

Arrived at the Job Site at 8:00 AM - Met Michael Lehman of CH2MHILL - Discussed the work (ρ_d/ρ_M) Compaction of the material used to cap the main site of the Sacramento Site -
Run several tests for density at various locations -
All tests passed the required specification except two - These locations will retested after more compaction

SKETCH (Indicate Dimensions or Scale)

N

Attested _____ WEI Name Tayeb Farez

Company _____ WEI Signature Tayeb Farez

Date _____ WEI Reviewed _____

Note: All test data, locations, elevations, and depths, etc. are subject to office review.

Field Soil/Aggregate Compaction Worksheet
Nuclear Moisture/Density Gauge Method

Testing Firm	Wang Engineering, Inc.
Address	1145 N Main Street
	Lombard, Illinois 60148
Office Telephone No.	(630) 953 - 9928
Gauge# / Serial No.	3430 / 33303
Calibration Date	12-20-07
M. Std / D. Std.	667 / 2397

Date	11-21-08
WEI Project No.	450-01-01
Client	CH2MHILL Constructors, Inc.
Project	Honeywell Celotex Main Site Cover Constru
Location	Chicago, IL
Contractor	HIS Construction, Inc.
Inspector Name	**Tayeb Farez**

1	Test Number	1	2	3	4	5	6	7
2	Date	11-21-08	→	→	→	→	→	→
3	Re-Test of Number							
4	Type of Construction	Capping main site surface with CA-6 aggregate	→	→	→	→	→	→
5	Sample Number	CA-06 #02						
6	Material Source	Vulcan Materials Company	→	→	→	→	→	→
7	Material Type	CA-6	→	→	→	→	→	→
8	Proctor Type	Standard	Standard	Standard	Standard	Standard	Standard	Standard
9	Max. Dry Density	134	→	→	→	→	→	→
10	Optimum Moisture (%)	9	→	→	→	→	→	→
11	Min. % of Proctor Density	95%	95%	95%	95%	95%	95%	95%
12	Test Location (Station/Offset)	Shot Nr: 52952	— 52950	— 52947	— 52948	— 52949	— 52951	— 52953
13	Elevation	598.86	599.44	600.06	600.59	600.00	599.33	597.33
14	Probe Depth	6	6	6	6	6	6	6
15	Test Wet Density (pcf)	133.0	132.5	137.5	141.7	126.6	135.0	134.2
16	Test Dry Density (pcf)	127.4	127.7	130.5	134.8	121.0	129.7	128.0
17	Test % Compaction	95.1	95.3	97.4	100.6	90.3	96.8	95.5
18	Test % Moisture	4.4	3.8	5.3	5.2	4.6	4.1	4.9
19	Test Moisture Count	79	71	94	94	79	76	86
20	Test Density Count	2004	2026	1811	1648	2308	1918	1948
21	Result (Pass or Fail)	Pass	Pass	Pass	Pass	Fail.	Pass	Pass
22	See Re-Test No.							

Comments:

Inspector: Tayeb Farez

Resident Engineer: _____

Field Soil/Aggregate Compaction Worksheet
Nuclear Moisture/Density Gauge Method

Testing Firm	Wang Engineering, Inc.
Address	1145 N Main Street
	Lombard, Illinois 60148
Office Telephone No.	(630) 953 - 9928
Gauge# / Serial No.	3430 / 33303
Calibration Date	12-20-07
M. Std / D. Std.	667 / 2397

Date	11-21-08
WEI Project No.	450-01-01
Client	CH2MHILL Constructors, Inc.
Project	Honeywell Celotex Main Site Cover Constru
Location	Chicago, IL
Contractor	HIS Construction, Inc.
Inspector Name	**Tayeb Farez**

1	Test Number	8	9	10	11	12	13	14
2	Date	11-21-08	→	→	→	→	→	→
3	Re-Test of Number		8					
4	Type of Construction	Capping Main Site Surface with CA-6 aggregate	→	→	→	→	→	→
5	Sample Number	CA-06 #02	→	→	→	→	→	→
6	Material Source	Vulcan Materials Company	→	→	→	→	→	→
7	Material Type	CA-6	→	→	→	→	→	→
8	Proctor Type	Standard	Standard	Standard	Standard	Standard	Standard	Standard
9	Max. Dry Density	134	→	→	→	→	→	→
10	Optimum Moisture (%)	9	→	→	→	→	→	→
11	Min. % of Proctor Density	95%	95%	95%	95%	95%	95%	95%
12	Test Location (Station/Offset)	Shotwr: 52954	— 52954	— 52962	— 52968	— 52967	— 52971	— 52969
13	Elevation	597.93	597.93	600.18	601.23	601.74	598.42	600.02
14	Probe Depth	6	6	6	6	6	4	6
15	Test Wet Density (pcf)	129.9	132.7	135.6	143.5	138.1	137.3	137.3
16	Test Dry Density (pcf)	124.2	126.6	129.8	136.6	131.9	131.4	131.7
17	Test % Compaction	92.7	94.5	96.8	101.9	98.4	98.1	98.3
18	Test % Moisture	4.6	4.8	4.5	5.1	4.7	4.5	4.2
19	Test Moisture Count	80	84	82	94	86	82	79
20	Test Density Count	2146	2016	1889	1584	1787	2436	1820
21	Result (Pass or Fail)	Fail	Fail	Pass	Pass	Pass	Pass	Pass
22	See Re-Test No.	9						

Comments:

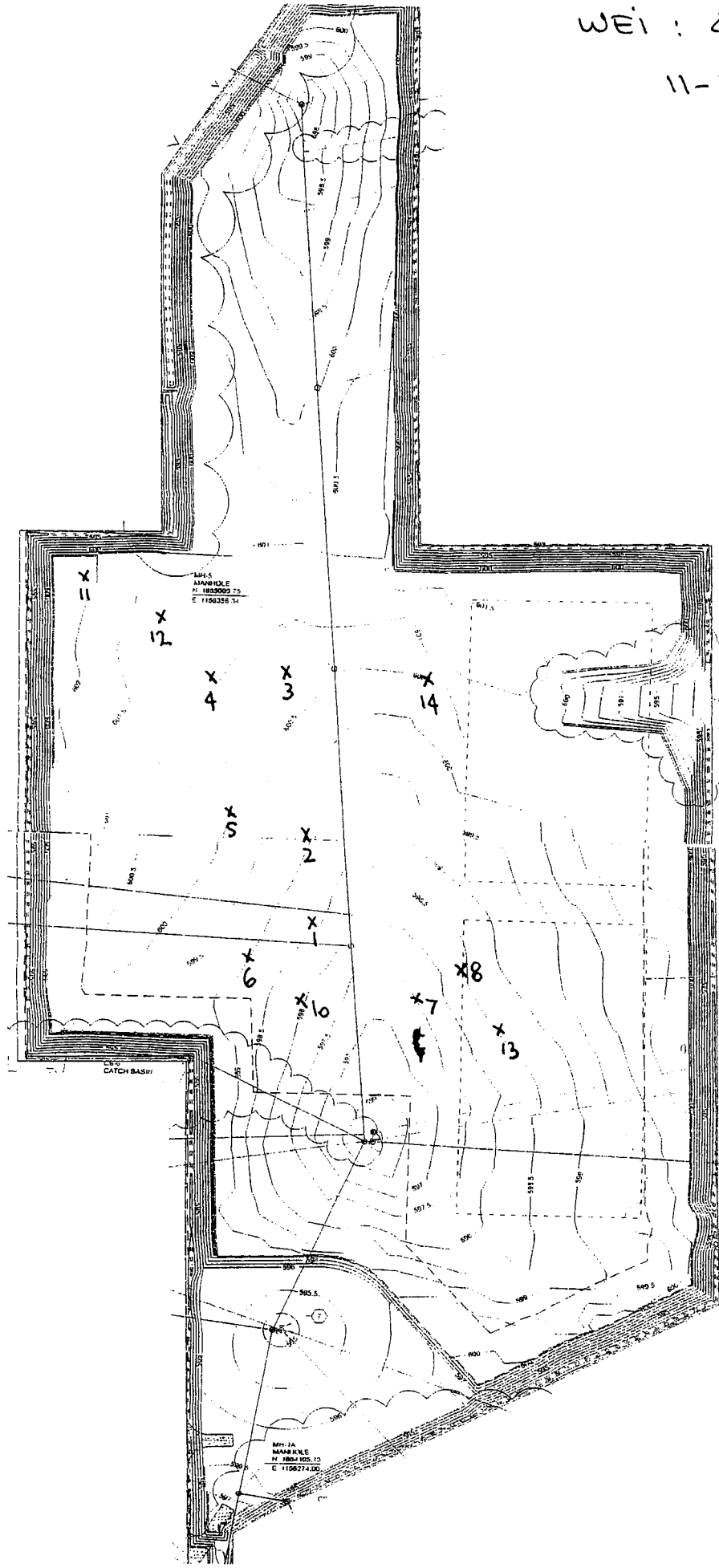
Inspector: Tayeb Farez

Resident Engineer: _____

CH2MHILL

WEI : 450-01-01

11-21-08



Wang Engineering, Inc.

1145 N. Main Street, Lombard, IL 60148
☎ (630) 953-9928 Fax: (630) 953-9938

FIELD OBSERVATION REPORT

Sequence _____
Sheet ____ of ____

Date 11-24-08
WEI No. 450-01-01
Project Name Honeywell Celotex Main Site Cover Construction
Arrive Time 9:00
Project Location Chicago, IL
Depart Time 5:00
Client CH2MHILL Constructors, Inc.
Total Hrs. on Job 8
Contractor HIS Construction, Inc.
Travel Time 2.5
Mileage Start 36847 Mileage End 36905 Daily Mileage 58
Total Chargeable Hrs. 10.5

Summary of technical and/or engineering services performed including field test data (attach additional sheets as required).

I arrived at the job site at 9:00 AM - Met Michael Lehman of CH2MHILL - Discussed the work (Qc/QA) compaction of the materials used to cap the main site surface and to build the swale and slope along the perimeter of the site.

Performed several nuclear density tests at various locations - All tests passed the required specification.

- Attached the datasheets for test results and locations.

SKETCH (indicate Dimensions or Scale)

N

Attested _____
Company _____
Date _____

WEI Name Tayeb Farez
WEI Signature Tayeb Farez
WEI Reviewed _____

Note: All test data, locations, elevations, and depths, etc. are subject to office review.

C:\DOCUMENTS AND SETTINGS\TFAREZ\MY DOCUMENTS\FORMS\FIELD OBSERVATION REPORT 450-01-01.DOC

Field Soil/Aggregate Compaction Worksheet
Nuclear Moisture/Density Gauge Method

Testing Firm	Wang Engineering, Inc.
Address	1145 N Main Street
	Lombard, Illinois 60148
Office Telephone No.	(630) 953 - 9928
Gauge# / Serial No.	3430 / 33303
Calibration Date	12-20-07
M. Std / D. Std.	667 / 2397

Date	11-24-08
WEI Project No.	450-01-01
Client	CH2MHILL Constructors, Inc.
Project	Honeywell Celotex Main Site Cover Constru
Location	Chicago, IL
Contractor	HIS Construction, Inc.
Inspector Name	**Tayeb Farez**

1	Test Number	1	2	3	4	5	6	7
2	Date	11-24-08	→	→	→	→	→	→
3	Re-Test of Number			2			4	
4	Type of Construction	Capping main site surface with CA-6 ~~[illegible]~~ aggregate						→
5	Sample Number	CA-06 #02	→	→	→	→	→	→
6	Material Source	Vulcan Materials Company	→	→	→	→	→	→
7	Material Type	CA-6	→	→	→	→	→	→
8	Proctor Type	Standard	Standard	Standard	Standard	Standard	Standard	Standard
9	Max. Dry Density	134	→	→	→	→	→	→
10	Optimum Moisture (%)	9	→	→	→	→	→	→
11	Min. % of Proctor Density	95%	95%	95%	95%	95%	95%	95%
12	Test Location (Station/Offset)	Shot Nr: 52977	— 52976	— 52976	— 52983	— 52982	— 52983	— 52984
13	Elevation	599.67	596.04	596.04	586.89	593.91	596.89	600.81
14	Probe Depth	6	6	6	6	6	6	6
15	Test Wet Density (pcf)	134.5	132.4	138.3	131.9	135.2	139.2	139.4
16	Test Dry Density (pcf)	128.3	126.2	131.6	126.7	129.0	133.1	134.1
17	Test % Compaction	95.7	94.2	98.2	94.6	96.2	99.3	100.0
18	Test % Moisture	4.9	4.9	5.1	4.1	4.8	4.5	4.0
19	Test Moisture Count	86	85	91	75	86	84	76
20	Test Density Count	1936	2030	1778	2052	1907	1746	1740
21	Result (Pass or Fail)	Pass	Fail	Pass	Fail	Pass	Pass	Pass
22	See Re-Test No.		3		6			

Comments:

Inspector: Tayeb [signature]

Resident Engineer: _____

Field Soil/Aggregate Compaction Worksheet
Nuclear Moisture/Density Gauge Method

Testing Firm	Wang Engineering, Inc.
Address	1145 N Main Street
	Lombard, Illinois 60148
Office Telephone No.	(630) 953 - 9928
Gauge# / Serial No.	3430 / 33303
Calibration Date	12-20-07
M. Std / D. Std.	667 / 2397

Date	11-24-08
WEI Project No.	450-01-01
Client	CH2MHILL Constructors, Inc.
Project	Honeywell Celotex Main Site Cover Constru
Location	Chicago, IL
Contractor	HIS Construction, Inc.
Inspector Name	**Tayeb Farez**

1	Test Number	8	9	10	11	12	13	14
2	Date	11-24-08	→	→	→	→	→	→
3	Re-Test of Number						12	
4	Type of Construction	Capping of main site surface with CA-6 aggregate	→	→	→	→	→	→
5	Sample Number	CA-06 #02	→	→	→	→	→	→
6	Material Source	Vulcan materials company	→	→	→	→	→	→
7	Material Type	CA-6	→	→	→	→	→	→
8	Proctor Type	Standard	Standard	Standard	Standard	Standard	Standard	Standard
9	Max. Dry Density	134	→	→	→	→	→	→
10	Optimum Moisture (%)	9	→	→	→	→	→	→
11	Min. % of Proctor Density	95%	95%	95%	95%	95%	95%	95%
12	Test Location (Station/Offset)	Shot wr: 52985	— 52989	— 52988	— 52987	— 52998	— 52998	— 52992
13	Elevation	601.02	600.39	601.52	602.38	601.73	601.73	599.46
14	Probe Depth	6	6	6	6	6	6	6
15	Test Wet Density (pcf)	141.4	143.1	141.0	141.0	131.1	137.4	137.9
16	Test Dry Density (pcf)	134.8	135.3	133.8	134.8	124.2	129.9	130.8
17	Test % Compaction	100.6	101.0	99.9	100.6	92.7	96.9	97.6
18	Test % Moisture	4.9	5.8	5.3	4.6	5.6	5.8	5.4
19	Test Moisture Count	90	103	96	86	94	100	95
20	Test Density Count	1662	1598	1676	1675	2084	1814	1795
21	Result (Pass or Fail)	Pass	Pass	Pass	Pass	Fail	Pass	Pass
22	See Re-Test No.					13		

Comments:

Inspector: Tayeb Farez

Resident Engineer: _____

Field Soil/Aggregate Compaction Worksheet
Nuclear Moisture/Density Gauge Method

Testing Firm	Wang Engineering, Inc.
Address	1145 N Main Street
	Lombard, Illinois 60148
Office Telephone No.	(630) 953 - 9928
Gauge# / Serial No.	3430 / 33303
Calibration Date	12 - 20 - 07
M. Std / D. Std.	667 / 2397

Date	11-24-08
WEI Project No.	450-01-01
Client	CH2MHILL Constructors, Inc.
Project	Honeywell Celotex Main Site Cover Constru
Location	Chicago, IL
Contractor	HIS Construction, Inc.
Inspector Name	Tayeb Farez

1	Test Number	15	16	17	18	19	20	21
2	Date	11-24-08	→	→	→	→	→	→
3	Re-Test of Number							
4	Type of Construction	Capping Main site surface with CA-6 aggregate	→	→	→	→	→	→
5	Sample Number	CA-06 #02	→	→	→	→	→	→
6	Material Source	Vulcan Materials Company	→	→	→	→	→	→
7	Material Type	CA-6	→	→	→	→	→	→
8	Proctor Type	Standard	Standard	Standard	Standard	Standard	Standard	Standard
9	Max. Dry Density	134	→	→	→	→	→	→
10	Optimum Moisture (%)	9	→	→	→	→	→	→
11	Min. % of Proctor Density	95%	95%	95%	95%	95%	95%	95%
12	Test Location (Station/Offset)	Shot NT: 52991	— 52993	— 52994	— 52996	— 52997	— 53008	— 53004
13	Elevation	599.37	598.68	599.13	597.90	598.81	600.10	593.48
14	Probe Depth	6	6	6	6	6	6	6
15	Test Wet Density (pcf)	131.0	139.1	127.8	138.8	144.4	137.1	138.5
16	Test Dry Density (pcf)	124.4	131.2	119.3	130.9	135.7	131.6	132.3
17	Test % Compaction	92.8	97.9	89.1	97.7	101.3	98.2	98.7
18	Test % Moisture	5.3	6.0	7.1	6.0	6.3	4.3	4.6
19	Test Moisture Count	90	104	110	104	112	79	85
20	Test Density Count	2091	1747	2243	1758	1553	1827	1774
21	Result (Pass or Fail)	Fail	Pass	Fail	Pass	Pass	Pass	Pass
22	See Re-Test No.	27						

Comments:

Inspector: Tayeb Farez

Resident Engineer: _____

Field Soil/Aggregate Compaction Worksheet
Nuclear Moisture/Density Gauge Method

Testing Firm	Wang Engineering, Inc.
Address	1145 N Main Street
	Lombard, Illinois 60148
Office Telephone No.	(630) 953 - 9928
Gauge# / Serial No.	3430 / 33303
Calibration Date	12 - 20 - 07
M. Std / D. Std.	667 / 2397

Date	11 - 24 - 08
WEI Project No.	450-01-01
Client	CH2MHILL Constructors, Inc.
Project	Honeywell Celotex Main Site Cover Constru
Location	Chicago, IL
Contractor	HIS Construction, Inc.
Inspector Name	Tayeb Farez

1	Test Number	22	23	24	25	26	27	28
2	Date	11-24-08	→	→	→	→	→	→
3	Re-Test of Number						15	
4	Type of Construction	slope along perimeter	swale along perimeter	capping main site surface with CA-6 aggregate	→	→	→	→
5	Sample Number			CA-06 #02	→	→	→	→
6	Material Source			Vulcan Materials Company				
7	Material Type	Gray clay	Brown silty clay	CA-6	→	→	→	→
8	Proctor Type	Standard	Standard	Standard	Standard	Standard	Standard	Standard
9	Max. Dry Density	102	114.6	134	→	→	→	→
10	Optimum Moisture (%)	20	14.5	9	→	→	→	→
11	Min. % of Proctor Density	90%	95%	95%	95%	95%	95%	95%
12	Test Location (Station/Offset)	Shot Nr: 52979	- 52980	- 53005	- 53006	- 53007	- 52991	- 53000
13	Elevation	596.84	592.15	597.98	601.27	600.71	599.37	600.86
14	Probe Depth	6	6	6	6	6	6	6
15	Test Wet Density (pcf)	115.0	123.8	142.0	143.2	142.1	138.8	137.4
16	Test Dry Density (pcf)	95.3	106.1	135.5	136.5	135.4	131.0	131.5
17	Test % Compaction	93.4	92.6	101.1	101.9	101.0	97.8	98.1
18	Test % Moisture	20.6	16.6	4.8	4.9	4.9	5.9	4.5
19	Test Moisture Count	233	209	89	91	91	103	83
20	Test Density Count	2344	2450	1640	1596	1636	1757	1815
21	Result (Pass or Fail)	Pass	Pass	Pass	Pass	Pass	Pass	Pass
22	See Re-Test No.							

Comments: | slope | swale |

Inspector: Tayeb Farez

Resident Engineer: _____

Field Soil/Aggregate Compaction Worksheet
Nuclear Moisture/Density Gauge Method

Testing Firm	Wang Engineering, Inc.
Address	1145 N Main Street
	Lombard, Illinois 60148
Office Telephone No.	(630) 953 - 9928
Gauge# / Serial No.	3430 / 33303
Calibration Date	12-20-07
M. Std / D. Std.	667 / 2397

Date	11-24-08
WEI Project No.	450-01-01
Client	CH2MHILL Constructors, Inc.
Project	Honeywell Celotex Main Site Cover Constru
Location	Chicago, IL
Contractor	HIS Construction, Inc.
Inspector Name	**Tayeb Farez**

1	Test Number	29	30					
2	Date	11-24-08	→					
3	Re-Test of Number							
4	Type of Construction	Capping main site surface with CA-6 aggregate.						
5	Sample Number	CA-06 #02	→					
6	Material Source	Vulcan Materials Company						
7	Material Type	CA-6	→					
8	Proctor Type	Standard	Standard	Standard	Standard	Standard	Standard	Standard
9	Max. Dry Density	134	→					
10	Optimum Moisture (%)	9	→					
11	Min. % of Proctor Density	95%	95%	95%	95%	95%	95%	95%
12	Test Location (Station/Offset)	Shot WT1 S3001	— S3002					
13	Elevation	600.75	600.77					
14	Probe Depth	6	6					
15	Test Wet Density (pcf)	138.3	128.1					
16	Test Dry Density (pcf)	131.2	122.0					
17	Test % Compaction	97.9	91.0					
18	Test % Moisture	5.4	5.0					
19	Test Moisture Count	96	85					
20	Test Density Count	1778	2232					
21	Result (Pass or Fail)	Pass	Fail					
22	See Re-Test No.		1 (11-25-08)					

Comments:

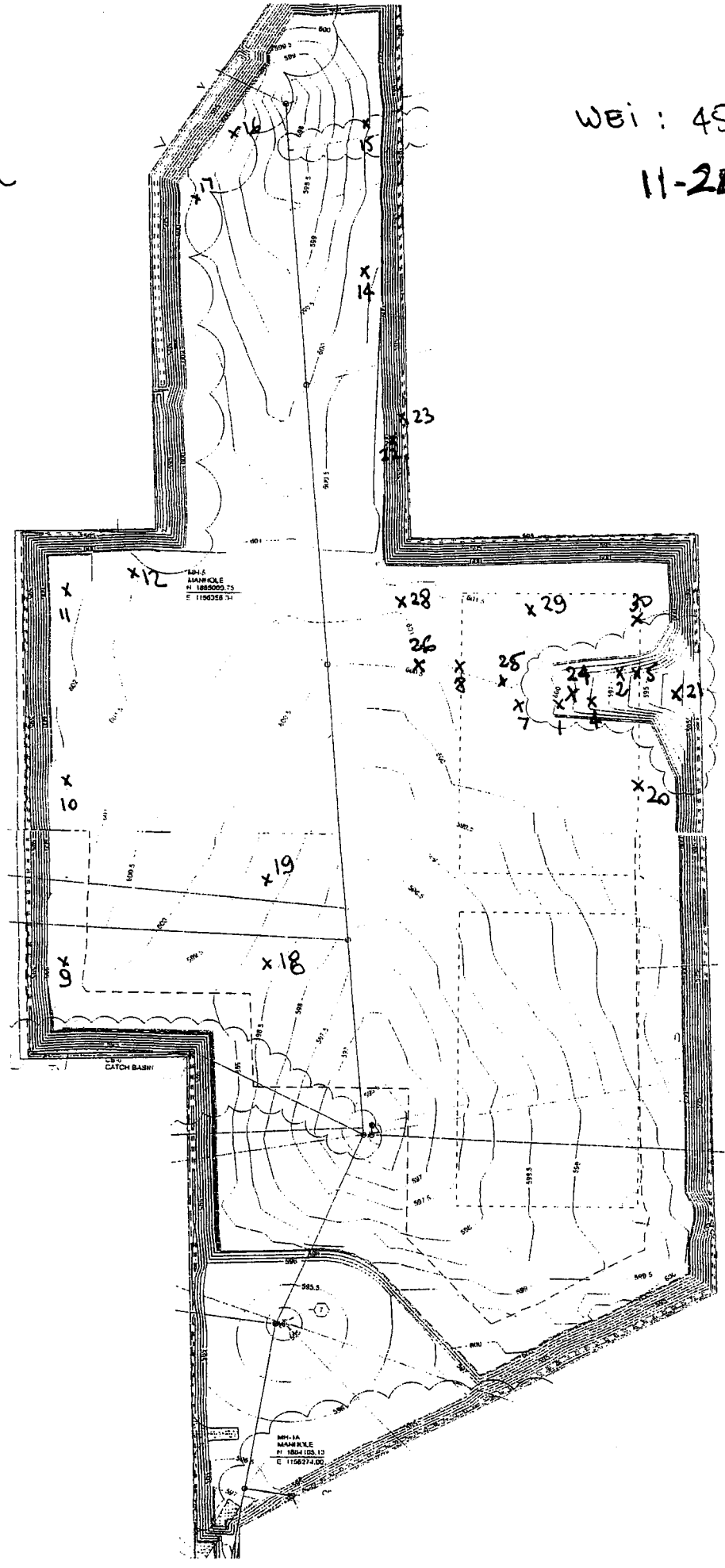
Inspector: Tayeb

Resident Engineer: _____

CH2MHILL

WBI : 450-01-01

11-24-08



Wang Engineering, Inc.

1145 N. Main Street, Lombard, IL 60148
☎ (630) 953-9928 Fax: (630) 953-9938

FIELD OBSERVATION REPORT

Sheet ____ of ____

Date 04-28-09

WE No 450-01-01

Project Name Honeywell Celotex Main Site Cover Construction

Arrive Time 8:00 AM | 3:00 PM

Project Location Chicago, IL

Depart Time 8:30 AM | 3:45 PM

Client CH2MHILL Constructors, Inc.

Total Hrs. on Job 0.5 | 0.75 | 1.2

Contractor HIS Construction, Inc.

Travel Time 2

Mileage Start 41,966 Mileage End 42,031 Daily Mileage 65

Total Chargeable Hrs. 3.25

Summary of technical and/or engineering services performed including field test data (attach additional sheets as required).

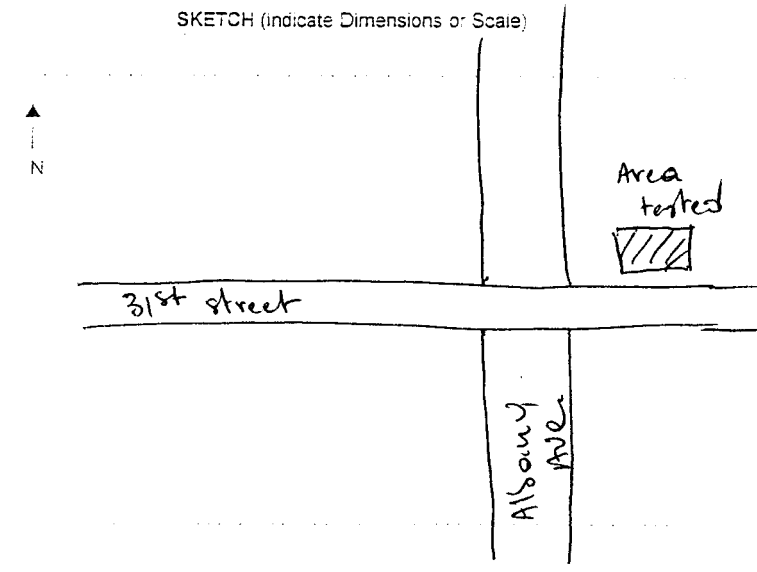
Arrived at the job site at 8:00AM - Met Javier of CH2MHILL - Inspected the work compaction.

Performed two nuclear density tests, both tests fail - let the contractor know to compact more.

Returned at the site at 3:00PM - Run two tests for compaction, both tests passed the required specification.

Attached the datasheet for test results

SKETCH (indicate Dimensions or Scale)



Attested Javier Alfaro.

Company CH2M HILL

Date 04/28/09

WE Name Tayep Farez

WE Signature Tayeb Farez

WE Reviewed

Note: All test data locations, elevations, and depths, etc. are subject to office review.

Field Soil/Aggregate Compaction Worksheet
Nuclear Moisture/Density Gauge Method

Testing Firm	Wang Engineering, Inc.
Address	1145 N Main Street
	Lombard, Illinois 60148
Office Telephone No.	(630) 953 - 9928
Gauge# / Serial No.	3430 #5 / 34651
Calibration Date	12-03-08
M. Std / D. Std.	669 / 2710

Date	04-28-09
WEI Project No.	450-01-01
Client	CH2MHILL Constructors, Inc.
Project	Honeywell Celotex Main Site Cover Constru
Location	Chicago, IL
Contractor	HIS Construction, Inc.
Inspector Name	**Tayeb Farez**

1	Test Number	1	2	3	4			
2	Date	04-28-09	→	→	→			
3	Re-Test of Number							
4	Type of Construction	Backfill						
5	Sample Number	CA-06 #02		1	2			
6	Material Source	Vulcan Materials Company	→	→	→			
7	Material Type	CA-6						
8	Proctor Type	Standard	Standard	Standard	Standard	Standard	Standard	Standard
9	Max. Dry Density	134	→	→	→			
10	Optimum Moisture (%)	9	→	→	→			
11	Min. % of Proctor Density	95%	95%	95%	95%	95%	95%	95%
12	Test Location (Station/Offset)	Center East of the area compacted	Center West of the area compacted	Center East of the area compacted	Center West of the area compacted			
13	Elevation	4" BG	4" BG	4" BG	4" BG			
14	Probe Depth	6"	BS	4"	4"			
15	Test Wet Density (pcf)	133.4	134.0	145.7	144.3			
16	Test Dry Density (pcf)	125.2	125.2	136.5	137.4			
17	Test % Compaction	93.4	93.5	101.9	102.5			
18	Test % Moisture	6.6	7.0	6.7	5.1			
19	Test Moisture Count	108	119	119	95			
20	Test Density Count	2240	880	2306	2374			
21	Result (Pass or Fail)	Fail	Fail	Pass	Pass			
22	See Re-Test No.	1	2					

Comments:

Inspector: Tayeb

Resident Engineer: Jan Olso.

Wang Engineering, Inc.

1145 N. Main Street, Lombard, IL 60148
☎ (630) 953-9928 Fax: (630) 953-9938

FIELD OBSERVATION REPORT

[redacted] _____
Sheet ____ of ____

Date 07-01-09

WE No 450-01-01

Project Name Honeywell Celotex Main Site Cover Construction

Arrive Time 11:45 AM

Project Location Chicago IL

Depart Time 4:45 PM

Client CH2MHILL Constructors Inc

Total Hrs on Job 5.0

Contractor HIS Construction, Inc.

Travel Time 2.0

Mileage Start 43,581 Mileage End _____ Daily Mileage _____ Total Chargeable Hrs. 7.0

Summary of technical and/or engineering services performed including field test data (attach additional sheets as required)

Arrived at the job site at 11:45 AM - Met Javier (RE) of CH2M HILL - Intuited the work Qc/QA Compaction -

Performed several nuclear density tests for the Top soil placed on slope, swale and Top (see drawing) at various locations about the perimeter of the site and transition area -

Most of the tests called Top" failed - I let the client know -

All others tests passed the required specifications of 85% -

Attached the datasheets for test results and the drawing -

SKETCH (indicate Dimensions or Scale)

N

Attested Javier Alfaro

Company CH2M HILL

Date 07/01/09

WE Name Tavec Farez

WE Signature Tavec Farez

WE Reviewed _____

Field Soil/Aggregate Compaction Worksheet
Nuclear Moisture/Density Gauge Method

Testing Firm	Wang Engineering, Inc.
Address	1145 N Main Street
	Lombard, Illinois 60148
Office Telephone No.	(630) 953 - 9928
Gauge# / Serial No.	3430 #5 / 34651
Calibration Date	12-03-08
M. Std / D. Std.	659 / 2719

Date	07-01-09
WEI Project No.	450-01-01
Client	CH2MHILL Constructors, Inc.
Project	Honeywell Celotex Main Site Cover Constru
Location	Chicago, IL
Contractor	HIS Construction, Inc.
Inspector Name	**Tayeb Farez**

1	Test Number	1	2	3	4	5	6	7
2	Date	07-01-09	→	→	→	→	→	→
3	Re-Test of Number							
4	Type of Construction	Backfill	→	→	→	→	→	→
5	Sample Number	# 02 - Top Soil	→	→	→	→	→	→
6	Material Source	NA						
7	Material Type	Black Sandy Loam	→	→	→	→	→	→
8	Proctor Type	Standard	Standard	Standard	Standard	Standard	Standard	Standard
9	Max. Dry Density	103.2	→	→	→	→	→	→
10	Optimum Moisture (%)	17.9	→	→	→	→	→	→
11	Min. % of Proctor Density	85%	85%	85%	85%	85%	85%	85%
12	Test Location (Station/Offset)	Loc: 1 swale whipple st.	Loc: 1 Top whipple st.	Loc: 2 swale whipple st.	Loc: 2 Top whipple st.	Loc: 3 swale whipple st.	Loc: 3 Top whipple st.	Loc: 4 swale 28th st.
13	Elevation	F.G	F.G	F.G	F.G	F.G	F.G	F.G
14	Probe Depth	6"	6"	6"	6"	6"	6"	6"
15	Test Wet Density (pcf)	113.6	86.5	108.1	86.9	108.6	86.5	115.9
16	Test Dry Density (pcf)	93.7	78.3	91.7	73.3	93.0	77.6	94.7
17	Test % Compaction	90.8	75.9	88.8	71.0	90.1	75.1	91.7
18	Test % Moisture	21.3	10.5	17.9	18.7	16.7	11.5	22.4
19	Test Moisture Count	233	107	195	166	186	115	247
20	Test Density Count	3373	6151	3820	6057	3783	6143	3206
21	Result (Pass or Fail)	Pass	Fail	Pass	Fail	Pass	Fail	Pass
22	See Re-Test No.							

Comments:

Inspector: Tayeb Farez

Resident Engineer: Jan Alfo.

\\DSPTT911\NETPROJECTS\1190501\MAINLINE FIELD COMPACTION FORM.XLS

Field Soil/Aggregate Compaction Worksheet
Nuclear Moisture/Density Gauge Method

Testing Firm	Wang Engineering, Inc.
Address	1145 N Main Street
	Lombard, Illinois 60148
Office Telephone No.	(630) 953 - 9928
Gauge# / Serial No.	3430 # 5 / 34651
Calibration Date	12-03-08
M. Std / D. Std.	659 / 2719

Date	07-01-09
WEI Project No.	450-01-01
Client	CH2MHILL Constructors, Inc.
Project	Honeywell Celotex Main Site Cover Constru
Location	Chicago, IL
Contractor	HIS Construction, Inc.
Inspector Name	**Tayeb Farez**

1	Test Number	8	9	10	11	12	13	14
2	Date	07-01-09	→	→	→	→	→	→
3	Re-Test of Number							
4	Type of Construction	Backfill	→	→	→	→	→	→
5	Sample Number	#02 - Top Soil	→	→	→	→	→	→
6	Material Source	NA						
7	Material Type	Black Sandy loam	→	→	→	→	→	→
8	Proctor Type	Standard	Standard	Standard	Standard	Standard	Standard	Standard
9	Max. Dry Density	103.2	→	→	→	→	→	→
10	Optimum Moisture (%)	17.9	→	→	→	→	→	→
11	Min. % of Proctor Density	95%	95%	95%	95%	95%	95%	95%
12	Test Location (Station/Offset)	loc: 4 Top 28th St.	loc: 5 Swale 28th St.	loc: 5 Top 28th St.	loc: 6 Swale Sacramento Ave	loc: 6 Top Sacramento Ave	loc: 7 Transition area	loc: 8 Transition area
13	Elevation	F.G	F.G	F.G	F.G	F.G	F.G	F.G
14	Probe Depth	6"	6"	6"	6"	6"	6"	6"
15	Test Wet Density (pcf)	89.3	111.6	100.8	102.9	94.5	110.9	103.2
16	Test Dry Density (pcf)	81.1	96.5	91.4	94.5	87.4	95.8	88.1
17	Test % Compaction	78.6	93.6	88.6	91.6	84.7	92.9	85.4
18	Test % Moisture	10.1	15.6	10.3	8.9	8.1	15.7	17.1
19	Test Moisture Count	107	181	120	109	95	181	181
20	Test Density Count	5783	3541	4504	4309	5184	3595	4253
21	Result (Pass or Fail)	Fail	Pass	Pass	Pass	Pass	Pass	Pass
22	See Re-Test No.							

Comments:

Inspector: Tayeb

Resident Engineer: Jan Allpo.

Field Soil/Aggregate Compaction Worksheet
Nuclear Moisture/Density Gauge Method

Testing Firm	Wang Engineering, Inc.
Address	1145 N Main Street
	Lombard, Illinois 60148
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Calibration Date	12-03-08
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Date	07-01-09
WEI Project No.	450-01-01
Client	CH2MHILL Constructors, Inc.
Project	Honeywell Celotex Main Site Cover Constru
Location	Chicago, IL
Contractor	HIS Construction, Inc.
Inspector Name	**Tayeb Farez**

1	Test Number	15	16	17	18	19	20	21
2	Date	07-01-09	→	→	→	→	→	→
3	Re-Test of Number							
4	Type of Construction	Backfill	→	→	→	→	→	→
5	Sample Number	#02 - Top Soil	→	→	→	→	→	→
6	Material Source	NA						
7	Material Type	Black Sandy Loam	→	→	→	→	→	→
8	Proctor Type	Standard	Standard	Standard	Standard	Standard	Standard	Standard
9	Max. Dry Density	103.2	→	→	→	→	→	→
10	Optimum Moisture (%)	17.9	→	→	→	→	→	→
11	Min. % of Proctor Density	85%	85%	85%	85%	85%	85%	85%
12	Test Location (Station/Offset)	Loc: 9 Transition area	Loc: 10 Transition area	Loc: 11 Transition area	Loc: 12 Entrance slope N. side	Loc: 13 Entrance slope N. side	Loc: 14 Entrance slope S. side	Loc: 15 Entrance slope S. side
13	Elevation	F.G	F.G	F.G	F.G	F.G	F.G	F.G
14	Probe Depth	6"	6"	6"	6"	6"	6"	6"
15	Test Wet Density (pcf)	105.9	101.0	110.3	123.4	119.7	105.1	102.6
16	Test Dry Density (pcf)	91.5	87.3	91.7	105.4	105.6	94.2	90.7
17	Test % Compaction	88.6	84.6	88.9	102.1	102.3	91.3	87.9
18	Test % Moisture	15.8	15.7	20.3	17.1	13.4	11.6	13.0
19	Test Moisture Count	174	166	219	213	171	136	146
20	Test Density Count	4013	4469	3628	2730	2971	4039	4327
21	Result (Pass or Fail)	Pass	Pass	Pass	Pass	Pass	Pass	Pass
22	See Re-Test No.							

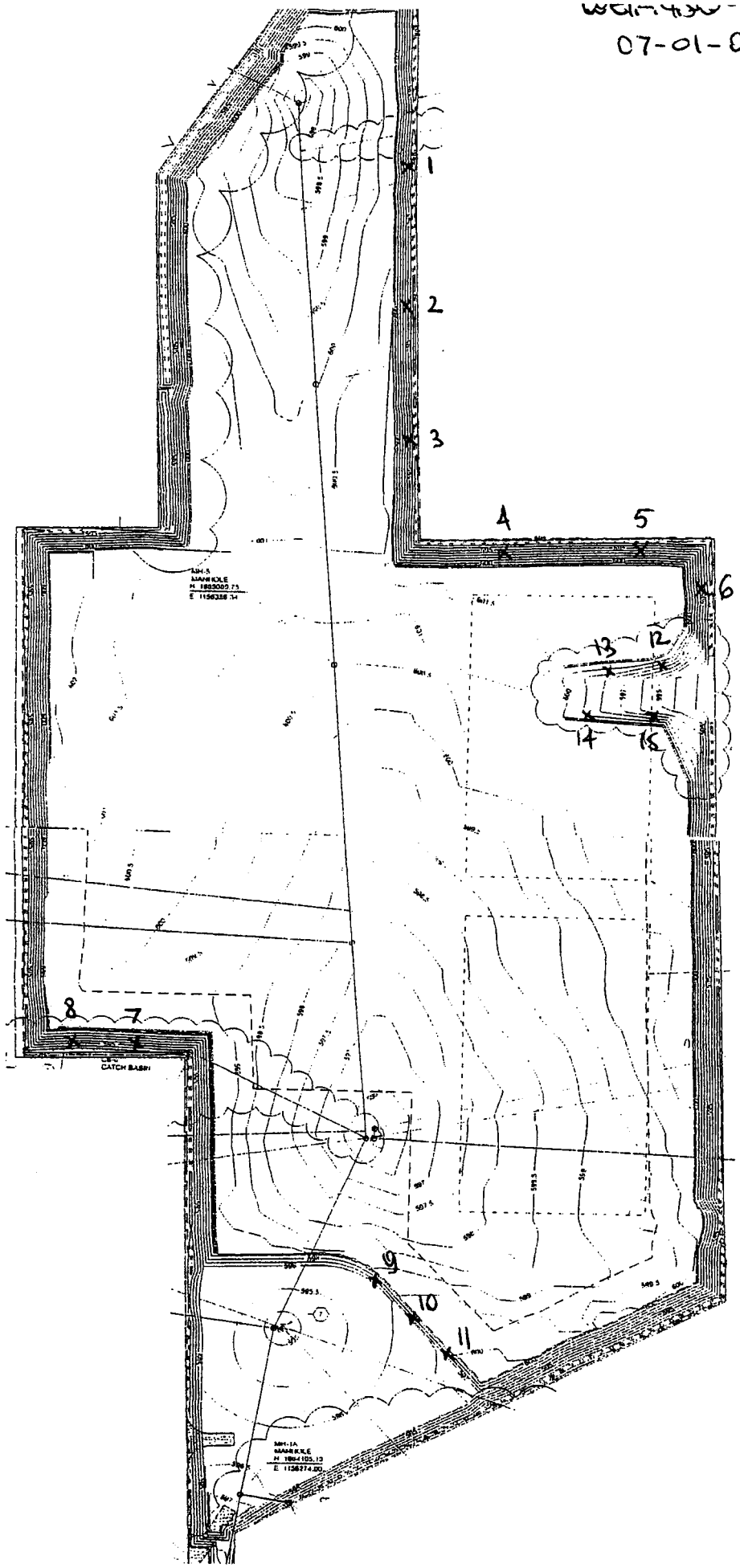
Comments:

Inspector: Tayeb Farez

Resident Engineer: Jan Alpo.

\\D5PTT911\NETPROJECTS\1190501\MAINLINE FIELD COMPACTION FORM.XLS

WCM-430-01-01
07-01-09



[redacted] _____

Sheet ____ of ____

Date 07-09-09

WE No 450-01-01

Project Name Honeywell Calotex Main Site Cover Construction

Arrive Time 9:00

Project Location Chicago IL

Depart Time 12:30

Client CH2MHILL Constructors Inc

Total Hrs on Job 3.5

Contractor HIS Construction Inc

Travel Time

Mileage Start 43,664 Mileage End _____ Daily Mileage _____ Total Chargeable Hrs _____

Summary of technical and/or engineering services performed including field test data (attach additional sheets as required)

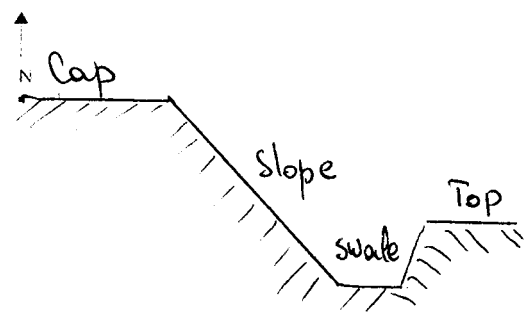
Arrived at the job site at 9:00 AM - Met Javier of CH2MHILL (RE) - Discussed the work Qc/QA compaction.

Performed several nuclear density tests at various locations along the perimeter of the site on slope, swale and Top (see Drawings attached).

Most of the tests passed the required specification of 85% for Top soil and 95% for the Clay (see test results attached).

Attached datasheets for test results and drawing for locations.

SKETCH (Indicate Dimensions or Scale)



Attested _____

Company CH2M HILL Francis Alfaro.

Date 7/09/09

WE Name Tayeb Farez

WE Signature Tayeb Farez

WE Reviewed _____

Field Soil/Aggregate Compaction Worksheet
Nuclear Moisture/Density Gauge Method

Testing Firm	Wang Engineering, Inc.
Address	1145 N Main Street
	Lombard, Illinois 60148
Office Telephone No.	(630) 953 - 9928
Gauge# / Serial No.	3430 #5 / 34651
Calibration Date	12-03-08
M. Std / D. Std.	668 / 2729

Date	07-09-09
WEI Project No.	450-01-01
Client	CH2MHILL Constructors, Inc.
Project	Honeywell Celotex Main Site Cover Constru
Location	Chicago, IL
Contractor	HIS Construction, Inc.
Inspector Name	**Tayeb Farez**

1	Test Number	1	2	3	4	5	6	7
2	Date	07-09-09	→	→	→	→	→	→
3	Re-Test of Number							
4	Type of Construction	Backfill	→	→	→	→	→	→
5	Sample Number	#02 Top soil	→	→	→	→	→	→
6	Material Source	NA						
7	Material Type	Black Sandy Loam	→	→	→	→	→	→
8	Proctor Type	Standard	Standard	Standard	Standard	Standard	Standard	Standard
9	Max. Dry Density	103.2	→	→	→	→	→	→
10	Optimum Moisture (%)	17.9	→	→	→	→	→	→
11	Min. % of Proctor Density	85%	85%	85%	85%	85%	85%	85%
12	Test Location (Station/Offset)	Loc: 1 slope 30th st.	Loc: 1 swale 30th st.	Loc: 1 Top 30th st.	Loc: 2 slope 30th st.	Loc: 2 swale 30th st.	Loc: 2 Top 30th st.	Loc: 3 slope Albany Ave
13	Elevation	F.G	F.G	F.G	F.G	F.G	F.G	F.G
14	Probe Depth	6"	6"	6"	6"	6"	6"	6"
15	Test Wet Density (pcf)	119.1	104.6	109.8	109.6	115.1	100.5	121.0
16	Test Dry Density (pcf)	103.2	90.3	90.4	96.9	95.8	90.2	105.7
17	Test % Compaction	100.0	87.5	87.6	93.9	92.9	87.4	102.5
18	Test % Moisture	15.4	15.9	13.7	13.2	20.1	11.4	14.4
19	Test Moisture Count	192	175	154	158	229	131	185
20	Test Density Count	3019	4147	4322	3720	3280	4550	2901
21	Result (Pass or Fail)	Pass	Pass	Pass	Pass	Pass	Pass	Pass
22	See Re-Test No.							

Comments:

Inspector: Tayeb Farez

Resident Engineer: Jamie Allpo.

Field Soil/Aggregate Compaction Worksheet
Nuclear Moisture/Density Gauge Method

Testing Firm	Wang Engineering, Inc.
Address	1145 N Main Street
	Lombard, Illinois 60148
Office Telephone No.	(630) 953 - 9928
Gauge# / Serial No.	3430 #5 / 34651
Calibration Date	12-03-08
M. Std / D. Std.	668 / 2729

Date	07-09-09
WEI Project No.	450-01-01
Client	CH2MHILL Constructors, Inc.
Project	Honeywell Celotex Main Site Cover Constru
Location	Chicago, IL
Contractor	HIS Construction, Inc.
Inspector Name	Tayeb Farez

1	Test Number	8	9	10	11	12	13	14
2	Date	07-09-09	→	→	→	→	→	→
3	Re-Test of Number							
4	Type of Construction	Backfill	→	→	→	→	→	→
5	Sample Number	#02 Top Soil	→	→	→	→	→	→
6	Material Source	NA						
7	Material Type	Black Sandy Loam	→	→	→	→	→	→
8	Proctor Type	Standard	Standard	Standard	Standard	Standard	Standard	Standard
9	Max. Dry Density	103.2	→	→	→	→	→	→
10	Optimum Moisture (%)	17.9	→	→	→	→	→	→
11	Min. % of Proctor Density	95%	95%	95%	95%	95%	95%	95%
12	Test Location (Station/Offset)	Loc: 3 swale Albany Ave	Loc: 3 Top Albany Ave	Loc: 4 slope Albany Ave	Loc: 4 swale Albany Ave	Loc: 4 Top Albany Ave	Loc: 5 slope Albany Ave	Loc: 5 swale Albany Ave
13	Elevation	F.G	F.G	F.G	F.G	F.G	F.G	F.G
14	Probe Depth	6"	6"	6"	6"	6"	6"	6"
15	Test Wet Density (pcf)	113.2	98.9	115.0	99.0	93.9	118.8	104.7
16	Test Dry Density (pcf)	102.3	90.4	100.7	86.6	83.2	102.9	91.1
17	Test % Compaction	99.2	87.6	97.5	84.0	80.6	99.7	88.3
18	Test % Moisture	10.6	12.0	14.2	14.3	12.9	15.5	14.9
19	Test Moisture Count	137	137	175	154	136	193	167
20	Test Density Count	3453	4476	3308	4686	5242	3037	4137
21	Result (Pass or Fail)	Pass	Pass	Pass	Fail	Fail	Pass	Pass
22	See Re-Test No.							

Comments:

Inspector: Tayeb Farez

Resident Engineer: James Delpo.

Field Soil/Aggregate Compaction Worksheet
Nuclear Moisture/Density Gauge Method

Testing Firm	Wang Engineering, Inc.
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	Lombard, Illinois 60148
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Gauge# / Serial No.	3430 #5 / 34651
Calibration Date	12-03-08
M. Std / D. Std.	668 / 2729

Date	07-09-09
WEI Project No.	450-01-01
Client	CH2MHILL Constructors, Inc.
Project	Honeywell Celotex Main Site Cover Constru
Location	Chicago, IL
Contractor	HIS Construction, Inc.
Inspector Name	**Tayeb Farez**

1	Test Number	15	16	17	18	19	20	21
2	Date	07-09-09	→	→	→	→	→	→
3	Re-Test of Number							
4	Type of Construction	Backfill	→	→	→	→	→	→
5	Sample Number	#02 Top Soil	→	→	→	→	→	→
6	Material Source	NA						
7	Material Type	Black Sandy Loam	→	→	→	→	→	→
8	Proctor Type	Standard	Standard	Standard	Standard	Standard	Standard	Standard
9	Max. Dry Density	103.2	→	→	→	→	→	→
10	Optimum Moisture (%)	17.9	→	→	→	→	→	→
11	Min. % of Proctor Density	95%	95%	95%	95%	95%	95%	95%
12	Test Location (Station/Offset)	Loc: 5 Top Albany Ave	Loc: 7 slope Albany Ave	Loc: 7 Swale Albany Ave	Loc: 7 Top Albany Ave	Loc: 8 slope S. of Howard side	Loc: 8 Swale S. of Howard side	Loc: 8 Top S. of Howard side
13	Elevation	F.G	F.G	F.G	F.G	F.G	F.G	F.G
14	Probe Depth	6"	6"	6"	6"	6"	6"	6"
15	Test Wet Density (pcf)	96.5	118.7	102.3	104.5	111.9	104.2	94.8
16	Test Dry Density (pcf)	86.2	103.8	88.2	93.9	96.0	90.9	85.6
17	Test % Compaction	83.5	100.6	86.5	91.0	93.0	88.0	82.9
18	Test % Moisture	11.9	14.3	14.7	11.2	16.5	14.7	10.8
19	Test Moisture Count	131	181	162	134	192	165	120
20	Test Density Count	4962	3050	4357	4171	3532	4180	5149
21	Result (Pass or Fail)	Fail	Pass	Pass	Pass	Pass	Pass	Pass
22	See Re-Test No.							

Comments:

Inspector: Tayeb Farez

Resident Engineer: Jan Alfro.

Field Soil/Aggregate Compaction Worksheet
Nuclear Moisture/Density Gauge Method

Testing Firm	Wang Engineering, Inc.
Address	1145 N Main Street
	Lombard, Illinois 60148
Office Telephone No.	(630) 953 - 9928
Gauge# / Serial No.	3430 #5 / 34651
Calibration Date	12-03-09
M. Std / D. Std.	668 / 2729

Date	07-09-09
WEI Project No.	450-01-01
Client	CH2MHILL Constructors, Inc.
Project	Honeywell Celotex Main Site Cover Constru
Location	Chicago, IL
Contractor	HIS Construction, Inc.
Inspector Name	**Tayeb Farez**

1	Test Number	22						
2	Date	07-09-09						
3	Re-Test of Number							
4	Type of Construction	Backfill -	construction of slope along perimeter.					
5	Sample Number	#01						
6	Material Source	NA						
7	Material Type	Brown Silty Clay						
8	Proctor Type	Standard	Standard	Standard	Standard	Standard	Standard	Standard
9	Max. Dry Density	114.6						
10	Optimum Moisture (%)	14.5						
11	Min. % of Proctor Density	95%	95%	95%	95%	95%	95%	95%
12	Test Location (Station/Offset)	Loc: 6 slope Albany Ave						
13	Elevation	6" B.F.G						
14	Probe Depth	12"						
15	Test Wet Density (pcf)	121.8						
16	Test Dry Density (pcf)	109.0						
17	Test % Compaction	95.1						
18	Test % Moisture	11.7						
19	Test Moisture Count	158						
20	Test Density Count	626						
21	Result (Pass or Fail)	Pass						
22	See Re-Test No.							

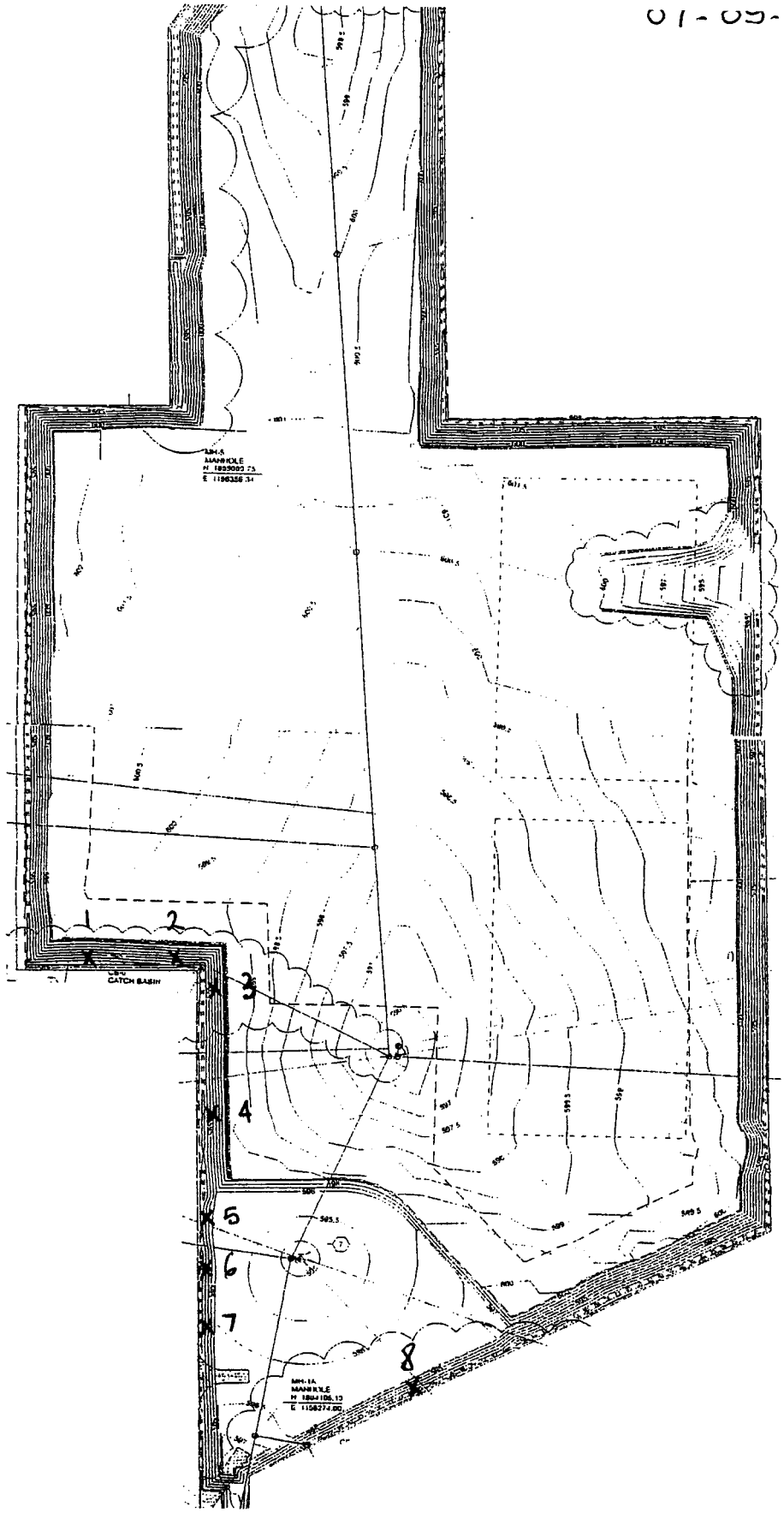
Comments:

Inspector: Tayeb Farez

Resident Engineer: Jan Alfro

\\DSPTT911\NETPROJECTS\11905001\MAINLINE FIELD COMPACTION FORM.XLS

01-09-09



Wang Engineering, Inc.

1145 N. Main Street, Lombard, IL 60148
☎ (630) 953-9928 Fax: (630) 953-9938

FIELD OBSERVATION REPORT

Sequence _____
Sheet ____ of ____

Date 07-16-09
WE. No 450-01-01
Project Name Honeywell Celotex Main Site Cover Construction
Arrive Time 3:00 PM
Project Location Chicago IL
Depart Time 6:15 PM
Client CH2M-HILL Constructors Inc
Total Hrs. on Job
Contractor HIS Construction, Inc.
Travel Time
Mileage Start 43,3956 Mileage End Daily Mileage
Total Chargeable Hrs

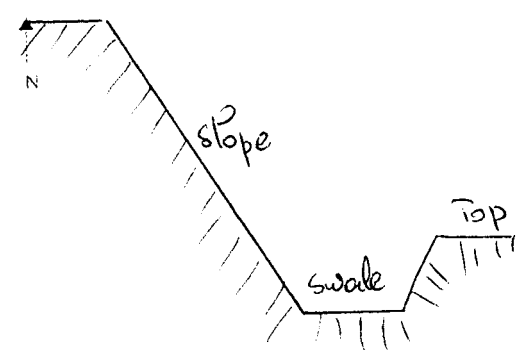
Summary of technical and/or engineering services performed including field test data (attach additional sheets as required)

Reached the Job Site at 3:00 PM - Met Jabier of CH2MHILL (RE) - Discussed the Work Qc/QA Compaction -

Performed Several Nuclear density tests at Various locations along the perimeter of the site on Slope, Swale and Top - (See Drawing attached) -

Most of the tests passed the required specification of 85% for Top soil. ~~see~~ Attached datasheets for test results and drawing for locations -

SKETCH (indicate Dimensions or Scale)



Attested
Company CH2M HILL
Date 7/16/09

WE. Name Tayeb Farez
WE. Signature Tayeb Farez
WE. Reviewed

Field Soil/Aggregate Compaction Worksheet
Nuclear Moisture/Density Gauge Method

Testing Firm	Wang Engineering, Inc.
Address	1145 N Main Street
	Lombard, Illinois 60148
Office Telephone No.	(630) 953 - 9928
Gauge# / Serial No.	3430 #5 / 34651
Calibration Date	12-03-08
M. Std / D. Std.	670 / 2704

Date	07-16-09
WEI Project No.	450-01-01
Client	CH2MHILL Constructors, Inc.
Project	Honeywell Celotex Main Site Cover Constru
Location	Chicago, IL
Contractor	HIS Construction, Inc.
Inspector Name	**Tayeb Farez**

1	Test Number	1	2	3	4	5	6	7
2	Date	07-16-09	–					→
3	Re-Test of Number							
4	Type of Construction	Back fill	→					→
5	Sample Number	#02 Top Soil	→					→
6	Material Source	NA						
7	Material Type	Black Sandy Loam	→					→
8	Proctor Type	Standard	Standard	Standard	Standard	Standard	Standard	Standard
9	Max. Dry Density	103.2	→					→
10	Optimum Moisture (%)	17.9	→					→
11	Min. % of Proctor Density	95%	95%	95%	95%	95%	95%	95%
12	Test Location (Station/Offset)	Loc: 1 slope Alley	Loc: 1 swale Alley	Loc: 1 Top Alley	Loc: 2 slope Alley	Loc: 2 swale Alley	Loc: 2 Top Alley	Loc: 3 slope Alley
13	Elevation	F.G	F.G	F.G	F.G	F.G	F.G	F.G
14	Probe Depth	6"	6"	6"	6"	6"	6"	6"
15	Test Wet Density (pcf)	125.0	114.4	116.5	119.9	115.8	112.5	107.1
16	Test Dry Density (pcf)	108.8	95.4	102.3	103.6	100.4	96.2	93.4
17	Test % Compaction	105.4	92.4	99.1	100.4	97.3	93.2	90.5
18	Test % Moisture	15.0	19.9	13.9	15.7	15.3	16.9	14.6
19	Test Moisture Count	197	227	175	197	187	197	168
20	Test Density Count	2627	3300	3168	2938	3218	3452	3895
21	Result (Pass or Fail)	Pass	Pass	Pass	Pass	Pass	Pass	Pass
22	See Re-Test No.							

Comments:

Inspector: Tayeb

Resident Engineer: Jim Alfo

Field Soil/Aggregate Compaction Worksheet
Nuclear Moisture/Density Gauge Method

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M. Std / D. Std.	670 / 2704

Date	07-16-09
WEI Project No.	450-01-01
Client	CH2MHILL Constructors, Inc.
Project	Honeywell Celotex Main Site Cover Constru
Location	Chicago, IL
Contractor	HIS Construction, Inc.
Inspector Name	**Tayeb Farez**

1	Test Number	8	9	10	11	12	13	14
2	Date	07-16-09	→	→	→	→	→	→
3	Re-Test of Number							
4	Type of Construction	Backfill	→	→	→	→	→	→
5	Sample Number	#02 Top Soil	→	→	→	→	→	→
6	Material Source	NA						
7	Material Type	Black Sandy Loam	→	→	→	→	→	→
8	Proctor Type	Standard	Standard	Standard	Standard	Standard	Standard	Standard
9	Max. Dry Density	103.2	→	→	→	→	→	→
10	Optimum Moisture (%)	17.9	→	→	→	→	→	→
11	Min. % of Proctor Density	95%	95%	95%	95%	95%	95%	95%
12	Test Location (Station/Offset)	loc: 3 swale Alley	loc: 3 Top Alley	loc: 4 slope Alley	loc: 4 swale Alley	loc: 4 Top Alley	loc: 5 slope 28th St.	loc: 5 swale 28th St
13	Elevation	F.G	F.G	F.G	F.G	F.G	F.G	F.G
14	Probe Depth	6"	6"	6"	6"	6"	6"	6"
15	Test Wet Density (pcf)	121.3	91.1	109.0	108.9	108.7	99.5	111.0
16	Test Dry Density (pcf)	102.9	85.5	92.3	94.1	88.2	87.5	96.6
17	Test % Compaction	99.7	82.9	89.4	91.2	85.4	84.7	93.6
18	Test % Moisture	17.9	6.5	18.1	15.7	23.2	13.8	14.9
19	Test Moisture Count	220	80	202	181	243	151	176
20	Test Density Count	2845	5554	3722	3737	3734	4595	3576
21	Result (Pass or Fail)	Pass	Fail.	Pass	Pass	Pass	Pass	Pass
22	See Re-Test No.							

Comments:

Inspector: Tayeb Farez

Resident Engineer: Jan Alfo

Field Soil/Aggregate Compaction Worksheet
Nuclear Moisture/Density Gauge Method

Testing Firm	Wang Engineering, Inc.
Address	1145 N Main Street
	Lombard, Illinois 60148
Office Telephone No.	(630) 953 - 9928
Gauge# / Serial No.	3430 #5 / 34651
Calibration Date	12-03-08
M. Std / D. Std.	670 / 2704

Date	07-16-09
WEI Project No.	450-01-01
Client	CH2MHILL Constructors, Inc.
Project	Honeywell Celotex Main Site Cover Constru
Location	Chicago, IL
Contractor	HIS Construction, Inc.
Inspector Name	**Tayeb Farez**

1	Test Number	15	16	17	18			
2	Date	07-16-09	→	→	→			
3	Re-Test of Number							
4	Type of Construction	Backfill	→	→	→			
5	Sample Number	#02 Top Soil	→	→	→			
6	Material Source	NA						
7	Material Type	Black Sandy Loam	→	→	→			
8	Proctor Type	Standard	Standard	Standard	Standard	Standard	Standard	Standard
9	Max. Dry Density	103.2	→	→	→			
10	Optimum Moisture (%)	17.9	→	→	→			
11	Min. % of Proctor Density	95%	95%	95%	95%	95%	95%	95%
12	Test Location (Station/Offset)	Loc: 5 Top 28th St.	Loc: 6 Slope 28th St.	Loc: 6 Swale 28th St.	Loc: 6 Top 28th St.			
13	Elevation	F.G	F.G	F.G	F.G			
14	Probe Depth	6"	6"	6"	6"			
15	Test Wet Density (pcf)	95.8	105.4	125.6	98.1			
16	Test Dry Density (pcf)	84.8	90.3	110.0	87.1			
17	Test % Compaction	82.2	87.5	106.6	84.4			
18	Test % Moisture	12.9	16.7	14.1	12.7			
19	Test Moisture Count	139	184	189	140			
20	Test Density Count	4987	4033	2598	4741			
21	Result (Pass or Fail)	Fail	Pass	Pass	Pass			
22	See Re-Test No.							

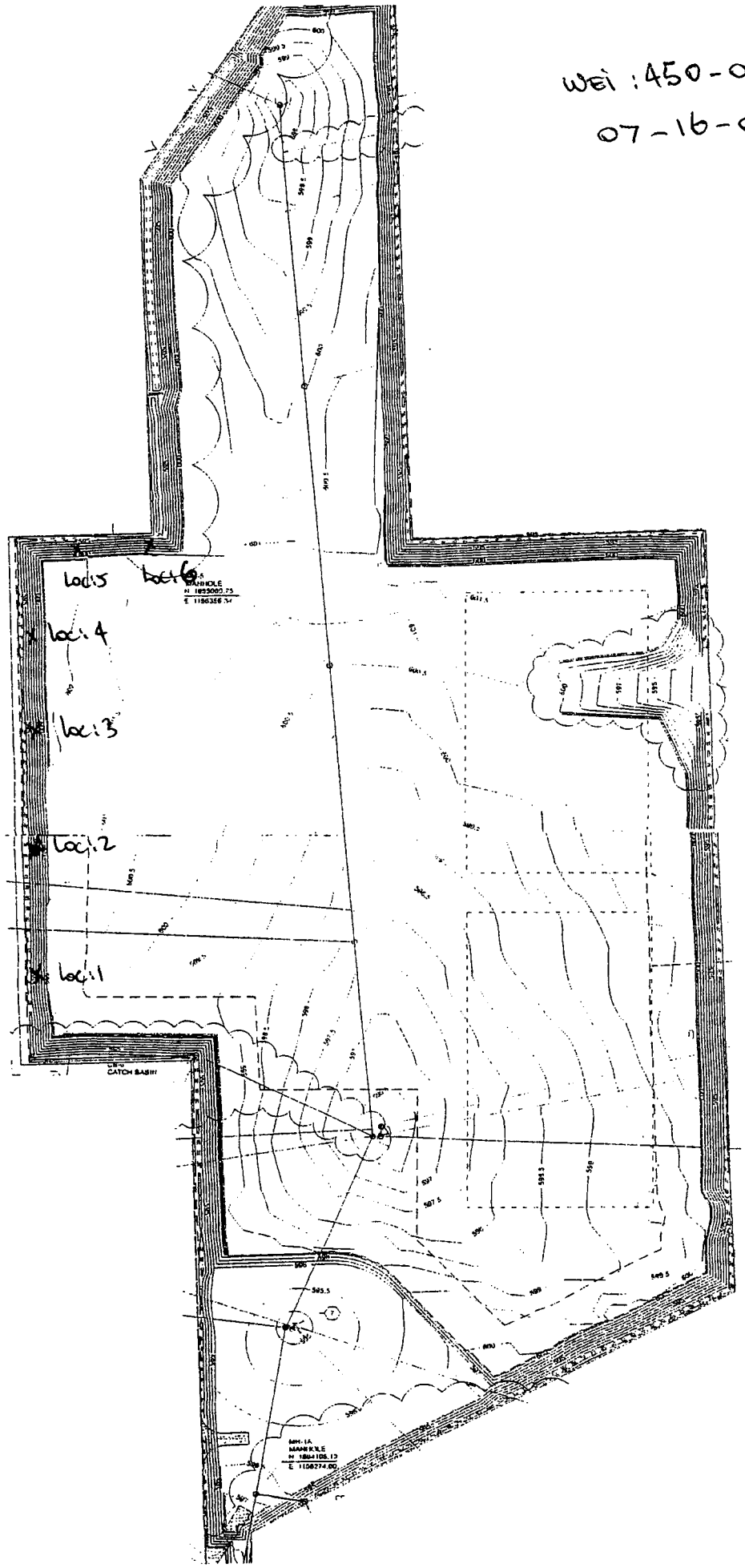
Comments:

Inspector: Tayeb Farez

Resident Engineer: Jan Alfo

WEI : 450-01-01

07-16-09



Jim Alfo.

Wang Engineering, Inc.

1145 N. Main Street, Lombard, IL 60148
☎ (630) 953-9928 Fax: (630) 953-9938

FIELD OBSERVATION REPORT

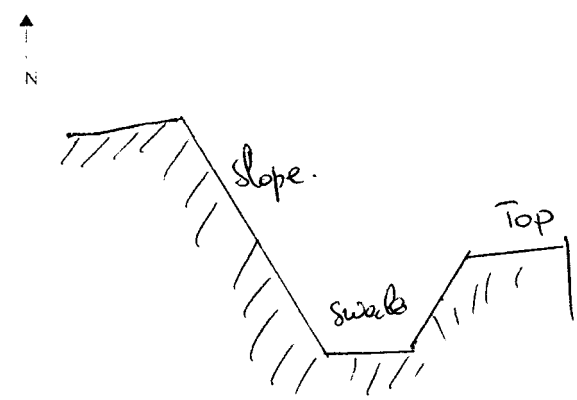
Submittal: _____
Sheet 1 of 5

Date 07-20-09 | WE No 450-01-01
Project Name Honeywell Celotex Main Site Cover Construction | Arrive Time 3:00 PM
Project Location Chicago IL | Depart Time 6:00 PM
Client CH2MHILL Constructors Inc | Total Hrs on Job 3.0
Contractor HIS Construction Inc | Travel Time _____
Mileage Start 44,199 | Mileage End _____ | Daily Mileage _____ | Total Chargeable Hrs _____

Summary of technical and/or engineering services performed including field test data (attach additional sheets as required).

Arrived at the job site at 3:00 PM - met Javier (RE) of CH2MHILL - Inspected the work Qe/Qn compaction -
Tested several locations along the perimeter of the site for testing on slope, swale and Top - (see drawing attached) -
Most of the tests passed the required specification of 85% for Top Soil.
Attached datasheets for test results and drawing for locations

SKETCH (Indicate Dimensions or Scale)



Attested _____
Company _____
Date _____

WE Name Tavep Farez
WE Signature Tavep Farez
WE Reviewed _____

Field Soil/Aggregate Compaction Worksheet
Nuclear Moisture/Density Gauge Method

Testing Firm	Wang Engineering, Inc.
Address	1145 N Main Street
	Lombard, Illinois 60148
Office Telephone No.	(630) 953 - 9928
Gauge# / Serial No.	3430 #5 / 34651
Calibration Date	12-03-08
M. Std / D. Std.	668 / 2718

Date	07-20-09
WEI Project No.	450-01-01
Client	CH2MHILL Constructors, Inc.
Project	Honeywell Celotex Main Site Cover Constru
Location	Chicago, IL
Contractor	HIS Construction, Inc.
Inspector Name	Tayeb Farez

1	Test Number	1	2	3	4	5	6	7
2	Date	07-20-09	→	→	→	→	→	→
3	Re-Test of Number							
4	Type of Construction	Backfill	→	→	→	→	→	→
5	Sample Number	#02 Top Soil	→	→	→	→	→	→
6	Material Source	NA						
7	Material Type	Black Sandy Loam	→	→	→	→	→	→
8	Proctor Type	Standard	Standard	Standard	Standard	Standard	Standard	Standard
9	Max. Dry Density	103.2	→	→	→	→	→	→
10	Optimum Moisture (%)	17.9	→	→	→	→	→	→
11	Min. % of Proctor Density	85%	85%	85%	85%	85%	85%	85%
12	Test Location (Station/Offset)	Loc: 1 Slope Alley	Loc: 1 Swale Alley	Loc: 1 Top Alley	Loc: 2 Slope Alley	Loc: 2 Swale Alley	Loc: 2 Top Alley	Loc: 3 Slope Alley
13	Elevation	F.G	F.G	F.G	F.G	F.G	F.G	FG
14	Probe Depth	6"	6"	6"	6"	6"	6"	6"
15	Test Wet Density (pcf)	117.6	118.9	104.1	126.9	115.5	82.6	109.8
16	Test Dry Density (pcf)	101.1	104.1	93.3	110.3	99.6	71.2	99.8
17	Test % Compaction	97.9	100.9	90.4	106.9	96.6	69.0	96.7
18	Test % Moisture	16.3	14.1	11.6	15.0	15.9	16.0	10.1
19	Test Moisture Count	198	179	137	199	191	143	128
20	Test Density Count	3107	3026	4186	2536	3253	6664	3701
21	Result (Pass or Fail)	Pass	Pass	Pass	Pass	Pass	Fail	Pass
22	See Re-Test No.							

Comments: F.G : Final Grade

Inspector: Tayeb

Resident Engineer: _____

Field Soil/Aggregate Compaction Worksheet
Nuclear Moisture/Density Gauge Method

Testing Firm	Wang Engineering, Inc.
Address	1145 N Main Street
	Lombard, Illinois 60148
Office Telephone No.	(630) 953 - 9928
Gauge# / Serial No.	3450 #5 / 34651
Calibration Date	12-03-08
M. Std / D. Std.	668 / 2718

Date	07-20-09
WEI Project No.	450-01-01
Client	CH2MHILL Constructors, Inc.
Project	Honeywell Celotex Main Site Cover Constru
Location	Chicago, IL
Contractor	HIS Construction, Inc.
Inspector Name	**Tayeb Farez**

1	Test Number	8	9	10	11	12	13	14
2	Date	07-20-09	→	→	→	→	→	→
3	Re-Test of Number							
4	Type of Construction	Backfill	→	→	→	→	→	→
5	Sample Number	#02 Top Soil	→				→	→
6	Material Source	NA						
7	Material Type	Black sandy loam	→				→	→
8	Proctor Type	Standard	Standard	Standard	Standard	Standard	Standard	Standard
9	Max. Dry Density	103.2	→	→	→	→	→	→
10	Optimum Moisture (%)	17.9	→	→	→	→	→	→
11	Min. % of Proctor Density	95%	95%	95%	95%	95%	95%	95%
12	Test Location (Station/Offset)	Loc: 3 Swale Alley	Loc: 3 Top Alley	Loc: 4 Slope Alley	Loc: 4 Swale Alley	Loc: 4 Top Alley	Loc: 5 Slope Alley	Loc: 5 Swale Alley
13	Elevation	F.G	F.G	F.G	F.G	F.G	F.G	F.G
14	Probe Depth	6"	6"	6"	6"	6"	6"	6"
15	Test Wet Density (pcf)	107.9	91.8	120.9	112.5	90.6	117.2	104.1
16	Test Dry Density (pcf)	92.2	80.7	106.2	99.1	79.2	101.0	89.1
17	Test % Compaction	89.3	78.2	102.9	96.1	76.7	97.9	86.3
18	Test % Moisture	17.1	13.7	13.9	13.5	14.4	16.0	16.8
19	Test Moisture Count	190	139	179	164	143	195	182
20	Test Density Count	3832	5472	2895	3481	5612	3133	4170
21	Result (Pass or Fail)	Pass	Fail	Pass	Pass	Fail	Pass	Pass
22	See Re-Test No.							

Comments: F.G : Final Grade.

Inspector: Tayeb Farez

Resident Engineer: _____

Field Soil/Aggregate Compaction Worksheet
Nuclear Moisture/Density Gauge Method

Testing Firm	Wang Engineering, Inc.
Address	1145 N Main Street
	Lombard, Illinois 60148
Office Telephone No.	(630) 953 - 9928
Gauge# / Serial No.	3430 #5 / 34651
Calibration Date	12-03-08
M. Std / D. Std.	668 / 2718

Date	07-20-09
WEI Project No.	450-01-01
Client	CH2MHILL Constructors, Inc.
Project	Honeywell Celotex Main Site Cover Constru
Location	Chicago, IL
Contractor	HIS Construction, Inc.
Inspector Name	**Tayeb Farez**

1	Test Number	15	16	17	18			
2	Date	07-20-09	→	→	→			
3	Re-Test of Number							
4	Type of Construction	Backfill	→	→	→			
5	Sample Number	#02 Top Soil	→	→	→			
6	Material Source	NA						
7	Material Type	Black Sandy Loam	→	→	→			
8	Proctor Type	Standard	Standard	Standard	Standard	Standard	Standard	Standard
9	Max. Dry Density	103.2	→	→	→			
10	Optimum Moisture (%)	17.9	→	→	→			
11	Min. % of Proctor Density	95%	95%	95%	95%	95%	95%	95%
12	Test Location (Station/Offset)	Loc: 5 Top Alley	Loc: 6 Slope 27th St.	Loc: 6 Swale 27th St.	Loc: 6 Top 27th St.			
13	Elevation	F.G	F.G	F.G	F.G			
14	Probe Depth	6"	6"	6"	6"			
15	Test Wet Density (pcf)	95.2	107.3	96.1	93.2			
16	Test Dry Density (pcf)	83.1	93.4	83.8	80.7			
17	Test % Compaction	80.5	90.5	81.2	78.2			
18	Test % Moisture	14.5	14.9	14.6	15.5			
19	Test Moisture Count	150	170	152	155			
20	Test Density Count	5077	3834	4373	5234			
21	Result (Pass or Fail)	Fail	Pass	Fail	Fail.			
22	See Re-Test No.							

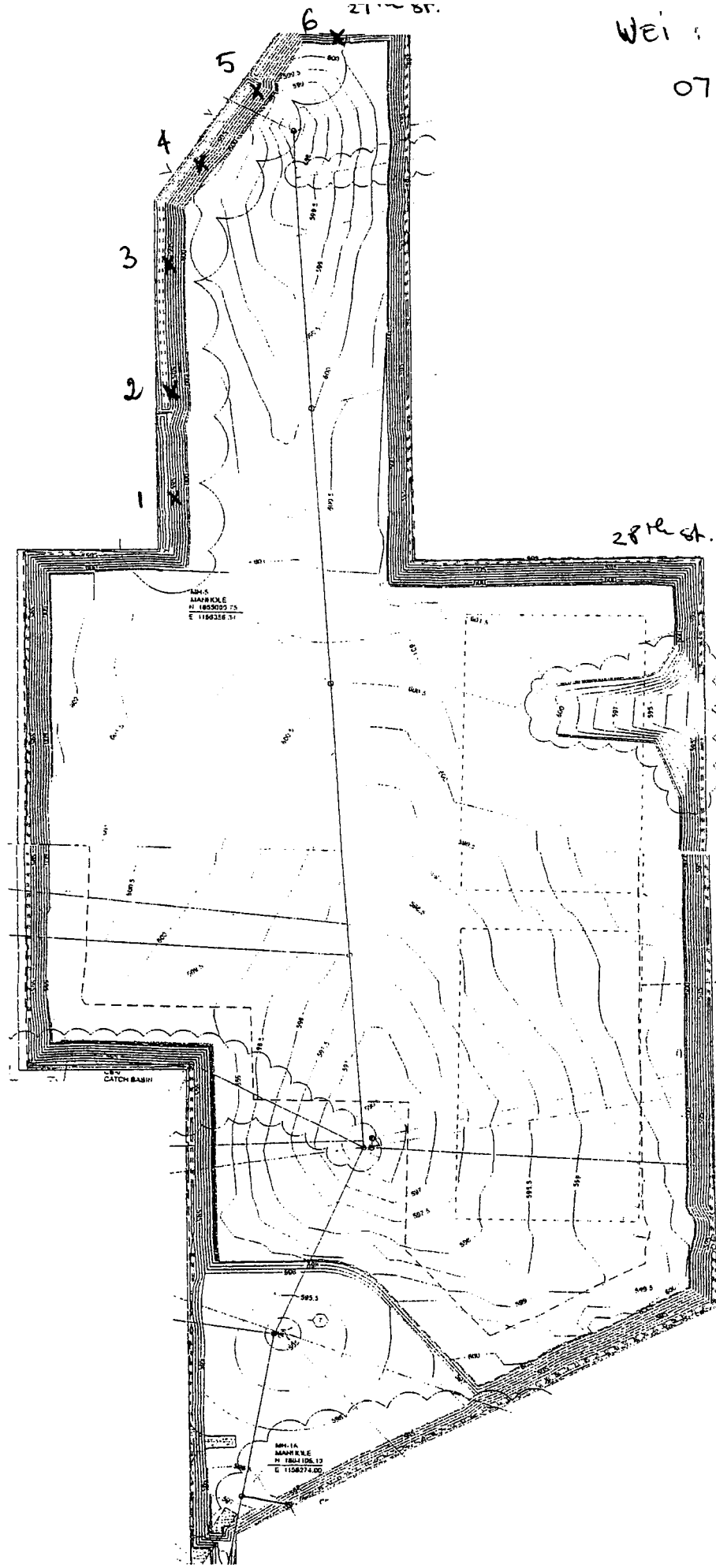
Comments: F.G : Final Grade.

Inspector: Tayeb

Resident Engineer: _____

WEI : 450-01-01

07-20-09



Wang Engineering, Inc.

1145 N. Main Street, Lombard, IL 60148
☎ (630) 953-9928 Fax: (630) 953-9938

FIELD OBSERVATION REPORT

Sample [redacted] _____
Sheet ____ of ____

Date 08-07-09
WE No 450-01-01
Project Name Honeywell Celotex Main Site Cover Construction
Arrive Time 7:00 AM
Project Location Chicago, IL
Depart Time 9:30 AM
Client CH2MHILL Constructors, Inc.
Total Hrs on Job 2.5
Contractor HIS Construction, Inc.
Travel Time 1.5
Mileage Start _____ Mileage End Personal Car Daily Mileage 48
Total Chargeable Hrs 4.0

Summary of technical and/or engineering services performed including field test data (attach additional sheets as required).

Arrived at the job site at 7:00 AM - met Javier (RE) of CH2M HILL - Discussed the work QC/QA test compaction of CA-6 used for capping the main site surface (SUB BASE).
Ran several tests for density at various locations on North of Sacramento Site (see drawing attached).
All tests passed the required specification of 95%
Attached Datasheets for test results and drawing for locations.

SKETCH (indicate Dimensions or Scale)

N

Attested Javier Alfaro.
Company CH2M HILL
Date 08/07/09

WE Name Tayeb Farez
WE Signature Tayeb Farez
WE Reviewed _____

Field Soil/Aggregate Compaction Worksheet
Nuclear Moisture/Density Gauge Method

Testing Firm	Wang Engineering, Inc.
Address	1145 N Main Street
	Lombard, Illinois 60148
Office Telephone No.	(630) 953 - 9928
Gauge# / Serial No.	3430 #5 / 34651
Calibration Date	12-03-2008
M. Std / D. Std.	660 / 2716

Date	08-07-09
WEI Project No.	450-01-01
Client	CH2MHILL Constructors, Inc.
Project	Honeywell Celotex Main Site Cover Constru
Location	Chicago, IL
Contractor	HIS Construction, Inc.
Inspector Name	Tayeb Farez

1	Test Number	1	2	3	4	5	6	7
2	Date	08-07-09	→	→	→	→	→	→
3	Re-Test of Number							
4	Type of Construction	Capping Main Site Surface (Sub base)	→	→	→	→	→	→
5	Sample Number	CA-6 # 2	→	→	→	→	→	→
6	Material Source	Vulcan Materials Company	→	→	→	→	→	→
7	Material Type	CA-6	→	→	→	→	→	→
8	Proctor Type	Standard	Standard	Standard	Standard	Standard	Standard	Standard
9	Max. Dry Density	134	→	→	→	→	→	→
10	Optimum Moisture (%)	9	→	→	→	→	→	→
11	Min. % of Proctor Density	95%	95%	95%	95%	95%	95%	95%
12	Test Location (Station/Offset)	Loc: 1 See Drawing	Loc: 2 See Drawing	Loc: 3 See Drawing	Loc: 4 See Drawing	Loc: 5 See Drawing	Loc: 6 See Drawing	Loc: 7 See Drawing
13	Elevation	F.G	F.G	F.G	F.G	F.G	F.G	F.G
14	Probe Depth	6	6	6	6	6	6	6
15	Test Wet Density (pcf)	141.9	136.7	137.1	143.7	140.1	134.0	129.9
16	Test Dry Density (pcf)	135.7	132.2	133.1	139.4	135.2	130.5	127.6
17	Test % Compaction	101.3	98.6	99.4	104.0	100.9	97.4	95.2
18	Test % Moisture	4.5	3.5	2.9	3.1	3.7	2.6	1.8
19	Test Moisture Count	85	68	61	66	72	56	44
20	Test Density Count	1846	2070	2057	1776	1921	2202	2407
21	Result (Pass or Fail)	Pass	Pass	Pass	Pass	Pass	Pass	Pass
22	See Re-Test No.							

Comments:

F.G = Final Grade

Inspector: Tayeb

Resident Engineer: Jan Allio

Field Soil/Aggregate Compaction Worksheet
Nuclear Moisture/Density Gauge Method

Testing Firm	Wang Engineering, Inc.
Address	1145 N Main Street
	Lombard, Illinois 60148
Office Telephone No.	(630) 953 - 9928
Gauge# / Serial No.	3430 #5 / 34651
Calibration Date	12-03-2008
M. Std / D. Std.	660 / 2716

Date	08-07-09
WEI Project No.	450-01-01
Client	CH2MHILL Constructors, Inc.
Project	Honeywell Celotex Main Site Cover Constru
Location	Chicago, IL
Contractor	HIS Construction, Inc.
Inspector Name	**Tayeb Farez**

1	Test Number	8	9					
2	Date	08-07-09	→					
3	Re-Test of Number							
4	Type of Construction	Capping (Sub-Base)	Main Site Surface					
5	Sample Number	CA-6 #02	→					
6	Material Source	Vulcan Materials Company						
7	Material Type	CA-6	→					
8	Proctor Type	Standard	Standard	Standard	Standard	Standard	Standard	Standard
9	Max. Dry Density	134	→					
10	Optimum Moisture (%)	9	→					
11	Min. % of Proctor Density	95%	95%	95%	95%	95%	95%	95%
12	Test Location (Station/Offset)	Loc: 8 see Drawing	Loc: 9 see Drawing					
13	Elevation	F.G	F.G					
14	Probe Depth	6	6					
15	Test Wet Density (pcf)	135.1	131.2					
16	Test Dry Density (pcf)	131.7	127.9					
17	Test % Compaction	98.3	95.4					
18	Test % Moisture	2.6	2.6					
19	Test Moisture Count	55	55					
20	Test Density Count	2150	2337					
21	Result (Pass or Fail)	Pass						
22	See Re-Test No.							

Comments:

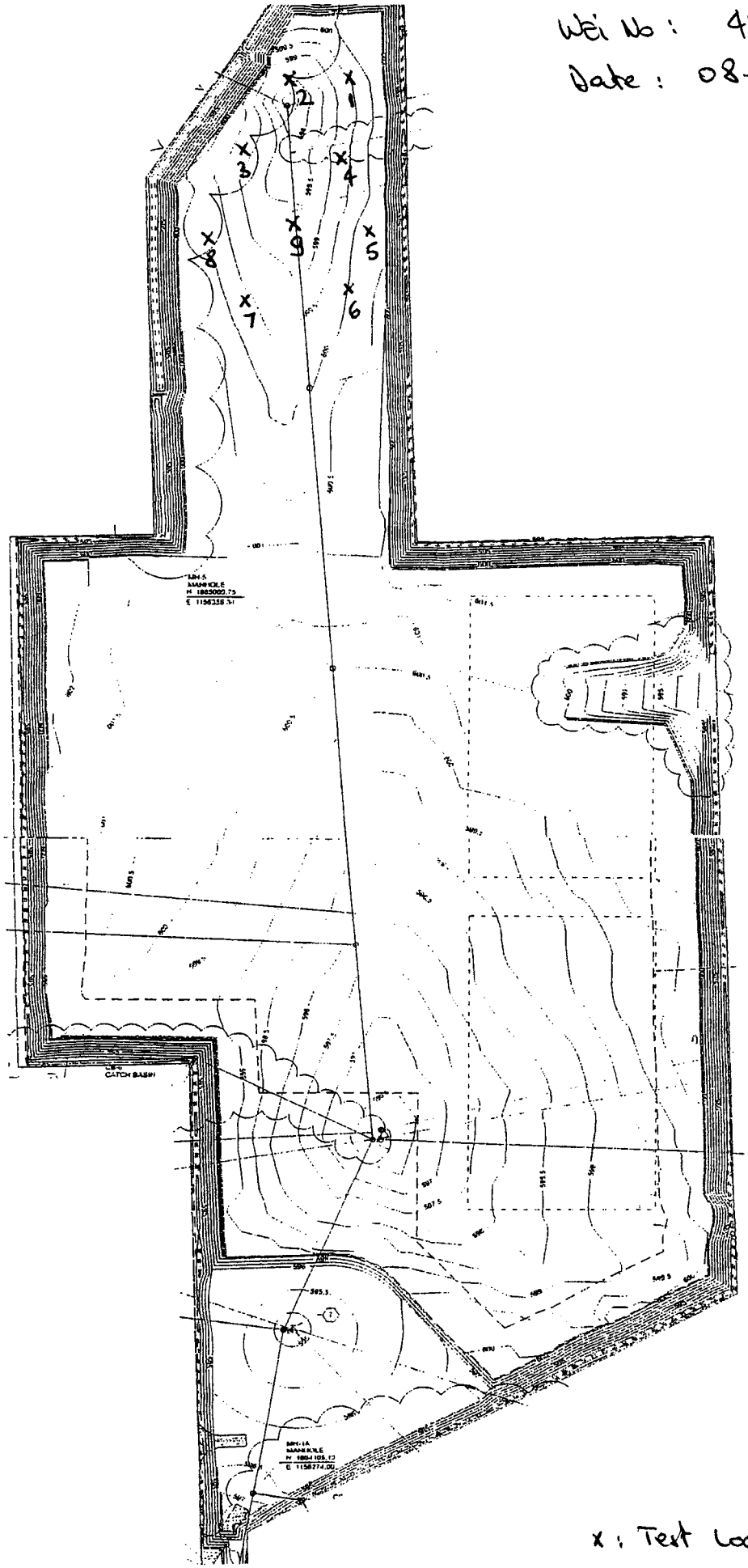
F.G = Final Grade

Inspector: Tayeb

Resident Engineer: Jan Alfo.

WEI No: 450-01-01

Date: 08-07-09



x : Test Location

Jan Alfo.

Wang Engineering, Inc.

1145 N. Main Street, Lombard, IL 60148
☎ (630) 953-9928 Fax: (630) 953-9938

FIELD OBSERVATION REPORT

[redacted] _____
Sheet ____ of ____

Date 08-18-09

WEI No. 450-01-01

Project Name Honeywell Celotex Main Site Cover Construction

Arrive Time 8:00 AM

Project Location Chicago, IL

Depart Time 4:30 PM

Client CH2MHILL Constructors, Inc.

Total Hrs. on Job 8.5

Contractor HIS Construction, Inc.

Travel Time 1.5

Mileage Start 45688 Mileage End 45740 Daily Mileage 52

Total Chargeable Hrs. 10.0

Summary of technical and/or engineering services performed including field test data (attach additional sheets as required).

Arrived at the job site at 8:00 AM - Met Dan Hernandez of CH2MHILL Constructors Inc - Discussed the work Q/QA compaction of CA-6 and Top Soil -

Run several nuclear density tests at various locations on Sacramento Site, Transition area and West swale (see attached drawing) -

All tests done on Main Site Surface and Transition area passed the required specification of 95%, the 2 tests done on North West swale failed (tests # 24 and # 25) -

Please see attached the datasheet for test results and drawing for locations -

SKETCH (Indicate Dimensions or Scale)

N

Attested _____

Company _____

Date _____

WEI Name Tayeb Farez

WEI Signature Tayeb Farez

WEI Reviewed _____

Note: All test data, locations, elevations, and depths, etc. are subject to office review.

Field Soil/Aggregate Compaction Worksheet
Nuclear Moisture/Density Gauge Method

Testing Firm	Wang Engineering, Inc.
Address	1145 N Main Street
	Lombard, Illinois 60148
Office Telephone No.	(630) 953 - 9928
Gauge# / Serial No.	3430 #5 / 34651
Calibration Date	12-03-2008
M. Std / D. Std.	660 / 2725

Date	08-18-09
WEI Project No.	450-01-01
Client	CH2MHILL Constructors, Inc.
Project	Honeywell Celotex Main Site Cover Constru
Location	Chicago, IL
Contractor	HIS Construction, Inc.
Inspector Name	Tayeb Farez

1	Test Number	1	2	3	4	5	6	7
2	Date	08-18-09	→	→	→	→	→	→
3	Re-Test of Number							
4	Type of Construction	Capping Main Site	surface		(sub-Base)	→	→	→
5	Sample Number	CA-6 #2	→	→	→	→	→	→
6	Material Source	Vulcan Material Company	→	→	→	→	→	→
7	Material Type	CA-6	→	→	→	→	→	→
8	Proctor Type	Standard	Standard	Standard	Standard	Standard	Standard	Standard
9	Max. Dry Density	134	→	→	→	→	→	→
10	Optimum Moisture (%)	9	→	→	→	→	→	→
11	Min. % of Proctor Density	95%	95%	95%	95%	95%	95%	95%
12	Test Location (Station/Offset)	Loc: 1 See drawing	Loc: 2 See drawing	Loc: 3 See drawing	Loc: 4 See drawing	Loc: 5 See drawing	Loc: 6 See drawing	Loc: 7 See drawing
13	Elevation	F.G	F.G	F.G	F.G	F.G	F.G	F.G
14	Probe Depth	6"	6"	6"	6"	6"	6"	6"
15	Test Wet Density (pcf)	144.7	135.9	139.5	142.8	141.9	142.8	142.5
16	Test Dry Density (pcf)	137.0	129.3	130.9	134.0	134.4	136.0	134.3
17	Test % Compaction	102.3	96.5	97.7	100.0	100.3	101.5	100.2
18	Test % Moisture	5.6	5.1	6.5	6.5	5.5	5.0	6.2
19	Test Moisture Count	101	90	111	113	99	92	108
20	Test Density Count	1740	2112	1947	1812	1848	1814	1821
21	Result (Pass or Fail)	Pass	Pass	Pass	Pass	Pass	Pass	Pass
22	See Re-Test No.							

Comments:

Inspector: Tayeb Farez

Resident Engineer: _____

Field Soil/Aggregate Compaction Worksheet
Nuclear Moisture/Density Gauge Method

Testing Firm	Wang Engineering, Inc.
Address	1145 N Main Street
	Lombard, Illinois 60148
Office Telephone No.	(630) 953 - 9928
Gauge# / Serial No.	3430 # 5 / 34651
Calibration Date	12-03-2008
M. Std / D. Std.	660 / 2725

Date	08-18-09
WEI Project No.	450-01-01
Client	CH2MHILL Constructors, Inc.
Project	Honeywell Celotex Main Site Cover Constru
Location	Chicago, IL
Contractor	HIS Construction, Inc.
Inspector Name	Tayeb Farez

1	Test Number	8	9	10	11	12	13	14
2	Date	08-18-09	→	→	→	→	→	→
3	Re-Test of Number							
4	Type of Construction	Capping Main Site Surface (Sub-Base)	→	→	→	→	→	→
5	Sample Number	CA-6 #2	→	→	→	→	→	→
6	Material Source	Vulcan Material Company	→	→	→	→	→	→
7	Material Type	CA-6	→	→	→	→	→	→
8	Proctor Type	Standard	Standard	Standard	Standard	Standard	Standard	Standard
9	Max. Dry Density	134	→	→	→	→	→	→
10	Optimum Moisture (%)	9	→	→	→	→	→	→
11	Min. % of Proctor Density	95%	95%	95%	95%	95%	95%	95%
12	Test Location (Station/Offset)	loc: 8 See Drawing	loc: 9 See Drawing	loc: 10 See Drawing	loc: 11 See Drawing	loc: 16 1st Lift See Drawing	loc: 17 1st Lift See Drawing	
13	Elevation	F.G	F.G	F.G	F.G	6" B.F.G	6" B.F.G	
14	Probe Depth	6"	6"	6"	6"	4"	4"	
15	Test Wet Density (pcf)	144.2	149.8	145.3	139.2	137.1	135.1	
16	Test Dry Density (pcf)	137.8	140.1	138.4	132.3	130.0	128.6	
17	Test % Compaction	102.8	104.5	103.3	98.7	97.0	96.0	
18	Test % Moisture	4.7	6.9	5.0	5.2	5.5	5.1	
19	Test Moisture Count	88	123	93	93	96	89	
20	Test Density Count	1759	1552	1718	1964	2739	2848	
21	Result (Pass or Fail)	Pass	Pass	Pass	Pass	Pass	Pass	
22	See Re-Test No.							

Comments:

Inspector: Tayeb Farez

Resident Engineer: _____

Field Soil/Aggregate Compaction Worksheet
Nuclear Moisture/Density Gauge Method

Testing Firm	Wang Engineering, Inc.
Address	1145 N Main Street
	Lombard, Illinois 60148
Office Telephone No.	(630) 953 - 9928
Gauge# / Serial No.	3430 #5 / 34651
Calibration Date	12-03-2008
M. Std / D. Std.	660 / 2725

Date	08-18-09
WEI Project No.	450-01-01
Client	CH2MHILL Constructors, Inc.
Project	Honeywell Celotex Main Site Cover Constru
Location	Chicago, IL
Contractor	HIS Construction, Inc.
Inspector Name	Tayeb Farez

1	Test Number	15	16	17	18	19	20	21
2	Date	08-18-09	→	→	→	→	→	
3	Re-Test of Number							
4	Type of Construction	Sewer Trench	→	→	→	→	→	
5	Sample Number	CA-6 #2	→	→	→	→	→	
6	Material Source	Vulcan Material Company	→	→	→	→	→	
7	Material Type	CA-6	→	→	→	→	→	
8	Proctor Type	Standard	Standard	Standard	Standard	Standard	Standard	Standard
9	Max. Dry Density	134	→	→	→	→	→	
10	Optimum Moisture (%)	9	→	→	→	→	→	
11	Min. % of Proctor Density	95%	95%	95%	95%	95%	95%	95%
12	Test Location (Station/Offset)	Loc:12 see drawing	Loc:13 see drawing	Loc:14 see drawing	Loc:15 see drawing	Loc:30 see drawing	Loc:31 see drawing	
13	Elevation	6" B.F.G	6" B.F.G	6" B.F.G	6" B.F.G	6" B.F.G	6" B.F.G	
14	Probe Depth	6"	6"	6"	6"	4"	4"	
15	Test Wet Density (pcf)	129.9	137.3	133.5	132.2	144.9	138.0	
16	Test Dry Density (pcf)	125.4	129.6	126.0	126.6	135.6	130.5	
17	Test % Compaction	93.6	96.7	94.0	94.5	101.2	97.4	
18	Test % Moisture	3.6	6.0	6.0	4.4	6.9	5.7	
19	Test Moisture Count	68	102	100	79	119	99	
20	Test Density Count	2409	2042	2220	2283	2353	2686	
21	Result (Pass or Fail)	Fail	Pass	Fail	Fail	Pass	Pass	
22	See Re-Test No.							

Comments:

Inspector: Tayeb Farez

Resident Engineer: _____

Field Soil/Aggregate Compaction Worksheet
Nuclear Moisture/Density Gauge Method

Testing Firm	Wang Engineering, Inc.
Address	1145 N Main Street
	Lombard, Illinois 60148
Office Telephone No.	(630) 953 - 9928
Gauge# / Serial No.	3430 #5 / 34651
Calibration Date	12-03-2008
M. Std / D. Std.	660 / 2725

Date	08-18-09
WEI Project No.	450-01-01
Client	CH2MHILL Constructors, Inc.
Project	Honeywell Celotex Main Site Cover Constru
Location	Chicago, IL
Contractor	HIS Construction, Inc.
Inspector Name	**Tayeb Farez**

1	Test Number	22	23	24	25	26	27	28
2	Date	08-18-09	→	→	→			
3	Re-Test of Number							
4	Type of Construction	Backfill - Swale Transition Area		Backfill - Small Dam on Swale -				
5	Sample Number	#02 - Top Soil		→	→			
6	Material Source	NA	→	→	→			
7	Material Type	Black Sandy Loam	→	→	→			
8	Proctor Type	Standard	Standard	Standard	Standard	Standard	Standard	Standard
9	Max. Dry Density	103.2	→	→	→			
10	Optimum Moisture (%)	17.9	→	→	→			
11	Min. % of Proctor Density	95%	95%	95%	95%	95%	95%	95%
12	Test Location (Station/Offset)	Loc: 18 Transition area-Slope	Loc: 19 Transition area-Slope	Loc: 20 Top of Small Dam.	Loc: 21 Top of Small Dam			
13	Elevation	F.G	F.G	F.G	F.G			
14	Probe Depth	6"	6"	6"	6"			
15	Test Wet Density (pcf)	118.2	104.7	100.3	102.7			
16	Test Dry Density (pcf)	99.2	88.7	81.6	83.4			
17	Test % Compaction	96.1	85.9	79.1	80.8			
18	Test % Moisture	19.1	18.0	22.9	23.2			
19	Test Moisture Count	223	191	220	227			
20	Test Density Count	3066	4124	4521	4287			
21	Result (Pass or Fail)	Pass	Pass	Fail	Fail.			
22	See Re-Test No.							

Comments:

Inspector: Tayeb Farez

Resident Engineer: _____

Field Soil/Aggregate Compaction Worksheet
Nuclear Moisture/Density Gauge Method

Testing Firm	Wang Engineering, Inc.
Address	1145 N Main Street
	Lombard, Illinois 60148
Office Telephone No.	(630) 953 - 9928
Gauge# / Serial No.	3430 #5 / 34651
Calibration Date	12 - 03 - 2008
M. Std / D. Std.	660 / 2725

Date	08 - 18 - 09
WEI Project No.	450-01-01
Client	CH2MHILL Constructors, Inc.
Project	Honeywell Celotex Main Site Cover Constru
Location	Chicago, IL
Contractor	HIS Construction, Inc.
Inspector Name	Tayeb Farez

1	Test Number	29	30	31	32	33	34	35
2	Date	08-18-09	→	→	→	→	→	→
3	Re-Test of Number							
4	Type of Construction	Capping	Main Site	surface	(Sub-Base)	→	→	→
5	Sample Number	CA-6 #2	→	→	→	→	→	→
6	Material Source	Vulcan	Material	company	→	→	→	→
7	Material Type	CA-6	→	→	→	→	→	→
8	Proctor Type	Standard	Standard	Standard	Standard	Standard	Standard	Standard
9	Max. Dry Density	134	→	→	→	→	→	→
10	Optimum Moisture (%)	9	→	→	→	→	→	→
11	Min. % of Proctor Density	95%	95%	95%	95%	95%	95%	95%
12	Test Location (Station/Offset)	loc: 22 see drawing	loc: 23 see drawing	loc: 24 see drawing	loc: 26 see drawing	loc: 27 see drawing	loc: 28 see drawing	loc: 29 see drawing
13	Elevation	F.G	F.G	F.G	F.G	F.G	F.G	F.G
14	Probe Depth	6"	6"	6"	6"	6"	6"	6"
15	Test Wet Density (pcf)	140.2	141.5	138.6	143.1	146.0	137.9	137.8
16	Test Dry Density (pcf)	134.6	135.4	132.6	136.3	138.9	130.2	133.1
17	Test % Compaction	100.4	101.0	99.0	101.7	103.6	97.2	99.3
18	Test % Moisture	4.2	4.5	4.5	5.0	5.1	5.9	3.6
19	Test Moisture Count	80	85	83	92	95	102	70
20	Test Density Count	1921	1866	1992	1801	1692	2016	2028
21	Result (Pass or Fail)	Pass	Pass	Pass	Pass	Pass	Pass	Pass
22	See Re-Test No.							

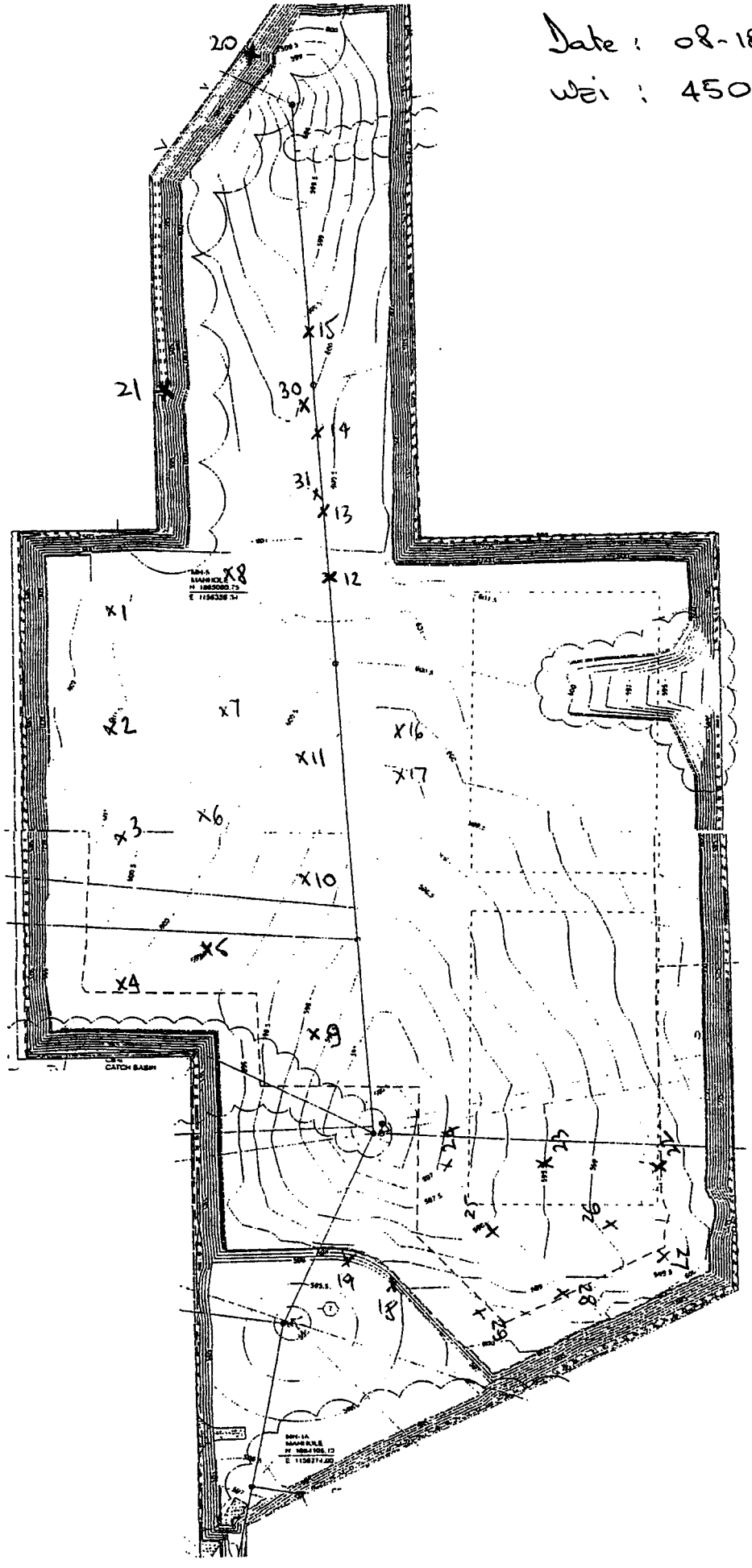
Comments:

Inspector: Tayeb Farez

Resident Engineer: _____

Date : 08-18-09

WBI : 450-01-01



Wang Engineering, Inc.

1145 N. Main Street, Lombard, IL 60148
☎ (630) 953-9928 Fax: (630) 953-9938

FIELD OBSERVATION REPORT

[redacted] _____

Sheet 1 of 5

Date 08-19-09

WEI No. 450-01-01

Project Name Honeywell Celotex Main Site Cover Construction

Arrive Time 8:30 AM

Project Location Chicago, IL

Depart Time 3:30 PM

Client CH2MHILL Constructors, Inc.

Total Hrs. on Job 7

Contractor HIS Construction, Inc.

Travel Time 2

Mileage Start 45740 Mileage End 45796 Daily Mileage 56

Total Chargeable Hrs. 9

Summary of technical and/or engineering services performed including field test data (attach additional sheets as required).

Reached the job site at 8:30 AM - met Dan Fernandez of CH2M HILL -
Tested for compaction CA-6 stone on NW of sacramento site (location 1 to 5), along the sewer line (locations 8 to 13) and rechecked for density, (Top Soil) the 2 Berms on NW edge ~~of~~ of the site (locations 6 and 7) -
All tests fall within the specifications -
please see attached data sheet for test results and drawing for locations -

SKETCH (Indicate Dimensions or Scale)

N

Attested _____

Company _____

Date _____

WEI Name Taveb Farez

WEI Signature Taveb Farez

WEI Reviewed _____

Note: All test data, locations, elevations, and depths, etc are subject to office review.

Field Soil/Aggregate Compaction Worksheet
Nuclear Moisture/Density Gauge Method

Testing Firm	Wang Engineering, Inc.
Address	1145 N Main Street
	Lombard, Illinois 60148
Office Telephone No.	(630) 953 - 9928
Gauge# / Serial No.	3430 #5 / 34651
Calibration Date	12-03-08
M. Std / D. Std.	667 / 2718

Date	08-19-09
WEI Project No.	450-01-01
Client	CH2MHILL Constructors, Inc.
Project	Honeywell Celotex Main Site Cover Constru
Location	Chicago, IL
Contractor	HIS Construction, Inc.
Inspector Name	Tayeb Farez

1	Test Number	1	2	3	4	5	6	7
2	Date	08-19-08	→	→	→	→	→	→
3	Re-Test of Number							
4	Type of Construction	Capping Main Site Surface (Sub-Base)	→	→	→	→	→	→
5	Sample Number	CA-6 #2	→	→	→	→	→	→
6	Material Source	Vulcan Material Company	→	→	→	→	→	→
7	Material Type	CA-6	→	→	→	→	→	→
8	Proctor Type	Standard	Standard	Standard	Standard	Standard	Standard	Standard
9	Max. Dry Density	134	→	→	→	→	→	→
10	Optimum Moisture (%)	9	→	→	→	→	→	→
11	Min. % of Proctor Density	95%	95%	95%	95%	95%	95%	95%
12	Test Location (Station/Offset)	Loc: 1 See Drawing	Loc: 2 See Drawing	Loc: 3 See Drawing	Loc: 4 See Drawing	Loc: 5 See Drawing	Loc: 8 See Drawing	Loc: 9 See Drawing
13	Elevation	F.G	F.G	F.G	F.G	F.G	5" BFG	6" BFG
14	Probe Depth	6"	6"	6"	6"	6"	6"	6"
15	Test Wet Density (pcf)	144.4	144.4	140.9	144.3	143.3	145.1	141.5
16	Test Dry Density (pcf)	137.7	136.0	134.4	136.9	136.2	123.3	135.2
17	Test % Compaction	102.8	101.5	100.3	102.2	101.6	96.5	100.9
18	Test % Moisture	4.8	6.2	4.8	5.4	5.3	4.5	4.7
19	Test Moisture Count	91	111	83	100	97	83	88
20	Test Density Count	1749	1742	1888	1748	1787	2142	1862
21	Result (Pass or Fail)	Pass	Pass	Pass	Pass	Pass	Pass	Pass
22	See Re-Test No.							

Comments:

Inspector: Tayeb Farez

Resident Engineer: _____

Field Soil/Aggregate Compaction Worksheet
Nuclear Moisture/Density Gauge Method

Testing Firm	Wang Engineering, Inc.
Address	1145 N Main Street
	Lombard, Illinois 60148
Office Telephone No.	(630) 953 - 9928
Gauge# / Serial No.	3430 #5 / 34651
Calibration Date	12-03-08
M. Std / D. Std.	667 / 2718

Date	08-19-09
WEI Project No.	450-01-01
Client	CH2MHILL Constructors, Inc.
Project	Honeywell Celotex Main Site Cover Constru
Location	Chicago, IL
Contractor	HIS Construction, Inc.
Inspector Name	Tayeb Farez

1	Test Number	8	9	10	11	12	13	14
2	Date	08-19-09	→	→	→			
3	Re-Test of Number							
4	Type of Construction	Capping Main Site	surface	(sub-base)				
5	Sample Number	CA-6 #2	→	→	→			
6	Material Source	Vulcan Material	Company	→	→			
7	Material Type	CA-6	→	→	→			
8	Proctor Type	Standard	Standard	Standard	Standard	Standard	Standard	Standard
9	Max. Dry Density	134	→	→	→			
10	Optimum Moisture (%)	9	→	→	→			
11	Min. % of Proctor Density	95%	95%	95%	95%	95%	95%	95%
12	Test Location (Station/Offset)	Loc. 10 see drawing	Loc. 11 see drawing	Loc. 12 see drawing	Loc. 13 see drawing			
13	Elevation	10" BFG	F.G	F.G	F.G			
14	Probe Depth	6"	6"	6"	6"			
15	Test Wet Density (pcf)	134.8	140.7	142.2	141.8			
16	Test Dry Density (pcf)	128.9	134.2	137.0	136.4			
17	Test % Compaction	96.2	100.1	102.3	101.8			
18	Test % Moisture	4.6	4.9	3.8	4.0			
19	Test Moisture Count	83	90	75	78			
20	Test Density Count	2158	1836	1858	1851			
21	Result (Pass or Fail)	Pass	Pass	Pass	Pass			
22	See Re-Test No.							

Comments:

Inspector: Tayeb Farez

Resident Engineer: _____

Field Soil/Aggregate Compaction Worksheet
Nuclear Moisture/Density Gauge Method

Testing Firm	Wang Engineering, Inc.
Address	1145 N Main Street
	Lombard, Illinois 60148
Office Telephone No.	(630) 953 - 9928
Gauge# / Serial No.	3430 #5 / 34651
Calibration Date	12-03-08
M. Std / D. Std.	667 / 2718

Date	08-19-09
WEI Project No.	450-01-01
Client	CH2MHILL Constructors, Inc.
Project	Honeywell Celotex Main Site Cover Constru
Location	Chicago, IL
Contractor	HIS Construction, Inc.
Inspector Name	Tayeb Farez

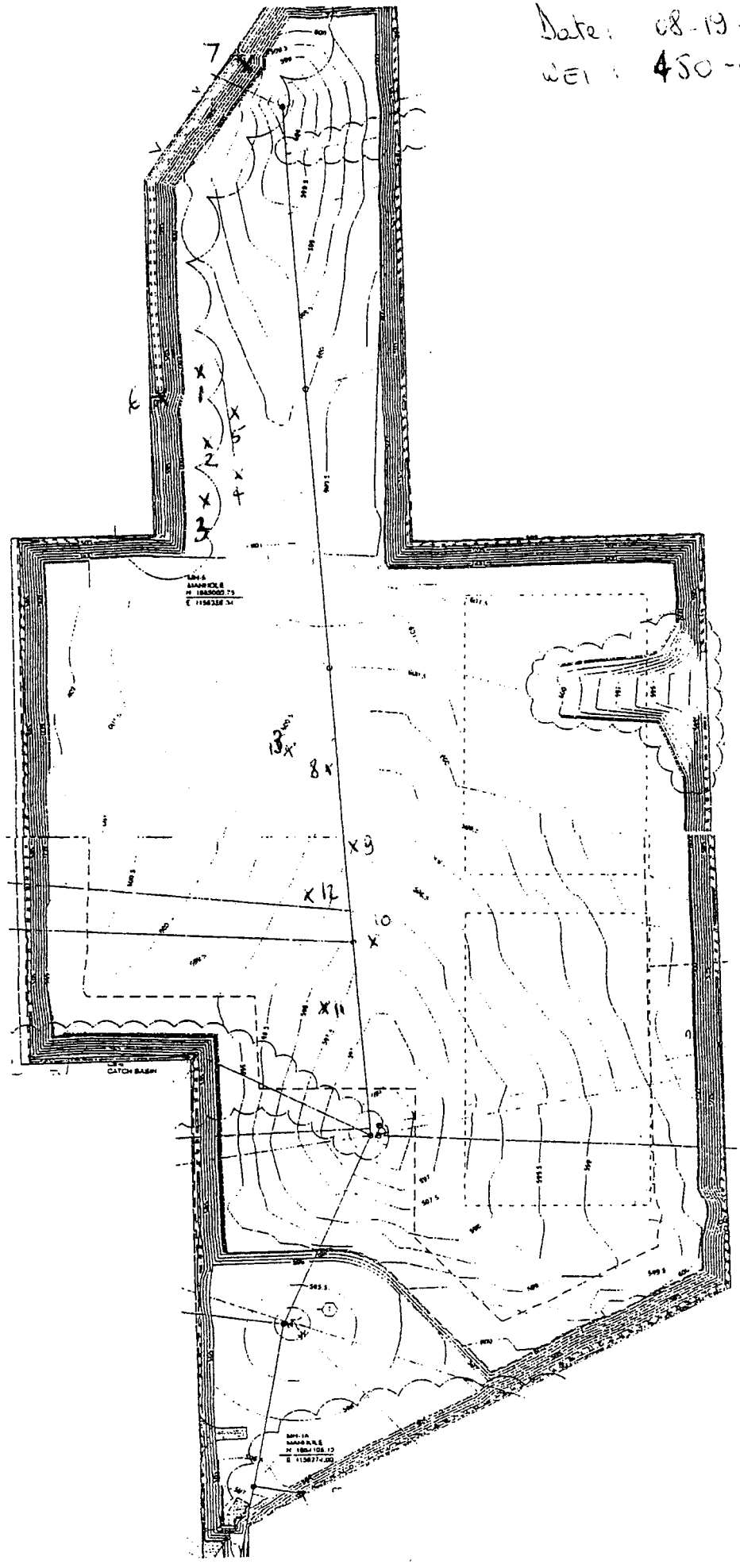
1	Test Number	15	16	17	18	19	20	21
2	Date	08-19-09						
3	Re-Test of Number							
4	Type of Construction	backfill - const. of berms						
5	Sample Number	#02 - Top Soil						
6	Material Source	NA						
7	Material Type	Black Sandy Loam						
8	Proctor Type	Standard	Standard	Standard	Standard	Standard	Standard	Standard
9	Max. Dry Density	103.2						
10	Optimum Moisture (%)	17.9						
11	Min. % of Proctor Density	95%	95%	95%	95%	95%	95%	95%
12	Test Location (Station/Offset)	Loc: 6 See drawing	Loc: 7 See drawing					
13	Elevation	F.G	F.G					
14	Probe Depth	6"	6"					
15	Test Wet Density (pcf)	103.9	104.3					
16	Test Dry Density (pcf)	88.0	88.3					
17	Test % Compaction	85.3	85.6					
18	Test % Moisture	19.3	16.2					
19	Test Moisture Count	201	174					
20	Test Density Count	4187	4176					
21	Result (Pass or Fail)	Pass	Pass					
22	See Re-Test No.							

Comments:

Inspector: Tayeb Farez

Resident Engineer: _____

Date: 08-19-09
WEI: 450-01-01



Wang Engineering, Inc.

1145 N. Main Street, Lombard, IL 60148

☎ (630) 953-9928 Fax: (630) 953-9938

FIELD OBSERVATION REPORT

Sequence _____

Sheet: 1 of 5

WE No 450-01-01

Date 08-21-09

Arrive Time 2:00 PM

Project Name Honeywell Celotex Main Site Cover Construction

Depart Time 5:00 PM

Project Location Chicago, IL

Total Hrs. on Job 3

Client CH2M-HILL Constructors, Inc

Travel Time 2

Contractor HIS Construction, Inc

Total Chargeable Hrs. 5

Mileage Start 45796 Mileage End 45845 Daily Mileage 49

Summary of technical and/or engineering services performed including field test data (attach additional sheets as required).

Arrived at the job site at 2:00 PM. Met Dan Hernandez of CH2M Hill - Inspected the work for compaction of CA-6 stone on main site surface. Tested for density at various locations, see drawing locations 1 to 17 - All tests passed the required specification but 1 failed test # 10 loc: 10 - I let the contractor know about the failing location and should water more the material -

Please see attached the data sheet for test results and ~~tests~~ ~~location~~ drawing for locations -

SKETCH (Indicate Dimensions or Scale)

N

Attested _____

Company _____

Date _____

WE Name Tayeb Farez

WE Signature Tayeb Farez

WE Reviewed _____

Note: All test data, locations, elevations, and depths, etc. are subject to office review.

Field Soil/Aggregate Compaction Worksheet
Nuclear Moisture/Density Gauge Method

Testing Firm	Wang Engineering, Inc.
Address	1145 N Main Street
	Lombard, Illinois 60148
Office Telephone No.	(630) 953 - 9928
Gauge# / Serial No.	3430 #5 / 34651
Calibration Date	12 - 03 - 2008
M. Std / D. Std.	667 / 2717

Date	08 - 21 - 09
WEI Project No.	450-01-01
Client	CH2MHILL Constructors, Inc.
Project	Honeywell Celotex Main Site Cover Constru
Location	Chicago, IL
Contractor	HIS Construction, Inc.
Inspector Name	Tayeb Farez

1	Test Number	1	2	3	4	5	6	7
2	Date	08-21-09	—					→
3	Re-Test of Number							
4	Type of Construction	Capping Main Site Surface						→
5	Sample Number	CA-6 # 2	—					→
6	Material Source	Vulcan Material company						→
7	Material Type	CA-6						→
8	Proctor Type	Standard	Standard	Standard	Standard	Standard	Standard	Standard
9	Max. Dry Density	134						→
10	Optimum Moisture (%)	9						→
11	Min. % of Proctor Density	95%	95%	95%	95%	95%	95%	95%
12	Test Location (Station/Offset)	Loc: 1 see Drawing	Loc. 2 see Drawing	Loc: 3 see Drawing	Loc: 4 see Drawing	Loc: 5 see Drawing	Loc: 6 see Drawing	Loc: 7 see Drawing
13	Elevation	F.G	F.G	F.G	F.G	F.G	F.G	F.G
14	Probe Depth	6"	6"	6"	6"	6"	6"	6"
15	Test Wet Density (pcf)	146.8	149.3	148.2	145.6	142.2	145.5	141.2
16	Test Dry Density (pcf)	139.9	141.8	139.7	136.5	136.1	139.6	133.7
17	Test % Compaction	104.4	105.8	104.2	101.9	101.6	104.2	99.8
18	Test % Moisture	4.9	5.3	6.1	6.7	4.5	4.2	5.6
19	Test Moisture Count	94	101	112	118	85	83	101
20	Test Density Count	1658	1567	1602	1697	1855	1708	1870
21	Result (Pass or Fail)	Pass	Pass	Pass	Pass	Pass	Pass	Pass
22	See Re-Test No.							

Comments:

Inspector: Tayeb Farez

Resident Engineer: _____

Field Soil/Aggregate Compaction Worksheet
Nuclear Moisture/Density Gauge Method

Testing Firm	Wang Engineering, Inc.
Address	1145 N Main Street
	Lombard, Illinois 60148
Office Telephone No.	(630) 953 - 9928
Gauge# / Serial No.	3430 #5 / 34651
Calibration Date	12-03-08
M. Std / D. Std.	667 / 2717

Date	08-21-09
WEI Project No.	450-01-01
Client	CH2MHILL Constructors, Inc.
Project	Honeywell Celotex Main Site Cover Constru
Location	Chicago, IL
Contractor	HIS Construction, Inc.
Inspector Name	Tayeb Farez

1	Test Number	8	9	10	11	12	13	14
2	Date	08-21-09	→	→	→	→	→	→
3	Re-Test of Number							
4	Type of Construction	Capping Main site surface	→	→	→	→	→	→
5	Sample Number	CA-6 #2	→	→	→	→	→	→
6	Material Source	Vulcan Material company	→	→	→	→	→	→
7	Material Type	CA-6	→	→	→	→	→	→
8	Proctor Type	Standard	Standard	Standard	Standard	Standard	Standard	Standard
9	Max. Dry Density	134	→	→	→	→	→	→
10	Optimum Moisture (%)	9	→	→	→	→	→	→
11	Min. % of Proctor Density	95%	95%	95%	95%	95%	95%	95%
12	Test Location (Station/Offset)	Loc: 8 see drawing	Loc: 9 see drawing	Loc: 10 see drawing	Loc: 11 see drawing	Loc: 12 see drawing	Loc: 13 see drawing	Loc: 14 see drawing
13	Elevation	F.G	F.G	F.G	F.G	F.G	F.G	5" BFG
14	Probe Depth	6"	6"	6"	6"	6"	6"	6"
15	Test Wet Density (pcf)	145.6	134.3	128.2	135.1	141.8	135.5	135.8
16	Test Dry Density (pcf)	138.2	128.3	122.7	130.5	136.5	130.0	130.5
17	Test % Compaction	103.1	95.7	91.6	97.4	101.9	97.0	97.4
18	Test % Moisture	5.4	4.7	4.4	3.5	3.8	4.2	4.1
19	Test Moisture Count	100	85	78	69	76	78	77
20	Test Density Count	1699	2178	2495	2146	1853	2127	2112
21	Result (Pass or Fail)	Pass	Pass	Fail	Pass	Pass	Pass	Pass
22	See Re-Test No.							

Comments:

Inspector: Tayeb Farez

Resident Engineer: _____

Field Soil/Aggregate Compaction Worksheet
Nuclear Moisture/Density Gauge Method

Testing Firm	Wang Engineering, Inc.
Address	1145 N Main Street
	Lombard, Illinois 60148
Office Telephone No.	(630) 953 - 9928
Gauge# / Serial No.	3430 #5 / 34651
Calibration Date	12-03-2008
M. Std / D. Std.	667 / 2717

Date	08-21-09
WEI Project No.	450-01-01
Client	CH2MHILL Constructors, Inc.
Project	Honeywell Celotex Main Site Cover Constru
Location	Chicago, IL
Contractor	HIS Construction, Inc.
Inspector Name	Tayeb Farez

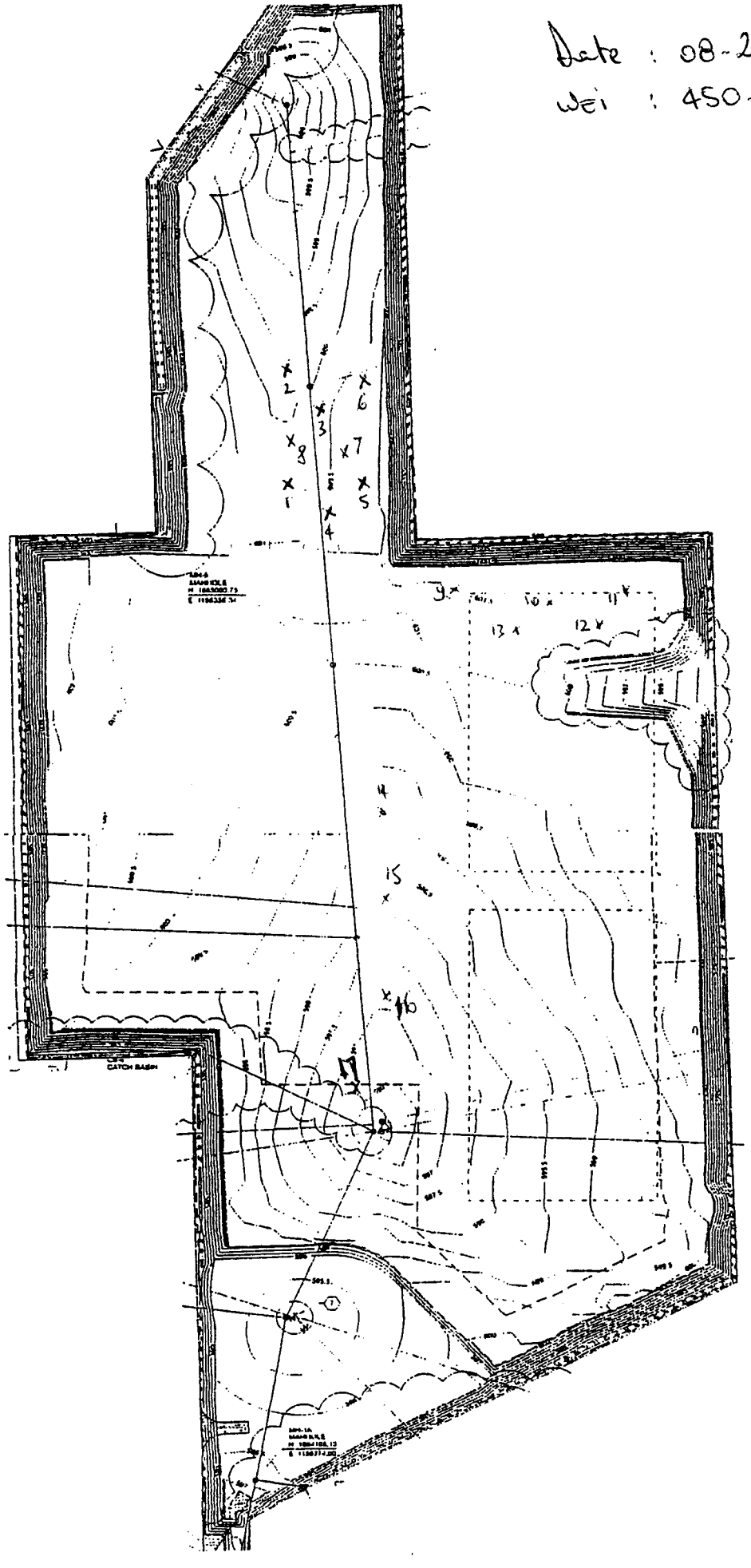
1	Test Number	15	16	17	18	19	20	21
2	Date	08-21-09	→	→				
3	Re-Test of Number							
4	Type of Construction	Capping	Main Site Surface					
5	Sample Number	CA-6 #2	→	→				
6	Material Source	Vulcan	Material Company					
7	Material Type	CA-6	→	→				
8	Proctor Type	Standard	Standard	Standard	Standard	Standard	Standard	Standard
9	Max. Dry Density	134	→	→				
10	Optimum Moisture (%)	9	→	→				
11	Min. % of Proctor Density	95%	95%	95%	95%	95%	95%	95%
12	Test Location (Station/Offset)	Loc: 15 See Drawing	Loc: 16 See Drawing	Loc: 17 See Drawing				
13	Elevation	6" BFG	8" BFG	8" BFG				
14	Probe Depth	6"	6"	6"				
15	Test Wet Density (pcf)	138.8	125.2	132.2				
16	Test Dry Density (pcf)	132.4	129.1	127.4				
17	Test % Compaction	98.8	96.4	95.1				
18	Test % Moisture	4.8	4.7	3.7				
19	Test Moisture Count	88	85	71				
20	Test Density Count	1977	2133	2286				
21	Result (Pass or Fail)	Pass	Pass	Pass				
22	See Re-Test No.							

Comments:

Inspector: Tayeb Farez

Resident Engineer: _____

Date : 08-21-08
WEI : 450-01-01



Wang Engineering, Inc.
1145 N. Main Street, Lombard, IL 60148
☎ (630) 953-9928 Fax: (630) 953-9938

FIELD OBSERVATION REPORT

[redacted]

Sheet 1 of 5

Date 08-29-09 WEI No 450-01-01

Project Name Honeywell Celotex Main Site Cover Construction Arrive Time 8:30 AM

Project Location Chicago, IL Depart Time 2:30 PM

Client CH2MHILL Constructors, Inc. Total Hrs. on Job 6

Contractor HIS Construction, Inc. Travel Time 1.5

Mileage Start 45845 Mileage End 45897 Daily Mileage 52 Total Chargeable Hrs. 7.5

Summary of technical and/or engineering services performed including field test data (attach additional sheets as required).

Reached the job site at 8:30 AM - Met Dan Hernandez of CH2M HILL - Directed the work of compaction of CA-6 stone used for capping the main site surface -

Tested for density at various locations (see drawing for locations), all tests passed the required specification of 95% -

Please see attached datasheets for test results and drawing for locations -

SKETCH (Indicate Dimensions or Scale)

N

Attested

Company

Date

WEI Name Tayeb Farez

WEI Signature Tayeb Farez

WEI Reviewed

Note: All test data, locations, elevations, and depths, etc. are subject to office review

Field Soil/Aggregate Compaction Worksheet
Nuclear Moisture/Density Gauge Method

Testing Firm	Wang Engineering, Inc.
Address	1145 N Main Street
	Lombard, Illinois 60148
Office Telephone No.	(630) 953 - 9928
Gauge# / Serial No.	3430 #5 / 34651
Calibration Date	12-03-2008
M. Std / D. Std.	664 / 2715

Date	08-24-09
WEI Project No.	450-01-01
Client	CH2MHILL Constructors, Inc.
Project	Honeywell Celotex Main Site Cover Constru
Location	Chicago, IL
Contractor	HIS Construction, Inc.
Inspector Name	Tayeb Farez

1	Test Number	1	2	3	4	5	6	7
2	Date	08-24-09	→	→	→	→	→	→
3	Re-Test of Number							
4	Type of Construction	Capping main site surface	→	→	→	→	→	→
5	Sample Number	CA-6 #2	→	→	→	→	→	→
6	Material Source	Vulcan Material company	→	→	→	→	→	→
7	Material Type	CA-6	→	→	→	→	→	→
8	Proctor Type	Standard	Standard	Standard	Standard	Standard	Standard	Standard
9	Max. Dry Density	134	→	→	→	→	→	→
10	Optimum Moisture (%)	9	→	→	→	→	→	→
11	Min. % of Proctor Density	95%	95%	95%	95%	95%	95%	95%
12	Test Location (Station/Offset)	Loc: 1 1st Lift See Drawing	Loc: 2 1st Lift See Drawing	Loc: 3 1st Lift See Drawing	Loc: 4 1st Lift See Drawing	Loc: 5 1st Lift See Drawing	Loc: 6 1st Lift See Drawing	Loc: 7 1st Lift See Drawing
13	Elevation	5" B.F.G	4" B.F.G	6" B.F.G	6" B.F.G	8" B.F.G	5" B.F.G	6" B.F.G
14	Probe Depth	4"	4"	4"	4"	4"	4"	4"
15	Test Wet Density (pcf)	136.2	140.3	142.8	138.7	136.4	136.7	138.2
16	Test Dry Density (pcf)	130.1	134.2	135.5	130.9	130.2	130.7	133.1
17	Test % Compaction	97.1	100.2	101.1	97.7	97.2	97.5	99.3
18	Test % Moisture	4.6	4.5	5.4	5.9	4.8	4.6	3.8
19	Test Moisture Count	84	85	98	103	86	84	74
20	Test Density Count	2784	2563	2449	2647	2769	2757	2681
21	Result (Pass or Fail)	Pass	Pass	Pass	Pass	Pass	Pass	Pass
22	See Re-Test No.							

Comments:

Inspector: Tayeb Farez

Resident Engineer: _____

Field Soil/Aggregate Compaction Worksheet
Nuclear Moisture/Density Gauge Method

Testing Firm	Wang Engineering, Inc.
Address	1145 N Main Street
	Lombard, Illinois 60148
Office Telephone No.	(630) 953 - 9928
Gauge# / Serial No.	3430 #5 / 34651
Calibration Date	12-03-2008
M. Std / D. Std.	664 / 2715

Date	08-24-09
WEI Project No.	450-01-01
Client	CH2MHILL Constructors, Inc.
Project	Honeywell Celotex Main Site Cover Constru
Location	Chicago, IL
Contractor	HIS Construction, Inc.
Inspector Name	Tayeb Farez

1	Test Number	8	9	10	11	12	13	14
2	Date	08-24-09	→	→	→	→	→	→
3	Re-Test of Number		8					
4	Type of Construction	Capping	Main Site	Surface	→	→	→	→
5	Sample Number	CA-6 #2	→	→	→	→	→	→
6	Material Source	Vulcan Material Company	→	→	→	→	→	→
7	Material Type	CA-6	→	→	→	→	→	→
8	Proctor Type	Standard	Standard	Standard	Standard	Standard	Standard	Standard
9	Max. Dry Density	134	→	→	→	→	→	→
10	Optimum Moisture (%)	9	→	→	→	→	→	→
11	Min. % of Proctor Density	95%	95%	95%	95%	95%	95%	95%
12	Test Location (Station/Offset)	Loc: 8 1st Lift See Drawing	Loc: 8 1st Lift See Drawing	Loc: 9 1st Lift See Drawing	Loc: 10 Final Lift See Drawing	Loc: 11 Final Lift See Drawing	Loc: 12 Final Lift See Drawing	Loc: 13 Final Lift See Drawing
13	Elevation	6" B.F.G	6" B.F.G	6" B.F.G	F.G	F.G	F.G	F.G
14	Probe Depth	4"	4"	6"	6"	6"	6"	6"
15	Test Wet Density (pcf)	132.5	136.4	143.6	137.0	140.5	142.5	142.2
16	Test Dry Density (pcf)	126.9	130.7	138.0	130.7	134.7	136.5	134.9
17	Test % Compaction	94.7	97.6	103.0	97.5	100.5	101.9	100.7
18	Test % Moisture	4.4	4.3	4.0	4.8	4.3	4.4	5.9
19	Test Moisture Count	79	80	79	87	82	84	98
20	Test Density Count	2988	2777	1779	2054	1901	1821	1829
21	Result (Pass or Fail)	Fail	Pass	Pass	Pass	Pass	Pass	Pass
22	See Re-Test No.	9						

Comments:

Inspector: Tayeb Farez

Resident Engineer: _____

Field Soil/Aggregate Compaction Worksheet
Nuclear Moisture/Density Gauge Method

Testing Firm	Wang Engineering, Inc.
Address	1145 N Main Street
	Lombard, Illinois 60148
Office Telephone No.	(630) 953 - 9928
Gauge# / Serial No.	3430 #5 / 34651
Calibration Date	12-03-2008
M. Std / D. Std.	664 / 2715

Date	08-24-09
WEI Project No.	450-01-01
Client	CH2MHILL Constructors, Inc.
Project	Honeywell Celotex Main Site Cover Constru
Location	Chicago, IL
Contractor	HIS Construction, Inc.
Inspector Name	Tayeb Farez

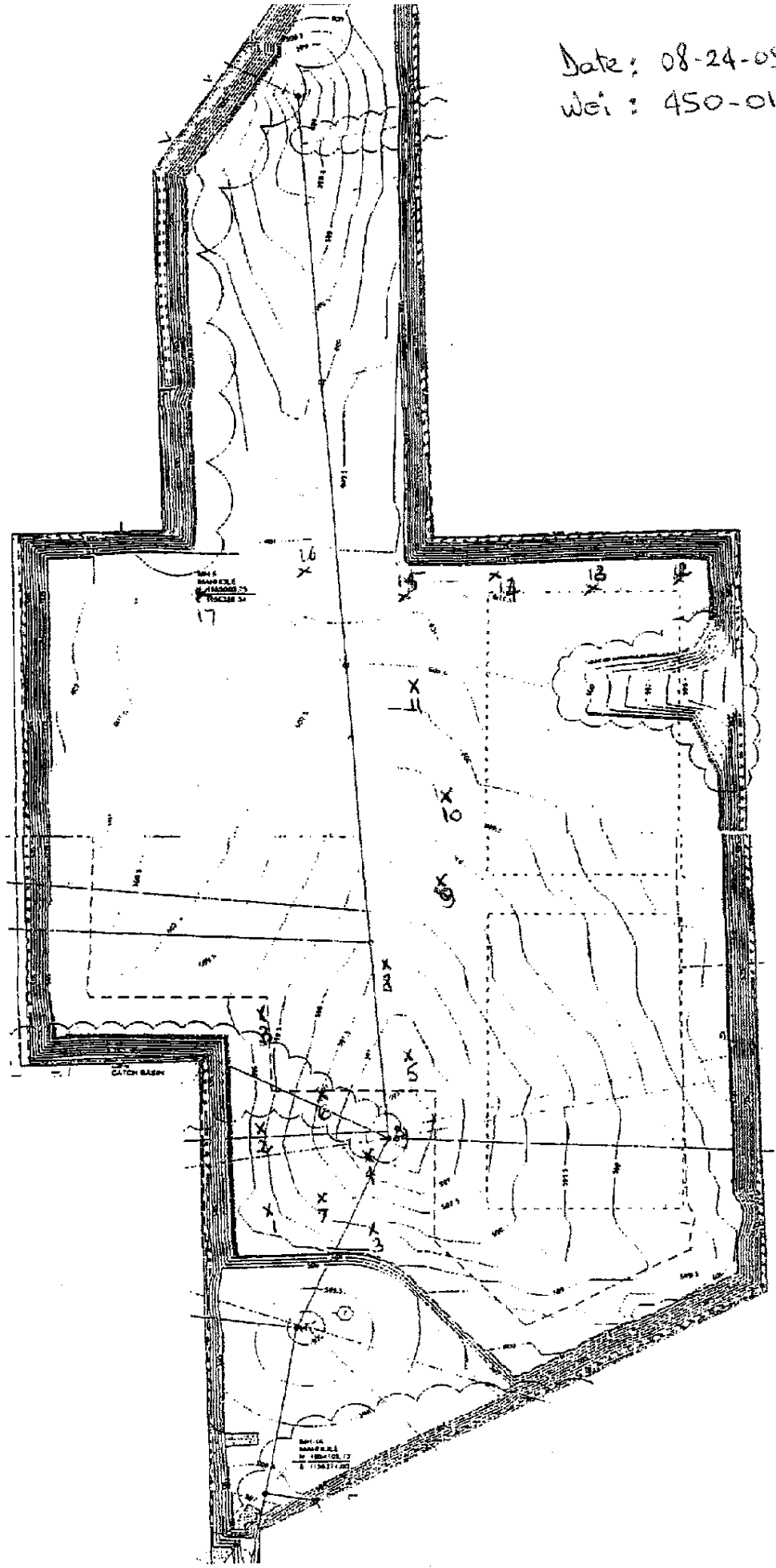
1	Test Number	15	16	17	18	19	20	21
2	Date	08-24-09	→	→	→			
3	Re-Test of Number							
4	Type of Construction	Capping main site surface			→			
5	Sample Number	CA-6 #2	→	→	→			
6	Material Source	Vulcan Material company						
7	Material Type	CA-6	→	→	→			
8	Proctor Type	Standard	Standard	Standard	Standard	Standard	Standard	Standard
9	Max. Dry Density	134	→	→	→			
10	Optimum Moisture (%)	9	→	→	→			
11	Min. % of Proctor Density	95%	95%	95%	95%	95%	95%	95%
12	Test Location (Station/Offset)	Loc: 14 Final lift see drawing	Loc: 15 Final lift see drawing	Loc: 16 Final lift see drawing	Loc: 17 Final lift see drawing			
13	Elevation	F.G	F.G	F.G	F.G			
14	Probe Depth	6"	6"	6"	6"			
15	Test Wet Density (pcf)	138.5	147.4	150.7	144.8			
16	Test Dry Density (pcf)	132.5	139.9	142.9	137.9			
17	Test % Compaction	98.9	104.4	106.6	102.9			
18	Test % Moisture	4.5	5.4	5.4	5.0			
19	Test Moisture Count	84	100	103	94			
20	Test Density Count	1988	1634	1519	1728			
21	Result (Pass or Fail)	Pass	Pass	Pass	Pass			
22	See Re-Test No.							

Comments:

Inspector: Tayeb Farez

Resident Engineer: _____

Date: 08-24-09
WO: 450-01-01



Wang Engineering, Inc.

1145 N. Main Street, Lombard, IL 60148
☎ (630) 953-9928 Fax: (630) 953-9938

FIELD OBSERVATION REPORT

Sequence _____
Sheet 1 of 8

Date 09-01-09 | WEI No. 450-01-01
Project Name Honeywell Celotex Main Site Cover Construction | Arrive Time 10:00 AM
Project Location Chicago, IL | Depart Time 5:30 PM
Client CH2MHILL Constructors, Inc. | Total Hrs. on Job 7.5
Contractor HIS Construction, Inc. | Travel Time 2.0
Mileage Start 46242 Mileage End 46307 Daily Mileage 65 | Total Chargeable Hrs. 9.5

Summary of technical and/or engineering services performed including field test data (attach additional sheets as required).

Arrived at the job site at 10:00 AM - Met Dan Hernandez of CH2MHill - Discussed the work Re/Re compaction of CA-6 stone on main site surface -
Tested for density at various locations, see drawing for locations 1 to 39 - All tests passed the required specification of 95% - Please see attached the datasheet for test results and drawing for locations -

SKETCH (Indicate Dimensions or Scale)

N

Attested _____
Company _____
Date _____

WEI Name Tayeb Farez
WEI Signature Tayeb Farez
WEI Reviewed _____

Note: All test data, locations, elevations, and depths, etc. are subject to office review.

Field Soil/Aggregate Compaction Worksheet
Nuclear Moisture/Density Gauge Method

Testing Firm	Wang Engineering, Inc.
Address	1145 N Main Street
	Lombard, Illinois 60148
Office Telephone No.	(630) 953 - 9928
Gauge# / Serial No.	3430 #5 / 34651
Calibration Date	12-03-2008
M. Std / D. Std.	2728 / 668

Date	09-01-09
WEI Project No.	450-01-01
Client	CH2MHILL Constructors, Inc.
Project	Honeywell Celotex Main Site Cover Constru
Location	Chicago, IL
Contractor	HIS Construction, Inc.
Inspector Name	Tayeb Farez

1	Test Number	1	2	3	4	5	6	7
2	Date	09-01-09	→	→	→	→	→	→
3	Re-Test of Number							
4	Type of Construction	Capping Main Site Surface	→	→	→	→	→	→
5	Sample Number	CA-6 #2	→	→	→	→	→	→
6	Material Source	Vulcan Material Company	→	→	→	→	→	→
7	Material Type	CA-6	→	→	→	→	→	→
8	Proctor Type	Standard	Standard	Standard	Standard	Standard	Standard	Standard
9	Max. Dry Density	134.0	→	→	→	→	→	→
10	Optimum Moisture (%)	9.0	→	→	→	→	→	→
11	Min. % of Proctor Density	95%	95%	95%	95%	95%	95%	95%
12	Test Location (Station/Offset)	Loc:1 S.D	Loc:2 S.D	Loc:3 S.D	Loc:4 S.D	Loc:5 S.D	Loc:6 S.D	Loc:7 S.D
13	Elevation	F.G	F.G	F.G	F.G	F.G	F.G	F.G
14	Probe Depth	6"	6"	6"	6"	6"	6"	6"
15	Test Wet Density (pcf)	138.1	148.2	144.3	142.0	146.7	139.2	144.3
16	Test Dry Density (pcf)	133.3	141.6	138.7	137.4	140.4	133.3	137.7
17	Test % Compaction	99.5	105.7	103.5	102.6	104.8	99.5	102.8
18	Test % Moisture	3.6	4.6	4.0	3.3	4.5	4.4	4.8
19	Test Moisture Count	71	90	80	69	88	83	91
20	Test Density Count	2018	1615	1760	1852	1667	1969	1756
21	Result (Pass or Fail)	Pass	Pass	Pass	Pass	Pass	Pass	Pass
22	See Re-Test No.							

Comments:

S.D = See Drawing
F.G = Final Grade

Inspector: Tayeb [signature]

Resident Engineer: _____

Field Soil/Aggregate Compaction Worksheet
Nuclear Moisture/Density Gauge Method

Testing Firm	Wang Engineering, Inc.
Address	1145 N Main Street
	Lombard, Illinois 60148
Office Telephone No.	(630) 953 - 9928
Gauge# / Serial No.	3430 #5 | 34651
Calibration Date	12-03-2008
M. Std / D. Std.	668 | 2728

Date	09-01-09
WEI Project No.	450-01-01
Client	CH2MHILL Constructors, Inc.
Project	Honeywell Celotex Main Site Cover Constru
Location	Chicago, IL
Contractor	HIS Construction, Inc.
Inspector Name	Tayeb Farez

1	Test Number	8	9	10	11	12	13	14
2	Date	09-01-09	→					→
3	Re-Test of Number							
4	Type of Construction	Capping	Main Site	Surface	→			→
5	Sample Number	CA-6 #2	→					→
6	Material Source	Vulcan Material Company			→			→
7	Material Type	CA-6	→					→
8	Proctor Type	Standard	Standard	Standard	Standard	Standard	Standard	Standard
9	Max. Dry Density	134.0	→					→
10	Optimum Moisture (%)	9.0	→					→
11	Min. % of Proctor Density	95%	95%	95%	95%	95%	95%	95%
12	Test Location (Station/Offset)	Loc:8 S.D	Loc:9 S.D	Loc:10 S.D	Loc:11 S.D	Loc:12 S.D	Loc:13 S.D	Loc:14 S.D
13	Elevation	F.G	F.G	F.G	F.G	F.G	F.G	F.G
14	Probe Depth	6"	6"	6"	6"	6"	6"	6"
15	Test Wet Density (pcf)	139.6	144.3	147.3	149.9	138.8	145.6	148.1
16	Test Dry Density (pcf)	133.9	138.1	141.8	143.8	132.3	138.2	140.7
17	Test % Compaction	99.9	103.1	105.8	107.3	98.8	103.1	105.0
18	Test % Moisture	4.3	4.4	3.9	4.2	4.9	5.4	5.2
19	Test Moisture Count	82	86	79	85	90	100	99
20	Test Density Count	1948	1760	1648	1556	1981	1705	1616
21	Result (Pass or Fail)	Pass	Pass	Pass	Pass	Pass	Pass	Pass
22	See Re-Test No.							

Comments:

S.D = See Drawing
F.G = Final Grade

Inspector: Tayeb Farez

Resident Engineer: _____

Field Soil/Aggregate Compaction Worksheet
Nuclear Moisture/Density Gauge Method

Testing Firm	Wang Engineering, Inc.
Address	1145 N Main Street
	Lombard, Illinois 60148
Office Telephone No.	(630) 953 - 9928
Gauge# / Serial No.	3430 #5 / 34651
Calibration Date	12-03-2008
M. Std / D. Std.	668 / 2728

Date	09-01-09
WEI Project No.	450-01-01
Client	CH2MHILL Constructors, Inc.
Project	Honeywell Celotex Main Site Cover Constru
Location	Chicago, IL
Contractor	HIS Construction, Inc.
Inspector Name	Tayeb Farez

1	Test Number	15	16	17	18	19	20	21
2	Date	09-01-09	→	→	→	→	→	→
3	Re-Test of Number							
4	Type of Construction	Capping Main Site Surface	→	→	→	→	→	→
5	Sample Number	CA-6 #2	→	→	→	→	→	→
6	Material Source	Vulcan Material Company	→	→	→	→	→	→
7	Material Type	CA-6	→	→	→	→	→	→
8	Proctor Type	Standard	Standard	Standard	Standard	Standard	Standard	Standard
9	Max. Dry Density	134.0	→	→	→	→	→	→
10	Optimum Moisture (%)	9.0	→	→	→	→	→	→
11	Min. % of Proctor Density	95%	95%	95%	95%	95%	95%	95%
12	Test Location (Station/Offset)	Loc:15 S.D	Loc:16 S.D	Loc:17 S.D	Loc:18 S.D	Loc:19 S.D	Loc:20 S.D	Loc:21 S.D
13	Elevation	F.G	F.G	F.G	F.G	F.G	F.G	F.G
14	Probe Depth	6"	6"	6"	6"	6"	6"	6"
15	Test Wet Density (pcf)	146.1	140.9	138.0	148.2	139.9	143.8	132.3
16	Test Dry Density (pcf)	138.9	134.4	132.0	140.8	135.1	136.8	126.5
17	Test % Compaction	103.6	100.3	98.5	105.1	100.8	102.1	94.5
18	Test % Moisture	5.2	4.8	4.5	5.3	3.5	5.1	4.6
19	Test Moisture Count	98	90	84	100	71	95	83
20	Test Density Count	1687	1892	2021	1611	1945	1777	2286
21	Result (Pass or Fail)	Pass	Pass	Pass	Pass	Pass	Pass	Fail
22	See Re-Test No.							40

Comments:

S.D = See Drawing

F.G = Final Grade

Inspector: Tayeb Farez

Resident Engineer: _____

Field Soil/Aggregate Compaction Worksheet
Nuclear Moisture/Density Gauge Method

Testing Firm	Wang Engineering, Inc.
Address	1145 N Main Street
	Lombard, Illinois 60148
Office Telephone No.	(630) 953 - 9928
Gauge# / Serial No.	3430 #5 / 34651
Calibration Date	12-03-2008
M. Std / D. Std.	668 / 2728

Date	09-01-09
WEI Project No.	450-01-01
Client	CH2MHILL Constructors, Inc.
Project	Honeywell Celotex Main Site Cover Constru
Location	Chicago, IL
Contractor	HIS Construction, Inc.
Inspector Name	Tayeb Farez

1	Test Number	22	23	24	25	26	27	28
2	Date	09-01-09	→	→	→	→	→	→
3	Re-Test of Number							
4	Type of Construction	Capping Main site surface	→	→	→	→	→	→
5	Sample Number	CA-6 #2	→	→	→	→	→	→
6	Material Source	Vulcan Material Company	→	→	→	→	→	→
7	Material Type	CA-6	→	→	→	→	→	→
8	Proctor Type	Standard	Standard	Standard	Standard	Standard	Standard	Standard
9	Max. Dry Density	134.0	→	→	→	→	→	→
10	Optimum Moisture (%)	9.0	→	→	→	→	→	→
11	Min. % of Proctor Density	95%	95%	95%	95%	95%	95%	95%
12	Test Location (Station/Offset)	Loc: 22 S.D	Loc: 23 S.D	Loc: 24 S.D	Loc: 25 S.D	Loc: 26 S.D	Loc: 27 S.D	Loc: 28 S.D
13	Elevation	F.G	F.G	F.G	F.G	F.G	F.G	F.G
14	Probe Depth	6"	6"	6"	6"	6"	6"	6"
15	Test Wet Density (pcf)	143.7	138.1	136.7	138.4	144.9	138.8	142.9
16	Test Dry Density (pcf)	137.5	131.8	129.4	132.5	137.6	132.0	134.5
17	Test % Compaction	102.6	98.4	96.6	98.9	102.7	98.5	100.4
18	Test % Moisture	4.5	4.7	5.6	4.4	5.3	5.1	6.3
19	Test Moisture Count	86	87	98	83	99	93	111
20	Test Density Count	1783	2015	2076	2001	1733	1982	1807
21	Result (Pass or Fail)	Pass	Pass	Pass	Pass	Pass	Pass	Pass
22	See Re-Test No.							

Comments:

S.D = See drawing
F.G = Final grade.

Inspector: Tayeb Farez

Resident Engineer: _____

Field Soil/Aggregate Compaction Worksheet
Nuclear Moisture/Density Gauge Method

Testing Firm	Wang Engineering, Inc.
Address	1145 N Main Street
	Lombard, Illinois 60148
Office Telephone No.	(630) 953 - 9928
Gauge# / Serial No.	3430 #5 / 34651
Calibration Date	12-03-2008
M. Std / D. Std.	668 / 2728

Date	09-01-09
WEI Project No.	450-01-01
Client	CH2MHILL Constructors, Inc.
Project	Honeywell Celotex Main Site Cover Constru
Location	Chicago, IL
Contractor	HIS Construction, Inc.
Inspector Name	Tayeb Farez

1	Test Number	29	30	31	32	33	34	35
2	Date	09-01-09	→	→	→	→	→	→
3	Re-Test of Number							
4	Type of Construction	Capping	Main Site	Surface	→	→	→	→
5	Sample Number	CA-6 #2	→	→	→	→	→	→
6	Material Source	Vulcan Material Company			→	→	→	→
7	Material Type	CA-6	→	→	→	→	→	→
8	Proctor Type	Standard	Standard	Standard	Standard	Standard	Standard	Standard
9	Max. Dry Density	134.0	→	→	→	→	→	→
10	Optimum Moisture (%)	9.0	→	→	→	→	→	→
11	Min. % of Proctor Density	95%	95%	95%	95%	95%	95%	95%
12	Test Location (Station/Offset)	Loc: 29 S.D	Loc: 30 S.D	Loc: 31 S.D	Loc: 32 S.D	Loc: 33 S.D	Loc: 34 S.D	Loc: 35 S.D
13	Elevation	F.G	F.G	F.G	F.G	F.G	F.G	F.G
14	Probe Depth	6"	6"	6"	6"	6"	6"	6"
15	Test Wet Density (pcf)	140.0	140.3	139.1	145.8	138.3	146.4	140.6
16	Test Dry Density (pcf)	134.9	133.3	132.4	138.2	131.4	139.4	134.9
17	Test % Compaction	100.7	99.5	98.8	103.1	98.0	104.0	100.6
18	Test % Moisture	3.7	5.2	5.1	5.5	5.3	5.0	4.3
19	Test Moisture Count	74	95	92	102	95	95	82
20	Test Density Count	1936	1918	1969	1700	2002	1678	1906
21	Result (Pass or Fail)	Pass	Pass	Pass	Pass	Pass	Pass	Pass
22	See Re-Test No.							

Comments:

S.D = See Drawing
F.G = Final Grade.

Inspector: Tayeb Farez

Resident Engineer: _____

Field Soil/Aggregate Compaction Worksheet
Nuclear Moisture/Density Gauge Method

Testing Firm	Wang Engineering, Inc.
Address	1145 N Main Street
	Lombard, Illinois 60148
Office Telephone No.	(630) 953 - 9928
Gauge# / Serial No.	3430 #5 / 34651
Calibration Date	12-03-2008
M. Std / D. Std.	668 / 2728

Date	09-01-09
WEI Project No.	450-01-01
Client	CH2MHILL Constructors, Inc.
Project	Honeywell Celotex Main Site Cover Constru
Location	Chicago, IL
Contractor	HIS Construction, Inc.
Inspector Name	Tayeb Farez

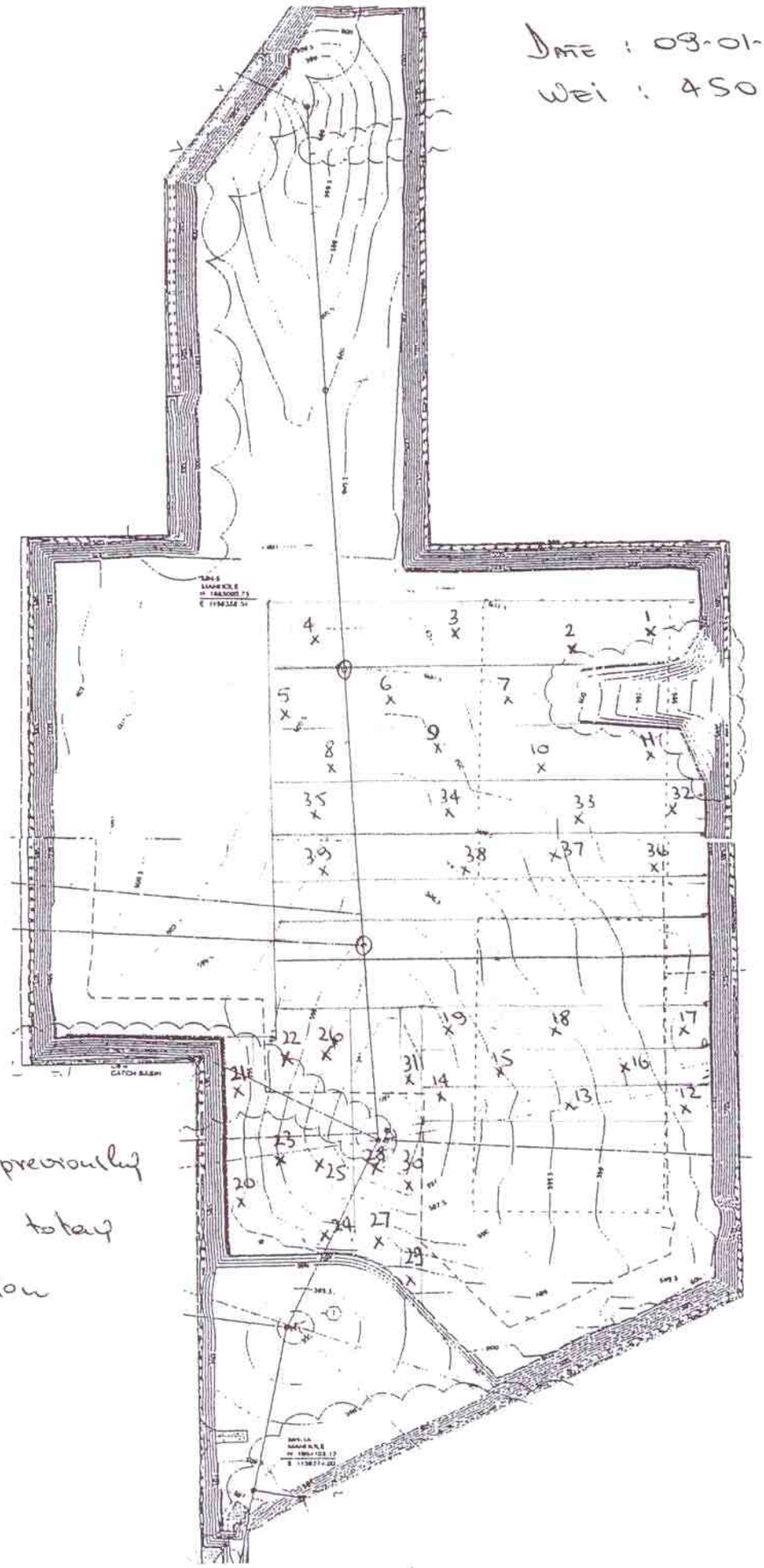
1	Test Number	36	37	38	39	40		
2	Date	09-01-09	→	→	→	→		
3	Re-Test of Number					21		
4	Type of Construction	Capping Main Site Surface				→		
5	Sample Number	CA-6 #2	→			→		
6	Material Source	Vulcan Material Company						
7	Material Type	CA-6	→	→	→	→		
8	Proctor Type	Standard	Standard	Standard	Standard	Standard	Standard	Standard
9	Max. Dry Density	134.0	→			→		
10	Optimum Moisture (%)	9.0	→	→	→	→		
11	Min. % of Proctor Density	95%	95%	95%	95%	95%	95%	95%
12	Test Location (Station/Offset)	Loc:36 S.D	Loc:37 S.D	Loc:38 S.D	Loc:39 S.D	Loc:21 S.D		
13	Elevation	F.G	F.G	F.G	F.G	F.G		
14	Probe Depth	6"	6"	6"	6"	6"		
15	Test Wet Density (pcf)	143.5	140.0	144.5	139.8	136.2		
16	Test Dry Density (pcf)	135.6	133.2	136.6	134.1	131.0		
17	Test % Compaction	101.2	99.4	102.0	100.1	97.7		
18	Test % Moisture	5.8	5.1	5.8	4.2	4.0		
19	Test Moisture Count	105	93	105	81	76		
20	Test Density Count	1787	1932	1747	1943	2102		
21	Result (Pass or Fail)	Pass	Pass	Pass	Pass	Pass		
22	See Re-Test No.							

Comments:

Inspector: Tayeb Farez

Resident Engineer: _____

Date : 09-01-09
WEI : 450-01-01



Area tested previously

Area tested today

x test location

Wang Engineering, Inc.

1145 N. Main Street, Lombard, IL 60148
☎ (630) 953-9928 Fax: (630) 953-9938

FIELD OBSERVATION REPORT

[redacted] _____
Sheet 1 of 4

WEI No 450-01-01

Date 09-03-09

Arrive Time 8:00 AM

Project Name Honeywell Celotex Main Site Cover Construction

Depart Time 10:30 AM

Project Location Chicago, IL

Total Hrs. on Job 2.5

Client CH2MHILL Constructors, Inc.

Travel Time

Contractor HIS Construction, Inc.

Total Chargeable Hrs.

Mileage Start 46425 Mileage End _____ Daily Mileage _____

Summary of technical and/or engineering services performed including field test data (attach additional sheets as required).

Arrived at the job site at 8:00 AM - Met Dan Hernandez of CH2MHILL - Discussed the work Pel/Pa compaction of CA-6 stone on Main Site surface.

Performed several density tests at various locations, see drawing for locations 1 to 14 -

All tests passed the required specifications of 95% -

Please see attached the datasheets for test results and drawing for locations.

SKETCH (Indicate Dimensions or Scale)

N

Attested _____

Company _____

Date _____

WEI Name Taveb Farez

WEI Signature Taveb Farez

WEI Reviewed _____

Note: All test data, locations, elevations, and depths, etc. are subject to office review

Field Soil/Aggregate Compaction Worksheet
Nuclear Moisture/Density Gauge Method

Testing Firm	Wang Engineering, Inc.
Address	1145 N Main Street
	Lombard, Illinois 60148
Office Telephone No.	(630) 953 - 9928
Gauge# / Serial No.	3430 # 5 / 34651
Calibration Date	12-03-2008
M. Std / D. Std.	658 / 2704

Date	09-03-09
WEI Project No.	450-01-01
Client	CH2MHILL Constructors, Inc.
Project	Honeywell Celotex Main Site Cover Constru
Location	Chicago, IL
Contractor	HIS Construction, Inc.
Inspector Name	Tayeb Farez

1	Test Number	1	2	3	4	5	6	7
2	Date	09-03-09	→	→	→	→	→	→
3	Re-Test of Number							
4	Type of Construction	Capping Main site surface	→	→	→	→	→	→
5	Sample Number	CA-6 #2	→	→	→	→	→	→
6	Material Source	Vulcan Material Company	→	→	→	→	→	→
7	Material Type	CA-6	→	→	→	→	→	→
8	Proctor Type	Standard	Standard	Standard	Standard	Standard	Standard	Standard
9	Max. Dry Density	134.0	→	→	→	→	→	→
10	Optimum Moisture (%)	9.0	→	→	→	→	→	→
11	Min. % of Proctor Density	95%	95%	95%	95%	95%	95%	95%
12	Test Location (Station/Offset)	Loc:1 S.D	Loc:2 S.D	Loc:3 S.D	Loc:4 S.D	Loc:5 S.D	Loc:6 S.D	Loc:7 S.D
13	Elevation	F.G	F.G	F.G	F.G	F.G	F.G	F.G
14	Probe Depth	6"	6"	6"	6"	6"	6"	6"
15	Test Wet Density (pcf)	144.2	144.1	142.7	147.7	139.2	145.1	148.7
16	Test Dry Density (pcf)	138.4	136.8	136.8	139.7	132.1	137.7	141.9
17	Test % Compaction	103.3	102.1	102.1	104.3	98.6	102.7	105.9
18	Test % Moisture	4.2	5.3	4.3	5.7	5.4	5.4	4.7
19	Test Moisture Count	81	97	82	104	95	98	91
20	Test Density Count	1749	1747	1807	1616	1945	1712	1582
21	Result (Pass or Fail)	Pass	Pass	Pass	Pass	Pass	Pass	Pass
22	See Re-Test No.							

Comments:

F.G : Fuel Grade

S.D : See Drawing

Inspector: Tayeb

Resident Engineer:

Field Soil/Aggregate Compaction Worksheet
Nuclear Moisture/Density Gauge Method

Testing Firm	Wang Engineering, Inc.
Address	1145 N Main Street
	Lombard, Illinois 60148
Office Telephone No.	(630) 953 - 9928
Gauge# / Serial No.	3430 #5 / 34651
Calibration Date	12-03-2008
M. Std / D. Std.	658 / 2704

Date	09-03-09
WEI Project No.	450-01-01
Client	CH2MHILL Constructors, Inc.
Project	Honeywell Celotex Main Site Cover Constru
Location	Chicago, IL
Contractor	HIS Construction, Inc.
Inspector Name	Tayeb Farez

1	Test Number	8	9	10	11	12	13	14
2	Date	09-03-09	→	→	→	→	→	→
3	Re-Test of Number							
4	Type of Construction	Capping Main Site Surface	→	→	→	→	→	→
5	Sample Number	CA-6 #2	→	→	→	→	→	→
6	Material Source	Vulcan Material company	→	→	→	→	→	→
7	Material Type	CA-6	→	→	→	→	→	→
8	Proctor Type	Standard	Standard	Standard	Standard	Standard	Standard	Standard
9	Max. Dry Density	134.0	→	→	→	→	→	→
10	Optimum Moisture (%)	9.0	→	→	→	→	→	→
11	Min. % of Proctor Density	95%	95%	95%	95%	95%	95%	95%
12	Test Location (Station/Offset)	Loc: 8 S.D	Loc: 9 S.D	Loc: 10 S.D	Loc: 11 S.D	Loc: 12 S.D	Loc: 13 S.D	Loc: 14 S.D
13	Elevation	F.G	F.G	F.G	F.G	F.G	F.G	F.G
14	Probe Depth	6"	6"	6"	6"	6"	6"	6"
15	Test Wet Density (pcf)	141.9	140.4	135.4	154.0	136.9	154.5	138.0
16	Test Dry Density (pcf)	135.4	134.5	129.3	145.8	129.5	146.4	130.6
17	Test % Compaction	101.1	100.4	96.5	108.8	96.7	109.3	97.5
18	Test % Moisture	4.8	4.2	4.7	5.6	5.7	5.5	5.7
19	Test Moisture Count	88	79	84	106	98	105	98
20	Test Density Count	1857	1911	2118	1406	2046	1391	1999
21	Result (Pass or Fail)	Pass	Pass	Pass	Pass	Pass	Pass	Pass
22	See Re-Test No.							

Comments:

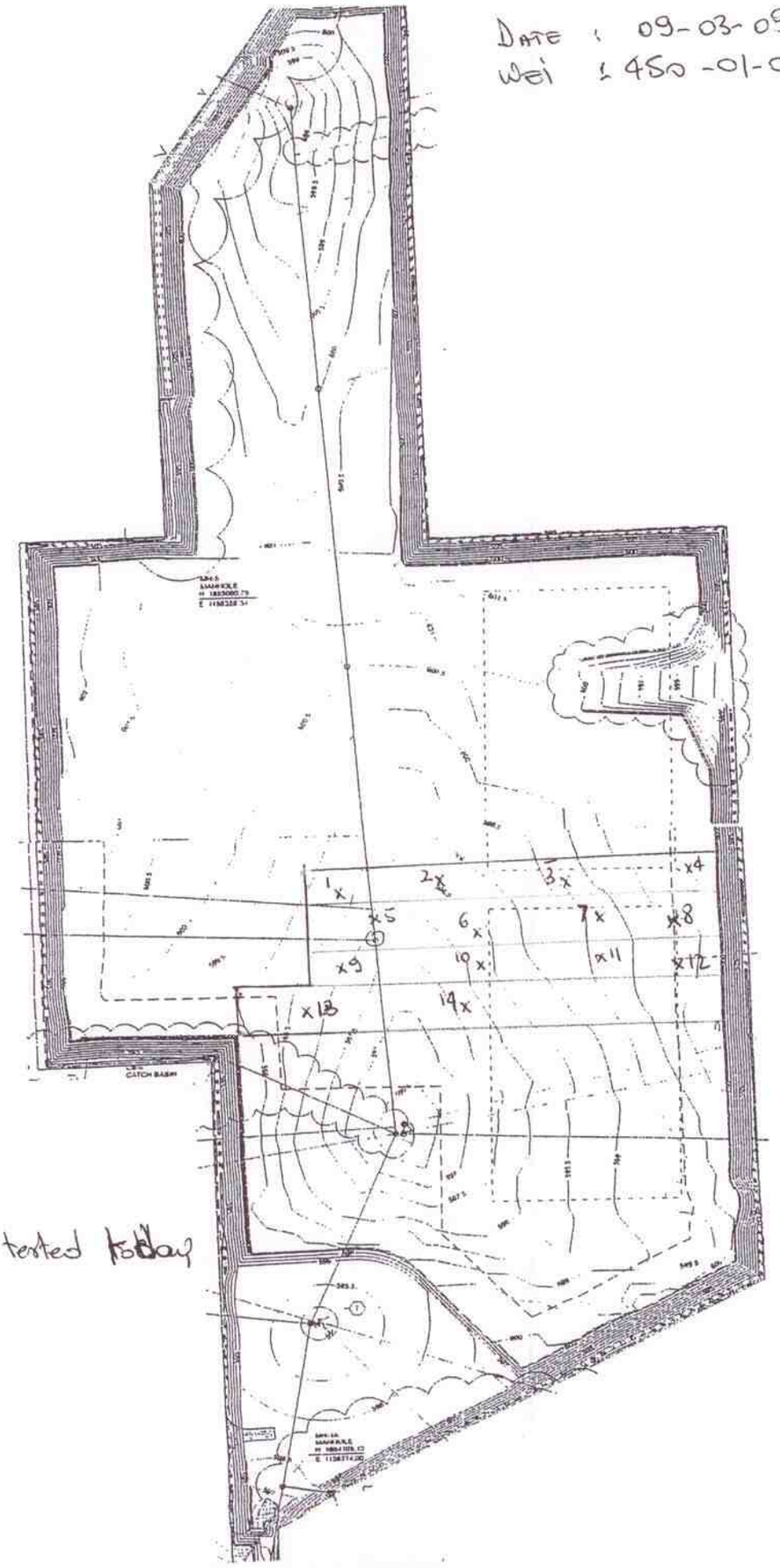
F.G : Final Grade

S.D : See Drawing

Inspector: Tayeb Farez

Resident Engineer: _____

DATE : 09-03-09
Wei : 450-01-01



☐ Area tested today