

Change Order

No. 6

Date of Issuance: May 2, 2018

Effective Date: May 2, 2018

Project: Improvements to Main Tile Drainage District #72	Owner: Trustees of Drainage District #72	Owner's Contract No.:
Contract:	Date of Contract: September 8, 2017	
Contractor: M D Construction Inc.	Engineer's Project No.:6833	

The Contract Documents are modified as follows upon execution of this Change Order:

Description: Contractor encountered organic clay soils at upper end of tile installation and achievement of Trench Compaction (bid item 224) was not determined as necessary in the area of organic clay soils.

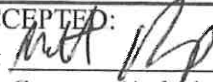
Attachments (list documents supporting change):

Test results from Contractor's subcontractor.

CHANGE IN CONTRACT PRICE:	CHANGE IN CONTRACT TIMES:
Original Contract Price: \$362,801.50	Original Contract Times: <input checked="" type="checkbox"/> Calendar days Substantial completion(date): 4-1-2018
Increase from previously approved Change Orders No. <u>1</u> to No. <u>5</u> : \$ 14,000.00	Increase from previously approved Change Orders No. <u>1</u> to No. <u>5</u> : Substantial completion for Items 222 & 223 (date): 6-15-2018 Substantial completion for all other Items (date): 5-1-2018
Contract Price prior to this Change Order: \$376,801.50	Contract Times prior to this Change Order: Substantial completion for Items 222 & 223 (date): 6-25-2018 Substantial completion for all other Items (date): 5-11-2018
Change of this Change Order: \$ 00.00	Increase of this Change Order: Substantial completion for Items 222 & 223 (date): None Substantial completion for all other Items (date): None
Contract Price incorporating this Change Order: \$376,801.50	Contract Times with all approved Change Orders: Substantial completion for Items 222 & 223 (date): 6-25-2018 Substantial completion for all other Items (date): 5-11-2018

RECOMMENDED:
By: _____
Engineer (Authorized Signature)

ACCEPTED:
By: _____
Owner (Authorized Signature)

ACCEPTED:
By: 
Contractor (Authorized Signature)

Date: _____

Date: _____

Date: 5-11-2018

Approved by Funding Agency (if applicable): _____

Date: _____

Liquid Limit, Plastic Limit & Plasticity Index of Soils

ASTM D-4318-10 Method B "Atterberg Limits"



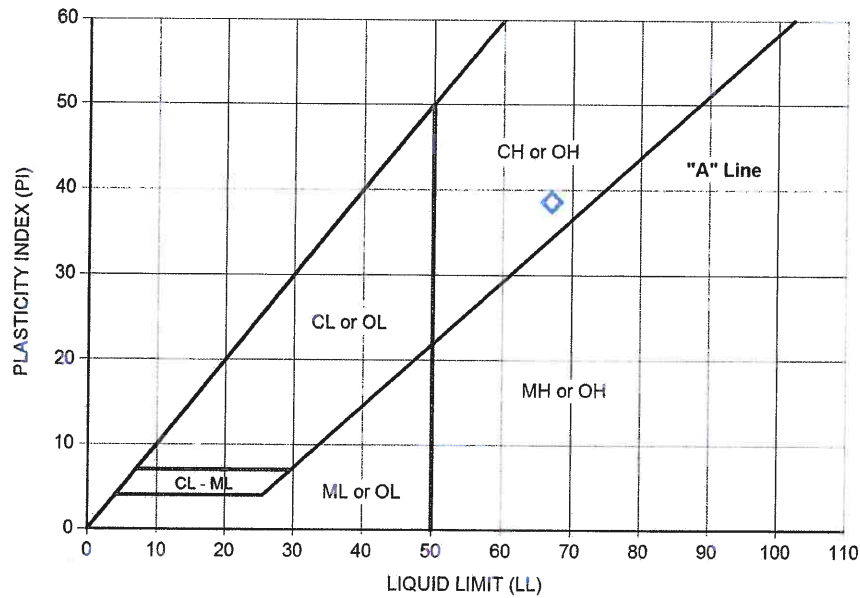
PROJECT NO: 5-1348
 PROJECT: Hardin County Main Tile Drainage District 72
 Hubbard, IA
 REPORT NO: 1-0

3424 1/2 5th Avenue South
 Fort Dodge, IA 50501
 Phone: 515-576-2098
 Fax: 515-576-1499
 www.teamservices.com
 staff@teamservices.com

SAMPLE ID: 1
 SAMPLE SOURCE: On Site West End of Project
 SAMPLE DESCRIPTION: Highly Organic Lean Clay Dark Grey (Peat)
 NOTES:

DATE RECEIVED: 2018-04-26
 DATE TESTED: 2018-04-27
 TESTED BY: MA

Wet (air-dried) Preparation. 2 Trials. Manual LL Device. Hand PL Rolling. Metal Grooving Tool



[CL] Lean Clay [CH] Fat Clay [ML] Silt [MH] Elastic Silt [OL] Organic Clay/Silt [OH] Organic Clay/Silt

LIQUID LIMIT TEST DATA

	NUMBER OF DROPS	WT. WET SOIL + TARE (g)	WT. DRY SOIL + TARE (g)	WT. TARE (g)	LIQUID LIMIT	AVG. LIQUID LIMIT (LL)
	25	89.20	84.90	78.70	69.40	67
Trial 2:	23	89.70	85.40	78.80	64.50	

PLASTIC LIMIT TEST DATA

	WT. WET SOIL + TARE (g)	WT. DRY SOIL + TARE (g)	WT. TARE (g)	PLASTIC LIMIT	AVG. PLASTIC LIMIT (LL)
	80.04	79.72	78.70	31.40	28
Trial 2:	80.08	79.82	78.80	25.50	

MATERIAL CLASSIFICATION: OH - Organic Clay

PLASTICITY INDEX (PI)

39

MOISTURE - DENSITY RELATIONSHIP REPORT



(Proctor Test)

ASTM D 698-12 Method A Standard

PROJECT: **Hardin County Main Tile Drainage District 72**
Hubbard, IA

PROJECT NO: 5-1348

REPORT NO: 2-0

PROCTOR ID: 4

DATE RECEIVED: 04/26/2018

DATE TESTED: 04/30/2018

TESTED BY: MA

TEST RESULTS

MAXIMUM DRY DENSITY (pcf)

62.0

OPTIMUM MOISTURE (%)

50.9

Natural Moisture: 66.0%

Prep Method:: dry

Rammer Type: Manual

Proctor points available upon request.

SOURCE: On Site West End of project

SAMPLE DESCRIPTION: Highly Organic Lean Clay Dark Grey (Peat)

Notes/Remarks:

APPROVED: Michael Ascherl

*Proctor reports shall not be reproduced, except in full, without our written permission.

TEAM Services, Inc.

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Fort Dodge, IA 50501

515-576-2098

515-576-1499

www.teamservices.com

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DENSITY FIELD REPORT

PROJECT NO: 5-1348

REPORT DATE: 4/30/2018

Report No: 4-0



Hardin County Main Tile Drainage District 72, Hubbard, IA

TO: MD Construction

1322 Hwy E27

Garwin, IA 50632

Attn: Matt Deschamp

cc: Lee Gallentine, Ryken Engineering and Land Surveying

Date	Test No.	Location (Comments)	Elev. (Ft.)	Mtl. Mark	Wet Density pcf	% H2O of Dry Mass	Dry Density pcf	% Compact ASTM D6938	% H2O Var. ASTM D6938	Spec. Density %	Spec. % H2O
04-26-18	34	138+00 {Fail}	-4.00	4	94.2	64.5	57.3	92	13.6	90.0	+/- 3
04-26-18	35	138+00 {Fail}	-2.00	4	83.6	56.2	53.5	86	5.3	90.0	+/- 3
04-26-18	36	136+00 {Fail}	-2.00	4	89.9	81.2	49.6	80	30.3	90.0	+/- 3
04-26-18	37	134+00 {Fail}	-3.00	3	107.9	34.0	80.5	88	15.3	90.0	+/- 3
04-26-18	38	132+00 {Fail}	-4.00	3	118.7	26.7	93.6	103	8.0	90.0	+/- 3
04-26-18	39	132+00	-2.00	3	123.0	16.9	105.2	115	-1.8	90.0	+/- 3
04-26-18	40	130+00	-6.00	2	125.5	18.7	105.7	100	1.5	90.0	+/- 3
04-26-18	41	130+00	-4.00	2	124.3	21.3	102.4	97	4.1	90.0	+/- 3
04-26-18	42	130+00	-2.00	2	124.4	18.5	105.0	99	1.3	90.0	+/- 3
04-26-18	43	128+00	-6.00	2	126.5	20.3	105.1	99	3.1	90.0	+/- 3
04-26-18	44	128+00	-4.00	2	123.2	19.0	103.5	98	1.8	90.0	+/- 3
04-26-18	45	128+00	-2.00	2	127.2	20.1	105.8	100	2.9	90.0	+/- 3
04-26-18	46	126+00	-6.00	2	123.9	21.0	102.4	97	3.8	90.0	+/- 3
04-26-18	47	126+00	-4.00	2	123.3	18.7	103.8	98	1.5	90.0	+/- 3
04-26-18	48	126+00	-2.00	2	123.8	19.0	104.0	98	1.8	90.0	+/- 3
04-26-18	49	124+00	-6.00	2	117.2	20.4	97.4	92	3.2	90.0	+/- 3
04-26-18	50	124+00	-4.00	2	117.6	20.2	97.8	93	3.0	90.0	+/- 3
04-26-18	51	124+00	-2.00	2	123.8	19.0	104.0	98	1.8	90.0	+/- 3
04-26-18	52	122+00	-6.00	2	127.2	19.1	106.8	101	1.9	90.0	+/- 3
04-26-18	53	122+00	-4.00	2	127.2	21.0	105.1	99	3.8	90.0	+/- 3
04-26-18	54	122+00	-2.00	2	126.5	21.3	104.3	99	4.1	90.0	+/- 3
04-26-18	55	120+00	-6.00	2	114.7	21.3	94.6	89	4.1	90.0	+/- 3
04-26-18	56	120+00	-4.00	2	124.4	18.7	104.8	99	1.5	90.0	+/- 3
04-26-18	57	120+00	-2.00	2	114.7	16.9	98.1	93	-0.3	90.0	+/- 3

[Datums]: FSG: 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57

MTL. MARK	MATERIAL DESCRIPTION	MAX DRY DENS. PCF	OPT. MOISTURE	Note: Locations indicated are approximate. results represent only the locations tested at the time of testing. Values may change due to construction activity, weather, or environmental conditions. Reports shall not be reproduced, except in full, without our written permission.
2	SILT, trace sand, trace gravel, trace organic matter, li...	105.7	17.2	
3		91.2	18.7	
4	Sandy Lean CLAY, trace gravel, light-dark gray Highly Organic Lean Clay Dark Grey (Peat)	62.0	50.9	

Hardin County Main Tile Drainage District 72

Hubbard, IA

Report No: 4-0

NUCLEAR DENSITY FIELD TEST RESULTS

Date	Operator	Standard Counts from Calibration		Gauge ID	Make	Model	S/N	Test Mode
		Density	Moisture					
04-26-18	Ostheimer	689.0	2,001.0	2935	Troxler	3440	37719	Direct Transmission
04-26-18	Ostheimer	2,006.0	683.0	2935	Troxler	3440	37719	Direct Transmission

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2	SILT, trace sand, trace gravel, trace organic	105.7	17.2	
3	matter, li....	91.2	18.7	
4	Sandy Lean CLAY, trace gravel, light-dark gray Highly Organic Lean Clay Dark Grey (Peat)	62.0	50.9	

Approved:
Michael Ascherl