AGENDA REGULAR DRAINAGE MEETING TUESDAY, AUGUST 27 AT 1:00 PM

- 1. Open Meeting
- 2. Approve Agenda
- 3. Approve Minutes
 - -July 31, 2019 Regular Drainage Meeting
 - -August 7, 2019 Regular Drainage Meeting
 - -August 14, 2019 Regular Drainage Meeting

Documents:

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7_31_2019 - DRAINAGE MINUTES.PDF
8_7_2019 - DRAINAGE MINUTES.PDF
8_14_2019 - DRAINAG MINUTES.PDF
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 Approve Claims For Payment Pay date of Friday, August 30, 2019.

Documents:

PAYABLES-DRAINAGE PUBLICATION.PDF

4.I. DD 34 - Discuss, With Possible Action, Rock Curtain Wall Invoice

Documents:

DRAIANGE CURTAIN 8.22.19 INVOICE.PDF

5. DD 102 - Discuss, With Possible Action, Wetlands Project

Documents:

WETLANDS FOLLOW UP MIKE BOURLAND.PDF

6. Acknowledge, With Possible Action, Radcliffe Telephone Tile Repair -Tile repair East Ionia St Radcliffe, Iowa.

Documents:

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20190806_114325.JPG
20190806_114341.JPG
20190806_120220.JPG
20190806_130901.JPG
20190806_133903.JPG
20190806_134609.JPG
20190806_135515.JPG
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7. DD 9 - Discuss, With Possible Action, Investigation Summary For Work Order 257

Documents:

6735.2-INVESTIGATION-REPORT-2019_08_23.PDF

8. DD 55-3 Lat 9 - Discuss, With Possible Action, Investigation Summary For Work Order 251

Documents:

DD55-3WO251 INV SUMMARY.PDF

Big Four Main - Discuss, With Possible Action, Repair Summary For Work Order 250
 Documents:

BIG4WO250 REPAIR SUMMARY.PDF

DD 124 - Discuss, With Possible Action, Repair Summary For Work Order 259
 Documents:

DD124WO259 REPAIR SUMMARY.PDF

11. DD 55-3 Lat 9 - Discuss, With Possible Action, Repair Summary For Work Order 224

Documents:

DD55-3WO224 REPAIR SUMMARY.PDF

- 12. Other Business
- 13. Adjourn Meeting

REGULAR DRAINAGE MEETING

7/31/2019 - Minutes

1. Open Meeting

Hardin County Board of Supervisors Chairperson, Renee McClellan, opened the meeting. Also present were Supervisor, Lance Granzow and BJ Hoffman; Lee Gallentine with Clapsaddle-Garber Associates (CGA); Drainage Clerk, Becca Junker. Heather Thomas with Clapsaddle-Garber (CGA) conference called in during DD 22 discussion.

2. Approve Agenda

Hoffman moved, Granzow seconded to approve the agenda as provided. All ayes. Motion carried.

3. Approve Minutes

Hoffman moved, Granzow seconded to approve the minutes of the July 10, 2019 regular drainage meeting, July 10, 2019 DD HF 5-75 reclassification hearing, and July 17, 2019 regular drainage meeting. All ayes. Motion carried.

4. DD 22 - Discuss, With Possible Action, Project Update

Thomas informed the Trustees that Gehrke has four spot repairs completed and are working on their fifth one and has been working well with CGA. Gehrke has submitted an alternate for private tile, Thomas explained she if fine with the alternate and would like to give them the go ahead to do the first couple this way and then formalize it in a change order next week. Thomas told the Trustees that the alternate being requested is a tap tee, they will put grout around the tap tee into a rectangular square and concreted in. It will be bedded in rock and there will be dual wall used to make connections to the private tile. It was explained that it is the same process that McDowell was allowed to use in Radcliffe and Handsaker to do last year.

Thomas explained she gave Gehrke the following items that needed to happen for a good connection using this method:

- -Connections don't protrude into the pipe where it would potentially restrict flow or camera access.
- -Hole cut in RCP pipe is neat.
- -Grout is smoothed out on the inside of the pipe and adequately seals/holds the joint in place. Joint is soil tight.
 - -The specified granular bedding of the RCP is used also to support the connection.
 - -Connection to existing tile is done with appropriate fittings to prevent crushing the tile connection.

Hoffman moved, Granzow seconded to approve the change on today, July 31, 2019 to use this process for the next week and have the installation and the methods observed and recorded by CGA to ensure proper technique and standards were met before proceeding to other variations of this type. Thomas updated the Trustees that they will continue with the spot repairs, she thinks it will be mid next week before they get to C Ave. They will skip over the spot repairs at C Ave because that is where the 30 inch is on the E side of the road is going to be replaced so they are going to do all of that at the same time. They will proceed to the cornfield on the E side after that. All ayes. Motion carried.

5. DD 9 - Discuss, With Possible Action, Legal Moving Forward

Junker explained that Sailor picked up the letter two week prior and had not contacted the drainage clerk. She explained that the Trustees had her put in the letter if they had not heard from him within two weeks, they would assume he approves of the project moving forward. She explained that she had emailed Mike Richards to let him know what was going on and ask if it would be better to do the reclassification or annexation first. He replied and said he would do the annexation before the reclassification. One of his colleagues reached out to Junker to ask if they should be proceeding with the annexation or if they should have this project on hold. She explained she just needed a motion on how the law firm should proceed.

Gallentine then explained that CGA has plans and specs ready and was looking to set a date and time for a bid letting. Granzow said that he would have Richards move forward when the project gets sent to bids. Gallentine said that everything is ready for this project to be sent to a bid letting. McClellan then asked how long it takes for annexation and splitting the district. Granzow then stated that he wants a signed approval of annexation from the landowner before the project goes to bid.

Granzow moved, Hoffman seconded to contact Richards and tell them to start the annexation process. All ayes. Motion carried.

6. DD 9 - Discuss, With Possible Action, CGA Findings

Gallentine explained that following the public hearing, CGA started investigating drainage district 9 to figure out if one of the northern laterals was in the railroad right of way. After a lot of digging they found one single original map that every map since has been a trace of. He said looking at the legend there is a nice straight line where there is tile and there is a more squiggle line that is ditch. Looking at the profile the length of the lateral only matches to the red dot on the map. He explained that all the current 1950 maps and GIS is wrong and is actually private because the lateral ends. He further explained that there was a ditch there at one time which is where there could have been confusion. He explained that in his opinion the tile is private and not district. Hoffman asked what year the original map is from and Gallentine explained it is from 1909. Hoffman then asked how to correctly show the tile in the records going further. Junker explained that she already fixed the tile within GIS after receiving the original map from Gallentine.

While looking at the original map, Granzow pointed out that all of the land that is currently under water was originally wild hay. He also noticed that the name of the original map was "Mather & Kier" who owned majority of the land that now the Roberts own. Gallentine explained that Mather & Kier were probably the people who requested the district. He further explained that majority of the laterals and main end in the Mather & Kier land which means the tile mainly benefited their land.

Hoffman moved, Granzow seconded to acknowledge the 1909 drainage district 9 map containing 550 acres. Hoffman continued that this map shows lost history that needs to be recognized now, that it was not hidden it was just unavailable, but it does show that the Mather & Kier properties have substantially benefitted from the drainage district since it conception. Gallentine then pointed out that it appears the 1950s copies are incorrect, unless there are minutes somewhere that the tile was extended. Hoffman explained the biggest misconception was that the tile makes an abrupt stop and that is not noted in the later maps. All ayes. Motion carried.

Junker reminded the Trustees that in the public hearing, landowners had requested for the drainage district to do work in the tile that is now determined to be private tile. It was decided at the hearing that any findings would be sent to the landowners. Junker asked if the Trustees wanted her to mail the findings to the landowners, or how they wanted to proceed with informing the landowners of the findings. Hoffman moved, Granzow seconded for Junker to forward the letter and map that Gallentine submitted to the Trustees to the landowner within the district. All ayes. Motion carried.

Drainage Utility Permit #2018-9 - Discuss, With Possible Action, Resubmitted
Granzow moved, Hoffman seconded to create a new utility permit work order for the revised plans and close the
#2018-9 work order. All ayes. Motion carried.

8. Other Business

Wind Turbines: Hoffman explained that now that he is doing work on wind turbine sites, he wanted to go on record and say if there are wind turbine sites being built within a drainage district, there needs to be reconsideration on how that is approached. He went on to say he has been on many sites and talked to many landowners who have said drainage has been significantly affected.

8.I. Regular Drainage Meeting 8/7/19

Trustees decided to have a meeting on August 7, 2019 and have Tina attend the meeting and take minutes since Junker will be out of office.

9. Adjourn Meeting

Hoffman moved, Granzow seconded to adjourn the meeting. All ayes. Motion carried.

REGULAR DRAINAGE MEETING

8/7/2019 - Minutes

1. Open Meeting

Hardin County Board of Supervisors Chairperson, Renee McClellan, opened the meeting. Also present were Supervisor, Lance Granzow and BJ Hoffman; Lee Gallentine with Clapsaddle-Garber Assoviates (CGA); Former Drainage Clerk, Tina Schlemme.

2. Approve Agenda

Hoffman moved, Granzow seconded to approve the agenda as provided. All ayes. Motion carried.

3. DD 22 - Discuss, With Possible Action, Change Order

The dual wall tap tees were not in stock so there is no change order, yet. Granzow moved, Hoffman seconded to table the item. All ayes. Motion carried.

4. DD 26 - Approve Work Order 266

Hoffman moved, Granzow seconded to approve work order #266 and for CGA to investigate and bring back findings. CGA is to call Gehrke Inc to see if they will do the repair while they are out working on another project in that area. All aye. Motion carried.

5. DD 143 - Discuss, With Possible Action, Unite Private Networks

Granzow moved, Hoffman seconded to send a letter with the repair process to Unite Private Networks. All ayes. Motion carried.

6. Other Business

DD 106 - Hoffman moved, Granzow seconded to have the drainage clerk create a work order and have CGA verify that the tile is district tile and go from there. All ayes. Motion carried.

7. Adjourn Meeting

Hoffman moved, Granzow seconded to adjourn the meeting. All ayes. Motion carried.

REGULAR DRAINAGE MEETING

8/14/2019 - Minutes

1. Open Meeting

Hardin County Board of Supervisors Chairperson, Renee McClellan, opened the meeting. Also present were Supervisor, Lance Granzow and BJ Hoffman; Lee Gallentine and Heather Thomas with Clapsaddle-Garber Associates (CGA); Drainage Clerk, Becca Junker.

2. Approve Agenda

Hoffman moved, McClellan seconded to approve the agenda as provided. All ayes. Motion carried.

3. Approve Claims For Payment

Hoffman moved, Granzow seconded to approve the claims for payment with pay date of Friday, August 16, 2019. All aye. Motion carried.

- DD 22- Professional Services After 06/15-07/20 Clapsaddle-Garber Assoc \$2477.8
- DD 86- Professional Services After 6/21-7/26 Clapsaddle-Garber Assoc \$398.3
- DD 119- Investigation of blowout on Lat 1 Clapsaddle-Garber Assoc \$274.35
- DD 143- Inv. of Sinkhole on N side of Hw 175 Clapsaddle-Garber Assoc \$757.9
- DD 143- Coordination of Main repairs by Rad Tele Clapsaddle-Garber Assoc \$378.9
- DD 9- Inv Blowout on Lat 1 & Lat limits Clapsaddle-Garber Assoc \$970.5
- DD 9- Generation of Palns and Specs for new outlet Clapsaddle-Garber Assoc \$6782.55
- DD 52- General Advice Davis, Brown, Koehn, Shors & \$40
- DD 52- Shawn Piel communication Davis, Brown, Koehn, Shors & \$80
- DD 52- Communication w/ attorney plugged lat 3 Clapsaddle-Garber Assoc \$298.7
- DD 102- Review of Wetland Project Clapsaddle-Garber Assoc \$743.4
- DD 124- Investigation of Sinkholes Clapsaddle-Garber Assoc \$358.2
- DD 167- Investigation of sinkholes Clapsaddle-Garber Assoc \$330.6
- DD HF 5-75- Prep and atten of reclass hearing Clapsaddle-Garber Assoc \$324.7

4. Discuss, With Possible Action, IRUA

Hoffman explained that after he read their latest letter, he thought it would be best to get a lawyer involved. He is focused on doing what is best for property owners and maintaining the drainage district facilities. Hoffman moved, Granzow seconded to consult Mike Richards to formulate a plan on how to move forward and to have him be the contact person for IRUA moving forward. Granzow explained that IRUA should have talked to the Trustees prior to signing the contact if they wanted to make altercations to it, not after it was signed, and the work was done.

When Junker asked about payment for lawyer fees the Trustees said that this will have to come out of their fund. Granzow then stated that once this issue is resolved the costs would then be divided and billed to every district because this will benefit all districts. He recommended making a separate line item for all of these costs.

All ayes. Motion carried.

5. Other Business

Trustee Fund/Stamped Warrants: Granzow recommended Junker looking into if it was possible for the Trustees to have a way of issuing stamped warrants. He said he would recommend having at least three accounts to start with, one for all drainage district, one for open ditches and one for just drainage district the Supervisors are Trustees of.

DD 22 Update: Thomas explained that the tap tees that were ordered were a special item not a stock item which is why it took longer than a week to get them in stock. They have come in and as of yesterday Gehrke has been installing them. Thomas presented the Trustees with a few photos and said she thinks they are doing a good job with them. She recommends letting them use this option moving forward. She explained there is two different options moving forward. One is with tap tees, she said this works well for when the tile is coming in, at least at the midpoint of the pipe or on the top half of the pipe. Two is custom, they took a dual wall section of pipe and had it cut and grouted.

The other item that has come up is where lateral one ties into the original main tile, that configuration was a little different in the field than anticipated, there were some funny angels and elevation differences. Instead of using the reducer they recommended switching to a field fabrication. In order to take the reducer our and put the fabrication in it will be a deduction of \$442 and it will fit in much nicer.

Hoffman moved, Granzow seconded to approve the change order with the cost reduction of \$442 and approve the engineer technique using the tap tees. Granzow then asked if the picture is showing concrete laying at the bottom of the tile, Thomas said that it was not and what he is seeing will be washed out. All ayes. Motion carried.

Thomas updated the Trustees that all the repairs to C Ave have been completed, which is all of the 24 inch and part of the 18 inch. She ran quick numbers and currently this project is about \$11,000 under the construction bid price. She has talked to Travis Rierson about his driveway a few times. At the time the plans were put out the driveway was in much better shape than it is today. Most of the driveway is currently washed out. After talking to the contractor and property owner it has been decided that the driveway will be restored to what he put in three years ago. There will be no cost difference for the district. The cross connection have been looked at for several different points and there are a few sketches, it will likely be a month out before Gehrke gets to those areas. Thomas is a little concerned with putting cross connections at all points as it might overload one of the tiles and not the rest. There should be a second crew starting soon, possibly today.

DD 102: Junker informed the Trustees that Mike Bourland reached out and would like to set up another meeting with the Trustees. Next week there is no meeting because the Supervisors will be at ISAC and the following week Junker will be at ISAC Wednesday-Friday. It was decided that Junker would see if Bourland was available on Monday, August 26 or Tuesday, August 27 for an afternoon meeting.

6. Adjourn Meeting

Hoffman moved, Granzow seconded to adjourn the meeting. All ayes. Motion carried.



DD 9 - Professional Legal Services-Annex & Reclass	The Davis Brown Law Firm	75.00
DD 9 - Eng Srvs 05/31/19- 06/28/19	Clapsaddle-Garber Assoc	1,118.80
DD 34- Rock Curtain Wall bill from last Oct	Hands On Excavating LLC.	6,516.04
DD 38- Finalizatrion of repair for Lat 4	Clapsaddle-Garber Assoc	308.70
DD HF 5-75- Public Notice Hearing	Times Citizen	97.76

Total Regular Payables: 0.00

Total Stamped Warrants: 8,116.30

8/26/2019 8:46:05 AM Page 1 of 1

Hands On Excavating LLC

3305 Ziegler Ave Radcliffe, Ia 50230

Bill To

Hardin County Drainage Clerk 1215 Edgington Ave, Suite 1 Eldora, IA 50627

Invoice

Date	Invoice #
8/20/2019	2569
Due Date	
9/1/2019	

l	Project Description	
	DD 34 Rock Check	-

Tax ID#	Terms
27-2399255	Due on receipt

Description	Quantity	Rate	Amount
Mobilization	1	150.00	150.00
Link Belt 210 Excavator hours	9	200.00	1,800.00
Man Labor Excavation	3	35.00	105.00
Class E Rip Rap	97.94	31.50	3,085.11
Hauling	97.94	6.70	656.20
1" Clean-Martin Marietta-Alden	34.03	14.45	491.73
Hauling	34.03	6.70	228.00

Thank you for the opportunity to work with you. We look forward to earning your business in the future. Interest at the rate of 1.5% applied from due date until paid. Customer agrees to pay all costs, including attorney fees, of collecting any balances more than 90 days late.

Total	\$6,516.04
Payments/Credits	\$0.00
Balance Due	\$6,516.04

Phone #	Web Site	E-mail
515 899 2394	www.handsonexcavating.com	handsonexc@gmail.com

Becca Junker

From: Bourland, Mike <Mike.Bourland@lowaagriculture.gov>

Sent: Tuesday, August 13, 2019 9:31 AM **To:** Lee Gallentine; Becca Junker

Cc: perryagservices .

Subject: RE: DD 102 and Wetlands.

Follow Up Flag: Flag for follow up

Flag Status: Completed

Hi Lee and Becca

Sorry to take so long to get back to you. We have been trying to address question 4 and it has taken some time to talk to the appropriate people. Below is our response in red. Is it possible to set up another time soon to meet with the Board to go over these items? Just let me know. Thanks.

Mike

Issues recommend resolving prior to construction:

- Who owns the proposed wetland (i.e. is it a district facility) after it is constructed?
 The wetland is owned by Perry. He will have an easement but maintains ownership unless he sells it to another party.
- 2. Who is responsible to complete maintenance activities of the proposed wetland?

 The owner of the wetland is responsible for maintenance unless some other arrangements are made.
- 3. Who is responsible to pay for maintenance activities of the proposed wetland?

 The owner of the wetland is responsible for payment of the maintenance activities. We have worked with districts before to help develop an agreement between the landowners and the district and can provide an example as a starting point is needed.
- 4. Is this project considered an improvement by NRCS and if so, is it deemed to have an impact on upstream jurisdictional wetlands?

We have had various conversations with people from NRCS. It has been difficult since some of the people have been on vacation. We should have a final answer this week and we will request something in writing. All conversations so far has been that there will no impact on jurisdictional wetlands.

Design question for District Trustees:

If this was a drainage district project, the materials that the District Trustees have historically used are similar to "municipal" specifications (i.e. for 12" tile and larger sizes RCP with rock bedding up to springline or Polypropylene with rock bedding to 1' above top of pipe and for smaller sizes Polyethylene with rock bedding to 1' above top of pipe). Is this going to be required of this project or will an "ag" specification be allowed? We have always followed the "ag" specifications for our projects and do not plan to require rock bedding. We recognize this is a district tile which is why we requiring concrete but the depth of cover does not require rock bedding. It the district wants to require this, we would want to pass along this additional cost to the district landowners.

From: Lee Gallentine [mailto:LGallentine@cgaconsultants.com]

Sent: Monday, July 15, 2019 11:38 AM

To: Bourland, Mike **Cc:** Becca Junker

Subject: DD 102 and Wetlands.

Mike,

At last week's drainage meeting, the District Trustees requested that I pass the attached review comments along to you. They are highly interested in the project and would like a timeframe on answers to the attached and possible dates for a meeting with you, them, and district landowners. Please let me know if you have any questions or need anything else.

Thanks,

Lee O. Gallentine, PLS & PE Vice President



Clapsaddle-Garber Associates, Inc. (CGA)

739 Park Avenue Ackley, Iowa 50601

Office:641-847-3273 Mobile: 515-689-5339

Igallentine@cgaconsultants.com www.cgaconsultants.com

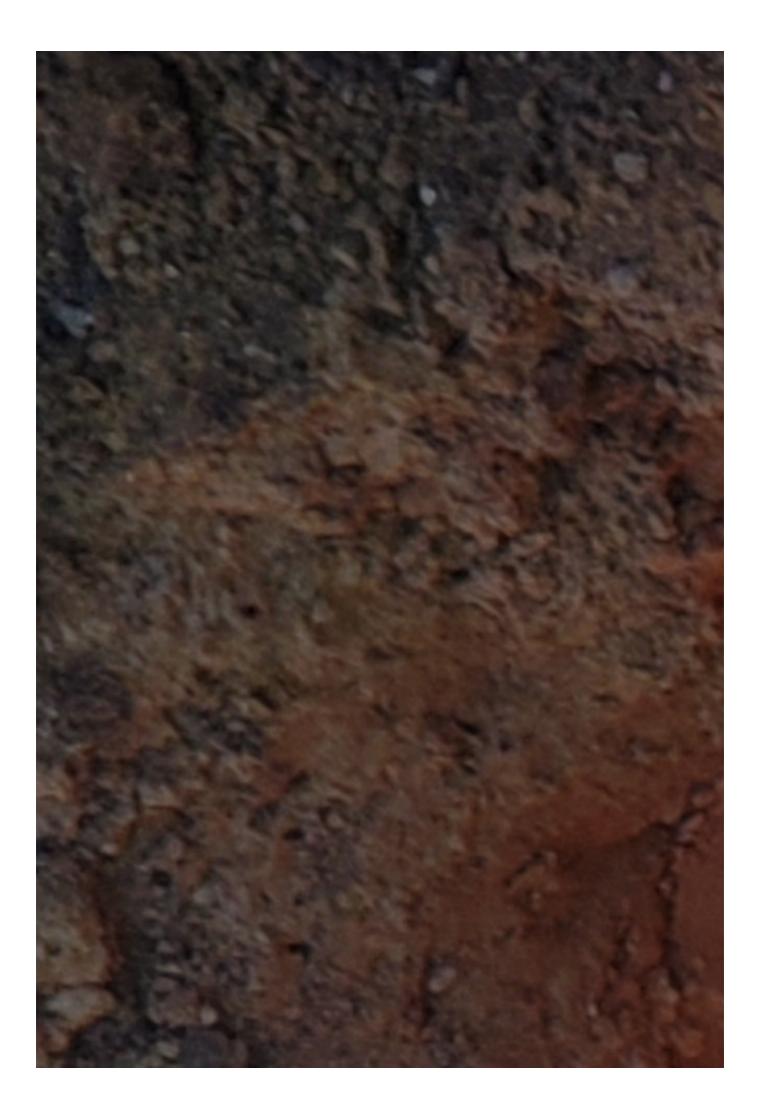
Ackley | Ames | Cedar Falls | Marshalltown | Webster City

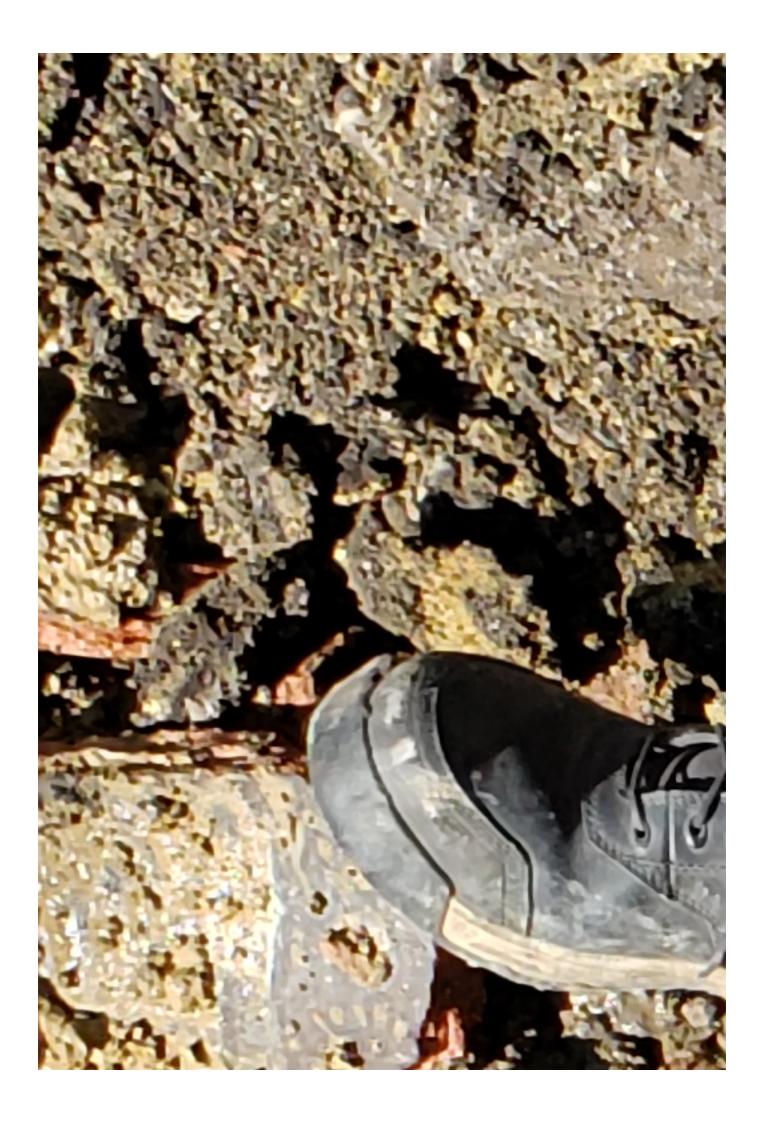
CLICK HERE to sign up for CGA news and updates!



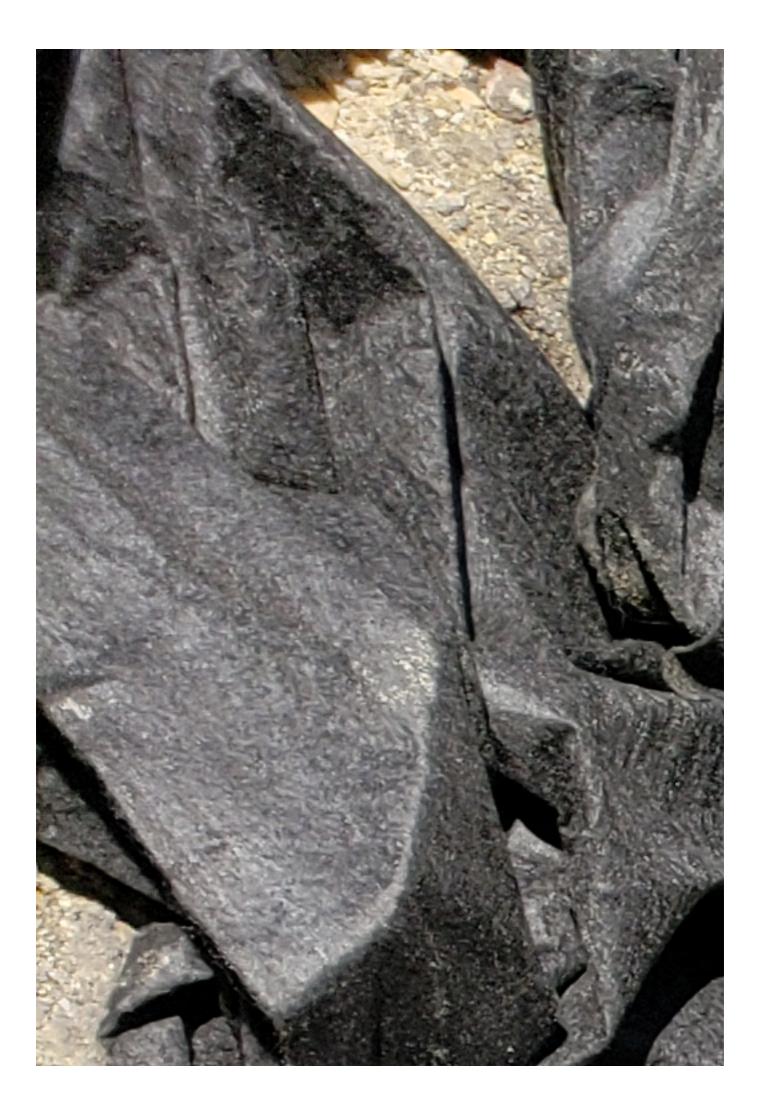




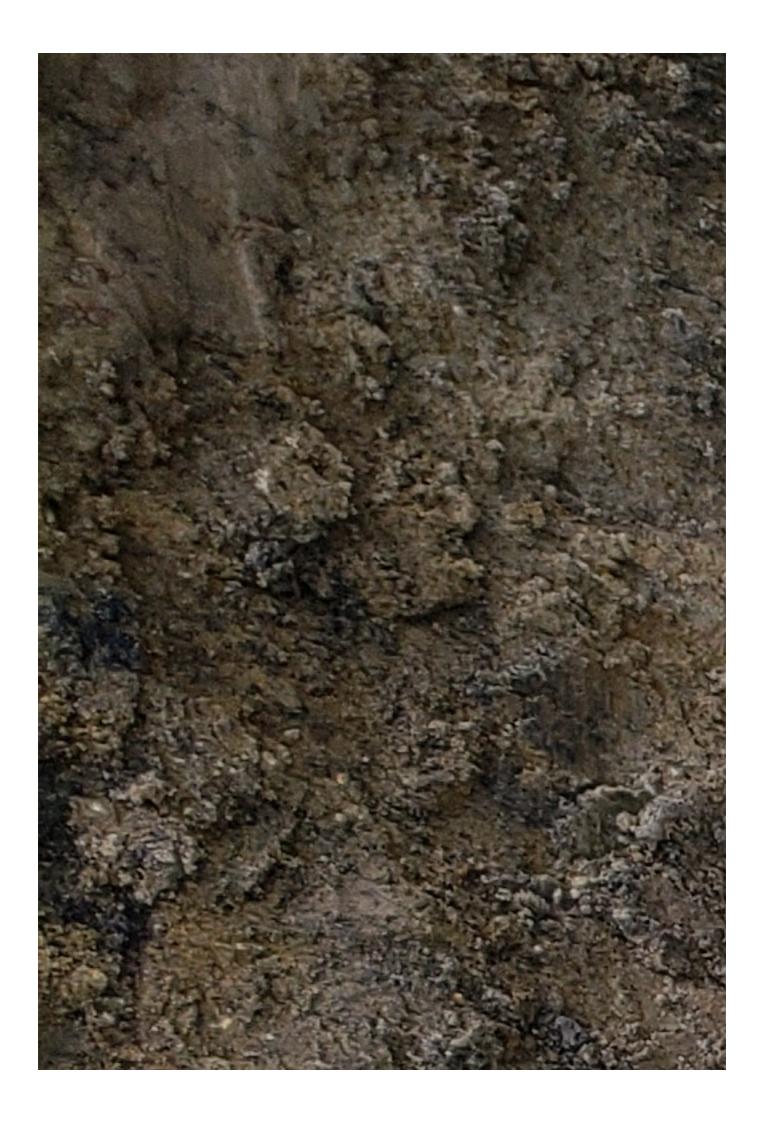


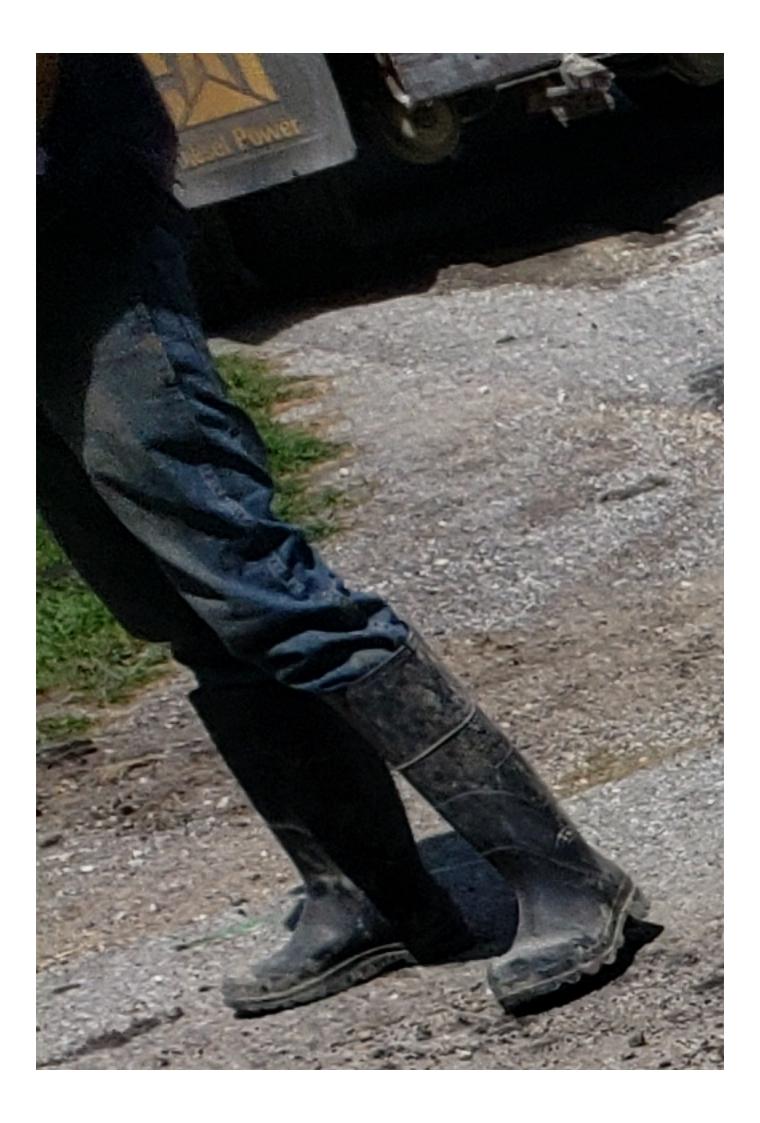












Drainage District:

9 Lat 1

Investigation Summary:

- Tenant reported tile sinkhole/blowout on Lateral 1 tile on the northwest side of railroad tracks, located NW¼ of Section 6, Township 88 North, Range 21 West,
- Visually inspected area and found blowout (assumed Lateral 1 tile) inside railroad right of way. Tile is under enough pressure to push water out of tile and it is running on surface southwest along railroad ditch.
- Cause of blowout could not be determined because the Lateral 1 tile is under too much water pressure to see anything in blowout.

Contractor Time and Materials (spent while CGA was on-site):

None – Only Investigation was performed

Additional Actions Recommended:

It appears that the blowout is partially caused by the Lateral 1 tile outlet (i.e. Main tile) is plugged under the UPRR. Until a free-flowing outlet is provided, not much can be done for further investigation or repair of the blowout.





Drainage Work Order Request For RepairHardin County

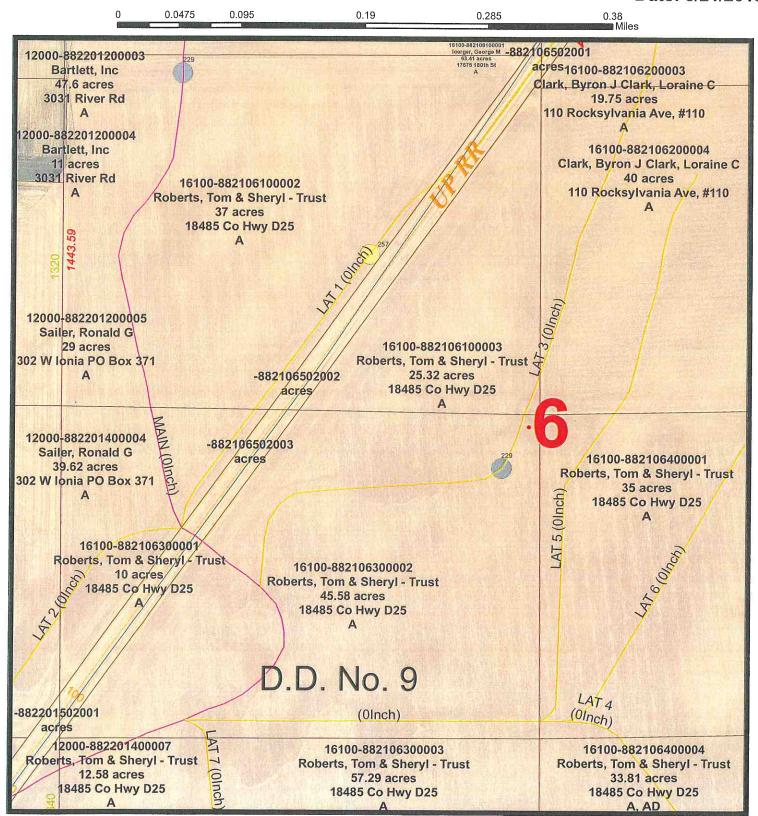
Date:	5/16/2019		
Work Order #:	WO0000257		
Drainage District:	DDs\DD 9 (51022)		
Sec-Twp-Rge:	Qtr Sec:		
Location/GIS:			
Requested By:	Scott Renaud (Tenant)		
Contact Phone:	(641) 751-4734		
Contact Email:			
Landowner (if different):			
Description: Repair labor, materia	DD 9 - Lat 1 a few telephone poles south of Toblown out in the railroad right of way (NW of the standard of th	racks)	
Repaired By:		Date:	
Please reference wor	k order # and send statement for services to:	Hardin County Auditor's Office Attn: Drainage Clerk 1215 Edgington Ave, Suite 1 Eldora, IA 50627 Phone (641) 939-8111 Fax (641) 939-8245	
or Office Use Only			
Approved:		Date:	



Hardin County Auditor's Office



Date: 5/21/2019



OBSERVATION REPORT		9/30/19
PROJECT NUMBER:	DAYS OF WEEK:	SMTWTFS
_ 6735. \(\)	SHEET NO.	OF
COUNTY, ROUTE, ROAD:		
LOCATION: W. SIDE OF UPRR		
DESCRIPTION OF WORK AND MATERIAL USED FOR	— R EACH OPERATION, INC	LUDING CONTRACTOR/SUB
NAME, ITEM NO. AND LOCATION RATING SUNLY,	75° CALM	
USED 424 RANGER AND DADUE IN ON E. 8	TOR OF UPRR, NORTH	TO END PP SOUTH OF
N. PAOP. LINK OF ROBERTS FARM. FOUND BL	OW-OUT ON LAT 1 11	N DITCH LINE OF
UPPR 500'+ SOUTH OF N. PROP. LINE WATE		
OF THE (NOT CREATING A SUCK HOLE) AND	RUNNING down dito	H LINK SOUTH AND
OUT INTO FIELD. BLOW-OUT IS BESUTS	OK NOT HAVING A	OUTLET @ RR OW MAIN XN
IT MIGHT JUST BY A WYDE JOINT		
No WORK CAN BE done HERE	UNTIL MAN X RR	CROSSING IS FIXED.
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N. páop. Unis	d/r. r	
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I Certify that the work described in this report was incorpora	ted into this contract unless of	otherwise noted.
Observer's Signature:	Date Prepared:	5/30/19
Reviewed by:	Engineer	
		Date Reviewed

DATE:

CONSTRUCTION ENGINEERING

LOOKING SOUTHERLY down WESTERLY diTCH OF UPRR. WATER BOILING UP, NO OUTLET



Drainage Work Order Request For Repair Hardin County

Approved:		Date:
For Office Use Only		
		Fax (641) 939-8245
		Phone (641) 939-8111
		1215 Edgington Ave, Suite 1 Eldora, IA 50627
		Attn: Drainage Clerk
Please reference work	order # and send statement for services to:	Hardin County Auditor's Office
Repaired By:		Date:
,		
Repair labor, materials	s and equipment:	
Description:	DD 55-3 Lat 9- Thompson said there may be prop	perty damage due to district facilities.
Landowner (if different):		
Contact Email:		
Contact Phone:		
Requested By:	Scott Thompson	
Location/GIS:	Qtr Sec:	
Drainage District: Sec-Twp-Rge:	DDs\DD 55-3 (51085)\DD 55-3 Lat 9(51244)	
Work Order #:	WO00000251	
Date:	4/29/2019	

Drainage District:

#55 Division #3, Lateral 9

Investigation Summary:

- Landowner in the NW¼ SW¼ Section 1 Township 86 North, Range 22 West reported high flows causing erosion to the banks of the Lateral 9 open ditch and affecting his septic system.
- Visual observation could not find evidence of erosion or elevated water table affecting the landowner's septic system. However, the septic system itself was not accessible/visible.
- Visual observation did find that the Landowner has excavated the Lateral 9 open ditch to form a pond/pool just downstream of the road culvert beneath G Avenue in an effort to slow the velocity of water. It appears said excavation extends into the G Avenue road Right Of Way.

Contractor Time and Materials (spent while CGA was on-site):

None recorded as only visual observation was performed.

Additional Actions Recommended:

The following are our recommendations to ensure the integrity of the district facilities:

- The excavation and maintenance of the pond/pool should be regulated by an agreement, whether the district adopts it as a district facility or not (i.e. as previously recommended for work order #134), or the Lateral 9 Open Ditch be returned to its original condition.
- The pond/pool has steep banks/slopes that are vulnerable to erosion and sloughing if allowed to stay in place. They should be flattened and seeded to prevent siltation of open ditch downstream of said pond/pool.
- The County Engineer should be notified of work in the G Avenue Right Of Way so that they can determine liability and appropriateness.



OBSERVATION REPORT DAYS OF WEEK: PROJECT NUMBER: SHEET NO. OF COUNTY, ROUTE, ROAD: LOCATION: G AVE DESCRIPTION OF WORK AND MATERIAL USED FOR EACH OPERATION, INCLUDING CONTRACTOR/SUB NAME, ITEM NO. AND LOCATION I Certify that the work described in this report was incorporated into this contract unless otherwise noted. Observer's Signature: Date Prepared: Reviewed by: Engineer

Date Reviewed

DATE:

CONSTRUCTION ENGINEERING







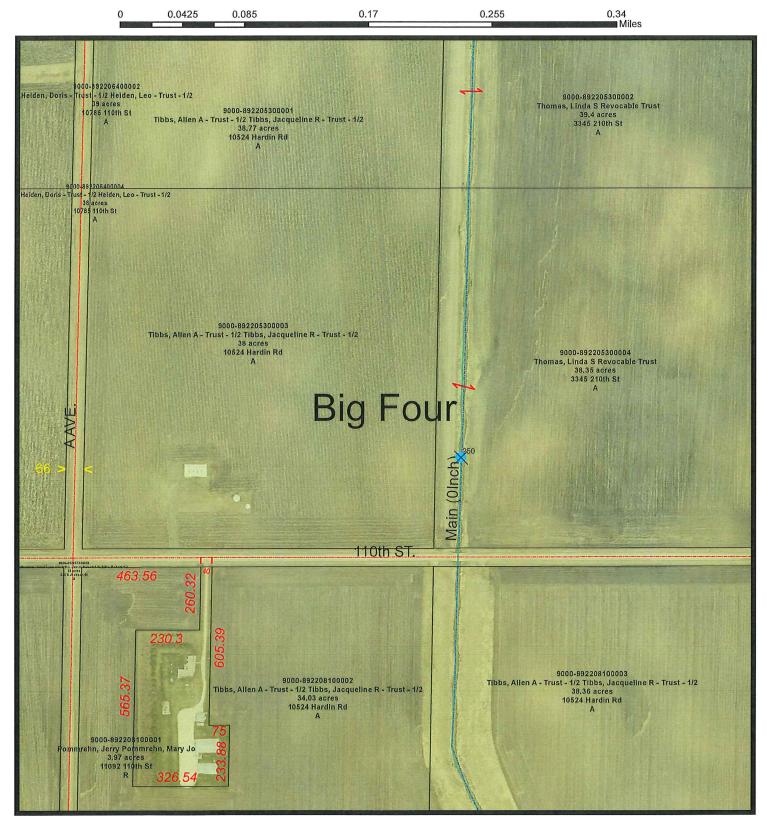
Date:	4/29/2019	
Work Order #:	WO00000250	
Drainage District:	DDs\Big 4 Main (51193)	
Sec-Twp-Rge:	05-89-22 Qtr Sec: <u>SW</u>	
Location/GIS:	89-22-05-300-004	
Requested By:	Clint Holtkamp	
Contact Phone:	(515) 689-5935	
Contact Email:	holtkampcj@outlook.com	
Landowner (if different):	Linda S Thomas Revocable Trust	
Description: Repair labor, materials	Big Four Main- Colvurt is starting to washout, Enter via field driveway. S and equipment:	fall into ditch. 300-400ft from 110th St.
Repaired By:		Date:
Please reference work	order # and send statement for services to:	Hardin County Auditor's Office Attn: Drainage Clerk 1215 Edgington Ave, Suite 1 Eldora, IA 50627 Phone (641) 939-8111 Fax (641) 939-8245
For Office Use Only		
Approved:		Date:



Hardin County Auditor's Office



Date: 4/30/2019



Drainage District:

Big 4

Investigation Summary:

- Landowner in the SE¼ SW¼ of Section 5 Township 89 North, Range 22 West reported a surface drain washing out and falling into the main open ditch approximately 400 feet north of 110th Street.
- Visual observation found a rusty 15-inch diameter ± CMP tile outlet beside a rusted out and leaking 24-inch diameter CMP surface drain. Overland flow of water and holes in surface drain have caused erosion of the soil surrounding each.
- In addition, a large washout of the main open ditch bank and adjacent property was found approximately 200-feet north of the 110th Street.
- In the north road ditch of 110th Street, CMP surface drains on each side of the main open ditch were found to be badly corroded and bent.

<u>Contractor Time and Materials (spent while CGA was on-site):</u>

None recorded as only visual observation was performed.

Additional Actions Recommended:

In order to prevent additional erosion of the main open ditch bank, and possible siltation of the main open ditch, CGA recommends the following:

- 400-feet ± north of 110th Street, the 15-inch tile outlet needs to be replaced with an equivalent sized CMP tile and rodent guard, and the surface drain needs to be replaced with a 36-inch CMP surface drain with anti-seep collar.
- The washout of the bank 200-feet ± north of 110th Street needs to have a 24-inch CMP surface drain with anti-seep collar installed, the main open ditch bank repaired/re-graded, and soil imported as needed.
- The CMP surface drains in the road ditch need to be replaced with equivalently sized CMP surface drains with anti-seep collars.



CONSTRUCTION ENGINEERING OBSERVATION REPORT	DATE:	5/3/19
	DAYS OF WEEK:	SMTWTF
PROJECT NUMBER: 5734, Z	SHEET NO.	; , OF
COUNTY, ROUTE, ROAD:		
LOCATION: NOF 1/0714		
DESCRIPTION OF WORK AND MATERIAL USED FOR	LACH OPERATION, INCL	UDING CONTRACTOR/SU
NAME, ITEM NO. AND LOCATION CLOUPY, 55°,		
ARRIVED @ DO BIG 4 AND HOTH ST., WAS		
FOUND A WASHOUT WITH NO COMP REMAINS		
TO 400' ± TO FIND A RISTRO OUT 24"CMP SI THE SURE CRAIN HAS A HOLE STANTED UNDER		OUTRE
THE SIRE STATE OF THE STATE ON THE		(5.74 (6.14 - 1.14)
0_42	The outlet RUNNING W	
		LEAKNG 24" cmp SURF.
		•
	LOOKS LIKE 2 ABANDONES	comps under water
Λ		J
400'	BAD WASHOUT NEEDS 24"C	MO SURE DRAIN
150′		
actio and		//
160TH BRIDGE		•
		-
•	*	
-	NOTE, ALL COMPS	IN ROAD PLW AND
	RUSTED OUT.	DE LOOK BAD, BENT,
	AUSTRIS OUT.	
Certify that the work described in this report was incorporated		etwise noted.
Observer's Signature: Reviewed by:	Date Prepared: 3/	3/19
	Engineer	Date Reviewed

LOOKING EAST FROM SURF. TUBE













Drainage Work Order Request For RepairHardin County

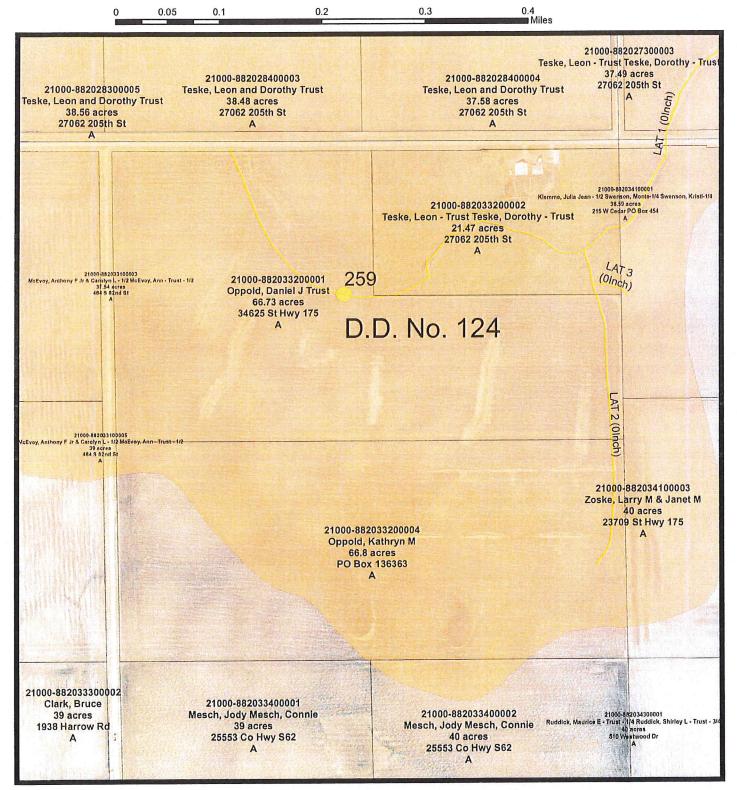
Date:	6/4/2019	
Work Order #:	WO00000259	·
Drainage District:	DDs\DD 124 (51139)	
Sec-Twp-Rge:	88-20-33 Qtr Sec:	
Location/GIS:	88-20-33-200-001	
Requested By:	Steve Kjormoe	
Contact Phone:	641-751-2609	
Contact Email:		
Landowner(if different):	Daniel Oppold	
Description:	DD 124: Blowout in SE corner, water is running Kjorme is now going to switch to beans this year Hwy D41.	
Repair labor, materia	als and equipment	
Repaired By:		Date:
Please reference wo	rk order # and send statement for services to:	Hardin County Auditor's Office Attn: Drainage Clerk 1215 Edgington Ave, Suite 1
		Eldora, IA 50627 Phone (641) 939-8111 Fax (641) 939-8245
For Office Use Only		
Approved:		Date:



Hardin County Auditor's Office



Date: 6/4/2019



Drainage District:

#124 Lat 1

Repair Summary:

- Landowner reported a blowout and overland flow of water in the NW¼ NE¼ Section 33 Township 88 North, Range 20 West.
- Visual observation found standing water in the grassed waterway, but no obvious blowout in the reported vicinity.

Contractor Time and Materials (spent while CGA was on-site):

None recorded as only visual observation was performed.

Additional Actions Recommended:

CGA recommends one of the following actions be taken to identify potential problems with the tile:

• Excavate Lateral 1 at intervals in the area of concern to detect differentials in the flow through the tile.

Or,

• Excavate Lateral 1 near the standing water in the grassed waterway and use tile locator to find location of what may be causing a restriction in flow.

Upon finding any restrictions or problems, excavate and repair district tile as needed.



CONSTRUCTION ENGINEERING	DATE:	6/11/19
OBSERVATION REPORT	DAVE OF WEEK.	
PROJECT NUMBER:	DAYS OF WEEK: SHEET NO.	S MT WT F S
COUNTY, ROUTE, ROAD:		
T O CLETTON	JACKSON TWP	
LOCATION: DY SOUTH OPPEL FARM	SEC. 33 HARDIN Co.	
DESCRIPTION OF WORK AND MATERIAL USED FOR INAME, ITEM NO. AND LOCATION		
PORKED IN FORM dave 8, Sipe 041,		
HAD PARTIALLY deuted up From 5 days		•
Has Standard WATER. No OBUIOUS BLOW-OF		/
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WITH STANDING	1	3
WATER	1- +- x- 1	- W
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		12
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		/
I Certify that the work described in this report was incorporate		nerwise noted.
Observer's Signature:	Date Prepared:	11/19
Reviewed by:	Engineer	n 0
		Date Reviewed



WHITER RUNNING MYDWAY IN GRASS AREA

LOOKING WEST @ GRASS AREA WITH WATER STAMPING





Drainage Work Order Request For RepairHardin County

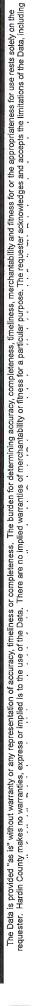
Date:	8/9/2018	
Work Order #:	W000000224	
Drainage District:	<u>Drainage Districts \DD 55-3 (51085)\DD 55-3 La</u>	t 9(5124
Sec-Twp-Rge:	01-86-20 Qtr Sec: NE1/4	······································
Location/GIS:	86-22-01-200-001	
Requested By:	Randy Dubberke	
Contact Phone:	(641) 864-3388	
Contact Email:	randeb@netins.net	
Landowner (if different):	RanShell, LLC	
Repair labor, material	Outlet seems plugged and land from NE1/4 Sec district boundaries but draining into DD) overflooditch lying east of H Avenue. s and equipment:	owing land in NE1/4 Section 1 to get to
Repaired By:		Date:
Please reference work	order # and send statement for services to:	Hardin County Auditor's Office Attn: Drainage Clerk 1215 Edgington Ave, Suite 1 Eldora, IA 50627 Phone (641) 939-8111 Fax (641) 939-8245
For Office Use Only		
Approved:		Date:



Date: 8/9/2018









Drainage District:

#55 Div 3, Lat 9

Investigation Summary:

- Per the recommended actions of the previous report, an investigation was conducted into the cause of blockage within the Lateral 9 tile. Began by running cable upstream from outlet, and quickly encountered restrictions within the tile. Upon excavation at said restriction, it was revealed that the 12-inch VCP Lateral 9 tile has been inundated with tree roots between the North side of 280th Street and the rusty 12" CMP outlet.
- Removed the smaller woody vegetation in the immediate vicinity of the Lateral 9 tile.
- Excavation and probing of assumed Lateral 9 tile revealed that restrictions also exist below the road itself.
- Landowners conducted own excavation, which allowed for additional tile location. However, visual observation, tile probing, and tile locating revealed that the reported blowout exists on private tile. This private tile was found to be in close proximity to the Lateral 9 tile, eventually emptying into said Lateral 9 tile, which then goes under 280th Street where it is restricted by obstructions (assumed to be roots) below 280th Street and the trees/woody vegetation as previously identified.

Contractor Time and Materials (spent while CGA was on-site):

See attached Tabulated Contractor Time and Materials Sheet.

Additional Actions Recommended:

Based on the above, it appears that there are two tiles on the South side of 280th Street, but only District tile under 280th Street (which is plugged). Therefore, we recommend one of the two following actions:

- Remove trees and brush within 50' of the Lateral 9 tile and jet clean the tile with root cutting head for a
 distance of 150 to 200 feet upstream from the Lateral 9 tile outlet. Approximate contractor cost of this
 action would be \$300 \$600 per hour.
 OR;
- 2. Remove trees and brush within 50' of the Lateral 9 tile and replace the Lateral 9 tile with a CMP outlet with rodent guard and dual wall polypropylene at an approximate contractor cost of \$50 per foot for a distance of 150 to 200 feet.

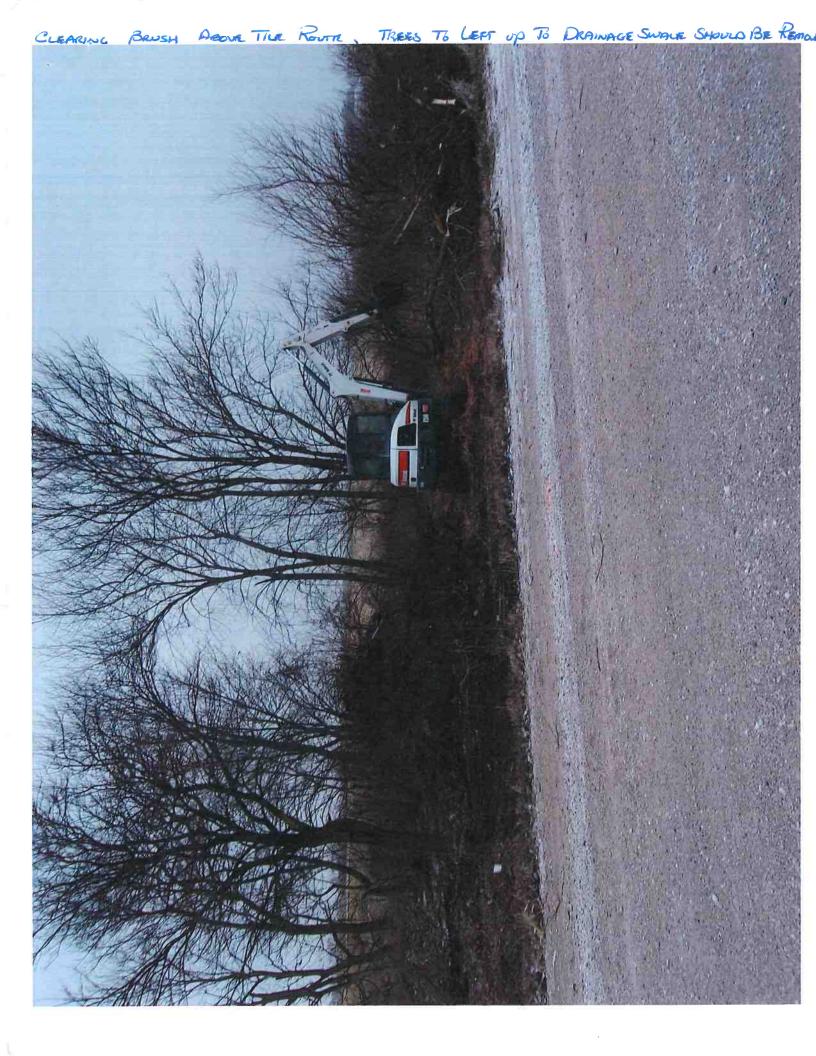


Tabulated Contractor Time and Materials

Date	Totals	12/28/2018
Workman (hrs)	6	6
Excavator (hrs)	2	2



CONSTRUCTION ENGINEERING	DATE:	12/28/18
OBSERVATION REPORT	DAYS OF WEEK:	CMTWTEC
PROJECT NUMBER:		9 MIT MIT (2)
COUNTY, ROUTE, ROAD:	SHEET NO.	OF
LOCATION: 280pt ST.		
BOOM ST.		
DESCRIPTION OF WORK AND MATERIAL USED FOR ENAME, ITEM NO. AND LOCATION	EACH OPERATION, INCL	
9:30 Williams CREWON SIR, TAKEN		
3 MEN MAN MINI EXCAVATOR BUD CAT. THE		
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Comp 12" Forms Loss + Loss OF Rooms,		
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Careo ENGINER, LIK SAID HE U	DUED TRY TO GA	ET A TETTER TO
CLEAN OUT THE. THE IS 10" OR 12" CO		
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on Top of The Win Propaging Hore To		
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1 SECTION OF 10" CONC. THE IS SETTING ON TOPO	DE GROUND C 8. P/W	280TH ST. @ BLOW- OUT.
3 ment, 1 Exercisors, 2 HRS.		
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		C3356
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37 3 12 201	de la	
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F.O.	11	
290TH ST. / Was /	7-7-7-7-1	BER OPTIC IN ROAD BED =
4	1	
*	^	
	BLOW-OVT, 10"CON	c. ? WATER BLOWING OUT
)	
I Certify that the work described in this report was incorporate	ed into this contract unless o	otherwise noted.
Observer's Signature:	Date Prepared:	2/28/18
Reviewed by:	Engineer	





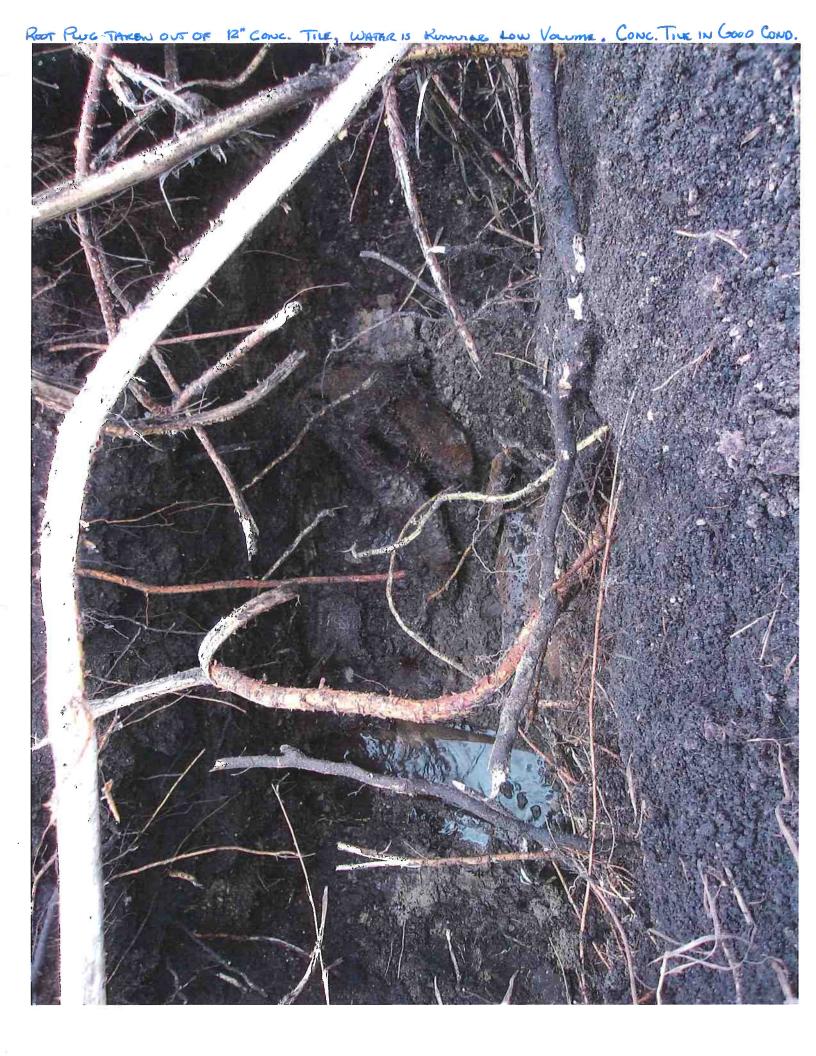


12" cmp As MEASURED BY WILLIAMS CREW. VERY RUSTED, NEEDS REPLACED

30' I FROM COMP OUTLET IN CREEK. GROUND IS SATURIATED WITH ROOTS



TILE @ END OF 20' CMP - SIMPLE VOLUME OF WATER UNDER PRESSURE



OLGGING @ N. SIDE ZEOTH ST., STILL LOTS OF ROOTS HEADING SOUTH AND COUNTY TO THE

CONSTRUCTION ENGINEERINGOBSERVATION REPORT	DATE:	5/3/19
,	DAYS OF WEEK:	SMTWTFS
PROJECT NUMBER:	- SHEET NO.	, OF
COUNTY, ROUTE, ROAD:		
LOCATION: 280m St. OVERT LAT9		
DESCRIPTION OF WORK AND MATERIAL USED FO	 OR EACH OPERATION, INCL	UDING CONTRACTOR/SUI
NAME, ITEM NO. AND LOCATION CLOVOY 55°, S	PRINKLES, CALM., MUDO	y Conditions
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OUT AND DUG E-W ACROSS THE PROPRIETY		
ON OLD COUR FUL OF POUTS, THIS LINES UP		
ROAD DITCH AND HIT CON LAT 9 THE, 4'C		
DISTRICT TILE BUT MUST BIE HOOKED INTO LA		
DAVLY I COMO @ OPEN DITCH ACTION, STATE		V
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	(Dispection)	•
	House	·
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		28001
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		-
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in the second se		
TORNICH STATEMENT	N.	
48 × 8/50° - X		
· Tross Sept. 18		
I Certify that the work described in this report was incorpora	ated into this contract unless oth	haton agrictan
Observer's Signature:	Date Prepared:	(2 (12 · · · · · · · · · · · · · · · · · · ·
Reviewed by:	Engineer	/.5./17
V		Date Reviewed

LOOKING down (UPSTREAM) ON PRIVATE TILE ROUTE

LOOKING UPSTRICEAM ON DISTRICT THE, NOTE LATH IN DITCH OVER PROBED THE



