December 15, 2026

H.M.A. Resurfacing with Milling

PROJECT NUMBER: FM-C007(184)--55-07

BLACK HAWK COUNTY

TRAFFIC CONTROL:
Independence Ave., Holgate Road, and Osage Road shall be CLOSED to thru traffic during construction with the use of flaggers.
Refer to traffic control plan on Sheet J.01.

105_04
4/16/24

STANDARDS

The following Standards apply to construction work on this project.

As outlined in Standards Tabulation 105_04 on Sheet C.07

101-4
04-30-02

DESIGN DATA RURAL

2021 AADT	660	V.P.D.
2041 AADT	805	V.P.D.
2041 DHV		V.P.D.
TRUCKS	10	%
Total Design ESALs	136,805	

IOWA DOT
HIGHWAY DIVISION

PLANS OF PROPOSED IMPROVEMENT ON THE

FARM TO MARKET SYSTEM

FM-C007(184)--55-07

BLACK HAWK COUNTY

Independence Ave., Holgate Rd., Osage Rd.

H.M.A. Resurfacing with Milling

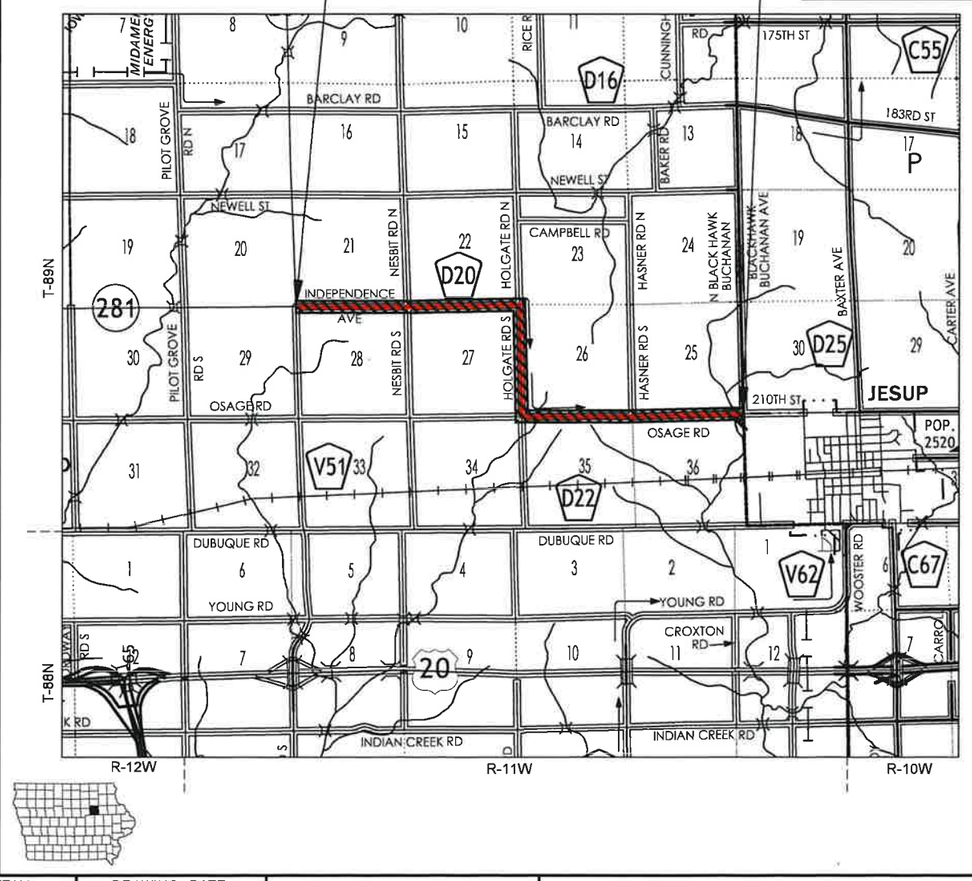
On D20, from Hwy. 281 East 5 Miles to Buchanan County Line.

Independence Ave., Holgate Road, Osage Road

Beginning of Project Sta. = 399+30
End of Project Sta. = 663+17

Scales: As Noted

Refer to the Proposal Form for list of applicable specifications.



Location Map
"Not to Scale"

IOWA ONE CALL
1-800-292-8989
www.iowaonecall.com

Approved by: Black Hawk County Board of Supervisors

Total Sheets: 28

105-3
10-18-05

INDEX OF SHEETS

Number	Description
A.01	Title Sheet
B.01	Typical Cross Section Detail
B.02	Granular Shoulder Detail
B.03	Residential Driveway Fillet Details
B.04	Paved Entrance Tabulation and Standard Details
B.05	Side Road Details - Nesbit Road
B.06	Side Road Details - Independence Ave. & Holgate Road
B.07	Side Road Details - Holgate Road & Osage Road
B.08	Side Road Details - Hasner Road
B.09	Side Road Details - Black Hawk Buchanan Road
C.01	Est. Project Quantities & Est. Ref. Notes
C.02	Est. Ref. Notes
C.03 - C.06	Tabulations
C.07	General Notes, Standard Road Plans, & Utility Tab.
D.01 - D.10	Plan Sheets
J.01	Traffic Control

105-1
09-27-94

MILEAGE SUMMARY

Division	Location	Lin. Ft.	Miles
	Independence Ave. 399+30 to 506+08	10,678	2.02
	Holgate Road 506+08 to 558+37	5,229	0.99
	Osage Road 558+37 to 663+17	10,480	1.98
	Project Length Total:	26,387	5.00

111_25
4/2/24

INDEX OF TABULATIONS

Line No.	Tabulation	Tabulation Title	Sheet No.
1	100_01A	Estimated Project Quantities	C.01
2	100_01D	Project Description	C.07
3	100_04A	Estimate Reference Information	C.01-C.02
4	101-4	Design Data Rural	A.01
5	102-5	Existing Pavement	C.04
6	105-1	Mileage Summary	A.01
7	105-3	Index of Sheets	A.01
8	105_04	Standard Road Plans	C.07
9	108-22	Pavement Marking Line Types	C.06
10	108_23A	Traffic Control Plan	J.01
11	111_25	Index of Tabulations	A.01
12	112_07	Rumble Strip Panels	C.05
13	Bhco-HMA-ST	HMA Placement ST Mix (Road Mainline)	C.04
14	Bhco-PaveDrive	Paved Points of Access	B.04
15	Bhco-PaveScarify	Pavement Scarification	C.03
16	Bhco-Shoulders	Shouldering	C.05
17	Bhco-SideRoad	Side Road Quantities	C.04
18	Bhco-Smoothness	Pavement Smoothness	C.05
19	Bhco-Utilities	Tabulation of Utilities	C.07

LICENSED PROFESSIONAL ENGINEER
CATHERINE FREET NICHOLAS
18815
IOWA

I hereby certify that this engineering document was prepared by me or under my direct personal supervision and that I am a duly licensed Professional Engineer under the laws of the State of Iowa.

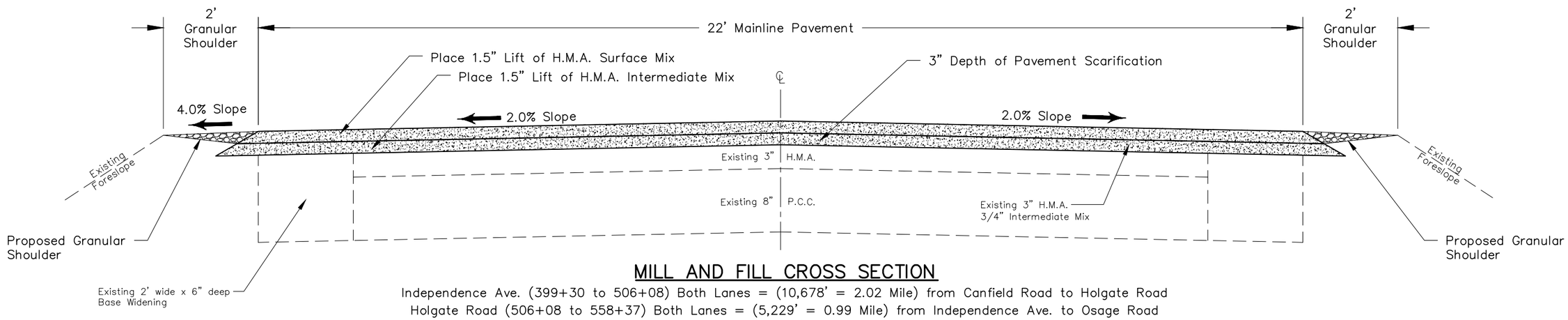
Catherine Nicholas 8-3-26
Signature Date

CATHERINE FREET NICHOLAS, P.E. #18815
Printed or Typed Name
My license renewal date is December 31, 2027

Pages or sheets covered by this seal: **All sheets per index above.**

DESIGN TEAM: CN, AK, CW	DRAWING DATE: 2/26/2026	BLACK HAWK COUNTY	H.M.A. Resurfacing with Milling	PROJECT NUMBER: FM-C007(184)--55-07	SHEET: A.01

7/9/2026 7:17:45 AM; G:\ADSK Civil\Civil3D Projects\PAV-Independence Rd-Holgate Rd-Osage Rd-5018\5018_SHT_A.dwg



MILL AND FILL CROSS SECTION

Independence Ave. (399+30 to 506+08) Both Lanes = (10,678' = 2.02 Mile) from Canfield Road to Holgate Road
Holgate Road (506+08 to 558+37) Both Lanes = (5,229' = 0.99 Mile) from Independence Ave. to Osage Road
Osage Road (558+37 to 663+17) Both Lanes = (10,480' = 1.98 Mile) from Holgate Road to just east of Black Hawk Buchanan Road

EXISTING 22' x 6" H.M.A. MAINLINE PAVEMENT
(To be Scarified 3" and Resurfaced with a 1.5" lift of H.M.A. ST Intermediate Mix and a 1.5" lift of H.M.A. ST Surface Mix)

Mainline Location Design Quantities (Per Station Per Side)

Pavement Scarification SY	Tack Coat GAL ①	Hot Mix Asphalt – Mainline				Remarks
		Intermediate		Surface		
		Area (Sq. Ft.)	Tons	Area (Sq. Ft.)	Tons	
Refer to Sheet C.03	See Note	1.4171	10.27	1.3890	10.07	

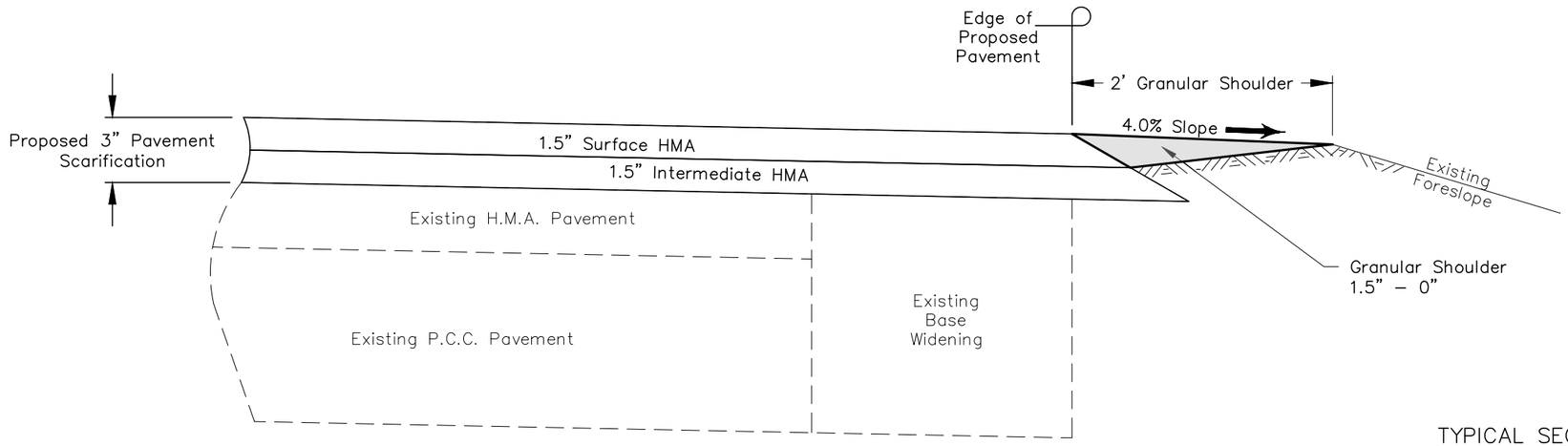
DESIGN RATES	
ITEM	RATE
HMA Courses	145 lbs./cu. ft.
Asphalt Binder	6% by weight
Tack Coat	Spec. 2303

Notes:
① Tack Coat estimated for 2 applications. (Shall be included with appropriate H.M.A. bid item). This coat shall be applied per Iowa DOT Standard Specification 2303.
② A 30° beveled safety edge will be incorporated into the H.M.A. paving. Outer edges of both lifts and both lanes will receive the safety edge. Due to the 1.5" lift thickness, the centerline edge will receive a vertical edge. All cost associated with the safety edge shall be included with the appropriate H.M.A. bid item. Refer to General Specification 2305 and Standard Road Plan PV–3 for more details.

TYPICAL CROSS SECTION DETAILS

DESIGN TEAM: CN, AK, CW	Drawing Date: 2/6/2026	BLACK HAWK COUNTY	H.M.A. Resurfacing with Milling	PROJECT NUMBER: FM–C007(184)––55–07	SHEET: B.01

BH GranShldr B
02-12-10



TYPICAL SECTION
TYPE 'B' GRANULAR SHOULDER

DESIGN RATES	
ITEM	RATE
Granular Shoulder	140 lbs./cu. ft.

Mainline Location Design Quantities (Per Station Per Side)

Location			Length		Side	Area Sq. Ft.	Tons
Road Identification	Station	to Station	Foot	Mile			
Independence Ave.	399+30	506+08	10,678	2.02	Both	0.1163	0.82
Holgate Road	506+08	558+37	5,229	0.99	Both	0.1163	0.82
Osage Road	558+37	663+17	10,480	1.98	Both	0.1163	0.82
		Total:	26,387	4.99			

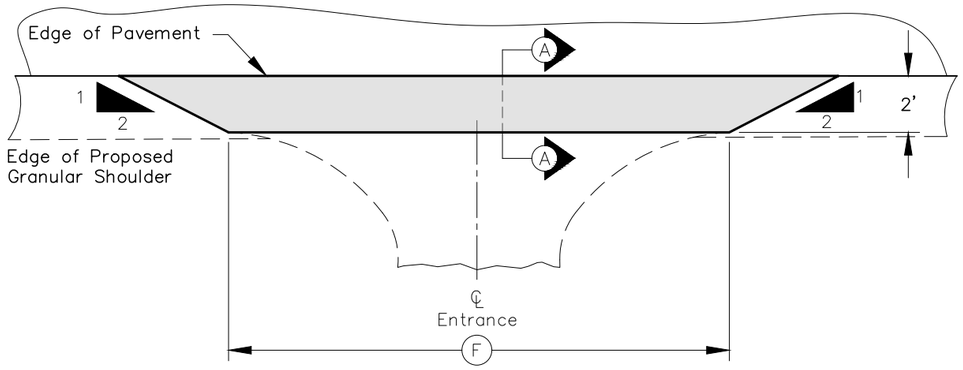
Shoulder area figured with safety slope and outer sloped shoulder edge.

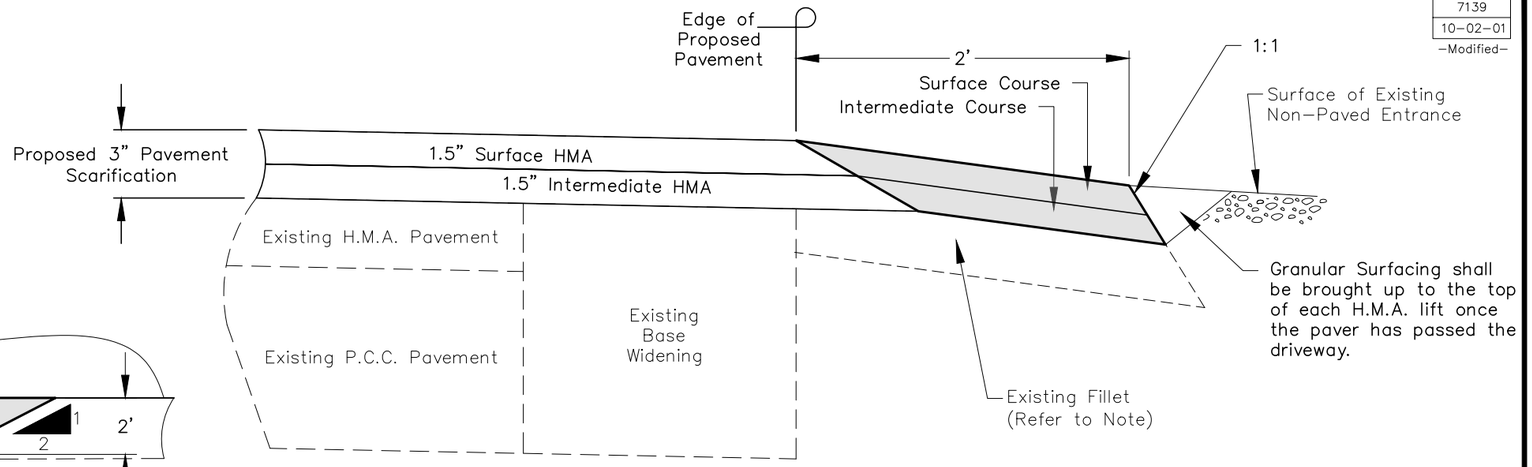
GRANULAR SHOULDER DETAILS

DESIGN TEAM: CN, AK, CW	Drawing Date: 2/26/2026	BLACK HAWK COUNTY	H.M.A. Resurfacing with Milling	PROJECT NUMBER: FM-C007(184)--55-07	SHEET: B.02

NORMAL FILLET SIZE	
Type	F
Res. Entrance	40'
Farm Entrance	60'
Commercial Ent.	80'

PLAN





SECTION A–A

7139
10-02-01
–Modified–

Normal Fillet Size Note:

- Fillet sizes as listed in the table are recommended and shall be used for design and estimating purposes.
- Black Hawk County shall establish the size of each individual fillet at the time of construction to accommodate conditions on the site.
- Special shaping of the existing surface prior to placement of the residential entrance fillet may be required. Any required work shall be included with either H.M.A. or Driveway Surfacing bid items.

Mailbox Turnout Note:

No mailbox fillets will be placed on this project. All existing mailbox fillets will be scarified and will then have granular shoulders placed over them.

All Entrance Fillet Note:

- Driveways may require granular surfacing once the final H.M.A. surfacing is placed – this material shall be placed during the granular shouldering process.

Residential Fillet Note:

- Only residential driveways will receive an asphalt fillet. All existing field entrance driveways will be scarified and then have granular shoulders placed over them.
- If an existing residential driveway fillet is present; the entire fillet shall be broomed, tacked and resurfaced with mainline placement. If no existing residential driveway fillet existing; the existing granular material shall be removed ahead of the mainline placement to allow the full proposed mainline paving thickness to be placed for the fillet.
- Driveways that are to receive asphalt fillets will be field marked at the time of construction by Black Hawk County.
- H.M.A. material for the fillets shall be placed with the roadway resurfacing H.M.A. as the paver passes the fillet.
- Any and all operations to accomplish the above mentioned work shall be included with the H.M.A. bid items for the project.

RESIDENTIAL DRIVEWAY FILLET DETAILS

DESIGN TEAM: CN, AK, CW	Drawing Date: 2/6/2026	BLACK HAWK COUNTY	H.M.A. Resurfacing with Milling	PROJECT NUMBER: FM-C007(184)--55-07	SHEET: B.03

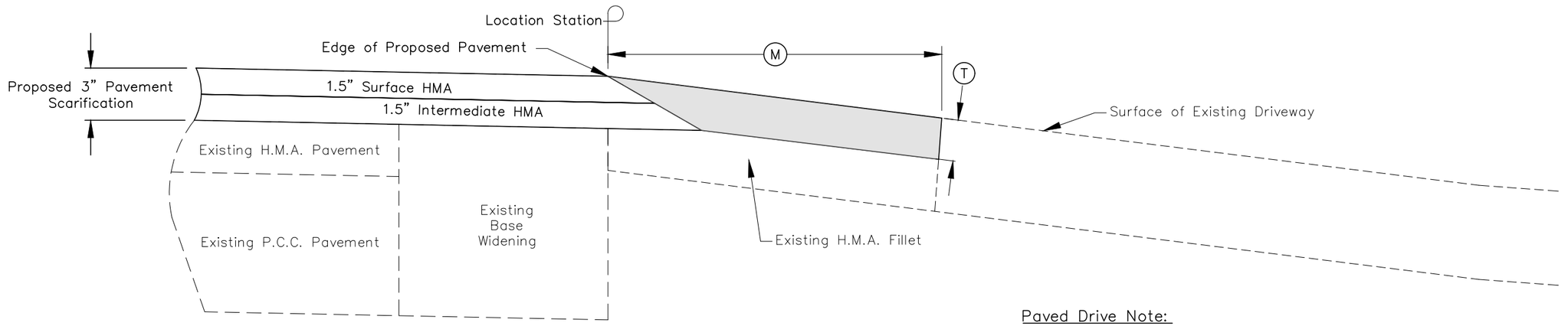
Bhco-PaveDrive
4/1/22

PAVED POINTS OF ACCESS

Line No.	Station	Side	Driveway Type	Current Driveway Surfacing	Tie-In Offset from Edge of Roadway (L) (LF)	Pavement Scarification Length (M) (LF)	Proposed Driveway Resurface Area (SF)	Estimated Removal Area (SY)	Estimated Pavement Scarification (SY)	* Estimated H.M.A. Material (TON)	Approximate Proposed Slope %	Remarks
	644+01	Rt.	Private	HMA	4.0	4.0	167.87		26.9	3.04	Existing	Residence #12616 Osage Road
	647+51	Rt.	Private	PCC	6.5	6.5	198.37		33.3	3.60	Existing	Residence #12728 Osage Road
						Project Total:	366.24		60.2	6.64		

The purpose of this table is to show the current paved driveways that will be encountered during the project.
These drives shall be protected during the construction process and no construction vehicles or equipment shall be driven or parked in any driveway that has a paved surface.
The paved driveway to roadway connection shall be field verified to ensure a proper and gradual taper. The tie in location of the new surfacing will be marked by the Engineer at the time of construction.
All paved driveways will require a 3" notch header be placed to allow the new paving material to tie into the existing paved driveway surface at depth instead of tapering out to 0".
* Average HMA thickness of 3" was used to calculation estimated tonnage. Half of this will be intermediate HMA and the other half will be surface HMA and will be placed with the mainline resurfacing operations.
All work involved in placing the new H.M.A. drive material will be paid for using the appropriate bid item for the lift being placed.

BH PavDr
06-10-15



The paved driveways shall be scarified out from the field marked header to ensure the full proposed H.M.A. surface thickness over the entire driveway.

Distance from the header varies per paved driveway.

Refer to "Paved Points of Access" Tabulation above for more details.

Paved Drive Note:

- Border limits of paved driveways will be field marked at the time of construction by Black Hawk County.
- H.M.A. material for the paved driveways shall be placed with the mainline paving operation as the paver passes the fillet unless the Contractor has discussed other options with Black Hawk County.
- Special shaping of the existing surface prior to placement of the paved driveway may be required.
- Any and all operations to accomplish the above mentioned work shall be included with the H.M.A. bid items for the project.

–Detail not to Scale–

(T) Milling Depth (3" Notch)
(M) Milling Length (Refer to "Paved Points of Access" Tabulation above)

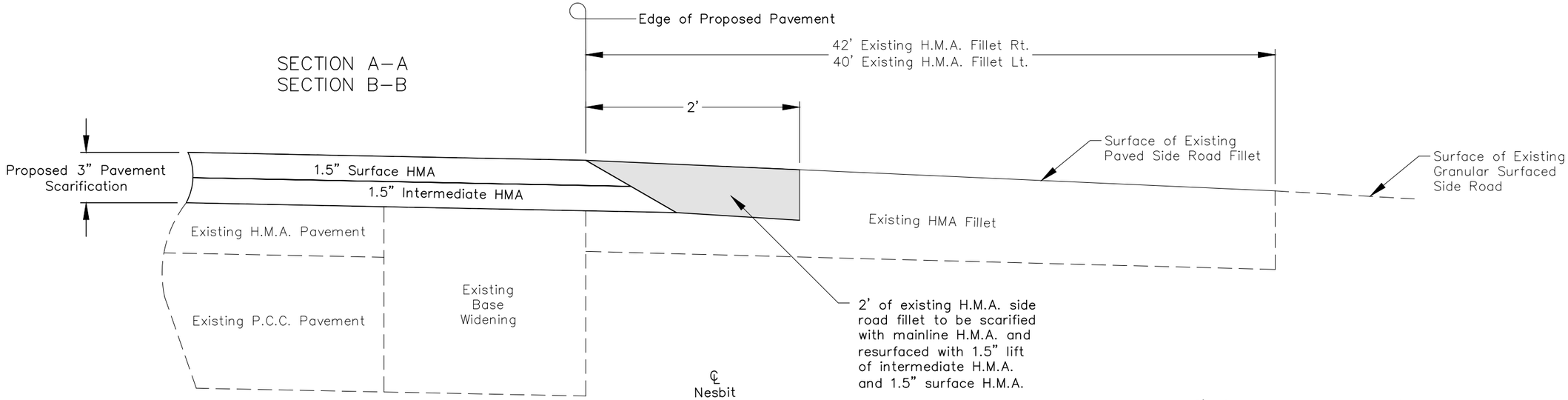
PAVED ENTRANCE TABULATION AND STANDARD DETAILS

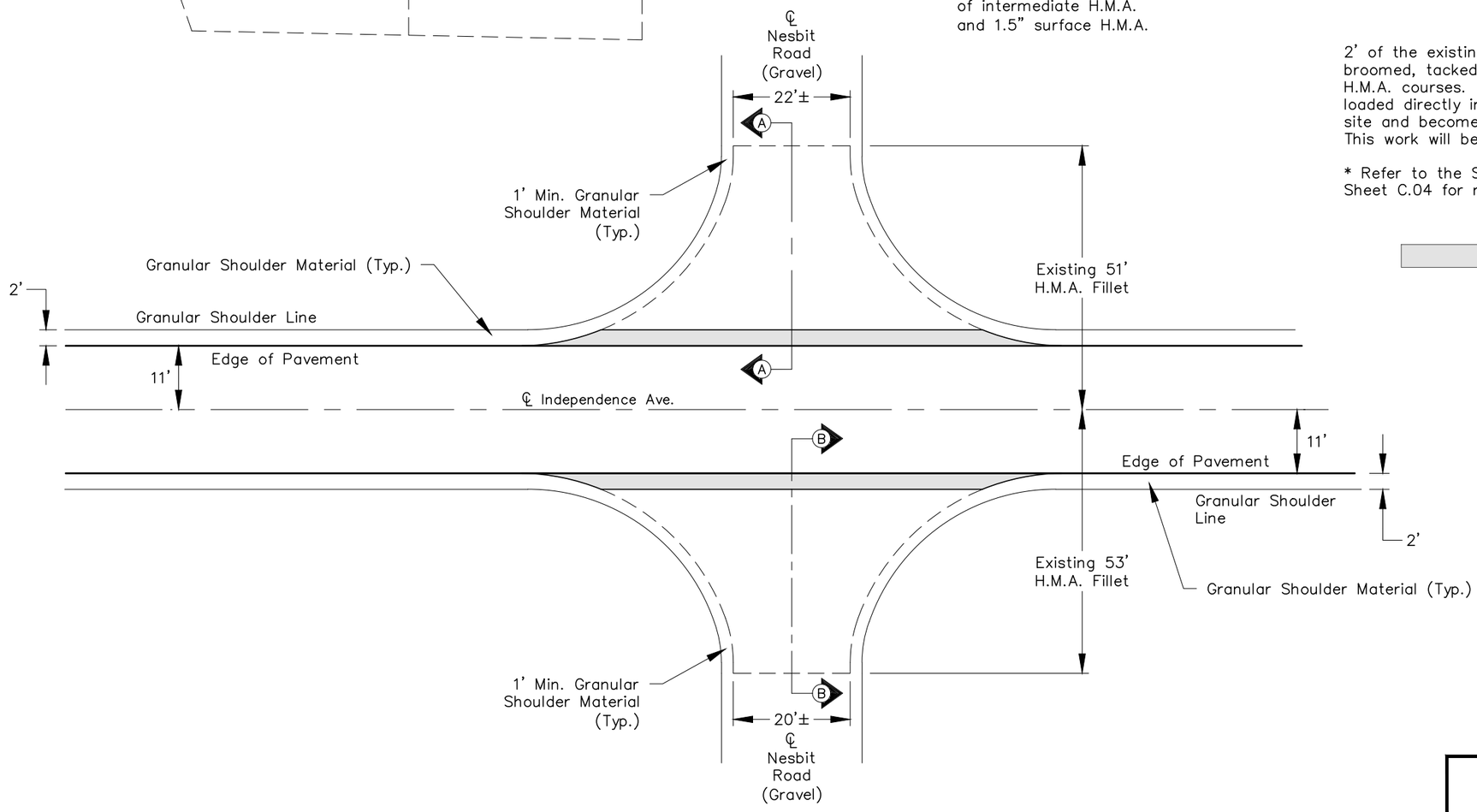
DESIGN TEAM: CN, AK, CW	Drawing Date: 2/6/2026	BLACK HAWK COUNTY	H.M.A. Resurfacing with Milling	PROJECT NUMBER: FM–C007(184)––55–07	SHEET: B.04

7/9/2026 7:18:45 AM; G:\ADSK Civil\Civil3D Projects\PAV–Independence Rd–Holgate Rd–Osage Rd–5018\5018_SHT_Bs.dwg

PAVED APPROACHES – NESBIT ROAD (Station 452+26.31)

SECTION A–A
SECTION B–B





2' of the existing side road fillet shall be milled, broomed, tacked and resurfaced with the proposed H.M.A. courses. The scarified material shall be loaded directly into trucks and removed from the site and become the property of the contractor. This work will be paid as Pavement Scarification.

* Refer to the Side Road Quantities Tabulation on Sheet C.04 for more information.

Denotes Paved Approach Areas

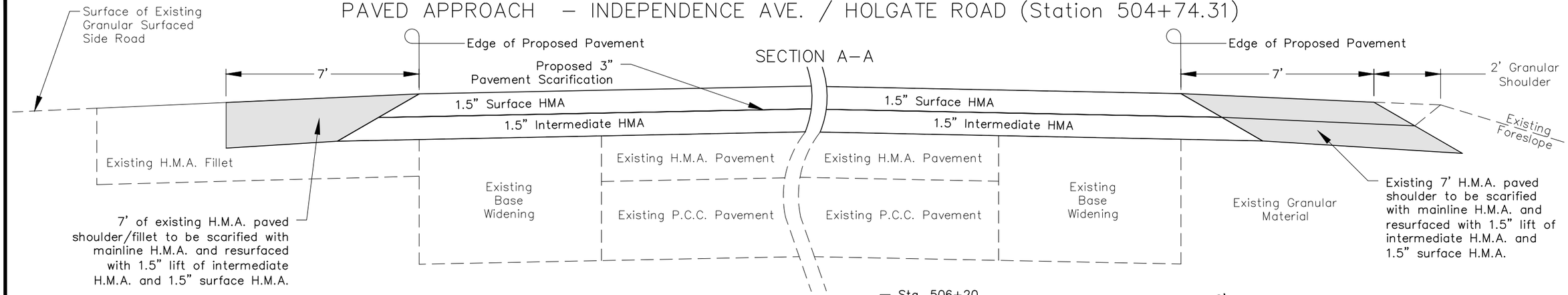
N

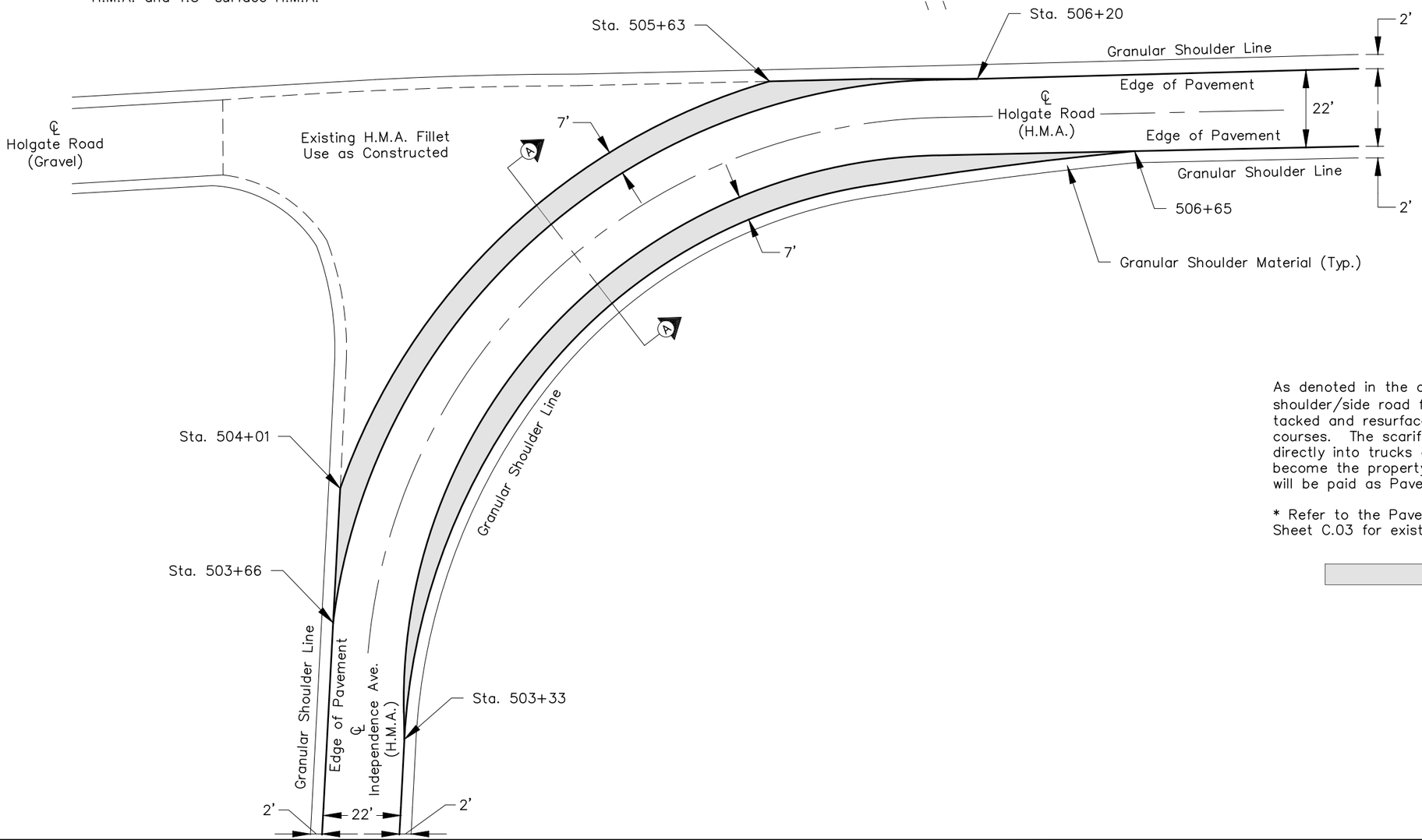
–Detail not to Scale–

SIDE ROAD DETAILS
NESBIT ROAD

DESIGN TEAM: CN, AK, CW	Drawing Date: 2/6/2026	BLACK HAWK COUNTY	H.M.A. Resurfacing with Milling	PROJECT NUMBER: FM–C007(184)––55–07	SHEET: B.05

PAVED APPROACH – INDEPENDENCE AVE. / HOLGATE ROAD (Station 504+74.31)





As denoted in the detail, the existing paved shoulder/side road fillet shall be milled, broomed, tacked and resurfaced with the proposed H.M.A. courses. The scarified material shall be loaded directly into trucks and removed from the site and become the property of the contractor. This work will be paid as Pavement Scarification.

* Refer to the Pavement Scarification Tabulation on Sheet C.03 for existing area.

Denotes Paved Approach Areas

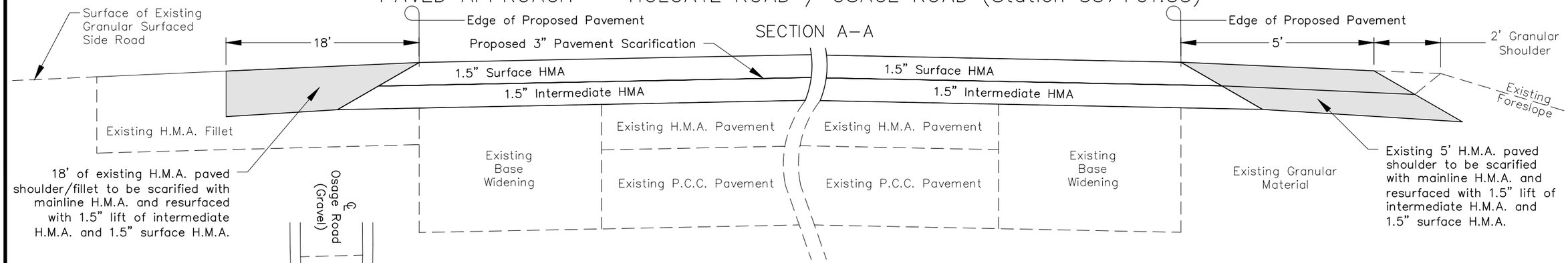
N

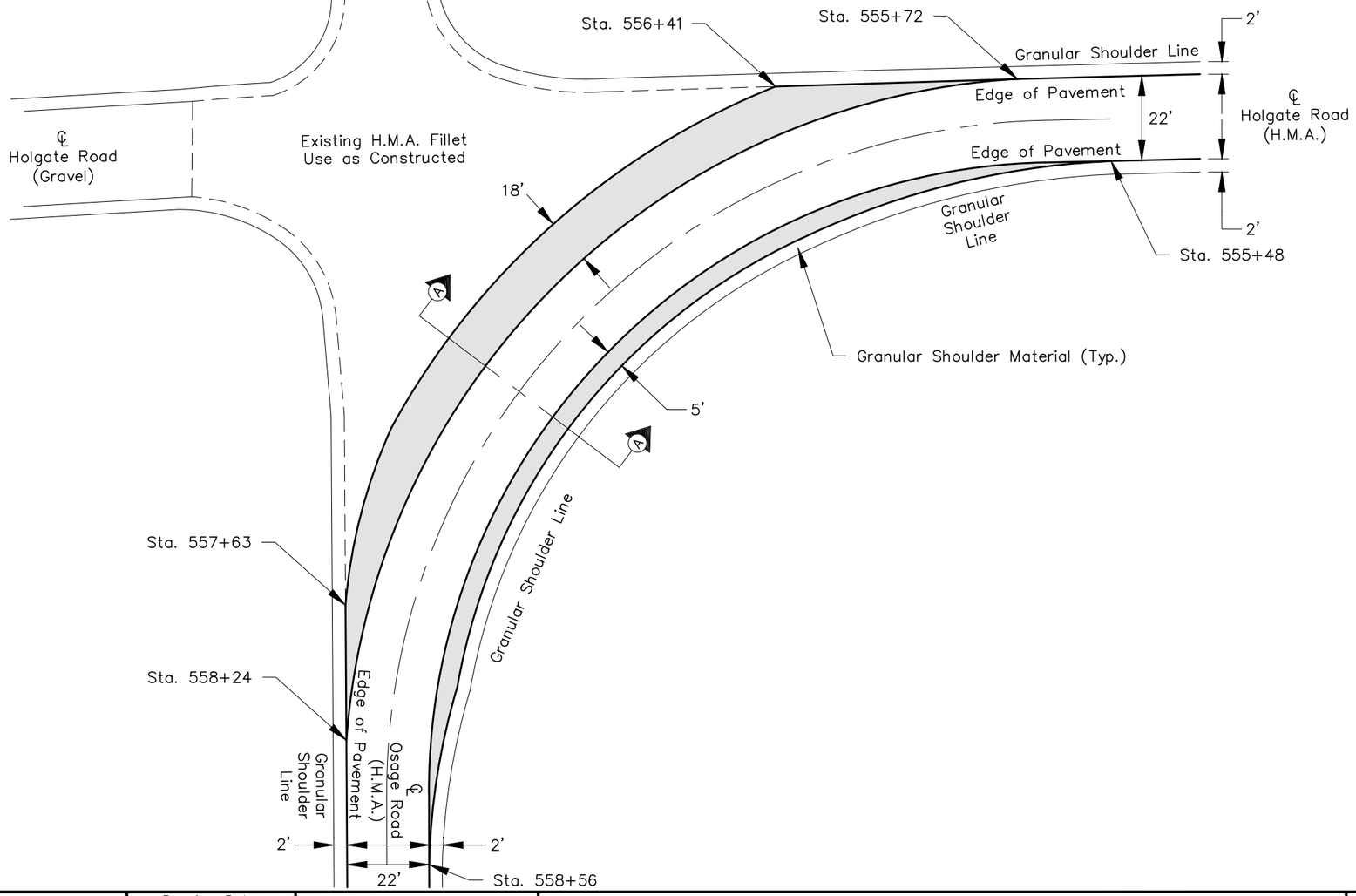
–Detail not to Scale–

SIDE ROAD DETAILS
INDEPENDENCE AVE. / HOLGATE ROAD

DESIGN TEAM: CN, AK, CW	Drawing Date: 2/6/2026	BLACK HAWK COUNTY	H.M.A. Resurfacing with Milling	PROJECT NUMBER: FM–C007(184)––55–07	SHEET: B.06

PAVED APPROACH – HOLGATE ROAD / OSAGE ROAD (Station 557+01.35)





As denoted in the detail, the existing paved shoulder/side road fillet shall be milled, broomed, tacked and resurfaced with the proposed H.M.A. courses. The scarified material shall be loaded directly into trucks and removed from the site and become the property of the contractor. This work will be paid as Pavement Scarification.

* Refer to the Pavement Scarification Tabulation on Sheet C.03 for existing area.

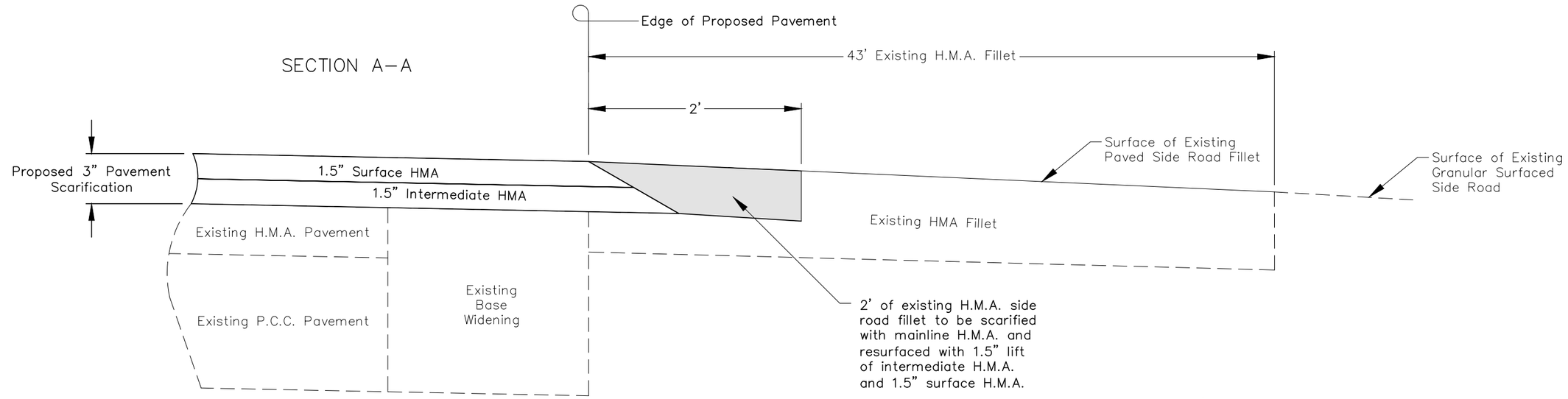
Denotes Paved Approach Areas

–Detail not to Scale–

SIDE ROAD DETAILS
HOLGATE ROAD / OSAGE ROAD

DESIGN TEAM: CN, AK, CW	Drawing Date: 2/6/2026	BLACK HAWK COUNTY	H.M.A. Resurfacing with Milling	PROJECT NUMBER: FM–C007(184)––55–07	SHEET: B.07

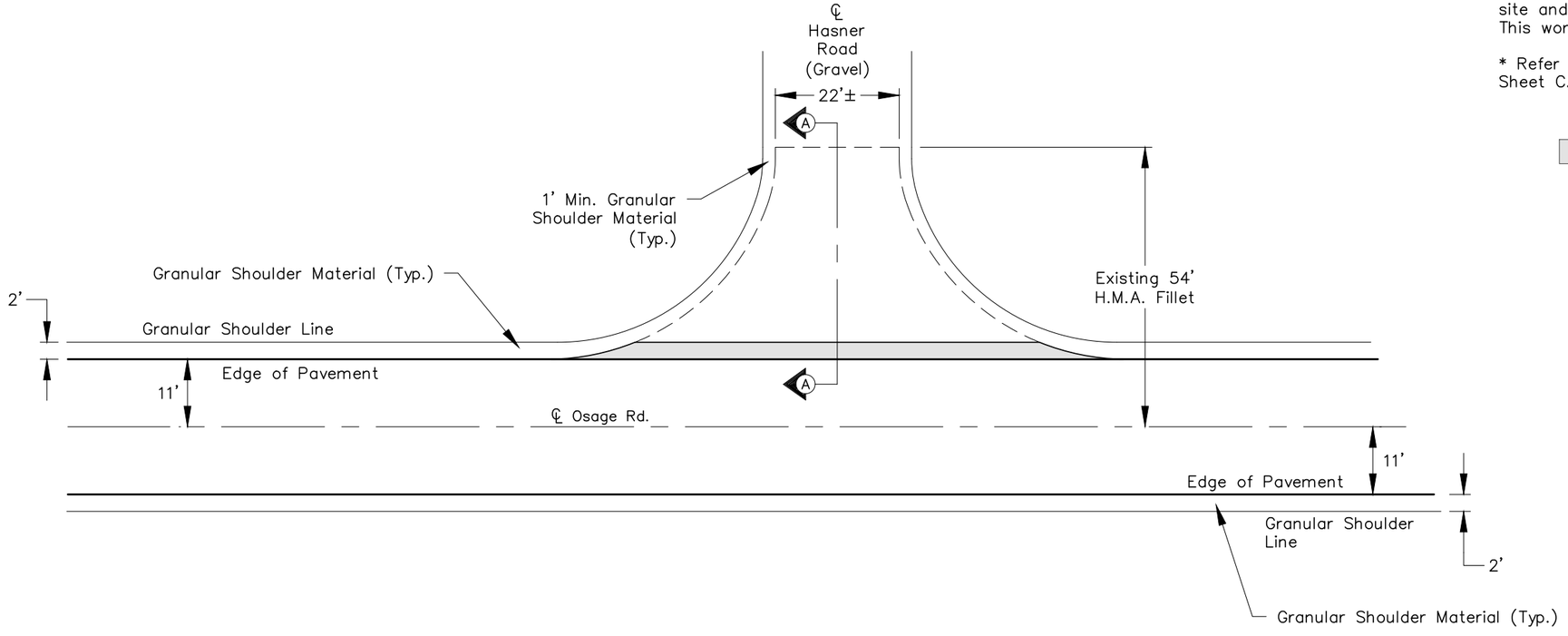
PAVED APPROACH – HASNER ROAD (Station 609+69.31)



2' of the existing side road fillet shall be milled, broomed, tacked and resurfaced with the proposed H.M.A. courses. The scarified material shall be loaded directly into trucks and removed from the site and become the property of the contractor. This work will be paid as Pavement Scarification.

* Refer to the Side Road Quantities Tabulation on Sheet C.04 for more information.

Denotes Paved Approach Areas



N

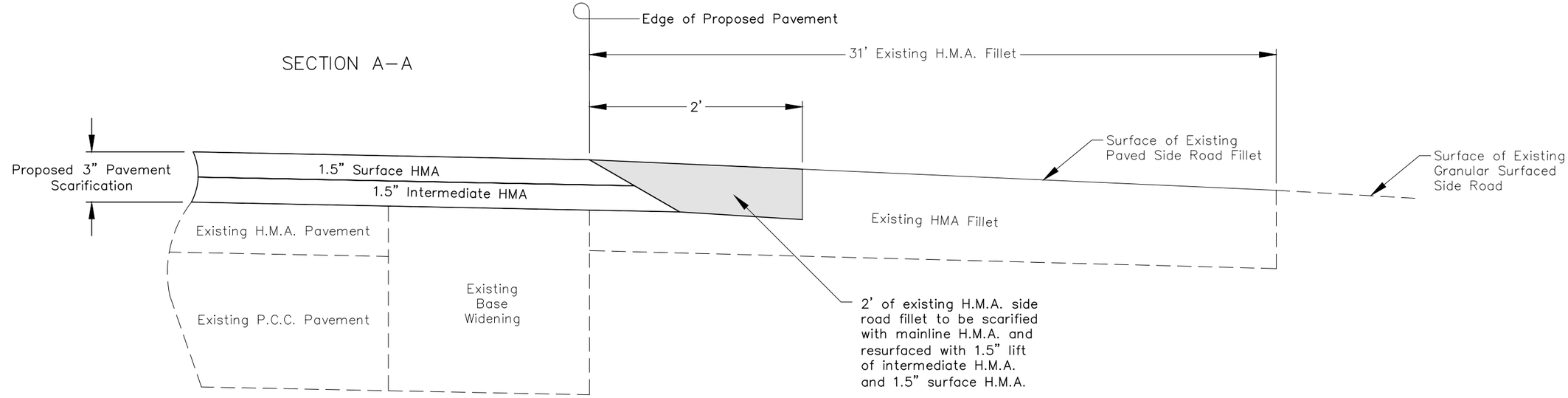
–Detail not to Scale–

SIDE ROAD DETAILS
HASNER ROAD

DESIGN TEAM: CN, AK, CW	Drawing Date: 2/6/2026	BLACK HAWK COUNTY	H.M.A. Resurfacing with Milling	PROJECT NUMBER: FM–C007(184)––55–07	SHEET: B.08

PAVED APPROACH – BLACK HAWK BUCHANAN ROAD (Station 662+48.53)

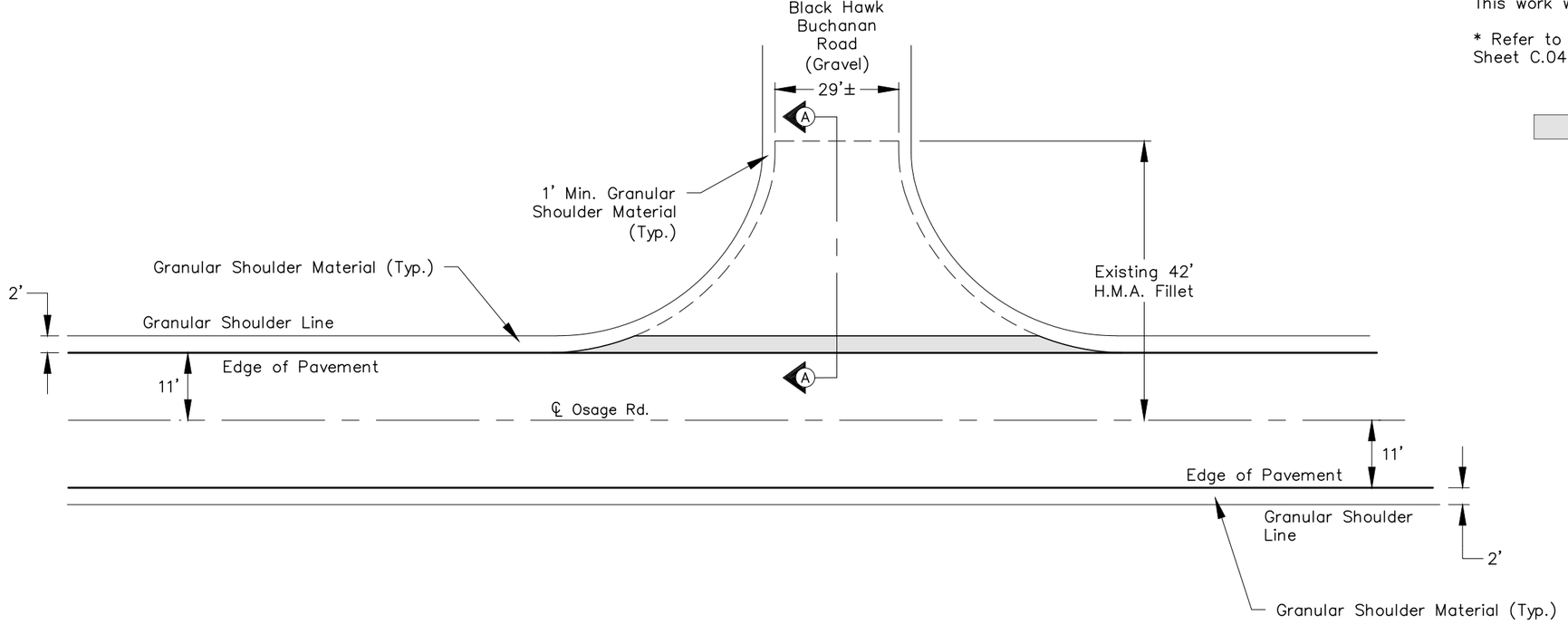
SECTION A–A



2' of the existing side road fillet shall be milled, broomed, tacked and resurfaced with the proposed H.M.A. courses. The scarified material shall be loaded directly into trucks and removed from the site and become the property of the contractor. This work will be paid as Pavement Scarification.

* Refer to the Side Road Quantities Tabulation on Sheet C.04 for more information.

Denotes Paved Approach Areas



N

–Detail not to Scale–

SIDE ROAD DETAILS
BLACK HAWK BUCHANAN ROAD

DESIGN TEAM: CN, AK, CW	Drawing Date: 2/6/2026	BLACK HAWK COUNTY	H.M.A. Resurfacing with Milling	PROJECT NUMBER: FM–C007(184)––55–07	SHEET: B.09

7/9/2026 7:17:54 AM; G:\ADSK Civil\Civil3D Projects\PAV–Independence Rd–Holgate Rd–Osage Rd–5018\5018_SHT_Bs.dwg

ESTIMATED PROJECT QUANTITIES

100 01A
9/20/22

Line No.	Item No.	Item Code	Item	Unit	Total
	1	2121-7425020	GRANULAR SHOULDERS, TYPE B	TON	475.00
	2	2214-5145152	PAVEMENT SCARIFICATION, CROSS SLOPE	SY	66,428.10
	3	2303-1032500	HOT MIX ASPHALT STANDARD TRAFFIC, INTERMEDIATE COURSE, 1/2 IN. MIX	TON	6,100.00
	4	2303-1033500	HOT MIX ASPHALT STANDARD TRAFFIC, SURFACE COURSE, 1/2 IN. MIX, NO SPECIAL FRICTION REQUIREMENT	TON	6,000.00
	5	2303-1258283	ASPHALT BINDER, PG 58-28S, STANDARD TRAFFIC	TON	726.00
	6	2303-6911000	HOT MIX ASPHALT PAVEMENT SAMPLES	LS	1.00
	7	2303-7000610	PAYMENT ADJUSTMENT INCENTIVE/DISINCENTIVE FOR HMA MIXTURE LABORATORY VOIDS (FORMULA - BY PAY FACTOR)	EACH	38,000.00
	8	2303-7000620	PAYMENT ADJUSTMENT INCENTIVE/DISINCENTIVE FOR HMA MIXTURE FIELD VOIDS (FORMULA - BY PAY FACTOR)	EACH	38,000.00
	9	2303-9091010	RUMBLE STRIP PANEL (HMA SURFACE)	EACH	3.00
	10	2315-8275025	SURFACING, DRIVEWAY, CLASS A CRUSHED STONE	TON	150.00
	11	2317-7000120	PAYMENT ADJUSTMENT INCENTIVE/DISINCENTIVE FOR HMA PAVEMENT SMOOTHNESS (BY SCHEDULE)	EACH	30,000.00
	12	2527-9263209	PAINTED PAVEMENT MARKING, WATERBORNE OR SOLVENT-BASED	STA	487.40
	13	2528-8445110	TRAFFIC CONTROL	LS	1.00
	14	2528-8445113	FLAGGERS	EACH	Per Proposal
	15	2533-4980005	MOBILIZATION	LS	1.00

ESTIMATE REFERENCE INFORMATION

100_04A
6/2/23

LINE NO.	ITEM NO.	ITEM CODE	DESCRIPTION
	1	2121–7425020	Granular Shoulders, Type B Bid price to include furnishing and delivery of material; also includes placing, compacting, final finishing of the shoulder, and brooming of the finished paved roadway. Refer to Sheets B.02 for details and Granular Shouldering Tabulation on Sheet C.05 for stationing and quantity breakdown. Material density of 140 pcf was used to calculate tonnage. Estimated project quantity includes an additional 10% for any cross section irregularities along the project. This 10% is not an assured amount and will only be used if necessary. Engineering staff will be present in the field at time of placement and determine if any irregularities exist and if any additional tonnage is required during placement.
	2	2214–5145152	Pavement Scarification, Cross Slope This item shall include the scarification of the top 3" of the existing roadway. This includes all driveway, side road, and mailbox fillets. All headers shall have a full 3" depth along their entire face. This may require a notch joint to be milled in a separate operation. Refer to Sheets B.01 for mainline details and Pavement Scarification Tabulation on Sheet C.03 for location and quantity breakdowns. Scarified material to be loaded directly into trucks and shall become the property of the Contractor. The scarification shall be completed so no vertical drop–off at the roadway center line is left overnight. Immediately following the scarification of roadway header locations, the Contractor shall place a wedge of millings along the headers to maintain traffic and to protect the edges of the adjacent roadway. The milling of paved driveway headers along the project is included in this bid item. The drives shall be field marked at the time of construction by the Engineering staff and shall be milled along the entire width of the drive. The lengths of the scarification areas will vary per driveway. The drives shall be scarified to ensure a minimum 3" depth of new H.M.A. will cover all portions of the paved drives. Refer to drive fillet cross section and Paved Points of Access Tabulation on Sheet B.04 for location and quantity breakdowns.

ESTIMATED PROJECT QUANTITIES
& ESTIMATE REFERENCE NOTES

DESIGN TEAM: CN, AK, CW	Drawing Date: 2/26/2026	BLACK HAWK COUNTY	H.M.A. Resurfacing with Milling	PROJECT NUMBER: FM–C007(184)––55–07	SHEET: C.01

ESTIMATE REFERENCE INFORMATION

100_04A
6/2/23

LINE NO.	ITEM NO.	ITEM CODE	DESCRIPTION
	3 4 5	2303-1032500 2303-1033500 2303-1258283	HMA Standard Traffic, Intermediate Course, 1/2 inch Mix HMA Standard Traffic Surface Course, 1/2 inch Mix, No Friction Asphalt Binder, PG 58-28S, Standard Traffic PWL (Percent Within Limits) is being included on this project for the mainline asphalt pavement. Design weight of 145 lbs. per cu. ft. Estimated project quantity includes an additional 10% for any cross section irregularities along the project. This 10% is not an assured amount and will only be used if necessary. Engineering staff will be present in the field at time of placement and determine if any irregularities exist and if any additional tonnage is required during placement. Refer to Sheet B.01 for typical cross section details. Refer to Paved Points of Access Tabulation on Sheet B.04 for paved drive location and breakdowns. Refer to ST H.M.A. Placement (Road Mainline) Tabulation on Sheet C.04 for location and quantity breakdowns. Bid price shall include full Quality Control, Quality Assurance, and Plant Inspection for all H.M.A. mix. All cost associated with the testing and inspection of the H.M.A. is to be considered included in accordance with the current Iowa DOT Standard Specifications. Material for drives & intersections were estimated as follows: Paved Driveways: Refer to Paved Points of Access Tabulation on Sheet B.04. Also note that no mailbox or field entrance fillets will be required on this project. Asphalt Cement shall be PG 58-28S. Quantities based on 6% by weight.
	7 8	2303-7000610 2303-7000620	Pay Adj. I/D-HMA Mixture Laboratory Voids Pay Adj. I/D-HMA Mixture Field Voids PWL "Percent within Limits" is being required on this project.
	9	2303-9091010	Rumble Strip Panels (HMA Surface) Cut rumble strip panels in new pavement per Standard Road Plan PV-10 at specified locations. Refer to Rumble Strip Panels Tabulation on Sheet C.05 for location and quantity breakdowns. Method of Measurement will be a count of each rumble strip panel cut in the new pavement. Basis of Payment will be the contract unit price for each rumble strip panel cut.
	10	2315-8275025	Surfacing, Driveway, Class A Crushed Stone Granular surfacing shall consist of Class "A" crushed stone. Includes granular surfacing for driveways, field entrances and side road intersections. These areas were estimated as follows: Division 2 Driveways/Field Entrances: 46 @ 3 tons each Bid price to include furnishing, delivery, placing, compaction rolling, and brooming for each area of placement.

ESTIMATE REFERENCE INFORMATION

100_04A
6/2/23

LINE NO.	ITEM NO.	ITEM CODE	DESCRIPTION
	11	2317-7000120	Pay Adj. I/D-HMA Pavement Smoothness Pavement Smoothness Specification Section 2317 is being required on this project and is classified as a Non-Primary roadway. Refer to Pavement Smoothness Tabulation on Sheet C.05 for location and quantity breakdowns.
	12	2527-9263209	Painted Pavement Markings, Waterborne/Solvent Locations and quantities are estimated. Actual locations are to be determined and provided by the Engineering staff during construction observation. Actual lengths will be field measured by the Engineering staff once the pavement markings have been placed. A two gun system following the current Standard Specifications and Standard Road Plans shall be used on all pavement markings. Temporary centerline paint will not be required on this project. Refer to Pavement Marking Line Types Tabulation on Sheet C.06 for location and quantity breakdowns. All pavement markings shall be 4" wide. The Contractor shall note pavement markings are based on a 6" wide pavement marking per Iowa DOT specification. Meaning a factor of 1 equals a 6" pavement marking. Plan quantities were adjusted using a quantity factor from the 6" marking to a 4" marking. Factors are shown in the above mentioned tabulation.
	13	2528-8445110	Traffic Control Item per Standard Road Plan TC-252. Traffic Control shall also include all provisions for work under the Traffic Control Plan on Sheet J.01. Item shall also include the bump signs required at all scarified header locations. The signs shall be placed immediately prior to the pavement being scarified and shall be left in place until the H.M.A. resurfacing is complete. Two (2) signs shall be placed at each actual header joint facing one each direction.
	14	2528-8445113	Flaggers Flagger quantities are being included on this project as an estimate to use during key construction activities and/or if the local traffic becomes an issue to control with only signage. Usage shall be agreed upon between the Contractor and the Engineer prior to using. The actual number of flaggers used will be the quantity paid for.

ESTIMATE REFERENCE NOTES

DESIGN TEAM: CN, AK, CW	Drawing Date: 2/26/2026	BLACK HAWK COUNTY	H.M.A. Resurfacing with Milling	PROJECT NUMBER: FM-C007(184)--55-07	SHEET: C.02

PAVEMENT SCARIFICATION

Bhco-PaveScarify
11/21/24

Refer to Tabulation 102-5 or 102-5A

Line No.	Road Identification	Station From	Station To	Side	Length (LF)	Width (LF)	Depth (IN)	Area (SY)	Remarks
Mainline and Paved Shoulders									
	Independence Ave.	399+30		Rt.	Varied	Varied	3	135.4	Canfield Road Radius.
	Independence Ave.	399+48	400+04	Both	56	20	3	123.4	Varied Width Section Adjoining Concrete Surfacing.
	Independence Ave.	400+04	506+08	Both	10,604	22	3	25,920.9	Beginning of Project Header to Holgate Road.
	Independence / Holgate Int.	503+33	506+65	Rt.	332	0 - 7 - 0	3	182.0	Paved Shoulder.
	Independence / Holgate Int.	503+66	506+20	Lt.	254	0 - 7 - 0	3	162.7	Paved Shoulder.
	Holgate Rd.	506+08	558+37	Both	5,229	22	3	12,782.0	Independence Ave. to Holgate Road.
	Holgate / Osage Int.	555+72	558+24	Rt.	252	0 - 18 - 0	3	372.2	Paved Shoulder.
	Holgate / Osage Int.	555+48	558+56	Lt.	308	0 - 5 - 0	3	125.1	Paved Shoulder.
	Osage Rd.	558+37	663+17	Both	10,480	22	3	25,617.8	Holgate Road to End of Project.
Existing Fillets									
	Independence Ave.	400+44		Lt.	87	3	3	25.4	Driveway.
	Independence Ave.	404+58		Rt.	47	3	3	17.7	Driveway.
	Independence Ave.	407+62		Rt.	74	2	3	18.4	Driveway.
	Independence Ave.	408+77		Rt.	31	4	3	12.1	Driveway.
	Independence Ave.	418+44		Rt.	34	2	3	6.7	Driveway.
	Independence Ave.	418+48		Lt.	45	2	3	8.0	Field Entrance.
	Independence Ave.	421+89		Rt.	53	3	3	18.8	Field Entrance.
	Independence Ave.	427+33		Lt.	26	3	3	8.4	Field Entrance.
	Independence Ave.	433+82		Lt.	51	2	3	13.5	Driveway.
	Independence Ave.	453+45		Lt.	25	3	3	8.6	Driveway.
	Independence Ave.	453+45		Rt.	43	3	3	13.0	Mailbox Fillet.
	Independence Ave.	457+83		Rt.	35	3	3	12.5	Field Entrance.
	Independence Ave.	460+91		Lt.	38	3	3	11.6	Driveway.
	Independence Ave.	460+91		Rt.	61	2	3	15.8	Mailbox Fillet.
	Independence Ave.	463+05		Lt.	38	3	3	12.0	Driveway.
	Independence Ave.	463+05		Rt.	58	3	3	19.6	Mailbox Fillet.
	Independence Ave.	465+04		Lt.	30	3	3	9.9	Driveway.
	Independence Ave.	465+04		Rt.	56	2	3	14.9	Mailbox Fillet.
	Independence Ave.	476+01		Lt.	51	3	3	16.6	Driveway.
	Independence Ave.	476+57		Rt.	47	2	3	10.1	Mailbox Fillet.
	Independence Ave.	478+70		Rt.	46	3	3	13.5	Field Entrance.
	Independence Ave.	491+02		Rt.	33	3	3	12.0	Field Entrance.
	Independence Ave.	495+45		Lt.	30	3	3	8.8	Driveway.
	Independence Ave.	495+45		Rt.	53	3	3	15.9	Mailbox Fillet.
	Independence Ave.	496+82		Lt.	36	3	3	12.2	Field Entrance.
	Holgate Rd.	514+96		Lt.	49	3	3	17.5	Driveway.
	Holgate Rd.	514+96		Rt.	42	2	3	10.1	Mailbox Fillet.
	Holgate Rd.	529+81		Rt.	79	3	3	28.4	Driveway.
	Holgate Rd.	557+87		Lt.	60	3	3	19.2	Driveway.
	Osage Rd.	570+03		Rt.	60	3	3	21.4	Field Entrance.
	Osage Rd.	576+97		Lt.	38	3	3	12.9	Driveway.
	Osage Rd.	576+97		Rt.	51	3	3	16.6	Mailbox Fillet.
	Osage Rd.	581+13		Lt.	43	2	3	11.7	Field Entrance.
	Osage Rd.	581+99		Rt.	33	3	3	10.3	Field Entrance.
	Osage Rd.	583+27		Lt.	39	3	3	13.3	Field Entrance.
	Osage Rd.	590+47		Lt.	62	2	3	16.5	Driveway.
	Osage Rd.	590+47		Rt.	42	3	3	13.3	Mailbox Fillet.
	Osage Rd.	605+20		Lt.	43	3	3	12.9	Field Entrance.
	Osage Rd.	606+27		Lt.	35	3	3	10.3	Field Entrance.
	Osage Rd.	606+40		Rt.	72	2	3	15.8	Driveway.
	Osage Rd.	615+54		Rt.	42	3	3	15.7	Field Entrance.
	Osage Rd.	618+38		Lt.	82	3	3	29.4	Driveway.
	Osage Rd.	618+38		Rt.	56	3	3	20.1	Mailbox Fillet.
	Osage Rd.	622+48		Lt.	45	3	3	14.8	Field Entrance.
	Osage Rd.	628+02		Lt.	54	2	3	14.5	Driveway.
	Osage Rd.	628+02		Rt.	56	3	3	19.3	Mailbox Fillet.
	Osage Rd.	632+12		Rt.	91	3	3	34.5	Driveway.
	Osage Rd.	635+31		Rt.	30	3	3	11.4	Field Entrance.
	Osage Rd.	646+04		Rt.	57	3	3	20.1	Driveway.
	Osage Rd.	650+05		Lt.	43	3	3	13.8	Driveway.
	Osage Rd.	650+36		Rt.	72	4	3	30.6	Driveway.
	Osage Rd.	652+47		Rt.	46	3	3	13.2	Mailbox Fillet.
	Osage Rd.	654+01-654+53		Rt.	85	2	3	21.6	2 Driveways with Shared Fillet.
	Osage Rd.	655+49		Rt.	66	3	3	22.4	Driveway.
	Osage Rd.	659+99		Rt.	21	3	3	7.3	Driveway.
	Osage Rd.	660+97		Rt.	27	3	3	9.3	Driveway.
	Osage Rd.	662+34		Rt.	59	3	3	17.0	Driveway.

Project Mainline and Paved Shoulder Total:	65,421.5
Existing Drive Fillet Project Total:	881.2
Side Road Project Total (Refer to Sheet C.04):	65.2
Paved Points of Access Project Total (Refer to Sheet B.04):	60.2
Pavement Scarification Project Total:	66,428.1

Length and Width of Existing Driveway Fillets is an Average Dimension. The Areas were Calculated by Polygons from Survey Shots.
Refer to Paved Points of Access Tabulation on Sheet B.04 for More Information Regarding Paved Driveway Scarification.
Refer to Side Road Quantities Tabulation on Sheet C.04 for More Information Regarding Side Road Scarification.

TABULATIONS

102_05
09/29/23

EXISTING PAVEMENT

Line No.	County	Route	Direction of Travel	Begin Ref. Location Sign	End Ref. Location Sign	Year	Type	Project Number	Surface Type	Surface Depth (IN)	Base Type	Base Depth (IN)	Subbase Type	Subbase Depth	Coarse Aggregate Source	Coarse Aggregate Type	Coarse Aggregate Durability Class	Remarks
1	Black Hawk	D20	EB/SB/EB			1931	PCC Pave	62	P.C.C. Paving	8.0								
2	Black Hawk	D20	EB/SB/EB	400+50	663+05	1960	ACC Resurf	SN-2878	Type B Asphaltic Base	2.5								
3	Black Hawk	D20	EB/SB/EB	400+50	663+05	1978	ACC Resurf	L-1378--73-07	Type A Asphalt Surface	1.0	Type A Asphalt Binder	1.5						
4	Black Hawk	D20	EB/SB/EB	399+48	663+79	2009	HMA Resurf	LFM-0823--7X-07	3/4" Interm. Mix	3.0								Milled 2" of Existing 5" Prior to Resurfacing.

Bhco-HMA-ST
4/1/22

ST HMA PLACEMENT (ROAD MAINLINE)

Line No.	Station From	Station To	Side	Length (LF)	Average Thickness (IN)	Lane Top Width (LF)	Average Lane Width (Yield Width)	Area per Lane Width (SF)	Area (SF)	HMA (TON/STA/SIDE)	HMA (TON)	Remarks
	Intermediate Course											
	399+30		Rt.			Varied			1,219		11.05	Canfield Road radius.
	399+48	400+04	Rt.	56.00		11.00	11.00	1.375		9.97	5.58	Mainline section next to radius.
	400+04	506+08	Rt.	10,604.00		11.00	11.34	1.4171		10.27	1,089.45	Mainline.
	506+08	558+37	Rt.	5,229.00		11.00	11.34	1.4171		10.27	537.23	Mainline.
	558+37	663+17	Rt.	10,480.00		11.00	11.34	1.4171		10.27	1,076.71	Mainline.
	399+48	400+04	Lt.	56.00		9.00	9.00	1.125		8.16	4.57	Mainline section next to concrete radius.
	400+04	506+08	Lt.	10,604.00		11.00	11.34	1.4171		10.27	1,089.45	Mainline.
	506+08	558+37	Lt.	5,229.00		11.00	11.34	1.4171		10.27	537.23	Mainline.
	558+37	663+17	Lt.	10,480.00		11.00	11.34	1.4171		10.27	1,076.71	Mainline.
											28.15	Estimated 29 non-paved residential driveway fillets (Est. 1,553' x 2')
										Intermediate Total:	5,456.13	@ 100%
	Surface Course											
	399+30		Rt.			Varied			1,219		11.05	Canfield Road radius.
	399+48	400+04	Rt.	56.00		11.00	11.00	1.375		9.97	5.58	Mainline section next to radius.
	400+04	506+08	Rt.	10,604.00		11.00	11.11	1.389		10.07	1,067.85	Mainline.
	506+08	558+37	Rt.	5,229.00		11.00	11.11	1.389		10.07	526.57	Mainline.
	558+37	663+17	Rt.	10,480.00		11.00	11.11	1.389		10.07	1,055.36	Mainline.
	399+48	400+04	Lt.	56.00		9.00	9.00	1.125		8.16	4.57	Mainline section next to concrete radius.
	400+04	506+08	Lt.	10,604.00		11.00	11.11	1.389		10.07	1,067.85	Mainline.
	506+08	558+37	Lt.	5,229.00		11.00	11.11	1.389		10.07	526.57	Mainline.
	558+37	663+17	Lt.	10,480.00		11.00	11.11	1.389		10.07	1,055.36	Mainline.
											28.15	Estimated 29 non-paved residential driveway fillets (Est. 1,553' x 2')
										Surface Total:	5,348.91	@ 100%
										Mainline ST HMA Project Total:	10,805.04	@ 100%

Bhco-Side Road
4/25/13

SIDE ROAD QUANTITIES

Line No.	Side Road Name	Station	Side	Current Surfacing	Resurface Area (SF)	Pavement Scarification		HMA Interm. (TON)	HMA Surface (TON)	Excavation Class 13 Waste (CY)	Granular Surfacing (TON)	Remarks
						Mainline Daylight Mill (SY)	Milled Taper Header "M" (SY)					
	Nesbit Road	452+26	Rt.	HMA	136.8	15.2		1	1			County Road. Existing 42' Fillet. 2' wide to be scarified and resurfaced with mainline.
	Nesbit Road	452+26	Lt.	HMA	137.2	15.2		1	1			County Road. Existing 40' Fillet. 2' wide to be scarified and resurfaced with mainline.
	Hasner Road	609+69	Lt.	HMA	171.6	19.1		2	2			County Road. Existing 43' Fillet. 2' wide to be scarified and resurfaced with mainline.
	BlackHawk Buchanan Road	662+49	Lt.	HMA	141.4	15.7		1	1			County Road. Existing 31' Fillet. 2' wide to be scarified and resurfaced with mainline.
				Project Total:	587.0	65.2		5	5			

TABULATIONS

DESIGN TEAM: CN, AK, CW	Drawing Date: 2/26/2026	BLACK HAWK COUNTY	H.M.A. Resurfacing with Milling	PROJECT NUMBER: FM-C007(184)--55-07	SHEET: C.04

Bhco-Smoothness
12/11/17

PAVEMENT SMOOTHNESS

Line No.	Road Identification	Station From	Station To	Side	Length (LF)	Segments (EACH)	Proposed Posted Speed			Remarks
							35 or less	40 - 45	over 45	
	D-20	400+80	663+17	Rt.	26,237	50			X	Independence Ave., Holgate Road, and Osage Road
	D-20	400+80	663+17	Lt.	26,237	50			X	Independence Ave., Holgate Road, and Osage Road
			Project Total:		52,474	100				

Bhco-Shoulders
2/23/26

SHOULDERING

Line No.	Station From	Station To	Side	Length (LF)	Average Thickness (IN)	Width (LF)	Area (SF)	Granular Shoulder Material (TON/STA/SIDE)	Granular Shoulder Material (TON)	HMA Shoulder Material (TON/STA/SIDE)	HMA Shoulder Material (TON)	Remarks
	399+30	503+33	Rt.	10,403		2		0.82	85.30			2' Granular Shoulder. Refer to Sheets B.02 & B.06.
	503+33	506+65	Rt.	332		7	1,637.61				29.68	7' HMA Shoulders. Scarify & resurface with mainline paving. Refer to Sheet B.06.
	503+33	506+65	Rt.	332		2		0.82	2.72			2' Granular Shoulder. Refer to Sheet B.02 & B.06.
	506+65	556+41	Rt.	4,976		2		0.82	40.80			2' Granular Shoulder. Refer to Sheet B.02, B.06 & B.07.
	555+72	558+24	Rt.	252		18	3,350.00				60.72	18' HMA Shoulders. Scarify & resurface with mainline paving. Refer to Sheet B.07.
	557+63	663+17	Rt.	10,554		2		0.82	86.54			2' Granular Shoulder. Refer to Sheet B.02 & B.07.
	400+90	504+01	Lt.	10,311		2		0.82	84.55			2' Granular Shoulder. Refer to Sheet B.02 & B.06.
	503+66	506+20	Lt.	254		7	1,464.47				26.54	7' HMA Shoulders. Scarify & resurface with mainline paving. Refer to Sheet B.06.
	505+63	555+48	Lt.	4,985		2		0.82	40.88			2' Granular Shoulder. Refer to Sheet B.02, B.06 & B.07.
	555+48	558+56	Lt.	308		5	1,126.03				20.41	5' HMA Shoulders. Scarify & resurface with mainline paving. Refer to Sheet B.07.
	555+48	558+56	Lt.	308		2		0.82	2.53			2' Granular Shoulder. Refer to Sheet B.02 & B.07.
	558+56	663+17	Lt.	10,461		2		0.82	85.78			2' Granular Shoulder. Refer to Sheet B.02.
			Project Total:	53,476					429.10	@ 100%	137.35	@ 100%

112_07
8/15/22

RUMBLE STRIP PANELS

Refer to Standard Road Plan PV-10.

Line No.	Roadway Identification	Station	Side	Pavement Type	Remarks
1	Independence Ave.	402+62	Lt.	HMA	
2	Independence Ave.	406+69	Lt.	HMA	
3	Independence Ave.	410+77	Lt.	HMA	

TABULATIONS

DESIGN TEAM: CN, AK, CW	Drawing Date: 2/26/2026	BLACK HAWK COUNTY	H.M.A. Resurfacing with Milling	PROJECT NUMBER: FM-C007(184)--55-07	SHEET: C.05

PAVEMENT MARKING LINE TYPES

Line factors based on 6 inch wide continuous line.
*BCY4 - Place on the same side of the roadway to match existing markings near the project.
**NPY4 - For estimating purposes only. No Passing Zone Lines will be located in the field.

BCY4: Broken Centerline (Yellow) @ 0.17
DCY4: Double Centerline (Yellow) @ 1.34
NPY4: No Passing Zone Line (Yellow) @ 0.84
ELW4: Edge Line Right (White) @ 0.67
DLW4: Dotted Line (White) @ 0.22
SLW2: Stop Line (White) @ 4.00

Line No.	Road ID	Station From	Station To	Lane	Marking Type	Left	Center	Right	Groove Marking Needed?	Groove Qty. (STA)	BCY4* Factored (STA)	DCY4 Factored (STA)	NPY4** Factored (STA)	ELW4 Factored (STA)	DLW4 Factored (STA)	SLW2 Factored (STA)	Remarks
1	D-20	399+62	405+00	BOTH	Waterborne/Solvent Paint	x		x	No			7.21					
2	D-20	405+00	409+29	BOTH	Waterborne/Solvent Paint		x		No		0.73						
3	D-20	409+29	415+03	WB	Waterborne/Solvent Paint	x			No				4.82				
4	D-20	415+03	425+08	BOTH	Waterborne/Solvent Paint		x		No		1.71						
5	D-20	425+08	432+26	EB	Waterborne/Solvent Paint			x	No				6.03				
6	D-20	432+26	435+84	BOTH	Waterborne/Solvent Paint		x		No		0.61						
7	D-20	435+84	442+41	WB	Waterborne/Solvent Paint	x			No				5.52				
8	D-20	442+41	493+15	BOTH	Waterborne/Solvent Paint		x		No		8.63						
9	D-20	493+15	503+15	EB	Waterborne/Solvent Paint			x	No				8.40				
10	D-20	503+15	509+40	BOTH	Waterborne/Solvent Paint	x		x	No			8.38					
11	D-20	509+40	520+51	NB	Waterborne/Solvent Paint	x			No				9.33				
12	D-20	520+51	523+27	BOTH	Waterborne/Solvent Paint		x		No		0.47						
13	D-20	523+27	530+17	SB	Waterborne/Solvent Paint			x	No				5.80				
14	D-20	530+17	534+21	BOTH	Waterborne/Solvent Paint		x		No		0.69						
15	D-20	534+21	540+83	NB	Waterborne/Solvent Paint	x			No				5.56				
16	D-20	540+83	545+69	BOTH	Waterborne/Solvent Paint		x		No		0.83						
17	D-20	545+69	553+84	SB	Waterborne/Solvent Paint			x	No				6.85				
18	D-20	553+84	558+66	BOTH	Waterborne/Solvent Paint	x		x	No			6.46					
19	D-20	558+66	561+78	WB	Waterborne/Solvent Paint	x			No				2.62				
20	D-20	561+78	567+85	BOTH	Waterborne/Solvent Paint	x		x	No			8.13					
21	D-20	567+85	569+02	EB	Waterborne/Solvent Paint			x	No				0.98				
22	D-20	569+02	572+44	BOTH	Waterborne/Solvent Paint		x		No		0.58						
23	D-20	572+44	579+63	WB	Waterborne/Solvent Paint	x			No				6.04				
24	D-20	579+63	597+43	BOTH	Waterborne/Solvent Paint		x		No		3.03						
25	D-20	597+43	604+44	EB	Waterborne/Solvent Paint			x	No				5.89				
26	D-20	604+44	606+85	BOTH	Waterborne/Solvent Paint		x		No		0.41						
27	D-20	606+85	614+16	WB	Waterborne/Solvent Paint	x			No				6.14				
28	D-20	614+16	632+90	BOTH	Waterborne/Solvent Paint		x		No		3.19						
29	D-20	632+90	638+04	EB	Waterborne/Solvent Paint			x	No				4.32				
30	D-20	638+04	643+30	BOTH	Waterborne/Solvent Paint		x		No		0.89						
31	D-20	643+30	649+69	WB	Waterborne/Solvent Paint	x			No				5.37				
32	D-20	649+69	663+25	BOTH	Waterborne/Solvent Paint		x		No		2.31						
33	D-20	399+30	451+90	EB	Waterborne/Solvent Paint			x	No					35.24			
34	D-20	452+62	555+70	EB SB	Waterborne/Solvent Paint			x	No					69.06			
35	D-20	555+70	558+25	SB	Waterborne/Solvent Paint			x	No						0.56		Dotted Edge Line Around Curve.
36	D-20	558+25	663+25	EB	Waterborne/Solvent Paint			x	No					70.35			
37	D-20	400+00	451+84	WB	Waterborne/Solvent Paint	x			No					34.73			
38	D-20	452+57	503+64	WB	Waterborne/Solvent Paint	x			No					34.22			
39	D-20	503+64	506+20	WB	Waterborne/Solvent Paint	x			No						0.56		Dotted Edge Line Around Curve.
40	D-20	506+20	609+20	NB WB	Waterborne/Solvent Paint	x			No					69.01			
41	D-20	610+15	661+95	WB	Waterborne/Solvent Paint	x			No					34.71			
42	D-20	662+90	663+25	WB	Waterborne/Solvent Paint	x			No					0.23			
43	D-20	399+62		WB	Waterborne/Solvent Paint	x			No							0.80	20' Stop Bar.
									Totals:		24.08	30.18	83.67	347.55	1.12	0.8	

Plan Temporary Paint Total:		**Stations**	**Plan Permanent Paint Total:**	**487.40**	**Stations**	**Plan Total Paint:**	**487.40**	**Stations**

TABULATIONS

100_01D
8/15/22

PROJECT DESCRIPTION

This construction project is located on D20 (Independence Ave., Holgate Road, and Osage Road. Project limits are from the Canfield Road intersection east to Holgate Road, then south to Osage Road, then east to Black Hawk Buchanan Road.

This project includes 3" pavement scarification, H.M.A. resurfacing with a 1.5" intermediate lift of H.M.A., and a 1.5" surface lift of H.M.A. followed by stop panel rumble strips and pavement markings.

The project shall be CLOSED to through traffic during the construction, however, local and emergency traffic will need to be maintained during all phases of construction.

Refer to Sheet J.01 for the traffic control plan and the proposed detour route provided by Black Hawk County.

No storm water permit 404 or Iowa DNR floodplain construction permit is required.

Black Hawk County will provide all construction staking on this project. The Contractor is responsible for the preservation of the stakes and markings.
The County will require a 24 hour written notice from the Contractor prior to needing any construction survey.

Section number references within these plans refer to the Iowa D.O.T. Standard Specifications for Highway and Bridge Construction, Series 2023.

105_04
10/20/26

STANDARDS

The following Standards apply to construction work on this project.

Number	Date	Title
PM-110	10-15-24	Line Types
PM-120	10-15-24	Stop Lines and Islands
PM-420	10-20-26	Two-Lane Roadway with No Turn Lanes (One-Way Stop Condition)
PV-3	10-15-24	Safety Edge
PV-10	10-20-26	Rumble Strip Panel for Intersection Approach
PV-202	04-21-20	Hot Mix Asphalt Resurfacing
SI-881	10-20-26	Special Signs for Workzones
TC-212	04-18-23	Spot Location Lane Closure with Flaggers
TC-233	10-17-17	Pavement Marking Operations
TC-252	10-20-26	Routes Closed to Traffic
TC-282	10-15-19	Uneven Lanes
TC-284	10-15-19	No Centerline Markings on Non-Primary Roadways

Bhco-Utilities
3/31/22

TABULATION OF UTILITIES

Company	Contact Person	Contact Number	
Iowa One-Call		1-800-292-8989	
(CIW3) Iowa Regional Utility Assoc.	Kimberlin Annis	1-641-792-7011	locates@irua.net
(CLECIA) Windstream Enterprise	CLEC Locate Desk	1-800-941-3430	wci.clec.locate@windstream.com
(DUT) Dunkerton Telephone	Brett Delagardelle	1-319-822-4512	brett@dunkerton.net
(FM8) Farmers Mutual Telephone	Devin Kuenstling	1-319-827-1151	devin.kuenstling@heartlandtechnology.com
(JVP) Jesup, City of	Mike Fettkether	1-319-327-2642	locates@jesupiowa.com
(M58E) MidAmerican-Electric	Jordyn Weber	1-319-291-4728	jlweber@midamerican.com

GENERAL NOTES, TABULATION OF UTILITIES & STANDARD ROAD PLANS

IOWA HWY 281 (P.C.C./H.M.A.)

BP: 399+18.88

CANFIELD ROAD RADIUS LT.
USE AS CONSTRUCTED
(IOWA DOT JURISDICTION)

MAINLINE VARIED WIDTH SECTION
399+48 – 400+04
1,110.81 SQ. FT.

T.89N. R.11W.
SEC.21

PI: 403+75.22

OWNER
NOLAN R. NEWHALL
33 N. CANFIELD RD.
WATERLOO, IA 50703

OWNER
J AND H FARMS CO.
9124 INDEPENDENCE AVE.
WATERLOO, IA 50703

STA: 400+44
EXIST DRIVE LT.
GRAVEL SURFACING

RUMBLE STRIP
STA. 402+62

EXISTING 50' ROW

RUMBLE STRIP
STA. 406+69

STA: 407+66
EXIST FIELD DRIVE LT.

RUMBLE STRIP
STA. 4

400+00 401+00 402+00 403+00 404+00 405+00 406+00 407+00 408+00 409+00 410+00

IOWA HWY 281/INDEPENDENCE AVE.
(H.M.A.)

INDEPENDENCE AVE.
(H.M.A.)

CANFIELD ROAD START
UNIFORM MAINLINE WIDTH
400+04

BEGINNING OF PROJECT (BOP)
STA: 399+30

STA: 404+58
EXIST DRIVE RT.
GRAVEL SURFACING

EXISTING 33' ROW

STA: 407+62
EXIST DRIVE RT.
GRAVEL SURFACING

STA: 408+77
EXIST DRIVE RT.
GRAVEL SURFACING

CANFIELD ROAD RADIUS RT.
1,219 SQ. FT.

CANFIELD RD.
(H.M.A.)

OWNER
ROTTINGHAUS FARMLAND CORPORATION
8734 INDEPENDENCE AVE.
WATERLOO, IA 50703

OWNER
J AND H FARMS CO.
9124 INDEPENDENCE AVE.
WATERLOO, IA 50703

OWNER
MARK E. &
LISA K. ANDERSON
9124 INDEPENDENCE AVE.
WATERLOO, IA 50703

EXISTING P.C.C.
USE AS CONSTRUCTED

T.89N. R.11W.
SEC.28

T.89N. R.11W.
SEC.21

OWNER
MARK E. &
LISA K. ANDERSON
9124 INDEPENDENCE AVE.
WATERLOO, IA 50703

OWNER
TRENT &
BRANDY ZUCK
2425 N. CANFIELD RD.
DUNKERTON, IA 50626

PI: 412+31.62

PI: 418+57.88

RUMBLE STRIP
STA. 410+77

EXISTING 50' ROW

STA: 418+48
EXIST FIELD DRIVE LT.

EXISTING 33' ROW

410+00 411+00 412+00 413+00 414+00 415+00 416+00 417+00 418+00 419+00 420+00 421+00 422+00 423+00 424+00 425+0

EXISTING 33' ROW

STA: 418+44
EXIST DRIVE RT.
GRAVEL SURFACING

STA: 421+89
EXIST FIELD DRIVE RT.

OWNER
EARLINE &
MICKEY W. WILLIAMS
241 PROSPECT AVE.
WATERLOO, IA 50703

OWNER
DANIEL L. &
ELIZABETH A. WASKOW
8115 INDEPENDENCE AVE.
WATERLOO, IA 50703

T.89N. R.11W.
SEC.28

N

100 0 100

DESIGN TEAM: CN, AK, CW	DRAWING DATE: 2/26/2026	BLACK HAWK COUNTY	H.M.A. Resurfacing with Milling	PROJECT NUMBER: FM-C007(184)--55-07	SHEET: D.01

T.89N. R.11W.
SEC.21

OWNER
NANCY GIBSON
9635 INDEPENDENCE AVE.
WATERLOO, IA 50703

PI: 425+60.46

STA: 427+33
EXIST FIELD DRIVE LT.

PI: 433+58.88

STA: 433+82
EXIST DRIVE LT.
GRAVEL SURFACING

EXISTING 33' ROW

424+00 425+00 426+00 427+00 428+00 429+00 430+00 431+00 432+00 433+00 434+00 435+00 436+00 437+00 438+00 439+00

EXISTING 33' ROW

OWNER
IRVIN C. &
JANE M. WEBER
11232 DUBUQUE RD.
JESUP, IA 50648

T.89N. R.11W.
SEC.28

T.89N. R.11W.
SEC.21

OWNER
NANCY GIBSON
9635 INDEPENDENCE AVE.
WATERLOO, IA 50703

NESBIT RD.
(GRAVEL)

REFER TO SHEET B.05 FOR INTERSECTION PAVED APPROACH DETAILS.

THE SIDE ROAD INTERSECTION SHALL BE MILLED 2' WIDE WITH THE MAINLINE PAVEMENT AND THEN SHALL BE RESURFACED WITH EACH LIFT OF H.M.A. MAINLINE PAVING.

452+26.31

EXISTING 33' ROW

438+00 439+00 440+00 441+00 442+00 443+00 444+00 445+00 446+00 447+00 448+00 449+00 450+00 451+00 452+00 453+

EXISTING 33' ROW

OWNER
IRVIN C. &
JANE M. WEBER
11232 DUBUQUE RD.
JESUP, IA 50648

NESBIT RD.
(GRAVEL)

N

100 0 100

T.89N. R.11W.
SEC.28

DESIGN TEAM: CN, AK, CW	DRAWING DATE: 2/26/2026	BLACK HAWK COUNTY	H.M.A. Resurfacing with Milling	PROJECT NUMBER: FM-C007(184)--55-07	SHEET: D.02

T.89N. R.11W.
SEC.22

NESBIT RD.
(GRAVEL)

452+26.31

OWNER
JACOB WRIGHT
10009 INDEPENDENCE AVE.
WATERLOO, IA 50703

STA: 453+45
EXIST DRIVE LT.
GRAVEL SURFACING

OWNER
RALPH R. &
KARLA A. KRAUS
8602 OSAGE RD.
WATERLOO, IA 50703

OWNER
TROY L. &
SUSAN M. ROBBINS
10127 INDEPENDENCE AVE.
WATERLOO, IA 50703

OWNER
CHANCE PINT
10145 INDEPENDENCE AVE.
WATERLOO, IA 50703

OWNER
KELBY ROBBINS
10217 INDEPENDENCE AVE.
WATERLOO, IA 50703

STA: 460+91
EXIST DRIVE LT.
GRAVEL SURFACING

STA: 463+05
EXIST DRIVE LT.
GRAVEL SURFACING

STA: 465+04
EXIST DRIVE LT.
GRAVEL SURFACING

EXISTING 33' ROW

452+00 453+00 454+00 455+00 456+00 457+00 458+00 459+00 460+00 461+00 462+00 463+00 464+00 465+00 466+00

STA: 457+83
EXIST FIELD DRIVE RT.

EXISTING 33' ROW

REFER TO SHEET B.05 FOR INTERSECTION PAVED APPROACH DETAILS.

THE SIDE ROAD INTERSECTION SHALL BE MILLED 2' WIDE WITH THE MAINLINE PAVEMENT AND THEN SHALL BE RESURFACED WITH EACH LIFT OF H.M.A. MAINLINE PAVING.

NESBIT RD.
(GRAVEL)

OWNER
ROBERT J. &
NANCY K. ANDERSON
11234 CAMPBELL RD.
JESUP, IA 50648

T.89N. R.11W.
SEC.27

T.89N. R.11W.
SEC.22

OWNER
RALPH R. &
KARLA A. KRAUS
8602 OSAGE RD.
WATERLOO, IA 50703

OWNER
JAMES H. NESBIT
9545 NEWELL ST.
WATERLOO, IA 50703

OWNER
BRANDI L. &
DON R. PALMER
10423 INDEPENDENCE AVE.
WATERLOO, IA 50703

PI: 478+55.10

OWNER
QUENT A. &
HALEY A. VOGEL
144 S. HOLGATE RD.
WATERLOO, IA 50703

STA: 465+04
EXIST DRIVE LT.
GRAVEL SURFACING

STA: 476+01
EXIST DRIVE LT.
GRAVEL SURFACING

EXISTING 33' ROW

466+00 467+00 468+00 469+00 470+00 471+00 472+00 473+00 474+00 475+00 476+00 477+00 478+00 479+00 480+00 481+00

EXISTING 33' ROW

STA: 478+70
EXIST FIELD DRIVE RT.

OWNER
ROBERT J. &
NANCY K. ANDERSON
11234 CAMPBELL RD.
JESUP, IA 50648

OWNER
ROBERT J. &
NANCY K. ANDERSON
11234 CAMPBELL RD.
JESUP, IA 50648

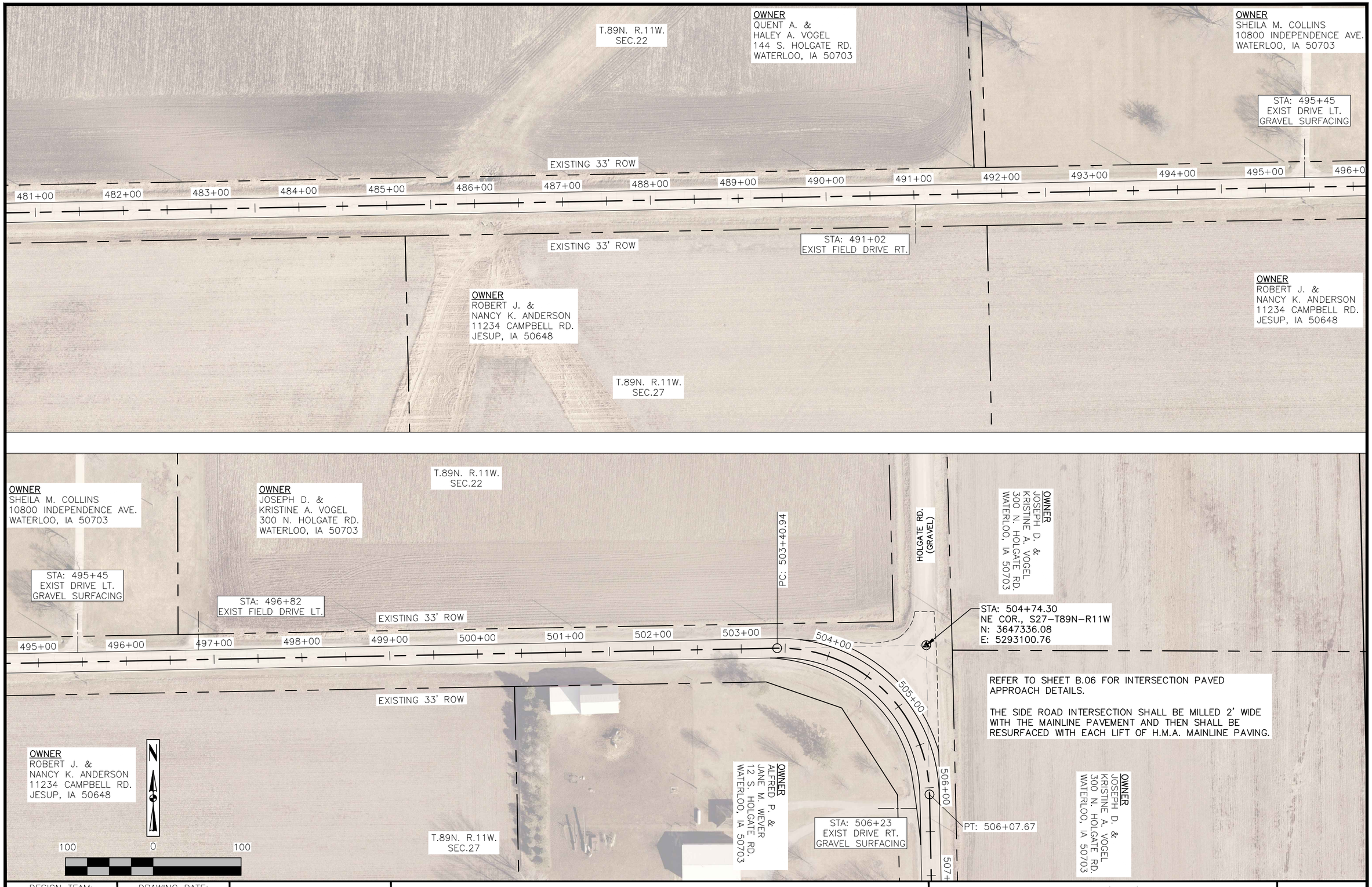
N

100 0 100

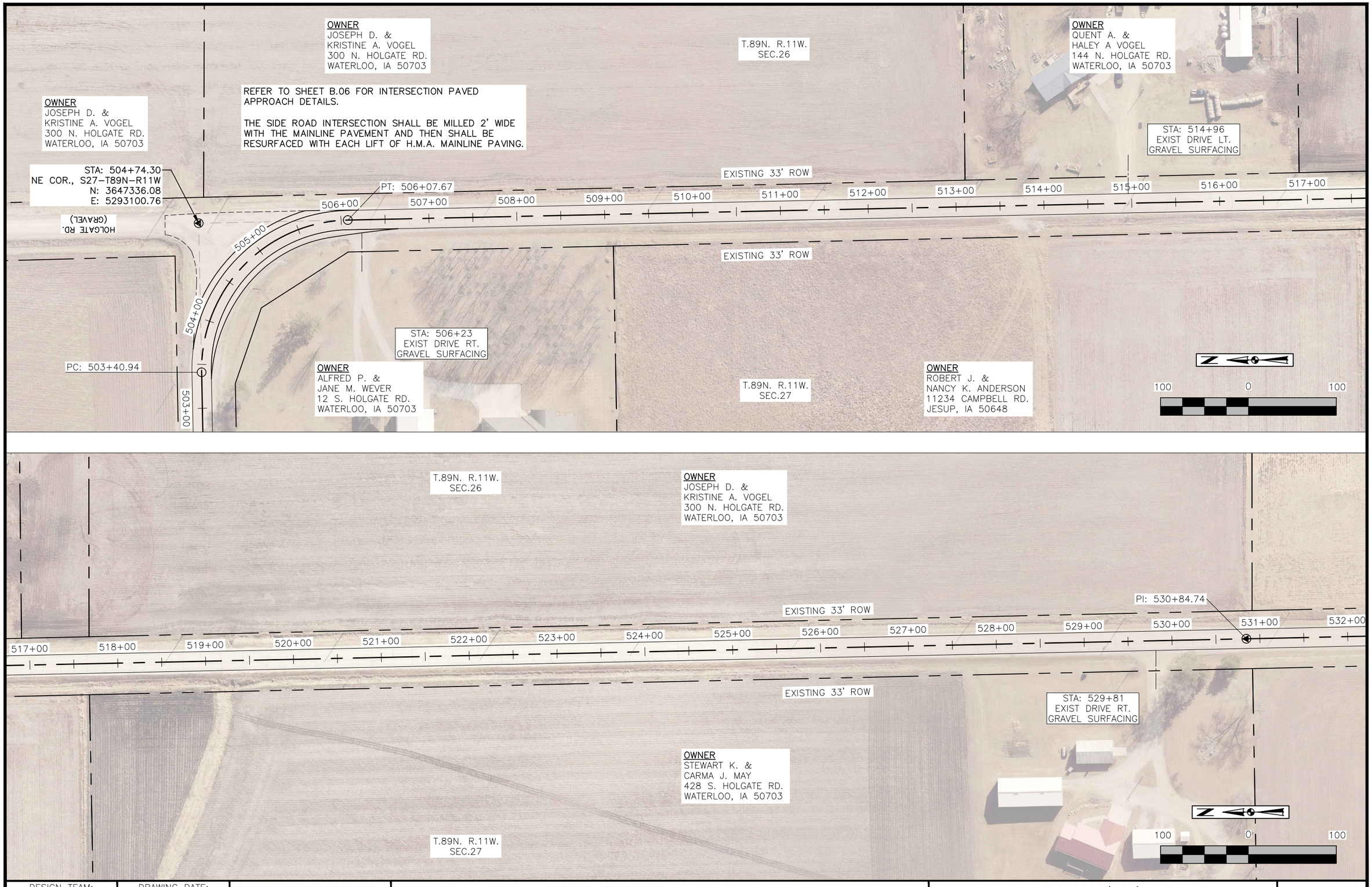
T.89N. R.11W.
SEC.27

DESIGN TEAM: CN, AK, CW	DRAWING DATE: 2/26/2026	BLACK HAWK COUNTY	H.M.A. Resurfacing with Milling	PROJECT NUMBER: FM-C007(184)--55-07	SHEET: D.03

7/9/2026 7:18:31 AM; G:\ADSK Civil\Civil3D Projects\PAV-Independence Rd-Holgate Rd-Osage Rd-5018\5018_SHT_Ds.dwg



DESIGN TEAM: CN, AK, CW	DRAWING DATE: 2/26/2026	BLACK HAWK COUNTY	H.M.A. Resurfacing with Milling	PROJECT NUMBER: FM-C007(184)--55-07	SHEET: D.04



DESIGN TEAM: CN, AK, CW	DRAWING DATE: 2/26/2026	BLACK HAWK COUNTY	H.M.A. Resurfacing with Milling	PROJECT NUMBER: FM-C007(184)--55-07	SHEET: D.05

OWNER
RICHARD E. COOK REV TRUST
1135 MAIN ST.
JESUP, IA 50648

T.89N. R.11W.
SEC.26

EXISTING 33' ROW

532+00 533+00 534+00 535+00 536+00 537+00 538+00 539+00 540+00 541+00 542+00 543+00 544+00 545+00 546+00 547+0

EXISTING 33' ROW

OWNER
RICHARD J. &
RAMONA M. ROTTINGHAUS
8734 INDEPENDENCE AVE.
WATERLOO, IA 50703

T.89N. R.11W.
SEC.27

N

100 0 100

T.89N. R.11W.
SEC.26

OWNER
RICHARD E. COOK REV TRUST
1135 MAIN ST.
JESUP, IA 50648

PT: 558+37.07

558+00

STA: 557+87
EXIST DRIVE LT.
GRAVEL SURFACING

557+00

OWNER
RPM FARMS CO.
1135 MAIN ST.
JESUP, IA 50648

REFER TO SHEET B.07 FOR INTERSECTION PAVED APPROACH DETAILS.

THE SIDE ROAD INTERSECTION SHALL BE MILLED 2' WIDE WITH THE MAINLINE PAVEMENT AND THEN SHALL BE RESURFACED WITH EACH LIFT OF H.M.A. MAINLINE PAVING.

PC: 555+65.63

EXISTING 33' ROW

547+00 548+00 549+00 550+00 551+00 552+00 553+00 554+00 555+00 556+00

HOLGATE RD.
(GRAVEL)

STA: 557+01.35
NE COR., S34-T89N-R11W
N: 3642038.09
E: 5293215.55

EXISTING 33' ROW

OSAGE RD.
(GRAVEL)

OWNER
RICHARD J. &
RAMONA M. ROTTINGHAUS
8734 INDEPENDENCE AVE.
WATERLOO, IA 50703

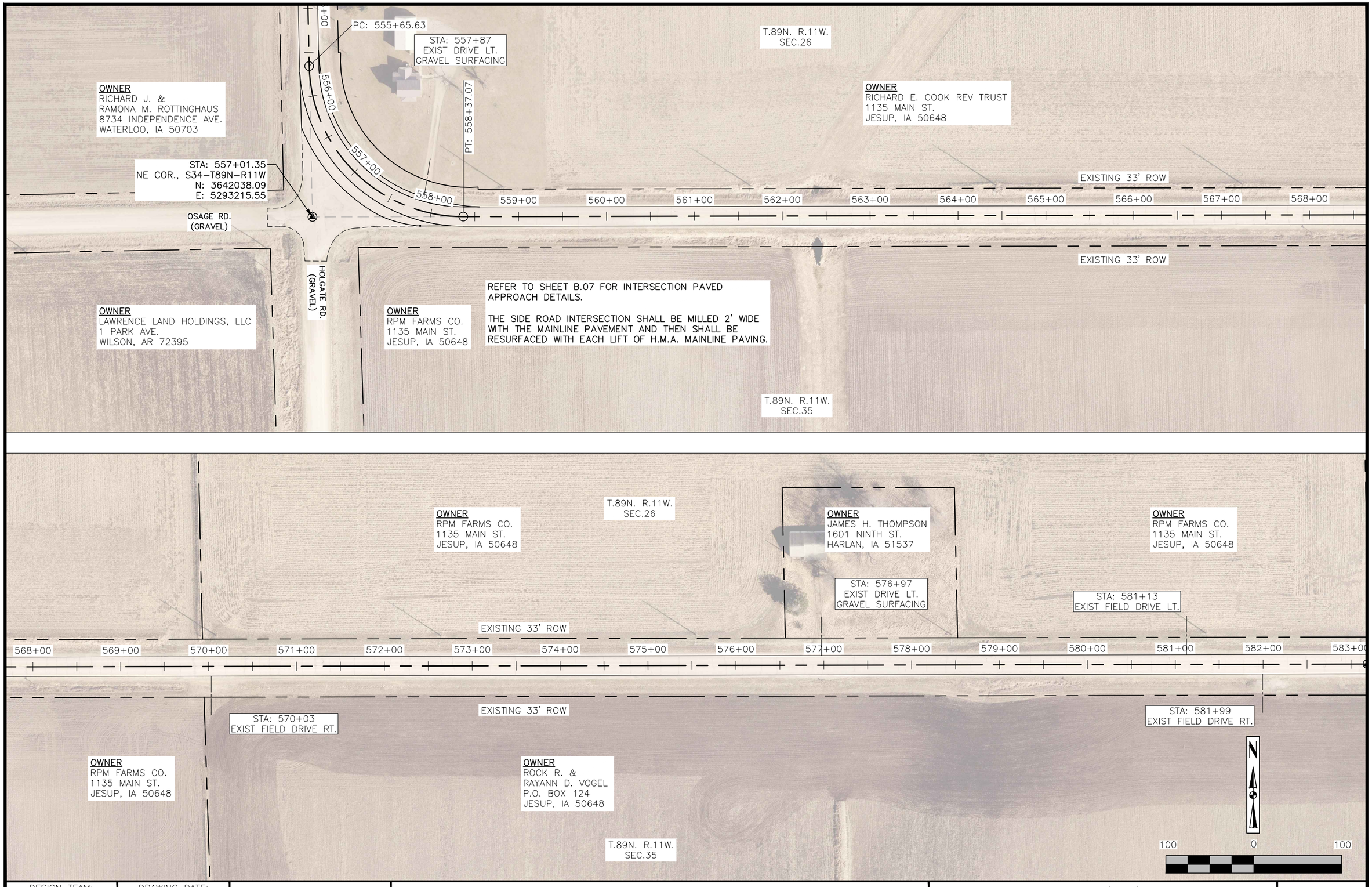
OWNER
LAWRENCE LAND HOLDINGS, LLC
1 PARK AVE.
WILSON, AR 72395

T.89N. R.11W.
SEC.27

N

100 0 100

DESIGN TEAM: CN, AK, CW	DRAWING DATE: 2/26/2026	BLACK HAWK COUNTY	H.M.A. Resurfacing with Milling	PROJECT NUMBER: FM-C007(184)--55-07	SHEET: D.06



DESIGN TEAM: CN, AK, CW	DRAWING DATE: 2/26/2026	BLACK HAWK COUNTY	H.M.A. Resurfacing with Milling	PROJECT NUMBER: FM-C007(184)--55-07	SHEET: D.07

T.89N. R.11W.
SEC.26

OWNER
RPM FARMS CO.
1135 MAIN ST.
JESUP, IA 50648

PI: 583+18.83

STA: 583+27
EXIST FIELD DRIVE LT.

STA: 590+47
EXIST DRIVE LT.
GRAVEL SURFACING

EXISTING 33' ROW

583+00 584+00 585+00 586+00 587+00 588+00 589+00 590+00 591+00 592+00 593+00 594+00 595+00 596+00 597+00 598+

EXISTING 33' ROW

OWNER
ROCK R. &
RAYANN D. VOGEL
P.O. BOX 124
JESUP, IA 50648

T.89N. R.11W.
SEC.35

T.89N. R.11W.
SEC.26

OWNER
RICHARD E. COOK REV TRUST
1135 MAIN ST.
JESUP, IA 50648

REFER TO SHEET B.08 FOR INTERSECTION PAVED APPROACH DETAILS.

THE SIDE ROAD INTERSECTION SHALL BE MILLED 2' WIDE WITH THE MAINLINE PAVEMENT AND THEN SHALL BE RESURFACED WITH EACH LIFT OF H.M.A. MAINLINE PAVING.

HASNER RD.
(GRAVEL)

OWNER
ELMER G. &
VALERIE R. WEBER
3607 JESUP RD.
JESUP, IA 50648

STA: 605+20
EXIST FIELD DRIVE LT.

STA: 606+27
EXIST FIELD DRIVE LT.

EXISTING 33' ROW

597+00 598+00 599+00 600+00 601+00 602+00 603+00 604+00 605+00 606+00 607+00 608+00 609+00 610+00 611+00 612+0

EXISTING 33' ROW

STA: 606+40
EXIST DRIVE RT.
GRAVEL SURFACING

PI: 609+69.31

OWNER
ROCK R. &
RAYANN D. VOGEL
P.O. BOX 124
JESUP, IA 50648

OWNER
ROCK R. &
RAYANN D. VOGEL
P.O. BOX 124
JESUP, IA 50648

N

100 0 100

T.89N. R.11W.
SEC.35

DESIGN TEAM: CN, AK, CW	DRAWING DATE: 2/26/2026	BLACK HAWK COUNTY	H.M.A. Resurfacing with Milling	PROJECT NUMBER: FM-C007(184)--55-07	SHEET: D.08



DESIGN TEAM: CN, AK, CW	DRAWING DATE: 2/26/2026	BLACK HAWK COUNTY	H.M.A. Resurfacing with Milling	PROJECT NUMBER: FM-C007(184)--55-07	SHEET: D.09



DESIGN TEAM: CN, AK, CW	DRAWING DATE: 2/26/2026	BLACK HAWK COUNTY	H.M.A. Resurfacing with Milling	PROJECT NUMBER: FM-C007(184)--55-07	SHEET: D.10

108_23A
8/15/22

Traffic Control Plan

Traffic control devices, procedures, layouts, signing, and pavement markings installed within the limits of this project shall conform to the Manual on Uniform Traffic Control Devices for Streets and Highways, as adopted by the Department per 761 of the Iowa Administrative Code (IAC), Chapter 130.

Traffic control on this project shall be in accordance with the Iowa Department of Transportation Standard Road Plans. For additional information, refer to the current Standard Specifications for Traffic Control.

This project shall be CLOSED to thru traffic during all phases of construction. The Contractor is responsible for all traffic control in accordance with Road Standard TC–252, Situation 5, and any general notes that apply. The Contractor will not be required to supply portable dynamic message signs on this project.

Immediately prior to pavement scarification, the Contractor shall place bump signs at each direction of travel at all scarified header locations to warn traffic of the milled header. The signs shall be left in place until the bumps have been removed. Two (2) signs shall be placed at each header location (facing each direction).

The Contractor shall maintain access to the project at all times for local and emergency traffic.

A marked detour shall be established, maintained, and removed by Black Hawk County. A minimum of 5 days notice shall be given to the County prior to the start of the project, any changes to the detour, and/or the completion of the project in order to allow the County to schedule the required detour work.

The Contractor shall also be required to provide any applicable special signs for work zones as part of Standard Road Plan SI–881 at all access points for this project.

As directed by the Engineer, the Contractor shall cover all signing that is not in use.

Storage of equipment by the Contractor during non–working hours will not be allowed within the R.O.W. limits. If the Contractor needs to have equipment parked on site, it is their responsibility to find an area away from the traveled portion of the roadway.

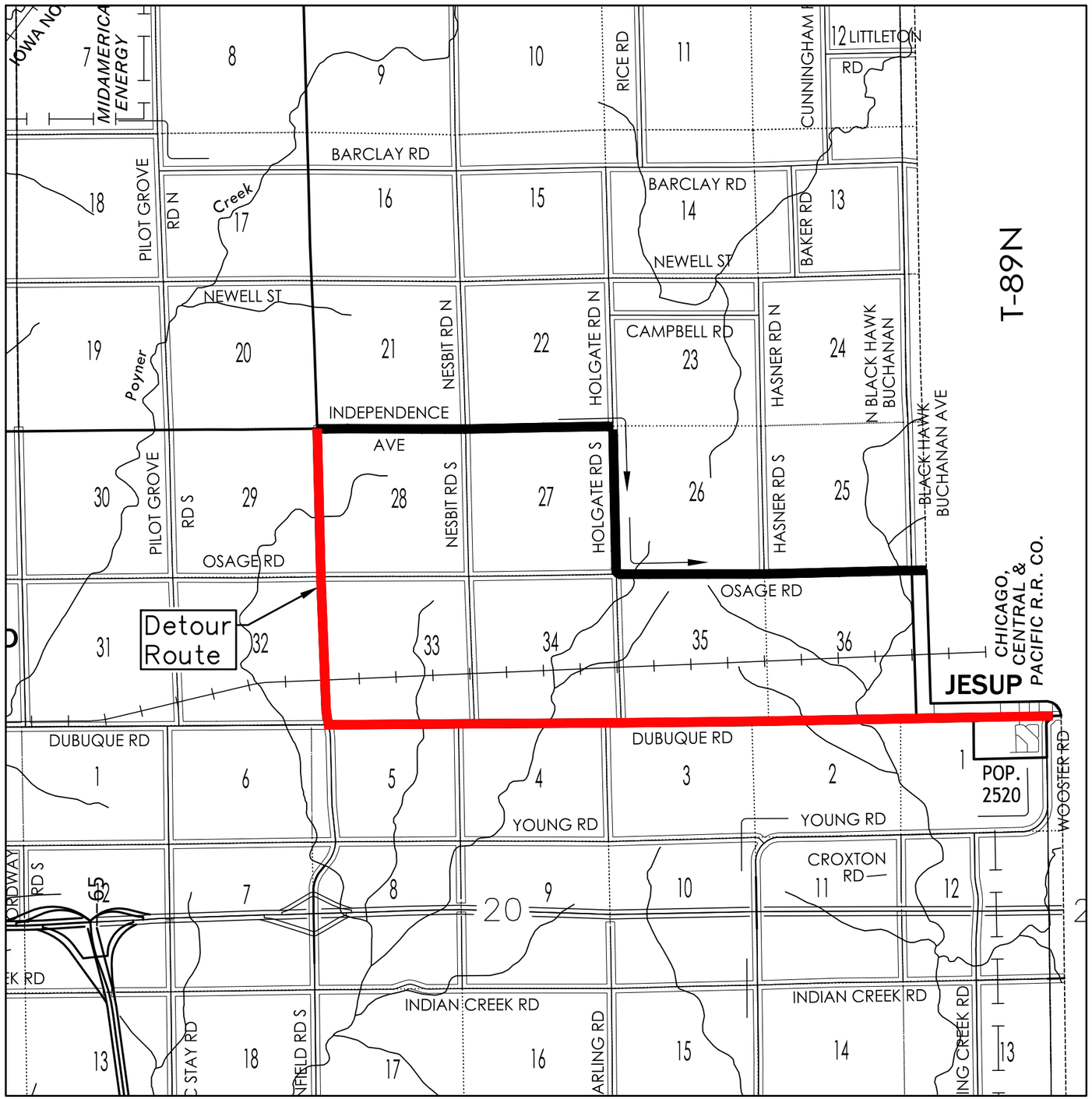
The Contractor shall be responsible for all installation, preservation, maintenance, and removal of necessary safety devices per these plans.

Proposed sign spacing may be modified as approved by the Engineer, to meet existing field restrictions or to prevent obstruction of the motorist's view of permanent signing.

Proposed changes in the traffic control plan, (including layout sheets) shall be reviewed with the County Engineer before the changes are made.

A written traffic control plan shall be submitted to the Engineer in order to coordinate construction. The proposed traffic control plan will be due on or before the pre–construction meeting. If the Contractor has proposed changes to any phase of work, they shall submit a traffic control plan revision to the Engineer prior to starting field work.

The Prime Contractor shall be responsible for the daily traffic control diary and have the appropriate certified staff to accomplish monitoring the traffic control.



TRAFFIC CONTROL PLAN & DETOUR ROUTE

DESIGN TEAM: CN, AK, CW	Drawing Date: 2/26/2026	BLACK HAWK COUNTY	H.M.A. Resurfacing with Milling	PROJECT NUMBER: FM–C007(184)––55–07	SHEET: J.01