

PROJECT MANUAL

FOR

**2023 GREENVILLE SIDEWALK
REPLACEMENT PROGRAM**

**411 S. LAFAYETTE STREET
GREENVILLE, MI 48838**

MONTCALM COUNTY, MICHIGAN

January 19, 2023

Project Number: 401-444-800.866

PREPARED BY:

CITY OF GREENVILLE
ENGINEERING DEPARTMENT
411 S. LAFAYETTE
GREENVILLE, MICHIGAN 48838
(616) 754-5645

CITY OF GREENVILLE

“Danish Festival City”



411 SOUTH LAFAYETTE STREET
GREENVILLE, MICHIGAN 48838
(616) 754-5645 FAX (616) 754-6320

NOTICE TO BIDDERS

2023 Greenville Sidewalk Replacement Program

The City of Greenville will receive sealed bids for the removal and replacement of approximately 888 square feet of existing sidewalk that are to be removed and replaced. In addition there are 400 diameter inches of roots to be removed from under the removed sidewalks. An additive alternate will be considered separately for the removal and replacement of 336 square feet of 4-inch thick concrete under a covered pavilion in Veterans Park. Bids will be received until Tuesday, April 11, 2023 at 2:00 p.m., in the City Hall Conference Room. All bids will be publicly opened and read aloud at that time.

Specifications and information for bidders may be obtained at the City Clerk's Office at Greenville City Hall, 411 S. Lafayette, Greenville, Michigan 48838 or on-line at www.greenvillemi.org.

NORICE RASMUSSEN
Clerk-Finance Director

2023 GREENVILLE SIDEWALK REPLACEMENT PROGRAM

CITY OF GREENVILLE MONTCALM COUNTY, MICHIGAN

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**SPECIFICATIONS
FOR
2023 Greenville Sidewalk Replacement Program**

INSTRUCTIONS TO BIDDERS

SCOPE OF WORK:

BASE BID: The Work is all in the northwest section of the City as shown in green on the Map included with photos at the end of these specifications.

Remove and replace sidewalks identified on the enclosed map and following tables by address. These addresses, with minor exceptions, are to be replaced to remove tripping hazards on public sidewalks caused by tree roots. The Contractor is to sawcut (if necessary) and remove the existing sidewalks that will be marked by the City Engineer prior to construction and any roots to a depth of 8-inches below a string-line between the surface of adjoining slabs that are to remain. Disturbed soil shall be compacted and sand backfill added and compacted, as necessary, to bring the underlying soil to a depth of 4-inches below the string-line described above. New sidewalk shall be formed, poured and finished according to these specifications. Adjacent soils shall be backfilled to subgrade level with removed materials and topsoil removed shall be placed in the gap and grass seed scattered appropriately so that new grass matches the appearance of existing grass.

Repairs and replacement of the sidewalks is generally the responsibility of the property owner. However, if damage to the walks was caused by City activity or trees between the sidewalk and edge of road, the City is responsible. This Contract is for the replacement of City-responsible portions of the walk, so the basis for the BID are the quantities for the addresses listed on page 6.

The City intends to offer property owners the opportunity to add their Work to this Contract if they choose to enter into an Agreement with the City by June 15, 2023. The Contractor can expect a Change Order to be issued for the quantities of Work based on those Agreements. The Change Order may include an extension of time for the additional Work. The addresses that could be associated with a potential Change Order are listed on pages 7 - 9.

Photos of the Contract Sidewalks by address are included as pages 28 - 31.

ADDITIVE ALTERNATE – VETERANS PARK PAVILION: This is similar work as above, but will take place under an open pavilion roof. It will be paid for with other funds and cannot begin until after July 1, 2023.

BIDDER'S INVESTIGATION: Prior to submission of the bid, all bidders shall make, and shall be deemed to have made a careful examination of the site (shown on the enclosed maps), the Scope of Work, the specifications included herewith, and shall have become informed as to the location and nature of the proposed work, general existing conditions, and all other matters that may affect the cost and the time of completion of the contract.

WORKMANSHIP / GUARANTEE: All construction shall be completed in a first-class workmanlike manner. The City may perform full-time inspection of the site, and the contractor will guarantee all materials and workmanship for a period of one (1) year from the date of substantial completion. The contractor shall request a completion certificate when all concrete work is completed. The warranty period shall begin on the date of the certificate of substantial completion.

SCOPE OF WORK BY ADDRESS:

The following addresses are included in the BID quantities and form the basis for the CONTRACT:

House Number	Direction	Street	Frontage Street	Offset	Width	Length	Area	Remove Sidewalk Area	Root Remove dia	Sidewalk, 4 inch
319	S	Hillcrest		4	4	10	40	40	15	40
319	S	Hillcrest		4	4	10	40	40	15	40
822	W	Orange		2.5	4	17	68	68	36	68
100	N	Olsen	W Grove	2.25	4	15	60	60	12	60
207	N	Bower		2	4	4	16	16	12	16
216	S	Bower		2	4	4	16	16	24	16
219	W	Cass	Barry	2	4	19	76	76	18	76
900	W	Cass	Luray	2	4	10	40	40	15	40
712	W	Cass		2	4	4	16	16	15	16
400	W	Grove		2	4	7.8	31.2	31	12	31
1002	W	Grove		2	4.5	6	27	27	15	27
1008	W	Grove		2	4	10	40	40	15	40
301	S	Barry		1.75	4.5	12	54	54	36	54
301	S	Barry		1.75	4.5	12	54	54	36	54
103	N	Bower		1.75	4	8	32	32	15	32
207	N	Bower		1.75	4	4	16	16		16
609	W	Cass		1.75	4	14.5	58	58	8	58
402	W	Grove		1.75	4	12	48	48	20	48
604	W	Grove		1.75	4	8	32	32	18	32
1002	W	Grove		1.75	4	5	20	20	15	20
1002	W	Grove		1.75	4	5	20	20	15	20
425	W	Montcalm		1.75	4	6	24	24	18	24
621	W	Montcalm		1.75	4	15	60	60	15	60
CONTRACT TOTALS								888	400	888

POTENTIAL CHANGE ORDER ADDRESSES

The following addresses are not included in the BID quantities and form the basis for a potential CHANGE ORDER:

Section	House Number	Direction	Street	Offset	Width	Length	Area	Remove Sidewalk Area	Root Remove dia	Sidewalk, 4 inch	Sidewalk, 6 inch
8	205	S	Greenville	1.75	4	4	16	16		16	
9	520	N	Barnard		4	40	160	160		160	
9	215	S	Barry	1.5	4	4	16	16	20	16	
9	301	S	Barry	1.5	4.5	11.7	52.65	53	30	53	
9	1206	W	Blackburn	2.5	4	4	16	16	2	16	
9	1218	W	Blackburn	1.5	4	8	32	32		32	
9	105	N	Bower		4	5	20	20	20	20	
9	105	S	Bower	2	4	8	32	32	20	32	
9	123	S	Bower		4	16	64	64		64	
9	123	S	Bower		4	4	16	16		16	
9	319	W	Cass		4.5	4	18	18		18	
9	524	W	Cass	1.75	4	12	48	48		48	
9	704	W	Cass		4	8	32	32	15	32	
9	821	W	Cass	5	4	9.5	38	38		38	
9	218	W	Charles	1.5	4	24	96	96		96	
9	117	S	Cross	2	4	12	48	48		48	
9	200	W	Grove		4.5	4	18	18		18	
9	604	W	Grove		4	5	20	20		20	
9	1009	W	Grove	2	4	9	36	36	20	36	
9	1030	W	Grove	2.25	4	10	40	40	24	40	
9	615	N	Lafayette	2	4	10	40	40	20	40	
9	301	W	Montcalm	2.5	4	6.4	25.6	26	15	26	
9	322	N	Irving	4	3	6	18	18		18	
9	322	N	Irving	4	3	10	30	30		30	
9	614	W	Montcalm		4	12	48	48		0	48
9	614	W	Montcalm		4	10	40	40		0	40
9	805	W	Montcalm		4	5	20	20	30	20	
9	805	W	Montcalm		4	4	16	16		0	16

POTENTIAL CHANGE ORDER ADDRESSES (Continued)

Section	House Number	Direction	Street	Offset	Width	Length	Area	Remove Sidewalk Area	Root Remove dia	Sidewalk, 4 inch	Sidewalk, 6 inch
9	1010	W	Montcalm	1.75	4	5	20	20	20	20	
9	1010	W	Montcalm	1.75	4	4	16	16	20	16	
9	1112	W	Montcalm	1.5	4	5	20	20		20	
9	100	N	Olsen	2.25	4	10	40	40	12	40	
9	503	W	Orange	1.5	4	8.5	34	34	24	34	
10	200	E	Cass	1.5	5	5	25	25		25	
10	115	E	Coffren	2.25	4	16	64	64	30	64	
10	202	E	Coffren	2	4	9	36	36	20	36	
10	202	E	Coffren		4	4	16	16		16	
10	208	E	Coffren	1.5	4	4	16	16	10	16	
10	1010	N	Lafayette	1.75	5	6	30	30		30	
10	1010	N	Lafayette	1.5	5	5.5	27.5	28		28	
10	400	E	Montcalm	2	4	12	48	48	18	48	
10	408	E	State		4	12	48	48			48
10	418	E	State	4	4	10	40	40	18	40	
10	306	N	Webster		4	20	80	80		64	16
10	121	S	Webster	1.5	4	16	64	64		64	
10	309	S	Webster	3	4	16	64	64	15	64	
10	309	S	Webster	2.5	4	12	48	48	15	48	
10	309	S	Webster	2.5	4	16	64	64	15	64	
10	309	S	Webster	2	4	8	32	32	15	32	
10	309	S	Webster		4	12	48	48		48	
15	219	E	Benton	2	4	23	92	92		92	
15	811	E	Brierwood	2	4	25	100	100	36	100	
15	811	E	Brierwood	1.5	4	20	80	80	36	80	
15	906	E	Brierwood	1.5	4	5	20	20		20	
15	418	S	Cedar		4	5	20	20		20	
15	418	S	Cedar		4	4.7	18.8	19		19	
15	922	S	Cedar		4	8	32	32		32	
15	606	E	Fairplains	1.5	4	13	52	52	15	52	

POTENTIAL CHANGE ORDER ADDRESSES (Continued)

Section	House Number	Direction	Street	Offset	Width	Length	Area	Remove Sidewalk Area	Root Remove dia	Sidewalk, 4 inch	Sidewalk, 6 inch
15	700	E	Fairplains	1.5	4	10	40	40	24	40	
15	908	E	Judd		4	7	28	28		28	
15	910	E	Judd		4	13.6	54.4	54		54	
15	918	E	Judd		4	5	20	20		20	
15	918	E	Judd		4	13	52	52		52	
16	726	S	Baldwin	1.5	4	8.3	33.2	33	20	33	
16	116	W	High	1.5	4	8	32	32	18	32	
16	209	W	High		4	16	64	64		64	
16	209	W	High		4	4	16	16		16	
16	209	W	High		4	4	16	16		16	
16	215	W	High		4	12	48	48		48	
16	817	S	Lafayette		4	8.5	34	34		34	
16	401	S	Luray	1.5	4	15	60	60	18	60	
16	401	S	Luray	1.5	4	15	60	60	18	60	
16	908	S	Marvel	1.5	4	10	40	40	18	40	
16	806	W	Merry Lane	1.75	4	16	64	64	30	64	
16	808	W	Merry Lane		4	4	16	16	18	16	
16	808	W	Merry Lane		4	4	16	16		16	
16	808	W	Merry Lane		4	8	32	32		32	
16	812	W	Oak	1.5	4	12.3	49.2	49	24	49	
16	818	W	Oak	1.5	4	20	80	80	24	80	
16	823	W	Washington		4	5.5	22	22		22	
Owner Responsibility Totals								3,228	747	3,228	168

2023 Greenville Sidewalk Replacement Program
Instructions to Bidders
Bid Opening: April 11, 2023

SUPERVISION: The contractor shall have a thoroughly competent supervisor in charge of the work at all times during construction. Anyone deemed incapable to supervise by the City shall be replaced immediately upon request by someone who is satisfactory.

LABOR, MATERIALS & EQUIPMENT: The contractor shall furnish all labor, materials, tools, and other equipment necessary to properly complete the work according to the specifications, as well as any safety devices the contractor deems necessary for safe operations, or as required by law.

INSURANCE: The contractor shall not commence, nor allow a sub-contractor to commence, work under this contract until he has obtained all insurance required under this heading and such insurance has been approved by the owner.

1. Workmen's Compensation Insurance as required by Michigan Workmen's Compensation Laws.
2. Contractor's Public Liability Insurance shall be furnished for \$25,000 limits for injuries to any one person and \$50,000 for any one accident.
3. Contractor's Property Damage Insurance shall be furnished for \$5,000 limits for damages as a result of any one accident and \$10,000 limits as an aggregate.

All policies required shall be written by a company licensed to do business in the State of Michigan. The City shall be named as an additional named insured on all liability policies. A copy of the policy shall be submitted to the City prior to beginning the work. The Contractor shall notify the City immediately of any damages at the project site, whether or not the contractor is liable.

PERFORMANCE AND PAYMENT BONDS:

The successful bidder will be required to furnish PAYMENT and PERFORMANCE BONDS in the amount of the CONTRACT as required in the previous paragraph. The Bonds shall remain in effect until the final acceptance of the project. BONDS shall be supplied through a company that is licensed to do business in the State of Michigan on a form that is consistent with the industry standard of practice.

TRAFFIC SAFETY: It is not necessary to close sections local streets to traffic. Minimum traffic control measures are shown in these specifications. Pedestrian advance warning signs or detours are not necessary.

The exception to this is along M-57 in front of the National Guard Armory. The City is seeking a temporary easement from the Armory to work from the private side. Traffic control in M-57 will be necessary whenever the through lane is blocked during the work. A Traffic Control sequence in this circumstance is included in these specifications. The work can be done under the City's Annual Permit so the Contractor is not required to obtain a separate permit. The Contractor shall ensure that employees working within the right of way are compliant with the MDOT work zone provisions included in these specifications.

PROTECTION OF THE WORK: The Contractor shall be responsible to protect the Work against damage during the early curing process. Any markings or impressions found in sidewalk sections will be subject to removal and replacement at the Contractor's expense.

LICENSING & PERMITS: The contractor shall comply with all local, state and federal regulations and statutes, and shall be licensed to perform work in the State of Michigan.

REFERENCES: All bidders must submit a list of references, which will be a consideration in the award of the contract.

2023 Greenville Sidewalk Replacement Program
Instructions to Bidders
Bid Opening: April 11, 2023

CONTRACT TIME: Work may begin following a Notice to Proceed and as weather allows. No work shall remain open through the winter months. All Contract work shall be complete by September 30, 2023 or as extended by Change Order.

BIDS: All bids must be submitted on the attached bid form and be received in the Office of the City Clerk at City Hall, 411 S. Lafayette Street, Greenville, Michigan 48838, on or before Tues, April 11, 2023 at 2:00 p.m. A bid will be considered complete with the submittal of the four pages (pages 13-16) of the Bid Proposal, signed and filled out, with the acknowledgement of any addenda.

BID ENVELOPE LABELING: Please mark "SIDEWALKS" on the outside of the envelope and submit to the City Clerk's Office prior to the bid opening.

ADDENDA: If addenda are required on this project, they will be posted to the website www.greenvillemi.org and distributed to known interested parties no later than 12:00 p.m. (noon) on Thursday, April 6, 2023. It is the responsibility of the bidder to check for addenda before the bid and acknowledge any addenda on the bid form.

QUESTIONS: Questions may be directed to Doug Hinken, in the City Engineer office at (616) 754-5645 or dhinken@greenvillemi.org.

RIGHTS RESERVED BY THE OWNER: The City of Greenville reserves the right to accept or reject any or all bids. The competency and responsibility of bidders will be considered in awarding contracts. The Owner does not obligate himself to accept the lowest or any other bid. The Owner reserves the right to waive any informality in any or all bids. The Owner reserves the right to make additions or deletions from the quantity of work to be performed.

CHANGES TO THE WORK: The City may add or delete work as necessary, at Contract unit prices, to complete the Work within the appropriate budget. The City intends to offer the Contract unit prices to owners who will acknowledge their interest to be included by entering into an agreement with the City prior to April 15, 2023.

The Contractor can expect a CHANGE ORDER to add work to the Contract after this date. No additional work shall be done without the written direction of the Engineer and agreement of the Contractor. Appropriate extensions of time will be issued as part of the Change Order if it is deemed necessary due to added Work.

CHANGES TO CONTRACT PRICE: If unforeseen conditions are found that are not covered under the Contract Unit Prices, a reasonable, negotiated price adjustment may be considered. Any price adjustments will be documented and allowed in writing if they are deemed necessary.

PROGRESS PAYMENTS: The City Engineer shall approve completed work and submit progress estimates for the Contractor's signature by the first and fifteenth of the month. Payments are generally made on or near the tenth and twenty-fifth day of each month.

PROTECTION OF UTILITIES AND INDEMNIFICATION: It is the Contractor's responsibility to contact Miss Dig, as appropriate and conduct all operations to prevent any damage to underground utilities, including sprinkler systems. The Contractor shall indemnify the City from any and all damages to utilities caused by the Contractor's operations.

2023 Greenville Sidewalk Replacement Program
Instructions to Bidders
Bid Opening: April 11, 2023

HOLIDAY WORK: No be allowed on the following holidays:

1. Memorial Day
2. Independence Day
3. Danish Festival Third weekend in August
4. Labor Day

WEEKEND WORK: Weekend work will not be allowed.

IRRIGATION SYSTEMS: There may be irrigation lines near the work area. The City will attempt to contact the homeowner to mark their irrigation lines. If marked the Contractor shall use due care to work around the irrigation lines. If an irrigation line is broken and the Contractor has demonstrated due care, responsibility for repairing the irrigation line will not be borne by the Contractor.

P.A. 517 COMPLIANCE, CERTIFICATION OF NO IRAN LINKED BUSINESS:

The BIDDER will need to certify that it is not an "Iran linked business" by signing the certification on page 12. An "Iran linked business" means either of the following:

- (i) A person engaging in investment activities in the energy sector of Iran, including a person that provides oil or liquefied natural gas tankers or products used to construct or maintain pipelines used to transport oil or liquefied natural gas for the energy sector of Iran.
- (ii) A financial institution that extends credit to another person, if that person will use the credit to engage in investment activities in the energy sector of Iran.

BID PROPOSAL

Proposal of _____ (hereinafter called "BIDDER"), organized and existing under the laws of the State of Michigan doing business as * _____ to the City of Greenville (hereinafter called "OWNER").

In compliance with the Advertisement for Bids, BIDDER hereby proposes to perform all WORK for construction of the **2023 GREENVILLE SIDEWALK REPLACEMENT PROGRAM** in strict accordance with the CONTRACT DOCUMENTS, within the time set forth therein, and at the prices stated below.

By submission of this BID, each BIDDER certifies, and in the case of a joint BID each party thereto certifies as to his own organization, that this BID has been arrived at independently, without consultation, communication, or agreement as to any matter relating to this BID with any other BIDDER or with any competitor.

CERTIFICATION

By submission of this bid, each bidder certifies, and, in the case of a joint bid, each party certifies as to his/her own organization, that this bid has been arrived at independently, without consultation, communication, or agreement as to any matter relating to this bid with any other bidder or with any competitor.

Further, each bidder also certifies that he/she has examined all sections of the contract documents and the location of the work described herein and is fully informed as to the nature of the work and the conditions relating to its performance.

Bidder understands that the quantities shown are approximate only and are subject to either increase or decrease. Furthermore, the bidder understands that there may be additions or deductions to the items of work. Price adjustments based on added or deleted quantities will be based on the unit prices as stated herein.

The bidder hereby agrees to commence the WORK under this contract within 10 days after the date of the NOTICE TO PROCEED, weather permitting, and complete the project as weather permits, in accordance with the schedule shown in the instructions to Bidders, unless the period of completion is extended by mutual agreement.

The bidder shall include and shall be deemed to have included, in his/her bid, all Michigan sales and use taxes currently imposed by legislative enactment and as administered by the Michigan Department of Revenue on the bid date.

The undersigned further agrees to so such extra work as may be authorized, in writing, by the Owner, prices for which are not given in this proposal. Compensation shall be made on the basis agreed upon, in writing, before such work is begun.

The bidder shall base bids on the materials or products specified or shown on the drawings.

All WORK described in the contract documents and required for completion of the project shall be considered to be incidental unless designated as a pay item on the Bid Form. Pay items shall not be used for any components installed for the convenience/or advantage of the contractor regardless of the fact that the type of component is described on the bid sheet.

*Insert “a corporation”, “a partnership”, or “an individual” as applicable.

BID PROPOSAL FORM
2023 GREENVILLE SIDEWALK REPLACEMENT PROGRAM

TO: Office of the City Clerk
 411 S. Lafayette Street
 Greenville, Michigan 48838

BASE BID					
Item No.	Item	Estimated Quantity	Unit	Unit Price	Total Cost
1	Remove Sidewalk	888	Sft		
2	Root Remove	400	Diameter Inch		
3	Sidewalk, 4"	888	Sft		
4	Sidewalk, 6" (Miscellaneous Qty)	100	Sft		
5	Traffic Control, Local Street	19	Ea		
6	Traffic Control, State	1	Ea		
TOTAL BASE BID					
ADDITIVE ALTERNATE - VETERANS PARK PAVILION					
Item No.	Item	Estimated Quantity	Unit	Unit Price	Total Cost
7	Remove Conc	336	Sft		
8	Conc Slab, 4"	336	Sft		
TOTAL BASE BID					

Acknowledgement of Addenda: _____

FIRM NAME: _____ ADDRESS: _____

TELEPHONE: _____

EMAIL: _____

DATED: _____

SIGNATURE: _____

P.A. 517 Compliance Statement. By signing this BID, the BIDDER is certifying that it is not an Iran Linked Business as defined on page 8 of these specifications.

Signature: _____

Date: _____

THE CITY RESERVES THE RIGHT TO ACCEPT OR REJECT ANY OR ALL BIDS.

BIDDER REFERENCES

BRIEF DESCRIPTION OF REFERENCE PROJECT 1:

Project Owner _____

Owner Contact _____

Owner Address _____

Owner Telephone _____

Owner Email Address _____

BRIEF DESCRIPTION OF REFERENCE PROJECT 2:

Project Owner _____

Owner Contact _____

Owner Address _____

Owner Telephone _____

Owner Email Address _____

BRIEF DESCRIPTION OF REFERENCE PROJECT 3:

Project Owner _____

Owner Contact _____

Owner Address _____

Owner Telephone _____

Owner Email Address _____

SAMPLE AGREEMENT
(FOR INFORMATION ONLY, DO NOT SIGN THIS)

THIS AGREEMENT, made this ____ day of ____ 2023 by and between the **City of Greenville**, hereinafter called “OWNER” and _____ doing business as a _____ and located at _____ hereinafter called “CONTRACTOR”.

WITNESSETH: That for and in consideration of the payments and agreements hereinafter mentioned:

1. The CONTRACTOR will commence and complete the construction of

2023 GREENVILLE SIDEWALK REPLACEMENT PROGRAM

2. The CONTRACTOR will furnish all of the material, supplies, tools, equipment, labor and other services necessary for the construction and completion of the PROJECT described herein.

3. The CONTRACTOR will commence the work required by the CONTRACT DOCUMENTS within 10 calendar days after the date of the NOTICE TO PROCEED, weather permitting and will have the Project complete the same by June 30, 2023 unless the period for completion is extended otherwise by the CONTRACT DOCUMENTS.

4. The CONTRACTOR agrees to perform all of the WORK described in the CONTRACT DOCUMENTS and comply with the terms therein for the sum of \$_____ or as shown in the BID schedule.

5. The term “CONTRACT DOCUMENTS” means and includes the following:

- A. Advertisement For BIDS
- B. Information For BIDDERS
- C. BID
- D. AGREEMENT
- E. NOTICE OF AWARD

F. NOTICE TO PROCEED

G. CHANGE ORDERS

H. BID DOCUMENTS

I. ADDENDA:

6. The OWNER will pay to the CONTRACTOR in the manner and at such times as set forth in the General Conditions such amounts as required by the CONTRACT DOCUMENTS.

7. This Agreement shall be binding upon all parties hereto and their respective heirs, executors, administrators, successors, and assigns.

IN WITNESS WHEREOF, the parties hereto have executed, or caused to be executed by their duly authorized officials, this Agreement in two (2) copies each of which shall be deemed an original on the date first above written.

OWNER:

City of Greenville

BY: _____

Name: George M. Bosanic

Title: City Manager

(SEAL)

ATTEST:

Name: Douglas W. Hinken

Title: City Engineer

CONTRACTOR:

BY: _____

Name: _____

Address: _____

(SEAL)

ATTEST:

Name: _____

Title: _____

SIDEWALK SPECIFICATIONS

Sidewalk Specifications:

Location and Design

Locations and scope of work are defined by the attached drawings and lists.

Removals

Existing Sidewalk:

Concrete removal shall be conducted in a way to minimize damage to adjacent sidewalk, curb, trees, pavement etc. This should include sawcutting where necessary. The Contractor shall notify the Engineer prior to doing any work if there is pre-existing damage to adjacent surfaces, otherwise the Contractor will be responsible for replacing damaged sections at his own expense. Damaged sections are to be replaced in their entirety.

Tree Roots:

City-owned sidewalks that are to be replaced under this Project are almost all going to involve root removal. Roots shall be chipped, removed or ground from the vertical face of the tree to 6-inches beyond the edge of the sidewalk. Portions of the trunk may also need to be chipped or ground if it slopes away from the vertical face.

The method of removal is up to the Contractor, but roots must be removed to a minimum of 2-inches below the bottom of the proposed walk. Wood material must be removed from the site.

Subgrade Preparation

The Contractor will be responsible for preparation of the subgrade. Existing subgrade material, but not topsoil, can be used as backfill. If additional material is needed it shall be sand. The Contractor shall compact the subgrade to 95% of maximum unit density of the in-place soil, prior to pouring of the concrete. Any additional subgrade material needed shall be included in the unit price for the work. The City may elect to periodically test compaction. The Contractor shall make corrections as necessary without additional compensation. The Contractor will be billed for any failing tests and provide any additional compactive effort needed to achieve appropriate density.

Ground temperatures shall not be below 40° prior to pouring.

Forms

Forms for the work shall be of lumber, 1½-inches thick or of steel of equal strength. They shall be clean and free from old concrete from previous pours. Forms shall be rigidly held to line by stakes or braces. All division plates shall be removed before the pouring of concrete.

Thickness and Proportions

The sidewalks shall be 4-inches thick throughout the Project, unless the section is in a driveway. Driveway sections need to be 6-inches thick. The concrete mix shall be at least 6 sacks of air entrained cement and shall be proportioned to achieve a minimum strength of 3,500 pounds per square inch with a 28 day curing time. It shall be mixed using limestone aggregates and have no added chloride.

Testing

The City of Greenville reserves the right to test the subgrade density and concrete for air entrainment, slump, temperature and strength. The City of Greenville will bear the costs of such testing, except the contractor will pay for failing tests and corrective measures.

Placing and Finishing

Concrete for sidewalks shall be placed immediately after mixing. It shall be tamped and struck off with a template and shall be floated with a wood float until the surface has a true contour. Care shall be taken not to bring to the surface an excess of water and fine sand by over-finishing. The final finish shall consist of brushing with a calcimine brush.

Air temperatures shall not be below 40° during the pouring, finishing and initial set of the concrete.

Expansion Joints

Expansion joints are likely not necessary for most of these repairs. If any pour exceeds 40 feet in length, a ½-inch expansion joint of pre-molded strips of bitumen-treated fiber or mineral aggregate shall be installed across the walk.

Jointing and Edging

Joints shall be cut to form squares according to the width of the sidewalk. Both edges of walk shall be edged. The edges and joints for sidewalks shall be rounded to a 1/4-inch radius.

Curing

After initial set of the concrete and within 24 hours, all new exposed concrete surfaces shall be sprayed with white membrane curing compound. Extreme care shall be taken to avoid overspray onto adjacent surfaces. The Contractor shall be responsible for cleanup of any oversprayed membrane material.

Blankets shall be provided for the first 24 hours if temperatures fall below freezing within that time frame.

Form Removal and Clean-up

After the forms have been removed and cleaned, the contractor shall load, haul and place City compost material from the 1150 Owen Mumaw Drive compost area to a depth of 4 inches along each edge of the sidewalk. The Contractor will not be charged for the compost material and all associated costs shall be included in the price for the finished walk. All adjacent areas that were disturbed by the Contractors operation shall be raked free of debris such as stones, sticks, roots, uprooted plant materials etc. The Contractor shall place a suitable mix of seed, fertilizer and mulch and initial water over all disturbed areas. The cost of the restoration shall be incidental to the work and included in the bid price.

Protection of the Work

The Contractor shall be responsible to protect the work to the degree necessary to prevent damage by the public either unintentionally or intentionally. The Contractor should plan his work in such a way that he can watch newly poured concrete until the point that the surface is sufficiently hard to prevent damage by those intending to mar new concrete. Any work found

with marred surfaces shall be immediately repaired if possible; otherwise the marred sections of walk shall be removed and replaced at the Contractor's expense.

Measurement & Payment:

Measurement for sidewalk replacement shall be to the nearest area by length and width measurement and shall include removal and disposal, (perhaps sawcutting) of existing sidewalk; cutting and digging out roots to a minimum of 2-inches below the bottom of the proposed sidewalk, replacement of subgrade, as necessary; forming, pouring, finishing, protecting and curing new concrete; adding or smoothing out topsoil and seeding. Payment will be according to the unit price for the area measured.

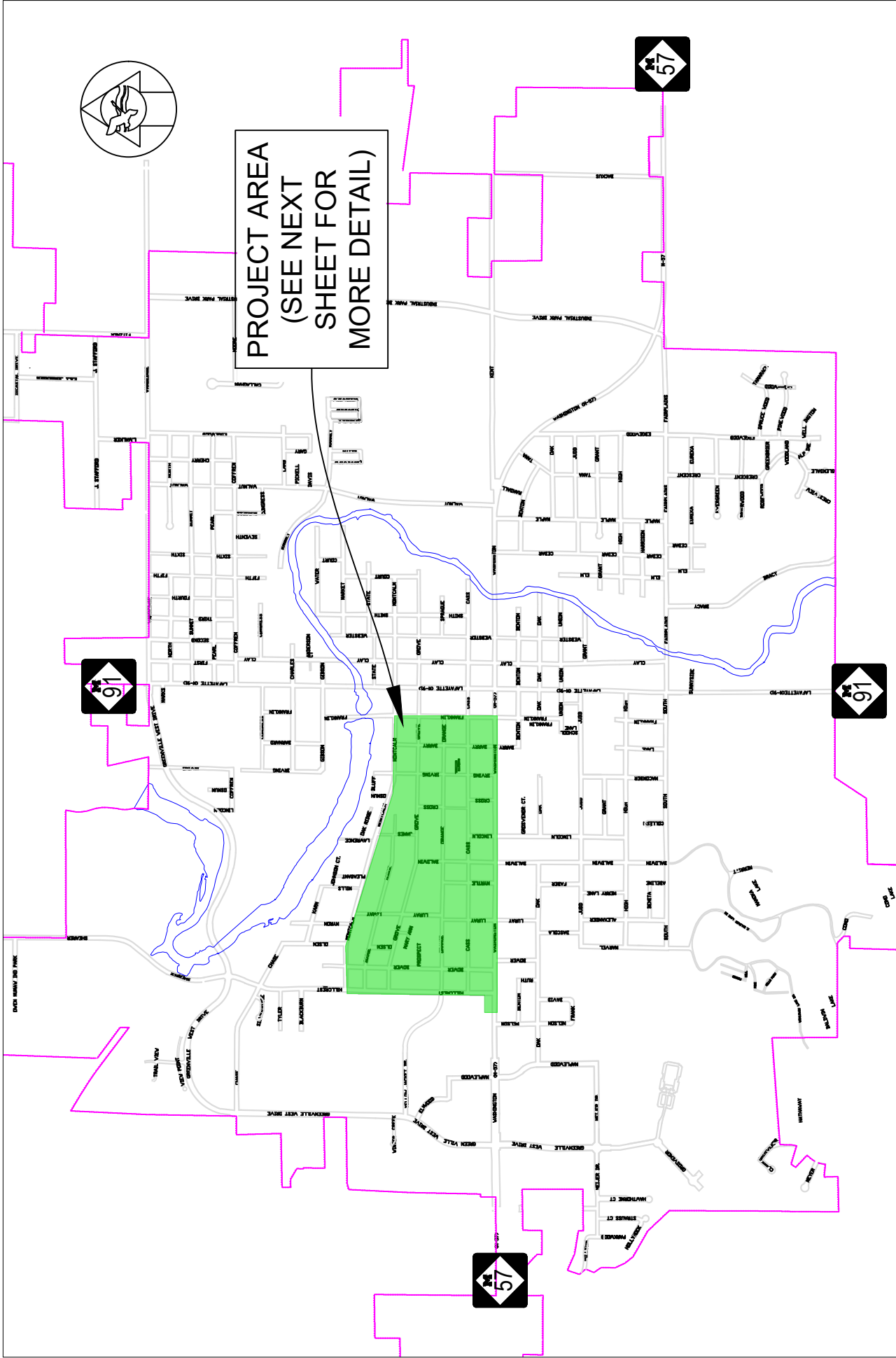
Remove Sidewalk: This item includes removal of existing walk to the nearest joint as marked by the City and shall include sawcutting, removal and disposal of concrete material. Measurement will be made based on the length times the width of the walk prior to removal.

Root Remove: This item includes digging out, cutting, chipping, pulling, grinding or other means of removing any roots found under the removed section of sidewalk to a minimum depth of 4-inches below the bottom of the proposed sidewalk. It shall also include the preparation of the subgrade to include additional sand, if necessary. It is recognized that the effort needed to remove the roots will be related to the size of the adjacent tree. Therefore, the unit price of this item is based on the diameter of the tree as measured at a point 4 feet above the finished sidewalk surface.


Sidewalk, ___-inch: This item includes forming; pouring new concrete; curing compound; monitoring against vandalism damage; form stripping; backfill with City compost, seed, fertilizer, mulch and an initial application of water; and final clean-up. Measurement will be made based on the length times the width of the new walk poured.

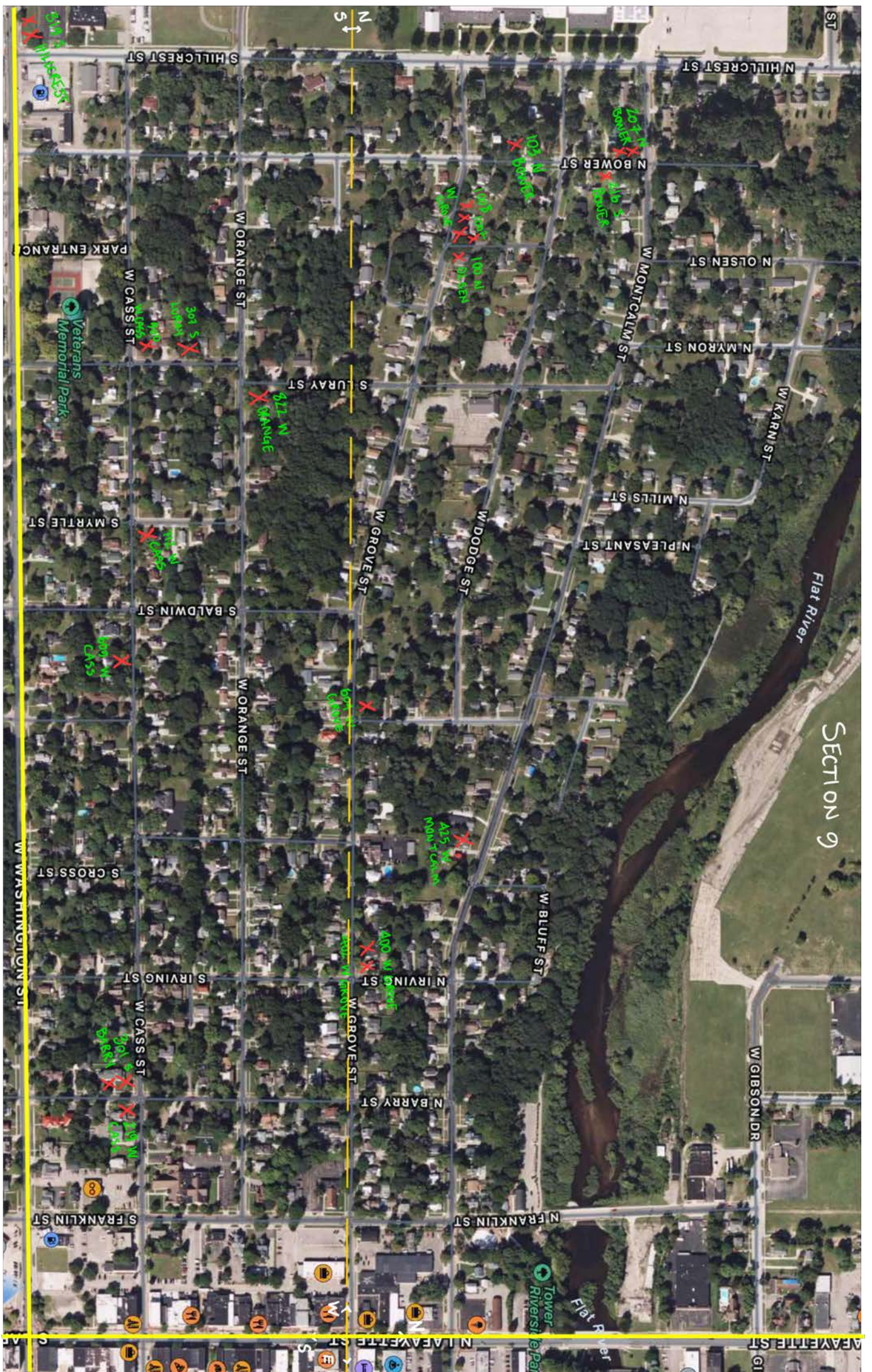
Traffic Control, Local Street: This item includes furnishing, placing and maintaining control items to protect the public, Contractors employees, vehicles, and the work. At a minimum it includes a minimum of 5 traffic cones and two barricades at each location and is paid for each address.

Traffic Control, State: This item includes furnishing, placing and maintaining control items according to standard traffic typicals that are part of this Bid Document. It also includes the safety provisions that are included herein. It is paid for each address that is applicable.



2023 SIDEWALK REMOVE/REPLACE CITY

	CITY OF GREENVILLE		HORIZONTAL SCALE: None	DRAWN BY: dwh
	ENGINEERING DEPARTMENT		VERTICAL SCALE: None	DATE:
	411 S. LAFAYETTE, GREENVILLE, MI 48838		FILE: Sidewalk Rpr	REVISED: 1/19/23
	TELEPHONE (616) 754-5645		JOB #:	SHEET 1 OF 1



CONTRACT PHOTOS



319 S. HILLCREST



822 W. ORANGE



100 N. OLSEN



207 N. BOWER



216 S BOWER



219 W CASS

CONTRACT PHOTOS (CONTINUED)



900 W CASS



712 W CASS



400 W GROVE



1002 W GROVE



1008 W GROVE



301 S BARRY

CONTRACT PHOTOS (CONTINUED)



301 S BARRY



103 N BOWER



207 N BOWER



609 W CASS



402 W GROVE



604 W GROVE

CONTRACT PHOTOS (CONTINUED)



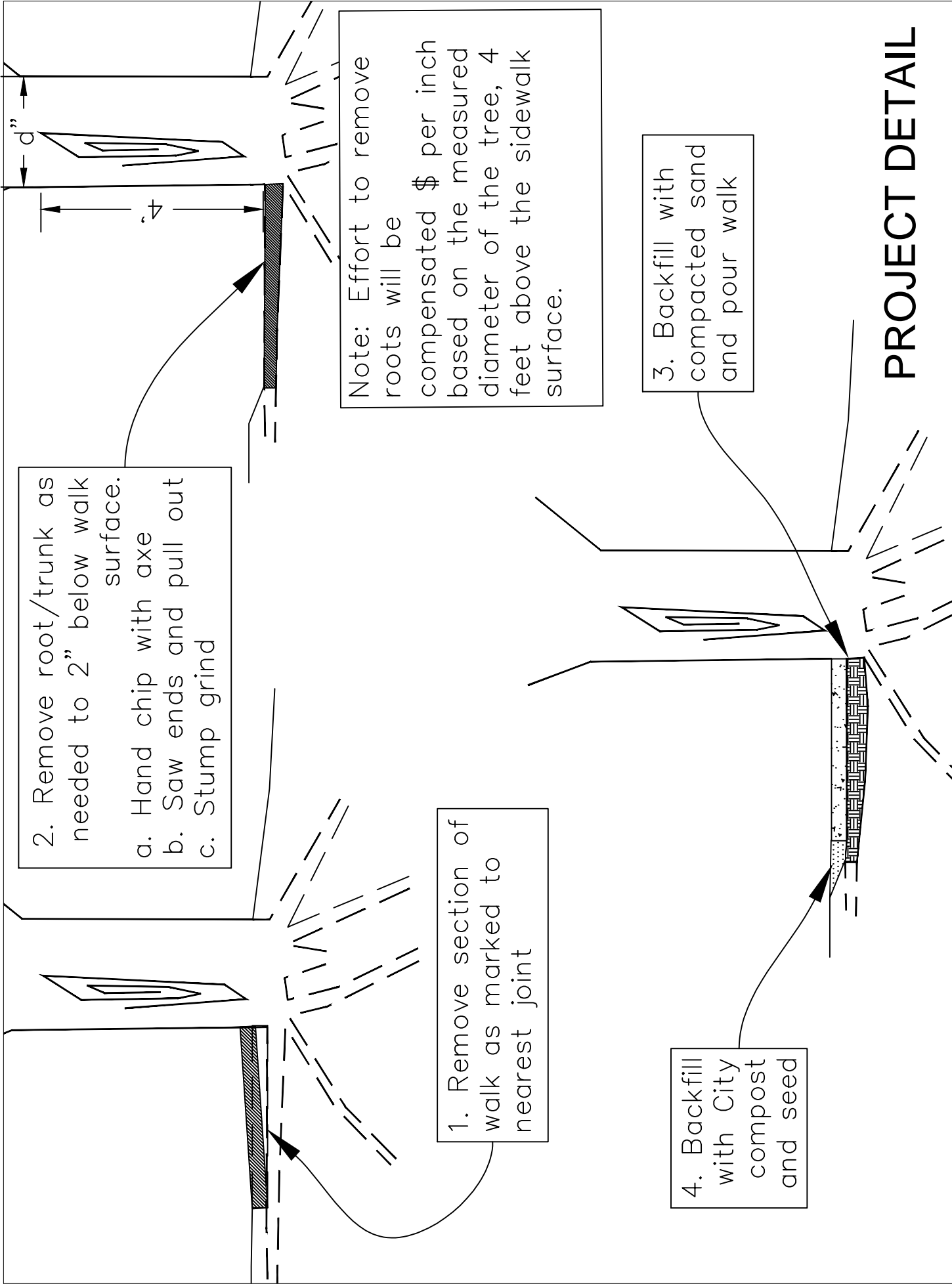
1002 W GROVE

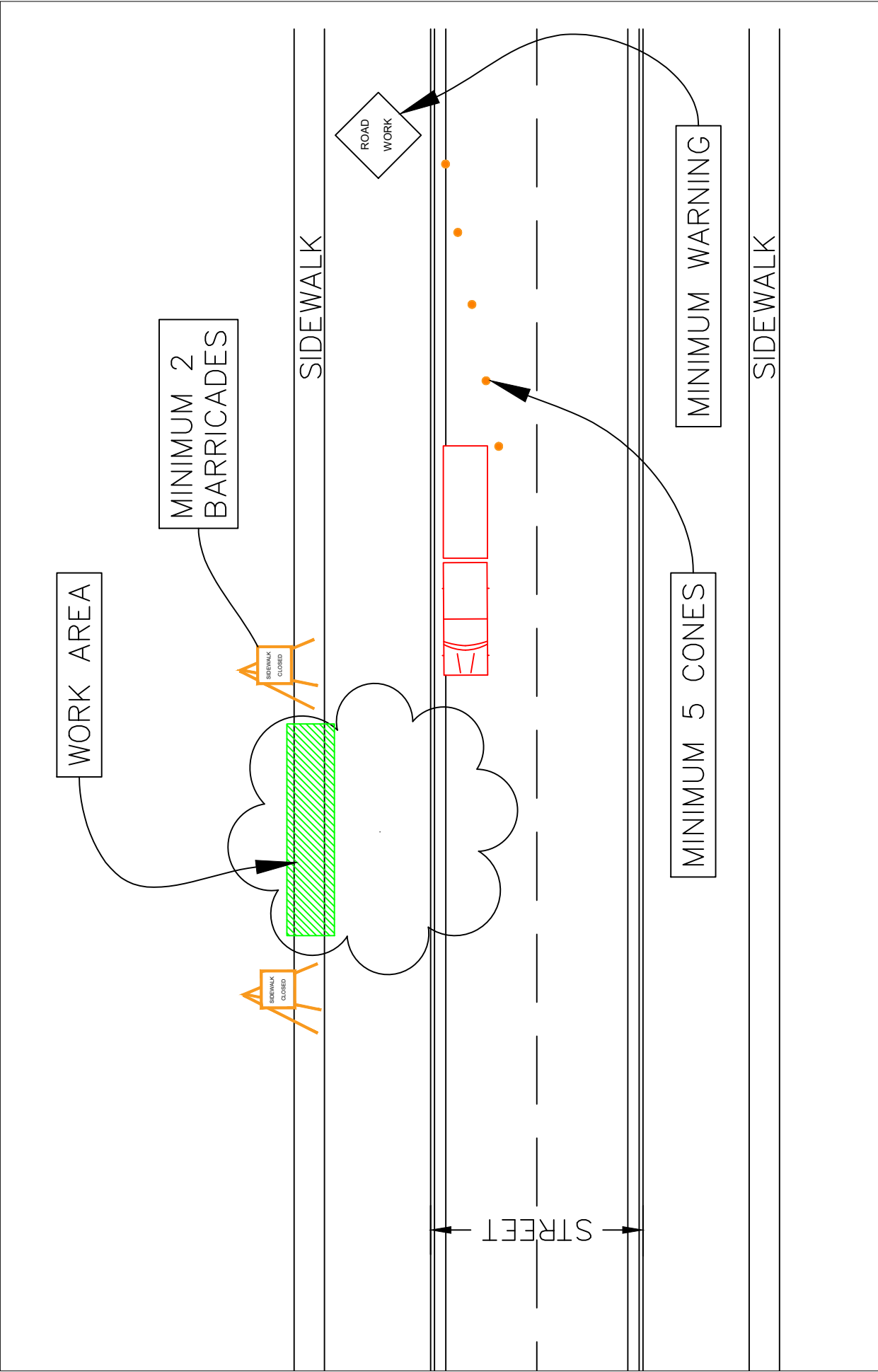



425 W MONTCALM



621 W MONTCALM





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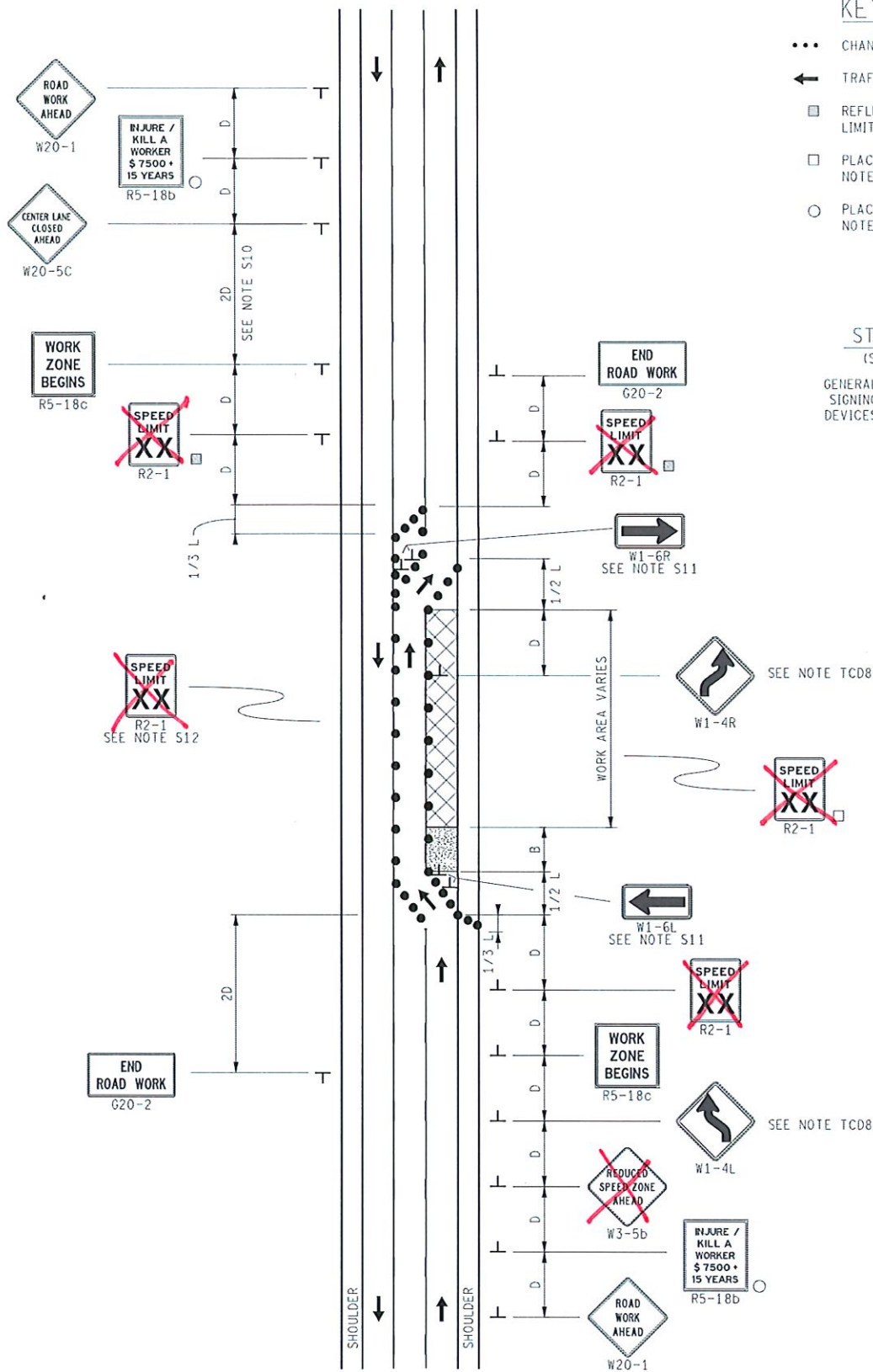
KEY

- ... CHANNELIZING DEVICES
- ← TRAFFIC FLOW
- REFLECTS EXISTING SPEED LIMIT
- PLACE SIGN AS INDICATED IN NOTE S5
- PLACE SIGN AS INDICATED IN NOTE S2

STANDARD NOTES

(SEE 102-GEN-NOTES)

GENERAL: G1, G2, G3, G4, G5
SIGNING: S1, S2, S3, S5, S10, S11, S12
DEVICES: TCD1, TCD2, TCD8





JENNIFER M. GRANHOLM
GOVERNOR

STATE OF MICHIGAN
DEPARTMENT OF TRANSPORTATION
GRAND RAPIDS TRANSPORTATION SERVICE CENTER

KIRK T. STEUDLE, P.E.
DIRECTOR

January 21, 2009

Notice: New MDOT Visibility Policy

Many permit applicants may already be aware that the Federal Highway Administration (FHWA) adopted a rule regarding the use of high visibility clothing for all workers on Federal-aid highways. The Michigan Department of Transportation (MDOT) supports this rule as we believe that worker safety is paramount, and the use of high visibility clothing is but one way to help ensure our workers go home at the end of their shifts. We need assurance that permit applicants who are working in State highway Right-of-Way are in compliance.

In November 2006, the Federal Highway Administration issued 23 CFR, Part 634, and Worker Visibility Final Rule. The rule states, "All workers within the right-of-way of a Federal-aid highway who are exposed either to traffic or to construction equipment within the work area shall wear high-visibility safety apparel." The compliance date for this rule is November 24, 2008.

High visibility safety apparel is defined as: "personal protective clothing that is intended to provide conspicuity during both daytime and nighttime usage, and that meets the Performance Class 2 or 3 of the ANSI ISEA (American National Standard Institute) 107-2004."

Many permit applicants are already in compliance with this requirement, but MDOT needs to assure FHWA that this rule has been adopted and is being observed statewide. Please ensure that by November 24, 2008, all individuals working in State highway Right-of-Way are wearing the proper high visibility clothing.

If you have any questions about this rule, please contact Jim Gaus, MDOT Occupational Safety Specialist, at (517) 241-4188 or email him your questions at gausj@michigan.gov.

System Operations Advisory

SOA 2016-002

May 1, 2016

Revised: 9/30/2016

From Mark Geib, Engineer of Operations Field Services Division

MDOT
Division of Operations
6333 Lansing Road
Lansing, MI 48917
Fax/517-322-3385

Questions regarding this advisory should be directed to:

Chris Brookes
Work Zone Delivery
Engineer
(517) 636 -0300
Brookesc@michigan.gov

Or

Chuck Bergmann
Work Zone Tech Specialist
(517)322-3314
Bergmanncc@michigan.gov

Fluorescent Sheeting Implementation

The Michigan Department of Transportation (MDOT) has been working with Michigan Infrastructure and Transportation Association (MITA) and its industry partners on the use of a 6-inch wide angle prismatic lens reflective sheeting for reflectorizing reboundable traffic control devices such as drums and 42-inch channelizing devices. MDOT, MITA, and industry partners piloted a number of successful projects over the last two years and have been working jointly to develop an implementation plan. Safety for both the motoring public and the workers is the number one reason for this change. Fluorescent reflective sheeting can increase distance visibility providing up to 2.5 seconds of additional driver reaction time at 55 MPH, compared with high intensity sheeting. Additionally, during weather events and low light conditions when approximately 35 percent of work zone crashes occur historically in Michigan, improved motorist visibility will reduce the potential of a traffic crash or fatality. This is a safety initiative that will help reach MDOT's goal of "Towards Zero Deaths".

Specification will be according to ASTM D 4956. The fluorescent orange sheeting color must have a daytime luminance factor that meets or exceeds 20, (ASTM D 4956 Table 2 – Daytime Luminance Factor (Y %), and the fluorescent orange and white sheeting classified as Type IV sheeting. For projects incorporating the new sheeting the following pay items will be used:

- "Plastic Drum, Fluorescent, Furn"
- "Plastic Drum, Fluorescent, Oper"
- "Channelizing Device, 42 Inch, Fluorescent, Furn"
- "Channelizing Device, 42 Inch, Fluorescent, Oper"

The following implementation plan was based on the average service life of the drums and 42-inch channelizing devices, which will allow industry to upgrade during the normal replacement cycle. The schedule detailed below, provides inclusion beginning with October 2017 project lettings on the interstate system.

The phase in period is described below for project letting dates:

- Official notification to industry of the upcoming phase in period was provided on 4/7/2016.
- Project lettings on or after 10/1/2017 – Type IV Fluorescent Orange and Type IV White required on all “I” routes.
- Project lettings on or after 10/1/2018 – Type IV Fluorescent Orange and Type IV White required on all “BR”, “US”, and “M” routes.
- Project lettings on or after 10/1/2020 – Type IV Fluorescent Orange and Type IV White required on all projects let through MDOT including local agency projects.
- Maintenance, utility, and permit work performed on state trunk line on or after 10/1/2020 will require – Type IV Fluorescent Orange and Type IV White.
- Selected projects may require the use of the new sheeting on a project-by-project basis after the Frequently Used Special Provision is released for each cycle

Contractors may implement new fluorescent sheeting on drums and 42 inch channelizing devices prior to the above specific dates, as an “equal to or better than” substitution, at no additional cost to MDOT.

During the phase in period, the intermixing of drums and 42 inch channelizing devices with fluorescent orange sheeting and high intensity standard orange sheeting, on the same project will not be allowed.

Intermixing of drums and 42 inch channelizing devices with fluorescent sheeting from different companies of the same grade will be allowed.

Please contact the Work Zone Delivery Engineer for any additional guidance.