

NOTICE TO BIDDERS

Sealed proposals will be received by the County Road Commissioners of the County of Ionia, Michigan at 170 E. Riverside Dr., P.O. Box 76 Ionia, Michigan 48846 until 10:30 A.M., Thursday, July 1, 2010, at which time and place, proposals will be publicly opened and read aloud for Furnishing and Delivering the following:

CONTRACT NO. 10-20

TO FURNISH AND PLACE CHIP SEAL WITH CS-2 COURSE AGGREGATE (NATURAL AGGREGATE OR BLAST FURNACE SLAG) AND CRS-2M EMULSION FOR APPROXIMATELY 9.6 MILES AT 8 LOCATIONS COUNTY-WIDE IN IONIA COUNTY AND APPROXIMATELY 1.4 MILES AT 6 LOCATIONS IN THE CITY OF IONIA, AND POSSIBLE OTHER LOCATIONS.

ALTERNATE BID SOUGHT: TO FURNISH AND PLACE CHIP SEAL WITH CS-2 COURSE AGGREGATE AND CM-90 MULTI-GRADE ASPHALT WITH CSS-1h FOG SEAL.

The Contract shall be completed by August 17, 2010.

The Contractor shall certify that the Aggregate and Emulsion meets current MDOT Specifications. Specifications, bid blanks and location map and further information may be obtained at the offices of the undersigned, 170 E. Riverside Dr, Ionia, Michigan 48846, Telephone (616) 527-1700.

All proposals must be submitted on bid blank in sealed envelopes bearing the name of the bidder and clearly marked with a notation indicating the project on which the bid is submitted. **Faxed proposals will not be accepted.**

The contractor shall provide for and in behalf of the Commission of the Ionia County Road Commission and its officials, agents and employees, and all agencies specifically named below and their employees, Owners Protective Public Liability Insurance. Such Insurance shall provide coverage and limits the same as the Contractors Public Liability Insurance. The agencies are the Ionia Board of County Road Commissioners, and the Ionia County Road Commission.

The Board reserves the right to accept or reject any or all bids, to waive irregularities in any proposal, and to make award in any manner deemed in the best interest of the County of Ionia.

RENEWAL OPTIONS:

The Commission reserves the right to renew the contract for two (2) additional one-year terms, each upon mutual agreement of both parties. Pricing, terms, and conditions of the contract will remain the same for any one-year renewal period.

BOARD OF COUNTY ROAD COMMISSIONERS

Herbert C. Cusack - Chairman

Earl S. Strater – Vice Chairman

Frederick A. Chapman – Member

(1)

To: BOARD OF IONIA COUNTY ROAD COMMISSION
170 E. Riverside Dr.
P.O. BOX 76
IONIA, MICHIGAN 48846

COMMISSIONERS:

WE, THE UNDERSIGNED, DO HEREBY AGREE TO PROVIDE ALL LABOR, EQUIPMENT, AND MATERIALS REQUIRED TO ACCOMPLISH THE WORK INDICATED IN ACCORDANCE WITH YOUR NOTICE TO BIDDERS AND SPECIFICATION AT THE UNIT PRICES BELOW:

COMPLETION DATE IS AUGUST 17, 2010

PROJECT/WORK ITEMS	QUANTITY/UNIT	UNIT/PRICE	AMOUNT
<u>Project</u>			
HMA Base Crushing and Shaping	14,145 syd	_____	_____
Seal, Single Chip	133,184 syd	_____	_____
Seal, Prime and Double Chip	14,145 syd	_____	_____
Seal, Fog (Optional)	147,329 syd	_____	_____
Raised Pav't Marker, Temp, Type			
1, Yellow Bidirectional	500 each	_____	_____
PROJECT TOTAL			_____

Indemnification: Contractor agrees to hold harmless and indemnify the Ionia County Road Commission, its commissioners and employees from any and all claims, suits and judgments to which the commission, its commissioners or employees may be subject and for all costs and actual attorney fees which may be incurred arising out of any injury to persons or damage to property, including property of the commission, whether due to negligence of the contractor or the joint negligence of the contractor and the commission, arising out of the work specified in this proposal, or in connection with work not authorized in this proposal, or resulting from failure to comply with the term of this proposal. Contractor will not be obligated to indemnify the Ionia County Road Commission for any injury of property damage arising out of the sole negligence of the Ionia County Road Commission, its commissioners or employees.
The Board Reserves the right to accept or reject any or all bids, to waive irregularities in any proposal, to reduce or delete pay item quantities, and to make award in any manner deemed in the best interest of the County of Ionia.

PROPOSAL SUBMITTED BY:

COMPANY NAME _____
ADDRESS _____
TELEPHONE NUMBER: _____
FACIMILE NUMBER: _____

PROPOSAL AUTHORIZED BY:

SIGNATURE & TITLE: _____
PRINTED OR TYPED NAME & TITLE: _____
DATE _____

(1 - Alternate)

To: BOARD OF IONIA COUNTY ROAD COMMISSION
170 E. Riverside Dr.
P.O. BOX 76
IONIA, MICHIGAN 48846

COMMISSIONERS:

WE, THE UNDERSIGNED, DO HEREBY AGREE TO PROVIDE ALL LABOR, EQUIPMENT, AND MATERIALS REQUIRED TO ACCOMPLISH THE WORK INDICATED IN ACCORDANCE WITH YOUR NOTICE TO BIDDERS AND SPECIFICATION AT THE UNIT PRICES BELOW:

COMPLETION DATE IS AUGUST 17, 2008

Alternate Bid: Furnish and Place Chip Seal with CM-90 Multi-Grade Asphalt, CS-2 Course Aggregate and CSS-1h Emulsion Fog Seal.

PROJECT/WORK ITEMS	QUANTITY/UNIT	UNIT/PRICE	AMOUNT
<u>Project</u>			
HMA Base Crushing and Shaping	14,145 syd	_____	_____
Seal, Single Chip	133,184 syd	_____	_____
Seal, Prime and Double Chip	14,145 syd	_____	_____
Seal, Fog (Optional)	147,329 syd	_____	_____
Raised Pav't Marker, Temp, Type			
1, Yellow Bidirectional	500 each	_____	_____
PROJECT TOTAL			_____

Indemnification: Contractor agrees to hold harmless and indemnify the Ionia County Road Commission, its commissioners and employees from any and all claims, suits and judgments to which the commission, its commissioners or employees may be subject and for all costs and actual attorney fees which may be incurred arising out of any injury to persons or damage to property, including property of the commission, whether due to negligence of the contractor or the joint negligence of the contractor and the commission, arising out of the work specified in this proposal, or in connection with work not authorized in this proposal, or resulting from failure to comply with the term of this proposal. Contractor will not be obligated to indemnify the Ionia County Road Commission for any injury of property damage arising out of the sole negligence of the Ionia County Road Commission, its commissioners or employees.

The Board Reserves the right to accept or reject any or all bids, to waive irregularities in any proposal, to reduce or delete pay item quantities, and to make award in any manner deemed in the best interest of the County of Ionia.

PROPOSAL SUBMITTED BY:

COMPANY NAME _____

ADDRESS _____

TELEPHONE NUMBER: _____

FACIMILE NUMBER: _____

PROPOSAL AUTHORIZED BY:

SIGNATURE & TITLE: _____

PRINTED OR TYPED NAME & TITLE: _____

DATE _____

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BOARD OF COUNTY ROAD COMMISSIONERS
For Ionia County

INSTRUCTIONS TO BIDDERS

Sealed bids will be publicly opened at the offices of the Board of County Road Commissioners of the County of Ionia, State of Michigan, located at 170 E. Riverside Drive, Ionia, Michigan 48846.

Refer to the **NOTICE TO BIDDERS** for the exact timing and for the identification of the bids as related to furnishing materials, services, equipment, work and/or supplies with the terms, conditions, specifications, drawings, plans and special provisions as stated herein and hereto attached.

The Board's standard practice is to open and read the bids then refer the file to staff for tabulation and analysis. During this period, the files are closed until this action is complete. Generally, this involves three to four days depending upon the nature of the bid. Copies of the bid tabulations are made available only after this time and upon request by mail or phone (616) 527-1700.

- I. Bid Document (Proposal Form)- Consists of 1) proper Cover Page, 2) schedule of Item Pages.
- II. The Cover Page of the Bid Document shall contain the legal company name, authorized Signature and Complete address and phone number of the Bidder.
- III. All bids must be submitted on the Board's blank form when provided. The bid shall be legibly prepared in ink or typewriter. Erasures or alterations must be initialed by the bidder.
- IV. Specifications and plans should not be returned unless otherwise stated herein.
- V. Bid shall be mailed or delivered. **It shall be in a sealed envelope and identified on the outside** as to the bid concerned. Faxed bids will NOT be accepted.
- VI. Bids will not be accepted after the time designated for the opening of the bids. The bidder shall assume full responsibility for delivery of bids prior to the appointed hour for opening same and shall assume the risk of late delivery or non-delivery regardless of the manner he/she employs for the transmission thereof. **Bids will be accepted at the Road Commission office** on behalf of the Board at any time during normal business hours only, said hours being 7:00 a.m. to 4:00 p.m., Monday through Friday, except legal holidays.
- VII. It is understood that the Board of County Road Commissioners is a governmental unit and as such, is exempt from the payment of all State and Federal taxes, except as allowed by the regulatory agencies to be included in the cost of materials and services.
- VIII. The bidder, as evidenced by the execution of the bid form, thereby declares that the bid is made without collusion with any other person, firm, or corporation and agrees to furnish all bid items in strict adherence with all State and/or Federal regulatory measures.
- IX. The Board reserves the right to reject any and all bids, to waive any irregularities therein and to accept any bid which, in the opinion of the Board, may be most advantageous and to the best interest of the County. In case of error in the extension of prices in the bid or other arithmetical error, the unit prices will govern.
- X. Insurance Requirements: Upon notification of award, and prior to execution of the contract, the contractor shall have fifteen (15) days to submit to the Ionia County Road Commission an Owner's Protective Public Liability Insurance policy or a completed copy of their Certificate of Liability Insurance as evidence of the following specific information:
 - A. Indemnification: The contractor will hold harmless and indemnify the Ionia County Road Commission, its commissioners, officers, agents and employees, against all claims for damages to public or private property and for injuries to persons arising out of and during the progress and to the completion of the work all in accordance with the current Michigan Department of Transportation "Standard Specifications for Construction", section number 107.10.

INSTRUCTIONS TO BIDDERS (con't)

1. CERTIFICATE HOLDER block shall read: "Ionia County Road Commission, 170 E. Riverside Drive, Ionia, Michigan 48846".
2. DESCRIPTION OF OPERATIONS/LOCATIONS/VEHICLES/SPECIAL ITEMS block shall read: "Additional Insured: The Board of County Road Commissioners for Ionia County, the Ionia County Road Commission and its officers, agents and employees".

B. Worker's Compensation Insurance: The contractor shall carry Worker's Compensation Insurance of not less than the Statutory Limit.

C. Bodily Injury and Property Damage: The contractor, shall afford protection against all claims for damages to public or private property, and injuries to persons, arising out of and during the progress of the work, and to its completion and, where specified in the proposal, similar insurance to protect the owner of premises on or near which construction operations are to be performed.

1. **Bodily Injury and Property Damage Other Than Automobile.** Unless otherwise specifically required by special provisions in the proposal, the minimum limits of property damage and bodily injury liability covering each contract shall be:

Bodily Injury and Property Damage Liability:

Each Occurrence: \$1,000,000
 Aggregate: \$2,000,000

The insurance shall include, but not be limited to coverage for:

- a. Underground damage to facilities due to drilling and excavating with mechanical equipment, and
- b. Collapse or structural injury to structures due to blasting or explosion, excavation, tunneling, pile driving, cofferdam work, or building moving or demolition.

2. **Bodily Injury Liability and Property Damage Liability Automobile.** Unless otherwise specifically required by special provision, the minimum limits of bodily injury liability and property damage liability shall be:

Bodily Injury Liability:

Each Person \$ 500,000
 Each Occurrence: \$1,000,000
 Property Damage Liability:
 Each Occurrence: \$1,000,000

Combined Single Limit for Bodily Injury and Property Damage Liability:

Each Occurrence: \$2,000,000

Comprehensive General Liability Insurance naming the Ionia County Road Commission, its commissioners, officers, agents and employees as an "Additional Insured" is required as shown above. This policy shall also include coverage for product liability and completed operations, and bodily or property damage due to perils of explosion, collapse and underground hazards, XCU. The completed certificate shall provide the name of the insurance company and its address, phone number, and fax number, in addition to the policy numbers, policy periods, policy descriptions, and signature of the insurance agent.

INSTRUCTIONS TO BIDDERS (con't)

- D. Owner's Protective Public Liability Insurance: In the alternative to the previous section, the contractor shall provide for and in behalf of the Ionia County Road Commission, its commissioners, officials, agents and employees, and all agencies specifically named below, and their employees, a policy for Owner's Protective Public Liability Insurance. Such insurance shall provide coverage and limits the same as the Contractor's Public Liability Insurance.

The agencies specifically named are the Ionia County Road Commission, the Board of Road Commissioners for Ionia County, the City of Ionia and the City Council of Ionia.

- XI. Cancellation of Contract Provisions: The Ionia County Road Commission shall have the right to cancel the contract for non-performance, should an inspection by the designated representative reveal that the contractor's work results in any non-acceptable maintenance condition of one or all specified areas. The designated representative at the time to the **first** circumstance shall call for a meeting with the contractor and issue a written warning of possible contract termination should the condition continue. If the condition should repeat for a **second** time, written notice of termination shall be sent.
- XII. Presumption upon Receipt of Bid: Submission of bid will be construed as a conclusive presumption that the contractor is thoroughly familiar with the bid requirements and specifications and that he/she understands and agrees to abide by each and all stipulations and requirements contained therein.
- XIII. Contractor and Contractor's Subcontractor: Neither the contractor nor his/her subcontractors shall discriminate against any employee or applicant for employment, to be employed in the performance of this contract, with respect to his/her hire, tenure, terms, conditions or privileges of employment because of his/her race, color, religion, national origin, or ancestry. Breach of this covenant may be regarded as a material breach of this contract.
- XIV. Questions concerning specifications may be directed to Wayne A. Schoonover, P.E., County Highway Engineer, or Mike Hamp, Engineering Technician at (616) 527-1700.

Start work within ten (10) working days after receiving notice of award of contract or on or before the date designated as the starting date in the Detailed Progress Schedule. In no case, shall any work be commenced prior to receipt of formal notice of award by the Department.

The project shall not start prior to July 19, 2008.

The entire project shall be completed on or before August 27, 2010.

The low bidder(s) for the work covered by this proposal will be required to meet the Department representatives to work out a detailed progress schedule.

The named subcontractor(s) for Designated and/or Specialty Items as shown in the proposal, is recommended to be at the scheduled meeting if such items materially affect the work schedule.

The Ionia County Highway Engineer will arrange the time and place for the meeting.

The Progress Schedule shall include, as a minimum, the controlling work items for the completion of the project and the planned dates (or work day for a work day project) that these work items will be controlling operations. When specified in the bidding proposal, the date of project completion shall also be included in the project schedule.

If the bidding proposal specifies other controlling dates, these shall also be included in the Progress Schedule.

Failure on the part of the Contractor to carry out the provisions of the Progress Schedule, as established, may be considered sufficient cause to prevent bidding future projects until a satisfactory rate of progress is again established.

(7)
IONIA COUNTY ROAD COMMISSION

**SPECIAL PROVISION
FOR
MAINTAINING TRAFFIC**

ICRC/WAS

1 OF 1

12/07

DESCRIPTION

The proposed project will be open to through traffic. Proper traffic control shall be established, signed and maintained by the contractor in accordance with Section 103.05, 103.06, Section 812 and 922 of the 2003 Standard Specifications for Construction, and as herein specified.

Local traffic shall be maintained at all times and property owners and emergency vehicles shall be assured of access to their property.

CONSTRUCTION INFLUENCE AREA

The construction influence area (CIA) shall consist of the width of the project right-of-way from 2500 feet before each locations P.O.B. to 2500 feet after each locations P.O.E.

TRAFFIC CONTROL DEVICES

All signs, barricades, warning lights, and other traffic control devices, shall be in accordance with the 2005 Michigan Manual of Uniform Traffic Control Devices (MMUTCD).

Signing shall be in accordance with the following traffic typical sheets: M0020a, M0050a and M0140a.

ESTIMATED QUANTITIES

The estimate of quantities for maintaining traffic is based on signing and related traffic control devices for one (1) lane closure for the entire contract. Relocation of the traffic control devices from site to site is considered included in the payment for Seal, Single Chip.

Any additional signing or maintaining traffic control devices required to expedite the construction shall be at the Contractor's expense.

Lighted Arrow, Type C, Furn	2	Each
Lighted Arrow, Type C, Oper	2	Each
Sign Type B, Temp, Furn	496	Square Foot
Sign Type B, Temp, Oper	496	Square Foot

MEASUREMENT AND PAYMENT

No additional compensation will be made for maintaining traffic items. This work will be considered included in other contract items.

MINIMUM MERGING TAPER LENGTH "L" (FEET)

OFFSET FEET	POSTED SPEED LIMIT, MPH (PRIOR TO WORK AREA)									
	25	30	35	40	45	50	55	60	65	70
1	10	15	20	27	45	50	55	60	65	70
2	21	30	41	53	90	100	110	120	130	140
3	31	45	61	80	135	150	165	180	195	210
4	42	60	82	107	180	200	220	240	260	280
5	52	75	102	133	225	250	275	300	325	350
6	63	90	123	160	270	300	330	360	390	420
7	73	105	143	187	315	350	385	420	455	490
8	83	120	163	213	360	400	440	480	520	560
9	94	135	184	240	405	450	495	540	585	630
10	104	150	204	267	450	500	550	600	650	700
11	115	165	225	293	495	550	605	660	715	770
12	125	180	245	320	540	600	660	720	780	840
13	135	195	266	347	585	650	715	780	845	910
14	146	210	286	374	630	700	770	840	910	980
15	157	225	307	400	675	750	825	900	975	1050

TAPER LENGTH "L" IN FEET

THE FORMULAS FOR THE MINIMUM LENGTH OF A MERGING TAPER IN DERIVING THE "L" VALUES SHOWN IN THE ABOVE TABLES ARE AS FOLLOWS:

"L" = $\frac{W \times S^2}{60}$ WHERE POSTED SPEED PRIOR TO THE WORK AREA IS 40 MPH OR LESS

"L" = S x W WHERE POSTED SPEED PRIOR TO THE WORK AREA IS 45 MPH OR GREATER

L = MINIMUM LENGTH OF MERGING TAPER
S = POSTED SPEED LIMIT IN MPH
PRIOR TO WORK AREA
W = WIDTH OF OFFSET

TYPES OF TAPERS

UPSTREAM TAPERS

MERGING TAPER
SHIFTING TAPER
SHOULDER TAPER
TWO-WAY TRAFFIC TAPER

DOWNSTREAM TAPERS
(USE IS OPTIONAL)

TAPER LENGTH

L - MINIMUM
1/2 L - MINIMUM
1/3 L - MINIMUM
100' - MAXIMUM
100' - MINIMUM
(PER LANE)



TABLES FOR "L", "D" AND "B" VALUES

DRAWN BY: CON:AE:djf
CHECKED BY: BMM

JUNE 2006
PLAN DATE:

M0020a

SHEET
1 OF 2

FILE: K:/DGN/TSR/STDS/ENGLISH/MNTTRF/M0020a.dgn

REV. 08/21/2006

DISTANCE BETWEEN TRAFFIC CONTROL DEVICES "D"
AND LENGTH OF LONGITUDINAL BUFFER SPACE ON
"WHERE WORKERS PRESENT" SEQUENCES


"D" DISTANCES	POSTED SPEED LIMIT, MPH (PRIOR TO WORK AREA)									
	25	30	35	40	45	50	55	60	65	70
D (FEET)	250	300	350	400	450	500	550	600	650	700

GUIDELINES FOR LENGTH OF
LONGITUDINAL BUFFER SPACE "B"

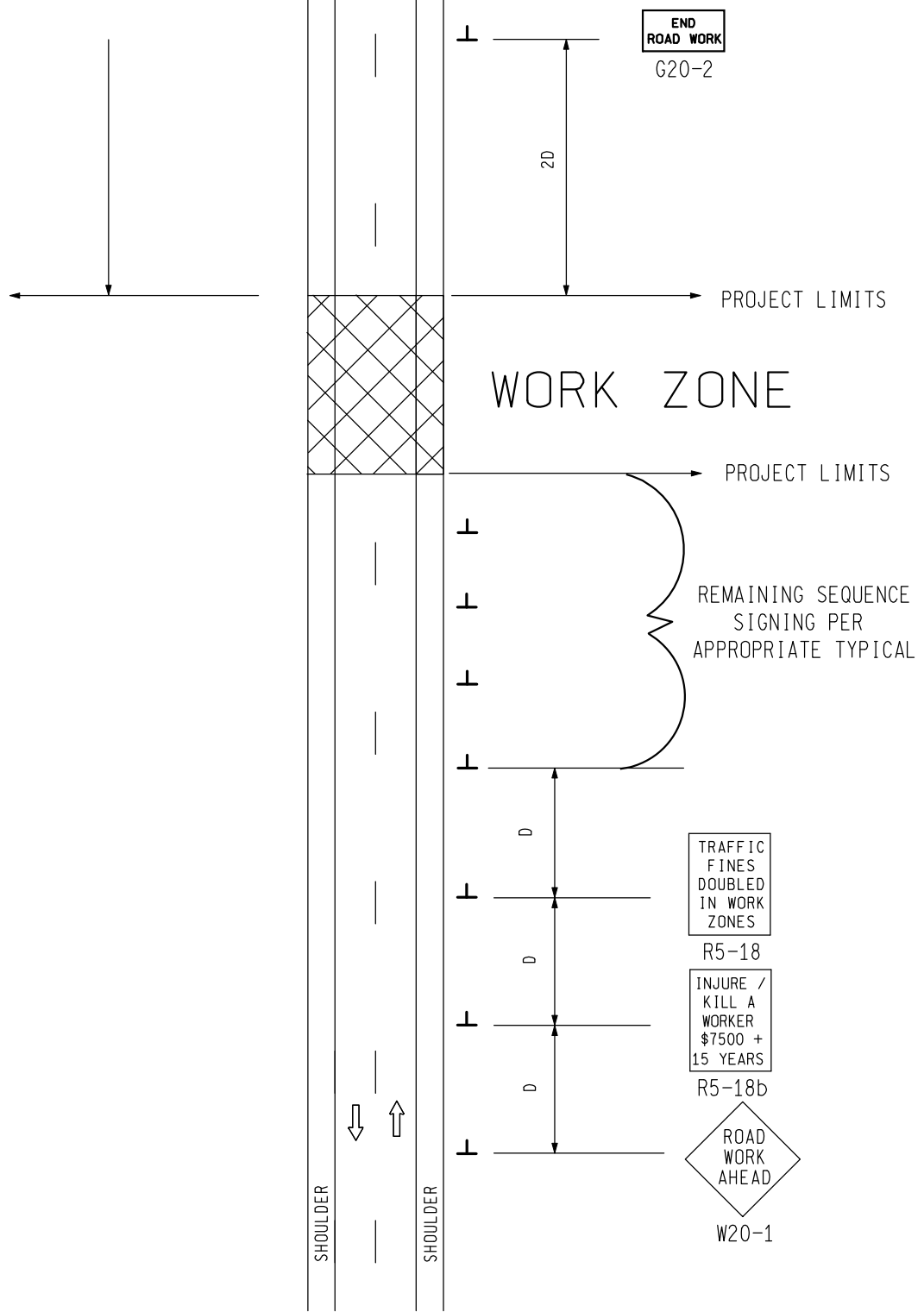
SPEED* MPH	LENGTH FEET
20	33
25	50
30	83
35	132
40	181
45	230
50	279
55	329
60	411
65	476
70	542

* POSTED SPEED, OFF PEAK 85TH PERCENTILE SPEED PRIOR TO WORK STARTING, OR THE ANTICIPATED OPERATING SPEED

1 BASED UPON AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS (AASHTO) BRAKING DISTANCE PORTION OF STOPPING SIGHT DISTANCE FOR WET AND LEVEL PAVEMENTS (A POLICY ON GEOMETRIC DESIGN OF HIGHWAY AND STREETS), AASHTO. THIS AASHTO DOCUMENT ALSO RECOMMENDS ADJUSTMENTS FOR THE EFFECT OF GRADE ON STOPPING AND VARIATION FOR TRUCKS.

 TRAFFIC AND SAFETY MAINTAINING TRAFFIC TYPICAL	TABLES FOR "L", "D" AND "B" VALUES		
	DRAWN BY: CON:AE:djf CHECKED BY: BMM	JUNE 2006 PLAN DATE:	M0020a
FILE: K:/DGN/TSR/STDS/ENGLISH/MNTTRF/M0020a.dgn REV. 08/21/2006			

SIGN PLACEMENT IS THE SAME FOR BOTH DIRECTIONS



SIGN = 48 ft x 2 - TYPE B
 FOR ONE DIRECTION OF TRAFFIC
 W20-1 QUANTITY INCLUDED WITH
 APPROPRIATE TYPICAL FOR
 SEQUENCE SIGNING

MDOT
 Michigan Department of Transportation
 TRAFFIC AND SAFETY
 MAINTAINING TRAFFIC
 TYPICAL

TYPICAL ADVANCE SIGNING TREATMENT FOR
 INTERMEDIATE AND SHORT TERM
 STATIONARY WORK ZONE OPERATIONS WHERE
 ALL TRAFFIC CONTROL DEVICES ARE
 REMOVED AT END OF EACH WORK DAY ON
 AN UNDIVIDED TWO-WAY ROADWAY

DRAWN BY: CON:AE:djf	JUNE 2006	M0050a	SHEET 1 OF 2
CHECKED BY: BMM	PLAN DATE:		
FILE: PW RD/TS/Typicals/Signs/MT NON FWY/M0050a.dgn REV. 08/15/2007			

NOT TO SCALE


NOTES

- 30. THE APPROPRIATE ADVANCE SIGNING SEQUENCE(S), (M0030a THROUGH M0080a) SHALL BE USED ON ALL PROJECTS.
- 35. THESE SIGNS ARE INTENDED TO BE USED WITHIN THE LIMITS OF THE TEMPORARY SEQUENCE SIGNING AS IS SHOWN ON 1 OF 2. THESE SIGNS ARE NOT TO BE INTERMINGLED WITH ANY OTHER TEMPORARY SEQUENCE SIGNING EXCEPT AS SHOWN.

SIGN SIZES

G20-2	-	48" x 24"
R5-18	-	48" x 60"
R5-18b	-	48" x 60"
W20-1	-	48" x 48"

NOT TO SCALE

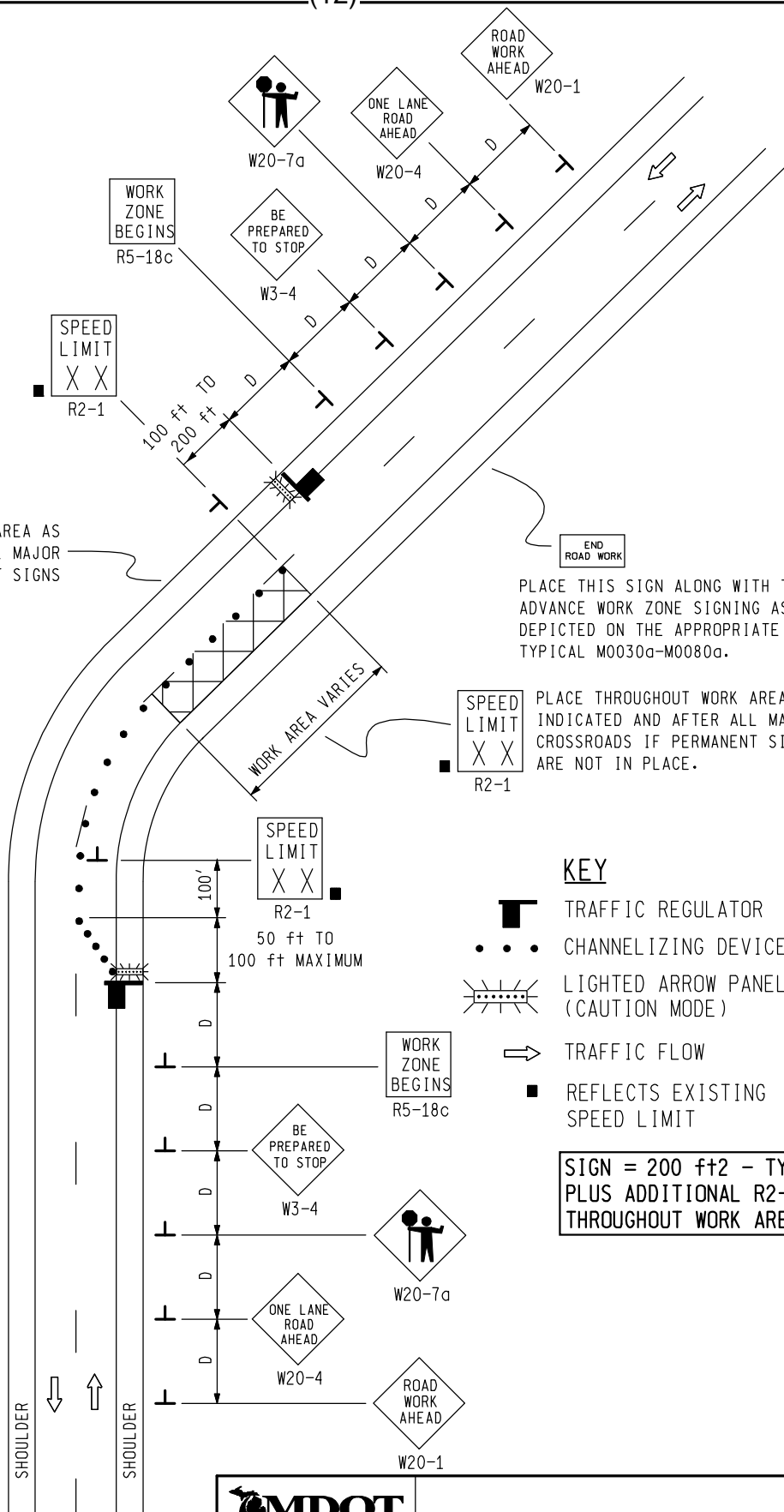
 TRAFFIC AND SAFETY MAINTAINING TRAFFIC TYPICAL	TYPICAL ADVANCE SIGNING TREATMENT FOR INTERMEDIATE AND SHORT TERM STATIONARY WORK ZONE OPERATIONS WHERE ALL TRAFFIC CONTROL DEVICES ARE REMOVED AT END OF EACH WORK DAY ON AN UNDIVIDED TWO-WAY ROADWAY	
	DRAWN BY: CON:AE:djf CHECKED BY: BMM	JUNE 2006 PLAN DATE:
FILE: PW RD/TS/Typicals/Signs/MT NON FWY/M0050a.dgn REV. 08/15/2007		

PLACE THROUGHOUT WORK AREA AS INDICATED AND AFTER ALL MAJOR CROSSROADS IF PERMANENT SIGNS ARE NOT IN PLACE.






PLACE THIS SIGN ALONG WITH THE ADVANCE WORK ZONE SIGNING AS DEPICTED ON THE APPROPRIATE TYPICAL M0030a-M0080a.

PLACE THROUGHOUT WORK AREA AS INDICATED AND AFTER ALL MAJOR CROSSROADS IF PERMANENT SIGNS ARE NOT IN PLACE.

PLACE THIS SIGN ALONG WITH THE ADVANCE WORK ZONE SIGNING AS DEPICTED ON THE APPROPRIATE TYPICAL M0030a-M0080a.



KEY

-  TRAFFIC REGULATOR
-  CHANNELIZING DEVICES
-  LIGHTED ARROW PANEL (CAUTION MODE)
-  TRAFFIC FLOW
-  REFLECTS EXISTING SPEED LIMIT

SIGN = 200 ft±2 - TYPE B PLUS ADDITIONAL R2-1's THROUGHOUT WORK AREA

NOT TO SCALE

MDOT
Michigan Department of Transportation
TRAFFIC AND SAFETY
MAINTAINING TRAFFIC
TYPICAL

TYPICAL TEMPORARY TRAFFIC CONTROL FOR A TWO-LANE TWO-WAY ROADWAY WHERE ONE LANE IS CLOSED UTILIZING TRAFFIC REGULATORS, NO SPEED REDUCTION

DRAWN BY: CON:AE:djf
CHECKED BY: BMM

JUNE 2006
PLAN DATE:

M0140a

SHEET
1 OF 2


NOTES

- 1H. D = DISTANCE BETWEEN TRAFFIC CONTROL DEVICES AND LENGTH OF LONGITUDINAL BUFFERS
SEE **M0020a** FOR "D" VALUES.
2. ALL NON-APPLICABLE SIGNING WITHIN THE CIA SHALL BE MODIFIED TO FIT CONDITIONS, COVERED OR REMOVED.
3. DISTANCES BETWEEN SIGNS, THE VALUES FOR WHICH ARE SHOWN IN TABLE D, ARE APPROXIMATE AND MAY NEED ADJUSTING AS DIRECTED BY THE ENGINEER.
- 3A. THE "WORK ZONE BEGINS" (R5-18c) SIGN SHALL BE USED ONLY IN THE INITIAL SIGNING SEQUENCE IN THE WORK ZONE. SUBSEQUENT SEQUENCES IN THE SAME WORK ZONE SHALL OMIT THIS SIGN AND THE QUANTITIES SHALL BE ADJUSTED APPROPRIATELY.
- 4A. THE MAXIMUM RECOMMENDED DISTANCE(S) BETWEEN CHANNELIZING DEVICES IN THE TAPER AREA(S) SHOULD BE 15 FEET AND SHOULD BE EQUAL IN FEET TO TWICE THE POSTED SPEED IN MILES PER HOUR IN THE PARALLEL AREA(S).
5. FOR OVERNIGHT CLOSURES, CHANNELIZING DEVICES SHALL BE LIGHTED PLASTIC DRUMS.
6. WHEN CALLED FOR IN THE FHWA ACCEPTANCE LETTER FOR THE SIGN SYSTEM SELECTED, THE TYPE A WARNING FLASHER, SHOWN ON THE WARNING SIGNS, SHALL BE POSITIONED ON THE SIDE OF THE SIGN NEAREST THE ROADWAY.
7. ALL TEMPORARY SIGNS, TYPE III BARRICADES, THEIR SUPPORT SYSTEMS AND LIGHTING REQUIREMENTS SHALL MEET NCHRP 350 CRASHWORTHY REQUIREMENTS STIPULATED IN THE 2005 EDITION OF THE MICHIGAN MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, THE CURRENT EDITION OF THE STANDARD SPECIFICATIONS FOR CONSTRUCTION, THE STANDARD PLANS AND APPLICABLE SPECIAL PROVISIONS. ONLY DESIGNS AND MATERIALS APPROVED BY MDOT WILL BE ALLOWED.
9. ALL TRAFFIC REGULATORS SHALL BE PROPERLY TRAINED AND SUPERVISED.
- 9A. IN ANY OPERATION INVOLVING MORE THAN ONE TRAFFIC REGULATOR, ONE PERSON SHOULD BE DESIGNATED AS HEAD TRAFFIC REGULATOR.
10. ALL TRAFFIC REGULATORS' CONDUCT, THEIR EQUIPMENT, AND TRAFFIC REGULATING PROCEDURES SHALL CONFORM TO THE CURRENT EDITION OF THE MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MMUTCD) AND THE CURRENT EDITION OF THE MDOT HANDBOOK ENTITLED "TRAFFIC REGULATORS INSTRUCTION MANUAL."
11. WHEN TRAFFIC REGULATING IS ALLOWED DURING THE HOURS OF DARKNESS, APPROPRIATE LIGHTING SHALL BE PROVIDED TO SUFFICIENTLY ILLUMINATE THE TRAFFIC REGULATOR'S STATIONS.
- 12E. THE MAXIMUM DISTANCE BETWEEN THE TRAFFIC REGULATORS SHALL BE NO MORE THAN 2 MILES IN LENGTH UNLESS RESTRICTED FURTHER IN THE SPECIAL PROVISIONS FOR MAINTAINING TRAFFIC. ALL SEQUENCES OF MORE THAN 2 MILES IN LENGTH WILL REQUIRE WRITTEN PERMISSION FROM THE ENGINEER BEFORE PROCEEDING.
13. WHEN INTERSECTING ROADS OR SIGNIFICANT TRAFFIC GENERATORS (SHOPPING CENTERS, MOBILE HOME PARKS, ETC.) OCCUR WITHIN THE ONE-LANE TWO-WAY OPERATION, INTERMEDIATE TRAFFIC REGULATORS AND APPROPRIATE SIGNING SHALL BE PLACED AT THESE LOCATIONS.
14. ADDITIONAL SIGNING AND/OR ELONGATED SIGNING SEQUENCES SHOULD BE USED WHEN TRAFFIC VOLUMES ARE SIGNIFICANT ENOUGH TO CREATE BACKUPS BEYOND THE W3-4 SIGNS.
15. THE HAND HELD (PADDLE) SIGNS REQUIRED BY THE MMUTCD TO CONTROL TRAFFIC WILL BE PAID FOR AS PART OF FLAG CONTROL.
- 28E. THE TRAFFIC REGULATORS SHOULD BE POSITIONED AT OR NEAR THE SIDE OF THE ROAD SO THAT THEY ARE SEEN CLEARLY AT A MINIMUM DISTANCE OF 500 FEET. THIS MAY REQUIRE EXTENDING THE BEGINNING OF THE LANE CLOSURE TO OVERCOME VIEWING PROBLEMS CAUSED BY HILLS AND CURVES.

SIGN SIZES

DIAMOND WARNING - 48" x 48"
 R2-1 REGULATORY - 48" x 60"
 R5-18c REGULATORY - 48" x 48"

NOT TO SCALE

 TRAFFIC AND SAFETY MAINTAINING TRAFFIC TYPICAL	TYPICAL TEMPORARY TRAFFIC CONTROL FOR A TWO-LANE TWO-WAY ROADWAY WHERE ONE LANE IS CLOSED UTILIZING TRAFFIC REGULATORS, NO SPEED REDUCTION		
	DRAWN BY: CON:AE:djf CHECKED BY: BMM	JUNE 2006 PLAN DATE:	M0140a
FILE: PW RD/TS/Typicals/Signs/MT NON FWY/M0140a.dgn REV. 08/17/2007			

LOG OF PROJECT
LOCATIONS & QUANTITIES

1. Jordan Lake Road from I-96 overpass to Grand River Ave and Durkee Road to Goodemoot Road in Berlin and Odessa Townships. 1.03 Miles (5,455'). Place Single Chip Seal 34 feet wide.

Seal, Single Chip	12,122 Square Yard
Seal, Fog (optional)	12,122 Square Yard
Raised Pav't Marker, Temp, Type 1, Yellow, Bidirectional	54 Each

2. Sunfield Hwy from 40' north of Musgrove Hwy to 35' south of Clarksville Road in Sebewa Township. 3.04 Miles (16,075'). Place Single Chip Seal 21 feet wide.

Seal, Single Chip	37,508 Square Yard
Seal, Fog (optional)	37,508 Square Yard
Raised Pav't Marker, Temp, Type 1, Yellow, Bidirectional	160 Each

3. Lyons Road from 312' north of Cross St. to Gibbs Road in Portland Township. 1.40 Miles (7392'). Place Single Chip Seal 2940' @ 34' wide, 4452' @ 22' wide.

Seal, Single Chip	21,990 Square Yard
Seal, Fog (optional)	21,990 Square Yard
Raised Pav't Marker, Temp, Type 1, Yellow, Bidirectional	74 Each

4. Hubble Road from 118' east of M-66 to 206' east of Jefferson Road in Ronald Township. 1.02 Miles (5368'). Place Single Chip Seal 22' feet wide.

Seal, Single Chip	13,122 Square Yard
Seal, Fog (optional)	13,122 Square Yard
Raised Pav't Marker, Temp, Type 1, Yellow, Bidirectional	54 Each

5. Drew Road from 32' east of Montcalm Ave to 400' west of Bell Road in Campbell Township. 1.97 Miles (10376'). Place Single Chip Seal 22 feet wide. .

Seal, Single Chip	25,363 Square Yard
Seal, Fog (optional)	25,363 Square Yard
Raised Pav't Marker, Temp, Type 1, Yellow, Bidirectional	104 Each

6. Westbrook Road bridge north of Nickle Plate Road in Ronald Township. 0.03 Miles (165'). Place Single Chip Seal 30 feet wide.

Seal, Single Chip	550 Square Yard
Seal, Fog (optional)	550 Square Yard
Raised Pav't Marker, Temp, Type 1, Yellow, Bidirectional	0 Each

7. Cutler Road bridge east of Grand River Ave in Portland Township. 0.08 Miles (430'). Place Single Chip Seal 30 feet wide.

Seal, Single Chip	1,434 Square Yard
Seal, Fog (optional)	1,434 Square Yard
Raised Pav't Marker, Temp, Type 1, Yellow, Bidirectional	0 Each

(15)

8. Powell Hwy from 100' south of Woods Road to 100' north of Borden Road including 100' on both legs of the Luce Road intersection in Ronald Township. 1.06 Miles (5605'). Crush existing 22 foot wide pavement and shape to 22 foot wide. Place and Prime and Double Chip Seal 22 feet wide.

HMA Base Crushing and Shaping	14,145 Square Yard
Seal, Prime and Double Chip	14,145 Square Yard
Seal, Fog (optional)	14,145 Square Yard
Raised Pav't Marker, Temp, Type 1, Yellow, Bidirectional	54 Each

Project location 9 thru 14 for the City of Ionia shall be billed directly to the City at:

City of Ionia

Gary Cunningham

City Hall

114 N. Kidd St.

P.O. Box 496

Ionia, MI 48846

9. Cleveland Street from Main Street to City Limits. 2,830' (0.54 Miles). Place Single Chip Seal 25' wide.

Seal, Single Chip	7,860 Square Yard
Seal, Fog (optional)	7,860 Square Yard

10. Hall Street from M-21 to Forest Street. 720' (0.14 Miles). Place Single Chip Seal 20' wide.

Seal, Single Chip	1,600 Square Yard
Seal, Fog (optional)	1,600 Square Yard

11. Harter Street from Hackett Street to M-21. 1,025' (0.19 Miles). Place Single Chip Seal 28' wide.

Seal, Single Chip	3,190 Square Yard
Seal, Fog (optional)	3,190 Square Yard

12. Jefferson Street from M-21 to East Main Street. 1,365' (0.26 Miles) Place Single Chip Seal 27' wide.

Seal, Single Chip	4,100 Square Yard
Seal, Fog (optional)	4,100 Square Yard

13. Jackson Street from Washington Street to M-21. 1,065' (0.20 Miles). Place Single Chip Seal 30' wide.

Seal, Single Chip	3,550 Square Yard
Seal, Fog (optional)	3,550 Square Yard

14. Jackson Street "Y" from Jackson Street to M-21. 265' (0.05 Miles). Place Single Chip Seal 27' wide.

Seal, Single Chip	795 Square Yard
Seal, Fog (optional)	795 Square Yard

(16)
PROJECT NOTES:

1. Seal, Single and Double, Chip shall be constructed according to Section 5.08 of the 2003 Michigan Department of Transportation Standard Specifications for Construction as amended by Supplemental Specifications and Special Provisions. Apply within the range of 20-24 pounds per square yard. Use a JMF target rate for the course aggregate of 22 pounds per square yard. The aggregate shall be CS-2.
2. CRS-2M emulsion shall be as per the 2003 Michigan Department of Transportation Standard Specifications for Construction Section 508.03.E.1 and 904. Apply within the range of 0.37-0.41 gallons per square yard. Use a JMF target rate of 0.39 gallons per square yard.
3. Prime Coat shall be SS-1h (diluted as place of manufacture, no field dilution, one part asphalt emulsion to three parts water) or approved equal, cost included with other items, applied at a rate of 0.32 to 0.35 gallons per syd.
4. **Alternate Bid:** CM-90 shall be spread at a residual target rate (after correction for temperature expansion and distillate loss) of .30 gallons per square yard. (min application rate is .29). If the target rate of .30 gallons per square yard is not the optimum application rate due to the gradation of the coarse aggregate or due to existing surface conditions of the pavement, the contractor shall notify the Road commission's inspector immediately and prior to application. Upon approval of changes by the engineer, the contractor shall then document the new JMF rate(s) by stationing. All truck demurrage will be the responsibility of the contractor.
5. **Alternate Bid:** CSS-1h (at 50% dilution) shall be spread at a target rate between 0.10 to 0.15 gallons per square yard with a target rate of 0.13 gallons per square yard. If the target rate of 0.13 gallons per square yard is not the optimum application rate due to the gradation of the coarse aggregate or due to existing surface conditions of the pavement, the contractor shall notify the Road commission's inspector immediately and prior to application. Upon approval of changes by the engineer, the contractor shall then document the new JMF rate(s) by stationing. All truck demurrage will be the responsibility of the contractor. Fog Seal shall be placed 24-48 hours after completion of chipseal brooming.
6. All pavement to be chip sealed shall be cleaned by the contractor. The contractor shall clean the pavement with a motorized power broom to remove all loose material. This work is included in the payment for Seal, Single Chip. The contractor shall take precautions not to sweep loose material into/ onto maintained yards.
7. Temporary Raised Pavement Markers will be used as directed in the 2003 Standard Specifications Sections 812.03.F.9 and will be paid as EACH. The Temporary Raised Pavement Markers (RAISED PAV'T MARKER, TEMP, TYPE 1, YELLOW BI-DIRECTIONAL) will be placed prior to the chip and seal applications or as directed by the engineer. **Pavement Markers are estimated at 1 marker every 100' with no additional markers for No Passing Zones.**

8. The contractor shall certify that all of the materials meet current MDOT specifications.
9. Permanent Pavement Markings will be completed by others after completion of this contract.
10. The Contractor shall secure their own stockpile areas at locations near the work. The Road Commission must approve stockpile locations and will require a copy of the contractor's written approval from the property owner.
11. Brooming is waved and shall be completed by the City of Ionia on *locations 9-14*.
12. Fog Seal bid acceptance is optional as determined by the Board
13. No approach work is estimated in Seal, Single Chip.
14. For protection of underground utilities, and in conformance with Public Act 53, 1974, the Contractor shall call toll free 1-800-482-7171 a minimum of three full working days, excluding Saturdays, Sundays and holidays, prior to beginning each excavation in areas where public utilities have not been previously located. All "MISS DIG" participating members will be thus routinely notified. This does not relieve the Contractor from notifying utilities owners who may not be a part of the "MISS DIG" alert system.

UTILITY COORDINATION CLAUSE

ICRC/WAS

1 OF 1

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For protection of underground utilities, and in conformance with Public Act 53, 1974, the Contractor shall call toll free 1-800-482-7171 a minimum of three full working days, excluding Saturdays, Sundays and holidays, prior to beginning each excavation in areas where public utilities have not been previously located. All "MISS DIG" participating members will be thus routinely notified. This does not relieve the Contractor from notifying utilities owners who may not be a part of the "MISS DIG" alert system.

The existing utilities listed below represent the best information available at the time of the preparation of these plans. This information does not relieve the Contractor of the responsibility to satisfy himself of their accuracy.

Telephone

SBC (Ameritech)
955 36th St.
P.O. Box 30162
(616) 246-0050

Centrytel
P.O. Box 389
100 Second St.
Pinconning, MI 48650-.389
989-879-8719

Verizon North
345 Pine Ave.
Alma, MI 48801-0459
517-723-0301

Electric

Mr. Christopher R. Schrock
Consumers Power
4000 Clay Ave.
P.O. Box 201
Grand Rapids, MI 49501-0201
(616) 530-4097

Homeworks Tri-County Electric CO-OP
7973 E. Grand River Ave.
Portland, MI 48875
517-647-7554

Gas

Mr. Jeremy Beard
Consumers Energy Co.
530 Willow St
P.O. Box 30162
Lansing, MI 48909
517-374-2131

The owners of public or private utilities which will not interfere with the completed project and which do not constitute a hazard to the public or an extraordinary hazard to the Contractor's operations will not be required to move their facilities on or from the right of way. The Contractor shall locate all utilities prior to starting work, and shall conduct his operations in such a manner as to ensure that those utilities not requiring relocation will not be disturbed.

When existing utilities are encountered which are or are not shown on the Plans and must be moved to a new location, or are accidentally damaged during construction, no additional compensation will be paid to the Contractor for reasonable delays to repair or relocate the utility beyond the control of the Ionia County Road Commission or the Michigan Department of Transportation. Such delays on construction, or delays caused by work stoppages by employees of or contractors for utility companies which delay utility repairs or revisions on any portion of the project may be considered the basis for extension of contract time, but will not be considered the basis for adjustment of contract unit prices.