

VILLAGE OF DOWNERS GROVE
Report for the Village Council Meeting
8/21/2018

| | |
|---|--|
| SUBJECT: | SUBMITTED BY: |
| 2018 Pavement Striping Maintenance Contract | Nan Newlon Director of Public Works |

SYNOPSIS

A motion is requested to award a contract for the 2018 Pavement Striping Maintenance to Superior Road Striping of Melrose Park, Illinois in the amount of \$50,000.

STRATEGIC PLAN ALIGNMENT

The goals for 2017-2019 include *Top Quality Infrastructure*.

FISCAL IMPACT

The FY18 Budget includes \$50,000 in the Capital Fund (Page 4-17, Line 20) for this program.

RECOMMENDATION

Approval on the August 21, 2018 consent agenda.

BACKGROUND

The Village has over 26 miles of thermoplastic pavement markings comprised of stop bars, centerlines, lane lines and edge lines in addition to symbols such as left and right turn arrows. Over time they require replacement due to normal weathering, traffic, snow plowing and construction activities. Staff's observations indicate that the average life of thermoplastic pavement markings in the Village is approximately four years.

This project is recommended to be completed through a cooperative purchasing contract with DuPage County's 2018 Pavement Marking Maintenance Contract, which included a Joint Purchase line item and allows for pricing to be extended to local governments in accordance with the provisions of the Village Purchasing Policy.

Superior Road Striping performed this work for the Village during the years of 2008 through 2010 as well as 2016-2017 and performed satisfactorily. Staff recommends award of this contract to Superior Road Striping.

ATTACHMENTS

Contract Documents

RETURN WITH BID



**Local Public Agency
Formal Contract Proposal**

| | | |
|-----------------------|----------|----------|
| PROPOSAL SUBMITTED BY | | |
| Contractor's Name | | |
| Street | P.O. Box | |
| City | State | Zip Code |

STATE OF ILLINOIS

COUNTY OF DuPage
DuPage County Division of Transportation
 (Name of City, Village, Town or Road District)

FOR THE IMPROVEMENT OF
 STREET NAME OR ROUTE NO. 2018 Pavement Marking Maintenance
 SECTION NO. 18-PVMKG-06-GM
 TYPES OF FUNDS _____

SPECIFICATIONS (required)

PLANS (required)

For Municipal Projects
 Submitted/Approved/Passed

Mayor President of Board of Trustees Municipal Official

Date

Department of Transportation

Released for bid based on limited review

Regional Engineer

Date

For County and Road District Projects
 Submitted/Approved

Highway Commissioner

Date

Submitted/Approved

County Engineer/Superintendent of Highways

Date

Note: All proposal documents, including Proposal Guaranty Checks or Proposal Bid Bonds, should be stapled together to prevent loss when bids are processed.

RETURN WITH BID

NOTICE TO BIDDERS

County DuPage
 Local Public Agency DuPage County D.O.T.
 Section Number 18-PVMKG-06-GM
 Route Various

Sealed proposals for the improvement described below will be received at the office of DuPage County Div of Transportation,
421 N. County Farm Road, 2nd Floor, Wheaton, IL 60187-2553 until 10:00 AM on April 24, 2018
 Address Time Date

Sealed proposals will be opened and read publicly at the office of the DuPage County Division of Transportation,
421 N. County Farm Road, 2nd Floor, Wheaton, IL 60187-2553 at 10:00 AM on April 24, 2018
 Address Time Date

DESCRIPTION OF WORK

Name 2018 Pavement Marking Maintenance Length: _____ feet (_____ miles)
 Location Various Routes
 Proposed Improvement Removal of existing pavement markings and installation of thermoplastic, urethane,
and spray thermoplastic pavement markings, and recessed pavement markers.

1. Plans and proposal forms will be available ~~in the office of~~ online at <http://www.dupageco.org/dot/doingbusiness>
or by contacting the DuPage County Division of Transportation at (630) 407-6900.
 Address
2. Prequalification
 If checked, the 2 low bidders must file within 24 hours after the letting an "Affidavit of Availability" (Form BC 57), in duplicate, showing all uncompleted contracts awarded to them and all low bids pending award for Federal, State, County, Municipal and private work. One original shall be filed with the Awarding Authority and one original with the IDOT District Office.
3. The Awarding Authority reserves the right to waive technicalities and to reject any or all proposals as provided in BLRS Special Provision for Bidding Requirements and Conditions for Contract Proposals.
4. The following ~~BLR~~ Forms shall be returned by the bidder to the Awarding Authority:
 - a. BLR 12200: Local Public Agency Formal Contract Proposal
 - b. BLR 12200a Schedule of Prices
 - c. BLR 12230: Proposal Bid Bond (if applicable)
 - d. BLR 12325: Apprenticeship or Training Program Certification (**do not use for federally funded projects**)
 - e. BLR 12326: Affidavit of Illinois Business Office
 - f. **DuPage County – Required Vendor Ethics Disclosure Statement**
5. The quantities appearing in the bid schedule are approximate and are prepared for the comparison of bids. Payment to the Contractor will be made only for the actual quantities of work performed and accepted or materials furnished according to the contract. The scheduled quantities of work to be done and materials to be furnished may be increased, decreased or omitted as hereinafter provided.
6. Submission of a bid shall be conclusive assurance and warranty the bidder has examined the plans and understands all requirements for the performance of work. The bidder will be responsible for all errors in the proposal resulting from failure or neglect to conduct an in depth examination. The Awarding Authority will, in no case be responsible for any costs, expenses, losses or changes in anticipated profits resulting from such failure or neglect of the bidder.
7. The bidder shall take no advantage of any error or omission in the proposal and advertised contract.
8. If a special envelope is supplied by the Awarding Authority, each proposal should be submitted in that envelope furnished by the Awarding Agency and the blank spaces on the envelope shall be filled in correctly to clearly indicate its contents. When an envelope other than the special one furnished by the Awarding Authority is used, it shall be marked to clearly indicate its contents. When sent by mail, the sealed proposal shall be addressed to the Awarding Authority at the address and in care of the official in whose office the bids are to be received. All proposals shall be filed prior to the time and at the place specified in the Notice to Bidders. Proposals received after the time specified will be returned to the bidder unopened.
9. Permission will be given to a bidder to withdraw a proposal if the bidder makes the request in writing or in person before the time for opening proposals.

RETURN WITH BID

PROPOSAL

County DuPage
 Local Public Agency DuPage County D.O.T.
 Section Number 18-PVMKG-06-GM
 Route Various

1. Proposal of _____

for the improvement of the above section by the construction of removal of existing pavement markings
and installation of thermoplastic, urethane, and spray thermoplastic pavement markings, and recessed pavement markers

a total distance of _____ feet, of which a distance of _____ feet, (_____ miles) are to be improved.

2. The plans for the proposed work are those prepared by DuPage County Division of Transportation
 and approved by the Department of Transportation on _____.

3. The specifications referred to herein are those prepared by the Department of Transportation and designated as "Standard Specifications for Road and Bridge Construction" and the "Supplemental Specifications and Recurring Special Provisions" thereto, adopted and in effect on the date of invitation for bids.

4. The undersigned agrees to accept, as part of the contract, the applicable Special Provisions indicated on the "Check Sheet for Recurring Special Provisions" contained in this proposal.

5. The undersigned agrees to complete the work within _____ working days or by September 14, 2018
 unless additional time is granted in accordance with the specifications.

6. A proposal guaranty in the proper amount, as specified in BLRS Special Provision for Bidding Requirements and Conditions for Contract Proposals, will be required. Bid Bonds will be allowed as a proposal guaranty. Accompanying this proposal is either a bid bond if allowed, on Department form BLR 12230 or a proposal guaranty check, complying with the specifications, made payable to:

County Treasurer of DuPage

The amount of the check is _____ (_____).

7. In the event that one proposal guaranty check is intended to cover two or more proposals, the amount must be equal to the sum of the proposal guaranties, which would be required for each individual proposal. If the proposal guaranty check is placed in another proposal, it will be found in the proposal for: Section Number _____.

8. The successful bidder at the time of execution of the contract will be required to deposit a contract bond for the full amount of the award. When a contract bond is not required, the proposal guaranty check will be held in lieu thereof. If this proposal is accepted and the undersigned fails to execute a contract and contract bond as required, it is hereby agreed that the Bid Bond or check shall be forfeited to the Awarding Authority.

9. Each pay item should have a unit price and a total price. If no total price is shown or if there is a discrepancy between the product of the unit price multiplied by the quantity, the unit price shall govern. If a unit price is omitted, the total price will be divided by the quantity in order to establish a unit price.

10. A bid will be declared unacceptable if neither a unit price nor a total price is shown.

11. The undersigned submits herewith the schedule of prices on BLR 12200a covering the work to be performed under this contract.

12. The undersigned further agrees that if awarded the contract for the sections contained in the combinations on BLR 12200a, the work shall be in accordance with the requirements of each individual proposal for the multiple bid specified in the Schedule for Multiple Bids below.

RETURN WITH BID



SCHEDULE OF PRICES

County: DuPage
 Local Public Agency: DuPage County DOT
 Section: 18-PVMKG-06-GM
 Route: Various

Schedule for Multiple Bids

| Combination Letter | Sections included in Combinations | Total |
|--------------------|-----------------------------------|-------|
| | | |
| | | |
| | | |
| | | |

Schedule for Single Bid

(For complete information covering these items, see plans and specifications)

| | |
|--|--|
| Bidder's proposal for making entire improvements | |
|--|--|

| Item No. | Items | Unit | Quantity | Unit Price | Total |
|----------|--|-------|----------|------------|-------|
| 1 | THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS | SQ FT | 22200 | | |
| 2 | THERMOPLASTIC PAVEMENT MARKING - LINE 4" | FOOT | 74400 | | |
| 3 | THERMOPLASTIC PAVEMENT MARKING - LINE 6" | FOOT | 82500 | | |
| 4 | THERMOPLASTIC PAVEMENT MARKING - LINE 8" | FOOT | 2800 | | |
| 5 | THERMOPLASTIC PAVEMENT MARKING - LINE 12" | FOOT | 33600 | | |
| 6 | THERMOPLASTIC PAVEMENT MARKING - LINE 24" | FOOT | 6850 | | |
| 7 | HOT SPRAY THERMOPLASTIC PAVEMENT MARKING LINE - 4 INCH | FOOT | 630000 | | |
| 8 | MODIFIED URETHANE PAVEMENT MARKING - LETTERS AND SYMBOLS | SQ FT | 2200 | | |
| 9 | MODIFIED URETHANE PAVEMENT MARKING - LINE 4" | FOOT | 18500 | | |
| 10 | MODIFIED URETHANE PAVEMENT MARKING - LINE 6" | FOOT | 7700 | | |
| 11 | MODIFIED URETHANE PAVEMENT MARKING - LINE 8" | FOOT | 2350 | | |
| 12 | MODIFIED URETHANE PAVEMENT MARKING - LINE 12" | FOOT | 1350 | | |
| 13 | MODIFIED URETHANE PAVEMENT MARKING - LINE 24" | FOOT | 1000 | | |
| 14 | PAVEMENT MARKING REMOVAL - GRINDING | SQ FT | 150500 | | |
| 15 | RECESSED REFLECTIVE PAVEMENT MARKER | EACH | 500 | | |
| 16 | REPLACEMENT REFLECTOR | EACH | 500 | | |
| 17 | TRAFFIC CONTROL AND PROTECTION | L SUM | 1 | | |
| | | | | | |

RETURN WITH BID

CONTRACTOR CERTIFICATIONS

| | |
|---------------------|-----------------------------|
| County | <u>DuPage</u> |
| Local Public Agency | <u>DuPage County D.O.T.</u> |
| Section Number | <u>18-PVMKG-06-GM</u> |
| Route | <u>Various</u> |

The certifications hereinafter made by the bidder are each a material representation of fact upon which reliance is placed should the Department enter into the contract with the bidder.

1. **Debt Delinquency.** The bidder or contractor or subcontractor, respectively, certifies that it is not delinquent in the payment of any tax administered by the Department of Revenue unless the individual or other entity is contesting, in accordance with the procedures established by the appropriate revenue Act, its liability for the tax or the amount of tax. Making a false statement voids the contract and allows the Department to recover all amounts paid to the individual or entity under the contract in a civil action.
2. **Bid-Rigging or Bid Rotating.** The bidder or contractor or subcontractor, respectively, certifies that it is not barred from contracting with the Department by reason of a violation of either 720 ILCS 5/33E-3 or 720 ILCS 5/33E-4.

A violation of Section 33E-3 would be represented by a conviction of the crime of bid-rigging which, in addition to Class 3 felony sentencing, provides that any person convicted of this offense or any similar offense of any state or the United States which contains the same elements as this offense shall be barred for 5 years from the date of conviction from contracting with any unit of State or local government. No corporation shall be barred from contracting with any unit of State or local government as a result of a conviction under this Section of any employee or agent of such corporation if the employee so convicted is no longer employed by the corporation and: (1) it has been finally adjudicated not guilty or (2) if it demonstrates to the governmental entity with which it seeks to contract and that entity finds that the commission of the offense was neither authorized, requested, commanded, nor performed by a director, officer or a high managerial agent in behalf of the corporation.

A violation of Section 33E-4 would be represented by a conviction of the crime of bid-rotating which, in addition to Class 2 felony sentencing, provides that any person convicted of this offense or any similar offense of any state or the United States which contains the same elements as this offense shall be permanently barred from contracting with any unit of State or local government. No corporation shall be barred from contracting with any unit of State or local government as a result of a conviction under this Section of any employee or agent of such corporation if the employee so convicted is no longer employed by the corporation and: (1) it has been finally adjudicated not guilty or (2) if it demonstrates to the governmental entity with which it seeks to contract and that entity finds that the commission of the offense was neither authorized, requested, commanded, nor performed by a director, officer or a high managerial agent in behalf of the corporation.

3. **Bribery.** The bidder or contractor or subcontractor, respectively, certifies that it has not been convicted of bribery or attempting to bribe an officer or employee of the State of Illinois or any unit of local government, nor has the firm made an admission of guilt of such conduct which is a matter of record, nor has an official, agent, or employee of the firm committed bribery or attempted bribery on behalf of the firm and pursuant to the direction or authorization of a responsible official of the firm.
4. **Interim Suspension or Suspension.** The bidder or contractor or subcontractor, respectively, certifies that it is not currently under a suspension as defined in Subpart I of Title 44 Subtitle A Chapter III Part 6 of the Illinois Administrative Code. Furthermore, if suspended prior to completion of this work, the contract or contracts executed for the completion of this work may be cancelled.

RETURN WITH BID

SIGNATURES

County DuPage
 Local Public Agency DuPage County D.O.T.
 Section Number 18-PVMKG-06-GM
 Route Various

(If an individual)

Signature of Bidder _____

Business Address _____

(If a partnership)

Firm Name _____

Signed By _____

Business Address _____

Inset Names and Addressed of All Partners

(If a corporation)

Corporate Name _____

Signed By _____

President

Business Address _____

Inset Names of Officers

{ President _____
 { Secretary _____
 { Treasurer _____

Attest: _____
Secretary



Illinois Department of Transportation

Local Agency Proposal Bid Bond

Route Various
County DuPage
Local Agency DuPage County D.O.T.
Section 18-PVMKG-06-GM

RETURN WITH BID

PAPER BID BOND

WE _____ as PRINCIPAL,
and _____ as SURETY,

are held jointly, severally and firmly bound unto the above Local Agency (hereafter referred to as "LA") in the penal sum of 5% of the total bid price, or for the amount specified in the proposal documents in effect on the date of invitation for bids whichever is the lesser sum.

WHEREAS THE CONDITION OF THE FOREGOING OBLIGATION IS SUCH that, the said PRINCIPAL is submitting a written proposal to the LA acting through its awarding authority for the construction of the work designated as the above section.

THEREFORE if the proposal is accepted and a contract awarded to the PRINCIPAL by the LA for the above designated section and the PRINCIPAL shall within fifteen (15) days after award enter into a formal contract, furnish surety guaranteeing the faithful performance of the work, and furnish evidence of the required insurance coverage, all as provided in the "Standard Specifications for Road and Bridge Construction" and applicable Supplemental Specifications, then this obligation shall become void; otherwise it shall remain in full force and effect.

IN THE EVENT the LA determines the PRINCIPAL has failed to enter into a formal contract in compliance with any requirements set forth in the preceding paragraph, then the LA acting through its awarding authority shall immediately be entitled to recover the full penal sum set out above, together with all court costs, all attorney fees, and any other expense of recovery.

IN TESTIMONY WHEREOF, the said PRINCIPAL and the said SURETY have caused this instrument to be signed by their respective officers this _____ day of _____

Principal

By: _____ (Company Name)
By: _____ (Company Name)
(Signature and Title) (Signature and Title)

(If PRINCIPLE is a joint venture of two or more contractors, the company names, and authorized signatures of each contractor must be affixed.)

Surety

By: _____ (Name of Surety)
(Signature of Attorney-in-Fact)

STATE OF ILLINOIS,
COUNTY OF _____
I, _____, a Notary Public in and for said county,
do hereby certify that _____

(Insert names of individuals signing on behalf of PRINCIPAL & SURETY)

who are each personally known to me to be the same persons whose names are subscribed to the foregoing instrument on behalf of PRINCIPAL and SURETY, appeared before me this day in person and acknowledged respectively, that they signed and delivered said instruments as their free and voluntary act for the uses and purposes therein set forth.

Given under my hand and notarial seal this _____ day of _____

My commission expires _____ (Notary Public)

ELECTRONIC BID BOND

[] Electronic bid bond is allowed (box must be checked by LA if electronic bid bond is allowed)

The Principal may submit an electronic bid bond, in lieu of completing the above section of the Proposal Bid Bond Form. By providing an electronic bid bond ID code and signing below, the Principal is ensuring the identified electronic bid bond has been executed and the Principal and Surety are firmly bound unto the LA under the conditions of the bid bond as shown above. (If PRINCIPAL is a joint venture of two or more contractors, an electronic bid bond ID code, company/Bidder name title and date must be affixed for each contractor in the venture.)

Electronic Bid Bond ID Code grid

Electronic Bid Bond ID Code

(Company/Bidder Name)

(Signature and Title)

Date



Apprenticeship or Training Program Certification

Return with Bid

| | |
|--------------|--|
| Route | Various |
| County | DuPage |
| Local Agency | DuPage County Division of Transportation |
| Section | 18-PVMKG-06-GM |

All contractors are required to complete the following certification:

- For this contract proposal or for all groups in this deliver and install proposal.
- For the following deliver and install groups in this material proposal:

Illinois Department of Transportation policy, adopted in accordance with the provisions of the Illinois Highway Code, requires this contract to be awarded to the lowest responsive and responsible bidder. The award decision is subject to approval by the Department. In addition to all other responsibility factors, this contract or deliver and install proposal requires all bidders and all bidders' subcontractors to disclose participation in apprenticeship or training programs that are (1) approved by and registered with the United States Department of Labor's Bureau of Apprenticeship and Training, and (2) applicable to the work of the above indicated proposals or groups. Therefore, all bidders are required to complete the following certification:

- I. Except as provided in paragraph IV below, the undersigned bidder certifies that it is a participant, either as an individual or as part of a group program, in an approved apprenticeship or training program applicable to each type of work or craft that the bidder will perform with its own employees.
- II. The undersigned bidder further certifies for work to be performed by subcontract that each of its subcontractors submitted for approval either (A) is, at the time of such bid, participating in an approved, applicable apprenticeship or training program; or (B) will, prior to commencement of performance of work pursuant to this contract, establish participation in an approved apprenticeship or training program applicable to the work of the subcontract.
- III. The undersigned bidder, by inclusion in the list in the space below, certifies the official name of each program sponsor holding the Certificate of Registration for all of the types of work or crafts in which the bidder is a participant and that will be performed with the bidder's employees. Types of work or craft that will be subcontracted shall be included and listed as subcontract work. The list shall also indicate any type of work or craft job category for which there is no applicable apprenticeship or training program available.

IV. Except for any work identified above, any bidder or subcontractor that shall perform all or part of the work of the contract or deliver and install proposal solely by individual owners, partners or members and not by employees to whom the payment of prevailing rates of wages would be required, check the following box, and identify the owner/operator workforce and positions of ownership.

The requirements of this certification and disclosure are a material part of the contract, and the contractor shall require this certification provision to be included in all approved subcontracts. The bidder is responsible for making a complete report and shall make certain that each type of work or craft job category that will be utilized on the project is accounted for and listed. The Department at any time before or after award may require the production of a copy of each applicable Certificate of Registration issued by the United States Department of Labor evidencing such participation by the contractor and any or all of its subcontractors. In order to fulfill the participation requirement, it shall not be necessary that any applicable program sponsor be currently taking or that it will take applications for apprenticeship, training or employment during the performance of the work of this contract or deliver and install proposal.

Bidder: _____

By: _____

(Signature)

Address: _____

Title: _____

RETURN WITH BID



Affidavit of Illinois Business Office

County DuPage
 Local Public Agency DuPage County D.O.T
 Section Number 18-PVMKG-06-GM
 Route Various

State of _____)
) ss.
 County of _____)

I, _____ of _____ , _____ ,
 (Name of Affiant) (City of Affiant) (State of Affiant)

being first duly sworn upon oath, states as follows:

1. That I am the _____ of _____ .
 officer or position bidder
2. That I have personal knowledge of the facts herein stated.
3. That, if selected under this proposal, _____ , will maintain a
 (bidder)
 business office in the State of Illinois which will be located in _____ County, Illinois.
4. That this business office will serve as the primary place of employment for any persons employed in the construction contemplated by this proposal.
5. That this Affidavit is given as a requirement of state law as provided in Section 30-22(8) of the Illinois Procurement Code.

 (Signature)

 (Print Name of Affiant)

This instrument was acknowledged before me on _____ day of _____ , _____ .

(SEAL)

 (Signature of Notary Public)



Illinois Department of Transportation

Bureau of Construction
2300 South Dirksen Parkway/Room 322
Springfield, Illinois 62764

Affidavit of Availability For the Letting of 3/13/2018

Instructions: Complete this form by either typing or using black ink. "Authorization to Bid" will not be issued unless both sides of this form are completed in detail. Use additional forms as needed to list all work.

Part I. Work Under Contract

List below all work you have under contract as either a prime contractor or a subcontractor. It is required to include all pending low bids not yet awarded or rejected. In a joint venture, list only that portion of the work which is the responsibility of your company. The uncompleted dollar value is to be based upon the most recent engineer's or owners estimate, and must include work subcontracted to others. If no work is contracted, show **NONE**.

| | 1 | 2 | 3 | 4 | Awards Pending | |
|--|---|---|---|---|----------------|--------------------|
| Contract Number | | | | | | |
| Contract With | | | | | | |
| Estimated Completion Date | | | | | | |
| Total Contract Price | | | | | | Accumulated Totals |
| Uncompleted Dollar Value if Firm is the Prime Contractor | | | | | | |
| Uncompleted Dollar Value if Firm is the Subcontractor | | | | | | |
| Total Value of All Work | | | | | | |

Part II. Awards Pending and Uncompleted Work to be done with your own forces.

List below the uncompleted dollar value of work for each contract and awards pending to be completed with your own forces. All work subcontracted to others will be listed on the reverse of this form. In a joint venture, list only that portion of the work to be done by your company. If no work is contracted, show **NONE**.

| | | | | | | Accumulated Totals |
|---------------------------------------|--|--|--|--|--|--------------------|
| Earthwork | | | | | | |
| Portland Cement Concrete Paving | | | | | | |
| HMA Plant Mix | | | | | | |
| HMA Paving | | | | | | |
| Clean & Seal Cracks/Joints | | | | | | |
| Aggregate Bases & Surfaces | | | | | | |
| Highway, R.R. and Waterway Structures | | | | | | |
| Drainage | | | | | | |
| Electrical | | | | | | |
| Cover and Seal Coats | | | | | | |
| Concrete Construction | | | | | | |
| Landscaping | | | | | | |
| Fencing | | | | | | |
| Guardrail | | | | | | |
| Painting | | | | | | |
| Signing | | | | | | |
| Cold Milling, Planning & Rotomilling | | | | | | |
| Demolition | | | | | | |
| Pavement Markings (Paint) | | | | | | |
| Other Construction (List) | | | | | | |
| | | | | | | \$ 0.00 |
| Totals | | | | | | |

Disclosure of this information is **REQUIRED** to accomplish the statutory purpose as outlined in the "Illinois Procurement Code." Failure to comply will result in non-issuance of an "Authorization To Bid." This form has been approved by the State Forms Management Center.

Part III. Work Subcontracted to Others.

For each contract described in Part I, list all the work you have subcontracted to others.

| | 1 | 2 | 3 | 4 | Awards Pending |
|--------------------|---|---|---|---|----------------|
| Subcontractor | | | | | |
| Type of Work | | | | | |
| Subcontract Price | | | | | |
| Amount Uncompleted | | | | | |
| Subcontractor | | | | | |
| Type of Work | | | | | |
| Subcontract Price | | | | | |
| Amount Uncompleted | | | | | |
| Subcontractor | | | | | |
| Type of Work | | | | | |
| Subcontract Price | | | | | |
| Amount Uncompleted | | | | | |
| Subcontractor | | | | | |
| Type of Work | | | | | |
| Subcontract Price | | | | | |
| Amount Uncompleted | | | | | |
| Subcontractor | | | | | |
| Type of Work | | | | | |
| Subcontract Price | | | | | |
| Amount Uncompleted | | | | | |
| Subcontractor | | | | | |
| Type of Work | | | | | |
| Subcontract Price | | | | | |
| Amount Uncompleted | | | | | |
| Total Uncompleted | | | | | |

I, being duly sworn, do hereby declare that this affidavit is a true and correct statement relating to ALL uncompleted contracts of the undersigned for Federal, State, County, City and private work, including ALL subcontract work, ALL pending low bids not yet awarded or rejected and ALL estimated completion dates.

Subscribed and sworn to before me

this _____ day of _____, _____ Type or Print Name _____
Officer or Director Title

Signed _____

 Notary Public

My commission expires _____

(Notary Seal)

Company _____

Address _____



Required Vendor Ethics Disclosure Statement

Failure to complete and return this form may result in delay or cancellation of the County's Contractual Obligation.

Date: _____

Bid/Contract/PO #: 18-PVMKG-06-GM

| | |
|----------------|------------------|
| Company Name: | Company Contact: |
| Contact Phone: | Contact Email: |

The DuPage County Procurement Ordinance requires the following written disclosures prior to award:

1. Every contractor, union, or vendor that is seeking or has previously obtained a contract, change orders to one (1) or more contracts, or two (2) or more individual contracts with the county resulting in an aggregate amount at or in excess of \$25,000, shall provide to Procurement Services Division a written disclosure of all political campaign contributions made by such contractor, union, or vendor within the current and previous calendar year to any incumbent county board member, county board chairman, or countywide elected official whose office the contract to be awarded will benefit. The contractor, union or vendor shall update such disclosure annually during the term of a multi-year contract and prior to any change order or renewal requiring approval by the county board. For purposes of this disclosure requirement, "contractor or vendor" includes owners, officers, managers, lobbyists, agents, consultants, bond counsel and underwriters counsel, subcontractors and corporate entities under the control of the contracting person, and political action committees to which the contracting person has made contributions.

NONE (check here) - If no contributions have been made

| Recipient | Donor | Description (e.g. cash, type of item, in-kind services, etc.) | Amount/Value | Date Made |
|-----------|-------|---|--------------|-----------|
| | | | | |

2. All contractors and vendors who have obtained or are seeking contracts with the county shall disclose the names and contact information of their lobbyists, agents and representatives and all individuals who are or will be having contact with county officers or employees in relation to the contractor bid and shall update such disclosure with any changes that may occur.

NONE (check here) - If no contacts have been made

| Lobbyists, Agents and Representatives and all individuals who are or will be having contact with county officers or employees in relation to the contract or bid | Telephone | Email |
|--|-----------|-------|
| | | |

A contractor or vendor that knowingly violates these disclosure requirements is subject to penalties which may include, but are not limited to, the immediate cancellation of the contract and possible disbarment from future county contracts.

Continuing disclosure is required, and I agree to update this disclosure form as follows: If information changes, within five (5) days of change, or prior to county action, whichever is sooner 30 days prior to the optional renewal of any contract Annual disclosure for multi-year contracts on the anniversary of said contract With any request for change order except those issued by the county for administrative adjustments

The full text for the county's ethics and procurement policies and ordinances are available at:

<http://www.dupageco.org/CountyBoard/Policies/>

I hereby acknowledge that I have received, have read, and understand these requirements.

Authorized Signature

Printed Name

Title

Date

Attach additional sheets if necessary. Sign each sheet and number each page. Page _____ of _____ (total number of pages)

RETURN WITH BID

Joint Purchasing Authorization

| | |
|---------------------|---------------------|
| County | DuPage |
| Local Public Agency | DuPage County D.O.T |
| Section Number | 18-PVMKG-06-GM |
| Route | Various |

JOINT PURCHASING:

OTHER TAXING BODIES: Based on County Board Resolution IR-084-76.

**Would your firm be willing to extend your bid to other taxing bodies in DuPage County such as school districts, townships, cities and villages, etc.?
The approximate quantity usage is unknown.**

YES _____ NO _____ **

**** Failure to complete this form will result in a default assumption of a "NO" response.**

State any other requirements that they would have to meet beyond that of our Bid Invitation and Specifications.

NOTE: The County of DuPage would not be involved in purchasing by any other taxing body other than to receive a copy of their purchase order that would reference the County of DuPage contract number. The invoicing and payments would be entirely between the other taxing bodies and the Contractor. If the County of DuPage accepts this bid, the procedure to handle joint purchases would be developed by the County of DuPage with the Contractor and distributed to the taxing bodies by the County of DuPage.

○ **TABLE OF CONTENTS**



TABLE OF CONTENTS

PROPOSAL DOCUMENTS

- BLR 12200 & BLR 12200a
 - Local Public Agency Formal Contract Proposal
 - Notice to Bidders
 - Proposal
 - Schedule of Prices
 - Contractor Certifications
 - Signatures
- BLR 12230 Local Agency Proposal Bid Bond
- BLR 12325 Apprenticeship or Training Program Certification
- BLR 12326 Affidavit of Illinois Business Office
- BC 57 Affidavit of Availability
- DuPage County – Required Vendor Ethics Disclosure Statement
- DuPage County – Joint Purchasing Authorization

PAGE

PLANS **A**

 GENERAL NOTES..... A

 SUMMARY OF QUANTITIES..... C

 SCHEDULES OF QUANTITIES D

SPECIAL PROVISIONS **1**

 BIDDING REQUIREMENTS AND CONDITIONS FOR CONTRACT PROPOSALS..... 1

 SECTION 107 LEGAL REGULATIONS AND RESPONSIBILITY TO PUBLIC 1

 SECTION 108 PROSECUTION AND PROGRESS 2

 SECTION 109 MEASUREMENT AND PAYMENT 2

 SECTION 671 MOBILIZATION 3

 RECESSED REFLECTIVE PAVEMENT MARKERS 3

 TRAFFIC CONTROL AND PROTECTION 3

 TRAFFIC CONTROL PLAN 4

 45 MIL HOT SPRAY THERMOPLASTIC PAVEMENT MARKING 5

INDEX FOR SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS
 CHECK SHEET FOR RECURRING SPECIAL PROVISIONS
 CHECK SHET FOR RECURRING LOCAL ROADS AND STREETS SPECIAL PROVISIONS


DuPAGE COUNTY PREVAILING WAGE EFFECTIVE SEPT. 1, 2017
 (FOR USE WITH CHECK SHEET # LRS12)

- BDE Special Provisions
- CONSTRUCTION AIR QUALITY – DIESEL RETROFIT
 - EQUIPMENT PARKING AND STORAGE
 - LIGHTS ON BARRICADES
 - PAVEMENT MARKING REMOVAL
 - PAYMENTS TO SUBCONTRACTORS
 - SUBCONTRACTOR MOBILILATION PAYMENTS

2018 Pavement Marking Maintenance
SEC. 18-PVMKG-06-GM

Highway Standard Drawings

| | |
|--------|---|
| 701201 | Lane Closure, 2L, 2W, Day Only, for Speeds > 45 MPH |
| 701301 | Lane Closure, 2L, 2W, Short Time Operations |
| 701306 | Lane Closure, 2L, 2W, Slow Moving Operations Day Only, for Speeds > 45 MPH |
| 701311 | Lane Closure, 2L, 2W, Moving Operations - Day Only |
| 701336 | Lane Closure, 2L, 2W, Work Areas in Series, for Speeds > 45 MPH |
| 701421 | Lane Closure, Multilane, Day Operations Only, for Speeds > 45 MPH to 55 MPH |
| 701422 | Lane Closure, Multilane, for Speeds > 45 MPH to 55 MPH |
| 701426 | Lane Closure, Multilane, Intermittent or Moving Operation, for Speeds > 45 MPH |
| 701427 | Lane Closure, Multilane, Intermittent or Moving Operation, for Speeds ≤ 40 MPH |
| 701501 | Urban Lane Closure, 2L, 2W, Undivided |
| 701502 | Urban Lane Closure, 2L, 2W, with Bidirectional Left Turn Lane |
| 701601 | Urban Lane Closure, Multilane, 1W or 2W with Nontraversable Median |
| 701602 | Urban Lane Closure, Multilane, 2W with Bidirectional Left Turn Lane |
| 701606 | Urban Single Lane Closure, Multilane, 2W with Mountable Median |
| 701611 | Urban Half Road Closure, Multilane, 2W with Mountable Median |
| 701701 | Urban Lane Closure, Multilane Intersection |
| 701801 | Lane Closure, Multilane 1W or 2W Crosswalk or Sidewalk Closure |
| 701901 | Traffic Control Devices |
| 780001 | Typical Pavement Markings |
| 781001 | Typical Applications Raised Reflective Pavement Markers |
| TC-10 | TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS |
| TC-11 | TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOWPLOW RESISTANT) |
| TC-13 | DISTRICT ONE TYPICAL PAVEMENT MARKINGS |
| TC-14 | TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC) |
| | RECESSED PAVEMENT MARKER |

- PLANS
 - NOTES
 - SUMMARY OF QUANTITIES
 - SCHEDULES OF QUANTITIES
- 

PLANS**GENERAL NOTES****GENERAL**

NO WORK SHALL COMMENCE UNTIL TRAFFIC CONTROL REQUIREMENTS ARE MET.

UNLESS AUTHORIZED BY THE ENGINEER, ALL EXISTING ACCESS POINTS SHALL BE MAINTAINED AT ALL TIMES BY THE CONTRACTOR.

TRAFFIC CONTROL AND PROTECTION

TRAFFIC CONTROL AND PROTECTION SHALL BE PERFORMED IN ACCORDANCE WITH THE TRAFFIC CONTROL PLAN, TRAFFIC SIGNAL PLANS, THESE NOTES, APPLICABLE SPECIAL PROVISIONS, AND SECTION 701 OF THE STANDARD SPECIFICATIONS AS AMENDED BY THE SPECIAL PROVISION FOR WORK ZONE TRAFFIC CONTROL (CHECK SHEET LRS 3).

THE TYPE III BARRICADES ARE TO BE PLACED IN ACCORDANCE WITH STANDARD 701901 UNLESS AUTHORIZED BY THE ENGINEER TO USE AN ALTERNATE ARRANGEMENT.

TYPE I OR TYPE II BARRICADES, DRUMS, OR VERTICAL PANELS WITH MONODIRECTIONAL STEADY-BURN LIGHTS SHALL BE REQUIRED ALONG TEMPORARY ROADS, DETOURS, AND SIDE STREETS TO DELINEATE THE TRAVELED WAY WITHIN THE CONSTRUCTION ZONE. THE MAXIMUM SPACING FOR THESE DEVICES SHALL BE 100 FEET CENTER TO CENTER.

BARRICADES THAT MUST BE PLACED IN EXCAVATED AREAS SHALL HAVE LEG EXTENSIONS INSTALLED SUCH THAT THE TOP OF THE BARRICADE IS IN COMPLIANCE WITH THE HEIGHT REQUIREMENTS OF STANDARD 701901.

TYPE I OR TYPE II BARRICADES WITH TWO-WAY FLASHING LIGHTS SHALL BE REQUIRED AT ALL OPEN TRENCHES, EXCAVATIONS, OPEN OR EXPOSED SEWER STRUCTURES, TRANSVERSE PAVEMENT JOINTS, MATERIALS OR EQUIPMENT WITHIN THE RIGHT-OF-WAY (NUMBER AND SPACING DEPENDS ON THE CONDITIONS); AND AT LOCATIONS DESIGNATED BY THE ENGINEER OR LOCAL LAW ENFORCEMENT AGENCIES.

TYPE I, II AND / OR III BARRICADES WITH TWO-WAY FLASHING LIGHTS WILL BE REQUIRED TO GUIDE TRAFFIC AWAY FROM PAVEMENT AREAS CLOSED FOR CONSTRUCTION.

WHERE REQUIRED, TRAFFIC SIGNS SHALL BE RELOCATED FOR EACH STAGE OF CONSTRUCTION.

ARROW BOARDS WILL BE REQUIRED WHEN IMPLEMENTING ALL LANE CLOSURES.

2018 Pavement Marking Maintenance
SEC. 18-PVMKG-06-GMTHE FOLLOWING TRAFFIC CONTROL STANDARDS ARE THE MINIMUM REQUIREMENTS
FOR THE TRAFFIC CONTROL FOR THIS PROJECT:

- 701201 Lane Closure, 2L, 2W, Day Only, for Speeds > 45 MPH
- 701301 Lane Closure, 2L, 2W, Short Time Operations
- 701306 Lane Closure, 2L, 2W, Slow Moving Operations Day Only, for Speeds > 45 MPH
- 701311 Lane Closure, 2L, 2W, Moving Operations - Day Only
- 701336 Lane Closure, 2L, 2W, Work Areas in Series, for Speeds > 45 MPH
- 701421 Lane Closure, Multilane, Day Operations Only, for Speeds > 45 MPH to 55 MPH
- 701422 Lane Closure, Multilane, for Speeds > 45 MPH to 55 MPH
- 701426 Lane Closure, Multilane, Intermittent or Moving Operation, for Speeds > 45 MPH
- 701427 Lane Closure, Multilane, Intermittent or Moving Operation, for Speeds ≤ 40 MPH
- 701431 Lane Closure, Multilane, Undivided with Crossover, for Speeds > 45 MPH to 55 MPH
- 701501 Urban Lane Closure, 2L, 2W, Undivided
- 701502 Urban Lane Closure, 2L, 2W, with Bidirectional Left Turn Lane
- 701601 Urban Lane Closure, Multilane, 1W or 2W with Nontraversable Median
- 701602 Urban Lane Closure, Multilane, 2W with Bidirectional Left Turn Lane
- 701606 Urban Single Lane Closure, Multilane, 2W with Mountable Median
- 701611 Urban Half Road Closure, Multilane, 2W with Mountable Median
- 701701 Urban Lane Closure, Multilane Intersection
- 701801 Lane Closure, Multilane 1W or 2W Crosswalk or Sidewalk Closure
- 701901 Traffic Control Devices
- TC-10 TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS,
AND DRIVEWAYS
- TC-13 DISTRICT ONE TYPICAL PAVEMENT MARKINGS
- TC-14 TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO
TRAFFIC)

Section: **18-PVMMKG-06-GM**
 Route: **Various**

SUMMARY OF QUANTITIES

Δ

| Item No. | Items | Unit | Quantity | REMOVE & REPLACE | REMOVAL ONLY | NEW MARKINGS | "OTHER" OR NOMINAL |
|----------|--|-------|----------|------------------|--------------|--------------|--------------------|
| 1 | THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS | SQ FT | 22200 | 20928.4 | | | 1271.6 |
| 2 | THERMOPLASTIC PAVEMENT MARKING - LINE 4" | FOOT | 74400 | 69753 | | | 4647 |
| 3 | THERMOPLASTIC PAVEMENT MARKING - LINE 6" | FOOT | 82500 | 77301 | | | 5199 |
| 4 | THERMOPLASTIC PAVEMENT MARKING - LINE 8" | FOOT | 2800 | 2676 | | | 124 |
| 5 | THERMOPLASTIC PAVEMENT MARKING - LINE 12" | FOOT | 33600 | 23635 | | 7893 | 2072 |
| 6 | THERMOPLASTIC PAVEMENT MARKING - LINE 24" | FOOT | 6850 | 6424 | | | 426 |
| 7 | HOT SPRAY THERMOPLASTIC PAVEMENT MARKING LINE - 4 INCH | FOOT | 630000 | | | 593902 | 36098 |
| 8 | MODIFIED URETHANE PAVEMENT MARKING - LETTERS AND SYMBOLS | SQ FT | 2200 | 2090.4 | | | 109.6 |
| 9 | MODIFIED URETHANE PAVEMENT MARKING - LINE 4" | FOOT | 18500 | 17326 | | | 1174 |
| 10 | MODIFIED URETHANE PAVEMENT MARKING - LINE 6" | FOOT | 7700 | 7178 | | | 522 |
| 11 | MODIFIED URETHANE PAVEMENT MARKING - LINE 8" | FOOT | 2350 | 2240 | | | 110 |
| 12 | MODIFIED URETHANE PAVEMENT MARKING - LINE 12" | FOOT | 1350 | 1050 | | 210 | 90 |
| 13 | MODIFIED URETHANE PAVEMENT MARKING - LINE 24" | FOOT | 1000 | 933 | | | 67 |
| 14 | PAVEMENT MARKING REMOVAL - GRINDING | SQ FT | 150500 | 136961.0 | 4104.5 | | 9434.5 |
| 15 | RECESSED REFLECTIVE PAVEMENT MARKER | EACH | 500 | | | | 500 |
| 16 | REPLACEMENT REFLECTOR | EACH | 500 | | | | 500 |
| 17 | TRAFFIC CONTROL AND PROTECTION | L SUM | 1 | | | | 1 |

TOTAL QUANTITIES MAY BE ROUNDED

* DESIGNATES SPECIALTY ITEM (NONE DESIGNATED)

Δ - NOMINAL ADDITIONAL QUANTITY FOR BIDDING PURPOSES (ASSUME SMALL QUANTITIES AT ANY SINGLE LOCATION)

○ **SPECIAL PROVISIONS**



STATE OF ILLINOIS**SPECIAL PROVISIONS**

The following Special Provisions supplement the "Standard Specifications for Road and Bridge Construction", adopted April 1, 2016, the latest edition of the "Manual on Uniform Traffic Control Devices for Streets and Highways", the "Manual of Test Procedures for Materials" in effect on the date of invitation for bids and the "Supplemental Specifications and Recurring Special Provisions" indicated on the Check Sheet included herein which apply to and govern the proposed improvement designated as Section **18-PVMKG-06-GM**, and in case of conflict with any part or parts of said Specifications, the said Special Provisions shall take precedence and shall govern.

BIDDING REQUIREMENTS AND CONDITIONS FOR CONTRACT PROPOSALS

(Illinois Department of Transportation Bureau of Local Roads and Streets Special Provision for BIDDING REQUIREMENTS AND CONDITIONS FOR CONTRACT PROPOSALS LRS Check Sheet #6)

Add the following to the section **Prequalification of Bidders**: "Prequalification is required. The Certificate of Eligibility shall be accompanied by a Request for Authorization to Bid form completed by the prospective bidder. The Certificate of Eligibility and Request for Authorization to Bid shall be submitted at least one business day prior to the public opening of proposals. Authorization to bid will be issued by the DuPage County Division of Transportation to prospective bidders who are qualified to perform the work, as evidenced by the Certificate of Eligibility."

Revise the first sentence of the section **Preparation of the Proposal** to read: "Bidders shall submit their proposals on the form furnished by the Awarding Authority or on a form approved by the Awarding Authority prior to submittal of the Proposal."

Add the following to the section **Preparation of the Proposal**: "Unit prices shall only be accepted rounded to the nearest one-hundredth (0.01) of a dollar."

Add the following to the section **Public Opening of Proposals**: "Proposals will only be accepted by bidders who have been issued an authorization to bid by the DuPage County Division of Transportation. Proposals submitted without authorization to bid will be returned unopened."

SECTION 107 LEGAL REGULATIONS AND RESPONSIBILITY TO PUBLIC

Article 107.26 Indemnification. In addition to the requirements of this Article, for any activity occurring on an easement or any other property not owned by the Department, the indemnification shall also be extended to the property owners and any tenants thereon.

Article 107.27 Insurance. In addition to the requirements of this Article, the policies of insurance for Commercial (Comprehensive) General Liability and Commercial (Comprehensive) Automobile Liability shall include an additional insured endorsement naming the County of DuPage, its officers and employees as additional insureds. The endorsements shall be on forms acceptable to the County of DuPage. This additional insured is to be on a primary and non-contributory basis and include a Waiver of Subrogation endorsement.

2018 Pavement Marking Maintenance
SEC. 18-PVMKG-06-GM

Employer's Liability insurance shall be in an amount not less than one million (\$1,000,000.00) dollars each accident/injury and one million (\$1,000,000.00) dollars each employee/disease.

Limits of Umbrella Excess Liability (over primary) shall not be less than an amount that in combination with Commercial General Liability totals \$6,000,000 of liability insurance per occurrence. The Umbrella Excess Liability Policy shall include in the "Who is Insured" pages of the policy wording such as "Any other person or organization you have agreed in a written contract to provide additional insurance" or wording to that affect. The contractor shall provide a copy of said section of the excess/umbrella liability policy upon request by the County of DuPage.

The Contractor shall require all subcontractors to maintain the same insurance coverage required of the contractor. The County of DuPage retains the right to obtain evidence of subcontractor insurance coverage at any time.

Replace the second sentence of the second paragraph (third to last paragraph) of this article with the following: "It is the duty of the Contractor to immediately notify the County of DuPage if any insurance required under this contract has been cancelled, materially changed, or renewal has been refused, and the Contractor shall immediately suspend all work in progress and take the necessary steps to purchase, maintain and provide the required insurance coverage. If a suspension of work should occur due to insurance requirements, upon verification by the County of DuPage of the required insurance coverage, the County of DuPage shall notify the Contractor that the Contractor can proceed with the work that is a part of this contract. Failure to provide and maintain the required insurance coverage could result in the immediate cancellation of this contract, and the Contractor shall accept and bear all costs that may result from the cancellation of this contract due to Contractor's failure to provide and maintain the required insurance."

Article 107.36 Dust Control. Add the following to the second paragraph of this article: "The Contractor will be required to have available a water truck or similar equipment to control dust. If necessary, the Contractor shall be required to control dust during non-working hours."

SECTION 108 PROSECUTION AND PROGRESS

Article 108.03 Prosecution of the Work. Revise the first sentence of this Article to read, "The Contractor shall not begin the work to be performed under the contract without written authorization from the DuPage County Division of Transportation to proceed with the work, and shall commence work not later than 10 days after receiving the authorization to proceed."

SECTION 109 MEASUREMENT AND PAYMENT

Article 109.08 Acceptance and Final Payment. Add the following to this Article: "Prior to final payment, an affidavit from the Contractor will be required."

SECTION 671 MOBILIZATION

Article 671.02 Basis of Payment. Revise this article to read: "Basis of Payment. This work will not be paid for separately, but shall be included in the various items of work."

RECESSED REFLECTIVE PAVEMENT MARKERS

Description. This work shall consist of setting reflective pavement markers in a recessed groove in the pavement. The recessed pavement markers shall be used to supplement other pavement markings, similar to the use of Raised Reflective Pavement Markers.

Materials. The reflective pavement marker shall be listed on the Illinois Department of Transportation approved list of snowplowable raised pavement markers, or Engineer approved equivalent, and be compatible with the reflector holder. The reflector holder shall be a MarkerOne Series R100 reflector holder or Engineer approved equivalent. The epoxy used shall be as recommended by the pavement marker manufacturer.

Installation. Spacing and orientation of the pavement markers shall be as detailed in the plans or as directed by the Engineer.

A recessed groove shall be cut in the pavement 5.25" wide, 0.9" deep on a 15.5" diameter. An additional 3.5' long groove shall taper from 0" (normal pavement) to 0.3" depth (full-recessed). For 1-way markers heading uphill, uphill grind taper may be omitted.

The recessed area shall be cleaned free of all loose material, and dry before the placement of the pavement marker. All excess material resulting from the construction of the recessed area shall be completely removed from the surface of the roadway by means of vacuum sweeper truck. The pavement marker shall be cemented with epoxy in the center of the 0.9" deep recessed groove.

Inspection. A straight edge shall be placed across the recess to check that the top of the marker is below the pavement. Inspection and acceptance shall be according to Article 781.04 of the Standard Specifications.

Basis of Payment. This work will be paid for at the contract unit price each for RECESSED REFLECTIVE PAVEMENT MARKER.

TRAFFIC CONTROL AND PROTECTION

Description. The traffic control and protection for this project shall be performed in accordance with the project Traffic Control Plan and Section 701 of the Standard Specifications as amended by the Special Provision for Work Zone Traffic Control (Illinois Department of Transportation Check Sheet #LRS 3).

The furnishing, placing, and removal of material, or any temporary concrete barrier and impact attenuators, not shown on the plans but required in order to meet the drop off requirements, shall be included in the contract unit price for Traffic Control and Protection.

The cost of supplying, erecting, and maintaining barricades, warning lights, and signs will be included in the contract unit price for Traffic Control and Protection.

2018 Pavement Marking Maintenance
SEC. 18-PVMKG-06-GM

Method of Measurement. Traffic control will not be measured by location or per Standard.

Basis of Payment. The cost of Traffic Control and Protection provided under the Traffic Control Plan and Section 701 WORK ZONE TRAFFIC CONTROL will be paid for at the contract lump sum price for TRAFFIC CONTROL AND PROTECTION.

TRAFFIC CONTROL PLAN

Traffic Control shall be according to the applicable sections of the Standard Specifications, the Supplemental Specifications, the "Illinois Manual on Uniform Traffic Control Devices for Streets and Highways", any special details and Highway Standards contained in the plans, and the Special Provisions contained herein.

Special attention is called to Article 107.09 of the Standard Specifications and the following Highway Standards, Details, Quality Standard for Work Zone Traffic Control Devices, Recurring Special Provisions and Special Provisions contained herein, relating to traffic control.

The Contractor shall notify the Engineer at least 72 hours in advance of beginning work.

STANDARDS:

| | |
|--------|--|
| 701201 | Lane Closure, 2L, 2W, Day Only, for Speeds > 45 MPH |
| 701301 | Lane Closure, 2L, 2W, Short Time Operations |
| 701306 | Lane Closure, 2L, 2W, Slow Moving Operations Day Only, for Speeds > 45 MPH |
| 701311 | Lane Closure, 2L, 2W, Moving Operations - Day Only |
| 701336 | Lane Closure, 2L, 2W, Work Areas in Series, for Speeds > 45 MPH |
| 701421 | Lane Closure, Multilane, Day Operations Only, for Speeds > 45 MPH to 55 MPH |
| 701422 | Lane Closure, Multilane, for Speeds > 45 MPH to 55 MPH |
| 701426 | Lane Closure, Multilane, Intermittent or Moving Operation, for Speeds > 45 MPH |
| 701427 | Lane Closure, Multilane, Intermittent or Moving Operation, for Speeds ≤ 40 MPH |
| 701501 | Urban Lane Closure, 2L, 2W, Undivided |
| 701502 | Urban Lane Closure, 2L, 2W, with Bidirectional Left Turn Lane |
| 701601 | Urban Lane Closure, Multilane, 1W or 2W with Nontraversable Median |
| 701602 | Urban Lane Closure, Multilane, 2W with Bidirectional Left Turn Lane |
| 701606 | Urban Single Lane Closure, Multilane, 2W with Mountable Median |
| 701611 | Urban Half Road Closure, Multilane, 2W with Mountable Median |
| 701701 | Urban Lane Closure, Multilane Intersection |
| 701801 | Lane Closure, Multilane 1W or 2W Crosswalk or Sidewalk Closure |
| 701901 | Traffic Control Devices |

DETAILS:

| | |
|-------|---|
| TC-10 | TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS |
| TC-14 | TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC) |

SPECIAL PROVISIONS:

TRAFFIC CONTROL AND PROTECTION

45 MIL HOT SPRAY THERMOPLASTIC PAVEMENT MARKING

This work shall consist of furnishing and applying spray thermoplastic pavement marking lines, sizes and colors as shown on the plans. The material shall be a mixture of resins and other materials providing an essentially nonvolatile thermoplastic compound especially developed for traffic markings. Spray thermoplastic pavement markings shall be applied only by contractors “approved” or “conditionally approved” for HAND OPERATED APPLICATION ONLY or for TRUCK OR HAND APPLICATION, on the list of Approved Thermoplastic Contractors maintained by the IDOT Engineer of Operations and in effect on the date of advertisement for bids.

Ingredient Materials:

- (a) **Binder.** The binder shall consist of a mixture of synthetic resins, at least one of which is solid at room temperature. The total binder content of the thermoplastic compound shall be well distributed throughout the compound. The binder shall be free from all foreign objects or ingredients that would cause bleeding, staining or discoloration. The binder shall be 25 percent minimum by weight of the thermoplastic compound. The binder shall be characterized by an “IR Spectra”. Future shipments of binder will be checked by an “IR Spectra” to verify that the binder has not been changed.
- (b) **Pigment.** The pigment used for the white thermoplastic compound shall be a highgrade pure (minimum 93 percent) titanium dioxide (TiO₂). The white pigment content shall not be less than 10 percent by weight and shall be uniformly distributed throughout the thermoplastic compound.

The pigments used for the yellow thermoplastic compound shall be heat resistant, and color-fast yellows, golds and oranges, which shall produce a compound meeting the requirements of the current Federal Highway Color Tolerance Chart, PR Color No. 1. The medium chrome yellow pigment content shall be not less than 4 percent by weight and shall be uniformly distributed throughout the thermoplastic compound.

- (c) **Filler:** The filler to be incorporated with the resins as a binder shall be a white calcium carbonate, silica, or an approved substitute. Any filler, which is insoluble in 6N hydrochloric acid, shall be of such particle size as to pass a No. 100 (150 µm) sieve.
- (d) **Glass Beads.**

(1) **Scope:**

This specification covers glass beads to be used for reflectorizing pavement marking lines.

Type A – uncoated

Type B - moisture resistant, silicone coated

Type A shall be used as intermix beads with thermoplastic pavement marking materials. They shall be uniformly mixed throughout the material at the rate of not less than 25 percent by weight (retained on the No. 100 (150 µm) sieve) of thermoplastic compound. Type B shall be used as drop-on beads with thermoplastic pavement marking materials and shall be applied uniformly at a minimum rate of 6 pounds per 100 square feet (2.9 kilograms per 10 square meters).

(2) **Properties:**

2018 Pavement Marking Maintenance
SEC. 18-PVMKG-06-GM

The glass beads furnished under this specification shall consist essentially of transparent, water-white glass particles of a spherical shape. They shall be manufactured from a glass of a composition designed to be highly resistant to traffic wear and to the effects of weathering. The glass beads shall conform to the following requirements:

- (a) Sieve Analysis. The glass beads shall meet the following sieve requirements:

| Total Percent (By Weight) | |
|------------------------------|----------------|
| <u>Sieve Size</u> | <u>Passing</u> |
| No. 20 (850 μm) | 100 |
| No. 30 (600 μm) | 75 - 100 |
| No. 50 (300 μm) | 15 - 40 |
| No. 100 (150 μm) | 0 - 5 |
| No. 200 (75 μm) | 0 - 1 |

- (b) Imperfections. The surface of the glass beads shall be free of pits and scratches. The glass beads shall be spherical in shape and shall contain not more than 20 percent by weight of irregular shapes when tested by the standard method using a vibratile inclined glass plate as adopted by the Department.
- (c) Index of Refraction. The index of refraction of the glass beads shall be not less than 1.50 when tested by the immersion method at 77 °F (25 °C).
- (d) Silica Content. The glass beads shall contain not less than 65 percent silica (SiO_2).
- (e) Chemical Stability. Glass beads which show tendency toward decomposition, including surface etching, when exposed to paint or thermoplastic constituents will be rejected. The glass beads shall be tested by Federal Specification TT-B-1325B, Section 4.3.9 (water resistance) and evaluated for compliance with Section 3.2.9, with the following exceptions:

The size of the sample to be tested shall be 25 grams and the reflux time shall be 5 hours.

- (f) Flowing Properties. The glass beads shall flow uniformly through dispensing equipment in atmospheric humidity up to 94%.

Intermix beads shall pass the following test: One hundred grams of glass beads, spread evenly and thinly in a suitable container, shall be conditioned at 77 °F (25 °C) for 4 hours over a solution of sulfuric acid (Sp. Gr. 1.10) in a closed desiccator. After 4 hours, the glass beads shall flow readily through a clean glass analytical funnel, 60°, 75 mm diameter and 105 mm stem. Inside diameter of the stem shall be a nominal 1/4 inch (6.35 mm).

The drop-on beads shall have a silicone, moisture resistant coating and pass the following test: One hundred grams of beads are placed in a 600 ml beaker and an equivalent volume of distilled water shall be added to the beaker. The beaker will then stand for 5 minutes, at the end of which time the water shall be carefully poured off and the beads transferred to a clean dry beaker and allowed to stand for 5 minutes. The

2018 Pavement Marking Maintenance
SEC. 18-PVMKG-06-GM

beads will then be poured slowly into a standard glass funnel (Corning 6120), 127 mm diameter, 102 mm stem length and 11 mm stem inside diameter.

The beads shall flow through the funnel stem without stoppage. Slight initial agitation to start the flow through the funnel at the beginning of the test is permissible.

- (g) Packaging. The Type B glass beads shall be delivered in approved moisture proof bags consisting of a least five-ply paper construction unless otherwise specified. Each bag shall contain 50 pounds (22.7 kg) net, and shall be legibly marked with the manufacturer, specifications and type, lot number, and the month and year the glass beads were packaged.

Thermoplastic Compound:

(a) Characteristic Requirements:

- (1) In the plastic state, the material shall not give off fumes that are toxic or otherwise injurious to persons or property. The manufacturer shall provide material safety data sheets for the product.
- (2) The temperature versus viscosity characteristic of the plastic material shall remain constant and the material shall not deteriorate in any manner during reheating processes.
- (3) There shall be no obvious change in color of the material as a result of repeated heating or from batch to batch. The maximum elapsed time after application after which normal traffic will leave no impression or imprint on the new stripe shall be 30 seconds when the air and road surface temperature is approximately 70 ± 3 °F (21 ± 2 °C). After application and proper drying, the material shall show no appreciable deformation or discoloration, shall remain free from tack, and shall not lift from the pavement under normal traffic conditions within a road temperature range of -20 to 150 °F (-28.9 to 65.6 °C). The stripe shall maintain its original dimensions and placement.

Cold ductility of the material shall be such as to permit normal dimensional distortion as a result of traffic impact within the temperature range specified.

- (4) The material shall provide a stripe that has a uniform thickness throughout its cross section and has the density and character to provide a sharp edge of the line.
- (5) The thermoplastic compound after heating for 4 hours \pm 5 min. at 375 ± 3 °F (190.6 ± 2 °C) and cooled at 77 °F (25 °C) shall meet the following requirements for daylight reflectance and color, when tested, using a color spectrophotometer with 45° circumferential / 0° geometry, illuminant C, and 2° observer angle. The color instrument shall measure the visible spectrum from 380 to 720 nm with a wavelength measurement interval and spectral bandpass of 10 nm.

White: Daylight Reflectance, 75 percent minimum

*Yellow: Daylight Reflectance, 45 percent minimum

*Shall match Federal Highway Color Tolerance Chart, PR Color No. 1.

- (6) Specific Gravity - the specific gravity of the thermoplastic material shall not exceed 2.15.

2018 Pavement Marking Maintenance
SEC. 18-PVMKG-06-GM

- (7) Softening Point - After heating the thermoplastic material for 4 hours \pm 5 min. at 375 ± 3 °F (190.6 ± 2 °C) and testing in accordance with ASTM E28, the material shall have a minimum softening point of 180 °F (82.2 °C) as measured by the ring and ball method.
- (8) Tensile Bond Strength - After heating the thermoplastic material for 4 hours \pm 5 min. at 375 °F (190.6 °C), the tensile bond strength to unprimed, sandblasted portland cement concrete block, 0.0625 inch (1.587 mm) thick film drawn-down 375 °F (190.6 °C), tested at 75 ± 2 °F (23.9 ± 1 °C) shall exceed 180 psi (1.24 Mpa) when tested in accordance with ASTM D4796-88.
- (9) Impact Resistance - After heating the thermoplastic material for 4 hours \pm 5 min at 375 ± 3 °F (190.6 ± 2 °C) the impact resistance shall be a minimum of 50 inch pounds (0.576 kilogram meters) with no cracks or bond loss when 0.0625 inch (1.587 mm) thick film drawdown is made at 375 °F (190.6 °C) on an unprimed sandblasted Portland cement concrete block, male indenter 5/8 inch (15.875 mm), no female Die, tested at 75 ± 2 °F (23.9 ± 1 °C) when tested in accordance with ASTM D2794 minimum.
- (10) Yellowness Index - The white thermoplastic material shall not exceed a yellowness index of 12 when tested in accordance with ASTM D1925.

(b) Identification

Each package of material shall be stenciled with the manufacturer's name, the type of material and IDOT specification number, the month and year the material was packaged and lot number. Lot numbers must begin with the last two digits of the year manufactured and be sequential with Lot 1. The letters and numbers used in the stencils shall be a minimum of 1/2 inch (12.7 mm) in height.

(c) Packaging

The thermoplastic material shall be packaged in suitable containers that will not adhere to the product during shipment and storage. The container of thermoplastic material shall weigh approximately 50 lbs (22.7 kg). Each container shall designate the color, binder (alkyd or hydrocarbon), spray and user information. The label shall warn the user that the material shall be heated in the range of 350 – 400 °F (177 – 204 °C).

(d) Storage Life

The material shall meet the requirements of this specification for a period of one year. The thermoplastic must also melt uniformly with no evidence of skins or unmelted particles for this one-year period. The manufacturer shall replace any material that does not meet the above requirements.

Sampling and Testing:

- (a) Unless otherwise provided, all materials shall be sampled and tested in accordance with the latest published standard methods of the American Society for Testing and Materials, and revisions thereof, in effect on the date of invitation for bids, where such standard methods exist. In case there are no ASTM Standards which apply, applicable standard methods of the American Association of State Highway Transportation Officials, or the Federal Government, or of other recognized standardizing agencies shall be used.

2018 Pavement Marking Maintenance
SEC. 18-PVMKG-06-GM

- (b) The right is reserved to inspect the material either at the place of manufacture or at the destination or at both places. If inspected at the place of manufacture, the manufacturer shall furnish such facilities as may be required for collecting and forwarding samples, and shall also furnish facilities for testing the material during the process of manufacture, if required. Tests will be made by and at the expense of the Department. All material samples for acceptance tests shall be taken or witnessed by a representative of the Bureau of Materials and Physical Research. All material samples shall be submitted to the Engineer of Materials and Physical Research, 126 East Ash Street, Springfield, Illinois 62704-4766 at least 30 days in advance of the pavement marking operations. Random check samples may be taken at the job site at the discretion of the Engineer.
- (c) The Engineer will test and approve the basic ingredients.
- (d) The sample(s) shall be labeled with the lot number, date, quantity and any other pertinent information. Samples shall be submitted in the following manner:
 - (1) Ingredient Materials:
 - (a) Glass beads: At least three randomly selected bags or containers shall be obtained from each lot or shipment of glass beads. The content of each bag or container shall be passed through a large Riffle Sampler, thus splitting the material down until a representative 1-quart (1-liter) sample is obtained. The sample from each container shall be submitted for testing.
 - (b) Binder: One pint (0.5 liter).
 - (c) Pigments: One pint (0.5 liter).
 - (d) Filler: One pint (0.5 liter).

(2) Thermoplastic:

At least three randomly selected containers shall be obtained from each lot. A 10 pound (4.5 kg) composite sample of the three containers shall be submitted for testing and acceptance. The lot size shall be approximately 44,000 pounds (20,000 kg) unless the total order is less than this amount.

Manufacturer's Responsibility:

- (a) The manufacturer shall perform tests on a minimum of one sample per 10,000 pounds (4,500 kg) of thermoplastic produced. Minimum tests required shall be a softening point determination and color. Manufacturer's test results shall be submitted along with the thermoplastic sample to the Bureau of Materials and Physical Research.
- (b) The manufacturer shall retain the test sample for a minimum period of 18 months.
- (c) The manufacturer shall furnish the Bureau of Materials and Physical Research with copies of bills of lading for all material inspected. Bills of lading shall indicate the consignee and destination, date of shipment, lot numbers, quantity, type of material, name and location of source.

Material Acceptance:

Final acceptance of a particular lot of thermoplastic will be based on the following:

2018 Pavement Marking Maintenance
SEC. 18-PVMKG-06-GM

- (a) Compliance of ingredient materials with the specifications.
- (b) Compliance of thermoplastic material with the specifications.
- (c) Manufacturer's test results for each lot of thermoplastic have been received.
- (d) Identification requirements are satisfactory.

Notification: The Contractor shall notify the Engineer 72 hours prior to the placement of the thermoplastic markings in order that an inspector can be present during the operation. At the time of this notification, the Contractor shall indicate the manufacturer and lot numbers of thermoplastic and glass beads that he intends to use. The Engineer will ensure that the approved lot numbers appear on the material package. Failure to comply with this provision may be cause for rejection.

Installation Requirements:

- (a) Before applying thermoplastic, the crack sealant shall be fully cured and hardened and the Contractor shall remove any dirt, glaze, grease, or any other material that would reduce the adhesion of the thermoplastic to the pavement.
- (b) This thermoplastic material shall be readily renewable by placing an overlay of new material directly over old markings of the same material. Such new material shall bond itself to the old markings in such a manner that no splitting or separation takes place. The contractor shall remove all existing material that might cause premature failure of the new material.
- (c) The thermoplastic material shall be installed in a molten state by the spray method at a minimum temperature of 350 °F (177 °C) and a maximum temperature of 400 °F (204 °C). Scorching or discoloration of material shall be cause for rejection by the Engineer. The machinery shall be constructed so that all mixing and conveying parts, up to and including the spray gun maintain the material in the molten state.
- (d) Thermoplastic pavement marking materials shall not be applied by the spray method when air and pavement surface temperatures are below 50 °F (10 °C) or when the surface of the pavement contains any evidence of moisture.
- (e) Unless directed by the Engineer, lines shall not be laid directly over a longitudinal crack or joint. The edge of the center line or lane line shall be offset a minimum distance of 2 inches (50 mm) from a longitudinal crack or joint. Edge lines shall be approximately 2 inches (50 mm) from the edge of pavement. The finished center and lane lines shall be straight, with the lateral deviation of any 10 foot (3 meter) line not to exceed 1 inch (25 mm).
- (f) A primer sealer of the type recommended by the manufacturer of the thermoplastic material shall be applied on all Portland concrete pavement surfaces, and if recommended by the manufacturer, on other types of pavement surface, prior to the installation of the thermoplastic material. The primer shall be free of solvent and water prior to the thermoplastic application.
- (g) The thermoplastic material shall be applied at a thickness of not less than 0.045 inch (1.143 mm), but in no case shall it exceed a thickness of 0.050 inch (1.27 mm). Finished lines shall be within a 1/4 inch (6.35 mm) of the width specified in the plans.

2018 Pavement Marking Maintenance
SEC. 18-PVMKG-06-GM

- (h) The Contractor shall place the thermoplastic markings with adequate drop on glass in accordance with the above requirements, uniformly applied to assure nighttime reflectivity. It shall be the Contractor's responsibility to use compatible combination of thermoplastic material and beads to preclude the surface beads from sinking deeply into the thermoplastic.
- (i) The thickness of the markings will be measured above the pavement surface at such random points as the Engineer selects to determine conformance to these specifications. If the measurements show less than 0.045 inch (1.143 mm), the Engineer will "chip" the edges of the markings at random points and measure the thickness of the chips to determine if the overall thickness of the markings is at least 0.045 inch (1.143 mm). If the overall thickness or the thickness above the pavement surface is substantially in conformance with the thickness requirements, payment will be made at 100 percent of the contract unit prices involved. When the thickness at a given location is less than 0.045 inch (1.143 mm), additional measurements will be taken on each side of such location at such intervals as the Engineer may select to determine the extent of the deficient portion of the marking. The Contractor shall then apply additional thermoplastic material and beads to bring the thickness of the markings to at least 0.045 inch (1.143 mm).

Equipment Requirements:

- (a) The application equipment used for placing lane and edge line on County Highways shall be either Truck-Mounted or Hand-Operated and meeting Article 1105.01 of the Standard Specifications and the requirements listed below. When the Truck-Mounted method is used, the application equipment shall be permanently mounted on a truck of sufficient size and stability to insure smooth, straight application. The truck shall be equipped to carry a minimum of 4,000 pounds (1800 kilograms) of molten thermoplastic. When the Hand-Operated method is used, the application equipment shall be a self-propelled riding unit of sufficient size and stability to ensure smooth, straight application with electronic application controls.

The equipment shall have the capability of automatically placing intermittent and continuous lines. The equipment shall be so constructed as to provide the various widths of pavement marking lines specified. The mounting shall be such as to allow the spray equipment to accurately follow road irregularities and produce lines of uniform dimensions.

- (b) The equipment used to install hot applied thermoplastic material shall provide continuous uniform heating to temperatures exceeding 400 °F (204 °C), mixing and agitation of the material. Conveying parts of the equipment between the main material reservoir and the dispensing device shall prevent accumulation and clogging. All parts of the equipment, which comes in contact with the material, shall be constructed for easy accessibility and exposure for cleaning and maintenance. The equipment shall operate so that all mixing and conveying parts including the line dispensing device, maintains the material at the plastic temperature. The use of pans, aprons, or similar devices to prevent die overruns will not be permitted.
- (c) Glass beads applied to the surface of the completed marking shall be applied by an automatic bead dispenser attached to the marking machine so that the beads are dispensed closely behind the installed marking. The glass bead dispenser shall be equipped with an automatic cut-off control synchronized with the cut-off of the thermoplastic material.
- (d) A special kettle shall be provided for uniformly melting and heating the thermoplastic material. The kettle must be equipped with an automatic thermostat control device and material thermometer for positive temperature control and to prevent overheating or under-heating of the material. The heating

2018 Pavement Marking Maintenance
SEC. 18-PVMKG-06-GM

kettle and application equipment shall meet the requirements of the National Fire Underwriters and the National Fire Protection Association.

- (e) The Contractor shall provide an accurate temperature measuring device which shall be capable of measuring the pavement temperature prior to installation of the thermoplastic and the temperature of the molten thermoplastic material immediately after it is applied.

Inspection: The 45 mil hot spray thermoplastic pavement markings will be inspected following installation, but no later than November 1, and inspected following a winter performance period that extends 180 days from November 1 in accordance with the provisions of Article 780.12 of the Standard Specification.

Method of Measurement: Lines will be measured for payment in feet. Double yellow lines will be measured as two separate lines.

Basis of Payment: This work will be paid for at the contract unit prices per foot of applied line width for HOT SPRAY THERMOPLASTIC PAVEMENT MARKING – LINE.

INDEX
FOR
SUPPLEMENTAL SPECIFICATIONS
AND RECURRING SPECIAL PROVISIONS

Adopted January 1, 2018

This index contains a listing of SUPPLEMENTAL SPECIFICATIONS, frequently used RECURRING SPECIAL PROVISIONS, and LOCAL ROADS AND STREETS RECURRING SPECIAL PROVISIONS.

ERRATA Standard Specifications for Road and Bridge Construction
(Adopted 4-1-16) (Revised 1-1-18)

SUPPLEMENTAL SPECIFICATIONS

| <u>Std. Spec. Sec.</u> | <u>Page No.</u> |
|--|-----------------|
| 106 Control of Materials | 1 |
| 403 Bituminous Surface Treatment (Class A-1, A-2, A-3) | 2 |
| 404 Micro-Surfacing and Slurry Sealing | 3 |
| 405 Cape Seal | 14 |
| 420 Portland Cement Concrete Pavement | 24 |
| 442 Pavement Patching | 26 |
| 502 Excavation for Structures | 27 |
| 503 Concrete Structures | 29 |
| 504 Precast Concrete Structures | 32 |
| 542 Pipe Culverts | 33 |
| 586 Sand Backfill for Vaulted Abutments | 34 |
| 630 Steel Plate Beam Guardrail | 36 |
| 631 Traffic Barrier Terminals | 39 |
| 670 Engineer's Field Office and Laboratory | 40 |
| 701 Work Zone Traffic Control and Protection | 41 |
| 704 Temporary Concrete Barrier | 42 |
| 781 Raised Reflective Pavement Markers | 44 |
| 888 Pedestrian Push-Button | 45 |
| 1003 Fine Aggregates | 46 |
| 1004 Coarse Aggregates | 47 |
| 1006 Metals | 50 |
| 1020 Portland Cement Concrete | 51 |
| 1050 Poured Joint Sealers | 53 |
| 1069 Pole and Tower | 55 |
| 1077 Post and Foundation | 56 |
| 1096 Pavement Markers | 57 |
| 1101 General Equipment | 58 |
| 1102 Hot-Mix Asphalt Equipment | 59 |
| 1103 Portland Cement Concrete Equipment | 61 |
| 1106 Work Zone Traffic Control Devices | 63 |



Check Sheet For Recurring Special Provisions



The Following Recurring Special Provisions Indicated By An "X" Are Applicable To This Contract And Are Included By Reference:

Recurring Special Provisions

| <u>Check Sheet #</u> | | <u>Page No.</u> |
|----------------------|---|-----------------|
| 1 | <input type="checkbox"/> Additional State Requirements for Federal-Aid Construction Contracts | 64 |
| 2 | <input type="checkbox"/> Subletting of Contracts (Federal-Aid Contracts) | 67 |
| 3 | <input type="checkbox"/> EEO | 68 |
| 4 | <input type="checkbox"/> Specific EEO Responsibilities Non Federal-Aid Contracts | 78 |
| 5 | <input type="checkbox"/> Required Provisions - State Contracts | 83 |
| 6 | <input type="checkbox"/> Asbestos Bearing Pad Removal | 89 |
| 7 | <input type="checkbox"/> Asbestos Waterproofing Membrane and Asbestos Hot-Mix Asphalt Surface Removal | 90 |
| 8 | <input type="checkbox"/> Temporary Stream Crossings and In-Stream Work Pads | 91 |
| 9 | <input type="checkbox"/> Construction Layout Stakes Except for Bridges | 92 |
| 10 | <input type="checkbox"/> Construction Layout Stakes | 95 |
| 11 | <input type="checkbox"/> Use of Geotextile Fabric for Railroad Crossing | 98 |
| 12 | <input type="checkbox"/> Subsealing of Concrete Pavements | 100 |
| 13 | <input type="checkbox"/> Hot-Mix Asphalt Surface Correction | 104 |
| 14 | <input type="checkbox"/> Pavement and Shoulder Resurfacing | 106 |
| 15 | <input type="checkbox"/> Patching with Hot-Mix Asphalt Overlay Removal | 107 |
| 16 | <input type="checkbox"/> Polymer Concrete | 109 |
| 17 | <input type="checkbox"/> PVC Pipeliner | 111 |
| 18 | <input type="checkbox"/> Bicycle Racks | 112 |
| 19 | <input type="checkbox"/> Temporary Portable Bridge Traffic Signals | 114 |
| 20 | <input type="checkbox"/> Work Zone Public Information Signs | 116 |
| 21 | <input type="checkbox"/> Nighttime Inspection of Roadway Lighting | 117 |
| 22 | <input type="checkbox"/> English Substitution of Metric Bolts | 118 |
| 23 | <input type="checkbox"/> Calcium Chloride Accelerator for Portland Cement Concrete | 119 |
| 24 | <input type="checkbox"/> Quality Control of Concrete Mixtures at the Plant | 120 |
| 25 | <input type="checkbox"/> Quality Control/Quality Assurance of Concrete Mixtures | 128 |
| 26 | <input type="checkbox"/> Digital Terrain Modeling for Earthwork Calculations | 144 |
| 27 | <input type="checkbox"/> Reserved | 146 |
| 28 | <input type="checkbox"/> Preventive Maintenance - Bituminous Surface Treatment | 147 |
| 29 | <input type="checkbox"/> Reserved | 153 |
| 30 | <input type="checkbox"/> Reserved | 154 |
| 31 | <input type="checkbox"/> Reserved | 155 |
| 32 | <input type="checkbox"/> Temporary Raised Pavement Markers | 156 |
| 33 | <input type="checkbox"/> Restoring Bridge Approach Pavements Using High-Density Foam | 157 |
| 34 | <input type="checkbox"/> Portland Cement Concrete Inlay or Overlay | 160 |
| 35 | <input type="checkbox"/> Portland Cement Concrete Partial Depth Hot-Mix Asphalt Patching | 164 |

The Following Local Roads And Streets Recurring Special Provisions Indicated By An "X" Are Applicable To This Contract And Are Included By Reference:

Local Roads And Streets Recurring Special Provisions

| <u>Check Sheet #</u> | | <u>Page No.</u> |
|----------------------|--|-----------------|
| LRS 1 | Reserved | 168 |
| LRS 2 | <input type="checkbox"/> Furnished Excavation | 169 |
| LRS 3 | <input checked="" type="checkbox"/> Work Zone Traffic Control Surveillance | 170 |
| LRS 4 | <input checked="" type="checkbox"/> Flaggers in Work Zones | 171 |
| LRS 5 | <input checked="" type="checkbox"/> Contract Claims | 172 |
| LRS 6 | <input checked="" type="checkbox"/> Bidding Requirements and Conditions for Contract Proposals | 173 |
| LRS 7 | <input type="checkbox"/> Bidding Requirements and Conditions for Material Proposals | 179 |
| LRS 8 | Reserved | 185 |
| LRS 9 | <input type="checkbox"/> Bituminous Surface Treatments | 186 |
| LRS 10 | Reserved | 187 |
| LRS 11 | <input checked="" type="checkbox"/> Employment Practices | 188 |
| LRS 12 | <input checked="" type="checkbox"/> Wages of Employees on Public Works | 190 |
| LRS 13 | <input checked="" type="checkbox"/> Selection of Labor | 192 |
| LRS 14 | <input type="checkbox"/> Paving Brick and Concrete Paver Pavements and Sidewalks | 193 |
| LRS 15 | <input checked="" type="checkbox"/> Partial Payments | 196 |
| LRS 16 | <input checked="" type="checkbox"/> Protests on Local Lettings | 197 |
| LRS 17 | <input checked="" type="checkbox"/> Substance Abuse Prevention Program | 198 |
| LRS 18 | <input type="checkbox"/> Multigrade Cold Mix Asphalt | 199 |

| Prevailing Wage rates for DuPage County effective Sept. 1, 2017 | | Region | Type | Class | Base Wage | Foreman Wage | M-F OT | OSA | OSH | H/W | Pension | Vacation | Training |
|---|-----|--------|------|-------|-----------|--------------|--------|-----|-----|-------|---------|----------|----------|
| ASBESTOS ABT-GEN | ALL | ALL | ALL | | 41.20 | 42.20 | 1.5 | 1.5 | 2 | 14.65 | 12.32 | 0.00 | 0.50 |
| ASBESTOS ABT-MEC | ALL | ALL | BLD | | 37.46 | 39.96 | 1.5 | 1.5 | 2 | 11.62 | 11.06 | 0.00 | 0.72 |
| BOILERMAKER | ALL | ALL | BLD | | 48.49 | 52.86 | 2 | 2 | 2 | 6.97 | 19.61 | 0.00 | 0.90 |
| BRICK MASON | ALL | ALL | BLD | | 45.38 | 49.92 | 1.5 | 1.5 | 2 | 10.45 | 16.68 | 0.00 | 0.90 |
| CARPENTER | ALL | ALL | ALL | | 46.35 | 48.35 | 1.5 | 1.5 | 2 | 11.79 | 18.87 | 0.00 | 0.63 |
| CEMENT MASON | ALL | ALL | ALL | | 44.25 | 46.25 | 2 | 1.5 | 2 | 14.00 | 17.16 | 0.00 | 0.92 |
| CERAMIC TILE FNCSHER | ALL | ALL | BLD | | 38.56 | 38.56 | 1.5 | 1.5 | 2 | 10.65 | 11.18 | 0.00 | 0.68 |
| COMMUNICATION TECH | ALL | ALL | BLD | | 33.38 | 36.18 | 1.5 | 1.5 | 2 | 12.35 | 19.21 | 1.45 | 0.61 |
| ELECTRIC PWR EQMT OP | ALL | ALL | ALL | | 37.89 | 51.48 | 1.5 | 1.5 | 2 | 5.00 | 11.75 | 0.00 | 0.38 |
| ELECTRIC PWR EQMT OP | ALL | ALL | HWY | | 41.45 | 56.38 | 1.5 | 1.5 | 2 | 5.50 | 12.87 | 0.00 | 0.73 |
| ELECTRIC PWR GRNDMAN | ALL | ALL | ALL | | 29.30 | 51.48 | 1.5 | 1.5 | 2 | 5.00 | 9.09 | 0.00 | 0.29 |
| ELECTRIC PWR GRNDMAN | ALL | ALL | HWY | | 32.00 | 56.38 | 1.5 | 1.5 | 2 | 5.50 | 9.92 | 0.00 | 0.66 |
| ELECTRIC PWR LINEMAN | ALL | ALL | ALL | | 45.36 | 51.48 | 1.5 | 1.5 | 2 | 5.00 | 14.06 | 0.00 | 0.45 |
| ELECTRIC PWR LINEMAN | ALL | ALL | HWY | | 49.67 | 56.38 | 1.5 | 1.5 | 2 | 5.50 | 15.40 | 0.00 | 0.88 |
| ELECTRIC PWR TRK DRV | ALL | ALL | ALL | | 30.34 | 51.48 | 1.5 | 1.5 | 2 | 5.00 | 9.40 | 0.00 | 0.30 |
| ELECTRIC PWR TRK DRV | ALL | ALL | HWY | | 33.14 | 56.38 | 1.5 | 1.5 | 2 | 5.50 | 10.29 | 0.00 | 0.59 |
| ELECTRICIAN | ALL | ALL | BLD | | 39.26 | 43.26 | 1.5 | 1.5 | 2 | 12.35 | 22.08 | 4.93 | 0.68 |
| ELEVATOR CONSTRUCTOR | ALL | ALL | BLD | | 51.94 | 58.43 | 2 | 2 | 2 | 14.43 | 14.96 | 4.16 | 0.90 |
| FENCE ERECTOR | NE | ALL | ALL | | 39.58 | 41.58 | 1.5 | 1.5 | 2 | 13.40 | 13.90 | 0.00 | 0.40 |
| FENCE ERECTOR | W | ALL | ALL | | 45.06 | 48.66 | 2 | 2 | 2 | 10.52 | 20.76 | 0.00 | 0.70 |
| GLAZIER | ALL | ALL | BLD | | 42.45 | 43.95 | 1.5 | 1.5 | 2 | 14.04 | 20.14 | 0.00 | 0.94 |
| HT/FROST INSULATOR | ALL | ALL | BLD | | 50.50 | 53.00 | 1.5 | 1.5 | 2 | 12.12 | 12.96 | 0.00 | 0.72 |
| IRON WORKER | E | ALL | ALL | | 47.33 | 49.33 | 2 | 2 | 2 | 14.15 | 22.39 | 0.00 | 0.35 |
| IRON WORKER | W | ALL | ALL | | 45.61 | 49.25 | 2 | 2 | 2 | 11.52 | 22.65 | 0.00 | 0.81 |
| LABORER | ALL | ALL | ALL | | 41.20 | 41.95 | 1.5 | 1.5 | 2 | 14.65 | 12.32 | 0.00 | 0.50 |

| | | | | | | | | | | | |
|----------------------|-----|-----|-------|-------|-----|-----|-----|-------|-------|------|------|
| LATHER | ALL | ALL | 46.35 | 48.35 | 1.5 | 1.5 | 2 | 11.79 | 18.87 | 0.00 | 0.63 |
| MACHINIST | ALL | BLD | 45.35 | 47.85 | 1.5 | 1.5 | 2 | 7.26 | 8.95 | 1.85 | 0.00 |
| MARBLE FINISHERS | ALL | ALL | 33.95 | 33.95 | 1.5 | 1.5 | 2 | 10.45 | 15.52 | 0.00 | 0.47 |
| MARBLE MASON | ALL | BLD | 44.63 | 49.09 | 1.5 | 1.5 | 2 | 10.45 | 16.28 | 0.00 | 0.59 |
| MATERIAL TESTER I | ALL | ALL | 31.20 | 31.20 | 1.5 | 1.5 | 2 | 14.65 | 12.32 | 0.00 | 0.50 |
| MATERIALS TESTER II | ALL | ALL | 36.20 | 36.20 | 1.5 | 1.5 | 2 | 14.65 | 12.32 | 0.00 | 0.50 |
| MILLWRIGHT | ALL | ALL | 46.35 | 48.35 | 1.5 | 1.5 | 2 | 11.79 | 18.87 | 0.00 | 0.63 |
| OPERATING ENGINEER | ALL | BLD | 50.10 | 54.10 | 2 | 2 | 2 | 18.80 | 14.35 | 2.00 | 1.30 |
| OPERATING ENGINEER | ALL | BLD | 48.80 | 54.10 | 2 | 2 | 2 | 18.80 | 14.35 | 2.00 | 1.30 |
| OPERATING ENGINEER | ALL | BLD | 46.25 | 54.10 | 2 | 2 | 2 | 18.80 | 14.35 | 2.00 | 1.30 |
| OPERATING ENGINEER | ALL | BLD | 44.50 | 54.10 | 2 | 2 | 2 | 18.80 | 14.35 | 2.00 | 1.30 |
| OPERATING ENGINEER | ALL | BLD | 53.85 | 54.10 | 2 | 2 | 2 | 18.80 | 14.35 | 2.00 | 1.30 |
| OPERATING ENGINEER | ALL | BLD | 51.10 | 54.10 | 2 | 2 | 2 | 18.80 | 14.35 | 2.00 | 1.30 |
| OPERATING ENGINEER | ALL | BLD | 53.10 | 54.10 | 2 | 2 | 2 | 18.80 | 14.35 | 2.00 | 1.30 |
| OPERATING ENGINEER | ALL | FLT | 38.00 | 38.00 | 1.5 | 1.5 | 2 | 18.05 | 13.60 | 1.90 | 1.30 |
| OPERATING ENGINEER | ALL | HWY | 48.30 | 52.30 | 1.5 | 1.5 | 2 | 18.80 | 14.35 | 2.00 | 1.30 |
| OPERATING ENGINEER | ALL | HWY | 47.75 | 52.30 | 1.5 | 1.5 | 2 | 18.80 | 14.35 | 2.00 | 1.30 |
| OPERATING ENGINEER | ALL | HWY | 45.70 | 52.30 | 1.5 | 1.5 | 2 | 18.80 | 14.35 | 2.00 | 1.30 |
| OPERATING ENGINEER | ALL | HWY | 44.30 | 52.30 | 1.5 | 1.5 | 2 | 18.80 | 14.35 | 2.00 | 1.30 |
| OPERATING ENGINEER | ALL | HWY | 43.10 | 52.30 | 1.5 | 1.5 | 2 | 18.80 | 14.35 | 2.00 | 1.30 |
| OPERATING ENGINEER | ALL | HWY | 51.30 | 52.30 | 1.5 | 1.5 | 2 | 18.80 | 14.35 | 2.00 | 1.30 |
| OPERATING ENGINEER | ALL | HWY | 49.30 | 52.30 | 1.5 | 1.5 | 2 | 18.80 | 14.35 | 2.00 | 1.30 |
| ORNAMNTL IRON WORKER | E | ALL | 46.75 | 49.25 | 2 | 2 | 2 | 13.90 | 19.79 | 0.00 | 0.75 |
| ORNAMNTL IRON WORKER | W | ALL | 45.06 | 48.66 | 2 | 2 | 2 | 10.52 | 20.76 | 0.00 | 0.70 |
| PAINTER | ALL | ALL | 44.18 | 46.18 | 1.5 | 1.5 | 1.5 | 10.30 | 8.20 | 0.00 | 1.35 |
| PAINTER SIGNS | ALL | BLD | 37.45 | 42.05 | 1.5 | 1.5 | 2 | 2.60 | 3.18 | 0.00 | 0.00 |
| PILEDRIIVER | ALL | ALL | 46.35 | 48.35 | 1.5 | 1.5 | 2 | 11.79 | 18.87 | 0.00 | 0.63 |
| PIPEFITTER | ALL | BLD | 47.50 | 50.50 | 1.5 | 1.5 | 2 | 10.05 | 17.85 | 0.00 | 2.12 |
| PLASTERER | ALL | BLD | 42.75 | 45.31 | 1.5 | 1.5 | 2 | 14.00 | 15.71 | 0.00 | 0.89 |
| PLUMBER | ALL | BLD | 49.25 | 52.20 | 1.5 | 1.5 | 2 | 14.34 | 13.35 | 0.00 | 1.28 |

| | | | | | | | | | | | | |
|---------------------|-----|-----|---|-------|-------|-----|-----|---|-------|-------|------|------|
| ROOFER | ALL | BLD | | 42.30 | 45.30 | 1.5 | 1.5 | 2 | 9.08 | 12.14 | 0.00 | 0.58 |
| SHEETMETAL WORKER | ALL | BLD | | 45.77 | 47.77 | 1.5 | 1.5 | 2 | 10.65 | 14.10 | 0.00 | 0.82 |
| SPRINKLER FITTER | ALL | BLD | | 47.20 | 49.20 | 1.5 | 1.5 | 2 | 12.25 | 11.55 | 0.00 | 0.55 |
| STEEL ERECTOR | E | ALL | | 42.07 | 44.07 | 2 | 2 | 2 | 13.45 | 19.59 | 0.00 | 0.35 |
| STEEL ERECTOR | W | ALL | | 45.06 | 48.66 | 2 | 2 | 2 | 10.52 | 20.76 | 0.00 | 0.70 |
| STONE MASON | ALL | BLD | | 45.38 | 49.92 | 1.5 | 1.5 | 2 | 10.45 | 16.68 | 0.00 | 0.90 |
| TERRAZZO FINISHER | ALL | BLD | | 40.54 | 40.54 | 1.5 | 1.5 | 2 | 10.65 | 12.76 | 0.00 | 0.73 |
| TERRAZZO MASON | ALL | BLD | | 44.38 | 47.88 | 1.5 | 1.5 | 2 | 10.65 | 14.15 | 0.00 | 0.82 |
| TILE MASON | ALL | BLD | | 45.49 | 49.49 | 1.5 | 1.5 | 2 | 10.65 | 13.88 | 0.00 | 0.86 |
| TRAFFIC SAFETY WRKR | ALL | HWY | | 33.50 | 35.10 | 1.5 | 1.5 | 2 | 8.10 | 7.62 | 0.00 | 0.25 |
| TRUCK DRIVER | ALL | ALL | 1 | 36.30 | 36.85 | 1.5 | 1.5 | 2 | 8.10 | 9.76 | 0.00 | 0.15 |
| TRUCK DRIVER | ALL | ALL | 2 | 36.45 | 36.85 | 1.5 | 1.5 | 2 | 8.10 | 9.76 | 0.00 | 0.15 |
| TRUCK DRIVER | ALL | ALL | 3 | 36.65 | 36.85 | 1.5 | 1.5 | 2 | 8.10 | 9.76 | 0.00 | 0.15 |
| TRUCK DRIVER | ALL | ALL | 4 | 36.85 | 36.85 | 1.5 | 1.5 | 2 | 8.10 | 9.76 | 0.00 | 0.15 |
| TUCKPOINTER | ALL | BLD | | 44.17 | 45.17 | 1.5 | 1.5 | 2 | 10.45 | 15.04 | 0.00 | 0.88 |

Legend

M-F OT Unless otherwise noted, OT pay is required for any hour greater than 8 worked each day, Mon through Fri. The number listed is the multiple of the base wage.

OSA Overtime pay required for every hour worked on Saturdays

OSH Overtime pay required for every hour worked on Sundays and Holidays

H/W Health/Welfare benefit

Explanations DUPAGE COUNTY

IRON WORKERS AND FENCE ERECTOR (WEST) - West of Route 53.

The following list is considered as those days for which holiday rates of wages for work performed apply: New Years Day, Memorial Day, Fourth of July, Labor Day, Thanksgiving Day, Christmas Day and Veterans Day in some classifications/counties. Generally, any of these holidays which fall on a Sunday is celebrated on the following Monday. This then makes work performed on that Monday payable at the appropriate overtime rate for holiday pay. Common practice in a given local may alter certain days of celebration. If in doubt, please check with IDOL.

EXPLANATION OF CLASSES

ASBESTOS - GENERAL - removal of asbestos material/mold and hazardous materials from any place in a building, including mechanical systems where those mechanical systems are to be removed. This includes the removal of asbestos materials/mold and hazardous materials from ductwork or pipes in a building when the building is to be demolished at the time or at some close future date.

ASBESTOS - MECHANICAL - removal of asbestos material from mechanical systems, such as pipes, ducts, and boilers, where the mechanical systems are to remain.

TRAFFIC SAFETY - work associated with barricades, hoses and drums used to reduce lane usage on highway work, the installation and removal of temporary lane markings, and the installation and removal of temporary road signs.

CERAMIC TILE FINISHER

The grouting, cleaning, and polishing of all classes of tile, whether for interior or exterior purposes, all burned, glazed or unglazed products; all composition materials, granite tiles, warning detectable tiles, cement tiles, epoxy composite materials, pavers, glass, mosaics, fiberglass, and all substitute materials, for tile made in tile-like units; all mixtures in tile like form of cement, metals, and other materials that are for and intended for use as a finished floor surface, stair treads, promenade roofs, walks, walls, ceilings, swimming pools, and all other places where tile is to form a finished interior or exterior. The mixing of all setting mortars including but not limited to thin-set mortars, epoxies, wall mud, and any other sand and cement mixtures or adhesives when used in the preparation, installation, repair, or maintenance of tile and/or similar materials. The handling and unloading of all sand, cement, lime, tile, fixtures, equipment, adhesives, or any other materials to be used in the preparation, installation, repair, or maintenance of tile and/or similar materials. Ceramic Tile Finishers shall fill all joints and voids regardless of method on all tile work, particularly and especially after installation of said tile work. Application of any and all protective coverings to all types of tile installations including, but not be limited to, all soap compounds, paper products, tapes, and all polyethylene coverings, plywood, masonite, cardboard, and any new type of products that may be used to protect tile installations, Blastrac equipment, and all floor scarifying equipment used in preparing floors to receive tile. The clean up and removal of all waste and materials. All demolition of existing tile floors and walls to be re-tiled.

COMMUNICATIONS TECHNICIAN

Low voltage installation, maintenance and removal of telecommunication facilities (voice, sound, data and video) including telephone and data inside wire, interconnect, terminal equipment, central offices, PABX, fiber optic cable and equipment, micro waves, V-SAT, bypass, CATV, WAN (wide area networks), LAN (local area networks), and ISDN (integrated system digital network), pulling of wire in raceways, but not the installation of raceways.

MARBLE FINISHER

Loading and unloading trucks, distribution of all materials (all stone, sand, etc.), stocking of floors with material, performing all rigging for heavy work, the handling of all material that may be needed for the installation of such materials, building of scaffolding, polishing if needed, patching, waxing of material if damaged, pointing up, caulking, grouting and cleaning of marble, holding water on diamond or Carborundum blade or saw for setters cutting, use of tub saw or any other saw needed for preparation of material, drilling of holes for wires that anchor material set by setters, mixing up of molding plaster for installation of material, mixing up thin set for the installation of material, mixing up of sand to cement for the installation of material and such other work as may be required in helping a Marble Setter in the handling of all material in the erection or installation of interior marble, slate, travertine, art marble, serpentine, alberene stone, blue stone, granite and other stones (meaning as to stone any foreign or domestic materials as are specified and used in building interiors and exteriors and customarily known as stone in the trade), carrara, sanionyx, vitrolite and similar opaque glass and the laying of all marble tile, terrazzo tile, slate tile and precast tile, steps, risers treads, base, or any other materials that may be used as substitutes for any of the aforementioned materials and which are used on interior and exterior which are installed in a similar manner.

MATERIAL TESTER I: Hand coring and drilling for testing of materials; field inspection of uncured concrete and asphalt.

MATERIAL TESTER II: Field inspection of welds, structural steel, fireproofing, masonry, soil, facade, reinforcing steel, formwork, cured concrete, and concrete and asphalt batch plants; adjusting proportions of bituminous mixtures.

OPERATING ENGINEER - BUILDING

Class 1. Asphalt Plant; Asphalt Spreader; Autograde; Backhoes with Caisson Attachment; Batch Plant; Benoto (requires Two Engineers); Boiler and Throttle Valve; Caisson Rigs; Central Redi-Mix Plant; Combination Back Hoe Front End-loader Machine; Compressor and Throttle Valve; Concrete Breaker (Truck Mounted); Concrete Conveyor; Concrete Conveyor (Truck Mounted); Concrete Paver Over 27E cu. ft; Concrete Paver 27E cu. ft. and Under; Concrete Placer; Concrete Placing Boom; Concrete Pump (Truck Mounted); Concrete Tower; Cranes, All; Cranes, Hammerhead; Cranes, (GCI and similar Type); Creter Crane; Spider Crane; Crusher, Stone, etc.; Derricks, All; Derricks, Traveling; Formless Curb and Gutter Machine; Grader, Elevating; Grouting Machines; Heavy Duty Self-Propelled Transporter or Prime Mover; Highlift Shovels or Front Endloader 2-1/4 yd. and over; Hoists, Elevators, outside type rack and pinion and similar machines; Hoists, One, Two and Three Drum; Hoists, Two Tugger One Floor; Hydraulic Backhoes; Hydraulic Boom Trucks; Hydro Vac (and similar equipment); Locomotives, All; Motor Patrol; Lubrication Technician; Manipulators; Pile Drivers and Skid Rig; Post Hole Digger; Pre-Stress Machine; Pump Cretes Dual Ram; Pump Cretes: Squeeze Cretes-Screw Type Pumps; Gypsum Bulker and Pump; Raised and Blind Hole Drill; Roto Mill Grinder; Scoops - Tractor Drawn; Slip-Form Paver; Straddle Buggies; Operation of Tie Back Machine; Tournapull; Tractor with Boom and Side Boom; Trenching Machines.

Class 2. Boilers; Broom, All Power Propelled; Bulldozers; Concrete Mixer (Two Bag and Over); Conveyor, Portable; Forklift Trucks; Highlift Shovels or Front Endloaders under 2-1/4 yd.; Hoists, Automatic; Hoists, Inside Elevators; Hoists, Sewer Dragging Machine; Hoists, Tugger Single Drum;

Laser Screed; Rock Drill (Self-Propelled); Rock Drill (Truck Mounted); Rollers, All; Steam Generators; Tractors, All; Tractor Drawn Vibratory Roller; Winch Trucks with "A" Frame.

Class 3. Air Compressor; Combination Small Equipment Operator; Generators; Heaters, Mechanical; Hoists, Inside Elevators (remodeling or renovation work); Hydraulic Power Units (Pile Driving, Extracting, and Drilling); Pumps, over 3" (1 to 3 not to exceed a total of 300 ft.); Low Boys; Pumps, Well Points; Welding Machines (2 through 5); Winches, 4 Small Electric Drill Winches.

Class 4. Bobcats and/or other Skid Steer Loaders; Oilers; and Brick Forklift.

Class 5. Assistant Craft Foreman.

Class 6. Gradall.

Class 7. Mechanics; Welders.

OPERATING ENGINEERS - HIGHWAY CONSTRUCTION

Class 1. Asphalt Plant; Asphalt Heater and Planer Combination; Asphalt Heater Scarfire; Asphalt Spreader; Autograder/GOMACO or other similar type machines: ABG Paver; Backhoes with Caisson Attachment; Ballast Regulator; Belt Loader; Caisson Rigs; Car Dumper; Central Redi-Mix Plant; Combination Backhoe Front Endloader Machine, (1 cu. yd. Backhoe Bucket or over or with attachments); Concrete Breaker (Truck Mounted); Concrete Conveyor; Concrete Paver over 27E cu. ft.; Concrete Placer; Concrete Tube Float; Cranes, all attachments; Cranes, Tower Cranes of all types; Creter Crane; Spider Crane; Crusher, Stone, etc.; Derricks, All; Derrick Boats; Dredges; Elevators, Outside type Rack & Pinion and Similar Machines; Formless Curb and Gutter Machine; Grader, Elevating; Grader, Motor Grader, Motor Patrol, Auto Patrol, Form Grader, Pull Grader, Subgrader; Guard Rail Post Driver Truck Mounted; Hoists, One, Two and Three Drum; Heavy Duty Self-Propelled Transporter or Prime Mover; Hydraulic Backhoes; Backhoes with shear attachments up to 40' of boom reach; Lubrication Technician; Manipulators; Mucking Machine; Pile Drivers and Skid Rig; Pre-Stress Machine; Pump Cretes Dual Ram; Rock Drill - Crawler or Skid Rig; Rock Drill - Truck Mounted; Rock/Track Tamper; Roto Mill Grinder; Slip-Form Paver; Snow Melters; Soil Test Drill Rig (Truck Mounted); Straddle Buggies; Hydraulic Telescoping Form (Tunnel); Operation of Tieback Machine; Tractor Drawn Belt Loader; Tractor Drawn Belt Loader (with attached pusher - two engineers); Tractor with Boom; Tractaire with Attachments; Traffic Barrier Transfer Machine; Trenching; Truck Mounted Concrete Pump with Boom; Raised or Blind Hole Drills (Tunnel Shaft); Underground Boring and/or Mining Machines 5 ft. in diameter and over tunnel, etc; Underground Boring and/or Mining Machines under 5 ft. in diameter; Wheel Excavator; Widener (APSCO).

Class 2. Batch Plant; Bituminous Mixer; Boiler and Throttle Valve; Bulldozers; Car Loader Trailing Conveyors; Combination Backhoe Front Endloader Machine (Less than 1 cu. yd. Backhoe Bucket or over or with attachments); Compressor and Throttle Valve; Compressor, Common Receiver (3); Concrete Breaker or Hydro Hammer; Concrete Grinding Machine; Concrete Mixer or Paver 7S Series to and including 27 cu. ft.;

Concrete Spreader; Concrete Curing Machine, Burlap Machine, Belting Machine and Sealing Machine; Concrete Wheel Saw; Conveyor Muck Cars (Haglund or Similar Type); Drills, All; Finishing Machine - Concrete; Highlift Shovels or Front Endloader; Hoist - Sewer Dragging Machine; Hydraulic Boom Trucks (All Attachments); Hydro-Blaster; Hydro Excavating (excluding hose work); Laser Screed; All Locomotives, Dinky; Off-Road Hauling Units (including articulating) Non Self-Loading Ejection Dump; Pump Cretes: Squeeze Cretes - Screw Type Pumps, Gypsum Bulker and Pump; Roller, Asphalt; Rotary Snow Plows; Rototiller, Seaman, etc., self-propelled; Self-Propelled Compactor; Spreader - Chip - Stone, etc.; Scraper - Single/Twin Engine/Push and Pull; Scraper - Prime Mover in Tandem (Regardless of Size); Tractors pulling attachments, Sheeps Foot, Disc, Compactor, etc.; Tug Boats.

Class 3. Boilers; Brooms, All Power Propelled; Cement Supply Tender; Compressor, Common Receiver (2); Concrete Mixer (Two Bag and Over); Conveyor, Portable; Farm-Type Tractors Used for Mowing, Seeding, etc.; Forklift Trucks; Grouting Machine; Hoists, Automatic; Hoists, All Elevators; Hoists, Tugger Single Drum; Jeep Diggers; Low Boys; Pipe Jacking Machines; Post-Hole Digger; Power Saw, Concrete Power Driven; Pug Mills; Rollers, other than Asphalt; Seed and Straw Blower; Steam Generators; Stump Machine; Winch Trucks with "A" Frame; Work Boats; Tamper-Form-Motor Driven.

Class 4. Air Compressor; Combination - Small Equipment Operator; Directional Boring Machine; Generators; Heaters, Mechanical; Hydraulic Power Unit (Pile Driving, Extracting, or Drilling); Light Plants, All (1 through 5); Pumps, over 3" (1 to 3 not to exceed a total of 300 ft.); Pumps, Well Points; Vacuum Trucks (excluding hose work); Welding Machines (2 through 5); Winches, 4 Small Electric Drill Winches.

Class 5. SkidSteer Loader (all); Brick Forklifts; Oilers.

Class 6. Field Mechanics and Field Welders

Class 7. Dowell Machine with Air Compressor; Gradall and machines of like nature.

OPERATING ENGINEER - FLOATING

Diver. Diver Wet Tender, Diver Tender, ROV Pilot, ROV Tender

TRUCK DRIVER - BUILDING, HEAVY AND HIGHWAY CONSTRUCTION

Class 1. Two or three Axle Trucks. A-frame Truck when used for transportation purposes; Air Compressors and Welding Machines, including those pulled by cars, pick-up trucks and tractors; Ambulances; Batch Gate Lockers; Batch Hopperman; Car and Truck Washers; Carry-alls; Fork Lifts and Hoisters; Helpers; Mechanics Helpers and Greasers; Oil Distributors 2-man operation; Pavement Breakers; Pole Trailer, up to 40 feet; Power Mower Tractors; Self-propelled Chip Spreader; Skipman; Slurry Trucks, 2-man operation; Slurry Truck Conveyor Operation, 2 or 3 man; Teamsters; Unskilled Dumpman; and Truck Drivers hauling warning lights, barricades, and portable toilets on the job site.

Class 2. Four axle trucks; Dump Crets and Adgetors under 7 yards; Dumpsters, Track Trucks, Euclids, Hug Bottom Dump Turnapulls or Turntrailers when pulling other than self-loading equipment or similar equipment under 16 cubic yards; Mixer Trucks under 7 yards; Ready-mix Plant Hopper Operator, and Winch Trucks, 2 Axles.

Class 3. Five axle trucks; Dump Crets and Adgetors 7 yards and over; Dumpsters, Track Trucks, Euclids, Hug Bottom Dump Turntrailers or turnapulls when pulling other than self-loading equipment or similar equipment over 16 cubic yards; Explosives and/or Fission Material Trucks; Mixer Trucks 7 yards or over; Mobile Cranes while in transit; Oil Distributors, 1-man operation; Pole Trailer, over 40 feet; Pole and Expandable Trailers hauling material over 50 feet long; Slurry trucks, 1-man operation; Winch trucks, 3 axles or more; Mechanic--Truck Welder and Truck Painter.

Class 4. Six axle trucks; Dual-purpose vehicles, such as mounted crane trucks with hoist and accessories; Foreman; Master Mechanic; Self-loading equipment like P.B. and trucks with scoops on the front.

TERRAZZO FINISHER

The handling of sand, cement, marble chips, and all other materials that may be used by the Mosaic Terrazzo Mechanic, and the mixing, grinding, grouting, cleaning and sealing of all Marble, Mosaic, and Terrazzo work, floors, base, stairs, and wainscoting by hand or machine, and in addition, assisting and aiding Marble, Masonic, and Terrazzo Mechanics.

Other Classifications of Work:

For definitions of classifications not otherwise set out, the Department generally has on file such definitions which are available. If a task to be performed is not subject to one of the classifications of pay set out, the Department will upon being contacted state which neighboring county has such a classification and provide such rate, such rate being deemed to exist by reference in this document. If no neighboring county rate applies to the task, the Department shall undertake a special determination, such special determination being then deemed to have existed under this determination. If a project requires these, or any classification not listed, please contact IDOL at 217-782-1710 for wage rates or clarifications.

LANDSCAPING

Landscaping work falls under the existing classifications for laborer, operating engineer and truck driver. The work performed by landscape plantsman and landscape laborer is covered by the existing classification of laborer. The work performed by landscape operators (regardless of equipment used or its size) is covered by the classifications of operating engineer. The work performed by landscape truck drivers (regardless of size of truck driven) is covered by the classifications of truck driver.

MATERIAL TESTER & MATERIAL TESTER/INSPECTOR I AND II

Notwithstanding the difference in the classification title, the classification entitled "Material Tester I" involves the same job duties as the classification entitled "Material Tester/Inspector I". Likewise, the classification entitled "Material Tester II" involves the same job duties as the classification entitled "Material Tester/Inspector II".

CONSTRUCTION AIR QUALITY – DIESEL RETROFIT (BDE)

Effective: June 1, 2010

Revised: November 1, 2014

The reduction of emissions of particulate matter (PM) for off-road equipment shall be accomplished by installing retrofit emission control devices. The term “equipment” refers to diesel fuel powered devices rated at 50 hp and above, to be used on the jobsite in excess of seven calendar days over the course of the construction period on the jobsite (including rental equipment).

Contractor and subcontractor diesel powered off-road equipment assigned to the contract shall be retrofitted using the phased in approach shown below. Equipment that is of a model year older than the year given for that equipment’s respective horsepower range shall be retrofitted:

| Effective Dates | Horsepower Range | Model Year |
|----------------------------|------------------|------------|
| June 1, 2010 ^{1/} | 600-749 | 2002 |
| | 750 and up | 2006 |
| June 1, 2011 ^{2/} | 100-299 | 2003 |
| | 300-599 | 2001 |
| | 600-749 | 2002 |
| | 750 and up | 2006 |
| June 1, 2012 ^{2/} | 50-99 | 2004 |
| | 100-299 | 2003 |
| | 300-599 | 2001 |
| | 600-749 | 2002 |
| | 750 and up | 2006 |

1/ Effective dates apply to Contractor diesel powered off-road equipment assigned to the contract.

2/ Effective dates apply to Contractor and subcontractor diesel powered off-road equipment assigned to the contract.

The retrofit emission control devices shall achieve a minimum PM emission reduction of 50 percent and shall be:

- a) Included on the U.S. Environmental Protection Agency (USEPA) *Verified Retrofit Technology List* (<http://www.epa.gov/cleandiesel/verification/verif-list.htm>), or verified by the California Air Resources Board (CARB) (<http://www.arb.ca.gov/diesel/verdev/vt/cvt.htm>); or
- b) Retrofitted with a non-verified diesel retrofit emission control device if verified retrofit emission control devices are not available for equipment proposed to be used on the project, and if the Contractor has obtained a performance certification from the retrofit

device manufacturer that the emission control device provides a minimum PM emission reduction of 50 percent.

Note: Large cranes (Crawler mounted cranes) which are responsible for critical lift operations are exempt from installing retrofit emission control devices if such devices adversely affect equipment operation.

Diesel powered off-road equipment with engine ratings of 50 hp and above, which are unable to be retrofitted with verified emission control devices or if performance certifications are not available which will achieve a minimum 50 percent PM reduction, may be granted a waiver by the Department if documentation is provided showing good faith efforts were made by the Contractor to retrofit the equipment.

Construction shall not proceed until the Contractor submits a certified list of the diesel powered off-road equipment that will be used, and as necessary, retrofitted with emission control devices. The list(s) shall include (1) the equipment number, type, make, Contractor/rental company name; and (2) the emission control devices make, model, USEPA or CARB verification number, or performance certification from the retrofit device manufacturer. Equipment reported as fitted with emissions control devices shall be made available to the Engineer for visual inspection of the device installation, prior to being used on the jobsite.

The Contractor shall submit an updated list of retrofitted off-road construction equipment as retrofitted equipment changes or comes on to the jobsite. The addition or deletion of any diesel powered equipment shall be included on the updated list.

If any diesel powered off-road equipment is found to be in non-compliance with any portion of this special provision, the Engineer will issue the Contractor a diesel retrofit deficiency deduction.

Any costs associated with retrofitting any diesel powered off-road equipment with emission control devices shall be considered as included in the contract unit prices bid for the various items of work involved and no additional compensation will be allowed. The Contractor's compliance with this notice and any associated regulations shall not be grounds for a claim.

Diesel Retrofit Deficiency Deduction

When the Engineer determines that a diesel retrofit deficiency exists, a daily monetary deduction will be imposed for each calendar day or fraction thereof the deficiency continues to exist. The calendar day(s) will begin when the time period for correction is exceeded and end with the Engineer's written acceptance of the correction. The daily monetary deduction will be \$1,000.00 for each deficiency identified.

The deficiency will be based on lack of diesel retrofit emissions control.

If a Contractor accumulates three diesel retrofit deficiency deductions for the same piece of equipment in a contract period, the Contractor will be shutdown until the deficiency is corrected.

Such a shutdown will not be grounds for any extension of the contract time, waiver of penalties, or be grounds for any claim.

80261

EQUIPMENT PARKING AND STORAGE (BDE)

Effective: November 1, 2017

Replace the first paragraph of Article 701.11 of the Standard Specifications with the following.

“701.11 Equipment Parking and Storage. During working hours, all vehicles and/or nonoperating equipment which are parked, two hours or less, shall be parked at least 8 ft (2.5 m) from the open traffic lane. For other periods of time during working and for all nonworking hours, all vehicles, materials, and equipment shall be parked or stored as follows.

- (a) When the project has adequate right-of-way, vehicles, materials, and equipment shall be located a minimum of 30 ft (9 m) from the pavement.
- (b) When adequate right-of-way does not exist, vehicles, materials, and equipment shall be located a minimum of 15 ft (4.5 m) from the edge of any pavement open to traffic.
- (c) Behind temporary concrete barrier, vehicles, materials, and equipment shall be located a minimum of 24 in. (600 mm) behind free standing barrier or a minimum of 6 in. (150 mm) behind barrier that is either pinned or restrained according to Article 704.04. The 24 in. or 6 in. measurement shall be from the base of the non-traffic side of the barrier.
- (d) Behind other man-made or natural barriers meeting the approval of the Engineer.”

80388

LIGHTS ON BARRICADES (BDE)

Effective: January 1, 2018

Revise Article 701.16 of the Standard Specifications to read:

“701.16 Lights. Lights shall be used on devices as required in the plans, the traffic control plan, and the following table.

| Circumstance | Lights Required |
|---|-------------------------------------|
| Daylight operations | None |
| First two warning signs on each approach to the work involving a nighttime lane closure and “ROUGH GROOVED SURFACE” (W8-I107) signs | Flashing mono-directional lights |
| Devices delineating isolated obstacles, excavations, or hazards at night (Does not apply to patching) | Flashing bi-directional lights |
| Devices delineating obstacles, excavations, or hazards exceeding 100 ft (30 m) in length at night (Does not apply to widening) | Steady burn bi-directional lights |
| Channelizing devices for nighttime lane closures on two-lane roads | None |
| Channelizing devices for nighttime lane closures on multi-lane roads | None |
| Channelizing devices for nighttime lane closures on multi-lane roads separating opposing directions of traffic | None |
| Channelizing devices for nighttime along lane shifts on multilane roads | Steady burn mono-directional lights |
| Channelizing devices for night time along lane shifts on two lane roads | Steady burn bi-directional lights |
| Devices in nighttime lane closure tapers on Standards 701316 and 701321 | Steady burn bi-directional lights |
| Devices in nighttime lane closure tapers | Steady burn mono-directional lights |
| Devices delineating a widening trench | None |
| Devices delineating patches at night on roadways with an ADT less than 25,000 | None |
| Devices delineating patches at night on roadways with an ADT of 25,000 or more | None |

Batteries for the lights shall be replaced on a group basis at such times as may be specified by the Engineer.”

Delete the fourth sentence of the first paragraph of Article 701.17(c)(2) of the Standard Specifications.

Revise the first paragraph of Article 603.07 of the Standard Specifications to read:

“603.07 Protection Under Traffic. After the casting has been adjusted and Class SI concrete has been placed, the work shall be protected by a barricade for at least 72 hours.”

80392

PAVEMENT MARKING REMOVAL (BDE)

Effective: July 1, 2016

Revise Article 783.02 of the Standard Specifications to read:

“783.02 Equipment. Equipment shall be according to the following.

| Item | Article/Section |
|--|-----------------|
| (a) Grinders (Note 1) | |
| (b) Water Blaster with Vacuum Recovery | 1101.12 |

Note 1. Grinding equipment shall be approved by the Engineer.”

Revise the first paragraph of Article 783.03 of the Standard Specifications to read:

“783.03 Removal of Conflicting Markings. Existing pavement markings that conflict with revised traffic patterns shall be removed. If darkness or inclement weather prohibits the removal operations, such operations shall be resumed the next morning or when weather permits. In the event of removal equipment failure, such equipment shall be repaired, replaced, or leased so removal operations can be resumed within 24 hours.”

Revise the first and second sentences of the first paragraph of Article 783.03(a) of the Standard Specifications to read:

“The existing pavement markings shall be removed by the method specified and in a manner that does not materially damage the surface or texture of the pavement or surfacing. Small particles of tightly adhering existing markings may remain in place, if in the opinion of the Engineer, complete removal of the small particles will result in pavement surface damage.”

Revise the first paragraph of Article 783.04 of the Standard Specifications to read:

“783.04 Cleaning. The roadway surface shall be cleaned of debris or any other deleterious material by the use of compressed air or water blast.”

Revise the first paragraph of Article 783.06 of the Standard Specifications to read:

“783.06 Basis of Payment. This work will be paid for at the contract unit price per each for RAISED REFLECTIVE PAVEMENT MARKER REMOVAL, or at the contract unit price per square foot (square meter) for PAVEMENT MARKING REMOVAL – GRINDING and/or PAVEMENT MARKING REMOVAL – WATER BLASTING.”

Delete Article 1101.13 from the Standard Specifications.

80371

PAYMENTS TO SUBCONTRACTORS (BDE)

Effective: November 2, 2017

Add the following to the end of the fourth paragraph of Article 109.11 of the Standard Specifications:

“If reasonable cause is asserted, written notice shall be provided to the applicable subcontractor and/or material supplier and the Engineer within five days of the Contractor receiving payment. The written notice shall identify the contract number, the subcontract or material purchase agreement, a detailed reason for refusal, the value of payment being withheld, and the specific remedial actions required of the subcontractor and/or material supplier so that payment can be made.”

80390

SUBCONTRACTOR MOBILILATION PAYMENTS (BDE)

Effective: November 2, 2017

Replace the second paragraph of Article 109.12 of the Standard Specifications with the following:

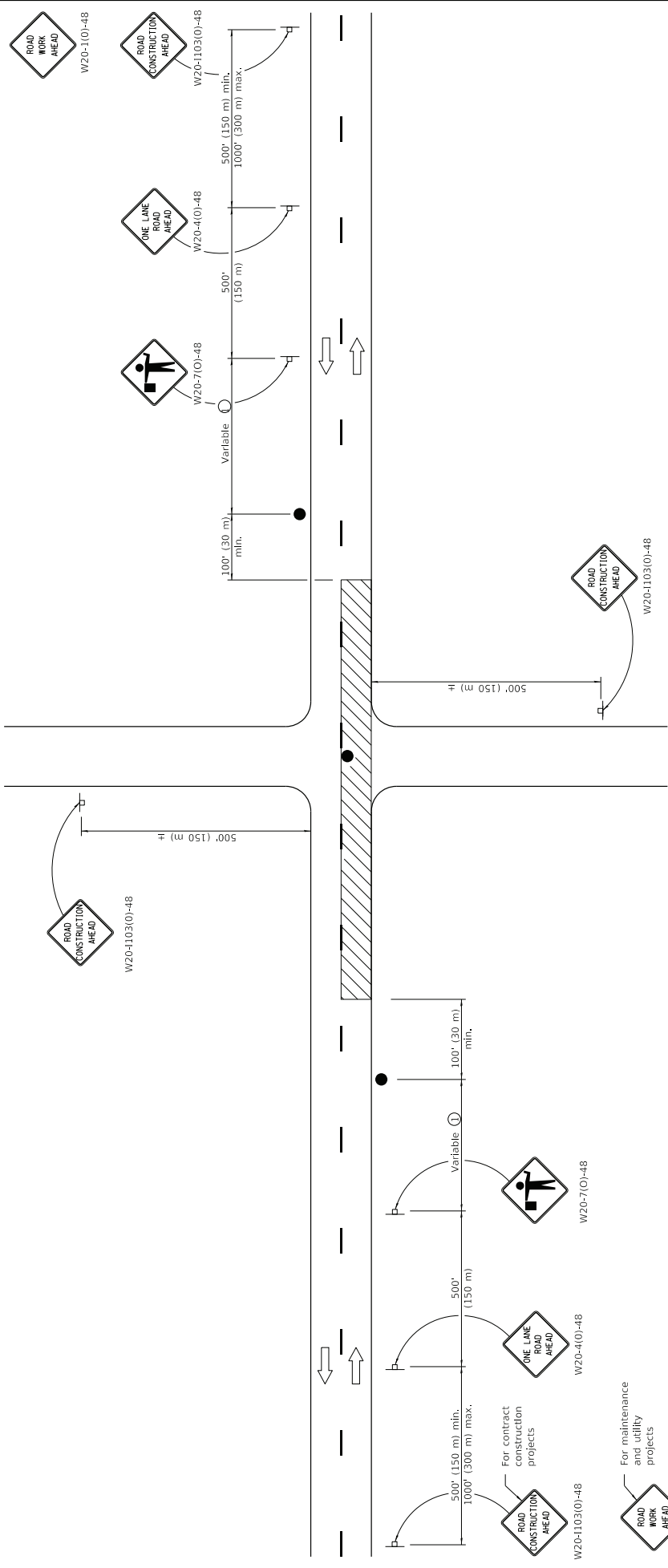
“This mobilization payment shall be made at least 14 days prior to the subcontractor starting work. The amount paid shall be at the following percentage of the amount of the subcontract reported on form BC 260A submitted for the approval of the subcontractor’s work.

| Value of Subcontract Reported on Form BC 260A | Mobilization Percentage |
|---|-------------------------|
| Less than \$10,000 | 25% |
| \$10,000 to less than \$20,000 | 20% |
| \$20,000 to less than \$40,000 | 18% |
| \$40,000 to less than \$60,000 | 16% |
| \$60,000 to less than \$80,000 | 14% |
| \$80,000 to less than \$100,000 | 12% |
| \$100,000 to less than \$250,000 | 10% |
| \$250,000 to less than \$500,000 | 9% |
| \$500,000 to \$750,000 | 8% |
| Over \$750,000 | 7%” |

80391

○ **HIGHWAY STANDARD DRAWINGS**





GENERAL NOTES

This Standard is used where at any time, any vehicle, equipment, workers or their activities require an intermittent or continuous moving operation on the pavement where the average speed of movement is greater than 1/2 mph (1 km/h) and less than 4 mph (6 km/h).
 When the operation does not exceed 60 minutes, traffic control may be according to Standard 701301.

All dimensions are in inches (millimeters) unless otherwise shown.

① Minimum distance is 200' (60 m). Maximum distance to be determined by the Engineer but should not exceed 1/2 the length required for one normal working days' operation or 2 miles (3200 m), whichever is less.

TYPICAL APPLICATIONS

- Bituminous resurfacing
- Milling operations
- Utility operations
- Shoulder operations

SYMBOLS

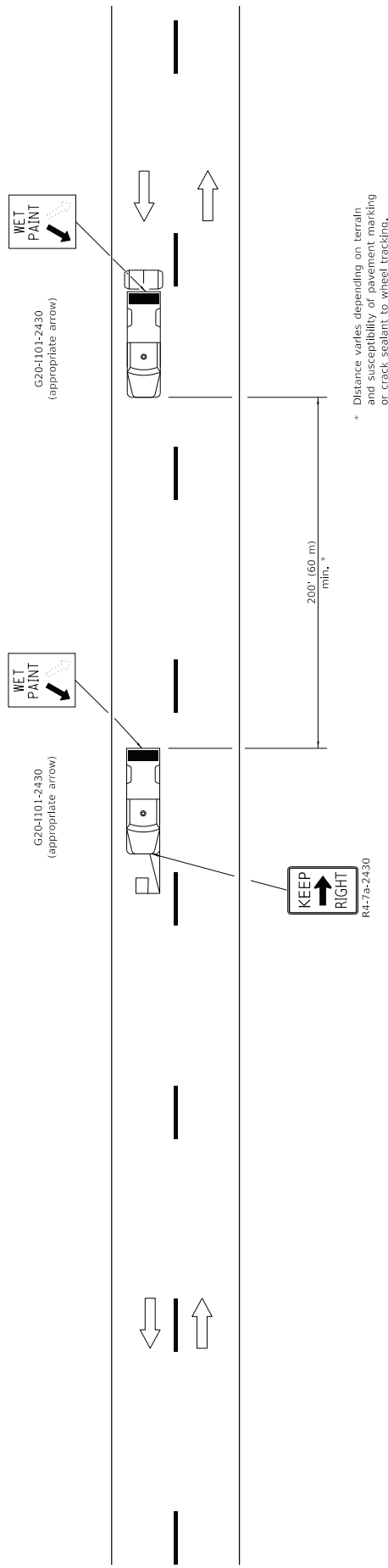
- Work area
- Sign on portable or permanent support
- Flagger with traffic control sign

LANE CLOSURE, 2L, 2W, SLOW MOVING OPERATIONS DAY ONLY, FOR SPEEDS ≥ 45 MPH

STANDARD 701306-04

| DATE | REVISIONS |
|--------|---|
| 1-1-18 | Revised lower speed limit for operation to 1/2 mph. |
| 1-1-11 | Revised flagger sign. |

Illinois Department of Transportation
 PASSED January 1, 2018
 ENGINEER OF SAFETY PROG. AND ENGINEERING
 APPROVED January 1, 2018
 ENGINEER OF DESIGN AND ENVIRONMENT



TYPICAL APPLICATIONS

- Landscape work
- Utility work
- Pavement marking
- Weed spraying
- Rodometer measurements
- Debris cleanup
- Crack pouring

SYMBOLS

- Arrow board (Hazard Mode only)
- Truck with headlights, emergency flashers and flashing amber light. (Visible from all directions)
- 18x18 (450x450) min., orange flag (use when guide wheel is used)
- Truck mounted attenuator

GENERAL NOTES

This Standard is used where any vehicle, equipment, workers or their activities will require a continuous moving operation where the average speed is greater than 3 mph (5 km/h).

For shoulder operations not encroaching on the pavement, use DETAIL A, Standard 701426. All dimensions are in inches (millimeters) unless otherwise shown.

| DATE | REVISIONS |
|--------|--|
| 1-1-09 | Switched units to English (metric). Omitted Pass With Care sign. |
| 1-1-00 | Elim. speed restrictions in Standard title. |

ILLINOIS DEPARTMENT OF TRANSPORTATION

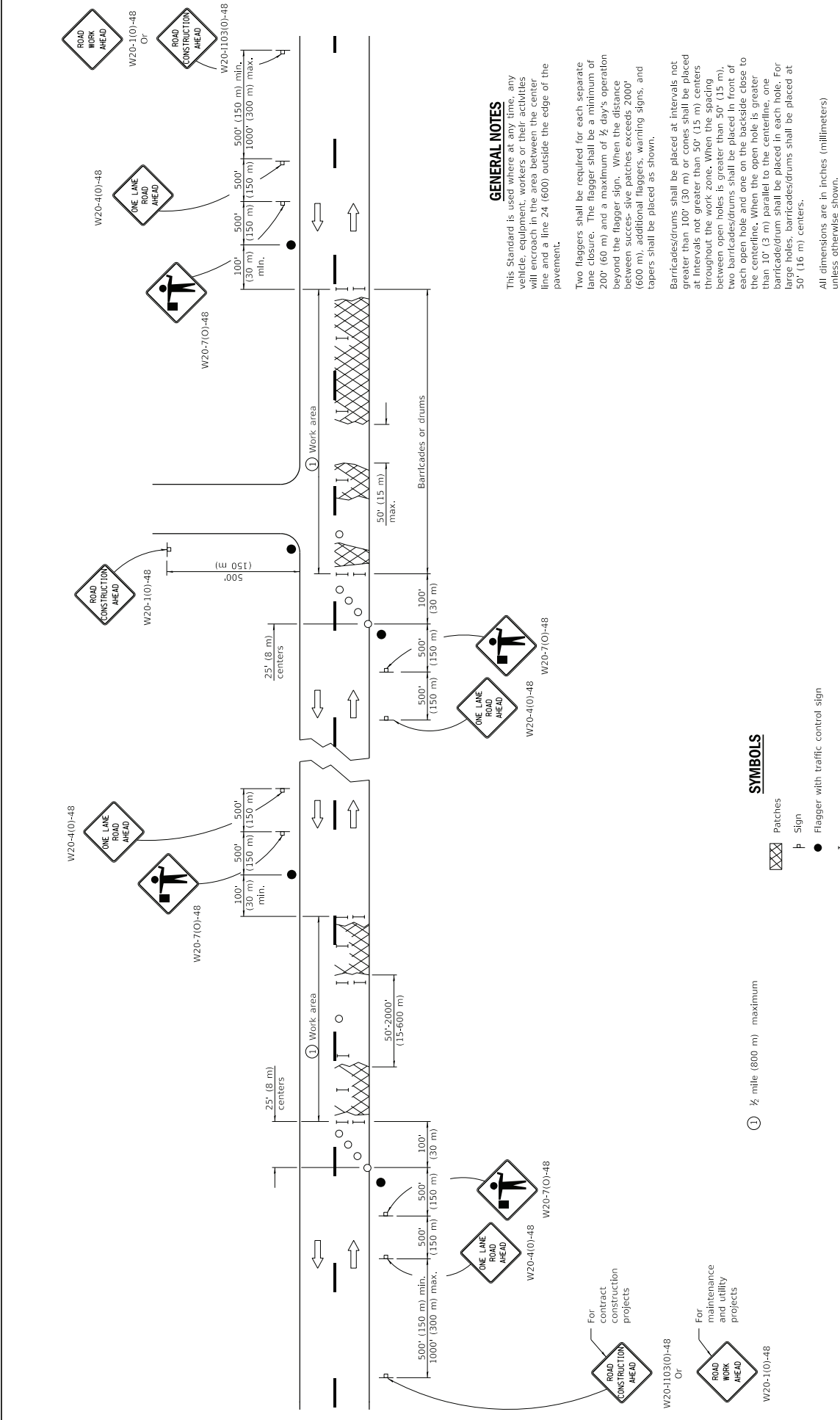
PASSED January 1, 2009
 ENGINEER OF OPERATIONS *[Signature]*

APPROVED January 1, 2009
 ENGINEER OF DESIGN AND ENVIRONMENT *[Signature]*

ISSUED 1-1-07

**LANE CLOSURE 2L, 2W
 MOVING OPERATIONS-
 DAY ONLY**

STANDARD 701311-03



GENERAL NOTES

This Standard is used where at any time, any vehicle, equipment, workers or their activities will encroach in the area between the center line and a line 24 (600) outside the edge of the pavement.

Two flaggers shall be required for each separate lane closure. The flagger shall be a minimum of 200' (60 m) and a maximum of 1/2 day's operation beyond the flagger sign. When the distance between successive patches exceeds 2000' (600 m), additional flaggers, warning signs, and tapers shall be placed as shown.

Barricades/drums shall be placed at intervals not greater than 100' (30 m) or cones shall be placed at intervals not greater than 50' (15 m) centers throughout the work zone. When the spacing between open holes is greater than 50' (15 m), two barricades/drums shall be placed in front of each open hole and one on the backside close to the centerline. When the open hole is greater than 10' (3 m) parallel to the centerline, one barricade/drum shall be placed in each hole. For large holes, barricades/drums shall be placed at 50' (16 m) centers.

All dimensions are in inches (millimeters) unless otherwise shown.

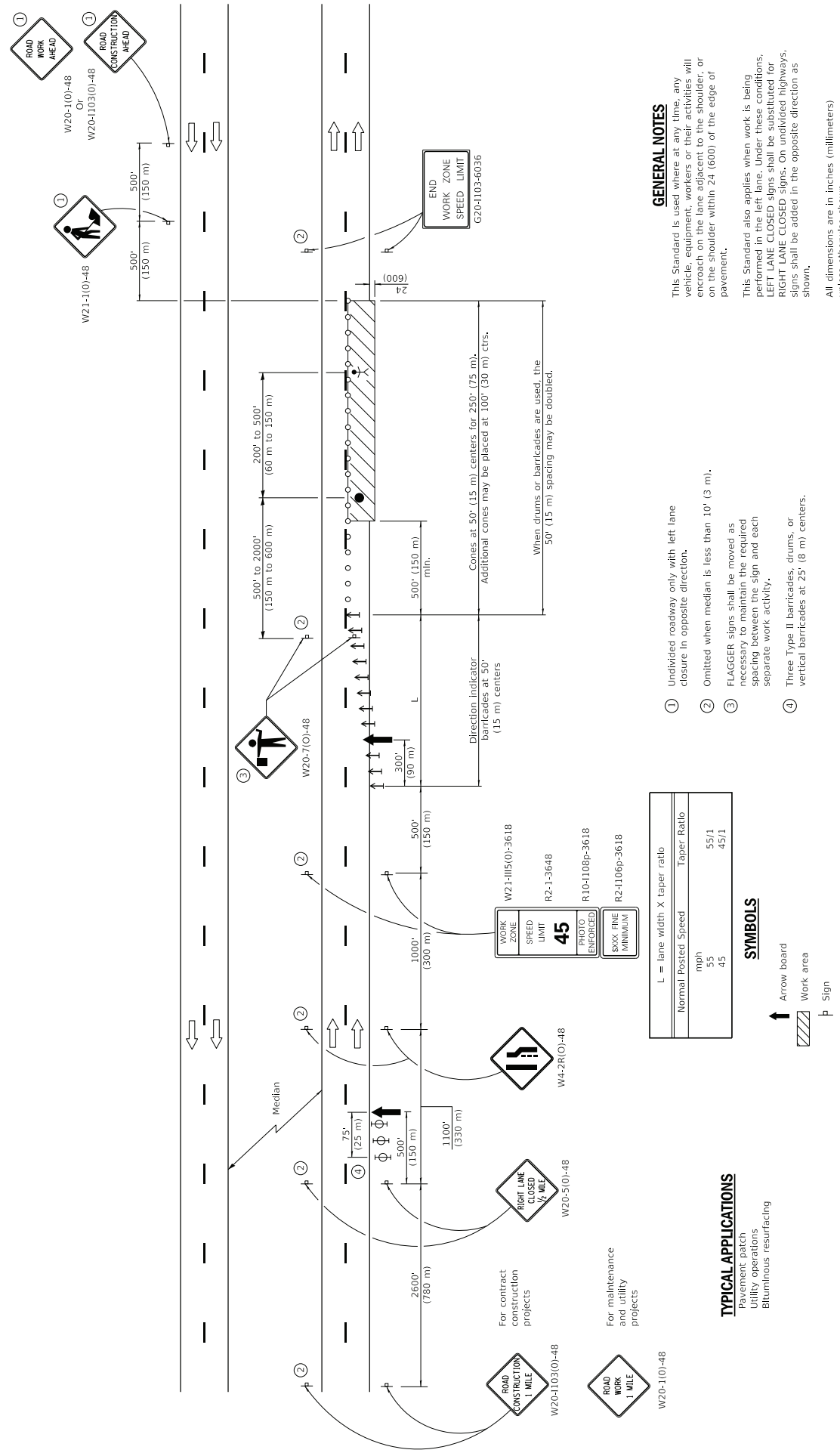
| DATE | REVISIONS |
|--------|-------------------------------------|
| 1-1-11 | Revised flagger sign. |
| 1-1-09 | Switched units to English (metric). |
| | Corrected sign No.'s. |

| TYPICAL APPLICATIONS | |
|----------------------|--|
| Patching | |

| | |
|---|---------------|
| Illinois Department of Transportation PASSED January 1, 2011 APPROVED January 1, 2011 ENGINEER OF SAFETY ENGINEERING ENGINEER OF DESIGN AND ENVIRONMENT | ISSUED 1-1-17 |
|---|---------------|

LANE CLOSURE, 2L, 2W, WORK AREAS IN SERIES, FOR SPEEDS ≥ 45 MPH

STANDARD 701336-06



GENERAL NOTES

This Standard is used where at any time, any vehicle, equipment, workers or their activities will encroach on the lane adjacent to the shoulder, or on the shoulder within 24 (600) of the edge of pavement.

This Standard also applies when work is being performed in the left lane. Under these conditions, LEFT LANE CLOSED signs shall be substituted for RIGHT LANE CLOSED signs. On undivided highways, signs shall be added in the opposite direction as shown.

- ① Undivided roadway only with left lane closure in opposite direction.
- ② Omitted when median is less than 10' (3 m).
- ③ FLAGGER signs shall be moved as necessary to maintain the required spacing between the sign and each separate work activity.
- ④ These Type II barricades, drums, or vertical barricades at 25' (8 m) centers.

L = lane width X taper ratio

| Normal Posted Speed | Taper Ratio |
|---------------------|-------------|
| mph | |
| 55 | 55/1 |
| 45 | 45/1 |

TYPICAL APPLICATIONS

- Pavement patch
- Utility operations
- Bituminous resurfacing

SYMBOLS

- ↑ Arrow board
- ▨ Work area
- ⊥ Sign
- ↑ Direction indicator barricade
- Cone, drum or barricade
- Flagger with traffic control sign
- ⋈ Worker
- ⊕ Type II barricade, drum, or vertical barricade with monodirectional flashing light

LANE CLOSURE, MULTILANE, DAY OPERATIONS ONLY, FOR SPEEDS ≥ 45 MPH TO 55 MPH

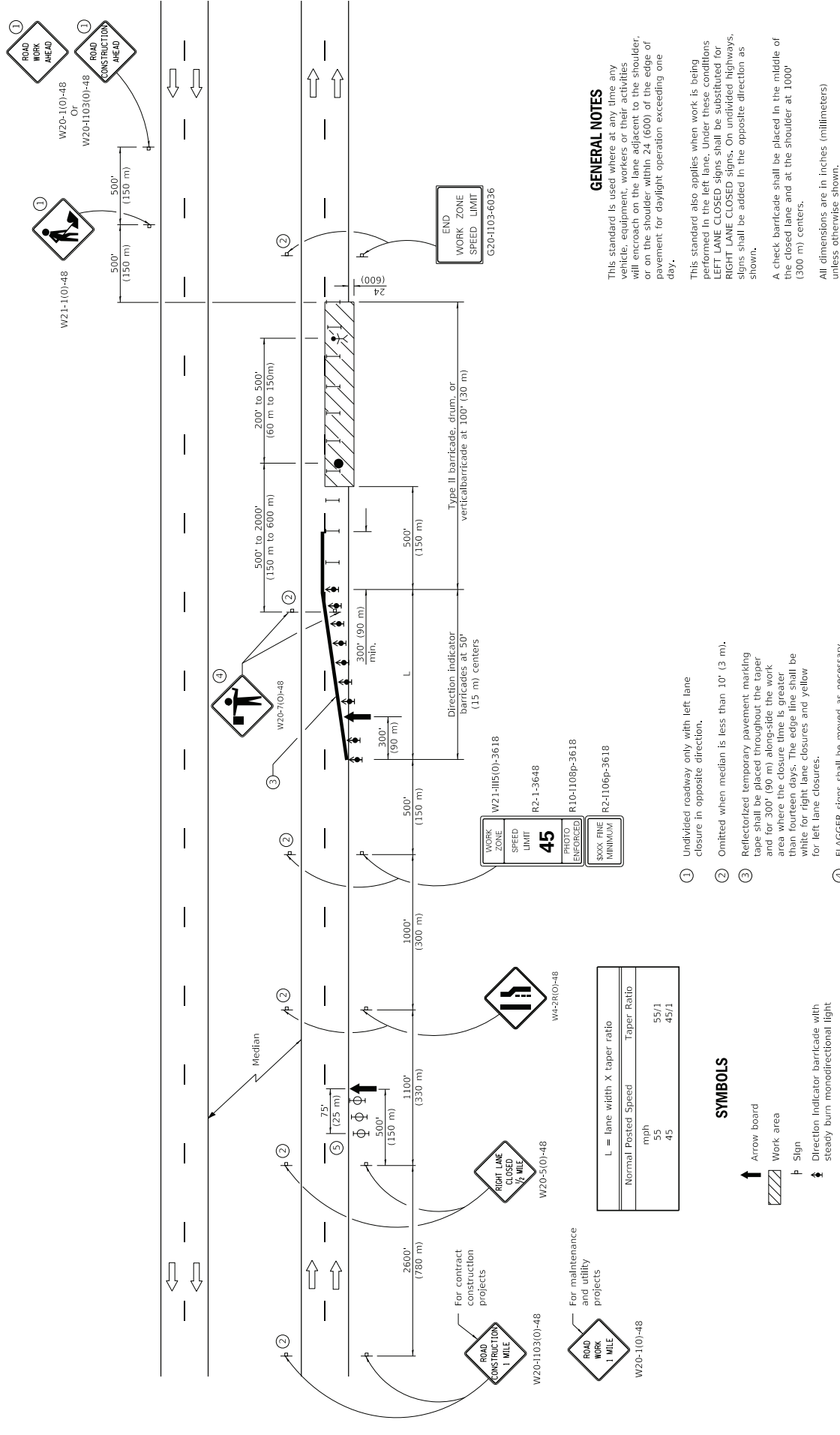
| DATE | REVISIONS |
|--------|--|
| 1-1-17 | Rev. END WORK ZONE SPEED LIMIT sign. Changed device spacing at first arr. bnd. |
| 1-1-15 | Revised END WORK ZONE SPEED LIMIT sign dimensions. |

STANDARD 701421-08

Illinois Department of Transportation

PASSED January 1, 2017
 ENGINEER OF SAFETY PROG. AND ENGINEERING
 APPROVED January 1, 2017
 ENGINEER OF DESIGN AND ENVIRONMENT

ISSUED 4-1-04



GENERAL NOTES

This standard is used where at any time any vehicle, equipment, workers or their activities will encroach on the lane adjacent to the shoulder, or on the shoulder within 24 (600) of the edge of pavement for daylight operation exceeding one day.

This standard also applies when work is being performed in the left lane. Under these conditions LEFT LANE CLOSED signs shall be substituted for RIGHT LANE CLOSED signs. On undivided highways, signs shall be added in the opposite direction as shown.

A check barricade shall be placed in the middle of the closed lane and at the shoulder at 1000' (300 m) centers.

All dimensions are in inches (millimeters) unless otherwise shown.

- ① Undivided roadway only with left lane closure in opposite direction.
- ② Omitted when median is less than 10' (3 m).
- ③ ReflectORIZED temporary pavement marking tape shall be placed throughout the taper and for 300' (90 m) along-side the work area where the closure time is greater than fourteen days. The edge line shall be white for right lane closures and yellow for left lane closures.
- ④ FLAGGER signs shall be moved as necessary to maintain the required spacing between the sign and each separate work activity.
- ⑤ Three Type II barricades, drums, or vertical barricades at 25' (8 m) centers.

SYMBOLS

- ↑ Arrow board
- ▨ Work area
- P Sign
- ↕ Direction Indicator barricade with steady burn monodirectional light
- I Type II barricade, drum, or vertical barricade
- Flagger with traffic control sign
- ⚡ Worker
- ⊕ Type II barricade, drum, or vertical barricade with monodirectional flashing light

| Normal Posted Speed | Taper Ratio |
|---------------------|-------------|
| mph | |
| 55 | 55/1 |
| 45 | 45/1 |

WORK ZONE SPEED LIMIT 45

PHOTO ENFORCED R2-1-3648

MINIMUM R2-1106p-3618

W21-115(0)-3618

W4-2R(0)-48

END WORK ZONE SPEED LIMIT

G20-1103-6036

LANE CLOSURE, MULTILANE, FOR SPEEDS ≥ 45 MPH TO 55 MPH

STANDARD 701422-10

| DATE | REVISIONS |
|--------|--|
| 1-1-18 | Omitted lights in tangent. |
| 1-1-17 | Rev. END WORK ZONE SPEED LIMIT sign. Changed device. Spacing at first arr. brct. |

Illinois Department of Transportation

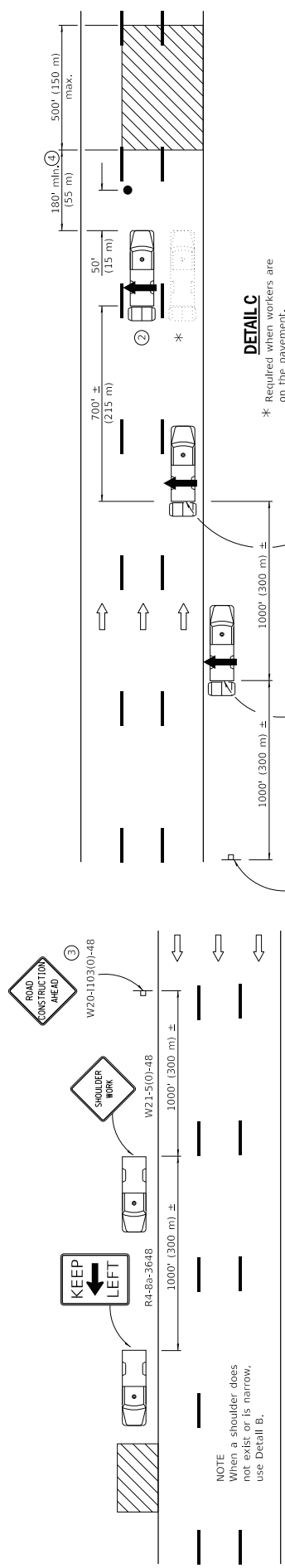
PASSED January 1, 2018

ENGINEER OF SAFETY PROC. AND ENGINEERING

APPROVED January 1, 2018

ENGINEER OF DESIGN AND ENVIRONMENT

ISSUED 4-1-04



DETAIL A

NOTE
When a shoulder does not exist or is narrow, use Detail B.



DETAIL B

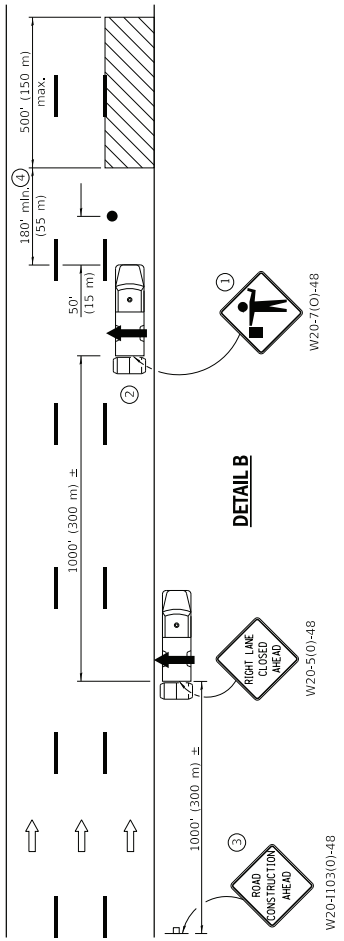
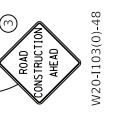


TYPICAL APPLICATIONS

- Landscape work
- Utility work
- Pavement marking
- Weed spraying
- Rodometer measurements
- Debris cleanup
- Crack pouring

DETAIL C

* Required when workers are on the pavement.



DETAIL B

SYMBOLS

- ↑ Arrow board
- ▨ Work area
- Truck with flashing amber light
- Truck/Trailer mounted attenuator
- Flagger with traffic control sign
- ⊞ Sign

- 1 Flaggers are required when workers are on the pavement.
- 2 For striping operations only. See sign arrow detail on this standard.
- 3 For stationary operations which are on the roadway or shoulder, greater than 15 minutes and up to 1 hour.
- 4 The distance between the work and the lead truck may vary according to terrain or paint/crack sealing drying time.



G20-101-2430
(appropriate arrow)
② (when striping only)

GENERAL NOTES

This Standard is used where any vehicle, equipment, workers or their activities will require:
1) stationary operations up to 1 hour, or 2) a continuous or intermittent moving operation where the average speed of movement is greater than 1 mph (2 km/h).

This Standard is also applicable when work is being performed in the left lanes) or on the median shoulder. Under these conditions, KEEP RIGHT signs shall be substituted for KEEP LEFT signs and arrow board indications shall be directed to the right.

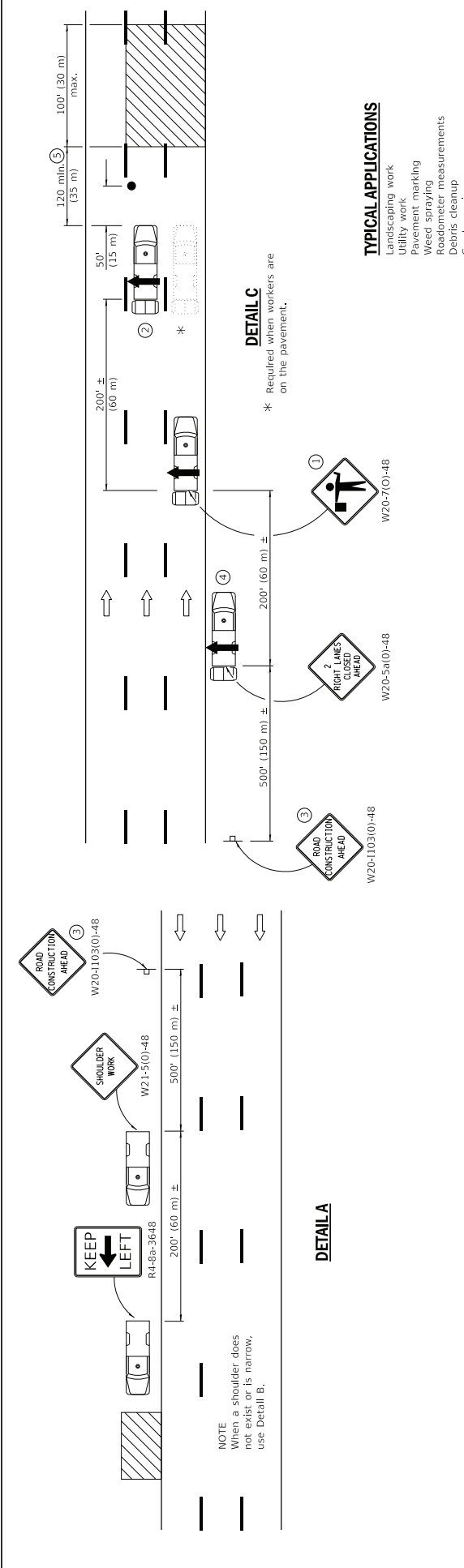
All dimensions are in inches (millimeter) unless otherwise shown.

LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPER., FOR SPEEDS ≥ 45 MPH

STANDARD 701426-09

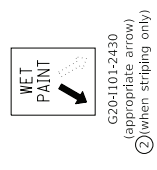
| DATE | REVISIONS |
|--------|---|
| 1-1-17 | Revised 'NOTE' on DETAIL A to use DETAIL B in lieu of DETAIL C. |
| 4-1-16 | Added trailer option for attenuator symbol. Added note ④. Revised gen. notes. |

Illinois Department of Transportation
 PASSED January 1, 2017
 ENGINEER OF SAFETY PROC. AND ENGINEERING
 APPROVED January 1, 2017
 ENGINEER OF DESIGN AND ENVIRONMENT



TYPICAL APPLICATIONS

- Landscape work
- Utility work
- Pavement marking
- Weed spraying
- Roadmeter measurements
- Debris cleanup
- Crack pouring



- ① Flaggers are required when workers are on the pavement.
- ② For striping operations only. See sign arrow detail on this standard.
- ③ For stationary operations which are on the roadway or shoulder, greater than 15 minutes and up to 1 hour.
- ④ Omit truck, attenuator and arrow board when no shoulder exists due to curb and gutter.
- ⑤ The distance between the work and the lead truck may vary according to terrain or pain/crack sealing time.

GENERAL NOTES

This Standard is used where any vehicle, equipment, workers or their activities will require:

- 1) stationary operations up to 1 hour, or
- 2) a continuous or intermittent moving operation where the average speed of movement is greater than 1 mph (2 km/h).

This Standard is also applicable when work is being performed in the left lane(s) or on the median shoulder. Under these conditions, KEEP RIGHT signs shall be substituted for KEEP LEFT signs and arrow board indications shall be directed to the right.

SYMBOLS

- ↑ Arrow board
- ▨ Work area
- Truck with flashing amber light
- Truck/Trailer mounted attenuator
- Flagger with traffic control sign
- ⊥ Sign

LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPER., FOR SPEEDS ≤ 40 MPH

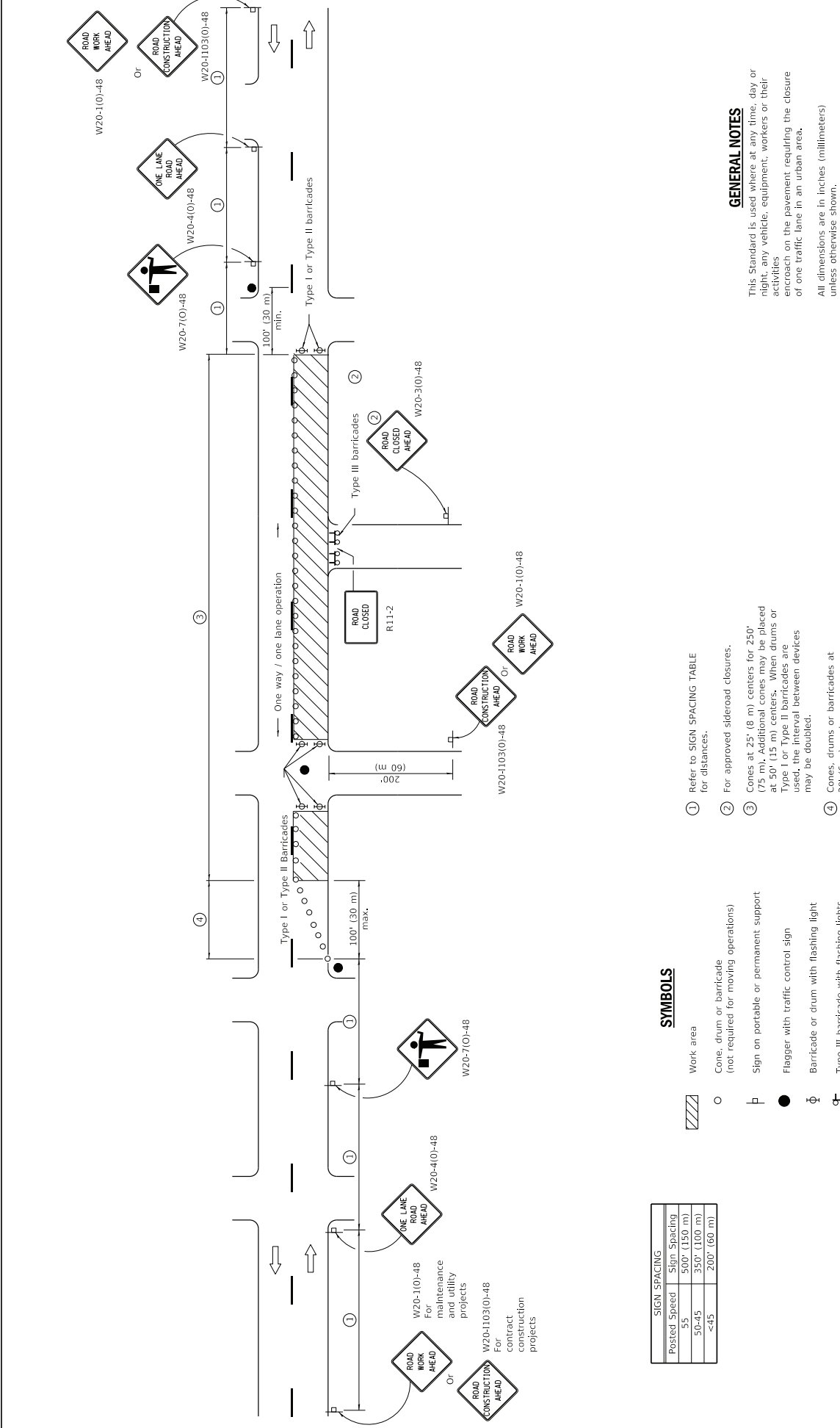
| DATE | REVISIONS |
|--------|--|
| 1-1-17 | Revised 'NOTE' on DETAIL A to use DETAIL B in lieu of DETAIL C. |
| 4-1-16 | Rev. gen. notes. Added note ⑤. Rev. dist. between work and lead truck. |

STANDARD 701427-05

Illinois Department of Transportation

PASSED January 1, 2017
 ENGINEER OF SAFETY PROC. AND ENGINEERING
 APPROVED January 1, 2017
 ENGINEER OF DESIGN AND ENVIRONMENT

ISSUED 1-1-11



| SIGN SPACING | |
|--------------|--------------|
| Posted Speed | Sign Spacing |
| 55 | 500' (150 m) |
| 50-45 | 350' (100 m) |
| <45 | 200' (60 m) |

SYMBOLS

- Work area
- Cone, drum or barricade (not required for moving operations)
- Sign on portable or permanent support
- Flagger with traffic control sign
- Barricade or drum with flashing light
- Type III barricade with flashing lights

1 Refer to SIGN SPACING TABLE for distances.

2 For approved sideroad closures.

3 Cones at 25' (8 m) centers for 250' (75 m). Additional cones may be placed at 50' (15 m) centers. When drums or Type I or Type II barricades are used, the interval between devices may be doubled.

4 Cones, drums or barricades at 20' (6 m) centers.

GENERAL NOTES

This Standard is used where at any time, day or night, any vehicle, equipment, workers or their activities encroach on the pavement requiring the closure of one traffic lane in an urban area.

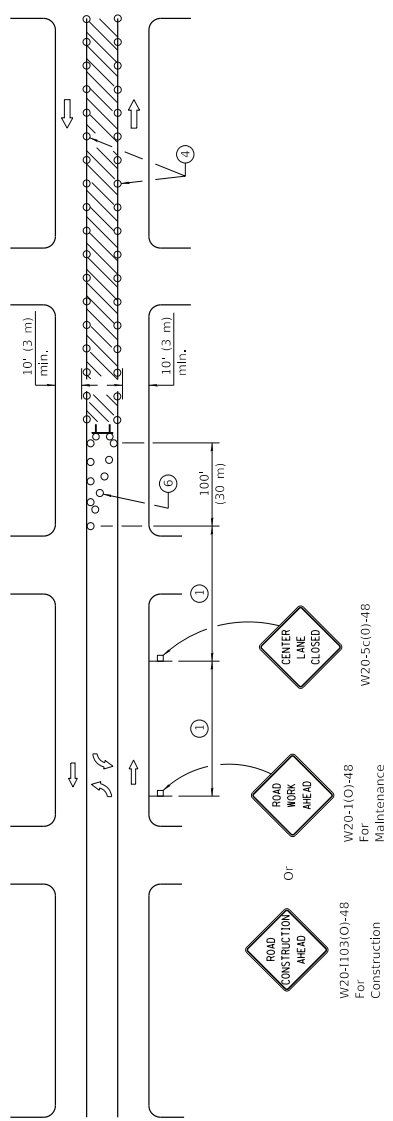
All dimensions are in inches (millimeters) unless otherwise shown.

| DATE | REVISIONS |
|--------|-------------------------------------|
| 1-1-11 | Revised flagger sign. |
| 1-1-09 | Switched units to English (metric). |
| | Corrected sign No.'s. |

**URBAN LANE CLOSURE,
2L, 2W, UNDIVIDED**

STANDARD 701501-06

Illinois Department of Transportation
 PASSED January 1, 2011
 ENGINEER OF SAFETY ENGINEERING
 APPROVED January 1, 2011
 ENGINEER OF DESIGN AND ENVIRONMENT



CASE I

(Signs required for both directions)

- 1 Refer to SIGN SPACING TABLE for distances.
- 2 Required for speeds > 40 mph (70 km/h).
- 3 Required if work exceeds 500' (164 m) or 1 block.
- 4 Cones at 25' (8 m) centers for 250' (75 m) on approach. Additional cones may be placed at 50' (15 m) centers. When drums or Type I or II barricades are used, the interval between devices may be doubled.
- 5 For approved sideroad closures.
- 6 Cones, drums or barricades at 20' (6 m) centers in taper.
- 7 Use flagger sign only when flagger is present.

| SIGN SPACING | |
|--------------|--------------|
| Posted Speed | Sign Spacing |
| 55 | 500' (150 m) |
| 50-45 | 350' (100 m) |
| <45 | 200' (60 m) |

SYMBOLS

- Work area
- Barricade or drum with flashing light
- Flagger with traffic control sign
- Cone, drum or barricade (Cones for daytime use only)
- Sign on portable or permanent support
- Type III barricade with flashing lights

GENERAL NOTES

This Standard is used to close one lane of an urban, two lane, two way roadway with a bidirectional turn lane.
 Case I applies when no workers are present. When workers are present, two lanes shall be closed and traffic control shall be according to Standard 701501.

Calculate L as follows:

| | | |
|------------------------------|-----------------------|------------------|
| SPEED LIMIT | English | FORMULAS |
| | (Metric) | |
| 40 mph (70 km/h) or less: | $L = \frac{WS^2}{60}$ | |
| 45 mph (80 km/h) or greater: | $L = (W)(S)$ | $L = 0.65(W)(S)$ |

W = Width of offset in feet (meters).
 S = Normal posted speed mph (km/h).

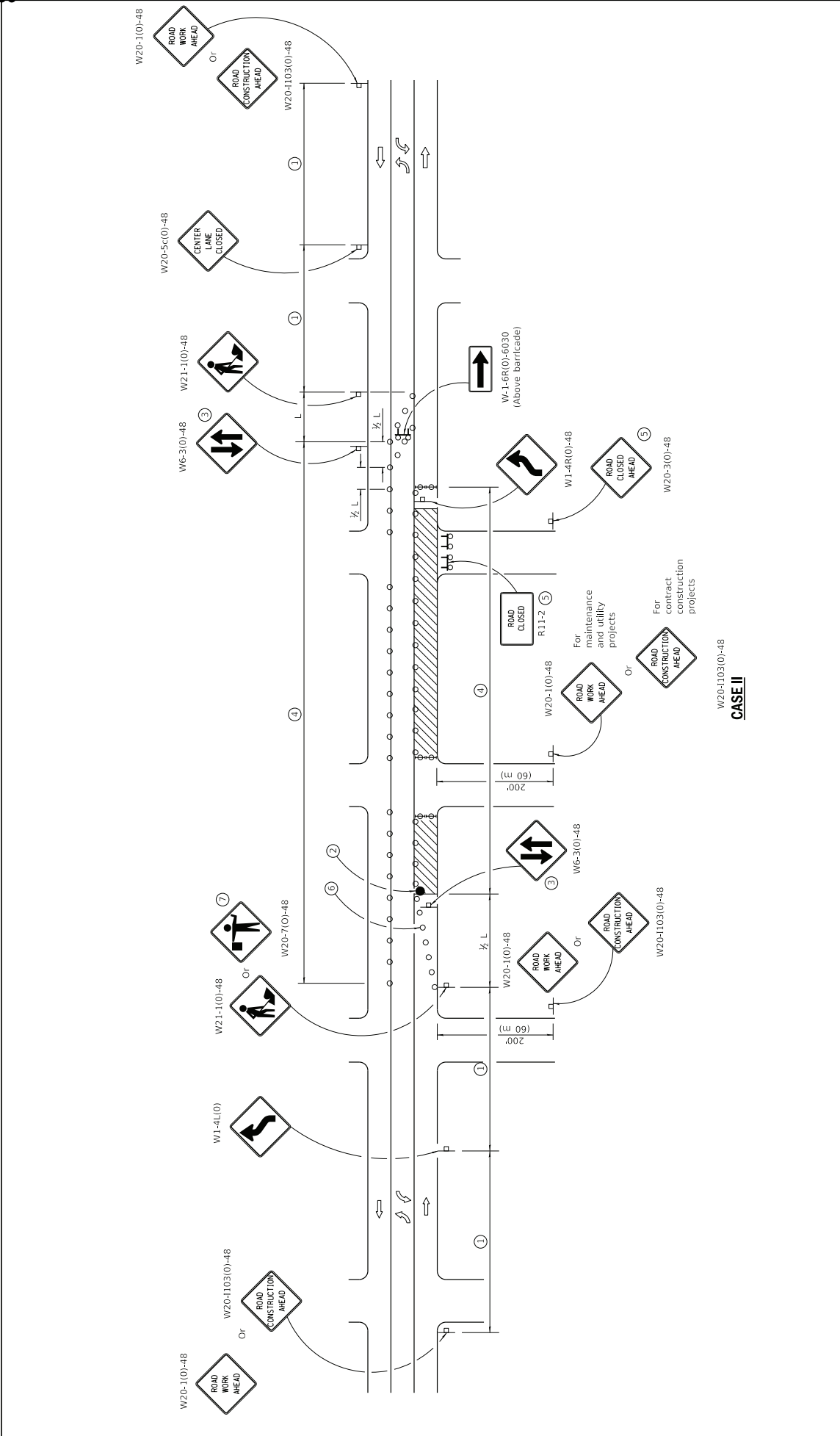
All dimensions are in inches (millimeters) unless otherwise shown.

| | |
|--------|--|
| DATE | REVISIONS |
| 1-1-18 | Corrected sign number for TWO WAY TRAFFIC sign for CASE II. |
| 1-1-17 | Added flashing lights to Type III barr. Revised dev. & sign spacing. TWLTL taper length. |

URBAN LANE CLOSURE, 2L, 2W, WITH BIDIRECTIONAL LEFT TURN LANE
 (Sheet 1 of 2)

STANDARD 701502-08

Illinois Department of Transportation
 PASSED January 1, 2018
 ENGINEER OF SAFETY PROG. AND ENGINEERING
 APPROVED January 1, 2018
 ENGINEER OF DESIGN AND ENVIRONMENT

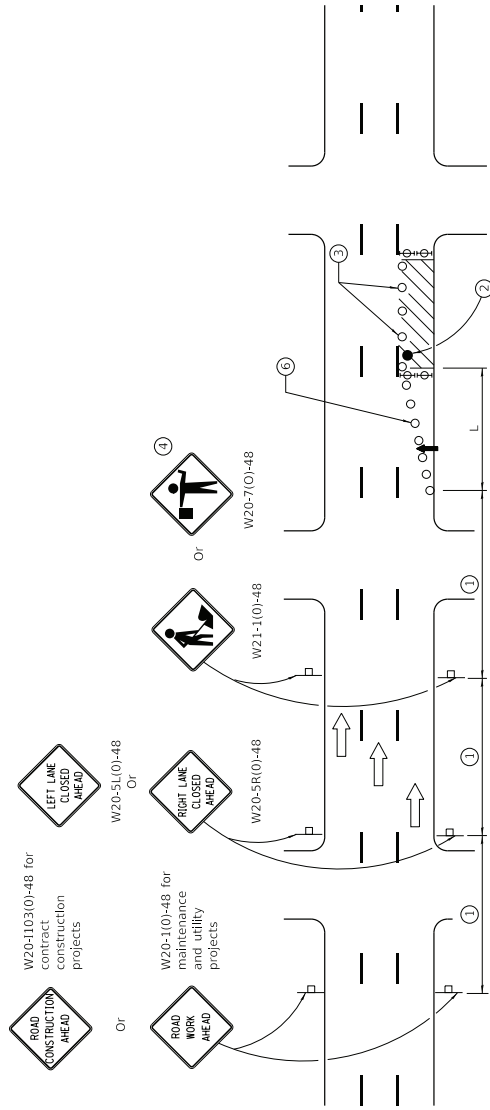


W20-1103(0)-48
CASE II

**URBAN LANE CLOSURE,
2L, 2W, WITH BIDIRECTIONAL
LEFT TURN LANE**
(Sheet 2 of 2)

STANDARD 701502-08

| | | |
|---|--------------------|---------------|
| Illinois Department of Transportation PASSED ENGINEER OF SAFETY PROG. AND ENGINEERING APPROVED ENGINEER OF DESIGN AND ENVIRONMENT | January 1, 2018 | ISSUED 1-1-01 |
| | <i>[Signature]</i> | |
| | January 1, 2018 | |
| | <i>[Signature]</i> | |



| SIGN SPACING | |
|--------------|--------------|
| Posted Speed | Sign Spacing |
| 55 | 500' (150 m) |
| 50-45 | 350' (100 m) |
| <45 | 200' (60 m) |

SYMBOLS

- ↑ Arrow board
- Cone, drum or barricade
- ⊥ Sign on portable or permanent support
- ▨ Work area
- ⊕ Barricade or drum with flashing light
- ⊕ Type III barricade with flashing lights
- Flagger with traffic control sign.

- 1 Refer to SIGN SPACING TABLE for distances.
- 2 Required for speeds > 40 MPH
- 3 Cones at 25' (8 m) centers for 250' (75 m). Additional cones may be placed at 50' (15 m) centers. When drums or Type I or Type II barricades are used, the interval between devices may be doubled.
- 4 Use flagger sign only when flagger is present.
- 5 For approved sideroad closures.
- 6 Cones, drums or barricades at 20' (6 m) in taper.

GENERAL NOTES

This Standard is used where at any time, day or night, any vehicle, equipment, workers or their activities encroach on the pavement during shoulder operations or where construction requires lane closures in urban areas.

Calculate L as follows:

| | | |
|------------------------------|-----------------------|------------------------|
| SPEED LIMIT | English | FORMULAS |
| | (Metric) | |
| 40 mph (70 km/h) or less: | $L = \frac{WS^2}{60}$ | $L = \frac{WS^2}{150}$ |
| 45 mph (80 km/h) or greater: | $L = (W)(S)$ | $L = 0.65(W)(S)$ |

W = Width of offset
In feet (meters).

S = Normal posted speed
mph (km/h).

All dimensions are in inches (millimeters) unless otherwise shown.

| | |
|--|--|
| URBAN LANE CLOSURE, MULTILANE, 1W OR 2W WITH NONTRAVERSABLE MEDIAN <small>(Sheet 1 of 2)</small> | |
| DATE | REVISIONS |
| 1-1-14 | Revised workers sign number to agree with current MUTCD. |
| 1-1-13 | Omitted text 'WORKERS' sign. |
| STANDARD 701601-09 | |

Illinois Department of Transportation

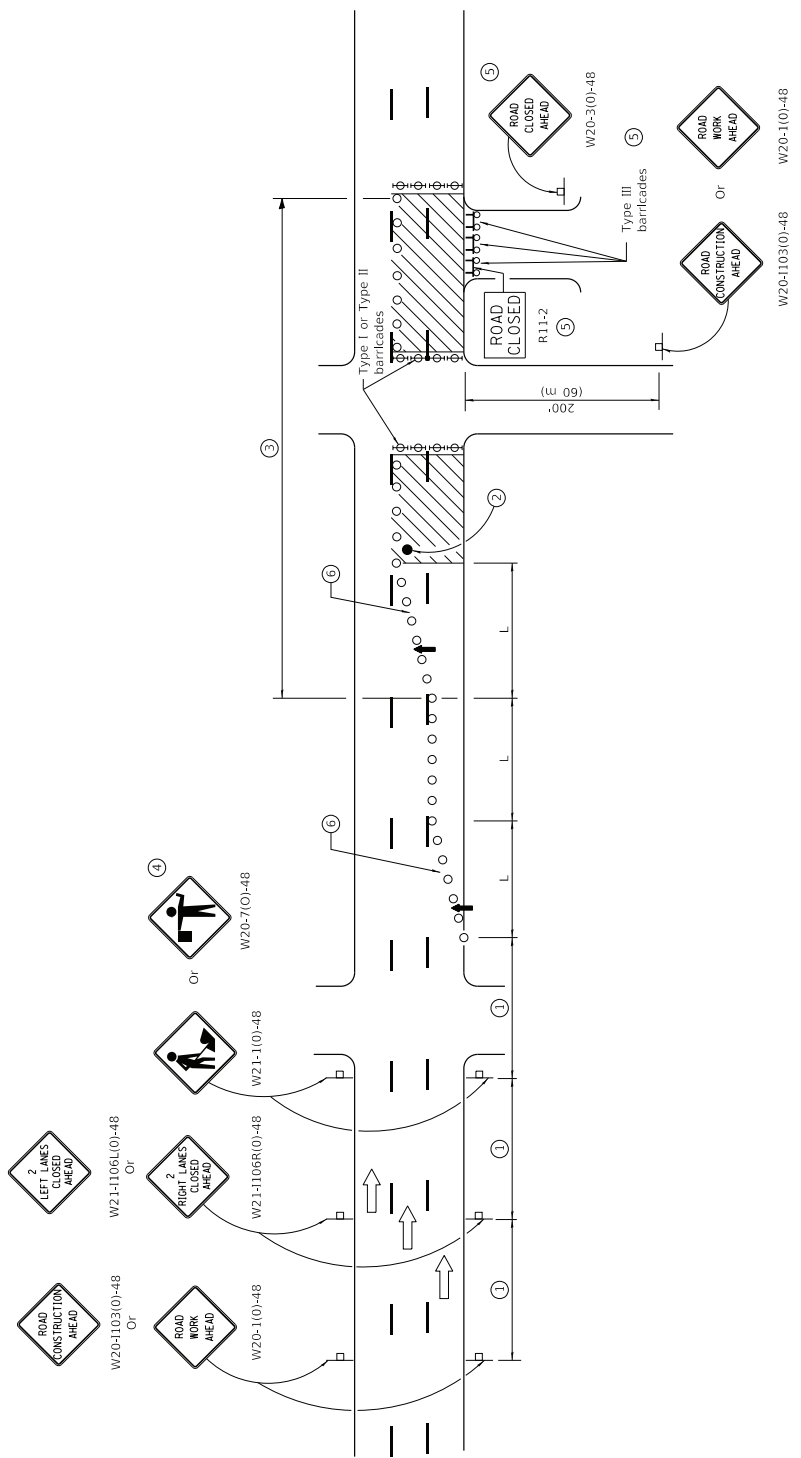
PASSED January 2014

ENGINEER OF SAFETY ENGINEERING

APPROVED January 1, 2014

ENGINEER OF DESIGN AND ENVIRONMENT

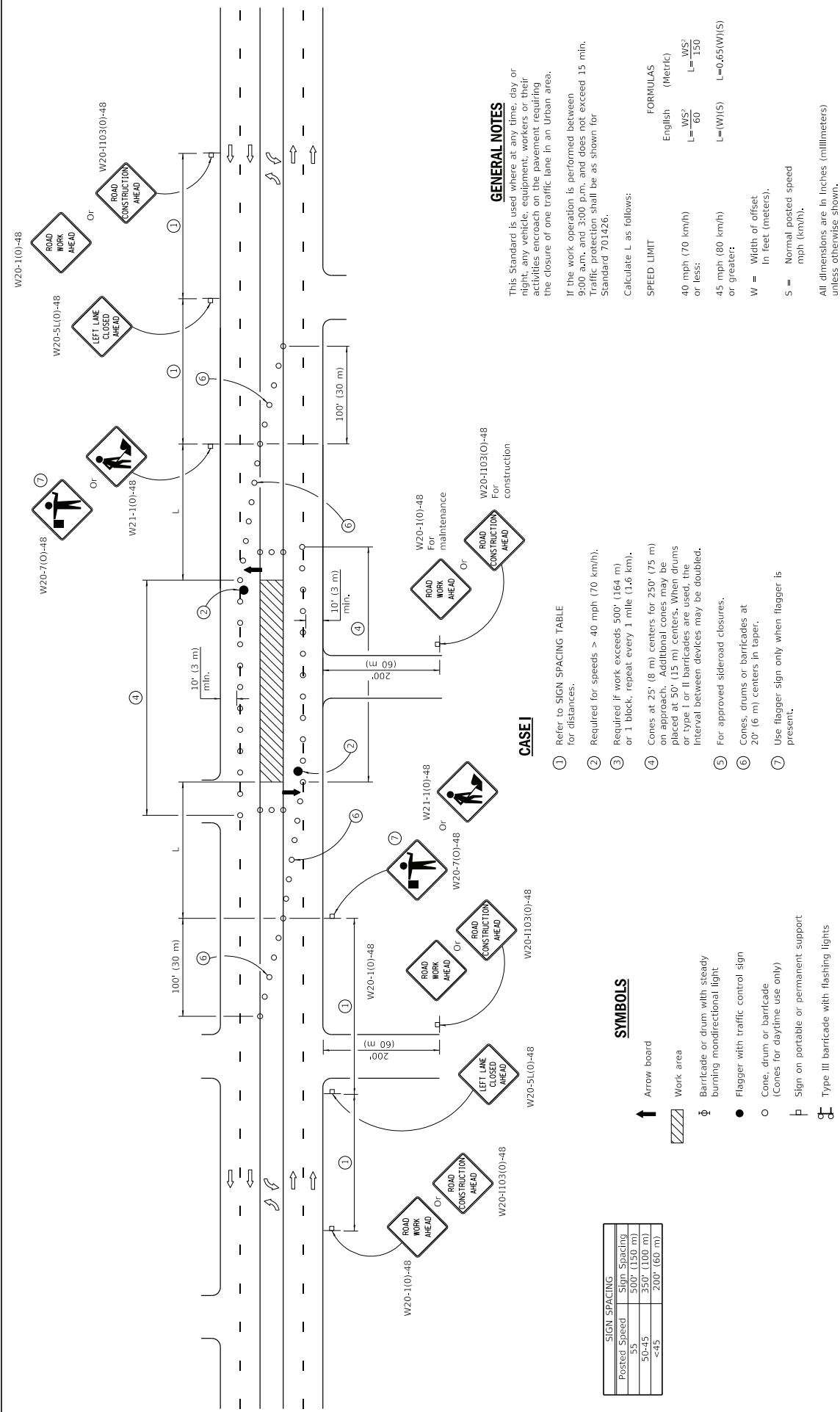
ISSUED 1-1-17



**URBAN LANE CLOSURE,
MULTILANE, 1W OR 2W WITH
NONTRAVERSABLE MEDIAN**
(Sheet 2 of 2)

STANDARD 701601-09

| | |
|--|--|
| Illinois Department of Transportation ISSUED 1-1-97 | PASSED January 2014 ENGINEER OF SAFETY ENGINEERING |
| | APPROVED January 2014 ENGINEER OF DESIGN AND ENVIRONMENT |



GENERAL NOTES

This Standard is used where at any time, day or night, any vehicle, equipment, workers or their activities encroach on the pavement requiring the closure of one traffic lane in an Urban area.

If the work operation is performed between 9:00 a.m. and 3:00 p.m., and does not exceed 15 min. Traffic protection shall be as shown for Standard 701426.

Calculate L as follows:

FORMULAS (Metric)

English L = WS² / 60 L = 0.65(W)(S)

40 mph (70 km/h) or less: L = WS² / 60 L = 0.65(W)(S)

45 mph (80 km/h) or greater: L = WS² / 60 L = 0.65(W)(S)

W = Width of offset in feet (meters).

S = Normal posted speed mph (km/h).

All dimensions are in inches (millimeters) unless otherwise shown.

CASE I

- 1 Refer to SIGN SPACING TABLE for distances.
- 2 Required for speeds > 40 mph (70 km/h).
- 3 Required if work exceeds 500' (164 m) or 1 block, repeat every 1 mile (1.6 km).
- 4 Cones at 25' (8 m) centers for 250' (75 m) on approach. Additional cones may be placed at 50' (15 m) centers. When drums or type I or II barricades are used, the interval between devices may be doubled.
- 5 For approved sitedroad closures.
- 6 Cones, drums or barricades at 20' (6 m) centers in taper.
- 7 Use flagger sign only when flagger is present.

SYMBOLS

- ↑ Arrow board
- ▨ Work area
- ⊕ Barricade or drum with steady burning monidirectional light
- Flagger with traffic control sign
- Cone, drum or barricade (Cones for daytime use only)
- ⊥ Sign on portable or permanent support
- ⊕ Type III barricade with flashing lights

| Posted Speed | Sign Spacing |
|--------------|--------------|
| 35 | 300' (130 m) |
| 50-45 | 300' (100 m) |
| <45 | 200' (60 m) |

| DATE | REVISIONS |
|--------|--|
| 1-1-18 | Moved arrow boards into closed lanes for CASE I. |
| 1-1-17 | Added flashing lights to Type III barr. Revised dev. & sign spacing. TWLTL taper length. |

URBAN LANE CLOSURE, MULTILANE, 2W WITH BIDIRECTIONAL LEFT TURN LANE (Sheet 1 of 4)

STANDARD 701602-09

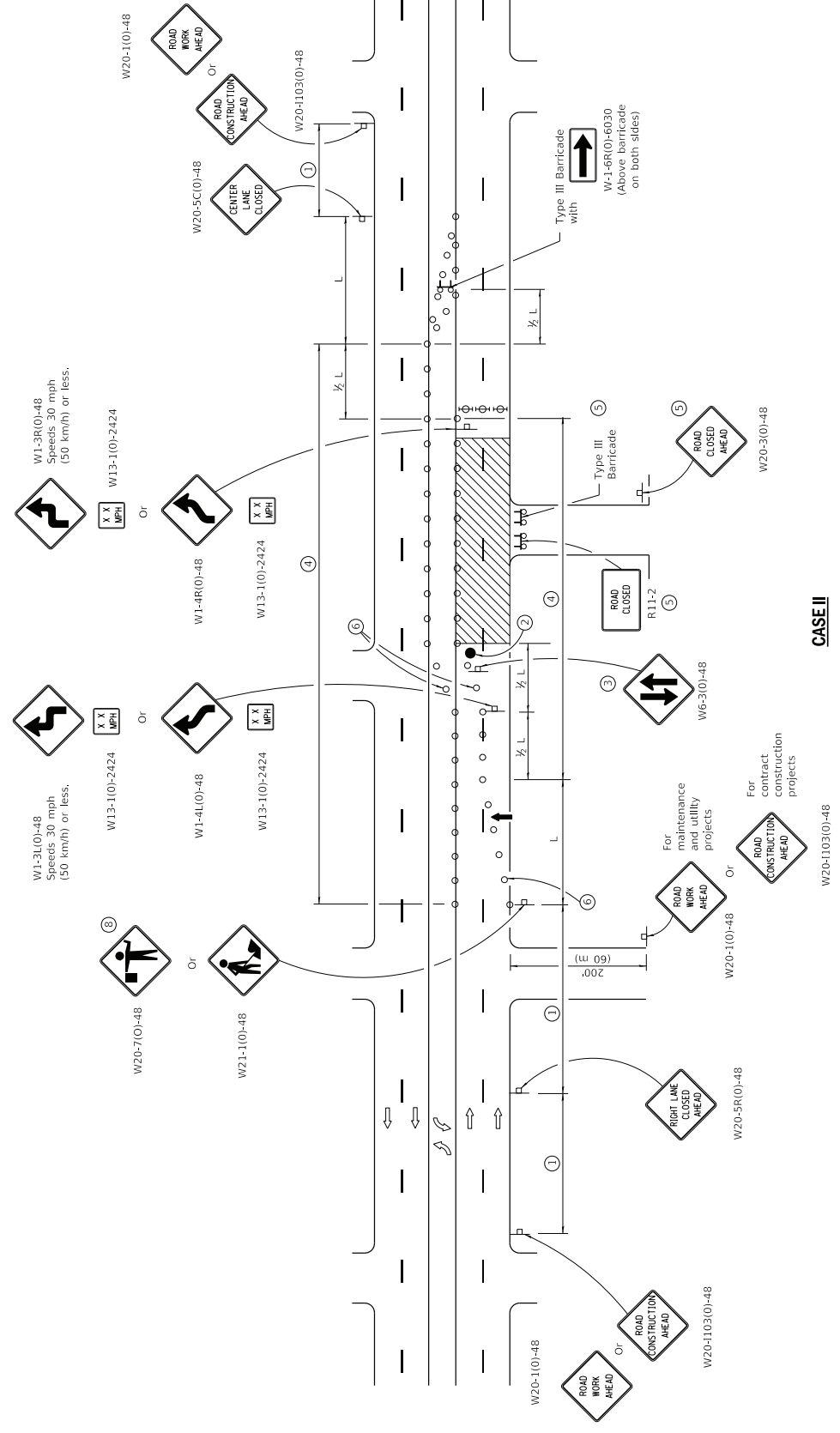
Illinois Department of Transportation

PASSED January 1, 2018

ENGINEER OF SAFETY PROC. AND ENGINEERING

APPROVED January 1, 2018

ENGINEER OF DESIGN AND ENVIRONMENT

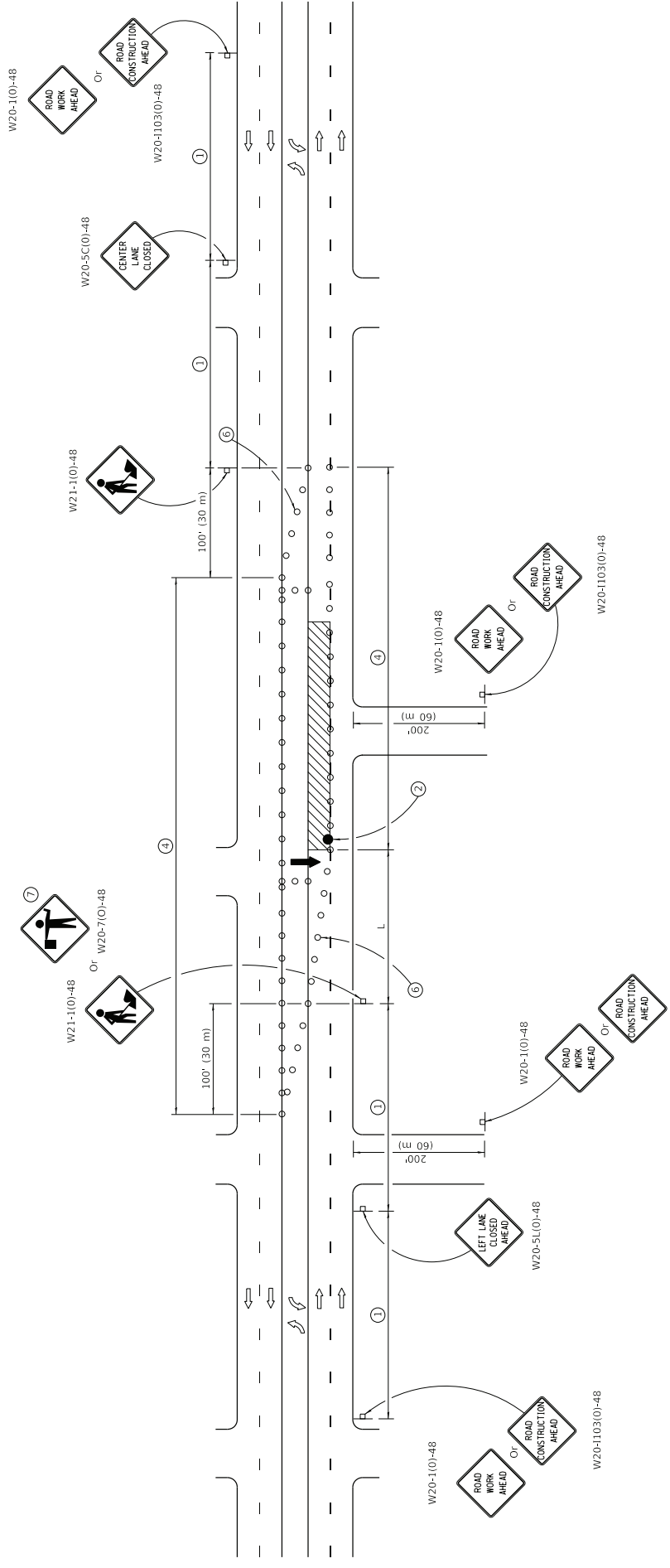


**URBAN LANE CLOSURE,
MULTILANE, 2W WITH
BIDIRECTIONAL LEFT TURN LANE**
(Sheet 2 of 4)

STANDARD 701602-09

Illinois Department of Transportation
 PASSED January 1, 2018
 ENGINEER OF SAFETY PROCS. AND ENGINEERING
 APPROVED January 1, 2018
 ENGINEER OF DESIGN AND ENVIRONMENT

ISSUED 1-1-01

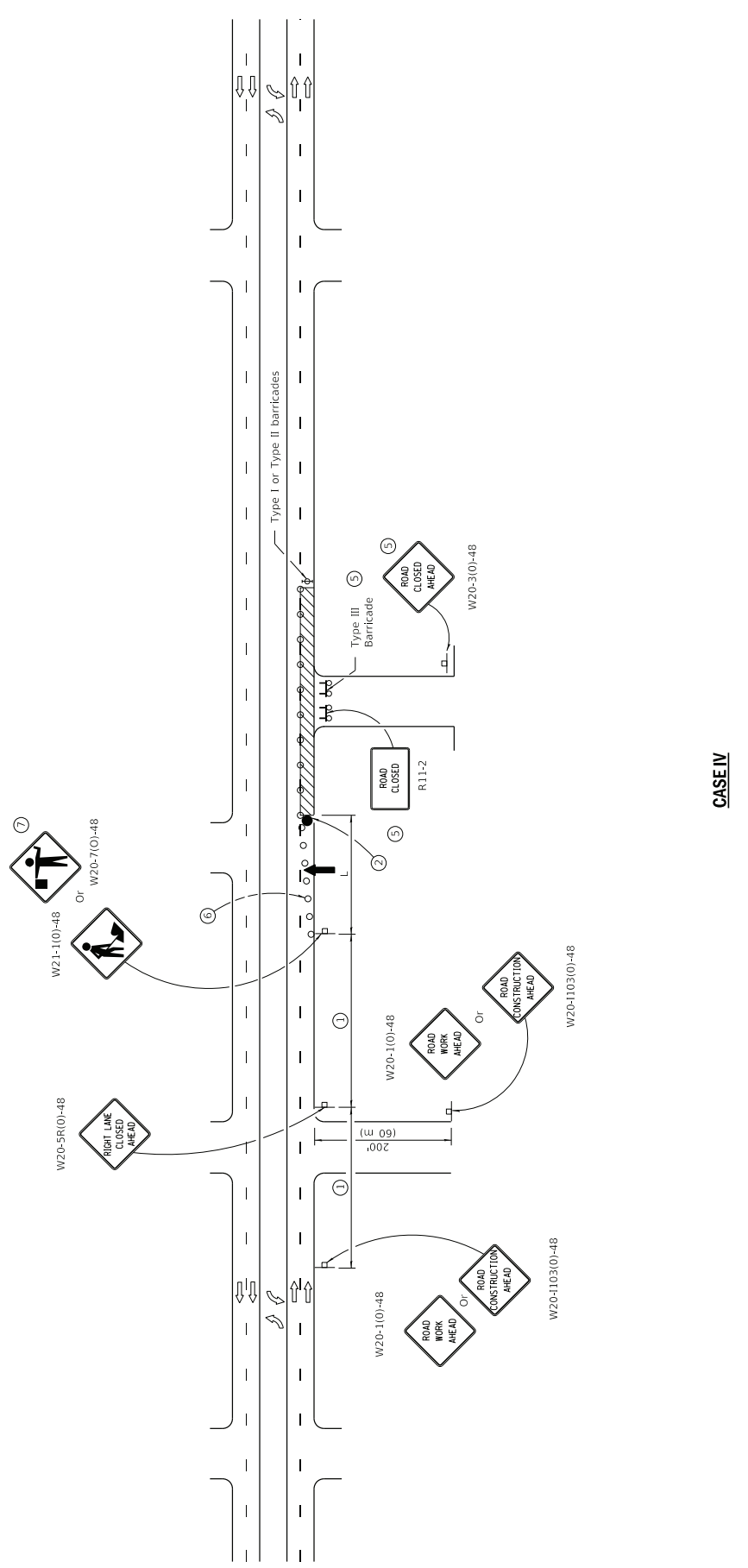


CASE III

**URBAN LANE CLOSURE,
MULTILANE, 2W WITH
BIDIRECTIONAL LEFT TURN LANE**
(Sheet 3 of 4)

STANDARD 701602-09

| | | |
|--|--|--------------------|
| | ISSUED | 1-1-01 |
| | PASSED | January 1, 2018 |
| | ENGINEER OF SAFETY PROC. AND ENGINEERING | <i>[Signature]</i> |
| | APPROVED | January 1, 2018 |
| | ENGINEER OF DESIGN AND ENVIRONMENT | <i>[Signature]</i> |

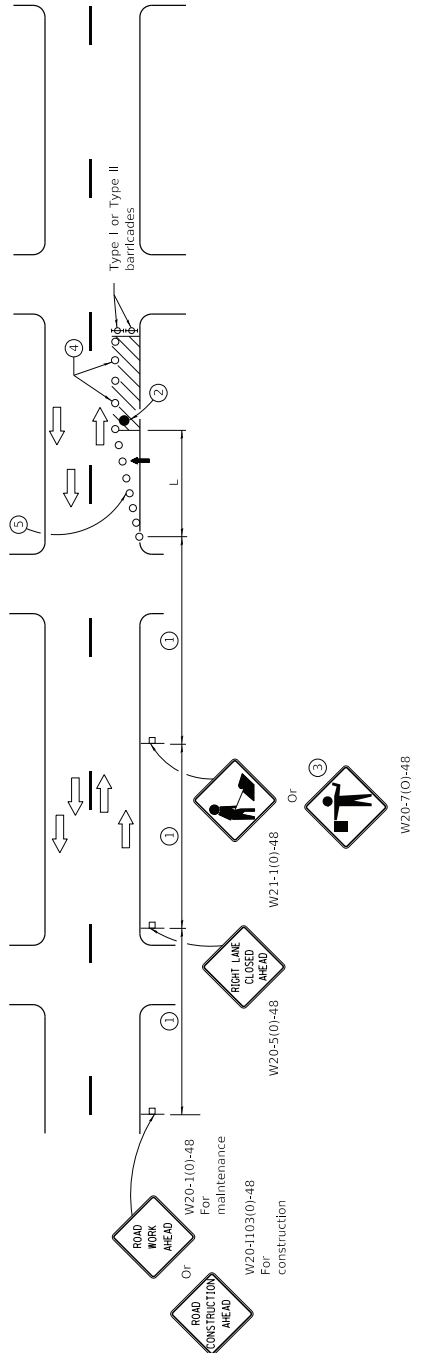


**URBAN LANE CLOSURE,
MULTILANE, 2W WITH
BIDIRECTIONAL LEFT TURN LANE**
(Sheet 4 of 4)

STANDARD 701602-09

Illinois Department of Transportation
 PASSED January 1, 2018
 ENGINEER OF SAFETY PROG. AND ENGINEERING
 APPROVED January 1, 2018
 ENGINEER OF DESIGN AND ENVIRONMENT

CASE IV



GENERAL NOTES

This Standard is used where, at any time, day or night, any vehicle, equipment, workers or their activities encroach on the pavement requiring the closure of one traffic lane in an Urban area.

Calculate L as follows:

| SPEED LIMIT | FORMULAS |
|------------------------------|--|
| 40 mph (70 km/h) or less: | English (Metric) $L = \frac{WS^2}{60}$ $L = \frac{WS^2}{150}$ |
| 45 mph (80 km/h) or greater: | $L = W(S)$ $L = 0.65(W)(S)$ |

W = Width of offset in feet (meters).
S = Normal posted speed mph (km/h).

All dimensions are in inches (millimeters) unless otherwise shown.

- 1 Refer to SIGN SPACING TABLE for distances.
- 2 Required for speeds > 40 mph.
- 3 Use flagger sign only when flagger is present.
- 4 Cones at 25' (8 m) centers for 250' (75 m). Additional cones may be placed at 50' (15 m) centers. When drums or Type I or Type II barricades are used, the interval between devices may be doubled.
- 5 Cones, drums or barricades at 20' (6 m) centers in taper.

SYMBOLS

- ↑ Arrow board
- Cone, drum or barricade
- ⊥ Sign on portable or permanent support
- ▨ Work area
- ⊕ Barricade or drum with flashing light
- Flagger with traffic control sign.

| Posted Speed | Sign Spacing |
|--------------|--------------|
| 55 | 500' (150 m) |
| 50-45 | 350' (100 m) |
| <45 | 200' (60 m) |

URBAN SINGLE LANE CLOSURE, MULTILANE, 2W WITH MOUNTABLE MEDIAN

| DATE | REVISIONS |
|--------|--|
| 1-1-15 | Renamed standard. Moved case on Sheet 2 to new Highway Standard. |
| 1-1-14 | Revised workers sign number to agree with current MUTCD. |

STANDARD 701606-10

Illinois Department of Transportation

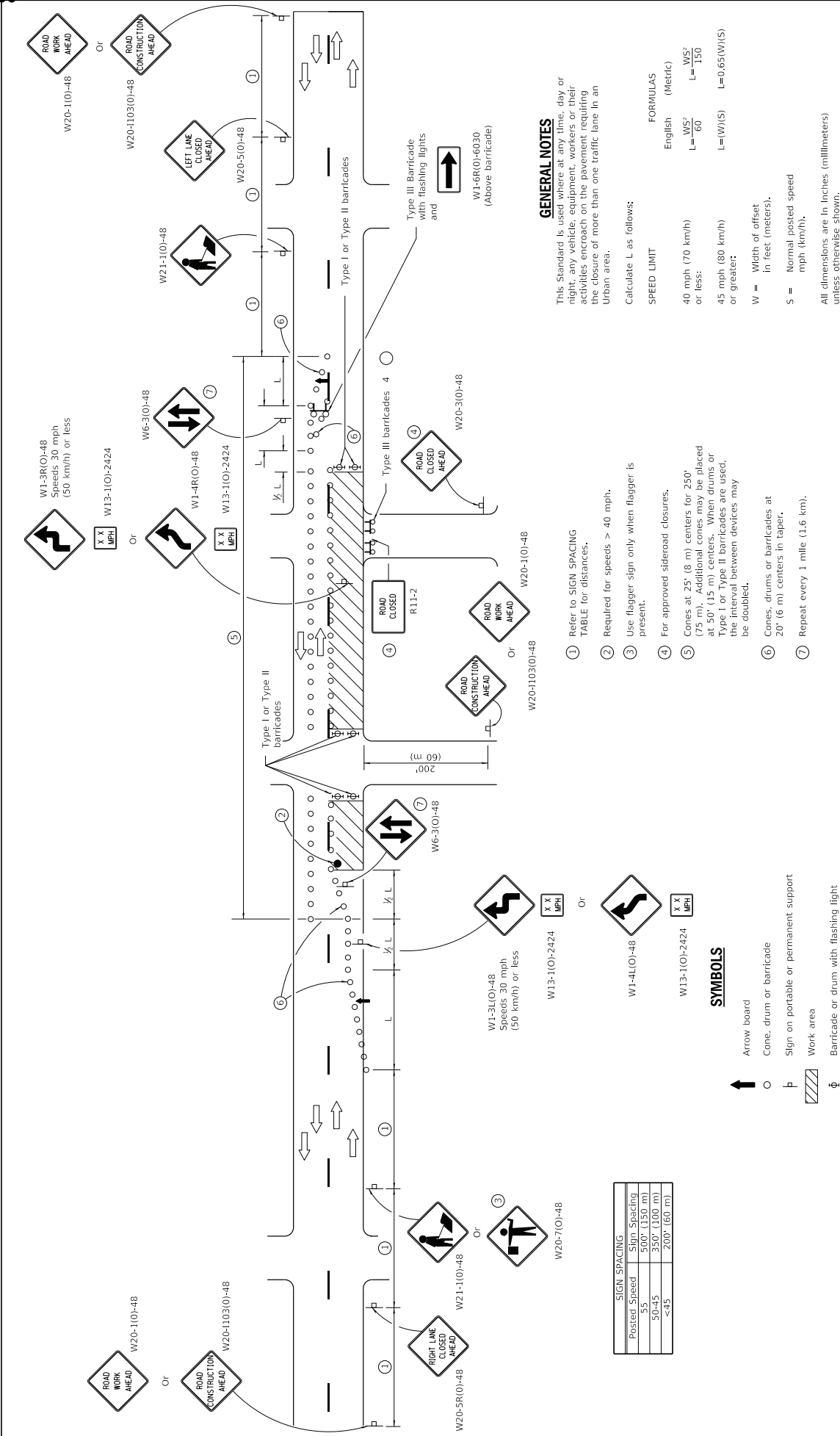
ISSUED 1-1-17

PASSED January 2015

 ENGINEER OF SAFETY ENGINEERING

APPROVED January 1, 2015

 ENGINEER OF DESIGN AND ENVIRONMENT



GENERAL NOTES
 This Standard is used where at any time, day or night, any vehicle, equipment, workers or their activities encroach on the pavement requiring the closure of more than one traffic lane in an Urban area.

Calculate L as follows:

| SPEED LIMIT | FORMULAS |
|------------------------------|-----------------------|
| English | (Metric) |
| 40 mph (70 km/h) or less: | $L = \frac{WS^2}{60}$ |
| 45 mph (80 km/h) or greater: | $L = \frac{WS^2}{60}$ |
| | $L = 0.65(W)(S)$ |

W = Width of offset in feet (meters).
 S = Normal posted speed mph (km/h).

All dimensions are in inches (millimeters) unless otherwise shown.

- 1 Refer to SIGN SPACING TABLE for distances.
- 2 Required for speeds > 40 mph.
- 3 Use flagger sign only when flagger is present.
- 4 For approved sideroad closures.
- 5 Cones at 25' (8 m) centers for 250' (75 m). Additional cones may be placed at 50' (15 m) centers. When drums or Type I or Type II barricades are used, the interval between devices may be doubled.
- 6 Cones, drums or barricades at 20' (6 m) centers in taper.
- 7 Repeat every 1 mile (1.6 km).

SYMBOLS

- ↑ Arrow board
- Cone, drum or barricade
- ⊥ Sign on portable or permanent support
- ▨ Work area
- ⊕ Barricade or drum with flashing light
- ⊕ Type III barricade with flashing lights
- Flagger with traffic control sign.

| Posted Speed | Sign Spacing |
|--------------|--------------|
| 55 | 500' (150 m) |
| 50-45 | 350' (100 m) |
| <45 | 200' (60 m) |

URBAN HALF ROAD CLOSURE, MULTILANE, 2W WITH MOUNTABLE MEDIAN

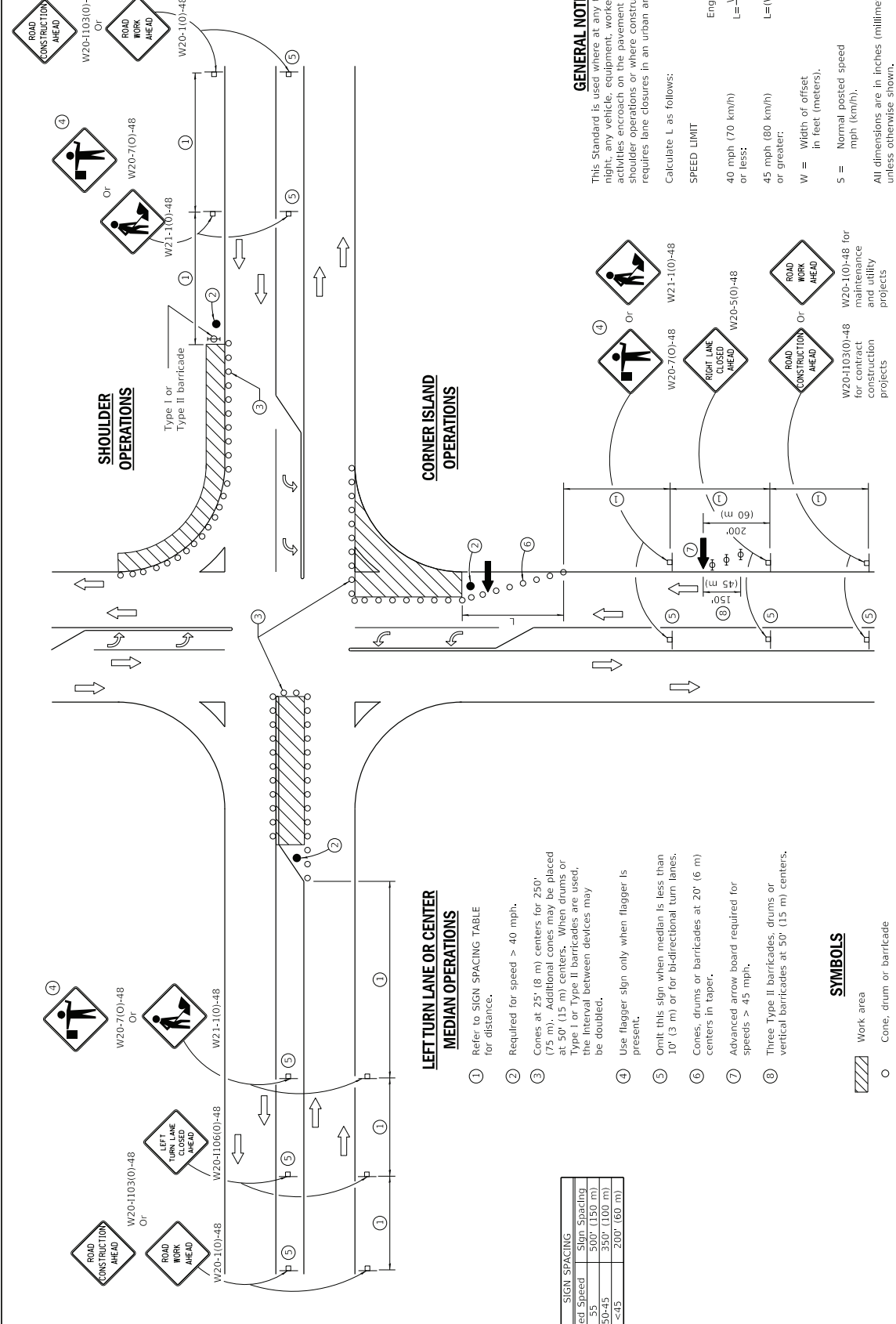
STANDARD 701611-01

| DATE | REVISIONS |
|--------|---|
| 4-1-16 | Moved first reverse curve/turn sign to middle of tangent. |
| 1-1-15 | New Standard. |

Illinois Department of Transportation

PASSED APRIL 1, 2016
 APPROVED APRIL 1, 2016
 ISSUED 1-1-15

ENGINEER OF DESIGN AND ENVIRONMENT



SHOULDER OPERATIONS

Type I or Type II barricade

CORNER ISLAND OPERATIONS

LEFT TURN LANE OR CENTER MEDIAN OPERATIONS

| SIGN SPACING | |
|--------------|--------------|
| Posted Speed | Sign Spacing |
| 55 | 500' (150 m) |
| 50-45 | 350' (100 m) |
| <45 | 200' (60 m) |

1 Refer to SIGN SPACING TABLE for distance.

2 Required for speed > 40 mph.

3 Cones at 25' (8 m) centers for 250' (75 m). Additional cones may be placed at 50' (15 m) centers. When drums or Type I or Type II barricades are used, the interval between devices may be doubled.

4 Use flagger sign only when flagger is present.

5 Omit this sign when median is less than 10' (3 m) or for bi-directional turn lanes.

6 Cones, drums or barricades at 20' (6 m) centers in taper.

7 Advanced arrow board required for speeds > 45 mph.

8 Three Type II barricades, drums or vertical barricades at 50' (15 m) centers.

SYMBOLS

- Work area
- Cone, drum or barricade
- Sign on portable or permanent support
- Arrow board
- Barricade or drum with flashing light
- Flagger with traffic control sign

GENERAL NOTES

This Standard is used where at any time, day or night, any vehicle, equipment, workers or their activities encroach on the pavement during shoulder operations or where construction requires lane closures in an urban area.

Calculate L as follows:

SPEED LIMIT
English (Metric)
40 mph (70 km/h) W²= L= 60
or less: W²= L= 150

45 mph (80 km/h) L=(W)(S) L=0.65(W)(S)
or greater: W = Width of offset in feet (meters).

S = Normal posted speed mph (km/h).

All dimensions are in inches (millimeters) unless otherwise shown.

| REVISIONS | |
|-----------|---|
| DATE | Corrected sign number for |
| 4-1-16 | LEFT TURN LANE CLOSED AHEAD. |
| 1-1-14 | Added devices at arrow board upstream from taper. |
| | Rev. workers sign number. |

URBAN LANE CLOSURE, MULTILANE INTERSECTION

ILLINOIS Department of Transportation

ISSUED 1-1-17

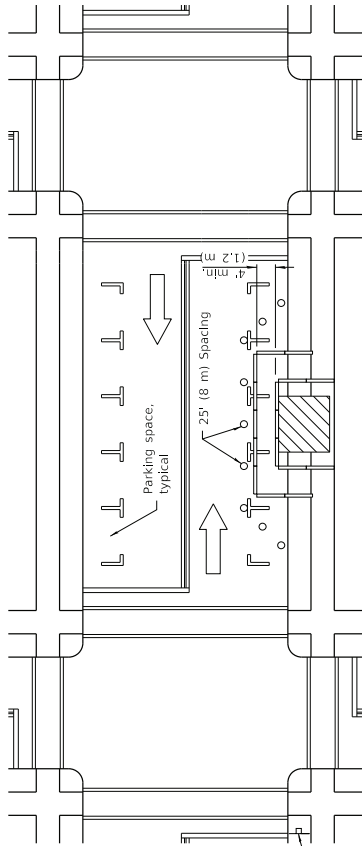
PASSED APRIL 1, 2016

APPROVED APRIL 1, 2016

ENGINEER OF SAFETY ENGINEERING

ENGINEER OF DESIGN AND ENVIRONMENT

STANDARD 701701-10

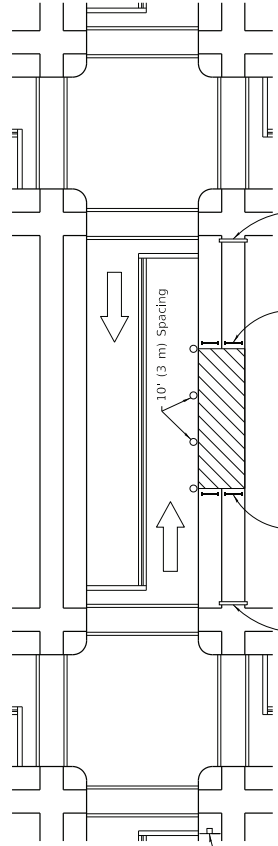


W20-1103(10)-48 for contract construction projects

Or

W20-1101-48 for maintenance and utility projects

SIDEWALK DIVERSION



W20-1103(10)-48 for contract construction projects

Or

W20-1101-48 for maintenance and utility projects

SIDEWALK CLOSURE

SYMBOLS

- Work area
- Sign on portable or permanent support
- Barricade or drum
- Cone, drum or barricade
- Type III barricade
- Detectable pedestrian channelizing barricade

① Omit whenever duplicated by road work traffic control.

GENERAL NOTES

This Standard is used where, at any time, pedestrian traffic must be rerouted due to work being performed.

This Standard must be used in conjunction with other Traffic Control & Protection Standards when roadway traffic is affected.

Temporary facilities shall be detectable and accessible.

The temporary pedestrian facilities shall be provided on the same side of the closed facilities whenever possible.

The SIDEWALK CLOSED / USE OTHER SIDE sign shall be placed at the nearest crosswalk or intersection to each end of the closure. Where the closure occurs at a corner, the signs shall be erected on the two corners across the street from the closure. The SIDEWALK CLOSED signs shall be used at the ends of the actual closures.

Type III barricades and R11-2-4830 signs shall be positioned as shown in "ROAD CLOSED TO ALL TRAFFIC" detail on Standard 701901.

All dimensions are in inches (millimeters) unless otherwise shown.

| DATE | REVISIONS |
|--------|--|
| 4-1-16 | Omitted orange safety fence from standard as this is covered in the std. spec. |
| 1-1-12 | Added SIDEWALK DIVERSION. Modified appearance of plan views. Retained Std. |

SIDEWALK, CORNER OR CROSSWALK CLOSURE

STANDARD 701801-06 (Sheet 1 of 2)

Illinois Department of Transportation

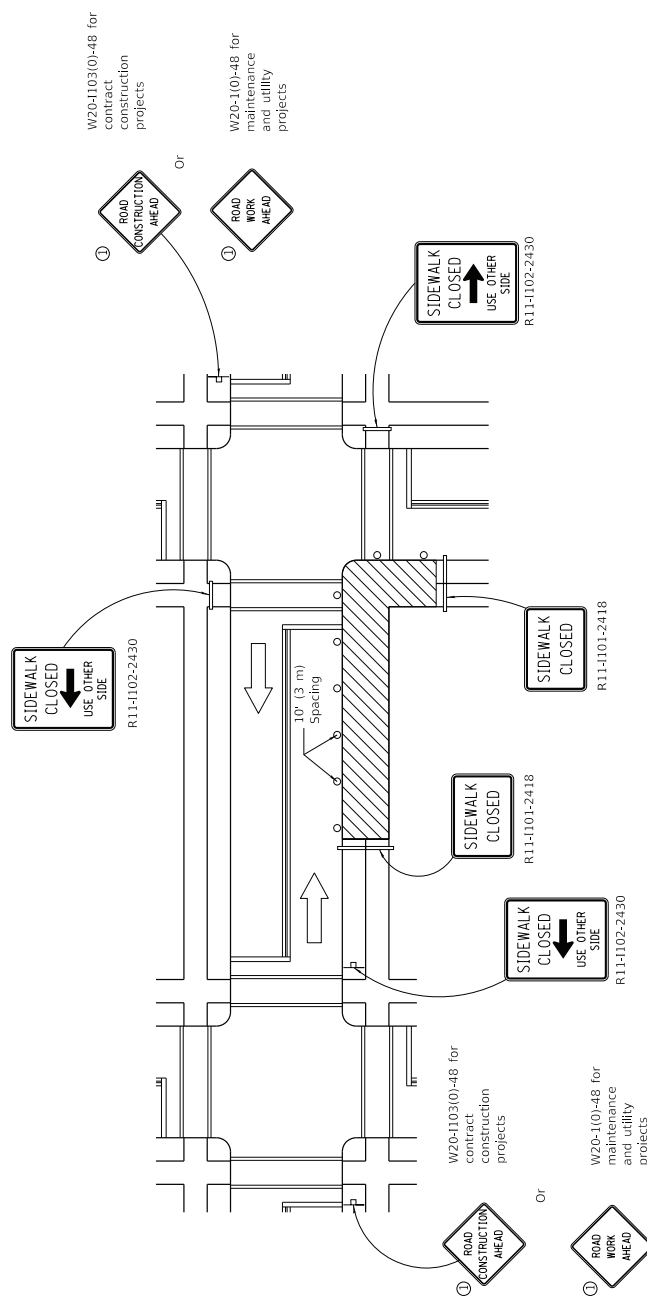
ISSUED 1-1-17

PASSED APRIL 1, 2016

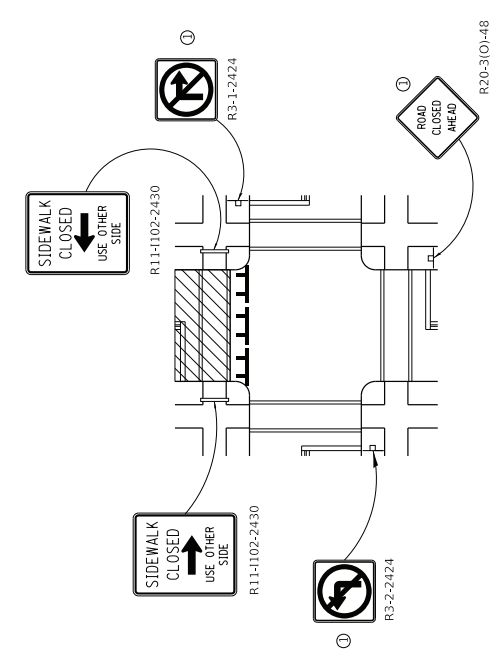
APPROVED APRIL 1, 2016

ENGINEER OF SAFETY ENGINEERING

ENGINEER OF DESIGN AND ENVIRONMENT



CORNER CLOSURE



CROSSWALK CLOSURE

SIDEWALK, CORNER OR CROSSWALK CLOSURE
 (Sheet 2 of 2)
STANDARD 701801-06

Illinois Department of Transportation

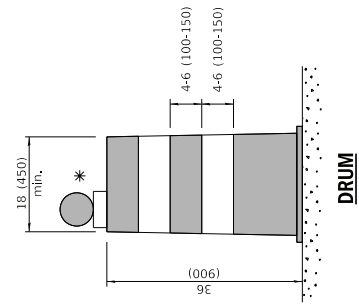
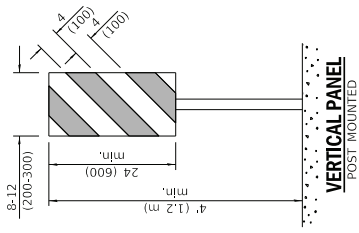
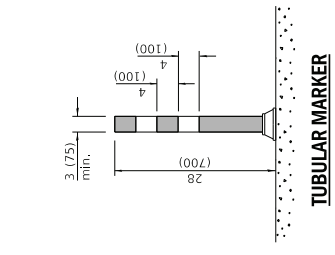
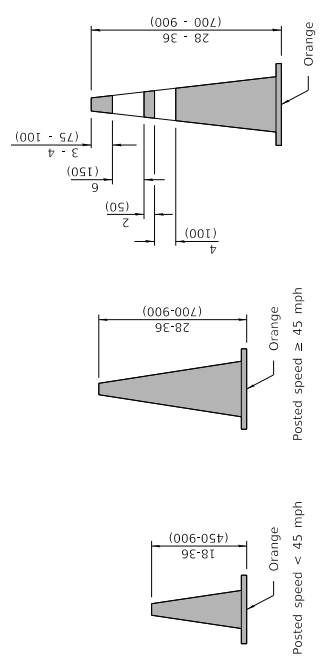
PASSED April 1, 2016

APPROVED April 1, 2016

ISSUED 1-1-97

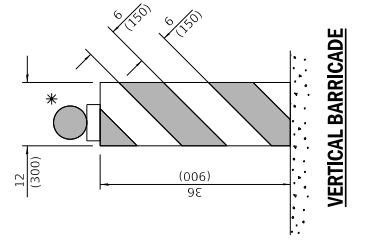
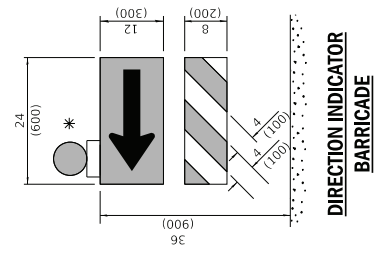
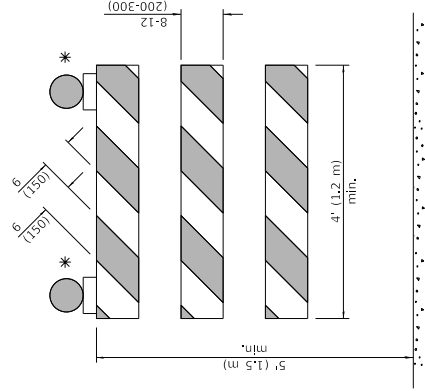
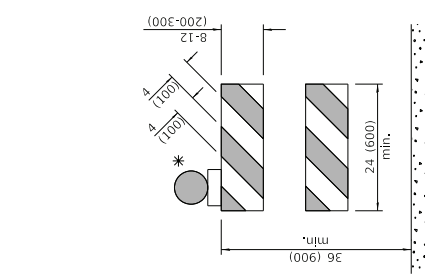
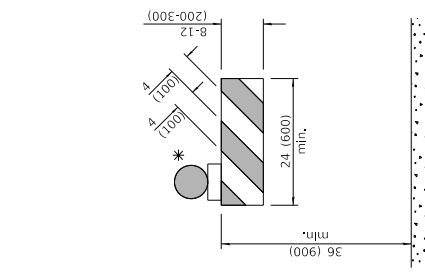
ENGINEER OF SAFETY ENGINEERING

ENGINEER OF DESIGN AND ENVIRONMENT



ORANGE CONE FOR DAYTIME

REFLECTORIZED CONE FOR NIGHTTIME



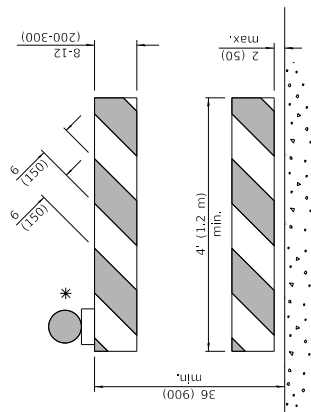
TYPE I BARRICADE

TYPE II BARRICADE

TYPE III BARRICADE

DIRECTION INDICATOR BARRICADE

VERTICAL BARRICADE



* Warning lights (if required)

GENERAL NOTES
 All heights shown shall be measured above the pavement surface.
 All dimensions are in inches (millimeters) unless otherwise shown.

Illinois Department of Transportation
 PASSED January 1, 2018
 ENGINEER OF OPERATIONS
 APPROVED January 1, 2018
 [Signature]

| DATE | REVISIONS |
|--------|---|
| 1-1-18 | Revised END WORK ZONE SPEED LIMIT sign from orange to white background. |
| 1-1-17 | Changed FLEXIBLE DELINEATOR to TUBULAR MARKER. |

TRAFFIC CONTROL DEVICES

(Sheet 1 of 3)

STANDARD 701901-07

ROAD CONSTRUCTION NEXT X MILES
G20-1104(0)-6036

END CONSTRUCTION
G20-1105(0)-6024

This signing is required for all projects 2 miles (3200 m) or more in length.

ROAD CONSTRUCTION NEXT X MILES sign shall be placed 500' (150 m) in advance of project limits.

END CONSTRUCTION sign shall be erected at the end of the job unless another job is within 2 miles (3200 m).

Dual sign displays shall be utilized on multi-lane highways.

WORK LIMIT SIGNING

| | |
|-------------------|---------------------|
| WORK ZONE | W21-115(0)-3618 |
| SPEED LIMIT | R2-1-3648 |
| XX | |
| PHOTO ENFORCED | R10-1108p-3618 **** |
| SXXX FINE MINIMUM | R2-1106p-3618 |

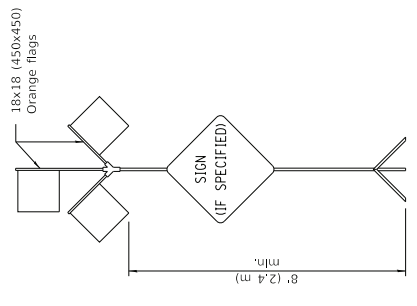
Sign assembly as shown on Standards or as allowed by District Operations.

END WORK ZONE SPEED LIMIT
G20-1103-6036

This sign shall be used when the above sign assembly is used.

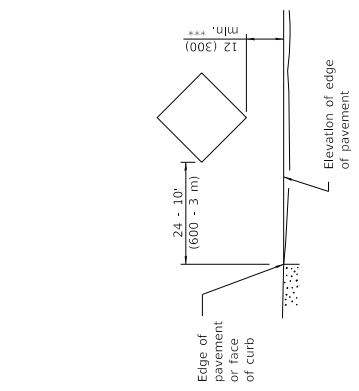
HIGHWAY CONSTRUCTION SPEED ZONE SIGNS

**** R10-1108p shall only be used along roadways under the jurisdiction of the State.

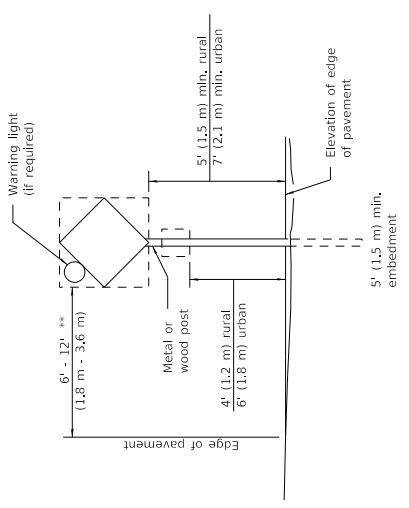


HIGH LEVEL WARNING DEVICE

*** When work operations exceed four days, this dimension shall be 5' (1.5 m) min. If located behind other devices, the height shall be sufficient to be seen completely above the devices.

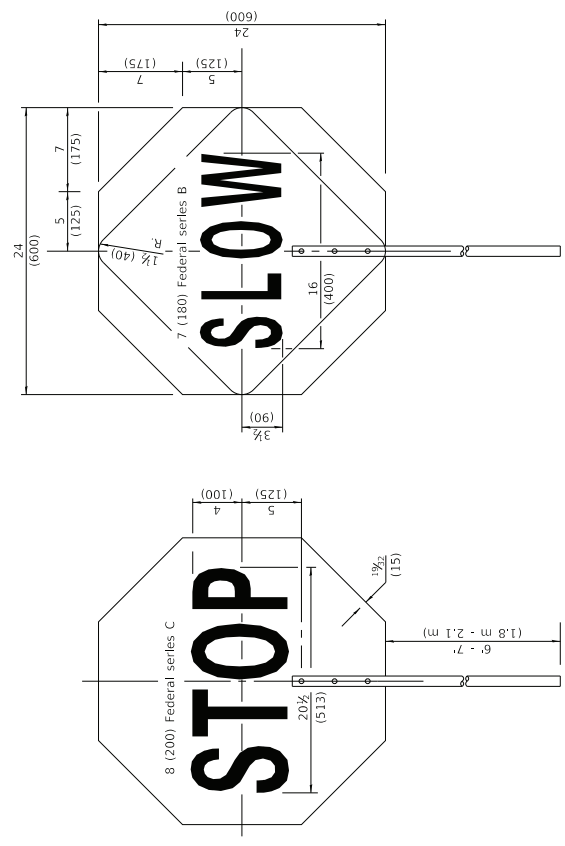


SIGNS ON TEMPORARY SUPPORTS



POST MOUNTED SIGNS

** When curb or paved shoulder are present this dimension shall be 24 (600) to the face of curb or 6' (1.8 m) to the outside edge of the paved shoulder.



REVERSE SIDE

FRONT SIDE

MAX WIDTH
XX' - XX"
X MILES
A HEAD

W12-1103-4848

WIDTH RESTRICTION SIGN
XX-XX" width and X miles are variable.

Illinois Department of Transportation

PASSED January 1, 2018
APPROVED January 1, 2018

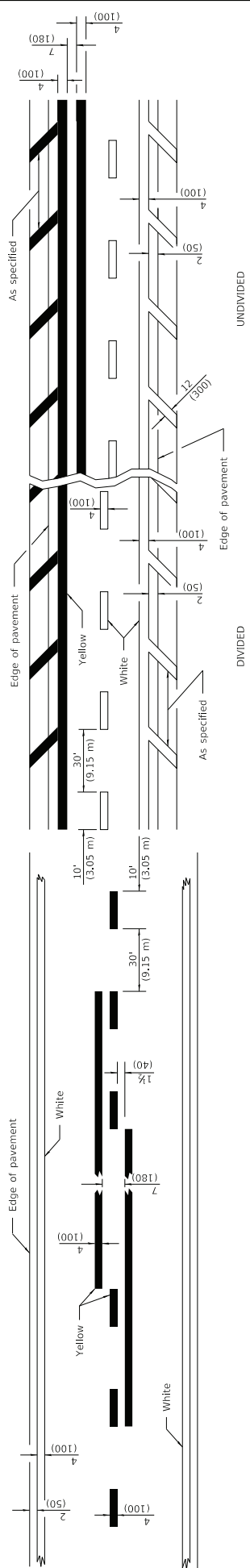
ISSUED 1-1-17

ENGINEER OF OPERATIONS
ENGINEER OF DESIGN AND ENVIRONMENT

FLAGGER TRAFFIC CONTROL SIGN

TRAFFIC CONTROL DEVICES
(Sheet 2 of 3)

STANDARD 701901-07

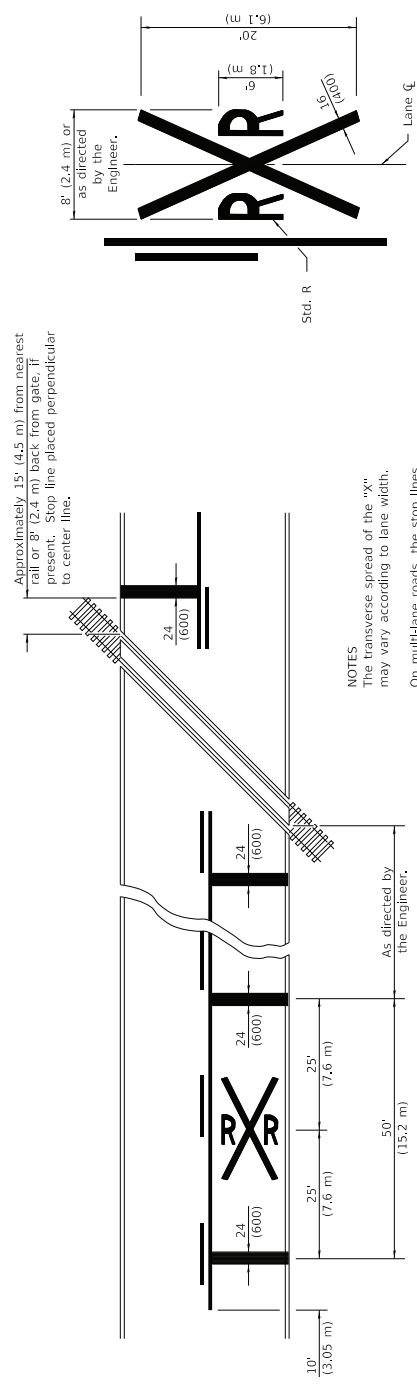


2 LANE

MULTI LANE

UNDIVIDED

LANE AND EDGE LINES



NOTES

The transverse spread of the "x" may vary according to lane width.

On multi-lane roads, the stop lines shall extend across all approach lanes and separate RRR symbols shall be placed adjacent to each other in each lane.

When the pavement marking symbol is used, a portion of the symbol should be located directly adjacent to the Advance Warning Sign (W10-1) as placed by Table 2C-4, Condition B or the MUTCD.

All dimensions are in inches (millimeters) unless otherwise shown.

PAVEMENT MARKINGS AT RAILROAD-HIGHWAY GRADE CROSSING

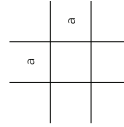
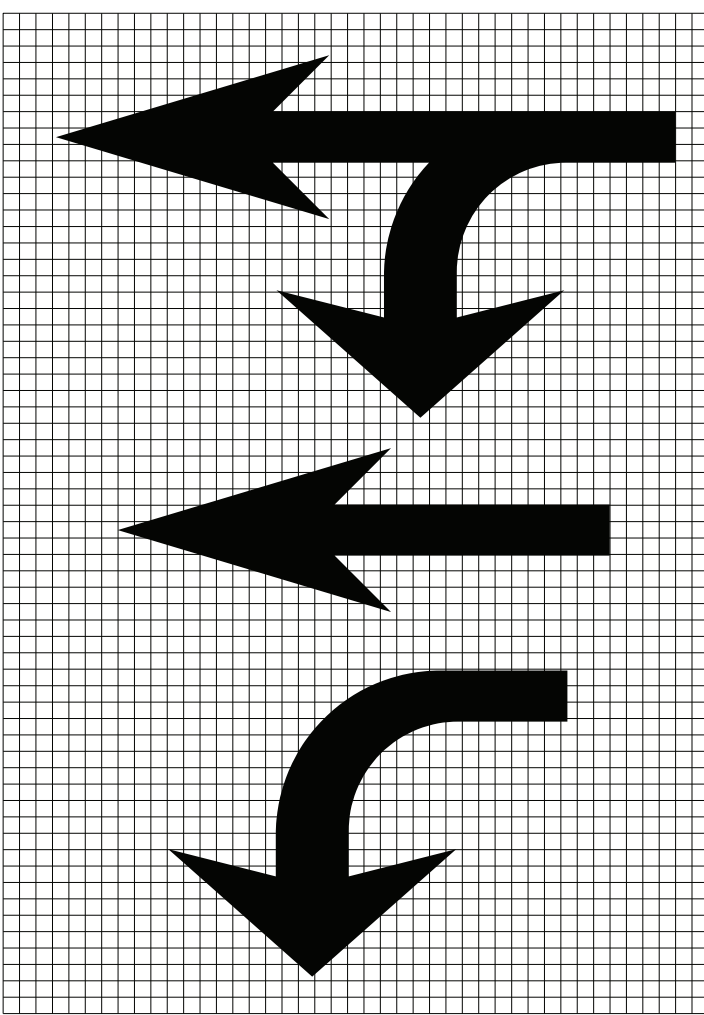
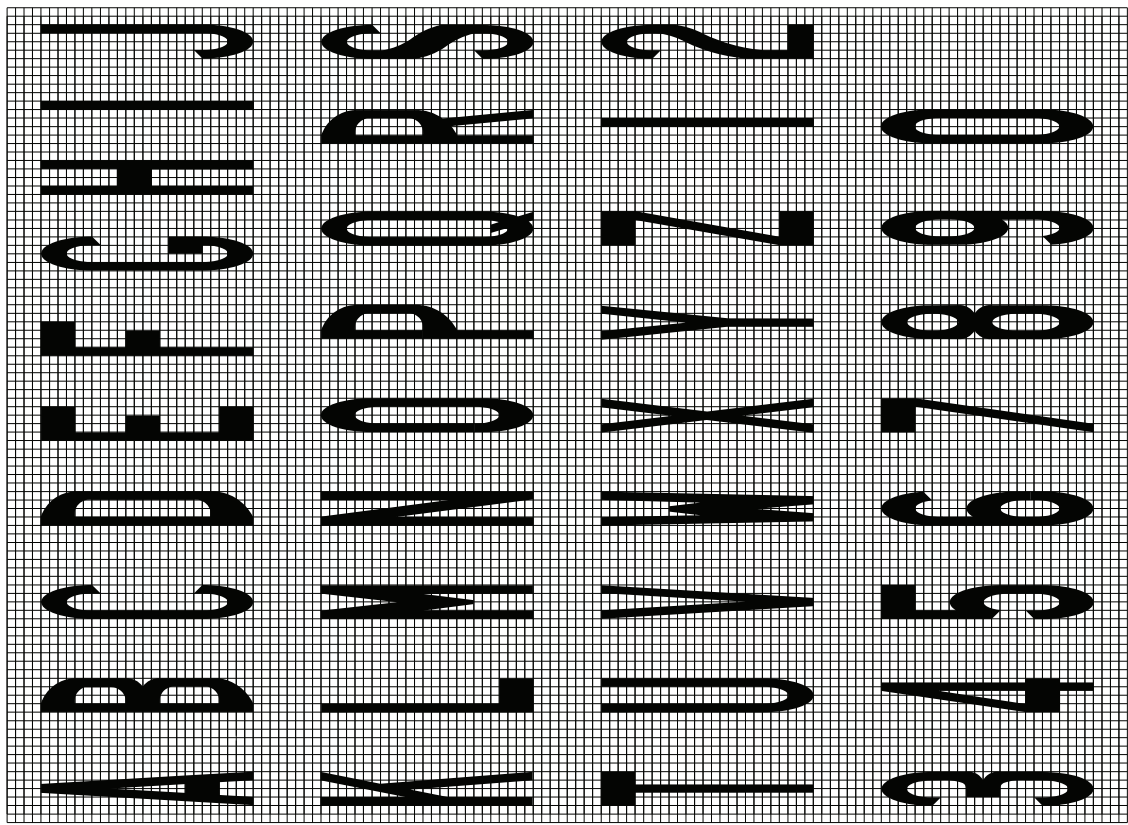
| DATE | REVISIONS |
|--------|--|
| 1-1-15 | Added symbol. Revised bike symbol. Revised note for stop line at RR crossing. |
| 1-1-14 | Added bike symbol. Renamed 'LANE DROP ARROW' detail to 'LANE-REDUCTION ARROW'. |

| | |
|---|--|
| Illinois Department of Transportation PASSED ENGINEER OF OPERATIONS APPROVED ENGINEER OF DESIGN AND ENVIRONMENT | ISSUED 1-1-17 January 1, 2015 January 1, 2015 January 1, 2015 |
|---|--|

TYPICAL PAVEMENT MARKINGS

STANDARD 780001-05

(Sheet 1 of 3)



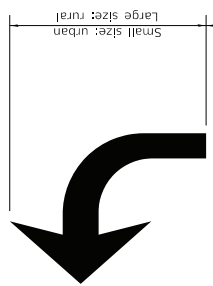
| Legend Height | Arrow Size | a |
|---------------|------------|----------|
| 6' (1.8 m) | Small | 2.9 (74) |
| 8' (2.4 m) | Large | 3.8 (96) |

The space between adjacent letters or numerals should be approximately 3/4 (75) for 6' (1.8 m) legend and 4/100 for 8' (2.4 m) legend.

LETTER AND ARROW GRID SCALE

Illinois Department of Transportation
 PASSED January 1, 2015
 ENGINEER OF OPERATIONS
 APPROVED January 1, 2015
 ENGINEER OF DESIGN AND ENVIRONMENT

TYPICAL PAVEMENT MARKINGS
 (Sheet 2 of 3)
STANDARD 780001-05

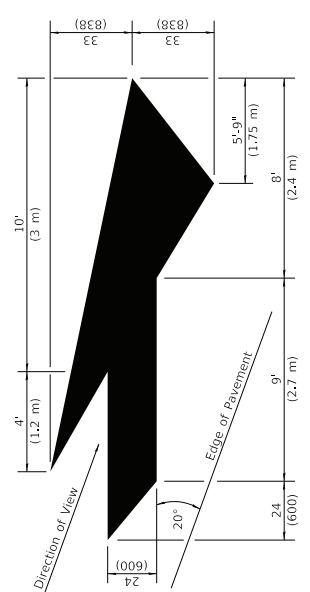


20" (508 mm) urban
30" (762 mm) rural
(Between arrow
and word or
between words)

ONLY

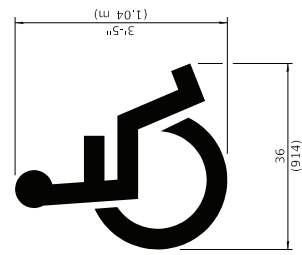
6' (1.8 m): urban
8' (2.4 m): rural

WORD AND ARROW LAYOUT

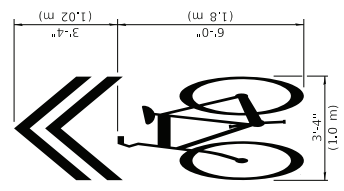


LANE-REDUCTION ARROW

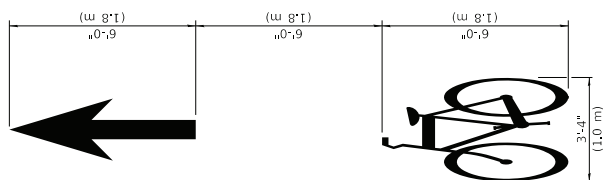
Right lane-reduction arrow shown.
Use mirror image for left lane.



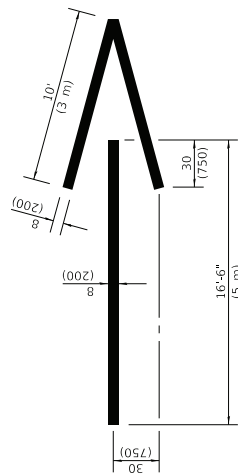
**INTERNATIONAL
SYMBOL OF
ACCESSIBILITY**



**SHARED LANE
SYMBOL**



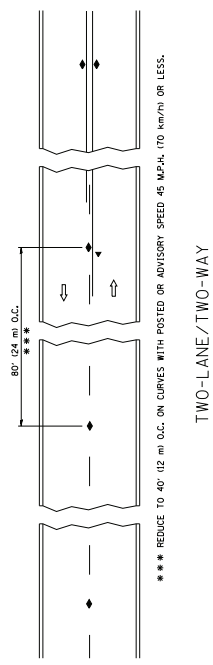
BIKE SYMBOL
(Arrow is optional)



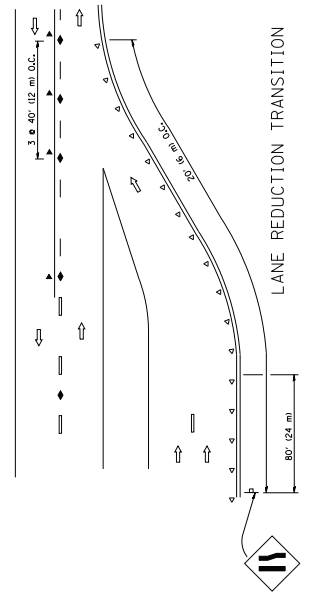
WRONG WAY ARROW

TYPICAL PAVEMENT MARKINGS
(Sheet 3 of 3)
STANDARD 780001-05

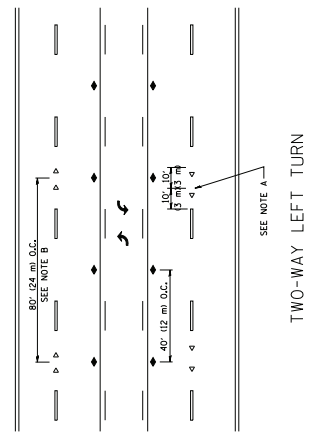
Illinois Department of Transportation
PASSED January 1, 2015
ENGINEER OF OPERATIONS
APPROVED January 1, 2015
ENGINEER OF DESIGN AND ENVIRONMENT



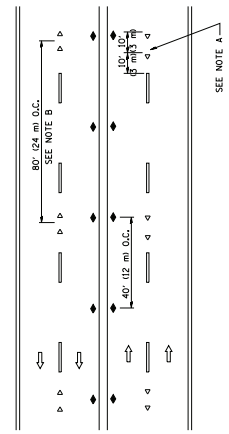
TWO-LANE/TWO-WAY



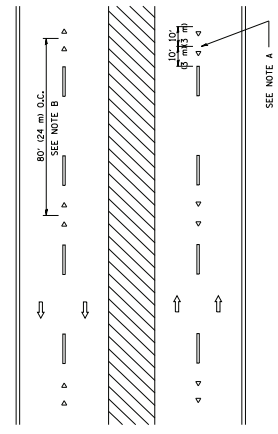
LANE REDUCTION TRANSITION



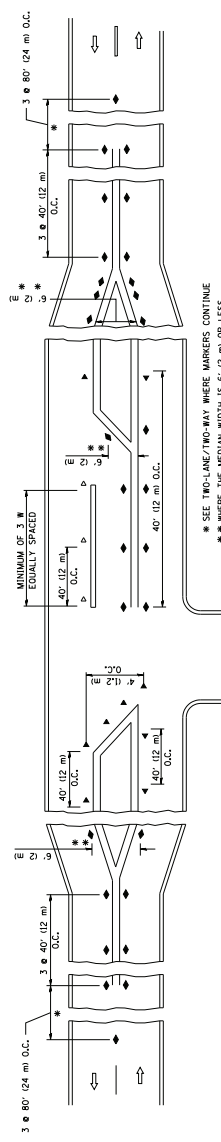
TWO-WAY LEFT TURN



MULTI-LANE/UNDIVIDED



MULTI-LANE/DIVIDED



LEFT TURN

GENERAL NOTES

1. MARKERS USED WITH DASHED LINES SHALL BE CENTERED IN THE OPEN SEGMENTS.
2. MARKERS USED WITH SOLID LINES SHALL BE OFFSET TO 3' (90 TO 75) TOWARD TRAFFIC AS SHOWN.
3. MARKERS THROUGH TANGENTS LESS THAN 500' (150 m) IN LENGTH BETWEEN CURVES SHALL BE INSTALLED AT THE LESSER OF THE TWO CURVE SPACINGS.

LANE MARKER NOTES

- A. USE DOUBLE LANE LINE MARKERS SPACED AS SHOWN.
- B. REDUCE TO 40' (12 m) O.C. ON CURVES WHERE ADVISORY SPEEDS ARE 10 MPH (16 km/h) LOWER THAN POSTED SPEEDS.

SYMBOLS

- YELLOW STRIPE
- WHITE STRIPE
- ◊ ONE-WAY AMBER MARKER
- ◊ TWO-WAY AMBER MARKER

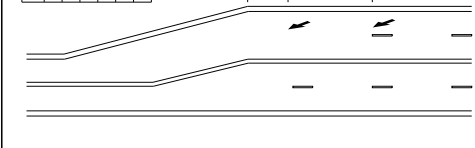
DESIGN NOTES

1. DOUBLE LANE LINE MARKERS SHALL BE USED UNLESS SPECIFIED OTHERWISE.
2. EXCEPT AS SHOWN ON THE LINE REDUCTION TRANSITION AND PREWAVE EXIT RAMP DETAIL, MARKERS ARE NOT TO BE SPECIFIED ON RIGHT EDGE LINES.
3. THE EXACT MARKER LIMITS, SPACING, AND COLOR SHALL BE INCLUDED IN THE PROJECT'S SPECIFICATIONS.
4. MARKERS SHOULD NOT BE USED AS UNDESIRABLE CURBS EXCEPT FOR EXTREMELY SHORT SECTIONS OF CURBS WHERE NOT MORE THAN TWO MARKERS WOULD BE INVOLVED.

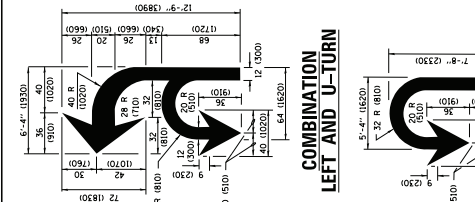
All dimensions are in inches (millimeters) unless otherwise shown.

| | | | | | | |
|--|-----------------------|--|--|--------------------------------------|------------------|-------------------------------|
| FILE NAME + c:\pwworkspace\mot2018\7866\103.dwg | DESIGNED - DRAWN - | REVISIONS REVISED - T. RAMWACHER 09-19-94 REVISED - T. RAMWACHER 03-12-99 REVISED - T. RAMWACHER 01-06-00 REVISED - C. JUCIUS 09-09-09 | TYPICAL APPLICATIONS BASED REFLECTIVE PAVEMENT MARKERS (ROUGH-PLYW RESISTANT) | SHEET NO. 1 OF 1 SHEETS STA. TO STA. | SECTION TC-11 | COUNTY SHEETS CONTRACT NO. |
| USER NAME + T. Ramwacher | DESIGNED - DRAWN - | REVISIONS REVISED - T. RAMWACHER 09-19-94 REVISED - T. RAMWACHER 03-12-99 REVISED - T. RAMWACHER 01-06-00 REVISED - C. JUCIUS 09-09-09 | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | SHEET NO. 1 OF 1 SHEETS STA. TO STA. | SECTION TC-11 | COUNTY SHEETS CONTRACT NO. |
| PLOT SCALE + 500000 / 1 IN. | CHECKED - | DATE - | | | | |
| PLOT DATE + 3/27/2011 | | | | | | |

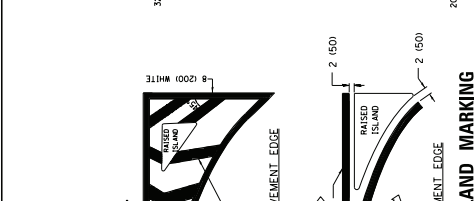
| DIFT | SPEED LIMIT |
|------|-------------|
| 345 | 30 |
| 425 | 35 |
| 500 | 40 |
| 580 | 45 |
| 665 | 50 |
| 750 | 55 |



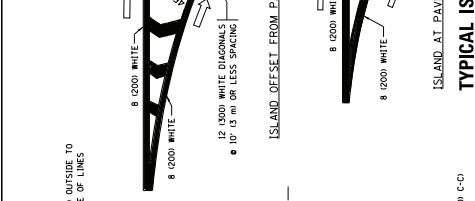
LANE REDUCTION TRANSITION
* LANE REDUCTION ARROWS REQUIRED AT SPEEDS OF 45 MPH OR GREATER OR WHEN SPECIFIED IN PLANS.



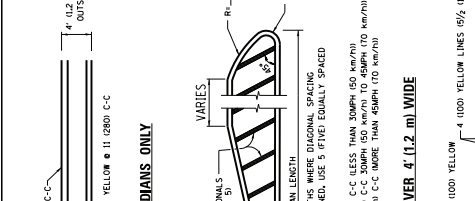
COMBINATION LEFT AND U-TURN



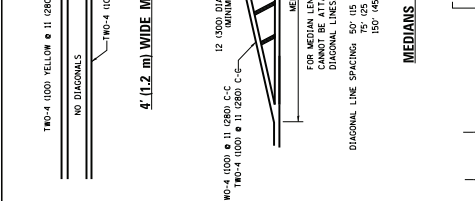
ISLAND AT PAVEMENT EDGE
TYPICAL ISLAND MARKING



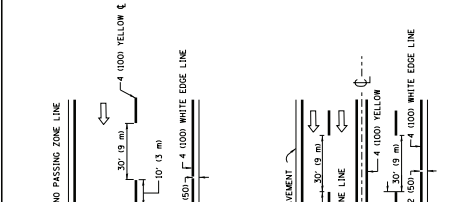
2-LANE ROADWAY



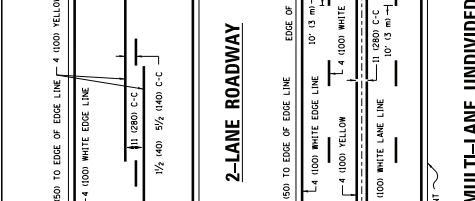
MULTI-LANE UNDIVIDED



MULTI-LANE DIVIDED WITH MEDIAN



TYPICAL LANE AND EDGE LINE MARKING



TYPICAL CROSSWALK MARKING



MEDIAN WITH TWO-WAY LEFT TURN LANE
TYPICAL PAINTED MEDIAN MARKING



TYPICAL LEFT (OR RIGHT) TURN LANE
TYPICAL TURN LANE MARKING

| TYPE OF MARKING | WIDTH OF LINE | PATTERN | COLOR | SPACING / REMARKS |
|---|---|----------------------|-----------------------------|--|
| CENTERLINE ON 2 LANE PAVEMENT CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT | 4 (100) | SKIP-DASH | YELLOW | 10' (3 m) LINE WITH 30' (9 m) SPACE |
| NO PASSING ZONE LINES FOR BOTH DIRECTIONS | 4 (100) 2 (4) (100) | SOLID | YELLOW | 5/8" (16.0) C-C FROM SKIP-DASH CENTERLINE 17' (5.2) C-C OMIT SKIP-DASH CENTERLINE BETWEEN |
| LANE LINES | 4 (100) 2 (4) (100) | SOLID | YELLOW | 10' (3 m) LINE WITH 30' (9 m) SPACE |
| DOTTED LINES (EXTENSION OF CENTER LANE OR TURN LANE MARKINGS) | 4 (100) ON FREWAYS EXTENDED | SKIP-DASH | WHITE | SAME AS LINE BEING EXTENDED |
| EDGE LINES | 4 (100) | SOLID | YELLOW/LEFT WHITE/RIGHT | OUTLINE MEDIANS IN YELLOW |
| TURN LANE MARKINGS | 6 (150) LINES, FULL SYMBOLS (8' (2.4m)) | SOLID | WHITE | SEE TYPICAL TURN LANE MARKING DETAIL |
| TWO WAY LEFT TURN MARKING | 2 (4) (100) EACH DIRECTION | SKIP-DASH (IN PAIRS) | YELLOW | 10' (3 m) LINE WITH 30' (9 m) SPACE FOR LINE AND SKIP-DASH CENTERLINE SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL |
| CROSSWALK LINES (PEDESTRIAN AND BICYCLE & EQUESTRIAN) | 2 (4) (150) 12 (300) @ 90° | SOLID | WHITE | NOT LESS THAN 6' (1.8 m) APART 2' (600) APART SEE TYPICAL CROSSWALK MARKING DETAILS. |
| STOP LINES | 24 (600) | SOLID | WHITE | PARALLEL TO CROSSWALK IN READING DIRECTION. POINT TO CROSSWALK CENTERLINE. MARK POSSIBLE TO CROSSWALK CENTERLINE. |
| PAINTED MEDIANS | 2 (4) (150) WITH 12 (300) DIAGONALS | SOLID | YELLOW | SEE TYPICAL PAINTED MEDIAN MARKING. |
| EDGE MARKING AND CHANNELLING LINES | 4 (100) WITH 12 (300) DIAGONALS @ 45° | SOLID | WHITE | DIAGONALS: 15' (4.5 m) C-C LESS THAN 30MPH (50 km/h) 10' (3 m) C-C OVER 30MPH (50 km/h) 30' (9 m) C-C OVER 45MPH (70 km/h) |
| RAILROAD CROSSING | 24 (600) TRANSVERSE LINES @ 90° | SOLID | WHITE | SEE STATE STANDARD 80001 |
| SHOULDER DIAGONALS (REQUIRED FOR SHOULDER 3' B') | 12 (300) @ 45° | SOLID | WHITE - RIGHT YELLOW - LEFT | AREA A OF 50' (15.2 m) FT. (30' (9.1 m) FT. 15.0 m) 150' (45.7 m) C-C OVER 45MPH (70 km/h) |
| U TURN ARROW | SEE DETAIL | SOLID | WHITE | 16.5 SF |
| 2 ARROW COMBINATION LEFT AND U TURN | SEE DETAIL | SOLID | WHITE | 30.4 SF |

FOR FURTHER DETAILS ON PAVEMENT MARKING REFER TO STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND STATE STANDARD 80001.

All dimensions are in inches (millimeters) unless otherwise shown.

| FILE | SECTION | COUNTY | CONTRACT NO. |
|-------|----------|--------|--------------|
| TC-13 | ILLINOIS | | |

| DISTRICT ONE | TYPICAL PAVEMENT MARKINGS | TO STA. |
|--------------|---------------------------|---------|
| SHEET 1 | OF 1 SHEETS, STA. | |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

| USER NAME | DESIGNED | EVERS |
|-------------------------|----------|-------|
| W:\mstc\022-24\141324gn | | |
| DATE | 03-19-90 | |
| REVISION | 03-19-90 | |
| DESIGNED | | |
| DRAWN | | |
| CHECKED | | |
| DATE | 03-19-90 | |

REVISION - C. JUCIUS 09-09-09
REVISION - C. JUCIUS 07-01-13
REVISION - C. JUCIUS 12-21-15
REVISION - C. JUCIUS 04-12-16

TURN BAY ENTRANCE AT START OF LANE CLOSURE TAPER

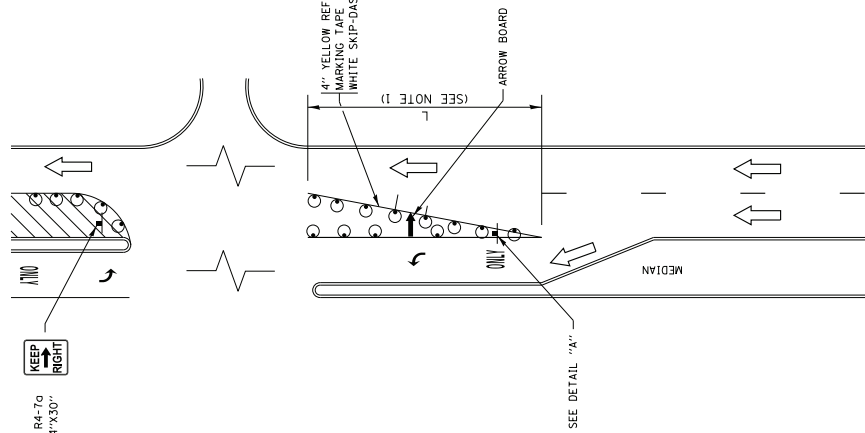


FIGURE 1

TURN BAY ENTRANCE WITHIN A LANE CLOSURE

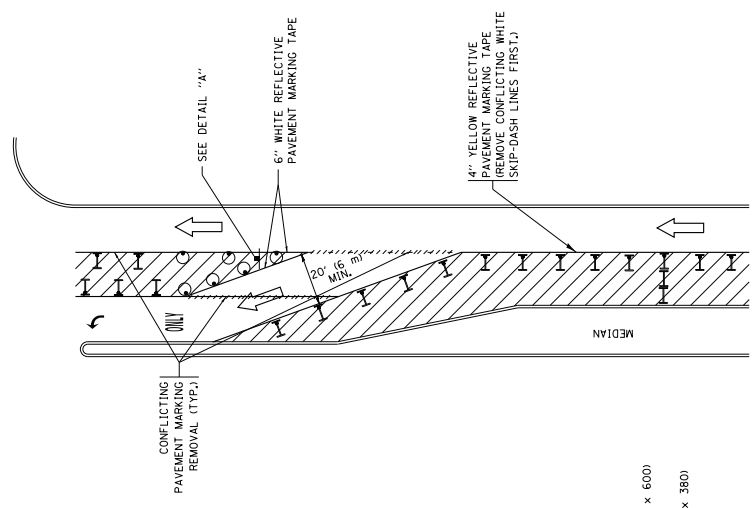


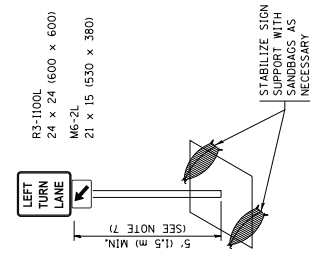
FIGURE 2

LEGEND

| | |
|--|---|
| | WORK AREA |
| | LANE OPEN TO TRAFFIC |
| | ARROW BOARD |
| | TYPE I OR II BARRICADE OR DRUM WITH STEADY BURN LIGHT |
| | DRUM WITH STEADY BURN LIGHT |
| | SIGN ASSEMBLY |
| | TYPE I OR II CHECK BARRICADE WITH FLASHING LIGHT |

NOTES:

1. A) WHEN "L" IS \leq THE STORAGE LENGTH OF THE TURN LANE (AS SHOWN IN FIG. 1), USE FIGURE 1.
 B) WHEN "L" IS $>$ THE STORAGE LENGTH OF THE TURN LANE OR THE TURN LANE IS WITHIN THE LANE CLOSURE, USE FIGURE 2.
2. CONES MAY BE SUBSTITUTED FOR BARRICADES OR DRUMS AT HALF THE SPACING DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (710) IN HEIGHT.
3. LIGHTS WILL NOT BE REQUIRED ON BARRICADES OR DRUMS FOR DAY OPERATIONS. ALL LIGHTS SHALL BE MONODIRECTIONAL.
4. REFLECTIVE TEMPORARY PAVEMENT MARKINGS SHALL BE PLACED THROUGHOUT THE BARRICADED AREAS OF EACH TURN BAY AS SHOWN WHERE THE CLOSURE TIME IS GREATER THAN FOURTEEN (14) DAYS.
5. THIS APPLICATION ALSO APPLIES WHEN WORK IS BEING PERFORMED IN THE RIGHT LANE(S) AND THE RIGHT TURN BAY IS TO REMAIN OPEN UNDER THIS CONDITION. "RIGHT TURN LANE," R3-100R 24 x 24 (600 x 600) AND M6-2R 21 x 15 (530 x 380) SHALL BE USED.
6. THESE CONTROLS SHALL SUPPLEMENT MAINLINE TRAFFIC CONTROL FOR LANE CLOSURES.
7. THE SIGNS SHALL BE MOUNTED ABOVE THE BARRICADES/DRUMS ON SEPARATE SIGN SUPPORTS THAT MEET NCHRP 350 OR MASH REQUIREMENTS.
8. TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC) SHALL BE INCLUDED IN THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

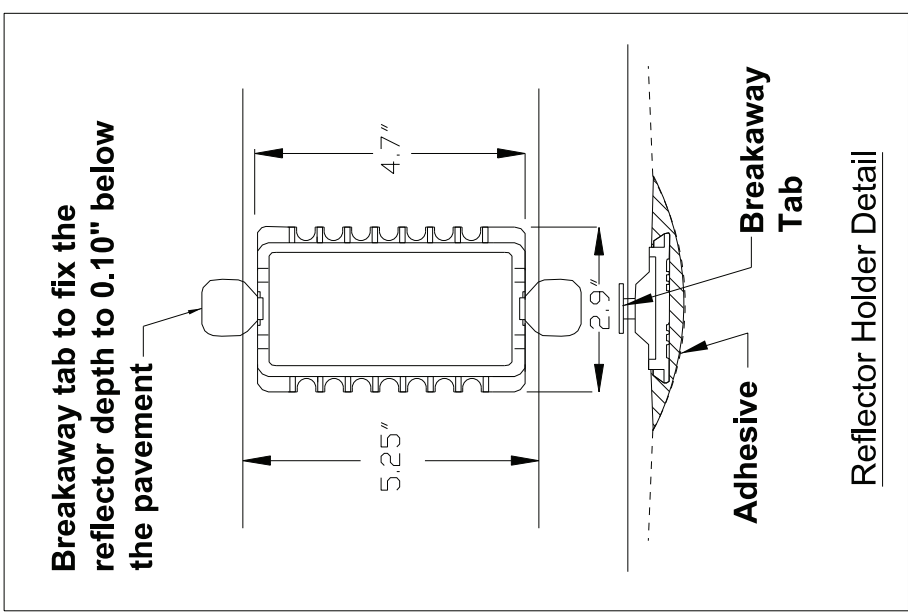
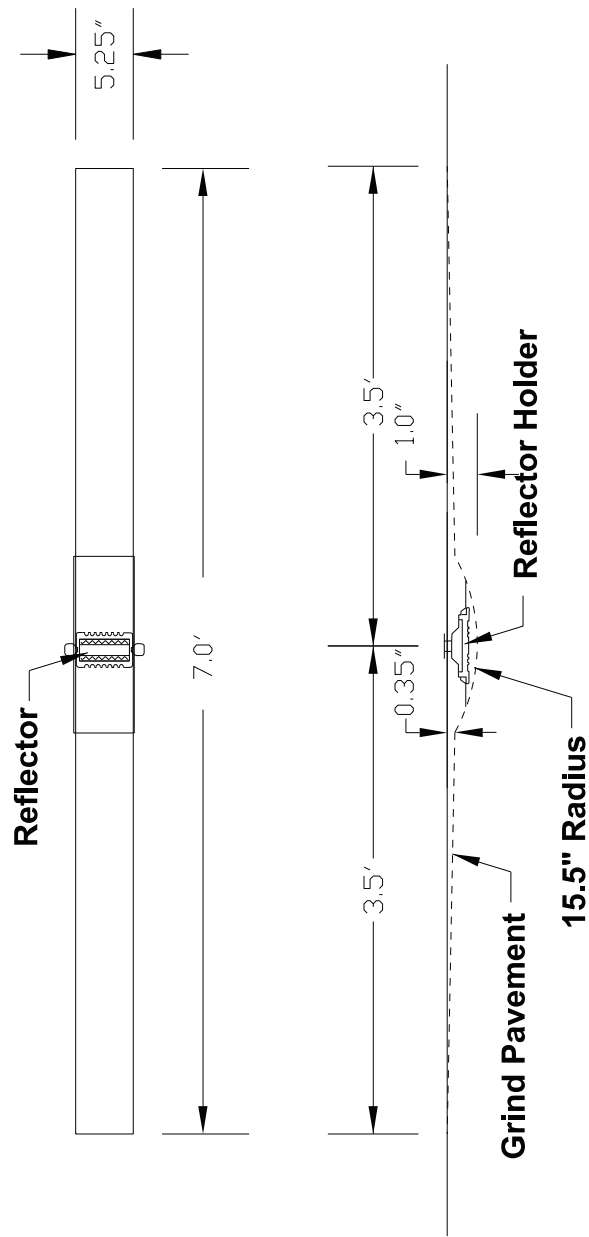


DETAIL A

All dimensions are in inches (millimeters) unless otherwise shown.

| | | | |
|---|--------------------------|--|---|
| FILE NAME : per\ALB\BIDD\BIDD\Gallatin\mop\PA001\Un- | USER NAME : ffoorey | REVISED - T. RAMMACHEE 09-08-94 | REVISED - R. BORO 09-14-09 |
| PROJECT NO. : 980088 / m. | PROJECT TITLE : Gallatin | REVISED - A. SCHETZLE 07-01-13 | REVISED - A. SCHETZLE 07-01-13 |
| DATE : 9/15/2016 | DATE : 9/15/2016 | REVISED - A. HOUSEH 10-12-96 | REVISED - A. SCHETZLE 09-15-16 |
| | | REVISED - T. RAMMACHEE 01-06-00 | REVISED - |
| STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | | TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC) | |
| SECTION FILE | | SECTION FILE | CONTRACT NO. ILLINOIS FED. AID PROJECT |
| SCALE: NONE | | SHEET 1 OF 1 | SHEETS STA. TO STA. |

RECESSED PAVEMENT MARKER



Notes

1. The reflector holder shall be made of a polycarbonate and shall be a MarkerOne Series R100 or Engineer approved equivalent.
2. The adhesive used shall meet the requirements of AASHTO M237 specification for adhesives to be used in cementing asphalt surfaces.
3. For 1-way markers heading uphill, uphill grind taper may be omitted.
4. Markers shall be placed at 80' intervals on lane lines and painted medians and 40' intervals on curves and approaching intersections.

PAVEMENT MARKINGS AND PAVEMENT MARKERS

MATERIALS FOR PAVEMENT MARKINGS:

| <u>LOCATION</u> | <u>MATERIAL</u> |
|-------------------------------------|------------------------------------|
| ALL MARKINGS ON BITUMINOUS PAVEMENT | THERMOPLASTIC PAVEMENT MARKINGS |
| ALL MARKINGS ON CONCRETE SURFACES | URETHANE PAVEMENT MARKINGS |

INSTALLATION OF PAVEMENT MARKINGS:

| <u>LOCATION</u> | <u>TYPE OF MARKING</u> |
|----------------------------------|--|
| PAINTED MEDIANS | 4" DOUBLE YELLOW; 11" c-c AND 12" YELLOW @ 45°; 30' c-c |
| BARRIER MEDIANS | 4" YELLOW |
| TURN BAY TAPERS ALONG THRU LANES | 6" WHITE, 2' LONG, 6' SPACE (DOTTED WHITE) |
| START OF TURN BAYS | ARROW AND "ONLY" |
| END OF TURN BAYS 150'-200' LONG | ADDITIONAL ARROW 10' FROM END |
| TURN BAYS > 200' LONG | ADDITIONAL "ONLY" |

ALL OTHER MARKINGS PER MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES OF ILLINOIS.

INSTALLATION OF RECESSED REFLECTIVE PAVEMENT MARKERS:

| <u>LOCATION</u> | <u>SPACING</u> |
|---|----------------|
| DOUBLE YELLOW CENTERLINE, & SKIP-DASH WHITE LANE LINES APPROACH & DEPARTURE FROM INTERSECTIONS & CURVES* | 40' |
| * EQUAL TO LENGTH OF TURN BAY, OR 200' | |
| ALONG CURVES OR TAPERS | 40' |
| TANGENT SECTIONS | 80' |
| SOLID LANE LINES (TURN BAYS) | 40' |
| END OF PAINTED MEDIANS | 3 @ 3' LATERAL |

| <u>LOCATION</u> | <u>TYPE</u> |
|---|-------------------|
| DOUBLE YELLOW CENTERLINE | 2-WAY YELLOW |
| PAINTED MEDIANS ≤ 4' WIDE | 2-WAY YELLOW |
| PAINTED MEDIANS >4' WIDE | 1-WAY YELLOW |
| YELLOW LINE ALONG BARRIER MEDIANS ** EXCEPT IN SPECIAL CIRCUMSTANCES | NONE ** |
| SKIP-DASH WHITE LANE LINES, SOLID LANE LINES (TURN BAYS) | |
| 2-WAY, UNDIVIDED ROADWAY | 1-WAY WHITE |
| 1-WAY ROADWAY, OR DIVIDED WITH BARRIER MEDIAN | 2-WAY WHITE / RED |

PROVIDE A 3M SERIES 190 REFLECTOR AND A MARKERONE SERIES R100 REFLECTOR HOLDER OR ENGINEER APPROVED EQUAL.