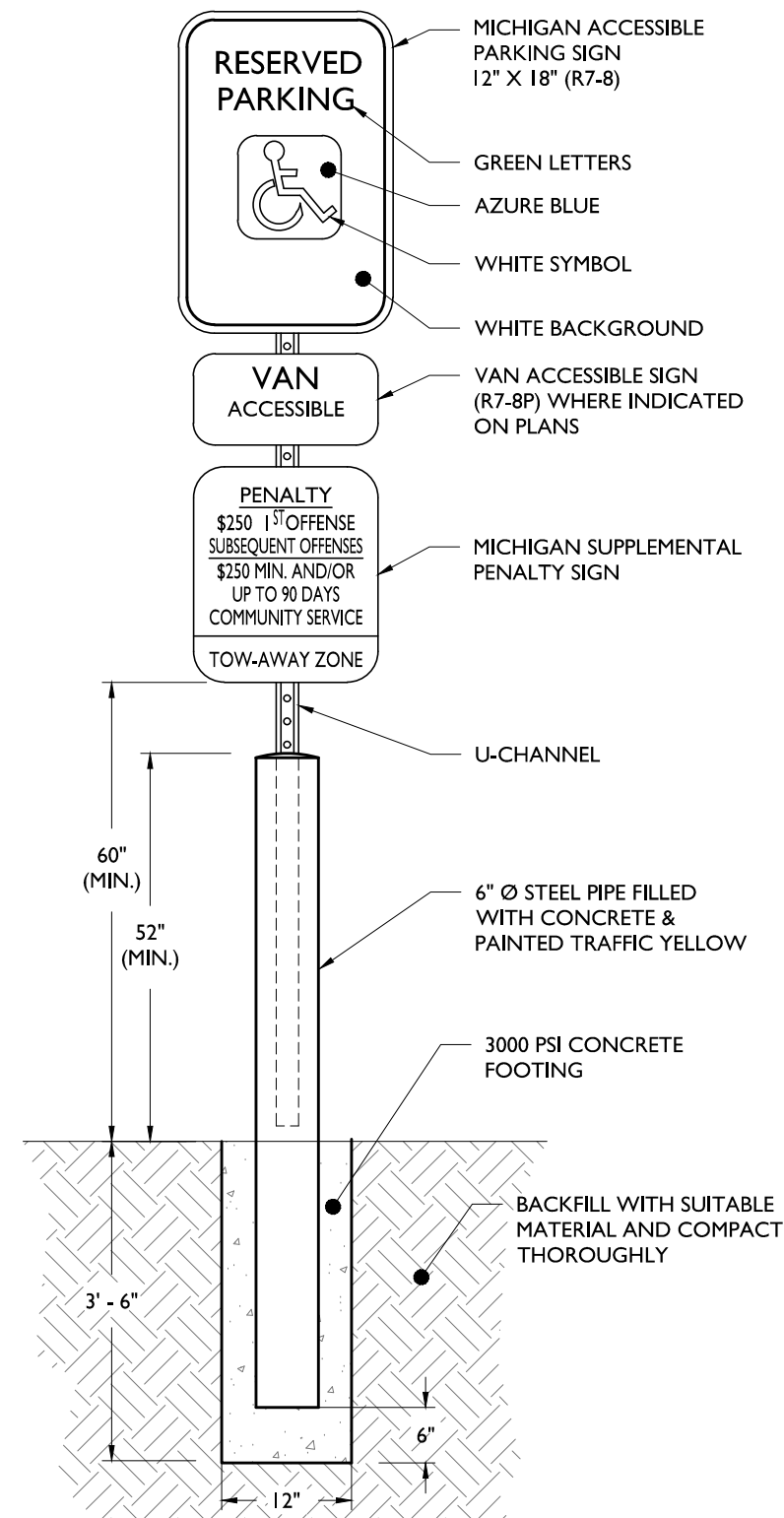


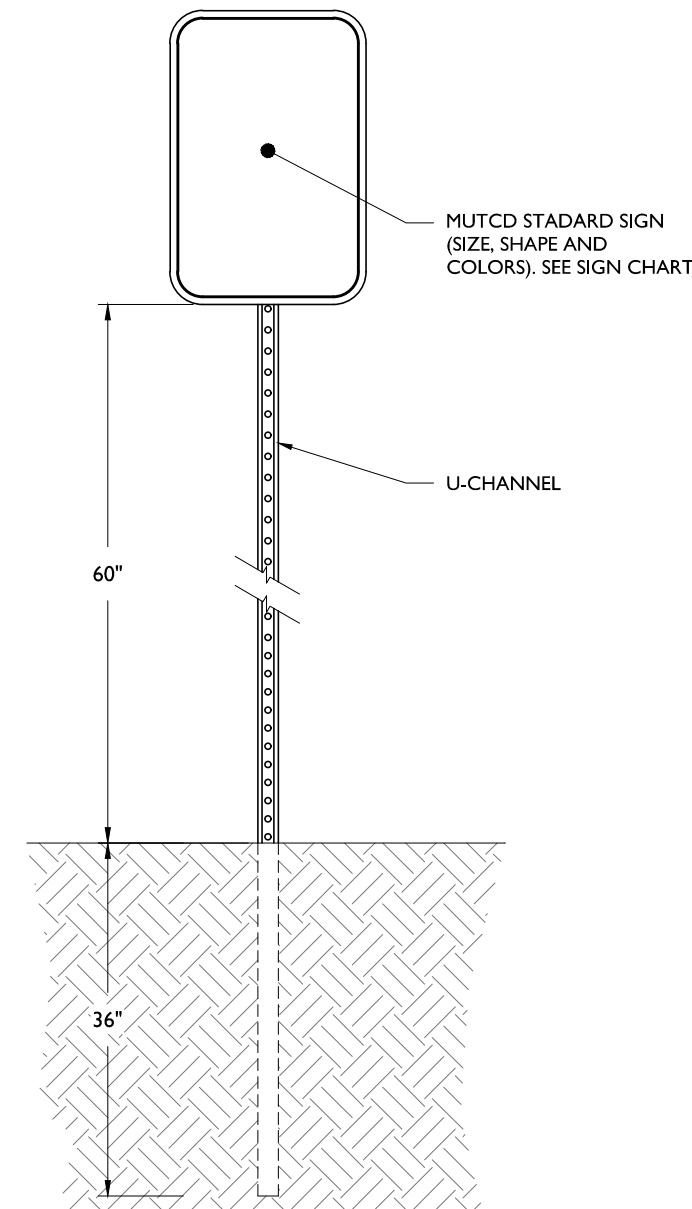
ACCESSIBLE PARKING SIGN WITH BOLLARD DETAIL



NOT TO SCALE

1

SIGN POST DETAIL



NOT TO SCALE

M.U.T.C.D. NUMBER	TEXT	COLOR	SIZE OF SIGN (WIDTH X HEIGHT)	TYPE OF MOUNT
STOP SIGN (R1-1)		RED	36" X 36"	GROUND

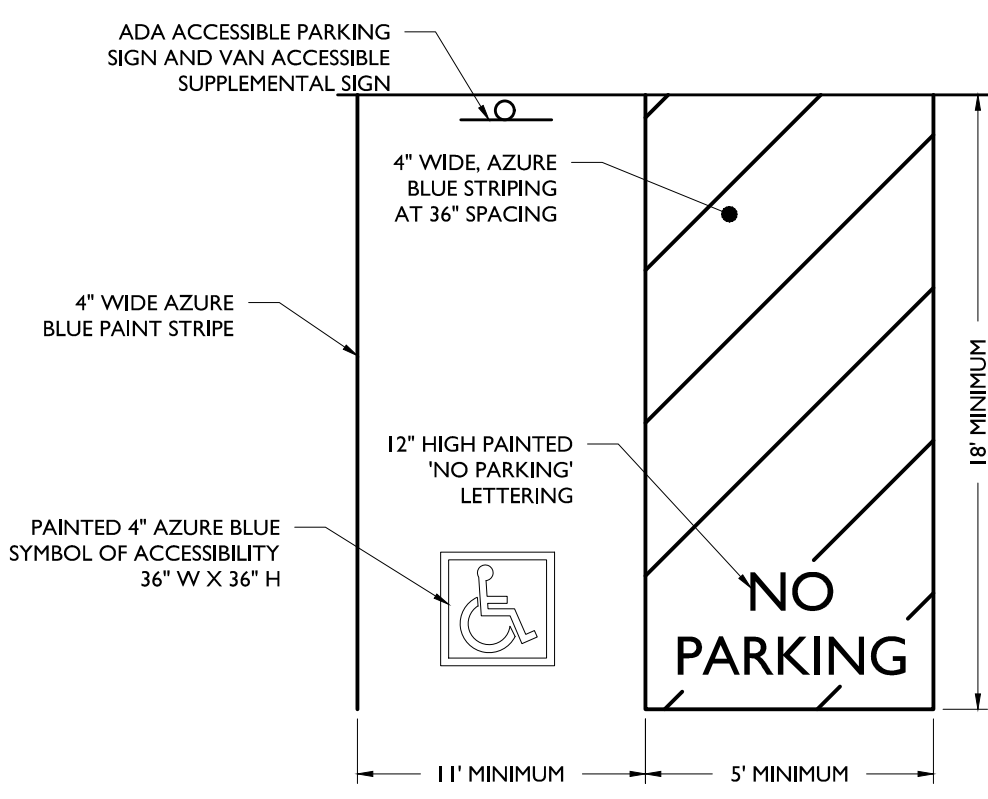
NOTE:
1. ALL SIGNS SHALL BE IN ACCORDANCE WITH THE FEDERAL HIGHWAY ADMINISTRATION (FHWA) MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), EXCEPT AS NOTED.
2. ALL SIGNS SHALL BE MOUNTED AS TO NOT OBSTRUCT THE SHAPE OF "STOP" (R1-1) AND "YIELD" (R1-2) SIGNS.

SIGN DATA TABLE

NOT TO SCALE

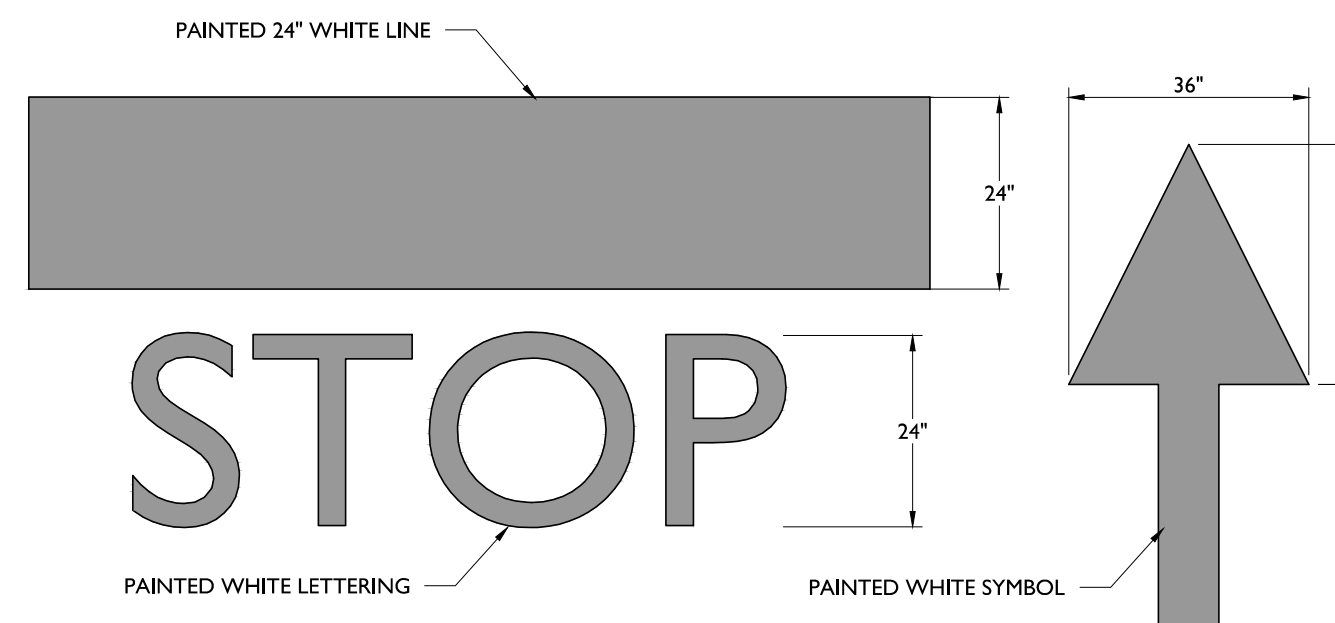
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ACCESSIBLE PARKING STALL MARKINGS



NOT TO SCALE

3

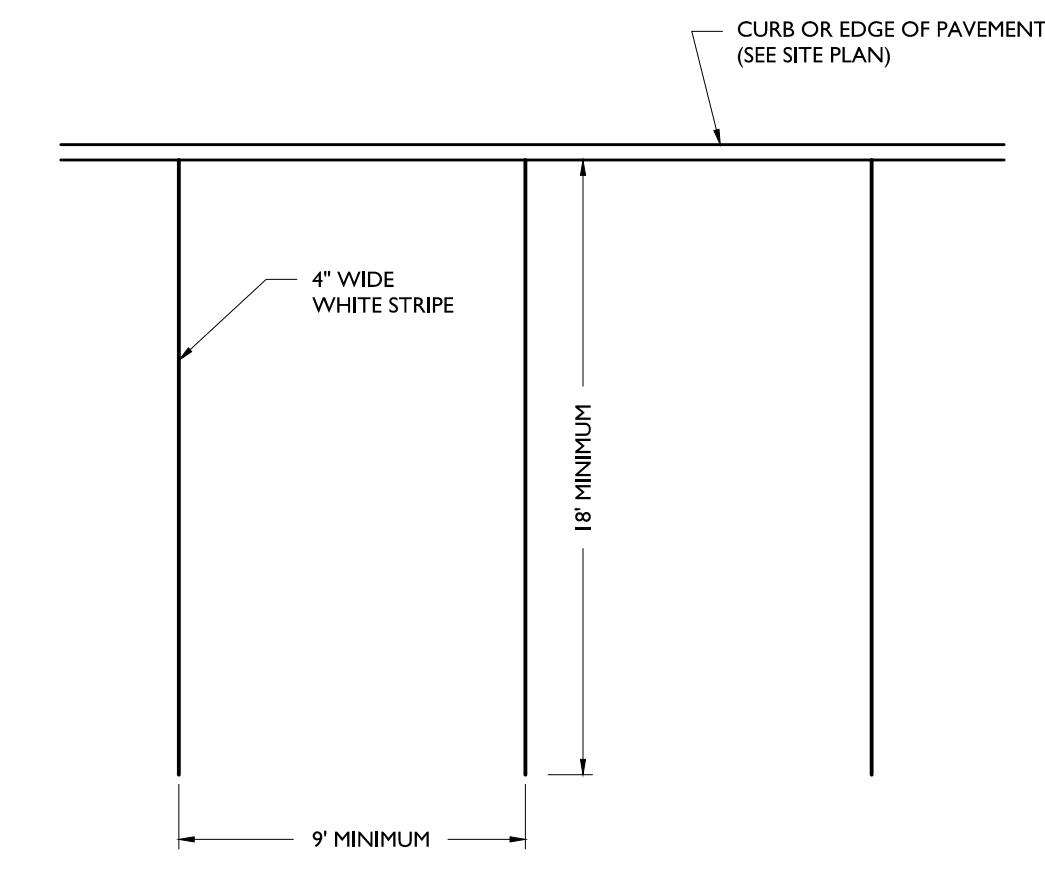


STOP BAR & ARROW DETAILS

NOT TO SCALE

5

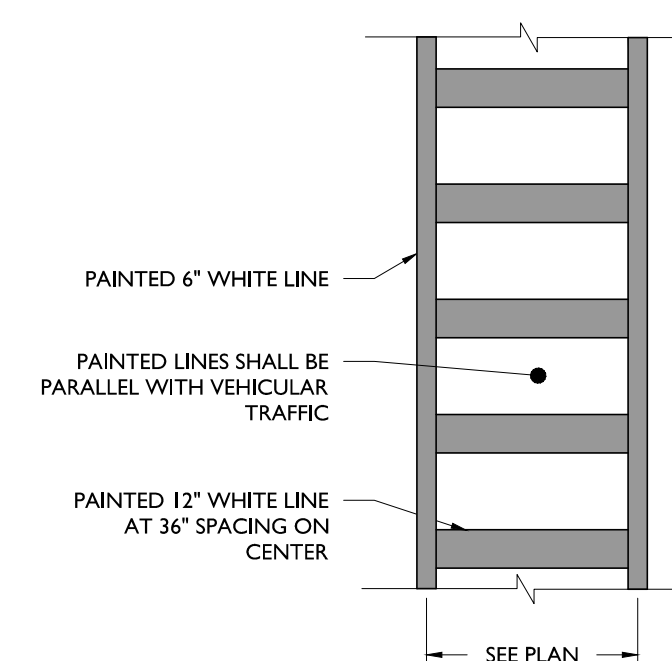
PARKING STALL MARKINGS



NOT TO SCALE

4

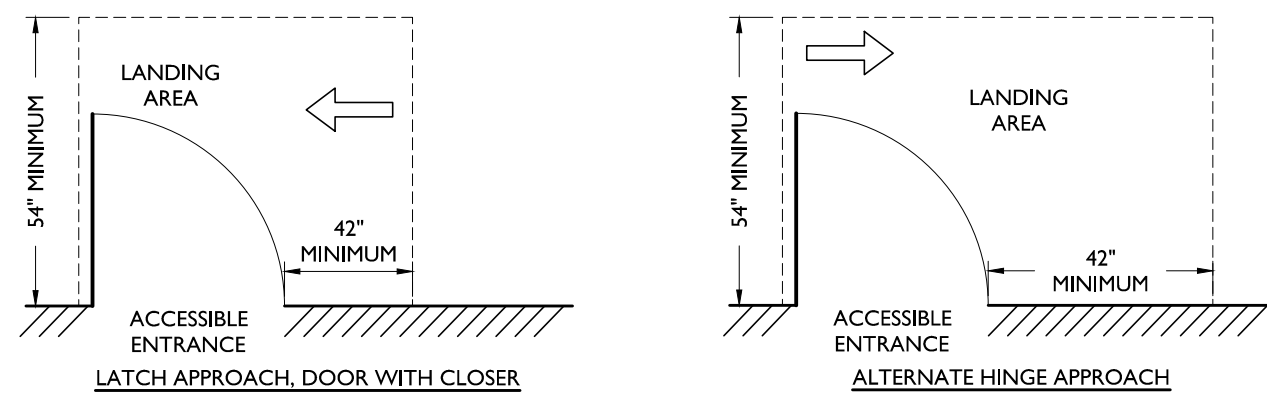
CROSSWALK DETAIL



NOT TO SCALE

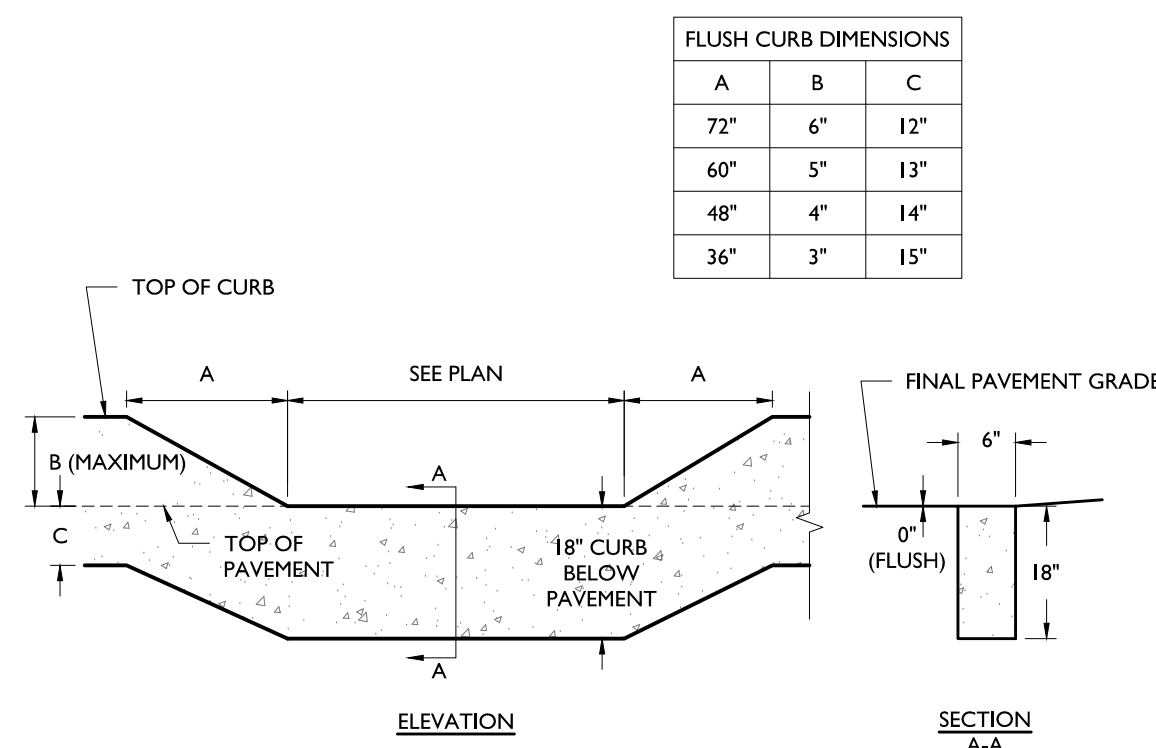
6

ACCESSIBLE ENTRANCE LANDING DETAIL



NOT TO SCALE

7

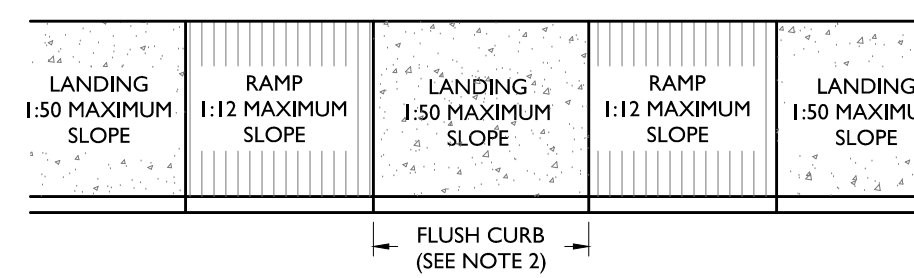


FLUSH CURB DETAIL

NOT TO SCALE

8

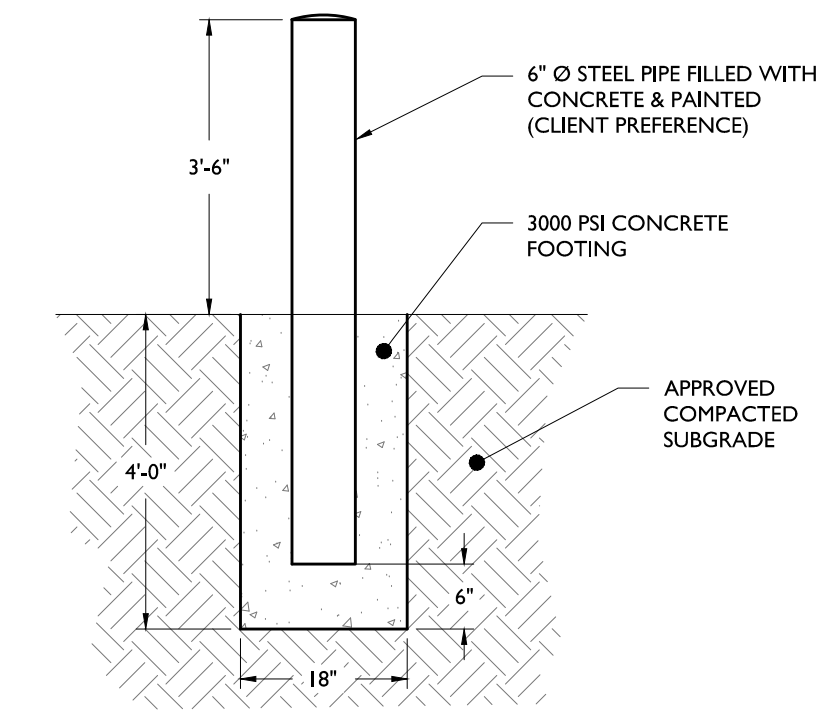
TRANSITION RAMP DETAIL



NOT TO SCALE

9

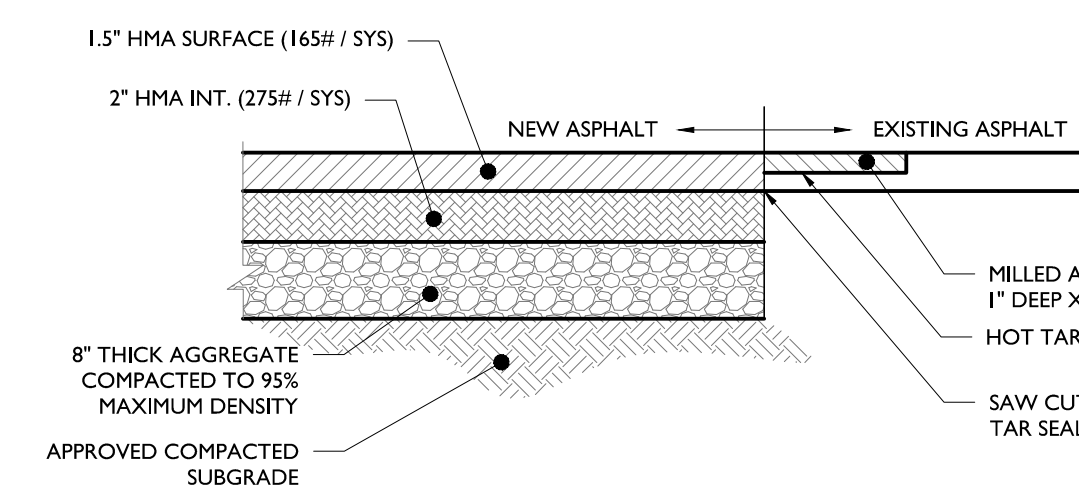
BOLLARD DETAIL



NOT TO SCALE

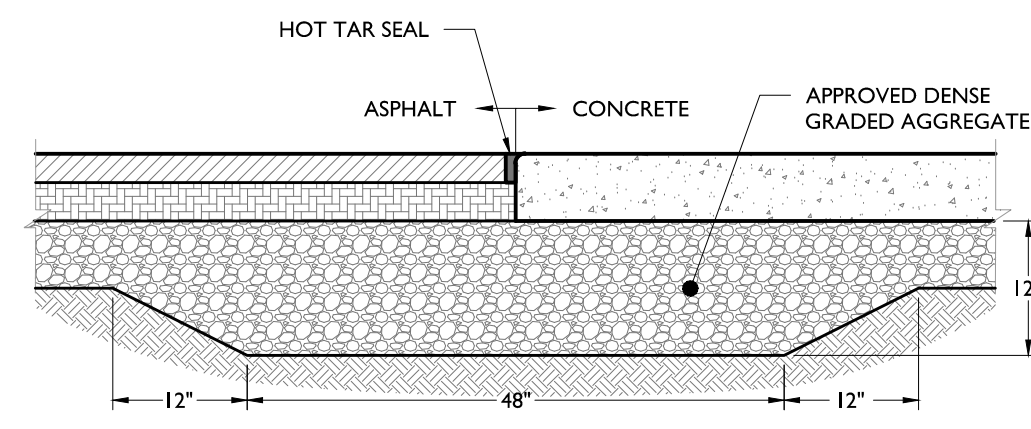
10

FULL DEPTH PARKING LOT ASPHALT PAVEMENT DETAIL



NOT TO SCALE

11

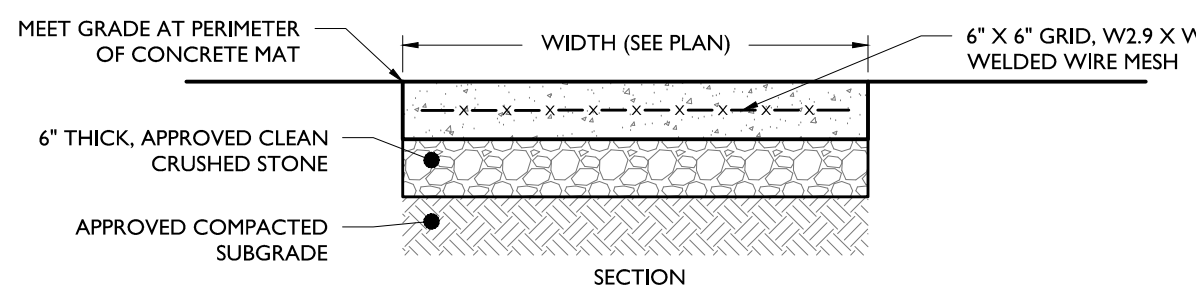


CONCRETE TO ASPHALT TRANSITION DETAIL

NOT TO SCALE

12

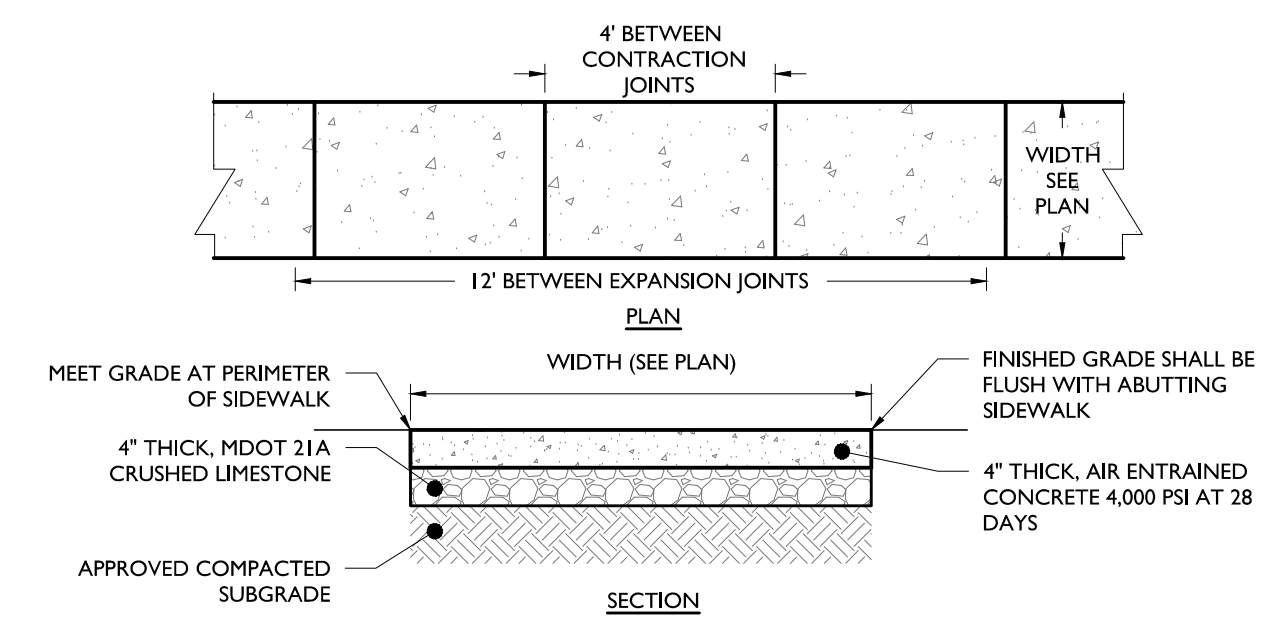
REINFORCED 6" CONCRETE MAT



NOT TO SCALE

13

CONCRETE WALKWAY DETAIL



NOT TO SCALE

14

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PARCEL ID: 15-09-476-030
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CITY OF ROCHESTER HILLS
OAKLAND COUNTY, MICHIGAN

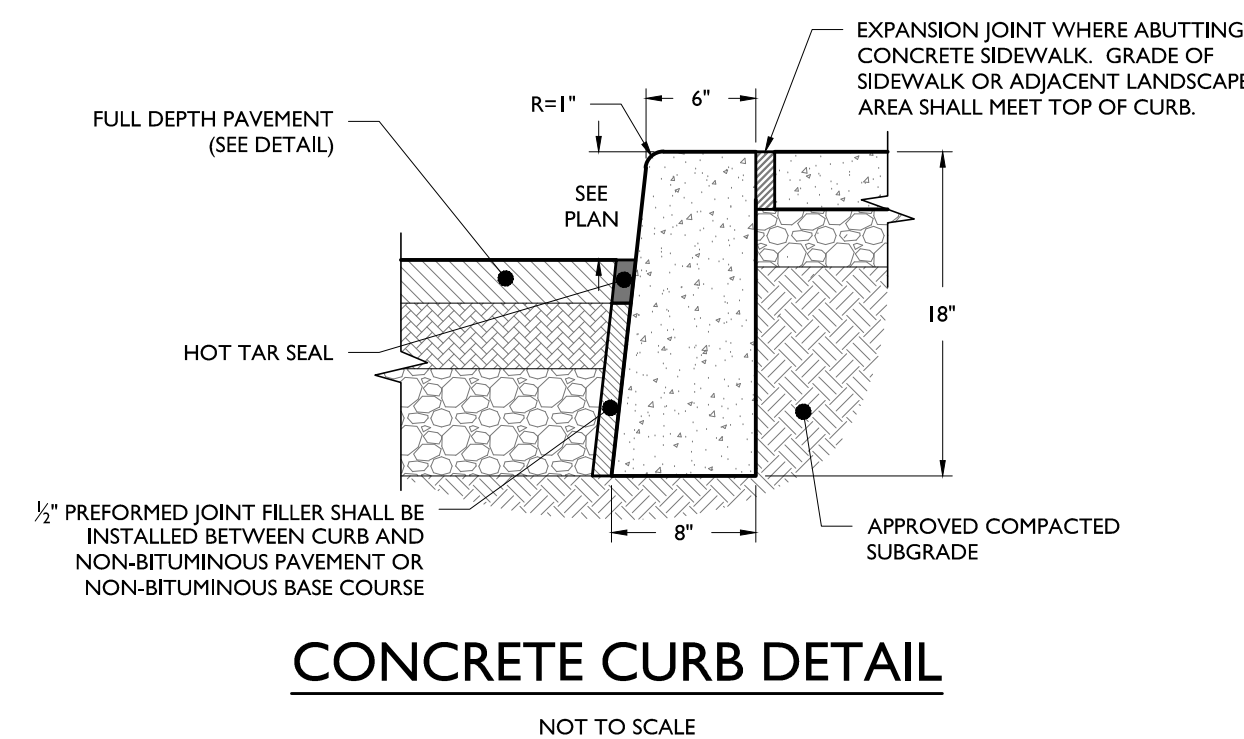
STATE OF MICHIGAN
CONCRETE ENGINEER

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CITY FILE #21-030 SECTION #9
SCALE: AS SHOWN PROJECT ID: DET-200412

TITLE:
CONSTRUCTION DETAILS

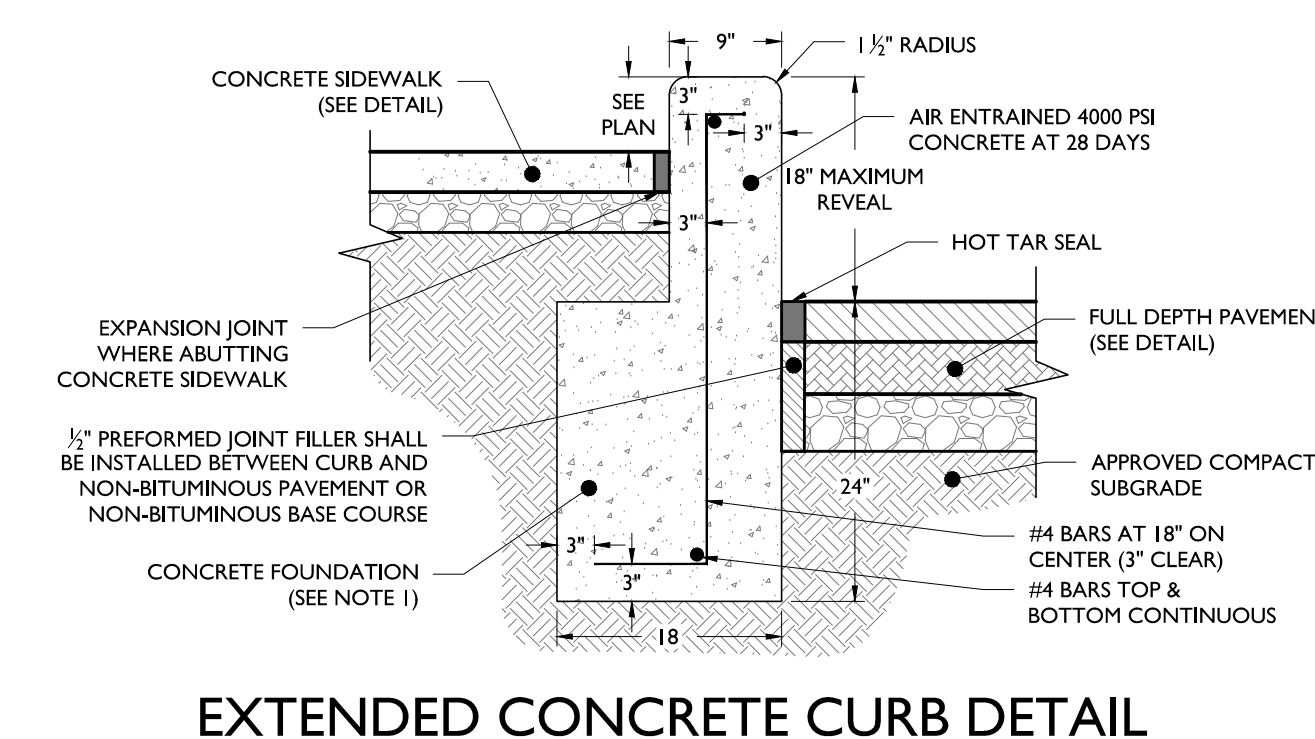
DRAWING:
C-12



CONCRETE CURB DETAIL

NOT TO SCALE

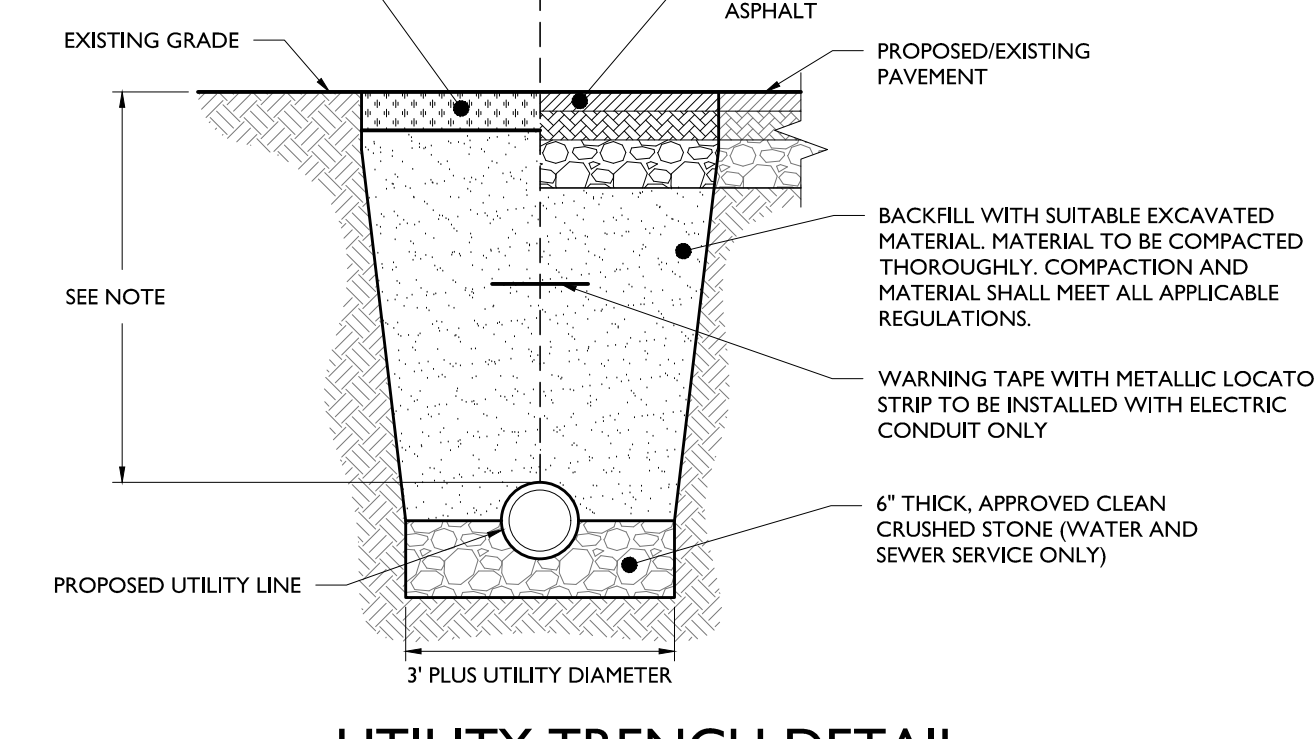
- NOTES:
1. CONCRETE SHALL BE 3500 PSI AT 28 DAYS, AIR-ENTRAINED.
 2. TRANSVERSE EXPANSION JOINTS SHALL BE PROVIDED AT 20 FOOT INTERVALS WITH PRE-MOLDED, BITUMINOUS JOINT FILLER, RECESSED 1/2" FROM SURFACE.
 3. HALF DEPTH CONTRACTION JOINTS SHALL BE PROVIDED AT 10 FOOT INTERVALS.
 4. 18" CURB DEPTH SHALL BE MAINTAINED AT DEPRESSED OR FLUSH CURBED AREAS.



EXTENDED CONCRETE CURB DETAIL

NOT TO SCALE

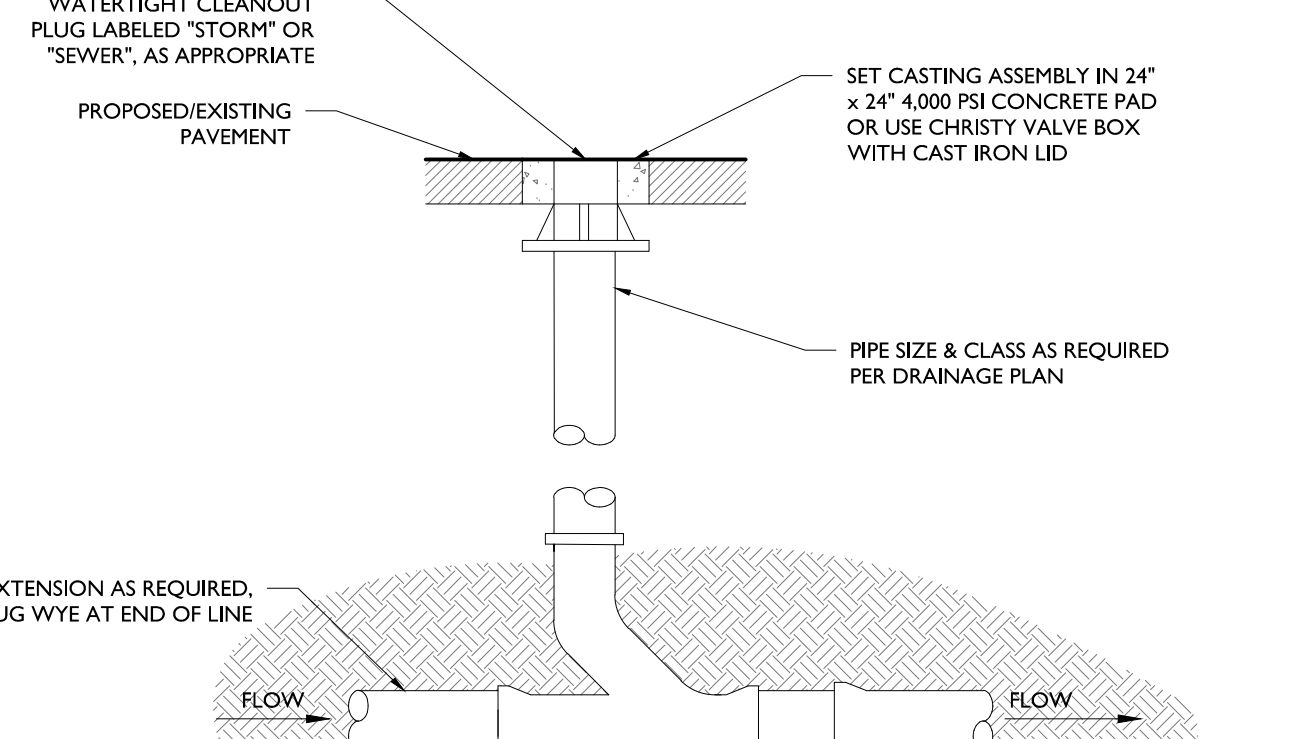
- NOTES:
1. CONCRETE SHALL BE 4000 PSI AT 28 DAYS, AIR-ENTRAINED.
 2. 1/2" EXPANSION JOINTS WITH WATER SEAL SHALL BE PROVIDED AT 50 FOOT INTERVALS WITH PRE-MOLDED, BITUMINOUS JOINT FILLER, RECESSED 1/2" FROM SURFACE. LONGITUDINAL REBAR TO BE CUT AT EXPANSION JOINTS.
 3. 1" DEEP AND 1/2" WIDE TOOLED CONTRACTION JOINTS SHALL BE PROVIDED AT MID-POINT BETWEEN EXPANSION JOINTS, OR 30 FOOT MAX.



UTILITY TRENCH DETAIL

NOT TO SCALE

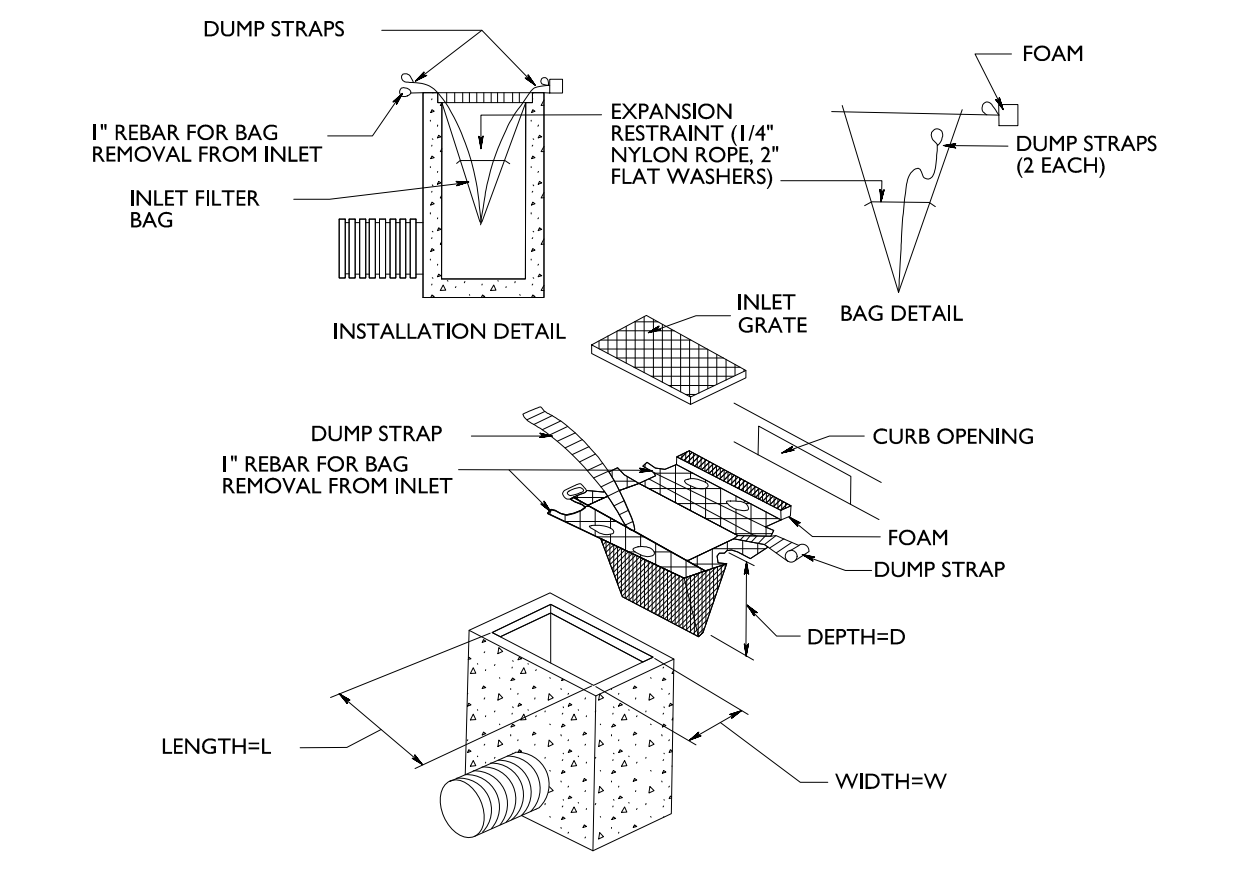
- NOTE:
- MINIMUM PIPE COVER SHALL BE AS FOLLOWS:
- ELECTRIC SERVICE - PER APPLICABLE UTILITY AUTHORITY
 - GAS SERVICE - PER APPLICABLE UTILITY AUTHORITY
 - SEWER SERVICE - 36" MINIMUM
 - WATER SERVICE - 48" MINIMUM



HARDSCAPE CLEAN-OUT

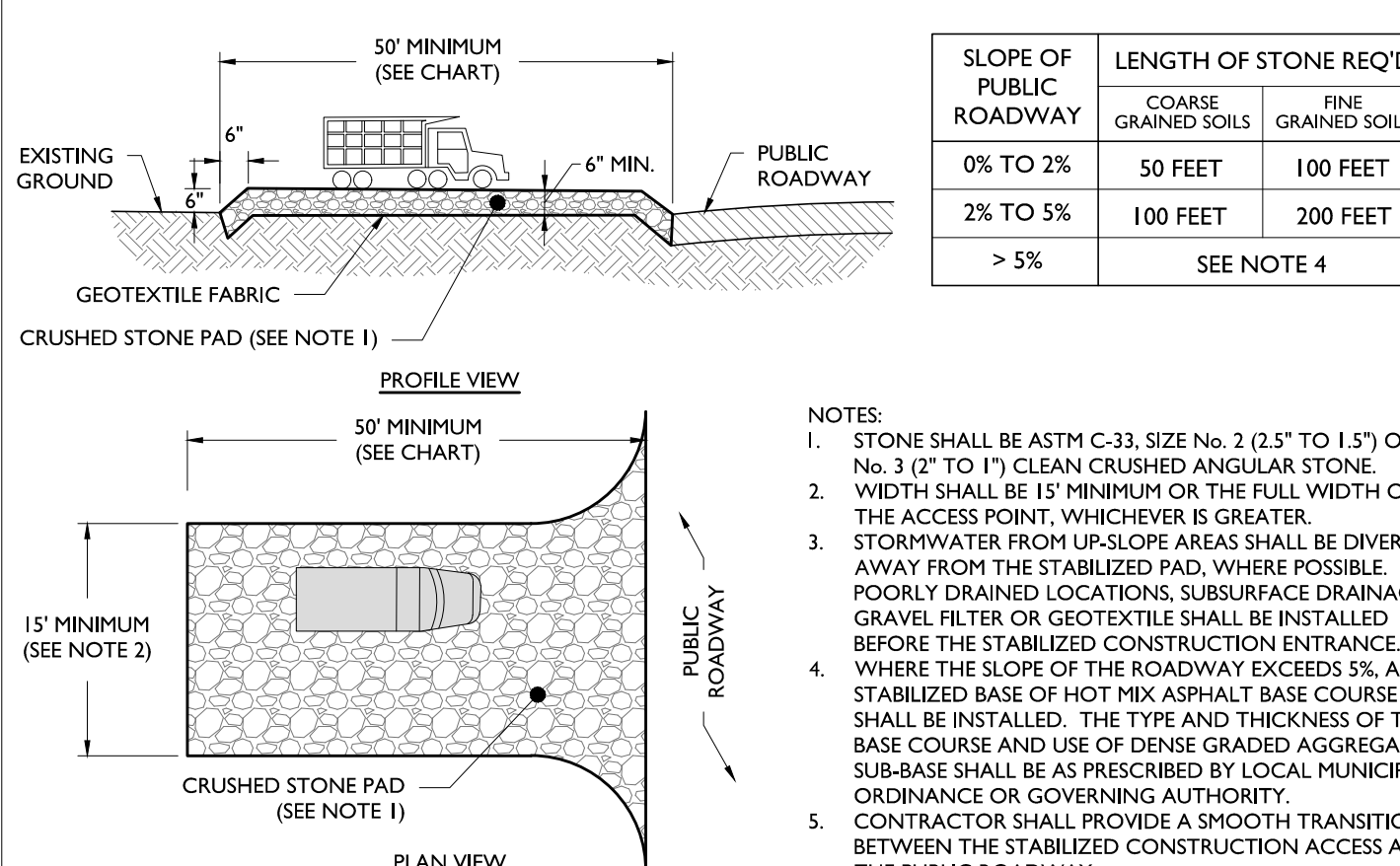
NOT TO SCALE

- EXTENSION AS REQUIRED, PLUG WYE AT END OF LINE



INLET FILTER BAG DETAIL

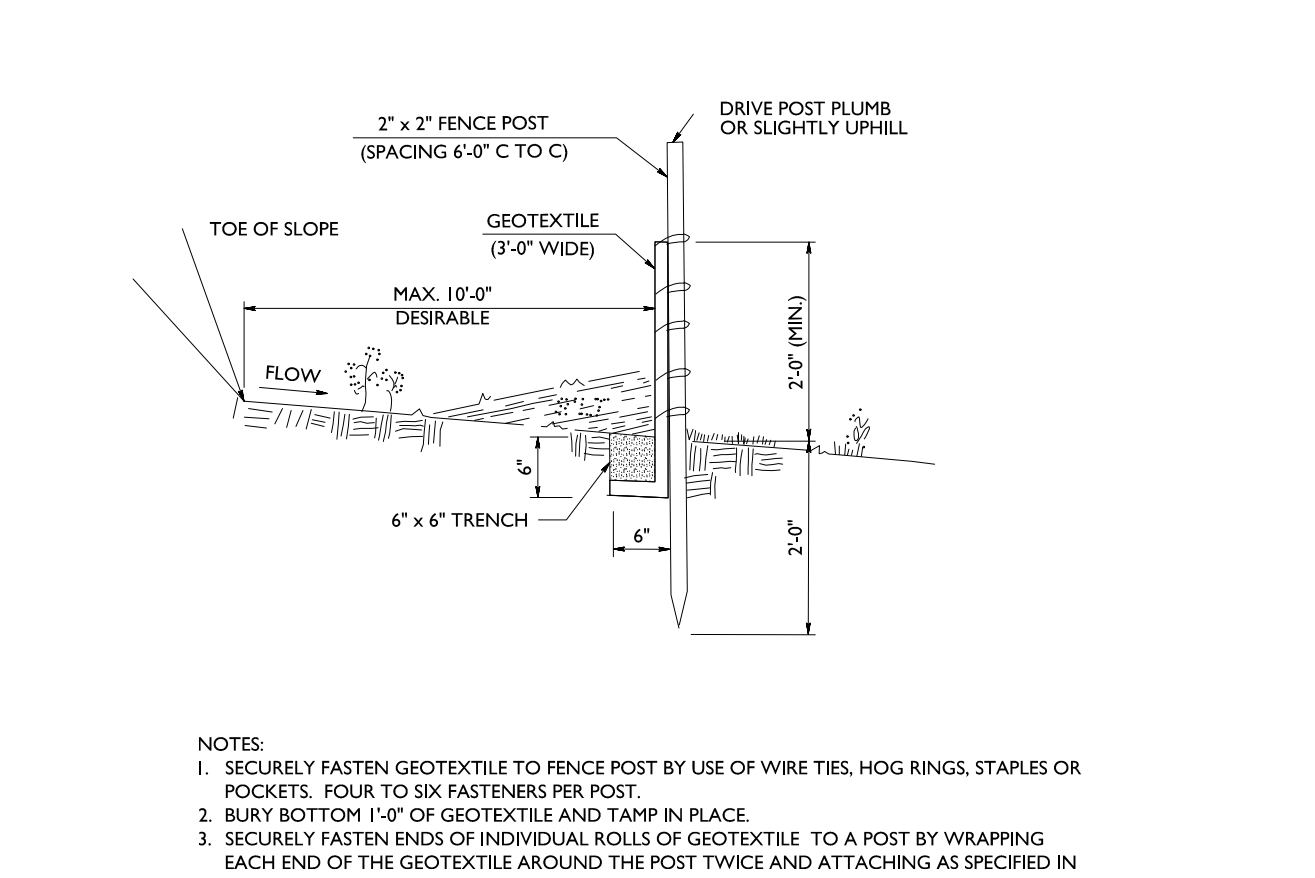
NOT TO SCALE



STABILIZED CONSTRUCTION ACCESS DETAIL

NOT TO SCALE

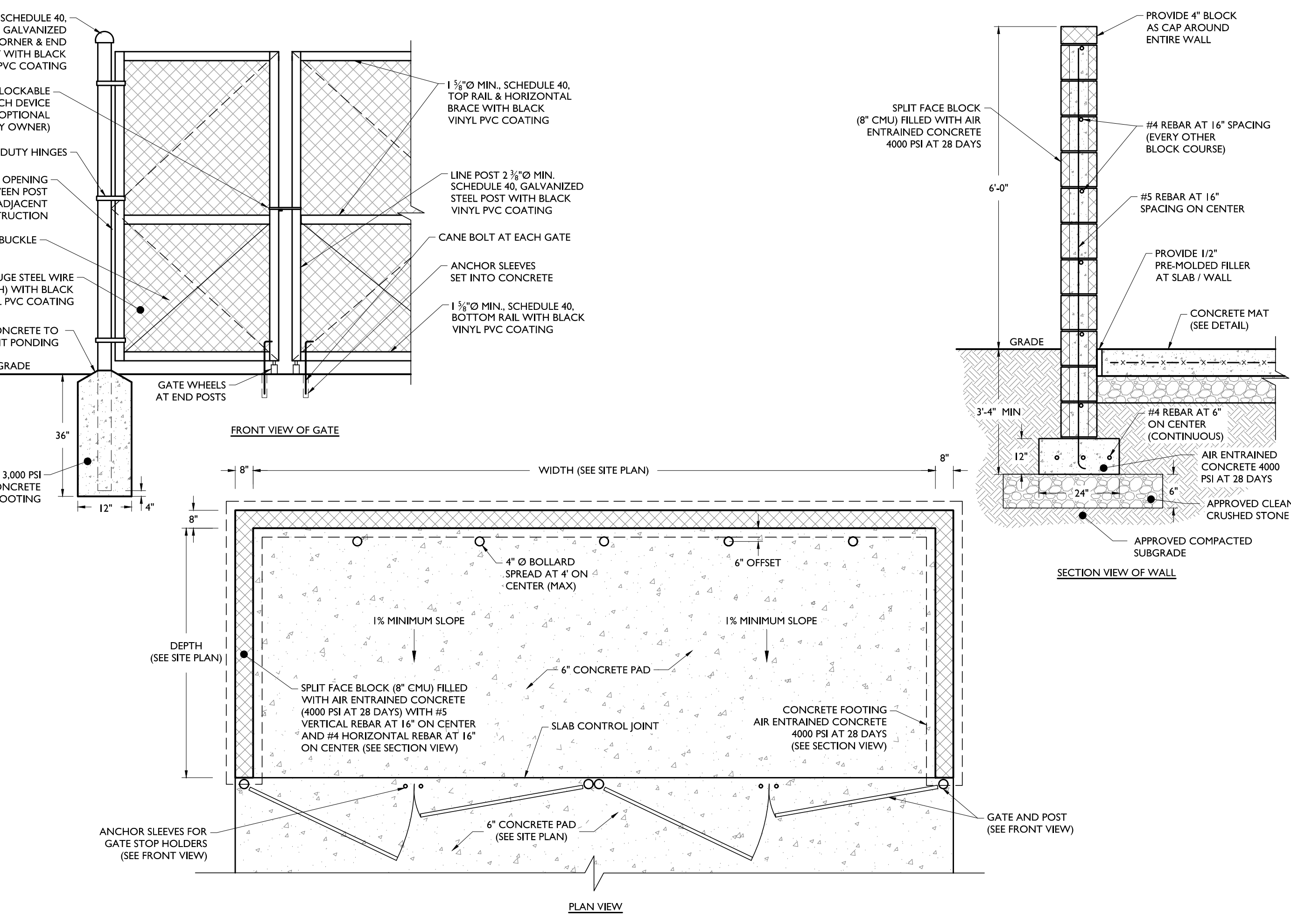
- NOTES:
1. STONE SHALL BE ASTM C-33, SIZE No. 2 (2.5" TO 1.5") OR No. 3 (2" TO 1") CLEAN CRUSHED ANGULAR STONE.
 2. WIDTH SHALL BE 15' MINIMUM OR THE FULL WIDTH OF THE ACCESS POINT, WHICHEVER IS GREATER.
 3. STORMWATER FROM UP-SLOPE AREAS SHALL BE DIVERTED AWAY FROM THE STABILIZED PAD, WHERE POSSIBLE. AT POORLY DRAINED LOCATIONS, SUBSURFACE DRAINAGE GRAVEL FILTER OR GEOTEXTILE SHALL BE INSTALLED BEFORE THE STABILIZED CONSTRUCTION ENTRANCE.
 4. WHERE THE SLOPE OF THE ROADWAY EXCEEDS 5% A STABILIZED BASE OF HOT MIX ASPHALT BASE COURSE SHALL BE INSTALLED. THE TYPE AND THICKNESS OF THE BASE COURSE AND USE OF DENSE GRADED AGGREGATE SUB-BASE SHALL BE AS PRESCRIBED BY LOCAL MUNICIPAL ORDINANCE OR GOVERNING AUTHORITY.
 5. CONTRACTOR SHALL PROVIDE A SMOOTH TRANSITION BETWEEN THE STABILIZED CONSTRUCTION ACCESS AND THE PUBLIC ROADWAY.



SILT FENCE DETAIL

NOT TO SCALE

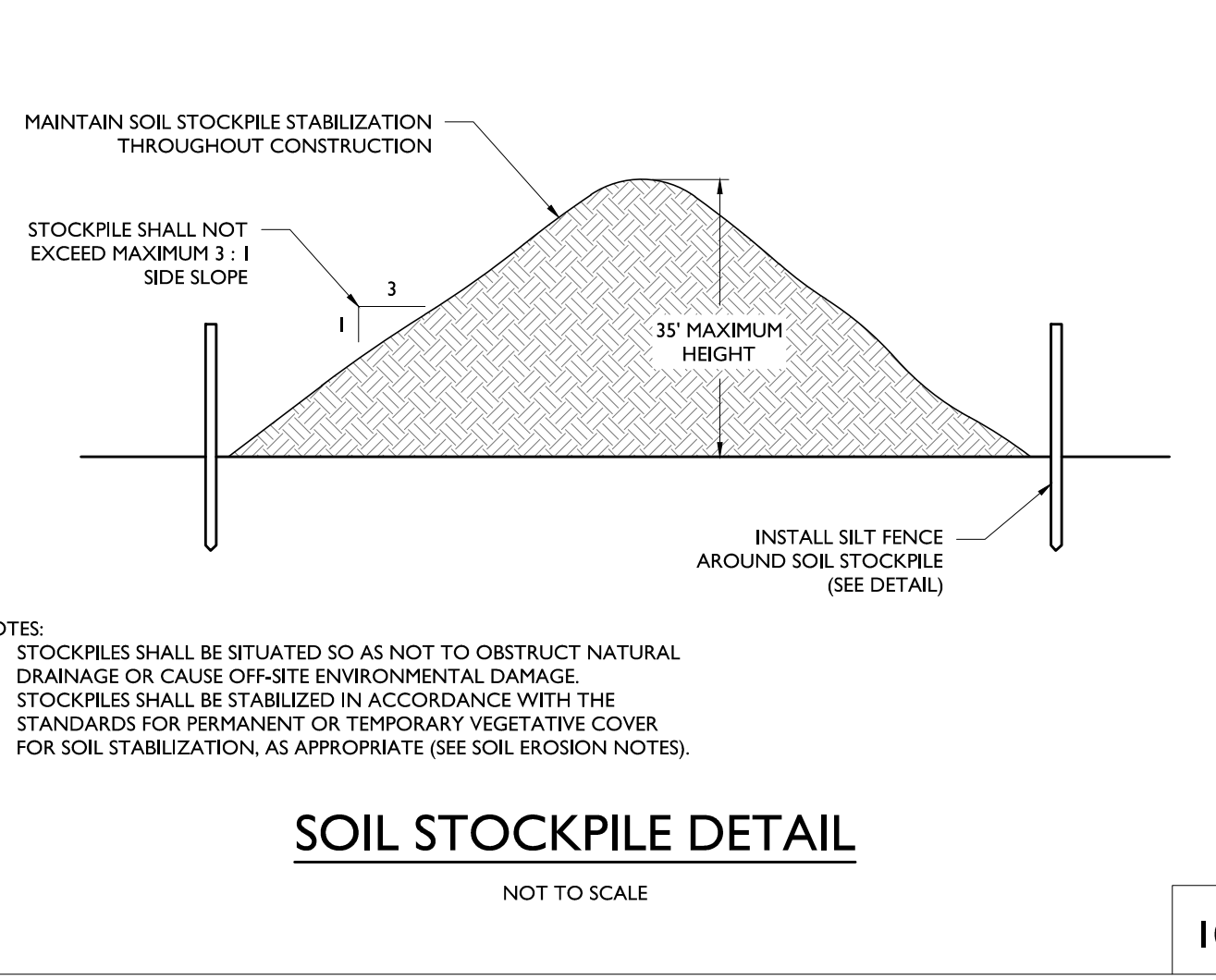
- NOTES:
1. SECURELY FASTEN GEOTEXTILE TO FENCE POST BY USE OF WIRE TIES, HOG RINGS, STAPLES OR POCKETS. FOUR TO SIX FASTENERS PER POST.
 2. BURY BOTTOM 1'-0" OF GEOTEXTILE AND TAMP IN PLACE.
 3. SECURELY FASTEN ENDS OF INDIVIDUAL ROLLS OF GEOTEXTILE TO A POST BY WRAPPING EACH END OF THE GEOTEXTILE AROUND THE POST TWICE AND ATTACHING AS SPECIFIED IN NOTE 1 ABOVE. SPLICING OF INDIVIDUAL ROLLS SHALL NOT OCCUR AT LOW POINTS.
 4. SET SILT FENCE WITHIN PROJECT LIMITS. 10'-0" IS DESIRABLE.



DOUBLE TRASH / RECYCLE ENCLOSURE DETAIL

NOT TO SCALE

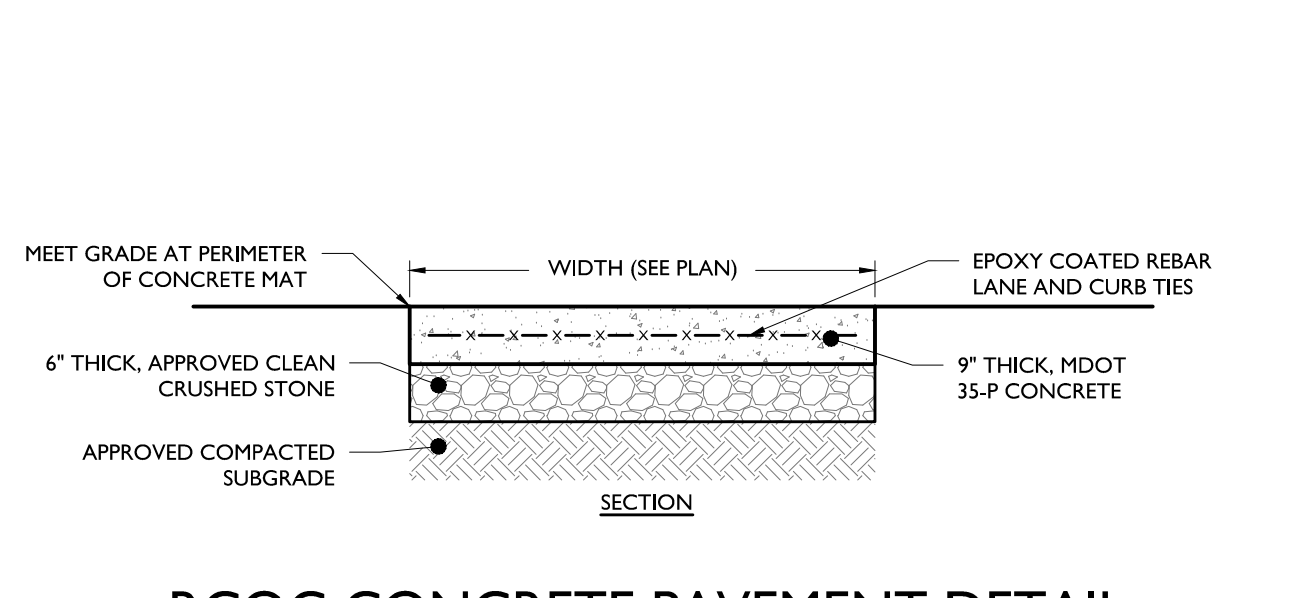
- NOTE:
- BLOCK COLOR TO MATCH BLOCKING OR AS SPECIFIED BY OWNER



SOIL STOCKPILE DETAIL

NOT TO SCALE

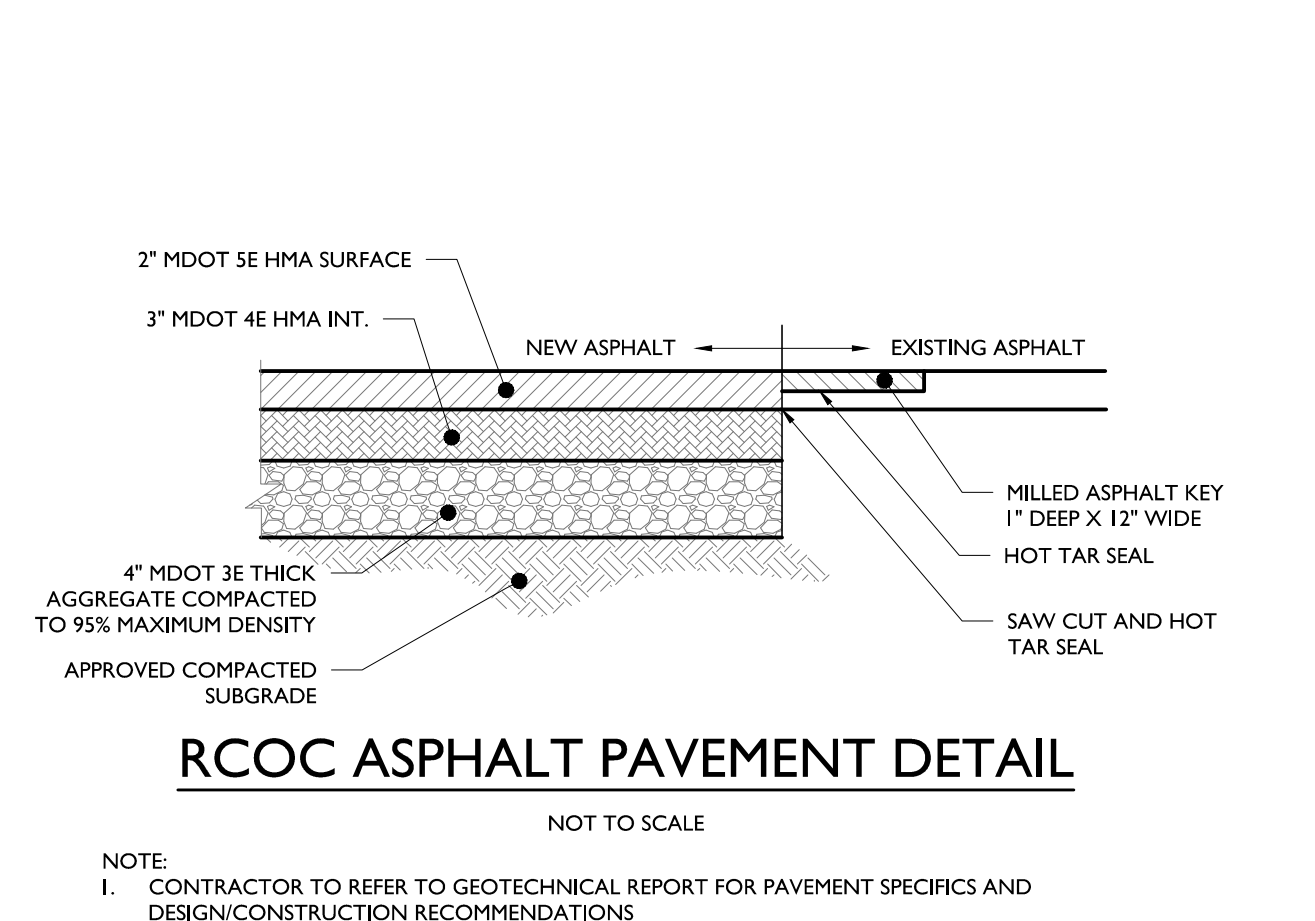
- NOTES:
1. STOCKPILES SHALL BE SITUATED SO AS NOT TO OBSTRUCT NATURAL DRAINAGE OR CAUSE OFF-SITE ENVIRONMENTAL DAMAGE.
 2. STOCKPILES SHALL BE STABILIZED IN ACCORDANCE WITH THE STANDARDS FOR PERMANENT OR TEMPORARY VEGETATIVE COVER FOR SOIL STABILIZATION, AS APPROPRIATE (SEE SOIL EROSION NOTES).



RCOC CONCRETE PAVEMENT DETAIL

NOT TO SCALE

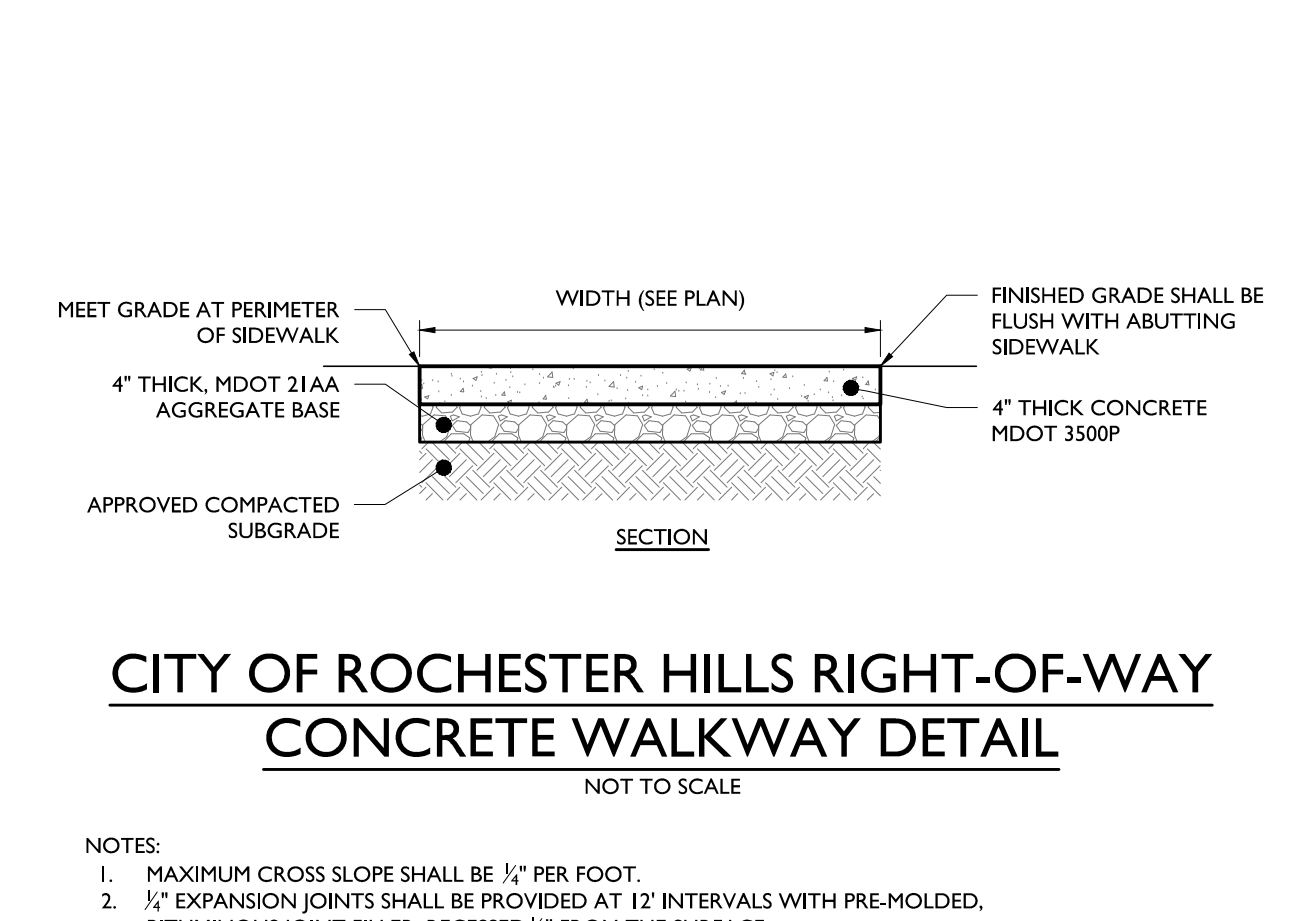
- NOTES:
1. 1/2" EXPANSION JOINTS WITH WATER SEAL SHALL BE PROVIDED AT 12' INTERVALS WITH PRE-MOLDED, BITUMINOUS JOINT FILLER, RECESSED 1/2" FROM THE SURFACE. LONGITUDINAL REBAR TO BE CUT AT EXPANSION JOINTS.
 2. 1" DEEP BY 1/2" WIDE, TOOLED CONTRACTION JOINTS SHALL BE PROVIDED AT MID-POINT BETWEEN EXPANSION JOINTS OR 6' INTERVALS MAX.
 3. CONCRETE SHALL RECEIVE BROOM FINISH.
 4. ALL EXPOSED CORNERS TO HAVE 12" CHAMFER.



RCOC ASPHALT PAVEMENT DETAIL

NOT TO SCALE

- NOTE:
1. CONTRACTOR TO REFER TO GEOTECHNICAL REPORT FOR PAVEMENT SPECIFICS AND DESIGN/CONSTRUCTION RECOMMENDATIONS
 2. HMA MIX AND DENSE GRADED AGGREGATE SHALL CONFORM TO STATE DEPARTMENT OF TRANSPORTATION SPECIFICATIONS.



CITY OF ROCHESTER HILLS RIGHT-OF-WAY CONCRETE WALKWAY DETAIL

NOT TO SCALE

- NOTES:
1. MAXIMUM CROSS SLOPE SHALL BE 1/2" PER FOOT.
 2. 1/2" EXPANSION JOINTS SHALL BE PROVIDED AT 12' INTERVALS WITH PRE-MOLDED, BITUMINOUS JOINT FILLER, RECESSED 1/2" FROM THE SURFACE.
 3. 1" DEEP BY 1/2" WIDE, TOOLED CONTRACTION JOINTS SHALL BE PROVIDED AT 4' INTERVALS.
 4. EXPANSION JOINT SHALL BE PROVIDED WHERE ADJACENT TO A BUILDING.

ISSUE	DATE	BY	DESCRIPTION
7	05/28/2022	JRC/ECM	SUBMISSION FOR SITE PLAN APPROVAL
6	02/09/2022	JRC/ECM	REVISED PER CITY SECOND SITE PLAN REVIEW
5	12/28/2021	JRC/ECM	REVISED PER CITY SITE PLAN REVIEW
4	09/08/2021	RAC/ECM	SUBMISSION FOR SITE PLAN APPROVAL
3	08/20/2021	RAC	REVISED PER FIRE DEPARTMENT COMMENTS
2	08/02/2021	ECM	REVISED PER CITY COMMENTS
1	07/08/2021	JRC	SUBMISSION FOR PRE-APPLICATION MEETING

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PARCEL ID: 15-09-476-030
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CITY OF ROCHESTER HILLS
OAKLAND COUNTY, MICHIGAN

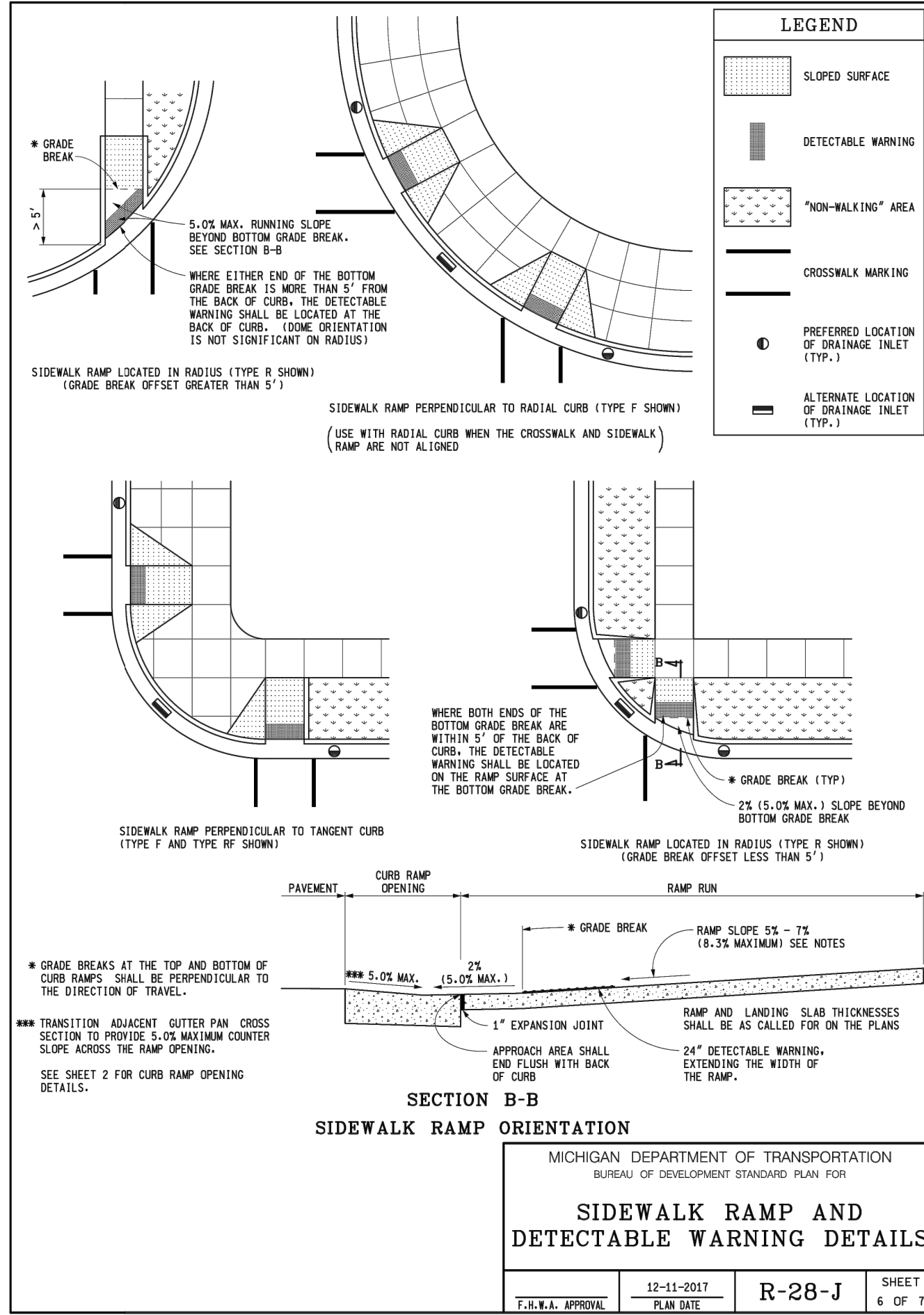
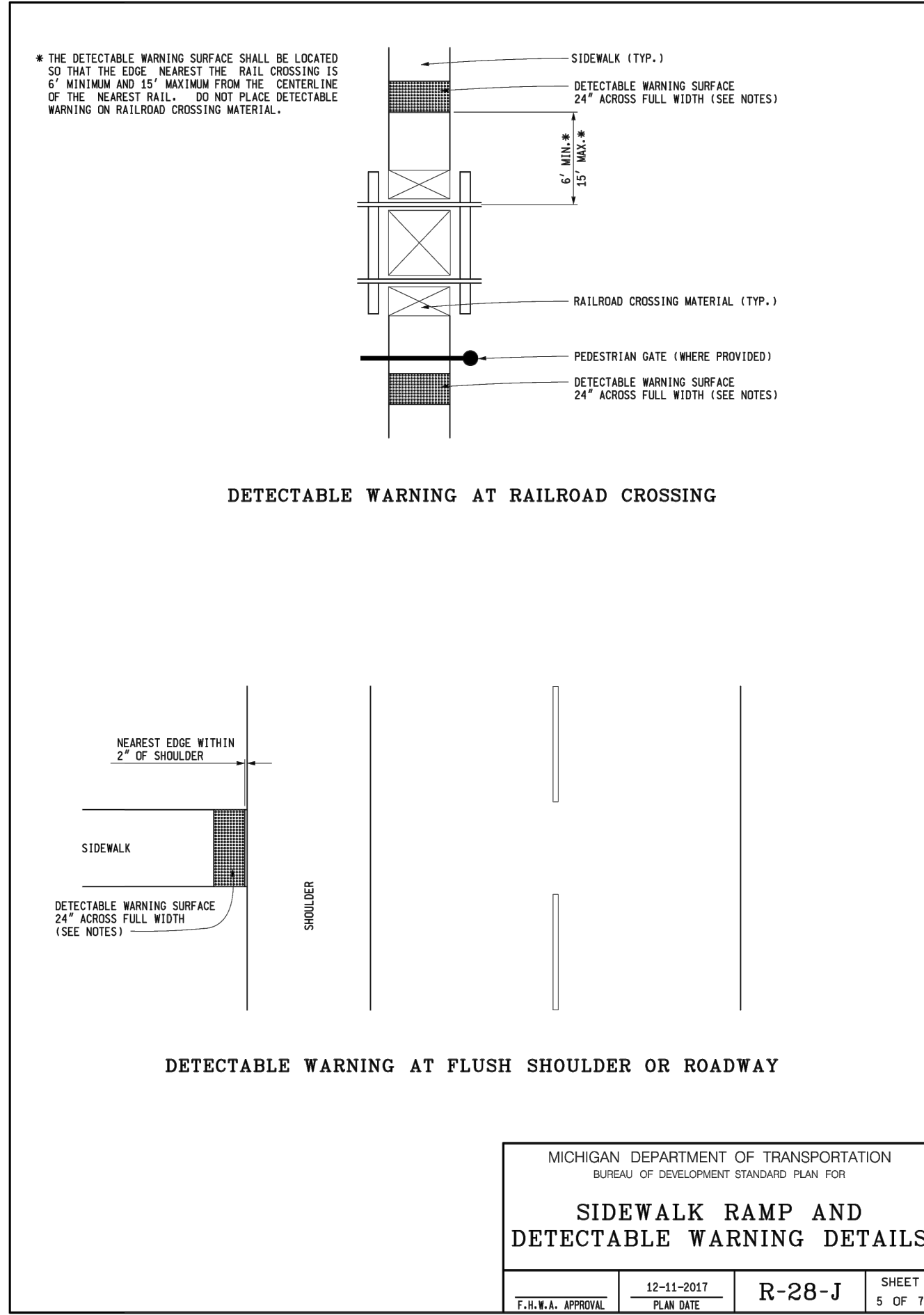
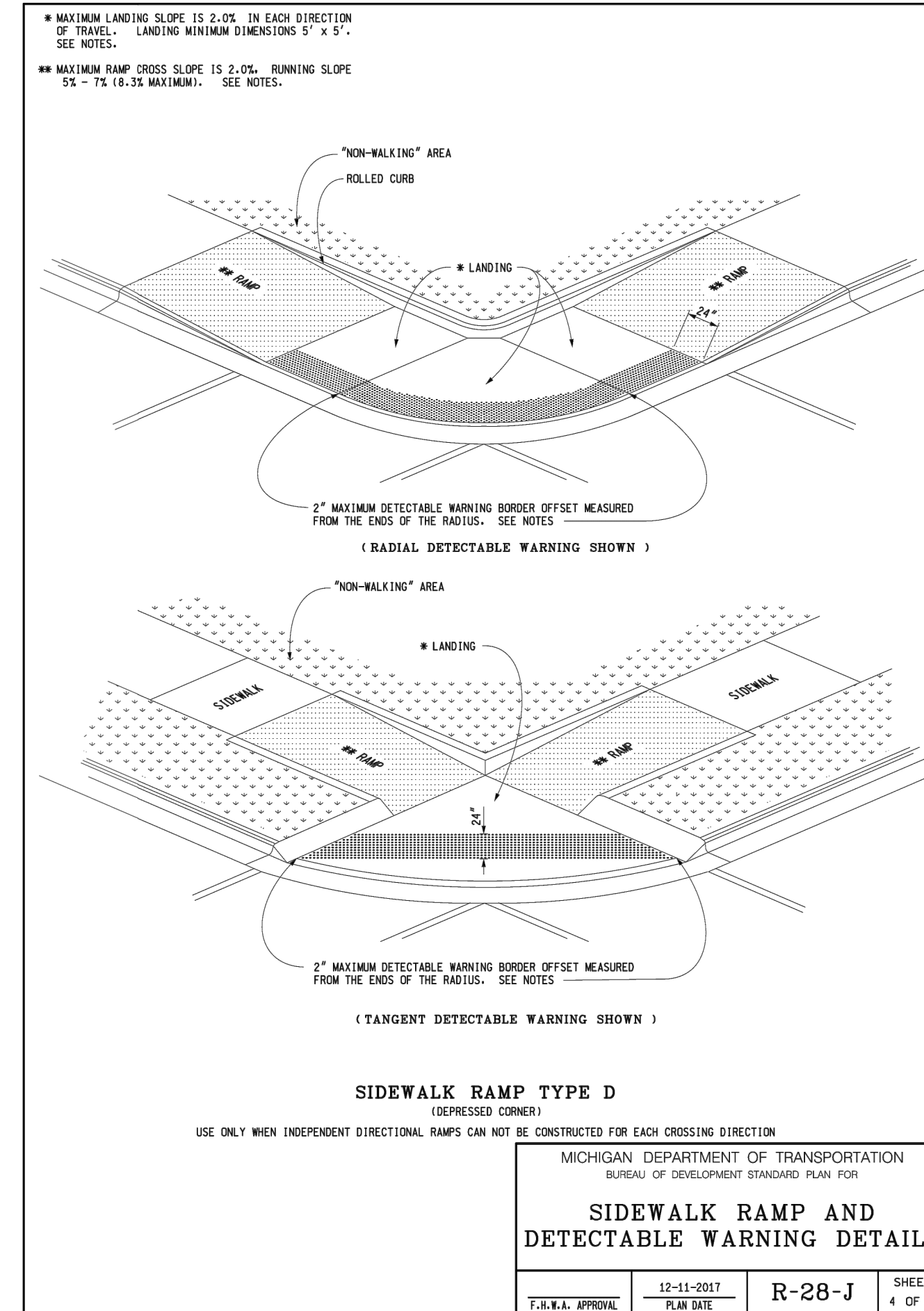
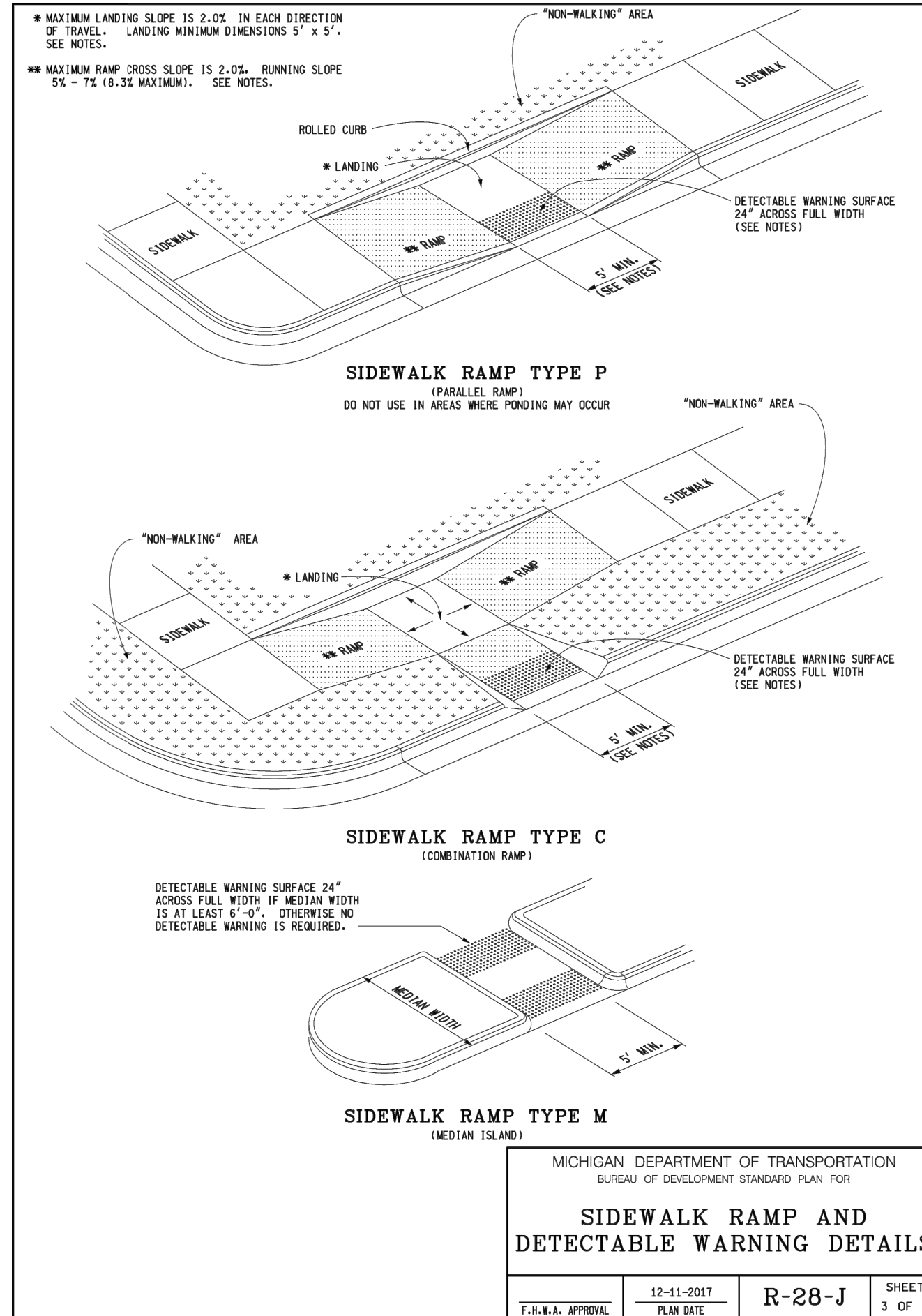
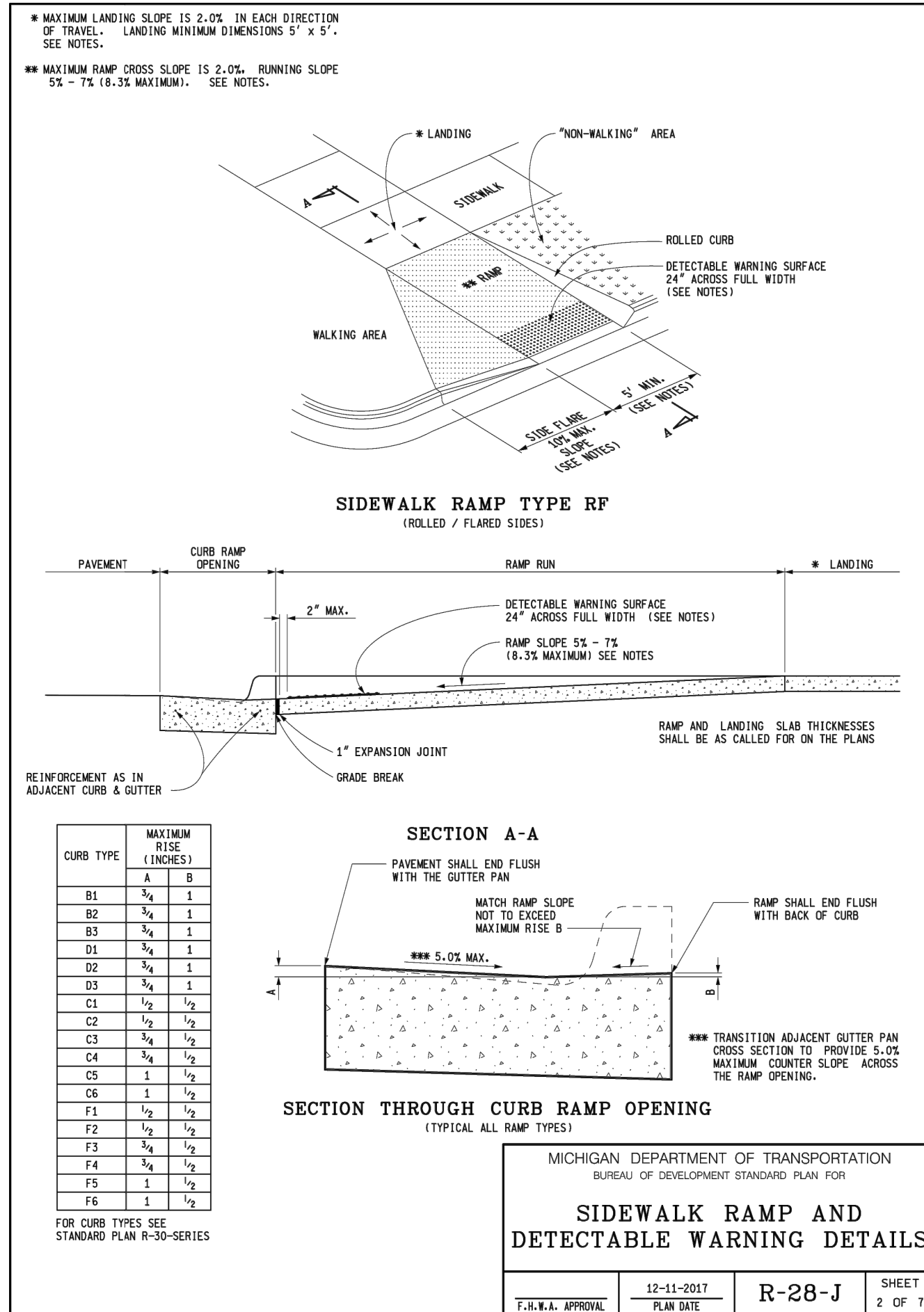
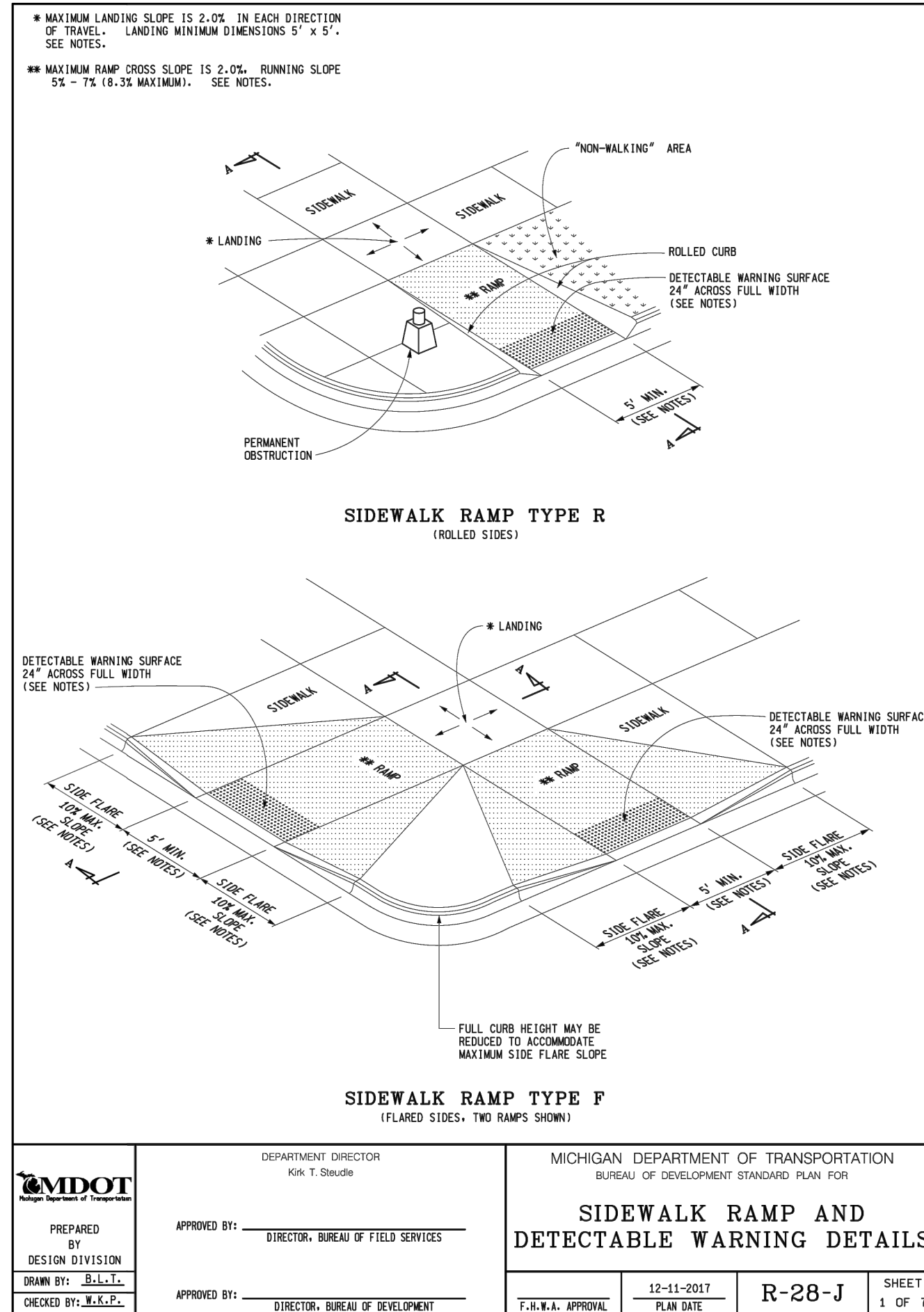
STATE OF MICHIGAN
COUNTY ENGINEER
MICHIGAN LICENSE # 0000000000

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CITY FILE #21-030 SECTION #9
SCALE: AS SHOWN PROJECT ID: DET-200412

TITLE:
CONSTRUCTION DETAILS

DRAWING:
C-13



MDOT SIDEWALK RAMP AND DETECTABLE WARNING DETAILS (R-28-J)

NOT TO SCALE

ISSUE	DATE	BY	DESCRIPTION
7	05/28/2022	JRC/ECM	SUBMISSION FOR SITE PLAN APPROVAL
6	02/09/2022	JRC/ECM	REVISED PER CITY SECOND SITE PLAN REVIEW
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1	07/02/2021	JRC	SUBMISSION FOR PRE-APPLICATION MEETING

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1360 WALTON BLVD

PROPOSED STARBUCKS

STARBUCKS

PARCEL ID: 15-09-476-030
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CITY OF ROCHESTER HILLS
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STATE OF MICHIGAN
COUNTY ENGINEER

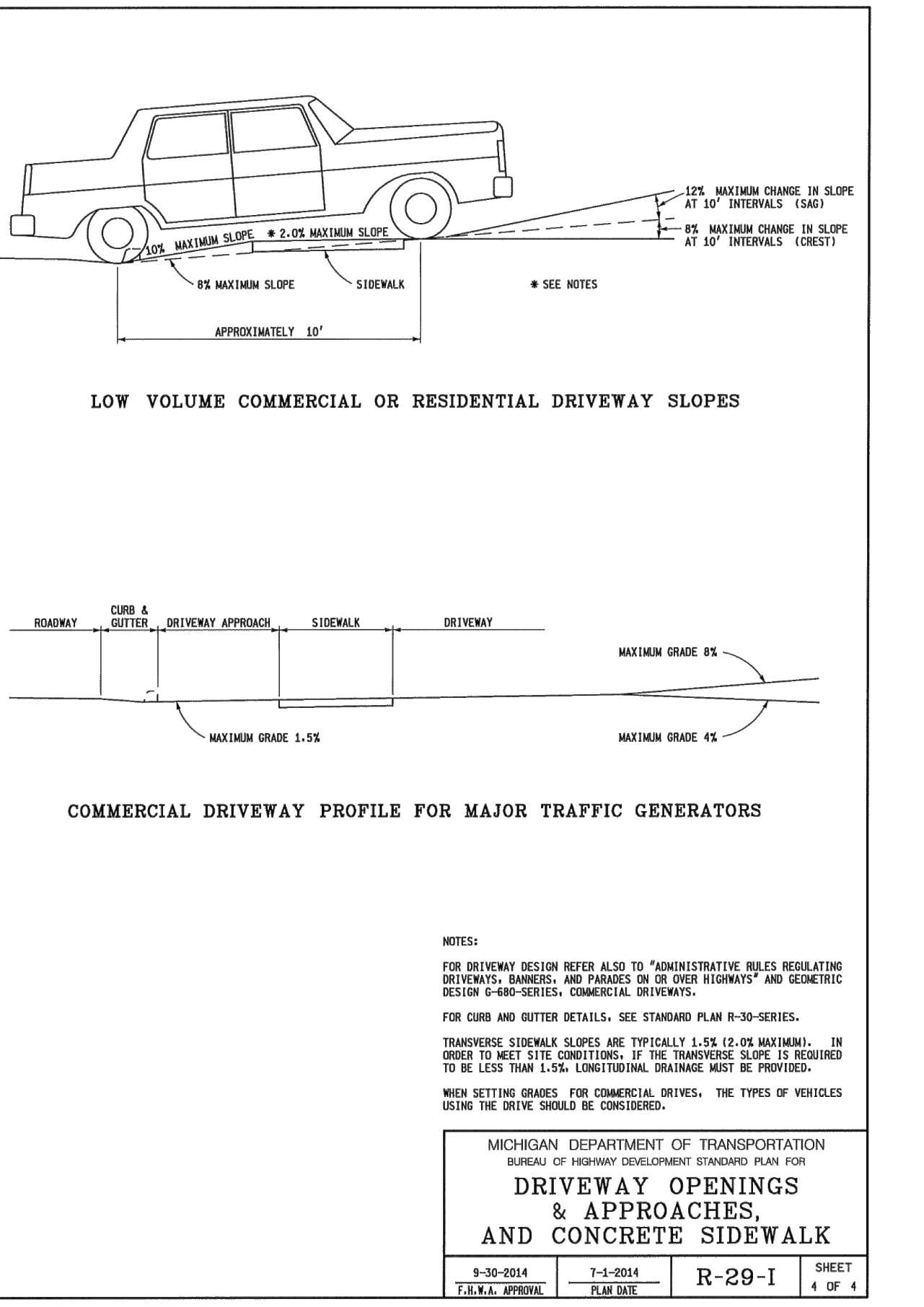
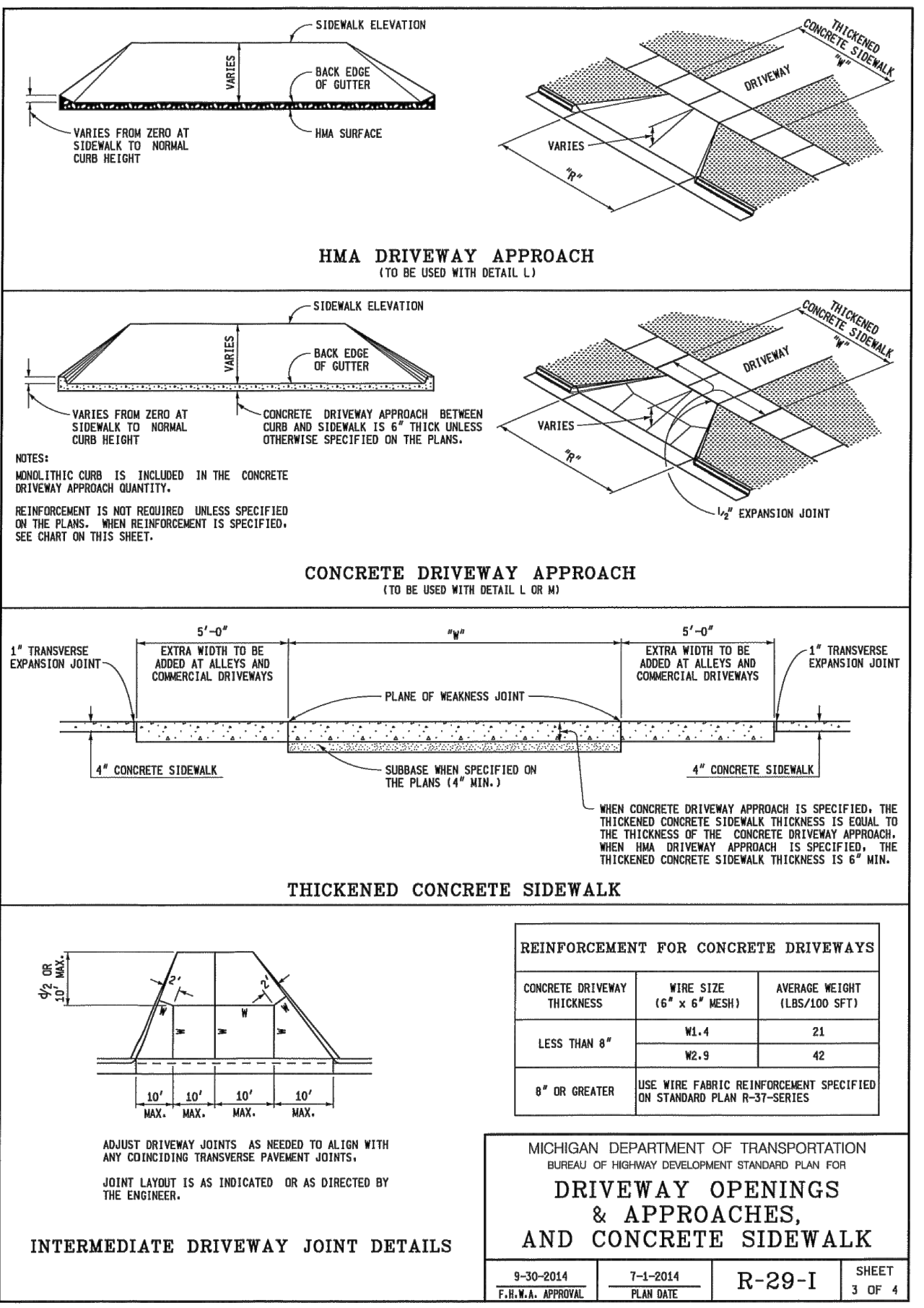
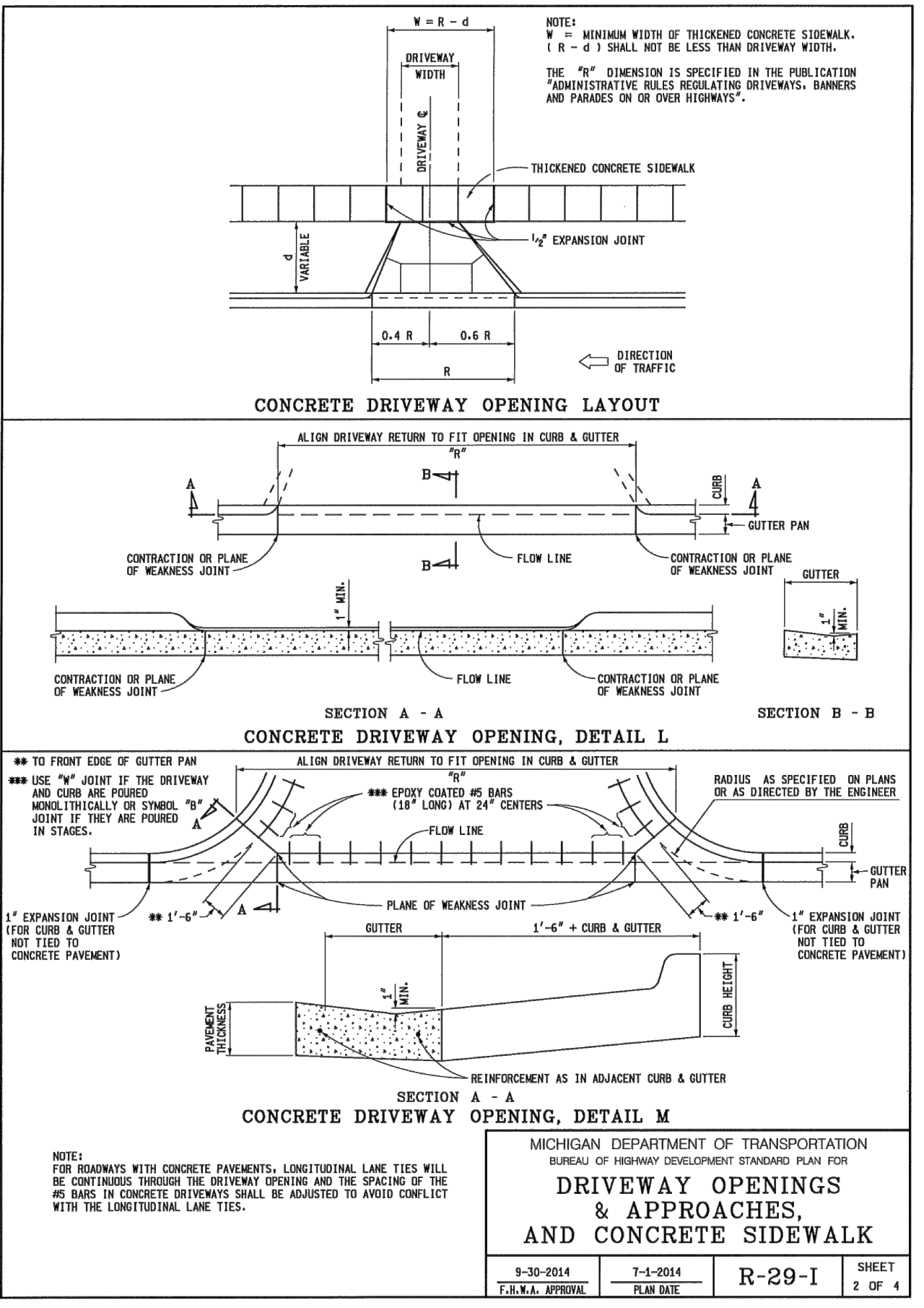
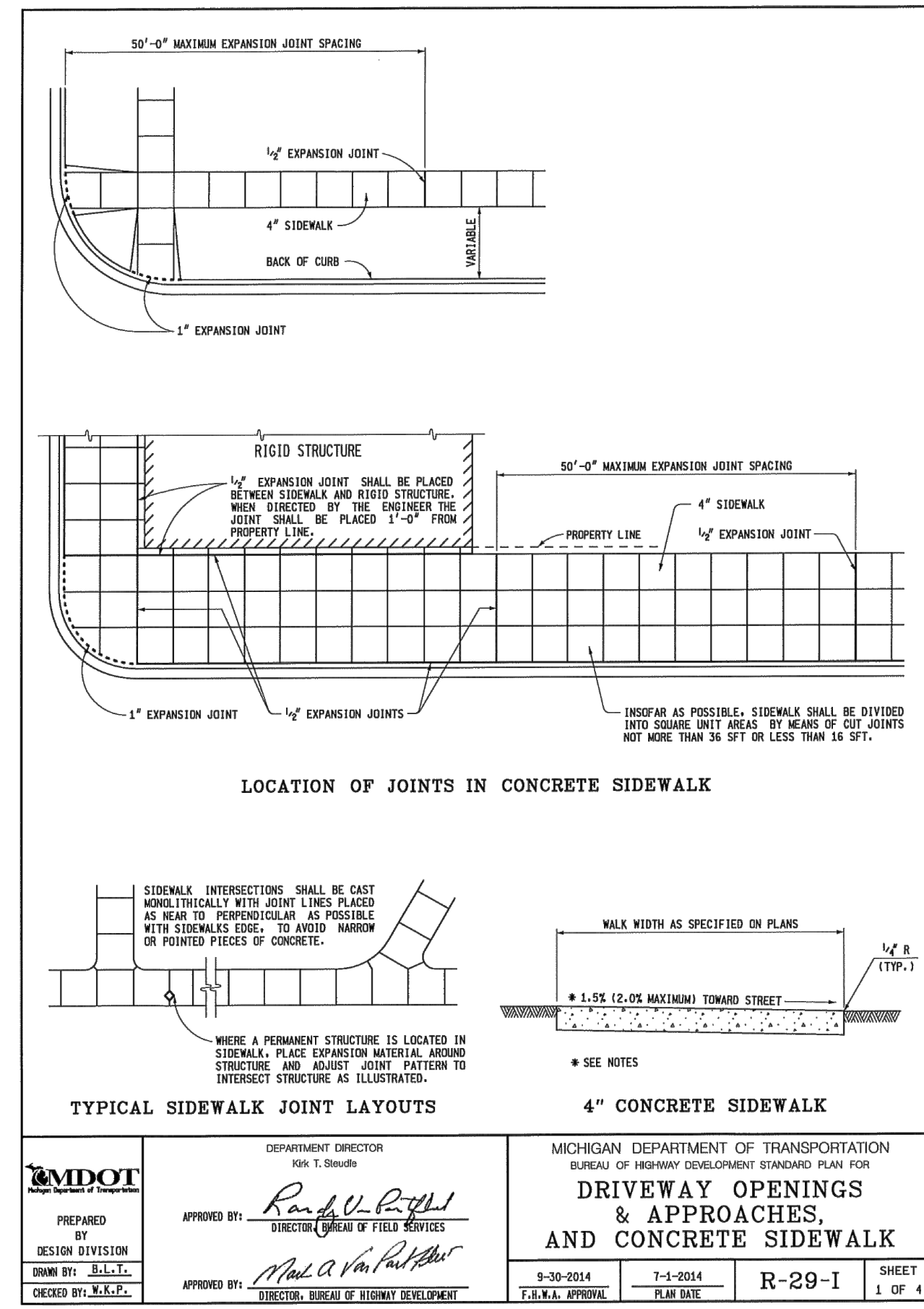
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CITY FILE #21-030 SECTION #9
SCALE: AS SHOWN PROJECT ID: DET-200412

TITLE: **CONSTRUCTION DETAILS**

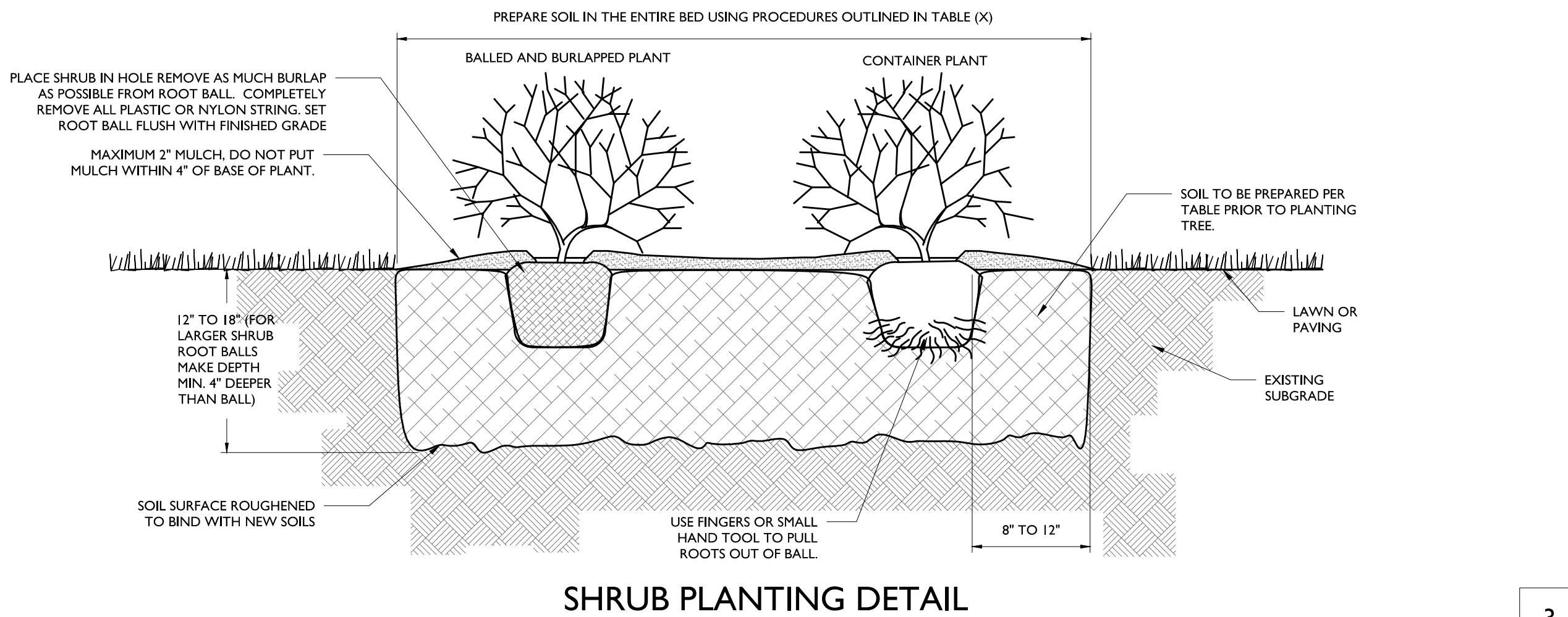
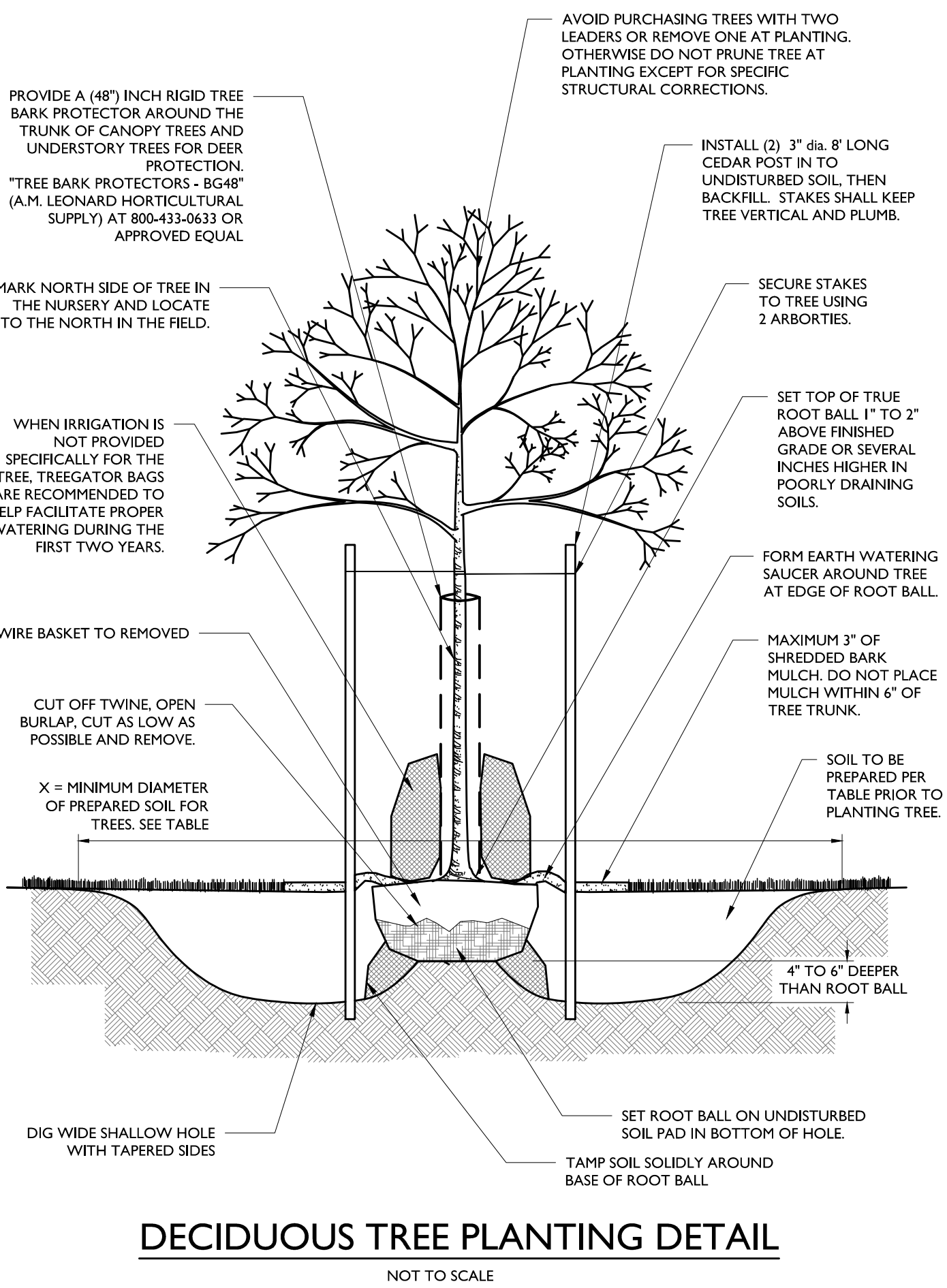
DRAWING: **C-15**

NOT TO SCALE



DRIVEWAY OPENINGS & APPROACHES, AND CONCRETE SIDEWALK (R-29-I)

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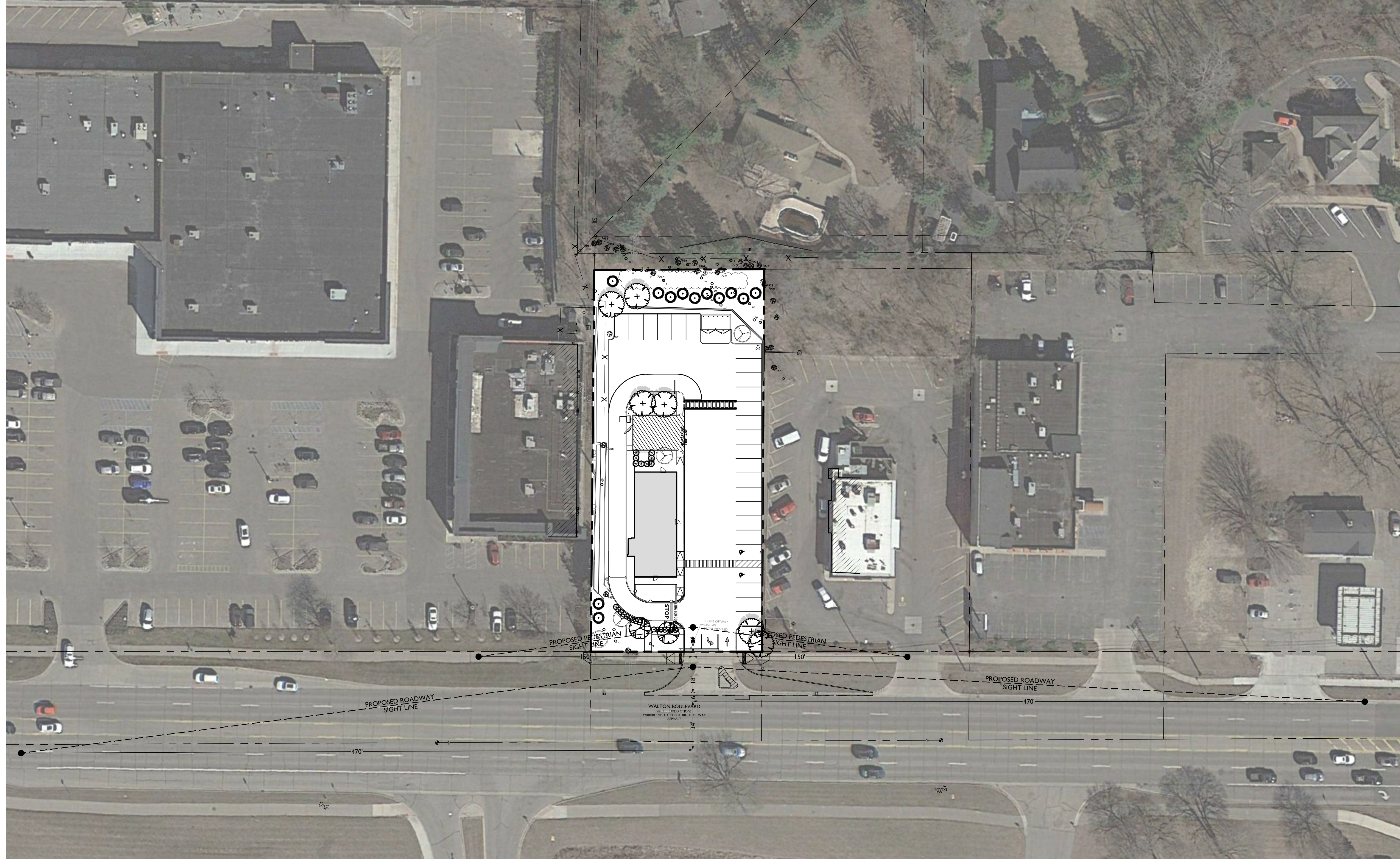
CITY FILE #21-030 SECTION #9
SCALE: AS SHOWN PROJECT ID: DET-200412

TITLE:
**CONSTRUCTION
DETAILS**

DRAWING:

C-16

V:\012000\DET200412\DEVELOPMENT\000491360 WALTON BOULEVARD, ROCHESTER HILLS, MICHIGAN\DET200412\17504PT.DWG

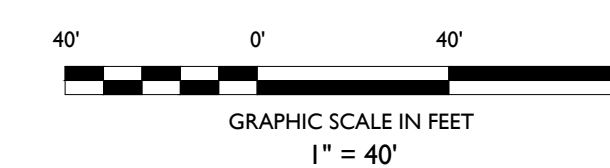


SYMBOL DESCRIPTION

--- PROPERTY LINE

GENERAL NOTES

1. THE CONTRACTOR SHALL VERIFY AND FAMILIARIZE THEMSELVES WITH THE EXISTING SITE CONDITIONS AND THE PROPOSED SCOPE OF WORK (INCLUDING DIMENSIONS, LAYOUT, ETC.) PRIOR TO INITIATING THE IMPROVEMENTS IDENTIFIED WITHIN THESE DOCUMENTS. SHOULD ANY DISCREPANCY BE FOUND BETWEEN THE EXISTING SITE CONDITIONS AND THE PROPOSED WORK THE CONTRACTOR SHALL NOTIFY STONEFIELD ENGINEERING & DESIGN, LLC PRIOR TO THE START OF CONSTRUCTION.
2. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS AND ENSURE THAT ALL REQUIRED APPROVALS HAVE BEEN OBTAINED PRIOR TO THE START OF CONSTRUCTION. COPIES OF ALL REQUIRED PERMITS AND APPROVALS SHALL BE KEPT ON SITE AT ALL TIMES DURING CONSTRUCTION.
3. ALL CONTRACTORS WILL, TO THE FULLEST EXTENT PERMITTED BY LAW, INDEMNIFY AND HOLD HARMLESS STONEFIELD ENGINEERING & DESIGN, LLC, AND ITS SUB-CONSULTANTS FROM AND AGAINST ANY DAMAGES AND LIABILITIES INCLUDING ATTORNEY'S FEES ARISING OUT OF CLAIMS CONNECTED TO THE PROJECT AS A RESULT OF NOT CARRYING THE PROPER INSURANCE FOR WORKERS COMPENSATION, LIABILITY INSURANCE, AND LIMITS OF COMMERCIAL GENERAL LIABILITY INSURANCE.
4. THE CONTRACTOR SHALL NOT DEVIATE FROM THE PROPOSED IMPROVEMENTS IDENTIFIED WITHIN THIS PLAN SET UNLESS APPROVAL IS PROVIDED IN WRITING BY STONEFIELD ENGINEERING & DESIGN, LLC.
5. THE CONTRACTOR IS RESPONSIBLE TO DETERMINE THE MEANS AND METHODS OF CONSTRUCTION.
6. THE CONTRACTOR SHALL NOT PERFORM ANY WORK OR CAUSE DISTURBANCE ON A PRIVATE PROPERTY NOT CONTROLLED BY THE PERSON OR ENTITY WHO HAS AUTHORIZED THE WORK WITHOUT PRIOR WRITTEN CONSENT FROM THE OWNER OF THE PRIVATE PROPERTY.
7. THE CONTRACTOR IS RESPONSIBLE TO RESTORE ANY DAMAGED OR UNDERMINED STRUCTURE OR SITE FEATURE THAT IS IDENTIFIED TO REMAIN ON THE PLAN SET. ALL REPAIRS SHALL USE NEW MATERIALS TO RESTORE THE FEATURE TO ITS EXISTING CONDITION AT THE CONTRACTOR'S EXPENSE.
8. CONTRACTOR IS RESPONSIBLE TO PROVIDE THE APPROPRIATE SHOP DRAWINGS, PRODUCT DATA, AND OTHER REQUIRED SUBMITTALS FOR REVIEW. STONEFIELD ENGINEERING & DESIGN, LLC, WILL REVIEW THE SUBMITTALS IN ACCORDANCE WITH THE DESIGN INTENT AS REFLECTED WITHIN THE PLAN SET.
9. THE CONTRACTOR IS RESPONSIBLE FOR TRAFFIC CONTROL IN ACCORDANCE WITH MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION.
10. THE CONTRACTOR IS REQUIRED TO PERFORM ALL WORK IN THE PUBLIC RIGHT-OF-WAY IN ACCORDANCE WITH THE APPROPRIATE GOVERNING AUTHORITY AND SHALL BE RESPONSIBLE FOR THE PROCUREMENT OF STREET OPENING PERMITS.
11. THE CONTRACTOR IS REQUIRED TO RETAIN AN OSHA CERTIFIED SAFETY INSPECTOR TO BE PRESENT ON SITE AT ALL TIMES DURING CONSTRUCTION & DEMOLITION ACTIVITIES.
12. SHOULD AN EMPLOYEE OF STONEFIELD ENGINEERING & DESIGN, LLC, BE PRESENT ON SITE AT ANY TIME DURING CONSTRUCTION, IT DOES NOT RELIEVE THE CONTRACTOR OF ANY OF THE RESPONSIBILITIES AND REQUIREMENTS LISTED IN THE NOTES WITHIN THIS PLAN SET.



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1360 WALTON BLVD

PROPOSED STARBUCKS

STARBUCKS logo

PARCEL ID: 15-09-476-030
1360 WALTON BOULEVARD
CITY OF ROCHESTER HILLS
OAKLAND COUNTY, MICHIGAN

STATE OF MICHIGAN
MICHIGAN BOARD OF PROFESSIONAL ENGINEERS
MICHIGAN PROFESSIONAL ENGINEER
LICENSED PROFESSIONAL ENGINEER

STONEFIELD
engineering & design

CITY FILE #21-030 SECTION #9
SCALE: 1" = 40' PROJECT ID: DET-200412

TITLE:
SIGHT DISTANCE PLAN

DRAWING:
C-17