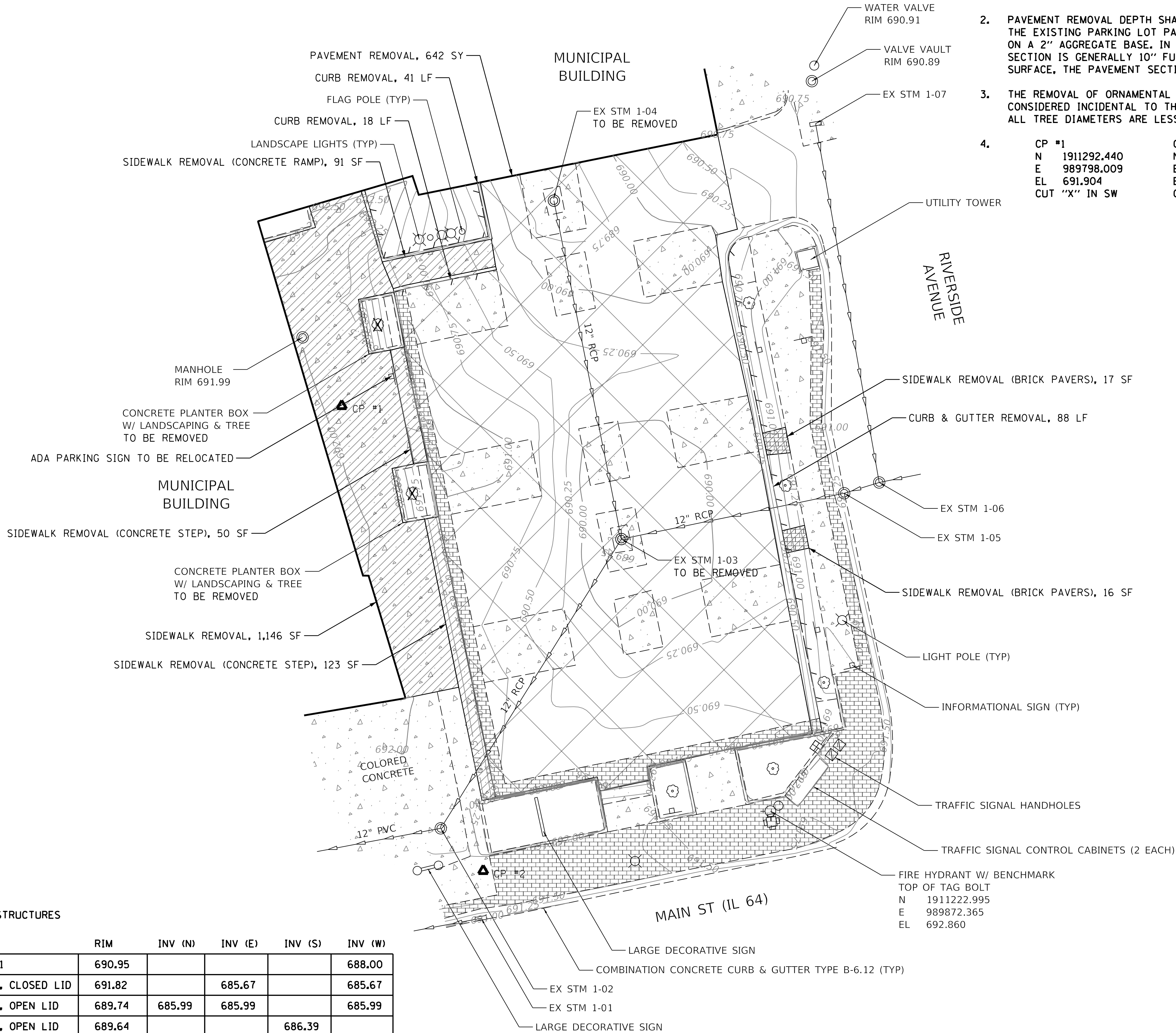


PLOT DATE : 6/13/2019
DRAWN BY : J. Kephart
CHECKED BY : J. Kephart
FILE NAME : W:\Projects\2018\180278 Checkerboard\Parking\at\cadd\Civil\Dgn\Sht\180278-ev.dgn

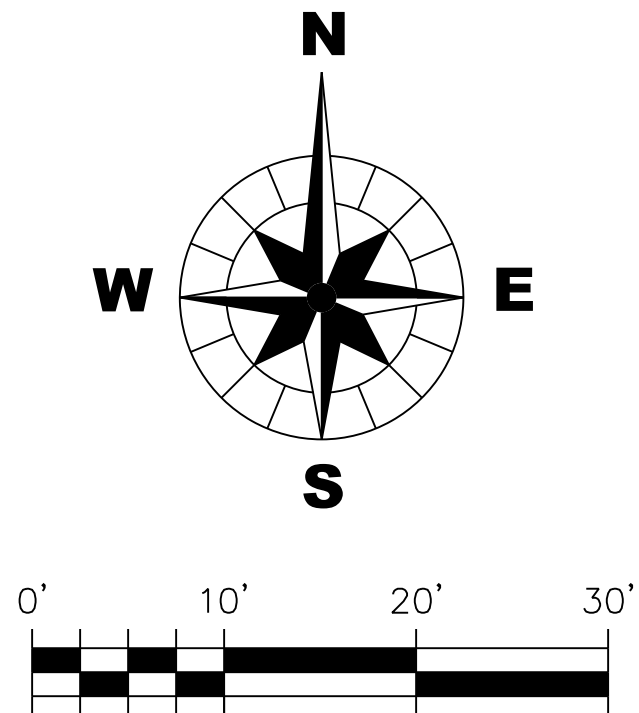
SCHEDULE OF EXISTING STORM SEWER STRUCTURES

STR NO.	STR TYPE	DIA.	F&G	RIM	INV (N)	INV (E)	INV (S)	INV (W)
STM 1-01	INLET	2'	TYPE 11	690.95				688.00
STM 1-02	MANHOLE	4'	TYPE 1, CLOSED LID	691.82		685.67		685.67
STM 1-03	MANHOLE	4'	TYPE 1, OPEN LID	689.74	685.99	685.99		685.99
STM 1-04	MANHOLE	4'	TYPE 1, OPEN LID	689.64			686.39	
STM 1-05	MANHOLE	4'	TYPE 11	691.06		686.06		686.06
STM 1-06	MANHOLE	4'	TYPE 1, CLOSED LID	691.14	686.44	688.49		686.04
STM 1-07	INLET	2'	TYPE 1, OPEN LID	690.83			687.18	



NOTES:

- EXISTING BASE INFORMATION IS THE RESULT OF A TOPOGRAPHIC SURVEY PERFORMED BY WBK ENGINEERING, LLC ON DECEMBER 20TH, 2018.
- PAVEMENT REMOVAL DEPTH SHALL BE 10" FOR THE ENTIRE PARKING LOT PAVEMENT. THE EXISTING PARKING LOT PAVEMENT GENERALLY CONSISTS OF A 10" PAVEMENT ON A 2" AGGREGATE BASE. IN AREAS WITH A CONCRETE SURFACE, THE PAVEMENT SECTION IS GENERALLY 10" FULL-DEPTH CONCRETE. IN AREAS WITH A BITUMINOUS SURFACE, THE PAVEMENT SECTION IS GENERALLY 2" ASPHALT ON 8" CONCRETE.
- THE REMOVAL OF ORNAMENTAL TREES WITHIN THE LANDSCAPING BEDS SHALL BE CONSIDERED INCIDENTAL TO THE PAY ITEM "CONCRETE PLANTER BED REMOVAL". ALL TREE DIAMETERS ARE LESS THAN 6".
- | | | |
|---------------|---------------|-------------------------|
| CP #1 | CP #2 | CITY BENCHMARK "STC 10" |
| N 1911292.440 | N 1911211.513 | N 1912051.776 |
| E 989798.009 | E 989822.642 | E 989716.063 |
| EL 691.904 | EL 691.641 | EL 695.26 |
| CUT "X" IN SW | CUT "X" IN SW | 2.5" ALUMINUM DISK |



CHECKERBOARD LOT
SITE IMPROVEMENTS
EXISTING CONDITIONS
& REMOVAL PLAN

DSGN.	JLB	JLB	JLB	VDP	SCALE : AS SHOWN	NATURE OF REVISION

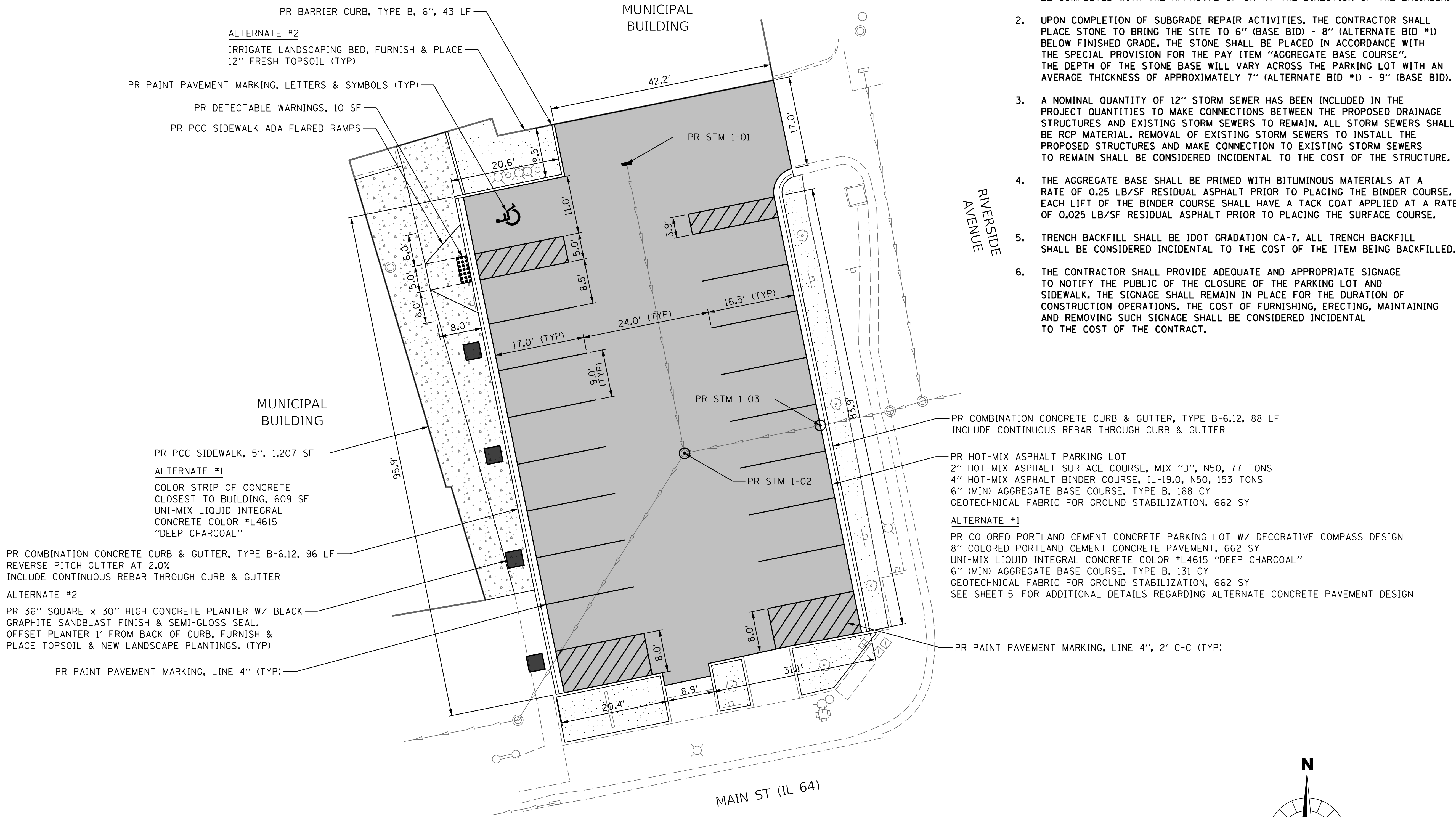
CITY OF ST. CHARLES
2 EAST MAIN STREET
ST. CHARLES, IL 60174
630.377.4405

WBK ENGINEERING, LLC
116 WEST MAIN STREET, SUITE 201
ST. CHARLES, ILLINOIS 60174
(630) 443-7755



PROJECT NO. 18-0278
DATE : 06/13/19
DRAWING NO. **EX1**
SHEET

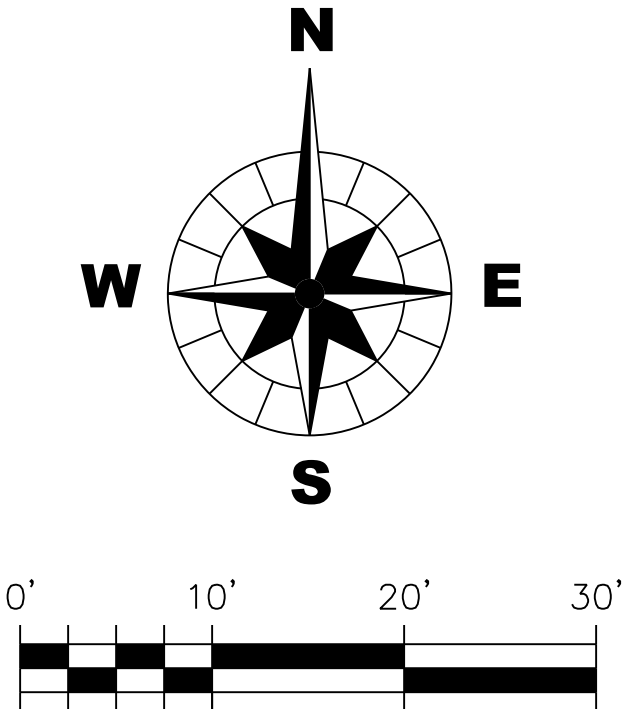
PLOT DATE : 6/13/2019
DRAWN BY : J. K. Kephtham
CHECKED BY : J. K. Kephtham
FILE NAME : W:\Projects\2018\180278 CheckerboardParkingLot\Acdd\Civil\Dgn\Sht\180278.gndgn



- NOTES:
- UPON COMPLETION OF PAVEMENT REMOVAL ACTIVITIES, THE CONTRACTOR SHALL PROOFROLL THE REMAINING AGGREGATE BASE AND SUBGRADE AND REPAIR ANY SOFT SPOTS IN ACCORDANCE WITH THE SPECIAL PROVISIONS FOR THE PAY ITEMS "REMOVAL AND DISPOSAL OF UNSUITABLE MATERIALS" AND "AGGREGATE SUBGRADE IMPROVEMENT". REPAIRS SHALL BE TO A MINIMUM DEPTH OF 12". ALL REPAIRS SHALL BE COMPLETED WITH THE APPROVAL OF OR AT THE DIRECTION OF THE ENGINEER.
 - UPON COMPLETION OF SUBGRADE REPAIR ACTIVITIES, THE CONTRACTOR SHALL PLACE STONE TO BRING THE SITE TO 6" (BASE BID) - 8" (ALTERNATE BID #1) BELOW FINISHED GRADE. THE STONE SHALL BE PLACED IN ACCORDANCE WITH THE SPECIAL PROVISION FOR THE PAY ITEM "AGGREGATE BASE COURSE". THE DEPTH OF THE STONE BASE WILL VARY ACROSS THE PARKING LOT WITH AN AVERAGE THICKNESS OF APPROXIMATELY 7" (ALTERNATE BID #1) - 9" (BASE BID).
 - A NOMINAL QUANTITY OF 12" STORM SEWER HAS BEEN INCLUDED IN THE PROJECT QUANTITIES TO MAKE CONNECTIONS BETWEEN THE PROPOSED DRAINAGE STRUCTURES AND EXISTING STORM SEWERS TO REMAIN. ALL STORM SEWERS SHALL BE RCP MATERIAL. REMOVAL OF EXISTING STORM SEWERS TO INSTALL THE PROPOSED STRUCTURES AND MAKE CONNECTION TO EXISTING STORM SEWERS TO REMAIN SHALL BE CONSIDERED INCIDENTAL TO THE COST OF THE STRUCTURE.
 - THE AGGREGATE BASE SHALL BE PRIMED WITH BITUMINOUS MATERIALS AT A RATE OF 0.25 LB/SF RESIDUAL ASPHALT PRIOR TO PLACING THE BINDER COURSE. EACH LIFT OF THE BINDER COURSE SHALL HAVE A TACK COAT APPLIED AT A RATE OF 0.025 LB/SF RESIDUAL ASPHALT PRIOR TO PLACING THE SURFACE COURSE.
 - TRENCH BACKFILL SHALL BE IDOT GRADATION CA-7. ALL TRENCH BACKFILL SHALL BE CONSIDERED INCIDENTAL TO THE COST OF THE ITEM BEING BACKFILLED.
 - THE CONTRACTOR SHALL PROVIDE ADEQUATE AND APPROPRIATE SIGNAGE TO NOTIFY THE PUBLIC OF THE CLOSURE OF THE PARKING LOT AND SIDEWALK. THE SIGNAGE SHALL REMAIN IN PLACE FOR THE DURATION OF CONSTRUCTION OPERATIONS. THE COST OF FURNISHING, ERECTING, MAINTAINING AND REMOVING SUCH SIGNAGE SHALL BE CONSIDERED INCIDENTAL TO THE COST OF THE CONTRACT.

SCHEDULE OF PROPOSED STORM SEWER STRUCTURES

STR NO.	STR TYPE	DIA.	F&G	RIM	INV (N)	INV (E)	INV (S)	INV (W)
STM 1-01	INLET	2'	TYPE 1, OPEN LID	690.10			686.36	
STM 1-02	MANHOLE	4'	TYPE 1, CLOSED LID	690.67	685.99	685.99		685.99
STM 1-03	MANHOLE	4'	TYPE 11	690.11		686.04		686.04



CHECKERBOARD LOT
SITE IMPROVEMENTS

GEOMETRIC PLAN

CLIENT :

CITY OF ST. CHARLES
2 EAST MAIN STREET
ST. CHARLES, IL 60174
630.377.4405

WBK engineering

WBK ENGINEERING, LLC
116 WEST MAIN STREET, SUITE 201
ST. CHARLES, ILLINOIS 60174
(630) 443-7755

PROJECT NO. 18-0278

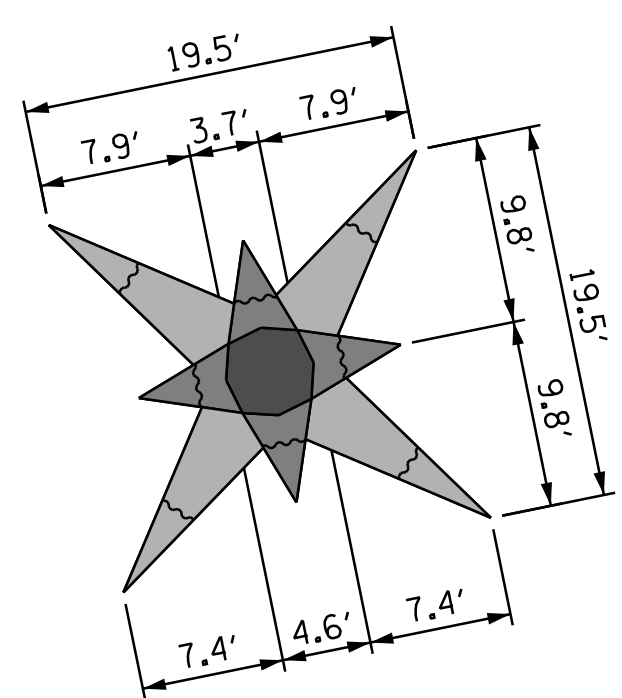
DATE : 06/13/19

DRAWING NO. **GM1**

SHEET

4 OF 10

COMPASS DESIGN DETAIL



LEGEND

- UNI-MIX LIQUID INTEGRAL CONCRETE COLOR *L0448 "PUTTY"
- UNI-MIX LIQUID INTEGRAL CONCRETE COLOR *L0961 "HARVEST WHEAT"
- UNI-MIX LIQUID INTEGRAL CONCRETE COLOR *L0262 "SALT MARSH GRAY"

MUNICIPAL BUILDING

MUNICIPAL BUILDING

RIVERSIDE AVENUE

MAIN ST (IL 64)

- NOTES:
- UPON COMPLETION OF PAVEMENT REMOVAL ACTIVITIES, THE CONTRACTOR SHALL PROOFROLL THE REMAINING AGGREGATE BASE AND SUBGRADE AND REPAIR ANY SOFT SPOTS IN ACCORDANCE WITH THE SPECIAL PROVISIONS FOR THE PAY ITEMS "REMOVAL AND DISPOSAL OF UNSUITABLE MATERIALS" AND "AGGREGATE SUBGRADE IMPROVEMENT". REPAIRS SHALL BE TO A MINIMUM DEPTH OF 12". ALL REPAIRS SHALL BE COMPLETED WITH THE APPROVAL OF OR AT THE DIRECTION OF THE ENGINEER.
 - UPON COMPLETION OF SUBGRADE REPAIR ACTIVITIES, THE CONTRACTOR SHALL PLACE STONE TO BRING THE SITE TO 6" (BASE BID) - 8" (ALTERNATE BID #1) BELOW FINISHED GRADE. THE STONE SHALL BE PLACED IN ACCORDANCE WITH THE SPECIAL PROVISION FOR THE PAY ITEM "AGGREGATE BASE COURSE". THE DEPTH OF THE STONE BASE WILL VARY ACROSS THE PARKING LOT WITH AN AVERAGE THICKNESS OF APPROXIMATELY 7" (ALTERNATE BID #1) - 9" (BASE BID).
 - THE COST OF SAWCUTTING JOINTS SHALL BE CONSIDERED INCIDENTAL TO THE COST OF THE PAY ITEM PORTLAND CEMENT CONCRETE PAVEMENT 8".
 - THE CONCRETE PAVEMENT SHALL BE REINFORCED IN ACCORDANCE WITH IDOT STANDARDS 420001 AND 420101. NO. 6 TIE BARS SHALL BE PLACED ALONG EACH LONGITUDINAL JOINT ON 36" CENTERS. DOWEL BARS SHALL BE PLACED ALONG EACH TRANSVERSE CONTRACTION JOINT ON 12" CENTERS. TIE BARS AND DOWEL BARS SHALL BE PLACED TO A DEPTH OF 4" BELOW FINISHED GRADE. THE COST OF REINFORCING THE CONCRETE PAVEMENT SHALL BE CONSIDERED INCIDENTAL TO THE COST OF THE PAY ITEM PORTLAND CEMENT CONCRETE PAVEMENT 8".

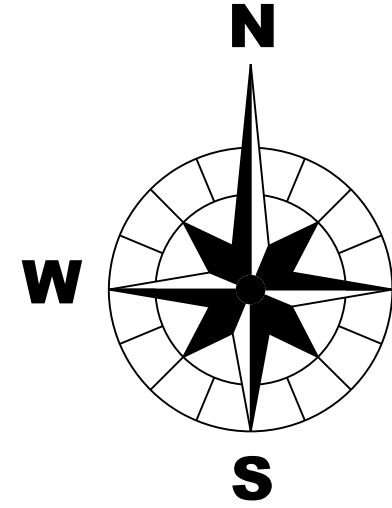
PR MULTI-COLORED COMPASS IN CONCRETE PAVEMENT WITH INTERNALLY SAWED CONTRACTION JOINTS (REFER TO DETAIL FOR ADDITIONAL DETAILS)

PR SAWED LONGITUDINAL CONSTRUCTION JOINT (TYP)

PR SAWED TRANSVERSE CONTRACTION JOINT CUT THROUGH BACK OF CURB (TYP)

ALTERNATE #1

PR COLORED PORTLAND CEMENT CONCRETE PARKING LOT W/ DECORATIVE COMPASS DESIGN
UNI-MIX LIQUID INTEGRAL CONCRETE COLOR *L4615 "DEEP CHARCOAL"
8" COLORED PORTLAND CEMENT CONCRETE PAVEMENT, 662 SY
6" (MIN) AGGREGATE BASE COURSE, TYPE B, 131 CY
GEOTECHNICAL FABRIC FOR GROUND STABILIZATION, 662 SY



CHECKERBOARD LOT
SITE IMPROVEMENTS
JOINTING PLAN

NO.	DATE	NATURE OF REVISION
1		
2		
3		
4		
5		
6		
7		
8		

CITY OF ST. CHARLES
2 EAST MAIN STREET
ST. CHARLES, IL 60174
630.377.4405

WBK ENGINEERING, LLC
116 WEST MAIN STREET, SUITE 201
ST. CHARLES, ILLINOIS 60174
(630) 443-7755



PROJECT NO. 18-0278

DATE: 06/13/19

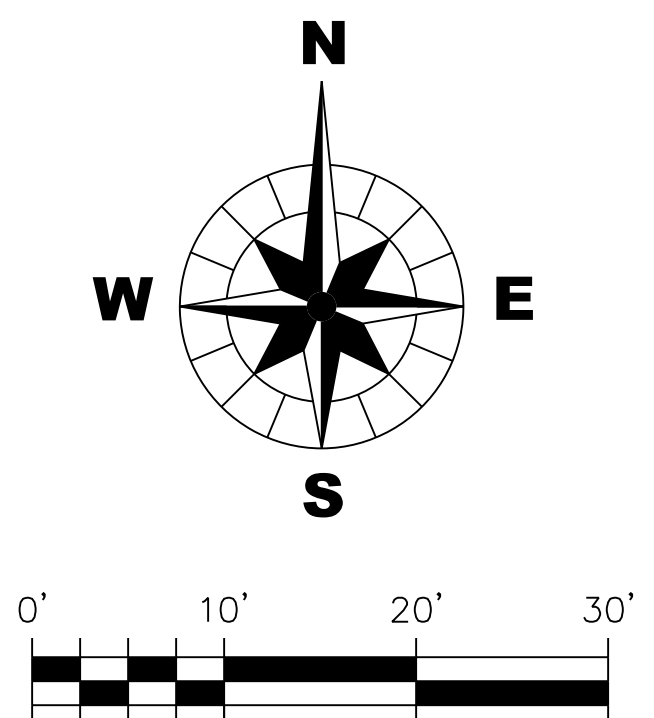
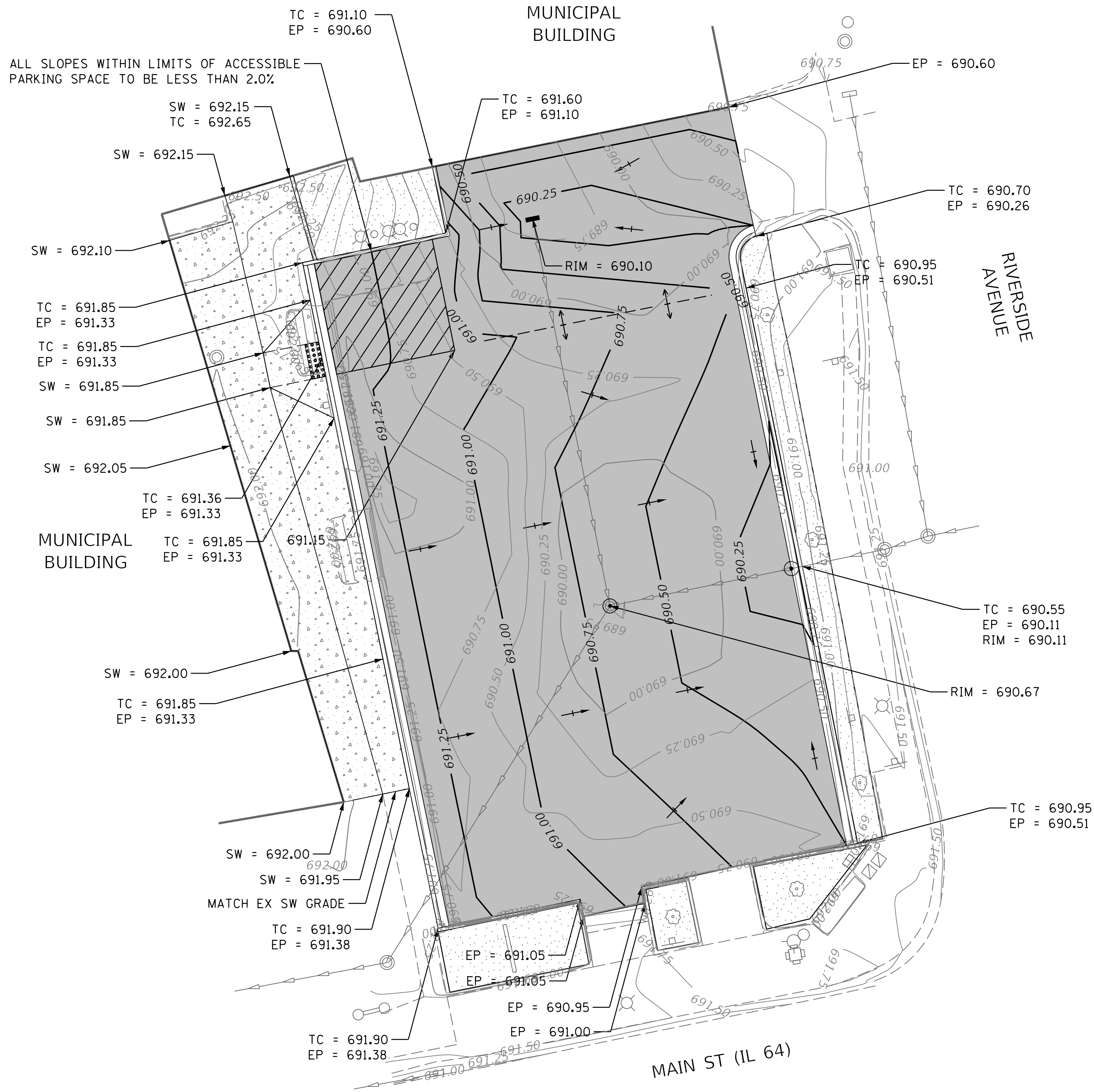
DRAWING NO. JT1

SHEET

5 OF 10

PLOT DATE : 6/13/2019
USER : jtd
FILE NAME : W:\Projects\2018\180278 CheckerboardParkingLot\Acad\Civil\Dgn\Sht\180278-jt.dgn

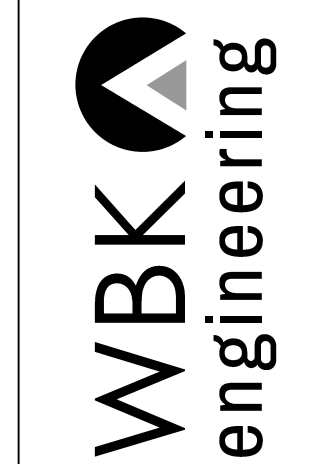
PLOT DATE : 6/13/2019
USER NAME : kperhem
FILE NAME : W:\Projects\2018\180278 Checkerboard\ParkingLot\Acadd\Civil\Dgn\Sht\180278-gr.dgn



NO.	CHECKERBOARD LOT SITE IMPROVEMENTS				NATURE OF REVISION
	DSGN.	JLB	JLB	VDP	
1					
2					
3					
4					
5					
6					
7					
8					

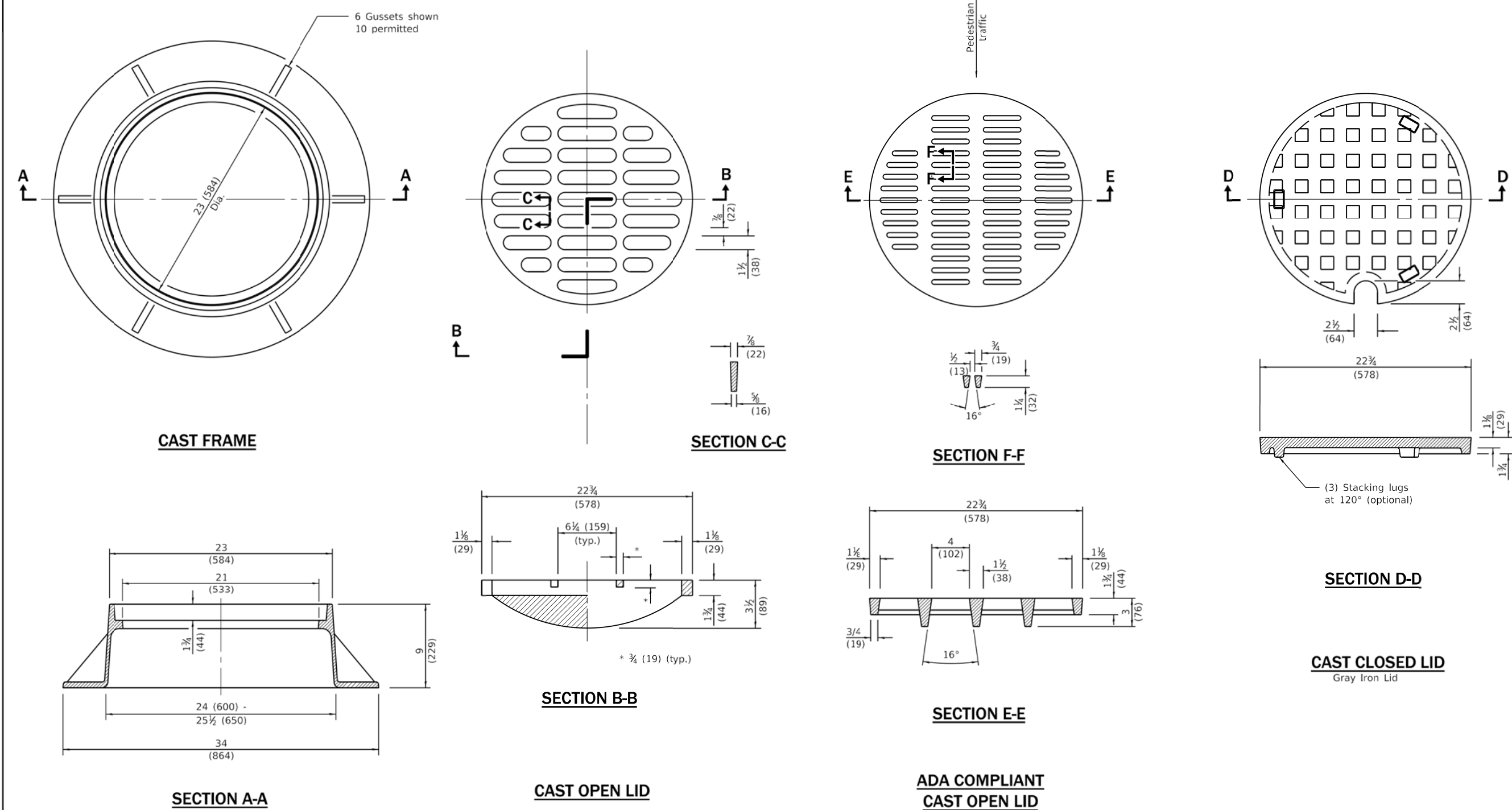
CITY OF ST. CHARLES
2 EAST MAIN STREET
ST. CHARLES, IL 60174
630.377.4405

WBK ENGINEERING, LLC
116 WEST MAIN STREET, SUITE 201
ST. CHARLES, ILLINOIS 60174
(630) 443-7755



PROJECT NO. 18-0278
DATE : 06/13/19
DRAWING NO. **GR1**
SHEET
6 OF 10

PLOT DATE : 6/13/2019
User Name : C:\Users\2018\180278 Checkerboard\Perking\ot\Acadd\Civil\Dgn\Sht\180278-dt.dgn
User Name : 180278



DATE	REVISIONS
1-1-15	Revised dimensioning of frame. Added ADA compliant open lid.
1-1-09	Switched units to English (metric).

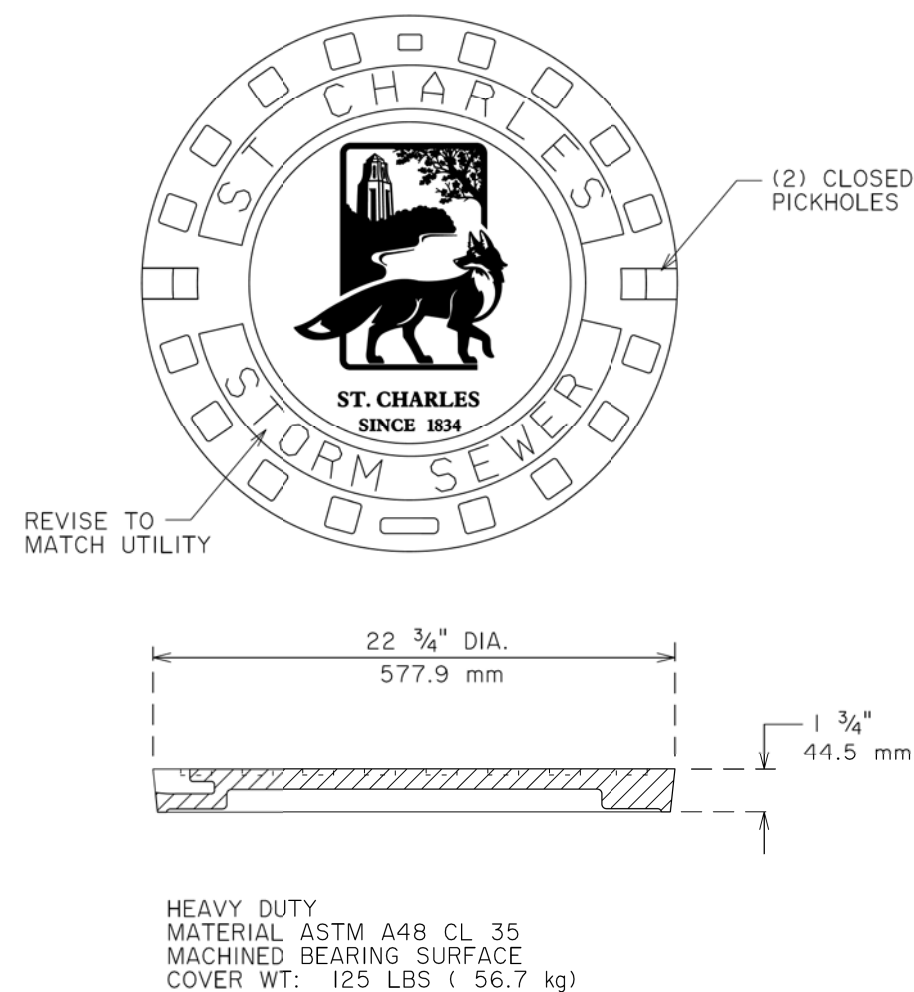
ILLINOIS DEPARTMENT OF TRANSPORTATION	DESIGNER
APPROVED	ENGINEER OF DESIGN AND ENVIRONMENT
DATE	1-1-15

**FRAME AND LIDS
TYPE 1**

STANDARD 604001-04

SPECIAL LETTERED R-1713 HDSI WATER VAULT, SANITARY AND STORM SEWER MANHOLE COVER

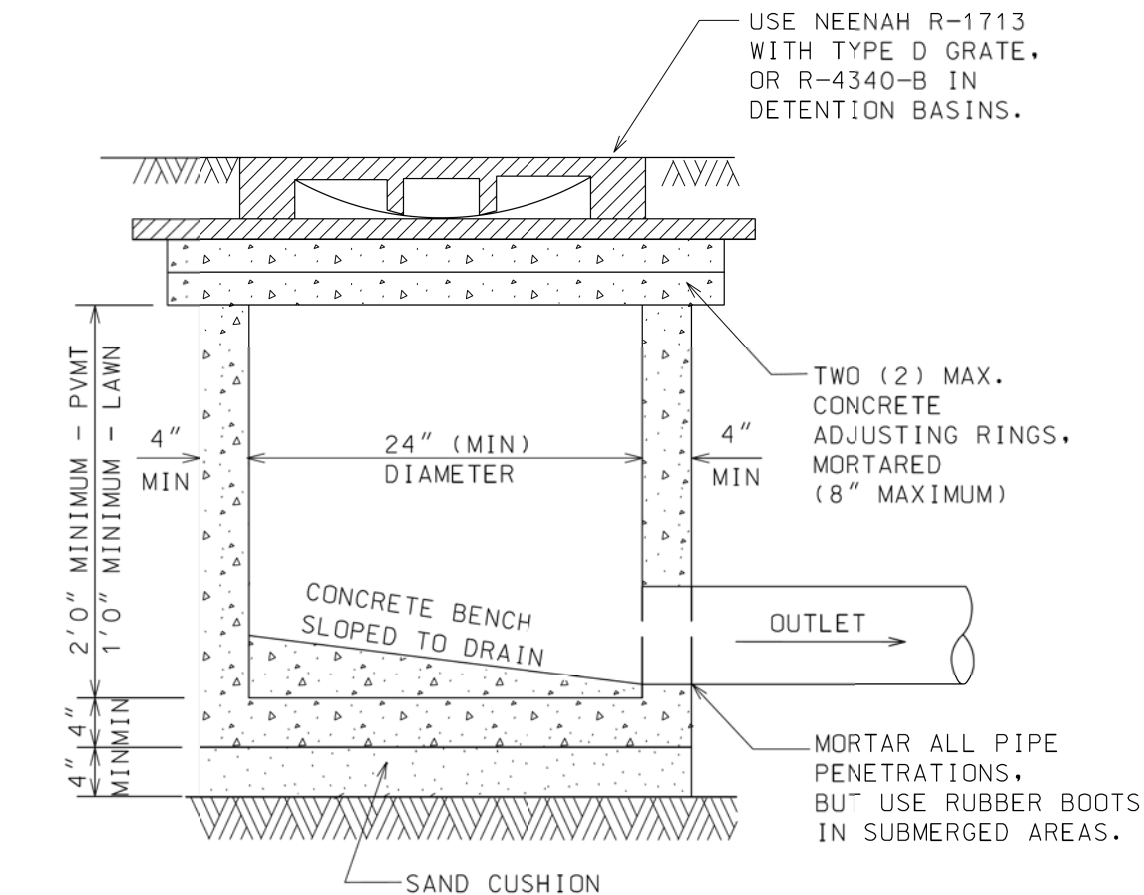
1 1/2" (38.1 mm) LETTERS
(RECESSED FLUSH)



**STANDARD
COVER
DETAIL**

DATE: 11-19-09

NOT TO SCALE



NOTE:

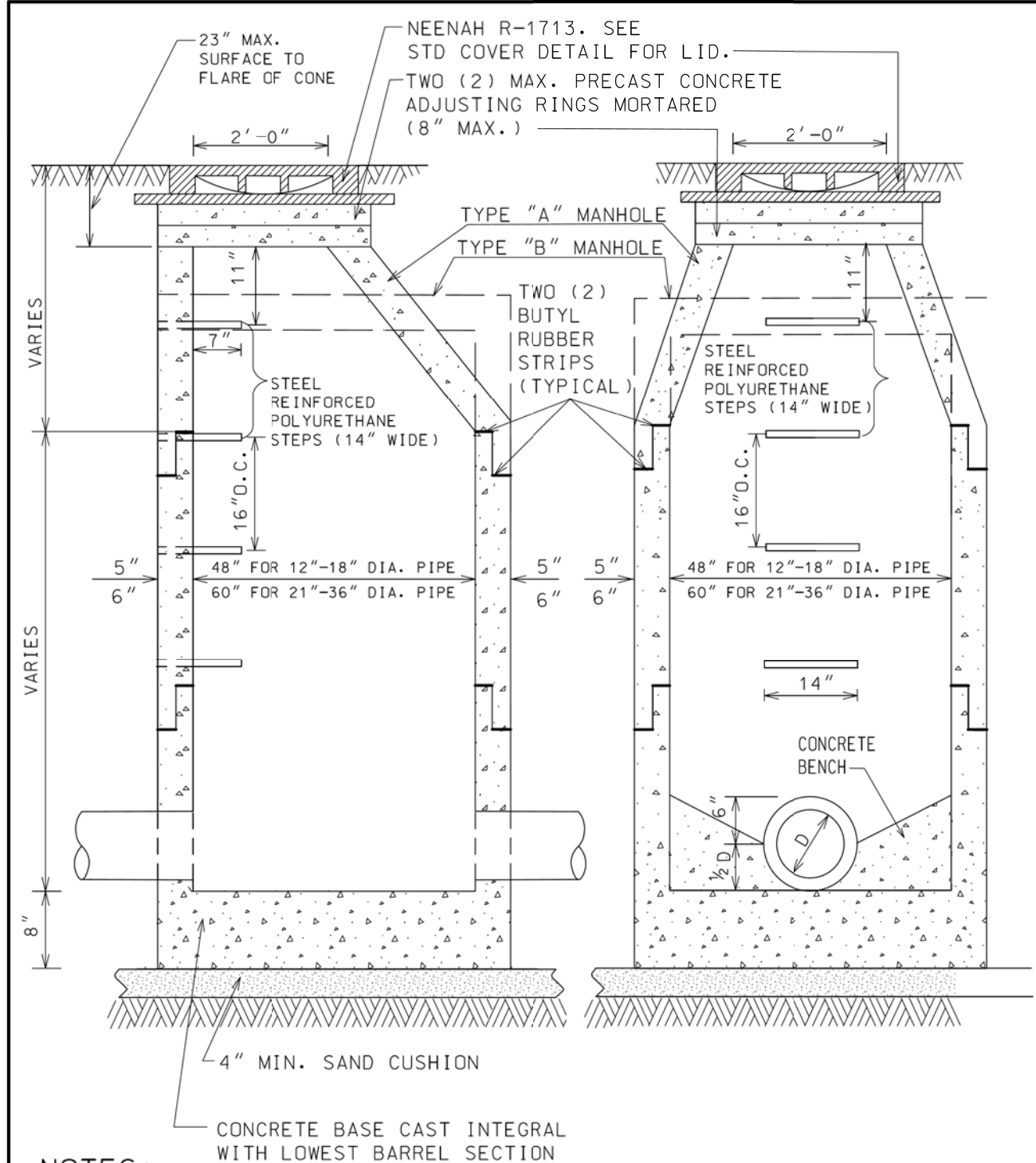
1. INLET TO BE CONSTRUCTED OF PRECAST REINFORCED CONCRETE.
2. INLET MUST CONFORM TO ASTM C-478.
3. NON-PRECAST OPENINGS SHALL BE CORED AND RUBBER BOOTED.
4. MAXIMUM DEPTH FROM INVERT OF OUTLET PIPE TO TOP OF FRAME SHALL NOT EXCEED 42 INCHES. IF DESIGN OR CONSTRUCTION REQUIRES DEPTH BEYOND 42 INCHES, STRUCTURE SHALL BE REVISED TO A 48 INCH DIAMETER TYPE A MANHOLE.

DATE: 3-31-09

**TYPE A INLET
DETAIL**

NOT TO SCALE

E-1



NOTES:

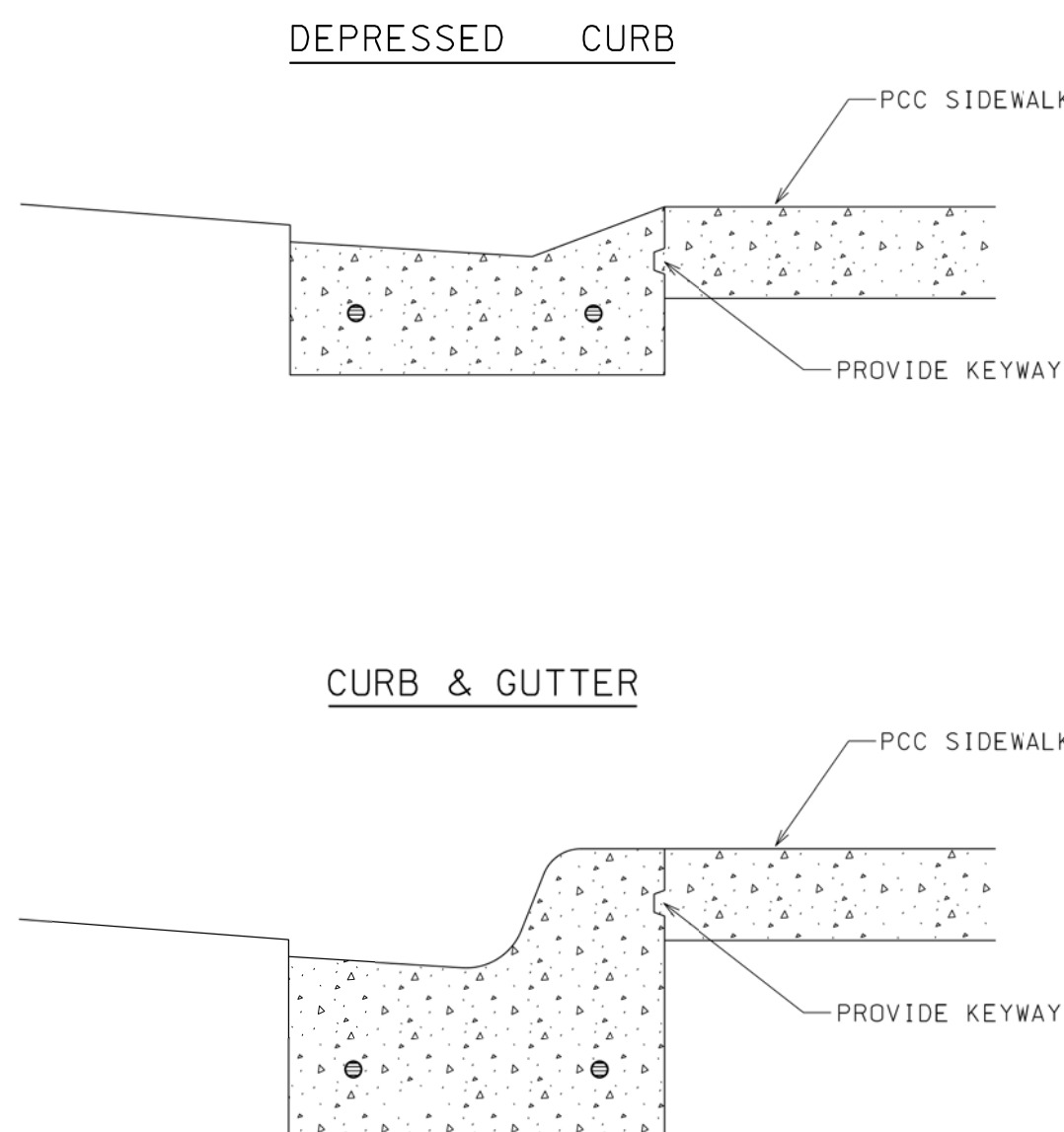
1. MANHOLES MUST CONFORM TO ASTM C-478.
2. MANHOLE SECTIONS TO BE TONGUE AND GROOVED.
3. BENCHES MUST BE PROVIDED IN ALL STORM SEWER MANHOLES.
4. NON-PRECAST OPENINGS SHALL BE CORED AND RUBBER BOOTED.
5. MORTAR ALL PIPE PENETRATIONS INSIDE AND OUTSIDE OF STRUCTURE.
6. IN "SUBMERGED" CONDITIONS, ALL PIPE PENETRATIONS TO BE CORED, RUBBER BOOTED AND INTERIOR MORTARED.
7. PRIOR TO THE PLACEMENT OF FINAL LAYER OF ROADWAY, FRAMES AND ADJUSTING RINGS LOCATED WITHIN PAVED AREAS SHALL BE SET IN AN IDOT APPROVED CONCRETE "SI" MIXTURE.

DATE: 7-27-10

**TYPE
A & B
STORM
MANHOLE
DETAIL**

NOT TO SCALE

B-3



NOTES:

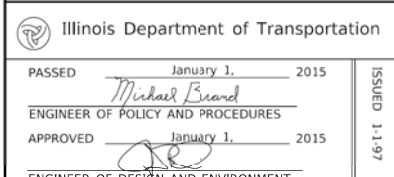
1. SEE TYPICAL DETAIL FOR CURB AND GUTTER FOR CURB DIMENSIONS AND SPECIFICATIONS.

DATE: 3-31-09

SIDEWALK AT CURB AND GUTTER

NOT TO SCALE

G-2



DATE	REVISIONS
1-1-15	Revised dimensions of frame and alternate curb box.
4-1-09	Switched units to English (metric).

**FRAME AND GRATE
TYPE 11**

STANDARD 604051-04

WBK ENGINEERING, LLC
116 WEST MAIN STREET, SUITE 201
ST. CHARLES, ILLINOIS 60174
(630) 443-7755

WBK
engineering

PROJECT NO. 18-0278
DATE: 06/13/19
DRAWING NO. **DT1**
SHEET

7 OF 10

CITY OF ST. CHARLES
2 EAST MAIN STREET
ST. CHARLES, IL 60174
630.377.4405

CLIENT :

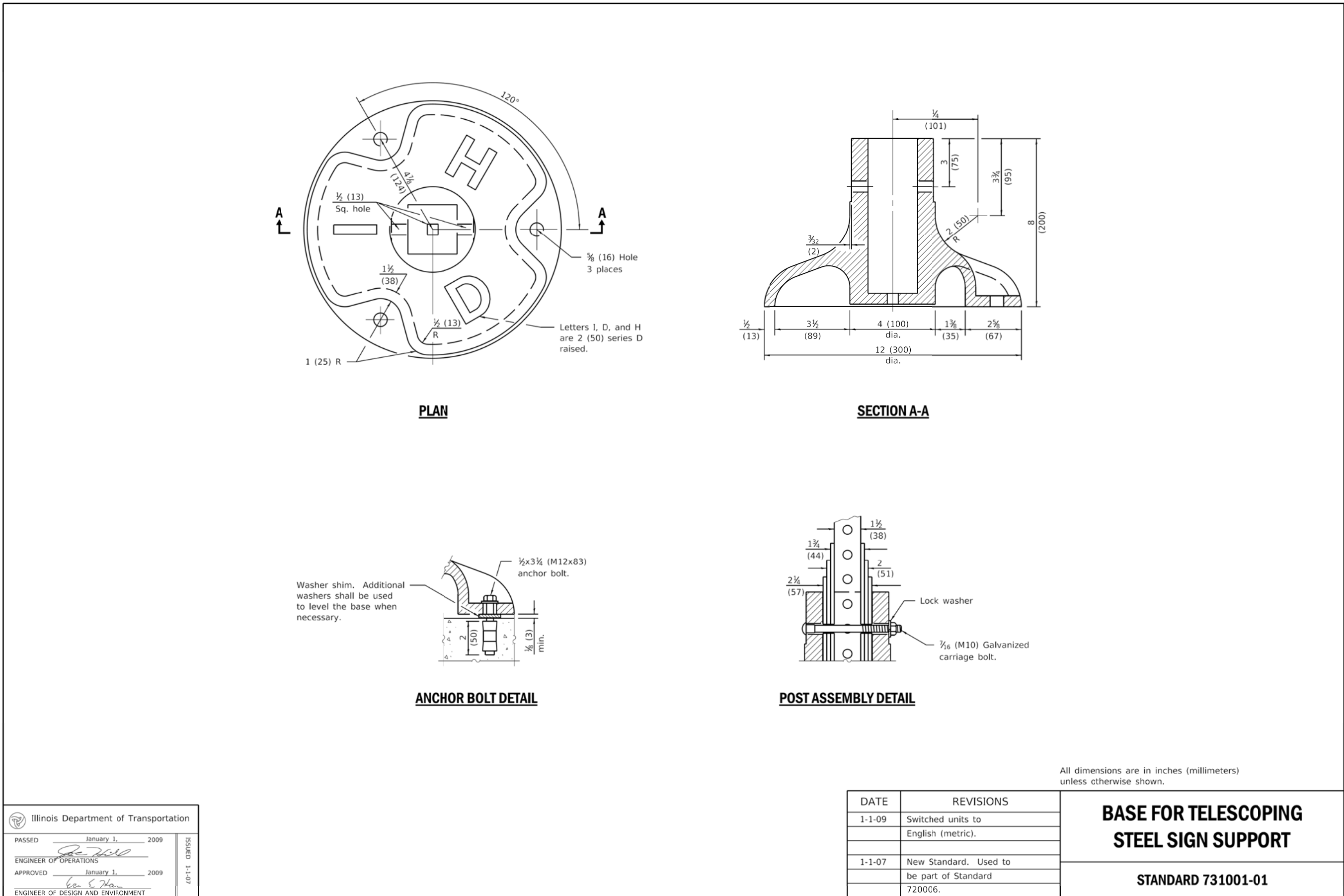
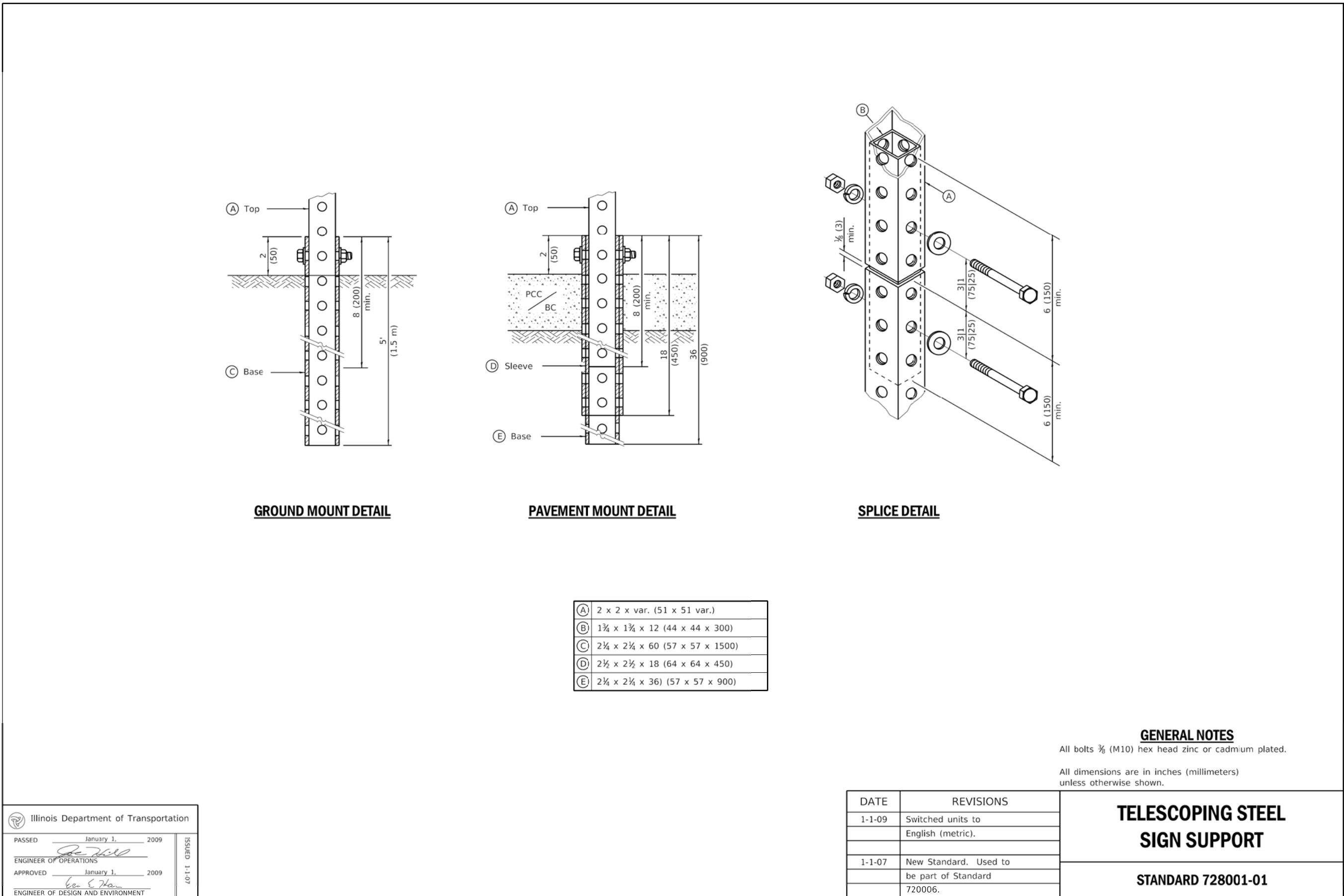
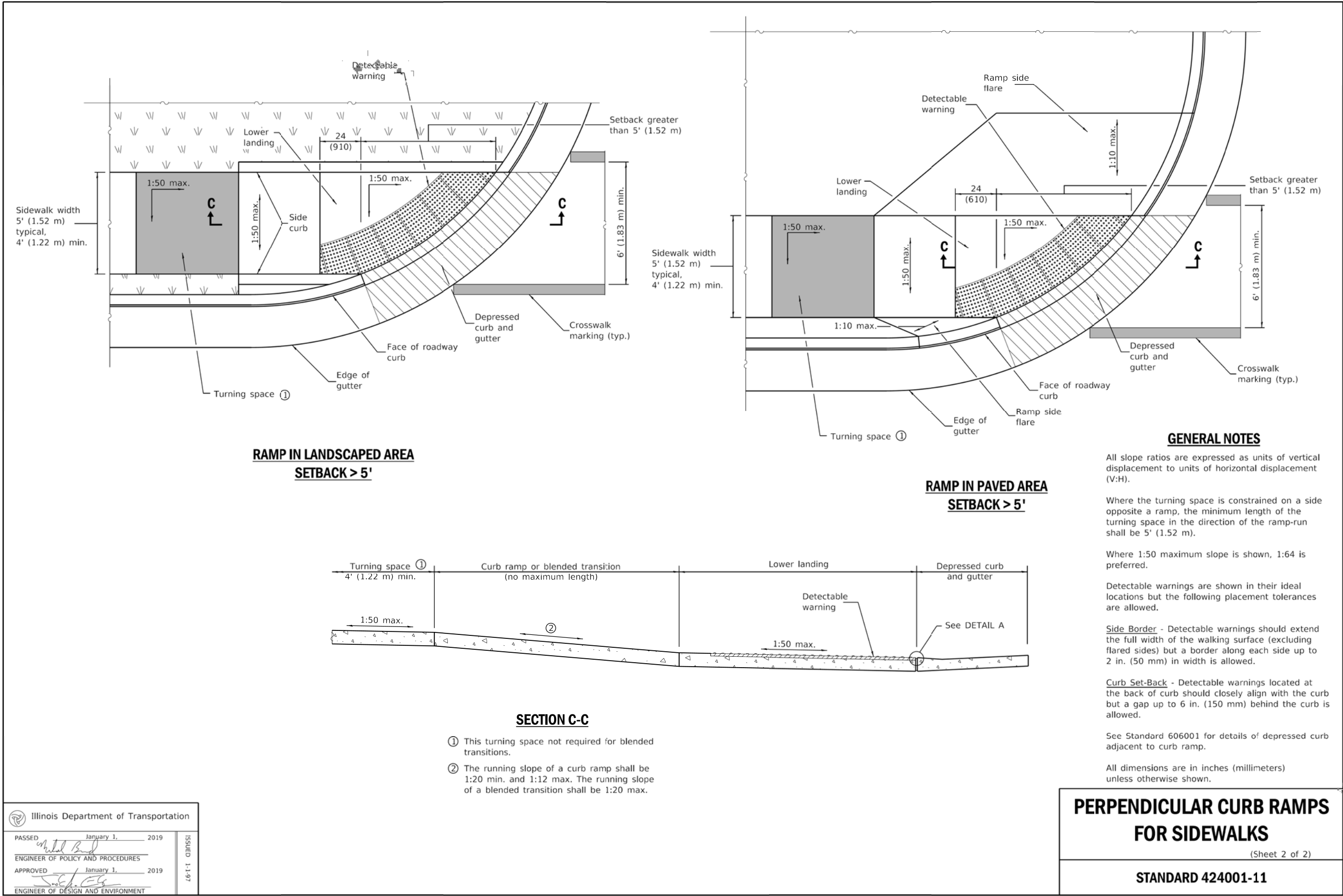
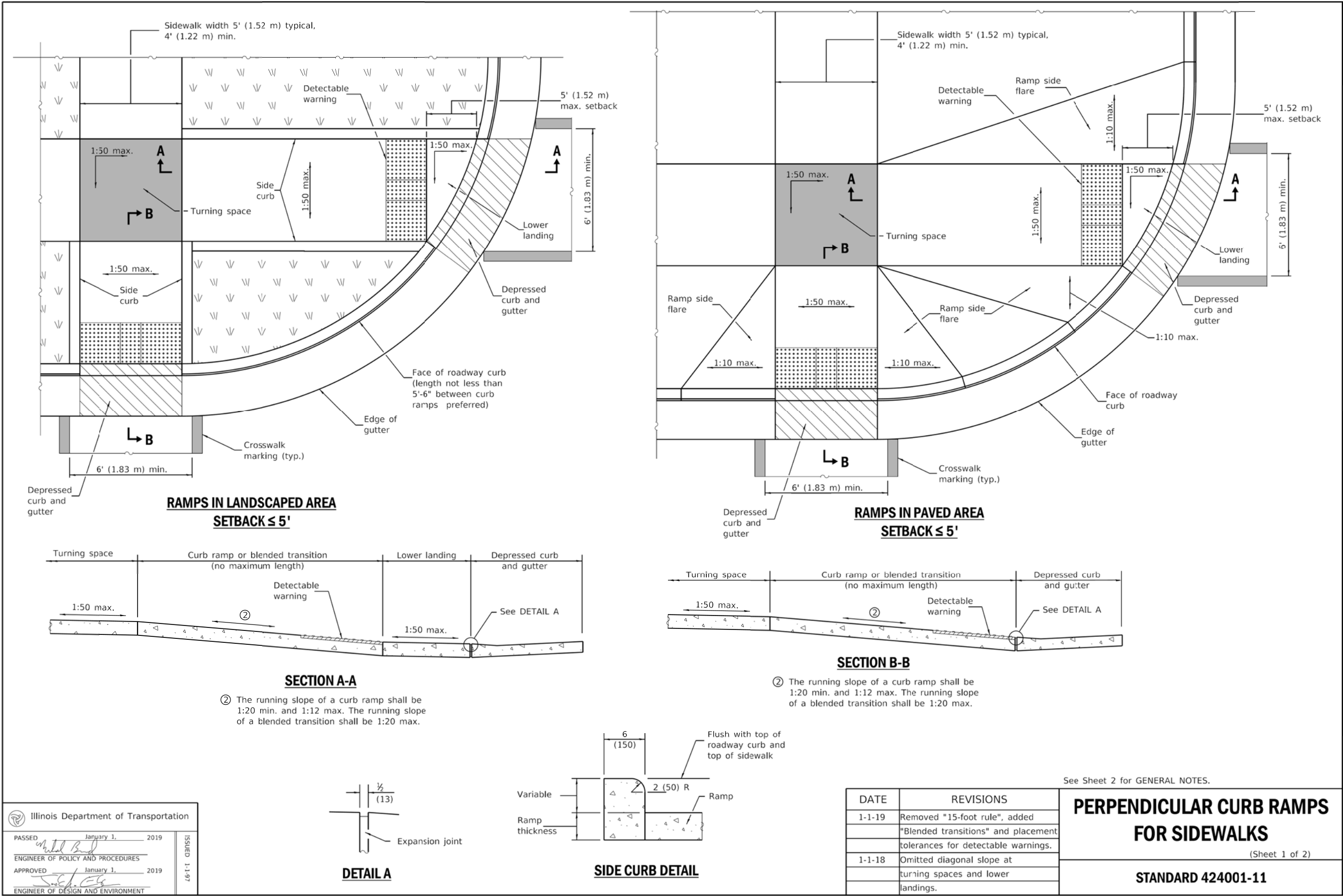
NO.	DATE	NATURE OF REVISION
1		
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8		

DSGN.	JLB	JLB	VDP

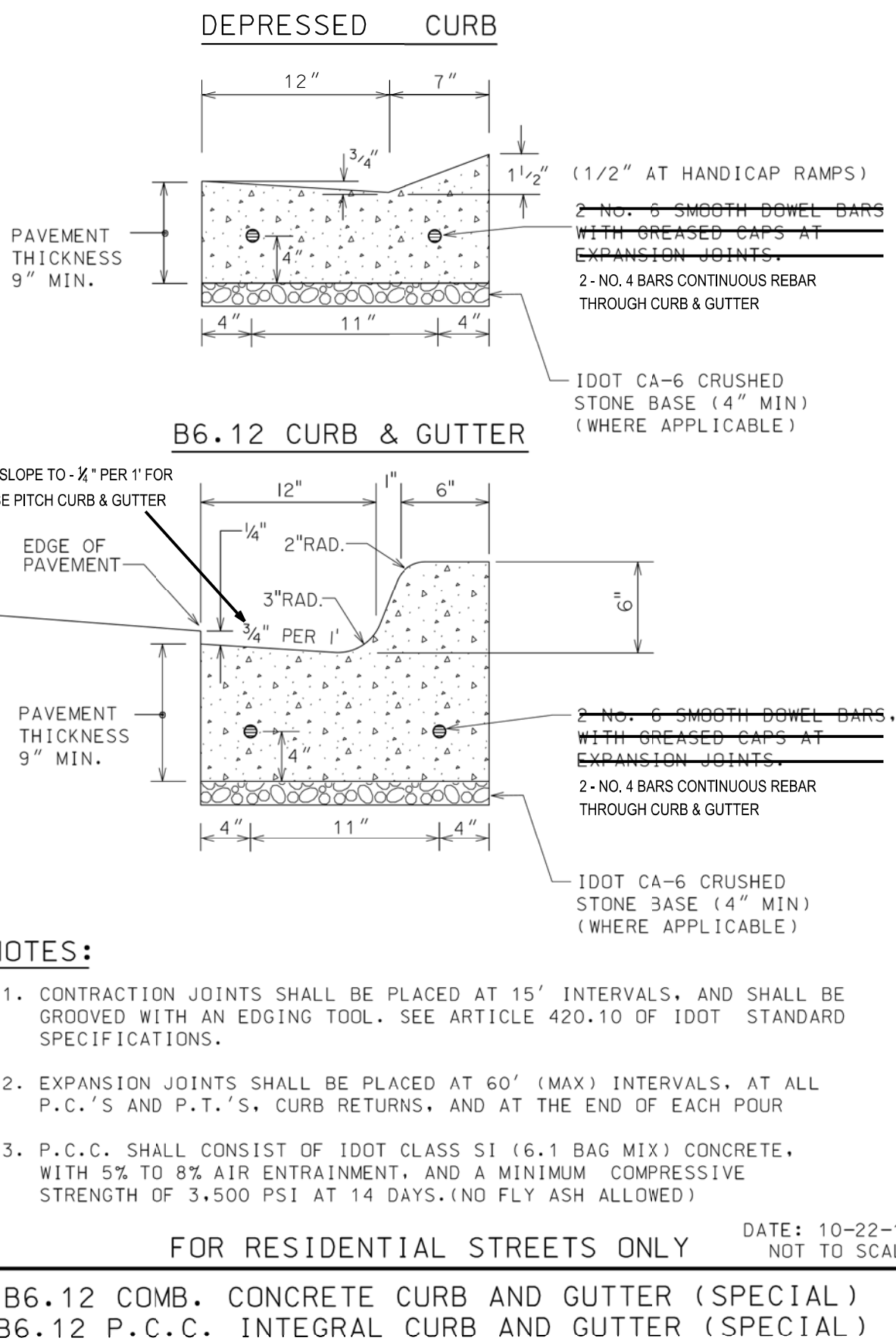
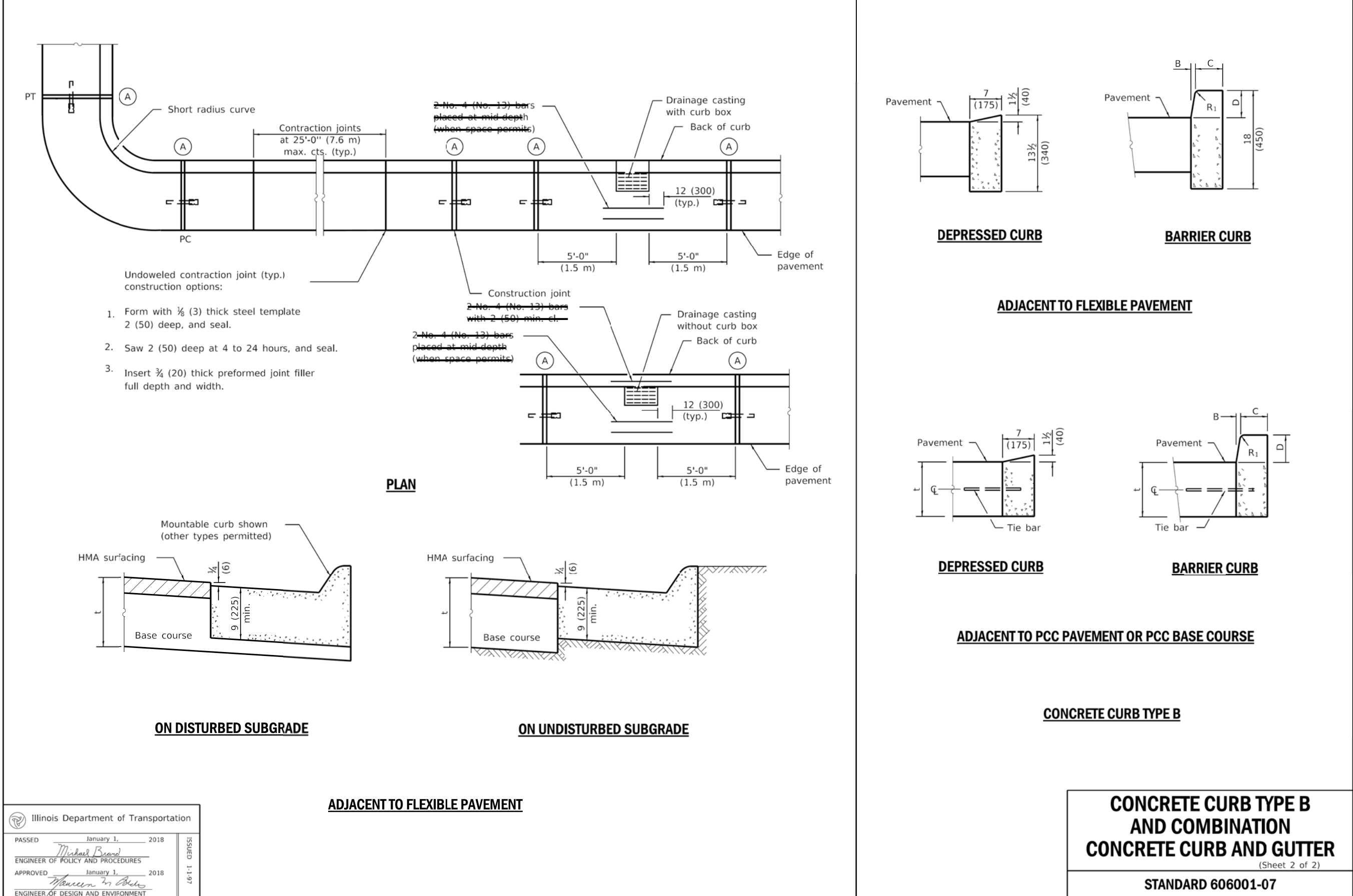
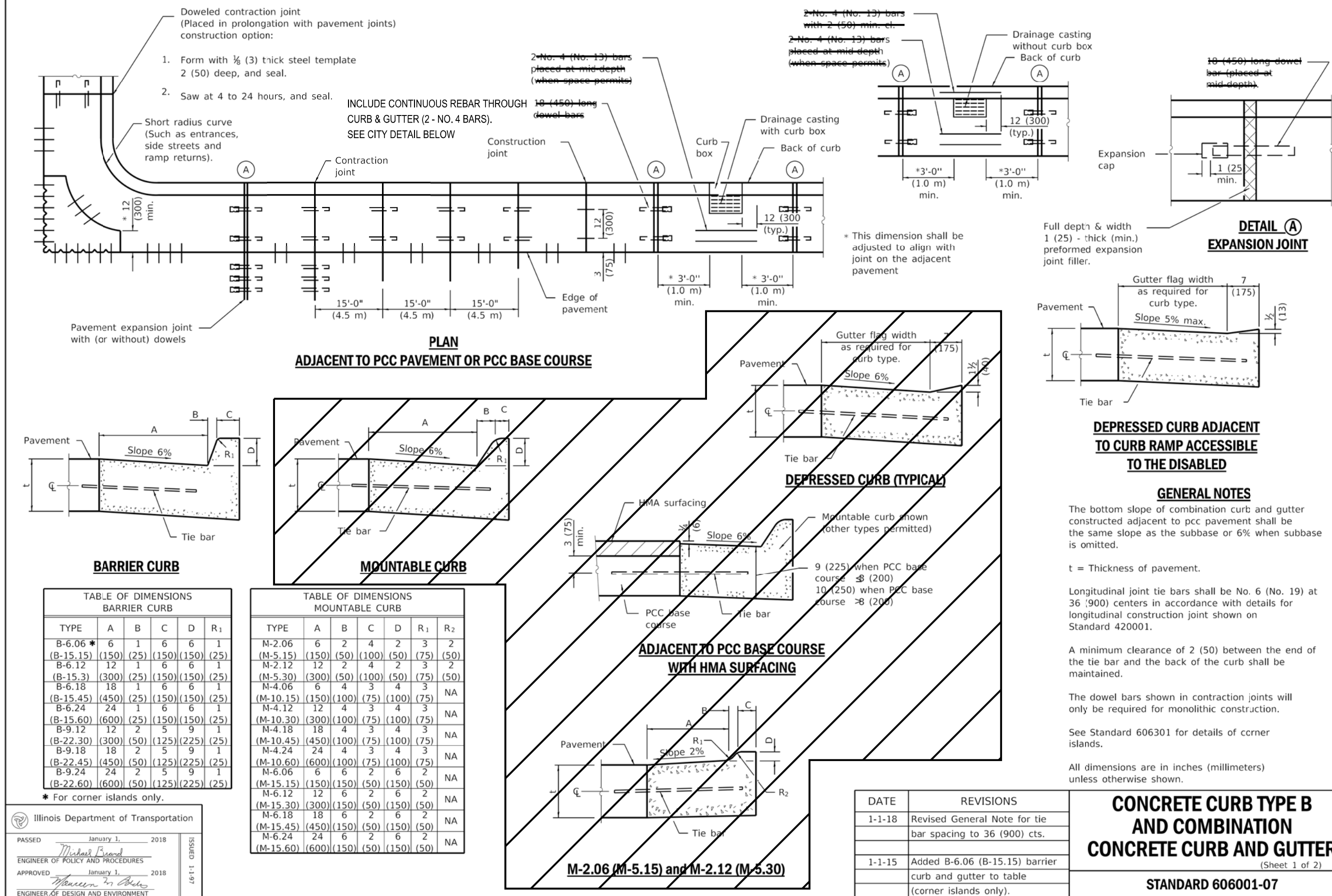
**CHECKERBOARD LOT
SITE IMPROVEMENTS**

CONSTRUCTION DETAILS

PLOT DATE : 6/13/2019
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FILE NAME : 180278.dwg

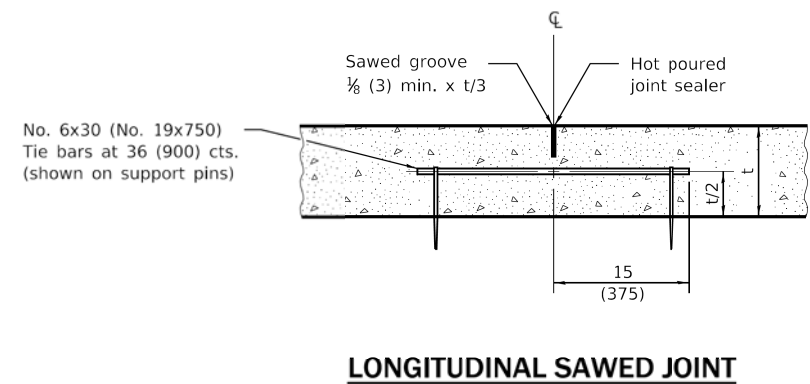


PLOT DATE : 6/13/2019
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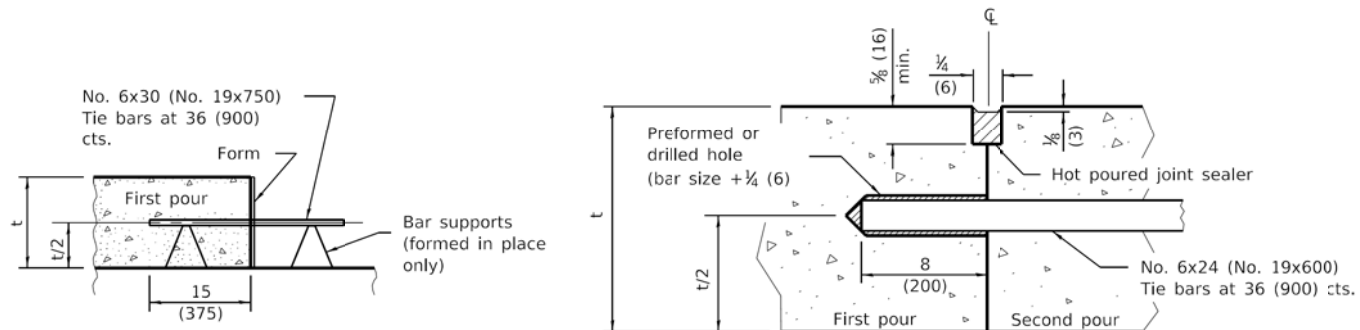


PLOT DATE : 6/13/2019
User Name : C:\Users\180278\Documents\180278 Checkerboard\Perking\otAcad\Civil\Dgn\Sht\180278-ct.dgn
FILE NAME : 180278.ctb

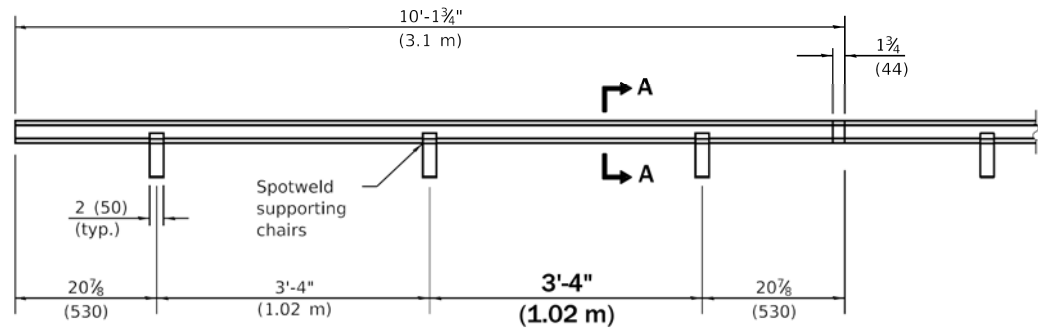
Illinois Department of Transportation
PASSED January 3, 2018
ENGINEER OF POLICY AND PROCEDURES
APPROVED January 3, 2018
ENGINEER OF DESIGN AND ENVIRONMENT



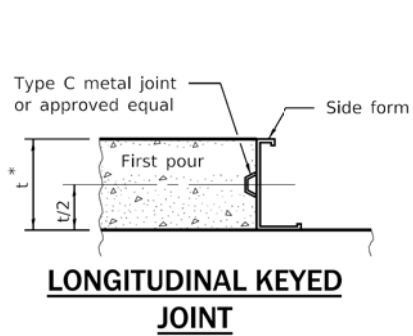
LONGITUDINAL CONSTRUCTION JOINT
(TIE BAR FORMED IN PLACE OR MECHANICALLY INSERTED)



LONGITUDINAL CONSTRUCTION JOINT
(TIE BAR GROUTED IN PLACE)

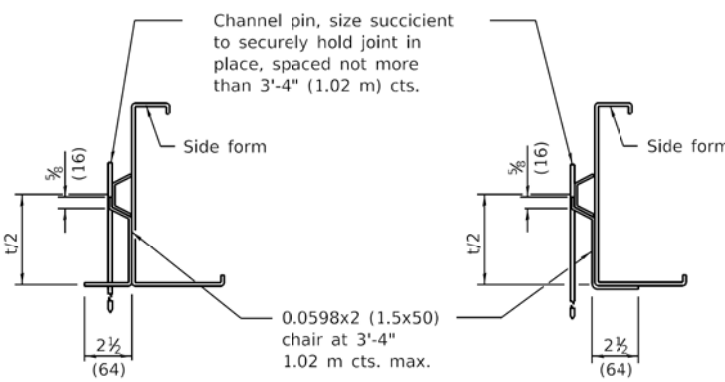


TYPE C METAL JOINT



LONGITUDINAL KEYED JOINT

* 8 (203) min. pavement thickness for keyed joints.



SUPPORTING CHAIR ALTERNATE

SECTION A-A

SUPPORTING CHAIR ALTERNATE

GENERAL NOTES

All slope ratios are expressed as units of vertical displacement to units of horizontal displacement (V:H).

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

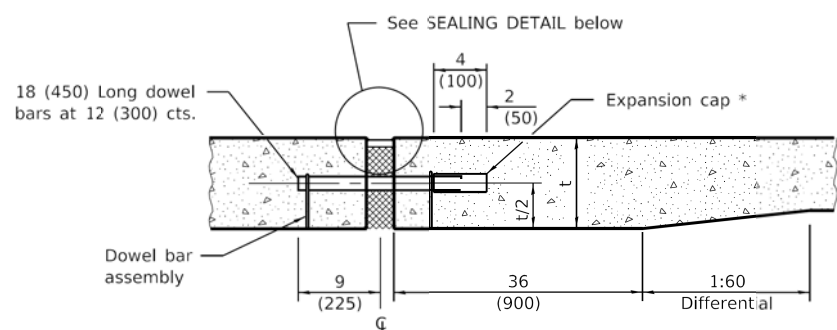
PAVEMENT JOINTS

(Sheet 1 of 2)

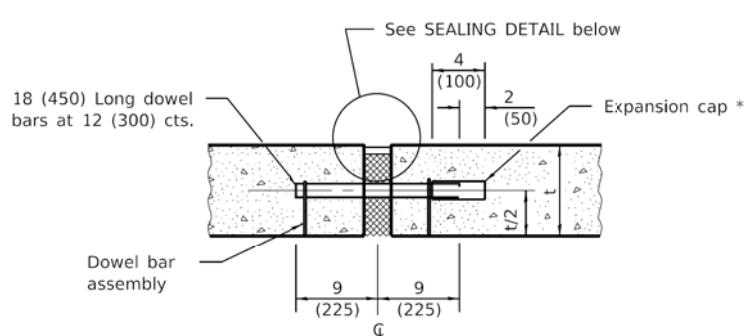
STANDARD 420001-09

DATE	REVISIONS
1-1-18	Changed tie bar spacing to 36 (900) cts. Revised DOWEL BAR TABLE.
1-1-08	Switched units to English (metric).

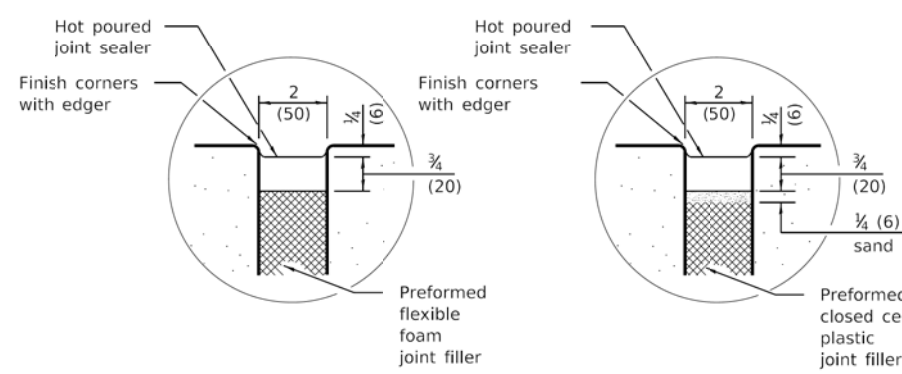
Illinois Department of Transportation
PASSED January 3, 2018
ENGINEER OF POLICY AND PROCEDURES
APPROVED January 3, 2018
ENGINEER OF DESIGN AND ENVIRONMENT



TRANSVERSE EXPANSION JOINT
(FOR PAVEMENTS WITH UNEQUAL THICKNESS)

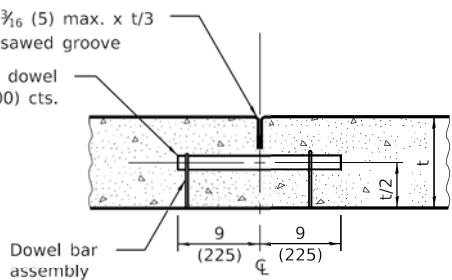


TRANSVERSE EXPANSION JOINT
(FOR PAVEMENTS WITH EQUAL THICKNESS)

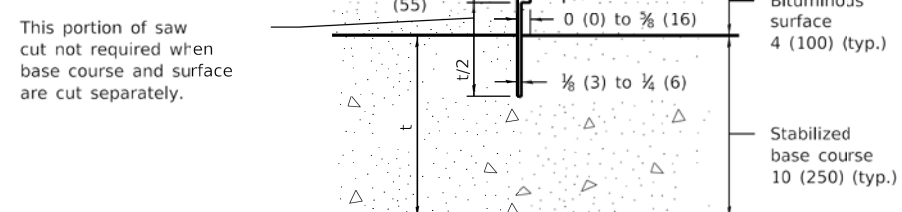


SEALING DETAIL

DOWEL BAR TABLE	
PAVEMENT THICKNESS	DOWEL BAR DIAMETER
10 (250) or greater	1 1/2 (38)
8 (200) thru 9.99 (249)	1 1/4 (32)
Less than 8 (200)	1 (25)



TRANSVERSE CONTRACTION JOINT

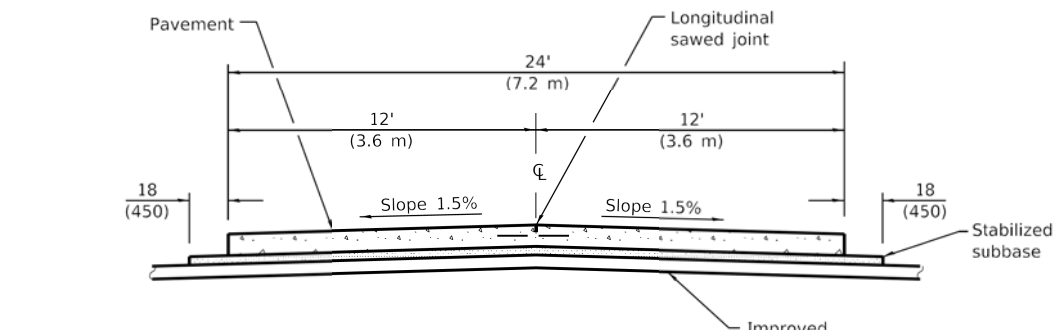


TRANSVERSE CONTRACTION JOINT
(FOR CAM, CFA AND LFA BASE COURSE MIXTURES)

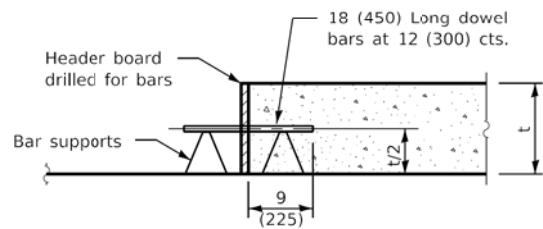
PAVEMENT JOINTS

(Sheet 2 of 2)

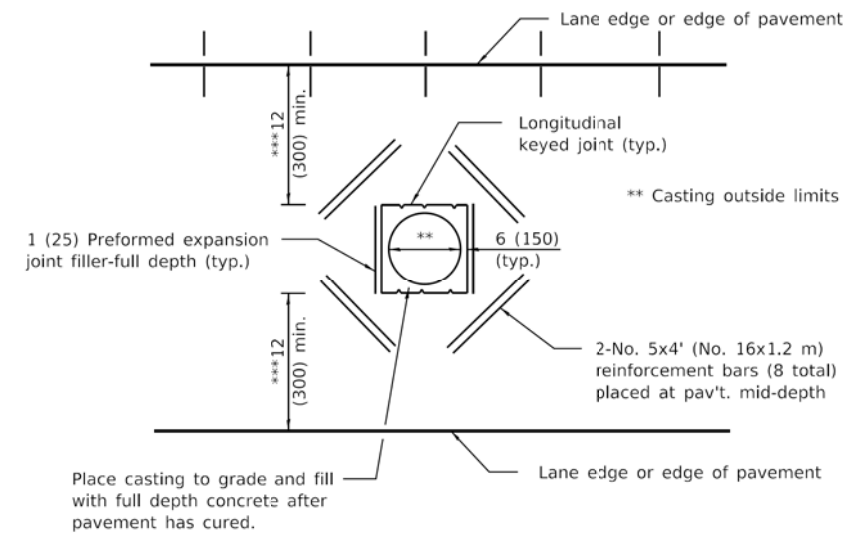
STANDARD 420001-09



SECTION A-A
(TYPICAL 2-LANE WITH SHOULDERS)



TRANSVERSE CONSTRUCTION JOINT



DETAIL OF ADDED REINFORCEMENT FOR PAVEMENT BLOCK-OUTS

GENERAL NOTES

See Standard 420001 for details of joints not shown.

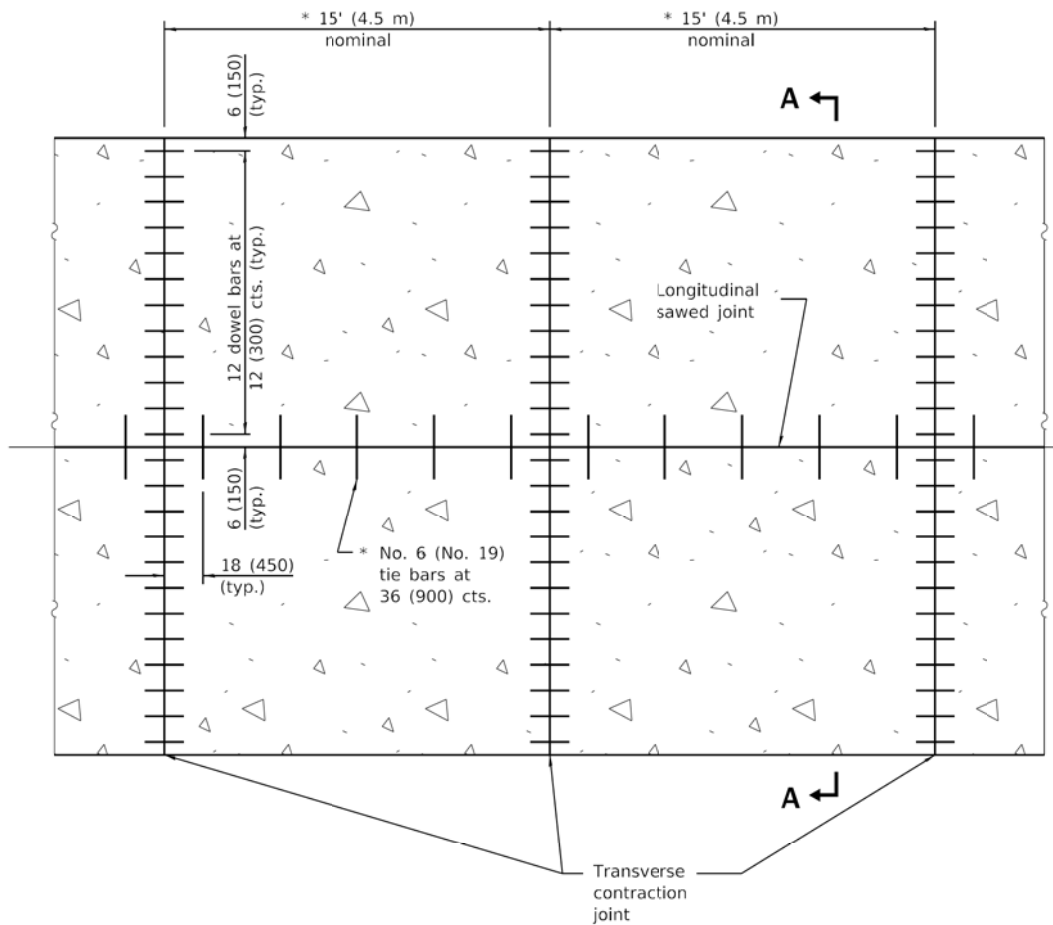
All dimensions are in inches (millimeters) unless otherwise shown.

24' (7.2 m) JOINTED PCC PAVEMENT

STANDARD 420101-06

DATE	REVISIONS
1-1-18	Changed spacing of tie bars to 36 (900).
1-1-15	Added dimension of tie bars from transverse contraction joints

Illinois Department of Transportation
PASSED January 3, 2018
ENGINEER OF POLICY AND PROCEDURES
APPROVED January 3, 2018
ENGINEER OF DESIGN AND ENVIRONMENT



PAVEMENT PLAN

* The 15' (4.5 m) dimension shall be adjusted to 12' (3.6 m) min. to 18' (5.5 m) max. when placed adjacent to existing pcc pavement structure so that the joints are in prolongation. Adjust the tie bar spacing to maintain a clearance of 6 (150) from dowel bars.

CITY OF ST. CHARLES
2 EAST MAIN STREET
ST. CHARLES, IL 60174
630.377.4405

WBK ENGINEERING, LLC
1116 WEST MAIN STREET, SUITE 201
ST. CHARLES, ILLINOIS 60174
(630) 443-7755

WBK engineering

PROJECT NO. 18-0278

DATE : 06/13/19

DRAWING NO. **DT4**

SHEET

10 OF 10

NO.	DATE	NATURE OF REVISION
1		
2		
3		
4		
5		
6		
7		
8		

DSGN.	JLB	DWN.	JLB	CHKD.	VDP

CHECKERBOARD LOT
SITE IMPROVEMENTS
CONSTRUCTION DETAILS