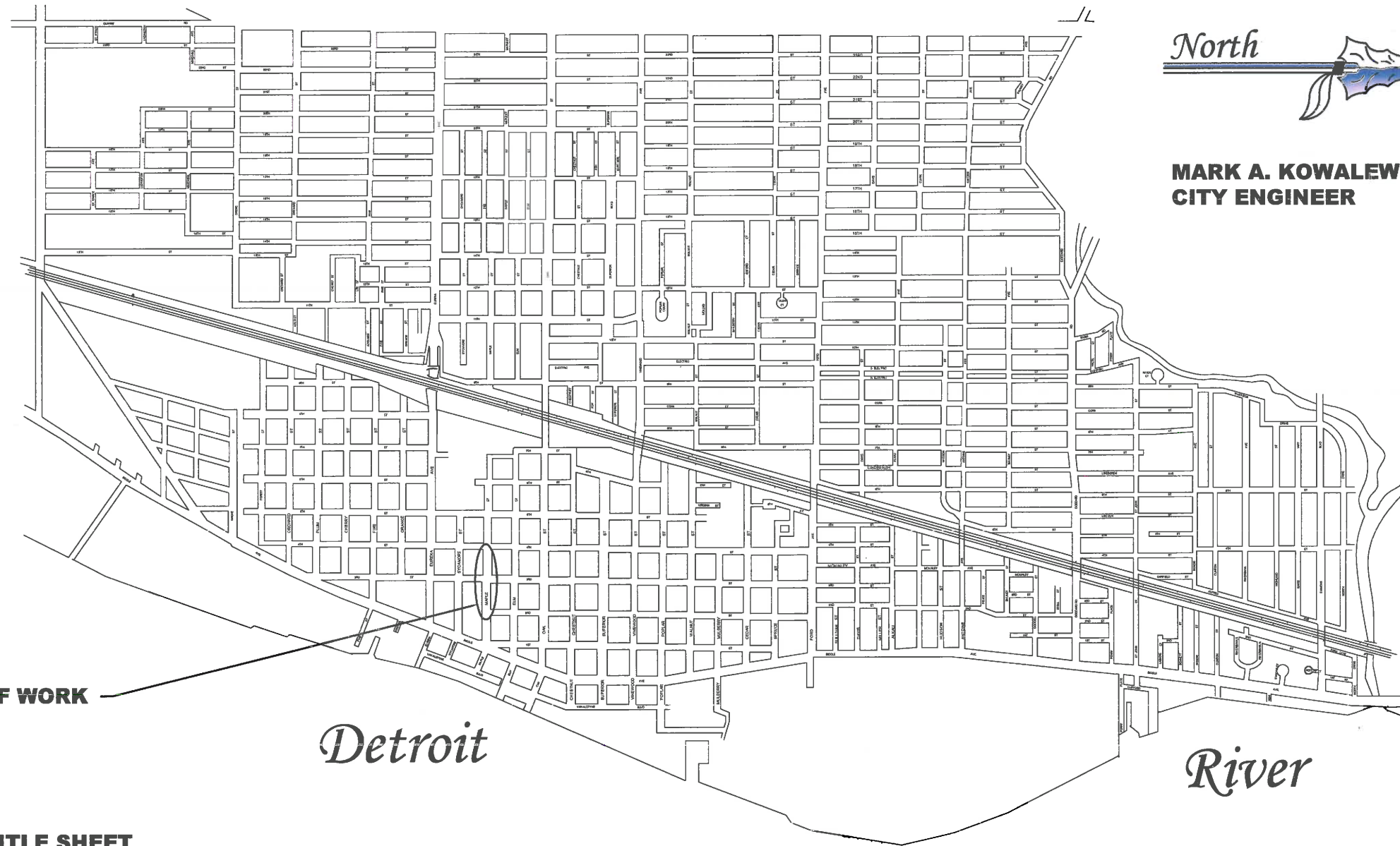


CITY OF WYANDOTTE - 2018 MAPLE STREET WATER MAIN PROJECT



**MARK A. KOWALEWSKI
CITY ENGINEER**

PROPOSED LOCATION OF WORK

Detroit

River

- T-1** **TITLE SHEET**
- P-1** **MAPLE STREET - 4TH ST. TO 2ND ST.**
- D-1** **DETAILS**
- D-2** **DETAILS**
- D-3** **DETAILS**

REVISIONS:

DATE: 06/08/18
 DRWN BY: JOE MAYHEW
 CK BY: JESUS FLASENCIA
 PROJECT NO: 4742

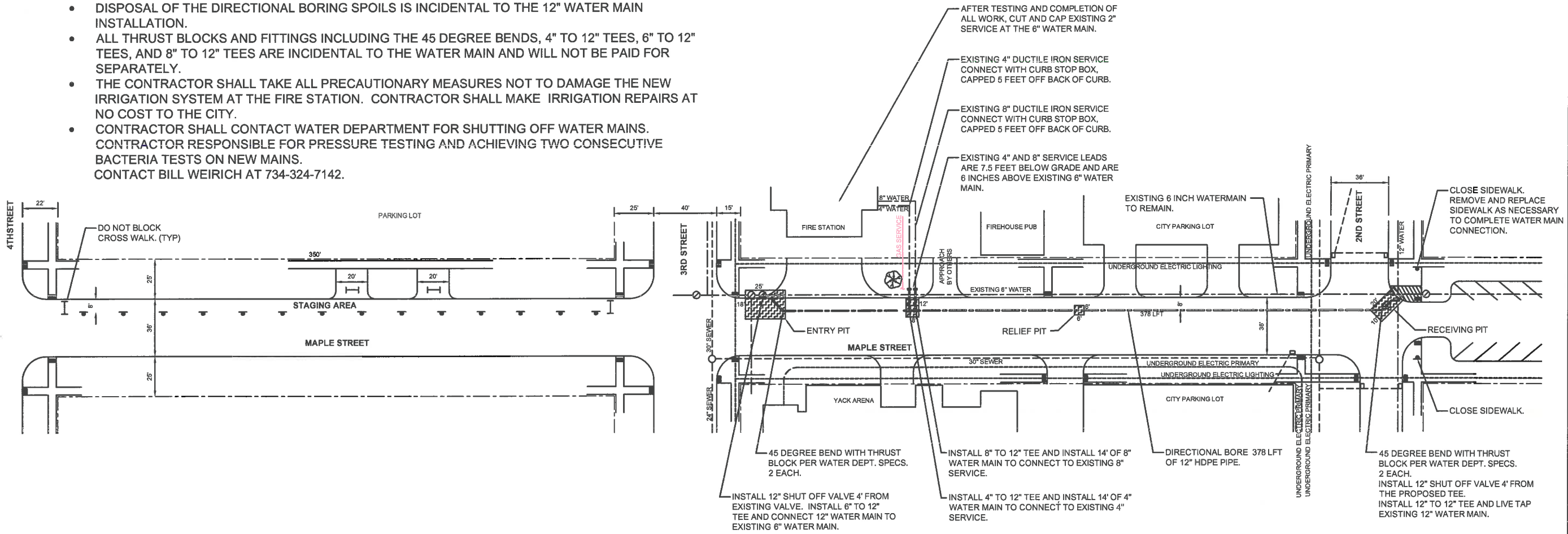
**2018 MAPLE STREET
 WATER MAIN PROJECT
 TITLE SHEET**

CITY OF WYANDOTTE - DEPT. OF ENGINEERING
 CITY ENGINEER - MARK A. KOWALEWSKI
 3200 BIDDLE AVENUE
 WYANDOTTE, MI 48192
 PHONE: (734) 324-4651
 FAX: (734) 324-4636

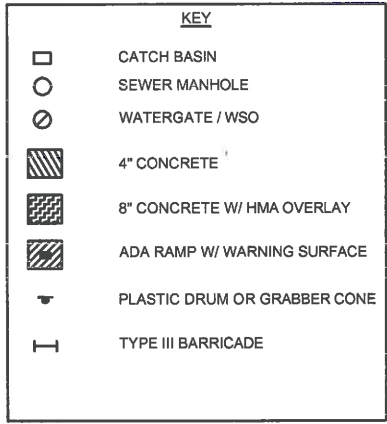
T-1

NOTES:

- CONTRACTOR SHALL PROVIDE SIGNAGE AND BARRICADES TO PROTECT ENTRY AND RECEIVING PITS AND TO CLOSE SIDEWALK ADJACENT TO THE RECEIVING PIT.
- CONTRACTOR SHALL CLOSE THE TWO APPROACHES TO THE PARKING LOT ADJACENT TO THE STAGING AREA. CONTRACTOR SHALL MAINTAIN TRAFFIC LANE AND SOUTH PARKING LANE ON MAPLE STREET.
- CONTRACTOR SHALL PROVIDE TRAFFIC CONTROL DEVICES TO CLOSE 3RD STREET. 3RD STREET SHALL ONLY BE CLOSED WHEN PULLING THE 12" PIPE.
- THE BORE PITS SHALL BE SAW CUT VERTICALLY AND PAVEMENT SHALL BE REPLACED IN KIND, PER CITY STANDARDS.
- DISPOSAL OF THE DIRECTIONAL BORING SPOILS IS INCIDENTAL TO THE 12" WATER MAIN INSTALLATION.
- ALL THRUST BLOCKS AND FITTINGS INCLUDING THE 45 DEGREE BENDS, 4" TO 12" TEES, 6" TO 12" TEES, AND 8" TO 12" TEES ARE INCIDENTAL TO THE WATER MAIN AND WILL NOT BE PAID FOR SEPARATELY.
- THE CONTRACTOR SHALL TAKE ALL PRECAUTIONARY MEASURES NOT TO DAMAGE THE NEW IRRIGATION SYSTEM AT THE FIRE STATION. CONTRACTOR SHALL MAKE IRRIGATION REPAIRS AT NO COST TO THE CITY.
- CONTRACTOR SHALL CONTACT WATER DEPARTMENT FOR SHUTTING OFF WATER MAINS. CONTRACTOR RESPONSIBLE FOR PRESSURE TESTING AND ACHIEVING TWO CONSECUTIVE BACTERIA TESTS ON NEW MAINS. CONTACT BILL WEIRICH AT 734-324-7142.



PAY ITEM	QUANTITY	UNIT
REMOVE CONCRETE PAVEMENT WITH HMA OVERLAY	85	SYD
REMOVE 4-INCH CONCRETE	200	SFT
21A STONE BASE	15	TON
8-INCH CONCRETE BASE COURSE	85	SYD
HMA WEARING COURSE - 13A	10	TON
4-INCH CONCRETE ADA SIDEWALK	200	SFT
ADA DETECTABLE WARNING SURFACE (YELLOW)	5	LFT
RE-GRADE AND SOD	75	SYD
12-INCH HDPE WATER MAIN (DIRECTIONALLY BORED)	405	LFT
8-INCH DUCTILE IRON WATER MAIN	14	LFT
6-INCH DUCTILE IRON WATER MAIN	13	LFT
4-INCH DUCTILE IRON WATER MAIN	14	LFT
GATE VALVE, 12-INCH	2	EA
LIVE TAP, 12-INCH x 12-INCH	1	EA
CUT AND CAP 2-INCH WATER SERVICE	1	EA
TRAFFIC MAINTENANCE AND CONTROL	1	LS
CLEAN UP	1	LS



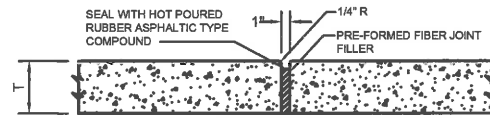
REVISIONS:
 DATE: 6/8/18
 DRWN BY: JOE MAYHEW
 CK BY: JESUS PLASENCIA
 PROJECT NO: 4742

2018 CENTRAL FIRE STATION WATER MAIN PROJECT PLAN SHEET

CITY OF WYANDOTTE - DEPT. OF ENGINEERING
 CITY ENGINEER - MARK A. KOWALEWSKI
 PHONE: (734) 324-4551
 FAX: (734) 324-4555

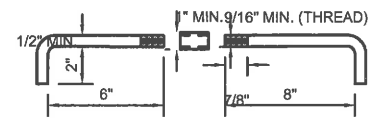
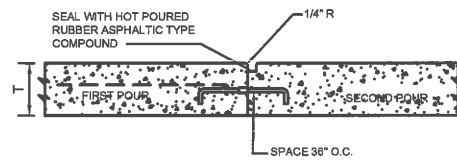
3200 BIDDLE AVENUE
 WYANDOTTE, MI 48192

P-1



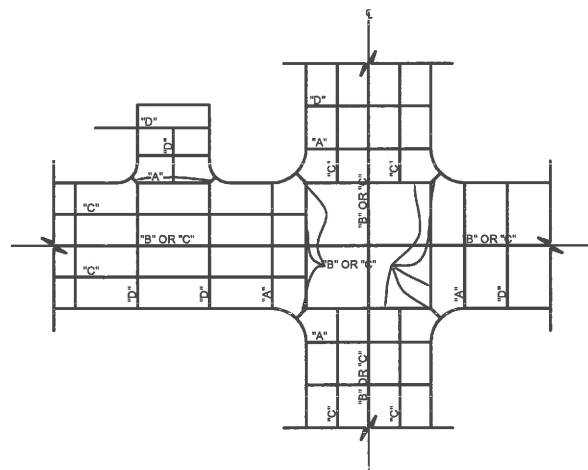
EXPANSION JOINT SHALL BE PLACED AT THE END OF THE RADIUS AT STREET INTERSECTIONS AND WHERE SHOWN ON THE PLANS. MAXIMUM SPACE OF 400' SHALL BE MAINTAINED FOR EXPANSION JOINTS.

TRANSVERSE EXPANSION JOINT "A"
(RESIDENTIAL STREET STANDARD) NOT TO SCALE

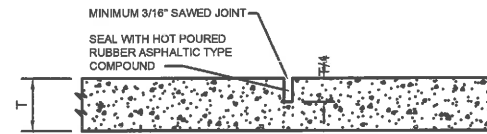


HOOK BOLT DETAIL

LONGITUDINAL BULKHEAD CONSTRUCTION JOINT "B"
(RESIDENTIAL STREET STANDARD) NOT TO SCALE



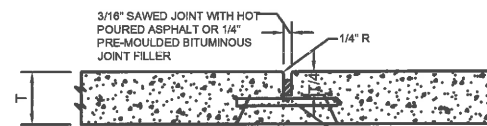
NOTE: TRANSVERSE EXPANSION AND WEAKENED PLANE JOINTS IN THE PAVEMENT SHALL EXTEND ENTIRELY THROUGH INTEGRAL CURBS AND SHALL BE OF THE SAME THICKNESS AND KIND AS PROVIDED FOR THE PAVEMENT. THE JOINT MATERIAL SHALL BE PRECUT SO AS TO CONFORM TO THE GEOMETRIC SHAPE AND CROSS SECTION AREA OF THE CURB AND SHALL BE PLACED IN CONTACT WITH THE FILLER MATERIAL IN THE PAVEMENT.



LONGITUDINAL JOINTS SHALL BE PLACED IN ACCORDANCE WITH THE JOINTING DETAILS SHOWN ON THIS SHEET.

SAWCUT (3/16" WIDE MIN.) NO SOONER THAN 12 HOURS NOR LATER THAN 48 HOURS AFTER PLACEMENT OF CONCRETE AND SEAL WITH HOT Poured RUBBER ASPHALT TYPE JOINT SEALING COMPOUND CONFORMING TO MDOT STANDARD SPECIFICATIONS FOR CONSTRUCTION 2003, SECTION 914, JOINT MATERIALS.

LONGITUDINAL PLANE JOINT "C"
(RESIDENTIAL STREET STANDARD) NOT TO SCALE



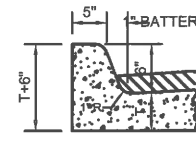
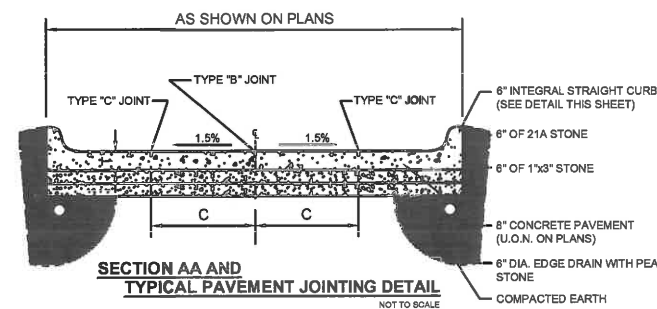
TRANSVERSE WEAKENED PLANE JOINT "D" SHALL BE PLACED AT 15' INTERVALS BETWEEN TRANSVERSE EXPANSION JOINTS UNLESS OTHERWISE SHOWN ON PLANS.

SAWCUT (3/16" WIDE MIN.) NO SOONER THAN 12 HOURS NOR LATER THAN 48 HOURS AFTER PLACEMENT OF CONCRETE AND SEAL WITH HOT Poured RUBBER ASPHALT TYPE JOINT SEALING COMPOUND CONFORMING TO MDOT STANDARD SPECIFICATIONS FOR CONSTRUCTION 2003, SECTION 914, JOINT MATERIALS.

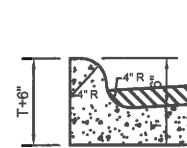
ALTERNATE: TRANSVERSE WEAKENED PLANE JOINTS SHALL BE CONSTRUCTED IMMEDIATELY AFTER THE FINISHING OPERATION HAS BEEN COMPLETED. A GROOVE SHALL BE FORMED IN THE PLASTIC CONCRETE WITH A METAL FORMING STRIP. A 1/4" PRE-MOULDED BITUMINOUS JOINT FILLER SHALL BE PLACED IN THE GROOVE FORMED BY THE METAL STRIP. FROM A BRIDGE OPERATION ON THE PAVEMENT FORMS. THE CONCRETE SHALL BE HARD FLOATED AGAINST THE SIDES OF THE FILLER AND THE JOINTS EDGED TO THE RADIUS SHOWN.

TRANSVERSE WEAKENED PLANE JOINT "D"
(RESIDENTIAL STREET STANDARD) NOT TO SCALE

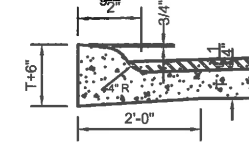
W	T	C	CENTERLINE JOINTS	REMARKS
21'	7"		"B" OR "C"	
29'	7"	8'	"B"	
30'	7"	8'	"B"	
37'	8"	11'	"B"	IF PAVEMENT IS PLACED IN TWO POURS USE "B" JOINT WITH 40' SPACING (SEE DETAIL THIS SHEET)
50'	8"	13'	"B"	
27'	9"	N/A	"B" OR "C"	



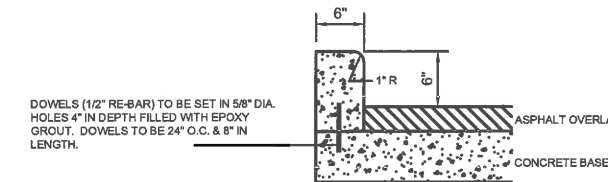
STRAIGHT
NOT TO SCALE



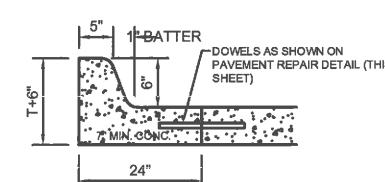
ROLL
NOT TO SCALE



AT DRIVEWAY RAMP
NOT TO SCALE

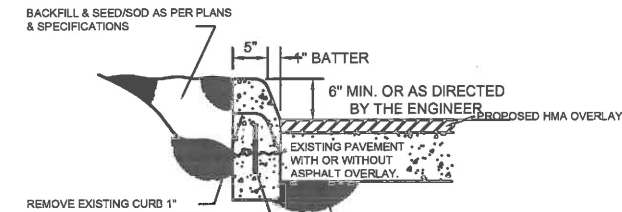


HEADER CURB CAP
NOT TO SCALE



CURB & GUTTER DETAIL
NOT TO SCALE

INTEGRAL CURB DETAILS WITH OR WITHOUT EXISTING OR PROPOSED ASPHALT OVERLAY
NOT TO SCALE



CURB CAP DETAIL
TYPICAL WITH OR WITHOUT ASPHALT OVERLAY NOT TO SCALE

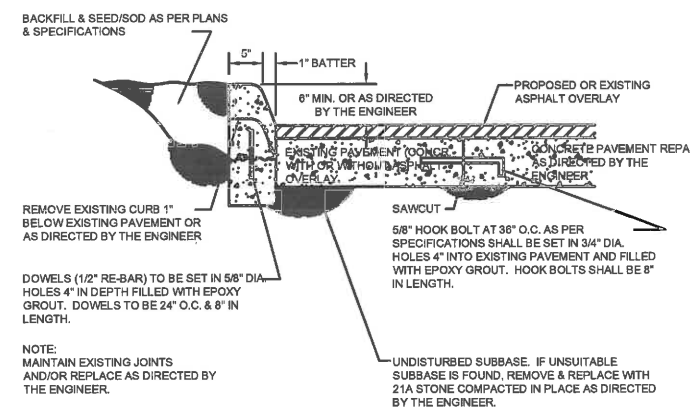
BACKFILL & SEED/SOD AS PER PLANS & SPECIFICATIONS

REMOVE EXISTING CURB 1" BELOW EXISTING PAVEMENT OR AS DIRECTED BY THE ENGINEER (Curb, Rem)

CONCRETE CURB CAP DOWELS (1/2" RE-BAR) TO BE SET IN 5/8" DIA. HOLES 4" IN DEPTH FILLED WITH EPOXY GROUT. DOWELS TO BE 24" O.C. & 8" IN LENGTH. (Curb, Conc, Modified)

NOTE: MAINTAIN EXISTING JOINTS AND/OR REPLACE AS DIRECTED BY THE ENGINEER.

UNDISTURBED SUBBASE. IF UNSUITABLE SUBBASE IS FOUND, REMOVE & REPLACE WITH 21A STONE COMPACTED IN PLACE AS DIRECTED BY THE ENGINEER.



CURBCAP & PAVEMENT REPAIR DETAIL
TYPICAL WITH OR WITHOUT ASPHALT OVERLAY NOT TO SCALE

BACKFILL & SEED/SOD AS PER PLANS & SPECIFICATIONS

REMOVE EXISTING CURB 1" BELOW EXISTING PAVEMENT OR AS DIRECTED BY THE ENGINEER

DOWELS (1/2" RE-BAR) TO BE SET IN 5/8" DIA. HOLES 4" IN DEPTH FILLED WITH EPOXY GROUT. DOWELS TO BE 24" O.C. & 8" IN LENGTH.

NOTE: MAINTAIN EXISTING JOINTS AND/OR REPLACE AS DIRECTED BY THE ENGINEER.

UNDISTURBED SUBBASE. IF UNSUITABLE SUBBASE IS FOUND, REMOVE & REPLACE WITH 21A STONE COMPACTED IN PLACE AS DIRECTED BY THE ENGINEER.

SAWCUT

5/8" HOOK BOLT AT 36" O.C. AS PER SPECIFICATIONS SHALL BE SET IN 3/4" DIA. HOLES 4" INTO EXISTING PAVEMENT AND FILLED WITH EPOXY GROUT. HOOK BOLTS SHALL BE 8" IN LENGTH.

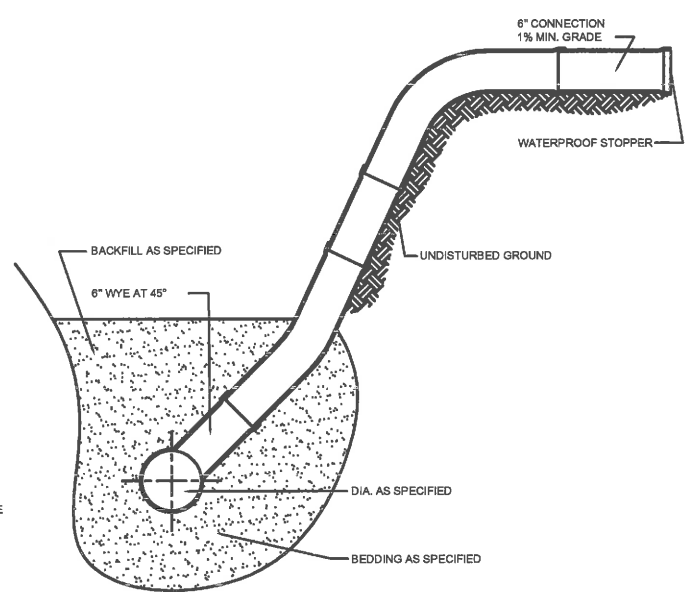
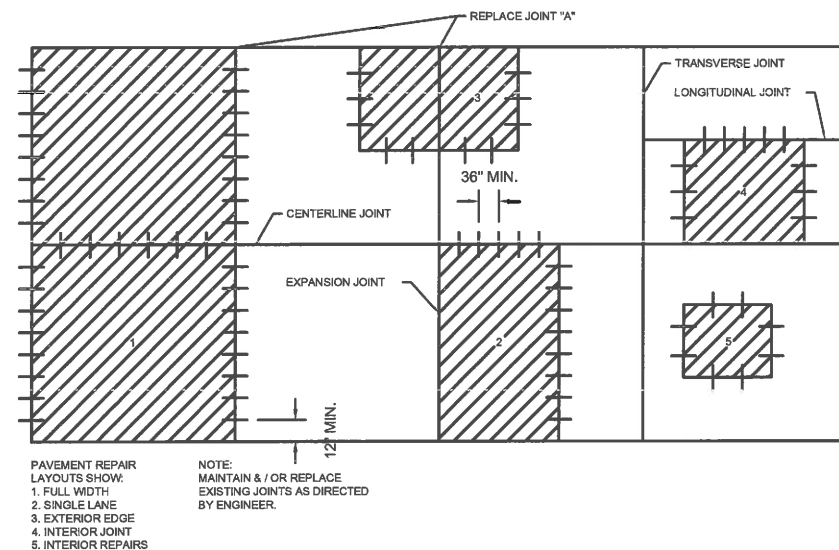
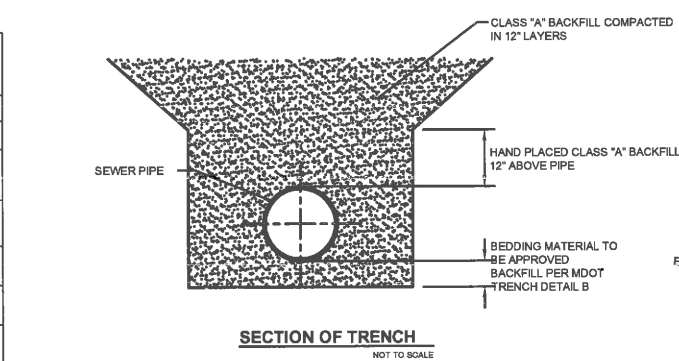
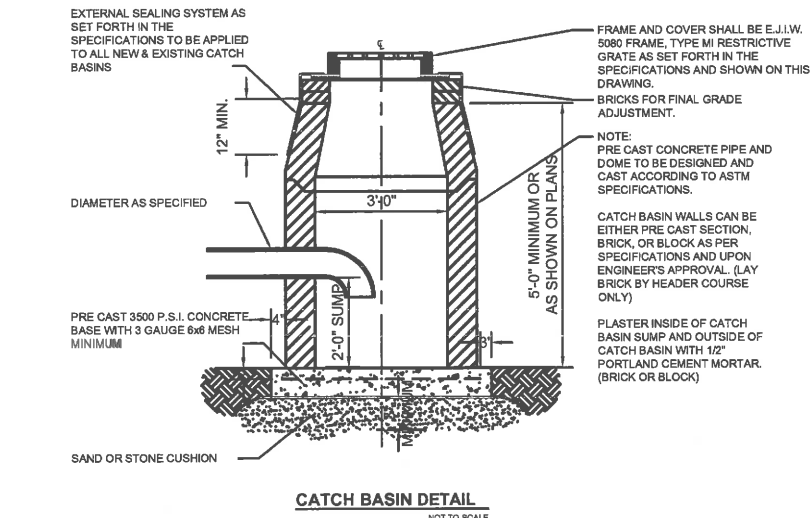
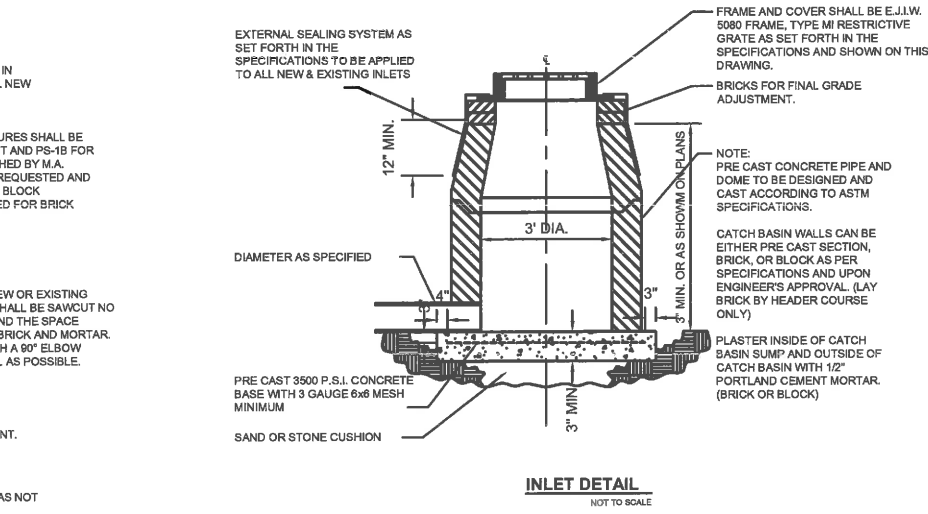
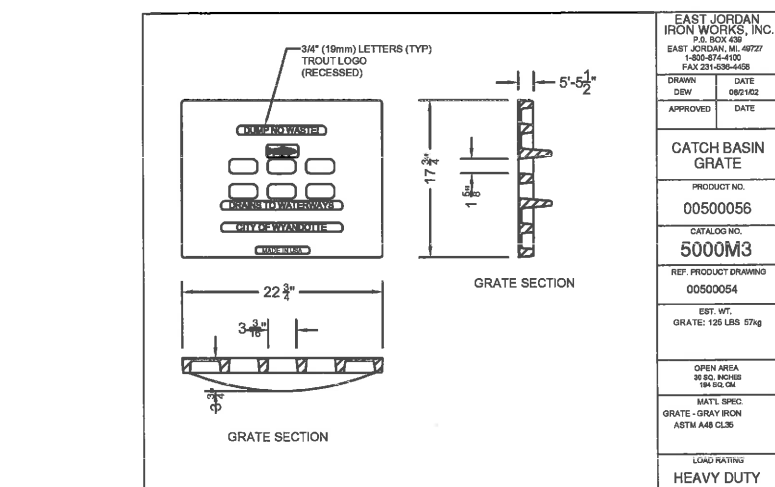
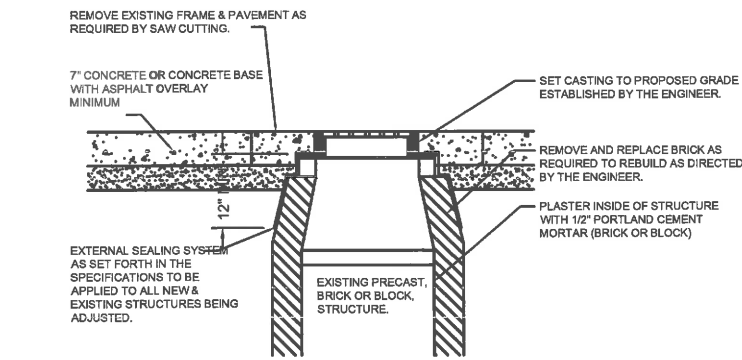
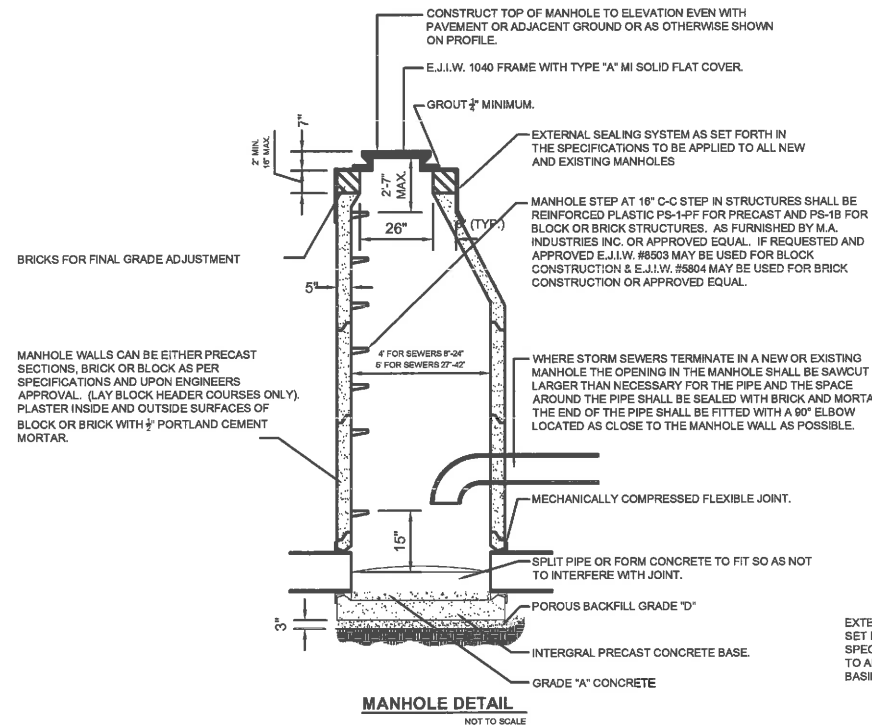
REVISIONS:

DATE: 6/8/18
DRWN BY: JOE MAYHEW
CHK BY: JESUS PIAJENCA
PROJECT NO: 4742

**2018 CENTRAL FIRE STATION
WATER MAIN PROJECT
DETAILS**

CITY OF WYANDOTTE - DEPT. OF ENGINEERING
CITY ENGINEER - MARK A. KOWALEWSKI
PHONE: (734) 324-4651
FAX: (734) 324-4536

3200 BIDDLE AVENUE
WYANDOTTE, MI 48192



NOT IN CONTRACT

REVISIONS:

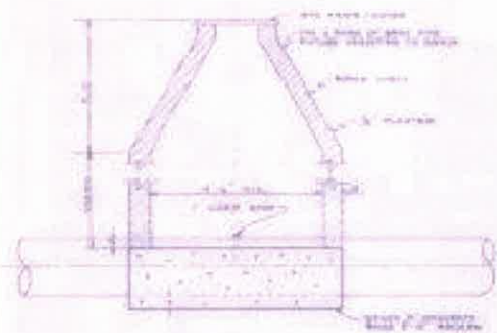
DATE: 6/8/18
 DRAWN BY: JOE MAYHEW
 CHECK BY: JESUS PLASENCIA
 PROJECT NO.: 4742

**2018 CENTRAL FIRE STATION
 WATER MAIN PROJECT
 DETAILS**

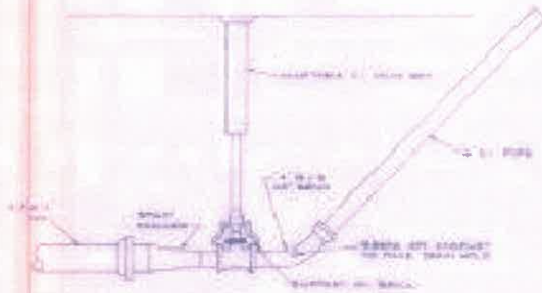
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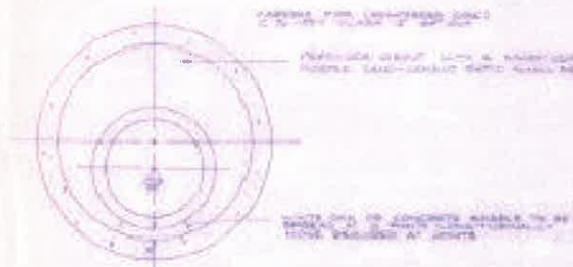
D-2



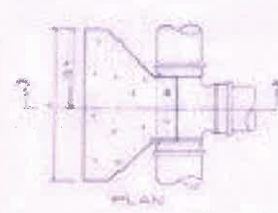
TYPICAL AIR RELIEF VALVE INSTALLATION
NO SCALE



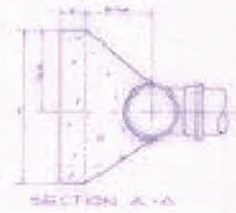
TYPICAL 45° BLOWOFF CONNECTION
NO SCALE



TYPICAL SECTION
CONCRETE CASING PIPE
NO SCALE



PLAN



SECTION A-A

PIPE SIZE	THRUST BLOCK
1/2"	1/2"
3/4"	3/4"
1"	1"
1 1/4"	1 1/4"
1 1/2"	1 1/2"
2"	2"
2 1/2"	2 1/2"
3"	3"
3 1/2"	3 1/2"
4"	4"
4 1/2"	4 1/2"
5"	5"
5 1/2"	5 1/2"
6"	6"
6 1/2"	6 1/2"
7"	7"
7 1/2"	7 1/2"
8"	8"
8 1/2"	8 1/2"
9"	9"
9 1/2"	9 1/2"
10"	10"
10 1/2"	10 1/2"
11"	11"
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