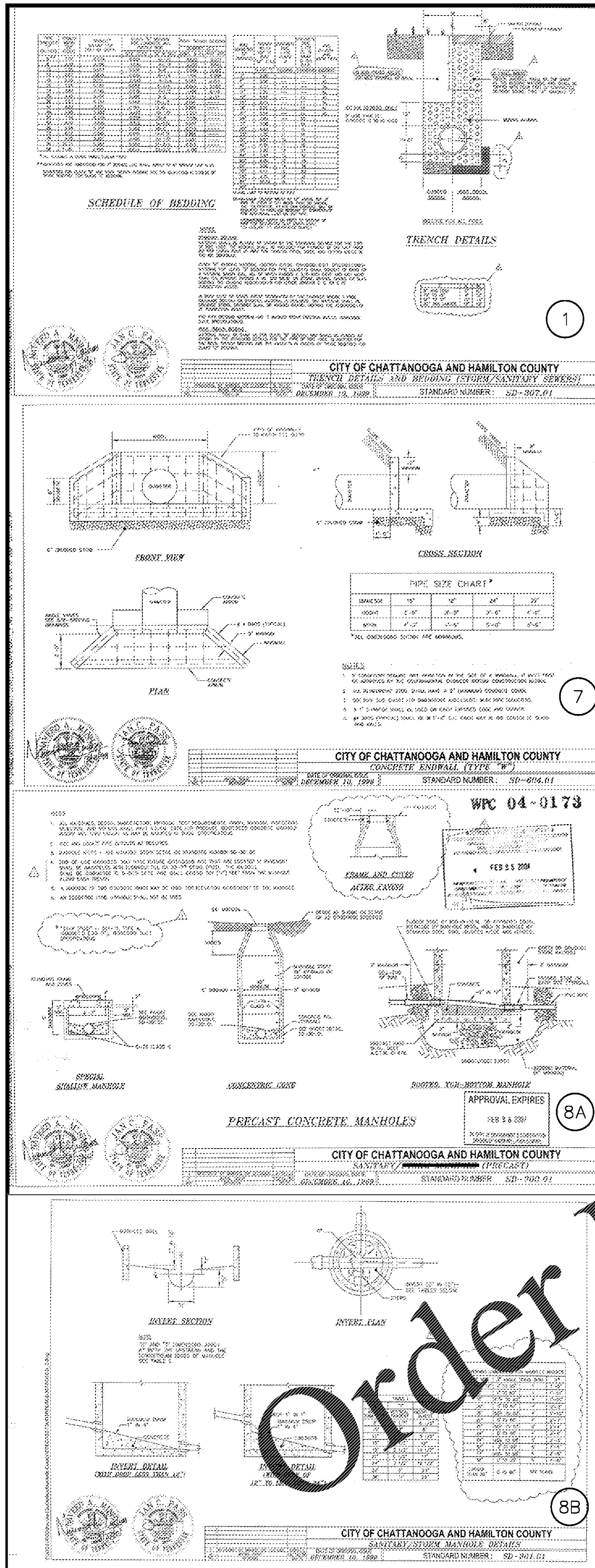
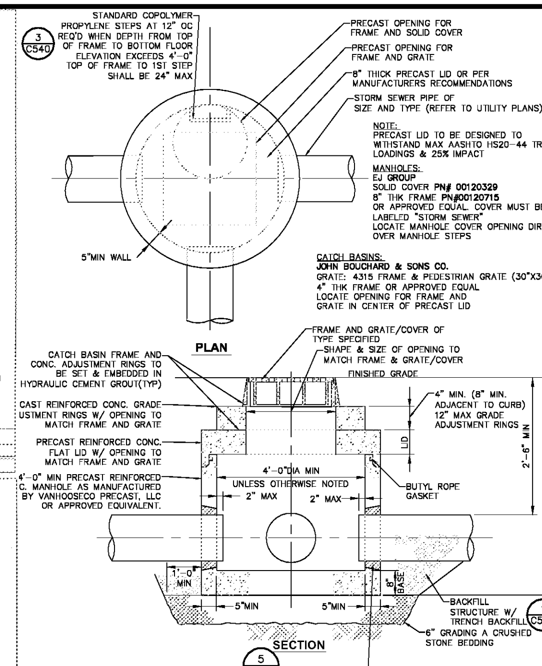




NOTE:
PRECAST LID TO BE DESIGNED TO WITHSTAND MAX AASHTO HS20-44 TRUCK LOADINGS & 25% IMPACT

MANHOLES:
EJ GROUP
SOLID COVER PN# 00120329
8" THK FRAME PN#00120715
OR APPROVED EQUAL. COVER MUST BE CLEARLY LABELED "STORM SEWER"
LOCATE MANHOLE COVER OPENING DIRECTLY OVER MANHOLE STEPS

CATCH BASINS:
JOHN BOUCHARD & SONS CO.
GRATE: 4315 FRAME & PEDESTRIAN GRATE (30"X30")
4" THK FRAME OR APPROVED EQUAL
LOCATE OPENING FOR FRAME AND GRATE IN CENTER OF PRECAST LID

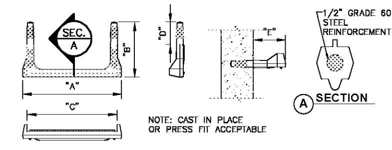
NOTES:
1. CATCH BASIN SHALL BE PRECAST CONCRETE. DESIGNED FOR HS20-44 VEHICULAR LOADING AND 25% IMPACT.
2. FRAME AND COVER SHALL BE DESIGNED FOR HS20-44 VEHICULAR LOADING & 25% IMPACT.
3. CONCRETE CATCH BASIN LID CLEAR OPENING DIMENSION MUST MATCH FRAME AND GRATE CLEAR OPENING DIMENSION.
4. CATCH BASINS HAVING A DEPTH GREATER THAN 48" FROM FINISHED SURFACE TO THE FLOOR OF THE CONCRETE BASE SHALL BE PROVIDED WITH STEPS.
5. BACKFILL USING TRENCH BACKFILL, COMPACTED IN 6" LIFTS.
6. SUMPS FOR CATCH BASINS SHALL BE 12".
7. ECCENTRIC CONE TOP CAN BE USED FOR MANHOLES DEPTH GREATER THAN 7 FEET.
8. SEE CHART FOR REQUIRED MANHOLES / CATCH BASINS DIAMETERS.
9. ALL PRECAST CONSTRUCTION IN ACCORDANCE W/ASTM C478

2 PRECAST CONCRETE CATCH BASIN/MANHOLE DETAIL
SCALE: NOT TO SCALE

ACCEPTABLE MANHOLE STEPS

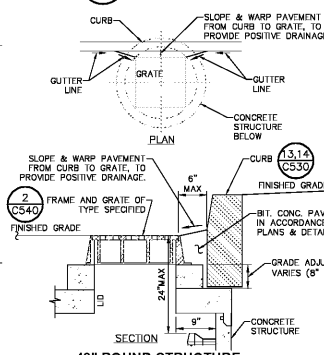
MANUFACTURER	PATTERN NUMBER	"A" STEP WIDTH	"B" LEG LENGTH	"C" RUNG CLEAR	"D" EMBED-MENT	"E" RUNG CLEAR
M.A. INDUSTRIES INC*	PS2-PF	14 3/4	9 1/4	13 3/4	3 3/8	5 7/8
M.A. INDUSTRIES INC*	PS2-PFS	14 3/4	8 1/4	13 3/4	3 3/8	4 7/8

* OR EQUIVALENT
MH STEP DESIGN AND INSTALLATION SHALL COMPLY WITH ALL OSHA REGULATIONS

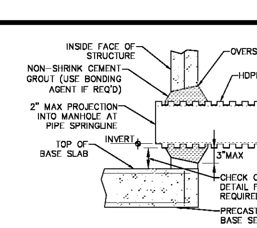


NOTE: CAST IN PLACE OR PRESS FIT ACCEPTABLE

3 COPOLYMER POLYPROPYLENE MH STEP
SCALE: NOT TO SCALE

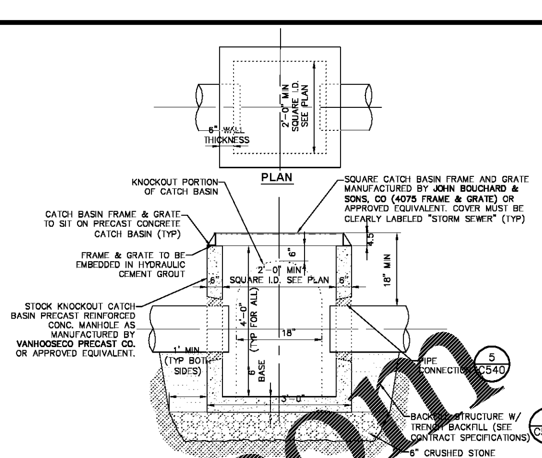


4 48" ROUND STRUCTURE PLACEMENT AT CURB
SCALE: NOT TO SCALE



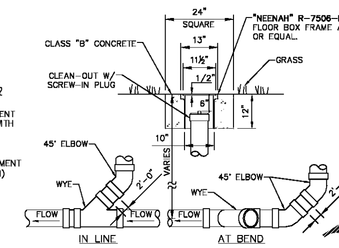
5 PIPE CONNECTION TO DRAINAGE STRUCTURE-CMP OR HDPE CEMENT GROUT SEAL JOINT
SCALE: NOT TO SCALE

STORM SEWER NOTES:
1. ALL STORM WATER MANAGEMENT STRUCTURES (I.E. CATCH BASIN, ETC.) SHALL BE REGULARLY INSPECTED FOR SEDIMENT ACCUMULATIONS. CATCH BASINS SHALL BE CLEANED WHEN SEDIMENT DEPTH REACHES A MAXIMUM OF 1/2 THE AVAILABLE SUMP DEPTH.
2. IF GROUNDWATER IS ENCOUNTERED DURING CONSTRUCTION ACTIVITIES, THE CONTRACTOR SHALL CONSTRUCT A DEWATERING PIT (A.K.A. SUMP PIT) TO TRAP AND FILTER WATER FOR PUMPING TO A SUITABLE DISCHARGE AREA. THE DEWATERING PIT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE NEW YORK STATE GUIDELINES FOR URBAN EROSION AND SEDIMENT CONTROL, LATEST EDITION.
3. ALL EROSION CONTROL MEASURES EMPLOYED DURING THE CONSTRUCTION PROCESS SHALL BE AS OUTLINED ON THE EROSION AND SEDIMENT CONTROL PLANS, DETAILS AND NOTES.



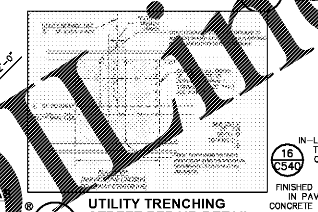
NOTES:
1. CATCH BASIN INLET BASINS SHALL BE PRECAST CONCRETE DESIGNED FOR HS20-44 VEHICULAR LOADING + 25% IMPACT AS MANUFACTURED BY FORT MILLER OR APPROVED EQUAL.
2. CATCH BASIN SHALL NOT HAVE A DEPTH GREATER THAN 60" FROM FINISHED SURFACE.
3. BACKFILL USING TRENCH BACKFILL COMPACTED IN 6" LIFTS.
4. MAX STORM SEWER PIPE FOR SHALLOW CATCH BASIN IS 15".
5. ALL PRECAST CONSTRUCTION IN ACCORDANCE W/ ASTM C478

6 PRECAST CONCRETE SHALLOW CATCH BASIN DETAIL
SCALE: NOT TO SCALE

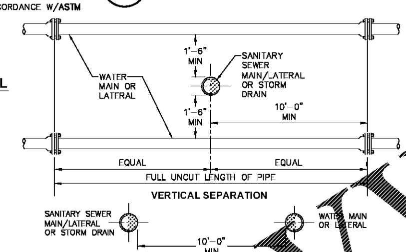


NOTES:
1. SEWER PIPE FITTINGS TO BE ASTM D-3033 OR D-3034 SDR-35.
2. TO BE USED FOR GRAVITY PORTION OF SANITARY SYSTEM AS WELL AS THE STORM ROOF DRAINAGE SYSTEM.

11 CLEAN OUT - NON TRAFFIC AREAS
SCALE: NOT TO SCALE

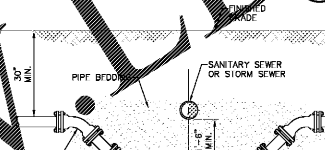


10 UTILITY TRENCHING STREET REPAIR DETAIL
SCALE: NOT TO SCALE



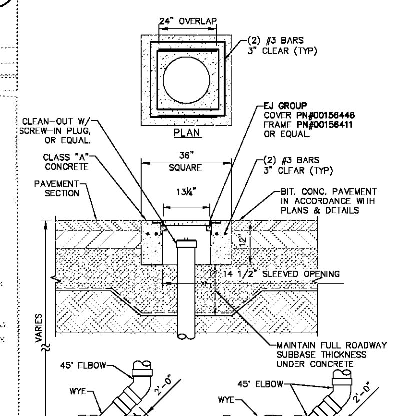
NOTES:
1. NO DEVIATION IN THE SEPARATION REQUIREMENTS WILL BE PERMITTED WITHOUT THE EXPRESS APPROVAL OF THE NYS HEALTH DEPARTMENT. OFFSETTING OF WATERLINE SHALL BE REQUIRED WHERE SEPARATION DISTANCES CANNOT BE MAINTAINED.
2. WHEN IT IS IMPOSSIBLE TO OBTAIN VERTICAL SEPARATION AS INDICATED ABOVE, BOTH THE WATER MAIN AND THE SEWER MAIN SHALL BE CONSTRUCTED OF MECHANICAL JOINT DUCTILE IRON PIPE OR PVC WATER WORKS GRADE PRESSURE PIPE FOR 10' EACH SIDE OF CROSSING AND SHALL BE PRESSURE TESTED TO 150psi TO ASSURE WATER TIGHTNESS.

13 SANITARY/STORM SEWER AND WATERMAIN SEPARATION DETAIL
SCALE: NOT TO SCALE



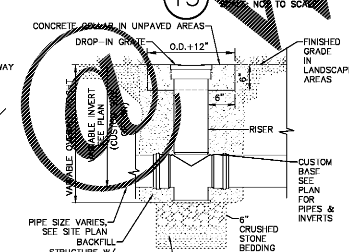
NOTES:
1. WHEN THE ELEVATION OF THE SEWER CAN NOT BE VARIED TO MEET THE ABOVE REQUIREMENTS, THE WATER MAIN SHALL BE RELOCATED TO PROVIDE THIS REQUIRED SEPARATION.
2. WHEN IT IS IMPOSSIBLE TO OBTAIN VERTICAL SEPARATION AS INDICATED ABOVE, BOTH THE WATER MAIN AND THE SEWER MAIN SHALL BE CONSTRUCTED OF MECHANICAL JOINT DUCTILE IRON PIPE OR PVC WATER WORKS GRADE PRESSURE PIPE FOR 10' EACH SIDE OF CROSSING AND SHALL BE PRESSURE TESTED TO 150psi TO ASSURE WATER TIGHTNESS.

14 WATERLINE OFFSET DETAIL
SCALE: NOT TO SCALE



NOTES:
1. SEWER PIPE FITTINGS TO BE ASTM D-3033 OR D-3034 SDR-35 PVC.
2. TO BE USED FOR GRAVITY PORTION OF SANITARY SYSTEM AS WELL AS THE STORM ROOF DRAINAGE SYSTEM.

12 CLEAN OUT - TRAFFIC AREAS
SCALE: NOT TO SCALE

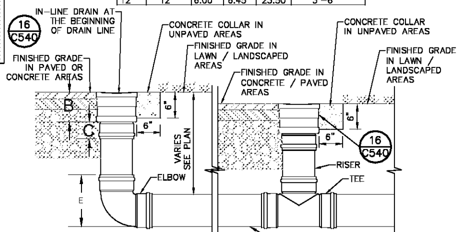


NOTES:
1. BACKFILL USING TRENCH BACKFILL, COMPACTED IN 6" LIFTS.
2. CONTRACTOR SHALL CONSULT ADS NYLOPLAST MANUFACTURER FOR SIZING AND ORDERING BASINS.
3. BASINS SHALL BE A MINIMUM OF 18-INCH DIAMETER.
4. SHALLOW PRE-CAST CATCH BASIN MAY BE USED AS ALTERNATE WHERE APPROVED BY OWNER AND ENGINEER.
5. MANUFACTURER SHALL BE ADVANCED DRAINAGE SYSTEMS (ADS) OR APPROVED EQUAL.

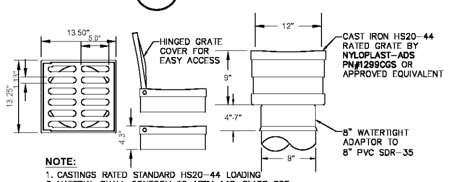
17 NYOPLAST YARD DRAIN BASIN
SCALE: NOT TO SCALE

IN-LINE DRAIN DIMENSIONS

BODY	ADAPTOR	B	C	E	MIN INV DEPTH
8"	6"	5.25"	4.21"	12.75"	2'-0"
8"	8"	7.25"	5.25"	13.25"	2'-2"
10"	6"	8.75"	4.21"	12.75"	2'-2"
10"	8"	6.50"	5.25"	13.25"	2'-2"
10"	10"	7.75"	6.08"	21.75"	3'-0"
12"	6"	11.50"	4.21"	12.75"	2'-6"
12"	8"	11.50"	5.25"	13.25"	3'-0"
12"	10"	11.25"	6.08"	21.75"	3'-4"
12"	12"	6.00"	6.45"	23.50"	3'-6"

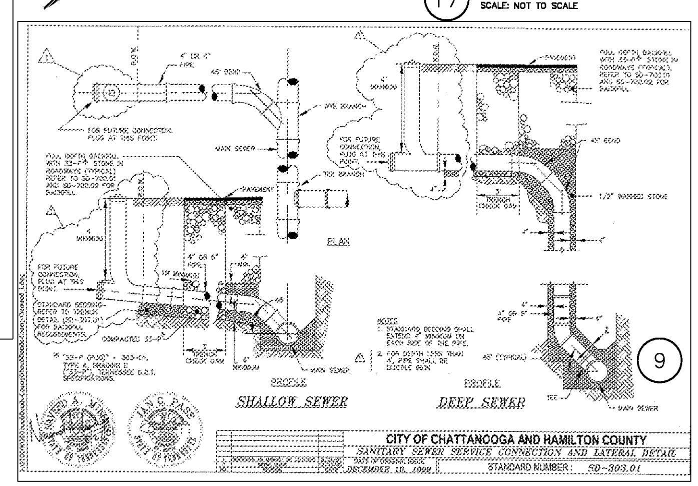


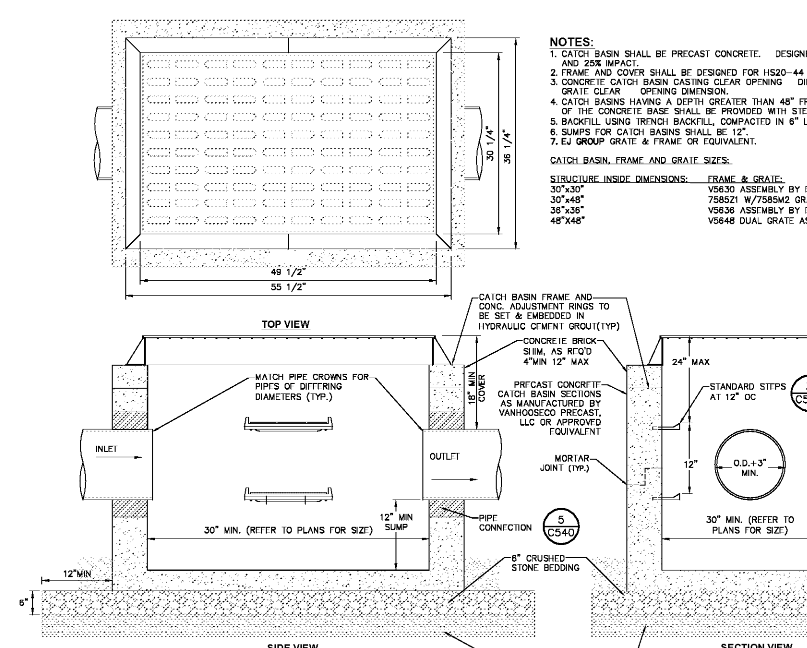
15 YARD IN-LINE DRAIN
SCALE: NOT TO SCALE



NOTE:
1. CASTINGS RATED STANDARD HS20-44 LOADING
2. MATERIAL SHALL CONFORM TO ASTM A48-CLASS 30B
3. PAINT: CASTINGS TO BE FURNISHED WITH A BLACK PAINT
4. IN-LINE DRAIN BY NYLOPLAST OR APPROVED EQUIVALENT
5. DRAIN AREA = 62.7 SQ. INCH

16 12" IN-LINE DRAIN & GRATE
SCALE: NOT TO SCALE





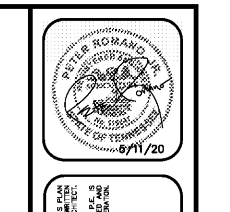
NOTES:
1. CATCH BASIN SHALL BE PRECAST CONCRETE. DESIGNED FOR HS20-44 VEHICULAR LOADING AND 25% IMPACT.
2. FRAME AND COVER SHALL BE DESIGNED FOR HS20-44 VEHICULAR LOADING & 25% IMPACT.
3. CONCRETE CATCH BASIN CASTING CLEAR OPENING DIMENSION MUST MATCH FRAME AND GRATE CLEAR OPENING DIMENSION.
4. CATCH BASINS HAVING A DEPTH GREATER THAN 48" FROM FINISHED SURFACE TO THE TOP OF THE CONCRETE BASE SHALL BE PROVIDED WITH STEPS.
5. BACKFILL USING TRENCH BACKFILL, COMPACTED IN 6" LIFTS.
6. SUMPS FOR CATCH BASINS SHALL BE 12".
7. EJ GROUP GRATE & FRAME OR EQUIVALENT.

CATCH BASIN, FRAME AND GRATE SIZES:

STRUCTURE INSIDE DIMENSIONS:	FRAME & GRATE:
30"x30"	V5630 ASSEMBLY BY EJ GROUP/JB SONS 4315 F&G
30"x48"	7585Z1 W/7585M2 GRATE BY EJ GROUP
36"x36"	V5636 ASSEMBLY BY EJ GROUP
48"X48"	V5648 DUAL GRATE ASSEMBLY BY EJ GROUP

18 PRECAST CONCRETE RECTANGULAR CATCH BASIN DETAIL
SCALE: NOT TO SCALE

Order Plans @ www.LDILine.com



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rev.	date	description

ISSUED FOR CITY OF CHATTANOOGA LAND DISTURBANCE PERMIT

FOUNDRY33 - RESIDENTIAL DEVELOPMENT

STORM AND SANITARY SEWER DETAILS

CITY OF CHATTANOOGA, HAMILTON COUNTY, TN

drawn	checked
TCC	TCC
date 5/11/2020	scale NTS
project no. 11916.01	
sheet no. C540	

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Date Printed: May 12, 2020, 4:15pm