

CITY OF MT. PLEASANT DIVISION OF PUBLIC WORKS

2011 STREET RECONSTRUCTION PROJECT

FANCHER STREET FROM HIGH STREET TO MICHIGAN STREET
WISCONSIN STREET FROM FANCHER STREET TO LANSING STREET
CHIPPEWA STREET FROM BROWN STREET TO RUSSELL STREET

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THIS PROJECT IS TO BE CONSTRUCTED TO 2003 MDOT STANDARD SPECIFICATIONS FOR CONSTRUCTION

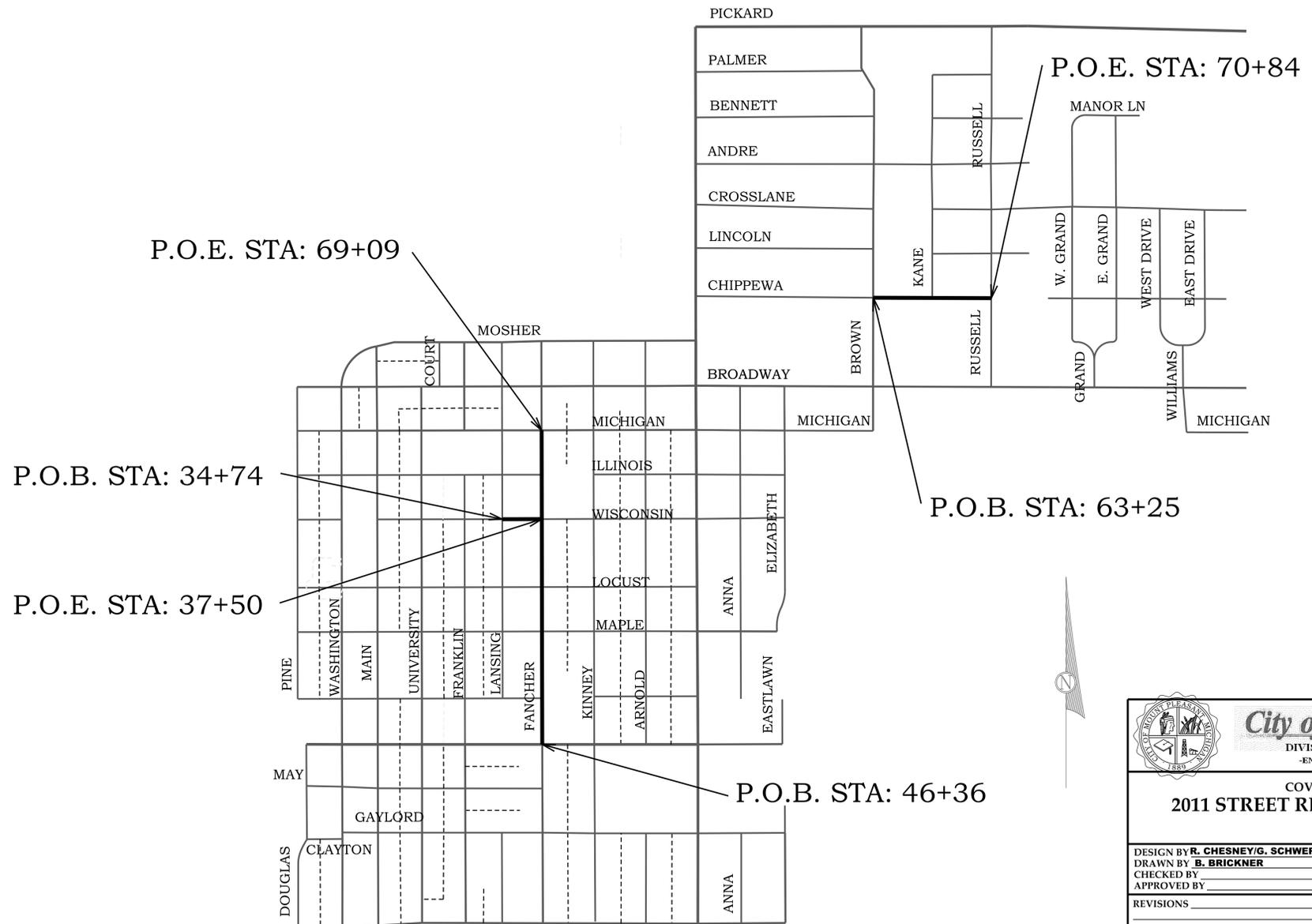
MAYOR
BRUCE KILMER

VICE MAYOR
KATHLEEN L. LING

COMMISSIONERS
NANCY ENGLISH
SHARON TILMANN
JON JOSLIN
JIM HOLTON

CITY MANAGER
KATHIE GRINZINGER

DIRECTOR OF PUBLIC WORKS
RANDY CHESNEY



THE IMPROVEMENTS COVERED BY THESE PLANS SHALL BE DONE IN ACCORDANCE WITH THE MICHIGAN DEPARTMENT OF TRANSPORTATION 2003 STANDARD SPECIFICATIONS AND SUPPLEMENTAL SPECIFICATIONS.

THE PROPOSED IMPROVEMENTS COVERED BY THESE PLANS ARE IN ACCORDANCE WITH THE AASHTO: A POLICY ON GEOMETRIC DESIGN OF HIGHWAYS AND STREETS, 2004, & 2005 MMUTCD.

MISS DIG: CALL TOLL FREE 1-800-482-7171 MINIMUM OF THREE WORKING DAYS BEFORE STARTING THIS PROJECT, OR ANY DIGGING.

UTILITIES:
THE FOLLOWING UTILITIES ARE LOCATED IN OR NEAR THE RIGHT-OF-WAY OF THIS PROJECT.

UTILITY	OWNER	CONTACT
GAS	DTE/MICHCON 609 BJORNSON BIG RAPIDS, MI 49307	DAVE NEWCOMB (231) 592-3244
ELECTRIC	CONSUMERS ENERGY 1325 WRIGHT AVENUE ALMA, MI 48801	RICHARD KLENDER (989) 466-4279
TELEPHONE	FRONTIER COMMUNICATION 345 PINE STREET ALMA, MI 48801	JEFF JAMES (989) 463-0392
CABLE	CHARTER COMMUNICATION 915 E. BROOMFIELD RD. MT. PLEASANT, MI 48858	JEFF PRICE (989) 773-7090
SEWER & WATER	CITY OF MT. PLEASANT 1303 N. FRANKLIN ST. MT. PLEASANT, MI 48858	GARY SCHWERIN (989) 779-5408



City of Mt. Pleasant
DIVISION OF PUBLIC WORKS
-ENGINEERING DEPARTMENT-

COVER SHEET 2011 STREET RECONSTRUCTION

DESIGN BY: R. CHESNEY/G. SCHWERIN	CONSTRUCTED
DRAWN BY: B. BRICKNER	DATE OF PLAN: 3/16/2011
CHECKED BY:	SCALE: NONE
APPROVED BY:	SHEET 1 OF 20 SHEETS

REVISIONS _____ DATE/INITIALS _____

CONTROL SECT.	JOB NO.	FED. PROJECT	FED. ITEM NO.
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PLOT DATE:

DRAWING PATH:

FED. ITEM NO.

FED. PROJECT:

JOB NO.:

CONTROL SECTION:

2011 STREET RECONSTRUCTION

GENERAL NOTE:
DEEP SAW AND REMOVE SUFFICIENT PAVEMENT TO CONSTRUCT NEW CATCH BASIN, AND SEWER SERVICE LEADS, AS DIRECTED BY THE ENGINEER.



QUANTITIES THIS SHEET

ROADWAY ITEMS	QUANTITY
Drainage Structure, Remove	7 Ea
Masonry and Conc. Structure, Rem	10 Cyd
Sidewalk, Rem	280 Syd
Driveway, Rem	690 Syd
Pav't, Rem, Modified	7600 Syd
Machine Grading, Modified	34 Sta
Subgrade Undercutting, Type II	50 Cyd
Drainage Structure, Temp Lowering	1 Ea
Deep Sawing	1700 Lft
Sawcutting	200 Lft
Barricade, Type III, High Intensity, Lighted, Furn.	26 Ea
Barricade, Type III, High Intensity, Lighted, Oper.	26 Ea
Plastic Drum, High Intensity, Lighted, Furn.	50 Ea
Plastic Drum, High Intensity, Lighted, Oper.	50 Ea
Maintenance Gravel, LM, Modified	250 Cyd
Sign, Type B, Temp, Furn.	100 Sft
Sign, Type B, Temp, Oper.	100 Sft

CORE BORING INFORMATION

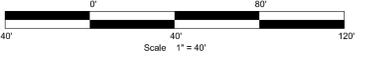
Between Michigan & Illinois 2" Asphalt 8" Concrete 36" Sand	Between Locust & Maple 1-1/2" Asphalt 7-1/2" Concrete 39" Sand
Between Illinois & Wisconsin 1-1/2" Asphalt 6-1/2" Concrete 26" Sand 14" Clay	Between Maple & Cherry 2" Asphalt 7" Concrete 39" Sand
Between Wisconsin & Locust 1-1/2" Asphalt 7-1/2" Concrete 33-1/2" Sand 6" Clay	Between Cherry & High 2" Asphalt 7-1/2" Concrete 39" Sand

REMOVAL LEGEND

Driveway, Rem	
Sidewalk, Rem	
Pav't, Rem, Modified	
Drainage Structure Temporary Lowering	
Structure, Rem	
Curb and Gutter, Rem (measured and paid for as Pav't, Rem, Modified)	

PLAN NOTES:

1. MOBILIZATION NOT PAID FOR SEPERATELY, BUT CONSIDERED INCLUDED AS PART OF OTHER MAJOR WORK ITEMS.



City of Mt. Pleasant
DIVISION OF PUBLIC WORKS
-ENGINEERING DEPARTMENT-

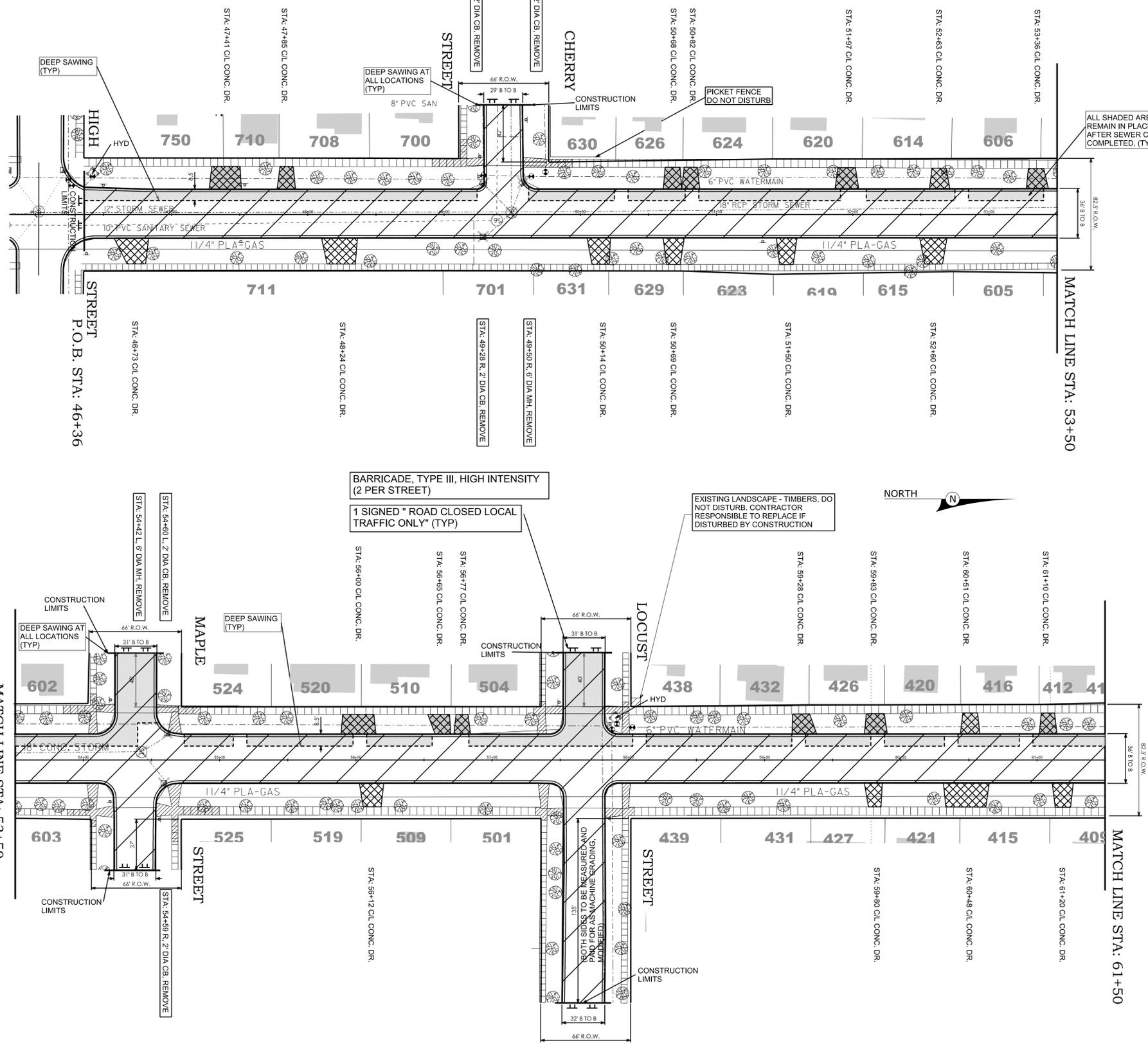
REMOVAL SHEET
2011 STREET RE-CONSTRUCTION PROJECT
FANCHER FROM STA: 46+36 TO STA: 61+50

DESIGN BY R. CHESNEY/G. SCHWERIN	CONSTRUCTED
DRAWN BY B. BRICKNER	DATE OF PLAN 3/16/2011
CHECKED BY	SCALE 1" = 40'
APPROVED BY	SHEET 2 OF 20 SHEETS

REVISIONS	DATE/INITIALS

CONTROL SECT.	JOB NO.	FED. PROJECT	FED. ITEM NO.

PLOT DATE:



DRAWING PATH:

FED. ITEM NO.

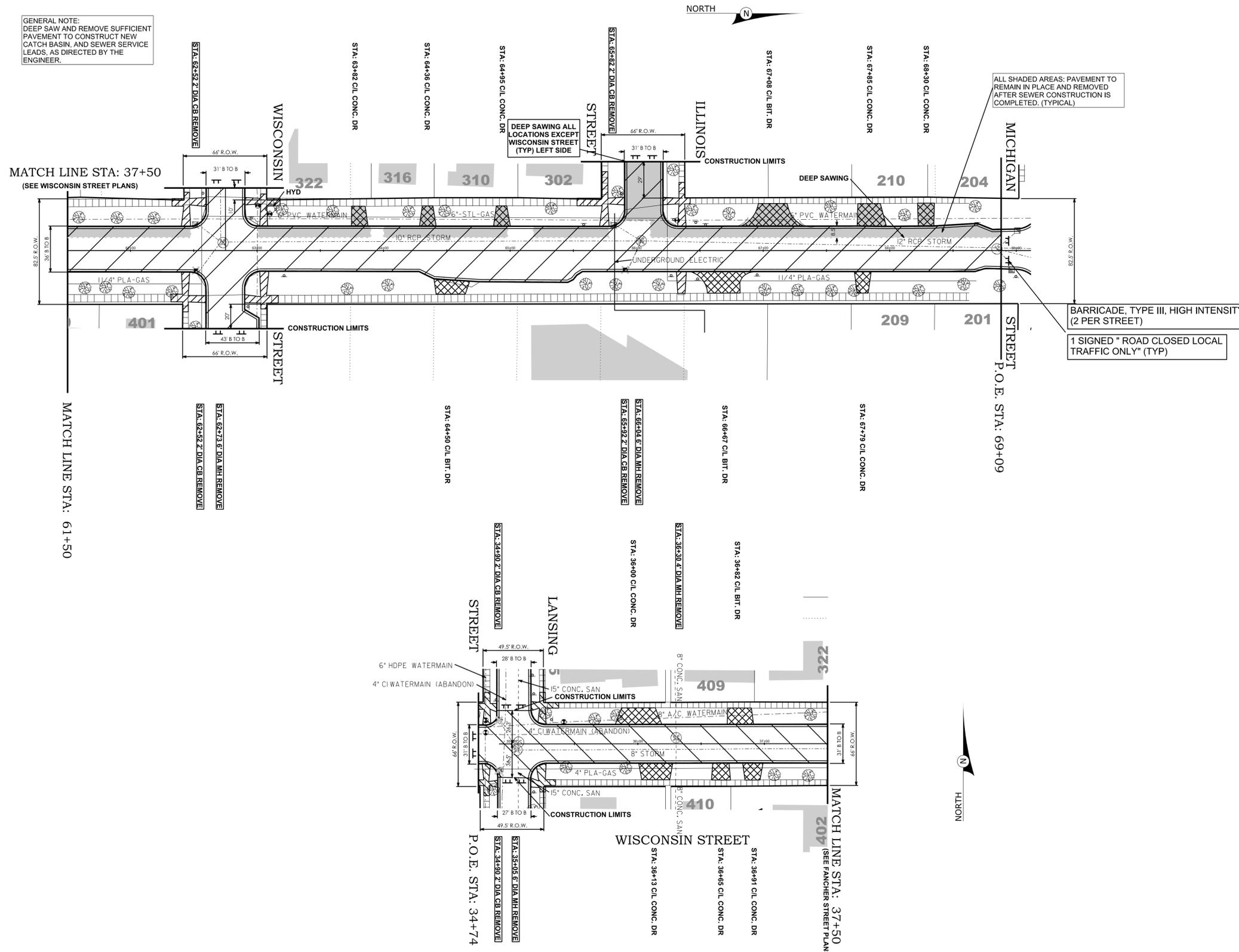
FED. PROJECT:

JOB NO.:

CONTROL SECTION:

2011 STREET RE-CONSTRUCTION PROJECT

GENERAL NOTE:
DEEP SAW AND REMOVE SUFFICIENT PAVEMENT TO CONSTRUCT NEW CATCH BASIN, AND SEWER SERVICE LEADS, AS DIRECTED BY THE ENGINEER.



QUANTITIES THIS SHEET

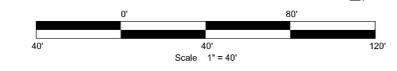
ROADWAY ITEMS	QUANTITY
Drainage Structure, Rem	10 Ea
Sidewalk, Rem	260 Syd
Driveway, Rem	435 Syd
Pav't, Rem, Modified	3940 Syd
Machine Grading, Modified	20 Sta
Drainage Structure, Temp Lowering	2 Ea
Deep Sawing	1200 Lft
Sawcutting	200 Lft
Maintenance Gravel, LM, Modified	150 Cyd

CORE BORING INFORMATION

Between Michigan & Illinois	Between Locust & Maple
2" Asphalt	1-1/2" Asphalt
8" Concrete	7-1/2" Concrete
36" Sand	39" Sand
Between Illinois & Wisconsin	Between Maple & Cherry
1-1/2" Asphalt	2" Asphalt
6-1/2" Concrete	7" Concrete
26" Sand	39" Sand
14" Clay	
Between Wisconsin & Locust	Between Cherry & High
1-1/2" Asphalt	2" Asphalt
7-1/2" Concrete	7-1/2" Concrete
33-1/2" Sand	39" Sand
6" Clay	

REMOVAL LEGEND

Driveway, Rem	
Sidewalk, Rem	
Pav't, Rem, Modified	
Drainage Structure Temporary Lowering	
Structure, Rem	
Curb and Gutter, Rem (measured and paid for as Pav't, Rem, Modified)	



City of Mt. Pleasant
DIVISION OF PUBLIC WORKS
-ENGINEERING DEPARTMENT-

REMOVAL SHEET
2011 STREET RE-CONSTRUCTION PROJECT
FANCHER FROM STA: 61+50 TO STA: 69+09
WISCONSIN FROM STA: 34+74 TO STA: 37+50

DESIGN BY R. CHESNEY/G. SCHWERIN	CONSTRUCTED
DRAWN BY B. BRICKNER	DATE OF PLAN 3/16/2011
CHECKED BY	SCALE 1" = 40'
APPROVED BY	SHEET 3 OF 20 SHEETS

REVISIONS	DATE/INITIALS

CONTROL SECT.	JOB NO.	FED. PROJECT	FED. ITEM NO.

PLOT DATE:

DRAWING PATH:

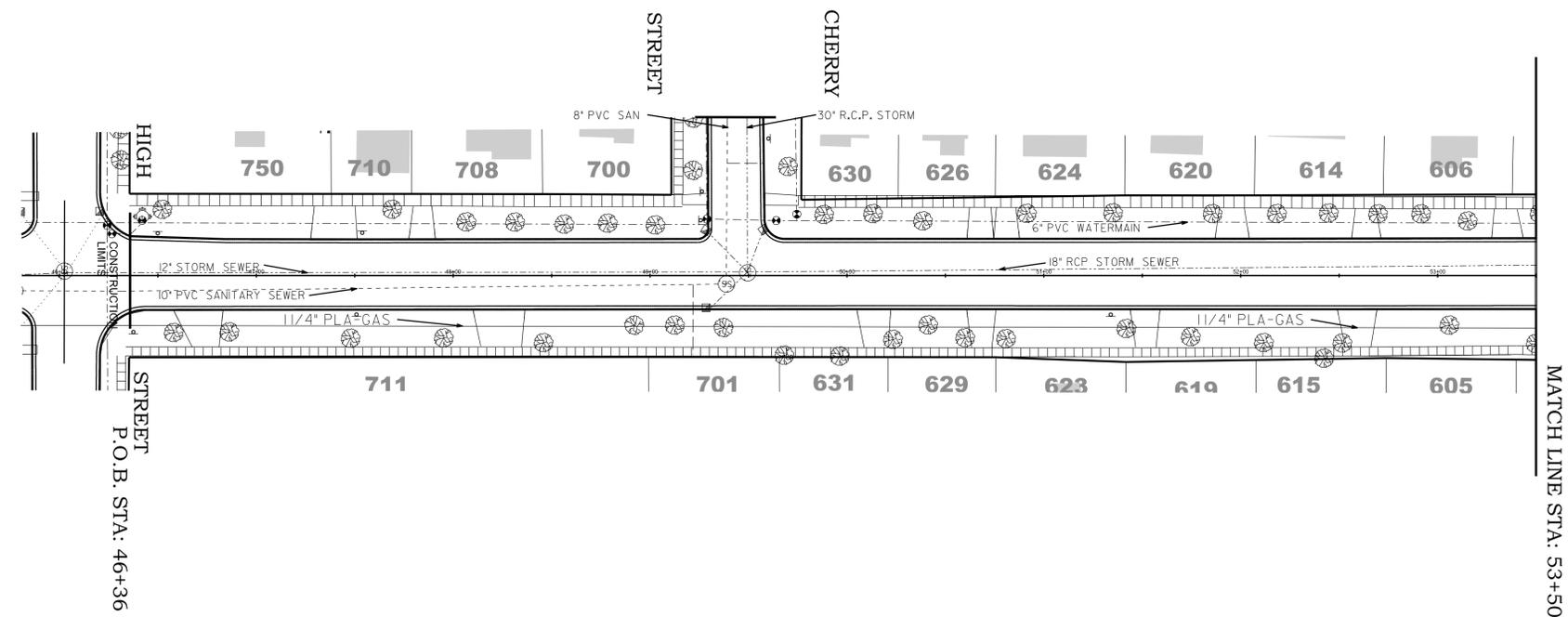
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FED. PROJECT:

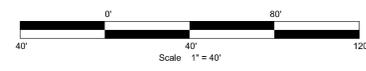
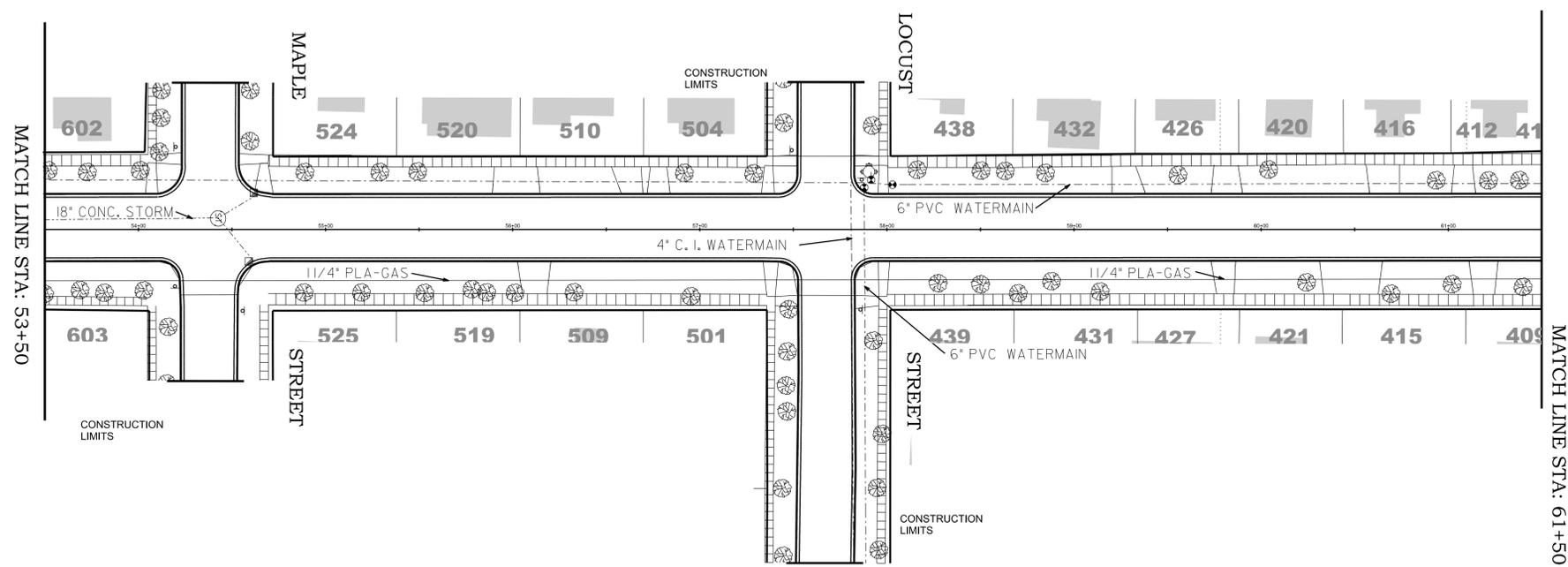
JOB NO.:

CONTROL SECTION:

2011 STREET RE-CONSTRUCTION PROJECT



FOR INFORMATION ONLY



City of Mt. Pleasant
 DIVISION OF PUBLIC WORKS
 -ENGINEERING DEPARTMENT-

UTILITY SHEET
2011 STREET RE-CONSTRUCTION PROJECT
FANCHER FROM STA: 46+36 TO STA: 61+50

DESIGN BY **R. CHESNEY/G. SCHWERIN** CONSTRUCTED _____
 DRAWN BY **B. BRICKNER** DATE OF PLAN **3/16/2011**
 CHECKED BY _____ SCALE **1" = 40'**
 APPROVED BY _____ SHEET **4** OF **20** SHEETS

REVISIONS _____ DATE/INITIALS _____

CONTROL SECT.	JOB NO.	FED. PROJECT	FED. ITEM NO.
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PLOT DATE: _____

DRAWING PATH:

FED. ITEM NO.

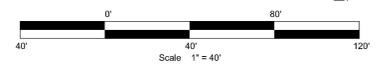
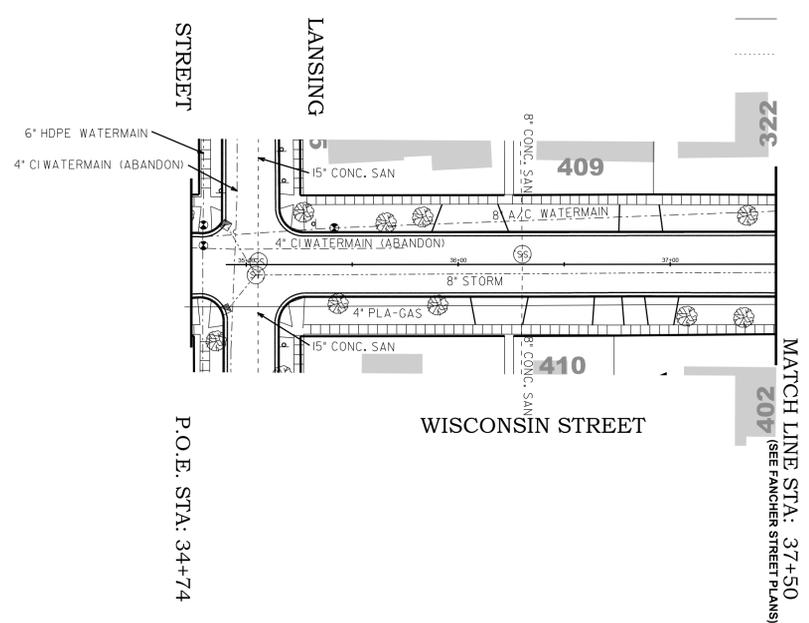
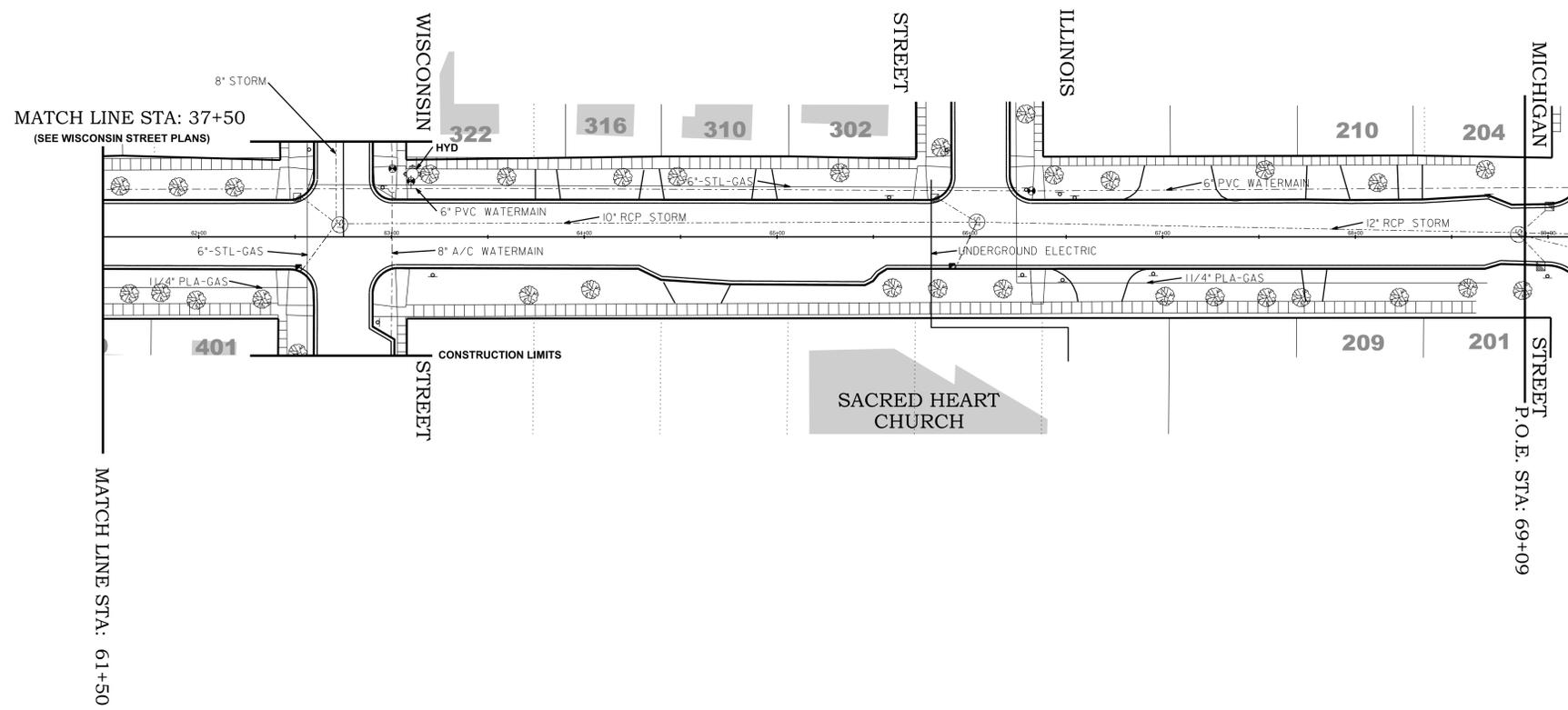
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JOB NO.:

CONTROL SECTION:

2011 STREET RE-CONSTRUCTION PROJECT

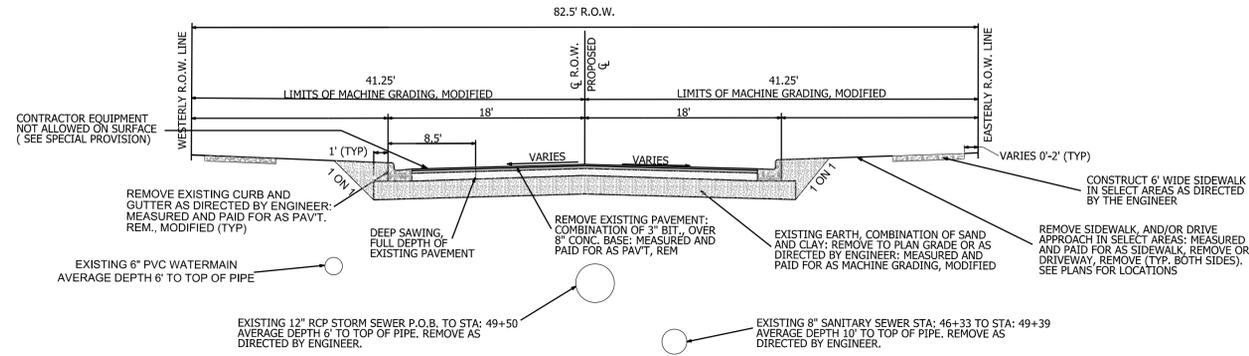
FOR INFORMATION ONLY



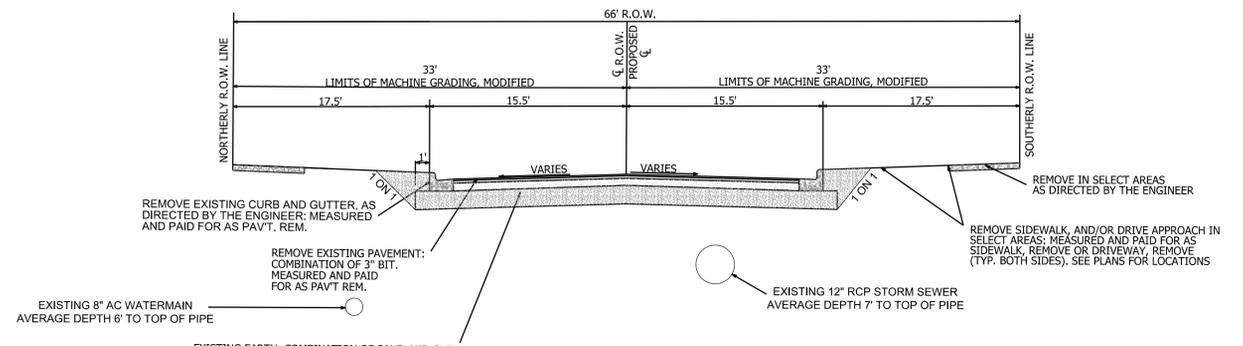
City of Mt. Pleasant
 DIVISION OF PUBLIC WORKS
 -ENGINEERING DEPARTMENT-

UTILITY SHEET			
2011 STREET RE-CONSTRUCTION PROJECT			
FANCHER FROM STA: 61+50 TO STA: 69+09			
WISCONSIN FROM STA: 34+74 TO STA: 37+50			
DESIGN BY R. CHESNEY/G. SCHWERIN	CONSTRUCTED	DATE OF PLAN 3/16/2011	
DRAWN BY B. BRICKNER	CHECKED BY	SCALE 1" = 40'	
APPROVED BY	SHEET 5	OF	20 SHEETS
REVISIONS _____ DATE/INITIALS _____			
CONTROL SECT.	JOB NO.	FED. PROJECT	FED. ITEM NO.
PLOT DATE:			

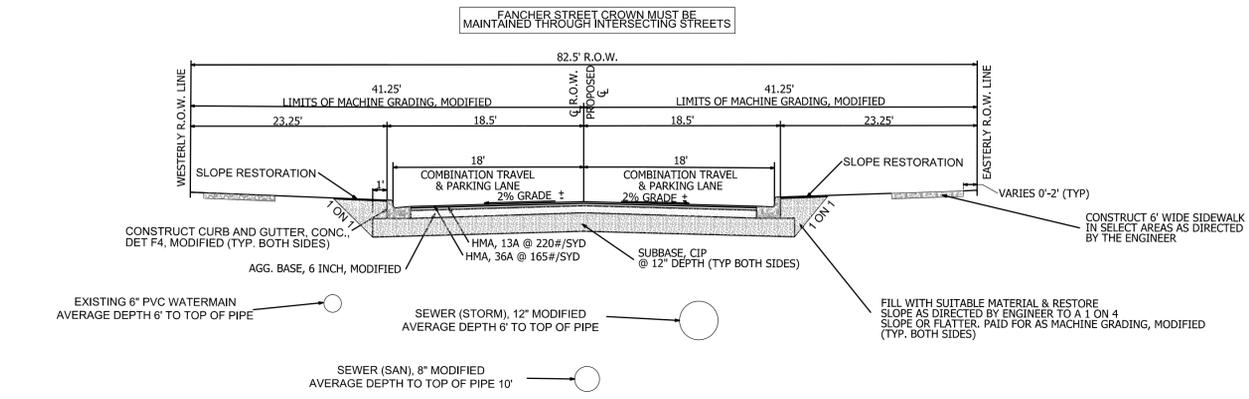
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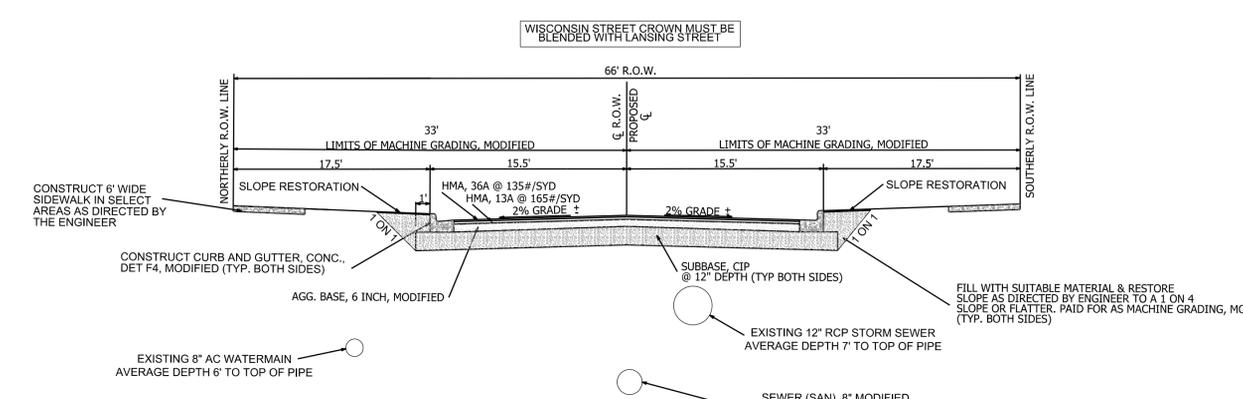
NOTE: OTHER UNDERGROUND UTILITIES EXIST.
FANCHER STREET EXISTING PAVEMENT
 P.O.B. STA: 46+36 P.O.E. STA: 69+00



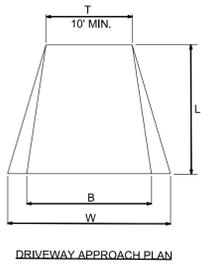
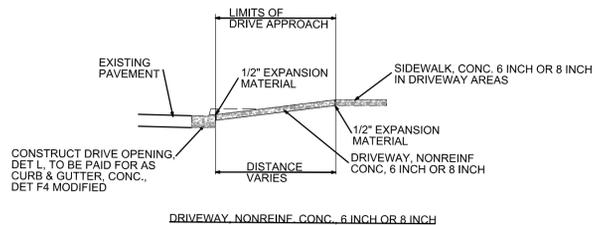
NOTE: OTHER UNDERGROUND UTILITIES EXIST.
WISCONSIN STREET EXISTING PAVEMENT



NOTE: OTHER UNDERGROUND UTILITIES EXIST.
FANCHER STREET PROPOSED PAVEMENT



NOTE: OTHER UNDERGROUND UTILITIES EXIST.
WISCONSIN STREET PROPOSED PAVEMENT



CORE BORING INFORMATION

Between Michigan & Illinois 2" Asphalt 8" Concrete 36" Sand	Between Locust & Maple 1-1/2" Asphalt 7-1/2" Concrete 39" Sand
Between Illinois & Wisconsin 1-1/2" Asphalt 6-1/2" Concrete 28" Sand 14" Clay	Between Maple & Cherry 2" Asphalt 7" Concrete 39" Sand
Between Wisconsin & Locust 1-1/2" Asphalt 7-1/2" Concrete 33-1/2" Sand 6" Clay	Between Cherry & High 2" Asphalt 7-1/2" Concrete 39" Sand

FANCHER STREET DRIVEWAY SCHEDULE

STATION	T	B	W	L	DRIVEWAY, DRIVEWAY, NONREINF. NONREINF.	
					6" SYD	8" SYD
46+73 R	11	16	19	17.5	29	
47+41 L	20	25	28	17.5	47	
47+85 L	10	15	18	17.5	27	
48+24 R	19	24	27	17.5	45	
50+14 R	11	16	19	17.5	29	
50+68 L	10	15	18	17.5	27	
50+69 R	12	17	20	17.5	31	
50+82 L	10	15	18	17.5	27	
51+50 R	10	15	18	17.5	27	
51+97 L	11	16	19	17.5	29	
52+60 R	11	16	19	17.5	29	
52+63 L	10	15	18	17.5	27	
53+36 L	10	15	18	17.5	27	
56+00 L	21	26	29	17.5	49	
56+12 R	12	17	20	17.5	31	
56+65 L	18	23	26	17.5	43	
56+77 L	10	15	18	17.5	27	
59+28 L	11	16	19	17.5	29	
59+80 R	10	15	18	17.5	27	
59+83 L	12	17	20	17.5	31	
60+48 R	28	33	36	17.5	53	
60+51 L	10	15	18	17.5	27	
61+10 L	10	15	18	17.5	27	
61+20 R	10	15	18	17.5	27	
63+82 L	10	15	18	17.5	27	
64+36 L	10	15	18	17.5	27	
64+50 R	23	28	31	17.5		53
64+95 L	10	15	18	17.5	27	
66+67 R	26	31	34	17.5		58
67+08 L	25	30	33	17.5		56
67+79 R	10	15	18	17.5	27	
67+85 L	17	22	25	17.5	41	
68+30 L	13	18	21	17.5	33	

WISCONSIN STREET DRIVEWAY SCHEDULE

STATION	T	B	W	L	DRIVEWAY, DRIVEWAY, NONREINF. NONREINF.	
					6" SYD	8" SYD
36+00 L	27	32	35	13	45	
36+13 R	23	28	31	13	39	
36+65 R	15	20	23	13	27	
36+82 L	19	24	27	13	33	
36+91 R	12	17	20	13	23	

City of Mt. Pleasant
 DIVISION OF PUBLIC WORKS
 -ENGINEERING DEPARTMENT-

2011 STREET RE-CONSTRUCTION PROJECT
FANCHER STREET TYPICAL CROSS SECTIONS

DESIGN BY **R. CHESNEY**
 DRAWN BY **B. BRICKNER**
 CHECKED BY _____
 APPROVED BY _____

CONSTRUCTED DATE OF PLAN **3/16/2011**
 SCALE SHEET **6** OF **20** SHEETS

REVISIONS _____ DATE/INITIALS _____

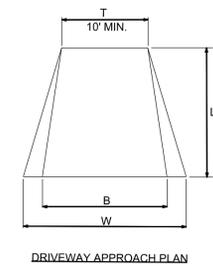
CONTROL SECT. _____ JOB NO. _____ FED. PROJECT _____ FED. ITEM NO. _____

PLOT DATE: _____

DRAWING PATH: _____ FED. ITEM NO. _____ FED. PROJECT: _____ JOB NO.: _____ CONTROL SECTION: _____ 2011 STREET RE-CONSTRUCTION PROJECT

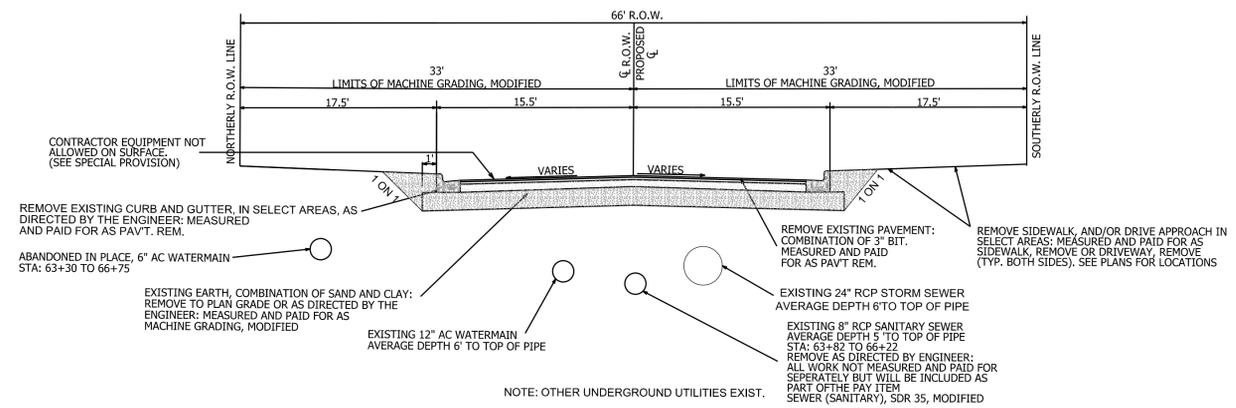
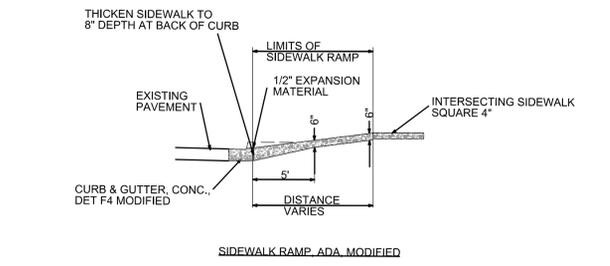
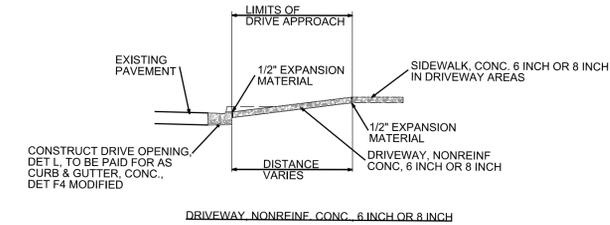
PROJECT NOTES:

- UNLESS OTHERWISE NOTED, MOBILIZATION WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE CONSIDERED INCLUDED AS PART OF MAJOR PAY ITEMS.
- ALL JOINTS BETWEEN PROPOSED PAVEMENT AND EXISTING PAVEMENT SHALL BE BUTT JOINTS CONSTRUCTED PRIOR TO PLACEMENT OF TOP COURSE MATERIAL. THESE JOINTS SHALL BE MADE BY SAW CUTTING THE PAVEMENT SURFACE AND REMOVING THE SLIVER OF ASPHALT. THIS WORK SHALL BE PAID FOR AS SAW CUTTING.
- CONCRETE MIX: ALL CONCRETE SHALL BE GRADE S2, SIX FULL SACK MIX.
- ALL INTERSECTING STREET APPROACHES SHALL BE RESURFACED AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER. THIS RESURFACING SHALL BE PAID FOR AS MAINLINE PAVING USING THE APPROPRIATE HMA MIXTURE ITEM.
- LIGHTED ARROW, TYPE B, MUST BE EITHER ELECTRICAL POWERED OR SOLAR POWERED, NO GAS FEED ENGINES ARE ALLOWED.
- RESTORATION OF ALL HMA SURFACES OUTSIDE OF THE ROADWAY WILL BE MEASURED AND PAID FOR AS THE WORK ITEM HMA APPROACH, MODIFIED. THE HMA MIXTURE SHALL BE 36A AND WILL BE VISUALLY ACCEPTED BY THE ENGINEER.
- THE CONTRACTOR IS RESPONSIBLE TO TAKE ALL NECESSARY PRECAUTIONS TO PROTECT EXISTING CURB IN AREAS NOT CALLED OUT FOR REPLACEMENT. IF EXISTING CURB IS DAMAGED DURING CONSTRUCTION, IT IS THE CONTRACTOR'S RESPONSIBILITY TO REPLACE/RESET AT NO ADDITIONAL COST TO THE CITY.
- THE CONTRACTOR IS RESPONSIBLE TO TAKE ALL NECESSARY PRECAUTIONS TO PROTECT EXISTING CATCH BASINS IN AREAS NOT CALLED OUT FOR REPLACEMENT OR ADJUSTMENT. IF EXISTING CATCH BASINS ARE DAMAGED DURING CONSTRUCTION BY CONTRACTOR NEGLIGENCE, IT IS THE CONTRACTOR'S RESPONSIBILITY TO REPAIR THE CATCH BASINS, AS DETERMINED BY THE ENGINEER, AT NO ADDITIONAL COST TO THE CITY.
- THE LOCATION AND ELEVATION OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THE PLANS WERE OBTAINED FROM UTILITY OWNERS AND ARE ONLY APPROXIMATE. NO GUARANTEE AS TO ACCURACY IS EITHER EXPRESSED OR IMPLIED. THE CONTRACTOR SHALL BE EXCLUSIVELY RESPONSIBLE FOR DETERMINING THE EXACT LOCATION AND ELEVATION OF THE EXISTING UTILITIES AND PROPOSED UTILITY CROSSINGS IN THE FIELD PRIOR TO CONSTRUCTION. ALL UTILITIES DAMAGED BY THIS CONSTRUCTION SHALL BE REPAIRED WITH LIKE MATERIALS IN ACCORDANCE WITH THE UTILITY OWNER'S REQUIREMENTS.
- THE CONTRACTOR SHALL BE REQUIRED TO EXPOSE ALL EXISTING UTILITY CONNECTION POINTS PRIOR TO CONSTRUCTION OF PROPOSED UTILITIES AND REPORT ANY DISCREPANCIES TO THE ENGINEER. THE CONTRACTOR SHALL VERIFY THE DEPTH AND HORIZONTAL LOCATION OF ALL EXISTING UTILITIES BY HAND DIGGING AND SHALL NOTIFY THE CONSTRUCTION REVIEWER AND ENGINEER OF ANY PROBLEM AREAS. ALL LABOR REQUIRED TO UNCOVER THE EXISTING UTILITIES SHALL BE CONSIDERED INCLUDED IN THE LINEAL FEET OF UTILITY INSTALLED. THE CONTRACTOR SHALL ARRANGE FOR THE VARIOUS UTILITIES TO LOCATE, REMOVE AND REPLACE, OR RELOCATE THEIR FACILITIES IN ACCORDANCE WITH THE RESPECTIVE UTILITY COMPANIES POLICY. ALL COST SHALL BE INCLUSIVE OF THE WORK.
- THE CONTRACTOR SHALL MAINTAIN ALL EXISTING SANITARY SEWER, WATER OR STORM SEWER SERVICE CONNECTIONS IN SERVICE THROUGHOUT THE CONSTRUCTION PERIOD. THE CONTRACTOR SHALL PROVIDE OR ARRANGE FOR TEMPORARY SUPPORT OF GAS MAIN, COMMUNICATION DUCTS AND UTILITY POLES WHERE NEEDED. ALL STORM SEWER DAMAGED, REMOVED OR RELOCATED BY THE CONTRACTOR SHALL BE REPLACED WITH SAME SIZE AND QUALITY OF PIPE BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE PROJECT. ALL UTILITIES UNDERMINED BY THE EXCAVATION SHALL HAVE CRUSHED STONE 6 A PLACED UNDER THEM.
- PUBLIC UTILITY INFORMATION IS DELINEATED IN ACCORDANCE WITH LOCATIONS PROVIDED BY THE OWNERS. THE DESIGN ENGINEER IS NOT RESPONSIBLE FOR THE ACCURACY OF THE INFORMATION OR THE LOCATION OF WHICH THESE SERVICES EXIST. DIFFERING FIELD CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER.
- THE CONTRACTOR SHALL TAKE CARE IN REMOVING AND SALVAGING ALL HYDRANTS, TRAFFIC SIGNS, VALVES AND BOXES, AND STRUCTURE COVERS. UPON REMOVAL, THE CONTRACTOR SHALL COORDINATE DELIVERY OF THE SALVAGED ITEMS TO THE CITY OF MT. PLEASANT. THESE REMOVED ITEMS SHALL BE INCLUDED IN THE COST FOR REMOVAL OF EACH RESPECTIVE ITEM.
- WHERE THE PROPOSED EXCAVATION REQUIRES THAT A POLE OR GUY BE SUPPORTED OR TEMPORARILY RELOCATED, THE CONTRACTOR SHALL MAKE ARRANGEMENTS WITH THE APPROPRIATE UTILITY TO HAVE THE POLE OR GUY SUPPORTED OR RELOCATED. IF THE CONTRACTOR SUPPORTS THE POLE OR RELOCATES THE GUY HIMSELF, THE METHOD USED SHALL MEET THE APPROVAL OF THE APPROPRIATE UTILITY.
- THE CONTRACTOR SHALL CONTACT THE ENGINEER PRIOR TO PLACING ANY PAVEMENT. IN ORDER THAT THE SUBGRADE MAY BE INSPECTED, ANY MATERIAL FOUND TO BE UNSUITABLE AS SUBGRADE WILL BE REMOVED AS DIRECTED BY THE ENGINEER. EXCAVATION OF UNSUITABLE SUBGRADE MATERIAL SHALL BE REPLACED WITH SUITABLE MATERIAL AS DIRECTED BY THE ENGINEER. ALL REPLACEMENT MATERIAL SHALL BE APPROVED BY THE ENGINEER AT THE SOURCE PRIOR TO BEING CONSIDERED FOR USE.
- THE CONTRACTOR SHALL EXCAVATE AHEAD OF THE PROPOSED UTILITY INSTALLATION TO EXPOSE ANY EXISTING BURIED UTILITIES. IF EXISTING UTILITY GRADES CONFLICT WITH PROPOSED UTILITY GRADE, THE PROPOSED UTILITY GRADE MAY BE ADJUSTED SLIGHTLY BY THE ENGINEER, IF NECESSARY, TO MISS THE EXISTING UTILITY GRADE AT NO ADDITIONAL EXPENSE.
- EARTHWORK QUANTITIES IN MACHINE GRADING MODIFIED PAY ITEM HAVE BEEN COMPUTED BY AVERAGE END AREA METHODS. EARTHWORK QUANTITIES ARE CALCULATED FROM BOTTOM OF PROPOSED CROSS SECTION TO TOP OF EXISTING GROUND. EARTHWORK ITEMS SHALL BE PAID BY PLAN QUANTITIES UNLESS CONTRACTOR HAS DISCREPANCIES FOR WHICH HE/SHE HAS SUBMITTED PROOF TO THE CITY.
- ALL RETIRED CATCH BASIN LEADS WILL BE REMOVED TO MANHOLE, UNLESS OTHERWISE NOTED. THIS WORK WILL NOT BE MEASURED OR PAID FOR SEPARATELY, BUT WILL BE CONSIDERED INCLUDED AS PART OF OTHER WORK ITEMS.

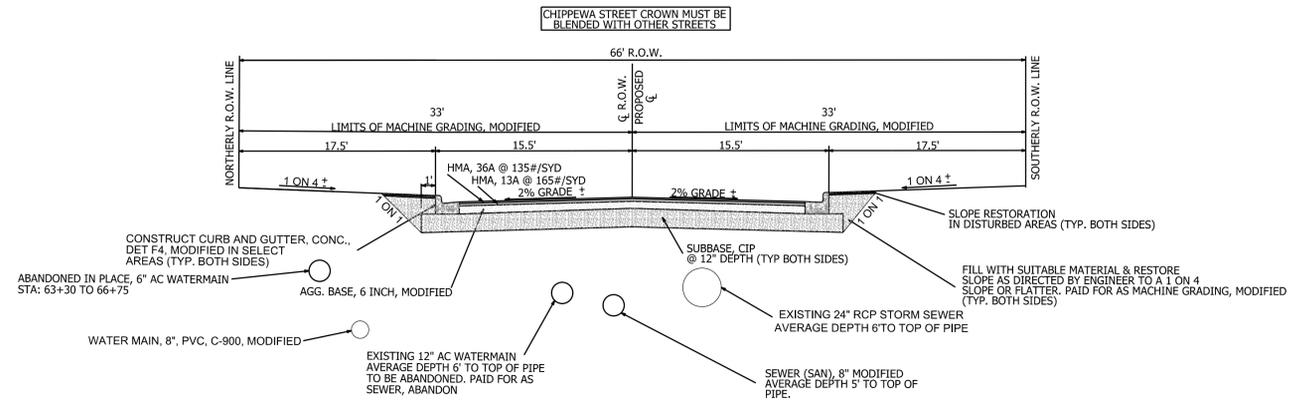


CHIPPEWA STREET DRIVEWAY SCHEDULE

STATION	T	B	W	L	DRIVEWAY, DRIVEWAY, NONREINF. NONREINF.	
					6" SYD	8" SYD
36+00 L	27	32	35	13	45	
36+13 R	23	28	31	13	39	
36+65 R	15	20	23	13	27	
36+82 L	19	24	27	13	33	
36+91 R	12	17	20	13	23	



CHIPPEWA STREET EXISTING PAVEMENT



CHIPPEWA STREET PROPOSED PAVEMENT



City of Mt. Pleasant
DIVISION OF PUBLIC WORKS
-ENGINEERING DEPARTMENT-

**2011 STREET RE-CONSTRUCTION PROJECT
CHIPPEWA STREET TYPICAL CROSS SECTIONS
FROM BROWN STREET TO RUSSELE STREET**

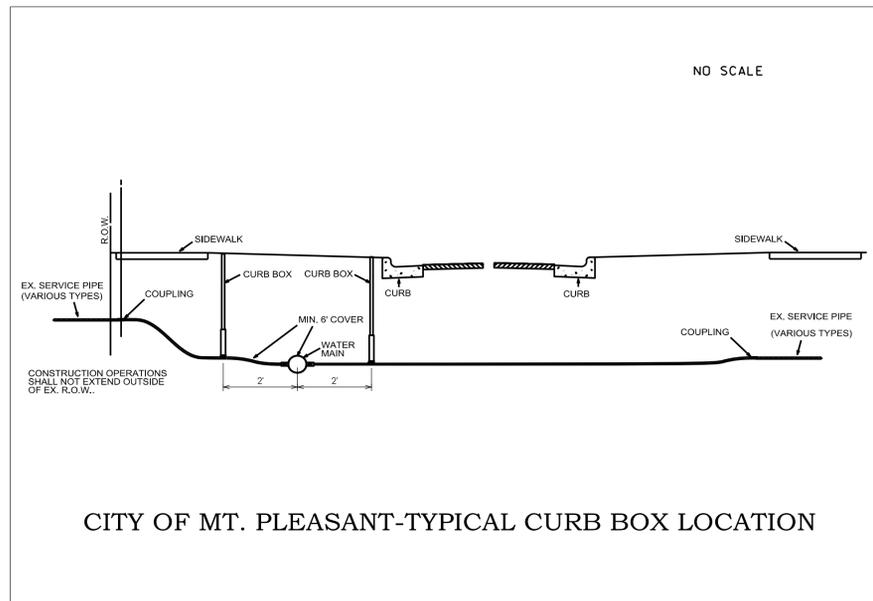
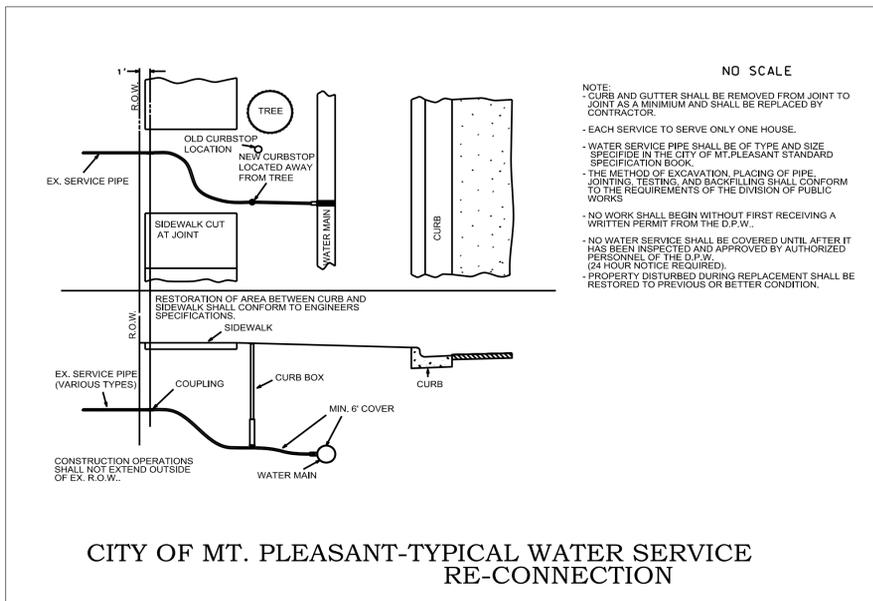
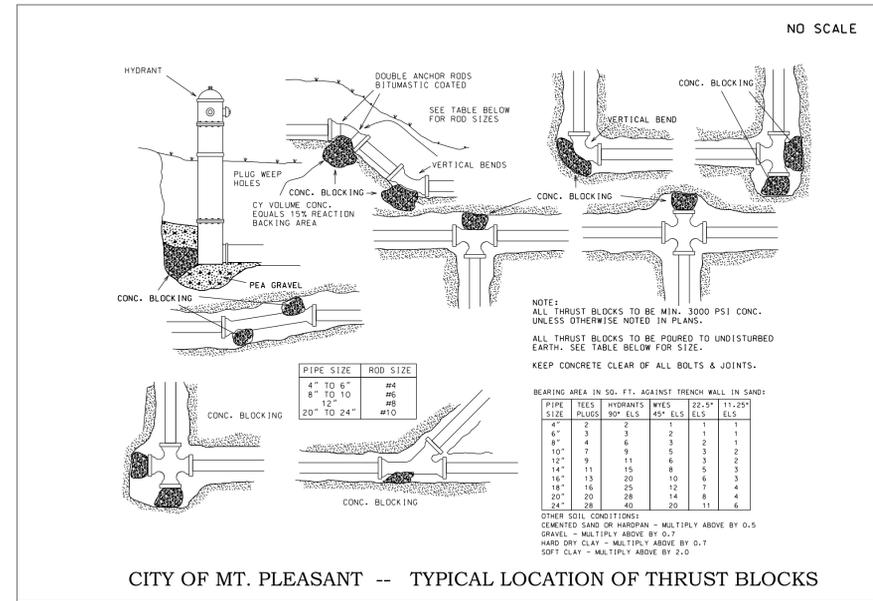
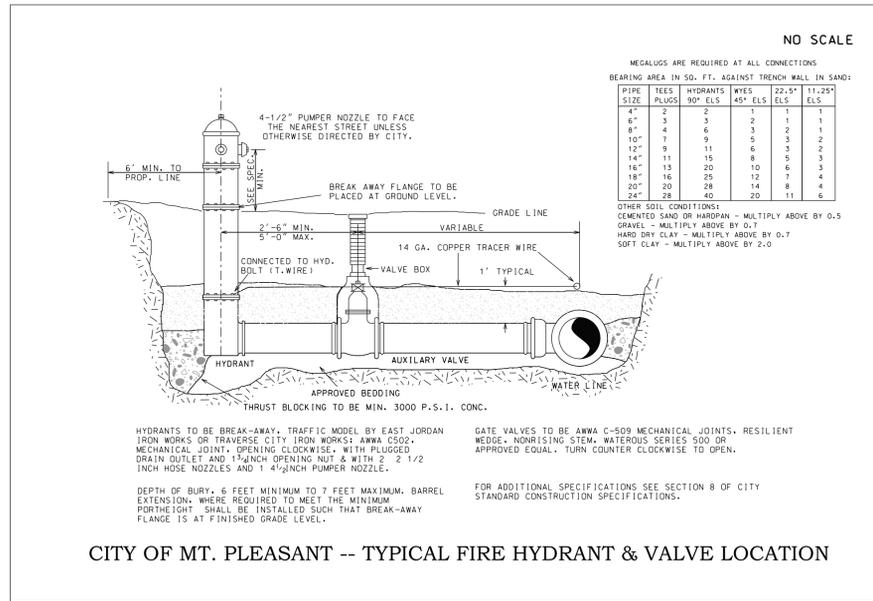
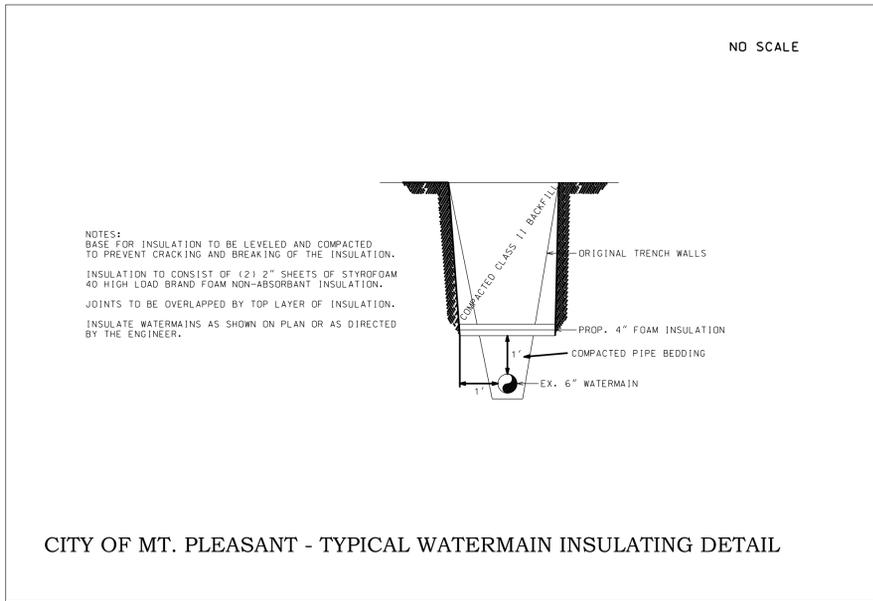
DESIGN BY R. CHESNEY	CONSTRUCTED DATE OF PLAN 3/16/2011
DRAWN BY B. BRICKNER	SCALE 1" = 40'
CHECKED BY	SHEET 7 OF 20 SHEETS
APPROVED BY	

REVISIONS _____ DATE/INITIALS _____

CONTROL SECT.	JOB NO.	FED. PROJECT	FED. ITEM NO.
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PLOT DATE: _____

DRAWING PATH: FED. ITEM NO. JOB NO.: CONTROL SECTION: 2011 STREET RE-CONSTRUCTION PROJECT



**2011 STREET RECONSTRUCTION
 WATER DETAIL SHEET**

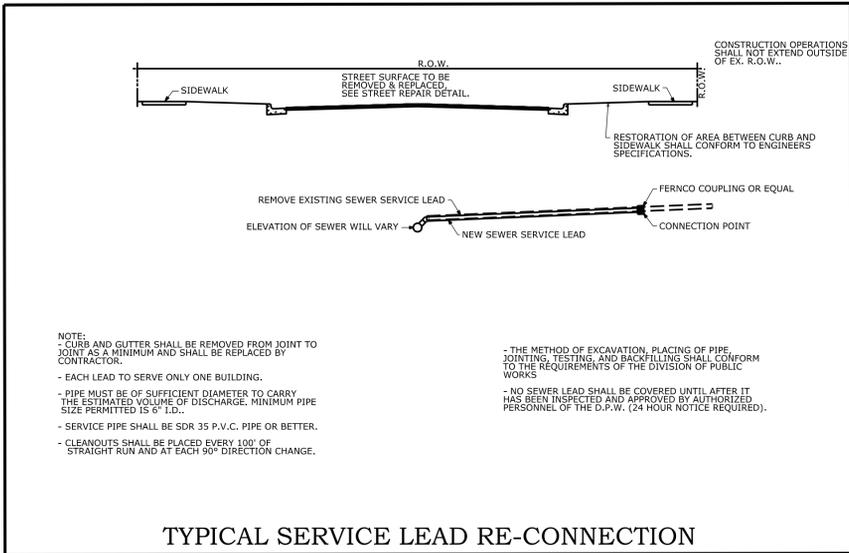
DESIGN BY G. SCHWERIN	CONSTRUCTED
DRAWN BY J. FLACHS	DATE OF PLAN 3/16/2011
CHECKED BY	SCALE
APPROVED BY	SHEET 8 OF 20 SHEETS

REVISIONS	DATE/INITIALS

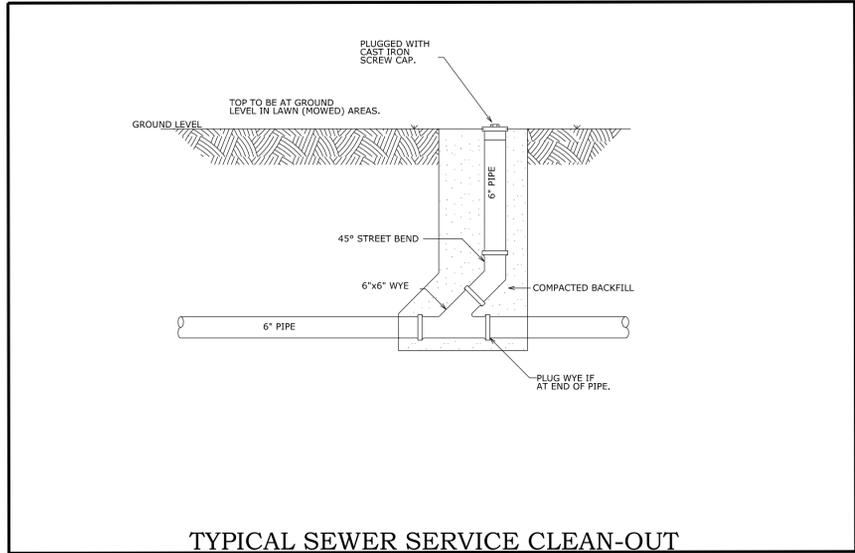
CONTROL SECT.	JOB NO.	FED. PROJECT	FED. ITEM NO.

PLOT DATE:

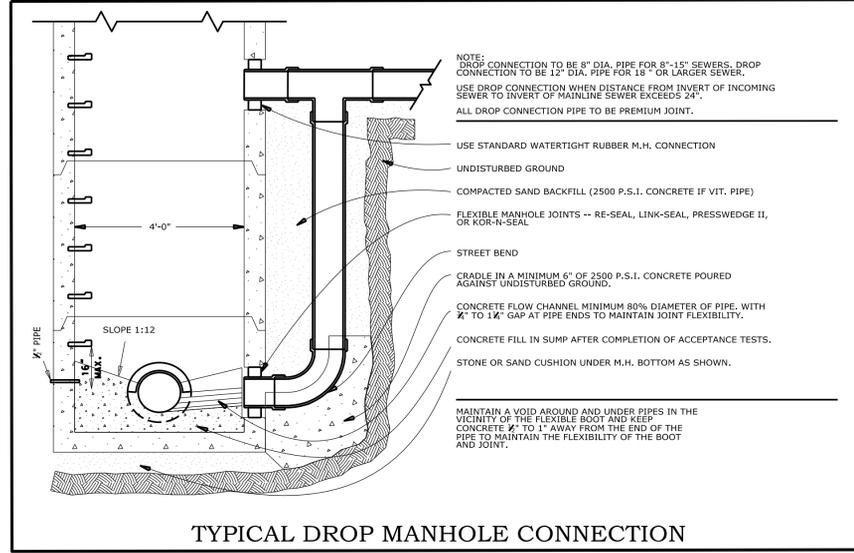
DRAWING PATH: FED. ITEM NO.: JOB NO.: CONTROL SECTION: 2011 STREET RECONSTRUCTION PROJECT



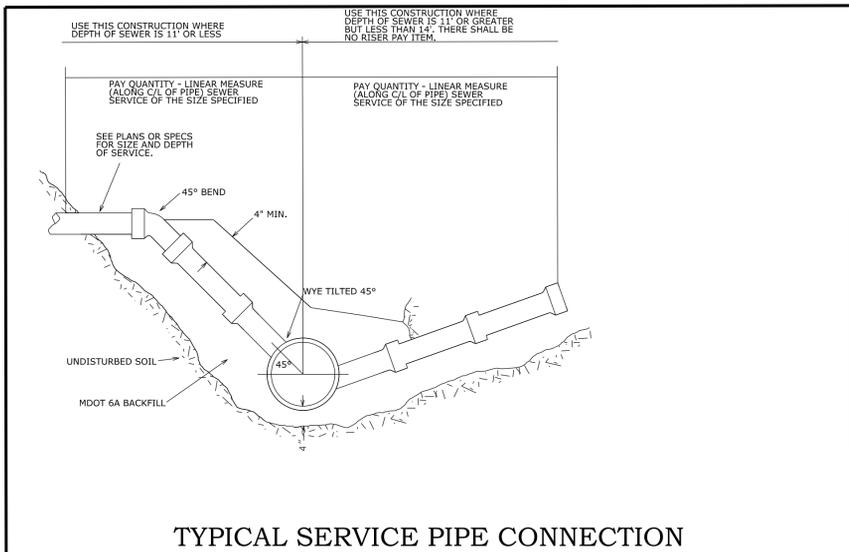
TYPICAL SERVICE LEAD RE-CONNECTION



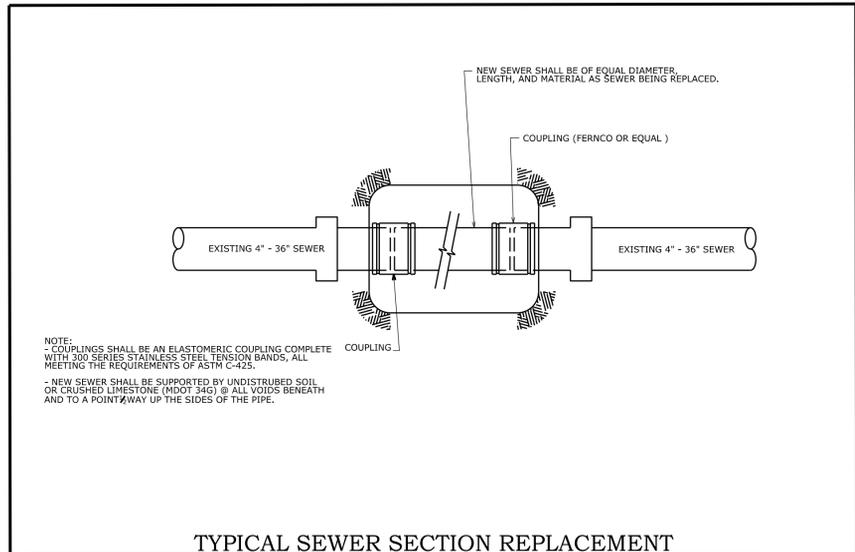
TYPICAL SEWER SERVICE CLEAN-OUT



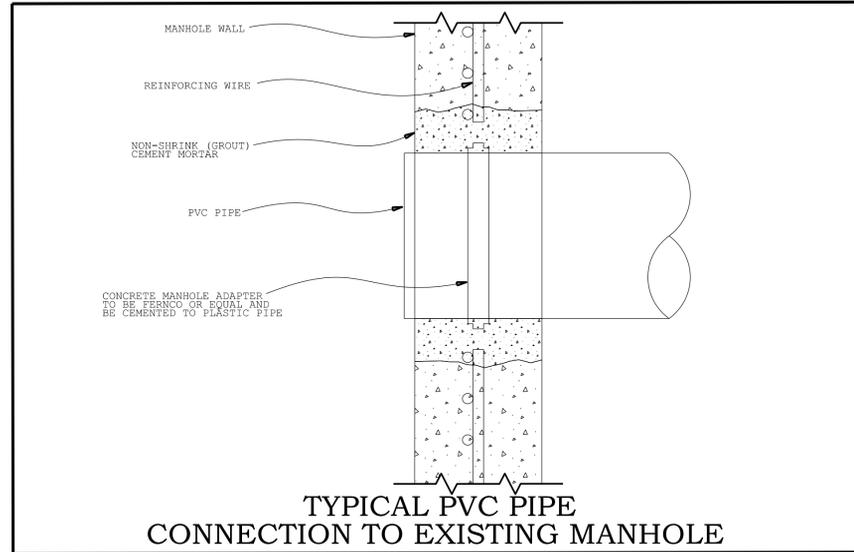
TYPICAL DROP MANHOLE CONNECTION



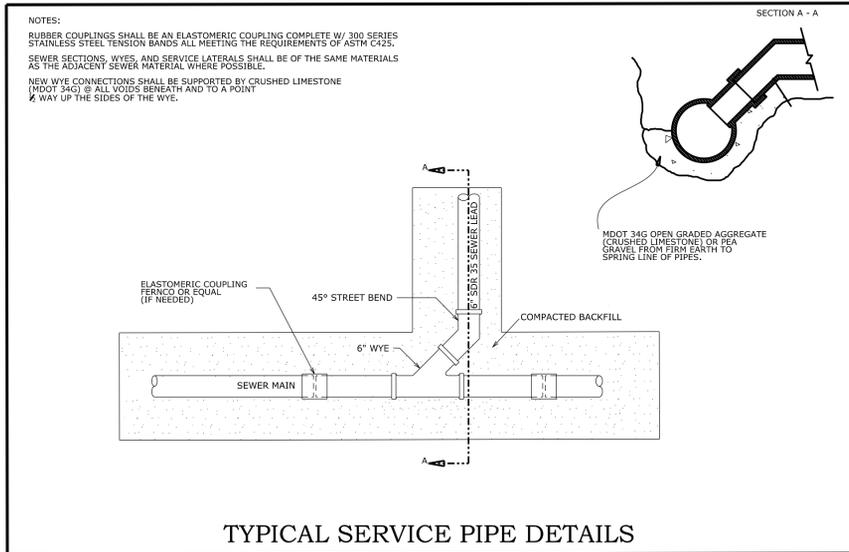
TYPICAL SERVICE PIPE CONNECTION



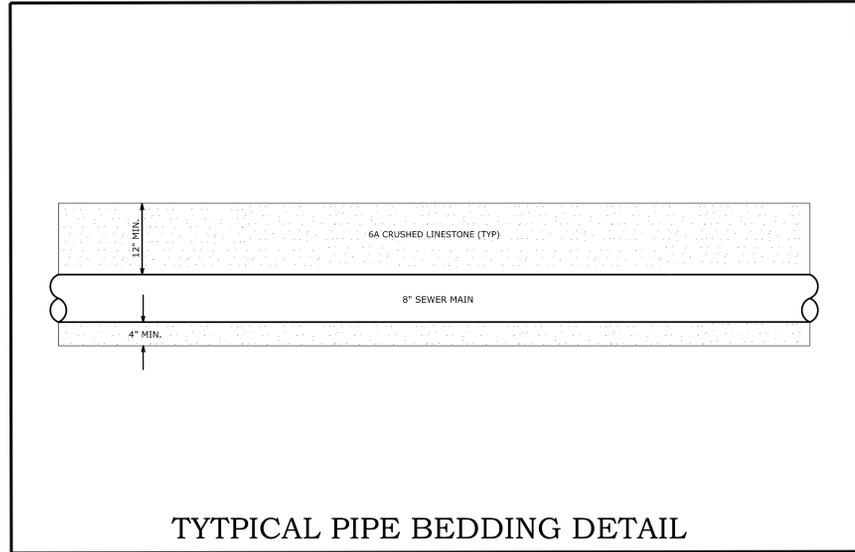
TYPICAL SEWER SECTION REPLACEMENT



TYPICAL PVC PIPE CONNECTION TO EXISTING MANHOLE



TYPICAL SERVICE PIPE DETAILS



TYPICAL PIPE BEDDING DETAIL

SEWER CONSTRUCTION NOTES:

THE CONTRACTOR SHALL CALL "MISS DIG" (1-800-482-7171) A MINIMUM OF THREE WORKING DAYS PRIOR TO CONSTRUCTION.

ALL EXISTING SEWER SERVICES WILL BE EXPOSED BY THE CONTRACTOR PRIOR TO REPLACEMENT TO DETERMINE THE EXACT LOCATION OF THE SEWER SERVICE AT THE PROPERTY LINE. SEWER SERVICES SHOWN ON THE PLANS ARE APPROXIMATE AND FOR INFORMATIONAL PURPOSES ONLY.

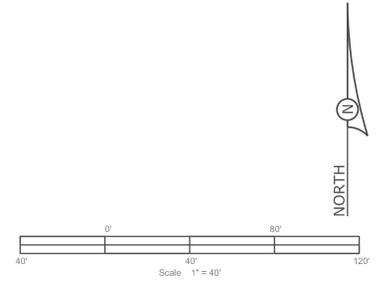
ALL SEWER SERVICES SHALL END IN AN OPEN CUT. WHERE THE PROPOSED SEWER IS LOCATED WITHIN THE TRAVELED SURFACE OF AN UNIMPROVED ROAD, THE HOUSE OR BUILDING SERVICE SHALL BE INSTALLED IN AN OPEN CUT. HOUSE AND BUILDING SERVICE PIPE AND JOINTS SHALL CONFORM TO THAT SPECIFIED OR AS LISTED IN THE PROPOSAL. PAY QUANTITY FOR SERVICES SHALL INCLUDE MAKING CONNECTIONS WHERE NECESSARY, PROVIDING BONDS, PLUGS, WITNESS MARKERS, AND CONCRETE.

ALL CONSTRUCTION UNDER EXISTING OR PROPOSED PAVEMENT AND FUTURE UTILITIES, INCLUDING HOSE SERVICES, SHALL BE COMPLETELY BACKFILLED WITH CLASS II GRANULAR MATERIAL, IN 12 INCH LAYERS, AND COMPACTED TO NOT LESS THAN 95 PERCENT OF THE MAXIMUM UNIT WEIGHT, COST TO BE INCLUDED IN THE UNIT PRICE BID.

ALL PIPE, BENDS, AND PLUGS SHALL BE OF THE TYPE REQUIRED IN THE PROPOSAL ITEM FOR RISER AND SHALL INCLUDE CLASS II GRANULAR MATERIAL BACKFILL AND CONCRETE WHERE REQUIRED.

ALL SEWER CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE STANDARDS OF THE LOCAL MUNICIPALITY.

SPECIFIED & APPROVED SEWER MATERIALS OTHER THAN P.V.C. OR V.C.P. SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS.



City of Mt. Pleasant
DIVISION OF PUBLIC WORKS
-ENGINEERING DEPARTMENT-

2011 STREET RECONSTRUCTION
SEWER DETAIL SHEET

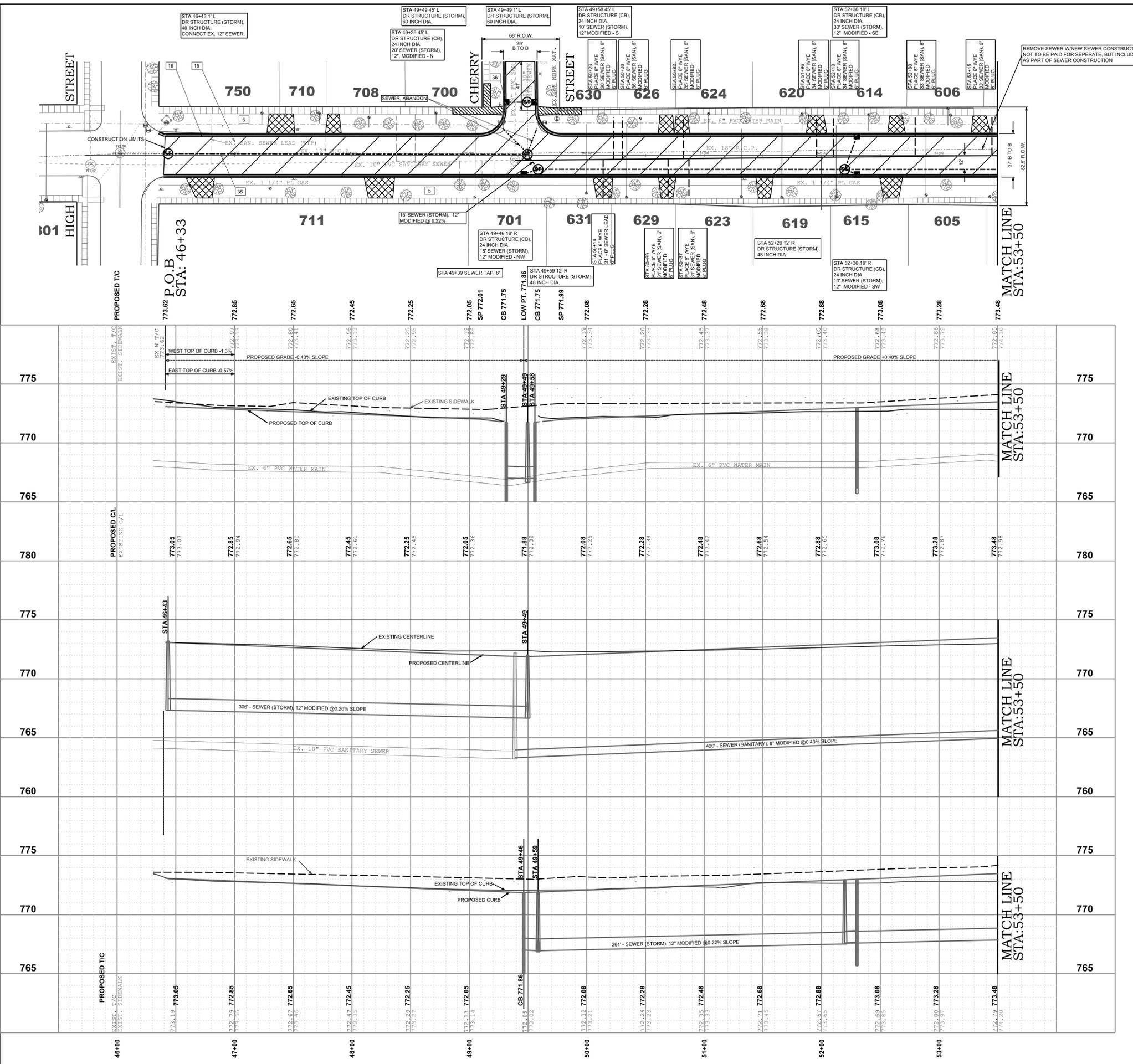
DESIGN BY G. SCHWERIN	CONSTRUCTED
DRAWN BY J. FLACHS	DATE OF PLAN 3/16/2011
CHECKED BY	SCALE 1" = 40'
APPROVED BY	SHEET 9 OF 20 SHEETS

REVISIONS _____ DATE/INITIALS _____

CONTROL SECT.	JOB NO.	FED. PROJECT	FED. ITEM NO.
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PLOT DATE: _____

DRAWING PATH: _____ FED. ITEM NO. _____ JOB NO. _____ CONTROL SECTION: _____ 2011 STREET RECONSTRUCTION PROJECT



QUANTITIES THIS SHEET

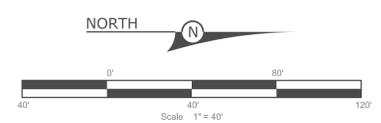
ROADWAY ITEMS	QUANTITY
Sewer (San), 8" Modified	420 Lft
Sewer (Storm), 12" Modified	610 Lft
Subbase, CIP	1200 Cyd
Aggregate Base, 6 Inch, Modified	3200 Syd
Dr Structure, 24 Inch Dia	5 Ea
Dr Structure, 48 Inch Dia	3 Ea
Dr Structure, 60 Inch Dia	2 Ea
Dr Structure Cover, Adj, Case 2	6 Ea
Dr Structure Cover, CB, Modified	5 Each
Dr Structure Cover, STM, Modified	5 Each
Dr Structure Cover, SAN, Modified	1 Each
HMA, 13A	370 Ton
HMA, 36A	290 Ton
HMA Approach, Modified	0
Driveway, Nonreinf. Conc., 6 Inch	450 Syd
Curb and Gutter, Conc., Det F4, Modified	1520 Lft
Sidewalk, Conc., 4 Inch	420 Sft
Sidewalk, Conc., 6 Inch	950 Sft
Sidewalk Ramp, ADA, Modified	160 Sft
Slope Restoration, Modified	780 Syd
Sewer (San), 6" Modified	385 Lft
Sewer, Abandon	9.5 Cyd

PROPOSED DRAINAGE STRUCTURES (STORM)

STATION	OFFSET	SIZE	RIM ELEV.	T/C ELEV.	REMARKS	INVERT ELEV.
46+43	1' L	48" MH	773.45		18" INVERT SOUTH	767.33
					12" INVERT NORTH	767.32
49+29	45' L	24" CB		771.75	12" INVERT NORTH	767.00
49+46	18' R	24" CB		771.86	12" INVERT NW'LY	767.00
49+49	1' L	60" MH	771.88		12" INVERT NE'LY	766.75
					12" INVERT SOUTH	766.70
					30" INVERT WEST	766.68
49+49	45' L	60" MH	771.75		12" INVERT NORTH	766.95
					12" INVERT SOUTH	766.95
					30" INVERT EAST	766.65
					30" INVERT WEST	766.65
49+58	45' L	24" CB		771.75	12" INVERT SOUTH	767.00
49+59	12' R	48" MH	771.92		12" INVERT NORTH	766.94
					12" INVERT SW'LY	766.84
					12" INVERT SE'LY	766.95
52+20	12' R	48" MH	772.56		12" INVERT NE'LY	767.90
					12" INVERT NW'LY	767.88
					12" INVERT NORTH	767.56
					12" INVERT SOUTH	767.51
52+30	18' L	24" CB		773.00	12" INVERT SE'LY	768.00
52+30	18' R	24" CB		773.00	12" INVERT SW'LY	768.00

PROPOSED DRAINAGE STRUCTURES (SAN)

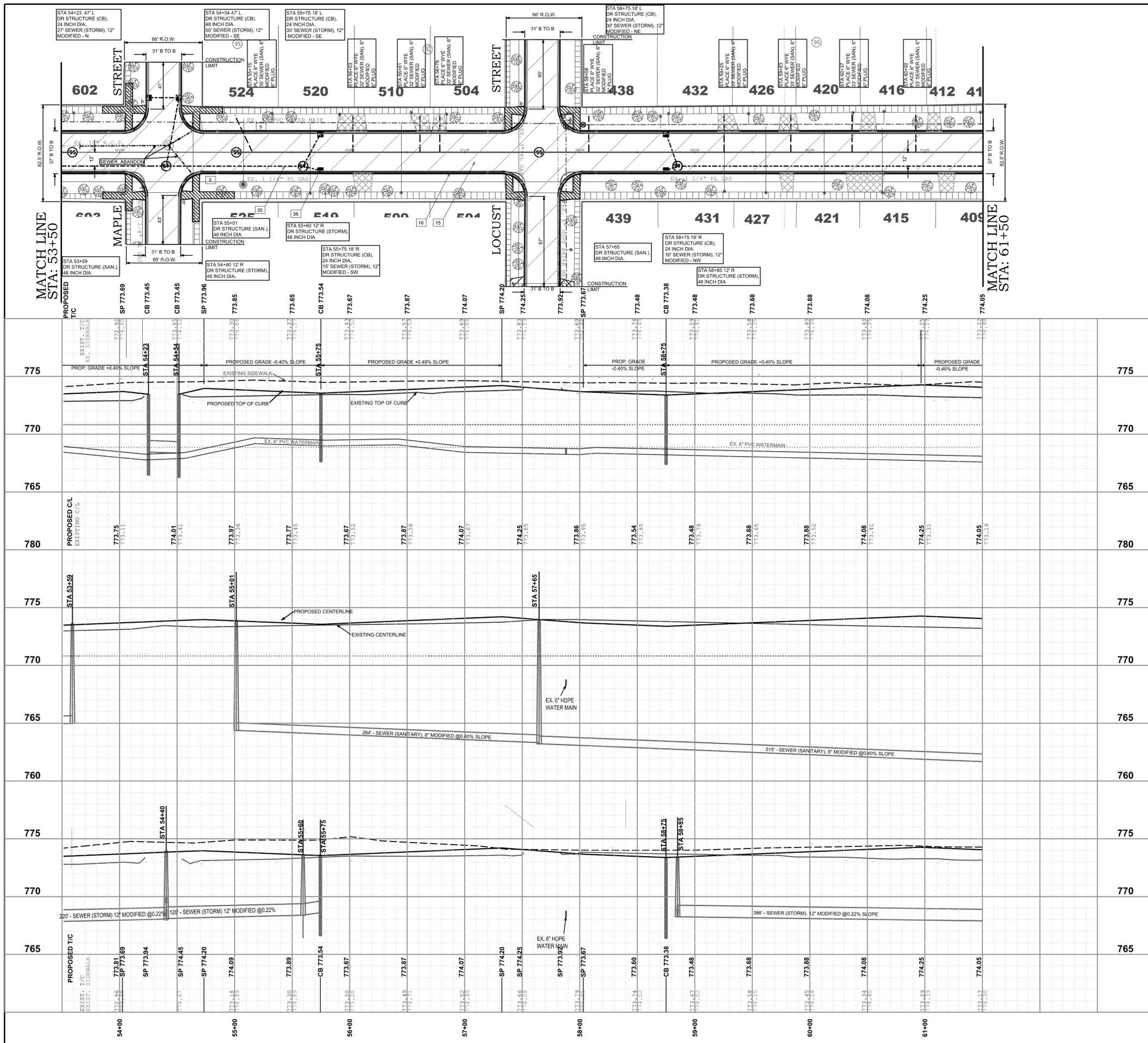
STATION	OFFSET	SIZE	RIM ELEV.	T/C ELEV.	REMARKS	INVERT ELEV.
49+39	4' R	8" TAP			8" INVERT SOUTH	763.30



**2011 STREET RE-CONSTRUCTION PROJECT
CONSTRUCTION SHEET
FANCHER STREET FROM STA: 46+33 TO STA: 53+50**

DESIGN BY R. CHESNEY/G. SCHWERIN	CONSTRUCTED
DRAWN BY B. BRICKNER	DATE OF PLAN 3/16/2011
CHECKED BY	SCALE 1" = 40'
APPROVED BY	SHEET 10 OF 20 SHEETS
REVISIONS	DATE/INITIALS
CONTROL SECT.	JOB NO.
	FED. PROJECT
	FED. ITEM NO.
PLOT DATE:	

DRAWING PATH: CONTROL SECTION: JOB NO.: FED. PROJECT: FED. ITEM NO.: 2011 STREET RE-CONSTRUCTION PROJECT



QUANTITIES THIS SHEET

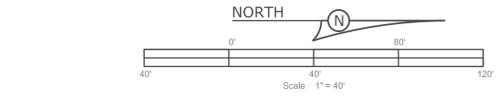
ROADWAY ITEMS	QUANTITY
Sewer (San), 8" Modified	779 Lft
Sewer (Storm), 12" Modified	900 Lft
Subbase, CIP	1470 Syd
Aggregate Base, 6 Inch, Modified	4300 Syd
Dr Structure, 24 Inch Dia	5 Ea
Dr Structure, 48 Inch Dia	7 Ea
Dr Structure, Add Depth of 48 Inch	6 Ft
Dr Structure, 8 Feet To 15 Feet	
Dr Structure Cover, Adj, Case 2	6 Ea
Dr Structure Cover, CB, Modified	6 Each
Dr Structure Cover, STM, Modified	3 Each
Dr Structure Cover, SAN, Modified	3 Each
HMA, 13A	500Ton
HMA, 36A	380 Ton
HMA Approach, Modified	
Driveway, Nonreinf. Conc., 6 Inch	390 Syd
Curb and Gutter, Conc., Det F4, Modified	2100 Lft
Sidewalk, Conc., 4 Inch	960 Sft
Sidewalk, Conc., 6 Inch	900 Sft
Sidewalk Ramp, ADA, Modified	1400 Sft
Slope Restoration, Modified	1100 Syd
Sewer (San), 6" Modified	315 Lft
Sewer, Abandon	6.9 Cyd

PROPOSED DRAINAGE STRUCTURES (STORM)

STATION	OFFSET	SIZE	RIM ELEV.	T/C ELEV.	REMARKS	INVERT ELEV.
54+23	47' L	24" CB		773.45	12" INVERT NORTH	768.45
					12" INVERT NW'LY	768.10
54+40	12' R	48" MH	773.77		12" INVERT NORTH	768.10
					12" INVERT SOUTH	768.00
54+54	47' L	48" CB		773.45	12" INVERT SOUTH	768.35
					12" INVERT SE'LY	768.25
					12" INVERT NE'LY	768.51
55+60	12' R	48" MH	773.63		12" INVERT SOUTH	768.41
55+75	18' L	24" CB		773.54	12" INVERT EAST	768.81
55+75	18' R	24" CB		773.54	12" INVERT WEST	768.71
58+75	18' L	24" CB		773.38	12" INVERT EAST	768.50
58+75	18' R	24" CB		773.38	12" INVERT WEST	768.40
58+85	12' R	48" MH	773.17		12" INVERT SE'LY	768.30
					12" INVERT NORTH	768.25

PROPOSED DRAINAGE STRUCTURES (SAN)

STATION	OFFSET	SIZE	RIM ELEV.	T/C ELEV.	REMARKS	INVERT ELEV.
53+59	0	48" MH	773.53		8" INVERT SOUTH	764.99
55+01	0	48" MH	773.98		8" INVERT NORTH	764.37
57+65	0	48" MH	773.90		8" INVERT SOUTH	763.31
					8" INVERT NORTH	763.21



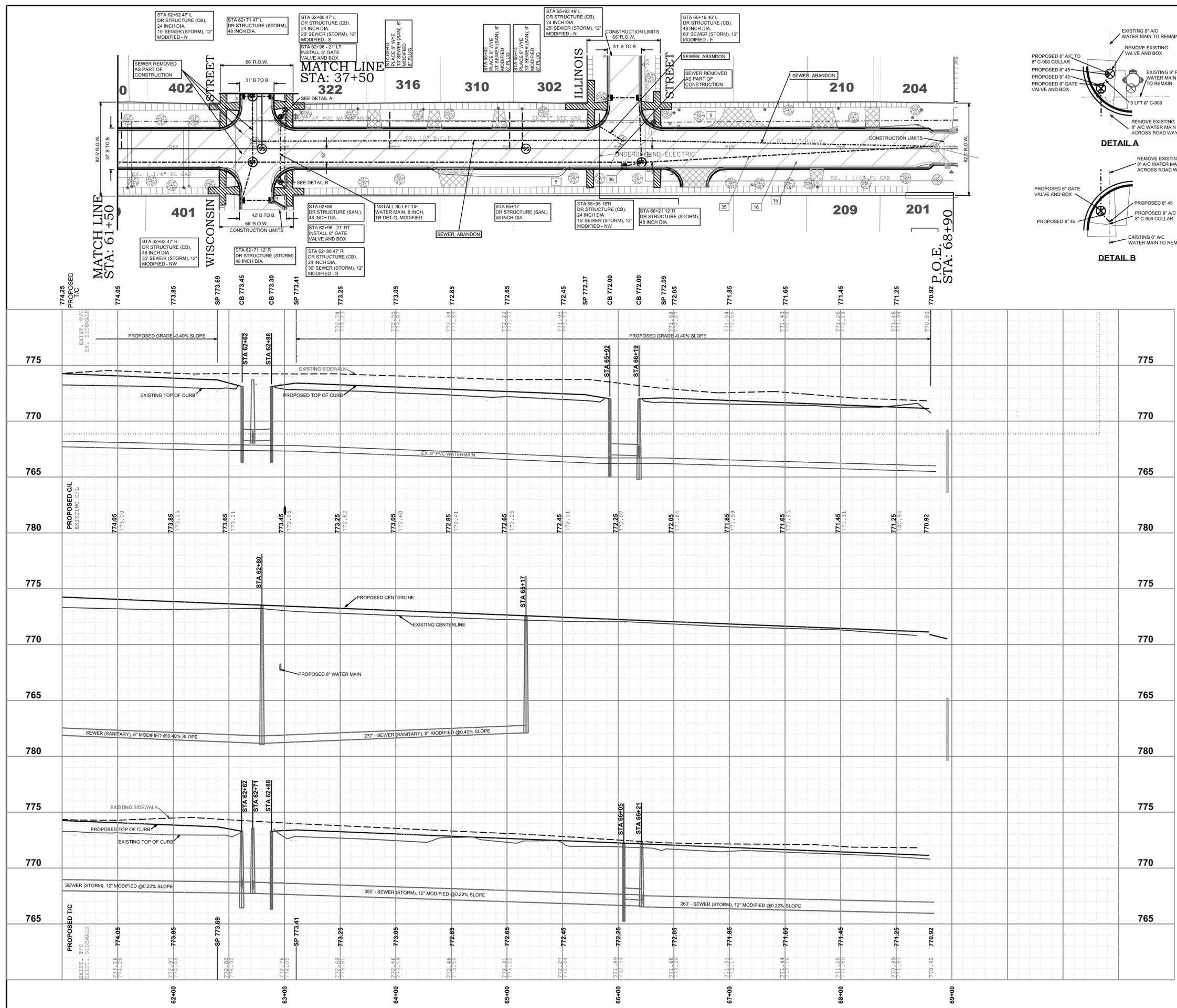
**2011 STREET RE-CONSTRUCTION PROJECT
CONSTRUCTION SHEET
FANCHER STREET FROM STA: 53+50 TO STA: 61+50**

DESIGN BY R. CHESNEY/G. SCHWERIN	CONSTRUCTED
DRAWN BY B. BRICKNER	DATE OF PLAN 3/16/2011
CHECKED BY	SCALE 1" = 40'
APPROVED BY	SHEET 11 OF 20 SHEETS

CONTROL SECT.	JOB NO.	FED. PROJECT	FED. ITEM NO.

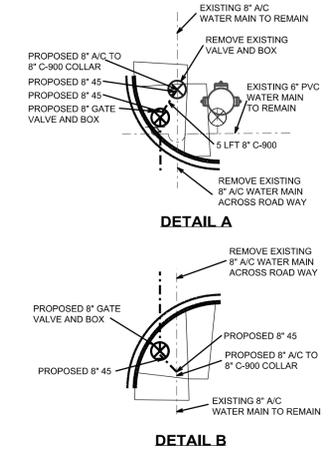
PLOT DATE:

DRAWING PATH: FED. ITEM NO.: FED. PROJECT: JOB NO.: CONTROL SECTION: 2011 STREET RE-CONSTRUCTION PROJECT



QUANTITIES THIS SHEET

ROADWAY ITEMS	QUANTITY
Sewer (San), 8" Modified	237 Lft
Sewer (Storm), 12" Modified	800 Lft
Subbase, CIP	1270 Cyd
Aggregate Base, 6 Inch, Modified	3100 Syd
Dr Structure, 24 Inch Dia	5 Ea
Dr Structure, 48 Inch Dia	7 Ea
Dr Structure, Add Depth of 48 Inch Dia., 8 Feet to 15 Feet	8 Ft
Dr Structure Cover, Adj, Case 2	6 Ea
Dr Structure Cover, CB, Modified	7 Each
Dr Structure Cover, STM, Modified	3 Each
Dr Structure Cover, SAN, Modified	2 Each
Water Main, 8 Inch, Tr Det G, Modified	80 Lft
Gate Valve And Box, 8 Inch	2 Ea
HMA, 13A	380 Ton
HMA, 36A	290 Ton
HMA Approach, Modified	10 Ton
Driveway, Nonreinf. Conc., 6 Inch	220 Syd
Driveway, Nonreinf. Conc., 8 Inch	180 Syd
Curb and Gutter, Conc., Det F4, Modified	1780 Lft
Sidewalk, Conc., 4 Inch	990 Sft
Sidewalk, Conc., 6 Inch	900 Sft
Sidewalk Ramp, ADA, Modified	450 Sft
Slope Restoration, Modified	1500 Sft
Sewer, Abandon	890 Syd
Sewer (San), 6 Inch, Modified	18.5 Cyd
	105 Lft



PROPOSED DRAINAGE STRUCTURES (STORM)

STATION	OFFSET	SIZE	RIM ELEV.	TC ELEV.	REMARKS	INVERT ELEV.
62+62	47' L	24" CB		773.45	12" INVERT NORTH	768.30
62+62	47' R	48" CB		773.30	12" INVERT NORTH	768.20
					12" INVERT NWLY	768.10
					12" INVERT WEST	768.12
62+71	12' R	48" MH	773.58		12" INVERT SE'LY	768.00
					12" INVERT SOUTH	767.40
					12" INVERT NORTH	767.40
					12" INVERT NORTH	768.45
62+71	47' L	48" MH	773.58		12" INVERT SOUTH	768.45
					12" INVERT WEST	768.35
					12" INVERT EAST	768.25
62+88	47' L	24" CB		773.30	12" INVERT SOUTH	768.30
62+88	47' R	24" CB		773.30	12" INVERT SOUTH	768.30
65+92	46' L	24" CB		772.00	12" INVERT NORTH	767.00
66+05	18' R	24" CB		773.63	12" INVERT NWLY	767.23
66+19	46' L	48" CB		772.00	12" INVERT SOUTH	766.90
					12" INVERT EAST	766.80
					12" INVERT SWLY	767.15
66+21	12' R	48" MH	772.38		12" INVERT NWLY	766.70
					12" INVERT SOUTH	766.63
					12" INVERT NORTH	766.60
68+84	2' L	12" TAP			12" INVERT SOUTH	765.94

PROPOSED DRAINAGE STRUCTURES (SAN)

STATION	OFFSET	SIZE	RIM ELEV.	TC ELEV.	REMARKS	INVERT ELEV.
62+80	0	48" MH	773.53		8" INVERT SOUTH	761.15
					8" INVERT NORTH	761.15
65+17	0	48" MH	772.57		8" INVERT WEST	761.03
					8" INVERT SOUTH	762.10



City of Mt. Pleasant
DIVISION OF PUBLIC WORKS
-ENGINEERING DEPARTMENT-

2011 STREET RE-CONSTRUCTION PROJECT
CONSTRUCTION SHEET
FANCHER STREET FROM STA: 61+50 TO STA: 68+90

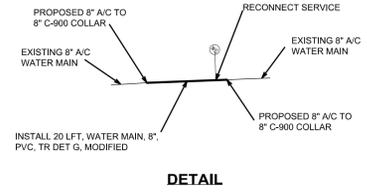
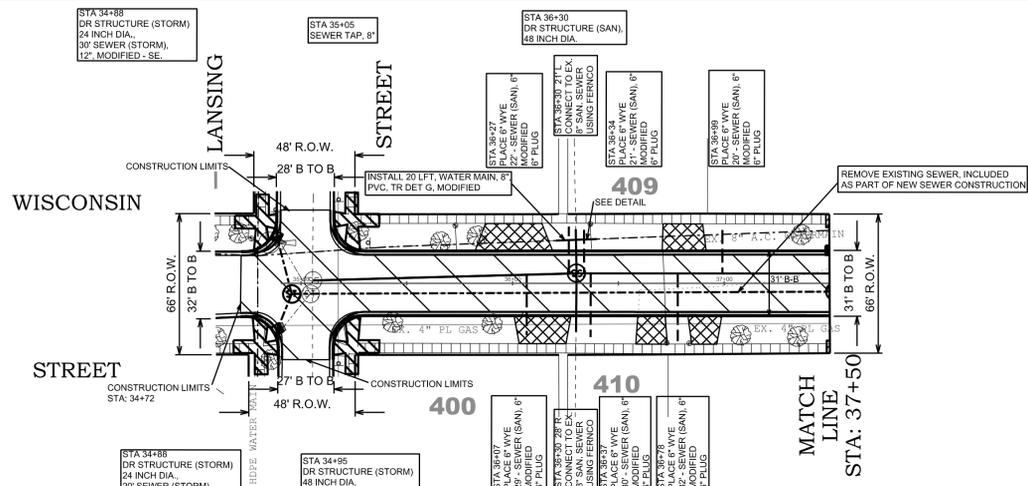
DESIGN BY R. CHESNEY/G. SCHWERIN	CONSTRUCTED
DRAWN BY B. BRICKNER	DATE OF PLAN 3/16/2011
CHECKED BY	SCALE 1" = 40'
APPROVED BY	SHEET 12 OF 20 SHEETS

REVISIONS _____ DATE/INITIALS _____

CONTROL SECT.	JOB NO.	FED. PROJECT	FED. ITEM NO.
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PLOT DATE: _____

DRAWING PATH: 2011 STREET RE-CONSTRUCTION PROJECT CONTROL SECTION: JOB NO.: FED. PROJECT: FED. ITEM NO.: 2011 STREET RE-CONSTRUCTION PROJECT



QUANTITIES THIS SHEET

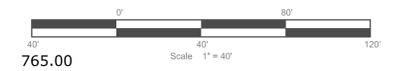
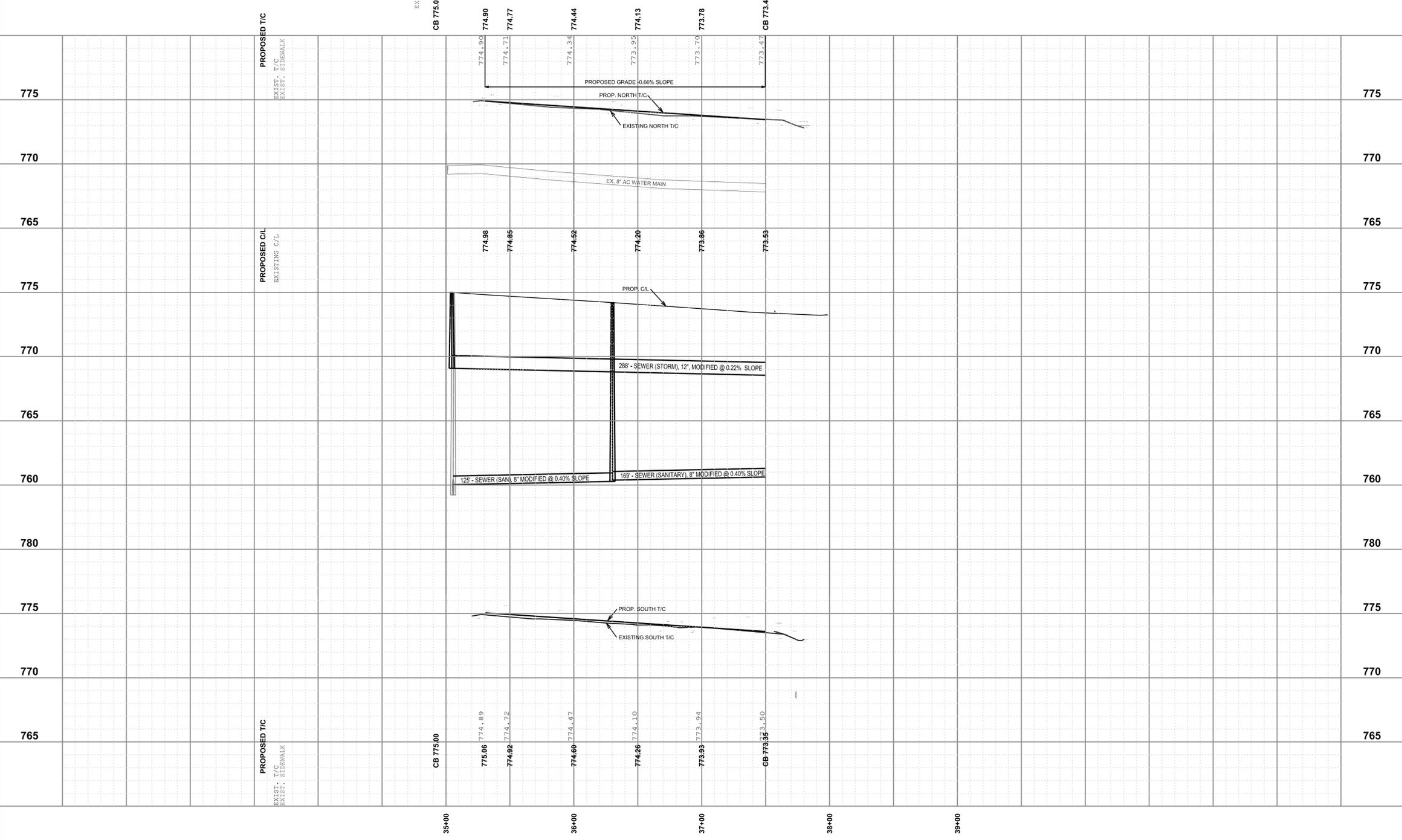
ROADWAY ITEMS	QUANTITY
Sewer (San), 8" Modified	294 Lft
Sewer (Storm), 12" Modified	290 Lft
Subbase, CIP	400 Cyd
Aggregate Base, 6 Inch, Modified	1000 Syd
Dr Structure, 24 Inch Dia	2 Ea
Dr Structure, 48 Inch Dia	2 Ea
Dr Structure, Add Depth of 48 Inch Dia., 8 Feet To 15 Feet	6 Ft
Dr Structure Cover, Adj, Case 2	3 Ea
Dr Structure Cover, CB, Modified	2 Each
Dr Structure Cover, STM, Modified	1 Each
Dr Structure Cover, SAN, Modified	2 Each
Water Main, 8 Inch, Pvc, C-900, Modified	20 Lft
HMA, 13A	115 Ton
HMA, 36A	90 Ton
HMA Approach, Modified	10 Ton
Driveway, Nonreinf. Conc., 6 Inch	160 Syd
Curb and Gutter, Conc., Det F4, Modified	660 Lft
Sidewalk, Conc., 4 Inch	600 Sft
Sidewalk, Conc., 6 Inch	600 Sft
Sidewalk Ramp, ADA, Modified	560 Sft
Slope Restoration, Modified	320 Syd
Sewer (San), 6 Inch, Modified	160 Lft

PROPOSED DRAINAGE STRUCTURES (STORM)

STATION	OFFSET	SIZE	RIM ELEV.	T/C ELEV.	REMARKS	INVERT ELEV.
34+88	20' L	24" CB		775.00	12" INVERT SE'LY	769.90
34+88	22' R	24" CB		775.00	12" INVERT NE'LY	769.90
34+95	5' R	48" STM	775.00		12" INVERT NW'LY 12" INVERT SW'LY 12" INVERT EAST	769.80 769.80 769.08

PROPOSED DRAINAGE STRUCTURES (SAN)

STATION	OFFSET	SIZE	RIM ELEV.	T/C ELEV.	REMARKS	INVERT ELEV.
35+05	1' L	8" TAP		775.00	8" INVERT EAST	759.75
36+30	1' L	48" SAN	773.53		8" INVERT NORTH 8" INVERT SOUTH 8" INVERT EAST	?? ?? 760.35 760.25



2011 STREET RE-CONSTRUCTION PROJECT
CONSTRUCTION SHEET
WISCONSIN STREET FROM STA: 34+72 TO STA: 37+50

DESIGN BY R. CHESNEY/G. SCHWERN	CONSTRUCTED
DRAWN BY B. BRICKNER	DATE OF PLAN 3/16/2011
CHECKED BY	SCALE 1" = 40'
APPROVED BY	SHEET 13 OF 20 SHEETS
REVISIONS _____ DATE/INITIALS	

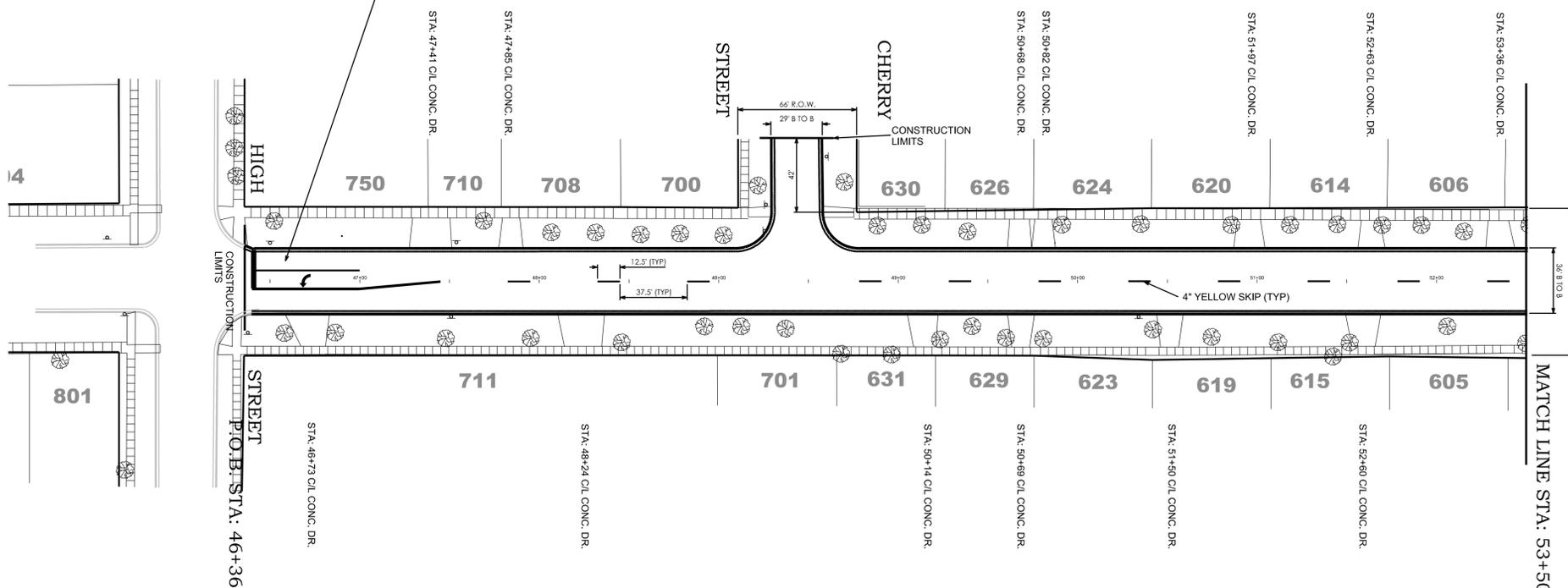
CONTROL SECT.	JOB NO.	FED. PROJECT	FED. ITEM NO.
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PLOT DATE:

DRAWING PATH: FED. ITEM NO.: FED. PROJECT: JOB NO.: CONTROL SECTION: 2011 STREET RE-CONSTRUCTION PROJECT

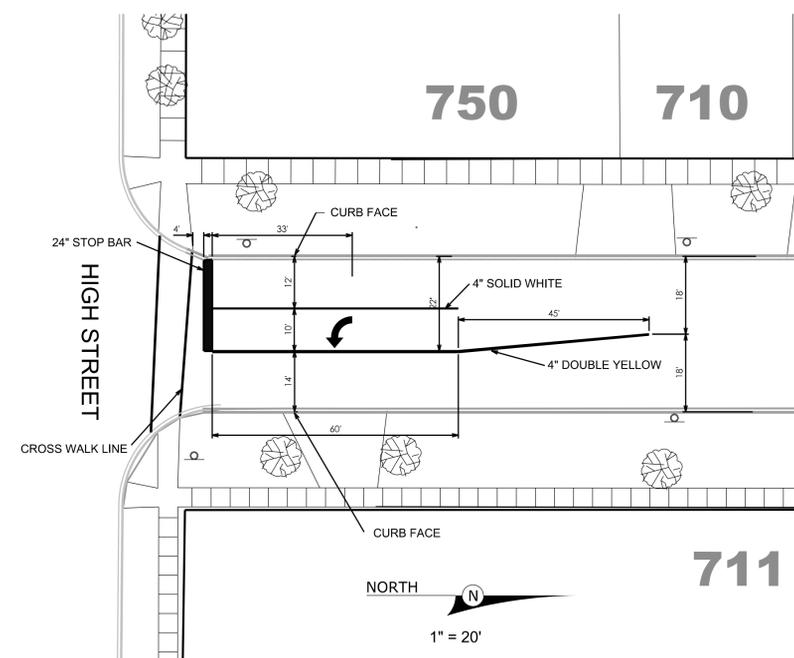


SEE INTERSECTION DETAIL

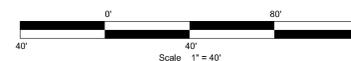


QUANTITIES THIS SHEET

ROADWAY ITEMS	QUANTITY
Pavement Marking, Inlay Cold Plastic, 4" White	60 Lft
Pavement Marking, Inlay Cold Plastic, 4" Yellow	820 Lft
Pavement Marking, Inlay Cold Plastic, 24" Stop Bar	20 Lft
Pavement Marking, Inlay Cold Plastic, Lt Turn Arrow, Symbol	1 Ea



INTERSECTION DETAIL



City of Mt. Pleasant
 DIVISION OF PUBLIC WORKS
 -ENGINEERING DEPARTMENT-

PAVEMENT MARKING SHEET
2011 STREET RE-CONSTRUCTION PROJECT
FANCHER FROM STA: 46+36 TO STA: 61+50

DESIGN BY R. CHESNEY/G. SCHWERIN	CONSTRUCTED
DRAWN BY B. BRICKNER	DATE OF PLAN 3/16/2011
CHECKED BY	SCALE 1" = 40'
APPROVED BY	SHEET 14 OF 20 SHEETS

REVISIONS _____ DATE/INITIALS _____

CONTROL SECT.	JOB NO.	FED. PROJECT	FED. ITEM NO.
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PLOT DATE:

DRAWING PATH:

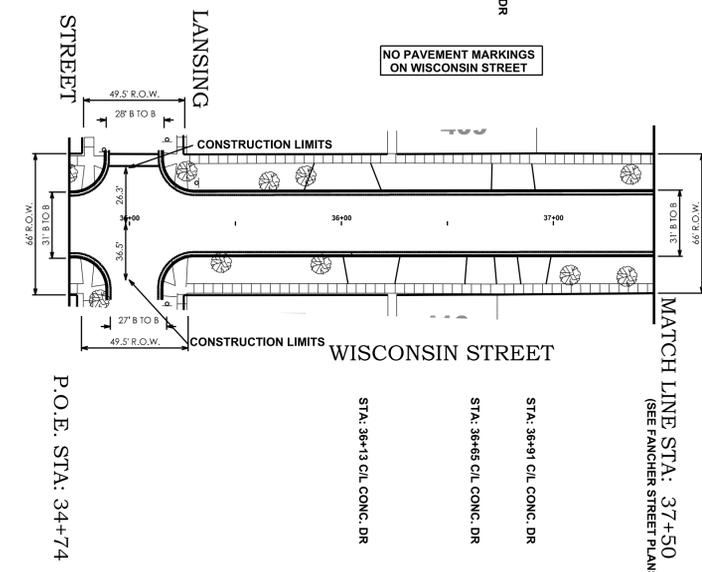
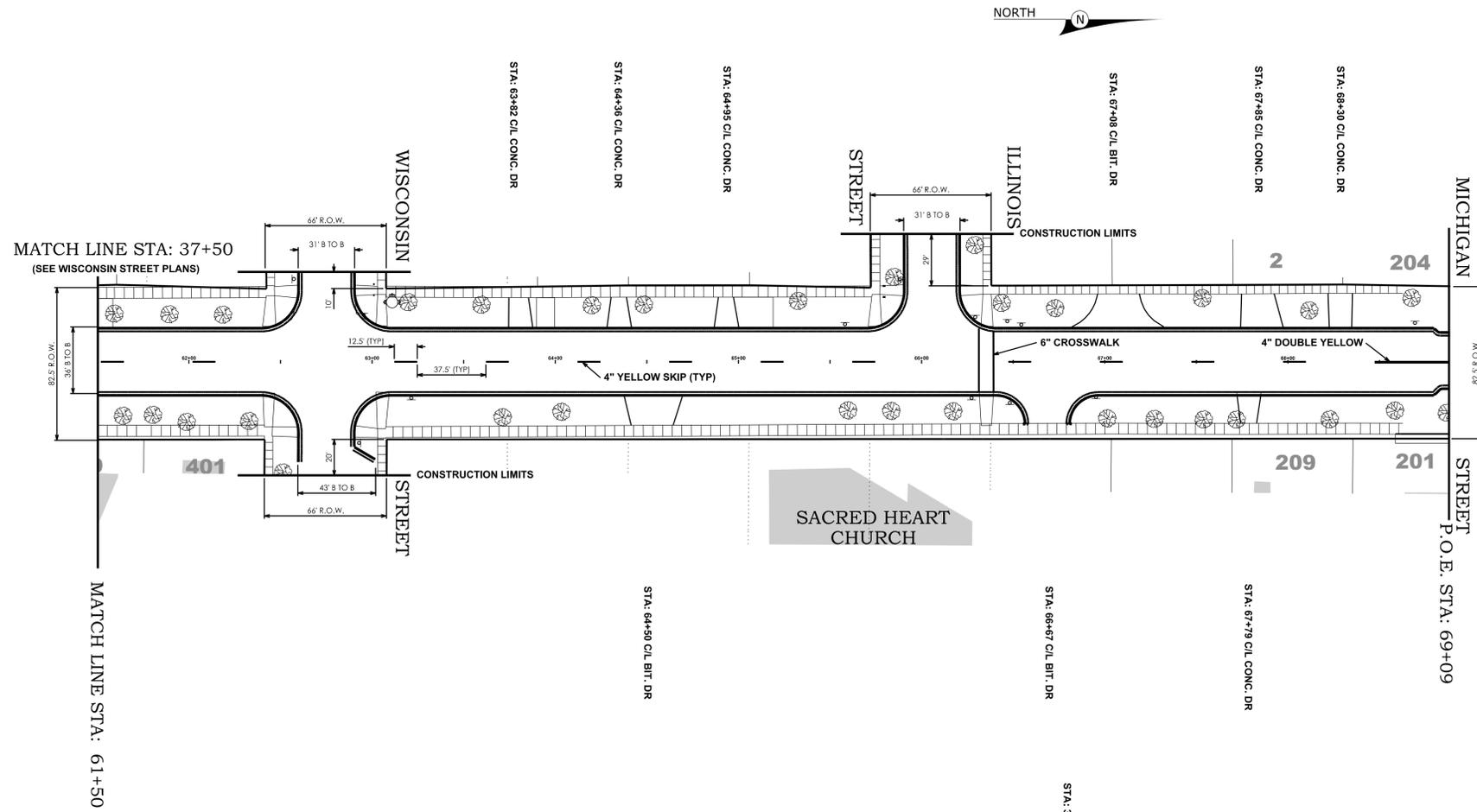
FED. ITEM NO.

FED. PROJECT:

JOB NO.:

CONTROL SECTION:

2011 STREET RE-CONSTRUCTION PROJECT



QUANTITIES THIS SHEET

ROADWAY ITEMS	QUANTITY
Pavement Marking, Inlay Cold Plastic, 4" Yellow	340 Lt
Pavement Marking, Inlay Cold Plastic, 6" Crosswalk	70 Lt



PAVEMENT MARKING SHEET
2011 STREET RE-CONSTRUCTION PROJECT
FANCHER FROM STA: 61+50 TO STA: 69+09
WISCONSIN FROM STA: 34+74 TO STA: 37+50

DESIGN BY R. CHESNEY/G. SCHWERIN	CONSTRUCTED
DRAWN BY B. BRICKNER	DATE OF PLAN 3/16/2011
CHECKED BY _____	SCALE 1" = 40'
APPROVED BY _____	SHEET 15 OF 20 SHEETS

REVISIONS _____ DATE/INITIALS _____

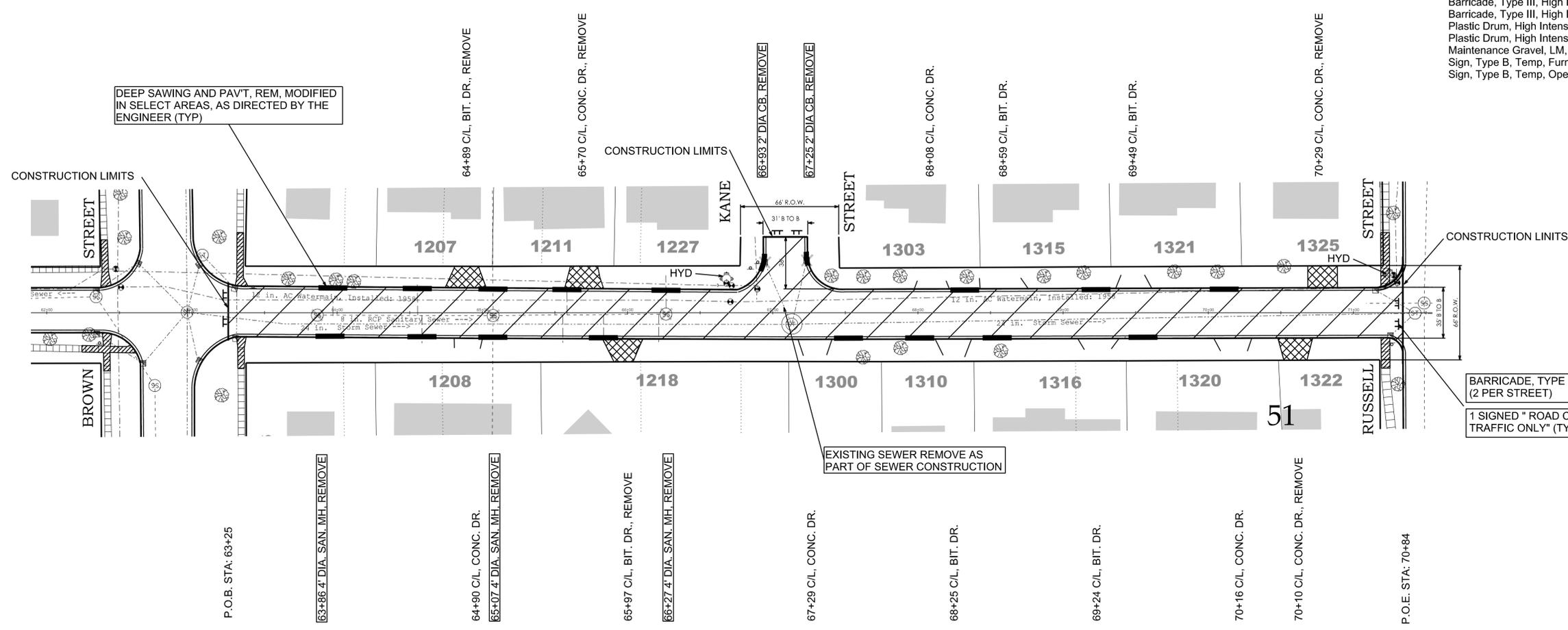
CONTROL SECT.	JOB NO.	FED. PROJECT	FED. ITEM NO.
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PLOT DATE: _____

DRAWING PATH: _____ FED. ITEM NO. _____ FED. PROJECT: _____ JOB NO.: _____ CONTROL SECTION: _____ 2011 STREET RE-CONSTRUCTION PROJECT

QUANTITIES THIS SHEET

ROADWAY ITEMS	QUANTITY
Drainage Structure, Remove	5 Ea
Sidewalk, Rem	120 Syd
Driveway, Rem	180 Syd
Pav't, Rem, Modified	2820 Syd
Machine Grading, Modified	16 Sta
Subgrade Undercutting, Type II	50 Cyd
Drainage Structure, Temp Lowering	1 Ea
Deep Sawing	160 Lft
Sawcutting	50 Lft
Barricade, Type III, High Intensity, Lighted, Furn.	6 Ea
Barricade, Type III, High Intensity, Lighted, Oper.	6 Ea
Plastic Drum, High Intensity, Lighted, Furn.	30 Ea
Plastic Drum, High Intensity, Lighted, Oper.	30 Ea
Maintenance Gravel, LM, Modified	150 Cyd
Sign, Type B, Temp, Furn.	30 Sft
Sign, Type B, Temp, Oper.	30 Sft



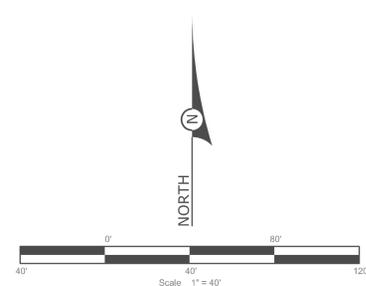
DEEP SAWING AND PAV'T, REM, MODIFIED IN SELECT AREAS, AS DIRECTED BY THE ENGINEER (TYP)

BARRICADE, TYPE III, HIGH INTENSITY (2 PER STREET)
1 SIGNED "ROAD CLOSED LOCAL TRAFFIC ONLY" (TYP)

EXISTING SEWER REMOVE AS PART OF SEWER CONSTRUCTION

REMOVAL LEGEND

Driveway, Rem	
Sidewalk, Rem	
Pav't, Rem, Modified	
Drainage Structure Temporary Lowering	
Gas and Water Shutoff, Adj, Modified	
Structure, Rem	
Curb and Gutter, Rem (measured and paid for as Pav't, Rem, Modified)	
Sewer, Rem, less than inch	



City of Mt. Pleasant
DIVISION OF PUBLIC WORKS
-ENGINEERING DEPARTMENT-

REMOVAL SHEET
2011 STREET RE-CONSTRUCTION PROJECT
CHIPPEWA FROM STA: 63+25 TO STA: 70+84

DESIGN BY R. CHESNEY/G. SCHWERIN	CONSTRUCTED
DRAWN BY B. BRICKNER	DATE OF PLAN 3/16/2011
CHECKED BY	SCALE 1" = 40'
APPROVED BY	SHEET 16 OF 20 SHEETS

REVISIONS	DATE/INITIALS

CONTROL SECT.	JOB NO.	FED. PROJECT	FED. ITEM NO.
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PLOT DATE:

DRAWING PATH:

FED. ITEM NO.

FED. PROJECT:

JOB NO.:

CONTROL SECTION:

2011 STREET RE-CONSTRUCTION PROJECT

QUANTITIES THIS SHEET

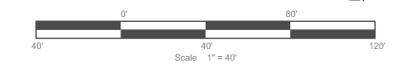
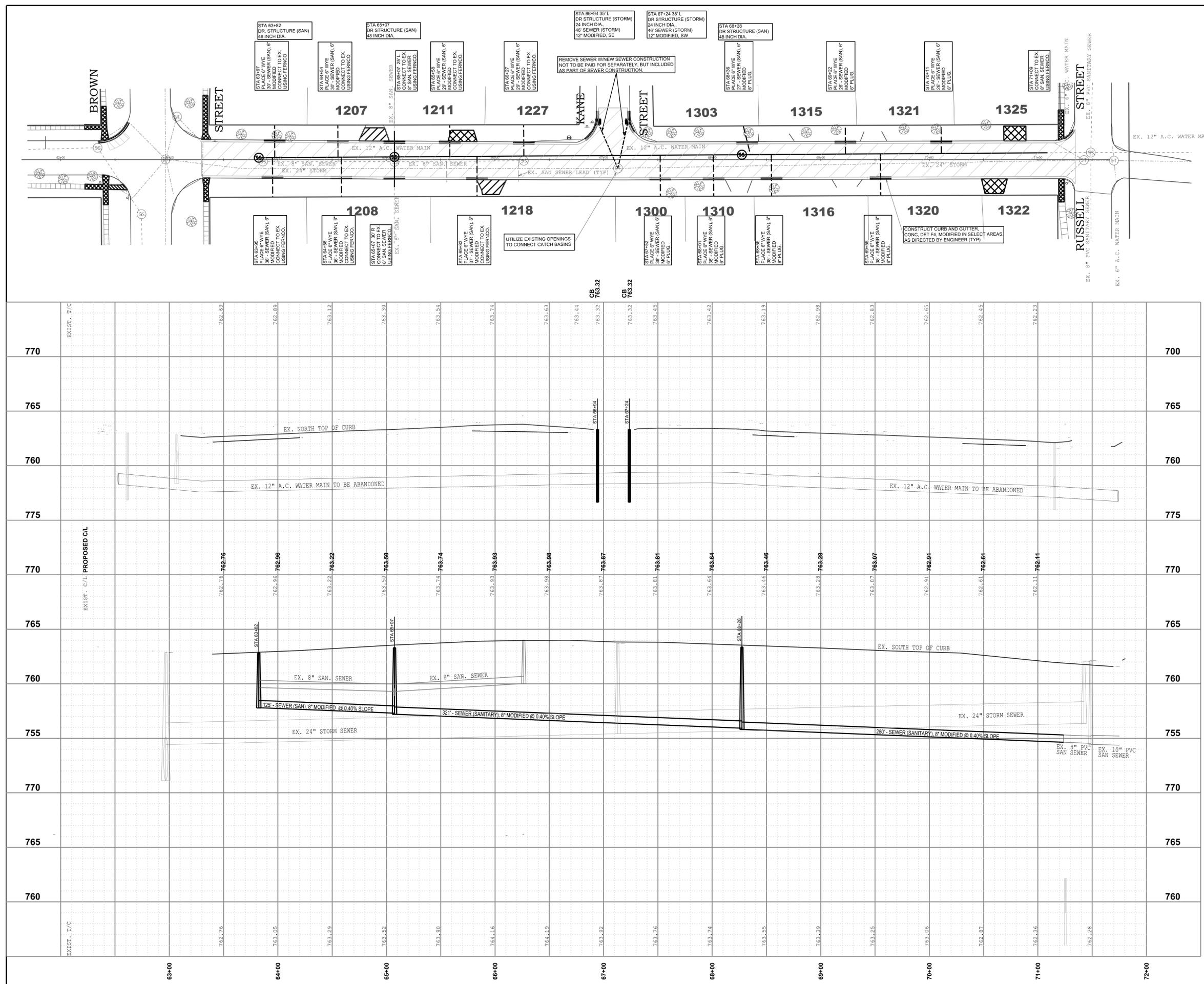
ROADWAY ITEMS	QUANTITY
Subbase, CIP	970 Cyd
Aggregate Base, 6 Inch, Modified	2820 Syd
Dr Structure, 24 Inch Dia	2 Each
Dr Structure, 48 Inch Dia	3 Each
Dr Structure Cover, Adj, Case 2	4 Each
Dr Structure Cover, CB, Modified	2 Each
Dr Structure Cover, STM, Modified	1 Each
Dr Structure Cover, SAN, Modified	3 Each
Sewer, (San) 8 Inch, Modified	726 Lft
Sewer, (Storm) 12 Inch, Modified	90 Lft
Sewer, (San) 6 Inch, Modified	430 Lft
HMA, 13A	250 Ton
HMA, 36A	200 Ton
HMA Approach, Modified	10 Ton
Driveway, Nonreinf. Conc., 6 Inch	140 Syd
Curb and Gutter, Conc., Det F4, Modified	400 Lft
Sidewalk, Conc., 4 Inch	840 St
Sidewalk Ramp, ADA, Modified	560 St
Slope Restoration, Modified	450 Syd

PROPOSED DRAINAGE STRUCTURES (SAN)

STATION	OFFSET	SIZE	RIM ELEV.	REMARKS	INVERT ELEV.
63+82	0	48" SAN	762.70	8" INVERT EAST	757.81
65+07	0	48" SAN	763.25	8" INVERT SOUTH 8" INVERT NORTH 8" INVERT WEST 8" INVERT EAST	758.90 758.90 757.31 757.21
68+28	0	48" SAN	763.25	8" INVERT WEST 8" INVERT EAST	755.92 755.82

PROPOSED DRAINAGE STRUCTURES (STM)

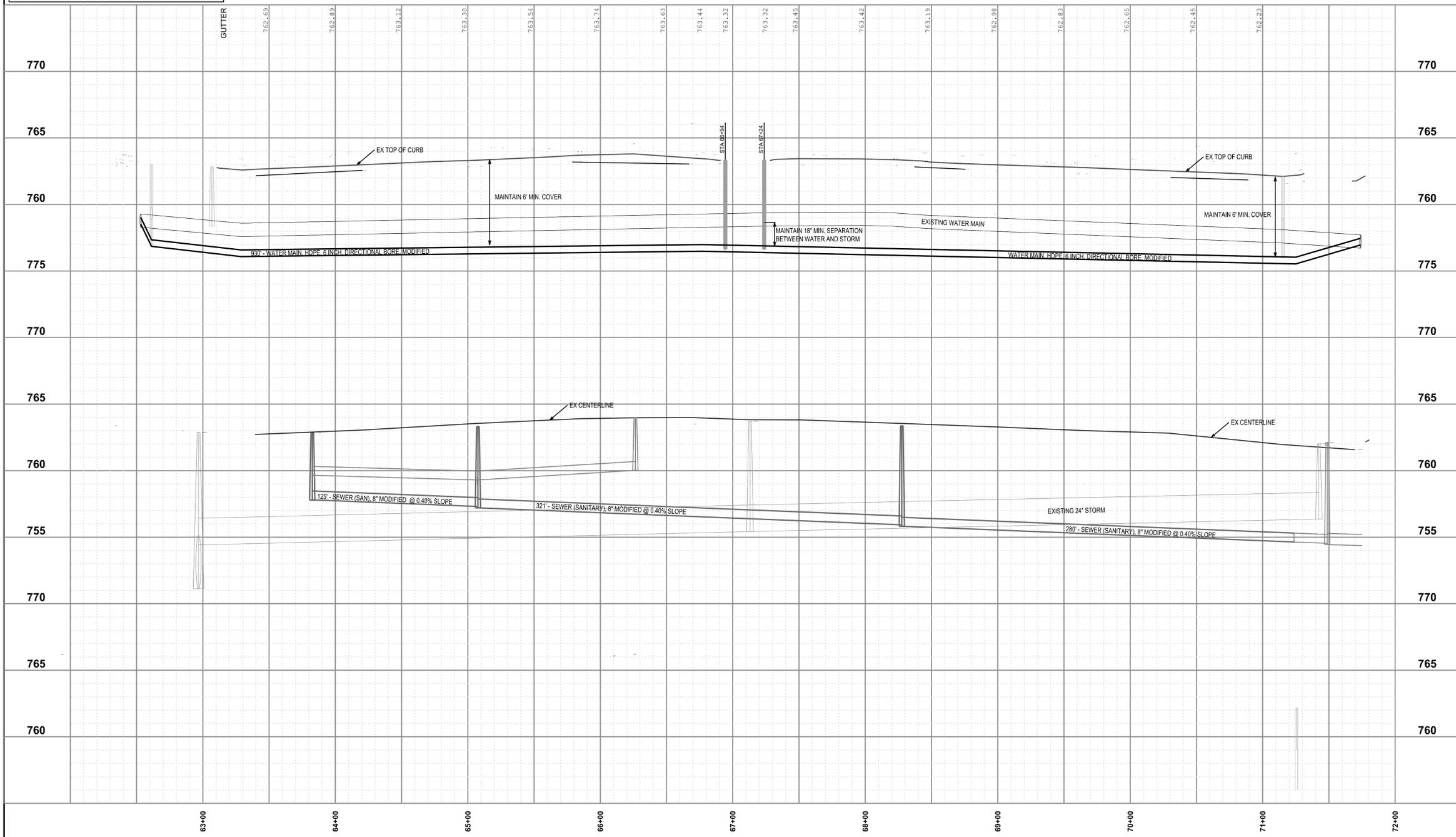
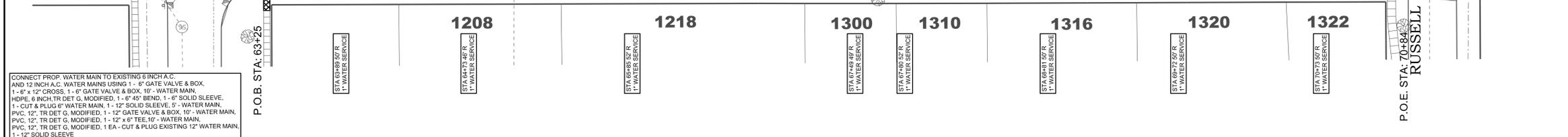
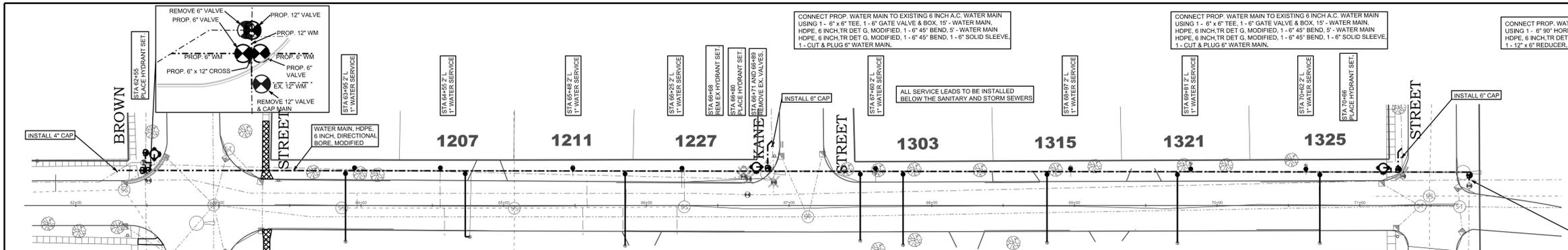
STATION	OFFSET	SIZE	T/C ELEV.	REMARKS	INVERT ELEV.
66+94	35' L	24" CB	763.32	12" INVERT SE'LY	758.65
67+24	35' L	24" CB	763.32	12" INVERT SW'LY	758.65
67+13	8' RT			UTILIZE EXISTING OPENINGS TO CONNECT CATCH BASINS	



**2011 STREET RE-CONSTRUCTION PROJECT
CONSTRUCTION SHEET
CHIPPEWA FROM STA: 63+30 TO STA: 71+35**

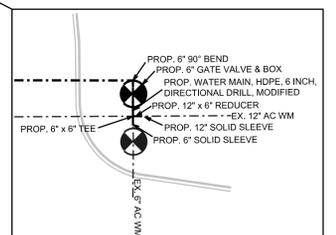
DESIGN BY R. CHESNEY/G. SCHWERIN	CONSTRUCTED
DRAWN BY B. BRICKNER	DATE OF PLAN 3/16/2011
CHECKED BY	SCALE 1" = 40'
APPROVED BY	SHEET 17 OF 20 SHEETS
REVISIONS _____ DATE/INITIALS _____	
CONTROL SECT.	JOB NO.
FED. PROJECT	FED. ITEM NO.
PLOT DATE:	

DRAWING PATH: FED. PROJECT: JOB NO.: CONTROL SECTION: 2011 STREET RE-CONSTRUCTION PROJECT



QUANTITIES THIS SHEET

ROADWAY ITEMS	QUANTITY
WATER MAIN, 6 INCH, DIRECTIONAL BORE, MODIFIED	930 LFT
WATER MAIN, 6 INCH, TR DET G, MODIFIED	55 LFT
WATER MAIN, 12 INCH, TR DET G, MODIFIED	10 LFT
GATE VALVE & BOX, 6 Inch	5 EACH
GATE VALVE & BOX, 12 Inch	1 EACH
1" WATER SERVICE, SHORT	8 EACH
1" WATER SERVICE, LONG	8 EACH
HYDRANT SET	3 EACH
REM HYDRANT SET	1 EACH
REM VALVE	2 EACH

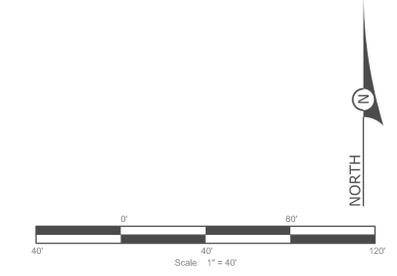


LEGEND

- EXISTING HYDRANT SET
- EXISTING VALVE
- PROPOSED HYDRANT SET
- PROPOSED VALVE
- PROPOSED CURB STOP

REMOVAL LEGEND

- REMOVE EXISTING HYDRANT SET
- REMOVE EXISTING VALVE



**2011 STREET RE-CONSTRUCTION PROJECT
CHIPPEWA STREET WATER**

DESIGN BY R. CHESNEY/G. SCHWERIN	CONSTRUCTED
DRAWN BY B. BRICKNER	DATE OF PLAN 3/16/2011
CHECKED BY _____	SCALE 1" = 40'
APPROVED BY _____	SHEET 18 OF 20 SHEETS

REVISIONS	DATE/INITIALS

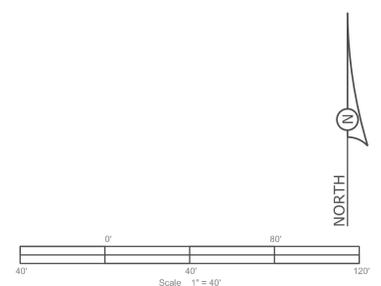
CONTROL SECT.	JOB NO.	FED. PROJECT	FED. ITEM NO.

PLOT DATE: _____

DRAWING PATH: _____ FED. ITEM NO. _____ FED. PROJECT: _____ JOB NO.: _____ CONTROL SECTION: _____ 2011 STREET RE-CONSTRUCTION PROJECT

	PayItemCode	Description	Units	Qty
Traffic				
Control	8120005	Barricade, Type III, High Intensity, Lighted, Furn	Ea	32
	8120006	Barricade, Type III, High Intensity, Lighted, Oper	Ea	32
	8120102	Plastic Drum, High Intensity, Lighted, Furn	Ea	80
	8120103	Plastic Drum, High Intensity, Lighted, Oper	Ea	80
	8120120	Sign, Type B, Temp, Prismatic, Furn	Sft	130
	8120121	Sign, Type B, Temp, Prismatic, Oper	Sft	130
	8120050	Minor Traffic Devices	Lsum	1
Site Work				
Removal	7087051	Preconstruction Audio Video Recording	Lsum	1
	2030011	Dr Structure, Rem	Ea	22
	2040045	Masonry and Conc Structure, Rem	Cyd	10
	2040055	Sidewalk, Rem	Syd	660
	2047011	Driveway, Rem	Syd	1305
	2047011	Pavt, Rem, Modified	Syd	14360
	2057002	Machine Grading, Modified	Sta	70
	2050041	Subgrade Undercutting, Type II	Cyd	100
	4030390	Dr Structure, Temp Lowering	Ea	4
	5017001	Deep Sawing	Lft	3060
	5017001	Sawcutting	Lft	450
Roadway				
	3010002	Subbase, CIP	Cyd	5310
	3027011	Aggregate Base, 6 inch, Modified	Syd	14420
	3067021	Maintenance Gravel, LM, Modified	Cyd	550
	4030200	Dr Structure, 24 Inch Dia	Ea	19
	4030210	Dr Structure, 48 Inch Dia	Ea	22
	4030006	Dr Structure, Add Depth of 48 Inch Dia, 8 feet to 15 feet	Ft	20
	4030010	Dr Structure, 60 Inch Dia	Ea	2
	4030053	Dr Structure Cover, Adj, Case 2	Ea	25
	4037050	Dr Structure Cover, CB, Modified	Ea	22
	4037050	Dr Structure Cover, Stm, Modified	Ea	13
	4037050	Dr Structure Cover, San, Modified	Ea	11
	5017031	HMA, 13A	Ton	1615
	5017031	HMA, 36A	Ton	1250
	5017031	HMA Approach, Modified	Ton	30
	8010005	Driveway, Nonreinf Conc, 6 inch	Syd	1360
	8010006	Driveway, Nonreinf Conc, 8 inch	Syd	180
	8027001	Curb and Gutter, Conc, Det F4, Modified	Ft	6460
	8030044	Sidewalk, Conc, 4 inch	Sft	3810
	8030046	Sidewalk, Conc, 6 inch	Sft	3350
	8037010	Sidewalk, Conc, 8 inch	Sft	450
	8037010	Sidewalk Ramp, ADA, Modified	Sft	4180
	8167011	Slope Restoration	Syd	3540

Watermain				
	8250052	Gate Valve and Box, 8 inch	Ea	2
	8257001	Water Main, 6 Inch, Tr Det G, Modified	Lft	55
	8257001	Water Main, 8 inch, Tr Det G, Modified	Lft	100
	8257001	Water Main, 12 Inch, Tr Det G, Modified	Lft	10
	8257001	Water Main, 6 Inch, Directional Bore, Modified	Lft	930
	8250051	Gate Valve and Box, 6 Inch	Ea	5
	8250054	Gate Valve and Box, 12 Inch	Ea	1
	8250240	1" Water Service, Short	Ea	8
	8250245	1" Water Service, Long	Ea	8
	8250091	Rem Hydrant Set	Ea	1
	8250040	Hydrant Set	Ea	3
Sewer				
	4027001	Sewer (San.), 8" Modified	Lft	2456
	4027001	Sewer (Storm), 12" Modified	Lft	2690
	4027001	Sewer (San) 6" Modified	Lft	1395
	4027021	Sewer Abandon	Cyd	34.9
	4030062	Dr Structure Tap, 8"	Ea	2
	4030064	Dr Structure Tap, 12"	Ea	1
Pavement				
Markings	8110025	Pavement Marking, Inlay Cold Plastic, 4" White	Lft	60
	8110026	Pavement Marking, Inlay Cold Plastic, 4" Yellow	Lft	1160
	8110040	Pavement Marking, Inlay Cold Plastic 24" Stop Bar	Lft	20
	8110045	Pavement Mrkg, Inlay Cold Plastic, Lt Turn Arrow, Symbol	Ea	1
	8110035	Pavement Marking, Inlay Cold Plastic, 6" Crosswalk	Lft	70



2011 STREET RECONSTRUCTION QUANTITIES SHEET			
DESIGN BY G. SCHWERIN	CONSTRUCTED	DATE OF PLAN 3/24/2011	
DRAWN BY J. FLACHS	CHECKED BY	SCALE 1" = 40'	SHEET 20 OF 20 SHEETS
APPROVED BY	REVISIONS _____ DATE/INITIALS _____		
CONTROL SECT.	JOB NO.	FED. PROJECT	FED. ITEM NO.
PLOT DATE:			

DRAWING PATH: FED. ITEM NO. FED. PROJECT: CONTROL SECTION: 2011 STREET RECONSTRUCTION PROJECT

MICHIGAN UNIFIED KEYING SYSTEM

SOIL EROSION SEDIMENTATION CONTROL MEASURES

* INDICATES APPLICABILITY OF A SPECIFIC CONTROL MEASURE TO ONE OR MORE OF THE SEVEN PROBLEM AREAS

KEY	DETAIL	CHARACTERISTICS	PROBLEM AREAS							KEY	DETAIL	CHARACTERISTICS	PROBLEM AREAS						
			A	B	C	D	E	F	G				A	B	C	D	E	F	G
1	STOPPING & STOCKPILING TOPSOIL	TOPSOIL MAY BE STOCKPILED ABOVE BARRIERS TO ACT AS A DIVERSION. STOCKPILE SHOULD BE TEMPORARILY SEED.	*				*	*		28	DROP SPILLWAY	SLOWS VELOCITY OF FLOW, REDUCES EROSION CAPACITY		*	*				
2	SELECTIVE GRADING & SHAPING	WATER CAN BE DIVERTED TO UNPAVED AREAS. FLATTER SLOPES EASE EROSION PROBLEMS.	*				*	*		29	PIPE DROP	REDUCES RUNOFF VELOCITY. REMOVES SEDIMENT AND TURBIDITY. CAN BE DESIGNED TO HANDLE LARGE VOLUMES OF FLOW.			*				
3	GRUBBING OMITTED	SAVES COST OF GRUBBING. PROMOTES NEW SPECIES. RETAINS EXISTING ROOT MAT SYSTEM. REDUCES WIND FALLOUT AT NEW FOREST EDGE. ENCOURAGES EQUIPMENT TRACKING.	*				*	*		30	PIPE SPILLWAY	REDUCES SEDIMENT AND TURBIDITY FROM RUNOFF. MAY BE PART OF PERMANENT EROSION CONTROL PLAN.			*				
4	VEGETATIVE STABILIZATION	MAY UTILIZE A VARIETY OF PLANT MATERIAL. STABILIZES SOIL. SLOWS RUNOFF VELOCITY. FILTERS SEDIMENT FROM RUNOFF.	*	*	*		*	*		31	ENERGY DISSIPATER	SLOWS RUNOFF VELOCITY TO NON-EROSIVE LEVEL. PROMPTS SEDIMENT COLLECTION FROM RUNOFF.	*		*	*			
5	SEEDING	RESPONSIVE AND VERY EFFECTIVE. STABILIZES SOIL. TRAPS IMPENDING EROSION. PROMPTS RUNOFF TO INFILTRATE SOIL. REDUCES RUNOFF VOLUME. SHOULD INCLUDE PREPARED TOPSOIL. BID.	*		*		*	*		32	LEVEL SPREADER	CONCRETE COLLECTED CHANNEL OR PIPE FLOW BACK TO SHEET FLOW. CHECKS CHANNEL ELEVATIONS AND CONSTRUCTION OFF PROJECT SITE. SIMPLE TO CONSTRUCT.			*				
6	SEEDING WITH MULCH AND/OR MATTING	FAVORABLE ESTABLISHMENT OF VEGETATIVE COVER. EFFECTIVE FOR GRADIENTS WITH LOW VELOCITY. EASE PLACED IN SMALL QUANTITIES BY RESPONSIBLE PERSONNEL. SHOULD INCLUDE PREPARED TOPSOIL. BID.	*		*		*	*		33	SEDIMENTATION TRAP	MAY BE CONSTRUCTED OF A VARIETY OF MATERIALS. TRAPS SEDIMENT AND REDUCES VELOCITY OF FLOW. CAN BE CLEANED AND EXPANDED AS NEEDED.			*	*			
7	HYDRO-SEEDING	EFFECTIVE ON LARGE AREAS. MULCH AND SEEDS APPLIED TO PROVIDE IMMEDIATE PROTECTION. MULCH GRASSES ROOTED. SHOULD INCLUDE PREPARED TOPSOIL. BID.	*				*	*		34	SEDIMENT BASIN	TRAPS SEDIMENT. RELEASES RUNOFF AT HIGH-EROSION RATES. CONTROLS RUNOFF AT SYSTEM OUTLETS. CAN BE VISUAL MONITORED.		*	*	*			
8	SOONING	PROMOTES IMMEDIATE PROTECTION. CAN BE USED ON STEEP SLOPES WHERE SEEDS MAY BE DIFFICULT TO ESTABLISH. EASY TO PLACE. MAY BE REPAIRED IF DAMAGED. SHOULD INCLUDE PREPARED TOPSOIL. BID.	*		*		*	*		35	STORM SEWER	SYSTEM REMOVES COLLECTED RUNOFF FROM SITE, PARTICULARLY FROM PAVED AREAS. CAN HANDLE LARGE CONCENTRATIONS OF RUNOFF. CONCRETE RUNOFF TO MANHOLE. SEED SYSTEM OR STABILIZED GUTTER. LOCATION USE CATCH BASINS TO COLLECT SEDIMENT.				*	*		
9	VEGETATIVE BUFFER STRIP	SLOWS RUNOFF VELOCITY. FILTERS SEDIMENT FROM RUNOFF. REDUCES VOLUME OF RUNOFF ON SLOPES.	*	*				*		36	CATCH BASIN DRAIN INLET	COLLECTS HIGH VELOCITY CONCENTRATED RUNOFF. MAY USE FILTER CLOTH OVER INLET.				*	*		
10	MULCHING	USED ALONG TO PROTECT EXPOSED AREAS FOR SHORT PERIODS. PROTECTS SOIL FROM IMPACT OF FALLING MAT. PRESERVES SOIL MOISTURE AND PROTECTS GERMINATING SEED FROM TEMPERATURE EXTREMES.	*				*	*		37	SOD FILTER	RESPONSIVE AND EASY TO CONSTRUCT. PROMOTES IMMEDIATE PROTECTION. PROTECTS AREAS AROUND INLETS FROM EROSION.				*			
11	ROUGHENED SURFACE	REDUCES VELOCITY AND INCREASES INFILTRATION RATES. COLLECTS SEDIMENT. PAVED SURFACES, CURBS AND MULCH BETTER THAN SMOOTH SURFACES.	*				*			38	STRAW BALE FILTER	RESPONSIVE AND EASY TO CONSTRUCT. CAN BE LOCATED AS NECESSARY TO COLLECT SEDIMENT. MAY BE USED IN CONJUNCTION WITH SHOW FENCE FOR ADDED STABILITY.				*			
12	COMPACTION	HELPS HOLD SOIL IN PLACE, MAKING EXPOSED AREAS LESS VULNERABLE TO EROSION.	*				*			39	ROCK FILTER	CAN UTILIZE MATERIAL FOUND ON SITE. EASY TO CONSTRUCT. FILTERS SEDIMENT FROM RUNOFF.				*			
13	RIPRAP, RUBBLE, COBBLES	USED WHERE VEGETATION IS NOT EASILY ESTABLISHED. EFFECTIVE FOR HIGH VELOCITIES OR HIGH CONCENTRATIONS. PROMPTS RUNOFF TO INFILTRATE SOIL. DISIPATES ENERGY FLOW AT SYSTEM OUTLETS.	*	*	*					40	INLET SEDIMENT TRAP	EASY TO SHAPE. COLLECTS SEDIMENT. MAY BE CLEANED AND EXPANDED AS NEEDED.				*			
14	AGGREGATE COVER	STABILIZES SOIL SURFACE. TRAPS IMPENDING EROSION. PROMPTS CONSTRUCTION MATING IN AREAS WHERE SEEDS MAY BE USED AS PART OF PERMANENT BASE. CONSTRUCTION OF PAVED AREAS.					*			41	STONE AND ROCK CROSSING	MAY BE ROCK OR CLEAN RUBBLE. IMPROVES UNDERSTRUCTURE PASSAGE FOR FISH AND OTHER WATER LIFE. IMPROVEMENTS MAY ALSO SERVE AS DITCH CHECK OR SEDIMENT TRAP.		*					
15	PAVING	PROTECTS AREAS WHICH CANNOT OTHERWISE BE PROTECTED, BUT INCREASES RUNOFF VOLUME AND VELOCITY. AREAS AT SURFACE WILL HELP SLOW VELOCITY.	*				*			42	TEMPORARY CULVERT	ELIMINATES STREAM SUBMERGENCE AND TURBIDITY. PROMPTS UNDERSTRUCTURE PASSAGE FOR FISH AND OTHER WATER LIFE. PROTECTS FOR NORMAL FLOW CAN BE PROVIDED WITH STORM WATER FLOWING OVER ROADWAY.		*					
16	CURB & GUTTER	KEEPS HIGH VELOCITY RUNOFF ON PAVED AREAS FROM LEAVING PAVED SURFACE. COLLECTS AND CONVEYS RUNOFF TO ENCLOSED DRAINAGE SYSTEM OR PREPARED DRAINAGEWAY.					*	*		43	CULVERT SEDIMENT TRAP	EASY TO INSTALL AT INLET. HELPS CLEAN UP AND PREVENT FLOODING. MAY BE CONSTRUCTED OF LAMBER OR LOGS.		*			*		
17	BENCHES	REDUCES RUNOFF VELOCITY BY REDUCING EFFECTIVE SLOPE LENGTH. COLLECTS SEDIMENT. PROVIDES ACCESS TO SLOPES FOR SEEDING, MULCHING AND MAINTENANCE.	*					*		44	CULVERT SEDIMENT TRAP	DEFLECTS CURRENTS AWAY FROM STREAMBANK AREAS.		*					
18	DIVERSION BERM	DIVERTS WATER FROM VULNERABLE AREAS. COLLECTS AND DIRECTS WATER TO PREPARED DRAINAGEWAYS. MAY BE PLACED AS PART OF NORMAL CONSTRUCTION OPERATION.	*				*	*		45	TEMP. STREAM CHANNEL CHANGE	NEW CHANNEL, HELPS NORMAL FLOWS AWAY FROM CONSTRUCTION. REQUIRES STATE PERMIT.		*					
19	DIVERSION DITCH	COLLECTS AND DIVERTS WATER TO REDUCE EROSION POTENTIAL. MAY BE INCORPORATED IN PERMANENT PROJECT DRAINAGE SYSTEMS.	*				*	*		46	SHEET PILING	PROTECTS EROSION PRONE AREAS FROM STREAM CURRENTS. DURING CONSTRUCTION. MANUAL INTERVENTION WHEN NEEDED.		*					
20	BERM & DITCH	DIVERTS WATER TO A PREPARED DRAINAGEWAY. MAY BE USED AT INTERVALS ACROSS SLOPE FACE TO REDUCE EFFECTIVE SLOPE LENGTH.	*				*	*		47	COFFERDAM	WORK CAN BE CONTINUED DURING MOST ANTICIPATED STREAM CONDITIONS. CLEAR WATER CAN BE PUMPED DIRECTLY BACK INTO STREAM.		*					
21	FILTER BERM	CONSTRUCTED OF GRAVEL OR STONE. INTERCEPTS AND DIVERTS RUNOFF TO STABILIZED AREAS OR PREPARED DRAINAGE SYSTEMS. SLOWS RUNOFF AND COLLECTS SEDIMENT.	*	*				*		48	CONSTRUCTION DAM	PERMITS WORK TO CONTINUE DURING NORMAL STREAM STAGES. CONTROLLED FLOODING CAN BE ACCOMMODATED DURING PERIODS OF INACTIVITY.		*					
22	BRUSH FILTER	USED IN SOIL LOSS FROM CLEARING OPERATIONS. CAN BE COVERED AND SEEDED RATHER THAN REMOVED. ELIMINATES NEED FOR BURNING OR REMOVAL OF MATERIAL FROM SITE.						*		49	CHECK DAMS	REDUCES FLOW VELOCITY. CATCHES SEDIMENT. PROMPTS RETENTION OF LOGS, STUMP, LIMBS, MACHOPY, OR SAND BARS.		*	*				
23	BARE CHANNEL	LEAST EXPOSURE FORM OF ORNAMENTATION. MAY BE USED ONLY WHERE GRADIENT IS VERY LOW AND WITH SOILS OF MINIMAL EROSION POTENTIAL.			*					50	WEIR	CONTROLS SEDIMENTATION IN LARGE STREAMS. CAUSES MINIMAL TURBIDITY.		*	*				
24	GRASSED WATERWAY	MUCH MORE STABLE FORM OF ORNAMENTATION THAN BARE CHANNEL. GRASSES STICK TO SLOPE ROOTS AND FILTER OUT SEDIMENT. USED WHERE BARE CHANNEL WOULD BE EXPOSED.			*					51	RETAINING WALL	REDUCES GRADIENT WHERE SLOPES ARE EXCESSIVELY STEEP. PROMPTS RETENTION OF EXISTING VEGETATION, KEEPING SOIL STABLE IN UNMAINTAINED AREAS.		*			*		
25	SLOPE DRAIN (SURFACE PIPE)	PREVENTS EROSION ON SLOPES WHEN RUNOFF CANNOT BE DIVERTED TO EDGE OF SLOPE AREA. USUALLY PERMANENT. CAN BE CONSTRUCTED OR EXTENDED AS GRADING PROGRESSES.	*							52	SEEPAGE CONTROL	PREVENTS PIPING AND SOIL SURFACE ON OUT SLOPES.	*				*		
26	SLOPE DRAIN (PIPE CHANNEL)	PREVENTS EROSION ON SLOPES WHEN RUNOFF CANNOT BE DIVERTED TO EDGE OF SLOPE AREA. USUALLY PERMANENT. CAN BE CONSTRUCTED OR EXTENDED AS GRADING PROGRESSES.	*							53	MINERALEAK	MINIMIZES WIND EROSION. MAY BE SHOW FENCE.				*			
27	SLOPE DRAIN (SUBSURFACE PIPE)	PREVENTS EROSION ON SLOPES WHEN RUNOFF CANNOT BE DIVERTED TO EDGE OF SLOPE AREA. USUALLY PERMANENT. CAN BE CONSTRUCTED AS GRADING PROGRESSES.	*							54	SALT FENCE	USES BIODEGRADABLE FABRIC AND POSTS OR PILES. EASY TO CONSTRUCT AND LOCATE AS NECESSARY.			*		*		

THE CITY OF MT. PLEASANT IS ULTIMATELY RESPONSIBLE FOR SESC PRACTICES UNDERTAKEN BY CONTRACTORS WORKING UNDER THE AUTHORIZED PUBLIC AGENCY DESIGNATION. THEREFOR, ALL CONTRACTORS SHALL COMPLY WITH THIS OPERATING PROCEDURE. IF THE CONTRACTOR FAILS TO INSTALL OR MAINTAIN THE NECESSARY SESC CONTROLS AFTER A 24 HOUR WRITTEN NOTIFICATION FROM THE CITY ENGINEER, THE CITY MAY COMPLETE SOIL EROSION AND SEDIMENTATION CONTROL WORK AND DEDUCT THE COST FROM MONIES DUE TO THE CONTRACTOR.



City of Mt. Pleasant
DIVISION OF PUBLIC WORKS
-ENGINEERING DEPARTMENT-

2011 STREET RE-CONSTRUCTION PROJECT
SOIL EROSION KEY SHEET

DESIGN BY R. CHESNEY/G. SCHWERIN	CONSTRUCTED
DRAWN BY B. BRICKNER	DATE OF PLAN 3/16/2011
CHECKED BY	SCALE 1" = 40'
APPROVED BY	SHEET 20 OF 20 SHEETS

REVISIONS _____ DATE/INITIALS _____

CONTROL SECT.	JOB NO.	FED. PROJECT	FED. ITEM NO.

PLOT DATE: _____

DRAWING PATH: _____
FED. ITEM NO. _____
JOB PROJECT: _____
JOB NO.: _____
CONTROL SECTION: _____