

# CITY OF DULUTH

## 2014 - 1st Ave East Flood Damage Repairs CONSTRUCTION PLANS FOR: EXISTING STREET REPAIR BITUMINOUS SURFACING, AGGREGATE BASE

GROSS LENGTH	1779 FEET	0.339 MILES
BRIDGE LENGTH	0.00 FEET	0.000 MILES
EXCEPTION LENGTH	0.00 FEET	0.000 MILES
NET LENGTH	1779 FEET	0.339 MILES

LOCATED ON : 1st AVENUE EAST BETWEEN 9th STREET AND 4th STREET

City of Duluth Project No. 1209

FEMA Site # 155



INDEX MAP

BENCHMARKS

EXCEPTIONS  
N/A



TWIN CITY AREA  
MN TOLL FREE  
454-0002  
1-800-252-

### PLAN SYMBOLS

- COUNTY LINE
- SECTION LINE
- QUARTER LINE
- SIXTEENTH LINE
- NEW RIGHT OF WAY LINE
- PRESENT RIGHT OF WAY LINE
- PROPERTY LINE
- CENTER LINE
- RETAINING WALL
- DRAIN TILE
- BOX CULVERT
- GUARD RAIL
- FENCE
- HEDGE
- BRUSH
- BUILDING
- DECIDUOUS TREE
- CONIFEROUS TREE
- MONUMENT (STONE, CONC., OR METAL)
- SMALL SIGN
- FIRE NUMBER & SUPPORT

### UTILITY SYMBOLS

- POWER POLE
- TELEPHONE POLE
- ANCHOR
- STREET LIGHT
- PEDESTAL (TELEPHONE CABLE TERMINAL)
- SIGNAL
- WATER MAIN
- CONDUIT
- TELEPHONE CABLE IN CONDUIT
- ELECTRIC CABLE IN CONDUIT
- EX. TELEPHONE MANHOLE/VAULT
- EX. ELECTRIC MANHOLE
- EX. STORM MANHOLE
- EX. SANITARY MANHOLE
- WATER & GAS MANHOLE
- STEAM HANDHOLE
- EX. HANDHOLE
- EX. CATCH BASIN
- PROPOSED CATCH BASIN
- PROPOSED MANHOLE
- PROPOSED TELEPHONE VAULT
- FIRE HYDRANT
- NEW SANITARY SEWER
- NEW STORM SEWER
- PVC PERFORATED PIPE
- BURIED TELEPHONE CABLE
- BURIED ELECTRIC CABLE
- STORM SEWER
- SANITARY SEWER
- GAS MAIN
- WATER & GAS VALVE (NEW)

### SCALES



### PROJECT LOCATION

ST. LOUIS COUNTY  
CITY OF DULUTH  
N1/2 OF SECTION 27  
S1/2 OF SECTION 27  
T 50 NORTH, R 14 WEST

CONTRACTOR TO NOTIFY 911 PERSONNEL PRIOR TO ALL ROAD CLOSURES.

THE SUBSURFACE UTILITY INFORMATION IN THIS PLAN IS UTILITY QUALITY LEVEL "D". THIS QUALITY LEVEL WAS DETERMINED ACCORDING TO THE GUIDELINES OF CI/ASCE 38-02, ENTITLED "STANDARD GUIDELINES FOR THE COLLECTION AND DEPICTION OF EXISTING SUBSURFACE UTILITY DATA."

**SPECIFICATIONS:**  
THE 2014 EDITION OF THE MINNESOTA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR CONSTRUCTION".  
THE 2013 EDITION OF THE CITY OF DULUTH PUBLIC WORKS AND DEPARTMENT STANDARD CONSTRUCTION SPECIFICATIONS AND SUPPLEMENTS OR ADDENDUMS SHALL APPLY.  
AVAILABLE AT: [http://www.duluthmn.gov/engineering/spec\\_book/](http://www.duluthmn.gov/engineering/spec_book/)  
ALL TRAFFIC CONTROL DEVICES AND SIGNING SHALL CONFORM TO THE MN MUTCD, INCLUDING THE FIELD MANUAL DATED JANUARY 2014.  
AVAILABLE AT: <http://www.dot.state.mn.us/trafficeng/publ/mutcd/index.html>  
THE 2360 PLANT MIXED ASPHALT PAVEMENT COMBINED 2360/2350 SPECIFICATION FOR 2012 CONSTRUCTION SEASON SHALL APPLY.  
AVAILABLE AT: [http://www.dot.state.mn.us/stateaid/so\\_electronic\\_proposal.html](http://www.dot.state.mn.us/stateaid/so_electronic_proposal.html)

### INDEX

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	STATEMENT OF ESTIMATED QUANTITIES (SEQ) / CONSTRUCTION NOTES TYPICAL SECTION
3	SITE #155

THIS PLAN SET CONTAINS 3 SHEETS

### APPROVALS

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

DAVID P. SALO

PROJECT ENGINEER (TYPED OR PRINTED NAME)

*[Signature]*  
PROJECT ENGINEER

8/19/2014 18553

DATE LIC. NO.

CITY APPROVAL

*[Signature]* 9/2/14  
APPROVED CHIEF ENGINEER OF TRANSPORTATION DATE

*[Signature]* 9/2/14  
APPROVED CHIEF ENGINEER OF UTILITIES DATE

*[Signature]* 9/2/14  
APPROVED CITY ENGINEER DATE

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DAVID P. SALO  
PRINTED NAME

08/13/2014	1			
DATE	2			
18553	3			
LIC. NO.	NO	DATE	REVISION	BY

TITLE SHEET  
Site #155, 1st Ave East Flood Damage Repairs

4				
5				
6				
NO	DATE	REVISION	BY	JOB NO.

SHEET NO. 1 OF 3

JOB NO. E-1953 DATE 08/13/2014

City of Duluth Project No. 1209

4560 Norway Pines Place  
Duluth, MN 55811  
tkda.com 218-727-8796

**CITY OF DULUTH SITE #155**

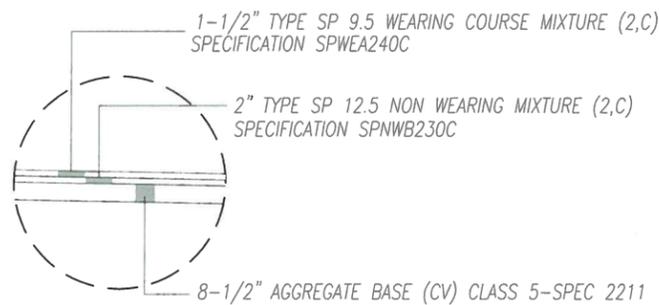
LINE NO.	CONST. NOTES	SPEC. NUMBER	ITEM DESCRIPTION	UNIT OF MEASURE	TOTAL QUANTITY
1		2021.501	MOBILIZATION	LS	1.0
2		2104.505	REMOVE CURB AND GUTTER	LF	118.0
3		2104.505	REMOVE BITUMINOUS PAVEMENT	SY	104.0
4		2104.505	REMOVE CONCRETE PAVEMENT	SF	269.0
5	1	2104.511	SAWING CONCRETE PAVEMENT (FULL DEPTH)	LF	122.0
6		2104.513	SAWING BITUMINOUS PAVEMENT (FULL DEPTH)	LF	241.0
7		2104.523	SALVAGE CASTING	EA	4.0
8	2	2105.501	COMMON EXCAVATION	CY	31.0
9		2211.503	AGGREGATE BASE (CV) CLASS 5	CY	24.0
10	3	2301.604	CONCRETE PAVEMENT 6"	SY	10.0
11		2360.501	TYPE SP 12.5 NON-WEARING COURSE MIXTURE (SPNW330C)	TON	12.0
12		2360.501	TYPE SP 9.5 WEARING COURSE MIXTURE (SPWEA240C)	TON	9.0
13	4	2506.522	ADJUST FRAME & RING CASTING	EA	1.0
14		2506.516	CASTING ASSEMBLY	EA	1.0
15	5	2506.602	RECONSTRUCT DRAINAGE STRUCTURE	EA	3.0
16		2521.501	4" CONCRETE WALK	SF	94.0
17	6	2531.501	CONCRETE CURB AND GUTTER DESIGN B624	LF	142.0
18		2563.601	TRAFFIC CONTROL	LS	1.0
19	7	2573.530	STORM DRAIN INLET PROTECTION	EA	12.0

**CONSTRUCTION NOTES:**

- 1.) ITEM INCLUDES SAW CUT OF CONCRETE PAVEMENT AND CURB CUTS
- 2.) ITEM TO BE USED FOR REMOVALS BELOW BITUMINOUS SURFACE FOR SUBGRADE
- 3.) MATCH EXISTING ROAD THICKNESS, QUANTITY BASED ON ASSUMED 6" CONCRETE THICKNESS
- 4.) ITEM INCLUDES REPAIR OF MANHOLE CHIMNEY
- 5.) ITEM INCLUDES REPAIR OF CATCH BASIN CHIMNEY
- 6.) SEED AND BLANKET BEHIND CURB INCIDENTAL TO BID ITEM
- 7.) ITEM TO BE USED ON DOWNHILL STORM SEWER INLETS

"THESE STANDARD PLATES AS APPROVED BY THE FHWA SHALL APPLY"

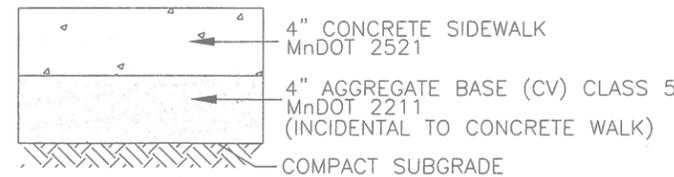
PLATE NO.	STANDARD PLATES
4020J	MANHOLE OR CATCH BASIN COVER
4129G	FRAME CASTING NO. 802A
4154B	GRATE CASTING FOR CATCH BASINS
7100H	CONCRETE CURB & GUTTER B624
9102D	TURF ESTABLISHMENT AREAS
	NOT APPROVED BY FHWA
	CITY OF DULUTH PLATES
STR-5	DRIVEWAY AND ALLEY ENTRANCE
STR-8	STREET RESTORATION OVER TRENCH
STRM-1	STORM MANHOLE CASTING
STRM-2	CATCH BASIN/CURB BOX CASTING
STRM-3	CATCH BASIN CASTING
STRM-4	FABRIC WRAPPED CATCH BASIN CASTING
STRM-5	FABRIC WRAPPED MANHOLE CASTING



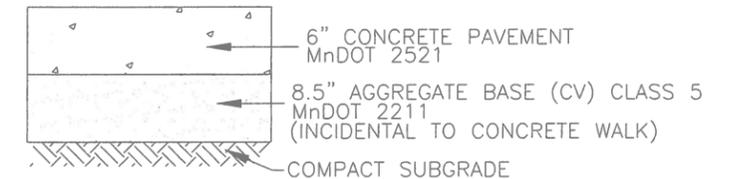
CONSTRUCT GE  
 1-1/2" (2.25) = 3.375  
 2" (2.25) = 4.500  
 (8-1/2") (1) = 8.500

TOTAL 16.375 G.E.

TYPICAL ROAD SECTION  
NO SCALE



4" CONCRETE SIDEWALK  
NO SCALE



6" CONCRETE ROAD SECTION  
NO SCALE

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DAVID P. SALO  
PRINTED NAME

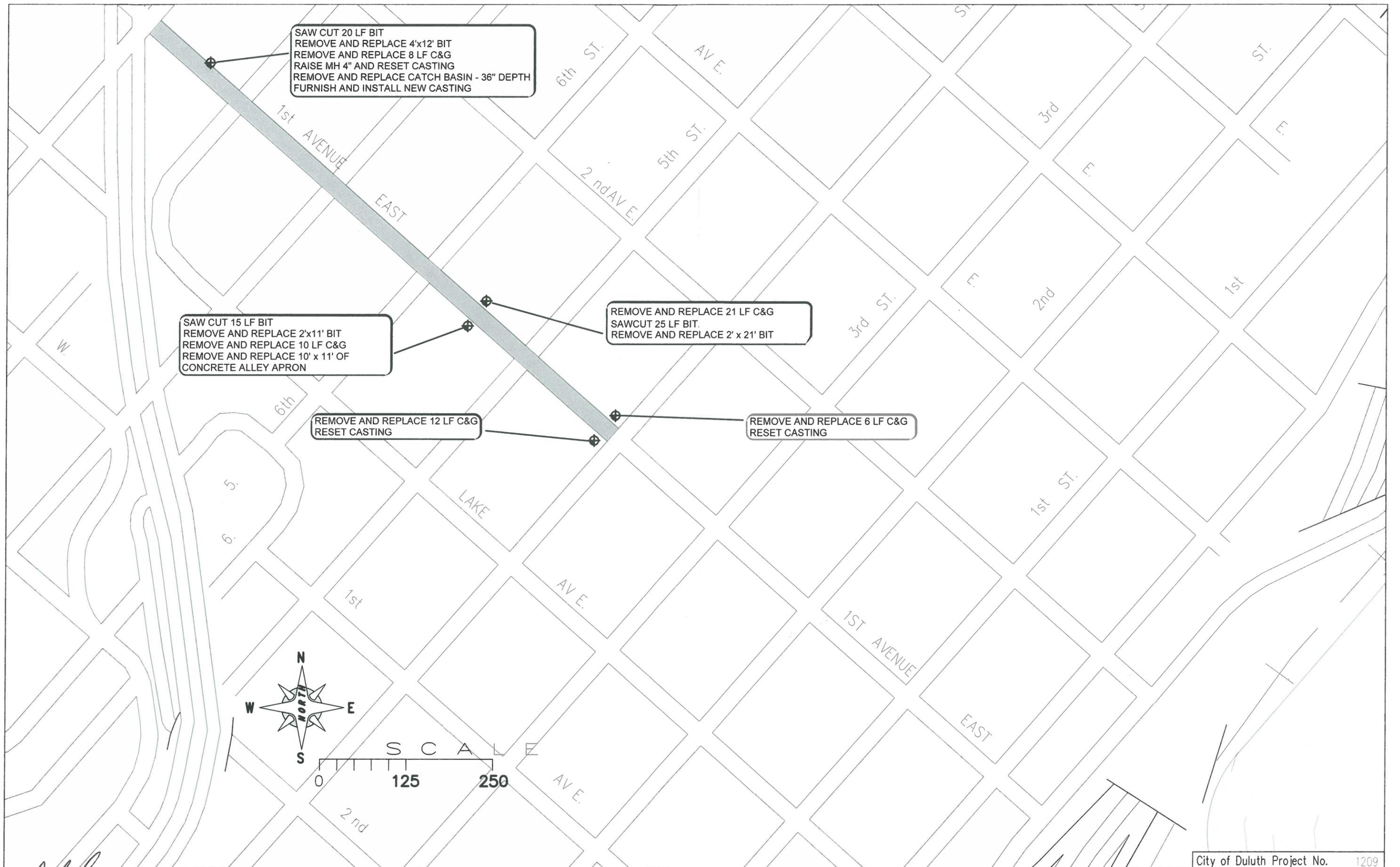
DATE	08/19/2014	1			
DATE	18553	2			
DATE		3			
LIC. NO.		NO	DATE	REVISION	BY

SEQ/CONSTRUCTION NOTES & TYPICAL SECTION  
Site #155, 1st Ave East Flood Damage Repairs

NO	DATE	REVISION	BY	JOB NO.	E-1953	DATE	08/19/2014
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SHEET NO. 2 OF 3

City of Duluth Project No. 1209  
 4560 Norway Pines Place  
 Duluth, MN 55811  
 tkda.com 218-727-8796



I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.  
 SIGNATURE: *[Signature]*  
 PRINTED NAME: DAVID P. SALO

DATE	08/19/2014	1			
DATE	18553	2			
LIC. NO.		3			
NO	DATE	REVISION	BY		

CITY OF DULUTH  
 Site #155, 1st Ave East Flood Damage Repairs

NO	DATE	REVISION	BY		
4					
5					
6					

SHEET NO. 3 OF 3

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