

PLAN LEGEND

RIGHT OF WAY LINE	---
DITCH CENTERLINE	---
FENCE LINE	---
RETAINING WALL	---
GRAVEL LINE	---
GUARD RAIL LINE	---
RAILROAD TRACK LINE	---
ROAD CENTERLINE	---
TREE LINE	---
STREAM LINE	---
WETLAND LINE	---
EX SANITARY LINE	---
PR SANITARY LINE	---
AB SANITARY LINE	---
EX FORCEMAIN LINE	---
PR FORCEMAIN LINE	---
AB FORCEMAIN LINE	---
EX STORM LINE	---
PR STORM LINE	---
AB STORM LINE	---
EX WATER LINE	---
PR WATER LINE	---
AB WATER LINE	---
EX GAS LINE	---
PR GAS LINE	---
AB GAS LINE	---
EX STEAM LINE	---
PR STEAM LINE	---
AB STEAM LINE	---
UG CABLE TV LINE	---
AB CABLE TV LINE	---
UG ELECTRIC LINE	---
AB ELECTRIC LINE	---
UG FIBEROPTIC LINE	---
AB FIBEROPTIC LINE	---
UG TELEPHONE LINE	---
AB TELEPHONE LINE	---
OH ELECTRIC LINE	---
OH TELEPHONE LINE	---
OH CABLE TV LINE	---

SYMBOLS

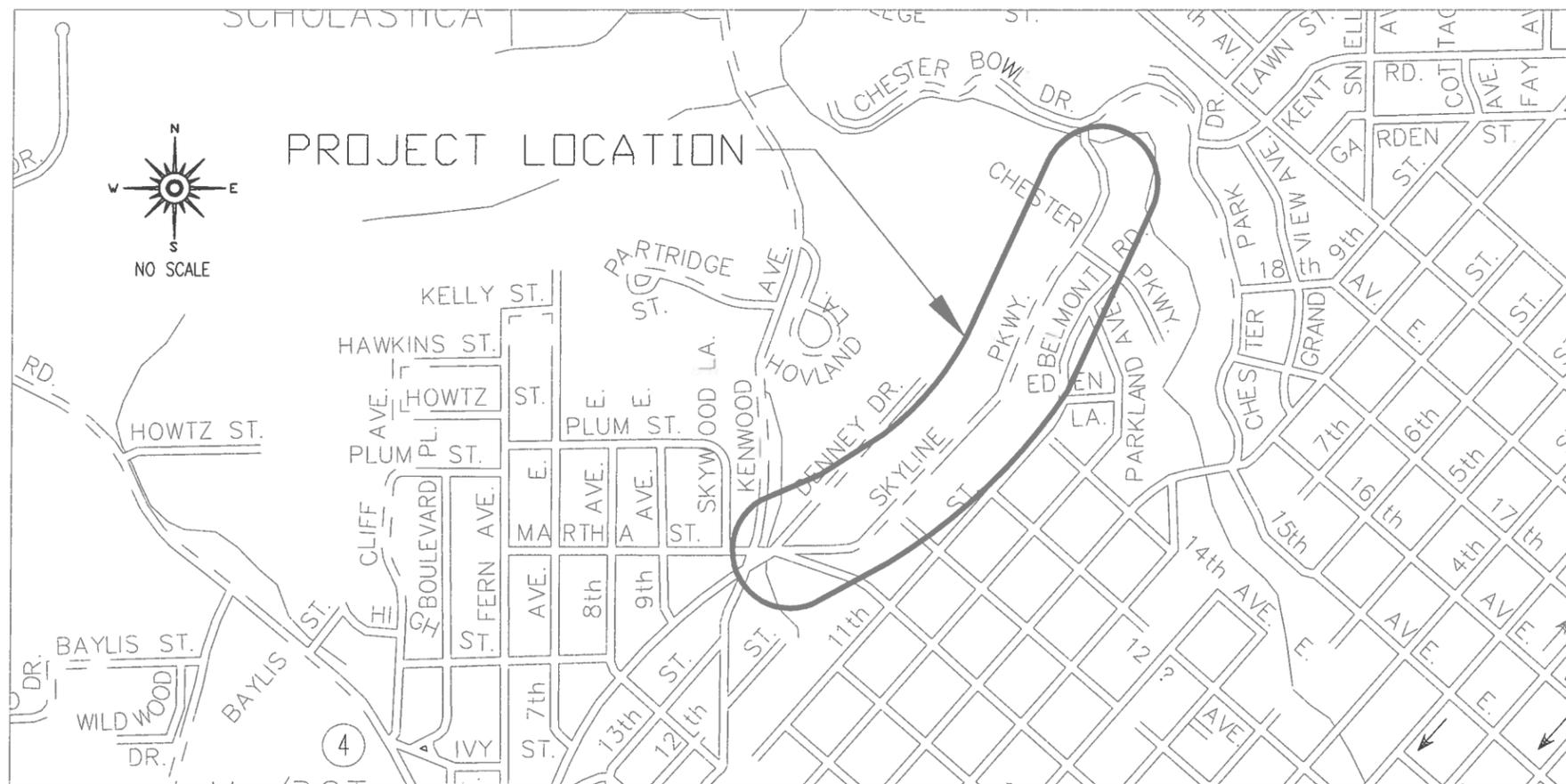
EX SANITARY MANHOLE	(SAN)
EX SANITARY CLEANOUT	(X)
EX STORM MANHOLE	(STRM)
EX STORM CATCHBASIN	(Hatched)
EX. WATER MANHOLE	(W)
EX. WATER VALVE	(V)
EX. WATER HYDRANT	(H)
EX. WATER SHUTOFF	(S)
EX. WATER & GAS MH	(W&G)
EX. GAS MANHOLE	(GAS)
EX. GAS VALVE	(V)
EX. GAS SHUTOFF	(S)
EX. STEAM MANHOLE	(STEAM)
EX. TELEPHONE MANHOLE	(T)
EX. ELECTRIC MANHOLE	(E)
EX. POWERPOLE	(P)
EX. LIGHT POLE	(L)
EX. ELECTRIC VAULT	(V)
EX. ANCHOR	(A)
EX. ELECTRIC TRANSFORMER	(ET)
EX. STREET LIGHT	(SL)
EX. SIGNAL W/ STREET LIGHT	(S)
EX. HANDHOLE	(H.H.)
EX. TELEPHONE PEDESTAL	(P)
EX. WELL	(W)
BENCHMARK	(B)
FOUND CI MONUMENT	(M)
EX. SIGN	(S)
CONTROL POINT	(C)
EX DECIDUOUS TREE	(D)
EX CONIFEROUS TREE	(C)
EX. PARKING METER	(P)
EX. SOIL BORING	(SB#) (ELEV.)

CITY OF DULUTH

DEPARTMENT OF PUBLIC WORKS AND UTILITIES ENGINEERING DIVISION

CONSTRUCTION PLANS FOR:
E. SKYLINE PARKWAY STORM SYSTEM IMPROVEMENTS - 2014
(KENWOOD AVENUE TO CHESTER BOWL DRIVE)

CITY PROJECT NO. 1371



THE SUBSURFACE UTILITY INFORMATION IN THIS PLAN IS UTILITY 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".

WARNING:
LOCATION OF UNDERGROUND UTILITIES TO BE VERIFIED BY CONTRACTOR. CALL BEFORE DIGGING. GOPHER STATE ONE CALL 1-800-252-1166 REQUIRED BY LAW

GOVERNING SPECIFICATIONS

THE 2014 EDITION OF THE MINNESOTA DEPARTMENT OF TRANSPORTATION 'STANDARD SPECIFICATIONS FOR CONSTRUCTION' AND THE 2014 EDITION OF THE 'MATERIALS LAB SUPPLEMENTAL SPECIFICATIONS FOR CONSTRUCTION' SHALL GOVERN. AVAILABLE AT: <http://www.dot.state.mn.us/pre-letting/spec/index.html>

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/fieldmanual/index.html>

THE 2013 EDITION OF THE CITY OF DULUTH PUBLIC WORKS AND UTILITIES DEPARTMENT STANDARD CONSTRUCTION SPECIFICATIONS AND SUPPLEMENTS OR ADDENDUMS SHALL APPLY. AVAILABLE AT: <http://www.duluthmn.gov/engineering/standard-construction-specifications/>

INDEX

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	SITE OVERVIEW, SEQ
3-4	PLAN PAGES

THIS PLAN CONTAINS 4 SHEETS

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.

Thomas M. Pfeffer 6-16-14 22442
THOMAS M. PFEFFER DATE LIC. NO.

CITY APPROVAL

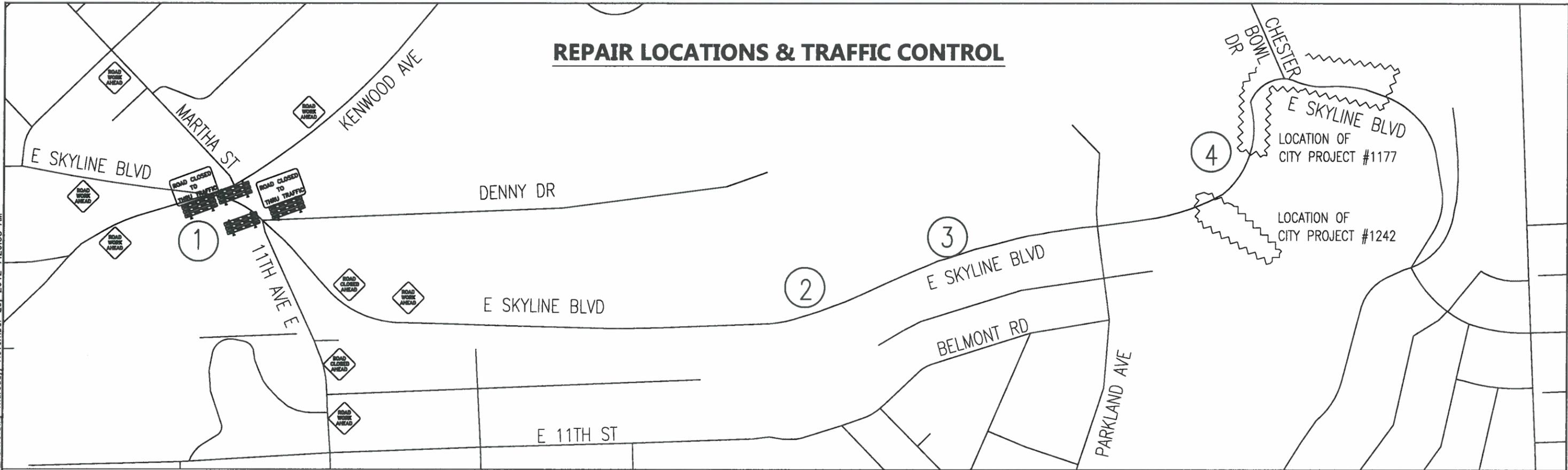
[Signature] 6/16/14
APPROVED CHIEF ENGINEER OF TRANSPORTATION DATE

[Signature] 6/16/14
APPROVED CHIEF ENGINEER OF UTILITIES DATE

[Signature] 6/16/14
APPROVED CITY ENGINEER DATE

I:\PWU\ENGINEER\PROJECTS\2014\1371_E_Skyline_Pkwy_Storm_System_Improvements\DWG\E_Skyline_DRAINAGE_IMPROVEMENTS.dwg Thursday, November 29, 2012 7:20:58 AM

REPAIR LOCATIONS & TRAFFIC CONTROL



STATEMENT OF ESTIMATED QUANTITIES

NOTES	LINE NUM	SPEC NUM	DESCRIPTION	UNIT	EST. QUANTITY	FINAL QUANTITY
	4	1	2021.501 MOBILIZATION	LS	1	
	1	2	2101.511 CLEARING & GRUBING	LS	1	
		3	2104.505 REMOVE BITUMINOUS PAVEMENT	SY	213	
	2	4	2104.501 REMOVE PIPE SEWER	LF	251	
	3	5	2104.513 SAWING BITUMINOUS PAVEMENT (FULL DEPTH)	LF	40	
		6	2105.522 SELECT GRANULAR BORROW MOD 7% (CV) (P)	CY	35	
		7	2105.603 DITCHING	LF	205	
	6	8	2211.503 AGGREGATE BASE (CV) CLASS 5	CY	39	
		9	2451.503 GRANULAR BACKFILL (CV)	CY	77	
		10	2501.515 12" RCP PIPE APRON	EACH	1	
		11	2501.515 15" RCP PIPE APRON	EACH	1	
		12	2501.515 30" RCP PIPE APRON	EACH	1	
		13	2501.511 12" CS PIPE CULVERT	LF	60	
		14	2503.541 12" RCP PIPE SEWER, DESIGN 3006 CLASS V	LF	38	
		15	2503.541 15" RCP PIPE SEWER, DESIGN 3006 CLASS V	LF	37	
		16	2503.541 30" RCP PIPE SEWER, DESIGN 3006 CLASS V	LF	110	
		17	2506.602 RECONSTRUCT DRAINAGE STRUCTURE	EACH	1	
		18	2511.501 RANDOM RIPRAP CLASS III	CY	20	
	5	19	2563.601 TRAFFIC CONTROL	LS	1	
		20	2574.508 FERTILIZER, TYPE 1	LB	20	
		21	2574.525 COMMON TOPSOIL BORROW	CY	28	
		22	2575.523 EROSION CONTROL BLANKET CATEGORY 3	SY	252	
		23	2575.501 SEEDING	ACRE	0.05	
		24	2575.502 SEED MIXTURE 36-311	LB	7	

NOTES:

- 1 ITEM INCLUDES REMOVAL OF LIVE TREES & BRUSH AS WELL AS DEAD TREES AND WOODY DEBRIS
- 2 ITEM INCLUDES REMOVAL OF (1) 12" & (1) 15" RCP APRON
- 3 THIS ITEM IS FOR A PRIVATE BITUMINOUS DRIVEWAY, NEATLINING BITUMINOUS PAVEMENT IN ROADWAY SHALL BE INCIDENTAL TO ASPHALT REMOVAL
- 4 CONTRACTOR TO COORDINATE WITH CITY PROJECT NO.S 1177 & 1242 TO MAINTAIN ACCESS
- 5 MOVE TRAFFIC CONTROL TO EACH WORK SITE AS CONSTRUCTION PROGRESSES.
- 6 ALL BITUMINOUS ASPHALT WILL BE RESTORED WITH TEMPORARY CLASS 5 SURFACE. NO PAVING WORK WILL BE INCLUDED IN THIS CONTRACT.

CERTIFIED BY: THOMAS M. PFEFFER, P.E.

REG. NO.: 22442

REVISION

EAST SKYLINE STORM SYSTEM IMPROVEMENTS

DRAWN BY: JJM

SIGNATURE:

Thomas M. Pfeffer

DATE:

6-16-14

CITY OF DULUTH

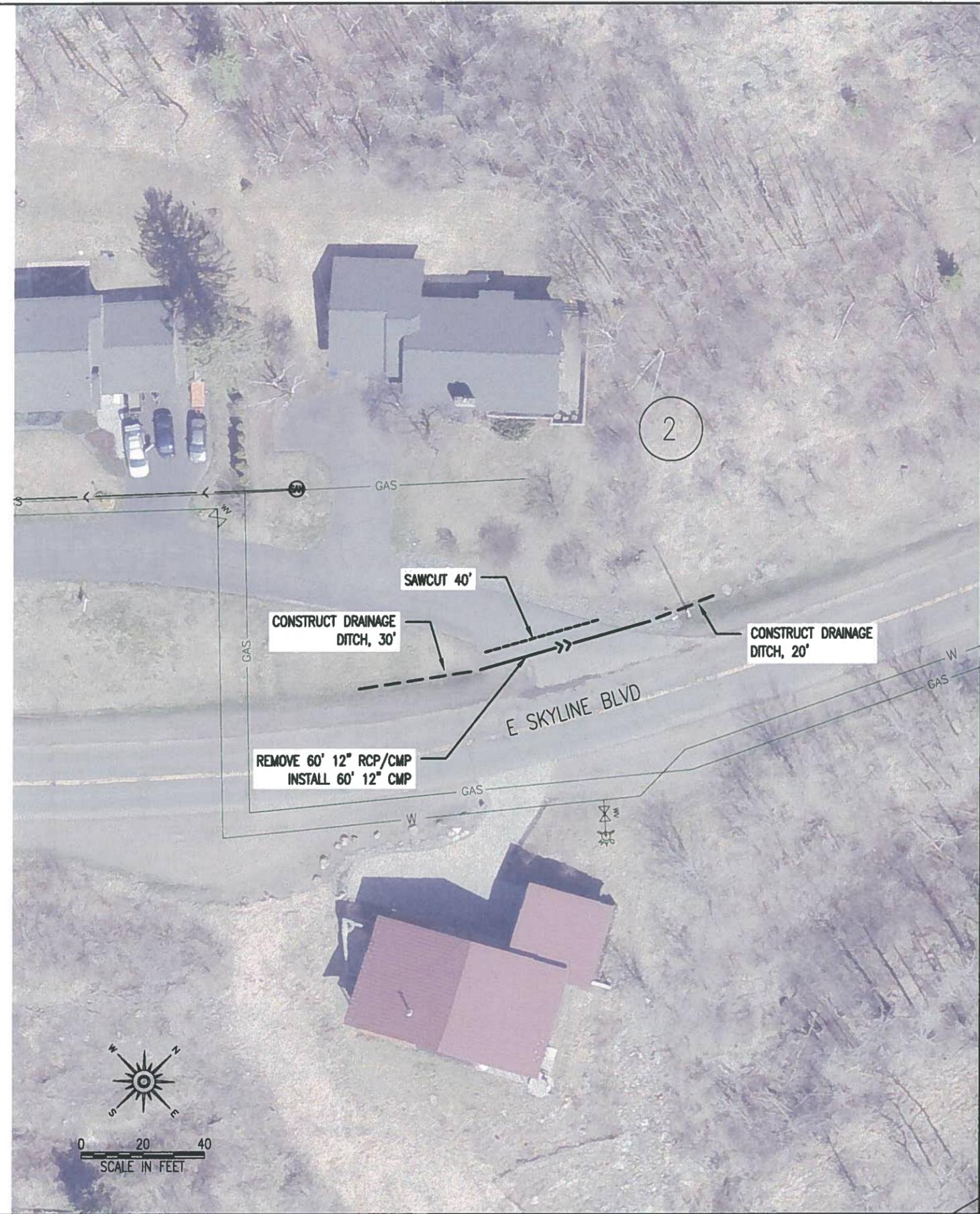
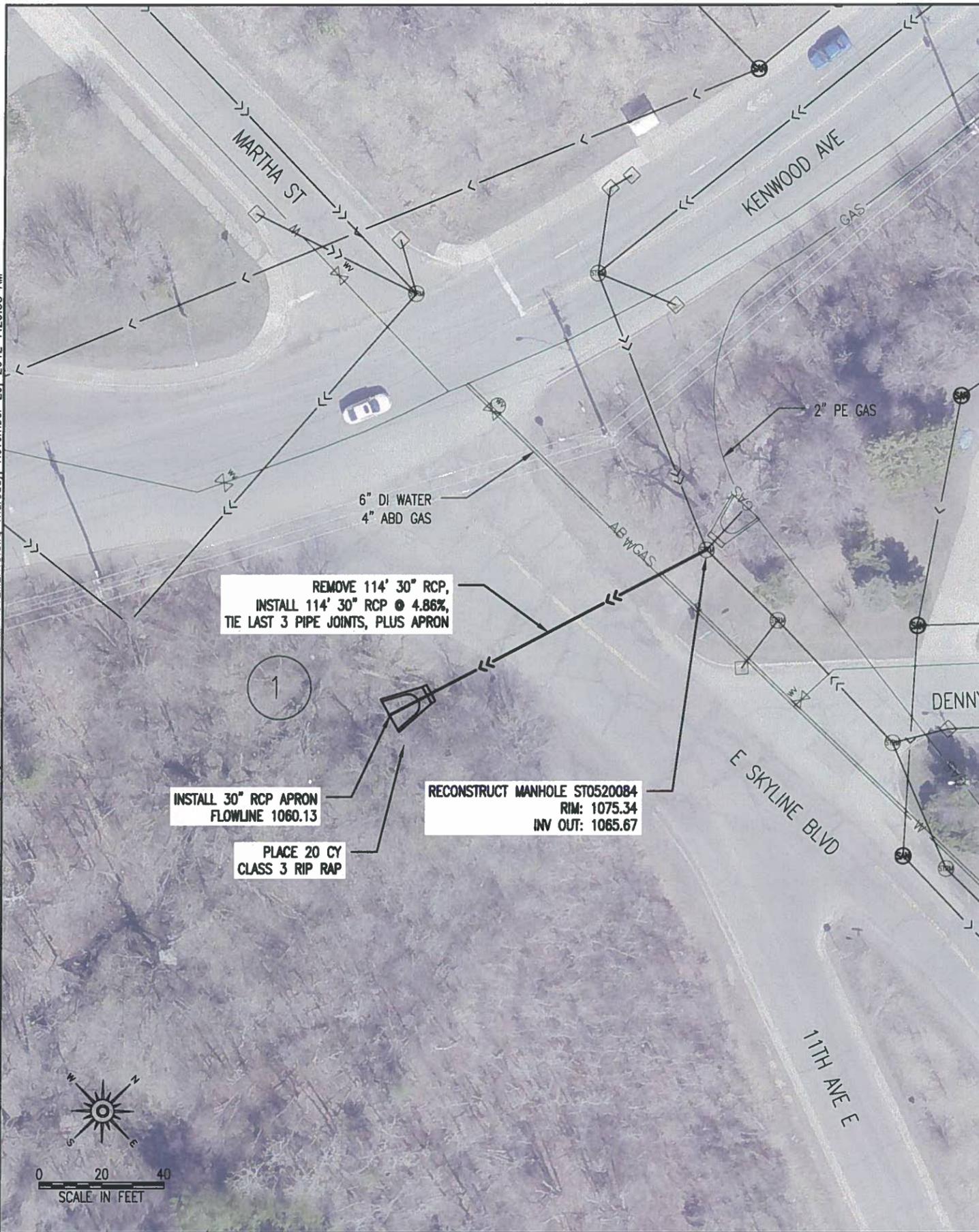
SITE OVERVIEW, SEQ

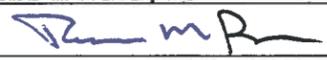
CITY PROJECT NO.: 1371

STATE AID PROJECT NO.:

SHEET NO. 2 OF 4

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CERTIFIED BY: THOMAS M. PFEFFER, P.E.	REG. NO.: 22442	REVISION	EAST SKYLINE STORM SYSTEM IMPROVEMENTS		DRAWN BY: JJM
SIGNATURE: 	DATE: 6-16-14		CITY OF DULUTH		PLAN
			CITY PROJECT NO.: 1371	STATE AID PROJECT NO.:	SHEET NO. 3 OF 4

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			CITY PROJECT NO.: 1371	STATE AID PROJECT NO.:
				SHEET NO. 4 OF 4