

SCAN

Scan

BOX 213

DATE: 8-25-03

Logged

RECORD DRAWING SUBMITTAL

12 sheets

JOB NUMBER: ES 98-1 (1) PROJECT NAME: MidTown MH RehabATLAS PAGE NO.: 2, 3, 9, 10, 11, 12, 14, 24, 25LOCATION: VariousPROJECT ENGINEER: USI PROJECT CONTRACTOR: TGDATE RELEASED FROM INSPECTION: 4-1-03

CONSTRUCTION COST: \$ _____ CITY COST: \$ _____

LIFT STATION INFORMATION	PIPE SIZE	PIPE TYPE	PIPE LENGTH
NAME OF STATION: _____	_____	_____	_____
USE FEES: \$ _____	_____	_____	_____
RELIEF FEES: \$ _____	_____	_____	_____
ACRES SERVED: _____	_____	_____	_____
FORCE MAIN: TYPE PIPE _____	_____	_____	_____
SIZE PIPE _____	_____	_____	_____
LENGTH _____	_____	_____	_____
COMMENTS: _____	ABANDONED LINE		
<u>Manhole Rehab - No</u>	_____	_____	_____
<u>changes to ATLAS</u>	_____	_____	_____

DATE SENT TO GRAPHICS: _____ DATE POSTED TO ATLAS: _____

CHECKED BY: _____

CONSTRUCTION PLANS FOR MIDTOWN EAST DISTRICT SANITARY SEWER REHABILITATION AND REPLACEMENT CONTRACT 1 (MIDTOWN) MANHOLE REHABILITATION

TULSA METROPOLITAN UTILITY AUTHORITY NO. ES 98-1
ACCOUNT NO. 6008-5455603-040522012120

PUBLIC WORKS DEPARTMENT
CITY OF TULSA, OKLAHOMA

June 2002

TABLE OF CONTENTS

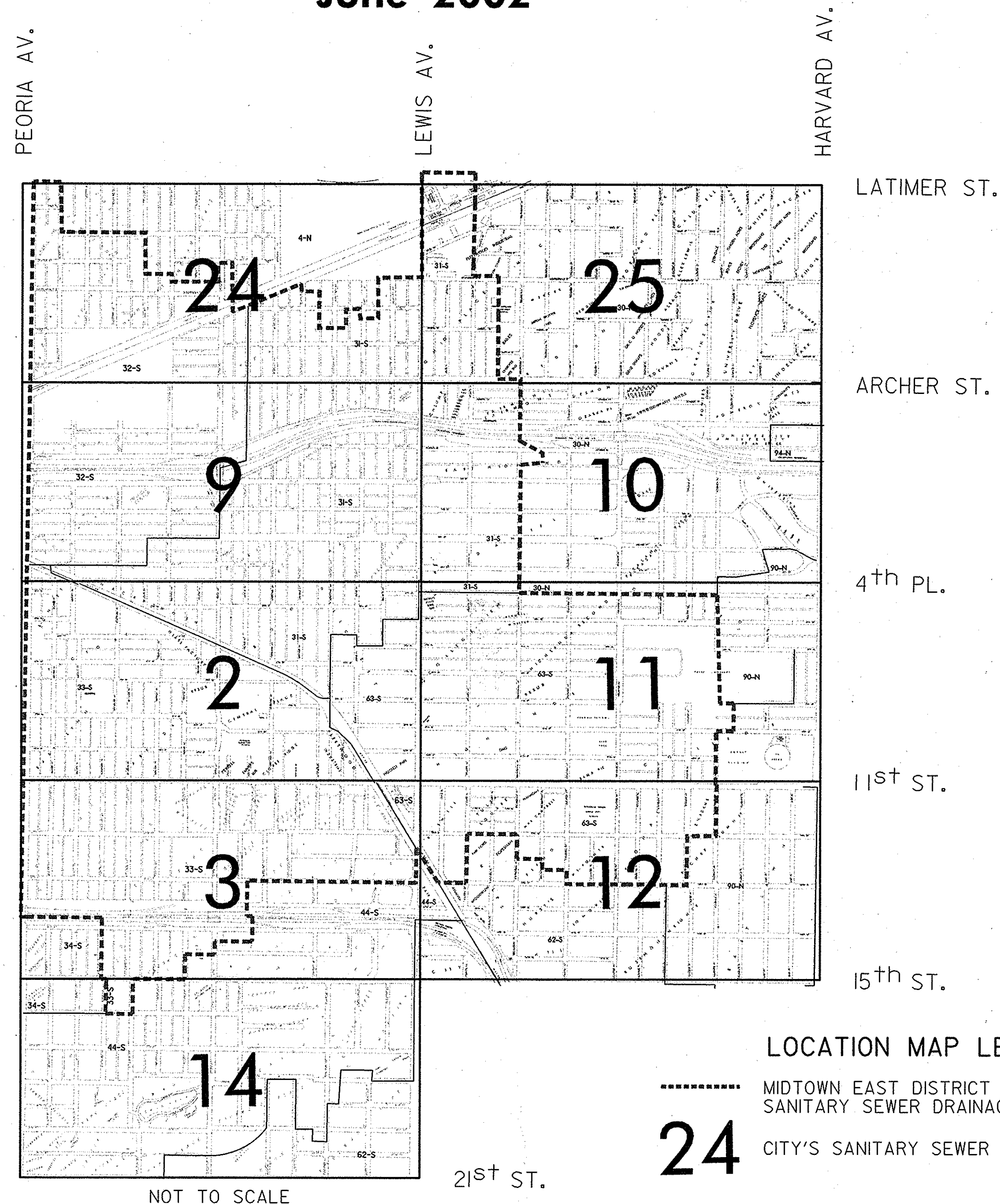
1	COVER SHEET
2	GENERAL NOTES AND QUANTITY SCHEDULES (1)
3	QUANTITY SCHEDULES (2)
4	SEWER ATLAS PAGE 2
5	SEWER ATLAS PAGE 3
6	SEWER ATLAS PAGE 9
7	SEWER ATLAS PAGE 10
8	SEWER ATLAS PAGE 11
9	SEWER ATLAS PAGE 12
10	SEWER ATLAS PAGE 14
11	SEWER ATLAS PAGE 24
12	SEWER ATLAS PAGE 25

SEWER ATLAS PAGE LEGEND

- MAINTENANCE AREA BOUNDARY
- 28-S MAINTENANCE AREA DESIGNATION
- MANHOLE, MANHOLE NO. & MANHOLE DEPTH
- DROP MANHOLE, MANHOLE NO. & MANHOLE DEPTH
- ▲ LAMPHOLE, LAMPHOLE NO. & DEPTH
- 12" 337' SEWER LINE (DIAMETER - LENGTH)

MANHOLE REHABILITATION LEGEND

- MANHOLE TO BE REHABILITATED
- DROP MANHOLE TO BE REHABILITATED
- ▲ LAMPHOLE TO BE REHABILITATED
- ⊙ MANHOLE TO BE REPLACED
- ⊠ DROP MANHOLE TO BE REPLACED
- ⚠ LAMPHOLE TO BE REPLACED

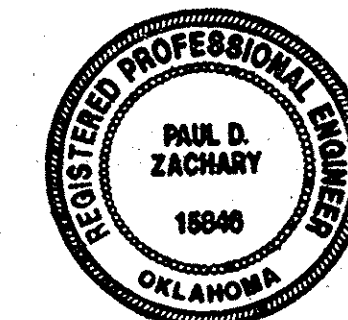


LOCATION MAP LEGEND

- MIDTOWN EAST DISTRICT SANITARY SEWER DRAINAGE BOUNDARY
- 24 CITY'S SANITARY SEWER ATLAS PAGE NO.

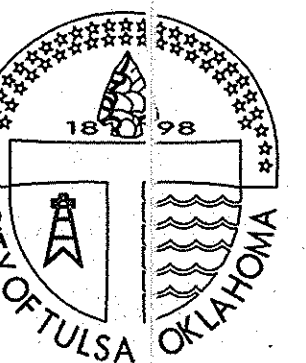
APPROVED BY

PUBLIC WORKS DEPARTMENT
CITY OF TULSA, OKLAHOMA



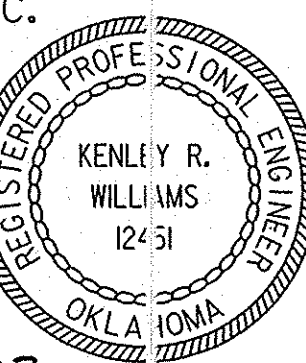
Charles J. Hardt
CHARLES J. HARDT, P.E.
PUBLIC WORKS DIRECTOR

June 28, 2002
DATE



PLANS & ESTIMATES PREPARED BY:

US INFRASTRUCTURE OF OKLAHOMA, INC.
CONSULTING ENGINEERS
7666 EAST 61ST STREET, SUITE 475
TULSA, OKLAHOMA 74133
PHONE: (918) 249-2208
FAX: (918) 249-9192



Kenley R. Williams 6/3/02
KENLEY R. WILLIAMS, P.E.
OKLAHOMA REG. P.E. NO. 12451
DATE



CERTIFICATE OF AUTHORIZATION NO. 3522 (PE/LS)
EXPIRATION DATE: JUNE 30, 2003

FOR INFORMATION ONLY

* MANHOLE DEPTH MEASURED FROM TOP OF RIM TO FLOW LINE.

NO CODE LISTING INDICATES STANDARD MANHOLE

CODE	DESCRIPTION
D	DROP MANHOLE
L	LAMP HOLE

CODE	DESCRIPTION	CODE	DESCRIPTION
0000	0000	0000	0000
0001	0001	0001	0001
0002	0002	0002	0002
0003	0003	0003	0003
0004	0004	0004	0004
0005	0005	0005	0005
0006	0006	0006	0006
0007	0007	0007	0007
0008	0008	0008	0008
0009	0009	0009	0009
0010	0010	0010	0010
0011	0011	0011	0011
0012	0012	0012	0012
0013	0013	0013	0013
0014	0014	0014	0014
0015	0015	0015	0015
0016	0016	0016	0016
0017	0017	0017	0017
0018	0018	0018	0018
0019	0019	0019	0019
0020	0020	0020	0020
0021	0021	0021	0021
0022	0022	0022	0022
0023	0023	0023	0023
0024	0024	0024	0024
0025	0025	0025	0025
0026	0026	0026	0026
0027	0027	0027	0027
0028	0028	0028	0028
0029	0029	0029	0029
0030	0030	0030	0030
0031	0031	0031	0031
0032	0032	0032	0032
0033	0033	0033	0033
0034	0034	0034	0034
0035	0035	0035	0035
0036	0036	0036	0036
0037	0037	0037	0037
0038	0038	0038	0038
0039	0039	0039	0039
0040	0040	0040	0040
0041	0041	0041	0041
0042	0042	0042	0042
0043	0043	0043	0043
0044	0044	0044	0044
0045	0045	0045	0045
0046	0046	0046	0046
0047	0047	0047	0047
0048	0048	0048	0048
0049	0049	0049	0049
0050	0050	0050	0050
0051	0051	0051	0051
0052	0052	0052	0052
0053	0053	0053	0053
0054	0054	0054	0054
0055	0055	0055	0055
0056	0056	0056	0056
0057	0057	0057	0057
0058	0058	0058	0058
0059	0059	0059	0059
0060	0060	0060	0060
0061	0061	0061	0061
0062	0062	0062	0062
0063	0063	0063	0063
0064	0064	0064	0064
0065	0065	0065	0065
0066	0066	0066	0066
0067	0067	0067	0067
0068	0068	0068	0068
0069	0069	0069	0069
0070	0070	0070	0070
0071	0071	0071	0071
0072	0072	0072	0072
0073	0073	0073	0073
0074	0074	0074	0074
0075	0075	0075	0075
0076	0076	0076	0076
0077	0077	0077	0077
0078	0078	0078	0078
0079	0079	0079	0079
0080	0080	0080	0080
0081	0081	0081	0081
0082	0082	0082	0082
0083	0083	0083	0083
0084	0084	0084	0084
0085	0085	0085	0085

1	BRICK	6	POURED
2	PRECAST	7	MORTAR MASK
3	BLOCK	9	PVC
4	CLAY PIPE	10	PVC COATED
5	CONCRETE PIPE	15	OTHER

FOR INFORMATION ONLY

* MANHOLE DEPTH MEASURED FROM TOP OF RIM TO FLOW LINE.

CODE	DESCRIPTION	CODE	DESCRIPTION
------	-------------	------	-------------

1	PAVED STREET	7	PARKING LOT
2	UNPAVED STREET	8	BACK YARD
3	PAVED INTERSECTION	9	DITCH
4	UNPAVED INTERSECTION	10	CURB/GUTTER
5	ALLEY	11	EASEMENT
6	SIDEWALK	12	PRIVATE RESIDENCE

1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH CITY OF TULSA PUBLIC WORKS DEPARTMENT ENGINEERING AND DESIGN STANDARDS, "WATER AND WASTEWATER CONSTRUCTION SPECIFICATIONS" (REVISED 8-17-98), SPECIAL CONDITIONS, AND SPECIAL DETAIL DRAWINGS FOR THIS CONTRACT.
2. THE CONTRACTOR SHALL GIVE THE NOTIFICATION CENTER OF THE OKLAHOMA ONE-CALL SYSTEM, INC. NOTICE OF ANY EXCAVATION NO SOONER THAN 10 DAYS NOR LATER THAN 48 HOURS, EXCLUDING SATURDAYS, SUNDAYS, AND LEGAL HOLIDAYS, PRIOR TO COMMENCEMENT OF WORK (CALL 1-800-522-6543).
3. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK IN EACH AREA. HE IS FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT RESULT FROM HIS FAILURE TO LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.
4. ALL MANHOLES, PIPE LENGTHS, OBSERVATIONS, DEFECTS AND THEIR LOCATIONS ARE SHOWN ACCORDING TO THE BEST INFORMATION AVAILABLE TO THE ENGINEER. THE CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL INFORMATION BEFORE ANY CONSTRUCTION MATERIALS ARE ORDERED.
5. QUANTITIES LISTED IN THE BID DOCUMENTS ARE NOT GUARANTEED QUANTITIES AND ARE LISTED ONLY FOR CONVENIENCE IN COMPARING BIDS. PAYMENT FOR ALL ITEMS WILL BE MADE ON THE BASIS OF THE ACTUAL WORK PERFORMED, MATERIAL PLACED, OR ITEMS COMPLETED IN PLACE.
6. THE CONTRACTOR WILL PLACE APPROPRIATE EROSION CONTROL DEVICES TO CONTROL EROSION AND SEDIMENTATION PER CITY OF TULSA STORM WATER MANAGEMENT REQUIREMENTS. THE COST OF THIS WORK SHALL BE INCLUDED IN OTHER ITEMS OF WORK.
7. ANY COSTS OF BYPASS PUMPING INCLUDED DURING CONSTRUCTION SHALL BE INCLUDED IN THE UNIT PRICE BID FOR OTHER ITEMS OF WORK.
8. THE CONTRACTOR SHALL CONTACT THE APPROPRIATE LEAD ENGINEER, CITY OF TULSA PUBLIC WORKS DEPARTMENT, ENGINEERING SERVICES DIVISION PRIOR TO PERFORMING ANY WORK ON MANHOLES WHICH ARE FOUND TO HAVE WATER LINES OR STORMWATER LINES PASSING THROUGH THEM.





WATER DESIGN:	ANTHONY G. WILKINS, P.E.	(918) 596-9566
STORMWATER DESIGN:	DEBORAH K. STOWERS, P.E.	(918) 596-9498

9. MANHOLES IDENTIFIED AS "BURIED" IN QUANTITY SCHEDULES ARE TO BE LOCATED AND RAISED TO GRADE, AFTER EXPOSING MANHOLE AND PRIOR TO PERFORMING ANY REHABILITATION WORK, THE MANHOLE SHALL BE INSPECTED BY THE FIELD ENGINEER TO DETERMINE IF ANY ADDITIONAL REHABILITATION IS NECESSARY. PAYMENT WILL BE MADE ON THE BASIS OF THE ACTUAL WORK PERFORMED, MATERIAL PLACED, OR ITEMS COMPLETED IN PLACE.

TABLE NO.	TITLE	MANHOLE REHABILITATION TYPE										K
		A	B	C	D	E	F	G	H	I	J	
1	MANHOLE REHABILITATION (1)	23	47	2	7	3	35	1	2	35	0	1
2	MANHOLE REHABILITATION (2)	21	45	0	7	4	44	0	3	44	0	3
3	MANHOLE REHABILITATION (3)	17	31	4	11	16	38	1	1	38	2	1
4	MANHOLE REHABILITATION (4)	6	21	1	3	5	22	1	1	22	0	3
	TOTAL	67	144	7	28	28	139	3	7	139	2	8

<u>CODE</u>	<u>SPECIFICATION NO.</u>	<u>DESCRIPTION</u>
-------------	--------------------------	--------------------

A	D2-18, TYPE A	REPLACE COVER/FRAME/FRAME SEAL
B	D2-18, TYPE B	REPLACE FRAME SEAL
C	D2-18, TYPE C	REPLACE COVER/FRAME/FRAME SEAL/CHIMNEY
D	D2-18, TYPE D	REPLACE FRAME SEAL/CHIMNEY
E	D2-18, TYPE E	GRADE ADJUST
F	D2-21	CORBEL/WALL/BENCH/TROUGH/PIPE SEAL REHABILITATION
G	D2-16	REPLACE MANHOLE ADDITIONAL DEPTH, MANHOLE REPLACEMENT (OVER 6 FT.)
H	D2-17	REPLACE CLEANOUT (LAMPHOLE)
I	D2-20	REPLACE STEPS
J	D2-19, D2-21	SEAL JOINTS AND LIFT HOLES
K	D2-17	REPLACE LAMPHOLE COVER/FRAME

ES 98-1		PLAN SCALE:		DRAWN		USI		12/01		APPROVED:	
MIDTOWN EAST DISTRICT SANITARY SEWER REHABILITATION AND REPLACEMENT CONTRACT 1 (MIDTOWN) - MANHOLE REHABILITATION GENERAL NOTES AND QUANTITY SCHEDULES (I)		P-SCALE		DESIGNED		USI		12/01		 J. B. Smith PUBLIC WORKS DEPT. CHIEF	
		PROFILE SCALE:		SURVEY		N/A		N/A			
		HORIZONTAL:		FIELD MNGR.		AGM		6-02			
PUBLIC WORKS DEPARTMENT ENGINEERING SERVICES DIVISION CITY OF TULSA, OKLAHOMA		H-S-SCALE		SECT. MNGR.		JCB		6/02		 J. B. Smith PUBLIC WORKS DEPT. CHIEF	
		V-S-SCALE		PROJ. MNGR.		MW		6/1/02			
		RECOMMENDED:		 J. B. Smith PUBLIC WORKS DEPT. CHIEF		6/1/02					
PLANS AND ESTIMATES PREPARED BY:		7666 E. 61ST ST. SUITE 475 TULSA, OKLAHOMA 74133 PHONE: (918) 949-6200 FAX: (918) 249-8932									
 USI INFRASTRUCTURE OF OKLAHOMA, INC.		FILE: _____ DRAWING: _____ ATLAS PAGE NO. _____ SHEET 2 OF 12 SHEETS									
		DATE: June 28, 2002									

CONSTRUCTION QUANTITIES - MANHOLE REHABILITATION (3)

FOR INFORMATION ONLY

SHEET NO.	ATLAS PAGE NO.	MANHOLE NO.	MANHOLE TYPE	*MANHOLE DEPTH (FT.)	MANHOLE CONST. MATERIAL	GROUND SURFACE CONDITION	MANHOLE DIAMETER (FT.)	MANHOLE REHABILITATION TYPE												
								A	B	C	D	E	F	G	H	I	J	K		
6	9	031011		9.8	7	5	4													
6	9	031013		8.9	7	11	4													
6	9	031016		5.9	7	1	4													
6	9	031020	L	9.5	4	12	1													
6	9	031022		7.6	7	1	4													
6	9	031023		10.7	7	12	4													
6	9	031024		7.3	1	12	4													
6	9	0310256		9.3	1	12	4													
6	9	0310257		8.4	7	12	4													
6	9	0310265		Buried																
6	9	0310266		Buried																
6	9	0310279		11.5	7	10	4													
6	9	0310289		12.0	1	5	4													
6	9	0310291		11.1	1	5	4													
6	9	0310297	L	11.5	4	12	1													
6	9	0320120		9.8	1	5	4													
6	9	0320121		10.1	7	1	4													
6	9	0320122		11.2	1	5	4													
6	9	0320123		11.9	1	5	4													
6	9	0320124		12.5	7	5	4													
6	9	0320133		11.9	7	5	4													
6	9	0320134		11.0	1	5	4													
6	9	0320135		14.9	7	5	4													
6	9	0320136		Buried																
6	9	0320139		13.8	2	1	4													
6	9	0320140	D	13.8	7	1	4													
6	9	0320144		9.1	7	5	4													
6	9	0320148		11.2	1	1	4													
6	9	0320149		12.2	7	5	4													
6	9	0320150		9.6	1	6	4													
6	9	0320155		6.8	1	5	4													
6	9	0320159		7.1	7	5	4													
6	9	0320160		8.8	7	5	4													
6	9	0320161		9.1	7	5	4													
6	9	0320162		6.9	7	5	4													
6	9	0320163		10.1	7	1	4													
6	9	0320164		10.4	1	5	4													
6	9	0320165	D	11.5	1	1	4													
6	9	0320168		11.9	7	7	4													
6	9	0320173		10.8	7	5	4													
6	9	0320182		7.2	7	10	4													
6	9	0320190		8.5	7	11	4													
6	9	0320192		6.5	7	11	4													
6	9	0320197		8.1	7	1	4													
6	9	0320198		Buried																
6	9	0320199		Buried																
6	9	0320319		6.1	6	11	4													
7	10	0310126		10.6	6	7	4													
7	10	0310129		9.3	6	11	4													
7	10	0310132		Buried																
7	10	0310138		10.1	7	8	4													
7	10	0310139		Buried																
7	10	0310141		10.0	7	6	4													
7	10	0310143		10.8	7	8	4													
7	10	0310144		9.5	7	8	4													
7	10	0310145		9.9	7	8	4													
7	10	0310146		Buried																
7	10	0310147		9.5	7	11	4													
7	10	0310154		10.2	7	12	4													
7	10	0310158		10.2	7	7	4													
7	10	0310169		15.0	7	1	4													
7	10	0310174	D	10.7	1	5	4													
7	10	0310194		8.7	7	1	4													
7	10	0310195		11.1	7	6	4													
7	10	0310197		14.2	7	11	4													
7	10	0310300		11.1	7	6	4													
7	10	0310304		8.6	2	1	4													
8	11	0630044		11.5	7	8	4													
8	11	0630047		10.1	7	8	4													
8	11	0630050	L	11.1	4	8	1													
8	11	0630074		15.7	7	11	4													
8	11	0630082		5.1	7	11	4													
8	11	0630098	L	0.0		Buried														
8	11	0630100		9.9	7	11	4													
8	11	0630103		10.0	7	1	4													
8	11	0630104		10.7	7	5	4													
8	11	0630124		10.7	7	1	4													
8	11	0630131	D	9.7	7	1	4													
8	11	0630162		11.8	7	11	4													
8	11	0630166		7.9	7	1	4													
8	11	0630234		15.1	2	7	4													
9	12	0630105		11.9	7	8	4													
9	12	0630126		10.0	7	8	4													
9	12	0630142		6.9	2	3	4													
9	12	0630143		8.7	7	1	4													
9	12	0630146		6.4	7	3	4													
9	12	0630182		6.9	7	1	4													
9	12	0630183	D	7.1	7	1	4													
9	12	0630184		7.1	7	1	4													
9	12	0630185		7.1	7	1	4													
9	12	0630188		7.6	7	11	4													
9	12	0630191	L	4.0	4	1	1													
9	12	0630192		4.1	7	1	4													
9	12	0630195		5.8	7	11	4													
9	12	0630196		8.1	6	11	4													
9	12	0630197	D	12.0	6	8	4													
9	12	0630199		7.0	6	11	4													
9	12	0630210		6.9	7	1	4													
9	12	0630211		7.6	7	5	4													
9	12	0630212		8.3	7	6	4													
SUBTOTAL								17	31	4	11	16	38	1	1	38	2	1		

* MANHOLE DEPTH MEASURED FROM TOP OF RIM TO FLOW LINE.

INDEX TO MANHOLE TYPES

NO CODE LISTING INDICATES STANDARD MANHOLE

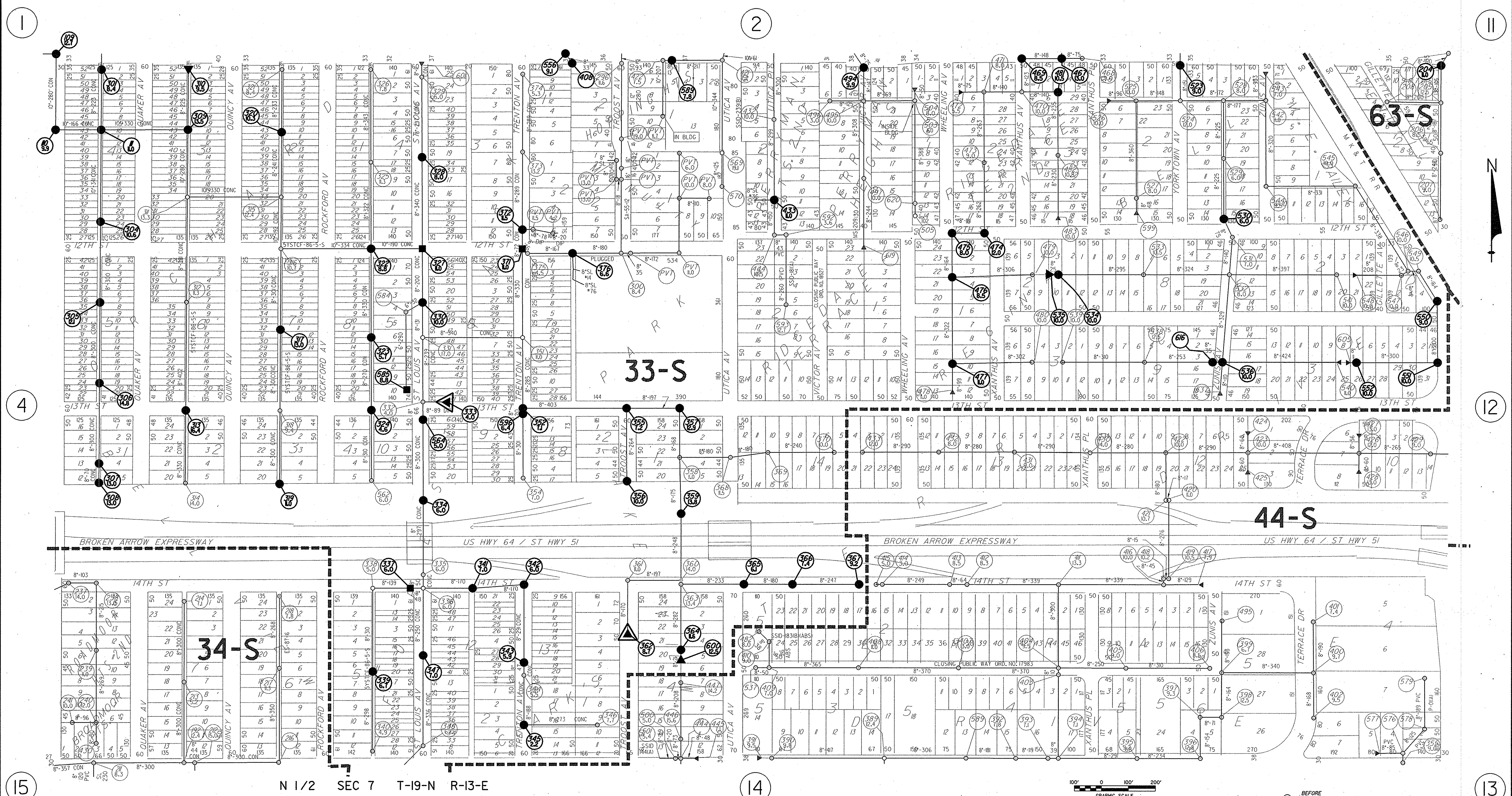
CODE	DESCRIPTION
D	DROP MANHOLE
L	LAMPHOLE

INDEX TO MANHOLE CONSTRUCTION MATERIAL TYPES

CODE	DESCRIPTION	CODE	DESCRIPTION
1	BRICK	6	POURED
2	PRECAST	7	MORTAR MASK
3	BLOCK	9	PVC
4	CLAY PIPE	10	PVC COATED
5	CONCRETE PIPE	15	OTHER

INDEX TO GROUND SURFACE CONDITIONS

CODE	DESCRIPTION	CODE	DESCRIPTION
1	PAVED STREET	7	PARKING LOT
2	UNPAVED STREET	8	BACK YARD
3	PAVED INTERSECTION	9	DITCH
4	UNPAVED INTERSECTION	10	CURB/GUTTER
5	ALLEY	11	EASEMENT
6	SIDEWALK	12	PRIVATE RESIDENCE



SEWER ATLAS PAGE LEGEND

28-S MAINTENANCE AREA DESIGNATION

MANHOLE, MANHOLE NO. & MANHOLE DEPTH

DROP MANHOLE, MANHOLE NO. & MANHOLE DEPTH

LAMPHOLE, LAMPHOLE NO. & DEPTH

SEWER LINE (DIAMETER - LENGTH)

MANHOLE REHABILITATION LEGEND

MANHOLE TO BE REHABILITATED

DROP MANHOLE TO BE REHABILITATED

LAMPHOLE TO BE REHABILITATED

MANHOLE TO BE REPLACED

DROP MANHOLE TO BE REPLACED

LAMPHOLE TO BE REPLACED

REVISION

BY

DATE

SN 6/14/02

6/14/02

6/14/02

ES 98-1

MIDTOWN EAST DISTRICT

SANITARY SEWER REHABILITATION AND REPLACEMENT

CONTRACT 1 (MIDTOWN) - MANHOLE REHABILITATION

ATLAS PAGE 3

PUBLIC WORKS DEPARTMENT

ENGINEERING SERVICES DIVISION

CITY OF TULSA, OKLAHOMA

PLANS AND ESTIMATES PREPARED BY:

USI OF OKLAHOMA, INC.

7666 E. 61ST ST., SUITE 475

TULSA, OKLAHOMA 74133

PHONE: (918) 249-2209

FAX: (918) 249-9992

PLANNING SCALE: DRAWN USI 12/01

DESIGNED USI 12/01

P-Scale SURVEY N/A N/A

PROFILE SCALE: FIELD MNGR. 6/14/02

SECT. MNGR. 6/14/02

PROJ. MNGR. 6/14/02

RECOMMENDED: 6/14/02

DEPUTY DIRECTOR

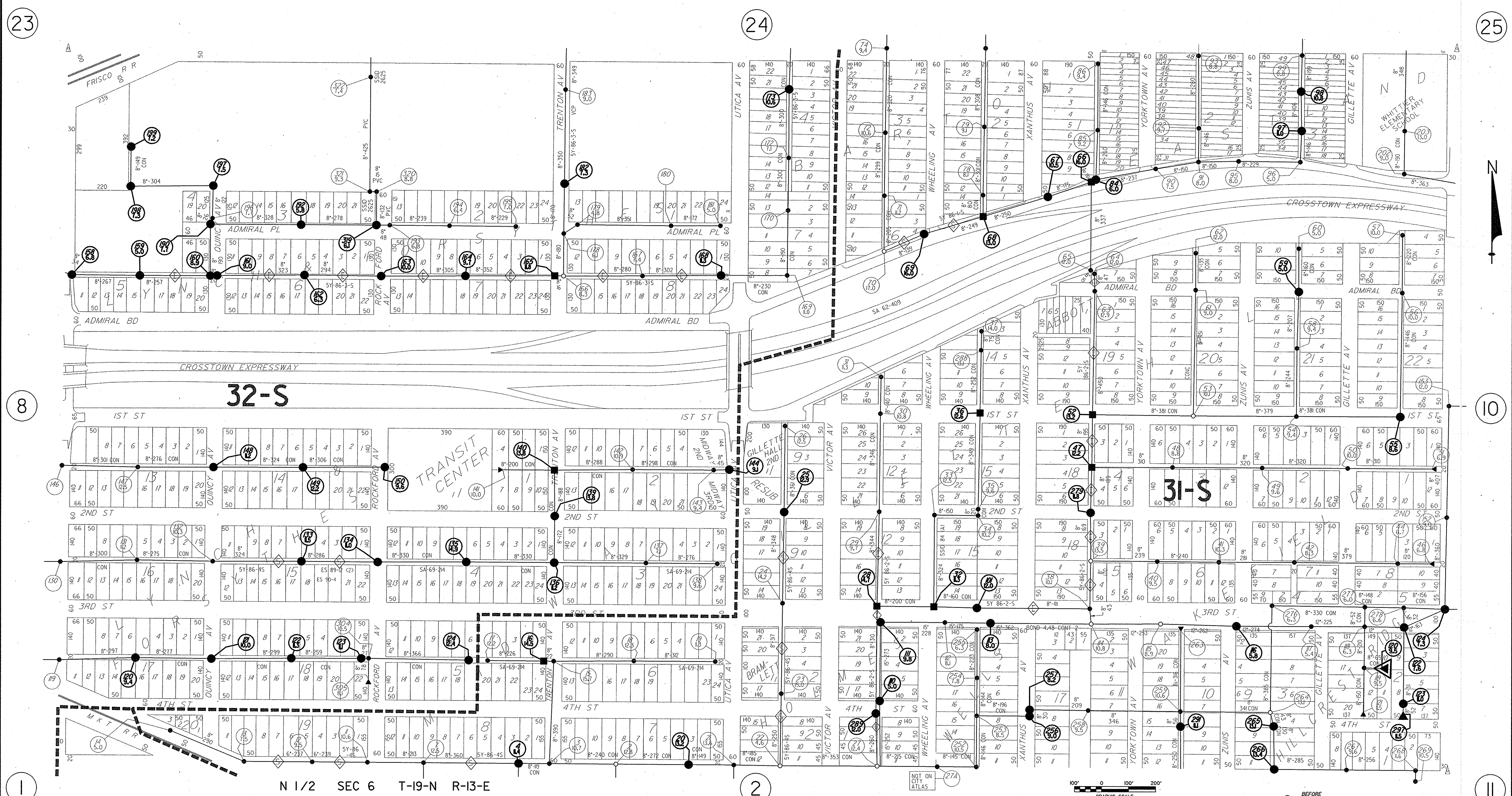
FILE: DRAWING

ATLAS PAGE NO. 3

APPROVED:

DATE June 28, 2002

SHEET 5 OF 12 SHEETS



SEWER ATLAS PAGE LEGEND

--- MAINTENANCE AREA BOUNDARY

28-S MAINTENANCE AREA DESIGNATION

○ MANHOLE, MANHOLE NO. & MANHOLE DEPTH

□ DROP MANHOLE, MANHOLE NO. & MANHOLE DEPTH

▲ LAMPHOLE, LAMPHOLE NO. & DEPTH

— 12"-337" SEWER LINE (DIAMETER - LENGTH)

MANHOLE REHABILITATION LEGEND

● MANHOLE TO BE REHABILITATED

■ DROP MANHOLE TO BE REHABILITATED

▲ LAMPHOLE TO BE REHABILITATED

○ MANHOLE TO BE REPLACED

□ DROP MANHOLE TO BE REPLACED

▲ LAMPHOLE TO BE REPLACED

REVISION	BY	DATE

ES 98-1

MIDTOWN EAST DISTRICT

SANITARY SEWER REHABILITATION AND REPLACEMENT

CONTRACT I (MIDTOWN) - MANHOLE REHABILITATION

ATLAS PAGE 9

PUBLIC WORKS DEPARTMENT

ENGINEERING SERVICES DIVISION

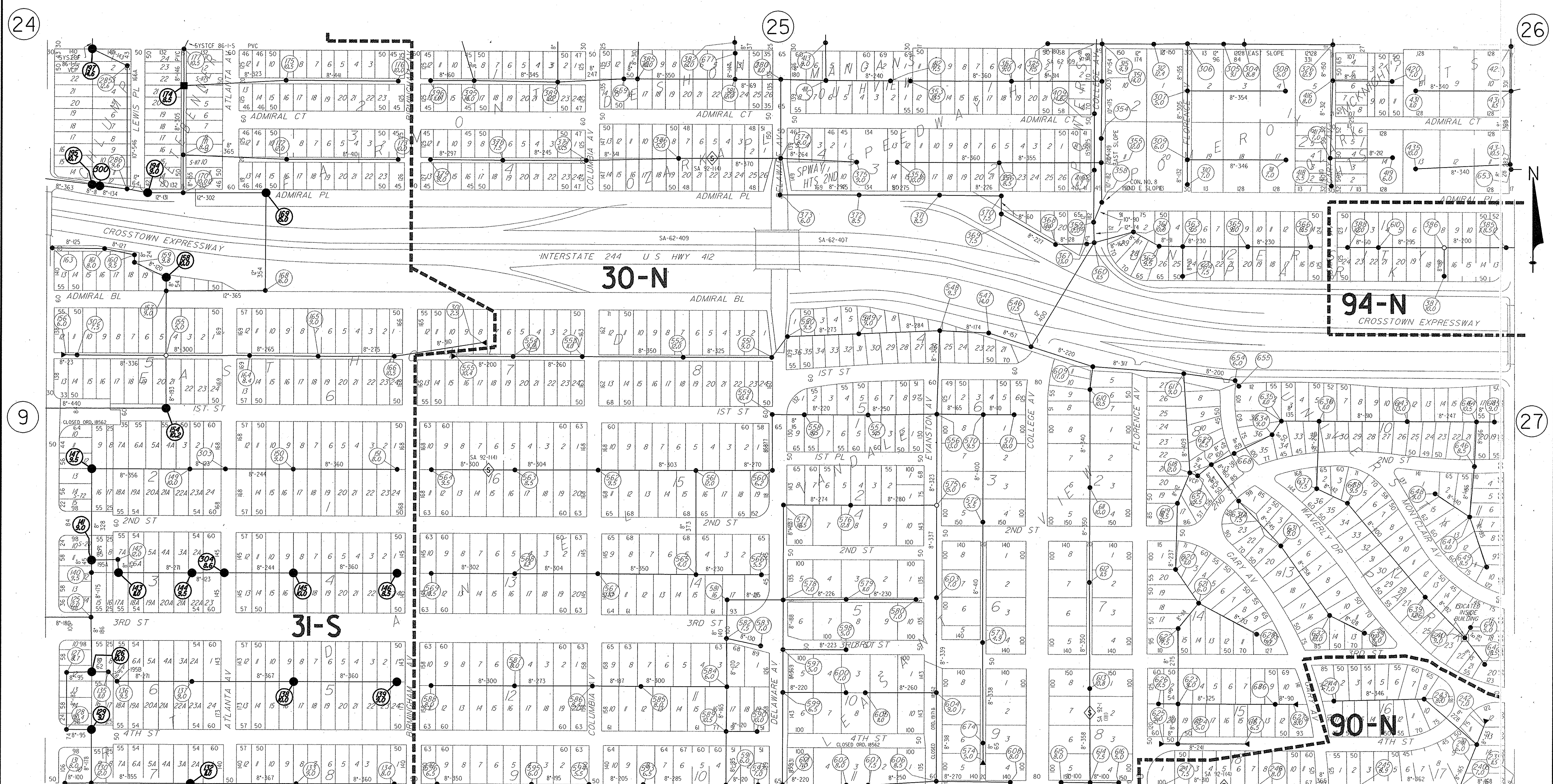
CITY OF OKLAHOMA

PLANS AND ESTIMATES PREPARED BY: **USI OF OKLAHOMA, INC.**

7666 E. 61ST ST. SUITE 415
TULSA, OKLAHOMA 74133
PHONE: (918) 249-2208
FAX: (918) 249-9192

DATE: **June 28, 2002**

SHEET **6** OF **12** SHEETS



28-S

MAINTENANCE AREA DESIGNATION

MANHOLE, MANHOLE NO. & MANHOLE DEPTH

DROP MANHOLE, MANHOLE NO. & MANHOLE DEPTH

LAMPHOLE, LAMPHOLE NO. & DEPTH

SEWER LINE (DIAMETER - LENGTH)

SEWER ATLAS PAGE LEGEND

MAINTENANCE AREA BOUNDARY

MANHOLE TO BE REHABILITATED

DROP MANHOLE TO BE REHABILITATED

LAMPHOLE TO BE REHABILITATED

MANHOLE REHABILITATION LEGEND

MANHOLE TO BE REPLACED

DROP MANHOLE TO BE REPLACED

LAMPHOLE TO BE REPLACED

REVISION

BY

DATE

SW 6/16/02

ES 98-1

MIDTOWN EAST DISTRICT

SANITARY SEWER REHABILITATION AND REPLACEMENT

CONTRACT 1 (MIDTOWN) - MANHOLE REHABILITATION

ATLAS PAGE 10

PUBLIC WORKS DEPARTMENT

ENGINEERING SERVICES DIVISION

CITY OF TULSA, OKLAHOMA

PLANS AND ESTIMATES PREPARED BY:

USI OF OKLAHOMA, INC.

7666 E. 61ST ST., SUITE 475

TULSA, OKLAHOMA 74133

PHONE: (918) 249-2208

FAX: (918) 245-9392

DATE

June 28, 2002

PLAN SCALE:

P-SCALE:

PROFILE SCALE:

H-SCALE:

V-SCALE:

DESIGNED

SURVEY

FIELD MNGR.

SECT. MNGR.

PROJ. MNGR.

RECOMMENDED

DATE

USI 12/01

USI 12/01

N/A

AS 6-02

MD 6/10/02

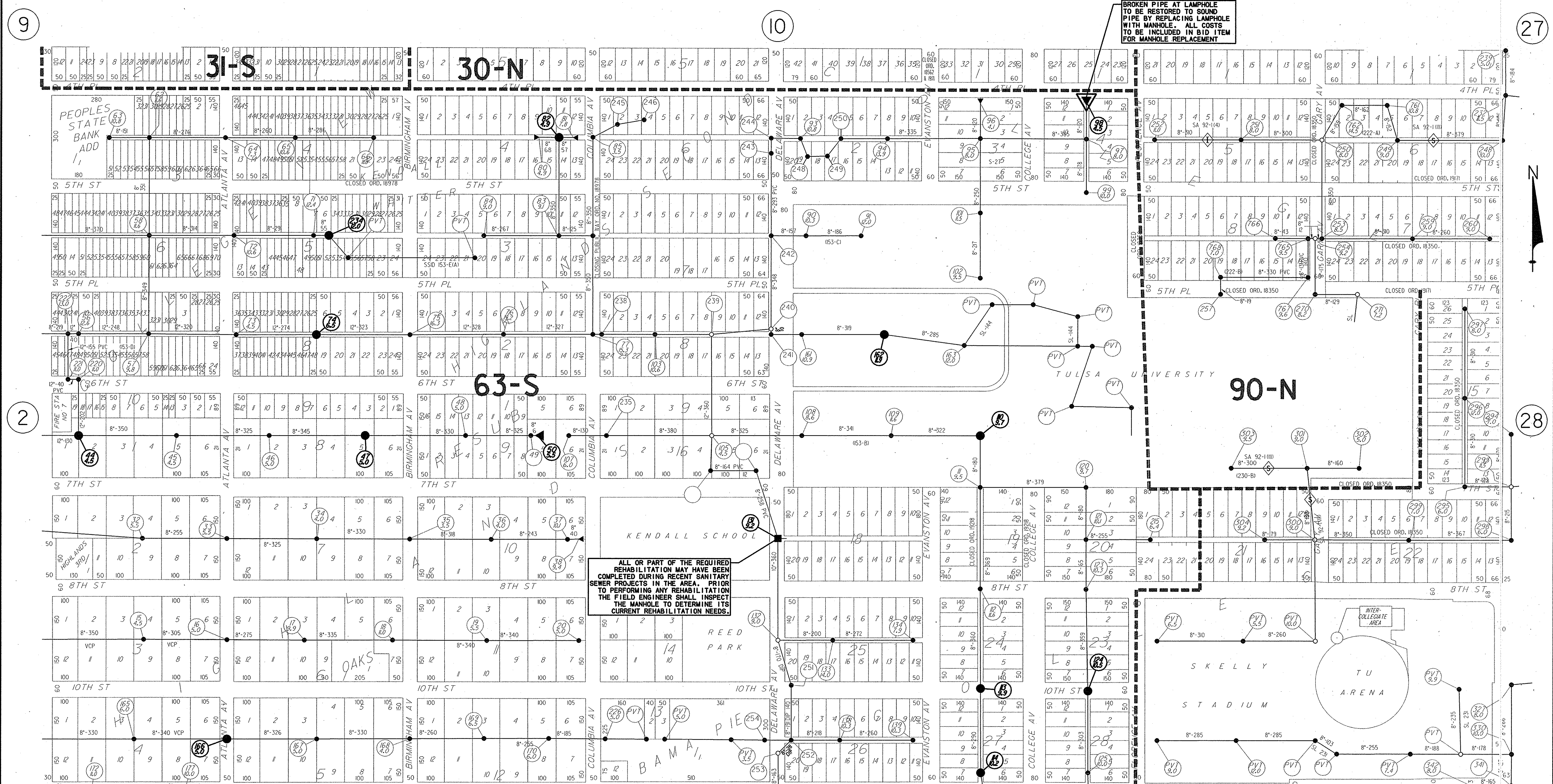
6/14/02

DATE

APPROVED:

DATE

SHEET



9

2

3

10

12

27

28

29

S 1/2 SEC 5 T-19-N R-13-E

SEWER ATLAS PAGE LEGEND

MAINTENANCE AREA BOUNDARY

28-S MAINTENANCE AREA DESIGNATION

MANHOLE, MANHOLE NO. & MANHOLE DEPTH

DROP MANHOLE, MANHOLE NO. & MANHOLE DEPTH

LAMPHOLE, LAMPHOLE NO. & DEPTH

SEWER LINE (DIAMETER - LENGTH)

MANHOLE REHABILITATION LEGEND

MANHOLE TO BE REHABILITATED

DROP MANHOLE TO BE REHABILITATED

LAMPHOLE TO BE REHABILITATED

MANHOLE TO BE REPLACED

DROP MANHOLE TO BE REPLACED

LAMPHOLE TO BE REPLACED

REVISION

BY

DATE

ES 98-1

MIDTOWN EAST DISTRICT

SANITARY SEWER REHABILITATION AND REPLACEMENT

CONTRACT I (MIDTOWN) - MANHOLE REHABILITATION

ATLAS PAGE II

PUBLIC WORKS DEPARTMENT

ENGINEERING SERVICES DIVISION

CITY OF TULSA, OKLAHOMA

PLANS AND ESTIMATES PREPARED BY:

USI OF OKLAHOMA, INC.

7666 E. 61ST ST. SUITE 415

TULSA, OKLAHOMA 74133

PHONE: (918) 249-2208

FAX: (918) 249-9992

BEFORE YOU DIG

CALL OR 1-800-522-6543

PLAN SCALE: DRAWN USI 12/01

P-SCALE DESIGNED USI 12/01

PROFILE SCALE: SURVEY N/A N/A

HORIZONTAL: FIELD MNGR. 6-02

H-SCALE SECT. MNGR. 6-02

V-SCALE PROJ. MNGR. 6/4/02

RECOMMENDED: 6/4/02

FILE: 6/4/02

ATLAS PAGE NO. 1

APPROVED: 6/4/02

DATE: June 28, 2002

SHEET 8 OF 12 SHEETS



SEWER ATLAS PAGE LEGEND

28-S

MAINTENANCE AREA BOUNDARY

MAINTENANCE AREA DESIGNATION

MANHOLE, MANHOLE NO. & MANHOLE DEPTH

DROP MANHOLE, MANHOLE NO. & MANHOLE DEPTH

LAMPHOLE, LAMPHOLE NO. & DEPTH

SEWER LINE (DIAMETER - LENGTH)

MANHOLE, MANHOLE NO. &
MANHOLE DEPTH

DROP MANHOLE, MANHOLE NO. &
MANHOLE DEPTH

LAMPHOLE, LAMPHOLE NO. & DEPTH

5.2
15
92

DROP MANHOLE, MANHOLE NO. &
MANHOLE DEPTH

LAMPHOLE, LAMPHOLE NO. & DEPTH

SEWER LINE (DIAMETER - LENGTH)

MANHOLE REHABILITATION LEGEND


●	MANHOLE TO BE REHABILITATED	◎	MANHOLE TO BE REPLACED
■	DROP MANHOLE TO BE REHABILITATED	◻	DROP MANHOLE TO BE REPLACED
▲	LAMPHOLE TO BE REHABILITATED	▲	LAMPHOLE TO BE REPLACED

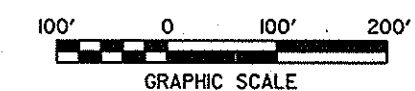
☐ DROP MANHOLE TO BE REHABILITATED
 ☒ DROP MANHOLE TO BE REPLACED

▲ LAMP HOLE TO BE REHABILITATED ▲ LAMP HOLE TO BE REPLACED

MANHOLE TO BE REPLACED

■ DROP MANHOLE TO BE REPLACED

 LAMP HOLE TO BE REPLACED




CALL OKIE
800.500.65

800-522-654

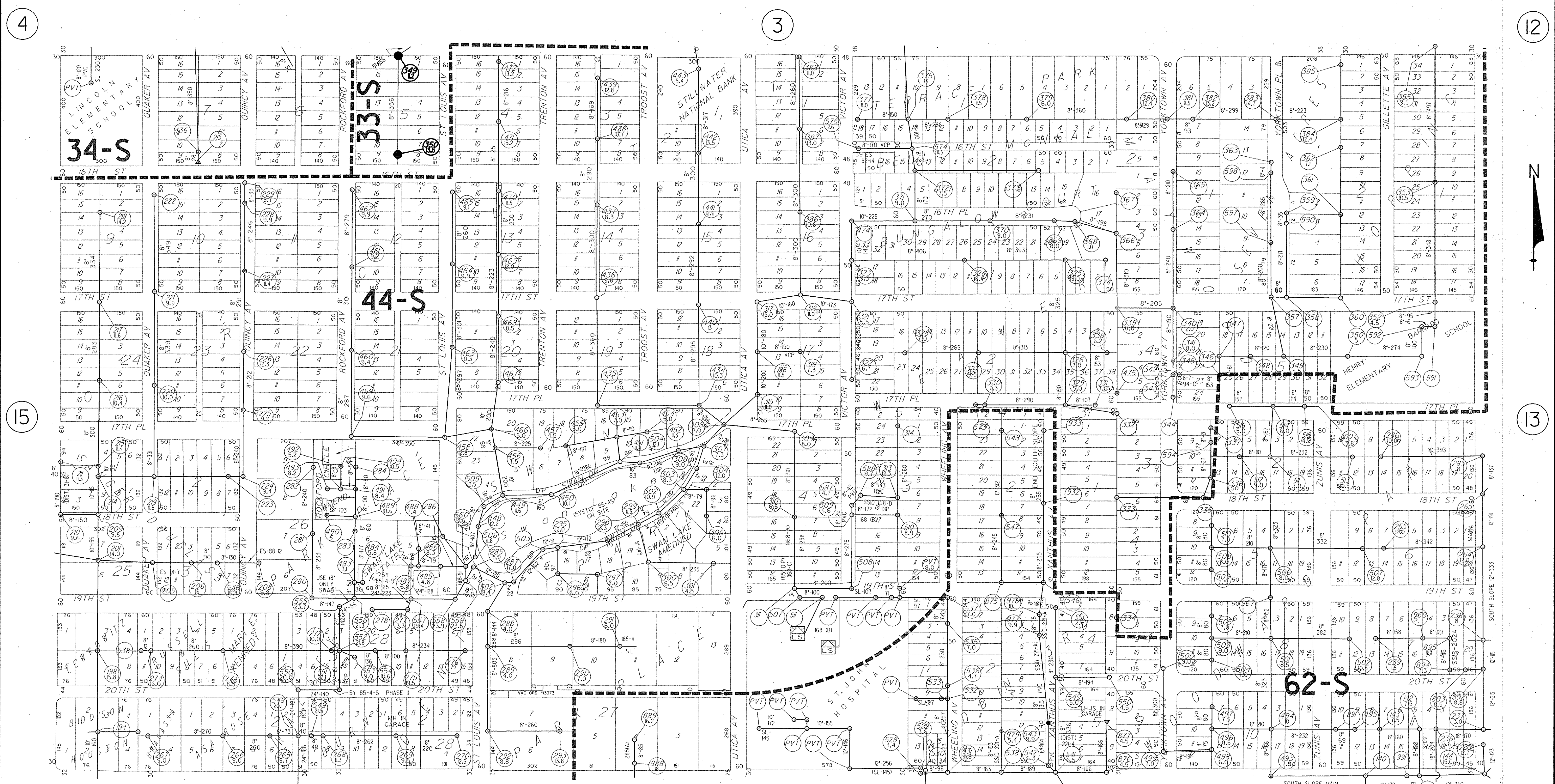
			SN 64602		ES 98-1		PLAN SCALES:		DRAWN: USI 12/01		APPROVED:	
					MIDTOWN EAST DISTRICT		P-SCALE:		DESIGNED: USI 12/01			
					SANITARY SEWER REHABILITATION AND REPLACEMENT		SURVEY: N/A N/A		FIELD MNGR. AS 6-02		DATE: June 28, 2002	
					CONTRACT 1 (MIDTOWN) - MANHOLE REHABILITATION		N/A		SECT. MNGR. 2002 6/02			
REVISION			BY		DATE		ATLAS PAGE 12		PROJ. MNGR. 100 6/1/02		RECOMMENDED: 2002 6/1/02	
							PUBLIC WORKS DEPARTMENT		RECOMMENDED:			
					CITY OF OKLAHOMA		ENGINEERING SERVICES DIVISION		RECOMMENDED:		PUBLIC WORKS DEPT. SUPERVISOR: [Signature]	
					PLANS AND ESTIMATES PREPARED BY:		CITY OF TULSA, OKLAHOMA		RECOMMENDED:			
					7666 E. GIST ST. SUITE 475		7666 E. GIST ST. SUITE 475		DEPUTY DIRECTOR: [Signature]		DATE: June 28, 2002	
					TULSA, OKLAHOMA 74123		TULSA, OKLAHOMA 74123		DEPUTY DIRECTOR: [Signature]			
					PHONE: (918) 249-3208		PHONE: (918) 249-3208		DRAWING:		SHEET 9 OF 12 SHEETS	
					FAX: (918) 249-9992		FAX: (918) 249-9992		ATLAS PAGE NO. 12			
					USI INFRASTRUCTURE OF OKLAHOMA, INC.		USI INFRASTRUCTURE OF OKLAHOMA, INC.					

PLANS AND ESTIMATES PREPARED BY:

 **USI INFRASTRUCTURE**
OF OKLAHOMA, INC.

**T666 E. 61ST ST. SUITE 475
TULSA, OKLAHOMA 74133
PHONE: (918) 249-2208
FAX: (918) 249-9192**

PUBLIC WORKS DIRECTOR
DATE June 28, 2002
SHEET 9 OF 12 SHEETS



4 3 12 15 32 33 34

S 1/2 SEC 7 T-19-N R-13-E

33 32

SEWER ATLAS PAGE LEGEND

- MAINTENANCE AREA BOUNDARY
- MAINTENANCE AREA DESIGNATION
- MANHOLE, MANHOLE NO. & MANHOLE DEPTH
- DROP MANHOLE, MANHOLE NO. & MANHOLE DEPTH
- LAMPHOLE, LAMPHOLE NO. & DEPTH
- SEWER LINE (DIAMETER - LENGTH)

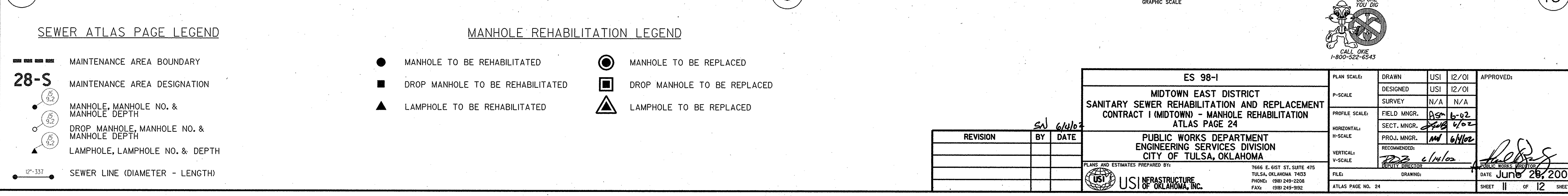
MANHOLE REHABILITATION LEGEND

- MANHOLE TO BE REHABILITATED
- DROP MANHOLE TO BE REHABILITATED
- LAMPHOLE TO BE REHABILITATED
- MANHOLE TO BE REPLACED
- DROP MANHOLE TO BE REPLACED
- LAMPHOLE TO BE REPLACED

REVISION	BY	DATE

ES 98-1		PLANS SCALE:	DRAWN	USI	12/01	APPROVED:
MIDTOWN EAST DISTRICT		P-SCALE:	DESIGNED	USI	12/01	
SANITARY SEWER REHABILITATION AND REPLACEMENT		PROFILE SCALE:	SURVEY	N/A	N/A	DATE June 28, 2002
CONTRACT 1 (MIDTOWN) - MANHOLE REHABILITATION		HORIZONTAL:	FIELD MNGR.	BSM	6/02	
ATLAS PAGE 14		H-SCALE:	SECT. MNGR.	MM	6/02	SHEET 10 OF 12 SHEETS
PUBLIC WORKS DEPARTMENT		VERTICAL:	PROJ. MNGR.	MM	6/02	
ENGINEERING SERVICES DIVISION		V-SCALE:	RECOMMENDED:	MM	6/02	DATE June 28, 2002
CITY OF TULSA, OKLAHOMA		FILE:	RECOMMENDED:	MM	6/02	
PLANS AND ESTIMATES PREPARED BY:		ATLAS PAGE NO. 14	DRAWING:	MM	6/02	DATE June 28, 2002
USI OF OKLAHOMA, INC.		ATLAS PAGE NO. 14	DRAWING:	MM	6/02	


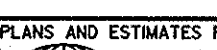
48

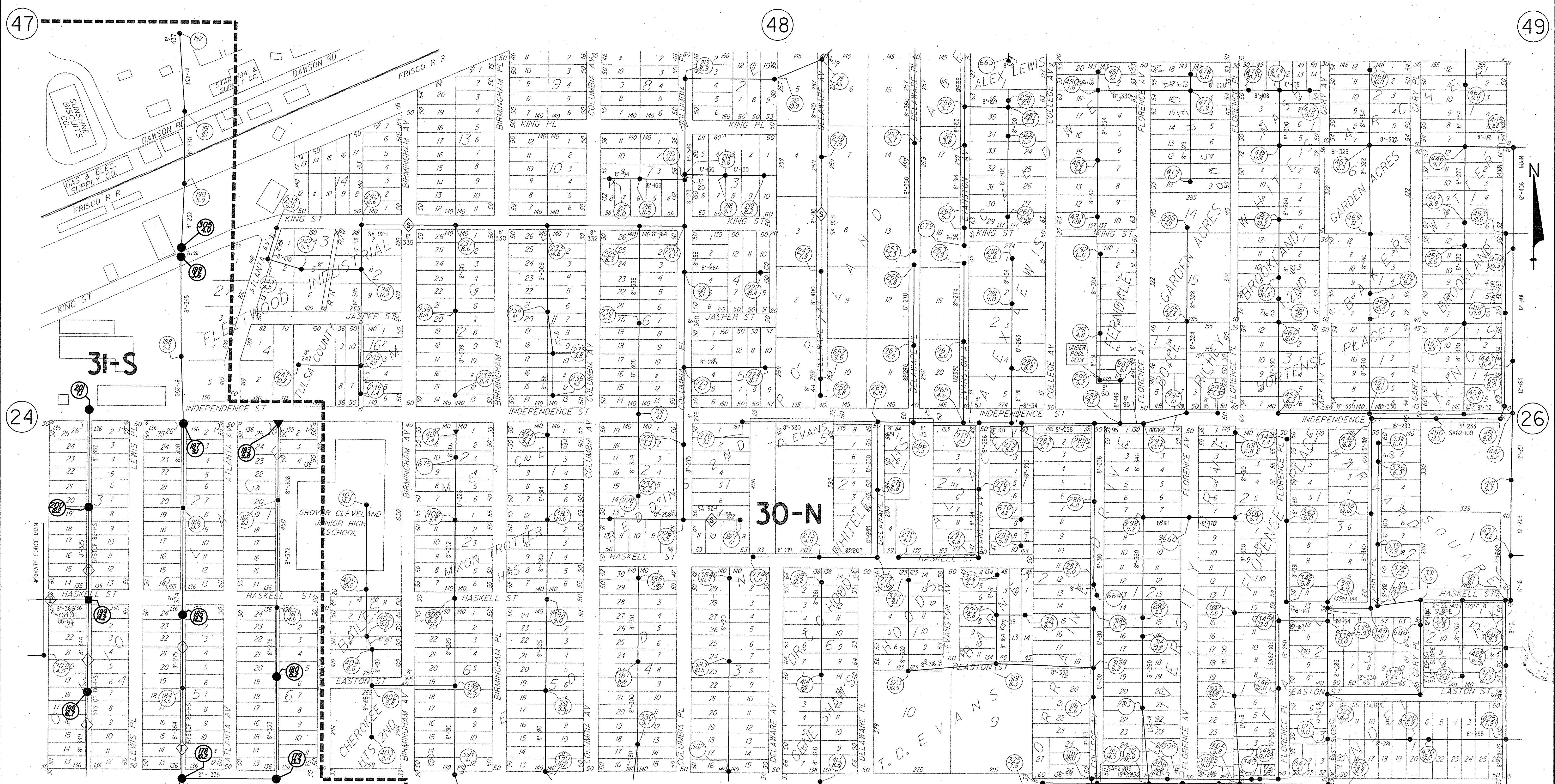


MANHOLE REHABILITATION LEGEND

- | | | | |
|---|----------------------------------|---|-----------------------------|
| ● | MANHOLE TO BE REHABILITATED | ⊙ | MANHOLE TO BE REPLACED |
| ■ | DROP MANHOLE TO BE REHABILITATED | ◼ | DROP MANHOLE TO BE REPLACED |
| ▲ | LAMPHOLE TO BE REHABILITATED | ⬆ | LAMPHOLE TO BE REPLACED |

REVISION	BY	DATE

ES 98-1		PLAN SCALE:		DRAWN		USI 12/01		APPROVED:	
MIDTOWN EAST DISTRICT SANITARY SEWER REHABILITATION AND REPLACEMENT CONTRACT 1 (MIDTOWN) - MANHOLE REHABILITATION ATLAS PAGE 24		P-SCALE		DESIGNED		USI 12/01			
				SURVEY		N/A N/A			
PUBLIC WORKS DEPARTMENT ENGINEERING SERVICES DIVISION CITY OF TULSA, OKLAHOMA		PROFILE SCALE:		FIELD MNGR.		DGM 6/02		 PUBLIC WORKS DEPT. DIRECTOR DATE June 28, 2001 SHEET 11 OF 12 SHEET	
		HORIZONTAL:		SECT. MNGR.		JWB 6/02			
		H-SCALE		PROJ. MNGR.		MNF 6/10/02			
		VERTICAL:		RECOMMENDED:		DDG 6/16/02			
V-SCALE		DEPT. DIRECTOR							
PLANS AND ESTIMATES PREPARED BY:		7666 E. 61ST ST. SLUTE 475 TULSA, OKLAHOMA 74133 PHONE: (918) 249-2208 FAX: (918) 249-2208		FILE:		DRAWING:			
 INFRASTRUCTURE OF OKLAHOMA, INC.				ATLAS PAGE NO. 24					



SEWER ATLAS PAGE LEGEND

28-S

MAINTENANCE AREA DESIGNATION

MANHOLE, MANHOLE NO. & MANHOLE DEPTH

DROP MANHOLE, MANHOLE NO. & MANHOLE DEPTH

LAMPHOLE, LAMPHOLE NO. & DEPTH

SEWER LINE (DIAMETER - LENGTH)

MANHOLE REHABILITATION LEGEND

MANHOLE TO BE REHABILITATED

DROP MANHOLE TO BE REHABILITATED

LAMPHOLE TO BE REHABILITATED

MANHOLE TO BE REPLACED

DROP MANHOLE TO BE REPLACED

LAMPHOLE TO BE REPLACED

REVISION

BY

DATE

SN 6/1/02

6/1/02

6/1/02

ES 98-1

MIDTOWN EAST DISTRICT

SANITARY SEWER REHABILITATION AND REPLACEMENT

CONTRACT 1 (MIDTOWN) - MANHOLE REHABILITATION

ATLAS PAGE 25

PUBLIC WORKS DEPARTMENT

ENGINEERING SERVICES DIVISION

CITY OF TULSA, OKLAHOMA

PLANS AND ESTIMATES PREPARED BY:

USI OF OKLAHOMA, INC.

7666 E. 61ST ST. SUITE 475

TULSA, OKLAHOMA 74133

PHONE: (918) 249-2200

FAX: (918) 249-9192

PLAN SCALE:

P-SCALE

PROFILE SCALE:

HORIZONTAL

VERTICAL

FILE:

ATLAS PAGE NO. 25

DRAWN

DESIGNED

SURVEY

FIELD MNGR.

SECT. MNGR.

PROJ. MNGR.

RECOMMENDED

DATE

APPROVED:

DATE

SHEET 12 OF 12 SHEETS