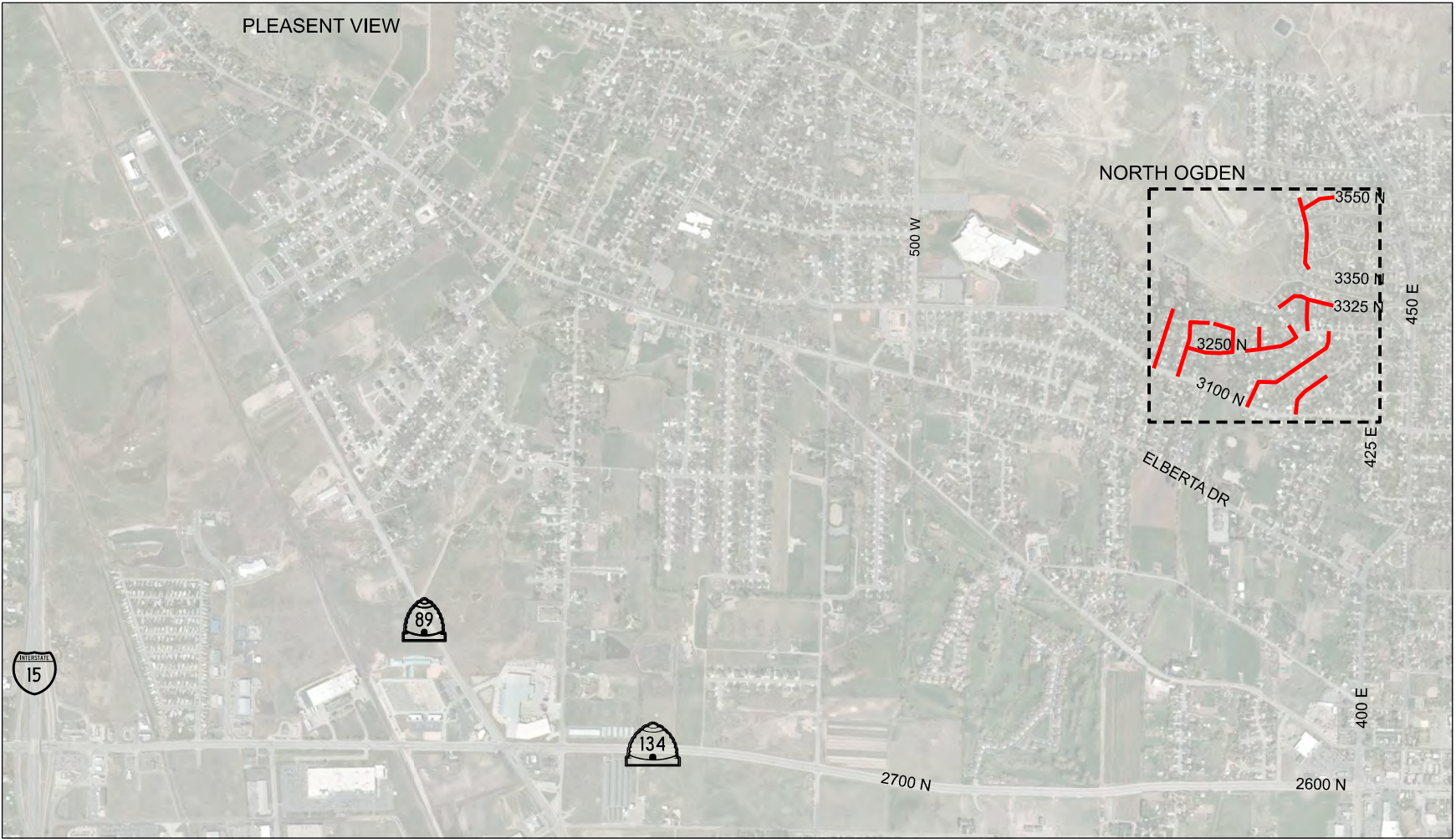
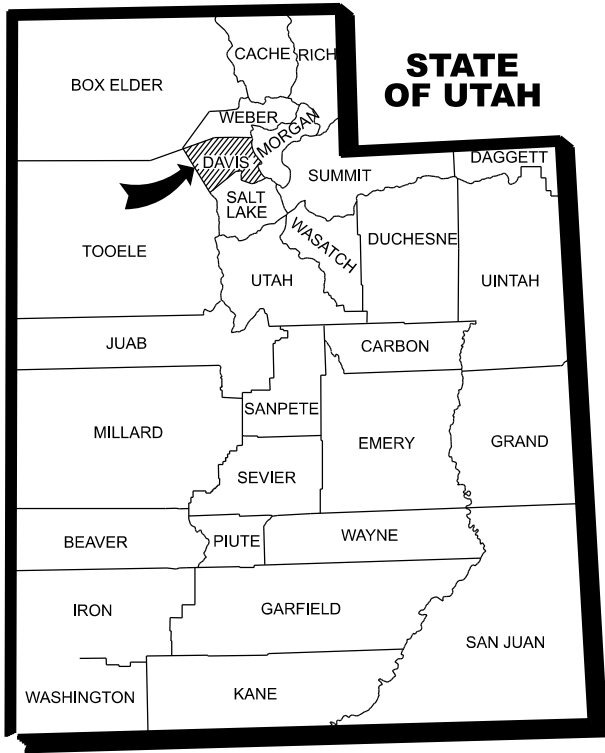


NORTH OGDEN PUBLIC WORKS

SEWER LINING REPLACEMENT



PROJECT LOCATION

VICINITY MAP

LIMITATIONS OF OPERATIONS:

A. TRAFFIC LIMITATIONS

1. LANE SHIFTS ARE ALLOWED FROM 9:00 AM TO 3:00 PM.
2. SHOULDER CLOSURES ARE ALLOWED ANYTIME.
3. PROVIDE ADA ACCESSIBLE ROUTES THROUGH OR AROUND THE WORK ZONE AT ALL TIMES.

B. NO WORK WILL BE ALLOWED ON CATEGORY II HOLIDAYS WHICH WILL EXTEND AS FOLLOWS:

1. NORTH OGDEN CITY SPECIAL HOLIDAY?

C. OBTAIN MS4 COMPLIANCE PLAN FROM ENGINEER AND COMPLETE.

SHEET INDEX			
SHEET NO.		SHEET TITLE	
1		TITLE SHEET	
2		NOTES AND CONTACTS	
3		LEGEND/ ABBREVIATIONS	
4		PLAN SHEET	
5		PLAN SHEET	
6		PLAN SHEET	
7		PLAN SHEET	
8		DETAILS	
9		DETAILS	
 ESI ENGINEERING CONSULTING ENGINEERS AND LAND SURVEYORS 3500 SOUTH MAIN STREET SUITE 206 SALT LAKE CITY, UTAH 84115 TEL: (801) 263-1752			
DESIGN		CDP	01/2020
CHECK		BFC	01/2020
DRAWN		KB	01/2020
CHECK		CDP	01/2020
QUANT.		CDP	01/2020
CHECK		BFC	01/2020
APPROVED _____ DATE _____ CITY ENGINEER _____			
PROJECT NUMBER		21-148	1 7

NO	BY	DATE	REMARKS
REVISIONS			

GENERAL

1. ALL CONSTRUCTION SHALL COMPLY WITH THE STANDARD DRAWINGS AND SPECIFICATIONS OF THE CITY UNLESS OTHERWISE NOTED.
2. EXISTING UTILITY LOCATIONS SHOWN MAY NOT BE EXACT AND ALL UTILITIES MAY NOT BE SHOWN. CONTACT BLUE STAKES, SEWER DISTRICT, IRRIGATION COMPANY & ANY OTHER REQUIRED UTILITY COMPANY PRIOR TO EXCAVATION.
3. THE CONTRACTOR SHALL HAVE ON SITE AT ALL TIMES AT LEAST ONE COPY OF THE SIGNED APPROVED PLANS & SPECIFICATIONS, AS WELL AS ALL PERMITS AS REQUIRED TO PERFORM THE WORK.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PREPARING A TRAFFIC CONTROL PLAN & PROVIDING ALL TRAFFIC CONTROL DEVICES AS MAY BE REQUIRED FOR CONSTRUCTION, INCLUDING FLAGGING. TRAFFIC CONTROL PLANS SHALL BE REVIEWED AND ACCEPTED BY THE DISTRICT. ALL TRAFFIC SHALL CONFIRM TO THE MOST RECENT VERSION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES AND CITY STANDARDS.
5. UTILITY TRENCHES ARE TO BE SLOPED OR BRACED & SHEETED AS PER STATE & FEDERAL REQUIREMENTS FOR SAFETY & PROTECTION OF WORKERS & OTHER UTILITIES. THE CONTRACTOR IS RESPONSIBLE FOR ALL PROJECT SAFETY, INCLUDING BUT NOT LIMITED TO: EXCAVATION & SHORING, TRAFFIC CONTROL & SECURITY.
6. THE CONTRACTOR IS RESPONSIBLE TO COORDINATE & COOPERATE WITH ALL UTILITY COMPANIES WITH REGARD TO RELOCATIONS OR ADJUSTMENTS OF EXISTING UTILITIES DURING CONSTRUCTION TO ASSURE THAT THE WORK IS ACCOMPLISHED IN A TIMELY MANNER & WITH MINIMUM DISRUPTION OF SERVICE.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR RECORD DRAWING INFORMATION & SUBMIT TO THE ENGINEER PRIOR TO FINAL PAYMENT.
8. CONTRACTOR SHALL PROTECT & NOT DISTURB PROPERTY ADJACENT TO PROJECT I.E. FENCE, LANDSCAPING, MAILBOXES, ETC. ANY DAMAGE TO PUBLIC OR PRIVATE PROPERTY BY CONTRACTOR SHALL BE RESTORED TO EQUAL CONDITION AT CONTRACTORS EXPENSE.
9. EXISTING DRAINS FROM ADJACENT PROPERTIES ARE TO BE MAINTAINED AND PROTECTED.
10. THE CONTRACTOR(S) SHALL REMOVE ALL OBSTRUCTIONS, BOTH ABOVE AND BELOW GROUND, AS REQUIRED FOR THE CONSTRUCTION OF THE PROPOSED IMPROVEMENTS. THIS SHALL INCLUDE CLEARING AND GRUBBING WHICH CONSISTS OF CLEARING THE GROUND SURFACE OF ALL TREES, STUMPS, BRUSH, UNDERGROWTH, HEDGES, HEAVY MATERIAL WHICH IN THE OPINION OF THE ENGINEER, IS SUITABLE FOR THE FOUNDATION OF PAVEMENTS OR CONCRETE. ALL MATERIAL NOT SUITABLE FOR FUTURE USE ON SITE SHALL BE DISPOSED OF OFF SITE.
11. ALL MATERIALS TO BE REMOVED SHALL BE HAULED AWAY & DISPOSED OF IN A SAFE & LEGAL MANNER BY THE CONTRACTOR.
12. CONTRACTOR IS RESPONSIBLE FOR DEWATERING AND DIVERSION OF GROUND WATER AS NECESSARY TO COMPLETE WORK.
13. THE CONTRACTOR SHALL EXAMINE THE DRAWING AND SHALL NOTIFY THE OWNER OF ANY DISCREPANCIES OR CONFLICTS BEFORE PROCEEDING WITH THE WORK.
14. THE CONTRACTOR SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS AT THE SITE AND SHALL NOTIFY THE ENGINEER OF DISCREPANCIES BETWEEN THE ACTUAL CONDITIONS AND INFORMATION SHOWN ON THE DRAWINGS BEFORE PROCEEDING WITH THE WORK.
15. PROPERTY IMPACTED BY PROJECT SHALL BE RESTORED TO EQUAL CONDITION, MATCHING EXISTING MATERIALS. REPLACING SPRINKLERS, DECORATIVE CURBING, ETC.
16. NEW UTILITY ALIGNMENTS SHALL BE ESTABLISHED IN THE FIELD ACCORDING TO POTHOLE FINDINGS OF EX. UTILITY LINES. ENGINEER TO VERIFY NEW UTILITY ALIGNMENT, PRIOR TO MILLING OR SAW-CUTTING OF ASPHALT.
17. THE CONTRACTOR IS REQUIRED TO CONTACT THE ENGINEER AT LEAST 24 HOURS PRIOR TO STARTING CONSTRUCTION.

UTILITY CONTACTS

NATURAL GAS

JASON MCGEE
(801) 324-3640

INTERNET

(801) 685-2105
TAYLOR CONSTANCE

IRRIGATION

DOUG JEPPESEN
(801) 621-6555 EXT. 1351

WATER

JASON RENEY
WATER SYSTEMS
SUPERINTENDENT
(801) 782-8111

POWER

(503) 813-6993
JOEL B SIMMONS

COMMUNICATION

(801) 685-2105
TAYLOR CONSTANCE

INTERNET

(435) 224-2356
JEFF HOUSTON

SEWER

TRENT WILKINS
SANITARY SEWER
SUPERINTENDENT
(801) 782-8111

CAUTION: NOTICE TO CONTRACTOR

THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS ARE BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE LOCAL UTILITY LOCATION CENTER AT LEAST 48 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATIONS OF THE UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS. IF A CONFLICT IS IDENTIFIED, THE ENGINEER OF RECORD SHOULD BE CONTACTED IMMEDIATELY, PRIOR TO ANY FURTHER WORK BEING DONE RELATED TO THE ISSUE.

UTILITY NOTES

SEWER

1. ALL NEW SEWER SYSTEMS WILL BE MANDREL AND AIR TESTED.
2. SEWER LENGTH AND SLOPES ON THE PROFILE VIEWS ARE MEASURED FROM INVERT-INVERT OF MANHOLES.
3. ALL REMOVED EXISTING SEWER UTILITIES SHALL EITHER BE SALVAGED OR PROPERLY DISPOSED OF ACCORDING TO GOVERNING REGULATIONS.



PROJECT SPECIFICATIONS AND STANDARDS

1. NORTH OGDEN CITY STANDARDS & SPECIFICATIONS LATEST EDITION
2. APWA STANDARDS AND SPECIFICATIONS LATEST EDITION

REVISIONS

PRELIMINARY

REMARKS

APPROVED BY

NO.	DATE
-----	------

DATE 07/26/2021

DRAWN BY	KB
----------	----

QC CHECKED BY	CDP
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ESI ENGINEERING, INC.
CONSULTING ENGINEERS

CONSULTING ENGINEERS
AND LAND SURVEYORS
2500 SOUTH MAIN STREET SUITE 206

3500 SOUTH MAIN STREET, SUITE 200
SALT LAKE CITY, UTAH 84115
TEL. 801.263.1752 FAX 801.263.1780



NORTH OGDEN CITY

WATER MAIN REPLACEMENT
FRUITLAND DR. - 2100 N TO 2500 N

NOTES & CONTACTS

PROJECT

SHEET

PROJECT NO. 21-148

SHEET NO. 2 OF 10

UTILITIES

EXISTING		PROPOSED
	SANITARY SEWER	
	STORM DRAIN	
	CULINARY WATER	
	IRRIGATION WATER	
	GAS	
	ELECTRICAL BELOW	
	ELECTRICAL OVERHEAD	
	INTERNET	
	COMMUNICATIONS BELOW	
	COMMUNICATIONS OVERHEAD	

ROW

EXISTING/PROPOSED	
	PROPERTY LINE
	QUARTER CORNER SECTION LINE
	BOUNDARY LINE
	TOWNSHIP LINE
	SECTION LINE
	UTILITY EASEMENT

HATCH PATTERNS

PROPOSED ASPHALT

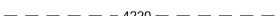
SEWER LINE TO BE RELINED

PROPOSED CONCRETE

PROPOSED CURB AND GUTTER

PROPOSED PED RAMP

SURFACE FEATURES

EXISTING/PROPOSED	
	WOOD FENCE
	CHAINLINK/WIRE FENCE
	INTERMEDIATE CONTOUR
	MAJOR CONTOUR
	BREAKLINE
	CURB & GUTTER
	TOP OF DITCH
	FLOW LINE
	CONCRETE

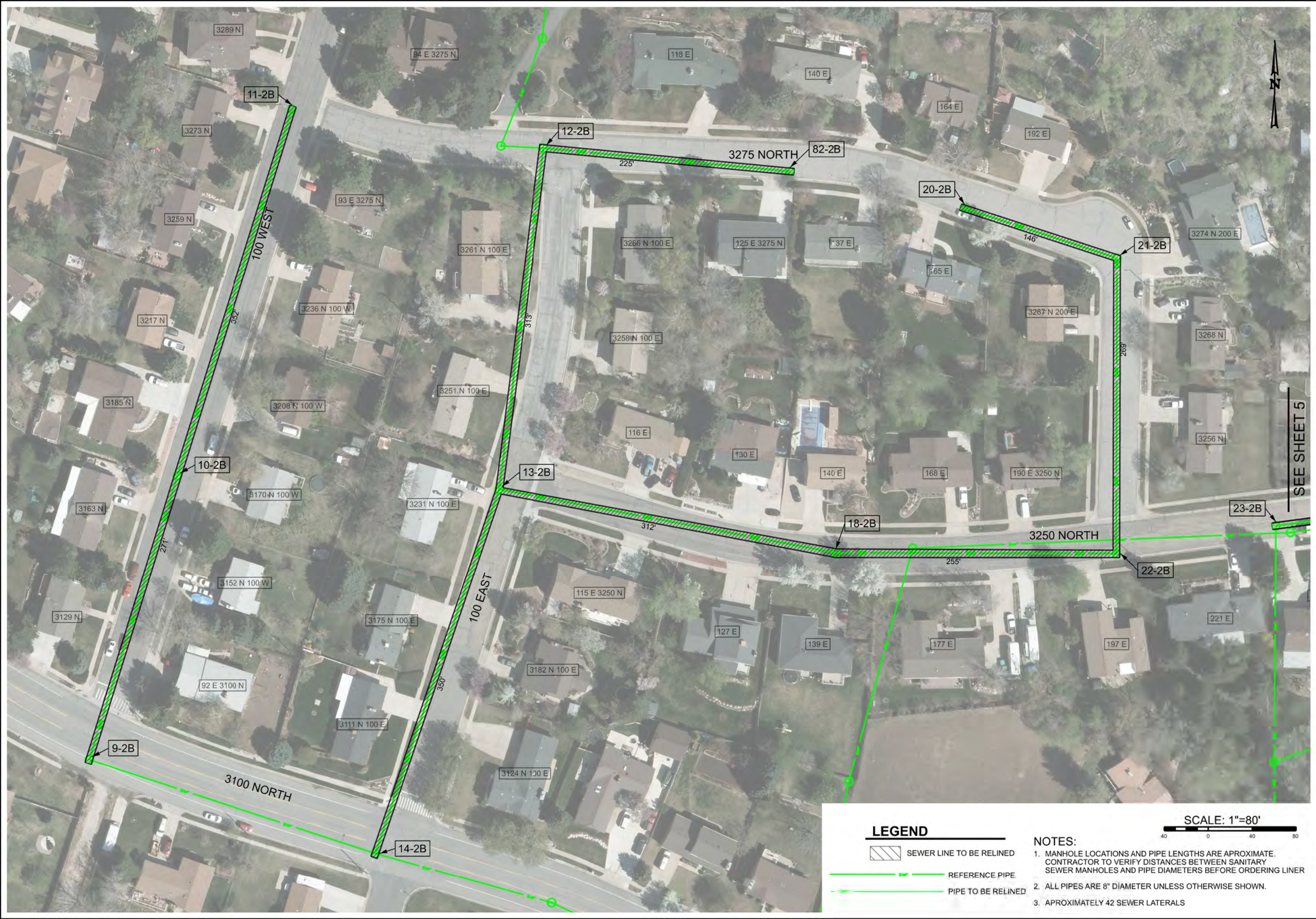
STANDARD SYMBOLS

EXISTING/PROPOSED	
	FIRE HYDRANT
	WATER METER
	CULINARY WATER VALVE
	IRRIGATION VALVE
	IRRIGATION JUNCTION BOX/ METER BOX
	CATCH BASIN
	STORM DRAIN MANHOLE
	SANITARY SEWER MANHOLE
	TELECOMM. JUNCTION BOX
	TV/PHONE PEDESTAL
	ELECTRICAL POLE
	LIGHT POLE
	ELECTRICAL BOX
	GUY WIRE
	GAS METER
	GAS VALVE
	MAILBOX
	SURVEY MONUMENT
	OIL/WATER-SEDIMENT/GREASE TRAP
	TEE
	90° BEND
	45° BEND
	22.5° BEND
	11.25° BEND
	THRUST BLOCK

ABBREVIATIONS

°	DEGREES
'	MINUTES, FEET
"	SECONDS, INCHES
ADA	AMERICAN DISABILITIES ACT
ARCH	ARCHITECT, ARCHITECTURAL
BH	BORE HOLE
BLDG	BUILDING POINT
BM	BENCHMARK
BOB	BOTTOM OF BANK
BOW	BOTTOM OF WALL
BOXCULV	BOX CULVERT
BS	BLUE STAKE
BW	BROKEN WHITE STRIPE
CB	CATCH BASIN
CG	CURB AND GUTTER
CL	CENTERLINE
CMP	CORRUGATED METAL PIPE
CO	CLEANOUT
COB	CLEANOUT BOX
COMBO	COMBINATION (BOX)
CONC	CONCRETE
CPP	CORRUGATED PLASTIC PIPE
CW	CURB WALL
DA	DRIVE APPROACH
DIA	DIAMETER
DRIVE	DRIVEWAY
DW	DOUBLE WHITE STRIP
DY	DOUBLE YELLOW STRIPE
E	ELECTRICITY, ELECTRICAL
EB	ELECTRICAL BOX
EBL	EAST BOUND LANE
ECB	ELECTRIC CONTROL BOX
EG	EXISTING GRADE
ELEC	ELECTRICAL
EOA	EDGE OF ASPHALT
EOB	EDGE OF BRUSH
EOC	EDGE OF CONCRETE
EOG	EDGE OF GRASS
EOGR	EDGE OF GRAVEL
EOL	EDGE OF LANE
EOW	EDGE OF WALK
EX	EXISTING
FG	FINISH GRADE
FH	FIRE HYDRANT
FL	FLOWLINE
FNC	FENCE
FT	FEET
GAS	GAS, NATURAL GAS
GB	GRADE BREAK
GR	GUARD RAIL
GV	GAS VALVE
HDPE	HIGH-DENSITY POLYETHYLENE PIPE
H2O	WATER
IE	INVERT ELEVATION
IR	IRRIGATION
IRRBBOX	IRRIGATION (SPRINKLER) BOX
IRRLV	IRRIGATION VALVE
L	LENGTH
LIP	LIP OF GUTTER
LF	LINEAL FEET
LP	LIGHT POLE
MH	MANHOLE
MHGAS	NATURAL GAS MANHOLE
MHSD	STORM DRAIN MANHOLE
MHSS	SANITARY SEWER MANHOLE
MHTELE	TELEPHONE MANHOLE
MHWTR	WATER MANHOLE
MON	MONUMENT
NBL	NORTHBOUND LANE
NG	NATURAL GROUND
NOTE	NOTE TO FOLLOW (ATTRIBUTE)
PC	CONTROL CODE: STARTS A TANGENTIAL CURVE
PCC	POINT OF COMPOUND CURVATURE
PI	POINT OF INTERSECTION
PL	PROPERTY LINE
PP	POWER POLE
POC	POINT OF CONNECTION
PROP	PROPERTY
PT	CONTROL CODE: ENDS A TANGENTIAL CURVE
R	RADIUS
RAMP	FREEWAY ON/OFF RAMP
RC	REBAR & CAP
RCP	REINFORCED CONCRETE PIPE
RMP	ROCKY MOUNTAIN POWER
ROW	RIGHT OF WAY
RW	RETAINING WALL
RWM	RIGHT OF WAY MARKER
SD	STORM DRAIN
SEC	SECTION
SF	SQUARE FEET
SPEC	SPECIFICATION
SPECS	SPECIFICATIONS
SS	SANITARY SEWER
STD	STANDARD
SW	SOLD WHITE STRIPE
SY	SOLD YELLOW STRIPE
TBC	TOP BACK OF CURB
TBS	TOP BACK OF SIDEWALK
TBW	TOP BACK OF WATER WAY
TELE	TELEPHONE
TFS	TOP FRONT OF SIDEWALK
TL	TRAVEL LANE
TOA	TOP OF ASPHALT
TOB	TOP OF BANK
TOC	TOP OF CONCRETE
TOE	BREAKLINE
TOR	TOP OF RAIL
TOW	TOP OF WALL
TYP	(TYPICAL) REPRESENTATIVE OF ALL SIMILARLY NOTED ITEMS
UTIL	UTILITY
UP	UTILITY POLE
W	WATER
WALK	SIDEWALK
WG	WALK & GUTTER (CONCRETE POURED AS ONE UNIT)
WM	WATER METER
WV	WATER VALVE

PROJECT NO. 21-148		SHEET NO. 3		NORTH OGDEN CITY WATER MAIN REPLACEMENT FRUITLAND DR. - 2100 N TO 2500 N			ESI ENGINEERING, INC. CONSULTING ENGINEERS AND LAND SURVEYORS 3500 SOUTH MAIN STREET, SUITE 206 SALT LAKE CITY, UTAH 84115 TEL. 801.263.1752 FAX 801.263.1780		07/26/2021 DATE											
PROJECT		SHEET		LEGEND & ABBREVIATIONS			DRAWN BY KB		QC CHECKED BY CDP		NO.		DATE		APPROVED BY		REMARKS			
PRELIMINARY																				



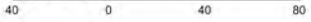
LEGEND

-  SEWER LINE TO BE RELINED
-  REFERENCE PIPE
-  PIPE TO BE RELINED

NOTES:

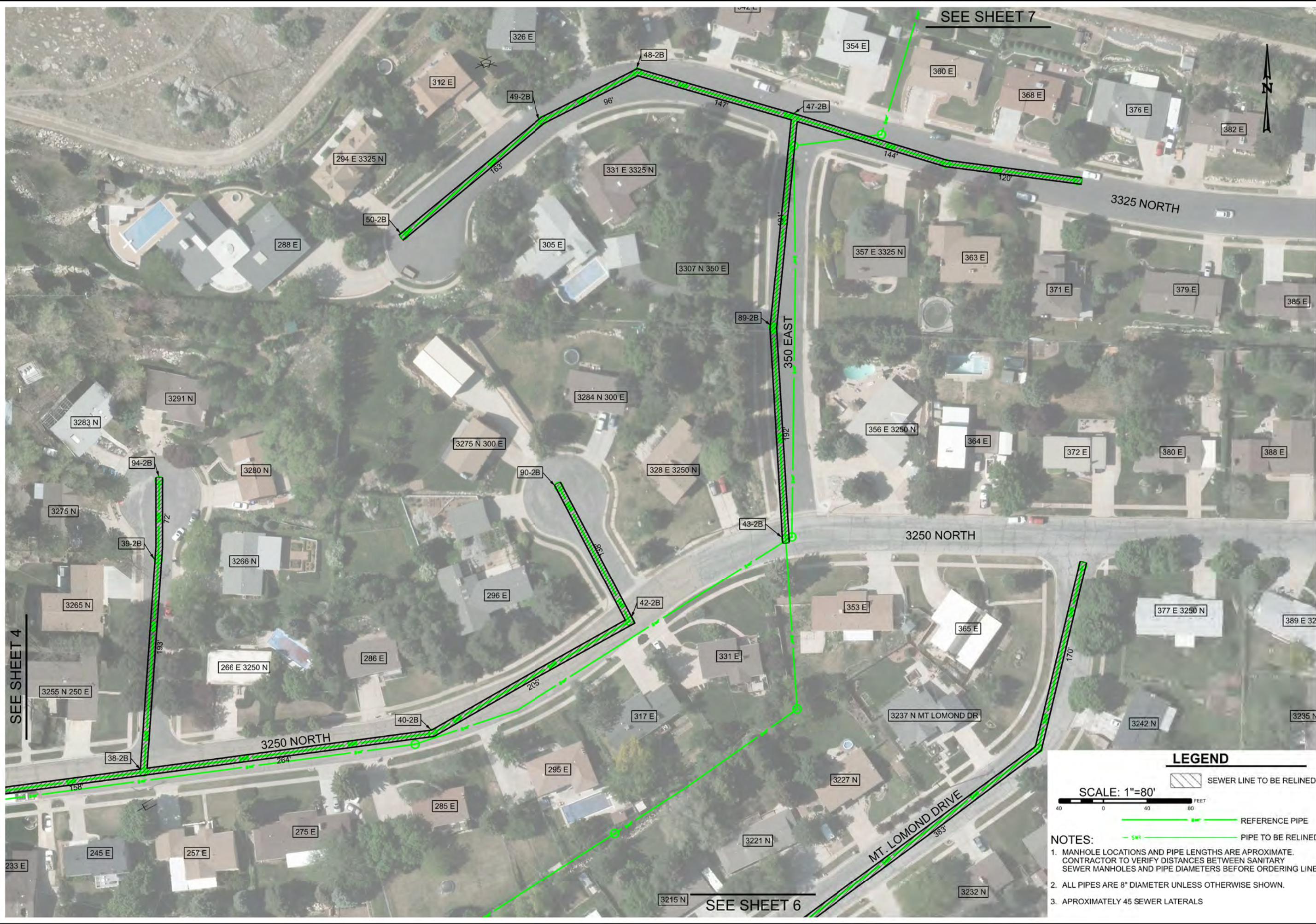
1. MANHOLE LOCATIONS AND PIPE LENGTHS ARE APPROXIMATE. CONTRACTOR TO VERIFY DISTANCES BETWEEN SANITARY SEWER MANHOLES AND PIPE DIAMETERS BEFORE ORDERING LINER
2. ALL PIPES ARE 8" DIAMETER UNLESS OTHERWISE SHOWN.
3. APPROXIMATELY 42 SEWER LATERALS

SCALE: 1"=80'



SEE SHEET 5

PROJECT		SHEET	
NORTH OGDEN CITY WATER MAIN REPLACEMENT FRUITLAND DR. - 2100 N TO 2500 N		PLAN SHEET	
PROJECT NO. 21-148		SHEET NO. 4	
DATE 07/26/2021		NO. DATE	
DRAWN BY KB		APPROVED BY	
QC CHECKED BY CDP		REMARKS	
ESI ENGINEERING, INC. CONSULTING ENGINEERS AND LAND SURVEYORS 3500 SOUTH MAIN STREET, SUITE 206 SALT LAKE CITY, UTAH 84115 TEL 801.263.1752 FAX 801.263.1780			
			



PROJECT		SHEET	
NORTH OGDEN CITY WATER MAIN REPLACEMENT FRUITLAND DR. - 2100 N TO 2500 N		PLAN SHEET	
PROJECT NO. 21-148		SHEET NO. 5	
DATE 07/26/2021		DATE 07/26/2021	
DRAWN BY KB		CHECKED BY CDP	
QC		APPROVED BY	
NO.		REMARKS	

ESI ENGINEERING, INC.
CONSULTING ENGINEERS
AND LAND SURVEYORS
3500 SOUTH MAIN STREET, SUITE 206
SALT LAKE CITY, UTAH 84115
TEL 801.263.1752 FAX 801.263.1780

LEGEND

SCALE: 1"=80'

SEWER LINE TO BE RELINED

REFERENCE PIPE

PIPE TO BE RELINED

NOTES:

1. MANHOLE LOCATIONS AND PIPE LENGTHS ARE APROXIMATE. CONTRACTOR TO VERIFY DISTANCES BETWEEN SANITARY SEWER MANHOLES AND PIPE DIAMETERS BEFORE ORDERING LINER

2. ALL PIPES ARE 8" DIAMETER UNLESS OTHERWISE SHOWN.

3. APPROXIMATELY 45 SEWER LATERALS



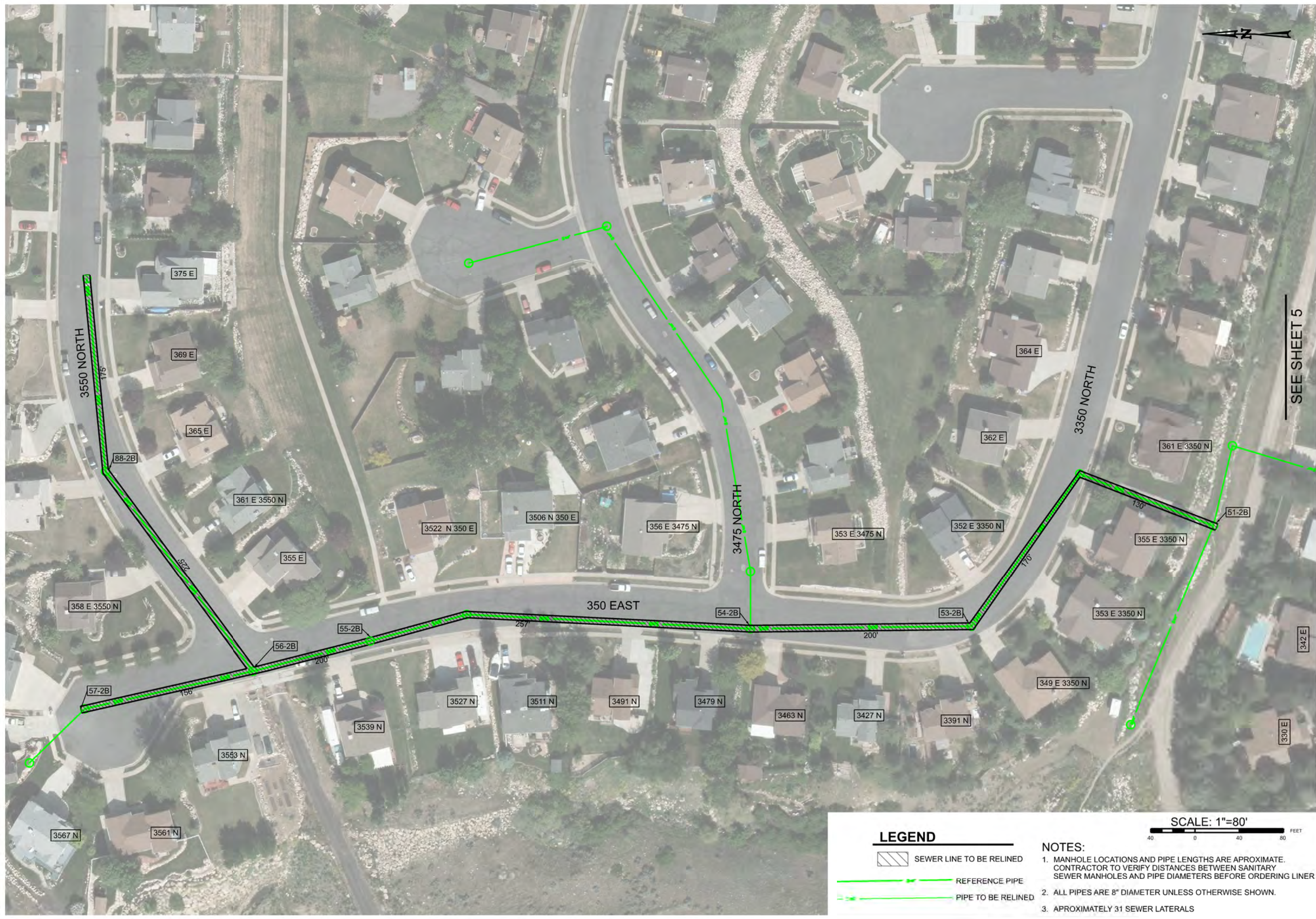
SCALE: 1"=80'

LEGEND

- SEWER LINE TO BE RELINED
- REFERENCE PIPE
- PIPE TO BE RELINED

NOTES:
1. MANHOLE LOCATIONS AND PIPE LENGTHS ARE APROXIMATE. CONTRACTOR TO VERIFY DISTANCES BETWEEN SANITARY SEWER MANHOLES AND PIPE DIAMETERS BEFORE ORDERING LINER
2. ALL PIPES ARE 8" DIAMETER UNLESS OTHERWISE SHOWN.
3. APROXIMATELY 34 SEWER LATERALS

PROJECT NO. 21-148		SHEET NO. 6	
PROJECT		SHEET	
NORTH OGDEN CITY WATER MAIN REPLACEMENT FRUITLAND DR. - 2100 N TO 2500 N		PLAN SHEET	
		ESI ENGINEERING, INC. CONSULTING ENGINEERS AND LAND SURVEYORS 3500 SOUTH MAIN STREET, SUITE 206 SALT LAKE CITY, UTAH 84115 TEL. 801.263.1752 FAX 801.263.1780	
DATE		07/26/2021	
DRAWN BY		KB	
QC		CDP	
CHECKED BY		NO.	
DATE		APPROVED BY	
REMARKS			



LEGEND

-  SEWER LINE TO BE RELINED
-  REFERENCE PIPE
-  PIPE TO BE RELINED

NOTES:

1. MANHOLE LOCATIONS AND PIPE LENGTHS ARE APPROXIMATE. CONTRACTOR TO VERIFY DISTANCES BETWEEN SANITARY SEWER MANHOLES AND PIPE DIAMETERS BEFORE ORDERING LINER
2. ALL PIPES ARE 8" DIAMETER UNLESS OTHERWISE SHOWN.
3. APPROXIMATELY 31 SEWER LATERALS

PROJECT		SHEET	
NORTH OGDEN CITY WATER MAIN REPLACEMENT FRUITLAND DR. - 2100 N TO 2500 N		PLAN SHEET	
PROJECT NO. 21-148		SHEET NO. 7	
DATE 07/26/2021		DATE 07/26/2021	
DRAWN BY KB		DRAWN BY KB	
QC CHECKED BY CDP		QC CHECKED BY CDP	
APPROVED BY		APPROVED BY	
REVISIONS		REVISIONS	
NO.		NO.	
DATE		DATE	
REMARKS		REMARKS	

ESI ENGINEERING, INC.
CONSULTING ENGINEERS
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3500 SOUTH MAIN STREET, SUITE 206
SALT LAKE CITY, UTAH 84115
TEL. 801.263.1752 FAX 801.263.1780



NORTH OGDEN CITY
WATER MAIN REPLACEMENT
FRUITLAND DR. - 2100 N TO 2500 N

PROJECT NO. 21-148
SHEET NO. 7