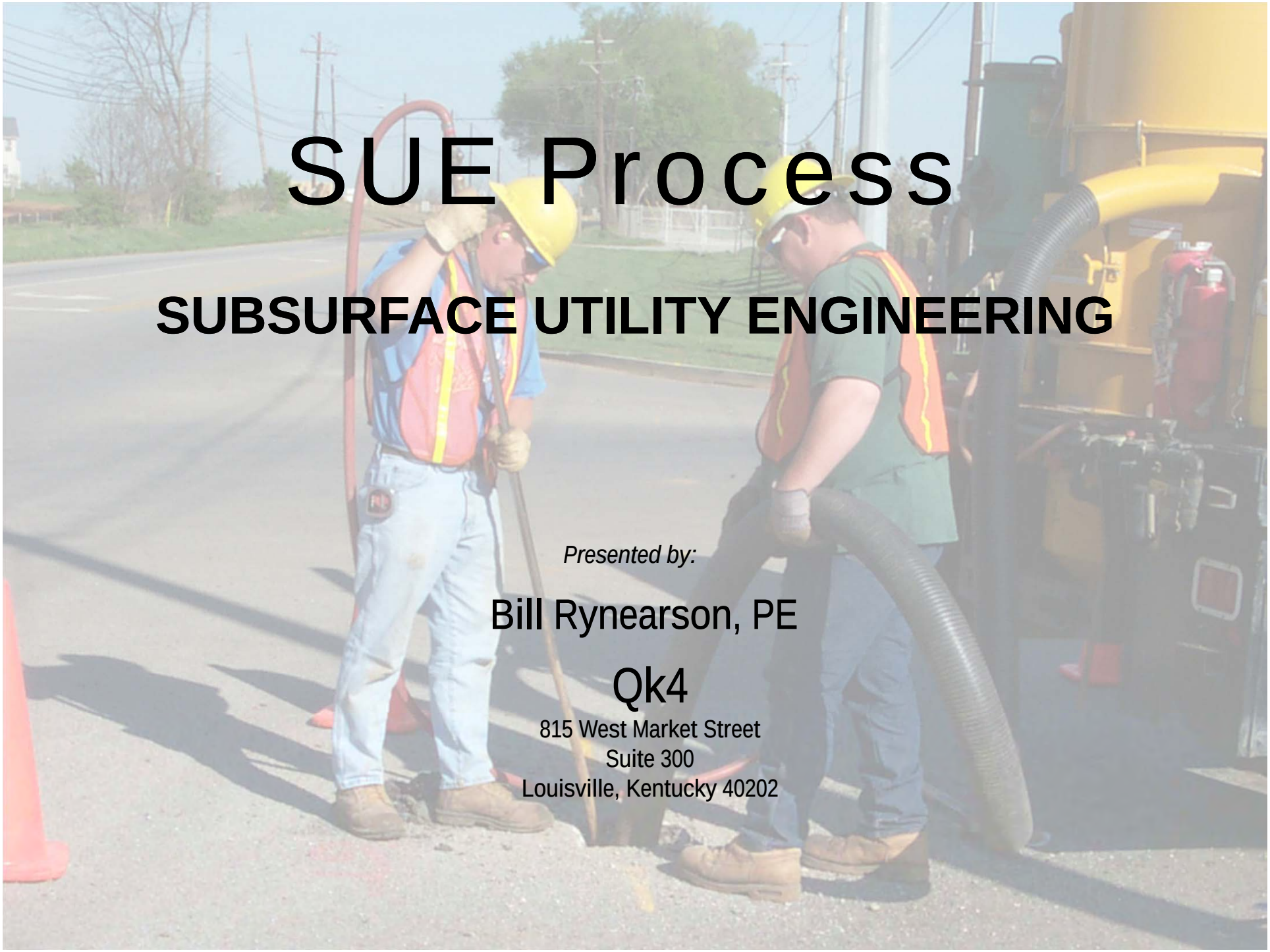


SUE Process

SUBSURFACE UTILITY ENGINEERING

Presented by:

Bill Rynearson, PE

Qk4

815 West Market Street
Suite 300
Louisville, Kentucky 40202

CI/ASCE 38-02

ASCE STANDARD

American Society of Civil Engineers

Standard Guideline for the Collection and Depiction of Existing Subsurface Utility Data

This document uses both Système International (SI) units and customary units.

ASCE

CI
Construction Institute

Utility Quality Level Attributes

LEVEL D

Review records and oral recollections.

LEVEL C

Identify and field survey surface appurtenances of existing subsurface utilities.

LEVEL B (Designation)

Approximate horizontal position of subsurface utilities using surface geophysical methods. Field survey and apply to plan drawings.

LEVEL A (Location)

Accurately locate utility using non-destructive excavation methods. Field survey the results and apply to plan and profile drawings.

Recent SUE Results

16 Projects

736 Locates – 27 “ Dry” Holes

SUE Process

- Obtain Preliminary Design Plans
- Coordinate with utilities (QLD)
- One Call
- Call non-subscribers to one-call

SUE Process (Con't.)

- Initial field work (QLC & QLB)
- Non-destructive excavations (QLA)
- Field survey
- Prepare Deliverables
  - Spreadsheet
  - Plan & Profile

QUALITY LEVEL D

Coordinate With Utilities


PARKWAY
PLACE
WILLIAMSBURG COURT
25' EASEMENT #2013
476-876
476-874
VIEUX CARRE DRIVE
HURSTBOURNE
PARKWAY
EASEMENT B
EASEMENT C
ESMT D
ROUNDSTONE
WILLOWHURST PLACE
479-874
17-C 1of2 476-876

QUALITY LEVEL C

Above Ground Appurtenances

QUALITY LEVEL B

Designate Using Geophysical Means


50-60
505
8.1 K
81 K
480 K
201
CM
IN
ON-OFF
VOLUME
FREQ.
(Hz)


50-60
505
8.1 K
81 K
480 K
202
CM
IN
ON-OFF
VOLUME
FREQ
(Hz)


50-60
505
8.1 K
81 K
400 K
203
LOCK
(EST) 117.
CM
IN
ON-OFF
VOLUME
FREQ.
(Hz)


SUZUKI
UofL

QUALITY LEVEL A

Non-destructive Excavations


15635C


CAUTION
Vac-Hoe


INDIANA
15635C
TRUCK
INDIANAPOLIS
EQUIP.
APOLIS


ALLIED


CAUTION
VAC-HOG


CAUTION
Vac-Hoe

Spreadsheet

VACUUM EXCAVATIONS

Existing Telephone and Gas Facilities

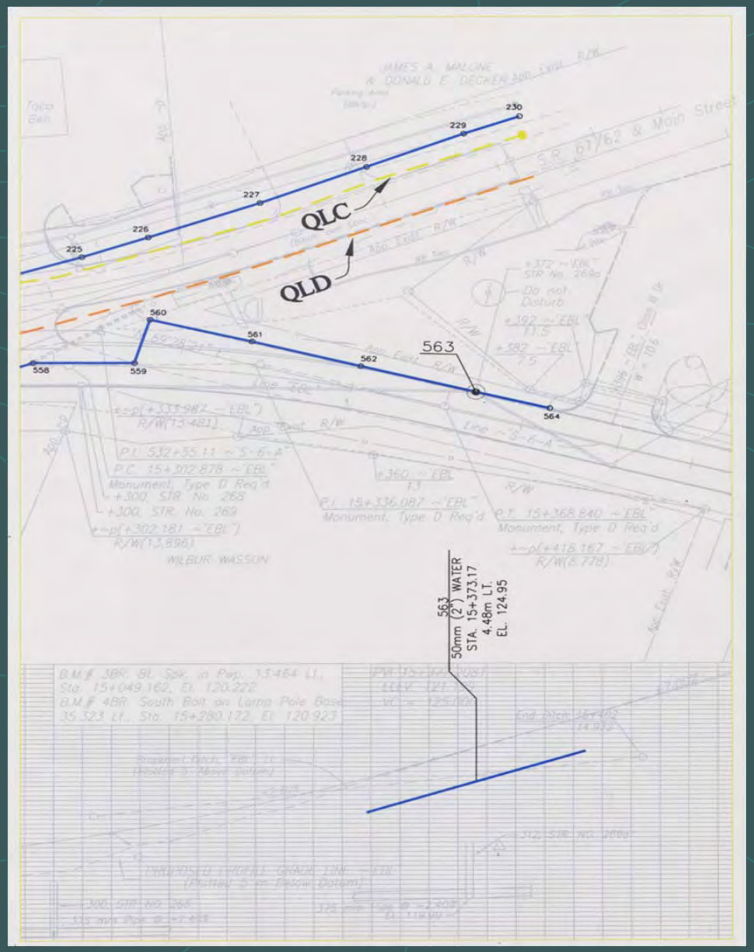
Project: Westport Road (Hubbards to I-264) **Item No.: 5-28.10** **Date: 7/29/2004**

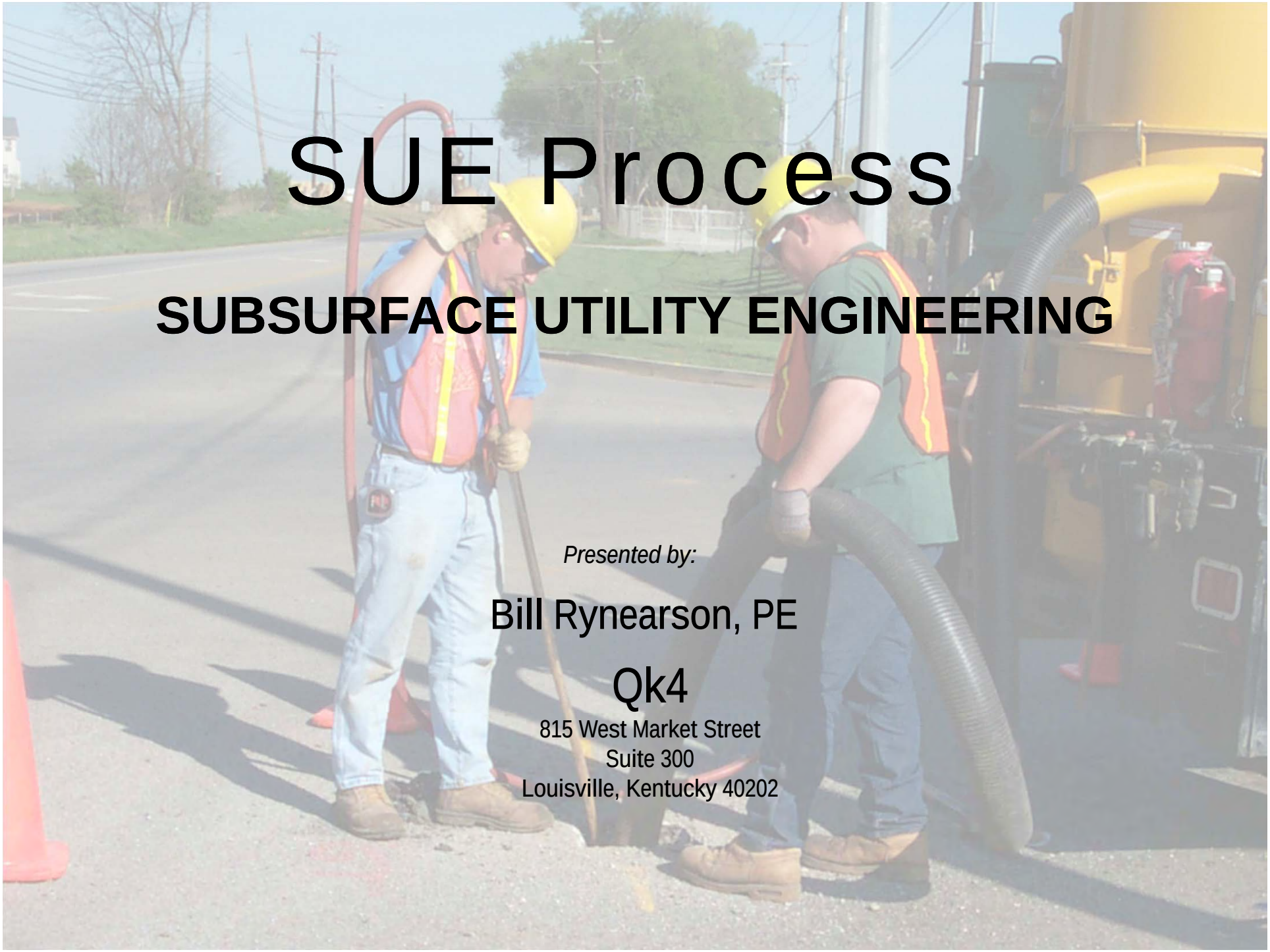
Clark Sanders (Bell South) 452-8844, Greg Geiser (LG&E) 333-1949

Westport Road Stationing

TEST HOLE	UTILITY	STATION	OFFSET	NORTHING	EASTING	GROUND ELEVATION	DEPTH (ft)	TOP UTILITY ELEVATION	SURFACE TYPE
1	8" Gas	9+85.40	21.24 Lt.	279321.95	1599666.29	546.66	5.49	541.17	Grass
2	Telephone	10+32.86	21.62 Lt.	279346.69	1599706.79	546.65	3.23	543.42	Asphalt
3	8" Gas	10+41.53	50.56 Rt.	279289.25	1599751.35	546.51	4.70	541.81	Grass
4	8" Gas	10+49.10	20.19 Lt.	279353.81	1599721.46	546.74	4.22	542.52	Grass
5	Telephone	11+02.95	23.75 Lt.	279384.57	1599765.81	547.14	3.27	543.87	Grass
6	8" Gas	10+99.45	18.37 Lt.	279378.15	1599765.57	547.12	2.80	544.32	Grass
7	2" Gas	10+99.28	16.23 Lt.	279376.23	1599766.52	547.16	3.49	543.67	Grass
8	Telephone	11+92.90	23.84 Lt.	279430.91	1599842.89	547.01	2.89	544.12	Grass
9	Telephone	12+98.76	23.17 Lt.	279484.78	1599934.02	550.07	3.22	546.85	Grass
10	Top Tel. Vault	13+62.75	24.11 Lt.	279518.50	1599988.42	549.67	0.44	549.23	Asphalt
11	Telephone	13+81.31	24.57 Lt.	279528.44	1600004.10	550.23	4.00	546.23	Asphalt
12	2" Gas	13+88.14	41.74 Lt.	279546.68	1600001.12	551.80	3.86	547.94	Grass
13	Telephone	15+00.32	25.02 Lt.	279589.91	1600106.25	552.34	2.33	550.01	Grass
14	8" Gas	15+00.33	28.14 Lt.	279592.61	1600104.68	552.92	3.26	549.66	Grass
15	2" Gas	15+00.51	21.60 Lt.	279587.06	1600108.15	552.27	2.76	549.51	Asphalt
16	Telephone	15+99.85	26.36 Lt.	279641.15	1600191.98	553.21	2.77	550.44	Grass
17	Telephone	16+99.80	30.59 Lt.	279693.99	1600277.36	553.16	3.41	549.75	Grass
18	8" Gas	16+99.55	27.89 Lt.	279691.51	1600278.45	553.06	2.75	550.31	Grass
19	4" Gas	16+99.57	26.53 Lt.	279690.33	1600279.12	553.14	3.27	549.87	Grass
20	Telephone	17+99.51	34.87 Lt.	279745.68	1600363.22	552.54	3.59	548.95	Grass
21	Telephone	18+97.52	41.26 Lt.	279797.67	1600446.55	552.16	3.87	548.29	Grass
22	8" Gas	18+99.17	35.50 Lt.	279793.38	1600450.73	552.08	3.09	548.99	Grass
23	2" Gas	18+98.89	34.27 Lt.	279792.16	1600451.07	552.18	3.98	548.20	Grass
24	Telephone	19+17.17	43.10 Lt.	279808.59	1600462.98	552.10	4.42	547.68	Grass
25	6" Gas	19+68.60	86.77 Lt.	279871.40	1600487.63	552.61	4.69	547.92	Grass
26	2" Gas	19+77.68	50.15 Rt.	279755.07	1600560.42	553.32	3.93	549.39	Asph/Conc
27	8" Gas	19+81.37	49.82 Rt.	279757.10	1600563.51	553.38	4.05	549.33	Asph/Conc
28	Telephone	19+91.32	45.45 Lt.	279845.74	1600527.21	552.89	5.30	547.59	Asph/Conc
29	Telephone	20+41.15	46.36 Lt.	279870.12	1600570.67	550.70	2.58	548.12	Grass
30	Telephone	20+99.14	47.66 Lt.	279898.71	1600621.15	550.68	2.72	547.96	Grass
31	8" Gas	20+99.06	32.87 Lt.	279885.64	1600628.07	552.13	4.33	547.80	Asphalt

Plan and Profile





SUE Process

SUBSURFACE UTILITY ENGINEERING

Presented by:

Bill Rynearson, PE

Qk4

815 West Market Street
Suite 300
Louisville, Kentucky 40202