



ENVIRONMENTAL CONSULTATION & REMEDIATION

KPRG and Associates, Inc.

**ADDITIONAL SITE INVESTIGATION WORK PLAN and BUDGET REQUEST**

December 13, 2019

Mr. Timothy G. Alessi, P.G.  
Wisconsin Department of Natural Resources  
2300 N. Dr. Martin Luther King Drive  
Milwaukee, WI 53212

VIA Email and US Mail

KPRG Project 10009

Re: Additional Site Investigation Work Plan and Budget Request  
Former Bask Dry Cleaners – Waukesha, WI  
BRRTS# 02-68-297669, FID# 268188800

Dear Mr. Alessi:

KPRG and Associates, Inc. (KPRG) submitted a Status Report to the Wisconsin Department of Natural Resources (WDNR) for the above referenced site on June 12, 2019. A meeting was held with the WDNR on December 4, 2019 to discuss the project status and pathway to closure. At that meeting, and in a follow-up e-mail dated December 5, 2019, WDNR outlined additional site investigation work to be completed based on the existing data generated to date. The following is the proposed Additional Site Investigation Work Plan for the requested work.

**ADDITIONAL SITE INVESTIGATION SCOPE OF WORK**

For budget estimating purposes, the additional work discussed below is divided into the following tasks:

- Task 1 – Additional Requested Work Planning/Coordination
- Task 2 – Additional Monitoring Well Installations and Well Abandonment
- Task 3 – Additional Groundwater Sampling
- Task 4 – Additional Vapor Intrusion Investigation
- Task 5 – Existing SSDS Inspections

- Task 6 – Additional Reporting

Each task is discussed separately below.

#### Task 1 – Additional Requested Work Planning/Coordination

The scope of this task includes the project management and planning that will be required for the successful completion of the proposed work. This includes obtaining a new permit(s) from the City of Waukesha for the installation of the proposed well(s) within the City right-of-way and contacting the existing residences with sub-slab depressurization system (SSDS) for inspection scheduling. In addition, the following work will be performed in an attempt to gain access to the additional residences and apartment building properties for vapor intrusion (VI) sampling and potential installations of SSDSs:

- Submitting at least two letters explaining the issue and requesting a signature for an Access Agreement to allow KPRG to complete the required VI sampling.
- Door-to-door visits with non-responsive residents to further discuss the request and answer any questions.
- Schedule samplings as needed once signed access is received.
- If a resident is still not responding after two mailings and attempting direct conversation (house visit), the WDNR will be requested to send a letter to the resident requesting their cooperation in study.

#### Task 2 – Additional Monitoring Well Installations and Well Abandonment

This Work Plan includes the installation of two proposed monitoring wells, MW-22 and MW-23 based on the December 4, 2019 meeting with WDNR. The proposed approximate well locations are provided on Figure 1. Actual locations may vary due to property access, rig constraints and utilities. The well installation, development and reporting procedures will be in accordance with previously approved work plans. The estimated depth of the wells is 55 to 60 feet.

It is noted that during the December 4, 2019 meeting, it was asked whether existing upgradient monitoring wells MW-1 and MW-2 located within the north parking lot can be abandoned to facilitate planned parking lot resurfacing. Since these wells are upgradient and have not had any VOC detections historically, the WDNR indicated that the wells can be properly abandoned.

#### Task 3 – Additional Groundwater Sampling

One round of groundwater samples will be collected from wells that had recent detections of chlorinated volatile organic compounds (CVOC). This round will include wells MW-5, -6, -7, -8, -10, -11, -12, -13, -14, -15, -16, -19, -20 and 21 and the two new wells MW-

22 and MW-23. A second round will also be collected from the new wells MW-22 and MW-23. One duplicate sample will be collected with each sampling.

Groundwater samples will be collected using low flow sampling techniques. Sample handling, shipping and analytical procedures will be in accordance with previously approved work plans. The groundwater samples will be analyzed for CVOCs.

#### Task 4 – Additional Vapor Intrusion Investigation

The additional requested vapor intrusion investigation is divided into the following subtasks:

- Task 4a – Residential Property(Single Family)
- Task 4b – Residential Property (Multi-family)
- Task 4c – Commercial Property
- Task 4d – Sewer Lines (no sampling work proposed)

The scope for each task is discussed separately below.

##### Task 4a – Residential Property (Single Family)

A total of 17 additional residences have been identified by WDNR at this time for vapor intrusion investigation. These properties are shown on Figure 2. Once access to a single family home property is obtained (see Task 1), the following initial sampling work will be performed:

- The basement will be inspected and any obvious potential sources of air quality impacts with solvents will be requested to be temporarily removed by the resident. A brief demographics evaluation will be completed as possible to determine whether the acute exposure target population (female within child bearing years) may live within the residence.
- A 24-hour indoor air sample, along with a concurrent 24-hour outdoor air sample, will be collected using a 6-liter summa canister with a 24-hour flow regulator.
- Upon completion of the indoor/outdoor air sampling, a Cox Colvin vapor pin will be installed through the basement floor of the residence. The vapor pin construction will be tested for air tightness using either the helium shroud or water dam test methods. A 6-liter summa canister assembly with a 30-minute flow regulator will then be connected and a shut-in test will be completed to verify that all connections in the sampling train are tight. Upon successful testing, a 30-minute sub-slab vapor sample will be collected. The vapor probe will be left in place for subsequent sampling events as necessary.

- All air/vapor samples will be sent to a Wisconsin certified analytical laboratory for analysis using Method TO15. The samples will be analyzed only for tetrachloroethene (PCE) and trichloroethene (TCE) as these are the two constituents of potential concern based on existing groundwater data. Expedited analytical turnaround may be requested based on the demographics evaluation noted in the first bullet above.
- Within no more than 10 days of receipt of the analytical data from a sampling event, the data will be provided to the residents as well as the WDNR. The results will also be verbally discussed as necessary with the resident/property owner.

If the resulting data indicates that there are no indoor air vapor action level (VAL) exceedances and no sub-slab vapor risk screening level (VRSL) exceedances, then two subsequent rounds of indoor/outdoor air and sub-slab vapor sampling will be completed at least 3 months apart. If there continue to be no VRSL exceedances at that residence (with one of the samplings having occurred during winter conditions), no additional sampling or work will be required at that residence and the sub-slab vapor probe will be removed and the hole properly sealed with hydraulic cement, or an equivalent.

If during any of the sampling events an indoor air VAL or a sub-slab vapor VRSL is exceeded, a sub-slab depressurization system (SSDS) will be installed within the residence. It is noted that a temporary carbon air filter unit may need to be placed within the basement of the residence while the SSDS installation is being scheduled/coordinated. The need for this additional interim action will be determined on a case by case basis. As part of SSDS commissioning, one follow-up round of indoor air sampling (approximately 4 to 8 weeks after system installation) to verify that the indoor air exceedance(s) have been rectified and, with the property owners approval, up to two additional rounds of pressure field extension testing (PFET) by the installation contractor to document that the system is addressing the overall footprint of the residence. The WDNR will be provided with commissioning documentation for each required system installation.

#### Task 4b – Residential Property (Multi-family)

Two structures within The Meadows apartment complex were identified by WDNR for vapor intrusion sampling (see Figure 2). The southern-most structure is an apartment building covering approximately 14,950 square feet. The smaller structure to the north is the property management/community center building which also includes some common use areas for the residents. The size of this structure is approximately 7,500 square feet. Based on WDNR guidance one sub-slab vapor sample should be collected per approximately 2,000 square feet of structure footprint. Based on this guidance, up to 8 vapor pins will be installed/sampled for southern structure and up to 4 vapor pins will be installed/sampled for the northern structure. In addition, 4 indoor air samples will be collected within the basement of the larger apartment building structure and 2 indoor air samples will be collected

within the property management/community center building. The same procedures and frequencies will be used as discussed in Task 4a above.

#### Task 4c – Commercial Property

The WDNR has requested that sub-slab vapor sampling be completed within the former dry cleaner space (see Figure 2). The former dry cleaning operation was within a rental unit of approximately 2,000 square feet. Two vapor pins will be installed and sampled within the former dry cleaning space. One vapor pin will be within the southern half of the space and one within the northern half of the space. The same installation and sampling procedures will be used as detailed under Task 4a. Two rounds of vapor sampling will be conducted, one during winter conditions and one during late Spring/Summer conditions. If there are no exceedances documented with the sampling, the vapor pins will be removed and the holes properly sealed with hydraulic cement or an equivalent. If an exceedance is documented, appropriate potential actions will be determined at that time. No indoor/outdoor air samples are proposed within the former dry cleaner space.

#### Task 4d – Sewer Lines

During the December 4, 2019 meeting and subsequent WDNR e-mail, the potential for evaluating the sewer lines for potential vapor issues was noted. KPRG has obtained available information regarding sanitary and storm water sewers within the subject area. This information is provided in Attachment 1.

A review of the overall area sewer layout indicates that the sanitary and storm water sewers generally run parallel within the same utility corridor. The sanitary sewer line on the north side of the Westbrook Shopping Center property, into which potential discharge occurred (line was repaired as part of remedial activities), drains to the west and into the Ramona Road/Sunnyside Drive sewer. The discharge then flows to the west beneath Sunnyside Drive. At no time could any discharge that may have occurred into the sanitary sewer have moved beneath Sunnyside Drive to the east of the confluence between the Ramona Road and Sunnyside Drive sewers where groundwater impacts are migrating. The sewers beneath Rambling Rose, Laura Lane and Ruben Drive are all independent (not connected with) of any sewers associated with Westbrook Shopping Center and all drain to the west.

The base of the sewer lines in the overall area on the north side of Westbrook Shopping Center are approximately nine to ten feet deep. Groundwater within this area is greater than 16 feet, based on water levels at wells MW-3, MW-4, MW-5, MW-7, MW-11 and MW-12. The base of the sewer lines beneath Sunnyside Drive are approximately 13 feet below ground surface (bgs). The depth to water at wells MW-14 and MW-8 along Sunnyside Drive are greater than 30 feet (just past well MW-10 is where a silty/clayey sand layer pinches out and water levels drop substantially). Similar observations are made for the sewers beneath Rambling Rose Road, Laura Lane and Ruben Drive. Available sewer cross-sections are included in Attachment 1.

Based on the above discussions and the existing trace of groundwater and soil vapor impacts presented in various submittals to WDNR, there does not appear to be any correlation of those impacts to the sewer line utility corridors. Therefore, no additional vapor or utility investigation is contemplated or proposed.

#### Task 5 – Existing SSDS Inspections

Per the previous WDNR request (see Work Plan dated April 2, 2018), KPRG will perform inspections on the nine existing SSDS associated with this project (see Figure 2). The manometer at each system will be checked as well as all associated piping. The results of the inspections will be documented and any items identified that may need repair will be addressed and the repair documented.

#### Task 6 – Additional Reporting

This task covers the additional effort in tabulating, evaluating and reporting the additional data. Specifically, this includes:

- Two groundwater data transmittals with updated data tales and figures as appropriate. New well installation documentation will also be included (boring logs, well construction and well development).
- Air/vapor testing data transmittals for residents/property owners and WDNR (up to 8 man hours).
- Two quarterly soil vapor data summary reports for submittal to WDNR.

#### PATHWAY TO CLOSURE

KPRG understands that once the extent of groundwater and soil vapor impacts have been sufficiently defined, the site will be ready for conditional closure consideration. If the data from the above proposed work indicate that additional work may be necessary, then discussions will be held with the WDNR to define the scope of any potential work. The proposed closure plan will include an Operation and Maintenance Plan for the subject property. Relative to the off-site properties, the home owners will be notified that the WDNR requires the sub-slab depressurization systems to be operational and maintained. An informational package will be provided that will include system inspection requirements and the contact information of the installation contractor if service is needed.

#### COST ESTIMATE

Costs are summarized in Table 1 and detailed on the costing sheets in Attachment 2. The additional requested budget for the above defined scope of work is \$125,565. The costs are based on the following assumptions:

- KPRG's client will pay all subcontractors (drilling lab, etc.) directly as to not incur KPRG mark-up which is not DERF reimbursable.
- Task 1 – Includes two rounds of property access request letters (via US Mail) and one round of door-to-door visits for the vapor intrusion study work (17 residences and one apartment complex). Both new monitoring wells will require City of Waukesha permits.
- Task 2 – Cascade drilling will be drill and construct the wells using Sonic drill method. Two wells up to 60 feet deep. Up to 8 drums of investigation derived waste (drill cuttings and purge water) for proper non-hazardous waste disposal. Two wells abandoned (MW-1 and MW-2) with documentation.
- Task 3 – One round of groundwater sampling for 17 wells and a resample event for the two new wells. One duplicate sample per round of sampling. All groundwater samples to be analyzed for CVOCs.
- Task 4a – Access is granted to 17 residents, one vapor pin installation per residence, with three samples per round (indoor air, outdoor air and sub-slab vapor) and three rounds of sampling. This yields a potential of up to 153 air/vapor samples.
- Task 4b – Up to 12 vapor pin installations with 19 samples (12 sub-slab vapor, 6 indoor air and 1 outdoor air) collected per round with three rounds. This yields a potential of up to 57 air/vapor samples.
- Task 4c – Two vapor pins sampled twice. No indoor/outdoor air sampling. This yields four vapor samples.
- Task 4a-c – All air and vapor samples analyzed only for PCE and TCE. Cost assumes standard analytical turn around. Expedited turnaround based on demographics will increase costs for that set of analyses by up to 2.5 times unit rate.
- Task 4d – WDNR will agree that no sewer line vapor migration study is necessary.
- Task 5 – Scope of the inspections limited to that defined in this Work Plan. No additional air sampling or PFET. Access is granted and all SSDS systems are in working order and will not require any maintenance.
- Task 6 – Two groundwater data transmittals, up to 8 hours of air/vapor data transmittals and two quarterly update reports for the vapor intrusion study work. A formal site investigation report revision is not anticipated to be required and not contemplated in this estimate.

This estimate does not include SSDS installations at residences, apartment building or commercial facility. Some of the installation costs, if incurred, may be off-set by an associated reduction in sampling/analytical costs. Preparation of a Case Close-Out package is also not included in the cost as the scope of the package cannot be anticipated until the WDNR approves that the Site Investigation/Remedial Action has been completed for this site.

Only those costs incurred will be billed. All billing will be performed on a monthly basis using the unit rates. No additional work will be performed without KPRG's Client authorization. If there are any questions, please contact me at 262-781-0475.

Sincerely,  
KPRG and Associates, Inc.



Richard R. Gnat, P.G.  
Principal



Patrick Allenstein, P.G.  
Senior Geologist

cc: Mr. Greg Butts, former Bask Dry Cleaners  
Mr. Donald Gallo, Axley Brynelson, LLP

*Attachments*

## **FIGURES**



**LEGEND**

- MW-12 EXISTING MONITORING WELL, PIEZOMETER LOCATION
- MW-17 PROPOSED MONITORING WELL LOCATION
- SV-1A SOIL VAPOR PROBE

ENVIRONMENTAL CONSULTATION & REMEDIATION

**K P R G**

KPRG and Associates, Inc.

14665 West Lisbon Road, Suite 2B Brookfield, Wisconsin 53005 Telephone 262-781-0475 Facsimile 262-781-0478

414 Plaza Drive, Suite 106 Westmont, Illinois 60559 Telephone 630-325-1300 Facsimile 630-325-1593

**PROPOSED ADDITIONAL MONITORING WELLS LOCATIONS**

WESTBROOK SHOPPING CENTER  
WAUKESHA, WISCONSIN

Scale: 1" = 130'

Date: December 11, 2019

KPRG Project No. 10009

FIGURE 1



## **TABLE**

Table 1. Additional Work Plan Budget Summary December 2019 - Former Bask Dry Cleaners, Waukesha WI

Task	KPRG Labor	Expenses	Contractors					Totals
			Analytical	Driller*	IDW Disposal	Private Locate	Surveyor	
1) Additional Requested Work Planning and Coordination	\$9,185	\$50	\$0	\$0	\$0	\$0	\$0	\$9,235
2) Monitoring Well Installation	\$3,355	\$1,070	\$0	\$17,600	\$1,400	\$350	\$1,200	\$24,975
3) Additional Groundwater Sampling (1 Full Event, 1 New Well Resample)	\$5,250	\$1,630	\$1,365	\$0	\$0	\$0	\$0	\$8,245
4a) Soil Vapor Study (17 Residences, 3 Rounds)	\$15,455	\$8,345	\$26,010	\$0	\$0	\$0	\$0	\$49,810
4b) Soil Vapor Study Multi-Family (Apt. Bldg and Community Center, 3 Rounds)	\$4,770	\$7,980	\$9,690	\$0	\$0	\$0	\$0	\$22,440
4c) Vapor Intrusion Study - Commercial (2 Rounds)	\$950	\$1,010	\$1,020	\$0	\$0	\$0	\$0	\$2,980
4d) Vapor Intrusion Study - Sewer Lines	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
5) Existing SSDS Inspections	\$1,820	\$320	\$0	\$0	\$0	\$0	\$0	\$2,140
6) Reporting	\$5,640	\$100	\$0	\$0	\$0	\$0	\$0	\$5,740
Totals	\$46,425	\$20,505	\$38,085	\$17,600	\$1,400	\$350	\$1,200	\$125,565

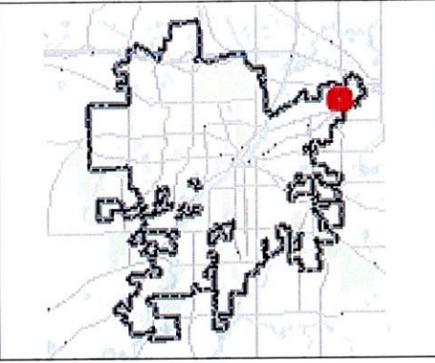
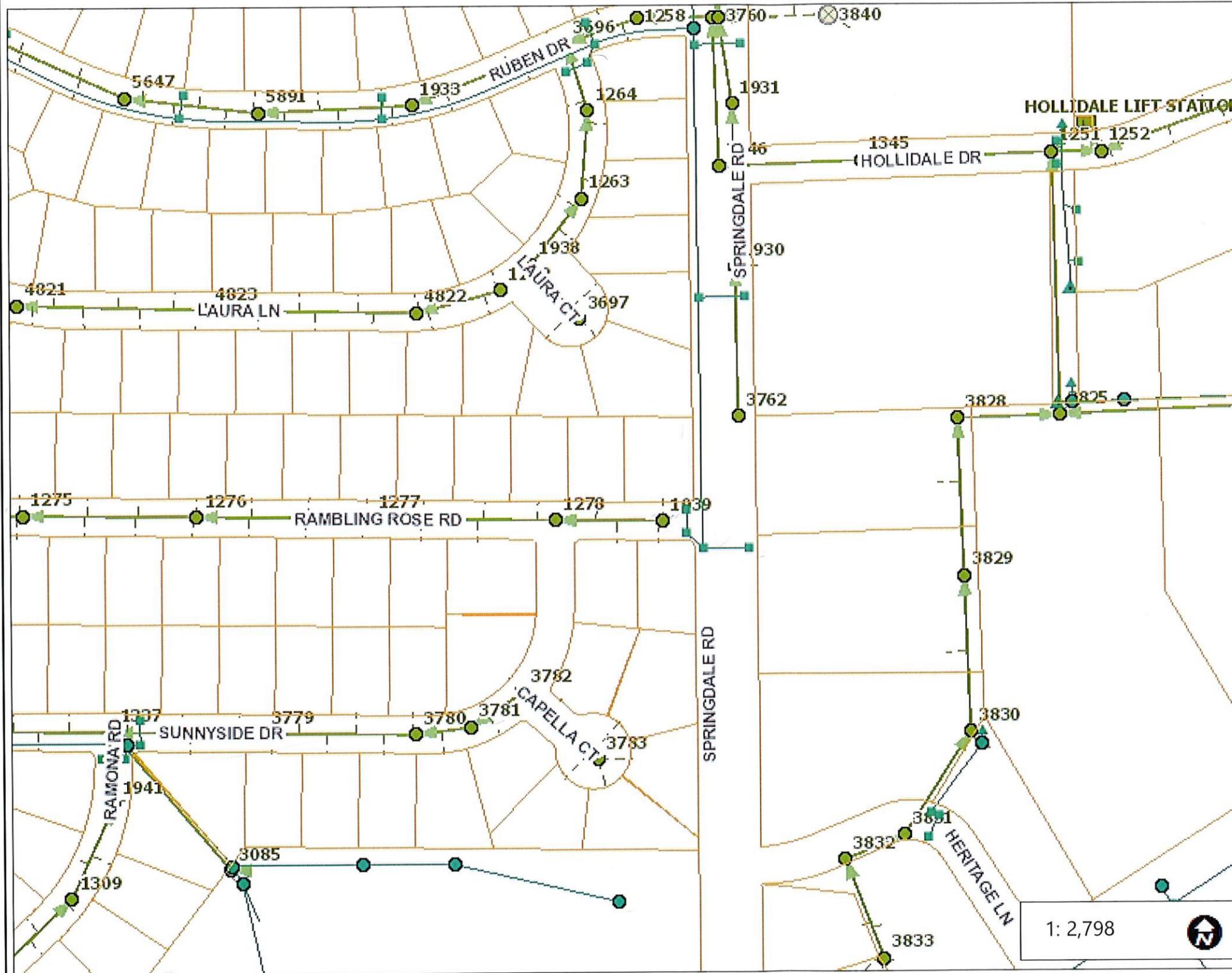
\* - Drilling cost includes two wells to 60 feet deep and abandonment of wells MW-1 and MW-2.

**ATTACHMENT 1**

**SEWER LINE INFORMATION**

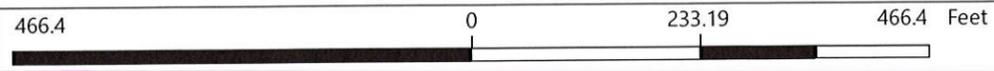


# City of Waukesha Utilities Map



- Legend**
- Parcels
  - Street Names
  - Catch Basin
  - Storm Manhole
  - Storm Discharge Point
  - Storm Inlet Point
  - Storm Lift Station
  - Storm Lateral Line
  - Storm Gravity Main
  - Other
  - Collector
  - Culvert
  - Drain tile
  - Storm Pressurized Main
  - Sanitary Manhole
  - Private Sanitary MH
  - City Sanitary Manholes
  - Sanitary Manhole - Currently In
  - <all other values>
  - <Null>
  - Sanitary Cleanout Structure
  - Sanitary Valve
  - Sanitary Lift Station
  - City Owned
  - Private
  - Sanitary Treatment Plant

1: 2,798

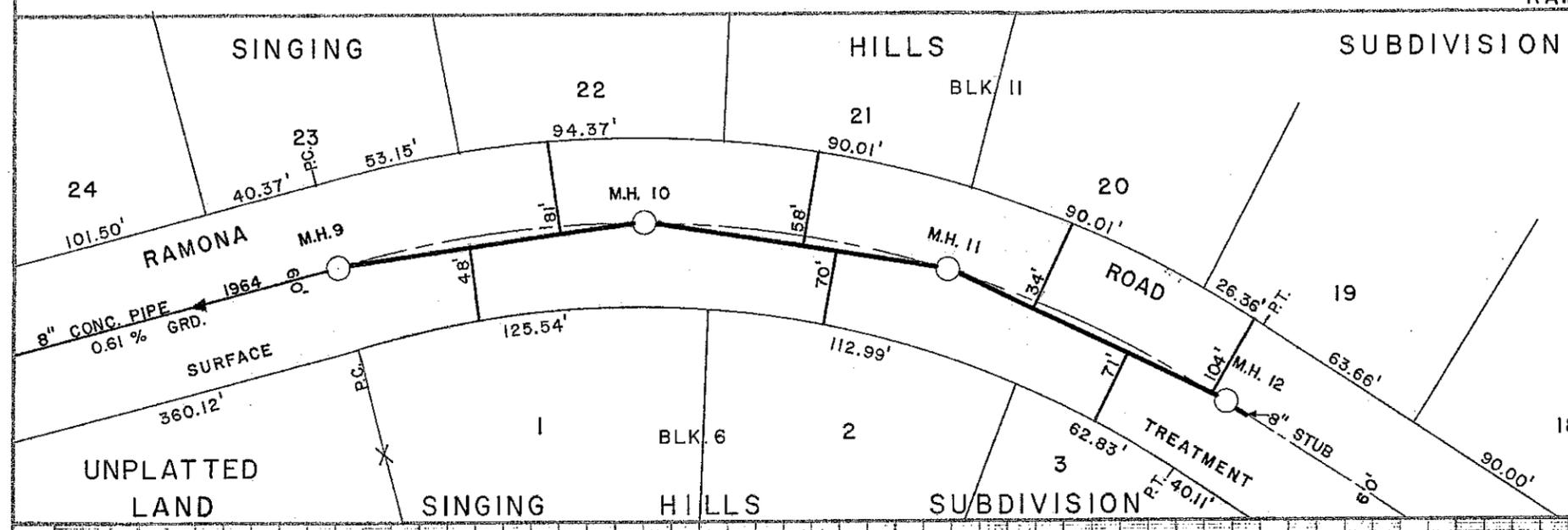


Print Date: 12/3/2019  
City of Waukesha GIS

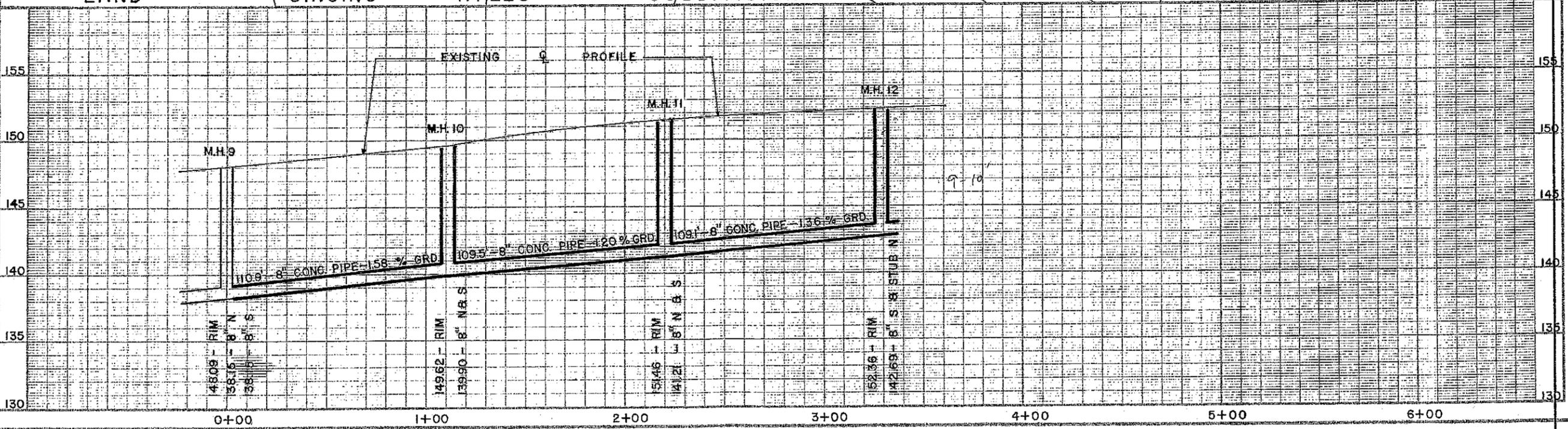
This map is a user generated static output from an Internet mapping site and is for reference only. The data found on this site is considered to be correct, but should not be used for engineering or survey applications without verifying the information from officially recorded sources.

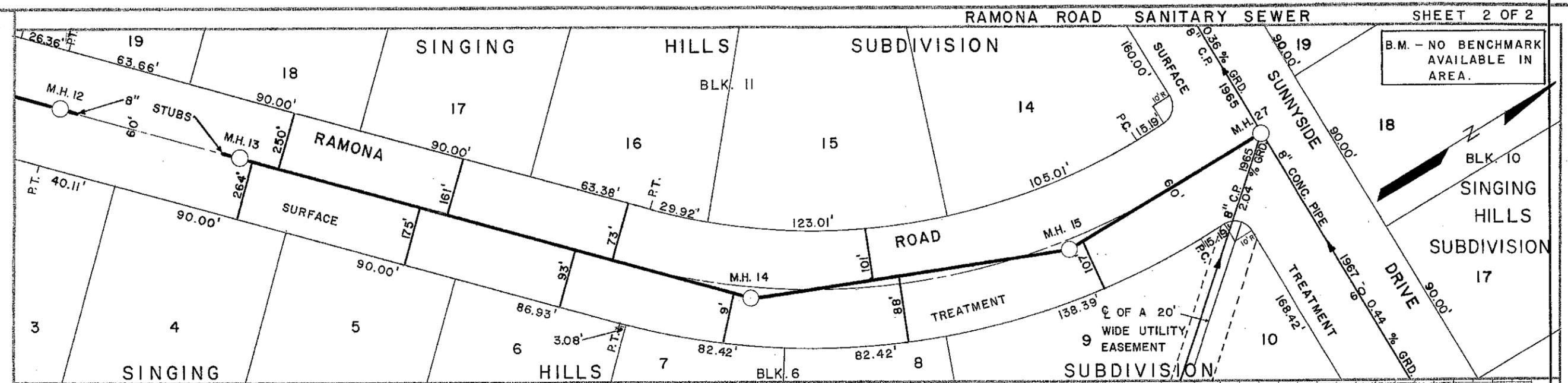
Notes:

B.M. - NO BENCHMARKS AVAILABLE IN AREA.

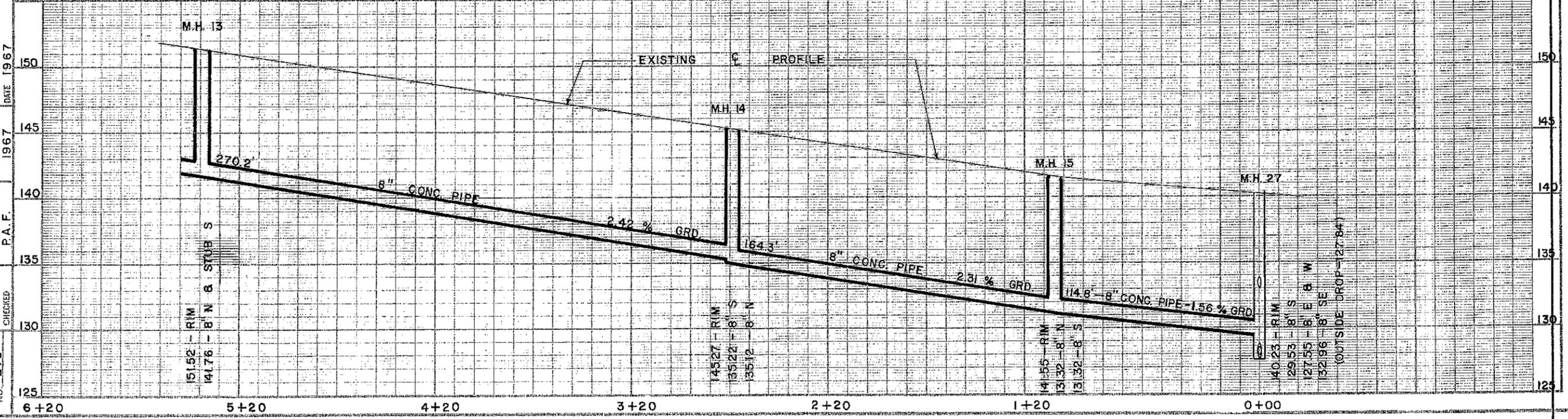


SURVEY NOTE BOOK NO. 270	SURVEYED	DATE	INSPECTOR
	PLOTTED	1967	WILLARD WAPP
	CHECKED	1967	CONTRACTOR
		1967	LEDGES CONSTRUCTION CO.
		DATE	CONTRACT NO.
		1967	PRIVATE CONTRACT

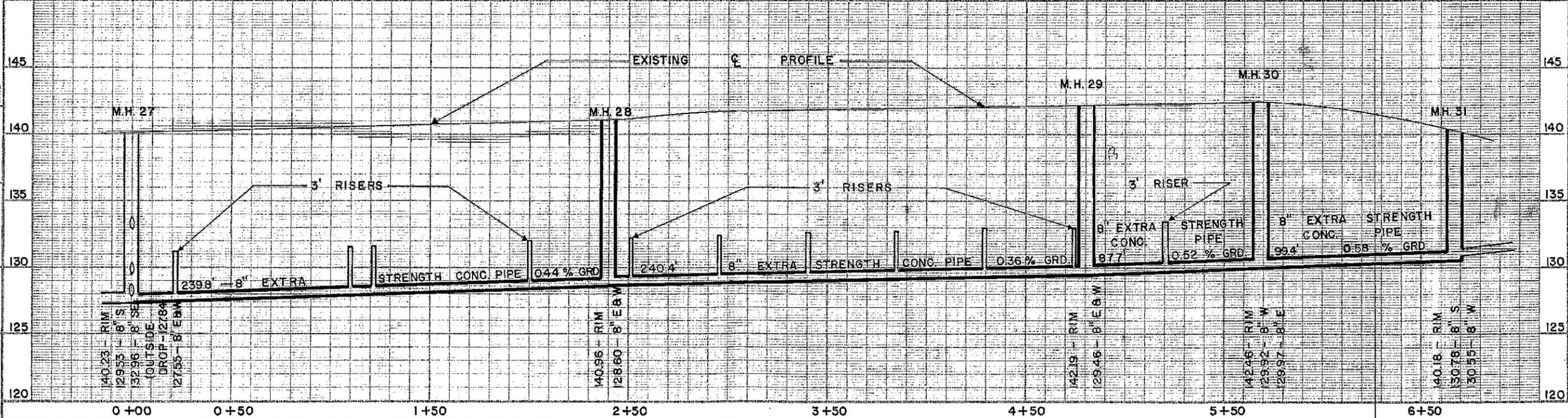
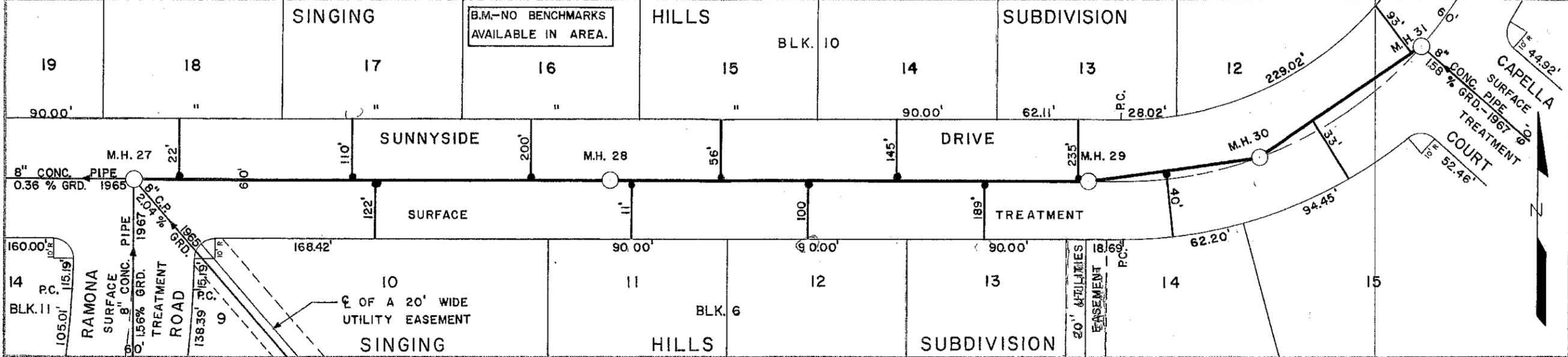




B.M. - NO BENCHMARK AVAILABLE IN AREA.



SURVEY NOTE BOOK NO. 270	SUBMITTED	BY	DATE	INSPECTOR	
	PLOTTED	M. J. H.	1967	WILLARD WAPP	
	CHECKED	R. W. B.	1967	CONTRACTOR	
		P. A. F.	1967	LEDGES CONSTRUCTION CO.	
			DATE	CONTRACT NO.	PRIVATE CONTRACT
			1967		

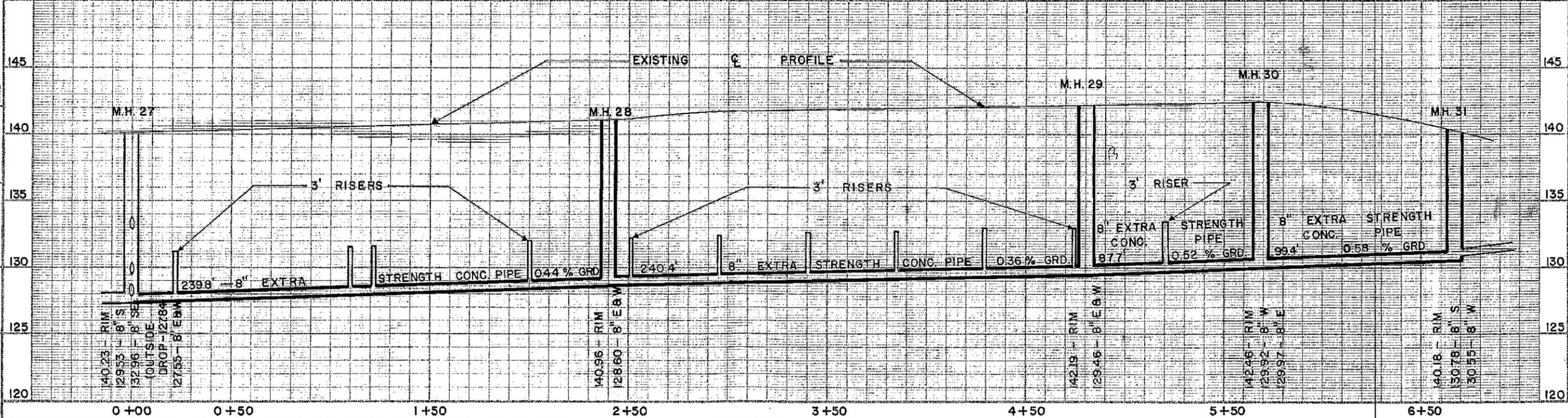


SURVEY NOTE BOOK NO. 270	SURVEYED	DATE	INSPECTOR
	PLOTTED	1967	WILLARD WAPP
	CHECKED	1967	LEDGES CONSTRUCTION CO.
		1967	CONTRACT NO. PRIVATE CONTRACT
			DATE
			1967

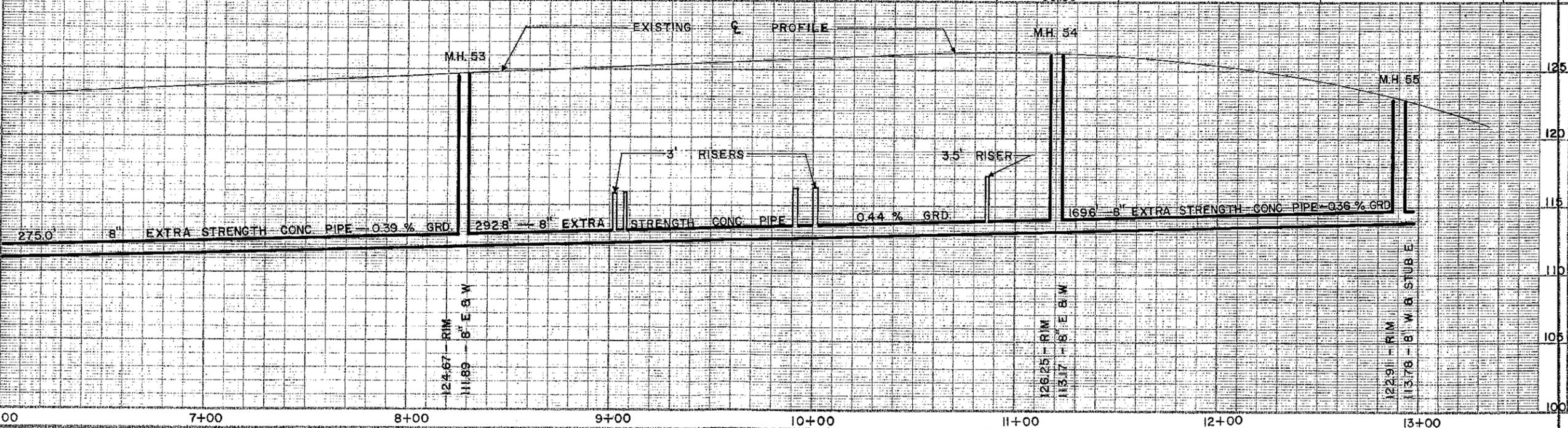
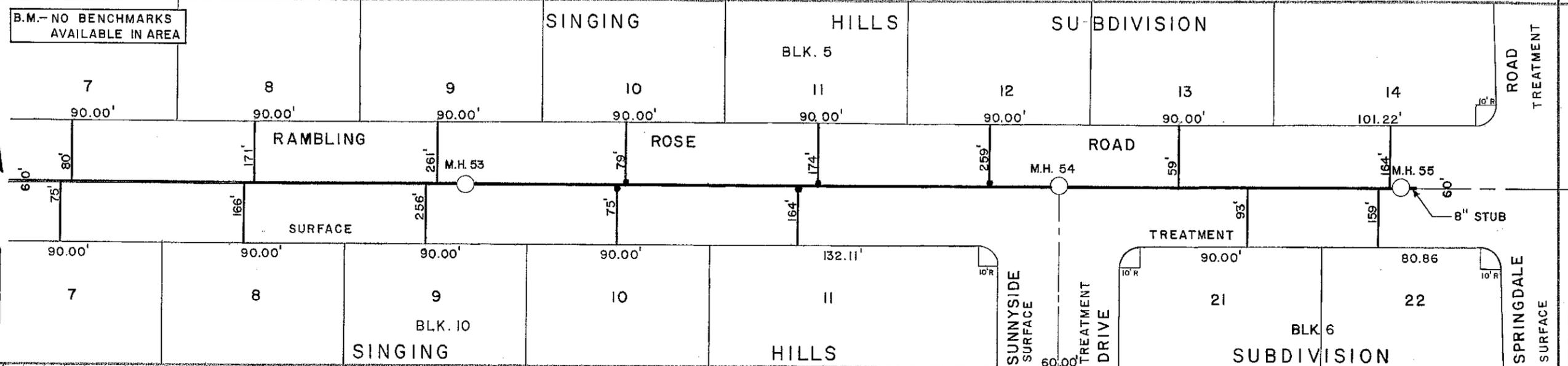
B.M.-NO BENCHMARKS  
AVAILABLE IN AREA.

RAMONA  
SURFACE  
TREATMENT  
ROAD

CAPELLA  
SURFACE  
TREATMENT  
COURT



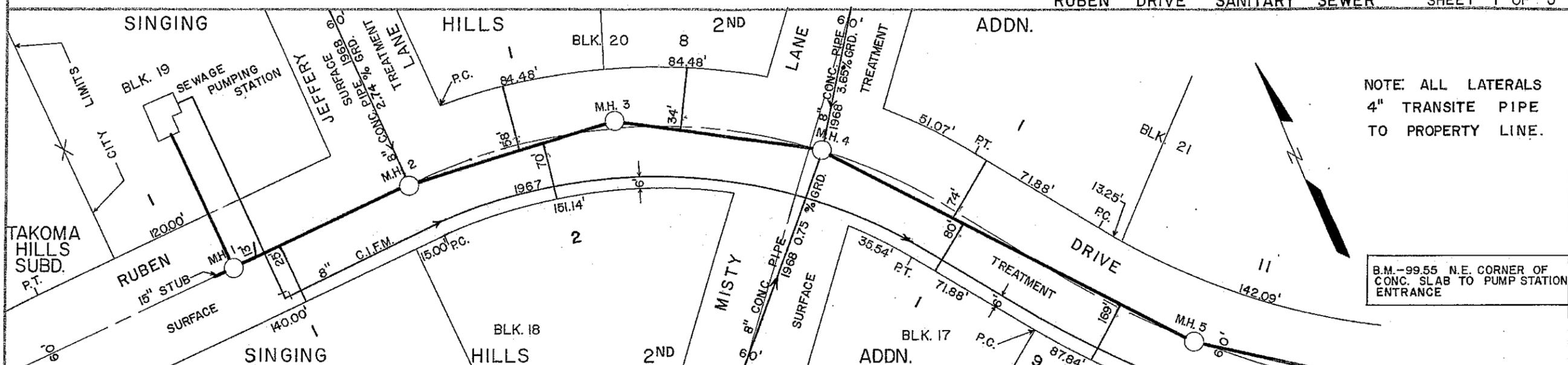
RAMBLING ROSE ROAD SANITARY SEWER SHEET 2 OF 2



SURVEY NOTE BOOK NO. 270	SURVEYED	DATE	INSPECTOR
	PLOTTED	1967	WILLARD WAPP
	CHECKED	1967	LEDGES CONSTRUCTION CO.
		1967	CONTRACT NO. PRIVATE CONTRACT
		DATE	
		1967	

6+00 7+00 8+00 9+00 10+00 11+00 12+00 13+00

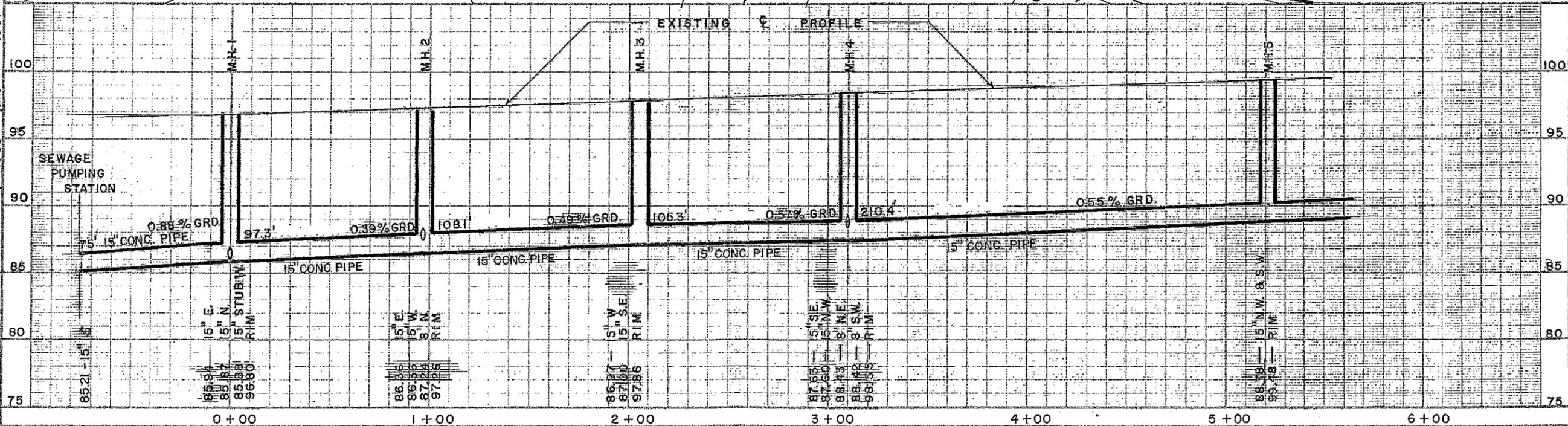




NOTE: ALL LATERALS  
4" TRANSITE PIPE  
TO PROPERTY LINE.

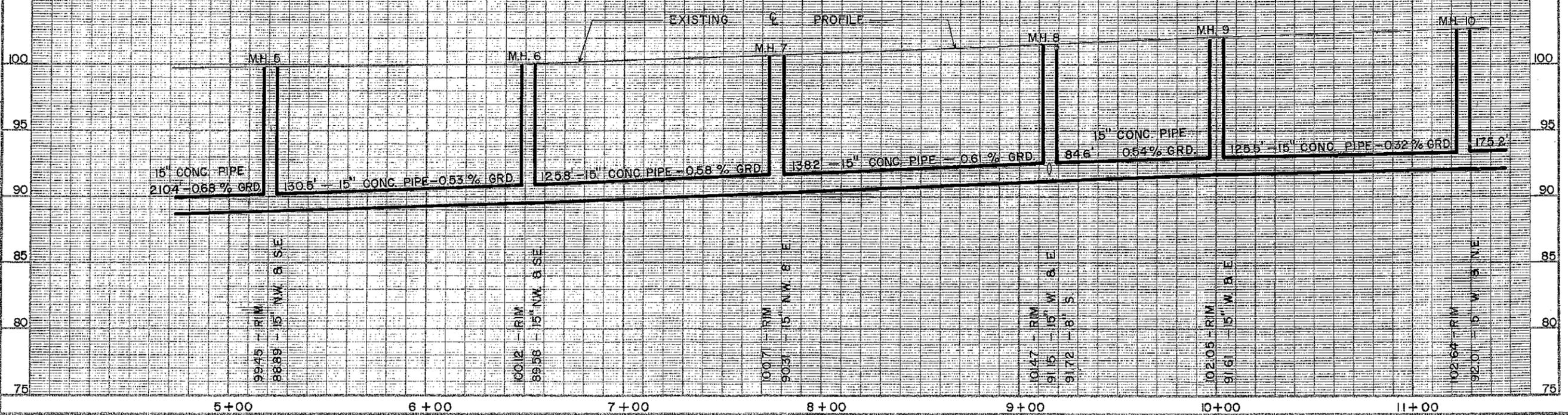
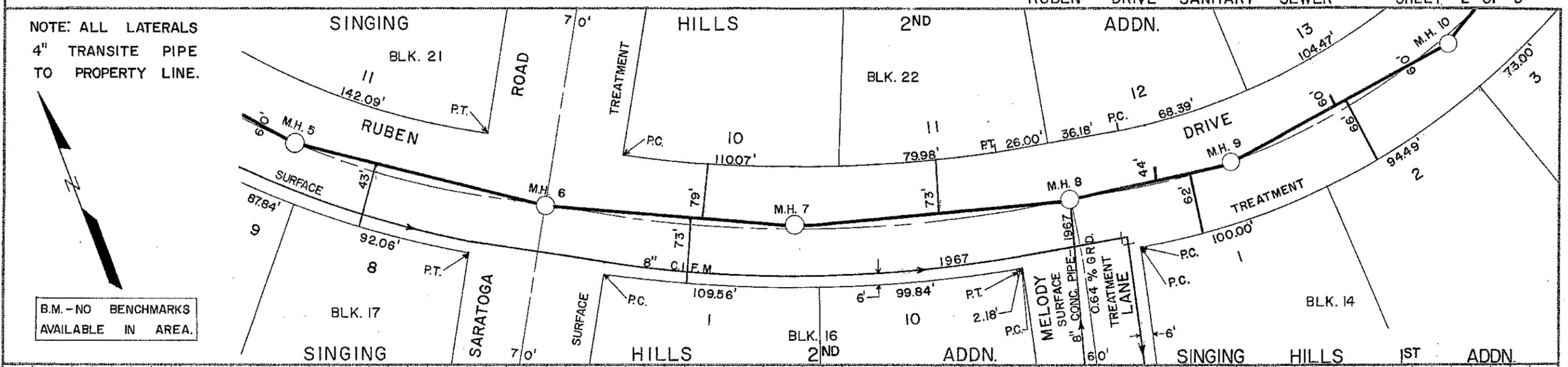
B.M.-99.55 N.E. CORNER OF  
CONC. SLAB TO PUMP STATION  
ENTRANCE

SURVEY NOTE BOOK NO. 270	SURVEYED	1967	INSPECTOR	L. GUTHRIE
	PLOTTED	1967	CONTRACTOR	LEDGES CONSTRUCTION CO.
	CHECKED	1968	CONTRACT NO.	PRIVATE CONTRACT
DATE	1967	DATE	1967	DATE
BY	T.J.H.	DATE	1967	DATE
	D.F.F.	DATE	1967	DATE
	P.A.F.	DATE	1968	DATE



NOTE: ALL LATERALS  
4" TRANSITE PIPE  
TO PROPERTY LINE.

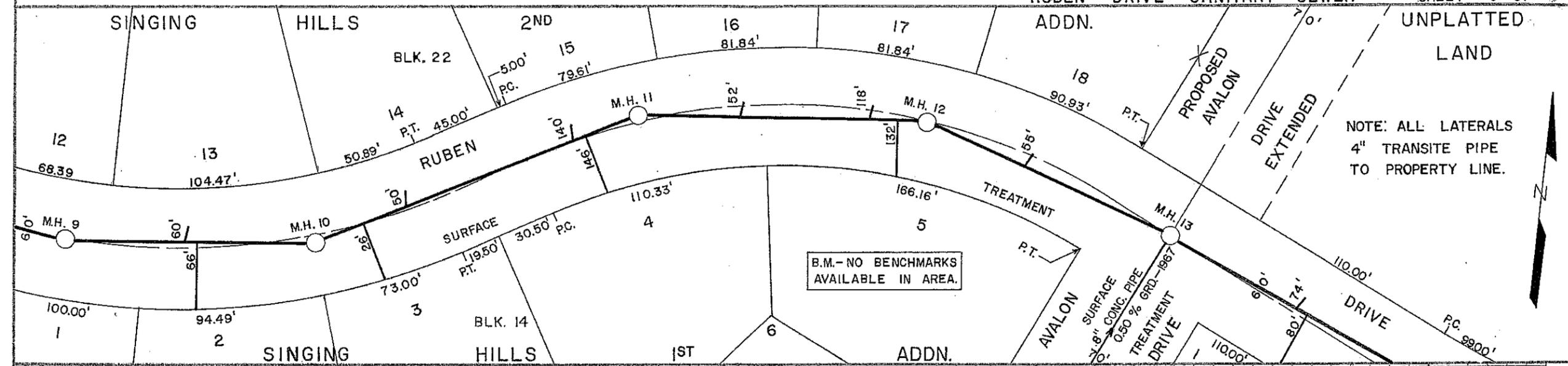
B.M. - NO BENCHMARKS  
AVAILABLE IN AREA.



SURVEY NOTE BOOK NO. 270	SURVEYED	INSPECTOR	L. GUTHRIE
	PLOTTED	CONTRACTOR	LEDGES CONSTRUCTION CO.
	CHECKED	CONTRACT NO.	PRIVATE CONTRACT
		DATE	1967
	BY	T. J. H.	
		D. F. F.	
		P. A. F.	

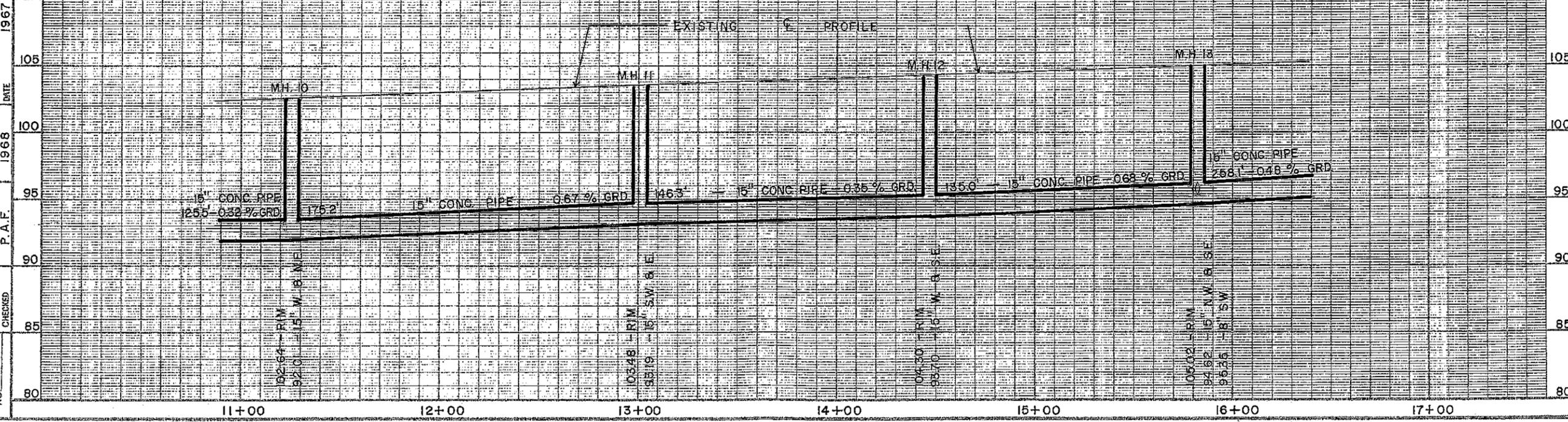
RUBEN DRIVE SANITARY SEWER

UNPLATTED LAND

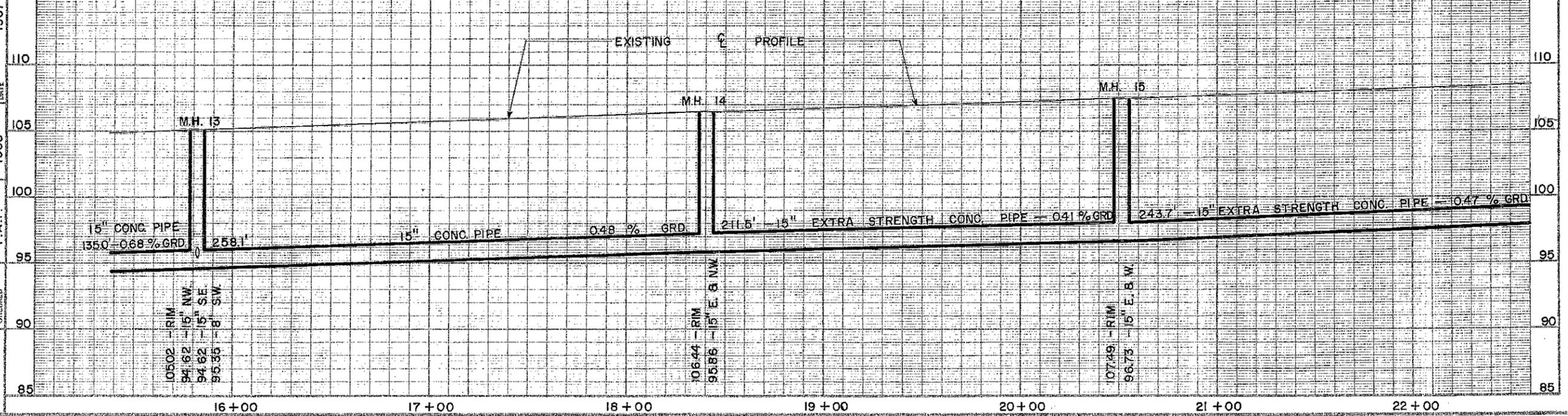
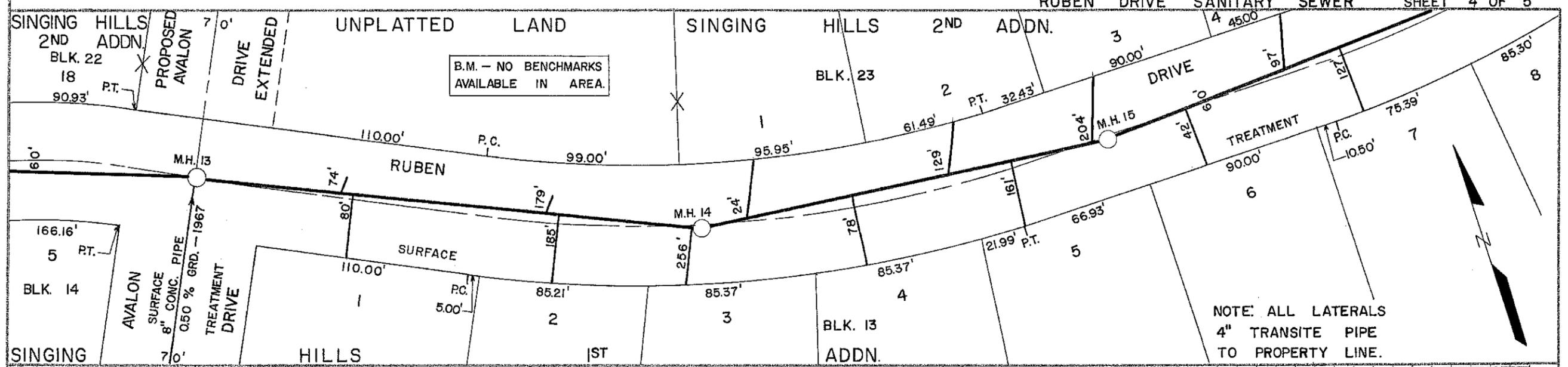


B.M. - NO BENCHMARKS AVAILABLE IN AREA.

NOTE: ALL LATERALS 4" TRANSITE PIPE TO PROPERTY LINE.



SURVEY NOTE BOOK NO. 270	SURVEYED	DATE	INSPECTOR
	PLOTTED	1967	L. GUTHRIE
	CHECKED	1967	LEDGES CONSTRUCTION CO.
		1968	PRIVATE CONTRACT
		BY	
		T.J.H.	
		D.F.F.	
		P.A.F.	



SURVEY NOTE BOOK NO. 270	SURVEYED	1967	INSPECTOR	L. GUTHRIE
	PLOTTED	1967	CONTRACTOR	LEDGES CONSTRUCTION CO.
	CHECKED	1968	CONTRACT NO.	PRIVATE CONTRACT
			DATE	1967
	BY	DATE		
	T. J. H.	1967		
	D. F. F.	1967		
	P. A. F.	1968		

**ATTACHMENT 2**

**DETAILED COSTING SHEETS**

KPRG TASK COSTING SHEET

Project: Former Bask Dry Cleaner - Westbrook Shopping Center - Waukesha, WI

Task: 1 Additional Requested Work Planning/Coordination

<u>Professional Labor</u>	<u>Rate (\$/Hr.)</u>		<u>Units</u>	<u>Total</u>
Principal/Proj. Mgr.	\$155		40	\$6,200.00
Senior Engineer/Geol	\$90		24	\$2,160.00
Eng./Sci.	\$75		8	\$600.00
CADD	\$60		3	\$180.00
Admin. Asst/ Word Proc.	\$45		1	\$45.00
			Total Labor	\$9,185.00

<u>External Expenses</u>	<u>Rate</u>	<u>Type</u>	<u>Units</u>	<u>Total</u>
Reproduction	\$50	Est.	1	\$50.00
Field Vehicle	\$80	Daily	0	\$0.00
Sampling Supplies	\$20	Daily	0	\$0.00
Waukesha Fees	\$300	Est.	0	\$0.00
PPE - Modified Level D	\$15	Daily	0	\$0.00
PPE - Level C	\$35	Daily	0	\$0.00
			Total Expenses	\$50.00

<u>Contractors</u>	<u>Rate</u>	<u>Type</u>	<u>Units</u>	<u>Total</u>
None.				\$0.00
			Total Contractors	\$0.00

<b>TASK TOTAL:</b>	<b>\$9,235.00</b>
--------------------	-------------------

KPRG TASK COSTING SHEET

Project: Former Bask Dry Cleaner - Westbrook Shopping Center - Waukesha, WI

Task: 2 Monitoring Well Installation

<u>Professional Labor</u>	<u>Rate (\$/Hr.)</u>		<u>Units</u>	<u>Total</u>
Principal/Proj. Mgr.	\$155		2	\$310.00
Eng./Sci.	\$75		40	\$3,000.00
CADD	\$60		0	\$0.00
Admin. Asst/ Word Proc.	\$45		1	\$45.00
			Total Labor	\$3,355.00

<u>External Expenses</u>	<u>Rate</u>	<u>Type</u>	<u>Units</u>	<u>Total</u>
PID	\$75	Daily	2	\$150.00
Field Vehicle	\$80	Daily	4	\$320.00
Sampling Supplies	\$20	Daily	0	\$0.00
Drums	\$55	Each	0	\$0.00
Waukesha Permit	\$300	Est.	2	\$600.00
PPE - Level C	\$35	Daily	0	\$0.00
			Total Expenses	\$1,070.00

<u>Contractors</u>	<u>Rate</u>	<u>Type</u>	<u>Units</u>	<u>Total</u>
Cascade Drilling/Construction	\$16,800	Est.	1	\$16,800.00
Well Abandonment	\$800	Est.	1	\$800.00
Private Locate	\$350	Est.	1	\$350.00
Surveyor	\$1,200	Est.	1	\$1,200.00
IDW Disposal	\$175	per Drum	8	\$1,400.00
			Total Contractors	\$20,550.00

<b>TASK TOTAL:</b>	<b>\$24,975.00</b>
--------------------	--------------------

KPRG TASK COSTING SHEET

Project: Former Bask Dry Cleaner - Westbrook Shopping Center - Waukesha, WI

Task: 3 Additional Groundwater Sampling (1 full event, 1 new well resample)

<u>Professional Labor</u>	<u>Rate (\$/Hr.)</u>		<u>Units</u>	<u>Total</u>
Principal/Proj. Mgr.	\$155		0	\$0.00
Eng./Sci.	\$75		35	\$2,625.00
Eng./Sci.	\$75		35	\$2,625.00
CADD	\$60		0	\$0.00
Admin. Asst/ Word Proc.	\$45		0	\$0.00
			Total Labor	\$5,250.00

<u>External Expenses</u>	<u>Rate</u>	<u>Type</u>	<u>Units</u>	<u>Total</u>
Field Vehicle	\$80	Daily	4	\$320.00
Water Quality Meter	\$150	Daily	4	\$600.00
Water Depth Meter	\$25	Daily	2	\$50.00
Peristaltic Pump	\$75	Daily	4	\$300.00
Disposable Tubing	\$260	Est.	1	\$260.00
Shipping	\$50	Est.	2	\$100.00
			Total Expenses	\$1,630.00

<u>Contractors</u>	<u>Rate</u>	<u>Type</u>	<u>Units</u>	<u>Total</u>
Analytical	\$65	Est.	21	\$1,365.00
			Total Contractors	\$1,365.00

<b>TASK TOTAL:</b>	<b>\$8,245.00</b>
--------------------	-------------------

KPRG TASK COSTING SHEET

Project: Former Bask Dry Cleaner - Westbrook Shopping Center - Waukesha, WI

Task: 4a Soil Vapor Pin Installation, Testing and Sampling (18 Residences)

<u>Professional Labor</u>	<u>Rate (\$/Hr.)</u>		<u>Units</u>	<u>Total</u>
Principal/Proj. Mgr.	\$155		16	\$2,480.00
Eng./Sci.	\$75		170	\$12,750.00
CADD	\$60		0	\$0.00
Admin. Asst/ Word Proc.	\$45		5	\$225.00
			Total Labor	\$15,455.00

<u>External Expenses</u>	<u>Rate</u>	<u>Type</u>	<u>Units</u>	<u>Total</u>
Photoionization Detector	\$75	Daily	0	\$0.00
Field Vehicle	\$80	Daily	14	\$1,120.00
Sub-slab Probes	\$85	ea	17	\$1,445.00
Concrete Drill Setup	\$100	Daily	17	\$1,700.00
Waukesha Permit (if necessary)	\$300	Est.	0	\$0.00
Helium Detection Kit	\$80	per test	51	\$4,080.00
			Total Expenses	\$8,345.00

<u>Contractors</u>	<u>Rate</u>	<u>Type</u>	<u>Units</u>	<u>Total</u>
Laboratory Rental (canisters)	\$50	Each	153	\$7,650.00
Laboratory Analytical	\$120	Each	153	\$18,360.00
			Total Contractors	\$26,010.00

TASK TOTAL:	\$49,810.00
-------------	-------------

KPRG TASK COSTING SHEET

Project: Former Bask Dry Cleaner - Westbrook Shopping Center - Waukesha, WI

Task: 4b Soil Vapor Pin Installation, Testing and Sampling (Apt Bldg and Community Center)

<u>Professional Labor</u>	<u>Rate (\$/Hr.)</u>		<u>Units</u>	<u>Total</u>
Principal/Proj. Mgr.	\$155		6	\$930.00
Eng./Sci.	\$75		50	\$3,750.00
CADD	\$60		0	\$0.00
Admin. Asst/ Word Proc.	\$45		2	\$90.00
			Total Labor	\$4,770.00

<u>External Expenses</u>	<u>Rate</u>	<u>Type</u>	<u>Units</u>	<u>Total</u>
Photoionization Detector	\$75	Daily	0	\$0.00
Field Vehicle	\$80	Daily	4	\$320.00
Sub-slab Probes	\$85	ea	12	\$1,020.00
Concrete Drill Setup	\$100	Daily	12	\$1,200.00
Waukesha Permit (if necessary)	\$300	Est.	0	\$0.00
Helium Detection Kit	\$80	per test	68	\$5,440.00
			Total Expenses	\$7,980.00

<u>Contractors</u>	<u>Rate</u>	<u>Type</u>	<u>Units</u>	<u>Total</u>
Laboratory Rental (canisters)	\$50	Each	57	\$2,850.00
Laboratory Analytical	\$120	Each	57	\$6,840.00
			Total Contractors	\$9,690.00

TASK TOTAL:	\$22,440.00
-------------	-------------

KPRG TASK COSTING SHEET

Project: Former Bask Dry Cleaner - Westbrook Shopping Center - Waukesha, WI

Task: 4c Commercial Soil Vapor Pin Installation, Testing and Sampling (Former Dry Cleaner Space)

<u>Professional Labor</u>	<u>Rate (\$/Hr.)</u>		<u>Units</u>	<u>Total</u>
Principal/Proj. Mgr.	\$155		1	\$155.00
Eng./Sci.	\$75		10	\$750.00
CADD	\$60		0	\$0.00
Admin. Asst/ Word Proc.	\$45		1	\$45.00
			Total Labor	<u>\$950.00</u>

<u>External Expenses</u>	<u>Rate</u>	<u>Type</u>	<u>Units</u>	<u>Total</u>
Photoionization Detector	\$75	Daily	0	\$0.00
Field Vehicle	\$80	Daily	2	\$160.00
Sub-slab Probes	\$85	ea	2	\$170.00
Concrete Drill Setup	\$100	Daily	2	\$200.00
Waukesha Permit (if necessary)	\$300	Est.	0	\$0.00
Helium Detection Kit	\$80	per test	6	\$480.00
			Total Expenses	<u>\$1,010.00</u>

<u>Contractors</u>	<u>Rate</u>	<u>Type</u>	<u>Units</u>	<u>Total</u>
Laboratory Rental (canisters)	\$50	Each	6	\$300.00
Laboratory Analytical	\$120	Each	6	\$720.00
			Total Contractors	<u>\$1,020.00</u>

<b>TASK TOTAL:</b>	<b>\$2,980.00</b>
--------------------	-------------------

KPRG TASK COSTING SHEET

Project: Former Bask Dry Cleaner - Westbrook Shopping Center - Waukesha, WI

Task: 4d Sewer Line Vapor Migration

<u>Professional Labor</u>	<u>Rate (\$/Hr.)</u>		<u>Units</u>	<u>Total</u>
Principal/Proj. Mgr.	\$155		0	\$0.00
Eng./Sci.	\$75		0	\$0.00
CADD	\$60		0	\$0.00
Admin. Asst/ Word Proc.	\$45		0	\$0.00
			Total Labor	\$0.00

<u>External Expenses</u>	<u>Rate</u>	<u>Type</u>	<u>Units</u>	<u>Total</u>
Photoionization Detector	\$75	Daily	0	\$0.00
Field Vehicle	\$80	Daily	0	\$0.00
Sub-slab Probes	\$85	ea	0	\$0.00
Concrete Drill Setup	\$100	Daily	0	\$0.00
Waukesha Permit (if necessary)	\$300	Est.	0	\$0.00
Helium Detection Kit	\$80	per test	0	\$0.00
			Total Expenses	\$0.00

<u>Contractors</u>	<u>Rate</u>	<u>Type</u>	<u>Units</u>	<u>Total</u>
Laboratory Rental (canisters)	\$50	Each	0	\$0.00
Laboratory Analytical	\$120	Each	0	\$0.00
			Total Contractors	\$0.00

TASK TOTAL:	\$0.00
-------------	--------

KPRG TASK COSTING SHEET

Project: Former Bask Dry Cleaner - Westbrook Shopping Center - Waukesha, WI

Task: 5 Sub-slab Depressurization System Inspections

<u>Professional Labor</u>	<u>Rate (\$/Hr.)</u>		<u>Units</u>	<u>Total</u>
Principal/Proj. Mgr.	\$155		4	\$620.00
Eng./Sci.	\$75		16	\$1,200.00
CADD	\$60		0	\$0.00
Admin. Asst/ Word Proc.	\$45		0	\$0.00
			Total Labor	<u>\$1,820.00</u>

<u>External Expenses</u>	<u>Rate</u>	<u>Type</u>	<u>Units</u>	<u>Total</u>
Reproduction	\$50	Est.	0	\$0.00
Field Vehicle	\$80	Daily	4	\$320.00
Sampling Supplies	\$20	Daily	0	\$0.00
Drums	\$55	Each	0	\$0.00
PPE - Modified Level D	\$15	Daily	0	\$0.00
PPE - Level C	\$35	Daily	0	\$0.00
			Total Expenses	<u>\$320.00</u>

<u>Contractors</u>	<u>Rate</u>	<u>Type</u>	<u>Units</u>	<u>Total</u>
None				
			Total Contractors	<u>\$0.00</u>

TASK TOTAL:	\$2,140.00
-------------	------------

KPRG TASK COSTING SHEET

Project: Former Bask Dry Cleaner - Westbrook Shopping Center - Waukesha, WI

Task: 6 Additional Reporting

<u>Professional Labor</u>	<u>Rate (\$/Hr.)</u>		<u>Units</u>	<u>Total</u>
Principal/Proj. Mgr.	\$155		12	\$1,860.00
Sr. Eng/Geol	\$90		16	\$1,440.00
Eng./Sci.	\$75		24	\$1,800.00
CADD	\$60		6	\$360.00
Admin. Asst/ Word Proc.	\$45		4	\$180.00
			Total Labor	<u>\$5,640.00</u>

<u>External Expenses</u>	<u>Rate</u>	<u>Type</u>	<u>Units</u>	<u>Total</u>
Reproduction	\$50	Est.	2	\$100.00
Field Vehicle	\$60	Daily	0	\$0.00
Water Quality Meter	\$175	Daily	0	\$0.00
Water Depth Meter	\$25	Daily	0	\$0.00
PPE - Modified Level D	\$15	Daily	0	\$0.00
Reproduction	\$50	Est.	0	\$0.00
			Total Expenses	<u>\$100.00</u>

<u>Contractors</u>	<u>Rate</u>	<u>Type</u>	<u>Units</u>	<u>Total</u>
None				\$0.00
			Total Contractors	<u>\$0.00</u>

<b>TASK TOTAL:</b>	<b>\$5,740.00</b>
--------------------	-------------------