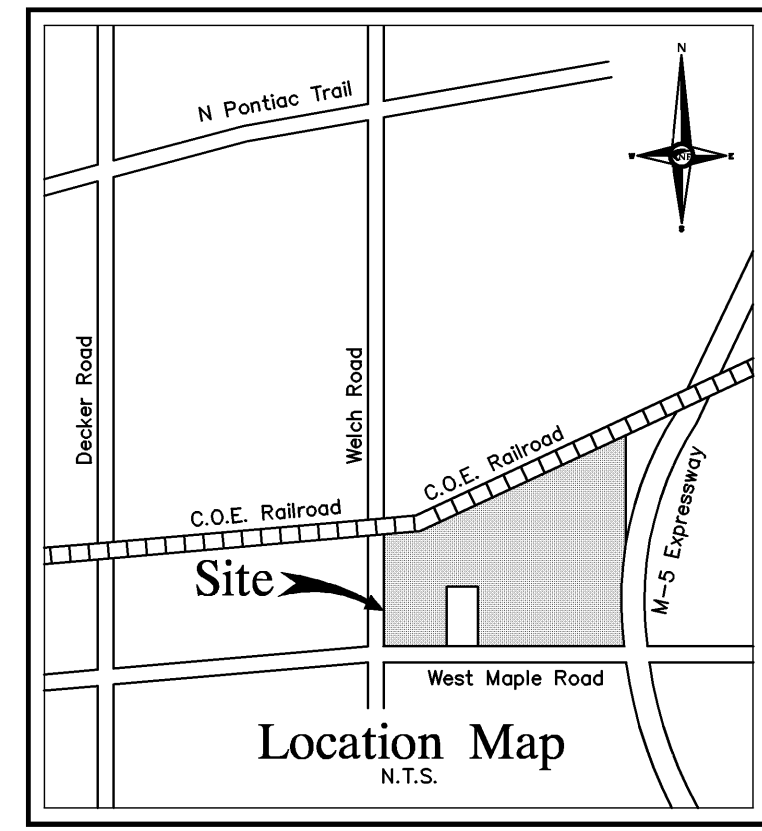
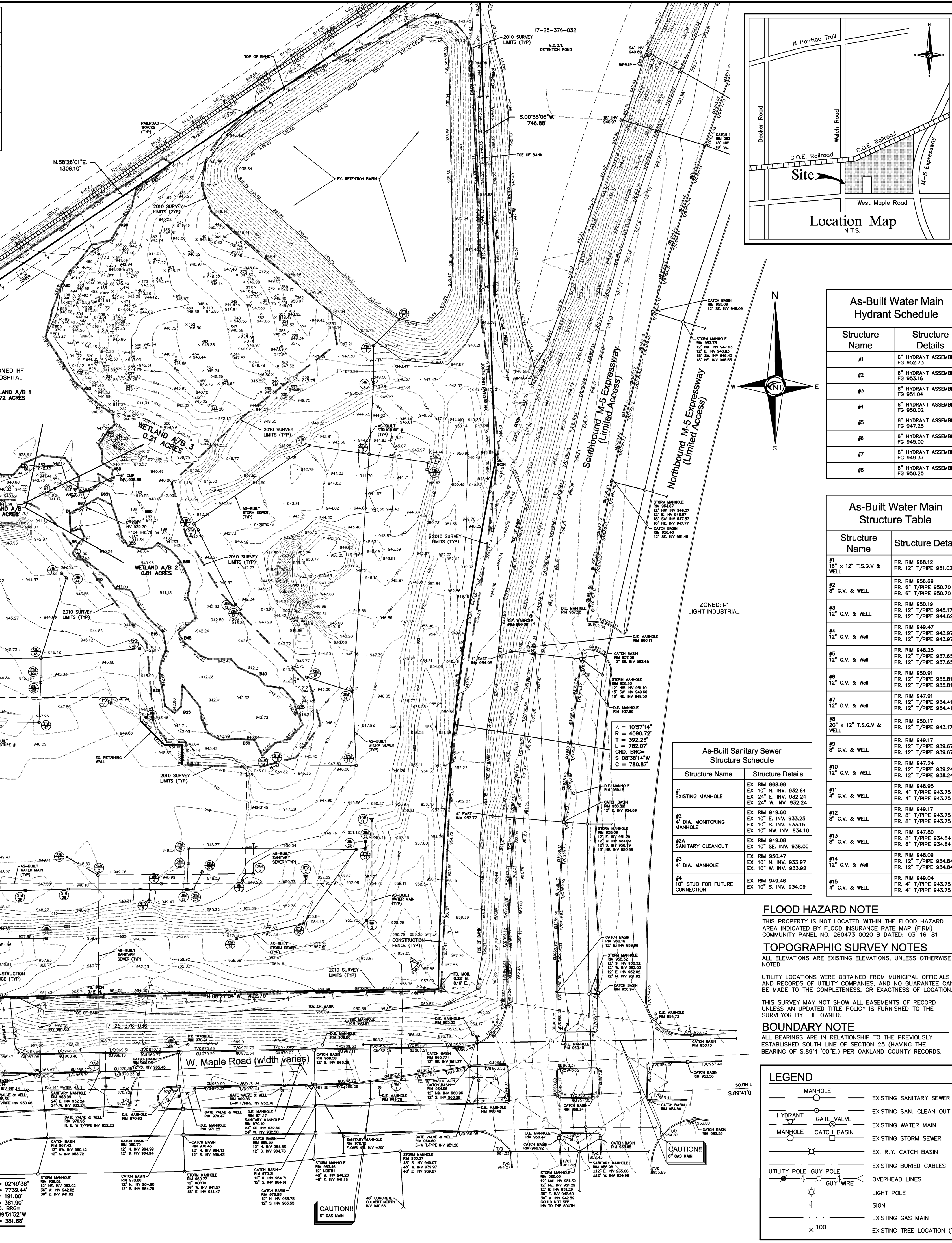
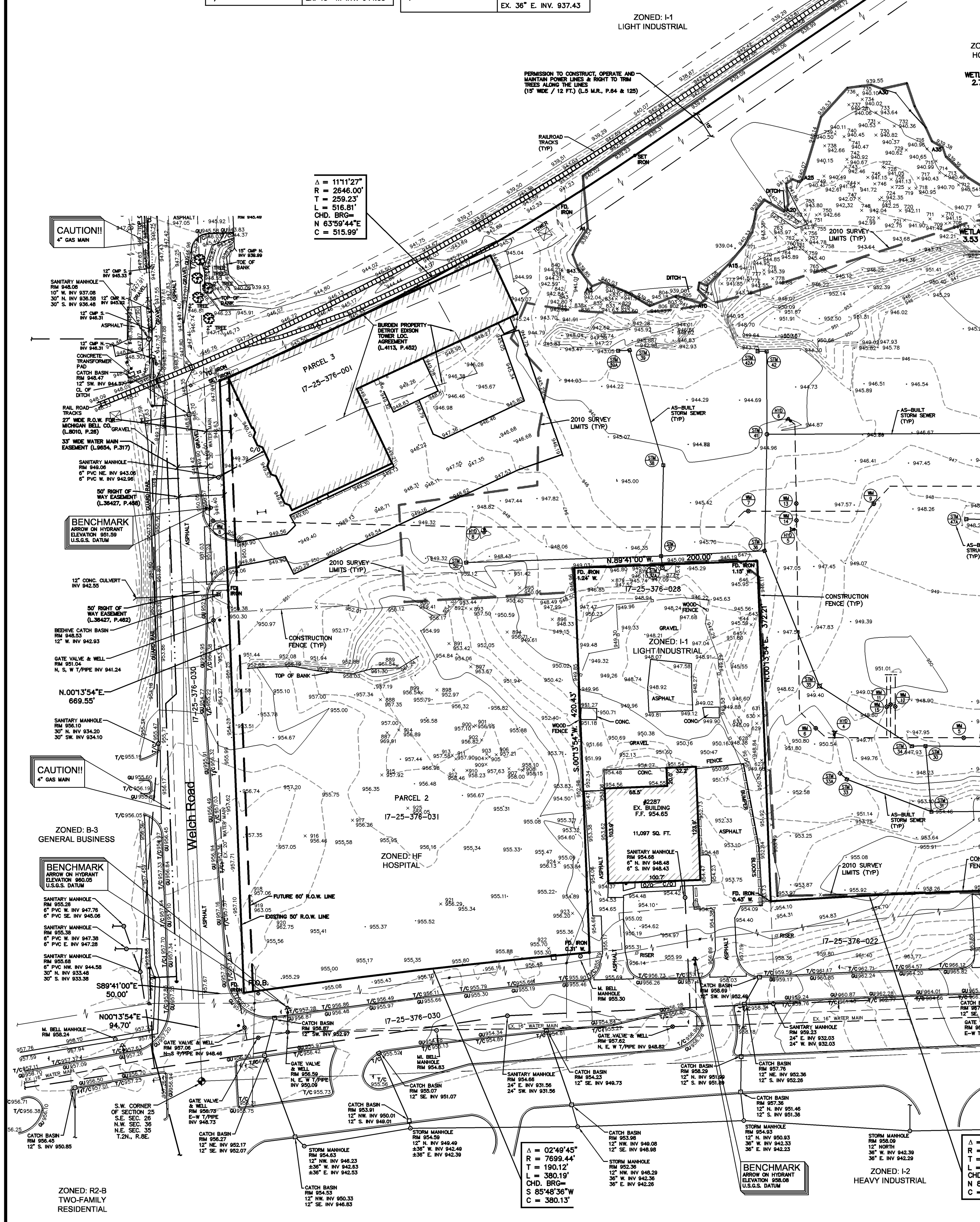


As-Built Storm Sewer Structure Schedule		As-Built Storm Sewer Structure Schedule		As-Built Storm Sewer Structure Schedule		As-Built Storm Sewer Structure Schedule		As-Built Storm Sewer Structure Schedule	
Structure Name	Structure Details	Structure Name	Structure Details	Structure Name	Structure Details	Structure Name	Structure Details	Structure Name	Structure Details
#1 8" DIA. MANHOLE	EX. RM 945.86 EX. 54" N. INV. 934.48 EX. 54" S. INV. 934.48	#17 8" DIA. MANHOLE	EX. RM 949.11 EX. 54" S. INV. 935.31 EX. 54" N. INV. 936.96	#27B 4" DIA. CATCH BASIN	EX. RM 948.84 EX. 12" SW. INV. 944.64	#37A 4" DIA. R.Y.C.B.	EX. RM 946.76 EX. 21" N. INV. 938.36	#47 4" DIA. MANHOLE	EX. RM 946.96 EX. 15" N. INV. 940.06 EX. 15" N. INV. 939.96
#2 8" DIA. MANHOLE	EX. RM 950.32 EX. 54" N. INV. 934.62	#18 4" DIA. CATCH BASIN	EX. RM 945.37 EX. 15" SW. INV. 940.32 EX. 18" E. INV. 940.17	#28 8" DIA. CATCH BASIN	EX. RM 948.35 EX. 48" E. INV. 936.15	#38 4" DIA. CATCH BASIN	EX. RM 945.46 EX. 15" N. INV. 937.81 EX. 18" S. INV. 937.76	#47A 4" DIA. CATCH BASIN	EX. RM 946.34 EX. 15" E. INV. 940.34
#3 8" DIA. MANHOLE	EX. RM 945.66 EX. 18" E. INV. 936.26 EX. 21" W. INV. 936.63 EX. 54" N. INV. 934.96	#19 4" DIA. CATCH BASIN	EX. RM 945.64 EX. 18" E. INV. 940.34	#29 8" DIA. CATCH BASIN	EX. RM 947.47 EX. 48" W. INV. 936.76 EX. 48" E. INV. 936.37	#39 4" DIA. CATCH BASIN	EX. RM 943.24 EX. 15" N. INV. 938.24 EX. 15" S. INV. 938.24	#49 4" DIA. CATCH BASIN	EX. RM 945.55 EX. 12" W. INV. 940.95
#4 4" DIA. CATCH BASIN	EX. RM 944.02 EX. 12" S. INV. 939.32 EX. 18" W. INV. 938.72	#20 8" DIA. MANHOLE	EX. RM 952.47 EX. 18" E. INV. 947.87 EX. 15" W. INV. 935.61 EX. 54" N. INV. 935.61	#30 8" DIA. CATCH BASIN	EX. RM 947.66 EX. 48" W. INV. 936.76 EX. 48" E. INV. 936.37	#40 4" DIA. CATCH BASIN	EX. RM 948.94 EX. 15" E. INV. 938.27	#50 4" DIA. CATCH BASIN	EX. RM 948.94 EX. 30" E. INV. 938.34
#4A 4" DIA. CATCH BASIN	EX. RM 944.34 EX. 12" N. INV. 939.40	#21 4" DIA. CATCH BASIN	EX. RM 952.10 EX. 15" N. INV. 947.50 EX. 18" W. INV. 947.50	#31 8" DIA. CATCH BASIN	EX. RM 945.46 EX. 15" N. INV. 945.66 EX. 12" E. INV. 947.36	#41 8" DIA. MANHOLE	EX. RM 944.20 EX. 12" W. INV. 938.82 EX. 21" S. INV. 938.70	#51 54" End Section	EX. RM 934.64 EX. 54" SW. INV. 934.64
#4B 4" DIA. CATCH BASIN	EX. RM 944.29 EX. 21" SE. INV. 937.32 EX. 21" NW. INV. 937.32	#22 4" DIA. CATCH BASIN	EX. RM 952.04 EX. 15" S. INV. 947.70	#32 8" DIA. CATCH BASIN	EX. RM 951.55 EX. 15" N. INV. 945.85 EX. 15" E. INV. 945.80	#42 4" DIA. CATCH BASIN	EX. RM 944.21 EX. 12" E. INV. 939.12		
#5 4" DIA. CATCH BASIN	EX. RM 942.06 EX. 12" SE. INV. 937.76 EX. 21" NW. INV. 937.46	#23 4" DIA. CATCH BASIN	EX. RM 952.04 EX. 15" S. INV. 947.70	#33 8" DIA. CATCH BASIN	EX. RM 951.55 EX. 15" N. INV. 945.85 EX. 15" E. INV. 945.80	#43 4" DIA. CATCH BASIN	EX. RM 943.76 EX. 15" S. INV. 940.19		
#5A 4" DIA. CATCH BASIN	EX. RM 942.94 EX. 12" SE. INV. 938.44 EX. 12" NW. INV. 938.34	#24 4" DIA. CATCH BASIN	EX. RM 952.04 EX. 15" S. INV. 947.70	#34 4" DIA. CATCH BASIN	EX. RM 951.28 EX. 15" SE. INV. 945.96	#44 4" DIA. CATCH BASIN	EX. RM 943.89 EX. 15" N. INV. 939.90 EX. 15" S. INV. 939.70		
#5B 4" DIA. CATCH BASIN	EX. RM 943.07 EX. 12" NW. INV. 938.57	#25 8" DIA. CATCH BASIN	EX. RM 948.91 EX. 48" S. INV. 935.91 EX. 48" E. INV. 935.91	#35 8" DIA. R.Y.C.B.	EX. RM 949.48 EX. 48" SE. INV. 937.02 EX. 48" N. INV. 936.21	#45 4" DIA. MANHOLE	EX. RM 945.95 EX. 15" N. INV. 939.90 EX. 15" S. INV. 939.70		
#6 8" DIA. CATCH BASIN	EX. RM 947.22 EX. 12" S. INV. 935.12 EX. 54" N. INV. 935.12	#26 8" DIA. CATCH BASIN	EX. RM 948.91 EX. 48" S. INV. 935.91 EX. 48" E. INV. 935.91	#36 8" DIA. CATCH BASIN	EX. RM 946.78 EX. 48" W. INV. 937.40 EX. 30" W. INV. 937.40	#46 4" DIA. MANHOLE	EX. RM 946.04 EX. 15" N. INV. 939.74 EX. 15" N. INV. 939.74		
#7 4" DIA. CATCH BASIN	EX. RM 944.94 EX. 12" E. INV. 939.94	#27 8" DIA. CATCH BASIN	EX. RM 948.91 EX. 48" S. INV. 935.91 EX. 48" E. INV. 935.91	#37 8" DIA. CATCH BASIN	EX. RM 945.33 EX. 30" W. INV. 937.40 EX. 21" S. INV. 938.34 EX. 18" N. INV. 937.43 EX. 36" E. INV. 937.43	#48 8" DIA. CATCH BASIN	EX. RM 946.04 EX. 15" N. INV. 939.74 EX. 15" N. INV. 939.74		



As-Built Water Main Hydrant Schedule

Structure Name	Structure Details
#1	6" HYDRANT ASSEMBLY FG 952.23
#2	6" HYDRANT ASSEMBLY FG 953.16
#3	6" HYDRANT ASSEMBLY FG 950.02
#4	6" HYDRANT ASSEMBLY FG 947.23
#5	6" HYDRANT ASSEMBLY FG 945.00
#6	6" HYDRANT ASSEMBLY FG 950.23

As-Built Water Main Structure Table

Structure Name	Structure Details
#1 18" x 12" T.S.G.V. & WELL	PR. RM 958.12 PR. 12" T/PIPE 951.02
#2 6" G.V. & WELL	PR. RM 956.66 PR. 6" T/PIPE 950.70 PR. 6" T/PIPE 950.70
#3 12" G.V. & WELL	PR. RM 950.19 PR. 12" T/PIPE 945.17 PR. 12" T/PIPE 944.69
#4 12" G.V. & Well	PR. RM 948.25 PR. 12" T/PIPE 937.65 PR. 12" T/PIPE 937.65
#5 12" G.V. & Well	PR. RM 950.91 PR. 12" T/PIPE 935.81 PR. 12" T/PIPE 935.81
#6 12" G.V. & Well	PR. RM 947.91 PR. 12" T/PIPE 934.41 PR. 12" T/PIPE 934.41
#7 20" x 12" T.S.G.V. & WELL	PR. RM 950.17 PR. 12" T/PIPE 943.17
#8 6" G.V. & WELL	PR. RM 949.17 PR. 12" T/PIPE 939.67 PR. 12" T/PIPE 939.67
#9 10" G.V. & WELL	PR. RM 947.24 PR. 12" T/PIPE 939.24 PR. 12" T/PIPE 938.24
#10 12" G.V. & WELL	PR. RM 948.95 PR. 4" T/PIPE 943.75 PR. 4" T/PIPE 943.75
#11 4" G.V. & WELL	PR. RM 949.60 PR. 8" T/PIPE 943.75 PR. 8" T/PIPE 943.75
#12 8" G.V. & WELL	PR. RM 947.80 PR. 8" T/PIPE 934.84 PR. 8" T/PIPE 934.84
#13 6" G.V. & WELL	PR. RM 948.00 PR. 12" T/PIPE 934.84 PR. 12" T/PIPE 934.84
#14 12" G.V. & Well	PR. RM 948.04 PR. 4" T/PIPE 943.75 PR. 4" T/PIPE 943.75
#15 4" G.V. & WELL	PR. RM 948.04 PR. 4" T/PIPE 943.75 PR. 4" T/PIPE 943.75

As-Built Sanitary Sewer Structure Schedule

Structure Name	Structure Details
#1 EXISTING MANHOLE	EX. RM 958.09 EX. 10" N. INV. 932.64 EX. 24" E. INV. 932.24 EX. 24" W. INV. 932.24
#2 4" DIA. MONITORING MANHOLE	EX. RM 949.60 EX. 10" E. INV. 933.25 EX. 10" N. INV. 933.15 EX. 10" NW. INV. 934.10
#2A SANITARY CLEANOUT	EX. RM 948.08 EX. 10" SE. INV. 938.00
#3 4" DIA. MANHOLE	EX. RM 950.47 EX. 10" N. INV. 933.97 EX. 10" W. INV. 933.92
#4 10" STUB FOR FUTURE CONNECTION	EX. RM 948.46 EX. 10" S. INV. 934.09

FLOOD HAZARD NOTE
THIS PROPERTY IS NOT LOCATED WITHIN THE FLOOD HAZARD AREA INDICATED BY FLOOD INSURANCE RATE MAP (FIRM) COMMUNITY PANEL NO. 260473 002D D DATED: 03-16-81

TOPOGRAPHIC SURVEY NOTES
ALL ELEVATIONS ARE EXISTING ELEVATIONS, UNLESS OTHERWISE NOTED.

UTILITY LOCATIONS WERE OBTAINED FROM MUNICIPAL OFFICIALS AND RECORDS OF UTILITY COMPANIES, AND NO GUARANTEE CAN BE MADE TO THE COMPLETENESS, OR EXACTNESS OF LOCATION.

THIS SURVEY MAY NOT SHOW ALL EASEMENTS OF RECORD UNLESS AN UPDATED TITLE POLICY IS FURNISHED TO THE SURVEYOR BY THE OWNER.

BOUNDARY NOTE
ALL BEARINGS ARE IN RELATIONSHIP TO THE PREVIOUSLY ESTABLISHED SOUTH LINE OF SECTION 25 (HAVING THE BEARING OF S.89°41'00"E) PER OAKLAND COUNTY RECORDS.

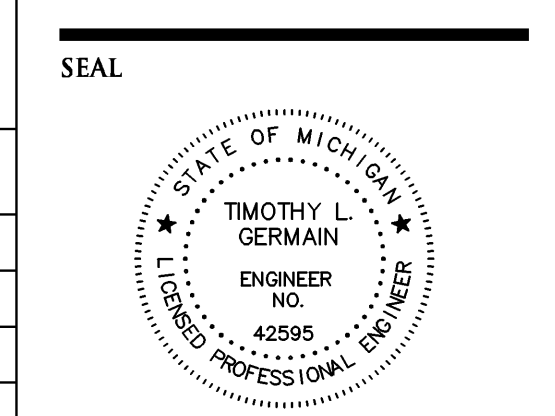
LEGEND

	MANHOLE		EXISTING SANITARY SEWER
	HYDRANT		EXISTING SAN. CLEAN OUT
	MANHOLE		EXISTING WATER MAIN
	MANHOLE		EXISTING STORM SEWER
	MANHOLE		EX. R.Y. CATCH BASIN
	MANHOLE		EXISTING BURIED CABLES
	MANHOLE		OVERHEAD LINES
	MANHOLE		LIGHT POLE
	MANHOLE		SIGN
	MANHOLE		EXISTING GAS MAIN
	MANHOLE		EXISTING TREE LOCATION (TYP)

NF ENGINEERS

CIVIL ENGINEERS
LAND SURVEYORS
LAND PLANNERS

NOWAK & FRAUS ENGINEERS
4677 WOODWARD AVE.
PONTIAC, MI 48342-5032
TEL. (248) 332-7931
FAX. (248) 332-8257



PROJECT
Beaumont Medical Center - Commerce

CLIENT
Beaumont Services Co., LLC
3601 W. Thirteen Mile Rd.,
Royal Oak, MI 48073
Contact:
Mr. Robert Mount
Ph: (248) 547-7659
Fax: (248) 547-7657

PROJECT LOCATION
Part of the S.W. 1/4
of Section 25,
T.2N., R.8E.,
Commerce Township,
Oakland County, MI

SHEET
As-Built Utility Plan



REVISIONS
03-23-10 ISSUED FOR CLIENT REVIEW

DRAWN BY:
R. Johnson

DESIGNED BY:
-

APPROVED BY:
T. Germain

DATE:
March 23, 2010

SCALE:
1" = 50'

NFE JOB NO.
E427-02

SHEET NO.
1 of 1