

23925 Woodward Avenue Pleasant Ridge, Michigan 48069

City Commission Meeting May 9, 2017 Agenda

Honorable Mayor, City Commissioners and Residents: This shall serve as your official notification of the Regular City Commission Meeting to be held Tuesday, May 9, 2017, at 7:30 p.m., in the City Commission Chambers, 23925 Woodward Avenue, Pleasant Ridge, Michigan 48069. The following items are on the Agenda for your consideration:

REGULAR CITY COMMISSION MEETING - 7:30 P.M.

- 1. Meeting Called to Order.
- 2. Pledge of Allegiance.
- 3. Roll Call.
- 4. PUBLIC DISCUSSION items not on the Agenda.
- 5. Governmental Reports.
- 6. City Commission Liaison Reports.
 - Commissioner Krzysiak Recreation Commission
 - Commissioner Foreman Ferndale Public Schools
 - Commissioner Perry Planning/DDA, Committee Liaison
 - Commissioner Scott Historical Commission

7. Consent Agenda.

All items listed on the Consent Agenda are considered to be routine by the City Commission, will be enacted by one motion and approved by a roll call vote. There will be no separate discussion of these items unless a City Commissioner or visitor so requests, in which event, the item will be removed from the consent agenda and considered as the last item of business.

- a. Minutes of the Regular City Commission Meeting held Tuesday, April 18, 2017.
- b. Monthly Disbursement Report.
- c. 2016-2017 Budget Amendments.
- d. Resolution recognizing May as Mental Health Month.
- e. Resolution recognizing Saturday, May 13, 2017 as National Association of Letter Carriers Food Drive Day.
- f. Proclamation declaring Monday, May 15, 2017 as Police Memorial Day and May 14 20, 2017 as Police Week.
- g. Resolution recognizing Wednesday, May 24, 2017 as Volunteers Recognition Day in the City of Pleasant Ridge.
- h. Resolution approving the City of Pleasant Ridge to continue to participate in the Oakland County Urban County Community Development Block Grant (CDBG) for program years 2018-2020.
- i. Resolution recognizing the retirement of Officer Glenn Fearn.

- 8. 56 Ridge Road Request for Ordinance modification to allow a front yard fence.
- 9. Consideration of Anti-Corruption Resolution.
- 10. Resolution authorizing the Oakland County Brownfield Authority to undertake review of the Iron Ridge Development project.
- 11. Establishing public hearings on June 13, 2017 at 7:30 p.m., to solicit public comments on the following:
 - a. Proposed fiscal year 2017-2018 Millage Rates.
 - b. Proposed fiscal year 2017-2018 Combined City Budgets.
- 12. Preliminary 2017-2018 Utility Bill rates.
- 13. Letter of Understanding between the City of Pleasant Ridge and the Michigan Fraternal Order of Police Labor Council.
- 14. City Manager's Report.
- 15. Other Business.
- 16. Adjournment.

In the spirit of compliance with the Americans with Disabilities Act, individuals with a disability should feel free to contact the City at least seventy-two (72) hours in advance of the meeting, if requesting accommodations.



23925 Woodward Avenue Pleasant Ridge, Michigan 48069

Regular City Commission Meeting April 18, 2017

Having been duly publicized, Mayor Metzger called the meeting to order at 7:34 p.m.

Present: Commissioners Foreman, Krzysiak, Perry, Scott, Mayor Metzger Also Present: City Manager Breuckman, City Attorney Need, City Clerk Drealan

Absent: None

Inrtroduction

Police Chief Kevin Nowak introduced new part-time police officer Julie Reid. She is the first female officer hired by the department.

Public Discussion

Gail Gerdan, 54 Ridge Road Pleasant Ridge Environmental Committee, announced that they are hosting a native plant sale on Saturday, June 10 from 9:00 a.m. until 2:00 p.m. Sale will be held at Gainsboro Park. Hoping to make this an annual event. April is Earth Month. April 22 is Earth Day with several local events. VegFest is April 30 with the actor that played "Worf" from Star Trek.

Keith Cunningham, 9 Cambridge, Pleasant Ridge Foundation President, announced the 57th Annual Auction and Gala, May 20, 2017. Funds from this event will go toward the Four Ridge Project. Always looking for donations. There will be a raffle, live auction, silent auction and a wall of wine. Commissioners and City are planning their donations.

Amanda Krogol, 1 Amherst, raised an encroachment issue. Many cars driving through the alley are actually driving on her property. She inquired as to what options would be available to address the problem. The problem gets work in the winter. Commissioner Krzysiak discussed whether the city can help address the issue as well as the correlated parking problem. City Manager Breuckman noted that the city does not typically spend money to improve private property. The primary issue is to maintain clear lines of sight. He and the city attorney plan to meet with her to discuss options.

Jean Russell, 65 Devonshire, thanked the city for taking care of the trees after the storm.

Governmental Reports

Chief Kevin Nowak, Pleasant Ridge Police, introduced city prosecutors Gene and Eric Lumberg. Gene Lumberg presented his State of the City report. He noted that the city does not have a lot of misdemeanor cases. The police department strongly supports the services that the Lumbergs provide. Chief Nowak noted that there had been a number of larcenies from vehicles recently. He strongly recommended that everyone lock their doors. There has also been an increase in scam calls. Assistant City Manager Scott Pietrzak noted an increase in police calls to the park and basketball court for a variety of reasons. He stated that the basketball rim will be locked for an unspecified amount of time to try to calm down activity in the area. Chief Nowak noted that the groups that are causing the problems are non-residents. The possibility of lowering the rim was discussed. Commissioner Krzysiak mentioned that being able to play basketball is important for the area youth but it is a struggle to keep it safe for families. Additional cameras and an emergency phone are being installed.

City Commission Liaison Reports

Commissioner Scott reported on the Historical Commission. The Home and Garden tour will be June 10. Seven homes are included on the tour. He encouraged everyone to look at the gardening around the police booth.

Commissioner Krzysiak reported on the Recreation Commission. The quarterly recreation meeting will be Wednesday, April 26. May 1 is the informational meeting for the swim team.

Commissioner Foreman reported on Ferndale Public Schools. The open seat on the school board has been filled by Sandra Dukhie. The district would like to have a new Superintendent in place by July. The search process has begun. Several meetings planned to discuss the qualifications that the district is looking for. The first meeting is April 19. The second meeting is April 20. A survey monkey is also available. April 24 at Loving Touch the cast from *Motown*, *The Musical* will perform to benefit Broadway Cares and Blessings in a Backpack. The next school board meeting will be on May 15 at 7:00 p.m. at the high school.

Commissioner Perry reported on the Planning Commission/DDA. The DDA met on Monday, March 27 to approve façade improvement grants. One was awarded to 23634 Woodward to replace windows. A second grant was awarded to 23675 Woodward for general façade improvement. The next meeting is April 24. Lauren Christianson was thanked for her work with the DDA and Planning Commission.

Consent Agenda

17-3305

Motion by Commissioner Perry, second by Commissioner Scott, that the Consent Agenda be approved as presented.

Adopted: Yeas: Commissioners Perry, Foreman, Krzysiak, Scott, Mayor Metzger

Nays: None

2017 Pleasant Ridge City Commission Goals and Objectives

City Manager Breuckman discussed the annual goals and objectives to identify priorities for city funding. He noted that the principal change involved the parks since the Gainsboro Park project was approaching completion and other projects are scheduled for future dates. Improving the park space behind the community center was added as a goal. Commissioner Krzysiak noted that the park improvements have been a major accomplishment for the City. He inquired whether additional improvements to Gainsboro should be added to the goals. There was some discussion regarding whether that should be added to the goals for future years.

17-3306

Motion by Commissioner Foreman, second by Commissioner Perry, to approve the 2017 City of Pleasant Ridge City Commission Goals and Objectives.

Adopted: Yeas: Commissioners Perry, Foreman, Krzysiak, Scott, Mayor Metzger.

Nays: None

Iron Ridge LLC Brownfield Development Plan Discussion

City Manager Breuckman introduced the Iron Ridge Development plan at the former Walker Wire plant site. There are a number of environmental issues at the site and Brownfield tax incentives are one way for the City to improve the site. The intent is to request Commission action on the Brownfield Plan at the May meeting. The City is working with Oakland County to implement the Plan. Dennis Griffin from Iron Ridge Holdings LLC introduced the development team. They have recently renovated several sites in Royal Oak. This project was first proposed in October, 2015. It will be a true mixed-use project - "Forged for Food, Family and Fun." Before and after pictures of the location were presented. The property crosses the border between Pleasant Ridge and Ferndale. Previous uses of the property were listed along with proposed future uses. The project covers approximately 231,000 square feet and will cost between \$25 and \$32 million which will come from private investment. The various environmental concerns and how to mitigate them were discussed. Approximately \$6.5 million of the proposed cost of the project is for environmental cleanup. Approximately \$2.5 million in Brownfield financing will be requested for Pleasant Ridge with the balance going to Ferndale. Commissioner Krzysiak asked why previous projects on the site did not require Brownfield assistance. City Manager Breuckman discussed Tax Increment Financing (TIF). TIF funding always has a specific purpose and an end date. It taxes new increases in taxable value of the property. The tax capture period is usually 20 to 30 years. The capture must be necessary for the project to proceed and the City must approve the plan for it to proceed. Oakland County will also need to approve both the Pleasant Ridge and Ferndale plans. The necessary resolutions will be proposed at the May 9 Commission meeting. Commissioner Foreman confirmed that no money is coming out of the city budget for this project. He inquired as to what happens if the taxable value of the property does not increase as planned. The plan has an expiration date regardless of the amount of taxes collected. Commissioner Scott asked about the difference between tax abatement and the TIF plan. There was a discussion regarding an Iron Ridge logo.

City Taxable Value and Headlee Rollback Discussion

City Manager Breuckman noted that property values have been increasing in the City. He discussed the difference between assessed value and taxable value. The State of Michigan levels off the rate of growth that cities receive through the Headlee Amendment. If taxable value grows faster than the approved formula, the City does not receive the excess, rather property tax millages are rolled back. Home sales affect taxable value because of Proposal A. Rather than following the rate of inflation, the taxable value jumps to the current rate upon transfer of ownership. Most residents are paying less property tax to the City in 2017 than they did in 2016 and that trend has occurred for the last several years. There was a discussion regarding the downward effects of Proposal A on local property taxes. Revenue sharing from the State has also been significantly reduced. Pleasant Ridge did not experience as extreme a property value downturn as many other cities.

City Manager's Report

City Manager Breuckman reported that the Norwich construction project is underway. Home owners are temporarily allowed to park on Ridge.

Other Business

Commissioner Foreman noted that the link for the survey monkey for input regarding the new Superintendent of Schools is surveymonkey.com/R/Ferndale2017.

Commissioner Krzysiak mentioned that the May book for the Book Club will be *The Residence: Inside the Private World of the White House*, by Kate Andersen Brower. It was written at the end of the Obama administration. The Club will meet Wednesday, May 10 at Gainsboro Park.

City Clerk Amy Drealan noted that qualifying petitions for Mayor and City Commission will be available April 27 for the November election. The filing deadline is July 25 at 4:00 p.m.

Commissioner Perry stated that the Women's Club Annual Brunch is Saturday, April 22. It is a fundraiser for scholarships for local students. On April 22 Ridge Resale will be open from 9:00 a.m. to 1:00 p.m.

Mayor Metzger mentioned the Ferndale Youth Assistance awards and the Ferndale Education Fund auction.

With no further business or	scussion, Mayor Metzger adjourned the meeting at 9:19 pm.	
Mayor Kurt Metzger		

Amy M. Drealan, City Clerk

/dleg

April 2017

ACCOUNTS PAYABLE

PAYROLL LIABILITIES	\$	7,117.52
TAX LIABILITIES	\$	342,478.33
ACCOUNTS PAYABLE	\$	197,955.67
TOTAL	\$	547,551.52
PAY	ROLL	
	<u>ROLL</u>	
April 12, 2017	\$	32,714.70
April 12, 2017 April 26, 2017		32,714.70 32,733.94

PG 1

CHECK REGISTER FOR CITY OF PLEASANT RIDGE PAYROLL LIABILITIES APRIL 2017

Check Date	Check	Vendor Name	Description	4	Amount
4/12/2017	1868	MIFOP	UNION DUES-APRIL 2017	\$	188.00
4/12/2017	1869	MISDU	FOC DEDUCTIONS	\$	224.60
4/12/2017	1870	M&T BANK-ICMA - 401a	RETIRMENT CONTRIBUTIONS	\$	1,433.01
4/12/2017	1871	ICMA RETIREMENT TRUST - 457	RETIRMENT CONTRIBUTIONS	\$	1,911.15
4/26/2017	1874	MISDU	FOC DEDUCTIONS	\$	224.60
4/26/2017	1875	M&T BANK-ICMA - 401a	RETIRMENT CONTRIBUTIONS	\$	1,318.01
4/26/2017	1876	ICMA RETIREMENT TRUST - 457	RETIRMENT CONTRIBUTIONS	\$	1,818.15

TOTAL PAYROLL LIABILITIES

7,117.52

342,478.33

CITY OF PLEASANT RIDGE CHECK REGISTER TAX LIABILITIES APRIL 2017

Check Date	Check	Vendor Name	Description	Amount
4/10/2017	2453	CITY OF PLEASANT RIDGE-DDA	2016 TAX COLLECTIONS	\$ 5,511.47
4/10/2017	2454	CITY OF PLEASANT RIDGE-TAXES	2016 TAX COLLECTIONS	\$ 124,022.83
4/10/2017	2455	FERNDALE PUBLIC SCHOOL	2016 TAX COLLECTIONS	\$ 82,905.06
4/10/2017	2456	J S TESS	2016 TAX OVERPAYMENT	\$ 47.46
4/10/2017	2457	OAKLAND COUNTY TREASURER	2016 TAX COLLECTIONS	\$ 125,834.06
4/10/2017	2458	VOID CHECK	MISPRINT	\$ -
4/11/2017	2459	VOID CHECK	MISPRINT	\$ -
4/11/2017	2460	VOID CHECK	MISPRINT	\$ -
4/19/2017	2461	JANE CARLS	2016 TAX OVERPAYMENT	\$ 4,157.45

Total for 3-1-2017 \$

CITY OF PLEASANT RIDGE CHECK REGISTER ACCOUNTS PAYABLE APRIL 12, 2017

Check Date	Check	Vendor Name	Description	Amount
4/12/2017	21112	45TH DISTRICT COURT	TICKET PAID IN ERROR ON PR WEBSITE	\$ 165.00
4/12/2017	21113	ADKISON, NEED & ALLEN P.L.L.C.	CITY ATTORNEY SERVICES	\$ 2,536.80
4/12/2017	21114	ARROW UNIFORM RENTAL	MAT RENTALS AND JANITORIAL SUPPLIES	\$ 553.52
4/12/2017	21115	ASTI ENVIROMENTAL SERVICES	ENVIROMENTAL SERVICES AT 92 AMHERST	\$ 3,500.00
4/12/2017	21116	BADGER METER, INC.	BEACON MOBILE HOSTING SERVICE	\$ 69.78
4/12/2017	21117	BLUE LAKES CHARTERS AND TOURS	CEDAR POINT TRIP 8/8/2017	\$ 200.00
4/12/2017	21118	CITY OF BERKLEY	MARCH DISPATCH SERVICES	\$ 3,499.61
4/12/2017	21119	CITY OF FERNDALE	FIRE CONTRACT PAYMENT - MAY 2017	\$ 21,381.72
4/12/2017	21120	CORY TRUESDELL	REIMB FOR PIRANAHS WEBSITE	\$ 29.95
4/12/2017	21121	DARREN HUMPHREYS	MIELAGE REIMBURSEMENT	\$ 155.52
4/12/2017	21122	DEBORAH GREEN	TRANSCRIPTION OF MEETING MINUTES	\$ 125.00
4/12/2017	21123	DETROIT EDISON COMPANY	COMMUNITY STREET LIGHTING	\$ 3,022.98
4/12/2017	21124	ERADICO SERVICES INC	EXTERMINATOR SERVICES	\$ 102.00
4/12/2017	21125	EUGENE LUMBERG	CITY ATTORNEY SERVICES	\$ 375.00
4/12/2017	21126	FERNDALE RECREATION	BUS USAGE FOR 3/22/2017	\$ 72.29
4/12/2017	21127	GLENN FEARN	UNIFORM SUPPLY REMIBURSEMENT	\$ 31.79
4/12/2017	21128	GREAT AMERICA	TELEPHONE SERVICES	\$ 433.00
4/12/2017	21129	GREAT LAKES WATER AUTHORITY	IWC CHARGES FOR FEBRUARY 2017	\$ 429.48
4/12/2017	21130	INTERSTATE TITLE	OVERPAYMENT OF FINAL UTILITY BILL	\$ 159.72
4/12/2017	21131	JANI-KING OF MICHIGAN, INC	JANITORIAL CLEANING SERVICES	\$ 2,161.00
4/12/2017	21132	KENNETH BORYCZ	MEHCANICAL INSPECTOR SERVICES	\$ 487.50
4/12/2017	21133	MICHIGAN MUNICIPAL LEAGUE	Q-1 2017 UNEMPLOYMENT PAYMENT	\$ 79.54
4/12/2017	21134	MUNICIPAL CODE CORPORATION	ANNUAL WEB HOSTING	\$ 350.00
4/12/2017	21135	NYE UNIFORM	UNIFORM FOR OFFICER JULIE REID	\$ 285.50
4/12/2017	21136	OAKLAND COUNTY TREASURER	SEWERAGE TREATMENT MARCH 2017	\$ 46,527.17
4/12/2017	21137	ORIENTAL TRADING COMPANY, INC.	EGG HUNT SUPPLIES	\$ 109.96
4/12/2017	21138	PENCHURA, LLC FKA SUPERIOR PLAY LLC	GAINSBORO PARK IMPROVMENTS	\$ 4,440.00
4/12/2017	21139	PROVIDENCE CORP.HEALTH SERVICE	PHYSICAL EXAM FOR OFFICER JULIE REID	\$ 98.00
4/12/2017	21140	SCHEER'S ACE HARDWARE	BUILDING MAINT & PARK SUPPLIES	\$ 80.80
4/12/2017	21141	SCORE SPORTS	YOUTH SOCCER UNIFORMS SPRING 2017	\$ 584.97
4/12/2017	21142	SOUTHEASTERN OAKLAND COUNTY	REFUSE COLLECTION CONTRACT	\$ 8,706.00
4/12/2017	21143	SOUTHEASTERN OAKLAND COUNTY	WATER PURCHASES	\$ 12,354.03
4/12/2017	21144	WEX BANK	FUEL PURCHASES FOR POLICE VEHICLES	\$ 1,214.69

Total for 4-12-2017 \$ 114,322.32

CITY OF PLEASANT RIDGE CHECK REGISTER ACCOUNTS PAYABLE APRIL 19, 2017

Check Date	Check	Vendor Name	Description		Amount
4/19/2017	21145	ACCUSHRED, LLC	CITY SHREDDING SERVICES	\$	55.00
4/19/2017	21146	ALERUS FINANCIAL	FY2017 ANNUAL CONTRIBUTION	\$	5,000.00
4/19/2017	21147	ARROW UNIFORM RENTAL	MAT RENTALS AND JANITORIAL SUPPLIES	\$	276.76
4/19/2017	21148	BLUE CROSS BLUE SHIELD OF MICHIGAN	HEALTH CARE BENEFITS	\$	23,721.04
4/19/2017	21149	BRILAR	DPW CONTRACTED SERVICES	\$	6,128.66
4/19/2017	21150	CITY OF ROYAL OAK	DPW CONTRACTED SERVICES	\$	11,645.91
4/19/2017	21151	COMMUNITY MEDIA NETWORK	CITY COMMISSION MEETING RECORDING	\$	200.00
4/19/2017	21152	FERNDALE PIZZA CO., INC.	SPECIAL PROGRAM SUPPLIES	\$	16.58
4/19/2017	21153	ICMA RETIREMENT CORPORATION	ANNUAL PLAN FEE	\$	250.00
4/19/2017	21154	J & J AUTO TRUCK CENTER	POLICE CAR MAINTENANCE	\$	65.61
4/19/2017	21155	JASON NAGY	UNIFORM ALLOWANCE	\$	115.72
4/19/2017	21156	LEGAL SHIELD	PRE PAID LEGAL SERVICES	\$	25.90
4/19/2017	21157	OAKLAND COUNTY TREASURER	ELECTION SUPPLIES	\$	132.87
4/19/2017	21158	PLANTE & MORAN PLLC	BENEFITS CONSULTING SERVICES	\$	1,000.00
4/19/2017	21159	SAFEBUILT	CODE ENFORCEMENT SERVICES	\$	440.00
4/19/2017	21160	SOUTHEASTERN OAKLAND COUNTY	REFUSE COLLECTION CONTRACT	\$	224.46
4/19/2017	21161	STANDARD & POOR'S FINANCIAL SERVICE	ACCOUNTING SERVICE FOR CAP IMPR BONDS	\$	11,500.00
4/19/2017	21162	STATE BARRICADES, INC	DPW SUPPLIES	\$	2,933.10
4/19/2017	21163	THE DAVEY TREE EXPERT COMPANY	TREE CONTRACTED SERVICES	\$	275.00
4/19/2017	21164	VERIZON	WIRELESS SERVICES	\$	50.08
4/19/2017	21165	WELCOMING AMERICA	MEMBERSHIP DUES	s	200.00

Total for 4-19-2017

64,256.69

PG 6

CITY OF PLEASANT RIDGE CHECK REGISTER ACCOUNTS PAYABLE

Electronic Payments & P-Card Transactions

Check Date	Check	Vendor Name	Description	Amount
4/17/2017	774	5TH 3RD	RECREATION AND EVENT SUPPLIES	\$ 1,927.61
4/17/2017	775	5TH 3RD	RECREATION AND EVENT SUPPLIES	\$ 1,063.90
4/17/2017	776	5TH 3RD	RECREATION AND EVENT SUPPLIES	\$ 1,226.67
4/17/2017	777	AMAZON.COM	MEMBERSHIP FEE-POLICE	\$ 96.36
4/17/2017	778	AMAZON.COM	POLICE DEPARTMENT SUPPLIES	\$ 229.49
4/17/2017	779	AMAZON.COM	POLICE DEPT OFFICE SUPPLIES	\$ 20.93
4/17/2017	780	COMCAST	TELECOMMUNICATION SERVICES	\$ 115.10
4/17/2017	781	COMCAST	TELECOMMUNICATION SERVICES	\$ 144.85
4/17/2017	782	COMCAST	TELECOMMUNICATION SERVICES	\$ 144.85
4/17/2017	783	COMCAST	TELECOMMUNICATION SERVICES	\$ 115.24
4/17/2017	784	FERNDALE FOODS	RECREATION PROGRAM SUPPLIES	\$ 84.12
4/17/2017	785	GALL'S, INC.	POLICE UNIFORM SUPPLIES	\$ 189.45
4/17/2017	786	HARBOR FREIGHT TOOLS	POLICE DEPARTMENT SUPPLIES	\$ 92.20
4/17/2017	787	QUILL CORPORATION	OFFICE SUPPLIES	\$ 389.43
4/19/2017	788	5TH 3RD	RECREATION, MEETING & PROGRAM SUPPLIES	\$ 13,536.46

Total for Electronic Payments

19,376.66



From: Carolyn Lorenz, Finance

To: Pleasant Ridge City Commission

Date: May 5, 2017

Re: 2016-17 Budget Amendment A-2017-002

Overview

The following budget amendments adjust property tax revenue estimates, reallocates capital outlay, transfers the original budgets from the recently closed Park Improvement Fund to the Segregated Capital Asset Fund, adjust investment earnings, and amends the budget for the issuance of the infrastructure bond.

Background

Budget Amendment Group 1

We have adjusted our property tax revenue accounts to reflect the final taxable values after all Michigan Tax Tribunals and Board of Review adjustments have been processed. The amendment to the current budgeted amounts is as follows:

J		Increase (Decrease)
101-000-401.000	Property Taxes - Operating	\$(18,400)
101-000-447.000	Property Taxes - Admin Fees	\$10,000
218-000-406.000	Infrastructure Taxes	\$(5,000)
226-000-403.000	Refuse Collection Taxes	\$(2,900)
251-000-408.000	Pool Operating Taxes	\$(2,200)
259-000-406.000	Park Improvement Taxes	\$(1,290)
260-000-405.000	T.I.F.A. Taxes	\$5,500
271-000-407.000	Library Taxes	\$(700)
301-000-404.000	Debt Service Property Taxes	\$(5,975)

Budget Amendment Group 2

We reallocated the capital outlay budgets for streets and alleys from the Infrastructure Improvement Fund to the Major and Local Street Funds so that we can utilize our Act 51 monies.

		<u>Increase (Decrease)</u>
202-910-970.446	Capital Outlay - Streets & Alleys	\$51,000
203-910-970.446	Capital Outlay - Streets & Alleys	\$82,000
218-910-970.446	Capital Outlay - Streets & Alleys	\$(133,000)

Budget Amendment Group 3

This amendment closes out the Park Improvement Fund (220) and reallocates the already approved budget amounts to the Segregated Capital Asset Fund "SCAF" (259). The "Transfer In – SCAF" budget has thus been eliminated.

		Increase (Decrease)
220-000-406.500	Park Improvement Taxes	\$(99,655)
220-000-699.259	Transfers In - SCAF	\$(660,000)
220-910-970.750	Capital Outlay - Recreation	\$(759,000)
259-000-406.500	Park Improvement Taxes	\$99,655
259-910-970.750	Capital Outlay - Recreation	\$759,000

Budget Amendment Group 3

This amendment adjusts for Vanguard's investment performance.

		<u>Increase (Decrease)</u>
258-000-665.000	Interest Income	\$15,000
258-000-665.100	Unrealized/Realized Gain	\$135,000

Budget Amendment Group 4

We are in the process of issuing infrastructure bonds to fund infrastructure improvements. We have received final numbers from bond council and would like to amend the current budgeted amounts as follows:

		<u>Increase (Decrease)</u>
218-000-655.000	Interest Income	\$154,500
218-000-698.000	Bond /Note Issuance @Face Value	\$3,000,000
218-905-816.001	Bond Issuance Costs	\$60,000
218-910-970.446	Capital Outlay - Streets & Alleys	\$1,173,000
218-910-970.750	Capital Outlay - Recreation	\$55,000

Requested Action

City Commission consideration of the above budget amendments.



23925 Woodward Avenue Pleasant Ridge, Michigan 48069

RESOLUTION

WHEREAS. mental health is important for our individual well-being and vitality, as well as that of our families, communities and businesses; and one in five Americans experience a mental health illness that required treatment at some WHEREAS, point in their lives; and WHEREAS, one in ten children has a serious emotional disturbance that, if untreated, can lead to school failure, physical illness, substance use, jail and even suicide; and WHEREAS, the State of Michigan will designate a Mental Health First Aide Training Week in May, recognizing an in-person training that teaches people how to help people developing a mental illness or in a crisis; and WHEREAS. stigma and stereotypes associated with mental illnesses often keep people from seeking treatment that could improve their quality of life; and WHEREAS, mental illness is a biologically based brain disorder that cannot be overcome thorough "will power" and is not related to a defect in a person's "character" or intelligence; and mental health recovery is a journey of healing and transformation, enabling people with a WHEREAS. mental illness to live in a community of his or her choice while striving to achieve his or her full potential; and WHEREAS, mental health recovery not only benefits individuals with mental health disorders by focusing on their abilities to live, work, learn and full participate and contribute to our society, but also enriches the culture of our community life; and

WHEREAS, the Oakland County Community Mental Health Authority, and its service provide agencies, are committed to inspiring hope, empowering people, and strengthening communities.

NOW, THEREFORE, BE IT RESOLVED that the City of Pleasant Ridge hereby proclaim May 2017 as Mental Health Month. The Mayor and City Commission call upon all citizens, government agencies, public and private institutions and businesses to recommit to increasing awareness and understanding of mental illness and the need for appropriate and accessible services for all people with mental illness.

In Witness Whereof, I Kurt Metzger, Mayor of the City of Pleasant Ridge, do hereby set my hand and affix the official Seal of the City on this 9th day of May 2017, affirming the vote of the Pleasant Ridge City Commission.

Kurt Metzger Mayor



23925 Woodward Avenue Pleasant Ridge, Michigan 48069

RESOLUTION

National Association of Letter Carriers Food Drive Day

WHEREAS, America's Second Harvest reports that 38 million Americans are food insecure, hungry or at risk of hunger. 25 million Americans receive food assistance from large and small food banks across the Nation; and

WHEREAS, nearly 9 million children and 3 million seniors who live in America at the poverty level receive food assistance. One in four people in a soup kitchen line is a child; and

WHEREAS, poverty adversely affects birth weight, child deaths, abuse and neglect, education and the general health of our most precious resource, our children and also affects our seniors; and

WHEREAS, the National Association of Letter Carriers (NALC) in conjunction with the United States Postal Service (USPS) is sponsoring the twenty-fifth Annual National Food Drive Day on Saturday, May 13, 2017; and

WHEREAS, the NALC Branch 3126, which includes the City of Pleasant Ridge, is participating in the National Food Drive Day; and

WHEREAS, the cost of inaction is too high, particularly in the face of many negative outcomes for our children and community which are preventable;

NOW, THEREFORE, BE IT RESOLVED, that the City of Pleasant Ridge endorses and supports the National Association of Letter Carriers Food Drive; and

THEREFORE, BE IT FURTHER RESOLVED, that the City of Pleasant Ridge publicly advocates that the residents of Pleasant Ridge leave non-perishable food at their mailboxes on Saturday, May 13, 2017; and

THEREFORE, BE FINALLY RESOLVED that the City of Pleasant Ridge go on record proclaiming Saturday, May 13, 2017, as National Association of Letter Carriers Food Drive Day.

Signed this 13th day of May, 2017, in the City of Pleasant Ridge State of Michigan in witness whereof the official seal and signature of the city.

Amy M. Drealan, City Clerk	



23925 Woodward Avenue Pleasant Ridge, Michigan 48069

PROCLAMATION

WHEREAS, the Congress of the United States of America has designated the week of May 15 to be dedicated as "National Police Week" and May 15 of each year to be "Police Memorial Day," and

WHEREAS, the law enforcement officers are our guardian of life and property, defenders of the individual right to be free men, warriors in the war against crime and dedicated to the preservation of life, liberty and the pursuit of happiness, and

WHEREAS, the City of Pleasant Ridge desires to honor the valor, service and dedication of its own police officers, and

WHEREAS, it is known that every two days an American Police Officer will be killed in the line of duty somewhere in the United States and more than one hundred officers will be seriously assaulted in the performance of their duties.

NOW, THEREFORE, as evidence of our sincere appreciation for our police officers and all others, the Mayor and City Commission are proud to proclaim the week of May 14 to May 20, 2017, as **Police Week in the City of Pleasant Ridge** and May 15, 2017, as **Police Memorial Day.**

FURTHER, The City of Pleasant Ridge hereby joins with other communities across this nation to honor all peace officers for their dedicated service and call upon all our citizens to make every effort to express their thanks to our men and women who make it possible for us to leave our homes and family in safety each day and return knowing they are protected by men and women willing to sacrifice their lives if necessary, to guard our loved ones, property and government against all who would violate the law.

In Witness Whereof, I Kurt Metzger, Mayor of the City of Pleasant Ridge, do hereby set my hand and affix the official Seal of the City on this 9^{th} day of May 2017, affirming the vote of the Pleasant Ridge City Commission.

Kurt Metzger Mayor	



23925 Woodward Avenue Pleasant Ridge, Michigan 48069

RESOLUTION

WOLUNTEER'S DAY MAY 24, 2017

WHEREAS, a basic ingredient in the foundation of this nation is the voluntary acceptance of initiative and responsibility by private citizens, and voluntary organizations, and this fact is largely responsible for the progress and development of our great country; and

WHEREAS, many citizens of this community contribute to the well-being of fellow residents and the welfare of all our citizens by giving tirelessly of their time and energy without desire for recognition, or for personal gain; and

WHEREAS, for many years these individuals and organizations have worked quietly, often unnoticed and unappreciated by the general public;

NOW, THEREFORE, I, Kurt Metzger, Mayor of the City of Pleasant Ridge do hereby declare May 24, 2017, as Volunteer's Day in Pleasant Ridge and urge all citizens to be aware of the contributions made by our service organizational and volunteer workers, and to participate in and support their various programs and projects.

In Witness Whereof, I Kurt Metzger, Mayor of the City of Pleasant Ridge, do hereby set my hand and affix the official Seal of the City on this 9th day of May 2017, affirming the vote of the Pleasant Ridge City Commission.

Kurt Metzger Mayor



23925 Woodward Avenue Pleasant Ridge, Michigan 48069

RESOLUTION

Oakland County's Urban County Community Development Block Grant (CDBG) programs 2018-2020

Motion by	, Second by		that the City of
Pleasant Ridge resolve to	opt into Oakland County's Urb	oan County Communit	y Development Block Grant
(CDBG) programs for the	e years 2018, 2019 and 2020.	Further, we resolve r	emain in Oakland County's
Urban County Communit	y Development programs, wh	ich shall be automatic	cally renewed in successive
three-year qualification p	periods of time, or until such	time that it is in the	e best interest of the local
Community to terminate the	he Cooperative Agreement.		



OAKLAND COUNTY EXECUTIVE L. BROOKS PATTERSON

COMMUNITY & HOME IMPROVEMENT

Karry L. Rieth, Manager (248) 858-0493

April 28, 2017 -

The Honorable Kurt Metzger, Mayor City of Pleasant Ridge 23925 Woodward Ave Pleasant Ridge MI 48069-1199

RE: 2018-2020 Cooperation Agreements

Dear Mayor Metzger:

We invite the City of Pleasant Ridge to continue to participate in the Oakland County urban county Community Development Block Grant (CDBG) program for program years 2018-2020. The City has participated during the past three years. During this period, approximately \$17,000 has funded programs to address the needs of low income residents.

The U. S. Department of Housing and Urban Development (HUD) requires the County to renew its Cooperation Agreement with participating communities every three years. Your participation is essential to the County and the other cities, townships and villages that combine demographics each year to achieve the highest level of federal funding for local projects. Participation in the urban county requires a three year commitment and your community must remain in the program for the three year duration. If your community chooses to remain with the urban county, it is ineligible to apply for grants under the State CDBG program while a part of the urban county. Besides the annual CDBG allocation, participating communities also benefit from the County's federally funded HOME Investment Partnerships and Emergency Solutions Grant (ESG) programs. HOME funds are combined with CDBG funds each year to improve local housing stock through our Home Improvement Program. ESG funds are used to meet the needs of the homeless through emergency shelters, rapid re-housing and homeless prevention assistance.

As a current participant, there is a Cooperation Agreement between the City of Pleasant Ridge and Oakland County on file. This three year Cooperation Agreement is automatically renewed for each three year cycle unless an amendment is required by HUD. A copy of the most current Cooperation Agreement is attached as reference.

In order to continue to participate in the Oakland County urban county program the City must submit the following document to the County by **Monday**, **June 12**, **2017**:

A resolution (see attached) specifically designed to meet HUD requirements. Please ensure that the original resolution is signed, dated and certified by the City Clerk. Alternatively, the original resolution can be signed and dated by the City Clerk and embossed with a seal. Please send us the original resolution and keep a copy for your records.

If you decide to opt out of the urban county program, a letter signed by the chief executive officer is required. The letter should state that the community intends to opt out of the Oakland County urban county program. Due to federal requirements, you must submit this letter to the County and to HUD. Please mail HUD's copy of the letter to: Keith E. Hernandez, ACIP, Director, Office of Community Planning and Development, Detroit Field Office, U.S. Department of Housing and Urban Development, McNamara Federal Building, 477 Michigan Avenue, Detroit, MI 48226 by Monday, June 12, 2017. The County's copy of the letter should be mailed to: Carla Spradlin, Grant Compliance & Program Coordinator, by Monday, June 12, 2017. If you have questions, please contact Carla at (248) 858-5312.

We look forward to three more years of productive partnership.

Sincerely,

Karry L. Rieth, Manager

cc: Amy Drealan, Clerk



23925 Woodward Avenue Pleasant Ridge, Michigan 48069

City of Pleasant Ridge

Resolution

In Honor and Recognition of 23 Years of Dedicated Service Officer Glenn Fearn

Whereas,	Glenn W. Fearn has been a dedicated employee of the Police Department of the City of Pleasant Ridge for 23 years, hired in 1994 as a Patrol Officer; and
Whereas,	Officer Fearn has tendered his notice of retirement effective May 30, 2017; and
Whereas,	his years of service has served this community well; marked by exemplary dedication to Justice and Right; he was a conscientious, trustworthy and loyal employee; and
Whereas,	when the City hired this young man in 1994, he demonstrated a clear understanding of what it meant to be a law enforcement officer in a small community like Pleasant Ridge; and
Whereas,	his performance of the duties and responsibilities of a Police Officer has been characterized by excellent and constructive contributions to the Police Department; and
Whereas,	Officer Fearn has worked closely with many City Elected Officials, City Administration, too many employees to count and many residents in our beautiful City, earning their respect and friendship; and
Whereas,	he was a true good will ambassador for Pleasant Ridge and would never hesitate to tell anyone how proud he was to be a part of the Pleasant Ridge Police Department; and
Whereas,	his determination and tenacity for Justice, his dedicated interest and devotion to Right, and his willingness to go above and beyond the call of Duty is deserving of recognition.

Now, Therefore, Be It Resolved, that I, Kurt Metzger, by virtue of the authority vested in me as Mayor of the City of Pleasant Ridge, and on behalf of the members of the City Commission, deem it an honor and privilege to recognize Officer Fearn for his Outstanding Service.

And, Be It Further Resolved, that sincere appreciation of the City Administration and all residents of Pleasant Ridge is hereby extended to Officer Fearn with wishes for a healthy retirement and continued success in all his future endeavors.

Kurt Metzger, Mayor	



James Breuckman, City Manager

From: Jim Breuckman, City Manager

To: City Commission

Date: May 2, 2017

Re: Modification to Allow Front Yard Fence – 56 Ridge

Overview

We have received a request from the homeowner at 56 Ridge to install a decorative white picket fence along the property frontage at the sidewalk. Fences by ordinance are not allowed in front yards (Section 14-117), but the City Commission may grant variances and modifications to the fence provisions in specific cases (Section 14-121).

Background

Proposed Action

The proposed action is to install a white picket fence along the frontage of the property near the Ridge Road sidewalk. Refer to the attached letter from the property owner. The below picture shows the very recently-installed brick pathway that the property owner references in her letter.



Context and Existing Conditions

Fences used to be permitted in front yards, and there are some existing front yard fences along Ridge Road that predate the now-existing ban on front yard fences. For example, there is a split-rail style fence that exists in the front yard of 50 Ridge, two houses to the north of 56 Ridge. 41 Ridge has a wrought iron fence along its frontage. There is a picket fence that extends along the side property lines in the front yard of 38 Ridge. Finally, there is a wrought-iron fence with brick piers at 16 Ridge.

Since the ban on front yard fences was enacted (in or before 1979), many residents along Ridge Road have installed landscape hedges to serve the same purpose.

However, the City has received requests for fence variance modifications in the past. Most recently, the property owners of 14 Ridge requested a variance to install a front yard fence in 2007. That request was denied by the Zoning Board of Appeals. Refer to the attached minutes and application package from 2007 for more details. That resident ended up installing an evergreen hedge that serves the same purpose as a fence along the perimeter of the property.

The City Commission should also be aware that the fence standards are not part of the Zoning Ordinance, but are a general ordinance. This means that the Planning Commission is not involved in the process of developing and adopting the fence standards, and that the Zoning Board of Appeals does not have purview over granting variances or modifications.

Decision Criteria

Section 14-121 establishes that:

Where, owing to special conditions, a strict enforcement of the provisions of this article would result in unnecessary hardship or involve practical difficulties, the city commission, after public notice and hearing, and subject to such conditions as the city commission may impose, shall have the power upon appeal in specific cases to authorize such variation or modification of the provisions of this article as will do substantial justice and will not be contrary to the public interest or to the spirit of this article.

The terms unnecessary hardship and practical difficulty have precise meanings when it comes to the question of variances. Specifically, they are the criteria that must be met for a Zoning Board of Appeals to grant a variance from a Zoning Ordinance provision. Unnecessary hardship is the criteria for granting a use variance to allow a use that is not otherwise permitted in a zoning district, while practical difficulty is the criteria that must be met to grant a dimensional variance.

The Zoning Board of Appeals is a quasi-judicial body that is empowered to grant variances from the Zoning Ordinance when the narrow criteria for unnecessary hardship or practical difficulty have been met.

In this specific case, the ordinance in question is a general ordinance, not a zoning ordinance. Further, the City Commission is established as the body that may grant the modification or variance, not the Zoning Board of Appeals. For these reasons, the City Commission need not be concerned with weighing this request against the narrow criteria for determining if unnecessary hardship or practical difficulty exist. Rather, the City Commission should determine if it feels this request is reasonable or not, and then act accordingly.

Review Considerations

As the City Commission weighs this request, it should consider the following:

- Does it feel that the request is reasonable and with merit?
- Would similar fences be appropriate on other properties along Ridge Road?
- Are there other factors that would make a front yard fence appropriate or not? For example, low decorative fences not exceeding 3-4 feet in height may be appropriate, but taller fences or chain link fences may not be appropriate.
- Any action to grant the request should include stipulations for the style and material of the fence being allowed.

I would suggest that the request is not unreasonable, as there is an existing pattern of fences or hedges that exist along the front and side property lines of many of the Ridge Road properties. While we would not want to allow for front yard fences on other properties in the City, the unique, estate-like nature of the Ridge Road properties does lend itself to front yard fences being contextually appropriate.

However, this City Commission action will serve to either reinforce the existing ban on fences, or to set a new precedent that front yard fences along Ridge Road are or may be appropriate. Given that, I would suggest that if the City Commission finds this request to be reasonable, that we also amend the ordinance to allow for front yard fences with certain design limitations along Ridge Road only. Such limitations could include materials, design, and height of fences.

Potential Actions

The City Commission may resolve this question in a few different ways:

- 1. Approve the request with certain stipulations for the fence that is being allowed.
- 2. Approve the request with certain stipulations for the fence that is being allowed, and direct staff to prepare an ordinance amendment that would permit front yard fences in certain instances (i.e. only along Ridge Road where this pattern has existed in the past).
- 3. Deny the request and uphold the ordinance ban on fences in front yards.
- 4. Deny the request, but direct staff to prepare an ordinance amendment that would permit front yard fences in certain instances (i.e. only along Ridge Road where this pattern has existed in the past). If the ordinance amendment passes, the property owner at 56 Ridge could construct a fence that meets the ordinance criteria.
- 5. Postpone action until a later date or provide other direction to Staff.

Requested Action

City Commission consideration of the resident request.

April 27, 2017

Dear Jim,

My husband and I have been working hard over the past few years to improve the exterior appearance of our home. We have painted, built a new garage, a new front porch and most recently a brick walkway in our front yard. To complete the project we plan to do landscaping in the front and to add a small, white picket fence with a gate positioned over the walkway.

We are proud of our historic home and would like to add the fence as a detail that was previously always a part of this home. 56 Ridge was originally situated on several acres with an apple orchard behind it. When we purchased the home in 1990 it had a picket fence that was in serious disrepair, so we took it down but at the time could not spend the money to replace it.

Our hope is that the city commission will provide us with an exception to the ordinance that does not allow fences in the front yard as an acknowledgement of the historic character of our home and the general improvement of the appearance of Ridge Rd. properties.

On the following page you find an image of the type of fence we would like to install.

Thank you for your consideration,

Judy and Rob Wachler



City of Pleasant Ridge 23925 Woodward Avenue Pleasant Ridge, Michigan 48069

Public Hearing and Zoning Board of Appeals Meeting

Tuesday, August 14, 2007

Having been duly publicized, Mayor Castelli called the meeting to order at 6:33 p.m.

Present:

Mayor Castelli, Commissioners Bushey, Howard, Kellett.

Also Present: City Manager Ball, City Attorney Cooper, City Clerk Allison.

Absent:

Commissioner Lenko

14 Ridge Road

Mr. and Mrs. Mark Leavy, homeowners, 14 Ridge, are requesting a variance to Article IX, Section 14-208 of the Pleasant Ridge City Code regarding the construction of a front yard fence.

Manager Ball explained the homeowners wish to install a new 4' high aluminum fence and driveway gates along the north and east side of the yard. The fence will be custom designed, open rail, decorative black aluminum. The gates will curve up to 4'6" at the peak. Manager Ball received comments from two residents. The first comment from a resident on Woodside Park had no objection to the variance as long as the proposed fence was in keeping with the neighborhood. The second comment was from a resident of Ridge Road who objects to the variance. The Leavy's property is located directly across from the Community Center and they are concerned about safety and trespass issues as detailed in their request. Three properties along Ridge Road have fences along the front of the properties; however, many more properties have landscaping and or shrubs. The existing fences along Ridge Road were constructed prior to this ordinance being adopted and are therefore "grandfathered in".

Mr. Mark Leavy, homeowner, commented that he has seen many instances of what they would consider to be violations of their property such as pedestrians allowing their animals into the yard, children and pedestrians cutting through the yard to get to the Community Center and to cut the corner at Woodside Park. He feels their situation is unique, they have much more exposure to trespass than other properties, commenting that, people have wandered onto the property to use their tennis courts, thinking that the courts were for general recreational use. He further commented that there isn't a useable rear yard, since the lot was subdivided to create the property at A1 Woodside Park.

The homeowners did consider using hedging as an alternative. It would require 350 linear feet of hedging along the north side of Woodside Park and the east side of Ridge Road. Mr. Leavy commented that he feels that would be an excessive amount of maintenance and cost. Also, the potential of hedging may invite people onto the property to view the home and grounds. Hedging may not mitigate the security and liability concerns, since the house sits far back from the street and there are many hours that the house is left unattended. The fence is a better alternative; it would still allow for visibility from the street since the fencing is not a solid structure, there is no maintenance issues and would address the security and liability issues. The homeowners are planning to install an irrigation system and re-landscaping the yard along with the installation of the fence. Mr. Leavy feels that if the variance is not granted, he will have to reconsider his investment in the landscaping of the property.

Ms. Natalie Leavy, homeowner, questioned what the objection was from the neighbor on Ridge Road. (The Leavy's were given a copy of the objection by the homeowner at 18 Ridge Road)

Commissioner Howard asked Manager Ball about the fence located at 50 Ridge Road, was this fence one of the "grandfathered" fences that were mentioned earlier.

Manager Ball commented that the original fence at 50 Ridge Road would have been grandfathered in, and that the homeowner is allowed to make repairs to that fence, which they have, however, they would be unable to remove and replace that fence.

Commissioner Howard recalled that there was an exception for homeowners along Ridge Road to allow for fences in the front yard since prior to the I-696, Ridge Road was the pass-through street and was subject to much more traffic than it is now. However, when the ordinance was redrafted, the prohibition was put in place.

Mr. Leavy had read the letter of objection and addressed the points in the letter, and reiterated his position for granting the variance.

Mayor Castelli opened the public hearing at 6:55 p.m.

Mr. Robert Greager, 3 Woodside Park, objects to the variance being granted. He commented that he has seen many properties that have landscaping and that seems to be a better alternative. He commented that he wished that he knew the petitioners better, he feels that a sign may be a better alternative, also he feels that an aluminum fence would not be keeping with the character of a stone and tile house — as a architect and as a planner, he feels there are better alternatives. He addressed the tennis court and the fence surrounding the tennis court and commented that the screening around the tennis court is adequate to deter trespassers. He commented that he would rather not see the fence installed unless it is absolutely necessary.

Mr. Kevin Donley, 20 Ridge Road, objects to the variance being granted. He also lives on a corner lot on Ridge Road. He commented that since the home is in a National

Historic District, he knows that this fence would not be approved by the State in keeping with the district. He lives on a corner as well and Mr. Leavy's comment that a hedge row would be expensive could easily be solved by the use of evergreens or other alternatives. The petitioners can start out small and in a few years it would cut a lot of the traffic. The maintenance doesn't seem to be that much at his property, he has evergreens planted. He suggested that the petitioners look at the property at 25 Oakland Park as an alternative to the installation of a fence.

Ms. Leavy commented that the driveway that comes out of the Community Center and the fence located at the park next to the Community Center, sets it up so that people want to cut through the yard.

Mayor Castelli questioned whether anyone has ever driven through the yard.

Ms. Leavy responded that they had a "yard job" last winter, which they reported, it happened in the middle of the night, she is not sure who did it or with what – car or truck. Her concern is the pedestrian traffic that walks from the Community Center that has a tendency to cut across the yard and the liability that presents. She can put up with the vehicles turning around in her driveway and she does like the treatment at 25 Oakland Park, however, she feels that it may be attractive for kids to jump over that type of treatment at her property.

With no further comments, Mayor Castelli closed the public hearing at 7:02 p.m.

Mayor Castelli asked about the factor of 'self created'. First an owner of that property built the tennis court and an owner decided to split the lot to create A1 Woodside. His question is whether the issue of self created as being only the petitioners or self created by any owner of that property.

City Attorney Cooper stated that self created would mean by any owner of that property, since it was created.

Commissioner Howard stated that the acts of a previous owner would have an impact on the current owner.

City Attorney Cooper agreed.

Commissioner Kellett commented that he appreciates the Leavy's concerns about installing something that is attractive; however he has concerns about putting a fence around the whole property. He feels that if the fence was more ornamental or a combination of landscaping and fencing would be a better alternative.

Commissioner Howard questioned how the ZBA could approve the variance. She states that she cannot grant a variance based on whether she likes the design of the fence or not, she is looking at the reasons that a variance can be granted and the Leavy's argument is not fitting into one of those categories.

Mayor Castelli commented that is why he asked about the self creation issue and how the current owners would be impacted by a former owner's decision.

Commissioner Bushey stated that he agreed with Commissioner Howard. He doesn't see a reason that would allow for this variance to be granted.

07-2379

Motion by Commissioner Howard, second by Commissioner Kellett, that the request by Mr. and Mrs. Mark Leavy, 14 Ridge Road, Pleasant Ridge, Michigan, for a variance to Article IX, Section 14-208 of the Pleasant Ridge City Code regarding the construction of a front yard fence be denied as recommended by the City Manager.

Denied:		Commissioners Howard, Kellett, Bushey, Mayor Castelli. None.
With no fup.m.	rther busi	ness or discussion, Mayor Castelli adjourned the meeting at 7:00
Mayor Ralp	oh A. Casto	elli, Jr.
Amy M. Al	lison, City	V Clerk

14 Ridge Road Pleasant Ridge, Michigan 48069

Sherry W. Ball City of Pleasant Ridge City Manager 23925 Woodward Ave Pleasant Ridge, Michigan 48069

Dear Sherry,

We are requesting a variance to install a custom designed 4 foot high aluminum fence and driveway gates around the north and east sides of our yard. Our yard comprises two lots and is located at the south corner of Ridge Road and Woodside Park Blvd. Currently the only "buffer" the yard has from the excessive pedestrian and vehicular traffic to and from the Community Center are several overgrown bushes which detract from the beauty of the lot(s). We propose removing these eyesores and installing a fence which would complement the vard and the style of our residence.

We advocate a hardship condition in requesting this variance due to the proximity of our yard to the community center and the traffic coming off Woodward Ave. down Ridge Road for commuters heading into Ferndale. Additionally, the location of our residence so far back from the road introduces a security concern that a fence would deter

We have specific examples of incidents that have taken place since we bought the house in 2004 that demonstrate the practical difficulty the installation of a fence would address. It should also be noted that our neighbor to the south already has a fence along the front of his property as do other residents along Ridge Road.

In closing, we desire to enhance the look and value of our property and Pleasant Ridge in general, through seeking this variance to install fencing around our front lawn.

We respectfully request your consideration in this matter.

Mark and Natalie Leavy

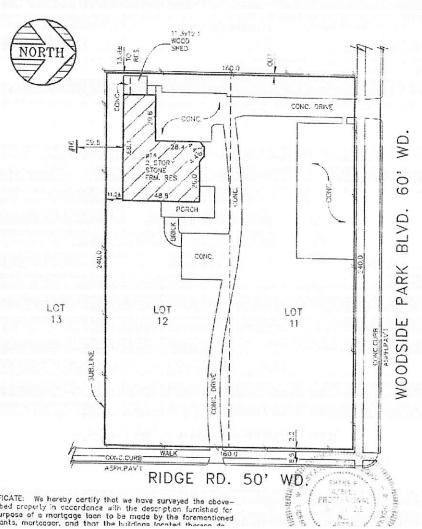
Certified to:

GMAC Mortgage

Applicant: MARK LEAVY AND NATALIE YOT

Property Description:

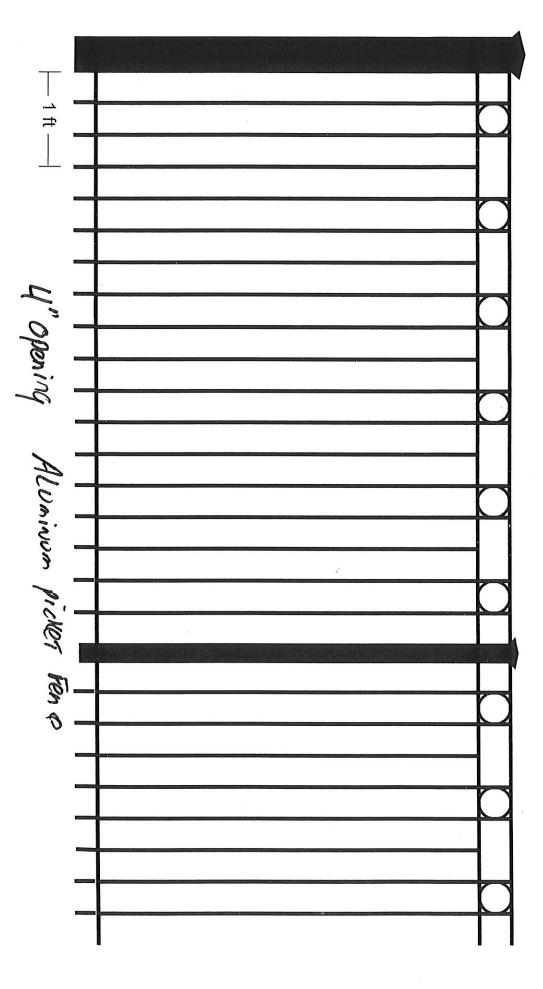
The East 240 feet of Lot 11 and 12; WOODSIDE PARK SUBD'N., of Gutlot 10, the N. 1/2 of Outlot 9, and South 80 feet of Outlot 11, Oakland Place Subd'n., also of Lot 93 of Burt E. Taylor's Woodland Subdivision, Royal Oak Twp. (now City of Pleasant Ridge). Oakland County, Michigan, as recorded in Liber 11 of Plats, Page 4 of Cakland County



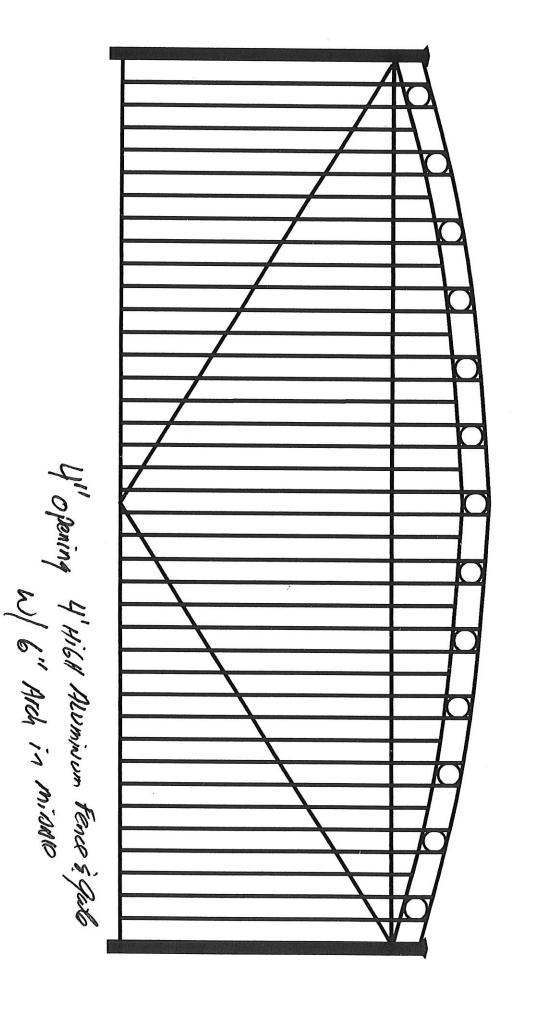
line of

CERRIFICATE: We hereby certify that we have surveyed the above-described property in accordance with the description furnished for the purpose of a mortgage loan to be made by the forementioned applicants, mortgager, and that the buildings located thereon de-

14 Ridge Fence Design

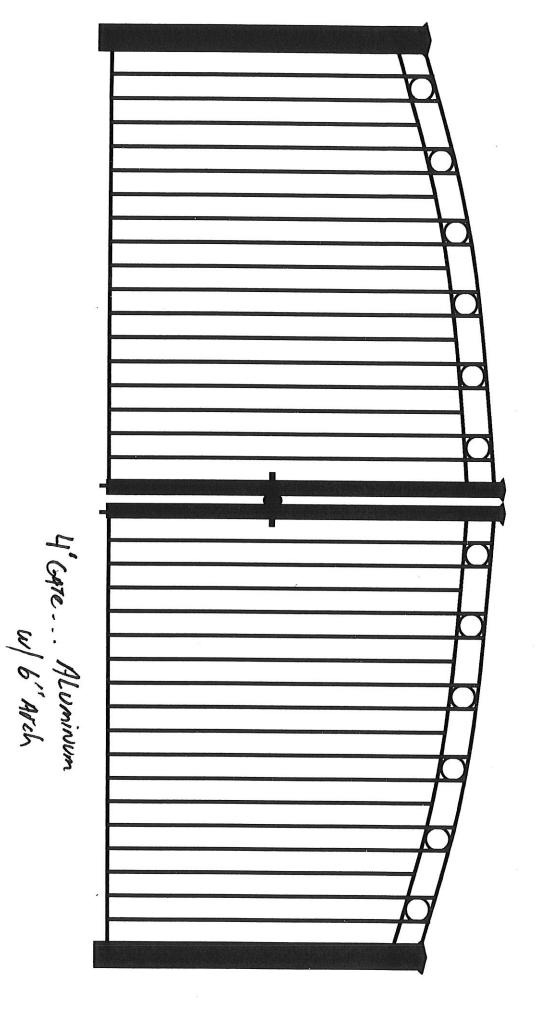


14 RIDGE 13' GATE DESIGN



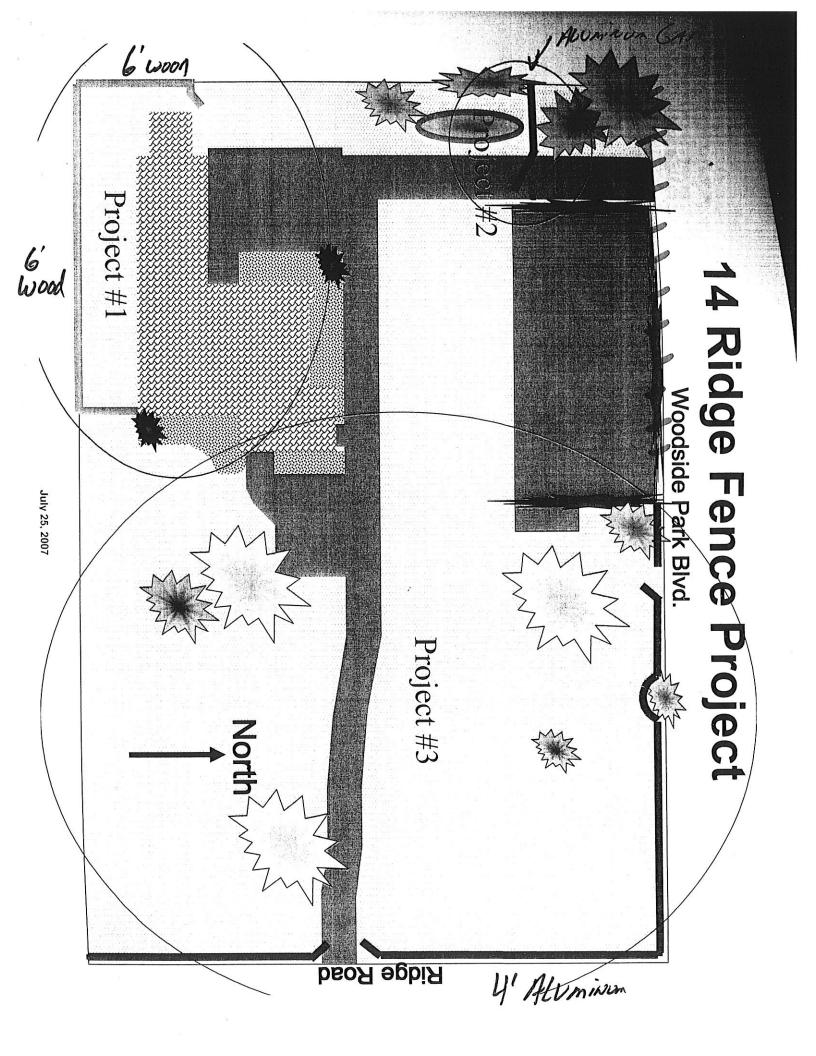
JULY 25, 2007

14 RIDGE 2 @ 6' GATE DESIGN



JULY 25, 2007

July 25, 2007





City of Pleasant Ridge

James Breuckman, City Manager

From: Jim Breuckman, City Manager

To: City Commission

Date: May 4, 2017

Re: Represent.US Anti-Corruption Resolution

Overview

A resident member of the group Represent.US has requested that the City Commission consider the adoption of the attached sample resolution. After conferring with the Mayor, we have included this request as an agenda item for your consideration and direction.

Background

The attached resolution was provided by Alex Lenko for the City Commission's consideration. The resolution is a sample and is in draft form. The City Commission may choose to adopt the resolution, table it with further instruction for Staff, or decline to act on this item.

Mr. Lenko will be at the City Commission meeting on May 9 to provide further background on this item.

Requested Action

City Commission consideration of the resolution.

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Sample Anti-Corruption Resolution

Resolution to establish as a position of Pleasant Ridge, County of Oakland, Sate of Michigan, that though, new anti-corruption laws for politicians, lobbyists and outside groups such as Super PACs are necessary in order to protect and promote First Amendment free speech rights of all citizens, regardless of wealth, and to restore ordinary Americans as the most important stakeholders in government instead of major donors.

WHEREAS, limits on contributions to political candidates are justified by the need to reduce corruption and the appearance of corruption, as outlined in Buckley v. Valeo (1976); and,

WHEREAS, contributions to candidates, and political spending on their behalf, from lobbyists, and Super PACs present a special risk of corruption; and,

WHEREAS, the Supreme Court held in Nevada Commission on Ethics v. Carrigan (2011) that restrictions on official actions taken by legislators in situations in which their independence of judgment is questioned do not constitute restrictions on the First Amendment free speech rights of legislators; and,

WHEREAS, closing the "revolving door," where elected representatives and senior staff sell off their legislative power for high-paying jobs, is important to ensure that government employees are not "influenced in the performance of public duties by the thought of later reaping a benefit from a private individual." Brown v. District of Columbia Board of Zoning, 413 A.2d 1276, 1282 (D.C. App. 1980); and,

WHEREAS, full transparency of all political money is necessary for the growth of an educated and informed electorate; and,

WHEREAS, with nearly \$6 billion spent in the 2012 elections, where the majority came from big special interest donors, politicians are dependent on a tiny percentage of the population to fundraise their campaigns while ordinary voters have less influence; and,

WHEREAS, federal agencies such as the Federal Election Commission routinely fail to enforce the anticorruption rules that already exist;

NOW, THEREFORE, BE IT RESOLVED that it is the position of Pleasant Ridge, County of Oakland, State of Michigan, that though, new anti-corruption laws must be passed by Congress, including legislation to prohibit politicians from taking campaign money from industries they regulate; put limits on unregulated Super PACs and other groups; increase transparency for campaign funding; stop elected representatives and senior staff from negotiating jobs while in office and bar them from all lobbying activity for five years once they leave; empower all voters through a \$100 tax rebate to contribute to candidates they support and strengthen federal agencies and House and Senate ethics committees to enforce the rules against politicians and special interests that break campaign finance law.

BE IT FURTHER RESOLVED that Pleasant Ridge hereby includes in its 2017 legislative agenda support for efforts to pass its own anti-corruption legislation, and respectfully urges the Michigan Congressional

delegation to support and introduce anti-corruption legislation to the House and Senate addressing the issues herein described.



City of Pleasant Ridge

James Breuckman, City Manager

From: Jim Breuckman, City Manager

To: City Commission

Date: May 4, 2017

Re: Iron Ridge Development Brownfield Plan Resolution

Overview

The former ePrize and Walker Wire buildings have been acquired by a new owner who is proposing to make substantial improvements to the entire complex of buildings, with the total planned investment being \$25-\$30 million dollars. Being former industrial sites, there are environmental issues that will be cleaned up as part of the project. The developer is proposing to create a Brownfield Tax Increment Financing vehicle to assist in financing the cleanup of the sites as they are redeveloped.

Background

The Iron Ridge development site includes the former ePrize building, the Walker Wire complex, and other properties along Bermuda Street. The project is generally bounded by 10 Mile, the railroad tracks, and Bermuda Street. The project is in both Ferndale and Pleasant Ridge, with the boundary line between the two cities running north-south near the east side of the Walker Wire building. The total project contains about 231,000 square feet of floor area.

The project will include a variety of uses that will activate the site and provide a destination for a variety of work, shopping, service, fitness, and entertainment uses. The proposed site mix will make this more of a community destination/anchor than it has been in the past, when it was solely office and industrial space.

No new buildings are proposed in Pleasant Ridge. The development activities in Pleasant Ridge will be focused on the transformation and re-use of the existing buildings. The proposed uses shown on the draft site plan are permitted uses in the Workplace zoning district. As such, no site or special use approvals are required for development activities. The proposed development would require City Commission approval for liquor licenses at the site under our liquor license ordinance.

The site has excellent access to the regional and local street network. Bermuda provides access to the site from the north and south. Traffic from Woodward can access the site from the I-696 service drive, while traffic coming from I-696 can use either the Woodward or Hilton exits to get to the site via the service drive. The proposed development, being located on the east side of the railroad tracks and having no connection to the local street network in Pleasant Ridge, will not create any traffic impacts on our local streets.

One potential drawback is that there is also limited pedestrian access to the site from Pleasant Ridge, although our residents will be able to easily reach the site by car, or by bicycle using Woodward Heights and Bermuda, which are part of a regional bike route and have experienced or have the potential for further bike lane improvements.

Overview of Environmental Issues

For an overview of the environmental issues present at the site, refer to the attached brownfield plan. The sites contain a variety of soil and groundwater contaminants from the past industrial activities, and asbestos is present in the buildings. The environmental issues at the sites currently exceed State standards for residential or nonresidential cleanup.

The proposed brownfield remediation activities include bringing the site into compliance with state standards, will abate the asbestos issues, and installing vapor barriers in the buildings to prevent vapor intrusion from the underlying soil entering the buildings.

All three of the parcels in Pleasant Ridge qualify as "facilities" under State brownfield legislation, which means that eligible environmental cleanup activities undertaken by the developer can be reimbursed through incremental post-development tax capture. The tax increment financing concept is described in more detail in the next section.

Eligible activities are described on pages 10 and 11 of the brownfield plan that may be reimbursed through a brownfield TIF. The table shows that there is a total of \$2,576,716 of environmental remediation work that can be reimbursed in Pleasant Ridge. There is a total of \$3,986,011 that can be reimbursed from eligible activities in Ferndale. That reimbursement will come from TIF capture generated by the Ferndale parcels.

Tax Increment Financing (TIF) Overview

TIF is a financing method that is used for brownfield projects, and for other public entities such as Downtown Development Authorities (DDAs). The City of Pleasant Ridge DDA is an existing TIF body that has used TIF financing for over two decades.

A TIF captures the <u>increased</u> property tax revenues from a defined geographic area for a defined period and for a specific purpose. When a TIF is created, the year in which it is created serves as the baseline year and the taxable value in the baseline year is set as the baseline taxable value. The various taxing jurisdictions (i.e. the City, Oakland County, the Ferndale School District, etc.) continue to collect property taxes on the baseline taxable value.

In subsequent years, when the taxable value increases due to either natural increases or new development, the increased tax revenue is captured by the TIF authority. In the case of a brownfield, the increased tax revenue is captured and distributed to the developer who incurred the environmental cleanup costs.

Once the TIF expires, all tax revenues are again collected by the various taxing jurisdictions.

The following table shows a simplified example of how a TIF would work for a development that incurred \$1,000,000 of environmental costs and that extended for 25 years.

	Year 0	Years 1-25	Years 26+
Baseline Taxable Value	\$100,000	\$100,000	\$100,000
- New Taxable Value	\$500,000	\$500,000	\$500,000
= Taxable Value Increment	\$400,000	\$400,000	\$400,000
Taxes Generated on Baseline Taxable Value	\$10,000	\$10,000	\$10,000
Taxes Generated on Taxable Value Increment	\$0	\$40,000	\$40,000
	***	***	
Taxes Collected by City	\$10,000	\$10,000	\$50,000
Taxes to Developer to Reimburse Environmental Costs	\$0	\$40,000	\$0

Financial Need

A brownfield TIF is a vehicle to reimburse a private developer for environmental cleanup work. It is, at its most basic, a public subsidy to support a private project. It is therefore incumbent upon the City to ensure that the project and the requested brownfield TIF meets the "but-for" test, where the project would not be viable but-for the TIF capture.

There are a few different ways to evaluate project need. One common way is to use a project pro forma excel workbook that the MEDC uses to evaluate projects that are seeking MEDC grants or subsidies. Many brownfield authorities key in on the Internal Rate of Return (IRR) calculation, and use this number to evaluate whether the project needs public subsidy or not. Most brownfield authorities do not set or publish a big bright line IRR percentage, but rather use the IRR calculation as a guidepost for evaluating the project.

We requested that the developer complete the MEDC pro forma workbook and provide it to us. They did so, and we asked them to revise it based on our initial review. The revised pro forma shows that this project has an IRR of 7.01%.¹ This is on the low side for a development project, and demonstrates that the brownfield TIF capture is almost certainly necessary for the project to be viable. Without the TIF capture, it is unlikely that the development would occur because the IRR would be so low as to make the project infeasible. In that case, there would be no development, no increased taxable value, and the City would continue collecting only the baseline taxes.

Given that the necessity of the TIF reimbursement is apparent, the next question is, does the City like the project? Staff believes that the project is well thought out, and will turn the site into something that the entire community can benefit from and use. The City Commission must come to its own conclusion on the matter, but Staff is supportive of the project.

Brownfield Plan Approval

Brownfield plans can be approved by any Brownfield Redevelopment Authority (BRA) with jurisdiction over a site. The site is in Pleasant Ridge, Ferndale, and Oakland County. Ferndale and Oakland County each have a BRA, but Pleasant Ridge does not. This leaves two possible options to approve a brownfield plan:

- 1. Use the Oakland County BRA to approve a joint brownfield plan for PR and Ferndale
- 2. Create a BRA in Pleasant Ridge and have PR and Ferndale each approve a local brownfield plan.

¹ The pro forma is an excel workbook with multiple spreadsheets and does not lend itself to inclusion in the agenda packet. Any interested party can review the workbook at City Hall.

Iron Ridge Development and Brownfield Plan Introduction May 4, 2017 - Page 4 of 4

After meeting and consulting with our environmental consultant, Ferndale Staff, and Oakland County Staff, we are recommending that we use the Oakland County BRA to approve a joint brownfield plan for the development. Oakland County would then administer the tax capture and reimbursement to the developer.

To facilitate this process, the City Commission must pass a resolution concurring with the provisions of the brownfield plan, and authorizing the Oakland County BRA to approve and implement the plan. We have completed our review of the brownfield plan with our brownfield consultant, and now the plan is ready to be forwarded to Oakland County. Please note that the "Additional Recommended Changes" noted in ASTI Environmental's review of the brownfield plan have been shared with the Oakland County BRA for inclusion in their final review of the plan. The recommended changes will not alter the essential details of the brownfield plan, and so it is not necessary to require the developer to revise and resubmit prior to our acting on the plan.

The brownfield plan is also proposing TIF capture of school district taxes, which will require review and approval by the State Michigan Economic Development Corporation.

Requested Action

City Commission consideration of the resolution authorizing the Oakland County Brownfield Redevelopment Authority to review and process the brownfield plan for the Iron Ridge development.

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Resolution Authorizing the Oakland County Brownfield Authority to Review and Process Brownfield Plan for the Iron Ridge Development

WHEREAS the City of Pleasant Ridge has a Brownfield project commonly known as the Iron Ridge Project that it would like to have reviewed and processed by the Oakland County Brownfield Redevelopment Authority; and

WHEREAS the City of Pleasant Ridge has not created a Brownfield Authority; and

WHEREAS the Oakland County Brownfield Redevelopment Authority was created by Oakland County pursuant to MCL 125.2651 et seq. to assist jurisdictions like the City of Pleasant Ridge that do not have their own Brownfield Authority; and

WHEREAS the Oakland County Brownfield Redevelopment Authority is prepared to assist the City of Pleasant Ridge by reviewing the proposed Iron Ridge Project, if the City of Pleasant Ridge acknowledges certain rights that the Oakland County Brownfield Redevelopment Authority has, to wit:

- the Oakland County Brownfield Redevelopment Authority intends to collect an administrative fee not to exceed \$150,000 depending on the size and complexity of the project; and
- the Oakland County Brownfield Redevelopment Authority intends to capture and collect an amount up to 100% of the eligible costs for the Brownfield project, and that such funds will be placed in the Oakland County Brownfield Redevelopment Authority's revolving loan fund for future remediation projects; and

WHEREAS the City of Pleasant Ridge will have the opportunity to provide public comment on any Brownfield plan (including the amount of the administrative fee to be collected and the amount captured for the revolving loan fund) before it is finally adopted by the OCBRA and/or the Oakland County Board of Commissioners.

NOW BE IT THEREFORE RESOLVED that the City of Pleasant Ridge requests that the OCBRA undertake review of the Iron Ridge Project with the following stipulations:

- The Brownfield Plan must specify that the City will only reimburse for our proportional share of expenses if the MEDC or the MEDQ does not approval all or some of the expenses.
- The reimbursement period in the Brownfield Plan not exceed 26 years or a maximum of \$1,473,784 from local taxes in the City of Pleasant Ridge, whichever comes first.
- That the OCBRA revolving loan fund capture be limited to \$50,000 per year for not more than 2 years, therefore having a maximum capture of 28 years in the plan.
- That a claw back or termination provision be included in the reimbursement agreement in the event of non-payment of property taxes by the property owner.

IT IS FURTHER RESOLVED THAT the City of Pleasant Ridge acknowledges and understands that the OCBRA intends to collect certain administrative fees which will be specified in detail in any Brownfield Plan before it is finally adopted.

I, Amy M. Drealan, do hereby attest that the foregoing is a true and accurate copy of a Resolution adopted by the Pleasant Ridge City Commission at its meeting held Tuesday, May 9, 2017.

Amy M. Drealan, City Clerk



ASTI Environmental

Date: May 3, 2017

To: Jordan Twardy, City of Ferndale

James Breuckman, City of Pleasant Ridge

From: Tom Wackerman

Subject: Review of Revised Brownfield Plan for Proposed Iron Ridge Development, dated April 5, 2017

and Revised April 26, 2017 (ASTI File No. 10108)

ASTI reviewed the revised Brownfield Plan for the above project titled Oakland County Brownfield Redevelopment Authority, Brownfield Plan For: Proposed Iron Ridge Development, Located at 3155-3351 Bermuda, 3164-3350 Bermuda, and 660 East 10 Mile Road, Ferndale: 400-404 East 10 Mile Road and 660 East 10 Mile Road, Pleasant Ridge, Oakland County, Michigan and dated April 26, 2017 (the Plan). Please refer to the following memos dated April 13, 2017 for background information and recommendations; Review of Brownfield Plan for Proposed Iron Ridge Development, City of Ferndale Recommendations for Brownfield Plan for Proposed Iron Ridge Development, and City of Pleasant Ridge Recommendations for Brownfield Plan for Proposed Iron Ridge Development. This memo is limited to a review of requested and unrequested changes.

Background

The Plan is still requesting reimbursement of \$6,562,728. The amount of reimbursement requested from each community and the duration of the reimbursement from each community is the same as in the April 5th draft Plan.

Requested Changes

All of the changes requested and recommendations provided in the memo titled *Review of Brownfield Plan for Proposed Iron Ridge Development* and dated April 13, 2017 were made in the revised Plan with the exception of the following:

 A site plan was not provided with the Plan. Although the Table of Contents indicates that it is intended to be included as Appendix C, Appendix C in this version of the Plan is the Documentation of Eligibility (which should have been included as Appendix D).

Other Changes

The following additional changes were made to the revised Plan.

- 1. According to Section II(A), the alley between 60 E. 10 Mile and 3351 Bermuda in Ferndale will now be vacated and included in the Plan. Therefore, there are now 25 parcels in the Plan.
- 2. 3334 Bermuda (25-27-202-010) was added to the eligible property map. This property was already included in the list of eligible properties.

Phone: 810.225.2800 Fax: 810.225.3800

- 3. For the City of Ferndale:
 - a. The total future estimated taxable value for the all of the properties was increased from \$3,604,850 to \$3,624,950.
 - b. The captured local total tax millage was increased from 30.8902 to 32.1902 because:
 - i. the FPS Sinking Fund was moved from ineligible millages
 - c. The non-captured local total tax millage was changed from 16.6810 to 17.1822 because:
 - i. the FPS Sinking Fund was moved to eligible millages
 - ii. the Stormwater Settlement millage was added
 - iii. the Library-Operating millage was added
 - iv. the Poll/Rec Debt (Pleasant Ridge) millage was removed
- 4. For the City of Pleasant Ridge
 - a. The captured local total tax millage was increased from 30.7698 to 32.0698 because:
 - i. the FPS Sinking Fund was moved from ineligible millages
 - b. The non-captured local total tax millage was changed from 10.1856 to 8.8856 because:
 - i. the FPS Sinking Fund was moved to eligible millages

Additional Recommended Changes

The following are recommended additional changes for the revised Plan.

- 1. Parcel 25-27-201-012 (3281 Bermuda) does not have a parcel ID number on the third Assessors map.
- 2. The current Appendix C should be moved to Appendix D and the site plan should be provided as Appendix C.
- 3. Change the number of parcels to 25 throughout Although it does not yet have a parcel number, include the alley between 60 E. 10 Mile and 3351 Bermuda in Ferndale in the parcel list in Section II(A), include it in the individual parcel descriptions in Section II(A), include it in the legal descriptions in Appendix A, highlight it and provide a call-out on the map indicating the eligible parcels by address (titled Assessors Map) in Appendix B, highlight it and provide a call-out on the map indicating the eligible parcels by property number (titled Assessors Map) in Appendix B, and include it in Table 4.
- 4. Although the Plan was updated to indicate that approval for revisions will be required from the City of Ferndale and the City of Pleasant Ridge, the third to last paragraph in Section II(C) still indicates that only the OCBRA and Oakland County Board of Commissioners are required to amended the Plan. Please change.
- 5. The amount listed for reimbursement and BRA fess in the second to last sentence in the first paragraph of Section II(E) is \$7,514,994. Based on the tax tables, the amount for reimbursement and BRA fees should be \$6,884,727. The last sentence in the same paragraph indicates that this amount also includes Brownfield Preparation (which is already a reimbursed expense) and LBRF deposits, but that amount would be \$7,359,727. Please remove the ambiguity of those two sentences and include the correct amount.
- In Section II(K) the reference to "five (5) years following developer reimbursement" should be changed, since the capture for LBRF in Pleasant Ridge is only for two years.

Please contact me if you have any questions, or need additional information.



OAKLAND COUNTY BROWNFIELD REDEVELOPMENT AUTHORITY

BROWNFIELD PLAN FOR:

PROPOSED IRON RIDGE DEVELOPMENT

Located at:

3155-3351 Bermuda, 3164-3350 Bermuda, and 660 East 10 Mile Road, Ferndale:

400-404 East 10 Mile Road and 660 East 10 Mile Road, Pleasant Ridge, Oakland County, Michigan

APRIL 5, 2017 Revised: April 26, 2017

Approved by BRA:
Approved by County Commission:

Prepared on Behalf of:

Iron Ridge Holdings, LLC and Iron Ridge Office, LLC 47 Oxford Road Grosse Pointe Shores, Michigan 48236 Contact Person: Mr. Dennis Griffin and Mr. John Breza

Telephone: (248) 855-3330

Prepared By:

PM Environmental, Inc.

4080 West Eleven Mile Road Berkley, Michigan 48072 Contact Person: Elizabeth Masserang

Telephone: (248)414-1441



TABLE OF CONTENTS

PRO.	JECT SUMMARY	1
I.	INTRODUCTION AND PURPOSE	2
II.	GENERAL PROVISIONS	2
A. B. C. D.	Description of the Eligible Property (Section 13 (2)(h)) and Project	8 9
F. G.	(2)(d))	12
H. I.	Estimated Impact of Tax Increment Financing on Revenues of Taxing Jurisdictions (Sec. 13 (2)(g))	
J. K. L.	(Sec. 13 (2)(h))	14 14
	ENDICIES	
Λ	andle A Land Daggintian	

Appendix A Legal Description

Appendix B Property Location Boundary

Appendix C Preliminary Site Plans and Renderings

Appendix D Documentation of Eligibility

TABLES

Table 1: Estimated Costs of Eligible Activities

Table 2: Tax Increment Financing Table - Pleasant Ridge

Table 3: Tax Increment Financing Table – Ferndale

Table 4: Post-Development Taxable Value Estimates

PROJECT SUMMARY

Project Name: Iron Ridge – Proposed Mixed-Use Campus

Project Location: The property consists of 24 parcels located partially in

Ferndale and Pleasant Ridge, Oakland County, Michigan, 48220 and 48069 in Township one north (T.1N), Range 11 east

(R.11E), Section 27.

Type of Eligible

Property:

The property is determined to be a "Facility" or adjacent and

contiguous to a "Facility"

Eligible Activities: Baseline Environmental Site Assessment Activities, Due Care

Activities, Demolition, Asbestos Activities, Infrastructure Improvements, Site Preparation, and Preparation of a

Brownfield Plan and Act 381 Work Plan.

Developer Reimbursable

Costs:

\$6,562,728 (includes eligible activities and 15% contingency)

Years to Complete

Developer

Reimbursement:

23-26 Years from date of Brownfield Plan approval

Estimated Capital

Investment:

Approximately \$25-32 million (including Acquisition, Hard and

Soft Costs)

Project Overview: The project entails the extensive renovation of a former,

dilapidated industrial building and surrounding property for reuse as an inclusive multi-use campus. The nearly 70,000 square foot vacant industrial building that anchors the campus, will be transformed into a market space, beer garden and brewery, and provide additional office and commercial space. The campus will include the renovation of three additional buildings that will be occupied by tech offices, professional offices, a fitness center, and commercial space. The construction of new apartment complexes to complement the site are also proposed along the eastern portion. Together, the existing building space and proposed new build totals approximately 231,000 square feet.

I. INTRODUCTION AND PURPOSE

In order to promote the revitalization of environmentally distressed, historic, functionally obsolete and blighted areas within the boundaries of Oakland County ("the County"), the County has established the Oakland County Brownfield Redevelopment Authority (OCBRA) the "Authority" pursuant to the Brownfield Redevelopment Financing Act, Michigan Public Act 381 of 1996, as amended ("Act 381").

The purpose of this Brownfield Plan (the "Plan") is to promote the redevelopment of and investment in the eligible "Brownfield" Property within the County and to facilitate financing of eligible activities at the Property. Inclusion of Property within any Plan in the County will facilitate financing of eligible activities at eligible properties, and will provide tax incentives to eligible taxpayers willing to invest in revitalization of eligible sites, commonly referred to as "Brownfields." By facilitating redevelopment of the Property, this Plan is intended to promote economic growth for the benefit of the residents of the County and all taxing units located within and benefited by the Authority.

This Plan is intended to apply to the eligible property identified in this Plan and, to identify and authorize the eligible activities to be funded. If significant changes are made to the proposed redevelopment and proposed use, the Brownfield Redevelopment Authority and the County Commission as the Governing Body, in accordance with the Act, may amend this Plan. This includes approval by the City of Ferndale City Council and City of Pleasant Ridge City Commission for proposed amendments.

This Plan is intended to be a living document, which may be modified or amended in accordance with and as necessary to achieve the purposes of Act 381. The applicable sections of Act 381 are noted throughout the Plan for reference purposes.

This Brownfield Plan contains information required by Section 13(2) of Act 381, as amended

II. GENERAL PROVISIONS

A. Description of the Eligible Property (Section 13 (2)(h)) and Project

The Eligible Property consists of twenty-four (24) legal parcels totaling approximately 13 acres, referred to within this plan as the Property. All parcels are located within Pleasant Ridge and Ferndale, Oakland County, Michigan (the "Property") as outlined below.

Parcel ID Number	Address	City	Approx. Acreage	Eligibility	Current Zoning
25-27-201-005	3351 BERMUDA ST	Ferndale	0.169	"Facility"	M-1: Limited Industrial
25-27-201-012	3281 BERMUDA ST	Ferndale	0.165	"Facility"	M-1: Limited Industrial
25-27-201-013	3265 BERMUDA ST	Ferndale	1.139	"Facility"	M-1: Limited Industrial
25-27-201-015	3155 BERMUDA ST	Ferndale	0.750	"Facility"	M-1: Limited Industrial
25-27-201-019	3291 BERMUDA ST	Ferndale	1.000	"Facility"	M-1: Limited Industrial

Brownfield Plan for the proposed Iron Ridge Located at 3155-3351 Bermuda, 3164-3350 Bermuda, and 660 East 10 Mile Road, Ferndale; And 400-404 East 10 Mile Road and 660 East 10 Mile Road, Pleasant Ridge, Michigan PM Project No. 01-7985-0002; April 5, 2017

Parcel ID Number	Address	City	Approx. Acreage	Eligibility	Current Zoning
25-27-201-020	660 E TEN MILE RD	Ferndale	0.290	"Facility"	M-1: Limited Industrial
25-27-202-008	3350 BERMUDA ST	Ferndale	0.177	Adjacent and contiguous to a "Facility"	P-1: Vehicular Parking
25-27-202-009	3342 BERMUDA ST	Ferndale	0.145	Adjacent and contiguous to a "Facility	P-1: Vehicular Parking
25-27-202-010	3334 BERMUDA ST	Ferndale	0.145	Adjacent and contiguous to a "Facility	P-1: Vehicular Parking
25-27-202-013	3310 BERMUDA ST	Ferndale	0.145	Adjacent and contiguous to a "Facility	P-1: Vehicular Parking
25-27-202-014	3300 BERMUDA ST	Ferndale	0.145	Adjacent and contiguous to a "Facility	P-1: Vehicular Parking
25-27-202-018	3252 BERMUDA ST	Ferndale	0.145	Adjacent and contiguous to a "Facility	P-1: Vehicular Parking
25-27-202-019	3242 BERMUDA ST	Ferndale	0.145	Adjacent and contiguous to a "Facility	P-1: Vehicular Parking
25-27-202-020	3232 BERMUDA ST	Ferndale	0.145	Adjacent and contiguous to a "Facility	P-1: Vehicular Parking
25-27-202-021	3224 BERMUDA ST	Ferndale	0.145	Adjacent and contiguous to a "Facility	P-1: Vehicular Parking
25-27-202-022	3216 BERMUDA ST	Ferndale	0.145	Adjacent and contiguous to a "Facility	P-1: Vehicular Parking
25-27-202-023	3206 BERMUDA ST	Ferndale	0.145	Adjacent and contiguous to a "Facility	P-1: Vehicular Parking
25-27-202-024	3164 BERMUDA ST	Ferndale	0.145	Adjacent and contiguous to a "Facility	P-1: Vehicular Parking
25-27-202-052	BERMUDA (formerly 700-710 E TEN MILE RD	Ferndale	0.206	Adjacent and contiguous to a "Facility	P-1: Vehicular Parking
25-27-202-053	BERMUDA (formerly 3262-3280 BERMUDA ST)	Ferndale	0.434	Adjacent and contiguous to a "Facility	P-1: Vehicular Parking
25-27-127-009	404 E TEN MILE RD	Pleasant Ridge	1.875	"Facility"	Workplace
25-27-127-010	660 E TEN MILE RD	Pleasant Ridge	3.470	"Facility"	Workplace

Parcel ID Number	Address	City	Approx. Acreage	Eligibility	Current Zoning
25-27-127-012	400 E TEN MILE RD	Pleasant Ridge	1.100	"Facility"	Workplace
25-27-127-013	NO ADDRESS	Pleasant Ridge	0.330	"Facility"	Workplace

Iron Ridge Holdings, LLC and Iron Ridge Office LLC, or any related entity, or such other developer as approved by the Authority, are collectively the project developer ("Developer").

The Developer team consists of CG Emerson Real Estate Group (CG Emerson), Milford Singer Company, and First Holding Management Company (First Holding). Collectively the they manage approximately 3 million square feet of commercial space and more than 2,000 residential units. CG Emerson has had recent experience redeveloping multiple properties within close proximity to the current project. Furthermore, Milford Singer is a third-generation development, construction, and property management company that has been continuously active for over 90 years.

The Property consists of commercial, industrial, and residential land in an area characterized by an area of similar uses. The property zoning will remain the same and permits the proposed future use, with the exception of the parcels currently zoned P-1: Vehicular Parking along the east side of Bermuda, which are currently being re-zoned to R-3: Residential to permit the proposed apartment use.

404 E. 10 Mile Road

The subject property, identified as 404 E. 10 Mile Road is developed with a 40,329 square foot commercial building. The building is mainly one-story with the central portion consisting of four stories and a basement. The northern portion of the subject building was occupied by Michigan Bell and utilized for service garages and machine shops in at least the 1950s. Additionally, the building contained an egg distributor in the 1950s. In the 1960s, the property was occupied by Frank's Nursery and utilized for warehousing of retail products, and by the late 1960s the building was occupied by Walmet Division of Valenite, Inc. A tool house was located on the southern portion of the property in at least the 1960s. Between 1974 and 1980, the current southern lobby area was developed in the area of the former tool house. Operations associated with Walmet consisted of manufacturing of carbides and included tooling and extrusion. The building was vacated by Walmet in 1994, and remained vacant through the 1990s. A portion of the building was occupied by professional offices from the early 2000s to 2016.

Associated with the following parcel:

Parcel ID Number	Address	City	Approx. Acreage	Eligibility	Current Zoning
25-27-127-009	404 E TEN MILE RD	Pleasant Ridge	1.875	"Facility"	Workplace

Walker Wire Properties

The main subject parcels, identified as 660 East 10 Mile Road (Ferndale and Pleasant Ridge) were initially developed prior to 1940 with dwellings. Industrial development began in the northern portion of the property in the mid-1940s, with the beginning of Walker Wire's operations. Multiple additions were constructed to the building through the early 1990s to expand the layout to the current building. The building, which totals approximately 74,000 square feet was occupied by various wire and steel companies, mainly identified as Walker Wire Company, from initial development in the 1940s until the mid-2000s. Operations included wire cutting, stretching, and chemical treatment.

The southern portion of the main parcel (660 East 10 Mile Road) was utilized by Michigan Bell for telephone pole storage from at least 1949 until at least 1957.

The subject parcel identified as 3351 Bermuda Street, was initially developed in the 1940s with the current building. The building, which totals approximate 1,150 square feet, was occupied by a W.E. Foltz Company from at least 1950 until 1975, and consisted of a small machine shop. Fire department records included documentation that the operations utilized trichloroethylene. The building was purchased by Walker Wire in the early 1980s, and utilized as an employment office since that time.

The subject parcel identified as 3291 Bermuda Street was initially developed prior to 1940 with dwellings. A small tin shop was constructed on the property in the mid-1960s. All former buildings were demolished by 1980 when the parcel was converted to the current concrete paved surface lot for Walker Wire.

The subject parcel identified as 3281 Bermuda Street was initially developed prior to 1940 with a dwelling, which was demolished in the late 1970s when the parcel was converted to a concrete paved storage lot for Walker Wire. The current hazardous materials storage building, which totals approximately 2,600 square feet, was constructed on the western portion of the parcel in 1992.

The subject parcel identified as 3265 Bermuda Street was initially developed with portions of the current building constructed in the mid-1940s. The current building totals approximately 24,000 square feet. Various additions were constructed in the 1950s and 1980s. Former occupants included machinery manufacturers and tooling companies through the 1980s.

The subject parcel identified as 3155 Bermuda Street was initially developed in the mid-1940s with portions of the current industrial building, with additions in the 1950s. The current building totals approximately 18,500 square feet. The property was occupied by a nut and bolt manufacturer from at least 1950 until 1985. The building was generally utilized for limited warehousing and storage from that time until 2016.

The western subject parcels, identified as 400 East 10 Mile Road and associated parking lot, were initially developed prior to 1940 with a coal and fuel storage and sales operation. These

operations ceased in the late 1970s, and the former silos were demolished and the current building was constructed. The current building at 400 East 10 Mile Road, which totals approximately 17,800 square feet was utilized for manufacturing operations from the 1970s until 1990s, associated with 404 East 10 Mile Road (carbide company). These operations ceased in the late 1990s, and the building was utilized for mostly warehousing with limited manufacturing by Walker Wire from the late 1990s until 2015. Former operations included stamping and presses. A small office building was present in the northwestern portion of the parcel, which was demolished between 2005 and 2008 to create more parking space for the adjoining property (404 East 10 Mile Road).

Associated with the following parcels:

Parcel ID Number	Address	City	Approx. Acreage	Eligibility	Current Zoning
25-27-201-005	3351 BERMUDA ST	Ferndale	0.169	"Facility"	M-1: Limited Industrial
25-27-201-012	3281 BERMUDA ST	Ferndale	0.165	"Facility"	M-1: Limited Industrial
25-27-201-013	3265 BERMUDA ST	Ferndale	1.139	"Facility"	M-1: Limited Industrial
25-27-201-015	3155 BERMUDA ST	Ferndale	0.750	"Facility"	M-1: Limited Industrial
25-27-201-019	3291 BERMUDA ST	Ferndale	1.000	"Facility"	M-1: Limited Industrial
25-27-201-020	660 E TEN MILE RD	Ferndale	0.290	"Facility"	M-1: Limited Industrial
25-27-127-010	660 E TEN MILE RD	Pleasant Ridge	3.470	"Facility"	Workplace
25-27-127-012	400 E TEN MILE RD	Pleasant Ridge	1.100	"Facility"	Workplace
25-27-127-013	NO ADDRESS	Pleasant Ridge	0.330	"Facility"	Workplace

Residential Lots

The 12 residential parcels along the east side of Bermuda Street identified as 3164-3252 Bermuda Street and 3300-3350 Bermuda Street, were initially developed for residential use and have retained residential usage since that time. At current, approximately half of the homes have since been demolished.

Two lots, also located along the east side of Bermuda with no address, identified as parcels 24-25-27-202-052 and 25-27-202-053 are included within the project. The parcels were initially developed for residential use and have since been converted to use as parking lots.

Associated with the following parcels:

Parcel ID Number	Address	City	Approx. Acreage	Eligibility	Current Zoning
25-27-202-008	3350 BERMUDA ST	Ferndale	0.177	Adjacent and contiguous to a "Facility	P-1: Vehicular Parking
25-27-202-009	3342 BERMUDA ST	Ferndale	0.145	Adjacent and contiguous to a "Facility	P-1: Vehicular Parking
25-27-202-010	3334 BERMUDA ST	Ferndale	0.145	Adjacent and contiguous to a "Facility	P-1: Vehicular Parking
25-27-202-013	3310 BERMUDA ST	Ferndale	0.145	Adjacent and contiguous to a "Facility	P-1: Vehicular Parking
25-27-202-014	3300 BERMUDA ST	Ferndale	0.145	Adjacent and contiguous to a "Facility	P-1: Vehicular Parking
25-27-202-018	3252 BERMUDA ST	Ferndale	0.145	Adjacent and contiguous to a "Facility	P-1: Vehicular Parking
25-27-202-019	3242 BERMUDA ST	Ferndale	0.145	Adjacent and contiguous to a "Facility	P-1: Vehicular Parking
25-27-202-020	3232 BERMUDA ST	Ferndale	0.145	Adjacent and contiguous to a "Facility	P-1: Vehicular Parking
25-27-202-021	3224 BERMUDA ST	Ferndale	0.145	Adjacent and contiguous to a "Facility	P-1: Vehicular Parking
25-27-202-022	3216 BERMUDA ST	Ferndale	0.145	Adjacent and contiguous to a "Facility	P-1: Vehicular Parking
25-27-202-023	3206 BERMUDA ST	Ferndale	0.145	Adjacent and contiguous to a "Facility	P-1: Vehicular Parking
25-27-202-024	3164 BERMUDA ST	Ferndale	0.145	Adjacent and contiguous to a "Facility	P-1: Vehicular Parking
25-27-202-052	BERMUDA (formerly 700-710 E TEN MILE RD	Ferndale	0.206	Adjacent and contiguous to a "Facility	P-1: Vehicular Parking
25-27-202-053	BERMUDA (formerly 3262-3280 BERMUDA ST)	Ferndale	0.434	Adjacent and contiguous to a "Facility	P-1: Vehicular Parking

The Property's legal description is included in Appendix A. Property location maps are included in Appendix B.

Proposed Project

The proposed project entails the reuse of former industrial/warehouse buildings, identified as 404 and 660 E. 10 Mile Road, for use as tech. incubator and professional office space and a market/retail building, respectively. The proposed renovation is part of a larger revitalization that include surrounding property for reuse as an inclusive multi-use campus including the new construction of three multi-family residential buildings and the adaptive reuse of former industrial/warehouse buildings adjacent to 404 and 660 E. 10 Mile Road.

The nearly 70,000 square foot vacant industrial building, identified as 660 E 10 Mile Road (former Walker Wire site) that anchors the larger campus, will be transformed into a market space, beer garden and brewery, and provide additional office and commercial space. The campus will include the renovation of additional buildings that will be occupied by tech. offices, professional offices, a fitness center, and commercial and manufacturing space. The construction of new apartment complexes to complement the site are also proposed in the eastern portion. Together, the existing building space and proposed new build totals approximately 231,000 square feet.

The proposed project also includes the vacating of the ally between 660 E 10 Mile Road and 3351 Bermuda Street.

Interior renovation activities have begun in some of the existing buildings. Overall project commencement is anticipated to begin in the summer of 2017. Renovations will continue over a two-year period as improvements and tenant spaces are created.

The Developer will invest an estimated \$25-32 million in the development and create approximately 200 construction jobs and create 200-250 full-time equivalent (FTE) permanent jobs over the next three years.

Preliminary site plans and renderings are included in Appendix C.

B. Basis of Eligibility (Section 13 (2)(h) and Section 2(o))

The Property is considered "Eligible Property" as defined by Act 381, Section 2 because: (a) the Property was previously utilized or is currently utilized for a commercial and/or industrial purpose; (b) a portion of the project it is located within the City of Ferndale, a qualified local governmental unit under Act 381 and, (c) the parcels comprising the Property have each been determined to be a "facility" and/or adjacent and contiguous to a "facility."

PM Environmental has completed a scope of work pursuant to:

- 1. a Phase II ESA and Baseline Environmental Assessment (BEA) at 660 East 10 Mile Road and adjacent parcels completed in December 2015;
- 2. a Phase II ESA at 404 E. 10 Mile Road completed in June 2016; and
- 3. a BEA at 404 East 10 Mile Road and adjacent parcels complete in April 2017;

The BEAs and related environmental site assessments consisted of various subsurface investigations including the advancement of soil borings and temporary monitoring wells throughout the Property. Soil and groundwater analytical results identified concentrations of tetrachloroethylene/trichloroethylene (PCE/TCE), benzene, various petroleum volatile organic compounds (VOCs), benzo(a)pyrene, flourathene and/or phenanthrene, polychlorinated

Brownfield Plan for the proposed Iron Ridge Located at 3155-3351 Bermuda, 3164-3350 Bermuda, and 660 East 10 Mile Road, Ferndale; And 400-404 East 10 Mile Road and 660 East 10 Mile Road, Pleasant Ridge, Michigan PM Project No. 01-7985-0002; April 5, 2017

biphenyls (PCBs), chromium, cis-1, 2-DCE, and vinyl chloride all above various Part 201 Residential and Nonresidential cleanup criteria.

According to Section 20101(1)(s) of Part 201 a "facility" means any area, place, or property where a hazardous substance in excess of the concentrations that satisfy the cleanup criteria for unrestricted residential use has been released, deposited, disposed of, or otherwise comes to be located. The subject property is a "facility" as defined under Part 201, based on concentrations identified in soil and groundwater identified during previous site investigations.

Contaminant concentrations identified on the Property identified as 660 East 10 Mile Road, 3155-3351 Bermuda Street, and 400 East 10 Mile Road indicate exceedances to the Part 201 Residential and Nonresidential Drinking Water Protection/Drinking Water (DWP/DW), Groundwater Surface Water Interface Protection/Groundwater Surface Water Interface (GSIP/GSI), Direct Contact (DC) cleanup criteria and Vapor Intrusion Screening Levels (VISLs); therefore, the Property is a "facility" under Part 201.

Contaminant concentrations identified on the Property identified as 404 East 10 Mile Road indicate exceedances to the Part 201 Residential and Nonresidential DWP, GSIP, SVII (Soil Volatilization to Indoor Air Inhalation (SVII), Ambient Air Volatile Soil Inhalation (SVI), Particulate Soil Inhalation (PSI), and DC cleanup criteria. Therefore, the subject property is a <u>facility</u> under Part 201 of P.A. 451, as amended, and the rules promulgated thereunder.

Additional documentation and description of the locality of the identified contaminants and the property's "facility" status is provided in Appendix D.

C. Summary of Eligible Activities and Description of Costs (Sec. 13 (2)(a-b))

Tax Increment Financing revenues will be used to reimburse the costs of "eligible activities" (as defined by Section 2 of Act 381) as permitted under the Brownfield Redevelopment Financing Act that include: Baseline Environmental Site Assessments, Due Care Activities, Demolition, Asbestos Activities, Infrastructure Improvements, Site Preparation Activities, and preparation of a Brownfield Plan and Act 381 Work Plan. A complete itemization of these activities and associated expenses is included in Table 1.

The following eligible activities and budgeted costs are intended as part of the development of the property and are to be financed solely by the developer. All activities are intended to be "Eligible Activities" under the Brownfield Redevelopment Financing Act. The Authority is not responsible for any cost of eligible activities listed below and will incur no debt for these activities.

Eligible Activities - Ferndale

- 1. Baseline Environmental Site Assessment Activities include Phase I Environmental Site Assessments (ESAs), Phase II ESAs, and BEAs as required as part of the pre-purchase due diligence conducted on the property at a total cost of \$37,205.
- 2. Due Care Activities includes the design and installation of a vapor barrier system including vapor evaluation for up to 4 quarters; contaminated soil transport and disposal associated with development activities; groundwater management; and, oversight/sampling/reporting by an environmental professional, removal of orphan USTs if encountered, at a total estimated cost of \$865,375.

- Demolition Activities includes a pre-demolition survey, building demolition, foundation removal, fill/compaction/rough grading to balance site where building is located, removal of parking lots, removal of curbs and gutters, removal of sidewalks, removal of paved alley, and fees related to demolition engineering and design at an estimated of \$457,500.
- 4. Asbestos Activities includes an asbestos survey, asbestos containing materials (ACM) abatement, oversight, air monitoring and associated reporting at an estimated cost of \$60,000.
- 5. Infrastructure Improvements include an urban storm water management system; sidewalks; curbs; gutters; landscaping within the public right of way and public park; public lighting; public signage; public park and seating areas; replacement and installation of water mains; replacement and installation of sanitary sewer mains; and professional fees directly related to infrastructure improvements at an estimated cost of \$1,430,000.
- 6. Site Preparation includes temporary construction access/road; temporary traffic control; temporary erosion control; temporary site control (fencing, gates, signage, and/or lighting); temporary facility; land balancing; grading; staking; clearing and grubbing; excavation of unstable materials; foundation work to address special soil concerns; fill and dewatering related to other eligible activities; relocation of active utilities (electric, gas, water, sewer); and other unique site preparation activities at an estimated cost of \$610,000.
- 7. Preparation of the Brownfield Plan and Act 381 Work Plan (if necessary) and associated activities (e.g. meetings with BRA, review by City Attorney etc.) at a cost of approximately \$12,500.
- 8. A 15% contingency of \$513,431 is established to address unanticipated environmental and/or other conditions that may be discovered through the implementation of site activities. This excludes the cost of Baseline Environmental Assessment Activities and preparation of the Brownfield Plan and Act 381 Work Plan.

Eligible Activities - Pleasant Ridge

- 1. Baseline Environmental Site Assessment Activities include Phase I ESAs, Phase II ESAs, and BEAs, required as part of the pre-purchase due diligence conducted on the property at a total cost of \$46,435.
- Due Care Activities includes the design and installation of a vapor barrier system including vapor evaluation for up to 4 quarters; contaminated soil transport and disposal associated with development activities; groundwater management; and, oversight/sampling/reporting by an environmental professional at a total estimated cost of \$1,666,875.
- Demolition Activities includes a pre-demolition survey, building demolition, foundation removal, fill/compaction/rough grading to balance site where building is located, removal of parking lots, removal of curbs and gutters, removal of sidewalks, removal of paved alley, and fees related to demolition engineering and design at an estimated of \$462,500.

Brownfield Plan for the proposed Iron Ridge Located at 3155-3351 Bermuda, 3164-3350 Bermuda, and 660 East 10 Mile Road, Ferndale; And 400-404 East 10 Mile Road and 660 East 10 Mile Road, Pleasant Ridge, Michigan PM Project No. 01-7985-0002; April 5, 2017

- Asbestos Activities includes an asbestos survey, asbestos containing materials (ACM) abatement, oversight, air monitoring and associated reporting at an estimated cost of \$60,000.
- 5. Preparation of the Brownfield Plan and Act 381 Work Plan (if necessary) and associated activities (e.g. meetings with BRA, review by City Attorney etc.) at a cost of approximately \$12.500.
- 6. A 15% contingency of \$328,406 is established to address unanticipated environmental and/or other conditions that may be discovered through the implementation of site activities. This excludes the cost of Baseline Environmental Assessment Activities and preparation of the Brownfield Plan and Act 381 Work Plan.

All activities are intended to be "Eligible Activities" under the Brownfield Redevelopment Financing Act. The total estimated cost of Eligible Activities subject to reimbursement from: (a) tax increment revenues in Ferndale is \$3,472,580 with a potential \$513,431 contingency resulting in a total cost of \$3,986,011, and (b) tax increment revenues in Pleasant Ridge is \$2,248,310 with a potential \$328,406 resulting in a total cost of \$2,576,716. Therefore the total cost for reimbursement to the applicant is a not-to-exceed amount of \$6,562,728 (including contingency), unless the Plan is amended and approved by the OCBRA and Oakland County Board of Commissioners.

This plan also allots capture for local administrative fees as outlined in Table 2 and Table 3.

The OCBRA has established a Local Brownfield Revolving Fund (LBRF). Capture for the LBRF is included in this plan following developer reimbursement, currently estimated at \$475,000. The funds deposited into the LBRF as part of this Plan will be used in accordance with the requirements of Act 381, as amended.

D. Estimate of Captured Taxable Value and Tax Increment Revenues (Sec. 13 (2)(c))

Incremental taxes on real property included in the redevelopment project will be captured under this Plan to reimburse eligible activity expenses. The base taxable value of the Property located in both Ferndale and Pleasant Ridge shall be determined by the use of the 2016 tax year tax values. The base taxable value for the Property located in Ferndale is \$398,740. The base taxable value of the Property located in Pleasant Ridge is \$651,820. Tax increment revenue capture is proposed to begin when tax increment is generated by redevelopment of the Property, which is expected to begin in 2018 or when full redevelopment is completed whichever occurs first. The estimated taxable value of the completed development in Ferndale is \$3,624,950 and in Pleasant Ridge is \$2,443,400. This assumes a two-year phase-in for completion of the redevelopment, which has been incorporated into the tax increment financing assumptions for this Plan. An annual increase in taxable value of 0.5% has been used for calculation of future tax increments in this Plan. Tables 2 and Table 3 detail the estimate of captured tax increment revenues for each year of the Plan from the eligible property.

Prior to reimbursement of tax increment revenue to the Developer, payment of Brownfield Redevelopment Authority Administrative fees will occur first.

E. Method of Brownfield Plan Financing and Description of Advances by the Municipality (Sec. 13 (2)(d))

Eligible activities will be financed by Iron Ridge Holdings, LLC and/or Iron Ridge Office LLC. The Developer will be reimbursed for eligible costs as described in Section C and outlined in Table 1. Costs for Eligible Activities funded by Iron Ridge Holdings, LLC and/or Iron Ridge Office LLC will be repaid under the Michigan Brownfield Redevelopment Financing Program (Michigan Public Act 381, as amended) with incremental taxes generated by future development of the property. The estimated amount of tax increment revenue capture that will be used to reimburse the Developer and Brownfield Redevelopment Authority is \$7,514,994. This includes Brownfield Plan preparation, Brownfield Redevelopment Authority Administrative fees and LBRF deposits.

No advances will be made by the OCBRA for this project. All reimbursements authorized under this Plan shall be governed by the Reimbursement Agreement.

F. Maximum Amount of Note or Bonded Indebtedness (Sec. 13 (2)(e))

No note or bonded indebtedness will be incurred by any local unit of government for this project.

G. <u>Duration of Brownfield Plan (Sec. 13 (2)(f))</u>

In no event shall the duration of the Plan, exceed 35 years following the date of the resolution approving the Plan, nor shall the duration of the tax capture exceed the lesser of the period authorized under subsection (4) and (5) of Section 13 of Act 381 or 30 years. Further, in no event shall the beginning date of the capture of tax increment revenues be later than five years after the date of the resolution approving the Plan. The Property will become part of this Plan on the date this Plan is approved by the Oakland County Board of Commissioners.

H. <u>Estimated Impact of Tax Increment Financing on Revenues of Taxing</u> Jurisdictions (Sec. 13 (2)(g))

Taxes will continue to be generated to taxing jurisdictions on local captured millages at the base taxable value of \$651,820 in Pleasant Ridge and \$398,740 in Ferndale throughout the duration of this Plan totaling approximately \$585,312 or \$20,904 annually in Pleasant Ridge and \$359,408 or \$12,836 annually in Ferndale.

Non-capturable millages; including debt millages, the zoo authority and art institute, will see an immediate increase in tax revenue following redevelopment and will provide new tax revenue of approximately \$517,839 in Pleasant Ridge and \$1,758,975 in Ferndale throughout the duration of this Plan.

A summary of the impact to taxing jurisdictions for the life of the Plan is summarized below, which assumes taxes are captured throughout the duration of the Plan as estimated in Table 2 and Table 3. "Taxes Preserved for Taxing Units" assumes the full capture of available taxes, however during LBRF capture, it is anticipated that more will be available to reimburse local taxing units as not all captured taxes will be utilized to reimburse the LBRF and other administrative fees.

Pleasant Ridge

Millage	Rate	Taxes Generated by Property (incl. base value)	Taxes Preserved for Taxing Units
County Pk & Rec	0.2392	\$18,306	\$4,366
НСМА	0.2146	\$16,423	\$3,917
OCPTA	0.9941	\$76,078	\$18,143
County Operating	4.0400	\$309,179	\$73,734
OIS Allocated	0.1985	\$15,191	\$3,623
OIS Voted	3.1413	\$240,402	\$57,332
OCC	1.5707	\$120,205	\$28,667
Infrastructure	2.8472	\$217,895	\$51,964
City Operating	10.8434	\$829,840	\$197,902
City Oper-2015	2.7804	\$212,783	\$50,745
Solid Waste	1.6260	\$124,437	\$29,676
Pool/Rec OPER	1.2073	\$92,394	\$22,034
Park Improvement	0.7190	\$55,025	\$13,122
Publicity	0.3481	\$26,640	\$6,353
FPS Sinking Fund	1.3000	\$99,488	\$23,726
Subtotal	32.0698	\$2,454,284	\$585,305
School Operating	18.0000	\$1,377,530	\$328,517
SET	6.0000	\$459,177	\$109,506
Subtotal	24.0000	\$1,836,707	\$438,023
Total Capturable	56.0698	\$4,191,503	\$999,601
Zoo Authority (County)	0.0990	\$7,576	\$7,576
Art Institute (County)	0.1981	\$15,160	\$15,160
FPS Debt	7.0000	\$535,706	\$535,706
Pool/Rec Debt	1.2122	\$92,769	\$92,769
Library	0.3763	\$28,798	\$28,798
Total Non-Capturable	8.8856	\$680,010	\$680,010
Total	64.9554	\$4,971,002	\$1,703,338

Ferndale

		Taxes Generated by Property (incl.	Taxes Preserved
Millage	Rate	base value)	for Taxing Units
County Pk & Rec	0.2392	\$27,007	\$2,671
НСМА	0.2146	\$24,230	\$2,396
OCPTA	0.9941	\$112,241	\$11,099
County Operating	4.0400	\$456,145	\$45,105
OIS Allocated	0.1985	\$22,412	\$2,216
OIS Voted	3.1413	\$354,675	\$35,072
OCC	1.5707	\$177,343	\$17,536

Millage	Rate	Taxes Generated by Property (incl. base value)	Taxes Preserved for Taxing Units
City Operating	13.9451	\$1,574,501	\$155,693
Refuse Disposal	2.0915	\$236,145	\$23,351
City Oper-Voted	4.4552	\$503,024	\$49,741
FPS Sinking Fund	1.3000	\$147,598	\$14,514
Subtotal	32.1902	\$3,487,723	\$ 344,880
School Operating	18.0000	\$2,032,328	\$200,965
SET	6.0000	\$677,443	\$66,988
Subtotal	24.0000	\$2,709,770	\$267,953
Total Capturable	56.1902	\$6,197,493	\$612,834
Zoo Authority (County)	0.0990	\$11,240	\$11,240
Art Institute (County)	0.1981	\$22,492	\$22,492
FPS Debt	7.0000	\$794,757	\$794,757
GWK Facility DBT	1.7340	\$196,873	\$196,873
Debt Service (Ferndale)	4.1790	\$474,470	\$474,470
Library-Voted	0.9587	\$108,848	\$108,848
Library-Operating	0.9204	\$104,499	\$104,499
Stormwater Settlement	2.0930	\$237,632	\$237,632
Total Non-Capturable	17.1822	\$1,950,809	\$1,950,809
Total	73.3724	\$8,330,457	\$2,578,157

For a complete breakdown of the captured millages and developer reimbursement please see "Table 2" and "Table 3."

I. <u>Legal Description</u>, <u>Property Map</u>, <u>Statement of Qualifying Characteristics and Personal Property</u> (Sec. 13 (2)(h))

The legal description of the Property included in this Plan is attached in Appendix A.

Property location maps are included in Appendix B.

Documentation of characteristics that qualify the property as eligible property is provided in Appendix D.

J. <u>Displacement/Relocation of Individuals on Eligible Property (Sec. 13 (2)(i-l))</u>

No displacement of residents or families is expected as part of this project.

K. Local Brownfield Revolving Fund ("LBRF") (Sec. 13 (2)(m))

The OCBRA has established a Local Brownfield Revolving Fund (LBRF). Capture for the LBRF is included in this plan for five (5) years following developer reimbursement, currently estimated at \$475,000. The funds deposited into the LBRF as part of this Plan will be used in accordance with the requirements of Act 381, as amended.

L. Other Material that the Authority or Governing Body Considers Pertinent (Sec. 13 (2)(n))

The Brownfield Redevelopment Authority and the County Commission as the Governing Body, in accordance with the Act, may amend this Plan in order to fund additional eligible activities associated with the Project described herein. This includes re-approval by the City of Ferndale City Council and City of Pleasant Ridge City Commission.

At this time, the developer intends to seek reimbursement from the Michigan Economic Development Corporation (MEDC)/Michigan Strategic Fund (MSF) and Michigan Department of Environmental Quality (MDEQ) support for the use of school millages. Should MEDC/MSF and/or MDEQ reimbursement not be received, the total local tax capture amount approved under this plan will be capped to the local contribution only and local taxes will not be utilized to reimbursement the school tax capture portion. Should for any reason, MEDC/MSF or MDEQ approval not be received, the developer may seek a potential amendment with the local municipalities at that time.

The tax increment financing table provided in Appendix D includes the assumption of MEDC/MSF and MDEQ approval.

This Brownfield Plan is the only incentive being pursued by the developer from the City of Ferndale and Pleasant Ridge.

The developer is contemplating the use of other incentive programs, such as Property Assessed Clean Energy (PACE) financing, to aid in upfront equity assistance. These programs being contemplated are separate from any direct assistance requested from the municipalities. Additionally, this statement is not meant to limit the exploration of grant and financial assistance sought from future tenants of the property which should be viewed for their own merit if presented.

Appendix A



City of Ferndale

Legal Description: 3351 BERMUDA ST, FERNDALE, MI Parcel Number: 25-27-201-005
T1N, R11E, SEC 27 WOODWARD HEIGHTS ROYAL OAK ADD LOT 252

Legal Description: 3281 BERMUDA ST, FERNDALE, MI Parcel Number: 25-27-201-012
T1N, R11E, SEC 27 WOODWARD HEIGHTS ROYAL OAK ADD LOT 259

Legal Description: 3265 BERMUDA ST, FERNDALE, MI Parcel Number: 25-27-201-013

T1N. R11E. SEC 27 WOODWARD HTS ROYAL OAK ADD LOTS 260 TO 266 INCL

Legal Description: 3155 BERMUDA ST, FERNDALE, MI Parcel Number: 25-27-201-015
T1N, R11E, SEC 27 WOODWARD HEIGHTS ROYAL OAK ADD LOTS 269 TO 272 INCL

Legal Description: 3291 BERMUDA ST, FERNDALE, MI Parcel Number: 25-27-201-019
T1N, R11E, SEC 27 WOODWARD HEIGHTS ROYAL OAK ADD LOTS 253 TO 258 INCL

Legal Description: 660 E TEN MILE RD, FERNDALE, MI Parcel Number: 25-27-201-020

T1N, R11E, SEC 27 WOODWARD HEIGHTS ROYAL OAK ADD LOTS 248 TO 251 INCL EXC THAT PART TAKEN FOR I-696 HWY & DESC AS LYING NLY OF LINE DESC AS BEG AT NW COR OF LOT 251 TH SELY TO POINT ON E LINE OF LOT 251 LOC NLY 97 FT FROM SE COR OF LOT 251, TH SELY TO POINT ON W LINE OF LOT 248 LOC NLY 58 FT FROM SW COR OF LOT 248, TH ELY 29 FT AT RIGHT ANGLE TO W LINE OF LOT 248, TH SLY TO POINT ON S LINE OFLOT 248 LOC 35 FT ELY OF SW COR OF LOT 248, TH ELY 5.00 FT TO POINT OF ENDING 1/7/85 FR 017

Legal Description: 3350 BERMUDA ST, FERNDALE, MI Parcel Number: 25-27-202-008

T1N, R11E, SEC 27 WOODWARD HEIGHTS ROYAL OAK ADD LOT 244, ALSO 1/2 OF VAC ALLEY ADJ TO SAME

Legal Description: 3342 BERMUDA ST, FERNDALE, MI Parcel Number: 25-27-202-009
T1N, R11E, SEC 27 WOODWARD HEIGHTS ROYAL OAK ADD LOT 243

Legal Description: 3334 BERMUDA ST, FERNDALE, MI Parcel Number: 25-27-202-010
T1N, R11E, SEC 27 WOODWARD HEIGHTS ROYAL OAK ADD LOT 242

Legal Description: 3310 BERMUDA ST, FERNDALE, MI Parcel Number: 25-27-202-013
T1N, R11E, SEC 27 WOODWARD HEIGHTS ROYAL OAK ADD LOT 239

Legal Description: 3300 BERMUDA ST, FERNDALE, MI Parcel Number: 25-27-202-014

T1N, R11E, SEC 27 WOODWARD HEIGHTS ROYAL OAK ADD LOT 238

Legal Description: 3252 BERMUDA ST, FERNDALE, MI Parcel Number: 25-27-202-018

T1N, R11E, SEC 27 WOODWARD HEIGHTS ROYAL OAK ADD LOT 234

Legal Description: 3242 BERMUDA ST, FERNDALE, MI Parcel Number: 25-27-202-019
T1N, R11E, SEC 27 WOODWARD HEIGHTS ROYAL OAK ADD LOT 233

Legal Description: 3232 BERMUDA ST, FERNDALE, MI Parcel Number: 25-27-202-020
T1N, R11E, SEC 27 WOODWARD HEIGHTS ROYAL OAK ADD LOT 232

Legal Description: 3224 BERMUDA ST, FERNDALE, MI Parcel Number: 25-27-202-021
T1N, R11E, SEC 27 WOODWARD HEIGHTS ROYAL OAK ADD LOT 231

Legal Description: 3216 BERMUDA ST, FERNDALE, MI Parcel Number: 25-27-202-022
T1N, R11E, SEC 27 WOODWARD HEIGHTS ROYAL OAK ADD LOT 230

Legal Description: 3206 BERMUDA ST, FERNDALE, MI Parcel Number: 25-27-202-023
T1N, R11E, SEC 27 WOODWARD HEIGHTS ROYAL OAK ADD LOT 229

Legal Description: 3164 BERMUDA ST, FERNDALE, MI Parcel Number: 25-27-202-024

T1N, R11E, SEC 27 WOODWARD HEIGHTS ROYAL OAK ADD LOT 228

<u>Legal Description: BERMUDA (formerly 700-710 E TEN MILE ROAD), FERNDALE, MI</u> Parcel Number: 25-27-202-052

T1N, R11E, SEC 27 WOODWARD HEIGHTS ROYAL OAK ADD LOTS 246 & 247, ALSO 1/2 OF VAC ALLEY ADJ TO SAME09/25/84 FR 001 & 002

<u>Legal Description: BERMUDA (formerly 3262-3280 BERMUDA ST), FERNDALE, MI</u> Parcel Number: 25-27-202-053

T1N, R11E, SEC 27 WOODWARD HEIGHTS ROYAL OAK ADD LOTS 235, 236 & 237 11-9-90 FR 015, 016 & 017

City of Pleasant Ridge

Legal Description: 404 E TEN MILE RD, PLEASANT RIDGE, MI Parcel Number: 25-27-127-009

T1N, R11E, SEC 27 STEPHENSON-BARBER R O SUB NO 3 LOTS 266, 267, 268 & PART OF LOT 269, ALSO PART OF NW 1/4 ALL BEING DESC AS BEG AT NE COR OF SD LOT 266,TH N 89-11-00 W 277.56 FT ALG S LINE OF TEN MILE RD, TH S 03-59-40 W 47.81 FT, TH S 27-39-20 E 400.39 FT, TH S 89-11-00 E 95.49 FT TO SE COR OF LOT 269, TH N 400 FT TO BEG

Legal Description: 660 E TEN MILE RD, PLEASANT RIDGE, MI Parcel Number: 25-27-127-010

T1N, R11E, SEC 27 STEPHENSON BARBER ROYAL OAK SUB NO 3 LOTS 261 TO 265 INCL, ALSO E 1/2 OF S 50 FT OF VAC BARBER AVE ADJ TO SD LOT 261, ALSO PART OF NW 1/4 OF SEC 27 BEG AT SE COR OF LOT 261 OF SD 'STEPHENSON BARBER ROYAL OAK SUB NO 3', TH S 575.86 FT ALG W LINE OF 'WOODWARD HEIGHTS ROYAL OAK ADD', TH N 28-28-15 W 606 FT, TH N 67-55-00 E 123 FT, TH S 89-11-00 E 175 FT TO BEG 12-3-15 CORR

Legal Description: 400 E TEN MILE RD, PLEASANT RIDGE, MI Parcel Number: 25-27-127-012

T1N, R11E, SEC 27 PART OF NE 1/4 OF NW 1/4 BEG AT PT DIST N 89-11-00 W 277.52 FT FROM INTER OF S LINE OF TEN MILE RD & W LINE OF BARBER AVE, TH S 03-59-40 W 48.59 FT, TH S 27-38-00 E 334.18 FT, TH SLY ALG W LINE OF 'STEPHENSON-BARBER ROYAL OAKSUB NO 3' TO SW COR OF LOT 270 OF SD SUB, TH ELY TO SE COR OF SD LOT, TH S 67-55-00 W 123 FT TO ELY R/W LINE GTRR, TH NW ALG SD R/W 631 FT, TH ELY 135.50 FT TO BEG 1.68 A

Legal Description: NO ADDRESS, PLEASANT RIDGE, MI Parcel Number: 25-27-127-013

T1N, R11E, SEC 27 STEPHENSON BARBER ROYAL OAK SUB NO 3 TRIANGULAR PART OF LOT 269 MEAS 29.51 FT ON S LOT LI & MEAS 59.43 FT ON W LOT LI, ALSO ALL OF LOT 270, ALSO W 1/2 OF VAC S 50 FT OF BARBER AVE ADJ TO SD LOT 270 10-18-89 CORR

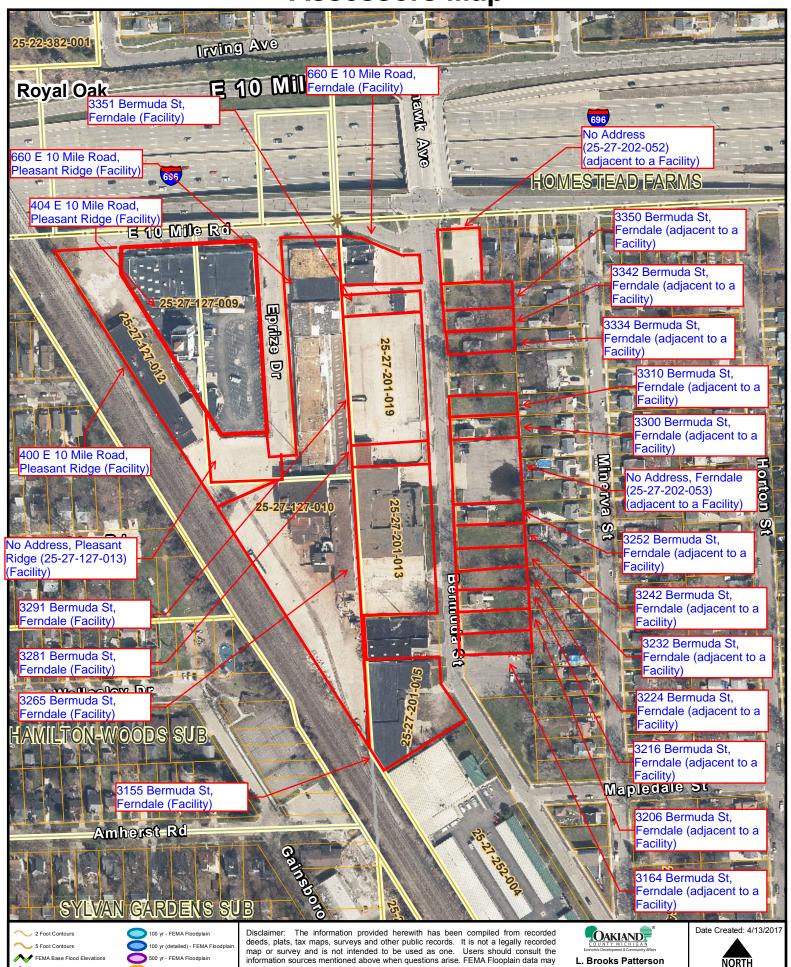
Appendix B



Assessors Map



Assessors Map



not always be present on the map

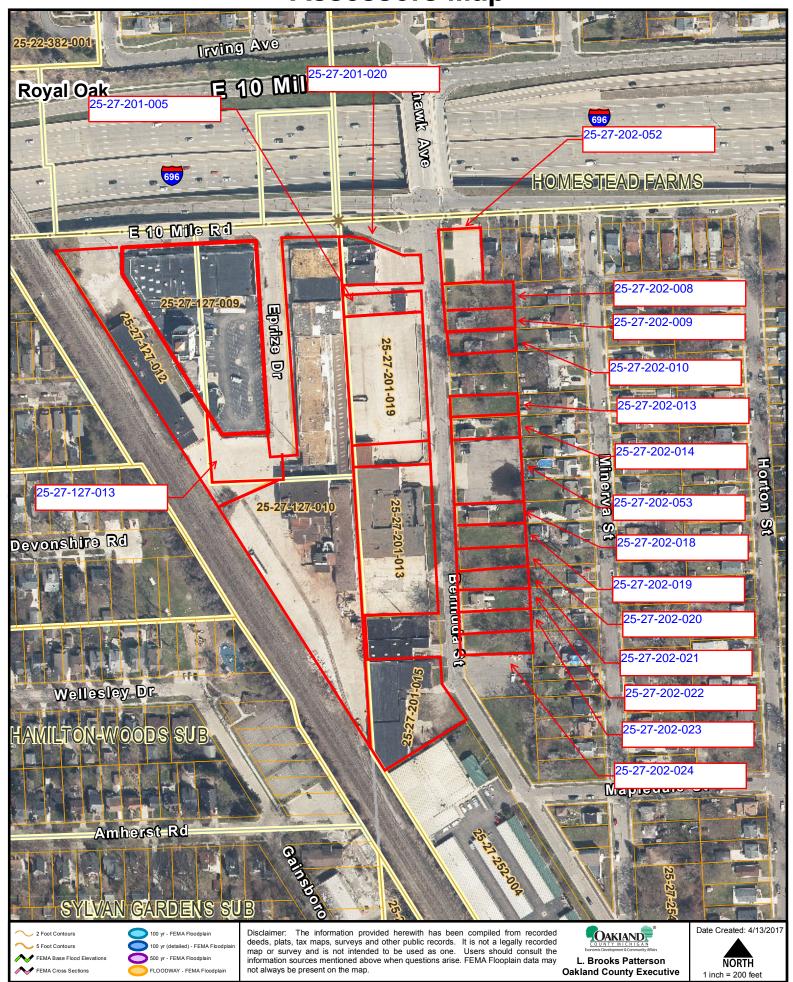
FLOODWAY - FEMA Floodplain

FEMA Cross Sections

Oakland County Executive

1 inch = 200 fee

Assessors Map



Appendix C





Environmental & Engineering Services Nationwide



BASELINE ENVIRONMENTAL ASSESSMENT

404 East 10 Mile Road | Pleasant Ridge, Michigan PM Project Number 01-5706-1-0002

Prepared for:

Iron Ridge Office LLC 520 North Main Street Royal Oak, Michigan 48067

Prepared by:

PM Environmental, Inc. 4080 West 11 Mile Road Berkley, Michigan 48072

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Suite 301

Grand Rapids

t: 616.285.8857

560 5th Street NW,

April 3, 2017

District Supervisor Michigan Department of Environmental Quality Southeast Michigan District Office 27700 Donald Court Warren, Michigan 48092

RE: **Baseline Environmental Assessment for the Commercial Property**

Located at 404 East 10 Mile Road, Pleasant Ridge, Michigan

Parcel ID: 25-27-127-009

PM Environmental, Inc. Project No. 01-5706-1-0002

Dear District Supervisor:

Enclosed is a copy of the Baseline Environmental Assessment prepared for the above referenced subject property in accordance with Section 20126(1)(c) of Part 201, Environmental Remediation, of the Natural Resources and Environmental Protection Act (NREPA), P.A. 451 of 1994, as amended.

If you have any questions regarding the information in this report, please contact us at 800-313-2966.

Sincerely,

PM ENVIRONMENTAL, INC.

Jamie Antoniewicz, P.E.

Project Engineer

J. Adam Patton, CHMM

Manager - Site Investigation Services

Enclosure



Metro Detroit

t: 248.336.9988

4080 W. 11 Mile Road Berkley, MI 48072 f: 877.884.6775

3340 Ranger Road Lansing, MI 48906 f: 877.884.6775 t: 517.321.3331

Lansing

Grand Rapids 560 5th Street NW, Suite 301 Grand Rapids, MI 49504

f: 877.884.6775 t: 616.285.8857

April 3, 2017

Mr. Gregory Cooksey Iron Ridge Office LLC 520 North Main Street Royal Oak, Michigan 48067

RE: Baseline Environmental Assessment for the Commercial Property

Located at 404 East 10 Mile Road, Pleasant Ridge, Michigan

Parcel ID: 25-27-127-009

PM Environmental, Inc. Project No. 01-5706-1-0002

Dear Mr. Cooksey:

Enclosed is a copy of the Baseline Environmental Assessment prepared for the above referenced subject property in accordance with Section 20126(1)(c) of Part 201, Environmental Remediation, of the Natural Resources and Environmental Protection Act (NREPA), P.A. 451 of 1994, as amended.

THIS BASELINE ENVIRONMENTAL ASSESSMENT WAS PERFORMED FOR THE EXCLUSIVE USE OF <u>IRON RIDGE OFFICE LLC</u> AND <u>OAKLAND COUNTY</u>, EACH OF WHOM MAY RELY ON THE REPORT'S CONTENTS.

If you have any questions regarding the information in this report, please contact our office at 800-313-2966.

Sincerely,

PM ENVIRONMENTAL, INC.

Jamie Antoniewicz, P.E.

Project Engineer

J. Adam Patton, CHMM

Manager - Site Investigation Services

Enclosure

TABLE OF CONTENTS

1.0	INTRODUCTION AND DISCUSSION	1
	1.1 Owner/Operator Information	1
	1.2 Intended Use of the Subject Property	1
	1.3 Summary of All Appropriate Inquiry Phase I Environmental Assessment	1
	1.3.1 Phase I ESA Exceptions or Deletions	2
	1.3.2 Phase I ESA Data Gaps	
	1.4 Summary of Previous Subsurface Site Investigations	2
	1.5 Geology and Hydrogeology	3
2.0	LOCATION OF CONTAMINATED MEDIA ON THE SUBJECT PROPERTY	3
	2.1 Summary of Soil/Groundwater Analytical Results – July 2015	4
	2.1.1 Summary of Soil Analytical Results - July 2015	6
	2.1.2 Summary of Groundwater Analytical Results – July 2015	7
	2.2 Summary of Soil Analytical Results – PCBs (1995-2016)	
	2.3 Subject Property Facility Status	10
3.0	PROPERTY INFORMATION	10
	3.1 Legal Description of Subject Property	10
	3.2 Map of Subject Property	11
	3.3 Subject Location and Analytical Summary Maps	
	3.4 Subject Property Location Map	
	3.5 Subject Property Address	11
	3.6 Subject Spatial Data	11
4.0		
	4.1 Summary Data Tables	11
	4.2 Laboratory Reports and Chain of Custody Documentation	12
5.0	IDENTIFICATION OF BEA AUTHOR	
6.0	AAI REPORT OR ASTM PHASE I ESA	
7 0	REFERENCES	13

FIGURES

Figure 1	Property Vicinity Map
Figure 2	Generalized Diagram of the Subject Property and Adjoining Properties
Figure 3A	Soil Boring/Temporary Monitoring Well Location Map with 1995 Soil Analytical Data
Figure 3B	Soil Boring/Temporary Monitoring Well Location Map with 2015 Soil Analytical Data
Figure 4A	Soil Boring/Temporary Monitoring Well Location Map with 1995 Groundwater Analytical Data
Figure 4B	Soil Boring/Temporary Monitoring Well Location Map with 2015 Groundwater Analytical Data
Figure 5A	Soil Boring/Temporary Monitoring Well Location Map with PCB Analytical Data (1995, 2015, and 2016)
Figure 5B	Soil Boring/Temporary Monitoring Well Location Map with PCB Analytical Data (1995, 2015, and 2016)

TABLES

Table 1	ASTI March 1995 and Integrated July 1995 Summary of Soil Analytical Results VOCs and PNAs
Table 2	ASTI March 1995 and Integrated July 1995 Summary of Soil Analytical Results PCBs and Metals
Table 3	ASTI March 1995 and Integrated July 1995 Summary of Groundwater Analytical Results VOCs, PNAs, and Michigan Ten Metals
Table 4	PM July 2015 Summary of Soil Analytical Results VOCs and PNAs
Table 5	PM July 2015 Summary of Soil Analytical Results PCBs and Michigan Ten Metals
Table 6	PM July 2015 Summary of Groundwater Analytical Results VOCs, PNAs, and Michigan Ten Metals
Table 7	PM 2015 and 2016 Summary of Soil Analytical Results PCBs

APPENDICES

Appendix A	Phase I ESA, March 30, 2017, PM
Appendix B	Soil Boring Logs
Appendix C	Laboratory Analytical Reports
Appendix D	Assessing Information
Appendix E	Professional Qualification Statements

1.0 INTRODUCTION AND DISCUSSION

PM Environmental, Inc. (PM) completed a Baseline Environmental Assessment (BEA) for the commercial property (Parcel ID: 25-27-127-009) located at 404 East 10 Mile Road, Pleasant Ridge, Oakland County, Michigan 48069 (hereafter referred to as the "subject property"; Figure 1) in accordance with Part 201, Environmental Remediation, of the Natural Resources and Environmental Protection Act (NREPA), P.A. 451 of 1994, as amended.

The subject property is identified as 404 East 10 Mile Road, Pleasant Ridge, Michigan, and consists of one 1.875 acre parcel (Figure 1). The subject property is developed with a 40,329 square foot commercial building. The building is mainly one-story with the central portion consisting of four stories and a basement (Figure 2). The property is currently zoned RO: Restricted Access.

Standard and other historical sources documented that the subject property was developed prior to 1940, and likely in 1933 based on Sanborn maps, with the northern and western-central portions of the current building. Additions were constructed in the 1960s, 1970s and 1990s to complete the current layout. The southern portion of the subject property was also occupied by a coal yard from at least the 1950s through late 1960s.

The northern portion of the subject building was occupied by Michigan Bell and utilized for service garages and machine shops in at least the 1950s. Additionally, the building contained an egg distributor in the 1950s. In the 1960s, the property was occupied by Frank's Nursery and utilized for warehousing of retail products, and by the late 1960s the building was occupied by Walmet Division of Valenite, Inc. The west-central portion of the subject building was formerly occupied by manufacturing operations in at least the 1950s and potentially as early as the 1930s. The building was occupied by Walmet by the 1960s. A tool house was located on the southern portion of the property in at least the 1960s. Between 1974 and 1980, the current southern lobby area was developed in the area of the former tool house. Operations associated with Walmet consisted of manufacturing of carbides and included tooling and extrusion. The building was vacated by Walmet in 1994, and remained vacant through the 1990s. The building has been occupied by professional offices since approximately 2000. Additionally, a portion of the northern building has been utilized for storage and limited fabrication of acoustical materials from approximately 2000 to 2016.

1.1 Owner/Operator Information

Iron Ridge Office LLC, 47 Oxford Road, Grosse Pointe, Michigan 48236, intends to purchase the subject property on or after April 7, 2017.

1.2 Intended Use of the Subject Property

Iron Ridge Office LLC intends to lease the property to commercial tenants.

1.3 Summary of All Appropriate Inquiry Phase I Environmental Assessment

PM completed a Phase I Environmental Site Assessment (ESA) dated March 30, 2017, in conformance with the scope and limitations of ASTM Practice E 1527-13 (i.e., the 'ASTM Standard'). A copy of the March 2017 Phase I ESA, including photographs of the subject property, is included in Appendix A.

The following recognized environmental conditions (RECs) were identified in PM's March 2017 Phase I ESA:

- The southern portion of the subject property was occupied by a coal yard from at least the 1950s through the 1960s and the subject property was utilized for manufacturing operations from the 1960s until the 1990s. Previous site assessment activities completed in 1995 and 2015 document soil and groundwater contamination exists onsite above the current Part 201 Residential and Nonresidential Generic Cleanup Criteria. Based on these analytical results, the subject property would be classified as a facility, as defined by Part 201 of P.A. 451 of the Michigan NREPA, as amended.
- Analytical results from 1995, 2015, and 2016 identified polychlorinated biphenyls (PCBs) above Toxic Substance Control Act (TSCA) subpart D cleanup standards, up to and including concentrations requiring removal, and a BEA will not provide the purchaser liability protection under TSCA.

No adjoining and/or nearby RECs were identified.

1.3.1 Phase I ESA Exceptions or Deletions

There were no exceptions or deletions from the Federal All Appropriate Inquiry Rule under 40 CFR 312, or the ASTM Standard during the completion of PM's March 2017 Phase I ESA and no special terms or conditions applied to the preparation of the Phase I ESA.

1.3.2 Phase I ESA Data Gaps

PM did not identify any significant data gaps during the completion of the March 2017 Phase I ESA.

1.4 Summary of Previous Subsurface Site Investigations

PM reviewed the following previous environmental reports for the subject property. Relevant portions of the reports are available in the Phase I ESA in Appendix A or within Michigan Department of Environmental Quality (MDEQ) records.

Name of Report	Date of Report	Company that Prepared Report		
Phase I ESA	October 5, 1993	Applied Science & Technology, Inc. (ASTI)		
Subsurface Investigation	April 20, 1995	ASTI		
Category D BEA	August 23, 1995	Integrated Environmental, Inc. (IE)		
Phase I ESA	December 23, 2014	PM		
Phase II ESA	June 14, 2016	PM		

The Phase I ESA conducted in 1994 was conducted when the Walmet Division of Valenite, Inc. still occupied the subject property. The report documented that Valenite, Inc. and its related companies had occupied the subject property since 1956. Limited historical information reviewed was consistent with this report. Documented operations consisted of extruding or pressing carbide-grade powder, which was then hardened in a furnace. The Phase I ESA also included the west adjoining property, which in the report is identified as Building #3.

ASTI identified concerns related to the long term manufacturing operations, floor drains in the manufacturing areas, and the removal of the former underground storage tanks (USTs) with no documentation of sampling, as potential areas of concern.

Based on these concerns, the subsurface investigation was conducted by ASTI in 1995. Site assessment activities included advancement of soil borings in the areas of concern identified, and collection of soil and groundwater samples for laboratory analysis of volatile organic compounds (VOCs), polynuclear aromatic compounds (PNAs), PCBs, and metals. Analytical results documented various concentrations of contaminants above the current Part 201 Generic Cleanup Criteria on the subject property and the west adjoining property. Based on these analytical results, the BEA was conducted for the current owner.

A summary of the analytical results from the previous site investigations are included on Figures 3A and 4A and in Tables 1 through 3.

On July 2, 2015, PM completed a scope of work consisting of the advancement of 16 soil borings (SB-1 through SB-16) and the installation of five temporary monitoring wells (TMW-1, TMW-4, TMW-6, TMW-15, and TMW-16) to assess the RECs identified in PM's December 2014 Phase I ESA. A total of 19 soil and five groundwater samples were analyzed for VOCs, PNAs, PCBs, and metals (arsenic, barium, cadmium, chromium, copper, lead, mercury, selenium, silver, and zinc), or some combination thereof.

Analytical results from the July 2015 sampling event identified PCB concentrations above TSCA subpart D cleanup standards. Additional investigations were conducted in August, September, and November 2015 and May 2016 that included of the advancement of 41 soil borings (SB-1R, SB-3R, and SB-17 through SB-55) and the collection of soil samples for analysis of PCBs to further define the area of PCB impact identified in July 2015. Refer to Section 2.0 for a summary of the analytical results from the previous investigations.

1.5 Geology and Hydrogeology

Based on review of soil boring logs prepared by PM, the soil stratigraphy generally consists of loose sand and/or clayey sand to a depth of 6.0 to 12.0 feet bgs underlain by silty clay or clay to a depth of at least 20.0 feet bgs. Soils associated with the identified PCB impact were generally black or gray stained/discolored. Limited, perched, and discontinuous groundwater was encountered between 7.0 and 11.0 feet bgs.

Soil boring/temporary monitoring well logs depicting the soil stratigraphy and PID readings are included in Appendix B.

2.0 LOCATION OF CONTAMINATED MEDIA ON THE SUBJECT PROPERTY

The analytical results for the samples collected during site investigation activities were compared with the MDEQ Generic Cleanup Criteria and Screening Levels as presented in Part 201 Rules 299.1 through 299.50, dated December 30, 2013 entitled "Cleanup Criteria Requirements for Response Activity", in accordance with Section 20120a(1) using the Residential and Nonresidential cleanup criteria.

Shallow groundwater (i.e. less than three meters bgs) analytical results were compared to Vapor Intrusions Screening Levels (VISLs) presented in the May 2013 MDEQ Guidance Document for the Vapor Intrusion Pathway.

PCB analytical results were further compared to TSCA subpart D cleanup standards as summarized below:

	No Action	Appropriate Cap w/Deed Restriction	Removal Required
High Occupancy Area (≥335 hours/year)	≤1 ppm	>1 to ≤10 ppm	>10 ppm
Low Occupancy Area (<335 hours/year)	≤25 ppm w/ deed restriction	>25 to ≤100 ppm	>100 ppm

Laboratory analytical reports from PM's 2015 and 2016 site investigation are included in Appendix C.

2.1 Summary of Soil/Groundwater Analytical Results – July 2015

The table below summarizes exceedances of cleanup criteria in the soil and groundwater samples collected by PM for soil borings SB-1 through SB-16.

SUMMARY OF ANALYTICAL RESULTS

Location and Total Depth	Soil Sample	Screen		Objectives	Part 201 Cleanup Criteria Exceedances		
(feet bgs)	Depth (feet bgs)	[DTW] (feet bgs)	Allalysis	Objectives	Soil	Groundwater	
SB/TMW-1 (10.0)	2.0-3.0	5.6-10.6 [9.45]	VOCs, PNAs, PCBs, metals	Assess former manufacturing operations	SVII/VSI/PSI/ DC/TSCA: PCBs	NONE	
SB-2 (15.0)	2.0-3.0	NA	VOCs, PNAs, PCBs, arsenic	Assess former coal yard, west adjoining property, and previously identified PCB impact	DWP/GSIP: 1,1,1- trichloroethane, arsenic DC(R) PCBs, arsenic TSCA: PCBs	NA	
SB-3 (15.0)	2.0-3.0	NA	VOCs, PNAs, PCBs, metals	Assess former coal yard	DWP/GSIP: 1,1,1- trichloroethane DC(R/NR)/ TSCA: PCBs	NA	
SB/TMW-4 (20.0)	4.0-5.0	9.6-14.6 [10.75]	VOCs, PNAs, PCBs, metals	Assess former coal yard and east adjoining property	NONE	NONE	

Location and Total Depth	Soil Sample	TMW Screen Depth and	Analysis	Objectives	Part 201 Clear Exceeda	
(feet bgs)	(feet bgs) Depth [i		[DTW] (feet bgs)		Soil	Groundwater
SB-5 (10.0)	4.0-5.0 and 9.0-10.0	NA	VOCs, PNAs, PCBs, metals	Assess former machine shop, manufacturing operations, floor drain and previous identified VOC impact	NONE	NA
SB/TMW-6* (20.0)	1.0-2.0	8.5-13.5 [9.61]	VOCs, PNAs, PCBs, arsenic	Assess west adjoining property and previously identified PCB	DWP/GSIP: 1,1,1- trichloroethane SVII/VSI/PSI/ DC/TSCA: PCBs	NONE
	4.0-5.0			impact	NONE	
SB-7 (10.0)	2.0-3.0	NA	VOCs, PNAs, PCBs, metals	Assess former machine shop and manufacturing operations	DWP/GSIP/ DC(R): arsenic	NA
SB-8 (15.0)	1.0-2.0	NA	VOCs, PNAs, PCBs, arsenic	Assess west adjoining property and previously identified arsenic impact	NONE	NA
SB-9 (5.0)	2.0-3.0	NA	VOCs, PNAs, PCBs, metals	Assess former manufacturing operations and previously identified arsenic impact	NONE	NA
SB-10 (9.0)	2.0-3.0	NA	VOCs, PNAs, PCBs, metals	Assess former machine shop	NONE	NA
SB-11 (10.0)	1.0-2.0	NA	VOCs, PNAs, PCBs, metals	Assess former manufacturing operations, former garage, and previously identified arsenic impact	DWP/GSIP/ DC(R): arsenic	NA
SB-12 (15.0)	4.0-5.0	NA	VOCs, PNAs, PCBs, metals	Assess former manufacturing operations and former garage	NONE	NA

Location and Total Depth	Soil Sample Sample Depth and Analysis		Objectives	Part 201 Cleanup Criteria Exceedances		
(feet bgs)	Depth (feet bgs)	[DTW] (feet bgs)	Allulysis	Objectives	Soil	Groundwater
SB-13 (15.0)	1.0-2.0 and 4.0-5.0	NA	VOCs, PNAs, PCBs, metals	Assess former manufacturing operations and former garage	NONE	NA
SB-14 (15.0)	5.0-6.0	NA	VOCs, PNAs, PCBs, metals	Assess previously identified arsenic and PCB concentrations	DWP/GSIP/ DC(R): arsenic	NA
SB/TMW-15 (15.0)	1.0-2.0	5.9-10.9 [7.70]	VOCs, PNAs, PCBs, metals	Assess former coal yard	DC(R): lead	NONE
SB/TMW-16 (20.0)	2.0-3.0	8.5-13.5 [8.98]	VOCs, PNAs, PCBs, metals	Assess east adjoining property and previously identified PCB concentrations	DWP/GSIP: 1,1,1- trichloroethane	NONE

DW/P - Drinking Water/ Protection

GSI/P - Groundwater Surface Water Interface/ Protection

SVII – Soil Volatilization to Indoor Air Inhalation

DC - Direct Contact

VSI - Ambient Air Volatile Soil Inhalation

PSI - Particulate Soil Inhalation

R - Residential

NR - Nonresidential

* Boring location is not within the property boundary

2.1.1 Summary of Soil Analytical Results - July 2015

The soil analytical results are summarized on Figure 3B and in Tables 4 and 5.

Soil analytical results identified concentrations of 1,1,1-trichloroethane in SB-2, SB-6, and SB-16 above Part 201 Residential and Nonresidential DWP and GSIP cleanup criteria. Concentrations of VOCs in the remaining soil samples are below laboratory method detection limits (MDLs) and/or the most restrictive Part 201 Residential cleanup criteria.

Soil analytical results identified concentrations of PNAs in SB-3 and SB-15 below the most restrictive Part 201 Residential cleanup criteria. No concentrations of PNAs were identified in the remaining soil samples above laboratory MDLs.

Refer to Section 6.3 for a summary of the PCB analytical results.

Soil analytical results identified concentrations of arsenic in SB-2, SB-7, SB-11, and SB-14 above Part 201 Residential and Nonresidential DWP, GSIP, and Residential DC cleanup criteria. A concentration of lead was identified in SB-15 above Part 201 Residential DC cleanup criteria. Concentrations of the remaining metals are below the Statewide Default Background Levels (SDBLs) and/or the most restrictive Part 201 Residential cleanup criteria.

2.1.2 Summary of Groundwater Analytical Results – July 2015

The groundwater analytical results are summarized on Figure 4B and in Table 6.

Groundwater analytical results identified concentrations of 1,1,1-trichloroethane and/or 1,1-dichloroethane in samples collected from TMW-1, TMW-4, TMW-6, and TMW-15 below the most restrictive Part 201 Residential cleanup criteria. No concentrations of VOCs were identified in the remaining groundwater samples above laboratory MDLs.

No concentrations of PNAs were identified in any of the groundwater samples above laboratory MDLs.

No concentrations of metals were identified in any of the groundwater samples above the most restrictive Part 201 Residential cleanup criteria.

2.2 Summary of Soil Analytical Results – PCBs (1995-2016)

The analytical results from the PCB sampling and delineation activities are summarized on Figures 5A and 5B and in Table 7.

The table below summarizes the PCB analytical results as compared to TSCA subpart D cleanup standards with considerations for low or high occupancy areas.

Location	0	Soil	TSCA Cleanup Levels Based on Occupancy Areas (mg/kg) Action Applicable (Yes/No)						
and Total Depth	Sample Depth	PCB Concentration	No Action			n cap with nal control	Removal Required		
(feet bgs)	(feet bgs)	(mg/kg)	High	Low	High	Low	High	Low	
			(≤1)	(≤25)	(>1 to ≤10)	(>25 to ≤100)	(>10)	(>100)	
		Marc	h and Ju	uly 1995,	ASTI and IE				
B1-1	2.0-4.0	< 0.33	YES	YES	-	-	-	-	
B3-1	0.0-2.0	< 0.33	YES	YES	-	-	-	-	
B13-4	6.0-8.0	0.43	YES	YES	-	-	-	-	
B13-5	8.0-10.0	< 0.33	YES	YES	-	-	-	-	
HB5	0.0-3.0	0.39	YES	YES	-	-	-	-	
HB6	0.0-3.0	17	No	YES	No	-	YES	-	
HB7	0.0-3.0	0.93	YES	YES	-	-	-	-	
HB8	0.0-3.0	0.86	YES	YES	-	-	-	-	
HB9	0.0-3.0	0.39	YES	YES	-	-	-	-	
B16-1	0.0-2.0	< 0.33	YES	YES	-	ı	-	-	
B16-3	4.0-6.0	< 0.33	YES	YES	-	-	-	-	
B17-1	0.0-2.0	< 0.33	YES	YES	-	-	-	-	
B17-3	4.0-6.0	< 0.33	YES	YES	-	-	-	-	
B18-1	0.0-2.0	0.44	YES	YES	-	-	-	-	
B18-3	4.0-6.0	<0.33	YES	YES	-	-	-		
B19-2	2.0-4.0	<0.33	YES	YES	-	-	-	-	
B19-3	4.0-6.0	< 0.33	YES	YES	-	-	-	-	
B20-1	0.0-2.0	<0.33	YES	YES	-	-	-	-	
B20-4	6.0-8.0	< 0.33	YES	YES	-	-	-	-	

			TSCA Cleanup Levels Based on Occupancy Areas (mg/kg) Action Applicable (Yes/No)					
Location and Total Depth	Soil Sample Depth	PCB Concentration	No Action		o Action Maintain cap with institutional control			noval uired
(feet bgs)	(feet bgs)	(mg/kg)	High	Low	High	Low	High	Low
			(≤1)	(≤25)	(>1 to ≤10)	(>25 to ≤100)	(>10)	(>100)
		July, August, a	and Nov	ember 20	15 and May 2	016, PM		
SB-1	2.0-3.0	11,000	No	No	No	No	YES	YES
SB-1R	5.0-6.0	7.4	No	YES	YES	-	-	-
SB-1R	8.5-9.5	247	No	No	No	No	YES	YES
SB-2	2.0-3.0	5.4	No	YES	YES	-	-	-
SB-3	2.0-3.0	23	No	YES	No	-	YES	-
SB-3R	8.5-9.5	<0.33	YES	YES	-	-	-	-
SB-4	4.0-5.0	<0.33	YES	YES	-	-	-	-
SB-5	4.0-5.0	< 0.33	YES	YES	-	-	-	-
SB-5	9.0-10.0	< 0.33	YES	YES	-	-	-	-
SB-6*	1.0-2.0	880	No	No	No	No	YES	YES
SB-6*	4.0-5.0	< 0.33	YES	YES	-	-	-	-
SB-7	2.0-3.0	< 0.33	YES	YES	-	-	-	-
SB-8	1.0-2.0	<0.33	YES	YES	-	-	-	-
SB-9	2.0-3.0	< 0.33	YES	YES	-	-	-	-
SB-10	2.0-3.0	< 0.33	YES	YES	-	-	-	-
SB-11	1.0-2.0	<0.33	YES	YES	-	-	-	-
SB-12	4.0-5.0	<0.33	YES	YES	-	-	-	-
SB-13	1.0-2.0	<0.33	YES	YES	-	-	-	-
SB-13	4.0-5.0	< 0.33	YES	YES	-	-	-	-
SB-14	5.0-6.0	0.43	YES	YES	-	-	-	-
SB-15	1.0-2.0	<0.33	YES	YES	-	-	-	-
SB-16	2.0-3.0	< 0.33	YES	YES	-	-	-	-
SB-17	2.0-3.0	< 0.33	YES	YES	-	-	-	-
SB-17	9.0-10.0	<0.33	YES	YES	-	-	-	-
SB-18	1.0-2.0	44	No	No	No	YES	YES	-
SB-18	2.0-3.0	16	No	YES	No	-	YES	-
SB-18	7.5-8.5	<0.33	YES	YES	-	-	-	-
SB-19	1.0-2.0	20	No	YES	No	-	YES	-
SB-19	2.0-3.0	24	No	YES	No	-	YES	-
SB-19	4.5-5.5	10	No	YES	YES	-	-	-
SB-19	6.5-7.5	<0.33	YES	YES	-	-	-	-
SB-20	1.0-2.0	16	No	YES	No	-	YES	-
SB-20	2.0-3.0	43	No	No	No	YES	YES	-
SB-20	7.0-8.0	<0.33	YES	YES	-	-	-	-
SB-21	2.0-30	<0.33	YES	YES	-	-	-	-
SB-22	2.0-3.0	6	No	YES	YES	-	-	-
SB-22	8.0-9.0	<0.33	YES	YES	-	-	-	-
SB-23	2.0-3.0	<0.33	YES	YES	-	-	-	-
SB-23	9.0-10.0	<0.33	YES	YES	-	-	-	-
SB-24	1.0-2.0	6,188	No	No	No	No	YES	YES
SB-24	8.0-9.0	<0.33	YES	YES	-	-	-	-

Location	Soil		TSC	CA Cleanu		d on Occupancy cable (Yes/No)	Areas (m	g/kg)
and Total Depth	Sample Depth	PCB Concentration	No A	Action		n cap with nal control		noval uired
(feet bgs)	(feet bgs)	(mg/kg)	High	Low	High	Low	High	Low
			(≤1)	(≤25)	(>1 to ≤10)	(>25 to ≤100)	(>10)	(>100)
SB-25	1.0-2.0	7	No	YES	YES	-	-	-
SB-25	2.0-3.0	19	No	YES	No	-	YES	-
SB-25	9.0-10.0	1.2	No	YES	YES	-	-	-
SB-26	2.0-3.0	2.3	No	YES	YES	-	-	-
SB-26	9.0-10.0	< 0.33	YES	YES	-	ı	-	-
SB-27	1.0-2.0	15	No	YES	No	ı	YES	-
SB-27	2.0-3.0	12	No	YES	No	ı	YES	-
SB-27	5.0-6.0	9	No	YES	YES	-	-	-
SB-28	1.0-2.0	7	No	YES	YES	ı	-	-
SB-28	2.0-3.0	14	No	YES	No	-	YES	-
SB-28	7.0-8.0	<0.33	YES	YES	-	-	-	-
SB-29	2.0-3.0	10	No	YES	YES	-	-	-
SB-29	6.5-7.5	<0.33	YES	YES	-	-	-	-
SB-30	2.0-3.0	< 0.33	YES	YES	-	-	-	-
SB-30	7.5-8.5	<0.33	YES	YES	-	-	-	-
SB-31	2.0-3.0	1.8	No	YES	YES	-	-	-
SB-32	2.0-3.0	4.3	No	YES	YES	-	-	-
SB-32	3.5-4.5	< 0.33	YES	YES	-	-	-	-
SB-33	1.0-2.0	<0.33	YES	YES	-	-	-	-
SB-34	2.0-3.0	< 0.33	YES	YES	-	-	-	-
SB-34	7.5-8.5	<0.33	YES	YES	-	-	-	-
SB-35	2.0-3.0	< 0.33	YES	YES	-	-	-	-
SB-35	7.0-8.0	<0.33	YES	YES	-	-	-	-
SB-36	2.0-3.0	0.3	YES	YES	-	-	-	-
SB-36	7.0-8.0	0.25	YES	YES	-	-	-	-
SB-37	2.0-3.0	1.8	No	YES	YES	-	-	-
SB-37	8.0-9.0	<0.33	YES	YES	-	-	-	-
SB-38	2.0-3.0	170	No	No	No	No	YES	YES
SB-38	5.0-6.0	<0.33	YES	YES	-	-	-	-
SB-39	2.0-3.0	10,800	No	No	No	No	YES	YES
SB-39	5.0-6.0	4.9	No	YES	YES	-	-	-
SB-40	2.0-3.0	<0.33	YES	YES	-	-	-	-
SB-40	5.0-6.0	<0.33	YES	YES	-	-	-	-
SB-40	8.5-9.5	2,015	No	No	No	No	YES	YES
SB-41	2.0-3.0	<0.33	YES	YES	-	-	-	-
SB-41	5.0-6.0	<0.33	YES	YES	-	-	-	-
SB-41	8.0-9.0	<0.33	YES	YES	-	-	-	-
SB-42	2.0-3.0	<0.33	YES	YES	-	-	-	-
SB-43	1.0-2.0	0.6	YES	YES	-	-	-	-
SB-43	2.0-3.0	<0.33	YES	YES	-	-	-	-
SB-43	5.0-6.0	<0.33	YES	YES	-	-	-	-
SB-44	1.0-2.0	0.7	YES	YES	-	-	-	-

Location	Soil	PCB Concentration (mg/kg)	TSCA Cleanup Levels Based on Occupancy Areas (mg/kg) Action Applicable (Yes/No)						
Location and Total Depth	Sample Depth		No Action		Maintain cap with institutional control		Removal Required		
(feet bgs)	(feet bgs)		High	Low	High	Low	High	Low	
			(≤1)	(≤25)	(>1 to ≤10)	(>25 to ≤100)	(>10)	(>100)	
SB-44	2.0-3.0	< 0.33	YES	YES	-	-	-	-	
SB-45	2.0-3.0	< 0.33	YES	YES	-	-	-	-	
SB-46	2.0-3.0	11	No	YES	No	-	YES	-	
SB-46	5.0-6.0	9	No	YES	YES	-	-	-	
SB-47	2.0-3.0	21	No	YES	No	-	YES	-	
SB-47	6.5-7.5	< 0.33	YES	YES	-	-	-	-	
SB-48	2.0-3.0	< 0.33	YES	YES	-	-	-	-	
SB-49	2.0-3.0	< 0.33	YES	YES	-	-	-	-	
SB-50	0.5-1.5	13	No	YES	No	-	YES	-	
SB-50	4.0-5.0	< 0.33	YES	YES	-	-	-	-	
SB-51	0.5-1.5	< 0.33	YES	YES	-	-	-	-	
SB-52	1.0-2.0	32.6	No	No	No	YES	YES	-	
SB-52	2.0-3.0	0.94	YES	YES	-	-	-	-	
SB-53	1.0-2.0	54.9	No	No	No	YES	YES	-	
SB-53	2.0-3.0	15	No	YES	No	-	YES	-	
SB-53	5.0-6.0	< 0.33	YES	YES	-	-	-	-	
SB-55	1.0-2.0	0.44	YES	YES	-	-	-	-	
SB-54	1.0-2.0	1.18	No	YES	YES	-	-	-	
SB-54	2.0-3.0	<0.33	YES	YES	-	-	-	-	
SB-55	2.0-3.0	<0.33	YES	YES	-	-	-	-	
SB-55	5.0-6.0	<0.33	YES	YES	_	_	-	-	

mg/kg – micrograms/kilogram

2.3 Subject Property Facility Status

A location where a hazardous substance is present in excess of the concentrations that satisfy the requirements of subsection 20120a(1)(a) or (17), is a facility pursuant to Part 201. Section 20120a(1)(a) requirements are the cleanup criteria for unrestricted residential usage.

Contaminant concentrations identified in soil and groundwater on the subject property indicate exceedances to the Part 201 Residential and Nonresidential DWP, GSIP, SVII, VSI, PSI, and DC cleanup criteria. Therefore, the subject property is a <u>facility</u> under Part 201 of P.A. 451, as amended, and the rules promulgated thereunder.

3.0 PROPERTY INFORMATION

3.1 Legal Description of Subject Property

A copy of the legal description is included in Appendix Das part of the assessing information.

^{*} Boring location is not located within the subject property boundary upon review of available information

3.2 Map of Subject Property

Refer to Figure 1, Property Location Map; and Figure 2, Generalized Diagram of the Subject Property and Surrounding Area which depicts the property/parcel boundaries.

3.3 Subject Location and Analytical Summary Maps

Figures 3 through 5 provide scaled maps of the subject property with site structures and sampling locations with analytical results.

3.4 Subject Property Location Map

Figures 1 and 2 provide scaled area maps depicting the subject property location in relation to the surrounding area.

3.5 Subject Property Address

As indicated in Section 1.0, the subject property (Parcel ID: 25-27-127-009) is located at 404 East 10 Mile Road, Pleasant Ridge, Oakland County, Michigan 48069.

3.6 Subject Spatial Data

As depicted in Figure 1, the subject property is located in township one North (T.1N), range 11 East (R.11E), and section 27, northwest quarter, northeast quarter-quarter in Pleasant Ridge, Oakland County, Michigan.

According to the MDEQ Groundwater Mapping Project Website, the center of the subject property is located at latitude 42.4748 and a longitude of -83.1347.

4.0 FACILITY STATUS OF SUBJECT PROPERTY

As indicated in Section 2.0, based upon documented exceedances of the Part 201 Residential and Nonresidential DWP, GSIP, SVII, VSI, PSI, and DC cleanup criteria in samples collected from the subject property, the subject property is a <u>facility</u> as defined under Part 201 of P.A. 451, as amended, and the rules promulgated thereunder.

4.1 Summary Data Tables

The analytical results were compared with the MDEQ Generic Cleanup Criteria and Screening Levels as presented in Part 201 Rules 299.1 through 299.50, dated December 30, 2013 entitled "Cleanup Criteria Requirements for Response Activity" in accordance with Section 20120a(1) using the Residential and Nonresidential cleanup criteria. Shallow groundwater (i.e. less than three meters bgs) analytical results were compared to VISLs presented in the May 2013 MDEQ Guidance Document for the Vapor Intrusion Pathway. PCB analytical results were further compared to TSCA subpart D cleanup standards.

The analytical results for compounds exceeding Part 201 cleanup criteria are summarized in Section 2.0. A summary of the analytical results are in Tables 1 through 7.

4.2 Laboratory Reports and Chain of Custody Documentation

Samples collected by PM in 2015 and 2016 were submitted to Brighton Analytical LLC, Brighton, Michigan and Merit Laboratories, East Lansing, Michigan for chemical analysis under chain of custody procedures and within applicable holding times. A copy of the laboratory analytical reports from site investigations conducted by PM are included in Appendix C.

5.0 IDENTIFICATION OF BEA AUTHOR

This BEA was conducted on April 3, 2017, by Mr. Jamie Antoniewicz, P.E., Project Engineer, and reviewed by Mr. J. Adam Patton, Manager – Site Investigation Services, PM Environmental, Inc., which is prior to or within 45 days of becoming the property owner or operator. Qualification statements are provided as Appendix E.

We declare that, to the best of our professional knowledge and belief, we meet the definition of *Environmental Professional* as defined in §312.10 of 40 CFR 312 and we have the specific qualifications based on education, training, and experience to assess a property of the nature and history of the subject property. We have developed and performed the all appropriate inquires in conformance with the standards and practices set forth in 40 CFR Part 312.

Jamie Antoniewicz, P.E.

Project Engineer

J. Adam Patton, CHMM

Manager - Site Investigation Services

6.0 AAI REPORT OR ASTM PHASE I ESA

As indicated in Section 1.3, PM completed a Phase I ESA dated March 30, 2017, in conformance with the scope and limitations of ASTM Practice E 1527-13, for the subject property (Parcel ID: 25-27-127-009) located at 404 East 10 Mile Road, Pleasant Ridge, Oakland County, Michigan 48069. The scope of the Phase I ESA included consideration of hazardous substances as defined in Section 20101(1)(x) of P.A 451 of 1994, as amended, and constituted the performance of an All Appropriate Inquiry in conformance with the standards and practices set forth in 40 CFR Part 312.

A copy of the March 2017 Phase I ESA is included in Appendix A.

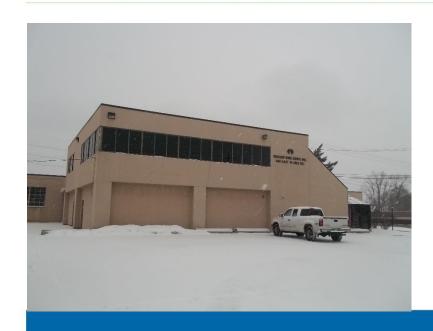
7.0 REFERENCES

- Michigan Department of Environmental Quality (MDEQ) Generic Cleanup Criteria and Screening Levels as presented in Part 201 Rules 299.1 through 299.50, dated December 30, 2013 entitled "Cleanup Criteria Requirements for Response Activity";
- MDEQ Operational Memorandum No. 4 "Site Characterization and Remediation Verification

 Attachment 10, Peer Review Draft Groundwater Not in an Aquifer," February 2007;
- MDEQ Operational Memorandum No. 2 "Sampling and Analysis," October 22, 2004, Revised July 5, 2007;
- MDEQ May 2013 Guidance Document for the Vapor Intrusion Pathway;
- Baseline Environmental Submittal Form (EQP 4025), September 2015;
- Phase I ESA, October 5, 1993, Applied Science & Technology, Inc. (ASTI);
- Subsurface Investigation, April 20, 1995, ASTI;
- Category D BEA, August 23, 1995, Integrated Environmental, Inc. (IE);
- Phase I ESA, December 23, 2014, PM;
- Phase II ESA, June 14, 2016, PM; and
- Phase I ESA, March 30, 2017, PM.



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BASELINE ENVIRONMENTAL ASSESSMENT

660 East 10 Mile Road | Ferndale, Michigan PM Project Number 01-5524-0-001

Prepared for:

Iron Ridge Holdings, LLC 47 Oxford Road Grosse Pointe, Michigan 48236

Prepared by:

PM Environmental, Inc. 4080 West Eleven Mile Road Berkley, MI 48072

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f: 877.884.6775 t: 616.285.8857

Grand Rapids

December 10, 2015

District Supervisor Michigan Department of Environmental Quality Southeastern Michigan District Office 27700 Donald Court Warren, Michigan 48092

RE: Baseline Environmental Assessment for the Industrial Property Located at 660 East 10 Mile Road, Ferndale, Michigan PM Environmental, Inc. Project No. 01-5524-0-001

Dear District Supervisor:

Enclosed is a copy of the Baseline Environmental Assessment prepared for the above referenced subject property in accordance with Section 20126(1)(c) of Part 201, Environmental Remediation, of the Natural Resources and Environmental Protection Act (NREPA), P.A. 451 of 1994 (Part 201), as amended.

If you have any questions regarding the information in this report, please contact us at 800-313-2966.

Sincerely,

PM ENVIRONMENTAL, INC.

Jamie Antoniewicz, P.E.

Project Engineer

Enclosure

Jennifer L. Ritchie, C.P.G.

Regional Site Investigation Manager



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Grand Rapids, MI 49504

f: 877.884.6775 t: 616.285.8857

December 10, 2015

Mr. Greg Cooksey Iron Ridge Holdings, LLC 47 Oxford Road Grosse Pointe, Michigan 48236

RE: Baseline Environmental Assessment for the Industrial Property

Located at 660 East 10 Mile Road, Ferndale, Michigan PM Environmental, Inc. Project No. 01-5524-0-001

Dear Mr. Cooksey:

Enclosed is a copy of the above-referenced document prepared in accordance with Section 20126(1)(c) of Part 201, Environmental Remediation, of the Natural Resources and Environmental Protection Act (NREPA), P.A. 451 of 1994 (Part 201), as amended.

THIS BASELINE ENVIRONMENTAL ASSESSMENT WAS PERFORMED FOR THE EXCLUSIVE USE OF IRON RIDGE HOLDINGS, LLC, WHO MAY RELY ON THE REPORT'S CONTENTS.

If you have any questions regarding the information in this report, please contact our office at 800-313-2966.

Sincerely,

PM ENVIRONMENTAL, INC.

Jamie Antoniewicz, P.E.

Project Engineer

Jennifer L. Ritchie, C.P.G. Regional Site Investigation Manager

Enclosure

TABLE OF CONTENTS

1.0) INTRODUCTION AND DISCUSSION	1
	1.1 Owner/Operator Information	2
	1.2 Intended Use of the Subject Property	
	1.3 Summary of All Appropriate Inquiry Phase I Environmental Asses	
	1.3.1 Phase I ESA Exceptions or Deletions	4
	1.3.2 Phase I ESA Data Gaps	4
	1.4 Summary of Previous Site Investigations	4
	1.5 Current Site Investigation	
	1.5.1 Geophysical Investigation	7
	1.5.2 Subsurface Investigation	7
	1.5.3 Investigation Techniques and QA/QC Procedures	13
	1.6 Geology and Hydrogeology	14
2.0	LOCATION OF CONTAMINATED MEDIA ON THE SUBJECT PRO	PERTY14
	2.1 Summary of Soil Analytical results	19
	2.2 Summary of Groundwater Analytical Results	20
	2.3 Subject Property Facility Status	21
3.0	PROPERTY INFORMATION	21
	3.1 Legal Description of Subject Property	21
	3.2 Map of Subject Property	21
	3.3 Subject Location and Analytical Summary Maps	21
	3.4 Subject Property Location Map	21
	3.5 Subject Property Address	21
	3.6 Subject Spatial Data	22
4.0) FACILITY STATUS OF SUBJECT PROPERTY	22
	4.1 Summary Data Tables	
	4.2 Laboratory Reports and Chain of Custody Documentation	22
5.0		
6.0	AAI REPORT OR ASTM PHASE I ESA	23
7.0	REFERENCES	23

FIGURES

Figure 1: Property Vicinity Map

Figure 2: Generalized Diagram of the Subject Property and Adjoining Properties with GPR

Area

Figure 3A: Soil Boring/Temporary Monitoring Well with Soil Analytical Results
Figure 3B: Soil Boring/Temporary Monitoring Well with PCB Soil Analytical Results
Figure 4: Soil Boring/Temporary Monitoring Well with Groundwater Analytical Results

TABLES

Table 1: Summary of Soil Analytical Results: Volatile Organic Compounds
Table 2: Summary of Soil Analytical Results: Polynuclear Aromatic Compounds
Table 3: Summary of Soil Analytical Results: Polychlorinated Biphenyls and Metals

Table 4: Summary of Groundwater Analytical Results: Volatile Organic Compounds,

Polynuclear Aromatic Compounds, and Metals

APPENDICES

Appendix A: Phase I ESA, November 30, 2015, PM Appendix B: Geophysical Investigation Survey Report

Appendix C: Boring Logs

Appendix D: Laboratory Analytical Reports

Appendix E: Assessing Information

Appendix F: Professional Qualification Statements

1.0 INTRODUCTION AND DISCUSSION

PM Environmental, Inc. (PM) completed a Baseline Environmental Assessment (BEA) for the industrial property located at 660 East 10 Mile Road, Ferndale/Pleasant Ridge, Oakland County, Michigan 48220/48069 (hereafter referred to as the "subject property"; Figure 1).

The subject property consists of nine parcels located in Ferndale and Pleasant Ridge (Figure 2). For ease of reference, PM has identified the property under its main address, 660 East 10 Mile Road, but the entire nine parcels included in this BEA are as follows:

Parcel ID Number	Address	City	Acreage	Building Size (sf)	Property Use
25-27-127-010	660 East 10 Mile Road	Pleasant Ridge	3.47	73,817	Vacant industrial building
25-27-201-020	660 East 10 Mile Road	Ferndale	0.29	6,036	Limited office operations for Walker Wire
25-27-201-013	3265 Bermuda Street	Ferndale	1.139	23,953	Vacant industrial building
25-27-201-005	3351 Bermuda Street	Ferndale	0.169	1,125	Office building utilized for general storage
25-27-201-019	3291 Bermuda Street	Ferndale	1.00	No structures	Surface parking lot
25-27-201-012	3281 Bermuda Street	Ferndale	0.165	2,602	Hazardous materials storage building
25-27-201-015	3155 Bermuda Street	Ferndale	0.75	18,516	Industrial building by a landscaping and snow removal company for storage of road salt and equipment and for general storage
25-27-127-012	400 East 10 Mile Road	Pleasant Ridge	1.10	17,752	Vacant industrial building
25-27-127-013	None	Pleasant Ridge	0.33	No structures	Surface parking lot

The main subject parcels, identified as 660 East 10 Mile Road (Ferndale and Pleasant Ridge) were initially developed prior to 1940 with dwellings. Industrial development began in the northern portion of the property in the mid-1940s, with the beginning of Walker Wire's operations. Multiple additions were constructed to the building through the early 1990s to expand the layout to the current building. The building was occupied by various wire and steel companies, mainly identified as Walker Wire Company, from initial development in the 1940s until the mid-2000s. Operations included wire cutting, stretching, and chemical treatment.

The southern portion of the main parcel (660 East 10 Mile Road) was utilized by Michigan Bell for telephone pole storage from at least 1949 until at least 1957. No evidence of chemical treatment (i.e. bulk chemical storage) was observed, and the area appeared to be for pole and equipment storage only.

The subject parcel identified as 3351 Bermuda Street was initially developed in the 1940s with the current building. The building was occupied by a W.E. Foltz Company from at least 1950 until 1975, and consisted of a small machine shop. Fire department records included documentation that the operations utilized trichloroethylene. The building was purchased by Walker Wire in the early 1980s, and utilized as an employment office since that time.

The subject parcel identified as 3291 Bermuda Street was initially developed prior to 1940 with dwellings. A small tin shop was constructed on the property in the mid-1960s. All former buildings were demolished by 1980 when the parcel was converted to the current concrete paved surface lot for Walker Wire.

The subject parcel identified as 3281 Bermuda Street was initially developed prior to 1940 with a dwelling, which was demolished in the late 1970s when the parcel was converted to a concrete paved storage lot for Walker Wire. The current hazardous materials storage building was constructed on the western portion of the parcel in 1992. The concrete floors in the building were observed to be in good condition, and interviews with representatives of Walker Wire document that the building was mainly used for used oil storage and dry bags of chemicals, and no significant solvent storage occurred in the building.

The subject parcel identified as 3265 Bermuda Street was initially developed with portions of the current building constructed in the mid-1940s. Various additions were constructed in the 1950s and 1980s. Former occupants included machinery manufacturers and tooling companies through the 1980s, with documented solvent use in Fire department records. The building has been occupied by Walker Wire since that time.

The subject parcel identified as 3155 Bermuda Street was initially developed in the mid-1940s with portions of the current industrial building, with additions in the 1950s. The property was occupied by a nut and bolt manufacturer from at least 1950 until 1985. The building has been generally utilized for limited warehousing and storage by Walker Wire since that time.

The western subject parcels, identified as 400 East 10 Mile Road and associated parking lot, were initially developed prior to 1940 with a coal and fuel storage and sales operation. These operations ceased in the late 1970s, and the former silos were demolished and the current building was constructed. The current building at 400 East 10 Mile Road was utilized for manufacturing operations from the 1970s until 1990s, associated with 404 East 10 Mile Road (carbide company). These operations ceased in the late 1990s, and the building has been utilized for mostly warehousing with limited manufacturing by Walker Wire since the late 1990s. Former operations included stamping and presses. A small office building was present in the northwestern portion of the parcel, which was demolished between 2005 and 2008 to create more parking space for the adjoining property (404 East 10 Mile Road).

1.1 Owner/Operator Information

Iron Ridge Holdings, LLC, 47 Oxford Road, Grosse Pointe, Michigan 48236, purchased the property on December 4, 2015.

1.2 Intended Use of the Subject Property

Iron Ridge Holdings, LLC intends to redevelop the property for retail and general commercial use.

1.3 Summary of All Appropriate Inquiry Phase I Environmental Assessment

PM completed a Phase I Environmental Site Assessment (ESA) for the subject property, dated November 30, 2015, in conformance with the scope and limitations of ASTM Practice E 1527-13 (i.e., the 'ASTM Standard'). A copy of the November 2015 Phase I ESA, including photographs of the subject property, is included in Appendix A.

The Phase I ESA also included 12 parcels located east of Bermuda Street; however, no RECs were identified with the parcels and are therefore excluded from this BEA.

The following recognized environmental conditions (RECs) were identified in PM's November 2015 Phase I ESA:

- The western portion of the subject property, identified as 400 East 10 Mile Road, 660 East 10 Mile Road, 3155 Bermuda Street, and 3265-3351 Bermuda Street, was historically occupied by various machine shops and manufacturing operations from the 1940s until the 2000s. Review of previous site assessments conducted in 1995 and 2015 document concentrations of various metals, polynuclear aromatic compounds (PNAs), and volatile organic compounds (VOCs) were detected in the soil and/or groundwater samples above the current Part 201 Residential and Nonresidential Drinking Water Protection (DWP) and Groundwater Surface Water Interface Protection (GSIP) Generic Cleanup Criteria (GCC). Additionally, concentrations of arsenic, polychlorinated biphenyls (PCBs), and benzo(a)pyrene were detected in soil samples above the current Part 201 Residential and/or Nonresidential Direct Contact GCC. Finally, cis-1,2-dichloroethylene and vinyl chloride were detected in groundwater above Vapor Intrusion Screening Levels (VISLs) in the vicinity of the former UST basin associated with 660 East 10 Mile Road. Based on these analytical results, the subject property would be classified as a "facility," as defined by Part 201 of P.A. 451 of the Michigan Natural Resources Environmental Protection Act (NREPA), as amended.
- Review of previous site assessment activities performed on the western parcel of the subject property documents concentrations of PCBs above the current Part 201 Residential Soil Direct Contact GCC and US EPA Toxic Substance Control Act (TSCA) Nonresidential cleanup standards in the vicinity of the central adjoining property (404 East 10 Mile Road). PCB contamination is not covered under the Michigan Department of Environmental Quality (MDEQ) liability protection afforded under a Baseline Environmental Assessment (BEA), and the known PCB contamination remains a concern.

The following adjoining REC was identified:

• The central adjoining property, identified as 404 East 10 Mile Road and located between 400 and 660 East 10 Mile Road, was occupied by manufacturing operations from at least the 1950s until 1990s. Previous subsurface investigations on the subject property document soil contamination above current Part 201 GCC along the eastern, southern, and western property boundary, which may be a result of migration from the central adjoining property.

1.3.1 Phase I ESA Exceptions or Deletions

There were no exceptions or deletions from the Federal All Appropriate Inquiry Rule under 40 CFR 312, or the ASTM Standard during the completion of PM's November 2015 Phase I ESA and no special terms or conditions applied to the preparation of the Phase I ESA.

1.3.2 Phase I ESA Data Gaps

PM did not identify any significant data gaps during the completion of the November 2015 Phase I ESA.

1.4 Summary of Previous Site Investigations

PM reviewed a previous Phase I ESA completed for the subject parcel identified as 400 East 10 Mile Road and the adjoining property located at 404 East 10 Mile Road by Applied Science and Technology, Inc. (ASTI) and dated October 5, 1993. The subject property is identified as Building 3 in the report, and at the time of the Phase I ESA was connected to 404 East 10 Mile Road via a catwalk, and was owned and operated by Walmet. Operations included general stamping and pressing. Two concerns were identified on the subject property parcel, which consisted of exterior staining at the southeast corner of the building, and a former 10,000-gallon used coolant oil UST removed from the eastern property boundary in the late 1980s with no confirmatory sampling completed.

PM also reviewed a Subsurface Investigation report prepared by ASTI for 400 and 404 East 10 Mile Road and dated April 20, 1995. The site assessment activities were performed to assess concerns identified in the 1993 Phase I ESA. Specifically, four soil borings were advanced in the southeastern portion to assess surficial staining, and seven soil borings were advanced in the former UST basin. A boring was also advanced in the northeastern portion of the property, for collection of a background sample.

No evidence of a release was identified in the former UST basin area, and no subsurface contamination was identified in this area. Therefore, PM considers the UST adequately assessed and no further investigation is recommended.

PM completed a Phase I ESA for the subject property in February 2015. The Phase I ESA identified the following RECs:

• The main subject building, identified as 660 East 10 Mile Road, was occupied by various wire and steel companies, mainly identified as Walker Wire Company, from initial development in the 1940s until the mid-2000s. Various additions has been constructed to the building to expand the original portion, located in the northwestern portion, to the south for the current layout. Operations included wire cutting, stretching, and chemical treatment. PM observed cracked and pitted floors in multiple former production areas. Historical interior waste streams associated with the former tooling operations would have consisted of general hazardous substances and/or petroleum products. A significant portion of this time period preceded major environmental regulations and current waste management and disposal procedures. The potential exists that a release occurred associated with these former operations and negatively impacted the subsurface.

- PM observed significant staining at the base of a steel coil holder in the western—central portion of the main subject building. The on-site manager indicated that steel coils were sprayed with oils prior to shipment, and that these operations were likely performed in this area since the 1990s. Based on the significant staining and length of operations, the potential exists that a release has occurred in this area and negatively impacted the subsurface.
- PM observed three 55-gallon drums of new oil and coolant in a secondary containment area in the western-central portion of 660 East 10 Mile Road. Significant staining was observed in the area, and the concrete floors were pitted and cracked. Mr. Craig indicated that the drum storage has been present since at least the 1990s. Based on the observed site conditions and length of time of operations, the potential exists that a release has occurred in this area and negatively impacted the subsurface.
- Floor drains were observed in various production areas of 660 East 10 Mile Road. Mr.
 Craig indicated that none of the drains were located in areas of former chemical storage,
 and most are sealed. No staining was observed. However, the long term operations
 associated with the building and unknown waste management practices associated with
 the floor drains may be a source of subsurface contamination.
- The eastern central portion of the main subject building contained an acid bath and rinse system from 1972 until the mid-2000s. Concrete pits were observed under the baths that contained chemicals for the operations, and staining / evidence of spills was observed during the site reconnaissance. Based on the length of time operations and observed site conditions, the potential exists that a release has occurred in this area and negatively impacted the subsurface.
- A wastewater treatment plant was present in the western-central portion of the property, which was installed in the 1990s to treat waste water generated in the acid bath and rinse section. Prior the 1990s, water was reportedly discharged to the sanitary sewer system. PM observed closed drains and cracked concrete in the waste water treatment area. Based on the length of time operations and observed site conditions, the potential exists that a release has occurred in this area and negatively impacted the subsurface.
- The northeastern subject building, identified as 3351 Bermuda Street, was initially developed in the 1940s and was occupied by a machine shop from at least 1950 until 1975. Fire department records included documentation that the operations utilized trichloroethylene. Historical interior waste streams associated with the former tooling operations would have consisted of general hazardous substances and/or petroleum products. This time period preceded major environmental regulations and current waste management and disposal procedures. The potential exists that a release occurred associated with these former operations and negatively impacted the subsurface.
- Fire inspection records for 3351 Bermuda Street document that the building was formerly occupied by W.E. Foltz Company from at least 1958 until 1972 and was heated with fuel oil stored in two 220-gallon aboveground storage tanks located at the "outside rear" of the building. Based on the length of time of use and lack of documentation of sufficient containment, the potential exists that a release of fuel oil has occurred.

- The eastern-central portion of the subject building, identified as 3265 Bermuda Street, was initially developed in the mid-1940s, with additions to the southern portion in the 1950s. Former occupants included machinery manufacturers and tooling companies through the 1980s, with documented solvent use in Fire department records. Historical interior waste streams associated with the former tooling operations would have consisted of general hazardous substances and/or petroleum products. This time period preceded major environmental regulations and current waste management and disposal procedures. The potential exists that a release occurred associated with these former operations and negatively impacted the subsurface.
- Fire inspection records for 3265 Bermuda Street from 1958 until 1972 document that the building was heated with fuel oil stored in a 1,000-gallon UST, but the location was not indicated. The potential exists for an orphan fuel oil UST to be present on the parcel identified as 3265 Bermuda Street and/or for a release of fuel oil to have occurred.
- The southeastern building of the subject property, identified as 3155 Bermuda, was initially developed in the mid-1940s with portions of the current industrial building, with additions in the 1950s. The property was occupied by a nut and bolt manufacturer from at least 1950 until 1985. Historical interior waste streams associated with the former tooling operations would have consisted of general hazardous substances and/or petroleum products. This time period preceded major environmental regulations and current waste management and disposal procedures. The potential exists that a release occurred associated with these former operations and negatively impacted the subsurface.
- The western portion of the subject property, identified as 400 East 10 Mile Road, was
 occupied by a coal yard from at least 1940 until the late 1960s, with unpaved coal
 storage areas throughout the property. The potential exists for subsurface contamination
 to be present from leaching of heavy metals, hazardous substances and/or petroleum
 products from these long term operations.
- The current building on the western portion of the subject property was occupied by manufacturing operations, reportedly associated with a carbide company that occupied the east adjoining property (404 East 10 Mile Road) from at least the 1970s until 1990s. Operations included stamping and presses. Historical interior waste streams associated with the former tooling operations would have consisted of general hazardous substances and/or petroleum products. This time period preceded major environmental regulations and current waste management and disposal procedures. The potential exists that a release occurred associated with these former operations and negatively impacted the subsurface.
- Review of previous site assessment activities performed on the western parcel of the subject property (400 East 10 Mile Road) in 1995 document concentrations of polychlorinated biphenyls (PCBs) above the current Part 201 Residential Soil Direct Contact Generic Cleanup Criteria and US EPA Toxic Substance Control Act (TSCA) Nonresidential cleanup standards. PCB contamination is not covered under the Michigan Department of Environmental Quality (MDEQ) liability protection afforded under a Baseline Environmental Assessment (BEA), and the known PCB contamination remains a concern.

Review of previous site assessment activities performed on the western parcel of the subject property (400 East 10 Mile Road) in 1995 document concentrations of various metals were detected in the soil samples collected from the southeastern portion of the property above the state default background levels and current Part 201 Residential and Nonresidential Drinking Water Protection and Groundwater Surface Water Interface Protection Generic Cleanup Criteria (GCC). Additionally, concentrations of arsenic were detected in soil samples collected above the current Part 201 Residential Direct Contact GCC, but below the Nonresidential Direct Contact GCC. Based on these analytical results, the subject property would be classified as a "facility," as defined by Part 201 of P.A. 451 of the Michigan Natural Resources Environmental Protection Act (NREPA), as amended.

The following adjoining RECs were identified:

• The central adjoining property, identified as 404 East 10 Mile Road and located between 400 and 660 East 10 Mile Road, was occupied by manufacturing operations from at least the 1950s until 1990s. Previous subsurface investigations on the property in 1995 document soil contamination above current Part 201 GCC along the eastern property boundary, which has not been delineated in the direction of the subject property. The potential exists for known contamination to have migrated onto the subject property.

The central adjoining property, identified as 3205 Bermuda Street and located between two parcels of the subject property along Bermuda Street, has been occupied by machinery and compressor rebuilding companies since at least 1960, and was occupied by a bottling company from at least 1950 until 1957. Long term interior waste streams would have included hazardous substances and/or petroleum products. The building and operations directly abuts subject property boundaries. The potential exists that a release has occurred and migrated onto the subject property and impacted the subsurface.

1.5 Current Site Investigation

Prior to the commencement of field activities, MISSDIG, a utility locating service, was contacted to locate utilities on or adjacent to the subject property. Utilities were marked by the respective utility companies where they entered or were located adjacent to the subject property. Ground penetrating radar (GPR) was utilized for clear the soil boring locations of utilities.

1.5.1 Geophysical Investigation

On June 8, 2015, PM completed a GPR survey at the 3265 Bermuda Street parcel (Figure 2) to investigate the potential for orphan USTs.

No anomalies consistent with the presence of orphan USTs were identified during the geophysical survey investigation. The complete Geophysical Investigation Survey Report is included in Appendix B.

1.5.2 Subsurface Investigation

Between June 8 and 10, 2015, PM completed a scope of work to assess RECs identified in PM's February 2015 Phase I ESA consisting of the advancement of 34 soil borings (SB-1 through SB-34), installation of 19 temporary monitoring wells (TMW-3, TMW-5, TMW-8 through TMW-11, TMW-13, TMW-14, TMW-16, TMW-19, TMW-21, TMW-24, TMW-27, and TMW-29

though TMW-34), and the collection of 31 soil and 19 groundwater samples, which were submitted to Merit Laboratories, Inc., East Lansing, Michigan for analysis of volatile organic compounds (VOCs), PNAs, PCBs, metals (arsenic, cadmium, chromium, lead, and/or zinc), pH, or some combination thereof.

On September 1, 2015, PM completed a scope of work consisting of the advancement of 12 soil borings (SB-27R, SB-35 through SB-45) to evaluate PCB concentrations along the property boundary.

The table below summarizes the Phase II ESA activities including total depth, objective of the soil borings, and sample justification. Refer to Figures 3 and 4 for soil boring/temporary monitoring well locations.

DESCRIPTION OF SOIL BORING/TEMPORARY MONITORING WELL LOCATIONS

Location and Total Depth (feet bgs)	Soil Sample Depth (feet bgs)	TMW Screen and [DTW] (feet bgs)	Analysis	Objectives	Sample Selection (justification)
SB-1 (10.0)	1.0-2.0	NA	VOCs, PNAs, PCBs, metals	Assess former operations in the main building	Soil: Sample collected from drain depth based on the lack of field evidence of contamination. GW: Not encountered.
SB-2 (15.0)	2.0-3.0	NA	VOCs, PNAs, PCBs, metals	Assess former operations and drain in the main building	Soil: Shallow drain depth sample collected based on the lack of field evidence of contamination. GW: Not encountered.
SB/TMW-3 (15.0)	0.5-1.5	2.09-7.09 [4.22]	VOCs, PNAs, PCBs, metals	Assess former operations and drain in 660 East 10 Mile	Soil: Shallow sample collected based on the lack of field evidence of contamination and the presence of shallow groundwater. GW: Sampled.
SB-4 (15.0)	2.0-3.0 and 5.0-6.0	NA	VOCs, PNAs, PCBs, metals	Assess former operations and drain in the main building	Soil: Samples collected from the shallow and deeper sand/clay interface based on the lack of field evidence of contamination. GW: Not encountered.
SB-5 (20.0)	0.5-1.5	3.29-8.29 [5.07]	VOCs, PNAs, PCBs, metals	Assess former operations in the main building	Soil: Shallow sample collected based on the lack of field evidence of contamination. GW: Sampled.
SB-6 (15.0)	0.5-1.5 and 6.0-7.0	NA	VOCs, PNAs, PCBs, metals	Assess former operations in the main building	Soil: Shallow and sand/clay interface samples collected based on the lack of field evidence of contamination. GW: Not encountered.

Location and Total Depth (feet bgs)	Soil Sample Depth (feet bgs)	TMW Screen and [DTW] (feet bgs)	Analysis	Objectives	Sample Selection (justification)
SB-7 (10.0)	3.0-4.0	NA	VOCs, PNAs, PCBs, metals	Assess former operations in the main building	Soil: Sand/clay interface sample collected based on the lack of field evidence of contamination. GW: Not encountered.
SB/TMW-8 (20.0)	NA	4.45-9.45 [5.80]	VOCs, PNAs, metals, pH	Assess acid line and pits in the southern portion of the main building	Soil: Soil sample not collected based on the lack of field evidence of contamination. GW: Sampled.
SB/TMW-9 (20.0)	NA	4.75-9.75 [5.00]	VOCs, PNAs, metals, pH	Assess acid line and pits in the southern portion of the main building	Soil: Soil sample not collected based on the lack of field evidence of contamination and the presence of shallow groundwater. GW: Sampled.
SB/TMW-10 (15.0)	NA	4.15-9.15 [4.75]	VOCs, PNAs, metals	Assess wastewater treatment plant	Soil: Soil sample not collected based on the lack of field evidence of contamination and the presence of shallow groundwater. GW: Sampled.
SB/TMW-11 (9.5)	NA	3.91-8.91 [4.98]	VOCs, PNAs, metals	Assess wastewater treatment plant	Soil: Soil sample not collected based on the lack of field evidence of contamination and the presence of shallow groundwater. GW: Sampled.
SB-12 (15.0)	1.0-2.0	NA	VOCs, PNAs, PCBs, metals	Assess exterior storage and nearby chemical storage room	Soil: Shallow sample collected based on the lack of field evidence of contamination. GW: Not sampled.
SB/TMW-13 (15.0)	1.0-2.0	2.84-7.84 [3.52]	VOCs, PNAs, metals, pH	Assess acid recovery room	Soil: Shallow sample collected based on the lack of field evidence of contamination and the presence of shallow groundwater. GW: Sampled.
SB/TMW-14 (15.0)	0.5-1.5	2.72-7.72 [4.09]	VOCs, PNAs, PCBs, metals	Assess former operations and drain in the main building	Soil: Shallow sample collected based on the lack of field evidence of contamination. GW: Sampled.

Location and Total Depth (feet bgs)	Soil Sample Depth (feet bgs)	TMW Screen and [DTW] (feet bgs)	Analysis	Objectives	Sample Selection (justification)
SB-15 (10.0)	1.0-2.0	NA	VOCs, PNAs, PCBs, metals	Assess testing lab in the main building	Soil: Shallow sample collected based on the lack of field evidence of contamination. GW: Not sampled.
SB/TMW-16 (15.0)	1.0-2.0	3.05-8.05 [4.36]	VOCs, PNAs, PCBs, metals	Assess location of suspect UST and former operations in the main building	Soil: Sample collected from the interval with the highest PID reading (8.9 ppm). GW: Sampled.
SB-17 (15.0)	1.0-2.0	NA	VOCs, PNAs, PCBs, metals	Assess location of suspect UST and former operations in the main building	Soil: Sample collected from the interval with the highest PID reading (3.2 ppm). GW: Not sampled.
SB-18 (6.0)	2.0-3.0	NA	VOCs, PNAs, PCBs, metals	Assess former operations at 3351 Bermuda Street	Soil: Sample collected from the interval with the highest PID reading (0.6 ppm). GW: Not encountered.
SB/TMW-19 (15.0)	6.0-7.0	4.15-9.15 [4.55]	VOCs and PNAs	Assess former operations and former AST at 3351 Bermuda Street	Soil: Sample collected from the interval with the highest PID reading (392 ppm). GW: Sampled.
SB-20 (10.0)	1.0-2.0	NA	VOCs, PNAs, PCBs, metals	Assess former operations at 3155 Bermuda Street and potential for migration from 3205 Bermuda Street	Soil: Shallow sample collected based on the lack of field evidence of contamination. GW: Not sampled based on the lack of field evidence of contamination.
SB/TMW-21 (15.0)	1.0-2.0	3.55-8.55 [5.40]	VOCs, PNAs, PCBs, metals	Assess former operations at 3155 Bermuda Street	Soil: Shallow sample collected based on the lack of field evidence of contamination and the presence of shallow groundwater. GW: Sampled.
SB-22 (10.0)	1.0-2.0	NA	PNAs, PCBs, metals	Assess former operations at 3155 Bermuda Street	Soil: Shallow sample collected based on the lack of field evidence of contamination. GW: Not sampled based on the lack of field evidence of contamination.
SB-23 (4.0)	3.0-4.0	NA	VOCs, PNAs, PCBs, metals	Assess former operations at 400 East 10 Mile	Soil: Sand/clay interface sample collected based on the lack of field evidence of contamination. GW: Not encountered.

Location and Total Depth (feet bgs)	Soil Sample Depth (feet bgs)	TMW Screen and [DTW] (feet bgs)	Analysis	Objectives	Sample Selection (justification)
SB/TMW-24 (15.0)	3.0-4.0	8.06-13.06 [9.69]	VOCs, PNAs, PCBs, metals	Assess former operations at 400 East 10 Mile	Soil: Sand/clay interface sample collected based on the lack of field evidence of contamination. GW: Sampled.
SB-25 (15.0)	4.0-5.0	NA	VOCs, PNAs, PCBs, metals	Assess former operations at 400 East 10 Mile	Soil: Sand/clay interface sample collected based on the lack of field evidence of contamination. GW: Not sampled based on the lack of field evidence of contamination.
SB-26 (10.0)	1.0-2.0	NA	VOCs, PNAs, PCBs, metals	Assess former operations at 400 East 10 Mile and former coal storage	Soil: Shallow sample collected based on the lack of field evidence of contamination. GW: Not sampled based on the lack of field evidence of contamination.
SB/TMW- 27/R (15.0)	1.0-2.0 and 2.0-3.0	5.0-10.0 [6.55]	VOCs, PNAs, PCBs, metals	Assess former coal storage on the western portion of the property	Soil: Shallow sample collected based on the lack of field evidence of contamination and presence of shallow groundwater. GW: Sampled.
SB-28 (15.0)	1.0-2.0	NA	VOCs, PNAs, PCBs, metals	Assess former coal storage on the western portion of the property	Soil: Shallow sample collected based on the lack of field evidence of contamination. GW: Not encountered.
SB/TMW-29 (15.0)	1.0-2.0	5.0-10.0 [7.45]	VOCs, PNAs, PCBs, metals	Assess former coal storage on the western portion of the property	Soil: Shallow sample collected based on the lack of field evidence of contamination and presence of shallow groundwater. GW: Sampled.
SB/TMW-30 (15.0)	1.0-2.0	2.86-7.86 [4.63]	VOCs, PNAs, PCBs, metals	Assess former coal storage on the western portion of the property	Soil: Shallow sample collected based on the lack of field evidence of contamination and presence of shallow groundwater. GW: Sampled.
SB/TMW-31 (20.0)	3.0-4.0	3.55-8.55 [4.15]	VOCs, PNAs, PCBs	Assess potential for migration from 404 East 10 Mile	Soil: Shallow sample collected based on the lack of field evidence of contamination and presence of shallow groundwater. GW: Sampled.

Location and Total Depth (feet bgs)	Soil Sample Depth (feet bgs)	TMW Screen and [DTW] (feet bgs)	Analysis	Objectives	Sample Selection (justification)
SB/TMW-32 (10.0)	NA	3.96-8.96 [5.20]	VOCs and PNAs	Assess potential for migration from 3205 Bermuda Street	Soil: Soil sample not collected based on the lack of field evidence of contamination and presence of shallow groundwater. GW: Sampled.
SB/TMW-33 (15.0)	NA	3.75-8.75 [5.10]	VOCs and PNAs	Assess potential for migration from 3205 Bermuda Street	Soil: Soil sample not collected based on the lack of field evidence of contamination and presence of shallow groundwater. GW: Sampled.
SB/TMW-34 (15.0)	1.0-2.0	4.46-9.46 [5.80]	VOCs, PNAs, PCBs	Assess potential for migration from 404 East 10 Mile and previously identified PCB concentrations	Soil: Shallow sample collected based on the lack of field evidence of contamination and previous sample depth. GW: Sampled.
SB-35 (5.0)	2.0-3.0 and 4.0-5.0	NA	PCBs	Assess PCB concentrations along the property boundary with 404 East 10 Mile Road	Soil: Samples collected based on previous identified impact and/or field observations. GW: Not encountered.
SB-36 (5.0)	2.0-3.0 and 4.0-5.0	NA	PCBs	Assess PCB concentrations along the property boundary with 404 East 10 Mile Road	Soil: Samples collected based on previous identified impact and/or field observations. GW: Not encountered.
SB-37 (5.0)	1.0-2.0 and 4.0-5.0	NA	PCBs	Assess PCB concentrations along the property boundary with 404 East 10 Mile Road	Soil: Samples collected based on previous identified impact and/or field observations. GW: Not encountered.
SB-38 (5.0)	1.0-2.0 and 4.0-5.0	NA	PCBs	Assess PCB concentrations along the property boundary with 404 East 10 Mile Road	Soil: Samples collected based on previous identified impact and/or field observations. GW: Not encountered.
SB-39 (5.0)	1.0-2.0 and 2.0-3.0	NA	PCBs	Assess PCB concentrations along the property boundary with 404 East 10 Mile Road	Soil: Samples collected based on previous identified impact and/or field observations. GW: Not encountered.
SB-40 (5.0)	1.0-2.0 and 4.0-5.0	NA	PCBs	Assess PCB concentrations along the property boundary with 404 East 10 Mile Road	Soil: Samples collected based on previous identified impact and/or field observations. GW: Not encountered.

Location and Total Depth (feet bgs)	Soil Sample Depth (feet bgs)	TMW Screen and [DTW] (feet bgs)	Analysis	Objectives	Sample Selection (justification)
SB-41 (5.0)	1.0-2.0, 2.0-3.0, and 4.0-5.0	NA	PCBs	Assess PCB concentrations along the property boundary with 404 East 10 Mile Road	Soil: Samples collected based on previous identified impact and/or field observations. GW: Not encountered.
SB-42 (5.0)	1.0-2.0 and 2.0-3.0	NA	PCBs	Assess PCB concentrations along the property boundary with 404 East 10 Mile Road	Soil: Samples collected based on previous identified impact and/or field observations. GW: Not encountered.
SB-43 (5.0)	1.0-2.0 and 2.0-3.0	NA	PCBs	Assess PCB concentrations along the property boundary with 404 East 10 Mile Road	Soil: Samples collected based on previous identified impact and/or field observations. GW: Not encountered.
SB-44 (5.0)	1.0-2.0	NA	PCBs	Assess PCB concentrations along the property boundary with 404 East 10 Mile Road	Soil: Samples collected based on previous identified impact and/or field observations. GW: Not encountered.
SB-45 (5.0)	1.0-2.0	NA	PCBs	Assess PCB concentrations along the property boundary with 404 East 10 Mile Road	Soil: Samples collected based on previous identified impact and/or field observations. GW: Not encountered.

GW – Groundwater bgs – below ground surface NA – Not Applicable DTW – depth to water ppm – parts per million PID – photoionization detector

1.5.3 Investigation Techniques and QA/QC Procedures

The soil borings were advanced to the desired depth using a direct push drill rig and/or stainless steel hand auger. Soil sampling was performed for soil classification, verification of subsurface geologic conditions, and for investigating the potential and/or extent of soil and groundwater contamination at the subject property.

During drilling operations, the drilling equipment was cleaned to minimize the possibility of cross contamination. These procedures included cleaning equipment with a phosphate free solution (i.e., Alconox®) and rinsing with distilled water after each sample collection. Drilling and sampling equipment was also cleaned in this manner prior to initiating field activities.

Soils collected from discrete sample intervals were screened using a PID to determine if VOCs were present. Soil from specific depths was placed in plastic bags, sealed, and allowed to volatilize. The headspace within each bag was then monitored with the PID. The PID is able to detect trace levels of organic compounds in the air space within the plastic bag. The PID utilizes a 10.6 electron volts (eV) lamp. Soil samples were collected from the soil borings based upon the highest PID reading, visual/olfactory evidence, a change in geology, surficial soil, and/or directly above saturated soil.

Soil samples for VOC analysis were preserved with methanol, in accordance with United States Environmental Protection Agency (USEPA) method 5035. The soil samples were placed in appropriately labeled containers with Teflon lined lids and/or sanitized glass jars, placed in an ice packed cooler, and transported under chain of custody procedures for laboratory analysis within applicable holding times.

Temporary monitoring wells were installed to collect a groundwater samples for chemical analysis. A new well assembly was used for the temporary wells, consisting of a 5-foot long, one-inch diameter, 0.010-inch slot, schedule 40, PVC screen and a 1-inch diameter PVC casing. After the screen for the well was set to the desired depth, natural sands were allowed to collapse around the well screen. Each well was developed using either a new disposable 0.9-inch diameter bailer or peristaltic pump equipped with new, chemically inert, 3/8-inch diameter polyethylene and silicon tubing. Well development was performed by purging until clear, turbid free, groundwater was observed coming from the well.

Groundwater samples were placed in appropriately labeled containers, placed in an ice packed cooler, and transported under chain of custody procedures for laboratory analysis within applicable holding times.

Upon completion of the investigation, the temporary well materials were removed from the soil boring and the soil borings were abandoned by placing the soil cuttings back into the borehole, filling the void with bentonite chips, hydrating the chips, resurfacing and returning the area to its pre-drilling condition.

1.6 Geology and Hydrogeology

Based upon onsite observations of soil samples and cuttings collected from the soil borings that were advanced at the subject property by PM, the general soil stratigraphy consists of clayey sand to a depth of approximately 4.0 to 6.0 feet bgs, sand to a depth of 6.0 to 9.0 feet bgs, underlain by medium stiff clay to a depth of at least 20.0 feet bgs, the maximum depth explored. Perched, limited and discontinuous groundwater was encountered in the sand layer encountered between 4.0 and 9.0 feet bgs.

Soil boring logs depicting the soil stratigraphy and PID readings are included in Appendix C.

2.0 LOCATION OF CONTAMINATED MEDIA ON THE SUBJECT PROPERTY

The analytical results for the soil and groundwater samples collected during site investigation activities conducted by PM were compared with the MDEQ Generic Cleanup Criteria and Screening Levels as presented in Part 201 Rules 299.1 through 299.50, dated December 30, 2013 entitled "Cleanup Criteria Requirements for Response Activity", in accordance with Section 20120a(1) using the Residential and Nonresidential cleanup criteria. When applicable, analytical results were compared to Vapor Intrusion Screening Level (VISLs) presented in the May 2013 MDEQ Guidance Document for the Vapor Intrusion Pathway.

The analytical results are summarized in Tables 1 through 4 and on Figures 3 and 4. The laboratory analytical reports are included in Appendix D.

SUMMARY OF SOIL AND GROUNDWATER ANALYTICAL RESULTS

Location and Total	Soil Sample	TMW Screen Depth and	Analysis	Objectives	Part 201 Clear Exceeds	
Depth (feet bgs)	Depth (feet bgs)	[DTW] (feet bgs)	7 , 6.10		Soil	GW
SB-1 (10.0)	1.0-2.0	NA	VOCs, PNAs, PCBs, metals	Assess former operations in the main building	NONE	NA
SB-2 (15.0)	2.0-3.0	NA	VOCs, PNAs, PCBs, metals	Assess former operations and drain in the main building	NONE	NA
SB/TMW-3 (15.0)	0.5-1.5	2.09-7.09 [4.22]	VOCs, PNAs, PCBs, metals	Assess former operations and drain in 660 East 10 Mile	NONE	NONE
SB-4 (15.0)	2.0-3.0 and 5.0-6.0	NA	VOCs, PNAs, PCBs, metals	Assess former operations and drain in the main building	NONE	NA
SB-5 (20.0)	0.5-1.5	3.29-8.29 [5.07]	VOCs, PNAs, PCBs, metals	Assess former operations in the main building	NONE	NONE
SB-6 (15.0)	0.5-1.5 and 6.0-7.0	NA	VOCs, PNAs, PCBs, metals	Assess former operations in the main building	NONE	NA
SB-7 (10.0)	3.0-4.0	NA	VOCs, PNAs, PCBs, metals	Assess former operations in the main building	NONE	NA
SB/TMW-8 (20.0)	NA	4.45-9.45 [5.80]	VOCs, PNAs, metals, pH	Assess acid line and pits in the southern portion of the main building	NA	NONE
SB/TMW-9 (20.0)	NA	4.75-9.75 [5.00]	VOCs, PNAs, metals, pH	Assess acid line and pits in the southern portion of the main building	NA	NONE
SB/TMW- 10 (15.0)	NA	4.15-9.15 [4.75]	VOCs, PNAs, metals	Assess wastewater treatment plant	NA	NONE
SB/TMW- 11 (9.5)	NA	3.91-8.91 [4.98]	VOCs, PNAs, metals	Assess wastewater treatment plant	NA	NONE

Location and Total	Soil Sample	TMW Screen Depth and	Analysis	Objectives	Part 201 Clear Exceeda	
Depth (feet bgs)	Depth (feet bgs)	[DTW] (feet bgs)	,,		Soil	GW
SB-12 (15.0)	1.0-2.0	NA	VOCs, PNAs, PCBs, metals	Assess exterior storage and nearby chemical storage room	DWP: Chromium GSIP: phenanthrene, chromium DC(R): benzo(a)pyrene	NA
SB/TMW- 13 (15.0)	1.0-2.0	2.84-7.84 [3.52]	VOCs, PNAs, metals, pH	Assess acid recovery room	NONE	NONE
SB/TMW- 14 (15.0)	0.5-1.5	2.72-7.72 [4.09]	VOCs, PNAs, PCBs, metals	Assess former operations and drain in the main building	NONE	NONE
SB-15 (10.0)	1.0-2.0	NA	VOCs, PNAs, PCBs, metals	Assess testing lab in the main building	NONE	NA
SB/TMW- 16 (15.0)	1.0-2.0	3.05-8.05 [4.36]	VOCs, PNAs, PCBs, metals	Assess location of suspect UST and former operations in the main building	NONE	DW: cis-1,2-DCE, vinyl chloride GSI: vinyl chloride VISLs: cis-1,2-DCE, vinyl chloride
SB-17 (15.0)	1.0-2.0	NA	VOCs, PNAs, PCBs, metals	Assess location of suspect UST and former operations in the main building	DWP: TCE	NA
SB-18 (6.0)	2.0-3.0	NA	VOCs, PNAs, PCBs, metals	Assess former operations at 3351 Bermuda Street	NONE	NA
SB/TMW- 19 (15.0)	6.0-7.0	4.15-9.15 [4.55]	VOCs and PNAs	Assess former operations and former AST at 3351 Bermuda Street	DWP: TCE	NONE
SB-20 (10.0)	1.0-2.0	NA	VOCs, PNAs, PCBs, metals	Assess former operations at 3155 Bermuda Street and potential for migration from 3205 Bermuda Street	NONE	NA

Location and Total	Soil Sample	TMW Screen Depth and	Analysis	Objectives	Part 201 Clear Exceeda	
Depth (feet bgs)	Depth (feet bgs)	[DTW] (feet bgs)		Objectives	Soil	GW
SB/TMW- 21 (15.0)	1.0-2.0	3.55-8.55 [5.40]	VOCs, PNAs, PCBs, metals	Assess former operations at 3155 Bermuda Street	NONE	NONE
SB-22 (10.0)	1.0-2.0	NA	PNAs, PCBs, metals	Assess former operations at 3155 Bermuda Street	DWP: PCE	NA
SB-23 (4.0)	3.0-4.0	NA	VOCs, PNAs, PCBs, metals	Assess former operations at 400 East 10 Mile	NONE	NA
SB/TMW- 24 (15.0)	3.0-4.0	8.06-13.06 [9.69]	VOCs, PNAs, PCBs, metals	Assess former operations at 400 East 10 Mile	GSIP: Fluoranthene and phenanthrene DC(R/NR): benzo(a)pyrene	NONE
SB-25 (15.0)	4.0-5.0	NA	VOCs, PNAs, PCBs, metals	Assess former operations at 400 East 10 Mile	NONE	NA
SB-26 (10.0)	1.0-2.0	NA	VOCs, PNAs, PCBs, metals	Assess former operations at 400 East 10 Mile and former coal storage	NONE	NA
SB/TMW- 27/R (15.0)	1.0-2.0 and 2.0-3.0	5.0-10.0 [6.55]	VOCs, PNAs, PCBs, metals	Assess former coal storage on the western portion of the property	GSIP: Fluoranthene, phenanthrene DC(R/NR): benzo(a)pyrene	NONE
SB-28 (15.0)	1.0-2.0	NA	VOCs, PNAs, PCBs, metals	Assess former coal storage on the western portion of the property	NONE	NA
SB/TMW- 29 (15.0)	1.0-2.0	5.0-10.0 [7.45]	VOCs, PNAs, PCBs, metals	Assess former coal storage on the western portion of the property	NONE	NONE
SB/TMW- 30 (15.0)	1.0-2.0	2.86-7.86 [4.63]	VOCs, PNAs, PCBs, metals	Assess former coal storage on the western portion of the property	NONE	NONE
SB/TMW- 31 (20.0)	3.0-4.0	3.55-8.55 [4.15]	VOCs, PNAs, PCBs	Assess potential for migration from 404 East 10 Mile	NONE	NONE

Location and Total	Soil Sample	TMW Screen Depth and	Analysis	Objectives	Part 201 Clear Exceeda	
Depth (feet bgs)	Depth (feet bgs)	[DTW] (feet bgs)	7 maryoro	C S J C C II V C C	Soil	GW
SB/TMW- 32 (10.0)	NA	3.96-8.96 [5.20]	VOCs and PNAs	Assess potential for migration from 3205 Bermuda Street	NA	NONE
SB/TMW- 33 (15.0)	NA	3.75-8.75 [5.10]	VOCs and PNAs	Assess potential for migration from 3205 Bermuda Street	NA	NONE
SB/TMW- 34 (15.0)	1.0-2.0	4.46-9.46 [5.80]	VOCs, PNAs, PCBs	Assess potential for migration from 404 East 10 Mile and previously identified PCB concentrations	DWP: benzene GSIP: petroleum VOCs	NONE
SB-35 (5.0)	2.0-3.0 and 4.0-5.0	NA	PCBs	Assess PCB concentrations along the property boundary with 404 East 10 Mile Road	NONE	NA
SB-36	2.0-3.0	NA	PCBs	Assess PCB concentrations along the property	DC(TSCA): PCBs	NA
(5.0)	4.0-5.0	IVA	ГОВЗ	boundary with 404 East 10 Mile Road	NONE	IVA
SB-37 (5.0)	1.0-2.0 and 4.0-5.0	NA	PCBs	Assess PCB concentrations along the property boundary with 404 East 10 Mile Road	NONE	NA
SB-38	1.0-2.0	NIA	DCDa	Assess PCB concentrations	DC(TSCA): PCBs	NIA
(5.0)	4.0-5.0	NA	PCBs	along the property boundary with 404 East 10 Mile Road	NONE	NA
SB-39	1.0-2.0	NIA	DCDa	Assess PCB concentrations	DC(TSCA): PCBs	NIA
(5.0)	2.0-3.0	NA	PCBs	along the property boundary with 404 East 10 Mile Road	NONE	NA
SB-40 (5.0)	1.0-2.0	NA	PCBs	Assess PCB concentrations along the property	DC(TSCA): PCBs	NA

Location and Total	Soil Sample	TMW Screen Depth and	Analysis	Objectives	Part 201 Clear Exceeda	
Depth (feet bgs)	Depth (feet bgs)	[DTW] (feet bgs)		,	Soil	GW
	4.0-5.0			boundary with 404 East 10 Mile Road	NONE	
	1.0-2.0			Assess PCB	DC(TSCA): PCBs	
SB-41 (5.0)	2.0-3.0	NA	PCBs	concentrations along the property boundary with 404	DC(TSCA): PCBs	NA
	4.0-5.0			East 10 Mile Road	NONE	
	1.0-2.0		Assess PCB Concentrations Assess PCB PCBs			
SB-42 (5.0)	2.0-3.0	NA	PCBs	along the property boundary with 404	DC(TSCA): PCBs	NA
	4.0-5.0			East 10 Mile Road	NONE	
	1.0-2.0			Assess PCB	DC(TSCA): PCBs	
SB-43 (5.0)	2.0-3.0	NA	PCBs	concentrations along the property boundary with 404	DC(TSCA): PCBs	NA
	4.0-5.0			East 10 Mile Road	NONE	
SB-44 (5.0)	1.0-2.0	NA	PCBs	Assess PCB concentrations along the property boundary with 404 East 10 Mile Road	DC(TSCA): PCBs	NA
SB-45 (5.0)	1.0-2.0	NA	PCBs	Assess PCB concentrations along the property boundary with 404 East 10 Mile Road	NONE	NA

DW/P: drinking water/ protection

GSIP: Groundwater Surface Water Interface Protection

VISL: Vapor Intrusion Screening Level DC: Direct Contact

R: Residential NR: Nonresidential PCE: tetrachloroethylene

TCE: trichloroethylene DCE: dichloroethylene

2.1 Summary of Soil Analytical results

Soil analytical results are summarized in Tables 1 through 3 and on Figure 3.

Soil analytical results identified concentrations of PCE or TCE above Part 201 Residential and Nonresidential DWP cleanup criteria in the samples collected from SB-17, SB-19, and SB-22. A concentration of benzene in SB-34 above Part 201 Residential and Nonresidential DWP and various petroleum VOCs were identified in SB-24 above Part 201 GSIP cleanup criteria. Concentrations of various VOCs were identified in SB-15, SB-16, SB-18, SB-24, SB-26, SB-27, and SB-19 below the most restrictive Part 201 Residential cleanup criteria. No concentrations of

VOCs were identified in the remaining soil samples above laboratory method detection limits (MDLs).

Concentrations of benzo(a)pyrene were identified in SB-12, SB-24, and SB-27 above Part 201 Residential DC cleanup criteria and the concentrations in SB-24 and SB-27 were also above Nonresidential DC cleanup criteria. Concentrations of fluoranthene and/or phenanthrene were identified in SB-12, SB-24, and SB-27 above Part 201 GSIP cleanup criteria. Concentrations of various PNAs were identified in SB-5, SB-17, and SB-20 below the most restrictive Part 201 Residential cleanup criteria. No concentrations of PNAs were identified in the remaining soil samples above laboratory MDLs.

Concentrations of PCBs exceeded TSCA cleanup standards in shallow soil samples collected from SB-36 through SB-44 at concentrations between 1,300 and 489,000 μ g/kg. A concentration of PCBs was identified above the laboratory MDL in SB-27 and SB-37, which are below the most restrictive Part 201 Residential cleanup criteria and TSCA cleanup standards. No concentrations of PCBs were identified above laboratory MDLs in any of the remaining soil samples collected.

Concentrations of various metals (arsenic, cadmium, chromium, lead, and/or zinc) were identified in each of the samples, where analyzed. A concentration of chromium was identified in SB-12 above Part 201 Residential and Nonresidential DWP and GSIP cleanup criteria. The remaining metal concentrations in soil are within SDBLs and/or below the most restrictive Part 201 Residential cleanup criteria.

A soil sample (SB-13) collected in the area of the acid line included a pH measurement which identified a pH of 7.63, which is not above characteristically hazardous levels.

2.2 Summary of Groundwater Analytical Results

Groundwater analytical results are summarized in Table 4 and on Figure 4.

Groundwater analytical results identified concentrations of cis-1,2-DCE and vinyl chloride in TMW-16 above Part 201 Residential and Nonresidential DW and/or GSI cleanup criteria and Residential and Nonresidential VISLs. Concentrations of various VOCs were identified in TMW-3, TMW-8, TMW-11, TNW-14, TMW-27, TMW-30, and TMW-34 below the most restrictive Part 201 Residential cleanup criteria. No concentrations of VOCs were identified in the remaining groundwater samples above laboratory MDLs.

No concentrations of PNAs were identified above laboratory MDLs in any of the groundwater samples collected.

Concentrations of various metals were identified below the most restrictive Part 201 Residential cleanup criteria.

Groundwater samples (TMW-8, 9, and 13) collected in the area of the acid line included pH measurements which identified pH ranges between 7.48 to 10.39, which are not above characteristically hazardous levels.

2.3 Subject Property Facility Status

A location where a hazardous substance is present in excess of the concentrations, which satisfy the requirements of subsection 20120a(1)(a) or (17), is a facility pursuant to Part 201. Section 20120a(1)(a) requirements are the cleanup criteria for unrestricted residential usage.

Contaminant concentrations identified on the subject property indicate exceedances to the Part 201 Residential and Nonresidential DWP/DW, GSIP/GSI, DC cleanup criteria and VISLs. Therefore, the subject property is a <u>facility</u> under Part 201 of P.A. 451, as amended, and the rules promulgated thereunder.

3.0 PROPERTY INFORMATION

3.1 Legal Description of Subject Property

A copy of the legal description is included in Appendix E as part of the assessing information.

3.2 Map of Subject Property

Refer to Figure 1, Property Location Map; and Figure 2, Generalized Diagram of the Subject Property and Surrounding Area which depicts the property/parcel boundaries.

3.3 Subject Location and Analytical Summary Maps

Figures 3 and 4 provide scaled maps of the subject property with site structures and sampling locations with analytical results.

3.4 Subject Property Location Map

Figures 1 and 2 provide scaled area maps depicting the subject property location in relation to the surrounding area.

3.5 Subject Property Address

As indicated in Section 1.0, the subject property is located at 660 East 10 Mile Road, Ferndale/Pleasant Ridge, Oakland County, Michigan 48220/48069 (hereafter referred to as the "subject property"; Figure 1).

The subject property consists of nine parcels located in Ferndale and Pleasant Ridge (Figure 2). For ease of reference, PM has identified the property under its main address, 660 East 10 Mile Road, but the entire nine parcels included in this BEA are as follows:

Parcel ID Number	Address	City	Acreage
25-27-127-012	400 East 10 Mile Road	Pleasant Ridge	1.10
25-27-127-013	No address identified	Pleasant Ridge	0.33
25-27-127-010	660 East 10 Mile Road	Pleasant Ridge	3.47
25-27-201-020	660 East 10 Mile Road	Ferndale	0.29
25-27-201-005	3351 Bermuda Street	Ferndale	0.169
25-27-201-019	3291 Bermuda Street	Ferndale	1.00
25-27-201-012	3281 Bermuda Street	Ferndale	0.165
25-27-201-013	3265 Bermuda Street	Ferndale	1.139
25-27-201-015	3155 Bermuda Street	Ferndale	0.75

3.6 Subject Spatial Data

As depicted in Figure 1, the subject property is located in township one North (T.1N), range 11 East (R.11E), and section 27, northwest quarter, northeast quarter-quarter in Ferndale and Pleasant Ridge, Oakland County, Michigan.

According to the MDEQ Groundwater Mapping Project Website, the center of the subject property is located at latitude 42.4740 and a longitude of -83.1343.

4.0 FACILITY STATUS OF SUBJECT PROPERTY

As indicated in Section 2.3, based upon documented exceedances of the Part 201 Residential and Nonresidential DWP/DW, GSIP/GSI, DC cleanup criteria and VISLs in soil and groundwater samples collected from the subject property, the subject property is a <u>facility</u> as defined under Part 201 of P.A. 451, as amended, and the rules promulgated thereunder.

4.1 Summary Data Tables

The analytical results were compared with the MDEQ Generic Cleanup Criteria and Screening Levels as presented in Part 201 Rules 299.1 through 299.50, dated December 30, 2013 entitled "Cleanup Criteria Requirements for Response Activity" in accordance with Section 20120a(1) using the Residential and Nonresidential cleanup criteria.

The analytical results for target analytes exceeding Part 201 cleanup criteria are summarized in Section 2.0. A summary of the analytical results are included in Tables 1 through 4.

4.2 Laboratory Reports and Chain of Custody Documentation

Samples collected were submitted to Merit Laboratories, Inc., East Lansing, Michigan for chemical analysis under chain of custody procedures and within applicable holding times. Refer to the laboratory analytical reports in Appendix D.

5.0 IDENTIFICATION OF BEA AUTHOR

This BEA was conducted on December 10, 2015, by Mr. Jamie Antoniewicz, P.E., Project Engineer, and reviewed by Ms. Jennifer L. Ritchie, C.P.G., Regional Site Investigation Manager, PM Environmental, Inc., which is prior to or within 45 days of becoming the property owner or operator. Qualification statements are provided as Appendix F.

We declare that, to the best of our professional knowledge and belief, we meet the definition of *Environmental Professional* as defined in §312.10 of 40 CFR 312 and we have the specific qualifications based on education, training, and experience to assess a property of the nature and history of the subject property. We have developed and performed the all appropriate inquires in conformance with the standards and practices set forth in 40 CFR Part 312.

Jamie Antoniewicz, P.E.

Project Engineer

Jennifer L. Ritchie, C.P.G.

Regional Site Investigation Manager

6.0 AAI REPORT OR ASTM PHASE I ESA

As indicated in Section 1.3, PM completed a Phase I ESA dated November 30, 2015 in conformance with the scope and limitations of ASTM Practice E 1527-13 of the subject property located at 660 East 10 Mile Road, Ferndale/Pleasant Ridge, Oakland County, Michigan 48220/48069. The scope of the Phase I ESA included consideration of hazardous substances as defined in Section 20101(1)(y) of P.A 451 of 1994, as amended, and constituted the performance of an All Appropriate Inquiry in conformance with the standards and practices set forth in 40 CFR Part 312.

A copy of the November 2015 Phase I ESA is included in Appendix A.

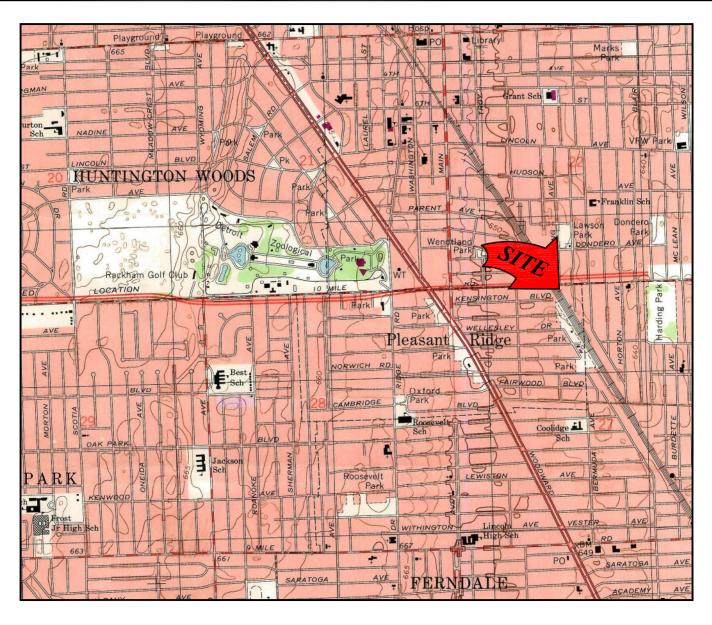
7.0 REFERENCES

- Michigan Department of Environmental Quality (MDEQ) Generic Cleanup Criteria and Screening Levels as presented in Part 201 Rules 299.1 through 299.50, dated December 30, 2013 entitled "Cleanup Criteria Requirements for Response Activity";
- MDEQ Operational Memorandum No. 4 "Site Characterization and Remediation Verification

 Attachment 10, Peer Review Draft Groundwater Not in an Aquifer," February 2007;
- MDEQ Operational Memorandum No. 2 "Sampling and Analysis," October 22, 2004, Revised July 5, 2007;
- MDEQ May 2013 Guidance Document for the Vapor Intrusion Pathway;
- Baseline Environmental Submittal Form (EQP 4025), September 2015;
- Phase I ESA, October 5, 1993, ASTI;
- Subsurface Investigation, April 20, 1995, ASTI;
- Phase I ESA, February 11, 2015, PM; and,
- Phase I ESA, November 30, 2015, PM.

Figures





OAKLAND COUNTY



FIGURE 1

PROPERTY VICINITY MAP USGS, 7.5 MINUTE SERIES ROYAL OAK, MI QUADRANGLE, 1996.

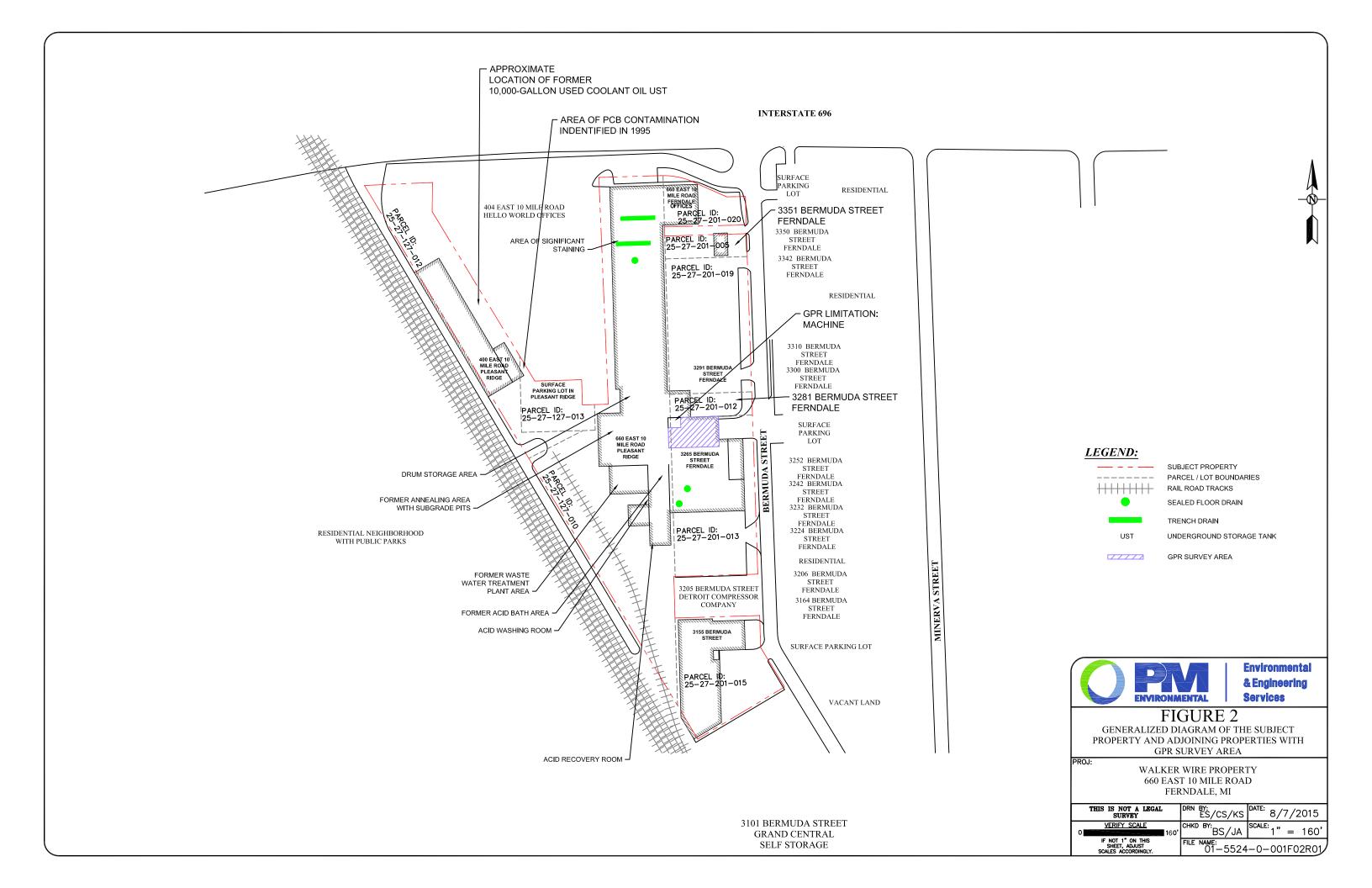


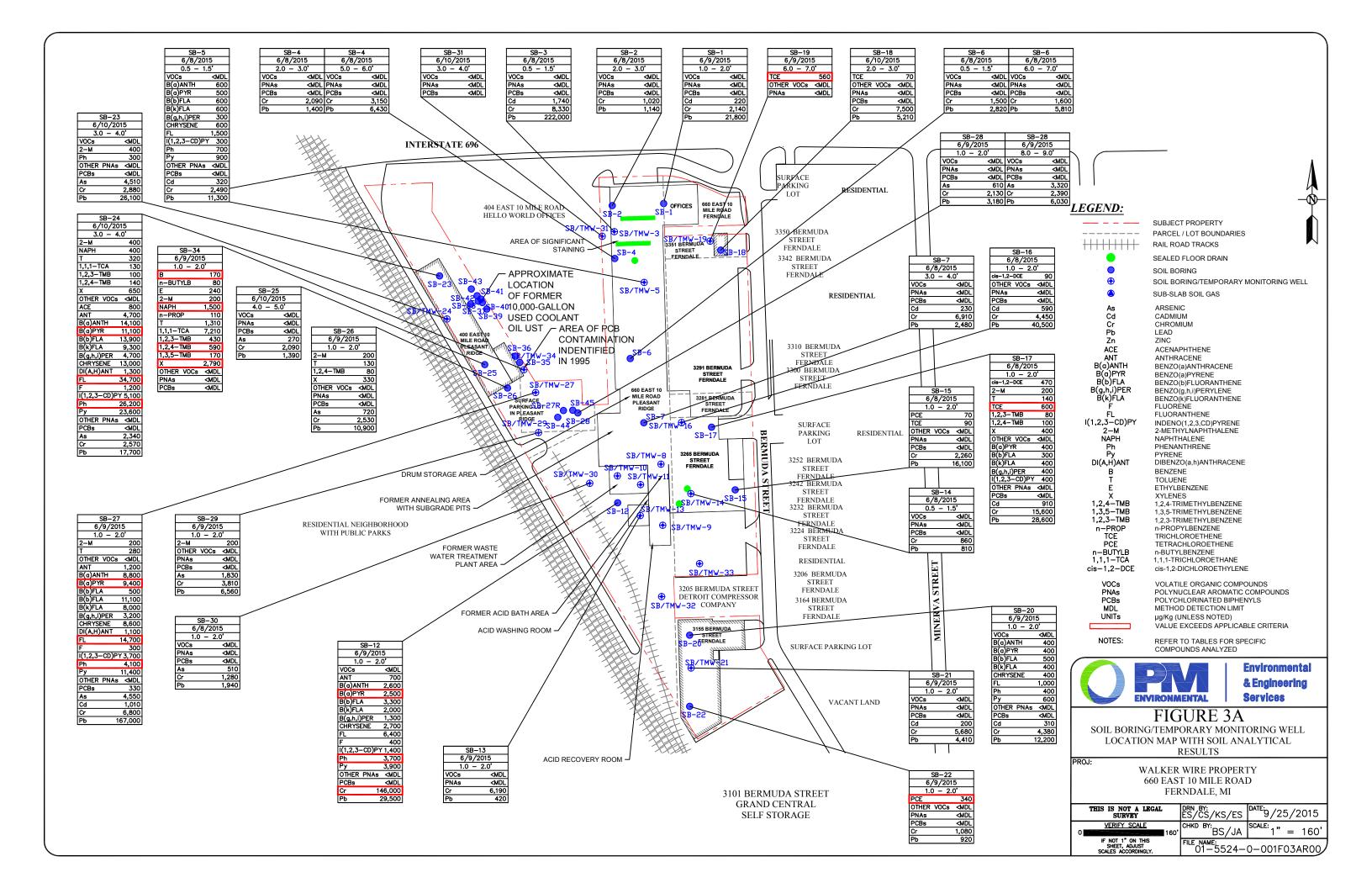


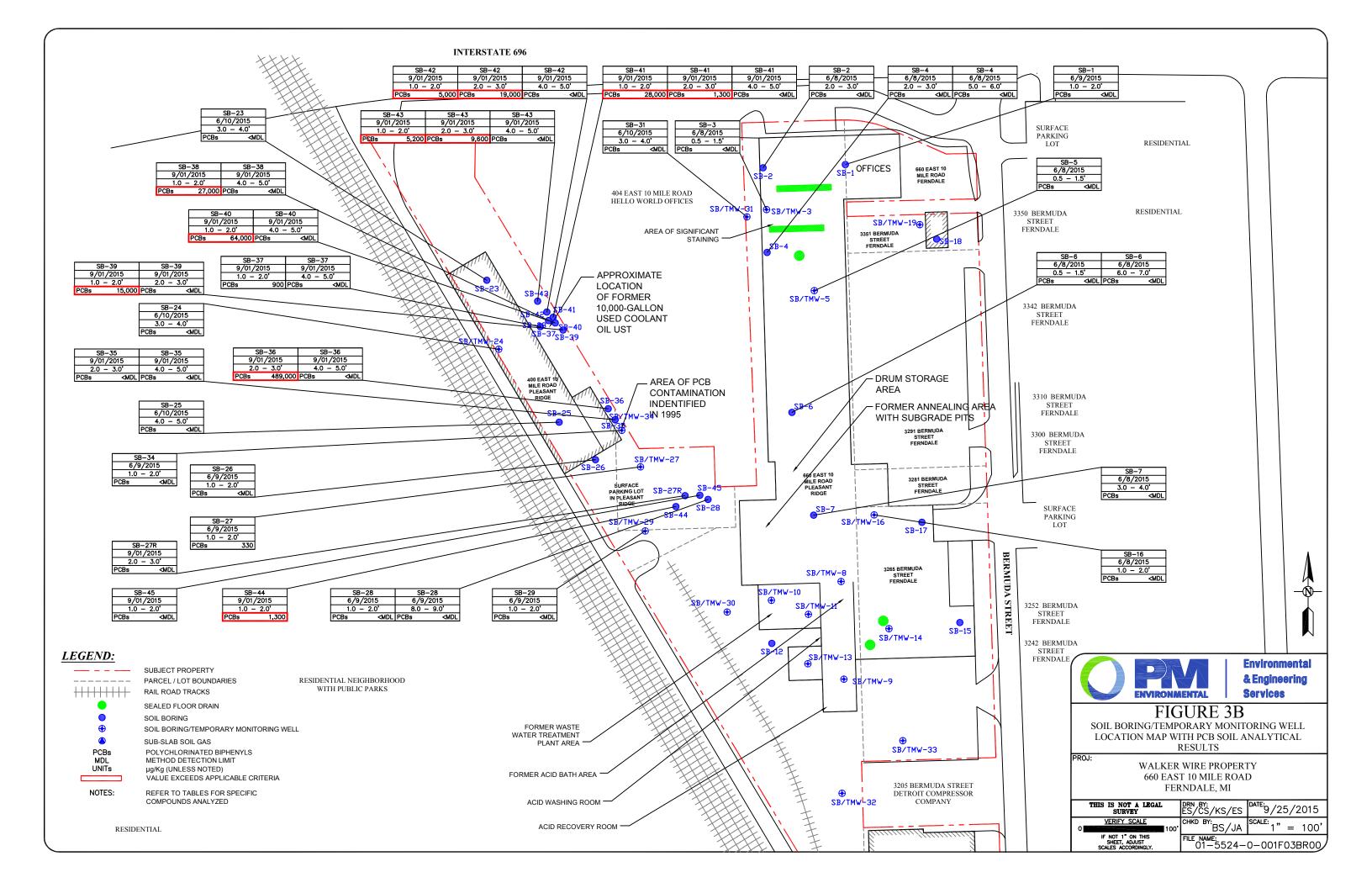
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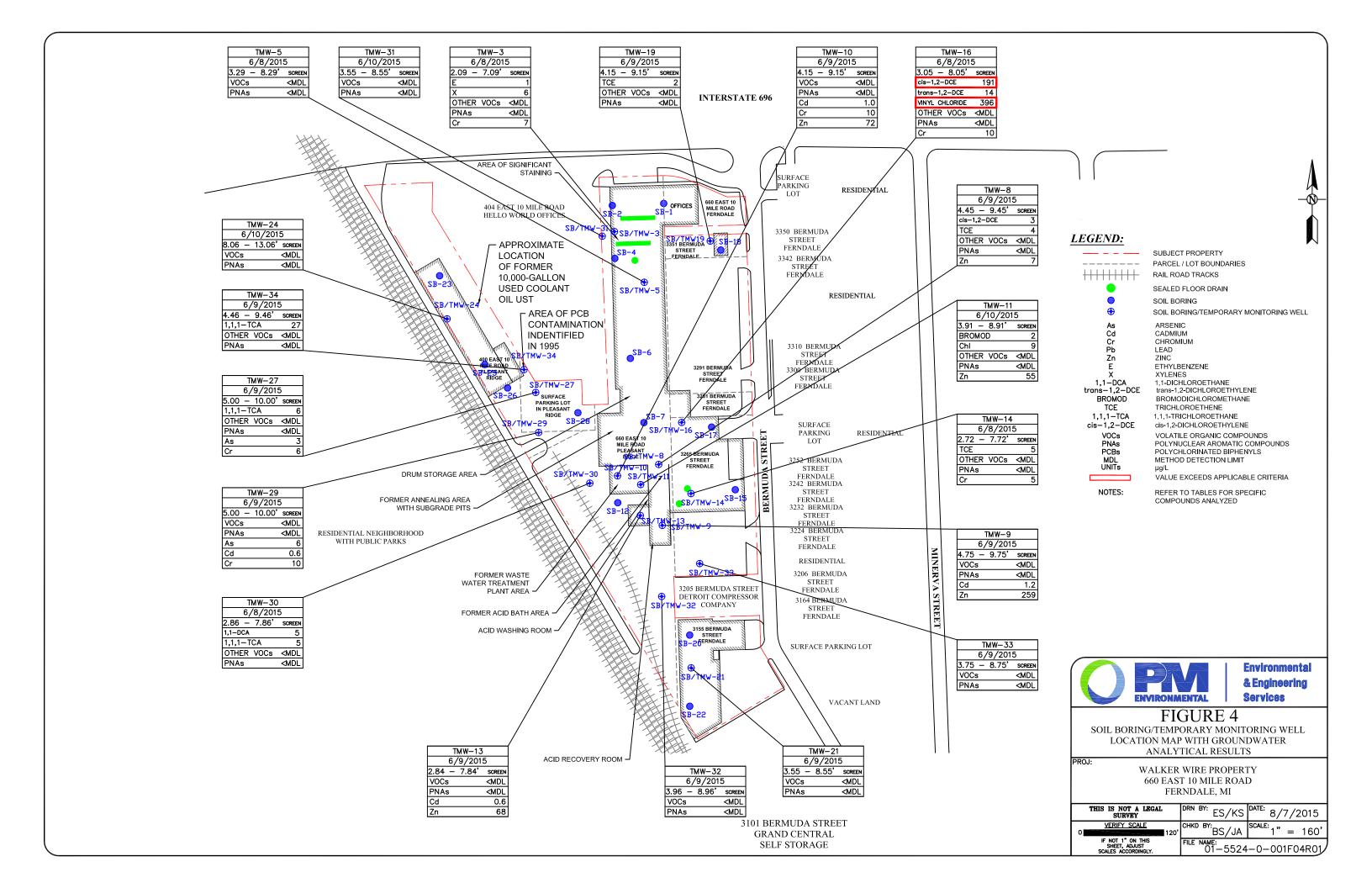
WALKER WIRE PROPERTY 660 EAST 10 MILE ROAD FERNDALE, MI

THIS IS NOT A LEGAL SURVEY	DRN BY:	ES	DATE: 2/6/2015
2,000	CHKD BY:	BS	SCALE: " = 2,000'
IF NOT 1" ON THIS SHEET, ADJUST SCALES ACCORDINGLY.	FILE NAME:	02-	7954-0F01R00









Tables



TABLE 1 SUMMARY OF SOIL ANALYTICAL RESULTS VOLATILE ORGANIC COMPOUNDS 660 EAST 10 MILE ROAD, FERNDALE, MICHIGAN PM PROJECT #01-5524-0-001

				jne.	.1,2-Dichloroethylene	eг	2-Methylnaphthalene	Φ.	ene	Tetrachloroethylene		1,1-Trichloroethane	ene	zene*	,2,4-Trimethylbenzene	.3,5-Trimethylbenzene		y,
VOLA	TILE ORGANIC COMPO	DUNDS	Benzene	n-Butylbenzene	oroei	Ethylbenzene	phth	Naphthalene	n-Propylbenzene	oeth)	Toluene	oroe	Trichloroethylene	3- Jenzi	hylbe	hylbe	nes	Other VOCs
	(µg/Kg)		Senz	₫ ¥ì	ichk	ylbe	ylna	phth	pylk	hlord	Polue	ich	lo roe	1,2, th ylt	meth	meth	Xylenes	her
			ш	n-B.	1,2-	뜊	Meth	Sa	-Prc	ıtrac		<u>+</u> -	rich	1,2,3- Trimethylbenz	4-Tri	5-Tri		ō
				_	cis-1		2-N			e L		7.	F	F	1,2,4	1,3,6		
Chemical	Abstract Service Numl	ber (CAS#)	71432	104518	156592	100414	91576	91203	103651	127184	108883	71556	79016	526738	95636	108678	1330207	Various
Sample ID	Sample Date	Sample Depth (feet bgs)								VO	Cs							
SB-1	06/09/2015	1.0-2.0	<70	<70	<70	<70	<100	<400	<70	<70	<70	<70	<70	<70	<70	<70	<170	<mdl< td=""></mdl<>
SB-2	06/08/2015	2.0-3.0	<70	<70	<70	<70	<100	<300	<70	<70	<70	<70	<70	<70	<70	<70	<170	<mdl< td=""></mdl<>
SB-3	06/08/2015	0.5-1.5	<70	<70	<70	<70	<100	<400	<70	<70	<70	<70	<70	<70	<70	<70	<170	<mdl< td=""></mdl<>
SB-4	06/08/2015	2.0-3.0	<60	<60	<60	<60	<100	<300	<60	<60	<60	<60	<60	<60	<60	<60	<160	<mdl< td=""></mdl<>
SB-4	06/08/2015	5.0-6.0	<70	<70	<70	<70	<100	<300	<70	<70	<70	<70	<70	<70	<70	<70	<170	<mdl< td=""></mdl<>
SB-5	06/08/2015	0.5-1.5	<80	<80	<80	<80	<200	<400	<80	<80	<80	<80	<80	<80	<80	<80	<280	<mdl< td=""></mdl<>
SB-6	06/08/2015	0.5-1.5	<60	<60	<60	<60	<100	<300	<60	<60	<60	<60	<60	<60	<60	<60	<160	<mdl< td=""></mdl<>
SB-6	06/08/2015	6.0-7.0	<80	<80	<80	<80	<200	<400	<80	<80	<80	<80	<80	<80	<80	<80	<280	<mdl< td=""></mdl<>
SB-7	06/08/2015	3.0-4.0	<90	<90	<90	<90	<200	<400	<90	<90	<90	<90	<90	<90	<90	<90	<290	<mdl< td=""></mdl<>
SB-12 SB-13	06/09/2015	1.0-2.0	<70	<70	<70	<70	<100	<300	<70	<70	<70	<70	<70	<70	<70	<70	<170	<mdl< td=""></mdl<>
SB-13	06/09/2015 06/08/2015	1.0-2.0 0.5-1.5	<60 <60	<60 <60	<60 <60	<60 <60	<100 <100	<300 <300	<60 <60	<60 <60	<60 <60	<60 <60	<60 <60	<60 <60	<60 <60	<60 <60	<160 <160	<mdl< td=""></mdl<>
SB-15	06/08/2015	1.0-2.0	<70	<70	<70	<70	<100	<300 <400	<70	70	<70	<70	90	<70	<70	<70	<170	<mdl< td=""></mdl<>
SB-16	06/08/2015	1.0-2.0	<70	<70	90	<70	<100	<400	<70	<70	<70	<70	<70	<70	<70	<70	<170	<mdl< td=""></mdl<>
SB-17	06/08/2015	1.0-2.0	<70	<70	470	<70	200	<400	<70	<70	140	<70	600	80	100	<70	400	<mdl< td=""></mdl<>
SB-18	06/10/2015	2.0-3.0	<70	<70	<70	<70	<100	<300	<70	<70	<70	<70	70	<70	<70	<70	<170	<mdl< td=""></mdl<>
SB-19	06/09/2015	6.0-7.0	<80	<80	<80	<80	<200	<400	<80	<80	<80	<80	560	<80	<80	<80	<280	<mdl< td=""></mdl<>
SB-20	06/09/2015	1.0-2.0	<70	<70	<70	<70	<100	<300	<70	<70	<70	<70	<70	<70	<70	<70	<170	<mdl< td=""></mdl<>
SB-22	06/09/2015	1.0-2.0	<70	<70	<70	<70	<100	<400	<70	340	<70	<70	<70	<70	<70	<70	<170	<mdl< td=""></mdl<>
SB-21	06/09/2015	1.0-2.0	<80	<80	<80	<80	<200	<400	<80	<80	<80	<80	<80	<80	<80	<80	<280	<mdl< td=""></mdl<>
SB-23	06/10/2015	3.0-4.0	<70	<70	<70	<70	<100	<300	<70	<70	<70	<70	<70	<70	<70	<70	<170	<mdl< td=""></mdl<>
SB-24	06/10/2015	3.0-4.0	<60	<60	<60	<60	400	400	<60	<60	320	130	<60	100	140	<60	650	<mdl< td=""></mdl<>
SB-25	06/10/2015	4.0-5.0	<60	<60	<60	<60	<100	<300	<60	<60	<60	<60	<60	<60	<60	<60	<160	<mdl< td=""></mdl<>
SB-26	06/09/2015	1.0-2.0	<60	<60	<60	<60	200	<300	<60	<60	130	<60	<60	<60	80	<60	330	<mdl< td=""></mdl<>
SB-27 SB-28	06/09/2015	1.0-2.0	<80	<80	<80	<80	200	<400	<80	<80	280	<80	<80	<80	<80	<80	<280	<mdl< td=""></mdl<>
SB-28 SB-28	06/09/2015 06/09/2015	1.0-2.0 8.0-9.0	<60 <70	<60 <70	<60 <70	<60 <70	<100 <100	<300 <400	<60 <70	<60 <70	<60 <70	<60 <70	<60 <70	<60 <70	<60 <70	<60 <70	<160 <170	<mdl< td=""></mdl<>
SB-29	06/09/2015	1.0-2.0	<60	<60	<60	<60	200	<300	<60		<60		<60	<60	<60	<60	<170	<mdl< td=""></mdl<>
SB-30	06/08/2015	1.0-2.0	<70	<70	<70	<70	<100	<300	<70	<70	<70	<70	<70	<70	<70	<70	<170	<mdl< td=""></mdl<>
SB-31	06/10/2015	3.0-4.0	<70	<70	<70	<70	<100	<300	<70	<70	<70	<70	<70	<70	<70	<70	<170	<mdl< td=""></mdl<>
SB-34	06/09/2015	1.0-2.0	170	80	<70	240	1,700	1,500	110	<70	1,310	7,210	<70	430	590	170	2,790	<mdl< td=""></mdl<>
			•	•	Clear	up Criteria R	equirements	for Response	Activity (R 2	99.1 - R 299.50	0)		•	•				
	G	eneric Soil Cleanup Crit MDEQ (, Policy and I	Procedure Nu	mber: 09-017				creening Leve Values, May 2		30, 2013			
Statewide Defects Deal	raraund Laurele							dential (µg/Kg	1	l ,	.,.							
Statewide Default Back	<u> </u>		NA 100	NA 1 600	NA 1.400	NA 1.500	NA 57,000	NA 25.000	NA 1 600	NA 100	NA 16.000	NA 4.000	NA 100	NA 1 800	NA 2.100	NA 1 800	NA 5 600	NA Various
Drinking Water Protecti Groundwater Surface V		ion (GSIP)	100	1,600 ID	1,400	1,500 360	57,000 4,200	35,000 730	1,600	100	16,000 5,400	4,000 1,800	100	1,800 570	2,100 570	1,800 1,100	5,600 820	Various
Soil Volatilization to Inc			4,000 {X} 1,600	ID	12,000	87,000	4,200 2.70E+06	730 2.50E+05	ID ID	1,200 {X} 11,000	5,400 3.3E+05 {C}	1,800 2.50E+05	4,000 {X} 1,000	2.6E+06 {C}	4.3E+06 (C)	1,100 2.6E+06 {C}	820 6.3E+06 (C)	Various Various
Ambient Air Infinite Sou	•		13,000	ID	1.80E+05	7.20E+05	1.50E+06	3.00E+05	ID	1.70E+05	2.80E+06	3.80E+06	11,000	1.60E+07	2.10E+07	1.60E+07	4.60E+07	Various
Ambient Air Finite VSI f			34,000	ID	4.20E+05	1.00E+06	1.50E+06	3.00E+05	ID	4.80E+05	5.10E+06	1.20E+07	25,000	3.80E+08	5.00E+08	3.80E+08	6.10E+07	Various
Ambient Air Finite VSI f			79,000	ID	9.90E+05	2.20E+06	1.50E+06	3.00E+05	ID	1.1E+06	1.20E+07	2.80E+07	57,000	3.80E+08	5.00E+08	3.80E+08	1.30E+08	Various
Ambient Air Particulate			3.80E+08	2.00E+09	2.30E+09	1.00E+10	6.70E+08	2.00E+08	1.30E+09	2.7E+09	2.70E+10	6.70E+10	1.30E+08	8.20E+10	8.20E+10	8.20E+10	2.90E+11	Various
Direct Contact (Res DC			1.80E+05	2.50E+06	2.5E+06 {C}	2.2E+07 (C)	8.10E+06	1.60E+07	2.50E+06	2.0E+05 {C}	5.0E+07 (C)	5.0E+08 {C}	5.0E+5 {C,DD}	3.2E+07 {C}	3.2E+07 (C)	3.2E+07 (C)	4.1E+08 (C)	Various
Drinking Water Protection (Nonres DWP)			100	4,600	1,400	1,500	1.70E+05	1.00E+05	4,600	100	16,000	4,000	100	1,800	2,100	1,800	5,600	Various
Soil Volatilization to Indoor Air Inhalation (Nonres SVII)			8,400	4,000 ID	41,000	4.6E+05 {C}	4.90E+06	4.70E+05	4,000 ID	21,000	6.1E+05 {C}	4.60E+05	1,900	4.8E+06 {C}	8.0E+06 {C}	4.8E+06 {C}	1.2E+07 {C}	Various
Ambient Air Infinite Source Volatile Soil Inhalation (Nonres VSI)			45,000	ID	2.10E+05	2.40E+06	1.80E+06	3.50E+05	ID	2.10E+05	3.30E+06	4.50E+06	14,000	1.90E+07	2.50E+07	1.90E+07	5.40E+07	Various
Ambient Air Finite VSI for 5 Meter Source Thickness			99,000	ID	4.30E+05	3.10E+06	1.80E+06	3.50E+05	ID	4.90E+05	3.60E+07	1.50E+07	25,000	4.60E+08	6.00E+08	4.60E+08	6.50E+07	Various
Ambient Air Finite VSI for 2 Meter Source Thickness			2.30E+05	ID	1.00E+06	6.50E+06	1.80E+06	3.50E+05	ID	1.1E+06	3.60E+07	3.10E+07	58,000	4.60E+08	6.00E+08	4.60E+08	1.30E+08	Various
Ambient Air Particulate			4.70E+08	ID	1.00E+09	1.30E+10	2.90E+08	8.80E+07	5.90E+08	1.2E+09	1.20E+10	2.90E+10	5.90E+07	3.60E+10	3.60E+10	3.60E+10	1.30E+11	Various
Direct Contact (Nonres DC)			8.40E+05 {C}	8.00E+06	8.0E+06 {C}	7.1E+07 {C}	2.60E+07	5.20E+07	8.00E+06	9.3E+05 (C)	1.6E+08 {C}	1.0E+09 (C)	6.6E+05 {C,DD}	1.0E+08 {C}	1.0E+08 {C}	1.0E+08 {C}	1.0E+09 {C}	Various
, , , , ,							ng Levels (µg	<u> </u>										
Soil Saturation Concen	tration Screening Leve	els (Csat)	4.00E+05	1.00E+07	6.40E+05	1.40E+05	NA	NA NA	1.00E+07	88,000	2.50E+05	4.60E+05	5.00E+05	94,000	1.10E+05	94,000	1.50E+05	Various
<u> </u>	-																	

Applicable Criterion/RBSL Exceeded

Applicable Criterion/RBSL Exceeded

Value Exceeds Applicable Criterion/RBSL
bgs Below Ground Surface (feet)

1 1,2,3-Trimethylbenzene RBSLs based on the more restrictive of 1,2,4-trimethylbenzene and 1,3,5-trimethylbenzene.

MDL Laboiratory method detection limit (MDL)

NA Not Applicable

NL Not Listed

NLL Not Likely to Leach

NLV Not Likely to Volatilize

ID Insufficient Data

TABLE 2 SUMMARY OF SOIL ANALYTICAL RESULTS POLYNUCLEAR AROMATIC COMPOUNDS 660 EAST 10 MILE ROAD, FERNDALE, MICHIGAN PM PROJECT #01-5524-0-001

					1							<u>a</u>			Φ		_		
			e.	au e		Benzo(a)anthracene	eu.	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Benzo(g,h,i)perylene		Dibenzo(a,h)anthracene	Ф		Indeno(1,2,3-cd)pyrene	Ф	2-Methylnaphthalene	Э	
POLYNUC	CLEAR AROMATIC CO	MPOUNDS	Acenaphthene	Acenaphthylene	Anthracene	thra	Benzo(a)pyrene	oran	orani)per	ene	anth	Fluoranthene	ane	φŞ	Naphthalene	ohth	Phenanthrene	e u
	(μg/Kg)		napł	aph	thra	a)ar	o(a))flu)H(c	g,h,i	Chrysene	a,h)	oran	Fluorene	2,3	ht	/lna/	nani	Pyrene
	(49/119)		Aceı	cen	An)ozı	Senz	zo(k	ZO(k)ozı	ō)ozı	Flu	ш	10(1	Nag	lethy	Phe	
			,	•		Ber	ш	Ben	Ben	Ber		Jiber			nde		2-№		
Chemical	Abstract Service Num	ber (CAS#)	83329	208968	120127	56553	50328	205992	207089	191242	218019	53703	206440	86737	193395	91203	91576	85018	129000
Sample ID	Sample Date	Sample Depth		1	•	•		•			PNAs						•		
SB-1	06/09/2015	(feet bgs) 1.0-2.0	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300
SB-2	06/09/2015	2.0-3.0	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300
SB-3	06/08/2015	0.5-1.5	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300
SB-4	06/08/2015	2.0-3.0	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300
SB-4	06/08/2015	5.0-6.0	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300
SB-5	06/08/2015	0.5-1.5	<300	<300	<300	600	500	600	600	300	600	<300	1,500	<300	300	<300	<300	700	900
SB-6	06/08/2015	0.5-1.5	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300
SB-6	06/08/2015	6.0-7.0	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300
SB-7 SB-12	06/08/2015	3.0-4.0	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300
SB-12 SB-13	06/09/2015 06/09/2015	1.0-2.0 1.0-2.0	<300 <300	<300 <300	700 <300	2,600 <300	2,500 <300	3,300 <300	2,000 <300	1,300 <300	2,700 <300	<300 <300	6,400 <300	400 <300	1,400 <300	<300 <300	<300 <300	3,700 <300	3,900 <300
SB-14	06/08/2015	0.5-1.5	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300
SB-15	06/08/2015	1.0-2.0	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300
SB-16	06/08/2015	1.0-2.0	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300
SB-17	06/08/2015	1.0-2.0	<300	<300	<300	<300	400	300	400	400	<300	<300	<300	<300	400	<300	<300	<300	<300
SB-18	06/10/2015	2.0-3.0	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300
SB-19	06/09/2015	6.0-7.0	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300
SB-20	06/09/2015	1.0-2.0	<300	<300	<300	400	400	500	400	<300	400	<300	1,000	<300	<300	<300	<300	400	600
SB-22 SB-21	06/09/2015 06/09/2015	1.0-2.0 1.0-2.0	<300 <300	<300 <300	<300 <300	<300 <300	<300 <300	<300 <300	<300 <300	<300 <300	<300	<300 <300	<300	<300 <300	<300 <300	<300 <300	<300 <300	<300 <300	<300 <300
SB-23	06/10/2015	3.0-4.0	<300	<300	<300	<300	<300	<300	<300	<300	<300 <300	<300	<300 <300	<300	<300	<300	400	300	<300
SB-24	06/10/2015	3.0-4.0	800	<500	4,700	14,100	11,100	13,900	9,300	4,700	13,000	1,300	34,700	1,200	5,100	<500	<500	26,200	23,600
SB-25	06/10/2015	4.0-5.0	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300
SB-26	06/09/2015	1.0-2.0	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300
SB-27	06/09/2015	1.0-2.0	<300	<300	1,200	8,800	9,400	11,100	8,000	3,200	8,600	1,100	14,700	300	3,700	<300	<300	4,100	11,400
SB-28	06/09/2015	1.0-2.0	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300
SB-28 SB-29	06/09/2015	8.0-9.0	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300
SB-29 SB-30	06/09/2015 06/08/2015	1.0-2.0 1.0-2.0	<300 <300	<300 <300	<300 <300	<300 <300	<300 <300	<300 <300	<300 <300	<300 <300	<300 <300	<300 <300	<300 <300	<300 <300	<300 <300	<300 <300	<300 <300	<300 <300	<300 <300
SB-31	06/10/2015	3.0-4.0	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300
SB-34	06/09/2015	1.0-2.0	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300
	•			Clear	up Criteria	a Requirer	nents for F	Response	Activity (R	299.1 - R	299.50)						•		
		Criteria Tables 2 and 3: EQ Guidance Document														ecember 3	0, 2013		
				про гини		,,		tial (µg/Kg		,рро	2 1460			g raiaee, .	, 2010				
Statewide Default Back	kground Levels		NA	NA	NA	NA	NA	NA NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Drinking Water Protect	tion (Res DWP)		3.00E+05	5,900	41,000	NLL	NLL	NLL	NLL	NLL	NLL	NLL	7.30E+05	3.90E+05	NLL	35,000	57,000	56,000	4.80E+05
Groundwater Surface \	Water Interface Protec	tion (GSIP)	8,700	ID	ID	NLL	NLL	NLL	NLL	NLL	NLL	NLL	5,500	5,300	NLL	730	4,200	2,100	ID
Soil Volatilization to Inc	•		1.9E+08	1.60E+06	1.0E+9 {D}	NLV	NLV	ID	NLV	NLV	ID	NLV	1.0E+9 {D}	5.8E+08	NLV	2.50E+05	2.70E+06	2.8E+06	1.0E+9 {D}
Ambient Air Infinite So			8.1E+07	2.2E+06	1.4E+09	NLV	NLV	ID	NLV	NLV	ID	NLV	7.40E+08	1.3E+08	NLV	3.0E+05	1.50E+06	1.6E+05	6.5E+08
Ambient Air Finite VSI			8.1E+07	2.2E+06	1.4E+09	NLV	NLV	ID	NLV	NLV	ID	NLV	7.4E+08	1.3E+08	NLV	3.0E+05	1.50E+06	1.6E+05	6.5E+08
Ambient Air Finite VSI Ambient Air Particulate			8.1E+07	2.2E+06	1.4E+09	NLV ID	NLV 1 FE LOG	ID ID	NLV ID	NLV 8.0E+08	ID ID	NLV ID	7.4E+08	1.3E+08	NLV ID	3.0E+05	1.50E+06	1.6E+05	6.5E+08
Direct Contact (Res DC	•		1.4E+10 4.1E+07	2.3E+09 1.6E+06	6.7E+10 2.3E+08	20,000	1.5E+06 2,000	20,000	2.00E+05	8.0E+08 2.5E+06	2.0E+06	2,000	9.3E+09 4.6E+07	9.3E+09 2.7E+07	20,000	2.0E+08 1.6E+07	6.70E+08 8.10E+06	6.7E+06 1.6E+06	6.7E+09 2.9E+07
, , , , , , , , , , , , , , , , , , ,							Nonreside			1		.,			-,-50	1	12.00		
Drinking Water Protect	nking Water Protection (Nonres DWP)			17,000	41,000	NLL	NLL	NLL	NLL	NLL	NLL	NLL	7.30E+05	8.90E+05	NLL	1.00E+05	1.70E+05	1.60E+05	4.80E+05
Soil Volatilization to Inc	Volatilization to Indoor Air Inhalation (Nonres SVII)			3.0E+06	1.0E+9 {D}	NLV	NLV	ID	NLV	NLV	ID	NLV	1.0E+9 {D}	1.0E+9 {D}	NLV	4.70E+05	4.90E+06	5.1E+06	1.0E+9 {D}
	nbient Air Infinite Source Volatile Soil Inhalation (Nonres VSI)			2.7E+06	1.6E+09	NLV	NLV	ID	NLV	NLV	ID	NLV	8.9E+08	1.5E+08	NLV	3.50E+05	1.80E+06	1.90E+05	7.8E+08
	nbient Air Finite VSI for 5 Meter Source Thickness			2.7E+06	1.6E+09	NLV	NLV	ID	NLV	NLV	ID	NLV	8.8E+08	1.5E+08	NLV	3.50E+05	1.80E+06	1.90E+05	7.8E+08
	nbient Air Finite VSI for 2 Meter Source Thickness			2.7E+06 1.0E+09	1.6E+09 2.9E+10	NLV ID	NLV 1.9E+06	ID ID	NLV ID	NLV 3.5E+08	ID ID	NLV	8.8E+08	1.5E+08 4.1E+09	NLV	3.50E+05 8.8E+07	1.80E+06 2.90E+08	1.90E+05 2.9E+06	7.8E+08 2.9E+09
	mbient Air Particulate Soil Inhalation (Nonres PSI)			1.0E+09 5.2E+06	7.3E+08	80,000	1.9E+06 8,000	80,000	8.00E+05	3.5E+08 7.0E+06	8.0E+06	8,000	4.1E+09 1.3E+08	4.1E+09 8.7E+07	ID 80,000	8.8E+07 5.2E+07	2.90E+08 2.60E+07	2.9E+06 5.2E+06	2.9E+09 8.4E+07
2co. contact (Notices	birect Contact (Nonres DC)			J.22.700	7.02100		creening L		<u> </u>	1.02100	5.52 700	5,500		5.7.2.707	55,500	0.22.107	2.002.707	J.EE 100	52.107
Soil Saturation Concer	ntration Screening Lev	rels (Csat)	NA	NA	NA	NA	NA NA	NA NA	NA NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
-				-			-		-				-						

Applicable Criterion/RBSL Exceeded

Applicable Criterion/RBSL Exceeded

Value Exceeds Applicable Criterion/RBSL
bgs Below Ground Surface (feet)

MDL Laboiratory method detection limit (MDL)
NA Not Applicable
NL Not Listed
NLL Not Listed
NLV Not Likely to Leach
NLV Not Likely to Volatilize
ID Insufficient Data

TABLE 3 SUMMARY OF SOIL ANALYTICAL RESULTS POLYCHLORINATED BIPHENYLS AND METALS 660 EAST 10 MILE ROAD, FERNDALE, MICHIGAN PM PROJECT #01-5524-0-001

	IATED BIPHNEYLS (PCB AND METALS (µg/Kg)	s)	PCBs	Arsenic	Cadmium	Chromium	Lead	Zinc
Chemical Abst	ract Service Number (CA	S#)	1336363	7440382	7440439	16065831	7439921	7440666
Sample ID	Sample Date	Sample Depth (feet bgs)	PCBs			METALs		
SB-1	06/09/2015	1.0-2.0	<330	NA	220	2,140	21,800	NA
SB-2	06/08/2015	2.0-3.0	<330	NA	<200	1,020	1,140	NA
SB-3	06/08/2015	0.5-1.5	<330	NA	1,740	8,330	222,000	NA
SB-4	06/08/2015	2.0-3.0	<330	NA	<200	2,090	1,400	NA
SB-4	06/08/2015	5.0-6.0	<330	NA	<200	3,150	6,430	NA
SB-5	06/08/2015	0.5-1.5	<330	NA	320	2,490	11,300	NA
SB-6	06/08/2015	0.5-1.5	<330	NA	<200	1,500	2,820	NA
SB-6	06/08/2015	6.0-7.0	<330	NA	<200	1,600	5,810	NA
SB-7	06/08/2015	3.0-4.0	<330	NA	230	6,910	2,480	NA
SB-12	06/09/2015	1.0-2.0	<330	NA	<200	146,000	29,500	NA
SB-13	06/09/2015	1.0-2.0	NA	NA	<200	6,190	420	2,070
SB-14	06/08/2015	0.5-1.5	<330	NA	<200	860	810	NA
SB-15 SB-16	06/08/2015	1.0-2.0	<330	NA	<200	2,260	16,100	NA
	06/08/2015	1.0-2.0	<330	NA	590	4,450	40,500	NA
SB-17 SB-18	06/08/2015	1.0-2.0	<330	NA NA	910	15,600	28,600	NA NA
SB-18 SB-19	06/10/2015	2.0-3.0	<330 NA	NA NA	<200 NA	7,500 NA	5,210 NA	NA NA
SB-19 SB-20	06/09/2015 06/09/2015	6.0-7.0 1.0-2.0	NA <330	NA NA	NA 310	4,380	12,200	NA NA
SB-21	06/09/2015	1.0-2.0	<330	NA NA	200	5,680	4,410	NA NA
SB-22	06/09/2015	1.0-2.0	<330	NA NA	<200	1,080	920	NA NA
SB-23	06/10/2015	3.0-4.0	<330	4,510	<200	2,880	26,100	43,500
SB-24	06/10/2015	3.0-4.0	<330	2,340	<200	2,570	17,700	22,400
SB-25	06/10/2015	4.0-5.0	<330	2,340	<200	2,090	1,390	3,100
SB-26	06/09/2015	1.0-2.0	<330	720	<200	2,530	10,900	3,100 NA
SB-27	06/09/2015	1.0-2.0	330	4,550	1,010	6,800	167,000	NA NA
SB-28	06/09/2015	1.0-2.0	<330	610	<200	2,130	3,180	NA NA
SB-28	06/09/2015	8.0-9.0	<330	3,320	<200	2,390	6,030	NA
SB-29	06/09/2015	1.0-2.0	<330	1,830	<200	3,810	6,560	NA
SB-30	06/08/2015	1.0-2.0	<330	510	<200	1,280	1,940	NA
SB-31	06/10/2015	3.0-4.0	<330	NA	NA	NA	NA	NA
SB-34	06/09/2015	1.0-2.0	<330	NA	NA	NA	NA	NA
SB-27R	09/01/2015	2.0-3.0	<330	NA	NA	NA	NA	NA
SB-35	09/01/2015	2.0-3.0	<330	NA	NA	NA	NA	NA
SB-35	09/01/2015	4.0-5.0	<330	NA	NA	NA	NA	NA
SB-36	09/01/2015	2.0-3.0	489,000	NA	NA	NA	NA	NA
SB-36	09/01/2015	4.0-5.0	<330	NA	NA	NA	NA	NA
SB-37	09/01/2015	1.0-2.0	900	NA	NA	NA	NA	NA
SB-37	09/01/2015	4.0-5.0	<330	NA	NA	NA	NA	NA
SB-38	09/01/2015	1.0-2.0	27,000	NA	NA	NA	NA	NA
SB-38	09/01/2015	4.0-5.0	<330	NA	NA	NA	NA	NA
SB-39	09/01/2015	1.0-2.0	15,000	NA	NA	NA	NA	NA
SB-39	09/01/2015	2.0-3.0	<330	NA	NA	NA	NA	NA
SB-40	09/01/2015	1.0-2.0	64,000	NA	NA	NA	NA	NA
SB-40	09/01/2015	4.0-5.0	<330	NA	NA	NA	NA	NA
SB-41	09/01/2015	1.0-2.0	28,000	NA	NA	NA	NA	NA
SB-41	09/01/2015	2.0-3.0	1,300	NA	NA	NA	NA	NA
SB-41	09/01/2015	4.0-5.0	<330	NA	NA	NA	NA	NA
SB-42	09/01/2015	1.0-2.0	5,000	NA	NA	NA NA	NA	NA
SB-42	09/01/2015	2.0-3.0	19,000	NA	NA	NA NA	NA	NA
SB-42	09/01/2015	4.0-5.0	<330	NA NA	NA NA	NA NA	NA	NA NA
SB-43	09/01/2015	1.0-2.0	5,200	NA NA	NA NA	NA NA	NA	NA NA
SB-43	09/01/2015	2.0-3.0	9,600	NA NA	NA NA	NA NA	NA NA	NA NA
SB-43 SB-44	09/01/2015	4.0-5.0	<330 1,300	NA NA	NA NA	NA NA	NA NA	NA NA
SB-44 SB-45	09/01/2015 09/01/2015	1.0-2.0 1.0-2.0	1,300 <330	NA NA	NA NA	NA NA	NA NA	NA NA
neric Soil Cleanup Criteria Tab	Cleanup Cr les 2 and 3: Residential	iteria Requirements fo and Non-Residential I Levels, D athway, Policy and P	or Response Ac Part 201 Generic ecember 30, 20	tivity (R 299.1 c Cleanup Crite 13	- R 299.50) eria and Scree	ning Levels/Pa	rt 213 Risk-Bas	sed Screer
tewide Default Background Le	vels	Nesiu	NA NA	5,800	1,200	18,000	21,000	47,000
nking Water Protection (Res D			NLL	4,600	6,000	30,000	7.00E+05	2.40E+0
oundwater Surface Water Inter			NLL	4,600	5,600 {G,X}	3,300	7.00E+05 5.2E+06 {G,X}	2.40E+0
I Volatilization to Indoor Air Inf			3.0E+06	4,600 NLV	5,600 {G,A}	3,300 NLV	5.2E+06 (G,A)	2.7E+05 { NLV
bient Air Infinite Source Volati		il)	2.40E+05	NLV	NLV	NLV	NLV	NLV
bient Air Finite VSI for 5 Meter		.,	7.9E+06	NLV	NLV NLV	NLV NLV	NLV	NLV NLV
bient Air Finite VSI for 2 Meter			7.9E+06 7.9E+06	NLV NLV	NLV NLV	NLV NLV	NLV NLV	NLV NLV
bient Air Particulate Soil Inhala			7.9E+06 5.2E+06	7.20E+05	1.70E+06	2.60E+05	1.00E+08	ID
ect Contact (Res DC)			5.2E+06 {T}	7,600	5.50E+05	2.50E+05 2.50E+06	4.00E+05	1.70E+0
20 (1100 20)		Nonres	idential (µg/Kg)	7,000	0.00E r00	2.502 700		1.752+0
nking Water Protection (Nonre	s DWP)	.1011163	NLL	4,600	6,000	30,000	7.00E+05	5.00E+0
I Volatilization to Indoor Air Inf			1.6E+07	4,600 NLV	NLV	30,000 NLV	7.00E+05 NLV	S.UUE+U NLV
	le Soil Inhalation (Nonres	VSI)	8.10E+05	NLV	NLV	NLV	NLV	NLV
DIGIT All IIIIIIIILE JOUILE VOINI	•		2.8E+07	NLV	NLV	NLV	NLV	NLV
bient Air Finite VSI for 5 Meter							 	
			2.8E+07	NLV	NLV	NLV	NLV	NLV
bient Air Finite VSI for 5 Meter	Source Thickness		2.8E+07 6.5E+06	NLV 9.10E+05	NLV 2.20E+06	NLV 2.40E+05	NLV 4.40E+07	NLV ID
bient Air Finite VSI for 5 Meter bient Air Finite VSI for 2 Meter	Source Thickness							

- Metal GSIP Criteria for Surface Water Not Protected for Drinking Water Use based on 269 mg/L CaCO3 Hardness: Station ID 500011, Red Run Drain, near Warren, Ml.
- Refer to the Toxic Substance Control Act (TSCA), 40 CFR 761, Subparts D and G, as amended, to determine the applicability of TSCA cleanup standards. Alternatives to compliance with the standards listed below are possible under Subpart D. New Releases may be subject to the standards identified in Subpart G. Use Part 201 soil direct contact criteria in the table below where TSCA standards are not applicable. {T}

LAND USE CATEGORY	TSCA, Subpart D	Part 201
Residential	1,000 µg/Kg, or	4,000 µg/Kg
Nonresidential	10 000 ug/Kg if capped	16 000 ug/Kg

BOLD

Applicable Criterion/RBSL Exceeded
Value Exceeds Applicable Criterion/RBSL
Below Ground Surface (feet)
Laboiratory method detection limit (MDL)
Not Applicable
Not Listed
Not Likely to Leach
Not Likely to Volatilize
Insufficient Data

bgs MDL NA NL

NLL NLV ID

TABLE 4

SUMMARY OF GROUNDWATER ANALYTICAL RESULTS VOLATILE ORGANIC COMPOUNDS, POLYNUCLEAR AROMATIC COMPOUNDS, AND METALS 660 EAST 10 MILE ROAD, FERNDALE, MICHIGAN PM PROJECT #01-5524-0-001

VOLATILE ORGANIC COMPOUNDS (µg/L)					Chloroform	1,1-Dichloroethane	cis-1,2-Dichloroethylene	trans-1,2- Dichloroethylene	Ethylbenzene	1,1,1-Trichloroethane	Trichloroethylene	Vinyl chloride	Xylenes	Other VOCs	PNAs	Arsenic	Cadmium	Chromium	Lead	Zinc
	Chemical Abstract Se	ervice Number (CAS#) Screen Depth	Depth to Groundwater	75274	67663	75343	156592	156605	100414	71556	79016	75014	1330207	Various	Various	7440382	7440439	16065831	7439921	7440666
Sample ID	Sample Date	(feet bgs)	(feet bgs)						VOCs					1	PNAs			METALS		1
TMW-3	06/08/2015	2.09-7.09	4.22	<1	<1	<1	<1	<1	1	<1	<1	<1	6	<mdl< td=""><td><mdl< td=""><td>NA</td><td><0.5</td><td>7</td><td><3</td><td>NA</td></mdl<></td></mdl<>	<mdl< td=""><td>NA</td><td><0.5</td><td>7</td><td><3</td><td>NA</td></mdl<>	NA	<0.5	7	<3	NA
TMW-5	06/08/2015	3.29-8.29	5.07	<1	<1	<1	<1	<1	<1	<1	<1	<1	<3	<mdl< td=""><td><mdl< td=""><td>NA</td><td><0.5</td><td><5</td><td><3</td><td>NA</td></mdl<></td></mdl<>	<mdl< td=""><td>NA</td><td><0.5</td><td><5</td><td><3</td><td>NA</td></mdl<>	NA	<0.5	<5	<3	NA
TMW-8	06/09/2015	4.45-9.45	5.80	<1	<1	<1	3	<1	<1	<1	4	<1	<3	<mdl< td=""><td><mdl< td=""><td>NA</td><td><0.5</td><td><5</td><td><3</td><td>7</td></mdl<></td></mdl<>	<mdl< td=""><td>NA</td><td><0.5</td><td><5</td><td><3</td><td>7</td></mdl<>	NA	<0.5	<5	<3	7
TMW-9	06/09/2015	4.75-9.75	5.00	<1	<1	<1	<1	<1	<1	<1	<1	<1	<3	<mdl< td=""><td><mdl< td=""><td>NA</td><td>1.2</td><td><5</td><td><3</td><td>259</td></mdl<></td></mdl<>	<mdl< td=""><td>NA</td><td>1.2</td><td><5</td><td><3</td><td>259</td></mdl<>	NA	1.2	<5	<3	259
TMW-10	06/09/2015	4.15-9.15	4.75	<1	<1	<1	<1	<1	<1	<1	<1	<1	<3	<mdl< td=""><td><mdl< td=""><td>NA</td><td>1.0</td><td>10</td><td><3</td><td>72</td></mdl<></td></mdl<>	<mdl< td=""><td>NA</td><td>1.0</td><td>10</td><td><3</td><td>72</td></mdl<>	NA	1.0	10	<3	72
TMW-11	06/10/2015	3.91-8.91	4.98	2	9	<1	<1	<1	<1	<1	<1	<1	<3	<mdl< td=""><td><mdl< td=""><td>NA</td><td><0.5</td><td><5</td><td><3</td><td>55</td></mdl<></td></mdl<>	<mdl< td=""><td>NA</td><td><0.5</td><td><5</td><td><3</td><td>55</td></mdl<>	NA	<0.5	<5	<3	55
TMW-13	06/09/2015	2.84-7.84	3.52	<1	<1	<1	<1	<1	<1	<1	<1	<1	<3	<mdl< td=""><td><mdl< td=""><td>NA</td><td>0.6</td><td><5</td><td><3</td><td>68</td></mdl<></td></mdl<>	<mdl< td=""><td>NA</td><td>0.6</td><td><5</td><td><3</td><td>68</td></mdl<>	NA	0.6	<5	<3	68
TMW-14	06/08/2015	2.72-7.72	4.09	<1	<1	<1	<1	<1	<1	<1	5	<1	<3	<mdl< td=""><td><mdl< td=""><td>NA</td><td><0.5</td><td>5</td><td><3</td><td>NA</td></mdl<></td></mdl<>	<mdl< td=""><td>NA</td><td><0.5</td><td>5</td><td><3</td><td>NA</td></mdl<>	NA	<0.5	5	<3	NA
TMW-16	06/08/2015	3.05-8.05	4.36	<5	<5	<5	191	14	<5	<5	<5	396	<15	<mdl< td=""><td><mdl< td=""><td>NA</td><td><0.5</td><td>10</td><td><3</td><td>NA</td></mdl<></td></mdl<>	<mdl< td=""><td>NA</td><td><0.5</td><td>10</td><td><3</td><td>NA</td></mdl<>	NA	<0.5	10	<3	NA
TMW-19	06/09/2015	4.15-9.15	4.55	<1	<1	<1	<1	<1	<1	<1	2	<1	<3	<mdl< td=""><td><mdl< td=""><td>NA</td><td>NA</td><td>NA</td><td>NA</td><td>NA</td></mdl<></td></mdl<>	<mdl< td=""><td>NA</td><td>NA</td><td>NA</td><td>NA</td><td>NA</td></mdl<>	NA	NA	NA	NA	NA
TMW-21	06/09/2015	3.55-8.55	5.40	<1	<1	<1	<1	<1	<1	<1	<1	<1	<3	<mdl< td=""><td><mdl< td=""><td>NA</td><td><0.5</td><td><5</td><td><3</td><td>NA</td></mdl<></td></mdl<>	<mdl< td=""><td>NA</td><td><0.5</td><td><5</td><td><3</td><td>NA</td></mdl<>	NA	<0.5	<5	<3	NA
TMW-24	06/10/2015	8.06-13.06	9.69	<1	<1	<1	<1	<1	<1	<1	<1	<1	<3	<mdl< td=""><td><mdl< td=""><td><2</td><td><0.5</td><td><5</td><td><3</td><td><5</td></mdl<></td></mdl<>	<mdl< td=""><td><2</td><td><0.5</td><td><5</td><td><3</td><td><5</td></mdl<>	<2	<0.5	<5	<3	<5
TMW-27	06/09/2015	5.0-10.0	6.55	<1	<1	<1	<1	<1	<1	6	<1	<1	<3	<mdl< td=""><td><mdl< td=""><td>3</td><td><0.5</td><td>6</td><td><3</td><td>NA</td></mdl<></td></mdl<>	<mdl< td=""><td>3</td><td><0.5</td><td>6</td><td><3</td><td>NA</td></mdl<>	3	<0.5	6	<3	NA
TMW-29	06/09/2015	5.0-10.0	7.45	<1	<1	<1	<1	<1	<1	<1	<1	<1	<3	<mdl< td=""><td><mdl< td=""><td>6</td><td>0.6</td><td>10</td><td><3</td><td>NA</td></mdl<></td></mdl<>	<mdl< td=""><td>6</td><td>0.6</td><td>10</td><td><3</td><td>NA</td></mdl<>	6	0.6	10	<3	NA
TMW-30	06/08/2015	2.86-7.86	4.63	<1	<1	5	<1	<1	<1	5	<1	<1	<3	<mdl< td=""><td><mdl< td=""><td><2</td><td><0.5</td><td><5</td><td><3</td><td>NA</td></mdl<></td></mdl<>	<mdl< td=""><td><2</td><td><0.5</td><td><5</td><td><3</td><td>NA</td></mdl<>	<2	<0.5	<5	<3	NA
TMW-31	06/10/2015	3.55-8.55	4.15	<1	<1	<1	<1	<1	<1	<1	<1	<1	<3	<mdl< td=""><td><mdl< td=""><td>NA</td><td>NA</td><td>NA</td><td>NA</td><td>NA</td></mdl<></td></mdl<>	<mdl< td=""><td>NA</td><td>NA</td><td>NA</td><td>NA</td><td>NA</td></mdl<>	NA	NA	NA	NA	NA
TMW-32	06/09/2015	3.96-8.96	5.20	<1	<1	<1	<1	<1	<1	<1	<1	<1	<3	<mdl< td=""><td><mdl< td=""><td>NA</td><td>NA</td><td>NA</td><td>NA</td><td>NA</td></mdl<></td></mdl<>	<mdl< td=""><td>NA</td><td>NA</td><td>NA</td><td>NA</td><td>NA</td></mdl<>	NA	NA	NA	NA	NA
TMW-33	06/09/2015	3.75-8.75	5.10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<3	<mdl< td=""><td><mdl< td=""><td>NA</td><td>NA</td><td>NA</td><td>NA</td><td>NA</td></mdl<></td></mdl<>	<mdl< td=""><td>NA</td><td>NA</td><td>NA</td><td>NA</td><td>NA</td></mdl<>	NA	NA	NA	NA	NA
TMW-34	06/09/2015	4.46-9.46	5.80	<1	<1	<1	<1	<1	<1	27	<1	<1	<3	<mdl< td=""><td><mdl< td=""><td>NA</td><td>NA</td><td>NA</td><td>NA</td><td>NA</td></mdl<></td></mdl<>	<mdl< td=""><td>NA</td><td>NA</td><td>NA</td><td>NA</td><td>NA</td></mdl<>	NA	NA	NA	NA	NA
Cleanup Criteria Requirements for Response Activity (R 299.1 - R 299.50) Generic Groundwater Cleanup Criteria Table 1: Residential and Non-Residential Part 201 Generic Cleanup Criteria and Screening Levels/Part 213 Risk-Based Screening Levels, December 30, 2013 MDEQ Guidance Document For The Vapor Intrusion Pathway, Policy and Procedure Number: 09-017, Appendix D Vapor Intrusion Screening Values, May 2013 Residential/Nonresidential (µg/L)																				
Residential Drinking W	ater (Res DW)			80 {A,W}	80 {A,W}	880	70 (A)	100 {A}	74 (E)	200 (A)	5.0 {A}	2.0 {A}	280 (E)	Various	Various	10 (A)	5.0 (A)	100 {A}	4.0 {L}	2,400
Nonresidential Drinking				80 {A,W}	80 {A,W}	2,500	70 (A)	100 {A}	74 (E)	200 (A)	5.0 {A}	2.0 {A}	280 {E}	Various	Various	10 (A)	5.0 (A)	100 {A}	4.0 {L}	5,000 {E}
Groundwater Surface V				ID	350	740	620	1,500 {X}	18	89	200 {X}	13 {X}	41	Various	Various	10	4.6 {G,X}	11	30 {G,X}	270 {G}
Residential Groundwat		or Air Inhalation (Res	GVII) ²	4,800	28,000	1.00E+06	93,000	85,000	1.10E+05	6.60E+05	2,200	1,100	1.9E+5 {S}	Various	Various	NLV	NLV	NLV	NLV	NLV
Nonresidential Ground		•	· ·	37,000	1.80E+05	2.30E+06	2.10E+05	2.00E+05	1.7E+5 {S}	1.3E+6 {S}	4,900	13,000	1.9E+5 {S}	Various	Various	NLV	NLV	NLV	NLV	NLV
			,				L	ing Levels			,,,,,,									
Residential Groundwat	er Vapor Intrusion Scre	ening Levels (GW _{VI-re}	s) ³	80	140	4,300	83	360	700	17,000	9.8	2.8	10,000	Various	Various	NL	NL	NL	NL	NL
Nonresidential Ground	water Vapor Intrusion S	Screening Levels (GW	/ _{VI-nr}) ³	170	720	18,000	350	1,500	2600	71000	41	52	10,000	Various	Various	NL	NL	NL	NL	NL
Water Solubility				6.74E+06	7.92E+06	5.06E+06	3.50E+06	6.30E+06	1.69E+05	1.33E+06	1.10E+06	2.76E+06	1.86E+05	Various	Various	NA	NA	NA	NA	NA
F1																				

ID ID 3.80E+05 5.30E+05 2.30E+05 43,000 ID ID 33,000 70,000

Applicable Criteria/RBSL Exceeded

BOLD Value Exceeds Applicable Criteria

bgs Below Ground Surface (feet)

MDL Laboiratory method detection limit (MDL)

² Tier 1 GVII Criteria based on 3 meter (or greater) groundwater depth

3 (2013 Vapor Intrusion Guidance) Screening Levels based on depth to groundwater less than 3.0 meters and not in contact with building foundation

NA Not Applicable

NL Not Listed

Flammability and Explosivity Screening Level

NLL Not Likely to Leach

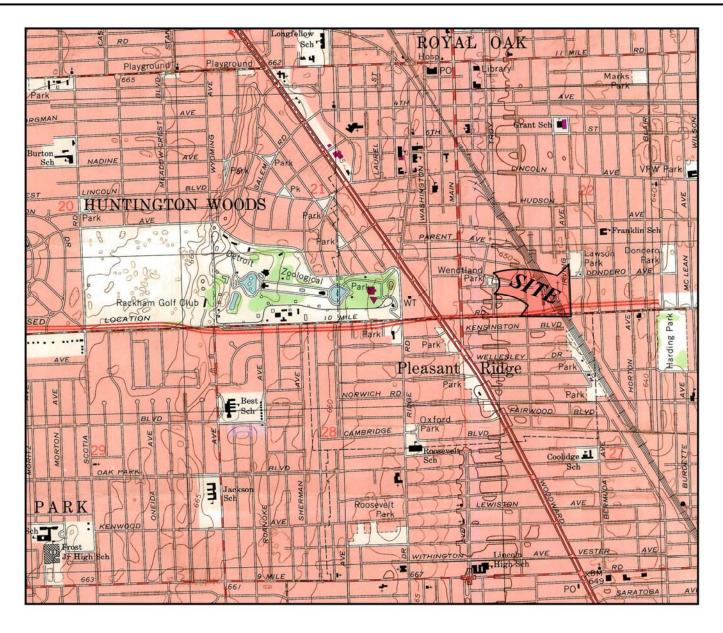
NLV Not Likely to Volatilize

ID Insufficient Data

{G} Metal GSI Criteria for Surface Water Not Protected for Drinking Water Use based on 269 mg/L CaCO3 Hardness: Station ID 500011, Red Run Drain, near Warren, MI.

Figures





OAKLAND COUNTY



SCALE 1:24,000

1 MILE 1/2 MILE 0 1 MILE

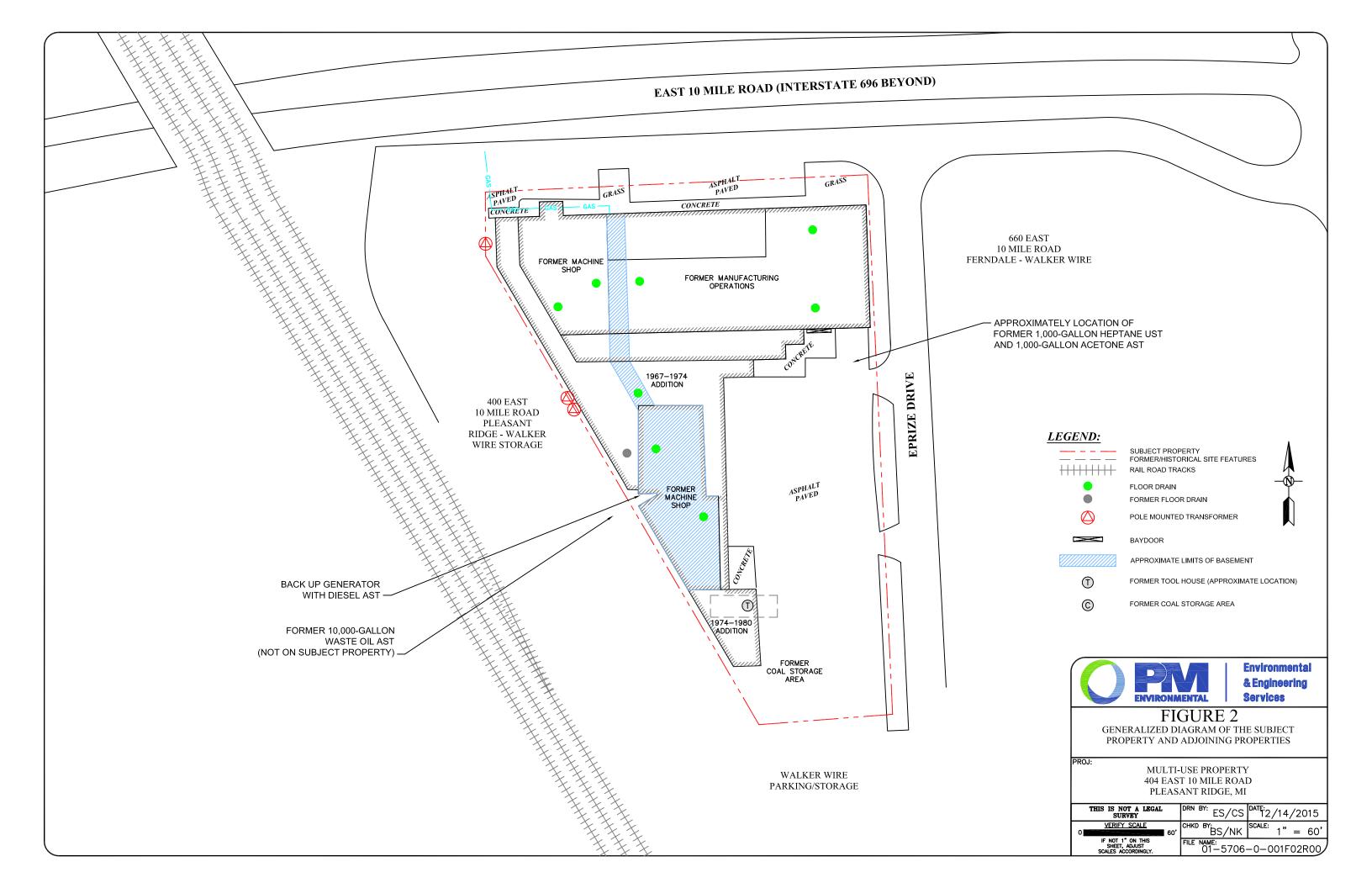
FIGURE 1

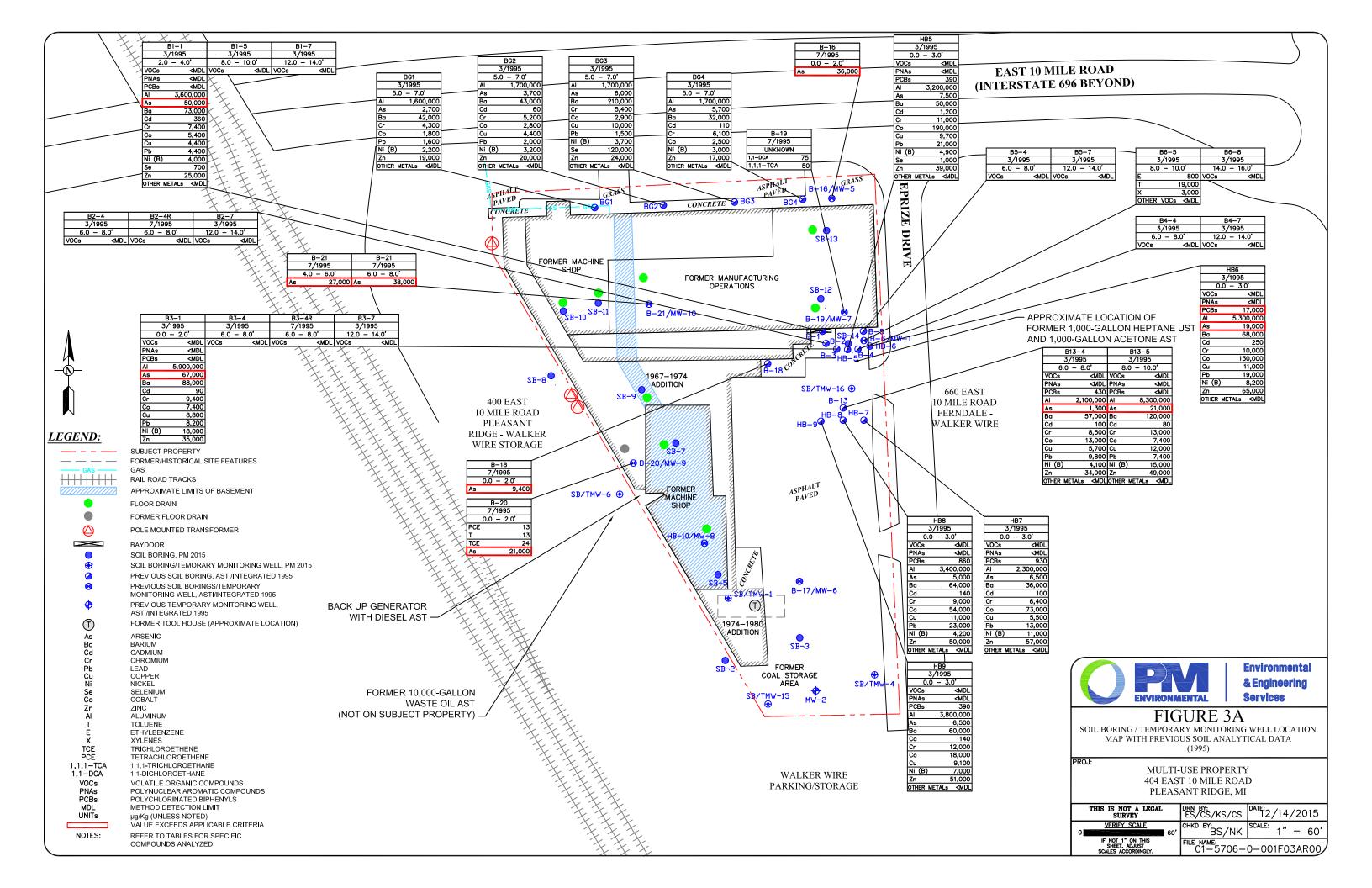
PROPERTY VICINITY MAP USGS, 7.5 MINUTE SERIES ROYAL OAK, MI QUADRANGLE, 1996.

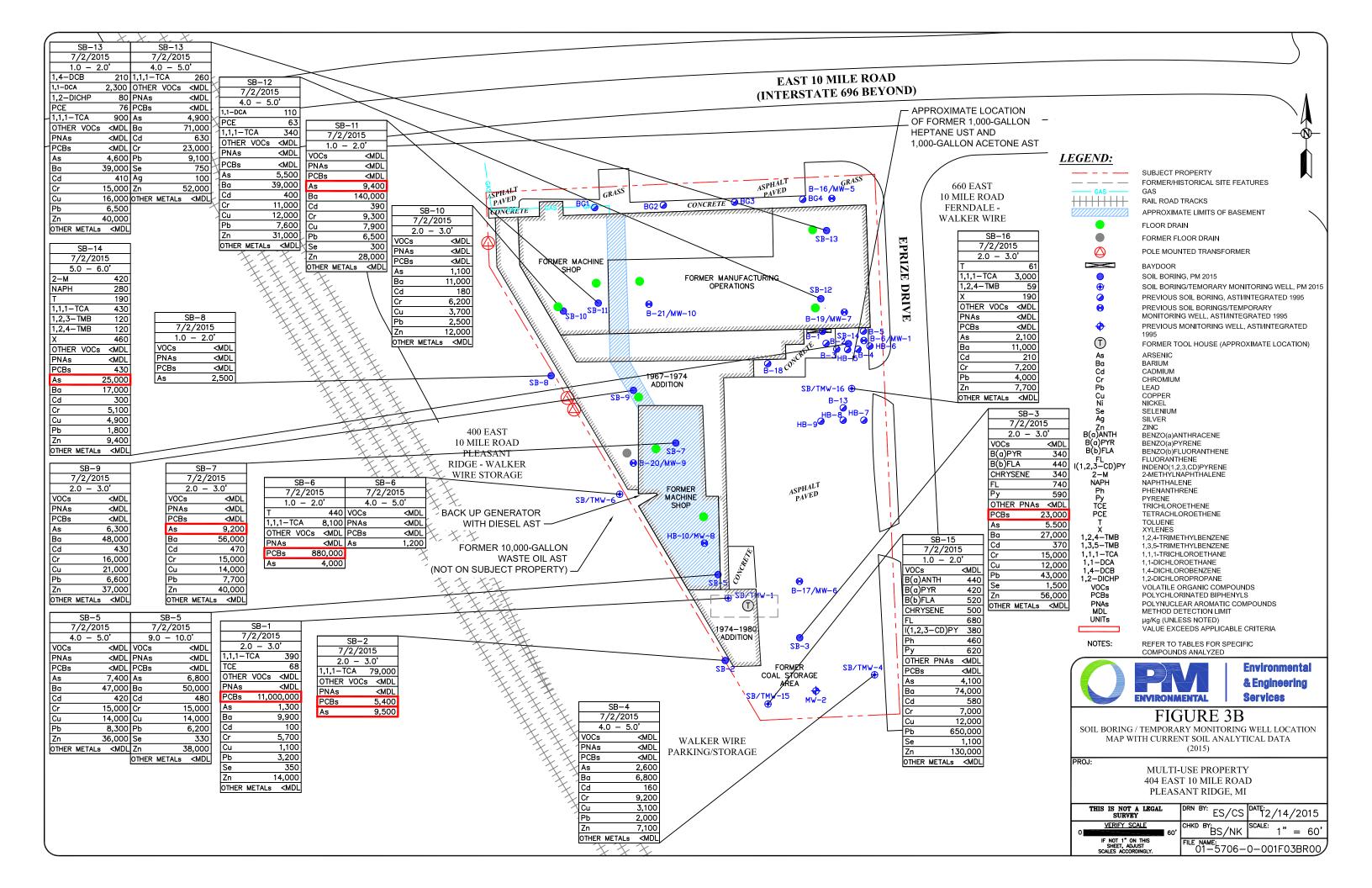


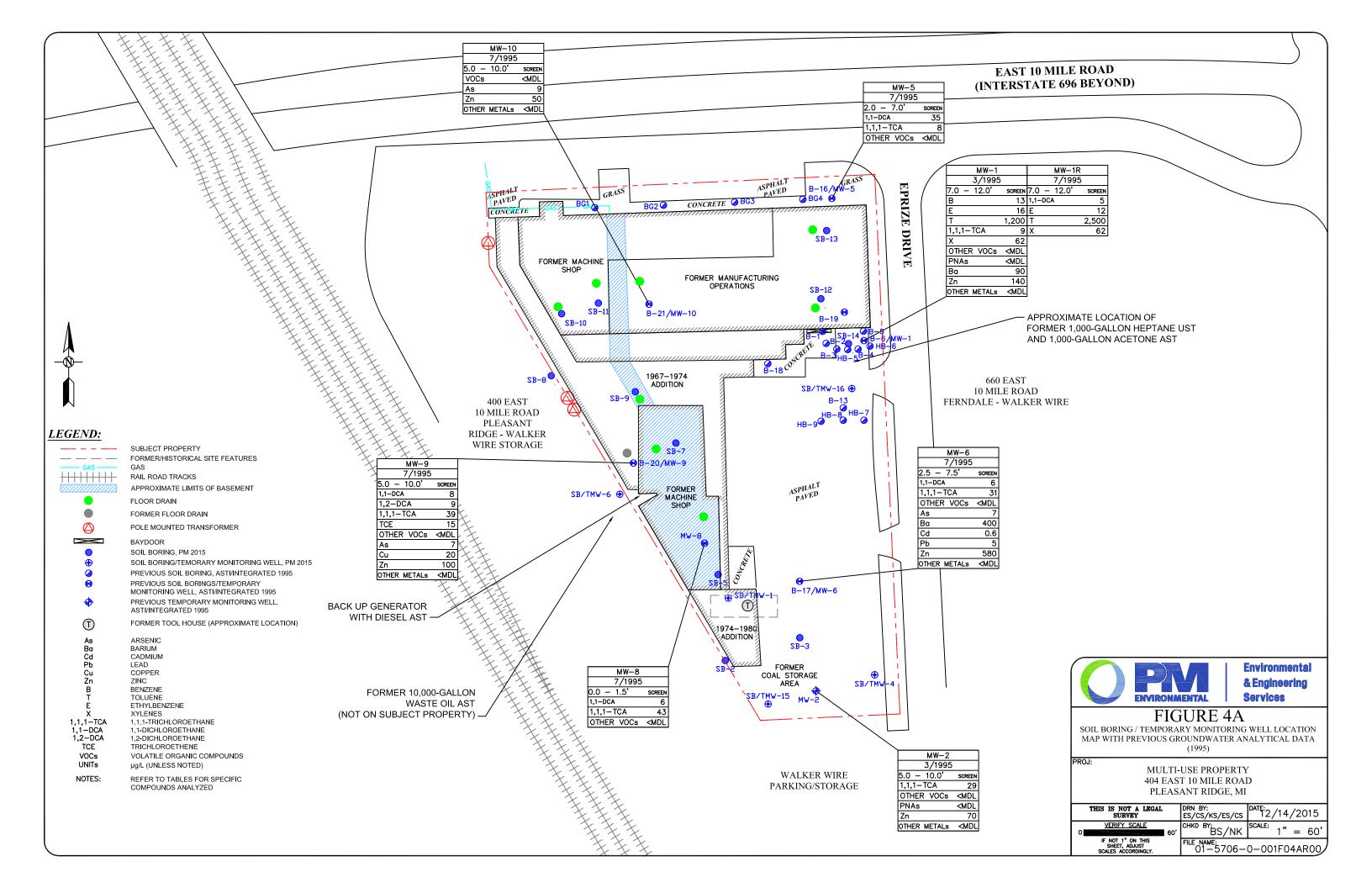
Environmental & Engineering Services PROJ: MULTI-USE PROPERTY 404 EAST 10 MILE ROAD PLEASANT RIDGE, MI

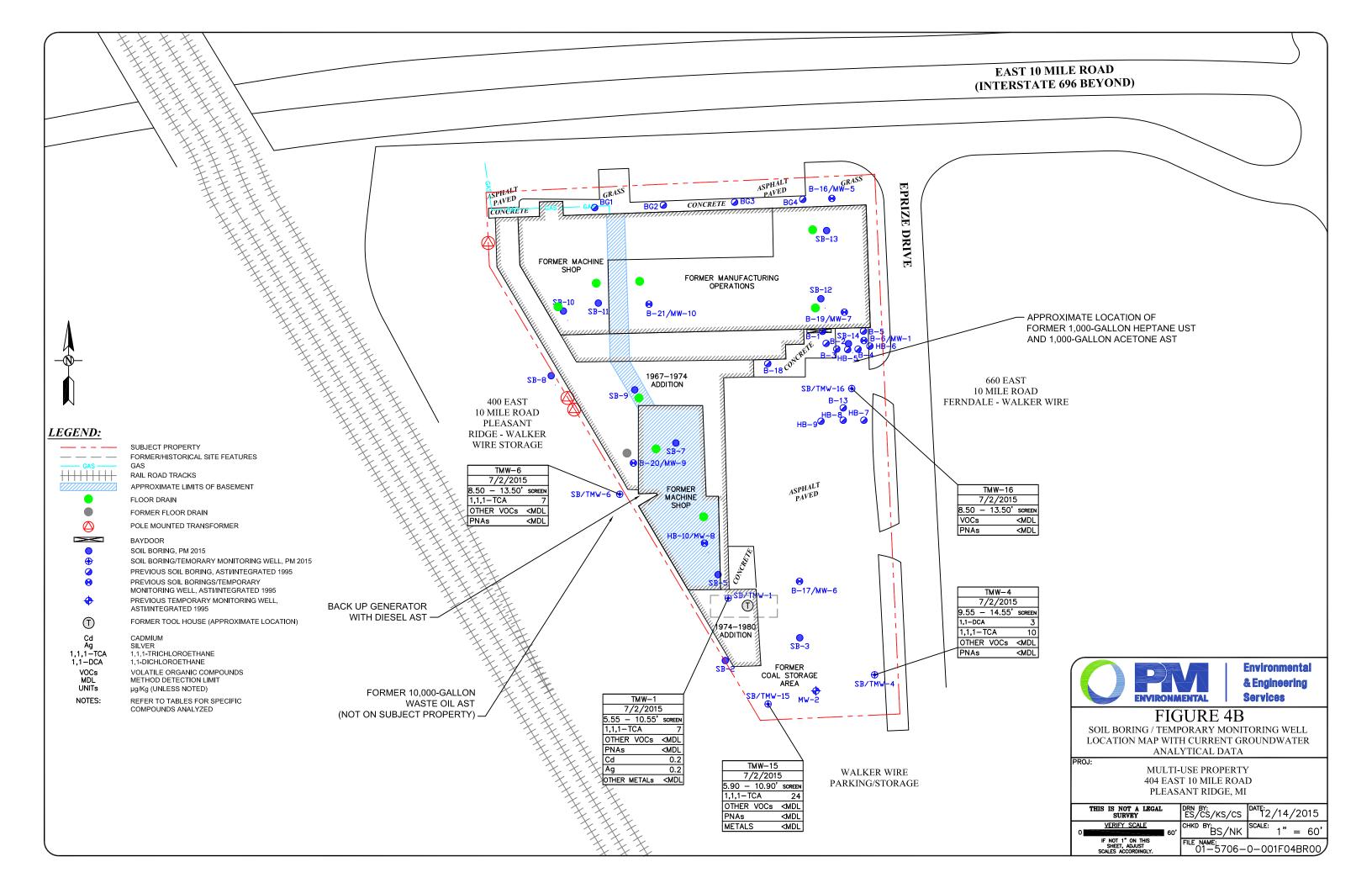
THIS IS NOT A LEGAL SURVEY	DRN BY:	CS	DATE: 2/:	23/	/2016
VERIFY SCALE 2,000'	CHKD BY:	JA	SCALE: "	=	2,000'
IF NOT 1" ON THIS SHEET, ADJUST SCALES ACCORDINGLY.	FILE NAME: 01-	-5706	-0-00)1F	01R00

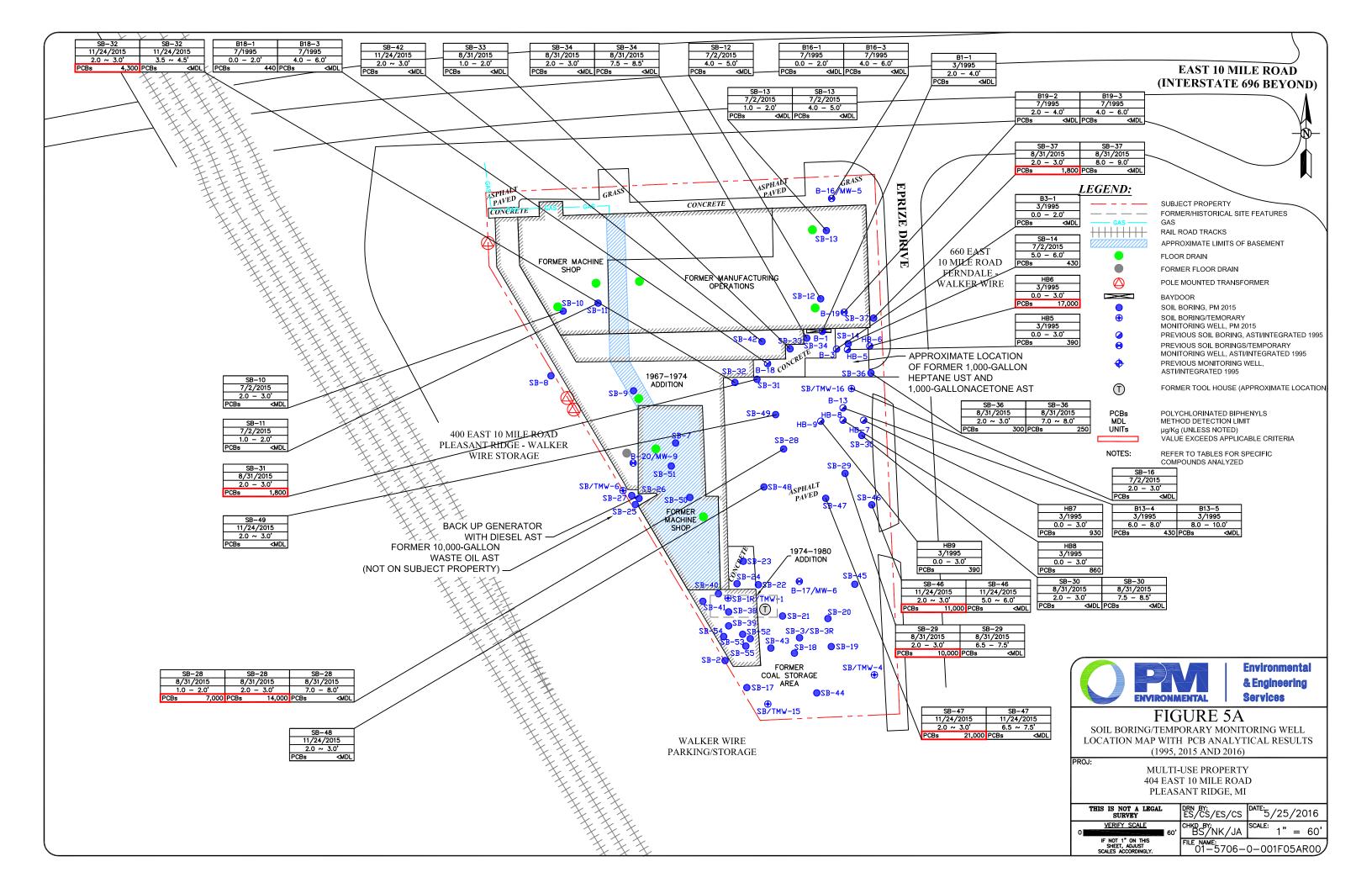


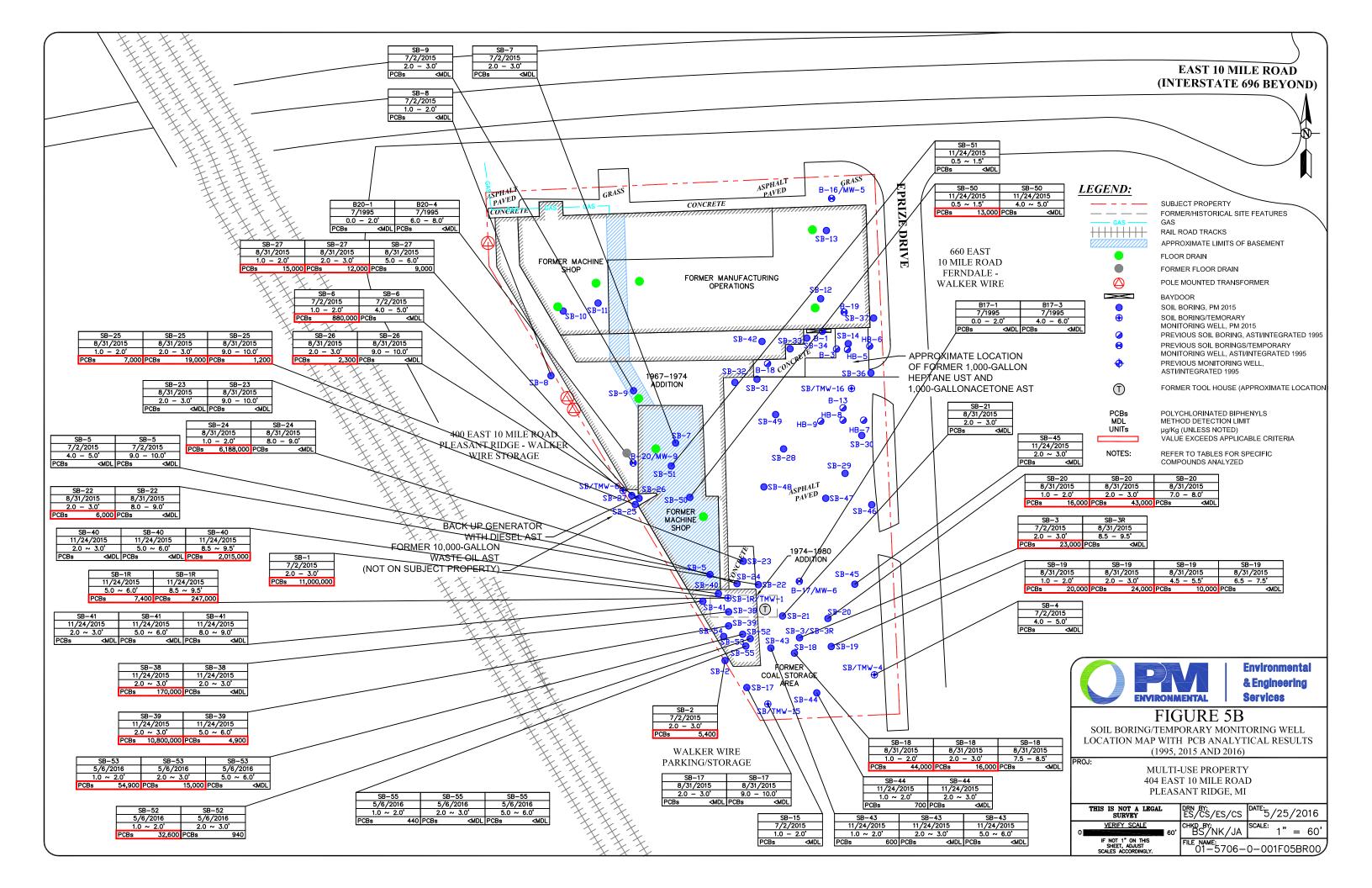












Tables



TABLE 1 ASTI MARCH 1995 AND INTEGRATED JULY 1995 SUMMARY OF SOIL ANALYTICAL RESULTS VOCS AND PNAS 404 EAST 10 MILE ROAD, PLEASANT RIDGE, MICHIGAN PM PROJECT # 01-5706-1-0002

	RGANIC COMPOUNDS (V R AROMATIC COMPOUN (µg/Kg)		1,1-Dichloroethane	Ethylbenzene	Tetrachloroethylene	Toluene	1,1,1-Trichloroethane	Trichloroethylene	Xylenes	Other VOCs	Acenaphthene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Benzo(g,h,i)perylene	Chrysene	Fluoranthene	Fluorene	Naphthalene	Phenanthrene	Pyrene	Other PNAs
	Abstract Service Number	(CAS#) Sample Depth	75343	100414	127184	108883	71556	79016	1330207	Various	83329	56553	50328	205992	207089	191242	218019	206440	86737	91203	85018	129000	Various
Sample ID	Sample ID Sample Date (feet bgs) VOCs PNAs ASTI March 1995																						
B1-1	3/13/1995	2.0-4.0	<10	<100	<10	<10	<10	<10	<30	<mdl< td=""><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><mdl< td=""></mdl<></td></mdl<>	<330	<330	<330	<330	<330	<330	<330	<330	<330	<330	<330	<330	<mdl< td=""></mdl<>
B1-5	3/13/1995	8.0-10.0	<10	<100	<10	<10	<10	<10	<30	<mdl< td=""><td>NA</td><td>NA</td><td>NA</td><td>NA</td><td>NA</td><td>NA</td><td>NA</td><td>NA</td><td>NA</td><td>NA</td><td>NA</td><td>NA</td><td>NA</td></mdl<>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
B1-7	3/13/1995	12.0-14.0	<10	<100	<10	<10	<10	<10	<30	<mdl< td=""><td>NA</td><td>NA</td><td>NA</td><td>NA</td><td>NA</td><td>NA</td><td>NA</td><td>NA</td><td>NA</td><td>NA</td><td>NA</td><td>NA</td><td>NA</td></mdl<>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
B2-4	3/13/1995	6.0-8.0	<10	<100	<10	<10	<10	<10	<30	<mdl< td=""><td>NA</td><td>NA</td><td>NA</td><td>NA</td><td>NA</td><td>NA</td><td>NA</td><td>NA</td><td>NA</td><td>NA</td><td>NA</td><td>NA</td><td>NA</td></mdl<>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
B2-7	3/13/1995	12.0-14.0	<10	<100	<10	<10	<10	<10	<30	<mdl< td=""><td>NA</td><td>NA</td><td>NA</td><td>NA</td><td>NA</td><td>NA</td><td>NA</td><td>NA</td><td>NA</td><td>NA</td><td>NA</td><td>NA</td><td>NA</td></mdl<>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
B3-1 B3-4	3/13/1995 3/13/1995	0.0-2.0	<10 <10	<100 <100	<10 <10	<10 <10	<10 <10	<10 <10	<30 <30	<mdl< td=""><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><mdl< td=""></mdl<></td></mdl<>	<330	<330	<330	<330	<330	<330	<330	<330	<330	<330	<330	<330	<mdl< td=""></mdl<>
B3-7	3/13/1995	6.0-8.0 12.0-14.0	<10	<100	<10	<10	<10	<10	<30	<mdl< td=""><td>NA NA</td><td>NA NA</td><td>NA NA</td><td>NA NA</td><td>NA NA</td><td>NA NA</td><td>NA NA</td><td>NA NA</td><td>NA NA</td><td>NA NA</td><td>NA NA</td><td>NA NA</td><td>NA NA</td></mdl<>	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
B4-4	3/13/1995	6.0-8.0	<10	<100	<10	<10	<10	<10	<30	<mdl< td=""><td>NA</td><td>NA</td><td>NA</td><td>NA</td><td>NA</td><td>NA</td><td>NA</td><td>NA</td><td>NA</td><td>NA</td><td>NA</td><td>NA</td><td>NA</td></mdl<>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
B4-7	3/13/1995	12.0-14.0	<10	<100	<10	<10	<10	<10	<30	<mdl< td=""><td>NA</td><td>NA</td><td>NA</td><td>NA</td><td>NA</td><td>NA</td><td>NA</td><td>NA</td><td>NA</td><td>NA</td><td>NA</td><td>NA</td><td>NA</td></mdl<>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
B5-4	3/13/1995	6.0-8.0	<10	<100	<10	<10	<10	<10	<30	<mdl< td=""><td>NA</td><td>NA</td><td>NA</td><td>NA</td><td>NA</td><td>NA</td><td>NA</td><td>NA</td><td>NA</td><td>NA</td><td>NA</td><td>NA</td><td>NA</td></mdl<>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
B5-7	3/13/1995	12.0-14.0	<10	<100	<10	<10	<10	<10	<30	<mdl< td=""><td>NA</td><td>NA</td><td>NA</td><td>NA</td><td>NA</td><td>NA</td><td>NA</td><td>NA</td><td>NA</td><td>NA</td><td>NA</td><td>NA</td><td>NA</td></mdl<>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
B6-5 B6-8	3/13/1995	8.0-10.0	<10	800	<10	19,000	<10	<10	3,000	<mdl< td=""><td>NA NA</td><td>NA NA</td><td>NA NA</td><td>NA NA</td><td>NA NA</td><td>NA NA</td><td>NA NA</td><td>NA NA</td><td>NA NA</td><td>NA NA</td><td>NA NA</td><td>NA NA</td><td>NA NA</td></mdl<>	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
B13-4	3/13/1995 3/14/1995	14.0-16.0 6.0-8.0	<10 <10	<100 <100	<10 <10	<10 <10	<10 <10	<10 <10	<30 <30	<mdl< td=""><td>NA <330</td><td>NA <330</td><td>NA <330</td><td>NA <330</td><td>NA <330</td><td>NA <330</td><td>NA <330</td><td>NA <330</td><td>NA <330</td><td>NA <330</td><td>NA <330</td><td>NA <330</td><td>NA <mdl< td=""></mdl<></td></mdl<>	NA <330	NA <330	NA <330	NA <330	NA <330	NA <330	NA <330	NA <330	NA <330	NA <330	NA <330	NA <330	NA <mdl< td=""></mdl<>
B13-5	3/14/1995	8.0-10.0	<10	<100	<10	<10	<10	<10	<30	<mdl< td=""><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><mdl< td=""></mdl<></td></mdl<>	<330	<330	<330	<330	<330	<330	<330	<330	<330	<330	<330	<330	<mdl< td=""></mdl<>
HB1	March 1995	0.0-3.0	<10	<100	<10	<10	<10	<10	<30	<mdl< td=""><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><mdl< td=""></mdl<></td></mdl<>	<330	<330	<330	<330	<330	<330	<330	<330	<330	<330	<330	<330	<mdl< td=""></mdl<>
HB2	March 1995	0.0-3.0	<10	<100	<10	<10	31	<10	<30	<mdl< td=""><td>13,000</td><td>2,000</td><td>900</td><td>2,000</td><td>1,800</td><td><330</td><td>1,400</td><td>2,000</td><td>960</td><td>3,000</td><td>1,100</td><td>3,900</td><td><mdl< td=""></mdl<></td></mdl<>	13,000	2,000	900	2,000	1,800	<330	1,400	2,000	960	3,000	1,100	3,900	<mdl< td=""></mdl<>
HB3	March 1995	0.0-3.0	<10	<100	<10	<10	<10	<10	<30	<mdl< td=""><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><mdl< td=""></mdl<></td></mdl<>	<330	<330	<330	<330	<330	<330	<330	<330	<330	<330	<330	<330	<mdl< td=""></mdl<>
HB4	March 1995	0.0-3.0	<10	<100	<10	<10	<10	<10	<30	<mdl< td=""><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><mdl< td=""></mdl<></td></mdl<>	<330	<330	<330	<330	<330	<330	<330	<330	<330	<330	<330	<330	<mdl< td=""></mdl<>
HB5 HB6	March 1995 March 1995	0.0-3.0	<10 <10	<100 <100	<10 <10	<10 <10	<10 <10	<10 <10	<30 <30	<mdl< td=""><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><mdl< td=""></mdl<></td></mdl<>	<330	<330	<330	<330	<330	<330	<330	<330	<330	<330	<330	<330	<mdl< td=""></mdl<>
HB7	March 1995	0.0-3.0	<10	<100	<10	<10	<10	<10	<30	<mdl< td=""><td><330 <330</td><td><330 <330</td><td><330 <330</td><td><330 <330</td><td><330 <330</td><td><330 <330</td><td><330 <330</td><td><330 <330</td><td><330 <330</td><td><330 <330</td><td><330 <330</td><td><330 <330</td><td><mdl< td=""></mdl<></td></mdl<>	<330 <330	<330 <330	<330 <330	<330 <330	<330 <330	<330 <330	<330 <330	<330 <330	<330 <330	<330 <330	<330 <330	<330 <330	<mdl< td=""></mdl<>
HB8	March 1995	0.0-3.0	<10	<100	<10	<10	<10	<10	<30	<mdl< td=""><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><mdl< td=""></mdl<></td></mdl<>	<330	<330	<330	<330	<330	<330	<330	<330	<330	<330	<330	<330	<mdl< td=""></mdl<>
HB9	March 1995	0.0-3.0	<10	<100	<10	<10	<10	<10	<30	<mdl< td=""><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><mdl< td=""></mdl<></td></mdl<>	<330	<330	<330	<330	<330	<330	<330	<330	<330	<330	<330	<330	<mdl< td=""></mdl<>
IE August 1995																							
B2-4R	July 1995	6.0-8.0	<10	<100	<10	<10	<10	<10	<10	<mdl< td=""><td>NA</td><td>NA</td><td>NA</td><td>NA</td><td>NA</td><td>NA</td><td>NA</td><td>NA</td><td>NA</td><td>NA</td><td>NA</td><td>NA</td><td>NA</td></mdl<>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
B3-4R B14-1	July 1995 7/25/1995	6.0-8.0 0.0-2.0	<10 <10	<100 <10	<10	<10 <10	<10 <10	<10 <10	<10	<mdl< td=""><td>NA <330</td><td>NA <330</td><td>NA <330</td><td>NA <330</td><td>NA <330</td><td>NA <330</td><td>NA <330</td><td>NA <330</td><td>NA <330</td><td>NA <330</td><td>NA <330</td><td>NA <330</td><td>NA <mdl< td=""></mdl<></td></mdl<>	NA <330	NA <330	NA <330	NA <330	NA <330	NA <330	NA <330	NA <330	NA <330	NA <330	NA <330	NA <330	NA <mdl< td=""></mdl<>
B14-4	7/25/1995	6.0-8.0	<10	<10	<10	<10	<10	<10	<30	<mdl< td=""><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><mdl< td=""></mdl<></td></mdl<>	<330	<330	<330	<330	<330	<330	<330	<330	<330	<330	<330	<330	<mdl< td=""></mdl<>
B15-1	7/25/1995	0.0-2.0	<10	<10	<10	<10	<10	<10	<30	<mdl< td=""><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><mdl< td=""></mdl<></td></mdl<>	<330	<330	<330	<330	<330	<330	<330	<330	<330	<330	<330	<330	<mdl< td=""></mdl<>
B15-4	7/25/1995	6.0-8.0	<10	<10	<10	<10	<10	<10	<30	<mdl< td=""><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><mdl< td=""></mdl<></td></mdl<>	<330	<330	<330	<330	<330	<330	<330	<330	<330	<330	<330	<330	<mdl< td=""></mdl<>
B16-1	7/25/1995	0.0-2.0	<10	<10	<10	<10	<10	<10	<30	<mdl< td=""><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><mdl< td=""></mdl<></td></mdl<>	<330	<330	<330	<330	<330	<330	<330	<330	<330	<330	<330	<330	<mdl< td=""></mdl<>
B16-3	7/25/1995	4.0-6.0	<10	<10	<10	<10	<10	<10	<30	<mdl< td=""><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><mdl< td=""></mdl<></td></mdl<>	<330	<330	<330	<330	<330	<330	<330	<330	<330	<330	<330	<330	<mdl< td=""></mdl<>
B17-1 B17-3	7/25/1995 7/25/1995	0.0-2.0	<10 <10	<10 <10	<10 <10	<10 <10	<10 <10	<10 <10	<30 <30	<mdl< td=""><td><330</td><td><330</td><td><330</td><td><330 <330</td><td><330 <330</td><td><330 <330</td><td><330</td><td><330 <330</td><td><330 <330</td><td><330</td><td><330</td><td><330</td><td><mdl< td=""></mdl<></td></mdl<>	<330	<330	<330	<330 <330	<330 <330	<330 <330	<330	<330 <330	<330 <330	<330	<330	<330	<mdl< td=""></mdl<>
B18-1	7/25/1995	4.0-6.0 0.0-2.0	<10	<10	<10	<10	<10	<10	<30	<mdl< td=""><td><330 <330</td><td><330 <330</td><td><330 <330</td><td><330</td><td><330</td><td><330</td><td><330 <330</td><td><330</td><td><330</td><td><330 <330</td><td><330 <330</td><td><330 <330</td><td><mdl< td=""></mdl<></td></mdl<>	<330 <330	<330 <330	<330 <330	<330	<330	<330	<330 <330	<330	<330	<330 <330	<330 <330	<330 <330	<mdl< td=""></mdl<>
B18-3	7/25/1995	4.0-6.0	<10	<10	<10	<10	<10	<10	<30	<mdl< td=""><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><mdl< td=""></mdl<></td></mdl<>	<330	<330	<330	<330	<330	<330	<330	<330	<330	<330	<330	<330	<mdl< td=""></mdl<>
B19-2	7/26/1995	2.0-4.0	<10	<10	<10	<10	<10	<10	<30	<mdl< td=""><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><mdl< td=""></mdl<></td></mdl<>	<330	<330	<330	<330	<330	<330	<330	<330	<330	<330	<330	<330	<mdl< td=""></mdl<>
B19-3	7/26/1995	4.0-6.0	75	<10	<10	<10	50	<10	<30	<mdl< td=""><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><mdl< td=""></mdl<></td></mdl<>	<330	<330	<330	<330	<330	<330	<330	<330	<330	<330	<330	<330	<mdl< td=""></mdl<>
B20-1	7/26/1995	0.0-2.0	<10	<10	13	13	<10	24	<30	<mdl< td=""><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><mdl< td=""></mdl<></td></mdl<>	<330	<330	<330	<330	<330	<330	<330	<330	<330	<330	<330	<330	<mdl< td=""></mdl<>
B20-4 B21-2	7/26/1995	6.0-8.0	<10	<10	<10	<10	<10	<10	<30	<mdl< td=""><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><mdl< td=""></mdl<></td></mdl<>	<330	<330	<330	<330	<330	<330	<330	<330	<330	<330	<330	<330	<mdl< td=""></mdl<>
B21-2 B21-3	7/27/1995 7/27/1995	4.0-6.0 6.0-8.0	<10 <10	<10 <10	<10 <10	<10 <10	<10 <10	<10 <10	<30 <30	<mdl< td=""><td><330 <330</td><td><330 <330</td><td><330 <330</td><td><330 <330</td><td><330 <330</td><td><330 <330</td><td><330 <330</td><td><330 <330</td><td><330 <330</td><td><330 <330</td><td><330 <330</td><td><330 <330</td><td><mdl< td=""></mdl<></td></mdl<>	<330 <330	<330 <330	<330 <330	<330 <330	<330 <330	<330 <330	<330 <330	<330 <330	<330 <330	<330 <330	<330 <330	<330 <330	<mdl< td=""></mdl<>
		oil Cleanup Criteria	ļ	Į.	CI	eanup Crite	eria Requir	ements for Re	sponse Ac	tivity (R 2	99.1 - R 2	99.50)	1					<u> </u>			1		
	Jenerit 3	O.Gainap Oliteria	2 dll	1.6310	ai dilu		arrant	Residential		unu 3	2. Coming		. wit 41			y L			, _v.i				
Drinking Water Protection	on (Res DWP)		18,000	1,500	100	16,000	4,000	100	5,600	Various	3.00E+05	NLL	NLL	NLL	NLL	NLL	NLL	7.30E+05	3.90E+05	35,000	56,000	4.80E+05	Various
Groundwater Surface W			15,000	360	1,200 {X}	5,400	1,800	4,000 {X}	820	Various	8,700	NLL	NLL	NLL	NLL	NLL	NLL	5,500	5,300	730	2,100	ID	Various
Soil Volatilization to Inde	oor Air Inhalation (Res S irce Volatile Soil Inhalation		2.30E+05 2.10E+06	87,000 7.20E+05	11,000 1.70E+05	3.3E+05 {C} 2.80E+06	2.50E+05 3.80E+06	1,000 11,000	6.3E+06 {C} 4.60E+07	Various Various	1.9E+08 8.1E+07	NLV NLV	NLV NLV	ID ID	NLV NLV	NLV NLV	ID ID	1.0E+9 {D} 7.40E+08	5.8E+08 1.3E+08	2.50E+05 3.0E+05	2.8E+06 1.6E+05	1.0E+9 {D} 6.5E+08	Various Various
Ambient Air Finite VSI fo		· ,	5.90E+06	1.00E+06	4.80E+05	5.10E+06	1.20E+07	25,000	6.10E+07	Various	8.1E+07	NLV	NLV	ID	NLV	NLV	ID	7.4E+08	1.3E+08	3.0E+05	1.6E+05	6.5E+08	Various
	or 2 Meter Source Thickn		1.40E+07	2.20E+06	1.1E+06	1.20E+07	2.80E+07	57,000	1.30E+08	Various	8.1E+07	NLV	NLV	ID	NLV	NLV	ID	7.4E+08	1.3E+08	3.0E+05	1.6E+05	6.5E+08	Various
Ambient Air Particulate Soil Inhalation (Res PSI)			3.30E+10	1.00E+10	2.7E+09	2.70E+10	6.70E+10	1.30E+08	2.90E+11	Various	1.4E+10	1D	1.5E+06	ID 20.000	ID 2 DOE+DE	8.0E+08	ID 2 DE+OR	9.3E+09	9.3E+09	2.0E+08	6.7E+06	6.7E+09	Various
Direct Contact (Res DC)			2.7E+07 {C}	2.2E+07 {C}	2.0E+05 {C}	5.0E+07 {C}	5.0E+08 {C}	5.0E+5 {C,DD} Nonresidenti	4.1E+08 {C} ial (µg/Kg)	Various	4.1E+07	20,000	2,000	20,000	2.00E+05	2.5E+06	2.0E+06	4.6E+07	2.7E+07	1.6E+07	1.6E+06	2.9E+07	Various
Drinking Water Protection	on (Nonres DWP)		50,000	1,500	100	16,000	4,000	100	5,600	Various	8.80E+05	NLL	NLL	NLL	NLL	NLL	NLL	7.30E+05	8.90E+05	1.00E+05	1.60E+05	4.80E+05	Various
	oor Air Inhalation (Nonre		4.30E+05	4.6E+05 {C}	21,000	6.1E+05 {C}	4.60E+05	1,900	1.2E+07 {C}	Various	3.5E+08	NLV	NLV	ID	NLV	NLV	ID	1.0E+9 {D}	1.0E+9 {D}	4.70E+05	5.1E+06	1.0E+9 {D}	Various
Ambient Air Infinite Sou Ambient Air Finite VSI fo	rce Volatile Soil Inhalation or 5 Meter Source Thickn		2.50E+06 6.00E+06	2.40E+06 3.10E+06	2.10E+05 4.90E+05	3.30E+06 3.60E+07	4.50E+06 1.50E+07	14,000 25,000	5.40E+07 6.50E+07	Various Various	9.7E+07 9.7E+07	NLV NLV	NLV NLV	ID ID	NLV NLV	NLV NLV	ID ID	8.9E+08 8.8E+08	1.5E+08 1.5E+08	3.50E+05 3.50E+05	1.90E+05 1.90E+05	7.8E+08 7.8E+08	Various Various
Ambient Air Finite VSI fo			1.40E+07	6.50E+06	1.1E+06	3.60E+07	3.10E+07	58,000	1.30E+08	Various	9.7E+07	NLV	NLV	ID	NLV	NLV	ID	8.8E+08	1.5E+08	3.50E+05	1.90E+05	7.8E+08	Various
Ambient Air Particulate	Soil Inhalation (Nonres F		1.50E+10	1.30E+10	1.2E+09	1.20E+10	2.90E+10	5.90E+07	1.30E+11	Various	6.2E+09	ID	1.9E+06	ID	ID	3.5E+08	ID	4.1E+09	4.1E+09	8.8E+07	2.9E+06	2.9E+09	Various
Direct Contact (Nonres I	DC)		8.7E+07 {C}	7.1E+07 {C}	9.3E+05 {C}	1.6E+08 {C}	1.0E+09 {C}	6.6E+05 {C,DD} Screening Lev	1.0E+09 {C} rels (µg/Kg	Various	1.3E+08	80,000	8,000	80,000	8.00E+05	7.0E+06	8.0E+06	1.3E+08	8.7E+07	5.2E+07	5.2E+06	8.4E+07	Various
Soil Saturation Concent	8.90E+05	1.40E+05	88,000	2.50E+05	4.60E+05	5.00E+05	1.50E+05	Various	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Various		

Applicable Criterion/RBSL Exceeded
Soil boring was advanced on west-adjoining property identified as 400 East Ten Mile Road, Pleasant Ridge, MI 48069

BOLD
Value Exceeds Applicable Criterion/RBSL
bgs
Below Ground Surface (feet)
Laboratory Method Detection Limit
NAINLI/ID
NLI/NLI/NLI
Not Applicable/Not Listed/Insufficient Data
Not Likely to Leach/Not Likely to Volatilize

TABLE 2 ASTI MARCH 1995 AND INTEGRATED JULY 1995 SUMMARY OF SOIL ANALYTICAL RESULTS PCBS AND METALS 404 EAST 10 MILE ROAD, PLEASANT RIDGE, MICHIGAN PM PROJECT # 01-5706-1-0002

							# 01-5706-1-									
POLYC	CHLORINATED BIPHENYL AND METALS	S (PCBs)	PCBs	Aluminum	Arsenic	Barium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Nickel (B)	Selenium	Silver	Zinc
	(µg/Kg)			<			0	O				_	Z	0)		
Chemic	al Abstract Service Numb	er (CAS#)	1336363	7429905	7440382	7440393	7440439	16065831	7440484	7440508	7439921	7439976	7440020	7782492	7440224	7440666
Sample ID	Sample Date	Sample Depth (feet bgs)	PCBs		•		•			Metals						
		(leet bys)				ASTI M	arch 1995									
B1-1	3/13/1995	2.0-4.0	ND	3.6E+06	50,000	73,000	360	7,400	5,400	4,400	4,400	<100	4,000	700	<50	25,000
B3-1	3/13/1995	0.0-2.0	ND	5.9E+06	67,000	88,000	90	9,400	7,400	8,800	8,200	<100	18,000	<50	<50	35,000
B7-4	3/14/1995	6.0-8.0	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
B7-6	3/14/1995	10.0-12.0	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
B8-3	3/14/1995	4.0-6.0	570	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
B8-6	3/14/1995	10.0-12.0	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
B9-5	3/14/1995	8.0-10.0	ND	NA	NA NA	NA	NA	NA	NA NA	NA NA	NA.	NA NA	NA	NA	NA	NA
B9-7	3/14/1995	12.0-14.0	ND	NA	NA	NA	NA	NA	NA	NA 	NA	NA 	NA 	NA	NA	NA
B10-4	3/14/1995	6.0-8.0	ND	NA 	NA	NA 	NA	NA	NA 	NA 	NA 	NA 	NA 	NA 	NA	NA
B10-6	3/14/1995	10.0-12.0	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
B11-5	3/14/1995	8.0-10.0	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
B11-7	3/14/1995	12.0-14.0	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
B12-5	3/14/1995	8.0-10.0	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
B12-7	3/14/1995	12.0-14.0	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
B13-4	3/14/1995	6.0-8.0	430	2.1E+06	1,300	57,000	100	8,500	13,000	5,700	9,800	<100	4,100	<500	<500	34,000
B13-5	3/14/1995	8.0-10.0	ND	8.3E+06	21,000	120,000	80	13,000	7,400	12,000	7,400	<100	15,000	<500	<500	49,000
HB1	March 1995	0.0-3.0	1,700	2.5E+06	8,000	230,000	1,100	17,000	25,000	12,000	57,000	<100	5,300	1,200	<500	73,000
HB2	March 1995	0.0-3.0	12,000	1.4E+06	7,700	290,000	850	12,000	50,000	10,000	33,000	<100	4,600	<500	<500	63,000
HB3	March 1995	0.0-3.0	7,800	2.4E+06	7,300	100,000	<50	17,000	29,000	9,000	30,000	<100	3,200	<500	<500	54,000
HB4	March 1995	0.0-3.0	14,000	4.0E+06	4,400	310,000	21	31,000	3,500	10,000	40,000	<100	1,300	600	<500	55,000
HB5	March 1995	0.0-3.0	390	3.2E+06	7,500	50,000	1,200	11,000	190,000	9,700	21,000	<100	4,900	1,000	<500	39,000
HB6	March 1995	0.0-3.0	17,000	5.3E+06	19,000	68,000	250	10,000	130,000	11,000	19,000	<100	8,200	<500	<500	65,000
HB7	March 1995	0.0-3.0	930	2.3E+06	6,500	36,000	100	6,400	73,000	5,500	13,000	<100	11,000	<500	<500	57,000
HB8	March 1995	0.0-3.0	860	3.4E+06	5,000	64,000	140	9,000	54,000	11,000	23,000	<100	4,200	<500	<500	50,000
HB9	March 1995	0.0-3.0	390	3.8E+06	6,500	60,000	140	12,000	18,000	9,100	<1,000	<100	7,000	<500	<500	51,000
BG1		5.0-7.0	1	1		-	<50			•				<500	<500	
	March 1995		NA	1.6E+06	2,700	42,000		4,300	1,800	<2,000	1,600	<100	2,200			19,000
BG2	March 1995	5.0-7.0	NA	1.7E+06	3,700	43,000	60	5,200	2,800	4,400	2,000	<100	3,200	<500	<500	20,000
BG3	March 1995	5.0-7.0	NA	1.7E+06	6,000	210,000	<50	5,400	2,900	10,000	1,500	<100	3,700	120,000	<500	24,000
BG4	March 1995	5.0-7.0	NA	1.7E+06	5,700	32,000	110	6,100	2,500	<2,000	<1,000	<100	3,000	<500	<500	17,000
B14-1	7/25/1995	0.0-2.0	7,400	NA	6,500	24,000	170	6,200	NA	4,900	13,000	100	NA	<500	<500	36,000
B14-4	7/25/1995					·										
		6.0-8.0	<330	NA 	4,300	13,000	80	3,500	NA	2,400	1,100	<100	NA 	<500	<500	18,000
B15-1	7/25/1995	0.0-2.0	<330	NA	15,000	28,000	190	8,000	NA	6,900	7,500	<100	NA	<500	<500	39,000
B15-4	7/25/1995	6.0-8.0	<330	NA	4,600	20,000	130	5,800	NA	3,500	1,000	<100	NA	<500	<500	22,000
B16-1	7/25/1995	0.0-2.0	<330	NA	9,100	53,000	130	8,300	NA	6,200	7,400	<100	NA	<500	<500	34,000
B16-3	7/25/1995	4.0-6.0	<330	NA	36,000	130,000	180	7,900	NA	3,000	<1,000	300	NA	<500	<500	25,000
B17-1	7/25/1995	0.0-2.0	<330	NA	5,500	19,000	110	5,200	NA	4,000	7,800	<100	NA	<500	<500	30,000
B17-3	7/25/1995	4.0-6.0	<330	NA	3,900	14,000	<50	3,500	NA	2,000	<1,000	<100	NA	<500	<500	19,000
B18-1	7/25/1995	0.0-2.0	440	NA	9,400	52,000	190	7,200	NA	16,000	23,000	<100	NA	<500	<500	51,000
B18-3	7/25/1995	4.0-6.0	<330	NA	5,600	25,000	70	5,700	NA	4,000	1,300	<100	NA	<500	<500	24,000
B19-2	7/26/1995	2.0-4.0	<330	NA	7,500	21,000	<50	5,600	NA	<1,000	<1,000	<100	NA	<500	<500	22,000
B19-3	7/26/1995	4.0-6.0	<330	NA	4,900	32,000	110	4,600	NA	3,300	1,700	<100	NA	<500	<500	51,000
B20-1	7/26/1995	0.0-2.0	<330	NA	21,000	90,000	1,200	9,000	NA	17,000	57,000	<100	NA	1,400	<500	240,000
B20-4	7/26/1995	6.0-8.0	<330	NA	4,800	24,000	70	4,800	NA	2,000	<1,000	<100	NA	<500	<500	20,000
B21-2	7/27/1995	4.0-6.0	NA	NA	27,000	55,000	160	7,800	NA	3,000	5,400	<100	NA	<500	<500	38,000
B21-3	7/27/1995	6.0-8.0	NA	NA	38,000	33,000	<50	5,200	NA	<1,000	<1,000	<100	NA	<500	<500	23,000
		L	1	Cleanup C	riteria Regui	rements for	Response Ac	tivity (R 299.	1 - R 299.50)	l		<u>l</u>			l	-
		o Criteria Tables 2 and 3: DEQ Guidance Document		and Non-Res	idential Part	201 Generic	Cleanup Crit	eria and Scr	eening Level	s/Part 213 Ri				r 30, 2013		
						Residen	tial (µg/Kg)									
	kground Levels (SDBLs)		NA	6.90E+06	5,800	75,000	1,200	18,000	6,800	32,000	21,000	130	20,000	410	1,000	47,000
Drinking Water Protect	tion (Res DWP) Water Interface Protection	(GSIP)	NLL NLL	1,000 NA	4,600 4,600	1.30E+06 8.2E+05 {G}	6,000 5,600 {G,X}	30,000 3,300	800 2,000	5.80E+06 1.2E+05 {G}	7.00E+05 5.2E+06 {G,X}	1,700 50 {M}; 1.2	100,000 1.2E+05 (G)	4,000 400	4,500 100 {M}; 27	2.40E+06 2.7E+05 {G}
	door Air Inhalation (Res S		3.0E+06	NLV	4,600 NLV	8.2E+05 (G) NLV	5,600 {G,X}	3,300 NLV	NLV	1.2E+05 {G} NLV	NLV	48,000	NLV	NLV	NLV	2.7E+05 {G} NLV
	urce Volatile Soil Inhalatio		2.40E+05	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	52,000	NLV	NLV	NLV	NLV
Ambient Air Finite VSI for 5 Meter Source Thickness Ambient Air Finite VSI for 2 Meter Source Thickness			7.9E+06 7.9E+06	NLV NLV	NLV NLV	NLV NLV	NLV NLV	NLV NLV	NLV NLV	NLV NLV	NLV NLV	52,000 52,000	NLV NLV	NLV NLV	NLV NLV	NLV NLV
	e Soil Inhalation (Res PSI)		7.9E+06 5.2E+06	ID	7.20E+05	3.30E+08	1.70E+06	2.60E+05	1.30E+07	1.30E+08	1.00E+08	52,000 2.00E+07	1.30E+07	1.30E+08	6.70E+06	ID ID
Direct Contact (Res DC			{T}	5.0E+07 (DD)	7,600	3.70E+07	5.50E+05	2.50E+06	2.60E+06	2.00E+07	4.00E+05	1.60E+05	4.00E+07	2.60E+06	2.50E+06	1.70E+08
Deinbie = W-4 5	tion (Norman District						ential (µg/Kg)		0.555		700-					
Drinking Water Protect Soil Volatilization to Inc	tion (Nonres DWP) door Air Inhalation (Nonre	s SVII)	NLL 1.6E+07	1,000 NLV	4,600 NLV	1.30E+06 NLV	6,000 NLV	30,000 NLV	2,000 NLV	5.80E+06 NLV	7.00E+05 NLV	1,700 89,000	100,000 NLV	4,000 NLV	4,500 NLV	5.00E+06 NLV
	urce Volatile Soil Inhalatio	•	8.10E+05	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	62,000	NLV	NLV	NLV	NLV
	for 5 Meter Source Thickn		2.8E+07	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	62,000	NLV	NLV	NLV	NLV
	for 2 Meter Source Thickn e Soil Inhalation (Nonres P		2.8E+07 6.5E+06	NLV ID	NLV 9.10E+05	NLV 1.50E+08	NLV 2.20E+06	NLV 2.40E+05	NLV 5.90E+06	NLV 5.90E+07	NLV 4.40E+07	62,000 8.80E+06	NLV 1.60E+07	NLV 5.90E+07	NLV 2.90E+06	NLV ID
Direct Contact (Nonres			(T)	3.7E+08 (DD)	37,000	1.30E+08	2.10E+06	9.20E+06	9.00E+06	7.30E+07	9.0E+5 (DD)	5.80E+05	1.50E+08	9.60E+06	9.00E+06	6.30E+08
0.110.1		(0					Levels (μg/Κο		1	1		1			1	
Soil Saturation Concer	ntration Screening Levels	(Csat)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Applicable Criterion/RBSL Exceeded

Soil boring was advanced on west-adjoining property identified as 400 East Ten Mile Road, Pleasant Ridge, MI 48069

BOLD Value Exceeds Applicable Criterion/RBSL bgs Below Ground Surface (feet)

MDL Laboratory Method Detection Limit

NA Not Applicable

NLL Not Likely to Leach

{G} Metal GSIP Criteria for Surface Water Not Protected for Drinking Water Use based on 269 mg/L CaCO3 Hardness: Station ID 500011, Red Run, near Warren, MI.

(T) Refer to the Toxic Substance Control Act (TSCA), 40 CFR 761, Subparts D and G, as amended, to determine the applicability of TSCA cleanup standards. Alternatives to compliance with the standards listed below are possible under Subpart D. New Releases may be subject to the standards identified in Subpart

 $G. \ \ Use \ Part \ 201 \ soil \ direct \ contact \ criteria \ in \ the \ table \ below \ where \ TSCA \ standards \ are \ not \ applicable.$

LAND USE CATEGORY	TSCA, Subpart D	Part 201
Residential	1,000 µg/Kg, or	4,000 μg/Kg
Nonresidential	10.000 ug/Kg if capped	16 000 ug/Kg

TABLE 3

ASTI MARCH 1995 AND INTEGRATED JULY 1995 SUMMARY OF GROUNDWATER ANALYTICAL RESULTS VOCs, PNAS, AND MICHIGAN TEN METALS 404 EAST 10 MILE ROAD, PLEASANT RIDGE, MICHIGAN

PM PROJECT # 01-5706-1-0002

POLYNUC	ILE ORGANIC COMPOUNDS (LEAR AROMATIC COMPOUNI AND MICHIGAN TEN METALS (µg/L)	DS (PNAs),	Benzene	1,1-Dichloroethane	1,2-Dichloroethane	Ethylbenzene	Toluene	1,1,1-Trichloroethane	Trichloroethene	Xylenes	Other VOCs	PNAs	Arsenic	Barium	Cadmium	Chromium	Copper	Lead	Mercury	Selenium	Silver	Zinc
Chem	ical Abstract Service Number	· · ·	71432	75343	107062	100414	108883	71556	79016	1330207	Various	Various	7440382	7440393	7440439	16065831	7440508	7439921	7439976	7782492	7440224	7440666
Sample ID	Sample Date	Screen Depth (feet bgs)					VOCs					PNAs					Michigan	Ten Metals				
								ASTI	March 1995			•	•									
MW-1	3/13/1995	7.00-12.00	13	<1	<1	16	1,200	9	<1	85	<mdl< td=""><td><mdl< td=""><td><500</td><td>90</td><td><50</td><td><50</td><td><50</td><td><50</td><td><2</td><td><500</td><td><50</td><td>140</td></mdl<></td></mdl<>	<mdl< td=""><td><500</td><td>90</td><td><50</td><td><50</td><td><50</td><td><50</td><td><2</td><td><500</td><td><50</td><td>140</td></mdl<>	<500	90	<50	<50	<50	<50	<2	<500	<50	140
MW-2	3/15/1995	5.00-10.00	<1	<1	<1	<1	<1	29	<1	<3	<mdl< td=""><td><mdl< td=""><td><500</td><td><50</td><td><50</td><td><50</td><td><50</td><td><50</td><td><2</td><td><500</td><td><50</td><td>70</td></mdl<></td></mdl<>	<mdl< td=""><td><500</td><td><50</td><td><50</td><td><50</td><td><50</td><td><50</td><td><2</td><td><500</td><td><50</td><td>70</td></mdl<>	<500	<50	<50	<50	<50	<50	<2	<500	<50	70
MW-3	3/14/1995	5.00-10.00	<1	<1	<1	<1	<1	10	<1	<3	<mdl< td=""><td><mdl< td=""><td><500</td><td><50</td><td><50</td><td><50</td><td><50</td><td><50</td><td><2</td><td><500</td><td><50</td><td><50</td></mdl<></td></mdl<>	<mdl< td=""><td><500</td><td><50</td><td><50</td><td><50</td><td><50</td><td><50</td><td><2</td><td><500</td><td><50</td><td><50</td></mdl<>	<500	<50	<50	<50	<50	<50	<2	<500	<50	<50
			-		-			IE A	ugust 1995			-	-									
MW-1R	July 1995	7.00-12.00	<1	5	<1	12	2,500	<1	<1	62	<mdl< td=""><td>NA</td><td>NA</td><td>NA</td><td>NA</td><td>NA</td><td>NA</td><td>NA</td><td>NA</td><td>NA</td><td>NA</td><td>NA</td></mdl<>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-4	7/25/1995	7.00-12.00	<1	<1	<1	<1	<1	42	<1	<1	<mdl< td=""><td>NA</td><td>7</td><td><200</td><td><0.2</td><td><50</td><td><20</td><td><3</td><td><0.2</td><td><5</td><td><0.5</td><td>60</td></mdl<>	NA	7	<200	<0.2	<50	<20	<3	<0.2	<5	<0.5	60
MW-5	7/25/1995	2.00-7.00	<1	35	<1	<1	<1	8	<1	<1	<mdl< td=""><td>NA</td><td>NA</td><td>NA</td><td>NA</td><td>NA</td><td>NA</td><td>NA</td><td>NA</td><td>NA</td><td>NA</td><td>NA</td></mdl<>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-6	7/25/1995	2.50-7.50	<1	6	<1	<1	<1	31	<1	<1	<mdl< td=""><td>NA</td><td>7</td><td>400</td><td>0.6</td><td><50</td><td>40</td><td>5</td><td><0.2</td><td><5</td><td><0.5</td><td>580</td></mdl<>	NA	7	400	0.6	<50	40	5	<0.2	<5	<0.5	580
MW-8	7/26/1995	0.00-1.50	<1	6	<1	<1	<1	43	<1	<1	<mdl< td=""><td>NA</td><td>NA</td><td>NA</td><td>NA</td><td>NA</td><td>NA</td><td>NA</td><td>NA</td><td>NA</td><td>NA</td><td>NA</td></mdl<>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-9	7/26/1995	5.00-10.00	<1	8	9	<1	<1	39	15	<1	<mdl< td=""><td>NA</td><td>7</td><td><200</td><td><0.2</td><td><50</td><td>20</td><td><3</td><td><0.2</td><td><5</td><td><0.5</td><td>100</td></mdl<>	NA	7	<200	<0.2	<50	20	<3	<0.2	<5	<0.5	100
MW-10	7/27/1995	5.00-10.00	<1	<1	<1	<1	<1	<1	<1	<1	<mdl< td=""><td>NA</td><td>9</td><td><200</td><td><0.2</td><td><50</td><td><20</td><td><3</td><td><0.2</td><td><5</td><td><0.5</td><td>50</td></mdl<>	NA	9	<200	<0.2	<50	<20	<3	<0.2	<5	<0.5	50

Cleanup Criteria Requirements for Response Activity (R 299.1 - R 299.50)

Generic Groundwater Cleanup Criteria Table 1: Residential and Non-Residential Part 201 Generic Cleanup Criteria and

Screening Levels/Part 213 Risk-Based Screening Levels, December 30, 2013

MDEQ Guidance Document For The Vapor Intrusion Pathway, Policy and Procedure Number: 09-017, Appendix D Vapor Intrusion Screening Values, May 2013

					F	esidential/N	onresidenti	ial (µg/L)												
Residential Drinking Water (Res DW)	5.0 {A}	880	5.0 {A}	74 {E}	790 {E}	200 {A}	5.0 {A}	280 {E}	Various	Various	10 {A}	2,000 {A}	5.0 {A}	100 {A}	1,000 {E}	4.0 {L}	2.0 {A}	50 {A}	34	2,400
Nonresidential Drinking Water (Nonres DW)	5.0 {A}	2,500	5.0 {A}	74 {E}	790 {E}	200 {A}	5.0 {A}	280 {E}	Various	Various	10 {A}	2,000 {A}	5.0 {A}	100 {A}	1,000 {E}	4.0 {L}	2.0 {A}	50 {A}	98	5,000 {E}
Groundwater Surface Water Interface (GSI)	200 {X}	740	360 {X}	18	270	89	200 {X}	41	Various	Various	10	1,300 {G}	4.6 {G,X}	11	21 {G}	30 {G,X}	0.0013	5.0	0.2 {M}; 0.06	270 {G}
Residential Groundwater Volatilization to Indoor Air Inhalation (Res GVII) ²	5,600	1.00E+06	9,600	1.10E+05	5.3E+5 {S}	6.60E+05	2,200	1.9E+5 {S}	Various	Various	NLV	NLV	NLV	NLV	NLV	NLV	56 (S)	NLV	NLV	NLV
Nonresidential Groundwater Volatilizationto Indoor Air Inhalation (Nonres GVII) ²	35,000	2.30E+06	59,000	1.7E+5 {S}	5.3E+5 {S}	1.3E+6 {S}	4,900	1.9E+5 {S}	Various	Various	NLV	NLV	NLV	NLV	NLV	NLV	56 (S)	NLV	NLV	NLV
						Screenin	ıg Levels (μ	g/L)												
Residential Groundwater Vapor Intrusion Screening Levels (GW _{VI-res}) ³	27	4,300	41	700	36,000	17,000	9.8	10,000	Various	Various	NL	NL	NL	NL	NL	NL	ID	NL	NL	NL
Nonresidential Groundwater Vapor Intrusion Screening Levels (GW _{VI-nr}) ³	140	18,000	210	2600	1.50E+05	71000	41	10,000	Various	Various	NL	NL	NL	NL	NL	NL	ID	NL	NL	NL
Water Solubility	1.75E+06	5.06E+06	8.52E+06	1.69E+05	5.26E+05	1.33E+06	1.10E+06	1.86E+05	Various	Various	NA	NA	NA	NA	NA	NA	56	NA	NA	NA
Flammability and Explosivity Screening Level	68,000	3.80E+05	2.50E+06	43,000	61,000	ID	ID	70,000	Various	Various	ID	ID	ID	ID	ID	ID	ID	ID	ID	ID

Applicable Criteria/RBSL Exceeded

Temporary monitoring well was installed on west-adjoining property identified as 400 East Ten Mile Road, Pleasant Ridge, MI 48069

BOLD Value Exceeds Applicable Criteria

bgs Below Ground Surface (feet)

MDL Laboratory Method Detection Limit

¹ Rule 323.1057 of Part 4 Water Quality Standards

² Tier 1 GVII Criteria based on 3 meter (or greater) groundwater depth

³ (2013 Vapor Intrusion Guidance) Screening Levels based on depth to groundwater less than 1.5 meters and not in contact with building foundation

⁴ (2013 Vapor Intrusion Guidance) Screening levels based on groundwater in contact with the building foundation or within a sump

⁵ 1,2,3-Trimethylbenzene RBSLs based on the more restrictive of 1,2,4-trimethylbenzene and 1,3,5-trimethylbenzene.

NA/NL/ID Not Applicable/Not Listed/Insufficient Data

NLL/NLV Not Likely to Leach/Not Likely to Volatilize

(G) Metal GSIP Criteria for Surface Water Not Protected for Drinking Water Use based on 269 mg/L CaCO3 Hardness: Station ID 500011, Red Run, near Warren, MI.

TABLE 4 PM JULY 2015 SUMMARY OF SOIL ANALYTICAL RESULTS

VOCS AND PNAS 404 EAST 10 MILE ROAD, PLEASANT RIDGE, MICHIGAN PM PROJECT # 01-5706-1-0002

									PIVI	PROJECT #	01-5/06-1-0	002												
POLYNUCLEA	ORGANIC COMPOUNDS AR AROMATIC HYDROCA (µg/Kg)	RBONS (PNAs)	1,4-Dichlorobenzene	1,1-Dichloroethane	1,2-Dichloropropane	2-Methylnaphthalene	Naphthalene	Tetrachloroethene	Toluene	1,1,1-Trichloroethane	Trichloroethene	1,2,3-Trimethylbenzene ¹	1,2,4-Trimethylbenzene	Xylenes	Other VOCs	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Chrysene	Fluoranthene	Indeno(1,2,3-cd)pyrene	Phenanthrene	Pyrene	Other PNAs
Chemica	al Abstract Service Numb	, ,	106467	75343	78875	91576	91203	127184	108883	71556	79016	526738	95636	1330207	Various	56553	50328	205992	218019	206440	193395	85018	129000	Various
Sample ID	Sample Date	Sample Depth (feet bgs)		_					VOCs											PNAs				
SB-1	7/2/2015	2.0-3.0	<50	<50	<50	<250	<250	<50	<50	390	68	<50	<50	<150	<mdl< td=""><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><mdl< td=""></mdl<></td></mdl<>	<330	<330	<330	<330	<330	<330	<330	<330	<mdl< td=""></mdl<>
SB-2	7/2/2015	2.0-3.0	<1,000	<1,000	<1,000	<5,000	<5,000	<1,000	<1,000	79,000	<1,000	<1,000	<1,000	<3,000	<mdl< td=""><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><mdl< td=""></mdl<></td></mdl<>	<330	<330	<330	<330	<330	<330	<330	<330	<mdl< td=""></mdl<>
SB-3	7/2/2015	2.0-3.0	<50	<50	<50	<250	<250	<50	<50	<50	<50	<50	<50	<150	<mdl< td=""><td><330</td><td>340</td><td>440</td><td>340</td><td>740</td><td><330</td><td><330</td><td>590</td><td><mdl< td=""></mdl<></td></mdl<>	<330	340	440	340	740	<330	<330	590	<mdl< td=""></mdl<>
SB-4	7/2/2015	4.0-5.0	<50	<50	<50	<250	<250	<50	<50	<50	<50	<50	<50	<150	<mdl< td=""><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><mdl< td=""></mdl<></td></mdl<>	<330	<330	<330	<330	<330	<330	<330	<330	<mdl< td=""></mdl<>
SB-5	7/2/2015	4.0-5.0	<50	<50	<50	<250	<250	<50	<50	<50	<50	<50	<50	<150	<mdl< td=""><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><mdl< td=""></mdl<></td></mdl<>	<330	<330	<330	<330	<330	<330	<330	<330	<mdl< td=""></mdl<>
SB-5	7/2/2015	9.0-10.0	<50	<50	<50	<250	<250	<50	<50	<50	<50	<50	<50	<150	<mdl< td=""><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><mdl< td=""></mdl<></td></mdl<>	<330	<330	<330	<330	<330	<330	<330	<330	<mdl< td=""></mdl<>
SB-6	7/2/2015	1.0-2.0	<250	<250	<250	<1,250	<1,250	<250	440	8,100	<250	<250	<250	<750	<mdl< td=""><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><mdl< td=""></mdl<></td></mdl<>	<330	<330	<330	<330	<330	<330	<330	<330	<mdl< td=""></mdl<>
SB-6	7/2/2015	4.0-5.0	<50	<50	<50	<250	<250	<50	<50	<50	<50	<50	<50	<150	<mdl< td=""><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><mdl< td=""></mdl<></td></mdl<>	<330	<330	<330	<330	<330	<330	<330	<330	<mdl< td=""></mdl<>
SB-7	7/2/2015	2.0-3.0	<50	<50	<50	<250	<250	<50	<50	<50	<50	<50	<50	<150	<mdl< td=""><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><mdl< td=""></mdl<></td></mdl<>	<330	<330	<330	<330	<330	<330	<330	<330	<mdl< td=""></mdl<>
SB-8	7/2/2015	1.0-2.0	<50	<50	<50	<250	<250	<50	<50	<50	<50	<50	<50	<150	<mdl< td=""><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><mdl< td=""></mdl<></td></mdl<>	<330	<330	<330	<330	<330	<330	<330	<330	<mdl< td=""></mdl<>
SB-9	7/2/2015	2.0-3.0	<50	<50	<50	<250	<250	<50	<50	<50	<50	<50	<50	<150	<mdl< td=""><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><mdl< td=""></mdl<></td></mdl<>	<330	<330	<330	<330	<330	<330	<330	<330	<mdl< td=""></mdl<>
SB-10	7/2/2015	2.0-3.0	<50	<50	<50	<250	<250	<50	<50	<50	<50	<50	<50	<150	<mdl< td=""><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><mdl< td=""></mdl<></td></mdl<>	<330	<330	<330	<330	<330	<330	<330	<330	<mdl< td=""></mdl<>
SB-11	7/2/2015	1.0-2.0	<50	<50	<50	<250	<250	<50	<50	<50	<50	<50	<50	<150	<mdl< td=""><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><mdl< td=""></mdl<></td></mdl<>	<330	<330	<330	<330	<330	<330	<330	<330	<mdl< td=""></mdl<>
SB-12	7/2/2015	4.0-5.0	<50	110	<50	<250	<250	63	<50	340	<50	<50	<50	<150	<mdl< td=""><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><mdl< td=""></mdl<></td></mdl<>	<330	<330	<330	<330	<330	<330	<330	<330	<mdl< td=""></mdl<>
SB-13	7/2/2015	1.0-2.0	210	2,300	80	<250	<250	76	<50	900	<50	<50	<50	<150	<mdl< td=""><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><mdl< td=""></mdl<></td></mdl<>	<330	<330	<330	<330	<330	<330	<330	<330	<mdl< td=""></mdl<>
SB-13	7/2/2015	4.0-5.0	<50	<50	<50	<250	<250	<50	<50	260	<50	<50	<50	<150	<mdl< td=""><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><mdl< td=""></mdl<></td></mdl<>	<330	<330	<330	<330	<330	<330	<330	<330	<mdl< td=""></mdl<>
SB-14	7/2/2015	5.0-6.0	<50	<50	<50	420	280	<50	190	430	<50	120	120	460	<mdl< td=""><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><mdl< td=""></mdl<></td></mdl<>	<330	<330	<330	<330	<330	<330	<330	<330	<mdl< td=""></mdl<>
SB-15	7/2/2015	1.0-2.0	<50	<50	<50	<250	<250	<50	<50	<50	<50	<50	<50	<150	<mdl< td=""><td>440</td><td>420</td><td>520</td><td>500</td><td>680</td><td>380</td><td>460</td><td>620</td><td><mdl< td=""></mdl<></td></mdl<>	440	420	520	500	680	380	460	620	<mdl< td=""></mdl<>
SB-16	7/2/2015	2.0-3.0	<50	<50	<50	<250	<250	<50 <50	61	3,000	<50	<50	59	190	<mdl< td=""><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><330</td><td><mdl< td=""></mdl<></td></mdl<>	<330	<330	<330	<330	<330	<330	<330	<330	<mdl< td=""></mdl<>
35-10	11212015	2.0-3.0	\30	\30	\50	\250									\IVIDL	\330	\330	\330	\330	\330	\330	\330	<330	\IVIDL
		C	Generic Soil (idential and	l Non-Reside	ential Part 20		leanup Crite	eria and Scre	ening Level	s/Part 213 R		Screening Le y Values, Ma		ber 30, 2013	3					
										Residentia	ıl (µg/Kg)													
Statewide Default Back	-		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Drinking Water Protecti	ion (Res DWP) Vater Interface Protection	(GSIP)	1,700 360	18,000 15,000	100 4,600 {X}	57,000 4,200	35,000 730	100 1,200 {X}	16,000 5,400	4,000 1,800	100 4,000 {X}	1,800 570	2,100 570	5,600 820	Various Various	NLL NLL	NLL NLL	NLL NLL	NLL NLL	7.30E+05 5,500	NLL NLL	56,000 2,100	4.80E+05	Various Various
	door Air Inhalation (Res S	· · · · · · · · · · · · · · · · · · ·	19,000	2.30E+05	4,000	2.70E+06	2.50E+05	11,000	3.3E+05 {C}	2.50E+05	1,000	2.6E+06 {C}	4.3E+06 {C}	6.3E+06 {C}	Various	NLV	NLV	ID	ID	1.0E+9 {D}	NLV	2.8E+06	1.0E+9 {D}	Various
Ambient Air Infinite Sou	urce Volatile Soil Inhalation	on (Res VSI)	77,000	2.10E+06	25,000	1.50E+06	3.00E+05	1.70E+05	2.80E+06	3.80E+06	11,000	1.60E+07	2.10E+07	4.60E+07	Various	NLV	NLV	ID	ID	7.40E+08	NLV	1.60E+05	6.5E+08	Various
-	for 5 Meter Source Thickr		77,000	5.90E+06	50,000	1.50E+06	3.00E+05	4.80E+05	5.10E+06	1.20E+07	25,000	3.80E+08	5.00E+08	6.10E+07	Various	NLV	NLV	ID	ID	7.4E+08	NLV	1.60E+05	6.5E+08	Various
	for 2 Meter Source Thickr Soil Inhalation (Res PSI)	less	1.10E+05 4.50E+08	1.40E+07 3.30E+10	1.10E+05 2.70E+08	1.50E+06 6.70E+08	3.00E+05 2.00E+08	1.1E+06 2.7E+09	1.20E+07 2.70E+10	2.80E+07 6.70E+10	57,000 1.30E+08	3.80E+08 8.20E+10	5.00E+08 8.20E+10	1.30E+08 2.90E+11	Various Various	NLV ID	NLV 1.5E+06	ID ID	ID ID	7.4E+08 9.3E+09	NLV ID	1.60E+05 6.7E+06	6.5E+08 6.7E+09	Various Various
Direct Contact (Res DC			4.00E+05	2.7E+07 {C}	1.40E+05	8.10E+06	1.60E+07	2.0E+05 {C}	5.0E+07 {C}		5.0E+5 {C,DD}		3.2E+07 {C}	4.1E+08 {C}	Various	20,000	2,000	20,000	2.0E+06	4.6E+07	20,000	1.6E+06	2.9E+07	Various
			-	1	1					Nonresiden	tial (µg/Kg)													
Drinking Water Protecti	ion (Nonres DWP) door Air Inhalation (Nonre	ae SVII)	1,700 1.00E+05	50,000 4.30E+05	100 7,400	1.70E+05 4.90E+06	1.00E+05 4.70E+05	100 21,000	16,000 6.1E+05 {C}	4,000 4.60E+05	100 1,900	1,800 4.8E+06 {C}	2,100 8.0E+06 {C}	5,600 1.2E+07 {C}	Various Various	NLL NLV	NLL NLV	NLL ID	NLL ID	7.30E+05 1.0E+9 {D}	NLL NLV	1.60E+05 5.1E+06	4.80E+05 1.0E+9 {D}	Various Various
-	urce Volatile Soil Inhalation		2.60E+05	4.30E+05 2.50E+06	30,000	4.90E+06 1.80E+06	4.70E+05 3.50E+05	21,000 2.10E+05	3.30E+06	4.50E+05 4.50E+06	14,000	4.8E+06 (C) 1.90E+07	2.50E+07	5.40E+07	Various	NLV NLV	NLV	ID	ID	8.9E+08	NLV	1.90E+05	7.8E+08	Various
-	for 5 Meter Source Thickr		2.60E+05	6.00E+06	51,000	1.80E+06	3.50E+05	4.90E+05	3.60E+07	1.50E+07	25,000	4.60E+08	6.00E+08	6.50E+07	Various	NLV	NLV	ID	ID	8.8E+08	NLV	1.90E+05	7.8E+08	Various
	for 2 Meter Source Thickr		3.40E+05	1.40E+07	1.20E+05	1.80E+06	3.50E+05	1.1E+06	3.60E+07	3.10E+07	58,000	4.60E+08	6.00E+08	1.30E+08	Various	NLV	NLV	ID	ID	8.8E+08	NLV	1.90E+05	7.8E+08	Various
Ambient Air Particulate Direct Contact (Nonres	Soil Inhalation (Nonres F	PSI)	5.70E+08 1.90E+06	1.50E+10	1.20E+08	2.90E+08 2.60E+07	8.80E+07	1.2E+09	1.20E+10	2.90E+10	5.90E+07 6.6E+05 (C.DD)	3.60E+10	3.60E+10	1.30E+11	Various	ID 80,000	1.9E+06 8,000	ID 80,000	ID 8.0E±06	4.1E+09 1.3E+08	ID 80,000	2.9E+06	2.9E+09	Various
Silect Contact (Noilles	55)		1.500=00	8.7E+07 {C}	6.6E+05 {C}	2.002707	5.20E+07	9.3E+05 {C}	1.6E+08 {C}	1.0E+09 (C) Screening Le		1.0E+08 {C}	1.0E+08 {C}	1.0E+09 {C}	Various	50,000	0,000	50,000	8.0E+06	1.32700	00,000	5.2E+06	8.4E+07	Various
Soil Saturation Concen	tration Screening Levels	(Csat)	NA	8.90E+05	5.50E+05	NA	NA	88,000	2.50E+05	4.60E+05	5.00E+05	94,000	1.10E+05	1.50E+05	Various	NA	NA	NA	NA	NA	NA	NA	NA	NA
· · · · · · · · · · · · · · · · · · ·																								

Applicable Criterion/RBSL Exceeded

BOLD Value Exceeds Applicable Criterion/RBSL

bgs Below Ground Surface (feet)

1 1,2,3-Trimethylbenzene RBSLs based on the more restrictive of 1,2,4-trimethylbenzene and 1,3,5-trimethylbenzene.

MDL Laboratory Method Detection Limit

NA/NL/ID Not Applicable/Not Listed/Insufficient Data

NLL/NLV Not Likely to Leach/Not Likely to Volatilize

TABLE 5 PM JULY 2015 SUMMARY OF SOIL ANALYTICAL RESULTS PCBs AND MICHIGAN TEN METALS 404 EAST 10 MILE ROAD, PLEASANT RIDGE, MICHIGAN PM PROJECT # 01-5706-1-0002

	HLORINATED BIPHENYLS ND MICHIGAN TEN META (µg/Kg)	• •	PCBs	Arsenic	Barium	Cadmium	Chromium	Copper	Lead ¹	Mercury	Selenium	Silver	Zinc
Chemica	al Abstract Service Numb	. , ,	1336363	7440382	7440393	7440439	16065831	7440508	7439921	7439976	7782492	7440224	7440666
Sample ID	Sample Date	Sample Depth (feet bgs)	PCBs					Michigan	Ten Metals				
SB-1	7/2/2015	2.0-3.0	11,000,000	1,300	9,900	100	5,700	1,100	3,200	<50	350	<100	14,000
SB-2	7/2/2015	2.0-3.0	5,400	9,500	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-3	7/2/2015	2.0-3.0	23,000	5,500	27,000	370	15,000	12,000	43,000	<50	1,500	<100	56,000
SB-4	7/2/2015	4.0-5.0	<330	2,600	6,800	160	9,200	3,100	2,000	<50	<200	<100	7,100
SB-5	7/2/2015	4.0-5.0	<330	7,400	47,000	420	15,000	14,000	8,300	<50	<200	<100	36,000
SB-5	7/2/2015	9.0-10.0	<330	6,800	50,000	480	15,000	14,000	6,200	<50	330	<100	38,000
SB-6	7/2/2015	1.0-2.0	880,000	4,000	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-6	7/2/2015	4.0-5.0	<330	1,200	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-7	7/2/2015	2.0-3.0	<330	9,200	56,000	470	15,000	14,000	7,700	<50	<200	<100	40,000
SB-8	7/2/2015	1.0-2.0	<330	2,500	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-9	7/2/2015	2.0-3.0	<330	6,300	48,000	430	16,000	21,000	6,600	<50	<200	<100	37,000
SB-10	7/2/2015	2.0-3.0	<330	1,100	11,000	180	6,200	3,700	2,500	<50	<200	<100	12,000
SB-11	7/2/2015	1.0-2.0	<330	9,400	140,000	390	9,300	7,900	6,500	<50	300	<100	28,000
SB-12	7/2/2015	4.0-5.0	<330	5,500	39,000	400	11,000	12,000	7,600	<50	<200	<100	31,000
SB-13	7/2/2015	1.0-2.0	<330	4,600	39,000	410	15,000	16,000	6,500	<50	<200	<100	40,000
SB-13	7/2/2015	4.0-5.0	<330	4,900	71,000	630	23,000	<1,000	9,100	<50	750	100	52,000
SB-14	7/2/2015	5.0-6.0	430	25,000	17,000	300	5,100	4,900	1,800	<50	<200	<100	9,400
SB-15	7/2/2015	1.0-2.0	<330	4,100	74,000	580	7,000	12,000	650,000	<50	1,100	<100	130,000
SB-16	7/2/2015	2.0-3.0	<330	2,100	11,000	210	7,200	<1,000	4,000	<50	<200	<100	7,700

Cleanup Criteria Requirements for Response Activity (R 299.1 - R 299.50)

Generic Soil Cleanup Criteria Tables 2 and 3: Residential and Non-Residential Part 201 Generic Cleanup Criteria and Screening Levels/Part 213 Risk-Based Screening Levels, December 30, 2013 MDEQ Guidance Document For The Vapor Intrusion Pathway, Policy and Procedure Number: 09-017, Appendix D Vapor Intrusion Screening Values, May 2013

		Re	esidential (µg	ı/Kg)							
Statewide Default Background Levels	NA	5,800	75,000	1,200	18,000	32,000	21,000	130	410	1,000	47,000
Drinking Water Protection (Res DWP)	NLL	4,600	1.30E+06	6,000	30,000	5.80E+06	7.00E+05	1,700	4,000	4,500	2.40E+06
Groundwater Surface Water Interface Protection (GSIP)	NLL	4,600	8.2E+05 {G}	5,600 {G,X}	3,300	1.2E+05 {G}	5.2E+06 {G,X}	50 (M); 1.2	400	100 (M); 27	2.7E+05 {G}
Soil Volatilization to Indoor Air Inhalation (Res SVII)	3.0E+06	NLV	NLV	NLV	NLV	NLV	NLV	48,000	NLV	NLV	NLV
Ambient Air Infinite Source Volatile Soil Inhalation (Res VSI)	2.40E+05	NLV	NLV	NLV	NLV	NLV	NLV	52,000	NLV	NLV	NLV
Ambient Air Finite VSI for 5 Meter Source Thickness	7.9E+06	NLV	NLV	NLV	NLV	NLV	NLV	52,000	NLV	NLV	NLV
Ambient Air Finite VSI for 2 Meter Source Thickness	7.9E+06	NLV	NLV	NLV	NLV	NLV	NLV	52,000	NLV	NLV	NLV
Ambient Air Particulate Soil Inhalation (Res PSI)	5.2E+06	7.20E+05	3.30E+08	1.70E+06	2.60E+05	1.30E+08	1.0E+08	2.00E+07	1.30E+08	6.70E+06	ID
Direct Contact (Res DC)	{T}	7,600	3.70E+07	5.50E+05	2.50E+06	2.00E+07	4.00E+05	1.60E+05	2.60E+06	2.50E+06	1.70E+08
		Nor	residential (μg/Kg)							
Drinking Water Protection (Nonres DWP)	NLL	4,600	1.30E+06	6,000	30,000	5.80E+06	7.00E+05	1,700	4,000	4,500	5.00E+06
Soil Volatilization to Indoor Air Inhalation (Nonres SVII)	1.6E+07	NLV	NLV	NLV	NLV	NLV	NLV	89,000	NLV	NLV	NLV
Ambient Air Infinite Source Volatile Soil Inhalation (Nonres VSI)	8.10E+05	NLV	NLV	NLV	NLV	NLV	NLV	62,000	NLV	NLV	NLV
Ambient Air Finite VSI for 5 Meter Source Thickness	2.8E+07	NLV	NLV	NLV	NLV	NLV	NLV	62,000	NLV	NLV	NLV
Ambient Air Finite VSI for 2 Meter Source Thickness	2.8E+07	NLV	NLV	NLV	NLV	NLV	NLV	62,000	NLV	NLV	NLV
Ambient Air Particulate Soil Inhalation (Nonres PSI)	6.5E+06	9.10E+05	1.50E+08	2.20E+06	2.40E+05	5.90E+07	4.4E+07	8.80E+06	5.90E+07	2.90E+06	ID
Direct Contact (Nonres DC)	{T}	37,000	1.30E+08	2.10E+06	9.20E+06	7.30E+07	9.0E+5 (DD)	5.80E+05	9.60E+06	9.00E+06	6.30E+08
		Scree	ening Levels	(µg/Kg)							
Soil Saturation Concentration Screening Levels (Csat)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Applicable Criterion/RBSL Exceeded

BOLD Value Exceeds Applicable Criterion/RBSL

bgs Below Ground Surface (feet)
MDL Laboratory Method Detection Limit

NA/NL/ID Not Applicable/Not Listed/Insufficient Data

NLL/NLV Not Likely to Leach/Not Likely to Volatilize

¹ Maximum of analyzed or calculated total lead value.

(G) Metal GSIP Criteria for Surface Water Not Protected for Drinking Water Use based on 269 mg/L CaCO3 Hardness: Station ID 500011, Red Run, near Warren, MI.

{T} Refer to the Toxic Substance Control Act (TSCA), 40 CFR 761, Subparts D and G, as amended, to determine the applicability of TSCA cleanup standards. Alternatives to compliance with the standards listed below are possible under Subpart D. New Releases may be subject to the standards identified in Subpart G. Use Part 201 soil direct contact criteria in the table below where TSCA standards are not applicable.

LAND USE CATEGORY	TSCA, Subpart D	Part 201
Residential	1,000 µg/Kg, or	4,000 μg/Kg
Nonresidential	10.000 ug/Kg if capped	16 000 ua/Ka

TABLE 6 PM JULY 2015

SUMMARY OF GROUNDWATER ANALYTICAL RESULTS VOCs, PNAs, AND MICHIGAN TEN METALS

404 EAST 10 MILE ROAD, PLEASANT RIDGE, MICHIGAN PM PROJECT # 01-5706-1-0002

P	OLYNUCLEAR AROM AND MICHIG (C COMPOUNDS (VOCs) ATIC COMPOUNDS (PN AN TEN METALS µg/L)	As),	1,1-Dichloroethane	1,1,1-Trichloroethane	Other VOCs	PNAS	Arsenic	Barium	Cadmium	Chromium	Copper	Lead	Mercury	Selenium	Silver	Zinc
	Chemical Abstract	Service Number (CAS#)		75343	71556	Various	Various	7440382	7440393	7440439	16065831	7440508	7439921	7439976	7782492	7440224	7440666
Sample ID	Sample Date	Screen Depth (feet bgs)	Depth to Groundwater (feet bgs)		VOCs		PNAs					Michigan [*]	Ten Metals				
TMW-1	07/02/15	5.55-10.55	9.45	<1	7	<1	<mdl< td=""><td><1</td><td><100</td><td>0.2</td><td><5</td><td><4</td><td><3</td><td><0.2</td><td><5</td><td>0.2</td><td><10</td></mdl<>	<1	<100	0.2	<5	<4	<3	<0.2	<5	0.2	<10
TMW-4	07/02/15	9.55-14.55	10.75	3	10	<1	<mdl< td=""><td>NA</td><td>NA</td><td>NA</td><td>NA</td><td>NA</td><td>NA</td><td>NA</td><td>NA</td><td>NA</td><td>NA</td></mdl<>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
TMW-6	07/02/15	8.50-13.50	9.61	<1	7	<1	<mdl< td=""><td>NA</td><td>NA</td><td>NA</td><td>NA</td><td>NA</td><td>NA</td><td>NA</td><td>NA</td><td>NA</td><td>NA</td></mdl<>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
TMW-15	07/02/15	5.90-10.90	7.70	<1	24	<1	<mdl< td=""><td><1</td><td><100</td><td><0.2</td><td><5</td><td><4</td><td><3</td><td><0.2</td><td><5</td><td><0.2</td><td><10</td></mdl<>	<1	<100	<0.2	<5	<4	<3	<0.2	<5	<0.2	<10
TMW-16	07/02/15	8.50-13.50	8.98	<1	<1	<1	<mdl< td=""><td>NA</td><td>NA</td><td>NA</td><td>NA</td><td>NA</td><td>NA</td><td>NA</td><td>NA</td><td>NA</td><td>NA</td></mdl<>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Cleanup Criteria Requirements for Response Activity (R 299.1 - R 299.50)

Generic Groundwater Cleanup Criteria Table 1: Residential and Non-Residential Part 201 Generic Cleanup Criteria and Screening Levels/Part 213 Risk-Based Screening Levels, December 30, 2013

MDEQ Guidance Document For The Vapor Intrusion Pathway, Policy and Procedure Number: 09-017, Appendix D Vapor Intrusion Screening Values, May 2013

MDEQ Guidance Document For The Vapo	r Intrusion	Pathway, Po	olicy and Pro	cedure Nun	nber: 09-017	, Appendix D	Vapor Intru	ısion Screer	ing Values,	May 2013	·			
		R	esidential/No	onresidentia	I (μg/L)									
Residential Drinking Water (Res DW)	880	200 {A}	Various	Various	10 {A}	2,000 {A}	5.0 {A}	100 {A}	1,000 {E}	4.0 {L}	2.0 {A}	50 {A}	34	2,400
Nonresidential Drinking Water (Nonres DW)	2,500	200 {A}	Various	Various	10 {A}	2,000 {A}	5.0 {A}	100 {A}	1,000 {E}	4.0 {L}	2.0 {A}	50 {A}	98	5,000 {E}
Groundwater Surface Water Interface (GSI)	740	89	Various	Various	10	{G}	{G,X}	11	{G}	{G,X}	0.0013	5.0	0.2 {M}; 0.06	{G}
Residential Groundwater Volatilization to Indoor Air Inhalation (Res GVII) ²	1.00E+06	6.60E+05	Various	Various	NLV	NLV	NLV	NLV	NLV	NLV	56 {S}	NLV	NLV	NLV
Nonresidential Groundwater Volatilization to Indoor Air Inhalation (Nonres GVII) ²	2.30E+06	1.3E+6 {S}	Various	Various	NLV	NLV	NLV	NLV	NLV	NLV	56 {S}	NLV	NLV	NLV
			Screening	g Levels (µg	/L)									
Residential Groundwater Vapor Intrusion Screening Levels (GW _{VI-res}) ³	4,300	17,000	Various	Various	NL	NL	NL	NL	NL	NL	ID	NL	NL	NL
Nonresidential Groundwater Vapor Intrusion Screening Levels (GW _{VI-nr}) ³	18,000	71000	Various	Various	NL	NL	NL	NL	NL	NL	ID	NL	NL	NL
Water Solubility	5.06E+06	1.33E+06	Various	Various	NA	NA	NA	NA	NA	NA	56	NA	NA	NA
Flammability and Explosivity Screening Level	3.80E+05	ID	Various	Various	ID	ID	ID	ID	ID	ID	ID	ID	ID	ID

Applicable Criteria/RBSL Exceeded

BOLD Value Exceeds Applicable Criteria

bgs Below Ground Surface (feet)

MDL Laboratory Method Detection Limit

¹ Rule 323.1057 of Part 4 Water Quality Standards

² Tier 1 GVII Criteria based on 3 meter (or greater) groundwater depth

³ (2013 Vapor Intrusion Guidance) Screening Levels based on depth to groundwater less than 1.5 meters and not in contact with building foundation

⁴ (2013 Vapor Intrusion Guidance) Screening levels based on groundwater in contact with the building foundation or within a sump

NA/NL/ID Not Applicable/Not Listed/Insufficient Data

NLV Not Likely to Volatilize

{G} Metal GSIP Criteria for Surface Water Not Protected for Drinking Water Use based on 269 mg/L CaCO3 Hardness: Station ID 500011, Red Run, near Warren, MI.

TABLE 7 (1 OF 2) PM 2015 AND 2016 SUMMARY OF SOIL ANALYTICAL RESULTS PCBs

404 EAST 10 MILE ROAD, PLEASANT RIDGE, MICHIGAN PM PROJECT # 01-5706-1-0002

POI	LYCHLORINATED BIPHENYLS (µg/Kg)	(PCBs)	PCBs			
Che	mical Abstract Service Numbe	r (CAS#)	1336363			
Sample ID	Sample Date	Sample Depth (feet bgs)	PCBs			
SB-1	7/2/2015	2.0-3.0	11,000,000			
SB-1R	11/24/2015	5.0-6.0	7,400			
SB-1R	11/24/2015	8.5-9.5	247,000			
SB-2	7/2/2015	2.0-3.0	5,400			
6B-3	7/2/2015	2.0-3.0	23,000			
SB-3R	8/31/2015	8.5-9.5	<330			
SB-4	7/2/2015	4.0-5.0	<330			
SB-5	7/2/2015	4.0-5.0	<330			
SB-5	7/2/2015	9.0-10.0	<330			
SB-6	7/2/2015	1.0-2.0	880,000			
SB-6	7/2/2015	4.0-5.0	<330			
SB-7	7/2/2015	2.0-3.0	<330			
SB-8	7/2/2015	1.0-2.0	<330			
SB-9	7/2/2015	2.0-3.0	<330			
SB-10	7/2/2015	2.0-3.0	<330			
SB-11	7/2/2015	1.0-2.0	<330			
SB-12	7/2/2015	4.0-5.0	<330			
SB-13	7/2/2015	1.0-2.0	<330			
SB-13	7/2/2015	4.0-5.0	<330			
SB-14	7/2/2015	5.0-6.0	430			
SB-15	7/2/2015	1.0-2.0	<330			
SB-16	7/2/2015	2.0-3.0	<330			
SB-17	8/31/2015	2.0-3.0	<330			
SB-17	8/31/2015	9.0-10.0	<330			
SB-18	8/31/2015	1.0-2.0	44,000			
SB-18	8/31/2015	2.0-3.0	16,000			
SB-18	8/31/2015	7.5-8.5	<330			
SB-19	8/31/2015	1.0-2.0	20,000			
SB-19	8/31/2015	2.0-3.0	24,000			
SB-19	8/31/2015	4.5-5.5	10,000			
SB-19	8/31/2015	6.5-7.5	<330			
SB-20	8/31/2015	1.0-2.0	16,000			
SB-20	8/31/2015	2.0-3.0	43,000			
SB-20	8/31/2015	7.0-8.0	<330			
SB-21	8/31/2015	2.0-3.0	<330			
SB-22	8/31/2015	2.0-3.0	6,000			
SB-22	8/31/2015	8.0-9.0	<330			
SB-23	8/31/2015	2.0-3.0	<330			
SB-23	8/31/2015	9.0-10.0	<330			
SB-24	8/31/2015	1.0-2.0	6,188,000			
SB-24	8/31/2015	8.0-9.0	<330			
SB-25	8/31/2015	1.0-2.0	7,000			
SB-25	8/31/2015	2.0-3.0	19,000			
SB-25	8/31/2015	9.0-10.0	1,200			
SB-26	8/31/2015	2.0-3.0	2,300			
SB-26	8/31/2015	9.0-10.0	<330			
SB-27	8/31/2015	1.0-2.0	15,000			
SB-27	8/31/2015	2.0-3.0	12,000			
Generic Soil Cleanup C	8/31/2015 p Criteria Requirements for Reiriteria Tables 2 and 3: Reside reening Levels/Part 213 Risk-E	ntial and Non-Residential Pa	rt 201 Generic Cleanu			
	Residentia		·			
Prinking Water Protectio		5	NLL			
Craumdurator Curfosa Wa	dwater Surface Water Interface Protection (GSIP)					

Residential (μg/Kg)	
Drinking Water Protection (Res DWP)	NLL
Groundwater Surface Water Interface Protection (GSIP)	NLL
Soil Volatilization to Indoor Air Inhalation (Res SVII)	3.0E+06
Ambient Air Infinite Source Volatile Soil Inhalation (Res VSI)	2.40E+05
Ambient Air Finite VSI for 5 Meter Source Thickness	7.9E+06
Ambient Air Finite VSI for 2 Meter Source Thickness	7.9E+06
Ambient Air Particulate Soil Inhalation (Res PSI)	5.2E+06
Direct Contact (Res DC)	{T}
Nonresidential (μg/Kg)	<u>-</u>
Drinking Water Protection (Nonres DWP)	NLL
Soil Volatilization to Indoor Air Inhalation (Nonres SVII)	1.6E+07
Ambient Air Infinite Source Volatile Soil Inhalation (Nonres VSI)	8.10E+05
Ambient Air Finite VSI for 5 Meter Source Thickness	2.8E+07
Ambient Air Finite VSI for 2 Meter Source Thickness	2.8E+07
Ambient Air Particulate Soil Inhalation (Nonres PSI)	6.5E+06
Direct Contact (Nonres DC)	{T}
Screening Levels (μg/Kg)	
Soil Saturation Concentration Screening Levels (Csat)	NA

Applicable Criterion/RBSL Exceeded

BOLD Value Exceeds Applicable Criterion/RBSL

bgs Below Ground Surface (feet)

NA/NL/ID Not Applicable/Not Listed/Insufficient Data

NLL/NLV Not Likely to Leach/Not Likely to Volatilize

{T} Refer to the Toxic Substance Control Act (TSCA), 40 CFR 761, Subparts D and G, as amended, to determine the applicability of TSCA cleanup standards. Alternatives to compliance with the standards listed below are possible under Subpart D. New Releases may be subject to the standards identified in Subpart G. Use Part 201 soil direct contact criteria in the table below where TSCA standards are not applicable.

LAND USE CATEGORY	TSCA, Subpart D	Part 201
Residential	1,000 µg/Kg, or	4,000 μg/Kg
Nonresidential	10,000 μg/Kg if capped	16,000 µg/Kg

TABLE 7 (2 OF 2) PM 2015 AND 2016 SUMMARY OF SOIL ANALYTICAL RESULTS PCBs

404 EAST 10 MILE ROAD, PLEASANT RIDGE, MICHIGAN PM PROJECT # 01-5706-1-0002

POI	POLYCHLORINATED BIPHENYLS (PCBs) (μg/Kg)							
	Chemical Abstract Service Number (CAS#) Sample ID Sample Date Sample Depth (feet bgs)							
Che	mical Abstract Service Number	er (CAS#)	1336363					
Sample ID	Sample Date		PCBs					
SB-28	8/31/2015		7,000					
SB-28	8/31/2015	2.0-3.0	14,000					
SB-28	8/31/2015	7.0-8.0	<330					
SB-29	8/31/2015	2.0-3.0	10,000					
SB-29	8/31/2015	6.5-7.5	<330					
SB-30	8/31/2015	2.0-3.0	<330					
SB-30	8/31/2015	7.5-8.5	<330					
SB-31	8/31/2015	2.0-3.0	1,800					
SB-32	11/24/2015	2.0-3.0	4,300					
SB-32	11/24/2015	3.5-4.5	<330					
SB-33	8/31/2015	1.0-2.0	<330					
SB-34	8/31/2015	2.0-3.0	<330					
SB-34	8/31/2015	7.5-8.5	<330					
SB-35	8/31/2015	2.0-3.0	<330					
SB-35	8/31/2015	7.0-8.0	<330					
SB-36	8/31/2015	2.0-3.0	300					
SB-36	8/31/2015	7.0-8.0	250					
SB-37	9/1/2015	2.0-3.0	1,800					
SB-37	9/1/2015	8.0-9.0	<330					
SB-38	11/24/2015	2.0-3.0	170,000					
SB-38	11/24/2015	5.0-6.0	<330					
SB-39	11/24/2015	2.0-3.0	10,800,000					
SB-39	11/24/2015	5.0-6.0	4,900					
SB-40	11/24/2015	2.0-3.0	<330					
SB-40	11/24/2015	5.0-6.0	<330					
SB-40	11/24/2015	8.5-9.5	2,015,000					
SB-41	11/24/2015	2.0-3.0	<330					
SB-41	11/24/2015	5.0-6.0	<330					
SB-41	11/24/2015	8.0-9.0	<330					
SB-42	11/24/2015	2.0-3.0	<330					
SB-43	11/24/2015	1.0-2.0	600					
SB-43	11/24/2015	2.0-3.0	<330					
SB-43	11/24/2015	5.0-6.0	<330					
SB-44	11/24/2015	1.0-2.0	700					
SB-44	11/24/2015	2.0-3.0	<330					
SB-45	11/24/2015	2.0-3.0	<330					
SB-46	11/24/2015	2.0-3.0	11,000					
SB-46	11/24/2015	5.0-6.0	9,000					
SB-47	11/24/2015	2.0-3.0	21,000					
SB-47	11/24/2015	6.5-7.5	<330					
SB-48	11/24/2015	2.0-3.0	<330					
SB-49	11/24/2015	2.0-3.0	<330					
SB-50	11/24/2015	0.5-1.5	13,000					
SB-50	11/24/2015	4.0-5.0	<330					
SB-51	11/24/2015	0.5-1.5	<330					
SB-52	5/6/2016	1.0-2.0	32,600					
SB-52	5/6/2016	2.0-3.0	940					
SB-53	5/6/2016	1.0-2.0	54,900					
SB-53	5/6/2016	2.0-3.0	15,000					
SB-53	5/6/2016	5.0-6.0	<330					
SB-54	5/6/2016	1.0-2.0	1,180					
SB-54	5/6/2016	2.0-3.0	<330					
SB-55	5/6/2016	1.0-2.0	440					
SB-55	5/6/2016	2.0-3.0	<330					
SB-55	5/6/2016	5.0-6.0	<330					

Cleanup Criteria Requirements for Response Activity (R 299.1 - R 299.50)

Generic Soil Cleanup Criteria Tables 2 and 3: Residential and Non-Residential Part 201 Generic Cleanup

Criteria and Screening Levels/Part 213 Risk-Based Screening Levels, December 30, 2013

Residential (µg/Kg)								
Drinking Water Protection (Res DWP)	NLL							
Groundwater Surface Water Interface Protection (GSIP)	NLL							
Soil Volatilization to Indoor Air Inhalation (Res SVII)	3.0E+06							
Ambient Air Infinite Source Volatile Soil Inhalation (Res VSI)	2.40E+05							
Ambient Air Finite VSI for 5 Meter Source Thickness	7.9E+06							
Ambient Air Finite VSI for 2 Meter Source Thickness	7.9E+06							
Ambient Air Particulate Soil Inhalation (Res PSI)	5.2E+06							
Direct Contact (Res DC)	{T}							
Nonresidential (μg/Kg)								
Drinking Water Protection (Nonres DWP)	NLL							
Soil Volatilization to Indoor Air Inhalation (Nonres SVII)	1.6E+07							
Ambient Air Infinite Source Volatile Soil Inhalation (Nonres VSI)	8.10E+05							
Ambient Air Finite VSI for 5 Meter Source Thickness	2.8E+07							
Ambient Air Finite VSI for 2 Meter Source Thickness	2.8E+07							
Ambient Air Particulate Soil Inhalation (Nonres PSI)	6.5E+06							
Direct Contact (Nonres DC) {T}								
Screening Levels (μg/Kg)								
Soil Saturation Concentration Screening Levels (Csat)								

Applicable Criterion/RBSL Exceeded

BOLD Value Exceeds Applicable Criterion/RBSL

bgs Below Ground Surface (feet)

NA/NL/ID Not Applicable/Not Listed/Insufficient Data NLL/NLV Not Likely to Leach/Not Likely to Volatilize

{T} Refer to the Toxic Substance Control Act (TSCA), 40 CFR 761, Subparts D and G, as amended, to determine the applicability of TSCA cleanup standards. Alternatives to compliance with the standards listed below are possible under Subpart D. New Releases may be subject to the standards identified in Subpart G. Use Part 201 soil direct contact criteria in the table below where TSCA standards are not applicable.

LAND USE CATEGORY	TSCA, Subpart D	Part 201
Residential	1,000 µg/Kg, or	4,000 μg/Kg
Nonresidential	10,000 μg/Kg if capped	16,000 μg/Kg

Appendix D





krieger klat

architecture interiors consulting 1412 E. 11 Mile Rd. | Royal Oak, MI 48067 P: 248.414.9270 F: 248.414.9275 www.kriegerklatt.com

Client:

Iron Ridge Holdings, LLC 520 N Main Royal Oak, MI 48067

Project:

Iron Ridge - Flat Plan

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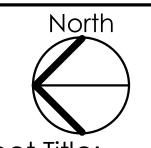
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Do not scale drawings. Use calculated dimensions only. Verify existing conditions in field.

North Arrow:



Sheet Title:

Iron Ridge Flat Plan

Project Number:

16-181

Sheet Number:

A.101



Photograph 1



Project Concept Overview Photo

Photograph 2



Proposed Apartment Complex



Photograph 3



Proposed Apartment Complex

Photograph 4



Proposed Campus (Brewery in front, apartments in back)



Photograph 5



Proposed Brewery (Exterior)

Photograph 6



Brewery Bar Area



Photograph 7



Brewery (Interior rendering)

Photograph 8



Proposed Office Building

Tables



Table 1: Ironridge, Ferndale/Pleasant Ridge Eligible Activities Cost Estimates 4.5.17						
Item/Activity		Total Request	MDEQ Act 381 Eligible Activities - Ferndale	MSF Act 381 Eligible Activities - Ferndale	MDEQ Act 381 Eligible Activities - Pleasant Ridge	MSF Act 381 Eligible Activities - Pleasant Ridge
Baseline Environmental Assessments						
Phase I ESA	\$	7,000	\$ 4,900		\$ 2,100	
Phase II ESA/BEA/DDCC	\$	76,640	\$ 32,305		\$ 44,335	
Baseline Environmental Assessments Sub-Total	\$	83,640	\$ 37,205	5 \$ -	\$ 46,435	\$
Due Care Activities						
Vapor Barrier Design and Installation				_		
Design	\$	10,000	\$ 5,000		\$ 5,000	
Oversight Vapor Evaluation, Reporting 4 Quarters	\$ \$	36,000 150,000	\$ 18,000 \$ 75,000		\$ 18,000 \$ 75,000	
Western Building Installation (Proposed Fitness Center)	\$	67,500	\$ -		\$ 67,500	
Eastern Building Installation (Former Walker Wire)	\$	450,000	\$ 135,000		\$ 315,000	
Southern Building Installation (3155 Bermuda St) Contaminated Soil Removal, Transport and Disposal	\$	80,000	\$ 80,000)	-	
PCB Remediation Activities 404 10 Mile (5,720 Tons)	s	991,000			\$ 991,000	
PCB Remediation Activities Walker Wire Bldg (2100 Tons)	\$	357,000	\$ 357,000		\$ -	
Contaminated Soil Transport and Disposal associated with Development Activities (1500 Tons)	\$	163,000	\$ 81,500		\$ 81,500	
Groundwater Management	\$	107,750	\$ 53,875		\$ 53,875	
Oversight, Sampling and Reporting by Environmental Professional	\$	110,000	\$ 55,000		\$ 55,000	
Removal of USTs if encountered	\$	10,000	\$ 5,000		\$ 5,000	
Due Care Activities Sub-Total	\$	2,532,250	\$ 865,375	s s -	\$ 1,666,875	\$ -
Demolition						
Predemolition Audit or Survey	\$	20,000		\$ 10,000		\$ 10,000
Building Demolition	\$	300,000	-	\$ 150,000		\$ 150,000
Dewatering During Foundation Removal Fill/Compaction/Rough Grading to Balance Site Where Building was Located	\$	20,000 10,000		\$ 10,000 \$ 2,500		\$ 10,000 \$ 7,500
Removal of Abandoned Utilities	\$	200,000		\$ 100,000		\$ 100,000
Removal of Parking Lots/Sidewalks/Curbs/Gutters	\$	200,000		\$ 100,000		\$ 100,000
Fill/Compaction/Rough Grading to Balance Site Where Site Improvements were Located Fees related to Demolition Engineering and Design	\$	100,000 70,000		\$ 50,000 \$ 35,000		\$ 50,000 \$ 35,000
Demolition Sub-Total	\$	920,000	s -	\$ 457,500	s -	\$ 462,500
		320,000	_	401,000	-	402,000
Asbestos Activities	10	22.222	10.000		10.000	
Asbestos Survey Asbestos Abatement, Oversight, Air Monitoring and Reporting	\$	20,000 100,000	\$ 10,000	\$ 50,000	\$ 10,000	\$ 50,000
Asbestos Activities Sub-Total	\$	120,000	\$ 10,000		\$ 10,000	\$ 50,000
		120,000	10,000	00,000	10,000	00,000
Infrastructure Improvements	I s	250,000		T# 050,000	1	
Urban Storm water Management System Sidewalks	\$	250,000 100,000		\$ 250,000 \$ 100,000		
Curbs and Gutters	\$	50,000		\$ 50,000		
Roads	\$	250,000		\$ 250,000		
Public Lighting	\$	100,000 50,000		\$ 100,000 \$ 50,000		
Public Signage Storm Sewers	\$	100,000		\$ 50,000 \$ 100,000		
Water Mains	\$	100,000		\$ 100,000		
Sanitary Sewer Mains	\$	100,000		\$ 100,000		
Landscaping Park/Conting Areas	\$	150,000 50,000		\$ 150,000 \$ 50,000		
Park/Seating Areas Professional Fees Directly Related to Infrastructure Improvements	\$	130,000		\$ 130,000		
Infrastructure Sub-Total	\$	·	\$ -	\$ 1,430,000	\$ -	s -
	<u> </u>	1,100,000	*	1,100,000	<u> </u>	•
Site Preparation Staking Related to Eligible Activities	¢	50,000		\$ 50,000		
Geotechnical Engineering	\$	25,000		\$ 50,000		
Clearing and Grubbing	\$	50,000		\$ 50,000		
Temporary Construction Access and/or Roads	\$	5,000		\$ 5,000		
Temporary Traffic Control Temporary Facility	\$	25,000 10,000		\$ 25,000 \$ 10,000		
Temporary Facility Temporary Erosion Control	\$	15,000		\$ 15,000		
Temporary Site Control (fencing, gates, signage, lighting etc.)	\$	25,000		\$ 25,000		
Excavation of Unstable Material	\$	25,000		\$ 25,000		
Foundation Work to Address Special Soil Concerns Fill Relating to Other Eligible Activities	\$	100,000 25,000		\$ 100,000 \$ 25,000		
Dewatering Relating to Other Eligible Activities	\$	25,000		\$ 25,000		
Grading	\$	30,000		\$ 30,000		
Relocation of Active Utilities (Electric, Gas, Water, Sewer)	\$	100,000		\$ 100,000		
Unique Site Preparation Activities	\$	50,000		\$ 50,000		
Professional Fees Directly Related to Site Preparation Activities	\$	50,000	•	\$ 50,000		•
Site Preparation Sub-Total	\$	610,000	-	\$ 610,000	-	-
Preparation of Brownfield Plan and Act 381 Workplan						
Brownfield Plan	\$	25,000	\$ 6,250		\$ 6,250	\$ 6,250
Brownfield Plan and Act 381 Workplan Sub-Total	\$	25,000	\$ 6,250	\$ 6,250	\$ 6,250	\$ 6,250
Eligible Activities Sub-Total	\$	5,720,890	\$ 918,830	\$ 2,553,750	\$ 1,729,560	\$ 518,750
15% Contingency*	\$	841,838	\$ 131,306	382,125	\$ 251,531	
Developer Eligible Reimbursement Total	S	6,562,728	\$ 1,050,136	\$ 2,935,875	\$ 1,981,091	\$ 595,625

Developer Eligible Reimbursement Total \$ 6,562,728 \$ 1,050,136 \$ 2,935,875 \$

*15% Contingency excludes preparation of Brownfield Plan/381 Work Plan and Baseline Environmental Assessments

Tax Increment Financing Estimates: Table 2: Pleasant Ridge

		2016	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
ENVIRONMENTAL STATE OF THE PROPERTY OF THE PRO												
Risk Well Managed			Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Base Combined Taxable Value Projected Taxable Value (estimated annual increase of 1%) Incremental Difference (Projected Tax Value <i>minus</i> Existing Tax Value)	\$	651,820 \$ \$ \$	651,820 \$ 1,221,700 \$ 569,880 \$	651,820 \$ 2,443,400 \$ 1,791,580 \$	651,820 \$ 2,467,834 \$ 1,816,014 \$	651,820 \$ 2,492,512 \$ 1,840,692 \$	651,820 \$ 2,517,437 \$ 1,865,617 \$	651,820 \$ 2,542,612 \$ 1,890,792 \$	651,820 \$ 2,568,038 \$ 1,916,218 \$	651,820 \$ 2,593,718 \$ 1,941,898 \$	651,820 \$ 2,619,656 \$ 1,967,836 \$	651,820 2,645,852 1,994,032
Local Taxes - Millage												
County Pk & Rec HCMA	0.2392 \$ 0.2146 \$	156 \$ 140 \$	136 \$ 122 \$	429 \$ 384 \$	434 \$ 390 \$	440 \$ 395 \$	446 \$ 400 \$	452 \$ 406 \$	458 \$ 411 \$	465 \$ 417 \$	471 \$ 422 \$	477 428
OCPTA	0.9941 \$	648 \$	567 \$	1,781 \$	1,805 \$	1,830 \$	1,855 \$	1,880 \$	1,905 \$	1,930 \$	1,956 \$	1,982
County Operating OIS Allocated	4.0400 \$ 0.1985 \$	2,633 \$	2,302 \$ 113 \$	7,238 \$ 356 \$	7,337 \$ 360 \$	7,436 \$ 365 \$	7,537 \$ 370 \$	7,639 \$ 375 \$	7,742 \$ 380 \$	7,845 \$ 385 \$	7,950 \$ 391 \$	8,056 396
OIS Voted	3.1413 \$	2,048 \$	1,790 \$	5,628 \$	5,705 \$	5,782 \$	5,860 \$	5,940 \$	6,019 \$	6,100 \$	6,182 \$	6,264
OCC	1.5707 \$	1,024 \$	895 \$	2,814 \$	2,852 \$	2,891 \$	2,930 \$	2,970 \$	3,010 \$	3,050 \$	3,091 \$	3,132
Infrastructure City Operating	2.8472 \$ 10.8434 \$	1,856 \$ 7,068 \$	1,623 \$ 6,179 \$	5,101 \$ 19,427 \$	5,171 \$ 19,692 \$	5,241 \$ 19,959 \$	5,312 \$ 20,230 \$	5,383 \$ 20,503 \$	5,456 \$ 20,778 \$	5,529 \$ 21,057 \$	5,603 \$ 21,338 \$	5,677 21,622
City Oper-2015	2.7804 \$	1,812 \$	1,584 \$	4,981 \$	5,049 \$	5,118 \$	5,187 \$	5,257 \$	5,328 \$	5,399 \$	5,471 \$	5,544
Solid Waste Pool/Rec OPER	1.6260 \$ 1.2073 \$	1,060 \$ 787 \$	927 \$ 688 \$	2,913 \$ 2,163 \$	2,953 \$ 2,192 \$	2,993 \$ 2,222 \$	3,033 \$ 2,252 \$	3,074 \$ 2,283 \$	3,116 \$ 2,313 \$	3,158 \$ 2,344 \$	3,200 \$ 2,376 \$	3,242 2,407
Park Improvement	0.7190 \$	469 \$	410 \$	1,288 \$	1,306 \$	1,323 \$	1,341 \$	1,359 \$	1,378 \$	1,396 \$	1,415 \$	1,434
Publicity	0.3481 \$	227 \$	198 \$	624 \$	632 \$	641 \$	649 \$	658 \$	667 \$	676 \$	685 \$	694
FPS Sinking Fund (Pleasant Ridge and Ferndale) Total Local Taxes (capturable)	1.3000 \$ 32.0698 \$	847 \$ 20,904 \$	741 \$ 18,276 \$	2,329 \$ 57,456 \$	2,361 \$ 58,239 \$	2,393 \$ 59,031 \$	2,425 \$ 59,830 \$	2,458 \$ 60,637 \$	2,491 \$ 61,453 \$	2,524 \$ 62,276 \$	2,558 \$ 63,108 \$	2,592 63,948
School Taxes School Operating	18.0000 \$	11,733 \$	10,258 \$	32,248 \$	32,688 \$	33,132 \$	33,581 \$	34,034 \$	34,492 \$	34,954 \$	35,421 \$	35,893
SET Total School Taxes	6.0000 \$ 24.0000 \$	3,911 \$ 15,644 \$	3,419 \$ 13,677 \$	10,749 \$ 42,998 \$	10,896 \$ 43,584 \$	11,044 \$ 44,177 \$	11,194 \$ 44,775 \$	11,345 \$ 45,379 \$	11,497 \$ 45,989 \$	11,651 \$ 46,606 \$	11,807 \$ 47,228 \$	11,964 47,857
Total Capturable Millages	56.0698	36,547 \$	31,953 \$	100,454 \$	101,824 \$	103,207 \$	104,605 \$	106,016 \$	107,442 \$	108,882 \$	110,336 \$	111,805
Non-Capturable Millages												
Zoo Authority (County) Art Institute (County)	0.0990 \$ 0.1981 \$	65 \$ 129 \$	56 \$ 113 \$	177 \$ 355 \$	180 \$ 360 \$	182 \$ 365 \$	185 \$ 370 \$	187 \$ 375 \$	190 \$ 380 \$	192 \$ 385 \$	195 \$ 390 \$	197 395
FPS Debt (Pleasant Ridge and Ferndale)	7.0000 \$	4,563 \$	3,989 \$	12,541 \$	12,712 \$	12,885 \$	13,059 \$	13,236 \$	13,414 \$	13,593 \$	13,775 \$	13,958
Pool/Rec Debt (Pleasant Ridge)	1.2122 \$	790 \$	691 \$	2,172 \$	2,201 \$	2,231 \$	2,262 \$	2,292 \$	2,323 \$	2,354 \$	2,385 \$	2,417
Library (Pleasant Ridge) Total Non-Capturable	0.3763 \$ 8.8856 \$	245 \$ 5,792 \$	214 \$ 5,064 \$	674 \$ 15,919 \$	683 \$ 16,136 \$	693 \$ 16,356 \$	702 \$ 16,577 \$	712 \$ 16,801 \$	721 \$ 17,027 \$	731 \$ 17,255 \$	740 \$ 17,485 \$	750 17,718
Total Millages	64.9554 \$	42,339 \$	37,017 \$	116,373 \$	117,960 \$	119,563 \$	121,182 \$	122,817 \$	124,469 \$	126,137 \$	127,822 \$	129,523
Annual Local Incremental Taxes		\$	18,276 \$	57,456 \$	58,239 \$	59,031 \$	59,830 \$	60,637 \$	61,453 \$	62,276 \$	63,108 \$	63,948
Annual School Incremental Taxes		\$	13,677 \$	42,998 \$	43,584 \$	44,177 \$	44,775 \$	45,379 \$	45,989 \$	46,606 \$	47,228 \$	47,857
OCBRA Admin Fee Local Admin Fee		\$	5,000 \$	5,000 \$	5,000 \$	5,000 \$	5,000 \$	5,000 \$	5,000 \$	5,000 \$	5,000 \$	5,000
3 Mils from SET to State Brownfield Fund		\$ \$	- \$ 1,710 \$	- \$ 5,375 \$	- \$ 5,448 \$	- \$ 5,522 \$	- \$ 5,597 \$	- \$ 5,672 \$	- \$ 5,749 \$	- \$ 5,826 \$	- \$ 5,904 \$	5,982
Annual Local Incremental Taxes Minus Admin Fee		\$	13,276 \$	52,456 \$	53,239 \$	54,031 \$	54,830 \$	55,637 \$	56,453 \$	57,276 \$	58,108 \$	58,948
Annual School Incremental Taxes Minus State Fund Total Combined Yearly Capturable Taxes		\$ \$	11,967 \$ 25,243 \$	37,623 \$ 90,079 \$	38,136 \$ 91,375 \$	38,655 \$ 92,685 \$	39,178 \$ 94,008 \$	39,707 \$ 95,344 \$	40,241 \$ 96,693 \$	40,780 \$ 98,056 \$	41,325 \$ 99,433 \$	41,875 100,823
Cumulative Combined Capturable Taxes		\$	25,243 \$	115,322 \$	206,698 \$	299,383 \$	393,391 \$	488,735 \$	585,428 \$	683,484 \$	782,917 \$	883,740
MDEQ Reimbursed Expenses												
Local Taxes			11,101	39,612	40,182	40,758	41,340	41,927	42,521	43,120	43,725	44,337
School Taxes Total			8,307 19,408	29,644 69,256	30,071 70,253	30,502 71,260	30,937 72,277	31,377 73,305	31,821 74,342	32,270 75,390	32,723 76,448	33,180 77,517
Unreimbursed MDEQ Eligible Expenses	\$	1,981,091	1,961,683	1,892,426	1,822,173	1,750,912	1,678,635	1,605,331	1,530,989	1,455,599	1,379,151	1,301,634
MSF Reimbursed Expenses												
Local Taxes			3,338	11,910	12,081	12,254	12,429	12,606	12,784	12,964	13,146	13,330
School Taxes Total			2,498 5,835	8,913 20,822	9,041 21,122	9,171 21,425	9,302 21,731	9,434 22,039	9,567 22,351	9,702 22,666	9,838 22,985	9,976 23,306
Unreimbursed MSF Eligible Expenses		595,625	589,790	568,968	547,845	526,421	504,690	482,651	460,299	437,633	414,649	391,343
Local Site Remediation Revolving Fund Capture Local Taxes												
	Tou Detic											-

Tax Ratio	Millages	Percentage
Local Tax	32.0698	57.20%
School Tax	24.0000	42.80%
Total	56.0698	100.00%

Total eligible expense ratio									
MSF	\$	595,625	23.12%						
MDEQ	\$	1,981,091	76.88%						
Local	\$	-	0.00%						
Total	\$	2,576,716	100.00%						

Eligible activity school/local reimbursement breakdown									
	Local		School	Total					
MSF		\$340,675	\$254,950	\$	595,625				
MDEQ		\$1,133,109	\$847,982	\$	1,981,091				
Total		\$1,473,784	\$1,102,932	\$	2,576,716				

Tax Increment Financing Estimates: Table 2: Pleasant Ridge

	2028		2029		2030	2031		2032		2033		2034		2035	2036	2037		2038
	Year 11		Year 12		Year 13	Year 14		Year 15		Year 16		Year 17		Year 18	Year 19	Year 20		Year 21
\$ \$	651,820 2,672,311		651,820 2,699,034	\$ \$	651,820 2,726,024	651,820 2,753,284		651,820 2,780,817	\$ \$	651,820 2,808,625	\$ \$	651,820 2,836,712	\$	651,820 \$ 2,865,079 \$	651,820 2,893,729		\$ \$	651,820 2,951,893
\$	2,020,491		2,047,214		2,074,204	2,101,464		2,128,997		2,156,805		2,184,892		2,213,259 \$	2,241,909	2,270,847		2,300,073
\$	483	\$	490	\$	496	\$ 503	\$	509	\$	516	\$	523	\$	529 \$	536	\$ 543	\$	550
\$	434		439		445	451		457	\$	463		469		475 \$	481	487		494
\$ \$	2,009 8,163		2,035 8,271		2,062 8,380	2,089 8,490		2,116 8,601		2,144 8,713		2,172 8,827		2,200 \$ 8,942 \$	2,229 9,057	2,257 9,174		2,287 9,292
\$	401	\$	406	\$	412	\$ 417	\$	423	\$	428	\$	434	\$	439 \$	445	\$ 451	\$	457
\$ \$	6,347 3,174		6,431 3,216		6,516 3,258	6,601 3,301		6,688 3,344		6,775 3,388		6,863 3,432		6,953 \$ 3,476 \$	7,043 3,521	7,133 3,567	\$ \$	7,225 3,613
\$	5,753		5,829		5,906	5,983		6,062		6,141		6,221		6,302 \$	6,383	6,466		6,549
\$		\$	22,199		22,491	22,787		23,086		23,387		23,692		23,999 \$	24,310	24,624		24,941
\$ \$	5,618 3,285		5,692 3,329		5,767 3,373	5,843 3,417		5,919 3,462		5,997 3,507		6,075 3,553		6,154 \$ 3,599 \$	6,233 3,645	6,314 3,692		6,395 3,740
\$	2,439		2,472		2,504	2,537		2,570		2,604		2,638		2,672 \$	2,707	\$ 2,742		2,777
\$	1,453		1,472		1,491	1,511		1,531		1,551		1,571		1,591 \$	1,612	1,633		1,654
\$ \$	703 2,627		713 2,661		722 2,696	732 2,732		741 2,768		751 2,804		761 2,840		770 \$ 2,877 \$	780 2,914	790 2,952		801 2,990
\$	64,797		65,654		66,519	67,394		68,277		69,168		70,069		70,979 \$	71,898	72,826		73,763
\$	36,369		36,850		37,336	37,826		38,322		38,822		39,328		39,839 \$	40,354	40,875		41,401
\$	12,123		12,283		12,445	12,609		12,774		12,941		13,109		13,280 \$	13,451	13,625		13,800
\$	48,492	\$	49,133	\$	49,781	\$ 50,435	\$	51,096	\$	51,763	\$	52,437	\$	53,118 \$	53,806	\$ 54,500	\$	55,202
\$	113,289	\$	114,787	\$	116,300	\$ 117,829	\$	119,372	\$	120,932	\$	122,506	\$	124,097 \$	125,703	\$ 127,326	\$	128,965
\$ \$	200 400	\$ \$	203 406	\$ \$	205 411	208 416		211 422	\$ \$	214 427		216 433	\$ \$	219 \$ 438 \$	222 444	225 450	\$ \$	228 456
\$	14,143		14,330		14,519	14,710		14,903		15,098		15,294		15,493 \$	15,693	15,896		16,101
\$	2,449	\$	2,482		2,514	2,547		2,581	\$	2,614		2,649		2,683 \$	2,718	2,753		2,788
\$ \$	760 17,953		770 18,191		781 18,431	791 18,673		801 18,917		812 19,165		822 19,414		833 \$ 19,666 \$	844 19,921	855 20,178		866 20,438
\$	131,242		132,978	\$	134,731	\$ 136,501	\$	138,290	\$	140,096	\$	141,921	\$	143,763 \$	145,624	\$ 147,504	\$	149,402
\$	64,797		65,654		66,519	67,394		68,277		69,168		70,069		70,979 \$	71,898	72,826		73,763
\$	48,492 5,000		49,133 5,000		49,781 5,000	50,435 5,000		51,096 5,000		51,763 5,000		52,437 5,000		53,118 \$ 5,000 \$	53,806 5,000	54,500 5,000		55,202 5,000
\$	-	\$	-	\$	-	\$ -	\$	-	\$	-	\$	-	\$	- \$	-	\$ -	\$	-
\$ \$	6,061 59,797		6,142 60,654		6,223 61,519	6,304 62,394		6,387 63,277		6,470 64,168		6,555 65,069	\$ \$	6,640 \$ 65,979 \$	6,726 66,898		\$ \$	6,900 68,763
\$	42,430		42,991		43,558	44,131		44,709		45,293		45,883		46,478 \$	47,080		\$	48,302
\$	102,227		103,645		105,078	106,524		107,985		109,461		110,952		112,457 \$	113,978	115,513		117,064
\$	985,967	\$	1,089,612	\$	1,194,690	\$ 1,301,214	\$	1,409,199	\$	1,518,661	\$	1,629,612	\$	1,742,070 \$	1,856,047	\$ 1,971,561	\$	2,088,625
	44,954		45,578		46,208	46,844		47,487		48,135		48,791		49,453	50,122	50,797		51,479
	33,642		34,109		34,580	35,057		35,537		36,023		36,514		37,009	37,509	38,015		38,525
	78,597 1,223,037		79,687 1,143,350		80,788 1,062,562	81,900 980,661		83,024 897,637		84,159 813,479		85,305 728,174		86,462 641,712	87,631 554,081	88,812 465,270		90,004 375,266
	1,223,037		1,143,350		1,002,502	300,001		091,031		013,479		120,114		041,712	J34,001	400,210		575,200
	13,516		13,703		13,893	14,084		14,277		14,472		14,669		14,868	15,069	15,272		15,477
	10,115		10,255		10,397	10,540		10,684		10,831		10,978		11,127	11,277	11,429		11,583
	23,630		23,958		24,289	24,624		24,962		25,303		25,647		25,995	26,347	26,702		27,060
	367,712		343,754		319,465	294,841		269,879		244,577		218,929		192,934	166,587	139,886		112,825

	2039		2040		2041		2042		2043		2044		2045		
	Year 22		Year 23		Year 24		Year 25		Year 26		Year 27		Year 28		
\$	651,820	\$	651,820	\$	651,820	\$	651,820	\$	651,820	\$	651,820	\$	651,820		
\$	2,981,412	\$	3,011,226	\$	3,041,339	\$	3,071,752	\$	3,102,470	\$	3,133,494	\$	3,164,829		
\$	2,329,592	\$	2,359,406	\$	2,389,519	\$	2,419,932	\$	2,450,650	\$	2,481,674	\$	2,513,009		
\$	557	\$	564	\$	572	\$	579	\$	586	\$	594	\$	601	\$	13,940
\$	500	\$	506	\$	513	\$	519	\$	526	\$	533	\$	539	\$	12,507
\$	2,316	\$	2,345	\$	2,375	\$	2,406	\$	2,436	\$	2,467	\$	2,498	\$	57,935
\$	9,412	\$	9,532	\$	9,654	\$	9,777	\$	9,901	\$	10,026	\$	10,153	\$	235,445
\$	462	\$	468	\$	474	\$	480	\$	486	\$	493	\$	499	\$	11,568
\$	7,318	\$	7,412	\$	7,506	\$	7,602	\$	7,698	\$	7,796	\$	7,894	\$	183,070
\$	3,659	\$	3,706	\$	3,753	\$	3,801	\$	3,849	\$	3,898	\$	3,947	\$	91,538
\$	6,633	\$	6,718	\$	6,803	\$	6,890	\$	6,977	\$	7,066	\$	7,155	\$	165,931
\$	25,261	\$	25,584	\$	25,911	\$	26,240	\$	26,573	\$	26,910	\$	27,250	\$	631,937
\$	6,477	\$	6,560	\$	6,644	\$	6,728	\$	6,814	\$	6,900	\$	6,987	\$	162,038
\$	3,788	\$	3,836	\$	3,885	\$	3,935	\$	3,985	\$	4,035	\$	4,086	\$	94,761
\$	2,813	\$	2,849	\$	2,885	\$	2,922	\$	2,959	\$	2,996	\$	3,034	\$	70,360
\$	1,675	\$	1,696	\$	1,718	\$	1,740	\$	1,762	\$	1,784	\$	1,807	\$	41,902
\$	811	\$	821	\$	832	\$	842	\$	853	\$	864	\$	875	\$	20,287
\$	3,028	\$	3,067	\$	3,106	\$	3,146	\$	3,186	\$	3,226	\$	3,267	\$	75,762
\$	74,710		75,666	\$	76,631	\$	77,607		78,592	\$	79,587	\$	80,592	\$	1,868,980
Ψ	74,710	Ψ	73,000	Ψ	70,031	Ψ	11,001	Ψ	70,332	Ψ	19,501	Ψ	00,332	Ψ	1,000,300
\$	41,933	\$	42,469	\$	43,011	\$	43,559	\$	44,112	\$	44,670	\$	45,234	\$	1,049,013
\$	13,978	\$	14,156	\$	14,337	\$	14,520	\$	14,704	\$	14,890	\$	15,078	\$	349,671
\$	55,910	\$	56,626	\$	57,348	\$	58,078	\$	58,816	\$	59,560	\$	60,312	\$	1,398,684
\$	130,620	\$	132,291	\$	133,980	\$	135,685	\$	137,407	\$	139,147	\$	140,904	\$	3,267,664
\$	231	\$	234	\$	237	\$	240	\$	243	\$	246	\$	249	\$	5,770
\$	461	\$	467	\$	473	\$	479	\$	485	\$	492	\$	498	\$	11,545
\$	16,307	\$	16,516	\$	16,727	\$	16,940	\$	17,155	\$	17,372	\$	17,591	\$	407,949
\$	2,824	\$	2,860	\$	2,897	\$	2,933	\$	2,971	\$	3,008	\$	3,046	\$	70,645
\$	877	\$	888	\$	899	\$	911	\$	922	\$	934	\$	946	\$	21,930
\$	20,700	\$	20,965	\$	21,232	\$	21,503	\$	21,775	\$	22,051	\$	22,330	\$	517,839
\$	151,320	\$	153,256	\$	155,212	\$	157,188	\$	159,183	\$	161,198	\$	163,234	\$	3,785,503
\$	74,710	\$	75,666	\$	76,631	\$	77,607	\$	78,592	\$	79,587	\$	80,592		
\$	55,910	\$	56,626	\$	57,348	\$	58,078	\$	58,816	\$	59,560	\$	60,312		
\$	5,000	\$	5,000	\$	5,000	\$	5,000	\$	5,000	\$	5,000	\$	5,000		
\$		\$		\$		\$		\$		\$	_ 7	\$			
\$	6,989	\$	7,078	\$	7,169	\$	7,260	\$	7,352	\$	7,445	\$	7,539		
\$	69,710	\$	70,666	\$	71,631	\$	72,607	\$	73,592	\$	74,587	\$	75,592		
\$	48,921		49,548		50,180	\$	50,819		51,464	\$	52,115	\$	52,773	_	
\$ \$	118,631 2,207,256		120,213 2,327,469		121,811 2,449,281		123,425 2,572,706		125,055 2,697,761		126,702 2,824,463		128,365 2,952,828	\$	2,952,828
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	52,168		52,864		53,566		54,276		1,763						1,133,109
	39,041		39,561		40,087		40,619		1,320						847,982
	91,209		92,425		93,654		94,895		3,083						1,981,091
	284,057		191,632		97,978		3,083		-						
	15,685		15,894		16,105		16,318		530						340,675
	11,738		11,894		12,052		12,212		397						254,950
	27,422		27,788		28,157		28,531		927						595,625
	85,403		57,615		29,458		927		-						
										_					,,
										\$	50,000	\$	50,000		100,000

Tax Increment Financing Estimates: Table 2: Pleasant Ridge

3of3

Tax Increment Financing Estimates: Table 3: Ferndale

		2016	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
PIVIRONMENTAL		2016	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Risk Well Managed			Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Base Combined Taxable Value		\$ 398,740 \$	398,740 \$	398,740 \$	398,740 \$	398,740 \$	398,740 \$	398,740 \$	398,740 \$	398,740 \$	398,740 \$	398,740
Projected Taxable Value (estimated annual increase of 1%) Incremental Difference (Projected Tax Value <i>minus</i> Existing Tax Value)		\$ \$	1,812,475 \$ 1,413,735 \$	3,624,950 \$ 3,226,210 \$	3,661,200 \$ 3,262,460 \$	3,697,811 \$ 3,299,071 \$	3,734,790 \$ 3,336,050 \$	3,772,138 \$ 3,373,398 \$	3,809,859 \$ 3,411,119 \$	3,847,957 \$ 3,449,217 \$	3,886,437 \$ 3,487,697 \$	3,925,301 3,526,561
Local Taxes - Millage			200 4	•					0.40			
County Pk & Rec	0.2392	\$ 95 \$	338 \$	772 \$	780 \$	789 \$	798 \$	807 \$	816 \$	825 \$	834 \$	844
HCMA OCPTA	0.2146 0.9941	\$ 86 \$ \$ 396 \$	303 \$	692 \$	700 \$	708 \$ 3,280 \$	716 \$	724 \$ 3,353 \$	732 \$ 3,391 \$	740 \$ 3,429 \$	748 \$	757
County Operating	4.0400	\$ 1,611 \$	1,405 \$ 5,711 \$	3,207 \$ 13,034 \$	3,243 \$ 13,180 \$	13,328 \$	3,316 \$ 13,478 \$	3,353 \$ 13,629 \$	13,781 \$	13,935 \$	3,467 \$ 14,090 \$	3,506 14,247
OIS Allocated	0.1985	\$ 79 \$	281 \$	640 \$	648 \$	655 \$	662 \$	670 \$	677 \$	685 \$	692 \$	700
OIS Voted	3.1413	\$ 1,253 \$	4,441 \$	10,134 \$	10,248 \$	10,363 \$	10,480 \$	10,597 \$	10,715 \$	10,835 \$	10,956 \$	11,078
OCC	1.5707	\$ 626 \$	2,221 \$	5,067 \$	5,124 \$	5,182 \$	5,240 \$	5,299 \$	5,358 \$	5,418 \$	5,478 \$	5,539
City Operating	13.9451	\$ 5,560 \$	19,715 \$	44,990 \$	45,495 \$	46,006 \$	46,522 \$	47,042 \$	47,568 \$	48,100 \$	48,636 \$	49,178
Refuse Disposal	2.0915	\$ 834 \$	2,957 \$	6,748 \$	6,823 \$	6,900 \$	6,977 \$	7,055 \$	7,134 \$	7,214 \$	7,295 \$	7,376
City Oper-Voted	4.4552	\$ 1,776 \$	6,298 \$	14,373 \$	14,535 \$	14,698 \$	14,863 \$	15,029 \$	15,197 \$	15,367 \$	15,538 \$	15,712
FPS Sinking Fund	1.3000	\$ 518 \$	1,838 \$	4,194 \$	4,241 \$	4,289 \$	4,337 \$	4,385 \$	4,434 \$	4,484 \$	4,534 \$	4,585
Total Local Taxes (capturable)	32.1902	\$ 12,836 \$	45,508 \$	103,852 \$	105,019 \$	106,198 \$	107,388 \$	108,590 \$	109,805 \$	111,031 \$	112,270 \$	113,521
School Taxes												
School Operating	18.0000	\$ 7,177 \$	25,447 \$	58,072 \$	58,724 \$	59,383 \$	60,049 \$	60,721 \$	61,400 \$	62,086 \$	62,779 \$	63,478
SET	6.0000	\$ 2,392 \$	8,482 \$	19,357 \$	19,575 \$	19,794 \$	20,016 \$	20,240 \$	20,467 \$	20,695 \$	20,926 \$	21,159
Total School Taxes	24.0000	\$ 9,570 \$	33,930 \$	77,429 \$	78,299 \$	79,178 \$	80,065 \$	80,962 \$	81,867 \$	82,781 \$	83,705 \$	84,637
Total Capturable Millages	56.1902	\$ 22,405 \$	79,438 \$	181,281 \$	183,318 \$	185,375 \$	187,453 \$	189,552 \$	191,671 \$	193,812 \$	195,974 \$	198,158
Non-Capturable Millages												
Zoo Authority (County)	0.0990	\$ 39 \$	140 \$	319 \$	323 \$	327 \$	330 \$	334 \$	338 \$	341 \$	345 \$	349
Art Institute (County)	0.1981	\$ 79 \$	280 \$	639 \$	646 \$	654 \$	661 \$	668 \$	676 \$	683 \$	691 \$	699
FPS Debt (Pleasant Ridge and Ferndale)	7.0000	\$ 2,791 \$	9,896 \$	22,583 \$	22,837 \$	23,094 \$	23,352 \$	23,614 \$	23,878 \$	24,145 \$	24,414 \$	24,686
GWK Facility DBT (Ferndale)	1.7340	\$ 691 \$	2,451 \$	5,594 \$	5,657 \$	5,721 \$	5,785 \$	5,849 \$	5,915 \$	5,981 \$	6,048 \$	6,115
Debt Service (Ferndale) Library-Voted	4.1790 0.9587	\$ 1,666 \$ \$ 382 \$	5,908 \$ 1,355 \$	13,482 \$ 3,093 \$	13,634 \$ 3,128 \$	13,787 \$ 3,163 \$	13,941 \$ 3,198 \$	14,097 \$ 3,234 \$	14,255 \$ 3,270 \$	14,414 \$ 3,307 \$	14,575 \$ 3,344 \$	14,738 3,381
Library-Operating	0.9204	\$ 367 \$	1,301 \$	2,969 \$	3,003 \$	3,036 \$	3,071 \$	3,105 \$	3,140 \$	3,175 \$	3,210 \$	3,246
Stormwater Settlement	2.0930	\$ 835 \$	2,959 \$	6,752 \$	6,828 \$	6,905 \$	6,982 \$	7,061 \$	7,139 \$	7,219 \$	7,300 \$	7,381
Total Non-Capturable Millages	17.1822	\$ 6,851 \$	24,291 \$	55,433 \$	56,056 \$	56,685 \$	57,321 \$	57,962 \$	58,611 \$	59,265 \$	59,926 \$	60,594
Total Millages	73.3724	\$ 29,257 \$	103,729 \$	236,715 \$	239,374 \$	242,061 \$	244,774 \$	247,514 \$	250,282 \$	253,077 \$	255,901 \$	258,752
Annual Local Incremental Taxes		\$	45,508 \$	103,852 \$	105,019 \$	106,198 \$	107,388 \$	108,590 \$	109,805 \$	111,031 \$	112,270 \$	113,521
Annual School Incremental Taxes		\$	33,930 \$	77,429 \$	78,299 \$	79,178 \$	80,065 \$	80,962 \$	81,867 \$	82,781 \$	83,705 \$	84,637
OCBRA Admin Fee Local Admin Fee		\$ \$	5,000 \$ 1,500 \$	5,000 1,500								
3 Mils from SET to State Brownfield Fund		\$ \$	4,241 \$	9,679 \$	9,787 \$	9,897 \$	10,008 \$	10,120 \$	10,233 \$	10,348 \$	10,463 \$	10,580
Annual Local Incremental Taxes Minus Admin Fee		\$	39,008 \$	97,352 \$	98,519 \$	99,698 \$	100,888 \$	102,090 \$	103,305 \$	104,531 \$	105,770 \$	107,021
Annual School Incremental Taxes Minus State Fund		\$	29,688 \$	67,750 \$	68,512 \$	69,281 \$	70,057 \$	70,841 \$	71,633 \$	72,434 \$	73,242 \$	74,058
Total Combined Yearly Captureable Taxes		\$	68,697 \$	165,103 \$	167,031 \$	168,978 \$	170,945 \$	172,932 \$	174,938 \$	176,965 \$	179,011 \$	181,079
Cumulative Combined Captureable Taxes		\$	68,697 \$	233,800 \$	400,830 \$	569,809 \$	740,754 \$	913,686 \$	1,088,624 \$	1,265,588 \$	1,444,600 \$	1,625,678
MDEO Deinhung de Fungas												
MDEQ Reimbursed Expenses			10.260	24.040	25 240	25 504	25 000	26 100	26 402	26 700	27.049	27 220
Local Taxes School Taxes			10,368 7,730	24,919 18,579	25,210 18,796	25,504 19,015	25,800 19,236	26,100 19,460	26,403 19,685	26,709 19,913	27,018 20,144	27,330 20,376
Total			18,099	43,497	44,005	44,518	45,036	45,560	46,088	46,622	47,161	47,706
Unreimbursed MDEQ Eligible Expenses		\$ 1,050,136	1,032,037	988,540	944,535	900,017	854,980	809,421	763,332	716,710	669,548	621,842
MSF Reimbursed Expenses												
Local Taxes			28,987	69,665	70,479	71,301	72,130	72,969	73,815	74,670	75,534	76,406
School Taxes			21,612	51,940	52,547	53,159	53,778	54,403	55,034	55,672	56,316	56,966
Total			50,598	121,606	123,026	124,460	125,909	127,372	128,850	130,342	131,850	133,372
Unreimbursed MSF Eligible Expenses		2,935,875	2,885,277	2,763,671	2,640,645	2,516,185	2,390,277	2,262,905	2,134,055	2,003,713	1,871,863	1,738,491
Local Site Remediation Revolving Fund Capture Local Taxes												

Tax Ratio	Millages	Percentage
Local Tax	32.1902	57.29%
School Tax	24.0000	42.71%
Total	56.1902	100.00%

Total eligible expense ratio									
MSF	\$	2,935,875	73.65%						
MDEQ	\$	1,050,136	26.35%						
Local	\$	-	0.00%						
Total	\$	3,986,011	100.00%						

Eligible activity school/local reimbursement breakdown										
	Local		School	Total						
MSF		\$1,681,902	\$1,253,973	\$	2,935,875					
MDEQ		\$601,601	\$448,535	\$	1,050,136					
Total		\$2,283,503	\$1,702,508	\$	3,986,011					

Tax Increment Financing Estimates: Table 3: Ferndale

	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	
•	Year 11	Year 12 398,740 \$	Year 13 398,740 \$	Year 14 398,740 \$	Year 15 398,740 \$	Year 16 \$	Year 17 398,740 \$	Year 18 398,740 \$	Year 19 398,740 \$	Year 20 398,740 \$	Year 21 398,740 \$	Year 22 398,740 \$	Year 23 398,740 \$	Year 24 398,740 \$	Year 25 398,740 \$	Year 26 398,740 \$	Year 27 398,740 \$	Year 28 398,740	
\$ \$	398,740 \$ 3,964,554 \$	4,004,200 \$		4,084,684 \$		4,166,787 \$, ,	4,250,539 \$	4,293,044 \$	4,335,975 \$			4,467,359 \$	398,740 \$ 4,512,033 \$	4,557,153 \$	398,740 \$ 4,602,725 \$	4,648,752 \$	4,695,239	
\$	3,565,814 \$	3,605,460 \$		3,685,944 \$		3,768,047 \$		3,851,799 \$		3,937,235 \$			4,068,619 \$	4,113,293 \$	4,158,413 \$			4,296,499	
\$	853 \$	862 \$	872 \$	882 \$	891 \$	901 \$	911 \$	921 \$	932 \$	942 \$	952 \$	963 \$	973 \$	984 \$	995 \$	1,006 \$	1,017 \$	1,028 \$	24,487
\$	765 \$	774 \$	782 \$	791 \$	800 \$	809 \$	818 \$	827 \$	836 \$	845 \$	854 \$	864 \$	873 \$	883 \$	892 \$	902 \$	912 \$	922 \$	21,969
\$	3,545 \$	3,584 \$	3,624 \$	3,664 \$	3,705 \$	3,746 \$	3,787 \$	3,829 \$	3,871 \$	3,914 \$	3,957 \$	4,001 \$	4,045 \$	4,089 \$	4,134 \$	4,179 \$	4,225 \$	4,271 \$	101,768
\$	14,406 \$	14,566 \$	14,728 \$	14,891 \$	15,056 \$	15,223 \$	15,391 \$	15,561 \$	15,733 \$	15,906 \$	16,082 \$	16,259 \$	16,437 \$	16,618 \$	16,800 \$	16,984 \$	17,170 \$	17,358 \$	413,583
\$ \$	708 \$ 11,201 \$	716 \$ 11,326 \$	724 \$ 11,452 \$	732 \$ 11,579 \$	740 \$ 11,707 \$	748 \$ 11,837 \$	756 \$ 11,967 \$	765 \$ 12,100 \$	773 \$ 12,233 \$	782 \$ 12,368 \$	790 \$ 12,504 \$	799 \$ 12,642 \$	808 \$ 12,781 \$	816 \$ 12,921 \$	825 \$ 13,063 \$	834 \$ 13,206 \$	844 \$ 13,351 \$	853 \$ 13,497 \$	20,321 321,581
\$	5,601 \$	5,663 \$	5,726 \$	5,790 \$	5,854 \$	5,918 \$	5,984 \$	6,050 \$	6,117 \$	6,184 \$	6,252 \$	6,321 \$	6,391 \$	6,461 \$	6,532 \$	6,603 \$	6,675 \$	6,749 \$	160,796
\$	49,726 \$	50,278 \$	50,837 \$	51,401 \$	51,970 \$	52,546 \$	53,127 \$	53,714 \$	54,306 \$	54,905 \$	55,510 \$	56,120 \$	56,737 \$	57,360 \$	57,989 \$	58,625 \$	59,267 \$	59,915 \$	1,427,587
\$	7,458 \$	7,541 \$	7,625 \$	7,709 \$	7,795 \$	7,881 \$	7,968 \$	8,056 \$	8,145 \$	8,235 \$	8,325 \$	8,417 \$	8,510 \$	8,603 \$	8,697 \$	8,793 \$	8,889 \$	8,986 \$	214,111
\$	15,886 \$	16,063 \$	16,241 \$	16,422 \$	16,604 \$	16,787 \$	16,973 \$	17,161 \$	17,350 \$	17,541 \$	17,734 \$	17,929 \$	18,127 \$	18,326 \$	18,527 \$	18,730 \$	18,935 \$	19,142 \$	456,087
\$	4,636 \$	4,687 \$	4,739 \$	4,792 \$	4,845 \$	4,898 \$	4,953 \$	5,007 \$	5,063 \$	5,118 \$	5,175 \$	5,232 \$	5,289 \$	5,347 \$	5,406 \$	5,465 \$	5,525 \$	5,585 \$	133,084
\$	114,784 \$	116,060 \$	117,349 \$	118,651 \$	119,966 \$	121,294 \$	122,635 \$	123,990 \$	125,358 \$	126,740 \$	128,136 \$	129,546 \$	130,970 \$	132,408 \$	133,860 \$	135,327 \$	136,809 \$	138,305 \$	3,295,373
\$	64,185 \$	64,898 \$	65,619 \$	66,347 \$	67,082 \$	67,825 \$	68,575 \$	69,332 \$	70,097 \$	70,870 \$	71,651 \$	72,439 \$	73,235 \$	74,039 \$	74,851 \$	75,672 \$	76,500 \$	77,337 \$	1,842,695
\$	21,395 \$	21,633 \$	21,873 \$	22,116 \$	22,361 \$	22,608 \$	22,858 \$	23,111 \$	23,366 \$	23,623 \$	23,884 \$	24,146 \$	24,412 \$	24,680 \$	24,950 \$	25,224 \$	25,500 \$	25,779 \$	614,232
\$	85,580 \$	86,531 \$	87,492 \$	88,463 \$	89,443 \$	90,433 \$	91,433 \$	92,443 \$	93,463 \$	94,494 \$	95,534 \$	96,585 \$	97,647 \$	98,719 \$	99,802 \$	100,896 \$	102,000 \$	103,116 \$	2,456,926
\$	200,364 \$	202,592 \$	204,841 \$	207,114 \$	209,409 \$	211,727 \$	214,069 \$	216,433 \$	218,822 \$	221,234 \$	223,670 \$	226,131 \$	228,617 \$	231,127 \$	233,662 \$	236,223 \$	238,809 \$	241,421 \$	5,752,299
\$	353 \$	357 \$	361 \$	365 \$	369 \$	373 \$	377 \$	381 \$	386 \$	390 \$	394 \$	398 \$	403 \$	407 \$	412 \$	416 \$	421 \$	425 \$	10,135
\$	706 \$	714 \$	722 \$	730 \$	738 \$	746 \$	755 \$	763 \$	771 \$	780 \$	789 \$	797 \$	806 \$	815 \$	824 \$	833 \$	842 \$	851 \$	20,280
\$	24,961 \$	25,238 \$	25,519 \$	25,802 \$	26,088 \$	26,376 \$	26,668 \$	26,963 \$	27,260 \$	27,561 \$	27,864 \$	28,171 \$	28,480 \$	28,793 \$	29,109 \$	29,428 \$	29,750 \$	30,075 \$	716,604
\$	6,183 \$ 14,902 \$	6,252 \$ 15,067 \$	6,321 \$ 15,235 \$	6,391 \$ 15,404 \$	6,462 \$ 15,574 \$	6,534 \$ 15,747 \$	6,606 \$ 15,921 \$	6,679 \$ 16,097 \$	6,753 \$ 16,274 \$	6,827 \$ 16,454 \$	6,902 \$ 16,635 \$	6,978 \$ 16,818 \$	7,055 \$ 17,003 \$	7,132 \$ 17,189 \$	7,211 \$ 17,378 \$	7,290 \$ 17,568 \$	7,370 \$ 17,761 \$	7,450 \$ 17,955 \$	177,513 427,812
\$	3,419 \$	3,457 \$	3,495 \$	3,534 \$	3,573 \$	3,612 \$	3,652 \$	3,693 \$	3,733 \$	3,775 \$	3,816 \$	3,858 \$	3,901 \$	3,943 \$	3,987 \$	4,030 \$	4,074 \$	4,119 \$	98,144
\$	3,282 \$	3,318 \$	3,355 \$	3,393 \$	3,430 \$	3,468 \$	3,506 \$	3,545 \$	3,584 \$	3,624 \$	3,664 \$	3,704 \$	3,745 \$	3,786 \$	3,827 \$	3,869 \$	3,912 \$	3,954 \$	94,223
\$	7,463 \$	7,546 \$	7,630 \$	7,715 \$	7,800 \$	7,887 \$	7,974 \$	8,062 \$	8,151 \$	8,241 \$	8,331 \$	8,423 \$	8,516 \$	8,609 \$	8,704 \$	8,799 \$	8,895 \$	8,993 \$	214,264
\$	61,269 \$	61,950 \$	62,638 \$	63,333 \$	64,034 \$	64,743 \$	65,459 \$	66,182 \$	66,913 \$	67,650 \$	68,395 \$	69,148 \$	69,908 \$	70,675 \$	71,451 \$	72,234 \$	73,025 \$	73,823 \$	1,758,975
\$	261,632 \$	264,541 \$	267,479 \$	270,447 \$	273,444 \$	276,471 \$	279,528 \$	282,616 \$	285,734 \$	288,884 \$	292,066 \$	295,279 \$	298,524 \$	301,802 \$	305,113 \$	308,456 \$	311,834 \$	315,244 \$	7,511,274
\$	114,784 \$	116,060 \$	117,349 \$	118,651 \$	119,966 \$	121,294 \$	122,635 \$	123,990 \$	125,358 \$	126,740 \$	128,136 \$	129,546 \$	130,970 \$	132,408 \$	133,860 \$	135,327 \$	136,809 \$	138,305	
\$	85,580 \$ 5,000 \$	86,531 \$ 5,000 \$	87,492 \$ 5,000 \$	88,463 \$ 5,000 \$	89,443 \$ 5,000 \$	90,433 \$ 5,000 \$	91,433 \$ 5,000 \$	92,443 \$ 5,000 \$	93,463 \$ 5,000 \$	94,494 \$ 5,000 \$	95,534 \$ 5,000 \$	96,585 \$ 5,000 \$	97,647 \$ 5,000 \$	98,719 \$ 5,000 \$	99,802 \$ 5,000 \$	100,896 \$ 5,000 \$	102,000 \$ 5,000 \$	103,116 5,000	
\$	1,500 \$	1,500 \$	1,500 \$	1,500 \$	1,500 \$	1,500 \$	1,500 \$	1,500 \$	1,500 \$	1,500 \$	1,500 \$	1,500 \$	1,500 \$	1,500 \$	1,500 \$	1,500 \$	1,500 \$	1,500	
\$	10,697 \$	10,816 \$	10,937 \$	11,058 \$	11,180 \$	11,304 \$	11,429 \$	11,555 \$	11,683 \$	11,812 \$	11,942 \$	12,073 \$	12,206 \$	12,340 \$	12,475 \$	12,612 \$	12,750 \$	12,889	
\$	108,284 \$	109,560 \$	110,849 \$	112,151 \$	113,466 \$	114,794 \$	116,135 \$	117,490 \$	118,858 \$	120,240 \$	121,636 \$	123,046 \$	124,470 \$	125,908 \$	127,360 \$	128,827 \$	130,309 \$	131,805	
\$	74,882 \$	75,715 \$	76,556 \$	77,405 \$	78,263 \$	79,129 \$	80,004 \$	80,888 \$	81,780 \$	82,682 \$	83,592 \$	84,512 \$	85,441 \$	86,379 \$	87,327 \$	88,284 \$	89,250 \$	90,226	5 000 404
\$	183,166 \$ 1,808,844 \$	185,275 \$ 1,994,120 \$	187,405 \$ 2,181,525 \$	189,556 \$ 2,371,081 \$	191,729 \$ 2,562,809 \$	193,923 \$ 2,756,733 \$	196,139 \$ 2,952,872 \$	198,378 \$ 3,151,250 \$	200,639 \$ 3,351,889 \$	202,922 \$ 3,554,811 \$	205,229 \$ 3,760,040 \$	207,558 \$ 3,967,598 \$	209,911 \$ 4,177,508 \$	212,287 \$ 4,389,795 \$	214,687 \$ 4,604,482 \$	217,111 \$ 4,821,593 \$	219,559 \$ 5,041,152 \$	222,032 \$ 5,263,184	5,263,184
	27,645	27,963	28,285	28,609	28,937	29,268	29,603	29,941	30,282	30,627	30,975	31,326	2,779						601,601
	20,611	20,849	21,088	21,330	21,575	21,822	22,071	22,323	22,577	22,834	23,094	23,356	2,072						448,535
	48,256 573 586	48,812 524,774	49,373 475 402	49,940 425 462	50,512 374 950	51,090	51,674 272 186	52,264 219,922	52,859 167,063	53,461	54,069 59 533	54,682 4.851	4,851						1,050,136
	573,586	524,774	475,402	425,462	374,950	323,860	272,186	£ 13,3££	167,063	113,602	59,533	4,851	-						
	77,287	78,177	79,076	79,983	80,900	81,826	82,761	83,706	84,660	85,623	86,596	87,579	7,769						1,681,902
	57,623 134,910	58,286 136,463	58,956 138,032	59,633 139,617	60,317 141 217	61,007 142,833	61,704 144 465	62,408 146 114	63,120 147,779	63,838 149,461	64,564 151 160	65,296 152,876	5,793 13,562						1,253,973 2 935 875
	1,603,580	136,463 1,467,117	138,032 1,329,085	139,617 1,189,468	141,217 1,048,251	142,833 905,418	144,465 760,953	146,114 614,839	147,779 467,059	149,461 317,598	151,160 166,438	152,876 13,562	13,562 -						2,935,875
													\$	75,000 \$	75,000 \$	75,000 \$	75,000 \$	75,000	375,000
													Ψ	, 5,000	, 5,000	, 0,000	70,000 \$	7 3,000	3.0,000

Table 4 - OCBRA - Cities of Ferndale and Pleasant Ridge Plan

City of Ferndale

Post-**Development TV** <u>LSD</u> **Estimate** Parcel No. **Address** 2016 TV 1 24- 25-27-201-005 3351 BERMUDA ST 110 10,000 37,470 2 24- 25-27-201-012 3281 BERMUDA ST 110 5,570 5,740 3 24- 25-27-201-013 3265 BERMUDA ST 110 82,500 307,840 4 24- 25-27-201-015 3155 BERMUDA ST 110 50,000 265,810 5 24- 25-27-201-019 3291 BERMUDA ST 33,790 34,810 110 6 24- 25-27-201-020 660 E TEN MILE RD 110 17,000 137,850 24- 25-27-202-008 3350 BERMUDA ST 110 12,420 12,790 8 24- 25-27-202-009 3342 BERMUDA ST 110 14,950 10,500 24- 25-27-202-010 3334 BERMUDA ST 20,100 110 13,740 10 24- 25-27-202-013 272,970 3310 BERMUDA ST 110 10,160 11 24- 25-27-202-014 3300 BERMUDA ST 110 19,980 283,070 12 24- 25-27-202-018 3252 BERMUDA ST 110 19,790 282,880 13 24- 25-27-202-019 3242 BERMUDA ST 110 10,160 272,970 14 24- 25-27-202-020 3232 BERMUDA ST 110 8,530 271,210 15 24- 25-27-202-021 3224 BERMUDA ST 110 10,160 272,970 16 24- 25-27-202-022 3216 BERMUDA ST 110 13,220 280,750 17 24- 25-27-202-023 3206 BERMUDA ST 110 8,530 271,210 18 24- 25-27-202-024 3164 BERMUDA ST 110 8,530 271,210 19 24- 25-27-202-052 **BERMUDA** 110 16,730 16,550 20 24- 25-27-202-053 296,070 **BERMUDA** 110 33,160 398,740 3,624,950

City of Pleasant Ridge

Post-**Development TV** Parcel No. **LSD Address** 2016 TV **Estimate** 1 60- 25-27-127-009 404 E TEN MILE RD 336,820 1,124,880 110 2 60- 25-27-127-010 660 E TEN MILE RD 110 225,000 1,059,230 3 60- 25-27-127-012 400 E TEN MILE RD 247,700 110 78,750 4 60- 25-27-127-013 11,590 No Address 110 11,250 651,820 2,443,400

^{*}Estimations provided are based on the Site Plan included in Appendix C



City of Pleasant Ridge

James Breuckman, City Manager

From: Jim Breuckman, City Manager

To: City Commission

Date: May 3, 2015

Re: Proposed Fiscal Year 2017-2018 Budget Call for Public Hearing

Overview

Attached is the proposed Fiscal Year 2017-2018 budget which will take effect July 1 of this year, if approved.

Background

Revenue

Financial projections for Fiscal Year 2017-2018 are stable. The City continued to experience solid growth in assessed values of about 6% over the past year, but due to a 0.9% rate of inflation the City will see very modest growth in revenues. Still, through careful budgeting and planning the City will be able to provide the same level of service in large part due to the property tax millages approved by the voters in November of 2014.

Accomplishments

As we enter our third year with the 2014 millages in place, the City has made significant progress addressing capital investment and maintenance items which had been deferred during the first half of this decade in the face of declining revenues. These include:

- Substantial completion of the Gainsboro Park project
- Energy efficiency upgrades at the City Hall and the Community Center
- Providing the Police with a new patrol car and fully funding an annual capital improvements budget to ensure equipment will be replaced on-time
- Sidewalk maintenance
- Street tree plantings
- Replacement of the roof over the large room at the Community Center
- Replacing the marcite surface in the pool
- New workout equipment and flooring in the wellness center

These efforts are bringing tangible benefits to our residents by allowing our Police to continue to provide reliable service; investing in the most significant recreation project since the construction of the pool and

fitness center in 2003; necessary maintenance and upkeep at our Community Center; making our streets a nicer, safer place to be by ensuring that we have smooth sidewalks, slow traffic, and a mature tree canopy.

Upcoming Projects

We will complete all the projects programmed for 2017-2018 in the City's 2017-2022 capital improvements plan. Considering rising construction costs, we have successfully sold a bond issue to complete the reconstruction of all remaining streets by the fall of 2018. As of the date of this memo the Hanover and Norwich street reconstruction project is in progress. Next summer, we will reconstruct Ridge, Indiana, and Bermuda. The infrastructure bond will be repaid using our existing infrastructure millage revenue.

We will also complete improvements to the park space behind the community center with major support from the Foundation. This project will include the creation of a patio gathering space outside of the large room that will complement the event function of the community center. It will also create a new community gathering space that will be available to residents. The project will remove the end-of-life playground equipment that currently exists behind the community center, and will replace it with a new play equipment that will be located where the swings currently are.

Challenges

As always, there are challenges. We have foreseen for a few years now that increasing retiree legacy costs will be an issue for us. This year, those increases resulted in us being able to balance our budget, but only just. In the coming years, increasing pension costs will result in the City entering a deficit position in the general fund. To provide some context, in 2019 retiree pension costs will be \$375,000 for the year, compared to about \$200,000 in 2014. Considering that the 2014 general operating millage resulted in about \$100,000 of new revenue, you can see that the increasing pension costs are a large challenge for the City.

These increases will again place us in a position where we must choose between cutting the services that our residents value, and funded in 2014, or again asking the voters to support our retirees. In fact, the shortfalls we will soon face are larger than we faced in 2014, and we will not be able to bear the increasing retiree costs by making minor cuts. Balancing the budget to absorb the rising retiree costs will require major cuts that will impact or eliminate services that our residents value, meaning that we will soon face a choice between raising additional revenue, or eliminating valued services.

The reasons for the increasing pension costs are explained further in this budget document, but in short, the increasing pension contribution requirement results from the fact that our pension fund is just 53% funded, and that MERS has changed actuarial assumptions in their pension fund valuation methodology which will result in higher required annual pension payments by the City in the coming years. Our current pension situation is not due to the City skipping or missing payments, but rather due to pension benefit increases in the 1980s and 90s that were not paid for at the time through increased contributions. Today, that bill has come due.

Projections

We continue to present a three-year budget. The budget now shows approved FY17-18 budget numbers, alongside projections for FY18-19 and 19-20 (only the 17-18 budget is adopted, the two following years are for planning purposes). The presentation of three budget years helps the City to plan for future expenses, and to ensure that budgetary decisions for the coming year consider future events and expenditures to ensure that we are making sound budget decisions. Examples include setting aside money each year in the capital improvement fund to support the purchase of a police car every other year. In this way, we can smooth out large capital expenditures over multiple budget years rather than bearing the full

FY 2017-18 Budget Call for Public Hearing May 3, 2017 - Page 3 of 3

cost in one budget year. The three-year projection is also used to set utility rates for the coming year, smoothing out large capital expenditures over three years to avoid having to make large jumps in utility rates in future years.

I thank the Commission and our residents for the trust and support that you provide to City Staff, and I thank all our talented City employees for their dedicated efforts. We are blessed with a group of City employees who truly go above and beyond to provide excellent service to our residents. Most of all, we acknowledge that we can do these things through the community-mindedness and support of our residents.

Requested Action

Scheduling the public hearing for the proposed FY2017-2018 budget and property tax millage rates for June 13, 2017

G:\City Commission Files\Agenda Files\2016\2016.05\Budget\2016.05.05 Budget Cover Memo.docx

ORIGINAL TO: County Clerk(s) COPY TO: Equalization Department(s) COPY TO: Each township or city clerk

For all Other

L-4029

2017 Tax Rate Request (This form must be completed and submitted on or before September 30, 2017)

	REQUEST REP				ISSIONERS iling is mandatory; Pena	ltv applies		,	Carefully read	the instructions	on page 2.
	Where the Local Gove			Thorana 211.04d. 1	2017 Taxa 145 ,	ble Value of ALL Prope 7 22,450					
City of	rnment Unit Requestin	e	•			School Districts: 2017 Personal and Commerci					
	must be complete orized for levy on t			nment for which a	property tax is levi	ed. Penalty for non-	-filing is provid	ed under MCL Sec	211.119. The follo	owing tax rates ha	ve
(1) Source	(2) Purpose of Millage	(3) Date of Election	(4) Original Millage Authorized by Election Charter, etc.	(5) ** 2016 Millage Rate Permanentl Reduced by MCl 211.34d "Headlee"	(6) 2017 Current y Year "Headlee" L Millage Reduction Fraction	(7) 2017 Millage Rate Permanently Reduced by MCL 211.34d "Headlee"	(8) Sec. 211.34 T in Assessing Equalization Millage Rollba Fraction	or (9) n Maximum	(10) Millage Requested to * be Levied July 1	(11) Millage Requested to be Levied Dec. 1	(12) Expiration Date of Millage Authorized
Charter	Gen Operating	NA	20.0000	10.8434	0.9797	10.6232	1.0000	10.6232	10.6232		NA
Charter	Operating-15	NA	2.9000	2.7804	0.9797	2.7239	1.0000	2.7239	2.7239		NA
PA298	Refuse	NA	3.0000	1.6260	0.9797	1.5929	1.0000	1.5929	1.5929		NA
PA359	Publicity	NA	0.5000	0.4793	0.9797	0.4695	1.0000	0.4695	0.3375		NA
Voted	Library	11/04/14	0.5000	0.4793	0.9797	0.4695	1.0000	0.4695	0.3687		2019
Voted	Park Improvement	11/04/14	0.7500	0.7190	0.9797	0.7044	1.0000	0.7044	0.7044		2024
Voted	Pool-Operating	04/07/03	1.4000	1.2073	0.9797	1.1827	1.0000	1.1827	1.1827		2028
Voted	Pool-Debt	04/07/03	unlimit	NA	NA	NA	NA	NA	1.2450		2028
Prepared by James	Breuckman			phone Number 8-541-2901		Title of Prepare City Man			Date DRAFT 5-9	-2017	
reduced, if	necessary to compl	v with thes	tate constitutio	n (Article 9. Sectio	t named above, we c n 31), and that the re school districts which	quested levy rates ha	ave also been re	educed, if	Local School Distri requesting millage 2017 for instruction	ct Use Only. Comple to be levied. See ST is on completing this	te if C Bulletin 3 of section.
380.1211(3	Signature	Cooliono	211,210, 211.0	····	Print Name		Date	<u> </u>	Total School District Operating Rates to be Levied (HH/Supp and NH Oper ONLY)		Rate
Secret Chairp					Print Name	.	Date	RAFT 5-9-24	For Principal Residence, Qualified Ag, Qualified Forest and Industrial		
Presid	•				TRIL HOUSE		Date		Personal For Commercial Personal		

^{*} Under Truth in Taxation, MCL Section 211.24e, the governing body may decide to levy a rate which will not exceed the maximum authorized rate allowed in column 9. The requirements of MCL 211.24e must be met prior to levying an operating levy which is larger than the base tax rate but not larger than the rate in column 9.

^{**} IMPORTANT: See instructions on page 2 regarding where to find the millage rate used in column (5).

ORIGINAL TO: County Clerk(s)
COPY TO: Equalization Department(s) COPY TO: Each township or city clerk

L-4029

2017 Tax Rate Request (This form must be completed and submitted on or before September 30, 2017)

Carefully read the instructions on page 2.

				DARD OF COMMI 11.34 and 211.34d. Fi			alty applies.					<u></u>	9
	Where the Local Gov					2017 Taxa 145 ,	ible Value of ALL Proper 722,450						
Local Gove	rnment Unit Requestir		vy			For LOCAI Industrial F	L School Districts: 2017 Personal and Commercia	Taxable Valu al Personal P	e excluding roperties.	g Principal Resid	ence, Qualified Agricu	Itural, Qualified Fores	t,
This form	must be complete orized for levy on	d for each	unit of gover	nment for which a	property	tax is levi	ied. Penalty for non	-filing is pro	ovided u	nder MCL Sec	211.119. The folio	owing tax rates ha	ve
(1) Source	(2) Purpose of Millage	(3) Date of Election	(4) Original Millage Authorized by Election	211.34d	2017 y Year " _ Mi Red	(6) Current Headlee" Ilage luction action	(7) 2017 Millage Rate Permanently Reduced by MCL 211.34d "Headlee"	(8) Sec. 211.: in Assess Equaliz Millage R Fract	34 Truth sing or ation tollback	(9) Maximum Allowable Millage Levy	(10) Millage Requested to be Levied July 1	(11) Millage Requested to be Levied Dec. 1	(12) Expiration Date of Millage Authorized
Voted	Infrastructure	11/05/13	3.0000	2.8472	0.979	7	2.7894	1.0000		2.7894	2.7894		2035
- ·													
				+		H-1							
					-								
					-							<u> </u>	
	<u> </u>												
Prepared by James	y Breuckman		I	ephone Number 48-541-2901			Title of Prepare City Man				Date DRAFT 5-9	-2017	
reduced if	necessary to comp	ly with thes	state constitution	on (Article 9. Sectio	n 31), and	that the re	certify that these requequested levy rates his levy a Supplementa	ave also bed	en reduce	ed, if	requesting millage	ct Use Only. Comple to be levied. See ST(s on completing this	Bulletin 3 of
380.1211(L Sections	211.24 0 , 211.	34 and, for LOCAL	SCHOOL UIS	LIICIS WIIIC	ii ievy a Supplementa	ai (i loid i laii	illiess) ivi	mage,	Total School Dis Rates to be Levi		
Clerk	Signature				Print Name				Date		and NH Oper Of	`	Rate
Secre	-				Print Name	·			DRAF	T 5-9-24	For Principal Resi	dence, Qualified est and Industrial	
Presid	person Signature dent]	rnnt Name				Date		Personal For Commercial F	Personal	
* Under Tr	uth in Taxation, MC	L Section 2	211.24e, the go	overning body may	decide to l	evy a rate	which will not exceed	the maxim	um autho	rized	- O Commercial F	G, SOTION	
	ed in column 9. The ger than the rate in		nts of MCL 211	1.24e must be met p	orior to levy	∕ıng an op	erating levy which is	iarger than t	ine base i	ax rate	For all Other		

^{**} IMPORTANT: See instructions on page 2 regarding where to find the millage rate used in column (5).



City of Pleasant Ridge 2017-2018 Annual Budget

DRAFT May 2, 2017

Mayor

Kurt Metzger

City Commissioners

Jay Foreman Jason Krzysiak Ann Perry Bret Scott

City Manager

James Breuckman

Table of Contents

Tal	ole (of Contents	i
A.	In	troduction	1
1	<u>.</u>	City Manager's Letter	1
2	2.	Public Hearing Notice – Proposed 2017-18 Annual Budget	3
3	3.	Budget Resolution	
В.	Вι	udget Summary	7
1	<u>.</u>	Key Budget Information	7
2	2.	Summary Graphs and Tables	
3	3.	City Commission Goals and Objectives	
2	1.	Budget Policies and Procedures	
5	5.	Fund Structure	
6	6.	Millage Rate Information	20
7	7.	City Property Tax Revenue Limitations and Headlee Impact	22
8	3.	Pension Unfunded Liability and Cost Increase	24
9).	Personnel	32
C.	Ge	eneral Fund	35
1	101.	Summary	35
1	.01	General Fund Revenues	36
1	101.	General Fund Expenditures	39
D.	Sp	pecial Revenue Funds	46
2	202.	Major Street Fund	46
		Local Street Fund	
		Infrastructure Improvements	
		Solid Waste Fund	
2	251.	Pool/Fitness Facility	52
2	258.	Segregated Capital Assets Fund - Parks Special Revenue Fund (SCAF-PSRF)	54
2	259.	Segregated Capital Assets Fund Remainder Fund (SCAF-RF)	56
		Downtown Development Authority	
2	271.	Library Fund	58
2	297.	Historical Fund	59
3	301.	Debt Service (Voted Bonds)	60
2	101.	Capital Improvement Fund	61
E.	Er	nterprise Funds	63
Į.	592	Water and Sewer Fund	63

A. Introduction

1. City Manager's Letter



City of Pleasant Ridge

May 2, 2017

RE: Proposed Fiscal Year 2017-2018 Operating Budget

Honorable Mayor Metzger and members of the Pleasant Ridge City Commission:

This budget message formally transmits for your review and consideration the City budget for the fiscal year 2017-2018. The public hearing to solicit public comment is scheduled for June 13, 2017 at 7:30pm.

Financial projections for Fiscal Year 2017-2018 are stable. The City continued to experience solid growth in assessed values of about 5% over the past year, but due to a 0.9% rate of inflation the City will see very modest growth in revenues. Still, through careful budgeting and planning the City will be able to provide the same level of service in large part due to the property tax millages approved by the voters in November of 2014.

As we enter our third year with the 2014 millages in place, the City has made significant progress addressing capital investment and maintenance items which had been deferred during the first half of this decade in the face of declining revenues. These include:

- Substantial completion of the Gainsboro Park project
- Energy efficiency upgrades at the City Hall and the Community Center
- Providing the Police with a new patrol car and fully funding an annual capital improvements budget to ensure equipment will be replaced on-time
- Sidewalk maintenance
- Street tree plantings
- Replacement of the roof over the large room at the Community Center

These efforts are bringing tangible benefits to our residents by allowing our Police to continue to provide reliable service; investing in the most significant recreation project since the construction of the pool and

1. City Manager's Letter

fitness center in 2003; necessary maintenance and upkeep at our Community Center; making our streets a nicer, safer place to be by ensuring that we have smooth sidewalks, slow traffic, and a mature tree canopy.

We will complete all the projects programmed for 2017-2018 in the City's 2017-2022 capital improvements plan. Considering rising construction costs, we have successfully sold a bond issue to complete the reconstruction of our streets by the fall of 2018. As of the date of this letter, the Hanover and Norwich street reconstruction project is in progress. Next summer, we will reconstruct Ridge, Indiana, and Bermuda. The infrastructure bond will be repaid using our existing infrastructure millage revenue.

As always, there are challenges. We have foreseen for a few years now that retiree legacy costs will be an issue for us. This year, those increasing costs have resulted in us being able to balance our budget, but only just. In the coming years, increasing pension costs will result in the City entering a deficit position in the general fund. To provide some context, in 2019 retiree pension costs will be \$375,000 for the year, compared to about \$200,000 in 2014. Considering that the 2014 general operating millage resulted in about \$100,000 of new revenue, you can see that the increasing pension costs are a large challenge for the City. The increase will again place us in a position where we must choose between cutting the services that our residents value, and funded in 2014, or again asking the voters to support our retirees.

The reasons for the increasing pension costs are explained further in this budget document, but in short, the increasing pension contribution requirement results from the fact that our pension fund is just 53% funded, and that MERS has changed actuarial assumptions in their pension fund valuation methodology which will result in higher required annual pension payments by the City in the coming years. Our current pension situation is not due to the City skipping or missing payments, but rather due to pension benefit increases in the 1980s and 90s that were not paid for at the time through increased contributions. Today, that bill has come due.

We continue to present a three-year budget. The budget now shows approved FY17-18 budget numbers, alongside projections for FY18-19 and 19-20 (only the 17-18 budget is adopted, the two following years are for planning purposes). The presentation of three budget years helps the City to plan for future expenses, and to ensure that budgetary decisions for the coming year consider future events and expenditures to ensure that we are making sound budget decisions. Examples include setting aside money each year in the capital improvement fund to support the purchase of a police car every other year. In this way, we can smooth out large capital expenditures over multiple budget years rather than bearing the full cost in one budget year. The three-year projection is also used to set utility rates for the coming year, smoothing out large capital expenditures over three years to avoid having to make large jumps in utility rates in future years.

I thank the Commission and our residents for your trust and support, and I thank all our talented City employees for their dedicated efforts. We are blessed with a group of City employees who truly go above and beyond to provide excellent service to our residents. Most of all, we acknowledge that we can do these things through the community-mindedness and support of our residents.

Respectfully,

James Breuckman City Manager

2. Public Hearing Notice – Proposed 2017-18 Annual Budget

City of Pleasant Ridge 23925 Woodward Avenue Pleasant Ridge, Michigan 48069

NOTICE OF A PUBLIC HEARING ON THE PROPOSED FY2017-2018 CITY BUDGET AND 2017 MILLAGE RATES

NOTICE IS HEREBY GIVEN in accordance with Section 4.03 of the Pleasant Ridge City Charter that a public hearing will be held on Tuesday, June 13, 2017, at 7:30 p.m. in the City Commission Chambers, 23925 Woodward Avenue, Pleasant Ridge, Michigan, to solicit public comments on the following:

THE PROPOSED 2017-2018 COMBINED CITY BUDGET AND MILLAGE RATES.

The last fiscal year (July 1, 2016 through June 30, 2017) and the proposed FY2017-2018 (July 1, 2017 through June 30, 2018) millage rates are as follows:

	16-17	17-18
General Operating - Charter	10.8434	10.6232
General Operating (2015)	2.7805	2.7239
Infrastructure Improvement (2015)	2.8473	2.7894
Community Promotion	0.3481	0.3375
Parks Improvement (2015)	0.7191	0.7044
Rubbish	1.6261	1.5929
Pool Operations	1.2074	1.1827
Library	0.3763	0.3687
Debt	1.2123	1.2450
Total Millage:	21 9604	21 5677

The City may not adopt its proposed FY 2017-2018 budget until after the public hearing. A copy of the proposed FY 2017-2018 budget and the proposed 2017 property tax millage rates is available for public inspection during normal business hours in the office of the City Clerk, at 23925 Woodward Avenue, Pleasant Ridge, Michigan. Public comments, oral or written, are welcome at the hearing on the proposed budget for Fiscal Year 2017-2018 and the proposed property tax millage rate. All interested citizens are encouraged to attend and to submit comments.

Amy M. Drealan City Clerk

Published: The Daily Tribune

May ___, 2017

AFFIDAVIT REQUESTED

3. Budget Resolution

City of Pleasant Ridge Budget Resolution General Appropriations Act Fiscal Year 2017-2018

WHEREAS, the City Manager has prepared and submitted to the City Commission the proposed budget for fiscal year 2017-2018; and

WHEREAS, the City Commission has advertised the tentative millage rates in the Daily Tribune on May ___, 2017, and held the public hearing on the budget and the tentative millage rates pursuant to Section 16 of the Uniform Budgeting and Accounting Act (Truth in Budgeting) on Tuesday, June 13, 2017; and

WHEREAS, the City Commission has reviewed the proposed property tax rates and budget.

NOW, THEREFORE LET IT BE RESOLVED, that the budget for the fiscal year commencing July 1, 2017 and ending June 30, 2018 be adopted; and

BE IT FURTHER RESOLVED, that the revenue and transfers-in for the fiscal year 2017-2018 are estimated as follows:

BE IT FURTHER RESOLVED, that the expenditures and transfers-out are hereby appropriated by the City Commission to meet the liabilities of the City of Pleasant Ridge in the ensuing fiscal year as follows:

REVENUES

	ILVENOES	
101	GENERAL FUND Taxes and special assessments Licenses and Permits Federal and State Grants State Shared Revenue Charges for Services Fines and Forfeits Interest and Rents Other revenue Transfers-In	\$2,021,616 56,150 24,920 246,232 206,916 40,000 8,500 102,500 0
	Total General Fund Revenue:	2,706,833
202 203 218 226 251 258 259 260 266 271 297 301 401 592	SCAF REMAINDER FUND DOWNTOWN DEVELOPMENT AUTHORITY DRUG FORFEITURE FUND LIBRARY SERVICES	141,915 124,200 3,583,599 341,464 199,639 30,000 102,865 96,039 0 51,465 6,860 165,335 37,000 1,307,243

EXPENDITURES

101	GENERAL FUND	
	Mayor and Commission	\$21,550
	City Manager	\$158,541
	Elections	\$15,363
	City Attorney	\$46,750
	City Clerk	\$105,259
	Information Technology	\$65,600
	General Government	\$139,350
	Cable TV	\$5,750
	City Treasurer	\$110,500
	Assessment	\$21,900
	Police Services	\$1,005,352
	Fire/Rescue	\$258,000
	Building Department	\$63,725
	Planning Commission	\$0
	Public Works	\$193,948
	Street Lighting	\$35,400
	Recreation	\$366,564
	Retirement Services	\$5,000
	Transfers Out	\$37,000
	Total General Fund Expenditures:	2,655,552
	Increase in General Fund Fund Balance:	12,182
202	MAJOR STREETS	197,515
203	LOCAL STREETS	150,119
218	INFRASTRUCTURE IMPROVEMENTS	1,360,000
226	SOLID WASTE	372,618
251	POOL/FITNESS FACILITY	193,231
258	SCAF PARKS SPECIAL REVENUE FUND	0
259	SCAF REMAINDER FUND	759,000
260	DOWNTOWN DEVELOPMENT AUTHORITY	86,532
266	DRUG FORFEITURE FUND	0
271	LIBRARY SERVICES	55,681
297	HISTORICAL FUND	5,310
301	DEBT SERVICE - VOTED	176,524
401	CAPITAL IMPROVEMENTS	37,000
592	WATER and SEWER	1,251,126

BE IT FURTHER RESOLVED, the following property tax rates be authorized and that the City Treasurer is ordered to levy such funds and rates and collect and deposit the various specific uses and funds as required by ordinance and resolution:

General Operating - Charter	10.6232
General Operating - 2015	2.7239
Infrastructure Improvements - 2015	0.3375
Community Promotion	2.7894
Parks Improvement - 2015	0.7044
Solid Waste Collection & Disposal	1.5929
Pool & Recreation Facility Operations	1.1827
Library Operations	0.3687
Pool & Recreation Facility Debt	1.2450
TOTAL MILLAGE:	21.5677

BE IT FURTHER RESOLVED, that the City Commission recognizes that the City of Pleasant Ridge Downtown Development Authority will capture taxes levied from all millages,

BE IT FURTHER RESOLVED, that the City Treasurer shall levy a 1% Tax Administration Fee on all property taxes collected by the City of Pleasant Ridge from all taxing jurisdictions, as permitted by State Law.

AND, BE IT FINALLY RESOLVED, that the legal budgetary level be at the departmental level in the General Fund and at the fund level for all other funds as indicated above.

I, Amy M. Drealan, duly certified clerk of the City of Pleasant Ridge, do hereby certify that the foregoing is a true and accurate copy of a resolution adopted by the City Commission of the City of Pleasant Ridge, County of Oakland, Michigan at the Regular City Commission Meeting held Tuesday, June 13, 2017.

Amy M. Drealan, City Clerk

amy M Duelan

B. Budget Summary

1. Key Budget Information

All Funds Budget Summary

The following table presents key information and a summary of revenues and expenditures for all funds for the preceding three years, the proposed 2017-2018 budget year, and the projected budget for the next two years. Note that the budget projections for 2018-19 and 2019-20 are for planning purposes only, and are not adopted budgets.

						Approved	Projected	Projected
		Actual	Actual	Actual	Budget	Budget	Budget	Budget
		2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
Asses	ssed Valuation							
	Real	141,185,920	156,207,830	171,421,930	189,097,190	199,597,430	200,613,209	206,631,605
	Personal	3,221,970	3,237,250	3,420,020	2,867,430	1,976,670	2,867,430	2,867,430
	Total	144,407,890	159,445,080	174,841,950	191,964,620	201,572,100	203,480,639	209,499,035
Taxal	ble Valuation							
	Real	125,139,900	129,164,540	133,845,550	138,859,980	143,747,780	149,459,464	155,398,097
	Personal	3,221,970	3,237,250	3,420,020	2,867,430	1,974,670	2,867,430	2,867,430
	Total	128,361,870	132,401,790	137,265,570	141,727,410	145,722,450	152,326,894	158,265,527
Milla	ge Rate							
	General Operating - Charter	11.4248	11.3094	11.1364	10.8434	10.6232	10.4001	10.1817
	General Operating - 2015	0.0000	0.0000	2.8556	2.7804	2.7239	2.6667	2.6107
	Community Promotion	0.0000	0.0000	0.2704	0.3481	0.3375	0.3304	0.3235
	Infrastructure - 2015	2.4124	2.3880	2.9242	2.8472	2.7894	2.7308	2.6735
	Parks Improvement - 2015	0.0000	0.0000	0.7385	0.7190	0.7044	0.6896	0.6751
	Rubbish	1.7134	1.6960	1.6700	1.6260	1.5929	1.5594	1.5267
	Pool Operations	1.2722	1.2593	1.2400	1.2073	1.1827	1.1579	1.1335
	Library - 2015	0.3700	0.4949	0.3865	0.3763	0.3687	0.3609	0.3533
	Pool Debt	1.3000	1.5000	1.3380	1.2123	1.2450	1.3550	1.3265
	Total	18.4928	18.6476	22.5596	21.9600	21.5677	21.2509	20.8046
Total	Revenues							
101	General Fund	2,441,920	2,491,437	2,773,167	2,687,562	2,706,833	2,724,955	2,743,442
202	Major Streets	119,687	114,575	148,492	141,915	161,090	162,539	164,002
203	Local Streets	103,937	114,814	104,944	124,200	105,756	110,440	115,240
218	Infrastructure Improvements	302,787	309,218	594,568	3,434,099	437,400	400,976	404,585
	Solid Waste	421,630	437,177	336,137	344,364	373,267	380,237	387,359
251	Pool/Fitness Facility	287,748	217,995	220,257	201,839	214,417	215,533	217,063
258	SCAF Parks Special Revenue Fund	0	(27,762)	10,246	30,000	60,000	60,000	60,000
259	SCAF Remainder Fund	70,252	43,242	7,189	104,155	104,154	105,941	107,752
260	Downtown Development Authority	71,252	77,739	103,522	90,539	94,128	94,965	95,811
266	Drug Forfeiture Fund	0	137	0	0	0	0	0
271	Library Services	46,480	64,086	51,850	52,165	52,542	53,015	53,492
	Historical Fund	10,144	10,520	6,710	6,860	6,960	6,960	6,960
301	Debt Service - Voted	163,054	194,218	179,453	171,310	177,373	193,000	190,000
401	Capital Improvements	0	672,308	70,080	37,000	105,000	35,000	35,000
592	Water and Sewer	1,321,495	1,133,057	1,234,474	1,307,243	1,344,900	1,384,572	1,425,434
	Total	5,360,386	5,852,761	5,937,409	8,733,251	5,943,820	5,928,135	6,006,142

						Approved	Projected	Projected
		Actual	Actual	Actual	Budget	Budget	Budget	Budget
	F dtr	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
	Expenditures							
	General Fund	2,592,051	2,462,428	2,719,248	2,655,552	2,692,124	2,736,021	2,786,325
	Major Streets	125,347	184,210	110,471	146,515	148,500	148,500	148,500
	Local Streets	71,724	93,274	148,210	68,119	92,700	92,700	92,700
218	Infrastructure Improvements	211,980	772,135	705,890	1,305,000	912,250	1,037,750	298,175
226	Solid Waste	416,457	425,128	350,198	372,618	372,621	377,447	382,294
251	Pool/Fitness Facility	287,470	218,273	219,291	193,231	212,144	212,402	212,666
258	SCAF Parks Special Revenue Fund	0	0	0	0	0	0	0
259	SCAF Remainder Fund	55,061	33,174	409	759,000	100	100	100
260	Downtown Development Authority	49,540	93,748	145,324	86,532	89,730	50,730	50,730
266	Drug Forfeiture Fund	0	2	0	0	0	0	0
271	Library Services	53,636	53,722	53,719	55,681	53,970	53,970	54,089
297	Historical Fund	4,479	18,974	4,025	5,310	4,780	4,780	4,780
301	Debt Service - Voted	160,806	183,562	183,756	176,524	171,524	192,524	189,000
401	Capital Improvements	0	779,519	622	37,000	140,000	46,000	10,000
592	Water and Sewer	1,124,723	1,119,751	1,063,001	1,251,126	1,451,573	1,343,252	1,370,692
	Total	5,153,274	6,437,900	5,976,057	7,112,208	6,342,016	6,296,176	5,600,051
End o	of Year Fund Balance							
101	General Fund	500,099	532,257	586,172	618,182	632,891	621,826	578,943
202	Major Street Fund	116,934	47,299	85,322	80,722	93,312	107,351	122,853
203	Local Street Fund	67,154	88,694	45,427	101,508	114,564	132,304	154,844
218	Infrastructure Improvements	90,807	(372,110)	(483,433)	1,645,666	1,170,816	534,042	640,453
226	Solid Waste Fund	34,174	46,221	32,161	3,907	4,553	7,343	12,408
251	Pool/Fitness Facility Fund	279	0	966	9,574	11,847	14,978	19,375
258	SCAF Parks Special Revenue Fund	0	1,972,238	1,982,484	2,012,484	2,072,484	2,132,484	2,192,484
259	SCAF Remainder Fund	3,260,566	1,270,634	1,277,415	446,997	551,051	656,892	764,545
260	Downtown Development Authority	89,551	73,542	31,740	35,747	40,145	84,381	129,462
	Drug Forfeiture Fund	323	429	425	425	429	429	429
	Library Fund	4,631	14,996	13,127	9,611	8,183	7,228	6,631
	Historical Fund	17,167	8,713	11,399	12,949	15,129	17,309	19,489
	Debt Service Fund	9,874	20,531	16,228	11,014	16,863	17,339	18,339
	Capital Improvements	0	0	69,458	69,458	34,458	23,458	48,458
	Water and Sewer	1,807,169	1,820,475	1,978,642	665,508	558,835	600,155	654,897
	Total	5,998,728	5,523,919	5,471,960	5,723,752	5,325,560	4,957,519	5,363,609
	10001	3,330,720	3,323,313	3,471,300	3,723,732	3,323,300	+,557,515	3,303,003

Grant Summary

Following is a summary of grants awarded to the City of Pleasant Ridge from 2015 to-date.

Year	Grant	Amount
2015	Tree Planting (DTE Energy Foundation/MDNR)	\$4,000
2015	Woodward Corridor Neighborhood Bicycle Network (MDOT Transportation Alternatives Program)	\$2,200
2015	Woodward Streetscape Tree Plantings (MDOT)	\$2,580
2016	Community Energy Management (Michigan Energy Office)	\$5,825
2016	Gainsboro Park Project (CN EcoConnexions From the Ground Up/America In Bloom)	\$25,000

2. Summary Graphs and Tables

General Fund Revenue Trends. The following Figure 1 shows general fund revenue trends for the 1985-2016 period. All dollar values are adjusted into 2017 equivalent dollars to provide a consistent point of comparison. The figure shows that revenues generated by property taxes remained consistent at about \$1,600,000 per year until 2010, when they dropped to about \$1,500,000 per year.

The figure also shows that state revenue sharing as a source of general fund revenue has dropped precipitously over the years. In 1985 it provided the equivalent of nearly \$600,000 in today's dollars, while it is projected to provide less than half of that - \$235,000 - in budget year 2017-18. Thus, other sources of revenue have had to be found over the years and service cutbacks have been made to compensate for revenue sharing reductions.

Total inflation-adjusted general fund revenue held in a steady range between \$2.7 and \$2.9 million per year between 1988 and 2010. From budget year 2010-11 until 2014-15, general fund revenue dropped to about \$2.35 million per year. With the voter-approved passage of the general operating millage in November 2014 and renewal of the infrastructure improvement millage in November 2013, general fund revenue was restored to close to its long-term average at about \$2,700,000 starting in budget year 2015-16.

While the City will be able to again operate and provide the level of service that has come to be expected by our residents, the reality is that we have had to tax ourselves at a higher rate, and those higher local taxes only partially replace revenue that has been withheld from us by the State over the past decade.

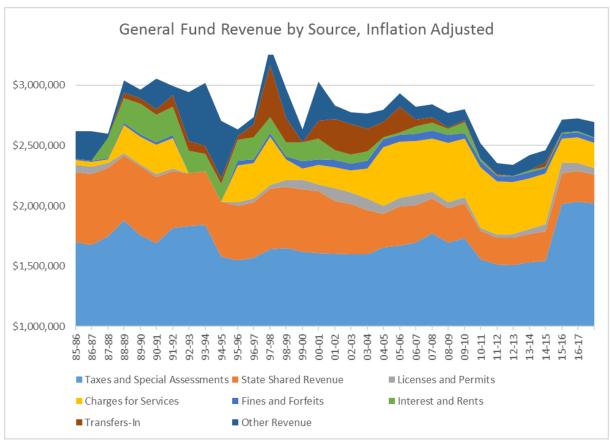


Figure 1. General Fund Revenues by Source, Adjusted for inflation in 2017 equivalent dollars, 1985-Present

Source: Pleasant Ridge Budget Documents and BLS CPI-U data for the Detroit-Ann Arbor-Flint MSA

The following Figure 2 presents the same data as Figure 1, except that each revenue source is presented as a percentage of the whole. This figure demonstrates that as other funding sources have decreased, the general fund has become steadily more reliant on locally-generated property tax revenue. Today, property taxes provide nearly 75% of general fund revenue, compared to an average of 59% of revenue over the 1985-2014 period.

Also notable is the increase of property taxes as a share of all City revenue has been increasing since FY97-98, and that state shared revenue to the City has been decreasing as a percentage of overall City funding despite the size of City expenditures remaining the same in real terms, highlighting the long-standing disinvestment of Michigan's State Government in its local municipalities.

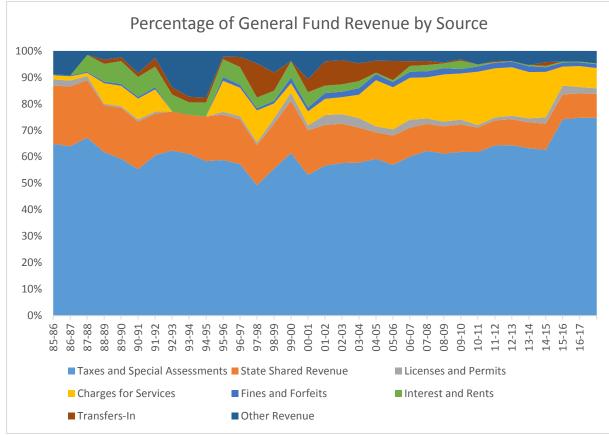


Figure 2. Percentage of General Fund Revenue by Source, 1985-Present

Source: Pleasant Ridge Budget Documents and BLS CPI-U data for the Detroit-Ann Arbor-Flint MSA

State Shared Revenue Trend. One of the main drivers impacting Pleasant Ridge's general fund budget over the past 15 years has been the decline in state shared revenues. Figure 3 shows that on an inflation adjusted basis, shared revenues have declined from the equivalent of nearly \$600,000 per year in the late 1980s to less than \$250,000 today. Shared revenues represented 23% of the City's general fund revenues in 1985, while today they represent just 9%.

Much of the financial stress under which local units of government operate today is explainable by this figure. It is an unfortunate fact that local municipalities have had to tax themselves at higher rates to make up for losses in shared revenues coming from the State. Had the State fulfilled its constitutional and statutory obligation to continue to fund local governments, Pleasant Ridge would be able to reduce local property taxes by 2.5 mills a year; to invest in pressing issues such as our underfunded pension, public infrastructure; or some combination thereof.

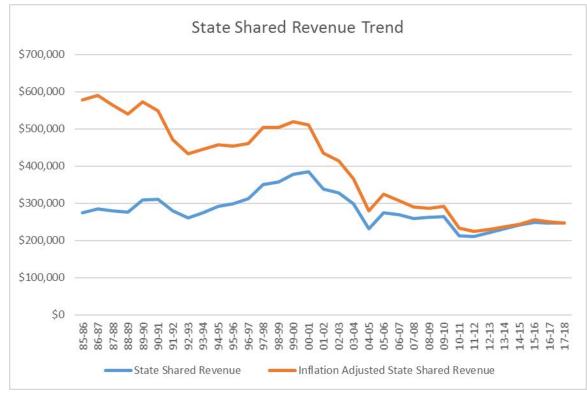


Figure 3. Pleasant Ridge Total Taxable Property Value, 1985-Present

Source: Pleasant Ridge Budget Documents and BLS CPI-U data for the Detroit-Ann Arbor-Flint MSA

General Fund Fund Balance Trends. The Government Finance Officers Association (GFOA) recommends that local governments maintain a minimum of two-months' worth of expenses, or 16.66%, in unrestricted fund balance. It is further recommended that a small unit of government like Pleasant Ridge maintain a higher fund balance due to the small size of our budget and the ability for relatively small unexpected expenses to dramatically impact our fund balance. Accordingly, it is the stated policy goal of the City to maintain a general fund balance equal to 25-30% of general fund expenditures.

Figure 4 shows the long-term trend for Pleasant Ridge's fund balance as a percentage of general fund expenditures. The figure shows that the City has generally maintained a fund balance percentage of about 20%, until the mid-00s when the sale of the 24000 Woodward property increased fund balance to about 30%. The recession and drop in revenues required fund balance draws to maintain services, which drew fund balance down to about 20%. Since FY13-14, fund balance has been slowly but steadily increasing, and is project to be about 23.4% at the end of FY17-18.

The proposed 2017-18 budget proposes a modest increase in fund balance, however, there is little margin as the City continues to reinvest in maintenance items that were deferred during the recession when revenues declined, and as required annual pension contributions continue to rise.

It is the City's plan in future years to continue to build fund balance towards the 25-30% range while also attending to the various deferred maintenance items that require attention throughout the City.

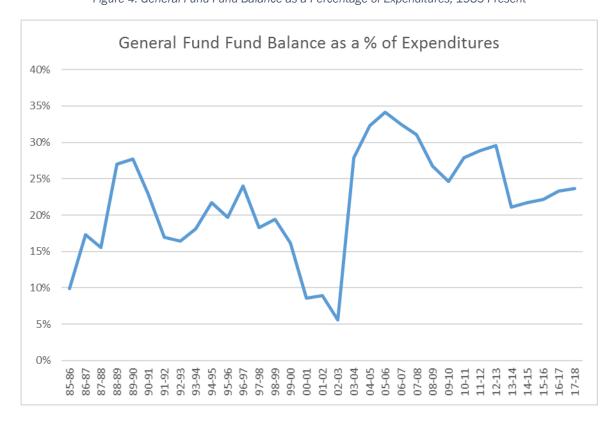


Figure 4. General Fund Fund Balance as a Percentage of Expenditures, 1985-Present

Property Value Trends. The following Figure 5 shows total (real + personal) taxable property value trends in the City of Pleasant Ridge. The inflation adjusted taxable property value has increased at a rate of about 1.8% per year. This small increase over the inflation rate is the result of certain development activities that are exempt from Headlee rollback, most notably new construction. The figure also shows the impact of the recent recession on taxable property values. On an inflation-adjusted basis the City is just now approaching taxable value levels last seen in 2006, and inflation-adjusted taxable values are still below the 2007-2009 period, meaning that the City's tax base in real terms still has not fully recovered from the 2008-2009 economic downturn.

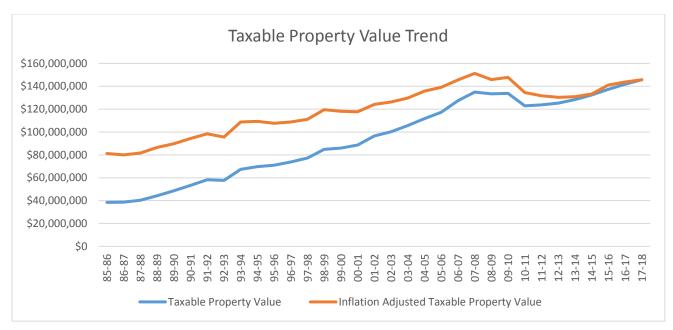


Figure 5. Pleasant Ridge Total Taxable Property Value, 1985-Present

The following Figure 6 shows how Pleasant Ridge's total assessed and taxable property values have changed over time since 2004. Assessed value is the true market value of all property in the City as determined by Oakland County Equalization (the City's assessor). Taxable value is the value of property against which property taxes are levied.

The taxable value of a property may not increase more than 5% or the rate of inflation in any given year, whichever is lower. Over time, assessed property values tend to rise faster than taxable property values. The cap on taxable property value is removed when a property is sold, and the taxable value for that property becomes equal to the assessed value in the year following the sale.

When properties become uncapped, they usually cause the City's total taxable property value to increase at a rate higher than inflation. To compensate for this, the Headlee Amendment then adjusts the City's millage rate down to ensure that the total tax revenue collected by the City does not increase at a rate higher than inflation.

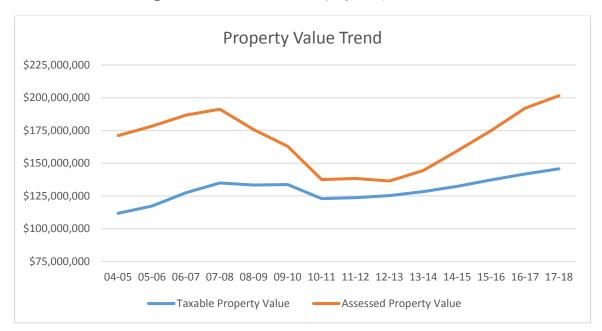


Figure 6. Taxable and Assessed Property Value, 2004-Present

3. City Commission Goals and Objectives

Following are the City Commission's 2017-2018 goals and objectives. These goals and objectives form the basis for evaluating and prioritizing budgeting decisions.

Note that the order in which these goals are presented is not intended to convey importance.

Goal: Maintain a Safe and Secure Community

Objectives:

- (1) Preserve effective levels of police staffing and equipment to ensure high quality public safety service delivery.
- (2) Maintain or improve existing fire/EMS service delivery.
- (3) Review any strategies possible to improve police, fire/EMS, and dispatch service.
- (4) Implement traffic calming measures where necessary to ensure appropriate vehicle travel speeds.
- (5) Preserve and enhance Neighborhood Watch program.

b. Goal: Ensure Good Stewardship of Municipal Infrastructure

Objectives:

- (1) Continue the City's ongoing street reconstruction program.
- (2) Implement a continuing maintenance program for previously reconstructed streets and alleys to extend their useful life.
- (3) Implement continuing maintenance and monitoring program for previously rehabilitated combined sewers to extend their useful life.
- (4) Improve bike and pedestrian infrastructure (sidewalks) throughout the City.
- (5) Complete capital projects identified in the Capital Improvements Plan.
- (6) Work with local transit authorities to improve existing bus stops.

c. Goal: Maintain Financial Sustainability

Objectives:

- (1) Maintain a competitive property tax rate position relative to other cities in the region.
- (2) Achieve and maintain an unrestricted fund balance of 20-25% and a total fund balance of 25-30% of annual general fund expenses.
- (3) Maintain a capital outlay reserve of 75% to 100% of expenditures in the Water and Sewer Enterprise Fund.
- (4) Continue to explore other revenue sources. Aggressively identify and pursue grant opportunities.
- (5) Increase funding for the defined benefit pension to reduce the City's unfunded liability.
- (6) Maintain property values by preserving Pleasant Ridge's status as a first class community.

d. Goal: Maintain Excellent Parks and Recreation Program

Objectives:

- (1) Improve park space behind the Community Center.
- (2) Complete necessary maintenance tasks at the community center, pool, and parks.
- (3) Achieve excellence in the offering and delivery of recreation services to residents of all ages.
- (4) Encourage active, healthy lifestyles for City residents.
- (5) Continue incremental facility upgrades at the community center and wellness center.

e. Goal: Preserve and Enhance Community & Neighborhood Character

Objectives:

- (1) Improve City code enforcement efforts to effectively preserve the character of the City's neighborhoods.
- (2) Protect the City's established historic character from destruction or erosion by inappropriate additions or modifications to existing buildings, or inappropriate construction of new buildings.
- (3) Work to influence future changes and enhancements to Woodward Avenue to reflect Pleasant Ridge's preferred plan.
- (4) Ensure that planning, development, and infrastructure projects enhance Pleasant Ridge as a walkable, bikeable community.

f. Goal: Foster Community Trust & Participation

Objectives:

- (1) Use a variety of outlets, including the City's website, traditional media, social media, town hall meetings, and the Ridger to inform and engage residents.
- (2) When more than one feasible choice exists for issues of major consequence, consult or collaborate with residents prior to making decisions.
- (3) Encourage, support, and recognize volunteers and community members who do good work in the community.
- (4) Conduct a statistically valid community survey at least bi-annually to measure City performance in delivering services and public sentiment on important issues facing the community.
- (5) Support resident-driven and managed initiatives.

g. Goal: Strive for Excellence in Governance

Objectives:

- (1) Develop and maintain a first-rate workforce by supporting the continued training and professional development for City employees.
- (2) Continue to pursue excellence in customer service by exploring alternative methods for improving delivery of services.
- (3) Facilitate increased use of technology during City meetings.
- (4) Continue to look for new ways to partner with nearby communities or private partners to improve the delivery of City services.
- (5) Continually evaluate and adjust the City's goals and objectives, Master Plan, Recreation Master Plan, and Capital Improvements Plan to ensure that policy decisions are being made that further the long-term interest of the City.

h. Goal: Protect the Environment

Objectives:

- (1) Reduce the City's carbon footprint through energy conservation, efficiency, and renewable generation measures.
- (2) Invest in maintaining the City's tree canopy by maintaining existing trees and planting new trees to fill gaps.
- (3) Explore ways to incorporate green infrastructure to infiltrate stormwater in place and reduce the amount of runoff that enters the City's sewer system.

4. Budget Policies and Procedures

a. Role of the Budget

The budget provides the annual financial plan for the management of the City's affairs. The document compiles the financial data needed to support Pleasant Ridge's comprehensive decision making/policy development process. This Budget is based on the City Commission's Goals and Objectives, the Capital Improvements Plan, the City's financial policies, and City Manager and departmental review of operations.

b. Budget Strategy

The current financial plan is based upon Commission direction and current revenue constraints. These factors govern the stewardship of public funds and reflect the following principles:

- (1) Basic services will be maintained at least at current levels and will be funded adequately
- (2) Program costs will reflect the true picture of the cost of operations. Depreciation will not be included in program costs (except in the enterprise fund), and some City-wide expenses will be separated from program expenditures for ease of administration.
- (3) Program services will be provided in the most efficient method while meeting the needs of the public.
- (4) Necessary infrastructure improvements will be completed to meet needs.
- (5) Revenue will be estimated at realistic levels.
- (6) Reserves will be programmed at appropriate levels to protect the City from future uncertainties. It is the City's goal to maintain unappropriated general fund reserves of at least 25% of general fund expenditures.
- (7) The budget will comply with provisions of the State Constitution, City Charter, Municipal Code, and sound fiscal policy.

c. Balanced Operating Budget

A balanced budget is a basic budgetary constraint intended to ensure that the City does not spend beyond its means. The City must function within the limits of the financial resources available and under normal circumstances requires commitment to a balanced budget. The appropriated budget cannot exceed available resources, defined as revenues generated in the current period added to balances carried forward from prior years. Any deviation from a balanced operating budget requires disclosure when it occurs.

d. Impact of Capital Budget on the Operating Budget

As new policies and programs are approved, both the operating and capital budgets are impacted. For example, an increase in service levels approved as part of the operating budget would have long-term effects on the Capital Improvements Program. Conversely, a restrictive change to the use of long-term debt would slow capital programs.

Regardless of the difference between the operating and capital budgets, the two are interdependent. Budgetary policy states that all foreseeable operating costs related to capital projects be estimated and provided for as part of the review process associated with the Capital Improvements Program. In addition, departments are required to include costs associated with operating and maintaining capital projects that are requested for the upcoming year.

e. Budgeting Controls

(1) <u>Internal Controls</u>. The annual adopted budget provides a basis of control over financial operations. The objective of these budgetary controls is to ensure compliance with legal provisions embodied in the approved budget. Activities of the General Fund and Special Revenue

Funds are included in the annual approved budget. The level of budgetary control (that is the level at which expenditures cannot exceed the appropriated amount) is established by function and category (Personnel Services, Supplies, Other Services and Charges, Capital Outlay and Debt Service) within each individual fund.

(2) Independent Audit. State statutes and the City Charter require an annual audit of all accounts of the City by certified public accountants selected by the City Commission. Abraham and Gaffney has fulfilled this requirement. The auditor's report is included in the City's Comprehensive Annual Financial Report (CAFR) and is available to the public on the City's website and through the State of Michigan Department of Treasury local audit and finance division website.¹

18

¹ See: https://treas-secure.state.mi.us/LAFDocSearch/ for CAFR files for units of local government from 2003 to present

5. Fund Structure

The accounts of the City are organized by funds and account groups, each of which is considered a separate accounting entity. Funds are established to segregate specific activities or objectives of a government in accordance with special regulations, restrictions, or limitations. The various funds are grouped into generic fund types in two broad categories as follows:

a. Governmental Funds

- (1) <u>General Fund</u>: The general fund contains the records of the ordinary activities of the City that are not accounted for in another fund. General fund activities are financed by revenue from general property taxes, state shared revenue and other sources.
- (2) <u>Special Revenue Funds</u>: Special revenue funds are used to account for the proceeds of earmarked special revenue from financing activities requiring separate accounting because of legal or regulatory provisions. Special revenue funds include Major Streets, Local Streets, Infrastructure, Solid Waste, Pool/Community Center Operations, Segregated Capital Asset Fund (SCAF), Library Services, and Parks Capital Improvement Fund.
- (3) <u>Debt Service Funds</u>: Debt service funds are used to account for the annual payment of principal and interest concerning certain long-term debt other than debt payable from the operations of an enterprise fund. The Pool/Community Center debt service fund is the City's only debt service fund.
- (4) <u>Capital Projects Funds</u>: Capital projects funds are used to account for the development of capital facilities other than those financed by the operations of the enterprise fund.

b. Proprietary Funds

(1) <u>Enterprise Fund</u>: The water and sewer fund is used to account for the results of operations that provide a service to citizens financed by a user charge for the provision of that service.

6. Millage Rate Information

Millage Rate Information. The following Table 1 shows the breakdown of Pleasant Ridge millage rates from 2006 to present.

	Original											
	Amount	Expiration	08-09	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18
General Operating - Charter	20.0000		11.4248	11.4248	11.4248	11.4248	11.4248	11.4248	11.3094	11.1363	10.8434	10.6232
General Operating (2015)	2.9000									2.8556	2.7804	2.7239
Infrastructure (2015)	3.0000	2035	2.4124	2.4124	2.4124	2.4124	2.4124	2.4124	2.3880	2.9242	2.8472	2.7894
Community Promotion	0.3431									0.2704	0.3481	0.3375
Parks Improvement (2015)	0.7500	2024								0.7385	0.7190	0.7044
Rubbish	3.0000		1.7134	1.7134	1.7134	1.7134	1.7134	1.7134	1.6960	1.6700	1.6260	1.5929
Pool Operations (2003)	1.4000	2028	1.2722	1.2722	1.2722	1.2722	1.2722	1.2722	1.2593	1.2400	1.2073	1.1827
Library (2014)	0.5000	2019	0.3700	0.4100	0.3700	0.3700	0.3700	0.3700	0.4949	0.3865	0.3763	0.3687
Pool Debt (2003)	unlimited	2028	1.0000	1.0000	1.0000	1.0000	1.0000	1.3000	1.5000	1.3380	1.2123	1.2450
Total Millage			18.1928	18.2328	18.1928	18.1928	18.1928	18.4928	18.6476	22.5595	21.9600	21.5677

Table 1. Pleasant Ridge Property Tax Millage Components, 2006 to Present

The following Figure 7 shows the long term total Pleasant Ridge city millage rate trend from 1985 to present.

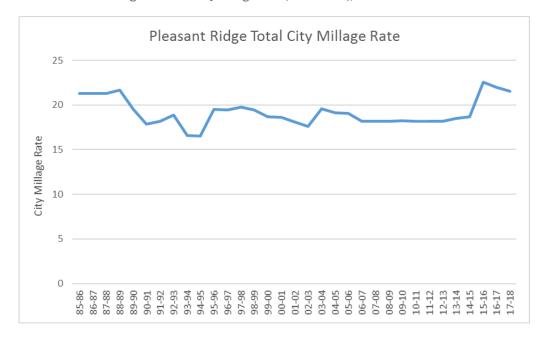


Figure 7. Total City Millage Rate (Homestead), 1985-Present

he 2017-2018 total City millage rates are reduced by 0.392 mills compared to last year due to Headlee rollback. While the City experienced robust home sales and strong growth in sales prices, Headlee limits the City to a total tax revenue growth rate of 0.9%, requiring a significant rollback in local tax rates. This 0.3923 mill reduction will reduce local taxes by \$45.08 per year per property, on average.

The community promotion millage authorized by PA 359 of 1925 (MCL 123.881) may generate up to \$50,000 annually. The 0.3375 mill levy will generate about \$49,000 for the City. The revenues will be used to pay for community publications, website maintenance, and the development of a new City website to replace our current one which is functionally obsolete.

Total Homestead Millage Rate Breakdown. The total homestead property tax rate for a property owner in Pleasant Ridge in 2017 will be not more than 46.5496 mills.² Of every tax dollar paid by residents, 46% goes to the City, 31% goes to the Ferndale school district, and the remaining 23% goes to the County and other regional entities including SMART, the intermediate school district, community college, Oakland County parks, Metro Parks, the Zoo, and the Detroit Institute of Arts.

The following Figure 7 shows the breakdown of how each tax dollar paid by residents is allocated to taxing entities. Note that the "other" category includes property taxes levied by Oakland County Parks (0.2392 mills), the Detroit Zoo (0.0990 mills), the Art Institute Authority (0.1981 mills), and the Huron Clinton Metro Parks (0.2146 mills).

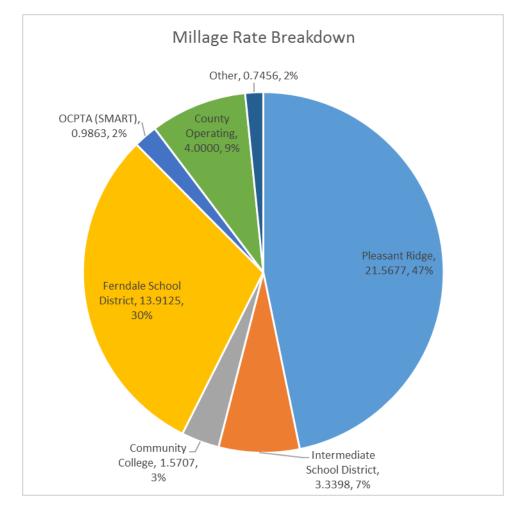


Figure 8. Total Pleasant Ridge Homestead Millage Rate Breakdown, 2017

² As of the date of adoption of this budget, final tax rates for outside, non-Pleasant Ridge jurisdictions is not known. Those outside jurisdictions are also subject to Headlee Rollbacks, and their adopted tax rates have not yet been published. For the purposes of this document, we have used updated 2017 millage rates for Pleasant Ridge millages, and the 2016 rates for outside jurisdictions.

7. City Property Tax Revenue Limitations and Headlee Impact

Property values in Pleasant Ridge have shown strong growth in recent years, rising 10.4% in 2015 and 6% in 2016. With this strong growth in property values it would be expected that the City's property tax revenue would show similar growth, however, this is not the case. The City's property tax collections are limited to the rate of inflation, which is 0.9% for FY17-18.

Take note of these numbers for RESIDENTIAL properties in the City:

Total Property Taxes Paid by Residents in 2016:	\$2,910,096
Total Property Taxes Paid by Residents in 2017:	\$2,968,93 <u>5</u>
Change in Taxes Paid 2017 vs. 2016:	
City Millage Rate in 2016	21.9600
City Millage Rate in 2017	21.5677
City Millage Rate Reduction 2016 vs. 2017:	1.8%
Uncapped Taxable Value Growth 2016 to 2017	\$89,804
Total Change in Taxes Paid for Uncapped Property 2017 vs. 2016:	\$89,804
Average Change in Taxes Paid for Capped Property 2017 vs. 2016:	\$976
Percent of Residents Paying More City Tax 2017 vs. 2016:	8.1%
Capped Taxable Value Growth 2016 to 2017:	0.9%
Total Change in Taxes Paid by Capped Properties 2017 vs. 2016:	
Average Change in Taxes Paid for Capped Property 2017 vs. 2016:	\$29
Percent of Residents Paying Less City Tax 2017 vs. 2016:	91.9%

Headlee and Proposal A. The Headlee Amendment to the State Constitution was enacted in 1978, and it established that City property tax revenues could only grow equal to the rate of inflation. If property values grew faster than inflation, the City's millage rate is rolled back (i.e. reduced) to ensure that property taxes grow only equal to inflation. If property values fell, the Headlee Amendment allowed the millage rate to roll up so that property taxes kept pace with inflation.

In 1994, the voters approved Proposal A, which created a new measure of value for each property – taxable value. Now, there are two measures of value for each property, SEV or Assessed Value, and Taxable Value. When you buy a house, the taxable value is set equal to assessed value. The assessed value is equal to about half of the true cash value of a house. In subsequent years, the assessed value of the house changes based on market rate for the house, but taxable value can increase only equal to the rate of inflation. This past year, that was 0.9%, and in Pleasant Ridge, 91.9% of all houses saw their

Assessed vs. Taxable Value Example

By way of example, consider a longtime resident of a house in Pleasant Ridge that is worth \$300,000. The assessed value of that home would be \$150,000, but because the taxable value has been capped, the taxable value is only \$92,750. That resident would pay \$2,000 a year in local City taxes. However, if they sell the house and move out, the taxable value would increase to \$150,000 to match the assessed value of \$150,000, and the new residents would pay \$3,225 a year in local taxes due to the uncapping of taxable value, even though the assessed value of the house did not change.

taxable value go up 0.9% because of this cap on taxable value growth. Over time, this leads to a gap between the assessed and taxable value of your property. You can see this gap on the valuation notice that Oakland County sends to your house each January.

However, when a house is sold, the taxable value becomes "uncapped" and pops up to equal the assessed value of a house. In 2016, 8.9% of Pleasant Ridge houses became uncapped. Their taxable value increased 47.7%.

The result of the taxable value increases due to properties being sold and having their taxable values become uncapped is that the TOTAL taxable value in Pleasant Ridge increased 3.9%. This was greater than the 0.9% growth allowed by the Headlee Amendment, so the City has had our local property tax millage rate reduced by about 0.4 mills to ensure that total property tax collections only grew by 0.9%.

Table 2. Residential Assessed vs. Taxable Value, 2016 & 2017

Assessed Value 2016	Assessed Value	% Change	Taxable Value	Taxable Value	% Change
	2017	Assessed Value	2016	2017	Taxable Value
\$180,908,696	\$191,851,957	6.0%	\$132,425,836	\$137,589,057	3.9%

This all leads to a key point. Residents who did not sell their house in 2016 will pay less in property taxes to the City in 2017 than they did in 2016. This is because the millage rate was reduced more than capped taxable values went up. In 2017, the average resident who has lived here since before 2016 will pay \$29 less in City property taxes than the year before. This effect compounds over time, as well. Residents who moved in before 2015 will pay \$85 less in City taxes in 2017 than they did in 2015.

Impact Over Time

The reduction in millage rates by the Headlee Amendment is a built-in tax reduction mechanism for long-time residents. This is a good thing for residents' pocketbooks, but it reduces the ability of the City to address growing fiscal challenges. The next section highlights the fact that the City's pension expense will increase by over \$170,000 from 2014 to 2021, while revenues are not growing at a fast-enough rate to keep up.

However, if the City's millage rate had only remained constant at the 22.5596 mills that it was in 2015 instead of being rolled back to the 21.5684 that it is in 2017, the City would have no issue meeting our increased pension expense requirement. Consider the following:

Total Taxable Value 2017:	\$145,722,410
Total Property Taxes at 2017 21.5677 millage rate:	\$3,142,879
Total Property Taxes at 2015 22.5596 millage rate:	\$3,287,440
Difference:	\$144,561

The above shows that, if non-new residents had *not* had their millage rates reduced and paid less taxes, and instead had only had their City property taxes increase at the rate of inflation, the City would not have an issue meeting its increased pension funding obligation. However, this is not the case in Michigan's local government finance environment.

8. Pension Unfunded Liability and Cost Increase

The City has been experiencing an unfunded pension liability, which is now becoming an acute financial problem. The following Figure 9 summarizes the funding level of the City's total and police pension funds (left scale), along with the City's actual and projected pension funding cost as a percentage of general fund expenses.

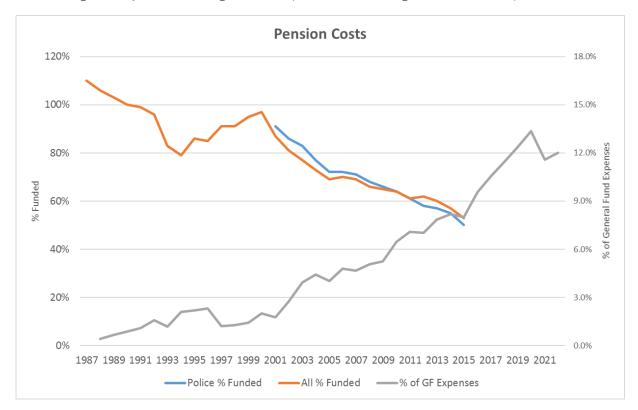


Figure 9. City Pension Funding Level and Expenses as a Percentage of General Fund Expenditures

The above Figure 9 shows that the City has experienced a decline from being 100% funded in the year 2000, to being just over 50% funded in 2016. Over the same 2000 – 2016 time period, pension costs have gone from 1.8% of general fund expenditures to 9.6% of general fund expenditures. By 2020, pension costs will represent 13.4% of general fund expenditures.

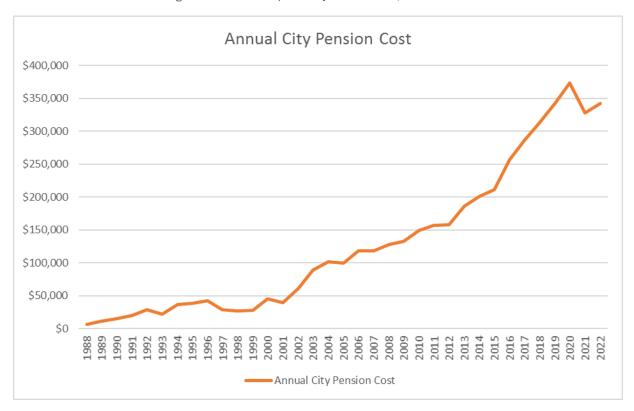


Figure 10. Annual Required City Pension Cost, 1988 - 2022

The above Figure 10 shows the City's annual required pension contribution. The required contribution is calculated each year by the Municipal Employees' Retirement System of Michigan, which is the City's pension system.

The reason for the jump in required contribution levels after 2001 were primarily due to the impact of increased benefit provisions, and will be explored in more detail on the following pages. The reason for the large increases in required pension contributions after 2012 are due to two primary reasons: 1) MERS started requiring underfunded pension groups to contribute additional funding to amortize the City's unfunded liability, and 2) MERS completed an experience study in 2015 that changed the underlying assumptions about market return and life expectancy.

The changes from the experience study were a decrease in expected returns, and an increase in life expectancy. Each of these changes individually would have caused the annual required contribution to increase, and in tandem, the effect was even more pronounced.

Benefit Costs Compared to Inflation.

Another way of presenting costs is to benchmark them to inflation. The following chart shows how costs have increased using 2006 as a baseline. The chart shows that since 2006:

- Inflation has increased 13%
- General fund revenue has increased 9%³
- Pension costs have increased 120% (projected to increase by 165% by 2018)
- Total benefit costs have increased 56%
- Health care costs have increased 30%
- Police wages have increased 15%

This chart highlights how pension costs are increasing at a much, much higher rate than both revenues and other benefit and salary costs.

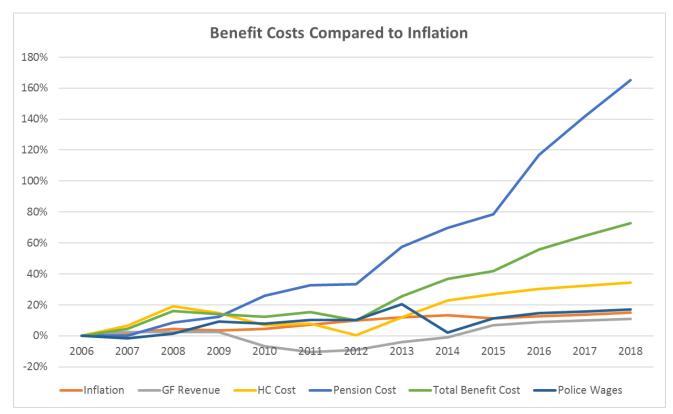


Figure 11. Benefit Costs Compared to Inflation, 2006 to 2018

26

³ General fund revenue has increased at a rate lower than inflation due to the loss in property values during the recession and limits on subsequent taxable value growth

How Did the Pension Fund Become So Underfunded?

The City has never skipped or missed a required contribution to the pension fund. Today's underfunded pension problem is due primarily to past decisions to increase pension benefits without paying for those increases at the time. MERS also did not require the City to increase our annual pension contributions to pay for those past benefits increases until recently. Basically, what happened was that pension benefits were increased in the 80s and 90s, but weren't paid for until very recently.

The following table summarizes the pension benefit and employee contribution history for groups 02 and 10, which are the largest City groups and have the largest unfunded liabilities:

Table 3. Group 02 and 10 Pension Benefit Provision History, 1946 to Present

Year	02 - Police
1946	5% Contribution, 1.7% multiplier
1982	0% Contribution, 1.7% multiplier
1989	0% Contribution, 2.0% multiplier
1992	0% Contribution, 2.25% multiplier
1998	0% Contribution, 2.5% multiplier
2011	2.5% Contribution, 2.5% multiplier
2011	02 – Police group closed to new hires
Year	10 - Non-Union
1946	5% Contribution, 1.7% multiplier
1985	5% Contribution, 1.7% multiplier (COLA)
1990	0% Contribution, 1.7% multiplier (COLA)
2001	0% Contribution, 2.5% multiplier
2011	10 – Non-Union group closed to new hires

The table shows that the trend from 1946 until 2001 was to increase benefits and to reduce employee contributions. Every change between 1946 and 2001 was to increase benefits, either through increased pension multipliers, or reduced employee contributions. In 1946, a patrol officer contributed 5% of their salary and received a 1.7% pension multiplier while a patrol officer hired before 2011 contributes 2.5% of their salary and receives a 2.5% pension multiplier – a much richer benefit at a lower cost.

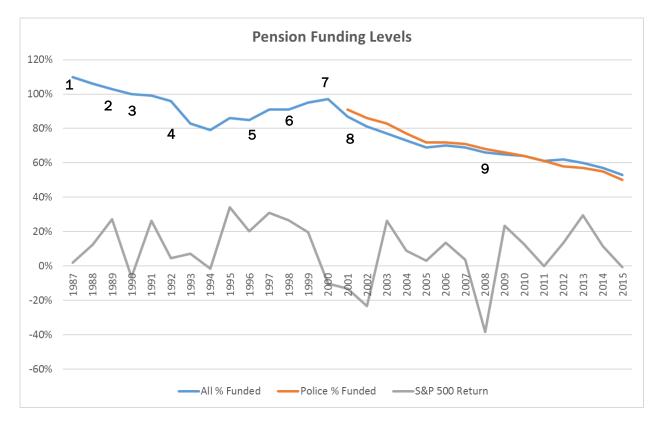
These changes are the primary cause of the situation we are now in. When an employee who contributed into the system for 20 years based on a 1.7% multiplier is bumped up to a 2.5% multiplier, it creates a shortfall that must be paid for eventually. The system only had enough money to pay out a benefit based on the 1.7% multiplier.

Alternately stated, an employee who contributed to the system based on a 1.7% multiplier would hypothetically need \$100 in the system to pay their retirement benefit. If that employee was then changed to receive a 2.5% multiplier, there would need to be \$250 in the system to pay their benefit. Yet, there was still only \$100 in the system. The need for the extra \$150 does not disappear, it must be paid by the City eventually.

The unsustainable nature of these benefit provisions led to the closing of these groups in 2011, and the creation of new pension groups with lower benefit levels for police and administrative employees hired after 2011.

Timeline of Pension Funded Percentage and Benefit Changes

The following chart and timeline show graphically the impact of the pension benefit decisions made during the 80s and 90s.



- 1. 1982 The change from 5% employee contribution to a 0% employee contribution in 1982 started a downward trend in the percent funded for pensions.
- 2. 1989 Police benefits increased from a 1.7% multiplier to a 2.0% multiplier. Funding level decrease continues.
- 3. 1990 Administrative employees reduced from 5% to 0% contribution.
- 4. 1992 Police benefits increased from 2.0% multiplier to 2.25% multiplier.
- 5. Booming stock market in the late 1990s generated abnormal gains in the pension fund, temporarily hiding the impacts of the past benefits increases/cost decreases.
- 6. 1998 Police benefits increased from 2.25% multiplier to 2.5% multiplier.
- 7. 2000 The tech bubble bursts, the early 2000s recession starts, and pension fund returns decrease back to "normal" historical levels.
- 8. 2001 Admin employees are increased to a 2.5% multiplier.
- 9. 2001 to Present Day Through the housing bubble in the stock market, the 2008 crash, or the market recovery to today, funding levels have continued to decline because benefits were increased for past employees above the level that the fund had been funded for, causing the fund to deplete over time.

Actions Taken To-Date to Address Unfunded Liability

The 01, 02, 10, and 11 groups are now closed to new hires. Employees hired after 2011 are in different pension groups with lower benefit levels and higher employee contribution amounts. The pension groups for employees hired after 2011 – groups 12 and 20, are fully funded or nearly so.

The following table is reproduced from the City's most recent Annual Actuarial Valuation Report published by MERS shows accrued liabilities, assets, and funding levels for all the City's employee groups. The full document is available for review at: http://cityofpleasantridge.org/documents/budget/aav2015.pdf

Actuarial Accrued Liabilities and Valuation Assets As of December 31, 2015

Table 6

Division	Acc	Actuarial rued Liability	Valu	uation Assets ¹	Percent Funded	(0	Unfunded Overfunded) Accrued Liabilities
01 - Gnrl Oth				_			
Active Employees	\$	0	\$	0	0.0%	\$	0
Vested Former Employees	1	254,809		3,696	1.5%		251,113
Retirees And Beneficiaries	1	237,537		173,569	73.1%		63,968
Pending Refunds	1	<u>0</u>		<u>0</u>	0.0%		<u>0</u>
Total	\$	492,346	\$	177,265	36.0%	\$	315,081
02 - Police							
Active Employees	\$	962,470	\$	114,490	11.9%	\$	847,980
Vested Former Employees	1	76,767		0	0.0%		76,767
Retirees And Beneficiaries	1	2,233,356		1,533,091	68.6%		700,265
Pending Refunds	1	<u>0</u>		<u>0</u>	0.0%		<u>0</u>
Total	\$	3,272,593	\$	1,647,581	50.3%	\$	1,625,012
10 - NonUnion							
Active Employees	\$	718,396	\$	35,099	4.9%	\$	683,297
Vested Former Employees	1	91,951		91,951	100.0%		0
Retirees And Beneficiaries	1	682,383		682,383	100.0%		0
Pending Refunds	1	<u>0</u>		<u>0</u>	0.0%		<u>o</u>
Total	\$	1,492,730	\$	809,433	54.2%	\$	683,297
11 - City Mgr	1						
Active Employees	\$	0	\$	0	0.0%	\$	0
Vested Former Employees	1	0		0	0.0%		0
Retirees And Beneficiaries	1	692,175		491,240	71.0%		200,935
Pending Refunds	1	0		0	0.0%		Ω
Total	\$	692,175	\$	491,240	71.0%	\$	200,935
12 - Non-Union after 7/1/2011							
Active Employees	\$	16,223	\$	17,598	108.5%	\$	(1,375)
Vested Former Employees	1	0		0	0.0%		0
Retirees And Beneficiaries	- 1	0		0	0.0%		0
Pending Refunds	- 1	2,244		2,244	100.0%		<u>0</u>
Total	\$	18,467	\$	19,842	107.4%	\$	(1,375)
20 - Police as of 7/1/2011	\top	•		•			
Active Employees	\$	21,154	\$	19,734	93.3%	\$	1,420
Vested Former Employees	1	0		0	0.0%		0
Retirees And Beneficiaries	- 1	0		0	0.0%		0
Pending Refunds		Q		Q	0.0%		Q
Total	\$	21,154	\$	19,734	93.3%	\$	1,420

The above table shows that the City's total unfunded liability is \$2,824,370, with nearly 60% of that unfunded liability being in the 02 – Police group. Given that the police group is the largest single source of the unfunded liability, the City is in the process of closing group 20 (which was created in 2011) and creating a new hybrid plan for new police officers hired after July 1, 2017. The hybrid plan combines a defined benefit with a 401k-style defined contribution component as a way of further controlling the City's future pension liabilities.

Budget Impact

In 2014, when the City was asking the residents to approve a Headlee Override to increase the local property tax rate, our annual pension contribution was about \$200,000. The residents approved the Headlee Override, which generated about \$100,000 of net new revenue for the City's general fund to preserve valued City services.⁴

In 2017-18, the City's annual pension payment will be \$285,000, and by 2020 it will be \$373,000. That will represent a \$173,000 increase over pension expenses in 2014. The increasing pension contribution requirements will soon have consumed the increased operating funding approved by the voters in 2014, and further, the City must find another \$73,000 in cuts.

So far we have absorbed the \$85,000 annual increase in pension funding through cuts and efficiencies in the general fund while still balancing the budget and adding a little to fund balance every year. However, the three-year budget projection shows that starting in FY18-19 the City's general fund will be in a net operating deficit and we will be again in a position where we must find supplemental funding, or to cut services to balance the budget.

	16-17	17-18	18-19	19-20	Increase: 2016 to 2020
Total General Fund Revenue	\$2,687,562	\$2,706,833	\$2,724,989	\$2,743,476	2.1%
Total General Fund Expenditures	\$2,655,552	\$2,692,124	\$2,741,661	\$2,792,201	5.1%
Pension Expenditures	\$238,010	\$295,670	\$324,984	\$354,891	49.1%
Non-Pension General Fund Expenditures	\$2,417,542	\$2,396,454	\$2,416,678	\$2,437,309	0.8%
Net Revenue	\$32,010	\$14,709	(\$16,673)	(\$48,725)	

The above table shows that non-pension spending in the general fund will remain essentially flat over the 2016 through 2020 period, increasing 0.8%. Pension expenses, however, will increase by 49%, and represent the large majority of the increase in general fund expenses.

It is worth noting that if the City's millage rate had not been reduced by over 1 mill from 2015 to 2017, providing most residents a reduction in City taxes paid, the City would be collecting over \$140,000 more in 2017 than it did in 2015. This additional funding would allow the City to cover the increased pension contributions and eliminate our unfunded liability over time.

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⁴ It should be noted that MERS did not provide future pension cost estimates until their valuation report issued in June of 2015. When the City was asking for the Headlee override millage in November of 2014, we did not know what our pension funding requirements would be in future years. This impacted our financial planning ability at the time of the 2014 millage requests.

Now that MERS is providing funding requirements 5 years into the future, we know what our funding requirements are going to be and can plan for the impact of the increases.

Actions Taken

Following is a summary of actions taken by the City to address the unfunded liability issue:

- Police and Administrative groups 02 and 10 were closed to new hires in 2010, replaced by groups with lower benefit levels. The new groups are fully or nearly fully funded.
- City Manager group closed. Current City Manager does not receive a pension.
- New police hires will receive a hybrid plan that has a small pension that is combined with a defined contribution, 401k-style plan.
- No retirement health care benefit for any employees hired after 2011. Instead, employees have
 access to a Health Care Savings Plan that allows them to save for retirement health care costs with a
 small City match.

9. Personnel

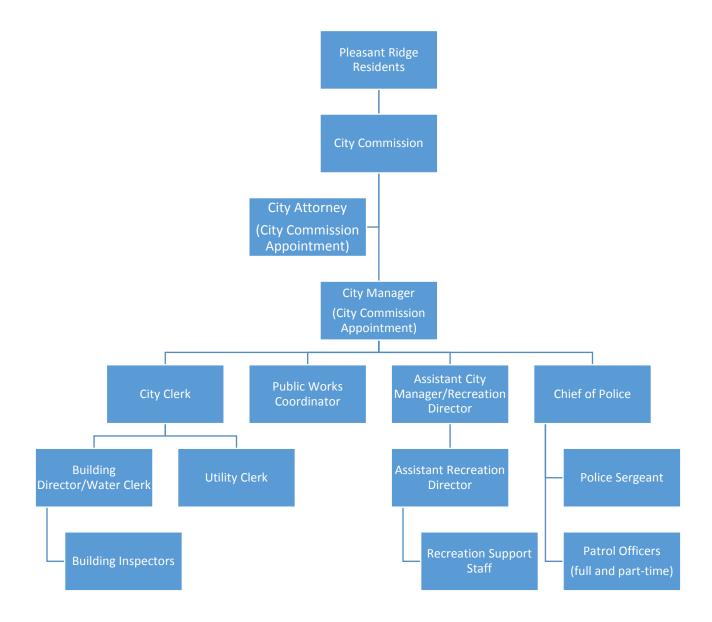
The City of Pleasant Ridge is a service-oriented organization with a large percentage of expenditures associated with staff salaries and related costs. In addition to part-time and full-time non-union employees, there is one bargaining unit - the Pleasant Ridge Police Officers Association, represented by the Fraternal Order of Police Labor Council.

The City outsources its Fire/EMS, Public Works, Treasury, Assessing, Police and Fire Dispatch, and City Attorney positions.

Full-time equivalent staff (one FTE = 2,080 hours) is projected to increase by one full-time position from FY2015-2016 to FY2016-2017. The budget includes a new public works manager position which is as yet unfilled. This position would bring back in-house some of the currently-outsourced public works department functions. This position would be responsible for managing the remaining outsourced public works contracts. The net result of bringing this position in-house is expected to be cost-neutral for the City while providing a higher level of service for residents.

Position	Status		FY16-17	FY17-18
City Hall				
City Manager	Full-Time	1.00	1.00	1.00
City Clerk	Full-Time	1.00	1.00	1.00
City Treasurer	Part-Time	0.00	0.00	0.00
Public Works Manager	Full-Time	0.00	0.00	1.00
Utility/Building Clerk	Full-Time	1.00	1.00	1.00
Solid Waste Clerk	Part-Time	0.33	0.33	0.33
City Hall Total		3.33	3.33	4.33
Police Department				
Chief	Full-Time	1.00	1.00	1.00
Sergeant	Full-Time	1.00	1.00	1.00
Patrol Officer	Full-Time	4.00	4.00	4.00
Patrol Officer (2)	Part-Time	0.48	0.48	0.48
Crossing Guard	Part-Time	0.33	0.33	0.33
Police Total		6.81	6.81	6.81
Recreation Department				
Director	Full-Time	1.00	1.00	1.00
Recreation Assistant	Full-Time	1.00	1.00	1.00
Building Supervisor	Part-Time	1.00	1.00	1.00
Playground Supervisor	Seasonal	0.44	0.44	0.44
Life Guard (senior)	Seasonal	0.44	0.44	0.44
Life Guard	Seasonal	1.75	1.75	1.75
Pool Instructors	Seasonal	0.10	0.10	0.10
Recreation Total		5.73	5.73	5.73
Full Time Positions		11.00	11.00	12.00
Part Time Positions (FTE)		4.87	4.87	4.87
All Departments		15.87	15.87	16.87

Organization Chart



Not shown in the organization chart are the Charter-established positions of City Treasurer and City Assessor. These positions are outsourced by the City to Plante Moran (City Treasurer) and Oakland County Equalization (Assessor).

C. General Fund

101. Summary

The General Fund functions as the City's operating fund and accounts for taxes and other general revenues and expenditures that are not restricted for other specific purposes. The City strives to maintain an undesignated fund balance of 25-30% of General Fund expenditures to maintain cash flow, solvency, and to set aside for unforeseen emergencies or cash shortfalls caused by revenue declines or delays. The FY2017-18 budget includes revenues of \$2,706,833 and expenditures of \$2,694,651 with a projected fund balance increase of \$12,182 resulting in a fund balance percentage of 23.08%.

REVENUES

	Actual	Actual	Actual	Amended	Requested	Projected	Projected
SOURCE	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
Taxes and special assessments	1,510,071	1,542,534	1,998,594	2,000,945	2,021,616	2,038,647	2,055,915
Licenses and Permits	69,560	61,581	85,577	64,450	56,150	56,150	56,150
Federal and State Grants	5,569	7,979	16,095	6,000	24,920	24,920	24,920
State Shared Revenue	234,957	240,814	236,248	246,232	246,232	246,232	246,232
Charges for Services	445,529	423,505	196,409	213,235	206,916	208,007	209,226
Fines and Forfeits	39,071	40,515	33,088	37,000	40,000	40,000	40,000
Interest and Rents	14,782	7,730	13,804	10,500	8,500	8,500	8,500
Other revenue	121,381	161,883	193,334	100,800	102,500	102,500	102,500
Transfers-In	0	4,896	18	0	0	0	0
REVENUE TOTAL	2,441,920	2,491,437	2,773,167	2,679,162	2,706,833	2,724,955	2,743,442

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SOURCE	AMOUNT						
Mayor and Commission	33,028	14,897	15,631	21,550	21,550	21,550	21,550
City Manager	129,668	126,756	133,499	158,541	164,592	167,442	170,328
Elections	4,903	11,015	8,318	15,363	10,410	10,410	10,410
City Attorney	44,663	49,490	38,304	46,750	46,000	46,000	46,000
City Clerk	107,903	116,649	110,733	105,259	101,140	103,338	105,574
Information Technology	15,040	6,660	67,748	65,600	60,600	54,600	54,600
General Government	187,532	154,056	136,283	139,350	139,500	139,500	139,500
Cable TV	1,478	5,401	1,222	5,750	4,110	4,110	4,110
City Treasurer	92,116	86,433	82,606	110,500	114,005	117,701	120,956
Assessment	20,949	21,605	21,023	21,900	21,645	21,645	21,645
Police Services	841,777	785,101	777,024	1,005,352	1,008,839	1,040,999	1,073,776
Fire/Rescue	250,000	254,000	256,581	258,000	258,900	261,230	263,581
Building Department	24,658	37,297	60,349	63,725	65,150	65,852	66,556
Planning Commission	72,347	13,121	650	0	0	0	0
Public Works	150,179	125,886	196,132	193,948	206,225	209,360	212,565
Street Lighting	45,993	52,798	37,249	35,400	36,500	36,500	36,500
Recreation	400,871	363,897	425,808	366,564	395,486	398,825	402,235
Retirement Services	168,237	235,372	272,588	5,000	5,000	5,000	5,000
Transfers Out	709	1,994	77,500	37,000	35,000	35,000	35,000
EXPENDITURES TOTAL	2,592,051	2,462,428	2,719,248	2,655,552	2,694,651	2,739,062	2,789,886
Revenue over (under) expenditures	(150,131)	29,009	53,919	23,610	12,182	(14,106)	(46,444)
Fund Balance, beginning of the year	650,230	500,104	532,253	586,172	609,782	621,964	607,858
Fund Balance adjustments		3,144					
Fund Balance, end of the year	500,099	532,257	586,172	609,782	621,964	607,858	561,414
General Fund Balance %	19.29%	21.62%	21.56%	22.96%	23.08%	22.19%	20.12%

101. General Fund Revenues

The General Fund revenues provide funding for City services that have a city-wide benefit. General Fund revenues are categorized as taxes and special assessments, community development permit fees and charges, intergovernmental transfers (state revenue sharing), and other revenues.

Total property tax revenue is projected remain flat during Fiscal Year 2016-2017 over the budgeted Fiscal Year 2015-2016 revenue. This small increase is due to an allowed growth in tax revenue of 0.9% by the Headlee amendment, and as calculated by the state. Projected property tax revenue growth in future years is estimated at 0.9% annually.

Account Number	Description	Actual 2015-16	Amended 2016-17	Activity to 05/02/17	Requested 2017-18	Projected 2018-19	Projected 2019-20
GENERAL FUND R	•						
Taxes and Special	Assessments						
101-000-401.000	Property Taxes - Operating	1,871,285	1,869,703	1,864,322	1,901,533	1,918,647	1,935,915
101-000-401.500	Property Taxes - Community Promo	36,260	48,242	47,618	48,083	48,000	48,000
101-000-410.000	Personal Property Taxes	13	0	0	0	0	0
101-000-410.500	Delinquent Tax Collection	1,298	0	271	0	0	0
101-000-445.000	Interest on Taxes	23,642	15,000	19,625	10,000	10,000	10,000
101-000-447.000	Property Tax Admin Fee	66,096	68,000	68,434	62,000	62,000	62,000
	Total taxes and special assessments	1,998,594	2,000,945	2,000,270	2,021,616	2,038,647	2,055,915
Licenses and Pern	nits						
101-000-476.000	Landlord Licenses	300	500	0	300	300	300
101-000-477.000	Electrical Permits	7,730	5,000	5,785	5,000	5,000	5,000
101-000-478.000	Building Permits	63,042	45,000	45,263	42,500	42,500	42,500
101-000-479.000	Plmb.Htg.Refrig.Permits	12,520	12,600	9,055	7,500	7,500	7,500
101-000-480.000	Liquor License Fee Revenue	963	850	784	850	850	850
101-000-485.000	Dog Licenses	1,022	500	(297)	0	0	0
101 000 103.000	Total licenses and permits	85,577	64,450	60,590	56,150	56,150	56,150
	- Total neerises and permits	03,377	04,430	00,330	30,130	30,130	30,130
Federal and State	Grants						
101-000-530.000	C.D.B.G.	4,699	5,000	2,968	5,000	5,000	5,000
101-000-540.000	State Grant	10,074	0	(3,494)	0	0	0
101-000-544.000	302 Training Funds	1,322	1,000	716	1,000	1,000	1,000
101-000-573.000	Local Community Stabilization	1,237	0	18,920	18,920	18,920	18,920
	Total federal and state grants	17,332	6,000	19,110	24,920	24,920	24,920
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State Shared Reve	enue						
101-000-576.500	Sales Taxes - Statutory	46,232	46,232	30,820	46,232	46,232	46,232
101-000-576.750	Sales Taxes - Constitutional	188,779	200,000	137,799	200,000	200,000	200,000
	Total state shared revenue	235,011	246,232	168,619	246,232	246,232	246,232
Charges for Service	ces						
101-000-607.000	NSF Fees	480	500	120	400	400	400
101-000-608.000	Registration Fees	3,848	3,100	2,180	3,000	3,000	3,000
101-000-609.000	Administrative Fees	6,313	7,000	6,100	5,000	5,000	5,000
101-000-627.000	Administrative Charges	100,680	101,700	100,700	101,384	101,912	102,563
101-000-627.100	Charges for Services - personnel	11,755	12,555	11,755	12,555	12,668	12,782
101-000-627.200	Charges for Services - IT	28,630	49,580	49,580	50,026	50,476	50,931
	-	-,	-,	-,	-,-	-,	-,

Account Number	Description	Actual 2015-16	Amended 2016-17	Activity to 05/02/17	Requested 2017-18	Projected 2018-19	Projected 2019-20
101-000-635.000	Copying Charges	403	1,200	130	50	50	50
101-000-641.100	Election Reimbursement	3,611	0	0	0	0	0
101-000-641.200	Spraying Reimbursement	0	600	514	250	250	250
101-000-641.300	Tree Planting Reimbursement	2,609	0	625	750	750	750
101-000-651.000	Use & Admission Fees	1,555	2,000	1,140	1,000	1,000	1,000
101-000-651.208	Admission - Dog Park	3,228	5,000	2,974	2,500	2,500	2,500
101-000-653.000	Registration Program Fees	33,297	30,000	35,440	30,000	30,000	30,000
	Total charges for services:	196,409	213,235	211,258	206,916	208,007	209,226
Fines and Forfeits	·						
101-000-656.000	Municipal Fines	2,255	3,000	21,614	10,000	10,000	10,000
101-000-657.000	District Court Fines	30,833	34,000	18,185	30,000	30,000	30,000
	Total fines and forfeits: _	33,088	37,000	39,799	40,000	40,000	40,000
Interest and Rents	·	4.404	6.000	4.004	4.000	4.000	4.000
101-000-665.000	Interest Income	4,194	6,000	4,091	4,000	4,000	4,000
101-000-667.000	4 Ridge Rental	9,610	4,500	4,185	4,500	4,500	4,500
	Total interest and rents: _	13,804	10,500	8,276	8,500	8,500	8,500
Other Revenue							
101-000-670.000	Cable Franchise and Peg Fees	69,600	65,000	57,801	60,000	60,000	60,000
101-000-671.000	Miscellaneous Other Revenues	36,804	5,000	17,653	5,000	5,000	5,000
101-000-674.000	Zoning Board of Appeal Fees	0	300	0	0	0	0
101-000-675.000	Contributions & Donations	18,112	5,000	12,019	5,000	5,000	5,000
101-000-679.000	Refunds & Rebates	62,213	23,000	7,295	27,500	27,500	27,500
101-000-679.300	R&R-Public Safety	5,605	1,000	7,187	4,000	4,000	4,000
101-000-681.000	Sidewalk Replacement/Residents	0	0	3,250	0	0	0
101-000-696.000	Bond & Insurance Recoveries	1,000	1,500	0	1,000	1,000	1,000
	Total other revenue:	193,334	100,800	105,205	102,500	102,500	102,500
Transfers-In							
101-000-699.208	Transfer In- Dog Park	0	0	0	0	0	0
	Transfers In - Tree Planting	18	0	0	0	0	0
101-000-033.212	Total transfers-in:	18	0	0	0	0	0
	rotui truiisjeis-iii.	10	U	U	U	0	0
TOTAL REVENUES	·	2,773,167	2,679,162	2,613,127	2,706,833	2,724,955	2,743,442

*District Court Fines and Funding Note:

The 45th District Court serves four political subdivisions: The cities of Oak Park, Huntington Woods, and Pleasant Ridge, and Royal Oak Township. As such, the 45th is a "district of the third class," comprised of one or more political subdivisions within a county, where each political subdivision is responsible for maintaining, financing, and operating the district court within its subdivision (MCL 600.8103(3)). Per the applicable statutes, a political subdivision in a district of the third class has three options:

- (1) Hold court in their own political subdivision, be responsible for their applicable court expenses and keep their fines and costs. (MCL 600.8103, 600.8104, and 600.8379). The 43rd District Court comprised of Ferndale, Hazel Park, and Madison Heights follows this arrangement.
- (2) Agree that the court be located in one political subdivision and follow the statutory distribution of fines and costs with one-third of ticket revenue going to the political subdivision in which the action commenced and two-thirds of ticket revenue going to the political subdivision in which the court sits. The 46th District Court comprised of Southfield,

101. General Fund Revenues

Beverly Hills, Bingham Farms, Franklin, and Lathrup Village follows this arrangement with Southfield serving as the district control unit and where the court sits.

(3) Agree that the court be in one political subdivision and agree to a different distribution of revenues (i.e. something different than the statutory 1/3-2/3 split). The 47th District Court comprised of Farmington Hills and Farmington follows this arrangement having come to an agreement.

The political subdivisions of the 45th District Court agreed long ago that the Court would be in Oak Park, and the 1/3-2/3 statutory distribution of fines and costs would be used. Under this arrangement Oak Park is the district control/funding unit and is responsible for all costs to operate the court but also retains any revenues more than court expenditures. Huntington Woods, Pleasant Ridge, and Royal Oak Township agreed to not have the court sit in their own political subdivisions, to give up their control over court expenditures, and to follow the statutory default 1/3-2/3 distribution of fines and costs.

Pleasant Ridge has funded the operations of the 45th District Court since its creation by contributing two-thirds of fines and costs associated with tickets originating in Pleasant Ridge to the City of Oak Park as the district control/funding unit. The proposed Pleasant Ridge fiscal year 2016-2017 budget continues to fund the court in this manner. The budgeted revenue line of \$30,000 represents Pleasant Ridge's one-third share of our fines and costs, with the remaining two-thirds of fines and costs associated with tickets originated in Pleasant Ridge going to Oak Park for court funding purposes. However, there are several court costs and fees that are assessed that go 100% to Oak Park, the County, or the State that are not subject to the 1/3-2/3 split. This means that in practice, Pleasant Ridge receives far less than 1/3 of the revenue generated on each ticket we write.

In FY15-16, Pleasant Ridge tickets generated a total revenue of \$261,272. Of this amount, \$53,377 went to the State of Michigan, \$1,045 went to Oakland County, and \$12,785 was held in trust. Of the remaining \$194,065, \$132,638 went to the City of Oak Park to operate and maintain the court, \$13,265 went to the court retiree health care fund, and \$17,545 went to the court building fund. The remaining \$30,616 was distributed to Pleasant Ridge. This means that Pleasant Ridge received 11.7% of the revenue generated by tickets that we wrote in FY15-16.

101. General Fund Expenditures

		Actual	Amended	Activity to	Requested	Projected	Projected
Account Number	·	2014-15	2015-16	05/02/17	2016-17	2018-19	2019-20
GENERAL FUND A	PPROPRIATIONS						
Department 101	Mayor and Commission						
101-101-715.000	Worker's Compensation	27	50	52	50	50	50
101-101-955.000	Miscellaneous Expenses	8,259	14,000	5,223	14,000	14,000	14,000
101-101-956.000	Meetings, Conferences, Workshop	833	2,000	0,223	1,000	1,000	1,000
101-101-958.000	Memberships & Dues	6,512	5,500	5,950	6,500	6,500	6,500
	r Department 101 - Mayor and Commission	15,631	21,550	11,225	21,550	21,550	21,550
		10,001	22,555	11)223	21)555	22,000	21,000
Department 172	· City Manager					·	
101-172-702.000	Administration Wages	91,446	91,910	77,739	92,737	93,572	94,414
101-172-702.250	CompTime Payout	0	0	0	0	0	0
101-172-711.000	Social Security & Medicare	7,827	7,505	6,646	8,000	8,072	8,145
101-172-712.000	Hospitalization/Dental/Vision	5,158	6,150	4,341	6,150	6,150	6,150
	Employee Contribution-Medical						
101-172-712.001	Insurance	0	0	0	0	0	0
101-172-712.003	Hospitalization/Dental/Vision - Retirees	0	13,584	13,426	14,000	14,500	15,000
101-172-712.004	Retiree Contribution-Medical Insurance	0	(1,845)	(1,442)	(1,400)	(1,450)	(1,500)
101-172-712.006	ER Contribution to HSA - Retirees	0	0	950	950	950	950
101-172-713.000	Life Insurance	1,032	1,042	986	1,000	1,000	1,000
101-172-714.000	Retirement - DB	0	0	0	0	0	0
101-172-714.003	Retirement - DB (Retirees)	0	11,000	7,623	13,215	14,533	15,877
101-172-714.500	Retirement DC - Employer	19,369	18,390	16,545	19,500	19,676	19,853
101-172-715.000	Worker's Compensation	33	55	64	50	50	50
101-172-716.000	Unemployment Compensation	36	400	20	40	40	40
101-172-720.000	Tuition, Training, Education	79	750	0	750	750	750
101-172-727.000	Office Supplies	0	0	0	0	0	0
101-172-728.000	Postage	0	0	0	0	0	0
101-172-731.000	Operating Supplies	95	100	19	100	100	100
101-172-790.000	Books & Periodicals	312	500	253	500	500	500
101-172-862.000	Automobile Allowance	6,000	6,000	5,000	6,000	6,000	6,000
101-172-956.000	Meetings, Conferences, Workshop	1,146	1,500	37	1,500	1,500	1,500
101-172-958.000	Memberships & Dues	966 133.499	1,500	698	1,500	1,500	1,500
	Totals for Department 172 - City Manager _	133,499	158,541	132,905	164,592	167,442	170,328
Department 191	- Flections						-
101-191-704.000	Part-Time Salaries	3,516	4,600	3,923	4,000	4,000	4,000
101-191-711.000	Social Security & Medicare	0	352	0,323	0	0	0
101-191-715.000	Worker's Compensation	7	11	13	10	10	10
101-191-728.000	Postage	100	400	350	400	400	400
101-191-731.000	Operating Supplies	2,975	8,000	1,534	4,000	4,000	4,000
101-191-809.000	Contractual Services	1,720	2,000	1,280	2,000	2,000	2,000
	Totals for Department 191 - Elections	8,318	15,363	7,100	10,410	10,410	10,410

Account Number	Description	Actual 2014-15	Amended 2015-16	Activity to 05/02/17	Requested 2016-17	Projected 2018-19	Projected 2019-20
Department 210 -	City Attorney						
101-210-815.000	City Attorney Services	30,366	40,000	23,878	40,000	40,000	40,000
101-210-815.250	•	7,938	6,750	0	6,000	6,000	6,000
	Totals for Department 210 - City Attorney	38,304	46,750	23,878	46,000	46,000	46,000
Department 215 -	City Clerk					.	
101-215-702.000	Administration Wages	75,834	69,539	60,759	70,165	70,796	71,434
101-215-711.000	Social Security & Medicare	5,648	5,320	4,517	5,650	5,701	5,752
101-215-712.000	Hospitalization/Dental/Vision Employee Contribution-Medical	15,259	17,100	11,495	7,750	7,983	8,222
101-215-712.001	Insurance	(1,875)	(1,920)	(988)	(775)	(798)	(822)
101-215-712.005	ER Contribution to HSA	0	1,900	1,900	1,900	1,900	1,900
101-215-713.000	Life Insurance	186	195	125	195	195	195
101-215-714.000	Retirement - DB	13,268	11,000	7,861	13,100	14,406	15,739
101-215-715.000	Worker's Compensation	77	125	148	125	125	125
101-215-716.000	Unemployment Compensation	24	100	13	30	30	30
101-215-728.000	Postage	0	0	0	0	0	0
101-215-731.000	Operating Supplies	1,225	200	725	1,250	1,250	1,250
101-215-861.000	Mileage Allowance	289	150	129	200	200	200
101-215-955.000	Miscellaneous Expenses	(136)	100	(381)	100	100	100
101-215-956.000	Meetings,Conferences,Workshop	669	1,000	186	1,000	1,000	1,000
101-215-958.000	Memberships & Dues	265	450	245	450	450	450
101-215-970.000	Capital Outlay	0	0	0	0	0	0
	Totals for Department 215 - City Clerk	110,733	105,259	86,734	101,140	103,338	105,574
Department 228	Information Technology						
101-228-809.000	Contractual Services	10,786	24,000	7,143	18,000	12,000	12,000
101-228-851.000	Communications	43,704	26,500	26,882	26,500	26,500	26,500
101-228-928.000	Software Maintenance	5,136	5,000	5,039	6,000	6,000	6,000
101-228-970.000	Capital Outlay	2,201	4,000	0,039	4,000	4,000	4,000
101-228-970.000	'	5,921	6,100	959	6,100	6,100	6,100
	r Department 228 - Information Technology				60,600		
Totals joi	Department 228 - Injormation Technology _	67,748	65,600	40,023	60,600	54,600	54,600
	General Government						
101-248-727.000	Office Supplies	6,338	6,700	2,969	6,000	6,000	6,000
101-248-728.000	Postage	1,928	4,450	1,851	3,000	3,000	3,000
101-248-731.000	Operating Supplies	8,886	8,100	2,824	6,000	6,000	6,000
101-248-734.000	Building Maintenance Supplies	0	200	0	200	200	200
101-248-803.000	Janitorial Contract	3,007	3,000	1,948	3,000	3,000	3,000
101-248-809.000	Contractual Services	2,789	6,500	4,218	4,000	4,000	4,000
101-248-809.002	Payroll Administration	11,230	10,500	9,252	10,500	10,500	10,500
101-248-809.600	Contract Svcs - Flag	0	300	0	300	300	300
101-248-814.000	Engineering Services	166	0	0	0	0	0
101-248-851.000	Communications	1,180	0	0	0	0	0
101-248-880.000	Community Promotion	640	1,300	8,134	4,500	4,500	4,500
101-248-900.000	Printing & Publishing	10,863	10,500	12,472	14,000	14,000	14,000
101-248-910.000	Insurance & Bonds	53,113	54,000	54,694	56,000	56,000	56,000
101-248-920.000	Public Utilities	19,018	18,000	10,720	18,000	18,000	18,000
101-248-929.000	Maintenance & Repair-Equipmen	35	0	1,339	500	500	500
101-248-931.000	Maintenance & Repair-Bldgs	11,020	7,500	11,138	8,500	8,500	8,500

Account Number	Description	Actual 2014-15	Amended 2015-16	Activity to 05/02/17	Requested 2016-17	Projected 2018-19	Projected 2019-20
101-248-955.000	Miscellaneous Expenses	4,992	8,300	7,948	5,000	5,000	5,000
101-248-983.000	Leased Assets	1,078	0	1,627	0	0	0
Totals	for Department 248 - General Government _	136,283	139,350	131,134	139,500	139,500	139,500
Department 249 -	Cable TV					<u> </u>	
101-249-715.000	Worker's Compensation	5	0	4	10	10	10
101-249-731.000	Operating Supplies	1,017	1,500	804	1,500	1,500	1,500
101-249-809.000	Contractual Services	200	3,000	600	1,400	1,400	1,400
101-249-958.000	Memberships & Dues	0	1,250	1,190	1,200	1,200	1,200
	Totals for Department 249 - Cable TV	1,222	5,750	2,598	4,110	4,110	4,110
Department 253 -	City Treasurer						
101-253-714.003	Retirement - DB (Retirees)	0	22,000	15,721	26,205	28,818	31,483
101-253-715.000	Worker's Compensation	0	0	52	0	0	0
101-253-728.000	Postage	0	0	0	0	0	0
101-253-790.000	Books & Periodicals	0	0	0	0	0	0
101-253-801.000	Audit Contract	17,500	18,000	17,500	18,500	19,000	19,000
101-253-809.001	Accounting Services	60,479	65,200	49,671	64,850	65,434	66,023
101-253-890.000	Service Charges	3,724	4,450	3,276	3,800	3,800	3,800
101-253-905.000	Printing Checks	287	0	0	0	0	0
101-253-928.000	Software Maintenance	395	0	0	0	0	0
101-253-954.000	Overage/Shortage	131	50	0	50	50	50
101-253-955.000	Miscellaneous Expenses	0	550	1,514	500	500	500
101-253-960.100	Credit Card Service Charge	90	250	10	100	100	100
	Totals for Department 253 - City Treasurer	82,606	110,500	87,744	114,005	117,701	120,956
Department 254 -	Assessing						
101-254-702.000	Administration Wages	300	500	300	300	300	300
101-254-711.000	Social Security & Medicare	23	50	23	25	25	25
101-254-804.000	County Assessor Fees	18,827	19,300	0	19,300	19,300	19,300
101-254-901.000	Printing Tax Bills	1,851	2,000	717	2,000	2,000	2,000
101-254-956.000	Meetings,Conferences,Workshop	22	50	20	20	20	20
	Totals for Department 254 - Assessment	21,023	21,900	1,060	21,645	21,645	21,645
Department 301 -	Police Services						
101-301-702.000	Administration Wages	71,283	74,180	64,290	74,848	75,521	76,201
101-301-702.250	CompTime Payout	1,592	25,000	0	0	0	0
101-301-703.000	Overtime	16,616	16,500	13,683	15,000	15,000	15,000
101-301-704.000	Part-Time Salaries	38,574	34,000	31,035	32,000	32,000	32,000
101-301-705.000	Regular Wages-Full time	291,969	307,500	258,258	313,650	319,923	326,321
101-301-708.000	Crossng Guard Wages	2,550	3,620	2,840	3,600	3,600	3,600
101-301-711.000	Social Security & Medicare	19,628	20,565	17,281	20,000	20,000	20,000
101-301-712.000	Hospitalization/Dental/Vision Employee Contribution-Medical	81,979	86,509	73,841	81,500	84,760	88,150
101-301-712.001	Insurance	(9,504)	(7,800)	(6,661)	(8,150)	(8,476)	(8,815)
101-301-712.002	ER Contribution to HSA	0	0	0	0	0	0
101-301-712.003	Hospitalization/Dental/Vision - Retirees	0	167,747	149,694	145,000	147,500	150,000
101-301-712.004	Retiree Contribution-Medical Insurance	0	(10,834)	(11,045)	0	0	0
101-301-712.005	ER Contribution to HSA	0	8,550	8,550	8,550	8,550	8,550
101-301-712.006	ER Contribution to HSA - Retirees	0	8,550	8,550	8,550	8,550	8,550
101-301-713.000	Life Insurance	1,116	1,150	825	1,200	1,200	1,200

		Actual	Amended	Activity to	Requested	Projected	Projected
Account Number	Description	2014-15	2015-16	05/02/17	2016-17	2018-19	2019-20
101-301-714.000	Retirement - DB	123,746	49,430	36,087	63,500	69,831	76,290
101-301-714.001	Employee Cont-Retirement	(9,513)	(9,900)	0	(9,016)	(9,173)	(9,333)
101-301-714.003	Retirement - DB (Retirees)	0	98,400	82,118	117,300	128,995	140,927
101-301-714.500	Retirement DC - Employer	2,903	3,000	2,398	3,100	3,200	3,300
101-301-715.000	Worker's Compensation	3,646	6,000	7,036	6,000	6,000	6,000
101-301-716.000	Unemployment Compensation	133	200	72	200	200	200
101-301-717.000	Longevity	900	0	0	0	0	0
101-301-718.000	Uniform Allowance	2,441	1,725	2,154	4,500	4,500	4,500
101-301-718.100	Uniform Cleaning Allowance	2,850	2,850	2,850	3,450	3,450	3,450
101-301-718.200	Firearm Allowance	(3,396)	0	0	0	0	0
101-301-720.000	Tuition,Training,Education	4,726	3,000	1,368	4,500	4,500	4,500
101-301-720.500	302 Training Funds	896	1,000	696	1,000	1,000	1,000
101-301-727.000	Office Supplies	1,409	2,000	1,570	1,250	1,250	1,250
101-301-728.000	Postage	0	250	0	0	0	0
101-301-731.000	Operating Supplies	32,963	14,000	14,403	14,000	15,000	16,000
101-301-751.000	Gas & Oil	10,226	16,500	10,942	16,500	16,649	16,798
101-301-803.000	Janitorial Contract	3,506	3,500	2,922	3,500	3,500	3,500
101-301-809.000	Contractual Services	5,350	1,000	3,583	4,000	4,000	4,000
101-301-809.200	CLEMIS/LEIN Services	9,470	8,500	5,561	10,000	10,000	10,000
101-301-809.911	Dispatch Contract	40,195	40,200	30,491	40,500	40,865	41,232
101-301-827.200	Charges for Services - IT	4,500	5,260	5,260	5,307	5,355	5,403
101-301-851.000	Communications	0	0	0	0	0	0
101-301-852.000	Radio Maintenance	27	0	0	0	0	0
101-301-929.000	Maintenance & Repair-Equipmen	1,554	1,500	107	1,500	1,500	1,500
101-301-930.000	Maintenance & Repair-Vehicles	11,701	8,500	5,088	8,500	8,500	8,500
101-301-955.000	Miscellaneous Expenses	89	500	569	500	500	500
101-301-956.000	Meetings, Conferences, Workshop	1,230	1,000	912	1,500	1,500	1,500
101-301-958.000	Memberships & Dues	265	500	115	500	500	500
101-301-970.000	Capital Outlay	8,725	10,500	14,038	11,000	11,250	11,500
101-301-995.100	INTR:Debt - Govt'l	679	700	0	0	0	0
	Totals for Department 301 - Police Services	777,024	1,005,352	841,481	1,008,839	1,040,999	1,073,776
D	Five /D						
Department 339 -	•	256 504	250,000	225 400	250,000	264 220	262 504
101-339-802.000	Fire Services Contract	256,581	258,000	235,199	258,900	261,230	263,581
	Totals for Department 339 - Fire/Rescue _	256,581	258,000	235,199	258,900	261,230	263,581
Department 371 -	Community Development						
101-371-715.000	Worker's Compensation	10	50	19	25	25	25
101-371-727.000	Office Supplies	67	0	0	0	0	0
101-371-728.000	Postage	0	0	0	0	0	0
101-371-809.000	Contractual Services	18,843	17,500	16,526	20,500	21,000	21,500
101-371-811.000	Electrical Inspector Fees	1,500	2,000	1,500	2,000	2,000	2,000
101-371-812.000	Mechanical Inspector Fees	5,329	6,500	3,311	5,000	5,000	5,000
101-371-813.000	Building Inspector Fees	13,350	14,400	12,000	14,400	14,400	14,400
101-371-827.100	Charges for Services - Personnel	11,755	11,755	11,755	11,860	11,967	12,074
101-371-827.200	Charges for Services - IT	9,000	10,520	10,520	10,615	10,710	10,807
101-371-955.000	Miscellaneous Expenses	495	1,000	681	750	750	750
101-371-970.000	Capital Outlay	0	0	100	0	0	0
Totals for L	Department 371 - Community Development	60,349	63,725	56,412	65,150	65,852	66,556
Department 400 -	Planning Commission						

Account Number	Description	Actual 2014-15	Amended 2015-16	Activity to 05/02/17	Requested 2016-17	Projected 2018-19	Projected 2019-20
101-400-809.000	Contractual Services	0	0	0	0	0	0
101-400-958.000	Memberships & Dues	650	0	0	0	0	0
Totals	for Department 400 - Planning Commission _	650	0	0	0	0	0
Department 440 -	Public Works						
101-440-702.000	Administration Wages	0	24,500	17,904	23,200	23,409	23,619
101-440-711.000	Social Security & Medicare	0	950	1,300	1,775	1,791	1,807
101-440-712.000	Hospitalization/Dental/Vision Employee Contribution-Medical	0	6,000	4,709	11,600	12,064	12,547
101-440-712.001	Insurance	0	(582)	(391)	(1,160)	(1,206)	(1,255)
101-440-712.002	ER Contribution to HSA	0	0	0	950	950	950
101-440-712.003	Hospitalization/Dental/Vision - Retirees	0	7,069	2,782	6,000	6,180	6,365
101-440-712.004	Retiree Contribution-Medical Insurance	0	(1,221)	0	0	0	0
101-440-712.005	ER Contribution to HSA	0	0	1,900	1,900	1,900	1,900
101-440-713.000	Life Insurance	0	100	72	60	60	60
101-440-714.000	Retirement - DB	0	0	0	0	0	0
101-440-714.003	Retirement - DB (Retirees)	0	10,100	14,597	22,900	25,183	27,513
101-440-714.500	Retirement DC - Employer	0	3,500	1,715	3,250	3,279	3,309
101-440-714.501	Retirement CD - Employee	0	0	0	0	0	0
101-440-715.000	Worker's Compensation	0	0	0	0	0	0
101-440-716.000	Unemployment Compensation	0	0	0	0	0	0
101-440-731.000	Operating Supplies	0	0	2,934	4,500	4,500	4,500
101-440-809.000	Contractual Services	(3,240)	0	0	0	0	0
101-440-809.110	Contract Svcs - B&L General P	4,449	6,500	7,510	10,000	10,000	10,000
101-440-809.130	Contract Svcs - Parks	158,211	93,032	59,267	95,000	95,000	95,000
101-440-809.140	Contract Svcs - Prop & Bldg	4,797	10,000	849	4,000	4,000	4,000
101-440-810.000	Public Works Contract	661	5,000	0	0	0	0
101-440-955.000	Miscellaneous Expenses	2,690	4,000	3,972	4,000	4,000	4,000
101-440-958.000	Memberships & Dues	0	0	20	750	750	750
101-440-970.000	Capital Outlay	28,564	25,000	2,810	17,500	17,500	17,500
	Totals for Department 440 - Public Works	196,132	193,948	121,950	206,225	209,360	212,565
Department 448 -	Street Lighting						
101-448-921.000		37,249	35,400	21,186	36,500	36,500	36,500
	Totals for Department 448 - Street Lighting	37,249	35,400	21,186	36,500	36,500	36,500
Department 750 -	Recreation						
101-750-702.000	Administration Wages	114,282	110,000	95,607	115,525	116,565	117,614
101-750-704.000	Part-Time Salaries	33,859	22,000	40,571	35,000	35,000	35,000
101-750-711.000	Social Security & Medicare	11,296	9,850	9,648	11,000	11,000	11,000
101-750-712.000	Hospitalization/Dental/Vision	24,007	21,452	21,507	22,000	22,880	23,795
101 750 712.000	Employee Contribution-Medical	24,007	21,432	21,507	22,000	22,000	23,733
101-750-712.001	Insurance	(2,940)	(2,964)	(1,955)	(2,200)	(2,288)	(2,380)
101-750-712.002	ER Contribution to HSA	0	0	0	0	0	0
101-750-712.003	Hospitalization/Dental/Vision - Retirees	0	0	0	0	0	0
101-750-712.004	Retiree Contribution-Medical Insurance	0	0	0	0	0	0
101-750-712.005	ER Contribution to HSA	0	3,800	3,800	3,800	3,800	3,800
101-750-713.000	Life Insurance	357	336	288	350	350	350
101-750-714.000	Retirement - DB	14,043	13,000	9,072	14,400	15,836	17,300
101-750-714.001	Employee Cont-Retirement	(323)	0	0	0	0	0
101-750-714.003	Retirement - DB (Retirees)	0	0	0	0	0	0
101-750-714.500	Retirement DC - Employer	0	4,400	0	0	0	0

43

Account Number	Description	Actual 2014-15	Amended 2015-16	Activity to 05/02/17	Requested 2016-17	Projected 2018-19	Projected 2019-20
101-750-715.000	Worker's Compensation	1,302	2,100	2,511	2,100	2,100	2,100
101-750-716.000	Unemployment Compensation	34	500	18	50	50	50
101-750-720.000	Tuition, Training, Education	0	1,500	0	750	750	750
101-750-727.000	Office Supplies	5,932	3,600	2,880	3,500	3,500	3,500
101-750-728.000	Postage	0	500	0	0	0	0
101-750-728.500	Newsletter Delivery	840	1,500	1,895	2,000	2,000	2,000
101-750-729.000	Recreation Program Supplies	8,268	9,000	8,412	9,000	9,000	9,000
101-750-730.000	Special Program Supplies	40,406	30,000	29,666	30,000	30,000	30,000
			•			•	•
101-750-731.000	Operating Supplies	6,229	7,500	4,803	6,500	6,500	6,500
101-750-736.000	Computer Supplies	0	0	0	0	0	0
101-750-790.000	Books & Periodicals	122	0	0	0	0	0
101-750-803.000	Janitorial Contract	8,151	8,500	10,166	8,500	8,500	8,500
101-750-803.700	Exterminator Service	569	750	397	750	750	750
101-750-809.000	Contractual Services	34,825	30,000	19,677	30,000	30,000	30,000
101-750-809.700	Alarm System	1,041	0	0	0	0	0
101-750-827.200	Charges for Services - IT	7,000	7,890	7,890	7,961	8,033	8,105
101-750-851.000	Communications	698	0	0	0	0	0
101-750-861.000	Mileage Allowance	353	700	316	500	500	500
101-750-883.000	Sports	7,254	4,000	5,705	6,000	6,000	6,000
101-750-884.000	Spring & Summer Sports	41	0	0	0	0	0
101-750-904.000	Printing Newsletter	6,181	9,000	5,818	7,500	7,500	7,500
101-750-920.000	Public Utilities	27,771	30,000	9,408	25,000	25,000	25,000
101-750-929.000	Maintenance & Repair-Equipmen	2,369	1,500	1,105	2,500	2,500	2,500
101-750-931.000	Maintenance & Repair-Bldgs	9,537	5,000	10,660	10,000	10,000	10,000
101-750-934.000	Maintenance & Repair-Parks	7,665	3,000	2,209	6,000	6,000	6,000
101-750-955.000	Miscellaneous Expenses	0	0	0	0	0	0
101-750-955.300	Transportation	0	0	0	0	0	0
101-750-956.000	Meetings, Conferences, Workshop	907	1,500	1,318	1,500	1,500	1,500
101-750-958.000	Memberships & Dues	296	1,650	435	500	500	500
101-750-961.000	Misc Program Supplies	0	0	0	0	0	0
101-750-970.000	Capital Outlay	53,436	25,000	18,047	35,000	35,000	35,000
	Totals for Department 750 - Recreation	425,808	366,564	321,874	395,486	398,825	402,235
Department 863 -	Retirement Services						
101-863-712.000	Hospitalization/Dental/Vision Employee Contribution-Medical	179,104	0	0	0	0	0
101-863-712.001	Insurance	0	0	0	0	0	0
101-863-712.002	ER Contribution to HSA	0	0	0	0	0	0
101-863-714.000	Retirement - DB	88,484	0	0	0	0	0
101-863-714.002	OPEB Contributions	5,000	5,000	5,000	5,000	5,000	5,000
Total	s for Department 863 - Retirement Services	272,588	5,000	5,000	5,000	5,000	5,000
Department 966 -	Transfers Out						
101-966-999.218	Transfers Out-Infrastructure	0	0	0	0	0	0
101-966-999.251	Transfers Out - Pool Operating	7,000	0	0	0	0	0
101-966-999.259	Transfers Out-Segregated Cap	0	0	0	0	0	0
101-966-999.351	Transfers Out-Debt Svc-Non V	500	0	0	0	0	0
404 000 000 00	Transfers Out- Capital Improvement	=0	27	0-	0=	0= 000	
101-966-999.401	Fund Totals for Donartment 066 Transfers Out	70,000	37,000	37,000	35,000	35,000	35,000
	Totals for Department 966 - Transfers Out	77,500	37,000	37,000	35,000	35,000	35,000
TOTAL ADDROSS:	ATIONS	2 740 240	2 655 556	2.464.505	2.604.656	2 720 000	3 700 000
TOTAL APPROPRIA	ATIONS	2,719,248	2,655,552	2,164,503	2,694,651	2,739,062	2,789,886

Account Number Description	Actual 2014-15	Amended 2015-16	Activity to 05/02/17	Requested 2016-17	Projected 2018-19	Projected 2019-20
					·	
NET OF REVENUES/APPROPRIATIONS - FUND 101	53,919	23,610	448,624	12,182	(14,106)	(46,444)
BEGINNING FUND BALANCE	532,253	586,172	586,172	609,782	621,964	607,858
FUND BALANCE ADJUSTMENTS	0	0	0	0	0	0
ENDING FUND BALANCE	586,172	609,782	1,034,796	621,964	607,858	561,414
	21.6%	23.0%	47.8%	23.1%	22.2%	20.1%

D. Special Revenue Funds

202. Major Street Fund

Fund 202 provides for the maintenance of major streets. Major activities include the maintenance and repair of traffic directional signage, pothole patching and other ongoing maintenance, street sweeping, and winter snow and ice removal.

		Actual	Amended	Activity to	Requested	Projected	Projected
Account Number		2015-16	2016-17	05/02/17	2017-18	2018-19	2019-20
FUND 202 - MAJO	OR STREET FUND						
REVENUES							
202-000-579.000	Gas Tax Allocation Formula	126,759	141,900	88,419	161,040	162,489	163,952
202-000-579.750	Extra Public Act Fundin	21,659	0	, 0	0	0	0
202-000-665.000	Interest Income	74	15	52	50	50	50
TOTAL REVENUES	·	148,492	141,915	88,471	161,090	162,539	164,002
APPROPRIATIONS	5						
Department 463	- Street Maintenance						
202-463-731.000	Operating Supplies	0	4,000	928	4,000	4,000	4,000
202-463-810.000	Public Works Contract	13,393	13,000	13,036	17,500	17,500	17,500
202-463-827.000	Administrative Service Charge	11,400	0	0	0	0	0
202-463-890.000	Service Charges	666	0	0	0	0	0
202-463-955.000	Miscellaneous Expenses	3,542	0	0	0	0	0
Totals	s for Department 463 - Street Maintenance _	29,001	17,000	13,964	21,500	21,500	21,500
Department 474							
202-474-731.000	Operating Supplies	3,449	4,500	1,175	3,500	3,500	3,500
202-474-810.000	Public Works Contract	926	5,000	4,928	5,000	5,000	5,000
202-474-935.000	-	1,776	4,000	4,022	4,500	4,500	4,500
7	Fotals for Department 474 - Traffic Services _	6,151	13,500	10,125	13,000	13,000	13,000
Department 478	- Winter Services						
202-478-731.000	Operating Supplies	6,836	9,000	1,095	10,000	10,000	10,000
202-478-810.000		13,983	24,000	14,442	20,000	20,000	20,000
T	otals for Department 478 - Winter Services	20,819	33,000	15,537	30,000	30,000	30,000
	-						
Department 910	- Capital Assets						
202-910-970.446	Capital Outlay - Streets & Alleys	0	51,000	50,027	25,000	25,000	25,000
	Totals for Department 910 - Capital Assets	0	51,000	50,027	25,000	25,000	25,000
Department 920							
	Administrative Service Charges	0	11,515	11,515	11,500	11,500	11,500
202-920-890.000		0	500	349	500	500	500
	Miscellaneous Expenses	0	1,000	1,223	2,000	2,000	2,000
7	Totals for Department 920 - Administration _	0	13,015	13,087	14,000	14,000	14,000
Department 966	Transfers Out						
	Transfers Out Transfers Out-Local Streets	54,500	70,000	70,000	45,000	45,000	45,000
		,	-,	-,0	-,0	-,	2,220

Account Number 202-966-999.401	Description Transfers Out- Capital Improvement	Actual 2015-16	Amended 2016-17	Activity to 05/02/17	Requested 2017-18	Projected 2018-19	Projected 2019-20
	Fund						
	Totals for Department 966 - Transfers Out	54,500	70,000	70,000	45,000	45,000	45,000
TOTAL APPROPRI	TOTAL APPROPRIATIONS		197,515	172,740	148,500	148,500	148,500
NET OF REVENUE	S/APPROPRIATIONS - FUND 202	38,021	(55,600)	(84,269)	12,590	14,039	15,502
BEGINNING FU	ND BALANCE	47,301	85,322	85,322	29,722	42,312	56,351
ENDING FUND	BALANCE	85,322	29,722	1,053	42,312	56,351	71,853

203. Local Street Fund

Fund 203 provides for the maintenance of local streets. Major activities include the maintenance and repair of traffic directional signage, pothole patching and other ongoing maintenance, street sweeping, and winter snow and ice removal.

		A -41	Add	A -41: -14: - 4 -	D	D	Duning to d
Account Number D	Description	Actual 2015-16	Amended 2016-17	Activity to 05/02/17	Requested 2017-18	Projected 2018-19	Projected 2019-20
Fund 203 - LOCAL ST	·						
REVENUES							
203-000-574.048 S	t Shared Rev - Metro Act	8,199	5,800	0	5,800	5,800	5,800
203-000-579.000	Gas Tax Allocation Formula	42,201	48,400	30,156	54,916	59,600	64,400
203-000-665.000 II	nterest Income	44	0	26	40	40	40
203-000-699.202 T	ransfer In - Major Streets	54,500	70,000	70,000	45,000	45,000	45,000
TOTAL REVENUES		104,944	124,200	100,182	105,756	110,440	115,240
APPROPRIATIONS							
Department 463 - St	reet Maintenance						
203-463-731.000 C	perating Supplies	0	1,000	589	1,000	1,000	1,000
203-463-810.000 P	ublic Works Contract	8,452	14,500	14,459	12,500	12,500	12,500
203-463-814.000 E	ngineering Services	2,714	0	0	0	0	0
203-463-827.000 A	Administrative Service Charge	3,880	0	0	0	0	0
203-463-890.000 S	ervice Charges	438	0	0	0	0	0
203-463-955.000 N	Miscellaneous Expenses	0	0	0	0	0	0
Totals for De	partment 463 - Street Maintenance	15,484	15,500	15,048	13,500	13,500	13,500
Department 474 - Ti	raffic Services						
203-474-731.000 C	perating Supplies	62	4,500	2,984	2,500	2,500	2,500
203-474-810.000 P	ublic Works Contract	1,435	3,400	3,353	5,000	5,000	5,000
Totals fo	or Department 474 - Traffic Services	1,497	7,900	6,337	7,500	7,500	7,500
Department 478 - W	/inter Services						
203-478-731.000 C	Operating Supplies	10,254	12,000	1,643	12,000	12,000	12,000
203-478-810.000 P	Public Works Contract	20,975	25,500	21,663	27,500	27,500	27,500
Totals fo	or Department 478 - Winter Services	31,229	37,500	23,306	39,500	39,500	39,500
Department 910 - Ca	apital Assets						
203-910-970.446 C	Capital Outlay - Streets & Alleys	0	82,000	81,035	25,000	25,000	25,000
Totals	for Department 910 - Capital Assets	0	82,000	81,035	25,000	25,000	25,000
Department 920 - A	dministration					<u>.</u>	
•	ngineering Services	0	2,000	1,288	2,000	2,000	2,000
	Administrative Service Charges	0	3,919	3,919	3,900	3,900	3,900
	ervice Charges	0	300	176	300	300	300
	Aiscellaneous Expenses	0	1,000	0	1,000	1,000	1,000
	or Department 920 - Administration	0	7,219	5,383	7,200	7,200	7,200
Department 966 - Tr	ransfers Out						
	ransfers Out-Infrastructure	100,000	0	0	0	0	0
	for Department 910 - Transfers Out	100,000	0	0	0	0	0

Account Number Description	Actual 2015-16	Amended 2016-17	Activity to 05/02/17	Requested 2017-18	Projected 2018-19	Projected 2019-20
TOTAL APPROPRIATIONS	148.210	150.119	131.109	92,700	92,700	92,700
	_ ::,			02,700	52,760	52,700
NET OF REVENUES/APPROPRIATIONS - FUND 203	(43,266)	(25,919)	(30,927)	13,056	17,740	22,540
BEGINNING FUND BALANCE	88,693	45,427	45,427	19,508	32,564	50,304
ENDING FUND BALANCE	45,427	19,508	14,500	32,564	50,304	72,844

218. Infrastructure Improvements

Fund 218 provides for the City's infrastructure improvement program, consisting primarily of road reconstruction projects. The program is funded by a 20-year infrastructure improvement approved by the voters in 2014 as a renewal of an earlier 20-year millage. The City sold bonds with a face value of \$3,000,000 in April of 2017 to provide funding for the completion of the street reconstruction program in 2017 and 2018. The term of the bond is 15 years and it will be repaid using the infrastructure millage funds.

Account Number Description 2015-16 2016-17 05/02/17 Requested 2018-19 Fund 218 - INFRASTRUCTURE IMPROVEMENTS Requested 2018-19	Projected 2019-20
	2019-20
Tund 215 - NATIOS FORE IN THE CONTROL OF THE CONTRO	
ESTIMATED REVENUES	
218-000-406.000 Infrastructure Taxes 392,183 389,599 389,521 397,400 400,976	404,585
218-000-406.500 Parks Improvement Taxes 2,720 0 0 0	0
218-000-665.000 Interest Income (335) 154,000 152,886 0 0	0
218-000-675.000 Contributions & Donations 0 0 0 0	0
218-000-679.000 Refunds & Rebates 0 0 5,627 0	0
218-000-698.000 Bond/Note Issuance @Face Value 0 3,000,000 3,000,000 0	0
218-000-699.101 Transfers In - General Fund 0 0 0 0	0
218-000-699.203 Transfers In - local roads 100,000 0 0 0	0
218-000-699.259 Transfers In - SCAF 0 0 0 0	0
218-000-699.260 Transfers In - DDA 100,000 40,000 40,000 0	0
TOTAL REVENUES 594,568 3,583,599 3,588,034 437,400 400,976	404,585
APPROPRIATIONS	
Department 905 - Long-Term Debt Retirement	
218-905-816.000 Paying Agent Fees 0 0 0 0	0
218-905-816.001 Bond Issuance Costs 0 60,000 32,100 0	0
218-905-991.044 PRIN: 2017 Street Bonds 0 0 0 150,000	155,000
218-905-995.044 INTR: 2017 Street Bonds 0 0 0 82,250 87,750	83,175
Totals for department 910 - Long-Term Debt Retirement 0 60,000 32,100 82,250 237,750	238,175
Department 910 - Capital Outlay	
218-910-970.446 Capital Outlay - Streets & Alleys 705,890 1,200,000 90,299 850,000 850,000	60,000
218-910-970.750 Capital Outlay - Recreation 0 100,000 56,778 30,000 0	0
Totals for department 910 - Capital Outlay 705,890 1,300,000 147,077 880,000 850,000	60,000
Department 920 - Service Charges	
218-920-890.000 Service Charges 0 0 122 0 0	0
Totals for department 910 - Capital 0 0 122 0 0	0
Outlay	
Department 966 - Transfers Out	
218-966-999.259 Transfers Out-Segregated Cap 0 0 0 0 0	0
218-966-999.401 Transfers Out- Capital Improvement Fund 0 0 0 0 0 0	0
Totals for department 966 - Transfers Out 0 0 0 0 0	0
TOTAL APPROPRIATIONS 705,890 1,360,000 179,299 962,250 1,087,750	298,175
	106,410
NET OF REVENUES/APPROPRIATIONS - FUND 218 (111,322) 2,223,599 3,408,735 (524,850) (686,774)	,
NET OF REVENUES/APPROPRIATIONS - FUND 218 (111,322) 2,223,599 3,408,735 (524,850) (686,774) BEGINNING FUND BALANCE (372,111) (483,433) (483,433) 1,740,166 1,215,316	528,542

226. Solid Waste Fund

Fund 226 provides for the collection and disposal of solid waste, recycling services, and brush pickup and removal for the City.

Account Number Description Description Description Sulfa-15 Description							
Part				•	•	-	•
STIMATED REVENUES 226,000 Refuse Collection Taxes 223,972 222,454 222,448 226,937 232,611 238,426 226,000-630,000 Refuse Collection Ser Charges 109,675 115,980 107,595 146,000 147,314 148,640 226,000-642,000 Sales 359 500 90 300	· · · · · · · · · · · · · · · · · · ·	2015-16	2016-17	05/02/17	2017-18	2018-19	2019-20
226-000-403.000 Refuse Collection Taxes 223,972 222,454 222,448 226,937 232,611 238,426 226-000-531.000 Federal Grants 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Fund 226 - SOLID WASTE FUND						
222-000-403.000 Refuse Collection Taxes 223,972 222,454 222,448 226,937 232,611 238,426 226-000-531.000 Redear Grants 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	ESTIMATED DEVENILIES						
226-000-531.000 Federal Grants		223 972	222 454	222 448	226 937	232 611	238 426
226-000-630.000 Rubbish Collection Ser Charges 359 500 90 300 300 300 300 300 300 300 300 30			•		·	•	•
226-000-642.000 Sales 3359 500 90 300 300 300 326-000-662.000 Util Bill Penaltiles 2,088 2,500 1,476 2,000 2,000 2,000 2,000 2,000 2,000 2,000 300 300 300 300 300 300 300 300 300							
226-000-662.000	•				·		•
APPROPRIATIONS							
APPROPRIATIONS				•		•	•
APPROPRIATIONS Department 248 - General Government 226-248-702.000	·						
Department 248 - General Government 226-248-702.000 Administration Wages 17,631 32,700 22,840 28,700 28,958 29,219 226-248-704.000 Part-Time Salaries 3,431 3,125 3,237 3,200 3,229 3,258 226-248-711.000 Social Security & Medicare 1,959 2,741 2,090 2,400 2,402 2,403 226-248-712.000 Hospitalization/Dental/Vision 1,810 1,800 2,936 5,050 5,151 5,254 Employee Contribution-Medical Employee Contribution-Medical 1,810 1,810 1,810 1,810 1,810 1,900 1,500 0 0 0 0 0 0 0 0 0		<u> </u>	<u>, </u>	<u> </u>	,	•	
Department 248 - General Government 226-248-702.000 Administration Wages 17,631 32,700 22,840 28,700 28,958 29,219 226-248-704.000 Part-Time Salaries 3,431 3,125 3,237 3,200 3,229 3,258 226-248-711.000 Social Security & Medicare 1,959 2,741 2,090 2,400 2,402 2,403 226-248-712.000 Hospitalization/Dental/Vision 1,810 1,800 2,936 5,050 5,151 5,254 Employee Contribution-Medical Employee Contribution-Medical 1,810 1,810 1,810 1,810 1,810 1,900 1,500 0 0 0 0 0 0 0 0 0							
226-248-702.000 Administration Wages 17,631 32,700 22,840 28,700 28,958 29,219 226-248-704.000 Part-Time Salaries 3,431 3,125 3,237 3,200 3,229 3,258 226-248-711.000 Social Security & Medicare 1,959 2,741 2,090 2,400 2,422 2,443 226-248-712.000 Hospitalization/Dental/Vision 1,810 1,800 2,936 5,050 5,151 5,254	APPROPRIATIONS						
226-248-714.000 Part-Time Salaries 3,431 3,125 3,237 3,200 3,229 3,258	Department 248 - General Government						
226-248-711.000 Social Security & Medicare 1,959 2,741 2,090 2,400 2,422 2,443 226-248-712.000 Hospitalization/Dental/Vision 1,810 1,800 2,936 5,050 5,151 5,254 Employee Contribution-Medical 226-248-712.001 Insurance (44) 0 (117) 0 0 0 0 0 0 0 0 0	226-248-702.000 Administration Wages	17,631	32,700	22,840	28,700	28,958	29,219
226-248-712.000 Hospitalization/Dental/Vision 1,810 1,800 2,936 5,050 5,151 5,254 Employee Contribution-Medical 1,810 0 (117) 0 0 0 0 0 0 0 0 0	226-248-704.000 Part-Time Salaries	3,431	3,125	3,237	3,200	3,229	3,258
Employee Contribution-Medical 1826-248-712.001 Insurance 266-248-712.003 Insurance 266-248-712.003 Hospitalization/Dental/Vision - Retirees 0	226-248-711.000 Social Security & Medicare	1,959	2,741	2,090	2,400	2,422	2,443
226-248-712.001 Insurance (44) 0 (117) 0 0 0 0 226-248-712.003 Hospitalization/Dental/Vision - Retirees 0 0 0 835 1,500 1,500 1,500 1,500 226-248-713.000 Life Insurance 62 120 8 100 100 100 226-248-714.001 Employee Cont-Retirement (569) (650) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	226-248-712.000 Hospitalization/Dental/Vision	1,810	1,800	2,936	5,050	5,151	5,254
226-248-712.003 Hospitalization/Dental/Vision - Retirees 0 0 835 1,500 1,500 1,500 1,500 226-248-713.000 Life Insurance 62 120 8 100 100 100 226-248-714.000 Retirement - DB 1,365 11,000 612 750 750 750 750 226-248-714.001 Employee Cont-Retirement (569) (650) 0 0 0 0 0 0 226-248-714.001 Employee Cont-Retirement DC - Employer 0 0 792 1,050 1,05	· ·						
226-248-713.000 Life Insurance 62 120 8 100 100 100 226-248-714.000 Retirement - DB 1,365 11,000 612 750 750 750 750 226-248-714.001 Employee Cont-Retirement (569) (650) 0 0 0 0 0 0 0 0 0							
226-248-714.000 Retirement - DB 1,365 11,000 612 750 750 750 226-248-714.001 Employee Cont-Retirement (569) (650) 0 0 0 0 226-248-714.500 Retirement DC - Employer 0 0 792 1,050 1,050 1,050 226-248-715.000 Worker's Compensation 113 180 166 250 250 250 226-248-716.000 Unemployment Compensation 13 250 7 25 25 25 25 226-248-890.000 Service Charges 548 300 391 500 500 500 Totals for department 248 - General Government 26,319 51,566 33,797 43,525 43,935 44,349 Department 528 - Refuse Collection & Disposal 226-528-805.000 Refuse Collection Scontract 180,332 184,000 147,534 203,000 204,827 206,670 226-528-810.001 Leaf Collection 62,705 43,900 21,498 35,000 37,500 40,000 226-528-810.001 Leaf	• • • • • •					•	•
226-248-714.001 Employee Cont-Retirement (569) (650) 0 0 0 0 226-248-714.500 Retirement DC - Employer 0 0 792 1,050 1,050 1,050 226-248-715.000 Worker's Compensation 113 180 166 250 250 250 226-248-716.000 Unemployment Compensation 13 250 7 25 25 25 226-248-890.000 Service Charges 548 300 391 500 500 500 Totals for department 248 - General Government 26,319 51,566 33,797 43,525 43,935 44,349 Department 528 - Refuse Collection & Disposal Z26-528-805.000 Refuse Collection Contract 180,332 184,000 147,534 203,000 204,827 206,670 226-528-806.250 Special Household Waste Prog 675 3,000 673 3,000 3,000 204,827 206,670 226-528-810.000 Public Works Contract 62,705 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>							
226-248-714.500 Retirement DC - Employer 0 0 792 1,050 1,050 1,050 226-248-715.000 Worker's Compensation 113 180 166 250 250 250 226-248-716.000 Unemployment Compensation 13 250 7 25 25 25 226-248-890.000 Service Charges 548 300 391 500 500 500 Totals for department 248 - General Government 26,319 51,566 33,797 43,525 43,935 44,349 Department 528 - Refuse Collection & Disposal 226-528-805.000 Refuse Collections Contract 180,332 184,000 147,534 203,000 204,827 206,670 226-528-806.250 Special Household Waste Prog 675 3,000 673 3,000 3,000 3000 226-528-810.000 Public Works Contract 62,705 43,900 21,498 35,000 37,500 40,000 226-528-810.100 Street Sweeping 12,810 12,500 5,860 13,000 13,000 13,000 226-528-827.000		•					
226-248-715.000 Worker's Compensation 113 180 166 250 250 250 226-248-716.000 Unemployment Compensation 13 250 7 25 25 25 226-248-890.000 Service Charges 548 300 391 500 500 500 Totals for department 248 - General Government 26,319 51,566 33,797 43,525 43,935 44,349 Department 528 - Refuse Collection & Disposal 226-528-805.000 Refuse Collections Contract 180,332 184,000 147,534 203,000 204,827 206,670 226-528-806.250 Special Household Waste Prog 675 3,000 673 3,000 3,000 3,000 226-528-810.000 Public Works Contract 62,705 43,900 21,498 35,000 37,500 40,000 226-528-810.001 Leaf Collection 52,357 55,000 56,660 55,000 55,000 55,000 226-528-827.000 Administrative Service Charge 15,000	• •	• •	• •				
226-248-890.00 Unemployment Compensation 13 250 7 25 25 25 226-248-890.000 Service Charges 548 300 391 500 500 500 500 Totals for department 248 - General Government 26,319 51,566 33,797 43,525 43,935 44,349 Department 528 - Refuse Collection & Disposal 226-528-805.000 Refuse Collections Contract 180,332 184,000 147,534 203,000 204,827 206,670 226-528-806.250 Special Household Waste Prog 675 3,000 673 3,000 3,000 3,000 226-528-810.000 Public Works Contract 62,705 43,900 21,498 35,000 37,500 40,000 226-528-810.001 Leaf Collection 52,357 55,000 56,660 55,000 55,000 55,000 226-528-810.100 Street Sweeping 12,810 12,500 5,860 13,000 13,000 13,000 226-528-827.000 Administrative Service Charge 15,000 15,152 15,152 15,288 15,426 15,565 226-528-827.200 Charges for Services - IT 0 7,500 7,500 7,568 7,636 7,704 Totals for department 528 - Refuse Collection & Disposal 323,879 321,052 254,877 331,856 336,389 340,940 NET OF REVENUES/APPROPRIATIONS - FUND 226 (14,061) (31,154) 42,991 (114) 1,931 4,107	• •					•	•
226-248-890.000 Service Charges 548 300 391 500 500 500 Totals for department 248 - General Government 26,319 51,566 33,797 43,525 43,935 44,349 Department 528 - Refuse Collection & Disposal 226-528-805.000 Refuse Collections Contract 180,332 184,000 147,534 203,000 204,827 206,670 226-528-806.250 Special Household Waste Prog 675 3,000 673 3,000 3,000 3,000 226-528-810.000 Public Works Contract 62,705 43,900 21,498 35,000 37,500 40,000 226-528-810.001 Leaf Collection 52,357 55,000 56,660 55,000 55,000 55,000 226-528-827.000 Street Sweeping 12,810 12,500 5,860 13,000 13,000 13,000 226-528-827.200 Charges for Services - IT 0 7,500 7,500 7,568 7,636 7,704 Totals for department 528 - Refuse Collection & Disposal	·						
Department 528 - Refuse Collection & Disposal 26,319 51,566 33,797 43,525 43,935 44,349 226-528-805.000 Refuse Collections Contract 180,332 184,000 147,534 203,000 204,827 206,670 226-528-806.250 Special Household Waste Prog 675 3,000 673 3,000 3,000 3,000 226-528-810.000 Public Works Contract 62,705 43,900 21,498 35,000 37,500 40,000 226-528-810.001 Leaf Collection 52,357 55,000 56,660 55,000 55,000 55,000 226-528-8210.100 Street Sweeping 12,810 12,500 5,860 13,000 13,000 13,000 226-528-827.000 Administrative Service Charge 15,000 15,152 15,152 15,288 15,426 15,565 226-528-827.200 Charges for Services - IT 0 7,500 7,500 7,568 7,636 7,704 Totals for department 528 - Refuse Collection & Disposal 323,879 321,052 254,877 331,	• • • • • • • • • • • • • • • • • • • •						
Department 528 - Refuse Collection & Disposal 226-528-805.000 Refuse Collections Contract 180,332 184,000 147,534 203,000 204,827 206,670 226-528-806.250 Special Household Waste Prog 675 3,000 673 3,000 3,000 3,000 226-528-810.000 Public Works Contract 62,705 43,900 21,498 35,000 37,500 40,000 226-528-810.001 Leaf Collection 52,357 55,000 56,660 55,000 55,000 55,000 226-528-810.100 Street Sweeping 12,810 12,500 5,860 13,000 13,000 13,000 226-528-827.000 Administrative Service Charge 15,000 15,152 15,152 15,288 15,426 15,565 226-528-827.200 Charges for Services - IT 0 7,500 7,500 7,568 7,636 7,704 Totals for department 528 - Refuse Collection & Disposal 323,879 321,052 254,877 331,856 336,389 340,940 NET OF REVENUES/APPROPRIATIONS - FUND 226 (14,061) (31,154) 42,991 (114) 1,9	_						
226-528-805.000 Refuse Collections Contract 180,332 184,000 147,534 203,000 204,827 206,670 226-528-806.250 Special Household Waste Prog 675 3,000 673 3,000 3,000 3,000 226-528-810.000 Public Works Contract 62,705 43,900 21,498 35,000 37,500 40,000 226-528-810.001 Leaf Collection 52,357 55,000 56,660 55,000 55,000 55,000 226-528-810.100 Street Sweeping 12,810 12,500 5,860 13,000 13,000 13,000 226-528-827.000 Administrative Service Charge 15,000 15,152 15,152 15,288 15,426 15,565 226-528-827.200 Charges for Services - IT 0 7,500 7,500 7,568 7,636 7,704 Totals for department 528 - Refuse Collection & Disposal 323,879 321,052 254,877 331,856 336,389 340,940 NET OF REVENUES/APPROPRIATIONS - FUND 226 (14,061) (31,154) 42,991 (114) 1,931 4,107	Totals for department 248 - General Government	20,319	51,500	33,797	43,525	43,935	44,349
226-528-805.000 Refuse Collections Contract 180,332 184,000 147,534 203,000 204,827 206,670 226-528-806.250 Special Household Waste Prog 675 3,000 673 3,000 3,000 3,000 226-528-810.000 Public Works Contract 62,705 43,900 21,498 35,000 37,500 40,000 226-528-810.001 Leaf Collection 52,357 55,000 56,660 55,000 55,000 55,000 226-528-810.100 Street Sweeping 12,810 12,500 5,860 13,000 13,000 13,000 226-528-827.000 Administrative Service Charge 15,000 15,152 15,152 15,288 15,426 15,565 226-528-827.200 Charges for Services - IT 0 7,500 7,500 7,568 7,636 7,704 Totals for department 528 - Refuse Collection & Disposal 323,879 321,052 254,877 331,856 336,389 340,940 NET OF REVENUES/APPROPRIATIONS - FUND 226 (14,061) (31,154) 42,991 (114) 1,931 4,107	Department 528 - Refuse Collection & Disness						
226-528-806.250 Special Household Waste Prog 675 3,000 673 3,000 3,000 3,000 226-528-810.000 Public Works Contract 62,705 43,900 21,498 35,000 37,500 40,000 226-528-810.001 Leaf Collection 52,357 55,000 56,660 55,000 55,000 55,000 226-528-810.100 Street Sweeping 12,810 12,500 5,860 13,000 13,000 13,000 226-528-827.000 Administrative Service Charge 15,000 15,152 15,152 15,288 15,426 15,565 226-528-827.200 Charges for Services - IT 0 7,500 7,500 7,568 7,636 7,704 Totals for department 528 - Refuse Collection & Disposal 323,879 321,052 254,877 331,856 336,389 340,940 TOTAL APPROPRIATIONS NET OF REVENUES/APPROPRIATIONS - FUND 226 (14,061) (31,154) 42,991 (114) 1,931 4,107	·	180 332	18/1 000	1/17 53/	203 000	204 827	206 670
226-528-810.000 Public Works Contract 62,705 43,900 21,498 35,000 37,500 40,000 226-528-810.001 Leaf Collection 52,357 55,000 56,660 55,000 55,000 55,000 226-528-810.100 Street Sweeping 12,810 12,500 5,860 13,000 13,000 13,000 226-528-827.000 Administrative Service Charge 15,000 15,152 15,152 15,288 15,426 15,565 226-528-827.200 Charges for Services - IT 0 7,500 7,500 7,568 7,636 7,704 Totals for department 528 - Refuse Collection & Disposal 323,879 321,052 254,877 331,856 336,389 340,940 TOTAL APPROPRIATIONS NET OF REVENUES/APPROPRIATIONS - FUND 226 (14,061) (31,154) 42,991 (114) 1,931 4,107							
226-528-810.001 Leaf Collection 52,357 55,000 56,660 55,000 55,000 55,000 226-528-810.100 Street Sweeping 12,810 12,500 5,860 13,000 13,000 13,000 226-528-827.000 Administrative Service Charge 15,000 15,152 15,152 15,288 15,426 15,565 226-528-827.200 Charges for Services - IT 0 7,500 7,500 7,568 7,636 7,704 Totals for department 528 - Refuse Collection & Disposal 323,879 321,052 254,877 331,856 336,389 340,940 TOTAL APPROPRIATIONS 350,198 372,618 288,674 375,381 380,323 385,289 NET OF REVENUES/APPROPRIATIONS - FUND 226					·	•	
226-528-810.100 Street Sweeping 12,810 12,500 5,860 13,000 13,000 13,000 226-528-827.000 Administrative Service Charge 15,000 15,152 15,152 15,288 15,426 15,565 226-528-827.200 Charges for Services - IT 0 7,500 7,500 7,568 7,636 7,704 Totals for department 528 - Refuse Collection & Disposal 323,879 321,052 254,877 331,856 336,389 340,940 TOTAL APPROPRIATIONS NET OF REVENUES/APPROPRIATIONS - FUND 226 (14,061) (31,154) 42,991 (114) 1,931 4,107		•	,	•		•	•
226-528-827.000 Administrative Service Charge 15,000 15,152 15,152 15,288 15,426 15,565 226-528-827.200 Charges for Services - IT 0 7,500 7,500 7,568 7,636 7,704 Totals for department 528 - Refuse Collection & Disposal 323,879 321,052 254,877 331,856 336,389 340,940 TOTAL APPROPRIATIONS NET OF REVENUES/APPROPRIATIONS - FUND 226 (14,061) (31,154) 42,991 (114) 1,931 4,107							
226-528-827.200 Charges for Services - IT 0 7,500 7,500 7,568 7,636 7,704 Totals for department 528 - Refuse Collection & Disposal 323,879 321,052 254,877 331,856 336,389 340,940 TOTAL APPROPRIATIONS 350,198 372,618 288,674 375,381 380,323 385,289 NET OF REVENUES/APPROPRIATIONS - FUND 226 (14,061) (31,154) 42,991 (114) 1,931 4,107	, -						
Totals for department 528 - Refuse Collection & Disposal 323,879 321,052 254,877 331,856 336,389 340,940 TOTAL APPROPRIATIONS 350,198 372,618 288,674 375,381 380,323 385,289 NET OF REVENUES/APPROPRIATIONS - FUND 226 (14,061) (31,154) 42,991 (114) 1,931 4,107							
TOTAL APPROPRIATIONS 350,198 372,618 288,674 375,381 380,323 385,289 NET OF REVENUES/APPROPRIATIONS - FUND 226 (14,061) (31,154) 42,991 (114) 1,931 4,107				-			
NET OF REVENUES/APPROPRIATIONS - FUND 226 (14,061) (31,154) 42,991 (114) 1,931 4,107		/-	, , , , , , , ,		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,	
	TOTAL APPROPRIATIONS	350,198	372,618	288,674	375,381	380,323	385,289
	NET OF REVENUES/APPROPRIATIONS - FUND 226	(14,061)	(31,154)	42,991	(114)	1,931	4,107
52,101 52,101 1,007 633 2,024	BEGINNING FUND BALANCE	46,222	32,161	32,161	1,007	893	2,824
ENDING FUND BALANCE 32,161 1,007 75,152 893 2,824 6,931	ENDING FUND BALANCE	32,161	1,007	75,152	893	2,824	6,931

251. Pool/Fitness Facility

Fund 251 provides for the operation and maintenance of the community pool and wellness center. Most revenues are provided by a 25-year operating millage approved by the voters in 2003.

Account Number Description	Actual 2015-16	Amended 2016-17	Activity to 05/02/17	Requested 2017-18	Projected 2018-19	Projected 2019-20
Fund 251 - POOL/FITNESS FACILITY						
ESTIMATED REVENUES						
251-000-408.000 Pool Operating Taxes	166,301	165,129	165,165	168,497	170,013	171,543
251-000-636.100 Pool Visitor Fees	515	500	363	500	500	500
251-000-636.200 Swimming Lesson Fees	925	4,000	6,418	5,000	5,000	5,000
251-000-636.300 Swim Team Fees	45,487	30,000	14,497	40,000	40,000	40,000
251-000-636.400 Sychronized Swimming Fees	0	0	400	400	0	0
251-000-665.000 Interest Income	29	10	18	20	20	20
251-000-699.101 Transfers In - General Fund	7,000	0	0	0	0	0
251-000-699.258 Transfers In - SCAF - PSRF	0	0	0	0	0	0
251-000-699.259 Transfers In - SCAF	0	0	0	0	0	0
TOTAL REVENUES	220,257	199,639	186,861	214,417	215,533	217,063
APPROPRIATIONS						
Department 750 - Recreation	10 155	40.500	24 222	04 777	04	04
251-750-983.000 Leased Assets	13,457	13,500	21,902	21,757	21,757	21,757
Totals for department 750 - Recreation	13,457	13,500	21,902	21,757	21,757	21,757
Department 759 - Pool/Fitness Facility Operations						
251-759-702.000 Administration Wages	8,154	9,500	7,362	10,000	10,000	10,000
251-759-704.000 Part-Time Salaries	41,798	35,000	35,946	42,000	42,000	42,000
251-759-711.000 Social Security & Medicare	5,220	3,404	4,870	5,200	5,200	5,200
251-759-712.000 Hospitalization/Dental/Vision	0	2,100	0	3,325	3,458	3,596
Employee Contribution-Medical						
251-759-712.001 Insurance	0	(210)	0	(333)	(346)	(360)
251-759-713.000 Life Insurance	0	50	0	0	0	0
251-759-714.000 Retirement - DB	3,231	415	0	0	0	0
251-759-714.001 Employee Cont-Retirement	0	(285)	0	0	0	0
251-759-715.000 Worker's Compensation	529	850	1,071	1,050	1,050	1,050
251-759-716.000 Unemployment Compensation	0	100	0	0	0	0
251-759-727.000 Office Supplies	1,633	750	642	750	750	750
251-759-728.000 Postage	0	0	0	0	0	0
251-759-731.000 Operating Supplies	8,715	5,000	5,003	7,000	7,000	7,000
251-759-731.500 Pool Chemicals	7,241	7,000	3,507	7,000	7,000	7,000
251-759-738.000 Licenses & Permits	510	200	145	300	300	300
251-759-803.000 Janitorial Contract	11,383	12,500	6,696	12,500	12,500	12,500
251-759-809.000 Contractual Services	0	0	31	0	0	0
251-759-827.000 Administrative Service Charge	12,500	12,627	12,627	12,741	12,855	12,971
251-759-827.200 Charges for Services - IT	1,100	2,630	2,660	2,654	2,678	2,702
251-759-851.000 Communications	0	0	0	0	0	0
251-759-880.200 Swim Team	48,758	38,000	22,420	40,000	40,000	40,000
251-759-880.300 Suits & Sweats/Uniforms	2,632	2,000	828	2,000	2,000	2,000
251-759-880.400 Synchronized Swimming	0	500	195	500	500	500
251-759-890.000 Service Charges	294	100	121	200	200	200

Account Number	Description	Actual 2015-16	Amended 2016-17	Activity to 05/02/17	Requested 2017-18	Projected 2018-19	Projected 2019-20
251-759-920.000	Public Utilities	12,134	15,000	9,820	12,000	12,000	12,000
251-759-920.300	Utilities - Water	25,816	21,000	11,388	18,000	18,000	18,000
251-759-929.000	Maintenance & Repair-Equipmen	7,314	1,500	195	5,000	5,000	5,000
251-759-929.500	Maintenance & Repair-Pump/Htr	3,293	5,000	3,104	5,000	5,000	5,000
251-759-931.000	Maintenance & Repair-Bldgs	3,579	5,000	2,546	3,500	3,500	3,500
Totals for	dept 759 - Pool/Fitness Facility Operations	205,834	179,731	131,177	190,387	190,645	190,909
	_						
TOTAL APPROPRI	ATIONS	219,291	193,231	153,079	212,144	212,402	212,666
NET OF REVENUES	S/APPROPRIATIONS - FUND 251	966	6,408	33,782	2,273	3,131	4,397
BEGINNING FUI	ND BALANCE	0	966	966	7,374	9,647	12,778
ENDING FUND I	BALANCE	966	7,374	34,748	9,647	12,778	17,175

258. Segregated Capital Assets Fund – Parks Special Revenue Fund (SCAF-PSRF)

The Segregated Capital Assets Fund (SCAF) includes settlement funds that are invested in various accounts. SCAF consists of two constituent parts – a Parks Special Revenue Fund invested under the terms of Section 7a of Public Act 20 of 1943 (MCL 129.97a), and a Remainder Fund invested under the terms of Section 1 of Public Act 20 of 1943 (MCL 129.91).

As restricted by Sections 2-255 through 2-263 of the City's Code of Ordinances, the City may use interest and investment returns for purposes specified in the Ordinance. The principal balance of the funds ("corpus") may not be used, spent, or diverted without a supermajority vote of the Commission following the procedures set forth in Section 2-261 of the Code of Ordinances.

The restricted corpus (principal) amount of the SCAF is \$3,242,872, which was the settlement amount received by the City during fiscal year 1995. On January 13, 2015 the City Commission passed ordinance 408 which created the SCAF Parks Special Revenue Fund (SCAF-PSRF) and allocated \$2,000,000 of the total SCAF principal balance to that newly-created fund, and by ordinance established that that protected corpus (principal) balance be indexed for inflation. This left \$1,242,872 as the restricted corpus (principal) balance of the SCAF Remainder Fund (SCAF-RF). The SCAF-RF principal balance is not indexed for inflation.

The SCAF-PSRF was invested in March of 2015. For the purposes of inflation indexing, the City uses the Consumer Price Index for All Urban Consumers (CPI-U) for the Detroit-Ann Arbor-Flint, MI region as calculated by the United States Bureau of Labor Statistics.⁵ The baseline CPI-U value for the SCAF-PSRF is 221.784, the annual value for 2014 which was the most recent available annual published value when the SCAF-PSRF was invested. In future years, the SCAF-PSRF restricted corpus (principal) balance will be updated using the annual CPI-U value for the year preceding for budgeting purposes.

The following table summarizes the yearly performance of the parks special revenue fund, the CPI-U value, and preceding year cash returns. The funds available for spending are the greater of the market value of the fund minus the inflation-indexed corpus value, or the preceding year cash returns. The SCAF-PSRF fund is projected to return \$45,000 in cash returns over the July 1, 2017 through June 30, 2018 period. No expenditure from the SCAF-PSRF is budgeted in FY17-18.

SCAF-PSRF Summary Table

Date	Market Value	CPI-U Value	Inflation- Indexed Corpus Value	Preceding Year Cash Returns	Available Funds
March 31, 2015	\$2,000,000	221.784	\$2,000,000		
March 31, 2016	\$1,947,373	218.706	\$1,972,243	\$17,547	\$17,547
March 31, 2017	\$2,132,749	222.167	\$2,003,454	\$35,726	\$129,295

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⁵ http://data.bls.gov/pdq/SurveyOutputServlet?data_tool=dropmap&series_id=CUURA208SA0,CUUSA208SA0

	Actual	Amended	Activity to	Requested	Projected	Projected
Account Number Description	2015-16	2016-17	05/02/17	2017-18	2018-19	2019-20
Fund 258 - SCAF PARKS SPECIAL REVENUE FUND						
ESTIMATED REVENUES						
258-000-665.000 Interest Income	17,547	45,000	37,123	45,000	45,000	45,000
258-000-665.100 Unrealized/Realized Gain/Loss	(7,301)	135,000	137,567	20,000	20,000	20,000
TOTAL REVENUES	10,246	180,000	174,690	65,000	65,000	65,000
APPROPRIATIONS Department 966 - Transfers Out 258-966-999.251 Transfers Out - Pool Operating Totals for department 966 - Transfers Out	0 0	0	0	0	0	0 0
TOTAL APPROPRIATIONS	0	0	0	0	0	0
NET OF REVENUES/APPROPRIATIONS - FUND 258 BEGINNING FUND BALANCE FUND BALANCE ADJUSTMENTS ENDING FUND BALANCE	10,246 1,972,238 0 1,982,484	180,000 1,982,484 2,162,484	174,690 1,982,484 2,157,174	65,000 2,162,484 2,227,484	65,000 2,227,484 2,292,484	65,000 2,292,484 2,357,484

259. Segregated Capital Assets Fund Remainder Fund (SCAF-RF)

\$1,242,872 is the restricted corpus (principal) balance of the SCAF Remainder Fund (SCAF-RF). The SCAF-RF principal balance is not indexed for inflation. The SCAF-RF has been used to finance the construction of Gainsboro Park. The recreation expenditures will be repaid using the park improvement millage which runs through FY24-25.

Account Number	Description	Actual 2015-16	Amended 2016-17	Activity to 05/02/17	Requested 2017-18	Projected 2018-19	Projected 2019-20
	·	2015-10	2010-17	05/02/17	2017-18	2016-19	2019-20
Fund 259 - SCAF R	EMAINDER FUND						
ESTIMATED REVE	NUES						
259-000-406.500	Parks Improvement Taxes	96,320	98,365	98,361	100,354	101,258	102,169
259-000-665.000	Interest Income	12,061	4,500	1,013	3,789	4,673	5,572
259-000-665.100	Unrealized/Realized Gain/Loss	(4,872)	0	(435)	0	0	0
259-000-665.260	Interest Income - DDA	0	0	0	0	0	0
259-000-699.218	Transfers In - Infrastructure	0	0	0	0	0	0
259-000-699.101	Transfers In - General Fund	0	0	0	0	0	0
TOTAL REVENUES		103,509	102,865	98,939	104,143	105,930	107,741
APPROPRIATIONS							
Department 248 -	General Government						
259-248-890.000	Service Charges	409	0	11	100	100	100
Totals for a	lepartment 248 - General Government _	409	0	11	100	100	100
Department 910 -	•						
259-910-970.750	Capital Outlay - Recreation	271,893	759,000	669,180	0	0	0
Totals for a	lepartment 248 - General Government _	271,893	759,000	669,180	0	0	0
D	Turning Out						
Department 966 -		0	0	0	0	0	0
	Transfers Out-Infrastructure	0	0	0	0	0	0
	Transfers Out - Pool Operating Transfers Out-Debt Svc-Non V	0	0	0	0	0	0
	als for department 966 - Transfers Out	0	0	0	0	0	0
7010	dis for department 966 - Transfers Out _	U	U	U	U	0	U
TOTAL APPROPRIA	ATIONS	272,302	759,000	669,191	100	100	100
	S/APPROPRIATIONS - FUND 259	(168,793)	(656,135)	(570,252)	104,043	105,830	107,641
BEGINNING FUN	-	1,270,635	1,101,842	1,101,842	445,707	549,750	655,580
FUND BALANCE		0	445 707	F24 F22	E 40 750	CEE ECC	762.222
ENDING FUND E	BALANCE	1,101,842	445,707	531,590	549,750	655,580	763,222

260. Downtown Development Authority

Fund 260 provides for the collection of TIFA taxes and the expenditure of funds on activities in support of the Downtown Development Authority's Development Plan. The DDA is paying for the alley reconstruction from 10 Mile to Devonshire over the 2015-16 through 2017-18 budget years. Other notable DDA activities include maintenance and capital improvements to the Woodward Avenue streetscape, and beginning in 2016-17 the reinstatement of a development grant program to assist property owners in the DDA in making façade or property beautification improvements. In 2017-18 the DDA will begin to explore options for and scope out a future project to comprehensively refresh the Woodward Avenue streetscape.

		Actual	Amended	Activity to	Requested	Projected	Projected
Account Number	Description	2015-16	2016-17	05/02/17	2017-18	2018-19	2019-20
Fund 260 - DOWN	TOWN DEVELOPMENT AUTHORITY						_
ESTIMATED REVE	NUES						
260-000-405.000	T.I.F.A. Taxes	92,733	93,029	93,069	93,003	93,840	94,685
260-000-410.500	Delinquent Tax Collection	515	100	77	100	100	101
260-000-665.000	Interest Income	45	20	40	25	25	25
260-000-671.000	Miscellaneous Other Revenues	3,500	2,890	10	1,000	1,000	1,000
260-000-675.000	Contributions & Donations	6,729	0	0	0	0	0
TOTAL REVENUES		103,522	96,039	93,196	94,128	94,965	95,811
APPROPRIATIONS							
Department 730 -	Development Activities						
260-730-731.000	Operating Supplies	0	100	0	0	0	0
260-730-740.200	Sales Tax Expense	0	30	0	30	30	30
260-730-809.000	Contractual Services	296	1,000	3,644	12,000	3,000	3,000
260-730-827.000	Administrative Service Charge	15,000	14,152	14,152	14,200	14,200	14,200
260-730-880.000	Community Promotion	7,450	5,500	0	6,500	6,500	6,500
260-730-890.000	Service Charges	535	250	277	500	500	500
260-730-955.000	Miscellaneous Expenses	1,905	500	0	1,000	1,000	1,000
260-730-955.200	Concerts in the Park	0	0	0	0	0	0
260-730-955.400	Brick Paver Program	0	500	0	0	0	0
260-730-955.500	Development Grant	0	4,500	0	5,500	5,500	5,500
260-730-970.000	Capital Outlay	20,138	20,000	0	10,000	20,000	20,000
260-730-991.100	PRIN:Debt - Govt'l	0	0	0		0	0
260-730-995.100	INTR:Debt - Govt'l	0	0	0	0	0	0
260-730-999.218	Transfers Out-Infrastructure	100,000	40,000	40,000	40,000	0	0
Totals for dep	partment 730 - Development Activities	145,324	86,532	58,073	89,730	50,730	50,730
TOTAL APPROPRIA	ATIONS	145,324	86,532	58,073	89,730	50,730	50,730
NET OF REVENUES	S/APPROPRIATIONS - FUND 260	(41,802)	9,507	35,123	4,398	44,235	45,081
BEGINNING FU	ND BALANCE	73,542	31,740	31,740	41,247	45,645	89,881
ENDING FUND E	BALANCE	31,740	41,247	66,863	45,645	89,881	134,962

271. Library Fund

Fund 271 provides for the collection of library services taxes and the annual payment of Pleasant Ridge's contract with the Huntington Woods library. Library services are funded by a 0.5 mill property tax adopted by the voters in 2014 for tax years 2015-16 through 2019-20. The City levies 0.3684 mills to generate the required revenue.

Account Number	Description	Actual 2015-16	Amended 2016-17	Activity to 05/02/17	Requested 2017-18	Projected 2018-19	Projected 2019-20
Fund 271 - LIBRARY	fund						
ESTIMATED REVEN	UES						
271-000-407.000	Library Taxes	51,831	51,455	51,476	52,522	52,995	53,472
271-000-665.000	Interest Income	19	10	21	20	20	20
TOTAL REVENUES		51,850	51,465	51,497	52,542	53,015	53,492
APPROPRIATIONS							
Department 299 - L	ibrary						
271-299-800.000	Library Services Contract	40,597	42,500	40,597	40,597	40,597	40,597
271-299-827.000	Administrative Service Charge	12,900	13,031	13,031	13,148	13,148	13,267
271-299-890.000	Service Charges	222	150	145	225	225	225
	Totals for department 299 - Library	53,719	55,681	53,773	53,970	53,970	54,089
TOTAL APPROPRIAT	TIONS	53,719	55,681	53,773	53,970	53,970	54,089
NET OF REVENUES/	APPROPRIATIONS - FUND 271	(1,869)	(4,216)	(2,276)	(1,428)	(955)	(597)
BEGINNING FUND	D BALANCE	14,996	13,127	13,127	8,911	7,483	6,528
ENDING FUND BA	ALANCE	13,127	8,911	10,851	7,483	6,528	5,931

297. Historical Fund

Fund 297 provides for the funding of projects and activities undertaken by the Historical Commission. These activities are funded by the Commission's annual Home and Garden tour.

		Actual	Amended	Activity to	Requested	Projected	Projected
Account Number	•	2015-16	2016-17	05/02/17	2017-18	2018-19	2019-20
Fund 297 - HISTOI	RICAL FUND						
ESTIMATED REVE	NUES						
297-000-642.000	Sales	136	350	645	350	350	350
297-000-651.000	Use & Admission Fees	5,760	6,250	2,491	6,250	6,250	6,250
297-000-654.000	Ticket Sales & Field Trips	450	0	0	0	0	0
297-000-665.000	Interest Income	14	10	8	10	10	10
297-000-675.000	Contributions & Donations	350	250	565	350	350	350
TOTAL REVENUES		6,710	6,860	3,709	6,960	6,960	6,960
						·	
APPROPRIATIONS	i						
Department 803 -	Historic Activities						
297-803-727.000	Office Supplies	0	100	0	0	0	0
297-803-728.500	Newsletter Delivery	0	500	0	0	0	0
297-803-731.000	Operating Supplies	3,288	3,500	635	3,500	3,500	3,500
297-803-740.200	Sales Tax Expense	20	30	10	30	30	30
297-803-827.000	Administrative Service Charge	0	0	0	0	0	0
297-803-890.000	Service Charges	117	30	55	100	100	100
297-803-931.000	Maintenance & Repair-Bldgs	600	650	200	650	650	650
297-803-955.000	Miscellaneous Expenses	0	500	0	500	500	500
297-803-970.000	Capital Outlay	0	0	0	0	0	0
Totals f	or department 803 - Historic Activities	4,025	5,310	900	4,780	4,780	4,780
TOTAL APPROPRIA	ATIONS	4,025	5,310	900	4,780	4,780	4,780
		.,	-,-20		.,. 30	-,- 30	-,
NET OF REVENUES	S/APPROPRIATIONS - FUND 297	2,685	1,550	2,809	2,180	2,180	2,180
BEGINNING FUI	ND BALANCE	8,714	11,399	11,399	12,949	15,129	17,309
ENDING FUND BALANCE		11,399	12,949	14,208	15,129	17,309	19,489

301. Debt Service (Voted Bonds)

This fund accounts for the repayment of the current portion of debt principal and interest due during the current fiscal year on general obligation unlimited tax debt, as approved by the electors. The debt was used to construct the pool and wellness center and was issued in 2003, and the final payment will be in 2029.

		Actual	Amended	Activity to	Requested	Projected	Projected
Account Number	Description	2015-16	2016-17	05/02/17	2017-18	2018-19	2019-20
Fund 301 - Debt S	ervice (Voted Bonds)						
ESTIMATED REVE	NUES						
301-000-404.000	Debt Service Property Taxes	179,445	165,835	165,835	177,373	193,000	190,000
301-000-665.000	Interest Income	8	(500)	0	0	0	0
TOTAL REVENUES		179,453	165,335	165,835	177,373	193,000	190,000
APPROPRIATIONS							
Department 905 -	Long-Term Debt Retirement						
301-905-809.000	Contractual Services	4,000	1,000	1,000	0	0	0
301-905-816.000	Paying Agent Fees	231	0	0	0	0	0
301-905-991.047	PRIN:Comm.Ctr/Bank of New Yor	100,000	100,000	100,000	100,000	125,000	125,000
301-905-995.045	INTR:Rec. Ctr 96-Natl City	0	0	0	35,762	33,762	32,000
301-905-995.047	INTR:Comm.Ctr/Bank of New Yor	79,525	75,524	75,525	35,762	33,762	32,000
Totals	for department 905 - Long-Term Debt						
	Retirement _	183,756	176,524	176,525	171,524	192,524	189,000
TOTAL APPROPRIA	ATIONS	183,756	176,524	176,525	171,524	192,524	189,000
NET OF REVENUES	S/APPROPRIATIONS - FUND 301	(4,303)	(11,189)	(10,690)	5,849	476	1,000
BEGINNING FU	ND BALANCE	20,531	16,228	16,228	5,039	10,888	11,364
ENDING FUND E	BALANCE	16,228	5,039	5,538	10,888	11,364	12,364

401. Capital Improvement Fund

The Capital Improvement Fund is being re-established to provide for non-infrastructure capital projects over \$5,000 in cost. The Capital Improvement Fund will allow the City to save for large purchases over multiple budget years to ensure that the City can maintain investment in its facilities and equipment. The Capital Improvement Fund has/will pay for new police cars in 2016 and 2018, and will be used to handle necessary buildings and facilities maintenance and improvements as necessary.

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Revolving Energy Fund

The Capital Improvement Fund also serves as the City's revolving energy fund. The intent is to establish a self-sustaining fund that finances energy efficiency and renewable energy projects that captures a set portion of the cost savings generated by completed energy projects.

The revolving loan fund supports the previous and ongoing community energy management work undertaken by the City of Pleasant Ridge with support from EcoWorks and the Southeast Michigan Energy Office (SEMREO) and funded by the Michigan Energy Office. This fund provides a financing mechanism for the Pleasant Ridge Strategic Energy Plan, which is expected to be adopted in July of 2017.

The City has committed to allocating at least 50% of the savings achieved through energy efficiency and renewable energy projects to the Capital Improvement Fund, which will provide funding for future energy efficiency and renewable energy projects. The savings achieved from energy projects are calculated using calendar year 2016 as the baseline year. Each year, the metered energy use from all City facilities for the preceding calendar year is compiled and compared to the 2016 baseline year. The reduction in energy usage is calculated and converted into a dollar amount using the most recent years' average utility rates. 50% of this savings is then included in the General Fund transfer to the Capital Improvement Fund to serve as seed funding for additional energy efficiency and renewable energy projects.

The City Manager serves as the City's Energy Manager, and has responsibility for management and oversight of the revolving energy fund, energy project implementation, and implementation of the Strategic Energy Plan.

Specific energy fund policies are as follows:

- The purpose of the energy fund is to support the implementation of the City's Strategic Energy Plan.
- 50% of energy project savings are reinvested into the energy fund on an ongoing basis until the
 capital cost of all energy projects has been repaid. If all projects have been repaid, then the
 aggregate savings amount will be contributed to the energy fund for a minimum of 5 additional
 years.
- Savings are evaluated using metered energy usage when available. If metered payback is not
 available or measurable, an estimated payback may be used. If weather-adjusted energy usage is
 available, it can be used as a metric if appropriate.
- Energy projects will be prioritized based on 1) expected payback period, 2) recommendations of the Strategic Energy Plan, 3) total capital cost of project, and 4) discretion of the energy manager and City Commission.
- The use and funding of the revolving energy fund may be evaluated and adjusted from time to time by the energy manager and the City Commission.

City Facility Baseline Energy Use - 2015-2016 Average

		Community		
Utility	City Hall	Center	Total	Cost per Unit
Electricity	44,594 kWh	182,360 kWh	226,954 kWh	\$0.121
Natural Gas	250 kcf	997.5 kcf	1,247.5 kcf	\$6.069

Completed Energy Project List

The following table lists energy projects completed since the creation of the revolving energy fund.

Project	Date Completed	Project Cost
City Hall LED Lighting Conversion	December 2016	\$800
Community Center LED Lighting Conversion	February 2017	\$8,900

E. Enterprise Funds

592. Water and Sewer Fund

The water and sewer fund is responsible for the distribution of water and maintenance and repair of water mains, valves, hydrants, meters and other appurtenant parts of the system. This department is also responsible for the removal of sanitary sewerage and storm water, and maintenance of catch basins and other parts of the combined sewer system. Finally, the department also handles billing, record maintenance, and other customer-related activities associated with the utility.

The 2017-18 budget includes a capital outlay of \$235,000 for the lining of the Oxford, West Cambridge, Hanover, and Norwich sewers. \$70,000 is budgeted in this and the subsequent two years for sewer cleaning and inspection. The projected 2018-19 and 2019-2020 projected budgets include capital outlays of \$100,000 for water meter head replacements. The current water meter heads will be reaching their end of life in the next few years, and the City plans to replace them in 2019 over the course of two budget years.

Account Number	Description	Actual 2015-16	Amended 2016-17	Activity to 05/02/17	Requested 2017-18	Projected 2018-19	Projected 2019-20
Fund 592 - WATER	Fund 592 - WATER AND SEWER FUND					·	
ESTIMATED REVE	NUES						
592-000-642.000	Sales	1,200,328	945,987	873,367	979,900	1,009,297	1,039,576
592-000-645.000	Storm Water Runoff Fees	0	340,506	228,038	342,500	352,775	363,358
592-000-650.000	IWC Charges Revenue	16,595	8,000	5,375	8,000	8,000	8,000
592-000-662.000	Util Bill Penalties	12,139	8,000	13,625	10,000	10,000	10,000
592-000-665.000	Interest Income	2,939	1,000	3,431	2,500	2,500	2,500
592-000-678.000	Sewer Replacement Reimb-Res.	0	0	0	0	0	0
592-000-679.000	Refunds & Rebates	2,473	3,750	2,935	2,000	2,000	2,000
TOTAL REVENUES		1,234,474	1,307,243	1,126,771	1,344,900	1,384,572	1,425,434

APPROPRIATIONS Department 536 - Water & Sewer Systems 19,093 38,150 29,856 38,722 39,071 39,422 592-536-702.000 Administration Wages 592-536-704.000 Part-Time Salaries 5,908 9,375 7,887 9,516 9,516 9,516 2,051 2,450 2,955 3,600 592-536-711.000 Social Security & Medicare 3,600 3,600 592-536-712.000 Hospitalization/Dental/Vision 1,810 5,000 4,606 8,200 8,200 8,200 Hospitalization/Dental/Vision -592-536-712.003 Retirees 0 1,947 800 800 800 150 150 150 592-536-713.000 Life Insurance 124 120 136 592-536-714.000 Retirement - DB 1,365 1,465 710 1,400 1,450 1,500 (525)0 592-536-714.001 Employee Cont-Retirement (680)0 0 592-536-714.003 Retirement - DB (Retirees) 0 10,200 14,302 22,900 25,183 27,513 2,450 592-536-714.500 Retirement DC - Employer 0 2,400 923 2,450 2,450

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3,000

2,500

9,570

166

446

1,985

13,914

6

225

20

3,000

1,000

17,500

225

20

3,000

1,000

17,500

225

20

3,000

1,000

17,500

592-536-715.000 Worker's Compensation

592-536-736.000 Computer Supplies

592-536-809.000 Contractual Services

592-536-728.000 Postage

592-536-716.000 Unemployment Compensation

		Actual	Amended	Activity to	Requested	Projected	Projected
Account Number	Description	2015-16	2016-17	05/02/17	2017-18	2018-19	2019-20
592-536-810.000	Public Works Contract	35,222	30,020	35,400	30,000	30,000	30,000
592-536-814.000	Engineering Services	24,948	10,000	3,500	5,000	5,000	5,000
592-536-818.000	Water Purchases	193,977	205,000	140,905	209,305	215,584	222,052
592-536-819.000	Sewage Treatment	542,703	217,820	163,365	234,156	241,181	248,416
592-536-819.500	Storm Water Treatment	0	340,506	255,380	342,500	352,775	363,358
592-536-820.000	IWC Charges	4,598	5,100	4,283	5,100	5,100	5,100
592-536-827.000	Administrative Service Charge	30,000	30,304	30,304	30,607	30,883	31,160
592-536-827.200	Charges for Services - IT	7,000	15,780	15,780	15,922	16,065	16,210
592-536-890.000	Service Charges	1,639	2,300	630	2,000	2,000	2,000
592-536-906.000	Printing Water Bills	3,455	3,900	3,010	3,900	3,900	3,900
592-536-910.000	Insurance & Bonds	10,000	10,000	10,000	10,000	10,000	10,000
592-536-929.000	Maintenance & Repair-Equipmen	0	5,000	740	3,000	3,000	3,000
592-536-939.000	Maintenance & Repair-Sewers	3,031	5,000	1,292	70,000	70,000	70,000
592-536-955.000	Miscellaneous Expenses	268	4,000	0	2,000	2,000	2,000
592-536-956.000	Meetings, Conferences, Workshop	0	0	630	350	350	350
592-536-958.000	Memberships & Dues	1,197	1,300	1,464	2,000	2,000	2,000
592-536-968.000	Depreciation & Depletion	119,026	0	0	0	0	0
592-536-970.000	Capital Outlay	0	82,700	81,612	30,000	30,000	30,000
592-536-970.594	Capital Outlay - Sewer Projects	3,071	87,300	87,243	235,000	100,000	100,000
592-536-991.000	PRIN: Debt - George Kuhn	0	0	0	0	0	0
592-536-995.000	INTR:Debt - George Kuhn	22,658	111,046	109,870	111,000	111,000	111,000
592-536-996.001	Paying Agent Fees	259	200	2	250	250	250
Totals for de	epartment 536 - Water & Sewer Systems	1,063,001	1,251,126	1,025,249	1,451,573	1,343,252	1,370,692
							_
TOTAL APPROPRIA	ATIONS	1,063,001	1,251,126	1,025,249	1,451,573	1,343,252	1,370,692
NET OF REVENUES/APPROPRIATIONS - FUND 592		171,473	56,117	101,522	(106,673)	41,320	54,742
BEGINNING FU	ND BALANCE	437,918	609,391	609,391	665,508	558,835	600,155
ENDING FUND BALANCE		609,391	665,508	710,913	558,835	600,155	654,897

Water and Sewer Enterprise Fund Fund Balance Notes

• Reported Fund Balance. In prior budgets, the fund balance for the water and sewer fund has been based on the net position in the City's annual financial statements. However, the net position includes noncurrent (i.e. non-liquid) assets such as capital assets that are being depreciated (mostly the pipes in the ground), along with noncurrent liabilities such as the noncurrent portion of long-term debt. Neither capital assets nor noncurrent debt has any impact on the ability of the water fund to handle the day to day operations of the water and sewer department. Similarly, they have no bearing on the ability of the water and sewer fund to fix a water main break or to repair a sewer.

For the above reasons, starting with this budget, working capital is the water and sewer enterprise fund balance that is reported for budgetary purposes. Working capital is defined as cash and cash equivalents plus liquid investments minus current liabilities. Refer to the water and sewer enterprise fund statement of net position in the City's most recent financial statements for a detailed accounting of all current and noncurrent assets and liabilities.

- Water and Sewer Enterprise Fund Fund Balance Policy. The City's policy is to maintain a minimum fund balance of \$650,000 in the Water and Sewer Enterprise Fund. This is to provide sufficient liquidity to meet current, future, and emergency spending needs. The minimum fund balance target is derived as follows:
 - o 90 days of operations (\$1,390,000/4 = \$347,500); plus
 - o Annual debt service (\$111,000); plus
 - Emergency capital replacement, or 5% of net book value of assets (\$962,699 * 0.05 = \$48.135); plus
 - Planned capital replacement (average of \$125,000 annually)

The target minimum fund balance is therefore \$362,180 + \$111,000 + \$48,135 + \$125,000 = \$631,635, which rounds up to \$635,000.

Fund balance will dip below target in FY17-18 due to large planned capital improvements, but is projected to be replenished over the following two fiscal years at which time it will again be above the minimum target amount.



City of Pleasant Ridge

James Breuckman, City Manager

From: Jim Breuckman, City Manager

To: City Commission

Date: May 4, 2017

Re: Preliminary 2017-18 Utility Bill Rates

Overview

Following are the preliminary water and sewer rate, ready-to-serve charge, storm water runoff treatment charge, and garbage pick-up fee. The new utility rates will be finalized as our suppliers and service providers finalize the rates they will be charging the City over the next month. We will have a resolution setting final rates ready for City Commission consideration at the June 13 meeting, and the new rates will take effect July 1, 2017.

Proposed Rate Structure

The proposed rate structure is as follows:

Ready-to-Serve Charge per bill (6 bills) (residential): Ready-to Serve Charge per bill (6 bills) (nonresidential):	\$31.15
	4
5/8 inch meter	\$31.15
3/4 inch meter	\$43.22
1 inch meter	\$63.17
1 ½ inch meter	\$79.79
2 inch meter	\$89.75
3 inch meter	\$119.68
Water charge per 1,000 cubic feet of water:	\$41.25
Sewage disposal charge per 1,000 cubic feet of water:	\$31.55
Garbage Collection Charge per bill (6 bills):	\$21.10
Stormwater Charge per equivalent residential unit per bill (6 bills):	\$45.39

Wholesale Costs

The largest expense component in our water and sewer fund budget is wholesale costs for water purchases, sewage treatment, and stormwater runoff treatment. These costs account for about 2/3 of the total expenditures of the water and sewer fund. These wholesale costs will be increasing by the following percentages starting July 1:

Water Wholesale Cost Increase4.7	′%
Sewage Treatment Cost Increase	%
Storm Water Treatment Cost Increase 0.6	3%

Water and Sewer Usage Rate

The water and sewer usage rate will increase 1.8% in the coming fiscal year, from \$71.47 to \$72.80, even though wholesale water rates will be going up by about 4.7% and wholesale sewer rates will be increasing by 7.5%.

Stormwater Charge per Equivalent Residential Unit (ERU)

The stormwater charge will cover the city's share of the cost to treat stormwater runoff that enters the combined sewer system. Oakland County operates the George W. Kuhn stormwater treatment facility which handles wet-weather sewer flows. Oakland County will bill the City \$342,500 for our share of that facility's costs in FY17-18. The ERU stormwater charge methodology allocates those costs to each property in the City based on how much stormwater runoff each property generates. This is calculated based on the size of each property, and the amount of pervious and impervious surface on each property. For more information, refer to the Equivalent Residential Unit Apportionment Study available on the City's website at: http://cityofpleasantridge.org/documents/ERUstudy.pdf.

Overall, moving to the ERU methodology will result in residential properties paying slightly less on average, and nonresidential properties paying slightly more on average. This is because nonresidential properties tend to have much larger percentages of impervious surface. The actual difference in residents' bills will be dependent on the ERU value for their property and the amount of water they use.

Fixed Ready-to-Serve Charge

Approximately 80% of the City's total cost to maintain and operate the water and sewer system is fixed, and not tied to actual usage. The City's water and sewer system is nearly 100 years old and requires annual maintenance and repairs. Those costs cannot be avoided if we are to provide safe and reliable water and sewer service. The cost to maintain and operate our system is entirely borne by the users of the system. The ready-to-serve charge covers a portion of the city's fixed maintenance and operation costs which allow us to maintain the system so that we can reliably deliver water to residents and businesses, and take the waste water away. The ready to serve charge is proposed to increase 5.6% over last year.

Total Cost Increase

For the average user (one who uses 8.4 MCF of water per year), the total cost increase will be 3.94% over the 2016-17 utility bill rates. This cost increase reflects the increased wholesale costs for water and sewer service to the City, increased garbage and recycling pickup costs associated with the upcoming implementation of single-stream recycling, and with notable sewer capital projects to line the West Cambridge, Oxford, Norwich, and Hanover sewers.

Effective Date of Changes

The City's fiscal year starts on July 1 and runs until June 30 of the next calendar year. A bill for May and June water usage and garbage pickup under the current rates in effect for the 2016-17 fiscal year will be mailed in July. This bill will be due in late August. The bill for July and August water usage will be the first bill using the new rates and will be sent to residents in late September and due in late October.

Requested Action

No action is requested now. A resolution will be placed before the City Commission for consideration at the June 13 meeting.



City of Pleasant Ridge

James Breuckman, City Manager

From: Jim Breuckman, City Manager

To: City Commission

Date: May 2, 2017

Re: Letter of Understanding Between City and Michigan Fraternal Order of Police Labor

Council

Overview

The City has worked with our police union, the Michigan Fraternal Order of Police Labor Council, to arrive at a letter of understanding regarding pension and retirement health care benefits offered to employees hired after July 1, 2017.

Background

The cost to provide retirement benefits (pension + health care) has increased from 2% of the City's general fund expenditures in 2001 to 17% in 2017, and is projected to rise to 20% of general fund expenditures by 2020. These cost increases are increasingly constricting the City's budget. Nonpension and retiree health care expenditures in the City's general fund budget have decreased over the past 2 years to compensate for rising retirement benefits costs. Beginning next year these continued cost increases will lead to growing operating deficits in the City's budget that will require significant spending cuts elsewhere in the general fund.

The City has been working to adjust benefits offered to employees to a sustainable path since 2011. The proposed letter of understanding extends that by establishing a new benefits package for full-time police officers hired after July 1, 2017. This letter of understanding will be in place until the current police contract expires on June 30, 2018.

These proposed changes will not solve the City's short to medium term retirement benefits cost issue. However, these are necessary steps to place retirement benefit costs on a sustainable footing for the long term.

The benefit changes for new full-time police officers are summarized as follows:

Hybrid Retirement Plan. The 2.25 multiplier defined benefit plan offered to police officers hired after 2011 is closed, and will be replaced with a hybrid plan that includes a small defined benefit component with a 1.0 multiplier and a defined contribution (401k-style) component. The change will not represent a cost savings to the City in the short term, but it does limit the City's risk profile in the long term by reducing the defined benefit component. On the other hand, the employee will in normal circumstances receive a City contribution into their defined contribution account.

Retirement Health Care. The proposed agreement eliminates the City's obligation to provide retirement health care for police officers hired after July 1, 2017. Instead, the City will establish a Health Care Savings Plan where the employee contributes 1% of their base pay and the City contributes 3% of base pay to a savings plan. The employee can then use this plan to pay for medical insurance and medical expenses in retirement.

Requested Action

City Commission approval of the letter of understanding with the Michigan Fraternal Order of Police Council, representing the City's police officers.

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LETTER OF UNDERSTANDING BETWEEN THE CITY OF PLEASANT RIDGE AND

MICHIGAN FRATERNAL ORDER of POLICE LABOR COUNCIL

WHEREAS, the City of Pleasant Ridge ("City") and the Michigan Fraternal Order of Police Labor Council ("Union") are parties to a collective bargaining agreement ("Contract") effective July 1, 2013 through June 30, 2018, and,

WHEREAS, the parties have agreed to reopen the Contract for purposes of modifying certain provisions thereof; and,

WHEREAS, the parties intend for these modifications to supersede and modify the provisions of the Contract to the extent of the contractual changes set forth herein;

NOW, THEREFORE, the City and Union agree as follows:

- 1. All employees hired after July 1, 2017 shall be provided a MERS Hybrid Plan with the following retirement benefits:
 - a. The Defined Benefit ("DB") component shall consist of the following provisions:
 - (i) Benefit Multiplier of 1.0%.
 - (ii) Final Average Compensation (FAC) shall be based on the highest consecutive 3 years.
 - (iii) Compensation for the DB portion of the Plan is defined as base wages.
 - (iv) Vesting shall be 6 years.
 - (v) Early normal retirement with unreduced benefits at age 55 with 25 years of service.
 - (vi) The DB component shall be exclusively funded by the City, with no member contributions permitted.
 - b. The Defined Contribution ("DC") component shall consist of the following provisions:
 - (i) Vesting (Employer Contribution only):
 25% after 2 years of service
 50% after 4 years of service
 100% after 6 years of service

In the event of disability or death a participant's (or his/her beneficiary's) entire employer contribution account shall be 100%

- vested, to the extent that the balance of such account has not previously been forfeited.
- (ii) Disbursements or distributions shall be consistent with IRS guidelines.
- (iii) The City contribution shall be the difference between the percentage of payroll contributed by the City to fund the DB Component of this Plan as determined annually by the Plan's actuaries (both normal and UAL costs) and 9.0%. There shall be no minimum City contribution to the DC Component of this plan should the cost to fund the DB Component meet or exceed 9.0% of payroll.
- (iv) The mandatory Employee contribution to the DC Component of the Plan shall be 5.0% of payroll. The Employee contribution vests immediately. Voluntary employee contributions may be made after-tax, subject to the Section 415(c) limitations of the Internal Revenue Code.
- (v) Compensation for the DC portion of the Plan is defined as base wages.
- 2. **Retiree Health Care**. Employees hired after July 1, 2017 shall be provided a Health Care Savings Plan ("HCSP") in lieu of employer-provided retiree health insurance. The Employer will contribute 3% of base wage on behalf of each employee for each month in which the employee is compensated at least 120 hours. The employee will also contribute 1% of base wage into the HCSP, prorated monthly, through payroll deduction. Employee accounts will be invested in a qualified plan under the provisions of the Internal Revenue Service. Employees who retire or otherwise terminate employment with the City will be entitled to apply their contribution and their vested City contribution for qualified medical expenses including the cost of health insurance in accordance with IRS regulations. Employees will be vested in the City contributions under the plan according to the following schedule: two years of seniority: 25%, four years of seniority: 50%, six years of seniority: 100%.
- 3. Upon ratification and execution of this Letter of Understanding, members of the bargaining unit shall receive a \$750.00 lump sum signing bonus, subject to normal withholding.
- 4. Effective July 1, 2017, the Uniform Allowance of \$575, set forth in Article XIV of the Contract, shall be increased to \$750 annually. The Uniform Cleaning Allowance shall be increased for \$475 to \$600 annually, also effective July 1, 2017.

- 5. All other provisions of the Contract shall remain unaffected by this Letter of Understanding.
- 6. This provisions of this Letter of Understanding shall become part of the successor agreement to the Contract, subject to the provisions of the Public Employment Relations Act, MCLA 423.201 et seq.

For the Union	For the City	
For the Union	For the City	