

1. Agenda

Documents: [MARCH 15, 2016 PLANNING COMMISSION MEETING AGENDA.PDF](#)

1.I. Item B

Documents: [DRAFT PLANNING COMMISSION MINUTES FOR FEBRUARY 9, 2016.PDF](#)

1.II. Item D1

Documents: [SPECIAL LAND USE AND SITE PLAN 16-03-02 - 3704 WEST 13 MILE - LEARNING CARE ACADEMY.PDF](#)

1.III. Item D2

Documents: [SITE PLAN 16-03-03 - 1617 EAST 12 MILE - MOBIL.PDF](#)

1.IV. Item D3

Documents: [SITE PLAN 16-03-04 - CENTER STREET PARKLET.PDF](#)

1.V. Item E1

Documents: [SIGN VARIANCE 16-03-02 - 1108 SOUTH MAIN - HARRISON LOFTS.PDF](#)

1.VI. Item E2

Documents: [CAPITAL IMPROVEMENTS PROGRAM FOR 2016-2017 FISCAL YEAR.PDF](#)

**PLANNING COMMISSION
CITY OF ROYAL OAK, MICHIGAN**

www.romi.gov

Tuesday, March 15, 2016

7:30 P.M.

Room 315

AGENDA

A. Call to Order

B. Approval of Minutes for February 9, 2016

C. Public Comment on Non-Agenda Items

D. New Business

- 1. Public Hearing – Special Land Use & Site Plan (SP 16-03-02)** to construct child day-care center (Learning Care Academy) on site of former elementary school at **3704 W. Thirteen Mile Rd.** (parcel no. 25-06-455-018)
AF Jonna Development & Mgt. Co., Petitioner
Tower Construction, LLC, Contractor
Beaumont Health System, Owner
- 2. SP 16-03-03 – Site Plan** to expand convenience store for automobile filling station (Mobil) at **1617 E. Twelve Mile Rd.** (parcel no. 25-10-480-013)
Sara Corp. / Makki Investments, LLC, Petitioner & Owner
Ziad El-Baba, Engineer
- 3. SP 16-03-04 – Site Plan** to develop public park (Center Street Parklet) at **222 S. Center St.** (parcel no. 25-21-232-001)
City of Royal Oak, Petitioner & Owner
Living Lab Design Studio, Designer

E. Other Business

- 1. SV 16-03-02 – Sign Variance** request to install off-premise wall sign for multiple-family development (Harrison Lofts) at **1108 S. Main St.** (parcel no. 25-21-433-012) with following variances:
 - (a) Allow off-premise sign; and
 - (b) Waive 131.1 sq. ft. from maximum permitted 15.9-sq. ft. wall sign area.Harrison Lofts II, LLC, Petitioner
W4 Signs, Contractor
Karen M. Shea & Jean Bower, Owners
- 2. Public Hearing – Capital Improvements Program for 2016-2017 Fiscal Year**

ROYAL OAK PLANNING COMMISSION
CITY OF ROYAL OAK, MICHIGAN

Tuesday, February 9, 2016
7:30p.m.

AGENDA

A. Call to Order

B. Approval of Minutes for January 12, 2016

C. Public Comment on Non-Agenda Items

D. New Business

1. **Public Hearing – Conditional Rezoning** from **One Family Residential** and **Neighborhood Business** to **Mixed Use 2** and associated **Site Plan (SP 16-02-01)** to redevelop site of former religious institution and off-street parking lot into 29 townhouse multiple-family dwelling units at **3506 Rochester Rd.** (parcel nos. 25-03-378-001 & 25-03-377-030)

J&G Partners Real Estate, LLC, Petitioner
First United Methodist Church of Royal Oak, Owner
Roger J. Berent Architects, Architect

E. Other Business

1. **Administrative Site Plan Approvals**

2. **Election of Officers**

Present

Rebecca Black
Robert Bruner
Jeffrey Chase
Sharlan Douglas, City Commissioner
Jim Ellison, Mayor
Clyde Esbri, Chairperson
Dan Godek
Gary Quesada
Anne Vaara, Vice-Chairperson

Absent

None

Staff

Doug Hedges, City Planner

A. Call to Order

Chairperson Esbri called the February 9, 2016 regular meeting of the Planning Commission to order at 7:30 p.m.

B. Approval of Minutes for January 12, 2016

Moved by Ms. Vaara
Supported by Mr. Chase

To approve the minutes of the January 12, 2016 regular meeting of the Planning Commission as presented.

Motion adopted unanimously.

C. Public Comment on Non-Agenda Items

Chairperson Esbri invited members of the audience to comment on any issues that were not part of the meeting's agenda. As no members of the audience came forward Chairperson Esbri closed the public comment portion of the agenda.

D. New Business

1. Public Hearing – Conditional Rezoning from One Family Residential and Neighborhood Business to Mixed Use 2 and associated Site Plan (SP 16-02-01) to redevelop site of former religious institution and off-street parking lot into 29 townhouse multiple-family dwelling units at 3506 Rochester Rd. (parcel nos. 25-03-378-001 & 25-03-377-030)

J&G Partners Real Estate, LLC, Petitioner
First United Methodist Church of Royal Oak, Owner
Roger J. Berent Architects, Architect

Moved by Commissioner Douglas
Supported by Mr. Godek

Be It Resolved, that the request to conditionally rezone 3506 Rochester Road (parcel nos. 25-03-378-001 & 25-03-377-030) from **One Family Residential and Neighborhood Business to Mixed Use 2** in order to redevelop the site of a former religious institution and off-street parking lot into 29 townhouse multiple-family dwelling units is hereby referred to the City Commission with a **recommendation for approval**, based upon the following:

- a. The requested Mixed Use 2 zone is consistent with the goals and objectives of the Master Plan, as well as with recent development trends within the city.
- b. The site's physical characteristics are compatible with multiple-family dwelling units.
- c. The townhouse-style dwelling units are compatible with surrounding uses and zoning in terms of land suitability, impacts on the environment, density, traffic volumes, aesthetics, infrastructure, and potential influence on property values.
- d. The street system is capable of safely and efficiently accommodating expected traffic volumes generated by the multiple-family dwelling units.
- e. The capacity of public utilities and services are sufficient to accommodate the multiple-family dwelling units without compromising the city's health, safety and welfare.
- f. There is an apparent demand in the city for townhouse-style dwelling units in relation to the amount of land in the city currently zoned and available to accommodate the demand.
- g. The requested zone shall not create an isolated and unplanned spot zone as property to the west across Rochester Road is similarly zoned.

Be it further resolved, that **SP 16-02-01**, a site plan to redevelop the site of a former religious institution and off-street parking lot into 29 townhouse multiple-family dwelling units at **3506**

Rochester Road (parcel nos. 25-03-378-001 and 25-03-377-030), is hereby referred to the City Commission with a **recommendation of approval** with the following **contingencies**:

- a. A conditional zoning agreement between the petitioner and the city shall be submitted for review by the City Attorney prior to approval by the City Commission, specifying all conditions voluntarily offered by the petitioner.
- b. Prior to review of the conditional zoning agreement by the City Commission, the petitioner shall submit a revised site plan and landscaping plan for review and approval by the Planning Division containing all required information including the following:
 - (1) An updated survey of existing conditions for both parcels shall be provided, including any overhead utilities within the public alley or other adjacent rights-of-way;
 - (2) Balconies shall have a minimum clearance of 13 feet 6 inches where required by the Fire Marshall;
 - (3) The type of pavement proposed for all off-street parking, driveways, sidewalks, walkways, curbs, gutters, etc., shall be specified on the site plan; and
 - (4) A detailed landscaping plan shall be provided containing all elements required under § 770-90 (C)(1) through (7) of the Zoning Ordinance, and also the location of any deciduous trees with a caliper of six inches or more on either parcel, and whether such trees will remain or be removed. The proposed berm shall be removed from the greenbelt along the east rear lot line of each parcel and more, larger evergreen trees shall be added to the greenbelt instead.
- c. All work and/or improvements within the public right-of-way shall be in accordance with the specifications and standards of the City Engineer and included on the revised site plan, including, but not limited to, the following:
 - (1) All new or replaced sidewalks, driveway approaches, curbs, gutters, etc.;
 - (2) Replacing asphalt within the Midland Boulevard right-of-way between the sidewalk and curb with lawn; and
 - (3) Removing all existing driveways and approaches to Rochester Road, and restoring the curb, sidewalk, and right-of-way.
- d. Any exterior lighting fixtures shall comply with § 770-96 (B) of the Zoning Ordinance and other city codes and ordinances, including being directed downward and shielded so as not to shine on adjacent property, and within maximum permitted fixture heights and illumination levels.
- e. All signage shall comply with the Sign Ordinance (Chapter 607 Signs, Article II Sign Regulations) or receive necessary variances from the Planning Commission.
- f. A performance bond shall be posted in an amount to be determined by the Building Official.
- g. The site plan shall meet all other code and ordinance requirements, as determined by the Building Official, Fire Marshall, and City Engineer, **prior** to issuance of **any** building permit. Such requirements include, but are not limited to, the Michigan Building Code, the Fire Prevention Ordinance (Chapter 340), and the Stormwater Detention Ordinance (Chapter 644).

Motion adopted unanimously.

E. Other Business

1. Administrative Site Plan Approvals

A list of site plans administratively approved by the Planning Division during the last quarter of 2015 was presented. No further action was taken.

2. Election of Officers

Moved by Mr. Godek
Supported by Ms. Vaara

To elect Clyde Esbri as Chairperson of the Planning Commission for 2016.

Motion adopted unanimously.

Moved by Mayor Ellison
Supported by Mr. Quesada

To elect Anne Vaara as Vice-Chairperson of the Planning Commission for 2016.

Motion adopted unanimously.

F. Adjournment

Moved by Mr. Godek
Supported by Mayor Ellison

To adjourn the February 9, 2016 regular meeting of the Planning Commission at 9:05 p.m.

Motion adopted unanimously.

Clyde Esbri
Chairperson, Planning Commission


Douglas A. Hedges, AICP, RCP
City Planner II

MEMORANDUM

Community Development Department
City of Royal Oak, Michigan

Meeting Date: March 15, 2016
211 Williams St. / P.O. Box 64
Royal Oak, MI 48068-0064
Phone: (248) 246-3280
Fax: (248) 246-3005
www.romi.gov

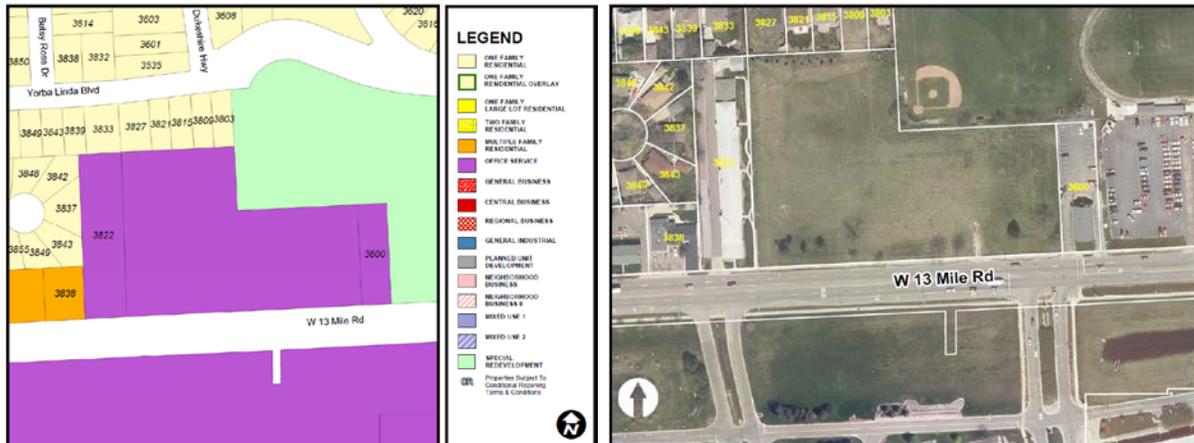
DATE: March 3, 2016

TO: Planning Commission

FROM: Planning Division

SUBJECT: Special Land Use & Site Plan (SP 16-03-02) to construct child day-care center (Learning Care Academy) on site of former elementary school at **3704 W. Thirteen Mile Rd.** (parcel no. 25-06-455-018)
AF Jonna Development & Mgt. Co., Petitioner
Tower Construction, LLC, Contractor
Beaumont Health System, Owner

1. Zoning Map & Aerial Photograph



2. Zoning Ordinance Provisions

ARTICLE IV Zone Regulations & General Provisions – § 770-38 Office Service, (C) Special Land Uses (3): Day-care centers are a special land use in the Office Service zoning district according to § 770-39 (C)(3) of the Zoning Ordinance, subject to the required standards in § 770-59, Day-Care Facilities.

ARTICLE V Special Provisions – § 770-59 Day-Care Facilities: This section contains design standards and operational requirements for day-care centers, group day-care homes, and adult day-care facilities.

3. Compatibility with Master Plan

The planned future use on the Master Plan's Future Land Use Map for this site is "Public / Institutional." Areas designated as "Public / Institutional" are intended to accommodate such activities as governmental and public buildings, schools, and religious institutions. Other sites with this designation include Beaumont Hospital, Royal Oak High School, Oakview Cemetery, and most religious institutions and schools outside of the downtown.

4. Other Findings

- A. Existing Conditions. The property is located on the north side of West Thirteen Mile Road between Woodward Avenue and Greenfield Road across from Beaumont Hospital. The lot has a width of 578.19 feet, a depth ranging from 253.50 to 408.69 feet, and approximately 190,100 square feet or 4.36 acres of area. The parcel is vacant but was the former site of the Parker Elementary School. Surrounding uses include single-family dwellings to the north, a medical office to the east, a private school to the east and north, multiple-family dwellings to the west, and Beaumont Hospital to the south.

- B. Proposed Use. The petitioner proposes to construct a day-care center on the eastern portion of the site. The one-story building would have approximately 12,086 square feet of ground floor area. Outdoor playgrounds would be placed in front of and behind the building and enclosed with a 6-foot fence as required under § 770-59 (A)(2) and (3) of the Zoning Ordinance.

- C. Off-Street Parking. Day-care centers are required to provide one off-street parking space for every 350 square feet of usable floor area according to § 770-107. The proposed building would have approximately 10,217 square feet of usable floor area and require 30 parking spaces. An off-street parking lot is proposed on the east side of the building with 34 spaces.

- D. Vehicular Access. Two one-way driveways are proposed to Thirteen Mile Road at the southeast corner of the site. Each would align with the existing driveways to Beaumont Hospital on the south side of Thirteen Mile Road. To accommodate the driveways at this location the existing curb cuts and approaches to the medical office on the property immediately to the east would be closed. Joint access to that property would then be provided along the petitioner's east side lot line.

The petitioner has yet to submit documentation indicating the adjacent property owner agrees to close their existing driveways to Thirteen Mile Road and have joint access provided to their property through the petitioner's site. The petitioner will need to provide a joint access agreement with the adjacent property owner that can be recorded with Oakland County. Otherwise, vehicular access to the petitioner's property may need to be modified as their in-bound driveway would be immediately next to and conflict with the out-bound driveway of the adjacent property to the east.

Further, the both proposed driveways appear to be wider than necessary to allow one in-bound lane and two out-bound lanes. Although both are less than the maximum 30-foot width allowed under § 770-109 (F) they may need to be narrowed to prevent conflicts with left turn movements from Thirteen Mile Road, and also vehicles attempting to access the parking lot directly from the in-bound driveway.

A 25-foot wide access drive is also proposed behind the day-care center along the north rear lot line. This access drive will provide future access to the west portion of the site should it be developed at a later date.

- E. Result of Approval. If the petitioner's request for a special land use permit is approved then site plan review may proceed.

5. Recommendations

The Planning Commission, at its discretion, may grant special land use permits. Following the required public hearing, the Commission may approve, approve with conditions, or deny a special land use permit. The basis for the Planning Commission's decision in the case of a special land use request is found in §770-11, Basis of Determination, which reads as follows:

The Planning Commission shall review the proposed special land use in terms of the standards stated within this Ordinance and shall establish that such use and the proposed location:

- (a) Will be harmonious and in accordance with the general objectives or any specific objectives of the Master Plan.*
- (b) Will be designed, constructed, operated, and maintained so as to be harmonious and appropriate in appearance with the existing or intended character of the general vicinity and will not change the essential character of the area.*
- (c) Will not be hazardous or disturbing to existing uses or uses reasonably anticipated in the future.*
- (d) Will be an improvement in relation to property in the immediate vicinity and to the City as a whole.*
- (e) Will be served adequately by essential public services and facilities or that the persons responsible for the establishment of the proposed use will provide adequately any such service or facility.*
- (f) Will not create excessive additional public costs and will not be detrimental to the economic welfare of the City.*
- (g) Will be consistent with the intent and purposes of this Ordinance, and comply with all applicable provisions and standards, which are established for said use by this Ordinance and other applicable codes.*

cc: Jordan Jonna, AF Jonna Development & Mgt. Co.
Jason Gekiere, Tower Construction, LLC

It is recommended that the petitioner or a representative attend the March 15, 2016 Planning Commission meeting. The meeting starts at 7:30 p.m. in the City Commission chambers on the 3rd floor of City Hall.

MEMORANDUM

Community Development Department
City of Royal Oak, Michigan

Meeting Date: March 15, 2016
211 Williams St. / P.O. Box 64
Royal Oak, MI 48068-0064
Phone: (248) 246-3280
Fax: (248) 246-3005
www.romi.gov

DATE: March 3, 2016

TO: Planning Commission

FROM: Planning Division

SUBJECT: SP 16-03-02 – Site Plan to construct child day-care center (Learning Care Academy) on site of former elementary school at **3704 W. Thirteen Mile Rd.** (parcel no. 25-06-455-018)
AF Jonna Development & Mgt. Co., Petitioner
Tower Construction, LLC, Contractor
Beaumont Health System, Owner

The above referenced site plan and its associated special land use permit are scheduled for consideration by the Planning Commission at the next regular meeting. Should the Planning Commission wish to consider approval of the site plan, including all discretionary items, the Planning Division recommends the following contingencies:

1. The day-care center shall comply with the requirements for hours of operation, overnight activity, and maintaining state licenses in § 770-59 (A)(5) and (6) of the Zoning Ordinance.
2. The petitioner shall provide a joint access agreement with the property owner of 3600 West Thirteen Mile Road (parcel no. 25-06-455-014) to be reviewed and approved by the City Attorney and recorded with the Oakland County Register of Deeds. The agreement shall state that the adjacent property owner agrees to the closing of their existing driveways to and from Thirteen Mile Road, and that the petitioner agrees to provide a permanent access easement to that adjacent property through the petitioner's site.
3. All improvements to the public right-of-way shall be in accordance with the specifications and standards of the City Engineer, including, but not limited to, narrowing of both driveway approaches.
4. All signage shall comply with the Sign Ordinance (Chapter 607 Signs, Article II Sign Regulations) or receive necessary variances from the Planning Commission.
5. A performance bond shall be posted in an amount to be determined by the Building Official.
6. The site plan shall meet all other code and ordinance requirements, as determined by the Building Official, Fire Marshall, and City Engineer, prior to issuance of any building permit. Such requirements include, but are not limited to, the Michigan Building Code, the Fire Prevention Ordinance (Chapter 340), and the Stormwater Detention Ordinance (Chapter 644).

cc: Jordan Jonna, AF Jonna Development & Mgt. Co.
Jason Gekiere, Tower Construction, LLC

It is recommended that the petitioner or a representative attend the March 15, 2016 Planning Commission meeting. The meeting starts at 7:30 p.m. in the City Commission chambers on the 3rd floor of City Hall.

PROJECT CONTACTS

OWNER REPRESENTATIVE

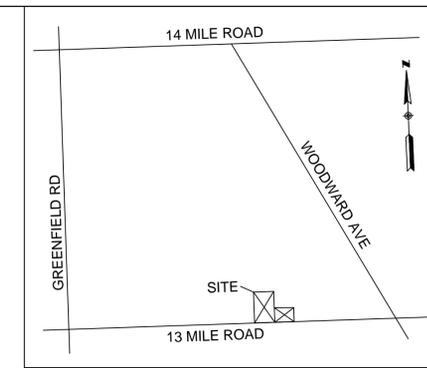
CONTACT: JASON GEKIERE
TOWER CONSTRUCTION, LLC
3883 TELEGRAPH RD., STE 200
BLOOMFIELD TWP, MI 48302
PH: (248)287-8200

ENGINEER

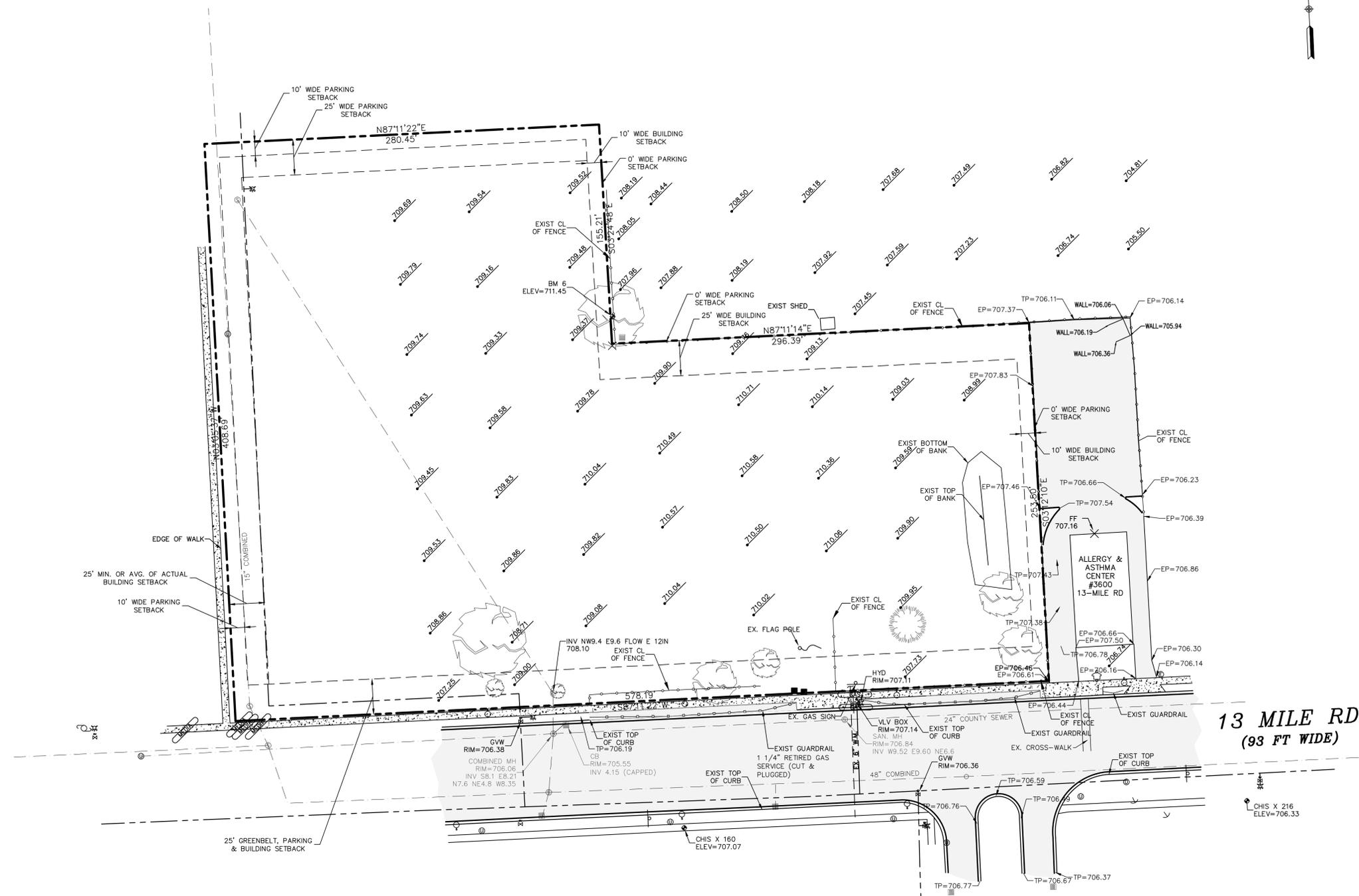
CONTACT: LESLIE ZAWADA PE
CIVIL ENGINEERING SOLUTIONS, INC
56711 GRAND RIVER AVE
P.O. BOX 243
NEW HUDSON, MI 48265
PH: (248)264-6906

13-MILE ROAD LEARNING CENTER

CITY OF ROYAL OAK, OAKLAND COUNTY, MICHIGAN



LOCATION MAP
NOT TO SCALE



LEGEND

- EXISTING**
- EXIST WATERMAIN
 - EXIST SEWER
 - EXIST SETBACK
 - EXIST FENCE
 - EXIST GUARDRAIL
 - - - EXIST BOUNDRY
 - EXIST AT&T RISER
 - ~ EXIST FLAGPOLE
 - EXIST STREETLIGHT
 - ⊕ EXIST CROSSWALK SIGNAL
 - ⊙ EXIST SEWER MH
 - ⊕ EXIST AT&T MARKER
 - ⊕ EXIST GAS MARKER
 - ⊙ EXIST DECIDUOUS TREE
 - ⊙ EXIST CONIFEROUS TREE
 - ▭ EXIST HMA
 - ▭ EXIST CONCRETE

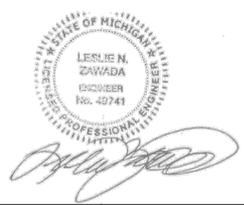
SHEET INDEX

SHEET NUMBER	SHEET TITLE
C.1	COVER SHEET & EXISTING CONDITIONS
C.2	DEMOLITION PLAN
C.3	GRADING & PAVING PLAN

P:\PROJECTS\2015-0111 13 MILE LEARNING CENTER\PLANS\SITE\PLAN_S\SUBMITTAL2.DWG

THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.

CONSTRUCTION SITE SAFETY IS THE RESPONSIBILITY OF THE CONTRACTOR. NEITHER THE OWNER NOR THE ENGINEER SHALL BE EXPECTED TO ASSUME ANY RESPONSIBILITY FOR SAFETY OF THE WORK, OF PERSONS ENGAGED IN THE WORK, OF ANY NEARBY STRUCTURES, OR ANY OTHER PERSONS.



CES CIVIL ENGINEERING SOLUTIONS, Inc.
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56711 GRAND RIVER AVE.
NEW HUDSON, MI 48165
PH: (248)264-6906
FAX: (810)448-5903
lzawada@civilengineeringsolutions.us

811 Know what's below.
Call before you dig.

CITY OF ROYAL OAK
13 MILE LEARNING CENTER
COVER SHEET & EXISTING CONDITIONS

NO.	DATE	SUBMITTAL	NO.	DATE	REVISION
1	09-23-2015	CONCEPTUAL DESIGN	8	-	-
2	01-18-2016	SITE PLAN	9	-	-
3	02-23-2016	SITE PLAN SUBMITTAL 2	10	-	-
4	-	-	11	-	-
5	-	-	12	-	-
6	-	-	13	-	-
7	-	-	14	-	-

PROJECT NO.: 2015-0111	SCALE: 1"=40'	SHEET NO. C.1
DRAWING NO.: -	DATE: 01/07/16	
DRAWN BY: JC	DATE: 01/07/16	
CHECKED BY: LZ	RANGE 11E	
SECTION 5 TOWN 1N	OAKLAND, MI	

PROJECT CONTACTS

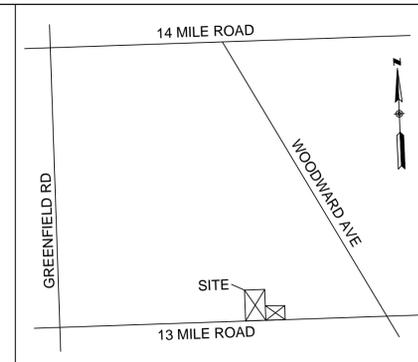
OWNER REPRESENTATIVE

CONTACT: JASON GEKIERE
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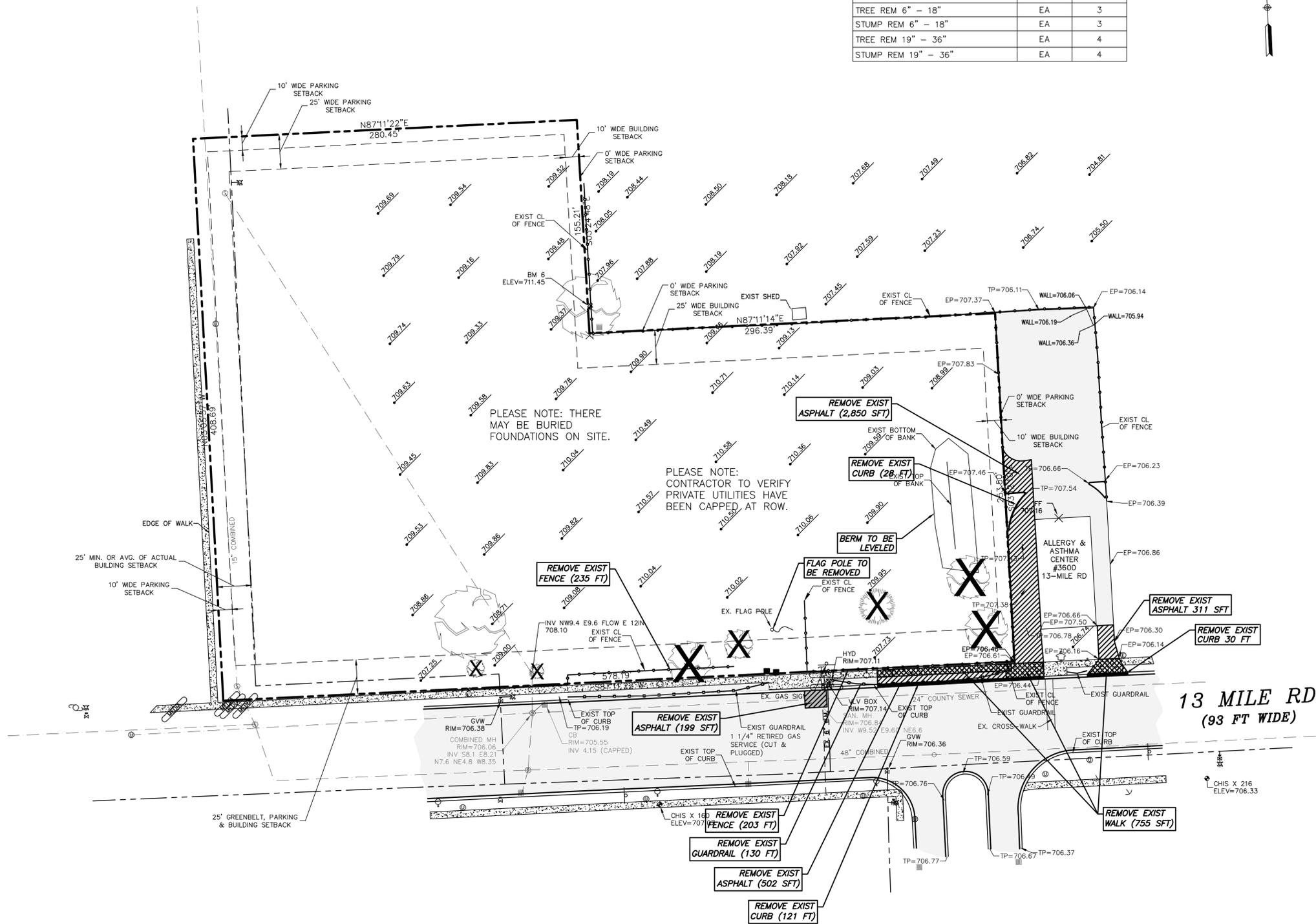
ENGINEER

CONTACT: LESLIE ZAWADA PE
CIVIL ENGINEERING SOLUTIONS, INC
56711 GRAND RIVER AVE
P.O. BOX 243
NEW HUDSON, MI 48265
PH: (248)264-6906

QUANTITIES THIS SHEET ONLY		
ITEM	UNIT	QUANTITY
REMOVE EXIST FENCE	FT	438
REMOVE EXIST GUARDRAIL	FT	130
REMOVE EXIST HMA	SFT	3,862
REMOVE EXIST CURB	FT	178
REMOVE EXIST CONC WALK	SFT	755
REMOVE FLAG POLE	EA	1
TREE REM 6" - 18"	EA	3
STUMP REM 6" - 18"	EA	3
TREE REM 19" - 36"	EA	4
STUMP REM 19" - 36"	EA	4



LOCATION MAP
NOT TO SCALE



LEGEND

- EXISTING**
- EXIST WATERMAIN
 - EXIST SEWER
 - EXIST SETBACK
 - EXIST FENCE
 - EXIST GUARDRAIL
 - EXIST BOUNDARY
 - EXIST AT&T RISER
 - EXIST FLAGPOLE
 - EXIST STREETLIGHT
 - EXIST CROSSWALK SIGNAL
 - EXIST SEWER MH
 - EXIST AT&T MARKER
 - EXIST GAS MARKER
 - EXIST DECIDUOUS TREE
 - EXIST CONIFEROUS TREE
 - EXIST HMA
 - EXIST CONCRETE

REMOVAL LEGEND

- CURB & GUTTER REMOVAL
- CONC WALK REMOVAL
- ASPHALT REMOVAL
- ✗ EXIST. TREE REMOVAL

PLEASE NOTE: THERE MAY BE BURIED FOUNDATIONS ON SITE.

PLEASE NOTE: CONTRACTOR TO VERIFY PRIVATE UTILITIES HAVE BEEN CAPPED AT ROW.

P:\PROJECTS\2015-0111 13 MILE LEARNING CENTER PLANS\SITEPLANS\STEP1\PLAN_SUBMITTAL2.DWG

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CES
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811 Know what's below.
Call before you dig.

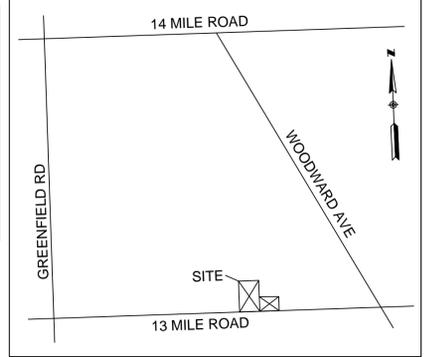
CITY OF ROYAL OAK
13 MILE LEARNING CENTER
DEMOLITION PLAN

NO.	DATE	SUBMITTAL	NO.	DATE	REVISION
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5	-	-	12	-	-
6	-	-	13	-	-
7	-	-	14	-	-

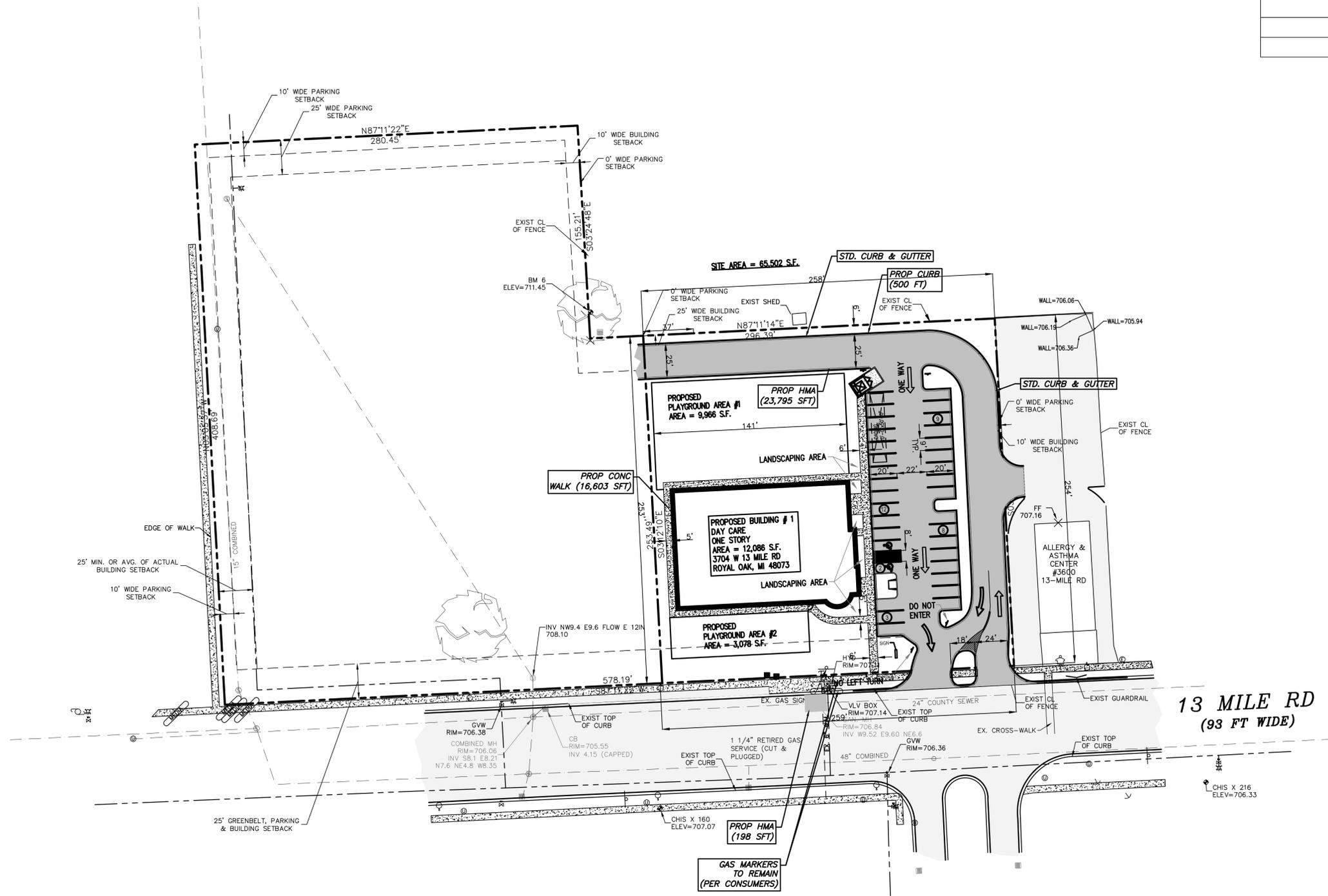
PROJECT NO.: 2015-0111	SCALE: 1"=40'	SHEET NO. C.2
DRAWING NO.: -	DATE: 01/07/16	
DRAWN BY: JC	DATE: 01/07/16	
CHECKED BY: LZ	RANGE 11E	
SECTION 5 TOWN 1N	CITY/TOWN: ROYAL OAK	OAKLAND, MI

P:\PROJECTS\2015-0111_13_MILE_LEARNING_CENTER\PLANS\SITE\PLAN_SITEPLAN_SUBMITTAL2.DWG

QUANTITIES THIS SHEET ONLY		
ITEM	UNIT	QUANTITY
PROP CONC WALK	SFT	16,603
PROP HMA	SFT	23,795
PROP CURB & GUTTER	FT	1,747



LOCATION MAP
NOT TO SCALE



LEGEND

EXISTING

- EXIST WATERMAIN
- EXIST SEWER
- EXIST SETBACK
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- EXIST SEWER MH
- EXIST AT&T MARKER
- EXIST GAS MARKER
- EXIST DECIDUOUS TREE
- EXIST CONIFEROUS TREE
- EXIST HMA
- EXIST CONCRETE

PROPOSED LEGEND

- CURB AND GUTTER
- PROP CONC WALK
- PROP HMA PAVEMENT

CES
CIVIL ENGINEERING SOLUTIONS, Inc.

P.O. BOX 243
56711 GRAND RIVER AVE.
NEW HUDSON, MI 48165
PH: (248)264-6906
FAX: (810)448-5903
lzawada@civilengineeringsolutions.us

811 Know what's below.
Call before you dig.

CITY OF ROYAL OAK
13 MILE LEARNING CENTER
GRADING & PAVING



NO.	DATE	SUBMITTAL	NO.	DATE	REVISION
1	09-23-2015	CONCEPTUAL DESIGN	8	-	-
2	01-18-2016	SITE PLAN	9	-	-
3	02-23-2016	SITE PLAN SUBMITTAL 2	10	-	-
4	-	-	11	-	-
5	-	-	12	-	-
6	-	-	13	-	-
7	-	-	14	-	-

PROJECT NO.: 2015-0111	SCALE: 1"=40'
DRAWING NO.: -	DATE: 01/07/16
DRAWN BY: JC	DATE: 01/07/16
CHECKED BY: LZ	RANGE 11E
SECTION 5 TOWN 1N	OAKLAND, MI

SHEET NO.
C.3



LyteProfile LED Downlights are designed for new construction and include downlight and wall wash distributions. They are highly energy efficient with up to 100lm/W, provide a full 60° cutoff, and feature an impressively shallow 4.5" housing.

Complete Product = Frame-in kit + Light engine + Reflector Order each separately

Ordering guide: Frame-in kit

Series	Style	Lumens	Installation	Dimming	Input voltage	Version	Options
P6R	LyteProfile 6" Round	10 1,000 lm	N Non-IC New construction	Z10 0-10V Dimming Lutron	U Universal (120/277V)	VB Version B	EM Emergency*
		15 1,500 lm		Z10 0-10V Dimming Lutron			
P6R	LyteProfile 6" Round	20 2,000 lm	N Non-IC New construction	Z10 0-10V Dimming Lutron	1 120V	2 277V	3 347V*
		25 2,500 lm		Z10 0-10V Dimming Lutron			

Ordering guide: Light engine

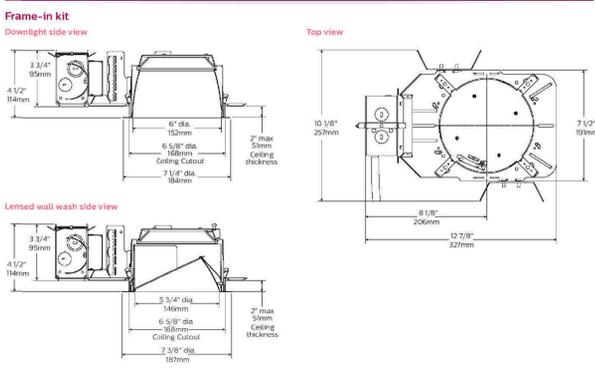
Series	Style	CRI	CCT	Version
P6R	LyteProfile 6" Round	8	27 2700K	VB Version B
			30 3000K	
			35 3500K	
			40 4000K	

Ordering guide: Reflector

Series	Style	Reflector	Flange
P6R	LyteProfile 6" Round	D Downlight	CL Clear
		LW Lensed wall wash	CC Comfort clear
			D Clear diffuse (applied)
			W White (painted)
		Blank White (painted)	Blank White (painted)

P6R LyteProfile 6" Round

Commercial downlight and lensed wall wash



Features
Ceiling cutout: 6" W (168mm).
Depth: 4 1/2" (114mm) including light engine.
Power connection: Attaches to light engine via push-in connector (on frame). Renewable cover provides access.
Junction box: 2" x 4" x 3 1/2" (22cu in.) cULus listed for 90°C. Supply conductor .048" thick galvanized steel. Allows inspection from below.
Thermal protector: The 2500 lumen fixture is thermally protected. The 1000, 1500 and 2000 lumen fixtures are inherently protected. Meets NEC & cULus requirements. Do not install insulation above or within 3" of luminaire.
Thermal Management: Thermal design ensures specified performance levels are maintained.
New construction
Mounting frame: Galvanized stamped steel for dry or plaster ceilings.
Mounting brackets: Galvanized Steel. Adjustable through aperture. Use latching channel (2 1/4" or 1 1/2"), 1/2" EMF, or optional mounting bars. See Options and Accessories for mounting bar options.

Options and accessories
Dimming capability: 0-10V dimming. See LED-DIM specification sheet.
Emergency capability: Integral. Add 'EM' suffix. See LED-EM spec sheet.
Mounting bars:
1951 27" long (set of 2)
1951 27" long (set of 2)
7994 Wood joist telescoping mounting bars (minimum 13 1/4" and maximum 24 1/2")
T-Bar anchor clips:
1956 Set of 4 for use with 18" or 27" mounting bars
Energy Star
 All New Construction non-IC (N) frame-in kit and trims are Energy Star certified with the following exceptions:
 - P6R/LCC, P6R/LWCC, P6R/LWV trims with the 1000lm frame (P6R/D10N/20U/VE)
 - P6R/D10LUV, P6R/D10SLUV, Lutron 1000lm and 1500lm frames are Energy Star certified for 120V applications only.
 - Emergency configurations
 - 347V configurations

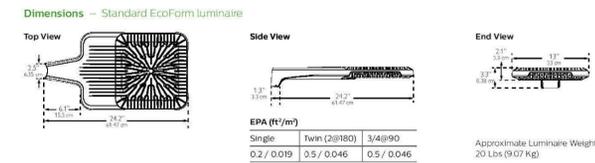
Quick-ship
 Philips is committed to having the most common items in stock, please refer to our Smart Service guide for details.
Electrical
Electronic power supply: RoHS compliant Class 2 power unit for use in a damp or dry location. Class A sound rated unit tolerates sustained over current and short circuit output conditions without damage. Complies with FCC rules per Title 47 CFR Part 15 Non-Consumer (Class A) for EMI/RFI (conducted and radiated). Intended for use with 0-10V DC type dimmers. See LED-DIM spec sheet for latest dimming switch compatibility.
Lifetime: Expected lifetime 50,000 hours at L70 and backed by a 5-year limited warranty (see Philips.com/warranties for details)
Labels
 cULus. Suitable for wet location.



EcoForm combines economy with performance in an LED area luminaire. Capable of delivering up to 20,000 lumens or more in a compact, low profile housing, EcoForm offers a new level of customer value. EcoForm features an innovative retrofit arm kit, simplifying site conversions to LED by eliminating the need to drill additional holes in most existing poles. Integral control systems, including motion response and wireless controls are available for further energy savings during off peak hours.

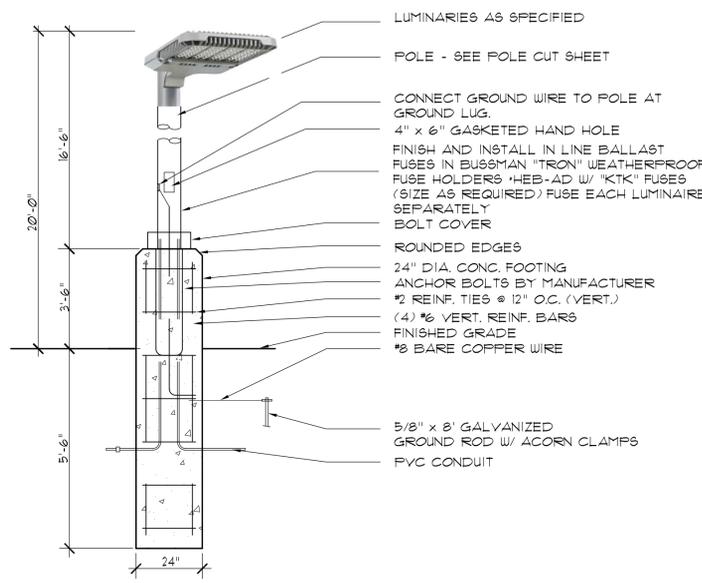
Ordering guide example: ECF-APD-MRO-1-4-75LA-NW-120-NP-LF

Prefix	Controls	Mounting	Optics	LED Wattage	Color Temp	Voltage	Finish	Options
ECF	Standard luminaire (leave blank)	1 Standard	2 Type 2	530 mA	CW Cool White	120	BRP Bronze Paint	TL Tool-Less entry and driver removal hardware
	0-10V Dimming	2	3	55LA-3251	5700K	120V	BLP Black Paint	TB1 Terminal Block
		2@90	3	75LA-4853	7000K	208	NS Natural Paint	IS Internal Shield
		2@90	4	700mA	100LA-4443	208V	WP White Paint	LF Line Fusing
		2@90	5	70LA-3270	Neutral White	240	HP Natural Paint	LCF Line Fusing for Canada
		2@90	5	105LA-4870	1000K	277	PC18	RP Receptacle with Phosorol (Includes PCRS)
		2@90	5	135LA-6470	1000K	377V	OC	PCB18 Photocell Button
		3@120	5	105mA	105LA-321A	347	OC	PCB18 Photocell Receptacle only with 2 dimming connectors
		3@120	5	105LA-321A	Warm White	347V	OC	PCB18 Photocell Receptacle only with 2 dimming and 2 auxiliary connectors
		4	4	105LA-481A	3000K	480	OC	PCB18 Photocell Receptacle only with 2 dimming and 2 auxiliary connectors
		4	4	215LA-641A	3000K	480V	OC	PCB18 Photocell Receptacle only with 2 dimming and 2 auxiliary connectors
		WS Wall mount including surface conduit, rear entry permitted				120-277V	SC	PCRT18 Photocell Receptacle only with 2 dimming and 2 auxiliary connectors
		MRI Motion Response at 50% low luminaire sensor				120-277V	SC	PCRT18 Photocell Receptacle only with 2 dimming and 2 auxiliary connectors
		MRSO Motion Response at 50% low, pole mounted sensor				120-277V	SC	PCRT18 Photocell Receptacle only with 2 dimming and 2 auxiliary connectors
		MA Mast Arm Fitter requires 2-3/8" O.D. Mast Arm				120-277V	SC	PCRT18 Photocell Receptacle only with 2 dimming and 2 auxiliary connectors
		LLC21 #2 lens for 8-1/2" mounted heights				120-277V	SC	PCRT18 Photocell Receptacle only with 2 dimming and 2 auxiliary connectors
		LLC31 #3 lens for 15-25" mounted heights				120-277V	SC	PCRT18 Photocell Receptacle only with 2 dimming and 2 auxiliary connectors
		LLC41 #4 lens for 29-40" mounted heights				120-277V	SC	PCRT18 Photocell Receptacle only with 2 dimming and 2 auxiliary connectors

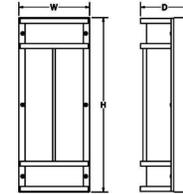


Dimensions - Standard EcoForm Luminaire

Mounting	Single	Twin (2@180)	3/4@180
EPA (ft ² /m ²)	0.2 / 0.019	0.5 / 0.046	0.5 / 0.046



SITE LIGHTING FIXTURE AND POLE BASE DETAIL
 SCALE: N.T.S.



GENERAL SPECIFICATION
Lamping: Standard lamping packages offer long lamp life, high power factor energy efficient electronic ballast.
Body: Formed .050 Al body with 1/4" x 1/2" Al rails and 1/2"sq decorative bars.
Acrylic: Cylinder is UL-94 HB Flame Class rated. Top and bottom lens standard.
Standard Finishes: Highly durable oven coated no VOC premium powder coat. Custom: Contact factory for custom lengths and lamping.
LED: High efficiency mid-power LEDs are field serviceable.
LED Dimming: 0-10V dimming standard with LED lamping option.

SAMPLE CATALOG NUMBER: GL-5410

MODEL NO.	LAMPING	ACRYLIC	FINISH	OPTION(S)
GL-5410	W in 7 1/4" mm 185 H in 18" mm 460 9cs 2.3kg D in 4 3/4" mm 120	Standard: W. White Opal Optional: S. Satin White F. Faux Alabaster M. Earth Marble H. Hand Painted Alabaster	Standard: Powder Coat Specify color from G-lighting color chart. Premium: SA - Satin Aluminum	A. No Options D. Integral Dimming E. Emergency F. LED Up Light G. LED Down Light
GL-5411	W in 9 1/4" mm 235 H in 20" mm 510 7cs 3.2kg D in 5 3/4" mm 145	A. 2CF@13 B. 2CF@18 C. 2CF@26 D. 1CF@9 F. 13LED30 G. 13LED35 H. 13LED40	Acrylic is UL-94 HB Flame Class rated.	Consult factory. Must be vertically mounted in a controlled environment with an area temperature range of 52°-131°F. Compact fluorescent only. EL Emergency LED. Specify with LED lamping only. Make/kit optional with option. Consult factory for dimming.

Lamp Definition

Lamp	Fluorescent	Lamp Base	Rated Life Hrs	Lumens	Lamp LED	CRI	Rated Life Hrs	Board Lumens	Kelvin	
CF@13	CF@13W	GX24q-1 4-PIN	12000	900	13LED30	13W	60	50000	1895	3000
CF@18	CF@18W	GX24q-2 4-PIN	12000	1250	13LED35	13W	60	50000	1895	3500
CF@26	CF@26W	GX24q-3 4-PIN	12000	1440	13LED40	13W	60	50000	1895	4000
CF@9	CF@36/9	2G11 4-PIN	12000	2510	URDOWN 4W SPOT LIGHT	75	35000	260	4000	

© Gross Chandelier Co. G-lighting reserves the right to modify existing designs to improve appearance or function.

SERRA - MARKO & ASSOCIATES
ARCHITECTURAL DESIGNERS
 189 E Big Beaver, Suite 106 Troy, MI 48063
 Tel: 248.457.6903 Fax: 248.457.6906
 Email: info@s-m-associates.com
 Website: www.s-m-associates.com

ALL DIMENSIONS SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR COORDINATION OF ALL DIMENSIONS.

PREPARED IN COLLABORATION WITH D'ANNA ASSOCIATES, INC.

Learning Care Academy
 Job # A-16-1360
 Issue Date: 02/23/2016
 PIETRO D'ALEO
 ARCHITECT
 No. 05511

PROJECT NAME:
LEARNING CARE ACADEMY

CITY REVIEW
SITE PLAN APPROVAL
02-23-2016

ADDRESS:
13 MILE AND WEST OF WOODWARD ROYAL OAK, MI

JOB NO.	A-16-1360		
ISSUANCES			
NO	DESCRIPTION	DATE	BY
1	SITE PLAN APPROVAL	01/25/16	IM
2	PER CITY REVIEW SITE PLAN APPROVAL	02/23/16	IM/EM

SHEET TITLE
PHOTOMETRIC NOTES AND DETAILS

DWG. NO.
A0.3.0

4 UNDER CANOPY LIGHT
 SCALE: N.T.S.

3 SHOE BOX POLE LIGHT
 SCALE: N.T.S.

2 WALL MOUNTED LIGHT
 SCALE: N.T.S.

MEMORANDUM

Community Development Department
City of Royal Oak, Michigan

Meeting Date: March 15, 2016
211 Williams St. / P.O. Box 64
Royal Oak, MI 48068-0064
Phone: (248) 246-3280
Fax: (248) 246-3005
www.romi.gov

DATE: March 3, 2016

TO: Planning Commission

FROM: Planning Division

SUBJECT: SP 16-03-03 – Site Plan to expand convenience store for automobile filling station (Mobil) at **1617 E. Twelve Mile Rd.** (parcel no. 25-10-480-013)
Sara Corp. / Makki Investments, LLC, Petitioner & Owner
Ziad El-Baba, Engineer

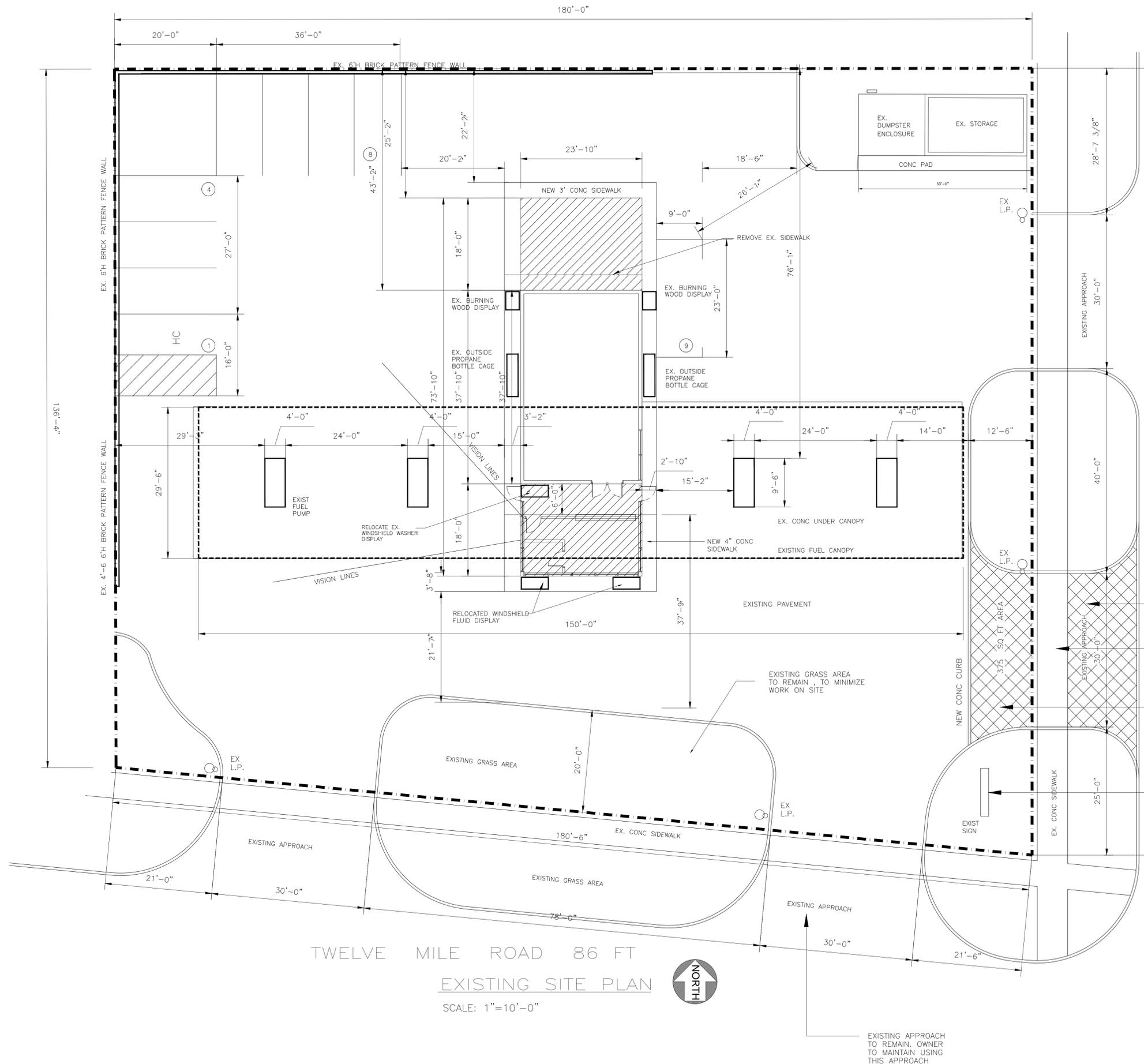
The above-referenced site plan is scheduled for consideration by the Planning Commission at the next regular meeting. Should the Planning Commission wish to consider approval of the site plan, including all discretionary items, the Planning Division recommends the following contingencies:

1. The petitioner shall submit revised site and landscaping plans for review and approval by the Planning Division that close the driveway to East Twelve Mile Road closest to the intersection of North Campbell Road and restore the right-of-way as required by the Engineering Division. The existing 20-foot wide greenbelt along Twelve Mile Road north of the sidewalk may be narrowed to no less than 10 feet to accommodate removal of the driveway.
2. Landscaping and screening as determined necessary and advisable by the Planning Commission shall be provided in accordance with § 770-90 (D) through (F) of the Zoning Ordinance.
3. No temporary and transient outdoor sales of seasonal goods, or any outdoor storage or display of merchandise and similar materials, shall be permitted.
4. Fuel pump nozzles shall not reach within 5 feet of any building openings when dispensing hoses are fully extended, and there shall be an unobstructed view of all fuel pumps from the cashier station, both as required by the Fire Marshall.
5. All improvements to the public right-of-way shall be in accordance with the specifications and standards of the City Engineer, including, but not limited to, closure of the driveway on East Twelve Mile Road nearest the intersection of North Campbell Road and restoration of the right-of-way.
6. All lighting underneath the fuel pump canopy shall be recessed and down-shielded according to § 770-64 (K) of the Zoning Ordinance. All exterior lighting fixtures including those underneath the fuel pump canopy shall comply with § 770-96 (B) of the Zoning Ordinance and other city codes and ordinances, including being directed downward and shielded so as not to shine on adjacent property, within maximum permitted fixture heights (15 feet), and within maximum permitted illumination levels (0.1 foot-candles along the west lot line; 0.5 foot-candles along all other lot lines; and 10 foot-candles at any point within the site).

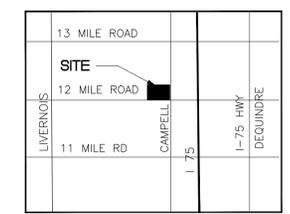
7. All signage shall comply with the Sign Ordinance (Chapter 607 Signs, Article II Sign Regulations) or receive necessary variances from the Planning Commission.
8. A performance bond shall be posted in an amount to be determined by the Building Official.
9. The site plan shall meet all other code and ordinance requirements, as determined by the Building Official, Fire Marshal, and City Engineer, prior to issuance of any building permit. Such requirements include, but are not limited to, the Michigan Building Code, the Fire Prevention Ordinance (Chapter 340), and the Stormwater Detention Ordinance (Chapter 644).

cc: Mohamad Makki, Sara Corp. / Makki Investments, LLC
Ziad El-Baba, PE, Ziad El-Baba Engineering

It is recommended that the petitioner or a representative attend the March 15, 2016 Planning Commission meeting. The meeting starts at 7:30 p.m. in the City Commission chambers on the 3rd floor of City Hall.



TWELVE MILE ROAD 86 FT
 EXISTING SITE PLAN
 SCALE: 1"=10'-0"



KEY PLAN
 SITE DATA

TOTAL SITE PLAN	26,075 SQ. FT	.6 AC
EXISTING BUILDING AREA	901 SQ. FT.	
NEW BUILDING ADDITION	858 SQ. FT.	
NEW TOTAL BUILDING AREA	1759 SQ. FT.	

PARKING REQUIRED	1431 USABLE/2000 =	8 SPACES
PARKING PROVIDED	B.F. SPACE	9 SPACES
	REGULAR SPACE	20'x16'
		9'x20'

72-25-10-480-013

CAMPBELL ROAD
 66 ft

- EXISTING APPROACH TO BE REMOVED
- EX. SIDEWALK TO REMAIN
- REMOVE EX. PAVEMENT AND SUBBASE MIN 4" TOP SOIL
- NO WORK IS PROPOSING FOR THE EXISTING SIGN ANY WORK WORK ON THE SIGN WILL REQUIRE SPECIAL PERMIT



ZIAD EL-BABA ENGINEERING

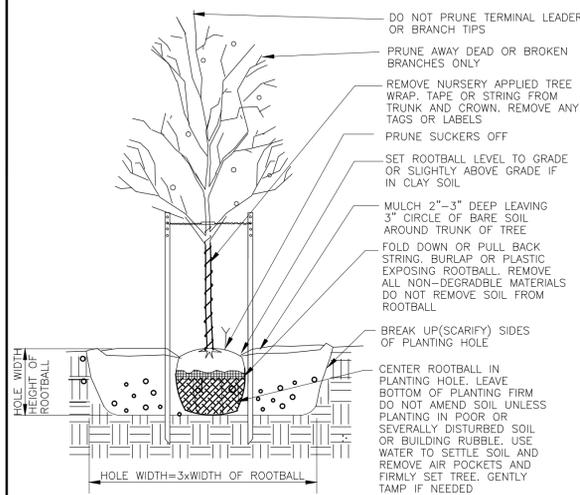
674 GAUTHIER
 TECUMSEH ONTARIO
 N8N3P8 CANADA
 CELL - 313-938-8767
 CELL - 519-796-9882
 FAX - 519-979-3535

DATE	REV. NO.	ISSUED FOR
JAN.29.16		SITE PLAN
FEB.15.16		SITE PLAN

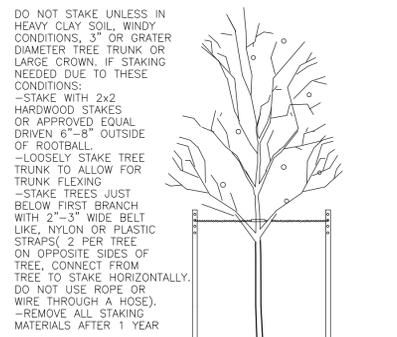
Project:
 NEW BUILDING ADDITION
 1617 E 12 MILE ROAD
 ROYAL OAK MI
 OWNER
 1617 E 12 MILE ROAD
 ROYAL OAK MI

Drawing Title: SITE PLAN	
Project Number	
Scale	AS NOTED
Date	
Drawn By	
Checked By	

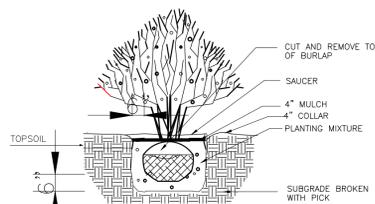
Drawing No.
 SP-1



Deciduous Tree Planting Detail

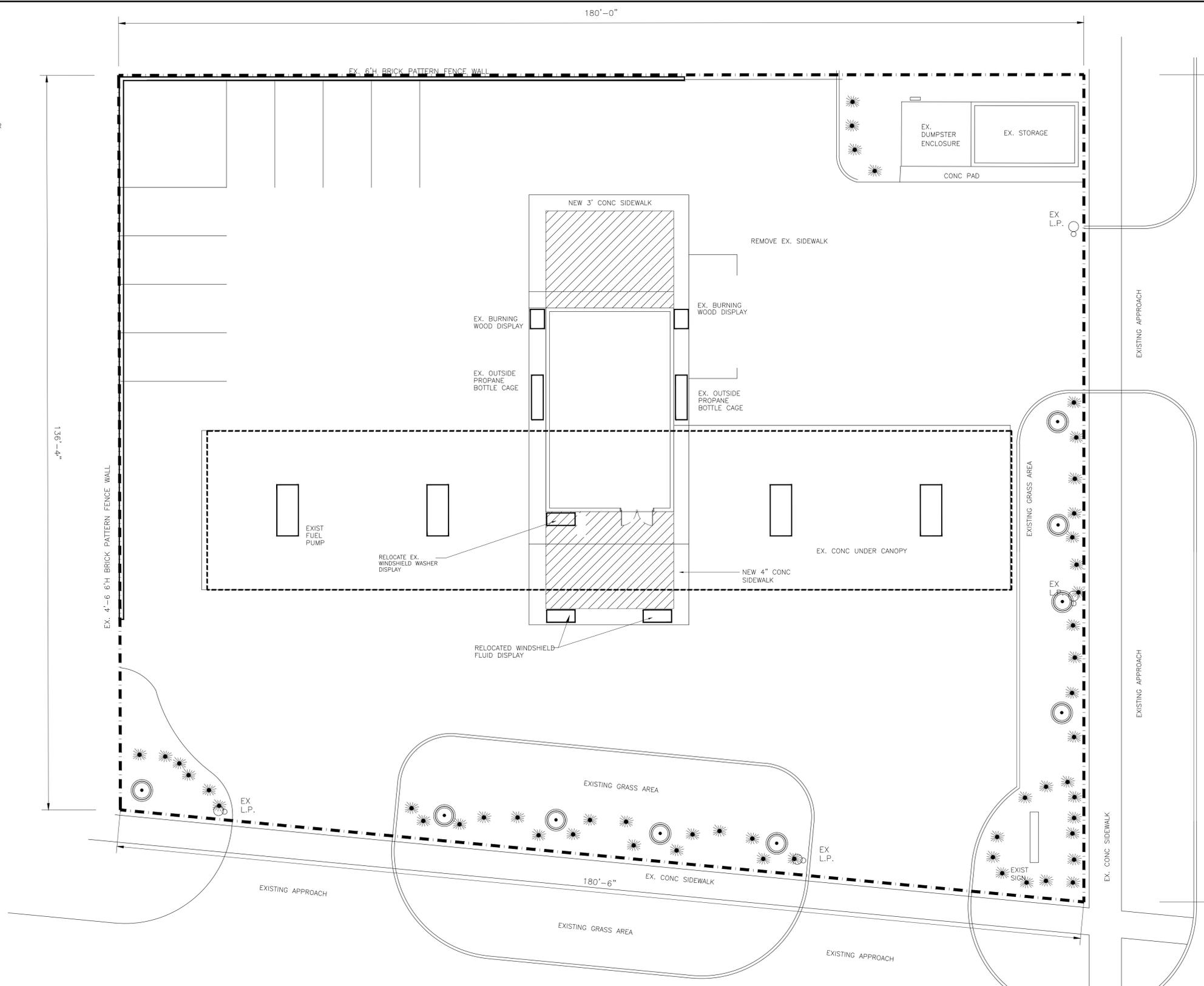


Shrub Planting



TYPE	SYMBOL	SIZE	BOTANICAL	QUANTITY
NEW JUNIPER SHRUBS		30" MIN SPREAD	"SPARTAN JUNIPERS"	50
DECIDUOUS SUGAR MAPLE		B&B ROOT 2 1/2" CALIP.	ACER SACCHARIN	9

NOTE:
THE EXISTING SITE AND ALL ADJACENT PROPERTIES ARE ZONED ONE FAMILY RESIDENTIAL AND ARE ALSO INCLUDED WITHIN THE ONE FAMILY RESIDENTIAL OVERLAY DISTRICT



TWELVE MILE ROAD 86 FT

LANDSCAPE PLAN

SCALE: 1"=10'-0"



LANDSCAPING REQUIREMENT:

ROAD FRONTAGE : 180'-6" AND 153'-7"

NO OF DECIDUOUS: 180.5/40 + 153.6/40 = 5 AND 4. = 9 TREES

NO OF SHRUBS: 180.5x 6/40+153.5x6/40 =27 AND 23 = 50 TREES

PROVIDED = EXISTING 9 TREES+4 NEW TREES = 13 TREES
PROVIDED = EXISTING 66 + 8 NEW SHRUBS = 74 SHRUBS

NOTES:

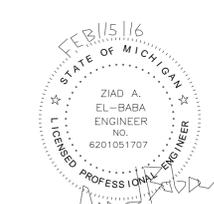
-A TREE PERMIT MUST BE OBTAINED FROM THE PLANNING OFFICE PRIOR TO ALL TREE REMOVAL ACTIVITY INVOLVING TREES SIX INCHES OR MORE DBH IN ACCORDANCE WITH THE ROYAL OAK

-TREES MUST BE PLANTED NO CLOSER THEN SIX FEET (6') TO PUBLIC UTILITIES.
-ALL REQUIRED LANDSCAPE MATERIAL INDICATED ON APPROVED PLANS WILL BE REQUIRED THROUGH THE LIFE OF THE PROJECT AND MUST BE REPLACED IF REMOVED OR DEAD.

-4 FOOT(4") HIGH WOOD SNOW FENCING OR OTHER RIGID MATERIAL IS TO BE ERCTED AROUND THE DRIP LINE OF ALL TREES TO BE SAVED IN ACCORDANCE WITH ROYAL OAK ZONING ORDINANCE

-REQUIRED LANDSCAPE MATERIAL SHALL SATISFY NURSERYMAN STANDARDS AND BE:
a. NURSERY GROWN
b. STATE DEPARTMENT OF AGRICULTURE INSPECTED
c. NO. 1 GRADE WITH STRAIGHT UNSECURED TRUNK AND WELL DEVELOPED UNIFORM CROWN (PARK GRADE TREES WILL NOT BE ACCEPTED)
d. PLANTED PER ROYAL OAK DETAILS AND SPECIFICATIONS

e. GUARANTEED FOR ONE YEAR.
f. REPLACEMENT TREES SHALL HAVE SHADE POTENTIAL AND OTHER CHARACTERISTICS COMPARABLE TO THE TREES PROPOSED FOR REMOVAL



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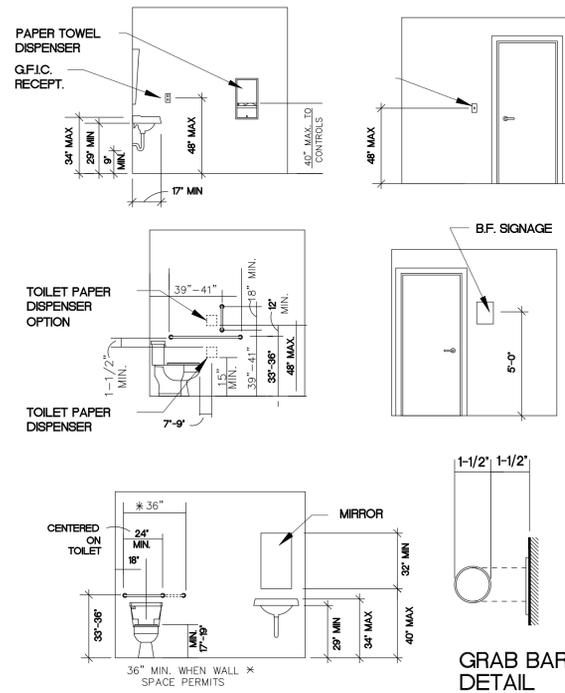
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DATE	REV. NO.	ISSUED FOR
JAN.29.16		SITE PLAN
FEB.15.16		SITE PLAN

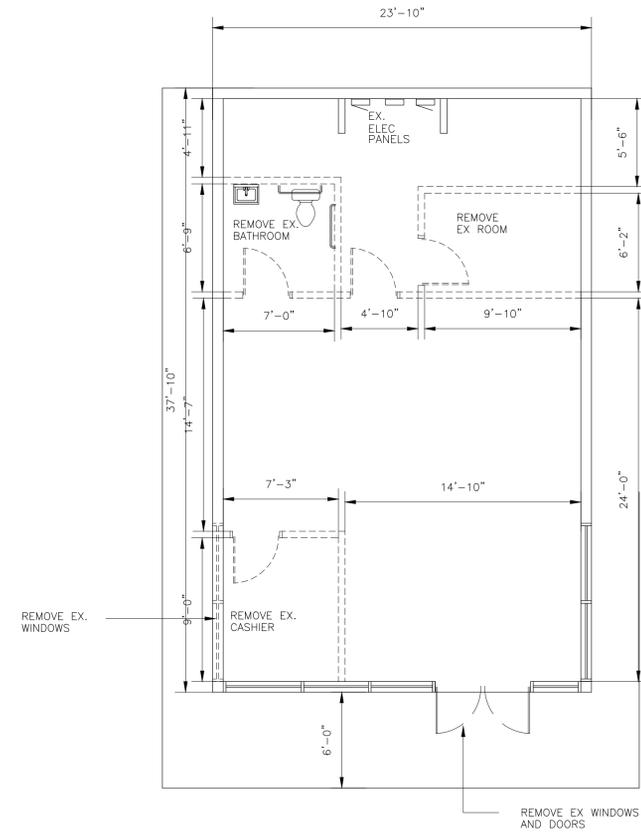
Project:
NEW BUILDING ADDITION
1617 E 12 MILE ROAD
ROYAL OAK MI
OWNER
1617 E 12 MILE ROAD
ROYAL OAK MI

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Project Number	
Scale	AS NOTED
Date	
Drawn By	
Checked By	

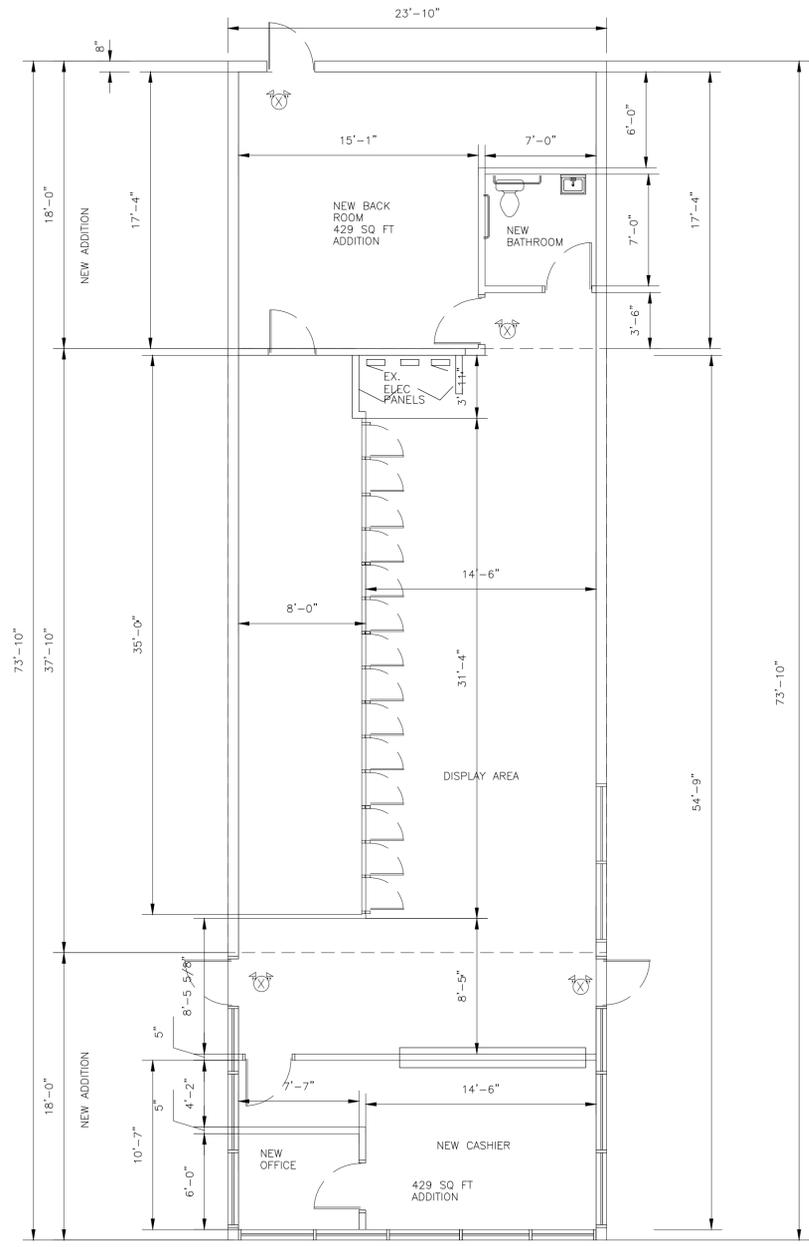
Drawing No.
SP-2



TYPICAL BARRIER FREE STANDARDS
 SINGLE OCCUPANCY (NOT TO SCALE)



EXISTING FLOOR PLAN
 SCALE: 3/16" = 1'-0"



MODIFIED FLOOR PLAN
 SCALE: 3/16" = 1'-0"

- "FA" 2'x4' LAY-IN FLUORESCENT FIXTURE WITH 3-F40 T12 LAMPS WITH ACRYLIC LENS. LITHONIA CAT.# 2CT-340-A12 OR APPROVED EQUAL
- "EM" EMERGENCY LIGHTING UNIT WITH SEALED BATTERY MIN 90 MIN BACKUP INTENSITY TEST SWITCH AND READY LIGHT 120VAC OPERATION LITHONIA CAT# ELU-2H OR APPROVED EQUAL
- EXIT LIGHT STENCIL FACE 6" HIGH RED LETTERS SEALED BATTERY. MIN 90 MIN INTENSITY LITHONIA CAT# ESIR-ELC OR APPROVED EQUAL
- EXIT AND EMERGENCY LIGHTS COMBINED

CODE COMPLIANCE
 ALL WORK MUST CONFORM TO
 2012 MICHIGAN BUILDING CODE
 2006 INTERNATIONAL FIRE CODE
 2012 MICHIGAN MECHANICAL CODE
 2012 MICHIGAN PLUMBING CODE
 2014 NATIONAL ELECTRIC CODE WITH PART 8 RULES
 IFC / 2009
 ICC/ ANSI 117.1-2009 (ACCESSIBILITY)
 ASHRAE 90.1 - 2007

AREA = 1608 SQ. FT
 AREA = 1608 SQ. FT
 AREA = 1608 SQ. FT
 CONSTRUCTION TYPE = III B
 USE GROUP = M
 OCCUPANT LOAD
 RETAIL
 400 / 30 = 13
 OFFICE
 65/100 = 1
 14 PEOPLE

PROVIDED ONE BARRIER FREE BATHROOM



ZIAD EL-BABA ENGINEERING
 674 GAUTHIER
 TECUMSEH ONTARIO
 N8N3P8 CANADA
 CELL - 313-938-8767
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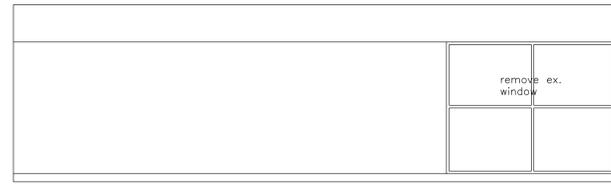
DATE	REV. NO.	ISSUED FOR
JAN.29.16		SITE PLAN

Project:
 NEW BUILDING ADDITION
 1617 E 12 MILE ROAD
 ROYAL OAK MI
 OWNER
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 ROYAL OAK MI

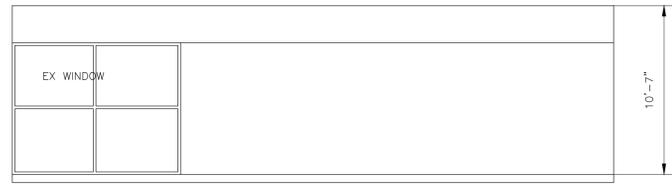
Drawing Title:
 FLOOR PLAN

Project Number	
Scale	AS NOTED
Date	
Drawn By	
Checked By	

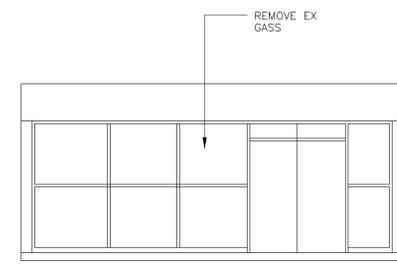
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 A-1



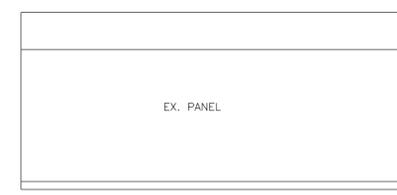
EX. WEST ELEVATION
SCALE: 3/16" = 1'-0"



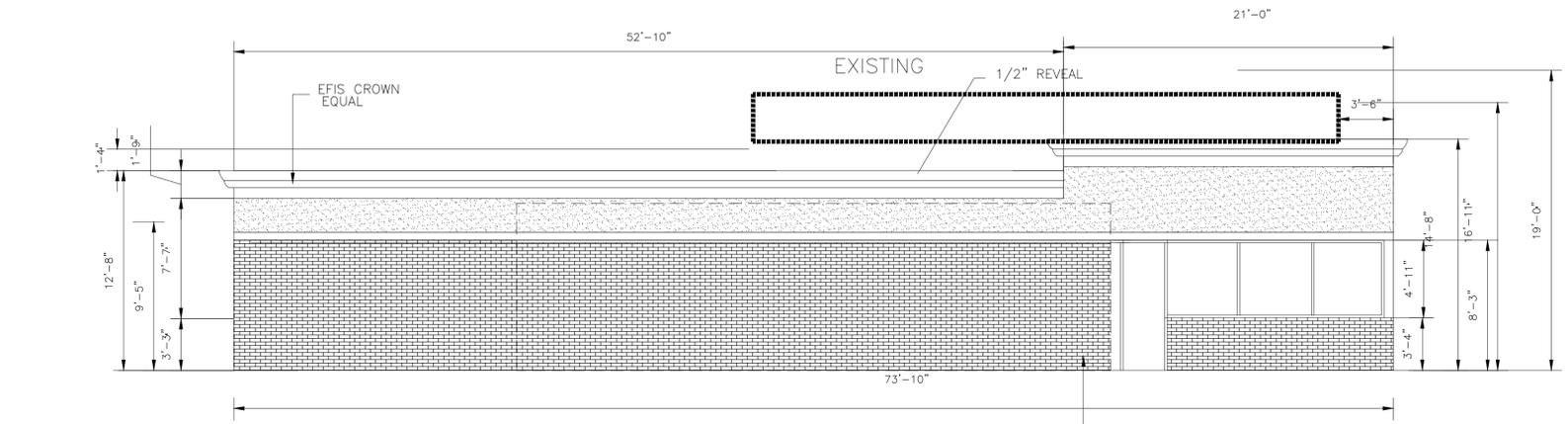
EX. EAST ELEVATION
SCALE: 3/16" = 1'-0"



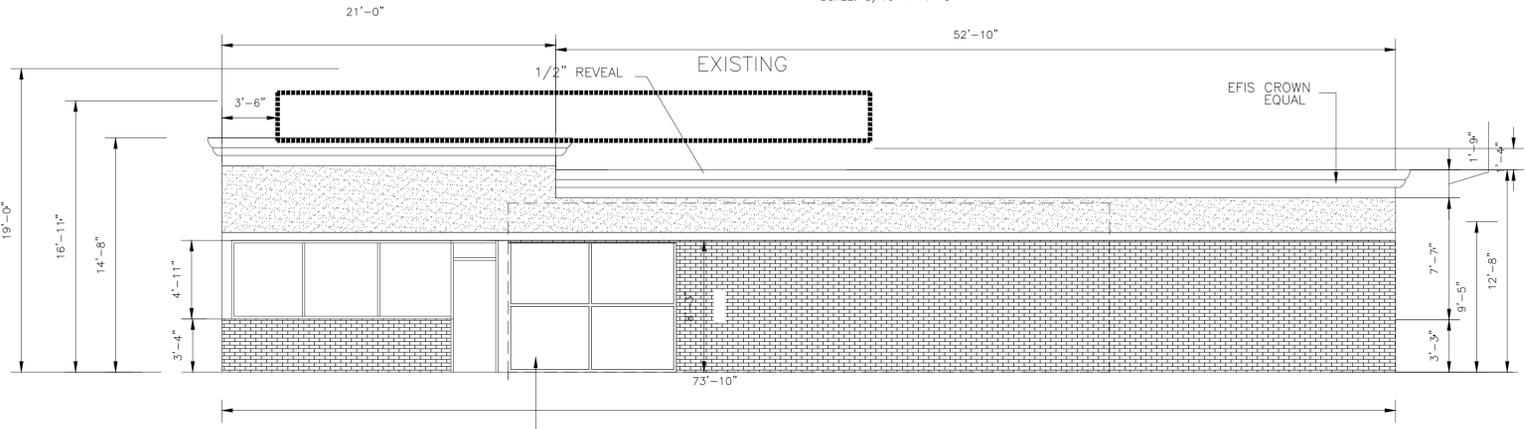
EX. SOUTH ELEVATION
SCALE: 3/16" = 1'-0"



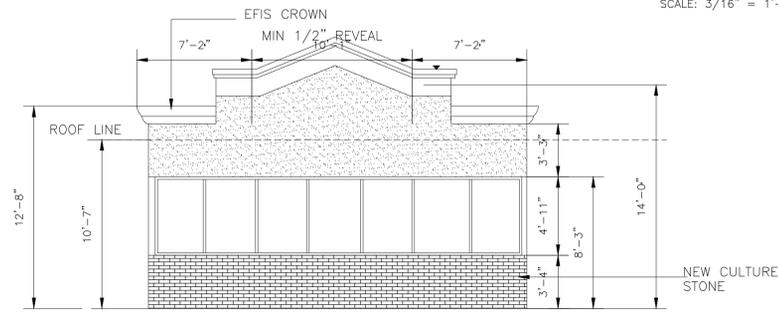
EX. NORTH ELEVATION
SCALE: 3/16" = 1'-0"



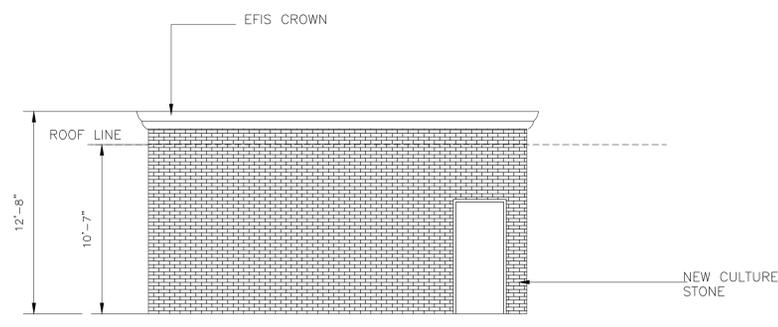
MODIFIED WEST ELEVATION
SCALE: 3/16" = 1'-0"



MODIFIED EAST ELEVATION
SCALE: 3/16" = 1'-0"



MODIFIED SOUTH ELEVATION
SCALE: 3/16" = 1'-0"



MODIFIED NORTH ELEVATION
SCALE: 3/16" = 1'-0"



ZIAD EL-BABA ENGINEERING

674 GAUTHIER
TECUMSEH ONTARIO
N8N3P8 CANADA
CELL - 313-938-8767
CELL - 519-796-9882
FAX - 519-979-3535

DATE	REV. NO.	ISSUED FOR
JAN.29.16		SITE PLAN
FEB.15.16		SITE PLAN

Project:
NEW BUILDING ADDITION
1617 E 12 MILE ROAD
ROYAL OAK MI
OWNER
1617 E 12 MILE ROAD
ROYAL OAK MI

Drawing Title:
ELEVATIONS

Project Number	
Scale	AS NOTED
Date	
Drawn By	
Checked By	

Drawing No.
A-2

MEMORANDUM

Community Development Department
City of Royal Oak, Michigan

Meeting Date: March 15, 2016
211 Williams St. / P.O. Box 64
Royal Oak, MI 48068-0064
Phone: (248) 246-3280
Fax: (248) 246-3005
www.romi.gov

DATE: March 3, 2016

TO: Planning Commission

FROM: Planning Division

SUBJECT: SP 16-03-04 – Site Plan to develop public park (Center Street Parklet) at **222 S. Center St.** (parcel no. 25-21-232-001)
City of Royal Oak, Petitioner & Owner
Living Lab Design Studio, Designer

The above-referenced site plan is scheduled for consideration by the Planning Commission at the next regular meeting. According to the Michigan Planning Enabling Act (Public Act 33 of 2008, as amended), the Planning Commission is required to review and approve plans for the construction of new streets, parks, playgrounds, public buildings, and other structures. Section 61(1) of Act 33 reads as follows:

MICHIGAN PLANNING ENABLING ACT (EXCERPT)
Act 33 of 2008

125.3861 Construction of certain projects in area covered by municipal master plan; approval; initiation of work on project; requirements; report and advice.

Sec. 61. (1) A street; square, park, playground, public way, ground, or other open space; or public building or other structure shall not be constructed or authorized for construction in an area covered by a municipal master plan unless the location, character, and extent of the street, public way, open space, structure, or utility have been submitted to the planning commission by the legislative body or other body having jurisdiction over the authorization or financing of the project and has been approved by the planning commission. The planning commission shall submit its reasons for approval or disapproval to the body having jurisdiction. If the planning commission disapproves, the body having jurisdiction may overrule the planning commission by a vote of not less than 2/3 of its entire membership for a township that on the enactment date of this act had a planning commission created under former 1931 PA 285, or for a city or village, or by a vote of not less than a majority of its membership for any other township. If the planning commission fails to act within 35 days after submission of the proposal to the planning commission, the project shall be considered to be approved by the planning commission.

Should the Planning Commission wish to consider approval of the site plan, including all discretionary items, the Planning Division recommends that it meet all code and ordinance requirements, as determined by the Building Official and City Engineer, prior to issuance of any permits, including, but not limited to, the Michigan Building Code and Stormwater Detention Ordinance (Chapter 644).



City of Royal Oak

CENTER STREET PARKLET

222 CENTER STREET

ROYAL OAK, MICHIGAN 48067



4444 Second Avenue
 Detroit, Michigan : 48201
 313.974.7602
 www.livinglabdetroit.com

project:
Center Street Parklet

location:
 Royal Oak, MI

title:
Cover Sheet

client:
 City of Royal Oak
 211 S. Williams Street
 Royal Oak, MI 48067

issue + revision:	date:
Design Review	12.17.15
Design Review	1.7.16
DD Submittal	2.12.16

PROJECT INFORMATION

PROJECT DESCRIPTION

REDEVELOPMENT OF URBAN PARKLET LOCATED (APPROXIMATELY) AT THE NORTHWEST CORNER OF 4TH STREET AND CENTER STREET. THE OUTDOOR SPACE IS BOUNDED BY AN EXISTING PARKING DECK TO THE NORTH, CENTER STREET TO THE EAST, BUSINESSES ALONG 4TH STREET TO THE SOUTH, AND THE CANADIAN NATIONAL RAILWAY TO THE WEST. THE REDEVELOPMENT IS IN RESPONSE TO THE NEED FOR USEABLE PUBLIC SPACE/GREENSPACE LOCATED WITHIN THE HEART OF DOWNTOWN. DESIGN FEATURES INCLUDE (BUT ARE NOT LIMITED TO): RECYCLED SHIPPING CONTAINER AMENITIES, OUTDOOR SEATING AREAS, PUBLIC ART DISPLAYS, PEDESTRIAN FRIENDLY WALKING PATHS, COVERED BIKE PARKING, WI-FI, ELECTRONIC KIOSK, AND SUSTAINABLE STORM WATER BMPs (best management practices)

CLIENT/OWNER

CITY OF ROYAL OAK
 211 S. WILLIAMS STREET
 ROYAL OAK, MI 48067
 (248) 246-3000
 CONTACT: TODD FENTON

LANDSCAPE ARCHITECT

LIVINGLAB
 4444 SECOND AVE
 DETROIT, MI 48201
 (313) 974-7602
 CONTACT: JASON P. MACDONALD, ASLA, PLA

SHEET INDEX

- 1 COVER SHEET
- 2 EXISTING CONDITIONS
- 3 DEMOLITION/REMOVAL PLAN
- 4 OVERALL PLAN
- 5 PRELIMINARY GRADING PLAN
- 6 DIMENSIONING PLAN
- 7 LANDSCAPE PLAN
- 8 DETAILS
- 9 DETAILS
- 10 DETAILS



STANDARD PLANS

CERTIFICATION

NOT AUTHORIZED FOR CONSTRUCTION UNLESS SIGNED AND DATED

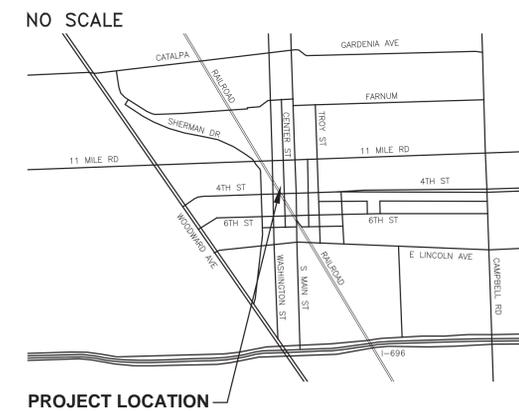
 Jason P. Macdonald, ASLA, PLA

xx/xx/2015

 DATE

SEAL

VICINITY MAPS



NOT FOR CONSTRUCTION

project information:
 project manager: JPM
 drawn by: JWB
 date: November 19, 2015
 project #: ROY0002.1

scale: NOT TO SCALE

sheet number:

1

project:
Center Street Parklet

location:
Royal Oak, Michigan

title:
Demolition/Removal Plan

client:
City of Royal Oak
211 S. Williams Street
Royal Oak, MI 48067
248-246-3000

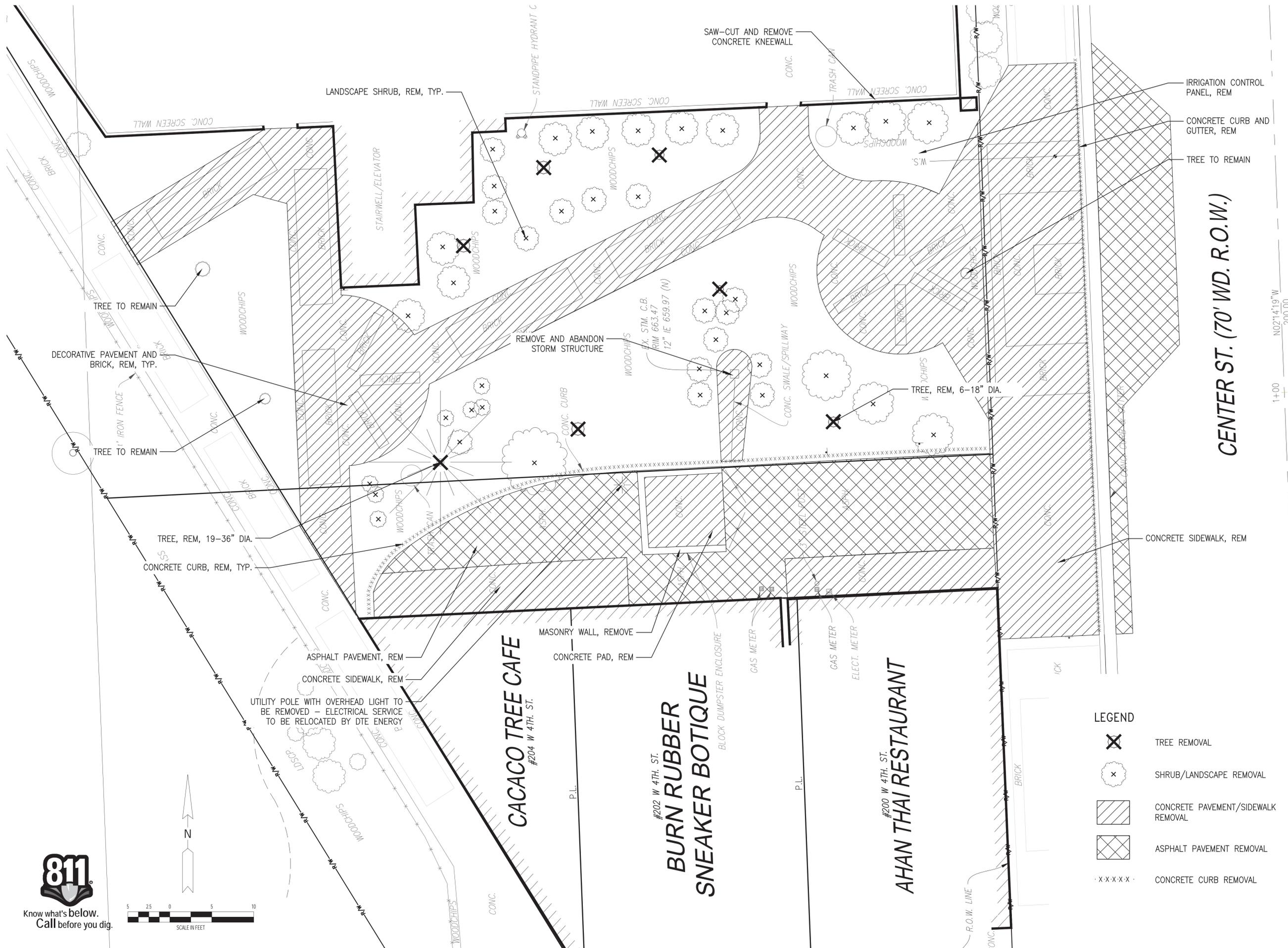
issue + revision:	date:
Design Review	12.17.15
Design Review	1.7.16
DD Submittal	2.12.16

NOT FOR CONSTRUCTION

project information:
project manager: JPM
drawn by: JPM
date: 11.17.2015
project #: ROY0002.1

scale: 1" = 5'

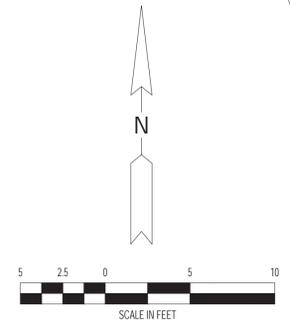
sheet number:



CENTER ST. (70' WD. R.O.W.)

N02°14'19"W
200.00
1+00

- LEGEND**
- TREE REMOVAL
 - SHRUB/LANDSCAPE REMOVAL
 - CONCRETE PAVEMENT/SIDEWALK REMOVAL
 - ASPHALT PAVEMENT REMOVAL
 - CONCRETE CURB REMOVAL



project:

Center Street Parklet

location:

Royal Oak, Michigan

title:

Landscape Plan

client:

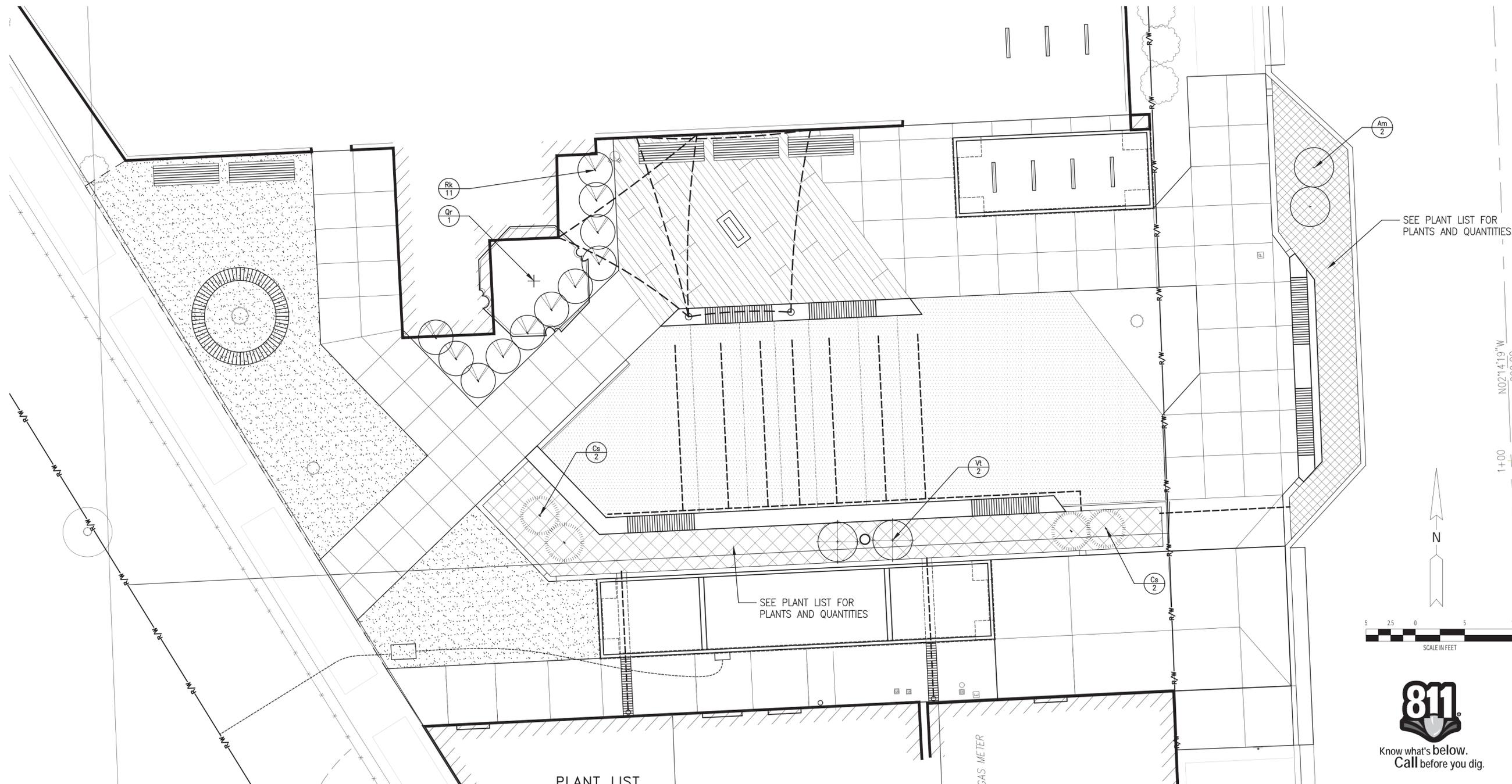
City of Royal Oak
211 S. Williams Street
Royal Oak, MI 48067
248-246-3000

issue + revision: date:

Design Review 12.17.15

Design Review 1.7.16

DD Submittal 2.12.16



PLANT LIST

Key	Qty.	Botanical/Common Name	Size	Spacing	Root	Comments
PARK PLANTINGS						
TREES						
Qr	1	<i>Quercus robur</i> x <i>bicolor</i> 'Long' Regal Prince Oak	2.5" cal.	As Shown	B&B	
SHRUBS						
Rk	11	<i>Rosa</i> 'Double Knock-out' Double Knock-out Rose	24-30" sp.	36" o.c.	Container	
BIO-CELL PLANTINGS						
SHRUBS						
Am	2	<i>Amelanchier canadensis</i> Black Chokeberry	24-30" sp.	As Shown	Container	
Cs	4	<i>Cornus sericea</i> 'Kelsey' Red-osier Dogwood	24-30" sp.	As Shown	Container	
Vt	2	<i>Viburnum trilobum</i> 'compactum' American Cranberry Bush	24-30" sp.	As Shown	Container	

Key	Qty.	Botanical/Common Name	Size	Spacing	Root	Comments
BIO-CELL PLANTINGS (cont.)						
Cv	20	<i>Carex vulpinoidea</i> Fox Sedge	4" pot	1' o.c.	Container	
Iv	10	<i>Iris versicolor</i> Blueflag Iris	4" pot	2' o.c.	Container	
Lc	10	<i>Lobelia cardinalis</i> Cardinal Flower	1 Gal.	2' o.c.	Container	
Ms	8	<i>Matteuccia struthiopteris</i> Ostrich Fern	1 Gal.	3' o.c.	Container	
Pv	20	<i>Panicum virgatum</i> Switchgrass	4" pot	1' o.c.	Container	
Ai	8	<i>Asclepias incarnata</i> Swamp Milkweed	4" pot	2' o.c.	Container	
Lis	10	<i>Liatris spicata</i> Marsh Blazingstar	1 Gal.	2' o.c.	Container	
Los	10	<i>Lobelia siphilitica</i> Blue Lobelia	4" pot	1' o.c.	Container	
Pv	16	<i>Panicum virgatum</i> Switchgrass	4" pot	1' o.c.	Container	
Ss	8	<i>Schizachyrium scoparium</i> Little Blue Stem	1 Gal.	2' o.c.	Container	



NOT FOR CONSTRUCTION

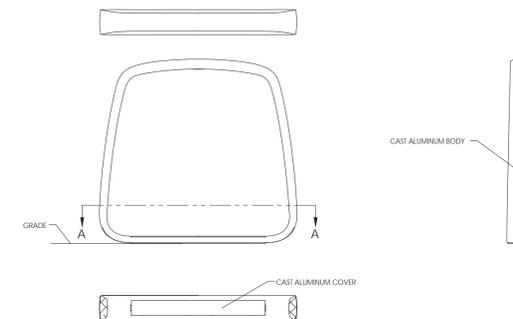
project information:

project manager: JPM
drawn by: JPM
date: 11.17.2015
project #: ROY0002.1

scale: 1" = 5'

sheet number:

Manufacturer: Landscape Forms
Model: "Ride" Bike Rack
Model Code:
Website: www.landscapeforms.com



X BIKE RACK
SCALE: 1" = 1'-0"

project:

Center Street Parklet

location:

Royal Oak, Michigan

title:

Details

client:

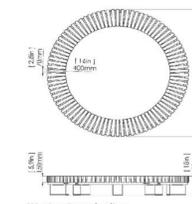
City of Royal Oak
211 S. Williams Street
Royal Oak, MI 48067
248-246-3000

issue + revision: date:

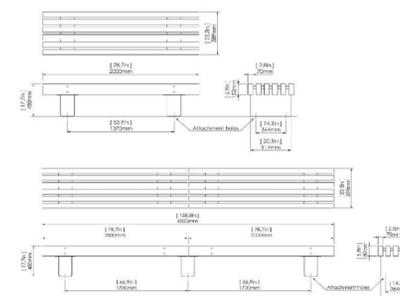
Design Review 12.17.15

Design Review 1.7.16

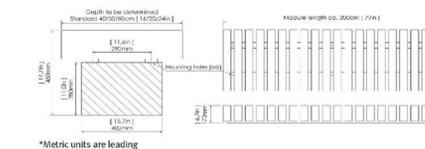
DD Submittal 2.12.16



Manufacturer: Streetlife
Model: Rough & Ready Circular Bench - All Black
Model Code: R&R-CURVE-D300-AB
Website: www.streetlife.nl



Manufacturer: Streetlife
Model: Rough & Ready 6 Bench - All Black
Model Code: R&R-6-2000
Website: www.streetlife.nl



Manufacturer: Streetlife
Model: Rough & Ready Crosswise Topseat - All Black
Model Code: R&R-CW-TOP-200-50-AB
Website: www.streetlife.nl

X SITE FURNITURE
SCALE: 1/2" = 1'-0"

NOT FOR CONSTRUCTION

project information:

project manager: JPM

drawn by: JPM

date: 11.17.2015

project #: ROY0002.1

scale: 1" = 5'

sheet number:

MEMORANDUM

Community Development Department
City of Royal Oak, Michigan

Meeting Date: March 15, 2016
211 Williams St. / P.O. Box 64
Royal Oak, MI 48068-0064
Phone: (248) 246-3280
Fax: (248) 246-3005
www.romi.gov

DATE: March 3, 2016

TO: Planning Commission

FROM: Planning Division

SUBJECT: SV 16-03-02 – Sign Variance request to install off-premise wall sign for multiple-family development (Harrison Lofts) at **1108 S. Main St.** (parcel no. 25-21-433-012) with following variances:
(a) Allow off-premise sign; and
(b) Waive 131.1 sq. ft. from maximum permitted 15.9-sq. ft. wall sign area.
Harrison Lofts II, LLC, Petitioner
W4 Signs, Contractor
Karen M. Shea & Jean Bower, Owners

The above-referenced sign variance application is from the Harrison Lofts, a multiple-family development currently under construction at 1210 Morse Avenue. The petitioner applied for a sign permit to install a wall sign on the north side façade of a barber shop located at 1108 South Main Street. That site is located within Sign Area 4 and must meet the required standards of § 607-13 and all other applicable standards of the Sign Ordinance.

The Building Division denied the petitioner's sign permit application for not complying with two sections of the Sign Ordinance. First, the sign would be used to promote the sale of dwelling units at the Harrison Lofts, not the barber shop or any other activity located at 1108 South Main Street. The wall sign would therefore be defined as an off-premise sign under § 607-8 of the Sign Ordinance. Off-premise signs are prohibited throughout the city regardless of a property's sign area according to § 607-16 (R).

Second, the sign exceeds the maximum permitted wall sign area – 10% of a building's façade area up to 100 square feet – allowed under § 607-11 (A)(2). (The city's established policy is to apply the required standards for Sign Area 2 under § 607-11 (A) to any wall signs proposed in Sign Area 4.) The north side façade of the building has approximately 159 square feet of façade area which would allow a wall sign of no more than 15.9 square feet. The proposed sign would have 147 square feet of wall sign area.

According to § 607-22 (D)(1), the Planning Commission is authorized to grant variances from the strict provisions of the Sign Ordinance "...whereby extraordinary or exceptional conditions of such property, the strict application of the regulations enacted would result in peculiar or exceptional practical difficulties to or exceptional undue hardship upon the owner of such property, provided such relief may be granted without substantial detriment to the public good and without substantially impairing the intent and purpose of this article."

In order to grant the requested variance, the Planning Commission must determine that the variance, either as proposed by the applicant or as otherwise determined by the Planning Commission based upon the record, is the minimum relief necessary in order to achieve

substantial justice. Further, in granting a variance, the Planning Commission must state the grounds upon which it justifies the granting of a variance as outlined below:

The applicant must present evidence to show that, if this article is applied strictly, unnecessary hardship and/or practical difficulties to the applicant will result, and that all eight of the following findings of fact are met:

- (a) That the property could not reasonably accommodate a sign permitted at that specific location;*
- (b) That the appeal results from exceptional and unique circumstances peculiar to the property and not from general neighborhood or City-wide conditions, including unique architectural character of the building or innovative techniques that are determined not to be detrimental to the building or the character of the area;*
- (c) That the sign requested by the variance would not alter the essential character of the area;*
- (d) That the alleged hardships and practical difficulties, or both, which will result from a failure to grant the variance include substantially more than mere inconvenience or monetary concern;*
- (e) That the alleged hardship has not been created by the petitioner or any other person presently having an interest in the property;*
- (f) That the article's restrictions unreasonably prevent the owner from using the property for a permitted land use;*
- (g) That the variance would do substantial justice to the applicant as well as to other property owners in the immediate vicinity that would be affected by granting the variance, considering the public benefits intended to be secured by this article, and the individual hardship that will be suffered by a failure of the Planning Commission to grant a variance; and*
- (h) That a lesser relaxation than that requested would not give substantial relief to the owner of the property or be more consistent with justice to other property owners.*

The Planning Commission must therefore consider one of the following actions: 1) approve the requested variance; 2) approve the requested variance with conditions; or 3) deny the requested variance.

It is recommended that the petitioner or a representative attend the March 15, 2016 Planning Commission meeting. The meeting starts at 7:30 p.m. in the City Commission chambers on the 3rd floor of City Hall.

cc: Kevin Wilson, Harrison Lofts II, LLC
Mike Giacomantonio, W4 Signs
Karen Shea, George & Daughter's Hairport



Royal Oak
**COMMUNITY
DEVELOPMENT**

1/25/16

W4 Signs
8200 Grand River
Brighton, MI 48114

**Re: "The Harrison" 1210 & 1232 Morse Royal Oak, MI 48067
Proposed sign to be installed at 1110 South Main**

Based upon the Code of the City of Royal Oak, Chapter 607, Signs, Sign Area #4, the application to install a wall sign on the north façade at 1110 South Main for a period of 18 months has been **denied** due to the following:

Since the location of the proposed sign is not at the actual site of "The Harrison" (1210 and/or 1232 Morse), this sign is considered a prohibited off-premises sign per Section 607-16 R. By definition, an off premises sign is "a sign which contains a commercial message unrelated to any business, activity, service or product actually carried out or sold upon the lot upon which the sign is located."

Additionally, the proposed sign is too large:

Wall sign size allowed: 15.9 square feet (10% of 12' H x 13.25' W)

Wall sign size proposed: 147 square feet (12' H x 12.25' W)

If you have any questions, please do not hesitate to contact me at (248) 246-3230. If you would like to apply for a sign variance, please contact Doug Hedges at (248) 246-3281.

Sincerely,
City of Royal Oak

Kevin Duhonich
Deputy Building Official

HARRISON LOFTS SIGN APPLICATION FOR OFF-SITE SIGN

The sign will be located on the north side of “George and Daughter’s Hairport” at the SW corner of Main Street and Harrison Ave.

The sign is a temporary marketing sign (18 months) for the Harrison Lofts apartment development at the corner of Harrison & Morse Ave.

The sign is needed to be able to direct potential residents to the apartment complex located back off Main Street in a residential neighborhood.

Questions, please call Kevin Wilson at 810-560-4749



The Harrison Building Sign Mock-Up – w/Dimensions

BUILDING WIDTH: 13.25'

NOW LEASING



THE HARRISON

LUXURY RESIDENCES

CALL **248.506.3693**
HARRISONROYALOK.COM

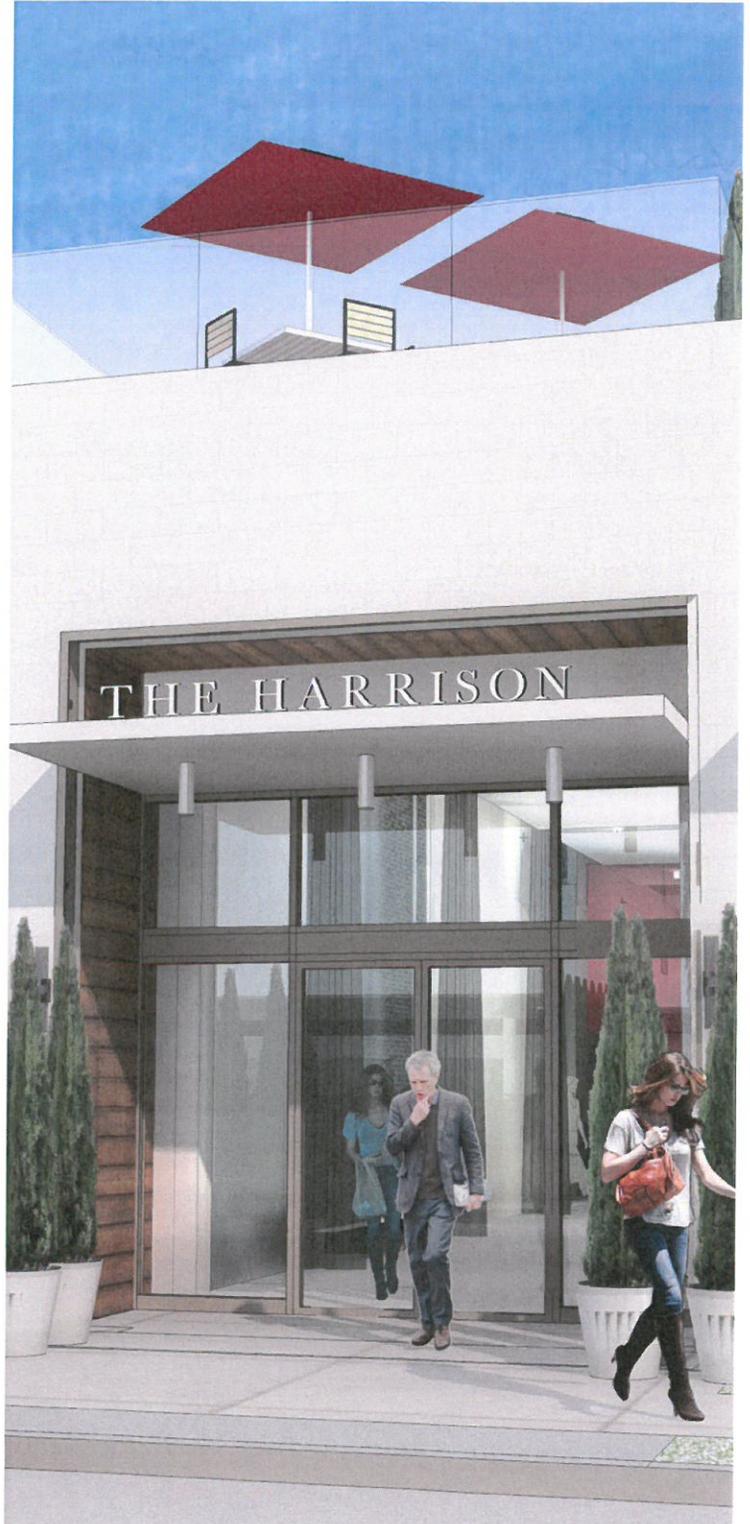


**TURN LEFT AT
HARRISON AVE
DRIVE 3 BLOCKS**

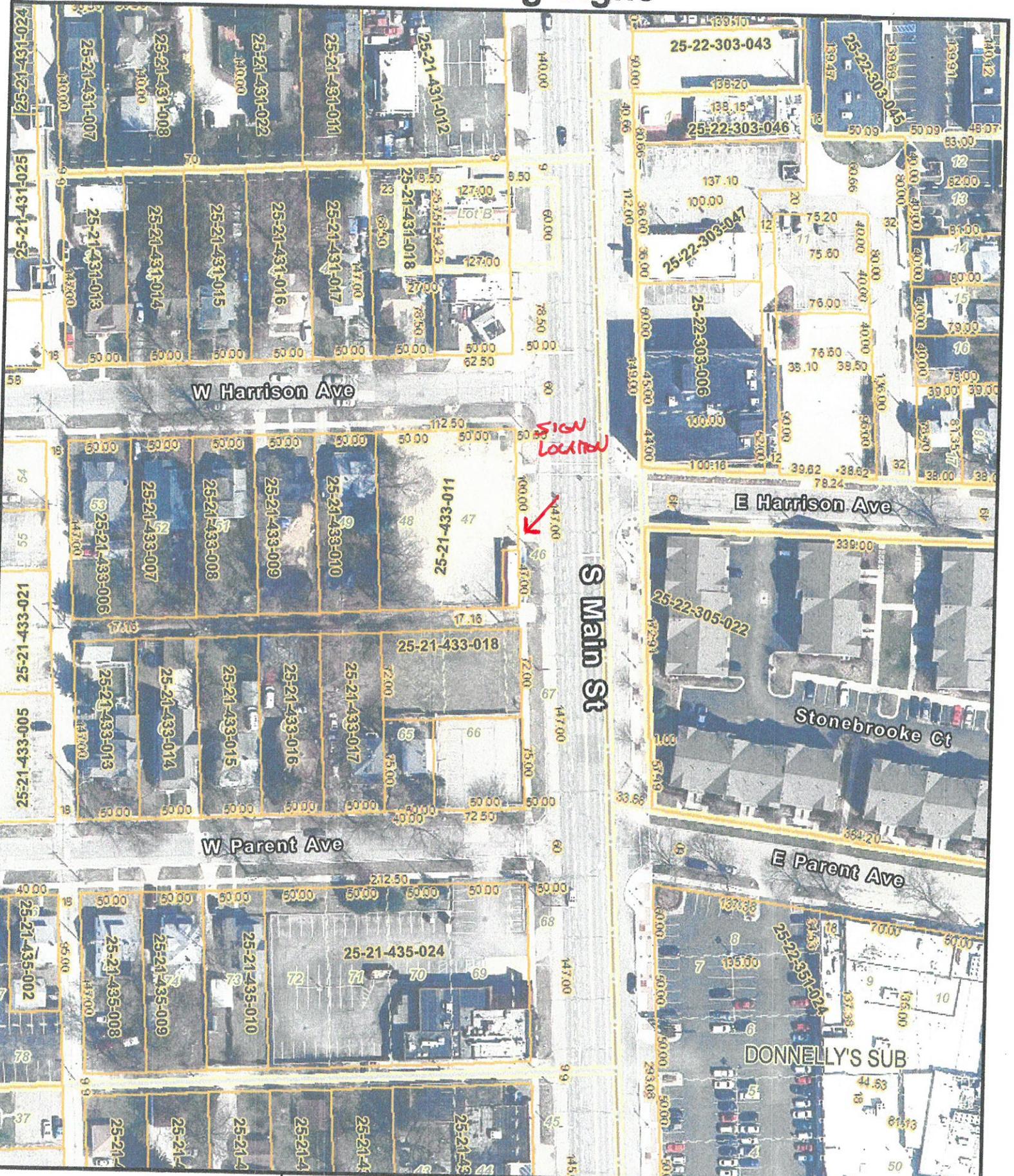
ARCHITECTURE
DRN Architects, PC

DRAWINGS
Pink+Wooderson

MANAGEMENT BY
LEGACY, LLC
Continuing Legacy Property Management Service



Marketing Signs



- 2 Foot Contours
- 5 Foot Contours
- FEMA Base Flood Elevations
- FEMA Cross Sections
- 100 yr - FEMA Floodplain
- 100 yr (detailed) - FEMA Floodplain
- 500 yr - FEMA Floodplain
- FLOODWAY - FEMA Floodplain

Disclaimer: The information provided herewith has been compiled from recorded deeds, plats, tax maps, surveys and other public records. It is not a legally recorded map or survey and is not intended to be used as one. Users should consult the information sources mentioned above when questions arise. FEMA Floodplain data may not always be present on the map.

OAKLAND
 COUNTY EXECUTIVE
 Economic Development & Community Affairs

L. Brooks Patterson
 Oakland County Executive

Date Created: 12/8/2015

NORTH

1 inch = 100 feet

marketing Signs



- 2 Foot Contours
- 5 Foot Contours
- FEMA Base Flood Elevations
- FEMA Cross Sections
- 100 yr - FEMA Floodplain
- 100 yr (detailed) - FEMA Floodplain
- 500 yr - FEMA Floodplain
- FLOODWAY - FEMA Floodplain

Disclaimer: The information provided herewith has been compiled from recorded deeds, plats, tax maps, surveys and other public records. It is not a legally recorded map or survey and is not intended to be used as one. Users should consult the information sources mentioned above when questions arise. FEMA Floodplain data may not always be present on the map.

OAKLAND COUNTY
 COUNTY ENGINEER
 Economic Development & Community Affairs

L. Brooks Patterson
 Oakland County Executive

Date Created: 12/8/2015

NORTH

1 inch = 400 feet



LOOKING SOUTH
SIGN WILL BE ON
THIS WALL



LOOKING WEST



LOOKING SOUTH

MEMORANDUM

Community Development Department
City of Royal Oak, Michigan

Meeting Date: March 15, 2016
211 Williams St. / P.O. Box 64
Royal Oak, MI 48068-0064
Phone: (248) 246-3280
Fax: (248) 246-3005
romi.gov

DATE: March 3, 2016

TO: Planning Commission

FROM: Planning Division

SUBJECT: Capital Improvements Program for 2016-2017 Fiscal Year

According to Section 65 of Michigan's Planning Enabling Act (P.A. 33 of 2008), the planning commission for any city that has adopted a master plan must annually prepare a capital improvements program of public structures and construction. That same section of Act 33 further states that such a program must show public structures and improvements in the general order of priority that, in the commission's judgment, will be needed or desirable and can be undertaken within a six-year period.

Attached is a draft of the proposed capital improvements program for the city's upcoming fiscal year. The projects are the result of submittals from the Engineering Division and Department of Public Services. The program is scheduled for a public hearing at the next regular meeting. The purpose of the hearing is to allow the Planning Commission an opportunity to receive input and review the program, then recommend any additions or changes to the City Commission that may be necessary.

The annual budget schedule will not allow the program to be postponed until the next regular meeting. Should the Planning Commission recommend any revisions following the public hearing those changes will need to be included within the motion recommending adoption of the program by the City Commission.

Once the Planning Commission is satisfied with the contents of the program, the following resolution is required:

Be it resolved, that the Royal Oak Planning Commission approves the capital improvements program for the 2016-2017 fiscal year as presented [or with the following specified revisions], and recommends its adoption by the City Commission as part of the 2016-2017 fiscal year budget.

CITY OF ROYAL OAK

DRAFT

CAPITAL IMPROVEMENT PLAN

FY2016-17 to FY2021-22

DRAFT

February 1, 2016

Dear Planning Commission Members:

The enclosed draft capital improvement plan (CIP) serves as the city's multi-year planning instrument used to identify needs and potential financing sources for public infrastructure improvements. The purpose of a CIP is to facilitate the orderly planning of infrastructure improvements; to maintain, preserve, and protect the city's existing infrastructure system; and to provide for the acquisition or scheduled replacement of equipment to help to ensure the efficient delivery of services that the community desires. The goal is to use the CIP as a tool to implement the city's various master plans, goals, objectives, policies and to assist with the city's financial planning.

The CIP plays an important role by providing the link between planning and budgeting for capital and non-routine expenditures. The CIP process occurs prior to the budget process as the CIP will be used to develop the capital portion of the budget. Approval of the CIP by the planning commission does not signify final approval or funding of any project contained within the plan. Rather, by approving a CIP, the planning commission acknowledges that they agree that the projects present a reasonable interpretation of the upcoming needs / wants for the city. The projects contained in the first year of the plan will be requested in next year's department requested budget and potentially advance to the manager's recommended and/or city commission's approved budget.

The CIP document includes several areas of projects such as street improvements, water & sewer improvements, city parks / facilities improvements, information technology, and vehicles, equipment, large studies, and other. (A project location map follows each section) An aggregate spreadsheet listing the summary of projects with current cost projections (in today's dollars) is found in the document after the project description section. Near the end of document the project application forms are included to provide readers with a better understanding as to how a project is submitted and rated.

During the upcoming year, it is recommended that the administration and planning commission members work together to better define and develop Royal Oak's CIP process for next year. CIP topics to improve could include the following: a project raters group to improve the legitimacy of project scoring and improve upon the reporting of related operating costs / savings impact.

Preparation of the CIP is performed under the authority of the Michigan Planning Enabling Act (Act 33 of 2008) which repealed and replaced the Municipal Planning Commission Act (PA 285 of 1931). A public hearing on the draft capital improvement plan will be conducted on March 15, 2016. The adopted CIP will assist the administration and city commission during the budget development process. The planning commission's assistance throughout this process is greatly appreciated.

Respectfully Submitted,

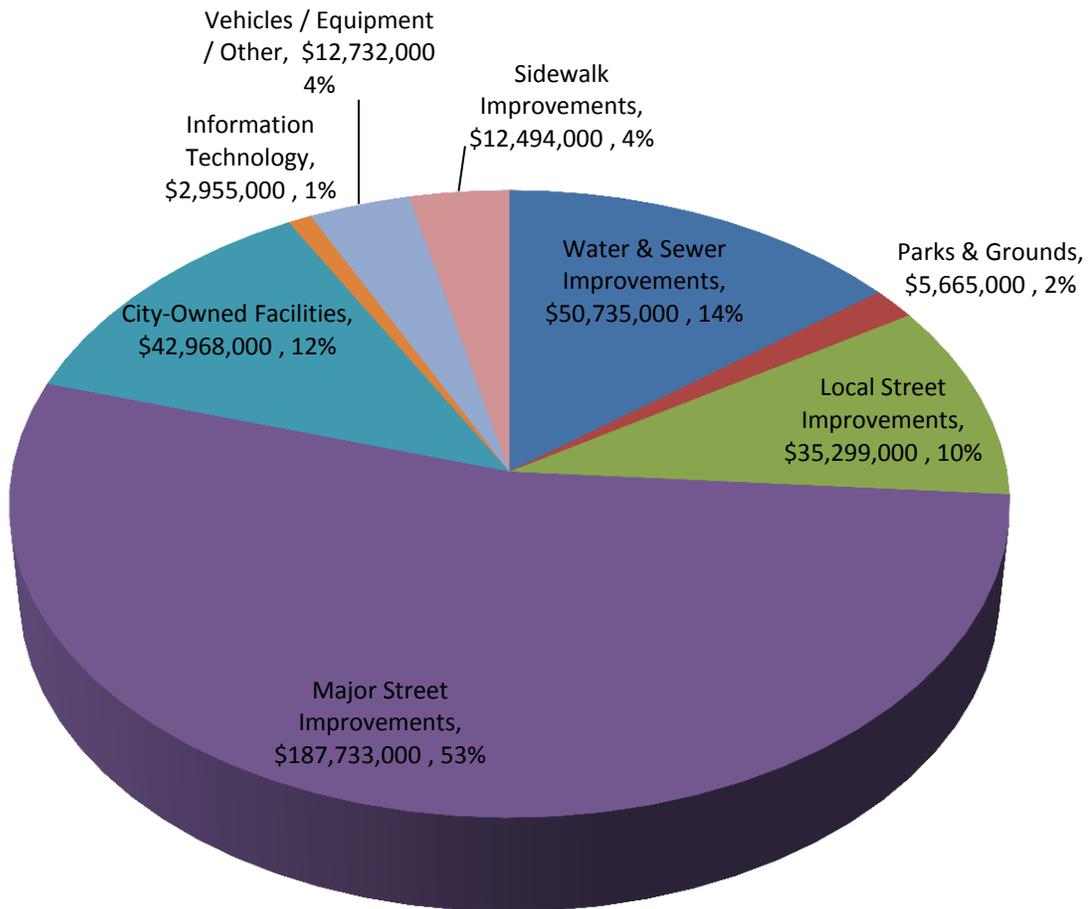
Julie Rudd
Director of Finance

Respectfully Submitted,

Timothy E. Thwing
Director of Community Development

Total Project Costs and Percentage

2016/17-2021/22



City of Royal Oak Capital Improvement Plan FY2016-17 to FY2021-22

CAP1745	14 Mile Road (Woodward Avenue-Tonawanda Avenue) & (Mankato Avenue-CN Railroad)
Project Length: 2017-2018	City Share: 100%
Estimated City Cost: \$1,138,000	Funding Source: water and sewer fund
Impact on the Operating Budget: Lower system maintenance costs.	
Description: Replace existing water main with a new 12" water main in 14 Mile Road from Woodward Avenue to Tonawanda Avenue and Mankato Avenue to CN Railroad.	

CAP1710	Rochester Road, Ferris Avenue, and Vermont Avenue Water Main Replacements
Project Length: 2017-2018	City Share: 100%
Estimated City Cost: \$1,236,000	Funding Source: water and sewer fund
Impact on the Operating Budget: Lower system maintenance costs.	
Description: Replace existing water mains with a new 12" water main in Rochester Road (Donald Avenue -14 Mile Road) and an 8" water main along Ferris Avenue (Donald Avenue-14 Mile Road) and Vermont Avenue (Donald Avenue-14 Mile Road).	

CAP1720	Normandy Road Water Main Replacement
Project Length: 2017-2018	City Share: 100%
Estimated City Cost: \$1,022,000	Funding Source: water and sewer fund
Impact on the Operating Budget: Lower system maintenance costs.	
Description: Replace existing water main with a new 12" water main along Normandy Road between Woodward Avenue and Normandy Court.	

CAP1730	Section 5 & 7 Water Main Replacements
Project Length: 2017-2018	City Share: 100%
Estimated City Cost: \$1,186,000	Funding Source: water and sewer fund
Impact on the Operating Budget: Lower system maintenance costs.	
Description: Replace existing water main with a new 12" water wain in the east side of Woodward Avenue (Buckingham Road-Normandy Road), Woodward Avenue just north of Starr Road and 8" water mains in Judson Avenue (Elmwood Avenue-Cummings Avenue), Nakota Road (Hillcrest Avenue-Crooks Road), and Rosewold (Normandy Road-Massoit Road).	

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CAP1735	Dallas Avenue Water Main Replacement
Project Length: 2017-2019	City Share: 100%
Estimated City Cost: \$843,000	Funding Source: water and sewer fund
Impact on the Operating Budget: Lower system maintenance costs.	
Description: Replacing existing water main with a new 8" water main along Dallas Avenue and Blair Avenue between Lincoln Avenue and 6 th Street.	

CAP1740	Section 6 Water Main Replacement
Project Length: 2017-2018	City Share: 100%
Estimated City Cost: \$1,032,000	Funding Source: water and sewer fund
Impact on the Operating Budget: Lower system maintenance costs.	
Description: Replace existing water main with a new 12" water main along Chester Road (Hillside Drive-Dukeshire Highway) and 8" water mains along Dukeshire Highway (Chester Road-Normandy Road), Yorba Linda Boulevard (Dukeshire Highway-Kensington Drive), Rockingham (Kensington Drive-Woodward Avenue) and Ravena Avenue (Chester Road-Woodward Avenue).	

CAP1750	Section 3 Water Main Replacement
Project Length: 2017-2018	City Share: 100%
Estimated City Cost: \$500,000	Funding Source: water and sewer fund
Impact on the Operating Budget: Lower system maintenance costs.	
Description: Replace existing water main with a new 8" water main along 14 Mile Road (Rochester Road-Campbell Road).	

CAP1810	Houstonia Avenue Water Main Replacement
Project Length: 2018-2019	City Share: 100%
Estimated City Cost: \$938,000	Funding Source: water and sewer fund
Impact on the Operating Budget: Lower system maintenance costs.	
Description: Replace existing water main with a new 12" water main along Houstonia Avenue (Beechwood Drive-Main Street) and 8" water main in Oakdale Street (11 Mile Road to 4th Street).	

CAP1820	Section 10 and 15 Water Main Replacements
Project Length: 2018-2019	City Share: 100%
Estimated City Cost: \$1,090,000	Funding Source: water and sewer fund
Impact on the Operating Budget: Lower system maintenance costs.	
Description: Replace existing water mains with new 8" water mains along Forest Avenue (Main Street-Rosedale Avenue), Virginia Avenue (Pingree Boulevard-Dead End), Clifton Avenue (12 Mile Road-Beaver Avenue), Fern Street (12 Mile Road-Beaver Avenue) and Ardmore Avenue (12 Mile Road-Beaver Avenue).	

CAP1830	Section 3 and 4 Water Main Replacements
Project Length: 2018-2019	City Share: 100%
Estimated City Cost: \$1,138,000	Funding Source: water and sewer fund
Impact on the Operating Budget: Lower system maintenance costs.	
Description: Replace existing water main with a new 12" water main along Lexington Boulevard (Senior Center-Washington Avenue) and 8" water mains in Glendale Avenue (13 Mile Road-Englewood Avenue) and Alexander Avenue(13 Mile Road-Woodlawn Avenue).	

CAP1840	Section 3 and 10 Water Main Replacements
Project Length: 2018-2019	City Share: 100%
Estimated City Cost: \$1,088,000	Funding Source: water and sewer fund
Impact on the Operating Budget: Lower system maintenance costs.	
Description: Replace existing water main with a new 8" water main along Blair Avenue (13 Mile Road-Woodlawn Avenue), Devillen Avenue (Ferris Avenue-Campbell Road), Girard Avenue (Red Run Park – Vermont Avenue), and Parkdale Avenue (Vermont Avenue-Wilson Avenue).	

CAP1850	Vermont Avenue Water Main Replacements
Project Length: 2018-2019	City Share: 100%
Estimated City Cost: \$1,136,000	Funding Source: water and sewer fund
Impact on the Operating Budget: Lower system maintenance costs.	
Description: Replace existing water main with a new 8" water main along Vermont Avenue (12 Mile Road-Girard Avenue) and Houstonia Avenue (Vermont Avenue-Campbell Road).	

CAP1910	Stephenson Highway Water Main Replacement
Project Length: 2019-2020	City Share: 100%
Estimated City Cost: \$1,614,000	Funding Source: water and sewer fund
Impact on the Operating Budget: Lower system maintenance costs.	
Description: Replace existing water main with a new 12" water main along Stephenson Highway (4th Street-Gardenia Avenue) and an 8" water main along Forest Avenue (Symes Avenue-Stephenson Highway).	

CAP1920	Section 14, 22, and 23 Water Main Replacements
Project Length: 2019-2020	City Share: 100%
Estimated City Cost: \$1,338,000	Funding Source: water and sewer fund
Impact on the Operating Budget: Lower system maintenance costs.	
Description: Replace existing water main with a new 8" water main along 11 Mile Road (Dorchester Avenue-Kenwood Avenue), Farnum Avenue (Campbell Road-Kenwood Avenue), Helene Avenue (Barrett-Brockton), Vermont Avenue (Lincoln Avenue-5 th Street), Longfellow Avenue (Harrison Avenue-Lincoln Avenue), and Rembrandt Avenue (Lincoln Avenue-6 th Street).	

CAP1930	5 th , 6 th , and 7 th Streets Water Main Replacements
Project Length: 2019-2020	City Share: 100%
Estimated City Cost: \$1,306,000	Funding Source: water and sewer fund
Impact on the Operating Budget: Lower system maintenance costs.	
Description: Replace existing water main with a new 12" water main along 5th Street (Knowles Street-Alexander Avenue) and 8" water mains along 6th Street (Knowles Street-Alexander Avenue), 7th Street (Troy Street-Knowles Street), and Altadena Avenue (Lincoln Avenue-6 th Street).	

CAP1935	Harrison Avenue Water Main Replacement
Project Length: 2019-2020	City Share: 100%
Estimated City Cost: \$1,244,000	Funding Source: water and sewer fund
Impact on the Operating Budget: Lower system maintenance costs.	
Description: Replace existing water main with a new 12" water main along Harrison Avenue (Main Street to Batavia Avenue) and an 8" water main in Houstonia Avenue (Northwood Boulevard-Evergreen Drive).	

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CAP2010	Section 15 and 23 Joint Replacements
Project Length: 2020-2021	City Share: 100%
Estimated City Cost: \$1,332,000	Funding Source: water and sewer fund
Impact on the Operating Budget: Lower system maintenance costs.	
Description: Replace universal joint water main with an 8" water main along St. Charles Court (Curry Avenue-Potter Avenue), Frederick Street (Curry Avenue-Potter Avenue), S. Dorchester Avenue (Lincoln Avenue-4 th Street), and S. Kenwood Avenue (Lincoln Avenue-4 th Street).	

CAP2020	Edgeworth Avenue and Minerva Avenue Joint Replacements
Project Length: 2020-2021	City Share: 100%
Estimated City Cost: \$1,582,000	Funding Source: water and sewer fund
Impact on the Operating Budget: Lower system maintenance costs.	
Description: Replace universal joint water main with an 8" water main along S. Edgeworth Avenue (Lincoln Avenue-11 Mile Road) and Minerva Avenue (Lincoln Avenue-11 Mile Road).	

CAP2030	Section 23 Joint Replacement
Project Length: 2020-2021	City Share: 100%
Estimated City Cost: \$1,366,000	Funding Source: water and sewer fund
Impact on the Operating Budget: Lower system maintenance costs.	
Description: Replace universal joint water main with an 8" water main along Helene Avenue (Lincoln Avenue-11 Mile Road), E. Hudson (dead end - Stephenson), Yale (Wellesley-Stephenson) and Brockton (Helene Avenue-Stephenson).	

CAP2110	Section 14 and 23 Joint Replacements
Project Length: 2021-2022	City Share: 100%
Estimated City Cost: \$1,096,000	Funding Source: water and sewer fund
Impact on the Operating Budget: Lower system maintenance costs.	
Description: Replace universal joint water main with an 8" water main along N. Minerva Avenue (11 Mile Road-Farnum Avenue), Mace Avenue (Minerva Avenue-Stephenson Highway), and S. Edison Avenue (Lincoln Avenue-4 th Street).	

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CAP2120	Section 16, 21, and 23 Joint Replacements
Project Length: 2021-2022	City Share: 100%
Estimated City Cost: \$996,000	Funding Source: water and sewer fund
Impact on the Operating Budget: Lower system maintenance costs.	
Description: Replace universal joint water main with an 8" water main along N. Maple Avenue (Derby Avenue-12 Mile Road), Huntington Avenue (Hereford Drive-Woodward Avenue), and Tufts Avenue (Wellesley Avenue to Stephenson Highway).	

CAP2210, CAP2220, CAP2310, CAP2320	Various Water Main Replacements
Project Length: 2021-2022	City Share: 100%
Estimated City Cost: \$9,042,000	Funding Source: water and sewer fund
Impact on the Operating Budget: Lower system maintenance costs.	
Description: Replace existing 6" water main with 8" water main in target area to be determined.	

CAP1614-CAP2214	Sewer Televising and Root Control
Project Length: 2017-2022	City Share: 100%
Estimated City Cost: \$3,030,000	Funding Source: water and sewer fund
Impact on the Operating Budget: Lower system maintenance costs and general liability costs.	
Description: Sewer televising, cleaning, and invasive root removal city wide.	

CAP1616-CAP2216	Sewer Lining (City Wide)
Project Length: 2017-2022	City Share: 100%
Estimated City Cost: \$4,113,000	Funding Source: water and sewer fund
Impact on the Operating Budget: Lower system maintenance costs.	
Description: Lining the sewers to prevent sewer pipe failure or collapse.	

CAP1617-CAP2217	Spot Sewer Repairs (City Wide)
Project Length: 2017-2022	City Share: 100%
Estimated City Cost: \$3,036,000	Funding Source: water and sewer fund
Impact on the Operating Budget: Lower system maintenance costs.	
Description: Spot sewer repair of broken sanitary sewer of different sizes in various locations city wide.	

CAP1606	2016 Sewer Improvements
Project Length: 2017-2022	City Share: 100%
Estimated City Cost: \$2,066,000	Funding Source: water and sewer fund
Impact on the Operating Budget: Lower system maintenance costs.	
Description: Sewer replacements / installations for increased capacity at the following locations: Ravine Road (alley to Hampton Boulevard), Edgewood Drive (Crooks Road to Woodsboro Drive), Park Avenue (Maple Avenue to Maxwell Avenue), Durham Road (13 Mile Road to Normandy Road), Windemere Avenue (Blair Avenue to Campbell Road), Vinsetta Boulevard (Marywood Drive to Main Street).	

CAP1736	Green Infrastructure Feasibility Study
Project Length: 2016-2017	City Share: 100%
Estimated City Cost: \$150,000	Funding Source: water and sewer fund
Impact on the Operating Budget: Will attempt to identify ways to reduce inflow into sewers with combinations of green and grey infrastructure.	
Description: Consultant to identify generic concepts for green infrastructure including infiltration basins, bio-swales and bio-retention cells; permeable pavements, ect. Identify specific locations, develop generic costs, and develop a plan for specific locations where concepts can be installed with estimated costs. Estimate effectiveness and compare to existing city requirements for detention.	

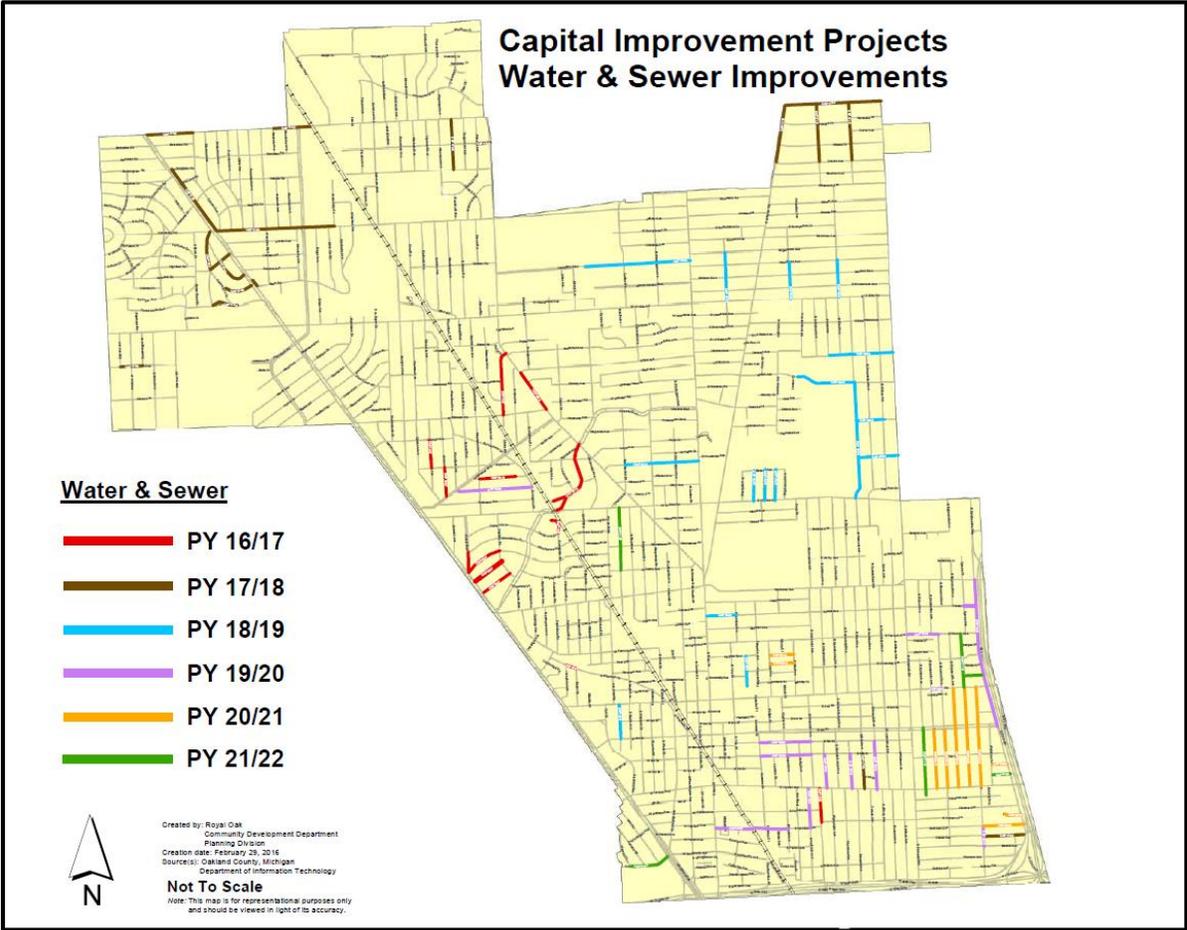
SIDEWALK IMPROVEMENTS

CAP1601-CAP2201	Concrete Pavement and Prepaid Sidewalk Program Improvements
Project Length: 2015-2022 Estimated City Cost: \$3,543,000	City Share: 100% Funding Source: water and sewer fund / direct billing
<p>Impact on the Operating Budget: Improve safety thus reducing liability expenses due to fewer trip and fall claims.</p> <p>Description: Repair of road/sidewalk concrete patches of the concrete roadway in a dedicated section of the city and based upon field inspections.</p>	

CAP1602, CAP1702	Sidewalk Improvements Program
Project Length: 2013-2018 Estimated City Cost: \$281,000	City Share: 4% Funding Source: special assessment, direct bill
<p>Impact on the Operating Budget: Improve safety thus reducing liability expenses due to fewer trip and fall claims.</p> <p>Description: Replace damaged sidewalk in an established, target area, over the entire city over six years.</p>	

CAP1604	2016 E. Fourth Street Streetscape Improvements (Main Street-Knowles Street DDA)
Project Length: 2016-2017 Estimated City Cost: \$1,100,000	City Share: 100% Funding Source: DDA
<p>Impact on the Operating Budget: Improve safety thus reducing liability expenses due to fewer trip and fall claims.</p> <p>Description: The work for this project includes new streetscape decorative concrete installation, concrete curb and gutter and asphalt street resurfacing, handicap ramp replacement, drainage improvements, installation of trees and tree grates, and removal of existing DTE wood poles and lights and installation of decorative street lights. This project extends along E. Fourth Street from S. Main Street to Knowles Street.</p>	

CAP1611	2016 Main Street Streetscape (10 Mile Road-Lincoln Avenue)
Project Length: 2016-2017 Estimated City Cost: \$367,000	City Share: 44% Funding Source: DDA / major streets / special assessment
Impact on the Operating Budget: Improve safety thus reducing liability expenses due to fewer trip and fall claims.	
Description: Improvements to streetscape along Main Street between 10 Mile Road and Lincoln Avenue.	



LOCAL STREET IMPROVEMENTS

CAP1705-CAP2205	Millage Concrete Street Repairs
Project Length: 2017-2022 Estimated City Cost: \$8,203,000	City Share: 100% Funding Source: local street fund
Impact on the Operating Budget: Will reduce road maintenance costs over time by making structural repairs to local roads.	
Description: Removal and replacement of failed concrete slab sections within the local street network, as identified through the city's pavement management system and based upon field inspections. The slab replacement program will replace/patch deteriorated concrete on local streets.	

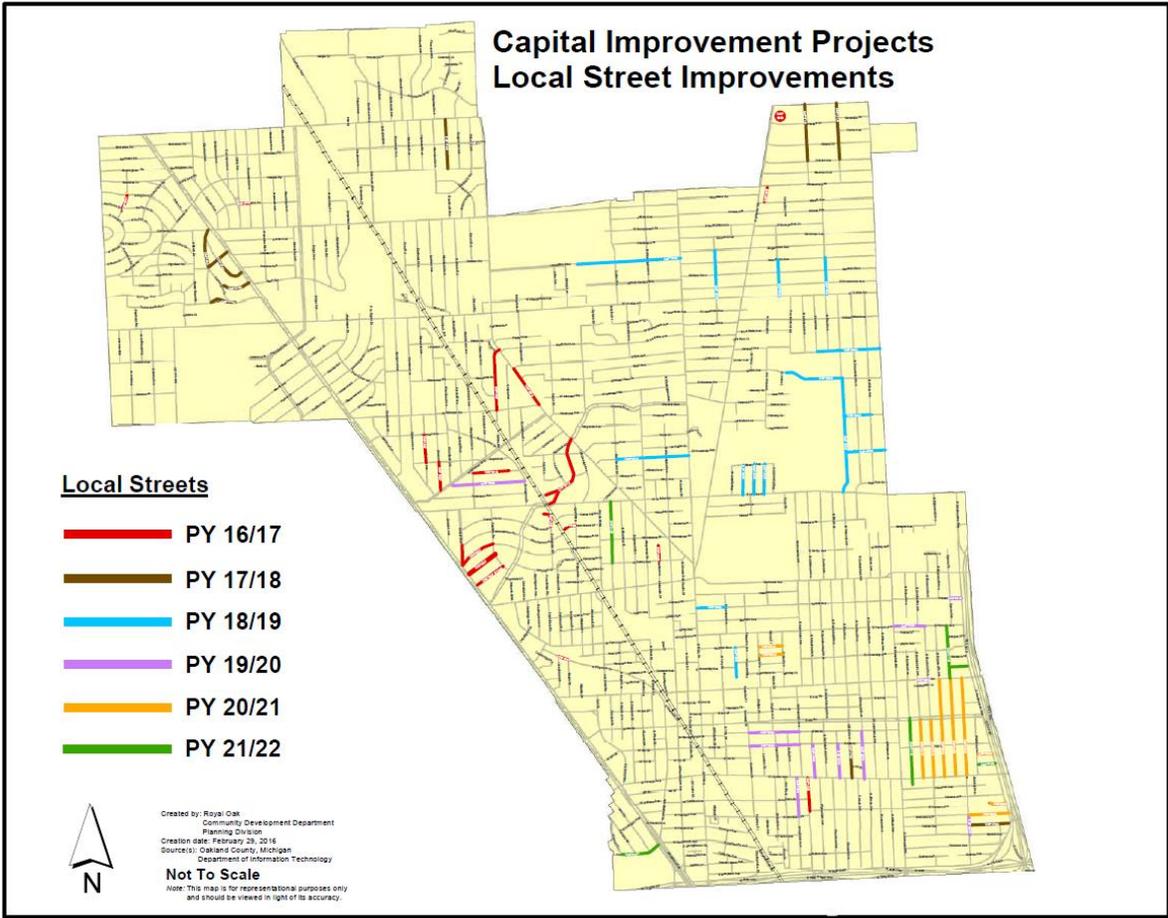
CAP1715-CAP2215	Millage Asphalt Street Resurfacing
Project Length: 2017-2022 Estimated City Cost: \$14,303,000	City Share: 100% Funding Source: local street fund
Impact on the Operating Budget: Will reduce road maintenance costs over time by making structural repairs to local roads.	
Description: Resurfacing of local roads with an asphalt top layer. This program is meant to address locations where the road is deteriorating.	

CAP1725-CAP2225	Millage Street Joint Sealing
Project Length: 2017-2022 Estimated City Cost: \$459,000	City Share: 100% Funding Source: local street fund
Impact on the Operating Budget: Will reduce road maintenance costs over time by making structural repairs to local roads.	
Description: Perform joint sealing maintenance on local streets for streets paved in previous year.	

CAP1735-CAP2035	Millage Street Reconstruction
Project Length: 2017-2020 Estimated City Cost: \$3,485,000	City Share: 100% Funding Source: local street fund
<p>Impact on the Operating Budget: Will reduce road maintenance costs over time by making structural repairs to local roads.</p> <p>Description: Removal and replacement of failed concrete slab sections within the local street network, as identified through the city's pavement management system and based upon field inspections. The slab replacement program will replace/patch deteriorated concrete on local streets.</p>	

CAP1745-CAP2245	2016 Sewer and Water Main Improvements
Project Length: 2017-2022 Estimated City Cost: \$4,647,000	City Share: 100% Funding Source: local street fund
<p>Impact on the Operating Budget: Will reduce road maintenance costs over time by making structural repairs to local roads.</p> <p>Description: Reconstruction of local roads in coordination with sewer and water main improvements.</p>	

CAP1755-CAP2255	Special Assessment Paving
Project Length: 2017-2022 Estimated City Cost: \$2,651,000	City Share: 63% Funding Source: local street fund
<p>Impact on the Operating Budget: Will reduce road maintenance costs over time by making structural repairs to local roads.</p> <p>Description: Special assessment paving of local roads. The city is covering a portion of costs due to these roads going from gravel to paved.</p>	



MAJOR STREET IMPROVEMENTS

CAP1101	Surveying Services
Project Length: 2014-2020 Estimated City Cost: \$80,000	City Share: 100% Funding Source: major street fund / water and sewer fund
Impact on the Operating Budget: Improve efficiency and access to information.	
Description: This program serves as a guide by providing surveying consulting services for preparing construction plans for street paving as well as water and sewer improvements.	

CAP1401	Traffic Signal Upgrade Project
Project Length: 2015-2018 Estimated City Cost: \$2,475,000	City Share: 100% Funding Source: major street fund / grant
Impact on the Operating Budget: Reduce maintenance budget by \$2,000 annually.	
Description: Replace or upgrade existing traffic signals with countdown audible signals.	

CAP1618	Traffic Signal Survey and Optimization Plan
Project Length: 2016-2017 Estimated City Cost: \$100,000	City Share: 25% Funding Source: major street fund / grant
Impact on the Operating Budget: Will reduce road maintenance costs over time by making structural repairs to major roads.	
Description: Consultant to inventory all traffic signals and create an asset management document. Develop an optimization plan, including prioritizing maintenance and construction projects and developing cost estimates.	

CAP1619	NB Stephenson Highway (Part A) Resurfacing
Project Length: 2017-2018 Estimated City Cost: \$270,000	City Share: 100% Funding Source: major street fund
Impact on the Operating Budget: Will reduce road maintenance costs over time by making structural repairs to major roads.	
Description: Resurfacing north bound Stephenson Highway with asphalt as a part of the program between 11 Mile Road and Gardenia Avenue.	

CAP1621	NB Stephenson Highway (Part B) Resurfacing
Project Length: 2017-2018	City Share: 100%
Estimated City Cost: \$270,000	Funding Source: major street fund
Impact on the Operating Budget: Will reduce road maintenance costs over time by making structural repairs to major roads.	
Description: Resurfacing north bound Stephenson Highway with asphalt as a part of the program between East Lincoln Avenue and 11 Mile Road.	

CAP1604	E. 4th Street Streetscape Improvements (Main-Knowles DDA)
Project Length: 2015-2017	City Share: 100%
Estimated City Cost: \$999,000	Funding Source: major street fund, DDA
Impact on the Operating Budget: Unknown	
Description: Perform topographic survey of E. 4 th Street from Main Street to Knowles Street and contract for the design of paving and streetscape upgrades.	

CAP1626	Crooks Road Resurfacing (14 Mile Road-Normandy Road and Webster Road-13 Mile Road)
Project Length: 2016-2017	City Share: 75%
Estimated City Cost: \$244,000	Funding Source: major street fund / City of Clawson
Impact on the Operating Budget: Will reduce road maintenance costs over time by making structural repairs to major roads.	
Description: Resurface Crooks Road between 13 Mile Road and Webster Road and between 14 Mile Road and Normandy Road.	

CAP1635	SA Paving Girard Avenue
Project Length: 2016-2017	City Share: 56%
Estimated City Cost: \$162,000	Funding Source: major street fund / special assessment
Impact on the Operating Budget: Will reduce road maintenance costs over time by making structural repairs to major roads.	
Description: Special assessment paving of Girard Avenue from Rochester Road to Ardmore Avenue. The city is covering a portion of costs due to this road going from gravel to paved.	

CAP1703	13 Mile Road Asphalt Resurfacing (Woodward Avenue to Crooks Road)
Project Length: 2018-2019	City Share: 100%
Estimated City Cost: \$495,000	Funding Source: major street fund
Impact on the Operating Budget: Will reduce road maintenance costs over time by making structural repairs to major roads.	
Description: Resurface 13 Mile Road between Woodward Avenue and Crooks Road.	

CAP1610	Main Street Improvements (10 Mile Road-Lincoln Avenue)
Project Length: 2016-2017	City Share: 48%
Estimated City Cost: \$590,000	Funding Source: major street fund
Impact on the Operating Budget: Will reduce road maintenance costs over time by making structural repairs to major roads.	
Description: 2016 MDOT S Main Street improvements between 10 Mile Road and Lincoln Avenue.	

CAP1622	Ferndale Bike Route Loop Extension
Project Length: 2016-2017	City Share: 100%
Estimated City Cost: \$50,000	Funding Source: major street fund
Impact on the Operating Budget: Unknown	
Description: Extension of the Ferndale bike route loop through the southwest corner of Royal Oak from the intersection of Woodward Avenue and Lincoln Avenue to the intersection of Mohawk Avenue and the I-696 service drive. From west to east, the route would travel along West Lincoln Avenue, Lafayette Avenue, West and East Harrison Avenue, Morse Avenue, East Parent Avenue, and Irving Avenue.	

CAP1704	W. 4th Street, Lafayette Avenue and W. Lincoln Avenue Asphalt Resurfacing
Project Length: 2018-2019	City Share: 100%
Estimated City Cost: \$700,000	Funding Source: major street fund
Impact on the Operating Budget: Will reduce road maintenance costs over time by making structural repairs to major roads.	
Description: Resurface W. 4th Street (West Street to Washington Avenue), Lafayette Avenue (Woodward Avenue to Lincoln Avenue, 4 th Street to 11 Mile Road), and W. Lincoln Avenue (Woodward Avenue to Washington Avenue).	

City of Royal Oak Capital Improvement Plan FY2016-17 to FY2021-22

CAP1706	Central Business District Street Resurfacing
Project Length: 2017-2018 Estimated City Cost: \$271,000	City Share: 100% Funding Source: DDA
Impact on the Operating Budget: Will reduce road maintenance costs over time by making structural repairs to major roads.	
Description: Central Business District (CBD) resurfacing of 6th and 7th Streets between Washington Avenue and Lafayette Avenue. This program is intended to address the deteriorating surface condition and install new gutter and curb to match the streetscape layout. Construction is planned to begin in 2017.	

CAP1707	Gardenia Avenue Reconstruction (Main Street-Gainsborough Avenue)
Project Length: 2018-2020 Estimated City Cost: \$1,201,000	City Share: 100% Funding Source: major street fund
Impact on the Operating Budget: Will reduce road maintenance costs over time by making structural repairs to major roads.	
Description: Reconstruct Gardenia Avenue between Main Street and Gainsborough Avenue.	

CAP1803	Washington Avenue Resurfacing (Crooks Road-12 Mile Road)
Project Length: 2019 Estimated City Cost: \$326,000	City Share: 100% Funding Source: major street fund
Impact on the Operating Budget: Will reduce road maintenance costs over time by making structural repairs to major roads.	
Description: Resurfacing of N. Washington Avenue with an asphalt top layer as a part of the program between 12 Mile Road and Crooks Road. This program is intended to address location where the road surface condition is deteriorating.	

CAP1765-CAP2265	Annual Major Joint Seal Program
Project Length: 2016-2022 Estimated City Cost: \$610,000	City Share: 100% Funding Source: major street fund
Impact on the Operating Budget: Will reduce road maintenance costs over time by making structural repairs to major roads.	
Description: Perform joint sealing maintenance on major streets paved in previous year.	

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CAP1806	Campbell Road (10 Mile Road-11 Mile Road)
Project Length: 2018-2019	City Share: 37%
Estimated City Cost: \$594,000	Funding Source: major street fund
Impact on the Operating Budget: Will reduce road maintenance costs over time by making structural repairs to major roads.	
Description: Resurfacing of Campbell Road with asphalt as a part of the program between 10 Mile Road and 11 Mile Road. This program is intended to address deteriorating road surface conditions.	

CAP2006	11 Mile Road Resurfacing (CN RR to Campbell Road)
Project Length: 2019-2021	City Share: 100%
Estimated City Cost: \$1,252,000	Funding Source: major street fund
Impact on the Operating Budget: Will reduce road maintenance costs over time by making structural repairs to major roads.	
Description: Resurface 11 Mile Road Between Troy Street and Campbell Road.	

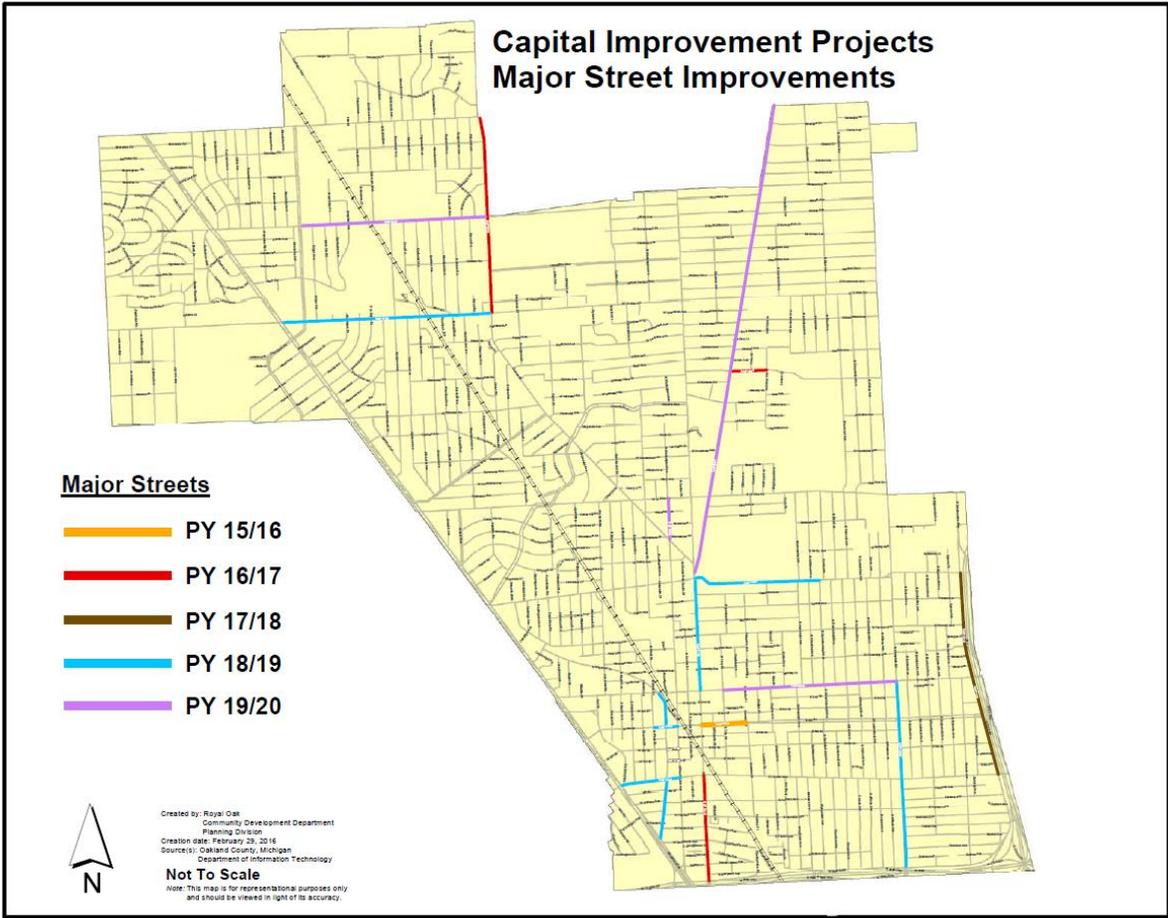
CAP2007	Rochester Road Resurfacing (Main Street-14 Mile Road)
Project Length: 2019-2021	City Share: 100%
Estimated City Cost: \$1,049,000	Funding Source: major street fund / City of Clawson
Impact on the Operating Budget: Will reduce road maintenance costs over time by making structural repairs to major roads.	
Description: Resurface Rochester Road between Main Street and 14 Mile Road.	

CAP2106	N. Main Street Resurfacing (11 Mile Road-Crooks Road)
Project Length: 2018-2020	City Share: 100%
Estimated City Cost: \$850,000	Funding Source: major street fund
Impact on the Operating Budget: Will reduce road maintenance costs over time by making structural repairs to major roads.	
Description: Resurface N. Main Street between 11 Mile Road and Catalpa Drive.	

City of Royal Oak Capital Improvement Plan FY2016-17 to FY2021-22

CAP2207	Normandy Road (Coolidge Highway-Crooks Road)
Project Length: 2019-2021	City Share: 100%
Estimated City Cost: \$1,008,000	Funding Source: major street fund
Impact on the Operating Budget: Will reduce road maintenance costs over time by making structural repairs to major roads.	
Description: Resurface Normandy Road between Crooks Road and Coolidge Highway.	

CAP1907	I-75 Widening Project
Project Length: 2018	City Share: 2.5%
Estimated City Cost: \$4,299,000	Funding Source: major street fund
Impact on the Operating Budget: Unknown	
Description: Local participation cost for the MDOT federally funded I-75 widening project. The project will add a fourth lane for carpooling between 8 Mile Road and M-59. The section north of I-696 and south of 12 Mile Road is scheduled to be done in 2018. The City of Royal Oak City Commission unanimously resolved that it opposes the highway capacity expansion project and will use all legal means at its disposal to prevent this expansion from taking place.	



PARKS AND FACILITIES

CAP1102	Parking Meters
Project Length: 2014-2020 Estimated City Cost: \$700,000	City Share: 100% Funding Source: parking fund / fees
Impact on the Operating Budget: Lower costs for coin collection and possibly increase costs for finance department.	
Description: Replacement of the city parking meters with improved meter technology, as they are aging and becoming obsolete. Technology will provide additional methods of payment which will provide improved service to the visitors.	

CAP1506	Lindell Ice Arena Painting
Project Length: 2018 Estimated City Cost: \$115,000	City Share: 100% Funding Source: ice arena fund / fees
Impact on the Operating Budget: Unknown	
Description: Painting of the interior and exterior of the building.	

CAP1731	Farmer's Market Flooring
Project Length: 2017 Estimated City Cost: \$45,000	City Share: 100% Funding Source: farmer's market fund / grants
Impact on the Operating Budget: Unknown	
Description: Staining of the farmer's market floor to improve appearance and safety.	

CAP1508	Farmer's Market Roll-up Doors
Project Length: 2016-2017 Estimated City Cost: \$38,000	City Share: 100% Funding Source: farmer's market fund / grants
Impact on the Operating Budget: Reduce maintenance costs by \$500 annually.	
Description: Replace the remaining doors under the planned maintenance.	

City of Royal Oak Capital Improvement Plan FY2016-17 to FY2021-22

CAP1902	Sherman Drive Parking Lot
Project Length: 2019	City Share: 100%
Estimated City Cost: \$125,000	Funding Source: parking fund
Impact on the Operating Budget: Reduce maintenance costs by \$500 annually.	
Description: Repave the parking lot surface to reduce maintenance and liability.	

CAP1903	Williams Street Parking Lot
Project Length: 2019	City Share: 100%
Estimated City Cost: \$55,000	Funding Source: parking fund
Impact on the Operating Budget: Reduce maintenance costs by \$400 annually.	
Description: Repave the parking lot surface to reduce maintenance and liability.	

CAP1708	Animal Shelter Access Road
Project Length: 2017	City Share: 100%
Estimated City Cost: \$45,000	Funding Source: unknown
Impact on the Operating Budget: Will reduce annual cold patch maintenance by \$250.	
Description: Pave the access road to the animal shelter and DPS off of Edgar Avenue.	

CAP1709	Second Street Parking Garage
Project Length: 2017	City Share: 100%
Estimated City Cost: \$8,000,000	Funding Source: n/a
Impact on the Operating Budget: Unknown	
Description: Construction of a new 500 space parking garage at Second Street and Center Street.	

CAP1812	Center Street and Catalpa Drive Parking Lot Wall
Project Length: 2018	City Share: 100%
Estimated City Cost: \$45,000	Funding Source: parking fund
Impact on the Operating Budget: Unknown	
Description: Repair of a wall at the Center Street and Catalpa Drive parking lot.	

City of Royal Oak Capital Improvement Plan FY2016-17 to FY2021-22

CAP1813	Police Department Building
Project Length: 2018	City Share: 100%
Estimated City Cost: \$19,200,000	Funding Source: unknown
Impact on the Operating Budget: Unknown	
Description: Construction of a new police department building.	

CAP1814	City Hall Building
Project Length: 2018	City Share: 100%
Estimated City Cost: \$7,000,000	Funding Source: unknown
Impact on the Operating Budget: Unknown	
Description: Construction of a new city hall building.	

CAP1908	Downtown Park Development
Project Length: 2019	City Share: 100%
Estimated City Cost: \$4,500,000	Funding Source: unknown
Impact on the Operating Budget: Unknown	
Description: Construction of a new downtown park.	

CAP1909	Library Improvements / Splash Pad / Radio Tower
Project Length: 2019	City Share: 100%
Estimated City Cost: \$3,100,000	Funding Source: unknown
Impact on the Operating Budget: Unknown	
Description: Improvements to the exterior of the library, construction of a splash pad and relocation of the radio tower in the event a downtown park is developed.	

CAP1301	Tennis Court Surfacing
Project Length: 2013-2017	City Share: 100%
Estimated City Cost: \$52,000	Funding Source: parks capital improvement fund / CDBG fund
Impact on the Operating Budget: Extends life of tennis court structures in city.	
Description: Planned resurfacing of tennis courts at Waterworks, Meininger, Dickinson Park.	

City of Royal Oak Capital Improvement Plan FY2016-17 to FY2021-22

CAP1402	Park Pavilions
Project Length: 2015-2018 Estimated City Cost: \$300,000	City Share: 100% Funding Source: General Fund (Rental Fees)
Impact on the Operating Budget: Rentals will generate future revenue of \$26,700 over the next 5 years.	
Description: Provide rental pavilions for family and group gatherings at four highly used parks Kenwood, Memorial, Exchange, and Red Run.	

CAP1906	Worden Park Lighting Replacement
Project Length: 2017 Estimated City Cost: \$350,000	City Share: 100% Funding Source: parks capital improvement fund / grant
Impact on the Operating Budget: Reduction in number of light poles will reduce lighting costs and improve field use.	
Description: New lighting to replace the entire system, reducing the number of poles and increasing lighting efficiency.	

CAP1511	Normandy Oaks Park
Project Length: 2016-2018 Estimated City Cost: \$3,000,000	City Share: 100% Funding Source: Normandy Oaks asset sales
Impact on the Operating Budget: \$55,000 annual operating cost	
Description: Redevelopment of Normandy Oaks Golf Course into a city park with wide range of recreational activities. Details have not been determined.	

CAP1711	Mark Twain and Elks Parks Parking Pavement
Project Length: 2017 Estimated City Cost: \$130,000	City Share: 100% Funding Source: parks capital improvement fund / CDBG fund
Impact on the Operating Budget: Reduce maintenance costs by \$500 annually.	
Description: Pave two unimproved parking lots.	

City of Royal Oak Capital Improvement Plan FY2016-17 to FY2021-22

CAP1712	Memorial Park Parking Lot Repaving
Project Length: 2017 Estimated City Cost: \$125,000	City Share: 100% Funding Source: parks capital improvement fund / parking fund
Impact on the Operating Budget: Reduce maintenance costs due to ongoing maintenance.	
Description: Repaving of parking lot (performed last in the 1990's).	

CAP1713	Fulton / Kenwood Play Equipment Upgrades
Project Length: 2017 Estimated City Cost: \$90,000	City Share: 100% Funding Source: parks capital improvement fund
Impact on the Operating Budget: Operating costs decrease \$600 annually due to decreased maintenance costs.	
Description: Upgrade of play equipment at Fulton & Kenwood Parks.	

CAP1718	Royal Oak Golf Course Improvements
Project Length: 2017 Estimated City Cost: \$421,000	City Share: 100% Funding Source: Normandy Oaks asset sales
Impact on the Operating Budget: Unknown	
Description: Install a golf cart path, clubhouse deck, and repave the parking lot at the Royal Oak golf course.	

CAP1719	Wagner Park Upgrade of Play Equipment
Project Length: 2018 Estimated City Cost: \$45,000	City Share: 100% Funding Source: CDBG Fund
Impact on the Operating Budget: \$300 annual savings	
Description: Upgrade of play equipment Wagner Park.	

City of Royal Oak Capital Improvement Plan FY2016-17 to FY2021-22

CAP1732	Dondero Park Upgrades
Project Length: 2017	City Share: 100%
Estimated City Cost: \$150,000	Funding Source: CDBG Fund
Impact on the Operating Budget: Unknown	
Description: Resurface sports courts, install additional playground equipment, and renovate baseball diamond.	

CAP1733	Tree Planting Program
Project Length: 2017	City Share: 100%
Estimated City Cost: \$100,000	Funding Source: CDBG Fund
Impact on the Operating Budget: Unknown	
Description: CDBG funds will be utilized to purchase and plant trees within the city's right-of-way and parks.	

CAP1734	Barton South Gazebo
Project Length: 2017	City Share: 100%
Estimated City Cost: \$175,000	Funding Source: CDBG Fund
Impact on the Operating Budget: Unknown	
Description: Install a gazebo to support small scale events.	

CAP1808	Westwood & Worden East Parks Play Equipment
Project Length: 2019	City Share: 100%
Estimated City Cost: \$90,000	Funding Source: CDBG fund
Impact on the Operating Budget: Annual maintenance will decrease by \$300 per structure.	
Description: Update play equipment at Westwood and Worden East Parks. Worden East Park heavily used by city preschool program.	

City of Royal Oak Capital Improvement Plan FY2016-17 to FY2021-22

CAP1809	Whittier Park Parking Lot Paving
Project Length: 2019 Estimated City Cost: \$75,000	City Share: 100% Funding Source: parks capital improvement fund / parking fund / CDBG fund
Impact on the Operating Budget: Will require pavement repair in 5 to 10 years.	
Description: Pave a parking lot at Whittier Park due to increased use of park.	

CAP1904	Upton Park Soccer Field Development
Project Length: 2019 Estimated City Cost: \$75,000	City Share: 100% Funding Source: parks capital improvement fund
Impact on the Operating Budget: Unknown	
Description: Improve open grass area at Upton Park to develop a soccer field.	

CAP1721	Wendland Park Play Equipment
Project Length: 2017 Estimated City Cost: \$45,000	City Share: 100% Funding Source: parks capital improvement fund
Impact on the Operating Budget: Annual maintenance will decrease by \$300 per structure.	
Description: Renovation of Wendland Park play equipment.	

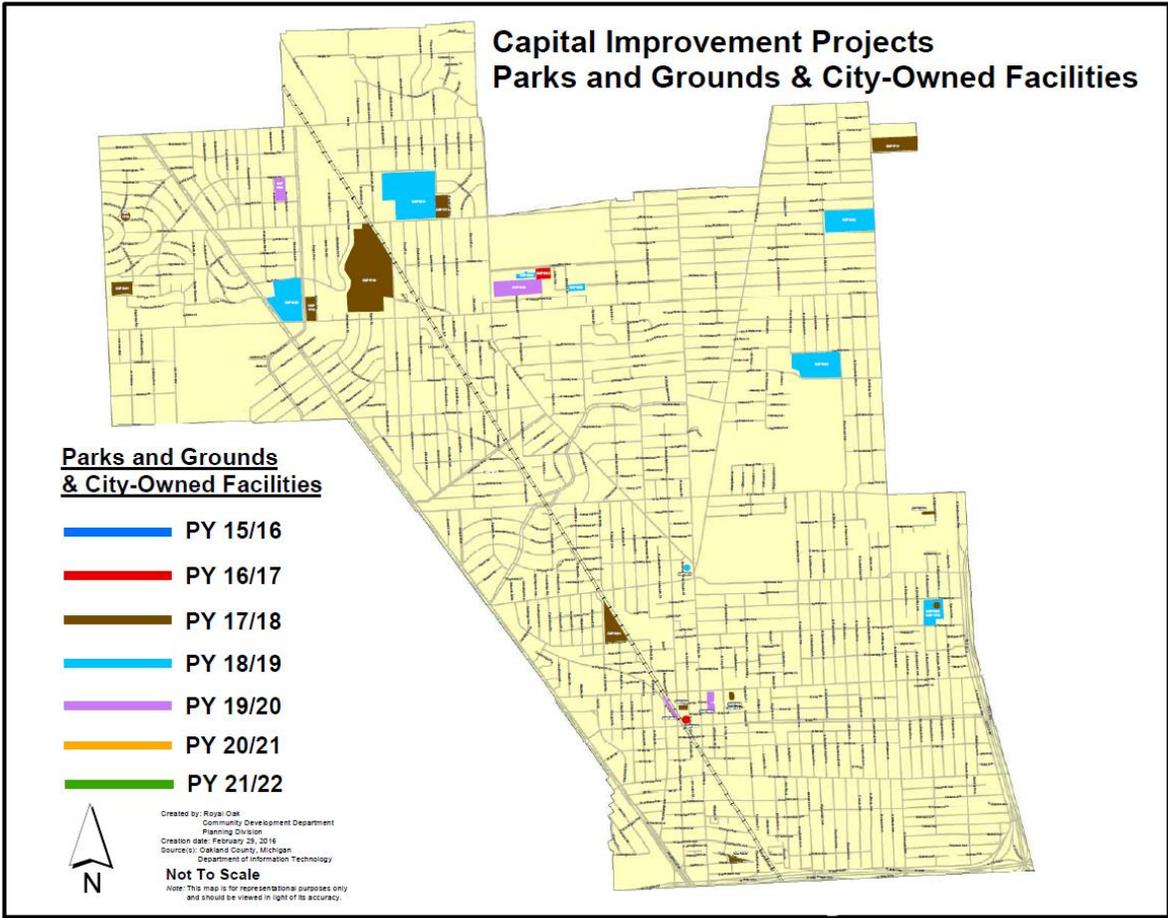
CAP1626	Park Signs
Project Length: 2016-17 Estimated City Cost: \$125,000	City Share: 100% Funding Source: parks capital improvement fund
Impact on the Operating Budget: Installation cost of \$200 per sign for a total of \$5,000.	
Description: Replace park signs within block grant areas. New signs are desired to move city branding forward.	

City of Royal Oak Capital Improvement Plan FY2016-17 to FY2021-22

CAP1722	Woodward Avenue Median Signs
Project Length: 2017 Estimated City Cost: \$35,000	City Share: 100% Funding Source: general fund / major streets
Impact on the Operating Budget: Unknown	
Description: Replace two median signs on Woodward Avenue, one of which was removed due to a vehicle accident.	

CAP1609	Smart Park Development
Project Length: 2016-2017 Estimated City Cost: \$250,000	City Share: 100% Funding Source: crowdfunding / MEDC
Impact on the Operating Budget: Unknown	
Description: Development of a downtown smart park that incorporates technology, sustainable landscaping, and materials that have the lowest impact on the environment.	

CAP1612	Worden Park Parking Lot Resurfacing
Project Length: 2016-2017 Estimated City Cost: \$132,000	City Share: 100% Funding Source: CDBG fund
Impact on the Operating Budget: Reduce maintenance costs due to ongoing maintenance.	
Description: Resurfacing of parking lot at Worden Park.	



INFORMATION TECHNOLOGY

CAP1103	Computer Replacement Program
Project Length: 2016-2022 Estimated City Cost: \$525,000	City Share: 100% Funding Source: IT fund / retained earnings
<p>Impact on the Operating Budget: Costs are anticipated to remain consistent for the proposed replacement, before more extensive service is required to keep older equipment operational.</p> <p>Description: Scheduled replacement of desktop computers when they have reached the end of their useful service life. Useful service life is generally 5 years.</p>	

CAP1104	Office Software and Training Program
Project Length: 2016-2022 Estimated City Cost: \$310,000	City Share: 100% Funding Source: IT fund / retained earnings
<p>Impact on the Operating Budget: Unknown</p> <p>Description: New office software and training program to replace the Office 97 & 2003 versions. A stop gap conversion program is used to open Office 2007 & Office 2010 files from outside contacts and vendors. Uses of cloud based apps are also being reviewed as an additional application. This program is ongoing.</p>	

CAP1105	Server-Network-Cabling Infrastructure
Project Length: 2012-2022 Estimated City Cost: \$474,000	City Share: 100% Funding Source: IT fund / retained earnings
<p>Impact on the Operating Budget: Unknown</p> <p>Description: Upgrade and replace key areas of the City's network, cabling, server hardware, and intrusion protection improvements when appropriate. This program is ongoing.</p>	

City of Royal Oak Capital Improvement Plan FY2016-17 to FY2021-22

CAP1302	GIS Integration
<p>Project Length: 2013-2022 Estimated City Cost: \$415,000</p>	<p>City Share: 100% Funding Source: IT fund / retained earnings</p>
<p>Impact on the Operating Budget: Costs will increase due to license renewals. Reporting capabilities could potentially save time and assist with decision making processes.</p> <p>Description: Integrate geographical information systems (GIS) applications and development into planning, fire, clerk, and engineering and various departments and Oakland County CAMS. This program is ongoing.</p>	

CAP1403	Mobile Workforce
<p>Project Length: 2014-2022 Estimated City Cost: \$120,000</p>	<p>City Share: 100% Funding Source: IT fund / retained earnings</p>
<p>Impact on the Operating Budget: Costs are anticipated to remain consistent, until more extensive service levels are required to keep older equipment operational.</p> <p>Description: This project would address the aging laptop computers for remote and mobile workforce equipment. Consideration and utilization of other electronic devices similar to PDA/smart phones and iPads can be addressed. Accessibility of wireless access points to be implemented. This is an ongoing program.</p>	

CAP1618	GIS Consulting Services
<p>Project Length: 2016-2017 Estimated City Cost: \$100,000</p>	<p>City Share: 100% Funding Source: water and sewer fund</p>
<p>Impact on the Operating Budget: Will streamline multiple functions and improve efficiency.</p> <p>Description: Development of GIS databases beginning with water and sewer and expanding to other areas.</p>	

CAP1723	Desktop Virtualization
Project Length: 2017-2022 Estimated City Cost: \$400,000	City Share: 100% Funding Source: IT fund / retained earnings
Impact on the Operating Budget: Annual software licensing and maintenance costs will increase. Desktop replacement, maintenance, and labor requirements will decrease.	
Description: Create a virtual environment for city employee's computer desktops. This project will provide four benefits: cost savings, simplified management, enhanced security, and increased productivity.	

CAP1726	Disaster Recovery Solution
Project Length: 2017-2022 Estimated City Cost: \$575,000	City Share: 100% Funding Source: IT fund / retained earnings
Impact on the Operating Budget: There will be ongoing operating expenses to provide data and telephony redundancy as well as rental costs for an offsite recovery location.	
Description: Implement a disaster recovery solution to ensure city technology and systems can be quickly recovered in case of a disaster. This could include rental costs for a recovery location, hardware, and cloud computing.	

CAP1724	Fire Department Computers
Project Length: 2017 Estimated City Cost: \$36,000	City Share: 100% Funding Source: IT fund / public safety fund
Impact on the Operating Budget: Unknown	
Description: The fire department needs three desktop computers for each station for a total of nine, as well as three laptops. The computers will be utilized for training, continuing education, and city related communications.	

VEHICLES, EQUIPMENT, LARGE STUDIES, AND OTHERS

CAP1623	Motor Pool Vehicle Replacement Plan
Project Length: 2017-2022 Estimated City Cost: \$11,077,000	City Share: 100% Funding Source: motor pool fund / user charges
Impact on the Operating Budget: Lower maintenance costs	
Description: Vehicle replacement plan for fiscal years 2016-17 to 2021-22; Plan is modified due to operational review modifications and year 2022 is being added to maintain six year period. Detailed schedules begin on the next page.	

CAP1729	Lucas Chest Compression System
Project Length: 2017 Estimated City Cost: \$55,000	City Share: 100% Funding Source: public safety fund
Impact on the Operating Budget: Unknown	
Description: The Lucas Chest Compression System is a piece of equipment that aids responders during CPR. The device maintains continuous, uninterrupted compressions giving patients a better chance at survival.	

CAP1727	Fire Hoses
Project Length: 2017 Estimated City Cost: \$145,000	City Share: 100% Funding Source: public safety fund
Impact on the Operating Budget: Unknown	
Description: To replace approximately 460 lengths of existing fire hoses to conform to NFPA 1962 which states, "Hose manufactured prior to July 1987 to meet the requirements of the 1979 and previous editions of NFPA 1961, standard on fire hose, shall be removed from service." The city currently has many hoses manufactured before 1987 that aren't in compliance with regulations.	

CAP1624	Power Lift Stretcher
Project Length: 2016-2017	City Share: 100%
Estimated City Cost: \$160,000	Funding Source: public safety fund
Impact on the Operating Budget: Lower back strains / workers compensation costs	
Description: Two power stretchers were approved in fiscal year 15-16. This request will provide a power stretcher in each of the two remaining ambulances. The power lift stretchers are strong enough to lift the heaviest of patients and can potentially decrease the number of on duty back-related injuries.	

CAP1728	Paratech Trench Systems
Project Length: 2017	City Share: 100%
Estimated City Cost: \$45,000	Funding Source: public safety fund
Impact on the Operating Budget: Unknown	
Description: The fire department is requesting to purchase Paratech Trench Systems equipment for the technical rescue team. This equipment is for the safety of the team, DPS workers, residents and firefighters. There are dangerous incidents that require the proper equipment to perform rescues. The equipment has been utilized on the Grosse Pointe trench collapse and the Wayne furniture explosion.	

CAP1737	Recycling Carts
Project Length: 2017	City Share: 100%
Estimated City Cost: \$1,250,000	Funding Source: solid waste fund
Impact on the Operating Budget: Should increase credits provided to the city for recycled material.	
Description: Conversion of recycling to single stream will require the use of new larger recycling carts for all residents.	

**VEHICLE REPLACEMENT
2016/2017**

<u>VEH #</u>	<u>YEAR</u>	<u>MAKE & MODEL</u>	<u>ESTIMATED REPLACEMENT COSTS</u>
		ASSESSING	
102	05	Pontiac G-6	\$ 27,500
109	05	Pontiac G-6	\$ 27,500
		BUILDING MAINTENANCE	
733	03	GMC Savana	\$ 33,320
		ENGINEERING	
630	04	GMC Safari	\$ 31,000
631	03	GMC Savana	\$ 33,320
		FIRE	
908	09	Ford Escape	\$ 32,700
909	96	GMC G-6 Van	\$ 36,800
992	08	Freightliner Ambulance	\$ 212,960
		HIGHWAY	
202	10	GMC Sierra	\$ 30,780
246	01	Sterling L8513 - Single	\$ 205,460
251	01	Sterling L8513 - Single	\$ 205,460
285	07	Elgin Sweeper	\$ 180,000
		INSPECTION	
187	09	Ford Escape	\$ 29,700
		MOTOR POOL	
GM031	03	Torro Groundsmaster 345	\$ 56,680
		PARKS & FORESTRY	
715	04	GMC Sierra	\$ 36,780
718	05	GMC Sierra	\$ 36,780
730	03	GMC Savana	\$ 33,320
762	01	Intl Forestry Truck	\$ 176,000
		POLICE	
801	10	Ford Crown Victoria	\$ 35,920
809	09	Ford Crown Victoria	\$ 35,920
825	05	GMC Savana	\$ 38,800
841	08	GMC Envoy	\$ 32,700
861	08	GMC Envoy	\$ 32,700
		SEWER	
445	01	GMC Sierra	\$ 57,000
		WATER MAINTENANCE	
401	09	GMC Sierra	\$ 30,780
441	01	Sterling L/LT9513 - Tandem	\$ 201,447
442	01	Sterling L/LT9513 - Tandem	\$ 201,447
		Total	\$ 2,092,774

**VEHICLE REPLACEMENT
2017/2018**

<u>VEH #</u>	<u>YEAR</u>	<u>MAKE & MODEL</u>	<u>ESTIMATED REPLACEMENT COSTS</u>
		AUTO PARKING	
636	00	GMC Safari	\$ 31,000
		ENGINEERING	
103	10	GMC Sierra	\$ 28,500
		FIRE	
993	08	Freightliner Ambulance	\$ 212,960
		HIGHWAY	
249	06	Sterling L8513 - Single	\$ 205,460
258	02	Sterling L/LT9513 - Tandem	\$ 205,460
286	08	Elgin Sweeper	\$ 180,000
717	09	GMC Sierra	\$ 36,780
1242	98	American Leaf Vacuum	\$ 40,260
		MOTOR POOL/COMMUNICATIONS	
332	05	GMC Savana	\$ 31,320
		MOTOR POOL	
GM061	06	Torro Groundsmaster 345	\$ 56,680
		PARKS & FORESTRY	
713	02	GMC Sierra	\$ 34,780
716	05	GMC Sierra	\$ 34,780
719	05	GMC Sierra	\$ 36,780
1761	98	Brush Bandit Chipper	\$ 43,400
		POLICE	
803	13	Ford Taurus	\$ 37,501
806	13	Ford Taurus	\$ 35,613
810	13	Ford Taurus	\$ 35,603
831	03	Chevy 3500 Van	\$ 38,800
842	10	Ford Taurus	\$ 30,500
		SEWER	
414	04	Ford F-450	\$ 39,800
415	04	Ford F-450	\$ 39,800
		WATER MAINTENANCE	
465	99	GMC/Crane	\$ 174,800
		Total	\$ 1,610,577

**VEHICLE REPLACEMENT
2018/2019**

<u>VEH #</u>	<u>YEAR</u>	<u>MAKE & MODEL</u>	<u>ESTIMATED REPLACEMENT COSTS</u>
		ELECTRICAL	
362	05	Ford F-550 Aerial Truck	\$ 120,000
		HIGHWAY	
232	03	GMC Sierra	\$ 34,780
250	03	Sterling L8513 - Single	\$ 205,460
254	03	Sterling L8513 - Single	\$ 205,460
257	08	Ford F-450	\$ 67,260
259	10	Sterling LT9500 - Tandem	\$ 205,460
261	15	Ford F-250	\$ 37,300
268	09	GMC Sierra	\$ 34,780
1243	98	American Leaf Vacuum	\$ 40,260
1264	01	Ingersoll Air Compressor	\$ 19,200
		INSPECTION	
181	09	Ford Escape	\$ 29,700
		MOTOR POOL	
682	98	Tennant Sweeper	\$ 39,600
670	02	Yale Forklift	\$ 58,500
GM051	05	Torro Groundsmaster 345	\$ 56,680
		PARK & FORESTRY	
776	96	Ford 4630Ldr Tractor	\$ 39,600
1762	03	Brush Bandit Chipper	\$ 43,400
		POLICE	
816	13	Ford Explorer	\$ 39,083
818	10	Chevy Tahoe	\$ 35,700
819	13	BMW Motorcycle	\$ 26,400
820	13	BMW Motorcycle	\$ 26,400
821	13	BMW Motorcycle	\$ 26,400
822	13	BMW Motorcycle	\$ 26,400
823	13	Ford Taurus	\$ 37,697
828	16	Chevy Tahoe	\$ 34,620
862	13	Ford Taurus	\$ 30,500
8901	97	Ford Cutaway Van	\$ 36,800
		SEWER	
443	01	Sterling L8513 - Single	\$ 201,447
474	98	Ford TLB	\$ 124,150
		Total	\$ 1,883,037

**VEHICLE REPLACEMENT
2019/2020**

<u>VEH #</u>	<u>YEAR</u>	<u>MAKE & MODEL</u>	<u>ESTIMATED REPLACEMENT COSTS</u>
		FIRE	
907	14	Ford Explorer	\$ 32,700
		HIGHWAY	
247	09	Sterling L8513 - Single	\$ 205,460
267	02	GMC Sign Truck	\$ 126,000
1241	98	American Leaf Vacuum	\$ 40,260
1245	02	American Leaf Vacuum	\$ 40,260
1469	00	Magnum Cement Saw	\$ 18,600
		ICE ARENA	
791	05	Zamboni	\$ 130,000
		MOTOR POOL	
GM071	07	Torro Groundsmaster 328D	\$ 56,680
		PARKS & FORESTRY	
764	94	Ford Chipper Truck	\$ 130,000
765	03	Sterling/Prentice Log Loader	\$ 205,460
766	01	Sterling L8513 - Single	\$ 205,460
774	01	NH TN-65 Tractor	\$ 33,000
777	96	Ford 4630 Tractor	\$ 33,000
		POLICE	
802	14	Ford Explorer	\$ 39,755
807	14	Ford Explorer	\$ 39,755
813	14	Ford Explorer	\$ 36,675
817	13	Ford Explorer	\$ 39,083
832	13	Ford Taurus	\$ 38,702
843	13	Ford Edge	\$ 30,106
858	13	Ford Taurus	\$ 30,500
859	13	Ford Explorer	\$ 30,571
863	13	Ford Edge	\$ 31,341
		SEWER	
413	09	GMC Savana	\$ 33,320
		WATER MAINTENANCE	
1460	97	Ingersoll Light Tower	\$ 19,800
1466	01	Ingersoll Air Compressor	\$ 19,200
		Total	\$ 1,645,688

**VEHICLE REPLACEMENT
2020/2021**

<u>VEH #</u>	<u>YEAR</u>	<u>MAKE & MODEL</u>	<u>ESTIMATED REPLACEMENT COSTS</u>
		ASSESSING	
104	15	Ford Escape	\$ 29,700
		CABLE	
1055	01	Ford F-550 Van	\$ 640,000
		FIRE	
906	14	Ford Explorer	\$ 32,700
908	09	Ford Escape	\$ 32,700
991	08	Freightliner Ambulance	\$ 212,960
		HIGHWAY	
233	05	GMC Sierra	\$ 34,780
235	05	GMC Sierra	\$ 34,780
252	15	Freightliner 108SD	\$ 205,460
295	93	Hypac Roller	\$ 58,500
1247	02	American Leaf Vacuum	\$ 40,260
1280	02	Target Arrow	\$ 6,700
		INSPECTION	
163	14	Ford Escape	\$ 29,700
182	14	Ford Escape	\$ 29,700
		MOTOR POOL	
1601	92	Ajax Trailer	\$ 21,000
1602	94	Special Events Trailer	\$ 16,800
		PARKS & FORESTRY	
771	04	NH TN-60A2 Tractor	\$ 33,000
778	96	Ford 4630 Tractor	\$ 33,000
2716	92	Ajax Trailer	\$ 16,800
2717	92	Ajax Trailer	\$ 16,800
		POLICE	
804	15	Ford Explorer	\$ 40,348
805	15	Ford Explorer	\$ 39,562
824	16	Ford Explorer	\$ 39,800
826	16	Ford Explorer	\$ 39,800
829	10	Ford Escape	\$ 35,700
830	13	Ford Taurus	\$ 38,702
840	15	Ford Explorer	\$ 34,800
851	15	Ford Taurus	\$ 29,500
854	14	Ford F-150	\$ 34,800
		SEWER	
1467	01	Ingersoll Air Compressor	\$ 19,200
		WATER MAINTENANCE	
491	04	Arrow Hammer	\$ 117,000
		Total	\$ 1,994,552

**VEHICLE REPLACEMENT
2021/2022**

<u>VEH #</u>	<u>YEAR</u>	<u>MAKE & MODEL</u>	<u>ESTIMATED REPLACEMENT COSTS</u>
		BUILDING MAINTENANCE	
737	15	Ford F-250	\$ 34,984
		FIRE	
911	08	E-1 Pumper (Evaluate)	\$ 782,334
967	15	Ford F-350	\$ 40,313
992	16	Ambulance	\$ 212,960
		HIGHWAY	
416	03	GMC Sierra	\$ 34,780
283	02	Bobcat L873	\$ 78,000
1248	98	American Leaf Vacuum	\$ 40,260
		INSPECTION	
164	14	Ford Escape	\$ 29,700
165	15	Ford Escape	\$ 29,700
184	15	Ford Escape	\$ 29,700
185	15	Ford Escape	\$ 29,700
		PARKS & FORESTRY	
775	01	NH D65C82 Tractor	\$ 33,000
779	97	Ford 4630 Tractor	\$ 33,000
1763	96	Altec Chipper	\$ 43,400
1765	95	Altec Chipper	\$ 43,400
1768	01	Bandit Tree Stumper	\$ 32,500
		POLICE	
801	16	Ford Explorer	\$ 35,920
808	15	Ford Explorer	\$ 37,812
809	16	Ford Explorer	\$ 35,920
811	15	Ford Explorer	\$ 38,450
812	15	Chevy Tahoe	\$ 44,040
814	16	Chevy Tahoe	\$ 36,620
815	16	Ford Explorer	\$ 39,800
841	16	Ford Explorer	\$ 32,700
		SEWER	
1481	08	Target Arrow	\$ 6,700
1482	89	Target Arrow	\$ 6,700
		WATER MAINTENANCE	
1483	08	Target Arrow	\$ 6,700
		Total	\$ 1,849,093

PROJECTS UNDER REVIEW

Projects Under Review are projects that may be deemed as worthy and viable; however they are not included as part of the active 2017-2022 Capital Improvement Plan as additional research or review is ongoing. Projects under review may require additional information, studies or city commission policies to be in place before more accurate timelines and/or funding levels can be identified. It is possible that projects under review may not fall under the city's jurisdiction and will require other agencies to move the project forward; while some projects may not fall within the 2017-2022 timeframe.

Fire Station #1 and #2 Construction/Strategic Relocation	
Project Length: N/A	City Share: 100%
Estimated City Cost: \$12,000,000	Funding Source: public safety fund / sale of stations
Impact on the Operating Budget: Unknown	
Description: Strategically relocate two fire stations, eliminating the three current stations. Position one fire station near Gardenia Avenue & Main Street and the other station near 13 Mile Road & Crooks Road.	

Downtown Park Parking Structure	
Project Length: N/A	City Share: 100%
Estimated City Cost: \$20,000,000	Funding Source: n/a
Impact on the Operating Budget: Unknown	
Description: Construction of a city center public parking garage.	

Swimming Pool	
Project Length: N/A	City Share: 100%
Estimated City Cost: \$4,000,000	Funding Source: parks capital improvement fund / CDBG fund / grants / special millage
Impact on the Operating Budget: Sanitizing, maintenance, and operation cost of \$150,000 annually.	
Description: Construction of a city swimming pool.	

I-75 Widening Project	
Project Length: N/A	City Share: 2.5%
Estimated City Cost: \$21,000	Funding Source: major street fund
Impact on the Operating Budget: Unknown	
<p>Description: Local participation cost for the MDOT federally funded I-75 widening project. The project will add a fourth lane for carpooling between 8 Mile Road and M-59. The section south of 12 Mile Road to north of 13 Mile Road is scheduled to be done in 2026 and the section north of 9 Mile Road to north of I-696 is scheduled to be done in 2028. The City of Royal Oak City Commission unanimously resolved that it opposes the highway capacity expansion project and will use all legal means at its disposal to prevent this expansion from taking place.</p>	

CIP #	PROJECT NAME	SUBMITTER RATING	PROJECT COORDINATION	PROJECT TYPE	POTENTIAL FUNDNG SOURCE(S)	ESTIMATED TOTAL PROJECT COST	% CITY SHARE	NON CITY COST	TOTAL CITY COST	PRIOR YRS CITY COST	FUTURE CITY COST (2016-2022)	2016-17 CITY COST	2017-18 CITY COST	2018-19 CITY COST	2019-20 CITY COST	2020-21 CITY COST	2021-22 CITY COST
Water and Sewer Improvements																	
CAP1535	Mohawk Ave. and Sherman Drive (8-inch)	132	Local St. Paving	Replacement	Water & Sewer Fund / Rates	766,000	100%		766,000	383,000	383,000	383,000					
CAP1607	Bassett, Vinton, Greenleaf, Woodsboro, Forestdale Ct., Linwood, Elmhurst, Oliver, Glenwood	145	Local St. Paving	Replacement	Water & Sewer Fund / Rates	2,318,000	100%		2,318,000	1,159,000	1,159,000	1,159,000					
CAP1613	Vinsetta, Sycamore, Northwood, Crooks	145	Local St. Paving	Replacement	Water & Sewer Fund / Rates	1,992,000	100%		1,992,000	996,000	996,000	996,000					
CAP1745	14 Mile Rd. 12" Water main Woodward to Tonawanda and Mankato to RR, 12" Water Main	145	Local St. Paving	Replacement	Water & Sewer Fund / Rates	1,138,000	100%		1,138,000	-	1,138,000	569,000	569,000				
CAP1710	Rochester Rd. 12" Water Main, Ferris & Vermont 8" Water Main (Donald-14 Mile)	145	Local St. Paving	Replacement	Water & Sewer Fund / Rates	1,236,000	100%		1,236,000	-	1,236,000	618,000	618,000				
CAP1720	Normandy Rd. 12" Water Main (Woodward Ave. to Normandy Ct.)	145	Major St. Paving	Replacement	Water & Sewer Fund / Rates	1,022,000	100%		1,022,000	-	1,022,000	511,000	511,000				
CAP1730	Woodward Ave. 12" Water Main, Judson, Nakota & Rosewood 8" Water Main (Sec. 5&7)	145	Local St. Paving	Replacement	Water & Sewer Fund / Rates	1,186,000	100%		1,186,000	-	1,186,000	593,000	593,000				
CAP1735	Dallas universal jt. replace (2017), Blair 8" WM (2018; Lincoln-6th)	130	Local St. Paving	Replacement	Water & Sewer Fund / Rates	843,000	100%		843,000	-	843,000	406,000	309,000	128,000			
CAP1740	Chester Rd. 12" Water Main, Dukeshire, Yorba Linda, Rockingham, Ravena 8" Water Main (Sec	145	Local St. Paving	Replacement	Water & Sewer Fund / Rates	1,032,000	100%		1,032,000	-	1,032,000	516,000	516,000				
CAP1750	14 Mile Rd., Rochester to Campbell, 8" Water Main (Section 3)	145	Local St. Paving	Replacement	Water & Sewer Fund / Rates	500,000	100%		500,000	-	500,000	250,000	250,000				
CAP1810	Houstonia Ave. 12" Water Main (Beechwood-Main), Oakdale St. 8" Water Main	145	Local St. Paving	Replacement	Water & Sewer Fund / Rates	938,000	100%		938,000	-	938,000	469,000	469,000	469,000			
CAP1820	Forest, Clifton, Fern, Ardmore, Virginia 8" Water Main (Sec. 10 & 15)	145	Local St. Paving	Replacement	Water & Sewer Fund / Rates	1,090,000	100%		1,090,000	-	1,090,000	545,000	545,000				
CAP1830	Lexington 12" Water Main, Glendale & Alexander 8" Water Main (Sec. 3 & 4)	145	Local St. Paving	Replacement	Water & Sewer Fund / Rates	1,138,000	100%		1,138,000	-	1,138,000	569,000	569,000				
CAP1840	Blair, DeVillen, Girard, Parkdale 8" Water Main (Sec. 3 & 10)	145	Local St. Paving	Replacement	Water & Sewer Fund / Rates	1,088,000	100%		1,088,000	-	1,088,000	544,000	544,000				
CAP1850	Vermont Ave. (Girard-12 Mile) & Houstonia Ave. (Vermont-Campbell) 8" Water Main	145	Local St. Paving	Replacement	Water & Sewer Fund / Rates	1,136,000	100%		1,136,000	-	1,136,000	568,000	568,000				
CAP1910	Stephenson 12" Water Main (4th-Gardenia), Forest 8" Water Main (Symes-Stephenson)	145	Local St. Paving	Replacement	Water & Sewer Fund / Rates	1,614,000	100%		1,614,000	-	1,614,000	807,000	807,000				
CAP1920	11 Mile, Farnum, Helene, Vermont, Longfellow, Rembrandt 8" Water Main (Sec.14, 22 & 23)	145	Local St. Paving	Replacement	Water & Sewer Fund / Rates	1,338,000	100%		1,338,000	-	1,338,000	669,000	669,000				
CAP1930	5th St. 12" Water Main (Knowles-Alexander), 7th, 6th Street & Altadena 8" Water Main	145	Local St. Paving	Replacement	Water & Sewer Fund / Rates	1,306,000	100%		1,306,000	-	1,306,000	653,000	653,000				
CAP1935	Harrison 12" Water Main (Main-Batavia), Houstonia 8" Water Main (Northwood-Evergreen)	145	Local St. Paving	Replacement	Water & Sewer Fund / Rates	1,244,000	100%		1,244,000	-	1,244,000	622,000	622,000				
CAP2010	St. Charles, Frederick, S. Dorchester, S. Kenwood - 8" Universal Jt. Replace (Sec.15&23)	130	Local St. Paving	Replacement	Water & Sewer Fund / Rates	1,332,000	100%		1,332,000	-	1,332,000	666,000	666,000				
CAP2020	S. Edgeworth & S. Minerva 8" Universal Jt. Replace (Lincoln - 11 Mile)	130	Local St. Paving	Replacement	Water & Sewer Fund / Rates	1,582,000	100%		1,582,000	-	1,582,000	791,000	791,000				
CAP2030	Helene, E. Hudson, Yale, Brockton 8" Universal Jt. Replace (Section 23)	130	Local St. Paving	Replacement	Water & Sewer Fund / Rates	1,366,000	100%		1,366,000	-	1,366,000	683,000	683,000				
CAP2110	N. Minerva, Mace & S. Edison 8" Universal Jt. Replace (Section 14 & 23)	130	Local St. Paving	Replacement	Water & Sewer Fund / Rates	1,096,000	100%		1,096,000	-	1,096,000	548,000	548,000				
CAP2120	N. Maple, Huntington & Tufts 8" Universal Jt. Replace (section16, 21, 23)	130	Local St. Paving	Replacement	Water & Sewer Fund / Rates	996,000	100%		996,000	-	996,000	498,000	498,000				
CAP2210	Installation of 8" water main to replace existing 6" water main in target area	145	Local St. Paving	Replacement	Water & Sewer Fund / Rates	2,860,000	100%		2,860,000	-	2,860,000	1,430,000	1,430,000				
CAP2220	Installation of 8" water main to replace existing 6" water main in target area	145	Local St. Paving	Replacement	Water & Sewer Fund / Rates	3,197,000	100%		3,197,000	-	3,197,000	1,598,500	1,598,500				
CAP2310	Installation of 8" water main to replace existing 6" water main in target area	145	Local St. Paving	Replacement	Water & Sewer Fund / Rates	1,170,000	100%		1,170,000	-	1,170,000	585,000	585,000				
CAP2320	Installation of 8" water main to replace existing 6" water main in target area	145	Local St. Paving	Replacement	Water & Sewer Fund / Rates	1,816,000	100%		1,816,000	-	1,816,000	908,000	908,000				
CAPXX75	Sewer Televising & Root Control (City Wide) (CAP1775 - CAP2275)	126	Local St. Paving	Rehabilitation	Water & Sewer Fund / Rates	3,030,000	100%		3,030,000	-	3,030,000	440,000	462,000	485,000	509,000	534,000	600,000
CAPXX85	Sewer Lining (City Wide) (CAP1785-CAP2285)	126	N/A	Rehabilitation	Water & Sewer Fund / Rates	4,113,000	100%		4,113,000	-	4,113,000	600,000	630,000	662,000	695,000	750,000	776,000
CAP1617	Spot Sewer Repairs (City Wide)	126	Local St. Paving	Rehabilitation	Water & Sewer Fund / Rates	3,036,000	100%		3,036,000	-	3,036,000	441,000	463,000	486,000	510,000	536,000	600,000
CAP1606	2016 Sewer and Water Main Improvements (Windemere, Vinsetta, Edgewood, Park, Ravena, D)	145	Local St. Paving	Rehab/Replace	Water & Sewer Fund / Rates	2,066,000	100%		2,066,000	1,033,000	1,033,000	1,033,000					
CAP1736	Green Infrastructure Feasibility Study	80	N/A	Study	Water & Sewer Fund / Rates	150,000	100%		150,000	10,000	140,000	140,000					
Water & Sewer Improvements						50,735,000		-	50,735,000	3,571,000	47,154,000	8,655,000	7,616,000	7,207,000	6,605,000	8,077,000	8,994,000
Sidewalk Improvements																	
CAP1604	2016 E. Fourth Street Streetscape Improvements (Main Street-Knowles Street DDA)	105	Major St. - CAP1604	Replacement	DDA	1,100,000	100%		1,100,000	550,000	550,000	550,000					
CAPXX02	2016 Sidewalk Improvements Program (section 5.6,32) (CAP1602 - CAP1702)	139	N/A	Replacement	Special Assesment Roll	7,026,000	4%	6,745,000	281,000	154,000	127,000	88,000	39,000				
CAPXX01	2016 Concrete Pavement And Prepaid Sidewalk Improv.(City Wide)(CAP1701 - CAP2201)	120	N/A	Replacement	Water & Sewer Funds / Rates	3,543,000	100%		3,543,000	978,000	2,565,000	410,000	435,000	470,000	470,000	380,000	400,000
CAP1611	2016 Main Street Streetscape (10 Mile Road to Lincoln Avenue)	105	Major St. - CAP1610	Replacement	DDA / Special Assessment	825,000	44%	458,000	367,000	45,000	322,000	322,000					
Sidewalk Improvements						12,494,000		458,000	5,291,000	2,095,000	3,564,000	1,370,000	474,000	470,000	470,000	380,000	400,000
Local Street Improvements																	
CAPXX05	Millage Concrete Street Repairs (CAP1705 - CAP2205)	133	N/A	Replacement	Local Streets fund	8,203,000	100%		8,203,000	-	8,203,000	1,201,000	1,288,000	1,249,000	1,366,000	2,039,000	1,060,000
CAPXX15	Millage Asphalt Resurfacing (CAP1715 - CAP2215)	133	N/A	Replacement	Local Streets fund	14,303,000	100%		14,303,000	-	14,303,000	2,405,000	2,763,000	2,812,000	2,201,000	1,739,000	2,383,000
CAPXX25	Millage Joint Sealing (CAP1725 - CAP2225)	133	N/A	Replacement	Local Streets fund	459,000	100%		459,000	-	459,000	76,000	91,000	85,000	111,000	54,000	42,000
CAPXX35	Millage Road Remove and Reconstruct (CAP1735 - CAP2035)	132	N/A	Replacement	Local Streets fund	3,485,000	100%		3,485,000	-	3,485,000	1,588,000	1,052,000	534,000	311,000		
CAPXX45	Road Work on Water / Sewer Projects (CAP1745 - CAP2245)	145	W & S Projects	Replacement	Local Streets fund	4,647,000	100%		4,647,000	-	4,647,000	1,252,000	626,000	903,000	1,019,000	488,000	359,000
CAPXX55	Special Assessments (CAP1755 - CAP2255)	133	N/A	Replacement	Local Streets fund	4,202,000	63%	1,551,000	2,651,000	-	2,651,000	676,000	395,000	395,000	395,000	395,000	395,000
Local Street Improvements						35,299,000		1,551,000	33,748,000	10,712,000	33,748,000	7,198,000	6,215,000	5,978,000	5,403,000	4,715,000	4,239,000
Major Street Improvements																	
CAP1101	Surveying Services	125	N/A	New	Major / Local Streets Funds, W&S Fund	80,000	100%		80,000	40,000	40,000	10,000	10,000	10,000	10,000		
CAP1401	Traffic Signal Upgrade Project	143	N/A	Replacement	Major Streets Fund / Safety Grant	2,475,000	100%		2,475,000	1,239,000	1,236,000	618,000	618,000				
CAP1618	Traffic Signal Survey and Optimization Plan	102	N/A	Study	Major Streets Fund / Grant	400,000	25%	300,000	100,000	50,000	50,000	50,000					
CAP1619	NB Stephenson Highway (Part A) Resurfacing	128	Major St. - CAP1621	Replacement	Major Streets Fund	270,000	100%		270,000	-	270,000	15,000	255,000				
CAP1621	NB Stephenson Highway (Part B) Resurfacing	128	Major St. - CAP1619	Replacement	Major Streets Fund	270,000	100%		270,000	-	270,000	15,000	255,000				
CAP1604	2016 E. Fourth Street Streetscape Improvements (Main Street-Knowles Street DDA)	105	Sidewalk - CAP1604	Replacement	Major Streets Fund (17.5%) / DDA (82.5%)	999,000	100%		999,000	480,000	519,000	519,000					
CAP1626	Crooks Road Resurfacing (14 Mile Road-Normandy and Webster-13 Mile Road)	140	N/A	Replacement	Major Streets Fund / City of Clawson	326,000	75%	82,000	244,000	7,000	237,000	237,000					
CAP1635	SA Paving Girard Avenue (Rochester Road to Ardmore Avenue)	112	N/A	New	Major Streets fund / Special Assessment	291,000	56%	129,000	162,000	81,000	81,000	81,000					
CAP1703	13 Mile Road Asphalt Resurfacing (Woodward Avenue to Crooks Road)	140	N/A	Replacement	Major Streets Fund	495,000	100%		495,000	-	495,000	15,000	480,000				
CAP1610	Main Street Improvements (10 Mile Road to Lincoln Avenue)	128	Sidewalk - CAP1611	Replacement	Major Streets Fund	1,240,000	48%	650,000	590,000	50,000	540,000	540,000					
CAP1622	Ferndale Bike Route Loop Extension (Irving, Harrison, Lafayette, Lincoln)	100	N/A	New	Major Streets Fund	50,000	100%		50,000	10,000	40,000	40,000					
CAP1704	W. 4th Street, Lafayette Avenue & W. Lincoln Avenue Asphalt Resurfacing	140	N/A	Replacement	Major Streets Fund	700,000	100%		700,000	-	700,000	20,000	680,000				
CAP1706	Central Business District Street Resurfacing (6th Street & 7th Street)	140	N/A	Replacement	DDA	271,000	100%		271,000	-	271,000	9,000	262,000				
CAP1707	Gardenia Avenue Reconstruction (Main Street to Gainsborough Avenue)	133	N/A														

CIP #	PROJECT NAME	SUBMITTER RATING	PROJECT COORDINATION	PROJECT TYPE	POTENTIAL FUNDNG SOURCE(S)	ESTIMATED TOTAL PROJECT COST	% CITY SHARE	NON CITY COST	TOTAL CITY COST	PRIOR YRS CITY COST	FUTURE CITY COST (2016-2022)	2016-17 CITY COST	2017-18 CITY COST	2018-19 CITY COST	2019-20 CITY COST	2020-21 CITY COST	2021-22 CITY COST
CAP1732	Dondero Park Upgrades	76	N/A	Replacement	CDBG Fund	150,000	100%		150,000	-	150,000	150,000					
CAP1733	Tree Planting Program	91	N/A	New	CDBG Fund	100,000	100%		100,000	-	100,000	100,000					
CAP1734	Barton South Gazebo	80	N/A	New	CDBG Fund	175,000	100%		175,000	-	175,000	175,000					
CAP1808	Westwood & Worden East Parks Play Equipment	97	N/A	Replacement	CDBG Fund	90,000	100%		90,000	-	90,000			90,000			
CAP1809	Whittier Park Parking Lot Paving	102	N/A	New	Parks Cap. Imp Fund / Parking Fund / CDBG	75,000	100%		75,000	-	75,000			75,000			
CAP1904	Upton Park Soccer Field Development	97	N/A	New	Parks Capital Improve. Fund	75,000	100%		75,000	-	75,000			75,000			
CAP1721	Wendland Park Play Equipment	118	N/A	Replacement	Parks Capital Improve. Fund	45,000	100%		45,000	-	45,000	45,000					
CAP1626	Park Signs	76	N/A	Replacement	Parks Capital Improve. Fund	125,000	100%		125,000	17,000	108,000	108,000					
CAP1722	Woodward Avenue Median Signs	83	N/A	New	General Fund / Major Streets	35,000	100%		35,000	-	35,000	35,000					
CAP1609	SMART Park Development	100	N/A	New	Crowdfunding, MEDC	250,000	100%		250,000	150,000	100,000	100,000					
CAP1612	2016 CDBG Worden Park Parking Lot Resurfacing	91	N/A	New	CDBG Fund	132,000	100%		132,000	66,000	66,000	66,000					
Parks & Grounds						Subtotal	5,665,000	-	5,665,000	618,000	5,047,000	3,637,000	920,000	240,000	250,000	-	-
Information Technology																	
CAP1103	Computer Replacement Program	42	N/A	Replacement	IT Fund / User Charges	525,000	100%		525,000	75,000	450,000	75,000	75,000	75,000	75,000	75,000	75,000
CAP1104	Office Software and Training Program	37	N/A	Replacement	IT Fund / User Charges	310,000	100%		310,000	22,000	288,000	48,000	48,000	48,000	48,000	48,000	48,000
CAP1105	Server-Network-Cabling Infrastructure	43	N/A	Replacement	IT Fund / User Charges	474,000	100%		474,000	149,000	325,000	75,000	50,000	50,000	50,000	50,000	50,000
CAP1302	GIS Integration	39	CAP1618	New	IT Fund / User Charges	415,000	100%		415,000	40,000	375,000	75,000	60,000	60,000	60,000	60,000	60,000
CAP1403	Mobile Workforce	37	N/A	New	IT Fund / User Charges	120,000	100%		120,000	16,000	104,000	48,000	16,000	8,000	8,000	16,000	8,000
CAP1618	GIS Consulting Services	145	CAP1302	Study	Water & Sewer Fund / Rates	100,000	100%		100,000	50,000	50,000	50,000					
CAP1723	Desktop Virtualization	47	N/A	New	IT Fund / User Charges	400,000	100%		400,000	-	400,000	150,000	50,000	50,000	50,000	50,000	50,000
CAP1724	Fire Department Computers	125	N/A	New	IT Fund / User Charges / Public Safety Fund	36,000	100%		36,000	-	36,000	36,000					
CAP1726	Disaster Recovery Solution	106	N/A	New	IT Fund / User Charges	575,000	100%		575,000	-	575,000	200,000	75,000	75,000	75,000	75,000	75,000
Information Technology						Subtotal	2,955,000	-	2,955,000	352,000	2,603,000	757,000	374,000	366,000	366,000	374,000	366,000
Vehicles / Equipment / Large Studies / Other																	
CAP1623	Motor Pool Vehicle Replacement Plan	125	N/A	Replacement	Motor Pool Fund / User Charges	11,077,000	100%		11,077,000	-	11,077,000	2,093,000	1,611,000	1,883,000	1,646,000	1,995,000	1,849,000
CAP1624	Power Stretchers (4)	104	N/A	New	Public Safety Fund	160,000	100%		160,000	80,000	80,000	80,000					
CAP1727	Fire Hoses	135	N/A	Replacement	Public Safety Fund	145,000	100%		145,000	-	145,000	145,000					
CAP1728	Paratech Trench Systems	125	N/A	New	Public Safety Fund	45,000	100%		45,000	-	45,000	45,000					
CAP1729	Lucas Chest Compression System	125	N/A	New	Public Safety Fund	55,000	100%		55,000	-	55,000	55,000					
CAP1737	Recycling Carts (25,000)	116	N/A	Replacement	Solid Waste Fund	1,250,000	100%		1,250,000	-	1,250,000	1,250,000					
Vehicles / Equipment / Other						Subtotal	12,732,000	-	12,732,000	80,000	11,402,000	3,668,000	1,611,000	1,883,000	1,646,000	1,995,000	1,849,000
GRAND TOTAL OF ALL CITY PROJECTS						350,581,000	-	171,389,000	171,989,000	19,768,000	162,071,000	35,669,000	49,654,000	26,556,000	17,524,000	17,840,000	16,028,000
Projects Under Review																	
	Fire Station #1 and #2 Construction/Strategic Relocation	N/A	N/A	Replacement	Public Safety Fund / Sale of Stations	12,000,000	100%		12,000,000	-	12,000,000						
	Downtown Park Parking Structure	79	N/A	New		20,000,000	100.0%		20,000,000	-	20,000,000						

Capital Improvement Project Instructions

A capital improvement plan (CIP) is a multi-year planning instrument used to identify needs and potentially the financing sources for public infrastructure improvements. The purpose of a CIP is to facilitate the orderly planning of infrastructure improvements; to maintain, preserve, and protect the city's existing infrastructure system; and to provide for the acquisition or scheduled replacement of equipment to ensure the efficient delivery of services that the community desires.

Preparation of CIP is done under the authority of the Michigan Planning Enabling Act (PA 33 of 2008). The goal is to use the CIP as a tool to implement the city's various master plans, goals, policies and to assist in the city's financial planning.

The CIP plays an important role by providing the link between planning and budgeting for capital expenditures. The CIP process occurs prior to the budget process as the CIP will be used to develop the capital and operating portions of the department requested budget.

Approval of the CIP document by the planning commission **does not** signify final legal appropriation of any project contained within the plan. Rather, by approving the CIP the planning commission acknowledges that they agree that the project presents a reasonable interpretation of the upcoming needs/wants for the city, with the projects contained in the first year of the plan *potentially* becoming the basis for the city's capital budget. It is important to note that the priority ranking on the "Assessment Form" does not necessarily correspond to funding sequence.

Instructions

- If you have a **NEW** capital *infrastructure* project request is equal to or in excess of \$10,000 please complete the following forms:
 - Capital Improvement Plan – Project Application **Form 1** (2 pages)
 - Project Application – (cost breakdown) **Form 3**
 - Capital Improvement Assessment **Form 4**

- If you have a **NEW** equipment/vehicle/ study/professional Services /Technology/Other Project request is equal to or in excess of \$10,000 please complete the following forms:
 - Capital Improvement Plan – Project Application **Form 1** (2 pages)
 - Capital Improvement Plan – Equipment/Vehicle/Study/Professional Service/ Technology/ Other Application **Form 2**
 - Project Application – (cost breakdown)**Form 3**
 - Capital Improvement Assessment **Form 4**

MODIFICATION FOR EXISTING PROJECT: If you have a modification to a CIP project that was submitted in a prior year, or wish to delete a prior year CIP project - please fill out the forms or highlight the change on the original form and resubmit. Changes such as the needs assessment rating, scope of the project, fiscal year of project or estimated change in cost are considered modifications.

PLEASE SUBMIT COMPLETED FORMS TO FINANCE BY MONDAY, JANUARY 4TH 2016. ANY PROJECTS THAT DEVELOP FROM THE CITY COMMISSION STRATEGIC BUDGET SESSION ARE DUE TO FINANCE BY JANUARY 26, 2016.

Form 1 FY2017 – 2022 Capital Improvement Plan – Project Application

Project Name/Title: _____

Program Area _____

Prepared By: _____ Date Prepared: _____

CIP ID #: _____ (to be determined later)

New Project **Modification of Existing Project** **Deletion of Existing Project**

Project Description: Provide a brief description of project:

Planning Context: Is the project part of an Adopted Program, Policy or Plan?

Yes (Identify Program/policy/plan): _____

No

List the adopted program or policy, and how this project directly or indirectly applies.

Planning Context: Is the City legally obligated to perform this project?

Yes - Directly

Yes -Indirectly

No

Please describe City's legal requirement:

Schedule: Estimated project beginning and ending dates. Projects may take several years to complete, so please fill out the multi-year schedule (Form 3). If applicable, be sure to include any work performed in prior years, including studies or other planning by filling in the "cost before FY15/16" column.

Coordination: Please identify if this project is dependent upon or should coordinate with one or more other CIP projects and please describe the relationship:

Project Priority: Low, Medium, High

_____ Priority within Program Area

_____ Priority Citywide

Form 1 FY2017 – 2022 Capital Improvement Plan – Project Application (page 2)

Prior Approval: Is this project included the FY15/16 Adopted or any prior years' budget? Has this project already been approved by any Board or Commission? (Please check appropriate box(es) below)

- Yes No
- City Commission Planning Commission Other _____
- 15/16 Budget Prior Year Budget: _____

Total Estimated Project Cost: In present value (Amount shown here should agree with total on Form 3)

\$ _____

List all funding options available for this project

Recommended funding option(s) to be used (i.e.: Tax Revenue, Fee Revenue, and Bond Issuance, fund balance, etc...)

Basis of the Cost Estimate: Please check the following:

- Cost of comparable facility / equipment Cost estimate from engineer/architect
- Other _____ Ballpark "guesstimate"

Budget Impact (Costs): Any and all future operating costs this project will cause. Wages, benefits, utilities, maintenance; supplies etc... (Should agree with Form 3 worksheet)

Budget Impact (Savings): Any and all future operating savings this project will cause. Wages, benefits, utilities, maintenance, supplies etc... (Should agree with Form 3 worksheet)

If Cost Impact Exceeds Savings Impact: Please explain in detail the increased level of services that will be provided with the implementation of this project (or explain justification for project).

Form 2
FY2017 – 2022 Capital Improvement Plan –
Equipment/Vehicle/Study/Technology/Other Application

Project Title: _____

Date Form Prepared: _____

Department: _____

CIP #: _____ (to be determined later)

Forms of Acquisition: Please check one of the following

Purchase Rental / Lease Other

Number of Units Requested: _____

Estimated Service Life (Years): _____

Below costs should tie with Form 3

<u>Direct Costs:</u>	<u>Per Unit (\$):</u>	<u>Total Cost (\$):</u>
Purchase Price or Annual Rent / Lease	_____	_____
Plus: Installation or Related Charges	_____	_____
Plus: Annual Operational Costs	_____	_____
Less: Annual Operational Savings	_____	_____
Less: Trade-in, Salvage Value, Discount	_____	_____
Net Purchase Cost / Annual Rent	_____	_____

Are you requesting this project to be on a replacement schedule? (example: Fire Dept. needs to purchase 40 turn-out gear/suits every 7 years)

YES NO

If yes, please describe the cycle

FORM 4 FY2016/17-2021/22 CAPTIAL IMPROVEMENT NEEDS ASSESSMENT

Project Name/Title:
 CIP # (to be determined later)
 Department:
 Total Score:
 Submitter's Name

	Score Range	Rater Score	Weight	Rate X Weight
1 Projects contribution to health, safety, and welfare				
Eliminates a known hazard (accident history)	5		5	
Eliminates a potential hazard	4			
Materially contributes	3			
Minimally contributes	2			
No Impact	1			
2 Project is needed to comply with Local, State or Federal Law				
Yes <input type="checkbox"/> Indirectly <input type="checkbox"/> Directly	5		5	
No	0			
3 Project conforms to Adopted Program, Policy or Plan				
Project is consistent with adopted City Council policy or plan	5		4	
Project is consistent with Administrative policy	3			
No policy / plan in place	0			
4 Project remedies an existing or projected deficiency				
Completely Remedy Problem	5		3	
Partially Remedy Problem	3			
No	0			
5 Contributes to long-term needs of community / (Projects useful life)				
More than 30 years	5		2	
21 - 30 years	4			
11 - 20 years	3			
4 -10 years	2			
3 years or less	1			
6 Impact Measures – Net Present Value & Internal Rate of Return (# of years to Recoup Costs)				
High / 0 – 3 years	5		3	
Medium-High / 4 – 7 years	4			
Medium / 8 – 11 years	3			
Medium-Low / 12 – 15 years	2			
Low / 16 – 20 years	0			
Never				
7 Service area of project				
Regional	5		2	
City-Wide	4			
Several neighborhoods	3			
Less than several neighborhoods	1			
8 Department priority				
High	5		2	
Medium	3			
Low	1			
9 Project delivers level of service desired by community				
High	5		3	
Medium	3			
Low	1			

Note: Assessment form is not intended to be scientific