

110 N. Poplar Street • PO Box 218 • West Branch, Iowa 52358 (319) 643-5888 • Fax (319) 643-2305 • www.westbranchiowa.org • <u>city@westbranchiowa.org</u>

## PLANNING AND ZONING COMMISSION MEETING Tuesday, July 24, 2018 • 7:00 p.m. West Branch City Council Chambers, 110 N. Poplar St.

Council Quorum May Be Present

- 1. Call to Order
- 2. Roll Call
- 3. Approve Agenda/Consent Agenda/Move to action.
  - a. Approve minutes from the May 29, 2018 Planning and Zoning Commission Meeting.
- 4. Public Hearing/Non-Consent Agenda./Move to action.
  - a. Approve Amended Urban Renewal Plan. /Move to action.
  - b. Review & approve Cedar's Edge / Little Lights on the Lane Site Plan. /Move to action.
  - c. Discussion Review draft site plan for The Meadows Part 4.
  - d. Discussion Chapter 165.34 (I-2) and 165.37 (CI-2), revisions to area regulations
  - e. Comprehensive Plan update discussion
    - i. Chapter 10, Environmental Stewardship (renamed)
- 5. City Staff Reports
- 6. Comments from Chair and Commission Members
- 7. The next regularly-scheduled Planning and Zoning Commission Meeting September 25, 2018 at 7:00 p.m.
- 8. Adjourn

Planning & Zoning Commission Members: Chair John Fuller, Vice Chair Ryan Bowers, Sally Peck, Gary Slach, Emilie Walsh, Tom Dean, Vacant · Zoning Administrator: Terry Goerdt · Deputy City Clerk: Leslie Brick

Mayor: Roger Laughlin · Council Members: Jordan Ellyson, Colton Miller, Brian Pierce, Nick Goodweiler, Jodee Stoolman City Administrator/Clerk: Redmond Jones II · Fire Chief: Kevin Stoolman · Library Director: Nick Shimmin Parks & Rec Director: Melissa Russell · Police Chief: Mike Horihan · Public Works Director: Matt Goodale

## City of West Branch Planning & Zoning Commission Meeting May 29, 2018 West Branch City Council Chambers, 110 North Poplar Street

Chairperson John Fuller opened the meeting of the Planning & Zoning Commission at 7:00 p.m. welcoming the audience and following City Staff; Deputy City Clerk Leslie Brick, Zoning Administrator Terry Goerdt, City Administrator Jones and Mayor Roger Laughlin. Commission Members Gary Slach, Ryan Bowers, Emilie Walsh and Tom Dean were present. Sally Peck was absent.

#### Approve Agenda/Consent Agenda/Move to action.

Approve the May 29, 2018 agenda. Motion by Bowers, second by Slach to approve the agenda. Absent: Peck. Motion carried on a voice vote.

Approve minutes from the March 27, 2018 Planning and Zoning Commission meeting. Motion by Walsh, second by Dean to approve the minutes. Absent: Peck. Motion carried on a voice vote.

Approve minutes from the May 1, 2018 Planning & Zoning Commission meeting. Motion by Bowers, second by Dean to approve minutes. Absent: Peck. Motion carried on a voice vote.

#### Public Hearing/Non-Consent Agenda

Public Hearing on the matter of re-zoning of the following described parcel located at 116 N. 1<sup>st</sup> Street, West Branch, Cedar County, Iowa. Rezoning parcel #0500-13-05-357-015-0 from CB-1 to RB-1.

Fuller opened the public hearing at 7:03 p.m. David Poppen summarized his intent for the property and turn it into a duplex with living space on both the upper and lower levels. Poppen stated that the building's vestibule did not meet the twenty-five foot setback requirement for RB-1 zoning change, however Poppen said he presented his situation to the Zoning Board of Adjustment earlier this month and was granted a variance for the vestibule. There were no public comments. Fuller closed the public hearing at 7:04 p.m.

Approve a recommendation to the City Council for the rezoning of the following described parcel located at 116 N. 1<sup>st</sup> Street, West Branch, Cedar County, Iowa. Rezoning parcel #0500-13-05-357-015-0 from CB-1 to RB-1. /Move to action.

Motion by Walsh, second Bowers to approve the rezoning of 116 N. 1<sup>st</sup> Street from CB-1 to RB-1. AYES: Walsh, Bowers, Fuller, Slach, Dean. Absent: Peck. NAYS: None. Motion carried.

#### Discuss and approve the draft the Planned Unit Development Ordinance. /Move to action.

Fuller described the planned unit development ordinance for the former Croell Redi-Mix property. Fuller said he had met with the Mayor Laughlin, City Attorney Olson and City Administrator Jones and made some additional changes after further research on PUD's. The commission discussed how the PUD would be administered and the on-going communication between the developer, City staff and community to come up with an agreeable and desirable re-development of the current site.

Motion by Walsh, second by Dean to approve the draft PUD ordinance. AYES: Walsh, Dean, Bowers, Fuller, Slach. NAYS: None. Absent: Peck. Motion carried on a voice vote.

#### Discuss Comprehensive Plan progress

Fuller presented the revisions to Chapter 7 – West Branch Economy to the commission for their review which states a variety of goals and objectives. Fuller asked the commission to review and provide comments and asked for this to be an approval item for the next meeting.

#### COMMENTS FROM CHAIR AND COMMISSION MEMBERS

Goerdt commented that he has been busy with building inspections with all of the new construction going on. He also said that US Autoforce just passed their final inspection for the remodel of their new location and will be moving in soon. Goerdt also advised the commission that a stop work order was placed on the Hilltop condo development for not meeting a couple of the approved site plan requirements. A meeting was held with staff, developer and realtors and the approved site plan was reviewed. At this time, three building permits had been issued. One condo duplex is complete (sold and occupied), while two others are pre-sold and under construction. One contingency of the site plan was that the developer was required to obtain an easement for storm water drainage from a resident on Pedersen Street and that had not yet been completed. Another issue was the lack of landscaping. The developer said they were close to getting the easement signed and that they expected it to be signed any day. In regard to the landscaping, both parties agreed that landscaping would be installed around the three duplex condos that were under construction, but not around the private drive (or next phase of the project). After all parties understood the site plan requirements and what needed to occur next, the City agreed to lift the stop work order but advised the developer that no additional building permits would be issued or road work could commence until the outlined issues were addressed and resolved.

Laughlin said he got permission from the property owner of the lot between Sullivan Street and the Greenview subdivision for an easement create a trail connection for the purpose of walking and golf carts but did not indicate a start or completion date.

Dean said he was disappointed to see the Council remove parking spaces and landscaping at Cubby Park due to financial constraints. He said the commission reviewed and approved the Cubby Park site plan with those items. Fuller commented that the commission makes recommendation to the Council, but ultimately they have final decision making power. Bowers asked if the changes were financial or value engineering to put toward other areas of the park. Laughlin explained that the Council is looking for ways to trim back on the project to prepare for the contingency. The commission expressed that if the financial situation changes the parking and landscaping be installed as planned.

#### <u>Adjourn</u>

Motion by Bowers, second by Walsh to adjourn the Planning & Zoning Commission meeting at 8:13 p.m. Motion approved on a voice vote.

Submitted by: Leslie Brick Deputy City Clerk



Prepared by: Kevin D. Olson, West Branch City Attorney, PO Box 5640, Coralville, Iowa 52241 (319)351-2277 Return to: City of West Branch, PO Box 218, West Branch, Iowa 52358 (319) 643-5888

## West Branch Urban Renewal Plan Amended and Restated

City of West Branch, Iowa

Prepared by the City of West Branch May, 2016

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## I. INTRODUCTION

The purpose of the West Branch Urban Renewal Plan ("the Plan) is to encourage the continued stability and vitality of the economic well being of the City of West Branch through economic development.

The primary goals of the plan are to stimulate, through public action and commitments, private investments and developments within the area, including, but not limited; commercial, industrial and retail activities and surrounding municipal facilities. In order to achieve the objectives of the West Branch Urban Renewal Plan, the City of West Branch will undertake the urban renewal actions specified in this Plan, pursuant to the powers granted to it under chapter 403 of the Iowa Code, <u>Urban Renewal Law</u>, and Chapter 15A of the Iowa Code.

## **II. URBAN RENEWAL PLAN OBJECTIVES**

The overall goal of the West Branch Urban Renewal Plan, as amended from time to time, is to encourage economic development by providing infrastructure improvements to accommodate development of commercial and industrial uses in the City of West Branch.

The following objectives have been established for this Urban Renewal Area:

- A. To preserve and create an environment within the area which will protect the health, safety and general welfare of the residents of West Branch.
- B. To provide a safe and efficient circulation system for both vehicles and pedestrian linkages.
- C. To encourage attractive, convenient, and suitable development.
- D. To ensure that the area is adequately served with public utilities and streets; including storm and sanitary sewers, water, power, gas and telephone.
- E. To facilitate the development and maintenance of open spaces, park spaces, and recreational facilities and opportunities for its citizens and the businesses located in said Urban Renewal Area.

## **III. DISTRICT BOUNDARIES**

#### 1989 West Branch Urban Renewal Area

#### Tract A:

The West 259.00 feet of a parcel of land in the north  $\frac{1}{2}$  of the SW  $\frac{1}{4}$  of Section 8, Township 79 North, Range 4 West of the 5<sup>th</sup> P.M. in Cedar County, Iowa as recorded in Plat Book 5, page 320 in the Auditor's Office of Cedar County, Iowa, except the south 40.00 feet thereof more particularly described as follows: Commencing at a point of reference at the southwest corner of the north  $\frac{1}{2}$  of the SW  $\frac{1}{4}$  of Section 8; thence north 90°00' 00" E, 50.00 feet along the south line of said north  $\frac{1}{2}$  to a found  $\frac{5}{8}$ " iron pin at a point of intersection with the easterly right-of-way line with County Road "D"; thence N 0°33' 00" W, 304.00 feet along the easterly right-of-way line to an iron pin being the point of beginning of Parcel "A"; thence N 90°00' 00" E, 259.00 feet to an iron pin; thence S 74°51' 00" W, 215.9 feet along the southerly right-of-way line to an iron rail; thence S 24°43' 00" W, 118.90 feet along said southerly right-of-way line to an iron rail along the easterly right-of-way line of County Road "D"; thence S 0°33' 0" W, 118.90 feet along said southerly right-of-way line to an iron rail along the easterly right-of-way line of County Road "D"; thence S 0°33' 0" W, 118.90 feet along said southerly right-of-way line to an iron rail along the easterly right-of-way line of County Road "D"; thence S 0°33' 0" E, 421.00 feet to the point of beginning, and also

#### Tract B:

Also a parcel of land in the SE corner of said recorded plat in Plat Bok 5, page 320 more particularly described as follows: Commencing at a point of reference at the SW corner of the north ½ of the SW ¼ of Section 8, Township 79 North, Range 4 West of the 5th P.M. in Cedar County, Iowa; thence N 90° 00' 00" E, 50.00 feet along the south line of said north ½ to a found 5/8" iron pin at the point of intersection with the easterly right-of-way line of County Road "D"; thence N 0° 33' 00" W, 264.00 feet along said easterly right-of-way line to a found 5/8" iron pin; thence N 90° 00' 00" E, 453.19 feet to an iron pin being the point of beginning of Parcel "B"; thence N 90° 00' 00" E, 465.98 feet to a found 5/8" iron pin; thence N 31 21' 00" W, 270.20 feet to an iron pin; thence S 54' 39' 30" W, 398.92 feet to the point of beginning, subject to easements and restrictions of record.

#### Tract C:

A tract of land located in the SW ¼ and the SW ¼ of Section 8, Township 79 North, Range 4 West of the 5th P.M., Cedar County, Iowa, and more particularly described as follows: Commencing at the southwest corner of the SE ¼ of said Section 8; thence N 00°21' West (assumed bearing 1805.0 feet on the west line of the SE ¼ of said Section 8) to the point of beginning of the tract herein described; thence N 90°00' West 1717.4 feet; thence North 00°33' West 380.00 feet; thence S 74° 51'W, 350.0 feet; thence N 00°33'W, 213.5 feet to the intersection with the southerly right-of-way of Interstate 80; thence N 74°51' East 668.1 feet along said southerly right-of-way line; thence N 81°36'E, 228.5 feet along said southerly right-of-way; thence N 88°47' East 1122.8 feet along said southerly right-of-way; thence S 36°10' East 107.6 feet to a point on the east line of the SW ¼ of said Section 8 and a point 50 feet radially distant westerly of the centerline of the C.R.I. & P. Railroad, said point being on the westerly right-of-way of said Railroad and the beginning of an 11,904.3 foot radius non-tangent curve whose center bears N 53°04' 17" E; thence southerly along

said curve and said right-of-way through a central angle of 04 00' 11" an arc distance of 831.71 feet; thence N 90 00' W, 518.6 feet to the point of beginning. Said tract contains 33.1 acres.

#### Tract D:

Commencing at the SW corner of the north ½ of the SW ¼ of Section 8, Township 79 North, Range 4 West of the 5th P.M., Cedar County, Iowa, thence in an easterly direction along the south line of the north ½ of the SW ¼ of said Section 8 a distance of 50 feet to a point on the east rightof-way line of County Road "D" and the point of beginning of the tract herein described; thence continuing in an easterly direction along the said south line of the north half of the SW ¼ of said Section 8, a distance of 1,119.17 feet to a point; thence in a northerly direction along a line which is parallel with the west line of the north ½ of the SW ¼ of said Section 8, a distance of 264.00 feet to a point; thence in a westerly direction along a line parallel with the south line of the north ½ of the SW ¼ of said Section 8, a distance of 1,119.17 feet to a point on the east right-of-way line of County Road "D"; thence in a southerly direction along said east right-of-way line of County Road "D" a distance of 264.00 feet to the point of beginning, containing 6 acres more or less, subject to zoning, easements of record, if any, public roads, and real estate taxes for 1971 and succeeding years.

#### 1994 Amendment to West Branch Urban Renewal Area

#### Part A:

Deleted by this Amended and Restated Urban Renewal Plan.

#### Part B:

All of the right-of-way of Main Street within the City of West Branch to the east of the westerly boundary of Cedar Addition Part Two;

#### Part C:

All of the right-of-way of North Second Street between Main and College Street; all of the rightof-way of College Street between North Second Street and North Fourth Street;

#### Part D:

All property located in an area bounded on the south by a line extended of west of the northern right-of-way boundary of Orange Street to the Hoover Trail; bounded to the west and including the former Railroad right-of-way, Hoover Trail and the eastern right-of-way line of Downey Street, bounded to the north by the West Branch Corporate Limits and bounded to the east and including all of the right-of-way of North Fourth Street north of College Street; these properties described as follows:

Sidwell Parcel Numbers 13-05-100-001; 13-05-100-004; 13-05-302-003; 13-05-302-004, 13-05-302-005, 13-05-302-006; 13-05-302-007; 13-05-302-008; 13-05-302-009 and Sidwell Parcel Numbers 13-05-353-001 Hawkeye Land Co.; 13-05-335-027 Hoover Trail, Inc.; 13-05-352-013 Hoover Trail, Inc.; 13-05-352-015 Private Owner; 13-05-302-001 Former RR, owner unknown; 13-05-302-002 Former RR, owner unknown; 13-05-301-004 Hoover Trail, Inc.; and an unnumbered parcel running parallel to Parcel 13-05-301-004 on its east side and part of the former railroad properties.

<u>Part E</u>

All of the City of West Branch right-of-way of Poplar Street south of Main Street.

Part F:

All of the City of West Branch right-of-way of both Downey Street north of the northwest corner of Lacina Subdivision connecting to and including Parkside Drive north to Main Street.

## Part G:

All of the property of the City of West Branch Sewage Treatment Lagoon site described as Parcel No. 13-08-400-005.

## 2002 Amendment to the West Branch Urban Renewal Area

The NW ¼ of the NW ¼ of Section 17, Township 79 North, Range 4 West of the 5th P.M., Cedar County, Iowa; the NE ¼ of the NW ¼ of Section 17, Township 79 North, Range 4 West of the 5th P.M., Cedar County, Iowa; the SW ¼ of the NE ¼ of Section 17, Township 79 North, Range 4 West of the 5th P.M., Cedar County, Iowa; and the North sixty (60) acres in the south ½ of the NW ¼ of Section 17, Township 79 North, Range 4 West of the 5th P.M., Cedar County, Iowa; and the North sixty (60) acres in the south ½ of the NW ¼ of Section 17, Township 79 North, Range 4 West of the 5th P.M., Cedar County, Iowa; and the North sixty (60) acres in the south ½ of the NW ¼ of Section 17, Township 79 North, Range 4 West of the 5th P.M., Cedar County, Iowa.

## 2014 Amendment to the West Branch Urban Renewal Area

The right of way of West Main Street from the corporate limits easterly to the existing boundary of said Urban Renewal Area; and

The right-of-way of Cedar-Johnson Road from its intersection with West Main Street northerly to the corporate limits of the City; and

The NW1/4 of the SE 1/4 of Section 6, Township 79 North, Range 4 West of the 5th P.M., West Branch, Cedar County, Iowa, except the following:

1. The east 300.17 feet of the north 1161.51 feet thereof; and

2. That part of Pedersen Valley, Part Two, Addition to West Branch, Cedar

County, Iowa, located therein; and

3. That part of Pedersen Valley, Part Four, Addition to West Branch, Cedar County, Iowa , located therein; and

4. Commencing at the NE corner of said Pedersen Valley, Part Four, Addition to West Branch, Cedar County, Iowa, thence South 88°40'44"W, 166.43 feet along the North line of said Pedersen Valley, Part Four, to the west line of the SE 1/4 of said Section 6, thence North 01° 17'36"W, 313.89 feet, thence N 86°39'40"E, 166.38 feet, thence S 01°19'16"E, 319.75 feet to the point of beginning,

Said parcels now being referred to as the "May 2014 Parcels."

## **IV. PUBLIC PURPOSE ACTIVITIES**

To meet the objectives of the Plan Amendment, the City of West Branch is prepared to initiate and support development through the following public purpose activities:

- Pre-development planning, including feasibility analysis and engineering, and consulting;
- Installation, construction and reconstruction of streets, utilities (including water, sanitary sewer systems and storm sewer systems), parking facilities, park spaces, open spaces, recreational trails and facilities, and other public improvements, including but not limited to the streetscape improvements;
- Site preparation, including planning, design, and engineering;
- Environmental Assessment and remediation and related purposes;
- Acquisition, sale or lease of real property for development purposes;
- Provide financial assistance for eligible public and private development and development efforts;
- Library;
- Community Center.

All public purpose activities shall meet the development restrictions and limitations placed upon it by the Plan.

## V. DEVELOPMENT AREA

Land Use Development and Redevelopment Requirements:

The intent of the West Branch Urban Area is to promote the development and redevelopment of quality commercial and industrial uses in the Area.

## Land Use and Zoning

The Zoning Map for the City of West Branch is attached hereto as Attachment "B". The major land use categories in the Urban Renewal Areas are public, industrial and commercial uses.

## I-2 Industrial Zoning District.

A. Permitted Uses. Any uses allowed in an I-1 Industrial Zoning District

B. Special Exception Uses. The following uses are allowed by Special Exception from the Zoning Board of Adjustment. These uses are manufacturing, fabricating and processing which has not previously been listed provided the proposed use will not constitute a fire hazard or emit objectionable smoke, noise, vibration, odor or dust.

#### HCI – Highway Commercial Industrial District.

- A. Permitted Uses.
  - 1. Tow Truck service business and impound lots, with restrictions
  - 2. Uses allowed in a B-2 District
  - 3. Uses allowed in an I-1 District
- B. The signage for the District shall be governed by Section 306B of the Code of lowa.
- C. The regulations of the B-2 District shall apply for B-2 uses, except no rear or side yards are required.
- D. The regulations of the I-1 District shall apply for I-1 uses, except no rear or side yards are required.

## Planning and Design Criteria

Except as specifically contemplated above, the bulk standards, parking requirements and signage restrictions established within the City of West Branch's Zoning Ordinance for applicable zoning districts shall apply to all development and redevelopment activities. Specific design standards applicable to the West Branch Development Area may also be developed to ensure compatible development of the area. The planning criteria to be used to guide the physical development of the West Branch Development Area are those standards and guidelines contained within the City of West Branch's Zoning Ordinance, the West Branch Community Plan and other local, state, and federal codes and ordinances

## **VI. URBAN RENEWAL PROJECTS**

The urban renewal powers to be exercised to achieve the objectives of the plan include, without limitation, provision of public improvements and facilities, dedication of public right of way, the establishment and enforcement of controls, standards and restrictions on land use, building and signage, arrangement of financing and any other activity pertaining to planning and implementing an urban renewal project authorized under the Urban Renewal Law of the State of Iowa.

#### . Proposed Activities

- 1. Improvement, installation, construction and reconstruction of curbs and gutters, sidewalks, landscaping, lighting, signage, water mains, storm sewer mains and detention facilities, and sanitary sewer mains within the area.
- 2. Acquisition of property for public improvements and private development and redevelopment.
- 3. Demolition and clearance of improvements not compatible with or necessary for future public, commercial, and or industrial redevelopment.
- 4. Disposition of any property acquired in the Urban Renewal Area, including without limitation, sale and initial leasing or retention by the City itself, at such property's fair market value.
- 5. Building and maintenance of recreational facilities and other public improvements, including, but not limited to, open spaces, park spaces, a community center, library, athletic fields, parking facilities and landscaping.

The following projects will be paid for using monies generated from the tax increment pursuant to Chapter 403 of the Code of Iowa:

- 1) Procter & Gamble Hair Care, LLC, Phases 2 and 3 (abatement only)
- 2) Water Tower #2 (\$481,373)
- 3) Casey's Marketing Company TIF Rebate Agreement (\$512,709.25)
- 4) South Downey Road Improvements Project (\$1,500,000)
- 5) Parkside Drive Road Improvements Project (\$118,708)
- 6) Tidewater Drive Road Improvements Project (\$200,000)

7) Pedersen Valley Park and Recreation & Library Complex (\$2,300,000). The City purchased 18.6 acres of land in Pedersen Valley for the purpose of providing community members with a community park, called for in the West Branch Comprehensive Plan, amended April 1, 2013. This project will construct athletic fields, concession stand, restrooms, trails and community center for a total cost of \$7,000,000. The TIF contribution will be capped at \$2,300,000. TIF revenues would only be

appropriated for the street and utility portions of the project to include water, sewer and stormwater. No TIF funds will be used on any public buildings, ball fields or trails.

The City is proposing to use incremental property tax revenues to pay for approximately 33% of the Project, and proposed to use monies from the Local Option Sales Tax and a Bond Referendum to fund the additional pieces. This project is only feasible if the city uses tax increment revenues to fund a portion of the Project. The LOST will generate \$1,700,000. To fund the rest with GO Bond revenues would raise the City's property taxes by 25.75%, which is not feasible. The TIF revenues are the final piece of funding. If the bond referendum or LOST does not pass through city voters, the TIF funding will still be capped at \$2,300,000, which means the entire project does not get constructed.

- 8) Fawcett Drive Road Improvements Project (\$1,000,000)
- 9) Slach's Commercial Subdivision Project (\$1,000,000)
- 10) Tidewater Rebate Agreement (\$100,000)
- 11) Acciona legal fees and administrative costs (\$250,000)
- 12) Johnson-Cedar Road (\$2,500,000)
- 13) 4<sup>th</sup> Street Reconstruction Phase 2 (\$750,000)
- 14) Downtown East Redevelopment Project (\$400,000)
- B. Standards and restrictions

All development in the urban renewal area will comply with existing zoning, subdivision and building code ordinances.

#### C. Special Financing Activities

To meet the objectives of this Amended and Restated Urban Renewal Plan and to encourage the development of the Urban Renewal Area and private investment therein, the City of West Branch is prepared to provide financial assistance to qualified industries and businesses through the making of loans or grants under chapter 15A of the Iowa Code and through the use of tax increment financing under 403 of the Iowa Code.

1. Chapter 15A Loan or Grants

The City of West Branch has determined that the making of loans or grants of public funds to industries and businesses within the Urban Renewal Area may be necessary to aid in the planning, undertaking, and carrying out of the urban renewal projects authorized under this Urban Renewal Plan within the meaning of Section 384.24(3) of the Iowa Code.

2. Tax Increment Financing

The City of West Branch is prepared to utilize tax increment financing as a means of financing the development costs associated with the development

of the Urban Renewal Area. Bonds or notes may be issued by the City under the authority of section 403.9 of the Iowa Code (tax increment revenue bonds), section 384.24A (Ioan agreements), or section 384.24(3)(q) and Section 403.12 (general obligation bonds) and tax increment reimbursement may be sought for, among other things, the following costs (if and to the extent incurred by the city):

- A. The construction of public improvements, such as streets and bridges, sanitary sewers, storm sewers, water mains, sidewalks, or streetscape in the Urban Renewal Area;
- B. Acquisition and preparation of land for development and redevelopment by private developers and the City;
- C. Acquisition and development of open spaces and park spaces for the benefit of the citizens of West Branch;
- D. The making of loans or grants to industries and businesses under 15A of the lowa Code, including debt service payments on any bonds or notes issued to finance such loans or grants; and
- E. Providing the local matching share for CEBA, RISE. IEDA or other state and federal grants and loans.
- 3. Attachment A (Urban Renewal Areas), Attachment B (Current Zoning), and Attachment C (List of Obligations) of the West Branch Urban Renewal Plan are hereby amended to be included to the existing exhibits to the Urban Renewal Development Area.

All other provisions of the West Branch Urban Renewal Plan, as amended, shall remain in full force and effect as provided therein.

## **VII. FINANCING ACTIVITIES**

The City of West Branch intends to utilize the various financing tools to finance physical improvements within the Urban Renewal Area. These include:

## A. Tax Increment Financing

Under Section 403.19 of the Iowa Code, urban renewal areas may utilize the tax increment mechanism (TIF) to finance the costs of public improvements associated with redevelopment projects. Upon creation of a tax increment district, the assessment base is frozen and the same amount of the tax revenue collected just prior to the creation of the district is segregated in a separate fund for the benefit of each taxing jurisdiction. The increased taxes generated by any development that takes place in the tax increment district after the TIF establishment date is placed in a special fund to pay the indebtedness incurred by the City in furtherance of an urban renewal project. Once such indebtedness is retired, the taxing jurisdiction may collect its proportionate share of the increased tax revenue generated from the district.

#### B. General Obligation Bonds

Under Sections 384.23-384.36 of the Iowa Code, the City has the authority to issue and sell G.O. bonds for the specified essential and general corporate purposes, including the acquisition and construction of certain public improvements within the Urban Renewal Area. Such bonds are payable from the levy of taxes on all taxable property within the City of West Branch.

#### C. Proposed Amount of Indebtedness

At this time the extent of improvements and new development within the Urban Renewal Area is only generally known. At such, the amount and duration of use of the tax increment revenues for public improvements and or private improvements can only be estimated. The actual use and amount of tax increment revenues to be used by the City of district activities will be determined at the time specific development is proposed.

It is anticipated that the maximum amount of indebtedness, including principal, interest and City advances, which will qualify for tax increment revenue reimbursement during the duration of this Plan, including acquisition, public improvements and private development assistance, will not exceed \$5,000,000.00.

At the time of adoption of the Plan, the City of West Branch's current general obligation debt is \$3,798,132 (a list of general obligations is found on Attachment C) and the applicable constitutional debt limit is \$9,174,616.

## **VIII. STATE AND LOCAL REQUIREMENTS**

The City of West Branch in the adoption of this AMENDED AND RESTATED URBAN RENEWAL PLAN and its supporting documents has complied with all provisions necessary to conform to state and local law.

## IX. DURATION OF THE APPROVED URBAN RENEWAL PLAN

This Amended and Restated West Branch Urban Renewal Plan and West Branch Urban Renewal Areas shall remain in full force and effect and will continue until such time that the City of West Branch has received full reimbursement from all incremental taxes of its advances, principal, and interest payable on all Tax Increment Financing or general obligations issues to carry out the objectives and projects of the area.

## X. SEVERABILITY

In the event that one or more provisions contained in this Plan shall be held for any reason to be invalid, illegal, unauthorized, or unenforceable in any respect, such invalidity, illegality, unauthorization, or unenforceability shall not effect any other provision of this Plan and this Plan shall be construed and implemented as if such provision had never been contained herein.

## XI. AMENDMENT OF THE APPROVED URBAN RENEWAL PLAN

This Plan may be amended by the City Council from time to time to respond to development opportunities. Any such amendment shall be completed in accordance with Chapter 403 of the Iowa Code, <u>Urban Renewal Law.</u>

## **XII. ATTACHMENTS**

- A. Urban Renewal District Location Map
- B. Zoning Map
- C. List of Obligations

## ATTACHMENT A – URBAN RENEWAL AREA MAPS

# Attachment A



## ATTACHMENT B – WEST BRANCH ZONING MAP



AL.

-

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315TH





## VEENSTRA & KIMM, INC.

PROJECT NO. 368100 MARCH 13, 2014



# ZONING MAP CITY OF WEST BRANCH, IOWA

Vissiopo, and the GIS User Community

## ATTACHMENT C – LIST OF OBLIGATIONS

#### Debt Limit.

The amount of general obligation debt a political subdivision of the State of Iowa can incur is controlled by the constitutional debt limit, which is an amount equal to 5% of the actual taxable value of property within the corporate limits, taken from the last County tax list. The issuer's debt limit, based upon said valuation, amounts to the following:

100% Valuation by Individual Levy Authority as of 1/1/2012	\$	183,492,329 X 5%
Statutory Debt Limit		\$ 9,174,616
General Obligation Bonds Water Revenue Bonds Loan Agreement – Streetsweeper/Skid Loan Agreement – Lawsuit Settlement Loan Agreement – Fire Station Expansion	\$ \$ \$ \$ \$	2,624,432 673,000 149,364 156,855 194,481

Total debt subject to limit	\$ 3,125,132
Percentage of debt limit consumed	34.1%

# DRAWINGS FOR PROPOSED IMPROVEMENTS CEDARS EDGE CLUB HOUSE AND EVENT CENTER WEST BRANCH, IOWA

# LEGAL DESCRIPTION

A PART OF THE NORTHWEST QUARTER OF SECTION 6, TOWNSHIP 79 NORTH, RANGE 4 WEST OF THE FIFTH PRINCIPAL MERIDIAN, CEDAR COUNTY, IOWA, DESCRIBED AS FOLLOWS:

BEGINNING AT THE NORTHEAST CORNER OF AUDITOR'S PARCEL B AS RECORDED IN BOOK F, PAGE 12 OF THE RECORDERS OFFICE OF CEDAR COUNTY; THENCE N69°52'28"E ALONG THE NORTH LINE OF SAID AUDITOR'S PARCEL B, A DISTANCE OF 302.50 FEET; THENCE S20°07'32"E ALONG THE EAST SIDE OF FUTURE DEVELOPMENT LOT, A DISTANCE OF 98.76 FEET; THENCE S29°05'13""E ALONG THE EAST SIDE OF FUTURE DEVELOPMENT LOT, A DISTANCE OF 117.52 FEET; THENCE S31°51'36"E ALONG THE EAST SIDE OF FUTURE DEVELOPMENT LOT, A DISTANCE OF 117.52 FEET; THENCE N70°01'30"E ALONG THE EAST SIDE OF FUTURE DEVELOPMENT LOT, A DISTANCE OF 117.52 FEET; THENCE N54°46'24"E ALONG THE EAST SIDE OF FUTURE DEVELOPMENT LOT, A DISTANCE OF 80.38 FEET; THENCE N49°45'40"E ALONG THE EAST SIDE OF FUTURE DEVELOPMENT LOT, A DISTANCE OF 76.21 FEET; THENCE N01°02'17"W ALONG THE EAST SIDE OF FUTURE DEVELOPMENT LOT, A DISTANCE OF 59.27 FEET; THENCE N88°57'43"E ALONG THE EAST SIDE OF FUTURE DEVELOPMENT LOT, A DISTANCE OF 80.00 FEET; THENCE S01°02'17"E ALONG THE EAST SIDE OF FUTURE DEVELOPMENT LOT, A DISTANCE OF 404.61 FEET; THENCE S88°57'43"W ALONG SOUTH SIDE FUTURE PUBLIC STREET, A DISTANCE OF 60.00 FEET; THENCE S01º02'17"E ALONG EAST SIDE FUTURE PUBLIC STREET, A DISTANCE OF 60.00 FEET; THENCE S88º57'43"W ALONG THE EAST SIDE OF FUTURE DEVELOPMENT LOT, A DISTANCE OF 125.00 FEET; THENCE S01°02'17"E ALONG THE EAST SIDE OF FUTURE DEVELOPMENT LOT, A DISTANCE OF 658.38 FEET; THENCE N87°07'55"E ALONG NORTH LINE SAID SOUTHWEST QUARTER, A DISTANCE OF 613.53 FEET; THENCE N01º06'13"W ALONG THE EAST SIDE OF FUTURE DEVELOPMENT LOT, A DISTANCE OF 1093.06 FEET TO THE POINT OF BEGINNING.

SAID PARCEL CONTAINS 16.56 ACRES, AND IS SUBJECT TO EASEMENTS AND RESTRICTIONS OF RECORD.

# **DESIGN STANDARDS AND REFERENCE DRAWINGS**

THE PROPOSED IMPROVEMENTS INCLUDED IN THESE DRAWINGS HAVE BEEN DESIGNED IN ACCORDANCE WITH CITY OF WEST BRANCH REQUIREMENTS AND THE IOWA STATEWIDE URBAN DESIGN AND SPECIFICATIONS (SUDAS), LATEST ADDITION, UNLESS NOTED OTHERWISE ON THE PLANS.

THE FOLLOWING DESIGN EXCEPTIONS ARE REQUIRED:

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NONE

THE FOLLOWING SUDAS FIGURES ARE INCLUDED BY REFERENCE:

FIGURE	TITLE
3010.101	TRENCH BEDDING AND BACKFILL ZONES
3010.103	FLEXIBLE GRAVITY PIPE TRENCH BEDDING
4010.201	SANITARY SEWER SERVICE STUB
4040.231	SUBDRAINS
4040.233	SUBDRAIN OUTLETS
5010.101	THRUST BLOCKS
5010.102	TRACER SYSTEM
5010.901	MINIMUM CLEARANCE BETWEEN WATER SERVICE AND STRUCTURE
5020.201	FIRE HYDRANT ASSEMBLY
6010.301	CIRCULAR SANITARY SEWER MANHOLE
6010.401	CIRCULAR STORM SEWER MANHOLE
6010.508	SINGLE OPEN-THROAT CURB INTAKE, LARGE BOX
6010.601	CASTINGS FOR SANITARY SEWER MANHOLES
6010.602	CASTINGS FOR STORM SEWER MANHOLES
9040.102	FILTER BERM AND FILTER SOCK
9040.104	ROLLED EROSION CONTROL INSTALLATION - CHANNEL
9040.119	SILT FENCE
9040.120	STABILIZED CONSTRUCTION ENTRANCE



COVER SHEET	
CIVIL	
LEGEND AND GENERAL NOTES	
GENERAL NOTES	
TOPOGRAPHIC SURVEY AND REMOVAL	
OVERALL SITE AND GRADING PLAN	
CLUB HOUSE SITE & UTILITY PLAN	
CLUB HOUSE GRADING & EROSION CONTROL PLAN	
LANDSCAPE	
LANDSCAPE PLAN	
	COVER SHEET CIVIL LEGEND AND GENERAL NOTES GENERAL NOTES TOPOGRAPHIC SURVEY AND REMOVAL OVERALL SITE AND GRADING PLAN CLUB HOUSE SITE & UTILITY PLAN CLUB HOUSE GRADING & EROSION CONTROL PLAN CLUB HOUSE GRADING & EROSION CONTROL PLAN LANDSCAPE LANDSCAPE LANDSCAPE PLAN

## **APPLICANT INFORMATION**

OWNER/DEVELOPER:
SEXTION CONSTRUCTION 192 HILLTOP CIRCLE
WEST BRANCH, IA 52358
DEVELOPER'S ATTORNEY:
DOUGLAS D. RUPPERT
IOWA CITY, IA 52240

## **PROJECT INFORMATION**

SCOPE OF WORK: CONSTRUCTION OF A NEW CLUB HOUSE AND EVENT CENTER TO REPLACE THE EXISTING STRUCTURES ON THE CEDARS EDGE GOLF COURSE PROPERTY. PROJECT WILL INCLUDE THE DEMOLITION OF THE EXISTING CLUB HOUSE AND OTHER STRUCTURES, NEW CLUB HOUSE AND EVENT CENTER BUILDING, AND ASSOCIATED INFRASTRUCTURE IMPROVEMENTS.

CONTACT PERSON:

MICHAEL WELCH AXIOM CONSULTANTS, LLC 60 E COURT STREET, UNIT 3 IOWA CITY, IOWA 52240-3833 PHONE: 319-519-6220 mwelch@axiom-con.com

## PROPOSED PAR PERMANEN STANDARD S

HANDICAP S TOTAL OVERFLOW WEST OF PA ALONG DRIV

TOTAL

MAXIMUM PAR

# UTILITY CONTACTS





# SITE INFORMATION

KING		
Г		
STALLS	128	
TALLS	6	(2 VAN ACCESSIBLE)
	134	
PARKING		
RKING LOT	58	
/EWAY	70	(ANGLED PARKING ON LAWN)
	128	
KING	262	

## LANDSCAPE AND OPEN SPACE

OWNER REQUESTS A WAIVER FROM THE CITY OF WEST BRANCH LANDSCAPE AND OPEN SPACE REQUIREMENTS BASED ON THE NATURE OF THE PROPERTY AND THE NUMBER OF EXISTING TREES AND AMOUNT OF OPEN SPACE ALREADY PRESENT ON SITE.

> HEREBY CERTIFY THAT THIS ENGINEERING DOCUMENT WAS PREPARED BY ME OR UNDER MY DIRECT PERSONAL SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF IOWA.

> > DATE:

SIGNED:

MICHAEL J. WELCH, P.E.

LICENSE NUMBER 19636.

MY LICENSED RENEWAL DATE IS DECEMBER 31, 2018.

PAGES OR SHEETS COVERED BY THIS SEAL: ALL SHEETS LISTED IN INDEX

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ш	DATE				0
DRAWING LOG	DESCRIPTION OF CHANGES				
	REV				
ISSUED FOR:	CONTRACTOR PRICING SET		NOT FOR CONSTRUCTION	DATE ISSUED: CURRENT RE	JULY 11, 2018 A
PROJECT NAME:	CEDARS EDGE CLUB HOUSE	AND EVENT CENTER	WEST BRANCH	CLIENT NAME:	SEXTON CONSTRUCTION
HEET NAME:	COVER SHEET			HEET NUMBER: PROJECT NO.: PROJECT MANAGER:	C0.00 18-0013 DECKER

# **LEGEND**:

UTILITIES COMMUNICATIONS OVERHEAD LINE ELECTRIC FIBER OPTIC GAS SANITARY SEWER STORM SUBDRAIN WATER: DOMESTIC WATER: WELL CHILLED WATER: SUPPLY CHILLED WATER: RETURN CONDENSATE STEAM: HIGH PRESSURE STEAM: LOW PRESSURE COMMUNICATIONS HANDHOLE COMMUNICATIONS PEDESTAL COMMUNICATIONS MANHOLE **GUY WIRE ANCHOR** UTILITY POLE UTILITY POLE WITH LIGHT LIGHT POLE ELECTRIC MANHOLE ELECTRIC TRANSFORMER **TRAFFIC HANDHOLE** TRAFFIC MANHOLE FIBER OPTIC HANDHOLE FIBER OPTIC MANHOLE GAS MANHOLE GAS VALVE SANITARY SEWER MANHOLE SANITARY SEWER CLEANOUT STORM SEWER MANHOLE STORM SEWER INTAKE HYDRANT WATER VALVE CURB STOP WATER MANHOLE POST INDICATOR VALVE

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DRINKING FOUNTAIN	WF	WF
MONITORING WELL		
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## **GENERAL NOTES**

- 1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WIT AND SPECIFICATIONS (SUDAS), UNLESS OTHERWISE
- 2. THE LOCATIONS OF UTILITY MAINS, STRUCTURES AN ON THIS DRAWING ARE APPROXIMATE ONLY AND V RECORD. THERE MAY BE OTHER EXISTING UTILITY N CONNECTIONS NOT KNOWN AND MAY NOT SHOWN
- 3. NOTIFY UTILITY COMPANIES WHOSE FACILITIES ARE TO BE WITHIN CONSTRUCTION LIMITS OF THE SCHE CONSTRUCTION.
- 4. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL CRITICAL LOCATIONS TO VERIFY EXACT HORIZONTAL
- 5. IOWA CODE 480, UNDERGROUND FACILITIES INFORM TO IOWA ONE-CALL 1-800-292-8989, NOT LESS THAI EXCLUDING WEEKENDS AND HOLIDAYS.
- 6. NOTIFY THE APPROPRIATE GOVERNING AUTHORITY CONSTRUCTION WITHIN PUBLIC RIGHT-OF-WAY. TH THE PUBLIC AGENCY RESPONSIBLE FOR INSPECTION PUBLIC PORTIONS OF THE PROJECT.
- NO WORK SHALL BE PERFORMED BEYOND THE PRO. AUTHORIZATION FROM THE OWNER OR OWNER'S I
- 8. PROVIDE TRAFFIC AND PEDESTRIAN CONTROL MEAS FLAGGERS, ETC.) IN COMPLIANCE WITH PART VI OF CONTROL DEVICES (MUTCD) LATEST EDITION.
- ADJUST ALL VALVES, MANHOLES, CASTINGS, GAS VE SURFACE. ADJUSTMENT SHALL BE COORDINATED V THE COST FOR ALL ADJUSTMENTS SHALL BE INCIDE ADDITIONAL COST TO THE OWNER, REPAIR ANY DA APPURTENANCES THAT OCCUR DURING CONSTRUC
- 10. REPLACE ANY PROPERTY MONUMENTS REMOVED C MONUMENTS SHALL BE SET BY A LAND SURVEYOR STATE OF IOWA.

## GRADING NOTES

- 1. STRIP EXISTING VEGETATION WITHIN THE GRADING STOCKPILE ON-SITE FOR REUSE IF SUITABLE.
- PROOF ROLL ALL FILL AREAS TO IDENTIFY SOFT OR D ALL UNSUITABLE MATERIAL IDENTIFIED SHALL BE RE **PROOFROLL WITH 25 TON MINIMUM GROSS VEHICI**
- REMOVE AND RECOMPACT AREAS OF SUBGRADE W 3. MEET SPECIFIED LIMITS FOR DENSITY AND MOISTUF
- 4. SCARIFY EXISTING SUBGRADE TO A DEPTH OF 12 INC STANDARD PROCTOR DENSITY (ASTM D698) PRIOR TO PLACEMENT OF FILL.
- 5. DO NOT PLACE, SPREAD, OR COMPACT ANY FILL MATERIAL DURING UNFAVORABLE WEATHER CONDITIONS AND DO NOT RESUME COMPACTION OPERATIONS UNTIL MOISTURE CONTENT AND DENSITY OF IN-PLACE FILL MATERIAL ARE WITHIN SPECIFIED LIMITS.
- 6. PLACE FILL MATERIAL IN 9" MAXIMUM LIFTS.
- 7. FILLS PLACED BELOW LAWN AREAS SHALL BE COMPACTED TO 90% OF MATERIALS MAXIMUM STANDARD PROCTOR DRY DENSITY (ASTM D698).
- 8. SCARIFY SUBGRADE TO DEPTH OF 3 INCHES WHERE TOPSOIL IS SCHEDULED. SCARIFY AREAS WHERE EQUIPMENT USED FOR HAULING AND SPREADING TOPSOIL HAS CAUSED COMPACTED SUBSOIL.
- 9. FILL MATERIAL OBTAINED FROM OFF-SITE SOURCES SHALL BE SOIL OR SOIL AND ROCK MIXTURE FREE FROM ORGANIC MATTER AND OTHER DELETERIOUS SUBSTANCES. IT SHALL CONTAIN NO ROCKS OR LUMPS OF 6 INCHES IN GREATEST DIMENSION AND NOT MORE THAN 15% OF THE ROCKS OR LUMPS SHALL BE LARGER THAN 2-1/2 INCHES IN GREATEST DIMENSION.
- 10. SCARIFY AND RECOMPACT THE TOP 9" OF SUBGRADE IN ALL CUT AREAS AFTER ROUGH GRADING IS COMPLETED. COMPACT THE ENTIRE PAVING SUBGRADE TO 98% STANDARD PROCTOR DRY DENSITY TO WITHIN 1.0' OF FINAL SUBGRADE. THE FINAL 1.0' OF FILL TO BE COMPACTED TO 98% STANDARD PROCTOR DRY DENSITY (ASTM D698).
- 11. IN AREAS TO RECEIVE ADDITIONAL FILL OVER EXISTING FILL MATERIALS. REMOVE TOP 12" OF MATERIAL AND SCARIFY AND RECOMPACT THE NEXT 9" OF RESULTING SUBGRADE. COMPACT RESULTING SUBGRADE TO 95% STANDARD PROCTOR DRY DENSITY. SUBSEQUENT FILL TO BE COMPACTED TO 98% STANDARD PROCTOR DRY DENSITY TO WITHIN 1.0' OF FINAL SUBGRADE. THE FINAL 1.0' OF FILL TO BE COMPACTED TO 98% STANDARD PROCTOR DRY DENSITY (ASTM D698).
- 12. FINISH CONTOURS SHOWN ARE TO TOP OF FINISHED GRADE OR TO TOP OF TOPSOIL

	SIT	TE PREPARATION NOTES
TH THE STATEWIDE URBAN DESIGN	1.	PROTECT ADJACENT PROPERTY DURING DEMOLITION.
	2.	DEMOLITION LIMIT LINE IS THE EXISTING PROPERTY LINE UNLESS NOTED OTHERW
ND SERVICE CONNECTIONS PLOTTED VERE OBTAINED FROM PLANS OF MAINS, STRUCTURES AND SERVICE	3.	MAINTAIN POSITIVE DRAINAGE ON THE SITE THROUGHOUT THE PROJECT DURATION
N ON THIS DRAWING. SHOWN ON THE PLANS OR KNOWN DULE PRIOR TO EACH STAGE OF	4.	PROVIDE WASTE AREAS OR DISPOSAL SITES FOR EXCESS MATERIAL (EXCAVATED MATERIAL OR BROKEN CONCRETE) WHICH IS NOT DESIRABLE TO BE INCORPORATE THE WORK INVOLVED ON THIS PROJECT. NO PAYMENT FOR OVERHAUL WILL BE ALLOWED FOR MATERIAL HAULED TO THESE SITES. NO MATERIAL SHALL BE PLACE
L UNCOVER EXISTING UTILITIES AT L AND VERTICAL LOCATION.		WITHIN THE EASEMENTS, UNLESS SPECIFICALLY STATED IN THE PLANS OR APPROV THE ENGINEER. DISPOSAL SITES MUST BE APPROVED BY THE ENGINEER. CONTRA SHALL APPLY NECESSARY MOISTURE TO THE CONSTRUCTION AREA AND TEMPORA HAUL ROADS TO PREVENT THE SPREAD OF DUST. OFF-SITE DISPOSAL SHALL BE IN ACCORDANCE WITH THE APPLICABLE GOVERNMENTAL REGULATIONS.
MATION, REQUIRES VERBAL NOTICE N 48 HOURS BEFORE EXCAVATING,	5.	KEEP ADJACENT PUBLIC STREETS FREE FROM SOIL AND DEBRIS GENERATED BY THE PROJECT. CLEAN SOIL AND DEBRIS FROM THE ADJACENT STREETS ON A DAILY BAS
7 48 - 72 HOURS PRIOR TO BEGINNING HE CITY OF WEST BRANCH SHALL BE A DURING CONSTRUCTION OF THE	6.	DURING CONSTRUCTION, CONTROL DUST SPREADING FROM ALL WORK AND STAG AREAS.
	7.	REMOVAL OR ABANDONMENT OF PUBLIC UTILITIES SHALL BE FULLY COORDINATED APPROPRIATE UTILITY SUPPLIER AND REGULATORY AGENCIES.
JECT LIMITS WITHOUT PRIOR REPRESENTATIVE.	8.	ANY EXISTING FACILITIES (CURBS, PAVEMENT, UTILITIES, ETC.) THAT THE CONTRAC OPERATIONS DAMAGE SHALL BE REPAIRED BY THAT CONTRACTOR AT HIS/HER CO
SURES (SIGNS, BARRICADES, THE MANUAL ON UNIFORM TRAFFIC	9.	REMOVE ALL DESIGNATED STREETS, DRIVEWAYS, ETC. IN THEIR ENTIRETY. BACKFI EXCAVATIONS WITH COHESIVE MATERIAL COMPACTED TO 98% STANDARD PROCT DRY DENSITY (ASTM D698).
ENTS, ETC., TO MATCH THE NEW WITH THE UTILITY COMPANIES AND NTAL TO THE CONSTRUCTION. AT NO MAGE TO SAID STRUCTURES AND TION.	10.	WHERE A SECTION OF PAVEMENT, CURB AND GUTTER OR SIDEWALK IS CUT OR OTHERWISE DAMAGED BY THE CONTRACTOR, THE ENTIRE SECTION SHALL BE REM AND REPLACED. PAVEMENT, CURBS, GUTTERS AND SIDEWALKS SHALL BE REMOVI MINIMUM OF TWO FEET BEYOND THE EDGE OF THE TRENCH CUT AND TO THE NE/ JOINT.
OR DESTROYED BY CONSTRUCTION. REGISTERED TO PRACTICE IN THE	11.	SAWCUT EDGES OF PAVEMENT FULL DEPTH PRIOR TO REMOVAL TO PREVENT DAN TO ADJACENT SLABS AND FIXTURES.
ELIMITS AND AREAS TO RECEIVE FILL.	12.	THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL EXISTING CONCRETE STRUCTURES ON THE SITE AS SHOWN ON THE PLANS. THE REMOVAL INCLUDES DRIVEWAYS, CURB AND GUTTER, SIDEWALK, AND BASEMENT FOUNDAT FOOTINGS, FLOOR AND WALLS. THE REMOVAL ALSO INCLUDES STORM SEWER IN AND PIPE AS SHOWN ON THE PLANS.
DISTURBED AREAS IN THE SUBGRADE. EMOVED AND RECOMPACTED. LE WEIGHT.	13.	IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROTECT TREES AND SHRUBS ON THE PLANS TO REMAIN IN PROJECT AREA FROM DAMAGE DUE TO CONSTRUCT ACTIVITY. PROTECTION INCLUDES, BUT IS NOT LIMITED TO, CONSTRUCTION FENC AROUND THE DRIP LINE OF TREES AND PROHIBITING VEHICLE TRAFFIC WITHIN THE
/HICH ARE SOFT OR UNSTABLE TO RE CONTENT.	14.	REMOVAL AND DISPOSAL OF EXISTING TREES AND SHRUBS WITHIN CONSTRUCTIO LIMITS SHALL BE INCIDENTAL TO THE GRADING PORTION OF THE PROJECT. STUMI
LILES AND RECOMPACT TO 98% OF		TO BE CROUND TO TWO FEET RELOW FINISHED CRADE

THE CONSTRUCTION RECORD DOCUMENTS.

EXISTING FIELD TILE LINES ENCOUNTERED IN THIS PROJECT SHALL BE REPAIRED BY THE CONTRACTOR IN ONE OF THE FOLLOWING WAYS:

- A. CONNECT TILE TO THE NEAREST STORM SEWER.
- B. DAYLIGHT TO FINISHED GROUND.

## SURFACE RESTORATION NOTES

- 1. ONLY DISTURBED AREAS NOT PAVED OR HARD SURFACED, ADJACENT TO THE PROPOSED BUILDING AND PAVING, SHALL RECEIVE MINIMUM 4" TOPSOIL. SCARIFY AREAS TO RECEIVE TOPSOIL TO A MIN. DEPTH OF 4". REMOVE ALL STONES, WOOD AND DEBRIS LARGER THAN 2" FROM AREAS TO RECEIVE TOPSOIL. DO NOT COMPACT TOPSOIL.
- 2. ALL DISTURBED AREAS SHALL BE SEEDED, FERTILIZED AND MULCHED IN ACCORDANCE WITH SUDAS SECTION 9010.
- 3. SEED ALL DISTURBED AREAS NOT TO BE HARD SURFACED, AND NOT TO HAVE TOPSOIL SPREAD, WITH TYPE 1 EROSION CONTROL MIXTURE PER SUDAS SECTION 9010.
- 4. APPLY SEED AT THE RATES INDICATED IN THE PROJECT SPECIFICATIONS.
- MAINTAIN SEEDED AREAS UNTIL AN ADEQUATE STAND OF GRASS HAS BEEN 5. ESTABLISHED. RESEED ANY AREAS AS NECESSARY TO STABILIZE SOIL PER PROJECT SPECIFICATIONS.
- 6. EXISTING FACILITIES (CURBS, PAVEMENT, UTILITIES, ETC.) THAT ARE TO REMAIN AND DAMAGED BY THE CONTRACTOR SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR AT NO ADDITIONAL EXPENSE TO THE OWNER.

THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) SHALL BE KEPT ON THE CONSTRUCTION SITE AT ALL TIMES FROM THE DATE CONSTRUCTION ACTIVITIES BEGIN TO THE DATE OF FINAL STABILIZATION. THE CONTRACTOR SHALL MAINTAIN THE SWPPP PER THE REQUIREMENTS OF GENERAL PERMIT NO. 2. ALL OPERATORS/CONTRACTORS WORKING ONSITE MUST SIGN THE CERTIFICATION STATEMENT PROVIDED AND WILL BECOME CO-PERMITTEES ON THE NPDES GENERAL PERMIT NO. 2 FOR THIS SITE. ALL OPERATORS/SUBCONTRACTORS WORKING ONSITE SHALL BE SUPPLIED A COPY OF THE SWPPP BY THE CONTRACTOR AND MUST BE FAMILIAR WITH ITS CONTENTS. THE SWPPP MUST BE PERIODICALLY UPDATED TO SHOW CURRENT EROSION CONTROL PRACTICES PER THE REQUIREMENTS OF THE GENERAL PERMIT #2. UPDATED VERSIONS OF THE SWPPP WILL BE PROVIDED TO ALL OF THE OPERATORS/SUBCONTRACTORS WHOM ARE AFFECTED BY THE CHANGES MADE TO THE SWPPP. IT WILL BE THE DUTY OF THE CONTRACTOR TO SEE THAT THESE REQUIREMENTS ARE MET.

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- )N IPS ARE TO BE GROUND TO TWO FEET BELOW FINISHED GRADE
- 15. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IF A TILE IS ENCOUNTERED AND SHALL INDICATE THE METHOD OF RESOLVING THE CONFLICT. THE ENGINEER SHALL APPROVE THE PROPOSED METHOD. THE LOCATION OF THE FIELD TILE SHALL BE RECORDED ON

- C. REPAIR TILE AND MAINTAIN SERVICE.

# **EROSION CONTROL NOTES**

- A. INSTALL INLET PROTECTION AROUND EXISTING INTAKES AS INDICATED ON THE SITE CONSTRUCTION PLAN. USE THESE LOW AREAS AS SEDIMENT BASINS DURING CONSTRUCTION.
- B. INSTALL PERIMETER SILT FENCE AS INDICATED ON THE SITE CONSTRUCTION PLAN.

- G. WHEN CONSTRUCTION IS COMPLETE AND THE SITE IS STABILIZED WITH PERMANENT SEEDING, REMOVE ACCUMULATED SEDIMENT FROM ANY SEDIMENT BASINS, REMOVE SILT FENCE AND RESEED ANY AREAS DISTURBED BY THE REMOVALS.

1. THE CONTRACTOR SHALL PROVIDE TEMPORARY EROSION CONTROL, SEDIMENT, AND DUST CONTROL IN ACCORDANCE WITH THE REQUIREMENTS OF THE PROJECT'S STORM WATER POLLUTION PREVENTION PLAN AND THE STATEWIDE URBAN DESIGN AND SPECIFICATIONS (SUDAS), UNLESS OTHERWISE NOTED.

2. THE CONTRACTOR SHALL INCORPORATE ALL EROSION CONTROL FEATURES INTO THE PROJECT PRIOR TO DISTURBING THE SOIL.

3. THE CONTRACTOR SHALL BE RESPONSIBLE TO INSPECT THE TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES A MINIMUM OF ONCE PER WEEK AND WITHIN 24 HOURS FOLLOWING A RAINFALL OF 1/2" OR MORE. IF A CONTROL MEASURE HAS BEEN REDUCED IN CAPACITY BY 50% OR MORE, THE CONTRACTOR SHALL RESTORE SUCH FEATURES TO THEIR ORIGINAL CONDITION IMMEDIATELY, WEATHER PERMITTING.

4. ERECT SILT FENCE AS SHOWN ON THE PLANS TO LIMIT LOSS OF MATERIAL FROM THE SITE. DEVICES TO REMAIN IN PLACE AND TO BE MAINTAINED UNTIL A PERMANENT GROUND COVER IS ESTABLISHED.

5. MINIMIZE SOIL EROSION BY MAINTAINING ALL EXISTING VEGETATIVE GROWTH WITHIN THE GRADING LIMITS FOR AS LONG AS PRACTICAL

6. INSTALL A SILT FENCE AROUND ALL STOCKPILED TOPSOIL.

7. THE CONTRACTOR SHALL PROVIDE TEMPORARY SEEDING FOR ALL AREAS THAT ARE DISTURBED AND OPERATIONS WILL NOT COMMENCE OR PERMANENT SEEDING WILL NOT BE COMPLETED IN LESS THAN 14 DAYS.

8. SEQUENCE OF EROSION AND SEDIMENT CONTROL EVENTS:

- C. INSTALL SILT FENCE AROUND ANY TOPSOIL OR EXCESS SOIL STOCKPILES. APPLY TEMPORARY SEEDING TO ALL TOPSOIL OR EXCESS SOIL STOCKPILES.
- D. INSTALL STONE SUBBASE ON STREET AREAS FOLLOWING COMPLETION OF GRADING.
- E. APPLY TEMPORARY SEEDING TO ALL DENUDED AREAS WHERE CONSTRUCTION ACTIVITY TEMPORARILY CEASES FOR 14 DAYS OR MORE. FERTILIZE AND LIME IF NEEDED. APPLY MULCH ON SLOPES GREATER THAN 4:1 (HORIZONTAL:VERTICAL).
- F. DESTROY TEMPORARY SEEDING AND APPLY PERMANENT SEEDING TO ALL DISTURBED AREAS NOT TO BE HARD SURFACED. FERTILIZE AND MULCH PERMANENT SEEDING AS REQUIRED. APPLY MULCH AT 1.5 TO 2.0 TONS PER ACRE ON SLOPES GREATER THAN 4:1.

## STORMWATER POLLUTION PREVENTION

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ENGINEER:				V CONSULTANTS	60 EAST COURT STREET, UNIT 3, IOWA CITY, IA 5224
	DATE				
DRAWING LOG	DESCRIPTION OF CHANGES				
	REV				
ISSUED FOR:	CONTRACTOR PRICING SET		NOT FOR CONSTRUCTION	DATE ISSUED: CURRENT REV	JULY 11, 2018 A
PROJECT NAME:	CEDARS EDGE CLUB HOUSE	AND EVENT CENTER	WESI BRANCH	CLIENT NAME:	SEXTON CONSTRUCTION
SHEET NAME:	LEGEND AND GENERAL NOTES			SHEET NUMBER: PROJECT NO.: PROJECT MANAGER:	C0.01 18-0013 DECKER

## **UTILITY NOTES**

## ALL PERMITS SHALL BE SECURED AND FEES SHALL BE PAID PRIOR TO START OF CONSTRUCTION.

- 1. WATER MAIN PIPE SHALL BE PVC C900. BEDDING FOR WATER MAIN AND SERVICES SHALL BE CLASS P-1 PER SUDAS 3010.104 (IDOT STANDARD ROAD PLAN SW-104). ALL WATER MAIN TO BE INSTALLED WITH TRACER WIRE.
- 2. BACKFILL WATER MAIN AND SERVICES UNDER PAVEMENT WITH SUITABLE NATIVE MATERIAL COMPACTED TO 95% STANDARD PROCTOR DENSITY. TRENCH COMPACTION TESTING SHALL BE IN ACCORDANCE WITH SUDAS SECTION 3010 - 3.06.
- 3. WATER SERVICE LINES SHALL BE 1" TYPE K COPPER OR 200 PSI SDIR-7 PE PIPE. SEE WATER SERVICE DETAIL, SHEET C900. CURB STOPS SHALL BE LOCATED BETWEEN THE SIDEWALK AND THE CURB. MAINTAIN 36" HORIZONTAL SEPARATION BETWEEN WATER AND SEWER SERVICES. THE ENDS OF WATER SERVICE LINES SHALL BE MARKED WITH 2X4 POSTS PAINTED BLUE.
- 4. VERIFY THE ELEVATION OF POSSIBLE CONFLICTING UTILITIES PRIOR TO CONSTRUCTING PROPOSED WATER MAINS, SANITARY SEWERS, STORM SEWERS, ETC. ANY CONFLICTS MUST IMMEDIATELY BE BROUGHT TO THE ENGINEER'S ATTENTION.
- 5. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL UNCOVER EXISTING UTILITIES AT CRITICAL LOCATIONS TO VERIFY EXACT HORIZONTAL AND VERTICAL LOCATION. 6. PROTECT EXISTING UTILITIES DURING CONSTRUCTION.
- 7. ADJUST ALL VALVES, MANHOLES, CASTINGS, GAS VENTS, ETC. TO MATCH THE NEW SURFACE. ADJUSTMENT SHALL BE COORDINATED WITH THE UTILITY COMPANIES AND
- THE COST FOR ALL ADJUSTMENTS SHALL BE INCIDENTAL TO THE CONSTRUCTION. AT NO ADDITIONAL COST TO THE OWNER, REPAIR ANY DAMAGE TO SAID STRUCTURES AND APPURTENANCES THAT OCCUR DURING CONSTRUCTION.
- 8. THE CONTRACTOR SHALL BE REQUIRED TO MAINTAIN AS-BUILTS REGARDING ASPECTS OF THE PROJECT WHICH DIFFER FROM THE CONTRACT DOCUMENTS. THIS INCLUDES BOTH EXISTING FACILITIES ENCOUNTERED AND PROPOSED FACILITIES CONSTRUCTED. THE INFORMATION SHALL INCLUDE LOCATION, DIMENSION AND MATERIAL DATA. THE LOCATION OF UNDERGROUND FACILITIES SHALL BE NOTED IF THEY DIFFER FROM THE PLANS BY MORE THAN 2 FEET HORIZONTALLY AND 0.5 FEET VERTICALLY OR ARE NOT SHOWN. FACILITIES CONSTRUCTED OR ENCOUNTERED ABOVE GROUND SHALL BE NOTED IF THEY DIFFER FROM THE PLANS BY MORE THAN 1 FOOT HORIZONTALLY AND 0.25 FEET VERTICALLY.
- 9. ALL FIRE HYDRANT STATIONING IS TO CENTER OF THE WATER MAIN. CONTRACTOR SHALL INSTALL HYDRANT OFFSET 3-FT FROM THE BACK OF CURB UNLESS STATED OTHERWISE. ALL FIRE HYDRANT'S SHALL INCLUDE TEE AND EXTENSION PIPE (OR REDUCER WHEN APPLICABLE). ASSEMBLIES SHALL ALSO INCLUDE 6" GATE VALVE FOR ALL FIRE HYDRANT'S. SEE FIGURE 5020.201.
- 10. PIPE LENGTHS FOR ALL UTILITIES ARE GIVEN FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE. PIPE LENGTHS FOR WATER MAIN ARE MEASURED BETWEEN ELBOWS, CROSSES, OR TEES (INCLUDING FH TEES).
- 11. CONTRACTOR SHALL INSTALL A MINIMUM OF 2" BLUE BOARD INSULATION OR EQUIVALENT ALONG THE BACK OF INTAKES TO PROTECT WATERMAINS FROM FREEZING.
- 12. CONTRACTOR MAY DEFLECT WATER MAIN PER MANUFACTURER'S SPECIFICATIONS FOR HORIZONTAL DEFLECTION. PIPE DEFLECTION IS NOT ALLOWED FOR VERTICAL DEFLECTIONS. CONTRACTOR SHALL USE DUCTILE IRON FITTINGS WITH MAG-A-LUG TYPE RESTRAINTS AS NECESSARY. ALL BENDS, TEES, ETC. SHALL HAVE ADEQUATE AND APPROPRIATE JOINT RESTRAINTS AND THRUST BLOCKS.
- 13. PRIOR TO WATERMAIN INSTALLATION, THE PROPERTY CORNERS MUST BE LOCATED AND ALL BENDS MUST BE STAKED WITH STATIONING AND OFFSETS AT PLAN LOCATION.
- 14. CONTRACTOR SHALL CONTACT WEST BRANCH PUBLIC WORKS DEPARTMENT OFFICE TO OBTAIN A 'START WORK' ORDER 24 HOURS PRIOR TO BEGINNING CONSTRUCTION OF WATER SYSTEM IMPROVEMENTS.
- 15. CONSTRUCTION OF PUBLIC AND PRIVATE WATER SYSTEM IMPROVEMENTS REQUIRES AN APPROVED PLAN SET ON FILE WITH THE CITY OF WEST BRANCH.
- 16. ON SITE INSPECTION OF WATER MAIN INSTALLATION WILL BE PROVIDED BY THE MUNICIPAL UTILITY.
- 17. THE CONTRACTOR IS RESPONSIBLE TO CONTACT IOWA ONE-CALL 1-800-292-8989 PRIOR TO EXCAVATION.
- 18. WATER MAIN MATERIALS, INSTALLATION AND TESTING MUST COMPLY WITH THE STATEWIDE URBAN DESIGN STANDARDS AND SPECIFICATIONS (SUDAS). THIS APPLIES TO BOTH PUBLIC AND PRIVATE WATER MAINS AND LARGE SERVICE LINES (3" OR LARGER) ON THE DISTRIBUTION SIDE OF THE METER. CONTRACTOR SHALL FURNISH AND INSTALL HYDRANTS AND VALVES IN COMPLIANCE WITH SUDAS.
- 19. CONTRACTOR SHALL OBTAIN APPROVAL FROM THE CITY OF WEST BRANCH FOR ANY VARIANCE FROM THE APPROVED PLAN.
- 20. THE CITY OF WEST BRANCH SHALL OPERATE ALL EXISTING SYSTEM VALVES AND THE CONTRACTOR AND CITY SHALL COORDINATE ANY SHUT DOWNS OF THE EXISTING SYSTEM. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TAPS, FILLIN AND FLUSHING NEW MAINS, AND ALL REQUIRED SAMPLING. DISPOSAL OF HIGHLY CHLORINATED WATER SHALL BE IN COMPLIANCE WITH LOCAL, STATE & FEDERAL CODES.
- 21. FOR WATER MAINS THAT ARE TO BE ACCEPTED INTO THE PUBLIC WATER DISTRIBUTION SYSTEM, THE CONTRACTOR SHALL WARRANT THE WORKMANSHIP AND MATERIAL OF THE INSTALLED WATER MAINS FOR A PERIOD OF TWO (2) YEARS FROM DATE OF ACCEPTANCE. AND SHALL FURNISH THE MUNICIPALITY WITH A MAINTENANCE BOND COVERING THE COST OF THE WATER IMPROVEMENTS FOR THAT PERIOD.

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- 22. TRACER WIRE IS REQUIRED ON ALL PRIVATE AND PUBLIC WATER MAIN 3 INCHES IN
- THE WATER MAIN.
- 'LIVE' TAPS USING AN APPROVED TAPPING SLEEVE OR SADDLE AND VALVE.
- 25. WATER MAINS AND LARGE SERVICES (3" OR LARGER) OVER 20 FEET IN LENGTH ARE WATER DEPARTMENT.
- PASSED BACTERIOLOGICAL TESTS.
- 27. IF INSTALLATION OF A CASING PIPE IS REQUIRED, IT SHALL INCLUDE CASING SPACERS AND WATERTIGHT MECHANICAL RUBBER END SEALS.
- 28. MINIMUM BURY OF 5.5-FT.
- TEES. ALL BENDS SHALL ALSO HAVE MEGALUG FITTINGS.

DIAMETER OR LARGER. HOLES IN VALVE BOXES FOR TRACER WIRE MUST BE DRILLED.

23. WHERE WATER MAIN AND SANITARY SEWERS CROSS, ONE FULL (20 FOOT) LENGTH OF WATER MAIN SHOULD BE CENTERED OVER THE SANITARY SEWER, AND THE VERTICAL DISTANCE SHOULD BE MAINTAINED 18 INCHES OR GREATER. WHERE WATER LINES AND SEWERS CROSS AND THE MINIMUM CLEARANCE CANNOT BE MAINTAINED, THE SEWER MUST BE CONSTRUCTED OF WATER MAIN GRADE AWWA C-900 SDR-18 PVC OR DUCTILE IRON PIPE WITH COMPRESSION FITTINGS OR MECHANICAL JOINTS IF WITHIN 10 FEET OF

24. UNLESS SPECIFICALLY APPROVED OTHERWISE, ALL TAPS 4-INCH OR LARGER ARE TO BE

REQUIRED TO BE DISINFECTED, FLUSHED, FILLED AND PRESSURE TESTED. PRESSURE / LEAKAGE TESTS ARE CONDUCTED AT 150 PSI UNDER THE DIRECTION OF THE HIAWATHA

26. ALL WATER MAINS SHALL BE DISINFECTED IN ACCORDANCE WITH AWWA STANDARD C 651. NO WATER MAIN SHALL BE PLACED INTO SERVICE UNTIL ALL SAMPLES HAVE

29. THRUST BLOCKS SHALL BE INSTALLED AT ALL HYDRANTS, BENDS, VALVES, CROSSES, AND

## PAVEMENT GENERAL NOTES

- ALL SLOPES IN PAVEMENT SHALL BE UNIFORM TO AVOID PONDING.
- 2. ALL DIMENSIONS TO BACK-OF-CURB UNLESS NOTED OTHERWISE.
- REMOVE AND REPLACE OR RESTORE ALL STREET SIGNS, PAVEMENT MARKINGS, SIDEWALK LAMPS, SIDEWALKS, STEPS, LANDSCAPE STRUCTURES, CURB AND GUTTER, STREETS, DRIVES AND ALL OTHER SURFACE STRUCTURES REMOVED OR OTHERWISE DAMAGED DURING THE COURSE OF THE WORK. SIDEWALKS SHALL BE REMOVED AND REPLACED TO NEAREST JOINT BEYOND CONSTRUCTION AREA.
- 4. COMPACT SUBGRADE BENEATH PAVEMENTS IN ACCORDANCE WITH GRADING NOTES.
- GRANULAR SUBBASE FOR PAVEMENTS SHALL MEET THE LIMITS OF GRADUATION NO. 14 (MODIFIED SUBBASE) PER IOWA DOT STANDARD SPECIFICATION FOR HIGHWAY AND **BRIDGE CONSTRUCTION SECTION 4123.**
- 6. PROOF-ROLL SUBGRADE PER SECTION 2115. REMOVE AND REPLACE UNSTABLE AREAS WITH SUITABLE COMPACTED MATERIAL.
- 7. ALL CURB AND GUTTER IS 4" LOW PROFILE CURB UNLESS STATED OTHERWISE.

## PCC PAVEMENT NOTES

- 1. PCC PAVING THICKNESS SHALL BE 7" THICK ON 6" GRANULAR SUBBASE UNLESS STATED OTHERWISE.
- 2. MATERIALS AND CONSTRUCTION FOR PORTLAND CEMENT CONCRETE PAVEMENTS SHALL MEET THE REQUIREMENT OF IOWA DOT STANDARD SPECIFICATIONS FOR HIGHWAY AND BRIDGE CONSTRUCTION, LATEST REVISION, SECTION 2301. THE PARAGRAPHS FOR MEASUREMENT AND PAYMENT SHALL NOT APPLY.
- MINIMUM 28-DAY COMPRESSIVE STRENGTH FOR CONCRETE USED FOR PAVEMENTS SHALL BE 4000 PSI. CONCRETE SHALL BE C-3 OR C-4 WITH TYPE 1 CEMENT. AIR CONTENT SHALL BE 6-1/2% ± 1.5% COARSE AGGREGATE. AIR ENTRAINMENT ADMIXTURES AND WATER REDUCING ADMIXTURES SHALL CONFORM TO IOWA DOT SPECIFICATIONS FOR HIGHWAY AND BRIDGE CONSTRUCTION SECTION 4103. DURABILITY FOR PORTLAND CEMENT CONCRETE SHALL BE CLASS 2. JOINT SEALER SHALL CONFORM TO IOWA DOT SPECIFICATIONS FOR HIGHWAY AND BRIDGE CONSTRUCTION SECTION 4136 FOR HOT POURED JOINT SEALER.
- 4. JOINT SEALER SHALL CONFORM TO IOWA DOT SPECIFICATIONS FOR HIGHWAY AND BRIDGE CONSTRUCTION SECTION 4136 FOR HOT POURED JOINT SEALER.
- 5. CURING COMPOUND (WHITE, DARK OR CLEAR) SHALL CONFORM TO IOWA DOT SPECIFICATIONS FOR SECTION 4105. APPLICATION METHOD AND CURING SHALL CONFORM TO IOWA DOT SPECIFICATIONS FOR HIGHWAY AND BRIDGE CONSTRUCTION SECTION 2301.19.
- 6. FLYASH PER IOWA DOT SPECIFICATIONS FOR HIGHWAY AND BRIDGE CONSTRUCTION SECTION 4108 MAY BE SUBSTITUTED FOR CEMENT AT THE RATES SPECIFIED IN SECTION 2301.04E AFTER NOTIFICATION AND AUTHORIZATION BY THE OWNER'S REPRESENTATIVE.
- 7. PAVEMENT TIE BARS AND DOWEL BARS SHALL CONFORM TO IOWA DOT SPECIFICATIONS FOR HIGHWAY AND BRIDGE CONSTRUCTION SECTION 4151. EPOXY COATING. WHEN SPECIFIED, SHALL CONFORM TO IOWA DOT SPECIFICATIONS FOR HIGHWAY AND BRIDGE CONSTRUCTION SECTION 4151.03B.
- 8. CURBS SHALL BE CAST INTEGRAL WITH CONCRETE PAVEMENT UNLESS NOTED OTHERWISE. EDGES SHALL BE ROUNDED BUT NOT ROLLED.
- 9. PCC SIDEWALKS SHALL BE 4 INCHES THICK, EXCEPT AT DRIVEWAYS. THICKNESS OF PCC WALKS AT DRIVEWAYS SHALL MATCH THAT OF THE ADJACENT DRIVEWAY. TRANSVERSE CONSTRUCTION JOINTS SPACING SHALL BE AT 5 FEET MAXIMUM CENTERS FOR 5 FEET WIDE WALKS. PLACE EXPANSION JOINTS WHERE WALK MEETS OTHER WALKS, BACK OF CURBS, FIXTURES, OR OTHER STRUCTURES, AND AT INTERVALS NOT EXCEEDING 50 FEET. SIDEWALKS SHALL HAVE A MAXIMUM CROSS SLOPE OF 2% DRAINING TOWARDS BACK OF CURB, UNLESS OTHERWISE NOTED.
- 10. ONE INCH PREFORMED FOAM EXPANSION JOINT MATERIAL SONOFLEX "F" BY SONOBORN OR APPROVED EQUAL SHALL BE PLACED BETWEEN NEW PAVEMENT CONSTRUCTION AND THE FACES OF BUILDINGS, STOOPS, EXISTING SLABS, AND OTHER FIXTURES, UNLESS NOTED ON THE DRAWINGS. JOINTS AT THESE LOCATIONS SHALL BE SEALED WITH A SELF-LEVELING POLYURETHANE SUCH AS SONOLASTIC SL-1 OR APPROVED EQUAL.
- 11. CONSTRUCT 1" EXPANSION JOINTS ON PCC CURB AT ALL ENDS OF RETURN RADII.

## **STORM SEWER NOTES**

# SANITARY SEWER

1. RCP STORM SEWER SHALL BE CLASS III REINFORCED CONCRETE PIPE (RCP) TO DEPTH OF COVER UP TO 12' CONFORMING TO ASTM C76 OR AASHTO M170.

2. RCP STORM SEWER SHALL BE CONSTRUCTED WITH CLASS R-1 BEDDING PER SUDAS FIGURE 3010.102 (IDOT STANDARD ROAD PLAN SW-102). RCP STORM SEWERS SHALL HAVE OPEN JOINTS WRAPPED IN ENGINEERING FABRIC. STORM SEWERS UNDERA ND WITHIN 5-FT OF PAVING SHALL BE BACKFILLED WITH POROUS BACKFILL TO BOTTOM OF SUBGRADE ELEVATION. ALL OTHER STORM SEWERS SHALL BE BACKFILLED WITH SUITABLE NATIVE MATERIAL.

HIGH DENSITY POLYETHYLENE PIPE (HDPE) SHALL BE CORRUGATED WITH INTEGRALLY FORMED SMOOTH INTERIOR MEETING THE REQUIREMENTS OF THE STATEWIDE URBAN DESIGN AND SPECIFICATIONS (SUDAS) SECTION 4020.

4. HDPE STORM SEWER SHALL BE CONSTRUCTED WITH CLASS F-3 BEDDING. HDPE STORM SEWER SHALL BE BACKFILLED WITH GRANULAR BACKFILL AGGREGATE TO A MINIMUM OF 12" ABOVE THE TOP OF THE PIPE.

5. STORM SEWER LINES SHALL BE A MINIMUM OF 10' FROM WATER LINES RUNNING PARALLEL. AT CROSSINGS, A MINIMUM 18" SEPARATION MUST BE PROVIDED.

6. ALL LINE AND GRADE CONTROL WILL BE DONE WITH A LASER BEAM, WITH GRADE CHECKS AT 25', 50' AND THEN EVERY 100' BETWEEN MANHOLES.

7. THE CONTRACTOR WILL BE REQUIRED TO MAINTAIN A RECORD DRAWING SET SHOWING LOCATIONS OF ALL STORM SEWER CONSTRUCTION. THE RECORD DRAWING SET WILL BE PROVIDED TO THE OWNER.

1. SANITARY SEWER CONSTRUCTION SHALL MEET THE REQUIREMENTS OF THE STATEWIDE URBAN DESIGN AND SPECIFICATIONS (SUDAS).

2. SANITARY SEWER SERVICE PIPE AND FITTINGS SHALL BE SDR 23.5 POLYVINYL CHLORIDE (PVC) PER SECTION 4010 OF SUDAS. SANITARY SERVICES ARE 4". MAINTAIN 36" HORIZONTAL SEPARATION BETWEEN WATER AND SEWER SERVICES. THE ENDS OF THE SANITARY SEWER SERVICE LINES SHALL BE MARKED WITH 2X4 POSTS PAINTED GREEN.

SANITARY SEWER MAINS SHALL BE PVC SDR26. CLASS F-2 BEDDING SHALL BE USED FOR SANITARY SEWER CONSTRUCTION PER SUDAS 3010.103 (IOWA DOT STANDARD ROAD PLAN SW-103). BACKFILL SANITARY SEWER MAINS AND SERVICES WITH SUITABLE NATIVE MATERIAL COMPACTED TO 95% STANDARD PROCTOR DENSITY.

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ENGINEER:				V V CONSULTANTS	60 EAST COURT STREET, UNIT 3, IOWA CITY, IA 52
	DATE				
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ISSUED FOR:	CONTRACTOR PRICING SET		NOT FOR CONSTRUCTION	DATE ISSUED: CURRENT RE	JULY 11, 2018 A
PROJECT NAME:	CEDARS EDGE CLUB HOUSE	AND EVENT CENTER	WEST BRANCH	CLIENT NAME:	SEXTON CONSTRUCTION
SHEET NAME:	GENERAL NOTES			SHEET NUMBER: PROJECT NO.: PROJECT MANAGER:	C0.02 18-0013 DECKER











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# SITE CONCEPT THE MEADOWS SUBDIVISION-PHASE 4 WEST BRANCH, CEDAR COUNTY, IOWA

## DEVELOPMENT CHARACTERISTICS

CURRENT ZONING IS R-1 RESIDENTIAL

R-1 RESIDENTIAL REQUIREMENTS MINIMUM LOT AREA MINIMUM SETBACK FRONTAGE FRONT YARD SETBACK SIDE YARD SETBACK REAR YARD SETBACK

R-2 RESIDENTIAL REQUIREMENTS MINIMUM LOT AREA MINIMUM SETBACK FRONTAGE FRONT YARD SETBACK SIDE YARD SETBACK REAR YARD SETBACK

STORMWATER MANAGEMENT AND OPEN PARK SPACE.

OUTLOTS "A" & "B" TO BE DEDICATED TO THE CITY OF WEST BRANCH FOR





\*\*Notes on this plat are not intended to create any vested private interest in any stated use restriction or covenant or create any third party beneficiaries to any noted use restriction or covenant.

SINGLE FAMILY: 7,700 SF SINGLE FAMILY: 70 FEET 25 FEET 8 FEET 25 FEET

SINGLE FAMILY: 8,400 SF SINGLE FAMILY: 70 FEET 25 FEET 8 FEET 25 FEET

HEET NAME:	PROJECT NAME:	ISSUED FOR:		DRAWING LOG		ENGINEER:	
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	THE MEADOWS						
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	PHASE 4	NOT FOR CONSTRUCTION					
HEET NUMBER: PROJECT NO.: PROJECT MANAGER:	CLIENT NAME:	DATE ISSUED:	'URRENT REV:			T T CONSULTANTS	
1 OF 1   18-0024   BOELK	KLM INVESTMENTS, INC	JULY 12, 2018	A			60 EAST COURT STREET, UNIT 3, IOWA CITY, IA 52240	)

#### **165.34 I-2 DISTRICT REQUIREMENTS.**

1. Permitted Uses: Any use permitted in Industrial 1-1 District.

2. Uses Allowed by Special Exception by the Board of Adjustment: Manufacturing, fabricating and processing, which has not previously been listed provided that the proposed use will not constitute a fire hazard or emit objectionable smoke, noise, vibration, odor or dust.

3. Prohibited Non-industrial Uses. In Industrial Districts, no building may be used in whole or in part for any of the following purposes.

A. Residential uses or any dwelling use including hotels and motels.

B. Restaurant, tavern, filling station, theater or other place of commercial recreation or amusement.

C. School, church, hospital, sanitarium, correctional institution or other institutional use.

D. Cemetery.

4. Prohibited Industrial Uses:

A. Acid manufacture, or storage except on limited scale as an accessory to a permitted industry and under conditions specified by the Zoning Board of Adjustment.

B. Slaughter house and stock yard.

C. Manufacture of fertilizers.

D. Garbage, waste materials, offal, dead animal, or refuse incineration or storage.

E. Manufacture or storage of gun powder, fireworks or other explosives.

#### 165.37 CI-2 DISTRICT REQUIREMENTS.

1. Permitted Uses: Any use permitted in Industrial I-1 District.

2. Uses Allowed by Special Exception by the Board of Adjustment: Manufacturing, fabricating and processing, which has not previously been listed provided that the proposed use will not constitute a fire hazard or emit objectionable smoke, noise, vibration, odor or dust.

3. Prohibited Non-industrial Uses. In Industrial Districts, no building may hereafter be used in whole or in part for any of the following purposes.

A. Residential uses or any dwelling use including hotels and motels.

B. Restaurant, tavern, filling station, theater or other place of commercial recreation or amusement.

C. School, church, hospital, sanitarium, correctional institution or other institutional use.

D. Cemetery.

4. Prohibited Industrial Uses.

A. Acid manufacture, or storage except on limited scale as an accessory to a permitted industry and under conditions specified by the Zoning Board of Adjustment.

B. Slaughter house and stock yard.

C. Manufacture of fertilizers.

D. Garbage, waste materials, offal, dead animal, or refuse incineration or storage.

E. Manufacture or storage of gun powder, fireworks or other explosive.

# WEST BRANCH COMPREHENSIVE PLAN

## Chapter 10: ENVIRONMENTAL STEWARDSHIP

FEMA's National Flood Hazard Map West Branch, IA


## Introduction

Chapter 10 of West Branch's 2013 Comprehensive Plan dealt with hazardous mitigation. This is an important city topic, but there are other concerns that an updated plan should address. The chapter is now retitled "Environmental Stewardship" and covers the additional topics of:

- The National Flood Insurance Program
- Derelict and Abandoned Buildings
- Urban Forestry
- Electric Vehicle Charging Stations
- Solid Waste and Compost
- Light Pollution
- Green Energy
- Brownfield Redevelopment and Remediation
- Topsoil

Each topic is described, and recommendations are made for action.

#### Picture 10.1. West Branch Hoover Nature Trail



Source: Source: Cedar County Conservation Board http://cedarccb.org/hoovertrail1.html. Accessed June, 2018.

## **Goal 1: Increase Community Based Environmental Outreach**



- 1. Publicize the federal flood insurance program so that residents become more aware and can participate if they choose.
- 2. Continue to partner with organizations such as Trees Forever and Alliant Energy and look for grant opportunities such as the Alliant "Branching Out" grants to increase the number and variety of trees in West Branch. This includes seeking opportunities that would allow the community to provide trees for private homeowners as well as to plant new trees in public spaces

3. Form a tree committee comprised of 6 to 7 community members to provide direction for future tree projects within the community.

4. Seek to become designated a "Tree City U.S.A."

5. Establish a brownfields inventory by identifying possible brownfields sites. Coordinate with the East Central Brownfield Coalition (ECBC) to produce a brownfield land bank. These recommendations are especially pertinent to redevelopment of the Croell Cement site.

## **Goal 2: Improve Creative Guidelines**



1. Research and adopt an ordinance to properly manage derelict buildings.

2. Adopt a tree policy meant to build a robust green infrastructure. This should encourage the community to complement and support other key goals established for a city in the Comprehensive Plan.

3. Expand and continue to diversity the City's tree-planting practice and canopy.

4. Continue to trim overhanging branches up to a height of 14 feet over every street and up to a height of 9 feet over every sidewalk in town annually.

5. Continue annual efforts to remove unhealthy trees on public ground that pose a hazard to nearby structures and passersby.

6. Continue annual efforts to monitor ash trees for signs of Emerald Ash Borer, and remove infected trees.

7. Continue to monitor developments in topsoil management. Consider adopting a bestpractices ordinance.

## **Goal 3: Embrace Green Technological Advances**

- 1. Pursue the instillation of one or two EV-2 Charging Stations within the next year.
- 2. Track green energy programs, particularly in the Midwest, and go on record as supporting and publicizing renewable energy programs. An example of such an energy program is "Solarize Johnson County".



3. Be attentive to the virtues of dark skies, and as opportunities present themselves take advantage of newer technologies in lighting to reduce light pollution in our city. In this effort, the City should coordinate with the West Branch School District.



4. Investigate compost and recycling service for apartments.



## **National Flood Insurance Program**

Nearly 650 Iowa communities currently participate in the National Flood Insurance Program (NFIP). To participate in the program, a community must adopt and enforce floodplain management ordinances meant to reduce damage from future flood events. In exchange, the NFIP makes federally-backed flood insurance available to homeowners, renters and business owners in these communities, regardless of whether their property is in the current floodplain or not. Community participation in the NFIP is voluntary, but there are many advantages to participating.<sup>1</sup>

West Branch is participating in the FEMA National Flood Insurance Program.<sup>2</sup> Chapter 160 "Flood Plain Regulations" of the West Branch municipal code addresses and enforces floodplain management. Specifically, Chapter 160 Section 8 addresses flood damage minimization. Per FEMA, as of 3/31/2018, there were 26 homes in West Branch which had NFIP insurance. However, the Flood Hazard Map on the initial page of this chapter suggests that rather more homes in the city might be eligible for insurance. The total annual premium paid for policies in force ("premium written in-force") was \$38,435 and the total coverage amount for policies in force ("insurance in-force") was \$3,531,100.<sup>3</sup> This is summarized in Table 10.1., following.



Source: Time Magazine 2008. http://content.time.com/time/nation/article/0,8599,1815178,00.html. Accessed June 12, 2018.

Table 10.1.				
National Flood Insurance Program Statistics				
NFIP Policy Statistics as of 3/31/2018				
	Homes Insured	Total Written Premium In-Force	Total Insurance In-Force	
West Branch, Iowa	26	\$38,435	\$3,531,100	
State of Iowa	12,547	\$12,812,897	\$2,591,614,000	
Source: Federal Emergency Management Association, 2018				

To purchase insurance, residents can contact an insurance agent or an insurer participating in the NFIP. It is not possible to buy the insurance directly from FEMA. To assist in finding an insurance agent, residents can call the NFIP referral call center at 800-427-4661. One local agent, Matt McCall State Farm (563-886-6120) in Tipton sells the NFIP policy. According to their estimate, annual premium quotes range from \$600 to \$4,000 per policy, which is determined based on location and value of the home.<sup>4</sup>

Recommendation: The City should publicize the federal flood insurance program so that residents become more aware and can participated if they so choose.

## **Derelict and Abandoned Buildings**

There is currently no West Branch ordinance that deals with derelict and abandoned buildings. It is recommended the City research and adopt such a code to ensure all rehabilitations and demolitions of derelict or abandoned buildings are performed with sensitivity to the environment. As a reference, the Cedar Rapids code, Chapter 33A – "Moving or Demolition of Buildings; Use of Streets" addresses their process to deal with abandoned buildings. The code requires a permit to demolish or wreck a building. The chapter explains the application, issuance, validity, expiration and permit fees. The full code is available online and at the City of Cedar Rapids website "Building Services Codes".<sup>5</sup>

## Recommendation: The City should research and adopt an ordinance on derelict and abandoned building.

## **Urban Forestry**

A core responsibility of any city administration is to provide for and maintain the community's infrastructure, which comprises the physical assets that support the city's basic functions. Many communities have started to think of infrastructure as having two components: gray infrastructure (buildings, roads, utilities) and green infrastructure (trees, shrubs, grass). Doing so recognizes that green infrastructure works in tandem with the gray infrastructure and impacts the functioning of systems critical to the community.

Another form of environmental stewardship is to increase the number of trees throughout the city. Trees yield many benefits to a community such as providing wind breaks, reducing home cooling costs, preventing erosion, adding value to properties and providing food for wildlife. A 2017 publication on the health and energy benefits of trees in cities is available at https://www.nature.org/newsfeatures/pressreleases/urban-trees-can-save-tens-of-thousands-of-lives-globally.xml. It should also be noted that trees enhance the historic nature of West Branch.

#### Picture 10.3. Urban Forestry Example



Source: Ten-year urban forestry action plan for the National Urban and Community Forestry Advisory Council and the Community of Practice: 2016-2026. https://urbanforestplan.org/the-urban-forest/. Accessed May, 2018.

## **City Forestry Data and Iowa DNR**

West Branch is a community that embraces the benefits trees provide, as evidenced by planting additional trees each year. In the past four years, the city has planted over 200 trees. In 2014, approximately 140 trees were planted on the municipal cemetery grounds. In 2015, 45 trees were planted in Beranek Park. In 2016, approximately 35 trees were planted on Main Street. It is suggested that tree species diversity should be sought with these plantings. Ideally, the goal should be to achieve ISU Extension best practices for community tree cover: no more than 10% of public trees should be a single species, no more than 20% should be a single genus, and no more than 30% should be a single tree family.

In 2011, a report prepared by the Iowa Department of Natural Resources (IDNR) that inventoried and assessed trees in West Branch determined that the community's trees provide \$75, 851 (\$81,887 in 2017, adjusted for inflation) in total annual benefits. The specific values can be viewed in Table 10.2. below. The report also contained recommendations for a maintenance plan that included removal of problem trees, planting and replacement, trimming activities, and monitoring/addressing incidents of Emerald Ash Borer. Current practices, as reported by Public Works Director Matt Goodale, meet or exceed all annual benchmarks recommended by IDNR.



Table 10.2.Value of Ecosystem Services Provided by Trees in West Branch				
Benefits	Value in 2011	Value in 2017 adjusted for inflation		
Annual Storm water Benefits	\$21,115	\$22,795		
Annual Air Quality Benefits	\$2,200	\$2,375		
Annual Carbon Benefits	\$24,659	\$26,621		
Annual Aesthetic Benefits	\$13,302	\$14,361		
Total	\$75,851	\$81,887		
Source: Calculated by IDNR, 2011				

The Public Works Department (PWD) performs all tree maintenance and coordinates all plantings. It has been popular to do larger plantings around Earth Day in the spring in order to engage the community. Students from local schools have helped support the successful plantings to date. In turn, this provides a great opportunity for relationship building between city employees and school-aged youth.

The PWD expects to continue to seek partnerships and grants to assist in acquiring additional trees. In the past, both Alliant Energy and Trees Forever have supported tree plantings throughout the community. There is a potential to establish a volunteer committee in West Branch which would assist the PWD with their tree planting initiatives.<sup>6</sup>

The town of Mt. Vernon (population 4,444) has established a "Sustainability Committee" to monitor, research, encourage and implement green and sustainability oriented and projects within the City. For example, they are currently looking into items such as EV charging stations, rain barrels, solar energy, and water quality for nearby streams.<sup>7</sup>

Recommendation: The City should monitor the Sustainability Committee in Mt. Vernon and consider adopting a volunteer tree and/or sustainability committee for the community.

## **Economic Environmental Incentives**

As an economic development incentive and a welcoming gift to new homeowners it has been suggested that the city provide and plant a tree for each new house in town, if the owners desire it. Homeowners would be asked to pay a small portion of the tree cost and commit to tree maintenance.

There is an opportunity to become officially designated as a "Tree City USA". By doing so, the community would demonstrate its leadership and commitment to the environment and its residents who benefit daily from the cleaner air, shadier streets and improved beauty that urban forests provide. There are eighty such designated communities in Iowa, including smaller cities such as Tipton.

To qualify as a Tree City USA community, a town or city must meet four standards established by The Arbor Day Foundation and the National Association of State Foresters. These includes having a tree board, department, or committee, adopting a treecare ordinance, establishing a community forestry department with an annual budget of at least \$2 per capita, and observing Arbor Day each year. Such a tree committee could report to the City's Recreation Commission or to the PWD. As a reference, the City of Marion has established a thorough City Code regarding tree care, planting and maintenance.<sup>8</sup> If any additional staff are needed in order to fulfill these standards, there may be an opportunity to partner with nearby cities or Cedar County in order reduce costs.



Source: Arbor Day Foundation. https://www.arborday.org/programs/treecityusa/. Accessed June, 2018.

#### **Environmental Incentive Recommendations**

In West Branch, a tree policy meant to build a robust green infrastructure for the community can complement and support other key goals established for a city in the Comprehensive Plan. For this reason, the following policies are recommended to codify the informal policies – and, where appropriate, build upon their successes – as already practiced in West Branch presently.

#### **Recommendations:**

- 1. Continue to partner with organizations such as Trees Forever and look for grant opportunities like the Alliant "Branching Out" grants to increase the number of trees in the city. This includes seeking opportunities that would allow the community to provide trees to private homeowners as well as to plant trees in public spaces.
- 2. Expand tree-planting practice and continue to diversify the community tree canopy, planting fewer maples and increasing the number of other tree species.
- 3. Continue to trim overhanging branches up to a height of 14 feet over every street and up to a height of 9 feet over every sidewalk in town annually.
- 4. Continue annual efforts to remove unhealthy trees on public ground that pose a hazard to nearby structures and passersby.
- 5. Continue annual efforts to monitor ash trees for signs of Emerald Ash Borer, and remove infected trees.
- 6. Form a tree committee comprised of 6-7 community members to provide direction for future tree projects within the community.
- 7. Seek to become designated a "Tree City U.S.A."
- 8. Integrate these measures into the West Branch Comprehensive Plan and other planning documents for the community as appropriate.



Source: Trees Forever. http://www.treesforever.org/App\_ABO. Accessed June, 2018.

## **Electric Vehicle Charging Stations**

As Electric Vehicle (EV) ownership increases, there will be a growing demand for EV charging stations. Currently, Alliant Energy is investing more in regional charging stations and EV charging infrastructure throughout the region. Providing public charging stations in West Branch could be an economic development tool to attract visitors, as well as demonstrate the community's leadership in environmental stewardship.

In 2018 Alliant started to offer rebates for community charging stations. Fast, level-2 stations for use by city employees or the public are eligible for \$1,500 from Alliant for a dual-prong unit. This amount will largely cover the equipment costs for non-networked charging stations, which means the city need only cover installation costs. Alliant can supply a field engineer to help identify locations where the installation costs would be lowest due to an adequate existing power supply. Rebates are available on a first-come basis for up to two stations. Additional support for charging stations may become available for mitigation activities from the state of Iowa resulting from a settlement from Volkswagen concerning settlements under the Clean Air Act being applied in 2018-19.<sup>9</sup> The funds are to be administered by the Iowa Department of Transportation.

A charging station may attract regional residents as well as persons traveling through along I-80. While many EVs currently have fairly limited battery ranges, the next closest charging stations are Iowa City (North Dodge St. Hy-Vee) and Davenport. The east side of Iowa City has one of the highest densities of electric vehicle ownership rates in Iowa.<sup>10</sup>

The average charge time is 1 hour 38 minutes. This provides the user of the electric charging station with time to visit the shops and restaurants in downtown West Branch while they are waiting for their vehicle to charge. As a result, foot traffic in the area surrounding the charging station would be expected to increase. An ideal location for a charging station may be in the parking lot just south of the City offices, on the northwest corner of West Main and Poplar St, because of its proximity to the retail shops and restaurants. A future potential location is within the development of the Croell cement plant area. Another possibility would be the Hoover complex. Inquiries suggest there is interest on the part of the Department of the Interior, and funds available but the process to apply for the funds may be lengthy.

There are several options to select from with regard charging infrastructure, software and user rates. While some communities offer charging stations free to the user, others charge a small fee that is managed by a third-party contractor. Both Centerville (pop. 5,924) and Mt. Vernon (pop. 4,444) have worked with Alliant on their charging station programs, so the company has a good track record of working with smaller communities. Ames has two stations available for public use and charge \$2 per hour, or \$1 per hour for Ames residents.<sup>11</sup> According to ChargePoint data in 2015, the average charging session cost the hosting entity \$0.50.<sup>12</sup>

## Recommendation: The City should pursue the installation of one or two EV 2 Charging Stations in 2018.

## West Branch Solid Waste and Compost

## The Current Recycling Program

Johnson County Refuse, a locally owned operation serving Johnson County and surrounding areas, provides garbage and recycling pickup every Friday morning in the City of West Branch. Garbage that cannot be recycled is placed in garbage bags or cans with one or two \$1.25 yellow stickers attached. These stickers can be purchased at the City Offices, Dewey's Jack & Jill, and Kum & Go, or year-round stickers can be purchased directly from Johnson County Refuse. Curbside recycling is mandatory in the City of West Branch. A monthly fee of \$4.75 is included in the water and sewer bill, and recycling bins are provided gratis to each residence. Service is not currently provided to apartment complexes.



#### Picture 10.6. Johnson County Refuse Recycling Action Picture



Source: Cedar Rapids Gazette 2015, "Rural Residents Face Limits to Recycling." http://www.thegazette.com/subject/news/rural-residents-face-limits-to-recycling-20150214. Accessed June, 2018.

## **Curbside Compost Pick-up**

In efforts to become more sustainable and reduce volume at local landfill sites, communities have started implementing curbside pick-up programs for compost. The compost can then be used by residents for agriculture, horticulture, and erosion control. Today, in cities where curbside programs do not exist, residents can voluntarily bring their food scraps and other compostable material to a facility or can compost in their yard. The closest facility to West Branch is the Iowa City Landfill and Recycling Center. Here they collect commercial organics for composting, ultimately diverting organic material from the landfill. A 2017 statewide study found that approximately 30% of material in the landfill material was compostable material.<sup>13</sup>

An investigation was done to determine whether compost pickup curbside might be possible for West Branch through Johnson County Refuse. As of 2017, the owners stated that curbside compost pick up service in West Branch was not feasible. They explained that the compost pick-up they currently provide to North Liberty is done because of the City's proximity to their facilities. They are currently not interested in expanding curbside compost pick-up service to other cities that use their solid waste/recycling services.

The City should continue to monitor the availability of curbside recycling options in the region.



Source: City of Iowa City Organics. https://www.icgov.org/foodwaste. Accessed June, 2018.

#### **Municipal Compost Examples**

Two nearby municipalities that provide curbside composting services to residents are Iowa City and North Liberty. Iowa City provides the service to residents receiving City of Iowa City garbage, recycling, and yard waste services. These residents simply use the annual yard waste stickers (\$12.50) on a 20-35 gallon, upright garbage bin and place it on the curb on their normal garbage pick-up day. A list of accepted curbside items is below.

The City of North Liberty, like West Branch, uses Johnson County Refuse services for garbage and recycling. North Liberty residents receive curbside compost pick up along with solid waste and recycling services. This program is voluntary and residents must sign up with the City to be provided the pick-up service. As of 2017, there were 170 residents participating in the program. This program is different from Iowa City's because rather than having an annual sticker on a container, the participants put their compostable material in a North Liberty yard waste bag (\$1.65 each) and place it on the curb in the compost container (obtained from the city for a \$25 deposit). The material is transported to Iowa City's Commercial Compost facility.

## Iowa City Compost Items

- All fruits and vegetable matter
- All grain products
- Non-liquid dairy products (no milk)
- Meat and seafood (raw or cooked, including bones and shells)
- Eggs and eggshells
- Pizza and used pizza boxes
- Coffee grounds/filters, tea and tea bags
- Leftovers, plate scrapings
- Spoiled foods
- Paper leftover containers from restaurants, but NOT plastic or foam containers
- Uncoated paper that has been in contact with food: napkins, paper towels, pizza boxes, uncoated paper plates, uncoated paper cups
- Small quantities of grease and fat
- Compostable service ware such as spoons, forks, plates, etc. that are certified ASTM D64001

## North Liberty Compost Items

- Fruit and vegetables
- Meat (raw or cooked, including bones) and seafood (raw or cooked, including shells)
- Grains, bread and baked goods
- Dairy, eggs, coffee grounds and filters
- Mixed plate scrapings
- Wood produce crates
- Floral waste
- Leftovers past the point of re-serving
- Spoiled foods
- Paper that has been in contact with food such as:
  - Napkins
  - Parchment bakery tray liners
  - Pizza boxes
  - Uncoated paper plates

#### **Compost Pilot Program**

More locally, before the Iowa City curbside pickup was launched in March 2017, a pilot study of fifty participants was completed in 2014. They found that in 6 weeks, 1,000 pounds of material was composted rather than transported to the landfill under the then-available waste services.

There are only three facilities in the State of Iowa that accept food waste into their composting operations. These include Metro Waste Authority (Des Moines), Cedar Rapids/Linn County Solid Waste Agency, and Iowa City Commercial Composting facility.

Because Johnson County Refuse finds compost recycling infeasible, another option for the City of West Branch is to compost its own material. The Iowa DNR provides a helpful toolkit for communities interested in collecting and producing their own compost. If a parcel of land is available and enough residents are interested, a compost facility could easily be set up to meet the needs of the City. If material coming in is less than two tons per week, the in-house facility would meet the "Permit by Rule" exemption.<sup>14</sup> If a curbside compost program collects more than two tons per week, the municipality must obtain the appropriate permit from the Iowa DNR. The final composted material could be used for City landscaping and soil quality restoration, or perhaps for use in a community garden. West Branch could also begin partnerships with local farmers or register with Iowa Department of Agriculture and Land Stewardship (IDALS) Feed and Fertilizer Division to legally sell the compost. The curbside pickup could be contracted out, while the City owns and operates the composting services, and would allow residents a solution to sustainably rid themselves of yard waste and food scraps.



http://www.glendaleca.gov/government/departments/publicworks/integrated-waste-management/refuse-trash-recycling/backyardcomposting. Accessed June, 2018.

## Apartment Solid Waste/Recycling Service

Iowa City passed a resolution (Nov. 2016) that requires all multi-family apartments and condominiums to provide recycling to their tenants. Landlords, apartment owners, managers and condo associations have until their next scheduled City inspection to comply. As such, the mandate will roll out through the end of 2018. The enforcement mechanism mirrors existing solid waste requirements and compliance will be enforced in conjunction with the next rental permit renewal permit issuance.

Recommendation: City of West Branch take the opportunity of observing recycling in Iowa City to further investigate compost and recycling service for apartments.

## **Light Pollution**

Astronomers have preached the virtues of dark skies for years. Modern cities, they say, use far more artificial light during nighttime than necessary, much of it emanating into the sky where it does no good.

So-called light pollution erases our view of stars and, to a degree, the wonder they bring at our place in the cosmos. High-intensity lights at night can actually do harm to humans, by suppressing hormones that help people fall asleep. For these reasons cities have begun replacing sodium high-pressure street lights with dark-sky-compliant LED bulbs.

Recommendation: West Branch be attentive to the virtues of dark skies, and as opportunities present themselves take advantage of newer technologies in lighting to reduce light pollution in our city. In this effort, the City should coordinate with the West Branch School District.



## **Green Energy**

Small cities may find it difficult to envision a future in which their energy consumption is more "green" than today, but many larger U.S. cities are making strides towards reducing the environmental impacts of the energy they consume. In 2017, over 20 cities had determined they would transition fully to renewable energy by various future periods of time. One such Midwestern city is Madison, Wisconsin.<sup>15</sup>

Communities need not be large to benefit from policies aimed at energy efficiency and green energy. The town of Columbus, Wisconsin has a population just under 5,000 residents and has adopted energy policies that have resulted in cost savings for municipal buildings, added to the quality of life within the community, and served as an important economic development tool. Efforts within Columbus began with several energy-efficiency projects for city facilities, including the public works department, senior center, police station, fire department, city hall and library. This included converting to LED lighting and energy-efficient windows. A solar array was installed at the community high school and integrated into industrial arts curriculum. The community also committed to reducing its non-renewable energy usage 25% by 2025. Steve Sobiak, the former economic development director for Columbus, credits the energy efficiency programs as a major factor in the decision by Enerpac to expand its manufacturing operations in Columbus rather than relocate to another community.<sup>16</sup>

Some residents in West Branch receive energy from Linn County REC rather than from Alliant. Most of the housing in West Branch that uses Linn County REC is located near the golf course in the Bickford and Greenview Drive neighborhoods. Linn Country REC follows state regulations for interconnecting with alternative renewable energy systems such as solar. Nearly 60% of Linn County REC "Generation Mix" electricity is from carbon free sources. Their generation mix is composed of coal, nuclear, hydro, landfill gas generation, wind, natural gas, and oil resources.<sup>17</sup>

A relatively new program, Solarize Johnson County, has been established to promote solar energy in the region. Offered by Johnson County, homeowners throughout West Branch may participate in the program to pool their buying power and secure significant discounts that make installing solar more affordable.<sup>18</sup> There have been two meetings in West Branch to date, which have received a fair amount of interest. In 2018, California passed a requirement for all new homes to have solar power.<sup>19</sup>

Recommendation: The West Branch Planning and Zoning Commission should monitor green energy activities, particularly in the Midwest. West Branch may also wish to go on record as supporting and publicizing renewable energy programs engaged in by its largest energy supplier, Alliant Energy.



## **Brownfield Redevelopment Policy**

Brownfields are defined by the U.S. Environmental Protection Agency (EPA) as "property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant." However, brownfield assessment and redevelopment is often hindered by confusion as to what is and is not a brownfield (a small, abandoned gas station may be, while an active manufacturing site often is not). The stigma associated with contaminated sites further compounds the problem, creating barriers to redevelopment.

Although generally assumed to be an urban problem, brownfield sites are pervasive across the U.S. and pose particular challenges in rural areas where many developers find it easier to build in the ample greenspaces on the outskirts of town rather than redevelop closer in. Brownfield sites in Iowa commonly take the form of former filling stations with underground storage tanks and older commercial spaces suspected of containing asbestos. Although concerns about these sites can leave them sitting empty and unused, communities may not realize they are brownfields and, as such, eligible for site assessment and cleanup funds through the EPA. In the majority of cases, environmental site assessments (ESAs) are sufficient to remove the stigma of contamination.



Source: Google Maps August 2013. Accessed June, 2018

## **Financial Help with Brownfields**

The East Central Intergovernmental Association (ECIA), which serves governments in a five-county area of eastern Iowa – including the government of West Branch – in 2016 received a \$600,000 grant from the EPA to support ESA activities in its service area. These funds must be used by 2019. To help disburse the grant money, ECIA has formed the East Central Brownfields Coalition (ECBC) with the intention of identifying brownfield sites and assisting with their redevelopment. More about ECBC can be found here: <u>ecia.org/Brownfields/coalition</u> and here: <u>http://ecia.org/Brownfields/</u>.

Participating in the ECBC can complement and support key goals outlined in the West Branch Comprehensive Plan, particularly goals related to downtown revitalization and business development in Chapter 7, Economic Development. For this reason, the following policies are recommended for West Branch in regards to brownfield sites within its jurisdiction:

- 1) Create an inventory of potential brownfield sites within West Branch in cooperation with ECIA and ECBC. A group of graduate students from the University of Iowa recently developed software available through ECIA to help communities create a brownfield inventory, assess redevelopment potential, identify priority sites, and request grant funding for ESAs.
- 2) Work with owners of unused commercial sites to determine whether they may be brownfield sites, assist with creating redevelopment plans, and apply for assistance from ECBC for those owners willing to consent to environmental site assessment.
- 3) Integrate brownfield assessment and redevelopment goals into the West Branch Comprehensive Plan, situating these policies within the context of broader economic development and environmental priorities.
- 4) Coordinate efforts with ECBC to obtain and convey brownfield sites to a brownfield land bank for redevelopment.



Recommendation: Embrace the above four recommendations on a brownfields inventory, determination of possible brownfields sites, and coordination with ECBC to produce a brownfield land bank. These recommendations are especially pertinent to redevelopment of the former Croell Cement site.

## **Topsoil Concerns in East-Central Iowa**<sup>20</sup>

Over the past several years, Johnson and Linn County, Iowa, municipalities have held an array of debates about dirt, or more specifically, topsoil. Topsoil is defined as the upper, outermost layer of soil containing the majority of a plant's roots.<sup>21</sup>

Iowa, historically a prairie state, is known and valued for its deep, nutrient-rich topsoil. When land is developed for construction, developers typically grade that land, altering the topography to make it suitable for buildings and infrastructure, and accommodating to storm water drainage requirements. During this process, topsoil is often compacted and stripped from the land. Contractors may then sell the topsoil to excavation companies or dispose of it. As buildings near completion, grass turf is generally placed directly on the top of the exposed and compacted land.

#### Why is this a problem?

When there is very little to no topsoil foundation, and a compacted surface area, grass turf roots cannot adequately establish themselves in the ground. This makes it challenging for a homeowner to grow vegetation on his or her lawn. It also hinders rainwater from infiltrating the ground at maximum capacity and increases the chance that water will run off the land. Such runoff, combined with runoff from paved land, stresses the storm sewer system. In addition, runoff carrying added chemicals is introduced to Iowa waterways. The turf is more easily eroded, so homeowners may face turf replacement or soil aeration costs.

In short, a lack of post-construction topsoil regulation reduces the ability of the land to hold vegetation, may inconvenience the homeowner, contributes to major and minor flooding events, and can pollute Iowa's water supply.



Source: Soil Science Society of America. http://www.soils4kids.org/about. Accessed June, 2018.

## **State Regulation**

For these reasons, in October 2012, Iowa was inspired by the Environmental Protection Agency (EPA) and the Iowa Department of Natural Resources to adopt a state topsoil rule. The state worked together with homebuilders to write a rule requiring developers to maintain up to four inches of topsoil on a site if the site had that much topsoil before construction started. If the site had less, only that prior amount needed to be maintained.<sup>22</sup> In 2013, developers stated the topsoil regulation was too costly and proposed a change. In 2015, the state Environmental Protection Commission voted to set aside the four-inch topsoil rule. Instead, communities may adopt their own topsoil rules, if they choose. Two nearby cities have adopted such rules.

#### Coralville, Iowa's Topsoil Ordinance

Coralville's topsoil ordinance is within Chapter 159 of the Code, listed as part of the post-construction storm water ordinance that new development applications must meet. The topsoil regulation states that *site design shall address the preservation and replacement of existing topsoil in an uncompact manner*, and that *existing topsoil must be preserved and reapplied on site in a uniform and uncompact manner*.<sup>23</sup> This simple language is phrased similarly to the DNR staff's originally proposed wording for the state regulation in 2012. If little or no topsoil is present before construction, builders can use a variety of options ( such as inexpensive compost mixtures, etc.) to recover the site. Coralville's topsoil requirement is only one piece of their vigorous post-construction storm water ordinance.

#### North Liberty, Iowa's Topsoil Ordinance

North Liberty's topsoil regulation is codified as part of its required storm water management permit. It states that *topsoil shall be preserved at all construction sites unless land use precludes the practice*, and requires developers to conduct soil testing to determine the original existing depth of the topsoil before site disturbance. This original topsoil depth must then be replaced at the project's end.<sup>24</sup> Other relevant requirements meant to address issues with storm water runoff include: builders are not allowed to export any topsoil away from site; topsoil must be set aside and not be mixed with clay during construction; and, the builder must till the site's compacted clay at the project's end.

North Liberty chose to exclude the 4-inch minimum that was originally part of the state's 2012 topsoil regulation, in order to prevent developers importing new dirt onto sites where four inches did not exist to begin with. However, typical sites in North Liberty have been reported to have anywhere from 5 to 24 inches of topsoil. As a result, many believe that North Liberty's regulation will prove to be sufficient.<sup>25</sup>

Enforcement of the topsoil ordinance will fall to North Liberty's building department in conjunction with its contracted engineering firm. A city inspector will assess site topsoil depths at a project's end to ensure it complies with the initial permit documentation.

## **Pros and Cons of Topsoil Regulation**

## Costs of topsoil regulations

Developers' primary argument against topsoil regulation is that it's too challenging and costly to comply. They emphasize their concern with making homes affordable for buyers, and declare that topsoil regulation adds costs to construction. In an appeal to homebuyers, developers emphasize that instead of developers sacrificing profits for topsoil replacement, it's the homeowners who will have to pay for replacement through increased housing prices.<sup>26</sup>

However, so far in debates over regulation no one seems to be able to agree on *how much* extra cost it will require. City officials in Cedar Rapids estimate that a 4-inch topsoil requirement could add \$1,000 to \$1,500 to a new home's cost.<sup>27</sup> Developers are conflicted: some say an 8-inch restoration on a 0.4 acre home lot would cost \$3,300 at most, while others estimate \$10,600 for an 8-inch restoration, and \$7,375 for 4-inches restoration on the same 0.4 acre lot.<sup>28</sup> In reality, the cost of topsoil replacement varies according to each individual site's grading, compaction, soil conditions, and the practicality of the developer to stockpile the site's topsoil during construction.



Others interpret topsoil regulation differently. Dan Holderness, the Coralville City Engineer states: "topsoil regulation protects unsuspecting new homeowners who are unfamiliar with construction process and the importance of topsoil."<sup>29</sup> Some point out that topsoil replacement is a *need* comparable to windows and plumbing that should not be considered an option that impairs affordability. In addition, it is to be noted that developer acceptance of topsoil regulation may depend on the type of developer. Residential developers construct and then transfer ownership to homebuyers, making them less likely to accept any "added costs" of topsoil replacement. On the other hand, commercial developers often maintain ownership of the property after development and prefer to have an attractive, low-maintenance lawn, which makes them more likely to support topsoil regulation.

Some developers argue that most new homebuilding happens at the edge of the city where storm water practices such as detention basins are already required to detain runoff.<sup>30</sup> While this may be true, storm water detention basins are intended to accommodate only the runoff from impervious surfaces. They may become overwhelmed when required to handle additional run-off from grass surfaces. An overwhelmed sewer system results in additional infrastructure costs for the municipality. Developers are quick to point out the increased costs to the homeowner. However, they fail to recognize that the combined impact of topsoil runoff from multiple developments can strain a city's sewer system, resulting in increased costs for the city and its taxpayers. For example, Cedar Rapids' storm sewer system has a backlog of 90 projects totaling \$50 million.<sup>31</sup> Finally, topsoil provides environmental services, such as increased vegetation health, water quality, and infiltration, which not all storm water detention basins are built to handle.

#### Willingness to Purchase Homes

In a recent debate between Cedar Rapids developers and city staff on topsoil regulation, developers argue that topsoil regulation will prevent people from wanting to live in Cedar Rapids. City officials in nearby Marion and Hiawatha are closely following the Cedar Rapids topsoil debate, from the contrary view that Cedar Rapids has the potential to make the city a regional leader in topsoil regulation.<sup>32</sup>

Good topsoil provides a substantial foundation for grasses and other vegetation. A homeowners' quality of life can increase with the ability to grow healthier, low-maintenance lawns that better support garden, trees, landscaping, and prevent localized flooding. Despite being short-lived, the state's topsoil ordinance has already served to educate prospective homebuyers on the benefits of having topsoil on their lawn. Thanks to the rule, homebuyers have begun asking about topsoil and soil quality as they decide on which homes to buy.<sup>33</sup> Publicity on this issue has brought to light stories from residents, who describe their challenges with attempting to grow vegetation on a foundation of compacted clay, gravel, and no topsoil. Although topsoil replacement may add upfront costs to the house, the cost for an owner to continually aerate the soil over their years of ownership may be much higher. It is possible that by rejecting a topsoil ordinance, Cedar Rapids could actually deter residents from purchasing homes within its boundaries.

Picture 10.10. An Example of a Well Maintained Lawn



Source: Atlanta Lawn Care Services, 2013.

The above picture helps explain why better topsoil may be more desirable to future homeowners who wish to have high quality landscaping and gardening.

#### Improved Water Quality and Reduced Flooding

While a healthy supply of topsoil allows the proper establishment of vegetation, other benefits accrue community wide. Lawns will require less chemical treatment, increase water infiltration into the ground, and slow and reduce storm water runoff and erosion. This helps prevent and mitigate flash flooding events and the contamination of waterways.

Although topsoil regulation cannot single handedly reverse lowa's impaired water situation or prevent flooding events, it is a piece in the large picture of regional and community sustainability. While improving the water quality and runoff from a single development may not make much difference, improving the water quality and runoff from hundreds of developments does make a difference. In addition, because Iowa communities are asking farmers to improve the way they handle runoff, it's appropriate that municipal residents also contribute.<sup>34</sup>

#### Strategies for Preservation and Replacement of Soil

Best management practices for topsoil involve both the preservation of the construction site's native soil, and the restoration of soil disturbed or removed by development to a state as close as possible to the original site. Although best management practices for topsoil may vary by location, the following methods have been adopted by a variety of state and local governments across the nation.

Builders can restore soil to meet topsoil replacement rules in a variety of ways. Most regulations and best practices suggest the four options described below. Strategies can be used individually or in combination at a single site.<sup>35</sup>

Picture 10.11. Counties Located in Lower Cedar River Watershed



Source: Muscatine Journal 2017, "Muscatine County approves creation of Lower Cedar Watershed Authority".

#### **Topsoil Composition**

Material that should *not* be mixed in topsoil includes: wood bark, wood fiber, grass hay, or grain straw. Topsoil may be mixed with organic material such as "compost and rock mulch for added slope protection and to improve the growing capability of seeded and planted vegetation."<sup>36</sup>

#### Reusing Stockpiled Topsoil

Stockpiling topsoil can result in the disruption and loss of beneficial soil microorganisms if stockpiled over a length of time (+/-6 months). If topsoil is stockpiled prior to placement, the top one foot of the stockpile material should be mixed with the remainder of the stockpile to ensure that living organisms are distributed throughout the topsoil material at the time of final placement.<sup>37</sup>

Following construction, stockpiled topsoil should be uniformly redistributed for placement to a depth of 6 inches. Placed topsoil should be cat-tracked vertically to the slope to compact the topsoil and to create horizontal pockets (safe sites) to hold seed and water.<sup>38</sup>

- 1. Plan site development to leave native soil undisturbed and protect from compaction during construction. Fence off areas that do not need to be stripped, logged or graded and protect these areas from disturbance;
- 2. Amend the existing soil by rototilling compost into the existing soil;
- 3. Import topsoil mixes with 5-10% organic matter for turf areas and planting beds;
- 4. Stockpile, reapply, and amend original-site soil.



**Temporary (Current) Stockpile Management** 

Source: http://ecologywa.blogspot.com/2013/08/around-sound-work-underway-at-rayonier.html

#### **Restoring Original Site Soil Moisture**

Some municipal, county, and state regulations require that unless covered by an impervious surface, areas cleared and graded be restored with an original soil moisture holding capacity equivalent to that of the original undisturbed native site soil.<sup>39</sup>

#### Restoring Original Site Organic Matter Content and pH

Best practices suggest that replaced topsoil have an 4-5% organic matter content (dry weight) for turf applications, 8-13% organic content for planting, and a pH that is suitable for the proposed landscape plants.<sup>40</sup>

#### **Replacement Thickness**

Several regulating agencies, such as the state of Minnesota, the City of Seattle, and King County, Washington, require that a minimum of four to eight inches thick of soil be restored to the site. In addition, they recommend that that compacted subsoil be tilled or plowed before the placement of topsoil.<sup>41</sup> Leaving the topsoil in a roughened condition reduces erosion and creates a safe environment for seeds to establish and grow. In addition, best practices recommend that subsoils below the topsoil be scarified at least four inches.<sup>42</sup>



Source: London Lawn Turf 2018. https://www.londonlawnturf.co.uk/turf-lawn-seeding-soil.html. Accessed, June, 2018.

## **Topsoil Conclusion**

The debate on topsoil replacement regulation for construction sites need not be "another tired showdown between builders and environmental interests. It can and should be a cooperative model that seeks and values input from a broad array of citizens, not just those able to wield clout behind the scenes." <sup>43</sup>

Topsoil replacement regulation's potential front-end cost impact on an individual lot is important. But also important are the burdens for homeowners who must struggle with an unproductive yard. Perhaps more important are the broader costs, borne over time by all city residents, associated with soil runoff, water quality, and the wear and tear of the municipal sewer systems that must handle quantities of runoff from inefficient land.

Employing best management practices for topsoil preservation and replacement, can help moderate development's impact on the land. A city can be both open to development and interested in maintaining its land in a way that provides social, economic, and environmental benefits through carefully construed topsoil regulation.

Recommendation: West Branch continue to monitor developments in topsoil management, to the end of adopting a best-practices ordinance.





Source: Cherry Hill screened top soil 2016. https://www.cherryhillinc.com/topsoil-rock-stone-process-aggregate. Accessed June, 2018.

## **Storm Water Management**

#### **Best Management Practices**

West Branch has developed the Storm Water Quality Best Management Practices Reimbursement program to promote residential installation of storm-water quality BMPs and improve water quality. Financial assistance is given to applicants who install BMPs on their property that improve the quality of storm-water runoff entering the City storm sewer system, creeks or streams. Typical projects include rain gardens, bio-retention, rain barrels, and pervious paving systems, among other practices.<sup>44</sup>

Recommendation: West Branch should monitor the program's effectiveness and make adjustments as warranted.

#### **Permeable Pavers**

Permeable pavers transform traditional transportation surfaces to allow water to soak down through the gaps between pavers and percolate into the soil. This system recharges the ground water, filters out pollutants, and cools the water while releasing it slowly. Benefits include a reduction in the volume of runoff and amount of pollutants in storm-water treatment facilities and streams, as well as no ponding of water in periods of freeze and thaw.<sup>45</sup>

Several small towns in Iowa have successfully implemented permeable pavers. By example, West Union (population 2,395) has converted their entire business district, approximately six blocks, from store front to store front.<sup>46</sup> <sup>47</sup> Charles City (population 7,500) has converted 26 blocks to permeable pavers, including a new planned unit development.<sup>48</sup> Hills (population 808) has installed permeable pavers for parking along their main commercial street.<sup>49</sup>



Source: West Branch Iowa, Storm Water Best Management Practices. https://westbranchiowa.org/sites/default/files/Stormwater\_BMP\_Program\_Fo rm\_Final.pdf. Accessed July, 2018.

Picture 10.15. Permeable Pavers in Downtown West Union, Iowa



Source: Rain Scaping Iowa. www.rainscapingiowa.org Accessed July, 2018.

## **Hazard Mitigation**

Hazard Mitigation is critical to the comprehensive planning process, and hazard concerns are integrated throughout this document. In order to facilitate review of the West Branch plan for compliance with Iowa's smart planning grant parameters, this section uses the "safe growth audit questions" from the FEMA publication Hazard Mitigation: Integrating Best Practices into Planning as a framework to collect and present the hazard mitigation elements of this plan. The West Branch comprehensive plan focuses primarily on flooding issues for its hazard mitigation recommendations, as this is the hazard most likely to be affected by the decisions of the comprehensive plan (namely, land-use and environmental decisions).

The efforts to minimize the impact of hazards in West Branch should be evaluated annually and be considered an on-going effort. The questions below will help the City of West Branch address and identify ways to minimize devastation from hazards.





Source: Adam Kofoed, Cedar County Planning Team at Iowa Initiative for Sustainable Communities. Fall. 2017.

#### Land-Use

Does the future land-use map clearly identify natural-hazard areas?

Map 10.1 shows the planned future land-use with the current floodplain. Development should be discouraged in the floodplain.

Do the land-use policies discourage development or redevelopment within natural-hazard areas?

Yes, as described above, existing structures in the floodplain areas are noted and mitigation continues to be processed through an ongoing cost- benefit analysis.

Does the plan provide adequate space for expected future growth in areas located outside of natural-hazard areas?

Map 10.2 shows the planned future land-use for the City of West Branch. With redevelopment of existing sites and looking at infill lots as the first priority of development there is adequate land outside of natural-hazard areas for development

## **Transportation**

Does the transportation plan limit access to hazard areas?

Yes. The transportation plan does not encourage access to hazardous area. For example, any new roads and streets proposed for growth areas would be discouraged not to enter the floodplain, but rather would access higher ground.

Is transportation policy used to guide growth to safe locations?

Yes. Proposed new roads would connect to areas of town that have areas of non-hazard land available for development. Providing access to these areas will encourage development in safe areas. The West Branch floodplain ordinance stipulated that subdivisions should have means of access during flood.

Are movement systems designed to function under disaster conditions (e.g., evacuation)?

Yes. One of the primary features of the set of proposed transportation changes (Chapter 9) is the provision of multiple access routes to all developed areas, and accommodation of multiple modes of transportation, including auto, bike, and pedestrian. By limiting single access developments (such as dead-end cul-de-sacs), the proposed system allows for greater evacuation possibilities. Most new growth areas have multiple street outlets and all new growth areas have at least one proposed street connection to the existing street network that does not cross a floodplain. A more connected street system also makes safety services such as ambulance/fire service more efficient. Providing multiple mode choices improves safety by allowing options for evacuation and mobility during disaster conditions, particularly for those without vehicles. Proposed street extensions also reduce the load on existing streets, which increases mobility for safety purposes such as ambulance/fire service and other emergency services.

## **Environmental Management**

Are environmental systems that protect development from hazards identified and mapped?

Yes. Map 10.1 shows floodplains and wetlands. These areas contribute to the natural drainage system that can help prevent flooding in developed areas by moving and dispersing storm water properly.

Do environmental policies provide incentives to development that is located outside of protective ecosystems?

Yes. The future land-use map (Map 10.2) located new development in areas outside of protective ecosystems and shows areas inside those eco systems as non-developable (greenways). This map is presented as a guide for the planning and zoning commission and city council in deciding where new development should be allowed. Additionally, the City of West Branch floodplain ordinance places restriction on development in the floodplain.

#### **Public Safety**

Are the goals and politics of the comprehensive plan related to those of the FEMA Hazard Mitigation Plan?

Yes. The goals and policies of the comprehensive plan are in agreement with the 2011 Cedar County, Iowa Multi-Jurisdictional Hazard Mitigation Plan (HMP). The comprehensive plan primarily addresses floodplain issues, as this is the hazard most likely to be affected by the decisions of the comprehensive plan (namely, land-use and environmental decisions). The land-use plan and storm-water plans in this document correlate directly to several mitigation actions identified in the Cedar County HMP that are fully outlined on the following page. Cedar County in general, has had significant issues with flooding in the past decade and many of the County's mitigation goals are related to flooding, which in turn become crucial to this comprehensive plan in terms of zoning, construction, roads and watershed preservation and restoration. Other factors that correlate from the HMP to the comprehensive plan are in terms of necessary safety systems that relate to mitigation, such as fire and safety personnel, systems and equipment.

Is safety explicitly included in the plan's growth and development policies?

Yes. Public Safety facility development is covered in chapter 12, while safety concerns regarding natural hazards are referenced as part of the "Comprehensive Planning Principles" and "preservation of Natural Areas" in chapter 5.

Does the monitoring and implementation section of the plan cover safe-growth objectives?

Yes. Chapter 14 outlines a plan and broad timeline for implementation of the safe-growth objectives, including: new residential developments connect well to existing neighborhoods, and guide growth to non-hazard areas of the city. Chapter 14 also provides possible funding sources to help the City of West Branch accomplish these goals.

## **Other Hazards**

While avoiding floodplain development is one of the biggest hazard prevention the City of West Branch can do, being aware of other hazards is important too. Even though there is little the City of West Branch can do to prevent natural disasters caused from tornadoes, windstorms, hailstorms, and thunder and lightning being aware of these hazards and have a storm preparedness plan in place can reduce the chaos if such a storm strikes the City of West Branch. The City should as be aware of manmade hazards from brownfields, and interstate highway for example. Having an understanding of these potential hazards and having a response plan in place if such a hazard occurs can limit the destruction caused by these manmade hazards. An investigation of possible brownfield sites in the City could be done so the City has a better understanding of where these potential hazards are. For a comprehensive look at all the potential hazards the City of West Branch could be exposed to please refer to the Cedar County, Iowa Multi-Jurisdictional Hazard Mitigation Plan January 2011.

# Specific action steps for hazard mitigation from the Cedar County multi-jurisdictional hazard mitigation plan included in the comprehensive plan:

*Storm Water System and Drainage Improvements* – these improvements can serve to more effectively convey runoff within cities and towns, preventing interior localized flooding. May also reduce the risk of illness/disease by eliminating standing water.

*Stream Bank Stabilization/Grade Control Structures/Channel Improvements* – which can serve to more effectively protect structures, increase conveyance, prevent down cutting, and provide flooding benefits.

**Drainage Study/Storm Water Master Plan** – Protective steps to identify all potential problems/issues can lead to effectively addressing improvements and prioritizing the projects to improve conditions. These improvements can serve to more effectively convey runoff within jurisdictions, preventing interior localized flooding resulting in damages. This ensures that the most beneficial projects are done first and could possibly eliminate the need for others.

*Flood-prone Property Acquisition* – Voluntary acquisition and demolition of properties prone to flooding will reduce the general threat of flooding for communities. Additionally, this can provide flood insurance benefits to those communities within the NFIP.

*Drainage Districts* – Improve land for agricultural and sanitary purposes on a regional basis.

## Map 10.1. Flood Risk

## **Regulation and Enforcement Updates**

Ensures that no new structures built will be vulnerable to flooding. Reducing damages and health risks associated with flooding.

#### Floodplain Management

Continue compliance with the NFIP. Good standing enables participants to apply for PDM and HMGP cost-share.

## **Civil Service Improvements**

Having appropriate and up to date equipment along with adequately trained and numbered personnel increases safety and reduces the risk of damage.

#### National Flood Hazard Map<sup>50</sup> West Branch, Iowa



*Figure 1*: Source: Iowa GIS Data Repository, Iowa Counties Information Technology. Compiled by Tara Cullison.



**Appendix** Appendix 1 – FEMA Flood Hazard Maps

> FEMA's National Flood Hazard Map West Branch, IA



Appendix Figure 1: Source: Iowa GIS Data Repository, Iowa Counties Information Technology. Compiled by Tara Cullison.
## FEMA's National Flood Hazard Map West Branch, IA



Appendix Figure 2: Source: Iowa GIS Data Repository, Iowa Counties Information Technology. Compiled by Tara Cullison.

FEMA's National Flood Hazard Map West Branch, IA



Appendix Figure 3: Source: Iowa GIS Data Repository, Iowa Counties Information Technology. Compiled by Tara Cullison.

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- <sup>3</sup> (Federal Emergency Management Agency, 2018) https://bsa.nfipstat.fema.gov/reports/1011.htm#IAT.
- <sup>4</sup> This estimate is based on a phone call between the author and insurance agency in November, 2017.
- <sup>5</sup> (City of Cedar Rapids, 2017) http://www.cedar-rapids.org/local\_government/departments\_a\_-\_f/building\_services/building\_and\_trades/codes.php
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